THE

ZIEGLER POLAR EXPEDITION

1903-1905

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INTRODUCTION

The scope of the scientific work of the Ziegler Polar Expedition* executed during 1903 to 1905 under the adverse conditions peculiar to the Polar Regions may be summarized by the following section headings of the results reported upon in this volume :

A—Magnetic Observations and Reductions ;
B—Notes and Sketches of the Auroræ Borealis ;
C—Meteorological Observations and Compilations ;
D—Tidal Observations and Reductions ;
E—Astronomic Observations and Reductions, and
F—Map Construction and Survey Work.

Many other lines of desirable research were contemplated. The final selection, however, had to be governed by limitations of the Expedition, namely : the personnel could not be increased by the addition of experienced observers, and the time available for preparation and securing of instrumental outfits was all too short.

As only occasional assistance could be rendered them by the other members of the Expedition practically the entire burden of the scientific work was borne by the following staff of observers :

William J. Peters, Washington, D. C., Chief Scientist and Second in Command of the Expedition ;
Russell W. Porter, Springfield, Vermont, First Assistant Scientist ;
Robert R. Tafel, Philadelphia, Pennsylvania, Second Assistant Scientist ;
Francis Long, Brooklyn, New York, Weather Observer, and
John Vedoe, Boston, Massachusetts, Assistant.

Owing to the loss of the ship, the building of winter quarters, and the almost constant sledging of coal and supplies until far into the winter, there was little time for other than the work of providing shelter and food and the preparations for the spring sledge journey northward. In addition to the scientific work, observers were called upon for other duties in these exigencies, besides taking part in the sledge journeys and assisting in the hauling of the instrument from Teplitz Bay to the relief ship. The amount of work accomplished in the consequently scant time available is sufficient evidence of the indefatigable and persistent prosecution of the

* The popular narrative of the Expedition, "Fighting the Polar Ice," by Commander Fiala, has been published by Messrs. Doubleday, Page & Co. The volume, now in its second edition, contains considerable information about the handling of Siberian ponies and dogs, the best clothing and equipment for Arctic work, and some useful directions for Polar photography.—Ed.

observations on the part of the scientific party. The difficulties encountered in the execution of work in the Polar Regions must be experienced in order to be properly appreciated. Storms are frequent in the winter, and observers, in going to and from observatories and instrument shelters, have often to crawl upon hands and knees in the face of high winds, whirling snow particles, low temperatures, and in the darkness of winter. The hearty and unselfish coöperation of all concerned is amply indicated by the execution of the great amount of detail work that is reported upon in this volume.

The natural features and natural history of the Franz Josef Archipelago could have been studied to advantage but for the lack of trained men, while the impossibility of transporting collections discouraged any systematic attempt to secure specimens. It might, however, be noted that coal was discovered by Mr. Anton Vedoe at Cape Flora in August, 1904, and was used during the following winter. The vein is a lignite of poor quality, which, however, burns freely. Brown coal was found by Mr. Russell Porter on Coalmine Island, Booth Channel, at a high elevation. Another vein containing fossils was discovered by Mr. Anton Vedoe at Cape Washington, the eastern extremity of Ziegler Island. Traces of coal were also found at Cape Richthofen, and without doubt other deposits would have been uncovered on the different islands had extended search been made. A detailed geological survey of the Archipelago would present some difficulties, owing to the fact that its islands are for the most part covered by a dome-shaped ice-cap extending to the sea. Strata are, however, exposed on Alger Island from base to summit, while the southern coast of the Archipelago presents many opportunities for the geologist.

No discoveries were made in the flora of the Islands during the two brief summers of work. Of the fauna, ptarmigan were seen for the first time in the Archipelago, and several were shot at Teplitz Bay in the summer of 1904, as also on Alger Island and at Rubini Rock. The nesting place of a pair of brants was discovered by Messrs. Stewart and John Vedoe at Camp Ziegler in the summer of 1905, and the eggs secured.

Mr. Miller, Assistant Ornithologist of the American Museum of Natural History, furnishes the following notes regarding the Ptarmigan:

"The pair of Ptarmigan collected by the Expedition on Alger Island, Franz Josef Land, in June, 1904, belong to a little-known species of considerable rarity in collections. This is the Spitzbergen or Hyperborean Ptarmigan, *Lagopus hyperboreus*, a very near relative of two well-known species, the Alpine Ptarmigan, *L. mutus* of the mountains of Europe, and the Rock Ptarmigan, *L. rupestris* of the Arctic regions of both hemispheres. From both these species it differs in larger size and the presence of a greater amount of white on the tail feathers, though in the latter respect there is considerable individual variation. In habits it does not differ from its near relatives.

"The Spitzbergen Ptarmigan was first described by Sundevall in 1838, and it is represented by a colored plate in Elliot's Monograph of the Tetraonidæ. It had not before been recorded outside of Spitzbergen, and from the fact that no Ptarmigan had previously been observed on Franz Josef Land it seems likely that the birds found there in 1904 had been blown over from Spitzbergen.

"The present pair of birds is an excellent illustration of the fact, already recorded, that the male of this species retains the white winter plumage considerably later in the spring than does the female. The male is wholly pure white, while the female, although taken at the same time, is in the brown plumage of summer."

The Expedition is under great obligation for generous assistance received from sources other than that of its lamented organizer and donor, Mr. William Ziegler of New York City. Mr. Ziegler was personally interested in every phase of the work and in the hope of carrying out some of his last wishes the executors of his estate have published this volume.

Acknowledgment is due Mr. William S. Champ, the rescuer of the party, whose opportune arrival at Cape Dillon saved both the members and records of the Expedition.

The National Geographic Society, through its former President, Dr. Alexander Graham Bell, and its present President, Dr. Willis L. Moore; its Vice-President, Henry Gannett; its Secretary, O. P. Austin, and its Editor, Gilbert H. Grosvenor, and through its members individually, has given encouragement and assistance in many ways, both in the initiation and completion of the work of the Expedition. It was to this organization that Mr. Ziegler extended the privilege of selecting the scientific leader and it was by the unanimous action of its Board of Managers that Mr. Peters was commissioned in this capacity. The scientific work accomplished conforms, in general, with the suggestions made by the Research Committee of this Society of which Professor G. K. Gilbert was chairman.

Grateful acknowledgments are due Professor Geelmuyden, Director of the Christiania Observatory, who loaned a Repsold Circle when at the last moment it appeared that one could not be obtained.

Mr. O. H. Tittmann, Superintendent of the United States Coast and Geodetic Survey, on the part of himself and the members of his Bureau, extended every possible help in the way of instruction and suggestion. Through his courtesy the Expedition had also the use of the instrumental outfit necessary for the execution of the magnetic work.

Dr. L. A. Bauer, Director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, devised the plan of observation best suited to the limited instrumental outfit and conditions to be encountered, which plan experience proved successful. He has further suggested the general scheme of reduction of this portion of the observations.

Professor Willis L. Moore, Chief of the United States Weather Bureau, supplied a number of instruments for use in the meteorological observations.

General A. W. Greely, of the United States Army, extended assistance by many valuable suggestions as the result of his own wide experience in Polar work; he also arranged for the loan of some meteorological instruments from the United States Signal Corps.

The task of preparing the scientific results for publication was taken up by Mr. Peters during September, 1905, upon the return of the Expedition. He was unable to complete this labor personally owing to his association on January 1, 1906, with the Department of Terrestrial Magnetism of the Carnegie Institution of Washington as Commander of the Magnetic Survey Yacht. In his absence, through the courtesy of Dr. L. A. Bauer, Director, the burden of the completion of compilation, computation, editing, and publication of the results has been borne by Mr. J. A. Fleming, of the Department of Terrestrial Magnetism. The principal assistance in the great amount of detail work necessary has been rendered by Messrs. E. H. Bowen, C. C. Craft, W. B. Corse, and W. N. Ross.

ANTHONY FIALA

New York City, July 1, 1907

ERRATA

Page iii: *Contents*, 1st line, for "1" read "v".

Page iii: *Contents*, 2nd line, for "v" read "1".

Page 8: 11th last line, for "$\frac{C}{\sin \mu}$" read "$\frac{C}{\sin u}$".

Page 10: 2nd last line of 2nd last paragraph, take out comma after "6765γ".

Page 13: last line of 2nd paragraph, for "3h 52m 37s (58° 09′) E" read "3h 51m 56s (57° 59′) E".

Page 116: tabulation of azimuths, for "108 00 53" read "180 00 53".

Page 297: station number 3, for "58 09" read "57 59".

Page 303: 5th line, for "range of 32 , while" read "range of 32′, while".

Page 303: 6th line, for "viz., 97. 1" read "viz., 97.′1".

Page 320: last line, for "58 09" read "57 59".

Page 371: illustration numbers, for "4", "5", and "6", read "5", "6", and "4".

Page 371: under illustration list, for "478" read "477".

Page 375: longitude east of Greenwich, for "57° 56′" read "57° 58′".

Page 391: 1st line, for "attz" read "at Teplitz".

Page 392: 1st line, omit "Tepli".

Page 392: last line under columns *Reading of Fahrenheit Thermometer*, for "—15.5 | —15.2 | —23.8" read "—17.0 | —15.5 | —15.2".

Page 398: last line under columns *Reading of Fahrenheit Thermometer*, for "—207.6 | —285.6" read "—276.0 | —207.6".

Page 418: 2nd last line, under column *Mean of Extremes*, for "+380.0" read "+380.9".

Page 449: longitude east of Greenwich, for "57° 56′" read "57° 58′".

Page 477: formula at head of tabulation, for "$\Delta p = B_1 \sin(\theta - C_1) - B_2 \sin(2\theta - C_2) - B_3 \sin(3\theta - C_3)$" read "$\Delta p = B_1 \sin(\theta + C_1) + B_2 \sin(2\theta + C_2) + B_3 \sin(3\theta + C_3)$".

Page 482: last line of 2nd last paragraph, for "figures 4 and 5" read "figures 5 and 6".

Page 495: 6th last line, for "57° 56′ (3h 51m 43s)" read "57° 58′ (3h 51m 53s)".

Page 543: longitude east of Greenwich, for "57° 56′" read "57° 58′".

SECTION A

MAGNETIC OBSERVATIONS AND REDUCTIONS

BY

W. J. PETERS

In Charge of Scientific Work of the Expedition

AND

J. A. FLEMING

Department Terrestrial Magnetism, Carnegie Institution of Washington

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MAGNETIC OBSERVATIONS

INTRODUCTION

STATIONS

The principal and most extended magnetic observations of the expedition were made at Camp Abruzzi, Teplitz Bay, Rudolph Island, Franz Josef Archipelago. (This station is hereafter referred to simply as Teplitz Bay.) The observations here extended from September 28, 1903, to July 1, 1904.

A second series, covering the period June 26 to July 30, 1905, was made at Camp Ziegler, Alger Island, Franz Josef Archipelago, while waiting for the arrival of the relief ship. (This station is hereafter referred to simply as Alger Island.)

Besides these primary series of observations a number of determinations (generally only of declination) were made at other points. These were limited necessarily in scope by the various exigencies arising, the numerous other duties of the observers, and the severe physical conditions encountered.

The observations and reductions are herein taken up in the following order of their importance :

Observations at Teplitz Bay
Observations at Alger Island
Miscellaneous observations

INSTRUMENTS

Through the courtesy of the Superintendent of the United States Coast and Geodetic Survey, Mr. O. H. Tittmann, the expedition had the use of the following instruments belonging to that Bureau :

Magnetometer No. IIII
Dip circle No. 5676

These instruments had also been loaned to the Baldwin-Ziegler Expedition of 1901 to 1902.

The magnetometer is one of the older magnetometers of the Coast and Geodetic Survey, but being large and heavy, with large magnets, was better adapted for work at a base station in a cold climate than the smaller and more portable instruments. Unfortunately it was discovered upon its return in 1905 that at some time, probably in the fall of 1899, six small steel tacks had been used to fasten the cloth hood to the end of the magnet-house. As will be seen later, these had no appreciable effect on the declination, but materially reduced the value of the horizontal intensity. The necessary correction on this account has been applied to the intensity results as related below.

The dip circle is of the usual pattern made for land observations by L. Casella of London, England.

In addition to these, the compass needle of a four-inch theodolite by Berger & Sons of Boston, U. S. A., and the plane-table needles were used for the determination of declination at several random stations.

The following compilation of constants for the primary magnetic outfit has been prepared by Mr. D. L. Hazard, of the United States Coast and Geodetic Survey, under the direction of the Chief of the Division of Terrestrial Magnetism of that Bureau.

Magnetometer Constants

A new brass deflection bar was supplied in April, 1903, to take the place of the old one not returned by the first Ziegler Expedition. It is a single straight bar 88 centimeters long. The *deflection distances*, as determined by the United States Bureau of Standards, are 30.019 centimeters and 40.025 centimeters at 28°.75 Centigrade.

The *moment of inertia* of intensity magnet No. 4 and stirrup has been determined several times by Mr. W. J. Peters, as follows:

Place	Date	No. of sets	log K_{20}	Weight
Washington, D. C. . .	May, 1903	11	2.45834	2
Cheltenham, Md. . .	Sept., 1905	11	2.45812	1
Cheltenham, Md. . .	Oct., 1905	10	2.45919	2
Value adopted, weighted mean			2.45864	

The *temperature coefficient* of the intensity magnet has been determined by special observations at various times, as follows:

Place	Date	Observer	Mean temp. Cent.	q	No. of sets
			°		
Philadelphia	1848, Dec.	J. S. Ruth . .	20.0	.000252	4
San Francisco	1884, Oct.	R. A. Marr .	20.1	230	6
District of Columbia . . .	1900, May	J. B. Baylor .	15.0	192	2

From regular intensity observations values have been derived as follows:

Place	Date	Observer	Mean temp. Cent.	q	No. of observations
			°		
Gaithersburg . . .	1900, Jan.–Apr. .	E. Smith . .	+ 2.2	.000353	12
Washington . . .	1900, Nov. 11 to 20	W. Weinrich .	+ 14.8	351	9
Teplitz Bay . . .	1903, Oct.–Dec. .	W. J. Peters .	— 10.1	334	12
Teplitz Bay . . .	1904, Jan.–Feb. .	W. J. Peters .	— 10.7	247	12
Teplitz Bay . . .	1904, March–May	W. J. Peters .	— 12.2	200	13
Teplitz Bay . . .	1904, May–June .	W. J. Peters .	+ 0.8	201	13
Cheltenham . . .	1905, Sept. . . .	W. J. Peters .	+ 24.3	416	4
Cheltenham . . .	1905, Oct. . . .	W. F. Wallis .	+ 15.6	273	5

The value q =0.000192 was used in the computation of horizontal intensity at Teplitz Bay. Only the difference in temperature between oscillations and deflections is involved in this computation, and it rarely exceeded 2°. For this value of q a value of $(t' - t)$ of 2° would affect the value of H only 1¼γ (.0000125 C. G. S.), so it is evident that no revision of the computation is required. For the reduction of the values of the magnetic moment to the same temperature in order to obtain an estimate of the accuracy of the observations, a value of q = 0.00030 was adopted as the best value to be obtained from the above varying values. It is probable that q varies with the temperature, increasing as the temperature increases, but the observations are not sufficiently accurate to determine the relation.

The *induction coefficient* has been determined as follows:

Date	Observer	No. of sets	$\mu = mh$
April, 1900	J. B. Baylor	8	5.39
Sept., 1905	W. J. Peters	4	5.87
Mean value adopted			5.63

The *first distribution coefficient*, P, has been determined from deflections at two distances as follows:

Place	Date	No. of sets	P	Weight
Various stations .	Nov., 1899–Nov., 1900	33	−2.30	2
Teplitz Bay . .	1903–1904	54	0.00	4
Cheltenham . .	Sept., 1905	6	−1.49	1
Cheltenham . .	Oct., 1905	7	−2.08	1
Mean value adopted			−1.0	

The *scale value* of long magnet has been determined at various times, the recent values being:

Place	Date	Observer	Scale value
Gaithersburg, Md. .	1899, Nov. 18	E. Smith . .	1.56
Washington, D. C. .	1900, May 7	J. B. Baylor .	1.54
Teplitz Bay	1903–1904 . .	W. J. Peters .	1.60
Cheltenham, Md. . .	1905, Sept. 21	W. J. Peters .	1.56
Mean value adopted			1.57

The *constants adopted* for magnet No. 4 of magnetometer No. IIII for the reduction of the Teplitz Bay observations are as follows:

Corrected distances on new brass deflection bar at 0° Centigrade :

r	$\log r$	$\log \frac{1}{2} r^3$	$\log C$
30.003 cm.	1.47716	4.13045	$\bar{5}.86889$
40.003 cm.	1.60209	4.50524	$\bar{5}.49441$

For an increase in temperature of 1° Centigrade log C decreases 0.000025

One division of scale = 1′.57

Temperature coefficient : q=0.00030 for 1° Centigrade

Induction coefficient : $\mu = 5.63$;

When $r = 30$ cm. $\log \left(1 + \frac{2\mu}{r^3}\right) = 0.00018$

$= 40$ cm. $= 0.00008$

Distribution coefficient : $P = -1.00$;

When $r = 30$ cm. $\log \left(1 - \frac{P}{r^3}\right) = 0.00048$

$= 40$ cm. $= 0.00027$

Moment of inertia :

Temp. Cent.	$\log \pi^2 K$
−20°	3.45252
−10	262
0	273
+10	283
+20	294

These constants are adapted for the methods of computation in use by the Coast and Geodetic Survey, where the following formulæ are used in computing horizontal intensity :

$$mH = \frac{\pi^2 K}{T^2}; \quad T^2 = T'^2\left[1 + \frac{h}{f}\right]\left[1 - (t' - t)q\right]\left[1 + \mu\frac{H}{m}\right];$$

$$\frac{H}{m} = \frac{C}{\sin \mu}; \quad C = \frac{2}{r^3\left(1 - \frac{P}{r^3}\right)\left(1 + \frac{2\mu}{r^3}\right)} \quad \text{and}$$

$$\log H = \tfrac{1}{2}\left(\log \frac{H}{m} + \log mH\right).$$

In these formulæ,

H = horizontal intensity
m = magnetic moment of magnet
T' = observed time of one oscillation corrected for rate of chronometer
h = angle through which magnet is turned by turning the torsion head through an angle f
t' = temperature of oscillations
t = temperature of deflections
u = deflection angle

The observations are arranged so that two sets of deflections come between two sets of oscillations, and t and t' do not usually differ very much. Consequently an erroneous value of q has little effect on the resulting value of horizontal intensity.

To determine the *effect of the steel tacks on declinations as observed* we have the following declination observations at the Cheltenham Magnetic Observatory :

(*a*) Before removal of tacks, by W. J. Peters :

Date 1905	Declination west ° ′
September 19	5 18.6
September 20	20.0
September 20	19.2
September 21	18.7
September 21	18.9
September 22	19.8
September 22	17.2
Mean	5 18.9

(*b*) After removal of tacks, by W. F. Wallis :

Date 1905	Declination west ° ′
October 27	5 18.5
October 27	18.7
October 28	18.9
Mean	5 18.7

The results by the Observatory magnetometer No. 26 were :

Date 1905	Declination west ° ′
September	5 18.7
October	5 18.9

All the above observations have been corrected for diurnal variation. They show that for declinations determined with Magnetometer No. IIII no correction is required.

To determine the *effect of the steel tacks in horizontal intensity observations* we have the following results at the Cheltenham Magnetic Observatory :

(*a*) Before removal of tacks, by W. J. Peters :

Date 1905	Horizontal intensity γ
September 20	19809
September 21	20
September 22	11
Mean	19813

(*b*) After removal of tacks, by W. F. Wallis:

Date 1905	Horizontal intensity
	γ
October 25	20068
October 27	64
October 27	68
October 28	72
Mean	20068

Observations by Magnetometer No. 26 gave the following results:

Date 1905	Horizontal intensity
	γ
September	20057
October	65
Mean	20061

Consequently values of horizontal intensity determined with Magnetometer No. IIII before the removal of the tacks must be increased by about 250γ.

The presence of tacks would affect only the oscillations, since throughout deflections the suspended magnet and the tacks would be always in the same relative position. Instead of the ordinary formulæ, use should be made of the following to reduce observations of horizontal intensity made when the tacks were present:

$$m(H+X) = \frac{\pi^2 K}{T^2} \text{ and } \frac{H}{m} = \frac{C}{\sin u}$$

From the observations at Cheltenham in 1905, X was found to be very nearly -500γ. The application of this correction to the Teplitz Bay and Alger Island observations has been made as follows: The combination of the above equations in the usual way to eliminate m gives the value of $\sqrt{H(H+X)}$, from which H may be derived when X is known. At Teplitz Bay the average value of $\sqrt{H(H+X)}$ was 6510γ, from which H=6765γ, for X= -500γ, or $H = \sqrt{H(H+X)} + 255\gamma$. The same correction applies for Alger Island.

The last column in the following table gives the mean value of log m reduced to 20° Centigrade for various groups of observations and furnishes the means for comparing the magnetic moment of the intensity magnet at Teplitz Bay and Alger Island and in the United States:

Date	Place	Temp. Cent.	No. of obs'ns	log m_{20}
		°		
1900, Jan.–Apr.	Gaithersburg, Md.	+ 1.9	12	2.64062
1900, Nov.	Washington and Oregon	+14.8	9	2.64086
1903, Oct.–Nov.	Teplitz Bay	−10.1	12	2.63832
1904, Jan.–Feb.	Teplitz Bay	−10.7	12	2.63886
1904, March–May	Teplitz Bay	−12.2	13	2.63947
1904, May–June	Teplitz Bay	+ 0.2	12	2.64054
1905, June–July	Alger Island	+ 6.8	8	2.64093
1905, Sept.–Oct.	Cheltenham, Md.	+19.5	9	2.64002

Observations in the United States before and after the instrument was used at Teplitz Bay show very little change in the magnetic moment of the intensity magnet. The observations at Teplitz Bay, however, indicate a gradual increase from beginning to end of the series. The cause of this change is not clear, as magnets are usually found to lose their strength with age. It is clearly not due to an erroneous temperature coefficient, as the mean temperatures of three of the groups are nearly the same. An error of .00087 in log m corresponds to an error of one part in 500 in H, which at Teplitz Bay would be only 13 γ.

Dip Circle Constants

So little time was available between the return of the instrument by the first Ziegler Expedition and its reissue to the second, that no extended comparisons could be attempted. Observations were made at the Coast Survey Office in Washington as follows on May 11, 1903:

Needle No. 3 69° 55′.8 N
Needle No. 4 69° 56′.3

The normal dip for the station was 69° 56′.0 N. Observations were also made in two planes making an angle of 60° with the magnetic meridian, so that the needles rested upon nearly the same parts of the pivots as at Teplitz Bay. These observations of May 23, 1903, resulted as follows:

Needle No. 3 69° 50′.2 N
Needle No. 4 69° 53′.6

Upon the return of the dip circle in the autumn of 1905 observations were made at the Cheltenham Magnetic Observatory as follows:

(*a*) In the magnetic meridian:

Date 1905	Observer	Needle No. 3	Needle No. 4
		° ′	° ′
September 20	W. J. Peters	70 29.6 N	70 28.7 N
September 21	W. J. Peters	29.9	35.2
September 22	W. J. Peters	31.2	30.2
September 28	W. J. Peters	29.4	33.6
October 3	S. G. Townshend . .	28.3	30.9
October 10	S. G. Townshend . .	32.1	31.3
October 31	S. G. Townshend . .	33.3	34.1
Means		70 30.54 N	70 32.00 N

(*b*) In planes making an angle of 60° with the magnetic meridian:

Date 1905	Observer	Observed dip		Reduced dip	
		Needle No. 3	Needle No. 4	Needle No. 3	Needle No. 4
		° ′	° ′	° ′	° ′
December 15	W. F. Wallis . .	79 59.9 N	79 56.6 N	70 34.3 N	70 28.2 N
December 15	W. F. Wallis . .	58.1	58.0	31.0	30.8
December 15	W. F. Wallis . .	63.0	61.7	39.9	37.5
December 15	W. F. Wallis . .	61.1	58.9	36.4	32.4
December 16	W. F. Wallis . .	61.9	59.6	38.0	33.7
December 16	W. F. Wallis . .	59.2	57.8	33.0	30.3
Means				70 35.4 N	70 32.2 N

The normal dip for this station is 70° 26′.4 N, as derived from the following observations with earth inductor:

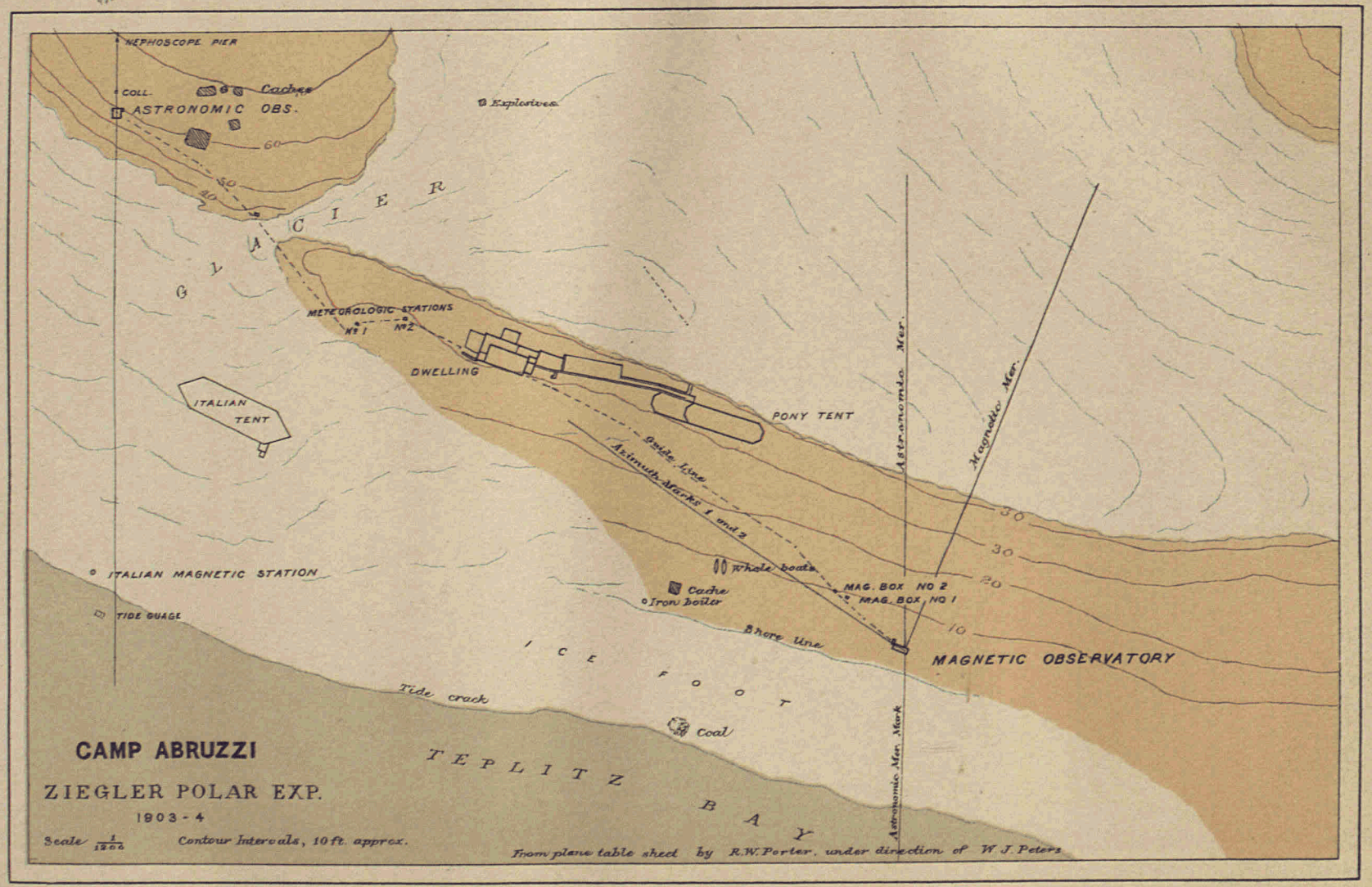
Date 1905	Dip
	° ′
September 18	70 24.7 N
September 25	26.4
October 2	26.7
October 9	26.3
October 17	27.3
October 23	25.9
October 30	27.4
Mean	70 26.4 N

These observations give the following corrections to the dip needles of dip circle No. 5676:

Year	Meridian observations		60° out of meridian	
	Needle No. 3	Needle No. 4	Needle No. 3	Needle No. 4
1903	+0′.2	−0′.3	+5′.8	+2′.4
1905	−4.1	−5.6	−9.0	−5.8

In view of the change indicated between 1903 and 1905 and the probability that the correction required becomes less as the dip increases, it is deemed best to apply no correction to the dip observations.

FIGURE 1



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OBSERVATIONS AT TEPLITZ BAY

Site of Observatory

The magnetic station occupied by the Italian Expedition at Teplitz Bay was examined with a view to reoccupying it, but at the time it was found impossible to accurately identify the point; besides it was on the ice-foot, subject to overflow during summer thaws and to possible movement. Under the circumstances it seemed advisable to select another location which could be more conveniently recovered in the future. It was also intended to make observations in a tent at a point as near to the Italian station as could be fixed from data appearing in their publications, but owing to the lateness of the season and the hurried debarkation, which required the help of all, this plan could not be carried out during the period of daylight in 1903 and was, therefore, postponed to the following spring.

Six or seven points were examined. All of these, which were fairly well distributed over the small area free from ice, gave indications of local magnetic attraction, varying from 40′ to 2°. The exposed surface is basalt and contains considerable disseminated magnetite in minute grains. The point finally selected was the one which appeared to be the least affected and at the same time reasonably free from the destructive effect of ice. It is on the shore of Teplitz Bay about 6 feet above sea level and 6 meters from the water edge, in latitude 81° 47′ 30″ N and longitude 3h 52m 37s (58° 09′) E.

Description of Magnetic Observatory

The observatory is 4.56 meters long, 1.82 meter wide, 1.82 meter to the eaves, and 2.45 meters to the ridge. Its length is parallel to the magnetic prime vertical and allows a distance of 2.1 meters between the magnetometer and dip circle piers.

The structure consists of a framework of wood. The floor, roof, and east and west sides are boarded. The north and south walls are each made of two layers of canvas, the outer layer extending over the board roof. The joints and fastenings are made by dovetailing, mortising, or by large brass screws. The canvas is held by copper tacks and brass nails, or by wooden cleats held in place by brass screws. Snow was banked against the walls up to the eaves and subsequent drifts finally buried the observatory in an even field. A shelf extends north and south across the middle of the room and serves both for a brace and for a table. Two lights were used on this shelf—a brass bull's-eye lantern and a copper kerosene lamp. Their positions are shown in the plan which is drawn to scale. The bull's-eye lantern was used for illuminating the scale and rested on a small, wooden tripod stand with an adjustable wooden footscrew. Two large windows—one in the east wall and one in the west wall—admitted light on the return of day. The iron nails used in the window frames were all removed.

A copper stove with copper stack was installed with a view to heating the room, if in extreme cold weather it became necessary to put in new fibers or do any other work requiring delicate manipulation. It was used but twice. The lamps and stove were each brought within 30 centimeters of the magnetometer, revolved and carried around the magnetometer without producing any noticeable effect.

The original carrying magnetometer case was placed under the east window after adjusting-pins, screw-drivers, and other magnetic articles and material were removed. Magnet No. 4, used in declination observations, was stored in this case when not in use.

There were two brass hooks on the east wall for garments and two on the south wall to hold the deflection bar in its case.

The timepiece was a watch* regulated approximately to local time beginning at midnight. It hung on a small brass hook screwed into the middle stud of the south wall.

The piers are of pine, 35 centimeters in diameter. That for the magnetometer is 2.3 meters long and is sunk 0.8 meter in coarse, frozen gravel, leaving 1.25 meter above the floor. The pier for the dip circle is 2.15 meters long, is 0.8 meter under the surface, and 1.10 meter above the floor. These piers are marked *M* and *D* respectively on the west side near the top.

There is a vestibule 0.75 meter by 1.3 meter by 1.25 meter, with doors opening into the observatory and outwards into the open air.

In cold weather considerable trouble was experienced from the collection of ice on the mirror, eyepiece, reading glass, and circle. The roof and walls of the observatory became studded with small ice crystals, the incessant fall of which covered the instrument and necessitated cleaning every day or two.

During the construction of the observatory a memorandum was kept of every iron tool used and its removal was assured before magnetic work began. This precaution was necessary because of the frequent snowfalls. The building is absolutely non-magnetic and the only iron near by was the small adjusting pin, used to reduce the amplitude of the oscillations after the magnet was disturbed. This pin was placed vertically on pier *D* beyond the sphere of influence and has since been brought away.

In the spring of 1904 a bear attempted to break into the observatory while Mr. John Vedoe was observing. He failed to drive it away by noise or voice and was liberated from the embarrassing situation by finally arousing the pack dogs, whose barkings brought aid from the house. As a safeguard against recurrence of such visits a revolver was afterward placed at the far end of the sight shaft 4.5 meters distant from the magnetometer. On March 1, 1904, this was taken away and instead a rifle was left outside standing against magnet box No. 1.

Permanence of Site and Preservation of Piers

Judging from the condition in which the living quarters of the Italian Expedition were found, it is to be concluded that the observatory with its piers may stand for a long time, but snow will collect about the building and hold a small supply of water coming from the summer thaws until it freezes again. Ice, accumulating annually in this manner, may gradually rise in the hut to the top of the piers. The distance and azimuth of the astronomic brick pier will, however, furnish a means of recovering the precise point, should it be buried in a future field of ice. The astronomic observatory is so situated as to be swept clear of snow by the strong winds, unless a decided and permanent change in the prevailing direction should occur.

On the cessation of observations (July 1, 1904) the observatory was left undisturbed with every article in place excepting the instruments.

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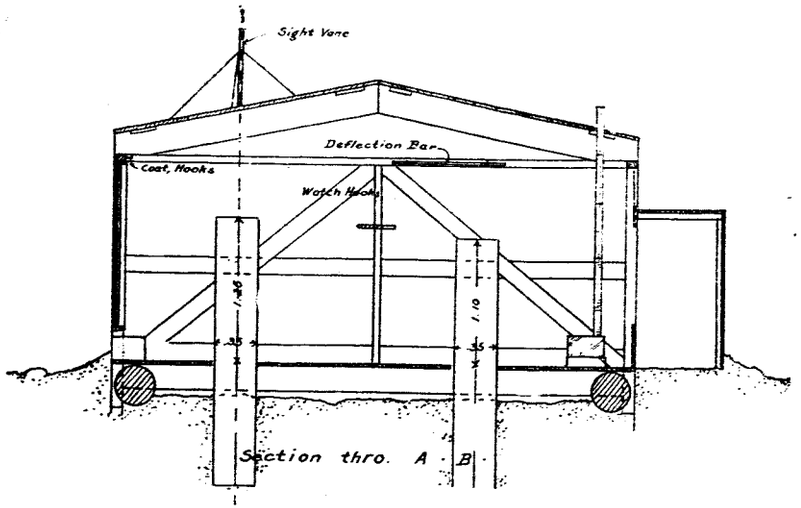
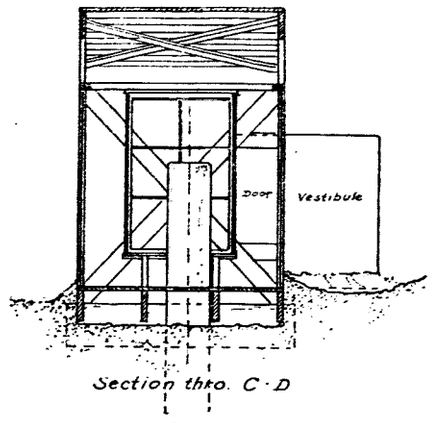
* In the tabulations of results the times by watch are listed as "Chronometer time."

FIGURE 2



Section thro. A · B ·



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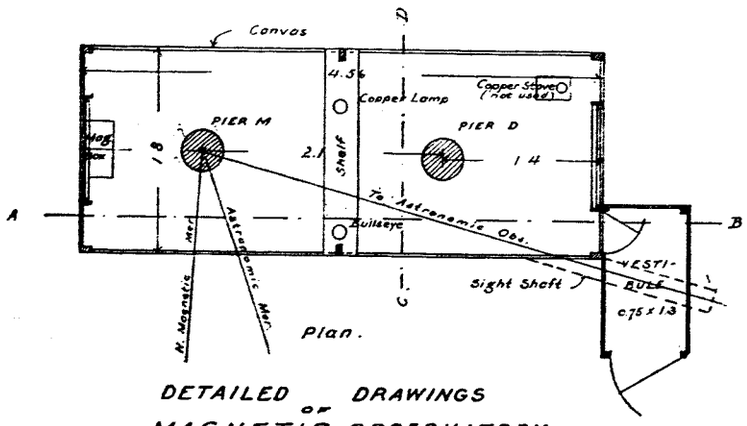
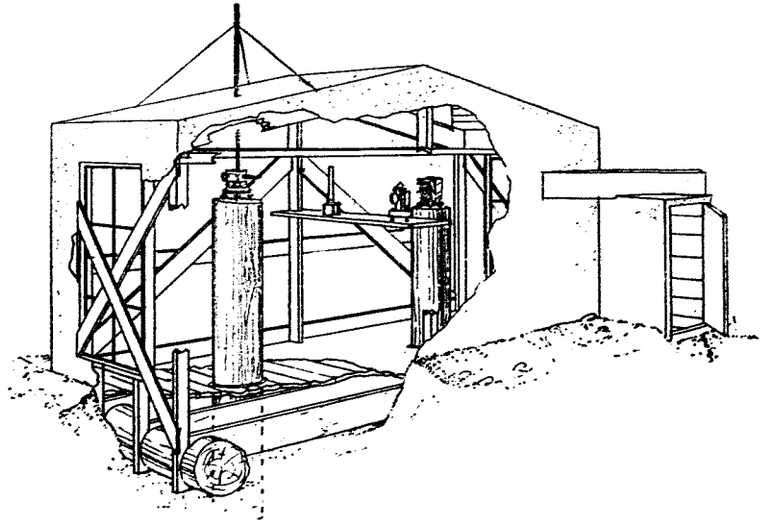


Plan.



Perspective, with part of the wall removed.

DETAILED DRAWINGS
OF
MAGNETIC OBSERVATORY,
CAMP ABRUZZI

Dimensions given in Meters

Scale: 1m 0m 1m 2m

DECLINATION

Azimuth Marks

Azimuth Mark No. 1 was the anemometer staff permanently fixed to the northwest corner of the astronomic observatory. It was used at first because of its early availability during daylight of October, 1903. Afterwards a hole 3 inches in diameter was cut through the east wall of this observatory. A cross radiating from this hole was painted on the wall to be used in daylight and a bull's-eye lantern seen through the hole was used at night. The center of the hole was on the line of sight from the magnetometer telescope to the telescope of the Repsold circle in the astronomic observatory when these two were directed towards each other and it is designated *Azimuth Mark No. 2*. The distance is approximately 288 meters. It should be noted that a distant mark is seldom available at Teplitz Bay on account of darkness or thick weather.

The azimuth of the magnetometer at the Repsold circle was first determined by measuring the angle between the magnetometer and the south pointing of the vertical thread as determined from star transit on December 2 and December 18, 1903, and January 27, 1904. It was again determined by measuring the same angle as determined from a combination of the transits of η Cephei at lower culmination and 1 H. Draconis at upper culmination on March 17, 1904. Finally the angle between the astronomic meridian mark (6440 meters distant) and the magnetometer was measured July 1, 1904, at the end of the season's work. It was measured on April 11, 1905, without any sensible difference in the results.

These observations by Mr. R. W. Porter are given in the astronomic notes; the result of of four days' observations are tabulated below:

Date	Method	Resulting azimuth of vertical thread Repsold circle
		° ′ ″
December 2, 1903	Star transits for time .	304 01 20
December 18, 1903	Star transits for time .	40
January 27, 1904	Star transits for time .	44
February 12, 1904	Combining circumpolar stars at U. C. and L. C.	32
Mean		304 01 34
This with distance to the magnetometer, 287.82 meters, gives additive		108 00 53
Hence the reverse azimuth		124 02.5

This is the value adopted and used in the final reduction of the magnetic declination observations.

For a rough check and to test the four-inch Berger & Sons' theodolities under existing unfavorable trigonometric and meteorologic conditions, some azimuths were obtained from solar altitudes with one of these instruments by Mr. W. J. Peters.

The four-inch theodolite in these observations was placed about 36 meters south of the magnetometer and exactly on a line connecting the magnetometer with the astronomic meridian mark (approximately 6430 meters distant). Both circles were graduated to read by two verniers to single minutes.

The instrument was reversed and opposite limbs of the sun were symmetrically observed. The means of each set of four pointings with the corresponding approximate local civil times,

reckoned from midnight, and the deduced azimuth of the mark are given in the following tabulation in deriving which the value for latitude used was 81° 47.′5 N :

Date 1904	Local civil time	Altitude	Angle between sun and mark	Temp. C.	Resulting azimuth
	h m s	° ′	° ′	°	° ′
June 3	16 25 07.4	25 20.62	57 59.6	— 3.5	2 14.2
June 3	17 18 17.8	23 30.12	81 21.1	— 3.5	14.7
June 6	6 18 36.4	23 04.67	90 51.6	— 2.9	13.9
June 6	6 27 34.7	23 24.00	88 36.4	— 2.9	12.2
June 6	17 34 22.8	23 19.94	85 00.1	— 3.8	13.0
June 6	17 39 58.0	23 07.38	86 36.4	— 3.8	17.1
June 7	6 32 32.2	23 39.50	87 32.8	— 0.2	14.0
June 7	6 40 28.2	23 36.38	85 33.3	— 0.2	12.1
Mean					2 13.9

The angle at pier *M* between this astronomic meridian mark and azimuth mark No. 2, measured with the circle of the magnetometer, was 121° 49′.3 ; whence the azimuth of mark No. 2 is 124° 03.′2, a determination with the small instrument which agrees within one minute of the Repsold circle determination.

By differentiating the spherical triangle and substituting values of the latitude, declinations and altitudes, and azimuths for the first observations of June 3 and June 6, A. M., there will result

$$\frac{dA}{dh} = 7.5 \text{ and } 7.0$$

in which dA and dh are the mutually dependent changes in the azimuth and altitude, respectively ; from which we might expect an error in the azimuths about seven times greater than an assumed error in the altitudes. Presumably the altitude could not be measured with these instruments closer than one-half minute of arc so that the above results are within the limits to be expected from this uncertainty.

Pier M and Its Twist

The magnetometer was mounted on the pine pier *M* which is, as stated, sunk 0.8 meter among large boulders and gravel. It was noticed while sinking the holes for the piers that the whole morainic mass of boulders and gravel was frozen together. The pier is not in contact with the floor and is quite firmly imbedded.

The horizontal circle of magnetometer No. IIII is rigidly connected with the base which receives the footscrews and, therefore, has no independent motion. As the instrument was left mounted and undisturbed after each day's observations, the various pointings on the azimuth mark taken from time to time should presumably have given the same circle readings. Very soon after the beginning of the winter's work it was noticed that these readings began to vary. The striding level, as well as the stationary level, was carefully examined at each pointing of the mark. When the circle readings were about their maximum and minimum the telescope was reversed in its Y's without disclosing any appreciable collimation error. Readings were taken when the temperature of the hut, practically the same as the outside, had reached its lowest point, to see if any of the effect was due to the passage of the line of sight from the warmer air of the hut to the colder air outside.

FIGURE 3

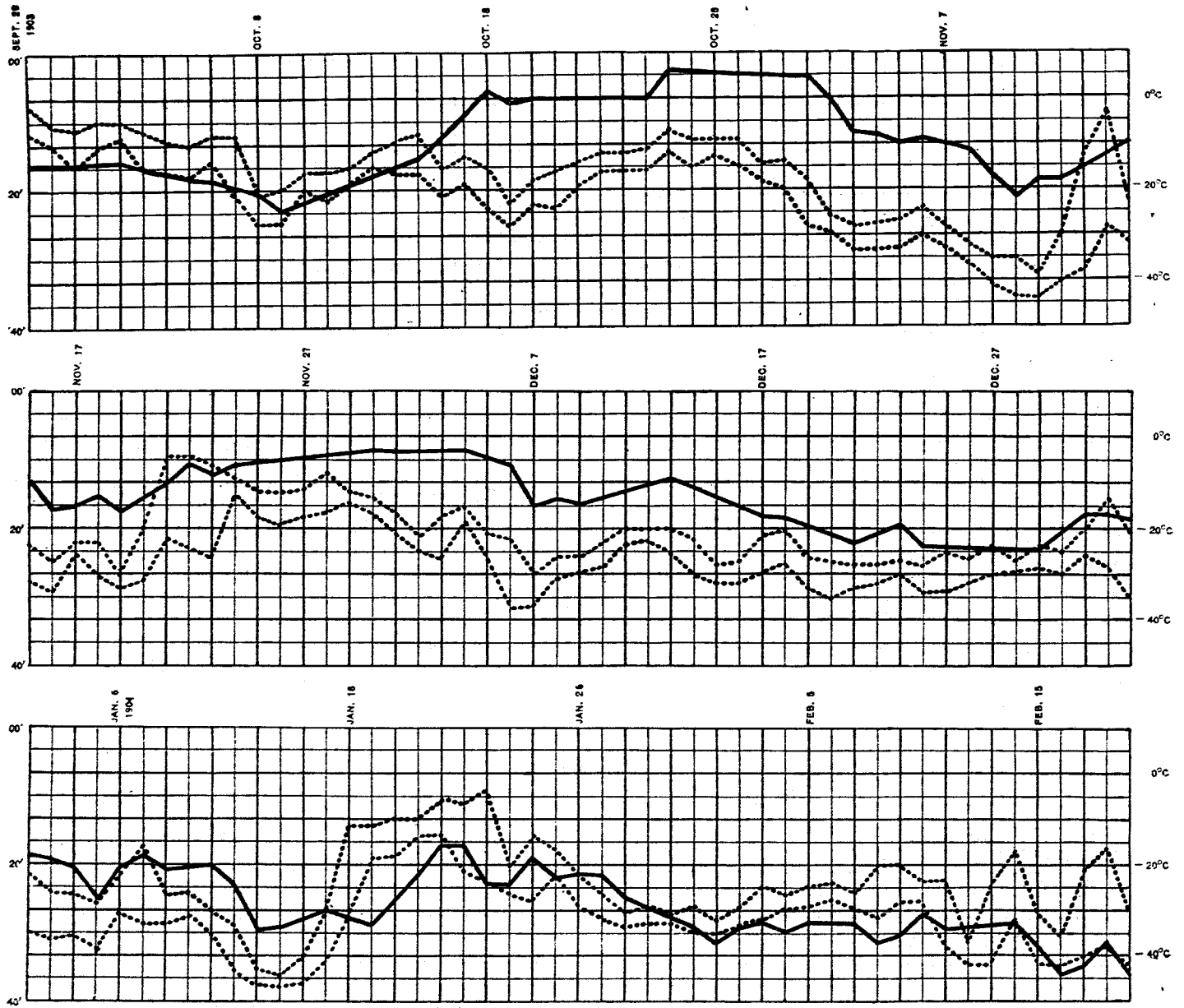


DIAGRAM SHOWING VARIATION IN MARK READING WITH CHANGES IN TEMPERATURE AT TEPLITZ BAY
FROM SEPTEMBER 28, 1903, TO FEBRUARY 19, 1904

(Mark readings shown by full line ; maximum and minimum temperatures by dotted lines. Increasing ordinate up indicates decrease in mark reading and increase in temperature.)

FIGURE 4

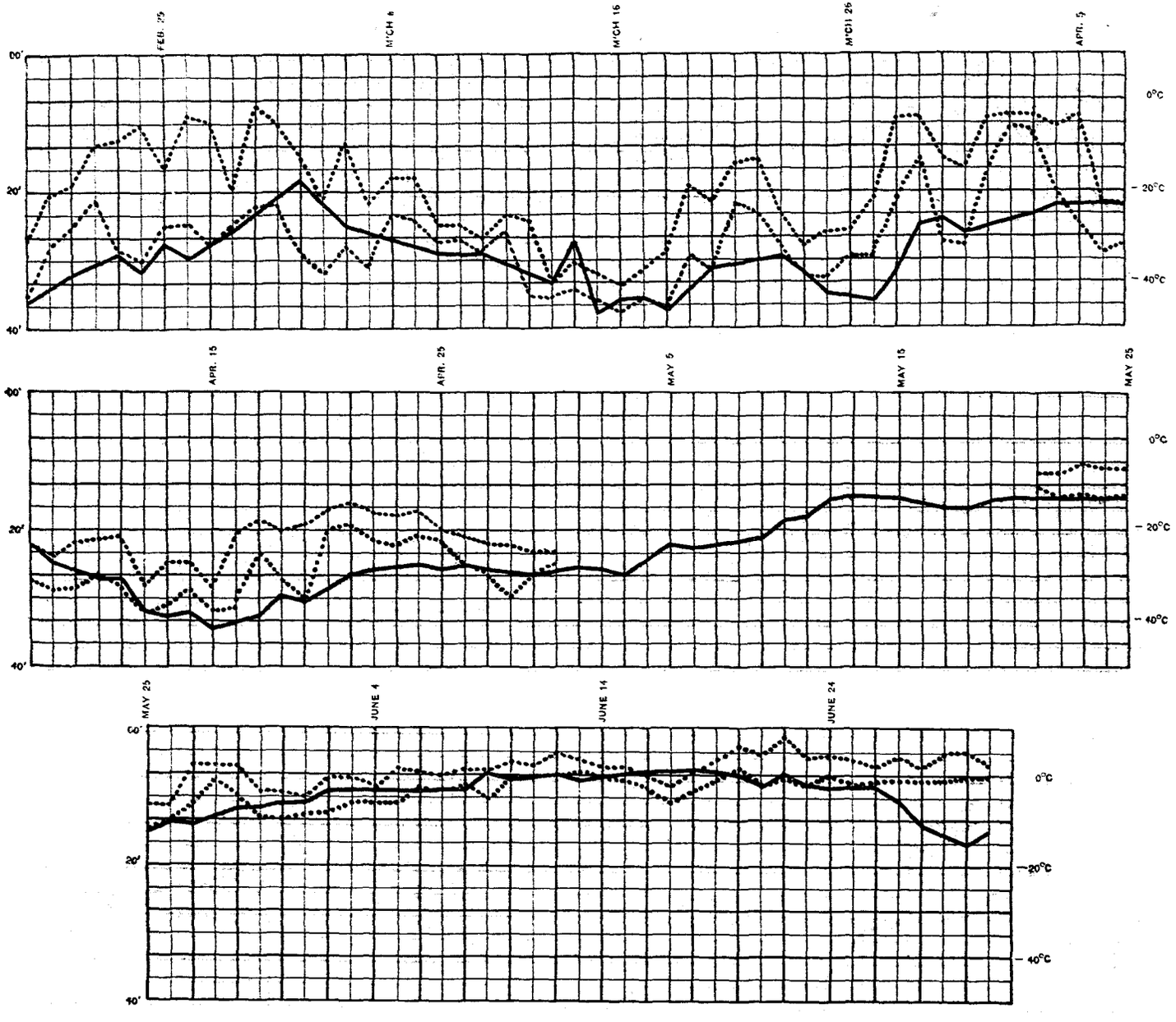


DIAGRAM SHOWING VARIATION IN MARK READING WITH CHANGES IN TEMPERATURE AT TEPLITZ BAY
FROM FEBRUARY 20, 1904, TO JULY 1, 1904

(Mark readings shown by full line; maximum and minimum temperatures by dotted lines. Increasing ordinate up indicates decrease in mark reading and increase in temperature.)

That these changes in the circle reading cannot be ascribed to any motion of translation of the pier *M* or the azimuth mark is evident from the small range in the azimuth determinations and the fact that the readings after having reached a maximum returned to near the same minimum. In the azimuth observations the Repsold circle was always pointed on, and bisected the illuminated object glass of the magnetometer after this had been directed towards the astronomic instrument.

These readings, however, appear to be functions of the temperature and the close agreement between the changes of temperature and changes of twist is graphically shown by curves in the plate opposite on which the dates are represented by abscissæ and the temperatures and pointings on the mark are shown as ordinates.

Program and Methods of Observing

A program for declination readings was arranged by Dr. L. A. Bauer. With a view to obtain a closed series every week, the observations were made to extend over four hours, these periods being selected daily in succession according to the following detailed program, in civil time, counting through 24 hours from midnight:

Day of week	Observations		Duration	Magnet scale
	From	To		
	h	*h*	*h*	
Monday . . .	8	12 (noon) . .	4	Erect
Tuesday . . .	12 (noon) . .	16	4	Inverted
Wednesday . .	0	24 (midnight)	24	Erect
Thursday . .	16	20	4	Inverted
Friday . . .	20	24 (midnight)	4	Erect
Sunday . . .	0	4	4	Inverted
Sunday . . .	4	8	4	Erect
Monday . . .	8	12 (noon) . .	4	Inverted
Tuesday . . .	12 (noon) . .	16	4	Erect
Wednesday . .	0	24 (midnight)	24	Inverted
Thursday . .	16	20	4	Erect
etc.	etc.	etc.	etc.	etc.

In the beginning observers were changed, possibly more frequently than might have been desired. Later, when they had become accustomed to the routine, the cold, and privations which longer hours demanded, they willingly agreed to observe throughout 8 hours without change. When observers changed during observations they observed alternately for 10 minutes or more. The observer is indicated by his initials, as follows:

W. J. P., . . . W. J. Peters
R. R. T., . . . R. R. Tafel
J. V., ... John Vedoe
R. W. P., . . . Russell Porter
F. L., ... Francis Long
H. H. N., . . . Dr. Newcomb

N. M. M. was an abbreviation used to denote that the incoming observer had been asked previously to his first observation if he had divested himself of all magnetic materials. It appears at every change of observers in the original record, but is left out of the published notes for lack of space.

Observations were made at every two minutes. Sometimes one would be accidentally taken later than planned, in which case the tenths of a minute were noted.

The time of one oscillation being about 10 seconds, the observer commenced at 10 seconds of the recorded time, and noted the scale reading at the end of the oscillation then occurring, whether left or right; then the opposite extreme reading of the following oscillation. The recorded time is, therefore, within 5 seconds of the time corresponding to the mean reading.

During magnetic disturbances the ten-second oscillation sometimes disappeared and the scale appeared motionless for ten seconds or more. This is indicated in the original by the remark "Quiescent," but in the published record it is shown by identical readings, scale right and left. Again during these disturbances the scale occasionally moved steadily and slowly (recorded "slowly decreasing" or "slowly increasing") for 10 or even 60 seconds, and the record then shows the division that transited at the recorded time. Where the note "slowly increasing" appears in record, the reading, as tabulated on pages 41 *et seq.*, is followed by the letter *a*, thus: 25.8*a*; where the note "slowly decreasing" appears in record, the tabulated reading is followed by the letter *b*, thus: 25.8*b*. As the observer had to glance at the watch in this case, the observation may be in error 5 seconds of time.

Axis Observations

Observations for axis were made immediately before and after the declination observation for the day, unless the disturbances were too great. Magnet No. 4, used in declination readings, is cylindrical, requiring some two minutes to place the scale truly horizontal. It was considered advisable to make these axis observations as rapidly as possible, owing to the fact that the changes in declination do not, in general, vary uniformly with the time, even over the short interval (sixteen minutes) usually consumed in making axis observations (United States Coast and Geodetic Survey method). Accordingly in the three positions of the scale *E*, *I*, *E*, or *I*, *E*, *I*, the ends of consecutive oscillations were read as soon as the magnet was made nearly stationary instead of waiting for consecutive two-minute periods. Even then some very discordant results were obtained, and these have been arbitrarily rejected, and the mean of the remaining results for the week ending Sunday 8 A. M. are the values used in the final reductions. The values adopted at Teplitz Bay are shown in the following tabulation:

Week ending at 8 A. M. Sunday	Number of determinations	Axis	Week ending at 8 A. M. Sunday	Number of determinations	Axis
1903		*d*	1904		*d*
October 4	6	53.12	February 21	4	53.36
October 11	7	52.88	February 28	6	53.74
October 18	6	53.15	March 6	5	53.41
October 25	5	53.52	March 13	8	52.90
November 1	8	52.97	March 20	8	53.35
November 8	8	53.25	March 27	5	53.42
November 15	3	52.62	April 3	5	53.29
November 22	6	53.36	April 10	5	53.28
November 29	9	53.69	April 17	5	53.07
December 6	7	53.39	April 24	8	53.20
December 13	4	53.40	May 1	7	53.38
December 20	8	53.37	May 8	10	53.27
December 27	5	53.43	May 15	11	53.65
1904			May 22	9	53.69
January 3	5	53.32	May 29	11	53.71
January 10	7	53.82	June 5	11	53.50
January 17	8	53.47	June 12	10	53.45
January 24	6	53.77	June 19	9	53.44
January 31	8	53.64	June 26	9	53.45
February 7	5	53.47	July 1	4	53.81
February 14	4	53.69			

Torsion

Two fibers were used until Thursday, October 1, 1903, when they were found broken. After this four fibers were used. New fibers were inserted March 27, 28, and 29, 1904, the last serving through the remainder of the observations. Several attempts to use two fibers alone failed, they being only sufficiently strong to suspend the torsion weight for but part of a day.

Observations for torsion were made before and after regular declination readings, excepting when the disturbances interfered. After the day's work the torsion weight was substituted for the magnet, the plane of detorsion was determined and the torsion weight was left suspended until the next observations. When torsion had accumulated during observations and made necessary a shift of torsion head, the effect of 90° of torsion is noted in the footnotes to tabulations.

Records

The chronological program arranged by Dr. L. A. Bauer could not be adhered to as closely as might have been desired during the fall and winter, owing to prevailing strong winds, when snow drifted to such an extent as to make travel to and from the observatory both difficult and dangerous. Under these conditions two men holding on to a leading line would struggle backwards to the observatory and dig out the entrance. This was filled again in a few moments, imprisoning the observer until again liberated by outside aid.

In order to economize space, the original notes have been tabulated as far as possible, with the corresponding results. On pages 20 to 26 will be found the readings of the azimuth mark under the headings *Azimuth Mark No. 2* and *Azimuth Mark No. 1*. In the column headed *Pointing* will be found the letters *B*, *A*, which indicate respectively that the reading of the azimuth mark has been taken before or after the declination observations of the day. Where both letters appear the mean is published; when none is given the azimuth marks were invisible on account of drifting snow or dense fog.

The readings corresponding to the position of the telescope when pointed on the magnet are given under the heading *Circle reading of magnet.* They are the mean of the readings taken before, after, and sometimes during the period of declination observations. When the telescope with the circle has been shifted during declination observation the values are omitted in this table, and will be found on pages 26 to 31, with corresponding time. This last mentioned table therefore shows when disturbances, so great as to require a shifting of the horizontal circle, have occurred. The times of observation first following these shiftings of horizontal circle in any day's work are also indicated in tabular summary of two-minute declinations by asterisks (*).

The circle reading of the true south is given for each day on which declination observations have been made. Where there is no corresponding reading on an azimuth mark it has been found by interpolating according to the dates and without considering the temperature effect.

In the temperature columns will be found the maximum and the minimum thermometer readings for the day, converted to Centigrade scale from the regular meteorologic record.

The reductions of the individual two-minute readings for declination are tabulated on pages 41 *et seq.* To make this tabulation quite clear the following specimen computation for November 1, 1903, is given:

The scale readings for 5h 00m are (see page 71) left $59^d.8$, right $65^d.3$, the mean of which is $62^d.5$.

The axis for week ending November 1, 1903 (see page 18), is $53^d.0$, whence the difference, scale minus axis (S—A), $9^d.5$, which converted into arc (see constants, page 8) is + 14′.9.

The circle reading is found on page 27, under "Circle reading of magnet," for corresponding time 67° 07′.3, whence magnetic south meridian reads 67° 22′.2.

The true south meridian for the corresponding day and time is (see page 21) 42° 09′.4.

Therefore the east declination, uncorrected for any change in the plane of detorsion, is 25° 12′.8.

But the plane of detorsion has shifted 29° in the direction of increasing azimuths in 9h 49m (see bottom page 71) and the effect of 90° of torsion as observed is 24′.5 (see bottom page 71), which gives by interpolation according to time a correction of —4′.4, whence the final value of last magnetic declination as observed at 5h 00m on November 1, 1903, is 25° 08′.4.

Note that in the tabulation of reductions of declination observations the results are entered to the nearest minute; in those cases where the figure in the tenths of a minute is 5 the rule is followed to take the nearest even minute as the result to be tabulated.

Tabulations of Records

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1903	° ′	° ′	° ′	° ′	°	°
B A	Sept. 28	. . .	166 25.5	65 05.0	42 17.4	— 2.1	— 7.9
B A	29	. . .	166 25.2	64 52.3	42 17.2	— 5.6	— 9.6
. .	30	. . .	. . .	. . .	42 17.1	— 6.7	— 14.6
. .	Oct. 1	. . .	. . .	63 55.5	42 17.0	— 5.4	— 10.6
B .	2	. . .	166 25.0	64 30.1	42 16.9	— 5.2	— 9.0
. .	3	. . .	. . .	. . .	42 17.3	— 7.0	— 15.2
A .	4	. . .	166 25.8	. . .	42 17.7	— 9.0	— 16.2
A .	5	. . .	166 26.5	64 31.5	42 18.4	— 10.0	— 17.4
B .	6	. . .	166 26.5	65 10.0	42 18.4	— 8.2	— 12.6
. .	7	. . .	. . .	. . .	42 19.0	— 8 1	— 20.7
B .	8	. . .	166 27.7	. . .	42 19.6	— 20.7	— 27.3
B .	9	. . .	166 29.4	64 51.7	42 21.3	— 20.0	— 26 8
. .	10	. . .	. . .	. . .	42 20.4	— 16.0	— 20.2
. .	11	. . .	. . .	. . .	42 19.5	— 15.7	— 21.8
A .	12	166 21.5	166 26.7	65 05.0	42 18.8	— 15.1	— 18.5
B .	13	166 20.9	. . .	. . .	42 18.4	— 10.6	— 15.1
. .	14	. . .	. . .	. . .	42 17.5	— 9.0	— 15.7
A .	15	166 19.2	. . .	64 47.0	42 16.7	— 8.3	— 15.7
. .	16	. . .	. . .	. . .	42 14.7	— 15.5	— 20.7
. .	17	. . .	. . .	. . .	42 12.8	— 12.6	— 18.0
B .	18	166 13.3	. . .	. . .	42 10.8	— 15.1	— 24.5
A .	19	166 14.3	. . .	64 35.7	42 11.8	— 22.9	— 27.9
A .	20	166 13.9	. . .	64 41.7	42 11.4	— 18.2	— 22.9
B .	21	166 14.0	. . .	64 40.0	42 11.5	— 16.2	— 23.8
. .	22	. . .	. . .	66 16.8	42 11.0	— 13.7	— 19.0

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Continued

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1903	° ′	° ′	° ′	° ′	°	°
. .	Oct. 23	. . .	. . .	. . .	42 10.5	— 12.3	— 16.0
. .	24	. . .	. . .	. . .	42 10.0	— 11.8	— 15.5
B A	25	166 12.0	. . .	64 43.1	42 09.5	— 10.6	— 15.7
A .	26	166 11.6	. . .	. . .	42 09.1	— 7.0	— 11.4
A .	27	166 11.5	. . .	64 31.3	42 09.0	— 9.0	— 15.1
. .	28	. . .	. . .	65 02.1	42 09.2	— 8.4	— 12.0
A .	29	166 11.8	. . .	64 31.8	42 09.3	— 9.0	— 14.3
B A	30	166 12.0	. . .	64 35.7	42 09.5	— 14.3	— 18.0
	31	. . .	. . .	. . .	. . .	— 13.5	— 19.6
B A	Nov. 1	166 11.9	. . .	. . .	42 09.4	— 17.7	— 27.9
A .	2	166 14.0	. . .	. . .	42 11.5	— 25.6	— 29.0
B A	3	166 16.8	. . .	64 56.5	42 14.3	— 27.8	— 33.4
B A	4	166 17.1	. . .	. . .	42 14.6	— 27.3	— 33.2
B A	5	166 17.7	. . .	64 53.4	42 15.2	— 26.4	— 32.9
A .	6	166 17.5	. . .	. . .	42 15.0	— 24.0	— 29.9
. .	7	. . .	. . .	. . .	. . .	— 28.0	— 32.3
B A	8	166 18.5	. . .	. . .	42 16.0	— 31.7	— 36.0
B A	9	166 20.8	. . .	65 09.0	42 18.3	— 35.0	— 41.1
B A	10	166 22.6	. . .	64 42.7	42 20.1	— 35.0	— 43.5
B A	11	166 21.2	. . .	. . .	42 18.7	— 38.8	— 43.9
B A	12	166 21.2	. . .	. . .	42 18.7	— 29.0	— 39.7
. .	13	. . .	. . .	. . .	42 17.6	— 12.9	— 37.7
. .	14	. . .	. . .	. . .	42 16.4	— 2.5	— 28.4
B .	15	166 17.8	. . .	. . .	42 15.3	— 23.9	— 31.7
A .	16	166 20.2	. . .	64 34.5	42 17.7	— 27.5	— 34.6
B A	17	166 19.9	. . .	. . .	42 17.4	— 22.9	— 30.4
B A	18	166 18.8	. . .	. . .	42 16.4	— 29.6	— 36.8
B A	19	166 20.5	. . .	. . .	42 18.0	— 29.6	— 33.3
. .	20	166 19.2	. . .	. . .	42 16.7	— 20.2	— 31.7
B .	21	166 18.0	. . .	. . .	42 15.5	— 3.7	— 22.2
B .	22	166 16.3	. . .	. . .	42 13.8	— 4.4	— 26.8
B .	23	166 17.2	. . .	65 10.4	42 14.7	— 6.7	— 26.8
B .	24	166 16.3	. . .	64 21.3	42 13.8	— 6.7	— 12.4
. .	25	. . .	. . .	. . .	42 13.6	— 12.4	— 18.0
. .	26	. . .	. . .	64 45.5	42 13.4	— 12.3	— 19.3
. .	27	. . .	. . .	. . .	42 13.2	— 11.3	— 18.0
. .	28	. . .	. . .	. . .	42 13.0	— 7.9	— 17.0
. .	29	. . .	. . .	. . .	42 12.8	— 11.8	— 14.8
B A	30	166 15.1	. . .	64 52.3	42 12.6	— 12.9	— 16.8
. .	Dec. 1	166 15 2	. . .	64 44.5	42 12.7	— 16.3	— 21.4
B A	2	166 15.1	. . .	. . .	42 12.6	— 21.2	— 25.1
B A	3	166 15 1	. . .	65 13.7	42 12.6	— 16.8	— 26.8
B A	4	166 15.2	. . .	. . .	42 12.7	— 15.3	— 18.0
. .	5	. . .	. . .	. . .	. . .	— 21.2	— 26.3
B A	6	166 16.3	. . .	. . .	42 13.8	— 22.1	— 37.7
A .	7	166 19.8	. . .	64 56.3	42 17.3	— 30.0	— 37.2

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Continued

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1903	° ′	° ′	° ′	° ′	°	°
A .	Dec. 8	166 19.3	. . .	64 47.7	42 16.8	— 26.0	— 31.0
B .	9	166 19.9	. . .	. . .	42 17.4	— 26.0	— 29.5
. .	10	. . .	. . .	64 51.7	42 16.8	— 23.0	— 29.0
. .	11	. . .	. . .	64 50.7	42 16.2	— 19.8	— 23.0
. .	12	. . .	. . .	. . .	42 15.6	— 20.0	— 23.0
A .	13	166 17.5	. . .	. . .	42 15.0	— 20.0	— 26.0
. .	14	. . .	. . .	65 14.3	42 15.8	— 22.5	— 30.5
. .	15	. . .	. . .	65 28.7	42 16.6	— 27.9	— 31.9
. .	16	. . .	. . .	. . .	42 17.5	— 26.9	— 31.9
B A	17	166 20.8	. . .	64 56.4	42 18.3	— 21.4	— 29.5
B A	18	166 20.9	. . .	64 53.5	42 18.4	— 20.6	— 28.1
. .	19	. . .	. . .	. . .	42 19.2	— 26.5	— 33.3
. .	20	. . .	. . .	. . .	42 19.9	— 27.3	— 35.5
A .	21	166 23.2	. . .	65 05.0	42 20.7	— 28.4	— 32.8
. .	22	. . .	. . .	64 45.0	42 19.8	— 27.9	— 31.8
B A	23	166 21.4	. . .	65 11.1	42 18.9	— 26.7	— 30.0
B A	24	166 23.4	. . .	64 50.7	42 20.9	— 28.1	— 34.4
. .	25	. . .	. . .	. . .	. . .	— 25.5	— 33.9
. .	26	. . .	. . .	. . .	. . .	— 26.2	— 32.0
. .	27	. . .	. . .	. . .	. . .	— 24.5	— 30.1
. .	28	. . .	. . .	. . .	. . .	— 26.8	— 29.5
B A	29	166 23.9	. . .	65 14.9	42 21.4	— 24.0	— 29.0
B A	30	166 22.1	. . .	. . .	42 19.6	— 25.6	— 29.8
A .	31	166 20.8	. . .	. . .	42 18.3	— 20.0	— 25.7
	1904						
A B	Jan. 1	166 20.7	. . .	. . .	42 18.2	— 12.5	— 27.9
. .	2	. . .	. . .	. . .	. . .	— 21.4	— 35.0
B A	3	166 21.5	. . .	. . .	42 19.0	— 25.8	— 36.4
B A	4	166 22.2	. . .	65 20.9	42 19.7	— 26.4	— 35.5
B A	5	166 23.4	. . .	64 38.1	42 20.9	— 28.3	— 38.8
B A	6	166 22.0	. . .	. . .	42 19.5	— 22.3	— 30.4
B A	7	166 21.0	. . .	65 01.9	42 18.5	— 15.7	— 32.9
A .	8	166 22.3	. . .	65 04.7	42 19.8	— 27.1	— 32.8
. .	9	. . .	. . .	. . .	. . .	— 26.0	— 31.1
B A	10	166 22.1	. . .	. . .	42 19.6	— 30.0	— 35.0
B .	11	166 23.5	. . .	. . .	42 21.0	— 33.3	— 43.3
B A	12	166 27.7	. . .	64 54.6	42 25.2	— 42.8	— 46.1
B A	13	166 27.5	. . .	. . .	42 25.0	— 44.4	— 46.7
B A	14	166 26.7	. . .	65 23.2	42 24.2	— 40.0	— 45.6
B A	15	166 26.1	. . .	64 45.0	42 23.6	— 30.8	— 41.2
. .	16	. . .	. . .	. . .	. . .	— 11.1	— 31.1
B A	17	166 23.2	. . .	. . .	42 20.7	— 11.1	— 18.5
A .	18	166 21.0	. . .	64 59.7	42 18.5	— 10.1	— 18.0
B A	19	166 18.9	. . .	65 02.0	42 16.4	— 10.0	— 13.6
A .	20	166 16.1	. . .	65 13.1	42 13.6	— 5.6	— 13.0
B A	21	166 16.2	. . .	64 34.2	42 13.7	— 0.6	— 21.2
. .	22	. . .	. . .	. . .	. . .	— 3.3	— 23.4
B .	23	166 19.6	. . .	. . .	42 17.1	— 20.7	— 26.2

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Continued

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1904	° ′	° ′	° ′	° ′	°	°
A .	Jan. 24	166 17.2	. . .	. . .	42 14.7	— 13.4	— 27.9
A .	25	166 18.8	. . .	64 55.3	42 16.3	— 16.2	— 21.8
A .	26	166 18.7	. . .	65 56.4	42 16.2	— 21.8	— 28.4
B A	27	166 18.9	. . .	64 51.1	42 16.4	— 26.4	— 31.7
B A	28	166 20.7	. . .	64 50.9	42 18.2	— 30.0	— 33.6
. .	29	. . .	. . .	64 58.9	42 19.1	— 29.0	— 32.7
. .	30	. . .	. . .	. . .	42 19.9	— 29.7	— 32.6
B .	31	166 23.2	. . .	. . .	42 20 7	— 29.6	— 34.5
A .	Feb. 1	166 24.7	. . .	65 24.1	42 22.2	— 31.7	— 35.0
B .	2	166 23.3	. . .	64 58.1	42 20.8	— 29 0	— 33.0
B A	3	166 22.9	. . .	. . .	42 20.4	— 24.5	— 31.7
A .	4	166 23.8	. . .	64 59.1	42 21.3	— 26.1	— 29.5
A .	5	166 23.0	. . .	. . .	42 20.5	— 24.1	— 29.0
. .	6	. . .	. . .	. . .	. . .	— 23.4	— 27.3
B A	7	166 23.1	. . .	. . .	42 20.6	— 25.6	— 29.5
B A	8	166 24.7	. . .	. . .	42 22.2	— 20.1	— 31.1
B A	9	166 24.2	. . .	65 03.1	42 21.7	— 20.1	— 27.8
B A	10	166 22.2	. . .	. . .	42 19.7	— 23.4	— 27.3
A .	11	166 23.5	. . .	. . .	42 21.0	— 22.9	— 38.2
. .	12	. . .	. . .	64 43.2	42 20.8	— 38.3	— 42.0
. .	13	. . .	. . .	. . .	42 20.6	— 24.0	— 41.7
A .	14	166 22.9	. . .	65 29.8	42 20.4	— 15.7	— 31.1
A .	15	166 25.0	. . .	. . .	42 22.5	— 31.1	— 41.7
B A	16	166 27.7	. . .	64 42.5	42 25.2	— 36.0	— 42.3
B .	17	166 26.7	. . .	. . .	42 24.2	— 20.9	— 40.0
B A	18	166 24.6	. . .	64 36.6	42 22.1	— 15.7	— 38.2
B .	19	166 27.7	. . .	65 24.1	42 25.2	— 31.6	— 42.6
. .	20	. . .	. . .	. . .	. . .	— 20.1	— 31.7
B A	21	166 25.2	. . .	. . .	42 22.7	— 18.5	— 27.6
. .	22	. . .	. . .	64 56.8	42 21.8	— 9.8	— 21.4
B A	23	166 23.4	166 29.3	64 58.4	42 20.1	— 8.8	— 33.0
B .	24	166 25.0	. . .	. . .	42 22.5	— 5.0	— 35.2
B A	25	166 22.4	. . .	64 58.3	42 19.9	— 15.1	— 27.5
B .	26	166 23.7	166 29.4	64 37.0	42 21.3	— 3.6	— 27.3
. .	27	. . .	. . .	. . .	. . .	— 4.4	— 31.7
B A	28	166 21.4	. . .	65 01.6	42 18.9	— 19.6	— 26.8
. .	29	. . .	. . .	65 02.8	42 17.3	— 1.0	— 13.3
B A	M'ch 1	166 18.2	166 23.8	64 57.6	42 14.8	— 5.0	— 22.9
B A	2	166 17.0	. . .	. . .	42 14.5	— 12.3	— 33.8
. .	3	. . .	. . .	64 20.3	42 16.5	— 22.7	— 38.4
A .	4	166 21.0	. . .	. . .	42 18.5	— 8.4	— 31.1
. .	5	. . .	. . .	. . .	. . .	— 23.6	— 37.6
. .	6	. . .	. . .	. . .	. . .	— 17.1	— 24.3
. .	7	. . .	. . .	. . .	. . .	— 17.2	— 27.2
A B	8	166 23.3	. . .	64 58.3	42 20.8	— 27.2	— 30.8
B .	9	166 23.7	. . .	65 01.4	42 21.2	— 27.8	— 30.5
B A	10	166 23.6	. . .	65 04.9	42 21.1	— 30.5	— 34.2

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Continued

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1904	° ′	° ′	° ′	° ′	°	°
B A	M'ch 11	166 24.4	. . .	64 49.2	42 21.9	— 25.0	— 27.9
. .	12	. . .	. . .	. . .	. . .	— 26.2	— 42.8
B A	13	166 26.1	. . .	65 05.1	42 23.6	— 40.6	— 43.8
A .	14	166 22.3	. . .	65 41.1	42 19.8	— 36.0	— 42.2
B A	15	166 28.6	. . .	64 42.4	42 26.1	— 38.6	— 44.4
B A	16	166 27.4	. . .	. . .	42 24.9	— 40.7	— 46.3
A .	17	166 27.2	. . .	65 00.3	42 24.7	— 37.5	— 43.8
A .	18	166 28.2	. . .	65 04.8	42 25.7	— 33.8	— 45.6
. .	19	. . .	. . .	. . .	. . .	— 19.0	— 33.9
B A	20	166 24.8	. . .	. . .	42 22.3	— 22.3	— 37.7
. .	21	. . .	. . .	64 49 9	42 21.8	— 13.3	— 22.9
. .	22	. . .	. . .	65 27.7	42 21.4	— 12.9	— 25.2
A .	23	166 23.5	. . .	64 52.2	42 21.0	— 25.2	— 31.7
A .	24	166 25.2	. . .	65 06.8	42 22.7	— 31.7	— 38.3
B .	25	166 27.0	. . .	64 25.7	42 24.5	— 29.0	— 39.4
. .	26	. . .	. . .	. . .	. . .	— 29.0	— 34.4
A .	27	166 27.7	. . .	. . .	42 25.2	— 21.2	— 34.9
B .	28	166 24.8	. . .	65 00.4	42 22.3	— 4.0	— 21.2
B A	29	166 20.8	. . .	64 42.2	42 18.3	— 3.3	— 12.4
B A	30	166 20.2	. . .	. . .	42 17.7	— 12.4	— 30.9
B A	31	166 21.6	. . .	64 36.3	42 19.1	— 15.1	— 31.7
B .	April 1	166 21.0	. . .	. . .	42 18.5	— 4.0	— 15.1
. .	2	. . .	. . .	. . .	. . .	— 3.4	— 5.6
A .	3	166 20.0	. . .	. . .	42 17.5	— 3.3	— 6.2
A .	4	166 19.3	. . .	. . .	42 16.8	— 5.6	— 19.6
B A	5	166 19.3	. . .	64 57.4	42 16.8	— 3.4	— 27.9
B A	6	166 18.9	. . .	. . .	42 16.4	— 22.9	— 33.3
B A	7	166 19.2	. . .	. . .	42 16.7	— 23.4	— 31.4
B A	8	166 21.0	. . .	. . .	42 18.5	— 25.3	— 33.1
. .	9	. . .	. . .	. . .	. . .	— 23.4	— 32.3
A B	10	166 22.2	. . .	. . .	42 19.7	— 22.5	— 30.1
A .	11	166 22.2	. . .	. . .	42 19,7	— 21.3	— 32.3
B A	12	166 25.2	. . .	65 02.7	42 22.7	— 32.2	— 38.3
B A	13	166 25.7	. . .	. . .	42 23.2	— 27.6	— 36.5
A .	14	166 25.3	. . .	64 51.4	42 22.8	— 27.1	— 32.9
B A	15	166 26.5	. . .	65 09.3	42 24.0	— 32.8	— 37.9
. .	16	. . .	. . .	. . .	. . .	— 20.7	— 37.3
B A	17	166 25.5	. . .	. . .	42 23.0	— 17.4	— 24.5
A .	18	166 23.7	. . .	. . .	42 21.2	— 20.0	— 30.9
B A	19	166 24.2	. . .	. . .	42 21.7	— 19.1	— 36.1
. .	20	. . .	. . .	64 39.1	42 20.5	— 15.7	— 19.6
A .	21	166 21.8	166 27.7	64 43.7	42 19.4	— 13.4	— 18.9
B A	22	166 21.5	166 27.3	64 39.6	42 18.1	— 16.2	— 22.6
. .	23	. . .	. . .	. . .	. . .	— 16.8	— 24.0
A .	24	166 21.1	166 27.1	65 00.3	42 18.8	— 15.7	— 21.3
A .	25	166 21.4	166 27.1	65 08.7	42 19.0	— 19.6	— 22.2
B A	26	166 21.2	. . .	64 54.0	42 18.7	— 21.6	— 28.1
B A	27	166 21.6	. . .	. . .	42 19.1	— 22.9	— 29.5

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Continued

Pointing	Date	Azimuth mark No. 2, cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature	
						Max.	Min.
	1904	° ′	° ′	° ′	° ′	°	°
A .	April 28	. . .	166 27.9	64 44.9	42 19.6	— 23.2	— 30.3
B A	29	166 22.0	166 27.2	64 34.8	42 18.1	— 24.4	— 29.9
. .	30	. . .	. . .	. . .	. . .	— 24.7	— 27.3
B A	May 1	166 21.3	. . .	. . .	42 18.8	. .	. .
A .	2	166 21.5	166 27.4	. . .	42 19.1	. .	. .
B A	3	166 21.9	. . .	64 34.8	42 19.4	. .	. .
B A	4	166 20.4	. . .	. . .	42 17.9	. .	. .
B A	5	166 19.1	166 24.4	65 02.8	42 15.6	. .	. .
B A	6	166 19.4	166 24.6	. . .	42 15.8	. .	. .
B A	8	166 18.8	166 24.0	. . .	42 15.2	. .	. .
B A	9	166 18.6	. . .	65 09.2	42 16.1	. .	. .
B A	10	166 17.1	. . .	64 51.1	42 14.6	. .	. .
B A	11	166 16.7	. . .	. . .	42 14.2	. .	. .
B A	12	166 15.2	166 20.7	. . .	42 11.7	. .	. .
B A	13	166 15.0	166 20.5	. . .	42 11.5	. .	. .
B A	15	166 15.1	166 20.7	. . .	42 11.7	. .	. .
. .	16	. . .	. . .	65 12.1	42 13.0	. .	. .
A .	17	166 16.0	. . .	65 11.2	42 13.5	. .	. .
A .	18	166 16.0	. . .	. . .	42 13.5	. .	. .
B A	19	166 15.3	166 20.2	64 26.2	42 12.4	. .	. .
B A	20	166 15.2	166 20.5	. . .	42 11.7	. .	. .
. .	21	. . .	. . .	. . .	. . .	— 7.3	— 10.5
B A	22	166 15.3	166 20.3	. . .	42 12.5	— 7.3	— 17 6
A .	23	. . .	166 21.2	65 04.3	42 13.0	— 5.3	— 12.1
A .	24	. . .	166 21.5	. . .	42 13.1	— 6.0	— 12.3
A .	25	166 15.2	. . .	65 01.0	42 12.7	— 6.7	— 11.8
B A	26	166 14.2	166 20.1	64 07.1	42 10.9	— 6.5	— 9.6
B A	27	166 14.3	166 19.3	64 51.0	42 10.7	+ 2.0	— 6.7
. .	28	. . .	. . .	. . .	. . .	+ 1.7	— 0.8
B A	29	166 13.0	166 17.7	. . .	42 09.3	+ 1.1	— 4.5
B A	30	166 13.0	. . .	65 07.8	42 10.5	— 3.9	— 9.6
B A	31	166 12.6	. . .	64 48.7	42 10.1	— 4.1	— 9.7
B A	June 1	166 12.5	166 18.2	. . .	42 09.1	— 5.2	— 8.4
B A	2	166 11.5	. . .	64 26.6	42 09.0	— 0.5	— 8.0
B A	3	166 11.3	166 16.8	64 01.7	42 07.8	— 0.5	— 6.0
. .	4	. . .	. . .	. . .	. . .	— 2.7	— 6.0
B A	5	166 11.5	166 16.5	. . .	42 07.9	+ 0.7	— 6.1
B A	6	166 11.5	. . .	. . .	42 09.0	+ 0.6	— 2.8
A .	7	166 11.2	. . .	. . .	42 08.7	— 0.5	— 3.9
B A	8	166 11.4	166 16.8	. . .	42 07.9	+ 0.6	— 2.2
B A	9	166 09.9	166 16.3	64 14.2	42 07.8	+ 0.6	— 5.3
B A	10	166 10.3	166 16.1	64 42.8	42 06.9	+ 2.4	— 0.5
. .	11	. . .	. . .	. . .	. . .	+ 1.6	— 0.5
B A	12	166 10.0	166 15.5	. . .	42 06.5	+ 4.4	— 0.0
A .	13	166 10.6	166 15.8	65 09.2	42 07.9	+ 2.8	— 0.7
. .	14	. . .	. . .	64 42.6	42 07.8	+ 1.0	— 0.5

Circle readings of azimuth marks, magnet, and true south at Teplitz Bay—Concluded

Pointing	Date	Azimuth mark No. 2 cross	Azimuth mark No. 1, anemometer staff	Circle reading of magnet	Circle reading true south	Cent. temperature Max.	Cent. temperature Min.
	1904	° ′	° ′	° ′	° ′	°	°
A .	June 15	166 10.0	. . .	. . .	42 07.5	+ 1.0	— 1.1
B A	16	166 09.7	. . .	. . .	42 07.2	— 0.5	— 2.9
B A	17	166 09.6	166 15.6	64 14.5	42 06.3	— 2.5	— 5.8
. .	18	. . .	. . .	. . .	. . .	+ 0.4	— 3.6
B A	19	166 09.6	. . .	. . .	42 07.1	+ 3.0	— 0.8
B A	20	166 10.1	. . .	65 13.2	42 07.6	+ 6.3	+ 1.1
B A	21	166 10.9	. . .	. . .	42 08.4	+ 4.2	— 1.7
B A	22	166 10.1	. . .	. . .	42 07.6	+ 8.5	— 1.1
A .	23	166 10.7	. . .	63 32.8	42 08.2	+ 3.2	— 2.0
B A	24	166 11.2	. . .	64 42.1	42 08.7	+ 3.9	— 0.2
. .	25	. . .	. . .	. . .	. . .	+ 3.3	— 1.7
B A	26	166 11.0	. . .	. . .	42 08.5	+ 1.7	— 1.1
A .	27	166 12.2	. . .	. . .	42 09.7	+ 4.0	— 1.2
B A	28	166 14.3	. . .	64 51.2	42 11.8	+ 1.1	— 1.3
A .	29	166 15.2	. . .	. . .	42 12.7	+ 4.8	— 1.1
B A	30	166 16.0	. . .	64 36.1	42 13.5	+ 4.9	— 0.5
B A	July 1	166 14.9	. . .	. . .	42 12.4	+ 1.7	— 0.4

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay

Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet
1903	h m	° ′	1903	h m	° ′	1903	h m	° ′
Sept. 30	0 00	64 40.6	Oct. 4	7 28	65 19.7	Oct. 8	17 52	65 22.0
	0 48	65 10.0	7	0 00	64 33.7		17 54	64 12.5
	10 58	65 36.0		6 22	64 10.7		18 04	65 32.0
	11 10	64 55.0		6 58	65 07.5		18 08	64 43.0
	20 28	66 11.3		7 54	64 14.5		18 20	65 36.2
	20 34	67 04.2		8 08	64 59.0	13	12 00	64 29.4
	20 36	65 52.2		9 42	63 52.5		13 32	65 32.0
	20 42	64 55.3		9 54	64 17.3		13 48	65 00.5
	21 06	66 10.0		10 44	63 24.5		14 00	64 17.5
	21 10	65 02.3		10 52	63 54.5	14	0 00	65 30.7
	21 28	65 52.2		10 54	64 16.0		0 04	65 58.7
	21 38	66 52.0		22 36	66 07.0		0 10	65 35.0
	21 42	65 06.7		22 44	66 38.0		1 04	64 43.3
	21 48	66 29.0		22 46	65 36.5		1 26	65 29.7
	21 52	65 20.1		23 00	66 12.7		2 08	66 19.8
Oct. 4	0 00	64 52.7		23 06	65 30.5		2 44	67 21.0
	4 48	65 29.7		23 12	65 11.2		2 46	67 57.3
	6 51	66 05.8	8	16 02	64 46.5		2 50	66 39.0

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay—Continued.

Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet
1903	h m	° ′	1903	h m	° ′	1903	h m	° ′
Oct. 14	2 56	68 01.0	Nov. 1	1 02	66 46.8	Nov. 1	4 26	71 32.6
	3 04	66 06.0		1 04	68 04.6		4 28	71 33.3
	3 12	67 19.3		1 08	67 11.8		4 30	68 34.9
	3 18	66 31.3		1 14	66 19.7		4 32	66 16.6
	3 20	68 00.0		1 28	64 57.0		4 34	66 15.3
	3 26	66 53.3		1 30	65 17.5		4 36	66 21.8
	3 30	67 54.7		1 32	66 13.5		4 38	67 14.3
	3 36	68 49.7		1 36	64 50.7		4 40	66 45.3
	3 38	67 58.0		1 42	65 07.2		4 42	67 04.3
	3 44	66 53.3		2 10	64 07.3		4 50	66 35.0
	3 52	65 51.3		2 14	65 27.2		4 52	66 35.0
	4 16	64 35.7		2 16	66 31.4		4 56	67 07.3
	4 18	67 39.0		2 20	67 56.5		5 04	68 50.2
	4 26	66 59.6		2 22	68 32.5		5 06	71 14.2
	4 28	67 30.5		2 24	66 44.5		5 10	66 14.9
	4 42	66 12.5		2 26	67 12.5		5 14	68 20.3
	8 58	65 26.8		2 28	68 28.3		5 16	67 42.8
	18 46	64 38.3		2 30	67 10.0		5 18	68 17.6
	18 58	65 12.0		2 32	65 45.3		5 22	67 26.9
	20 08	64 12.3		2 42	66 15.5		5 24	65 40.5
	20 16	65 05.3		2 44	65 35.2		5 26	66 35.7
	20 26	64 04.3		3 02	66 22.7		5 28	68 09.9
	20 36	65 27.2		3 06	67 14.0		5 31	65 35.6
	20 38	65 02.3		3 14	69 05.6		5 34	64 54.9
	20 52	66 00.2		3 18	70 22.6		5 36	65 01.3
	20 56	67 39.2		3 20	68 46.5		5 38	66 00.5
	21 02	65 36.0		3 22	65 39.8		5 44	65 04.9
	23 30	65 55.3		3 22	65 18.5		5 46	62 20.9
	23 34	65 05.7		3 30	65 00.5		5 49	68 14.7
	23 48	65 53.7		3 32	65 31.7		5 51	64 40.0
16	20 00	64 49.2		3 34	65 21.2		5 54	67 10.5
	20 10	65 36.8		3 38	67 54.1		5 56	69 54.2
	20 24	64 22.7		3 40	72 50.8		5 58	69 02.9
	21 04	64 10.0		3 44	73 38.7		6 00	66 55.2
	21 06	65 59.3		3 46	72 01.6		6 02	67 34.9
	21 08	66 55.3		3 50	72 35.7		6 04	69 14.3
	21 10	66 09.5		3 52	74 53.0		6 06	67 50.9
	21 16	64 53.3		3 54	72 06.8		6 08	66 31.5
	23 58	64 57.7		3 56	70 21.5		6 10	68 01.5
18	0 00	64 24.1		3 58	79 19.5		6 14	68 42.6
	4 08	65 15.2		4 06	68 55.8		6 16	66 25.9
26	7 59	66 01.1		4 08	66 53.2		6 18	64 46.5
	9 56	64 51.9		4 10	66 57.7		6 20	66 32.5
Nov. 1	0 00	66 40.7		4 12	66 52.7		6 24	68 10.9
	0 06	67 23.5		4 14	69 30.8		6 32	68 55.3
	0 12	66 39.5		4 16	71 08.3		6 34	67 35.8
	0 14	65 30.5		4 18	70 32.1		6 36	67 36.1
	0 36	66 14.8		4 20	66 36.0		6 38	67 19.5
	0 38	67 19.7		4 22	66 35.4		7 16	68 15.3
	0 46	66 06.5		4 24	69 34.3		7 24	67 09.4

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay—Continued

Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet
1903	h m	° ′	1903	h m	° ′	1903	h m	° ′
Nov. 2	8 00	64 25.0	Nov. 11	18 14	65 57.2	Nov. 25	17 22	66 00.7
	8 06	64 59.5		18 20	66 12.5		17 42	65 15.7
4	0 00	65 29.5		18 52	65 23.0	27	20 00	65 06.7
	0 02	64 40.3		21 08	65 38.3		23 14	66 15.7
	13 02	63 48.7		21 12	64 36.3		23 16	65 54.7
	16 26	65 50.0		22 46	65 28.0		23 38	65 39.5
	16 46	67 02.7		22 50	67 08.3	29	0 00	64 37.5
	16 50	70 55.2		22 51	65 42.2		4 36	65 38.8
	16 52	72 10.7		22 58	64 51.3	Dec. 2	0 00	64 18.2
	16 54	70 11.7	12	15 58	65 24.7		3 14	65 11.9
	17 00	69 00.2		16 28	64 33.2		5 46	66 18.9
	17 02	68 04.5		16 52	65 42.3		6 26	65 38.7
	17 08	67 02.5		16 56	67 00.7		12 00	64 58.2
	17 10	65 42.2		17 00	65 27.8	4	20 00	64 17.5
	17 16	64 45.1		17 04	66 48.7		20 12	63 32.8
6	20 00	64 23.5		17 14	65 50.2		20 28	64 41.2
	20 44	65 37.3		17 28	64 47.3		20 30	66 05.8
	20 46	64 34.3		19 44	66 08.2		20 33	64 06.1
	20 56	65 33.3		19 50	64 06.0		20 37	63 34.8
	21 06	64 35.5	15	0 00	64 31.2		20 40	65 08.9
8	0 00	64 58.0		4 30	65 29.5		20 46	65 00.5
	3 54	65 14.4	17	12 00	65 29.0		20 48	65 46.6
11	0 00	65 35.1		14 38	64 39.4		20 52	65 15.5
	0 36	67 13.8	18	0 00	64 09.2		20 56	64 48.3
	0 38	65 37.7		0 38	65 05.1		21 00	65 16.2
	0 40	66 35.9		15 26	64 10.3		21 08	65 33.7
	0 48	65 14.8		23 12	64 49.6		21 16	64 31.0
	1 44	65 35.5	19	16 00	65 05.3		23 04	65 43.7
	2 42	66 06.5		19 40	65 22.0		23 08	65 11.7
	2 54	66 23.7		19 46	65 29.8		23 16	64 06.2
	3 00	67 06.7		19 56	64 36.9		23 26	64 40.0
	3 10	67 42.5	20	20 00	64 54.0		23 36	66 23.7
	3 16	66 41.5		23 34	65 17.5		23 38	65 45.1
	3 20	67 38.0		23 42	65 07.0		23 46	65 35.7
	3 44	66 16.9		23 46	64 44.5		23 48	65 11.2
	4 36	65 13.5		24 00	65 31.7		23 56	66 17.0
	4 50	66 17.5	22	0 00	65 12.0		23 58	66 37.0
	4 58	65 25.8		3 24	66 15.5	6	0 00	67 31.7
	6 10	65 37.5		3 30	67 10.3		0 02	66 03.8
	8 06	64 35.5		3 38	67 49.7		0 08	65 42.5
	8 12	65 08.5		3 40	68 25.5		0 12	66 55.0
	12 08	65 22.1		3 42	67 28.9		0 16	66 08.2
	17 45	69 30.7		3 44	68 48.5		4 02	64 42.1
	17 48	70 33.0		3 52	67 47.4	9	0 02	65 23.3
	17 50	68 26.0		4 00	67 20.7		20 20	65 23.7
	17 52	66 37.2		4 14	66 42.0		20 32	64 23.2
	17 56	65 50.5		4 20	66 25.8		20 36	65 05.0
	18 00	65 07.0		4 24	65 40.9		20 50	64 52.0
	18 02	66 10.2		7 26	64 34.8	13	0 00	64 56.5
	18 07	67 06.3	25	0 00	65 03.8		6 02	65 35.5

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay—Continued

Date	Chr'r time		Circle reading of magnet		Date	Chr'r time		Circle reading of magnet		Date	Chr'r time		Circle reading of magnet	
1903	h	m	°	′	1904	h	m	°	′	1904	h	m	°	′
Dec. 16	0	02	64	45.4	Jan. 1	19	52	68	06.2	Feb. 3	0	50	67	39.5
	20	58	65	22.0		19	54	64	52.8		0	52	66	11.5
	21	02	66	41.3		19	56	64	01.0		1	52	65	37.5
	21	08	65	08.7		19	59	64	28.1		19	12	66	43.3
	21	10	66	50.9		20	00	63	48.1		19	16	65	38.5
	21	13	65	46.7	3	0	00	65	03.8		21	24	67	28.3
	21	14	64	53.2		3	08	65	30.2		21	26	66	28.2
	21	16	66	25.0	6	0	00	65	18.4		21	30	65	12.2
	21	20	65	44.5		5	36	66	06.6		22	22	66	22.3
	21	26	64	50.7		6	29	65	30.4		22	40	64	53.2
	22	42	65	21.2		10	08	64	55.6	5	20	00	64	56.2
20	0	00	64	53.3		22	08	66	54.0		21	14	68	22.0
	3	06	65	57.7		22	12	66	03.1		21	16	67	24.7
	3	32	66	40.9		22	14	65	21.3		21	25	65	08.0
	3	44	65	36.4	10	0	00	64	43.8		21	28	64	36.3
	7	16	64	41.6		2	18	65	27.6		21	54	65	20.2
30	0	00	64	28.6		2	32	66	16.7		22	14	66	23.7
	7	12	62	56.5		2	58	65	20.2		22	22	67	43.0
	7	14	65	21.5		3	14	66	10.8		22	28	65	57.2
	7	18	64	23.3		3	56	67	37.5		22	32	64	27.2
	7	24	65	01.3		4	24	66	42.4		23	16	65	24.9
	7	42	66	22.9	11	8	00	65	28 2	7	0	00	65	01.6
	7	48	65	25.8		8	50	66	23.8		0	10	65	33.4
	8	34	64	27.0		9	18	65	35.1		0	16	64	56.2
	9	52	63	34 0		9	38	64	56.2		0	18	65	48.7
	10	44	64	44.8	13	0	04	64	34.0		1	02	65	13.9
	11	00	64	05.2		2	14	64	47.1		4	54	66	34.2
	12	12	65	30.5		2	46	65	28.9		5	26	65	48.0
	17	20	64	29.3		10	06	64	55.2		8	00	64	57.7
31	20	00	65	58.7		23	14	66	12.3	8	8	00	65	11.5
	21	10	66	17.8		23	30	66	06.4		11	14	64	24.5
	21	16	64	50.9		23	58	65	05.4	10	0	00	64	57.1
	21	22	66	14.7	17	0	00	65	05.8		22	18	66	20.7
	21	24	65	11.8		0	50	66	04.0		22	21	64	34.7
	21	26	65	55.0		4	00	64	59.7		22	56	65	34.7
	21	40	65	12.7	23	20	00	65	15.1		23	00	66	31.7
	23	24	66	27.8		22	12	66	07.0		23	02	64	49.0
	23	26	65	21.0		22	36	64	53.2		23	20	65	34.7
	23	46	66	19.8		22	54	65	44.1		23	32	64	30.3
	23	53	65	14.3	24	0	02	64	43.2	11	16	00	64	59.7
	23	55	65	19.2		4	06	65	26.8		19	36	66	30.7
	23	56	66	48.8	31	0	00	65	04.8		19	38	67	42.3
	23	58	66	15.3		1	12	65	55.9		19	42	66	47.2
	24	00	64	56.7		1	30	66	31.7		19	52	67	24.7
1904						1	36	66	55.7		20	00	68	29.0
Jan. 1	16	00	64	55.8		4	04	64	33.3	15	8	00	66	18.0
	18	50	66	11.2		4	08	65	31.7		9	28	65	25.0
	19	08	65	21.7		7	04	64	22.9	17	0	00	64	44.8
	19	34	64	34.3	Feb. 3	0	00	65	52.5		0	12	65	19.4
	19	48	66	39.3		0	16	66	03.5		2	32	66	02.2

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay—Continued

Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet
1904	h m	° ′	1904	h m	° ′	1904	h m	° ′
Feb. 17	4 30	66 27.7	M'ch 27	2 52	65 52.0	April 3	1 38	65 32.8
	5 06	65 15.0		4 00	65 16.2		1 40	64 47.0
	6 10	66 59.9	30	0 00	65 33.2		4 00	66 03.0
	6 14	66 49.2		21 46	65 37.5		5 46	67 37.7
	6 28	66 43.4	April 1	20 00	64 10.2		5 48	66 25.7
	6 44	65 42.2		20 12	64 33.7		6 50	65 43.7
	8 06	66 42.0		20 14	65 03.7	4	8 00	66 02.4
	8 28	65 39.2		20 17	66 12.2		8 26	65 12.2
	12 32	64 49.2		20 20	63 38.8		11 00	64 03.4
	21 04	66 12.2		20 23	64 41.7	6	0 00	64 42.6
	21 10	65 29.3		20 24	65 37.7		5 20	65 19.2
	21 12	65 23.2		20 27	62 41.4		5 54	66 11.3
	21 22	67 56.7		20 29	66 32.7		6 46	65 10.7
	21 26	66 12.2		20 32	64 54.1		12 36	64 38.4
	21 28	64 24.8		20 34	64 10.7		14 22	63 55.6
	21 30	63 29.2		20 38	65 17.4		23 04	64 47.0
	21 32	65 11.5		20 42	64 29.7		23 08	65 58.2
	21 34	66 11.2		20 46	65 35.5		23 18	64 59.8
	21 42	64 32.5		20 48	66 06.7		23 30	65 32.2
	22 04	65 12.4		20 52	64 46.7		23 32	64 52.6
	22 10	64 23.7		21 00	65 43.1	7	16 00	64 22.4
	22 12	64 50.2		21 04	64 21.0		19 00	65 01.2
	22 16	66 33.2		21 12	65 38.2		19 30	63 52.5
	22 30	65 31.1		21 18	65 08.7	8	20 00	64 45.8
21	0 00	64 48.6		21 24	64 39.1		20 56	64 17.8
	4 00	65 17.2		23 18	66 15.8	10	0 00	64 52.4
24	0 00	64 36.2		23 22	65 12.8		3 44	65 47.2
	3 56	65 26.8		23 28	66 02.7		4 00	65 29.2
	10 18	64 36.6		23 31	67 03.4		4 14	66 15.3
M'ch 2	0 00	64 49.0		23 38	66 01.9		4 32	67 09.2
	2 10	64 48.5		23 40	65 29.5		4 34	68 05.2
	20 16	66 03.6		23 44	64 21.2		4 38	66 42.3
	20 22	68 08.3		23 46	64 59.8		4 44	66 30.8
	20 24	67 03.4		23 48	65 40.4		4 56	68 25.3
	20 28	67 30.4		23 56	66 57.8		4 58	67 49.6
	20 32	65 33.6		23 58	67 33.8		5 02	66 37.6
	20 34	64 57.4	3	0 00	64 35.8		5 04	67 51.2
	20 56	65 44.7		0 10	66 15.0		5 10	67 09.4
	21 08	64 53.7		0 12	65 17.6		5 22	66 09.8
4	20 00	65 00.5		0 16	63 54.6		6 00	65 15.2
	20 02	65 27.7		0 22	64 38.2	11	8 00	66 09.3
	20 04	66 19.3		0 28	66 03.5		8 34	64 36.1
	20 08	65 22.2		0 30	65 48.8		9 34	65 21.2
	20 10	65 42.3		0 32	67 01.5	13	0 00	65 09.2
16	0 00	65 02.1		0 38	65 38.5		4 10	65 55.8
	20 34	65 35.3		0 40	67 30.1		12 26	65 06.6
20	0 00	65 58.6		0 43	64 50.2	17	0 00	64 53.4
	7 04	66 03.7		0 52	65 39.4		4 26	65 49.7
27	0 00	65 00.4		1 10	64 25.8	18	8 00	65 19.5

Circle reading of magnet for days on which the circle was shifted at Teplitz Bay—Concluded

Date	Chr'r time		Circle reading of magnet	Date	Chr'r time		Circle reading of magnet	Date	Chr'r time		Circle reading of magnet
1904	h	m	° ′	1904	h	m	° ′	1904	h	m	° ′
April 18	8	32	64 41.9	May 18	1	20	64 40.7	June 8	4	38	65 29.5
	8	56	64 09.9		2	52	65 24.4	12	0	00	64 26.8
	9	58	64 36.3		9	08	64 25.7		5	14	65 05.8
19	12	00	65 30.2		10	20	65 21.4	15	0	00	64 49.2
	15	52	64 40.7		10	32	64 19.0		17	10	64 09.2
27	0	00	65 33.3		18	56	63 21.8		18	06	63 28.8
	3	42	65 09.0		19	14	64 22.2		18	52	62 47.2
May 1	0	00	64 36.4	20	20	00	63 59.1		20	48	62 07.4
	3	50	65 38.3		20	22	62 59.8		21	38	63 45.8
	4	22	66 37.0		20	24	63 50.3		21	46	63 03.2
	7	56	67 19.7		20	30	63 03.1	16	16	00	64 05.5
2	8	00	64 59.8		21	00	63 46.8		18	06	63 26.7
	10	46	64 48.7		22	12	64 09.3	19	0	00	64 30.4
4	0	00	64 25.2		22	16	65 12.3		3	52	65 04.0
	1	18	65 03.7		22	24	64 23.0	21	12	00	64 46.6
	13	06	64 22.2	22	0	00	64 53.9		15	10	64 01.7
6	20	00	64 21.2		2	46	65 30.2	22	0	00	64 14.7
	23	18	65 22.6	24	12	00	65 33.2		1	58	64 59.0
	23	22	64 16.4		13	50	65 01.2		5	22	65 58.4
8	0	00	64 42.5		15	06	64 20.2		11	34	64 58.7
	3	42	65 26.8	29	0	00	64 13.8	26	0	00	63 53.5
11	0	00	64 57.5		1	18	65 27.2		4	00	65 04.2
	4	52	65 50.7		4	01	66 00.7		5	34	65 55.4
	12	44	65 00.0	June 1	0	00	63 53.3	27	8	00	65 35.8
12	16	00	63 05.3		0	40	64 43.8		8	22	64 39.8
	18	26	64 06.1		3	48	65 28.2		10	04	65 58.8
	18	32	63 10.0		9	51	64 27.9		10	36	65 09.2
13	20	00	63 57.4	5	0	00	64 42.8		11	14	64 38.2
	22	58	64 53.6		1	10	65 17.2	29	0	00	64 33.8
	23	00	65 41.5	6	8	00	65 07.6		5	06	65 43.6
	23	04	64 31.4		8	42	63 36.2		7	28	64 56.9
15	0	00	64 09.8		8	44	65 16.2		13	48	63 58.0
	2	52	65 03.8	7	12	00	64 41.2		23	38	65 10.3
	4	38	66 05.5		13	18	65 48.3		23	48	64 11.3
	5	10	66 42.8		14	14	65 02.2	July 1	20	00	63 35.5
	6	58	65 50.0		15	26	64 17.8		20	54	62 42.7
18	0	00	64 05.1		15	46	63 27.5		21	50	63 22.8
	0	44	64 56.9	8	0	00	64 55.1		22	04	64 07.0
	1	18	65 47.3								

Notes Accompanying Declination Records at Teplitz Bay

October, 1903.—4, auroral display about 9:30, fog prevailing since 0:00; 4:03:48, daylight begins.—7:09:24,* oscillation checked with steel pin; 7:09:46, scale passed off thread, $4^d.5$ estimated; 7:10:36, oscillation checked with pin; 7:10:32, quiescent for 10 seconds.—12, snow drifting, cloudy, daylight about 6 A. M., bright moon makes it difficult to determine daylight in cloudy weather.—14, slight aurora in east on beginning, sky 50 per cent clouded, windy; 14:07:00, daylight begins; 14:20:30, cloudy and foggy; 14:24:00, thick, cloudy weather.—15, cloudy and foggy entire period of observation.—16:21:00, aurora appears; 16:21:32, aurora disappears gradually overhead, low fog; 16:21:36, aurora again appears extending from north to southwest, but not very intense; 16:22:34, wind rising; 16:22:58, aurora has disappeared.—18, on beginning light aurora from southeast to southwest, clear and still; 18:00:48, aurora has disappeared; 18:03:34, scale went from $40^d.8$ to $42^d.5$ in 30 seconds.—19, foggy; 19:09:13, scale traveled from 9:13 to 9:15 and then stopped.—21, clear; 21:04:12, clouded over; 21:07:00, daylight begins; 21:16:06, daylight ends; 21:18:38 clouded entirely; 21:20:18, R. R. T. reports aurora in northwest.—22:16:00, daylight ends, clear; 22:18:42, very high wind in gusts; 22:19:32, faint auroral light in southwest.—23, observations omitted on account of blizzard.—25, foggy, clear overhead, still; 25:03:10, very slowly increasing; 25:03:12, very slowly increasing; 25:03:24, wind begins to rise; 25:04:00, partly cloudy; 25:07:00, daylight begins; 25:08:22, starts to decrease; 25:08:40, continues to increase from $22^d.2$.—27, northeasterly storm; 27:14:26, wind subsides; 27:15:00, wind rises.—28, cloudy and calm; 28:02:06, clouds breaking away overhead, foggy; 28:03:14, took 30 seconds to make oscillation; 28:03:50.5, took one minute to make this oscillation beginning at 3:50; 28:07:34, daylight begins; 28:11:20, cloudy and calm, light snowflakes; 28:17:50, snowing.—29:18:00, clouded entirely.—30:22:30, overcast and cloudy.

November, 1903.—1:00:00, auroral light is waning as observer begins; 1:00:22, stopped for an instant and continued to decrease; 1:00:28, clear sky, aurora has disappeared; 1:00:50, aurora appears again, not very brilliant, clear sky; 1:01:12, passed $9^d.0$ and came back to recorded values, aurora not very brilliant from magnetic northeast to zenith and magnetic southwest; 1:01:22, aurora growing faint in northeast and zenith, southwest remains the same; 1:01:26, jumps off scale from $70^d.2$; 1:01:38, brilliant light again northeast, zenith and west; 1:01:58, aurora fainter and in southeast; 1:02:10, aurora mostly in north; 1:04:12, a gradual change from 4:12 to 4:14.5; 1:07:10, aurora disappeared; 1:08:12, daylight begins.—2:08:15, cloudy, completely overcast.—3:12:32, steady at 33m and begins to decrease, no oscillation.—4:00:14, cloudy and snowing; 4:00:46, observations suspended to give order relating to ice gain signals; 4:04:12, clear sky; 4:07:58, daylight begins; 4:17:12, faint aurora stretching in line overhead from magnetic northeast to southwest; 4:19:28, bright, moonlight night; 4:22:20, faint aurora from overhead to magnetic southwest; 4:22:44, aurora has disappeared.—5:16:00, thick fog prevails throughout observations.—8:00:10, clear, light fog on horizon; 8:04:12, clear, moonlight, still.—9:08:22, magnet had to be raised; 9:08:50, stationary for 10 seconds or more; 9:09:30, stationary for 10 seconds or more; 9:09:52, reaches $48^d.0$ at 9:53; 9:09:56, reaches $38^d.7$ at 9:57.2.—11:00:34, reaches 71d at 0:34.5; 11:00:56, faint aurora in zenith; 11:01:42, reading

*The first figure indicates day of month, the others the hour and minute on chronometer, civil reckoning from 0 hour through 24 hours, thus: 23:21:08 means 23d day of month at 21h 08m or 9h 08m P. M. Directions unless "otherwise" specified are magnetic.

estimated; 11:03:30, decreasing, but stopped at this; 11:03:32.3, decreasing, but stopped at this; 11:03:42, scale goes off at 3:42.5; 11:09:20, decreased to 49^d.1 at 9:20.3; 11:10:10, begins to decrease without oscillating; 11:14:04, faint aurora in magnetic north; 11:16:00, aurora in magnetic south; 11:17:32, aurora, east to southeast; 11:17:45, oscillation had to be reduced with the pin as scale swung beyond the thread; 11:17:50, aurora, north to southwest; 11:19:32, faint aurora, north to southwest; 11:21:06, aurora magnetic east to west through south; 11:21:26, aurora has disappeared; 11:21:50, faint auroral light from magnetic south to west; 11:22:06, aurora from west to east through zenith; 11:22:14, aurora from south through west, faint; 11:22:26, reached 75^d and returned to this.—12:16:00, faint aurora magnetic north to southwest at beginning; 12:16:50, aurora from northeast by east to south; 12:16:56, aurora extends in ill-defined bands from northeast to southwest, a bright band extends through the south, the others between this last and zenith, one through zenith; 12:17:10, aurora, three bright streams northeast to southwest through zenith and through southern sky; 12:17:30.3, aurora extending 45° vertically from horizon northeast; 12:18:24, no aurora; 12:18:40, bright aurora northeast to east, 45° above horizon; 12:19:36, auroral band east to south, 10° above horizon; 12:19:50, auroral streak north to west, 10° above horizon.—13, omitted on account of blizzard, hut inaccessible.—15:20:16, partly cloudy.—17, faint aurora at beginning, single strip northeast to southwest through zenith; 17:12:20, sky overcast; 17:14:32, partly cloudy, faint aurora in west, vertical strips from 15° to zenith; 17:14:40, faint aurora west to east through zenith; 17:14:50, faint aurora east to west through zenith and very faint patch in north 45° above horizon; 17:15:10, aurora growing stronger in east, patch to north has disappeared; 17:15:22, scale stopped at 67^d.9 and then increased to 68^d.8; 17:15:46, aurora has practically disappeared.—18:07:58, aurora in zenith extends to all points of the horizon, strongest in east and southeast; 18:08:18, aurora has grown very dim, especially in the east; 18:08:36, aurora has disappeared; 18:09:36, partly cloudy; 18:10:34, overcast; 18:11;56, overcast; 18:11:14, clear in zenith, very faint aurora from northeast to southwest through zenith; 18:12:48, aurora has disappeared; 18:13:04, faint aurora starts in zenith with increasing streamers extending 30° to southwest; 18:13:08, faint aurora, northeast to southwest, stronger in southwest; 18:13:24, aurora increasing in strength, extending from zenith to horizon from north to east and north to southwest, stronger in east; 18:13:30, aurora stronger in north, has disappeared in east; 18:18:14, aurora through zenith from northeast to southwest; 18:18:46, aurora has almost disappeared; 18:18:56, faint aurora in broken patches from north to east and half way to zenith; 18:19:08, aurora has disappeared; 18:19:58, very faint aurora in north, west and south; 18:20:10, aurora has disappeared; 18:20:22, faint aurora in south and southwest; 18:20:32, aurora in arch from northeast to northwest, vertex of arch 45° above horizon, also streamers from zenith to south and west; 18:20:42, very faint aurora extends in spots from east to west through zenith; 18:21:00, horizontal circle accidentally moved; 18:21:06, aurora has disappeared; 18:23:12, clear sky, no aurora; 18:24:55, telescope reversed on azimuth mark and gave same reading.—19:16:00, faint aurora at beginning from northeast to southwest through zenith, stronger in southwest; 19:16:30, aurora has disappeared; 19:19:36, aurora reappears from northeast to southwest along horizon.—20:20:00, southeast blizzard throughout observations.—22:01:58, strong gale from south with flying snow; 22:04:54, decreased to 27^d.0.—23:08:30, increased to 42^d.9; 23:08:36, decreased to 27^d.7; 23:11:22, decreased to 25^d.2; 23:11:38, this oscillation in 30 seconds.—25:00:00, blizzard, 48 to 60 miles per hour, had to dig out entrance; 25:11:16, calm; 25:12:50, wind rising; 25:18:54, aurora northeast to southwest through south at 45° altitude; 25:21:06, cloudy.—26:16:00, east-southeast blizzard.—27:20:00, blizzard continues; 27:19:30, plane of detorsion is 352°, this change since last reading probably due to slackening of fiber before 10:00 in an attempt to get intensity observations.—30:11:38, foggy and snowing.

December, 1903.—1: 12: 22, overcast.—2: 01: 14, slowly decreasing after this reading; 2: 02: 06, 80 per cent thin clouds; 2: 03: 40, clear, calm, moonlight night; 2: 03: 58, increased to $54^d.2$; 2: 05: 50, clear, moonlight, no auroral light; 2: 05: 54.1, 30 seconds for this oscillation; 2: 07: 40, aurora extending from zenith to within 10° of horizon from north to west through zenith; 2: 07: 58, aurora from northeast through zenith; 2: 08: 18, aurora has almost disappeared; 2: 08: 24, aurora grows stronger from zenith to northeast and southwest; 2: 08: 46, aurora very faint; 2: 09: 02, aurora has practically disappeared; 2: 09: 10, aurora grows stronger in southwest, has disappeared in northeast; 2: 10: 06, aurora has disappeared; 2: 11: 54, faint aurora northeast to southwest through zenith; 2: 12: 22, aurora extending from zenith in all directions, chiefly northeast and southwest, strongest in southwest; 2: 12: 34, aurora in band from northeast to south 15° above horizon, also faint patches in southwest; 2: 12: 42, aurora has almost disappeared in southwest; 2: 12: 50, aurora very faint; 2: 13: 10, aurora has disappeared; 2: 16: 58, 50 per cent clouded, no aurora; 2: 18: 04, 75 per cent clouded; 2: 21: 58, aurora in band from east to west through zenith, stronger in east; 2: 22: 06, aurora has disappeared.—4: 20: 00, moon visible through clouds during most of observations, very well defined halo.—6: 00: 44, decreased to 26d; 6: 01: 38, 90 per cent thin clouds; 6: 03: 12, sky overcast entirely; 6: 05: 50, clear sky.—7: 08: 00 moon has ill-defined halo, no aurora; 7: 11: 24, very faint aurora in vertical stripes from horizon up to 15°; 7: 11: 48, aurora just starting in northwest and north-northwest, one vertical stripe in each direction, 15° long, half way between horizon and zenith.—8: 14: 22, aurora in several bands from northeast to southwest through zenith; 8: 14: 34, aurora growing stronger to eastward; 8: 14: 46, aurora has almost disappeared; 8: 15: 06, aurora grows stronger to the eastward; 8: 15: 18, aurora grows weaker in the east; 8: 15: 28, increased to $36^d.9$; 8: 15: 38, aurora in well-defined arch from northeast to southwest, vertex of arch in southeast 15° above horizon; another arch later appeared above the first vertex southwest 50° above horizon.—9: 00: 00, aurora during axis observations; 9: 02: 16, wind rises; 9: 03: 32, high wind; 9: 05: 48, increasing, but stopped a moment here; 9: 08: 02, shoveling snow from entrance, no time for observers to alternate; 9: 10: 10, calm; 9: 10: 48, wind rises; 9: 14: 14, shoveling snow from entrance, stopped at 14: 24; 9: 18: 22, shoveling snow from entrance; 9: 20: 48, had to check needle with steel pin.—10: 17: 10, increased to $56^d.2$; 10: 17: 14, decreased to $53^d.7$.—16: 16: 38, shoveling snow from entrance; 16: 16: 50, no time for more alternation on account of drift against door of hut; 16: 21: 30, checked with steel pin one minute before observation; 16: 22: 50, checked with steel pin one minute before observation.—17: 16: 00, partly cloudy.—18: 22: 20, aurora in snake-like clouds and streaks from southeast to southwest 20° above horizon, constantly changing position and shape; 18: 22: 32, aurora forms arch from east to west through zenith, also streak from south to west 15° above horizon; 18: 22: 58, aurora growing weak; 18: 23: 12, aurora in streaks southwest to west 15° above horizon; 18: 23: 42, aurora has disappeared.—21: 08: 08, aurora from zenith to northeast to north; 21: 08: 42, aurora has disappeared.—22: 12: 00, had to dig out entrance.—23: 03: 37, decreased to 33d; 23: 03: 50.2, 30 seconds for this oscillation; 23: 07: 32, 40-mile wind and drifting snow, had to dig out entrance; 23: 12: 52, aurora from northeast to southwest through zenith; 23: 13: 48, faint auroral light in north; 23: 14: 56, had to dig out entrance; 23: 15: 04, ten auroral streams from northeast, not very bright; 23: 18: 16, clear; 23: 21: 28, very faint aurora, streaked northeast to southwest; 23: 21: 34, aurora growing considerably brighter in east; 23: 21: 40, aurora has mottled appearance in east, practically gone in west; 23: 21: 56, aurora has disappeared entirely in west and increased in east, with vertical streamer from horizon to zenith in east and mottled appearance in south; 23: 22: 02, aurora has very much diminished to one small spot in northeast, with mottled appearance in southwest increasing; 23: 22: 08, checked motion with steel pin; 23: 22: 24, aurora has disappeared; 23: 22: 36, aurora east to west through zenith,

partly mottled and partly moving streamers; 23:22:44, aurora growing stronger in west, snake-like streak in southwest from zenith to horizon, where it is mottled, very faint in northeast; 23:22:52; snake-like streak northeast to southwest through zenith, also a horizontal streamer 10° above horizon southeast to southwest; 23:23:28, aurora has disappeared.—25, observations were not taken on account special request of Mr. Fiala to be present at Christmas dinner.—26, the fibers were found broken, the suspension tube was taken to the dwelling-house to attach new fibers, meanwhile a strong blizzard came up preventing return to hut.—29:14:46, clear, moonlight.—30:00:00, cloudy; 30:06:14, increasing to 38d in one minute; 30:06:22, stops at $29^{d}.3$; 30:06:46, stops at $22^{d}.0$ and then continues to decrease to 6:48; 30:07:04, reached $42^{d}.5$ after this reading; 30:07:08, rapidly decreasing to $9^{d}.5$; 30:07:10, increases to $61^{d}.9$; 30:06:20, faint aurora through zenith to southwest, fog all along horizon; 30:08:00, clouded all over; 30:09:54, increased to $39^{d}.1$; 30:09:24, faint aurora through zenith to northeast and southwest; 30:09:56, clear sky, no aurora; 30:13:16, clear and moonlight; 30:15:08, increased to 38d; 30:20:18, clear, moonlight, no aurora; 30:23:44, clouded over.—31:21:00, overcast and snowing.

January, 1904.—1:17:14, snowing.—3:00:00, clear, moonlight night, no aurora.—4:08:00, clear, moonlight, no aurora; 4:09:58, scale increases rapidly.—5:12:14, temperature falling rapidly outside; 5:12:44, aurora in streak 15° above horizon from west to north; 5:12:50, faint aurora northeast to southwest through zenith; 5:12:56, aurora growing stronger, streak becoming wavy; 5:13:00, aurora growing stronger in northeast, now two streaks; 5:13:12, aurora a series of bands close together northeast to southwest through zenith, stronger in northeast; 5:13:24, aurora growing fainter, particularly in southwest; 5:13:32, aurora stronger in southwest; 5:13;44, aurora growing stronger in northeast; 5:14;02, aurora very faint; 5:14:08, aurora in broad band from horizon to zenith northeast, extremely faint in southwest from zenith to horizon in band; 5:14:16, aurora in three wavy bands from northeast to southwest through zenith; 5:14:54, aurora has entirely disappeared.—6:04:18, scale decreases unsteadily; 6:10:00, high wind, snowing; 6:13:08, wind moderating; 6:16:28, calm; 6:16:20, overcast; 6:16:36, snowing; 6:18:50, calm, overcast, light snow; 6:21:14, temperature rising very rapidly outside.—7:16:00, easterly wind, about 35 miles an hour; 7:19:42, calm.—8:20:00, easterly wind, about 25 miles an hour.—10:00:26, faint aurora, north wind, 20 miles; 10:06:06, after this small oscillation scale continues to increase.—11:08:30, aurora northeast to southwest through zenith.—12:12:00, overcast and foggy; 12:15:28, aurora, faint, northeast to southwest, one arch with vertex 60° above horizon in southeast, another streak parallel to arch and above it ending in zenith; 12:15:40, streak and arch have united to form one broad band stronger in northeast.—13:03:10, magnet vibrating up and down; 13:03:14, vertical vibrations have ceased; 13:04:16, magnet vibrating up and down; 13:04:20, clear, light fog on horizon; 13:04:28, vertical vibrations have ceased; 13:05:16, magnet checked with adjusting pin; 13:06:22, clear and calm; 13:07:50, scale continues to decrease after reading of $56^{d}.5$ taken; 13:13:44, arc-shaped aurora from northeast to northwest; 13:14:56, aurora still northeast to northwest and bulk increased by about two; 13:15:40, aurora has disappeared; 13:16:16, faint aurora north to west in arch northwest 10° above horizon; 13:16:32, aurora very faint; 13:17:40, aurora has practically disappeared; 13:20:04, faint aurora in streak, northeast to southwest, stronger in northeast; 13:20:24, aurora has disappeared entirely in southwest; 13:20:32, aurora in two arches northeast to southwest, vertices of both in southeast, the one 20° and the other 50° above the horizon; 13:20:48, aurora in broad irregular band, northeast to southwest through zenith; 13:21:28, aurora has disappeared; 13:22:26, aurora reappears in two streaks from northeast to south 10° above and parallel to horizon, changing rapidly to mottled appearance; 13:22:30, aurora

from zenith northeast to south, snaky streamers with transverse rays; 13:22:38, aurora extremely faint; 13:22:44, aurora grows stronger; 13:22:56, aurora very faint; 13:23:16, $78^d.7$ estimated; 13:23:36, aurora growing faint.—15:20:00, clear sky; 15:21:32, hazy along horizon; 15:21:38, overcast.—17:00:00, overcast.—19:12:00, one fiber of the suspension broken during observations this day, but it apparently does not touch tube.—20:00:00, broken fiber removed before observations, magnet remaining suspended by but three fibers; 40 mile wind from southeast, drifting snow; 20:00:26, magnet checked with adjusting pin; 20:07:46, shoveling snow from entrance; 20:17:04, very faint aurora in spots west to south 10° above horizon; 20:18:18, overcast; 20:20:22, calm.—22, observations omitted this day on account of blizzard, wind being 60 to 70 miles per hour.—23:20:00, partly cloudy; 23:21:36, aurora in irregular band from east to south and from horizon to 10° above horizon; 23:21:46, aurora growing stronger and moving considerably; 23:22:06, strong aurora from zenith to horizon northeast to south, stronger in east and moving rapidly; 23:22:14, aurora from zenith in all directions, moving rapidly; 23:22:24, aurora fainter, it is now in the northeast and southwest to south; stronger in southwest to south, where it consists of snaky clouds; 23:22:46, aurora fainter; 23:22:58, aurora in irregular moving circular streaks having their centers in zenith; 23:23:18, aurora in irregular, snaky streak from zenith to northeast and southwest; 23:23:34, aurora in irregular streaks and spots in all parts of the sky; 23:23:56, scale decreases, stopped here and then continues to decrease.—24:02:22, wind rising; 24:03:46, foggy, except in zenith; 24:05:18, wind light; 24:06:30, calm, cloudy, snow.—25:08:00, overcast.—26:12:00, partly cloudy, wind southeast, velocity 35 miles; 26:13:20, calm.—27:00:00, clear, moonlight night, light wind, no aurora; 27:10:36, hazy 10° above horizon; 27:12:00, sky hazy; 27:14:18, sky clear, except in the south; 27:14:56, scale decreases; 27:16:14, calm, clear, moonlight; 27:19:30, thin clouds, stars and moon visible, light wind from east; 27:19:50, instrument slightly out of level; it was probably leveled by striding level which appears level at present but probably has thin snow particles on axis; instrument not disturbed by attempting adjustment since level but slightly out; fiber hangs free in center of tube; 27:21:40, magnet starts from its quiet phases; calm, moonlight, faint clouds all over sky but stars visible through them; 27:22:30, scale suddenly increases to this; 27:24:02, striding level taken off, cleaned, reversed and found to be in good adjustment; the plate level is slightly out of adjustment; the wyes appear clear.—28:16:00, plate level adjusted before observations began; 28:16:12, very faint aurora northeast from horizon to zenith; 28:16:54, aurora has disappeared; 28:17:06, very faint aurora in southwest, zenith to horizon; 28:17:46, aurora has disappeared; 28:18:56, aurora in irregular horizontal streak south to southwest 10° above horizon; 28:19:04, no aurora; 28:19:26, after this scale increased to $32^d.8$; 28:19:36, aurora in irregular horizontal streak northeast to east 10° above horizon; 28:19:44, aurora northeast zenith to horizon; irregular horizontal band southeast to south-southwest 10° above horizon; 28:19:52, aurora stronger from zenith in all directions northwest to southwest, horizontal streak northeast 10° above horizon.—31, magnet was dropped on floor in afternoon; 31:01:52, wind rises, no aurora.

February, 1904.—2:12:20, calm, overcast; 2:14:38, scale increased to $38^d.9$.—3:00:02, scale decreased to $45^d.0$, then increased to $66^d.0$; 3:00:44, scale stopped a moment here and then continued to 70d; 3:00:50, scale reached 40d on this swing; 3:01:38, wind has risen; 3:05:12 and 14, scale increases very slowly; 3:07:30, decreasing slowly and irregularly; 3:07:36, wind in squalls, clear in north, moon visible, stars visible in north; 3:07:44, shoveling snow from entrance; 3:08:22, high wind through 20:00; 3:14:46, cloudy; 3:15:50, shoveling snow from entrance; 3:18:50, wind very strong, at end observations wind light, from northeast.—4:16:00, high wind, clear overhead, cloudy in south; 4:19:02, almost

calm, clear overhead, hazy to 30° above horizon.—5:21:06, scale stopped here, then decreased; 5:21:18 to 22, unable to check magnet with pin, had to stop motion with block and then check with pin; 5:22:10, aurora in northeast and zenith of irregular shape, light wind, clear overhead; 5:22:38, aurora faint in east; 5:23:12, aurora in faint streaks from zenith to northeast and east.—7:00:06, hazy 20° above horizon, aurora in south; 7:00:24, faint streaks of aurora in south and north; 7:01:08, arc-shaped aurora from zenith to northwest; 7:01:24, scale decreasing; 7:01:44, aurora has disappeared, sky overcast, calm, few stars to be seen; 7:02:28, faint streaks of aurora from northeast to zenith, more stars visible; 7:03:34, no aurora visible, calm, sky hazy; 7:04:34, scale increasing; 7:04:42, scale increasing.—9:14:42, daylight ends, about 5 hours' duration; 9:15:24, very faint aurora in northeast.—10:00:00, faint aurora in south at 10° altitude, bank of clouds below; 10:01:06, scale increasing but does not pass $48^d.2$; 10:01:52, scale reaches $45^d.5$ at 1:53; 10:03:50, scale quiescent at $35^d.1$ and then continues decreasing almost imperceptibly; 10:07:28, wind of 10 miles velocity from southwest, cloudy, no aurora; 10:08:22, scale decreased to $42^d.0$; 10:08:34, scale increased about 7 divisions; 10:09:24, scale increasing; 10:10:50, scale decreasing; 10:12:44, scale increases to $55^d.0$; 10:16:38, overcast; 10:22:12, scale decreasing rapidly; scale reads $17^d.1$ at 22:14.4; 10:22:54, decreasing off scale.—11:19:34, brilliant aurora from northeast to southeast.—12:20:00, sky clear, no aurora; 12:22:56, bear trying to break into observatory; 12:23:20, aurora in southeast; 12:23:40 to 48, observer investigating outside to see if bear is gone.—14:00:00, cloudy, light wind; 14:06:18, scale increased to $60^d.1$.—17:01:08, scale decreasing to $21^d.2$; 17:01:42, scale increased to $64^d.5$; 17:01:56, scale decreasing; 17:03:00, high wind during balance this day's work; 17:03:40, scale decreasing; 17:05:58, scale decreasing to $41^d.0$ after 5:00; 17:06:42, magnet checked with adjusting pin; 17:07:02, increasing; 17:07:42, shoveling snow from entrance; 17:08:38, daybreak; 17:08:42, magnet oscillating vertically, hut perfectly steady in high wind; 17:08:58, vertical oscillation has ceased; 17:12:08, shoveling snow from entrance; 17:16:05, no more alternating on account of snow drifting against entrance to hut.—18:17:48, faint aurora in northeast, wavy streak from horizon to zenith; 18:18:22, aurora northeast to southwest through zenith; 18:18:48, after this oscillation scale decreased to $30^d.0$; 18:18:52, aurora much stronger in northeast where it consists of many irregular bands; 18:19:48, after this scale increased to $42^d.8$; 18:20:00, magnet dropped from top of pier to floor.—19, high wind throughout observations this day.—20:00:56, very faint aurora.—23, duration of daylight, 8 hours.—24, clear and calm at beginning of observations, wind rising to 60 miles an hour at 7:10 and continuing until about 14:00, when it began to slacken, being light at end of day's work; 24:07:30, J. V. enters hut, has two small iron rings on person, these are removed; 24:08:08, reading increased on next oscillation to $55^d.2$; 24:10:32, magnet checked with adjusting pin; 24:16:00, temperature rising rapidly outside all day; 24:16:58, daylight ends; 24:19:26, magnet vibrating up and down; 24:21:48, scale increasing to $55^d.8$ at 21:49.8; 24:21:52, very faint aurora east to southeast; 24:22:38, aurora becoming much stronger and extending from east to south.—28:00:00, sky overcast, revolver placed for first time in far end of sight shaft; 28:00:56, pocket knife found on person and removed; 28:05:26 and 28, scale increasing.

March, 1904.—1:12:00, partly cloudy and snowing; revolver not taken to hut.—2:00:00, revolver not taken to hut; occasional gusts of wind; 2:06:14, daylight begins; 2:12:26, wind increasing; 2:14:18, wind diminishing, clear; 2:16:14, light clouds in south, balance sky clear, moderate wind; 2:17:22, daylight ends; 2:19:00, sky clear, wind very light; 2:20:00, moon rises in east with very distinct four-armed cross through center; 2:20:16, scale increased to $66^d.0$; 2:20:20 and 24, magnet checked with adjusting pin; 2:20:30, irregular spiral aurora

in south and zenith; 2:20:42, very light wind, faint aurora in south, cross still in moon; 2:20:52, aurora from zenith to east and west; 2:21:12, faint aurora in west, dark clouds in east and west; 2:21:38, aurora has disappeared, partly cloudy in east, wind light.—3:16:00, revolver not taken to hut; high wind.—4:20:00, revolver not taken to hut, aurora in north; 4:20:46, passage to vestibule drifted in so much that observer cannot very well observe weather conditions or aurora.—6, preparations for sledge journey being completed, no time to carry out observations this day.—7, sledge party left this A. M.—9:06:26, observations interrupted by failure of light.—13:02:46, magnet vibrating up aud down; 13:04;02, daylight begins; 13:06:36, increasing but stopped a moment at this reading.—16:03:42, daylight begins; 16:08:18, magnet taken out and replaced (not being level in stirrup either way); 16:12:00, clear overhead, light fog on ice field; 16:12:32, scale increasing almost imperceptibly; 16:16:32, observer can see no cause for this jump of needle; 16:21:18, daylight ends; 16:22;22, sky clear; 16:22:54, aurora from northeast to zenith increasing in intensity; 16:23:10, very faint aurora in zenith and southwest.—17; 16:00, instrument removed from pier in morning to clean grooves in which foot-screws set.—18:22:00, wind velocity about 20 miles an hour, sky hazy.—20:00:00, instrument cleaned in morning, revolver not taken to hut; 20:03:28, daylight begins.—21:11:36, revolver not taken to hut; owing to 60 to 70 mile wind hut could not be reached before 11:30.—22:12:00, revolver not taken to hut; 22:14:21, checked magnet with adjusting pin.—23:00:00, revolver not taken to hut; 23:00:06, magnet checked with adjusting pin; 23:03:18, daylight begins; 23:05:30, wind ceases; 23:06:46, wind in gusts; 23:08:58, light northerly wind, sky cloudy; 23:15:54, wind from northwest; 23:16:04, trouble with light cause of delay in observations; 23:22:06, sufficient light to see dwelling distinctly through flying snow; 23:23:18, daylight ends.—24:16:00, revolver not taken to hut.—25:24:10, fiber broke.—26:11:30, put in four new fibers.—27:02:46, daylight begins; 27:05:22, decreased to this, stopped, and then increased.—28:08:00, fibers found broken; three new fibers put in and observations started as soon as torsion taken out; fibers again broken during intensity observations and replaced by four new fibers at 23:00.—29:13:54, scale increased to $57^d.4$ at 13:55.2.—30:00:00, sky partly cloudy, north-northeast wind of velocity 48 miles per hour; 30:00:12, observer found tin box in pocket and put same away where would not affect instruments; 30:06:00, wind decreasing; 30:12:41.7, scale reached $28^d.7$, decreased steadily, stationary for a moment at $16^d.8$, decreased to $10^d.0$ after reading at 12:46, then increased to $18^d.7$, and then oscillated as shown at 12:50; 30:15:04, scale decreased to $11^d.6$; 30:15:54, magnet vibrating up and down; 30:20:02, scale increased to $22^d.9$, stopped, decreased to $22^d.1$; 30:20:10.6, scale increased to $51^d.7$; 30:20:38, increased to $49^d.1$, stopped, then increased to $51^d.9$ at 20:38.9; 30:20:44, scale decreased to $38^d.7$, stopped, then decreased to $34^d.9$ at 20:44.2; 30:20:46, then increased to $36^d.2$; 30:21:13, scale increased to $26^d.2$; 30:21:14, decreasing to $28^d.1$; 30:21:40, reading $6^d.4$ estimated; 30:21:46, daylight ends.

April, 1904.—1:20:00, revolver not taken to hut; 1:20:06.5, decreased to $28^d.0$.—3:00:00, revolver not taken to hut; 3:00:36.4, scale increased to $78^d.1$; 3:00:38, scale decreased until passed out of field of view; 3:02:26, daylight begins.—4:08:00, revolver not taken to hut; 4:10:58, scale increased to $72^d.9$.—5:12:00, revolver not taken to hut.—6:02:00, sky clear, calm; 6:16:14, instrument slightly out of level.—7:16:00, sky clear, calm.—8:20:00, sky clear, light north wind.—10:02:08, scale decreased to $65^d.2$; 10:03:20, scale increased to $52^d.2$; 10:05:44, reading $78^d.7$ estimated.—11:08:00, northeast wind of 40 miles per hour velocity.—12:12:00, revolver not taken to hut; 12:12:08, magnet oscillating up and down.—13:00:00, light southwest wind; 13:07:00, wind south, hazy, light snow; 13:09:12, from quiescence scale decreased; 13:16:59, scale now $20^d.6$.—

14: 16: 00, sky clear, light north wind.—15: 22: 20, light east wind, hazy around horizon.—17: 04: 10, magnet checked with adjusting pin; 17: 07: 02, scale increased to $31^d.3$; 17: 07: 06, scale decreased to $6^d.7$; 17: 07: 08, scale increased to $32^d.9$; 17: 07: 12, scale increased to $46^d.8$; 17: 07: 20, scale decreased to $29^d.3$.—18: 08: 00, sky hazy, wind variable.—19: 12: 00, revolver not taken to hut, calm, sky clear; 19: 15: 10, southeast wind rising.—20: 00: 00, revolver not taken to hut, southeast wind of velocity 45 miles an hour, drifting snow; 20: 07: 54, wind velocity now 60 miles an hour.—21: 16: 00, revolver not taken to hut, wind southeast and east in gusts; 21: 18: 10, magnet oscillating vertically.—22: 20: 00, revolver not taken to hut, wind south and east-southeast.—24: 00: 00, revolver not taken to hut, wind from southeast.—26: 12: 00, revolver not taken to hut, wind north and northwest.—27: 00: 00, revolver not taken to hut, wind northwest; 27: 06: 34.5, scale now reads $50^d.8$; 27: 11: 18, no apparent cause for this movement of magnet; sky clear, light northwest wind; 27: 13: 20, calm.—28: 16: 00, after this date revolver no longer taken to hut, wind from northeast.—29: 20: 00, wind light north to calm.

May, 1904.—1: 00: 00, sky clear, wind light north to calm.—2: 10: 42, reading increased off scale to about 79^d; north wind.—3: 12: 18, scale decreased to $49^d.3$; wind north-northeast to north; 3: 13: 30, scale decreased to $30^d.8$; 3: 13: 34, scale increased to $39^d.9$.—4: 00: 00, calm; 4: 03: 50, partly cloudy around horizon; 4: 08: 02, calm and clear; 4: 09: 34, clouding up; 4: 12: 48, scale increasing almost imperceptibly, but returns to reading at 12: 51; 4: 12: 56, scale increasing very slowly to $78^d.6$ and returns to reading at 12: 58; 4: 14: 50, sun breaking through clouds, clouds disappearing; 4: 17: 20, sky again overcast; 4: 22: 00, scale decreased to $35^d.0$; 4: 22: 12, scale decreased to $37^d.1$; wind from northeast.—5: 16: 00, wind from north-northeast.—6: 20: 00, wind from northeast, sky overcast, snowing.—8: 00: 00, wind calm to east; 8: 03: 38, reading $79.^d0$ estimated.—9: 08: 00, wind from southeast to east.—10: 12: 00, wind from southeast to calm.—11: 00: 00, sky overcast, wind from south; 11: 08: 54, wind has shifted through east-southeast to east, clouds mostly in horizon; 11: 09: 14, scale increasing from $21^d.6$ to $22^d.8$, then quiescent; 11: 10: 24, sky again completely overcast; 11: 12: 10, sun breaking through clouds; 11: 16: 10, scattering cirro-cumulus clouds, wind has subsided; 11: 23: 56, magnet oscillating vertically.—12, wind from east.—13: 20: 00, in turning magnet stirrup slipped and made several turns in fiber, it took until 20: 00 to recover plane of detorsion; wind calm; 13: 20: 18, magnet checked with adjusting pin; 13: 20: 36, observer found a pocket knife on his person; the same was removed outside of hut between 20: 36 and 20: 38.—15, wind from north; 15: 02: 42, scale decreasing; 15: 06: 06, scale increased to $49^d.7$; 15: 07: 36, reading $7.^d0$ estimated.—17, wind from north-northwest.—18, wind from east, northeast, and north; sky overcast generally throughout observations; 18: 06: 12, scale increasing; 18: 09: 54, sun appears for a short time.—19, wind from north-northeast to north.—20, wind north, snow; 20: 20: 15.8, scale increased to $67^d.0$.—22, northeast wind.—23, northeast wind; 23: 11: 47.6, scale decreased to $22^d.3$.—24, northeast wind.—25, sky overcast, light southeast and east wind, snowing; 25: 11: 38, scale increasing to $42^d.6$; 25: 13: 46, scale decreased to $31^d.6$; 25: 13: 48, scale increased to $37^d.0$ and then decreased to quiescence at 13: 50.—26, sky overcast, variable wind.—27, east to south wind, snowing at end.—29, sky overcast, light east-southeast wind increasing in strength to east wind and snow at end; 29: 01: 26, magnet checked with adjusting pin; 29: 07: 36, scale increasing.—30, west-southwest wind; 30: 08: 04.4, scale decreased to $57^d.9$.—31, southwest to south-southeast wind at end.

June, 1904.—1, sky overcast, variable winds; 1: 00: 14, scale decreasing; 1: 05: 48, scale increasing; 1: 06: 29.1, scale decreased to $16^d.9$ and then increased steadily to $64^d.1$ at 6: 32.2;

1:06:41.9, scale increased steadily to 60^{d}.9 at this time; 1:10:38, fog on horizon; 1:22:00, scale decreased to 53^{d}.2.—2, cloudy, strong east to north wind.—3, sky generally overcast, southeast wind.—5, east wind to calm; 5:04:59, scale decreased to 55^{d}.5 at this time; 5:05:45.2, scale decreased to 20^{d}.4 at this time.—6, east-southeast to south-southwest wind.—7, south-southeast wind; 7:12:18.5, scale increased to 64^{d}.1; 7:14:12, reading 79^{d}.3 estimated.—8, southeast to southwest wind at end, generally cloudy; 8:04:35, scale increased to 76^{d}.9; 8:05:58, scale increasing to 52^{d}.1; 8:05:59.3, scale increased to 61^{d}.0.—9, southwest wind, snowing, sky overcast, hazy.—12, east to south-southeast wind, sky overcast; 12:04;04, scale increasing; 12:06:22, scale decreasing.—13, east-southeast wind; 13:08:40.5, scale increased to 55^{d}.9.—14, easterly wind of velocity 40 to 50 miles per hour; snow.—15, sky overcast, east to northeast wind at end; 15:07:44, scale increasing; 15:10:06, scale increases to 55^{d}.6, becomes quiescent and then continues to 56^{d}.3; 15:14:02, scale decreases to 59^{d}.3; 15:15:30, first rain of the season begins.—16, west-northwest wind; cloudy; drifting snow.—17, cloudy; west wind.—19, southeast, east, calm to south wind, partly cloudy; 19:03:40, light fog; 19:05:22, scale increased to 52^{d}.0, fog gone; 19:05:24, scale increasing; 19:05:26, scale decreasing; 19:06:58, strong south wind.—20, calm to northeast wind.—21, east-southeast to east wind.—22, sky clear, calm.—23, light east-southeast wind.—24, calm.—26, east to southeast to south-southeast wind, cloudy; 26:03:38, raining; 26:06:22, fine hail.—27, southeast wind.—28, partly cloudy, calm.—29:09:00, calm, foggy, cloudy; 29:14:40, scale increases to 48^{d}.5, then decreases to quiescence; 29:19:54, clear overhead, variable wind; 29:21:50, east-southeast wind increasing rapidly.—30, southeast wind.

July, 1904.—1, sky overcast, snowing, northwest wind; 1:21:22.7, scale increased to 53^{d}.0.

MAGNETIC OBSERVATIONS

TABULATION OF MAGNETIC DECLINATIONS

OBSERVED AT

TEPLITZ BAY STATION, RUDOLPH ISLAND

FRANZ JOSEF ARCHIPELAGO

SEPTEMBER 28, 1903, TO JULY 1, 1904

NORTH LATITUDE: 81° 47′.4

LONGITUDE EAST OF GREENWICH: $3^h\ 52^m$

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Tabulation of magnetic declinations observed at Teplitz Bay

Monday, September 28, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
9 00				
02				
04				
06				
08				
10				
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32	54.5	57.8	22 52	−2.9
34	53.6	55.0	50	
36	48.6	50.4	42	
38	45.3	47.0	37	
40	Missed			
42	47.8	49.2	40	
44	49.8	51.6	44	
46	46.2	48.6	39	−2.6
48	43.4	47.5	36	
50	43.6	47.8	36	
52	46.0	49.3	39	
54	48.0	50.8	42	
56	45.6	49.0	38	
58	45.5	48.5	38	−2.4
10 00	46.4	48.7	39	
02	46.6	49.4	40	
04	47.0	49.7	40	
06	47.2	50.0	41	
08	45.0	48.0	37	
10	45.9	47.8	38	
12	48.0	50.4	42	−2.2
14	47.0	50.7	41	
16	46.9	49.8	40	
18	49.5	52.4	44	
20	48.2	50.3	42	
22	49.8	52.0	44	
24	50.6	52.5	45	
26	51.0	52.4	45	−2.1
28	58.0	61.3	58	
30	59.2	61.5	22 59	
32	62.5	64.2	23 04	
34	50.3	51.8	22 44	
36	46.0	47.8	38	
38	47.0	48.3	39	
40	46.8	48.3	39	−2.1
42	45.2	47.5	37	
44	46.3	48.0	38	
46	44.4	45.2	35	
48	41.6	43.6	31	
50	44.0	44.3	34	
52	45.5	46.3	36	
54	45.3	47.0	37	−2.0
56	48.2	49.3	41	
58	50.0	51.4	44	
	47.6	49.0	40	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
11 00	46.5	48.0	22 38	
02	46.8	48.7	39	
04	46.0	47.6	38	
06	45.7	47.0	37	−1.6
08	45.2	45.3	35	
10	44.6	45.3	35	
12	46.0	46.3	37	
14	44.8	46.0	36	
16	44.3	45.3	35	
18	43.7	44.4	33	
20	45.3	45.6	36	
22	44.6	45.6	35	−1.4
24	45.0	45.9	36	
26	45.3	45.6	36	
28	45.4	46.5	36	
30	44.9	46.1	36	
32	44.3	45.9	35	
34	43.3	45.0	34	
36	44.0	45.3	34	
38	45.3	47.0	37	−1.2
40	39.9	42.8	29	
42	42.5	44.4	32	
44	42.3	44.6	32	
46	41.0	44.5	31	
48	45.2	48.0	38	
50	44.3	46.9	36	
52	40.6	43.8	30	−1.0
54	37.0	41.3	26	
56	37.2	40.6	25	
58	39.4	43.0	29	
12 00	42.3	45.6	34	
02	45.0	46.9	36	
04	43.9	46.3	35	
06	40.9	43.2	30	
08	40.7	43.0	30	
10	41.9	44.0	32	
12				
14				
16	R. R. T.			
18	observed			
20	12h 02m			
22	to end			
24				
26				
28				
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50				
52				
54				
56				
58				

Correction to local mean time is + 3h 52m 32s.
Torsion head at 9h 30m read 12° and at end read the same.
Observers—R. R. T. and W. J. P., who alternated from 9h 58m to 10h 18m.

Tuesday, September 29, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	46.3	44.7	22 47	−2.1
02	49.9	49.4	41	
04	51.3	51.0	38	
06	48.5	46.1	44	
08	46.5	44.3	47	
10	48.5	46.3	44	
12	43.4	41.9	52	
14	42.2	38.5	55	−2.1
16	43.8	41.3	22 52	
18	37.6	35.0	23 01	
20	41.5	39.1	22 55	
22	42.6	41.2	53	
24	45.5	43.8	48	
26	42.3	40.4	54	
28	51.8	48.3	40	
30	55.6	51.0	35	−2.0
32	57.0	52.3	33	
34	67.0	57.8	21	
36	63.4	57.7	24	
38	57.3	53.2	32	
40	50.4	46.4	43	
42	65.9	56.2	23	
44	68.0	52.3	24	−1.8
46	55.0	50.9	36	
48	60.8	50.4	31	
50	62.4	57.9	24	
52	60.0	56.3	27	
54	57.7	55.0	30	
56	60.4	58.7	25	
58	58.0	56.0	29	
13 00	57.7	56.7	29	−1.6
02	62.0	59.3	23	
04	63.1	60.6	22	
06	63.2	60.2	22	
08	60.9	59.1	24	
10	57.7	56.5	29	
12	58.4	55.8	29	
14	59.0	55.6	28	−1.8
16	59.7	56.2	28	
18	60.2	58.2	26	
20	61.4	59.5	24	
22	57.0	56.2	30	
24	53.5	53.3	35	
26	55.9	54.8	32	
28	54.5	52.5	35	
30	52.3	50.6	38	−1.9
32	51.6	50.3	39	
34	48.9	47.3	43	
36	46.0	45.4	47	
38	49.7	47.5	42	
40	50.6	49.1	40	
42	46.7	44.7	47	
44	48.0	45.3	45	−2.0
46	38.3	37.5	22 59	
48	36.8	36.6	23 01	
50	44.4	43.6	22 50	
52	41.3	40.5	54	
54	41.8	41.5	53	
56	43.2	43.0	51	
58	44.6	43.4	50	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	46.0	43.5	22 48	−2.0
02	48.5	46.3	44	
04	49.2	48.0	42	
06	46.6	44.6	47	
08	45.3	42.6	50	
10	45.4	42.4	50	
12	49.3	46.3	44	
14	47.6	44.6	46	−2.0
16	45.6	43.8	48	
18	47.3	44.5	46	
20	48.6	46.4	44	
22	48.4	46.6	44	
24	46.3	44.5	47	
26	45.3	44.7	48	
28	45.4	43.9	48	
30	46.7	44.7	47	−1.8
32	44.0	42.5	51	
34	44.0	42.6	51	
36	46.0	44.5	48	
38	44.5	43.0	50	
40	46.3	45.5	46	
42	46.4	44.3	48	
44	46.5	44.3	47	
46	45.5	43.6	49	
48	44.5	43.2	50	
50	44.9	43.3	49	
52	45.6	43.6	48	
54	46.7	43.0	48	
56	46.5	43.0	48	
58	45.6	43.5	48	
15 00	46.9	44.5	47	
02	47.8	45.3	46	
04	48.2	45.3	45	
06	48.6	45.6	45	
08	48.2	45.0	45	
10	48.0	45.2	45	
12	48.8	46.2	44	
14	51.1	48.1	41	−1.7
16	54.5	50.8	36	
18	55.3	50.8	35	
20	52.5	48.5	39	
22	54.0	50.2	37	
24	54.8	50.5	36	
26	56.5	47.5	37	
28	54.5	46.1	40	
30	49.1	48.4	42	−1.8
32	46.8	45.8	46	
34	46.0	44.6	47	
36	46.0	45.4	47	
38	46.6	45.4	46	
40	43.5	43.5	50	
42	42.0	40.4	54	
44	43.0	41.5	52	−1.7
46	43.4	38.6	22 54	
48	36.9	33.9	23 03	
50	41.6	37.0	22 57	
52	36.9	35.2	23 02	
54	42.8	39.5	22 54	
56	44.7	42.2	51	
58	44.4	43.0	50	
16 00	46.1	44.7	47	−1.7

Correction to local mean time + 1m 40s.
Torsion head at 11h 55m read 327° and at end read the same.
Observers—W. J. P. and R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, September 30, 1903					Magnet scale erect				Wednesday, September 30, 1903					Magnet scale erect			
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	47.2	49.0	22 16	−5.2	2 00	51.6	52.9	22 52	−3.6	4 00	65.8	67.7	23 14	−5.1	6 00	56.2	58.0	22 59	−5.3
02	47.3	49.5	16		02	51.9	53.4	52		02	67.0	68.4	16		02	71.3*a*		23 22	
04	49.8	52.0	20		04	53.3	54.7	54		04	63.1	64.4	09		04	59.4	60.6	04	
06	49.3	51.4	19		06	53.0	54.2	54		06	61.1	62.5	06		06	59.6	62.3	05	
08	51.3	53.0	22		08	53.6	55.0	55		08	60.4	61.9	05		08	63.9	64.9	11	
10	56.5	59.0	31		10	54.7	56.4	57		10	64.9	66.8	13		10	64.6	65.9	12	
12	58.0	61.0	34		12	56.0	57.1	58		12	66.5	68.5	15		12	59.1	60.8	04	
14	58.2	61.0	34	−5.4	14	55.8	56.8	58	−3.7	14	71.3	72.2	22	−5.2	14	58.2	62.3	04	−5.5
16	57.6	60.4	33		16	56.0	57.2	58		16	66.0	66.2	23 13		16	56.2	58.4	00	
18	58.0	60.5	33		18	56.3	57.4	59		18	54.6	56.8	22 57		18	68.7	70.5	19	
20	59.4	62.0	35		20	54.1	55.0	55		20	55.6	57.2	22 58		20	61.9	63.5	08	
22	60.3	63.2	37		22	53.7	54.7	55		22	57.8	59.4	23 02		22	66.1*a*		13	
24	59.8	62.3	36		24	51.7	52.6	52		24	55.1	57.0	22 57		24	58.9	62.4	05	
26	60.8	63.2	38		26	52.6	53.4	53		26	60.9	61.4	23 05		26	73.2*a*		23 24	
28	59.9	62.3	36		28	53.4	54.8	54		28	64.4	64.8	11		28	55.7	58.0	22 59	
30	59.6	61.8	35	−4.8	30	51.2	52.2	51	−3.3	30	61.7	62.2	07	−5.0	30	71.8	72.8	23 23	−5.7
32	60.4	62.4	36		32	48.6	50.0	47		32	64.4	65.6	12		32	60.0	63.2	23 06	
34	61.3	62.7	38		34	47.5	48.9	45		34	62.6	64.0	09		34	53.7	56.0	22 56	
36	59.6	60.5	34		36	46.5	47.9	44		36	67.7	68.3	16		36	57.3	60.4	23 02	
38	61.1	62.4	37		38	45.5	47.0	42		38	64.0	64.3	10		38	59.6	64.8	07	
40	61.8	62.3	38		40	45.3	46.7	42		40	61.9	64.0	08		40	56.1	65.5	05	
42	63.0	63.3	39		42	46.7	47.7	44		42	62.7	64.1	09		42	61.7	62.0	07	
44	66.4	66.8	45	−4.4	44	44.4	45.3	40	−3.8	44	62.9	64.3	09	−5.1	44	65.8	67.3	23 14	−5.8
46	69.0	70.0	49		46	43.3	43.8	38		46	64.2	64.6	10		46	50.4	51.3	22 49	
48*	48.5	51.8	48		48	43.3	44.2	38		48	64.9	67.0	13		48	61.8	62.2	23 07	
50	48.6	50.9	48		50	42.3	43.0	36		50	62.3	63.8	08		50	65.2	66.2	13	
52	51.8	54.8	53		52	40.8	41.3	34		52	57.4	59.0	01		52	64.2	66.0	12	
54	48.5	50.2	47		54	41.5	42.0	35		54	58.5	60.4	03		54	58.3	60.5	03	
56	52.2	56.6	55		56	43.7	44.3	38		56	61.7	63.9	08		56	63.0	66.1	11	
58	54.1[1]	57.4	57		58	46.1	46.8	42		58	57.1	60.0	23 01		58	61.6	63.3	08	
1 00	52.8	56.9	56	−3.8	3 00	48.6	49.4	46	−4.2	5 00	53.9	56.7	22 56	−5.0	7 00	59.9	62.4	06	−5.8
02	47.3	50.2	46		02	50.2	51.2	49		02	54.8	57.8	58		02	66.2	66.8	14	
04	46.5	49.2	45		04	51.9	53.3	52		04	54.7	58.1	58		04	58.9	63.8	06	
06	46.2	48.6	44		06	52.5	53.6	53		06	52.9	57.4	56		06	62.3	64.9	09	
08	47.6	49.5	46		08	53.7	54.4	54		08	54.3	58.0	58		08	55.7	59.5	00	
10	44.5	45.4	40		10	54.8	55.6	56		10	51.9	55.4	54		10	58.5	59.7	02	
12	44.3	46.0	40		12	56.5	56.5	22 58		12	52.4	54.8	54		12	70.3*a*		23 20	
14	50.4	51.8	50	−3.6	14	59.8	59.8	23 03	−4.3	14	54.9	58.3	58	−5.0	14	56.8*b*		22 59	
16	47.6	48.9	45		16	59.1	59.8	03		16	55.9	58.5	59		16	63.2	64.2	23 10	−5.9
18	47.9	49.1	46		18	58.4	59.3	02		18	54.2	58.0	58		18	60.3	62.0	06	
20	51.8	54.5	53		20	58.6	59.4	02		20	56.2	58.0	59		20	62.4	63.2	08	
22	49.7	51.5	49		22	59.0	59.9	03		22	52.9	55.7	55		22	62.2	63.1	08	
24	50.3	52.4	50		24	60.8	61.5	05		24	52.0	54.3	53		24	64.9	68.1	14	
26	47.4	48.8	45		26	61.7	62.3	07		26	52.8	54.8	54		26	62.2	63.2	08	
28	44.4	46.2	41		28	62.4	63.2	08		28	54.0	55.8	56		28	66.5	67.4	14	
30	47.4	48.8	45	−3.4	30	63.1	63.9	09	−4.5	30	54.3	55.4	56	−5.0	30	61.9	63.0	08	−6.0
32	49.1	51.7	49		32	63.9	64.9	10		32	51.3	55.0	53		32	66.0	66.8	14	
34	47.1	49.4	45		34	63.3	64.2	09		34	48.3	51.8	48		34	61.9	63.0	08	
36	48.2	50.0	47		36	64.2	64.8	11		36	48.3	52.3	48		36	63.3	64.7	10	
38	51.7	53.6	52		38	65.8	66.8	14		38	49.0	52.9	50		38	62.4	63.2	08	
40	51.0	53.3	51		40	64.8	64.8	11		40	48.0	51.7	48		40	64.2	66.3	12	
42	48.4	50.4	47		42	64.8	65.2	12		42	51.6	54.8	22 53		42	64.2	65.3	11	
44	48.3	50.7	47	−3.5	44	64.2	64.8	11	−4.8	44	56.9	59.7	23 01	−4.9	44	63.3	65.3	10	−6.4
46	49.1	51.0	48		46	62.1	62.8	07		46	50.8	58.8	22 56		46	67.2	68.2	16	
48	50.5	52.4	50		48	62.2	62.8	08		48	59.3	63.0	23 06		48	66.2	69.5	16	
50	49.7	50.2	48		50	61.4	62.6	07		50	53.6	55.3	22 55		50	68.0	69.3	17	
52	49.9	51.2	49		52	61.2	62.3	06		52	52.3	54.1	22 53		52	66.9	70.8	18	
54	51.7	53.0	52		54	57.5	58.0	00		54	61.1	62.0	23 06		54	65.5	68.1	14	
56	52.2	53.8	53		56	57.8	59.1	01		56	63.2	65.4	10		56	66.2	67.8	15	
58	53.0	54.7	54		58	63.5	64.3	10		58	56.9	59.4	01		58	64.2	64.8	11	

Observers—W. J. P. and R. W. P., who alternated from 0h 16m to 0h 18m.

Observers—R. W. P. and R. R. T., who alternated 4h 18m to 4h 28m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, September 30, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	64.4	67.5	23 13	−7.0
02	71.0	71.5	23 21	
04	36.3	37.3	22 27	
06	37.6	40.0	30	
08	35.9	37.8	27	
10	32.0	35.5	22	
12	35.2	38.2	27	
14	36.6	39.8	30	−7.0
16	34.2	37.3	26	
18	40.8	45.0	37	
20	33.8	38.3	26	
22	38.0	40.0	31	
24	35.3	36.3	26	
26	29.5	32.1	18	
28	32.2	33.4	21	
30	29.9	31.8	18	−7.0
32	28.4	29.5	15	
34	29.4	31.6	17	
36	30.5	34.5	21	
38	30.5	36.0	22	
40	30.4	37.6	23	
42	27.2	35.8	19	
44	42.5	44.0	37	−7.0
46	41.7	51.3	42	
48	26.3	33.4	16	
50	29.5	39.9	24	
52	26.7	33.0	16	
54	23.5	32.8	14	
56	24.9	32.9	15	
58	31.4	36.0	22	
9 00	24.5	31.0	13	
02	37.2	45.8	35	−7.0
04	22.4	35.8	15	
06	29.2	35.4	20	
08	24.8	35.0	16	
10	30.4	35.4	21	
12	29.4	33.8	19	
14	26.3	31.7	15	
16	24.8	29.4	12	
18	30.6	32.6	19	−7.0
20	23.8	25.8	08	
22	19.9	22.4	22 03	
24	14.0	17.0	21 54	
26	17.0	20.3	59	
28	16.2	19.5	58	
30	16.1	18.8	57	−7.0
32	9.8	12.2	47	
34	12.2	14.2	50	
36	12.8	15.8	52	
38	14.2	16.5	54	
40	13.1	16.3	53	
42	12.3	14.6	51	
44	16.4	16.6	56	−7.1
46	15.5	15.7	54	
48	14.4	17.2	54	
50	16.0	17.5	56	
52	16.0	17.5	56	
54	15.8	16.2	55	
56	15.3	15.6	54	
58	11.2	14.2	49	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
10 00	9.4	11.3	21 46	
02	15.3	18.3	56	−7.6
04	17.5	18.8	58	
06	12.7	14.7	51	
08	16.5	19.1	58	
10	12.9	16.4	52	
12	14.6	18.3	55	
14	13.7	16.3	53	−7.8
16	13.0	16.5	53	
18	16.0	21.2	59	
20	12.8	17.0	53	
22	12.5	16.4	52	
24	14.3	18.5	55	
26	8.8	26.0	21 57	
28	10.4	30.6	22 02	
30	20.4	24.5	05	
32	15.0	26.0	02	
34	17.0	24.3	02	−7.0
36	15.0	25.0	01	
38	13.5	36.3	09	
40	26.0	35.0	17	
42	22.0	28.9	09	
44	17.4	34.8	11	−6.9
46	13.5	33.5	06	
48	11.0	32.5	04	
50	17.5	27.2	05	
52	9.4	29.5	00	
54	12.8	30.3	03	
56	19.0	25.6	05	
58*	19.3	25.6	31	
11 00	15.3	29.0	30	−6.5
02	17.8	27.0	31	
04	24.5	25.8	35	
06	11.1	25.7	24	
08	16.0	21.3	25	
10	42.2	54.6	31	
12*	44.7	50.2	29	
14	41.8	50.8	27	−6.7
16	31.8	62.3	28	
18	43.5	58.3	34	
20	29.8	70.4	33	
22	40.2	48.5	24	
24	29.6	59.0	24	
26	19.5	63.8	20	
28	25.0	57.6	19	−7.0
30	35.5	43.1	16	
32	27.5	50.0	15	
34	33.5	54.0	23	
36	37.4	56.7	28	
38	47.6	51.2	32	
40	48.4	53.0	34	
42	46.7	50.7	31	
44	42.8	47.8	26	
46	44.8	47.4	27	−7.0
48	44.2	46.7	26	
50	45.5	48.1	28	
52	45.1	47.2	27	
54	45.0	48.0	28	
56	49.6	52.4	35	
58	48.2	51.2	33	

Observers—R. R. T. and W. J. P., who alternated from 8h 02m to 8h 14m; W. J. P. and R. W. P., who alternated from 11h 48m to 12h 02m.

Wednesday, September 30, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	49.5	52.1	22 34	−6.6
02	50.5	53.5	36	
04	50.7	53.7	36	
06	56.2	59.3	45	
08	51.7	53.4	37	
10	43.0	44.9	23	
12	38.3	40.7	17	
14	40.0	42.7	20	−6.6
16	46.2	47.7	28	
18	48.3	50.8	32	
20	45.2	46.4	27	
22	49.3	51.8	34	
24	43.9	46.4	25	
26	52.3	54.9	39	
28	53.8	56.2	41	
30	50.3	51.0	34	−6.8
32	45.7	48.2	28	
34	51.2	52.4	36	
36	48.1	49.1	31	
38	42.2	43.8	22	
40	43.2	43.8	23	
42	42.8	44.2	23	
44	40.0	40.6	18	−7.0
46	45.7	46.0	27	
48	43.8	44.5	24	
50	40.5	40.6	18	
52	45.6	45.8	26	
54	47.4	47.8	29	
56	48.0	48.8	30	
58	43.0	45.0	24	
13 00	40.0	41.8	19	−7.0
02	41.8	43.5	22	
04	47.6	48.5	30	
06	49.3	49.9	32	
08	46.6	47.9	29	
10	48.9	50.3	32	
12	46.4	48.8	29	
14	43.6	45.5	24	−7.0
16	44.7	46.3	26	
18	45.4	47.6	28	
20	44.4	46.0	26	
22	45.3	46.5	27	
24	44.7	46.3	26	
26	47.4	48.2	30	
28	44.8	45.9	26	
30	41.2	42.8	20	−6.9
32	41.3	42.7	20	
34	51.8	53.7	37	
36	59.3	60.9	49	
38	46.4	47.0	28	
40	46.2	46.6	27	
42	63.5	64.0	54	
44	40.2	47.4	23	−6.9
46	51.2	55.0	38	
48	40.6	43.5	20	
50	50.2	54.2	36	
52	52.0	56.9	40	
54	42.7	44.7	23	
56	28.2	33.0	03	
58	37.2	42.6	17	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	42.8	47.8	22 26	−7.1
02	41.1	46.0	23	
04	37.3	42.7	17	
06	41.2	45.3	22	
08	42.9	47.2	25	
10	44.4	48.2	27	
12	47.0	50.6	31	
14	48.6	52.4	34	−7.2
16	43.3	46.6	25	
18	44.2	47.1	26	
20	45.2	48.2	28	
22	44.8	47.6	27	
24	44.2	46.9	26	
26	44.8	47.9	27	
28	45.7	48.2	28	
30	47.0	49.2	30	−7.6
32	48.6	51.0	33	
34	46.1	48.2	28	
36	45.1	47.2	27	
38	45.8	47.2	28	
40	47.4	48.9	30	
42	47.9	49.2	31	
44	49.1	50.6	33	
46	49.4	51.4	34	−8.0
48	48.8	50.4	32	
50	49.7	51.4	34	
52	48.3	49.8	32	
54	48.7	50.4	32	
56	45.8	46.9	27	
58	48.2	49.6	31	
15 00	50.0	51.3	34	−8.0
02	49.0	50.0	32	
04	47.4	49.8	31	
06	47.1	48.3	29	
08	47.3	48.3	30	
10	47.2	48.1	29	
12	48.2	49.2	31	
14	48.8	49.6	32	−8.1
16	48.9	49.8	32	
18	48.8	49.7	32	
20	49.4	50.1	33	
22	48.9	49.4	32	
24	48.2	48.7	31	
26	48.6	48.8	31	
28	49.0	49.3	32	
30	49.8	49.9	33	−8.0
32	49.2	49.5	32	
34	48.5	48.7	31	
36	46.2	46.8	28	
38	45.3	46.1	26	
40	45.3	46.8	27	
42	44.9	46.8	26	
44	42.2	44.0	22	−7.9
46	42.0	44.3	22	
48	40.8	43.6	21	
50	41.9	45.6	23	
52	42.3	45.8	24	
54	41.3	44.7	22	
56	43.7	46.3	25	
58	Overl'k'd			

Observers—R. W. P. and R. R. T., who alternated from 15h 40m to 15h 54m. (W. J. P. 12h 48m to 13h 24m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, September 30, 1903					Magnet scale erect					Wednesday, September 30, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	45.1	48.0	22 28	−7.7	18 00	49.2	51.3	22 33	−7.4	20 00	45.3	46.5	22 27		22 00	31.8	43.8	22 39	−6.0
02	46.8	48.7	29		02	49.2	52.3	34		02	45.7	47.3	27		02	36.3	43.2	22 42	
04	46.7	49.0	30		04	50.7	53.2	36		04	45.3	47.5	28		04	51.2	62.0	23 08	
06	47.2	49.1	30		06	50.7	52.8	36		06	44.0	46.3	26		06	37.8	51.6	22 50	
08	46.6	49.3	30		08	51.1	53.2	36		08	44.0	46.9	26		08	34.0	46.2	43	
10	46.9	48.8	30		10	51.3	53.2	36		10	44.7	47.4	27		10	23.2	33.8	24	
12	47.8	49.0	30		12	52.1	53.8	38		12	44.7	47.4	27		12	20.6	30.6	20	
14	47.2	48.8	30	−7.6	14	50.3	51.9	35	−7.4	14	44.5	46.7	26		14	19.8	29.8	19	−6.0
16	48.1	49.8	31		16	48.3	50.3	32		16	44.5	46.8	26	−6.3	16	25.0	28.5	22	
18	49.2	51.1	33		18	48.1	51.2	32		18	45.0	47.0	27		18	26.7	30.3	24	
20	48.6	50.3	32		20	49.0	52.0	34		20	44.6	46.6	26		20	27.4	30.4	25	
22	49.2	51.1	33		22	49.4	52.3	34		22	43.8	45.7	25		22	27.6	30.6	26	
24	48.9	50.8	33		24	49.3	52.3	34		24	37.8	41.2	17		24	29.4	32.3	28	
26	48.9	50.8	33		26	50.1	52.6	35		26	41.6	44.5	22 22		26	30.6	32.8	30	
28	48.8	50.8	33		28	50.8	53.0	36		28*	38.8	51.3	23 42		28	31.1	33.0	30	
30	48.2	50.9	32	−7.5	30	51.3	53.3	37	−7.0	30	Overl'k'd				30	30.5	32.5	29	
32	47.9	50.6	32		32	50.3	52.3	35		32	33.0	54.5	39		32	31.4	33.3	30	−6.0
34	48.2	51.1	32		34	49.6	56.5	38		34*	14.5	17.0	48	−6.2	34	31.4	33.3	30	
36	47.8	49.9	31		36	48.8	50.7	33		36*	35.7	38.8	23 10		36	30.3	31.9	29	
38	48.2	49.9	32		38	49.0	51.0	33		38	18.7	21.3	22 43		38	30.4	32.8	29	
40	48.5	50.2	32		40	49.5	51.4	34		40	15.2	17.4	37		40	32.3	34.3	32	
42	48.9	50.4	32		42	50.2	52.0	35		42*	34.1	41.8	14		42	32.7	34.5	32	
44	49.2	50.8	33	−7.5	44	49.6	51.3	34		44	30.5	36.5	07	−6.0	44	31.6	33.2	31	−6.0
46	49.9	50.3	33		46	49.7	51.2	34		46	29.7	36.0	06		46	28.3	30.3	26	
48	49.9	50.4	33		48	49.7	50.4	33		48	33.7	35.3	09		48	28.4	29.6	25	
50	49.9	50.3	33		50	48.3	49.8	32		50	37.2	38.9	14		50	29.3	31.1	27	
52	49.2	49.8	32		52	47.6	48.8	30		52	37.1	38.3	14		52	31.1	32.3	30	
54	48.9	49.6	32		54	46.4	48.0	29		54	46.8	56.3	36		54	30.8	32.0	29	
56	49.2	50.1	32		56	46.6	47.5	28		56	47.4	52.3	33		56	31.2	32.2	30	
58	50.6	51.8	35		58	46.0	47.0	28		58	52.7	63.9	46		58	31.8	32.8	30	
17 00	51.9	53.1	37	−7.6	19 00	45.2	46.6	27	−7.7	21 00	53.6	60.0	22 44	−6.0	23 00	32.2	33.3	31	−6.0
02	51.9	52.9	37		02	45.3	47.2	27		02	64.8	72.0	23 02		02	31.0	31.8	29	
04	51.0	51.9	35		04	46.0	47.9	28		04	54.0	58.0	22 43		04	30.6	31.8	29	
06	51.8	52.0	36		06	46.2	48.0	28		06*	26.2	29.0	23 13		06	30.5	31.3	28	
08	50.6	50.8	34		08	46.2	48.0	28		08	18.0	29.0	23 07		08	29.5	30.1	26	
10	49.2	49.7	32		10	47.0	48.2	29		10*	46.5	49.3	22 37		10	30.0	31.0	28	
12	49.8	50.0	33		12	45.3	47.1	27		12	40.6	43.5	28		12	30.2	30.8	28	
14	49.6	50.0	33	−7.6	14	46.1	48.5	29	−6.8	14	42.2	43.8	29	−6.0	14	28.3	29.2	25	
16	49.9	50.8	34		16	46.6	48.0	29		16	25.3	30.7	06		16	27.7	28.2	24	−5.9
18	50.6	50.9	34		18	48.2	49.2	31		18	32.8	36.0	16		18	27.4	28.1	23	
20	49.2	49.9	32		20	48.9	50.0	32		20	43.5	44.8	31		20	28.0	28.8	24	
22	48.9	50.3	32		22	49.2	50.1	32		22	39.8	40.8	25		22	27.4	28.4	24	
24	49.0	50.0	32		24	48.7	50.2	32		24	47.2	50.8	39		24	23.4	23.5	16	
26	49.9	50.7	34		26	51.2	52.6	36		26	45.0	59.7	22 44		26	28.0	29.0	24	
28	50.3	50.9	34		28	49.2	50.3	33		28*	53.3	62.7	23 43		28	28.8	29.9	26	
30	50.2	51.0	34	−7.5	30	49.4	50.2	33	−6.7	30	47.5	53.5	23 31	−6.0	30	29.6	30.2	27	−5.8
32	50.2	51.0	34		32	49.2	50.5	33		32	15.8	25.8	22 44		32	30.8	31.1	28	
34	49.9	51.0	34		34	49.6	50.9	33		34	25.5	46.3	23 08		34	33.6	33.6	32	
36	50.8	52.0	35		36	49.9	51.1	34		36	32.7	49.0	23 16		36	35.0	35.0	35	
38	50.3	51.4	34		38	50.2	51.5	34		38*	55.4	64.3	24 45		38	33.5	33.9	33	
40	51.1	52.3	36		40	50.6	51.9	35		40	37.0	63.6	24 31		40	32.7	33.3	32	
42	51.4	52.8	36		42	49.9	51.2	34		42*	21.5	46.5	22 20		42	31.3	31.5	29	
44	52.1	53.0	37	−7.5	44	48.9	50.4	32	−6.7	44	64.0	66.6	23 09	−6.0	44	30.0	30.4	27	−5.7
46	51.7	53.7	37		46	47.4	48.5	30		46	18.1	33.3	22 07		46	31.0	31.1	29	
48	50.9	52.7	36		48	46.8	47.8	29		48*	68.0	75.6	24 41		48	31.8	32.6	30	
50	50.0	52.0	35		50	47.3	49.0	30		50	11.6	38.0	23 28		50	33.8	34.7	33	
52	50.1	52.0	35		52	45.6	47.6	28		52*	16.0	34.5	22 19		52	35.0	36.9	36	
54	50.4	52.2	35		54	44.9	46.4	26		54	19.3	33.5	21		54	40.5	44.0	46	
56	50.1	52.2	35		56	45.2	46.0	26		56	23.3	39.8	29		56	45.2	47.0	52	
58	49.9	51.7	34		58	45.7	47.0	27	−6.5	58	40.6	51.4	52		58	47.0	48.6	22 55	
															60	57.4	58.1	23 10	−5.5

Observers—R. R. T. and W. J. P., who alternated from 19h 52m to 20h 06m. (W. J. P. alternated R. R. T. also from 18h 16m to 18h 22m and observed readings from 18h 24m to 18h 44m.)

Correction to local mean time + 37s.

Torsion head at 0h 00m read 339° and at 24h 30m read the same.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, October 1, 1903				Magnet scale inverted				Friday, October 2, 1903				Magnet scale erect			
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00					18 00	52.6	52.0	21 40	−2.9	20 00	50.8	58.2	22 15	−5.0	22 00	65.5	67.9	22 35	−4.7
02					02	52.3	52.0	40		02	49.0	51.1	08		02	64.3	67.6	33	
04					04	51.4	51.0	41		04	54.6	58.2	18		04	65.3	68.4	35	
06					06	50.9	50.6	42		06	55.7	58.2	19		06	65.9	68.6	35	
08					08	49.9	49.7	44		08	55.4	58.4	19		08	65.4	68.1	35	
10					10	49.3	48.9	45		10	56.9	58.7	21		10	66.1	68.9	36	
12					12	48.1	47.7	47		12	56.2	58.2	20		12	66.2	69.0	36	
14					14	47.0	46.0	49	−3.0	14	54.8	56.6	17	−5.0	14	66.3	69.2	36	−4.4
16					16	44.1	43.6	53		16	53.0	54.7	14		16	64.4	69.7	35	
18					18	43.9	43.0	54		18	46.4	49.0	05		18	64.9	69.2	35	
20					20	41.1	40.7	21 58		20	49.7	52.3	10		20	64.4	69.0	35	
22					22	39.1	37.8	22 02		22	51.9	54.5	13		22	65.0	69.0	35	
24					24	36.5	35.7	05		24	52.8	54.8	14		24	65.0	68.6	35	
26					26	34.3	33.7	08		26	52.7	54.4	14		26	65.1	68.8	35	
28					28	35.8	34.8	06		28	54.9	56.0	17		28	66.1	69.0	36	
30					30	36.8	35.8	05	−3.0	30	55.9	57.7	19	−4.8	30	65.4	68.1	35	−4.3
32					32	32.3	31.5	12		32	55.9	57.1	19		32	65.3	69.0	35	
34					34	31.8	30.6	13		34	55.3	57.0	18		34	65.3	69.0	35	
36					36	32.4	31.2	12		36	54.9	56.3	17		36	64.9	68.4	34	
38					38	32.3	30.5	13		38	55.4	57.6	19		38	64.1	67.8	33	
40					40	30.4	28.8	15		40	56.2	58.7	20		40	65.0	68.5	35	
42					42	33.4	31.8	11		42	55.6	58.1	19		42	65.9	69.0	36	
44					44	36.5	35.3	06		44	53.7	56.1	16	−4.7	44	66.0	69.4	36	−4.1
46					46	34.0	33.6	09	−3.0	46	54.9	56.0	17		46	65.9	67.3	34	
48					48	38.5	37.3	02		48	57.3	58.9	21		48	65.7	67.0	34	
50					50	39.0	38.6	22 01		50	57.0	58.4	20		50	65.9	67.4	34	
52					52	40.8	39.4	21 59		52	55.9	57.1	19		52	65.3	67.0	34	
54					54	40.1	38.8	22 00		54	56.9	58.2	20		54	64.3	65.9	32	
56					56	40.1	38.4	00		56	56.8	57.8	20		56	63.8	65.1	31	
58					58	40.1	38.8	00		58	56.9	58.1	20		58	63.9	64.6	31	
17 00					19 00	38.5	37.4	02	−2.9	21 00	55.3	56.8	18	−4.8	23 00	63.1	64.0	30	−4.0
02					02	38.8	37.0	02		02	58.2	60.1	23		02	63.5	65.3	31	
04					04	40.1	38.3	22 00		04	61.0	62.3	27		04	64.9	66.9	33	
06					06	40.8	39.2	21 59		06	61.9	64.0	28		06	65.3	67.3	34	
08					08	42.5	41.0	56		08	60.7	62.4	26		08	65.2	67.5	34	
10					10	41.1	39.8	58		10	61.0	68.0	31		10	64.9	67.0	33	
12					12	41.1	40.1	21 58		12	61.2	63.0	27		12	63.9	66.3	32	
14					14	39.9	38.4	22 00		14	60.9	62.0	26	−4.8	14	62.7	65.0	30	−4.0
16					16	39.7	38.0	01		16	60.7	62.3	26		16	66.9	68.0	36	
18					18	39.9	38.6	22 00		18	61.5	63.1	28		18	65.6	67.5	34	
20					20	40.7	39.6	21 59		20	61.5	63.3	28		20	60.9	61.4	26	
22					22	40.9	39.6	21 59		22	61.5	63.2	28		22	60.9	62.0	26	
24					24	40.1	39.0	22 00		24	62.5	64.1	29		24	59.3	60.4	24	
26					26	39.1	37.9	01		26	63.2	65.1	30		26	60.5	61.6	26	
28					28	37.3	36.5	04		28	63.2	65.2	31		28	62.0	64.2	29	
30					30	37.8	36.8	03	−2.4	30	63.7	65.0	31		30	64.4	65.9	32	−4.0
32					32	37.7	36.8	04		32	64.0	65.3	31		32	63.8	67.0	33	
34					34	36.6	35.7	05		34	63.5	64.0	30		34	63.0	66.2	31	
36					36	35.8	34.9	06		36	64.0	64.1	30		36	63.0	66.0	31	
38					38	35.6	34.6	07		38	63.9	64.0	30		38	63.2	66.0	31	
40					40	35.8	34.7	07		40	62.9	63.3	29		40	62.2	64.9	30	
42					42	35.5	34.4	07		42	62.2	63.0	28		42	61.9	64.5	29	
44					44	35.7	34.7	07	−2.3	44	61.5	62.6	27	−5.0	44	63.3	65.8	31	−4.0
46					46	36.3	35.3	06		46	61.5	62.6	27		46	63.9	65.6	31	
48					48	36.8	36.0	05		48	62.9	64.0	29		48	64.2	65.9	32	
50					50	37.0	36.6	04		50	62.9	64.2	30		50	64.6	66.0	32	
52					52	37.6	36.9	04		52	63.6	65.0	31		52	64.8	66.9	33	
54					54	37.7	36.9	03		54	63.0	65.8	31		54	65.9	67.1	34	
56					56	37.6	37.0	03		56	64.2	66.8	33		56	66.3	69.9	37	
58					58	37.0	36.7	04		58	65.0	67.3	34		58	66.8	68.1	36	−2.8
					20 00	36.0	35.8	06	−2.0						60	67.0	69.2	37	
	The fibre was found broken. A new set of four was substituted, and after the plane of detorsion was found, the scale readings were commenced at—																		
	57.0	51.5	21 37	−3.0															
	58.8	52.0	35																
	56.8	55.2	34																
	56.5	55.3	34																
	54.5	53.5	37																
	53.3	51.9	39																
	54.6	53.5	37																
	56.0	54.4	35																
	58.3	57.5	31	−3.0															
	58.3	57.0	31																
	58.1	56.8	32																
	59.0	58.0	30																
	58.6	57.7	31																
	58.9	58.4	30																
	61.6	60.5	26																
	61.1	60.0	27	−3.1															
	63.0	62.0	24																
	62.8	62.0	24																
	60.1	59.6	28																
	62.4	61.9	24																
	57.1	56.4	33																
	55.2	54.7	36																
	54.8	54.4	36	−2.9															
	55.6	54.9	35																
	56.1	55.6	34																
	56.1	55.2	35																
	55.0	54.3	36																
	54.3	53.8	37																
	52.8	52.2	39																
	52.9	52.2	39																

Correction to local mean time — 1m 02s. 90° torsion = 20.′6.
Torsion head at 7h 00m read 72° and at 20h 26m read 89°.
Observer—R. R. T.

Correction to local mean time is — 1m 06s.
Torsion head at 19h 45m read 222° and at 24h 20m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, October 4, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	53.1	50.0	22 38	
02	55.6	52.2	34	-10.3
04	Overl'k'd			
06	58.2	57.8	27	
08	56.5	54.9	31	
10	55.1	54.2	33	
12	55.7	54.7	32	
14	56.1	54.1	32	-10.0
16	55.1	52.2	34	
18	55.3	52.0	34	
20	54.8	51.9	35	
22	51.8	48.9	39	
24	50.7	48.0	41	
26	50.3	48.2	41	
28	48.6	46.3	44	
30	47.0	45.3	46	-9.4
32	47.1	45.2	46	
34	46.5	45.0	46	
36	47.5	44.8	46	
38	49.1	45.8	44	
40	49.1	45.9	44	
42	48.2	45.0	45	
44	48.4	45.0	45	-8.9
46	48.1	45.6	45	
48	49.0	45.3	44	
50	49.0	45.6	44	
52	49.3	46.0	44	
54	48.1	44.9	45	
56	48.0	44.9	46	
58	49.0	46.3	44	
1 00	49.6	47.0	43	-8.7
02	47.2	44.0	47	
04	50.0	47.0	42	
06	49.1	45.2	44	
08	50.7	47.2	42	
10	51.7	48.1	40	
12	48.5	45.0	45	
14	51.1	47.3	41	-8.3
16	50.5	47.9	41	
18	51.4	49.5	39	
20	46.0	44.1	48	
22	56.0	54.2	32	
24	54.1	52.9	34	
26	42.8	42.7	51	
28	48.5	46.3	44	
30	53.6	52.2	35	-8.0
32	55.1	53.0	34	
34	53.8	52.0	35	
36	51.3	50.0	39	
38	47.1	45.7	45	
40	47.7	47.0	44	
42	50.8	50.6	39	
44	56.0	50.3	35	-8.0
46	50.1	48.4	41	
48	49.0	47.4	43	
50	49.1	47.4	43	
52	50.0	48.4	41	
54	50.2	48.7	41	
56	46.1	45.8	46	
58	46.4	45.1	47	
2 00	46.3	45.2	22 47	-7.8
02	46.1	44.7	47	
04	46.2	44.8	47	
06	45.1	43.2	49	
08	44.1	42.0	51	
10	42.6	40.3	53	
12	41.1	39.5	55	
14	42.1	40.0	54	-7.7
16	41.3	39.2	55	
18	43.1	40.2	53	
20	46.1	43.5	48	
22	47.0	44.5	47	
24	47.9	45.4	45	
26	48.0	46.0	45	
28	48.2	46.3	44	
30	49.0	47.0	43	-7.8
32	50.0	48.2	41	
34	50.0	48.2	41	
36	49.5	48.0	42	
38	49.5	48.6	42	
40	50.3	49.0	41	
42	51.0	49.7	40	
44	51.0	50.3	39	-7.8
46	49.4	48.5	42	
48	49.2	48.0	42	
50	49.8	48.8	41	
52	48.6	47.3	43	
54	48.4	47.2	43	
56	48.6	47.2	43	
58	48.8	47.6	43	
3 00	49.3	48.0	42	-8.0
02	48.5	47.4	43	
04	48.0	47.0	44	
06	48.2	47.0	44	
08	49.8	48.8	41	
10	51.2	50.6	39	
12	50.6	49.9	40	
14	48.6	47.6	43	-8.0
16	47.6	47.0	44	
18	48.4	47.2	43	
20	48.0	46.8	44	
22	48.3	47.2	44	
24	48.8	47.6	43	
26	49.1	47.0	43	
28	47.4	45.6	45	
30	45.8	43.7	48	-8.0
32	44.0	42.6	50	
34	43.8	42.2	51	
36	45.0	43.2	49	
38	46.0	44.9	47	
40	47.0	45.5	46	
42	47.3	46.0	45	
44	48.9	47.2	43	-7.8
46	47.5	45.0	46	
48	44.0	41.1	52	
50	42.0	39.9	54	
52	42.1	40.0	54	
54	47.1	44.6	47	
56	48.2	46.1	45	
58	46.6	44.9	47	

Observers—R. R. T. (W. J. P. 2h 44m to 3h 24m, alternated R. R. T. to 3h 46m.)

Sunday, October 4, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	48.5	56.3	22 34	
02	46.3	48.0	26	-7.3
04	44.0	44.8	21	
06	45.7	46.8	24	
08	54.7	54.8	38	
10	60.8	61.7	48	
12	53.3	55.2	37	
14	54.2	55.8	38	-7.1
16	57.2	57.4	42	
18	60.9	61.9	48	
20	63.9	65.1	53	
22	63.9	65.1	53	
24	62.2	64.2	51	
26	63.1	65.9	53	
28	63.5	66.3	54	
30	63.2	66.0	53	-7.3
32	61.2	64.9	51	
34	58.9	62.0	47	
36	59.2	62.0	47	
38	63.9	66.8	54	
40	62.2	64.6	51	
42	63.2	65.7	53	
44	61.6	64.4	51	-7.5
46	66.6	69.9	22 59	
48*	52.8	55.8	23 14	
50	57.6	59.4	21	
52	52.0	54.8	13	
54	50.4	52.5	10	
56	54.2	54.4	14	
58	62.7	63.3	28	
5 00	65.5	66.5	32	-7.5
02	69.8	70.0	38	
04	71.9	72.6	42	
06	69.8	70.3	39	
08	63.0	65.6	30	
10	64.0	67.2	32	
12	64.3	66.8	32	
14	62.2	65.8	29	-7.6
16	61.7	63.9	27	
18	56.7	59.0	20	
20	52.4	54.6	13	
22	45.5	47.0	01	
24	45.9	47.3	02	
26	43.9	47.0	23 00	
28	39.2	42.8	22 53	
30	37.0	39.9	49	-7.8
32	40.9	43.1	55	
34	35.9	37.3	46	
36	31.1	33.7	40	
38	36.1	38.0	47	
40	39.1	41.0	52	
42	42.9	44.6	22 57	
44	45.6	48.1	23 02	-7.7
46	40.9	44.0	22 55	
48	38.9	42.9	53	
50	40.2	45.4	22 56	
52	43.9	48.1	23 01	
54	37.0	39.2	22 49	
56	39.2	46.8	22 56	
58	58.2	60.7	23 22	
6 00	30.5	34.3	22 40	-7.9
02	52.6	54.3	23 13	
04	41.0	48.6	22 59	
06	32.1	36.0	22 42	
08	49.9	52.9	23 09	
10	54.2	59.0	18	
12	45.9	50.7	23 05	
14	40.9	44.0	22 55	-8.0
16	39.2	42.8	53	
18	40.6	42.0	54	
20	41.0	42.6	22 54	
22	45.1	45.9	23 00	
24	46.2	47.9	03	
26	50.2	52.0	09	
28	53.7	54.2	13	
30	58.9	61.3	23	-8.0
32	54.9	56.2	16	
34	66.3	69.3	35	
36	64.9	66.7	32	
38	65.1	65.9	32	
40	65.7	66.8	33	
42	57.9	60.2	21	
44	61.8	62.5	26	-8.0
46	58.6	58.8	21	
48	47.8	50.3	23 06	
51*	59.0	63.0	24 00	
52	47.2	51.0	23 42	
54	39.7	42.3	23 29	
56	19.0	22.0	22 57	
58	33.1	34.0	23 17	
7 00	32.2	37.0	19	-7.8
02	25.1	28.2	07	
04	24.8	27.9	06	
06	21.0	25.7	23 01	
08	20.3	22.8	22 58	
10	13.1	17.9	49	
12	13.1	16.8	48	
14	16.8	18.8	53	-7.5
16	12.5	19.0	49	
18	10.8	16.0	46	
20	12.5	18.0	49	
22	18.0	20.0	55	
24	12.5	14.0	45	
26	5.0	10.0	36	
28*	36.9	40.8	40	
30	38.5	44.3	44	-7.5
32	43.4	46.4	49	
34	46.8	51.8	22 56	
36	51.2	54.3	23 02	
38	57.0	60.5	23 11	
40	46.2	49.4	22 54	
42	46.3	51.5	56	
44	39.4	45.4	45	-7.6
46	38.3	43.8	43	
48	38.8	45.8	45	
50	43.5	49.1	52	
52	44.6	51.5	54	
54	40.6	47.7	48	
56	47.8	55.0	59	
58	41.6	46.8	48	-7.5
8 00	46.7	48.5	53	

Correction to local mean time + 1m 09s.

Torsion head at 23h 00m read 219° and at 8h 15m read the same.

Observers—R. R. T. (W. J. P. 7h 14m to 8h 20m, alternated R. R. T. to 8h 32m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, October 5, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	40.5	38.4	22 34	
02	39.3	37.5	36	−12.2
04	35.5	31.3	44	
06	38.3	35.0	39	
08	37.4	30.8	43	
10	39.3	35.3	38	
12	39.0	34.3	39	
14	40.0	37.0	36	−12.2
16	43.3	38.3	32	
18	47.6	45.9	23	
20	42.5	38.3	33	
22	47.1	41.1	27	
24	57.3	48.6	13	
26	44.1	39.7	30	
28	38.3	33.8	40	
30	27.2	23.1	57	−11.9
32	37.6	35.5	39	
34	42.6	39.3	32	
36	51.3	45.4	20	
38	43.3	38.2	32	
40	43.3	38.3	32	
42	45.3	41.1	28	
44	41.9	38.6	33	−11.2
46	43.5	39.2	31	
48	42.9	39.2	32	
50	38.3	35.2	39	
52	44.5	43.0	28	
54	39.0	32.9	40	
56	37.4	37.2	38	
58	44.0	43.0	28	
9 00	40.0	39.2	34	−10.9
02	43.6	41.2	30	
04	46.1	43.1	26	
06	41.9	39.2	33	
08	38.2	34.1	40	
10	47.1	39.2	29	
12	48.1	46.1	22	
14	41.1	36.8	35	−10.6
16	39.1	32.6	40	
18	48.3	41.2	26	
20	46.2	37.6	31	
22	44.0	39.2	31	
24	44.0	39.9	31	
26	46.6	43.3	26	
28	40.4	37.0	36	
30	40.0	36.7	36	−10.3
32	41.0	34.9	37	
34	42.5	38.9	32	
36	45.0	39.4	30	
38	43.8	39.8	31	
40	37.3	32.1	42	
42	45.2	37.3	32	
44	45.1	34.8	34	−10.1
46	45.0	35.5	33	
48	44.0	34.9	34	
50	40.8	31.7	39	
52	42.0	31.1	39	
54	44.0	29.0	39	
56	47.0	35.2	32	
58	44.0	31.9	37	
10 00	46.3	36.8	22 31	−9.6
02	42.1	30.9	39	
04	45.8	34.3	33	
06	44.3	35.0	34	
08	44.8	36.5	32	
10	43.6	36.3	34	
12	44.0	34.6	35	
14	43.0	34.4	36	−8.8
16	42.0	34.0	37	
18	45.9	38.2	30	
20	46.8	37.3	30	
22	40.1	37.4	36	
24	38.8	37.8	36	
26	38.9	36.9	37	
28	38.1	35.3	39	
30	40.9	39.0	34	−8.1
32	38.0	36.2	38	
34	38.5	36.7	37	
36	39.1	36.9	37	
38	39.3	36.4	37	
40	41.9	40.0	32	
42	43.0	40.0	31	
44	41.8	39.8	32	−8.0
46	43.9	40.1	30	
48	46.1	41.1	28	
50	44.0	38.9	31	
52	43.0	37.8	33	
54	45.0	39.1	30	
56	43.9	37.3	32	
58	43.1	38.0	33	
11 00	44.1	38.8	31	−7.7
02	Overl'k'd			
04	41.9	36.6	35	
06	39.8	35.4	37	
08	44.1	37.5	32	
10	43.0	37.2	33	
12	41.0	36.5	36	
14	42.0	36.2	35	−7.2
16	40.1	34.3	38	
18	38.2	34.6	39	
20	37.8	33.9	40	
22	37.8	33.1	41	
24	36.9	32.1	42	
26	41.9	36.1	35	
28	42.9	36.1	34	
30	39.0	33.8	39	
32	40.3	34.2	38	−7.3
34	42.8	36.9	34	
36	43.6	36.8	33	
38	43.7	37.3	33	
40	41.0	35.7	36	
42	38.9	34.5	39	
44	40.0	35.2	37	−7.5
46	43.0	38.1	33	
48	42.9	36.9	34	
50	43.4	37.0	33	
52	45.9	40.2	29	
54	47.0	40.2	28	
56	40.9	36.7	35	
58	41.7	35.4	36	−7.6
12 00	41.3	35.5	36	

Correction to local mean time is + 1m 02s.
Torsion head at 8h 00m read 210° and at the end read the same.
Observers—W. J. P., R. R. T., and F. L.

Tuesday, October 6, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	33.9	39.8	22 26	−6.2
02	35.1	41.3	28	
04	35.1	41.6	29	
06	37.5	43.0	32	
08	35.0	39.8	27	
10	36.2	39.3	28	
12	34.9	38.0	26	
14	33.0	37.7	24	−6.3
16	38.2	43.9	32	
18	37.9	43.9	32	
20	36.4	40.9	28	
22	32.9	38.1	23	
24	23.2	24.8	22 05	
26	14.2	24.4	21 58	
28	14.3	23.2	21 57	
30	19.3	25.7	22 03	−6.4
32	23.5	32.2	11	
34	25.9	32.1	13	
36	26.8	34.8	16	
38	26.0	33.2	14	
40	27.9	34.8	17	
42	31.0	35.0	19	
44	34.3	35.9	22	−6.5
46	30.1	34.0	18	
48	27.0	31.0	13	
50	28.7	33.1	16	
52	24.6	29.8	10	
54	22.8	23.4	04	
56	25.8	30.1	11	
58	21.3	22.3	02	
13 00	21.2	23.0	02	−6.6
02	24.1	27.8	08	
04	26.2	30.9	12	
06	27.2	31.3	13	
08	24.8	29.0	10	
10	26.2	30.0	12	
12	28.0	31.5	14	
14	27.2	32.8	14	−6.5
16	26.8	30.3	12	
18	25.6	30.6	11	
20	25.6	30.6	11	
22	25.3	24.8	06	
24	26.3	31.2	12	
26	24.7	29.3	10	
28	22.0	27.0	06	
30	21.0	25.8	04	−6.6
32	19.7	23.6	22 01	
34	13.5	18.0	21 52	
36	19.0	23.7	22 00	
38	20.8	24.9	03	
40	19.2	23.3	22 00	
42	18.5	21.9	21 58	
44	21.5	24.6	22 03	−6.5
46	22.8	25.6	05	
48	23.2	25.0	04	
50	23.3	25.6	05	
52	22.8	24.8	04	
54	24.5	27.0	07	
56	28.0	30.6	12	
58	27.3	29.4	11	
14 00	25.5	27.4	22 08	−6.5
02	24.9	26.5	07	
04	26.0	27.2	08	
06	26.4	27.6	09	
08	28.2	29.8	12	
10	29.5	30.5	13	
12	29.1	30.4	13	
14	30.5	31.8	15	−6.3
16	28.3	29.1	11	
18	26.6	28.0	09	
20	23.9	25.8	05	
22	22.0	24.7	03	
24	21.2	24.2	02	
26	21.8	24.8	22 03	
28	19.0	21.6	21 58	
30	24.0	26.2	22 06	−6.3
32	22.1	26.0	04	
34	29.0	33.1	15	
36	27.5	30.8	22 12	
38	18.0	21.1	21 57	
40	20.9	24.8	22 02	
42	29.9	32.4	15	
44	28.2	31.0	12	−6.3
46	29.0	30.3	12	
48	29.8	32.0	14	
50	28.7	31.0	12	
52	28.3	30.9	12	
54	28.1	30.8	12	
56	27.9	30.3	11	
58	26.0	29.0	09	
15 00	25.6	28.0	08	−6.2
02	23.8	27.0	05	
04	25.0	28.0	07	
06	21.9	24.8	02	
08	23.7	29.0	07	
10	25.7	31.2	10	
12	25.2	31.8	10	
14	24.0	30.0	07	−6.2
16	22.9	28.3	05	
18	22.8	28.0	05	
20	24.0	29.1	07	
22	25.5	30.8	09	
24	26.8	31.1	10	
26	28.1	32.0	12	
28	28.5	32.0	12	
30	27.8	31.0	11	−6.1
32	27.0	30.6	10	
34	28.0	30.5	11	
36	29.3	31.9	13	
38	28.7	31.2	12	
40	28.6	31.1	12	
42	28.1	30.2	10	
44	28.8	30.7	11	−5.9
46	29.2	30.2	11	
48	29.8	30.8	12	
50	29.0	30.6	11	
52	29.6	30.5	12	
54	30.7	31.9	14	
56	31.2	32.3	14	
58	31.8	33.1	15	
16 00	31.2	32.7	14	

Correction to local mean is + 58s. 90° torsion = 25.'1.
Torsion head at 12h 00m read 216° and at 16h 35m read 233°.
Observer—R. R. T. (W. J. P. 13h 12m to 14h 02m, alternated R. R. T. to 14h 14m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	53.0	51.8	22 16	
02	51.6	49.8	18	−6.8
04	49.6	47.8	21	
06	49.5	48.2	21	
08	50.4	48.3	20	
10	47.8	45.7	24	
12	45.5	43.0	28	
14	44.0	41.0	31	
16	42.5	38.8	34	−6.5
18	41.2	39.2	35	
20	45.0	44.0	28	
22	41.1	39.3	35	
24	46.8	38.8	31	
26	37.8	35.7	40	
28	43.2	41.8	31	
30	40.8	39.0	35	−6.0
32	39.1	36.6	38	
34	41.8	39.0	34	
36	45.6	44.0	27	
38	45.6	45.1	27	
40	41.8	41.3	33	
42	38.1	37.0	39	
44	36.4	34.8	42	−5.8
46	39.2	36.0	39	
48	33.0	32.8	46	
50	39.3	35.8	39	
52	41.7	39.1	34	
54	40.8	38.8	35	
56	39.2	36.6	38	
58	37.4	34.9	41	
1 00	35.9	35.3	42	−6.0
02	35.7	34.0	43	
04	39.9	38.5	36	
06	42.8	41.6	32	
08	42.4	41.1	32	
10	42.3	40.7	33	
12	42.6	40.6	32	
14	43.1	41.5	31	−5.8
16	43.3	41.2	32	
18	44.0	42.6	30	
20	43.7	42.8	30	
22	42.8	41.3	32	
24	38.8	37.8	38	
26	43.2	42.7	31	
28	41.7	41.0	33	
30	50.2	50.1	19	−6.0
32	51.3	51.1	17	
34	47.4	46.7	24	
36	53.3	52.5	15	
38	47.6	47.4	23	
40	48.6	48.2	22	
42	50.5	50.1	19	
44	49.4	49.3	20	−5.8
46	51.8	50.7	18	
48	44.4	44.0	28	
50	40.6	40.2	34	
52	39.2	39.1	36	
54	32.4	32.3	47	
56	27.5	26.2	56	
58	29.0	26.9	54	
2 00	30.1	28.7	22 52	−5.8
02	39.0	38.3	37	
04	45.5	42.2	29	
06	40.8	37.9	36	
08	42.3	40.3	33	
10	43.4	41.5	31	
12	46.4	44.2	27	
14	45.1	43.3	29	−5.9
16	46.1	43.2	28	
18	43.9	42.2	30	
20	39.8	37.7	37	
22	36.9	35.4	41	
24	33.3	31.7	47	
26	36.1	32.6	44	
28	42.2	39.4	34	
30	39.6	36.7	38	−6.1
32	40.3	37.7	37	
34	44.7	41.8	30	
36	49.2	45.8	23	
38	45.6	42.5	29	
40	40.8	37.7	36	
42	42.8	40.4	32	
44	44.1	41.8	30	
46	42.2	39.5	34	−6.1
48	38.2	36.1	40	
50	35.6	33.0	44	
52	34.7	32.0	46	
54	35.4	32.5	45	
56	36.0	33.2	44	
58	34.6	32.2	46	
3 00	31.7	28.8	50	−6.2
02	26.1	23.2	22 59	
04	18.8	16.1	23 11	
06	20.2	17.1	23 09	
08	28.2	24.2	22 57	
10	36.3	33.4	43	
12	30.2	27.2	53	
14	32.1	28.3	50	−6.2
16	34.5	30.8	47	
18	34.2	31.1	47	
20	33.8	31.1	47	
22	36.6	34.1	42	
24	39.0	37.3	38	
26	41.9	39.7	34	
28	36.9	34.4	42	
30	32.0	29.3	50	−6.3
32	29.8	27.2	53	
34	31.2	29.3	50	
36	32.9	30.7	48	
38	33.8	31.8	46	
40	34.9	33.2	44	
42	35.5	33.8	43	
44	34.8	33.3	44	−6.3
46	37.0	36.0	41	
48	41.3	39.0	35	
50	45.0	44.4	28	
52	38.7	37.8	38	
54	38.4	37.2	38	
56	41.8	40.8	33	
58	48.8	48.0	22	

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	49.8	49.1	22 21	−6.3
02	51.3	50.2	18	
04	50.3	49.7	19	
06	42.4	41.8	32	
08	41.2	40.3	34	
10	38.0	36.3	40	
12	41.2	39.0	35	
14	43.9	42.9	30	−6.3
16	41.8	40.8	33	
18	39.7	37.8	37	
20	39.9	38.6	36	
22	39.2	36.7	39	
24	37.0	35.5	41	
26	33.9	31.3	47	
28	31.9	29.0	50	
30	30.9	28.0	52	−6.3
32	30.9	28.9	51	
34	31.2	29.3	51	
36	32.9	30.3	48	
38	31.8	29.6	50	
40	32.1	29.2	50	
42	36.0	33.8	43	
44	39.0	36.6	39	−6.3
46	37.4	35.0	41	
48	37.3	34.2	42	
50	37.0	34.0	42	
52	38.8	35.3	40	
54	39.2	36.7	38	
56	43.8	41.2	31	
58	38.9	35.6	40	
5 00	37.0	34.5	42	−6.3
02	37.0	33.5	43	
04	34.7	32.0	46	
06	30.4	37.8	44	
08	28.1	26.2	55	
10	26.8	24.7	58	
12	32.0	29.2	50	
14	29.1	26.9	54	−6.4
16	27.0	25.3	57	
18	28.0	26.1	22 56	
20	24.6	23.1	23 01	
22	23.8	22.4	23 02	
24	35.7	35.4	22 42	
26	25.9	24.1	59	
28	25.8	24.4	22 58	
30	21.9	20.0	23 05	−6.5
32	13.9	12.7	17	
34	18.7	16.0	11	
36	22.0	20.6	23 04	
38	30.1	29.9	22 51	
40	36.0	33.7	43	
42	39.9	38.2	37	
44	41.0	38.3	36	−6.5
46	41.0	40.8	34	
48	38.8	37.4	22 38	
50	25.2	22.5	23 01	
52	22.8	22.0	23 03	
54	40.1	37.4	22 37	
56	50.5	45.0	23	
58	36.8	32.1	44	
6 00	33.2	30.0	22 48	−6.5
02	39.4	36.0	39	
04	42.1	36.6	36	
06	37.3	33.9	42	
08	32.2	28.9	22 50	
10	25.8	20.6	23 02	
12	45.8	36.1	22 34	
14	48.3	40.2	29	−6.5
16	39.9	35.8	39	
18	Overl'k'd			
20	Overl'k'd			
22*	22.0	16.0	45	
24	Overl'k'd			
26	25.9	20.2	39	
28	20.8	15.2	47	
30	15.1	12.2	22 53	−6.4
32	10.8	8.4	23 00	
34	24.6	21.8	22 38	
36	29.8	22.6	34	
38	21.0	18.2	44	
40	13.3	9.2	57	
42	13.0	9.9	57	
44	21.5	16.8	45	−6.0
46	24.0	17.9	42	
48	14.7	9.9	55	
50	19.1	11.1	51	
52	16.9	8.8	55	
54	22.1	18.9	43	
56	Overl'k'd			
58*	61.1	60.6	36	
7 00	61.8	60.1	36	−6.0
02	60.9	58.1	38	
04	63.8	61.0	34	
06	57.1	55.9	43	
08	60.4	59.0	38	
10	58.7	56.8	41	
12	58.1	56.8	41	
14	56.2	53.5	46	−6.2
16	55.5	53.6	22 46	
18	42.8	40.5	23 06	
20	48.1	44.1	22 59	
22	48.0	47.2	22 57	
24	41.2	40.7	23 07	
26	46.5	44.1	00	
28	43.9	41.3	05	
30	47.4	43.9	00	−6.4
32	47.2	44.1	23 00	
34	47.9	45.0	22 59	
36	45.7	38.4	23 06	
38	50.1	45.1	22 57	
40	57.2	51.1	47	
42	63.8	58.9	35	
44	63.8	58.9	35	−6.5
46	63.0	56.0	38	
48	68.0	58.7	32	
50	71.2	65.0	25	
52	68.4	67.2	25	
54*	41.2	31.7	21	
56	51.0	45.6	03	
58	28.1	24.6	37	

Observers—W. J. P. and R. W. P. alternated from 0h 14m to 0h 26m; Observer—R. R. T.
R. W. P. and R. R. T. alternated from 3h 52m to 4h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	26.8	18.3	22 43	−6.5	10 00	30.6	25.8	22 37	
02	59.4	53.3	21 50		02	26.8	25.6	40	−6.0
04	62.2	43.0	21 56		04	28.5	22.5	41	
06	46.0	17.9	22 29		06	45.3	35.3	18	
08*	56.9	37.1	49		08	52.0	42.0	08	
10	Overl'k'd				10	37.0	30.3	29	
12	46.0	36.7	58		12	25.0	16.0	49	
14	68.8	55.0	26	−6.5	14	41.3	33.3	23	−6.2
16	69.8	62.8	19		16	27.6	23.8	41	
18	68.7	65.5	22 18		18	51.8	47.2	04	
20	34.8	30.9	23 12		20	41.8	34.1	22	
22	40.0	35.8	23 04		22	30.3	25.6	38	
24	67.0	62.0	22 22		24	34.3	28.8	32	
26	45.0	43.2	54		26	35.6	35.3	26	
28	48.5	45.8	49		28	46.0	40.3	14	
30	67.1	62.0	22	−6.3	30	46.3	34.3	18	−6.2
32	61.3	58.3	29		32	45.6	39.2	15	
34	46.0	46.0	51		34	46.8	31.0	20	
36	67.0	61.7	22		36	48.0	30.0	22 20	
38	47.8	43.0	52		38	60.0	50.0	21 55	
40	50.8	41.8	50		40	76.6	66.5	29	
42	69.7	60.3	21		42	Overl'k'd			
44	54.5	45.1	45	−6.1	44*	42.5	31.8	30	−6.2
46	64.0	58.2	27		46	21.8	19.2	56	
48	60.3	57.0	22 31		48	28.6	15.0	21 54	
50	41.3	34.3	23 04		50	13.2	8.1	22 12	
52	58.0	47.2	41		52*	29.0	15.5	24	
54	58.0	48.2	40		54*	26.0	17.2	46	
56	42.3	25.6	10		56	31.3	23.6	37	
58	59.8	52.8	35		58	32.3	27.2	33	
9 00	66.0	65.8	20	−6.0	11 00	33.3	24.3	35	−6.0
02	38.0	35.2	23 06		02	39.7	32.3	24	
04	63.2	55.2	22 30		04	41.5	34.3	21	
06	57.5	47.2	41		06	40.5	33.0	22	
08	53.0	40.6	50		08	43.3	36.3	18	
10	49.7	37.7	22 54		10	35.8	29.9	28	
12	39.9	22.4	23 14		12	41.3	35.0	20	
14	64.8	44.3	22 38	−6.1	14	49.0	42.2	08	−6.2
16	53.0	37.0	52		16	49.8	41.5	08	
18	54.4	42.2	47		18	49.0	41.3	09	
20	61.6	44.7	40		20	48.0	40.6	11	
22	66.5	43.0	37		22	43.6	36.6	17	
24	60.6	35.0	48		24	42.3	33.8	20	
26	46.8	46.3	50		26	45.7	36.8	15	
28	69.5	66.5	16		28	46.8	39.8	12	
30	63.2	51.4	33	−6.0	30	44.0	37.2	16	−6.2
32	65.7	59.7	25		32	43.3	38.4	16	
34	64.3	60.0	25		34	40.6	34.6	21	
36	75.0	69.3	10		36	40.3	34.1	22	
38	45.8	42.6	54		38	40.6	33.8	22	
40	65.8	55.8	22 28		40	40.5	33.0	22	
42*	58.1	55.2	21 28		42	44.6	38.2	15	
44	27.3	24.3	22 16	−6.0	44	42.5	35.5	19	−6.3
46	10.6	4.5	45		46	34.1	25.6	33	
48	27.5	16.8	22		48	29.4	20.8	41	
50	22.5	17.5	50		50	30.7	23.3	38	
52	18.4	16.0	30		52	33.6	26.1	33	
54*	20.0	20.0	25		54	34.6	27.3	32	
56	51.0	48.2	03		56	33.9	27.4	32	
58	41.2	38.8	18		58	33.9	27.4	32	

Observers—R. R. T. and W. J. P. alternated from 8h 24m to 8h 32m. W. J. P. and R. W. P. alternated from 11h 54m to 12h 08m. (W. J. P. 13h 08m to 13h 38m.)

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	31.8	25.6	22 35	−6.2	14 00	39.7	39.1	22 18	−6.8
02	31.2	23.3	37		02	37.1	37.1	22	
04	33.3	26.2	33		04	38.3	38.2	20	
06	35.1	27.1	31		06	38.7	38.3	20	
08	34.2	27.0	32		08	37.3	37.2	22	
10	36.4	29.9	28		10	41.4	40.5	16	
12	37.4	31.4	26		12	41.2	40.6	16	
14	38.6	32.8	24	−6.1	14	42.8	42.3	13	−6.9
16	38.2	33.8	24		16	45.0	44.1	10	
18	37.6	32.9	25		18	41.8	41.1	15	
20	38.1	32.3	25		20	49.2	48.1	04	
22	38.2	33.8	24		22	45.4	42.6	11	
24	41.0	35.6	20		24	40.9	38.4	18	
26	40.5	35.7	20		26	43.1	41.6	14	
28	47.8	43.7	08		28	40.8	39.6	17	
30	49.2	44.7	07	−6.0	30	40.2	38.7	18	−7.0
32	51.1	48.9	02		32	39.8	38.8	18	
34	47.8	44.2	08		34	37.7	36.7	22	
36	46.4	42.9	10		36	37.9	36.8	22	
38	49.0	47.2	05		38	38.4	37.3	21	
40	51.1	48.7	02		40	40.2	38.7	18	
42	48.2	45.2	07		42	40.8	39.3	17	
44	48.7	46.1	22 06	−6.2	44	42.7	41.1	14	−7.1
46	52.6	50.4	21 59		46	45.8	44.7	09	
48	49.4	47.3	22 04		48	48.2	46.3	22 06	
50	46.3	44.3	09		50	54.1	52.1	21 57	
52	45.8	43.2	10		52	57.0	55.7	52	
54	43.8	42.1	13		54	55.8	55.3	53	
56	42.7	40.8	15		56	55.0	53.9	55	
58	44.1	40.8	14		58	53.3	52.7	21 57	
13 00	47.0	44.5	08	−6.3	15 00	51.2	50.1	22 00	−7.2
02	46.1	43.4	10		02	47.7	46.3	06	
04	43.2	40.8	14		04	48.6	47.7	05	
06	39.6	36.9	20		06	46.5	45.2	08	
08	38.0	35.3	23		08	43.3	42.1	13	
10	36.6	34.4	24		10	44.3	43.9	11	
12	34.8	32.5	27		12	41.7	41.4	15	
14	38.0	35.2	23	−6.5	14	39.8	39.2	18	−7.3
16	33.0	31.3	30		16	37.8	36.1	22	
18	33.8	32.0	29		18	41.9	40.6	15	
20	34.8	33.3	27		20	40.2	39.1	18	
22	34.8	33.3	27		22	43.2	42.2	13	
24	35.1	33.5	26		24	41.9	39.7	16	
26	36.8	36.0	23		26	37.2	36.3	22	
28	37.9	37.1	21		28	33.7	33.1	28	
30	37.0	36.0	23	−6.6	30	37.7	37.5	21	−7.4
32	35.7	34.5	25		32	32.8	32.8	29	
34	36.0	35.1	24		34	36.0	35.9	24	
36	40.1	39.3	18		36	34.5	33.9	26	
38	41.6	40.4	16		38	35.4	35.2	25	
40	38.7	36.2	22		40	33.6	33.2	28	
42	41.8	40.2	16		42	35.8	35.0	25	
44	43.1	42.1	13	−6.6	44	35.4	34.8	25	
46	43.6	42.5	13		46	36.3	34.6	25	−7.1
48	41.8	40.5	16		48	38.4	36.3	22	
50	42.7	41.4	14		50	37.2	36.2	22	
52	42.7	42.0	14		52	36.9	36.6	22	
54	39.0	38.4	19		54	36.3	35.7	24	
56	40.3	39.7	17		56	37.6	35.5	23	
58	40.9	39.7	17		58	40.1	35.4	21	

Observers—R. W. P. and R. R. T. alternated from 15h 46m to 16h 02m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	40.2	35.6	22 21	
02	41.0	36.7	19	
04	38.8	33.0	24	
06	37.9	34.0	24	
08	37.8	34.7	23	
10	37.7	34.2	24	
12	37.9	35.6	22	
14	38.2	35.7	22	-6.4
16	38.9	34.8	22	
18	38.0	34.0	24	
20	37.3	33.2	25	
22	37.3	33.3	25	
24	38.1	34.8	23	
26	38.9	34.9	22	
28	37.1	33.2	25	
30	37.3	34.6	24	-6.4
32	38.8	33.8	23	
34	39.0	34.1	23	
36	39.1	35.0	22	
38	37.9	34.2	24	
40	37.4	33.0	25	
42	38.4	33.6	24	
44	38.1	33.3	24	-6.6
46	37.8	35.0	23	
48	37.0	33.6	25	
50	37.0	33.1	25	
52	37.1	32.8	25	
54	36.8	31.9	26	
56	36.9	32.6	26	
58	37.5	32.9	25	
17 00	40.9	34.2	21	-6.7
02	42.9	35.4	19	
04	42.0	39.1	16	
06	40.4	34.1	22	
08	38.8	33.0	24	
10	38.9	33.7	23	
12	38.0	34.1	24	
14	37.9	34.0	24	-6.8
16	37.3	32.1	26	
18	38.9	34.2	23	
20	39.5	34.1	22	
22	40.1	34.9	21	
24	41.9	36.0	19	
26	41.0	36.0	20	
28	42.6	37.2	17	
30	40.0	36.8	20	-6.9
32	40.0	36.0	20	
34	40.8	37.7	19	
36	40.8	37.5	19	
38	40.9	37.0	19	
40	41.5	38.0	18	
42	39.8	36.8	20	
44	39.0	36.0	21	
46	41.9	36.7	18	-7.0
48	42.7	37.0	18	
50	43.8	37.5	16	
52	40.9	36.9	19	
54	40.3	36.9	19	
56	40.2	36.7	20	
58	41.0	37.1	19	
18 00	40.3	36.0	22 20	-7.2
02	41.6	35.7	19	
04	42.9	36.8	18	
06	40.3	35.2	21	
08	41.8	37.0	18	
10	41.5	36.2	19	
12	42.3	38.3	17	
14	43.0	39.0	16	-7.0
16	40.7	38.9	18	
18	40.3	38.0	19	
20	40.3	37.5	19	
22	40.3	38.3	18	
24	39.7	37.3	20	
26	38.3	36.2	22	
28	38.5	36.4	21	
30	38.1	36.5	22	-7.0
32	38.3	34.3	23	
34	42.0	36.8	18	
36	41.8	37.8	18	
38	38.0	34.8	23	
40	39.5	35.6	21	
42	40.2	36.4	20	
44	40.9	37.2	19	-7.1
46	41.9	35.6	19	
48	41.0	36.0	20	
50	40.2	35.7	21	
52	38.7	34.0	23	
54	36.9	32.3	26	
56	33.9	29.9	30	
58	33.4	29.7	31	
19 00	32.8	29.0	32	-7.3
02	33.1	27.8	32	
04	33.3	28.1	32	
06	33.8	29.0	31	
08	33.5	29.1	31	
10	35.0	30.3	29	
12	34.7	30.4	29	
14	35.1	31.1	28	-7.5
16	35.3	29.0	30	
18	36.0	29.9	29	
20	36.1	30.2	28	
22	36.8	31.0	27	
24	35.8	29.9	29	
26	37.2	32.6	25	
28	37.2	32.8	25	-7.8
30	36.7	29.8	28	
32	37.3	31.1	26	
34	37.1	31.1	26	
36	37.1	31.2	26	
38	37.1	31.8	26	
40	36.8	31.3	27	
42	36.5	31.5	27	
44	36.0	31.3	27	-8.2
46	36.3	32.5	26	
48	36.9	32.8	25	
50	35.9	32.0	27	
52	35.1	31.7	28	
54	35.2	32.4	27	
56	36.0	33.2	26	
58	35.0	32.5	27	

Observers—R. R. T. and W. J. P. alternated from 20h 28m to 20h 38m. (W. J. P. 18h 12m and 18h 38m to 18h 42m.)

Wednesday, October 7, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	36.7	34.0	22 25	-8.6
02	37.5	33.9	24	
04	36.7	33.7	25	
06	35.6	32.1	27	
08	35.2	32.1	27	
10	33.5	31.8	29	
12	34.8	32.1	28	
14	35.6	32.9	26	-9.0
16	35.8	33.8	25	
18	35.9	34.0	25	
20	35.1	33.1	27	
22	34.9	32.8	27	
24	36.9	35.0	24	
26	38.2	35.9	22	
28	39.9	36.6	20	
30	40.8	38.1	18	-9.3
32	39.3	38.4	19	
34	39.2	38.1	19	
36	38.4	38.0	20	
38	38.1	38.1	20	
40	39.6	38.4	19	
42	39.3	37.8	20	
44	42.6	41.4	14	-9.3
46	44.9	43.5	11	
48	42.5	42.1	14	
50	45.3	44.7	09	
52	40.3	39.7	17	
54	46.3	44.5	09	
56	45.7	44.5	09	
58	46.0	44.6	09	
21 00	45.7	43.5	10	-9.9
02	46.3	44.3	09	
04	44.8	42.5	12	
06	44.3	42.8	12	
08	44.4	42.2	12	
10	44.5	42.2	12	
12	44.0	41.5	13	
14	42.6	40.3	15	-10.2
16	43.2	41.2	14	
18	44.2	42.2	12	
20	43.0	41.5	14	
22	43.3	41.5	14	
24	43.0	41.6	14	
26	40.8	39.4	17	
28	40.3	38.6	18	
30	40.2	39.0	18	-10.6
32	40.5	39.7	17	
34	40.0	39.0	18	
36	39.0	38.2	19	
38	40.8	40.2	16	
40	44.3	42.3	12	
42	50.8	50.2	01	
44	49.0	48.3	04	-11.0
46	51.2	50.8	00	
48	51.3	50.4	22 00	
50	53.2	52.6	21 57	
52	55.3	54.3	54	
54	56.6	55.5	52	
56	53.0	52.0	21 58	
58	50.3	47.0	22 04	
22 00	41.3	36.5	22 19	-11.2
02	45.8	37.5	15	
04	51.4	42.7	06	
06	47.8	40.2	11	
08	48.0	41.2	10	
10	48.2	41.4	10	
12	49.2	42.6	08	
14	50.8	44.8	05	-11.3
16	51.3	45.2	04	
18	50.6	45.2	05	
20	50.9	45.5	04	
22	49.3	44.4	06	
24	49.0	44.7	06	
26	49.3	45.1	06	
28	46.5	42.5	10	
30	47.8	36.0	14	-11.6
32	29.5	25.8	22 37	
34	8.8	7.6	23 07	
36*	49.0	8.0	24 26	
38	32.3	24.8	26	
40	20.6	8.2	48	
42	48.3	34.3	06	
44*	36.5	31.0	24 49	
46*	62.0	39.6	23 21	-11.8
48	68.0	46.0	23 11	
50	15.7	13.8	24 18	
52	63.1	52.2	23 10	
54	64.0	56.6	06	
56	56.3	53.1	23 15	
58	24.0	20.0	24 06	
23 00*	29.0	15.8	24 42	
02	66.6	50.6	23 45	
04	67.1	60.6	37	
06*	57.2	50.5	10	
08	55.3	47.7	23 14	-11.9
10	72.0	65.7	22 46	
12*	69.0	66.3	22 29	
14	70.3	61.3	32	-12.0
16	69.3	60.3	34	
18	72.4	63.0	29	
20	76.0	62.3	27	
22	76.4	67.8	22	
24	73.9	65.6	26	
26	75.2	65.8	25	
28	73.2	67.3	25	
30	73.0	66.8	26	-12.4
32	73.8	67.3	25	
34	71.5	65.3	28	
36	66.3	60.9	35	
38	67.1	61.0	35	
40	65.0	59.2	38	
42	62.5	56.8	42	
44	63.2	57.5	41	-12.4
46	61.3	56.6	43	
48	61.1	55.3	44	
50	59.8	54.6	45	
52	60.0	55.3	45	
54	58.9	54.0	47	
56	57.0	52.5	49	
58	58.6	54.6	46	
24 00	59.0	55.9	45	-12.9

Correction to local mean time is + 1m 06s.

Torsion head at 0h 00m read 232° and at 24h 00m read the same.

Observers—R. R. T. and W. J. P., who alternated from 20h 28m to 20h 38m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, October 8, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	42.8	46.6	22 14	−17.0
02*	38.2	50.1	13	
04	34.3	52.7	12	
06	35.2	51.9	12	
08	39.2	43.0	08	
10	39.2	42.8	08	
12	39.7	43.2	09	
14	37.1	40.9	05	−16.9
16	40.0	42.5	08	
18	38.3	40.9	06	
20	36.8	39.0	03	
22	36.2	38.0	02	
24	35.0	37.0	00	
26	35.8	37.9	02	
28	34.3	36.8	00	
30	36.1	37.8	02	−17.2
32	36.2	40.0	04	
34	38.9	42.9	08	
36	38.1	42.1	07	
38	37.4	42.2	06	
40	40.0	44.0	10	
42	37.1	42.0	06	
44	36.1	38.9	03	−17.1
46	34.8	37.9	01	
48	34.8	37.0	22 00	
50	31.5	34.8	21 56	
52	30.6	33.5	54	
54	27.9	30.8	50	
56	27.0	30.0	49	
58	27.5	30.9	50	
17 00	30.0	33.0	53	−16.9
02	32.2	38.0	21 59	
04	34.1	39.7	22 02	
06	34.2	39.0	01	
08	35.8	40.9	04	
10	39.2	43.4	09	
12	40.4	43.3	10	
14	38.7	42.3	08	−16.5
16	38.2	41.3	06	
18	39.6	41.5	08	
20	37.0	39.1	04	
22	38.0	41.1	06	
24	39.1	42.8	08	
26	39.2	42.8	08	
28	40.0	43.2	09	
30	39.5	42.1	08	−16.3
32	38.5	43.8	08	
34	39.1	44.3	10	
36	38.3	45.2	10	
38	34.0	42.1	22 04	
40	22.9	33.2	21 48	
42	17.1	25.5	21 37	
44	56.3	57.1	22 33	−16.0
46	Overl'k'd			
48	Overl'k'd			
50	Overl'k'd			
52*	6.4	35.2	22 12	
54*	15.5	49.7	21 21	
56	40.7	43.0	36	
58	37.9	41.8	33	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	38.2	42.0	21 33	−15.3
02	50.6	62.2	21 58	
04*	35.9	62.0	23 06	
06	11.0	15.0	22 10	
08*	28.1	35.0	21 50	
10	24.8	29.0	21 42	
12	39.1	42.0	22 04	
14	39.5	44.0	06	−14.9
16	48.2	49.2	17	
18	51.0	54.0	22 23	
20*	46.9	49.5	23 09	
22	22.6	25.8	22 32	
24	23.9	25.9	33	
26	18.0	18.4	22	
28	16.0	19.3	21	
30	17.0	22.0	24	−14.9
32	18.6	23.6	27	
34	24.6	28.6	35	
36	24.3	26.8	34	
38	22.3	24.7	30	
40	18.3	21.0	24	
42	20.5	23.4	28	
44	18.8	20.9	25	−15.0
46	18.2	20.2	24	
48	18.4	20.4	24	
50	18.6	21.0	25	
52	17.3	18.5	22	
54	15.3	18.0	20	
56	16.1	18.5	21	
58	16.3	18.5	21	
19 00	14.2	17.0	18	−15.3
02	13.2	18.8	19	
04	14.9	20.0	21	
06	16.3	21.8	23	
08	16.0	20.9	22	
10	15.0	19.4	20	
12	14.2	18.8	19	
14	13.4	18.0	18	−15.2
16	8.1	14.0	11	
18	2.2	8.2	02	
20	4.3	10.0	05	
22	7.9	14.1	11	
24	7.2	13.2	10	
26	7.1	12.0	08	
28	7.2	11.9	08	
30	13.0	17.2	17	−15.3
32	12.2	18.2	17	
34	13.2	19.0	19	
36	17.1	22.9	25	
38	16.2	22.2	24	
40	18.2	23.0	26	
42	19.9	24.2	28	−15.3
44	19.8	23.2	27	
46	18.7	22.2	26	
48	18.0	22.0	25	
50	19.3	23.2	27	
52	18.3	21.5	25	
54	15.8	18.9	21	
56	17.2	19.6	22	
58	18.9	19.7	24	
20 00	17.0	18.8	22	

Correction to local mean time is + 1m 33s.
Torsion head at 0h 14m read 233° and at the end read the same.
Observers—R. R. T. (W. J. P. 18h 30m to 18h 58m.)

Friday, October 9, 1903 — Magnet scale erect—inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	49.5	52.0	22 27	−5.2
02	50.0	50.0	26	
04	50.0	50.3	26	
06	49.5	50.2	26	
08	48.9	49.6	25	
10	48.9	49.7	25	
12	47.8	48.5	23	
14	46.3	47.8	21	−5.5
16	46.1	46.9	20	
18	46.4	47.1	21	
20	47.4	47.9	22	
22	48.2	48.6	23	
24	48.2	48.2	23	
26	48.8	48.8	24	
28	48.2	51.2	25	
30	48.8	50.9	26	−5.1
32	48.1	52.9	27	
34	48.9	53.8	28	
36	48.0	53.9	27	
38	48.2	53.8	27	
40	49.8	54.0	29	
42	50.1	54.5	30	
44	52.0	53.8	30	−2.7
46	51.9	52.7	30	
48	51.3	52.7	29	
50	51.6	52.0	29	
52	50.4	52.9	28	
54	50.9	52.6	28	
56	Sc. invert.			
58	53.9	52.7	30	
21 00	54.0	53.0	30	−1.3
02	53.8	52.8	30	
04	54.7	53.6	28	
06	54.7	53.3	29	
08	54.9	53.2	29	
10	55.2	52.3	29	
12	54.7	52.6	29	
14	54.0	52.2	30	−0.0
16	54.9	51.9	30	
18	54.7	51.3	30	
20	53.8	51.3	31	
22	54.2	51.8	30	
24	53.5	51.4	31	
26	54.2	51.2	30	
28	57.2	52.4	27	
30	58.0	53.3	26	−0.0
32	58.8	55.0	24	
34	59.0	55.0	24	
36	58.8	53.8	25	
38	60.1	56.1	22	
40	60.2	56.2	22	
42	58.2	55.8	24	
44	57.9	55.0	25	+0.1
46	58.3	54.1	25	
48	56.9	54.2	26	
50	56.8	53.1	27	
52	56.0	52.8	28	
54	56.0	52.0	29	
56	55.2	51.7	30	
58	54.6	51.1	31	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	53.2	51.4	22 31	+0.5
02	53.7	50.8	32	
04	53.0	49.7	33	
06	52.7	50.0	33	
08	53.2	48.8	33	
10	53.6	48.9	33	
12	53.3	49.2	33	
14	53.2	49.3	33	+1.1
16	52.8	49.0	34	
18	52.0	48.8	34	
20	51.8	48.8	34	
22	52.3	50.0	33	
24	53.6	49.3	33	
26	54.6	51.0	31	
28	54.7	51.1	30	
30	55.7	52.0	29	+2.5
32	54.5	51.0	31	
34	56.0	52.9	28	
36	55.3	51.9	29	
38	51.3	48.9	35	
40	49.9	47.3	37	
42	47.2	45.0	41	
44	48.9	46.1	39	+3.2
46	50.1	48.8	36	
48	52.0	49.9	34	
50	54.2	52.2	30	
52	54.1	52.6	30	
54	55.0	52.2	29	
56	54.5	52.2	30	
58	54.2	51.2	31	
23 00	54.1	52.0	30	+3.9
02	53.8	52.0	30	
04	53.4	52.0	31	
06	52.9	51.2	32	
08	52.0	50.7	33	
10	51.8	50.7	33	
12	51.2	50.1	34	
14	51.0	50.1	34	+5.0
16	51.2	50.1	34	
18	51.2	50.1	34	
20	50.9	49.9	34	
22	50.1	49.1	36	
24	49.8	49.0	36	
26	50.0	49.2	36	
28	50.2	49.4	35	
30	50.5	49.8	35	+5.4
32	51.1	49.7	34	
34	51.5	50.1	34	
36	51.0	49.7	34	
38	51.2	49.0	35	
40	51.0	48.2	36	
42	51.4	49.7	34	
44	51.7	49.7	34	+5.1
46	50.7	49.9	34	
48	50.9	50.2	34	
50	50.4	49.8	35	
52	51.2	50.4	34	
54	52.2	51.1	32	
56	52.0	51.1	33	
58	51.1	50.3	34	
24 00	52.4	51.1	32	+4.8

Correction to local mean time is + 1m 34s. 90° torsion = 26.'06.
Torsion head at 20h 00m read 270° and at the end read 264°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, October 12, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00				
02	50.5	59.5	22 49	−13.0
04	55.9	56.8	51	
06	60.7	61.5	59	
08	58.2	58.8	54	
10	57.5	58.1	54	
12	58.3	58.7	54	
14	57.0	57.0	52	
16	55.8	56.0	50	−13.1
18	55.3	55.7	50	
20	54.3	54.7	48	
22	53.5	54.1	47	
24	54.5	55.2	49	
26	53.8	55.0	48	
28	55.0	56.2	50	
30	57.7	58.2	54	−13.2
32	51.9	52.9	45	
34	54.0	54.0	47	
36	55.8	56.4	51	
38	55.6	56.1	50	
40	55.3	56.0	50	
42	53.0	53.8	46	
44	53.5	54.1	47	−13.2
46	51.6	52.4	44	
48	50.3	51.2	42	
50	49.5	50.6	41	
52	51.6	52.5	44	
54	52.3	53.7	46	
56	54.7	55.3	49	
58	52.7	57.0	49	
9 00	49.3	50.6	41	−13.2
02	48.2	49.6	40	
04	48.8	50.2	40	
06	48.3	49.4	39	
08	48.2	49.3	39	
10	46.6	48.8	38	
12	46.5	48.4	37	
14	47.0	48.6	38	−13.0
16	46.3	47.4	36	
18	42.8	44.4	41	
20	41.7	43.0	29	
22	41.0	42.3	28	
24	45.0	45.6	34	
26	47.0	48.4	38	
28	44.4	46.2	34	
30	41.0	41.8	28	−13.0
32	44.0	45.3	33	
34	48.6	49.3	39	
36	45.5	46.2	35	
38	42.5	43.8	30	
40	43.0	44.5	31	
42	41.0	41.6	28	
44	40.5	40.8	26	−12.9
46	42.1	42.5	29	
48	44.0	45.0	33	
50	45.0	45.5	34	
52	42.6	42.8	30	
54	41.2	43.8	29	
56	42.4	43.1	30	
58	41.3	44.0	30	
10 00	40.2	42.8	22 28	−12.4
02	39.3	39.5	24	
04	37.2	38.8	22	
06	38.9	41.2	26	
08	42.0	45.0	31	
10	40.8	43.5	29	
12	41.9	43.8	30	
14	43.8	45.9	33	−12.3
16	41.2	45.2	30	
18	39.1	43.5	28	
20	40.9	45.8	31	
22	43.5	47.3	34	
24	44.3	48.2	35	
26	39.2	43.2	27	
28	37.4	40.9	24	
30	37.7	41.8	25	−12.2
32	34.3	37.9	19	
34	35.2	36.9	19	
36	33.8	35.2	17	
38	38.9	40.1	25	
40	36.7	39.2	22	
42	37.1	38.8	22	
44	38.2	40.2	24	−12.0
46	42.8	43.1	30	
48	42.2	43.0	30	
50	38.0	39.6	24	
52	40.0	41.6	27	
54	39.8	42.7	27	
56	35.2	37.2	20	
58	35.9	38.4	21	
11 00	38.3	40.3	24	−12.0
02	39.3	41.3	26	
04	35.9	37.4	20	
06	40.0	40.9	26	
08	37.9	38.1	22	
10	38.2	39.8	24	
12	35.1	37.1	19	
14	33.8	37.3	18	−11.9
16	28.3	30.8	09	
18	35.2	40.1	22	
20	40.3	44.8	29	
22	43.3	48.7	35	
24	41.2	47.0	32	
26	40.3	47.7	32	
28	48.2	55.4	44	
30	40.3	48.8	33	−11.6
32	36.0	45.9	27	
34	29.1	39.3	16	
36	35.3	42.0	23	
38	31.2	37.4	17	
40	29.2	37.2	15	
42	28.4	37.7	14	
44	32.2	39.0	19	−11.5
46	27.3	33.9	11	
48	31.6	37.9	17	
50	26.0	29.3	06	
52	37.0	39.4	23	
54	38.8	45.2	29	
56	27.2	29.3	07	
58	23.9	28.8	04	
12 00	27.3	31.8	09	

Correction to local mean time is + 55s. 90° torsion = 24.′7.
Torsion head at 8h 02m read 246° and at 12h 00m read 249°.
Observers—W. J. P. and R. R. T., who alternated from 9h 44m to 10h 00m.

Tuesday, October 13, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00*	67.7	40.4	22 10	−0.6
02	78.3	52.1	21 52	
04	64.5	63.0	21 54	
06	56.0	54.2	22 08	
08	60.2	57.1	02	
10	56.3	56.1	06	
12	56.2	54.1	08	
14	57.4	54.3	07	−1.2
16	44.7	40.0	28	
18	42.2	38.5	31	
20	45.8	42.8	25	
22	42.2	38.9	31	
24	42.0	37.7	32	
26	44.0	40.3	28	
28	43.3	38.0	31	
30	37.8	35.2	37	−1.6
32	47.8	44.0	22	
34	44.9	42.0	26	
36	34.7	33.2	41	
38	36.2	33.8	40	
40	39.8	38.3	33	
42	37.0	34.9	38	
44	28.0	25.3	22 53	−1.3
46	21.3	19.7	23 02	
48	26.0	24.3	22 55	
50	30.0	28.2	49	
52	37.0	36.0	37	
54	40.1	38.0	33	
56	35.9	33.9	40	
58	28.2	25.6	52	
13 00	33.0	29.8	45	−1.1
02	32.2	29.0	46	
04	32.3	28.7	47	
06	29.0	26.6	51	
08	30.7	27.6	22 49	
10	22.4	21.6	23 00	
12	19.2	17.9	23 06	
14	24.8	22.0	22 58	−0.7
16	32.3	30.7	22 45	
18	22.6	19.9	23 01	
20	16.0	12.2	12	
22	18.1	14.0	09	
24	18.0	15.0	09	
26	13.7	10.0	16	
28	12.8	9.2	17	
30	10.8	7.3	20	−0.4
32*	53.0	48.6	17	
34	50.7	47.8	20	
36	50.8	48.4	19	
38	56.2	53.6	11	
40	60.1	58.0	23 04	
42	64.1	62.8	22 58	
44	68.6	67.0	51	−0.0
46	73.0	70.0	45	
48*	64.2	55.7	32	
50	61.6	58.0	32	
52	66.4	62.6	24	
54	73.0	68.3	15	
56	72.5	69.2	14	
58	77.6	75.2	22 06	
14 00*	58.6	56.8	21 52	−0.2
02	54.4	51.5	22 00	
04	43.2	42.2	16	
06	44.8	41.5	15	
08	38.6	36.2	24	
10	32.0	30.8	33	
12	33.2	30.0	33	
14	26.8	26.2	41	−0.2
16	26.9	25.9	41	
18	23.4	23.2	46	
20	20.3	18.9	52	
22	21.9	21.0	49	
24	21.1	19.4	51	
26	16.8	15.4	22 57	
28	12.8	9.3	23 05	
30	24.9	24.5	22 44	−1.0
32	34.8	32.6	30	
34	31.0	28.4	36	
36	29.2	27.3	38	
38	29.5	27.4	38	
40	28.2	26.6	40	
42	29.1	27.2	38	
44	31.2	29.1	35	−1.4
46	30.8	28.9	36	
48	32.9	31.3	32	
50	37.2	35.3	26	
52	36.6	34.2	27	
54	36.9	34.2	27	
56	35.4	32.8	29	
58	36.9	33.0	28	
15 00	35.5	31.8	30	−2.2
02	35.8	31.0	30	
04	35.9	30.6	30	
06	36.9	32.1	28	
08	39.2	34.0	25	
10	40.4	34.9	24	
12	40.7	35.0	23	
14	39.9	33.9	25	−2.8
16	40.7	35.2	23	
18	40.3	35.2	24	
20	38.0	33.0	27	
22	36.8	31.2	29	
24	33.2	28.2	34	
26	33.2	28.8	34	
28	31.8	27.9	36	
30	31.9	28.7	35	−3.2
32	33.7	30.8	32	
34	34.7	31.1	31	
36	34.8	31.9	30	
38	34.2	32.0	31	
40	35.8	32.9	29	
42	35.8	33.2	28	
44	37.2	33.8	27	−3.1
46	40.7	36.8	22	
48	40.1	36.8	22	
50	40.0	37.6	22	
52	40.2	37.2	22	
54	40.4	38.2	21	
56	41.2	38.6	20	
58	42.3	38.7	19	−3.2
16 00	40.5	37.9	21	

Correction to local mean time is + 42s.
Torsion head at 12h 00m read 327° and at the end read the same.
Observers—W. J. P. and R. R. T., change at 14h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 14, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	53.9	57.8	23 17	-9.6
02	63.0	66.8	32	
04*	22.6	36.1	23 04	
06	14.8	29.6	22 52	
08	15.4	17.8	22 44	
10*	1.8	3.2	21 58	
12	56.0	63.2	23 28	
14	48.0	53.4	14	-8.8
16	40.8	45.8	23 02	
18	40.1	41.8	22 58	
20	37.4	38.8	22.54	
22	44.1	46.5	23 05	
24	55.4	62.1	26	
26	41.7	45.6	02	
28	44.8	49.2	23 08	
30	37.2	41.8	22 56	-8.5
32	32.5	37.2	49	
34	29.2	33.5	43	
36	32.5	37.4	49	
38	36.8	41.2	55	
40	36.1	44.4	57	
42	27.2	31.4	40	
44	16.6	22.3	24	-8.6
46	15.8	21.9	24	
48	19.3	24.2	28	
50	19.5	23.9	28	
52	16.7	20.6	23	
54	13.9	18.3	19	
56	14.2	17.8	19	
58	12.7	15.9	16	
1 00	12.9	15.9	16	-8.5
02	12.1	15.0	15	
04*	47.1	50.3	19	
06	47.0	50.7	19	
08	46.3	49.6	18	
10	48.4	51.1	20	
12	52.2	55.0	26	
14	55.0	58.0	31	-8.4
16	58.8	61.5	37	
18	62.9	66.2	44	
20	67.1	70.0	50	
22	66.8	69.2	49	
24	70.1	74.0	55	
26*	38.9	45.2	55	
28	36.1	42.0	50	
30	38.6	43.8	53	-8.4
32	40.5	46.0	57	
34	40.1	44.2	22 55	
36	42.4	47.9	23 00	
38	44.8	49.2	02	
40	48.2	54.1	09	
42	51.7	57.0	14	
44	54.3	59.2	18	-8.3
46	48.6	50.6	07	
48	42.8	50.1	02	
50	57.8	60.2	22	
52	60.0	64.2	26	
54	62.2	65.8	29	
56	59.5	61.7	24	
58	59.7	62.3	24	
2 00	54.6	58.5	23 17	-8.3
02	55.8	61.7	21	
04	61.0	66.0	28	
06	72.2	77.8	46	
08*	42.6	44.0	23 47	
10	50.5	54.2	24 01	
12	57.7	58.8	10	
14	56.2	56.9	24 08	-8.2
16	37.6	40.1	23 40	
18	24.3	29.2	21	
20	15.2	21.9	08	
22	25.2	31.4	23	
24	41.2	47.5	48	
26	36.9	41.1	40	
28	48.2	51.8	57	
30	46.1	53.3	57	-8.4
32	23.3	35.6	25	
34	23.6	30.6	21	
36	19.3	28.1	16	
38	29.8	38.9	33	
40	40.5	48.6	23 49	
42	53.3	64.3	24 11	
44*	54.4	58.0	25 08	-8.4
46*	50.2	62.8	25 45	
48	16.8	29.9	24 53	
50*	52.9	60.1	27	
52	34.0	45.9	01	
54	62.1	66.1	24 29	
56*	36.8	56.2	25 33	
58	47.3	51.9	38	
3 00	25.4	42.0	25 13	-8.4
02	21.2	26.5	24 57	
04*	46.6	60.1	23 49	
06	44.0	55.0	43	
08	43.3	61.2	23 47	
10	68.8	71.8	24 15	
12*	34.8	49.2	44	
14	32.7	40.8	36	-8.4
16	28.6	30.4	25	
18*	55.7	57.3	24 19	
20*	30.6	41.5	25 16	
22	36.5	40.6	25 19	
24	23.6	24.2	24 56	
26*	22.2	34.9	23 57	
28	56.5	66.1	24 48	
30*	36.6	48.1	25 20	-8.2
32	46.2	55.8	25 34	
34	69.2	69.9	26 03	
36*	27.8	38.0	26 00	
38*	Overl'k'd			
40	28.4	45.7	25 15	
42	20.0	27.1	24 54	
44*	38.1	45.2	18	-8.1
46	31.3	44.2	24 12	
48	25.2	32.6	23 58	
50	9.2	15.9	32	
52*	43.0	52.4	25	
54	43.8	52.0	25	
56	43.3	50.9	24	
58	45.8	53.0	28	

Observer—R. W. P.

Wednesday, October 14, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	47.1	54.9	23 30	-8.2
02	39.0	46.7	18	
04	37.1	45.6	15	
06	42.3	50.4	23	
08	42.7	51.1	24	
10	44.9	50.1	25	
12	56.0	67.8	47	
14	58.9	59.7	23 43	-8.3
16*	44.5	55.9	22 14	
18*	23.1	33.2	24 42	
20	20.3	35.3	42	
22	10.4	19.3	21	
24	10.2	18.9	24 21	
26*	63.9	74.9	25 08	
28*	47.4	56.9	11	
30	53.1	59.7	18	-8.0
32	48.8	58.9	14	
34	63.3	64.8	30	
36	44.8	55.7	25 08	
38	13.9	19.8	24 16	
40	6.0	17.8	24 08	
42*	38.8	48.2	23 40	
44	35.8	43.6	23 34	-7.9
46	56.5	60.5	24 03	
48	60.9	65.8	11	
50	62.3	73.9	18	
52	55.4	68.1	08	
54	60.0	76.0	24 18	
56	54.5	55.8	23 58	
58	37.9	42.0	34	
5 00	36.7	39.1	31	-7.8
02	32.8	35.8	25	
04	26.8	30.9	17	
06	25.1	28.6	14	
08	24.0	26.7	11	
10	21.3	23.8	07	
12	19.0	21.1	03	
14	19.6	21.7	04	-8.0
16	20.8	22.2	05	
18	20.7	22.7	06	
20	20.6	22.7	05	
22	20.2	22.1	05	
24	20.8	23.0	06	
26	21.6	24.3	07	
28	22.7	24.8	09	
30	23.8	25.8	10	-8.0
32	28.0	29.4	16	
34	27.0	28.3	15	
36	29.0	31.0	19	
38	33.2	35.2	25	
40	35.0	37.1	28	
42	39.3	41.1	35	
44	38.7	41.3	34	-8.0
46	40.0	42.4	36	
48	44.0	45.7	42	
50	44.7	46.6	43	
52	43.0	44.9	40	
54	42.0	44.0	39	
56	41.2	44.0	38	
58	39.2	43.0	36	
6 00	37.8	39.4	23 32	-8.0
02	35.2	38.8	30	
04	33.1	37.0	26	
06	30.6	33.8	22	
08	29.9	33.7	21	
10	29.8	33.7	21	
12	29.0	33.0	20	
14	29.0	33.1	20	-7.8
16	27.5	32.9	19	
18	28.0	32.8	19	
20	29.2	33.2	20	
22	27.1	31.1	17	
24	24.2	29.0	13	
26	22.8	26.0	10	
28	26.1	29.7	15	
30	25.1	28.7	14	-7.6
32	23.9	27.2	12	
34	25.2	28.8	14	
36	28.3	30.6	18	
38	27.6	30.5	17	
40	26.7	28.2	14	
42	28.1	29.5	17	
44	27.1	28.2	15	-7.5
46	26.3	27.6	14	
48	29.2	29.9	18	
50	29.2	29.7	18	
52	27.8	28.9	16	
54	27.0	28.3	15	
56	26.1	27.3	13	
58	26.9	27.0	14	
7 00	24.3	25.0	10	-7.3
02	21.8	23.0	07	
04	23.1	23.9	08	
06	25.3	26.8	12	
08	28.7	29.2	17	
10	31.3	32.3	21	
12	29.9	31.0	19	
14	30.4	31.9	20	-7.3
16	30.3	31.3	20	
18	31.7	32.3	22	
20	32.4	34.4	24	
22	33.0	34.9	25	
24	34.2	35.2	26	
26	32.0	33.8	23	
28	33.5	34.7	25	
30	32.8	34.0	24	-7.3
32	32.8	33.8	24	
34	33.6	34.8	25	
36	33.4	35.3	25	
38	33.7	35.3	26	
40	33.0	35.0	25	
42	32.1	34.0	23	
44	34.0	35.7	26	-7.2
46	34.0	35.7	26	
48	33.9	35.0	26	
50	33.1	34.1	24	
52	34.1	36.0	26	
54	33.8	36.1	26	
56	33.0	34.9	25	
58	33.3	35.2	25	

Observers—R. W. P. and R. R. T. alternated 4h 02m to 4h 12m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 14, 1903					Magnet scale erect					Wednesday, October 14, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	33.5	35.2	23 25	−7.0	10 00	29.8	38.4	22 39	−6.5	12 00	29.0	30.0	22 32	−5.6	14 00	32.8	33.8	22 38	−5.1
02	35.1	36.0	27		02	42.7	46.1	22 56		02	31.6	31.8	36		02	31.3	32.9	36	
04	34.9	36.3	27		04	47.3	49.3	23 02		04	35.2	36.2	42		04	29.0	30.5	32	
06	34.1	36.1	27		06	49.2	51.4	05		06	45.0	46.0	57		06	27.9	29.1	31	
08	33.7	35.4	26		08	50.6	51.6	23 06		08	35.4	38.2	44		08	26.7	27.6	28	
10	32.0	34.2	24		10	41.0	42.8	22 52		10	27.5	30.0	31		10	23.3	24.7	24	
12	30.7	33.0	21		12	46.8	48.0	23 00		12	39.4	40.9	49		12	22.8	24.0	23	
14	27.0	29.9	16	−7.0	14	54.4	56.3	13	−6.5	14	35.6	37.6	22 43	−5.6	14	21.6	22.8	21	−5.0
16	24.0	26.9	11		16	51.5	53.0	23 08		16	48.1	51.2	23 04		16	21.6	22.7	21	
18	24.0	26.7	11		18	44.5	45.0	22 56		18	56.5	58.7	16		18	24.1	24.3	24	
20	22.3	25.4	09		20	37.2	37.7	44		20	56.9	57.4	15		20	25.8	26.9	27	
22	20.0	23.0	05		22	36.8	38.2	45		22	49.4	50.2	04		22	25.6	26.5	27	
24	19.6	23.3	05		24	36.8	37.8	44		24	50.1	50.9	05		24	23.0	23.6	22	
26	18.5	23.3	04		26	37.3	38.3	45		26	Slowly in-				26	17.2	18.2	14	
28	19.9	24.3	06		28	32.2	32.3	36		28	creasing				28	15.8	17.4	12	
30	21.5	24.5	08	−6.7	30	35.5	37.0	43	−6.5	30	51.1	51.8	07	−5.4	30	17.8	19.3	15	−5.0
32	22.0	25.3	09		32	34.4	36.4	41		32	49.8	50.4	05		32	23.0	24.4	23	
34	22.0	24.0	08		34	30.2	30.9	34		34	51.2	52.8	07		34	21.4	22.9	21	
36	19.7	22.0	23 04		36	25.5	26.8	27		36	52.4	53.9	09		36	25.0	26.4	26	
38	16.0	17.4	22 58		38	27.1	28.9	30		38	57.8	59.4	18		38	25.9	27.0	27	
40	16.0	17.6	58		40	32.5	32.8	37		40	58.3	59.7	18		40	25.2	26.4	26	
42	15.6	16.2	57		42	32.5	33.8	38		42	57.2	59.2	17		42	25.3	25.6	26	
44	15.0	16.2	56	−6.7	44	35.4	37.0	43		44	55.7	58.0	15	−5.4	44	23.9	24.4	24	−5.0
46	13.6	14.7	22 54		46	29.8	31.6	34	−6.6	46	55.7	58.4	15		46	19.5	20.9	17	
48	17.8	18.6	23 00		48	28.7	29.7	32		48	55.8	58.4	15		48	19.0	20.1	17	
50	15.0	18.4	22 58		50	28.7	31.5	33		50	55.9	58.4	15		50	21.4	23.3	21	
52	23.6	25.4	23 10		52	31.1	32.5	36		52	50.2	52.6	07		52	24.1	25.0	24	
54	23.1	25.1	23 09		54	33.5	35.1	40		54	52.4	54.9	10		54	25.3	26.9	27	
56	14.7	17.6	22 57		56	27.8	30.6	32		56	50.2	52.9	07		56	27.2	28.0	29	
58*	17.5	36.0	28		58	23.0	25.5	24		58	50.2	53.3	07		58	29.0	30.0	32	
9 00	9.1	14.5	04	−6.5	11 00	27.4	30.7	31	−6.4	13 00	47.4	50.0	23 02	−5.4	15 00	28.0	29.2	31	−4.8
02	14.0	38.0	27		02	34.8	36.2	42		02	43.1	45.7	22 56		02	27.3	29.0	30	
04	29.6	34.6	36		04	35.2	37.2	43		04	39.0	41.9	49		04	27.1	28.9	30	
06	28.8	36.8	37		06	35.0	39.0	44		06	37.9	40.2	47		06	20.5	27.5	24	
08	32.6	37.2	40		08	38.3	41.9	49		08	38.5	41.3	48		08	25.3	28.0	28	
10	33.8	37.8	42		10	38.9	42.7	50		10	38.5	40.4	47		10	27.2	30.9	31	
12	35.0	38.3	43		12	39.6	41.6	50		12	39.5	40.9	49		12	28.6	30.7	32	
14	29.3	33.8	35	−6.5	14	38.7	40.8	48	−6.0	14	39.7	40.5	49	−5.4	14	27.7	30.7	32	−4.8
16	28.6	32.0	33		16	43.6	46.0	56		16	37.5	39.2	46		16	27.6	31.2	32	
18	33.0	35.6	40		18	45.4	46.0	58		18	37.3	38.8	45		18	28.6	31.4	33	
20	33.5	37.0	41		20	43.2	44.3	54		20	38.3	38.8	46		20	28.6	30.8	32	
22	32.0	35.6	39		22	33.0	36.2	40		22	35.3	35.7	42		22	29.0	31.6	33	
24	41.0	44.0	52		24	33.2	33.9	38		24	33.6	34.3	39		24	28.0	30.6	32	
26	42.2	45.2	54		26	28.1	31.4	32		26	32.0	32.0	36		26	28.0	30.6	32	
28	41.8	44.0	53		28	23.0	25.0	24		28	36.7	37.3	44		28	28.6	31.1	33	
30	35.3	37.7	43	−6.5	30	22.5	23.0	21	−6.0	30	37.9	38.4	46	−5.4	30	30.7	33.7	36	−3.9
32	36.3	38.8	45		32	23.5	24.5	23		32	37.9	38.9	46		32	34.0	34.8	40	
34	37.2	39.2	46		34	21.8	23.5	21		34	35.9	36.6	43		34	35.0	35.9	41	
36	37.1	39.3	46		36	19.6	20.8	18		36	36.4	37.4	44		36	34.9	36.5	42	
38	41.3	44.0	53		38	20.0	20.3	17		38	27.0	28.0	29		38	33.8	36.7	41	
40	46.3	47.3	59		40	22.0	22.4	20		40	37.2	38.2	45		40	34.3	36.8	42	
42	45.3	47.3	22 58		42	21.6	22.6	20		42	38.1	38.8	46		42	36.8	39.9	46	
44	45.8	48.6	23 00		44	19.9	20.2	17	−5.5	44	37.9	38.4	46	−5.3	44	35.9	38.4	44	−3.8
46	44.5	46.6	22 57	−6.5	46	20.0	21.0	18		46	37.8	38.9	46		46	35.8	37.3	43	
48	44.0	46.3	57		48	24.0	24.1	24		48	37.9	38.8	46		48	37.5	41.0	47	
50	45.8	47.3	22 59		50	23.5	23.5	23		50	37.9	39.3	46		50	38.2	42.8	49	
52	47.4	49.4	23 02		52	24.0	25.0	24		52	37.2	38.0	45		52	37.3	41.7	48	
54	47.3	48.7	23 01		54	18.7	20.8	17		54	36.2	37.8	44		54	38.1	41.3	48	
56	40.3	42.0	22 50		56	12.6	13.2	06		56	36.7	37.7	44		56	37.3	39.6	46	
58	31.0	32.3	36		58	23.2	25.8	24		58	34.2	35.9	41		58	38.6	39.8	47	

Observers—R. R. T. and W. J. P. alternated from 8h 26m to 8h 38m. (F. L. made a few alternations with W. J. P. 11h 04m to 11h 14m.)

Observers—W. J. P. and R. W. P. alternated 12h 04m to 12h 18m. R. W. P., F. L., and R. R. T. alternated 14h 58m to 16h 02m. (R. R. T. 13h 20m to 13h 56m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 14, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	40.0	40.9	22 49	−3.5
02	37.4	38.9	46	
04	35.7	36.7	43	
06	33.9	34.9	40	
08	32.0	33.4	37	
10	30.1	32.0	35	
12	28.9	30.4	32	
14	25.2	26.9	27	−3.5
16	23.7	25.7	25	
18	22.1	24.1	22	
20	22.1	23.9	22	
22	22.1	23.4	21	
24	20.8	22.0	20	
26	19.8	21.2	18	
28	18.2	19.6	15	
30	16.4	16.7	12	−3.7
32	15.0	16.4	10	
34	16.1	16.8	12	
36	19.3	20.2	17	
38	20.8	21.9	19	
40	23.0	23.2	22	
42	23.5	24.0	23	
44	26.8	27.4	28	−3.8
46	28.1	29.1	31	
48	27.7	27.9	29	
50	28.2	28.9	30	
52	28.2	28.6	30	
54	28.3	29.2	31	
56	27.1	28.2	29	
58	26.5	27.4	28	
17 00	26.9	27.8	29	−4.0
02	26.8	27.3	28	
04	25.0	25.9	26	
06	24.1	25.4	25	
08	22.7	24.0	22	
10	22.6	23.8	22	
12	19.8	20.9	18	
14	17.0	18.1	13	−4.0
16	15.9	17.5	12	
18	15.9	17.5	12	
20	16.0	17.5	12	
22	16.6	18.0	13	
24	15.8	16.9	11	
26	14.7	15.7	10	
28	14.2	15.2	09	
30	14.9	16.1	10	−4.0
32	15.3	17.3	11	
34	14.9	17.0	11	
36	14.0	15.3	09	
38	13.2	14.9	08	
40	11.9	12.9	05	
42	12.7	13.9	07	
44	21.0	25.0	22	−4.0
46	24.9	31.1	30	
48	19.8	28.1	23	
50	16.9	24.9	19	
52	12.2	20.8	12	
54	20.0	22.0	19	
56	26.0	28.8	29	
58	12.3	14.6	07	
18 00	11.0	13.1	22 05	−4.0
02	14.3	15.9	10	
04	15.8	17.4	12	
06	16.0	20.8	15	
08	18.6	21.3	17	
10	21.3	27.0	24	
12	18.7	20.9	17	
14	17.3	19.3	15	−4.0
16	10.9	12.8	04	
18	10.2	13.1	04	
20	13.6	15.8	09	
22	17.3	20.3	15	
24	16.2	19.3	13	
26	11.5	16.6	08	
28	10.9	18.3	09	
30	16.9	19.9	15	−3.8
32	20.7	25.7	22	
34	17.9	22.8	18	
36	17.4	20.8	16	
38	18.4	26.0	21	
40	13.8	22.2	14	
42	16.3	25.3	18	
44	12.5	19.8	11	−3.7
46	8.7	14.3	04	
48*	44.2	50.8	12	
50	41.2	47.0	22 07	
52	32.0	37.3	21 52	
54	29.3	33.2	21 46	
56	68.2	72.8	22 48	
58*	47.1	71.1	23 04	
19 00	16.8	24.8	22 04	−3.4
02	8.3	13.2	21 48	
04	14.2	20.6	58	
06	12.3	20.1	56	
08	12.0	18.4	55	
10	11.3	17.0	53	
12	13.2	19.8	21 57	
14	17.1	24.1	22 03	−3.0
16	15.7	23.1	01	
18	16.0	22.9	01	
20	15.0	22.0	22 00	
22	13.1	19.5	21 57	
24	11.5	16.8	53	
26	14.0	19.3	57	
28	11.1	21.9	57	
30	11.3	21.9	57	−3.0
32	10.2	19.2	54	
34	13.8	17.0	55	
36	14.3	18.2	56	
38	14.8	18.2	57	
40	12.8	15.3	53	
42	13.0	15.3	53	
44	16.2	18.6	21 58	−3.2
46	18.2	21.5	22 02	
48	20.4	23.1	05	
50	16.0	22.0	22 01	
52	13.3	19.9	21 57	
54	13.1	18.8	56	
56	12.7	18.1	55	
58	11.1	15.3	52	

Observers—R. R. T. and W. J. P. alternated from 20h 20m to 20h 32m. (W. J. P. 18h 20m to 18h 26m.)

Wednesday, October 14, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	13.0	18.0	21 55	−3.3
02	15.4	18.8	58	
04	16.0	19.6	59	
06	10.3	19.2	54	
08*	41.0	50.0	43	
10	39.9	49.2	21 41	
12	63.9	63.9	22 12	
14	Lost			
16*	14.9	67.0	22 29	
18	67.3	73.9	23 15	−3.2
20	37.6	73.1	22 51	
22	54.3	56.7	22 51	
25	5.0	31.3	21 53	
26*	28.7	41.8	19	
28	47.3	63.9	21 51	
30	60.0	63.3	22 00	−2.8
32	33.3	41.5	21 22	
34	59.6	76.2	22 10	
36*	28.3	40.3	22 40	
38*	11.5	26.0	21 51	
40	34.8	39.4	22 20	
42	13.3	33.3	21 58	
44	24.2	36.0	22 09	−2.5
46	44.0	54.0	38	
48	33.5	38.8	18	
50	34.7	43.3	22 23	
52*	49.5	63.8	23 48	
54	24.3	38.3	23 08	
56*	59.7	71.3	25 41	
58	39.0	48.0	25 07	
21 00	13.3	13.7	24 19	−2.9
02*	23.3	24.5	22 33	
04	17.4	18.8	23	
06	19.7	22.3	28	
08	21.7	25.0	32	
10	13.5	16.2	18	
12	13.0	16.2	18	
14	15.5	18.4	22	−2.9
16	19.0	22.8	28	
18	17.8	20.8	25	
20	14.2	18.4	21	
22	13.8	17.2	19	
24	13.6	17.2	19	
26	11.6	14.6	16	
28	10.6	13.6	14	
30	10.5	14.0	14	−3.0
32	12.2	15.2	17	
34	13.1	16.0	18	
36	13.0	15.5	17	
38	12.6	15.1	17	
40	14.7	17.4	20	
42	11.3	13.6	14	
44	13.1	15.8	18	−3.0
46	13.2	15.1	17	
48	12.0	14.0	15	
50	12.0	13.6	15	
52	13.0	14.1	16	
54	11.2	13.2	14	
56	8.7	10.3	10	
58	12.0	13.8	15	
22 00	13.5	13.5	22 16	−3.1
02	12.9	13.1	15	
04	11.9	12.2	14	
06	10.8	11.4	12	
08	11.5	12.0	13	
10	11.3	12.0	13	
12	12.6	12.8	15	
14	12.4	12.8	15	−3.2
16	12.4	12.8	15	
18	13.2	14.6	17	
20	15.4	15.6	19	
22	19.6	20.5	26	
24	19.5	20.7	27	
26	22.3	23.2	31	
28	22.3	23.4	31	
30	20.3	22.1	28	−3.2
32	19.3	19.5	25	
34	14.3	14.7	18	
36	18.0	18.5	24	
38	20.4	21.2	28	
40	30.2	30.6	22 43	
42	42.3	46.3	23 05	
44	39.0	44.5	23 00	−3.3
46	30.6	33.4	22 45	
48	34.4	37.8	52	
50	18.6	20.8	26	
52	24.8	28.0	36	
54	24.2	27.8	36	
56	20.6	23.8	30	
58	15.3	17.7	21	
23 00	12.9	18.3	20	−3.2
02	14.6	18.8	21	
04	21.2	24.7	31	
06	18.0	21.0	26	
08	16.4	20.0	23	
10	18.9	21.4	27	
12	19.3	23.8	29	
14	23.0	27.6	35	−3.3
16	23.5	28.2	36	
18	21.0	26.0	32	
20	17.4	27.6	30	
22	23.2	37.2	42	
24	37.2	44.8	22 59	
26	43.8	51.0	23 09	
28	67.9	74.3	23 47	
30*	65.0	75.3	24 04	−3.3
32	32.3	36.3	23 08	
34*	27.6	31.3	22 11	
36	38.0	42.6	28	
38	41.3	47.5	22 34	
40	66.0	68.0	23 10	
42	73.2	74.8	21	
44	75.0	77.1	24	−3.2
46	64.2	69.8	10	
48*	51.6	56.6	38	
50	34.3	40.3	23 11	
52	22.6	28.3	22 53	
54	39.7	52.1	23 25	
56	57.5 25.6	26.3	22 53	
58	37.0	37.0	23 11	
24 00	42.0	44.0	20	−3.1

Correction to local mean time is + 30s. 90° torsion = 26.′1.

Torsion head at 0h 00m read 327° and at 24h 10m read 324°.

Observers—R. R. T. and W. J. P., who alternated from 20h 20m to 20h 32m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, October 15, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	59.1	47.0	22 31	−0.0
02	60.6	47.7	29	
04	55.3	50.7	31	
06	52.0	48.6	35	
08	53.3	49.8	33	
10	55.7	51.5	30	
12	57.4	53.4	27	
14	59.7	56.0	23	−0.2
16	62.2	54.9	22	
18	62.9	55.1	21	
20	62.6	57.7	20	
22	62.8	55.6	21	
24	62.9	56.2	20	
26	64.0	57.9	18	
28	64.7	57.8	18	
30	63.7	57.2	19	−0.4
32	61.8	55.7	22	
34	61.3	55.3	22	
36	58.1	51.5	28	
38	58.5	52.0	27	
40	57.8	51.2	28	
42	58.1	52.2	27	
44	58.0	53.3	27	−0.6
46	60.3	56.5	22	
48	60.5	56.2	22	
50	58.5	54.0	26	
52	54.2	49.8	32	
54	54.3	50.9	31	
56	55.0	51.3	31	
58	50.9	47.3	37	
17 00	49.9	46.3	38	−0.7
02	49.1	46.6	39	
04	45.8	42.9	44	
06	49.8	43.8	40	
08	36.9	33.8	58	
10	37.2	35.0	57	
12	37.3	36.2	22 56	
14	34.6	32.3	23 01	−0.7
16	30.2	26.8	09	
18	33.9	30.3	23 03	
20	36.2	33.2	22 59	
22	33.9	31.8	23 02	
24	31.3	28.6	07	
26	29.1	23.9	12	
28	21.3	17.8	23	
30	11.8	11.2	36	−1.0
32	12.2	9.0	37	
34	23.0	20.1	20	
36	24.7	22.0	17	
38	27.2	25.2	13	
40	26.2	24.0	14	
42	28.1	25.2	12	
44	32.2	29.8	23 05	−1.0
46	35.9	33.8	22 59	
48	39.3	37.1	54	
50	37.0	34.2	58	
52	37.8	36.2	56	
54	40.7	39.1	51	
56	41.2	39.4	51	
58	42.0	40.0	49	
18 00	43.1	40.7	22 48	−1.3
02	41.8	40.0	50	
04	41.8	40.2	49	
06	42.8	42.0	47	
08	44.7	43.0	45	
10	46.3	44.7	42	
12	45.2	43.8	44	
14	45.0	43.3	45	−1.6
16	49.0	46.5	39	
18	43.7	41.5	47	
20	47.0	45.2	41	
22	46.6	44.9	42	
24	44.3	42.4	46	
26	43.0	41.6	47	
28	44.1	42.7	46	
30	45.5	44.3	43	−1.8
32	45.4	46.6	42	
34	47.7	46.6	40	
36	48.2	47.0	39	
38	49.1	47.9	38	
40	49.6	48.6	37	
42	50.3	49.3	36	
44	49.1	48.1	38	−2.0
46	51.0	50.0	35	
48	51.8	50.7	33	
50	52.8	51.6	32	
52	53.5	52.4	31	
54	52.8	52.0	32	
56	51.9	51.2	33	
58	52.2	51.5	33	
19 00	51.4	50.9	34	−2.1
02	50.2	49.6	35	
04	49.8	49.1	36	
06	49.8	49.1	36	
08	49.4	48.6	37	
10	48.3	47.4	39	
12	47.3	46.8	40	
14	47.4	46.7	40	−2.2
16	47.1	46.7	40	
18	46.7	46.5	41	
20	45.8	45.6	42	
22	45.6	45.4	42	
24	46.0	45.7	42	
26	45.3	44.9	43	
28	44.8	44.4	44	
30	45.3	44.9	43	−2.5
32	45.6	45.1	43	
34	47.1	46.6	40	
36	47.3	46.6	40	
38	46.8	46.5	41	
40	46.2	45.6	42	
42	45.8	45.3	42	
44	45.4	45.0	43	−2.8
46	45.2	44.8	43	
48	44.8	44.3	44	
50	45.0	44.5	44	
52	45.0	44.5	44	
54	45.0	44.5	44	
56	45.0	44.3	44	
58	44.6	43.9	44	
20 00	44.7	44.3	44	

Correction to local mean time is + 30s.
Torsion head at 15h 40m read 327° and at 20h 24m read the same.
Observers—R. R. T. and W. J. P., who alternated from 18h 18m to 18h 30m.

Friday, October 16, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	45.2	45.8	22 22	−11.2
02	40.0	42.2	16	
04	37.7	40.2	12	
06	38.2	42.8	15	
08	50.6	55.5	22 34	
10*	50.2	52.0	23 19	
12	58.0	67.2	37	
14	58.4	60.1	23 31	−10.8
16	26.7	32.4	22 45	
18	17.1	21.3	29	
20	8.5	11.7	14	
22*	40.9	68.3	10	
24	50.7	55.7	08	
26	50.9	54.7	07	
28	51.9	55.4	09	
30	54.1	57.0	12	−10.5
32	54.9	57.0	12	
34	55.8	57.8	14	
36	56.7	57.7	14	
38	57.2	57.8	15	
40	57.3	60.0	16	
42	58.2	59.8	17	
44	53.9	59.7	14	−10.3
46	52.4	59.8	13	
48	57.0	59.3	16	
50	55.0	59.9	15	
52	50.1	51.2	04	
54	49.2	49.3	22 02	
56	44.3	47.0	21 56	
58	45.7	46.8	57	
21 00	Lost			−10.0
02	Lost			
04*	48.0	67.1	22 02	
06*	34.1	36.2	23 16	
08*	19.2	58.0	24 18	
10*	33.1	39.2	23 28	
12	37.9	54.5	44	
14	23.6	32.0	23 15	−9.4
16*	20.1	54.2	22 13	
18	39.0	50.5	25	
20	41.0	48.6	25	
22	38.8	42.1	19	
24	38.8	46.8	22 22	
26	10.1	29.3	21 46	
28	22.1	24.4	21 52	
30	29.3	33.2	22 04	−9.0
32	26.0	29.0	21 58	
34	22.3	25.8	21 53	
36	30.6	34.3	22 06	
38	49.8	54.2	37	
40	61.6	65.9	55	
42	55.2	59.2	45	
44	33.2	40.2	13	−9.0
46	42.2	46.8	25	
48	45.7	49.2	29	
50	33.7	40.7	14	
52	32.2	36.8	09	
54	30.0	34.2	06	
56	30.9	35.2	07	
58	47.3	50.6	32	
22 00	26.2	35.0	22 03	−9.0
02	38.3	47.2	22	
04	32.1	43.6	14	
06	29.8	43.1	12	
08	38.0	39.3	16	
10	33.1	35.9	09	
12	33.7	37.0	11	
14	27.7	31.8	22 02	−9.0
16	25.9	29.7	21 59	
18	26.6	30.5	22 00	
20	33.9	36.0	10	
22	40.3	42.2	20	
24	39.1	41.2	18	
26	36.3	39.2	14	
28	35.6	38.3	13	
30	33.5	36.0	10	−8.7
32	35.3	37.4	12	
34	36.5	39.2	14	
36	36.5	38.8	14	
38	36.0	39.1	14	
40	33.0	36.9	10	
42	38.5	41.8	18	
44	35.9	37.8	13	−9.0
46	35.8	38.4	13	
48	37.3	40.3	16	
50	36.3	38.8	14	
52	38.3	40.6	17	
54	39.4	41.4	19	
56	42.1	43.5	22	
58	42.9	44.3	24	
23 00	38.6	40.3	17	−9.2
02	41.0	41.8	20	
04	42.8	44.3	23	
06	40.9	41.8	20	
08	39.0	39.5	17	
10	37.5	38.3	15	
12	36.2	37.4	13	
14	39.8	40.6	18	−9.3
16	40.0	40.9	18	
18	40.8	41.8	20	
20	43.6	44.2	24	
22	44.8	45.4	26	
24	45.0	45.3	26	
26	44.5	45.0	25	
28	44.4	44.8	25	
30	46.0	46.0	27	−9.3
32	46.5	47.0	28	
34	48.9	48.9	32	
36	49.8	50.1	33	
38	50.5	50.5	34	
40	50.0	50.0	33	
42	47.6	48.0	30	
44	48.4	48.8	31	−9.4
46	47.8	48.0	30	
48	48.6	48.8	32	
50	49.5	49.7	33	
52	50.8	51.6	36	
54	51.2	51.6	36	
56	49.7	50.5	34	
58*	49.8	50.2	38	
24 00	50.5	51.2	39	−9.0

Correction to local mean time is + 44s. 90° torsion = 25.′3.
Torsion head at 20h 00m read 336° and at 24h 25m read 341°.
Observers—R. R. T. and W. J. P., who alternated from 22h 14m to 22h 30m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, October 18, 1903					Magnet scale inverted					Sunday, October 18, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	45.8	44.8	22 26	−13.0	2 00	31.0	31.0	22 48	−13.2	4 00†	35.6	34.0	22 42		6 00	42.0	42.8	22 47	−13.2
02	46.2	45.6	25		02	32.6	32.2	46		02	71.0	76.0	45		02	43.2	44.7	50	
04	45.4	45.0	26		04	30.2	30.1	50		04	73.0	77.0	47	−12.8	04	39.3	39.8	43	
06	39.0	38.0	36		06	30.6	30.6	49		06	71.2	75.2	45		06	35.3	36.3	37	
08	39.8	38.6	35		08	29.3	29.3	51		08*	36.6	42.0	43		08	35.8	36.3	37	
10	41.6	40.6	32		10	32.8	32.6	46		10	34.9	39.9	40		10	38.1	38.8	41	
12	39.0	37.8	37		12	36.6	36.0	40		12	33.7	39.8	38		12	38.3	40.1	42	
14	35.1	34.3	42	−13.2	14	33.8	33.0	44	−13.0	14	32.3	37.7	36	−12.3	14	39.8	40.2	44	−13.3
16	41.0	40.2	33		16	37.0	36.5	39		16	31.6	37.0	35		16	43.7	44.8	50	
18	44.6	42.3	29		18	38.5	37.9	37		18	31.7	36.9	35		18	45.1	45.4	52	
20	44.0	42.0	29		20	40.2	39.4	34		20	31.8	36.8	35		20	50.0	50.8	22 60	
22	41.6	39.6	33		22	39.1	38.6	36		22	33.9	38.3	38		22	52.6	54.3	23 05	
24	38.2	29.8	44		24	37.5	37.0	39		24	35.6	39.7	40		24	56.3	56.8	10	
26	38.6	37.3	37		26	36.4	35.9	40		26	34.0	37.9	37		26	55.3	56.5	09	
28	38.4	36.6	38		28	35.5	34.8	42		28	32.8	37.0	36		28	57.8	58.0	12	
30	39.0	37.5	37	−13.3	30	34.6	33.6	43		30	28.9	33.8	30	−12.2	30	56.2	57.0	10	−13.5
32	41.2	39.8	33		32	32.6	31.8	46	−13.0	32	27.8	32.9	28		32	57.0*b*		10	
34	42.8	41.0	31		34	34.2	33.0	44		34	31.8	36.8	35		34	54.0	54.2	06	
36	43.6	42.4	29		36	34.8	34.0	43		36	39.6	44.8	47		36	54.0	54.7	06	
38	47.0	45.8	24		38	35.2	34.4	42		38	40.9	45.7	49		38	54.0	55.8	07	
40	48.6	47.3	22		40	35.3	34.6	42		40	37.8	40.8	43		40	51.3	53.9	04	
42	49.2	48.0	21		42	35.6	35.0	42		42	23.3	25.3	19		42	50.9	52.0	02	
44	50.0	49.0	19	−13.6	44	36.8	36.0	40	−13.0	44	25.8	28.9	24	−12.2	44	50.4	50.8	00	−13.6
46	51.0	50.0	18		46	36.8	36.0	40		46	23.8	26.8	21		46	53.6	54.8	06	
48	48.4	47.6	22		48	37.8	37.5	38		48	36.8	37.8	39		48	53.0	56.0	06	
50	46.5	45.3	25		50	38.3	37.7	37		50	41.2	43.8	48		50	50.0	53.2	02	
52	51.3	50.0	17		52	39.8	39.0	35		52	36.9	39.3	41		52	51.0	53.2	03	
54	52.8	51.8	15		54	44.3	43.0	28		54	44.2	46.0	52		54	52.0	54.9	05	
56	51.6	50.8	17		56	43.3	42.3	30		56	48.2	50.1	58		56	52.0	53.9	04	
58	51.0	50.5	17		58	42.0	41.5	32		58	40.1	41.2	45		58	54.7	56.8	08	
1 00	51.4	50.5	17	−13.7	3 00	44.3	44.0	28	−13.0	5 00	34.8	37.3	37	−12.5	7 00	53.8	56.3	07	−14.0
02	52.1	51.3	16		02	46.8	46.6	24		02	45.8	47.8	54		02	54.1	56.5	08	
04	51.8	50.6	17		04	47.4	46.6	23		04	46.0	47.1	54		04	52.7	55.0	23 05	
06	49.6	49.0	20		06	46.0	45.8	25		06	38.9	39.1	42		06	49.8	51.2	22 60	
08	46.6	46.0	24		08	47.0	46.8	23		08	34.2	35.8	36		08	49.2	50.0	22 59	
10	44.5	43.7	28		10	41.7	41.5	32		10	39.9	40.1	44		10	52.8	54.2	23 05	
12	41.8	41.1	32		12	45.9	45.7	25		12	30.8	31.8	30		12	49.6	51.1	22 60	
14	39.0	37.8	37	−13.6	14	47.2	47.0	23	−13.0	14	26.0	27.3	23	−12.7	14	47.8	48.7	22 56	−14.0
16	36.0	35.5	41		16	46.4	46.4	24		16	49.0	50.3	22 59		16	52.9	53.2	23 04	
18	36.5	35.9	40		18	47.3	47.3	23		18	62.3*a*		23 19		18	53.9	54.2	06	
20	36.0	35.4	41		20	46.8	46.4	24		20	74.0	74.0	37		20	53.2	54.0	05	
22	34.5	33.5	44		22	46.6	46.1	24		22	64.1*b*		23 21		22	50.0	51.8	01	
24	34.3	33.4	44		24	45.2	44.8	26		24	45.1*b*		22 52		24	52.0	52.8	03	
26	36.7	36.0	40		26	42.8	42.1	30		26	43.3	44.8	50		26	54.0	55.0	06	
28	37.7	37.0	38		28	45.6	45.2	26		28	44.0	47.3	52		28	50.9	51.8	02	
30	37.5	36.8	39	−13.5	30	40.0	39.4	35	−13.0	30	29.7	32.9	30	−12.9	30	50.1	52.1	23 01	−14.1
32	37.6	37.0	38		32	38.7	38.3	37		32	19.6	22.0	13		32	48.3	50.7	22 59	
34	37.1	36.7	39		34	40.8*a*		33		34	21.1	21.9	14		34	45.8	47.6	54	
36	37.3	36.8	39		36	43.5	43.5	29		36	42.7	43.0	22 48		36	35.3	36.2	37	
38	38.5	37.8	37		38	43.5	43.2	29		38	55.2	56.0	23 08		38	45.0	45.9	52	
40	39.2	38.6	36		40	41.4	41.4	32		40	48.8	49.6	22 58		40	49.8	50.2	22 59	
42	39.4	38.5	36		42	39.5	39.5	35		42	49.1	49.9	58		42	52.9	55.3	23 06	
44	39.4	38.6	36	−13.3	44	37.5	37.5	38	−13.0	44	46.8	47.9	55	−13.0	44	54.3	55.0	07	−14.2
46	38.1	37.1	38		46	46.1	45.6	25		46	43.9	46.0	51		46	55.9	56.6	09	
48	35.6	34.7	42		48	42.8	42.3	30		48	40.2	41.2	45		48	56.9	58.5	12	
50	33.7	33.3	44		50	46.8	46.1	24		50	44.3	45.3	51		50	56.4	57.9	11	
52	32.7	32.3	46		52	48.4	48.3	21		52	48.8	49.0	22 58		52	56.9	57.9	11	
54	32.1	31.6	47		54	46.0	45.6	25		54	50.2	50.6	23 00		54	59.3	60.1	15	
56	31.8	31.5	47		56	42.0	41.6	31		56	48.0	48.8	22 57		56	59.8	60.6	15	
58	37.0	36.8	39		58	37.7	35.0	38		58	44.8	45.1	51		58	56.7	57.6	11	
															8 00	57.2	57.7	11	

Observer—W. J. P.

Correction to local mean time is + 55s.
Torsion head at 0h 00m read 340° and at 8h 25m read the same.
Observers—W. J. P. and R. R. T., who alternated 3h 58m to 4h 14m.
† Scale inverted for readings at 4h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, October 19, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	58.1	47.1	22 25	
02	42.1	38.8	44	−20.5
04	43.5	39.4	43	
06	39.4	38.0	47	
08	48.4	38.6	40	
10	49.6	38.8	39	
12	39.0	33.0	51	
14	43.5	40.6	42	
16	44.6	38.6	43	−20.5
18	Lost			
20	57.6	49.6	24	
22	38.6	28.0	22 55	
24	25.0	18.8	23 14	
26	26.5	23.0	09	
28	30.0	26.5	23 04	
30	33.0	30.8	22 58	−20.4
32	32.0	28.6	23 00	
34	37.6	37.0	22 49	
36	42.0	38.0	45	
38	44.1	35.6	45	
40	47.2	31.9	46	
42	49.3	39.3	38	
44	45.6	36.2	44	−20.3
46	46.0	36.2	43	
48	49.2	37.2	40	
50	50.6	42.0	35	
52	49.2	42.0	36	
54	51.0	45.0	33	
57	48.5	44.0	35	
58	50.7	47.0	31	
9 00	43.0	40.6	42	−20.0
02	48.5	45.4	34	
04	45.0	42.3	39	
06	53.8	50.6	26	
08	49.0	46.0	33	
10	61.0	59.5	13	
12	50.8	46.6	32	
15	54.3	54.3	23	
16	55.2	54.8	22	−20.0
18	54.3	53.5	23	
20	34.6	34.6	54	
22	33.6	32.2	56	
24	45.6	43.4	38	
26	51.0	45.0	33	
28	57.6	53.1	21	
30	48.4	44.8	35	−20.0
32	48.6	45.6	34	
34	50.5	46.8	32	
36	58.0	54.7	20	
38	59.1	55.3	18	
40	55.2	52.6	23	
42	54.9	52.0	24	
44	57.9	54.5	20	−19.7
46	57.3	57.0	18	
48	61.7	60.3	12	
50	58.2	56.2	18	
52	58.1	55.2	19	
54	58.2	56.7	18	
56	57.3	56.3	19	
58	58.0	56.0	18	
10 00	55.5	55.0	22 21	−19.0
02	52.4	50.8	27	
04.3	50.6	48.8	30	
06	47.9	47.1	33	
08	51.3	50.0	28	
10	47.2	45.1	36	
12	52.8	50.1	27	
14	49.7	48.0	31	−18.3
16	49.3	46.2	33	
18	47.0	46.0	35	
20	60.8	59.7	13	
22	56.8	54.0	21	
24	49.2	48.0	32	
26	50.1	49.0	30	
28	53.5	51.8	25	
30	55.1	53.0	23	−18.3
32	52.3	51.3	27	
34	52.1	50.1	28	
36	54.0	52.7	24	
38	55.1	53.1	23	
40	54.8	51.9	24	
42	53.0	49.8	27	
44	52.9	49.2	28	−18.3
46	53.8	50.4	26	
48	53.9	51.1	26	
50	53.2	49.7	27	
52	52.8	49.0	28	
54	52.7	49.2	28	
56	54.1	49.2	27	
58	51.2	47.5	30	
11 00	54.7	50.4	26	−18.2
02	54.3	51.0	25	
04	55.3	51.2	24	
06	55.2	51.9	24	
08	61.8	58.0	14	
10	61.1	57.9	15	
12	60.8	59.0	14	
14	59.8	59.0	15	−18.2
16	64.8	63.2	07	
18	60.3	59.3	14	
20	58.0	57.0	18	
22	59.2	58.0	16	
24	59.4	57.7	16	
26	51.7	50.6	28	
28	56.8	55.0	20	
30	55.1	54.1	22	−18.3
32	62.7	61.4	11	
34	59.1*b*		15	
36	56.0	55.1	21	
38	54.8	53.0	23	
40	61.0	60.1	22 13	
42	71.7	69.0	21 58	
44	66.0	63.1	22 07	−18.0
46	58.0	56.2	18	
48	54.2	53.2	24	
50	54.4	53.9	23	
52	57.7	56.2	19	
54	58.1	57.6	17	
56	58.7	57.6	17	
58	60.3	59.2	14	
12 00	61.9	60.5	12	−18.0

Correction to local mean time is + 1m 15s.

Torsion head at 8h 00m read 339° and at 12h 30m read the same.

Observers—W. J. P. and R. R. T., who alternated from 9h 46m to 10h 00m.

Tuesday, October 20, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	51.4	54.5	22 29	−15.0
02	51.2	54.2	29	
04	50.1	53.2	27	
06	51.2	54.2	29	
08	52.2	54.9	30	
10	51.5	53.8	29	
12	51.4	53.4	29	
14	51.7	53.9	29	−14.8
16	51.3	53.8	29	
18	50.4	53.0	28	
20	51.2	53.8	29	
22	51.0	53.7	28	
24	51.2	53.5	28	
26	49.8	52.0	26	
28	50.0	53.0	27	
30	50.8	53.0	28	−14.7
32	51.0	53.7	28	
34	51.0	53.8	29	
36	51.7	54.2	29	
38	51.9	54.9	30	
40	53.8	55.3	32	
42	53.7	55.9	32	
44	54.0	56.0	33	−14.4
46	53.8	55.7	32	
48.7	51.3	53.8	29	
50	50.7	52.7	28	
52	51.2	53.2	28	
54	53.1	55.1	31	
56	53.0	54.5	31	
58	51.0	53.0	28	
13 00	51.1	52.9	28	−14.3
02.3	52.9	54.9	31	
04	53.9	55.7	32	
06	53.0	54.9	31	
08	53.0	54.8	31	
10	53.0	54.7	31	
12	52.5	54.2	30	
14	52.1	53.8	29	−14.3
16	51.9	53.2	29	
18	51.3	52.8	28	
20	52.0	53.2	29	
22	52.7	53.4	29	
24	52.4	53.4	29	
26	52.2	53.2	29	
28	53.0	54.0	30	
30	52.6	53.8	30	−14.3
32	52.2	53.5	29	
34	51.3	52.3	28	
36	51.4	52.8	28	
38	51.2	52.3	28	
40	51.5	52.7	28	
42	52.8	54.1	30	
44	51.9	53.1	29	−14.3
46.2	51.5	52.8	28	
48	51.7	53.9	29	
50	51.9	54.0	29	
52.4	51.2	53.8	29	
54	50.9	53.0	28	
56	50.2	52.7	27	
58	49.8	52.0	26	
14 00	50.4	52.0	22 27	−14.2
02	51.3	53.0	28	
04	50.4	51.9	27	
06	51.5	53.0	28	
08	51.0	51.8	27	
10	50.8	51.5	27	
12	51.2	52.0	27	−14.0
14	51.1	52.1	27	
16	51.2	52.0	27	
18	51.0	52.3	27	
20	51.5	52.2	28	
22	51.2	52.1	27	
24	51.2	51.8	27	
26	50.8	51.8	27	
28	52.3	53.0	29	
30	52.0	52.6	28	−13.5
32	52.2	52.8	29	
34	52.5	53.4	29	
36	52.5	53.4	29	
38	51.0	51.8	27	
40	51.2	52.3	28	
42	52.0	52.6	28	
44	51.5	52.2	28	−13.5
46	51.8	52.3	28	
48	52.6	53.3	29	
50	52.5	52.7	29	
52	51.6	52.0	28	
54	51.8	52.2	28	
56	52.4	52.8	29	
58	52.6	52.8	29	
15 00	53.5	53.6	30	−13.7
02	52.9	53.3	30	
04	52.6	53.0	29	
06	53.6	53.9	31	
08	52.6	52.8	29	
10	55.8	56.1	34	
12	52.0	52.0	28	
14	52.3	52.6	28	−13.8
16	52.6	53.0	29	
18	52.2	52.8	29	
20	52.2	52.5	28	
22	51.6	52.0	28	
24	51.4	51.8	27	
26	51.0	51.4	27	
28	51.0	51.4	27	
30	51.1	51.5	27	−13.9
32	50.8	51.3	26	
34	51.3	51.9	27	
36	51.3	51.6	27	
38	50.8	51.3	26	
40	50.9	51.5	27	
42	51.1	51.7	27	
44	51.1	51.7	27	
46	51.9	52.4	28	−13.9
48	52.1	52.5	28	
50	51.9	52.3	28	
52	52.3	52.7	28	
54	52.3	52.7	29	
56	51.9	52.4	28	
58	51.6	52.2	28	
16 00	52.3	52.9	29	−14.0

Correction to local mean time is + 1m 37s.

Torsion head at 11h 30m read 339° and at 16h 15m read the same.

Observers—R. R. T. and W. J. P., who alternated from 14h 10m to 14h 20m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	51.2	48.6	22 34	−16.2
02	50.0	48.0	36	
04	50.5	48.3	35	
06	50.2	48.0	35	
08	50.4	48.2	35	
10	49.8	47.5	36	
12	49.0	47.1	37	
14	49.3	47.3	37	−16.2
16	50.0	48.2	35	
18	49.5	47.8	36	
20.3	50.2	48.6	35	
22	50.0	48.6	35	
24	50.6	49.2	34	
26	51.3	49.9	33	
28	52.6	51.3	31	
30	53.1	51.8	30	−16.0
32	53.6	52.3	29	
34	53.1	52.0	30	
36	52.2	51.2	31	
38	52.4	51.2	31	
40	53.0	52.0	30	
42	52.6	51.6	31	
44	52.6	51.8	31	−16.0
46	52.6	51.4	31	
48	52.2	51.2	31	
50	52.6	51.6	31	
52	52.5	48.0	34	
54	51.2	49.3	34	
56	51.1	49.4	34	
58	51.2	48.8	34	
1 00	51.2	49.6	33	
03	50.9	49.4	34	−15.8
04	50.8	49.4	34	
06	50.6	49.3	34	
08	50.4	49.3	34	
10	50.3	49.0	35	
12	49.8	48.6	35	
14	49.4	48.4	36	−15.6
16	49.1	48.2	36	
18	49.3	48.4	36	
20	50.0	49.1	35	
22	50.2	49.3	35	
24	50.6	49.6	34	
26	50.6	49.8	34	
28	51.0	50.1	33	
30	51.0	50.0	33	−15.6
32	50.6	50.0	34	
34	50.2	49.6	34	
36	50.0	49.4	35	
38	50.0	49.3	35	
40	50.3	49.7	34	
42	50.7	50.1	33	
44	50.9	50.5	33	−15.5
46	50.8	50.6	33	
48	50.8	50.6	33	
50	50.3	50.0	34	
52	49.3	49.2	35	
54	48.9	48.6	36	
56	49.3	48.8	36	
58	48.3	48.1	37	
2 00	48.2	48.0	22 37	−15.5
02	49.0	49.0	36	
04	48.9	48.9	36	
06	49.6	49.6	35	
08	49.4	49.3	35	
10	49.0	48.8	36	
12	47.8	47.8	37	
14	48.0	48.0	37	−15.3
16	48.3	48.0	37	
18	49.2	49.0	35	
20	47.8	47.5	38	
22	46.2	46.0	40	
24	45.8	45.6	41	
26	45.6	45.4	41	
28	45.6	45.6	41	
30	46.0	45.8	41	−15.2
32	45.4	45.1	42	
34	46.6	46.2	40	
36	46.8	46.4	39	
38	46.7	46.3	40	
40	47.2	47.0	39	
42	47.2	47.0	39	
44	47.3	47.2	38	−15.1
46	47.6	47.2	38	
48	47.5	47.3	38	
50	47.6	47.4	38	
52	48.0	47.8	37	
54	52.8	52.4	30	
56	47.8	47.4	38	
58	48.1	47.9	37	
3 00	47.4	47.2	38	−15.0
02	46.5	46.3	40	
04	46.0	45.6	41	
06	45.6	45.2	41	
08	46.3	45.7	40	
10	47.4	46.8	39	
12	48.2	47.8	37	
14	49.3	48.8	36	−14.9
16	50.1	49.9	34	
18	50.6	50.4	33	
20	51.4	51.2	32	
22	52.3	52.1	31	
24	52.5	52.3	30	
26	53.0	53.0	29	
28	52.6	52.2	30	
30	51.6	51.3	32	
32	50.6	50.4	33	−14.0
34	49.6	49.6	35	
36	49.6	49.6	35	
38	50.0	49.8	34	
40	49.6	49.4	35	
42	48.3	48.0	37	
44	47.1	46.8	39	−14.5
46	47.0	46.6	39	
48	46.2	46.0	40	
50	47.1	46.8	39	
52	48.0	47.7	37	
54	48.8	48.3	36	
56	50.0	49.3	35	
58	51.1	50.8	33	

Observers—W. J. P. and R. R. T. alternated from 3h 54m to 4h 08m.

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	52.0	50.8	22 32	−14.2
02	52.1	50.2	32	
04	51.2	50.2	33	
06	50.3	49.2	34	
08	48.5	47.8	37	
10	47.7	47.1	38	
12	47.2	46.3	39	
14	48.0	47.0	38	−13.8
16	48.6	46.4	38	
18	48.8	46.8	37	
20	48.8	47.0	37	
22	48.9	47.1	37	
24	48.2	47.2	38	
26	48.3	47.0	38	
28	48.9	47.3	37	
30	48.8	47.1	37	−13.4
32.3	48.7	47.0	37	
34	48.0	46.5	38	
36	48.2	46.8	38	
38	48.2	47.0	38	
40	48.8	47.1	37	
42	49.7	48.3	36	
44	51.2	49.8	33	−13.0
46	50.8	49.7	34	
48	47.9	46.3	38	
50	47.5	46.6	39	
52	48.6	47.6	37	
54	48.9	47.9	36	
56	48.0	46.9	38	
58	47.8	47.0	38	
5 00	48.6	47.9	37	−12.9
02	48.2	48.1	37	
04	47.2	47.2	38	
06	47.0	46.8	39	
08	47.0	47.0	39	
10	48.2	48.0	37	
12	49.7	49.1	35	
14	50.0	49.1	35	−12.8
16	49.6	49.2	35	
18	49.1	49.0	36	
20	49.2	48.4	36	
22	48.8	47.8	37	
24	49.7	48.2	36	
26	49.2	47.9	36	
28	49.2	48.0	36	
30	49.0	47.2	37	−12.6
32	49.0	48.0	36	
34	49.0	48.0	36	
36	49.0	48.0	36	
38	48.7	47.2	37	
40	48.3	47.0	38	
42	48.0	46.8	38	
44	48.0	46.9	38	−12.2
46	47.7	46.7	38	
48	47.8	46.9	38	
50	48.9	48.1	36	
52	49.1	48.7	36	
54	49.9	49.2	35	
56	49.8	49.0	35	
58	49.2	48.2	36	
6 00	49.0	48.0	22 36	−12.0
02	49.0	48.0	36	
04	48.8	47.8	37	
06	48.8	47.8	37	
08	49.1	48.2	36	
10	49.3	48.3	36	
12	49.2	48.2	36	
14	48.8	47.5	37	−11.8
16	48.2	47.5	37	
18	47.3	46.8	39	
20	46.8	46.5	39	
22	47.8	47.2	38	
24	48.0	47.5	38	
26	48.0	47.7	37	
28	48.4	48.0	37	
30	48.8	48.0	36	−11.6
32	48.7	48.2	36	
34	48.7	48.5	36	
36	49.1	48.8	36	
38	49.1	48.8	36	
40	48.8	48.1	36	
42	48.2	48.0	37	
44	48.0	47.8	37	−11.5
46	48.2	47.7	37	
48	48.0	47.7	37	
50	47.8	47.2	38	
52	48.1	48.0	37	
54	49.0	48.2	36	
56	48.9	47.9	36	
58	49.8	47.8	36	
7 00	52.8	47.2	34	−11.4
02	51.8	48.2	34	
04	51.3	47.9	35	
06	51.2	48.0	35	
08	51.1	49.0	34	
10	51.0	48.0	35	
12	50.2	46.1	37	
14	50.1	46.2	37	−10.9
16	50.2	46.6	36	
18	49.0	45.6	38	
20	50.1	46.0	37	
22	50.2	46.1	37	
24	49.0	45.2	38	
26	48.8	46.2	38	
28	49.7	47.8	36	
30	48.8	46.5	38	−10.8
32	48.8	47.0	37	
34	49.8	48.8	35	
36	49.1	48.0	36	
38	49.8	47.5	36	
40	49.3	47.3	37	
42	50.0	48.1	36	
44	48.8	46.4	38	−10.8
46	49.9	47.0	36	
48	49.5	46.9	37	
50	50.0	47.1	36	
52	50.0	47.1	36	
54	50.1	47.0	36	
56	49.0	46.5	38	
58	49.0	46.4	38	

Observers—R. R. T. and R. W. P. alternated from 7h 52m to 8h 10m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	49.3	46.2	22 38	-10.8	10 00	51.2	50.2	22 33	-11.2
02	49.0	45.9	38		02	50.1	49.8	34	
04	50.0	47.7	36		04	48.8	48.0	36	
06	49.0	47.2	37		06	47.2	46.8	39	
08	48.3	47.1	38		08	47.1	46.3	39	
10	48.2	46.8	38		10	48.6	47.5	37	
12	48.2	47.2	38		12	49.6	48.5	36	
14	49.3	48.2	36	-10.6	14	49.9	48.8	35	-11.1
16	48.8	47.2	37		16	50.1	49.0	35	
18	49.1	48.1	36		18	51.4	50.4	33	
20	49.2	48.4	36		20	51.1	50.0	33	
22	48.2	47.7	37		22	51.7	50.1	33	
24	48.7	48.0	37		24	51.3	50.1	33	
26	48.6	48.2	36		26	51.3	50.3	33	
28	48.7	48.0	37		28	50.6	49.9	34	
30	48.2	48.1	37	-10.6	30	50.7	49.6	34	-11.1
32	49.2	48.7	36		32	50.5	49.0	34	
34	48.2	48.1	37		34	50.2	48.7	35	
36	48.8	48.6	36		36	50.1	48.8	35	
38	49.0	48.7	36		38	50.8	48.2	35	
40	49.7	48.7	35		40	49.9	48.4	35	
42	50.4	49.7	34		42	51.6	50.0	33	
44	50.0	49.7	34	-10.1	44	51.6	50.3	33	-11.0
46	49.2	48.1	36		46	50.1	49.2	35	
48	48.7	48.1	36		48	50.7	49.1	34	
50	49.2	48.8	36		50	50.8	49.9	34	
52	49.0	48.1	36		52	51.1	50.1	33	
54	48.7	47.8	37		54	52.0	50.9	32	
56	49.3	48.0	36		56	51.1	49.9	33	
58	50.1	49.8	34		58	51.6	50.4	32	
9 00	49.2	48.7	36	-10.3	11 00	50.9	49.9	33	-11.1
02	49.6	48.2	36		02	51.1	49.9	33	
04	50.0	48.0	36		04	50.3	48.4	35	
06	51.2	49.0	34		06	51.2	50.3	33	
08	52.5	50.5	32		08	50.8	50.2	33	
10	51.1	49.8	33		10	51.8	50.9	32	
12	50.0	48.2	35		12	50.5	50.0	34	
14	51.0	49.7	34	-11.4	14	50.7	49.8	34	
16	50.2	47.6	36		16	51.0	50.8	32	-10.9
18	50.9	48.7	34		18	52.0	51.3	32	
20	50.9	48.9	34		20	51.6	51.1	32	
22	48.9	47.1	37		22	51.1	50.5	33	
24	48.8	47.1	37		24	50.5	49.7	34	
26	46.9	45.3	40		26	50.8	50.2	33	
28	48.8	46.6	38		28	50.8	50.1	33	
30	48.7	46.7	38	-11.3	30	51.9	50.9	32	-10.9
32	47.5	46.6	39		32	51.0	50.1	33	
34	46.2	45.8	40		34	51.4	49.9	33	
36	46.1	45.7	40		36	52.0	50.2	32	
38	46.6	45.7	40		38	50.5	49.1	34	
40	46.2	45.2	41		40	51.7	49.6	33	
42	49.8	48.5	35		42	50.7	49.0	34	
44	50.4	49.8	34	-11.2	44	51.0	49.0	34	-10.9
46	47.9	46.8	38		46	52.0	50.3	32	
48	48.7	48.0	37		48	51.2	49.5	34	
50	50.2	49.4	34		50	50.1	48.6	35	
52	52.0	51.1	32		52	50.8	49.5	34	
54	52.0	51.3	31		54	52.6	50.5	32	
56	51.7	50.8	32		56	52.2	50.8	32	
58	51.0	50.7	33		58	51.5	50.5	32	

Observer—R. W. P.

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	51.6	50.7	22 32	-11.1	14 00	53.1	51.0	22 31	-12 0
02	50.9	49.5	34		02	53.6	51.4	30	
04	51.3	50.1	33		04	53.4	51.0	31	
06	52.5	51.5	31		06	53.6	51.1	30	
08	51.9	51.1	32		08	55.3	53.7	27	
10	50.7	50.2	33		10	55.3	52.7	28	
12	51.0	50.0	33		12	55.3	52.7	28	
14	51.3	50.3	33	-11.0	14	55.7	53.0	27	
16	52.7	52.1	30		16	54.9	52.8	28	-11.9
18	53.3	52.3	30		18	53.3	51.6	30	
20	51.3	50.6	33		20	54.6	52.0	29	
22	52.1	51.2	31		22	55.9	53.5	27	
24	51.6	51.2	32		24	56.0	53.7	26	
26	51.3	50.7	32		26	54.9	53.3	28	
28	51.8	51.5	31		28	54.1	51.6	30	
30	51.6	51.0	32	-11.0	30	54.7	53.0	28	-11.6
32	52.6	51.8	31		32	54.8	52.1	29	
34	53.9	53.3	28		34	55.0	53.0	28	
36	54.0	53.5	28		36	55.4	52.6	28	
38	53.5	52.8	29		38	55.5	53.6	27	
40	52.6	52.5	30		40	55.5	53.3	27	
42	52.7	52.4	30		42	55.7	54.3	26	
44	52.4	51.3	31	-11.1	44	56.6	54.6	25	-11.1
46	52.2	50.9	32		46	55.6	55.0	26	
48	52.6	51.2	31		48	56.1	54.7	26	
50	52.5	51.1	31		50	55.9	54.6	26	
52	52.7	51.5	31		52	54.0	53.0	28	
54	51.4	50.3	33		54	53.3	52.7	29	
56	51.3	50.3	33		56	53.6	53.0	29	
58	52.7	51.4	31		58	54.3	53.8	28	
13 00	53.9	52.7	29	-11.5	15 00	54.6	54.0	27	-10.8
02	53.7	52.9	29		02	55.5	54.6	26	
04	53.3	51.3	30		04	56.0	55.3	25	
06	53.4	52.7	29		06.3	54.6	54.1	27	
08	53.8	53.0	29		08	53.5	53.0	29	
10	53.5	52.9	29		10	53.1	52.6	30	
12	53.4	52.4	29		12	53.3	52.9	29	
14	52.3	51.4	31	-11.6	14	53.3	52.7	29	-11.0
16	51.4	50.4	32		16	54.0	53.4	29	
18	51.8	50.5	32		18	55.5	55.0	26	
20	52.4	51.7	31		20	55.0	54.4	27	
22	52.4	51.4	31		22	53.5	53.0	29	
24	52.3	51.7	31		24	53.3	52.3	30	
26	53.0	52.2	30		26	53.3	53.0	29	
28	53.2	52.3	30		28	53.3	53.0	28	
30	52.5	51.8	31	-12.0	30	55.0	54.4	27	-11.0
32	53.6	52.4	29		32	54.1	53.6	28	
34	53.7	52.7	29		34	53.6	53.0	29	
36	52.8	52.2	30		36	53.4	53.0	29	
38	53.3	52.7	29		38	53.7	53.3	28	
40	52.5	52.0	31		40	54.2	53.8	28	
42	53.5	53.3	29		42	54.2	54.0	28	
44	52.5	52.0	31	-12.0	44	53.9	53.5	28	-11.0
46	52.3	51.9	31		46	54.4	53.9	28	
48	52.2	51.6	31		48	54.3	54.1	27	
50	53.5	53.0	29		50	54.0	53.2	28	
52	54.8	53.0	28		52	55.2	54.3	27	
54	54.3	53.5	28		54	54.3	53.7	28	
56	53.8	52.6	29		56	54.1	52.9	28	
58	53.4	52.0	30		58	54.1	52.9	28	

Observers—R. W. P. and W. J. P. alternated 12h 02m to 12h 22m.
W. J. P. and R. R. T. alternated 15h 50m to 16h 06m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	54.0	53.0	22 28	−11.0
02	53.2	52.3	30	
04	53.3	52.7	29	
06	53.2	52.1	30	
08	53.7	52.2	29	
10	53.1	52.2	30	
12	53.5	52.5	29	
14	53.0	52.0	30	−10.8
16	52.8	52.2	30	
18	53.0	53.0	29	
20	52.7	52.1	30	
22	52.8	52.1	30	
24	53.3	52.6	29	
26	53.6	52.9	29	
28	53.0	52.2	30	
30	54.7	53.9	27	−11.0
32	54.9	54.1	27	
34	55.1	54.3	27	
36	54.8	53.8	27	
38	55.9	54.6	26	
40	55.5	54.2	26	
42	56.3	54.1	26	
44	57.8	55.6	24	−10.8
46	56.9	54.1	25	
48	56.2	54.8	25	
50	56.0	53.2	27	
52	57.3	54.3	25	
54	56.4	54.0	26	
56	55.8	54.0	26	
58	55.3	54.0	27	
17 00	55.9	54.0	26	−10.0
02	55.0	54.5	27	
04	55.8	53.8	26	
06	55.9	53.5	27	
08	56.0	53.7	26	
10	55.6	53.1	27	
12	55.3	53.1	27	
14	55.0	53.2	28	−9.8
16	55.1	52.0	28	
18	55.3	51.9	28	
20	55.0	52.0	28	
22	54.9	52.1	28	
24	55.0	52.3	28	
26	55.1	53.9	27	
28	54.5	53.0	28	
30	54.4	53.1	28	−9.6
32	54.1	51.5	30	
34	53.9	50.0	31	
36	53.3	50.7	31	
38	53.7	51.0	30	
40	54.0	51.5	30	
42	53.9	51.4	30	
44	54.0	51.3	30	−9.3
46	54.1	52.2	29	
48	54.1	52.2	29	
50	53.8	52.2	29	
52	54.1	52.3	29	
54	54.5	52.6	28	
56	54.2	52.3	29	
58	53.9	52.1	29	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	54.1	52.1	22 29	−9.7
02	54.1	52.0	29	
04	53.8	51.9	30	
06	53.8	52.0	29	
08	53.7	52.2	29	
10	54.0	52.0	29	
12	53.8	52.2	29	
14	53.2	51.9	30	−9.8
16	52.8	52.0	30	
18	52.5	51.8	31	
20	52.8	51.8	30	
22	52.8	51.8	30	
24	53.2	52.1	30	
26	54.0	53.0	28	
28	54.6	53.6	28	
30	54.6	53.6	28	−9.9
32	54.4	53.4	28	
34	54.5	53.5	28	
36	54.4	53.3	28	
38	54.5	53.6	28	
40	54.5	53.7	28	
42	54.8	54.2	27	
44	55.0	54.0	27	−10.1
46	54.7	53.8	27	
48	54.5	53.2	28	
50	54.7	53.2	28	
52	54.5	53.5	28	
54	54.2	53.2	28	
56	54.2	53.6	28	
58	54.1	53.1	28	
19 00	54.0	53.1	28	−10.2
02	54.0	53.0	28	
04	53.8	53.0	29	
06	53.8	52.0	29	
08	53.6	52.9	29	
10	54.0	53.1	28	
12	53.5	52.8	29	
14	53.9	52.9	29	−10.5
16	53.8	53.0	29	
18	54.1	53.2	28	
20	54.4	53.8	28	
22	54.2	53.8	28	
24	54.2	53.8	28	
26	54.1	53.7	28	
28	54.2	53.8	28	
30	54.7	53.7	27	
32	54.6	53.2	28	
34	54.6	53.1	28	
36	54.8	53.1	28	
38	54.9	53.8	27	
40	55.1	54.1	27	
42	55.0	54.2	27	
44	55.1	54.2	27	−10.6
46	55.8	54.0	26	
48	57.1	55.9	24	
50	56.8	54.8	25	
52	55.9	53.2	27	
54	56.1	54.1	26	
56	56.7	54.8	25	
58	57.1	55.8	24	

Observers—R. R. T. and R. W. P. alternated 19h 48m to 20h 02m. (W. J. P. 17h 24m to 18h 42m. F. L. 16h 54m to 17h 44m.)

Wednesday, October 21, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	58.8	55.2	22 23	−10.4
02	58.3	55.0	24	
04	57.8	55.0	24	
06	58.1	54.0	24	
08	57.8	53.8	25	
10	56.9	53.3	26	
12	57.4	54.3	25	
14	60.9	57.9	19	−10.4
16	58.0	55.0	24	
18	48.8	45.0	39	
20	39.4	37.8	22 52	
22	35.0	12.0	23 16	
24	38.5	36.8	22 53	
26	50.0	48.9	35	
28	61.0	56.8	20	
30	65.1	59.8	15	−10.6
32	66.5	59.9	13	
34	63.3	57.1	18	
36	56.6	53.0	26	
38	61.3	54.0	22	
40	61.4	54.2	22	
42	61.0	54.0	22	
44	60.4	52.6	24	−10.6
46	58.4	51.7	26	
48	58.8	52.0	26	
50	57.2	51.5	27	
52	58.6	52.3	26	
54	58.6	50.1	27	
56	59.0	51.0	26	
58	56.2	54.4	26	
21 00	57.5	55.0	24	−10.5
02	56.8	55.1	25	
04	56.7	54.2	26	
06	56.2	54.6	26	
08	57.5	54.7	24	
10	56.8	54.0	26	
12	53.7	52.3	29	
14	55.3	52.8	28	−10.3
16	55.8	53.2	27	
18	55.4	52.3	28	
20	55.1	51.1	29	
22	56.0	51.7	28	
24	54.8	50.4	30	
26	55.1	51.0	29	
28	55.2	51.8	28	
30	53.9	51.7	30	−10.0
32	55.1	52.0	28	
34	54.7	51.7	29	
36	54.3	51.9	29	
38	54.2	51.8	29	
40	54.5	51.7	29	
42	53.7	50.7	30	
44	53.9	51.1	30	−10.1
46	Overl'k'd			
48	51.0	50.0	33	
50	56.0	55.0	25	
52	56.0	46.0	32	
54	52.0	42.0	39	
56	53.0	41.0	39	
58	52.0	43.2	38	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	52.4	40.3	22 40	−9.9
02	51.0	43.2	38	
04	53.0	44.9	36	
06	55.0	45.6	34	
08	53.0	44.0	36	
10	53.9	40.0	39	
12	61.0	41.2	32	
14	49.3	41.2	42	−9.9
16	71.2	51.2	16	
18	56.1	55.8	25	
20	52.3	48.4	34	
22	50.9	47.6	35	
24	53.2	47.4	34	
26	55.2	47.1	32	
28	60.3	45.9	29	
30	63.3	45.0	28	−9.8
32	61.5	45.5	28	
34	55.2	53.5	27	
36	55.2	54.0	27	
38	52.6	50.8	31	
40	52.1	49.2	33	
42	52.6	49.7	32	
44	52.8	49.5	32	−9.5
46	52.6	48.9	33	
48	51.2	47.8	35	
50	51.0	48.1	35	
52	51.1	48.6	34	
54	51.9	49.6	33	
56	52.9	50.3	31	
58	54.0	51.1	30	
23 00	56.2	53.0	27	−9.6
02	53.5	50.6	31	
04	53.1	50.5	31	
06	53.2	51.1	31	
08	48.8	46.3	38	
10	49.9	45.6	38	
12	50.9	47.6	35	
14	55.0	49.4	31	−9.7
16	47.7	40.9	43	
18	45.8	34.8	22 49	
20	25.8	18.9	23 17	
22	34.3	25.8	23 05	
24	45.6	34.7	22 50	
26	36.1	25.2	23 04	
28	43.9	35.1	22 50	
30	30.8	20.2	23 12	−9.8
32	37.5	28.7	23 01	
34	41.0	30.6	22 56	
36	34.4	31.7	23 01	
38	35.1	33.1	22 59	
40	36.1	33.9	58	
42	45.5	43.9	42	
44	51.7	49.9	33	−9.8
46	54.6	52.2	29	
48	55.8	53.3	27	
50	55.2	53.8	27	
52	56.5	54.9	25	
54	57.1	52.8	26	
56	56.4	52.0	27	
58	56.0	52.0	28	
24 00	55.8	52.0	28	−9.1

Correction to local mean time is + 1m 54s.
Torsion head at 0h 00m read 339° and at the end read the same.
Observers—R. W. P. (F. L. 21h 50m to 22h 30m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, October 22, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	36.2	38.7	23 40	+4.7	18 00	32.8	33.1	23 33	+1.9
02	34.6	37.0	38		02	31.2	31.9	31	
04	34.8	36.8	38		04	30.1	31.0	30	
06	33.2	34.9	35		06	26.8	28.2	25	
08	32.5	34.2	34		08	26.0	27.7	24	
10	33.2	34.4	35		10	25.2	27.2	23	
12	35.9	37.0	39		12.2	25.6	27.5	23	
14	34.9	36.3	38	+4.4	14	26.0	28.1	24	+1.9
16	33.3	34.8	35		16	24.2	26.8	22	
18	31.0	32.5	32		18	22.8	24.6	19	
20	38.2	39.8	43		20	22.8	24.7	19	
22	37.5	39.0	42		22	23.2	25.0	20	
24	31.2	32.8	32		24	23.9	25.1	20	
26	34.7	36.2	37		26	24.3	25.8	21	
28	30.2	31.8	30		28	22.8	23.9	18	
30.3	29.2	30.2	28	+3.8	30	21.6	23.3	17	+2.3
32.6	26.2	28.0	24		32	21.6	23.4	17	
34	26.0	26.5	23		34	21.6	23.2	17	
36.3	24.1	24.8	20		36	21.0	22.5	16	
38	23.2	26.0	20		38	21.5	22.8	17	
40	23.8	26.0	21		40	23.2	24.4	19	
42	21.1	23.2	17		42	23.3	24.5	19	
44	20.1	23.1	16	+2.0	44	23.2	24.2	19	
46	18.8	21.4	13		46	23.1	24.1	19	+2.9
48.2	17.4	20.5	11		48	25.1	25.8	22	
50	21.0	23.8	17		50	26.2	28.0	24	
52	22.8	25.4	20		52	25.2	26.0	22	
54	25.3	27.8	23		54	24.0	24.8	20	
56	28.2	30.8	28		56	23.7	24.5	20	
58	30.9	33.2	32		58	23.7	24.3	20	
17 00	33.1	35.0	35	+3.1	19 00	23.1	23.3	18	+2.6
02	35.0	37.0	38		02	23.7	24.0	19	
04	35.3	37.7	39		04	23.0	23.3	18	
06	36.3	38.2	40		06	24.0	24.3	20	
08	36.2	38.1	40		08	22.8	23.3	18	
10	35.4	37.2	39		10	23.7	24.1	19	
12	35.8	37.0	39		12	24.4	24.6	20	
14	35.2	36.8	38	+2.1	14	20.6	20.9	14	+1.9
16	34.0	35.0	36		16	21.7	21.8	16	
18	33.4	34.0	35		18	21.0	21.2	15	
20	31.8	32.0	32		20	21.0	21.0	15	
22	31.8	32.7	32		22	21.2	21.6	15	
24	32.4	32.7	33		24	21.3	21.8	16	
26	33.2	33.8	34		26	23.3	23.5	19	
28	34.2	34.8	36		28	23.6	24.0	19	
30	33.8	34.2	35	+2.5	30	22.7	23.2	18	+0.6
32.5	35.0	36.0	38		32	25.0	25.6	22	
34	36.9	37.2	40		34	23.9	24.0	19	
36	35.6	36.8	39		36	23.5	24.4	19	
38	29.4	31.0	29		38	24.0	25.0	20	
40	30.3	31.6	30		40	22.8	23.2	18	
42	32.8	34.1	34		42	21.3	21.9	16	
44	32.3	33.2	33	+2.2	44	20.9	21.2	15	−0.0
46	33.0	34.0	34		46	22.0	22.8	17	
48	34 0	35.1	36		48	21.6	22.2	16	
50	35.7	36.0	38		50	21.8	22.4	17	
52	34.9	35.2	37		52	20.9	21.2	15	
54	37.2	37.7	40		54	19.8	20.0	13	
56	34.3	34.9	36		56	19.2	20.0	13	
58	33.8	34.2	35		58	20.1	20.5	14	
					20 00	21.2	21.9	16	−0.3

Sunday, October 25, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	52.5	52.6	22 32	−10.7	2 00	47.9	48.2	22 25	−8.1
02	51.0	51.6	30		02	47.9	48.1	25	
04	52.0	52.0	31		04	47.8	48.0	25	
06	52.6	53.1	32		06	48.6	48.7	26	
08	53.0	53.6	33		08	49.0	49.2	27	
10	52.6	53.1	32		10	50.3	50.5	29	
12	50.9	51.3	30		12	50.7	51.0	29	
14	51.8	52.2	31	−10.6	14	50.9	51.1	30	−8.0
16	51.5	52.1	31		16	51.6	51.7	31	
18	52.1	52.3	32		18	52.9	53.1	33	
20	54.7	54.7	36		20	49.3	49.6	27	
22	56.3	56.5	38		22	54.8	55.3	36	
24	56.1	56.9	38		24	55.3	55.6	36	
26	52.2	52.8	32		26	55.6	56.0	37	
28	52.3	53.0	32		28	56.2	56.6	38	
30	52.8	53.2	33	−10.3	30	56.4	56.8	38	−7.8
32	53.3	53.8	34		32	56.2	56.6	38	
34	53.4	53.9	34		34	55.2	55.6	36	
36	53.6	53.9	34		36	54.6	54.8	36	
38	52.8	53.4	33		38	54.0	54.3	34	
40	53.0	53.5	33		40	54.3	54.6	35	
42	52.5	53.0	32		42	54.6	54.8	36	
44	52.2	52.6	32	−10.1	44	54.8	55.2	36	−7.5
46	51.8	52.3	31		46	55.6	55.8	37	
48	52.0	52.3	31		48	55.2	55.4	36	
50	52.0	52.3	31		50	55.8	56.2	38	
52	51.5	52.0	31		52	56.6	57.1	39	
54	50.9	51.2	30		54	57.2	57.6	40	
56	50.6	51.0	29		56	57.8	58.2	41	
58	50.0	50.7	29		58	58.1	58.3	41	
1 00	49.6	50.0	28	−9.5	3 00	56.9	57.3	39	−7.2
02	49.8	50.2	28		02	54.6	55.0	36	
04	50.0	50.4	28		04	51.0	51.6	30	
06	50.0	51.1	29		06	48.0*b*		25	
08	51.3	51.8	30		08	46.5	46.5	23	
10	51.4	51.9	31		10	47.5*a*		24	
12	51.6	51.8	31		12	50.2*a*		28	
14	51.3	51.6	30	−9.1	14	52.3	52.3	32	−7.1
16	51.0	51.3	30		16	54.8	54.8	36	
18	51.0	51.3	30		18	54.5	54.8	35	
20	51.3	51.8	30		20	54.7	54.9	36	
22	51.3	51.6	30		22	52.5	52.7	32	
24	50.8	51.3	30		24	52.3	52.5	32	
26	51.0	51.5	30		26	52.6	53.1	32	
28	50.8	51.3	30		28	53.6	54.1	34	
30	50.8	51.3	30	−8.8	30	52.6	53.0	32	−6.9
32	50.7	51.1	30		32	51.3	51.6	30	
34	50.3	50.8	29		34	51.0	51.3	30	
36	50.0	50.3	28		36	50.8	51.2	30	
38	50.6	51.0	29		38	50.8	51.2	30	
40	51.0	51.3	30		40	51.2	51.4	30	
42	51.2	51.5	30		42	51.5	51.6	30	
44	51.3	51.6	30	−8.5	44	51.5	51.9	31	−6.6
46	50.6	51.0	29		46	52.8	53.1	33	
48	50.9	51.1	30		48	52.0	52.3	31	
50	50.9	51.1	30		50	51.3	51.5	30	
52	50.0	50.0	28		52	51.0	51.3	30	
54	50.0	50.3	28		54	52.0	52.6	32	
56	49.3	49.6	27		56	53.0	53.5	33	
58	48.5	48.7	26		58	53.5	53.9	34	

Correction to local mean time is + 2m 25s.

Torsion head at oh oom read 339° and at oh 30m read the same.

Observers—R. R. T. and W. J. P., who alternated 18h 18m to 18h 30m.

Observer—W. J. P

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, October 25, 1903 — Magnet scale inverted									Monday, October 26, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 01	54.8	53.6	22 32	-6.2	6 00	56.1	55.3	22 30	-4.8	8 00	34.7	39.2	23 27	-9.0	10 00	53.0	55.0	22 44	-6.8
02	56.0	55.0	30		02	53.1	49.7	37		02	34.5	38.7	26		02	54.8	56.0	46	
04	55.8	55.0	31		04	50.6	48.1	40		04	35.5	40.2	28		04	57.2	59.0	51	
06	56.1	55.3	30		06	51.9	49.6	38		06	28.3	34.5	18		06	56.0	57.7	49	
08	57.3	57.0	28		08	55.5	52.9	32		08	32.8	36.5	23		08	57.2	58.2	50	
10	56.5	55.9	29		10	55.0	52.9	33		10	29.5	35.1	20		10	56.3	57.3	49	
12	54.8	54.0	32		12	54.5	51.8	34		12	26.7	31.2	14		12	51.9	52.9	42	
14	55.2	51.2	34	-6.0	14	53.0	50.8	36	-4.8	14	26.6	31.2	14	-8.7	14	52.9	53.0	43	-6.5
16	51.8	51.0	37		16	47.9	46.2	44		16	23.5	27.8	09		16	54.2	54.8	45	
18	52.5	51.5	36		18	51.0	49.2	39		18	24.3	32.3	13		18	54.0	55.2	45	
20	55.8	53.8	32		20	55.9	53.0	32		20	25.9	27.0	10		20	56.2	57.3	49	
22	55.9	54.8	31		22	51.4	49.2	39		22	29.3*b*		15		22	57.9	59.0	51	
24	54.1	52.8	34		24	50.0	46.8	42		24	22.5	23.4	05		24	60.0	61.1	55	
26	54.0	52.0	34		26	50.0	47.2	41		26	22.4	23.8	05		26	58.1	59.1	52	
28	51.7	50.1	38		28	51.0	48.3	40		28	22.0	23.3	04		28	57.2	58.8	51	
30	50.9	49.6	39	-5.8	30	55.1	51.7	34	-4.8	30	19.2	20.8	23 00	-8.5	30	56.1	57.2	48	-6.6
32	48.8	47.7	42		32	56.0	55.0	30		32	17.6	19.2	22 58		32	55.0	57.0	48	
34	47.1	45.8	45		34	54.7	53.0	33		34	22.6	24.8	23 06		34	55.0	57.2	48	
36	50.7	49.8	39		36	55.1	53.9	32		36	21.6	23.2	04		36	56.0	57.7	49	
38	50.9	49.7	39		38	53.8	52.8	34		38	21.5	23.2	04		38	58.6	59.9	52	
40	48.8	48.2	41		40	55.0	54.0	32		40	20.8	22.2	03		40	57.3	58.9	51	
42	49.2	48.2	41		42	55.7	54.5	31		42	25.0	25.5	08		42	58.7	59.5	52	
44	49.2	48.0	41	-5.5	44	56.8	55.2	30	-4.8	44	21.0	22.9	03	-8.3	44	57.1	58.5	50	-6.6
46	47.5	45.7	44		46	55.0	53.2	33		46	22.0	23.8	05		46	57.2	57.9	50	
48	47.8	46.0	44		48	51.0	50.0	38		48	20.2	20.8	01		48	55.7	57.4	48	
50	49.0	47.9	42		50	54.1	53.4	33		50	21.0	22.2	03		50	45.8*b*		32	
52	49.2	47.6	42		52	53.5	52.1	35		52	10.8	31.8	02		52	43.8*a*		28	
54	52.0	49.2	38		54	55.1	54.1	32		54	22.2	26.2	23 07		54	53.8*a*		44	
56	54.3	51.1	35		56	52.8	52.0	35		56	16.9	20.0	22 58		56	58.8	59.2	52	
58	54.7	51.9	34		58	54.9	54.0	32		58	18.9	22.0	23 01		58	60.3	60.8	55	
5 00	54.5	51.8	34	-5.3	7 00	55.8	54.1	31	-4.8	9 00	17.4	20.6	22 59	-7.8	11 00	61.0	61.0	55	-6.6
02	55.0	51.9	34		02	57.2	55.8	29		02	18.8	20.9	23 00		02	59.8	60.7	54	
04	55.1	52.6	33		04	57.0	55.8	29		04	19.2	20.8	00		04	59.2	61.0	54	
06	55.1	52.2	33		06	55.7	55.3	30		06	19.6	20.4	00		06	60.2	61.4	55	
08	53.9	51.2	35		08	50.2	49.2	40		08	20.2	20.6	23 01		08	52.5	53.8	43	
10	52.3	50.1	37		10	53.5	52.2	35		10	15.4	16.9	22 54		10	42.2	44.0	27	
12	51.1	49.2	39		12	55.0	54.0	32		12	15.8	18.4	56		12	46.3	47.7	33	
14	52.2	50.1	37	-5.0	14	57.2	56.0	29	-4.8	14	18.9	19.4	59	-7.5	14	49.8	51.6	39	-6.6
16	51.1	49.2	39		16	56.6	55.5	30		16	18.9	19.9	59		16	54.1	57.1	47	
18	49.7	48.4	41		18	58.1	57.0	27		18	10.9	11.9	47		18	56.2	59.2	50	
20	49.0	47.2	42		20.3	56.6	55.9	29		20	10.0	11.0	45		20	52.4	55.0	44	
22	48.0	46.0	44		22	56.9	54.8	30		22	10.2	12.0	46		22	50.9	54.4	42	
24	47.1	45.0	45		24	57.6	55.9	29		24	10.1	12.2	46		24	51.8	54.8	43	
26	48.6	47.0	42		26	57.2	54.9	30		26	10.8	12.9	47		26	49.7	52.2	40	
28	48.8	47.3	42		28	55.3	53.8	32		28	9.6	11.3	45		28	51.2	54.0	42	
30	50.0	49.3	40	-4.9	30	52.0	51.2	37	-5.0	30	7.7	8.8	42	-7.1	30	50.9	53.8	42	-6.5
32	49.8	48.0	41		32	58.1	56.1	28		32	9.5	11.2	45		32	50.6	52.4	40	
34	47.8	46.1	44		34	55.8	53.7	32		34	7.4	8.5	41		34	53.5	55.0	45	
36	50.7	49.5	39		36	57.8	55.5	29		36	9.0	9.2	43		36	53.4	55.2	45	
38	52.5	50.7	36		38	54.8	52.4	33		38	10.6	11.1	46		38	52.8	54.1	43	
40	51.9	50.1	38		40	58.0	55.4	29		40	9.3	9.8	44		40	51.2	52.4	41	
42	49.1	47.2	42		42	56.1	54.2	31		42	9.2	9.8	44		42	53.0	54.0	44	
44	48.2	46.2	44	-4.8	44	53.0	51.6	36	-5.0	44	8.1	8.8	42	-6.8	44	54.3	55.3	46	-6.5
46	52.2	50.8	37		46	58.8	57.3	26		46	8.2	10.3	43		46	53.8	55.4	45	
48	53.8	51.3	35		48	52.8	51.8	36		48	8.2	10.0	43		48	57.8	59.9	52	
50	51.9	49.3	38		50	55.9	53.8	32		50	9.0	10.5	44		50	55.8	57.9	49	
52	52.0	49.8	38		52	54.2	53.7	33		52	8.1	10.5	43		52	57.5	59.1	51	
54	51.6	49.1	39		54	57.0	56.8	28		54	8.9	9.9	44		54	59.1	61.3	54	
56	51.8	49.8	38		56	58.9	58.7	25		56*	47.2	55.3	40		56	58.9	61.9	54	
58	55.1	52.6	33		58	58.8	58.2	26		58	47.2	55.2	40		58	56.3	59.8	51	
					8 00	51.8	50.8	37	-5.1						12 00	55.0	57.8	48	-6.4

Correction to local mean time is + 2m 25s.
Torsion head at 0h 00m read 339° and at the end read the same.
Observers—W. J. P. and R. R. T., who alternated 4h 04m to 4h 16m.

Correction to local mean time is + 1m 51s. 90° torsion = 25.′1.
Torsion head at 8h 00m read 336° and at 12h 53m read 339°.
Observers—W. J. P. and R. R. T., who alternated 8h 40m to 8h 52m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, October 27, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	47.9	45.3	22 32	-10.8
02	52.0	50.7	25	
04	54.1	52.1	22	
06	52.7	49.6	25	
08	49.3	46.8	30	
10	49.7	47.8	29	
12	39.4	39.1	44	
14	40.9	40.0	42	-10.3
16	44.3	42.7	37	
18	42.2	41.0	40	
20	45.3	44.9	35	
22	47.8	47.7	31	
24	46.9	46.1	32	
26	51.2	50.8	25	
28	52.0	51.9	24	
30	52.2	51.0	24	-10.0
32	53.0	50.2	24	
34	51.8	49.6	26	
36	50.8	49.6	27	
38	49.9	48.1	29	
40	52.7	50.9	24	
42	53.7	52.1	22	
44	56.1	53.2	20	-10.0
46	57.6	56.3	16	
48	56.1	54.9	18	
50	55.8	53.9	20	
52	52.2	51.1	24	
54	53.1	51.9	23	
56	57.1	56.1	17	
58	58.4	58.2	14	
13 00	62.8	60.5	09	-9.7
02	64.2	63.5	05	
04	61.8	60.2	10	
06	63.2	63.1	06	
08	64.2	63.2	22 06	
10	71.5	69.7	21 55	
12	65.9	62.8	22 04	
14	58.8	54.9	16	-9.6
16	54.1	49.7	24	
18	53.8	49.0	25	
20	45.3	40.9	38	
22	48.2	44.8	32	
24	54.8	50.7	23	
26	57.8	53.9	18	
28	57.2	51.8	20	
30	54.7	48.1	25	-9.4
32	57.0	50.7	21	
34	55.5	50.2	23	
36	57.3	51.2	20	
38	59.7	53.4	17	
40	60.8	56.1	14	
42	60.6	56.8	13	
44	58.3	54.6	17	-9.3
46	57.6	54.1	18	
48	55.7	50.7	22	
50	51.1	47.2	28	
52	49.3	45.1	31	
54	55.1	51.5	22	
56	51.2	46.8	29	
58	49.0	45.0	32	
14 00	46.8	44.0	22 34	-9.2
02	49.9	47.0	30	
04	44.1	41.0	39	
06	47.3	44.3	34	
08	47.9	45.1	32	
10	46.0	44.0	35	
12	49.0	46.4	31	
14	45.0	42.5	37	-8.9
16	46.0	43.8	35	
18	46.3	44.0	35	
20	45.6	43.6	36	
22	47.2	45.2	33	
24	49.3	47.5	30	
26	47.7	46.3	32	
28	45.6	44.1	35	
30	45.0	43.5	36	
32	44.0	42.8	37	
34	45.6	44.7	35	
36	46.0	45.0	34	-8.5
38	45.2	44.2	36	
40	43.8	42.8	38	
42	42.3	41.3	40	
44	42.6	41.3	40	-8.5
46	42.5	41.5	40	
48	42.3	41.3	40	
50	43.0	42.3	39	
52	42.5	41.5	40	
54	42.0	41.0	40	
56	41.2	40.2	42	
58	40.0	38.8	44	
15 00	39.7	38.7	44	-8.3
02	40.8	40.3	42	
04	38.7	38.5	45	
06	36.2	35.2	50	
08	33.2	33.1	54	
10	35.3	34.6	51	
12	39.9	39.3	43	
14	42.6	41.8	39	-8.2
16	41.8	40.6	41	
18	46.0	45.3	34	
20	48.0	47.2	31	
22	44.6	44.0	36	
24	48.3	47.8	30	
26	45.6	45.1	34	
28	46.8	46.3	32	
30	48.6	48.2	30	-8.1
32	47.4	47.0	31	
34	47.3	46.5	32	
36	48.3	47.8	30	
38	46.0	45.5	34	
40	46.8	46.3	32	
42	47.3	46.7	32	
44	48.2	48.2	30	-8.0
46	47.3	46.7	32	
48	47.5	47.3	31	
50	47.3	47.3	31	
52	47.7	47.3	31	
54	47.3	47.1	31	
56	48.2	48.0	30	
58	47.1	47.0	32	-8.0
16 00	47.2	46.9	32	

Wednesday, October 28, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	37.3	39.0	22 30	-9.0
02	37.2	38.7	29	
04	37.3	38.7	29	
06	37.3	38.7	29	
08	37.4	38.7	29	
10	36.8	37.8	28	
12	36.6	37.5	28	
14	36.5	37.5	28	-8.5
16	35.9	36.8	27	
18	35.8	36.6	26	
20	38.0	39.0	30	
22	38.6	40.0	31	
24	39.0	39.6	31	
26	39.6	41.6	33	
28	39.8	40.8	33	
30	41.0	41.7	35	-8.0
32	41.3	42.0	35	
34	41.9	42.3	36	
36	42.2	42.6	36	
38	41.4	42.0	35	
40	39.3	39.9	32	
42	39.3	39.7	32	-7.5
44	39.3	39.7	32	
46	40.7	41.1	34	
48	40.5	40.9	34	
50	41.2	41.7	35	
52	41.6	41.9	35	
54	41.5	41.9	35	
56	41.5	41.9	35	
58	41.6	41.8	35	
1 00	41.1	41.3	34	-7.0
02	41.3	41.5	35	
04	40.9	41.1	34	
06	40.6	40.8	34	
08	41.0	41.2	34	
10	40.0	40.0	32	
12	39.1	39.3	31	
14	39.5	39.8	32	
16	38.5	38.9	30	-6.8
18	38.9	39.3	31	
20	38.9	39.3	31	
22	39.3	39.5	32	
24	41.7	41.9	35	
26	42.0	42.2	36	
28	42.3	42.4	36	
30	42.0	42.1	36	-6.5
32	42.4	42.6	36	
34	42.7	43.3	37	
36	41.8	42.2	36	
38	41.5	41.8	35	
40	40.9	41.1	34	
42	40.5	40.9	34	
44	40.9	41.3	34	-6.0
46	41.2	41.4	35	
48	41.6	41.6	35	
50	42.2	42.2	36	
52	43.2	43.8	38	
54	44.1	44.2	39	
56	44.7	44.9	40	
58	47.8	48.0	45	
2 00	52.6	54.0	22 53	-6.0
02	57.2	59.1	23 01	
04	55.8	57.8	22 59	
06	56.0	57.8	22 59	
08	56.8	57.8	23 00	
10	55.6	57.2	22 58	
12	55.0	56.2	57	
14	53.7	54.8	55	-5.6
16	54.2	55.6	56	
18	52.1	53.6	53	
20	52.4	53.8	53	
22	51.3	52.5	51	
24	50.3	51.3	50	
26	50.7	51.3	50	
28	51.0	52.6	51	
30	51.0	51.5	50	-5.5
32	49.5	50.2	48	
34	47.8	48.5	45	
36	47.4	48.0	45	
38	47.0	47.2	44	
40	44.3	44.6	39	
42	43.0	43.4	38	-5.2
44	42.3	42.9	37	
46	43.6	44.0	38	
48	45.0	45.0	40	
50	45.3	45.5	41	
52	46.3	46.6	42	
54	46.2	46.3	42	
56	45.3	45.6	41	
58	47.2	47.7	22 44	
3.00		*a*		
02	64.0	64.0	23 10	-5.0
04	61.1	61.7	06	
06	59.0	60.1	23 03	
08	56.0	56.0	22 58	
10	55.0	55.0	56	
12	53.8	54.0	54	
14	50.6	52.0	50	-5.0
16	51.5	52.0	51	
18	54.3	54.8	55	
20	54.5	55.2	56	
22	56.6	57.3	59	
24	55.1	55.5	56	
26	53.6	54.3	54	
28	54.5	55.0	56	
30	54.6	55.1	56	-5.0
32	54.0	54.3	55	
34	52.6	53.0	53	
36	51.6	51.9	51	
38	51.5	51.7	51	
40	51.0	51.9	50	
42	51.3	51.9	51	
44	55.0	55.5	56	-4.9
46	47.1	47.4	44	
48	56.6	56.8	59	
50	50.5	53.0	55.8	55
52	53.3	53.3	53	
54	55.1	55.3	56	
56	53.2	53.8	54	
58	52.8	52.8	53	

Correction to local mean time is + 1m 54s.

Torsion head at 10h 50m read 339° and at the end read the same.

Observers—R. R. T. and W. J. P., who alternated 13h 52m to 14h 06m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 28, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	53.2	53.3	22 53	−4.8
02	54.8	55.2	56	
04	56.6	57.1	59	
06	56.1	56.6	58	
08	54.2	54.8	55	
10	54.2	54.6	55	
12	54.8	55.3	56	
14	54.2	55.0	55	−4.5
16	51.1	52.0	51	
18	47.3	48.2	45	
20	44.6	45.2	40	
22	43.1	43.8	38	
24	42.7	43.1	37	
26	43.2	44.1	38	
28	44.2	44.8	40	
30	45.0	46.1	41	−4.2
32	45.2	46.0	41	
34	45.2	46.8	42	
36	45.7	46.8	42	
38	44.9	46.0	41	
40	45.5	46.6	42	
42	46.8	47.8	44	
44	45.1	46.2	41	−4.1
46	47.2	48.1	44	
48	46.8	48.0	44	
50	47.6	49.2	46	
52	47.1	48.0	44	
54	49.2	50.0	48	
56	49.7	50.8	48	
58	47.8	49.2	46	
5 00	47.8	48.8	46	−4.0
02	51.9	52.3	51	
04	53.1	53.9	54	
06	56.2	57.4	22 59	
08	58.7	59.6	23 02	
10	57.0	57.3	22 59	
12	56.2	57.1	58	
14	54.8	55.2	56	−4.0
16	51.9	52.3	51	
18	50.7	51.4	50	
20	50.9	52.1	51	
22	50.9	52.1	51	
24	48.8	49.1	46	
26	49.1	49.8	47	
28	49.7	50.0	48	
30	51.2	52.6	22 51	−4.0
32	57.2	58.0	23 00	
34	51.0	51.9	22 50	
36	54.2	55.8	22 56	
38	57.8	58.2	23 01	
40	63.9	65.2	11	
42	61.7	63.2	08	
44	61.3	63.3	08	−4.0
46	63.7	64.2	10	
48	62.6	63.8	09	
50	63.0	64.9	10	
52	61.1	63.1	07	
54	62.2	64.6	09	
56	63.2	63.9	09	
58	55.5	59.7	00	
6 00	65.9	66.2	23 13	−4.0
02	57.0	57.4	23 00	
04	50.9	51.8	22 50	
06	55.8	56.2	22 58	
08	60.6	62.4	23 06	
10	64.8	65.4	12	
12	65.7	68.7	15	
14	67.1	70.0	17	−3.9
16	68.2	69.4	18	
18	66.2	67.6	15	
20	67.8	69.1	17	
22	63.7	66.2	12	
24	62.7	65.9	11	
26	58.9	61.9	04	
28	60.2	62.2	06	
30	62.0	65.0	09	−3.9
32	61.9	62.3	23 07	
34	55.5	57.9	22 59	
36	55.1	56.9	58	
38	53.0	55.4	55	
40	54.2	56.6	57	
42	55.2	57.6	58	
44	55.2	57.9	58	−3.7
46	55.0	57.2	22 58	
48	56.1	59.0	23 00	
50	54.3	57.8	22 58	
52	55.2	58.2	59	
54	54.4	58.0	58	
56	51.2	55.6	22 54	
58	58.8	63.8	23 06	
7 00	50.2	56.2	22 53	−3.6
02	54.0	58.0	58	
04	52.8	58.4	57	
06	52.9	57.7	56	
08	51.3	56.0	54	
10	50.6	53.9	22 52	
12	55.8	58.8	23 00	
14	52.0	55.7	22 54	−3.6
16	54.2	57.2	57	
18	56.0	58.2	59	
20	54.0	56.1	56	
22	54.2	55.0	55	
24	53.2	54.0	54	
26	48.9	49.9	47	
28	47.7	49.0	46	
30	49.3	51.8	49	−3.4
32	47.1	48.9	45	
34	48.6	50.0	47	
36	49.0	50.0	47	
38	50.8	51.6	50	
40	49.8	51.0	49	
42	50.3	50.7	49	
44	51.2	52.3	51	−3.4
46	47.9	48.0	45	
48	50.1	51.2	49	
50	46.7	48.2	44	
52	46.7	49.0	45	
54	47.8	50.1	46	
56	47.3	48.8	45	
58	48.1	50.0	47	

Observers—W. J. P. and R. R. T. alternated from 4h 18m to 4h 34m. R. R. T. and R. W. P. alternated from 7h 52m to 8h 08m.

Wednesday, October 28, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	47.1	48.1	22 44	−3.3
02	45.2	46.4	42	
04	48.2	49.2	46	
06	44.2	45.8	40	
08	43.9	45.1	40	
10	46.5	47.5	44	
12	44.6	45.7	40	
14	44.4	44.9	40	−3.0
16	45.0	45.9	41	
18	43.2	43.4	38	
20	42.0	43.0	36	
22	44.1	45.3	40	
24	43.7	45.8	40	
26	38.6	39.9	31	
28	38.4	39.8	31	
30	40.2	41.7	34	−2.8
32	37.3	38.5	29	
34	37.8	39.0	30	
36	43.0	43.9	38	
38	43.2	43.6	38	
40	39.2*b*		31	
42	38.8	39.0	31	
44	39.0	39.8	32	−2.8
46	39.8	41.2	33	
48	38.6	40.7	32	
50	37.9	38.2	29	
52	35.9	36.6	26	
54	33.5	35.3	24	
56	39.2	40.9	32	
58	40.6	41.6	34	
9 00	36.0	37.3	27	−2.7
02	36.2	37.0	27	
04	37.9	39.1	30	
06	37.0	38.0	29	
08	36.0	37.3	27	
10	37.6	38.7	30	
12	34.6	35.2	24	
14	39.5	40.6	32	
16	38.5	39.0	30	−2.7
18	36.9	37.5	28	
20	37.3	37.6	28	
22	40.6	40.6	34	
24	42.3	42.9	37	
26	38.5	39.2	31	
28	39.7	39.9	32	
30	41.4	42.2	35	−2.5
32	40.0	40.9	33	
34	38.8	40.1	32	
36	38.2	39.1	30	
38	40.8	41.7	34	
40	40.1	40.2	33	
42	36.4	36.4	27	
44	33.2	33.8	22	−2.6
46	40.0	40.0	32	
48	41.8	42.3	36	
50	38.0	39.2	30	
52	36.1	36.3	26	
54	35.8	36.5	26	
56	36.0	36.4	26	
58	37.0	37.2	28	
10 00	37.8	38.0	22 29	−2.5
02	38.9	39.1	31	
04	39.0	39.2	31	
06	40.0	40.7	33	
08	38.1	38.2	30	
10	36.3	36.9	27	
12	38.0	38.5	30	
14	38.4	39.0	30	−2.3
16	38.0	38.7	30	
18	37.2	38.2	29	
20	36.9	37.3	28	
22	37.2	37.8	29	
24	37.4	38.2	29	
26	37.0	38.0	29	
28	36.4	37.6	28	
30	35.8	36.9	27	−2.2
32	35.3	36.6	26	
34	35.2	36.4	26	
36	35.9	36.9	27	
38	35.5	37.2	27	
40	35.9	37.1	27	
42	35.0	36.2	26	
44	36.3	37.7	28	−2.2
46	36.2	37.8	28	
48	36.3	37.5	28	
50	37.1	38.4	29	
52	37.6	38.5	29	
54	37.5	38.2	29	
56	37.8	38.5	30	
58	38.7	39.4	31	
11 00	37.9	38.4	30	−2.1
02	36.6	37.5	28	
04	35.9	36.6	26	
06	35.6	36.1	26	
08	35.0	36.0	25	
10	36.1	37.1	27	
12	36.0	37.0	27	
14	36.0	36.9	27	−2.2
16	37.1	37.6	28	
18	37.5	38.1	29	
20	37.7	38.2	29	
22	38.8	39.0	31	
24	39.3	39.6	32	
26	39.6	39.8	32	
28	38.6	38.9	30	
30	37.6	37.9	29	−2.3
32	37.8	38.2	29	
34	37.3	37.7	29	
36	36.9	37.1	28	
38	36.7	36.9	28	
40	36.1	36.4	26	
42	35.7	35.8	26	
44	35.7	35.9	26	−2.2
46	36.2	36.5	27	
48	35.8	36.2	26	
50	36.5	36.7	27	
52	37.5	37.6	29	
54	37.8	38.0	29	
56	38.0	38.2	30	
58	38.2	38.4	30	

Observers—R. W. P. (R. R. T. observed readings from 8h 32m to 9h 06m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 28, 1903					Magnet scale erect				Wednesday, October 28, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	37.1	37.2	22 28	-2.2	14 00	34.3	35.7	22 25	-1.5	16 00	31.4	32.4	22 20	-1.7	18 00	31.0	31.7	22 19	-1.2
02	36.2	36.8	27		02	34.8	35.8	25		02	31.8	32.9	20		02	30.7	31.3	18	
04	35.9	36.9	27		04	33.8	35.1	24		04	32.9	33.8	22		04	29.6	30.2	17	
06	36.6	37.0	28		06	33.6	34.9	23		06	33.6	34.4	23		06	28.8	29.4	15	
08	38.0	38.7	30		08	33.5	34.7	23		08	35.0	35.9	25		08	26.5	27.0	12	
10	36.0	36.9	27		10	33.0	34.3	22		10	34.5	35.9	25		10	23.8	24.2	07	
12	35.5	36.8	26		12	34.6	35.0	24		12	34.9	36.0	25		12	22.3	24.2	06	
14	36.8	37.8	28	-2.2	14	34.5	36.7	26	-1.6	14	34.8	36.8	26	-1.3	14	23.2	25.0	08	-1.2
16	38.0	39.2	30		16	32.6	33.6	22		16	35.9	37.4	27		16	23.9	25.3	08	
18	36.4	36.9	27		18	32.4	33.0	21		18	36.0	37.8	28		18	23.8	25.4	08	
20	36.8	38.0	28		20	31.5	32.2	20		20	36.0	38.0	28		20	25.4	27.2	11	
22	46.3	47.2	43		22	32.5	33.0	21		22	35.5	37.4	27		22	26.4	29.1	13	
24	38.5	38.9	30		24	31.8	32.4	20		24	35.5	37.2	27		24	27.8	30.8	16	
26	30.5	30.9	18		26	32.6	33.6	22		26	34.7	36.4	25		26	29.0	32.0	18	
28	24.5	25.0	08		28	32.5	33.3	21		28	33.9	36.0	24		28	32.0	34.9	22	
30	23.8	24.6	08	-1.5	30	32.3	33.0	21	-1.6	30	34.8	36.3	25	-1.2	30	33.0	35.3	23	-1.3
32	27.1	28.3	13		32	32.3	33.4	21		32	35.5	36.8	26		32	34.3	37.0	26	
34	29.3	30.7	17		34	33.5	34.1	23		34	36.1	36.9	27		34	34.2	36.9	25	
36	29.6	31.3	17		36.2	33.5	34.2	23		36	36.0	36.9	27		36	35.9	38.2	28	
38	31.8	32.8	20		38	32.6	33.2	21		38	35.5	36.3	26		38	36.1	37.9	28	
40	32.5	33.8	22		40	32.9	33.4	22		40	35.2	36.3	26		40	36.2	37.7	28	
42	37.8	39.2	30		42	33.2	33.8	22		42	34.9	35.7	25		42	37.0	38.3	29	
44	31.0	32.6	20	-1.5	44	33.8	34.3	23	-1.8	44	34.7	35.7	25	-1.2	44	37.2	38.7	29	-1.2
46	32.2	33.5	21		46	33.8	34.4	23		46	35.0	35.7	25		46	40.2	41.3	34	
48	31.9	33.4	21		48	33.2	33.6	22		48	34.3	35.1	24		48	41.1	42.7	35	
50	33.0	33.9	22		50	32.6	33.3	21		50	34.0	35.2	24		50	40.8	42.1	35	
52	32.9	33.8	22		52	31.6	32.2	20		52	34.0	35.2	24		52	39.2	40.8	32	
54	32.1	33.8	21		54	30.4	31.0	18		54	34.2	35.2	24		54	41.0	42.2	35	
56	31.9	34.3	22		56	31.0	31.6	19		56	34.0	34.7	24		56	40.3	41.2	34	
58	31.3	33.5	20		58	32.8	33.1	21		58	33.8	34.2	23		58	36.2	38.0	28	
13 00	31.4	34.3	21	-1.5	15 00	31.8	32.4	20	-2.0	17 00	33.1	33.8	22	-1.2	19 00	34.2	35.2	24	-1.2
02	33.5	35.0	23		02	31.4	31.9	19		02	33.2	33.8	22		02	34.1	34.6	24	
04	33.5	35.2	24		04	30.7	31.2	18		04	33.0	33.8	22		04	34.2	35.8	25	
06	32.8	34.3	22		06	30.6	31.3	18		06	33.2	34.3	23		06	34.1	35.7	24	
08	33.0	34.0	22		08	29.8	30.4	17		08	33.9	35.0	24		08	32.9	33.1	22	
10	33.2	34.3	23		10	30.6	31.2	18		10	34.1	35.3	24		10	30.1	32.1	19	
12	34.8	35.5	25		12	30.3	31.0	18		12	34.5	35.9	25		12	30.2	31.2	18	
14	34.3	34.9	24	-1.5	14	30.1	30.9	18	-1.9	14	34.2	35.8	25	-1.3	14	31.1	32.5	20	-1.2
16	33.5	34.3	23		16	31.5	31.9	19		16	34.6	35.4	25		16	31.2	32.3	19	
18	32.1	32.6	20		18	31.6	32.0	20		18	36.8	37.2	28		18	29.0	31.3	17	
20	33.6	33.8	23		20	29.5	30.3	17		20	35.6	36.8	26		20	29.0	30.4	16	
22	34.0	34.5	23		22	29.7	30.3	17		22	35.0	35.9	25		22	29.3	31.2	17	
24	34.9	34.9	24		24	30.3	30.9	18		24	33.8	34.8	24		24	30.7	32.1	19	
26	34.3	34.3	24		26	29.3	30.0	16		26	32.3	33.6	21		26	30.9	32.1	19	
28	33.8	34.2	23		28	30.2	31.1	18		28	31.8	31.9	20	-1.3	28	30.1	32.1	19	
30	35.2	35.6	25	-1.6	30	30.5	31.2	18	-1.9	30	30.9	32.1	19		30	28.9	30.2	16	-1.3
32	36.0	36.5	26		32	30.8	31.6	19		32	31.0	32.1	19		32	32.5	32.8	21	
34	36.8	36.8	28		34	30.5	31.2	18		34	30.8	32.0	19		34	31.8	32.6	20	
36	35.0	35.6	25		36	31.6	32.5	20		36	31.0	32.2	19		36	32.0	32.8	20	
38	34.3	34.6	24		38	31.0	31.8	19		38	31.7	32.3	20		38	30.8	31.8	19	
40	34.3	34.5	24		40	31.2	31.5	19		40	31.8	32.9	20		40	28.7	29.7	16	
42	33.3	33.8	22		42	32.3	32.8	21		42	31.1	32.7	20		42	28.1	29.2	15	
44	32.3	32.8	21	-1.6	44	32.3	32.8	21	-1.9	44	30.4	31.9	19	-1.3	44	27.2	28.1	13	-1.4
46	31.3	31.6	19		46	31.8	32.2	20		46	30.7	31.9	19		46	26.5	27.8	12	
48	30.2	30.6	17		48	30.8	31.2	18		48	30.4	32.0	19		48	25.8	27.0	11	
50	32.8	33.6	22		50	31.3	31.9	19		50	30.2	31.0	18		50	26.2	27.4	12	
52	31.8	32.6	20		52	31.8	32.0	20		52	30.5	31.2	18		52	26.9	28.5	13	
54	31.8	33.2	21		54	31.5	32.1	20		54	30.9	31.6	19		54	27.4	29.2	14	
56	31.9	33.2	21		56	31.9	32.2	20		56	30.6	31.2	18		56	27.9	29.1	14	
58	33.8	35.4	24		58	31.5	31.9	19		58	31.2	31.8	19		58	27.7	29.1	14	

Observers—R. W. P. and W. J. P., who alternated from 12h 04m to 12h 22m. W. J. P. and R. R. T., who alternated from 15h 52m to 16h 06m.

Observers—R. R. T. and R. W. P., who alternated from 19h 48m to 19h 58m. (W. J. P. observed readings 17h 50m to 18h 08m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, October 28, 1903 — Magnet scale erect									Thursday, October 29, 1903 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	27.8	29.1	22 14	−1.3	22 00	24.7	26.3	22 10	−1.6	16 00	41.3	37.8	22 44	−1.2	18 00	51.1	50.9	22 26	−2.3
02	27.3	28.6	14		02	26.2	28.2	12		02	39.0	36.0	47		02	50.5	50.5	26	
04	26.0	27.2	12		04	27.8	30.0	15		04	37.6	34.8	49		04	49.0	48.9	29	
06	26.7	27.9	12		06	27.7	29.7	15		06	39.6	36.6	46		06	49.6	49.2	28	
08	27.8	28.6	14		08	27.5	29.1	14		08	39.3	36.6	46		08	50.7	50.6	26	
10	28.5	29.0	15		10	28.2	29.7	15		10	40.6	38.3	44		10	50.0	49.7	28	
12	27.9	28.2	14		12	29.0	30.0	16		12	40.3	37.6	45		12	50.5	50.3	27	
14	26.8	27.3	12	−1.0	14	30.2	31.3	18	−1.7	14	41.7	39.5	42	−1.5	14	50.5	50.2	27	−2.3
16	26.5	26.9	12		16	31.0	32.1	19		16	36.1	34.8	50		16	50.9	50.1	26	
18	27.7	27.8	13		18	33.4	34.4	23		18	32.4	30.7	22 56		18	52.2	51.2	24	
20	26.8	27.0	12		20	32.8	33.5	22		20	27.5	27.0	23 03		20	54.3	53.8	21	
22	28.2	28.4	14		22	31.6	32.2	20		22	19.6	17.9	16		22	54.3	53.6	21	
24	28.8	29.8	16		24	29.5	30.1	17		24	19.6	18.2	16		24	56.9	55.4	18	
26	27.5	27.8	13		26	28.0	28.9	14		26	17.6	16.3	19		26	59.7	58.0	13	
28	27.0	27.2	12		28	28.1	28.8	14		28	18.9	17.5	17		28	61.0	59.2	11	
30	24.7	25.0	09	−1.3	30	27.6	28.0	13	−1.8	30	20.4	18.5	15	−2.0	30	57.7	55.9	16	−2.2
32	24.6	24.7	08		32	28.5	29.5	15		32	21.0	19.3	14		32	53.2	52.5	23	
34	24.9	25.1	09		34	28.5	28.6	14		34	24.0	21.4	10		34	51.6	50.9	25	
36	25.2	25.9	10		36	28.1	28.9	14		36	29.6	27.3	23 01		36	51.0	50.7	26	
38	25.6	27.1	11		38	27.2	27.8	13		38	33.6	30.5	22 56		38	52.8	51.5	24	
40	26.3	27.9	12		40	26.9	27.3	12		40	36.3	33.5	51		40	52.5	51.1	24	
42	25.0	26.6	10		42	28.2	29.0	15		42	37.6	35.3	49		42	52.0	51.2	25	
44	25.3	26.7	10	−1.4	44	30.9	31.8	19	−1.8	44	40.5	37.8	44	−2.0	44	52.2	51.1	25	−2.2
46	26.8	27.6	12		46	33.2	34.2	23		46	42.8	39.9	41		46	52.7	51.6	24	
48	26.5	27.7	12		48	33.4	34.6	23		48	44.1	41.5	38		48	52.8	51.9	24	
50	25.1	25.8	10		50	33.3	34.3	23		50	45.4	42.9	36		50	52.4	51.7	24	
52	23.6	24.5	07		52	37.7	39.0	30		52	46.2	44.2	35		52	51.6	50.8	25	
54	24.8	25.1	09		54	40.3	42.2	34		54	44.4	42.6	37		54	51.7	51.1	25	
56	26.7	27.2	12		56	42.3	43.7	37		56	56.3	54.3	19		56	53.2	52.2	23	
58	25.6	26.0	10		58	41.5	42.8	36		58	53.7	50.7	24		58	53.9	52.7	22	
21 00	26.2	26.9	11	−1.5	23 00	41.0	41.9	35	−1.9	17 00	56.3	53.8	19	−2.2	19 00	56.9	55.9	17	−2.2
02	24.8	25.3	09		02	40.4	41.2	34		02	58.1	56.3	16		02	58.1	57.1	15	
04	23.0	23.5	06		04	40.0	41.1	33		04	60.1	58.5	13		04	61.0	59.8	11	
06	25.3	25.8	10		06	38.1	39.1	30		06	60.6	58.9	12		06	63.1	62.0	08	
08	26.4	27.4	12		08	37.6	39.1	30		08	61.0	59.4	11		08	64.7	63.8	05	
10	27.8	28.7	14		10	41.3	44.0	37		10	61.3	59.6	11		10	64.9	64.2	04	
12	27.7	28.7	14		12	43.6	44.0	38		12	58.6	57.0	15		12	62.8	62.1	08	
14	26.2	27.6	12	−1.5	14	39.4	41.2	33	−2.0	14	56.6	55.0	18	−2.2	14	63.0	61.8	08	−2.2
16	26.2	27.3	12		16	39.0	41.3	33		16	56.5	55.5	18		16	61.6	60.7	10	
18	25.2	26.1	10		18	36.4	38.3	28		18	58.6	57.6	15		18	59.8	58.7	13	
20	25.3	26.1	10		20	35.0	37.0	26		20	59.3	58.6	13		20	61.2	60.8	10	
22	25.3	26.3	10		22	34.8	36.5	26		22	60.3	59.8	12		22	62.0	61.7	09	
24	24.5	25.7	09		24	33.8	35.3	24		24	61.1	60.3	10		24	63.1	62.9	07	
26	23.9	25.7	09		26	33.8	35.4	24		26	61.3	60.9	10		26	65.6	64.9	03	
28	24.8	28.1	11		28	33.5	34.8	23		28	60.7	60.1	11		28	65.8	65.1	03	
30	25.9	28.9	13	−1.5	30	35.0	36.3	26	−2.0	30	61.6	61.3	09	−2.3	30	63.1	62.2	07	−2.3
32	24.9	27.5	11		32	32.8	33.8	22		32	63.1	62.4	07		32	61.0	60.2	10	
34	25.8	30.3	14		34	32.1	32.8	20		34	63.7	63.1	06		34	61.0	60.3	10	
36	28.0	32.0	17		36	31.0	32.2	19		36	65.3	64.8	04		36	54.6	54.3	20	
38	25.8	29.4	13		38	36.0	36.9	27		38	67.8	67.1	22 00		38	57.0	56.8	16	
40	26.2	29.0	13		40	31.8	32.3	20		40	69.0	68.1	21 58		40	57.4	56.4	16	
42	23.9	28.2	10		42	33.2	34.0	22		42	68.3	67.4	21 59		42	56.9	55.3	18	
44	25.8	29.6	13	−1.6	44	35.5	35.6	25	−2.1	44	64.7	64.1	22 05	−2.3	44	56.9	55.2	18	−2.3
46	25.4	29.2	13		46	36.2	37.0	27		46	60.9	60.3	10		46	53.9	51.7	23	
48	22.3	25.7	07		48	38.5	38.5	30		48	58.6	57.9	14		48	53.8	50.8	24	
50	22.9	25.3	08		50	38.2	39.1	30		50	57.6	56.6	16		50	53.8	50.9	24	
52	22.0	25.0	07		52	37.0	38.5	29		52	57.6	57.0	16		52	54.5	51.9	22	
54	23.7	25.9	09		54	34.8	35.9	25		54	57.6	57.0	16		54	53.2	51.2	24	
56	23.9	25.9	09		56	35.0	35.3	25		56	56.3	55.5	18		56	51.8	50.6	25	
58	23.5	25.5	08		58	36.5	37.3	28		58	54.3	53.9	21		58	51.3	50.8	26	
					24 00	37.0	37.7	28	−1.4						20 00	50.8	50.0	27	

Correction to local mean time is + 1m 58s.
Torsion head at 0h 00m read 339° and at the end read the same.
Observer—R. W. P.

Correction to local mean time is + 2m 11s. 90° torsion = 22.′4.
Torsion head at 0h 22m read 339° and at 20h 47m read 348°.
Observers—W. J. P. and R. R. T., who alternated from 18h 16m to 18h 30m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, October 30, 1903 — Magnet scale erect										Sunday, November 1, 1903 — Magnet scale inverted									
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	36.5	41.9	22 04	−7.3	22 00	48.8	49.7	22 20	−4.8	0 00*	46.8	38.3	24 47	−13.0	2 00	31.1	23.7	23 36	−12.1
02	34.7	39.2	01		02	50.2	51.2	23		02	24.2	10.5	25 27		02	29.6	19.4	40	
04	38.8	41.9	06		04	52.8	53.8	27		04	68.8	42.3	26 08		04	30.6	29.9	32	
06	44.9	48.2	16		06	45.9	46.8	16		06*	65.6	21.3	25 29		06	20.0	6.8	58	
08	44.1	47.2	15		08	43.1	44.8	12		08	57.3	36.6	23		08	45.0	32.0	23 19	
10	39.8	44.3	09		10	44.8	46.6	15		10	46.9	36.3	25 31		10*	44.5	40.3	22 13	
12	41.9	46.1	12		12	46.2	46.8	16		12*	67.4	60.7	24 12		12	23.7	12.0	22 51	
14	43.3	47.0	14	−7.0	14	46.2	47.8	17	−4.4	14*	59.8	41.0	23 25	−12.9	14*	35.6	16.6	23 58	−12.2
16	40.7	45.2	10		16	47.0	47.4	17		16	77.2	44.6	08		16*	38.0	22.5	24 56	
18	40.1	45.2	10		18	48.2	49.0	19		18	57.0	54.5	16		18	30.6	18.2	25 04	
20	41.0	45.3	11		20	48.8	50.0	20		20	57.6	54.0	16		20*	62.5	42.5	25 45	
22	43.0	47.0	14		22	58.2	59.0	35		22	41.0	40.9	40		22*	43.0	15.3	26 58	
24	43.2	47.0	14		24	57.1	58.1	33		24	43.8	36.2	41		24*	63.2	10.0	24 59	
26	43.0	46.2	13		26	61.4	62.2	40		26	56.5	54.5	17		26*	22.0	14.0	25 55	
28	40.2	44.0	09		28	64.8	65.2	45		28	65.5	60.8	04		28*	44.0	35.0	26 37	
30	38.1	41.6	06	−6.4	30	70.8	71.8	55	−4.3	30	60.8	57.2	10	−12.8	30*	69.2	58.3	24 41	−12.0
32	37.2	41.9	05		32	63.8	64.5	44		32	52.4	38.6	23 32		32*	18.3	11.5	33	
34	40.2	44.8	10		34	61.2	63.2	41		34	18.5	11.0	24 20		34	37.2	31.8	24 02	
36	45.1	48.0	16		36	56.4	58.8	33		36*	28.8	19.0	24 50		36	77.2	67.0	23 03	
38	50.6	53.3	24		38	56.0	57.9	32		38*	54.6	41.0	25 17		38	42.6	33.5	23 57	
40	51.2	55.4	27		40	56.0	57.8	32		40	73.3	55.0	24 52		40	11.6	8.3	24 41	
42	50.2	54.6	25		42	54.1	55.8	29		42	74.8	72.0	37		42*	29.3	9.0	24 57	
44	46.1	51.4	19	−5.8	44	51.3	53.2	25	−4.2	44	76.1	75.1	34	−12.6	44*	75.8	67.0	22 55	−12.0
46	47.8	52.1	21		46	51.0	52.0	24		46*	52.0	44.5	24 04		46	57.0	53.5	23 20	
48	46.1	51.1	19		48	44.4	45.8	14		48	70.3	66.3	23 32		48	38.5	35.8	23 48	
50	47.2	51.7	20		50	42.2	43.8	10		50	27.3	25.4	24 38		50	22.2	19.2	24 14	
52	48.2	52.9	22		52	40.3	42.1	08		52	24.1	18.8	46		52	24.8	14.4	24 16	
54	50.1	54.3	25		54	42.6	43.0	10		54	42.3	26.3	26		54	36.8	35.0	23 50	
56	50.3	54.3	25		56	43.1	44.4	12		56	49.5	41.4	08		56	25.5	14.5	24 14	
58	50.8	54.8	26		58	44.3	45.3	13		58	34.0	27.4	24 31		58	20.8	8.2	24 23	
21 00	49.5	52.9	23	−5.4	23 00	46.1	47.1	16	−4.1	1 00	11.5	9.5	25 03	−12.5	3 00	37.0	30.3	23 53	−12.0
02	48.2	50.8	21		02	46.3	47.3	16		02*	26.2	18.9	25 24		02*3	43.0	31.3	24 35	
04	50.1	52.3	23		04	46.6	47.2	17		04*5	47.0	39.9	26 09		04	54.3	50.8	24 11	
06	49.9	52.2	23		06	47.0	47.2	17		06	43.4	37.3	26 13		06*	14.3	13.3	26 03	
08	42.9	51.0	17		08	44.8	45.1	13		08*	59.3	47.8	25 00		08	53.1	36.8	25 14	
10	53.1	55.1	28		10	44.8	45.8	14		10	25.5	22.3	46		10	22.7	7.3	26 01	
12	47.1	49.4	19		12	46.2	47.2	16		12	30.5	23.0	25 42		12	16.7	11.5	03	
14	43.4	44.7	12	−5.2	14	47.0	47.9	17	−4.0	14*	55.5	43.7	24 14	−12.3	14*	57.5	42.2	58	−12.0
16	43.0	45.2	12		16	44.2	45.8	14		16	73.3	50.6	23 55		16	73.0	40.3	26 48	
18	47.3	49.7	19		18	45.3	47.0	15		18	59.7	54.3	24 02		18*	23.0	15.0	29 04	
20	47.8	50.8	20		20	47.0	48.3	18		20	63.5	44.7	24 07		20*	61.0	34.0	26 43	
22	45.4	46.8	15		22	44.5	45.8	14		22	68.6	60.6	23 51		22*	63.6	51.0	23 21	
24	44.2	46.8	14		24	44.2	45.2	13		24	76.6	63.0	42		24*	64.6	35.3	11	
26	46.2	49.7	18		26	46.0	46.2	15		26	72.0	70.2	23 40		26	65.2	13.5	28	
28	47.9	51.7	21		28	47.2	48.0	18		28*	64.0	46.0	22 43		28	37.2	21.5	23 43	
30	48.2	51.2	21	−5.1	30	46.1	46.9	16	−4.1	30*	24.5	10.6	24 02	−12.2	30*	67.5	50.3	22 34	−12.0
32	43.3	44.1	12		32	46.4	48.0	17		32*	43.5	30.2	28		32*	28.0	12.3	24 11	
34	46.1	47.1	16		34	48.3	49.9	20		34	61.0	36.2	24 10		34*	75.0	49.0	22 54	
36	45.2	46.9	15		36	51.0	52.2	24		36*	42.1	33.3	23 04		36	69.0	47.0	23 00	
38	40.2	43.3	08		38	51.0	52.0	24		38	39.2	38.2	03		38*	67.5	18.0	25 57	
40	35.7	37.8	01		40	51.2	52.8	25		40	30.0	18.5	25		40*	44.0	28.0	31 04	
42	40.2	42.0	08		42	52.6	54.1	27		42*	25.5	19.0	45		42	37.5	11.0	23	
44	36.7	37.0	01	−5.0	44	55.8	57.8	32	−4.2	44	29.2	22.6	38	−12.0	44*	75.0	28.5	31 28	−12.0
46	40.2	41.8	07		46	57.6	58.9	34		46	41.3	30.6	22		46*	46.3	13.6	30 25	
48	38.3	38.8	04		48	57.8	59.2	35		48	49.6	36.8	11		48	51.3	9.5	30 24	
50	43.2	43.8	11		50	56.9	57.4	33		50	49.2	35.0	13		50*	38.3	21.8	31 19	
52	37.8	38.0	02		52	56.0	56.9	32		52	48.5	34.3	14		52*	74.6	27.8	32 43	
54	36.7*a*		01		54	54.3	55.8	29		54	30.3	27.3	34		54*	64.0	12.8	30 16	
56	40.8	42.1	08		56	52.2	54.3	26		56	34.0	26.0	32		56*	61.6	21.0	28 27	
58	43.3	44.3	12		58	52.8	54.2	27		58	29.0	22.0	39		58*	66.3	8.2	37 31	
					24 00	55.9	57.8	32	−4.4										

Correction to local mean time is + 2m 20s.
Torsion head at 19h 38m read 348° and at 24h 16m read the same.
Observer—R. R. T.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, November 1, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	Overl'k'd			
02	Lost while			-11.3
04	reversing			
06*	26.0	44.3	26 15	
08*	24.1	74.0	24 34	
10*	16.8	61.0	22	
12*	41.4	46.9	24 25	
14*5	56.7	59.3	27 25	-11.0
16*	32.9	57.8	28 43	
18*	8.5	14.5	27 14	
20*	31.8	58.8	24 10	
22*	25.0	50.0	23 58	
24*3	48.0	68.1	27 29	
26*	47.7	73.0	29 31	
28*	10.8	28.1	28 27	
30*	42.1	63.8	26 21	-10.4
32*	42.0	60.8	24 01	
34*	7.2	56.3	23 29	
36*	16.0	54.9	23 41	
38*	7.0	46.1	24 19	
40*	37.3	74.2	36	
42*	34.8	71.0	51	
44	25.4	60.8	35	-10.2
46	10.0	43.8	24 10	
48	17.3	19.0	23 55	
50*	17.7	18.9	23 27	
52	62.8	66.8	24 39	
54	67.2	72.8	48	
56*	46.8	56.0	51	
58	36.1	55.0	24 41	
5 00	59.8	65.3	25 08	-10.3
02	Lost			
04*	29.2	49.8	26 15	
06*	28.7	48.8	28 38	
08	Lost			
10*	38.2	43.5	23 42	
12	Lost			
14*	7.9	19.2	25 04	-10.3
16*	21.2	52.0	03	
18*	46.3	74.8	26 16	
20	25.6	45.0	25 36	
22*	23.7	32.7	24 34	
24*	70.0	71.8	23 55	
26*	49.6	52.6	24 18	
28*	18.9	36.1	25 15	
31*	16.2	25.8	22 31	-10.3
32	27.3	55.0	23 03	
34*	47.1	75.7	22 54	
36*	22.2	71.3	22 37	
38*	19.8	44.0	23 13	
40	23.2	77.8	42	
42	Overl'k'd			
44*	18.2	33.3	22 08	-10.0
46*	43.0	71.0	20 13	
49*	48.8	67.8	26 09	
51*	31.1	35.1	21 55	
52	Overl'k'd			
54*	45.2	72.3	25 05	
56*	18.2	42.8	27 05	
58*	14.0	69.1	26 31	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00*	30.1	71.7	24 37	-10.0
02*	40.9	61.2	25 16	
04*	38.3	64.1	26 56	
06*	18.8	53.1	25 09	
08*	14.3	34.2	23 32	
10*	48.3	60.3	25 48	
12	Lost			
14*	25.7	37.2	25 54	-10.0
16*	33.0	65.8	24 05	
18*	55.2	72.8	22 48	
20*	35.2	45.8	23 58	
22	64.4	74.3	24 43	
24*	25.6	49.7	25 32	
26	29.7	59.7	43	
28	34.9	72.7	58	
30	24.6	55.5	25 36	-9.9
32*	29.2	66.7	26 33	
34*	12.1	73.4	25 05	
36*	19.8	78.1	15	
38*	66.0	67.7	25 27	
40	42.8	44.2	24 49	
42	38.2	48.2	49	
44	37.1	44.3	24 45	
46	51.1	52.8	25 03	
48	41.2	46.0	24 49	-10.0
50	24.9	36.3	29	
52	40.8	43.8	47	
54	43.0	49.1	24 53	
56	50.4	63.3	25 10	
58	33.8	49.3	24 46	
7 00	44.1	46.8	24 52	
02	50.9	53.2	25 02	
04	39.9	41.2	24 44	
06	55.2	58.0	25 10	
08	52.3	58.3	08	
10	51.2	57.3	06	
12	52.1	60.9	10	
14	58.1	68.9	21	-10.7
16*	26.2	42.2	30	
18	15.8	33.4	15	
20	18.1	18.7	25 05	
22	10.1	12.8	24 54	
24*	47.8	56.1	52	
26	43.8	49.5	43	
28	43.3	52.1	45	
30	36.8	45.0	34	-10.8
32	32.1	39.0	26	
34	43.1	45.4	40	
36	48.6	50.3	24 48	
38	60.5	61.8	25 06	
40	64.9	67.1	14	
42	65.1	65.9	13	
44	56.4	59.6	01	-11.0
46	59.3	60.1	14	
48	63.6	64.4	11	
50	58.9	60.1	25 04	
52	56.0*b*		24 58	
54	44.9	45.9	41	
56	50.7	52.2	50	
58	45.3	45.8	41	
8 00	40.3	42.1	34	

Correction to local mean time is + 2m 36s. 90° torsion = 24.'5.
Torsion head at 23h 30m, October 31, read 348° and at 9h 19m, November 1, read 17°.
Observers—W. J. P. and R. R. T., who alternated from 3h 58m to 4h 18m.

Monday, November 2, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	70.0	61.3	21 54	-20.5
02	46.7	33.5	22 34	
04	28.5	20.0	22 59	
06*	33.0	27.5	23 24	
08	47.0	42.0	23 02	
10	52.2	48.0	22 53	
12	42.8	33.2	23 12	
14	41.2	38.0	10	-19.5
16	37.0	32.7	17	
18	41.0	38.5	23 10	
20	52.0	49.4	22 53	
22	50.6	45.5	22 57	
24	41.2	36.2	23 11	
26	38.0	18.7	28	
28	51.3	34.5	04	
30	50.6	35.8	23 04	-18.7
32	54.0	52.3	22 49	
34	50.6	56.8	41	
36	54.8	46.0	53	
38	59.0	49.5	47	
40	53.6	46.5	22 54	
42	50.3	39.5	23 02	
44	56.0	47.3	22 51	-18.3
46	51.2	42.8	58	
48	52.3	44.4	22 56	
50	45.8	37.6	23 07	
52	51.9	44.2	22 57	
54	48.7	43.6	23 00	
56	42.7	37.8	09	
58	48.8	42.5	01	
9 00	47.3	42.1	23 02	-18.0
02	51.3	45.6	22 57	
04	39.8	36.6	23 13	
06	40.5	35.8	13	
08	44.0	37.8	08	
10	42.0	35.6	12	
12	42.3	33.3	14	
14	42.7	37.4	10	-17.9
16	42.5	37.5	10	
18	46.5	42.7	03	
20	42.1	37.0	11	
22	43.1	40.9	07	
24	42.0	38.2	23 10	
26	48.9	44.8	22 59	
28	47.2	44.4	23 01	
30	47.9	42.9	02	-17.6
32	38.2	33.5	17	
34	38.2	32.5	18	
36	33.8	27.3	25	
38	39.0	33.1	17	
40	35.4	32.2	20	
42	36.7	32.1	19	
44	46.6	42.2	23 04	-17.0
46	49.8	47.2	22 57	
48	49.7	47.8	57	
50	57.9	54.8	45	
52	52.8	51.0	52	
54	51.1	48.2	22 56	
56	46.3	44.2	23 03	
58	43.8	43.3	05	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
10 00	41.8	41.2	23 08	-16.6
02	38.3	37.3	14	
04	34.8	32.1	21	
06	40.0	38.1	13	
08	45.3	43.8	04	
10	46.0	42.4	04	
12	42.0	40.1	10	
14	45.3	43.3	04	-16.2
16	44.2	42.9	06	
18	44.3	43.0	06	
20	43.0	41.0	08	
22	41.2	38.2	12	
24	37.9	36.0	16	
26	45.8	43.2	23 04	
28	50.9	46.2	22 58	
30	51.2	48.6	56	-16.0
32	52.7	50.2	53	
34	53.8	52.2	51	
36	57.7	56.3	45	
38	57.8	57.1	45	
40	59.2	58.0	43	
42	61.1	60.7	38	
44	64.6	63.0	34	-15.8
46	63.2	62.1	36	
48	61.8	60.5	39	
50	61.8	60.0	39	
52	68.8	67.1	28	
54	68.4	65.7	29	
56	64.4	62.6	35	
58	68.8	66.1	29	
11 00	76.3	71.7	18	-15.5
02	73.4	64.7	27	
04	66.8	59.0	36	
06	64.3	62.3	36	
08	57.2	52.5	49	
10	51.7	48.1	22 57	
12	47.7	43.1	23 04	
14	39.9	35.6	16	-15.2
16	42.9	38.2	11	
18	48.1	41.8	04	
20	45.8	38.2	23 09	
22	51.2	45.0	22 59	
24	50.9	46.8	58	
26	54.7	49.6	53	
28	62.8	57.3	41	
30	56.0	54.8	49	-15.0
32	54.8	52.3	52	
34	51.9	50.2	22 55	
36	48.2	45.7	23 02	
38	47.1	43.7	04	
40	48.3	45.3	02	
42	48.0	44.9	03	
44	49.7	46.7	23 00	-15.0
46	52.2	50.2	22 55	
48	57.2	55.4	47	
50	57.8	56.9	45	
52	54.9	52.9	51	
54	61.0	59.3	41	
56	68.8	62.7	32	
58	60.8	56.1	44	
12 00	60.0	55.0	46	-14.8

Correction to local mean time is + 2m 38s. 90° torsion = 24.'0.
Torsion head at 7h 40m read 339° and at 12h 29m read 321°.
Observers—W. J. P. and R. R. T., who alternated from 9h 22m to 9h 36m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, November 3, 1903				Magnet scale erect				Wednesday, November 4, 1903				Magnet scale inverted			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	Delayed				14 00	53.5	56.8	22 45	-17.3	0 00*	69.0	68.2	22 51	-20.0	2 00	33.6	33.1	22 57	-17.2
02	account				02	55.9	59.0	49		02*	47.3	40.6	40		02	33.9	33.1	22 57	
04	frosted				04	56.2	59.0	49		04	42.5	35.8	48		04	31.6	30.6	23 00	
06	mirror				06	55.2	58.1	48		06	37.6	32.8	54		06	30.0	29.4	23 03	
08					08	51.5	53.6	41		08	37.3	32.1	22 55		08	33.5	33.1	22 57	
10	40.3	49.0	22 29	-18.5	10	51.0	53.0	40		10	32.6	27.8	23 02		10	34.6	34.2	55	
12	42.6	50.2	31		12	54.2	55.2	45		12	35.0	30.1	22 58		12	33.6	33.3	57	
14	45.3	51.7	35		14	54.3	56.5	46	-16.9	14	35.2	31.0	57	-19.5	14	33.6	33.6	22 56	
16	49.0	52.0	38		16	54.7	57.2	46		16	38.5	34.3	52		16	31.2	30.6	23 01	
18	49.8	53.3	40		18	50.3	53.2	40		18	39.6	35.7	50		18	Lost			
20	51.0	54.5	41		20	49.6	52.8	39		20	42.7	39.0	45		20	32.0	31.2	23 00	-17.0
22	48.2	50.8	36		22	50.2	52.8	40		22	41.5	37.6	47		22	36.0	36.0	22 53	
24	40.5	43.6	25		24	49.9	52.7	39		24	43.1	38.9	45		24	37.2	37.2	51	
26	35.0	36.3	15		26	47.1	49.3	34		26	45.8	42.5	40		26	36.8	36.8	51	
28	31.0	33.2	09		28	47.2	49.1	34		28	40.6	35.6	22 49		28	35.8	35.8	22 53	
30	27.3	28.3	02	-18.5	30	47.1	49.4	34	-16.7	30	32.8	28.2	23 01	-18.8	30	30.6	30.6	23 01	-16.9
32	33.0	33.0	10		32	45.5	47.2	31		32	32.3	28.3	02		32	31.5	31.5	23 00	
34	26.5	29.5	03		34	45.9	46.8	31		34	33.0	29.2	00		34	32.8	32.6	22 58	
36	29.0	33.3	08		36	47.2	48.8	34		36	32.4	28.9	23 01		36	33.3	33.3	57	
38	27.5	31.7	22 05		38	45.8	47.7	32		38	33.3	30.3	22 59		38	32.1	31.8	22 59	
40	20.8	28.8	21 58		40	44.6	46.2	30		40	34.0	31.4	58		40	31.3	31.3	23 00	
42	24.3	34.0	22 04		42	42.5	44.2	27		42	34.8	32.0	22 57		42	34.3	33.5	22 56	
44	34.4	37.0	15	-18.5	44	38.8	41.2	22	-16.6	44	31.8	28.6	23 02	-18.5	44	33.3	33.3	57	-16.8
46	34.8	38.6	16		46	30.8	31.9	08		46	29.5	26.0	06		46	39.9	39.9	47	
48	36.8	42.0	20		48	29.1	30.2	05		48	Observer				48	41.2	40.7	45	
50	36.8	39.8	19		50	31.5	31.9	08		50	called				50	43.0	43.0	42	
52	35.4	41.8	19		52	41.9	44.2	26		52	away				52	45.7	45.1	38	
54	33.3	35.9	13		54	44.7	48.8	32		54					54	44.4	43.0	41	
56	37.4	38.0	18		56	39.8	44.2	25		56	22.3	19.8	16		56	42.9	42.2	43	
58	34.8	40.6	18		58	38.7	42.1	22		58	21.0	18.9	18		58	43.0	42.1	43	
13 00	39.0	45.7	25	-18.3	15 00	39.8	43.2	24	-16.3	1 00	18.3	16.8	22	-18.3	3 00	42.0	40.8	44	-16.5
02	40.3	45.8	26		02	41.0	44.0	25		02	20.6	18.8	18		02	40.2	39.5	47	
04	42.0	45.8	28		04	43.2	46.0	29		04	26.8	25.3	08		04	41.0	40.3	45	
06	44.5	48.3	31		06	43.9	46.8	30		06	31.3	29.4	23 02		06	38.0	37.6	50	
08	51.7	52.7	41		08	46.1	49.0	33		08	32.8	31.2	22 59		08	34.5	34.0	56	
10	52.5	54.8	43		10	47.5	50.8	36		10	33.1	31.8	58		10	35.7	34.8	54	
12	51.9	55.3	43		12	47.2	49.9	35		12	34.6	33.3	56		12	36.5	35.8	53	
14	52.6	56.5	44	-18.2	14	46.2	49.4	34	-16.2	14	35.0	33.8	55	-18.0	14	37.0	36.3	52	-16.5
16	56.0	58.6	49		16	45.2	48.6	32		16	35.0	33.9	55		16	36.0	35.6	53	
18	53.8	56.8	46		18	47.1	49.9	35		18	33.8	33.0	57		18	37.3	36.8	51	
20	57.3	60.9	52		20	47.3	50.2	35		20	36.5	35.3	53		20	36.0	35.5	53	
22	57.3	60.6	51		22	49.8	52.7	39		22	35.6	34.8	54		22	38.0	37.6	50	
24	55.4	59.3	49		24	51.3	53.1	41		24	33.6	32.8	57		24	39.6	38.3	48	
26	59.3	62.9	55		26	50.2	52.4	39		26	34.7	34.0	55		26	40.0	39.0	47	
28	57.6	61.6	52		28	47.2	50.7	35		28	36.4	35.8	52		28	44.8	43.5	40	
30	60.0	63.6	56	-18.0	30	44.6	48.2	32	-16.0	30	38.1	37.3	50	-17.8	30	45.6	44.6	38	-16.4
32	61.5	64.8	58		32	45.2	49.6	33		32	40.3	39.7	46		32	44.2	43.0	41	
34	60.6	64.0	57		34	48.6	52.8	38		34	40.0	39.8	47		34	45.8	45.0	38	
36	60.3	63.3	56		36	42.1	46.0	28		36	41.2	40.8	45		36	46.5	45.3	37	
38	57.5	59.9	51		38	44.2	47.9	31		38	40.8	40.2	46		38	47.2	46.0	36	
40	55.3	57.8	47		40	46.0	49.2	33		40	39.2	39.2	48		40	51.9	51.7	28	
42	55.3	58.6	48		42	47.7	51.2	36		42	37.9	37.9	50		42	54.8	54.0	24	
44	53.0	56.4	45	-18.0	44	51.0	54.8	42	-15.8	44	37.2	37.2	51	-17.5	44	54.0	53.4	25	-16.3
46	52.8	54.8	43		46	53.0	56.7	45		46	36.2	36.2	52		46	55.0	54.5	23	
48	50.8	54.0	41		48	52.4	56.7	44		48	34.5	34.5	55		48	52.0	51.2	28	
50	52.2	55.9	43		50	53.9	58.1	47		50	34.8	34.8	55		50	48.3	47.7	34	
52	54.5	58.3	47		52	49.0	53.2	39		52	34.5	34.5	55		52	49.4	48.7	32	
54	53.7	57.1	46		54	42.9	46.8	29		54	34.7	34.5	55		54	47.8	46.8	35	
56	53.0	57.2	45		56	43.0	46.3	29		56	33.6	33.3	57		56	44.8	43.6	40	
58	53.6	56.8	45		58	48.2	51.6	37		58	32.3	31.8	59		58	39.8	38.8	48	
					16 00	49.2	53.7	39	-15.7										

Correction to local mean time is + 2m 37s.

Torsion head at 11h 44m read 315° and at 16h 30m read the same.

Observers—W. J. P. and R. R. T., who alternated from 13h 46m to 14h 00m.

Observers—W. J. P. and R. R. T., who alternated from 3h 56m to 4h 10m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 4, 1903					Magnet scale inverted					Wednesday, November 4, 1903					Magnet scale inverted				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	37.1	35.9	22 52	-16.1	6 00	22.6	22.3	23 14	-15.4	8 00	44.0	39.6	22 44	-15.1	10 00	41.0	37.8	22 47	-15.2
02	39.8	34.8	51		02	22.8	22.0	14		02	42.8	38.8	45		02	48.6	43.8	37	
04	39.2	33.9	52		04	26.0	25.0	09		04	43.8	40.0	44		04	42.0	36.2	48	
06	37.2	32.2	55		06	27.8	27.0	23 06		06	43.8	41.2	43		06	40.1	33.8	51	
08	34.8	30.3	58		08	33.2	32.2	22 58		08	41.2	38.8	46		08	35.9	30.4	57	
10	35.1	31.0	57		10	31.0	29.0	23 02		10	43.4	40.8	43		10	37.4	33.5	54	
12	37.9	34.2	53		12	30.6	29.0	02		12	42.2	40.0	45		12	40.5	35.6	50	
14	42.8	38.1	46	-16.0	14	31.0	26.7	04	-15.4	14	44.3	41.8	42	-15.2	14	39.7	35.1	51	-15.1
16	44.3	39.5	44		16	26.2	24.0	10		16	43.0	41.1	43		16	43.8	39.0	44	
18	42.8	37.7	46		18	30.8	29.0	02		18	45.6	43.2	40		18	48.6	45.5	35	
20	43.7	39.1	44		20	32.0	30.8	23 00		20	48.1	46.7	35		20	50.8	46.0	33	
22	45.9	41.0	41		22	36.2	35.9	22 53		22	41.2	40.2	45		22	45.0	40.3	42	
24	46.8	42.3	39		24	38.2	37.8	50		24	34.8	33.2	56		24	37.0	31.6	55	
26	45.8	41.2	41		26	40.2	39.2	47		26	35.8	34.2	54		26	35.0	31.9	57	
28	46.1	42.2	40		28	39.2	37.3	49		28	36.1	33.0	55		28	38.7	35.3	22 51	
30	45.5	41.1	41	-15.9	30	33.6	32.9	22 57	-15.4	30	36.3	35.2	53	-15.2	30	32.5	28.8	23 01	-15.0
32	43.2	39.8	44		32.1	31.8	29.0	23 02		32	40.4	34.8	50		32	32.5	29.5	01	
34	43.2	39.2	45		34	34.8	32.9	22 56		34	39.8	31.2	54		34	33.4	29.5	23 00	
36	44.4	40.0	43		36	42.0	40.0	45		36	42.8	37.0	47		36	35.3	31.2	22 57	
38	44.8	42.1	41		38	41.8	40.0	45		38	34.9	31.1	22 57		38	31.6	29.0	23 02	
40	48.1	45.3	36		40	45.8	43.2	39		40	34.1	28.2	23 00		40	33.6	29.2	00	
42	47.1	44.8	37		42	40.5	39.0	47		42	38.3	32.3	22 54		42	31.0	28.6	02	
44	38.8	37.2	50	-15.8	44	36.0	34.2	54	-15.3	44	42.2	37.3	47	-14.9	44	22.0	19.4	17	-14.7
46	36.5	34.0	54		46	39.0	37.6	49		46	47.9	43.8	37		46	20.7	18.1	19	
48	35.2	33.2	56		48	45.1	42.2	41		48	47.4	40.8	40		48	25.3	22.8	12	
50	37.0	35.8	52		50	47.8	46.2	35		50	40.0	33.9	51		50	32.5	29.5	01	
52	35.8	34.0	55		52	40.2	38.0	48		52	38.4	32.7	54		52	31.2	28.3	03	
54	33.2	31.9	22 58		54	40.2	39.1	22 47		54	42.8	38.8	45		54	28.0	24.7	08	
56	29.9	29.0	23 03		56	30.8	29.0	23 02		56	39.5	36.8	49		56	26.5	24.0	10	
58	24.8	23.8	11		58	35.5	32.3	22 56		58	38.6	36.2	51		58	26.0	23.5	10	
5 00	21.9	21.0	23 16	-15.7	7 00	33.4	28.8	23 00	-15.3	9 00	42.8	40.3	44	-15.1	11 00	23.0	19.3	16	-14.6
02	34.2	33.2	22 56		02	39.0	34.0	22 52		02	43.4	41.8	42		02	26.0	22.0	12	
04	30.7	29.7	23 02		04	32.8	28.0	23 02		04	44.0	41.2	42		04	29.0	25.0	07	
06	37.1	35.9	22 52		06	37.9	36.0	22 51		06	43.9	41.5	42		06	30.1	25.0	06	
08	38.2	37.8	50		08	41.5	37.0	22 48		08	42.5	39.0	45		08	24.8	20.0	14	
10	38.3	37.3	50		10	30.2	26.0	23 05		10	40.9	36.5	49		10	27.2	23.8	09	
12	36.8	36.3	52		12	37.7	31.1	22 55		12	45.9	43.5	39		12	23.9	20.4	15	
14	35.0	34.2	22 55		14	44.6	41.2	42	-15.3	14	49.0	44.8	36	-15.1	14	19.3	17.0	21	
16	28.0	27.1	23 06		16	42.0	35.8	48		16	46.2	43.8	39		16	22.9	19.6	16	-14.7
18	30.9	30.0	23 02		18	39.1	35.3	51		18	41.8	38.8	46		18	28.0	23.2	09	
20	33.1	32.9	22 57		20	43.2	40.1	44		20	44.8	43.5	40		20	25.6	21.1	13	
22	31.8	30.7	23 00		22	35.0	31.3	57		22	45.7	44.7	38		22	18.9	14.9	23	
24	36.5	35.0	22 53		24	36.0	30.8	57		24	51.3	49.5	30		24	23.9	15.8	18	
26	36.5	36.0	52		26	48.2	45.0	36		26	51.4	50.4	29		26	20.3	13.5	23	
28	35.7	34.8	54		28	40.3	32.8	52		28	49.1	47.1	34		28	17.9	10.8	27	
30	34.0	33.2	22 56	-15.7	30	34.8	29.3	59	-15.2	30	50.2	49.0	31	-15.0	30	21.0	15.2	21	-14.5
32	31.4	29.0	23 02		32	55.8	52.5	24		32	53.5	48.0	30		32	24.4	19.1	15	
34	30.1	28.0	23 04		34	45.2	39.8	42		34	53.8	52.5	26		34	17.0	12.0	26	
36	33.8	31.0	22 58		36	38.9	34.0	52		36	52.6	48.1	30		36	19.0	13.1	24	
38	35.4	35.1	54		38	56.1	51.0	25		38	48.8	44.7	36		38	25.1	20.9	13	
40	45.0	42.3	41		40	38.9	35.2	51		40	44.5	39.2	44		40	28.5	24.3	08	
42	33.8	31.2	58		42	40.5	36.1	49		42	45.5	40.5	42		42	29.3	23.3	08	
44	61.0	60.8	13	-15.6	44	45.4	41.8	41	-15.1	44	45.6	41.0	41	-15.2	44	34.0	29.0	00	-14.2
46	63.0	61.3	12		46	44.8	41.7	41		46	50.6	48.3	32		46	32.9	30.1	23 00	
48	44.8	44.2	22 39		48	39.2	36.3	50		48	48.2	38.0	42		48	33.3	30.3	22 59	
50	27.0	25.3	23 08		50	36.9	33.8	54		50	43.2	38.8	45		50	33.0	29.3	23 00	
52	19.0	18.1	20		52	44.8	42.2	41		52	43.4	40.4	44		52	30.8	27.0	04	
54	22.2	21.9	15		54	42.8	39.4	45		54	43.3	41.2	43		54	31.3	27.8	23 03	
56	15.2	13.6	27		56	39.8	36.8	49		56	40.7	39.6	46		56	33.9	30.8	22 59	
58	19.0	18.0	20		58	41.3	38.0	47		58	46.6	39.8	41		58	36.6	33.9	54	

Observer—R. R. T.

Observers—R. R. T. and R. W. P., who alternated from 8h 24m to 8h 38m; R. W. P. and W. J. P., who alternated from 10h 32m to 10h 42m. F. L. observed readings from 11h 06m to 12h 58m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 4, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	37.0	34.6	22 53	−14.2
02	36.3	35.2	53	
04	38.0	34.7	52	
06	39.4	34.7	51	
08	37.1	34.7	53	
10	40.0	36.9	49	
12	43.9	40.6	43	
14	45.5	44.6	39	−13.8
16	51.2	46.7	32	
18	49.9	47.0	33	
20	67.0	59.6	22 10	
22	75.9	71.0	21 54	
24	76.7	67.0	57	
26	74.0	67.0	21 59	
28	66.1	55.1	22 14	
30	68.0	58.1	10	−13.8
32	60.0	48.5	24	
34	56.0	44.6	30	
36	57.5	46.6	28	
38	63.1	56.4	16	
40	60.1	41.9	29	
42	66.0	48.9	19	
44	61.9	53.3	19	
46	59.9	48.9	24	−13.9
48	58.0	50.8	24	
50	57.0	47.3	28	
52	54.2	48.0	29	
54	54.5	49.2	28	
56	59.9	52.7	21	
58	73.0	66.1	22 00	
13 00	Lost			
02*	52.5	49.3	21 38	−13.5
04	49.8	47.5	41	
06	60.0	51.5	30	
08	56.8	46.5	37	
10	45.3	41.5	21 50	
12	36.1	28.8	22 07	
14	26.2	18.7	23	−13.5
16	19.6	12.8	32	
18	13.0	7.4	42	
20	15.8	10.0	37	
22	20.8	14.5	30	
24	18.1	12.0	34	
26	15.0	10.2	38	
28	12.8	9.6	40	
30	12.8	9.1	41	−13.4
32	12.0	7.1	43	
34	12.8	9.2	40	
36	12.3	7.2	42	
38	11.1	6.8	44	
40	12.1	7.9	42	
42	12.8	9.1	41	
44	12.7	9.1	41	−13.2
46	13.0	8.5	41	
48	11.0	7.0	44	
50	11.0	7.3	43	
52	12.1	8.6	41	
54	12.2	9.1	41	
56	11.9	8.2	42	
58	14.7	11.2	37	
14 00	15.0	11.9	22 37	−13.0
02	16.9	13.2	34	
04	19.4	15.9	30	
06	18.2	15.3	31	
08	17.8	14.1	33	
10	17.7	14.3	33	
12	15.9	12.4	35	
14	16.8	13.5	34	−13.0
16	16.4	13.2	34	
18	15.4	12.8	35	
20	16.8	14.0	34	
22	17.6	14.7	32	
24	14.8	13.0	36	
26	15.1	13.0	36	
28	13.6	11.8	38	
30	12.8	11.2	39	−13.0
32	15.0	12.1	36	
34	16.1	13.3	35	
36	15.3	12.8	36	
38	15.2	12.7	36	
40	16.7	14.8	33	
42	19.8	16.8	29	
44	18.1	15.3	31	−12.9
46	16.1	11.7	36	
48	17.1	12.6	34	
50	17.1	12.7	34	
52	18.0	14.0	33	
54	18.8	15.0	31	
56	17.2	13.7	34	
58	16.2	13.0	35	
15 00	17.2	14.0	33	−12.9
02	17.8	15.0	32	
04	17.9	14.9	32	
06	19.8	16.1	30	
08	21.2	18.3	27	
10	21.0	17.8	27	
12	19.7	16.8	29	
14	20.2	18.5	27	−13.0
16	21.8	19.8	25	
18	22.8	20.8	23	
20	23.4	21.8	22	
22	23.1	21.2	23	
24	23.1	22.0	22	
26	23.8	22.8	21	
28	26.0	24.0	18	
30	26.8	24.3	18	−13.0
32	29.1	26.0	14	
34	29.1	26.7	14	
36	28.4	26.2	15	
38	28.0	26.3	15	
40	29.0	28.0	13	
42	31.8	29.9	09	
44	31.0	30.0	10	−13.1
46	30.7	27.2	12	
48	27.9	26.0	15	
50	28.2	25.8	15	
52	26.8	25.0	17	
54	25.8	24.2	18	
56	24.5	23.5	20	
58	21.9	20.3	24	

Observers—F. L. to 12h 58m; W. J. P. to 13h 20m, and R. R. T.

Wednesday, November 4, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	20.8	19.1	22 26	−13.1
02	22.1	19.9	25	
04	22.1	19.8	25	
06	22.0	20.2	24	
08	21.6	19.9	25	
10	21.0	19.2	26	
12	16.2	14.2	34	
14	14.3	12.3	37	−13.1
16	14.2	14.0	35	
18	16.2	15.8	33	
20	19.8	16.8	29	
22	16.7	13.4	34	
24	15.8	14.2	22 34	
26*	48.2	44.4	23 46	
28	47.7	43.3	48	
30	51.2	47.0	42	−13.1
32	49.4	45.8	44	
34	50.0	46.8	43	
36	50.4	46.0	43	
38	54.2	49.0	38	
40	52.7	48.2	23 40	
42	38.2	33.5	24 03	
44	19.2*b*		24 29	−13.2
46*	25.0*b*		25 32	
49	39.8	23.0	25 22	
50*	54.7	54.2	28 39	
52*	47.0	41.2	30 10	
54*	41.2	36.8	28 19	
56	36.2	26.2	28 32	
58	77.7	77.0	27 19	
17 00*	51.7	51.2	26 48	−13.2
02*	58.3	40.7	25 56	
04	56.9	47.7	51	
06	64.8	56.2	38	
08*	51.1	36.3	25 03	
10*	40.3	38.8	23 49	
12.3	62.7	57.6	17	
14	75.0	67.1	23 00	−13.0
16*	45.8	30.3	22 55	
18	50.0	36.3	46	
20	45.8	43.7	44	
22	45.2	34.9	51	
24	46.9	36.9	48	
26	48.0	38.8	46	
28	46.5	38.2	48	
30	47.0	39.2	46	−13.3
32	48.2	41.7	44	
34	47.4	40.8	45	
36	47.7	41.8	44	
38	48.1	42.2	43	
40	48.1	43.1	43	
42	49.1	44.7	40	
44	48.9	44.2	41	−13.8
46	45.9	44.2	44	
48	47.2	46.0	41	
50	47.8	45.9	41	
52	46.7	45.0	42	
54	47.3	46.3	41	
56	50.7	49.6	35	
58	52.0	51.0	33	
18 00	51.9	51.2	22 33	−14.0
02	54.2	52.0	31	
04	55.6	53.7	28	
06	57.3	55.3	26	
08	58.8	57.2	23	
10	59.8	59.0	21	
12	61.3	60.8	18	
14	61.8	61.0	18	−14.1
16	63.8	60.4	17	
18	65.2	62.0	14	
20	66.8	64.2	11	
22	65.6	64.0	12	
24	66.0	65.1	11	
26	66.3	65.1	11	
28	66.0	64.8	12	
30	64.3	62.9	14	−14.0
32	62.9	61.7	16	
34	61.1	60.1	19	
36	60.1	59.1	20	
38	59.5	58.3	22	
40	58.6	57.7	23	
42	57.3	56.3	25	
44	56.8	55.4	26	−14.0
46	55.8	54.3	28	
48	55.6	54.3	28	
50	56.1	54.8	27	
52	57.0	55.6	26	
54	57.3	56.0	25	
56	57.4	56.3	25	
58	56.3	55.6	26	
19 00	55.6	55.0	27	−14.0
02	56.0	55.0	27	
04	55.0	54.5	28	
06	55.0	54.5	28	
08	55.8	55.3	27	
10	55.3	54.7	28	
12	53.6	53.0	30	
14	52.7	51.9	32	−14.0
16	51.6	51.0	33	
18	52.2	51.2	33	
20	52.3	51.6	33	
22	51.5	50.9	34	
24	51.1	50.3	34	
26	51.4	50.6	34	
28	51.2	50.0	35	
30	51.6	51.0	33	−14.0
32	51.8	51.1	33	
34	51.9	51.3	33	
36	51.3	50.7	34	
38	57.3	56.8	24	
40	55.9	53.1	28	
42	56.3	52.7	28	
44	55.2	52.2	30	−14.2
46	57.3	54.3	26	
48	57.6	54.8	26	
50	57.3	54.8	26	
52	57.0	53.1	28	
54	53.3	50.0	33	
56	53.4	50.5	32	
58	53.0	50.6	33	

Observers—R. R. T. and W. J. P., who alternated from 18h 18m to 18h 32m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 4, 1903 — Magnet scale inverted									Thursday, November 5, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	54.8	52.4	22 30	-14.4	22 00	60.1	59.0	22 21	-15.0	16 00	43.2	56.3	22 33	-18.0	18 00	52.9	53.4	22 38	-15.0
02	55.3	53.0	29		02	59.8	58.2	21		02	43.8	56.1	33		02	51.8	52.7	37	
04	55.3	53.0	29		04	60.5	59.0	20		04	47.8	49.8	31		04	51.9	52.7	37	
06	54.8	52.8	29		06	60.3	58.9	20		06	47.8	49.7	31		06	52.9	53.3	38	
08	54.7	52.3	30		08	60.3	58.6	21		08	49.2	50.8	33		08	49.0	50.2	33	
10	53.2	51.2	32		10	60.8	59.2	20		10	47.4	49.8	31		10	48.0	48.5	30	
12	55.6	52.6	29		12	59.5	57.2	23		12	49.0	50.7	33		12	48.2	49.0	31	
14	52.6	50.3	33	-14.4	14	56.5	54.2	27	-15.0	14	44.9	46.8	27	-18.0	14	50.8	51.2	35	-14.8
16	53.0	51.0	32		16	52.0	51.1	33		16.2	46.0	47.4	28		16	52.4	52.8	37	
18	52.0	50.2	34		18	54.8	50.6	31		18	46.9	48.5	30		18	48.2	49.1	31	
20	52.2	50.9	33		20	57.9	49.2	30		20	49.2	50.7	33		20	47.7	48.0	30	
22	53.6	51.6	31		22	66.3	58.1	16		22	51.4	53.3	37		22	45.0	46.0	26	
24	55.2	53.4	29		24	59.8	51.3	27		24	52.8	54.0	38		24	43.8	45.2	25	
26	51.6	50.0	34		26	62.9	54.9	22		26	53.8	55.0	40		26	39.5	39.7	17	
28	57.6	56.3	25		28	64.2	57.6	19		28	51.7	52.8	37		28	33.0	33.2	07	
30	58.6	57.3	23	-14.5	30	64.8	58.0	18	-15.0	30	48.2	50.1	32	-17.4	30	38.0	39.2	15	-14.3
32	59.1	57.4	23		32	65.8	59.0	16		32.5	50.6	53.2	36		32	37.2	37.8	14	
34	58.1	56.8	24		34	66.8	60.6	14		34	49.8	52.8	35		34.2	35.6	36.0	11	
36	57.3	55.6	25		36.1	66.1	60.7	15		36	50.7	53.0	36		36	39.3	40.1	17	
38	56.9	55.6	26		38	66.3	60.8	14		38	50.6	52.4	36		38	38.6	39.7	16	
40	55.2	54.0	28		40	67.0	61.3	13		40	48.8	50.2	32		40	39.9	40.6	18	
42	54.8	53.4	29		42	67.6	61.9	13		42	49.3	51.7	34		42	41.8	42.5	21	
44	53.3	52.3	31	-14.6	44	66.8	61.1	14	-15.0	44	51.0	52.9	36	-17.0	44	41.5	43.0	21	-14.1
46	53.0	52.0	32		46	65.9	60.3	15		46	51.9	54.8	38		46	42.5	43.3	22	
48	55.8	54.6	27		48	65.1	60.0	16		48	51.2	53.8	37		48	42.5	43.7	22	
50	54.3	53.3	30		50	62.0	56.7	21		50	51.9	53.9	38		50	43.0	44.4	23	
52	53.9	53.0	30		52	59.8	54.8	24		52	53.0	55.0	39		52	42.6	43.8	22	
54	52.5	51.3	33		54	57.8	52.3	28		54	50.2	52.2	35		54	40.8	42.2	20	
56	51.7	50.8	34		56	55.1	51.2	31		56	49.7	51.1	34		56	41.4	43.1	21	
21 00	50.2	49.5	36		58	54.7	50.0	32		58	48.7	49.1	31		58	43.2	45.4	24	
02	49.4	48.7	37		23 00	50.8	45.7	38	-15.0	17 00	46.3	47.8	28	-16.5	19 00	44.0	46.0	25	-14.0
04	50.3	49.9	35		02	46.8	42.8	44		02	48.2	49.2	31		02	45.1	47.3	27	
06	51.6	50.8	34		04	41.8	36.1	53		04	48.4	49.2	31		04	47.0	48.0	29	
08	52.6	52.0	32		06	39.0	33.6	57		06	49.2	49.8	32		06	47.6	50.0	31	
10	52.1	51.3	33		08	37.8	32.4	59		08	50.8	51.8	35		08	52.2	55.1	39	
12	52.3	51.8	32		10	37.8	33.0	59		10	49.3	50.2	33		10	49.4	52.8	35	
14	52.9	52.3	31		12	39.5	34.9	56		12	49.2	49.4	32		12	47.5	49.6	31	
16	52.1	51.7	33	-14.8	14	41.9	37.7	52	-15.0	14	52.2	52.8	37	-16.0	14	45.1	43.2	24	-14.0
18	52.2	51.6	33		16	44.8	40.9	47		16	50.1	52.0	35		16	43.1	46.0	25	
20	52.2	51.6	33		18	48.3	43.9	42		18	48.2	50.2	32		18	43.1	46.1	25	
22	52.2	51.8	32		20	47.2	44.8	42		20	47.1	49.3	30		20	42.4	45.1	23	
24	52.8	52.2	32		22	50.3	49.3	36		22	48.9	50.8	33		22	40.8	44.0	21	
26	52.0	51.5	33		24	58.4	55.0	25		24	49.2	51.9	34		24	37.2	40.4	16	
28	51.0	50.5	34		26	59.1	55.3	24		26	48.8	50.2	32		26	41.1	42.9	21	
30	50.7	50.1	35		28	60.9	56.8	22		28	47.2	48.7	30		28	36.0	37.9	13	
32	50.6	49.9	35	-15.0	30	63.9	60.2	17	-14.9	30	48.7	49.7	32	-15.1	30	42.0	43.6	22	-14.0
34	52.7	52.0	32		32	52.9	51.0	33		32	49.6	51.9	34		32	43.4	44.8	24	
36	55.0	53.3	29		34	61.1	56.2	22		34	50.1	52.2	35		34	43.1	44.9	24	
38	53.6	51.9	31		36	71.6	68.2	04		36	50.8	52.8	36		36	43.2	44.8	24	
40	53.0	51.4	32		38	74.5	71.3	00		38	51.9	53.8	38		38	45.3	47.0	27	
42	52.5	51.1	33		40	69.7	68.0	06		40	52.1	54.0	38		40	46.0	47.5	28	
44	53.3	52.2	31		42	71.3	67.8	05		42	52.1	54.2	38		42	45.3	46.6	27	
46	56.0	54.9	27	-15.0	44	72.0	69.0	03	-15.0	44	52.3	54.8	39	-15.5	44	45.6	47.0	27	
48	56.5	55.6	26		46	68.1	64.5	10		46	54.1	54.9	40		46	44.9	45.6	26	-13.8
50	56.9	56.0	25		48	67.2	65.2	10		48	54.6	55.1	41		48	42.0	42.9	21	
52	57.2	56.3	25		50	68.7	67.3	07		50	54.3	55.3	41		50	43.0	44.3	23	
54	58.4	57.5	23		52	68.0	66.4	09		52	53.9	54.7	40		52	42.9	44.3	23	
56	58.8	58.0	22		54	66.2	65.7	11		54	53.2	54.0	39		54	41.4	42.5	20	
58	58.5	58.0	23		56	64.5	62.9	14		56	53.2	53.9	39		56	41.8	43.2	21	
	60.0	58.3	21		58	64.9	63.8	13		58	53.0	53.4	38		58	41.2	42.9	21	-13.3
					24 00	65.0	63.3	13	-15.0						20 00	39.5	40.8	18	

Correction to local mean time is + 2m 50s. 90° torsion = 27.'9.
Torsion head at 0h 00m read 315° and at 24h 21m read 310°.
Observers—W. J. P. and R. R. T., who alternated from 22h 06m to 22h 16m.

Correction to local mean time is + 5m 11s. 90° torsion = 27.'9.
Torsion head at 15h 20m read 355° and at 20h 16m read 350°.
Observers—R. R. T. and W. J. P., who alternated from 18h 22m to 18h 36m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, November 6, 1903 — Magnet scale inverted.

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	45.2	44.1	22 22	−17.3
02	43.0	41.6	26	
04	38.2	36.7	33	
06	42.8	40.0	27	
08	44.0	42.0	25	
10	39.7	36.8	32	
12	39.1	37.7	32	
14	37.1	35.0	35	−17.0
16	35.8	34.9	37	
18	33.3*b*		40	
20	34.8	34.1	38	
22	31.8	29.5	44	
24	25.0	22.2	55	
26	30.8	28.0	46	
28	32.8	29.1	43	
30	33.0	28.9	43	−17.0
32	37.8	30.0	39	
34	36.7	34.2	37	
36	35.0	33.0	39	
38	34.9	33.8	38	
40	27.2	20.6	54	
42	27.2	18.0	22 56	
44*	56.1	49.8	23 23	−16.8
46*	41.8	25.0	22 50	
48	31.2	16.3	23 06	
50	32.0	17.2	04	
52	30.2	15.7	07	
54	32.1	15.2	06	
56*	57.8	41.7	24	
58	70.6	57.0	23 02	
21 00	78.2	65.3	22 49	−16.3
02	67.7	52.7	23 07	
04	67.6	56.0	23 05	
06*	42.1	33.3	22 45	
08	44.0	36.6	41	
10	51.7	41.0	31	
12	44.7	35.2	41	
14	48.2	37.7	37	−16.0
16	33.9	26.2	57	
18	46.0	30.4	44	
20	40.5	28.1	50	
22	47.1	36.3	39	
24	53.7	43.2	28	
26	49.0	40.5	34	
28	48.7	41.8	33	
30	57.1	50.4	20	−15.8
32	53.0	45.0	27	
34	45.0	36.0	40	
36	31.0	29.3	22 57	
38	26.2	24.0	23 05	
40	27.1	24.8	03	
42	18.2	13.8	19	
44	12.8	9.2	27	−15.6
46	14.6	9.6	25	
48	23.3	20.3	10	
50	22.2	20.9	10	
52	17.0	15.2	23 19	
54	32.2	29.4	22 56	
56	42.2	41.0	39	
58	45.8	45.0	33	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	47.2	46.8	22 30	−15.5
02	46.9	44.9	32	
04	47.2	45.2	32	
06	48.8	46.8	29	
08	49.8	47.9	27	
10	49.1	47.6	28	
12	49.7	48.0	27	
14	47.8	46.1	30	−15.3
16	46.8	43.7	33	
18	45.1	42.6	35	
20	45.2	43.7	34	
22	45.2	42.7	35	
24	45.7	42.8	35	
26	45.7	43.2	34	
28	45.3	43.0	35	
30	44.2	42.1	36	−15.0
32	43.8	40.5	38	
34	41.8	38.6	41	
36	42.2	39.3	40	
38	45.1	42.9	35	
40	44.9	42.2	36	
42	44.2	41.9	37	
44	40.9	38.1	42	−14.8
46	41.2	37.4	42	
48	42.2	37.6	41	
50	45.1	40.2	37	
52	45.0	40.2	37	
54	44.7	40.2	38	
56	43.3	39.2	39	
58	43.3	39.2	39	
23 00	42.9	39.1	40	−14.7
02	42.2	38.9	40	
04	42.3	39.1	40	
06	41.8	38.2	41	
08	41.2	38.0	42	
10	41.3	38.0	42	
12	42.3	39.0	40	
14	42.0	38.9	41	−14.7
16	43.7	40.7	38	
18	43.7	40.8	38	
20	43.2	41.2	38	
22	45.4	43.0	35	
24	43.8	41.1	38	
26	41.8	39.5	40	
28	40.8	38.7	42	
30	40.8	38.9	42	−14.6
32	41.2	38.2	42	
34	41.4	38.1	42	
36	41.8	38.2	41	
38	41.7	37.8	42	
40	43.8	39.9	38	
42	43.1	40.7	38	
44	44.0	41.0	37	−14.6
46	44.2	39.8	38	
48	43.3	39.2	39	
50	43.2	39.4	39	
52	42.7	38.7	40	
54	41.3	37.7	42	
56	41.8	39.8	40	
58	42.1	40.8	39	
24 00	41.0	40.1	40	−14.5

Correction to local mean time is + 5m 36s.
Torsion head at 19h 40m read 350° and at 24h 20m read the same.
Observer—R. R. T.

Sunday, November 8, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	41.4	47.8	22 28	−19.8
02	41.8	47.6	29	
04	40.0	45.8	26	
06	43.5	49.3	31	
08	47.8	52.8	37	
10	48.0	53.3	38	
12	47.3	52.0	36	−19.4
14	50.2	54.0	40	
16	50.5	55.0	41	
18	53.8	57.8	46	
20	59.0	62.0	53	
22	55.6	58.2	48	
24	53.6	56.6	45	
26	51.8	54.5	42	
28	49.7	52.3	39	
30	47.3	50.2	35	−19.0
32	47.1	49.0	34	
34	51.1	53.5	41	
36	49.3	51.6	38	
38	51.7	53.3	41	
40	52.4	54.5	42	
42	52.0	53.6	41	
44	52.3	54.1	42	−18.6
46	50.3	52.5	39	
48	50.5	52.4	39	
50	49.6	50.8	37	
52	54.0	56.2	45	
54	52.9	54.1	42	
56	52.9	54.8	43	
58	52.4	53.8	42	
1 00	53.4	54.9	43	−18.2
02	57.6	58.6	50	
04	55.6	56.8	47	
06	60.5	61.8	54	
08	62.3	63.5	57	
10	58.6	59.3	51	
12	56.9	57.9	49	
14	57.0	58.5	49	−18.2
16	61.4	63.7	57	
18	62.4	64.8	22 58	
20	64.6	66.2	23 01	
22	66.8	67.8	04	
24	65.1	67.2	23 02	
26	60.3	61.3	22 54	
28	61.6	62.6	56	
30	58.6	58.9	51	−18.0
32	58.0	58.9	50	
34	58.8	59.2	51	
36	50.6	52.0	39	
38	48.9	49.7	36	
40	53.4	54.6	43	
42	55.0	55.6	45	
44	53.6	54.3	43	−17.9
46	52.8	53.5	42	
48	52.0*b*		40	
50	50.0*b*		37	
52	50.0	50.2	37	
54	54.0	54.4	44	
56	56.3	56.9	47	
58	51.1	52.3	40	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	49.2	49.8	22 36	−17.6
02	49.4	50.1	36	
04	50.8	51.5	39	
06	50.3	51.0	38	
08	51.3	52.0	39	
10	52.2	52.6	41	
12	51.0	51.6	39	
14	50.3	50.9	38	−17.3
16	49.8	50.2	37	
18	49.0	49.8	36	
20	49.8	50.8	37	
22	52.0	52.8	41	
24	52.4	52.8	41	
26	52.4	53.1	41	
28	54.7	55.7	45	
30	54.3	55.0	44	−17.1
32	52.5	53.5	42	
34	51.2	51.6	39	
36	52.3	52.9	41	
38	53.8	54.3	43	
40	54.3	54.6	44	
42	54.7	55.3	45	
44	57.0	58.0	49	−17.0
46	58.1	59.3	51	
48	59.4	60.3	52	
50	60.6	62.2	55	
52	62.8	64.2	22 58	
54	65.2	66.8	23 02	
56	66.9	68.1	04	
58	67.3	68.9	05	
3 00	67.8	69.0	06	−16.9
02	69.1	70.6	08	
04	71.0	72.5	11	
06	72.3	73.3	13	
08	73.0	73.6	14	
10	74.0	74.6	15	
12	74.8	75.6	17	
14	75.0	75.8	17	−16.6
16	74.4	75.6	16	
18	73.5	74.2	14	
20	75.6	76.3	18	
22	70.9	71.8	11	
24	69.8	70.3	09	
26	66.9	67.2	23 04	
28	61.8	62.9	22 56	
30	60.5	61.2	54	−16.5
32	57.0	58.2	49	
34	58.7	60.1	52	
36	59.3	61.0	53	
38	58.2	60.0	51	
40	57.5	58.8	50	
42	58.9	59.9	52	
44	60.9	61.8	55	−16.5
46	63.6	64.8	59	
48	63.2	64.6	59	
50	62.6	63.4	58	
52	61.6	62.2	56	
54*	51.3	52.6	22 57	
56	54.3	56.3	23 02	
58	52.9	55.0	00	

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, November 8, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	Magnet inverted			
02	49.0	48.0	23 06	−16.2
04	47.5	46.5	08	
06	48.1	46.2	08	
08	49.0	47.6	06	
10	48.1	46.3	08	
12	46.2	44.2	11	
14.3	46.2	43.1	12	−16.0
16	43.0	39.8	17	
18	40.3	36.1	22	
20	45.8	42.6	13	
22	48.4	46.0	08	
24	53.1	50.3	01	
26	50.8	48.1	05	
28	52.8	49.5	02	
30	46.9	45.7	09	−15.8
32	44.7	43.2	13	
34	47.7	45.5	09	
36	48.0	46.2	08	
38	50.6	49.1	04	
40	46.3	45.3	10	
42	48.3	47.1	07	
44	43.8	41.8	15	−15.7
46	45.5	43.7	12	
48	45.9	44.1	11	
50	41.1	38.6	20	
52	40.0	36.7	22	
54	39.8	37.2	22	
56	38.2	35.5	24	
58	33.2	31.2	32	
5 00	38.1	36.1	24	−15.7
02	40.8	38.0	20	
04	39.7	37.2	22	
06	41.2	38.2	20	
08	39.1	36.9	22	
10	39.8	38.4	21	
12	41.8	40.8	17	
14	45.2	42.2	13	−15.6
16	44.1	41.1	15	
18	44.8	42.1	14	
20	46.9	43.1	11	
22	42.2	38.3	19	
24	34.8	32.8	29	
26	33.0	31.9	31	
28	33.8	33.2	29	
30	36.0	34.2	27	−15.5
32	41.8	39.8	18	
34	41.0	39.3	19	
36	41.7	38.6	19	
38	44.8	41.8	14	
40	49.3	46.1	07	
42	46.3	42.7	12	
44	37.8	34.3	26	−15.4
46	41.8	38.5	19	
48	46.8	42.2	12	
50	42.3	38.1	19	
52	40.8	36.7	21	
54	43.7	38.0	18	
56	37.3	33.2	27	
58	41.8	35.7	21	
6 00	50.1	46.3	23 06	−15.3
02	55.2	50.0	22 59	
04	52.8	47.8	23 03	
06	53.1	49.4	02	
08	51.0	48.2	04	
10	49.9	48.0	23 05	
12	57.1	54.0	22 55	
14	54.8	52.9	22 58	−15.2
16	52.1	49.2	23 03	
18	48.0	46.1	08	
20	42.9	41.1	16	
22	41.9	39.5	18	
24	43.8	41.8	15	
26	52.4	51.8	23 00	
28	57.9	55.1	22 53	
30	52.8	50.2	23 01	−15.2
32	47.7	44.6	10	
34	37.6	34.8	25	
36	41.3	37.8	20	
38	46.9	45.9	09	
40	45.0	44.1	12	
42	45.0	42.3	14	
44	49.3	47.7	06	−15.2
46	52.2	50.0	02	
48	52.0	50.1	02	
50	49.8	47.1	06	
52	49.2	46.8	07	
54	49.7	48.2	05	
56	47.2	44.8	10	
58	51.7	49.1	03	
7 00	48.3	46.1	08	−15.2
02	44.8	42.3	14	
04	49.1	48.5	05	
06	47.8	45.7	09	
08	49.7	48.4	05	
10	44.4	44.2	12	
12	45.8*a*		10	
14	40.8	40.8	18	−15.2
16	39.8	39.2	20	
18	41.1	39.2	19	
20	41.2	40.2	18	
22	46.1	45.6	10	
24	51.0	48.8	23 04	
26	53.9	51.2	22 59	
28	53.8	52.5	59	
30	56.5	53.3	56	−15.2
32	58.0	56.5	52	
34	53.1	52.7	59	
36	59.5	58.7	49	
38	53.7	51.7	59	
40	54.3	53.3	22 58	
42	51.8	50.7	23 02	
44	51.6	50.8	02	−15.2
46	50.8	49.2	23 04	
48	53.0	52.0	22 59	
50	50.8	50.1	23 03	
52	51.1	49.0	23 04	
54	55.7	52.9	22 57	
56	51.5	48.1	23 04	
58	55.3	53.5	22 57	
8 00	53.2	50.8	23 00	

Correction to local mean time is + 7m 12s. 90° torsion = 27.′6.
Torsion head at 0h 00m read 351° and at 9h 15m read 354°.
Observers—W. J. P. and R. R. T., who alternated from 4h 06m to 4h 16m.

Monday, November 9, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	45.8	47.5	22 41	−26.2
02	45.5	46.0	40	
04	43.5	44.0	37	
06	42.3	43.3	35	
08	45.5	47.3	41	
10	49.9	50.6	47	
12	46.3	47.8	42	
14	47.4	50.3	45	−25.1
16	54.5	57.0	56	
18	56.3	57.6	57	
20	50.9	53.0	50	
22	44.3	48.3	41	
24	42.3	44.8	36	
26	43.8	45.4	38	
28	45.3	47.3	41	
30	48.7	51.0	46	−24.4
32	51.5	54.5	51	
34	46.1	47.7	42	
36	43.8	46.0	39	
38	39.7	42.3	33	
40	40.8	42.8	34	
42	44.3	45.9	39	
44	43.8	44.4	37	−24.0
46	47.5*a*		43	
48	51.3	52.0	49	
50	56.3	56.3	56	
52	49.5	49.8	46	
54	43.8	44.7	38	
56	47.5	49.3	44	
58	51.4	52.5	50	
9 00	49.1	51.3	47	−23.5
02	50.0	51.6	48	
04	44.0	46.0	39	
06	41.0	42.3	34	
08	43.0	44.3	37	
10	40.1	41.5	32	
12	36.8	37.3	26	
14	45.4	47.3	41	−23.1
16	50.2	50.8	47	
18	47.6	48.9	44	
20	43.5	44.6	37	
22	38.1	39.6	29	
24	42.9	43.3	36	
26	45.3	45.6	39	
28	44.6	44.9	38	
30	44.3	44.3	38	−22.8
32	46.6	47.0	42	
34	46.3	47.3	42	
36	42.3*a*		35	
38	43.0	44.3	37	
40	45.3	46.0	40	
42	44.0	45.0	38	
44	43.1	44.4	37	−22.5
46	45.1	46.2	40	
48	47.0	48.3	43	
50	45.6	45.6	40	
52	41.6*a*		34	
54	56.0	56.3	56	
56	46.8*b*		42	
58	38.5	39.6	29	
10 00	42.3	44.8	22 36	−22.0
02	42.1	46.1	37	
04	42.8	46.2	38	
06	44.0	47.0	40	
08	43.2	46.0	38	
10	42.8	46.2	38	
12	44.3	46.3	39	
14	42.0	43.9	36	−21.5
16	42.2	44.7	36	
18	42.9	45.8	38	
20	42.9	45.7	38	
22	40.7	43.0	34	
24	40.7	42.7	34	
26	41.2	42.9	34	
28	44.0	45.0	38	
30	42.4	43.9	36	−21.3
32	38.6	44.1	33	
34	39.3	42.2	32	
36	41.2	43.0	34	
38	45.0	47.1	40	
40	42.3	46.2	38	
42	42.7	45.8	38	
44	44.0	46.0	39	−21.0
46	45.2	46.2	40	
48	44.0	44.8	38	
50	42.2	43.2	35	
52	40.4	42.0	33	
54	40.2	41.7	32	
56	40.9	42.8	34	
58	41.6	42.9	34	
11 00	41.5	43.9	35	−20.9
02	42.0	44.7	36	
04	42.2	44.9	36	
06	44.1	46.3	39	
08	43.8	45.7	38	
10	44.2	45.8	39	
12	44.3	46.0	39	
14	43.0	46.0	38	−20.8
16	43.0	46.0	38	
18	43.9	47.2	40	
20	43.0	46.1	38	
22	42.1	45.0	36	
24	41.8	45.5	37	
26	43.8	46.4	39	
28	45.5	48.2	41	
30	44.2	47.3	40	−20.7
32	42.9	46.5	38	
34	42.9	46.2	38	
36	42.8	46.2	38	
38	42.3	46.2	38	
40	41.7	44.8	36	
42	40.9	43.9	35	
44	39.1	41.7	32	−20.5
46	39.8	42.0	32	
48	40.7	42.0	33	
50	38.2	40.4	30	
52	38.8	40.6	30	
54	36.1	38.9	27	
56	36.9	39.8	28	
58	37.8	40.9	30	
24 00	40.3	43.2	34	

Correction to local mean time is + 2m 34s.
Torsion head at 7h 20m read 356° and at 12h 30m read the same.
Observers—W. J. P. and R. R. T., who alternated 9h 56m to 10h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, November 10, 1903 — Magnet scale inverted									Wednesday, November 11, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	54.9	53.9	22 20	−26.0	14 00	37.7	34.7	22 48	−23.1	0 00*	38.0	38.8	22 54	−26.0	2 00	32.4	35.6	22 48	−23.0
02	54.0	52.8	21		02	39.9	37.2	45		02	38.5	39.8	22 55		02	35.1	39.6	53	
04	56.7	55.1	18		04	37.8	35.0	48		04	41.5	43.1	23 00		04	35.3	40.1	53	
06	56.7	55.2	18		06	35.4	33.3	51		06	37.0	39.2	22 54		06	36.3	40.1	54	
08	56.6	55.1	18		08	31.3	30.0	22 57		08	43.0	44.3	23 02		08	36.3	39.3	54	
10	51.2	50.2	26		10	28.8	26.8	23 02		10	40.4*a*		22.57		10	38.0	40.9	22 56	
12	51.7	50.1	25		12	32.8	30.6	22 55		12	34.0	34.0	47		12	41.3	43.9	23 01	
14	59.8	48.0	28	−25.9	14	32.8	31.2	55	−22.7	14	37.0	38.3	53	−25.5	14	44.6	46.5	06	−23.0
16	48.8	48.1	29		16	32.0	31.2	55		16	37.3	38.7	22 54		16	48.1	49.8	11	
18	50.5	49.1	27		18	36.3	34.8	49		18	43.0	44.8	23 03		18	51.6	54.0	17	
20	46.0	44.3	34		20	36.3	35.0	49		20	50.2	52.5	14		20	55.0	57.1	22	
22	47.4	46.2	32		22	35.8	34.5	50		22	43.3	47.6	05		22	62.0	63.8	33	
24	50.8	48.8	27		24	35.3	33.6	51		24	44.0	48.8	07		24	61.5	64.3	33	
26	48.8	47.6	30		26	34.5	33.2	52		26	44.5	49.3	07		26	60.1	62.3	30	
28	45.4	44.3	35		28	35.6	34.3	50		28	44.9	48.0	07		28	64.3	66.7	37	
30	47.8	47.0	31	−25.4	30	33.3	32.0	54	−23.0	30	44.9	47.8	06	−24.8	30	56.5	59.2	25	−22.6
32	49.1	46.4	30		32	33.0	31.5	55		32	46.0	47.3	07		32	54.6	55.6	21	
34	47.3	43.9	34		34	37.2	35.5	48		34	60.0*a*		23 28		34	60.5	62.6	31	
36	45.1	43.1	36		36	40.6	39.5	42		36*	21.5	28.0	24 11		36	62.2	64.4	34	
38	44.9	41.8	37		38	42.3	41.3	40		38*	61.0	65.5	23 36		38	64.6	68.5	39	
40	44.0	41.2	38		40	41.0	40.0	42		40*	37.0	42.3	57		40	73.1	74.3	23 50	
42	41.9	39.8	41		42	39.5	38.2	44		42	10.2	12.6	13		42*	62.0	66.3	24 06	
44	43.7	41.4	38	−25.0	44	38.1	37.3	46	−23.0	44	37.0	45.0	23 59	−24.3	44	65.0	69.8	11	−22.5
46	44.0	42.0	38		46	38.5	38.0	45		46	48.1	54.7	24 15		46	64.0	69.3	10	
48	43.0	39.9	40		48	41.3	40.7	41		48*	49.5	53.7	22 54		48	59.3	69.7	24 06	
50	42.1	37.3	43		50	40.0	38.8	43		50	43.3	53.3	22 49		50	49.8	54.3	23 47	
52	46.3	40.7	37		52	39.0	38.6	44		52	61.5	77.0	23 22		52	50.6	58.0	23 50	
54	44.7	39.0	40		54	39.5	38.6	44		54	73.0	78.0	23 32		54*	61.1	70.0	24 25	
56	42.2	37.0	43		56	39.0	38.3	45		56	14.0	26.6	22 05		56	37.9	48.2	23 50	
58	42.8	37.3	42		58	38.0	37.6	46		58	34.2	50.9	22 40		58	59.0	65.9	24 20	
13 00	41.8	36.3	44	−24.5	15 00	37.3	36.6	47	−23.2	1 00	56.0	58.3	23 03	−23.8	3 00*	43.8	58.3	24 45	−22.3
02	41.1	34.8	46		02	38.4	37.9	45		02	34.6	38.6	22 31		02	59.8	72.0	25 09	
04	41.8	35.6	44		04	41.0	40.8	41		04	72.8	78.5	23 32		04	37.7	45.4	24 31	
06	41.6	35.9	44		06	42.0	40.8	40		06	36.5	38.8	22 33		06	66.1	71.9	25 14	
08	41.7	36.0	44		08	38.7	37.7	45		08	26.5	29.3	17		08	57.0	62.3	24 59	
10	39.1	34.2	48		10	38.4	37.4	46		10	53.0	55.5	22 59		10*	64.3	73.6	25 49	
12	40.0	35.1	46		12	38.6	37.4	46		12	75.0	75.0	23 31		12	61.5	71.1	25 45	
14	39.7	34.9	47	−24.1	14	37.9	37.3	46	−23.2	14	36.3	36.8	22 31	−23.6	14	23.0	32.5	24 45	−22.3
16	42.7	35.6	44		16	37.2	36.5	47		16	31.6	33.0	24		16*	33.0	44.5	01	
18	44.8	38.2	40		18	38.6	37.8	45		18	36.0	41.5	34		18	53.0	61.3	24 30	
20	45.9	40.0	38		20	40.8	39.8	42		20	32.3	33.3	25		20*	33.2	52.0	25 04	
22	45.1	39.5	39		22	46.9	46.0	32		22	28.8	30.2	20		22	25.0	43.3	24 50	
24	46.7	40.6	37		24	47.1	46.5	32		24	22.7	24.3	10		24	34.0	38.9	24 54	
26	48.3	42.3	34		26	48.0	47.7	30		26	18.8	22.2	06		26	54.0	56.3	25 23	
28	47.0	43.5	34		28	48.6	48.1	29		28	21.5	23.9	09		28	40.6	45.2	25 04	
30	45.9	41.3	37	−23.9	30	50.9	50.3	26	−23.3	30	22.8	24.6	11	−23.4	30	32.5	32.5	24 48	−22.0
32	42.1	39.8	41		32	49.9	48.8	28		32	24.9	28.1	15		32.3	15.5	15.5	21	
34	37.6	35.2	48		34	46.8	45.4	33		34	25.4	28.4	16		34	9.7	10.0	12	
36	36.1	34.0	50		36	46.0	44.9	34		36	33.3	36.5	28		36	17.2	19.0	25	
38	33.9	33.1	53		38	44.3	43.1	37		38	18.2	19.8	03		38	9.6	10.1	12	
40	35.1	34.0	51		40	43.4	42.6	38		40	17.8	20.2	22 03		40	17.7	20.6	27	
42	32.1	30.1	56		42	42.7	42.3	38		32	0.0	2.3	21 35		42	18.5*b*		24 26	
44	30.0	28.6	22 59	−23.7	44	41.1	40.3	41	−23.5	44*	25.6	26.6	22 35	−23.2	44*	45.0	52.6	23 52	−22.0
46	29.1	25.2	23 03		46	39.9	38.9	43		46	24.0	25.6	33		46	47.0	53.8	23 55	
48	27.5	23.7	05		48	36.7	36.3	48		48	26.0	27.3	36		48	56.5	66.5	24 12	
50	27.1	22.6	06		50	36.3	35.7	49		50	27.3	28.9	38		50	50.0	58.6	24 01	
52	29.0	25.0	23 03		52	37.6	38.4	46		52	23.7	24.3	32		52	49.8	56.3	23 59	
54	32.7	27.9	22 58		54	40.7	40.4	42		54	23.3	24.3	32		54	42.7	48.9	48	
56	36.6	32.6	51		56	40.7	40.0	42		56	23.4	25.3	32		56	45.6	55.2	23 55	
58	36.3	33.0	51		58	40.1	39.8	43	−23.4	58.3	27.6	31.6	41		58	53.3	57.3	24 02	
					16 00	39.5	39.1	43											

Correction to local mean time is + 3m 06s.
Torsion head at 11h 00m read 356° and at 16h 20m read the same.
Observers—R. R. T. and W. J. P., who alternated 13h 56m to 14h 06m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 11, 1903					Magnet scale erect					Wednesday, November 11, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	63.0	68.6	24 19	−22.0	6 00	34.2	35.9	22 40	−20.1	8 00	20.7	22.1	22 30	−19.0	10 00	46.8	48.0	22 42	
02	63.7	68.7	19		02	45.1	47.5	22 57		02	20.8	23.2	31		02	46.8	48.0	42	−19.5
04	55.0	58.3	24 04		04	54.2	55.8	23 11		04	13.2	17.1	20		04	47.6	48.3	43	
06	39.1	44.2	23 41		06	53.2	55.7	10		06*	42.1	50.9	07		06	50.6	51.3	47	
08	41.3	43.2	42		08	49.8	53.7	23 06		08	48.9	58.9	19		08	50.1	50.5	46	
10	36.8	37.2	34		10*	27.3	46.2	22 54		10	63.7	73.3	42		10	49.0*b*		44	
12	45.6	46.1	48		12	21.2	39.9	22 44		12*	51.7	57.7	53		12	44.0	46.8	39	
14	44.8	47.7	48	−21.9	14	34.6	51.1	23 03	−20.0	14	50.2	55.3	50		14	42.6	43.6	35	
16	42.4	48.3	47		16	38.2	58.2	12		16	47.2	54.3	22 47	−18.8	16	41.3	42.0	33	−19.6
18	39.2	44.7	41		18	34.0	50.7	23 03		18	59.1	64.2	23 04		18	36.0	39.6	27	
20	45.9	54.2	54		20	30.2	45.8	22 56		20	52.6	57.4	22 54		20	39.8	44.2	33	
22	49.2	54.5	57		22	25.9	41.8	49		22	56.1	60.2	22 59		22	41.0	45.3	35	
24	30.2	34.8	27		24	32.2	45.0	57		24	60.9	65.8	23 07		24	37.0	41.0	29	
26	21.1	25.3	12		26	32.6	44.3	57		26	66.5	70.2	14		26	40.6	42.8	33	
28	15.1	21.7	05		28	30.8	43.5	55		28	63.7	67.2	10		28	48.1	50.5	45	
30	24.4	27.2	16	−21.4	30	14.2	25.2	27		30	58.8	61.5	02	−18.7	30	46.3	48.3	42	−19.7
32	37.2	42.7	38		32	14.2	24.7	27	−19.8	32	57.7	60.9	23 00		32	40.0	41.0	31	
34	30.3	36.8	23 28		34	26.9	36.8	46		34	52.1	55.8	22 52		34	45.6	47.8	41	
36*	44.1*b*		22 42		36	31.6	44.6	22 56		36	48.2	51.2	45		36	45.0	45.8	39	
38	24.9	25.2	12		38	39.9	49.4	23 06		38	51.3	54.9	22 51		38	46.3	48.2	41	
40	20.2	20.9	04		40	36.4	47.3	02		40	57.2	60.9	23 00		40	48.1	49.6	44	
42	27.2	29.2	17		42	45.3	55.3	23 15		42	55.0	58.8	22 56		42	46.0	47.3	40	
44	45.5*a*		44		44	33.2	39.7	22 53	−19.6	44	55.8	60.2	58	−18.9	44	44.6	45.0	38	−19.6
46	53.6	56.1	22 58		46	11.3	20.6	21		46	55.5	58.8	57		46	47.5	48.6	43	
48	63.0*a*		23 11		48	27.8	34.3	45		48	51.6	55.5	51		48	51.5	52.6	49	
50*	39.3	45.2	42		50	30.9	38.5	51		50	53.0	57.1	22 54		50	51.5	52.5	49	
52	35.8	38.7	35		52	30.3	38.9	51		52	59.0	63.2	23 03		52	49.4	51.5	46	
54	11.7	18.2	23 00		54	24.2	31.9	40		54	59.2	61.9	23 02		54	52.0	52.3	49	
56	9.8	15.9	22 56		56	29.9	38.8	22 50		56	55.5	58.6	22 57		56	51.5	53.2	49	
58*	22.7	39.3	33		58	36.1	44.4	23 00		58	60.0	62.0	23 03		58	49.2	49.6	45	
5 00	26.9	45.5	41	−20.7	7 00	37.8	48.2	23 04	−19.3	9 00	56.8	59.0	22 58	−18.5	11 00	48.6	51.5	46	−19.6
02	34.3	51.3	22 52		02	30.3	37.5	22 49		02	54.5	56.3	54		02	50.6	55.6	51	
04	46.1	63.9	23 11		04	28.2	34.3	22 45		04	52.5	54.9	22 52		04	54.9	59.4	57	
06	51.6	66.0	17		06	45.2	53.9	23 14		06	60.4	62.2	23 04		06	54.6	55.3	53	
08	50.1	63.2	23 13		08	55.1	60.3	23 27		08	68.3	70.4	16		08	48.6	52.6	47	
10	40.2	51.2	22 56		10	32.8	40.2	22 54		10	66.0	68.5	13		10	44.5	46.3	39	
12	34.1	45.3	47		12	55.1	61.1	23 27		12	65.0	67.0	11		12	47.8	50.8	45	
14	26.8	36.4	34	−20.3	14	46.3	52.0	13	−19.3	14	62.0	64.2	23 06	−19.0	14	42.5	46.2	37	−19.8
16	23.2	31.5	27		16	58.8	62.2	31		16	54.6	55.6	22 54		16	39.0	43.6	32	
18	29.8	38.2	38		18	55.7	61.1	28		18	54.0	55.4	53		18	47.5	51.5	45	
20	41.3	50.3	56		20	52.1	56.1	21		20	53.0*b*		50		20.2	45.3	49.0	41	
22	40.3	49.1	22 55		22	55.9	60.1	27		22	47.0	50.6	44		22	44.6	46.9	39	
24	45.2	51.3	23 00		24	54.4	60.7	26		24	50.6	54.3	49		24	48.0	51.0	45	
26	45.1	51.1	23 00		26	49.1	56.0	18		26	53.1	57.6	54		26	48.3	50.6	45	
28	35.8	42.2	22 46		28	42.2	47.5	07		28	46.7	52.3	45		28	46.7	49.7	43	
30	26.2	31.9	30	−20.3	30	40.8	46.1	23 04	−19.2	30	41.6	44.0	34	−19.2	30	44.2	48.0	40	−20.0
32	20.9	24.9	20		32	35.8	39.9	22 56		32	53.2	54.3	52		32	44.3	47.0	39	
34	22.4	31.3	22 27		34	45.0	48.1	23 09		34	56.6	58.3	57		34	44.0	46.0	38	
36	47.8	52.2	23 03		36	41.0	41.8	01		36	53.2	56.5	53		36	43.1	45.9	37	
38	45.0	48.8	22 58		38	41.9	42.2	23 02		38	53.0	56.4	53		38	44.2	47.9	39	
40	33.7	36.5	40		40	37.7	39.9	22 57		40	48.2	53.0	47		40	48.0	51.0	45	
42	34.2	38.1	41		42	45.6	46.9	23 09		42	31.2	37.0	21		42	49.3	51.8	47	
44	42.8	48.8	22 56	−20 2	44	41.9	45.0	04	−19.0	44	37.0	42.0	29	−19.6	44	48.8	51.1	46	−20.0
46	53.3	58.3	23 12		46	42.1	46.0	23 05		46	43.6	47.0	38		46	46.8	48.8	42	
48	47.8	52.1	23 03		48	38.5	41.8	22 59		48	43.5	45.9	37		48	46.3	48.7	42	
50	32.3	36.6	22 39		50	34.1	38.8	53		50	52.9	55.5	52		50	45.0	46.7	39	
52	29.2	35.1	35		52	37.4	40.3	57		52	56.3	59.3	58		52	40.8	42.8	33	
54	16.3	21.5	14		54	24.9	28.9	38		54	53.6	56.5	54		54	41.1	43.2	33	
56	28.2	30.1	30		56	35.5	37.8	54		56	46.3	49.3	42		56	39.5	41.3	31	
58	45.8	48.6	58		58	28.2	31.6	43		58	44.0	45.0	37		58	38.3	39.8	29	

Observers—W. J. P. and R. R. T., who alternated from 4h 04m to 4h 12m.

Observers—R. R. T. and W. J. P., who alternated from 8h 44m to 8h 54m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 11, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	36.8	37.8	22 26	-20.0
02	34.8	35.1	22	
04	36.2	37.2	25	
06	37.2	37.7	26	
08*	38.3	38.9	42	
10	35.0	35.8	37	
12	32.3	33.0	32	
14	34.7	35.0	36	-19.8
16	30.0	31.2	29	
18	32.9	33.0	33	
20	33.0	34.6	34	
22	34.9	36.8	37	
24	40.4	42.2	46	
26	44.9	46.8	53	
28	48.0	50.0	22 58	
30	51.3	54.0	23 04	-19.9
32	54.2	56.0	07	
34	56.6	58.2	11	
36	55.4	57.8	10	
38	56.0	57.8	10	
40	58.0	58.8	13	
42	63.0	64.0	21	
44	62.1	63.0	19	-19.7
46	60.1	62.0	17	
48	54.7	55.0	07	
50	52.2	53.7	04	
52	51.2	53.4	03	
54	51.0	52.9	02	
56	51.4	52.0	02	
58	50.3	51.8	01	
13 00	53.9	54.6	06	-19.8
02	54.0	55.0	07	
04	49.3	51.3	00	
06	52.5	53.4	04	
08	54.0	55.9	07	
10	49.9	51.0	00	
12	51.7	53.2	03	
14	51.9	52.6	03	-19.1
16	53.1	54.3	05	
18	54.0	56.3	07	
20	52.4	54.3	05	
22	51.9	53.3	04	
24	50.6	51.7	23 01	
26	48.7	49.3	22 58	
28	45.0	45.6	52	
30	44.2	45.8	52	-19.0
32	44.0	46.8	52	
34	45.0	47.6	54	
36	40.8	43.0	47	
38	44.8	46.4	52	
40	44.4	46.6	52	
42	43.6	45.4	51	
44	42.8	44.3	49	-19.0
46	41.0	42.0	46	
48	42.0	43.5	48	
50	42.1	43.6	48	
52	40.8	41.4	45	
54	40.8	40.9	45	
56	38.0	38.0	41	
58	31.8	32.8	32	
14 00	38.4	39.8	22 42	-20.6
02	39.4	40.6	44	
04	40.0	41.0	45	
06	36.7	37.7	39	
08	36.2	37.3	39	
10	33.8	35.8	36	
12	34.0	36.5	36	
14	Lost			-19.4
16	30.7	41.7	38	
18	28.7	38.7	34	
20	29.2	38.4	34	
22	30.2	38.2	34	
24	29.3	36.6	32	
26	29.1	35.9	32	
28	30.6	36.5	33	
30	31.5	35.9	34	-18.8
32	34.2	37.8	37	
34	36.2	39.4	40	
36	39.2	42.7	45	
38	39.2	42.8	45	
40	38.2	41.4	43	
42	37.9	41.6	43	
44	38.2	41.7	43	-18.6
46	40.9	44.2	47	
48	39.9	42.9	46	
50	38.2	44.1	45	
52	38.1	40.8	43	
54	36.2	38.2	39	
56	37.0	39.1	40	
58	37.8	39.8	42	
15 00	39.5	41.3	44	-18.5
02	38.8	40.8	43	
04	37.6	39.3	41	
06	37.7	39.0	41	
08	38.2	40.2	42	
10	40.2	42.2	45	
12	41.9	43.9	48	
14	43.2	45.1	50	-18.5
16	43.9	45.8	51	
18	46.1	47.9	55	
20	47.5	50.0	22 57	
22	49.8	50.9	23 00	
24	47.8	50.3	22 58	
26	47.1	49.9	22 57	
28	48.9	51.8	23 00	
30	50.0	52.4	01	-18.5
32	52.8	54.2	05	
34	55.5	57.3	09	
36	56.9	57.9	11	
38	54.7	55.8	07	
40	54.0	55.3	06	
42	53.1	54.4	05	
44	50.4	52.1	23 01	-18.6
46	48.9	48.9	22 58	
48	46.7	47.0	54	
50	46.0	46.3	53	
52	44.9	45.3	52	
54	43.2	44.0	49	
56	41.9	42.5	47	
58	40.0	41.1	44	

Observers—W. J. P. and F. L., who alternated from 12h 14m to 12h 24m; F. L. and W. J. P., who alternated from 12h 58m to 13h 12m; W. J. P. and R. R. T., who alternated from 14h 08m to 14h 14m.

Wednesday, November 11, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	40.0	41.3	22 44	-18.8
02	39.3	40.8	43	
04	39.2	40.8	43	
06	39.6	41.2	44	
08	37.4	38.8	41	
10	36.4	37.3	38	
12	34.4	35.3	35	
14	33.2	33.2	33	-19.0
16	33.9	34.2	34	
18	34.6	35.3	35	
20	33.9	34.0	34	
22	32.7	33.7	33	
24	35.4	36.9	37	
26	35.2	37.0	37	
28	38.0	39.9	42	
30	42.2	42.6	47	-19.4
32	42.3	43.2	48	
34	44.3	44.9	51	
36	46.0	47.9	54	
38	45.0	47.0	53	
40	45.3	47.0	53	
42	46.0	46.8	54	
44	46.0	47.0	54	-19.3
46	44.0	44.8	50	
48	42.0	42.3	47	
50	40.9	41.9	46	
52	38.0	38.9	41	
54	36.6	38.9	40	
56	37.0	38.0	40	
58	36.2	38.5	39	
17 00	34.7	37.6	37	-18.5
02	33.6	35.2	35	
04	33.7	34.0	34	
06	32.8	35.9	34	
08	34.2	36.6	36	
10	33.8	35.9	35	
12	35.9	37.6	38	
14	36.3	38.1	39	-18.3
16	33.9	35.7	35	
18	32.1	33.8	32	
20	31.0	32.9	31	
22	31.8	33.4	32	
24	31.8	33.4	32	
26	31.2	33.2	32	
28	25.1	27.1	22	
30	21.2	22.2	15	-18.5
32	27.8	30.5	22 27	
34	56.1	66.0	23 17	
36	37.8	44.7	22 45	
38	29.5	35.9	32	
40	32.5	36.8	22 35	
42	72.2	73.8	23 35	
44*6	41.5	52.5	27 03	
46	Lost			
48*2	19.7	20.2	27 23	
50*	39.2	62.0	26 04	
52*2	34.1	57.7	24 08	
54	7.8	40.9	23 34	
56*	19.2	50.5	04	
58	39.9	64.9	31	
18 00*	37.1	75.0	22 54	-18.3
02*	38.0	53.8	23 41	
04	31.7	51.9	23 35	
07*	5.8	37.8	24 00	
08	6.0	34.0	23 56	
10	13.1	33.3	24 01	
12	9.3	35.8	24 00	
14*	30.1	60.8	23 27	-18.0
16	55.2	74.8	58	
18	Lost			
20*	27.8	58.0	38	
22	22.5	49.6	28	
24	23.2	47.3	26	
26	28.3	50.8	33	
28	19.7	40.8	19	
30	21.1	40.5	20	-18.0
32	22.9	42.7	23	
34	17.2	35.9	13	
36	12.5	29.2	04	
38	10.7	26.4	23 00	
40	9.0	23.9	22 57	
42	13.0	16.2	54	
44	8.5	9.9	46	-18.0
46	7.6	10.7	46	
48	7.0	9.5	44	
50	6.5	9.7	44	
52*	39.0	41.0	44	
54	38.5	40.4	44	
56	38.2	40.5	44	
58	38.5	40.6	44	
19 00	39.6	41.6	45	-18.0
02	39.6	41.6	45	
04	38.0	40.0	43	
06	36.6	38.5	41	
08	35.4	37.0	38	
10	34.5	35.8	37	
12	33.5	35.0	35	
14	34.5	36.5	38	-18.2
16	39.6	42.8	46	
18	44.5	47.0	53	
20	47.0	49.0	22 57	
22	49.5	51.3	23 01	
24	46.5	49.5	22 57	
26	45.5	46.6	54	
28	39.4	42.0	46	
30	42.5	44.6	50	-18.6
32	42.3	44.6	50	
34	44.9	46.2	53	
36	46.0	47.4	55	
38	39.0	41.0	44	
40	41.0	43.2	48	
42	Lost			
44	41.9	45.7	50	-18.5
46	43.6	45.6	22 52	
48	50.0	52.3	23 02	
50	56.9	59.3	13	
52	63.2	66.8	24	
54	62.9	65.7	23	
56	59.7	64.8	19	
58	57.6	61.6	15	

Observers—R. R. T. and W. J. P., who alternated from 18h 40m to 18h 50m; W. J. P. and R. R. T., who alternated from 19h 34m to 19h 44m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 11, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	51.1	57.8	23 07	-18.3
02	43.3	47.9	22 53	
04	39.2	44.1	47	
06	38.8	42.4	45	
08	36.0	39.0	41	
10	37.3	41.8	44	
12	33.6	37.1	37	
14	36.1	39.8	22 41	-18.4
16	47.3	52.1	23 00	
18	41.1	47.2	22 51	
20	42.1	47.2	52	
22	42.0	51.5	55	
24	40.2	45.7	49	
26	31.0	37.2	35	
28	28.5	37.9	34	
30	28.6	33.0	30	-18.4
32	31.5	35.4	34	
34	37.7	46.4	48	
36	33.0	41.3	40	
38	43.6	47.2	22 53	
40	55.9	74.1	23 24	
42	18.3	49.2	22 35	
44	26.1	34.5	29	-18.5
46	21.6	27.6	20	
48	17.9	25.8	16	
50	19.6	26.8	18	
52	20.7	27.4	19	
54	24.7	30.5	25	
56	26.9	33.2	29	
58	26.9	35.3	31	
21 00	27.9	34.7	31	-18.1
02	24.0	30.2	24	
04	24.5	33.6	27	
06	29.4	65.1	22 56	
08*	26.7	65.6	23 09	
10	Lost			
12*				
14	14.9	24.8	21 26	
16	54.6	55.6	22 22	-17.8
18	41.6	44.4	02	
20	44.3	45.8	06	
22	43.8	47.2	06	
24	43.2	48.1	07	
26	42.0	47.0	05	
28	58.8	60.8	29	
30	65.3	68.8	40	
32	62.2	65.2	35	-17.8
34	53.9	57.2	22	
36	53.2	55.4	20	
38	52.8	55.2	20	
40	52.0	52.6	17	
42	54.2	55.2	21	
44	42.2	42.2	27	
46	58.0	60.4	28	-17.7
48	52.8	55.9	20	
50	48.2	52.4	14	
52	51.2	52.8	17	
54	46.5	48.8	10	
56	46.9	48.8	10	
58	53.0	55.6	20	
	55.9	59.4	25	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	54.0	56.5	22 22	-17.7
02	53.1	57.8	22	
04	58.8	62.6	30	
06	43.0	56.5	22 13	
08	33.6	35.6	21 49	
10	36.3	43.4	58	
12	33.1	44.6	56	
14	35.7	40.3	55	
16	29.7	33.0	44	-17.4
18	25.6	31.6	21 40	
20	52.0	56.6	22 20	
22	70.1	70.3	45	
24	60.0b		29	
26	61.3	61.3	31	
28	60.0	62.1	31	
30	53.6	55.6	21	-17.5
32	53.8	56.3	21	
34	46.8	48.9	10	
36	41.1	44.6	02	
38	42.5	44.8	04	
40	52.0	52.6	17	
42	62.3	65.0	35	
44	61.0	72.3	22 40	-17.5
46*3	51.2	65.5	23 18	
48	Lost			
50*	6.0	25.5	23 52	
51*	32.3	37.0	22 55	
54	12.3	21.0	27	
56	6.0	14.3	17	
58*	37.0	53.8	21	
23 00	42.6	60.0	31	-17.3
02	52.8	56.3	36	
04	53.5	57.3	37	
06	59.3	62.3	46	
08	56.2	59.2	41	
10	48.6	51.6	29	
12	55.1	58.5	39	
14	49.6	52.3	30	-17.3
16	57.4	60.0	42	
18	54.0	57.8	38	
20	53.0	56.0	36	
22	47.8	50.0	27	
24	52.8	53.9	34	
26	59.3	60.3	44	
28	59.0	60.8	44	
30	62.3	63.0	48	
32	61.8	65.6	50	
34	64.2	70.0	55	-17.3
36	66.0	69.3	56	
38	68.0	71.0	59	
40	60.1	65.0	48	
42	59.4	62.2	46	
44	59.3	62.8	46	-17.3
46	61.6	66.5	50	
48	60.8	66.2	50	
50	61.8	66.4	51	
52	62.5	67.5	52	
54	63.1	67.5	53	
56	59.5	64.3	47	
58	54.5	58.3	38	
24 00	61.2	64.6	49	-17.2

Correction to local mean time is + 3m 54s. 90° torsion = 28.′7.
Torsion head at 0h 00m read 356° and at 24h 15m read 351°.
Observers—R. R. T. and W. J. P., who alternated from 21h 52m to 22h 02m.

Thursday, November 12, 1903 — Magnet scale erect—inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	37.3	37.9	22 43	-19.0
02	37.3	38.1	44	
04	37.0	37.4	44	
06	37.6	37.9	44	
08	36.6	36.8	43	
10	36.5	37.3	43	
12	37.1	37.8	43	
14	37.3	38.2	44	-19.0
16	36.0	37.0	42	
18	35.7	36.1	41	
20	34.0	34.9	39	
22	32.8	34.8	38	
24	Scale			
26	inverted			
28*	46.6	36.1	34	
30	46.3	36.3	34	-19.0
32	42.7	42.2	32	
34	45.3	45.3	27	
36	41.6	39.8	35	
38	35.8	34.9	43	
40	27.9	30.3	53	
42	33.7	32.6	46	
44	36.7	35.1	42	
46	36.8	33.8	43	-19.0
48	30.6	28.1	22 53	
50	19.8	18.8	23 08	
52*	51.0	40.3	23 36	
54	33.0	18.2	24 08	
56*	50.3	38.8	57	
58	74.3	64.3	24 18	
17 00*1	38.9	23.1	23 45	-19.0
02	22.9	6.9	24 10	
04*	51.9	39.1	43	
06	73.3	57.6	12	
08	70.7	60.2	12	
10	75.1	65.9	04	
12	79.0	67.2	24 00	
14*	56.3	48.7	23 34	-18.8
16	45.9	41.2	48	
18	52.7	46.1	38	
20	65.2	60.4	17	
22	74.0	68.9	04	
24	73.1	69.5	04	
26	75.3	72.7	23 00	
28*2	41.2	32.2	22 56	
30.3	43.8	34.1	53	-18.8
32	46.5	40.2	46	
34	49.1	43.1	41	
36	51.1	46.1	37	
38	52.2	47.6	36	
40	52.9	48.2	34	
42	51.8	47.7	36	
44	50.8	47.3	37	-18.8
46	51.0	47.3	36	
48	50.9	47.3	36	
50	50.1	47.1	37	
52	50.2	47.3	37	
54	48.9	45.9	39	
56	46.9	44.1	42	
58	46.8	44.2	43	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	46.2	43.7	22 44	-18.8
02	47.3	44.7	42	
04	50.4	47.7	37	
06	50.8	48.6	36	
08	51.8	49.3	35	
10	52.4	49.9	34	
12	54.8	52.4	30	
14	56.0	53.6	28	-18.5
16	55.2	53.0	29	
18	52.5	54.5	30	
20	55.2	53.7	29	
22	48.0	46.0	40	
24	48.0	46.3	40	
26	45.3	43.6	44	
28	45.3	44.0	44	
30	47.8	46.6	40	-18.5
32	48.1	46.0	41	
34	48.4	46.9	39	
36	48.9	47.8	39	
38	43.2	41.2	49	
40	37.7	36.0	57	
42	36.5	35.3	58	
44	38.3	37.6	22 55	-18.6
46	34.8	33.6	23 01	
48	33.6	32.3	23 03	
50	40.1	38.9	22 53	
52	45.5	44.0	44	
54	43.8	42.7	47	
56	42.7	41.7	22 48	
58	32.4	31.8	23 04	
19 00	27.8	26.8	12	-18.3
02	17.8	15.4	29	
04	26.9	24.8	23 15	
06	37.4	36.2	22 58	
08	46.9	44.6	44	
10	50.5	48.1	38	
12	55.8	52.7	30	
14	57.4	54.8	27	-18.1
16	57.4	52.7	29	
18	55.2	50.7	32	
20	58.8	49.2	30	
22	54.9	50.3	32	
24	55.6	51.2	31	
26	56.7	52.3	30	
28	56.9	52.9	29	
30	56.8	53.1	29	-18.1
32	52.9	51.3	33	
34	57.2	55.1	28	
36	67.7	63.7	13	
38	69.1	66.1	10	
40	63.3	53.2	24	
42	49.3	45.1	22 42	
44*	68.3	66.1	23 31	-18.0
46	58.1	55.7	23 47	
48	Overl'k'd			
50*	44.5	14.7	22 28	
52	45.2	30.5	15	
54	51.3	33.9	07	
56	41.8	34.2	22 15	
58	72.4	61.2	21 29	
20 00	51.7	40.8	22 02	-17.5

Correction to local mean time is + 4m 54s. 90° torsion = 29′.
Torsion head at 15h 00m read 344° and at 20h 10m read 329°.
Observers—R. R. T. (W. J. P. 17h 14m to 18h 40m, alternated to 18h 52m.)

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, November 15, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	46.3	40.3	22 30	−15.0
02	46.3	41.0	30	
04	44.9	39.6	32	
06	44.9	39.8	32	
08	44.3	39.4	33	
10	47.8	43.5	27	
12	46.0	42.0	29	
14	45.8	42.2	29	−14.6
16	44.6	40.9	32	
18	46.9	44.8	26	
20	43.3	40.0	33	
22	41.8	38.8	35	
24	41.6	38.5	36	
26	39.8	36.8	38	
28	39.8	37.1	38	
30	41.1	38.9	36	−14.7
32	41.7	38.1	36	
34	42.9	39.3	34	
36	42.3	39.4	34	
38	39.8	36.8	38	
40	39.8	37.2	38	
42	40.8	39.1	36	
44	41.0	38.0	36	−14.6
46	41.6	37.8	36	
48	40.7	37.7	37	
50	40.9	38.1	36	
52	42.7	40.1	34	
54	42.5	39.9	34	
56	42.0	39.4	35	
58	41.2	39.2	35	
1 00	41.8	39.8	34	−14.7
02	41.3	38.3	36	
04	39.8	37.1	38	
06	40.0	36.9	38	
08	40.9	37.3	37	
10	40.3	37.2	38	
12	40.5	37.3	37	
14	39.8	36.8	38	−14.6
16	39.2	36.3	39	
18	39.0	36.1	40	
20	39.1	36.2	39	
22	37.7	36.8	40	
24	38.8	36.3	40	
26	37.8	35.9	41	
28	38.8	36.8	39	
30	38.1	35.9	40	−14.3
32	37.3	33.3	43	
34	35.8	32.2	45	
36	36.6	33.2	44	
38	36.4	33.2	44	
40	35.8	33.2	44	
42	34.9	32.1	46	
44	34.3	31.3	47	−14.2
46	33.8	29.8	48	
48	35.0	30.9	47	
50	34.9	30.8	47	
52	34.3	29.9	48	
54	33.7	29.6	49	
56	33.4	29.4	49	
58	33.0	28.9	50	
2 00	32.8	29.1	22 50	−14.1
02	31.7	29.2	51	
04	30.9	28.8	52	
06	28.9	27.1	54	
08	29.1	26.9	54	
10	30.6	28.6	52	
12	35.0	33.3	45	
14	35.7	34.2	44	−14.0
16	35.7	31.6	46	
18	35.3	31.8	46	
20	35.2	32.1	46	
22	35.2	32.2	46	
24	34.0	30.9	48	
26	31.8	28.8	51	
28	30.0	27.7	53	
30	32.1	29.5	50	−14.0
32	37.2	33.2	43	
34	38.1	34.2	42	
36	37.0	33.3	43	
38	33.6	29.8	49	
40	33.1	28.9	50	
42	33.8	29.8	48	
44	33.2	29.2	50	−13.9
46	34.0	27.2	50	
48	33.1	27.1	51	
50	33.2	27.7	51	
52	34.8	29.4	48	
54	32.9	27.9	51	
56	32.3	27.9	51	
58	32.4	28.2	51	
3 00	32.6	29.0	50	−13.8
02	33.2	30.0	49	
04	32.8	30.0	49	
06	33.6	31.2	48	
08	32.3	30.2	50	
10	31.8	29.3	51	
12	32.4	30.0	50	
14	32.2	30.0	50	
16	33.6	30.0	48	
18	33.1	29.7	49	
20	32.3	29.1	50	
22	31.8	29.3	51	
24	33.2	31.0	48	
26	34.8	32.8	45	
28	35.1	33.4	45	
30	34.8	33.1	45	−13.4
32	34.0	33.3	46	
34	34.2	33.8	45	
36	34.8	34.6	44	
38.3	33.9	33.2	46	
40	34.3	33.9	45	
42	35.2	34.9	44	
44	34.8	34.2	44	−13.3
46	34.6	32.0	46	
48	34.3	31.8	47	
50	34.8	32.6	46	
52	34.6	32.3	46	
54	33.8	31.7	47	
56	34.4	32.4	46	
58	35.3	34.9	43	

Observer—R. R. T.

Sunday, November 15, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	Scale made			
02	erect			
04	73.1	75.3	22 50	−12.8
06	73.1	76.2	50	
08	73.8	77.1	52	
10	73.6	76.4	51	
12	73.1	75.8	50	
14	73.7	75.8	51	−12.7
16	73.2	76.4	51	
18	74.7	76.8	52	
20	74.8	77.4	53	
22	75.1	77.8	53	
24	74.9	77.2	53	
26	75.2	77.4	53	
28	76.8	78.3	55	
30*	36.8	42.0	54	−12.4
32	37.1	42.3	54	
34	37.6	42.9	55	
36	38.3	41.8	54	
38	38.7	41.7	55	
40	40.1	42.7	57	
42	37.8	39.8	53	
44	34.8	36.8	48	−12.1
46	33.0	35.7	46	
48	35.8	38.8	50	
50	37.7	39.8	52	
52	34.4	36.8	48	
54	35.2	37.7	49	
56	38.2	39.2	52	
58	35.3	37.0	48	
5 00	33.0	34.1	44	−12.0
02	33.1	34.8	45	
04	35.3	37.7	49	
06	34.0	36.0	47	
08	32.0	34.3	44	
10	30.0	32.8	41	
12	35.4	37.3	49	
14	35.3	38.1	49	−12.0
16	30.2	33.8	42	
18	32.5	35.7	45	
20	33.7	36.4	47	
22	31.4	34.0	43	
24	31.9	34.1	43	
26	35.8	37.6	49	
28	34.9	36.1	47	
30	30.8	33.2	42	−12.0
32	30.3	32.9	41	
34	31.3	33.2	42	
36	33.9	36.1	47	
38	31.2	33.8	43	
40	32.2	33.9	43	
42	32.6	34.0	44	
44	35.1	36.0	47	−11.9
46.3	35.1	36.0	47	
48	33.2	34.1	44	
50	33.4	34.8	45	
52	34.2	34.7	46	
54	36.1	37.9	50	
56	33.4	34.4	45	
58	34.6	36.0	47	
6 00	36.0	36.8	22 49	−11.7
02	33.7	34.5	45	
04	33.4	34.9	45	
06	34.2	35.2	46	
08	33.3	35.1	45	
10	35.2	36.8	48	
12	34.1	35.0	46	
14	33.8	34.6	45	−11.7
16	33.7	36.7	47	
18	33.3	36.2	46	
20	30.6	33.6	42	
22	32.1	34.8	44	
24	32.5	34.7	45	
26	33.6	35.8	46	
28	33.3	35.2	45	
30	31.8	33.1	42	−11.3
32	31.6	32.9	42	
34	33.1	34.6	45	
36	33.8	34.8	46	
38	31.5	32.2	42	
40	29.4	30.6	39	
42	32.8	33.4	44	
44	34.2	35.2	46	−11.2
46	31.8	35.2	44	
48	31.8	34.3	43	
50	37.1	40.3	52	
52	29.8	33.7	41	
54	30.8	33.3	42	
56	31.1	34.1	43	
58	31.1	33.2	42	
7 00	31.9	34.0	43	−11.1
02	30.1	33.5	42	
04	30.3	33.8	42	
06	31.0	33.3	42	
08	31.1	32.9	42	
10	31.1	32.7	42	
12	31.4	32.8	42	
14	30.3	31.1	40	−11.0
16	29.9	33.9	42	
18	31.1	35.1	44	
20	28.9	32.9	40	
22	30.3	34.1	42	
24	29.1	33.1	40	
26	29.6	33.2	41	
28	31.9	35.8	45	
30	32.0	35.2	44	−10.8
32	30.1	32.0	40	
34	29.8	31.7	40	
36	27.8	29.7	37	
38	28.8	30.0	38	
40	36.2	39.6	51	
42	35.9	36.9	49	
44	30.3	31.1	40	−10.7
46	31.2	32.3	41	
48	33.2	34.8	45	
50	31.0	32.8	42	
52	32.5	33.7	43	
54	33.7	34.6	45	
56	31.8	32.9	42	
58	32.7	34.2	44	
8 00	31.9	33.2	43	

Correction to local mean time is + 5m 58s.
Torsion head at 0h 00m read 324° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, November 16, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	41.8	35.7	22 40	-22.0
02	39.8	36.8	40	
04	41.1	37.8	39	
06	40.8	37.8	39	
08	43.8	39.6	35	
10	44.8	39.2	35	
12	43.8	38.9	36	
14	42.2	37.5	38	-21.5
16	42.3	35.2	40	
18	42.0	35.1	40	
20	42.9	35.9	39	
22	42.8	36.4	38	
24	44.2	38.2	36	
26	42.8	37.0	38	
28	42.2	36.8	39	
30	43.0	37.9	37	-21.0
32	42.7	35.7	39	
34	40.6	38.8	38	
36	39.8	38.0	40	
38	38.9	37.4	41	
40	39.7	38.1	40	
42	39.4	38.4	40	
44	39.2	38.0	40	-20.9
46	39.9	36.2	41	
48	40.3	37.2	40	
50	40.8	37.9	39	
52	40.9	37.8	39	
54	39.2	37.0	41	
56	41.0	37.9	39	
58	43.0	40.3	35	
9 00	42.8	40.3	36	-20.4
02	40.8	38.6	38	
04	39.3	37.3	40	
06	39.1	37.2	41	
08	39.1	38.1	40	
10	39.1	37.9	40	
12	38.2	37.2	42	
14	38.4	37.3	41	-19.8
16	39.0	36.7	41	
18	39.2	37.2	41	
20	39.8	37.6	40	
22	39.6	37.8	40	
24	39.8	38.1	40	
26	39.6	38.2	40	
28	39.2	38.1	40	
30	39.0	38.2	40	-19.0
32	40.1	37.4	40	
34	39.8	37.8	40	
36	39.9	38.0	40	
38	39.4	37.8	40	
40	39.1	37.3	41	
42	37.8	36.5	42	
44	38.1	36.9	42	-18.0
46	38.2	36.8	42	
48	39.7	38.3	39	
50	39.3	38.3	40	
52	39.9	38.7	39	
54	40.2	38.7	39	
56	39.7	37.8	40	
58	39.8	38.0	40	
10 00	39.3	37.9	22 40	-18.2
02	40.3	37.6	40	
04	39.8	37.3	40	
06	39.4	37.4	40	
08	39.5	37.3	40	
10	39.6	38.1	40	
12	39.9	39.1	39	
14	39.3	37.7	40	-17.8
16	38.9	37.0	41	
18	39.3	36.3	41	
20	39.8	37.0	40	
22	40.0	37.8	40	
24	39.8	37.7	40	
26	39.6	37.8	40	
28	40.1	38.8	39	
30	39.8	38.6	39	-17.7
32	40.5	37.7	39	
34	39.8	37.1	40	
36	39.5	36.9	41	
38	39.8	37.3	40	
40	39.8	37.7	40	
42	40.9	39.2	38	
44	42.0	40.5	36	-17.8
46	41.5	40.2	37	
48	40.7	39.6	38	
50	40.7	39.8	38	
52	40.3	39.7	38	
54	40.1	39.5	38	
56	40.2	39.8	38	
58	39.8	39.6	38	-18.0
11 00	39.5	39.2	39	
02	39.3	39.2	39	
04	39.6	39.2	39	
06	39.7	39.3	39	
08	39.6	39.4	39	
10	38.9	38.9	40	
12	39.1	39.1	39	
14	39.8	39.2	39	-18.0
16	40.0	39.5	38	
18	39.6	39.2	39	
20	40.1	39.2	38	
22	40.7	40.0	37	
24	40.2	39.3	38	
26	40.6	40.2	37	
28	39.3	38.9	39	
30	40.0	39.3	38	-18.0
32	40.7	39.8	38	
34	40.9	40.2	37	
36	40.8	40.2	37	
38	41.8	40.9	36	
40	41.1	40.1	37	
42	42.0	40.9	36	
44	42.8	42.2	34	-18.2
46	44.0	42.9	32	
48	44.8	43.3	32	
50	43.3	42.2	34	
52	42.5	41.0	35	
54	43.1	42.1	34	
56	42.8	42.2	34	
58	42.7	41.9	34	-18.1
12 00	42.7	39.2	36	

Correction to local mean time is + 6m 01s. 90° torsion = 25.'6.
Torsion head at 7h 30m read 324° and at 12h 30m read 321°.
Observer—R. R. T.

Tuesday, November 17, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00*	40.2	44.4	22 54	-14.7
02	38.8	44.2	22 53	
04	48.5	51.6	23 06	
06	45.1	48.8	23 01	
08	40.6	43.3	22 54	
10	39.1	40.3	50	
12	39.9	42.7	53	
14	44.0	46.3	22 59	-14.6
16	45.9	48.3	23 02	
18	43.8	46.0	22 58	
20	40.5	42.2	53	
22	37.7	40.0	49	
24	33.8	35.8	42	
26	31.0	32.9	38	
28	27.1	29.8	32	
30	25.2	27.9	29	-14.5
32	22.2	25.9	25	
34	24.7	28.1	29	
36	26.1	29.8	32	
38	25.8	29.1	31	
40	24.9	28.2	29	
42	24.3	28.1	29	
44	22.9	25.5	26	-14.4
46	23.3	26.2	26	
48	23.0	25.9	26	
50	23.8	25.8	27	
52	23.4	25.8	26	
54	22.0	23.8	24	
56	23.9	25.2	26	
58	26.0	27.5	30	
13 00	24.8	26.0	28	-14.2
02	24.2	25.1	26	
04	20.6	21.8	21	
06	21.8	23.2	23	
08	19.8	20.8	20	
10	18.1	19.1	17	
12	20.0	21.7	20	
14	22.3	24.2	24	-14.2
16	26.1	27.2	30	
18	23.9	25.0	26	
20	24.3	25.3	27	
22	23.4	24.4	25	
24	21.8	22.3	22	
26	20.9	21.8	21	
28	22.6	23.0	24	
30	21.4	21.9	22	-14.1
32	20.9	22.7	22	
34	21.7	22.6	22	
36	21.8	22.2	22	
38	23.2	23.9	25	
40	22.2	23.0	23	
42	22.1	22.9	23	
44	22.3	23.6	24	-14.0
46	21.9	22.7	23	
48	20.4	21.8	21	
50	22.7	23.5	24	
52	23.2	23.9	25	
54	21.8	22.5	22	
56	20.2	20.9	20	
58	18.2	19.5	17	
14 00	14.7	15.9	22 12	-13.8
02	12.2	13.1	08	
04	11.1	12.0	06	
06	13.2	14.8	10	
08	15.8	17.9	14	
10	18.2	20.2	18	
12	14.3	16.1	12	
14	14.0	14.8	10	-13.6
16	8.9	11.7	04	
18	8.2	10.8	03	
20	11.7	14.1	08	
22	15.8	18.6	15	
24	19.4	21.7	20	
26	17.4	21.5	18	
28	16.8	17.8	15	
30	17.3	18.1	16	-13.4
32	9.3	11.2	04	
34	10.1	11.9	05	
36	6.8	8.2	00	
38*	37.8	43.3	02	
40	37.0	43.1	01	
42	40.7	45.9	06	
44	38.0	42.1	01	-13.2
46	41.9	45.9	07	
48	40.2	44.7	05	
50	37.9	41.9	01	
52	38.2	41.7	01	
54.2	38.3	41.2	00	
56	38.2	41.2	22 00	
58	36.4	39.8	21 58	
15 00	41.1	44.8	22 06	-13.1
02	44.5	46.2	09	
04	47.6	50.1	15	
06	48.3	50.7	16	
08	49.4	52.1	18	
10	49.3	51.8	18	
12	48.8	50.9	16	
14.5	56.1	57.2	27	-13.1
16	60.2	60.3	33	
18	63.9	64.2	39	
20	63.9	64.7	39	
22	67.1	67.9	44	
24	68.8	69.6	47	
26	71.4	71.8	51	
28	72.8	73.7	53	
30	71.9	72.3	51	-13.2
32	72.1	72.9	52	
34	72.8	73.7	53	
36	73.1	73.7	53	
38	73.5	74.2	54	
40	74.1	74.6	55	
42	76.0	77.1	58	
44	73.8	74.7	55	-13.2
46	72.8	74.1	53	
48	72.1	73.5	52	
50	71.2	72.6	51	
52	69.6	71.2	49	
54	67.9	69.8	46	
56	66.8	68.8	45	
58	66.3	67.8	43	
16 00	64.9	66.1	41	-13.2

Correction to local mean time is + 6m 15s.
Torsion head at 11h 00m read 318° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 18, 1903					Magnet scale inverted					Wednesday, November 18, 1903					Magnet scale inverted				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	39.0	38.0	22 16	-17.7	2 00	47.5	45.7	22 59	-15.8	4 00	36.8	35.0	23 16	-15.8	6 00	44.6	44.6	23 02	-16.0
02	39.5	38.4	16		02	48.5	46.5	58		02	36.0	34.4	17		02	46.0	45.6	01	
04	39.6	38.3	16		04	49.4	47.8	56		04	35.4	34.0	18		04	44.6	43.9	03	
06	39.9	38.6	15		06	50.8	49.2	54		06	34.4	33.0	20		06	41.8	41.3	07	
08	39.0	37.8	16		08	51.2	49.2	54		08	35.4	33.8	18		08	42.8	42.3	06	
10	37.2	36.3	19		10	52.1	50.3	52		10	37.8	36.4	14		10	33.0	32.5	21	
12	35.3	34.8	22		12	50.5	48.6	55		12	41.4	40.8	08		12	28.4	27.4	29	
14	33.5	33.3	24	-17.3	14	48.6	46.6	22 58	-15.7	14	45.4	45.0	02	-16.0	14	33.8	32.2	21	-15.9
16	30.1	29.5	30		16	47.2	45.2	23 00		16	46.2	45.1	23 01		16	40.0	38.2	11	
18	30.6	29.4	30		18	47.5	45.5	23 00		18	50.5	49.4	22 54		18	41.8	40.6	08	
20	28.0	26.6	34		20	49.3	47.3	22 57		20	54.4	53.5	48		20	43.0	41.0	07	
22	23.2	21.7	42		22	51.8	49.8	53		22	56.4	55.3	45		22	45.0	43.3	03	
24	22.3	21.0	43		24	53.0	51.3	51		24	56.0	55.0	45		24	39.0	37.5	13	
26	22.0	20.1	44		26	50.1	49.0	55		26	53.1	51.9	50		26	35.3	33.8	18	
28	20.5	18.5	46		28	48.8	47.6	57		28	52.6	51.6	51		28	33.4	32.3	21	
30	17.3	15.3	51	-17.0	30	49.9	48.3	55	-15.7	30	60.3	59.1	39	-16.1	30	34.5	33.4	19	-15.8
32	17.3	15.7	51		32	51.6	50.5	52		32	60.8	59.9	38		32	29.0	26.8	29	
34	14.3	11.4	22 56		34	54.2	53.0	48		34	64.9	63.3	32		34	29.7	28.3	27	
36	9.3	7.0	23 04		36	55.9	54.4	46		36	66.2	64.5	30		36	28.6	27.0	29	
38*	45.3	38.7	07		38	54.2	52.6	49		38	65.0	64.3	31		38	25.2	24.0	34	
40	40.3	39.1	10		40	52.3	51.0	52		40	64.3	64.0	32		40	24.2	23.6	35	
42	40.3	38.8	10		42	52.5	51.5	51		42	65.3	64.4	31		42	27.2	26.2	31	
44	38.8	37.7	13	-16.6	44	52.8	51.6	51	-15.6	44	68.0	66.5	27	-16.1	44	29.5*b*		26	-15.8
46	38.3	37.3	13		46	55.1	54.1	47		46	65.6	64.5	30		46	22.9	22.6	37	
48	38.0	36.6	14		48	58.0	57.0	42		48	62.7	62.3	34		48	22.0	21.2	39	
50	39.6	38.0	12		50	58.3	57.1	42		50	65.3*a*		30		50	24.0	23.3	36	
52	40.0	38.0	11		52	58.8	57.6	41		52	64.6	64.6	31		52	23.6	23.4	36	
54	42.8	41.2	07		54	61.3	60.0	37		54	62.2	62.2	35		54	30.1	29.3	26	
56	42.6	39.4	08		56	62.3	61.4	36		56	61.4	61.2	36		56	26.2	25.8	32	
58	42.0	40.0	08		58	60.9	60.4	37		58	58.4	58.4	41		58	19.8	18.6	42	
1 00	43.8	42.3	05	-16.3	3 00	60.6	60.6	37	-15.6	5 00	55.8	55.3	45	-16.1	7 00	18.5	17.6	44	-15.8
02	47.0	45.6	23 00		02	59.2	58.8	40		02	53.5*b*		48		02	23.5	22.6	36	
04	50.1	49.3	22 54		04	57.6	56.9	43		04	52.3	52.0	51		04	20.2	19.5	41	
06	51.0*b*		52		06.3	53.8	53.0	49		06	52.6	52.2	50		06	25.3	25.3	33	
08	50.6	50.0	54		08	56.2	55.5	45		08	54.3	54.0	48		08	31.3	30.9	24	
10	50.0	49.8	54		10	57.2	56.2	44		10	54.5	54.2	47		10	29.0	28.3	28	
12	51.0	50.8	53		12	56.2	54.6	46		12	55.0	54.3	47		12	30.3	30.3	25	
14	58.0	56.5	43	-16.2	14	51.9	50.3	52	-15.8	14	58.1	57.1	42	-16.1	14	29.3	28.7	27	-15.8
16	58.0	55.6	43		16	48.0	46.2	22 58		16	56.7	55.9	44		16	29.0	27.8	28	
18	60.0	58.3	40		18	43.1	42.0	23 06		18	57.9	57.0	42		18	26.5	25.5	32	
20	55.9	54.9	46		20	42.8	41.3	07		20	56.6	55.0	45		20	25.3	22.7	35	
22	58.0	56.8	42		22	37.8	36.8	14		22	57.2	56.8	43		22	28.3	24.9	31	
24	55.5	54.6	46		24	38.0	36.0	14		24	58.9	58.0	41		24	29.4	25.6	29	
26	49.4	47.8	56		26	35.4	33.8	18		26	56.8	56.0	44		26	32.0	28.8	25	
28	51.8	51.0	52		28	36.0	33.8	18		28	55.4	55.0	46		28	27.5	24.3	32	
30	55.3	54.3	46	-16.0	30	34.6	32.0	20	-15.8	30	57.8	57.0	42	-16.1	30	28.6	25.6	30	-16.3
32	54.5	54.2	47		32	30.8	28.2	26		32	61.7	61.7	36		32	31.0	27.3	27	
34	56.6	55.1	45		34	33.3	31.0	22		34	67.0	66.3	28		34	30.2	26.0	28	
36	56.6	54.6	45		36	30.6	28.4	26		36	58.0*b*		41		36	27.5	24.6	32	
38	57.1	55.6	44		38	29.9	28.1	27		38	55.0	53.9	47		38	29.4	25.8	29	
40	56.0	54.8	46		40	31.5	30.4	24		40	54.6	54.0	47		40	29.9	27.3	28	
42	55.3	53.7	47		42	32.6	31.4	22		42	57.0	56.3	44		42	27.8	26.3	30	
44	52.6	51.2	51	-16.0	44	33.6	31.9	21	-15.8	44	56.9	56.3	44	-16.0	44	28.3	26.3	30	-16.0
46	51.7	50.3	52		46	34.4	31.6	21		46.2	56.0	55.5	45		46	21.8	18.6	41	
48	51.5	50.2	53		48	34.5	32.0	20		48	55.8	55.0	46		48	25.3	23.7	34	
50	50.8	49.5	54		50	34.6	32.1	20		50	53.2	52.8	49		50	29.0	27.3	28	
52	50.7	49.3	54		52	37.3	35.3	15		52	50.2	49.8	22 54		52	31.0	29.0	25	
54	51.0	49.4	54		54	35.9	33.4	18		54	45.6	45.2	23 01		54	33.6	28.8	24	
56	50.5	48.8	55		56	38.2	36.3	14		56	46.6	45.3	00		56	36.0	34.6	17	
58	48.5	47.0	58		58	37.6	35.2	15		58	44.5	43.5	04		58	36.0	35.3	17	

Observer—W. J. P.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 18, 1903 — Magnet scale inverted									Wednesday, November 18, 1903 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	39.4	38.9	23 11	-15.8	10 00	52.2	51.4	22 51	-15.0	12 00	62.8	59.6	22 36	-13.8	14 00	65.6	64.9	22 30	-13.5
02	38.0	37.3	14		02	49.4	49.2	55		02	56.2	54.3	46		02	63.8	63.0	33	
04	38.2	36.9	14		04	48.8	47.6	57		04	53.0	49.7	52		04	65.0	63.8	32	
06	38.6	40.3	11		06	53.0	50.2	22 52		06	49.0	46.4	22 58		06	66.4	65.7	29	
08	40.8	39.3	10		08	39.0	38.3	23 12		08	45.7	41.9	23 04		08	66.1	64.9	30	
10	45.6	45.2	01		10	36.5	34.4	17		10	48.4	45.2	22 59		10	65.5	64.1	31	
12	42.0	40.4	08		12	35.9	35.1	17		12	50.0	48.9	55		12	65.6	64.6	30	
14	45.7	43.9	02	-15.6	14	34.2	32.9	20		14	48.7	45.2	22 59	-13.8	14	67.0	66.1	28	-13.6
16	45.1	42.8	04		16	38.9	38.5	12	-15.0	16	47.4	41.7	23 03		16	68.8	67.7	26	
18	35.2	34.6	18		18	45.9	43.9	02		18	45.0	39.9	06		18	68.2	66.8	27	
20	40.2	37.8	11		20	45.3	42.3	23 04		20	47.6	41.8	02		20	70.8	69.7	22	
22	39.9	36.2	13		22	48.2	46.8	22 58		22	47.9	41.2	23 03		22	70.0	68.2	24	
24	37.8	34.8	16		24	48.8	46.4	58		24	49.5	43.7	22 59		24	66.2	65.0	30	
26	39.8	36.1	13		26	48.0	46.1	22 59		26	53.4	49.0	52		26	63.3	62.2	34	
28	36.3	33.7	18		28	44.5	43.0	23 04		28	51.9	47.7	54		28	65.5	64.2	31	
30	37.6	35.6	15	-15.4	30	48.1	45.6	22 59	-14.8	30	48.9	44.9	59	-13.7	30	64.5	63.4	32	-13.7
32	40.9	38.9	10		32	47.2	46.1	22 59		32	57.1	52.8	46		32	63.0	62.1	34	
34	45.5	44.0	02		34	46.2	45.1	23 01		34	60.0	56.2	41		34	62.6	61.8	35	
36	41.1	40.0	09		36	57.0	53.5	22 46		36	55.2	50.8	49		36	62.0	61.5	36	
38	47.4	45.7	00		38	62.1	59.6	37		38	58.1	53.3	45		38	60.8	60.0	38	
40	42.1	40.0	08		40	54.9	51.7	22 49		40	60.2	54.7	42		40	61.5	60.9	36	
42	47.4	45.4	00		42	44.9	43.0	23 04		42	59.6	53.4	44		42	64.0	63.5	33	
44	37.7	36.7	14	-15.3	44	44.1	41.8	05	-14.6	44	57.7	52.1	46	-13.9	44	65.4	64.4	31	-14.0
46	30.1	26.3	28		46	42.1	41.2	07		46	60.8	52.7	44		46	69.0	67.0	26	
48	35.9	32.7	19		48	39.3	38.3	12		48	61.2	54.9	42		48	66.2	63.9	30	
50	39.7	35.7	23 13		50	41.2	39.6	09		50	58.7	51.6	46		50	64.8	62.8	32	
52	51.7	47.9	22 54		52	44.8	43.3	23 04		52	53.0	48.1	53		52	66.0	63.3	31	
54	52.3	48.2	54		54	49.5	48.2	22 56		54	56.0	51.2	48		54	65.5	63.2	32	
56	55.2	52.0	48		56	50.3	49.2	22 54		56	58.6	53.8	44		56	74.0	71.3	18	
58	52.6	49.2	53		58	44.8	44.2	23 03		58	60.0	56.0	42		58	74.6	72.2	17	
9 00	57.8	54.7	44	-15.2	11 00	40.1	40.1	10	-14.4	13 00	63.1	59.3	36	-13.9	15 00	72.8	70.8	20	-14.0
02	55.8	52.8	47		02	37.5	36.2	15		02	63.5	60.1	36		02	74.3	71.7	18	
04	52.4	50.2	52		04	46.9	45.2	00		04	63.0	60.1	36		04	73.8	71.6	18	
06	52.7	52.2	50		06	42.2	40.9	23 07		06	68.8	64.8	28		06	73.3	71.5	19	
08	58.8	56.2	42		08	47.2	48.1	22 59		08	68.9	64.6	28		08	74.4	72.1	18	
10	58.3	55.0	44		10	50.1	48.1	55		10	66.4	63.3	31		10	70.2	68.1	24	
12	51.2	48.1	22 55		12	56.6	52.8	47		12	64.8	61.6	33		12	70.9	69.0	23	
14	45.9	41.8	23 04	-15.2	14	61.0	59.0	38	-14.1	14	60.9	58.3	39	-14.0	14	74.1	72.2	18	-14.0
16	40.1	36.4	13		16	49.4	48.7	56		16	61.2	59.2	38		16	72.2	70.3	21	
18	41.8	37.3	10		18	47.3	46.2	59		18	59.6	58.2	40		18	73.5	72.0	18	
20	40.0	37.2	12		20	50.7	49.2	54		20	54.1	53.3	48		20	75.1	72.7	17	
22	43.2	39.9	23 07		22	50.3	49.8	54		22	52.4	50.3	52		22	74.9	71.6	18	
24	52.8	49.3	22 52		24	49.8	49.2	22 55		24	53.7	52.2	50		24	77.0	74.2	14	
26	43.6	42.2	23 05		26	44.7	44.1	23 03		26	56.8	54.1	46		26*	43.8	38.2	14	
28	45.7	43.8	02		28	53.1	52.9	22 49		28	63.0	61.1	35		28	42.2	36.9	16	
30	47.0	45.2	23 00	-15.1	30	58.9	58.6	40	-14.1	30	64.7	61.8	33	-14.0	30	44.1	37.1	14	-14.0
32	52.2	50.6	22 52		32	62.6	61.2	35		32	64.1	63.2	33		32	46.9	36.8	12	
34	51.8	48.9	22 54		34	56.9	55.9	44		34	66.1	64.3	30		34	43.2	38.0	14	
36	46.1	45.6	23 01		36	56.4	55.7	45		36	65.8	64.3	30		36	42.9	38.5	14	
38	39.9	37.1	12		38	59.4	58.0	40		38	65.7	64.0	31		38	41.8	37.2	16	
40	42.8	39.9	23 08		40	54.6	53.2	48		40	65.7	63.4	31		40	40.9	36.9	17	
42	48.8	47.9	22 57		42	56.0	54.5	46		42	62.9	62.2	34		42	39.9	36.4	18	
44	45.1	43.2	23 03	-15.0	44	51.9	49.3	53	-14.0	44	65.1	62.6	32	-13.9	44	43.3	39.6	13	-14.0
46	48.2	46.9	22 58		46	49.7	48.1	56		46	68.0	67.8	26		46	39.9	36.7	18	
48	54.9	52.8	48		48	51.8	49.7	53		48	68.8	67.5	26		48	39.9	37.8	17	
50	52.5	50.1	52		50	56.6	54.1	46		50	69.8	69.1	24		50	28.5	25.2	36	
52	49.0	47.9	57		52	53.4	51.9	50		52	67.1	67.0	27		52	26.5	24.6	38	
54	53.8	51.8	50		54	50.9	50.2	53		54	65.9	65.4	30		54	33.0	30.0	28	
56	53.9	52.6	49		56	53.7	51.3	50		56	63.1	61.9	34		56	40.8	38.2	16	
58	58.5	56.1	43		58	62.8	61.7	35		58	63.7	62.3	34		58	48.0	47.0	03	

Observers—W. J. P. and R. R. T., who alternated from 8h 00m to 8h 10m.

Observers—R. R. T. and R. W. P., who alternated from 13h 36m to 14h 46m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 18, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	44.8*b*		22 08	−14.2	18 00	30.0	29.0	22 32	−14.8
02	43.1	42.1	11		02	28.6	28.0	34	
04	45.1	44.3	08		04	26.9	26.1	36	
06	46.6	44.7	06		06	26.8	25.9	37	
08	41.9	40.3	13		08	27.9	27.2	35	
10	42.0	40.0	13		10	26.2	25.8	37	
12	38.0	36.6	19		12	24.0	23.9	41	
14	40.1	39.9	15	−14.2	14	23.8	23.2	41	−14.8
16	42.6	41.5	12		16	21.7	20.1	45	
18	44.8	43.0	09		18	13.9	14.4	56	
20	41.8	41.1	13		20	15.7	14.9	54	
22	41.1	41.0	14		22	20.5	19.6	47	
24	37.0	36.0	21		24	27.7	25.9	36	
26	37.9	37.6	19		26	32.9	32.8	27	
28	41.2	40.8	13		28	38.8	38.8	17	
30	44.9	43.4	09	−14.4	30	40.8	40.1	15	−14.6
32	43.2	42.0	11		32	45.8	42.8	09	
34	41.1	39.9	14		34	46.9	44.3	07	
36	39.0	37.3	18		36	50.1	47.6	22 02	
38	37.2	36.7	20		38	51.2	49.2	21 59	
40	37.8	37.2	19		40	48.7	47.2	22 03	
42	37.8	37.5	19		42	43.8	42.2	11	
44	36.2	35.3	22	−14.4	44	44.2	42.5	10	−14.3
46	37.5	35.8	20		46	41.2	40.0	14	
48	30.1	28.8	32		48	41.0	39.4	15	
50	33.4	31.4	27		50	41.2	39.2	15	
52	33.6	32.1	26		52	39.5	37.8	18	
54	37.4	36.2	20		54	38.1	36.8	20	
56	40.9	40.5	14		56	35.6	34.2	24	
58	39.1*a*		16		58	36.6	35.3	22	
17 00	37.9	37.8	19	−14.5	19 00	34.9	33.7	24	−14.3
02	36.6*b*		20		02	35.9	35.2	22	
04	35.5	35.3	22		04	37.8	37.0	20	
06	35.5	35.0	23		06	36.5	35.2	22	
08	36.4	37.2	20		08	34.2	33.2	25	
10	33.3	32.3	27		10	33.4	32.3	27	
12	30.9	30.2	30		12	31.1	30.2	30	
14	31.9	31.3	28	−14.6	14	30.8	30.2	30	−14.4
16	32.1	31.8	28		16	31.8	29.0	30	
18	31.7	31.2	29		18	32.0	29.6	30	
20	36.7	35.5	21		20	29.7	27.8	33	
22	41.9	41.2	13		22	28.2	25.8	36	
24	42.1	41.8	12		24	27.9	25.5	36	
26	41.3	41.1	13		26	29.0	27.1	34	
28	36.6	35.9	21		28	31.8	29.4	30	
30	37.2	36.8	20	−14.7	30	33.1	31.1	28	−14.4
32	35.2	33.8	24		32	35.4	32.2	25	
34	39.0	38.1	18		34	36.0	33.3	24	
36	36.5	36.2	21		36	36.8	34.1	23	
38	31.9	31.7	28		38	37.1	34.9	22	
40	26.7	26.2	37		40	37.3	35.2	21	
42	25.1	24.5	39		42	37.8	35.8	20	
44	26.8	26.1	37	−14.7	44	38.7	36.6	19	−14.5
46	26.8	25.8	37		46	38.9	35.7	20	
48	25.8	25.0	38		48	38.9	36.0	20	
50	28.9	28.1	33		50	40.1	37.2	18	
52	30.8	30.1	30		52	42.2	39.3	14	
54	29.2	28.8	33		54	43.3	40.7	12	
56	30.7	29.9	30		56	44.3	40.6	12	
58	33.8	32.8	26		58	44.9	41.4	10	

Observers—R. W. P. and R. R. T., who alternated from 18h 16m to 18h 30m.

Wednesday, November 18, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	46.5	43.1	22 08	−14.4	22 00	28.9	27.4	22 33	−14.6
02	48.7	43.8	06		02	26.2	25.6	37	
04	45.8	41.3	10		04	24.7	24.2	39	
06	41.8	37.9	16		06	23.8	23.2	40	
08	39.6	35.9	19		08	24.5	23.5	40	
10	38.2	34.9	21		10	23.7	23.3	40	
12	38.0	34.6	21		12	22.0	21.7	43	
14	39.1	35.8	20	−14.6	14	20.0	19.3	47	−14.7
16	39.7	34.9	20		16	19.0	17.9	49	
18	41.7	37.2	16		18	18.6	17.8	49	
20	42.8	38.9	14		20	18.3	17.9	49	
22	44.5	41.0	11		22	19.0	18.3	48	
24	46.5	43.2	08		24	20.3	19.9	46	
26	47.8	44.7	06		26	23.3	23.7	41	
28	48.7	45.6	04		28	25.6	25.3	38	
30	46.3	44.2	07	−14.6	30	25.6	25.3	38	−14.8
32	43.2	40.3	13		32	24.0	23.5	40	
34	42.0	39.1	15		34	23.0	22.6	42	
36	40.1	37.2	18		36	26.3	25.6	37	
38	37.8	35.3	21		38	28.4	28.0	33	
40	36.9	34.9	22		40	29.0	28.6	32	
42	39.7	34.2	20		42	30.3	29.8	30	
44	36.0	33.9	24	−14.6	44	31.0	31.0	29	
46	33.5	32.6	26		46	32.6	32.3	27	−14.8
48	31.8	31.2	29		48	30.6	30.1	30	
50	30.9	30.0	30		50	27.3	26.3	35	
52	30.9	29.9	30		52	24.5	23.3	40	
54	31.3	30.3	30		54	22.0	20.1	44	
56	30.5	29.5	31		56	20.2	17.2	48	
58	30.9	29.8	31		58	18.4	16.0	50	
21 00	Lost			−14.6	23 00	18.1	16.3	50	−15.0
02*	32.2	26.8	31		02	18.0	15.1	52	
04	32.1	27.3	31		04	16.6	14.3	53	
06	32.8	27.1	30		06	13.1	11.3	22 58	
08	34.9	29.3	27		08	11.3	10.0	23 01	
10	36.1	31.0	25		10	8.7	7.6	05	
12.2	35.5	30.8	25		12*	30.6	29.6	10	
14	35.0	30.2	26	−14.6	14	34.3	29.8	07	−14.9
16	35.3	31.7	25		16	35.6	31.6	04	
18	33.2	29.8	28		18	36.2	32.2	23 03	
20	32.9	29.9	28		20	39.6	36.8	22 57	
22	34.2	31.3	26		22	42.8	40.0	52	
24	34.9	31.9	25		24	44.3	42.0	49	
26	35.4	32.3	24		26	44.3	41.7	50	
28	34.1	31.7	26		28	43.3	40.8	51	
30	33.8	33.2	25	−14.6	30	43.5	41.2	50	−15.0
32	35.9	33.8	23		32	44.3	41.8	50	
34	34.3	30.0	27		34	45.8	43.4	47	
36	34.3	30.0	27		36	46.3	43.7	46	
38	35.8	32.1	24		38	45.6	43.6	47	
40	37.8	34.1	21		40	47.3	45.6	44	
42	37.7	33.8	21		42	44.6	42.6	49	
44	36.8	33.1	23	−14.4	44	45.6	44.3	47	−15.0
46	36.8	35.1	21		46	45.4	43.8	47	
48	36.3	36.0	21		48	47.4	45.3	44	
50	35.8	35.2	22		50	46.4	45.2	45	
52	36.1	35.7	21		52	43.6	41.6	50	
54	35.1	34.2	23		54	42.3	40.3	52	
56	33.3	32.2	26		56	39.8	37.6	56	
58	31.3	29.8	30		58	38.3	36.9	58	−15.0
					24 00	38.0	36.6	58	

Correction to local mean time is + 6m 28s. 90° torsion = 24.′6.
Torsion head at 0h 00m read 318° and at 24h 30m read 308°.
Observers—R. R. T. and W. J. P., who alternated from 20h 10m to 22h 20m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, November 19, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00*	39.7	40.7	22 27	−21.7
02	39.8	41.6	28	
04	38.0	42.4	27	
06	39.2	43.6	29	
08	38.8	43.0	28	
10	38.8	42.7	28	
12	40.5	43.6	29	
14	41.1	44.1	30	−21.0
16	41.8	45.5	32	
18	42.6	45.8	33	
20	42.6	46.0	33	
22	44.8	48.1	37	
24	46.5	49.3	39	
26	46.2	49.0	38	
28	46.8	48.8	39	
30	46.3	48.9	38	−20.0
32	46.8	49.0	39	
34	46.8	49.2	39	
36	46.4	48.3	38	
38	45.9	47.8	37	
40	45.4	46.7	36	
42	46.4	47.5	38	
44	46.9	47.8	38	−19.3
46	45.3	47.1	36	
48	45.7	47.1	37	
50	45.4	47.3	37	
52	45.3	47.1	36	
54	45.1	46.8	36	
56	44.5	46.2	35	
58	44.5	46.1	35	
17 00	44.0	45.2	34	−18.4
02	44.4	45.8	34	
04	44.3	45.8	34	
06	43.8	45.2	34	
08	43.2	44.7	33	
10	43.2	44.1	32	
12	43.2	43.8	32	
14	42.8	44.3	32	−18.0
16	40.9	43.8	30	
18	41.8	44.8	32	
20	40.7	42.3	29	
22	39.1	40.9	27	
24	37.7	40.2	25	
26	37.8	40.0	25	
28	38.2	40.8	26	
30	39.3	41.0	27	−17.8
32	38.9	42.0	27	
34	39.3	42.5	28	
36	40.1	42.8	29	
38	40.1	43.0	29	
40	39.3	41.8	27	
42	39.2	41.3	27	
44	38.6	40.8	26	−17.3
46	39.0	43.2	28	
48	39.3	43.8	29	
50	40.1	43.4	29	
52	39.5	42.7	28	
54	38.6	41.7	27	
56	38.7	42.4	27	
58	40.2	44.0	30	
18 00	40.8	44.3	22 30	−17.1
02	40.7	45.5	31	
04	39.6	44.1	29	
06	39.1	43.7	29	
08	40.3	44.7	30	
10	40.2	44.2	30	
12	41.0	44.8	31	
14	40.2	43.6	30	−16.8
16	41.7	42.9	30	
18	42.3	43.7	31	
20	42.2	43.2	31	
22	42.8	43.6	32	
24	42.7	43.7	32	
26	42.8	43.8	32	
28	42.0	42.8	30	
30	41.5	42.3	30	−16.5
32	39.2	40.4	26	
34	39.2	40.1	26	
36	37.8	38.7	24	
38	35.5	36.8	20	
40	34.8	38.2	21	
42	34.1	38.6	21	
44	36.0	40.8	24	−16.3
46	41.7	44.8	32	
48	41.8	44.2	32	
50	40.4	42.3	29	
52	38.7	40.8	26	
54	37.2	39.6	24	
56	36.9	39.7	24	
58	37.2	39.3	24	
19 00	36.1	37.7	22	
02	34.9	37.2	20	−16.2
04	34.8	37.1	20	
06	34.8	37.0	20	
08	35.4	37.8	21	
10	33.8	36.6	19	
12	32.7	35.4	17	
14	34.0	36.4	19	−16.0
16	32.9	34.4	16	
18	33.0	34.6	17	
20	36.1	37.8	22	
22	37.7	38.9	24	
24	36.8	37.7	22	
26	33.8	34.7	17	
28	32.2	33.2	15	
30	30.4	31.8	12	−15.8
32	31.0	32.8	14	
34	36.4	37.8	22	
36	51.0	53.4	22 46	
38	60.1	64.2	23 01	
40*2	41.9	45.0	22 48	
42	50.2	65.6	23 11	
44	32.9	45.9	22 42	−14.7
46*	21.2	51.8	45	
48	33.7	46.2	51	
50	18.9	33.9	29	
52	10.2	23.7	14	
54	6.0	18.9	07	
56*	37.8	52.9	06	
58	37.0	52.8	05	
20 00	38.3	52.8	06	−15.3

Correction to local mean time is + 8m 49s.
Torsion head at 14h 25m read 308° and at the end read the same.
Observer—R. R. T.

Friday, November 20, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	46.3	44.9	22 50	−11.4
02	50.7	45.6	46	
04	51.8	48.0	43	
06	52.4	49.2	41	
08	51.7	48.5	42	
10	50.1	47.2	45	
12	50.6	47.0	44	
14	51.1	47.6	44	−11.3
16	51.3	46.2	45	
18	49.9	45.2	46	
20	49.6	44.5	47	
22	50.7	45.8	46	
24	49.9	45.8	46	
26	50.0	45.9	46	
28	50.8	46.7	45	
30	50.7	46.8	45	−11.3
32	48.9	47.1	46	
34	50.2	48.5	44	
36	49.1	46.6	46	
38	50.8	48.9	43	
40	49.9	48.1	44	
42	49.8	48.8	44	
44	48.7	48.7	45	−11.1
46	50.3	48.3	44	
48	50.2	48.2	44	
50	50.0	48.3	44	
52	49.7	48.7	44	
54	50.2	49.0	43	
56	51.4	50.2	41	
58	50.4	49.3	43	
21 00	50.1	49.0	43	−11.0
02	52.7	50.3	40	
04	51.9	49.3	42	
06	55.0	53.1	36	
08	56.4	52.7	36	
10	57.7	55.2	33	
12	58.0	54.2	33	
14	57.9	54.2	33	−10.9
16	58.1	53.0	34	
18	57.0	52.2	35	
20	56.2	52.1	36	
22	56.2	52.8	36	
24	55.3	52.3	37	
26	54.6	52.1	38	
28	55.1	52.6	37	
30	55.8	53.2	36	−10.5
32	57.3	54.0	34	
34	55.0	52.1	37	
36	54.8	51.5	38	
38	53.2	50.2	40	
40	53.9	50.8	39	
42	53.9	50.4	39	
44	55.4	52.9	36	−10.3
46	54.7	52.9	37	
48	52.7	50.9	40	
50	56.4	56.0	33	
52	52.7	51.9	39	
54	49.7	47.7	45	
56	54.0	53.2	37	
58	57.5	55.9	32	
22 00	51.0	49.0	22 43	−10.2
02	48.8	48.2	45	
04	49.2	49.0	44	
06	49.2	49.1	44	
08	50.2	48.9	43	
10	51.3	49.7	42	
12	51.5	50.0	42	
14	51.8	49.8	41	−10.0
16	52.3	50.3	41	
18	52.8	50.9	40	
20	52.0	50.7	41	
22	52.6	51.2	40	
24	51.9	50.7	41	
26	49.8	48.4	44	
28	50.9	49.7	42	
30	49.8	48.2	44	−9.9
32	49.0	46.1	46	
34	48.0	45.2	48	
36	49.3	46.3	46	
38	50.5	47.9	44	
40	50.4	48.0	44	
42	49.9	47.5	45	
44	49.0	46.4	46	−9.8
46	48.3	46.0	47	
48	47.2	45.0	49	
50	47.4	45.2	48	
52	47.8	45.7	48	
54	48.3	46.1	47	
56	47.8	45.7	48	
58	48.5	45.9	47	
23 00	49.9	47.4	45	−9.7
02	51.6	47.2	44	
04	52.8	48.2	42	
06	55.0	48.0	40	
08	54.8	48.7	40	
10	56.3	50.9	37	
12	52.2	48.0	42	
14	52.1	47.2	43	−9.4
16	49.0	46.8	46	
18	49.7	47.9	44	
20	47.0	43.0	50	
22	47.2	42.5	51	
24	49.4	44.2	48	
26	43.6	39.0	56	
28	43.5	38.2	57	
30	42.7	37.8	22 58	−9.4
32	35.6	18.3	23 19	
34*	52.2	30.0	20	
36	35.9	18.8	42	
38	23.8	9.2	59	
40	29.8	15.9	49	
42*	46.0	15.6	23 26	
44	61.1	34.9	22 59	−9.3
46*	71.3	42.1	23	
48	74.8	47.2	16	
50	69.2	42.2	24	
52	64.7	39.0	30	
54	66.7	42.0	22 26	
56	42.9	21.6	23 01	
58	40.4	15.3	08	
24 00*	65.0	39.5	17	−9.2

Correction to local mean time is + 9m 03s.
Torsion head at 19h 30m read 318° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, November 22, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	38.0	39.0	22 35	-6.0	2 00	35.1	35.3	22 30	-3.3
02	38.0	39.3	35		02	33.8	34.3	28	
04	38.3	39.3	35		04	33.7	34.2	28	
06	37.8	38.6	34		06	35.7	36.0	31	
08	37.3	38.1	34		08	38.3	38.7	35	
10	36.5	37.3	32		10	42.3	43.9	42	
12	36.3	36.9	32		12	45.8	46.0	46	
14	36.3	36.8	32	-5.2	14	49.8	51.4	22 54	-3.3
16	36.0	36.8	32		16.9	55.3	56.3	23 02	
18	36.9	37.4	33		18	58.1	59.8	07	
20	37.1	37.7	33		20	61.2	62.1	11	
22	37.4	37.9	33		22	65.5	65.7	17	
24	37.9	38.5	34		24	69.3	69.9	24	
26	38.0	38.3	34		26	72.5	72.6	28	
28	37.5	38.0	34		28	74.4	74.8	32	
30	36.8	37.3	32	-4.6	30	75.6	76.8	34	-3.3
32	35.5	36.1	31		32	76.9	77.7	36	
34	34.7	35.3	29		34	75.3	77.5	34	
36	32.4	33.1	26		36	74.6	76.0	33	
38	29.5	30.0	21		38	71.1	73.1	28	
40	28.2	28.6	19		40	67.3	68.9	21	
42	29.3	29.7	21		42	68.3	69.9	23	
44	29.8	30.3	22	-4.2	44	67.6	68.3	21	-3.3
46	29.3	29.9	21		46	65.3	66.7	18	
48	28.6	29.2	20		48	61.2	61.7	11	
50	28.6	29.1	20		50	59.9	60.6	09	
52	29.9	30.3	22		52	61.8*a*		11	
54	31.3	31.6	24		54	65.9	67.0	19	
56	32.2	32.5	25		56	62.7	63.7	23 14	
58	33.3	33.5	27		58	52.3	53.7	22 58	
1 00	34.3	34.5	28	-4.0	3 00	58.0	60.0	23 07	-3.3
02	35.2	35.4	30		02	55.6	57.1	23 03	
04	37.2	37.6	33		04	53.2	54.3	22 59	
06	40.1	40.3	38		06	51.8	54.2	58	
08	41.1	41.7	39		08	48.9	49.1	51	
10	43.5	44.1	43		10	44.3	44.9	44	
12	43.6	44.6	44		12	47.0	49.0	22 50	
14	43.1	44.0	43	-3.8	14	54.9	57.3	23 02	-3.3
16	42.2	43.1	41		16	62.3	65.5	15	
18	42.3	43.2	41		18	59.7	62.9	11	
20	42.4	43.2	42		20	64.5	67.0	18	
22	41.9	42.9	41		22	73.2	76.1	32	
24	43.3	43.7	43		24*	28.3	39.7	31	
26	41.5	41.7	40		26	35.3	44.9	41	
28	40.6	41.0	38		28	47.0	56.3	23 59	
30	40.8	41.6	39	-3.5	30*	30.3	48.3	24 34	-3.3
32	41.2	41.8	40		32	35.8	55.8	45	
34	38.9	40.0	36		34	52.8	55.3	24 57	
36	37.9	38.9	35		36	60.2	69.3	25 14	
38	36.8	37.3	32		38*	52.3	73.2	25 50	
40	36.3	36.9	32		40*	49.7	68.3	26 20	
42	35.9	36.6	31		42*	20.0	44.8	24 42	
44	33.9	34.6	28	-3.4	44*	33.2	60.0	26 24	-3.3
46	33.1	33.6	27		46	49.8	50.3	26 29	
48	32.5	33.1	26		48	28.0	33.5	25 59	
50	32.4	32.9	26		50	18.7	25.3	25 45	
52	32.5	33.0	26		52*	30.8	31.6	24 59	
54	33.0	33.4	26		54	15.5	18.7	37	
56	34.6	35.0	29		56	10.4	12.0	27	
58	35.3	35.6	30		58	29.7	33.3	59	-3.2

Observer—W. J. P.

Sunday, November 22, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00*	66.8	62.8	24 49	-3.1	6 00	44.0	41.9	23 44	-3.4
02	68.0	60.6	50		02	46.3	44.8	39	
04	71.2	64.6	44		04	51.0*b*		31	
06	73.1	66.3	41		06	37.3	35.1	23 54	
08	69.5	61.3	48		08	34.0	30.2	24 00	
10	68.1	63.0	48		10	28.2	26.3	24 08	
12	71.2	69.3	40		12	38.6	36.3	23 52	
14*	57.7	51.7	26	-3.2	14	47.3	43.4	40	-3.4
16	66.3	61.3	24 12		16	43.3	38.9	46	
18	77.5	68.0	23 58		18	46.6	42.2	41	
20*	69.7	61.1	53		20	39.8	35.4	52	
22	69.6	67.8	48		22	41.1	36.3	50	
24*	52.5	42.2	37		24	57.6	52.1	25	
26	56.3	46.3	30		26	62.4	58.4	16	
28	56.8	53.8	24		28	57.2	52.3	25	
30	58.0	54.6	22	-3.2	30	49.6	45.6	36	-3.5
32	57.3	52.9	24		32	45.3	42.3	42	
34	57.0	53.2	24		34	46.5	43.3	40	
36	47.4	44.4	39		36	47.2	44.5	39	
38	47.4	47.0	37		38	50.0	47.2	35	
40	45.6	42.7	42		40	46.6	43.3	40	
42	38.3	36.9	52		42	40.2	38.0	50	
44	43.6	43.1	43	-3.2	44	35.6	33.6	23 57	-3.4
46	47.9	46.9	36		46	34.0	30.1	24 01	
48	52.7	51.9	29		48	32.6	30.3	24 02	
50	47.4	47.4	36		50	37.6	35.8	23 53	
52	37.9	37.1	23 52		52	31.2	28.8	24 04	
54	28.0*b*		24 07		54	28.9	26.4	24 08	
56	36.1	35.5	23 55		56	43.9	41.3	23 44	
58	39.3	37.6	51		58	57.3	51.9	25	
5 00	41.1	40.3	47	-3.2	7 00	67.5	64.1	08	-3.5
02	38.9	37.0	52		02	71.9	67.3	23 02	
04	39.0	35.6	52		04	75.4	71.2	22 56	
06	36.7	34.3	23 55		06	73.3	70.3	22 58	
08	30.1	27.6	24 06		08	65.0	61.9	23 11	
10	28.6	25.1	24 09		10	59.3	56.5	20	
12	36.3	33.5	23 56		12	64.7	63.0	11	
14	37.0	35.2	54	-3.3	14	70.5	67.5	23 03	-3.5
16.6	47.3	44.3	39		16	79.0	74.7	22 50	
18	49.0	45.0	37		18.5	75.5	72.6	22 55	
20	59.6	49.7	25		20	72.3	69.8	23 00	
22	59.0	54.3	22		22	74.3	71.3	57	
24	56.3	51.7	26		24	75.0	72.0	23 56	
26	59.3	54.7	22		26*	40.3	32.0	22 48	
28	57.3	53.1	24		28	31.8	23.8	23 01	
30	66.6	56.2	15	-3.3	30	26.3	19.6	09	-3.5
32	66.3	62.1	10		32	24.8	18.0	11	
34	66.8	63.3	09		34	24.3	18.0	12	
36	63.3	59.6	15		36	31.6	24.0	23 01	
38	60.5	56.8	19		38	34.0	26.6	22 57	
40	60.5	56.8	19		40	38.6	31.9	50	
42	57.8	52.0	25		42	47.3	39.6	37	
44	59.0	53.0	23	-3.4	44	54.6	52.2	21	-3.5
46	53.6	48.6	31		46	33.8	31.2	22 54	
48	48.9	44.5	38		48	28.7	25.2	23 03	
50	45.2	40.8	43		50	27.8	24.1	04	
52	40.5	35.7	51		52	25.5	21.4	08	
54	43.8	39.3	46		54	28.2	25.8	23 02	
56	44.5	36.3	48		56	33.2	30.9	22 55	
58	38.8	35.8	52		58	30.3	27.1	23 00	
					8 00	29.3	26.7	01	-3.5

Correction to local mean time is + 9m 32s.
Torsion head at 0h 00m read 314° and at 8h 17m read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, November 23, 1903 — Magnet scale erect					Tuesday, November 24, 1903 — Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	37.8	42.9	22 35	-10.0	10 00	37.3	38.6	22 31	-6.0
02	39.2	43.8	37		02	37.2	39.0	31	
04	41.5	42.9	38		04	29.8	32.8	21	
06	38.1	40.2	33		06	29.7	31.2	19	
08	37.3	40.2	32		08	28.8	29.8	17	
10	38.8	42.4	35		10	33.3	34.3	24	
12	34.6	37.9	28		12	32.8	35.0	25	
14	35.8	39.1	30	-9.5	14	29.1	31.2	19	-6.2
16	37.4	39.9	32		16	34.0	36.8	27	
18	37.4	39.1	31		18	35.0	38.4	29	
20	32.3	33.5	23		20	35.9	38.8	30	
22	35.0	36.3	27		22	34.2	37.3	27	
24	38.2	39.3	32		24	39.1	41.2	34	
26	38.1	38.5	32		26	41.1	42.2	37	
28	29.7	30.2	18		28	41.2	42.1	37	
30	32.0*a*		22		30	39.1	39.9	33	-5.9
32	39.9	42.1	36	-9.0	32	35.3	35.8	27	
34	33.8	34.4	25		34	34.8	35.3	26	
36	33.3*b*		24		36	32.0	33.7	23	
38	28.5	29.3	17		38	33.1	35.0	25	
40	39.6	40.0	22 34		40	32.7	34.1	24	
42	60.1	60.3	23 06		42	32.3	34.1	24	
44	47.2	50.9	22 48	-8.4	44	32.8	34.7	24	-5.6
46	37.0	39.2	31		46	36.0	37.6	29	
48	40.7	43.9	38		48	37.0	39.0	31	
50	35.8	39.1	30		50	35.5	36.9	28	
52	33.9	37.3	27		52	34.1	35.7	26	
54	35.0	38.2	29		54	36.0	36.9	28	
56	35.1	37.8	28		56	36.1	36.8	28	
58	34.3	37.9	28		58	36.7	37.3	30	
9 00	35.0	36.9	28	-8.0	11 00	35.9	36.3	28	-5.4
02	37.1	38.2	30		02	35.8	36.1	28	
04	39.0	40.2	34		04	39.7	40.4	34	
06	38.0	39.1	32		06	38.4	40.1	33	
08	35.6	36.8	28		08	36.2	38.0	30	
10	36.7	37.9	30		10	33.2	34.3	24	
12	37.0	38.4	31		12	34.2	35.3	26	
14	33.2	35.8	26	-7.6	14	36.6	37.8	30	-5.2
16	34.1	37.1	27		16	37.2	38.9	31	
18	36.8	40.3	32		18	31.1	32.1	21	
20	31.1	34.5	23		20	29.5	30.6	18	
22	31.8	35.6	24		22	27.8*b*		15	
24	32.1	34.8	24		24	26.6	28.1	14	
26	29.2	31.9	19		26	30.1	30.1	19	
28	34.8	36.3	27		28	27.3	27.8	15	
30	34.5	35.1	26	-7.2	30	24.8	25.7	11	-5.1
32	37.8	38.3	31		32	22.0	22.8	07	
34	39.2	40.7	34		34	25.5	25.8	12	
36	36.6	37.2	29		36	26.8	27.2	14	
38	36.3	36.7	29		38	29.7	32.4	20	
40	34.3	35.0	26		40.3	32.3	35.1	24	
42	33.3	34.3	24		42	34.5	36.8	27	
44	29.2	30.3	18	-6.8	44	34.9	37.2	28	-5.0
46	28.0	28.3	16		46	35.0	36.9	28	
48	28.1	31.0	18		48	35.1	39.0	30	
50	35.6	35.8	27		50	33.4	37.7	27	
52	36.8	37.9	30		52	30.8	34.9	23	
54	35.5	37.7	29		54	33.2	36.8	26	
56	36.2	37.3	29		56	35.9	39.1	30	
58	37.1	40.7	32		58	35.7	38.5	30	
					12 00	36.0	39.7	31	-4.8
					12 00	43.7	42.3	22 24	-6.5
					03	42.6	40.9	26	
					04	42.8	41.4	26	
					06	45.7	43.8	22	
					08	48.8	45.3	18	
					10	49.8	46.9	16	
					12	53.1	49.1	12	
					14	51.7	48.9	13	-6.2
					16	48.2	45.2	19	
					18	46.1	42.2	23	
					20	43.1	38.1	28	
					22	44.7	40.2	25	
					24	42.9	37.8	29	
					26	43.8	38.6	27	
					28	44.3	39.2	26	
					30	41.9	37.3	30	-6.1
					32	42.9	39.7	27	
					34	44.2	40.4	25	
					36	44.4	41.3	25	
					38	45.0	42.3	23	
					40	47.2	44.8	20	
					42	45.8	43.1	22	
					44	44.3	41.7	24	-6.0
					46	42.5	40.1	27	
					48	42.0	39.3	28	
					50	40.9	38.2	30	
					52	39.1	37.3	32	
					54	39.1	38.0	31	
					56	37.7	36.2	34	
					58	39.0	37.2	32	
					13 00	39.3	37.1	32	-5.8
					02	38.7	37.3	32	
					04	37.0	35.9	35	
					06	36.1	35.0	36	
					08	35.9	35.0	36	
					10	37.2	36.7	34	
					12	35.1	34.9	37	
					14	35.2	34.8	37	-5.4
					16	36.0	34.6	36	
					18	36.3	35.2	36	
					20	36.6	35.5	35	
					22	35.6	34.6	37	
					24	34.6	33.2	39	
					26	34.7	33.7	38	
					28	32.9	31.9	41	
					30	31.0	30.6	43	-5.2
					32	30.2	29.9	45	
					34	30.4	29.8	45	
					36	32.2	32.0	41	
					38	33.3	32.9	40	
					40	32.2	32.2	41	
					42	32.8	32.1	41	
					44	33.8	32.9	40	-4.9
					46	32.7	32.3	41	
					48	30.9	28.9	45	
					50	28.8	27.3	48	
					52	29.2	27.2	48	
					54	30.8	29.2	45	
					56	32.2	30.1	43	
					58	32.4	30.3	43	
					14 00	32.0	29.9	22 43	-4.7
					02	32.6	30.8	42	
					04	32.4	30.3	43	
					06	31.9	30.3	43	
					08	32.6	30.9	42	
					10	32.1	30.6	43	
					12	32.6	30.9	42	
					14	32.3	31.0	42	-4.6
					16	32.1	30.4	43	
					18	31.9	30.1	43	
					20	30.6	29.0	45	
					22	30.6	29.2	45	
					24	30.9	29.5	44	
					26	30.4	28.8	45	
					28	29.8	28.2	46	
					30	29.0	27.8	47	-4.3
					32	30.0	28.3	46	
					34	30.0	28.6	46	
					36	30.0	28.9	46	
					38	30.4	29.3	45	
					40	30.7	29.8	44	
					42	29.2	28.3	47	
					44	29.5	27.9	47	-4.1
					46	29.8	28.6	46	
					48	30.2	29.1	45	
					50	32.0	31.0	42	
					52	32.0	30.6	43	
					54	29.9	28.2	46	
					56	30.0	28.7	46	
					58	30.7	29.1	45	
					15 00	30.8	29.8	44	-4.0
					02	31.0	30.2	44	
					04	31.3	30.5	43	
					06	31.9	31.0	43	
					08	30.9	30.0	44	
					10	30.9	30.1	44	
					12	30.6	30.0	44	
					14	29.9	29.3	45	-3.8
					16	29.9	28.9	46	
					18	29.1	28.7	47	
					20	31.6	30.1	43	
					22	32.2	31.4	42	
					24	32.0	31.1	42	
					26	31.6	30.6	43	
					28	30.3	29.5	45	
					30	28.9	28.0	47	-3.6
					32	28.0	26.8	49	
					34	28.3	27.1	48	
					36	27.5	26.4	50	
					38	28.0	26.9	49	
					40	28.7	27.9	47	
					42	29.2	28.6	47	
					44	29.7	28.9	46	-3.4
					46	30.6	29.7	45	
					48	31.8	31.0	43	
					50	32.8	31.6	41	
					52	30.6	29.0	45	
					54	29.8	28.2	46	
					56	29.1	28.1	47	
					58	28.9	27.8	47	
					16 00	28.9	27.9	47	-3.2

Correction to local mean time is + 28s.
Torsion head at 7h 25m read 310° and at 12h 15m read the same.
Observer—R. R. T.

Correction to local mean time is — 22s.
Torsion head at 11h 52m read 307° and at 16h 25m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 25, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	39.7	41.7	22 30	-9.8
02	40.9	42.6	31	
04	42.3	43.8	33	
06	43.0	44.3	34	
08	43.0	44.5	34	
10	43.2	44.4	35	
12	43.2	44.3	34	
14	43.0	44.3	34	-9.2
16	43.3	44.6	35	
18	43.0	44.3	34	
20	43.6	44.6	35	
22	43.6	44.6	35	
24	43.5	44.6	35	
26	44.2	44.9	36	
28	44.2	45.8	37	
30	43.8	44.6	35	-8.7
32	43.6	44.0	35	
34	43.6	44.2	35	
36	43.0	43.6	34	
38	43.5	44.3	35	
40	44.0	44.9	36	
42	44.3	45.0	36	
44	44.6	45.5	37	-8.2
46	44.8	45.5	37	
48	45.3	45.6	37	
50	46.4	47.0	39	
52	46.0	46.6	39	
54	45.6	46.0	38	
56	47.8	48.5	41	
58	49.3	49.6	43	
1 00	48.3	48.8	42	-7.8
02	48.5	48.7	42	
04	48.3	49.6	43	
06	48.0	48.4	42	
08	47.9	48.5	42	
10	47.3	47.7	40	
12	47.6	48.0	41	
14	48.1	48.5	42	-7.3
16	46.6	47.3	40	
18	47.6	48.3	41	
20	48.6	49.0	42	
22	48.3	48.6	42	
24	47.6	48.3	41	
26	48.0	48.4	42	
28	48.6	49.3	43	
30	47.3	47.9	41	-7.0
32	47.5	48.2	41	
34	47.8	48.2	41	
36	46.3	46.6	39	
38	45.8	46.3	38	
40	45.6	46.1	38	
42	46.5	46.8	39	
44	46.1	46.3	38	-6.8
46	46.4	46.8	39	
48	47.2	47.6	40	
50	46.9	47.3	40	
52	46.3	46.9	39	
54	46.1	46.6	39	
56	46.4	46.9	39	
58	46.6	47.1	39	
2 00	46.3	46.6	22 39	-6.3
02	45.8	46.3	38	
04	45.8	46.2	38	
06	46.3	46.8	39	
08	46.3	46.8	39	
10	46.3	46.8	39	
12	46.6	47.1	39	
14	46.6	47.0	39	-6.1
16	46.8	47.0	39	
18	48.2	48.4	42	
20	47.8	48.2	41	
22	47.5	47.8	41	
24	47.3	47.7	40	
26	48.2	48.4	42	
28	48.6	48.8	42	
30	48.8	49.2	43	-6.0
32	49.3	49.4	43	
34	47.6	47.8	41	
36	46.0	46.2	38	
38	45.7	46.0	38	
40	46.3	46.6	39	
42	46.6	47.3	39	
44	47.3	47.9	41	-6.0
46	47.6	48.3	41	
48	48.0	48.6	42	
50	48.3	48.9	42	
52	48.6	49.2	43	
54	48.1	48.6	42	
56	47.3	47.9	41	
58	47.2	47.8	40	
3 00	47.0	47.6	40	-5.8
02	46.7	47.3	40	
04	46.9	47.3	40	
06	47.2	47.7	40	
08	46.7	47.3	40	
10	47.1	47.5	40	
12	47.8	48.3	41	
14	47.9	48.6	42	
16	48.3	48.8	42	-5.6
18.2	48.8	49.5	43	
20	49.8	49.2	44	
22	48.7	49.3	43	
24	47.9	48.6	42	
26	47.6	48.3	41	
28	47.6	48.0	41	
30	48.1	48.4	42	-5.4
32	47.9	48.2	41	
34	47.3	47.7	40	
36	47.3	47.6	40	
38	46.8	47.2	40	
40	46.8	47.2	40	
42	47.3	47.6	40	
44	46.5	46.8	39	-5.3
46	46.5	46.9	39	
48	46.7	47.3	40	
50	46.9	47.3	40	
52	47.3	47.7	40	
54	47.6	47.8	41	
56	47.2	47.6	40	
58	46.6	47.0	39	

Observer—W. J. P.

Wednesday, November 25, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	46.2	46.5	22 39	-5.2
02	46.8	47.0	40	
04	47.0	47.4	40	
06	46.9	47.3	40	
08	47.2	47.6	40	
10	47.4	47.7	40	
12	47.7	47.8	41	
14	48.4	48.6	42	
16	49.3	49.5	43	-5.1
18	48.8	49.3	43	
20	49.3	49.5	43	
22	48.1	48.5	42	
24	47.7	48.0	41	
26	47.0	47.3	40	
28	46.6	47.0	39	
30	46.0	46.6	39	-5.0
32	47.2	47.5	40	
34	47.6	47.8	41	
36	47.7	47.9	41	
38	48.0	48.2	41	
40	47.8	48.3	41	
42	47.9	48.2	41	
44	47.3	47.6	40	-5.0
46	47.0	47.3	40	
48	46.0	46.0	38	
50	44.3	44.9	36	
52	43.8	44.0	35	
54	42.6	43.6	33	
56	43.3	43.8	34	
58	43.1	43.5	34	-5.0
5 00	43.4	43.6	34	
02	43.3	43.7	34	
04	44.2	44.4	35	
06	44.3	44.6	36	
08	43.6	43.8	34	
10	43.1	43.3	34	
12	42.8	42.9	33	
14	43.9	44.0	35	-5.0
16	45.3	45.6	37	
18	46.5	46.8	39	
20	48.3	48.6	42	
22	50.6	50.6	45	
24	51.6	51.8	47	
26	54.7	54.9	52	
28	56.1	56.3	54	
30	51.9	52.4	48	-4.9
32	47.4	47.7	40	
34	45.8	46.0	38	
36	47.0	47.3	40	
38	48.2	48.6	42	
40	46.8	47.1	40	
42	45.3	45.3	37	
44	45.0	45.2	37	-4.8
46	42.7	43.0	33	
48	43.6	43.6	34	
50	54.5a		52	
52	57.3	57.9	56	
54	55.0	55.6	53	
56	54.0	54.9	51	
58	51.5	52.4	47	
6 00	47.5	48.3	22 41	-4.7
02	50.6	51.0	46	
04	51.6	52.3	47	
06	50.3	50.9	45	
08	46.6	47.8	40	
10	43.5	44.5	35	
12	46.1	46.4	38	
14	45.8	46.0	38	-4.6
16	41.9	42.6	32	
18	44.6	45.6	37	
20	50.6	51.7	46	
22	49.3	50.3	44	
24	47.9	48.6	42	
26	47.0	47.6	40	
28	48.3	48.9	42	
30	48.3	48.9	42	
32	46.6	47.6	40	-4.6
34	42.6	43.2	33	
36	40.5	41.9	31	
38	46.8	48.0	40	
40	41.6	42.8	32	
42	39.7	41.3	30	
44	45.3	46.7	38	-4.6
46	49.7	50.7	45	
48	42.6	43.6	34	
50	40.8	41.6	31	
52	43.0	43.6	34	
54	43.6	44.4	35	
56	42.3	43.6	33	
58	41.2	42.6	32	
7 00	42.3	43.7	33	-4.6
02	43.0	44.3	34	
04	44.6	45.6	37	
06	45.0	46.6	38	
08	44.7	46.3	37	
10	42.8	44.5	34	
12	42.6	43.5	33	
14	41.7	42.7	32	-4.6
16	41.3	41.6	31	
18	42.3	42.7	33	
20	42.3	43.1	33	
22	41.3	42.3	32	
24	40.9	41.8	31	
26	42.2	42.6	32	
28	41.6	41.6	31	
30	43.3	44.1	34	-4.5
32	42.7	43.7	34	
34	40.3	40.8	30	
36	39.3	40.7	29	
38	38.5	41.3	29	
40	43.2	44.9	35	
42	47.5	49.3	42	
44	43.8	45.9	36	-4.5
46	41.2	43.1	32	
48	47.3	49.1	42	
50	42.4	44.3	34	
52	42.2	43.7	33	
54	44.3	46.2	37	
56	43.2	45.8	36	
58	41.9	44.4	34	

Observers—W. J. P. and R. R. T., who alternated from 7h 44m to 7h 54m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 25, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	41.7	43.1	22 33	−4.2
02	42.2	44.1	34	
04	43.0	44.8	35	
06	41.1	42.4	31	
08	38.3	40.2	27	
10	37.2	39.1	26	
12	38.8	40.7	28	
14	38.3	40.9	28	−4.0
16	37.3	39.7	26	
18	37.7	39.2	26	
20	39.0	41.0	29	
22	38.6	40.0	28	
24	40.0	42.1	30	
26	43.7	46.1	36	
28	45.2	47.1	38	
30	44.9	48.3	39	−4.1
32	47.6	49.1	42	
34	46.3	49.2	41	
36	39.3	43.5	31	
38	37.7	39.7	27	
40	38.8	41.9	29	
42	32.6	34.9	19	
44	36.2	38.1	24	−4.3
46	43.1	45.0	35	
48	43.3	45.5	36	
50	43.8	44.8	35	
52	41.4	42.8	32	
54	44.3	46.0	37	
56	44.4	45.2	36	
58	40.3	40.7	30	
9 00	36.8	38.2	25	−4.4
02	35.8	38.0	24	
04	38.6	42.5	30	
06	38.9	42.9	30	
08	42.6	46.2	36	
10	38.3	41.7	29	
12	37.7	41.4	28	
14	40.7	43.2	32	−4.5
16	42.6	44.7	34	
18	33.3	37.6	22	
20	37.0	43.0	29	
22	43.8	48.7	38	
24	43.1	47.9	37	
26	39.8	43.8	32	
28	38.0	40.9	28	
30	39.5	43.0	31	−4.6
32	36.9	40.8	27	
34	32.1	33.3	17	
36	34.1	38.0	22	
38	32.2	36.2	20	
40	34.0	39.7	24	
42	34.8	43.7	27	
44	34.1	41.6	25	−4.8
46	36.1	42.9	28	
48	35.4	43.2	28	
50	35.3	42.2	27	
52	36.1	43.8	28	
54	37.2	43.9	29	
56	32.5	41.0	23	
58	34.1	42.2	26	
10 00	32.3	40.7	22 23	−5.0
02	35.1	44.2	28	
04	35.2	44.1	28	
06	36.3	44.3	29	
08	34.6	41.8	26	
10	38.6	45.8	32	
12	37.2	44.7	30	
14	36.5	44.8	30	−5.1
16	34.0	41.2	25	
18	35.3	42.1	27	
20	36.0	42.1	27	
22	38.0	44.0	30	
24	38.3	44.2	31	
26	39.3	44.2	31	
28	35.8	40.6	26	
30	36.2	40.8	26	−5.0
32	37.1	42.3	28	
34	38.7	43.1	30	
36	38.9	43.1	30	
38	38.5	42.8	30	
40	39.1	42.9	30	
42	40.2	43.7	32	
44	38.1	41.9	29	−4.9
46	39.0	42.0	29	
48	39.7	42.9	31	
50	37.4	40.6	27	
52	37.6	40.7	27	
54	36.2	38.6	25	
56	38.2	39.6	27	
58	41.0	42.7	32	
11 00	41.6	43.2	32	−4.8
02	38.9	40.8	28	
04	40.8	41.8	31	
06	40.5	41.8	30	
08	40.2	41.6	30	
10	39.3	40.9	29	
12	39.3	40.8	29	
14	40.1	41.6	30	−4.8
16	41.6	43.0	32	
18	41.9	43.0	32	
20	41.9	43.1	33	
22	40.9	41.8	31	
24	41.3	42.8	32	
26	39.9	41.5	30	
28	39.9	41.2	29	
30	41.0	42.9	32	−4.7
32	40.7	43.1	32	
34	39.8	42.2	30	
36	38.7	40.5	28	
38	37.7	39.7	27	
40	39.2	41.4	29	
42	39.0	40.6	28	
44	39.8	41.2	29	−4.7
46	40.9	42.7	32	
48	41.5	43.2	32	
50	41.4	43.0	32	
52	43.2	44.7	35	
54	42.8	44.3	34	
56	41.6	43.0	32	
58	41.8	43.7	33	

Observer—R. R. T.

Wednesday, November 25, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	41.2	43.1	22 32	−4.6
02	42.1	44.1	34	
04	41.8	43.5	33	
06	40.1	41.3	30	
08	39.2	40.8	29	
10	40.3	42.1	31	
12	40.8	42.0	31	
14	40.0	41.2	30	−4.4
16	39.4	40.8	29	
18	40.1	41.7	30	
20	41.0	42.2	31	
22	41.8	43.0	32	
24	42.0	43.0	33	
26	42.2	43.6	33	
28	43.0	44.0	34	
30	43.7	44.7	35	−4.3
32	42.6	44.0	34	
34	42.2	43.3	33	
36	41.6	42.8	32	
38	40.1	41.3	30	
40	39.3	40.3	28	
42	40.7	41.1	30	
44	42.4	42.8	33	−4.2
46	41.9	42.5	32	
48	42.3	42.7	33	
50	42.7	43.0	33	
52	42.2	43.1	33	
54	42.2	42.8	33	
56	42.8	43.3	33	
58	43.2	43.9	34	
13 00	43.3	43.9	34	−4.3
02	43.9	44.9	35	
04	43.8	44.8	35	
06	43.8	44.6	35	
08	43.0	44.7	35	
10	42.1	43.7	33	
12	41.7	42.8	32	
14	41.0	42.0	31	−4.7
16	39.6	41.2	29	
18	39.8	41.2	29	
20	38.2	40.0	27	
22	38.0	40.8	28	
24	38.3	40.9	28	
26	39.2	42.7	30	
28	38.3	39.2	27	
30	37.7	40.5	27	−5.0
32	37.4	40.2	27	
34	38.0	40.0	27	
36	38.2	39.9	27	
38	38.3	42.1	29	
40	38.0	42.2	29	
42	38.9	42.6	30	
44	39.5	44.0	31	−5.0
46	40.0	43.1	31	
48	38.8	41.7	29	
50	37.8	41.1	28	
52	39.2	42.7	30	
54	39.5	42.7	30	
56	39.8	42.7	31	
58	39.8	42.2	30	
14 00	39.2	41.8	22 29	−5.0
02	39.5	42.0	30	
04	39.4	41.8	30	
06	39.3	41.5	29	
08	40.1	42.2	30	
10	41.3	43.2	32	
12	39.2	41.0	29	
14	39.0	41.0	29	−5.0
16	39.4	41.2	29	
18	38.8	40.1	28	
20	38.4	40.1	27	
22	39.8	41.4	30	
24	40.5	42.0	31	
26	40.5	42.0	31	
28	40.8	42.2	31	
30	40.4	42.2	31	−5.0
32	41.0	42.4	31	
34	40.2	42.0	30	
36	40.7	42.3	31	
38	39.9	41.1	29	
40	39.2	40.3	28	
42	39.1	40.2	28	
44	39.9	40.9	29	−5.0
46	39.0	40.0	28	
48	39.1	40.1	28	
50	39.2	40.1	28	
52	39.8	40.7	29	
54	39.1	40.0	28	
56	37.8	38.8	26	
58	38.0	38.8	26	
15 00	38.6	39.3	27	−5.2
02	38.8	39.7	27	
04	38.0	38.8	26	
06	38.1	38.9	26	
08	37.8	38.2	26	
10	37.9	38.4	26	
12	37.5	38.0	25	
14	37.7	38.0	25	−5.2
16	38.3	38.7	26	
18	38.8	39.2	27	
20	39.3	39.7	28	
22	39.9	40.2	29	
24	40.2	40.5	29	
26	40.1	40.2	29	
28	40.1	40.3	29	
30	40.1	40.4	29	−5.2
32	40.2	40.7	29	
34	39.9	40.5	29	
36	41.0	41.8	31	
38	42.1	42.5	32	
40	41.9	42.3	32	
42	42.2	42.8	33	
44	43.8	44.2	35	−5.2
46	43.7	44.0	35	
48	43.3	43.6	34	
50	43.2	43.5	34	
52	43.5	43.8	34	
54	43.7	43.9	35	
56	43.4	43.8	34	
58	44.1	44.3	35	

Observers—R. R. T. and R. W. P., who alternated from 13h 28m to 13h 38m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, November 25, 1903 — Magnet scale erect									Wednesday, November 25, 1903 — Magnet scale erect									
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	44.3	44.7	22 36	−5.3	18 00	42.1	43.8	22 45	−5.4	20 00	27.6	28.0	22 21	−5.8	22 00	25.6	28.9	22 20	−5.0
02	44.7	44.8	36		02	41.8	43.8	45		02	27.0	27.3	20		02	28.9	32.6	26	
04	44.1	44.3	35		04	43.0	44.9	47		04	27.8	28.1	22		04.2	33.3	35.3	32	
06	44.7	44.8	36		06	41.0	43.0	44		06	29.0	29.5	24		06	33.5	37.2	33	
08	44.4	44.6	36		08	39.9	41.4	42		08	27.0	27.3	20		08	31.3	34.7	30	
10	44.0	44.2	35		10	38.3	40.1	39		10	25.3	26.0	18		10	32.3	35.2	31	
12	43.9	44.1	35		12	37.4	38.7	37		12	26.6	27.0	20		12	31.7	34.3	30	
14	43.9	44.1	35	−5.3	14	37.5	38.9	38	−5.8	14	28.0	29.0	23	−6.0	14	31.1	33.2	28	−4.9
16	43.1	43.3	34		16	40.0	40.6	41		16	25.8	28.2	20		16	33.6	36.6	33	
18	43.3	43.7	34		18	40.8	41.9	43		18	26.3	28.7	21		18	27.0	30.3	23	
20	43.4	43.6	34		20	44.2	44.3	47		20	26.3	27.0	20		20	29.3	32.1	26	
22	42.9	43.3	34		22	43.0	44.0	46		22	26.3	28.3	21		22	29.2	31.8	26	
24	42.8	43.2	33		24	43.2	44.2	46		24	28.7	30.5	24		24	30.6	32.6	27	
26	42.6	43.0	33		26	39.3	41.6	41		26	31.6	32.7	28		26	31.8	33.2	29	
28	42.5	42.9	33		28	46.9	47.3	52		28	26.3	29.7	22		28	31.3	33.0	28	
30	43.0	43.2	34	−5.2	30	46.7	47.4	52	−5.9	30	25.6	26.6	19	−5.9	30	33.3	33.9	31	−4.9
32	44.0	44.2	35		32	40.8	42.3	43		32	35.2	36.6	34		32	32.6	33.6	30	
34	44.9	45.1	37		34	38.5	38.9	38		34	31.8	32.3	28		34	30.3	31.3	26	
36	45.4	45.8	38		36	37.2	38.2	37		36	32.3	33.3	29		36	29.5	30.7	25	
38	44.8	45.2	37		38	38.2	38.4	38		38	34.4	36.4	33		38	32.5	34.7	31	
40	43.7	44.0	35		40	36.6	37.0	36		40	43.8	46.8	49		40	33.5	34.9	31	
42	42.9	43.2	33		42	33.2	33.7	30		42	42.0	46.3	47		42	34.9	36.3	34	
44	42.8	43.0	33	−5.2	44	34.0	34.2	31	−5.8	44	36.3	39.0	37	−5.5	44	31.8	34.2	30	−4.8
46	42.5	42.7	33		46	38.3a		38		46	35.2	38.0	35		46	33.6	36.0	32	
48	42.6	42.9	33		48	45.3	45.4	49		48	33.0	34.6	31		48	33.2	35.0	31	
50	42.1	42.3	32		50	46.6	47.4	52		50	37.1	38.1	37		50	32.1	33.8	29	
52	41.6	41.9	31		52	37.6	40.9	39		52	40.3	43.3	43		52	32.9	33.6	30	
54	40.2	40.5	29		54	34.1	37.8	34		54	35.6	37.6	22 35		54	31.8	33.3	29	
56	39.7	40.0	28		56	33.0	36.4	32		56	46.8	58.8	23 01		56	33.0	34.7	31	
58	39.2	39.3	27		58	31.1	33.8	29		58	46.6	62.6	04		58	32.5	34.1	30	
17 00	38.9	39.3	27		19 00	23.5	25.3	16	−5.4	21 00	48.2	68.2	09	−5.3	23 00	30.4	32.3	27	−4.8
02	38.8	39.0	27	−5.3	02	19.8	23.2	12		02	66.8	79.0	23 32		02	33.0	34.5	31	
04	37.8	38.2	26		04.3	24.2	28.2	19		04	Lost				04	31.6	33.3	29	
06	37.8	38.0	25		06	27.2	30.6	23		06	27.7	36.3	22 28		06	33.3	35.5	32	
08	37.6	37.8	25		08	27.1	30.5	23		08	29.0	37.0	30		08	33.8	36.2	33	
10	34.8	35.0	21		10	30.2	32.6	27		10	27.2	34.8	26		10	34.6	37.0	34	
12	34.2	35.8	21		12	31.9	34.0	29		12	30.3	37.5	31		12	35.2	37.7	35	
14	34.1	35.0	20	−5.2	14	31.5	34.1	29	−5.2	14	26.3	33.3	25	−5.1	14	34.5	37.2	34	−4.9
16	40.6	42.2	31		16	29.3	31.3	25		16.2	24.3	28.2	19		16	34.4	36.8	34	
18	49.0	50.2	44		18	25.6	28.3	20		18	23.6	28.4	19		18	35.6	37.8	35	
20	57.4	58.0	22 56		20	28.7	31.1	25		20	22.1	28.7	18		20	33.3	35.0	31	
22*	32.1	38.0	23 18		22	31.2	32.6	28		22	28.2	31.6	25		22	31.0	32.2	27	
24	17.8	24.2	22 56		24	32.3	33.3	29		24	29.8	31.3	26		24	33.8	37.2	34	
26	19.0	24.9	57		26	31.5	32.6	28		26	21.4	22.8	13		26	32.5	34.3	30	
28	21.8	22.8	58		28	32.0	32.8	29		28	26.7	29.2	22		28	32.5	34.0	30	
30	19.1	21.2	54	−5.2	30	30.4	31.2	26	−5.2	30	26.7	33.1	25	−5.0	30	34.3	35.3	32	−5.0
32	18.9	19.3	53		32	29.9	30.9	25		32	40.0	45.6	45		32	35.3	36.3	34	
34	22.0	23.3	22 58		34	30.4	31.3	26		34	36.5	41.7	39		34	34.6	36.6	34	
36	23.3	26.0	23 01		36	30.4	31.2	26		36	26.8	34.3	26		36	32.7	34.3	30	
38	13.5	17.0	22 47		38	30.6	31.4	26		38	29.6	37.8	31		38	32.8	34.2	30	
40	10.5	14.2	42		40	30.6	31.2	26		40	26.3	38.6	29		40	34.5	36.1	33	
42*	43.9	46.0	48		42	29.9	30.7	25		42	28.6	36.8	29		42	36.5	37.8	36	
44	43.9	46.6	49	−5.3	44	30.7	31.3	26	−5.5	44	32.8	37.2	33	−5.0	44	35.8	36.9	35	−5.0
46	42.3	45.6	47		46	30.7	31.3	26		46	32.8	36.2	32		46	36.2	36.5	35	
48	40.0	42.6	43		48	29.7	30.3	25		48	36.3	39.6	37		48	34.4	35.5	33	
50	41.8	44.3	45		50	29.0	29.6	24		50	34.0	38.6	35		50	36.4	37.3	36	
52	43.7	45.4	48		52	29.9	30.2	25		52	27.2	31.2	24		52	36.9	37.4	36	
54	42.4	44.3	46		54	30.4	30.8	26		54.2	25.4	27.8	20		54	37.3	37.8	37	
56	41.5	44.0	45		56	29.7	29.9	25		56	28.4	31.7	25		56	33.8	34.6	31	
58	42.3	43.8	45		58	24.1	24.3	16		58	26.8	29.2	22		58	34.2	34.9	32	
															24 00	36.3	37.6	36	

Observers—R. W. P. and W. J. P., who alternated from 19h 00m to 19h 14m.

Correction to local mean time is — 05s.
Torsion head at 0h 00m read 307° and at 24h 25m read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, November 26, 1903 — Magnet scale inverted									Friday, November 27, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	52.7	51.7	22 34	-8.4	18 00	51.3	51.0	22 36	-6.8	20 00*	38.8	40.1	22 31	-10.9	22 00	40.0	40.2	22 32	-8.5
02	53.0	51.8	34		02	51.6	51.1	36		02	36.2	37.2	27		02	38.9	39.1	30	
04	53.1	52.1	34		04	51.8	51.3	36		04	37.3	38.3	29		04	38.9	39.0	30	
06	53.1	52.4	34		06	51.9	51.7	35		06	38.6	40.0	31		06.2	38.9	39.0	30	
08	53.0	52.3	34		08	51.9	51.8	35		08	40.0	41.2	33		08	39.0	39.2	31	
10	52.5	52.0	34		10	51.9	51.8	35		10	40.7	41.9	34		10	38.6	38.8	30	
12	53.0	52.3	34		12	52.0	52.0	35		12	39.7	40.7	32		12	39.1	39.3	31	
14	53.2	52.7	33	-8.1	14	51.9	51.9	35	-6.8	14	40.0	40.9	33	-10.4	14	39.0	39.0	30	-8.2
16	53.3	52.8	33		16	51.9	51.8	35		16	39.9	40.8	33		16	39.0	39.4	31	
18	53.7	53.0	33		18	51.9	51.7	35		18	39.9	40.7	33		18	38.7	39.2	30	
20	54.0	53.3	32		20	51.8	51.2	36		20	39.8	40.3	32		20	39.1	39.7	31	
22	53.7	53.1	33		22	51.9	51.4	35		22	40.1	40.8	33		22	40.0	40.3	32	
24	53.3	53.0	33		24	51.8	51.4	35		24	40.1	40.6	33		24	39.3	39.9	31	
26	53.2	52.9	33		26	51.8	51.4	35		26	40.9	41.4	34		26	40.2	40.8	33	
28	53.1	52.6	34		28	51.8	51.3	36		28	41.9	42.4	35		28	38.0	38.2	29	
30	53.2	52.7	33	-8.0	30	52.0	51.7	35	-6.8	30	41.9	42.4	35	-10.0	30	36.9	37.1	27	-8.1
32	53.6	52.9	33		32	52.3	52.0	35		32	40.8	41.2	34		32	35.3	36.0	25	
34	53.3	52.6	33		34	52.6	52.2	34		34	40.0	40.5	32		34	35.8	36.7	26	
36	52.9	52.1	34		36	52.1	52.0	35		36	40.7	41.0	33		36	37.1	37.9	28	
38	52.5	51.8	35		38	51.8	51.4	35		38	40.8	41.2	34		38	35.7	36.1	25	
40	52.0	51.2	35		40	51.2	51.1	36		40	40.2	40.7	33		40	35.2	35.8	25	
42	51.9	51.2	36		42	51.0	50.8	37		42	40.1	40.6	33		42	33.3	34.3	22	
44	51.9	51.1	36	-7.8	44	51.2	50.9	36	-6.8	44	40.6	41.0	33	-10.0	44	34.3	34.9	24	-8.1
46	51.7	51.0	36		46	52.0	51.8	35		46	40.2	40.8	33		46	33.2	34.4	22	
48	51.7	51.1	36		48	52.8	52.3	34		48	39.9	40.2	32		48	31.6	32.4	20	
50	51.9	51.5	35		50	53.1	52.7	33		50	39.9	40.8	33		50	33.4	34.0	22	
52	51.9	51.9	35		52	53.5	53.0	33		52	40.8	41.7	34		52	33.1	33.3	21	
54	52.1	51.9	35		54	53.8	53.2	32		54	40.7	41.6	34		54	30.9	32.0	19	
56	52.0	51.8	35		56	53.8	53.1	33		56	40.9	41.7	34		56	32.8	33.5	21	
58	52.1	51.8	35		58	53.7	53.0	33		58	40.7	41.2	33		58	33.0	33.2	21	
17 00	52.2	51.9	35	-7.4	19 00	53.9	53.1	32	-6.7	21 00	40.2	40.8	33	-9.7	23 00	32.1	33.8	21	-8.0
02	52.2	51.9	35		02	54.2	53.7	32		02	40.0	40.7	33		02	31.8	33.8	21	
05	52.2	51.7	35		04	54.1	53.8	32		04	40.1	40.8	33		04	36.1	38.8	28	
06.6	52.3	51.9	35		06	54.4	54.1	31		06	40.7	41.0	33		06	50.2	55.2	52	
08	52.2	51.9	35		08	54.2	53.9	32		08	40.8	41.2	34		08	48.2	57.7	52	
10	52.1	51.4	35		10	53.3	52.9	33		10	40.6	41.0	33		10	34.9	48.2	34	
12	51.9	51.2	36		12	52.4	51.8	35		12	40.8	41.1	33		12	47.6	61.8	22 55	
14	52.0	51.3	35	-7.0	14	51.2	50.4	37	-6.6	14	40.3	40.8	33	-9.4	14*	20.8	48.2	23 32	-7.9
16	51.9	51.3	35		16	50.9	50.2	37		16	40.1	40.7	33		16*2	9.8	42.1	22 58	
18	51.9	51.3	35		18	51.1	50.4	37		18	40.0	40.3	32		18	8.2	32.9	22 49	
20	51.9	51.3	35		20	51.5	50.9	36		20	39.9	40.2	32		20	16.2	43.3	23 04	
22	51.9	51.4	35		22	52.8	52.1	34		22	39.9	40.2	32		22	23.0	43.2	09	
24	51.9	51.4	35		24	53.4	52.9	33		24	39.6	40.0	32		24	31.0	48.6	20	
26	51.9	51.4	35		26	53.3	53.0	33		26	40.0	40.3	32		26	48.0	59.7	42	
28	52.0	51.6	35		28	53.0	52.7	34		28	40.2	40.7	33		28	41.1	55.9	33	
30	51.9	51.5	35	-7.0	30	52.6	52.2	34	-6.5	30	40.4	40.8	33	-9.3	30	48.8	67.2	48	-7.8
32	52.0	51.6	35		32	51.9	51.4	35		32	40.8	41.1	34		32	18.9	36.3	01	
34	52.0	51.6	35		34	51.8	51.2	36		34	40.4	40.8	33		34	35.3	55.8	29	
36	52.1	51.8	35		36	52.0	51.8	35		36	39.9	40.1	32		36	27.3	42.3	23 11	
38	52.0	51.6	35		38	52.9	52.6	34		38	39.8	40.0	32		38*	10.8	35.6	22 38	
40	51.8	51.3	36		40	52.7	52.2	34		40	39.8	40.1	32		40	8.2	25.3	28	
42	51.6	51.1	36		42	53.0	52.6	34		42	39.8	39.8	32		42	9.1	24.1	28	
44	51.4	51.0	36	-6.8	44	53.0	52.6	34	-6.5	44	39.2	39.3	31	-9.1	44	8.8	22.7	27	-7.8
46	51.3	51.1	36		46	52.8	52.2	34		46	39.1	39.2	31		46	16.9	19.2	30	
48	51.0	51.0	36		48	52.3	51.9	35		48	39.1	39.6	31		48	9.4	13.3	20	
50	51.0	51.0	36		50	52.7	52.2	34		50	39.0	39.3	31		50	9.1	14.2	20	
52	51.2	51.0	36		52	53.0	52.8	33		52	40.1	40.4	32		52	21.3	25.1	38	
54	51.3	51.2	36		54	54.7	54.0	31		54	39.6	39.9	32		54	14.1	18.8	28	
56	51.5	51.2	36		56	57.4	57.0	27		56	39.0	39.1	30		56	12.8	16.8	25	
58	51.6	51.1	36		58	59.0	58.6	24		58	38.8	39.0	30		58	14.2	18.8	28	
					20 00	59.8	59.5	22 23	-6.3						24 00	14.1	19.0	22 28	-7.9

Correction to local mean time is — 02s.
Torsion head at 15h 41m read 307° and at 20h 30m read the same.
Observer—R. R. T.

Correction to local mean time is — 35s.
Torsion head at 19h 30m read 352° and at 24h 00m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, November 29, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	41.9	40.8	22 44	-8.0	2 00	42.2	42.0	22 43	-7.6
02	42.0	40.8	44		02	42.6	42.0	43	
04	42.1	41.0	44		04	44.9	44.0	39	
06	43.0	42.1	42		06	46.7	46.1	36	
08	42.5	41.3	43		08	45.2	44.9	38	
10	42.7	41.9	42		10	43.7	43.2	41	
12	43.0	42.2	42		12	43.1	42.6	42	
14	42.8	41.9	42	-8.0	14	44.3	43.9	40	-7.4
16	42.0	41.1	44		16	43.1	42.8	42	
18	41.9	41.0	44		18	41.7	41.3	44	
20	42.7	42.0	42		20	41.7	41.2	44	
22	42.4	41.8	43		22	39.9	38.9	47	
24	41.6	41.2	44		24	34.0*b*		56	
26	41.7	41.2	44		26	32.7	32.1	58	
28	41.6	41.1	44		28	33.3	32.3	57	
30	41.7	41.0	44	-8.0	30	34.9	34.5	55	-7.3
32	42.1	41.2	44		32	36.1	35.2	53	
34	42.2	41.9	43		34	35.8	35.2	53	
36	42.8	41.8	42		36	35.1	34.1	55	
38	42.7	41.5	43		38	36.7	36.1	52	
40	42.2	41.9	43		40	37.7	36.8	51	
42	41.6	40.7	44		42	37.6	37.1	50	
44	42.0	40.4	44		44	37.7	37.1	50	-7.2
46	41.1	40.1	45	-8.0	46	36.9	36.6	51	
48	41.4	40.3	45		48	37.1	36.9	51	
50	41.9	40.9	44		50	37.4	37.1	51	
52	42.8	41.9	43		52	37.4	37.2	50	
54	43.5	42.3	42		54	37.2	37.1	51	
56	44.3	43.1	40		56	38.1	37.8	50	
58	44.5	43.5	40		58	37.8	37.8	50	
1 00	45.0	44.2	39	-7.9	3 00	38.2	37.9	49	-7.1
02	43.8	43.2	41		02	38.0	37.8	50	
04	43.7	42.8	41		04	37.9	37.7	50	
06	44.3	43.2	40		06	37.8	37.8	50	
08	43.0	42.1	42		08	39.1	38.9	48	
10	42.0	41.0	44		10	39.9	39.7	47	
12	40.5	39.4	46		12	40.8	40.3	45	
14	40.1	39.5	46	-7.8	14	40.7	40.1	46	-7.0
16	39.8	39.0	47		16	41.2	40.9	45	
18	37.4	36.9	51		18	41.3	41.0	44	
20	37.9	37.1	50		20	40.0	39.7	46	
22	39.3	38.9	48		22	40.1	40.1	46	
24	40.2	39.8	46		24	40.7	40.3	45	
26	39.2	38.9	48		26	41.9	41.4	44	
28	38.9	38.1	48		28	41.2	40.6	45	
30	36.8	36.6	51	-7.7	30	41.1	40.9	45	-6.6
32	37.1	36.9	51		32	41.6	41.4	44	
34	36.6	36.6	51		34	42.8	42.6	42	
36	37.5	37.3	50		36	41.8	41.5	44	
38	40.8	40.8	45		38	42.2	41.7	43	
40	38.8	38.5	48		40	42.6	42.1	42	
42	39.6	39.2	47		42	42.1	41.3	43	
44	36.2	35.4	53	-7.6	44	41.2	40.9	45	-5.8
46	37.8	37.1	50		46	37.5	37.5	50	
48	38.7	38.1	49		48	37.2	36.8	51	
50	38.7	37.8	49		50	37.2	37.1	51	
52	38.8	37.6	49		52	36.5	36.2	52	
54	41.5	40.1	45		54	36.3	36.0	52	
56	39.2	38.1	48		56	37.7	37.2	50	
58	45.6	44.7	38		58	39.7	39.2	47	

Observer—R. R. T.

Sunday, November 29, 1903 — Magnet scale inverted—erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00.5	67.0	65.2	22 44	-4.9	6 00	37.1	39.9	23 02	-6.3
02	67.1	65.7	45		02	36.5	39.4	01	
04	69.1	67.9	48		04	37.1	39.8	02	
06	71.0	69.2	50		06	38.0	40.1	03	
08	72.4	71.3	53		08	36.1	37.9	23 00	
10	71.8	70.7	52		10	35.9	36.8	22 59	
12	71.8	70.8	52	-4.6	12	38.7	40.7	23 04	
14	70.1	69.2	50		14	36.1	38.0	23 00	-6.6
16	70.1	69.4	50		16	35.3	37.1	22 58	
18	70.1	69.2	50		18	37.8	37.8	23 01	
20	72.9	72.2	54		20	44.1	45.0	12	
22	72.4	73.0	54		22	44.1	45.0	12	
24	72.8	73.4	55		24	40.9	42.7	07	
26	74.0	74.3	57		26	38.0	40.3	03	
28	74.6	75.1	58		28	40.1	41.2	06	
30	75.0	75.4	22 58	-4.6	30	40.8	43.1	08	-6.8
32	77.0	77.7	23 02		32	44.3	45.8	12	
34	78.0	78.3	03		34	46.2	48.8	16	
36*	37.1	42.2	04		36	46.1	48.7	16	
38	36.9	41.8	03		38	47.1	49.7	18	
40	38.7	44.0	07		40	45.2	47.8	15	
42	43.9	47.7	14		42	47.1	50.2	18	
44	42.0	46.8	11	-4.8	44	50.8	53.8	24	-6.9
46	39.7	43.5	07		46	49.1	50.8	20	
48	37.2	40.2	02		48	51.8	54.2	25	
50	37.7	41.1	03		50	54.1	55.8	28	
52	43.1	47.2	13		52	54.9	57.7	30	
54	46.8	49.7	17		54	61.1	63.5	40	
56	45.9	48.0	15		56	60.9	62.8	39	
58	47.8	49.7	18		58	59.4	61.0	36	
5 00	47.8	49.3	18	-5.2	7 00	58.3	60.5	35	-7.0
02	55.3	56.7	30		02	54.0	55.1	27	
04	59.0	59.2	34		04	52.7	53.9	25	
06	61.6	62.8	39		06	51.0	52.1	23	
08	63.9	64.0	42		08	53.2	55.3	27	
10	68.0	70.9	51		10	61.4	63.3	40	
12	68.1	69.9	50		12	62.2	64.1	41	
14	62.3	67.3	43	-5.5	14	57.6	60.0	34	-7.0
16	56.3	59.8	33		16	59.9	62.4	38	
18	53.4	57.7	29		18	58.9	61.9	36	
20	55.2	58.8	31		20	61.4	63.8	40	
22	52.7	58.1	29		22	59.6	61.8	37	
24	52.8	56.8	28		24	62.8	64.2	41	
26	57.1	59.3	33		26	63.3	65.1	42	
28	57.4	58.8	33		28	61.7	63.7	40	
30	57.8	59.1	33	-5.8	30	56.0	56.8	30	-7.0
32	57.2	58.3	32		32	52.8	54.1	25	
34	51.7	53.8	24		34	49.8	51.3	21	
36	49.8	51.2	21		36	49.2	50.8	20	
38	53.8	54.8	27		38	50.1	51.2	21	
40	56.3	56.7	30		40	50.2	52.2	22	
42	53.7	54.2	26		42	45.2	46.8	14	
44	52.3	53.2	24	-6.0	44	42.8	44.6	10	-7.1
46	50.0	51.1	21		46	37.3	39.8	02	
48	47.7	49.3	18		48	40.3	42.8	07	
50	45.3	47.0	14		50	37.5	39.3	02	
52	45.2	48.1	15		52	38.6	39.8	03	
54	43.8	46.8	13		54	43.2	45.2	11	
56	41.1	44.2	09		56	44.3	45.6	12	
58	38.0	41.2	04		58	45.1	46.4	13	
					8 00	42.7	43.4	09	-7.2

Correction to local mean time is — 1m 01s. 90° torsion = 21.'1.
Torsion head at 0h 00m read 342° and at 8h 20m read 339°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, November 30, 1903 — Magnet scale inverted									Tuesday, December 1, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	61.0	59.2	22 29	−10.3	10 00	61.0	59.1	22 29	−6.8	12 00	46.1	47.1	22 21	−8.0	14 00	48.4	48.6	22 24	−6.8
02.3	60.2	58.1	31		02	61.3	59.1	29		02	55.2	56.1	35		02	49.0	49.1	25	
04	57.9	56.1	34		04	61.0	58.8	29		04	54.5	54.9	34		04	49.1	49.3	25	
06	57.7	56.3	34		06	58.9	57.6	32		06	48.9	49.9	26		06	51.1	51.1	28	
08	55.8	54.5	37		08	59.2	57.9	32		08	49.1	50.2	26		08	50.9	51.1	28	
10	54.1	53.2	39		10	59.1	58.2	32		10	48.3	49.8	25		10	52.9	53.1	31	
12	53.9	52.1	40		12	58.8	57.9	32		12	50.1	51.2	27		12	54.1	54.1	33	
14	51.9	50.5	43	−9.8	14	58.3	57.3	33	−6.4	14	49.2	50.2	26	−7.8	14	53.9	54.9	33	−6.7
16	51.4	50.2	44		16	59.1	58.7	31		16	50.9	51.7	29		16	55.3	55.7	35	
18	53.2	52.0	41		18	60.7	59.3	29		18	49.8	50.8	27		18	54.8	54.8	34	
20	52.6	52.0	41		20	60.2	58.9	30		20	53.1	53.7	32		20	54.3	54.8	34	
22	54.8	52.2	40		22	58.9	58.6	31		22	50.2	51.3	28		22	53.8	54.0	33	
24	57.9	55.9	34		24	58.5	57.3	33		24	51.7	52.1	29		24	55.0	55.2	35	
26	57.7	55.3	35		26	60.7	57.8	31		26	57.3	58.3	39		26	53.9	54.2	33	
28	57.2	55.2	35		28	60.0	57.8	31		28	55.4	57.6	37		28	54.0	54.3	33	
30	58.1	57.0	33	−9.3	30	62.1	59.6	28	−6.2	30	46.8	48.8	23	−7.6	30	53.9	54.1	33	−6.5
32.3	63.3	62.1	25		32	61.1	59.1	29		32	45.9	47.7	22		32	53.9	54.1	33	
34	57.5	56.1	34		34	61.0	58.2	30		34	48.3	49.9	25		34	54.8	54.8	34	
36	45.3	44.8	22 53		36	60.9	58.0	30		36	49.7	50.9	27		36	55.1	55.3	35	
38	39.1	36.6	23 04		38	59.3	57.0	32		38	55.1	55.4	35		38	55.2	55.4	35	
40	45.7	42.3	22 54		40	59.3	57.2	32		40	53.3	55.2	33		40	55.5	55.8	35	
42	56.3	56.1	35		42	60.1	58.0	31		42	52.2	53.3	31		42	55.6	55.8	35	
44	56.6	56.1	35		44	60.5	58.1	30	−6.1	44	45.3	46.9	20	−7.4	44	55.8	56.0	36	−6.4
46	48.1	47.7	48		46	60.9	58.5	30		46	47.0	49.0	23		46	56.0	56.2	36	
48	50.0	48.6	46		48	60.8	58.9	30		48	48.1	49.9	25		48	56.3	56.7	37	
50	50.0	48.9	46	−8.7	50	60.6	58.3	30		50	49.4	51.1	27		50	56.3	56.8	37	
52	56.1	54.9	36		52	61.1	59.5	29		52	47.8	49.2	24		52	54.9	55.3	35	
54	55.7	54.2	37		54	61.3	59.8	28		54	46.6	48.1	22		54	54.1	54.6	33	
56	56.0	55.0	36		56	61.2	59.6	29		56	45.4	47.6	21		56	54.3	55.0	34	
58	57.1	55.4	35		58	61.2	59.6	29		58	45.0	46.3	20		58	55.0	55.3	35	
9 00	58.1	56.2	34	−8.2	11 00	58.9	57.2	33	−6.1	13 00	45.3	46.9	20	−7.3	15 00	54.8	55.2	34	−6.2
02	60.2	56.8	32		02	57.9	56.2	34		02	43.9	45.9	18		02	55.4	55.9	35	
04	60.1	57.4	31		04	57.8	56.2	34		04	39.1	40.3	10		04	55.0	55.2	35	
06	58.4	56.3	34		06	57.5	56.6	34		06	43.8	45.3	18		06	56.3	56.5	37	
08	57.5	54.3	36		08	59.7	58.7	31		08	44.0	45.7	18		08.3	57.3	58.0	39	
10	58.1	55.0	35		10	63.1	61.1	26		10	42.8	44.1	16		10	58.2	58.8	40	
12	60.7	57.7	31		12	61.4	60.8	28		12	39.3	39.8	10		12	59.1	59.3	41	
14	61.8	59.3	29	−7.7	14	59.5	59.0	31	−6.0	14	40.7	41.7	13	−7.1	14	59.2	59.6	41	−6.2
16	59.4	57.7	32		16	57.4	57.1	34		16	42.4	42.6	15		16	60.0	60.4	43	
18	60.3	57.9	31		18	58.1	56.3	34		18	44.0	44.2	17		18	60.3	60.8	43	
20	61.2	59.2	29		20	59.4	57.6	32		20	43.9	44.2	17		20	61.3	61.9	45	
22	60.6	59.1	30		22	59.1	57.2	32		22	45.1	45.1	19		22	61.9	62.4	46	
24	60.3	59.2	30		24	59.7	56.4	32		24	42.2	42.2	14		24	61.9	62.3	46	
26	60.9	59.2	29		26	59.8	57.8	31		26	43.8	44.0	17		26	61.9	62.1	45	
28	60.3	59.1	30		28	58.6	56.4	33		28	43.6	45.0	18		28	61.2	61.5	44	
30	59.7	58.2	31	−7.3	30	57.9	55.9	34	−5.9	30	42.7	42.8	15	−7.0	30	61.8	62.0	45	−6.2
32	60.6	59.6	29		32	58.5	56.9	33		32	43.6	44.4	17		32	62.8	63.0	47	
34	60.7	59.9	29		34	59.2	57.7	32		34	46.3	47.8	22		34	61.5	61.7	45	
36	60.3	59.4	30		36	59.4	57.9	32		36	46.2	46.7	21		36	60.9	60.9	44	
38	60.3	60.0	29		38	59.4	57.8	32		38	42.8	43.4	16		38	60.3	60.5	43	
40	58.9	57.9	32		40	61.0	59.5	29		40	45.3	45.7	19		40	60.1	60.3	43	
42	58.1	57.2	33		42	61.8	60.6	28		42	43.1	43.7	16		42	60.4	60.6	43	
44	57.2	55.4	35	−7.0	44	60.3	59.7	29	−5.7	44	46.0	47.0	21	−7.0	44	60.2	60.4	43	−6.1
46	55.7	54.6	37		46	59.8	58.8	30		46	46.7	47.4	22		46	59.6	59.9	42	
48	56.2	55.1	36		48	60.3	59.5	30		48	47.0	47.4	22		48	58.8	58.8	40	
50	58.7	57.9	32		50	61.1	60.3	28		50	47.8	48.1	23		50	57.7	57.8	39	
52	59.3	58.4	31		52	60.3	59.7	29		52	47.8	47.8	23		52	56.8	57.0	37	
54	60.0	59.2	30		54	60.3	59.3	30		54	48.7	48.9	25		54	56.2	56.4	36	
56	61.7	60.4	28		56	59.3	58.3	31		56	48.1	48.3	24		56	56.3	56.8	37	
58	60.9	60.0	29		58	58.3	57.7	33		58	47.7	47.9	23		58	56.2	56.4	36	
					12 00	60.1	60.0	29	−5.4						16 00	55.8	56.0	36	−6.0

Correction to local mean time is — 1m 30s.
Torsion head at 7h 36m read 339° and at 12h 20m read the same.
Observer—R. R. T.

Correction to local mean time is + 25s. 90° torsion = 22.′6.
Torsion head at 10h 10m read 336° and at 16h 25m read 341°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 2, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	32.3	31.3	22 39	−13.3
02	31.9	31.6	40	
04	31.5	30.3	41	
06	31.2	30.4	41	
08	33.3	33.0	37	
10	34.4	34.3	35	
12	36.5	36.0	33	
14	38.6	38.1	29	−12.6
16	39.3	39.0	28	
18	37.0	36.2	32	
20	35.0	34.0	35	
22	33.3	32.7	38	
24	35.0	34.5	35	
26	37.6	36.3	31	
28	37.5	37.2	31	
30	37.8	37.0	31	−12.0
32	37.3	36.3	32	
34	34.9	34.3	35	
36	33.1	32.5	38	
38	34.6	34.0	35	
40	33.3	32.8	37	
42	31.3	31.0	40	
44	34.3	33.7	36	−11.3
46	28.0	27.6	46	
48	28.6	28.5	45	
50	29.5	29.3	43	
52	32.3	32.3	39	
54	31.0	30.6	41	
56	28.8	28.8	44	
58	27.9	27.1	46	
1 00	23.8	22.5	53	−11.0
02	23.0	22.1	54	
04	24.6	23.8	51	
06	24.6	24.3	51	
08	26.3	26.0	48	
10	27.3	26.8	47	
12	27.6	27.5	46	
14	25.6	25.3	49	−10.5
16	21.6	21.6	55	
18	21.8	21.2	56	
20	20.4	19.7	58	
22	22.8	21.8	54	
24	26.6	25.8	48	
26	25.6	24.7	50	
28	25.6	25.0	50	
30	25.3	24.7	50	−10.2
32	26.0	25.3	49	
34	25.1	24.5	50	
36	25.0	24.6	50	
38	23.2	22.7	53	
40	23.8	23.0	53	
42	21.8	21.8	55	
44	29.2	28.8	44	−10.0
46	30.1	29.7	42	
48	31.3	30.9	41	
50	31.6	31.3	40	
52	33.3	32.8	38	
54	34.3	34.0	36	
56	37.3	37.3	31	
58	39.4	39.3	28	
2 00	40.8	40.6	22 26	−9.9
02	41.4	41.3	25	
04	40.9	40.5	26	
06	37.6	37.6	30	
08	37.4	37.2	31	
10	36.8	36.5	32	
12	34.3	33.7	36	
14	33.3	33.0	37	−9.8
16	31.6	31.3	40	
18	31.3	30.8	41	
20	30.1	29.6	43	
22	27.8	27.3	46	
24	26.7	26.0	48	
26	25.5	25.3	50	
28	24.6	24.1	51	
30	24.1	23.6	52	−9.6
32	23.5	22.7	53	
34	21.4	21.3	56	
36	19.3	19.0	22 59	
38	18.4	18.3	23 01	
40	18.8	18.3	00	
42	18.0	17.6	01	
44	17.8	17.6	02	−9.6
46	18.3	18.3	01	
48	17.0	17.0	03	
50	17.2	17.0	02	
52	16.0	15.8	04	
54	15.8	15.4	05	
56	14.6	14.6	06	
58	14.3	13.7	07	
3 00	13.5	13.3	08	−9.5
02	14.3	13.8	07	
04	14.6	14.3	07	
06	13.7	13.7	08	
08	13.0	13.0	09	
10	10.6	10.4	13	
12	8.0	7.3	18	
14*	44.8	40.0	17	−9.4
16	39.3	38.7	22	
18	38.8	38.4	23	
20	38.3	37.9	23	
22	36.3	36.2	26	
24	36.1	35.9	27	
26	36.0	34.6	28	
28	35.8	35.0	28	
30	36.6	36.3	26	−9.2
32	32.6	31.8	33	
34	35.5	34.5	28	
36	37.5	37.3	24	
38	43.8	42.8	15	
40	48.8	47.6	23 08	
42	57.6	56.3	22 54	
44	56.0	55.4	22 56	−9.2
46	52.0	51.0	23 02	
48	55.0	54.5	22 57	
50	60.4	58.6	50	
52	63.2	61.8	45	
54	60.6	59.5	49	
56	54.8	54.3	22 58	
58	52.8*a*		23 00	

Observer—W. J. P.

Wednesday, December 2, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	47.8	46.2	23 09	−9.3
02	45.3	45.3	12	
04	37.3*b*		25	
06	40.0	38.3	22	
08	37.0	35.8	26	
10	39.5	38.6	22	
12	39.6	39.3	21	
14	36.6	36.0	26	−9.3
16	37.9	37.3	24	
18	32.6	32.3	32	
20	30.6	29.6	36	
22	32.9	31.3	33	
24	40.6	38.6	21	
26	47.5	46.7	09	
28	47.5	47.1	09	
30	47.8	46.8	09	−9.3
32	43.1	42.0	16	
34	40.8	39.9	20	
36	36.9	36.3	26	
38	35.3	32.7	30	
40	31.6	31.3	34	
42	34.8	34.2	29	
44	30.0	29.5	37	−9.1
46.4	30.0	29.3	37	
48	34.6	33.8	30	
50	34.4	33.3	30	
52	41.6	39.6	19	
54	43.6	41.0	17	
56	50.3	47.5	07	
58	53.6	51.0	23 01	
5 00	56.1	52.6	22 58	−9.1
02	59.3	56.8	52	
04	59.8	57.2	51	
06	60.5	58.1	50	
08	60.8	57.9	50	
10	60.1	57.9	50	
12	62.6	60.0	47	
14	63.7	61.0	45	−9.1
16	61.1	59.8	48	
18	58.3	57.0	53	
20	55.8	54.3	22 57	
22	53.3	51.2	23 01	
24	53.0	51.3	01	
26	50.0	49.0	05	
28	49.3	47.4	07	
30	45.1	43.1	14	−9.0
32	43.2	41.2	17	
34	39.4	38.2	22	
36	40.6	39.1	21	
38	36.6	35.5	27	
40	27.0	23.4	44	
42	20.3	18.8	23 53	
44	8.5	6.8	24 11	−9.0
46*	56.0	48.0	08	
48	48.8	45.6	16	
50	46.2	42.6	20	
52	46.9	44.0	19	
54.1	58.0	52.8	03	
56	57.6	57.2	24 00	
58	59.3	57.6	23 58	
6 00	56.0	55.0	24 03	−9.1
02	64.6	62.1	23 51	
04	69.8	68.6	41	
06	69.4	67.5	43	
08	70.1	68.6	41	
10	71.0	69.2	40	
12	70.2	68.6	41	
14	63.8	62.0	51	−9.0
16	63.9	62.6	51	
18	69.3	67.5	43	
20	70.1	68.9	41	
22	75.2	72.6	34	
24	79.0	77.5	27	
26*	56.7	49.6	27	
28	61.3	55.3	18	
30	57.2	55.6	21	−9.0
32	59.3	57.0	19	
34	61.0	59.8	15	
36	60.2	59.3	16	
38	59.8	58.2	17	
40	58.8	58.2	18	
42	62.7	61.8	12	
44	59.3	58.5	17	−9.0
46	62.5	61.0	13	
48	67.3	66.6	05	
50	61.6	60.2	14	
52	56.0	55.0	23	
54	56.3	55.3	22	
56	56.3	55.0	23	
58	55.3	55.0	23	
7 00	58.9	58.5	18	−9.0
02	55.0	53.8	25	
04	53.0	52.5	27	
06	56.1	55.3	22	
08	44.7	44.3	40	
10	46.0	45.2	38	
12	36.8	35.6	53	
14	44.6	44.0	40	−9.0
16	44.5	43.8	41	
18	42.3	39.5	46	
20	41.1	38.4	48	
22	45.0*a*		39	
24	52.6	50.7	29	
26	49.3	48.5	33	
28	52.3	49.5	30	
30	44.0	41.5	43	−9.1
32	38.2	35.3	52	
34	42.6	39.0	46	
36	49.2	45.6	36	
38	49.2	45.0	36	
40	45.0	41.8	42	
42	44.6	40.5	43	
44	36.9	35.2	23 53	−9.0
46	32.3	27.8	24 03	
48	23.1	22.6	14	
50	21.3	16.7	20	
52	21.4	17.6	24 19	
54.2	34.6	30.3	23 59	
56	35.9	31.2	23 57	
58	33.3	29.9	24 00	

Observers—W. J. P. and R. R. T., who alternated from 7h 48m to 7h 58m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 2, 1903					Magnet scale inverted				Wednesday, December 2, 1903					Magnet scale inverted			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	36.8	33.4	23 55	-8.8	10 00	64.8	62.1	23 11	-8.6	12 00*3	56.1	50.8	22 46	-8.7	14 00	51.2	49.2	22 51	-8.5
02	37.8	35.1	53		02	66.3	64.0	08		02	57.1	52.9	43		02	47.9	46.7	55	
04	45.9	41.2	42		04	65.9	64.0	08		04	59.8	55.8	39		04	46.9	45.5	22 57	
06	50.9	48.3	32		06	63.8	61.9	12		06	59.1	55.3	40		06	42.2	41.2	23 04	
08	55.1	49.9	28		08	63.2	63.2	11		08	60.0	56.1	39		08	42.3	41.1	04	
10	44.2	38.2	45		10	62.2	61.8	13		10	59.2	55.7	40		10	41.0	39.5	06	
12	45.5	38.2	44		12	62.0	61.5	13		12	58.7	54.7	41		12	41.7	40.3	05	
14	38.3	33.7	54	-8.7	14	58.8	58.5	18	-8.6	14	59.9	56.3	38	-8.6	14	43.8	42.5	02	-8.5
16	35.2	31.0	58		16	57.8	57.4	20		16	59.8	56.4	38		16	44.5	43.5	01	
18	38.6	32.7	54		18	57.1	56.6	21		18	57.7	54.0	42		18	42.2	41.1	04	
20	36.8	30.1	23 58		20	56.0	55.0	23		20	59.9	57.7	37		20	40.3	39.5	07	
22	28.0	22.1	24 11		22	55.0	54.5	24		22	65.8	62.1	29		22	39.1	38.3	09	
24	20.3	17.8	20		24	57.7	56.1	21		24	58.8	54.0	41		24	40.0	39.5	07	
26	24.3	20.8	24 15		26	56.0	54.8	23		26	58.9	56.1	39		26	41.6	40.8	05	
28	34.0	31.1	23 59		28	56.2	55.9	22		28	55.2	52.4	45		28	41.1	40.4	06	
30	20.4	15.3	24 22	-8.7	30	60.9	60.2	15	-8.7	30	54.1	50.1	48	-8.7	30	42.5	42.1	03	-8.5
32	29.7	25.9	24 06		32	60.9	60.5	15		32	51.9	47.5	52		32	41.0	39.8	06	
34	37.3	34.6	23 54		34	61.3	60.1	15		34	50.1	46.7	54		34	37.8	37.2	11	
36	43.7	39.1	45		36	61.1	60.2	15		36	55.3	50.7	46		36	36.8	35.6	13	
38	39.8	34.0	52		38	62.1	61.7	13		38	57.1	52.3	44		38	36.6	35.3	13	
40	43.7	36.9	47		40	63.1	62.0	12		40	54.0	49.5	48		40	34.9	33.8	16	
42	45.0	38.7	44		42	63.9	63.1	11		42	48.1	44.8	22 57		42	34.5	33.6	16	
44	47.4	40.8	23 41	-8.7	44	63.6	62.8	11	-8.7	44	46.2	42.7	23 00	-8.8	44	35.3	34.1	15	-8.5
46	33.0	29.0	24 02		46	62.7	62.0	12		46	44.6	40.9	23 02		46	33.3	32.6	18	
48	42.9	37.8	23 47		48	61.9	60.9	14		48	47.5	43.8	22 58		48	33.0	32.3	18	
50	49.8	44.3	36		50	61.8	60.3	14		50	49.3	45.3	55		50	32.4	31.6	19	
52	55.7	48.1	29		52	62.0	60.8	14		52	56.1	51.7	45		52	34.8	33.9	16	
54	49.9	44.0	37		54	63.1	62.1	12		54	59.2	55.8	39		54	34.6	34.1	16	
56	52.8	46.1	33		56	66.2	65.0	07		56	60.7	57.2	37		56	35.3	34.4	15	
58	47.6	43.0	39		58	68.8	68.0	03		58	58.8	56.0	40		58	37.8	36.3	12	
9 00	49.2	44.1	37	-8.7	11 00	67.9	67.1	04	-8.7	13 00	55.7	54.2	44		15 00	38.3	37.6	10	-8.5
02	52.2	47.7	32		02	67.7	66.9	04		02	50.7	47.8	52	-8.9	02	38.0	37.1	11	
04	57.9	52.8	23		04	62.8	62.6	12		04	46.7	44.8	58		04	39.9	38.7	08	
06	59.1	54.8	21		06	64.7	64.7	23 09		06	48.3	46.2	55		06	41.3	40.3	05	
08	60.7	56.9	18		08	74.6	74.1	22 54		08	48.8	47.0	54		08	44.3	42.8	01	
10	58.7	56.1	20		10	73.4	72.7	56		10	53.0	50.5	48		10	45.6	43.6	23 00	
12	60.2	56.1	19		12	71.0	70.8	22 59		12	53.1	51.4	48		12	47.1	45.5	22 57	
14	57.8	54.2	22	-8.7	14	68.6	66.0	23 05	-8.6	14	51.7	50.2	50	-9.0	14	48.5	46.6	55	-8.5
16	60.1	56.2	19		16.2	70.9	68.3	01		16	50.3	48.6	52		16	48.0	46.1	56	
18	61.8	57.3	17		18	66.3	63.7	08		18	48.9	47.2	54		18	47.2	45.6	57	
20	61.6	56.7	17		20	63.3	60.4	13		20	45.4	44.7	59		20	46.6	45.4	57	
22	63.2	58.9	14		22	64.2	62.1	11		22	48.7	48.1	54		22	45.6	44.0	22 59	
24	63.7	58.8	14		24	64.3	62.6	11		24	51.6	49.8	50		24	45.0	44.1	23 00	
26	67.6	62.0	08		26	65.1	63.1	10		26	59.6	56.1	39		27	45.3	44.5	22 59	
28	65.8	61.0	11		28	65.7	63.9	08		28	58.9	58.4	38		28	46.0	45.4	58	
30	64.7	60.1	12	-8.7	30	66.9	65.3	06	-8.6	30	61.1	60.3	34	-9.0	30	46.5	45.9	57	-8.6
32	64.2	60.1	13		32	66.3	64.9	07		32	58.4	57.2	39		32	47.2	46.6	56	
34	62.7	58.8	15		34	71.2	69.2	00		34	58.3	57.0	39		34	47.6	47.1	55	
36	63.8	60.0	13		36	63.1	62.1	12		36	58.7	56.2	40		36	48.3	47.7	54	
38	63.4	60.2	13		38	62.2	60.0	14		38	60.8	58.6	36		38	49.3	48.3	53	
40	65.3	61.4	11		40	63.8	61.7	12		40	61.9	60.2	34		40	50.0	49.1	52	
42	65.1	62.1	10		42	64.7	62.3	11		42	65.1	63.1	29		42	53.1	51.5	48	
44	65.1	61.0	11	-8.7	44	65.1	62.3	10	-8.6	44	64.2	62.8	30	-8.7	44	54.5	52.8	46	-8.7
46	62.8	59.7	14		46	59.7	58.6	18		46	64.7	63.3	29		46	55.3	53.8	44	
48	62.7	58.8	15		48	64.1	62.9	11		48	62.0	60.5	34		48	56.3	54.6	43	
50	63.9	59.2	14		50	68.2	66.2	05		50	59.3	58.2	38		50	55.7	54.3	43	
52	64.3	61.9	11		52	68.8	67.0	04		52	55.5	54.0	44		52	55.0	53.5	45	
54	64.1	61.1	12		54	68.2	66.9	23 04		54	52.8	51.0	48		54	56.0	55.0	43	
56	63.5	62.1	12		56	73.3	71.5	22 57		56	51.3	49.4	51		56	56.0	54.6	43	
58	65.8	63.5	09		58	74.7	73.1	54		58	51.9	49.8	50		58	56.6	55.4	42	

Observer—R. R. T.

Observers—R. R. T. and W. J. P., who alternated from 13h 32m to 13h 40m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 2, 1903					Magnet scale inverted					Wednesday, December 2, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	57.6	56.2	22 40	-8.8	18 00	63.5	62.6	22 30	-9.5	20 00	64.7	64.4	22 28	-9.7	22 00	52.0	49.0	22 50	-9.9
02	58.8	57.6	38		02	63.0	62.5	31		02	66.1	65.9	25		02	57.1	54.0	42	
04	60.0	58.3	37		04	63.1	62.0	31		04	66.0	65.9	26		04	58.7	57.2	38	
06	60.1	58.4	37		06.2	62.3	62.3	31		06	65.0	65.0	27		06	54.1	51.2	47	
08	60.9	59.3	35		08	62.3	61.3	32		08	66.2	66.1	25		08	53.8	52.0	46	
10	60.1	58.6	36		10	61.1	59.4	35		10	66.9	66.6	24		10	54.8	52.1	45	
12	62.3	60.8	33		12	60.0	59.0	36		12	65.9	65.3	26		12	57.8	54.0	41	
14	66.3	64.5	27	-8.9	14	58.7	57.7	38	-9.5	14	65.7	65.0	27	-9.6	14	55.8	51.2	45	-10.0
16	68.5	67.2	23		16	58.5	57.2	38		16	66.6	66.0	25		16	60.7	57.6	36	
18	67.5	66.3	25		18	57.8	57.0	39		18	65.9	65.2	26		18	58.5	54.2	41	
20	63.5	62.3	31		20	56.7	55.2	41		20	65.4	64.9	27		20	57.8	54.0	41	
22	60.5	59.4	36		22	57.0	56.8	41		22	65.2	65.0	27		22	56.6	54.1	42	
24	58.1	57.4	39		24	60.8	59.9	34		24	66.6	65.9	25		24	56.7	53.6	43	
26	57.7	56.4	40		26	63.9	62.5	30		26	66.8	66.2	25		26	61.1	57.7	36	
28	59.4	58.6	37		28	62.4	61.7	32		28	67.1	66.3	25		28	61.3	59.2	35	
30	59.1	58.3	38	-9.0	30	63.2	62.3	31	-9.5	30	67.1	66.6	24	-9.7	30	61.0	58.3	35	-10.0
32	57.8	57.0	40		32	65.0	63.1	29		32	66.9	66.1	25		32	60.0	58.0	36	
34	57.8	57.0	40		34	62.9	61.1	32		34	68.1	67.9	22		34	60.9	59.2	35	
36	58.3	57.5	39		36	62.3	60.7	33		36	67.3	66.3	24		36	62.1	59.9	33	
38	58.2	57.5	39		38	61.7	60.1	33		38	67.4	66.4	24		38	60.3	58.5	36	
40	60.8	60.0	35		40	63.0	61.9	31		40	68.3	67.8	22		40	58.4	56.6	39	
42	61.8	61.2	33		42	65.3	63.8	28		42	68.9	68.0	22		42	62.8	61.1	32	
44	66.3	65.3	26	-9.0	44	65.8	64.3	27	-9.4	44	68.9	68.0	22	-9.7	44	63.8	62.3	30	-10.0
46	69.1	67.2	23		46	66.1	64.8	27		46	70.2	69.7	19		46	63.3	62.0	31	
48	71.6	69.3	19		48	64.8	63.8	28		48	73.0	72.2	15		48	63.3	61.8	31	
50	76.0	73.2	12		50	63.2	62.3	31		50	72.1	71.1	17		50	64.0	62.7	30	
52	79.0	76.5	07		52	62.0	61.1	33		52	72.0	71.0	17		52	64.1	62.6	30	
54	77.5	75.1	09		54	62.7	61.8	32		54	69.0	67.8	22		54	65.0	63.1	29	
56	73.8	71.5	15		56	62.1	61.0	33		56	69.8	68.1	21		56	66.7	64.9	26	
58	69.4	68.0	21		58	63.2	62.6	30		58	71.7	70.0	18		58	65.2	64.0	28	
17 00	66.8	64.8	26	-9.0	19 00	62.9	62.1	31	-9.4	21 00	71.0	69.6	19	-9.7	23 00	63.7	62.2	30	-9.9
02	61.0	59.9	34		02	64.0	63.5	29		02	70.9	69.7	19		02	62.4	61.1	32	
04	57.5	56.0	40		04	65.8	65.1	26		04	71.1	70.1	18		04	62.1	61.1	32	
06	54.6	52.8	22 45		06	67.6	66.9	24		06	68.8	67.1	23		06	62.9	61.7	31	
08	43.1	41.3	23 03		08	68.1	67.7	23		08	68.9	67.8	22		08	62.2	61.2	32	
10	44.3	43.2	01		10	68.6	68.0	22		10	68.8	67.3	22		10	62.8	61.7	31	
12	41.8	39.3	06		12	68.8	68.1	22		12	67.2	66.0	25		12	62.9	61.9	31	
14	38.2	36.7	10	-9.0	14	69.4	68.9	21	-9.4	14	69.8	68.5	21	-10.0	14	63.0	62.1	31	
16	38.2	36.8	10		16	70.1	69.7	19		16	69.8	69.1	20		16	62.8	62.1	31	
18	41.1	39.3	06		18	70.1	69.2	20		18	67.3	66.8	24		18	62.9	62.0	31	
20	43.2	41.8	02		20	70.6	69.9	19		20	71.0	69.2	19		20	63.3	62.7	30	
22	39.8	37.9	08		22	71.0	70.2	18		22	70.9	69.3	19		22	62.8	61.9	31	
24	40.0	39.5	06		24	70.0	69.2	20		24	71.7	70.2	18		24	62.2	61.6	32	
26	43.8	42.0	23 02		26	69.3	68.8	21		26	74.1	72.9	14		26	62.3	61.8	32	
28	44.9	44.6	22 59		28	69.2	68.9	21		28	73.7	72.1	15		28	62.3	61.8	32	
30	44.3	43.2	23 01	-9.3	30	68.3	68.0	22	-9.5	30	73.8	71.6	15	-10.0	30	62.1	61.2	32	-9.8
32	51.5	50.3	22 49		32	68.7	68.2	22		32	73.3	71.6	15		32	61.7	60.9	33	
34	51.0	51.0	49		34	68.8	68.2	22		34	70.0	68.1	21		34	61.7	60.9	33	
36	53.2	52.8	46		36	68.2	67.8	22		36	66.4	65.3	26		36	62.0	61.7	32	
38	54.5	54.0	44		38.4	69.2	69.0	21		38	69.1	68.3	21		38	61.7	61.2	33	
40	56.0	55.2	42		40	69.1	68.8	21		40	65.2	63.9	28		40	62.1	61.7	32	
42	56.6	55.7	41		42	68.8	68.1	22		42	70.0	69.2	20		42	62.1	61.7	32	
44	57.8	57.0	39	-9.3	44	67.7	67.2	23	-9.6	44	66.1	65.7	26		44	61.8	61.1	33	
46	58.0	57.4	39		46	67.7	67.0	23		46	66.8	66.0	25		46	61.3	60.7	33	
48	57.5	56.9	39		48	67.2	67.0	24		48	69.6	67.1	22		48	61.3	60.8	33	
50	52.9	52.4	47		50	66.1	65.9	25		50	68.4	67.3	23		50	61.3	60.8	33	
52	59.3	59.1	36		52	65.8	65.7	26		52	60.9	57.2	36		52	61.1	60.6	34	
54	62.1	62.0	32		54	66.7	66.3	25		54	54.0	52.2	45		54	60.3	59.9	35	
56	63.2	62.9	30		56	66.2	65.8	25		56	50.6	49.8	50		56	60.0	59.6	35	
58	63.9	63.1	29		58	65.1	64.8	27		58	46.9	42.8	59		58	60.1	59.7	35	
															24 00	60.3	59.8	35	-9.8

Observers—W. J. P. and R. R. T., who alternated from 18h 20m to 18h 30m.

Correction to local mean time is — 3m 02s.
Torsion head at oh oom read 341° and at 24h 20m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, Decemer 3, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	40.1	42.7	22 42	-5.5
02	39.3	41.8	41	
04	39.1	41.2	40	
06	38.1	39.9	38	
08	36.8	39.8	37	
10	37.1	39.9	38	
12	37.1	39.8	37	
14	36.0	38.2	36	-5.8
16	35.8	37.9	35	
18	36.8	38.9	37	
20	36.3	38.3	36	
22	35.3	37.6	34	
24	35.1	37.0	34	
26	34.9	36.6	33	
28	35.3	36.9	34	
30	34.6	36.1	33	-6.0
32	35.1	36.7	34	
34	35.6	36.9	34	
36	35.9	37.1	35	
38	34.8	36.1	33	
40	35.3	36.3	33	
42	35.6	36.8	34	
44	35.8	36.7	34	-6.2
46	35.8	36.8	34	
48	35.2	36.1	33	
50	35.9	36.8	34	
52	36.2	37.1	35	
54	36.8	37.6	36	
56	35.9	36.5	34	
58	34.6	35.2	32	
17 00	34.2	35.0	32	-6.3
02	34.6	35.2	32	
04	34.2	34.9	31	
06	34.2	34.9	31	
08	34.1	34.8	31	
10	32.4	33.2	29	
12	32.4	33.1	29	
14	33.2	33.8	30	-6.4
16	33.9	34.3	31	
18	34.6	35.1	32	
20	34.1	34.8	31	
22	33.8	34.2	31	
24	33.7	34.1	30	
26	33.8	34.2	31	
28	34.1	34.7	31	
30	33.3	33.9	30	-6.5
32	34.8	35.1	32	
34	33.7	34.2	30	
36	33.4	33.9	30	
38	32.6	33.9	30	
40	33.9	34.2	31	
42	34.3	34.8	31	
44	34.1	34.6	31	-6.6
46	34.1	34.4	31	
48	34.7	35.1	32	
50	35.2	35.7	33	
52	34.1	34.4	31	
54	33.7	33.9	30	
56	33.0	33.1	29	
58	33.5	33.8	30	
18 00	34.1	34.4	22 31	-6.6
02	35.1	35.5	33	
04	36.2	36.7	34	
06	36.8	37.0	35	
08	36.5	36.8	35	
10	36.2	36.2	34	
12	35.7	35.9	33	
14	34.9	35.1	32	-6.5
16	35.3	35.3	33	
18	35.1	35.1	32	
20	35.7	35.8	33	
22	36.3	36.5	34	
24	36.8	36.8	35	
26	35.8	35.8	33	
28	35.1	35.1	32	
30	34.9	34.9	32	-6.4
32	34.7	34.7	32	
34	33.8	33.8	30	
36	33.3	33.3	30	
38	34.2	34.3	31	
40	34.1	34.1	31	
42	33.3	33.4	30	
44	33.8	33.9	30	-6.4
46	33.8	33.9	30	
48	32.4	33.7	30	
50	32.3	32.3	28	
52	32.9	33.0	29	
54	33.8	33.8	30	
56	32.1	32.8	28	
58	31.1	31.2	26	
19 00	31.2	31.2	26	-6.5
02	31.2	31.3	26	
04	31.9	31.9	27	
06	31.9	31.9	27	
08	32.3	32.5	28	
10	33.9a		30	
12	34.2	34.4	31	
14	34.7	34.9	32	-6.7
16	33.3	33.4	30	
18	32.1	32.2	28	
20	31.5	31.9	27	
22	31.6	31.9	27	
24	32.2	32.8	28	
26	31.2	32.1	27	
28	31.7	32.1	27	
30	31.9	32.0	27	-6.7
32	31.1	31.3	26	
34	29.1	29.1	23	
36	28.9	29.0	23	
38	29.0	29.2	23	
40	29.9	30.1	24	
42	29.9	30.0	24	
44	30.0	30.2	25	-6.6
46	29.2	29.7	24	
48	29.0	29.1	23	
50	29.0	29.2	23	
52	29.2	29.5	23	
54	29.8	30.2	24	
56	30.7	30.9	26	
58	32.1	32.3	28	
20 00	31.8	32.1	22 27	-6.5

Correction to local mean time is — 19s.
Torsion head at 15h 15m read 344° and at 20h 24m read the same.
Observer—R. R. T.

Friday, December 4, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	53.9	52.8	22 05	
02*	54.7	53.9	22 03	-10.0
04	57.3	56.8	21 59	
06	58.1	57.0	58	
08	59.0	58.2	56	
10	70.2	69.2	39	
12*	49.5	45.2	30	
14	54.8	50.1	22	-9.7
16	58.8	57.8	21 12	
18	69.6	64.2	20 59	
20	71.0	65.9	57	
22	73.4	65.0	20 55	
24	65.4	55.8	21 09	
26	37.1	30.2	21 51	
28*	75.8	43.5	22 19	
30*	64.9	14.1	24 15	-9.5
33*	51.2	44.3	22 02	
34	42.2	26.7	22 23	
37*	59.5	19.8	21 44	
38.2	78.2	40.7	21 13	
40*	34.8	14.2	23 42	
42	60.3	30.1	09	
44	63.2	36.8	02	-9.2
46*	63.2	23.4	04	
48*5	55.4	20.5	58	
50	78.3	41.3	24	
52*	67.8	16.3	21	
54	50.8	18.1	23 33	
56*	76.8	33.1	22 33	
58.2	66.3	31.2	22 43	
21 00*	46.3	16.1	23 38	-9.0
02	54.8	15.9	32	
04	66.4	34.7	08	
06	45.8	13.8	23 41	
08*	35.8	9.3	24 10	
10	38.0	15.6	24 03	
12	70.3	51.0	23 10	
14	70.8	50.1	23 10	-9.0
16*	41.9	19.5	22 54	
18	43.1	22.1	51	
20	43.0	23.5	50	
22	49.1	29.6	40	
24	53.8	34.6	33	
26	52.3	33.8	35	
28	55.9	38.9	28	
30	49.3	46.9	27	-9.1
32	49.3	47.9	26	
34	64.2	60.9	22 04	
36	71.9	68.8	21 52	
38	68.2	64.1	21 58	
40	51.9	47.6	22 24	
42	47.3	45.2	30	
44	43.2	40.4	37	-9.2
46	37.1	34.7	46	
48	34.9	33.3	49	
50	39.8	37.9	41	
52	38.2	37.1	43	
54	39.8	35.6	43	
56	35.0	31.1	50	
58	39.8	35.7	43	
22 00	39.9	36.2	22 43	-9.3
02	38.0	34.3	45	
04	43.7	38.8	38	
06	56.3	52.3	17	
08	60.9	58.3	08	
10	65.2	62.5	02	
12	63.2	62.7	03	
14	66.9	63.0	00	-9.3
16	64.2	60.9	04	
18	66.0	62.3	22 01	
20	67.2	64.1	21 59	
22	66.8	64.3	21 59	
24	64.0	61.9	22 03	
26	67.2	64.6	21 59	
28	68.8	66.3	56	
30	69.5	67.8	54	-9.3
32	68.0	66.2	57	
34	68.4	66.5	56	
36	69.2	66.2	56	
38	68.1	64.0	58	
40	70.9	64.0	21 56	
42	57.1	51.9	22 17	
44	49.9	43.8	29	-9.3
46	56.8	50.5	18	
48	56.3	51.3	18	
50	57.8	51.7	16	
52	55.0	50.1	20	
54	48.6	48.0	26	
56	40.0	37.8	41	
58	28.8	27.8	22 58	
23 00	21.0	12.1	23 16	-9.3
02	12.5	10.8	24	
04*	59.7	47.7	31	
06	71.2	59.1	23 13	
08*	65.8	53.7	22 49	
10	57.6	44.2	23 03	
12	48.5	38.2	23 15	-9.2
14	70.1	59.8	22 41	
16*	46.2	29.6	18	
18	38.2	23.6	29	
20	38.0	25.2	28	
22	32.1	19.2	37	
24	20.8	9.9	53	
26*	38.5	29.0	58	
28	54.0	48.0	31	
30	50.9	46.5	22 35	-9.3
32	20.3	14.6	23 24	
34	41.3	29.0	22 56	
36*	48.2	36.7	24 28	
38*	61.1	52.3	23 27	
40	68.9	59.7	15	
42	45.9	35.8	52	
44	71.1	55.0	17	-9.3
46*	41.0	20.6	59	
48*3	39.4	21.0	35	
50.2	31.5	12.3	48	
52	36.8	21.2	37	
54	37.1	19.8	23 38	
56*	60.3	39.0	24 10	
58*2	42.8	21.7	24 58	
24 00	31.2	9.3	25 16	-9.3

Correction to local mean time is — 22s. 90° torsion = 23.'3.
Torsion head at 19h 15m read 324° and at 24h 15m read 333°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, December 6, 1903					Magnet scale erect					Sunday, December 6, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	27.0	42.6	24 49	-14.6	2 00	18.5	18.9	23 00	-11.0	4 00	Lost				6 00	43.6	40.3	22 47	-10.0
02*	21.0	32.6	23 08		02	18.8	19.3	23 00		02*	38.5	38.0	22 52	-9.5	02	46.0	43.3	42	
04	13.3	26.3	22 57		04	16.8	17.0	22 57		04	38.6	38.1	52		04	43.0	41.0	46	
06	24.3	35.0	23 13		06	13.0	13.3	51		06	36.8	36.0	22 55		06	44.3	42.3	44	
08*	41.0	61.8	26		08	10.4	10.8	47		08	32.3	32.0	23 02		08	44.0	42.1	45	
10	54.0	61.3	23 35		10	9.8	10.1	46		10	27.3	27.3	09		10	43.2	42.0	45	
12*	21.4	38.3	24 04		12	8.6	9.0	44		12	24.3	23.3	15		12	44.1	41.0	45	
14	7.0	20.6	23 39	-13.8	14	10.0	10.3	46	-10.6	14	22.5	22.2	17	-9.4	14	40.3	37.7	51	-10.0
16*	30.0	47.4	31		16	12.0	12.3	49		16	23.5	23.0	16		16	42.0	39.8	48	
18	36.2	55.0	42		18	12.7	13.0	51		18	29.3	29.1	23 06		18	43.1	41.5	46	
20	36.5	38.5	29		20	13.7	13.9	52		20	35.0	34.1	22 58		20	45.8	45.0	41	
22	38.0	40.2	32		22	15.3	15.5	55		22	35.3	34.3	58		22	46.9	46.1	39	
24	37.8	40.0	31		24	16.3	17.0	57		24	36.3	35.7	56		24	49.6	48.9	35	
26	40.5	42.6	36		26	17.5	18.0	58		26	36.7	35.9	55		26	47.5	46.1	39	
28	47.6	48.5	46		28	15.4	15.6	55		28	38.3	37.0	53		28	46.1	45.0	41	
30	53.9	57.5	58	-13.0	30	16.7	16.8	57	-10.3	30	37.8	37.0	53	-9.5	30	46.3	44.7	41	-10.2
32	53.8	56.7	57		32	16.4	16.8	57		32	39.5	38.3	51		32	40.7	40.3	49	
34	48.4	48.6	47		34	18.0	18.3	22 59		34	39.5	37.6	52		34	41.3	40.5	48	
36	46.2	47.7	44		36	18.4	18.6	23 00		36	40.3	38.7	50		36	39.8	38.8	51	
38	43.3	46.2	41		38	17.9	18.1	22 59		38	42.3	40.9	47		38	35.6	35.3	57	
40	35.9	36.5	27		40	20.0	20.7	23 02		40	44.8	43.5	43		40	37.9	37.0	54	
42	45.0*a*		41		42	20.5	20.9	03		42	46.8	45.6	40		42	42.6	41.5	46	
44	28.0*b*		14	-12.5	44	19.6	20.2	02	-10.2	44	45.3	44.6	42	-9.5	44	39.9	37.8	51	-10.3
46	22.5	23.6	07		46	20.9	21.3	04		46	46.2	45.5	40		46	38.0	35.8	54	
48	27.3	28.0	14		48	21.0	21.3	04		48	42.5	41.3	46		48	39.8	38.2	51	
50	29.6	30.6	18		50	21.7	21.8	05		50	40.2	38.3	51		50	44.5	41.6	45	
52	33.7	34.3	24		52	21.3	21.3	04		52	37.0	34.5	56		52	42.6	39.5	48	
54	39.1	40.6	33		54	19.7	20.0	23 02		54	36.5	33.9	22 57		54.3	42.5	41.3	47	
56	35.3	37.2	27		56	17.6*b*		22 58		56	34.3	32.6	23 00		56	43.3	42.3	45	
58	34.9	37.1	27		58	14.6	14.6	54		58	28.6	26.0	09		58	44.1	42.6	44	
1 00	29.0	31.0	18	-12.0	3 00	14.0	14.1	53	-10.0	5 00	25.9	23.9	13	-9.6	7 00	45.1	43.9	42	-10.6
02	20.4	24.0	05		02	15.2	15.5	55		02	24.6	23.3	15		02	45.0	43.5	43	
04	25.7	29.2	13		04	15.5	15.5	55		04	24.8	22.2	15		04	47.3	44.5	40	
06	30.2	31.6	19		06	15.0	15.0	54		06	21.1	19.7	20		06	47.0	44.8	40	
08	25.0	26.3	11		08	14.7	15.0	54		08	27.3	25.1	11		08.3	48.6	47.2	37	
10	26.3	27.7	13		10	13.7	13.9	52		10	29.8	29.1	23 06		10	52.3	50.7	31	
12	26.2	28.2	13		12	15.0	15.5	54		12	35.0*a*		22 57		12	50.9	49.3	34	
14	30.3	32.7	20	-11.9	14	18.0	18.5	59	-10.0	14	44.0	43.2	22 44	-9.8	14	51.7	50.7	32	-11.0
16	35.1	36.7	27		16	16.3	16.7	56		16.2	33.0	31.0	23 02		16	46.8	45.4	40	
18	29.5	30.1	17		18	14.0	14.3	53		18	27.9	25.9	10		18	48.8	48.1	36	
20	26.7	27.3	13		20	14.3	15.0	53		20	21.2	22.6	18		20	49.5	47.2	36	
22	30.6	30.9	19		22	17.3	17.7	22 58		22	23.4	22.6	16		22	42.6	40.7	47	
24	29.5	30.2	17		24	18.6	19.4	23 00		24	22.3	21.8	18		24	50.3	48.1	35	
26	30.3	31.5	23 19		26	20.0	20.4	23 02		26	31.8	30.6	03		26	43.9	40.5	46	
28	18.5*b*		22 59		28	17.0	17.7	22 58		28	32.5	31.5	23 02		28	44.6	42.0	44	
30	13.1	13.3	22 51	-11.4	30	16.6	17.0	57	-9.9	30	39.5	39.0	22 51	-9.9	30	44.9	43.1	43	-11.0
32	19.5*a*		23 01		32	15.2	15.7	55		32.3	42.3	40.8	47		32	44.3	40.9	45	
34	22.7	23.3	07		34	15.0	15.3	54		34	42.8	40.4	47		34	46.0	41.8	43	
36	18.7	20.3	23 01		36	14.0	14.0	52		36	38.8	38.5	52		36	48.6	45.9	38	
38	17.3	18.0	22 58		38	13.6	13.9	52		38	39.1	38.3	22 52		38	41.3	38.3	50	
40	17.6	18.6	59		40	13.0	13.1	51		40	30.6	30.2	23 05		40	41.2	39.5	49	
42	16.4	17.3	57		42	13.0	13.0	51		42	28.3*a*		23 08		42	41.5	40.3	48	
44	15.3	16.3	55	-11.1	44	13.2	13.7	51	-9.8	44	35.2	33.8	22 58	-10.0	44	42.8	40.5	47	-11.0
46	17.4	18.4	58		46	15.0	15.5	54		46	44.6	44.3	43		46	45.3	42.8	43	
48	14.4	15.3	54		48	15.3	15.6	55		48	42.1	41.3	47		48	48.2	47.0	38	
50	15.8	17.0	56		50	13.3	13.6	51		50	41.6	40.1	48		50	45.6*b*		41	
52	17.6	18.6	59		52	11.4	12.0	49		52	38.6	36.3	54		52	46.7	46.3	39	
54	18.0	18.8	22 59		54	13.0	13.4	51		54	40.0	38.0	51		54	50.3	49.8	34	
56	19.2	20.2	23 01		56	13.4	14.0	52		56	40.6	37.8	51		56	44.3	42.2	44	
58	16.6	17.3	22 57		58	13.8	14.0	52		58	41.5	37.8	50		58	45.1	44.0	42	
															8 00	44.0	40.0	46	-11.0

Observer—W. I. P.

Correction to local mean time is — 20s.
Torsion head at oh oom read 336° and at 8h 55m read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, December 7, 1903 — Magnet scale erect									Tuesday, December 8, 1903 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	53.0	54.7	22 40	-22.7	10 00	52.1	58.1	22 42	-18.8	12 00	49.9	48.7	22 37	-18.7	14 00	47.5	46.6	22 41	-15.1
02	52.7	53.9	39		02	49.7	55.0	37		02	48.8	47.0	39		02	49.2	47.9	39	
04	54.7	56.9	43		04	48.2	54.3	36		04	52.3	51.0	34		04	51.6	50.1	35	
06	51.1	53.5	37		06	48.6	52.3	34		06	53.8	52.3	31		06	56.8	55.1	27	
08	54.9	55.1	42		08	41.8	47.2	25		08	54.2	52.7	31		08	56.4	55.2	27	
10	52.5	53.9	39		10	36.7	40.7	16		10	54.1	53.2	31		10	57.6	56.8	25	
12	50.4	54.3	37		12	42.8	46.2	25		12	53.1	52.2	32		12	54.5	53.6	30	
14	51.2	54.2	38	-22.0	14	39.2	43.3	20	-18.7	14	50.0	49.7	36	-18.2	14	54.1	53.1	31	-15.0
16	52.3	55.0	39		16	43.2	46.1	25		16	50.7	49.4	36		16	54.9	53.7	30	
18	45.5	48.4	29		18	38.4	43.2	19		18	50.5	50.0	36		18	56.4	55.6	27	
20	47.0	49.1	31		20	41.5	45.8	24		20	47.9	47.3	40		20	57.9	55.9	25	
22	49.1	52.8	35		22	38.3	44.3	20		22	48.4	46.7	40		22	54.5	51.2	32	
24	45.6	49.0	30		24	43.0	47.2	26		24	49.2	47.7	39		24	55.2	51.3	32	
26	42.9	45.2	24		26	43.8	48.1	27		26	50.9	48.6	37		26	51.5	48.2	37	
28	46.2	48.0	29		28	42.8	46.5	25		28	50.2	48.8	37		28	49.1	46.6	40	
30	45.9	48.1	29	-21.3	30	42.3	47.1	25	-18.4	30	51.1	48.8	36	-17.8	30	51.7	48.8	36	-14.7
32	38.9	41.4	18		32	38.0	43.1	19		32	53.0	51.3	33		32	49.2	46.8	39	
34	36.1	37.1	13		34	37.0	43.7	19		34	54.4	51.8	31		34	45.2	42.7	46	
36	46.2	47.1	28		36	39.3	44.3	21		36	47.1	43.8	43		36	42.7	39.2	50	
38	43.7	44.7	25		38	36.6	39.0	15		38	48.7	46.2	40		38	39.2	37.2	55	
40	40.1	40.7	19		40	46.2	47.8	29		40	50.9	48.9	36		40	38.0	35.7	57	
42	40.3	42.1	20		42	44.3	46.8	27		42	53.7	50.9	33		42	37.8	34.9	22 58	
44	40.2	41.7	19	-20.7	44	44.3	46.8	27	-18.2	44	52.9	50.2	34	-17.3	44	34.8	32.0	23 02	
46	45.6	47.7	28		46	44.8	47.2	27		46	51.1	48.8	36		46	35.0	32.6	02	-14.8
48	40.2	41.1	19		48	43.9	45.9	26		48	47.7	45.7	41		48	35.7	33.2	01	
50	38.9	40.2	17		50	42.9	44.9	24		50	46.6	44.8	43		50	36.3	34.2	23 00	
52	45.2	45.9	27		52	41.2	41.9	20		52	48.6	47.0	40		52	37.7	35.7	22 57	
54	41.8	42.4	21		54	42.1	43.8	23		54	52.8	51.1	33		54	37.4	35.9	22 57	
56	39.9	40.9	19		56	41.1	42.4	21		56	53.3	52.2	32		56	35.3	33.9	23 00	
58	41.0	43.8	22		58	42.8	43.8	23		58	48.3	47.8	39		58	38.8	37.3	22 55	
9 00	45.8	49.4	30	-20.1	11 00	41.1	42.0	20	-17.9	13 00	53.9	51.8	32	-16.8	15 00	38.0	36.9	56	-14.7
02	35.2	37.4	12		02	41.0	42.7	21		02	61.2	60.9	19		02	37.7	36.6	56	
04	37.3	38.8	15		04	40.9	42.7	21		04	62.8	61.9	17		04	37.0	35.8	58	
06	39.0	40.6	18		06	44.1	45.1	25		06	61.1	60.4	19		06	35.7	35.0	22 59	
08	46.3a		28		08	38.2	40.8	17		08	54.4	53.2	30		08	35.6	34.3	23 00	
10	39.0	39.8	17		10	45.2	46.0	27		10	58.8	57.8	23		10	33.0	31.8	04	
12	36.3	40.2	15		12	42.8	43.9	23		12	62.0	60.4	19		12	30.2	29.1	08	
14	41.8	45.2	24	-19.3	14	38.9	39.9	17	-17.7	14	61.0	60.2	20	-16.3	14	29.0	27.8	10	-14.6
16	36.8	39.3	15		16	40.6	43.3	21		16	59.3	57.3	23		16	28.6	27.2	11	
18	35.2	39.0	14		18	42.8	44.3	24		18	55.0	52.7	30		18	28.8	27.9	10	
20	38.2	40.6	17		20	37.9	40.2	16		20	49.0	47.1	39		20	26.9	25.8	13	
22	40.8	42.1	20		22	40.1	42.2	20		22	48.2	46.8	40		22	30.7	29.9	07	
24	42.0	44.1	23		24	41.8	44.2	23		24	49.1	47.8	39		24	31.8	31.2	05	
26	37.7	39.7	16		26	41.8	44.0	23		26	50.9	49.6	36		26	33.1	32.9	23 03	
28	41.8	41.8	21		28	42.7	44.9	24		28	52.8	51.3	33		28	36.1a		22 58	
30	44.6	44.8	25	-19.2	30	44.9	47.0	27		30	51.1	50.0	35	-16.0	30	37.6	36.9	56	-14.4
32	36.0	43.8	18		32	45.8	47.2	28		32	50.9	49.7	36		32	38.8	38.0	55	
34	36.5	41.6	16		34	43.8	45.9	26		34	54.2	52.9	31		34	38.1	37.1	22 56	
36	32.8	39.9	12		36	40.2	41.9	20		36	56.0	55.2	27		36	35.6	34.5	23 00	
38	35.0	41.2	15		38	38.8	40.8	18		38	55.9	55.1	28		38	35.4	34.2	00	
41	28.6	34.8	05		40	43.9	46.2	26		40	56.1	55.3	27		40	32.8	31.4	04	
42	34.3	41.4	15		42	45.8	47.3	28		42	54.0	53.0	31		42	32.8	31.3	05	
44	31.8	41.1	12	-19.0	44	47.0	48.7	30	-17.0	44	51.0	49.3	36	-15.6	44	33.9	32.3	03	-14.1
46	34.7	44.1	17		46	46.3	48.3	30		46	50.3	49.6	36		46	34.8	33.2	23 01	
48	41.1	49.8	26		48	44.8	46.3	27		48	49.1	48.9	38		48	36.9	35.9	22 58	
50	43.3	50.9	29		50	42.6	43.9	23		50	48.3	47.3	40		50	36.4	35.5	58	
52	37.8	45.2	20		52	50.1	50.8	34		52	47.7	47.0	40		52	36.0	35.0	22 59	
54	35.0	40.3	14		54	46.1	47.3	29		54	47.0	46.2	41		54	35.0	33.8	23 01	
56	38.8	45.3	21		56.2	43.8	45.7	25		56	47.1	46.5	41		56	33.7	33.0	02	
58	38.8	44.8	21		58	42.8b		22		58	48.5	47.6	39		58	32.3	31.1	05	
					12 00	38.0a		15							16 00	30.9	30.0	07	-13.9

Correction to local mean time is — 13s.
Torsion head at 7h 30m read 336° and at 12h 30m read the same.
Observer—R. R. T.

Correction to local mean time is — 07s.
Torsion head at 11h 30m read 347° and at 16h 20m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 9, 1903					Magnet scale erect				Wednesday, December 9, 1903					Magnet scale erect			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	Lost			-17.0	2 00	41.6	41.6	22 48	-14.5	4 00	53.5	54.1	23 08	-14.5	6 00	45.7	47.2	22 57	-15.0
02*	36.1	37.4	22 40		02	41.8	42.0	48		02	51.1	51.9	04		02	53.0	54.8	23 08	
04	38.0	38.1	42		04	41.0	41.3	47		04	52.1	52.5	05		04	52.5	55.3	08	
06	39.0	40.1	44		06	40.3	40.6	46		06	53.5	54.3	08		06	58.3	60.3	23 17	
08	39.3	39.9	44		08	40.5	40.7	46		08	54.3	55.0	09		08	44.0*b*		22 53	
10	38.5	39.5	43		10	41.2	41.4	47		10	56.0	56.8	12		10	34.8	36.0	39	
12	38.3	39.3	43		12	40.8	41.1	47		12	57.3	57.9	13		12	42.3	44.0	22 51	
14	37.3	37.8	41	-16.5	14	40.6	40.6	46	-14.4	14	58.0	58.9	15	-14.5	14	47.8	50.8	23 01	-15.0
16	38.4	39.0	43		16	40.0	40.2	46		16	59.0	59.7	16		16	41.0	43.2	22 50	
18	39.3	39.3	44		18	40.5	40.8	46		18	60.2	60.8	18		18	38.1	41.5	46	
20	40.6	40.3	45		20	46.0	46.3	55		20	63.0	63.8	23		20	39.4	41.9	47	
22	39.1	39.6	44		22	41.5	41.8	48		22	65.5	66.8	27		22	41.7	43.3	50	
24	38.1	38.3	42		24	42.3	42.6	49		24	67.8	68.8	30		24	38.2	40.2	45	
26	38.0	38.3	42		26	42.3	42.6	49		26	67.3	68.1	29		26	35.4	37.5	41	
28	38.6	38.8	43		28	42.2	42.3	49		28	67.5	68.5	30		28	35.6	37.7	41	
30	38.6	39.0	43		30	42.3	42.5	49	-14.4	30	67.0	67.6	29	-14.7	30	40.3	43.2	49	-15.2
32	38.0	39.0	43		32	42.0	42.3	49		32	66.3	66.5	27		32	41.7	44.5	51	
34	43.6	44.8	51	-16.1	34	41.4	41.4	47		34	63.9	64.1	23		34	36.9	39.5	43	
36	45.6	46.2	54		36	40.6	41.0	46		36	61.6	62.0	20		36	37.6	38.3	43	
38	46.6	47.3	56		38	41.2	41.6	47		38	63.0	63.2	22		38	44.4	45.7	54	
40	46.6	47.3	56		40	42.4	43.0	49		40	61.6	61.9	20		40	46.7	48.3	58	
42	47.6	47.8	57		42	42.4	42.6	49		42	62.5	63.1	22		42	39.3	41.6	47	
44	44.3	44.8	22 52	-15.6	44	43.9	44.6	52	-14.3	44	63.9	65.3	24	-14.7	44	37.7	40.6	45	-15.2
46	50.4	51.2	23 02		46	47.5	47.5	57		46	66.6	67.6	28		46	38.7	41.7	47	
48	50.6	51.1	02		48	48.1	48.6	58		48	66.1	66.8	27		48	42.3	45.1	52	
50	51.6	52.5	04		50	46.3	46.7	56		50	67.8	68.9	30		50	44.3	46.8	55	
52	51.9	52.5	04		52	45.8	46.0	54		52	68.5	69.0	31		52	38.1	39.8	45	
54	51.0	51.9	03		54	48.0	48.2	22 58		54	67.1	67.6	29		54	29.4	31.6	31	
56	50.6	51.6	02		56	49.3	49.6	23 00		56	65.7	66.1	26		56	30.3	33.8	34	
58	49.8	50.7	02		58	50.6	50.9	02		58	67.5	67.8	29		58	35.3	37.3	41	
1 00	48.7	49.3	00	-15.2	3 00	50.0	50.0	23 01	-14.3	5 00	69.3	69.3	32	-14.8	7 00	30.5	32.5	33	-15.2
02	49.8	50.3	01		02	47.5	47.9	22 57		02	68.3	70.3	32		02	28.6	30.0	30	
04	48.6	49.0	00		04	47.0	47.0	56		04	60.1	60.8	19		04	35.4	36.3	40	
06	48.7	49.0	23 00		06	44.9	45.3	53		06	55.3	56.3	11		06	39.5	41.5	47	
08	48.6	48.9	22 59		08	44.6	45.0	53		08	60.2	61.0	18		08	36.8	38.3	42	
10.2	48.2	48.4	59		10	43.6	43.8	52		10	55.4	56.6	23 11		10	34.4	36.8	39	
12	48.0	48.3	59		12	42.3	42.7	50		12	47.3	47.6	22 57		12	33.3	34.2	36	
14	48.5	48.7	59	-15.1	14	41.0	41.3	48	-14.3	14	36.2	37.8	41	-14.8	14	41.6	42.6	50	-15.2
16	47.7	48.3	58		16	41.1	41.4	48		16.5	33.0	34.0	36		16	46.8	48.6	58	
18	46.6	46.9	56		18	41.6	41.8	49		18	35.6	36.0	39		18	40.4	42.2	48	
20	45.3	45.6	54		20	41.9	42.2	49		20	42.8	43.5	51		20	36.6	39.1	43	
22	44.7	44.9	53		22	42.3	42.4	50		22	40.5	41.0	48		22	43.2	46.0	54	
24	43.6	43.9	51		24	43.3	43.6	51		24	32.9	33.3	36		24	45.1	46.3	55	
26	43.0	43.4	51		26	44.1	44.2	52		26	28.3	29.1	29		26	43.3	46.1	54	
28	43.1	43.6	51		28	44.9	44.9	54		28	25.8	27.0	25		28	40.9	42.8	49	
30	42.6	42.6	50	-15.1	30	45.6	45.6	55	-14.4	30	26.6	28.6	27	-15.0	30	44.6	46.5	55	-15.2
32	42.8	43.1	50		32	46.0	46.0	55		32	30.1	31.0	32		32	44.4	47.2	55	
34	42.6	42.8	50		34	46.1	46.1	56		34	31.6	34.0	35		34	44.0	46.0	22 55	
36	42.5	42.8	50		36	46.8	47.0	57		36	37.4	38.6	43		36	50.2	53.4	23 06	
38	43.3	43.4	51		38	48.3	48.6	22 59		38	37.2	37.6	43		38	48.3	51.5	23 03	
40	43.1	44.3	51		40	49.8	50.0	23 02		40	41.3	42.6	50		40	42.4	45.0	22 53	
42	44.3	44.6	53		42	51.3	51.3	04		42	42.7	43.0	51		42	39.9	43.0	49	
44	44.3	44.5	52	-14.8	44	52.1	53.0	06		44	44.6	45.0	54	-15.0	44	45.7	48.5	58	-15.2
46	43.9	43.9	52		46	55.7	56.3	11	-14.5	46	45.0*a*		22 54		46	46.6	49.1	59	
48	43.1	43.1	50		48	62.3	63.4	22		48	54.3*a*		23 09		48	47.8	45 8	58	
50	43.3	43.5	51		50	59.5*b*		17		50	48.3	50.0	02		50	43.9	45.6	55	
52	43.9	44.0	51		52	51.5*b*		04		52	48.0	49.7	00		52	44.1	47.5	22 56	
54	43.7	43.8	51		54	50.6	50.8	03		54	48.6	49.1	00		54	47.8	51.8	23 02	
56	43.1	43.3	50		56	57.5*b*		13		56	49.6	50.4	23 02		56	41.8	46.6	22 54	
58	42.3	42.5	49		58	56.8	58.1	13		58	45.2	45.4	22 55		58	36.8	39.6	44	

Observer—W. J. P.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 9, 1903 — Magnet scale erect									Wednesday, December 9, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	36.3	40.6	22 44	-15.2	10 00	32.3	37.2	22 39	-13.8	12 00	25.8	26.3	22 26	-13.9	14 00	31.1	31.4	22 34	-14.1
02	44.3	48.2	57		02	33.8	39.0	42		02	26.2	27.2	27		02	31.1	31.9	34	
04	45.6	50.3	59		04	30.9	34.7	36		04	26.3	27.3	27		04	32.2	32.8	36	
06	35.8	42.7	46		06	30.8	34.1	36		06	26.0	27.9	27		06	33.0	33.2	37	
08	41.6	48.8	22 55		08	23.6	28.7	25		08	26.0	26.8	27		08	31.9	32.2	36	
10	46.3	50.9	23 01		10	26.1	30.1	29		10	25.4	26.7	26		10	31.8	32.1	36	
12	42.3	47.8	22 55		12	23.7	28.8	26		12	26.7	27.8	28		12	31.3	31.8	35	
14	41.1	46.1	53	-15.0	14	18.3	22.7	17	-13.8	14	26.8	28.0	28	-14.0	14	30.8	31.8	35	-14.1
16	42.8	46.7	54		16	18.2	23.2	17		16	26.1	26.8	27		16	29.0	31.3	33	
18	35.9	38.8	43		18	15.1	20.5	13		18	25.8	26.7	26		18	29.6	32.0	34	
20	30.8	34.3	35		20	16.8	24.0	17		20	28.7	29.8	31		20	29.1	32.2	34	
22	38.6	40.2	46		22	17.3	21.7	15		22	29.3	30.1	32		22	26.7	33.9	33	
24	28.7	34.1	33		24	23.2	26.8	24		24	27.9	28.3	29		24	26.9	34.8	34	
26	35.8	36.8	41		26	25.7	30.2	29		26	26.9	27.9	28		26	26.3	34.0	33	
28	37.8	39.9	45		28	26.7	30.9	30		28	27.1	28.0	28		28	25.7	32.3	31	
30	28.2	31.8	31	-14.9	30	26.3	31.8	30	-13.7	30	27.6	28.6	29	-14.0	30	22.8	29.3	27	-14.1
32	31.0	32.3	34		32	32.7	37.8	40		32	31.1	31.9	35		32	22.9	28.7	26	
34	33.2	35.1	38		34	34.1	38.8	42		34	33.7	34.1	39		34	20.5	27.3	23	
36	36.0	38.2	42		36	31.1	37.3	38		36	32.2	33.7	37		36	21.0	27.0	23	
38	33.6	35.2	38		38	34.1	39.5	42		38	29.6	31.1	33		38	21.3	29.1	25	
40	34.8	36.2	40		40	30.3	34.8	36		40	30.2	31.3	33		40	23.5	30.7	28	
42	32.2	34.5	36		42	26.4	30.4	29		42	31.0	32.0	35		42	26.3	27.0	28	
44	32.0	35.1	37	-14.7	44	26.0	29.7	28	-13.7	44	27.8	29.1	30	-14.0	44	25.5	26.0	26	-13.9
46	34.7	37.2	40		46	30.5	34.7	36		46	28.0	29.7	30		46	26.3	26.8	27	
48	38.0	40.8	46		48	24.8	29.9	28		48	28.8	29.9	31		48	27.0	28.0	29	
50	38.0	41.0	46		50	17.5	21.1	15		50	28.3	29.8	31		50	27.6	28.2	30	
52	34.1	36.7	40		52	12.0	16.2	07		52	29.2	30.2	32		52	26.1	27.0	27	
54	28.2	30.8	30		54	14.0	19.4	11		54	30.1	31.2	33		54	26.1	26.4	27	
56	27.2	31.2	30		56	18.6	22.8	17		56	34.2	34.7	39		56	27.2	27.6	29	
58	31.3	36.2	37		58	19.1	23.5	18		58	32.2	32.8	36		58	24.3	25.2	24	
9 00	32.7	36.2	38	-14.3	11 00	20.9	25.8	21	-13.7	13 00	31.8	32.2	35	-14.0	15 00	23.7	24.3	23	-14.0
02	33.5	36.2	39		02	22.2	25.2	22		02	31.8	32.2	35		02	24.6	25.3	25	
04	31.2	34.8	36		04	23.8	27.2	25		04	32.2	32.9	36		04	24.4	24.8	24	
06	30.7	33.7	35		06	25.3	29.0	27		06	33.7	34.1	38		06	23.9	24.3	23	
08	32.3	36.8	38		08	24.3	27.5	25		08	33.6	34.1	38		08	23.0	23.5	22	
10	33.1	37.2	39		10	22.2	25.8	22		10	32.6	33.1	37		10	21.6	22.0	20	
12	30.2	33.3	34		12	20.9	23.8	20		12	32.2	32.8	36		12	21.7	22.3	20	
14	30.3	33.2	34	-14.2	14	24.3	26.9	25	-13.7	14	31.2	32.1	35	-14.0	14	23.3	24.3	23	-14.2
16	28.2	33.8	33		16	24.8	27.6	26		16	29.9	30.7	33		16	24.6	25.0	25	
18	22.7	28.5	24		18	28.2	30.2	30		18	30.0	30.9	33		18	24.3	24.6	24	
20	16.0	22.0	14		20	28.9	31.2	32		20	31.7	32.3	35		20	24.4	24.9	24	
22	11.1	16.9	06		22	29.0	31.1	32		22	31.2	31.8	34		22	25.5	26.1	26	
24	23.3	28.9	25		24	29.9	32.2	33		24	32.0	32.6	36		24	28.0	28.6	30	
26	30.0	33.1	33		26	29.9	32.7	34		26	33.0	33.8	37		26	28.7	29.4	31	
28	27.8	32.9	32		28	27.8	29.4	29		28	33.0	33.3	37		28	28.5	29.3	31	
30	22.6	25.2	21	-14.1	30	28.7	30.1	31	-13.8	30	29.7	30.4	32	-14.0	30	30.1	31.0	33	-14.4
32	30.4	35.0	35		32	30.1	31.7	33		32	29.0	30.2	32		32	30.4	31.3	34	
34	33.8	37.1	39		34	29.0	30.7	31		34	31.9	32.5	36		34	31.2	31.7	35	
36	32.4	37.8	39		36	28.8	29.9	30		36	32.2	32.8	36		36	32.2	32.8	37	
38	35.7	40.0	43		38	28.2	29.8	30		38	30.9	31.8	34		38	33.7	34.0	39	
40	40.7	45.8	52		40	26.1	27.9	27		40	30.0	30.3	32		40	33.3	33.7	38	
42	38.3	43.3	48		42	26.7	27.2	27		42	31.9	32.0	35		42	34.9	34.6	40	
44	32.2	37.9	39	-14.0	44	25.0	25.9	24	-13.8	44	35.3	35.6	40	-14.1	44	35.4	35.9	41	-14.5
46	39.0	45.2	51		46	24.4	25.2	23		46	36.1	36.3	42		46	36.5	36.8	43	
48	31.3	36.3	38		48	25.8	26.7	26		48	36.3	36.7	42		48	36.3	36.6	43	
50	29.5	35.8	36		50	27.0	27.9	27		50	35.1	35.8	40		50	35.0	35.3	41	
52	38.6	45.1	50		52	27.2	27.9	28		52	33.9	34.3	38		52	36.3	36.7	43	
54	37.3	43.6	48		54	26.0	26.2	25		54	32.1	32.8	36		54	36.8	37.3	44	
56	32.6	38.9	41		56	26.0	27.1	27		56	30.8	31.2	34		56	38.8	39.4	47	
58	32.3	39.1	41		58	26.8	27.3	28		58	30.2	30.8	33		58	40.1	40.5	49	

Observers—W. J. P. and R. R. T. changed at 8h 10m; no time for alternating observations account snow drifts.

Observers—R. R. T. and W. J. P., who alternated from 14h 26m to 14h 36m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 9, 1903					Magnet scale erect					Wednesday, December 9, 1903					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	38.9	39.3	22 47	-14.8	18 00	35.3	36.3	22 42	-15.1	20 00	32.6	33.3	22 38	-14.6	22 00	56.7	58.4	22 46	-15.0
02	37.8	37.9	45		02.2	36.3	37.0	44		02	32.1	32.9	38		02	57.3	59.3	47	
04	39.5	39.9	48		04	36.8	37.2	44		04	30.1	30.8	34		04	56.2	57.9	45	
06	38.7	39.0	46		06.2	38.5	38.5	46		06	29.8	30.8	34		06	56.1	58.0	45	
08	37.8	38.0	45		08	37.3	38.0	45		08	28.9	29.8	33		08	54.5	56.1	43	
10	36.1	36.4	42		10	39.8	41.0	49		10	27.3	28.2	30		10	54.3	56.0	42	
12	35.6	36.0	42		12	38.9	40.1	48		12	27.8	28.8	31		12	57.7	59.1	47	
14	36.0	36.3	42	-14.8	14	37.3	38.0	45	-15.1	14	26.3	27.3	29	-14.7	14	54.0	56.0	42	-14.9
16	36.6	36.8	43		16	37.3	37.7	45		16	31.3	33.8	38		16	53.3	55.3	41	
18	36.9	37.1	44		18	38.0	38.7	46		18	37.6	45.0	22 51		18	53.5	55.1	41	
20	36.8	36.9	44		20	38.5	39.2	47		20*	48.2	60.9	23 12		20	52.9	55.3	41	
22	36.8	36.9	44		22	37.0	37.3	44		22	56.1	74.9	30		22	52.7	55.0	40	
24	37.2	37.4	45		24.2	36.3	38.3	45		24.2	55.2	56.8	15		24	52.9	54.8	40	
26	38.4	38.8	47		26	35.5	38.8	44		26	51.4	68.0	23 21		26	51.9	54.1	39	
28	38.3	38.5	47		28	35.0	38.2	43		28	24.2	34.8	22 33		28	52.8	55.2	40	
30	38.2	38.4	46	-15.0	30	35.2	39.2	45	-15.0	30	42.2	74.0	23 18	-14.8	30	53.4	55.8	41	-14.7
32	36.7	37.0	44		32.5	37.0	41.4	48		32*	38.7	70.8	22 13		32	52.3	54.0	39	
34	35.3	35.6	42		34	37.2	41.1	48		34	38.3	72.8	14		34	52.2	53.8	39	
36	34.0	34.3	40		36	38.1	42.1	50		36*	19.5	65.9	35		36	52.7	53.9	39	
38	33.8	34.0	39		38	36.8	40.0	47		38	7.7	47.3	11		38	53.4	55.1	41	
40	35.3	35.6	42		40	35.9	37.9	45		40	8.1	51.1	15		40	54.0	55.9	42	
42	36.0	36.0	43		42	34.5	39.0	44		42	13.7	54.8	22		42	56.8	57.5	45	
44	36.9	37.0	44	-15.1	44	35.1	37.3	44	-14.9	44.2	20.5	58.6	31	-14.8	44	56.3	58.5	46	-14.7
46	38.0	38.0	46		46	34.1	36.2	42		46	37.8	69.7	53		46	56.3	57.9	45	
48	38.2	38.6	46		48	34.1	36.1	42		48	Lost				48	59.3	61.2	50	
50	38.6	39.1	47		50	34.4	36.3	42		50*	35.6	43.9	18		50	56.1	59.1	46	
52	38.3	38.7	47		52	34.7	36.3	43		52	41.1	55.2	32		52	59.1	60.9	50	
54	36.6	36.8	44		54	34.7	36.3	43		54	43.9	52.3	32		54	61.6	64.7	56	
56	35.2	35.6	42		56	35.2	36.9	43		56	47.6	56.9	38		56	64.1	66.9	22 59	
58	34.3	34.8	40		58	35.8	37.2	44		58	34.1	41.9	16		58	64.3	68.9	23 01	
17 00	32.6	33.3	38	-15.1	19 00	35.0	36.3	43	-14.8	21 00	36.0	45.9	20	-14.9	23 00	67.0	70.2	23 04	-14.6
02	30.9	31.3	35		02	34.3	35.8	42		02	39.9	48.3	25		02	60.9	63.9	22 54	
04	31.6	32.4	36		04	34.8	36.2	42		04	42.3	50.3	29		04	55.1	57.3	45	
06	37.0	37.5	45		06	35.1	36.3	43		06	41.8	50.0	28		06	51.7	54.7	40	
08	35.0	35.6	42		08	35.1	36.3	43		08	39.8	48.8	25		08	49.3	52.2	36	
10	30.4	30.6	34		10	35.0	36.1	42		10	42.7	50.8	29		10	49.9	52.2	37	
12	25.3	26.4	27		12	35.2	36.2	43		12	44.1	51.9	32		12	51.9	54.3	40	
14	25.1	25.6	26	-15.1	14	35.1	36.1	43	-14.6	14	44.8	52.2	32	-14.9	14	54.0	56.1	43	-14.5
16	26.1	27.1	28		16	35.6	36.6	43		16	45.5	52.8	33		16	55.2	57.2	45	
18	24.5	26.3	26		18	35.5	36.6	43		18	47.1	53.9	35		18	58.8	61.0	51	
20	38.3	45.8	22 52		20	35.6	36.6	43		20	47.8	54.3	36		20	59.7	61.5	52	
22	44.4	54.4	23 04		22	35.2	36.1	43		22	48.1	54.3	36		22	57.9	59.8	49	
24	54.0	61.0	16		24	34.5	35.6	42		24	48.7	54.5	37		24	56.3	58.3	46	
26	55.0	61.5	17		26	34.2	35.3	41		26	49.2	54.9	38		26	57.6	59.1	48	
28	55.3	60.1	17		28	33.9	34.7	40		28	50.1	55.4	39		28	53.6	55.0	42	
30	49.3	51.0	23 05	-15.1	30	33.7	34.3	40	-14.4	30	50.6	55.7	39	-15.0	30	54.1	55.4	42	-14.3
32	43.2	44.5	22 55		32	33.6	34.3	40		32	52.0	56.8	41		32	57.0	58.2	47	
34	39.0	39.4	48		34	33.7	34.2	40		34	54.0	58.3	44		34	58.1	59.2	48	
36	34.8	35.2	41		36	33.2	33.9	39		36	54.7	58.9	45		36	60.2	61.1	52	
38	32.2	33.3	37		38	33.3	33.8	39		38	54.2	58.3	44		38	58.8	59.8	50	
40	30.3	31.0	34		40	33.8	34.2	40		40	54.1	58.0	45		40	56.8	57.8	46	
42	29.4	30.3	33		42	34.9	35.3	42		42	54.7	58.1	44		42	57.2	58.0	47	
44	30.4	31.0	34	-15.0	44	35.3	35.9	43	-14.4	44	54.2	57.8	44	-15.0	44	57.0	58.0	47	-14.5
46	31.3	31.8	35		46	33.9	35.1	41		46	54.2	57.7	44		46	56.8	57.3	46	
48	32.4	33.0	37		48	33.3	34.4	40		48	55.7	58.7	46		48	57.2	58.1	47	
50	33.9	34.3	40		50	33.5	34.7	40		50	55.9	58.6	46		50	57.1	57.8	46	
52	33.9	34.3	40		52	33.2	34.1	39		52	56.0	58.4	46		52	56.0	56.8	45	
54	35.5	36.0	42		54	32.2	33.7	38		54	55.5	58.1	45		54	56.8	57.2	46	
56	35.3	35.8	42		56	32.3	33.1	38		56	56.3	58.7	46		56	56.9	57.2	46	
58	35.3	35.6	42		58	33.0	33.7	39		58	56.3	58.6	46		58	55.9	56.3	44	
															24 00	55.4	56.0	44	-14.6

Observers—W. J. P. and R. R. T., who alternated from 18h 30m to 18h 36m.

Correction to local mean time is + 36s. 90° torsion = 25.'0.
Torsion head at oh 00m read 5° and 24h 15m read 345°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, December 10, 1903 — Magnet scale inverted					Friday, December 11, 1903 — Magnet scale erect.				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	57.2	53.6	22 32	-17.4	18 00	54.6	54.2	22 33	-14.7
02	56.3	52.9	33		02	55.7	55.3	32	
04	56.1	53.0	33		04	56.1	55.9	31	
06	55.8	52.8	34		06	55.1	55.1	32	
08	55.5	53.0	34		08	55.0	54.8	33	
10	55.8	53.2	33		10	54.6	54.3	33	
12	55.7	53.3	33		12	55.9	55.8	31	
14	55.1	53.0	34	-17.0	14	53.9	53.9	34	-14.6
16	55.1	53.2	34		16	54.6	54.2	33	
18	54.6	52.9	34		18	55.7	55.5	31	
20	54.1	52.4	35		20	55.8	55.8	31	
22	54.2	52.8	35		22	55.2	55.2	32	
24	54.7	53.3	34		24	55.1	55.1	32	
26	54.7	53.2	34		26	55.5	55.3	32	
28	54.3	53.2	34		28	55.1	55.0	32	
30	55.1	54.0	33	-16.6	30	55.4	55.2	32	-14.2
32	56.2	55.3	31		32	55.1	54.9	32	
34	52.8	52.2	36		34	54.4	54.1	34	
36	54.2	53.0	35		36	53.9	53.6	34	
38	56.4	55.7	31		38	53.4	53.1	35	
40	55.9	55.2	32		40	53.6	53.2	35	
42	55.9	55.3	31		42	53.9	53.7	34	
44	55.8	55.2	32	-16.2	44	53.9	53.6	34	-14.0
46	55.7	55.0	32		46	53.0	52.8	36	
48	56.8	56.2	30		48	53.2	53.1	35	
50	58.1	57.7	28		50	52.9	52.7	36	
52	55.7	55.2	32		52	52.7	52.2	37	
54	55.7	55.2	32		54	52.4	52.2	37	
56	55.7	55.2	32		56	53.7	53.3	35	
58	56.0	56.0	31		58	52.9	52.7	36	
17 00	56.8	56.3	30	-15.8	19 00	52.8	52.6	36	-13.9
02	57.0	56.8	30		02	53.2	53.1	35	
04	56.5	56.1	30		04	53.0	52.7	36	
06	55.2	55.1	32		06	53.0	52.8	36	
08	54.7	54.3	33		08	53.0	52.9	36	
10	55.8*a*		31		10	53.2	53.0	35	
12	56.9	56.9	30		12	53.8	53.3	35	
14	54.6*b*		33	-15.5	14	53.1	53.0	35	-13.9
16	54.7	54.7	33		16	53.7	53.2	35	
18	57.0	57.0	29		18	53.9	53.6	34	
20	55.5	55.3	32		20	54.1	53.9	34	
22	54.7	54.2	33		22	54.2	54.0	34	
24	55.4	55.2	32		24	54.1	54.0	34	
26	55.3	55.1	32		26	54.2	54.1	34	
28	54.8	54.2	33		28	54.0	53.9	34	
30	54.8	54.2	33	-15.0	30	53.8	53.3	35	-13.9
32	54.2	53.9	34		32	53.8	53.4	35	
34	55.1	55.1	32		34	53.8	53.6	34	
36	57.3	57.1	29		36	53.5	53.2	35	
38	56.1	55.7	31		38	53.8	53.4	35	
40	55.0	55.0	32		40	53.7	53.5	35	
42	56.1	56.1	31		42	53.8	53.7	34	
44	56.0	55.9	31	-14.9	44	53.8	53.4	35	-13.9
46	54.2	54.2	34		46	53.9	53.8	34	
48	54.8	54.8	33		48	54.0	54.0	34	
50	57.1	57.0	29		50	53.9	53.8	34	
52	56.1	56.1	31		52	54.7	54.3	33	
54	54.7	54.2	33		54	54.1	54.0	34	
56	53.2	53.2	35		56	54.1	53.8	34	
58	53.8	53.7	34		58	53.8	53.3	35	-13.8
					20 00	53.9	53.2	35	
20 00	51.1	51.9	22 32	-15.0	22 00	54.2	54.6	22 36	-12.0
02	51.8	52.6	33		02	54.2	54.4	36	
04	52.7	53.2	34		04	53.3	53.8	35	
06	53.1	53.9	35		06	54.1	54.2	36	
08	53.2*b*		34		08	55.7	56.0	38	
10	53.8	53.8	35		10	53.8	54.1	35	
12	53.1	53.2	34		12	52.5	52.8	33	
14	53.1	53.1	34	-14.3	14	52.7	52.9	34	-12.0
16	53.2	53.2	34		16	53.2	53.8	35	
18	53.0	53.1	34		18	53.1	53.3	34	
20	52.7	52.8	33		20	52.9	53.2	34	
22	52.2	52.3	33		22	53.6	54.2	35	
24	52.2	52.2	33		24	50.7	51.3	31	
26	52.9	52.9	34		26	50.8	52.1	31	
28	53.1	53.1	34		28	51.2	52.2	32	
30	53.4	53.7	35	-13.7	30	50.2	51.2	30	-12.0
32	53.2	53.2	34		32	50.2	51.3	30	
34	53.0*b*		34		34	49.4	50.2	29	
36	51.8	51.8	32		36	51.1	51.9	32	
38	51.9	51.9	32		38	52.9	53.4	34	
40	51.7	51.8	32		40	50.1	50.6	30	
42	50.9	51.2	31		42	50.1	50.9	30	
44	51.2	51.8	32	-13.3	44	52.9	53.1	34	-11.9
46	51.9	52.4	33		46	52.2	52.9	33	
48	52.1	52.4	33		48	52.3	52.9	33	
50	52.3	52.7	33		50	53.2	53.9	35	
52	52.8	53.1	34		52	52.8	53.2	34	
54	52.3	52.8	33		54	52.0	52.4	33	
56	52.9	53.1	34		56	51.9	52.8	33	
58	53.2	53.4	34		58	52.8	53.2	34	
21 00	53.1	53.1	34	-12.9	23 00	51.8	52.3	32	-11.8
02	53.1	53.1	34		02	53.8	54.2	36	
04	52.9	53.0	34		04	53.9	54.9	36	
06	53.1	53.1	34		06	55.0	55.8	38	
08	52.9	52.9	34		08	53.8	54.1	35	
10	52.2	52.2	33		10	53.6	53.9	35	
12	52.4	52.6	33		12	54.1	54.8	36	
14	52.7	52.9	34	-12.7	14	55.2	55.9	38	-11.7
16	53.4	53.7	35		16	54.7	55.3	37	
18	54.0	54.1	36		18	55.2	56.0	38	
20	54.5	54.8	36		20	55.8	56.2	39	
22	54.2	54.2	36		22	56.2	56.9	39	
24	54.2	54.4	36		24	55.3	55.9	38	
26	54.1	54.2	36		26	57.2	57.8	41	
28	54.2	54.3	36		28	57.9	58.8	42	
30	54.1	54.1	36	-12.3	30	56.8	57.0	40	-11.7
32	53.9	54.0	35		32	56.3	56.9	40	
34	53.3	53.8	35		34	56.1*a*		39	
36	53.8	53.9	35		36	54.8	55.1	37	
38	53.8	53.9	35		38	54.8	55.1	37	
40	53.1	53.1	34		40	53.8	54.0	35	
42	52.8	52.9	34		42	52.8	53.0	34	
44	52.4	52.8	33	-12.0	44	54.9	55.0	37	-11.7
46	53.0	53.1	34		46	53.4	53.8	35	
48	53.0	53.1	34		48	53.2	53.9	35	
50	53.2	53.8	35		50	56.1	56.4	39	
52	53.8	54.0	35		52	56.0	56.2	39	
54	54.2	54.6	36		54	54.1	54.6	36	
56	54.7	54.9	37		56	54.4	54.7	36	
58	54.8	54.9	37		58	54.2	54.5	36	
					24 00	54.0	54.8	36	-11.7

Correction to local mean time is + 1m 49s. 90° torsion = 24.′6.
Torsion head at 15h 40m read 347° and at 20h 20m read 341°.
Observer—W. J. P.

Correction to local mean time is — 20s.
Torsion head at 19h 45m read 344° and at 24h 15m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, December 13, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	55.0	52.8	22 41	−15.3
02	56.1	54.1	39	
04	56.7	54.7	38	
06	55.2	53.9	40	
08	55.6	54.1	39	
10	54.1	52.7	42	
12	51.3	50.3	46	
14	52.2	51.8	44	−15.0
16	55.3	53.9	40	
18	58.8	57.7	34	
20	55.9	55.1	38	
22	53.8	52.7	42	
24	53.5	52.4	42	
26	54.3	53.6	41	
28	56.6	55.5	37	
30	56.8	55.8	37	−14.6
32	54.3	53.2	41	
34	53.2	52.3	43	
36	51.9	51.1	45	
38	53.1	52.1	43	
40	56.3	55.7	37	
42	56.5	56.1	37	
44	54.7	54.2	40	−14.2
46	54.0	53.4	41	
48	54.3	53.9	40	
50	54.2	53.9	41	
52	54.2	53.9	41	
54	53.8	53.1	42	
56	52.8	52.3	43	
58	52.9	52.6	43	
1 00	53.8	53.6	41	−13.9
02	55.1	54.9	39	
04	56.1	56.0	37	
06	56.9	56.7	36	
08	57.2	57.1	36	
10	57.7	57.3	35	
12	57.8	57.5	35	
14	58.2	58.0	34	−13.4
16	57.9	57.7	35	
18	57.2	57.1	36	
20	56.9	56.8	36	
22	56.2	56.1	37	
24	56.1	55.9	37	
26	56.3	56.1	37	
28	56.2	56.1	37	
30	56.3	56.1	37	−13.2
32	56.1	56.0	37	
34	55.7	55.6	38	
36	55.8	55.7	38	
38	56.1	56.0	37	
40	55.7	55.2	38	
42	54.9	54.8	39	
44	54.4	54.3	40	−13.0
46	53.7	53.7	41	
48	53.9	53.9	41	
50	54.1	54.0	40	
52	55.2	55.0	39	
54	56.1	56.1	37	
56	56.2	56.1	37	
58	55.8	55.7	38	
2 00	55.9	55.9	22 38	−12.9
02	56.8	56.3	37	
04	56.1	55.9	37	
06	55.2	55.1	39	
08	54.4	54.2	40	
10	54.7	54.3	40	
12	54.7	54.5	40	
14	54.2	54.1	40	−12.8
16	54.3	54.2	40	
18	54.4	54.2	40	
20	54.0	53.9	41	
22	54.1	54.0	41	
24	53.9	53.8	41	
26	53.8	53.7	41	
28	53.0	52.9	42	
30	52.0	51.9	44	−12.7
32	52.6	52.3	43	
34	52.8	52.8	42	
36	53.1	53.0	42	
38	53.7	53.2	42	
40	54.2	54.1	40	
42	54.1	53.9	41	
44	54.2	54.1	40	−12.7
46	55.2	55.1	39	
48	56.1	56.1	37	
50	56.9	56.8	36	
52	57.1	56.9	36	
54	58.1	58.0	34	
56	57.8	57.3	35	
58	56.9	56.8	36	
3 00	56.5	56.2	37	−12.4
02	55.9	55.8	38	
04	55.7	55.4	38	
06	54.8	54.2	40	
08	52.9	52.5	43	
10	52.3	52.1	43	
12	52.1	51.9	44	
14	52.1	51.9	44	−12.3
16	52.2	52.0	44	
18	53.2	53.1	42	
20	53.9	53.2	41	
22	53.9	53.8	41	
24	53.9	53.7	41	
26	52.9	52.7	43	
28	52.4	52.1	43	
30	51.9	51.7	44	−12.1
32	51.9	51.8	44	
34	52.1	52.0	44	
36	52.9	52.8	43	
38	53.7	53.2	42	
40	53.1	53.0	42	
42	53.9	53.5	41	
44	53.8	53.6	41	−12.0
46	53.9	53.5	41	
48	54.8	54.6	40	
50	54.9	54.8	39	
52	55.1	55.0	39	
54	54.7	54.3	40	
56	54.8	54.7	40	
58	55.1	55.0	39	

Observer—W. J. P.

Sunday, December 13, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	53.1	54.2	22 42	−11.8
02	52.8	54.3	42	
04	53.2	54.9	43	
06	51.1	52.3	39	
08	51.1	52.8	39	
10	50.9	52.1	39	
12	49.9	50.9	37	
14	50.9	52.0	38	−11.6
16	51.2	52.2	39	
18	51.9	52.9	40	
20	51.9	53.0	40	
22	52.2	53.1	40	
24	54.6	55.9	44	
26	57.7	58.8	49	
28	58.6	59.4	50	
30	57.8	58.8	49	−11.5
32	58.8	59.5	51	
34	59.1	60.6	51	
36	59.4	60.2	52	
38	59.8	60.8	52	
40	58.1	58.9	50	
42	57.0	57.9	48	
44	56.3	57.1	47	−11.5
46	55.9	56.2	46	
48	54.3	54.8	43	
50	54.1	54.8	43	
52	52.8	53.1	41	
54	52.2	52.8	40	
56	51.3	52.0	39	
58	52.2	52.9	40	
5 00	53.0	53.4	41	−11.4
02	52.2	52.3	40	
04	53.3	53.8	42	
06	54.8	55.1	44	
08	54.3	54.7	43	
10	56.0	56.2	46	
12	57.7	58.2	49	
14	58.8	59.0	50	−11.3
16	60.1	60.2	52	
18	60.9	61.1	53	
20	63.7*a*		58	
22	63.9	63.9	22 58	
24	65.2	65.2	23 00	
26	66.6	67.0	02	
28	67.1	67.3	03	
30	66.2	66.8	02	−11.2
32	65.0	65.9	23 00	
34	63.3	64.0	22 58	
36	63.8	64.3	58	
38	62.9	63.8	57	
40	62.6	62.9	56	
42	62.6	62.0	56	
44	62.0	62.3	55	−11.2
46	62.4	62.8	56	
48	59.9	61.0	22 53	
50	67.9*a*		23 04	
52	70.3	71.1	09	
54	71.2*a*		09	
56	73.8*a*		14	
58	76.2*a*		23 17	
6 00	51.2	57.2	22 43	−11.2
02*	48.5	54.0	23 17	
04	52.0	57.2	22	
06	46.1	49.8	12	
08	51.0	56.5	21	
10	55.8	59.1	27	
12	54.2	57.9	25	
14	58.1	60.4	30	−11.2
16	54.0	56.8	24	
18	55.1	56.3	24	
20	55.8	57.7	26	
22	46.5	48.0	11	
24	58.0*a*		28	
26	61.0	62.0	33	
28	56.9	58.9	28	
30	54.0	56.2	23	−11.2
32	51.1	52.8	18	
34	51.8	52.5	18	
36	56.1	56.8	25	
38	54.7	55.3	23	
40	48.2	49.9	14	
42	49.0	50.1	14	
44	42.0	44.3	04	−11.4
46	46.8	47.2	10	
48	48.1	48.9	13	
50	46.9	47.8	11	
52	45.6	45.8	08	
54	50.1	50.8	16	
56	48.1	50.1	14	
58	44.2	44.7	06	
7 00	49.0	50.3	15	−11.4
02	46.9	47.7	11	
04	45.1	45.6	23 08	
06	38.2	38.4	22 57	
08	37.2*a*		22 55	
10	54.9	55.1	23 23	
12	34.8	37.5	22 53	
14	40.6	41.0	23 01	−11.4
16	46.9	48.9	12	
18	47.3	48.4	12	
20	40.1	41.0	23 00	
22	36.8	38.7	22 56	
24	37.7	39.6	22 57	
26	40.2	42.0	23 01	
28	33.3	35.3	22 50	
30	30.7	33.2	47	−11.4
32	33.4	35.2	50	
34	26.8	30.0	22 41	
36	39.3	40.7	23 00	
38	30.4	33.0	22 46	
40	32.3	34.8	49	
42	37.2	40.1	57	
44	36.2	37.9	55	−11.5
46	31.2	33.7	48	
48	34.8	37.7	53	
50	36.6	37.2	55	
52	31.2	32.5	47	
54	27.8	28.3	41	
56	28.0	29.0	41	
58	24.5	28.0	38	
8 00	20.2	25.0	32	−11.5

Correction to local mean time is — 45s.
Torsion head at 0h 00m read 350° and at 9h 30m read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, December 14, 1903 — Magnet scale inverted									Tuesday, December 15, 1903 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	53.4	52.8	22 59	-18.0	10 00	55.1	54.8	22 56	-16.9	12 00	35.9	34.7	22 44	-20.0	14 00	32.2	32.4	22 39	-17.1
02	55.6	54.3	56		02	56.1	55.6	22 55		02	33.2	34.8	42		02	30.8	31.0	37	
04	58.3	56.7	52		04	47.2	46.8	23 09		04	32.3	33.7	40		04	30.9	32.2	38	
06	53.9	52.8	59		06	59.5	59.1	22 49		06	33.9	34.7	42		06	31.1	32.1	38	
08	54.8	53.8	57		08	59.8	58.7	49		08	34.0	35.1	42		08	32.9	33.3	40	
10	53.3	52.3	22 59		10	58.1	57.3	52		10	33.2	34.1	41		10	32.2	32.8	39	
12	51.8	50.0	23 02		12	59.0	58.0	51		12	32.8	33.4	40		12	31.7	32.1	38	
14	51.5	49.7	03	-17.8	14	58.2	57.5	52	-16.7	14	33.2	34.2	41	-19.7	14	31.4	31.8	38	-17.0
16	48.7	47.3	07		16	58.7	57.9	51		16	34.8	35.4	43		16	32.3	32.7	39	
18	51.5	50.2	23 03		18	58.2	57.2	52		18	35.8	36.7	45		18	31.8	32.9	39	
20	53.8	52.9	22 59		20	59.2	58.2	50		20	36.0	36.8	45		20	33.3	34.0	41	
22	52.9	52.0	23 00		22	58.3	57.4	52		22	35.1	36.0	44		22	33.3	33.9	41	
24	54.9	54.0	22 57		24	58.2	57.4	52		24	30.7	31.1	37		24	34.2	35.0	43	
26	57.2	56.0	54		26	58.7	57.9	51		26	27.8	28.3	32		26	34.2	34.8	43	
28	57.2	56.2	53		28	59.0	58.1	51		28	28.8	29.3	34		28	32.2	32.9	39	
30	53.9	53.1	22 58	-17.8	30	61.3	60.3	47	-16.6	30	29.2	30.4	35	-19.2	30	31.8	32.8	39	-16.9
32	49.7	48.7	23 05		32	62.0	61.3	46		32	33.3	34.3	41		32	33.2	34.0	41	
34	49.1	47.7	06		34	61.8	61.0	46		34	34.8	35.7	43		34	33.1	33.9	41	
36	47.4	46.3	09		36	61.3	60.8	47		36	36.1	37.1	46		36	33.2	34.1	41	
38	46.3	46.1	10		38	61.1	60.6	47		38	36.8	37.2	46		38	32.9	33.9	41	
40	48.4	48.2	07		40	61.0	60.3	47		40	34.6	35.2	43		40	32.2	33.2	40	
42	46.3	45.0	11		42	60.7	60.0	48		42	33.2	34.0	41		42	33.1	33.7	41	
44	49.2	48.0	06	-17.7	44	61.0	60.2	47	-16.5	44	32.2	33.0	39	-19.0	44	33.0	33.7	41	-16.7
46	49.8	49.3	05		46	61.8	61.1	46		46	32.1	32.6	39		46	33.0	33.6	41	
48	49.2	47.9	06		48	62.3	61.7	45		48	31.9	32.5	39		48	32.9	33.4	40	
50	50.0	49.3	04		50	63.0	62.3	44		50	33.3	34.1	41		50	32.9	33.3	40	
52	51.7	50.2	02		52	62.0	61.5	46		52	34.0	34.9	42		52	32.2	32.9	39	
54	50.7	49.3	04		54	61.9	61.3	46		54	33.8	34.4	42		54	32.0	32.4	39	
56	48.1	47.9	07		56	61.2	60.8	47		56	33.3	34.2	41		56	32.1	32.3	39	
58	46.1	46.1	10		58	61.5	61.1	46		58	32.5	33.0	40		58	31.9	32.2	38	
9 00	48.1	48.0	07	-17.6	11 00	62.6	62.0	45	-16.4	13 00	32.7	33.0	40	-18.4	15 00	32.7	33.0	40	-16.6
02	47.1	46.8	09		02	63.0	62.7	44		02	32.1	32.6	39		02	32.2	32.8	39	
04	46.4	46.4	10		04	63.9	63.2	43		04	32.5	32.9	40		04	32.7	33.1	40	
06	48.1	47.4	08		06	62.9	62.2	44		06	33.0	33.6	41		06	33.2	33.9	41	
08	49.9	49.2	05		08	63.8	63.3	43		08	34.7	35.1	43		08	33.2	33.8	41	
10	52.9	51.9	00		10	63.0	62.7	44		10	35.1	35.8	44		10	32.7	33.1	40	
12	49.3	48.8	05		12	62.3	62.0	45		12	33.6	34.0	41		12	32.0	32.3	39	
14	47.8	47.1	08	-17.3	14	63.0	62.7	44	-16.2	14	31.3	32.0	38	-18.0	14	32.1	32.9	39	-16.3
16	50.7	50.1	03		16	62.7	62.1	44		16	31.8	32.1	38		16	32.1	32.7	39	
18	47.9	47.1	08		18	62.3	61.9	45		18	32.0	32.1	38		18	31.6	31.9	38	
20	46.9	46.5	09		20	63.5	63.0	43		20	32.8	32.9	40		20	32.2	32.7	39	
22	49.3	48.2	06		22	63.0	62.4	44		22	32.1	32.5	39		22	28.3	28.7	33	
24	49.2	48.7	06		24	62.7	62.1	44		24	31.6	31.7	38		24	27.2	27.4	31	
26	51.8	50.8	02		26	62.9	62.3	44		26	32.3	32.7	39		26	24.2	25.0	27	
28	52.8	51.5	01		28	62.6	62.2	44		28	32.6	32.8	40		28	25.9	26.1	29	
30	53.2	52.2	00	-17.1	30	62.2	61.9	45	-16.2	30	34.1	34.7	42	-17.8	30	28.6	28.8	33	-16.0
32	53.1	52.2	23 00		32	62.1	61.9	45		32	34.8	34.9	43		32	28.8	28.8	34	
34	56.2	55.1	22 55		34	62.2	61.9	45		34	33.1	33.3	40		34	28.1	28.9	33	
36	58.9	57.7	51		36	62.3	62.1	45		36	32.3	32.8	39		36	30.1	30.2	36	
38	58.0	56.9	52		38	62.0	61.8	45		38	32.6	32.8	40		38	31.5	32.0	38	
40	55.9	54.2	56		40	61.3	61.1	46		40	31.3	31.8	38		40	31.8	32.1	38	
42	57.0	55.9	54		42	62.1	61.9	45		42	29.9	30.1	35		42	31.8	32.1	38	
44	57.6	56.8	53	-17.0	44	62.1	62.0	45	-16.2	44	30.1	30.1	36	-17.3	44	32.1	32.9	39	-15.9
46	53.1	52.6	59		46	62.0	62.2	45		46	32.1	32.1	39		46	32.1	32.9	39	
48	57.9	57.3	52		48	63.8	63.3	43		48	32.1	32.1	39		48	30.6	31.3	37	
50	56.9	56.1	54		50	63.8	63.2	43		50	30.4	30.8	36		50	29.1	29.7	34	
52	56.6	56.0	54		52	63.2	63.0	43		52	30.1	30.2	36		52	31.1	32.1	38	
54	56.8	56.1	54		54	62.7	62.4	44		54	30.3	30.9	36		54	33.9	34.3	42	
56	55.1	54.7	56		56	62.7	62.1	44		56	31.9	32.6	39		56	33.7	33.9	41	
58	57.0	56.3	54		58	65.2	64.8	40		58	32.1	32.2	39		58	32.9	33.1	40	
					12 00	65.1	64.9	40	-16.0						16 00	32.7	33.8	41	-15.6

Correction to local mean time is — 03s. 90° torsion = 24.′1.
Torsion head at 7h 30m read 350° and at 12h 20m read 356°.
Observer—R. R. T.

Correction to local mean time is — 18s. 90° torsion = 24.′9.
Torsion head at 12h 00m read 351° and at 16h 00m read 341°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 16, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00.2	40.3	39.1	22 49	-20.5
02*	38.3	37.1	53	
04	39.5	39.0	50	
06	42.2	38.6	48	
08	42.3	40.0	47	
10	44.4	41.3	44	
12	45.0	42.6	43	
14	46.2	44.3	41	-20.0
16	46.2	43.5	41	
18	43.4	42.2	44	
20	43.7	42.3	44	
22	42.7	41.6	46	
24	43.0	41.8	45	
26	42.3	41.3	46	
28	42.6	42.1	45	
30	39.3	38.7	50	-19.5
32	39.3	39.1	50	
34	39.4	39.1	50	
36	38.3	38.2	52	
38	39.5	39.5	50	
40	40.1	39.8	49	
42	40.6	40.2	48	
44	41.2	41.1	47	-18.9
46	41.8	41.6	46	
48	41.6	41.4	47	
50	41.7	41.3	47	
52	41.5	41.1	47	
54	40.2	39.8	49	
56	38.3	38.1	52	
58	39.2	38.8	50	-18.6
1 00	40.8	40.3	48	
02	39.6	38.8	50	
04	37.3	36.9	53	
06	35.0	34.3	57	
08	34.5	34.1	58	
10	35.0	34.6	57	
12	33.8	33.4	59	
14	36.7	36.5	54	-18.2
16	39.2	39.0	50	
18	40.0	39.5	49	
20	41.2	40.0	48	
22	40.0	39.3	50	
24	42.1	41.0	46	
26	40.5	40.0	49	
28	38.3	37.5	52	
30	40.2	39.0	50	-18.2
32	40.2	39.2	49	
34	41.3	40.4	48	
36	41.5	41.3	47	
38	41.3	39.9	48	
40	40.0	38.6	50	
42	38.9	37.8	52	
44	42.0	40.8	47	-18.0
46	43.2	42.3	45	
48	42.3	41.6	46	
50	40.2	39.0	50	
52	41.7	40.3	47	
54	39.7	39.2	50	
56	38.2	37.6	52	
58	36.0	35.0	56	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	39.2	37.8	22 51	-17.9
02	33.6	33.0	59	
04	36.6	35.8	55	
06	35.8	35.4	56	
08	36.6	36.0	55	
10	37.0	36.8	54	
12	38.6	38.2	52	
14	38.1	37.5	52	-17.8
16	40.2	39.9	49	
18	40.4	40.0	49	
20	41.2	40.6	48	
22	39.7	39.3	50	
24	39.9	39.5	49	
26	39.2	38.8	50	
28	38.5	38.1	52	
30	38.3	38.0	52	-17.7
32	38.6	38.5	51	
34	38.5	38.3	52	
36	36.8	36.3	54	
38	35.9	35.6	56	
40	35.2	34.8	57	
42	35.3	35.0	57	
44	35.5	33.0	58	-17.5
46	36.3	36.0	55	
48	37.0	36.6	54	
50	37.3	37.1	53	
52	35.3	34.6	57	
54	35.3	35.1	56	
56	35.2	34.9	57	
58	37.3	37.0	53	
3 00	38.1	37.7	52	-17.5
02	38.0	37.5	53	
04	40.3	39.9	49	
06	43.2	43.0	44	
08	43.0	42.5	45	
10	42.6	42.3	45	
12	41.9	41.5	46	
14	40.7	40.3	48	-17.4
16.2	38.3	38.3	52	
18	37.6	37.3	53	
20	38.3	38.1	52	
22	39.2	39.0	50	
24	40.0	39.8	49	
26	40.6	40.2	48	
28	38.9	38.3	51	
30	37.7	37.3	53	-17.2
32	37.8	37.3	53	
34	37.4	37.4	53	
36	38.2	37.6	52	
38	40.0	39.5	49	
40	41.2	40.5	48	
42	39.3	38.5	51	
44	40.3	39.5	49	-17.0
46	41.2	40.8	47	
48	41.3	40.3	48	
50	40.3	39.5	49	
52	39.7	39.1	50	
54	41.3	40.3	48	
56	42.2	41.0	46	
58	45.9	45.2	40	

Observer—W. J. P.

Wednesday, December 16, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	46.3	45.3	22 40	-16.9
02	44.3	43.4	43	
04	42.7	42.3	45	
06	40.3	39.9	49	
08	40.3	39.8	49	
10	41.5	41.3	47	
12	44.4	44.0	42	
14.1	44.6	44.0	42	-16.8
16	45.0	44.5	42	
18	43.3	43.0	44	
20	41.3	40.9	47	
22	41.8	41.5	46	
24	41.6	41.3	47	
26	41.6	41.3	47	
28	42.0	41.6	46	
30	42.2	41.9	46	-16.7
32	41.0	40.4	48	
34	38.8	38.7	51	
36	41.3	41.3	47	
38	41.0	40.8	48	
40	40.6	40.1	48	
42	39.3	38.9	50	
44	38.2	37.8	52	-16.6
46	37.9	37.5	53	
48	37.0	36.3	54	
50	35.1	34.7	57	
52	36.1	35.8	55	
54	37.1	36.6	54	
56	33.8	33.3	59	
58	39.0	38.5	51	
5 00	38.1	37.3	53	-16.5
02	35.3	34.6	57	
04	35.0	34.2	57	
06	36.6	36.3	55	
08	36.2	35.3	22 56	
10	32.1	31.8	23 02	
12	29.9	29.3	05	
14	30.0	29.5	05	-16.4
16	29.9	29.3	05	
18	30.3	30.1	04	
20	32.3	32.0	23 01	
22	34.0	33.6	22 59	
24	34.0	33.4	59	
26	37.1	36.5	22 54	
28	29.6	28.7	23 06	
30	29.8	29.3	05	-16.3
32	29.3	28.7	06	
34	28.3	28.1	08	
36	29.7	29.3	05	
38	30.9	30.6	04	
40	32.6	32.4	01	
42	33.3	33.1	00	
44	33.5	32.6	00	-16.2
46	32.3	31.7	02	
48	31.3	30.3	03	
50	29.3	29.0	06	
52.2	28.9	28.3	07	
54	30.9	30.5	04	
56	33.0	33.0	00	
58	32.3	32.0	01	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00	30.2	29.8	23 05	-16.2
02	28.8	28.2	07	
04	31.0	30.6	03	
06	33.0	32.3	23 00	
08	35.3	34.7	22 57	
10	36.0	35.3	56	
12	36.0	35.1	56	
14	35.3	34.3	57	-16.5
16	34.0	33.2	22 59	
18	33.0	32.0	23 01	
20	32.2	31.0	02	
22	33.5	32.6	23 00	
24	34.1	33.3	22 59	
26	34.2	33.3	59	
28	34.6	33.7	58	
30	35.3	34.3	57	-16.5
32	37.0	36.4	54	
34	39.3	38.3	51	
36	39.0	37.6	52	
38	37.8	36.8	53	
40	36.0	35.2	22 56	
42	31.6	30.6	23 03	
44	30.6	28.7	23 05	-16.6
47	35.3	33.3	22 58	
48	38.9	35.1	54	
50	42.5	39.3	48	
52	42.8	40.2	47	
54	42.0	40.0	47	
56	42.6	40.4	47	
58	42.0	40.0	47	
7 00	39.6	37.6	51	-16.8
02	37.0	36.0	54	
04	38.2	37.2	53	
06	39.1	38.2	51	
08	39.6	38.0	51	
10	44.1	42.0	44	
12	47.8	46.3	38	
14	44.9	44.3	42	-17 0
16	40.5	39.5	49	
18	39.2	37.8	51	
20.3	40.0	39.0	50	
22	35.6	35.3	56	
24	35.8	34.7	56	
26	35.3	34.2	57	
28.2	40.0	39.3	50	
30	41.3	40.5	48	-17.0
32	36.0	33.0	22 58	
34	29.0	25.8	23 09	
36	26.4	22.4	14	
38	26.3	22.0	14	
40	31.5	29.5	23 04	
42	38.5	36.0	22 53	
44	44.3	41.6	44	-17.0
46	46.0	45.0	40	
48	46.0	44.1	41	
50	48.0	45.2	38	
52	49.3	44.1	38	
54	50.2	45.6	36	
56	53.4	49.3	31	
58	56.1	51.0	28	

Observers—W. J. P. and R. R. T., who alternated from 7h 52m to 8h 06m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 16, 1903					Magnet scale inverted					Wednesday, December 16, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	54.0	51.7	22 29	-17.0	10 00	50.7	48.4	22 34	-16.4	12 00	47.7	47.3	22 37	-16.2	14 00	49.1	48.9	22 35	-16.2
03	53.2	48.1	32		02	44.1	42.1	44		02	47.7	47.3	37		02	50.1	50.0	33	
04	49.3	45.1	38		04	45.9	45.1	40		04	47.7	47.6	37		04	49.8	49.3	34	
06	47.2	42.5	41		06	51.1	50.2	32		06	48.7	48.4	36		06	49.2	49.2	34	
08	48.2	44.2	39		08	51.9	50.9	31		08	48.1	48.1	36		08	51.8*b*		30	
10	51.7	47.2	34		10	50.2	48.9	34		10	48.0	47.9	36		10	53.8	53.3	28	
12	51.8	47.8	34		12	47.9	45.9	38		12	47.8	47.6	37		12	53.2	53.0	28	
14	41.9	38.7	48	-17.0	14	46.8	44.3	40	-16.4	14	47.8	47.5	37	-16.2	14	53.0	52.9	29	-16.3
17	41.1	37.2	50		16	48.2	46.3	38		16	47.7	47.2	37		16	52.7	52.1	30	
18	44.9	40.9	44		18	47.5	45.7	38		18	47.6	47.2	37		18	53.4	53.0	28	
20	47.1	44.3	40		20	48.9	46.9	36		20	47.9	47.7	37		20	54.1	53.7	27	
22	49.7	41.1	40		22	47.0	45.9	39		22	48.0	47.8	36		22	51.5	50.8	32	
24	42.8	40.0	47		24	42.9	42.9	44		24	47.7	47.1	37		24	51.2	50.7	32	
26	44.8	42.2	43		26	44.8	44.2	42		26	48.2	47.8	36		26	50.4	50.2	33	
28	44.9	41.8	44		28	47.0	46.2	38		28	47.2	47.0	38		28	50.8	50.1	33	
30	40.0	37.0	51	-16.9	30	50.0	49.7	34	-16.3	30	47.8	47.1	37	-16.3	30	50.3	49.7	33	-16.3
32	41.3	37.5	50		32	50.2	49.2	34		32	48.1	47.6	37		32	50.3	50.0	33	
34	45.4	42.2	43		34	46.0	45.9	40		34	49.0	48.6	35		34	50.8	50.2	32	
36	46.8	43.6	41		36	46.2	45.5	40		36	48.3	47.8	36		36	50.0	49.4	34	
38	39.1	36.9	52		38	46.0	45.1	40		38	49.0	48.6	35		38	50.0	49.7	34	
40	36.0	33.7	57		40	47.0	46.0	39		40	48.8	48.1	36		40	49.2	49.0	35	
42	42.6	42.4	45		42	47.7	46.7	38		42	49.0	48.8	35		42	49.0	48.6	35	
44	45.9	45.2	40	-16.9	44	50.6	49.9	33	-16.3	44	49.9	49.2	34	-16.2	44	49.0	48.7	35	-16.3
46	45.9	45.0	40		46	48.9	48.0	36		46	49.0	48.8	35		46	49.1	48.8	35	
48	45.9	45.0	40		48	49.1	47.7	36		48	47.9	47.3	37		48	48.4	48.1	36	
50	42.7	41.2	46		50	46.9	45.9	39		50	47.7	47.2	37		50	48.2	47.9	36	
52	43.2	42.0	45		52	47.8	46.8	37		52	47.8	47.8	37		52	48.2	47.7	36	
54	46.2	45.1	40		54	48.9	48.0	36		54	47.3	47.0	38		54	48.0	47.7	37	
56	47.9	46.7	37		56	48.9	48.0	36		56	47.8	47.3	37		56	47.9	47.6	37	
58	46.3	45.1	40		58	49.3	48.9	35		58	49.2	48.9	35		58	47.9	47.5	37	
9 00	44.9	44.1	42	-16.8	11 00	49.9	48.9	34	-16.3	13 00	49.4	48.9	35	-16.1	15 00	47.9	47.4	37	-16.3
02	45.7	45.0	41		02	49.8	48.8	34		02	48.7	47.9	36		02	47.3	47.1	38	
04	40.1	38.2	50		04	49.8	48.8	34		04	48.8	48.1	36		04	46.3	46.1	39	
06	39.8	38.3	50		06	50.7	49.1	33		06	48.9	48.2	36		06	45.7	45.2	40	
08	40.9	40.1	48		08	51.9	50.7	31		08	49.7	49.0	34		08	45.2	45.0	41	
10	44.0	42.2	44		10	52.5	50.1	31		10	49.2	48.6	35		10	45.1	44.8	41	
12	45.7	43.2	42		12	53.6	52.0	29		12	49.7	49.1	34		12	44.6	44.2	42	
14	47.6	46.0	38	-16.7	14	54.8	53.8	26	-16.2	14	50.1	49.8	33	-16.1	14	44.1	43.7	43	-16.4
16	50.3	48.4	34		16	57.2	55.9	23		16	51.2	51.0	32		16	45.2	45.0	41	
18	50.9	49.2	33		18	59.0	57.3	20		18	50.0	49.8	33		18	45.8	45.4	40	
20	55.6	53.8	26		20	54.9	52.0	28		20	49.9	49.2	34		20	45.3	45.1	41	
22	54.0	52.0	28		22	54.7	53.2	27		22	51.8	51.3	31		22	45.8	45.6	40	
24	52.8	51.4	30		24	52.2	50.4	31		24	48.1	47.7	37		24	46.1	45.9	40	
26	53.2	52.1	29		26	55.7	54.8	25		26	47.9	47.8	37		26	45.8	45.7	40	
28	54.3	53.7	27		28	51.7	50.1	32		28	47.3	47.1	38		28	45.9	45.7	40	
30	52.1	50.2	32	-16.6	30	49.8	49.2	34	-16.2	30	46.2	45.9	40	-16.0	30	45.9	45.7	40	-16.3
32	47.0	46.3	38		32	48.1	47.0	37		32	47.2	46.9	38		32	45.1	45.0	41	
34	52.0	51.1	31		34	48.7	47.6	36		34	48.1	47.9	36		34	44.4	44.2	42	
36	50.1	50.1	33		36	48.1	46.9	37		36	48.0	47.8	36		36	45.3	45.1	41	
38	50.1	49.2	34		38	48.0	47.0	37		38	47.9	47.6	37		38	44.8	44.8	41	
40	47.9	47.0	37		40	47.7	46.7	38		40	47.7	47.2	37		40	44.7	44.4	42	
42	44.3	42.6	44		42	48.2	47.3	37		42	47.3	47.0	38		42	44.5	44.2	42	
46	49.1	47.9	36	-16.4	44	48.5	47.6	36	-16.2	44	47.2	47.1	38	-16.1	44	44.4	44.2	42	-16.3
48	50.7	49.6	33		46	47.8	46.9	37		46	48.2	48.0	36		46	44.0	43.8	43	
50	50.8	49.7	33		48	47.2	46.7	38		48	48.8	48.6	35		48	44.3	44.2	42	
52	48.9	47.7	36		50	47.2	47.2	38		50	48.8	48.0	36		50	45.1	45.1	41	
54	47.0	46.1	39		52	48.7	48.4	36		52	46.9	46.8	38		52	44.8	44.8	41	
56	47.7	46.4	38		54	48.6	48.4	36		54	47.1	46.9	38		54	44.8	44.8	41	
58	48.8	47.8	36		56	48.0	48.0	36		56	47.0	47.0	38		56	45.0	45.0	41	
	48.3	47.3	37		58	47.7	47.3	37		58	47.0	47.0	38		58	45.2	45.1	41	

Observer—R. R. T.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 16, 1903 — Magnet scale inverted									Wednesday, December 16, 1903 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	45.5	45.2	22 41	−16.3	18 00	46.2	45.2	22 40	−16.0	20 00	49.3	49.0	22 35	−16.0	22 00	54.0	53.0	22 33	−15.8
02	45.7	45.5	40		02	46.3	45.2	40		02	50.5	49.8	33		02	53.9	53.0	33	
04	46.3	46.1	39		04	46.5	45.5	40		04	51.2	50.6	32		04	55.2	54.4	31	
06	46.8	46.7	38		06	46.5	45.6	40		06	51.8	50.8	31		06	56.1	55.7	29	
08	47.0	47.0	38		08	46.5	45.7	39		08	53.4	52.3	29		08	55.6	55.1	30	
10	47.3	47.2	38		10	46.6	46.0	39		10	53.6	53.2	28		10	54.1	53.3	32	
12	47.3	47.2	38		12	47.0	46.3	38		12	50.3	49.6	33		12	55.0	54.3	31	
14	47.1	47.0	38	−16.3	14	47.3	47.0	38	−16.0	14	54.0	53.3	28	−16.0	14	54.0	53.0	33	−16.0
16	47.2	47.1	38		16	47.3	46.8	38		16	54.3	53.3	27		16	55.4	55.0	30	
18	47.1	46.9	38		18	46.5	46.3	39		18	55.0	53.9	26		18	58.0*a*		26	
20	47.0	46.9	38		20	46.3	45.9	39		20	54.8	53.4	27		20	58.7	58.5	25	
22	46.7	46.2	39		22	46.0	45.5	40		22	54.3	53.3	27		22	58.2	58.2	26	
24	46.3	46.1	39		24	46.1	45.6	40		24	54.3	53.3	27		24	56.8	56.8	28	
26	46.7	46.2	39		26	46.1	46.1	39		26	53.2	53.0	28		26	57.0	57.0	27	
28	46.8	46.6	39		28.	46.0	45.6	40		28	51.2	50.6	32		28	55.6	55.3	30	
30	45.3	45.1	41	−16.3	30	46.3	46.0	39	−16.0	30	50.6	50.0	33	−16.0	30	55.7	55.5	30	−16.0
32	44.9	44.7	41		32	46.9	46.5	38		32	50.0	49.3	34		32	52.3	52.0	35	
34	44.8	44.8	41		34	46.6	46.3	39		34	50.0	49.3	34		34	60.8	60.2	22	
36	45.8	45.8	40		36	46.4	46.2	39		36	50.2	49.6	33		36	52.5	50.1	36	
38	45.3	44.8	41		38	46.8	46.4	38		38	49.6	49.3	34		38	39.8	37.4	22 56	
40	48.2	46.8	37		40	46.7	46.7	38		40	49.3	48.3	35		40	20.6	6.0	23 36	
42	48.0	45.1	39		42	46.9	46.6	38		42	48.5	47.5	36		42*	61.0	41.0	23 08	
44	48.0	45.0	39	−16.3	44	47.5	47.2	37	−16.0	44	49.3	48.2	35	−16.0	44	64.8	55.4	22 53	−16.0
46	47.8	44.6	39		46	48.1	47.8	36		46	49.7	48.7	34		46	59.6	39.3	23 10	
48	47.5	44.3	40		48	48.0	48.0	36		48	49.0	48.3	35		48	65.1	51.1	22 56	
50	47.3	44.5	40		50	48.7	48.3	36		50	48.4	47.4	36		50	64.3	63.0	48	
52	47.2	44.8	40		52	47.6	47.2	37		52	53.0	52.2	29		52	59.1	58.0	56	
54	47.5	45.0	39		54	47.6	47.3	37		54	55.3	50.0	29		54	67.0	65.3	44	
56	48.0	45.6	38		56	47.0	46.6	38		56	43.0	33.0	22 52		56	58.6	58.4	56	
58	48.2	46.0	38		58	46.6	46.1	39		58*	42.0	28.0	23 33		58	63.4	61.5	50	
17 00	48.3	46.3	37	−16.2	19 00	46.8	46.2	39	−15.8	21 00	64.0	24.0	19	−16.0	23 00	69.5	69.0	39	−16.0
02	48.3	46.5	37		02	46.9	46.6	38		02*	56.3	36.3	24 35		02	62.7	60.4	51	
04	48.3	46.5	37		04	47.3	47.0	38		04	48.4	7.0	25 04		04	60.6	59.0	54	
06	48.6	47.0	37		06	47.2	47.0	38		06	69.3	65.3	24 02		06	65.0	61.6	48	
08	48.1	46.3	38		08	47.5	47.3	37		08*	47.0	30.0	23 15		08	68.3	61.6	46	
10	47.6	46.3	38		10	48.5	48.3	36		10*	56.7	25.0	24 53		10	65.1	64.0	46	
12	47.7	46.0	38		12	48.3	48.0	36		13*	76.0	52.0	23 13		12	69.0	67.9	40	
14	47.8	46.0	38	−16.0	14	47.5	47.1	37	−16.0	14*	60.5	34.0	22 45	−15.8	14	72.6	72.2	34	−16.1
16	47.6	46.3	38		16	46.8	46.4	38		16*	47.8	34.3	24 27		16	68.7	66.5	41	
18	48.0	46.4	38		18	45.7	45.4	40		18	56.3	30.3	24 23		18	64.0	61.0	50	
20	48.1	46.8	37		20	45.3	45.1	41		20*	66.8	45.0	23 23		20	66.8	66.1	43	
22	47.9	46.7	37		22	45.8	45.2	40		22	53.5	43.5	35		22	64.2	63.8	47	
24	48.0	46.9	37		24	45.6	45.5	40		24	72.8	53.2	23 12		24	63.0	61.0	50	
26	47.8	46.8	37		26	46.0	45.6	40		26*	73.1	33.0	22 34		26	63.6	61.9	49	
28	47.5	46.5	38		28	45.6	45.3	40		28	64.7	48.3	28		28	69.9	68.6	39	
30	47.3	46.1	38	−16.0	30	46.0	45.8	40	−15.9	30	67.0	65.3	13	−15.5	30	72.3	70.9	35	−16.0
32	46.6	45.3	40		32	46.0	45.8	40		32	68.5	67.4	10		32	73.0	71.6	34	
34	46.2	44.8	40		34	46.0	45.8	40		34	67.0	65.3	13		34	71.2	69.9	37	
36	45.9	44.7	41		36	46.3	45.7	40		36	66.6	65.3	13		36	68.2	66.6	42	
38	45.9	44.6	41		38	48.0	47.8	36		38	65.2	63.9	16		38	71.0	70.1	37	
40	46.0	44.7	41		40	49.3	46.3	37		40	63.8	62.8	17		40	70.1	69.1	38	
42	46.3	44.9	40		42	46.9	46.3	38		42	62.3	61.3	20		42	68.3	67.3	41	
44	46.4	45.3	40	−16.0	44	46.8	46.3	39	−16.0	44	60.8	59.8	22	−15.6	44	70.0	69.0	38	−16.3
46	46.7	45.5	39		46	46.5	46.3	39		46	60.0	58.8	24		46	70.3	69.5	38	
48	47.1	45.7	39		48	46.7	46.7	38		48	58.3	57.3	26		48	68.6	68.3	40	
50	46.3	46.0	39		50	47.0	47.0	38		50	56.6	55.3	29		50	69.0	68.3	40	
52	46.8	45.6	39		52	46.5	46.5	39		52	55.0	53.8	31		52	67.4	66.8	42	
54	46.6	45.6	39		54	45.7	45.7	40		54	54.6	53.6	32		54	68.5	67.8	41	
56	46.3	45.3	40		56	46.3	46.1	39		56	54.0	53.3	33		56	69.3	68.0	40	
58	46.3	45.3	40		58	47.2	46.7	38		58	54.0	53.0	33		58	69.3	68.1	40	
															24 00	68.3	67.1	41	−16.3

Observers—R. R. T. and W. J. P., who alternated from 16h 44m to 16h 46m.

Correction to local mean time is + 32s. 90° torsion = 25.′1.

Torsion head at 16h 30m, December 15, read 341°, and at 0h 25m, December 17, read 346°.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, December 17, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	49.1	51.8	22 33	-17.8
02	48.4	51.0	32	
04	50.1	52.7	35	
06	51.2	53.7	36	
08	51.8	53.9	37	
10	52.3	54.3	38	
12	53.2	55.1	39	
14	53.8	55.6	40	
16	54.5	56.0	41	-17.5
18	54.3	56.0	41	
20	54.8	56.2	41	
22	54.8	56.2	41	
24	54.8	56.2	41	
26	54.7	56.1	41	
28	54.6	55.9	41	
30	54.3	55.6	40	-17.0
32	54.2	55.2	40	
34	54.3	55.3	40	
36	53.7	54.7	39	
38	53.1	54.1	38	
40	53.2	54.2	39	
42	53.1	54.0	38	
44	53.2	54.0	38	-16.2
46	53.2	54.0	38	
48	53.6	54.2	39	
50	53.8	54.3	39	
52	53.7	54.2	39	
54	53.1	53.9	38	
56	52.9	53.8	38	
58	52.8	53.1	37	
17 00	52.2	52.8	37	-15.8
02	52.1	52.7	36	
04	52.3	52.8	37	
06	52.9	53.2	38	
08	53.8	54.1	39	
10	54.2	54.7	40	
12	54.6	54.8	40	
14	54.5	54.8	40	-15.4
16	54.2	54.8	40	
18	54.2	54.8	40	
20	54.2	54.8	40	
22	54.1	54.3	39	
24	54.2	54.4	40	
26	54.1	54.2	39	
28	54.2	54.7	40	
30	54.8	54.8	40	-15.2
32	54.7	54.8	40	
34	54.8	54.8	40	
36	54.1	54.3	39	
38	54.0	54.0	39	
40	53.9	53.9	39	
42	54.0	54.1	39	
44	54.2	54.3	39	-15.0
46	54.1	54.2	39	
48	54.0	54.1	39	
50	53.8	53.8	39	
52	53.8	53.8	39	
54	54.0	54.1	39	
56	54.1	54.1	39	
58	54.1	54.1	39	
18 00	54.0	54.0	22 39	-14.8
02	54.0	54.0	39	
04	54.0	54.1	39	
06	54.0	54.1	39	
08	53.9	54.0	39	
10	53.5	53.8	39	
12	53.8	53.9	39	
14	54.0	54.0	39	-14.7
16	53.8	53.9	39	
18	53.8	53.9	39	
20	53.8	53.8	39	
22	53.8	53.9	39	
24	53.9	53.9	39	
26	53.9	54.0	39	
28	53.9	54.0	39	
30	53.8	53.9	39	-14.6
32	53.9	54.0	39	
34	53.9	53.9	39	
36	53.9	54.1	39	
38	53.9	54.0	39	
40	53.8	53.9	39	
42	53.9	53.9	39	
44	53.8	53.9	39	-14.3
46	53.6	53.8	39	
48	53.4	53.8	38	
50	53.4	53.7	38	
52	53.6	53.8	39	
54	53.7	53.9	39	
56	53.6	53.8	39	
58	53.1	53.2	38	
19 00	53.0	53.1	38	-14.0
02	53.3	53.7	38	
04	53.3	53.7	38	
06	53.4	53.8	38	
08	53.6	53.8	39	
10	53.7	53.9	39	
12	53.3	53.4	38	
14	53.1	53.2	38	-14.0
16	53.2	53.6	38	
18	53.3	53.7	38	
20	53.0	53.1	38	
22	53.0	53.0	38	
24	52.9	52.9	37	
26	53.2	53.3	38	
28	53.9	54.0	39	
30	54.2	54.2	39	-14.0
32	54.0	54.0	39	
34	54.1	54.2	39	
36	54.2	54.2	39	
38	54.2	54.2	39	
40	54.0	54.0	39	
42	54.1	54.2	39	
44	54.5	54.6	40	-14.0
46	54.2	54.2	39	
48	53.8	53.9	39	
50	53.2	53.3	38	
52	52.9	53.8	38	
54	52.9	53.6	38	
56	52.8	53.3	38	
58	52.8	53.3	38	
20 00	52.9	53.6	38	-14.0

Correction to local mean time is + 45s.
Torsion head at 15h 10m read 344° and at the end read the same.
Observer—R. R. T.

Friday, December 18, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	53.3	52.2	22 36	-16.8
02	53.1	52.2	36	
04	53.0	52.1	36	
06	53.1	52.2	36	
08	53.3	52.7	36	
10	53.0	52.4	36	
12	53.9	53.1	35	
14	54.1	53.4	35	-16.8
16	54.0	53.3	35	
18	54.1	53.7	34	
20	54.0	53.5	35	
22	54.0	53.6	34	
24	53.7	53.1	35	
26	53.6	53.0	35	
28	53.9	53.2	35	
30	53.8	53.2	35	-16.8
32	53.8	53.2	35	
34	53.9	53.3	35	
36	54.1	53.9	34	
38	54.6	54.1	34	
40	54.2	54.0	34	
42	54.8	54.2	33	
44	54.8	54.4	33	-16.7
46	55.2	54.9	33	
48	55.3	54.8	33	
50	55.2	54.6	33	
52	56.6	56.1	30	
54	56.8	56.0	30	
56	58.3	57.6	28	
58	58.7	58.0	27	
21 00	57.9	57.2	29	-16.3
02	57.8	57.1	29	
04	57.2	56.6	30	
06	56.7	56.0	30	
08	56.2	55.7	31	
10	56.2	55.7	31	
12	57.9	57.1	29	
14	58.0	56.8	29	-16.3
16	57.7	56.5	28	
18	57.9	57.1	29	
20	58.1	57.2	28	
22	59.0	58.2	27	
24	57.9	57.4	28	
26	58.3	57.9	28	
28	58.7	57.7	28	
30	59.9	59.1	26	-16.0
32	58.3	57.9	28	
34	58.3	57.9	28	
36	58.0	57.7	28	
38	57.2	57.1	29	
40	56.9	56.9	30	
42	56.8	56.4	30	
44	57.2	57.0	29	-15.9
46	57.9	57.6	28	
48	59.0	58.1	27	
50	59.7	59.1	26	
52	58.8	58.5	27	
54	59.7	58.9	26	
56	59.3	58.9	26	
58	59.7	59.0	26	
22 00	59.9	58.2	22 26	-15.7
02	59.8	58.2	26	
04	59.8	58.0	26	
06	60.0	58.6	26	
08	60.0	59.1	26	
10	58.7	57.9	27	
12	58.0	57.5	28	
14	55.8	54.9	32	-15.3
16	56.8	55.8	30	
18	55.8	54.3	33	
20	54.9	53.8	34	
22	54.9	54.0	34	
24	52.0	50.7	38	
26	51.9	50.7	38	
28	58.8	58.1	27	
30	55.1	54.9	33	-15.3
32	57.0	56.0	30	
34	56.2	56.0	31	
36	56.2	55.0	32	
38	56.9	56.2	30	
40	57.3	56.2	30	
42	58.0	57.3	28	
44	56.8	55.6	31	-15.0
46	57.5	56.9	29	
48	58.0	57.6	28	
50	57.0	56.0	30	
52	58.0	57.2	28	
54	57.6	56.6	29	
56	55.0	53.8	34	
58	53.0	52.1	36	
23 00	52.1	51.1	38	-15.0
02	50.8	50.1	40	
04	51.9	51.1	38	
06	52.2	51.0	38	
08	52.5	51.2	38	
10	51.2	50.6	39	
12	51.8	50.7	39	
14	52.0	51.1	38	-14.9
16	51.3	50.3	39	
18	50.3	49.2	41	
20	50.3	49.8	40	
22	50.2	49.5	41	
24	50.1	49.3	41	
26	48.7	48.0	43	
28	49.1	48.7	42	
30	49.0	47.5	43	-14.8
32	50.1	49.6	41	
34	51.0	50.4	39	
36	51.3	50.9	39	
38	51.2	50.9	39	
40	51.0	50.7	39	
42	50.9	50.7	39	
44	51.0	50.8	39	-14.6
46	51.0	50.7	39	
48	50.8	50.4	39	
50	50.7	50.1	40	
52	50.4	50.0	40	
54	50.7	50.2	40	
56	50.9	50.6	39	
58	51.1	50.7	39	
24 00	51.0	50.8	39	-14.5

Correction to local mean time is + 43s.
Torsion head at 19h 15m read 346° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, December 20, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	51.6	53.8	22 32	
02	52.0	54.6	33	
04	53.3	55.6	35	
06	54.0	55.4	35	
08	54.5	56.6	37	
10	54.0	56.0	36	
12	54.5	56.0	36	
14	56.3	56.3	38	-21.7
16	56.3	56.9	38	
18	54.9	55.6	36	
20	53.7	54.3	34	
22	55.0	55.6	36	
24	53.7	54.3	34	
26	54.0	54.3	35	
28	55.3	55.7	37	
30	55.0	55.3	36	-21.5
32	58.0	58.3	41	
34	56.3	56.5	38	
36	52.5	53.5	33	
38	53.0	54.2	34	
40	52.8	53.9	33	
42	50.6	51.6	30	
44	49.9	51.0	29	-21.3
46	51.1	51.6	30	
48	55.0	55.5	36	
50	56.7	57.3	39	
52	57.3	57.9	40	
54	57.5	57.8	40	
56	57.6	57.6	40	
58	56.0	56.3	38	
1 00	54.7	54.9	36	-21.0
02	54.1	54.3	35	
04	53.3	53.5	33	
06	52.4	52.7	32	
08	51.7	52.0	31	
10	51.4	51.6	30	
12	51.3	51.6	30	
14	56.0	56.3	38	-21.0
16	55.7	55.7	37	
18	50.7	50.8	29	
20	51.2	51.3	30	
22	54.3	54.7	35	
24	54.4	54.6	35	
26	54.0	54.6	35	
28	54.7	55.2	36	
30	55.6	56.5	37	-21.0
32	57.4	57.6	40	
34	56.3	56.8	38	
36	56.5	56.7	38	
38	56.1	56.3	38	
40	56.3	56.3	38	
42	57.3	57.6	40	
44	55.4	55.7	37	-20.5
46	54.5	54.6	35	
48	54.3	54.7	35	
50	54.7	55.3	36	
52	54.0	54.6	35	
54	53.9	54.5	35	
56	53.0	53.6	33	
58	54.0	54.6	35	
2 00	55.4	55.8	22 37	-20.0
02	55.1	55.6	36	
04	56.0	56.8	38	
06	57.5	58.0	40	
08	56.0	56.6	38	
10	53.9	54.6	35	
12	54.5	54.7	35	
14	53.9	54.3	35	-20.0
16	53.5	53.8	34	
18	53.3	53.3	33	
20	53.0	53.3	33	
22	53.1	53.6	33	
24	53.6	53.9	34	
26	54.3	54.9	35	
28	55.3	56.0	37	
30	55.3	56.1	37	-20.0
32	57.4	58.0	40	
34	60.1	61.3	45	
36	63.7	64.0	50	
38	67.0	67.3	55	
40	66.5	66.5	54	
42	69.3	70.0	59	-20.0
44	69.0	69.6	58	
46	68.6	69.1	22 58	
48	70.0	70.6	23 00	
50	70.6	71.1	01	
52	72.8	73.8	05	
54	73.3	74.1	05	
56	73.3	74.0	05	
58	73.5	78.3	06	
3 00	73.3	74.0	05	-19.8
02	72.8	73.7	05	
04	76.0	76.5	09	
06*	33.6	40.0	12	
08	38.5	40.1	16	
10	36.3	38.1	12	
12	34.3	35.1	08	
14	37.5	39.2	14	-19.5
16	43.6	45.8	24	
18	53.3	54.6	39	
20	58.5	59.5	23 47	
22	67.0	69.0	24 01	
24	67.7	70.3	02	
26	68.7	71.8	04	
28	69.9	74.2	07	
30	69.5	74.9	07	-19.5
32*	49.0	53.0	17	
34	38.8	43.0	24 01	
36	25.8	28.8	23 40	
38	27.2	29.0	41	
40	13.3	16.3	20	
42	10.0*b*		13	
44*	44.5	51.5	08	-19.5
46	42.3	48.9	04	
48	42.0	47.1	03	
50	44.8	49.0	06	
52	55.5	58.6	22	
54	57.0	60.6	25	
56	60.5	61.6	29	-19.4
58	52.3	55.3	17	

Observer—W. J. P.

Sunday, December 20, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	57.8	52.3	23 14	
02	58.0	53.0	13	-19.0
04	56.1	51.2	16	
06.2	55.8	50.8	17	
08	56.0	51.4	16	
10	57.3	53.6	14	
12	57.5	53.8	13	
14	55.7	53.0	15	-19.0
16	58.0	54.6	12	
18	57.3	53.6	14	
20	56.9	53.6	14	
22	58.0	54.0	12	
24	59.5	56.3	10	
26	56.3	54.0	14	
28	54.3	52.4	17	
30	56.6	54.9	13	-19.1
32	54.9	53.5	15	
34	56.5	54.3	13	
36	60.3	58.2	08	
38	60.3	58.3	07	
40	59.0	57.3	09	
42	60.3	59.2	07	
44	58.8	58.2	09	-19.2
46	60.2	58.0	08	
48	60.2	57.7	08	
50	55.5	54.6	14	
52	57.3	56.7	11	
54	57.5	56.3	11	
56	53.5	53.5	16	
58	48.8	48.3	24	
5 00	48.6	48.2	24	-19 0
02	55.3	53.0	15	
04	56.7	54.3	13	
06	57.0	54.2	13	
08	59.0	54.8	11	
10.2	60.2	59.0	07	
12	60.6	58.3	07	
14	58.6	56.0	10	
16	61.3	58.3	07	-19.2
18	60.6	57.2	08	
20	59.7	56.3	09	
22	59.1	55.3	11	
24	58.0	53.6	13	
26	56.5	52.5	15	
28	52.2	49.0	21	
30	50.3	47.3	24	-19.0
32	47.3	42.5	30	
34	44.3	41.0	34	
36	47.2	44.8	28	
38	50.6	49.0	22	
40	58.7	57.3	10	
42	56.6	55.3	13	
44	55.0*a*		14	-19.0
46	55.5	51.1	17	
48	53.6	51.6	18	
50	51.6	51.0	20	
52	49.6	49.0	23	
54	50.3	49.6	22	
56	51.3	50.7	20	
58	52.0	51.0	20	
6 00	42.6	40.0	23 36	-19.3
02	38.6	37.5	41	
04	39.4	38.1	40	
06	39.4	35.2	42	
08	38.0	36.8	42	
10	37.3	35.3	44	
12	43.1	39.6	36	
14	42.6	39.6	36	-19.3
16	42.5	40.8	35	
18	44.3	42.6	32	
20	43.3	42.3	33	
22	33.6	33.1	48	
24	31.8	30.3	52	
26	30.0	27.0	56	
28	37.0	33.6	45	
30	33.6	29.6	23 51	-19.3
32.6	25.6	24.4	24 01	
34	33.6	29.5	23 51	
36	35.9	34.6	45	
38	44.6	44.3	31	
40	54.8	52.6	16	
42	57.0	55.2	12	
44	57.8	56.0	11	-19.3
46	59.0	58.3	08	
48	57.8	56.0	11	
50	53.8	51.5	18	
52	50.3	48.9	23	
54	52.6	50.8	19	
56	55.8	54.3	14	
58	56.9	56.0	12	
7 00	58.6	58.0	09	-19.3
02.2	61.3	61.0	23 05	
04	66.6	65.5	22 57	
06	63.6	62.0	23 02	
08	63.5	61.0	23 03	
10	71.3	69.3	22 50	
12	72.0	71.0	48	
14	73.8	72.0	46	-19.3
16*	42.0	38.9	42	
18	42.0	35.3	45	
20	43.6	35.3	44	
22	45.3	38.6	40	
24	43.3	37.8	42	
26	39.0	32.8	49	
28	43.5	38.0	42	
30	43.2	36.4	43	-19.3
32	41.5	35.0	46	
34	40.9	40.2	42	
36	39.3	38.5	44	
38	38.8	37.5	46	
40	43.3	43.0	38	
42	42.0	41.3	40	
44	35.1	34.3	51	-19.5
46	36.6	36.3	48	
48	36.6	36.6	48	
50	31.6	30.8	22 57	
52	30.3	27.9	23 00	
54	30.3	29.3	22 59	
56	32.0	29.5	22 57	
58	27.3	23.7	23 06	
8 00	30.3	26.3	01	-19.6

Correction to local mean time + 46s.
Torsion head at oh oom read 348° and at the end read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, December 21, 1903 — Magnet scale erect									Tuesday, December 22, 1903 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	58.2	59.3	22 53		10 00	70.2	70.8	23 11	-20.0	12 00	46.0	45.4	22 37	-22.2	14 00	48.7	47.6	22 34	-19.1
02	55.1	66.3	22 56	-25.0	02	69.1	69.8	09		02	45.1	44.8	39		02	47.0	46.2	36	
04	62.1	66.9	23 02		04	67.7	68.1	07		04	45.0	44.7	39		04	46.2	45.6	37	
06	63.9	68.0	04		06	64.7	65.1	02		06	46.4	45.6	37		06	46.6	46.1	36	
08	67.9	69.9	09		08	65.2	67.0	04		08	47.9	47.1	35		08	43.9	43.0	41	
10	69.9	72.1	12		10	67.1	67.8	06		10	46.5	46.0	36		10	43.3	42.8	42	
12	67.1	69.7	08		12	66.9	67.1	06		12	45.3	43.9	39		12	44.7	44.0	40	
14	69.3	71.3	11	-24.5	14	66.8	67.2	06	-19.7	14	46.1	44.8	38	-21.7	14	46.1	45.8	37	-18.9
16	69.1	71.3	11		16	67.9	68.2	07		16	47.1	45.9	36		16	47.3	47.0	35	
18	66.0	68.5	06		18	67.8	68.0	07		18	47.1	45.8	36		18	46.1	45.7	37	
20	67.9	69.7	08		20	68.7	68.9	08		20	46.8	44.9	37		20.4	46.8	46.2	36	
22	67.9	69.8	08		22	68.1	68.7	08		22	46.6	45.6	37		22	47.2	46.7	36	
24	68.2	69.8	09		24	68.0	68.9	08		24	46.8	45.8	36		24	45.1	44.6	39	
26	66.3	67.9	06		26	67.2	68.2	07		26	48.8	48.1	33		26	46.2	45.9	37	
28	65.0	66.2	23 04		28	67.9	68.7	08		28	49.1	48.0	33		28	47.2	46.8	35	
30	62.5	63.5	22 59	-23.8	30	64.2	65.5	23 02	-19.4	30	47.6	46.7	35	-21.0	30	45.5	44.9	38	-18.7
32	61.1	61.9	57		32	61.2	61.9	22 57		32	47.7	46.6	35		32	44.1	43.7	40	
34	61.9	63.5	22 59		34	61.2	61.5	57		34	49.7	49.0	32		34	44.7	42.9	40	
36	63.2	64.1	23 00		36	59.7	60.2	55		36	49.3	48.7	32		36	43.3	42.9	41	
38	63.9	65.1	02		38	59.7	59.8	54		38	49.9	49.6	31		38	43.0	42.3	42	
40	65.2	66.9	04		40	61.6	62.2	58		40	51.2	51.0	29		40	43.1	43.0	42	
42	62.9	63.9	00		42	62.0	62.9	22 58		42	50.6	50.3	30		42	47.4	46.2	36	
44	63.3	64.8	01	-22.8	44	62.7	63.7	23 00	-19.1	44	49.4	49.2	32	-20.3	44	47.5	47.2	35	-18.3
46	62.6	63.8	00		46	63.1	63.3	00		46	48.9	48.4	33		46	47.9	47.6	34	
48	64.3	65.9	03		48	64.2	65.1	02		48	48.9	48.3	33		48	49.2	48.9	32	
50	66.8	68.0	06		50	64.7	65.0	23 02		50	48.2	47.4	34		50	46.9	46.8	36	
52	70.6	71.3	12		52	62.0	62.8	22 58		52	48.3	47.5	34		52	46.8	45.7	36	
54	70.7	71.8	12		54	60.9	61.9	57		54	49.7	48.8	32		54	48.2	47.5	34	
56	69.7	70.8	11		56	57.0	57.8	50		56	48.8	48.0	33		56	48.1	47.3	34	
58	69.5	70.8	11		58	56.3	56.8	49		58	48.6	48.0	33		58	48.8	48.2	33	
9 00	70.2	70.9	11	-22.0	11 00	45.8	46.8	33	-18.9	13 00	48.9	48.1	33	-20.0	15 00	49.9	49.0	32	-18.2
02	70.2	70.9	11		02	44.0	44.7	30		02	49.8	48.9	32		02	50.7	49.1	31	
04	68.8	69.7	09		04	43.9	44.6	30		04	49.3	48.8	32		04	49.2	48.1	33	
06	68.7	68.9	08		06.2	43.0	44.1	29		06	49.7	48.9	32		06	48.5	47.2	34	
08	66.3	66.9	05		08	40.0	40.5	24		08	48.2	47.6	34		08	49.6	48.7	32	
10	67.3	67.8	06		10	43.3	44.1	29		10	47.8	47.2	34		10	48.5	47.7	34	
12	68.2	68.5	08		12	45.3	45.7	32		12	47.2	46.5	36		12	47.1	46.3	36	
14	65.1	66.0	23 03	-21.8	14	47.5	48.0	35	-18.7	14	47.9	47.6	34	-19.7	14	46.2	45.2	37	-18.0
16	59.9	61.4	22 56		16	49.1	50.0	38		16	48.1	47.8	34		16	46.5	45.3	37	
18	56.8	57.1	50		18	48.3	48.8	37		18	49.6	48.8	32		18	48.7	47.6	33	
20	61.8	62.0	58		20	49.7	51.1	40		20	50.5	49.6	30		20	47.8	47.0	35	
22	59.2	60.2	54		22	55.8	57.7	49		22.4	49.2	49.2	32		22	47.9	47.1	34	
24	58.1	58.9	52		24	57.1	57.9	51		24	49.9	49.7	31		24	46.8	45.6	36	
26	55.9	57.0	49		26	57.2	57.9	51		26	49.7	49.2	32		26	47.2	46.1	36	
28	57.2	58.0	51		28	58.2	58.9	52		28	49.2	49.2	32		28	47.8	46.2	35	
30	57.3	58.2	51	-21.2	30	56.9	57.6	50	-18.3	30	49.6	49.2	32	-19.6	30	47.1	45.7	36	-17.9
32	58.3	58.9	52		32	57.1	57.9	51		32	50.8	50.1	30		32	47.6	46.0	35	
34	59.9	60.1	55		34	55.2	56.2	48		34	49.1	48.8	32		34	48.8	46.9	34	
36	62.0	62.3	22 58		36	55.5	56.1	48		36	47.7	47.4	34		36	48.2	46.7	35	
38	64.0	64.3	23 01		38	54.7	55.1	47		38	47.4	47.0	35		38	49.1	47.6	33	
40	66.7*b*		05		40	55.0	55.9	47		40	46.7	45.6	37		40	48.8	48.0	33	
42	66.6	66.8	05		42	53.0	53.8	44		42	46.8	45.9	36		42	48.3	47.6	34	
44	68.6*a*		08	-20.8	44	57.2	57.7	50	-18.0	44	47.3	46.7	35	-19.2	44	49.1	48.1	33	-17.8
46	71.2	71.3	12		46	56.3	56.8	49		46	48.0	46.9	35		46	49.1	48.1	33	
48	69.9	69.9	10		48	57.2	57.3	50		48	47.6	46.8	35		48	48.8	47.7	33	
50	70.1	70.4	11		50	58.1	58.1	52		50	45.8	44.9	38		50	48.6	47.3	34	
52	69.7	70.2	10		52	57.2	57.8	51		52	44.0	43.0	41		52	48.0	47.1	34	
54	70.7	71.1	12		54	59.3	60.1	54		54	46.0	44.6	38		54	47.8	46.9	35	
56	70.6	71.2	12		56	56.9	57.3	50		56	44.2	43.6	40		56	48.8	47.8	33	
58	70.1	70.9	11		58	57.2	57.8	51		58	47.2	46.1	36		58	49.1	48.2	33	
					12 00	58.1	58.2	52	-17.9						16 00	49.0	48.0	33	-17.7

Correction to local mean time is + 37s. 90° torsion = 25.′4.
Torsion head at 8h 10m, December 20, read 348°, and at 12h 30m, December 21, read 15°.
Observer—R. R. T.

Correction to local mean time is + 30s.
Torsion head at 11h 40m read 345° and at the end read the same.
Observer—Not noted.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	52.6	55.6	22 53	-18.0
02	60.3	64.6	23 06	
04	68.8	72.8	23 20	
06	50.0*b*		22 47	
08	51.3	52.3	50	
10	49.8	51.6	48	
12	48.0	49.3	45	
14	49.8	50.1	47	-18.0
16	49.0	51.0	47	
18	53.3	54.9	53	
20	45.3	48.5	42	
22	44.3	45.6	39	
24	43.3	43.9	37	
26	47.3	49.3	44	
28	44.4	47.5	40	
30	45.6	47.8	42	-17.8
32	46.0	48.0	42	
34	44.6	46.7	40	
36	44.3	46.1	39	
38	46.3	48.5	43	
40	44.3	45.8	39	
42	41.3	43.5	35	
44	47.6	48.6	44	-17.8
46	55.8	56.0	56	
48	47.7	48.7	44	
50	45.2	46.8	41	
52	39.7	45.6	35	
54	43.4	48.7	41	
56	47.0	53.0	47	
58	48.4	53.0	48	
1 00	47.6	52.8	47	-17.6
02	52.5	58.5	56	
04	53.5	56.6	55	
06	52.6	55.6	53	
08	53.4	57.9	56	
10	55.6	58.6	58	
12	55.9	58.9	22 58	
14	58.0	59.8	23 01	-17.7
16	51.3	54.2	22 51	
18	53.0	55.9	54	
20	50.8	52.4	49	
22	47.9	49.9	45	
24	49.8	50.8	47	
26	50.1	51.7	48	
28	47.2	48.7	44	
30	47.7	49.1	44	-17.6
32	48.2	49.4	45	
34	48.6	49.4	45	
36	49.3	50.7	47	
38	50.7	52.1	49	
40	51.3	52.6	50	
42	50.3	51.5	48	
44	51.8	53.2	51	-17.5
46	52.8	54.2	52	
48	51.5	53.0	50	
50	50.5	51.8	48	
52	52.3	53.5	51	
54	51.9	53.0	51	
56	53.3	54.3	53	
58	53.5	54.4	53	
2 00	53.4	54.3	22 53	-17.4
02	54.3	55.4	54	
04	52.3	53.3	51	
06	55.0	56.1	56	
08	55.6	56.6	56	
10	55.8	56.6	57	
12	54.5	55.2	54	
14	54.1	54.9	54	-17.3
16	54.7	55.3	55	
18	56.9	57.3	58	
20	56.8	57.6	58	
22	54.7	55.3	55	
24	51.7	53.5	51	
26	50.6	51.2	48	
28	52.3	53.1	51	
30	55.8	56.2	56	-17.1
32	54.9	55.3	55	
34	52.7	53.1	51	
36	50.6	51.0	48	
38	50.8	51.2	48	
40	51.9	52.3	50	
42	53.0	53.6	52	
44	53.1	53.5	52	
46	51.7	52.1	50	
48	50.6	50.9	48	
50	49.6	50.0	47	
52	49.6	49.9	46	
54	50.0	50.2	47	
56	50.5	50.7	48	
58	51.3	51.7	49	
3 00	51.8	52.0	50	-17.0
02	51.1	51.1	49	
04	50.3	50.5	48	
06	49.1	49.5	46	
08	48.3	48.3	44	
10	48.5	48.5	44	
12	48.6	48.8	45	
14	49.3	49.6	46	-17.0
16	50.5	50.9	48	
18	50.3	50.6	48	
20	48.8	49.3	45	
22	47.1	47.3	42	
24	46.6	46.8	42	
26	46.6	46.6	42	
28	46.6	46.7	42	
30	45.4	45.8	40	-16.9
32	43.0*b*		36	
34	39.0*b*		30	
36	34.0*b*		22	
38	33.7*a*		21	
40	41.0*a*		33	
42	50.0	50.6	47	
44	54.7	55.4	55	-16.8
46	53.0*b*		52	
48	46.0	46.0	41	
50.2	42.1	42.8	35	
52	40.1	40.3	32	
54	45.0*a*		39	
56	52.5*a*		22 51	
58	59.5*a*		23 02	

Observer—W. J. P.

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	66.3	66.3	23 12	-16.7
02	68.3*b*		16	
04	61.2*b*		23 04	
06	54.5*b*		22 54	
08	48.8*b*		45	
10	46.6*b*		42	
12	45.3	45.6	40	
14	44.0	44.2	38	-16.7
16	44.2	44.2	38	
18	46.6	46.6	42	
20	47.6*a*		43	
22	49.8	49.8	47	
24	49.0	49.0	45	
26	48.5	48.9	45	
28	48.7	49.0	45	
30	47.8	48.0	44	-16.7
32	46.8	47.2	42	
34	47.6	48.0	43	
36	45.3	45.5	40	
38	45.4	45.6	40	
40	48.0	48.9	44	
42	53.1*a*		52	
44	56.2	56.6	57	-16.7
46	56.2	56.6	57	
48	57.5	58.0	59	
50	57.8	58.3	59	
52	54.3	54.5	54	
54	49.5	50.0	46	
56	49.5	50.0	46	
58	50.0	50.6	47	
5 00	51.6	52.6	50	-16.7
02	52.6	53.4	52	
04	54.7	55.0	22 54	
06	58.1	59.0	23 00	
08	58.7	59.8	01	
10	58.7	59.3	01	
12	58.9	59.9	23 02	
14	56.9	58.0	22 58	-16.8
16	55.3	56.3	56	
18	54.0	54.9	54	
20	53.3	54.0	52	
22	51.0	51.6	49	
24	50.9	51.5	49	
26	49.3	49.9	46	
28	50.0	50.3	47	
30	51.6	51.8	50	-16.9
32.2	53.3	54.6	53	
34.3	54.3	54.7	54	
36	54.3	55.0	54	
38	53.3	54.3	53	
40	52.3	54.2	52	
42	55.1	56.3	56	
44	53.6	54.6	53	-17.0
46	53.2	54.3	53	
48	52.7	53.3	52	
50	52.6	53.3	52	
52	52.6	53.0	51	
54	50.1	50.3	47	
56	49.3*a*		46	
58	51.7	51.7	50	
6 00	51.3	51.6	22 49	-16.9
02	52.6	52.9	51	
04	51.4	51.4	49	
06	50.2	50.6	48	
08	47.6	48.5	44	
10	51.4	52.6	50	
12	53.4	54.2	53	
14	52.5	53.2	51	-17.0
16	50.4	51.6	48	
18	53.4	54.0	53	
20	56.6	57.3	58	
22	55.0	56.0	56	
24	50.8	51.0	48	
26	51.8	52.2	50	
28	50.2	50.6	48	
30	50.6	51.0	48	-16.9
32	53.5	54.0	53	
34	52.6	52.9	51	
36	50.5	50.6	48	
38	49.0	49.0	45	
40	47.6	48.0	43	
42	45.6	45.8	40	
44	49.6	50.4	47	-17.0
46	50.1	50.3	47	
48	51.6	52.6	50	
50	49.8	50.6	47	
52	Lost			
54	50.3	50.3	47	
56	52.4	53.2	51	
58	55.0	55.7	55	
7 00	56.9	57.5	58	-16.9
02	57.3	57.9	59	
04	56.4	56.8	57	
06	54.5	54.8	54	
08	57.2	57.2	58	
10	57.5	57.5	22 59	
12	59.9	60.1	23 03	
14	60.2	60.4	03	-16.8
16	59.9	60.0	02	
18	62.3*a*		06	
20	62.9	63.3	08	
22	62.3	63.0	07	
24	59.9	60.9	03	
26	60.0	62.0	04	
28	64.5	67.3	12	
30	66.9	69.9	16	-16.8
32	66.7	68.8	15	
34	64.5	67.0	12	
36	64.5	67.3	12	
38	63.3	66.6	10	
40	62.0	64.0	07	
42	60.8	62.9	05	
44	59.0	60.2	02	-16.8
46	57.2	59.8	00	
48	56.6	62.2	02	
50	60.0	64.3	06	
52	58.3	61.0	02	
54	57.1	60.8	01	
56	59.1	62.1	04	
58	60.9	63.5	06	

Observers—W. J. P. and R. R. T., who alternated from 7h 42m to 7h 48m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	63.2	65.9	23 10	−16.3
02	66.8	67.9	14	
04	66.7	69.0	15	
06	67.1	69.2	15	
08	64.7	66.8	12	
10	62.0	63.2	23 07	
12	57.3	58.5	22 59	
14	49.8	51.8	48	−16.0
16	48.3	49.4	45	
18	51.9	53.6	22 51	
20	59.9	60.3	23 03	
22	60.5	61.3	04	
24	64.1	64.1	09	
26	64.1	64.1	23 09	
28	56.1	56.8	22 57	
30	52.2	52.7	51	−15.6
32	50.3	51.2	48	
34	50.1	51.0	48	
36	46.0	46.4	41	
38	42.3	43.3	36	
40	44.9	45.9	40	
42	47.0	48.1	43	
44	46.9	47.8	43	
46	47.2	48.5	43	−15.3
48	47.0	48.2	43	
50	47.2	48.2	43	
52	48.9	50.4	46	
54	49.1	50.6	47	
56	49.7	51.8	48	
58	50.2	52.1	49	
9 00	47.7	49.6	45	−15.3
02	49.0	50.8	47	
04	47.8	50.3	45	
06	42.8	44.8	37	
08	41.4	43.8	35	
10	37.0	39.3	28	
12	41.6	43.9	35	
14	42.6	46.9	38	−15.0
16	41.1	45.2	36	
18	40.9	43.3	34	
20	43.1	45.1	38	
22	41.2	43.8	35	
24	42.2	43.1	35	
26	42.8	44.1	36	
28	42.2	44.2	36	
30	42.1	44.8	36	−14.9
32	41.2	44.8	36	
34	41.7	45.1	36	
36	41.1	44.2	35	
38	40.1	43.0	34	
41	40.1	42.8	33	
42	40.2	42.8	34	
44	41.2	43.2	35	−14.8
46	41.4	43.0	35	
48	41.0	42.2	34	
50	39.8	41.0	32	
52	39.3	40.5	31	
54	40.8	41.2	33	
56	41.6	42.8	35	
58	40.7	41.6	33	
10 00	39.6	41.5	22 32	−14.7
02	42.2	44.1	36	
04	40.1	41.6	32	
06	39.9	41.0	32	
08	40.7	42.2	33	
10	40.3	40.7	32	
12	36.9	37.3	27	
14	36.3	37.3	26	−14.6
16	37.8	37.8	28	
18	37.9	39.0	29	
20	36.1	36.8	26	
22	34.8	37.2	25	
24	35.8	37.8	26	
26	34.7	38.8	26	
28	32.9	35.6	22	−14.7
30	36.0	38.1	26	
32	32.3	36.1	22	
34	32.7	37.7	24	
36	30.0	32.2	17	
38	27.1	32.7	15	
40	28.7	33.1	17	
42	28.8	31.3	16	
44	28.5	30.9	15	−14.9
46	30.2	32.8	18	
48	34.3	37.4	25	
50	38.2	41.3	31	
52	37.1	41.8	30	
54	34.2	40.1	27	
56	33.0	37.0	23	
58	35.4	39.1	27	
11 00	36.2	40.0	28	−14.9
02	37.0	40.9	29	
04	38.9	43.6	33	
06	37.1	38.8	28	
08	36.1	38.5	27	
10	37.8	40.4	30	
12	38.1	41.8	31	
14	37.6	40.3	29	−14.9
16	38.3	41.6	31	
18	39.0	42.5	32	
20	39.9	42.7	33	
22	41.2	44.7	36	
24	42.3	44.9	37	
26	37.7	40.1	29	
28	35.3	38.5	26	
30	38.1	41.2	31	−14.8
32	39.3	43.1	33	
34	38.3	41.9	31	
36	39.0	41.6	32	
38	40.4	42.8	34	
40	42.0	44.0	36	
42	44.2	45.9	39	
44	41.2	42.6	34	−14.8
46	39.3	40.7	31	
48	42.0	43.2	35	
50	42.9	44.0	36	
52	41.3	42.8	34	
54	42.4	43.4	36	
56	43.3	44.7	37	
58	43.2	44.2	37	

Observer—R. R. T.

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	45.7	46.2	22 40	−14.9
02	45.1	45.7	40	
04	46.0	46.3	41	
06	46.7	46.9	42	
08	45.2	45.8	40	
10	44.0	44.9	38	
12	44.2	45.0	38	
14	44.8	45.5	39	−14.8
16	45.2	45.9	40	
18	45.0	45.7	40	
20	47.8	48.0	44	
22	46.7	47.1	42	
24	46.2	47.0	42	
26	46.6	47.2	42	
28	44.7	45.1	39	
30	43.8	44.3	37	−14.8
32	45.9	47.3	42	
34	45.3	46.7	41	
36	46.0	46.8	41	
38	43.8	44.6	38	
40	41.9	42.8	35	
42	42.0	42.9	35	
44	41.1	42.7	34	−14.8
46	42.1	42.9	35	
48	40.9	41.4	33	
50	38.2	39.0	29	
52	37.6	38.4	28	
54	37.8	38.0	28	
56	35.1	35.8	24	
58	35.0	35.8	29	−14.8
13 00	38.7	39.1	29	
02	38.4	39.0	29	
04	37.6	38.4	28	
06	36.2	36.9	26	
08	37.7	38.4	28	
10	38.6	39.2	29	
12	39.0	39.7	30	
14	39.8	40.3	31	−14.8
16	40.7	41.9	33	
18	40.8	41.4	33	
20	40.6	41.1	32	
22	38.8	39.4	30	
24	38.0	38.8	29	
26	39.1	40.0	30	
28	40.6	41.9	33	
30	40.7	41.7	33	−15.0
32	40.7	41.9	33	
34	38.7	39.2	29	
36	40.3	40.3	32	
38	40.1	40.7	32	
40	39.3	40.0	31	
42	36.8	37.1	26	
44	36.5	36.9	26	
46	36.9	37.3	27	
48	37.1	37.8	27	
50	38.2	38.8	29	
52	39.0	39.3	30	
54	40.8	41.1	33	
56	40.2	43.6	34	
58	37.0	41.7	30	
14 00	35.9	42.8	22 30	−15.0
02	35.0	41.5	28	
04	36.1	42.0	30	
06	38.0	42.6	32	
08	40.7	41.8	33	
10	41.7	42.0	34	
12	40.6	41.2	33	
14	41.8	42.6	35	−14.8
16	39.8	40.8	32	
18	35.6	37.0	25	
20	31.0	32.5	18	
22	37.5	38.5	28	
24	39.5	40.6	31	
26	38.8	39.5	30	
28	38.9	39.5	30	
30	38.4	39.0	29	−14.8
32	39.0	39.5	30	
34	39.8	40.2	31	
36	41.5	42.2	34	
38	42.2	42.6	35	
40	37.0	38.0	27	
42	41.0	41.5	33	
44	38.8	39.3	30	−14.9
46	39.7	39.8	31	
48	39.4	39.9	31	
50	41.4	41.7	34	
52	42.4	43.0	35	
54	40.0	40.3	31	
56	39.1	39.2	30	
58	41.3	41.3	33	
15 00	41.3	41.5	33	−15.0
02	39.3	39.6	30	
04	40.0	40.6	32	
06	39.9	40.6	32	
08.2	40.1	40.6	32	
10	40.6	41.0	32	
12	41.0	41.4	33	
14	38.6	39.6	30	
16	37.8	38.6	28	−15.0
18	38.8	39.6	30	
20	38.8	39.8	30	
22	38.4	39.4	29	
24	38.8	39.0	29	
26	40.0	40.6	32	
28	36.0	36.6	25	
30	37.3	37.7	27	−15.0
32	39.3	40.3	31	
34	38.8	39.8	30	
36	39.0	40.6	31	
38	40.0	41.6	32	
40	41.6	42.8	35	
42	42.0	43.1	35	
44	41.8	42.8	35	−15.0
46	40.6	41.8	33	
48	41.3	42.1	34	
50	41.4	42.2	34	
52	40.3	41.1	32	
54	40.8	41.4	33	
56	40.6	41.1	32	
58	39.6	40.1	31	

Observers—R. R. T. and W. J. P., who alternated from 14h 02m to 14h 08m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	39.8	40.2	22 31	-15.3
02	41.0	41.8	33	
04	42.4	43.0	35	
06	42.6	43.0	36	
08	42.4	43.0	35	
10	42.3	42.7	35	
12	42.4	42.6	35	
14	42.3	42.7	35	-15.3
16	42.0	42.4	35	
18	41.8	42.3	34	
20	41.6	42.2	34	
22	41.6	42.0	34	
24	42.3	42.9	35	
26	43.7	44.3	37	
28	44.5	45.1	39	
30	44.8	45.3	39	-15.4
32	44.0	44.7	38	
34.6	44.0	44.5	38	
36	43.5	44.0	37	
38	42.7	42.4	35	
40	41.8	42.3	34	
42	41.8	42.6	35	
44	42.8	43.6	36	-15.5
46	44.3	45.3	39	
48	42.7	43.6	36	
50	43.5	44.0	37	
52	42.9	43.6	36	
54	44.1	44.8	38	
56	43.6	44.5	37	
58	43.3	44.3	37	
17 00	44.4	45.3	39	-15.5
02	44.0	44.8	38	
04	44.9	45.7	40	
06	44.0	44.7	38	
08	45.6	46.6	41	
10	45.0	45.6	40	
12	45.7	46.2	40	
14	45.0	45.7	40	-15.6
16	44.8	45.4	39	
18	45.6	46.2	40	
20	46.7	47.2	42	
22	47.0	47.6	43	
24	47.3	47.6	43	
26	48.1	48.5	44	
28	47.6	48.0	43	
30	47.3	47.5	43	-15.5
32	47.3	47.5	43	
34	46.6	47.0	42	
36	46.1	46.6	41	
38	45.4	45.7	40	
40	45.6	45.8	40	
42	45.2	45.5	40	
44	46.0	46.3	41	-15.6
46	45.3	45.6	40	
48	45.3	45.6	40	
50	45.7	45.7	40	
52	44.8	44.8	39	
54	44.5	44.5	38	
56	44.3	44.5	38	
58	43.0	43.0	36	
18 00	42.7	42.7	22 35	-15.7
02	42.5	42.6	35	
04	42.3	42.5	35	
06	42.6	42.8	35	
08	42.9	43.1	36	
10	43.3	43.3	36	
12	43.8	43.8	37	
14	44.0	44.1	37	-15.6
16.3	43.6	43.6	37	
18.3	43.2	43.2	36	
20	42.9	43.0	36	
22	42.8	43.0	36	
24	43.1	43.3	36	
26	43.3	43.8	37	
28	43.8	44.0	37	
30	43.5	43.8	37	-15.3
32	43.2	43.7	36	
34	42.8	43.0	36	
36	42.8	43.1	36	
38	42.9	43.1	36	
40	42.3	42.8	35	
42	42.3	42.9	35	
44	43.0	43.2	36	-15.0
46	43.8	44.1	37	
48	43.3	43.8	37	
50	43.8	44.0	37	
52	44.3	44.7	38	
54	43.9	44.1	37	
56	43.2	43.5	36	
58	44.2	44.2	38	
19 00	43.8	44.1	37	-14.9
02	43.8	44.0	37	
04	44.1	44.4	38	
06	44.1	44.4	38	
08	44.1	44.4	38	
10	44.0	44.8	38	
12	44.0	44.8	38	
14	43.9	44.8	38	-14.9
16	45.0	45.6	40	
18	45.1	45.6	40	
20	45.1	45.4	39	
22	44.4	44.8	38	
24	44.6	44.9	38	
26	44.4	44.8	38	
28	44.0	44.2	38	
30	43.2	43.8	37	-14.8
32	42.9	43.1	36	
34	42.9	43.1	36	
36	43.1	43.6	36	
38	43.2	43.8	37	
40	43.3	44.0	37	
42	43.3	44.0	37	
44	44.1	44.8	38	-14.6
46	44.9	45.8	40	
48	45.2	46.0	40	
50	44.9	45.5	39	
52	44.1	44.9	38	
54	43.8	44.3	37	
56	43.2	44.0	37	
58	43.1	43.8	36	

Wednesday, December 23, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	42.9	43.3	22 36	-14.4
02	42.6	43.1	36	
04	42.6	43.0	36	
06	42.8	43.3	36	
08	43.2	43.8	37	
10	43.7	44.1	37	
12	43.8	43.3	37	
14	43.8	44.0	37	-14.2
16	43.4	43.8	37	
18	43.1	43.2	36	
20	43.0	43.2	36	
22	42.7	42.9	36	
24	42.9	43.0	36	
26	43.1	43.3	36	
28	43.3	43.8	37	-14.1
30	43.8	44.0	37	
32	43.8	43.9	37	
34	43.9	44.0	37	
36	44.0	44.4	38	
38	44.6	45.0	39	
40	44.1	44.7	38	
42	44.0	44.7	38	
44	44.1	44.8	38	-14.0
46	43.8	44.7	38	
48	42.9	43.6	36	
50	41.6	42.1	34	
52	41.1	41.9	34	
54	41.8	42.1	34	
56	41.5	41.8	34	
58	41.1	41.5	33	
21 00	40.0	40.6	32	-14.0
02	38.2	38.7	29	
04	38.1	38.8	29	
06	38.3	39.2	29	
08	39.1	39.9	30	
10	39.8	40.7	32	
12	40.1	41.1	32	
14	41.3	42.0	34	-14.1
16	42.7	43.2	36	
18	43.0	43.3	36	
20	43.8	44.0	37	
22	44.1	44.5	38	
24	44.2	44.7	38	
26	44.0	44.7	38	
28	40.8	41.7	33	
30	40.1	39.7	31	-14.0
32	38.6	40.2	30	
34	36.9	38.6	28	
36	37.4	39.4	29	
38	37.5	38.9	28	
40	37.3	38.9	28	
42	37.8	39.6	29	
44	37.9	39.2	29	-14.2
46	40.1	41.3	32	
48	38.9	40.2	30	
50	39.7	41.8	32	
52	50.7	51.0	48	
54	51.1	59.3	22 55	
56	57.9	66.9	23 06	
58	58.8	64.7	05	
22 00	43.8	49.1	23 41	-14.2
02	34.7	41.6	28	
04	31.2	38.3	23	
06	31.8	38.7	24	
08	35.8	37.2	26	
10	37.1	38.3	28	
12	38.0	39.8	29	
14	39.2	41.0	31	-14.3
16	40.2	42.1	33	
18	41.1	42.9	34	
20	42.1	43.8	36	
22	42.8	44.2	37	
24	43.0	44.3	37	
26	43.0	44.3	37	
28	42.8	44.2	37	
30	42.2	43.7	36	-14.3
32	41.6	43.3	35	
34	40.8	42.8	34	
36	38.1	43.8	33	
38	37.2	41.5	30	
40	43.2	50.3	42	
42	43.9	56.5	47	
44	39.2	45.9	35	-14.1
46	38.0	40.1	30	
48	28.9	30.8	15	
50	28.2	30.1	14	
52	39.8	40.2	31	
54	34.2	35.3	23	
56	47.2	56.1	49	
58	34.4	40.9	27	
23 00	24.4	33.2	14	-14.0
02	26.8	34.4	16	
04	30.4	38.5	22	
06	30.7	37.2	22	
08	31.9	37.1	22	
10	34.8	41.9	28	
12	32.2	38.9	24	
14	29.5	36.1	20	-13.8
16	30.9	36.7	21	
18	32.8	38.8	25	
20	32.3	38.3	24	
22	34.3	40.9	27	
24	37.1	43.6	32	
26	37.8	42.7	31	
28	39.1	43.3	33	
30	38.0	42.1	31	-13.4
32	40.7	44.3	35	
34	41.3	44.8	36	
36	40.0	43.2	34	
38	39.2	42.1	32	
40	38.0	40.8	30	
42	39.1	41.8	32	
44	39.4	42.0	32	-13.3
46	38.8	41.1	31	
48	37.6	40.1	29	
50	39.8	41.8	32	
52	39.8	41.8	32	
54	40.3	41.8	33	
56	40.1	41.2	32	
58	40.9	41.9	33	
24 00	43.0	43.6	36	-13.3

Observers—W. J. P. and R. R. T., who alternated from 18h 20m to 18h 30m.

Correction to local mean time is + 32s.

Torsion head at oh oom read 345° and at 24h oom read the same.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, December 24, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	49.7	49.3	22 36	-21.3
02	49.4	48.2	37	
04	49.4	47.9	37	
06	49.5	47.9	37	
08	49.6	48.0	37	
10	49.1	47.8	38	
12	49.2	48.0	37	-21.0
14	49.7	48.5	36	
16	49.3	48.6	37	
18	49.0	48.2	37	
20	49.0	48.2	37	
22	49.2	48.5	37	
24	49.1	48.1	37	
26	49.1	48.2	37	
28	49.2	48.3	37	
30	49.1	48.1	37	-20.7
32	48.9	48.1	38	
34	48.9	48.0	38	
36	48.9	48.0	38	
38	48.7	47.9	38	
40	48.8	48.0	38	
42	48.7	47.8	38	
44	48.5	47.7	38	
46	48.9	47.9	38	
48	49.0	48.0	38	
50	49.0	48.0	38	
52	48.9	48.1	38	
54	48.9	48.3	37	
56	49.0	48.7	37	
58	49.0	48.8	37	
17 00	49.0	48.9	37	-19.8
02	49.3	48.8	37	
04	49.4	48.8	36	
06	49.6	49.0	36	
08	49.4	48.9	36	
10	49.0	48.7	37	
12	49.0	48.3	37	
14	49.1	48.2	37	-19.4
16	49.4	48.1	37	
18	49.8	48.6	36	
20	50.2	49.1	36	
22	50.9	49.4	35	
24	50.8	49.5	35	
26	50.7	49.4	35	
28	50.5	49.5	35	
30	50.5	49.7	35	-19.1
32	49.9	49.2	36	
34	49.0	48.3	37	
36	48.9	48.3	37	
38	49.0	48.5	37	
40	48.8	48.1	38	
42	48.8	47.9	38	
44	48.9	48.2	37	-19.0
46	49.4	48.1	37	
48	49.6	48.1	37	
50	49.1	47.7	38	
52	49.1	47.9	37	
54	48.9	47.6	38	
56	48.7	47.1	38	
58	48.2	46.7	39	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	48.1	46.3	22 39	-18.9
02	48.7	47.0	39	
04	48.5	46.9	39	
06	49.0	47.7	38	
08	49.4	48.1	37	
10	49.6	48.3	37	
12	49.3	48.3	37	
14	49.3	48.3	37	-18.9
16	49.7	48.9	36	
18	50.2	49.3	36	
20	50.4	49.4	35	
22	49.9	48.9	36	
24	49.1	48.1	37	
26	48.3	47.6	38	
28	48.5	47.8	38	
30	48.7	47.7	38	-19.0
32.3	48.7	47.4	38	
34	48.2	47.1	39	
36	48.2	47.1	39	
38	48.7	47.4	38	
40	48.7	47.6	38	
42	48.2	47.3	39	
44	48.9	47.9	38	-19.0
46	49.2	47.9	37	
48	49.1	48.0	37	
50	49.0	47.9	38	
52	49.0	47.9	38	
54	48.9	47.9	38	
56	49.0	48.0	37	
58	49.0	47.7	38	
19 00	49.1	48.0	37	-19.2
02	48.9	47.7	38	
04	49.0	47.8	38	
06	49.2	48.1	37	
08	49.0	48.0	37	
10	49.0	48.1	37	
12	49.2	48.0	37	
14	49.1	47.9	37	-19.4
16	48.3	47.6	38	
18	48.9	48.0	38	
20	49.0	47.9	38	
22	48.9	47.6	38	
24	48.8	47.9	38	
26	48.7	47.7	38	
28.5	48.1	47.6	39	
30	48.6	47.7	38	-19.6
32	48.7	47.1	38	
34	48.9	47.3	38	
36	48.7	47.2	38	
38	49.0	47.9	38	
40	48.6	47.7	38	
42	48.8	48.0	38	
44	49.0	48.5	37	-19.8
46	49.0	48.8	37	
48	49.7	49.2	36	
50	50.3	49.1	36	
52	50.7	48.6	36	
54	49.9	47.7	37	
56	49.8	47.7	37	
58	48.9	47.8	38	
20 00	50.8	49.3	35	-19.7

Correction to local mean time is + 21s.
Torsion head at 15h 40m read 345° and at 20h 15m read the same.
Observer—R. R. T.

Tuesday, December 29, 1903 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	38.8	40.9	22 32	-20.0
02	38.8	40.9	32	
04	39.8	40.9	33	
06	39.8	41.1	33	
08	39.3	40.6	32	
10	38.9	40.2	32	
12	39.0	40.4	32	
14	39.2	40.8	33	-19.3
16	39.3	40.9	33	
18	39.3	40.8	33	
20	38.4	39.8	31	
22	38.1	39.2	30	
24	38.3	39.2	30	
26	38.8	39.7	31	
28	38.5	39.3	31	
30	38.9	39.8	31	-18.8
32	39.1	39.8	32	
34	38.8	39.3	31	
36	39.0	39.4	31	
38	39.2	39.8	32	
40	39.2	39.9	32	
42	38.7	39.1	31	
44	38.8	39.2	31	-18.3
46	39.1	39.9	32	
48	39.2	39.9	32	
50	38.8	39.2	31	
52	39.0	39.2	31	
54	38.8	39.2	31	
56	39.1	39.3	31	
58	39.9	40.1	33	
13 00	39.3	39.8	32	-17.8
02	39.2	39.5	32	
04	39.0	39.2	31	
06	39.8	40.0	32	
08	39.8	40.2	33	
10	39.6	40.1	32	
12	39.7	40.2	32	
14	39.3	39.9	32	-17.3
16	38.9	39.8	32	
18	39.1	39.8	32	
20	39.1	40.0	32	
22	39.1	39.8	32	
24	38.9	39.4	31	
26	39.8	40.2	32	
28	40.2	40.8	33	
30	40.1	40.7	33	-17.0
32	39.2	39.9	32	
34	38.7	39.0	31	
36	40.1	40.3	33	
38	40.0	40.2	33	
40	39.2	39.9	32	
42	39.1	39.7	32	
44	39.6	40.1	32	-16.8
46	39.1	40.0	32	
48	39.2	40.1	32	
50	39.2	40.1	32	
52	39.3	40.2	32	
54	39.2	40.2	32	
56	39.3	40.2	32	
58	39.1	39.9	32	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	39.4	40.2	22 32	-16.3
02	39.9	40.4	33	
04	39.9	40.4	33	
06	39.7	40.0	32	
08	39.2	39.8	32	
10	39.2	39.8	32	
12	39.1	39.7	32	
14	39.8	40.2	33	-15.9
16	39.7	39.9	32	
18	39.2	39.8	32	
20	39.1	39.3	31	
22	39.0	39.2	31	
24	39.6	39.8	32	
26	40.1	40.2	33	
28	40.2	40.8	33	
30	39.8	40.1	32	-15.5
32	38.7	38.9	31	
34	37.9	38.1	30	
36	38.6	38.8	31	
38	40.0	40.3	33	
40	40.1	40.6	33	
42	39.7	40.1	32	
44	39.1	39.9	32	
46.2	39.2	39.9	32	-15.0
48.2	38.9	39.2	31	
50	38.3	38.9	30	
52	38.3	39.3	31	
54	38.3	39.3	31	
56	38.2	39.3	31	
58	38.5	39.3	31	
15 00	38.3	39.2	31	-14.7
02	39.1	39.7	32	
04	39.1	39.8	32	
06	39.0	39.6	32	
08	39.1	39.9	32	
10	39.2	39.9	32	
12	38.1	38.9	30	
14	38.9	39.8	32	-14.7
16	40.0	40.9	33	
18	39.2	40.1	32	
20	38.1	38.8	30	
22	38.8	39.3	31	
24	39.1	39.9	32	
26	38.8	39.3	31	
28	38.9	39.3	31	
30	39.0	39.5	31	-14.7
32	38.9	39.3	31	
34	38.9	39.3	31	
36	38.7	39.0	31	
38	38.3	38.9	30	
40	38.3	38.9	30	
42	38.8	39.1	31	
44	38.5	38.9	31	-14.8
46	38.3	38.9	30	
48	38.9	39.3	31	
50	38.3	40.6	32	
52	38.9	40.6	32	
54	39.1	40.7	32	
56	38.8	40.2	32	
58	39.3	40.4	32	
16 00	39.1	40.3	32	-14.7

Correction to local mean time is — 1m 08s. 90° torsion = 24.'8.
Torsion head at 7h 55m read 201° and at 16h 40m read 210°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 30, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	38.8	32.2	22 37	−18.8
02	36.7	35.3	36	
04	37.1	35.3	36	
06	37.2	35.2	36	
08	Lost			
10	37.6	35.6	35	
12	37.8	35.8	35	
14	37.4	35.6	36	−18.3
16	35.9	34.1	38	
18	36.6	35.1	37	
20	36.6	35.2	36	
22	35.6	34.1	38	
24	34.9	33.7	39	
26	35.3	33.7	39	
28	35.3	33.5	39	
30	34.1	32.3	41	−18.1
32	33.3	31.3	42	
34	33.7	30.4	43	
36	31.1	29.0	46	
38	30.3	27.3	48	
40	30.6	29.3	46	
42	32.6	31.3	43	
44	33.8	32.2	41	−17.9
46	33.2	32.5	41	
48	32.6	31.6	42	
50	33.3	32.7	41	
52	35.3	34.3	38	
54	34.6	33.7	39	
56	35.8	35.0	37	
58	37.1	36.0	36	
1 00	37.6	37.0	34	−17.8
02	38.3	37.3	33	
04	38.7	38.3	32	
06	38.4	37.8	33	
08	39.3	38.7	32	
10	36.3	35.3	37	
12	36.0	35.5	37	
14	38.0	37.4	34	−17.8
16	37.0	36.1	36	
18	36.8	36.0	36	
20	35.5	35.3	37	
22	35.7	34.7	38	
24	34.1	33.3	40	
26	33.0	32.3	42	
28	33.3	32.4	41	
30	30.6	29.3	46	−17.7
32	30.0	28.8	47	
34	30.5	28.8	46	
36	32.3	30.4	44	
38	33.3	32.0	41	
40	33.5	31.7	41	
42	31.0	29.3	45	
44	31.3	30.3	44	−17.5
46	31.1	30.0	45	
48	32.1	31.0	43	
50	30.9	30.1	45	
52	30.6	30.0	45	
54	30.0	29.3	46	
56	31.5	30.6	44	
58	32.2	31.1	43	
2 00	30.4	29.9	22 45	−17.4
02	33.2	32.3	41	
04	31.9	31.3	43	
06	32.3	32.0	42	
08	32.3	32.0	42	
10	31.3	31.1	44	
12	33.8	33.5	40	
14	32.8	32.3	42	−17.3
16	32.7	32.3	42	
18	33.6	33.1	40	
20	31.3	30.3	44	
22	28.3	28.0	48	
24	30.9	30.5	44	
26	30.9	30.5	44	
28	29.1	28.8	47	
30	29.7	29.3	46	−17.3
32	31.0	30.8	44	
34	35.0	34.4	38	
36	35.6	35.3	37	
38	35.4	34.2	38	
40	30.0	29.0	46	
42	27.0	26.7	51	
44	29.4	29.0	47	−17.2
46	27.8	27.4	49	
48	29.2	28.2	48	
50	30.8	30.2	45	
52	29.3	28.3	47	
54	27.8	27.1	50	
56	29.3	28.7	47	
58	28.6	28.2	48	
3 00	28.0	27.4	49	−17.2
02	27.5	27.1	50	
04	24.4	24.0	55	
06	25.3	24.8	53	
08	26.1	25.8	52	
10	30.1	27.3	48	
12	28.9	28.5	48	
14	30.9	30.5	44	−17.2
16	29.9	29.5	46	
18	27.3	26.7	50	
20	24.8	24.8	54	
22	23.0	23.0	57	
24	22.3*b*		58	
26	22.2	22.0	58	
28	22.2	22.0	58	
30	23.3	23.3	56	−17.0
32	26.7	26.0	51	
34	30.3	30.1	45	
36	33.9	33.1	40	
38	35.3	34.4	38	
40	35.7	34.9	37	
42	35.2	34.6	38	
44	36.4	35.6	36	−17.0
46	40.0*a*		30	
48	42.5	42.3	26	
50	40.6	40.0	29	
52	38.0	37.6	33	
54	38.3	37.8	33	
56	39.5	39.0	31	
58	37.8	37.5	34	

Wednesday, December 30, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	37.3	37.0	22 34	−17.0
02	37.8	37.5	34	
04	39.3	39.0	31	
06	40.5	40.1	29	
08	41.3	40.9	28	
10	42.3	42.1	26	
12	42.0	41.8	27	
14	41.3	40.7	28	−16.9
16	38.8	38.2	32	
18	37.2	36.8	35	
20	35.6	35.3	37	
22	34.6	34.2	39	
24	34.1	33.8	39	
26	32.5	32.5	42	
28	31.6	31.3	43	
30	31.7	31.5	43	−16.9
32	31.8	31.6	43	
34	31.0	30.8	44	
36	29.6	29.1	47	
38	29.3	29.1	47	
40	29.3	29.1	47	
42	33.5	32.9	41	
44	36.8	36.8	35	−16.8
46	40.0	40.0	30	
48	41.3	41.1	28	
50	41.5	41.3	28	
52	42.0	41.9	27	
54	41.3	41.3	28	
56	40.3	40.3	29	
58	40.5	40.5	29	
5 00	40.1	40.1	30	−16.7
02	41.3	41.0	28	
04	41.6	41.4	27	
06	42.3*b*		26	
08	40.3*b*		29	
10	39.3*b*		31	
12	39.2	39.2	31	
14	36.3	35.9	36	−16.5
16	35.0	34.9	38	
18	34.5	34.3	39	
20	34.9	34.7	38	
22	33.7*b*		40	
24	31.2	30.6	44	
26	29.0	28.7	47	
28	30.9	30.8	44	
30	33.4	33.4	40	−16.4
32	34.2	34.0	39	
35	34.0	33.6	40	
36	34.5	34.3	39	
38	35.9	35.5	37	
40	34.9	34.9	38	
42	35.8	35.8	36	
44	35.4	35.4	37	−16.5
46	33.8	33.8	40	
48	34.5	34.3	39	
50	35.9	35.9	36	
52	35.9	35.9	36	
54	36.3	36.3	36	
56	36.3	36.3	36	
58	36.7	36.3	35	
6 00	34.3	33.7	22 39	−16.5
02	32.2	32.0	42	
04	33.5	33.3	40	
06	33.1	33.1	41	
08	31.8	31.8	43	
10	30.0	30.0	46	
12	30.6	30.3	45	
14	36.0*a*		36	−16.4
16	40.0*a*		30	
18	39.4*b*		31	
20	34.5*b*		39	
22	30.3*b*		45	
24	30.2	30.1	45	
26	37.2*a*		34	
28	37.6	37.4	34	
30	41.3	41.0	28	−16.3
32	39.4	34.6	35	
34	37.4	37.2	34	
36	37.6	37.4	34	
38	35.6	35.6	37	
40	40.9	40.6	29	
42	43.1	43.0	25	
44	25.4*b*		53	−16.4
46	24.5*b*		54	
48	21.8	21.1	22 59	
50	21.0	20.2	23 00	
52	23.1	22.8	22 57	
54	26.6	26.2	51	
56	33.7	32.7	41	
58	26.5*b*		51	
7 00	22.0	22.0	58	−16.3
02	28.0*a*		49	
04.5	34.6	34.3	39	
06	35.0*b*		22 38	
08	15.0*a*		23 09	
10	59.0	59.0	22 00	
12*	35.3	27.5	21 11	
14*	25.6	25.6	23 45	−16.2
16	50.0*a*		23 07	
18*	47.3	37.9	22 21	
20	22.3	14.7	58	
22	22.2	19.5	22 55	
24*3	28.0	24.5	23 24	
26.2	39.6	36.8	05	
28	41.0	38.0	03	
30	38.8	34.0	08	
32	28.3	21.8	26	−16.0
34	38.3	29.8	12	
36	37.7	28.3	14	
38	25.0	17.2	32	
40	16.5	9.0	45	
42*	65.5	50.0	56	
44	71.5	58.3	45	−16.0
46	69.9	58.7	46	
48*	43.0	30.0	33	
50	45.0	30.5	31	
52	44.0	33.2	29	
54	45.8	44.2	19	
56	49.7	48.1	13	
58	53.9	53.1	06	

Observer—W. J. P.

Observers—W. J. P. and R. R. T., who alternated from 7h 46m to 7h 56m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 30, 1903					Magnet scale inverted					Wednesday, December 30, 1903					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	52.9	49.9	23 09	-15.1	10 00	39.4	36.0	21 39	-14.0	12 00	27.0*a*		22 27	-13.8	14 00	60.0	56.8	23 03	-14.3
02	50.9	48.3	12		02	49.3	43.0	26		02	32.8	29.7	20		02	54.8	52.5	11	
04	50.9	47.2	13		04	34.8	30.0	47		04	19.2	17.0	41		04	54.3	51.9	12	
06	47.7	46.0	16		06	33.3	27.0	51		06	17.0	15.1	44		06	56.2	54.8	08	
08	45.8	45.1	19		08	30.7	26.1	21 53		08	21.2	19.0	38		08	53.0	51.2	13	
10	47.6	45.5	17		10	22.8	17.6	22 06		10	12.8	9.9	22 52		10	53.0	52.3	12	
12	39.0	37.2	30		12	15.9	10.7	22 17		12*	58.2	48.0	23 11		12	51.8	51.0	14	
14	37.8	35.4	33	-14.9	14	38.2*a*		21 38	-14.0	14.5	60.5	52.2	06		14	59.3	59.0	02	-14.5
16	39.2	35.2	32		16	21.3	21.1	22 05		16	55.9	47.0	14	-13.9	16	55.3	55.0	08	
18	39.1	36.0	31		18	29.7*a*		21 52		19	58.9	50.2	09		18	58.4	58.0	04	
20	34.3	29.1	40		20	36.2*b*		41		20	60.4	50.6	23 07		20	54.8	54.0	10	
22	57.1	53.9	23 03		22	31.9	29.7	50		22	65.2	57.1	22 58		22	47.7	47.0	21	
24	61.2	55.9	22 58		24	40.6	37.8	37		24	63.9	55.7	23 01		24	46.9	46.2	22	
26	57.7	52.8	23 03		26	31.8	29.7	50		26	64.3	57.0	22 59		26	47.4	45.6	22	
28	65.8	61.8	22 50		28.5	25.9	24.2	21 59		28	66.1	58.9	56		28	50.2	48.8	17	
30	74.9	69.1	37	-14.6	30.5	23.2	22.2	22 02	-13.8	30	63.9	59.0	58	-14.0	30	49.4	48.3	18	-14.5
32	77.2	73.9	31		32	23.3	21.0	03		32	63.8	59.2	22 58		32	49.2	48.7	18	
34*	47.1	32.7	29		34	25.0	22.0	01		34	62.3	58.2	23 00		34	49.0	48.7	18	
36	46.1	34.8	28		36	24.0	22.8	01		36	62.0	58.2	00		36	48.2	45.7	21	
38	41.5	28.2	36		38	13.0	10.4	20		38	62.4	58.1	23 00		38	50.2	48.6	17	
40	43.2	27.0	36		40	11.2	10.2	21		40	62.0	59.1	22 59		40	55.3	54.4	08	
42	37.2	33.3	36		42	10.7	9.7	22		42	55.9	51.8	23 10		42	52.0	51.0	14	
44	39.4	35.1	33	-14.4	44*	56.2	49.1	26	-13.8	44	51.8	46.4	17	-14.1	44	52.3	51.3	13	-14.7
46	43.6	40.9	25		46	59.9	52.1	21		46	44.0	38.4	30		46	52.4	51.8	13	
48	42.9	39.2	27		48	62.9	59.6	13		48	36.1	30.4	42		48	47.1	45.5	22	
50	37.5	34.8	34		50	56.1	52.0	24		50	37.1	32.4	40		50	47.1	46.0	21	
52	34.1	31.1	40		52	63.2	58.2	14		52	34.5	29.7	44		52	42.3	41.3	29	
54	37.7*a*		32		54	61.3	57.8	15		54	37.9	32.4	39		54	41.0	39.3	31	
56	42.2	37.3	29		56	65.1	62.0	09		56	45.9	40.7	27		56	41.9	40.3	30	
58	45.8	44.9	20		58	71.1	65.3	22 02		58	44.8	40.1	28		58	48.3	47.0	20	
9 00	36.9	31.9	37	-14.2	11 00*	48.9	45.9	21 55	-13.4	13 00	54.7	51.1	11	-14.2	15 00	46.0	44.7	23	-15.0
02	37.0	36.3	34		02	51.7	47.3	21 52		02	53.9	49.2	14		02	41.5	41.0	30	
04	48.0*a*		16		04	45.2	41.8	22 01		04	58.1	54.5	06		04	36.9	36.6	37	
06	42.7	40.7	26		06	41.5	36.4	08		06	58.8	57.2	04		06	32.3	31.6	44	
08	37.8	34.9	34		08	37.9	32.0	15		08	59.0	57.0	04		08	37.0*a*		37	
10	32.6	28.8	43		10	39.0	34.7	12		10	49.3	47.4	19		10	45.0	45.0	24	
12	29.2	24.9	49		12	30.9	25.6	25		12	44.1	41.2	28		12	51.3	51.3	14	
14	40.9	39.8	28	-14.0	14	32.5	27.1	23	-13.4	14	42.1	38.9	31	-14.1	14	59.0	57.0	03	-15.0
16	44.3	43.2	23		16	34.0	27.6	21		16	44.6	41.4	28		16	52.3	49.6	15	
18	48.1	46.3	17		18	31.0	24.1	26		18	42.0	39.9	31		18	53.0	49.5	14	
20	41.9*a*		25		20	25.1	20.1	34		20	39.4	39.0	33		20	44.2	42.1	27	
22	49.6	46.0	16		22	24.9	19.5	35		22	37.5	36.5	37		22	38.3	35.3	37	
24	56.1	49.1	09		24	24.1	19.8	35		24	35.9	35.0	39		24	38.3	35.5	37	
26	47.7	44.0	19		26	24.6	20.1	34		26	37.8	36.7	37		26	42.9	40.3	29	
28	52.0	51.1	10		28	22.9	18.2	37		28	38.8	36.8	36		28	43.4	40.6	29	
30	41.1*b*		27	-14.0	30	27.1	23.5	30	-13.5	30	43.3	41.0	29	-14.2	30	44.4	41.6	27	-15.0
32	47.7	43.1	20		32	21.8	19.1	37		32	43.0	41.0	29		32	43.8	40.3	29	
34	61.3	54.2	01		34	17.2	13.5	45		34	49.2	46.6	20		34	40.0	39.0	33	
36	55.2	49.9	22 09		36	17.9	14.8	44		36	49.0	45.8	21		36	41.0	40.5	31	
38	65.9	60.2	21 52		38	11.7	10.6	52		38	51.1	48.1	17		38.3	44.0	43.5	26	
40	70.7	65.6	44		40	15.1	12.8	48		40	56.9	54.4	08		40	45.2	44.0	24	
42	61.8	57.1	58		42	12.7	10.6	51		42	52.5	49.2	15		42	46.3	44.6	23	
44	67.1	63.7	48	-14.0	44	13.0	12.5	49	-13.7	44	56.0	53.2	09	-14.4	44	52.2	50.1	14	-15.2
46	64.1	59.8	54		46	9.2	7.2	57		46	56.9	54.8	07		46	57.5	55.4	06	
48	75.2	69.3	38		48	14.6	12.2	48		48	58.7	56.7	23 04		48	56.3	55.0	07	
50	74.9	70.2	37		50	17.3	14.1	45		50	63.9	61.8	22 56		50	54.0	52.2	11	
52*	47.3	37.3	32		52	19.9	18.0	40		52	57.3	56.0	23 06		52	46.6	45.0	23	
54	48.8	40.0	28		54	20.3	16.7	40		54	58.3	56.7	05		54	58.6	54.3	23 06	
56	37.6	27.9	47		56	17.2	14.2	45		56	55.8	54.2	09		56	62.3	60.5	22 58	
58	34.7	27.8	49		58	22.8	21.8	34		58	60.9	58.9	01		58	46.3	44.0	23 24	

Observer—R. R. T.

Observers—R. R. T. and W. J. P., who alternated from 14h 00m to 14h 08m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, December 30, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	44.0	41.3	23 28	−15.3
02	48.8	46.3	20	
04	48.6	45.3	21	
06	48.6	46.3	20	
08	45.6	42.8	25	
10	47.2	44.5	22	
12	51.2	49.5	15	
14	57.0	54.6	07	−15.3
16	60.3	57.6	02	
18	60.5	58.2	01	
20	56.2	53.6	08	
22	53.8	52.0	11	
24	56.0	54.0	08	
26	57.6	55.4	06	
28	59.7	58.0	02	
30	61.0	59.3	23 00	−15.5
32	61.3	60.5	22 59	
34	61.0	59.5	23 00	
36	62.0	60.9	22 58	
38	61.7	60.5	59	
40	62.7	61.5	57	
42	69.7	68.5	46	
44	65.0	64.0	53	−15.5
46	67.8	66.8	49	
48	68.0	67.2	48	
50.3	70.1	69.3	45	
52	70.0	69.0	45	
54	69.9	69.1	45	
56	70.6	69.5	45	
58	69.6	68.6	46	
17 00	66.7	65.6	51	−15.6
02	67.5	66.3	49	
04	68.9	68.0	47	
06	68.2	67.5	48	
08	66.9	66.3	50	
10	65.0	64.0	53	
12	61.3	60.5	59	
14	61.0	60.4	59	−15.7
16	68.6	68.4	47	
18	78.0	78.0	32	
20*	51.6	43.3	19	
22	59.0	52.0	06	
24	58.0	51.0	08	
26	54.6	48.8	12	
28	48.3	42.5	22	
30	44.4	38.6	28	−15.5
32	40.3	35.3	34	
34	37.3	32.0	39	
36	37.2	32.3	39	
38	37.0	35.6	36	
40	39.0	38.2	33	
42	34.1	33.5	40	
44	34.7	33.6	40	−15.6
46.2	36.3	35.7	37	
48	35.2	34.4	38	
50	33.8	33.3	40	
52	33.2	32.7	41	
54	31.5	31.2	44	
56	31.3	30.8	45	
58	30.0	29.6	47	
18 00	28.0	27.9	22 49	−15.5
02	31.0	31.0	45	
04	29.7	29.3	47	
06	32.6	32.6	42	
08	32.1	32.1	43	
10	32.3	32.3	42	
12	35.0	35.0	38	
14	32.6	32.4	42	−15.6
16	33.6	33.0	41	
18	35.6	35.3	38	
20	32.3	31.6	43	
22	31.3	30.3	45	
24	27.6	26.8	51	
26	32.5	32.3	42	
28	39.8	37.7	32	
30	40.6	39.5	30	
32	39.5	38.3	32	−15.3
34	38.2	36.8	34	
36	37.9	37.2	34	
38	43.2	42.1	26	
40	41.9	41.1	28	
42	40.1	39.6	30	
44	40.0	39.2	31	−14.9
46	40.8	39.6	30	
48	39.9	38.7	31	
50	38.7	37.3	34	
52	37.9	36.7	35	
54	37.0	35.9	36	
56	36.5	35.4	37	
58	35.0	33.9	39	
19 00	35.2	33.3	39	−14.3
02	35.4	34.2	39	
04	35.1	33.9	39	
06	37.5	36.1	35	
08	39.8	38.6	32	
10	40.0	38.7	31	
12	39.9	38.8	31	
14	37.9	37.0	34	−14.2
16	38.8	37.0	34	
18	40.8	38.2	31	
20	38.0	36.2	35	
22	37.8	36.2	35	
24	40.9	39.1	30	
26	41.9	40.2	29	
28	41.6	40.2	29	
30	41.1	39.9	30	−14.1
32	38.9	37.4	33	
34	37.0	36.8	35	
36	35.8	34.8	38	
38	35.2	34.1	39	
40	36.5	34.9	37	
42	41.1	39.1	30	
44	45.7	43.9	23	−14.0
46	44.3	42.3	25	
48	41.7	39.7	29	
50	38.0	36.1	35	
52	37.1	35.2	36	
54	37.7	35.7	36	
56	36.9	35.3	37	
58	38.0	36.8	34	

Wednesday, December 30, 1903 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	40.2	38.4	22 31	−13.9
02	41.2	40.1	29	
04	41.6	40.6	29	
06	38.0	37.0	34	
08	38.3	37.9	33	
10	37.1	36.4	35	
12	37.8*a*		34	
14	36.4	36.1	36	−13.8
16	38.8	36.9	34	
18	46.7	44.8	21	
20	45.4	43.9	23	
22	42.2	39.9	29	
24	37.1	34.7	37	
26	36.6	35.2	37	
28	40.2	37.8	32	
30	42.2	39.7	29	−13.6
32	44.3	41.9	25	
34	44.1	42.2	25	
36	41.9	39.3	30	
38	42.2	40.2	29	
40	44.0	42.9	25	
42	47.2	44.9	21	
44	46.9	45.0	21	−13.4
46	47.2	45.1	21	
48	42.3	40.2	28	
50	40.8	38.2	31	
52	42.2	39.9	29	
54	43.2	40.8	27	
56	42.9	40.6	28	
58	42.3	39.8	29	
21 00	42.0	39.1	29	−13.4
02	43.2	39.8	28	
04	40.9	37.7	31	
06	40.1	37.1	32	
08	40.8	37.1	32	
10	41.4	37.9	31	
12	37.9	34.8	36	
14	35.2	32.2	40	−13.3
16	38.0	35.1	36	
18	42.0	38.0	30	
20	45.3	41.3	25	
22	47.0	43.1	22	
24	45.8	42.7	24	
26	42.9	40.1	28	
28	45.9	43.9	23	
30	44.2	42.1	26	−13.2
32	41.2	39.6	30	
34	41.9	39.8	29	
36	45.8	44.9	22	
38	45.1	43.8	23	
40	48.1	47.5	18	
42	48.6	47.8	18	
44	43.9	43.3	25	−13.0
46	41.7	40.3	29	
48	40.8	39.0	31	
50	41.9	40.2	29	
52	41.5	39.8	29	
54	41.1	39.9	30	
56	37.2	36.1	36	
58	36.8	35.6	36	
22 00	37.2	36.3	22 36	−13.0
02	42.8	41.4	27	
04	44.5	42.7	25	
06	42.7	40.3	28	
08	41.8	39.2	30	
10	41.3	39.1	30	
12	44.4	42.3	25	
14	43.3	42.2	26	−12.9
16	39.8	38.1	32	
18	36.9	35.8	36	
20	34.9	33.5	40	
22	33.9	32.2	41	
24	36.3	34.7	38	
26	38.0	37.2	34	
28	38.0	36.9	35	
30	39.9	38.2	32	−12.3
32	39.2	37.5	33	
34	40.2	38.1	32	
36	38.9	37.1	34	
38	38.3	36.8	34	
40	36.7	35.0	37	
42	38.0	36.9	34	
44	39.9	37.9	32	−12.0
46	41.2	38.9	30	
48	39.0	37.2	34	
50	37.8	36.8	35	
52	37.0	35.8	36	
54	38.2	36.3	35	
56	37.8	36.1	35	
58	38.1	37.1	34	
23 00	37.9	37.1	34	−11.5
02	39.9	37.9	32	
04	37.9	36.3	35	
06	36.1	34.3	38	
08	34.2	32.7	41	
10	33.3	31.9	42	
12	35.2	33.3	39	
14	35.3	33.0	40	−11.2
16	34.3	31.3	42	
18	34.2	31.3	42	
20	35.2	32.1	40	
22	35.9	34.1	38	
24	34.8	32.8	40	
26	36.2	34.0	38	
28	38.0	35.9	35	
30	38.9	36.9	34	−11.0
32	39.5	37.2	33	
34	39.3	36.9	34	
36	39.8	37.1	33	
38	39.8	37.2	33	
40	41.0	38.2	31	
42	41.3	38.7	31	
44	43.2	40.2	28	
46	42.8	39.9	28	
48	45.2	42.9	24	
50	47.1	43.7	22	
52.3	45.1	41.7	25	
54	41.8	38.1	31	
56	39.3	36.1	34	
58	37.9	35.9	35	
24 00	37.8	35.8	36	−10.9

Observers—W. J. P. and R. R. T., who alternated from 18h 24m to 18h 34m.

Correction to local mean time is — 1m 15s.

Torsion head at oh 00m read 225° and at 24h 20m read the same.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, December 31, 1903 — Magnet scale erect									Friday, January 1, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	44.7	45.2	23 27	-15.0	22 00	28.7	40.2	22 25	-11.0	16 00*	49.2	49.0	22 44	-15.0	18 00	67.4	61.2	22 15	-12.5
02	42.9	44.0	25		02	30.0	40.4	26		02	50.5	49.2	42		02	66.1	60.7	16	
04	41.4	42.3	22		04	23.6	33.8	16		04	52.9	51.7	38		04	64.2	59.1	19	
06	42.1	42.8	23		06	28.7	38.7	24		06	56.1	54.3	33		06	63.9	59.1	19	
08	41.0	42.2	22		08	25.1	35.2	18		08	56.8	56.0	31		08	63.1	58.8	20	
10	39.9	41.2	20		10	20.1	28.2	09		10	60.2	56.7	28		10	63.8	59.6	19	
12	38.7	39.9	18		12	26.2	33.4	18		12	62.8	58.2	25		12	62.4	58.1	22	
14	37.4	37.5	15	-14.2	14	28.0	35.2	20	-10.8	14	63.2	59.8	23	-14.9	14	63.6	59.9	18	-12.2
16	34.0	36.0	12		16	36.7	42.1	32		16	64.2	60.8	22		16	65.1	61.8	17	
18	34.9	36.5	13		18	40.1	46.2	38		18	63.3	60.6	23		18	64.2	61.1	17	
20	35.3	36.6	13		20	41.7	47.2	40		20	61.1	58.7	25		20	61.9	58.9	21	
22	38.9	41.1	19		22	37.3	44.6	35		22	59.1	56.9	28		22	58.9	56.3	25	
24	39.5	41.4	20		24	32.1	37.6	25		24	56.8	54.2	32		24	58.0	55.8	26	
26	40.4	41.0	21		26	30.0	36.2	23		26	54.8	52.1	36		26	56.8	54.7	28	
28	40.0	41.2	20		28	30.2	36.0	23		28	53.8	50.1	37		28	52.6	50.2	34	
30	37.1	40.8	18	-13.5	30	28.8	33.9	20	-10.7	30	52.3	50.1	39	-14.5	30	47.8	44.7	42	-12.1
32	38.2	41.4	19		32	28.6	32.0	18		32	51.8	49.1	40		32	38.2	35.0	22 57	
34	35.0	39.0	15		34	29.0	32.8	19		34	51.6	49.7	40		34	21.1	18.2	23 26	
36	34.0	37.6	13		36	30.8	34.2	22		36	51.4	49.9	39		36	11.8	6.8	40	
38	35.7	39.3	16		38	32.0	35.1	23		38	51.1	49.6	40		38	22.4	20.2	21	
40	33.0	36.9	11		40	31.3	38.8	26		40	50.8	49.3	40		40	22.8	20.2	21	
42	33.0	37.0	12		42	36.2	39.5	30		42	51.1	50.0	40		42	34.7	33.9	23 01	
44	33.0	37.4	12	-12.8	44	38.8	41.9	34	-10.6	44	50.2	49.2	41		44	36.7	34.9	22 58	-12.0
46	34.4	37.9	13		46	37.8	41.0	32		46	49.6	48.8	42		46	36.2	33.8	22 59	
48	36.2	39.6	16		48	35.6	37.8	28		48	50.2	49.2	41	-14.0	48	21.3	20.2	23 22	
50	37.0	40.3	17		50	34.8	37.7	27		50	50.2	50.2	39		50*	62.5	49.7	42	
52	37.8	40.9	18		52	44.2	48.2	43		52	51.2	50.8	38		52	62.3	50.0	42	
54	37.4	40.0	17		54	48.0	51.0	48		54	53.2	52.7	35		54	38.5	31.1	15	
56	36.8	38.9	16		56	51.0	55.5	54		56	53.9	53.2	34		56	64.1	50.8	40	
58	34.9	36.8	13		58	52.0	55.9	55		58	54.6	53.8	33		58	73.0	67.1	19	
21 00	34.0	36.0	12	-12.2	23 00	49.5	52.0	50	-10.4	17 00	54.2	53.0	34	-13.5	19 00	69.0	62.2	26	-12.0
02	34.7	36.0	12		02	53.1a		22 54		02	53.9	53.0	35		02	74.7	70.1	16	
04	40.8	42.4	22		04	65.0	67.2	23 15		04	54.1	53.2	34		04	77.0	69.8	14	
06	46.2	47.9	30		06	60.0	66.5	10		06	50.1	49.3	40		06	77.2	74.2	11	
08	58.4	61.1	50		08	59.0	65.5	23 08		08	51.5	50.2	38		08*	52.3	44.5	23 03	
10*2	33.0	41.5	34		10	48.0	56.5	22 53		10	54.1	52.9	34		10	57.8	48.7	22 56	
12	40.8	47.8	45		12	54.0	54.0	56		12	57.3	56.4	29		12	62.9	54.2	23 47	
14	27.9	30.0	23 21	-12.0	14	49.8	58.6	56	-10.2	14	59.0	58.5	26	-13.1	14	65.8	59.2	22 41	-11.8
16*2	31.1	61.2	22 21		16	50.0	55.2	53		16	58.0	56.9	28		16	66.9	60.3	39	
18	28.7	62.0	20		18	39.8	64.9	22 53		18	55.8	54.7	31		18	68.8	62.8	36	
20	43.5	71.5	22 39		20	48.0	70.0	23 03		20	55.0	53.8	32		20	69.2	64.7	34	
22*	27.0	40.7	23 26		22	21.2	38.2	22 17		22	54.3	52.9	33		22	71.1	65.7	32	
24*3	45.5	66.8	22 58		24*4	25.4	33.0	23 31		24	58.7	57.2	26		24	73.2	67.3	29	
26*	58.0	74.6	23 57		26*2	37.8	57.0	22 53		26	60.9	59.6	23		26	74.0	68.8	26	
28.3	40.2	57.5	30		28	42.0	60.9	23 00		28	61.5	60.0	22		28	74.9	70.2	25	
30	38.5	53.5	25	-11.4	30	39.3	59.2	22 56	-10.0	30	59.4	58.2	25	-12.9	30	76.2	72.7	22	-11.8
32	19.8	39.6	23 00		32	30.3	49.2	41		32	58.0	56.9	27		32	78.2	74.1	19	
34	13.0	37.8	22 53		34	30.2	47.9	40		34	58.1	57.2	26		34*	50.2	40.1	21	
36	14.9	27.7	47		36	32.0	37.8	22 34		36	57.3	56.7	27		36	47.6	35.4	26	
38	8.4	28.4	42		38	45.2	65.3	23 06		38	55.9	55.3	30		38	48.9	37.8	23	
40*	28.2	47.6	30		40	52.0	57.7	05		40	53.2	52.8	34		40	54.8	44.0	13	
42	21.3	41.4	20		42	53.0	68.7	15		42	57.7	56.3	27		42	53.9	45.1	13	
44	24.0	41.5	22	-11.2	44	54.0	66.1	13	-9.7	44	64.3	62.8	17	-12.8	44	35.1	32.9	37	-11.7
46	24.9	42.1	23		46*3	29.0	58.9	23 47		46	66.9	65.8	12		46	45.6	36.1	22 27	
48	24.1	39.2	20		48.2	55.9	75.3	24 21		48	73.0	71.7	03		48*	14.8	13.1	25 14	
50	23.8	38.2	19		50	Lost				50	74.1	71.2	02		50	Lost			
52	23.5	37.2	18		53*5	53.1	60.8	23 02		52	74.1	71.5	02		51*8	65.9	49.8	25 32	
54	26.7	29.2	14		55*	41.7	71.3	23 06		54	64.7	59.2	19		54*	64.9	13.7	22 47	
56	27.6	40.0	24		56*	28.7	60.9	24 17		56	54.5	50.3	34		56*	70.9	11.2	21 52	
58	28.0	40.2	24		58*	12.7	46.2	23 19		58	61.9	56.2	24		59*	65.8	49.7	54	
					24 00*	49.0	73.0	22 51	-9.3						20 00*	58.2	35.2	31	-11.2

Correction to local mean time is — 1m 33s.
Torsion head at 19h 25m read 225° and at 24h 10m read the same.
Observers—J. S. V. (R. R. T. observed readings 23h 53.5m to 24h 00m.)

Correction to local mean time is — 1m 47s. 90° torsion = 22.'1.
Torsion head at 15h 30m read 228° and at 20h 10m read 268°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, January 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	50.5	51.8	22 45	-21.6
02	54.6	58.1	53	
04	58.2	61.8	22 58	
06	59.2	62.8	23 00	
08	61.7	64.7	03	
10	64.2	66.6	07	
12	64.6	65.9	06	
14	64.2	65.9	06	-20.8
16	65.9	67.3	08	
18	67.0	68.4	10	
20	68.0	69.1	12	
22	68.9	70.0	14	
24	69.1	70.5	14	
26	67.0	68.7	11	
28	65.6	67.5	09	
30	64.0	65.4	06	-19.8
32	64.1	65.2	06	
34	65.2	66.7	08	
36	64.9	65.8	07	
38	63.8	64.8	06	
40	62.5	64.0	04	
42	64.2	65.3	07	
44	63.7	64.9	06	-19.2
46	69.0	69.8	14	
48	67.1	68.1	11	
50	65.1	66.5	08	
52	64.4	66.0	07	
54	64.2	65.8	07	
56	62.8	64.7	06	
58	63.0	64.3	06	
1 00	64.7	66.2	08	-18.8
02	67.1	69.2	13	
04	68.3	70.8	15	
06	67.1	69.6	13	
08	66.7	69.0	12	
10	66.3	68.9	11	
12	63.0	65.0	23 06	
14	57.6	59.8	22 58	
16	56.1	58.9	57	-18.3
18	57.1	59.8	22 58	
20	60.3	63.0	23 03	
22	64.8	66.8	09	
24	64.0	65.7	08	
26	71.0	72.4	19	
28	68.9	71.0	16	
30	64.7	66.3	09	-18.0
32	65.8	67.2	10	
34	65.9	67.3	11	
36	67.3	68.7	13	
38	66.9	67.8	12	
40	61.7	62.9	04	
42	60.3	61.9	03	
44	59.8	61.1	01	-17.9
46	59.9	61.8	02	
48	60.6	62.1	03	
50	61.2	62.8	04	
52	61.1	62.4	04	
54	59.9	61.1	02	
56	58.8	60.1	00	
58	59.9	60.8	02	
2 00	58.5	59.6	23 00	-17.7
02	57.8	58.8	22 59	
04	56.3	57.4	56	
06	54.7	56.1	54	
08	54.7	56.9	54	
10	56.2	58.3	22 58	
12	57.5	59.7	23 00	
14	57.8	59.4	00	-17.4
16	59.8	61.0	02	
18	61.1	62.3	04	
20	60.3	61.8	03	
22	61.1	63.0	05	
24	62.3	63.9	07	
26	62.1	63.8	06	
28	63.8	65.3	09	
30	63.4	65.3	09	-17.3
32	64.0	64.3	09	
34	63.8	64.2	09	
36	68.0	68.4	15	
38	61.7	62.3	05	
40	60.8	61.0	04	
42	59.7	59.7	02	
44	60.8	61.1	03	-17.1
46	64.2	65.4	10	
48	64.8	65.9	11	
50	65.8	67.0	13	
52	67.4	69.0	16	
54	69.7	70.9	19	
56	69.2	70.3	18	
58	69.0	70.0	18	
3 00	70.2	71.4	20	-17.1
02	73.3	74.1	24	
04	73.7	75.4	25	
06	74.2	76.8	27	
08*	56.9	63.3	30	
10	55.1	62.4	28	
12	52.6	62.0	25	
14	52.1	60.3	24	-16.9
16	51.8	58.2	22	
18	50.3	55.6	18	
20	49.8	53.1	16	
22	49.1	52.2	14	
24	51.0	54.2	18	
26	52.7	55.0	21	
28	52.7	54.8	20	
30	51.5	52.9	18	-16.7
32	50.8	52.1	17	
34	49.1	50.8	14	
36	48.0	49.6	12	
38	48.7	50.1	13	
40	48.2	49.5	12	
42	47.2	48.5	11	
44	45.4	46.9	.09	-16.6
46	45.0	46.1	08	
48	44.7	45.8	07	
50	43.8	44.9	06	
52	44.1	45.7	07	
54	42.1	43.8	04	
56	42.2	44.2	04	
58	41.1	43.1	02	-16.4

Observer—R. R. T.

Sunday, January 3, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	69.4	68.7	22 55	
02	67.2	66.3	22 59	
04	64.1	62.9	23 05	
06	64.4	62.7	05	
08	65.8	62.9	03	
10	65.3	63.1	03	
12	64.1	61.8	05	-16.0
14	62.0	59.5	09	
16	62.0	59.5	09	
18	61.2	59.5	09	
20	62.0	60.2	08	
22	59.8	58.8	12	
24	61.4	60.7	09	
26	63.9	63.2	05	
28	60.8	60.4	10	
30	58.3	57.9	13	-16.1
32	57.6	57.3	15	
34	57.0	56.5	16	
36	58.0	57.2	14	
38	58.0	56.8	14	
40	54.9	54.3	19	
42	55.0	54.2	20	
44	56.8	55.4	17	-16.1
46	58.0	56.0	16	
48	63.1	61.5	07	
50	61.5	60.7	09	
52	54.4	52.8	20	
54	46.1	45.5	33	
56	46.8	45.7	33	
58	42.7	40.8	40	
5 00	38.8	38.1	46	-16.1
02	48.3	47.1	31	
04	56.7	55.6	18	
06	61.3	60.3	23 10	
08	69.1	68.0	22 58	
10	69.6	68.8	22 57	
12	60.9	59.3	23 11	
14	58.8	58.0	14	-16.2
16	51.0	51.9	25	
18	49.0	48.8	29	
20	46.2	45.8	34	
22	48.6*a*		30	
24	52.0	50.8	26	
26	55.0	54.7	20	
28	53.3	52.6	23	
30	51.9	50.8	26	-16.3
32	45.0	40.5	39	
34	39.2	34.0	23 49	
36	31.1	26.3	24 01	
38	27.0	24.7	06	
40	17.9	16.0	20	
42	12.0	9.6	30	
44	21.2	17.7	16	-16.3
46	26.8	21.6	09	
48	21.2	17.6	24 16	
50	34.8	29.5	23 56	
52	36.0	33.2	52	
54	36.7	33.1	52	
56	36.4	32.7	53	
58	36.0	29.7	56	
6 00	34.8	28.7	23 58	-16.3
02	38.8	34.1	50	
04	49.7	43.8	34	
06	52.8	47.1	29	
08	55.2	50.6	24	
10	56.7	51.7	22	
12	58.6	54.9	18	
14	58.7	55.2	18	-16.3
16	60.8	57.2	15	
18	63.9	61.7	09	
20	64.1	61.9	09	
22	61.3	58.8	14	
24	58.7	55.3	18	
26	58.1	55.3	19	
28	58.8	56.1	17	
30	60.0	57.1	16	-16.3
32	59.8	57.0	16	
34	57.9	55.8	19	
36	55.1	52.8	24	
38	54.6	52.3	24	
40	55.4	53.7	23	
42	59.3	57.7	16	
44	60.0	58.1	16	-16.2
46	60.9	58.3	15	
48	62.1	59.2	13	
50	63.0	60.9	11	
52	59.8	57.9	16	
54	56.2	54.1	22	
56	55.9	53.7	23	
58	59.4	56.7	18	
7 00	59.1	57.3	17	-16.2
02	55.9	54.5	22	
04	55.2	54.2	23	
06	56.0	53.9	22	
08	56.1	54.1	22	
10	58.6	56.9	18	
12	59.3	57.0	18	
14	60.3	57.7	17	-16.1
16	58.6	57.3	18	
18	51.9	50.7	29	
20	55.9	54.0	23	
22	59.1	57.2	18	
24	59.2	57.7	17	
26	58.5	56.3	19	
28	59.9	58.8	16	
30	58.3	56.1	20	-16.0
32	56.9	54.0	23	
34	58.9	57.0	19	
36	63.8	61.0	12	
38	66.9	64.0	07	
40	71.2	69.0	23 00	
42	72.7	70.1	22 57	
44	72.5	70.8	22 57	-15.9
46	61.0	59.8	23 15	
48	57.9	56.7	20	
50	50.2	48.1	33	
52	57.1	55.6	22	
54	56.0	54.8	23	
56	51.5	50.6	30	
58	56.8	56.0	22	
8 00	60.7	58.7	16	-15.9

Correction to local mean time is — 2m 07s. 90° torsion = 22.′6.
Torsion head at 0h 00m read 255° and at 9h 15m read 185°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, January 4, 1904 — Magnet scale erect									Tuesday, January 5, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	41.8	44.6	22 45	-19.4	10 00	38.6	39.8	22 43	-18.0	12 00	40.3	39.6	22 40	-16.4	14 00	19.8	18.7	23 14	-17.0
02	39.7	43.7	42		02	37.2	39.3	42		02	44.2	43.1	34		02	21.2	19.6	12	
04	41.9	43.0	44		04	38.9	40.1	44		04	41.0	39.3	39		04	22.3	20.9	10	
06	37.9	41.8	40		06	45.1	46.1	54		06	41.9	40.6	38		06	21.2	20.6	11	
08	36.8	38.9	37		08	44.3	45.3	52		08	44.0	42.0	35		08	17.9	17.3	16	
10	31.2	35.3	29		10	42.9	44.9	51		10	42.3	40.4	37		10	21.8	20.7	11	
12	29.9	33.8	27		12	42.6	45.3	52		12	39.9	37.3	42		12	18.6	17.8	15	
14	36.2	40.1	37	-19.2	14	42.0	44.3	50	-17.9	14	42.8	41.1	37	-16.8	14	19.4	18.7	14	-17.0
16	43.2	46.3	47		16	41.8	45.4	51		16	46.9	44.3	31		16	20.7	19.2	13	
18	42.2	44.6	46		18	43.2	46.8	53		18	51.7	48.8	24		18	18.0	15.3	18	
20	37.9	41.7	40		20	43.6	45.5	52		20	49.0	45.9	28		20	20.3	18.0	14	
22	41.7	44.9	46		22	43.7	46.8	53		22	45.5	42.2	34		22	20.9	18.7	13	
24	39.2	42.8	42		24	45.1	48.0	56		24	44.9	42.0	35		24	24.2	21.9	08	
26	38.7	42.2	41		26	46.7	49.8	22 59		26	45.0	42.7	34		26	25.1	21.7	07	
28	31.0	33.8	28		28	47.2	50.3	23 00		28	47.9	45.7	29		28	25.9	22.3	06	
30	35.1	46.4	34	-19.0	30	44.7	47.4	22 55	-17.8	30	49.3	47.6	27	-17.0	30	28.7	25.1	23 02	-17.0
32	44.9	46.5	50		32	47.1	48.8	22 58		32	47.9	46.8	28		32	33.8	29.2	22 55	
34	45.6	47.4	51		34	49.8	52.2	23 03		34	47.2	46.1	29		34	36.1	33.3	50	
36	41.1	42.2	43		36	47.3	50.2	23 00		36	45.4[b]		31		36	37.2	34.1	48	
38	36.7	38.8	37		38	43.8	45.3	22 54		38	48.0	47.0	28		38	37.7	34.9	47	
40	40.5	42.2	43		40	41.3	43.3	50		40	46.3	45.9	30		40	37.9	35.6	47	
42	41.1	43.7	45		42	35.3	36.3	40		42	48.2	47.9	27		42	38.2	36.0	46	
44	42.5	42.8	46	-18.9	44	32.8	34.6	36	-17.8	44	55.8	53.9	17	-17.2	44	38.1	36.7	46	-17.0
46	49.2	49.2	56		46	35.1	35.9	40		46	55.8	54.4	16		46	38.1	37.2	46	
48	46.1	46.2	22 51		48	39.7	40.7	47		48	49.3	47.4	27		48	39.5	38.8	43	
50	52.8	52.8	23 02		50	38.3	39.3	45		50	48.1	46.8	29		50	39.2	38.8	43	
52	44.3[a]		22 49		52	42.8	44.2	52		52	47.2	44.9	31		52	39.7	38.8	43	
54	57.7	58.8	23 11		54	32.2	34.7	36		54	43.7	40.2	37		54	38.6	37.9	45	
56	52.9	53.2	23 02		56	30.8	31.8	33		56	43.2	41.1	37		56	38.6	37.9	45	
58	45.6	47.1	22 52		58	38.8	39.8	47		58	42.9	40.0	38		58	39.0	38.1	44	
9 00	39.2	41.5	42	-18.7	11 00	39.7	40.8	48	-17.6	13 00	40.8	39.2	40	-17.2	15 00	38.4	37.7	45	-17.0
02	37.4	39.1	39		02	34.8	36.6	41		02	39.1	38.5	42		02	38.0	37.0	46	
04	32.1	33.8	32		04	38.0	40.1	46		04	40.2[b]		40		04	38.8	37.0	45	
06	31.3	32.0	29		06	37.3	39.8	45		06	37.9	36.6	45		06	40.3	39.0	43	
08	29.1	29.9	26		08	34.9	36.8	41		08	34.9	33.9	49		08	40.0	38.7	43	
10	32.1	32.8	31		10	32.8	36.0	38		10	37.8	35.9	45		10	39.3	37.8	44	
12	33.1	33.7	32		12	37.1	40.9	47		12	38.8	36.4	44		12	38.9	37.2	45	
14	36.8	38.3	38	-18.4	14	36.9	39.1	45	-17.6	14	36.9	35.2	47	-17.2	14	39.2	37.9	44	-17.0
16	39.0	41.0	43		16	34.7	36.3	41		16	36.4	34.2	48		16	39.9	38.3	43	
18	39.8	41.9	44		18	34.8	36.9	41		18	33.9	32.0	52		18	42.9	41.2	39	
20	46.2	50.0	56		20	36.7	37.7	44		20	33.6	31.8	52		20	44.8	42.8	36	
22	42.4	45.8	49		22	38.8	39.6	47		22	34.0	32.5	51		22	42.9	40.2	40	
24	36.9	40.1	41		24	39.4	40.1	48		24	32.2	31.2	53		24	42.0	39.8	41	
26	40.8	45.2	48		26	36.8	37.8	44		26	30.1	29.8	56		26	42.7	40.8	39	
28	35.2	39.8	40		28	36.1	37.1	43		28	31.2	30.9	55		28	41.2	39.9	41	
30	40.3	45.1	48	-18.3	30	36.8	37.1	43	-17.5	30	33.6	32.7	51	-17.2	30	42.2	40.7	40	-16.9
32	36.8	40.8	42		32	37.1	37.4	45		32	33.8	33.0	51		32	43.7	43.3	37	
34	42.9	45.9	50		34	36.8	37.4	45		34	32.9	32.2	52		34	42.9	42.2	38	
36	36.7	39.1	40		36	35.8	36.1	43		36	32.1	31.2	54		36	42.9	42.3	38	
38	42.0	44.6	49		38	36.9	37.3	44		38	32.8	31.9	53		38	43.7	42.3	38	
40	38.7	41.4	44		40	36.6	36.9	44		40	32.2	31.2	54		40	48.1	47.3	30	
42	39.0	40.3	43		42	35.7	36.2	42		42	30.4	29.7	57		42	51.3	49.7	26	
44	34.0	35.5	36	-18.1	44	34.8	36.0	42	-17.4	44	28.9	28.2	22 59	-17.1	44	51.9	49.1	26	-16.8
46	38.8	40.1	43		46	34.2	36.3	42		46	28.2	27.3	23 01		46	52.5	49.2	26	
48	33.1	34.8	34		48	34.8	36.6	43		48	27.0	26.4	02		48	51.8	48.1	27	
50	30.4	32.0	31		50	34.2	36.3	42		50	22.9	22.3	08		50	52.9	48.6	26	
52	34.8	36.1	37		52	34.1	35.8	41		52	22.1	21.7	09		52	53.2	46.9	27	
54	39.6	41.3	45		54	34.1	36.6	42		54	23.0	22.1	08		54	49.0	43.9	33	
56	37.2	38.4	41		56	31.2	33.3	38		56	21.3	20.7	11		56	49.8	44.6	31	
58	38.8[a]		43		58	35.3	37.8	45		58	21.2	20.3	11		58	47.0	43.0	35	
					12 00	32.3	34.8	40	-17.3						16 00	48.3	43.3	34	-16.6

Correction to local mean time is — 2m 32s. 90° torsion = 23.'6.
Torsion head at 8h 00m read 175° and at 12h 30m read 130°.
Observer—W. J. P.

Correction to local mean time is — 2m 55s. 90° torsion = 20.'8.
Torsion head at 11h 20m read 135° and at 16h 25m read 117°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 6, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	40.6	40.8	22 38	−23.0
02	41.6	41.9	40	
04	42.2	42.3	41	
06	41.8	42.0	40	
08	41.5	41.9	40	
10	41.6	42.0	40	
12	41.2	41.2	39	
14	41.0	41.3	39	−22.5
16	40.0	40.3	37	
18	39.3	39.8	37	
20	39.3	39.7	37	
22	39.4	39.8	37	
24	38.9	39.3	36	
26	38.1	38.3	34	
28	37.0	37.3	33	
30	35.5	35.8	30	−22.3
32	35.5	35.6	30	
34	35.1	35.1	30	
36	35.0	35.0	29	
38	35.3	35.5	30	
40	35.0	35.2	30	
42	33.9	34.1	28	
44	33.6	33.9	27	−22.1
46	33.6	34.1	27	
48	34.9	35.5	30	
50	36.9	37.4	33	
52	38.1	38.5	35	
54	38.2	38.6	35	
56	38.4	38.7	35	
58	38.4	38.8	35	
1 00	38.6	38.8	35	
02	39.1	39.3	36	−22.0
04	39.0	39.0	36	
06	38.4	38.7	35	
08	37.4	37.6	33	
10	37.3	37.5	33	
12	36.3	36.7	32	
14.2	36.4	36.8	32	−22.0
16	36.3	36.6	32	
18	36.3	36.6	32	
20	36.0	37.2	32	
22	35.6	35.8	31	
24	35.6	35.8	31	
26	35.3	35.5	30	
28	36.0	36.1	31	
30	35.4	35.7	30	−21.7
32	35.5	35.9	31	
34	36.7	37.3	33	
36	37.6	38.0	34	
38	37.7	38.1	34	
40	38.6	39.0	35	
42	41.1	41.3	39	
44	43.8	44.6	44	−21.5
46	45.4	47.0	47	
48	46.0	48.1	48	
50	47.4	48.4	50	
52	48.4	49.3	51	
54	48.0	49.0	51	
56	47.6	48.6	50	
58	47.8	48.8	50	
2 00	45.3	46.3	22 46	−21.4
02	45.3	45.5	46	
04	44.7	45.7	45	
06	44.8	45.4	45	
08	44.7	45.2	45	
10	44.4	44.6	44	
12	42.2*b*		41	
14	39.0	39.3	36	−21.2
16	39.3	39.6	36	
18	38.0	38.0	34	
20	35.6	36.0	31	
22	34.3	34.7	29	
24	34.3	34.6	28	
26	35.6	36.0	31	
28	36.2	36.6	32	
30	36.6	36.8	32	−21.0
32	37.8	38.4	34	
34	37.8	38.3	34	
36	37.6	38.0	34	
38	38.2	38.4	35	
40	39.9	40.0	37	
42	39.0	39.3	36	
44	43.9	44.6	44	−21.0
46	47.1	47.6	49	
48	51.3	51.8	55	
50	53.3	53.7	22 58	
52	55.5	56.1	23 02	
54	55.4	56.0	02	
56	55.3	55.7	02	
58	54.7	55.3	01	−21.0
3 00	54.2	54.9	23 00	
02	53.3	53.9	22 59	
04	52.2	52.8	57	
06	51.9	52.2	56	
08	53.0*a*		22 58	
10	54.1	54.7	23 00	
12	55.6	56.0	02	
14	55.0	55.0	01	−21.2
16	54.5	54.5	23 00	
18	53.6	53.6	22 59	
20	51.8	52.0	56	
22	50.0	50.0	53	
24	48.5*b*		51	
26	47.8	47.8	50	
28	47.8	47.8	50	
30	48.0	48.3	50	−20.9
32	46.3	46.7	48	
34	49.8	50.1	53	
36	51.5	52.6	22 56	
38	55.2	55.8	23 02	
40	62.0*a*		12	
42	67.0	68.0	20	
44	63.1	64.3	14	−20.7
46	60.5	60.7	10	
48	58.3	59.3	07	
50	60.1	60.8	09	
52	57.6	58.5	06	
54	54.5	55.5	23 01	
56	53.5	54.7	22 59	
58	51.3	52.3	56	

Observer—W. J. P.

Wednesday, January 6, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	49.3	49.6	22 52	−20.6
02	51.2	51.6	55	
04	49.7	50.1	53	
06	49.5	50.3	22 53	
08	59.0	59.0	23 07	
10	61.0	61.3	10	
12	60.3	60.9	10	
14	64.0	65.2	16	−20.5
16	64.5*b*		16	
18	64.3	64.6	16	
20	62.1*b*		12	
22	59.4	59.9	08	
24	58.6	59.3	07	
27.2	61.3	62.3	12	
28	62.6	64.2	14	
30	66.9	67.6	20	−20.4
32	70.7	71.1	26	
34	75.5	77.2	34	
36	71.3	73.0	28	
38	69.7	72.2	26	
40	66.3	69.2	21	
42	61.6	64.1	13	
44	67.8	69.0	22	−20.1
46	62.6	64.0	14	
48	60.3	61.9	10	
50	59.7	59.7	08	
52	56.6	58.3	23 05	
54	54.0	54.5	22 59	
56	53.0	54.9	59	
58	45.9	47.7	48	
5 00	51.9	52.8	22 57	
02	59.2	61.8	23 09	−20.0
04	48.0	51.3	22 52	
06	49.0	51.6	53	
08	53.1	54.7	22 59	
10	58.8	60.0	23 08	
12	54.2	54.4	00	
14	55.7	57.0	03	−19.9
16	61.0	62.2	11	
18	62.6	63.9	14	
20	67.3	67.3	20	
22	72.0	72.7	28	
24	69.0	69.0	23	
26	58.5	60.0	07	
28	57.8	59.3	23 06	
30	54.0*b*		22 59	−20.0
32	57.0*a*		23 04	
34	48.0	50.6	22 52	
36*	49.2	51.8	23 42	
38	46.6	46.6	36	
40	50.5	51.8	43	
42	52.0	55.6	47	
44	57.0	61.3	55	−19.6
46	51.4	53.6	45	
48	56.5	57.0	51	
50	48.8	56.0	45	
52	43.0	55.6	40	
54	24.6	31.8	23 07	
56	19.2	25.4	22 57	
58	13.0	19.3	48	
6 00	16.1	24.8	22 54	−19.4
02	23.5	30.0	23 04	
04	31.0	40.0	23 18	
06	20.0	25.5	22 58	
08	9.8	18.0	44	
10	13.0	20.0	48	
12	16.2	23.3	53	
14	17.8	25.6	56	−19.2
16	11.6	18.2	46	
18	11.3	19.1	22 46	
20	41.3	50.3	23 34	
22	47.3	57.6	45	
24	55.0	63.0	23 55	
26	61.3	75.0	24 10	
29*2	32.5	45.6	22 48	
30	34.8	54.3	22 56	−18.8
32	66.6	71.6	23 35	
34	67.5	71.0	35	
36	69.2	72.8	38	
38	57.6	63.0	21	
40	61.3	68.3	28	
42	64.5	70.6	32	
44	56.8	62.8	20	−18.6
46	53.2	63.1	18	
48	48.8	56.8	09	
50	58.8	64.5	23	
52	60.0	69.3	28	
54	62.2	69.5	30	
56	59.6	62.0	22	
58	60.8	61.8	23	
7 00	63.2	64.0	26	−18.5
02	59.1	60.0	20	
04	55.8	57.3	15	
06	53.0	54.4	11	
08	52.0	54.0	10	
10	55.3	56.5	14	
12	53.6	54.1	11	
14	56.3	57.7	16	−18.5
16	52.3	61.0	15	
18	66.5	71.3	35	
20	62.9	67.0	28	
22	59.7	63.4	23	
24	52.6	57.6	13	
26	50.2	54.6	09	
28	47.7	52.0	05	
30	47.8	51.5	23 04	−18.4
32	44.7	48.0	22 59	
34	39.7	42.5	51	
36	38.3	41.5	49	
38	34.0	35.6	41	
40	36.4	38.2	45	
42	32.9	35.3	40	
44	45.0	45.6	58	−18.2
46	27.8	30.5	32	
48	24.9	28.0	28	
50	26.0	28.3	29	
52	26.5	28.8	30	
54	25.3	28.6	29	
56	26.8	29.9	31	
58	30.0	32.0	35	

Observers—W. J. P. and J. V., who alternated from 7h 48m to 7h 58m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 6, 1904					Magnet scale erect					Wednesday, January 6, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	29.0	32.3	22 34	-17.6	10 00	16.4	21.1	22 16	-16.6	12 00	45.8	51.0	22 27	-15.6	14 00	51.0	53.0	22 33	-14.9
02	34.3	39.0	44		02	19.0	27.0	23		02	50.0	56.9	35		02	49.3	53.0	32	
04	31.8	35.2	39		04	20.6	23.5	21		04	50.0	58.5	37		04	48.2	52.0	30	
06	33.1	36.7	41		06	9.0	13.0	22 04		06	52.3	60.2	40		06	48.8	49.9	29	
08	31.2	35.0	38		08*	22.8	32.6	21 55		08	56.4	65.1	47		08	48.7	50.2	29	
10	32.8	35.0	40		10	30.0	36.8	22 04		10	59.0	68.8	52		10	48.0	50.1	28	
12	31.2	33.0	37		12	35.5	42.1	12		12	60.9	71.9	56		12	46.8	50.6	28	
14	27.1	28.9	30	-17.4	14	34.4	40.0	10	-16.6	14	60.0	66.8	51	-15.5	14	46.4	50.9	28	-14.8
16	24.2	26.3	26		16	37.4	39.3	12		16	59.4	66.5	50		16	48.0	50.2	29	
18	26.3	27.5	28		18	42.0	47.7	22		18	59.0	65.9	49		18	48.7	52.6	31	
20	27.4	27.4	29		20	41.5	47.2	21		20	62.0	67.9	53		20	49.8	54.2	33	
22	34.0	34.7	40		22	35.0	39.8	10		22	63.4	67.0	54		22	51.0	55.1	35	
24	36.9	39.0	46		24	31.9	43.2	10		24	61.0	66.0	51		24	55.0	58.0	40	
26	34.0	35.2	41		26	32.3	39.7	08		26	60.8	62.3	48		26	56.0	58.5	41	
28	28.6	37.8	39		28	34.8	38.9	09		28	60.3	62.0	48		28	53.0	54.4	36	
30	22.6	25.2	24	-17.2	30	42.0	46.0	20	-16.6	30	59.2	61.0	46	-15.3	30	51.6	55.6	36	-14.6
32	32.2	35.0	39		32	30.5	38.0	05		32	58.2	65.0	48		32	52.8	57.5	38	
34	31.0	36.1	39		34	39.5	48.0	20		34	56.7	64.0	46		34	53.0	57.1	38	
36	33.6	36.6	41		36	43.0	47.0	22		36	56.3	62.8	45		36	52.6	57.8	38	
38	35.3	37.4	43		38	42.0	48.9	23		38	56.9	63.0	45		38	52.2	56.0	36	
40	35.2	35.8	42		40	43.9	52.7	27		40	56.7	62.0	45		40	54.0	56.2	38	
42	22.4	26.6	25		42	38.0	46.0	17		42	56.6	61.5	44		42	52.2	55.5	36	
44	27.3	28.9	31	-17.2	44	47.4	55.0	32	-16.7	44	56.4	60.9	44	-15.2	44	51.8	54.1	35	-14.5
46	37.6	40.3	48		46	43.7	53.5	28		46	57.6	60.0	44		46	52.5	55.0	36	
48	34.0	35.4	41		48	41.7	51.0	24		48	59.0	59.0	44		48	53.3	57.0	38	
50	29.3	32.8	35		50	42.0	51.5	25		50	58.6	61.0	45		50	52.0	55.6	36	
52	27.0	30.1	31		52	45.8	57.9	33		52	57.0	59.6	43		52	51.0	55.9	35	
54	25.0	27.8	28		54	40.3	43.0	17		54	54.0	57.0	39		54	51.9	55.8	36	
56	22.0	23.7	22		56	44.3	53.7	28		56	57.0	59.0	42		56	51.8	55.9	36	
58	24.0	28.2	27		58	46.0	56.6	32		58	58.0	59.9	44		58.8	51.6	55.4	35	
9 00	23.0	27.0	26	-17.0	11 00	44.2	53.2	28	-16.7	13 00	59.5	59.5	45	-15.2	15 00	51.0	55.0	35	-14.4
02	27.5	29.2	31		02	44.1	53.9	28		02	59.7	62.5	47		02	51.1	55.3	35	
04	26.6	28.2	29		04	46.2	56.2	32		04	59.3	61.7	46		04	50.8	54.0	34	
06	21.2	24.3	22		06	41.6	54.2	27		06	60.1	61.8	47		06	50.1	54.6	34	
08	23.5	26.5	26		08	37.2	46.1	17		08	61.7	63.5	50		08	Lost			
10	22.0	24.8	23		10	31.0	38.2	06		10	62.0	64.5	51		10	Lost			
12	21.1	24.0	21		12	37.2	42.7	14		12	62.0	65.0	51		13	49.0	54.5	33	
14	28.0	32.4	34	-16.7	14	50.0	55.2	34		14	66.0	68.8	57	-15.1	14	44.2	49.8	25	-14.2
16	26.2	32.0	32		16	54.2	48.5	32	-16.5	16	64.9	68.1	56		16	40.0	44.6	18	
18	27.9	31.2	33		18	51.4	55.5	35		18	63.0	66.0	53		18	44.0	48.0	24	
20	27.6	32.5	34		20	54.0	59.5	40		20	61.3	64.5	50		20	46.6	49.9	27	
22	25.0	28.8	29		22	53.1	58.0	39		22	60.1	63.0	48		22	43.6	47.9	23	
24	22.0	29.9	27		24	44.5	49.8	25		24	59.0	61.8	46		24	43.2	47.0	22	
26	21.6	31.5	28		26	42.9	47.9	23		26	57.9	60.7	44		26	45.0	48.8	25	
28	24.4	33.2	32		28	41.5	44.6	19		28	56.1	59.0	42		28	46.9	51.0	28	
30	30.3	37.9	40	-16.6	30	46.2	49.2	26	-15.8	30	54.1	58.2	40	-15.0	30	47.6	52.1	30	-14.0
32	30.4	39.8	42		32	50.0	54.0	33		32	59.0	59.0	44		32	49.0	52.9	31	
34	29.1	39.6	40		34	55.4	57.8	40		34	56.1	58.0	41		34	50.4	53.0	33	
36	27.0	36.0	36		36	46.8	48.1	26		36	47.7	51.3	29		36	49.0	52.9	31	
38	27.1	34.0	34		38	43.9	46.5	22		38	46.5	49.9	27		38	48.0	51.0	29	
40	26.0	34.3	34		40	41.0	42.0	17		40	45.8	49.0	26		40	47.4	51.1	29	
42	23.8	32.0	30		42	48.0	50.0	28		42	46.5	48.0	25		42	48.8	52.3	31	
44	23.2	31.8	30	-16.8	44	49.1	51.5	30		44	40.8	41.9	16	-15.0	44	51.0	52.7	33	-14.0
46	24.9	31.9	31		46	52.7	55.9	37	-15.6	46	48.2	49.4	28		46	49.3	53.0	32	
48	24.5	31.4	30		48	50.0	54.4	33		48	50.0	52.0	32		48	50.6	53.2	33	
50	23.2	30.4	29		50	47.4	53.0	30		50	51.0	52.5	33		50	50.5	52.4	32	
52	24.9	31.5	31		52	47.0	51.6	29		52	51.4	53.5	34		52	52.5	52.5	34	
54	19.4	26.9	23		54	47.7	51.2	29		54	51.0	53.5	33		54	51.1	53.1	33	
56	20.4	25.7	23		56	44.0	49.1	24		56	51.0	53.0	33		56	51.4	54.2	34	
58	18.9	24.6	21		58	45.6	49.3	26		58	51.1	53.0	33		58	49.9	52.9	32	

Observer—J. V.

Observers—J. V. and R. R. T., who alternated from 15h 55m to 16h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, Januarv 6, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	50.5	53.2	22 33	-13.8
02	50.8	54.9	34	
04	50.9	54.1	34	
06	51.2	55.3	35	
08	50.0	53.2	32	
10	51.2	53.9	34	
12	52.1	54.8	35	
14	50.9	51.9	32	-12.8
16	47.6	48.3	27	
18	45.2	46.1	23	
20	45.9	46.8	24	
22	45.9	46.1	24	
24	44.7	45.8	22	
26	44.8	45.3	22	
28	44.9	45.4	22	
30	45.0	45.3	22	-12.6
32	46.7	47.6	25	
34	45.6	46.8	24	
36	47.3	48.9	27	
38	48.7	50.8	29	
40	47.9	50.0	28	
42	47.9	49.2	28	
44	45.9	46.8	24	-12.6
46	50.2	52.4	32	
48	52.6	55.3	36	
50	55.1	57.9	40	
52	55.3	58.1	40	
54	54.7	57.7	40	
56	53.4	56.1	37	
58	52.4	55.3	36	
17 00	54.1	55.1	37	-12.3
02	56.1	56.9	40	
04	54.8	55.9	38	
06	54.3	55.2	37	
08	53.9	55.1	37	
10	52.9	54.1	35	
12	51.6	53.1	34	
14	50.1	52.8	32	-12.2
16	48.7	50.3	29	
18	50.1	51.9	32	
20	50.8	52.5	32	
22	51.0	52.4	33	
24	52.0	53.8	35	
26	52.8	54.7	36	
28	53.9	55.7	38	
30	54.3	56.2	38	-12.1
32	55.3	57.2	40	
34	54.8	56.3	39	
36	54.0	55.8	38	
38	53.1	54.7	36	
40	53.7	54.2	36	
42	54.4	55.3	38	
44	54.1	54.8	37	-12.0
46	54.3	55.1	37	
48	52.8	55.8	37	
50	54.8	56.9	39	
52	59.1	60.8	46	
54	57.4	59.1	43	
56	57.5	58.5	43	
58	58.6	59.9	44	
18 00	58.3	59.4	22 44	-12.0
02	59.8	61.3	47	
04	60.3	62.3	48	
06	60.4	62.6	48	
08	60.3	62.3	48	
10	60.1	61.8	47	
12	60.0	61.9	47	
14	60.1	61.8	47	-11.9
16	60.5	61.1	47	
18	60.3	61.1	47	
20	59.9	60.5	46	
22	59.1	60.3	45	
24	59.1	60.2	45	
26	58.7	59.8	44	
28	59.0	60.0	45	
30	59.2	60.3	45	-11.8
32	59.6	59.8	45	
34	59.1	59.8	45	
36	58.7	59.6	44	
38	58.7	59.7	44	
40	58.1	59.2	43	
42	57.9	59.2	43	-11.6
44	57.3	59.3	43	
46	57.2	58.8	43	
48	56.1	57.4	40	
50	55.3	56.6	39	
52	54.9	55.7	38	
54	55.0	55.9	38	
56	55.1	55.8	38	
58	54.8	55.4	38	
19 00	54.0	54.8	37	-11.4
02	53.8	54.8	37	
04	53.8	55.0	37	
06	53.8	54.8	37	
08	54.0	55.3	37	
10	53.1	54.2	36	
12	52.6	53.7	35	
14	52.6	53.2	35	-11.2
16	52.6	53.8	35	
18	52.3	53.7	35	
20	52.9	53.9	36	
22	53.6	54.5	36	
24	52.8	53.9	35	
26	52.2	53.2	34	
28	52.1	53.1	34	
30	51.1	52.0	33	-11.2
32	50.5	52.8	33	
34	51.0	53.9	34	
36	51.8	54.6	35	
38	51.2	53.9	34	
40	51.1	53.9	34	
42	51.2	53.2	34	
44	50.7	52.1	32	-11.1
46	50.7	52.8	33	
48	50.8	52.8	33	
50	51.1	53.1	34	
52	50.6	52.3	32	
54	49.2	51.3	30	
56	48.8	51.1	30	
58	49.2	51.9	31	

Observer—R. R. T.

Wednesday, January 6, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	49.8	52.1	22 32	-11.0
02	49.2	52.8	32	
04	50.1	53.1	33	
06	50.1	53.3	33	
08	51.1	54.3	34	
10	51.8	54.8	35	
12	50.8	53.4	34	
14	50.0	52.5	32	-11.0
16	49.0	51.7	31	
18	48.9	50.4	30	
20	46.2	48.8	26	
22	44.1	47.2	23	
24	44.0	46.1	22	
26	45.0	47.1	24	
28	46.0	48.1	26	
30	46.1	48.7	26	-11.0
32	46.4	48.8	26	
34	45.1	47.1	24	
36	45.3	47.9	25	
38	45.2	48.1	25	
40	45.0	47.9	25	
42	44.2	47.7	24	
44	44.7	47.7	24	-10.9
46	45.0	48.3	25	
48	44.7	47.9	24	
50	44.5	47.0	24	
52	47.6	49.8	28	
54	48.9	51.1	30	
56	49.8	51.8	32	
58	49.9	52.1	32	
21 00	49.0	51.0	30	-10.8
02	47.3	48.6	27	
04	47.0	48.2	26	
06	45.9	47.8	25	
08	44.6	45.8	23	
10	45.3	47.1	24	
12	46.3	48.7	26	
14	44.7	46.4	23	-10.7
16	40.7	43.1	18	
18	40.2	42.1	16	
20	41.2	43.8	18	
22	42.3	44.8	20	
24	42.3	44.1	19	
26	41.2	43.1	18	
28	40.9	43.0	18	
30	41.0	43.0	18	-10.5
32	42.8	44.9	20	
34	44.0	46.2	23	
36	44.7	46.9	24	
38	45.2	47.6	25	
40	48.1	50.4	29	
42	48.8	50.3	30	
44	44.1	46.1	23	-10.5
46	41.8	45.2	20	
48	50.0*a*		30	
50	45.1	46.8	24	
52	40.2	40.3	15	
54	37.1*b*		10	
56	35.2	35.5	07	
58	35.6	38.3	10	
22 00	37.7	49.1	22 20	-10.4
02	41.1	48.3	22	
04	45.4	52.2	28	
06	60.0	70.8	22 54	
08*	18.1	44.3	23 59	
10	26.7	57.2	24 16	
12*	33.1	47.2	23 22	
14*	30.5	38.0	22 31	
16	25.2	29.9	20	-10.2
18	29.2	34.9	28	
20	24.6	29.9	20	
22	37.8	39.1	38	
24	36.7	38.8	36	
26	47.8	55.4	58	
28	49.2	53.8	58	
30	46.1	52.4	55	-10.0
32	39.1	44.2	43	
34	31.0	36.7	30	
36	34.8	39.6	36	
38	26.3	33.9	25	
40	39.8	48.7	47	
42	39.3	45.9	44	
44	41.1	48.9	48	-10.0
46	39.4	44.3	43	
48	39.7	44.9	44	
50	36.1	41.7	38	
52	35.9	39.8	37	
54	34.9	44.2	39	
56	40.0	45.7	44	
58	41.6	48.8	48	
23 00	33.2	38.1	33	-10.1
02	38.6	45.8	44	
04	35.4	40.3	37	
06	27.6	33.3	25	
08	39.7	47.1	45	
10	42.8	46.9	48	
12	41.7	45.9	46	
14	41.9	47.8	48	-10.0
16	30.1	37.4	30	
18	21.3	26.1	14	
20	19.8	23.2	11	
22	18.3	22.7	10	
24	22.1	26.4	15	
26	25.2	29.3	20	
28	14.3	18.1	22 03	
30	10.3	14.4	21 57	-10.0
32	14.1	18.1	22 03	
34	14.3	18.1	03	
36	24.3	26.1	17	
38	21.2	24.0	13	
40	22.9	24.9	15	
42	25.0	26.8	18	
44	26.7	29.6	22	-10.0
46	30.8	32.8	27	
48	31.9	33.4	28	
50	36.2	37.2	35	
52	38.8	39.7	39	
54	34.0	35.6	32	
56	34.1	35.8	32	
58	27.2	28.9	21	
24 00	35.2	36.2	33	-9.9

Correction to local mean time is — 15s.
Torsion head at oh oom read 117° and at 24h oom read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, January 7, 1904 — Magnet scale inverted					Friday, January 8, 1904 — Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	46.0	43.9	22 57	-16.0	18 00	59.4	58.2	22 36	-15.7
02	46.6	44.9	56		02	59.0	58.7	36	
04	47.9	45.2	55		04	58.1	57.7	37	
06	49.3	47.2	52		06	58.2	58.0	37	
08	50.3	48.7	50		08	58.2	57.8	37	
10	51.1	48.9	49		10	57.7	57.3	38	
12	52.0	50.5	47		12	57.1	56.9	38	
14	52.8	50.8	46	-16.3	14	56.9	56.1	39	-15.8
16	54.8	51.3	45		16	56.9	55.3	40	
18	54.8	52.0	44		18	56.5	55.1	40	
20	54.6	52.1	44		20	56.2	54.9	41	
22	54.9	52.3	44		22	56.3	54.8	41	
24	55.0	52.7	43		24	56.6	54.3	41	
26	55.8	54.2	42		26	56.6	54.3	41	
28	56.2	54.2	41		28	56.8	54.2	41	
30	56.8	54.2	41	-16.3	30	56.8	54.2	41	-15.8
32	56.2	54.0	41		32	56.9	53.7	41	
34	55.5	53.2	43		34	56.8	53.6	41	
36	55.8	53.2	42		36	56.8	54.0	41	
38	55.8	54.2	42		38	56.8	54.4	40	
40	56.0	53.9	42		40	56.6	54.9	40	
42	56.3	54.1	41		42	56.7	55.1	40	
44	56.7	54.3	41	-16.3	44	56.4	54.8	40	-15.7
46	56.8	55.0	40		46	55.8	55.1	41	
48	57.2	55.6	39		48	55.7	55.1	41	
50	57.0	55.0	40		50	55.2	54.6	42	
52	57.1	55.1	40		52	55.2	54.6	42	
54	57.2	55.1	40		54	55.4	54.5	42	
56	56.9	55.2	40		56	55.3	54.2	42	
58	57.7	56.3	38		58	55.3	54.6	42	
17 00	57.4	56.7	38	-16.1	19 00	55.3	54.2	42	-15.8
02	56.1	54.6	41		02	55.8	54.2	42	
04	56.6	54.9	40		04	56.8	55.2	40	
06	56.8	55.2	40		06	57.2	55.7	39	
08	57.1	55.9	39		08	56.8	55.2	40	
10	58.0	56.2	38		10	56.2	55.3	40	
12	57.9	56.0	39		12	55.1	54.9	42	
14	58.0	55.7	39	-16.0	14	55.0	54.1	42	-15.7
16	57.0	53.1	42		16	55.3	54.4	42	
18	57.5	55.6	39		18	55.8	55.0	41	
20	57.9	55.9	39		20	55.8	54.8	41	
22	58.2	56.2	38		22	56.0	55.2	40	
24	57.9	55.9	39		24	56.0	55.0	41	
26	57.4	55.7	39		26	56.0	55.0	41	
28	57.1	55.6	40		28	55.9	54.9	41	
30	56.9	55.7	40	-15.8	30	56.2	55.2	40	-15.6
32	57.6	55.8	39		32	56.9	55.2	40	
34	57.1	55.8	39		34	56.8	55.0	40	
36	56.8	55.5	40		36	55.9	54.2	42	
38	59.1	55.8	38		38	55.8	54.1	42	
40	56.7	55.8	40		40	56.2	54.7	41	
42	56.9	55.8	40		42	56.3	54.2	41	
44	57.3	55.3	40	-15.7	44	55.9	53.2	42	-15.5
46	57.0	54.8	40		46	55.7	52.3	43	
48	57.2	55.1	40		48	55.7	52.4	43	
50	57.3	55.1	40		50	55.6	52.7	43	
52	57.9	55.8	39		52	55.9	53.0	42	
54	58.2	56.2	38		54	55.1	54.1	42	
56	58.7	57.2	37		56	55.9	54.2	42	
58	59.2	58.1	36		58	55.5	54.1	42	
					20 00	55.3	53.8	42	-15.2

Thursday, January 7, 1904 — Magnet scale inverted					Friday, January 8, 1904 — Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	51.8	54.9	22 44	-18.4	22 00	47.9	48.9	22 36	-15.7
02	51.2	55.8	44		02	48.0	49.8	37	
04	49.3	56.2	43		04	48.7	50.3	38	
06	49.8	54.0	42		06	49.9	51.3	40	
08	49.0	53.0	40		08	49.2	50.8	39	
10	48.8	52.7	40		10	49.2	51.2	39	
12	48.7	52.3	40		12	49.3	51.4	39	
14	47.7	50.8	38	-17.9	14	49.6	51.8	40	-15.5
16	46.8	49.8	36		16	49.3	51.3	39	
18	47.7	49.9	37		18	49.5	50.7	39	
20	46.8	49.8	36		20	49.8	50.8	39	
22	45.7	48.8	34		22	49.2	50.4	39	
24	46.7	49.1	36		24	48.8	49.6	38	
26	48.0	50.0	37		26	49.3	50.0	38	
28	49.0	51.3	39		28	50.2	50.8	40	
30	50.1	52.4	41	-17.4	30	50.8	51.6	41	-15.3
32	50.2	53.4	42		32	49.3	50.9	39	
34	50.5	54.1	43		34	48.1	49.9	37	
36	51.5	54.8	44		36	48.8	50.8	39	
38	51.6	54.7	44		38	48.9	51.0	39	
40	51.2	54.1	43		40	48.9	50.7	39	
42	51.0	53.1	42		42	48.2	50.8	38	
44	51.1	52.8	42	-17.1	44	48.1	50.0	37	-15.2
46	52.2	52.9	43		46	47.7	50.2	37	
48	51.4*b*		41		48	47.8	51.0	38	
50	48.0	48.9	36		50	48.2	51.4	39	
52	47.9	49.3	37		52	48.5	51.3	39	
54	48.1	49.9	37		54	49.2	52.0	40	
56	48.0	49.6	37		56	49.4	51.3	39	
58	49.3	51.0	39		58	50.2	52.7	41	
21 00	50.1	52.0	40	-16.7	23 00	49.3	51.3	39	-15.0
02	50.8	53.7	42		02	49.1	51.8	40	
04	52.0	54.9	44		04	48.1	50.3	38	
06	52.2	55.2	45		06	47.8	50.1	37	
08	52.2	55.1	45		08	48.1	50.2	38	
10	51.5	54.5	44		10	49.2	51.8	40	
12	50.7	53.2	42		12	50.1	52.9	41	
14	50.0	53.6	42	-16.3	14	50.3	53.0	42	-14.9
16	50.9	52.2	41		16	49.3	52.8	40	
18	49.9	50.4	39		18	49.7	51.8	40	
20	49.2	50.1	38		20	50.2	53.1	42	
22	49.7	50.8	39		22	48.1	50.9	38	
24	49.8	50.9	39		24	47.7	50.2	37	
26	50.2	50.6	40		26	50.9	52.8	42	
28	49.9	50.7	39		28	50.9	52.9	42	
30	50.0	51.3	40	-16.0	30	50.3	52.0	41	-14.8
32	50.8	51.7	41		32	51.0	52.6	42	
34	48.9	49.8	38		34	52.1	53.8	44	
36	48.4	50.2	38		36	52.7	54.3	44	
38	47.0	48.9	36		38	51.9	53.2	43	
40	47.2	49.2	36		40	52.8	54.2	44	
42	45.3	47.7	34		42	53.8	53.8	45	
44	45.3	47.8	34	-15.9	44	53.0	55.3	45	-14.5
46	45.1	46.7	32		46	52.9	54.5	45	
48	46.5	48.0	34		48	52.0	53.0	43	
50	47.0	48.0	35		50	54.6	58.5	49	
52	46.2	47.4	34		52	54.8	55.9	47	
54	46.8	47.6	34		54	55.0	56.2	48	
56	47.3	48.4	36		56	55.8	57.8	50	
58	48.1	48.8	36		58	53.3	55.5	46	
					24 00	50.8	51.8	41	-14.4

Correction to local mean time is — 46s.
The torsion head at 15h 25m read 102° and at 20h 25m read the same.
Observer—J. V.

Correction to local mean time is — 38s. 90° torsion = 17.'5.
Torsion head at 20h 25m, January 7th, read 102°, and 24h 20m read 98°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, January 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	37.5	37.0	22 50	-20.0	2 00	42.0	39.0	22 45	-19.5
02	Lost				02	43.2	40.9	43	
04	35.5	33.0	55		04	45.5	43.1	39	
06	32.0	30.8	59		06	43.0	40.1	44	
08	35.0	34.0	54		08	40.4	38.7	47	
10	39.7	37.9	48		10	35.0	32.8	22 56	
12	44.2	44.0	39		12	29.0	29.0	23 03	
14	45.3	44.8	38	-18.4	14	Overl'k'd			
16	45.0	43.6	39		16	30.8	28.1	02	-19.5
18	42.7	41.3	43		18*	30.5	30.2	45	
20	41.9	40.0	44		20	21.3	21.0	23 59	
22	44.4	42.8	40		22	15.0	11.0	24 12	
24	46.0	45.6	37		24	10.2	7.0	19	
26	45.5	44.4	38		26	20.5	14.0	24 06	
28	48.8	47.0	34		28	31.4	25.6	23 48	
30	49.9	48.7	31	-18.0	30.5	30.0	28.5	23 47	
32	46.5	46.5	36		32*	26.2	21.4	24 44	
34	46.0	45.2	37		34	19.0	19.0	52	-19.0
36	44.7	43.7	39		36	19.0	18.9	52	
38	41.4	40.0	45		38	31.0	28.8	35	
40	39.8	37.0	48		40	39.5	36.9	22	
42	40.5	39.5	46		42	41.1	38.0	20	
44	41.9	41.0	44		44	53.8	49.8	00	-18.9
46	46.4	45.7	36	-18.4	46	37.8	36.8	23	
48	44.0	43.7	40		48	53.0	51.0	00	
50	37.9	37.6	50		50	35.8	33.0	24 28	
52	38.0	37.6	49		52	57.0	50.0	23 58	
54	45.2	44.6	38		54	6.0	2.0	25 15	
56	49.8	48.9	31		56	48.5	43.0	24 10	
58	49.0	47.7	33		58*	41.2	36.0	23 24	
1 00	49.3	48.7	32	-18.9	3 00	47.0	42.0	15	-18.9
02	51.3	50.4	29		02.5	44.0	38.9	20	
04	49.8	48.0	32		04	46.2	39.7	18	
06	50.3	50.3	30		06	36.9	33.8	30	
08	51.5	51.0	28		08	20.5	18.9	23 54	
10	52.0	51.6	27		10	13.8	11.2	24 05	
12	54.7	53.3	24		12	14.0	9.8	24 06	
14	53.2	52.2	26	-19.1	14*	35.1	24.0	23 39	-19.0
16	51.5	50.3	29		16	30.9	19.8	24 36	
18	49.8	48.6	31		18	19.9	9.0	53	
20	49.9	48.6	31		20	29.2	14.0	42	
22	50.5	49.5	30		22	42.0	30.3	19	
24	50.3	49.2	31		24	37.2	30.0	23	
26	51.3	50.0	29		26	29.7	20.0	37	
28	50.7	49.3	30		28	19.3	12.6	51	
30	50.4	49.2	30	-19.2	30	26.2	19.5	40	-19.1
32	53.2	52.2	26		32	32.0	29.0	28	
34	53.4	53.0	25		34	26.9	22.2	37	
36	54.8	53.8	23		36	37.4	33.5	20	
38	54.0	53.6	24		38	40.1	35.5	16	
40	51.8	51.8	27		40	41.0	36.3	15	
42	49.0	46.8	34		42	34.6	29.5	25	
44.5	45.2	43.0	39	-19.4	44	38.9	34.0	18	-19.2
46	43.8	40.0	43		46	38.0	32.5	20	
48	43.1	39.9	44		48	32.0	25.4	31	
50	44.2	40.8	42		50	30.8	22.3	23 34	
52	44.2	41.3	42		52	13.0	6.0	25 01	
54	41.8	39.0	45		54	18.3	11.0	24 53	
56	41.5	39.0	46		56*	67.5	64.0	24 59	
58	42.4	39.8	44		58	60.9	59.2	25 08	

Observers—J. V. and W. J. P., who alternated from 3h 50m to 4h 04m.

Sunday, January 10, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	48.5	50.2	25 11	-19.6	6 00	22.0*b*		23 33	-19.0
02	41.0	47.6	03		02	10.8	11.3	16	
04	42.0	43.1	25 00		04	28.6*a*		43	
06	33.0	36.0	24 48		06	36.5	37.0	23 56	
08	24.8	27.0	34		08	46.0	50.0	24 14	
10	12.6	13.9	14		10	40.3	42.0	03	
12	26.0	26.8	35		12	38.0	41.6	01	
14	27.9	28.7	38	-18.8	14	39.3	42.3	02	-19.0
16	34.7	35.6	49		16	42.8	44.0	06	
18	30.8	33.2	44		18	44.1	45.3	08	
20	25.2	28.0	35		20	50.8	53.3	20	
22	13.3	18.0	18		22	49.0	55.0	20	
24*	37.8	46.3	04		24	41.8	45.3	24 07	
26.3	42.5	49.3	10		26	36.0	40.5	23 58	
28.3	47.6	55.8	20		28	33.8	37.0	54	
30	39.7	47.5	07	-18.6	30	36.0	38.5	57	-19.3
32	39.5	47.0	06		32	26.8	31.0	44	
34	42.3	49.8	11		34	21.0	25.8	35	
36	52.0	60.6	27		36	29.0	32.5	46	
38	55.8	63.8	32		38	22.3	26.0	36	
40	50.4	59.3	24		40	14.5	18.2	24	
42	56.8	57.2	28		42	16.7	20.1	27	
44	49.3	50.1	16		44	17.6	20.2	28	-19.5
46	45.7	46.7	24 11	-19.0	46	24.3	26.2	38	
48	36.0	37.3	23 56		48	23.3	25.0	36	
50	41.4	43.0	24 05		50	21.0	22.8	33	
52	44.0	48.2	11		52	26.9	29.1	42	
54	41.2	45.0	06		54.5	27.7	30.5	44	
56.8	38.8	42.8	02		56	28.8	32.7	46	
58	37.4	40.8	24 00		58	35.7	37.5	56	
5 00	32.3	36.3	23 52	-19.1	7 00	30.6	32.5	48	-19.5
02	35.4	37.8	23 56		02	30.4	32.4	48	
04	40.3	42.1	24 03		04	29.0	31.6	46	
06	37.0	39.3	23 58		06	27.0	28.7	42	
08	36.0	39.6	58		08	21.0	22.0	32	
10	36.6	40.5	23 59		10	18.2	19.7	28	
12	49.7	54.3	24 20		12	18.0	19.9	28	
14	59.8	63.6	35	-19.2	14	17.0	18.5	26	-19.5
16	70.5	72.5	51		16	22.0	23.0	34	
18	68.3	70.5	47		18	24.3	26.3	38	
20	67.6	69.6	46		20	23.6	24.6	36	
22	53.6	54.3	23		22	23.0	25.2	36	
24	45.0*b*		24 09		24	19.0	20.9	30	
26	38.1	39.1	23 59		26	13.3	14.3	20	
28	45.8	47.8	24 12		28	21.5	23.0	33	
30	56.1	56.6	27	-19.1	30	26.2	27.7	41	-19.4
32	58.5*b*		30		32	32.5	33.1	50	
34	46.0*b*		11		34	32.3	32.7	49	
36	42.3	42.3	05		36	27.5*b*		42	
38	42.0	42.3	04		38.2	21.0	21.6	32	
40	41.8	42.3	24 04		40	17.8	19.6	28	
42	30.0*b*		23 45		42	15.6	16.5	24	
44	24.5*b*		37	-19.0	44	19.6	22.3	31	-19.4
46	21.0	21.0	31		46	20.3	21.5	31	
48	32.3*a*		49		48	14.6	17.1	23	
50	35.6	37.0	55		50	10.5	11.6	16	
52	26.3	27.5	41		52	10.2	12.3	16	
54	25.6	26.2	39		54	10.5	11.8	16	
56	22.3*b*		33		56	9.4	10.6	14	
58	22.3	22.7	34		58	7.2	8.2	10	-19.0
					8 00	7.5	8.0	10	

Correction to local mean time is — 22s. 90° torsion = 17.′5.
Torsion head at 0h 00m read 93° and at 9h 30m read 96°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, January 11, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	38.0	35.8	23 33	-23.0
02	40.8	38.7	29	
04	37.8	36.8	33	
06	37.8	36.4	33	
08	38.9	37.2	32	
10	42.8	41.2	25	
12	41.4	41.0	26	
14	38.2	36.2	33	-22.9
16	34.0	32.0	39	
18	31.2	29.3	44	
20	33.1	31.9	40	
22	31.7	29.2	44	
24	32.3	30.7	42	
26	30.7	28.6	45	
28	28.2	25.7	49	
30	25.2	22.3	54	-22.3
32	25.9	24.9	51	
34	24.8	24.2	53	
36	26.9	26.3	49	
38	28.3	25.2	49	
40	27.2	26.7	49	
42	22.2	20.4	58	
44	26.6	23.5	23 52	-22.0
46	18.3	16.2	24 04	
48	18.2	17.2	03	
50*	48.7*a*		10	
52.4	55.6	54.0	24 01	
54	63.8	60.9	23 49	
56	69.3	66.6	40	
58	72.4	67.7	37	
9 00	61.2	57.6	54	-21.6
02	69.3	65.3	41	
04	69.3	67.1	40	
06	65.6	64.7	45	
08	64.0	62.5	48	
10	71.0	69.2	37	
12	70.0	69.2	38	
14	69.7	68.9	38	-21.2
16	77.8	76.2	26	
18*	49.8	44.3	24	
20	49.1	42.1	26	
22	51.3	45.7	22	
24	47.8	41.8	28	
26	48.9	42.0	27	
28	57.6	50.3	14	
30	62.4	55.8	23 05	-21.0
32	67.8	60.3	22 58	
34	77.8	66.9	45	
36	76.3	70.2	43	
38*	53.1	47.2	40	
40	51.9	46.8	42	
42	53.2	48.9	39	
44	52.6	48.0	40	-20.7
46	53.9	48.9	38	
48	55.3	51.4	35	
50	55.3	51.8	35	
52	54.0	50.9	37	
54	56.1	53.2	33	
56	56.2	53.7	33	
58	54.1	51.5	36	
10 00	52.9	50.4	22 38	-20.6
02	52.0	50.3	39	
04	50.7	48.9	41	
06	49.9	48.2	42	
08	51.8	49.2	40	
10	48.8	46.5	44	
12	43.0	41.2	53	
14	45.3	43.5	50	-20.6
16	48.2	47.2	44	
18	50.2	48.9	42	
20	49.9	48.3	42	
22	49.6	48.7	42	
24	49.0	48.0	43	
26	48.0	47.2	44	
28	48.5	46.8	44	
30	49.1	47.8	43	-20.7
32	50.0	49.1	42	
34	48.9	47.5	44	
36	49.2	48.1	43	
38	49.8	48.9	42	
40	49.9	48.1	42	
42	48.0	46.5	45	
44	47.7	46.7	45	-20.5
46	45.4	44.0	49	
48	46.1	44.8	48	
50	47.2	45.7	46	
52	48.2	46.8	45	
54	48.4	47.3	44	
56	50.8	48.7	41	
58	50.3	48.2	42	
11 00	50.2	48.2	42	-20.6
02	51.8	49.9	39	
04	50.2	48.1	42	
06	51.3	48.3	41	
08	49.8	48.2	42	
10	48.0	45.7	46	
12	54.2	52.9	35	
14	55.0	53.1	34	-20.5
16	51.3	48.3	41	
18	50.9	48.3	41	
20	54.8	51.2	36	
22	50.9	47.9	42	
24	53.9	50.9	37	
26	53.4	49.7	38	
28	58.5	55.4	30	
30	61.8	57.6	26	-20.7
32	63.9	62.5	20	
34	61.7	59.2	24	
36	58.4	56.0	29	
38	55.3	53.8	34	
40	53.8	52.2	36	
42	52.5	49.3	39	
44	57.1	53.0	33	-20.7
46	57.8	54.3	31	
48	54.2	51.2	36	
50	50.8	48.3	42	
52	51.2	48.8	41	
54	51.9	49.2	40	
56	52.0	49.4	40	
58	52.9	50.8	38	
12 00	52.1	49.4	40	-20.6

Correction to local mean time is — 40s.
Torsion head at 7h 00m read 96° and at the end read the same.
Observer—R. R. T.

Tuesday, January 12, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	59.9	60.3	22 40	-29.0
02	57.8	58.9	37	
04	56.9	58.8	36	
06	57.0	57.7	35	
08	54.1	55.2	31	
10	55.4*a*		32	
12	51.2	52.0	26	
14	51.2	52.9	27	-28.4
16	50.1	51.6	25	
18	47.1	49.2	21	
20	46.5	47.2	19	
22	45.3	47.1	18	
24	46.6	49.4	21	
26	45.0	48.3	19	
28	52.7	53.8	29	
30	54.7	60.1	36	-28.0
32	54.3	58.8	34	
34	49.9	54.9	28	
36	45.1	49.8	20	
38	53.2	59.1	34	
40	52.2	57.8	32	
42	52.1	57.1	31	
44	52.6	56.5	31	-27.8
46	53.9	56.3	32	
48	55.3	57.8	34	
50	55.5	57.6	34	
52	57.1	59.0	36	
54	56.4	58.2	35	
56	55.1	59.1	35	
58	53.3	58.0	33	
13 00	52.2	57.2	31	-27.2
02	55.3	59.2	35	
04	58.2	61.2	39	
06	57.7	60.1	38	
08	57.5	59.9	38	
10	55.1	57.7	34	
12	55.2	57.8	34	
14	58.2	60.2	38	-26.9
16	59.6	61.3	40	
18	57.2	59.0	37	
20	57.0	58.8	36	
22	57.1	58.8	36	
24	55.9	57.4	34	
26	55.1	56.8	33	
28	54.0	55.8	32	
30	50.3	52.0	26	-26.4
32	52.0	53.0	28	
34	53.2	54.1	30	
36	52.9	54.0	29	
38	50.7	52.7	26	
40	50.0	51.0	25	
42	52.0	52.6	28	
44	53.3	54.8	30	-26.0
46	54.2	56.9	32	
48	52.2	55.4	30	
50	51.3	54.0	28	
52	52.9	55.1	30	
54	51.9	54.2	29	
56	52.5	55.8	30	
58	55.6	58.0	35	
14 00	56.1	58.1	22 35	-25.8
02	56.7	59.2	36	
04	55.2	57.8	34	
06	54.0	56.8	32	
08	54.3	56.7	32	
10	54.8	56.7	33	
12	55.1	56.8	33	
14	55.0	56.8	33	-25.4
16	55.9	57.5	34	
18	55.1	56.4	33	
20	54.7	56.4	32	
22	55.8	57.3	34	
24	55.1	56.3	33	
26	54.2	56.0	32	
28	53.4	55.2	31	
30	54.0	55.3	31	-25.2
32	51.1	53.5	28	
34	51.1	52.3	26	
36	51.3	53.0	27	
38	54.3	55.7	32	
40	50.5	53.3	27	
42	49.9	52.7	26	
44	49.8	52.2	26	-25.0
46	52.5	55.7	30	
48	55.7	58.4	35	
50	53.0	55.7	31	
52	55.2	58.1	34	
54	54.3	56.1	32	
56	55.2	58.0	34	
58	56.9	59.3	37	
15 00	53.3	55.9	31	-25.0
02	54.1	57.9	33	
04	55.1	57.7	34	
06	56.3	58.7	36	
08	58.0	59.2	37	
10	57.1	58.0	36	
12	58.2	59.9	38	
14	58.4	59.0	38	-25.0
16	61.0	62.7	42	
18	66.3	67.8	51	
20	69.8	71.7	56	
22	66.7	68.8	52	
24	65.2	67.2	49	
26	65.0	67.1	49	
28	64.2	66.3	48	
30	62.3	64.6	45	-24.7
32	61.1	63.1	43	
34	62.0	63.8	44	
36	63.5	65.0	46	
38	66.1	67.7	50	
40	66.0	66.3	49	
42	63.8	64.8	46	
44	65.0	65.9	48	-24.7
46	63.8	64.8	47	
48	64.0	64.6	46	
50	63.2	64.0	45	
52	64.6	65.0	47	
54	64.9	65.1	47	
56	65.1	65.3	48	
58	61.9	62.3	43	
16 00	69.9	70.1	55	-24.7

Correction to local mean time is — 49s.
Torsion head at 11h 15m read 87° and at the end read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 13, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00					2 00	22.0	21.2	22 59	-28.5
02					02	20.3	18.3	23 03	
04*5	26.0	25.3	22 53	-29.2	04	18.5	17.8	04	
06.2	26.0	23.8	22 54		06	10.2	9.0	18	
08	20.3	20.1	23 01		08	14.2	13.6	11	
10	27.3	22.5	22 54		10	17.6	16.6	06	
12	30.8	28.6	46		12	8.6	6.4	21	
14	28.3	26.0	22 50	-28.8	14*	21.6	19.8	14	-28.4
16	20.5	18.6	23 02		16	24.3	23.6	09	
18	14.0	12.0	13		18	28.0	26.5	23 03	
20	14.0	12.7	23 12		20	34.0*a*		22 53	
22	32.0	31.2	22 43		22	36.0	35.6	50	
24	32.6	31.3	43		24	37.8	37.0	47	
26	38.2	38.0	33		26	40.0	39.3	44	
28	42.0	38.6	30		28	38.2	37.6	47	
30	31.6	30.3	45	-28.6	30	38.5	38.0	46	-28.3
32	35.5	35.0	38		32	37.5	37.3	47	
34	44.3	42.3	25		34	38.3	38.1	46	
36	47.6	46.3	19		36	37.2	36.4	48	
38	44.0	43.5	24		38	38.3	37.6	47	
40	35.0	34.0	39		40	36.6	36.3	49	
42	37.7	36.6	35		42	36.3	35.3	50	
44	31.3	29.5	46	-28.7	44	32.4	32.2	22 55	-28.2
46	35.9	34.3	38		46*	27.0	24.0	23 48	
48	35.5	34.2	38		48	42.0	39.0	24	
50	33.0	32.6	22 42		50	43.6	38.0	24	
52	20.3	19.5	23 02		52	49.0	43.0	16	
54	21.0	20.3	01		54	39.8	35.0	29	
56	14.5*b*		10		56	48.0	43.3	16	
58	11.5	11.0	15		58	48.2	44.0	16	
1 00	8.6	7.5	20	-28.8	3 00	46.8	43.3	17	-28.2
02	15.1	13.5	23 11		02	46.0	45.0	16	
04	23.3	23.3	22 56		04	47.8	42.8	17	
06	30.6	30.3	22 45		06	56.3	53.3	02	
08	19.8	18.8	23 03		08	54.3	51.7	05	
10	26.8	24.6	22 53		10	49.6	48.6	11	
12	25.3	25.0	54		12	45.6	41.8	19	
14	26.0	24.7	53	-28.8	14	53.3	51.3	06	
16	28.0	26.8	50		16	56.7	54.3	01	
18	30.2	29.2	46		18	51.5	50.0	08	
20	31.2	30.0	45		20	48.2	46.8	13	
22	33.5	33.0	41		22	49.0	47.3	12	
24	34.4	34.0	39		24	51.2	49.0	09	
26	36.0	35.8	37		26	57.0	55.0	00	
28	34.6	34.3	39		28	56.0	55.2	23 01	
30	32.3	32.1	42	-28.8	30	59.1	58.3	22 56	-27.9
32	35.4*b*		37		32	58.0	57.3	22 57	
34	26.6	26.3	52		34	51.3	50.0	23 08	
36	27.3	27.0	51		36	48.3	47.5	13	
38	24.8	23.6	55		38	47.3	46.0	15	
40	27.3	26.3	51		40	54.0	52.3	04	
42	30.7	29.3	46		42	54.5	53.3	03	
44	32.0	30.4	44	-28.5	44	50.3	49.7	09	-27.9
46	31.0	29.5	46		46	50.3	49.9	09	
48	29.3	26.8	49		48	50.3	49.6	10	
50	24.7	23.5	55		50	51.6	50.0	08	
52	23.2	21.7	58		52	56.6	53.8	23 01	
54	25.0	23.4	55		54	59.9	57.5	22 56	
56	23.8	21.6	57		56	54.0	50.3	23 06	
58	26.0	24.3	54		58	54.5	51.5	05	

Observer—W. J. P.

Wednesday, January 13, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	54.0	53.6	23 03	-27.9	6 00	57.6	57.0	22 58	-27.8
02	55.3	55.0	01		02	56.8	55.6	23 00	
04	50.9	49.0	10		04	50.0*b*		09	
06	46.2	44.2	17		06	45.7	44.3	17	
08	47.6	45.2	15		08	47.0	46.8	14	
10	41.6	39.7	24		10	45.3	41.0	20	
12	46.0	45.0	16		12	45.3	41.0	20	
14	48.6	47.2	13	27.8	14	44.3	40.6	21	-27.8
16	49.5	48.0	12		16	43.0	39.4	23	
18	48.4	47.0	13		18	51.6	44.0	13	
20.2	45.0	44.5	18		20	50.2	47.8	11	
22	43.3	42.3	21		22	45.6	39.3	21	
24	42.0	41.0	23		24	45.0	37.5	23	
26	43.5	41.9	21		26	45.7	43.6	18	
28	47.3	46.3	14		28	51.0	50.4	08	
30	49.0	48.2	12	-27.9	30	52.3	49.4	08	-27.7
32	47.7	47.0	14		32	56.6	52.2	23 02	
34	47.8	47.0	14		34	61.6	59.5	22 53	
36	46.6	46.0	15		36	68.7	66.5	42	
38	42.6	42.3	21		38	72.0	69.3	37	
40	45.4	45.0	17		40	70.3	68.8	39	
42	47.3	46.5	14		42	62.0	60.0	52	
44	48.9	48.3	12	-27.9	44	60.3	58.6	55	-27.6
46	52.3	51.3	07		46	63.0	61.0	51	
48	55.6	55.1	23 01		48	60.5	59.0	54	
50	58.6	58.3	22 56		50	60.6	59.2	54	
52	57.2	56.0	22 59		52.2	59.9	58.4	55	
54	53.8	51.8	23 05		54.3	60.0	58.5	55	
56	54.2	52.6	04		56	60.9	59.5	53	
58	51.7	51.3	07		58	63.0	62.3	50	
5 00	53.2	51.6	06	-27.8	7 00	61.0	59.6	53	-27.6
02	54.1	53.0	23 04		02	60.1	59.0	54	
04	57.2	56.5	22 59		04	60.3	58.9	54	
06	58.1	57.3	57		06	60.0	58.2	22 55	
08	57.8	57.5	57		08	57.3	55.3	23 00	
10	60.0	59.7	54		10	56.7	54.6	23 01	
12	58.8*b*		22 56		12	58.2	56.5	22 58	
14	57.8	53.2	23 01		14	60.7	59.0	22 54	-27.5
16	55.0	55.0	02	-27.8	16	55.5	47.8	23 07	
18	56.3	55.6	23 00		18	53.4	51.9	05	
20	56.9	56.7	22 59		20	51.6	50.8	08	
22	58.3	58.3	56		22	55.5	54.0	02	
24	60.8	60.6	53		24	56.7	54.7	23 00	
26	62.5	62.3	50		26	59.5	58.0	22 56	
28	63.4	63.3	48		28	59.6	59.3	55	
30	63.4	63.2	48	-27.7	30	59.0	57.4	22 56	-27.7
32	64.3	64.3	47		32	51.4	49.0	23 09	
34	62.9	62.4	50		34	48.0	45.3	15	
36	59.5	58.9	22 55		36	49.0	45.2	14	
38	56.6	56.0	23 00		38	52.0	48.0	09	
40	56.3	55.7	23 00		40	51.6	46.3	11	
42	59.0*a*		22 55		42	58.9	52.4	01	
44	64.0*a*		47	-27.7	44	56.0	49.3	05	-27.8
46	69.5	69.5	39		46	61.3	51.0	23 00	
48	70.5	70.3	37		48	64.4	55.3	22 54	
50	68.6	68.0	41		50	59.2	56.5	57	
52	66.0	65.2	45		52	59.5	58.0	56	
54	59.6	59.0	22 55		54	59.0	56.6	57	
56	56.0	56.0	23 00		56	61.0	58.6	54	
58	63.3	56.6	22 54		58	59.6	58.4	55	

Observers—W. J. P. and J. V., who alternated from 7h 42m to 7h 52m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 13, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	59.9	58.0	22 55	-26.2	10 00	73.0	69.8	22 36	-26.1
02	62.0	60.0	52		02	75.2	73.8	31	
04	59.0	57.7	22 56		04	76.6	74.0	30	
06	57.0	53.8	23 01		06*	57.8	56.5	24	
08	55.0	50.3	05		08.5	66.5	58.0	17	
10	56.5	51.4	03	-26.2	10	56.8	55.0	26	
12	48.2	42.5	17		12	57.6	55.6	25	
14	48.8	40.0	18		14	58.4	57.2	23	-26.0
16	52.5	43.8	12		16	54.5	53.8	29	
18	48.3	34.8	23		18	57.7	54.7	26	
20	54.0	44.6	10		20	59.0	56.0	24	
22	52.9	42.7	13		22	60.0	57.1	22	
24	53.6	34.2	19		24	56.0	55.0	27	
26	57.8	39.0	12		26	60.0	56.0	23	
28	55.0	40.5	13	-26.2	28	59.7	54.9	24	
30	60.0	47.0	04		30	56.2	50.0	31	-25.8
32	55.0	42.5	12		32	53.1	48.5	34	
34	55.0	38.6	14		34	51.5	48.1	36	
36	53.0	34.0	20		36	48.4	45.5	41	
38	57.3	32.8	23 17		38	51.8	49.3	35	
40	70.5	49.4	22 54		40	51.1	48.6	36	
42	51.6	35.0	23 20		42	54.5	46.1	35	
44	67.8	48.8	22 56	-26.5	44	49.0	44.7	41	
46	69.8	44.4	58		46	46.0	42.8	44	-25.8
48	66.4	48.9	57		48	47.0	44.0	43	
50	66.5	46.5	59		50	53.0	50.2	33	
52	72.4	50.5	52		52	54.0	51.4	31	
54	67.0	49.0	57		54	54.5	51.8	31	
56	73.0	55.8	47		56	53.8	51.2	32	
58	73.2	58.2	45		58	54.6	51.0	31	
9 00	72.3	60.0	44	-26.8	11 00	57.8	55.0	25	-25.9
02	73.2	60.7	43		02	55.6	52.4	29	
04	64.1	54.5	55		04	53.8	50.8	32	
06	72.8	62.8	41		06	53.0	50.9	33	
08	72.2	60.5	44		08	52.0	50.0	34	
10	69.0	58.4	48		10	51.7	48.9	35	
12	66.5	54.5	53		12	51.2	48.2	36	
14	74.5	64.5	39	-26.7	14	51.0	48.0	36	-26.0
16	74.8	66.1	37		16	52.9	49.8	34	
18	73.4	66.8	38		18	53.2	50.0	33	
20	68.9	62.8	45		20	54.2	50.7	32	
22	69.5	62.2	45		22	53.3	50.0	33	
24	72.0	67.2	39		24	55.0	51.8	30	
26	68.6	65.1	43		26	60.0	57.2	22	
28	61.2	57.5	55		28	56.8	55.7	26	
30	68.7	65.0	43		30	58.7	57.8	23	-26.0
32	62.2	60.4	52		32	59.0	57.8	22	
34	65.7	63.0	47		34	60.2	58.4	21	
36	73.0	70.9	35	-26.2	36	54.4	53.2	30	
38	71.0	70.0	37		38	54.0	51.3	32	
40	68.1	67.0	42		40	49.2	47.2	38	
42	65.5	65.0	46		42	47.9	45.7	41	
44	64.6	62.0	48		44	49.0	46.7	39	-26.0
46	61.8	61.0	52	-26.1	46	48.9	47.8	38	
48	64.6	62.9	48		48	48.9	46.6	39	
50	65.6	65.2	45		50	49.0	47.6	38	
52	66.7	63.8	46		52	53.0	50.5	33	
54	73.9	71.0	34		54	58.3	51.9	28	
56	69.0	64.5	43		56	55.0	52.5	30	
58	74.2	69.2	35		58	55.3	54.1	28	

Observer—J. V.

Wednesday, January 13, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	58.0	56.0	22 25	-25.8	14 00	55.0*b*		22 28	-25.0
02	58.0	57.1	24		02	53.5	52.6	31	
04	56.5	56.5	26		04	53.8	53.0	30	
06	55.5	55.5	27		06	56.0	55.0	27	
08	53.3	52.3	31		08	57.0	57.0	25	
10	54.0	53.0	30		10	55.5	55.5	27	
12	58.2	57.7	23		12	54.5	54.1	29	
14	57.3	55.9	25	-25.7	14	55.0	55.0	28	-25.0
16	53.0	51.1	33		16	55.1	54.0	29	
18	53.0	52.0	32		18	55.1	54.9	28	
20	52.0	51.1	33		20	58.0	56.8	24	
22	54.6	53.0	30		22	57.2	55.0	26	
24	58.5	51.2	28		24	58.2	57.0	24	
26	52.2	49.9	34		26	60.0	57.9	22	
28	50.9	50.0	35		28	61.0	58.2	21	
30	50.0	49.1	36	-25.6	30	60.2	57.5	22	-25.0
32	50.3	50.0	36		32	60.2	57.9	22	
34	53.1	53.0	31		34	58.0	55.8	25	
36	53.2	52.5	31		36	57.3	55.0	26	
38	55.0	55.0	28		38	59.8	57.5	22	
40	55.8	54.9	27		40	58.3	56.2	24	
42	54.2	54.0	29		42	58.8	56.5	24	
44	56.2	55.0	27	-25.5	44	57.0	54.2	27	
46	55.7	54.0	28		46	55.1	52.8	30	
48	55.3	54.8	28		48	56.3	54.0	28	-24.8
50	54.1	53.1	30		50	55.3	53.1	29	
52	54.7	53.9	29		52	54.7	53.0	30	
54	54.5	53.5	29		54	53.8	53.0	30	
56	55.3	55.0	28		56	54.5	52.8	30	
58	56.0	54.5	28		58	55.7	54.8	28	
13 00	56.0	53.9	28		15 00	56.3	55.6	26	-24.8
02	57.2	54.9	26		02	55.0	54.3	28	
04	55.5	53.2	29	-25.2	04	56.2*a*		26	
06	55.0	53.5	29		06	59.0	59.0	22	
08	55.2	53.0	29		08	58.0	57.2	24	
10	54.1	51.5	31		10	56.8	56.0	26	
12	54.9	52.7	30		12	58.3	57.2	24	
14	56.0	53.5	28	-25.1	14	56.4	55.1	27	-24.7
16	54.8	51.0	31		16	51.7	50.4	34	
18	54.9	51.0	31		18	52.0	50.9	34	
20	56.0	52.0	29		20	52.3	51.8	33	
22	55.4	51.8	30		22	52.1	51.3	33	
24	56.2	52.0	29		24	53.2	52.8	31	
26	56.5	52.1	29		26	53.8	52.8	30	
28	56.2	53.2	28		28	55.9	54.8	27	
30	56.2	53.2	28	-25.1	30	59.8	57.8	22	-24.8
32	54.7	52.9	30		32	60.3	59.6	20	
34	54.9	53.8	29		34	58.7	56.6	24	
36	55.0	54.0	29		36	56.4	54.2	27	
38	53.6	53.0	30		38	55.8	53.7	28	
40	52.8*b*		31		40	56.2	54.9	27	
42	52.0	52.0	33		42	55.3	53.8	29	
44	52.0	51.0	33		44	52.8	50.0	34	-24.5
46	53.0	52.0	32		46	54.0	52.0	31	
48	51.3	50.3	34		48	54.0	52.5	31	
50	52.1	51.1	33	-25.1	50	53.9	51.9	31	
52	54.8	52.1	30		52	56.0	54.0	28	
54	56.0	54.4	28		54	56.2	55.2	27	
56	54.0	51.5	32		56	54.8	54.3	29	
58	54.8	52.5	30		58	53.8	53.0	30	

Observers—J. V. and R. R. T., who alternated from 15h 42m to 15h 52m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 13, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	52.9	52.0	22 32	-24.0
02	53.0	51.5	32	
04	51.8	50.1	34	
06	51.8	49.9	34	
08	51.0	50.3	35	
10	51.2	50.5	34	
12	52.9	50.5	33	
14	54.9	53.0	30	-23.8
16	54.8	52.0	30	
18	53.5	51.0	32	
20	56.2	54.2	28	
22	56.7	54.3	27	
24	55.2	53.3	29	
26	55.3	53.8	29	
28	56.0	53.7	28	
30	56.3	54.6	27	-23.9
32	56.3	54.6	27	
34	56.8	54.7	27	
36	56.3	54.2	28	
38	55.7	53.8	28	
40	54.9	53.4	29	
42	56.7	54.2	27	
44	59.8	57.0	22	-24.0
46	57.5	55.1	26	
48	57.1	54.1	27	
50	58.1	56.2	24	
52	57.9	55.1	26	
54	57.4	55.1	26	
56	57.1	54.9	26	
58	57.3	65.2	26	
17 00	57.3	55.2	26	-24.0
02	54.9	53.3	29	
04	54.9	53.3	29	
06	56.0	63.9	28	
08	55.4	53.0	29	
10	53.9	51.9	31	
12	53.9	51.3	32	
14.3	53.9	52.5	31	
16	54.3	52.0	31	-24.0
18	54.3	52.2	31	
20	52.9	51.1	33	
22	52.7	51.2	33	
24	54.2	52.3	31	
26	54.8	52.3	30	
28	53.8	51.3	32	
30	53.8	51.9	31	-24.0
32	53.8	51.9	31	
34	52.0	51.1	33	
36	52.8	52.0	32	
38	53.0	52.3	32	
40	53.9	52.2	31	
42	53.9	52.2	31	
44	52.3	51.2	33	-24.0
46	54.1	52.2	31	
48	54.2	52.4	30	
50	54.0	51.3	32	
52	54.0	50.9	32	
54	54.1	51.1	32	
56	54.8	50.8	31	
58	54.8	51.2	31	
18 00	55.3	51.0	22 31	-24.0
02	54.1	51.8	31	
04	52.9	50.8	33	
06	52.2	50.4	34	
08	52.8	50.1	34	
10	53.0	50.1	33	
12	52.8	50.7	33	
14	51.9	50.3	34	-24.0
16	51.6	50.3	34	
18	50.2	49.2	36	
20	49.1	48.1	38	
22	49.3	48.2	38	
24	50.1	48.9	37	
26	51.0	49.7	35	
28	50.8	49.2	36	
30	50.8	49.3	36	
32	50.7	49.7	35	-24.0
34	51.8	50.3	34	
36	52.0	50.9	34	
38	52.5	51.2	33	
40	53.0	52.0	32	
42	53.5	52.9	31	
44	53.1	52.3	32	-24.0
46	53.1	52.0	32	
48	52.3	51.2	33	
50	51.3	50.3	34	
52	50.5	49.7	36	
54	50.1	49.1	36	
56	50.0	49.2	36	
58	50.0	48.9	37	
19 00	51.2	49.5	35	-24.0
02	50.4	48.4	37	
04	50.9	48.9	36	
06	50.1	47.9	37	
08	49.3	47.3	38	
10	48.8	47.1	39	
12	47.7	46.7	40	
14	47.2	45.8	41	-23.9
16	46.8	45.7	42	
18	46.0	45.2	43	
20	46.8	44.9	42	
22	46.0	44.3	43	
24	46.1	44.3	43	
26	46.8	45.0	42	
28	44.6	42.3	46	
30	44.9	42.1	46	-23.8
32	43.9	42.8	46	
34	44.9	43.7	44	
36	43.3	42.1	47	
38	45.6	43.3	44	
40	46.4	43.3	44	
42	46.0	43.2	44	
44	46.2	43.3	44	-23.5
46	45.8	43.2	44	
48	43.9	41.6	47	
50	43.8	42.0	47	
52	43.2	42.2	47	
54	44.6	43.0	45	
56	44.3	43.2	46	
58	45.1	43.9	44	

Observer—R. R. T.

Wednesday, January 13, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	44.3	43.0	22 46	-23.3
02	41.9	41.1	49	
04	40.2	38.4	52	
06	38.0	37.2	55	
08	38.9	37.3	54	
10	37.6	36.9	22 56	
12	34.0	33.0	23 02	
14	34.8	33.1	01	-23.3
16	34.2	32.8	02	
18	32.8	31.0	04	
20	35.2	32.7	23 01	
22	37.2	35.5	22 57	
24	39.1	37.1	54	
26	42.0	40.0	50	
28	43.1	40.2	49	
30	44.4	41.8	46	-23.6
32	45.8	42.8	45	
34	46.2	42.9	44	
36	46.0	43.4	44	
38	47.0	44.0	43	
40	47.7	45.0	42	
42	47.2	44.8	42	
44	47.6	45.1	42	-23.8
46	47.8	44.6	42	
48	47.2	44.2	42	
50	45.7	43.7	44	
52	46.9	45.1	42	
54	48.1	46.0	40	
56	46.9	45.2	42	
58	46.0	45.2	43	
21 00	46.0	44.8	43	-23.9
02	45.0	44.2	44	
04	45.0	43.1	45	
06	44.2	43.0	46	
08	43.2	42.1	47	
10	49.3	47.0	39	
12	51.3	49.2	35	
14	50.2	49.2	36	-23.8
16	50.8	48.6	36	
18	50.2	48.2	37	
20	49.9	48.1	37	
22	51.8	49.2	35	
24	51.1	49.1	36	
26	50.4	48.3	37	
28	50.4	48.3	37	
30	49.8	48.1	37	-23.8
32	49.5	48.8	37	
34	49.0	47.7	38	
36	48.7	47.1	39	
38	48.9	47.2	39	
40	48.7	46.9	39	
42	48.2	46.9	40	
44	47.6	46.0	41	-23.7
46	47.0	46.1	41	
48	47.2	46.7	41	
50	47.2	46.7	41	
52	49.2	48.9	37	
54	50.0	49.1	36	
56	49.2	48.2	38	
58	49.3	48.0	38	
22 00	49.4	48.2	22 38	-23.4
02	49.2	47.2	38	
04	51.3	49.2	35	
06	52.2	49.4	34	
08	52.9	50.6	33	
10	53.7	51.1	32	
12	53.2	51.0	32	
14	53.2	50.9	33	-23.4
16	54.1	52.4	31	
18	54.8	52.8	30	
20	54.0	52.8	30	
22	52.7	50.2	34	
24	46.1	44.9	43	
26	38.0	36.9	56	
28	42.6	40.7	22 49	
30	32.8	28.9	23 06	-23.4
32	37.9	35.1	22 57	
34	16.9	14.9	23 29	
36	34.1	27.1	23 06	
38	38.2	32.5	22 59	
40	39.2	34.2	57	
42	44.3	39.2	49	
44	45.4	41.7	46	-23.6
46	42.9	38.9	50	
48	46.9	43.0	44	
50	49.9	44.2	40	
52	49.7	45.3	40	
54	52.9	48.5	35	
56	54.3	49.5	33	
58	54.1	50.0	33	
23 00	57.0	52.2	28	-23.7
02	56.0	51.1	30	
04	55.0	50.3	32	
06	53.8	51.2	32	
08	49.9	47.8	38	
10	46.9	44.8	22 42	
12	29.4*b*		23 08	
14*	59.7	41.0	52	-23.4
16	78.7	65.5	23 18	
18	36.2	25.1	24 23	
20	36.3	22.1	24 26	
22	70.9	65.5	23 24	
24	78.3	69.5	23 15	
26	30.0	29.1	24 25	
28	73.9	69.3	23 19	
30*	45.2	30.5	24 06	
32	58.3	44.9	23 44	-23.5
34	66.8	52.5	32	
36	62.2	51.7	36	
38	63.6	51.8	35	
40	65.4	55.4	31	
42	62.2	54.1	34	
44	60.1	52.5	37	-23.4
46	58.2	50.9	40	
48	46.1	38.6	23 59	
50	39.2	26.8	24 14	
52	48.9	33.7	24 00	
54	72.9	60.3	23 21	
56	80.0	64.5	12	
58*2	38.2	21.0	23 18	
24 00	60.8	51.0	22 37	-23.3

Correction to local mean time is — 50s.

Torsion head at 22h 45m, January 12, read 81° and at the end read the same.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, January 14, 1904					Magnet scale erect					Friday, January 15, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	40.5	41.0	22 39		18 00	38.1	39.8	22 36	-20.0	20 00	44.1	40.7	22 39	-21.4	22 00	43.9	42.1	22 38	-17.9
02	40.8	41.0	39	-19.4	02	38.3	40.0	36		02	47.6	43.9	34		02	44.8	43.6	36	
04	40.1	40.4	38		04	36.8	39.8	35		04	47.4	43.2	34		04	45.3	44.2	35	
06	40.0	40.7	38		06	36.9	39.7	35		06	46.6	44.0	34		06	44.8	43.7	36	
08	39.3	40.8	38		08	36.8	39.5	35		08	45.6	43.0	36		08	42.1	41.2	40	
10	38.8	40.3	37		10	36.8	39.3	34		10	44.8	41.8	37		10	43.3	43.1	38	
12	38.7	40.3	37		12	36.6	38.9	34		12	43.8	42.4	38		12	42.2	41.9	39	
14	37.9	39.8	36	-19.6	14	36.8	38.9	34	-20.0	14	43.7	42.0	38	-20.9	14	42.2	42.2	39	-17.8
16	37.6	39.7	36		16	36.5	39.0	34		16	44.9	42.7	37		16	42.7	41.1	40	
18	38.1	38.8	35		18	36.7	38.8	34		18	46.9	44.2	34		18	43.2	42.2	38	
20	38.7	39.5	36		20	37.1	38.9	35		20	49.2	46.8	30		20	43.7	42.1	38	
22	39.1	40.8	38		22	37.4	39.2	35		22	48.2	46.2	31		22	44.3	42.1	38	
24	38.7	40.2	37		24	37.7	39.3	35		24	47.2	45.4	33		24	44.3	42.0	38	
26	38.9	40.2	37		26	38.0	40.0	36		26	46.9	45.4	33		26	44.3	42.1	38	
28	38.7	41.8	38		28	38.7	40.8	37		28	47.2	44.8	33		28	43.9	42.1	38	
30	39.2	42.5	39	-19.6	30	39.2	41.0	38	-20.0	30	47.9	45.9	32	-20.0	30	42.8	41.1	40	-17.6
32	40.9	42.7	40		32	39.0	41.9	38		32	48.6	45.1	32		32	43.3	41.1	39	
34	40.8	42.2	40		34	39.2	41.6	38		34	50.5	47.7	28		34	43.1	41.8	39	
36	39.3	41.0	38		36	39.0	42.0	38		36	50.3	48.3	28		36	43.2	41.6	39	
38	39.0	40.3	37		38	39.6	41.7	39		38	50.2	47.2	29		38	42.7	40.9	40	
40	38.8	40.0	36		40	39.9	41.8	39		40	51.9	48.9	26		40	40.3	39.0	43	
42	39.2	40.2	37		42	39.7	41.3	39		42	51.9	49.9	26		42	40.0	39.0	43	
44	39.3	40.3	37	-19.6	44	39.7	41.1	38	-20.0	44	52.8	51.0	24	-19.2	44	40.2	39.8	43	-17.3
46	38.8	40.2	37		46	39.7	41.7	39		46	53.2	50.7	24		46	41.0	39.8	42	
48	39.2	40.0	37		48	39.9	42.0	39		48	52.1	50.1	25		48	39.2	38.2	45	
50	38.8	40.3	37		50	40.5	42.4	40		50	52.1	49.9	25		50	39.3	38.2	45	
52	38.3	40.3	36		52	40.3	42.1	40		52	53.9	51.7	22		52	41.0	40.1	42	
54	38.8	40.8	37		54	40.1	41.9	39		54	56.9	54.9	18		54	41.2	40.2	42	
56	38.9	40.8	37		56	39.1	41.0	38		56	55.1	53.2	20		56	43.1	42.1	38	
58	38.4	40.8	37		58	39.0	41.8	38		58	53.7	51.7	23		58	46.3	45.0	34	
17 00	38.1	40.3	36	-20.0	19 00	39.0	41.2	38		21 00	53.0	51.0	24	-18.3	23 00	47.7	46.7	31	-17.1
02	37.9	39.8	36		02	38.5	41.8	38		02	53.8	49.7	24		02	47.8	46.1	32	
04	37.6	39.9	36		04	38.1	42.0	38		04	54.0	49.4	24		04	50.8	48.7	27	
06	37.7	39.7	36		06	38.4	42.2	38		06	53.9	49.9	24		06	52.4	50.2	25	
08	37.8	40.0	36		08	38.2	42.2	38		08	54.2	50.5	23		08	54.0	52.3	22	
10	38.0	40.3	36		10	38.3	42.1	38		10	55.3	51.9	21		10	57.2	55.2	17	
12	38.5	40.3	37		12	38.7	42.0	38		12	55.9	52.7	20		12	60.9	58.7	11	
14	38.7	40.2	37	-20.0	14	38.8	42.0	38	-20.0	14	56.8	54.0	18	-18.0	14	59.4	57.0	14	-17.0
16	39.2	40.0	37		16	38.4	41.5	37		16	57.0	55.8	17		16	55.7	52.8	20	
18	39.3	40.2	37		18	38.2	41.0	37		18	58.5	56.9	15		18	54.0	51.7	22	
20	39.1	40.3	37		20	38.2	40.3	36		20	53.8	52.8	22		20	51.1	49.1	27	
22	39.6	40.0	37		22	38.2	40.3	36		22	56.9	56.2	17		22	49.6	48.1	29	
24	39.1	40.0	37		24	38.6	40.6	37		24	56.1	55.4	18		24	49.3	48.3	29	
26	39.7	40.8	38		26	38.7	40.8	37		26	56.1	55.2	18		26	49.5	48.8	28	
28	39.8	41.1	38		28	38.3	40.4	36		28	55.8	54.9	19		28	48.7	47.8	30	
30	39.7	40.8	38	-20.0	30	38.4	40.3	36	-20.0	30	55.1	53.9	20	-18.0	30	47.3	46.9	31	-16.9
32	38.9	41.1	37		32	37.7	40.4	36		32	52.8	52.6	23		32	45.7	44.2	35	
34	39.0	41.8	38		34	37.3	39.8	35		34	48.7	48.4	29		34	45.6	44.0	35	
36	39.3	41.8	39		36	36.8	39.1	34		36	48.8	48.2	29		36	45.0	43.7	36	
38	39.1	41.0	38		38	36.7	38.9	34		38	44.8	44.4	35		38	44.6	43.0	37	
40	39.0	40.0	37		40	36.7	38.3	34		40	45.9	45.2	34		40	43.9	42.8	37	
42	38.4	40.0	36		42	36.4	38.0	33		42	50.3	48.8	28		42	44.0	42.1	37	
44	38.7	39.8	36	-20.0	44	36.3	38.0	33	-20.0	44	51.2	49.9	26	-17.9	44	43.7	42.0	38	-16.8
46	38.7	40.0	37		46	36.9	38.1	34		46	48.9	47.7	30		46	44.2	42.4	37	
48	38.6	40.0	36		48	35.6	40.7	34		48	45.1	43.9	36		48	45.9	40.9	37	
50	38.2	39.8	36		50	36.0	40.2	35		50	40.4	39.2	43		50	45.3	40.3	38	
52	38.0	39.7	36		52	35.8	40.3	35		52	40.2	38.8	43		52	44.6	39.8	39	
54	38.0	39.8	36		54	35.8	40.0	34		54	41.4	39.3	42		54	43.0	38.3	42	
56	38.3	39.8	36		56	36.0	39.9	34		56	41.8	39.9	41		56	42.9	38.4	42	
58	38.2	39.8	36		58	36.0	39.8	34		58	41.3	38.9	42		58	42.9	38.6	41	
					20 00	36.0	39.2	34	-20.0						24 00	41.3	39.0	42	-16.4

Correction to local mean time is — 56s.
Torsion head at 15h 20m read 84° and at the end read the same.
Observer—W. J. P.

Correction to local mean time is — 32s.
Torsion head at 19h 25m read 84° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, January 17, 1904					Magnet scale erect					Sunday, January 17, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	39.2	40.9	22 24	−9.0	2 00	26.7	29.3	23 04	−7.3	4 00*2	51.7	51.0	22 44	−6.4	6 00	45.2	41.0	22 58	
02	38.0	39.3	22		02	24.7	28.2	02		02	52.8	49.2	44		02	51.8	49.6	46	−6.6
04	38.6	41.7	24		04	26.3	30.8	05		04	53.0	49.9	44		04	49.7	46.3	50	
06	38.8	39.6	22		06	24.1	27.2	23 01		06	54.5	54.2	39		06	45.1	42.2	57	
08	40.9	43.4	28		08	23.0	26.9	22 59		08	54.6	54.1	39		08	44.1	40.9	59	
10	47.0	48.2	36		10	24.9	28.2	23 02		10	51.1	50.7	45		10	43.7	40.9	59	
12	47.5	50.1	38		12	28.1	31.0	07		12	49.0	49.0	48		12	45.6	41.5	57	
14	47.8	50.0	38	−8.9	14	24.0	26.0	00	−7.1	14	49.2	48.6	48	−6.5	14	50.0	47.9	22 49	−6.6
16	46.3	49.9	37		16	25.7	26.2	01		16	48.9	47.7	49		16	43.2	40.3	23 00	
18	49.9	53.6	22 43		18	26.9	27.3	23 03		18	49.1	46.3	50		18	44.9	42.4	23 57	
20	62.8	64.0	23 01		20	21.6	21.8	22 54		20	48.3	45.3	51		20	50.0	48.1	22 49	
22	49.8	55.7	22 44		22	20.3	21.7	22 53		22	48.0	45.2	51		22	45.3	43.7	56	
24	64.1	66.7	23 04		24	24.8	25.2	23 00		24	47.2	44.3	53		24	44.1	44.1	56	
26	57.8	61.9	22 55		26	32.0	33.2	11		26	47.2	44.1	53		26	44.1	42.4	58	
28	56.9	62.2	55		28	30.0	31.9	09		28	46.4	44.0	54		28	50.4	47.2	49	
30	57.3	64.1	57	−9.0	30	29.1	31.8	08	−7.1	30	47.7	45.3	52	−6.5	30	52.3	48.8	46	−6.7
32	47.6	59.3	45		32	25.0	27.8	23 02		32	49.2	46.9	50		32	46.1	43.2	22 55	
34	49.9	58.7	47		34	22.7	25.2	22 58		34	49.8	47.0	49		34	43.9	39.1	23 00	
36	44.7	54.9	40		36	22.6	24.1	57		36	49.5	47.7	49		36	45.4	42.3	22 57	
38	41.9	51.9	35		38	23.3	25.0	58		38	50.7	48.4	47		38	50.2	47.0	49	
40	52.7	57.3	48		40	22.9	24.8	22 58		40	49.3	47.7	49		40	51.6	48.2	47	
42	57.0	63.8	22 56		42	25.0	26.3	23 00		42	49.2	47.3	49		42	51.8	49.1	46	
44	66.7	73.1	23 11	−8.9	44	24.9	26.7	23 01		44	49.7	47.1	49	−6.6	44	48.1	45.5	52	−6.5
46	62.8	76.2	11		46	23.9	25.8	22 59	−7.1	46	50.3	48.2	48		46	50.9	47.7	48	
48	66.5	74.3	12		48	23.0	25.8	58		48	49.4	47.7	49		48	53.3	49.7	45	
50*	38.0	44.8	25		50	22.2	24.8	57		50	49.2	47.2	49		50	50.4	47.2	49	
52	30.1	42.2	17		52	21.6	23.1	55		52	48.7	46.6	50		52	48.9	45.5	51	
54	24.9	35.4	07		54	20.2	21.7	53		54	47.3	45.2	53		54	51.3	48.9	47	
56	27.0	37.8	11		56	18.4	20.7	51		56	46.2	45.0	54		56	49.9	46.8	49	
58	28.1	36.9	11		58	18.2	20.5	51		58	47.7	45.8	52		58	47.4	44.1	54	
1 00	23.6	32.2	03		3 00	18.9	20.4	51	−7.1	5 00	50.3	47.8	48	−6.6	7 00	44.9	43.0	57	−6.5
02	26.9	34.0	08	−8.7	02	19.1	21.9	53		02	53.3	50.5	44		02	44.8	44.6	55	
04	29.8	37.8	13		04	20.1	22.9	54		04	53.9	51.8	42		04	51.3	48.7	47	
06	33.8	40.3	18		06	19.7	22.4	54		06	53.9	51.2	43		06	56.8	55.8	37	
08	35.1	43.2	21		08	19.2	21.1	52		08	51.1	48.2	47		08	44.0	43.1	22 57	
10	39.4	46.1	27		10	18.9	20.8	52		10	48.3	45.0	52		10	36.3	35.8	23 09	
12	38.2	45.9	26		12	19.1	20.9	52		12	48.2	45.2	52		12	43.9	42.9	22 57	
14	25.0	31.1	04		14	18.9	20.9	52	−7.0	14	49.9	47.2	49	−6.7	14	49.8	49.2	48	−6.4
16	33.7	38.7	17	−8.4	16	19.2	21.2	52		16	53.8	49.8	44		16	55.2	53.3	40	
18	43.1	46.9	31		18	18.7	20.7	52		18	54.7	51.1	42		18	51.9	50.1	46	
20	34.0	39.1	17		20	19.2	21.8	53		20	53.3	49.9	44		20	49.0	47.2	51	
22	31.2	36.8	13		22	19.5	22.4	54		22	47.8	44.1	53		22	44.8	43.6	57	
24	18.9	25.7	22 55		24	18.6	21.8	52		24	45.0	41.6	57		24	49.1	47.1	50	
26	24.6	30.8	23 03		26	17.0	20.2	50		26	44.1	41.8	57		26	57.0	55.9	37	
28	30.8	37.0	13		28	15.1	19.7	48		28	43.7	42.0	58		28	51.9	50.3	46	
30	27.8	34.1	08	−8.1	30	13.8	17.3	45	−7.0	30	47.1	44.7	53		30	44.0	42.6	58	
32	33.4	38.1	16		32	13.6	17.3	45		32	50.0	48.2	48		32	48.3	46.0	52	−6.4
34	32.3	36.1	14		34	13.3	17.1	45		34	47.7	44.8	52		34	51.8	49.9	46	
36	31.1	35.2	12		36	13.8	17.9	46		36	44.8	42.5	22 56		36	49.1	46.7	51	
38	31.0	35.3	12		38	14.2	18.7	47		38	42.9	40.0	23 00		38	44.1	41.2	22 59	
40	33.1	38.0	16		40	15.3	20.1	49		40	43.1	41.8	22 58		40	39.6	37.2	23 06	
42	36.2	40.3	20		42	16.7	18.8	49		42	47.7	45.9	51		42	41.0	37.8	23 04	
44	29.8	33.1	10		44	16.8	19.8	50	−7.0	44	47.2	44.3	53	−6.6	44	53.8	50.9	22 44	
46	28.7	32.9	23 09		46	17.8	19.9	51		46	51.0	48.5	47		46	59.2	57.2	35	
48	22.8	26.8	22 59		48	17.1	19.2	49		48	46.2	43.7	54		48	57.0	54.9	38	
50	26.5	30.3	23 05		50	14.7	17.5	46		50	48.9	42.0	22 54		50	48.3	46.7	52	
52	25.2	29.0	03		52	13.1	16.4	44		52	40.8	37.7	23 03		52	47.4	45.7	53	
54	26.9	30.1	05		54	15.1	18.8	47		54	44.5	42.0	22 58		54	50.9	50.2	47	
56	23.7	27.3	23 00		56	15.2	18.2	47		56	49.1	46.0	51		56	56.2	54.5	39	
58	22.0	25.1	22 57		58	14.1	16.8	45		58	45.0	40.6	58		58	52.8	50.8	45	
															8 00	55.9	51.1	42	−6.5

Observer—R. R. T.

Correction to local mean time is + 4h 01s. 90° torsion = 13.′8.
Torsion head at 0h 00m read 87° and at 10h 00m read 63°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, January 18, 1904 — Magnet scale erect									Tuesday, January 19, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	51.9	53.8	22 40	−10.0	10 00	51.7	53.0	22 39	−6.8	12 00	51.9	50.7	22 49	−1.8	14 00	54.5	52.9	22 46	−2.2
02	50.1	51.8	37		02	51.2	53.1	39		02	52.1	51.1	49		02	54.4	53.1	46	
04	55.4	57.7	45		04	50.1	52.1	37		04	52.8	51.3	48		04	54.7	53.2	45	
06	50.7	53.9	39		06	48.9	51.0	35		06	53.1	50.7	49		06	54.9	53.4	45	
08	49.9	53.3	38		08	47.3	48.3	32		08	52.7	51.2	49		08	54.9	53.6	45	
10	50.5	53.0	38		10	49.9	52.4	37		10	52.4	50.7	49		10	54.7	53.2	45	
12	49.2	52.3	36		12	52.7	54.3	41		12	53.3	50.5	49		12	54.6	53.1	46	
14	53.8	57.3	44	−9.1	14	50.1	52.3	37	−6.7	14	53.7	51.1	48	−1.8	14	54.3	53.2	46	−2.2
16	52.8	54.1	41		16	48.9	49.1	34		16	53.2	52.1	47		16	54.8	52.4	46	
18	50.9	54.1	39		18	51.8	52.1	38		18	52.1	50.9	49		18	54.8	52.2	46	
20	52.0	53.8	40		20	51.2	51.3	37		20	52.2	50.9	49		20	54.7	52.2	46	
22	48.3	51.2	35		22	50.7	51.0	36		22	52.9	51.9	48		22	54.9	53.0	45	
24	53.3	55.7	42		24	54.2	54.8	42		24	53.2	52.1	47		24	54.9	53.0	45	
26	51.0	52.3	38		26	49.2	50.4	35		26	52.9	51.9	48		26	54.8	53.0	45	
28	48.3	50.3	34		28	51.3	52.8	38		28	52.2	51.5	49		28	54.9	53.0	45	
30	53.1	54.9	42	−8.9	30	51.9	52.6	39	−6.3	30	52.8	51.6	48	−2.0	30	54.8	53.7	45	−2.2
32	48.6	50.9	35		32	49.9	50.9	36		32	53.0	51.8	48		32	54.2	53.8	45	
34	49.2	51.1	35		34	50.9	51.6	37		34	53.9	51.2	48		34	54.1	53.4	46	
36	51.5	52.9	39		36	50.9	52.1	38		36	53.9	50.9	48		36	54.2	53.2	46	
38	56.0	57.6	46		38	51.2	53.8	39		38	53.8	50.3	48		38	54.4	53.3	46	
40	48.2	50.1	34		40	53.1	55.5	42		40	53.2	50.5	49		40	54.8	53.3	45	
42	47.9	50.8	34		42	53.2	54.8	42		42	53.1	50.9	48		42	55.1	53.3	45	
44	51.2	54.1	39	−8.3	44	56.6	57.9	46	−6.2	44	53.8	51.2	48	−2.2	44	55.2	53.1	45	−2.2
46	51.9	53.1	39		46	55.1	56.4	44		46	54.1	50.9	48		46	55.7	52.9	45	
48	52.9	54.3	41		48	52.2	54.7	41		48	53.9	51.2	48		48	55.6	53.1	45	
50	51.0	52.0	38		50	52.1	54.5	40		50	53.1	50.9	48		50	55.9	53.0	45	
52	52.0	52.5	38		52	51.0	53.9	39		52	53.1	51.1	48		52	55.7	52.8	45	
54	51.9	52.9	39		54	50.9	53.9	39		54	53.3	51.7	48		54	55.2	52.9	45	
56	51.1	52.3	38		56	51.9	52.5	39		56	53.3	51.8	48		56	55.2	52.9	45	
58	50.7	51.9	37		58	52.2	52.9	39		58	53.2	51.5	48		58	55.2	53.2	45	
9 00	51.4	53.1	39	−8.0	11 00	52.0	52.9	39	−6.0	13 00	53.2	51.2	48	−2.2	15 00	55.3	53.3	45	−2.2
02	52.1	52.9	39		02	51.4	53.2	39		02	53.9	51.1	48		02	55.2	53.1	45	
04	52.7	54.1	41		04	53.1	53.9	40		04	54.0	51.1	48		04	55.9	52.8	45	
06	53.1	55.0	42		06	52.6	54.2	41		06	54.3	51.4	47		06.4	55.8	52.9	45	
08	51.0	53.1	38		08	52.8	54.3	41		08	54.1	51.8	47		08	55.8	52.8	45	
10	51.3	54.3	40		10	52.3	54.7	41		10	54.3	42.0	47		10	55.7	52.9	45	
12	50.7	53.3	38		12	52.2	54.3	40		12	54.3	52.2	47		12	55.8	52.9	45	
14	50.8	54.0	39	−7.7	14	52.0	54.7	40	−5.9	14	53.9	52.2	47	−2.2	14	55.2	53.2	45	−2.3
16	51.1	53.5	39		16	51.9	56.1	42		16	53.3	51.6	48		16	55.2	53.1	45	
18	51.1	53.4	39		18	51.6	55.1	40		18	54.0	52.0	47		18	55.1	53.3	45	
20	51.7	53.3	39		20	51.9	55.6	41		20	54.1	52.1	47		20	54.8	53.8	45	
22	50.9	52.1	38		22	51.3	55.0	40		22	54.1	51.9	47		22	54.9	53.9	45	
24	52.0	53.0	39		24	51.5	55.2	40		24	54.1	51.7	47		24	55.0	53.8	45	
26	51.9	53.0	39		26	51.1	53.9	39		26	54.0	51.7	47		26	55.0	53.9	45	
28	51.6	52.2	38		28	50.8	53.9	39		28	54.2	52.1	47		28	55.1	53.9	45	
30	52.3	54.1	40	−7.2	30	50.1	53.2	38	−5.8	30	54.2	52.2	47	−2.2	30	55.4	53.2	45	−2.3
32	51.2	51.9	38		32	50.2	53.8	38		32	54.7	52.1	46		32	56.1	52.5	45	
34	52.7	53.3	40		34	50.2	53.7	38		34	55.0	52.2	46		34	56.1	52.8	45	
36	52.3	52.3	39		36	50.6	54.0	39		36	54.8	52.8	46		36	56.2	52.7	45	
38	50.3	51.2	36		38	50.3	54.1	39		38	54.3	52.9	46		38	56.2	52.7	45	
40	48.7	49.0	33		40	50.7	54.2	39		40	54.2	52.8	46		40	56.2	52.7	45	
42	52.6	53.8	40		42	51.7	55.0	40		42	54.0	52.7	46		42	56.1	52.9	45	
44	48.9	49.7	34	−7.0	44	52.1	55.2	41	−5.6	44	54.2	52.9	46	−2.2	44	56.0	53.0	45	−2.3
46	51.0	52.0	38		46	51.8	54.8	40		46	54.7	53.2	45		46	56.2	52.9	45	
48	52.2	53.9	40		48	52.4	55.0	41		48	54.9	53.1	45		48	56.1	52.9	45	
50	48.2	50.1	34		50	51.8	54.1	40		50	54.2	52.7	46		50	55.9	53.5	44	
52	50.1	51.7	37		52	52.2	54.5	40		52	54.1	52.1	47		52	55.8	53.9	44	
54	53.2	54.1	41		54	52.7	54.8	41		54	54.5	52.7	46		54	55.8	53.8	44	
56	51.7	52.2	38		56	52.3	56.1	42		56	54.9	53.2	45		56	55.9	53.8	44	
58	49.3	50.1	35		58	52.2	56.1	42		58	54.7	52.9	46		58	55.7	53.7	44	
					12 00	51.1	53.1	39	−5.3						16 00	55.1	53.2	45	−2.3

Correction to local mean time is + 3m 10s. 90° torsion = 12.'8.
Torsion head at 10h 00m, January 17, read 63° and at 13h 10m, January 18, read 60°.
Observer—R. R. T.

Correction to local mean time is + 2m 35s.
Torsion head at 11h 45m read 60° and at the end read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 20, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	39.3	41.6	22 38	-6.5
02	38.9	41.3	38	
04	38.9	41.2	38	
06	38.6	40.8	37	
08	38.4	40.5	37	
10	38.3	40.3	37	
12	38.4	40.4	37	
14	39.0	40.3	37	-6.2
16	38.9	40.3	37	
18	38.0	40.3	37	
20	39.0	42.5	39	
22	39.3	42.6	39	
24	39.3	42.3	39	
26	40.5	41.3	39	
28	40.3	41.0	39	
30	40.5	41.2	39	-5.7
32	40.5	41.1	39	
34	40.4	41.0	39	
36	40.5	41.0	39	
38	40.5	41.0	39	
40	40.3	40.6	38	
42	40.5	40.9	39	
44	40.6	41.1	39	-5.6
46	40.5	40.9	39	
48	40.2	40.6	38	
50	40.2	40.6	38	
52	40.2	40.6	38	
54	40.0	40.5	38	
56	40.1	40.3	38	
58	40.6	41.0	39	
1 00	41.0	41.3	40	-5.5
02	40.9	41.2	39	
04	40.5	40.9	39	
06	40.3	40.6	38	
08	40.3	40.6	38	
10	40.6	40.8	39	
12	40.3	40.6	38	
14	40.6	40.8	39	-5.4
16	40.7	40.8	39	
18	40.4	40.6	39	
20	40.4	40.6	39	
22	40.4	40.6	39	
24	40.4	40.6	39	
26	40.0	40.3	38	
28	40.1	40.3	38	
30	40.1	40.3	38	-5.2
32	40.1	40.3	38	
34	39.8	39.9	38	
36	39.6	39.6	37	
38	39.6	39.6	37	
40	39.6	39.6	37	
42	39.7	39.9	38	
44	39.6	39.7	37	-5.2
46	39.6	39.9	37	
48	39.8	40.0	38	
50	40.1	40.3	38	
52	40.3	40.3	38	
54	40.6	40.6	39	
56	41.2	41.3	40	
58	41.0	41.1	39	
2 00	40.6	40.8	22 39	-5.0
02	40.6	40.8	39	
04	40.4	40.6	39	
06	40.3	40.7	39	
08	40.3	40.7	39	
10	40.4	40.6	39	
12	40.1	40.4	38	
14	39.4	39.6	37	-5.0
16	39.3	39.3	37	
18	39.7	40.0	38	
20	30.6	40.3	38	
22	40.5	40.5	39	
24	40.5	40.6	39	
26	41.3	41.6	40	
28	42.0	42.0	41	
30	41.9	41.9	41	-4.9
32	41.8	41.9	41	
34	41.6	41.6	40	
36	41.0	41.2	40	
38	40.8	41.0	39	
40	41.0	41.0	39	
42	41.1	41.1	40	
44	40.8	40.8	39	-4.7
46	40.6	40.6	39	
48	41.1	41.1	40	
50	41.2	41.3	40	
52	40.5	40.5	39	
54	39.6	39.8	37	
56	39.7	39.7	37	
58	39.3	39.4	37	
3 00	39.6	39.6	37	-4.6
02	39.9	40.0	38	
04	40.0	40.0	38	
06	39.9	40.0	38	
08	40.3	40.6	38	
10	41.0	41.0	39	
12	40.2	40.3	38	
14	40.9	40.9	39	-4.5
16	41.0	41.0	39	
18	40.2	40.2	38	
20	39.6	39.6	37	
22	40.0	40.0	38	
24	39.4	39.6	37	
26	39.9	40.0	38	
28	40.5	40.5	39	
30	39.8	40.0	38	-4.5
32	40.1	40.1	38	
34	40.4	40.6	39	
36	40.3	40.3	38	
38	39.9	39.9	38	
40	39.7	39.7	37	
42	39.6	39.6	37	
44	39.6	39.7	37	-4.4
46	39.9	39.9	38	
48	40.2	40.3	38	
50	39.9	40.0	38	
52	39.9	40.0	38	
54	40.0	40.7	38	
56	41.3	41.6	40	
58	41.9	42.0	41	

Observer—W. J. P.

Wednesday, January 20, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	42.0	42.2	22 41	-4.3
02	40.7	40.7	39	
04	40.3	40.5	38	
06	40.8	40.8	39	
08	40.4	40.4	38	
10	40.2	40.2	38	
12	40.3	40.3	38	
14	39.7	39.9	38	-4.2
16	39.8	39.9	38	
18	40.6	40.9	39	
20	40.6	40.9	39	
22	41.1	41.3	40	
24	41.3	41.3	40	
26	41.6	41.6	40	
28	41.7	41.7	41	-4.2
30	41.6	41.6	40	
32	42.0	42.0	41	
34	41.8	41.8	41	
36	40.6	40.6	39	
38	41.0	41.0	39	
40	41.9	41.9	41	
42	40.6	40.8	39	
44	39.7	39.8	37	-4.1
46	39.9	40.0	38	
48	39.9	40.0	38	
50	40.8	41.0	39	
52	40.8	41.0	39	
54	39.6	39.8	37	
56	40.6	40.9	39	
58	40.9	40.9	39	
5 00	41.0	41.0	39	-4.0
02	41.3	41.3	40	
04	41.0	41.0	39	
06	40.8	40.8	39	
08	40.0	40.4	38	
10	40.3	40.5	38	
12	41.0	41.0	39	
14	40.5	40.5	30	-4.0
16	40.0	40.0	38	
18	40.4	40.7	39	
20	41.8	42.0	41	
22	40.8	41.0	39	
24	40.0	40.1	38	
26	39.2	39.6	37	
28	39.7	40.1	38	
30	40.9	40.9	39	-3.8
32	41.0	41.3	40	
34	41.5	41.6	40	
36	41.2	41.6	40	
38	40.3	40.5	38	
40	41.1	41.2	40	
42	40.2	40.3	38	
44	40.0	40.4	38	-3.8
46	40.8	41.0	39	
48	40.8	41.0	39	
50	40.8	41.0	39	
52	39.7	39.8	37	
54	40.3	40.7	39	
56	41.1	41.3	40	
58	40.7	40.9	39	
6 00	41.5	41.6	22 40	-3.8
02	42.0	42.2	41	
04	41.3	41.0	40	
06	40.6	40.9	39	
08	39.8	40.2	38	
10	40.3	40.6	38	
12	39.3	39.6	37	
14	39.4	39.8	37	-3.9
16	39.2	39.5	37	
18	40.4	40.6	39	
20	41.0	41.1	39	
22	41.2	41.4	40	
24	40.2	40.6	38	
26	40.9	41.0	39	
28	38.3	39.9	37	
30	37.1	37.6	34	-4.0
32	41.9	42.0	41	
34	43.3	44.1	44	
36	43.4	44.0	44	
38	40.0	40.9	38	
40	41.0	41.5	40	
42	39.9	40.7	38	
44	37.6	37.9	34	-4.0
46	37.4	37.8	34	
48	37.8	38.1	35	
50	39.0	39.6	37	
52	40.0	40.5	38	
54	40.5	40.9	39	
56	39.5	39.5	37	
58	40.0	40.3	38	
7 00	39.9	40.3	38	-4.0
02	40.6	41.5	39	
04	40.8	41.2	39	
06	39.9	40.1	38	
08	38.9	39.1	36	
10	39.7	40.0	38	
12	37.0	37.8	34	
14	37.0	37.1	33	-4.0
16	37.5	38.1	34	
18	40.0	40.8	38	
20	42.0	42.3	41	
22	38.0	38.2	35	
24	39.0	39.8	37	
26	39.3	40.1	37	
28	40.5	41.2	39	
30	39.6	40.3	38	-4.0
32	40.7	41.0	39	
34	38.8	39.6	37	
36	39.0	39.7	37	
38	38.6	39.3	36	
40	38.4	39.0	36	
42	38.0	38.6	35	
44	39.5	39.8	37	-4.0
46	40.5	41.3	39	
48	37.8	38.8	35	
50	38.8	39.3	36	
52	39.5	40.4	38	
54	38.8	39.7	37	
56	37.6	39.0	35	
58	42.0	43.1	42	

Observers—W. J. P. and J. V., who alternated from 7h 50m to 7h 56m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 20, 1904					Magnet scale erect					Wednesday, January 20, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	40.7	41.2	22 39	-3.9	10 00	39.3	40.3	22 38	-3.3	12 00	39.2	39.2	22 37	-3.1	14 00	35.4	36.0	22 31	-3.0
02	40.0	40.2	38		02	38.9	40.1	37		02	39.3	39.7	37		02	36.0	36.0	32	
04	37.9	38.7	35		04	39.0	40.3	37		04	40.0	40.8	38		04	36.2	36.2	32	
06	38.4	38.9	36		06	39.0	40.1	37		06	39.8	40.1	38		06	36.5	36.5	32	
08	37.5	37.8	34		08	38.9	40.0	37		08	39.8	39.8	38		08	36.1	36.1	32	
10	38.0	38.5	35		10	38.8	39.4	36		10	40.2	40.2	38		10	37.1*a*		33	
12	39.0	39.4	37		12	38.2	39.2	36		12	40.2	40.2	38		12	37.1	37.8	34	
14	39.0	40.0	37	-3.8	14	38.2	39.6	36	-3.3	14	40.2	40.3	38	-3.0	14	36.3	37.0	32	-3.0
16	43.5	44.8	44		16	39.0	40.2	37		16	39.8	40.1	38		16	36.6	37.0	33	
18	38.8	38.9	36		18	39.1	40.2	37		18	39.9	40.2	38		18	36.9	37.2	33	
20	31.5	32.0	25		20	38.9	40.0	37		20	39.9	40.1	38		20	36.8	37.0	33	
22	40.3	41.8	39		22	38.8	40.0	37		22	39.4	39.9	37		22	37.0	37.6	34	
24	40.3	41.0	39		24	39.2	40.0	37		24	39.3	40.0	37		24	35.9	36.2	32	
26	37.4	38.0	34		26	39.0	40.0	37		26	39.5	40.0	37		26	36.0	36.6	32	
28	38.2	39.0	36		28	39.5	40.4	38		28	39.4	39.9	37		28	37.1	37.6	34	
30	40.0	40.5	38	-3.6	30	39.5	40.3	38	-3.5	30	39.0	39.7	37	-3.0	30	37.0	37.5	33	-2.9
32	38.4	39.0	36		32	39.0	40.0	37		32	39.4	40.7	38		32	35.6	36.0	31	
34	37.2	37.9	34		34	39.5	40.3	38		34	39.2	39.7	37		34	35.9	36.3	32	
36	38.0	38.8	35		36	39.0	40.0	37		36	39.4	39.4	37		36	37.0	37.4	33	
38	38.6	39.2	36		38	38.8	39.6	37		38	39.5	39.5	37		38	36.7	37.2	33	
40	39.6	40.8	38		40	38.1	39.1	36		40	39.1	39.2	37		40	35.6	36.2	31	
42	39.2	40.0	37		42	38.7	39.7	37		42	39.2	39.4	37		42	36.1	36.8	32	
44	38.4	39.9	36	-3.7	44	38.3	39.7	36	-3.4	44	39.2	39.2	37	-3.0	44	36.9	37.4	33	-2.7
46	39.2	40.2	37		46	39.4	41.6	39		46	39.2	39.2	37		46	37.0	37.5	33	
48	38.8	39.2	36		48	39.3	40.3	38		48	39.2	39.4	37		48	37.0	37.6	34	
50	38.0	38.6	35		50	38.7	39.8	37		50	39.0	39.2	37		50	36.8	37.3	33	
52	38.8	39.3	36		52	39.2	40.3	37		52	39.1	39.1	37		52	37.7	38.0	34	
54	38.4	39.1	36		54	38.8	39.7	37		54	39.3	39.3	37		54	36.3	36.7	32	
56	39.8	40.7	38		56	39.8	40.4	37		56	38.5	39.0	36		56	36.2	36.7	32	
58	38.0	39.2	36		58	39.0	39.8	37		58	38.3	39.0	36		58	36.4	36.7	32	
9 00	37.9	38.1	35	-3.7	11 00	39.0	39.5	37	-3.4	13 00	38.2	38.9	36	-2.9	15 00	36.5	37.0	33	-2.5
02	39.4	39.8	37		02	39.1	39.6	37		02	39.0	39.9	37		02	36.2	36.7	32	
04	38.3	38.3	35		04	39.4	39.8	37		04	38.7	39.3	36		04	35.4	35.8	31	
06	38.4*a*		35		06	39.1	39.6	37		06	39.2	40.0	37		06	37.3	37.3	34	
08	39.7	40.0	38		08	36.9	39.3	35		08	39.0	39.8	37		08	36.0*a*		32	
10	39.0	39.8	37		10	38.1	39.3	36		10	38.5	39.0	36		10	39.5*a*		37	
12	37.9	38.2	35		12	39.2	39.7	37		12	38.6	39.1	36		12	38.6	38.8	36	
14	37.9	38.2	35	-3.8	14	40.0	40.4	38	-3.3	14	38.5	39.0	36	-2.9	14	39.0	39.0	36	-2.5
16	39.0	39.7	37		16	38.7	39.3	36		16	38.7	39.2	36		16	39.2	39.2	37	
18	39.0	40.0	37		18	38.6	38.8	36		18	38.5	39.0	36		18	39.1	39.3	37	
20	38.4	39.1	36		20	38.8	39.3	36		20	38.2*a*		35		20	39.2	39.7	37	
22	38.4	39.6	36		22	39.0	39.5	37		22	37.8	38.2	35		22	35.0	35.8	31	
24	37.9	38.8	35		24	39.6	40.0	38		24	39.2	40.0	37		24	35.0	35.3	30	
26	37.8	39.0	35		26	39.8	39.9	38		26	38.8	39.5	37		26	34.4	35.0	29	
28	39.0	40.1	37		28	39.7	40.0	38		28	37.3	37.9	34		28	35.3	36.0	31	
30	38.5	39.8	37	-3.8	30	39.8	39.8	38	-3.3	30	38.0	38.4	35	-3.0	30	35.5	36.0	31	-2.4
32	39.3	40.4	38		32	39.8	40.1	38		32	38.0	38.8	35		32	34.6	35.1	30	
34	39.0	40.1	37		34	39.5	39.8	37		34	37.5	38.1	34		34	34.2	34.7	29	
36	38.4	39.9	36		36	39.5	39.5	37		36	37.0	37.6	34		36	35.0	35.8	31	
38	37.8	39.8	36		38	39.5	39.5	37		38	37.9	38.0	34		38	34.9	35.9	31	
40	38.7	40.0	37		40	39.0	39.7	37		40	37.4	38.0	34		40	34.9	35.7	30	
42	39.3	40.8	38		42	39.6	39.8	37		42	36.7	37.0	33		42	34.8	35.4	30	
44	39.0	40.4	37	-3.6	44	39.5	39.9	37	-3.2	44	35.8	36.5	32	-3.0	44	35.0	35.5	30	-2.4
46	39.8	40.7	38		46	39.0	39.3	37		46	35.8	36.3	32		46	35.0	35.7	30	
48	38.2	39.2	36		48	39.1	39.4	37		48	35.5	36.1	31		48	35.3	36.0	31.	
50	37.9	39.0	35		50	39.2	39.7	37		50	34.9	35.5	30		50	35.0	35.8	31	
52	38.3	39.5	36		52	39.5	40.1	38		52	35.7	36.5	32		52	35.5	36.0	31	
54	38.0	39.2	36		54	39.0	39.2	37		54	34.8	35.8	31		54	35.1	36.8	31	
56	37.1	38.1	34		56	39.4	40.0	37		56	35.0	35.5	30		56	35.1	36.0	31	
58	39.0	40.0	37		58	39.8	39.8	38		58	35.0	35.5	30		58	35.9	36.9	32	

Observer—J. V.
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Observers—J. V. and R. R. T., who alternated from 15h 52m to 16h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 20, 1904					Magnet scale erect
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	35.5	36.0	22 31	−2.2
02	34.8	35.9	30	
04	34.8	36.0	31	
06	34.3	35.3	30	
08	35.0	35.2	30	
10	35.2	35.8	31	
12	35.4	35.9	31	
14	35.2	35.7	31	−1.9
16	36.0	36.6	32	
18	36.4	37.0	33	
20	35.2	35.7	31	
22	36.2	36.4	32	
24	36.0	36.8	32	
26	34.9	35.8	31	
28	35.2	36.1	31	
30	34.9	35.8	30	−1.8
32	34.8	35.0	30	
34	35.2	35.2	30	
36	35.8	36.1	31	
38	36.1	36.9	32	
40	36.1	36.9	32	
42	35.8	36.8	32	
44	35.0	36.8	31	−1.7
46	34.9	37.2	31	
48	35.3	37.8	32	
50	35.6	37.7	32	
52	35.0	36.9	31	
54	34.9	35.3	30	
56	34.8	35.9	30	
58	34.7	35.9	30	
17 00	34.7	36.1	31	−1.7
02	33.9	35.9	30	
04	33.9	35.9	30	
06	34.1	36.3	30	
08	33.8	35.9	30	
10	32.8	35.3	28	
12	33.1	35.8	29	
14	32.8	35.0	28	−1.7
16	32.2	35.1	28	
18	32.6	35.0	28	
20	32.5	35.0	28	
22	33.0	35.1	28	
24	33.2	35.0	29	
26	33.2	34.7	28	
28	32.7	34.2	27	
30	32.6	34.2	27	−1.7
32	33.2	34.8	28	
34	34.2	35.8	30	
36	34.6	36.3	31	
38	34.7	36.6	31	
40	35.0	36.8	31	
42	34.7	36.3	31	
44	33.9	35.6	29	−1.7
46	34.1	35.8	30	
48	34.2	36.1	30	
50	35.3	36.9	32	
52	34.7	36.2	31	
54	34.2	36.5	30	
56	33.8	36.1	30	
58	33.8	35.7	30	
18 00	34.0	35.5	22 30	−1.6
02	34.1	35.6	30	
04	34.1	35.8	30	
06	34.9	36.2	31	
08	35.8	37.0	32	
10	36.8	37.3	33	
12	36.6	37.0	33	
14	36.9	37.2	33	−1.6
16	36.0	37.2	32	
18	36.1	37.7	33	
20	35.8	36.8	32	
22	35.2	37.0	32	
24	35.8	37.5	32	
26	35.7	37.3	32	
28	35.2	37.0	32	
30	34.9	36.9	31	−1.6
32	36.3	38.9	34	
34	33.9	36.2	30	
36	33.6	36.0	30	
38	33.9	35.9	30	
40	34.1	36.9	31	
42	37.5	39.8	36	
44	33.5	35.5	29	−1.5
46	33.0	34.6	28	
48	32.2	33.9	27	
50	32.0	33.3	26	
52	31.2	32.9	25	
54	31.5	32.8	26	
56	31.0	33.0	25	
58	30.9	32.3	25	
19 00	30.7	32.2	24	−1.4
02	29.9	32.1	24	
04	29.3	31.9	23	
06	28.7	31.6	22	
08	28.0	31.3	22	
10	28.0	31.0	21	
12	27.8	30.4	21	
14	27.6	29.7	20	−1.3
16	27.7	29.5	20	
18	28.7	30.2	21	
20	28.7	30.3	21	
22	28.1	29.9	21	
24	28.2	29.2	20	
26	29.1	29.1	21	
28	27.9	28.0	19	
30	29.7	30.1	22	−1.2
32	30.0	30.8	23	
34	29.1	30.1	22	
36	27.9	28.9	20	
38	27.0	28.0	18	
40	26.9	27.9	18	
42	26.8	26.8	17	
44	25.9	26.5	16	−1.2
46	22.8	24.2	12	
48	22.8	24.0	12	
50	22.9	24.1	12	
52	25.0	26.8	16	
54	24.7	25.8	15	
56	24.1	26.0	14	
58	27.0	28.1	18	

Observer—R. R. T.

Wednesday, January 20, 1904					Magnet scale erect
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	26.2	27.8	22 17	−1.3
02	27.0	28.1	18	
04	27.2	28.3	18	
06	26.1	27.0	17	
08	25.5	26.7	16	
10	24.1	25.4	14	
12	23.8	25.5	14	
14	24.5	26.2	15	−1.4
16	23.7	25.2	13	
18	26.7	28.1	18	
20	28.2	29.1	20	
22	29.1	30.0	21	
24	30.9	32.1	24	
26	30.1	30.8	23	
28	29.7	30.2	22	
30	29.9	30.9	23	−1.6
32	30.6	31.7	24	
34	33.8	34.3	28	
36	33.7	34.3	28	
38	33.1	34.5	28	
40	33.3	34.3	28	
42	33.5	35.5	29	
44	33.2	33.9	28	−1.8
46	32.8	34.1	27	
48	32.1	33.7	27	
50	33.1	34.6	28	
52	33.6	34.3	28	
54	34.1	34.9	29	
56	33.9	35.2	29	
58	32.9	34.8	28	
21 00	32.1	34.7	27	−1.9
02	32.2	35.2	28	
04	32.6	35.3	28	
06	32.3	35.4	28	
08	33.0	35.0	28	
10	33.1	34.8	28	
12	33.0	34.3	28	
14	33.9	34.9	29	−2.0
16	34.0	35.7	30	
18	34.2	35.9	30	
20	32.1	34.2	27	
22	32.1	34.4	27	
24	31.1	34.0	26	
26	31.8	34.6	27	
28	31.1	34.4	26	
30	30.1	33.8	25	−2.1
32	31.8	34.9	27	
34	31.8	33.8	27	
36	28.8	31.2	22	
38	30.0	31.3	23	
40	25.2	26.8	16	
42	26.0	27.3	17	
44	27.1	28.2	18	−2.2
46	27.4	28.2	19	
48	27.1	28.1	18	
50	29.1	29.8	21	
52	28.7	29.2	20	
54	29.7	30.3	22	
56	29.2	30.2	22	
58	31.0	32.4	25	
22 00	30.1	31.0	22 23	−2.3
02	28.1	30.7	31	
04	27.1	29.7	20	
06	31.3	33.9	26	
08	34.1	36.4	30	
10	30.7	32.1	24	
12	34.3	36.3	30	
14	38.9	39.9	37	−2.6
16	34.2	35.8	30	
18	35.1	36.8	31	
20	30.7	33.2	25	
22	34.1	35.8	30	
24	33.8	36.0	30	
26	34.7	36.1	31	
28	34.3	35.9	30	
30	33.6	36.1	30	−2.8
32	34.4	37.0	31	
34	34.3	37.0	31	
36	33.2	33.8	28	
38	33.2	35.8	29	
40	32.2	33.8	27	
42	32.2	34.4	27	
44	35.1	37.8	32	−2.8
46	34.7	36.8	31	
48	34.8	37.1	31	
50	37.5	39.0	35	
52	35.9	37.2	32	
54	36.9	38.7	34	
56	35.1	37.9	32	
58	34.1	36.5	30	
23 00	32.5	35.4	28	−2.8
02	36.1	38.7	34	
04	38.0	40.1	36	
06	41.9	43.8	42	
08	41.2	43.9	42	
10	40.3	42.9	40	
12	38.0	40.9	37	
14	37.1	39.2	35	−3.0
16	36.9	39.5	35	
18	37.8	40.2	36	
20	37.9	40.9	37	
22	41.0	43.2	41	
24	41.2	43.3	41	
26	38.3	40.3	37	
28	39.9	41.2	39	
30	43.1	44.5	44	−3.0
32	39.0	40.8	38	
34	38.5	40.1	37	
36	38.0	39.8	36	
38	37.8	39.6	36	
40	36.2	38.0	33	
42	37.5	40.0	36	
44	37.8	39.9	36	−3.0
46	39.9	42.0	39	
48	40.2	41.9	39	
50	36.6	41.9	37	
52	36.9	40.2	36	
54	35.8	39.9	34	
56	36.2	40.8	36	
58	36.1	41.2	36	
24 00	37.1	41.9	37	−2.9

Correction to local mean time is — 2s.

Torsion head at 0h 00m read 40° and at the end read the same.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, January 21, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	48.9	44.8	22 31	-3.3
02	50.4	45.7	30	
04	47.8	43.1	34	
06	48.1	44.2	32	
08	47.3	44.3	33	
10	46.7	44.2	34	
12	45.3	43.2	36	
14	45.0	42.1	37	-3.3
16	46.9	44.7	33	
18	47.2	44.5	33	
20	46.0	43.5	35	
22	43.7	41.6	38	
24	40.5	39.0	43	
26	39.9	38.8	43	
28	39.5	38.6	44	
30	39.8	38.9	43	-3.0
32	40.0	39.3	43	
34	40.8	40.0	42	
36	40.9	40.2	41	
38	41.3	40.7	41	
40	41.9	40.9	40	
42	41.9	41.1	40	
44	42.7	41.9	38	-3.0
46	41.8	40.8	40	
48	41.6	41.0	40	
50	41.7	40.2	41	
52	43.3	41.9	38	
54	43.5	42.6	38	
56	43.2	42.6	38	
58	44.0	42.7	37	
17 00	42.9	41.2	39	-2.8
02	43.1	42.0	38	
04	43.3	43.1	37	
06	44.2	44.2	36	
08	44.8	43.8	35	
10	45.9	45.0	34	
12	46.7	45.2	33	
14	46.0	45.5	33	-2.6
16	47.9	47.2	30	
18	49.0	48.1	29	
20	49.1	48.2	29	
22	47.8	47.2	30	
24	47.9	47.5	30	
26	48.4	48.0	29	
28	47.9	47.4	30	
30	47.2	46.9	31	-2.5
32	47.1	46.0	32	
34	47.3	46.0	32	
36	45.8	44.3	34	
38	45.8	44.2	34	
40	46.0	44.9	34	
42	44.9	43.3	36	
44	44.8	43.3	36	-2.4
46	44.8	42.8	36	
48	44.2	42.9	37	
50	43.2	41.8	38	
52	42.1	40.4	40	
54	42.0	40.2	40	
56	41.8	39.8	41	
58	42.3	40.9	40	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	41.5	40.7	22 40	-2.3
02	39.9	38.8	43	
04	40.1	38.9	43	
06	40.9	39.9	42	
08	41.9	41.1	40	
10	39.9	39.0	43	
12	39.9	39.1	43	
14	40.1	39.2	43	-2.3
16	42.9	42.2	38	
18	45.7	44.8	34	
20	45.2	44.0	35	
22	44.1	43.7	36	
24	44.1	42.4	37	
26	44.8	44.0	35	
28	42.6	41.2	39	
30	43.1	42.2	38	-2.3
32	42.9	42.3	38	
34	43.0	41.9	38	
36	43.0	41.9	38	
38	44.0	42.5	37	
40	43.0	41.0	39	
42	43.7	41.5	38	
44	43.4	42.3	38	-2.4
46	42.9	42.0	38	
48	43.1	41.9	38	
50	43.2	41.8	38	
52	43.8	42.9	37	
54	42.6	41.3	39	
56	40.8	40.0	42	
58	44.3	43.7	36	
19 00	45.7	44.1	35	-2.6
02	43.7	43.1	37	
04	42.7	42.1	38	
06	43.8	42.7	37	
08	43.7	42.9	37	
10	42.9	42.3	38	
12	44.4	43.1	36	
14	44.0	42.8	37	-2.8
16	44.9	44.0	35	
18	43.9	42.3	37	
20	43.5	41.4	38	
22	42.7	41.1	39	
24	43.7	41.7	38	
26	44.9	43.7	35	
28	44.1	42.9	37	
30	43.7	42.2	38	-3.0
32	43.7	41.9	38	
34	42.9	42.0	38	
36	42.0	41.1	40	
38	42.2	41.2	40	
40	43.0	42.1	38	
42	43.8	42.8	37	
44	44.1	43.1	37	-3.0
46	44.0	43.8	36	
48	45.1	42.5	36	
50	43.9	42.9	37	
52	44.5	42.8	37	
54	45.0	43.4	36	
56	45.0	43.3	36	
58	44.9	43.1	36	
20 00	45.7	43.0	35	-3.0

Correction to local mean time is — 44s.
Torsion head at 15h 10m read 34° and at the end read the same.
Observer—R. R. T.

Saturday, January 23, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	36.9	38.1	22 32	-16.2
02	35.8	37.6	31	
04	35.9	37.2	31	
06	36.3	37.6	31	
08	36.8	38.0	32	
10	37.2	38.7	33	
12	37.8	39.1	34	
14	38.3	39.8	35	-16.0
16	38.0	39.8	34	
18	38.9	39.7	35	
20	39.2	40.1	36	
22	39.4	40.2	36	
24	39.2	40.0	36	
26	39.0	39.8	35	
28	38.8	39.3	35	
30	38.1	39.1	34	-15.3
32	38.2	39.0	34	
34	38.3	39.1	34	
36	38.4	38.5	34	
38	38.0	38.5	34	
40	37.7	38.3	33	
42	38.0	38.9	34	
44	38.6	38.6	34	-15.0
46	37.8	39.3	34	
48	37.5	39.8	34	
50	37.3	39.4	34	
52	37.8	39.9	34	
54	38.2	40.3	35	
56	39.3	41.2	37	
58	40.3	41.8	38	
21 00	40.3	41.1	37	-14.7
02	40.1	41.7	38	
04	38.7	40.4	36	
06	38.0	39.9	35	
08	37.9	39.9	35	
10	38.0	40.2	35	
12	38.6	40.9	36	
14	38.2	41.1	36	-14.4
16	38.3	40.6	35	
18	38.9	40.4	36	
20	39.9	40.9	37	
22	40.3	42.0	38	
24	41.0	42.0	39	
26	40.2	42.1	38	
28	40.3	42.0	38	
30	40.5	42.1	38	-14.0
32	37.3	39.2	34	
34	35.1	37.2	30	
36.4	30.9	34.8	25	
38	24.1	31.4	17	
40	27.8	37.8	25	
42	26.2	30.7	18	
44	29.9	38.1	27	-14.0
46	31.9	37.9	28	
48	26.1	34.1	21	
50	32.8	39.3	30	
52	29.0	36.1	25	
54	27.8	36.0	24	
56	32.2	40.2	30	
58	36.3	45.7	38	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
22 00	35.3	43.1	22 35	-13.9
02	42.7	47.8	44	
04	41.0	49.8	45	
06	43.0	52.8	22 49	
08	55.1	62.4	23 06	
10	42.2	53.8	22 49	
12*	38.7	61.3	23 44	
14	28.3	42.6	21	-13.9
16	28.6	47.3	25	
18	22.8	45.9	19	
20	34.8	44.1	27	
22	23.0	28.1	06	
24	41.9	44.8	33	
26	30.0	33.0	15	
28	21.9	25.3	23 02	
30	9.7	10.3	22 41	-13.8
32	24.3	24.8	23 04	
34	10.9	11.8	22 43	
36*5	52.2	59.9	40	
38	55.6	61.3	43	
40	53.8	58.8	40	
42	50.8	54.9	35	
44	50.7	55.1	35	-13.7
46	50.8	54.8	35	
48	48.5	51.1	30	
50	56.0	62.1	22 44	
52	73.3	76.1	23 09	
54*	52.2	60.8	31	
56	35.3	48.1	23 08	
58	23.2	36.6	22 50	
23 00	31.1	47.0	23 04	-13.4
02	55.3	72.1	42	
04	31.2	46.2	03	
06	45.1	58.1	24	
08	36.1	47.1	23 08	
10	24.8	36.5	22 50	
12	39.2	49.4	23 12	
14	42.1	50.0	23 15	-13.3
16	31.8	38.0	22 57	
18	11.5	19.9	27	
20	12.2	19.0	27	
22	16.8	21.4	22 33	
24	38.0	39.8	23 04	
26	39.1	40.1	05	
28	57.1	61.2	35	
30	46.1	47.5	16	-13.4
32	44.8	47.1	15	
34	40.3	41.3	23 07	
36	32.5	32.8	22 54	
38	24.9	26.0	42	
40	22.3	23.2	38	
42	23.1	23.9	39	
44	20.8	21.1	35	-13.3
46	20.7	21.9	36	
48	25.9	27.1	44	
50	30.0	31.0	50	
52	33.4	34.2	55	
54	30.7	31.9	52	
56	23.2*b*		39	
58	22.0	23.0	38	

Correction to local mean time is — 27s. 90° torsion = 14′.
Torsion head at 19h 20m read 34° and at 9h 40m on the 24th read 28°.
Observers—R. R. T. and J. V., who alternated from 23h 50m to 24h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, January 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00.5	46.8	44.9	22 41	
02*	41.5	40.7	48	
04	35.2	35.0	22 58	
06	Lost			
08	34.8	30.6	23 02	
10	30.1	27.0	23 08	
12	36.2	34.2	22 58	
14	41.1	40.9	49	-11.7
16	44.8	43.9	43	
18	46.1	45.6	41	
20	45.2	44.3	43	
22	46.0	45.7	41	
24	48.1	47.9	38	
26	45.8	45.0	42	
28	45.0	45.0	42	
30	40.5	40.0	50	-11.8
32	42.4	41.8	47	
34	45.3	45.0	42	
36	46.1	45.1	41	
38	46.7	45.3	41	
40	47.6	45.2	40	
42	44.2	44.0	44	
44	42.8	41.6	47	-11.8
46	43.8	42.8	45	
48	45.5	44.2	43	
50	44.9	44.0	43	
52	43.7	43.0	45	
54	44.1	43.8	44	
56	44.0	42.9	45	
58	42.1	41.0	48	
1 00	42.0	41.3	48	-12.6
02	43.0	42.2	46	
04	42.5	41.9	47	
06	39.0*b*		52	
08	37.9	37.5	54	
10	40.0	39.5	51	
12	41.0	41.0	49	
14	42.6	42.0	46	-12.1
16	43.4	42.8	45	
18	43.7	42.8	45	
20	42.9	42.1	46	
22	42.2	41.6	47	
24	43.0	42.3	46	
26	41.1	40.9	49	
28	39.9	39.5	51	
30	41.2	40.5	49	-12.1
32	42.8	42.0	46	
34	39.9	39.0	51	
36	40.6	40.0	50	
38	40.9	40.0	50	
40	41.0	40.0	49	
42	40.1	39.1	51	
44	39.8	39.0	51	-12.0
46	38.9	38.9	52	
48	40.3	39.2	51	
50	40.8	40.2	49	
52	40.0	39.3	51	
54	40.2	39.3	51	
56	40.5	39.6	50	
58	39.9	38.8	51	
2 00	39.0	37.8	22 53	-11.6
02	37.8	36.7	55	
04	37.7	36.8	55	
06	37.5	36.3	55	
08	38.3	37.2	54	
10	38.9	38.0	53	
12	38.9	38.3	52	
14	39.0	38.6	52	-11.2
16	38.9	38.0	53	
18	36.8	36.6	55	
20	38.2	38.0	53	
22	39.0	39.0	52	
24	40.0	39.8	50	
26	40.7	40.2	50	
28	41.5	40.8	48	
30	41.0	40.2	49	-11.0
32	41.0	40.5	49	
34	41.5	40.8	48	
36	42.7	42.0	46	
38	42.9	42.3	46	
40	42.5	42.0	47	
42	41.8	41.4	48	
44	42.4	42.0	47	-11.0
46	43.0	43.0	46	
48	42.5	42.5	46	
50	41.5	41.5	48	
52	40.8	40.8	49	
54	40.8	40.8	49	
56	40.8	40.8	49	
58	40.2	40.0	50	
3 00	39.0	38.9	52	-10.6
02	38.5	38.2	53	
04	39.2	38.8	52	
06	39.9	39.2	51	
08	40.0	39.0	51	
10	39.8	36.8	51	
12	39.8	39.0	51	
14	39.7	38.7	51	
16	39.9	38.8	51	
18	39.0	38.9	52	
20	39.9	38.8	51	
22	39.8	38.8	51	
24	39.9	38.7	51	
26	39.0	37.8	53	
28	39.2	38.2	52	
30	39.2	37.8	52	-9.5
32	40.0	38.9	51	
34	40.7	39.7	50	
36	40.3	39.3	50	
38	41.0	40.0	49	
40	40.5	39.5	50	
42	39.6	38.7	52	
44	38.9	38.0	53	-9.3
46	38.9	37.9	53	
48	39.0	37.9	53	
50	38.7	37.7	53	
52	38.4	37.7	53	
54	39.6	39.0	51	
56	39.2	38.7	52	
58	37.5	37.2	54	

Sunday, January 24, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	Lost			
02.6	70.0	71.0	22 55	-8.6
04	70.8	71.2	56	
06*	40.1	44.0	54	
08	42.1	46.0	57	
10	42.5	45.9	57	
12	42.7	45.0	56	
14	44.0	46.0	58	-8.2
16	44.5	46.1	59	
18	44.8	46.1	59	
20	44.5	45.0	58	
22	44.5	45.9	58	
24	45.0	46.2	22 59	
26	45.3	46.4	23 00	
28	47.1	48.0	02	
30	48.3	49.1	04	-8.2
32	50.0	51.1	07	
34	54.0	54.7	13	
36	53.5	54.0	12	
38	50.9	51.2	08	
40	47.8	47.8	23 03	
42	44.0	44.8	22 57	
44	40.2	41.3	51	-8.2
46	36.8	37.0	45	
48	36.0	36.8	45	
50	35.8	36.4	44	
52	37.7	38.2	47	
54	39.0	40.0	50	
56	44.7	44.7	22 58	
58	48.3*a*		23 04	
5 00	49.2	49.9	05	-8.2
02	49.5	50.0	06	
04	50.0	52.2	08	
06	53.0	53.5	11	
08	52.3	52.9	10	
10	50.2	51.1	07	
12	47.9	48.8	23 03	
14	45.1	46.0	22 59	-8.2
16	43.5	44.2	56	
18	42.1	42.9	54	
20	41.8	42.2	54	
22	43.6	44.5	22 57	
24	46.2	47.1	23 01	
26	45.8	46.0	23 00	
28	44.1	44.8	22 57	
30	44.9	45.2	22 58	-8.1
32	45.8	46.3	23 00	
34	45.1	45.5	22 59	
36	44.0	44.8	57	
38	43.6	44.5	57	
40	42.0	42.6	54	
42	40.6	41.2	52	
44	39.6	40.0	50	-8.1
46	39.8	40.0	50	
48	39.1	39.5	49	
50	38.7	39.0	48	
52	37.7	38.0	47	
54	37.4	37.0	46	
56	39.0	39.1	49	
58	40.4	40.6	51	
6 00	43.3	43.6	22 56	-8.0
02	40.2	41.8	52	
04	36.9	37.8	46	
06	38.5	39.0	48	
08	40.0	40.3	50	
10	42.0	43.0	54	
12	42.0	42.6	54	
14	41.9	42.3	54	-8.0
16	43.8	44.0	56	
18	40.7	41.0	52	
20	39.3	40.0	50	
22	40.0	40.0	50	
24	42.0	42.1	54	
26	43.0	43.0	55	
28	42.3	42.3	54	
30	41.0*b*		52	-7.9
32	39.5*a*		50	
34	42.3	42.3	54	
36	41.7*b*		53	
38	39.1*b*		49	
40	35.7	35.7	44	
42.5	37.5	38.5	47	
44	39.3	40.1	50	-7.7
46	40.0	41.0	51	
48	40.0	39.0	50	
50	35.4	36.6	44	
52	35.2	35.7	43	
54	38.0	39.0	48	
56	39.1	40.0	50	
58	36.8	37.0	45	
7 00	36.3	37.0	45	-7.5
02	39.0	39.2	49	
04	40.7	41.1	52	
06	41.5	42.0	53	
08	40.0	40.8	51	
10	39.0	39.4	49	
12	39.0	39.3	49	
14	39.0	39.5	49	-7.3
16	41.0	41.4	52	
18	42.0	42.9	54	
20	40.4	40.8	51	
22	36.0	36.1	44	
24	34.6	35.0	42	
26	33.9	34.0	41	
28	37.8	39.1	48	
30	39.5	39.7	50	-7.2
32	33.6	34.4	41	
34	35.7	36.0	44	
36	35.0	36.3	43	
38	42.0*b*		54	
40	34.5*b*		42	
42	31.2	31.2	36	
44	30.0	30.1	35	
46	29.2	29.9	34	
48	30.2	31.0	36	-7.1
50	29.3*b*		34	
52	28.8	29.2	33	
54	30.4	31.0	36	
56	32.2	33.0	39	
58	32.2	32.9	39	
8 00	33.0	33.5	40	-7.0

Observer—J. V.

Correction to local mean time is — 33s. 90° torsion = 14′.
Torsion head at 19h 25m on 23d read 34° and at 9h 40m read 28°.
Observers—J. V. (W. J. P. axis observations).

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, January 25, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	48.1	47.8	22 48	-12.2
02	49.9	48.0	46	
04	56.9	55.1	35	
06	55.9	55.1	36	
08	53.8	52.8	39	
10	49.7	48.9	46	
12	49.2	48.2	47	
14	52.5	51.8	41	-12.0
16	55.1	53.9	38	
18	55.0	54.0	38	
20	53.9	53.0	39	
22	52.2	51.8	42	
24	51.1	50.9	43	
26	56.1	54.8	36	
28	58.0	56.0	34	
30	55.3	52.9	38	-11.8
32	55.7	53.9	37	
34	56.2	54.8	36	
36	55.9	54.0	37	
38	54.8	52.8	39	
40	54.9	53.0	38	
42	55.0	53.7	38	
44	53.9	52.9	39	-11.5
46	59.7	55.9	32	
48	64.5	63.1	23	
50	56.0	53.8	37	
52	57.4	56.0	34	
54	57.0	55.0	35	
56	52.9	50.3	42	
58	51.3	49.0	45	
9 00	56.9	55.2	35	-11.2
02	59.7	58.1	31	
04	55.8	55.1	36	
06	55.1	54.1	37	
08	53.1	52.4	40	
10	53.9	52.9	39	
12	54.6	53.9	38	
14	53.8	53.0	39	-10.9
16	54.1	52.5	39	
18	56.0	54.1	37	
20	55.2	53.3	38	
22	53.6	52.0	40	
24	54.9	53.2	38	
26	53.2	51.8	41	
28	54.2	52.6	39	
30	54.2	53.1	39	-10.5
32	54.3	54.1	38	
34	54.3	54.3	38	
36	54.1	53.7	38	
38	55.8	54.7	36	
40	54.7	53.9	38	
42	55.4	54.7	37	
44	52.9	52.0	41	-10.3
46	55.8	54.0	37	
48	53.2	52.3	40	
50	54.0	53.0	39	
52	54.3	53.6	38	
54	55.9	55.2	36	
56	54.3	53.8	38	
58	55.0	54.2	38	
10 00	56.6	56.1	22 35	-10.0
02	56.0	53.7	37	
04	59.8	58.1	31	
06	55.9	53.4	37	
08	58.1	55.8	34	
10	53.8	51.7	40	
12	57.3	54.1	36	
14	57.1	54.6	36	-10.0
16	58.0	54.2	35	
18	59.7	56.7	32	
20	58.1	56.1	34	
22	56.9	55.0	35	
24	57.7	55.9	34	
26	57.2	55.5	35	
28	58.2	56.8	33	
30	58.0	56.1	34	-9.8
32	57.9	57.0	34	
34	57.0	56.2	34	
36	58.0	57.1	33	
38	57.8	56.7	33	
40	56.3	55.3	36	
42	56.9	55.7	35	
44	56.9	55.7	35	-9.7
46	56.8	55.1	35	
48	56.2	54.6	36	
50	57.0	54.8	35	
52	56.2	54.0	37	
54	56.5	54.2	36	
56	55.9	54.1	37	
58	55.9	53.8	37	
11 00	56.9	55.2	35	-9.4
02	56.3	54.8	36	
04	57.3	55.8	34	
06	59.0	57.7	32	
08	57.8	55.7	34	
10	57.0	55.0	35	
12	56.1	54.2	37	
14.4	68.3	66.7	17	-9.2
16	68.6	67.1	17	
18	58.1	57.4	33	
20	59.2	58.9	30	
22	60.2	59.0	30	
24	61.8	60.3	27	
26	60.0	58.1	30	
28	59.9	57.9	31	
30	60.0	58.1	30	-9.2
32.3	59.8	56.2	32	
34.4	59.7	58.0	31	
36	60.5	57.7	30	
38	62.3	59.7	27	
40	60.2	57.5	31	
42	58.9	57.3	32	
44	58.8	58.0	32	-9.2
46	58.5	58.0	32	
48	57.2	56.9	34	
50	58.0	57.1	33	
52	57.5	56.8	34	
54	58.2	57.1	33	
56	56.9	56.2	34	
58	60.0	58.2	30	
12 00	60.2	57.6	31	-9.1

Correction to local mean time is — 1m 11s.
Torsion head read 28° at beginning and ending.
Observer—R. R. T.

Tuesday, January 26, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	55.8	57.0	23 44	-11.7
02	54.2	56.8	43	
04	53.0	54.9	41	
06	53.9	56.0	42	
08	56.0	57.9	45	
10	54.6	56.1	43	
12	52.6	55.0	41	
14	51.7	53.2	38	-11.3
16	54.0	56.8	43	
18	53.4	56.8	43	
20	52.8	55.3	41	
22	49.0	52.2	35	
24	53.8	57.3	43	
26	57.2	60.2	48	
28	56.1	58.9	46	
30	54.0	56.6	43	-11.1
32	53.1	55.3	41	
34	53.1	55.1	41	
36	52.1	53.1	39	
38	52.0	52.4	38	
40	52.8	53.2	39	
42	53.1	53.8	40	
44	53.3	54.1	40	-11.0
46	54.1	55.2	42	
48	52.7	54.5	40	
50	52.0	53.2	38	
52	53.2	53.8	40	
54	53.6	54.0	41	
56	54.5	55.1	42	
58	56.2	56.8	45	
13 00	56.0	56.8	45	-10.9
02	55.8	56.7	44	
04	55.8	57.0	45	
06	56.1	57.8	45	
08	56.8	58.3	46	
10	56.2	57.8	45	
12	55.8	57.1	45	
14	55.7	56.5	44	-10.8
16	55.2	57.1	44	
18	55.1	57.0	44	
20	54.7	56.8	44	
22	55.3	57.2	44	
24	55.6	57.3	45	
26	55.7	57.2	45	
28	55.0	57.0	44	
30	54.1	57.2	43	-10.8
32	56.0	58.8	46	
34	57.0	59.6	48	
36	56.3	58.9	46	
38	56.2	59.1	46	
40	56.7	59.3	47	
42	56.2	58.3	46	
44	57.0	58.9	47	-10.8
46	56.2	57.8	46	
48	55.8	56.9	44	
50	55.0	56.0	43	
52	53.9	55.1	42	
54	53.8	55.0	41	
56	53.3	54.3	41	
58	54.1	55.7	42	
14 00	54.2	56.1	23 43	-10.3
02	54.1	55.1	42	
04	53.9	54.9	41	
06	56.1	57.5	45	
08	56.1	57.1	45	
10	56.1	56.9	45	
12	54.1	55.1	42	
14	53.2	53.7	40	-10.3
16	55.1	55.5	43	
18	54.9	55.3	43	
20	54.6	55.1	42	
22	55.0	55.5	43	
24	56.0	56.8	45	
26	58.0	58.6	48	
28	57.8	58.5	47	
30	55.9	56.9	45	-10.4
32	52.8	54.8	41	
34	52.1	53.8	39	
36	50.2	52.1	36	
38	48.7	49.8	33	
40	51.0	52.5	37	
42	51.9	53 8	39	
44	51.0	52.9	38	-10.4
46	50.0	51.1	35	
48	50.0	51.3	35	
50	50.0	50.5	35	
52	50.3	50.9	35	
54	51.0	51.6	37	
56	51.0	51.6	37	
58	49.6	49.9	34	
15 00	50.0	50.0	34	-10.7
02	50.0	50.9	35	
04	49.0	50.2	34	
06	48.9	50.5	34	
08	48.7	50.8	34	
10	48.9	51.1	34	
12	50.1	52.4	36	
14	51.3	53.9	38	-10.7
16	52.0	54.5	40	
18	52.1	54.8	40	
20	53.2	55.2	41	
22	53.9	55.1	42	
24	54.3	55.1	42	
26	54.1	54.8	41	
28	54.8	55.3	42	
30	55.4	55.9	43	-10.7
32	55.1	56.8	44	
34	56.8	57.8	46	
36	56.7	57.8	46	
38	57.1	58.1	46	
40	57.0	57.9	46	
42	57.7	58.2	47	
44	58.1	59.0	48	-10.7
46	58.1	58.8	48	
48	56.2	59.9	47	
50	57.7	61.3	50	
52	59.8	63.1	52	
54	61.0	64.6	55	
56	60.1	63.7	53	
58	56.9	60.8	48	
16 00	52.9	57.4	43	-10.6

Correction to local mean time is — 1m 25s.
Torsion head at 11h 40m read 35° and at 16h 30m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 27, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00	48.9	47.9	22 43	-16.3
02	48.9	48.8	42	
04	49.2	48.1	43	
06	49.9	48.2	42	
08	50.3	49.2	41	
10	51.0	49.3	40	
12	50.8	49.3	40	
14	50.4	49.1	41	-15.9
16	50.7	49.0	41	
18	50.4	48.7	41	
20	50.3	47.8	42	
22	50.3	48.0	42	
24	50.7	48.1	41	
26	50.3	48.9	41	
28	50.2	47.8	42	
30	49.9	47.3	43	-15.3
32	49.1	47.7	43	
34	48.8	47.6	43	
36	48.8	47.3	44	
38	48.7	47.9	43	
40	48.9	48.2	43	
42	49.2	48.5	42	
44	49.4	48.9	42	
46	50.0	49.2	41	-15.0
48	50.8	49.0	40	
50	50.7	49.0	41	
52	50.3	49.0	41	
54	50.7	48.9	41	
56	50.2	48.7	41	
58	49.9	48.0	42	
1 00	49.8	47.9	42	-14.7
02	49.4	48.4	42	
04	49.5	48.4	42	
06	49.3	48.3	42	
08	49.4	48.2	42	
10	49.1	48.2	43	
12	48.9	48.2	43	
14	48.8	48.0	43	-14.3
16	49.1	47.3	43	
18	49.1	47.8	43	
20	49.2	47.3	43	
22	49.2	47.2	43	
24	49.7	47.4	43	
26	49.4	47.2	43	
28	49.0	46.9	44	
30	48.8	46.9	44	-14.0
32	48.8	46.9	44	
34	48.9	46.9	44	
36	49.0	47.2	43	
38	49.3	47.3	43	
40	49.3	47.7	43	
42	49.3	47.9	43	
44	49.3	48.0	43	-13.8
46	49.8	47.8	42	
48	49.9	47.8	42	
50	50.8	47.2	42	
52	50.3	47.8	42	
54	50.4	47.9	42	
56	50.1	47.6	42	
58	49.9	47.5	42	
2 00	49.8	47.4	22 43	-13.5
02	50.0	47.3	43	
04	49.9	47.2	43	
06	50.0	47.5	42	
08	49.9	47.5	42	
10	49.8	47.6	42	
12	49.7	47.2	43	
14	49.5	47.2	43	-13.2
16	49.7	47.1	43	
18	49.8	47.1	43	
20	49.9	47.0	43	
22	49.7	46.8	43	
24	49.1	46.3	44	
26	48.8	46.7	44	
28	48.7	47.1	44	
30	48.5	47.5	44	-13.0
32	48.9	47.5	43	
34	49.2	47.2	43	
36	49.2	47.6	43	
38	49.1	47.7	43	
40	49.1	47.9	43	
42	48.8	47.6	43	
44	48.7	47.5	43	-13.0
46	49.0	47.1	44	
48	49.1	47.2	43	
50	49.8	47.5	43	
52	50.0	47.9	42	
54	50.9	48.3	41	
56	51.0	49.0	40	
58	51.0	49.2	40	
3 00	51.0	49.2	40	-13.0
02	50.8	48.9	41	
04	50.8	48.9	41	
06	50.7	48.5	41	
08	50.4	48.3	41	
10	50.4	48.4	41	
12	50.2	48.3	42	
14	50.1	48.5	41	-13.0
16	50.5	48.9	41	
18	51.0	49.2	40	
20	50.3	49.1	41	
22	50.7	49.1	40	
24	50.2	48.8	41	
26	49.8	48.2	42	
28	49.3	48.0	43	
30	49.3	47.8	43	-13.0
32	49.5	47.2	43	
34	49.9	47.2	43	
36	50.0	47.1	43	
38	50.3	47.0	43	
40	50.4	47.3	42	
42	50.0	47.0	43	
44	49.8	46.9	43	-13.0
46	49.1	47.3	43	
48	48.8	47.2	44	
50	48.8	47.9	43	
52	48.9	48.0	43	
54	49.1	48.2	43	
56	49.0	48.0	43	
58	49.0	48.0	43	

Observer—R. R. T.

Wednesday January 27, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	49.3	47.9	22 43	-13.0
02	49.1	48.1	43	
04	48.9	48.2	43	
06	49.2	45.3	45	
08	49.1	45.4	45	
10	49.8	46.2	44	
12	50.1	46.9	43	
14	49.8	46.7	43	-12.9
16	49.1	46.8	44	
18	49.2	47.0	43	
20	48.1	46.6	45	
22	47.9	45.9	45	
24	47.9	45.9	45	
26	48.3	46.3	45	
28	48.2	46.2	45	
30	48.0	46.2	45	-13.0
32	49.1	46.1	44	
34	48.9	45.5	45	
36	48.9	46.1	45	
38	49.2	46.5	44	
40	48.8	46.2	44	
42	48.8	46.7	44	
44	48.2	46.7	45	-13.0
46	47.8	46.3	45	
48	47.8	46.3	45	
50	47.9	45.9	45	
52	49.0	46.8	44	
54	50.1	47.8	42	
56	49.7	46.8	43	
58	48.9	46.3	44	
5 00	49.1	46.9	44	-13.0
02	48.8	47.2	44	
04	48.3	47.5	44	
06	48.7	47.3	44	
08	49.0	47.2	43	
10	48.1	46.6	45	
12	48.2	46.9	44	
14	47.8	46.7	45	-13.0
16	48.1	47.2	44	
18	49.1	48.1	43	
20	48.5	47.8	43	
22	47.9	47.0	44	
24	48.2	47.2	44	
26	48.2	47.2	44	
28	47.7	46.6	45	
30	47.7	46.0	45	-13.0
32	47.9	45.8	45	
34	48.3	46.7	44	
36	49.2	47.1	43	
38	48.1	45.9	45	
40	48.0	45.9	45	
42	47.9	46.2	45	
44	49.2	47.9	43	-13.0
46	49.7	47.7	42	
48	47.9	46.4	45	
50	48.9	46.5	44	
52	48.1	45.8	45	
54	47.8	45.2	46	
56	48.5	46.1	45	
58	48.8	46.1	44	
6 00	48.2	45.9	22 45	-13.0
02	48.3	46.7	44	
04	50.2	48.2	42	
06	47.9	45.7	45	
08	46.1	44.2	48	
10	48.4	46.9	44	
12	48.3	46.6	44	
14	48.2	46.2	45	-13.0
16	50.0	48.2	42	
18	49.0	48.0	43	
20	46.3	44.9	47	
22	48.5	47.3	44	
24	48.6	42.5	47	
26	49.2	47.7	43	
28	50.3	48.9	41	
30	46.3	44.3	48	-13.0
32	40.9	39.7	56	
34	44.0	43.7	50	
36	49.2	48.9	42	
38	49.8	47.3	43	
40	49.8	47.9	42	
42	47.9	45.0	46	
44	45.9	43.8	48	-13.0
46	52.0	49.9	39	
48	53.0	49.9	38	
50	52.2	49.0	40	
52	45.4	44.0	49	
54	42.0	41.3	54	
56	46.4	44.8	47	
58	50.6	48.9	41	
7 00	46.7	44.8	47	-13.0
02	47.8	45.2	46	
04	49.9	47.9	42	
06	47.5	45.0	46	
08	46.7	43.6	48	
10	47.8	45.2	46	
12	49.3	46.8	44	
14	53.1	50.7	37	
16	49.9	47.8	42	
18	46.9	44.8	47	
20	48.0	46.6	45	
22	44.7	42.8	50	
24	44.2	42.2	51	
26	45.8	43.0	49	
28	47.3	45.1	46	
30	47.9	45.6	46	-13.0
32	47.8	46.0	45	
34	48.1	46.1	45	
36	45.1	42.2	50	
38	40.1	38.2	57	
40	44.1	42.2	51	
42	46.1	43.9	48	
44	45.0	43.9	49	-12.9
46	50.8	49.8	40	
48	44.9	43.8	49	
50	48.1	40.9	49	
52	48.0	46.0	45	
54	45.7	44.0	48	
56	43.9	42.3	51	
58	47.3	46.9	45	

Observers—R. R. T. and J. V., who alternated from 7h 48m to 7h 58m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 27, 1904					Magnet scale inverted					Wednesday, January 27, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	47.9	47.0	22 44	-12.6	10 00	53.0	52.0	22 36	-11.2	12 00	56.2	55.0	22 32	-11.0	14 00	56.0	54.7	22 32	-11.0
02	48.8	48.0	43		02	51.8	50.2	39		02	55.9	55.0	32		02	56.1	55.0	31	
04	50.2	49.4	41		04	51.6	50.8	38		04	55.0	54.2	33		04	57.0	56.2	30	
06	44.7	44.0	49		06	53.0	52.0	36		06	56.4	55.3	31		06	58.1	57.0	29	
08	46.3	46.0	46		08	52.2	51.8	37		08	56.0	55.0	32		08	59.0	57.8	27	
10	42.9*b*		52		10	53.0	52.4	36		10	55.0	54.8	33		10	59.0	57.8	27	
12	44.0	42.8	51		12	53.0	52.2	36		12	54.2	53.0	35		12	59.1	58.3	27	
14	48.0	46.9	44	-12.3	14	53.8	52.9	35	-11.1	14	55.0	54.0	33	-11.0	14	58.9	58.0	27	-11.0
16	50.4	49.5	40		16	53.9	52.0	36		16	54.9	53.8	34		16	59.0	58.1	27	
18	50.0	48.7	41		18	53.4	53.0	35		18	57.5	55.2	30		18	60.5	59.5	25	
20	48.1	44.0	47		20	50.7	50.7	39		20	55.5	54.9	32		20	61.0	60.0	24	
22	44.7	44.7	49		22	53.9	52.8	35		22	56.1	52.2	34		22	60.5	59.8	24	
24	46.1	45.3	47		24	52.3	50.0	39		24	56.6	56.0	30		24	60.4	59.0	25	
26	44.0	41.2	52		26	53.8	53.0	35		26	55.0	54.2	33		26	60.0	58.7	26	
28	48.3	47.8	44		28	53.6	53.1	35		28	56.8	56.0	30		28	58.8	57.4	28	
30	47.4	46.8	45	-12.0	30	55.3	54.2	33	-11.1	30	55.4	54.3	33	-11.1	30	58.0	56.8	29	-11.0
32	48.1	47.0	44		32	52.8	52.3	36		32	56.5	55.2	31		32	58.5	57.6	28	
34	47.6	47.3	44		34	57.7	57.7	28		34	57.0	55.8	30		34	59.5	58.1	26	
36	50.3	49.0	41		36	55.0*b*		32		36	55.8	54.0	33		36	59.3	58.0	27	
38	53.0	52.0	36		38	51.1*b*		39		38	55.3	54.9	32		38	58.2	57.3	28	
40	48.9	46.0	44		40	51.0	50.2	40		40	55.2	54.3	33		40	55.2	54.9	32	
42	48.9	47.9	43		42	54.0	53.6	34		42	55.7	55.7	31		42	52.3	51.7	37	
44	46.6*b*		46	-11.9	44	55.3	55.0	32	-11.1	44	55.0	55.0	32	-11.1	44	54.5	53.8	34	-11.1
46	49.2	48.5	42		46.5	57.3	56.0	30		46	57.0	56.0	30		46	55.5	53.0	34	
48	50.2	43.0	46		48	57.3	57.1	29		48	55.9	55.2	32		48	57.9	56.9	29	
50	57.0	55.8	30		50	53.6	52.8	35		50	56.2	56.0	31		50	58.2	57.6	28	
52	53.0	50.9	37		52	51.9	51.0	38		52	53.0	52.6	36		52	58.0	57.6	28	
54	48.0	47.1	44		54	49.1	49.0	42		54	54.8	53.8	34		54	57.8	57.1	29	
56	50.0	48.9	41		56	53.8	53.0	35		56	57.0	56.2	30		56	58.0*b*		28	
58	50.0	49.7	41		58	56.2	56.0	31		58	56.0	55.2	32		58	56.2	56.2	31	
9 00	50.2	49.9	40	-11.8	11 00	58.8*b*		26	-11.2	13 00	55.1	54.3	33	-11.1	15 00	56.5*a*		30	-11.0
02	51.7	50.4	39		02	58.8*b*		26		02	55.9	55.0	32		02	57.3	57.3	29	
04	55.0	54.2	33		04	58.2	57.4	28		04	57.0	55.8	30		04	57.4	57.2	29	
06	51.8	49.8	39		06	57.9	56.9	29		06	56.8	55.5	31		06	58.5	58.0	28	
08	54.1	53.3	34		08	59.5	59.2	25		08	56.8	55.5	31		08	58.0	57.5	28	
10	54.0	53.0	35		10	58.9	57.9	27		10	58.0	56.8	29		10	57.2	56.1	30	
12	54.3	52.3	35		12	59.6	59.1	26		12	58.0	56.2	29		12	56.0	54.6	32	
14	56.0	54.6	32	-11.6	14	59.7	59.0	26	-11.2	15	56.5	55.0	31	-11.1	14	55.1	53.7	34	-11.1
16	52.2	51.8	37		16	57.3	56.9	29		16	55.8	54.1	33		16	55.0	53.2	34	
18	51.2	50.0	40		18	58.8	58.2	27		18	57.7	56.4	29		18	55.3	54.2	33	
20	50.5	49.5	40		20	59.0	58.5	27		20	59.3	58.7	26		20	56.0	55.0	32	
22	52.8	51.0	37		22	60.3	59.8	25		22	60.8	59.5	24		22	56.0	55.2	32	
24	53.0	51.8	37		24	60.8	60.1	24		24	60.2	59.0	25		24	56.1	55.5	31	
26	46.1	45.2	47		26	60.5	60.0	24		26	58.0	57.0	29		26	56.2	55.5	31	
28	54.0	52.8	35		28	59.3	58.9	26		28	56.9	55.5	31		28	57.1	56.5	30	
30	51.5	49.0	40	-11.6	30	57.5	57.0	29	-11.0	30	57.1	56.0	30	-11.0	30	56.9	56.8	30	-11.2
32	51.2	49.2	40		32	56.2	56.3	30		32	58.0	57.0	29		32	55.9	55.0	32	
34	55.0	52.2	35		34	59.0	57.8	27		34	58.9	58.0	27		34	56.3	55.7	31	
36	53.0	50.5	38		36	57.3	56.0	30		36	60.0	59.0	25		36	56.5	55.8	31	
38	52.2	49.6	39		38	55.8	54.4	32		38	60.3	59.5	25		38	56.0	55.8	31	
40	54.2	52.2	35		40	55.1	53.1	34		40	58.2	57.5	28		40	56.5	56.0	31	
42	51.9	49.6	39		42	56.6	54.8	31		42	58.0	57.4	28		42	56.3	55.9	31	
44	52.2	51.0	38		44	57.0	55.1	31	-11.0	44	57.9	57.3	28	-11.0	44	57.4	56.8	29	-11.5
46	52.2	50.5	38	-11.4	46	56.2	54.3	32		46	58.6	57.8	28		46	57.3	56.8	29	
48	53.3	52.5	36		48	56.9	54.7	31		48	58.2	57.1	28		48	57.2	56.5	30	
50	54.3	53.2	34		50	60.9	59.4	24		50	58.0	56.5	29		50	57.0	56.2	30	
52	55.2	54.2	33		52	56.9	54.2	32		52	57.8	56.1	30		52	57.0	56.3	30	
54	51.4	50.0	39		54	54.2	53.0	35		54	58.0	56.7	29		54	56.2	55.3	31	
56	49.0	47.0	44		56	55.8	54.6	32		56	58.9	57.5	28		56	56.1	55.6	31	
58	50.7	50.0	40		58	56.7	55.6	31		58	57.0	55.7	30		58	56.5	55.9	31	

Observer—J. V.

Observers—J. V. and W. J. P., who alternated from 15h 54m to 16h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, January 27, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	56.6	56.6	22 30	-11.5	18 00	52.5	51.9	22 37	-11.5
02	57.0	56.6	30		02	52.3	51.8	37	
04	57.0	56.4	30		04	52.5	52.0	37	
06	57.3	57.1	29		06	52.5	52.0	37	
08	56.3	55.9	31		08	52.7	52.1	37	
10	56.3	55.9	31		10	52.6	52.4	36	
12	56.3	55.3	31		12	52.6	52.4	36	
14	55.5	54.5	32	-11.0	14	52.9	52.6	36	-11.6
16	55.5	54.5	32		16	52.9	52.6	36	
18	55.1	54.1	33		18	53.0	52.6	36	
20	55.1	54.0	33		20	53.0	52.6	36	
22	54.7	53.9	34		22	52.8	52.3	36	
24	55.2	54.4	33		24	52.3	51.8	37	
26	55.1	54.1	33		26	52.2	51.9	37	
28	55.1	54.1	33		28	52.3	51.9	37	
30	55.5	54.5	32	-11.1	30	52.6	52.0	37	-11.6
32	55.0	54.3	33		32.3	52.0	51.8	37	
34	55.0	54.0	33		34	52.1	51.7	37	
36	54.1	53.3	34		36	52.6	52.2	37	
38	54.3	54.0	34		38	52.6	52.3	37	
40	54.3	54.1	34		40	52.6	52.2	37	
42	53.6	53.4	35		42	52.6	52.1	37	-11.6
44	54.1	53.9	34	-11.2	44	52.5	52.3	37	
46	55.3	55.1	32		46	52.6	52.0	37	
48	54.5	54.3	34		48	52.6	52.3	37	
50	54.8	54.8	33		50	52.7	52.3	36	
52	54.8	54.8	33		52	52.8	52.5	36	
54	54.5	54.5	33		54	52.8	52.4	36	
56	55.7	55.5	32		56	52.8	52.5	36	
58	55.3	55.3	32		58	52.7	52.5	36	
17 00	56.2	56.2	31	-11.2	19 00	52.6	52.5	36	-11.8
02	56.2	56.1	31		02	52.7	52.6	36	
04	56.0	55.9	31		04	53.0	52.8	36	
06	56.6	56.5	30		06	53.0	53.0	36	
08	56.2	56.2	31		08	53.0	52.6	36	
10	55.5	55.3	32		10	53.4	53.2	35	
12	55.3	55.3	32		12	52.8	52.5	36	
14	55.2	55.1	32	-11.3	14	53.0	53.0	36	-11.9
16	55.5	55.3	32		16	52.9	52.7	36	
18	54.5	54.5	33		18	53.3	53.3	35	
20	52.0	52.0	37		20	53.0	53.0	36	
22	53.7	53.3	35		22	53.2	53.0	35	
24	54.0	53.5	35		24	53.2	53.0	35	
26	51.0	50.3	40		26	53.3	53.1	35	
28	52.0	51.6	38		28	53.3	53.1	35	
30	54.0	54.0	34	-11.4	30	53.3	53.2	35	-12.0
32	55.0	54.7	33		32	53.3	53.0	35	
34	55.0	54.6	33		34	53.6	53.3	35	
36	53.9	53.3	35		36	53.3	53.3	35	
38	52.7	52.3	36		38	53.2	52.8	36	
40	54.1	53.5	34		40	53.3	52.9	35	
42	54.3	53.9	34		42	53.3	53.0	35	
44	54.1	53.6	34	-11.4	44	53.0	52.7	36	-12.0
46	52.6	52.3	37		46	54.1	53.9	34	
48	52.6	52.1	37		48	53.2	53.0	35	
50	52.4	52.2	37		50	53.6	53.3	35	
52	52.6	52.3	37		52	53.9	53.6	34	
54	53.0	52.6	36		54	54.2	54.0	34	
56	52.9	52.4	36		56	53.0	52.9	36	
58	52.9	52.3	36		58	54.2	54.2	34	

Observer—W. J. P,

Wednesday, January 27, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	54.0	53.9	22 34	-12.1	22 00	57.3	56.3	22 30	-12.8
02	55.0	55.0	32		02	55.9	54.8	32	
04	54.1	53.9	34		04	53.0	52.5	36	
06	54.2	54.0	34		06	51.9	50.6	38	
08	54.3	54.3	34		08	52.1	50.9	38	
10	54.5	54.4	34		10	52.3	51.2	38	
12	54.8	54.8	33		12	52.5	51.3	37	
14	54.9	54.9	33	-12.2	14	52.6	51.6	37	-12.8
16	54.0	54.0	34		16	53.2	52.3	36	
18	54.1	53.7	34		18	54.9	54.3	33	
20	54.1	53.8	34		20	55.2	54.5	33	
22	54.6	54.3	34		22	56.6	56.0	30	
24	54.9	54.6	33		24	58.8	58.0	27	
26	54.7	54.5	33		26	58.2	56.3	29	
28	55.1	55.0	32		28	57.8	56.0	30	
30	55.3	55.0	32	-12.2	30	59.5	57.3	27	-12.8
32	56.0	56.0	31		32	59.7	57.9	26	
34	55.0	55.0	32		34	59.8	58.0	26	
36	55.7	55.5	32		36	60.1	58.2	26	
38	56.0	55.6	31		38	59.5	57.6	27	
40	56.2	55.9	31		40	58.6	56.9	28	
42	56.3	56.0	31		42	58.0	56.2	29	
44	55.8	55.2	32	-12.3	44	57.0	55.3	31	-12.8
46	55.0	54.8	33		46	56.0	54.6	32	
48	55.6	55.2	32		48	57.0	55.3	31	
50	55.6	55.1	32		50.2	54.6	53.3	34	
52	56.3	56.1	31		52	54.0	52.6	35	
54	56.9	56.4	30		54	53.6	52.3	36	
56	57.0	56.6	30		56	53.4	52.0	36	
58	56.2	55.9	31		58	53.8	52.6	35	
21 00	55.6	55.6	32	-12.4	23 00	53.3	52.3	36	-12.9
02	56.0	55.8	31		02	53.1	52.3	36	
04	56.1	56.0	31		04	52.5	51.6	37	
06	55.2	55.0	32		06	52.2	51.2	38	
08	55.4	55.2	32		08	52.3	51.6	37	
10	55.1	54.9	32		10	52.5	51.9	37	
12	54.9	54.7	33		12	52.3	51.9	37	
14	55.1	54.9	32	-12.5	14.3	53.6	53.0	35	-13.0
16	55.3	55.1	32		16	53.9	53.3	35	
18	55.6	55.4	32		18	53.9	53.2	35	
20	55.1	54.9	32		20	53.3	52.6	36	
22	54.9	54.7	33		22	53.0	52.5	36	
24	54.6	54.2	34		24	52.6	52.3	37	
26	53.9	53.5	34		26	53.0	52.6	36	
28	53.9	53.5	34		28	53.0	52.6	36	
30	54.0	53.8	34	-12.6	30	53.3	53.0	35	-13.0
32	53.6	53.6	35		32	52.8	52.4	36	
34	54.0	53.8	34		34	52.2	51.6	37	
36	54.0	53.8	34		36	52.5	52.2	37	
38	54.5	54.3	34		38	54.2	54.0	34	
40	56.0	55.8	31		40	54.0	53.9	34	
42	57.6	56.8	29		42	53.5	53.0	35	
44	58.6	56.9	28	-12.8	44	52.2	52.0	37	-13.0
46	59.3	57.6	27		46.2	53.1	52.8	36	
48	59.6	58.1	26		48	53.2	52.6	36	
50	58.8	56.8	28		50	53.6	53.1	35	
52	59.0	57.2	28		52	53.4	53.0	35	
54	59.0	57.5	28		54	53.3	53.0	36	
56	59.3	58.0	27		56	52.9	52.5	36	
58	59.1	57.8	27		58	52.5	52.1	37	-13.0
					24 00	52.0	51.6	38	

Correction to local mean time is — 1m 16s.
Torsion head at oh oom read 34° and at the end read the same.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, January 28, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	57.8	58.3	22 39	−20.8
02	60.0	60.8	43	
04	59.7	62.3	44	
06	59.0	62.7	43	
08	56.7	60.2	40	
10	55.0	59.1	37	
12	53.9	58.7	36	
14	54.2	58.9	37	−20.8
16	53.0	57.4	35	
18	53.8	57.9	36	
20	54.9	58.2	37	
22	55.2	58.5	37	
24	53.8	57.2	35	
26	53.5	56.0	34	
28	53.1	55.8	33	
30	52.7	55.1	33	−20.4
32	51.3	54.8	31	
34	51.0	53.9	30	
36	50.6	52.9	29	
38	51.2	54.1	31	
40	51.8	54.8	32	
42	52.2	55.0	32	
44	52.2	54.4	32	−20.0
46	52.2	53.8	31	
48	50.9	52.8	29	
50	51.2	52.9	30	
52	49.5	51.5	27	
54	48.9	50.1	26	
56	48.1	49.0	24	
58	47.9	48.3	23	
17 00	48.1	48.5	23	−20.0
02	48.1	48.8	23	
04	48.2	48.8	24	
06	48.8	48.8	24	
08	48.1	48.7	23	
10	47.2	47.9	22	
12	47.5	48.3	23	
14	47.8	48.3	23	−19.9
16	48.1	48.8	23	
18	48.7	49.6	25	
20	49.0	50.3	25	
22	49.5	50.8	26	
24	48.8	49.9	25	
26	46.1	47.9	21	
28	46.2	47.0	21	
30	45.7	46.1	20	−19.7
32	45.8	46.1	20	
34	45.3	46.0	19	
36	45.4	45.7	19	
38	48.1	48.3	23	
40	48.5	48.9	24	
42	50.2	50.8	27	
44	51.7	52.0	29	−19.6
46	51.1	52.0	28	
48	51.8	52.8	30	
50	50.1	51.7	28	
52	48.8	50.1	25	
54	46.7	48.2	22	
56	46.2	48.2	22	
58	46.6	49.6	23	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	47.3	50.2	22 24	−19.4
02	49.2	52.1	27	
04	48.2	51.1	26	
06	48.0	50.1	24	
08	47.9	49.4	24	
10	45.3	47.1	20	
12	41.1	42.9	13	
14	39.8	41.1	11	−19.2
16	37.5	39.7	08	
18	38.6	40.7	09	
20	40.1	42.2	12	
22	42.0	44.2	15	
24	44.0	46.7	18	
26	45.7	48.3	21	
28	45.0	47.1	19	
30	43.0	45.1	16	−19.1
32	41.0	42.3	12	
34	38.8	39.9	09	
36	37.1	38.2	06	
38	36.3	37.2	05	
40	35.6	35.9	03	
42	37.7	38.0	06	
44	37.6	38.2	07	−19.0
46	37.2	38.8	07	
48	38.1	39.6	08	
50	36.9	38.3	06	
52	33.9	34.8	22 01	
54	30.0	31.9	21 55	
56	30.8	31.9	56	
58	31.1	31.9	57	
19 00	24.9	26.2	47	−19.0
02	21.2	22.8	42	
04	24.8	25.8	47	
06	25.9	26.2	48	
08	26.5	26.9	21 49	
10	33.6	34.4	22 01	
12	30.7	31.1	21 56	
14	34.0	34.8	22 01	−19.0
16	38.0	39.2	08	
18	35.2	37.0	22 04	
20	32.1	33.8	21 59	
22	28.7	30.4	53	
24	30.9	31.9	56	
26	29.2	30.8	21 53	
28	35.1	36.3	22 02	
30	34.1	36.8	22 02	−18.9
32	29.7	33.0	21 56	
34	28.7	33.4	21 55	
36	34.5	38.0	22 03	
38	44.1	48.0	19	
40	46.0	48.9	21	
42	46.8	48.4	21	
44	64.9	67.8	51	−18.9
46	67.8	69.1	22 54	
48	75.7	78.4	23 07	
50	59.2	61.9	22 41	
52	43.2	52.1	21	
54	37.2	50.1	15	
56	48.4	63.8	35	
58	48.3	62.0	33	
20 00	62.8	79.1	58	−18.9

Correction to local mean time is — 12s. 90° torsion = 12.′8.
Torsion head at 15h 10m read 23° and at 20h 30m read 38°.
Observer—J. V.

Friday, January 29, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	52.9	52.2	22 42	−19.4
02	53.0	52.2	41	
04	53.0	51.8	42	
06	52.7	51.5	42	
08	52.3	51.1	43	
10	52.1	50.9	43	
12	54.2	50.0	42	
14	54.2	49.6	42	−19.0
16	54.7	50.0	42	
18	54.8	50.2	41	
20	54.6	50.2	42	
22	54.8	50.3	41	
24	54.2	50.2	42	
26	55.6	51.4	40	
28	57.1	52.7	38	
30	56.0	53.0	39	−18.7
32	55.3	52.1	40	
34	54.2	51.0	42	
36	52.7	49.8	44	
38	53.1	50.1	43	
40	53.9	51.1	42	
42	53.9	51.0	42	
44	53.0	50.2	43	−18.2
46	53.2	49.8	44	
48	53.7	50.2	43	
50	53.3	50.2	43	
52	53.8	50.3	43	
54	53.9	51.2	42	
56	54.2	51.9	41	
58	54.4	52.0	41	
21 00	54.7	52.3	41	−18.0
02	55.8	53.5	39	
04	56.1	54.2	38	
06	56.8	54.1	38	
08	55.6	52.8	40	
10	54.8	52.1	41	
12	55.5	53.1	40	
14	55.5	53.5	39	−17.8
16	55.7	53.7	39	
18	55.2	53.9	39	
20	54.9	53.9	39	
22	54.8	53.7	40	
24	55.2	52.8	40	
26	55.1	51.9	41	
28	54.8	51.2	42	
30	54.5	51.8	42	−17.4
32	54.3	51.8	42	
34	54.8	52.2	41	
36	55.2	52.7	40	
38	54.9	52.8	40	
40	55.0	52.6	40	
42	54.9	52.7	40	
44	54.9	52.5	40	−17.2
46	54.0	52.8	41	
48	53.8	52.2	42	
50	53.8	51.9	42	
52	53.2	51.3	44	
54	53.2	51.1	44	
56	53.1	51.0	44	
58	53.3	51.1	44	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	53.2	51.2	22 44	−17.2
02	53.2	51.9	43	
04	53.2	52.0	43	
06	52.7	51.4	44	
08	52.3	51.3	44	
10	52.2	51.2	44	
12	51.9	50.9	45	
14	51.9	50.7	45	−17.0
16	52.9	50.1	45	
18	53.2	50.9	44	
20	53.9	51.1	43	
22	53.9	51.7	42	
24	53.8	51.8	42	
26	53.5	51.8	43	
28	53.5	52.1	42	
30	53.1	52.2	43	−17.0
32	54.0	53.3	41	
34	57.7	56.6	36	
36	61.1	60.2	30	
38	61.3	59.7	31	
40	66.5	65.0	23	
42	65.8	63.1	25	
44	64.8	64.0	25	−17.0
46	65.3	64.3	24	
48	66.0	64.6	23	
50	64.9	63.8	25	
52	64.2	63.1	26	
54	63.2	62.8	27	
56	60.7	60.0	31	
58	58.8	58.1	34	
23 00	57.3	56.3	37	−17.0
02	55.9	55.6	38	
04	56.3	55.9	38	
06	56.7	56.1	37	
08	57.1	56.8	36	
10	56.0	55.2	38	
12	54.5	53.9	41	
14	53.9	53.1	42	−17.0
16	53.8	53.1	42	
18	54.5	54.0	41	
20	54.7	54.1	40	
22	54.2	54.0	41	
24	54.1	53.7	42	
26	54.9	54.4	41	
28	54.9	54.3	41	
30	55.2	54.5	41	−16.9
32	55.0	54.2	41	
34	54.8	54.0	41	
36	55.0	53.6	41	
38	56.1	55.0	39	
40	62.1	60.9	30	
42	62.6	61.6	29	
44	61.5	59.3	32	−16.5
46	60.3	58.6	33	
48	60.0	58.4	33	
50	61.1	58.2	33	
52	60.1	57.4	34	
54	59.9	56.7	35	
56	58.9	55.1	37	
58	58.7	55.9	36	
24 00	58.1	55.3	37	−16.2

Correction to local mean time is — 37s. 90° torsion = 12.′8.
Torsion head at 20h 00m read 49° and at 24h 40m read 27°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, January 31, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	51.3	52.0	22 41	-18.9
02	51.0	51.9	41	
04	51.3	52.2	41	
06	51.0	51.8	41	
08	51.0	52.3	41	
10	50.0	50.3	39	
12	48.1	49.0	36	
14	47.0	47.6	34	-18.5
16	46.7	47.3	34	
18	46.8	41.1	34	
20	48.2	48.5	36	
22	49.8	50.7	39	
24	52.0	52.3	42	
26	51.9	52.6	42	
28	51.0	51.9	41	
30	51.4	51.8	41	-18.3
32	53.2	54.0	44	
34	53.0	54.0	44	
36	51.2	52.0	41	
38	49.8	50.8	39	
40	49.8	50.5	39	
42	49.3	50.2	38	
44	49.2	50.0	38	-18.0
46	50.1	50.8	39	
48	50.2	51.0	39	
50	49.9	50.7	39	
52	49.8	50.1	38	
54	49.2	50.1	38	
56	46.7	48.7	35	
58	48.8	50.0	38	
1 00	50.6	52.0	40	-18.0
02	56.5	56.9	22 49	
04	62.3	67.0	23 01	
06	67.0	69.6	07	
08	68.3	70.0	08	
10	69.3	70.7	10	
12*	40.2	47.8	20	
14	36.8	43.0	14	-18.0
16	53.2	69.3	47	
18	27.4	68.9	27	
20	35.1	43.8	13	
22	20.5	52.1	08	
24	45.0	65.8	38	
26	27.6	54.3	15	
28	32.9	54.0	23 19	
30*	42.2	60.1	24 07	
32	36.0	54.8	23 58	
34	Lost			
36*	33.1	42.1	24 10	
38	22.0	42.0	01	
40	38.0	52.3	22	
42	38.0	53.0	22	
44	63.0	71.1	56	-17.2
46	40.2	49.8	22	
48	40.4	52.8	24	
50	46.5	52.4	28	
52	57.0	64.0	46	
54	46.3	51.0	24 27	
56	19.9	22.8	23 44	
58	8.2	13.2	28	
2 00	8.0	11.0	23 25	-17.1
02	19.8	24.0	45	
04	12.0	17.7	34	
06	14.2	18.0	36	
08	19.4	23.9	45	
10	10.5	12.8	23 29	
12	37.4	41.1	24 12	
14	40.2	43.0	16	-17.2
16	42.4	44.2	19	
18	40.8	42.1	16	
20	37.7	39.0	24 11	
22	28.6	30.9	23 57	
24	25.0	26.1	51	
26	26.8	27.2	23 53	
28	34.0	34.7	24 05	
30	37.3	38.1	10	-17.2
32	37.1	38.1	10	
34	33.0	34.0	04	
36	34.6	35.8	06	
38	34.1	35.2	05	
40	35.6	36.9	08	
42	35.4	36.9	08	
44	34.1	36.3	06	-17.2
46	36.0	37.5	08	
48	33.0	34.4	04	
50	34.0	37.2	07	
52	35.2	37.1	08	
54	34.3	36.2	06	
56	40.7	42.0	16	
58	42.0	43.7	18	
3 00	35.0	36.4	07	-17.2
02	33.2	34.2	04	
04	33.0	33.5	03	
06	31.3	32.0	24 00	
08	28.3	29.7	23 56	
10	20.5	22.7	45	
12	24.2	26.5	51	
14	26.8	29.2	23 55	-17.2
16	32.9	35.1	24 04	
18	37.0	38.2	10	
20	33.9	35.5	05	
22	36.0	39.0	10	
24	34.2	38.1	08	
26	36.0	39.0	10	
28	45.1	48.0	24	
30	49.4	52.1	30	-17.2
32	50.0	51.9	31	
34	41.0	45.0	24 18	
36	30.5	31.0	23 59	
38	31.4	33.2	24 02	
40	37.5	40.2	12	
42	35.0	36.0	24 07	
44	22.0	24.9	23 48	-17.5
46	17.2	20.2	40	
48	12.2	14.5	32	
50	14.8	17.0	36	
52	21.8	23.2	46	
54	25.8	27.9	53	
56	29.2	32.3	23 59	
58	42.1	46.0	24 20	

Observer—J. V.

Sunday, January 31, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	61.2	53.2	24 29	
02	77.2	71.8	24 02	
04*	36.2	22.1	22 51	
06	28.9	14.0	23 03	
08*	54.9	36.9	23	
10	51.0	33.9	29	
12	47.5	32.0	33	
14	53.1	38.8	23	-16.6
16	57.1	43.2	16	
18	61.3	48.1	09	
20	55.0	41.0	20	
22	57.2	43.2	23 16	
24	69.8	59.7	22 54	
26	67.1	56.3	58	
28	67.0	59.0	56	
30	72.1	64.1	48	-16.9
32	67.0	58.0	57	
34	68.0	60.4	54	
36	70.5	62.1	51	
38	75.0	68.0	43	
40	73.1	65.5	46	
42	70.0	61.0	22 52	
44	58.8	50.5	23 09	-17.0
46	59.7	55.0	23 05	
48	69.0	62.5	22 52	
50	69.8	63.9	50	
52	70.0	63.5	50	
54	68.5	62.0	53	
56	66.2	60.5	56	
58	64.9	59.0	58	
5 00	64.2	59.1	22 58	-17.0
02	61.0	56.2	23 03	
04	63.0	58.0	23 00	
06	69.0	65.1	22 50	
08	64.6	59.5	58	
10	65.9	62.0	55	
12	67.6	62.9	53	
14	64.0	59.1	22 59	-17.0
16	61.0	56.8	23 03	
18	66.2	62.8	22 54	
20	58.6	54.9	23 06	
22	49.9	46.9	19	
24	60.0	56.7	04	
26	59.9	57.3	03	
28	59.9	57.2	03	
30	57.9	54.3	07	-17.2
32	60.0	58.2	02	
34	55.5	52.1	11	
36	54.2	51.9	12	
38	57.3	55.0	23 07	
40	65.0	62.0	22 55	
42	61.3	59.9	23 00	
44	56.0	53.2	08	-17.2
46	57.0	54.5	08	
48	58.1	56.7	23 05	
50	63.8	62.3	22 56	
52	55.1	52.0	23 11	
54	57.3	55.9	06	
56	56.8	55.5	07	
58	59.9	58.2	02	
6 00	60.0	58.0	23 02	-17.0
02	57.9	57.0	05	
04	57.0	54.0	08	
06	51.0	49.9	16	
08	45.1	44.9	24	
10	41.5	39.5	32	
12	47.3	42.5	25	
14	49.0	46.9	20	-17.2
16	39.1	36.0	36	
18	42.2	39.8	31	
20	50.7	47.4	18	
22	56.0	53.0	10	
24	59.6	57.7	03	
26	56.9	54.3	23 08	
28	61.9	60.8	22 59	
30	61.1	60.1	23 00	-17.3
32	59.8	58.5	02	
34	59.6	57.9	03	
36	57.0	55.5	07	
38	58.1	57.2	23 05	
40	65.3	65.3	22 53	
42	65.8	64.0	53	
44	64.3	62.7	55	-17.2
46	66.9	65.0	52	
48	64.1	63.6	55	
50	67.2	64.0	52	
52	67.9	65.2	51	
54	65.8	64.0	53	
56	70.0	69.8	45	
58	63.3	63.0	56	
7 00	65.9	63.1	54	-17.3
02	66.9	66.0	51	
04*	41.5	35.2	26	
06	41.0	29.0	22 31	
08	15.3	11.3	23 05	
10.5	14.0	7.0	23 10	
12	25.5	18.2	22 52	
14	36.2	31.9	22 33	-17.2
16	13.0	10.9	23 08	
18	14.0	11.0	23 07	
20	32.1	29.0	22 38	
22	30.1	26.4	42	
24	26.5	21.6	49	
26	21.3	16.5	57	
28	26.3	24.0	47	
30	31.4	29.0	39	-17.2
32	24.9	25.5	47	
34	20.3	18.1	56	
36	26.8	23.1	47	
38	25.3	24.0	48	
40	25.2	23.0	48	
42	24.8	23.6	48	
44	22.2	20.9	53	-17.2
46	30.9	28.6	40	
48	26.5	24.9	46	
50	24.2	23.2	49	
52	32.8	30.0	37	
54	26.1	25.0	46	
56	25.6	24.0	47	
58	25.2	24.3	48	
8 00	27.7	26.2	44	-17.2

Correction to local mean time is — 1m 12s.

Torsion head at 0h 00m read 35° and at the end read the same.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, February 1, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	Lost			-24.0
02	Lost			
04	42.0	45.0	22 46	
06	43.1	44.0	46	
08	46.1	48.2	52	
10	39.6	41.9	42	
12	42.0	43.8	45	
14	41.2	42.1	43	-23.4
16	47.6	48.0	53	
18	Lost			
20	42.0	42.0	44	
22	39.5	42.0	42	
24	43.0	45.2	47	
26	41.0	44.2	45	
28	37.0	38.8	37	
30	37.2	39.8	38	-23.4
32	38.0	40.5	39	
34	43.4	46.2	48	
36	44.0	46.8	49	
38	33.6	37.0	33	
40	27.0	29.8	22	
42	29.2	30.8	25	
44	27.2	29.4	22	-22.0
46	33.2	34.4	31	
48	Lost			
50	37.0	40.2	38	
52	36.4	41.0	39	
54	26.0	32.3	24	
56	31.8	34.8	30	
58	28.0	30.2	24	
9 00	25.0	27.4	19	-21.0
02	29.2	33.8	27	
04	29.0	30.4	24	
06	33.2	36.0	32	
08	30.5	37.8	32	
10	25.8	29.5	21	
12	32.2	37.8	22 33	
14	57.4	62.5	23 12	-20.5
16	50.6	57.2	02	
18	58.0	66.1	15	
20	60.0	64.2	23 15	
22	26.2	30.2	22 22	
24	23.4	27.6	18	
26	33.1	38.2	34	
28	42.0	48.9	49	
30	38.0	51.1	48	-20.0
32	21.8	32.2	20	
34	15.2	23.4	08	
36	30.2	39.9	33	
38	24.3	35.0	24	
40	32.1	41.8	36	
42	32.0	39.9	34	
44	29.0	37.4	30	-19.5
46	36.9	47.2	44	
48	26.2	37.0	28	
50	29.8	41.9	34	
52	31.1	42.4	36	
54	32.0	44.5	38	
56	27.1	37.8	29	
58	29.0	41.6	33	
10 00	36.8	49.2	22 45	-19.2
02	32.0	44.3	38	
04	20.2	34.2	21	
06	14.6	30.2	13	
08	23.1	26.2	16	
10	24.0	32.4	22	
12	21.9	37.8	25	
14	28.0	39.9	31	-19.0
16	32.8	42.0	37	
18	32.3	42.2	36	
20	35.2	44.6	40	
22	29.7	39.3	32	
24	32.0	40.0	34	
26	34.0	39.8	36	
28	24.8	32.9	23	
30	15.1	23.5	08	-18.8
32	16.2	30.1	14	
34	18.8	39.3	23	
36	23.6	41.3	29	
38	15.5	31.0	14	
40	20.8	28.8	17	
42	35.3	43.1	39	
44	27.5	41.8	32	-18.2
46	20.7	31.1	19	
48	22.1	31.3	20	
50	27.2	38.9	30	
52	29.6	41.3	34	
54	29.7	38.3	31	
56	31.5	39.9	34	
58	25.1	34.0	24	
11 00	32.3	40.4	35	-18.0
02	34.6	42.0	38	
04	26.0	33.7	25	
06	28.7	34.6	28	
08	29.1	36.1	29	
10	29.2	34.8	28	
12	31.0	35.6	30	
14	30.4	35.0	29	-18.0
16	32.4	36.9	32	
18	39.3	44.0	43	
20	36.6	41.1	39	
22	39.3	44.5	44	
24	34.0	36.9	34	
26	32.3	36.0	32	
28	30.1	34.9	29	
30	33.0	37.8	34	-18.0
32	36.7	41.6	39	
34	38.6	42.9	42	
36	31.5	34.6	30	
38	32.6	36.1	32	
40	25.7	30.3	22	
42	23.2	28.0	18	
44	24.9	30.1	21	-17.9
46	26.1	30.4	22	
48	28.9	32.3	26	
50	26.3	31.1	23	
52	23.9	27.2	18	
54	23.7	26.9	18	
56	28.3	31.2	24	
58	32.1	34.7	30	
12 00	25.8	29.6	21	-17.7

Correction to local mean time is + 1m 58s.
Torsion head at 7h 35m read 31° and at the end read the same.
Observer—H. H. N.

Tuesday, February 2, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	47.6	46.7	22 47	-14.7
02	45.3	44.1	51	
04	44.8	43.7	52	
06	44.9	44.0	52	
08	47.2	45.9	48	
10	45.0	42.9	52	
12	44.7	43.6	52	
14	46.2	44.7	50	-15.0
16	45.4	44.0	51	
18	45.2	43.3	52	
20	49.1	44.8	48	
22	49.1	46.4	46	
24	47.1	43.3	50	
26	48.5	44.2	49	
28	50.5	47.8	44	
30	47.9	44.3	49	-15.2
32	45.1	41.8	53	
34	46.9	43.6	50	
36	45.9	41.8	52	
38	45.0	41.2	54	
40	42.7	38.8	22 57	
42	41.1	37.6	23 00	
44	42.9	39.9	22 56	-15.3
46	41.2	38.2	59	
48	42.3	39.2	57	
50	43.7	41.1	55	
52	43.6	41.2	55	
54	41.5	40.1	57	
56	40.7	39.2	59	
58	41.2	41.0	22 57	
13 00	39.7	39.2	23 00	-15.2
02	41.6	39.6	22 58	
04	41.0	39.5	58	
06	42.3	40.9	56	
08	40.7	39.0	22 59	
10	40.4	38.3	23 00	
12	37.1	34.8	05	
14	34.8	33.0	08	-15.0
16	34.0	32.7	09	
18	36.9	34.7	05	
20	37.2	35.5	04	
22	37.3	34.8	23 05	
24	44.2	41.8	22 54	
26	42.8	40.5	56	
28	41.6	39.6	58	
30	41.8	39.8	57	-15.0
32	41.8	40.4	57	
34	41.9	40.7	56	
36	40.6	39.9	22 58	
38	39.6	39.1	23 00	
40	39.1	39.1	00	
42	37.2	36.7	03	
44	37.2	36.3	04	-14.9
46	37.9	36.8	03	
48	35.2	34.2	07	
50	35.1	34.9	06	
52	32.9	32.9	10	
54	30.9	29.8	14	
56	32.1	31.8	11	
58	34.3	33.1	08	
14 00	36.2	35.2	23 05	-14.9
02	35.6	35.1	06	
04	38.2	38.2	01	
06	38.0	38.0	23 02	
08	40.1	39.7	22 59	
10	41.0	40.1	58	
12	39.8	39.2	22 59	
14	39.2	38.3	23 00	-14.9
16	37.8	37.1	03	
18	39.9	38.3	00	
20	39.3	38.3	00	
22	39.3	38.1	00	
24	39.9	39.0	23 00	
26	40.2	39.0	22 59	
28	40.8	39.4	22 58	
30	39.3	38.0	23 01	-14.9
32	38.3	38.0	01	
34	37.4	37.1	03	
36	38.0	38.0	02	
38	38.2a		23 01	
40	41.1	40.0	22 58	
42	41.1	40.2	58	
44	42.2	41.1	22 56	-14.9
46	39.7	39.1	23 00	
48	38.6	38.2	01	
50	40.0	38.7	23 00	
52	41.0	40.2	22 58	
54	42.1	41.3	56	
56	42.8	41.7	55	
58	45.3	44.1	51	
15 00	44.7	44.1	52	-15.0
02	41.6	41.1	56	
04	42.8	41.3	55	
06	44.0	43.2	53	
08	43.3	42.9	54	
10	43.0	42.2	54	
12	44.9	43.9	52	
14	47.3	46.2	48	-15.0
16	48.2	47.3	46	
18	49.2	47.9	45	
20	50.0	48.6	44	
22	49.7	47.8	45	
24	48.9	47.4	46	
26	48.9	47.2	46	
28	49.8	48.9	44	
30	49.4	48.6	44	-15.0
32	48.9	48.2	45	
34	49.1	48.3	45	
36	48.8	48.2	45	
38	47.8	46.8	47	
40	47.9	47.1	47	
42	48.0	46.3	47	
44	47.4	46.0	48	-15.0
46	47.3	45.8	48	
48	49.1	48.7	44	
50	53.2	50.3	40	
52	53.9	51.2	39	
54	53.3	51.2	39	
56	53.1	51.1	40	
58	53.9	52.2	38	
16 00	55.0	53.3	36	-14.8

Correction to local mean time is — 17s. 90° torsion = 13.'7.
Torsion head at 11h 25m read 18° and at 16h 35m read 29°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	49.8*a*		23 26	−20.5
02	55.0*b*		34	
04	63.5*a*		48	
06	46.2	54.6	23 27	
08	13.8	16.5	22 32	
10	25.0*a*		22 47	
12	79.0*a*		24 12	
14	30.0*b*		22 55	
16*	37.0	51.7	23 29	−20.0
18	40.0	53.5	32	
20	24.7	36.4	07	
22	21.5	34.0	03	
24	26.0	40.0	11	
26	20.6	32.8	01	
28	21.4	33.3	02	
30	30.8	34.4	10	−19.5
32	38.0	39.0	20	
34	49.3	49.6	37	
36	48.7	49.9	36	
38	45.6	47.6	32	
40	39.3	42.6	23	
42	39.7	42.2	23	
44	55.6*a*		46	−19.3
46	63.0*b*		23 58	
48	70.0*a*		24 09	
50*	9.2	26.5	24 23	
52*	37.6	43.0	23 30	
54	27.8	34.5	16	
56	21.6	25.3	04	
58	22.5	26.3	05	
1 00	19.3	23.0	00	−19.0
02	19.4	22.2	23 00	
04	19.0	22.3	22 59	
06	27.6	29.6	23 12	
08	27.3	29.6	12	
10	22.6	25.6	05	
12	22.0	23.0	02	
14	21.3	24.0	03	
16	24.0	26.5	07	−19.0
18	24.0	26.1	06	
20	24.3	26.9	07	
22	25.8	27.7	09	
24	27.6	30.0	12	
26	23.9	26.6	07	
28	23.9	25.3	06	
30	24.8	28.0	08	−19.0
32	26.6	29.3	11	
34	21.4	24.0	23 03	
36	16.5	18.3	22 54	
38	16.3	17.1	53	
40	16.8	17.6	54	
42	14.3	14.5	50	
44	17.0	17.6	54	−18.9
46	19.9	20.3	59	
48	19.8	20.3	58	
50	18.3	19.3	57	
52*	37.3	42.3	56	
54	36.3	40.3	53	
56	34.5	38.1	50	
58	38.3	42.3	56	
2 00	32.9	36.6	22 48	−18.5
02	30.3	35.0	44	
04	37.0	38.5	22 52	
06	45.3	48.7	23 07	
08	46.4	48.3	08	
10	47.3	49.4	09	
12	47.0	48.8	08	
14	44.0	45.2	03	−18.4
16	48.3	49.0	10	
18	47.5	49.0	09	
20	42.5	43.9	01	
22	46.3	49.1	08	
24	52.9	55.9	19	
26	53.6	56.0	19	
28	53.0	54.9	18	
30	57.6	59.0	25	−18.3
32	58.4	59.8	26	
34	49.6	51.2	12	
36	45.6	47.0	06	
38	43.9	45.0	03	
40	44.3	45.6	04	
42	43.0	44.0	02	
44	45.8	46.4	06	−18.0
46	47.8	49.1	09	
48	50.0	50.5	12	
50	45.8	46.2	23 05	
52	39.3	41.0	22 56	
54	44.5	46.5	23 05	
56	48.0	49.5	10	
58	50.6	51.6	14	
3 00	49.3	50.3	11	−18.0
02	50.2	51.3	13	
04	47.3	48.0	23 08	
06	40.1	41.0	22 57	
08	35.0	36.2	49	
10	36.0	37.3	51	
12	37.3	38.5	53	
14	39.7	40.3	22 56	−18.0
16	42.3	42.6	23 00	
18	40.9	41.6	22 58	
20	39.9	41.0	57	
22	40.3	41.1	57	
24	39.6	40.5	56	
26	35.3	36.0	49	
28	32.1	33.0	44	
30	25.3	25.5	33	−18.0
32	26.0	26.6	34	
34	29.3	29.6	39	
36	34.0	34.3	47	
38	37.6	38.3	53	
40	38.6	39.8	55	
42	37.1	37.8	52	
44	35.0	36.0	49	−18.0
46	37.2	38.0	22 52	
48	42.8	44.6	23 02	
50	44.7	45.1	23 04	
52	41.0	41.6	22 58	
54	47.8	48.3	23 09	
56	56.0*a*		21	
58	55.3	57.0	21	

Observer—W. J. P.

Wednesday, February 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	64.3	65.1	23 35	−17.8
02	68.0	69.2	41	
04	62.3	64.0	32	
06	59.6	61.0	28	
08	61.0	62.5	30	
10	59.8	61.2	28	
12	59.2	61.3	28	
14	69.6	72.2	44	−17.8
16	75.8	78.0	54	
18	75.5	78.0	54	
20	69.9	72.6	45	
22	65.5	67.3	37	
24	63.0	64.0	33	
26	51.2	52.5	15	
28	48.2	49.6	10	
30	54.0	54.6	18	−17.5
32	48.5	49.9	10	
34	51.1	52.3	14	
36	45.6	45.8	05	
38	44.3	45.0	03	
40	44.8	50.5	08	
42	47.0	47.9	08	
44	47.8	48.0	08	
46	49.8	50.2	12	−17.5
48	45.9	46.3	06	
50	48.0	48.3	09	
52	48.5	49.8	10	
54	49.6	50.0	11	
56	48.0	48.6	09	
58	44.7	45.3	23 04	
5 00	39.9	40.3	22 56	−17.3
02	36.3	37.0	51	
04	30.6	31.0	42	
06	30.8	30.8	42	
08	34.6	34.9	48	
10	35.6	35.6	22 49	
12	44.0*b*		23 02	
14	53.0*b*		16	−17.3
16	60.9	61.5	29	
18	56.5	57.5	23	
20	44.4	46.2	23 04	
22	38.3	40.5	22 55	
24	39.8	40.5	22 56	
26	44.2	44.9	23 03	
28	45.5	46.8	06	
30	45.0	45.0	23 04	−17.2
32	39.7	40.3	22 56	
34	39.3	39.7	22 55	
36	46.0	46.3	23 06	
38	45.5	46.1	05	
40	47.8	48.3	09	
42	50.0*b*		12	
44	59.0	60.5	27	
46	56.3	57.6	22	−17.1
48	55.6	57.0	22	
50	52.6	53.0	16	
52	47.5	48.0	08	
54	46.4	47.8	07	
56	53.8	55.0	19	
58	53.0	55.0	18	
6 00	48.6	51.2	23 12	−17.1
02	47.0	49.8	09	
04	53.2	57.9	20	
06	46.0	53.2	23 11	
08	38.0	43.3	22 57	
10	49.3	54.6	23 15	
12	49.6	53.2	14	
14	41.6	47.0	03	
16	39.8	46.0	01	−17.0
18	45.6	52.8	10	
20	40.6	43.8	23 00	
22	37.3	42.6	22 56	
24	44.7	49.3	23 07	
26	30.3	31.6	22 42	
28	13.0	15.0	22 15	
30	52.8	58.0	23 20	−17.1
32	41.9	49.3	23 05	
34	33.0	37.5	22 48	
36	40.3	45.5	23 01	
38	33.9	37.7	22 50	
40	29.9	35.5	44	
42	31.1	35.1	45	
44	29.8	34.0	43	−17.2
46	32.3	35.4	46	
48	31.6	34.5	45	
50	24.7	27.5	34	
52	17.3	21.0	23	
54	15.1	18.0	19	
56	16.3	18.7	21	
58	29.9	31.6	41	
7 00	24.3	26.0	33	−17.1
02	26.0	26.6	34	
04	33.5	34.5	47	
06	30.3	32.0	42	
08	21.1	23.0	28	
10	22.8	23.0	29	
12	22.3	23.0	29	
14	24.0	24.5	31	
16	26.8	28.0	36	−17.0
18	29.6	30.6	40	
20	39.6	40.7	56	
22	25.2		33	
24	15.0	16.3	18	
26	16.5	19.6	22	
28	25.1	26.0	33	−17.0
30	21.6		27	
32	22.0	22.9	28	
34	34.1	34.6	47	
36	37.9	39.5	54	
38	27.8	29.6	38	
40	19.0	20.6	24	
42	23.6	26.6	33	
44	27.0	29.0	37	−17.2
46	25.0	28.3	35	
48	26.4	30.3	38	
50	28.5	31.8	40	
52	26.0	28.9	36	
54	26.0	29.0	36	
56	27.1	29.2	37	
58	27.5	29.9	38	

Observers—W. J. P. and J. V., who alternated from 7h 48m to 7h 58m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 3, 1904					Magnet scale erect				Wednesday, February 3, 1904					Magnet scale erect				
Chr'l time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	28.1	29.9	22 39		10 00	24.2	27.0	22 33	-16.4	12 00	23.6	24.3	22 31	-16.6	14 00	24.0	24.7	22 31	-17.0
02	24.7	26.8	34	-16.5	02	26.0	28.0	36		02	24.1	25.3	32		02	25.1	26.0	33	
04	26.2	28.6	36		04	25.8	28.1	35		04	26.3	27.1	35		04	24.5	25.0	32	
06	27.3	30.3	38		06	25.0	27.0	34		06	27.2	28.1	36		06	25.0	25.8	33	
08	29.0	31.6	41		08	26.9	27.2	36		08	27.6	28.9	38		08	26.0	27.0	35	
10	27.4	31.8	40		10	28.1	29.5	38		10	27.0	28.0	36		10	26.3	27.2	35	
12	24.3	29.0	35		12	26.8	28.9	37		12	27.4	28.1	36		12	26.0	27.0	35	
14	24.1	29.0	35	-16.4	14	25.2	27.0	34	-16.5	14	28.0	29.0	38	-16.8	14	27.0	28.0	36	-17.0
16	25.1	29.9	36		16	24.9	26.2	33		16	27.4	29.2	38		16	26.9	27.8	36	
18	24.8	29.5	36		18	25.1	26.7	34		18	28.3	29.8	39		18	26.7	27.9	36	
20	24.3	29.1	35		20	25.2	26.5	34		20	28.9	30.1	40		20	26.0	27.0	35	
22	26.0	30.0	37		22	25.6	25.8	34		22	28.6	30.0	39		22	26.4	27.8	36	
24	24.0	28.1	34		24	26.2	26.2	34		24	28.5	29.6	39		24	26.9	28.1	36	
26	22.9	26.0	32		26	26.0	26.3	34		26	29.0	29.9	39		26	27.2	28.8	37	
28	31.0	36.7	46		28	25.9	27.0	35		28	29.1	30.0	40		28	26.8	28.0	36	
30	30.5	34.5	44	-16.2	30	26.9	28.0	36	-16.5	30	29.0	29.8	39	-16.9	30	26.0	27.2	35	-16.9
32	27.2	32.4	40		32	26.8	27.9	36		32	28.0	28.7	38		32	25.4	27.0	34	
34	21.8	26.0	31		34	27.0	28.1	36		34	27.1	27.8	36		34	26.3	27.8	36	
36	20.9	25.2	29		36	26.4	27.7	36		36	27.1	27.9	36		36	27.0	28.1	36	
38	26.7	34.7	41		38	26.2	27.0	35		38	27.5	28.1	37		38	26.3	27.4	35	
40	28.0	36.3	44		40	25.4	26.9	34		40	28.8	29.3	39		40	26.2	27.0	35	
42	28.6	36.1	44		42	25.2	27.0	34		42	29.0	29.7	39		42	25.9	26.8	34	
44	24.6	32.1	38	-16.2	44	27.0	29.0	37	-16.6	44	28.5	29.4	39	-17.0	44	25.9	26.6	34	-16.9
46	23.8	30.2	36		46	27.0	29.0	37		46	27.7	28.0	37		46	26.7	27.2	35	
48	24.7	31.0	37		48	26.1	28.0	36		48	27.0	27.4	36		48	26.8	27.2	36	
50	24.5	30.8	36		50	26.1	28.0	36		50	26.7	27.0	35		50	27.0	27.8	36	
52	23.8	28.8	34		52	27.7	29.3	38		52	27.6	27.9	36		52	27.3	28.0	36	
54	21.0	25.8	30		54	27.0	29.0	37		54	28.0	29.1	38		54	27.8	28.4	37	
56	21.8	23.7	29		56	27.1	28.9	37		56	28.0	29.3	38		56	27.9	28.2	37	
58	22.0	25.1	30		58	27.2	29.0	37		58	27.9	28.9	38		58	26.5	27.6	36	
9 00	26.3	30.1	38	-16.2	11 00	26.2	28.2	36	-16.6	13 00	27.2	28.1	36	-17.0	15 00	26.6	27.8	36	-16.9
02	28.4	31.8	40		02	26.9	28.8	37		02	27.0	28.1	36		02	26.7	27.7	36	
04	31.8	34.0	45		04	27.5	29.1	38		04	27.0	28.2	36		04	27.7	28.9	38	
06	30.3	32.1	42		06	27.3	29.0	37		06	26.9	27.8	36		06	28.0	29.8	38	
08	25.0	26.2	33		08	27.0	28.3	36		08	27.0	28.2	36		08	27.3	28.2	37	
10	16.8	19.2	22		10	27.1	29.1	37		10	29.2	29.8	40		10	27.0	27.9	36	
12	21.0	23.0	28		12	27.7	29.3	38		12	28.2	30.0	39		12	26.8	27.7	36	
14	23.3	25.2	31	-16.2	14	27.4	29.3	38		14	26.8	29.1	37	-17.0	14	27.0	28.0	36	-16.8
16	24.0	26.5	33		16	26.6	28.1	36	-16.5	16	26.0	28.0	36		16	27.4	27.9	36	
18	24.0	26.2	33		18	27.6	29.0	38		18	27.1	28.6	37		18	26.9	27.3	36	
20	23.7	27.2	33		20	27.1	28.9	37		20	28.1	29.6	38		20	26.0	26.7	34	
22	25.0	29.0	36		22	25.7	27.0	34		22	29.1	30.6	40		22	26.0	26.3	34	
24	24.5	28.0	34		24	26.0	27.2	35		24	28.4	30.0	39		24	25.7	26.0	34	
26	25.1	29.0	36		26	27.8	29.1	38		26	27.9	29.3	38		26	24.8	25.1	32	
28	27.3	30.8	39		28	29.7	31.0	41		28	26.9	28.0	36		28	24.2	25.0	32	
30	27.3	31.0	39	-16.5	30	29.8	30.7	41	-16.4	30	26.0	27.1	35	-17.1	30	25.0	25.2	33	-16.8
32	28.1	31.6	40		32	27.8	28.5	37		32	26.7	27.2	35		32	25.8	26.3	34	
34	28.9	29.9	39		34	24.9	25.9	33		34	25.6	26.7	34		34	25.8	26.1	34	
36	23.5	25.6	32		36	24.0	25.9	32		36	25.1	26.3	34		36	24.8	25.0	32	
38	21.1	24.0	29		38	23.0	24.8	31		38	26.5	27.7	36		38	25.0	25.0	32	
40	25.0	26.0	33		40	23.8	26.0	32		40	27.1	28.2	36		40	25.8	26.0	34	
42	27.2	27.8	36		42	25.2	27.3	34		42	25.8	26.5	34		42	26.0	26.0	34	
44	24.1	25.8	32	-16.5	44	24.3	26.2	33	-16.5	44	25.0	26.0	33	-17.1	44	25.4	25.8	33	-16.8
46	22.7	24.1	30		46	23.8	24.0	31		46	25.0	25.4	33		46	24.2	24.7	32	
48	27.3	29.9	38		48	22.9	24.1	30		48	25.2	26.0	33		48	21.9	24.1	29	
50	28.1	31.0	40		50	23.5	24.4	31		50	25.2	25.9	33		50	24.0	26.1	32	
52	25.8	27.0	35		52	26.0	28.0	35		52	26.2	27.0	35		52	24.0	27.1	33	
54	20.1	23.9	28		54	27.0	28.5	36		54	27.7	28.1	37		54	24.0	27.1	33	
56	24.4	28.5	35		56	25.4	27.1	34		56	23.3	24.0	30		56	24.0	27.2	33	
58	24.1	27.0	33		58	25.0	26.6	34		58	22.2	23.2	29		58	24.1	27.0	33	

Observer—J. V.

Observers—J. V. and R. R. T., who alternated from 15h 56m to 16h 08m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	23.7	26.1	22 32	
02	23.9	26.4	33	
04	24.0	26.5	33	
06	24.2	27.1	33	
08	24.6	27.9	34	
10	24.6	26.8	34	
12	25.9	27.9	35	
14	26.5	27.9	36	-16.2
16	26.5	28.1	36	
18	26.0	28.0	36	
20	26.1	27.8	35	
22	26.1	27.7	35	
24	25.7	27.2	35	
26	25.5	27.1	34	
28	26.4	28.8	36	
30	26.2	28.8	36	-16.0
32	26.1	28.3	36	
34	25.3	27.7	35	
36	25.9	27.8	35	
38	27.0	29.0	37	
40	27.9	30.0	39	
42	26.2	28.1	36	
44	26.2	28.9	36	-16.1
46	26.8	29.7	38	
48	25.3	27.8	35	
50	25.1	27.1	34	
52	25.8	27.8	35	
54	24.3	27.6	34	
56	23.9	26.9	33	
58	24.3'	27.8	34	
17 00	24.6	28.2	35	-15.9
02	25.5	28.9	36	
04	25.1	28.2	35	
06	24.0	27.1	33	
08	24.2	27.4	34	
10	25.0	28.0	35	
12	24.9	27.9	35	
14	24.8	27.1	34	-15.8
16	25.2	27.8	35	
18	25.3	27.3	34	
20	25.8	27.2	35	
22	26.1	27.5	35	
24	26.2	27.6	35	
26	26.4	27.9	36	
28	26.3	27.8	36	
30	26.6	27.6	36	-15.8
32	26.9	27.7	36	
34	26.6	27.1	35	
36	26.8	27.2	36	
38	26.9	27.5	36	
40	26.4	27.1	35	
42	26.1	26.8	35	
44	26.1	26.8	35	-15.8
46	26.2	27.0	35	
48	26.0	26.8	35	
50	26.1	26.8	35	
52	25.9	26.7	34	
54	25.9	26.6	34	
56	25.7	26.1	34	
58	25.3	25.9	33	
18 00	25.6	26.0	22 34	-15.9
02	25.2	25.8	33	
04	25.1	25.4	33	
06	24.8	25.2	32	
08	24.5	24.9	32	
10	24.3	24.8	32	
12	24.2	24.4	31	
14	23.6	23.8	30	-15.8
16	22.9	23.1	29	
18	22.3	22.8	29	
20	21.9	22.2	28	
22	21.8	22.1	28	
24	22.1	22.4	28	
26	22.2	22.8	29	
28	22.0	22.3	28	
30	22.2	22.9	29	-15.8
32	22.9	23.8	30	
34	23.0	23.8	30	
36	23.6	23.8	30	
38	24.2	24.5	31	
40	24.8	25.1	32	
42	25.2	25.7	33	
44	24.7	25.7	33	-15.9
46	24.1	24.9	32	
48	24.7	24.9	32	
50	24.3	25.3	32	
52	24.2	25.4	32	
54	25.6	26.9	34	
56	28.1	29.9	39	
58	35.9	37.9	22 51	
19 00	44.2	51.8	23 09	-15.8
02	36.3	37.0	22 51	
04	37.0	40.7	22 54	
06	54.9	58.3	23 22	
08	58.9	60.3	27	
10	72.7*b*		47	
12*	31.2	42.0	56	
14	31.9	39.9	55	-15.8
16*3	44.1	45.0	23 04	
18	33.6	35.9	22 49	
20	31.0	34.0	45	
22	26.8	30.0	39	
24	25.7	28.0	36	
26	26.2	28.8	37	
28	25.9	27.8	36	
30	26.3	27.8	36	-15.6
32	25.9	26.1	35	
34	25.1	26.0	34	
36	24.3	25.0	33	
38	23.8	24.4	32	
40	24.7	25.3	33	
42	23.9	24.6	32	
44	22.7	23.3	30	-15.4
46	23.5	24.0	31	
48	23.8	24.3	32	
50	24.0	24.0	32	
52	24.2	24.8	33	
54	21.9	22.9	29	
56	22.9	23.7	31	
58	22.8	23.5	30	

Observer—R. R. T.

Wednesday, February 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	23.8	24.4	22 32	-15.4
02	25.9	26.5	35	
04	26.8	26.8	36	
06	26.9	26.9	36	
08	26.3	26.3	35	
10	26.1	26.1	35	
12	25.2	25.9	34	
14	25.8	26.0	35	-15.3
16	25.5	26.3	35	
18	26.1	27.2	36	
20	25.7	26.0	35	
22	25.0	25.8	34	
24	25.8	26.5	35	
26	25.6	26.0	35	
28	25.9	26.1	35	
30	25.2	25.9	34	-15.3
32	24.2	24.5	32	
34	23.5	24.1	32	
36	22.7	23.2	30	
38	21.6	22.2	28	
40	21.0	21.6	28	
42	20.8	21.2	27	
44	21.0	21.5	27	-15.2
46	20.2	21.0	26	
48	20.0	21.0	26	
50	20.0	21.0	26	
52	20.0	21.2	26	
54	19.6	21.2	26	
56	19.7	21.8	27	
58	20.0	21.5	27	
21 00	19.7	21.2	26	-15.0
02	18.0	19.7	24	
04	16.9	18.1	22	
06	14.1	16.7	18	
08	11.9	15.6	16	
10	12.1	14.9	15	
12	11.1	14.2	14	
14	12.0	15.2	15	-15.0
16	10.9	14.0	14	
18	13.7	17.1	18	
20	22.0	26.5	32	
22	36.1	46.5	22 59	
24*	33.2	68.9	25 04	
26*	15.7	53.2	23 38	
28.2	26.9	67.4	58	
30*	54.2	74.0	23 09	-14.8
32	38.2	75.9	22 57	
34	24.8	61.8	22 36	
36	61.3	70.8	23 12	
38	50.9	58.4	22 54	
40	42.9	50.9	42	
42	30.8	38.8	23	
44	28.0	36.8	19	-14.7
46	28.9	36.4	19	
48	28.6	35.9	18	
50	30.6	37.9	22	
52	33.7	40.2	26	
54	27.7	31.7	14	
56	30.5	32.8	18	
58	34.1	37.0	24	
22 00	34.0	36.0	22 23	-14.6
02	36.7	38.8	27	
04	36.9	39.2	27	
06	37.1	38.9	28	
08	37.8	39.1	28	
10	39.0	39.9	30	
12	43.3	46.3	38	
14	45.0	49.3	42	-14.4
16	45.3	46.9	40	
18	48.1	49.1	22 44	
20	64.1	65.9	23 10	
22*	23.0	35.6	24	
24	21.1	32.8	20	
26	24.5	37.0	26	
28	18.7	31.2	17	
30	18.9	40.7	25	-14.4
32	20.8	39.1	25	
34	40.2	61.8	58	
36	10.7	28.7	09	
38	8.2	25.4	23 04	
40*	53.1	77.0	22 51	
42	47.8	65.1	37	
44	49.7	71.0	44	-14.4
46	49.0	68.2	41	
48	52.2	70.3	45	
50	53.2	69.9	45	
52	Overl'k'd			
54	50.0	66.6	40	
56	47.9	63.0	36	
58	46.4	60.8	33	
23 00	45.2	59.9	31	-14.4
02	45.7	60.3	32	
04	44.5	58.3	30	
06	46.2	60.4	32	
08	48.3	61.8	35	
10	52.3	64.8	41	
12	53.2	64.9	41	
14	53.2	63.9	41	-14.5
16	53.2	64.2	41	
18	53.0	63.3	40	
20	51.6	61.5	38	
22	49.9	58.8	34	
24	49.3	58.4	33	
26	51.2	59.8	36	
28	51.2	59.7	36	
30	52.6	60.4	38	-14.5
32	51.0	61.3	37	
34	49.9	59.9	35	
36	50.1	59.8	35	
38	50.0	59.0	34	
40	51.1	59.1	35	
42	52.1	59.9	37	
44	51.9	58.2	35	
46	53.9	59.8	38	-14.5
48	53.1	59.7	37	
50	53.2	59.0	37	
52	53.6	58.9	37	
54	54.0	58.9	37	
56	55.3	59.9	39	
58	56.7	61.4	41	
24 00	56.7	63.1	43	-14.5

Correction to local mean time is — 1m 59s. 90° torsion = 14.'9.
Torsion head at 0h 00m read 26° and at 24h 26m read 28°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, February 4, 1904 — Magnet scale inverted									Friday, February 5, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	54.5	54.5	22 36	-22.0	18 00	56.9	56.1	22 33	-17.9	20 00*	41.2	41.9	22 17	-19.5	22 00	35.0	42.9	22 37	-15.9
02	55.0	53.9	36		02	57.1	56.9	32		02	40.8	41.1	16		02	35.0	42.2	36	
04	54.7	53.5	37		04	57.1	56.9	32		04	40.9	41.2	16		04	37.6	46.9	42	
06	54.0	53.0	38		06	56.8	56.0	33		06	39.9	40.5	15		06	46.3	54.5	22 55	
08	54.4	53.2	37		08	56.5	55.8	34		08	39.2	40.2	14		08	61.0	68.9	23 18	
10	55.2	53.4	36		10	56.0	55.2	35		10	38.9	39.4	13		10	60.3	66.1	15	
12	56.2	55.2	34		12	55.9	55.2	35		12	37.5	38.8	12		12	79.0	80.0	40	
14	56.8	55.0	34	-21.1	14	55.9	55.2	35	-17.7	14	38.0	39.0	12	-18.8	14*	36.0	46.8	44	-15.9
16	57.0	55.1	34		16	55.9	55.2	35		16	37.3	38.3	11		16	17.0	33.0	18	
18	58.8	56.0	32		18	56.0	55.8	34		18	37.8	38.3	11		18	41.8	49.8	23 51	
20	57.3	55.4	33		20	56.2	56.2	34		20	37.9	38.9	12		20	63.0	77.5	24 29	
22	57.7	55.9	33		22	56.3	56.1	34		22	39.4	40.0	14		22*	53.3	55.1	25 24	
24	57.8	55.6	33		24	55.9	55.8	34		24	39.5	40.0	14		24	31.1	42.2	24 56	
26	57.1	55.8	33		26	55.8	55.2	35		26	40.5	41.0	16		26	40.5	49.0	25 09	
28	56.8	55.2	34		28	56.0	55.8	34		28	41.3	42.0	17		28*	38.5	48.9	23 21	
30	57.2	56.0	33	-20.0	30	56.0	55.8	34	-17.4	30	41.1	41.9	17	-18.3	30	13.5	27.7	22 45	
32	56.9	55.8	33		32	56.2	55.8	34		32	41.9	43.0	18		32*	40.0	49.0	21 53	
34	56.0	55.0	35		34	57.0	56.1	33		34	42.2	43.9	19		34	41.9	58.0	22 01	-15.3
36	55.6	54.5	36		36	57.1	56.6	33		36	43.0	44.2	20		36	51.2	62.0	12	
38	56.5	55.7	34		38	56.8	56.0	33		38	43.1	44.0	20		38	50.9	60.0	22 10	
40	56.4	55.7	34		40	56.6	56.0	33		40	43.5	44.1	20		40	42.5	50.4	21 56	
42	56.3	55.7	34		42	56.4	56.0	34		42	43.3	44.2	20		42	61.0	64.8	22 21	
44	56.2	55.2	34	-19.9	44	57.1	56.6	33	-17.2	44	42.9	43.1	19	-18.0	44	67.0	72.2	32	-15.2
46	55.1	54.3	36		46	58.0	57.3	31		46	42.0	43.0	18		46	61.4	66.5	23	
48	54.9	54.2	36		48	58.1	57.7	31		48	40.8	41.2	16		48	63.2	69.0	26	
50	56.0	55.6	34		50	58.0	57.5	31		50	39.7	40.1	14		50	67.0	72.0	32	
52	56.7	56.0	33		52	58.2	57.9	31		52	40.1	41.2	15		52	65.8	70.4	30	
54	57.0	56.5	33		54	58.8	58.0	30		54	40.4	41.2	16		54	60.2	64.0	20	
56	57.1	56.7	32		56	59.0	58.5	30		56	39.0	40.2	14		56	62.1	67.0	24	
58	57.0	56.5	33		58	59.5	59.0	29		58	31.3	33.5	02		58	65.0	69.0	28	
17 00	57.9	57.5	31	-19.4	19 00	59.5	58.9	29	-17.0	21 00	31.5	33.3	02	-17.5	23 00	68.8	72.0	33	-15.1
02	57.5	57.3	32		02	59.0	58.7	30		02	30.9	32.6	02		02	69.5	71.8	34	
04	59.0	58.2	30		04	58.8	58.2	30		04	30.1	32.1	22 01		04	68.2	70.6	32	
06	57.7	57.0	32		06	58.7	58.2	30		06	25.8	29.0	21 55		06	71.0	73.0	36	
08	57.7	57.2	32		08	59.0	58.7	30		08	21.8	26.1	21 49		08	73.0	75.1	39	
10	58.1	57.9	31		10	59.0	58.5	30		10	26.3	35.2	22 00		10	75.6	77.0	42	
12	59.0	58.6	30		12	57.9a		31		12	45.8	54.5	22 30		12	75.0	76.9	42	
14	58.6	58.2	30	-19.0	14	57.7	57.2	32	-17.0	14*	33.0	52.2	25 44		14	76.3	78.1	44	-15.1
16	57.9	57.4	31		16	57.5	57.2	32		16*	15.0	59.0	24 38		16*	38.5	46.5	47	
18	57.2	56.9	32		18	57.8	57.5	31		18	Lost				18	40.1	48.0	50	
20	57.0	56.7	33		20	58.6	58.1	30		20	Lost				20	39.0	45.9	47	
22	57.0	56.5	33		22	58.3	57.9	31		22	Lost				22	36.7	43.0	43	
24	56.8	56.2	33		24	58.1	57.8	31		25*	21.8	29.4	22 04		24	35.0	41.2	40	
26	56.0	55.5	34		26	58.2	57.7	31		26	13.0	19.0	21 49		26	34.8	40.2	39	
28	55.0	54.7	36		28	58.2	57.7	31		28*	26.8	32.9	39		28	34.0	39.2	38	
30	55.0	54.8	36	-18.5	30	58.3	58.0	31	-16.6	30	22.8	28.0	32	-16.3	30	34.0	39.1	38	-15.0
32	55.5	55.0	35		32	58.2	58.0	31		32	21.2	26.8	30		32	33.3	38.3	37	
34	55.0	54.4	36		34	57.9	57.4	31		34	23.8	29.0	33		34	34.5	39.1	38	
36	54.8	54.1	36		36	58.0	57.8	31		36	23.1	28.2	32		36	36.0	40.5	40	
38	55.0	54.7	36		38	58.8	58.2	30		38	27.8	33.6	40		38	38.5	43.0	44	
40	55.5	55.2	35		40	58.9	58.4	30		40	32.9	37.1	47		40	39.5	44.5	46	
42	56.0	55.7	34	-18.2	42	58.2	58.1	31		42	37.6	42.2	21 54		42	38.0	42.1	43	
44	56.0	55.9	34		44	58.2	57.9	31	-16.4	44	44.6	47.9	22 04	-16.0	44	37.0	40.9	42	-15.0
46	55.9	55.4	35		46	57.9	57.8	31		46	55.4	58.0	21		46	38.1	42.0	43	
48	55.9	55.2	35		48	57.5	57.5	32		48	57.8	60.0	24		48	38.1	40.8	42	
50	56.1	55.6	34		50	57.5	57.0	32		50	67.2	71.0	40		50	37.9	41.0	42	
52	56.4	55.9	34		52	58.2	57.6	31		52	71.4	75.4	47		52	37.3	40.3	41	
54	56.2	55.8	34		54	58.6	58.0	30		54*	47.2	57.3	58		54	36.1	39.0	39	
56	56.2	55.8	34		56	57.5	56.9	32		56	46.8	57.0	57		56	34.9	36.9	37	
58	56.2	55.9	34		58	58.3	57.7	31		58	40.2	48.0	45		58	33.7	35.8	35	
					20 00	58.0	57.3	31	-16.3						24 00	38.0	39.7	41	-14.3

Correction to local mean time is + 9s.
Torsion head at 15h 40m read 28° and at the end read the same.
Observer—J. V.

Correction to local mean time is — 5s. 90° torsion = 13.′3.
Torsion head at 19h 30m read 28° and at 24h 20m read 32°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, February 7, 1904 — Magnet scale inverted									Sunday, February 7, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	50.2	30.2	23 02	-20.0	2 00	52.1	48.7	22 58	-17.7	4 00	63.8	66.1	23 11		6 00	35.2	41.3	23 03	-15.5
02	43.0	12.0	23 22		02	47.9	45.5	23 04		02	56.0	59.2	23 00		02	36.0	40.3	23 03	
04	74.5	69.5	22 12		04	43.8	40.9	11		04	54.2	56.3	22 56		04	31.0	36.0	22 56	
06	51.5	42.0	22 52		06	41.0	37.9	16		06	Overl'k'd				06	31.3	37.0	22 57	
08	41.0	31.9	23 08		08	46.1	42.6	08		08	52.0	56.8	55		08	35.5	40.9	23 03	
10*	24.0	19.0	24 03		10	44.9	41.1	10		10	56.0	57.8	59		10	34.2	40.0	02	
12	59.0	29.9	23 27		12	40.3	36.3	17		12	52.8	53.2	52		12	38.8	46.0	10	
14	61.0	35.4	21	-19.4	14	37.9	34.8	20	-17.4	14	49.0	50.0	47	-15.5	14	42.0	47.0	13	-15.4
16*	55.2	17.3	03		16	40.0	36.9	17		16	48.5	49.0	46		16	46.0	50.8	19	
18*	69.0	35.4	30		18	44.9	41.2	10		18	46.6	47.2	43		18	46.0	49.7	18	
20	71.1	37.3	27		20	51.1	47.9	23 00		20	50.0	51.0	49		20	46.6	50.5	20	
22	54.3	19.0	55		22	52.2	49.1	22 58		22	52.1	52.3	51		22	41.0	43.9	10	
24	58.9	28.0	44		24	48.0	45.2	23 04		24	51.0	51.2	50		24	41.8	44.0	11	
26	53.0	23.3	52		26	54.8	52.9	22 53		26	49.3	49.9	47		26	40.1	42.5	08	
28	51.2	24.0	53		28	60.3	58.2	44		28	50.2	50.2	48		28	37.4	38.1	23 03	
30	63.2	41.5	30	-18.8	30	60.5	58.3	44	-17.2	30	48.8	49.6	46	-15.6	30	34.0	35.3	22 58	-15.3
32	61.0	43.5	30		32	60.5	58.4	44		32	46.0	46.7	42		32	37.0	39.2	23 03	
34	61.0	41.6	32		34	63.3	61.8	39		34	47.0	48.2	44		34	35.9	39.0	23 02	
36	60.6	41.2	32		36	53.8	52.0	54		36	53.1*a*		53		36	34.0	36.5	22 59	
38	65.0	46.0	25		38	51.2	49.6	58		38	51.0	51.0	49		38	36.4	38.1	23 02	
40	56.2	37.6	38		40	50.7	49.2	22 59		40	51.0*b*		49		40	36.0	37.1	23 01	
42	60.1	42.9	31		42	50.0	48.8	23 00		42	50.0	50.6	22 48		42	30.7	32.9	22 53	
44	61.3	43.2	30	-18.6	44	49.1	47.9	01	-17.0	44	56.8	59.0	23 00	-15.7	44	26.8	29.1	47	-15.2
46	53.1	38.0	41		46	49.3	48.3	23 01		46	56.6	58.0	22 59		46	24.5	26.3	43	
48	50.2	31.8	48		48	50.9	49.7	22 58		48	55.2	57.8	22 58		48	23.0	25.3	41	
50	43.6	38.3	48		50	50.2	49.3	59		50	60.0	61.2	23 04		50	26.8	29.9	48	
52	50.0	36.2	44		52	51.7	50.8	57		52	72.5	73.0	23		52	24.2	26.0	22 43	
54	50.2	39.0	42		54	52.6	51.8	55		54*	25.6	35.0	37		54	35.0	38.2	23 01	
56	70.0	58.5	23 11		56	52.8	51.6	55		56	16.0	23.0	20		56	48.8	49.8	21	
58	78.4	65.9	22 59		58	51.8	51.1	57		58	27.7	36.1	40		58	62.2	65.0	43	
1 00	76.9	66.0	23 00	-18.4	3 00	52.1	51.4	56	-16.9	5 00	15.7	25.1	22	-15.5	7 00	64.0	68.3	47	-15.1
02*	57.0	45.0	22 57		02	53.1	52.5	54		02	21.4	31.1	31		02	63.5	65.0	44	
04	55.9	44.4	22 59		04	52.0	51.4	56		04	28.2	37.2	41		04	72.0	73.0	57	
06	52.1	46.5	23 00		06	57.7	52.6	51		06	22.9	34.0	34		06	56.0	57.8	33	
08	50.0	40.0	07		08	53.8	52.8	54		08	11.1	21.8	15		08	58.9	60.0	37	
10	53.5	45.0	23 00		10	54.0	53.8	53		10	15.0	26.0	22		10	39.5	42.7	08	
12	63.9	55.2	22 44		12	53.0	52.3	55		12	21.9	29.9	30		12	58.4	60.8	37	
14	65.0	56.9	42		14	51.5	50.7	57	-16.7	14	6.0	16.3	07	-15.5	14	39.9	41.2	07	-15.0
16	59.5	56.6	46	-18.3	16	52.0	50.9	57		16	9.0	17.5	10		16	48.4	50.0	21	
18	56.5	48.7	55		18	50.7	49.5	59		18	19.1	27.8	26		18	40.9	44.5	10	
20	56.2	50.2	22 54		20	52.4	51.7	56		20	25.9	34.9	37		20	58.3	59.9	36	
22	44.1	42.9	23 09		22	52.1	51.2	56		22	18.9	25.3	24		22	65.0	68.4	48	
24	33.0	31.2	27		24	50.0	49.8	22 59		24	18.7	22.1	23 22		24	54.5*b*		23 29	
26	30.0	28.1	32		26	49.0	49.3	23 00		26*	26.0	36.1	22 52		26	32.5	38.1	22 59	
28	38.3	35.8	19		28	50.3	49.8	22 59		28	24.2	35.0	50		28	44.0	48.1	23 16	
30	38.7	36.2	19	-18.0	30	50.9	50.9	57	-16.4	30	28.9	38.2	56	-15.5	30	37.0	47.2	23 10	-15.1
32	38.8	35.1	19		32	52.9*a*		54		32	31.2	39.4	22 59		32	20.9	32.0	22 45	
34	31.3	29.4	30		34	54.9	53.5	52		34	43.6	52.0	23 18		34	26.0	40.7	22 56	
36	34.5	32.5	25		36	56.0	55.6	50		36	48.7	60.2	29		36	32.0	40.9	23 00	
38	32.2	30.0	28		38	55.8	55.1	50		38	44.0	53.8	23 20		38	29.9	36.0	22 55	
40	42.0	40.0	13		40	66.8	66.1	33		40	26.0	35.8	22 52		40	21.0	31.0	44	
42	39.2	37.0	17		42	55.9	55.3	50		42	23.2	32.4	47		42	15.3	28.5	38	
44	39.0	37.2	17	-17.8	44	53.9	53.5	53	-16.3	44	24.7	34.0	49	-15.5	44	21.1	29.0	43	-15.1
46	26.0	24.0	38		46	52.0	51.8	56		46	30.4	39.0	22 58		46	29.7	39.1	57	
48	24.5	22.1	41		48	51.3	50.4	22 58		48	31.7	40.0	23 00		48	17.1	21.9	34	
50	35.5	32.2	24		50	48.5	48.2	23 01		50	36.0	40.0	03		50	23.5	33.6	48	
52	35.5	32.0	24		52	50.9	50.0	22 58		52	47.0	54.0	23		52	21.8	30.1	44	
54	38.7	35.8	19		54	52.3	52.0	55		54	48.2	53.4	23		54	18.0	24.0	36	
56	35.2	32.0	25		56	51.8	51.0	57		56	46.0	52.8	21		56	25.5	29.2	22 46	
58	40.5	36.3	17		58	52.7	52.0	55		58	39.1	45.3	10		58	15.0	16.1	21 38	
															8 00*	41.0	42.0	22 18	-15.1

Observer—J. V.

Correction to local mean time is — 1m 33s.
Torsion head at oh oom read 34° and at the end read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, February 8, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	48.9	41.8	23 02	-20.0
02	53.2	45.3	22 56	
04	52.3	41.5	23 00	
06	46.2	34.9	10	
08	43.7	33.2	13	
10	48.9	38.0	05	
12	50.4	41.0	02	
14	36.2	21.3	28	-20.5
16	19.8	16.5	45	
18	32.1	20.2	32	
20	35.2	23.3	28	
22	23.9	18.7	40	
24	29.0	21.9	34	
26	50.7	40.6	23 02	
28	53.1	43.3	22 58	
30	53.0	45.5	22 56	-19.1
32	33.3	25.1	23 28	
34	40.9	27.6	20	
36	40.7	30.2	18	
38	44.4	33.0	13	
40	46.0	35.4	10	
42	43.9	30.8	15	
44	40.4	23.0	24	-18.5
46	51.2	28.3	23 11	
48	57.8	38.4	22 58	
50	52.1	35.7	23 05	
52	47.0	33.2	23 10	
54	55.1	44.0	22 56	
56	59.9	42.5	53	
58	60.9	43.3	52	
9 00	61.7	51.2	45	-18.3
02	67.6	57.4	35	
04	57.8	47.3	51	
06	59.7	49.9	47	
08	59.3	50.5	47	
10	61.0	52.4	44	
12	55.3	49.7	51	
14	59.9	54.2	44	-18.0
16	56.3	50.0	50	
18	62.2	57.1	40	
20	61.6	55.7	41	
22	61.3	57.6	40	
24	59.3	53.6	45	
26	64.7	50.2	43	
28	54.4	44.7	22 56	-17.4
30	47.1	38.0	23 07	
32	55.4	43.9	22 56	
34	59.8	44.0	52	
36	63.0	42.9	50	
38	61.6	48.2	47	
40	54.9	41.3	58	
42	59.6	50.8	47	
44	57.4	50.0	49	-17.0
46	59.4	50.7	47	
48	62.7	53.5	42	
50	59.8	51.1	46	
52	62.3	52.4	43	
54	63.4	55.1	40	
56	63.3	56.6	39	
58	66.0	60.9	34	
10 00	64.3	58.2	22 37	-16.7
02	67.2	59.9	34	
04	64.3	55.0	40	
06	63.9	54.6	40	
08	66.0	60.2	34	
10	66.7	60.6	34	
12	68.4	62.9	30	
14	67.0	61.2	33	-16.4
16	68.0	64.3	30	
18	68.3	64.8	29	
20	68.3	64.3	29	
22	67.5	64.3	30	
24	65.1	63.0	33	
26	65.7	62.3	33	
28	67.5	64.1	30	
30	68.3	64.6	29	-16.2
32	66.8	63.5	31	
34	66.0	62.3	33	
36	64.9	61.8	34	
38	49.5	47.3	57	
40	56.2	52.1	48	
42	61.8	58.3	39	
44	64.9	59.7	36	-16.1
46	72.1	66.2	25	
48	66.7	60.6	34	
50	59.2	55.3	44	
52	72.4	67.3	24	
54	73.5	66.2	24	
56	68.8	63.3	30	
58	78.7	72.0	15	
11 00	70.2	67.6	25	-16.0
02	70.7	65.0	27	
04	63.9	59.4	37	
06	67.3	61.9	32	
08	74.8	67.3	22	
10	68.7	55.5	36	
12	70.8	58.2	22 32	
14*	76.8	71.3	21 30	-15.6
16	64.8	43.2	22 02	
18	64.9	44.8	00	
20	58.8	40.0	09	
22	57.2	43.4	07	
24	64.8	43.2	02	
26	49.3	30.2	24	
28	50.8	34.9	19	
30	46.5	33.2	24	-15.0
32	52.0	41.1	13	
34	54.8	42.2	10	
36	50.3	37.0	18	
38	43.8	36.9	23	
40	45.1	37.2	22	
42	44.0	33.9	25	
44	40.2	28.7	32	-14.8
46	33.4	24.2	41	
48	34.6	26.8	38	
50	34.4	26.5	39	
52	36.8	22.5	40	
54	41.9	28.8	31	
56	45.5	30.2	27	
58	45.8	29.9	27	
12 00	42.0	27.3	32	-14.7

Correction to local mean time is + 4m 23s.
Torsion head at 7h 25m read 29° and at the end read the same.
Observer—H. H. N.

Tuesday, February 9, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	41.1	45.7	22 25	-18.3
02	41.8	42.8	24	
04	38.9	42.7	21	
06	33.2	38.0	13	
08	28.1	29.3	22 02	
10	19.8	22.0	21 50	
12	12.2	15.2	39	
14	11.1	22.1	43	-17.8
16	20.7	30.3	21 57	
18	27.9	31.3	22 04	
20	22.5	27.1	21 56	
22	21.8	29.0	57	
24	10.1	20.8	42	
26	12.0	21.2	43	
28	11.1	22.0	43	
30	17.7	24.4	21 50	-17.3
32	29.1	45.3	22 16	
34	24.1	40.0	08	
36	28.2	45.1	15	
38	35.2	49.8	24	
40	35.2	49.2	24	
42	40.7	52.9	31	
44	40.6	55.3	33	-17.0
46	33.3	46.7	20	
48	36.2	49.1	24	
50	38.2	51.0	27	
52	42.1	52.7	32	
54	44.1	54.4	35	
56	47.9	57.7	40	
58	49.8	58.2	42	
13 00	47.4	54.5	37	-16.7
02	38.2	46.1	24	
04	41.8	48.0	28	
06	44.5	49.8	31	
08	43.3	49.0	30	
10	43.2	48.6	30	
12	44.8	45.5	28	
14	42.7	46.7	28	-16.4
16	41.2	45.4	25	
18	37.9	42.2	20	
20	38.0	42.7	21	
22	38.8	42.9	21	
24	35.6	41.8	18	
26	39.2	44.2	23	
28	36.2	40.8	18	
30	32.8	36.0	11	-16.2
32	31.1	36.8	10	
34	38.0	39.7	18	
36	34.2	36.8	13	
38	34.8	37.3	14	
40	33.2	37.3	13	
42	31.3	35.9	10	
44	33.8	38.2	14	-16.1
46	35.1	37.2	14	
48	38.6	39.8	19	
50	43.2	43.9	26	
52	44.5	45.8	28	
54	46.6	47.0	31	
56	45.1	45.9	29	
58	44.0	45.9	28	
14 00	45.0	47.7	22 30	-16.0
02	41.9	44.1	25	
04	42.9	44.1	26	
06	45.6	45.9	29	
08	48.6	49.9	35	
10	47.1	48.3	32	
12	44.8	46.1	29	
14	46.0	47.0	30	-16.0
16	48.0	49.5	34	
18	46.3	49.1	32	
20	47.5	48.8	33	
22	47.1	48.4	32	
24	51.3	52.0	38	
26	50.3	50.6	37	
28	43.5	44.2	26	
30	45.2	45.4	29	-16.0
32	46.5	46.8	30	
34	46.3	46.7	30	
36	46.7a		31	
38	49.4	49.8	35	
40	46.0	47.2	30	
42	45.0	46.0	39	
44	45.6	46.8	30	-15.9
46	49.1a		34	
48	48.7	48.9	34	
50	49.8	50.8	36	
52	51.3	54.1	40	
54	50.8	52.3	38	
56	49.2	51.3	36	
58	52.7	54.3	41	
15 00	52.1	54.5	41	-15.9
02	54.1	55.6	43	
04	54.6	56.0	44	
06	55.1	56.0	44	
08	57.0	58.0	48	
10	58.4	59.0	50	
12	58.8	59.2	50	
14	56.0	56.0	45	-15.8
16	59.2	59.7	50	
18	62.6	63.1	56	
20	62.3	63.8	56	
22	63.0	65.3	22 58	
24	66.7	69.2	23 04	
26	62.3	64.7	22 57	
28	65.8	67.9	23 02	
30	68.2	70.8	06	-15.8
32	68.8	70.7	06	
34	68.2	69.4	05	
36	67.0	68.8	23 04	
38	63.9	65.5	22 59	
40	64.3	66.0	59	
42	67.7	68.8	04	
44	65.1	66.7	23 00	-15.8
46	62.3	64.3	22 56	
48	64.0	65.8	59	
50	63.9	64.8	58	
52	61.0	62.4	54	
54	63.9	65.1	22 58	
56	66.7	68.4	23 03	
58	63.9	65.7	22 59	
16 00	63.9	65.8	59	-15.6

Correction to local mean time is + 53s. 90° torsion = 13.'8.
Torsion head at 11h 25m read 25° and at 16h 42m read 38°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	°	°
0 00*	39.5	37.1	23 02	−18.0
02	39.5	37.5	23 01	
04	41.5	40.0	22 57	
06	43.5	41.9	55	
08	45.3	43.6	52	
10	48.0	47.0	47	
12	50.1	49.3	44	
14	52.5	51.2	40	−17.7
16	53.3	52.5	39	
18	55.6	54.8	35	
20	58.8	58.0	30	
22	59.4	58.3	29	
24	59.9	58.9	28	
26	60.4	59.1	28	
28	58.3	57.1	31	
30	54.2	52.6	58	−17.5
32	51.8	50.8	41	
34	51.6	50.8	41	
36	51.3	50.8	42	
38	49.8	49.0	44	
40	48.3	48.0	46	
42	48.3	48.0	46	
44	49.3	48.8	45	−17.3
46	49.8	49.2	44	
48	49.3	48.5	45	
50	48.2	47.3	47	
52	49.3	48.5	45	
54	46.0	45.6	50	
56	47.6	47.2	47	
58	47.5	47.0	48	
1 00	46.6	46.3	49	−17.0
02	46.8	46.3	49	
04	46.5	46.3	49	
06	47.8*a*		47	
08	48.2	48.1	46	
10	48.5	48.2	46	
12	48.1	47.7	46	
14	47.8	47.3	47	−17.0
16	49.3	49.3	44	
18	49.6	49.3	44	
20	50.8	50.3	42	
22	51.6	51.3	41	
24	50.8	50.6	42	
26	50.8	50.6	42	
28	48.2	48.2	46	
30	48.3	48.1	46	
32	48.2	48.1	46	
34	49.2	48.7	45	
36	48.0	47.8	46	
38	46.5	46.5	49	
40	47.5	47.3	47	
42	46.9	46.6	48	
44	45.8	45.6	50	−16.5
46	44.5	44.5	52	
48	43.5	43.5	53	
50	44.3	43.7	53	
52	41.8*a*		56	
54	42.5	42.2	55	
56	43.5	43.2	54	
58	46.2	45.6	50	
2 00	43.6	43.3	22 54	−16.5
02	45.6	45.3	50	
04	46.3	45.7	49	
06	47.1	46.5	48	
08	47.1	46.7	48	
10	48.3	47.9	46	
12	48.3	48.0	46	−16.4
14	46.8	46.4	49	
16	46.0	45.8	50	
18	47.2	47.0	48	
20	46.9	46.6	48	
22	48.2	47.8	46	
24	44.4	44.1	52	
26	48.6	48.3	46	
28	49.8	49.2	44	
30	49.8	49.2	44	−16.3
32	49.4	49.0	44	
34	47.6	47.3	47	
36	46.4	45.3	50	
38	45.3	44.3	51	
40	44.9	44.3	52	
42	43.8	43.0	54	
44	46.2	44.6	50	−16.2
46	41.8	41.3	56	
48	48.8	48.2	46	
50	46.3	45.3	50	
52	42.7	41.6	56	
54	40.9	40.0	58	
56	42.2	41.0	56	
58	47.6	47.2	47	
3 00	49.8	48.2	45	−16.2
02	46.7	45.4	50	
04	46.5	45.4	50	
06	47.2	45.8	49	
08	46.8	45.5	49	
09	46.8	45.4	49	
12	46.1	44.8	50	
14	45.2	43.7	52	−16.0
16	43.6	42.6	54	
18	42.0	41.0	57	
20	41.2	40.7	57	
22	41.3	40.1	22 58	
24	39.6	38.4	23 00	
26	37.6	36.7	03	
28	37.8	36.8	03	
30	38.8	38.1	23 01	−16.0
32	41.5	40.6	22 57	
34	44.4	43.3	53	
36	45.6	44.8	51	
38	43.7	43.3	53	
40	41.1	40.9	57	
42	41.9	41.2	56	
44	40.6	40.3	22 58	−16.0
46	39.3	39.1	23 00	
48	37.5*b*		03	
50	35.0*b*		07	
52	33.5*b*		09	
54	31.0	31.0	13	
56	30.5	30.5	14	
58	28.1*b*		18	

Observer—W. J. P.

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	°	°
4 00	24.0	23.6	23 24	−16.0
02	27.3	25.7	20	
04	30.3	29.3	15	
06	31.1	30.3	14	
08	29.7	28.3	16	
10	31.3	30.3	13	
12	33.0	31.3	11	
14	35.3	34.3	07	−16.0
16	29.4	28.6	16	
18	33.6	32.3	23 10	
20	41.3	40.1	22 58	
22	39.5	39.0	23 00	
24	40.3	39.7	22 59	
26	39.3	38.6	23 01	
28	38.6	38.0	02	−16.0
30	38.5	37.9	02	
32	38.0	37.8	02	
34	34.1	33.3	09	
36	28.8	28.6	17	
38	26.1	25.5	21	
40	20.8	20.1	30	
42	20.6	20.6	29	
44	24.2	23.9	24	−16.0
46	28.3	28.1	18	
48	36.3	35.3	06	
50	39.3	39.0	00	
52	37.8*b*		02	
54	34.6	34.3	08	
56	33.6	33.3	09	
58	32.6	32.4	11	
5 00	30.0	28.2	16	−16.0
02	27.6	26.6	19	
04	24.6	24.1	24	
06	24.1	22.9	25	
08	28.3	27.9	18	
10	28.2	26.8	18	
12	25.2	24.1	23	
14	25.0	24.3	23	−16.0
16	29.7	28.8	16	
18	29.3	28.5	16	
20	32.5	32.3	11	
22	37.6	37.0	23 03	
24	40.5	40.0	22 59	
26	41.2	40.6	58	
28	45.2	44.0	52	
30	47.2	46.7	48	−14.0
32	53.1	52.6	39	
34	51.3	51.0	41	
36	47.0	45.5	49	
38	42.5	39.8	22 57	
40	26.5	23.3	23 23	
42	18.5	16.8	34	
44	24.3*a*		24	−16.0
46	33.3	32.5	10	
48	34.9	34.3	07	
50	29.3	27.8	17	
52	23.6	22.0	26	
54	19.9	19.6	31	
56	22.0	21.2	28	
58	23.0	22.2	26	
6 00	31.0	30.3	23 14	−16.0
02	34.3	34.0	08	
04	33.5	33.5	23 09	
06	Overl'k'd			
08	41.0*a*		22 57	
10	48.3	47.3	47	
12	50.2	50.0	43	
14	50.0*b*		43	−16.0
16	42.6	41.6	56	
18	48.1	47.0	47	
20	49.3	48.8	45	
22	48.3	47.5	46	
24	48.2	47.6	22 46	
26	39.6	39.4	23 00	
28	32.0*b*		12	
30	29.7	28.7	16	−15.8
32.2	33.5	33.0	10	
34	29.2	27.6	17	
36	22.8	21.6	27	
38	26.3	24.9	22	
40	27.5	24.3	21	
42	23.5	19.9	28	
44	25.5	23.5	23	−15.6
46	26.8	24.0	22	
48	23.2	21.2	27	
50	28.0	23.2	22	
52	35.3	33.3	08	
54	36.0	32.7	08	
56	35.1	31.0	10	
58	37.0	34.5	06	
7 00	36.5	33.3	07	−15.7
02	34.0	31.8	10	
04	31.3	29.7	14	
06	29.0	25.5	19	
08	34.4	29.8	11	
10	37.3	33.3	06	
12	36.0	31.6	09	
14	34.0	26.8	14	−15.6
16	32.0	24.7	17	
18	30.0	27.8	16	
20	30.7	27.6	16	
22	29.6	27.6	17	
24	28.9	26.2	19	
26	32.0	29.3	14	
28	34.8	33.0	08	
30	28.0	27.0	18	−15.5
32	27.5	26.0	20	
34	23.8	21.5	26	
36	24.6	20.0	27	
38	31.1	28.3	15	
40	26.7	23.4	22	
42	33.6	30.0	12	
44	26.9	22.0	23	−15.4
46	24.2	20.2	27	
48	35.0	31.3	10	
50	27.3	24.3	21	
52	41.0	37.3	23 00	
54	53.0	47.8	22 43	
56	42.1	39.9	57	
58	45.3	41.8	53	

Observers—W. J. P. and J. V., who alternated from 7h 40m to 7h 50m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
8 00	43.1	38.0	22 58	−15.0
02	40.0	34.9	23 03	
04	37.9	35.4	23 04	
06	62.5	60.8	22 25	
08	51.2	50.4	42	
10	44.0	38.9	57	
12	42.2	38.9	58	
14	54.0	52.2	38	−15.0
16	43.5	42.2	22 54	
18	29.3	24.8	23 19	
20	56.5	46.0	22 41	
22	58.2	54.7	22 33	
24	34.2	33.2	23 09	
26	42.0	40.8	22 57	
28	49.1	46.0	47	
30	43.0	40.5	22 56	−14.9
32	40.2	36.9	23 01	
34	77.0	73.5	22 04	
36	60.9	59.0	22 28	
38	13.5	7.5	23 45	
40	27.3	26.1	23 20	
42	52.5	49.5	22 42	
44	53.0	49.0	42	−14.9
46	46.0	42.6	52	
48	49.3	45.3	47	
50	49.2	47.9	46	
52	41.9	39.0	58	
54	44.2	37.8	57	
56	45.2	42.5	53	
58	48.1	41.0	52	
9 00	52.3	42.2	48	−14.8
02	46.6	38.0	55	
04	43.7	38.5	57	
06	49.8	43.2	49	
08	43.1	38.8	58	
10	50.0	47.0	46	
12	48.0	44.5	49	
14	46.8	42.0	52	−14.8
16	45.1	41.9	53	
18	49.9	45.9	46	
20	45.0	42.3	53	
22	45.0	41.8	54	
24	49.2	48.9	45	
26	49.1	47.5	46	
28	53.5	50.0	40	
30	56.9	53.9	35	−14.3
32	56.6	48.2	40	
34	53.1	51.2	40	
36	56.0	47.0	41	
38	59.0	50.0	36	
40	58.0	51.8	36	
42	49.0	43.0	50	
44	54.0	52.0	38	−14.1
46	54.6	52.8	37	
48	55.0	54.0	36	
50	55.7	54.0	36	
52	53.0	50.1	41	
54	54.0	52.0	38	
56	51.6	49.0	43	
58	52.2	49.9	42	
10 00	55.2	53.0	22 37	−14.2
02	50.0	47.9	45	
04	53.4	50.4	40	
06	50.1	46.9	46	
08	56.3	53.8	35	
10	57.2	54.9	34	
12	53.1	52.8	39	
14	55.9	54.5	35	−14.2
16	57.5	56.9	32	
18	61.7	59.6	27	
20	60.5	59.2	28	
22	60.4	58.9	28	
24	61.9	59.8	26	
26	57.0	55.3	34	
28	59.2	55.1	32	
30	55.9	52.0	37	−14.3
32	55.2	52.2	37	
34	54.5	51.0	39	
36	57.1	53.2	35	
38	60.0	57.0	30	
40	58.0	56.0	32	
42	58.5	57.6	31	
44	57.0	55.1	34	−14.3
46	61.1	58.9	28	
48	64.0	61.5	23	
50	58.2	57.0	31	
52	62.7	59.9	25	
54	61.1	59.8	27	
56	61.0	60.9	26	
58	58.1	56.0	32	
11 00	58.2	57.2	31	−14.1
02	61.8	61.0	25	
04	56.5*b*		33	
06	58.0	58.0	31	
08	58.4	56.2	32	
10	53.0	50.2	41	
12	61.1	60.0	27	
14	60.4	60.0	27	
16	56.5	55.0	34	−14.0
18	57.5	55.9	33	
20	58.5	57.0	31	
22	59.5	58.1	29	
24	62.5	60.3	25	
26	59.1	57.7	30	
28	56.9	55.2	34	
30	56.5	55.6	34	−14.0
32	56.0	53.9	36	
34	55.2	54.0	36	
36	53.9	52.1	38	
38	57.0	55.5	34	
40	55.7	53.1	36	
42	60.0	58.2	29	
44	60.3	58.5	28	−14.0
46	59.6	58.2	29	
48	61.0	60.0	27	
50	57.5	55.7	33	
52	59.0	57.0	31	
54	57.5	56.5	32	
56	56.9	55.3	34	
58	57.2	55.9	33	

Observer—J. V.

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	57.2	56.1	22 33	−14.0
02	56.9	56.1	33	
04	54.3	53.9	37	
06	56.0	55.0	34	
08	55.0	53.7	36	
10	56.3	55.7	34	
12	56.1	55.3	34	
14	58.2	58.9	30	−14.0
16	57.9	57.2	31	
18	55.2	55.0	35	
20	53.0	52.1	39	
22	56.0	54.3	35	
24	54.8	54.1	36	
26	58.0	56.7	32	
28	58.3	57.5	31	
30	57.1	55.8	33	−13.9
32	56.2	55.1	34	
34	58.0	57.7	31	
36	55.8	55.6	34	
38	54.0	54.0	37	
40	55.3	54.8	35	
42	55.0		35	
44	48.6	43.0	50	
46	45.0	44.8	51	−13.9
48	56.1	55.3	34	
50	57.9	57.0	32	
52	59.8	58.9	28	
54	56.7	55.7	34	
56	55.0	53.3	37	
58	56.8	55.3	34	
13 00	59.2	57.7	30	−13.8
02	59.0	57.9	30	
04	60.7	59.3	28	
06	63.2	61.8	24	
08	62.4	61.0	25	
10	61.8	60.0	26	
12	57.0	55.8	33	
14	55.4	54.7	35	−13.6
16	53.9	53.0	38	
18	59.8	57.5	30	
20	59.1	58.0	30	
22	58.2	57.3	31	
24	59.8	58.0	29	
26	58.1	55.9	32	
28	59.0	57.1	31	
30	60.0	58.8	28	−13.6
32	60.8	59.0	28	
34	58.4	57.0	31	
36	60.7	59.2	28	
38	64.7	62.3	22	
40	65.3	64.1	20	
42	66.2	64.0	20	
44	64.2	63.6	21	−13.7
46	61.9	59.8	26	
48	60.7	59.0	28	
50	58.7	57.6	30	
52	55.2	55.0	35	
54	50.0	49.9	43	
56	52.0	51.1	41	
58	49.7	48.8	44	
14 00.5	48.0	47.5	22 47	
02	45.1	41.5	54	−13.7
04	45.8	43.1	52	
06	46.0	42.4	52	
08	41.6	40.0	22 58	
10	40.0	37.8	23 01	
12	39.8	37.2	23 01	
14	41.7	39.5	22 58	−13.8
16	38.0	37.0	23 03	
18	40.5	39.0	22 59	
20	42.0	40.3	57	
22	43.2	41.1	56	
24	43.8	42.0	54	
26	45.3	43.5	52	
28	49.0	48.6	45	
30	47.5	46.8	48	−13.7
32	48.0	46.4	48	
34	50.4	49.5	43	
36	50.5	49.9	43	
38	50.2	49.2	44	
40	51.9	51.6	40	
42	53.9	53.1	38	
44	55.0	53.9	36	−13.5
46	55.4	56.2	34	
48	57.0	56.0	33	
50	54.8	53.8	36	
52	55.0	54.0	36	
54	55.4	53.4	36	
56	55.2	54.5	36	
58	56.0	55.2	34	
15 00	57.5	56.5	32	−13.5
02	58.1	57.3	31	
04	59.2	58.8	29	
06	60.9	60.0	27	
08	60.9	59.9	27	
10	61.8	60.5	26	
12	60.3	59.4	28	
14	62.8	61.5	25	−13.3
16	62.5	61.8	24	
18	63.0	62.0	23	
20	62.0	61.2	25	
22	64.0	62.8	22	
24	64.9	63.8	21	
26	64.5	62.9	22	
28	63.6	62.4	23	
30	63.9	62.0	23	−13.2
32	65.0	63.0	21	
34	64.0	62.9	22	
36	64.3	63.1	22	
38	62.9	61.0	24	
40	63.1	61.8	24	
42	64.0	62.0	23	
44	64.7	61.5	23	−13.2
46	67.2	64.4	19	
48	65.0	63.0	21	
50	65.0	63.8	21	
52	63.8	62.5	23	
54	65.8	64.0	20	
56	65.0	63.2	21	
58	65.5	63.7	20	

Observers—J. V. and R. R. T., who alternated from 15h 54m to 16h 04m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
16 00	63.0	62.1	22 24	−13.0
02	63.2	62.5	23	
04	65.2	64.2	20	
06	63.1	62.9	23	
08	63.7	63.4	22	
10	62.4	62.0	24	
12	65.8	62.6	21	
14	63.5	60.8	24	−12.5
16	63.9	61.0	24	
18	63.0	60.7	25	
20	62.1	59.2	27	
22	62.1	59.0	27	
24	62.0	58.8	27	
26	61.7	58.8	27	
28	61.2	58.2	28	
30	64.1	61.3	23	−12.2
32	66.2	64.1	19	
34	65.9	63.1	20	
36	63.9	60.9	24	
38	62.8	60.0	25	
40	63.8	60.8	24	
42	62.8	60.4	25	
44	61.7	59.6	27	−12.0
46	60.4	58.5	28	
48	60.9	59.0	28	
50	59.7	57.6	30	
52	59.5	57.8	30	
54	57.7	56.0	33	
56	56.4	55.0	34	
58	56.1	54.6	35	
17 00	55.3	53.9	36	−12.0
02	56.6	55.0	34	
04	57.3	55.1	34	
06	57.3	55.2	34	
08	57.0	54.5	34	
10	55.8	53.3	36	
12	55.2	53.0	37	
14	54.0	51.6	39	−11.9
16	54.9	53.2	37	
18	54.1	53.0	38	
20	55.9	54.2	35	
22	56.1	55.0	34	
24	55.6	54.3	36	
26	56.2	55.0	34	
28	56.1	55.0	34	
30	56.0	54.8	34	−11.9
32	55.2	53.8	36	
34	53.4	51.8	39	
36	52.9	50.8	40	
38	52.2	50.1	41	
40	52.0	49.9	42	
42	52.9	50.3	41	
44	52.0	49.8	42	−11.9
46	51.3	49.0	43	
48	51.1	48.9	43	
50	52.1	49.9	42	
52	53.5	51.8	39	
54	52.1	50.6	41	
56	52.1	50.3	41	
58	52.5	50.9	40	
18 00	52.0	50.1	22 42	−11.8
02	51.9	48.8	43	
04	50.1	48.8	44	
06	50.2	48.8	44	
08	51.0	49.3	43	
10	50.8	48.9	44	
12	50.7	49.2	43	
14	51.5	50.4	42	−11.8
16	51.7	50.3	42	
18	52.2	51.4	40	
20	52.4	51.4	40	
22	52.3	52.0	40	
24	52.2	51.9	40	
26	50.1	50.0	43	
28	49.6	48.8	44	
30	49.4	49.0	44	−11.8
32	49.2	48.6	45	
34	49.3	48.1	45	
36	50.2	48.9	44	
38	50.5	49.3	43	
40	50.3	49.3	44	
42	51.7	50.3	42	
44	52.4	51.0	40	−11.8
46	52.2	51.0	41	
48	53.0	50.0	41	
50	53.1	50.0	41	
52	53.1	48.7	42	
54	52.8	48.2	42	
56	52.0	48.0	43	
58	52.0	48.1	43	
19 00	51.9	48.2	43	−11.6
02	51.1	48.4	44	
04	50.9	48.5	44	
06	50.8	48.8	44	
08	51.1	49.2	43	
10	51.4	49.8	42	
12	51.2	49.5	43	
14	51.4	49.9	42	−11.7
16	52.0	50.6	41	
18	54.3	52.5	38	
20	54.2	52.4	38	
22	54.2	52.7	38	
24	53.9	52.2	38	
26	54.2	52.6	38	
28	54.0	53.0	38	
30	54.1	52.2	38	−11.7
32	53.3	52.0	39	
34	52.4	51.0	41	
36	52.4	51.2	40	
38	52.2	51.1	41	
40	52.9	51.2	40	
42	53.8	51.9	39	
44	55.2	53.3	37	−11.6
46	55.8	53.9	36	
48	56.0	54.8	35	
50	55.3	54.5	36	
52	54.7	53.5	37	
54	54.8	53.2	37	
56	55.9	54.3	35	
58	54.8	53.5	37	

Observer—R. R. T.

Wednesday, February 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	55.5	54.7	22 35	−11.6
02	58.0	56.7	32	
04	58.1	56.6	32	
06	58.2	56.7	32	
08	58.4	57.0	31	
10	60.0	58.2	29	
12	59.4	58.3	29	
14	59.5	58.2	29	−11.7
16	58.8	57.2	31	
18	60.8	58.6	28	
20	59.9	58.2	29	
22	59.0	56.9	31	
24	58.5	57.0	31	
26	58.7	57.2	31	
28	59.1	57.4	30	
30	58.9	57.4	30	−11.5
32	58.8	57.6	30	
34	58.2	57.0	31	
36	58.3	57.2	31	
38	58.3	57.1	31	
40	58.8	57.4	30	
42	58.4	57.2	31	
44	58.5	57.4	31	−11.4
46	59.3	58.8	29	
48	60.2	59.2	28	
50	61.1	59.6	27	
52	60.2	58.7	28	
54	60.5	58.9	28	
56	60.2	58.3	29	
58	59.9	58.3	29	
21 00	59.7	58.1	29	−11.4
02	59.0	58.1	30	
04	59.8	58.7	29	
06	60.1	59.4	28	
08	60.6	60.1	27	
10	59.8	58.9	29	
12	55.0	54.1	36	
14	47.8	43.0	50	−11.4
16	53.0	52.3	39	
18	73.8	62.2	15	
20	68.8	58.1	22	
22	68.9	61.8	19	
24	69.3	61.0	20	
26	69.1	63.1	18	
28	71.2	64.4	15	
30	69.3	63.1	18	−11.4
32	68.1	62.3	19	
34	66.9	61.9	21	
36	67.1	62.2	20	
38	66.9	62.7	20	
40	66.2	62.4	21	
42	67.8	62.8	19	
44	66.1	61.8	21	−11.3
46	65.8	61.4	22	
48	65.9	62.2	21	
50	64.8	61.2	23	
52	64.8	61.8	22	
54	64.7	61.4	23	
56	63.2	60.1	25	
58	61.7	59.2	27	
22 00	60.9	57.9	22 28	−11.2
02	63.9	61.3	23	
04	62.9	59.2	26	
06	62.0	59.0	27	
08	51.0	48.5	43	
10	56.3	50.1	22 38	
12	23.*ob*		23 26	
14	42.2	40.3	22 57	−11.2
16	32.1	31.7	23 12	
18*4	54.1	53.6	24 01	
20*6	48.8	28.9	22 38	
22	57.9	43.2	20	
24	50.9	35.8	31	
26	45.6	31.6	39	
28	47.8	33.2	36	
30	44.4	31.3	40	−11.2
32	38.7	29.1	46	
34	50.9	42.8	26	
36	58.8	50.9	13	
38	51.7	42.1	26	
40	49.9	41.9	27	
42	48.6	39.3	30	
44	54.3	45.8	21	−11.1
46	40.0	32.8	42	
48	45.4	37.8	34	
50	39.7	31.0	44	
52	28.2	25.1	22 58	
54	15.*ob*		23 16	
56*	41.7	25.6	47	
58	28.8	27.8	23 55	
23 00*	72.3	42.0	24 07	−11.0
02*	69.0	23.1	22 41	
04	70.4	24.1	40	
06	72.7	38.8	22 26	
08	34.0	12.7	23 17	
10	61.0	38.9	22 35	
12	62.8	43.0	31	
14	65.1	45.0	27	−11.0
16	48.8	29.1	22 52	
18	37.7	19.2	23 09	
20*	36.1	34.0	44	
22	59.8	45.2	23 17	
24	72.8	58.7	22 56	
26	66.0	52.2	23 06	
28	68.7	54.3	23 03	
30	78.3	68.0	22 44	−11.0
32*	44.8	28.2	38	
34	44.5	26.4	39	
36	44.0	27.8	39	
38	44.7	27.7	38	
40	40.9	24.7	43	
42	39.0	24.0	45	
44	41.4	26.3	42	−11.0
46	41.8	28.1	40	
48	41.0	27.2	41	
50	37.7	25.3	45	
52	42.2	30.2	38	
54	39.3	28.2	42	
56	38.5	28.5	42	
58	39.8	29.4	41	
24 00	37.9	27.8	43	−11.0

Correction to local mean time is — 13s. 90° torsion = 14.′0.
Torsion head at oh oom read 32° and at 24h 22m read 31°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, February 11, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00*	52.2	54.9	22 38	-18.7
02	52.9	54.8	39	
04	53.7	55.1	40	
06	53.8	54.9	40	
08	53.9	55.1	40	
10	52.8	54.2	38	
12	51.9	53.2	37	
14	51.1	53.0	36	-18.2
16	50.8	52.3	35	
18	49.9	52.2	34	
20	49.3	51.2	33	
22	49.1	51.3	33	
24	49.2	51.7	34	
26	49.2	51.4	34	
28	49.6	51.6	34	
30	49.3	50.8	33	-17.9
32	49.2	51.0	33	
34	49.0	50.8	33	
36	49.2	50.8	33	
38	49.7	50.8	33	
40	50.2	51.0	34	
42	50.5	51.0	34	
44	50.7	51.1	34	-17.7
46	50.3	51.1	34	
48	50.1	50.8	34	
50	50.9	51.4	35	
52	52.1	52.3	36	
54	52.9	53.3	38	
56	54.3	54.8	40	
58	55.3	55.8	42	
17 00	55.2	55.8	42	-17.3
02	54.1	54.9	40	
04	54.3	55.3	41	
06	54.1	55.5	41	
08	54.5	55.3	41	
10	54.5	55.4	41	
12	53.8	54.7	40	
14	53.9	54.7	40	-17.1
16	54.0	54.6	40	
18	55.1	56.0	42	
20	55.2	56.0	42	
22	52.9	54.1	38	
24	52.9	53.5	38	
26	54.9	55.3	41	
28	54.7	55.2	41	
30	53.2	54.4	39	-17.0
32	53.3	54.5	39	
34	53.2	54.2	39	
36	52.2	53.2	37	
38	52.2	53.2	37	
40	52.5	53.8	38	
42	52.8	53.7	38	
44	52.5	53.1	37	-16.9
46	52.7	53.0	37	
48	52.3	53.1	37	
50	51.9	52.8	37	
52	51.2	52.0	36	
54	51.1	51.9	35	
56	50.8	51.8	35	
58	50.7	51.8	35	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	50.8	52.0	22 35	-16.9
02	50.7	51.9	35	
04	50.7	51.9	35	
06	51.0	52.1	35	
08	51.8	52.9	37	
10	52.0	53.5	37	
12	51.8	53.4	37	
14	51.7	53.8	37	-16.9
16	51.7	54.1	38	
18	51.7	54.1	38	
20	51.7	54.0	37	
22	51.1	53.2	36	
24	50.2	52.3	35	
26	50.2	52.1	35	
28	50.1	52.0	35	
30	50.1	51.8	34	-17.0
32	50.1	51.2	34	
34	50.2	52.1	35	
36	50.7	51.9	35	
38	50.5	51.8	35	
40	50.2	51.3	34	
42	49.7	50.9	34	
44	49.2	50.2	32	-17.0
46	49.6	51.2	34	
48	49.8	51.3	34	
50	50.1	51.7	34	
52	50.2	51.9	35	
54	51.3	52.6	36	
56	51.8	52.9	37	
58	52.0	52.9	37	
19 00	51.8	52.9	37	-17.0
02	51.9	53.0	37	
04	52.4	53.8	38	
06	52.8	54.2	38	
08	53.0	54.7	39	
10	52.7	54.1	38	
12	52.6	54.0	38	
14	52.0	52.9	37	-17.0
16	50.8	52.0	35	
18	50.8	51.7	35	
20	50.1	50.9	34	
22	49.7	50.5	33	
24	49.7	50.3	33	
26	48.1	48.8	30	
28	48.0	48.3	30	
30	46.0	46.0	27	-17.0
32	44.0	45.0	24	
34	42.1	50.7	22 27	
36*	49.5	59.8	24 11	
38*	27.6	48.7	57	
40	6.7	32.9	28	
42*	36.3	73.8	28	
44	27.6	52.6	24 05	-17.0
46	11.2	34.1	23 37	
48	23.7	37.8	50	
50	17.5	38.1	23 46	
52*	41.4	74.3	25 10	
54	28.7	48.5	24 40	
56	50.2	67.8	25 12	
58	71.9	76.8	36	
20 00*	13.1	21.3	11	-17.0

Correction to local mean time is — 47s.
Torsion head at 15h 30m read 30° and at the end read the same.
Observer—R. R. T.

Friday, February 12, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
20 00	41.8	41.2	22 42	-24.9
02	41.0	40.7	43	
04	41.9	40.3	42	
06	41.9	38.6	44	
08	42.3	37.1	44	
10	41.8	37.0	45	
12	41.9	37.4	45	
14	41.8	37.2	45	-24.0
16	42.0	37.1	45	
18	42.4	37.7	44	
20	42.2	37.6	44	
22	42.3	37.8	44	
24	42.9	38.2	43	
26	42.9	38.2	43	
28	42.8	38.7	43	
30	42.6	39.0	43	-23.9
32	42.8	39.0	42	
34	42.8	39.0	42	
36	42.3	39.1	43	
38	41.8	38.8	43	
40	41.1	39.0	44	
42	41.0	38.7	44	
44	41.1	38.6	44	-23.6
46	41.5	37.9	44	
48	42.0	38.1	44	
50	42.4	38.8	43	
52	42.7	38.7	43	
54	42.1	38.1	44	
56	41.5	38.1	44	
58	41.2	38.0	44	
21 00	40.9	37.8	45	-23.4
02	40.0	38.1	46	
04	40.7	38.4	45	
06	40.9	39.0	44	
08	41.0	39.9	43	
10	41.0	40.0	43	
12	40.8	39.4	44	
14	40.5	39.2	44	-23.2
16	41.0	38.8	44	
18	40.7	37.4	46	
20	40.0	37.0	46	
22	40.5	37.8	45	
24	40.8	38.0	45	
26	40.2	37.8	46	
28	39.9	39.0	45	
30	38.9	38.4	46	-23.0
32	38.8	37.4	47	
34	38.1	37.8	47	
36	38.9	38.3	46	
38	39.0	38.2	46	
40	40.3	38.2	45	
42	39.1	38.8	46	
44	39.5	38.9	45	-22.9
46	39.1	38.9	46	
48	39.1	38.4	46	
50	39.8	38.4	45	
52	40.4	39.0	44	
54	40.0	38.6	45	
56	40.2	39.1	45	
58	40.3	39.0	45	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	40.8	39.2	22 44	-22.6
02	41.9	39.0	43	
04	41.1	39.1	44	
06	41.2	39.0	44	
08	41.1	38.9	44	
10	40.9	38.2	45	
12	40.8	38.0	45	
14	40.0	38.0	46	-22.5
16	41.1	38.0	45	
18	41.1	39.0	44	
20	41.0	39.0	44	
22	41.0	39.4	44	
24	40.9	39.5	44	
26	40.9	39.9	43	
28	41.1	39.9	43	
30	41.9	40.2	42	-22.4
32	43.0	40.5	41	
34	43.2	40.4	41	
36	43.8	40.9	40	
38	43.9	41.0	40	
40	44.8	41.8	39	
42	44.8	41.2	39	
44	45.2	41.7	39	-22.2
46	46.0	41.0	38	
48	46.0	40.9	39	
50	46.0	41.0	38	
52	45.6	42.0	38	
54	42.3	42.0	41	
56	Bear			
58	outside			
23 00	45.8	42.3	38	-22.1
02	45.6	43.1	37	
04.5	45.3	43.2	37	
06	45.0	43.3	37	
08	45.0	43.0	38	
10	44.8	43.8	37	
12.5	44.3	42.5	39	
14	44.1	43.0	38	-22.0
16	43.7	43.7	38	
18	44.0	43.6	38	
20	Overl'k'd			
22	40.8	40.2	43	
24	41.8	42.3	41	
26	48.5	47.8	31	
28	49.0	47.4	31	
30	49.0	47.3	31	-22.2
32	49.8	48.2	30	
34	49.8	48.1	30	
36	50.0	48.0	30	
38	50.0	48.2	30	
40	Lost			
42	on			
44	account			
46	of			
48	bear			
50	46.9	45.3	34	
52	43.0	41.8	40	
54	41.8	38.7	44	
56	37.5	33.1	51	
58	39.9	32.0	50	
24 00	40.1	31.2	51	-22.5

Correction to local mean time is — 1m 12s.
Torsion head at 19h 30m read 28° and at the end read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, February 14, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
0 00	39.7	42.0	22 49	
02	40.8	41.9	50	-19.0
04	41.0	42.7	51	
06	42.0	43.0	52	
08	41.8	43.0	52	
10	40.8	42.0	50	
12	42.2	42.7	52	
14	43.0	43.8	53	-18.0
16	42.9	43.6	53	
18	42.1	43.0	52	
20	40.8	41.5	50	
22	39.9	40.8	48	
24	37.9	38.5	45	
26	42.8	43.5	53	
28	43.0	44.0	53	
30	42.8	43.2	53	-17.7
32	41.9	42.9	52	
34	43.6	44.4	54	
36	44.9	45.7	56	
38	44.1	45.8	56	
40	45.2	45.8	56	
42	44.0	44.4	54	
44	42.3	42.8	52	-17.5
46	41.3	41.8	50	
48	40.7	41.0	49	
50	41.9	42.0	51	
52	45.2	45.8	57	
54	46.0	46.9	58	
56	44.9	45.1	56	
58	42.1	42.5	52	
1 00	39.0	39.2	46	-17.0
02	37.1	37.4	44	
04	35.8	36.0	41	
06	33.9	34.0	38	
08	32.0	32.5	36	
10	32.5	32.8	36	
12	33.7	33.8	38	
14	33.8	34.0	38	-16.8
16	32.9	33.1	37	
18	31.7	31.9	35	
20	29.9	30.1	32	
22	30.4	31.0	33	
24	31.0	31.5	34	
26	33.2	33.7	38	
28	34.9	35.1	40	
30	36.0	37.0	42	-16.3
32	38.0	38.0	45	
34	39.1	39.8	47	
36	40.8	40.9	49	
38	40.1	40.2	48	
40	40.4	41.0	49	
42	41.5	42.1	51	
44	40.8	41.0	49	-16.0
46	39.9	40.3	48	
48	40.0	40.5	48	
50	39.2	40.0	47	
52	37.0	37.8	44	
54	34.0	35.0	39	
56	32.0	32.2	36	
58	30.8	31.2	34	
2 00	31.9	32.1	22 35	-15.7
02	34.8	34.9	40	
04	37.0	37.4	44	
06	38.1	38.4	45	
08	39.0	39.6	47	
10	39.8	40.2	48	
12	39.0	40.0	47	
14	36.0	37.0	42	-15.2
16	37.9	39.0	45	
18	41.2	41.9	50	
20	40.4	41.0	49	
22	40.3	40.9	49	
24	40.4	40.6	49	
26	38.0	38.1	45	
28	37.9	38.0	45	
30	37.8	38.0	45	
32	37.1	37.6	44	
34	37.7	37.9	44	
36	37.0	37.2	43	
38	35.4	35.6	41	
40	34.2	34.2	39	
42	34.4	34.7	39	
44	35.8	36.0	41	
46	35.3	35.9	41	-15.0
48	34.0	34.5	39	
50	35.8	36.0	41	
52	36.0	36.8	42	
54	36.0	36.2	42	
56	36.8	37.0	43	
58	37.3	37.8	44	
3 00	37.0	37.4	44	-14.9
02	37.1	37.3	44	
04	36.9	37.1	43	
06	38.7	39.0	46	
08	36.0	36.8	42	
10	37.2	37.9	44	
12	31.6	32.2	35	
14	29.6	30.1	32	-14.7
16	31.9	32.0	35	
18	35.4	35.5	41	
20	36.5	36.9	43	
22	36.9	37.3	43	
24	36.9	37.3	43	
26	37.5	38.0	44	
28	36.8	37.7	44	
30	35.2	36.0	41	-14.3
32	35.0	35.3	40	
34	34.9	35.2	40	
36	34.0	34.9	39	
38	34.4	35.0	40	
40	35.0	35.3	40	
42	36.3	37.0	43	
44	38.0	39.1	46	-14.0
46	42.3	42.9	52	
48	43.0	43.4	53	
50	44.8	45.2	56	
52	44.9	45.4	56	
54	45.9	46.2	57	
56	46.2	47.0	22 58	
58	46.9	48.0	23 00	

Observer—J. V.

Sunday, February 14, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
4 00.4	61.1	58.4	23 00	
02	61.0	58.5	23 00	
04	61.5	59.0	22 59	
06	60.8	59.0	23 00	
08	58.8	57.0	03	
10	58.0	56.1	04	
12	60.6	59.0	00	
14	59.8	58.3	01	-13.0
16	60.9	59.0	00	
18	60.5	59.0	23 00	
20	63.0	61.8	22 56	
22	64.7	63.0	54	
24	64.7	63.0	54	
26	62.1	60.9	57	
28	61.2	60.0	22 59	
30	59.1	58.1	23 02	-13.1
32	57.5	56.8	04	
34	59.0	58.2	02	
36	58.0	57.4	03	
38	58.5	58.0	02	
40	58.7	57.8	02	
42	60.0	59.2	23 00	
44	61.0	60.0	22 59	-13.1
46	56.4	54.8	23 06	
48	56.0	54.0	07	
50	55.7	53.8	08	
52	52.0	50.4	13	
54	51.9	49.7	14	
56	50.0	48.5	16	
58	57.0	55.2	06	
5 00	57.0	55.1	06	-13.1
02	59.0	57.2	02	
04	60.2	58.9	00	
06	60.2	59.2	23 00	
08	61.7	60.9	22 57	
10	64.0	63.2	54	
12	63.3	62.1	22 55	
14	57.8	56.9	23 04	-13.2
16	54.1	53.0	10	
18	54.5	54.0	09	
20	56.0	55.9	06	
22	54.0	53.0	10	
24	52.0	50.0	14	
26	50.2	48.8	16	
28	46.0	45.2	22	
30	44.2	43.3	25	-13.2
32	46.0	45.0	22	
34	42.8	41.9	27	
36	43.2	42.1	27	
38	41.0	40.0	30	
40	45.0	43.5	24	
42	43.9	42.2	26	
44	44.0	43.8	25	-13.2
46	44.0	43.0	25	
48	37.1	36.3	36	
50	39.1	37.3	34	
52	45.0	44.3	24	
54	47.0	46.1	21	
56	43.0	42.2	27	
58	42.0	42.0	28	
6 00	45.5	45.0	23 23	-13.1
02	40.0	38.0	32	
04.4	40.0	39.5	31	
06	42.4	42.0	28	
08	34.1	34.0	40	
10	33.9	32.0	42	
12	42.2	40.6	29	
14.5	33.0	32.0	23 43	-13.2
16	21.8	20.9	24 00	
18	28.0a		23 50	
20	60.1	58.2	01	
22	50.1	49.2	16	
24	41.8	40.9	29	
26	26.8	25.2	53	
28	36.1	34.8	38	
30	44.3	43.7	25	-13.1
32	48.7	47.7	18	
34	57.0	48.0	11	
36	49.6	48.9	16	
38	35.0	33.1	40	
40	34.2	33.0	41	
42	53.3	49.0	13	
44	55.5	48.0	23 12	-13.0
46	62.0	60.8	22 57	
48	63.0	61.5	56	
50	63.1	61.1	56	
52	69.2	67.6	46	
54	67.8	66.5	48	
56	63.0	61.8	56	
58	69.7	69.0	45	
7 00	74.0	72.0	39	-13.0
02	62.8	62.0	22 56	
04	53.9	51.9	23 11	
06	56.0	54.4	23 07	
08	61.4	59.8	22 59	
10	62.8	60.3	22 57	
12	58.0	56.9	23 04	
14	59.1	56.1	03	-13.0
16	57.2	54.0	06	
18	53.0	52.9	11	
20	57.6	55.7	05	
22	59.9	58.9	00	
24	60.0	57.9	23 01	
26	63.1	61.8	22 56	
28	66.0	63.7	52	
30	63.9	62.0	22 55	-12.9
32	61.3	58.8	23 00	
34	64.3	62.0	22 55	
36	72.0	72.0	40	
38	76.8	75.2	34	
40	71.9	70.0	42	
42	64.0	62.0	55	
44	65.0	62.9	53	-12.8
46	64.8	62.9	54	
48	63.8	60.8	56	
50	60.1	60.1	59	
52.5	62.2	61.2	57	
54	61.9	61.0	22 57	
56.5	53.4	52.0	23 11	
58	52.5		22 56	
8 00	62.8	59.9	57	-12.6

Correction to local mean time is — 1m 40s. 90° torsion = 9.'7.
Torsion head at 0h 00m read 30° and at 9h 55m read 39°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, February 15, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	38.7	38.9	23 33	-24.0
02	34.6	39.0	30	
04	36.1	40.1	32	
06	35.8	39.4	31	
08	25.9	29.1	15	
10	30.8	32.5	21	
12	27.9	30.3	17	
14	28.0	30.8	18	-23.4
16	37.7	41.9	34	
18	38.6	40.3	34	
20	40.8	41.6	36	
22	37.6	38.8	32	
24	32.3	34.4	24	
26	32.2	34.4	24	
28	32.2	34.8	24	
30	41.8	44.1	39	-22.8
32	41.9	44.9	40	
34	45.2	48.3	45	
36	40.0	44.0	38	
38	36.6	39.5	31	
40	35.2	36.3	28	
42	34.8	36.2	27	
44	36.2	38.1	30	-22.7
46	41.2	45.0	39	
48	37.9	42.7	35	
50	35.3	38.8	30	
52	34.1	34.8	26	
54	36.5	39.6	31	
56	39.2	44.0	37	
58	41.2	44.1	38	
9 00	44.3	46.5	43	-22.6
02	35.2	37.9	29	
04	33.4	34.9	25	
06	40.8	41.5	36	
08	40.9	41.2	36	
10	39.3	39.9	34	
12	35.2	36.5	28	
14	22.8	23.9	08	-22.2
16	22.1	23.2	07	
18	22.9	25.2	09	
20	17.3	19.0	23 00	
22	15.0	16.9	22 57	
24	10.1	11.2	48	
26	8.9	10.1	47	
28*	34.9	42.0	39	
30	33.0	38.7	35	-21.8
32	32.8	38.6	35	
34	30.5	36.6	31	
36	35.2	39.9	38	
38	41.7	47.0	48	
40	41.2	46.8	48	
42	39.9	45.7	46	
44	40.8	45.5	46	
46	38.8	42.9	43	
48	37.3	43.2	42	-21.0
50	36.8	41.3	40	
52	37.2	42.0	41	
54	36.6	41.1	40	
56	36.7	41.5	40	
58	34.3	40.0	37	
10 00	31.6	35.8	22 32	-20.5
02	29.2	33.3	28	
04	29.9	32.0	27	
06	29.6	32.0	27	
08	30.3	31.6	27	
10	34.1	35.0	33	
12	35.9	37.2	36	
14	31.1	31.9	28	-20.4
16	30.3	31.5	27	
18	32.1	33.3	30	
20	34.3	35.5	33	
22	34.2	35.0	33	
24	36.7	37.4	37	
26	36.5	38.0	37	
28	26.9	38.5	30	
30	31.9	33.2	30	-20.4
32	34.2	34.9	33	
34	39.5	40.1	41	
36	38.7	39.9	40	
38	35.8	36.5	35	
40	37.0	37.3	37	
42	34.5	35.1	33	
44	34.2	35.4	33	-20.4
46	34.0	34.8	33	
48	34.9	35.6	34	
50	35.4	39.2	37	
52	40.0	40.4	42	
54	37.1	39.2	38	
56	36.1	37.3	36	
58	33.5	34.1	32	
11 00	37.1	39.2	38	-20.3
02	37.5	38.0	38	
04	36.0	36.9	36	
06	36.5	36.8	36	
08	35.4	36.0	35	
10	36.3	37.4	36	
12	36.1	36.6	36	
14	37.8	38.5	38	-20.3
16	42.0	43.1	45	
18	39.2	40.5	41	
20	39.0	39.9	40	
22	36.9	37.8	37	
24	38.8	39.4	40	
26	39.5	39.8	41	
28	36.4	37.0	36	
30	36.7	37.2	37	-20.3
32	31.2	33.3	29	
34	29.4	30.1	25	
36	29.3	30.4	26	
38	40.3	42.0	43	
40	42.2	43.1	46	
42	36.9	38.0	37	
44	35.0	36.2	34	-20.3
46	34.3	34.9	33	
48	36.2	38.4	37	
50	34.6	35.8	34	
52	33.0	33.0	30	
54	33.2	33.6	31	
56	31.8	34.3	30	
58	31.8	34.5	31	
12 00	37.0	41.4	40	-20.1

Correction to local mean time is — 1m 50s.
Torsion head at 7h 45m read 39° and at the end read the same.
Observer—H. H. N.

Tuesday, February 16, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	69.6	66.8	21 54	-25.8
02	68.7	66.7	21 55	
04	57.9	54.8	22 13	
06	57.1	54.8	13	
08	58.0	56.8	11	
10	50.6	49.6	22	
12	48.5	47.0	26	
14	50.7	49.8	22	-25.5
16	54.8	54.1	16	
18	50.0	50.0	23	
20	49.1	48.3	25	
22	44.6	44.0	32	
24	42.4	41.5	35	
26	42.7	42.0	35	
28	40.6	40.0	38	
30	39.7	38.7	40	-25.0
32	40.1	38.8	39	
34	40.7	39.0	39	
36	40.6	39.0	39	
38	38.9	37.8	41	
40	36.8	35.7	44	
42	36.9	35.6	44	
44	39.7	38.1	40	-24.8
46	41.6	39.7	37	
48	37.4	36.0	44	
50	37.2	36.7	43	
52	36.6	36.0	44	
54	33.9	33.6	48	
56	35.6	35.0	46	
58	37.0	36.5	44	
13 00	40.3	38.8	39	-24.4
02	41.3	40.1	37	
04	46.4	45.5	29	
06	39.7	38.9	39	
08	36.0	35.1	45	
10	36.1	34.7	46	
12	36.0	35.8	44	
14	38.6	37.5	42	-24.0
16	43.1	41.0	35	
18	46.6	44.9	29	
20	49.6	48.0	24	
22	46.1	43.9	30	
24	42.1	40.5	36	
26	40.0	38.0	40	
28	40.6	38.9	39	
30	42.8	41.9	35	-23.9
32	44.0	42.0	34	
34	39.6	38.0	40	
36	40.6	39.2	38	
38	42.1	41.0	36	
40	45.6	43.9	31	
42	47.5	46.2	28	
44	49.1	47.4	26	-23.8
46	52.0	50.0	21	
48	57.1	56.0	12	
50	62.1	60.0	22 05	
52	65.6	64.0	21 59	
54	65.7	64.6	21 59	
56	64.0	62.8	22 02	
58	58.1	57.1	11	
14 00	56.6	55.5	22 13	-23.4
02	56.0	54.9	14	
04	54.2	53.0	17	
06	54.0	53.1	17	
08	52.7	51.9	19	
10	52.8	51.9	19	
12	54.0	52.8	17	
14	52.6	52.6	19	-23.3
16	55.9	55.0	14	
18	57.5	56.3	12	
20	60.1	59.5	07	
22	61.3	60.7	05	
24	61.7	60.9	22 05	
26	66.0	65.5	21 58	
28	56.2	56.0	22 13	
30	61.0	60.6	06	-23.2
32	62.1	61.4	04	
34	59.3	58.0	09	
36	56.8	55.7	13	
38	56.7	55.6	13	
40	48.5	47.0	26	
42	47.1	45.7	28	
44	43.9	42.1	34	-23.2
46	45.0	43.0	32	
48	43.6	42.0	34	
50	41.7	40.2	37	
52	41.6	39.6	37	
54	43.0	41.8	35	
56	43.1	41.3	35	
58	41.9	40.8	36	
15 00	43.5	42.5	34	-23.1
02	42.7	41.1	35	
04	43.0	41.6	35	
06	44.0	42.7	33	
08	43.9	42.6	33	
10	42.6	40.9	36	
12	41.6	40.0	37	
14	39.8	38.5	40	-23.0
16	39.1	37.9	41	
18	38.0	37.1	42	
20	38.6	36.6	42	
22	37.2	36.6	43	
24	37.8	36.7	43	
26	38.6	37.3	42	
28	38.9	37.9	41	
30	39.6	37.6	41	-23.0
32	38.9	37.3	41	
34	40.7	38.5	39	
36	40.7	38.6	39	
38	40.1	37.2	41	
40	39.6	37.0	41	
42	39.4	37.2	41	
44	37.8	36.2	43	-22.9
46	40.8	38.9	39	
48	41.4	39.6	38	
50	41.7	39.6	37	
52	40.5	38.9	39	
54	39.9	37.4	41	
56	40.2	38.3	40	
58	41.1	39.2	38	
16 00	42.3	40.9	36	-22.9

Correction to local mean time is — 1m 51s. 90° torsion = 15.'3.
Torsion head at 11h 25m read 36° and at 16h 26m read 46°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	52.3	58.0	22 23	-27.1
02	58.3	63.0	32	
04	65.2	73.0	45	
06	62.0	69.0	40	
08	63.0	68.9	40	
10	69.2	73.0	22 48	
12*	52.1	60.9	23 00	
14	56.1	63.0	05	-25.5
16	58.2	64.0	07	
18	63.0	68.6	15	
20	68.3	76.2	25	
22	68.1	76.2	24	
24	71.1	78.0	28	
26	69.6	75.0	25	
28	68.2	73.2	22	
30	61.8	68.0	13	-25.0
32	58.9	63.2	07	
34	57.0	60.2	03	
36	54.8	58.0	23 00	
38	49.0	53.0	22 51	
40	46.0	48.8	46	
42	43.0	45.7	41	
44	38.2	40.9	33	-24.7
46	36.5	39.0	30	
48	38.8	40.2	33	
50.5	38.8	41.1	34	
52	41.0	43.0	37	
54	47.9	49.8	22 48	
56	Lost			
58	55.8	58.5	23 01	
1 00	60.0	61.0	23 06	-24.2
02	55.8	55.8	22 59	
04	45.9	46.1	44	
06	44.0	44.8	41	
08	38.0*b*		31	
10	25.6	26.9	12	
12	29.0	31.0	18	
14	34.7	37.2	28	-23.9
16	41.2	43.5	38	
18	43.0	44.9	40	
20	41.8	43.9	38	
22	39.0	41.2	34	
24	40.3	42.8	36	
26	40.1	42.1	36	
28	40.8	43.0	37	
30	48.5	51.0	22 49	-23.0
32	61.0	62.9	23 08	
34	63.0	64.0	23 11	
36	55.9	56.0	22 59	
38	54.9	55.0	22 58	
40	56.3	56.8	23 00	
42	61.1*a*		07	
44	62.3	62.8	09	-22.6
46	66.8	67.0	16	
48	68.0	68.8	19	
50	67.0	67.2	17	
52	66.2	66.6	16	
54	66.2	66.6	16	
56	65.2	66.0	14	
58	60.0	60.9	06	
2 00	57.8	58.0	23 02	-22.0
02	57.0	57.9	01	
04	59.2	60.5	05	
06	61.2	62.1	08	
08	68.0	68.8	19	
10	56.5	56.9	00	
12	58.8	59.0	04	
14	59.1	59.3	04	-21.6
16	58.3	58.9	03	
18	58.8	59.0	04	
20	57.2	57.8	23 02	
22	54.0	54.6	22 57	
24	56.2	58.0	23 01	
26	58.1	58.7	03	
28	67.0	67.2	17	
30	74.0	74.4	28	-20.9
32*	49.8	54.1	36	
34	52.0	56.1	39	
36	49.5	52.8	34	
38	46.1	49.8	29	
40	47.6	50.4	31	
42	45.3	47.9	27	
44	40.8	42.9	20	-20.8
46	36.0	38.0	12	
48	34.1	36.9	10	
50	34.0	37.0	10	
52	33.0	35.9	08	
54	29.5	32.9	03	
56	28.0	32.6	02	
58	31.6	33.8	06	
3 00	32.1	34.8	07	-20.5
02	28.9	31.2	23 01	
04	21.6	28.4	22 53	
06	24.0	26.0	53	
08	21.5	23.8	50	
10	21.0	23.2	49	
12	23.1	25.2	52	
14	25.9	28.2	22 57	-20.3
16	28.7	30.8	23 01	
18	34.5	37.0	10	
20	36.6	38.5	23 13	
22	26.1	28.1	22 57	
24	27.0	28.9	22 58	
26	29.0	32.0	23 03	
28	22.8	24.4	22 51	
30	20.0	21.5	47	-20.1
32	19.0	20.3	45	
34	16.0	17.8	41	
36	17.0	18.4	42	
38	22.2	22.9	50	
40	27.0	30.0	59	
42	18.0	20.0	44	
44	18.8	20.0	45	-20.1
46	23.2	24.0	51	
48	24.3	25.2	22 53	
50	30.2	31.7	23 03	
52	30.0	30.3	02	
54	30.4	30.4	02	
56	32.0	32.5	05	
58	33.2	34.0	07	

Observer—J. V.

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	37.2*a*		23 12	-19.6
02	38.3	39.0	15	
04	40.1	40.9	18	
06	45.7	46.7	27	
08	51.5	57.9	40	
10	53.0	55.0	39	
12	56.0	57.3	43	
14	57.0	58.4	45	-19.5
16	62.0	64.0	53	
18	61.5	64.0	53	
20	61.9	64.6	53	
22	65.0	67.3	58	
24	64.6	67.3	23 58	
26	68.6	71.5	24 04	
28	74.0	76.0	12	
30*	58.8	60.1	24 13	-19.2
32	48.5	49.1	23 56	
34	49.0	50.3	23 58	
36	56.6	59.5	24 11	
38	58.0	60.3	12	
40	53.2	57.9	24 07	
42	47.9	51.0	23 57	
44	42.8	45.4	49	-19.1
46	41.0	45.0	47	
48	39.1	43.0	44	
50	37.0	40.9	41	
52	34.5	37.0	36	
54	33.0	34.8	33	
56	29.5	32.0	28	
58	27.5	30.1	25	
5 00	23.0	26.0	18	-19.0
02	15.2	16.5	23 04	
04	4.4	5.9	22 48	
06*	50.0	56.1	50	
08	47.8	52.3	46	
10	49.7	53.0	22 48	
12	13.1	17.0	21 50	
14	40.3	53.0	22 47	-19.0
16	48.2	51.9	46	
18	48.3	52.0	46	
20	43.5	47.0	38	
22	36.7	41.0	28	
24	38.1	42.5	30	
26	46.0	51.2	22 43	
28	61.9	64.0	23 06	
30	68.9	71.8	17	-18.9
32	60.5	65.0	23 05	
34	55.9	57.2	22 56	
36.5	53.0	55.0	22 51	
38.5	63.0	64.1	23 07	
40	71.5	73.5	21	
42	62.7	64.2	06	
44	64.7	66.0	23 10	-18.7
46	55.2	57.2	22 55	
48	44.3	47.0	38	
50	50.5	51.0	47	
52	45.0*b*		38	
54	42.0*a*		33	
56	39.5*a*		29	
58	53.2	55.9	53	
6 00	52.0*b*		22 49	-18.6
02	40.0	41.5	31	
04	40.5	40.8	22 31	
06	62.0	62.3	23 04	
08	76.5	77.0	23 27	
10*	36.3	46.6	24 17	
12	30.4	33.5	02	
14*	48.0	59.2	25	
16	43.2	58.6	21	
18	66.0	77.3	54	
20	65.5	70.0	48	-18.3
22	62.7	70.1	45	
24	64.3	70.0	24 47	
26	73.1	78.1	25 00	
28*	36.0	50.5	24 03	
30	36.1	49.0	24 02	-18.1
32	26.3	44.2	23 51	
34	33.0	46.0	23 57	
36	35.5	49.0	24 02	
38	20.5	35.0	23 39	
40	17.0	31.1	33	
42	9.0	17.5	16	
44*	42.9	45.0	23 03	-18.0
46	32.1	35.0	22 47	
48	34.0	36.0	49	
50	40.0	40.6	58	
52	40.8	42.0	59	
54	37.0	37.9	53	
56	30.0	30.0	41	
58	28.0	29.1	39	
7 00	31.0	33.1	44	-18.0
02	30.2	37.8	48	
04	37.9	38.9	54	
06	33.5	36.0	49	
08	27.0	27.8	37	
10	31.0	33.0	44	
12	35.0	35.7	50	
14	33.7	34.0	47	-18.0
16	30.0	30.4	42	
18	35.8	37.2	52	
20	39.0	41.0	57	
22	38.0	40.0	55	
24	29.8	32.9	43	
26	23.0	25.2	32	
28	26.9	28.0	37	
30	28.2	29.6	40	-18.0
32	30.0	30.1	41	
34	32.5	33.3	46	
36	33.6	34.0	47	
38	34.6	36.0	50	
40	27.0	27.1	37	
42	20.9	22.6	28	
44	13.0	17.0	18	
46	8.8	13.0	11	
48	16.0	21.9	24	
50	36.6	41.6	22 56	
52	49.5	54.0	23 15	
54	44.5	51.9	23 10	
56	23.8	29.2	22 36	
58	28.0	31.2	41	

Observers—J. V. and W. J. P., who alternated from 7h 48m to 8h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	50.1	57.0	23 18	-17.4
02	Over'l'k'd			
04	53.6	56.0	20	
06*2	33.8	42.6	54	
08	37.0	42.8	57	
10	25.3	31.3	38	
12	26.6	30.8	39	
14	35.1	40.5	53	-17.2
16	30.7	37.2	47	
18	25.8	31.3	39	
20	19.5	22.6	27	
22	11.0	12.2	12	
24	9.9	12.1	11	
26	7.6	12.0	23 09	
28*	39.2	42.0	22 55	
30	31.0	32.8	41	-17.0
32	22.2	25.3	28	
34	29.3	35.3	22 42	
36	42.4	45.6	23 00	
38	36.6	39.8	22 51	
40	31.8	34.8	44	
42	30.5	33.8	42	
44	30.5	33.6	41	-17.0
46	29.0	32.3	39	
48	28.4	30.5	37	
50	27.4	29.4	36	
52	27.6	30.0	36	
54	29.0	30.3	38	
56	31.6	34.2	43	
58	31.2	33.6	42	
9 00	31.0	33.2	42	-17.1
02	30.6	33.6	42	
04	31.0	33.3	42	
06	24.0	26.0	30	
08	24.3	26.0	31	
10	27.1	27.6	34	
12	28.7	29.7	37	
14	28.3	31.3	38	-17.2
16	26.1	27.3	33	
18	19.3	25.3	26	
20	17.0	24.3	24	
22	19.5	26.3	27	
24	14.9	22.9	21	
26	20.0	21.8	24	
28	35.0	42.0	52	
30	25.3	27.3	33	-17.2
32	24.5	29.5	34	
34	36.0	40.8	51	
36	35.5	39.0	50	
38	21.8	25.6	28	
40	20.8	25.0	27	
42	23.0	28.0	31	
44	22.3	30.3	32	-17.3
46	26.6	33.2	38	
48	31.6	37.3	45	
50	28.5	31.6	38	
52	23.6	28.6	32	
54	21.6	28.0	30	
56	23.8	30.0	33	
58	26.0	32.5	37	
10 00	25.6	30.8	22 35	-17.3
02	22.0	28.0	30	
04	21.9	26.8	29	
06	24.5	28.6	33	
08	22.3	26.0	29	
10	21.0	25.3	28	
12	23.4	28.3	32	
14	23.3	29.7	33	-17.4
16	25.3	32.9	37	
18	19.0	26.0	27	
20	20.0	27.6	29	
22	22.6	31.2	33	
24.5	23.9	31.2	34	
26	22.8	28.2	31	
28	26.0	30.8	36	
30	25.3	31.6	36	-17.3
32	24.3	29.3	33	
34	24.7	30.5	36	
36	25.5	31.0	35	
38	25.3	30.2	35	
40	26.6	30.8	36	
42	26.0	30.2	35	
44	24.9	27.6	32	-17.2
46	28.2	31.1	38	
48	28.8	31.5	38	
50	27.3	30.0	36	
52	21.0	24.0	26	
54	23.6	28.5	32	
56	24.3	29.5	33	
58	24.6	30.3	34	
11 00	28.0	33.6	40	-17.2
02	29.0	34.0	41	
04	25.6	30.0	35	
06	27.4	31.6	38	
08	24.6	28.4	33	
10	24.5	27.6	32	
12	27.2	33.3	39	
14	29.7	35.2	42	
16	27.4	33.4	39	-17.1
18	22.4	28.8	31	
20	22.3	23.8	27	
22	27.3	32.9	38	
24	24.3	29.9	34	
26	25.0	29.6	34	
28	28.3	32.8	39	
30	26.6	31.3	36	-17.1
32	27.3	31.3	37	
34	27.3	31.1	37	
36	29.4	32.6	40	
38	29.8	33.3	41	
40	26.2	29.9	35	
42	29.0	31.0	38	
44	31.5	33.8	42	-17.1
46	31.3	33.6	42	
48	27.3	29.5	36	
50	29.7	31.1	39	
52	24.3	25.8	30	
54	26.3	28.4	34	
56	30.1	31.6	40	
58	31.3	32.6	41	

Observer—W. J. P.

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	29.9	31.2	22 39	-17.1
02.5	28.3	29.1	36	
04	25.2	25.7	31	
06	21.8	22.3	26	
08	23.5	28.3	32	
10	26.3	31.0	36	
12	20.6	24.8	27	
14	23.7	29.5	33	-17.1
16	25.6	34.1	38	
18	20.0	30.0	30	
20	16.0	25.3	24	
22	17.5	26.0	25	
24	19.3	28.3	29	
26	15.5	24.1	22	
28	14.0	22.0	19	
30	8.8	16.6	11	-16.8
32*	34.0	46.0	04	
34	38.9	50.3	11	
36	40.1	49.0	11	
38	45.9	55.6	21	
40	48.9	57.6	25	
42	49.8	57.4	25	
44	49.7	59.1	27	-16.0
46	54.2	60.8	32	
48	58.5	65.0	38	
50	52.7	59.9	30	
52	50.4	57.0	26	
54	53.0	60.2	30	
56	48.3	54.5	22	
58	50.8	57.2	26	
13 00	35.5	42.4	02	-16.1
02	42.0	46.5	10	
04	42.7	49.1	13	
06	50.2	54.2	23	
08	54.6	60.0	31	
10	50.2	55.4	24	
12	44.9	50.2	16	
14	45.6	49.0	16	-16.2
16	42.5	46.0	10	
18	46.2	50.0	17	
20	48.2	52.8	20	
22	45.6	51.0	17	
24	48.0	52.4	20	
26	50.6	54.8	24	
28	49.1	54.0	22	
30	53.8	57.0	28	-16.1
32	52.0	56.6	26	
34	53.4	58.0	29	
36	54.5	59.1	30	
38	52.7	57.6	28	
40	56.2	60.0	32	
42	59.8	63.5	38	
44	58.1	61.4	35	-16.1
46	57.8	59.8	34	
48	54.8	57.2	29	
50	51.0	54.0	24	
52	52.1	54.7	25	
54	52.0	55.7	26	
56	53.5	55.5	27	
58	51.9	54.6	25	
14 00	50.8	53.2	22 23	-16.2
02	51.6	53.8	24	
04	53.6	54.5	26	
06	54.7	56.3	28	
08	56.2	57.2	30	
10	54.1	55.8	27	
12	53.4	54.3	26	
14	56.1	58.0	31	-16.1
16	56.1	58.1	31	
18	56.5	58.0	31	
20	56.4	58.4	31	
22	55.2	56.8	29	
24	58.3	59.4	34	
26	59.4	60.5	35	
28	63.2	63.8	41	
30	57.0	59.2	32	-16.1
32	51.0	53.0	23	
34	52.2	54.1	24	
36	53.3	55.2	26	
38	57.1	58.0	32	
40	62.2	62.8	39	
42	58.6	59.3	34	
44	47.6	48.8	17	-16.1
46	41.0	42.2	06	
48	51.2	53.3	23	
50	52.4	55.0	26	
52	50.0	51.4	21	
54	49.1	50.0	19	
56	51.0	52.2	22	
58	50.3	52.0	21	
15 00	49.8	50.8	20	-15.9
02	53.3	54.2	26	
04	54.7	55.6	28	
06	56.5	57.0	30	
08	61.0d		37	
10	65.7	66.7	45	
12	61.1	61.3	37	-15.7
14	59.5	60.0	35	
16	61.8	62.0	38	
18	59.2	60.2	35	
20	56.5	57.1	30	
22	61.0	61.3	37	
24	59.1	59.1	34	
26	67.9	68.1	48	
28	62.2	62.6	39	
30	61.9	62.3	39	-15.6
32	57.9	58.1	32	
34	62.4	63.4	40	
36	62.9	63.1	40	
38	61.4	61.4	38	
40	62.5	62.7	39	
42	60.7	60.9	37	
44	60.1	60.3	36	-15.3
46	56.2	56.9	30	
48	56.0	57.1	30	
50	56.1	57.2	30	
52	55.0	56.0	28	
54	54.2	55.6	27	
56	55.3	56.8	29	
58	54.2	56.2	28	

Observers—J. W. P. and R. W. P., who alternated from 12h 26m to 12h 32m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
16 00	55.6	57.8	22 30	-15.0
02	52.2	54.2	25	
04	45.8	48.3	15	
06	45.7	48.8	15	
08	45.9	48.8	16	
10	44.3	47.7	13	
12	48.3	51.7	20	
14	50.0	53.1	22	-14.7
16	48.3	51.2	19	
18	52.4	54.8	25	
20	55.6	57.2	30	
22	56.1	57.5	30	
24	54.2	55.7	27	
26	55.1	56.2	28	
28	55.7	56.9	30	
30	54.8	55.9	28	-14.0
32	56.1	57.6	30	
34	55.6	56.1	29	
36	56.0	57.2	30	
38	56.5	57.8	31	
40	56.1	58.1	31	
42	57.4	59.4	33	
44	59.1	60.9	35	-13.7
46	60.2	61.2	36	
48	61.1	61.8	38	
50	62.7	64.0	41	
52	64.9	65.0	43	
54	63.2	64.2	41	
56	62.3	62.8	39	
58	62.8	63.3	40	
17 00	62.7	63.0	40	-13.5
02	65.2	65.8	44	
04	65.8	66.2	45	
06	64.9	65.2	43	
08	66.2	66.9	46	
10	63.2	64.0	41	
12	64.1	65.3	43	
14	66.9	67.9	47	-13.0
16	67.0	67.9	47	
18	65.7	66.7	45	
20	65.2	66.0	44	
22	66.0	66.4	45	
24	66.2	67.2	46	
26	64.7	66.2	44	
28	65.0	66.9	45	
30	66.5	67.8	47	-12.8
32	68.1	68.8	49	
34	68.3	69.8	50	
36	66.2	67.7	46	
38	66.7	68.2	47	
40	67.7	69.3	49	
42	68.8	70.2	50	
44	70.5	72.2	53	-12.7
46	69.9	71.3	52	
48	70.6	72.0	53	
50	70.9	72.3	53	
52	72.7	73.8	22 56	
54	74.7	76.1	23 00	
56	72.1	73.0	22 55	
58	71.1	72.2	54	
18 00	69.0	70.0	22 50	-12.4
02	69.5	70.9	51	
04	71.0	72.2	54	
06	72.3	73.2	55	
08	70.2	71.0	52	
10	71.0	71.1	53	
12	71.2	71.8	54	
14	70.0	71.0	52	-12.3
16	68.8	69.1	49	
18	67.8	67.8	48	
20	65.0	65.8	44	
22	67.2	68.8	48	
24	60.1	70.7	51	
26	68.8	69.9	50	
28	66.7	67.2	46	
30	64.7	65.2	43	-12.2
32	65.1	65.8	44	
34	67.7	68.2	48	
36	66.1	67.0	46	
38	65.8	66.3	45	
40	66.0	66.8	45	
42	67.2	68.0	47	
44	66.2	67.1	46	-12.1
46	65.3	66.3	44	
48	63.5	64.2	41	
50	63.3	64.2	41	
52	64.1	64.8	42	
54	64.2	65.0	42	
56	64.0	65.0	42	
58	64.8	65.3	43	
19 00	61.7	62.8	39	-12.1
02	59.3	60.0	35	
04	60.1	60.8	36	
06	61.7	62.8	39	
08	63.3	64.0	41	
10	61.7	63.0	39	
12	59.3	60.1	35	
14	57.9	58.5	32	-12.0
16	58.1	58.7	33	
18	61.0	61.8	38	
20	59.8	60.1	35	
22	59.0	59.9	34	
24	59.7	60.6	36	
26	54.8	66.4	36	
28	54.9	65.9	36	
30	54.3	64.2	34	-12.0
32	54.6	63.8	34	
34	54.4	62.8	33	
36	55.3	63.1	34	
38	56.2	63.6	35	
40	55.3	62.1	33	
42	55.7	62.1	34	
44	56.5	62.6	35	-12.0
46	55.7	61.3	33	
48	53.0	58.8	29	
50	53.7	59.0	30	
52	51.1	56.8	26	
54	52.0	56.7	26	
56	54.6	58.8	30	
58	54.7	58.9	30	

Wednesday, February 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
20 00	53.9	58.0	22 29	-12.0
02	52.2	56.2	26	
04	52.1	55.9	26	
06	52.1	55.8	26	
08	52.2	55.9	26	
10	52.1	56.1	26	
12	52.2	56.3	26	
14	51.6	55.8	26	-12.0
16	50.3	54.9	24	
18	49.3	53.0	21	
20	48.3	51.8	20	
22	48.0	51.1	19	
24	46.9	49.7	17	
26	45.0	48.1	14	
28	45.4	48.2	15	
30	45.7	48.9	16	-12.0
32	42.7	47.0	12	
34	42.1	47.2	11	
36	39.2	44.5	22 07	
38	31.7	36.9	21 55	
40	35.9	39.8	22 00	
42	34.9	38.9	21 59	
44	32.0	37.8	56	-12.0
46	31.8	39.2	21 57	
48	Snow drift			
50				
52				
54				
56				
58				
21 00	36.6	38.1	22 00	-11.7
02	37.6	41.9	04	
04*	8.0	36.8	22 59	
06	30.8	55.9	23 32	
08				
10*	10.7	50.4	22 29	
12*	33.9	35.1	29	
14	33.9	35.1	29	-11.7
16	33.2	33.9	29	
18	31.9	34.7	22 28	
20	60.00		23 09	
22*	29.5	70.0	25 27	
24	Lost			
26*	42.9	56.5	23 42	
28*	40.8	45.8	21 45	
30*	20.3	55.3	20 40	-11.6
32*	61.2	69.9	23 06	
34*	10.8	19.1	22 46	
36	69.3	71.7	24 14	
38	32.6	46.0	23 25	
40	15.9	21.9	22 53	
42*	58.1	71.9	26	
44	47.2	60.1	09	-11.4
46	46.1	55.8	04	
48	44.9	55.1	03	
50	48.7	57.8	08	
52	50.4	59.9	11	
54	56.1	64.5	19	
56	57.8	65.8	22	
58	60.1	68.8	26	
22 00	61.0	69.8	22 27	-11.3
02	63.0	67.0	22 26	
04*	55.2	66.4	23 00	
06	21.3	53.0	22 23	
08	10.7	48.8	22 11	
10*	29.0	70.2	21 54	
12*	30.0	69.3	22 20	
14	32.9	68.1	22 22	-11.3
16*	31.9	52.8	23 52	
18	50.5	74.7	24 23	
20	14.1	37.3	23 26	
22	14.8	36.8	26	
24	22.8	43.9	38	
26	21.9	40.9	34	
28	9.1	25.2	23 12	
30*	32.7	49.6	22 48	-11.3
32	23.1	39.3	32	
34	20.4	36.2	28	
36	18.9	34.0	24	
38	19.4	33.8	25	
40	19.8	33.3	25	
42	20.4	33.8	26	
44	23.0	34.9	28	-11.4
46	22.4	34.0	27	
48	22.6	33.9	27	
50	24.1	35.3	30	
52	24.8	36.1	31	
54	26.9	37.8	34	
56	27.2	37.8	34	
58	30.9	40.6	39	
23 00	32.1	40.8	40	-11.4
02	34.2	42.3	43	
04	35.9	43.1	45	
06	32.9	38.7	39	
08	33.2	40.2	41	
10	36.3	43.3	46	
12	30.5	37.2	36	
14	29.3	35.8	34	-11.4
16	33.2	39.1	40	
18	32.3	38.1	38	
20	34.2	39.1	40	
22	32.7	37.4	38	
24	31.9	36.8	37	
26	34.0	38.2	40	
28	35.1	39.0	41	
30	34.3	39.0	40	-11.4
32	25.1	29.9	26	
34	23.0	26.6	22	
36	25.5	28.8	26	
38	27.2	30.4	28	
40	28.8	31.6	30	
42	29.8	32.7	32	
44	29.0	31.9	31	-11.4
46	28.3	31.2	30	
48	28.3	31.4	30	
50	29.8	32.7	32	
52	31.8	34.1	35	
54	32.3	34.2	35	
56	31.7	32.3	33	
58	32.0	33.5	34	
24 00	32.7	33.7	35	-11.4

Observers—R. W. P. and R. R. T., who alternated from 16h 00m to 16h 02m.

Correction to local mean time is — 1m 55s.

Torsion head at 0h 00m read 36° and at the end read the same.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, February 18, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	40.2	37.0	22 38	-22.4
02	39.9	36.0	39	
04	40.2	36.9	38	
06	40.8	37.2	37	
08	40.3	37.0	38	
10	41.2	37.8	36	
12	41.9	38.2	36	
14	40.7	37.5	37	-22.2
16	40.8	37.8	37	
18	42.8	40.0	33	
20	42.3	40.2	34	
22	41.8	39.7	34	
24	42.0	40.0	34	
26	42.0	40.0	34	
28	41.8	39.4	35	
30	41.7	39.2	35	-22.0
32	41.1	38.8	36	
34	40.9	38.8	36	
36	41.2	39.1	35	
38	42.4	40.1	34	
40	42.2	40.1	34	
42	42.3	40.7	33	
44	42.9	41.0	33	-21.9
46	43.1	42.0	32	
48	43.8	42.4	31	
50	43.8	42.2	31	
52	43.6	42.1	31	
54	45.2	44.1	28	
56	44.2	43.2	30	
58	44.0	43.4	30	
17 00	43.8	43.0	30	-21.3
02	43.2	42.5	31	
04	43.0	42.2	32	
06	42.8	42.2	32	
08	43.1	42.4	31	
10	42.9	42.2	32	
12	43.2	42.6	31	
14	43.7	42.5	31	-21.1
16	42.6	41.3	33	
18	41.8	40.8	34	
20	40.8	39.6	35	
22	39.9	38.6	37	
24	38.2	37.0	39	
26	38.3	37.0	39	
28	35.6	35.0	43	
30	36.2	35.8	42	-21.0
32	35.7	35.0	43	
34	35.9	35.2	43	
36	36.9	36.2	41	
38	36.7	36.1	41	
40	33.5	33.0	46	
42	33.0	32.0	47	
44	31.8	30.2	50	-20.9
46	31.6	29.2	51	
48	29.8	27.2	54	
50	27.9	26.2	56	
52	29.6	27.8	53	
54	32.0	30.2	49	
56	33.8	32.2	47	
58	35.9	34.0	44	
18 00	36.5	34.7	22 42	-20.7
02	38.2	36.0	40	
04	40.4	38.8	36	
06	39.9	38.7	37	
08	39.9	38.8	37	
10	39.7	38.9	37	
12	39.5	38.4	37	
14	38.5	37.2	39	-20.7
16	38.1	37.0	39	
18	40.0	39.0	36	
20	40.0	38.2	37	
22	39.0	37.3	38	
24	37.8	36.7	40	
26	37.8	36.7	40	
28	37.8	36.2	40	
30	37.8	36.1	40	-20.5
32	36.0	35.1	42	
34	35.8	35.2	43	
36	34.8	34.3	44	
38	35.2	35.0	43	
40	33.9	33.5	45	
42	33.2	33.1	46	
44	33.4	33.0	46	-20.4
46	34.0	33.4	45	
48	33.8	32.2	46	
50	30.0a		51	
52	32.8	32.8	47	
54	33.0	32.8	47	
56	34.2	33.8	45	
58	35.5	34.9	43	
19 00	35.3	34.8	43	-20.2
02	37.2	36.2	41	
04	37.9	36.8	40	
06	39.8	39.1	36	
08	39.6	39.0	37	
10	39.8	38.9	37	
12	38.9	38.0	38	
14	39.4	38.2	37	-20.0
16	39.7	38.2	37	
18	40.1	38.8	36	
20	40.7	39.2	36	
22	40.8	39.2	35	
24	40.1	38.8	36	
26	39.0	38.0	38	
28	39.1	38.1	38	
30	40.9	39.3	35	-20.0
32	40.1	38.8	36	
34	38.0	37.0	39	
36	37.1	36.1	41	
38	37.2	36.0	41	
40	39.2	38.8	37	
42	41.0	40.1	35	
44	42.1	41.1	33	-20.0
46	42.9	42.2	32	
48	41.9	41.0	33	
50	40.9	39.9	35	
52	38.5	38.0	38	
54	40.9	40.7	34	
56	42.9	41.2	32	
58	44.9	44.1	28	
20 00	48.8	48.0	22	-20.0

Correction to local mean time is — 2m 00s.
Torsion head at 15h 35m read 36° and at the end read the same.
Observer—R. R. T.

Friday, February 19, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	37.0	37.2	22 33	-26.1
02	36.8	37.1	33	
04	37.0	37.4	33	
06	36.9	37.3	33	
08	36.8	37.4	33	
10	36.0	36.3	32	
12	37.2	37.8	34	
14	38.0	39.0	35	-25.8
16	40.1	40.7	38	
18	39.7	40.0	38	
20	39.0	39.5	37	
22	40.1	40.9	39	
24	39.0	39.7	37	
26	38.9	39.0	36	
28	38.9	39.2	36	
30	39.0	39.7	37	-25.4
32	39.0	39.7	37	
34	39.1	39.9	37	
36	38.7	39.0	36	
38	38.4	39.0	36	
40	37.9	38.0	34	
42	40.0	40.1	38	
44	40.1	40.6	38	-25.0
46	40.1	40.3	38	
48	40.3	40.9	39	
50	39.3	39.9	37	
52	39.0	39.5	37	
54	38.7	39.1	36	
56	39.2	39.9	37	
58	39.3	39.8	37	
21 00	40.0	40.3	38	-24.8
02	40.4	40.9	39	
04	40.0	40.8	38	
06	40.5	40.9	39	
08	40.1	40.3	38	
10	40.0	40.1	38	
12	39.2	39.6	37	
14	38.7	38.9	36	-24.3
16	38.2	38.7	35	
18	38.9	39.0	36	
20	39.4	39.7	37	
22	39.6	40.0	38	
24	39.6	40.0	38	
26	39.2	39.7	37	
28	39.0	40.0	38	
30	39.8	40.1	38	-24.0
32	39.3	39.9	37	
34	39.7	40.0	38	
36	39.6	40.0	38	
38	39.0	39.1	36	
40	38.7	39.0	36	
42	38.4	38.7	35	
44	38.8	39.0	36	-23.5
46	38.7	38.9	36	
48	39.0	39.1	36	
50	39.2	39.4	37	
52	39.2	39.8	38	
54	39.1	39.5	37	
56	39.0	39.2	36	
58	39.1	39.3	37	
22 00	39.1	39.3	22 37	-23.0
02	38.8	38.8	36	
04	39.2	39.4	37	
06	39.4	39.8	37	
08	39.7	40.2	38	
10	39.9	40.5	38	
12	40.0	40.9	38	
14	41.0	41.8	40	-22.9
16	41.0	41.5	40	
18	40.1	40.4	38	
20	40.0	40.5	38	
22	40.9	41.3	40	
24	41.0	41.5	40	
26	40.8	41.0	39	
28	40.3	40.4	38	
30	39.7	40.0	38	-22.5
32	39.0	39.3	36	
34	38.4	38.9	36	
36	38.3	38.9	36	
38	39.0	39.2	36	
40	39.5	40.0	37	
42	39.8	40.0	38	
44	40.0	40.2	38	-22.1
46	40.4	41.0	39	
48	40.5	41.2	39	
50	40.8	41.3	39	
52	40.8	41.2	39	
54	40.5	41.0	39	
56	40.1	40.8	38	
58	40.4	40.8	39	
23 00	40.5	40.9	39	-22.0
02	41.6	41.9	40	
04	40.8	41.1	39	
06	40.7	40.9	39	
08	40.8	41.0	39	
10	40.7	40.9	39	
12	40.0	40.4	38	
14	40.0	42.0	39	-21.8
16	39.0	39.9	37	
18	38.8	39.2	36	
20	38.7	39.2	36	
22	38.3	39.1	36	
24	38.5	39.1	36	
26	39.3	39.5	37	
28	40.5	40.9	39	
30	41.4	41.5	40	-21.6
32	41.5	41.5	40	
34	41.6	41.7	40	
36	41.1	41.2	40	
38	40.1	40.3	38	
40	39.3	39.4	37	
42	39.1	39.1	36	
44	39.4	39.5	37	-21.4
46	39.4	39.8	37	
48	39.5	40.0	37	
50	39.8	40.1	38	
52	40.0	40.3	38	
54	40.4	40.7	39	
56	40.7	40.9	39	
58	40.2	40.6	38	
24 00	40.7	40.8	39	

Correction to local mean time is — 2m 15s.
Torsion head at 19h 25m read 36° and at the end read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, February 21, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	45.9	45.2	22 38	-18.0
02	44.8	44.0	40	
04	43.2	41.9	43	
06	44.2	43.1	41	
08	45.1	44.2	40	
10	44.0	43.0	41	
12	43.8	42.8	42	
14	42.6	41.3	44	-17.3
16	42.8	41.2	44	
18	41.8	40.1	45	
20	40.8	39.3	47	
22	40.1	39.1	48	
24	39.4	38.9	48	
26	38.9	38.7	49	
28	38.3	37.9	50	
30	39.3	38.8	48	-17.1
32	39.9	39.6	47	
34	40.1	39.3	47	
36	40.0	39.1	48	
38	39.6	38.8	48	
40	37.8	37.2	51	
42	37.6	37.0	51	
44	37.8	36.7	51	-17.0
46	37.1	35.7	53	
48	37.8	36.8	51	
50	36.6	35.9	53	
52	35.9	35.1	22 54	
54	31.5	30.3	23 01	
56	28.8	26.4	06	
58	30.8	29.1	03	
1 00	31.0	29.7	23 02	-16.9
02	34.0	32.8	22 57	
04	35.6	34.0	55	
06	35.8	33.8	55	
08	37.5	35.0	53	
10	38.2	36.2	51	
12	38.3	36.1	51	
14	38.2	36.2	51	-16.8
16	38.4	36.3	51	
18	38.1	36.2	51	
20	38.1	36.2	51	
22	38.5	36.7	51	
24	39.0	37.2	50	
26	38.8	37.0	50	
28	38.8	36.9	50	
30	39.2	37.3	50	-16.5
32	39.1	37.0	50	
34	38.3	36.2	51	
36	38.0	35.2	52	
38	37.3	34.7	53	
40	38.1	34.7	53	
42	36.8	34.6	54	
44	37.4	35.5	53	-16.2
46	36.8	35.1	53	
48	36.1	34.3	54	
50	37.1	35.2	53	
52	37.8	36.4	51	
54	38.2	36.7	51	
56	37.7	35.9	52	
58	37.8	36.2	52	
2 00	38.9	37.5	22 50	-16.2
02	40.3	38.7	48	
04	40.2	39.0	48	
06	40.8	39.9	46	
08	41.2	39.3	47	
10	41.8	39.9	46	
12	41.8	39.9	46	
14	42.0	40.1	45	-16.1
16	41.1	39.2	47	
18	40.8	38.8	47	
20	40.2	38.1	48	
22	39.4	37.7	49	
24	39.7	37.9	49	
26	39.0	37.4	50	
28	38.8	37.3	50	
30	38.3	37.1	51	-16.0
32	37.3	36.0	52	
34	36.3	35.2	54	
36	37.9	37.1	51	
38	37.2	36.9	52	
40	37.8	37.3	51	
43	37.8	37.2	51	
44	37.5	37.0	51	-16.0
46	37.2	36.6	52	
48	35.8	34.8	54	
50	33.3	32.2	58	
52	32.2	31.7	60	
54	33.9	32.5	58	
56	34.8	33.2	56	
58	35.6	34.3	55	
3 00	35.0	33.9	56	-15.8
02	34.6	33.7	56	
04	33.9	33.2	57	
06	33.2	32.3	58	
08	33.3	32.7	58	
10	33.7	32.9	57	
12	33.9	33.1	57	
14	33.4	32.8	58	-15.8
16	33.0	32.1	59	
18	33.6	32.2	58	
20	34.3	33.0	57	
22	36.7	34.2	54	
24	37.8	35.2	52	
26	38.4	36.2	51	
28	38.6	36.8	51	
30	38.1	36.5	51	-15.7
32	38.2	37.1	51	
34	38.4	37.6	50	
36	37.3	36.8	52	
38	36.8	36.0	53	
40	36.7	35.5	53	
42	36.7	35.1	53	
44	36.8	35.1	53	-15.3
46	36.6	35.0	53	
48	36.0	34.8	54	
50	34.7	33.9	56	
52	34.0	33.1	57	
54	35.2	34.3	55	
56	36.1	35.1	54	
58	35.8	35.1	54	

Sunday, February 21, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00*	50.1	52.0	22 51	-14.9
02	49.9	51.8	50	
04	49.0	51.2	49	
06	51.0	54.9	54	
08	52.2	55.8	55	
10	53.5	56.0	56	
12	51.9	55.0	54	
14	49.2	52.0	50	-14.3
16	48.9	51.1	49	
18	48.8	51.8	50	
20	49.1	52.0	50	
22	49.5	51.9	50	
24	49.9	52.2	51	
26	50.7	53.0	52	
28	50.0	51.8	51	
30	48.5	50.2	48	-14.0
32	48.5	50.9	49	
34	49.0	50.0	48	
36	50.2	51.3	50	
38	51.1	51.1	51	
40	51.1	51.4	51	
42	51.1	51.8	51	
44	52.0	52.5	53	-14.0
46	51.0	52.0	51	
48	50.5	50.8	50	
50	50.5	51.0	50	
52	50.4	51.0	50	
54	51.2	51.6	51	
55.6	51.0	51.4	51	
58	50.8	51.0	51	
5 00	50.9	51.3	51	-14.0
02	50.0	51.2	50	
04	50.8	52.3	51	
06	53.0	54.2	22 55	
08	56.3	58.8	23 01	
10	57.7	59.5	03	
12	56.0	58.0	23 00	
14	55.0	57.0	22 59	-14.2
16	53.9	55.3	56	
18	50.6	52.7	52	
20	49.9	51.1	50	
22	51.7	52.3	52	
24	54.5	55.0	57	
26	53.1	55.3	56	
28	52.2	54.6	54	
30	52.0	54.5	54	-14.2
32	51.1	53.0	52	
34	51.8	53.7	53	
36	50.2	53.0	51	
38	49.0	51.0	49	
40	48.9	50.1	48	
42	47.7	49.1	47	
44	47.0	48.8	46	-14.3
46	49.5	52.0	50	
48	53.3	55.6	56	
50	55.3	58.1	60	
52	55.0	57.0	59	
54	51.0	53.0	52	
56	51.0	53.8	53	
58	52.0	55.0	55	
6 00	52.3	55.4	22 55	-14.2
02	51.1	55.4	54	
04	50.9	55.8	54	
06	51.1	56.0	55	
08	51.3	56.0	55	
10	51.1	55.0	54	
12	49.9	52.0	51	
14	49.5	52.3	51	-14.1
16	51.8	53.7	53	
18	50.8	52.5	52	
20	50.0	51.4	50	
22	51.6	53.0	53	
24	51.8	54.0	54	
26	50.7	52.0	51	
28	51.0	51.9	51	
30	49.7	51.2	50	-14.0
32	48.9	52.1	50	
34	49.0	52.2	50	
36	49.0	51.9	50	
38	50.0	53.2	52	
40	51.8	54.7	54	
42	51.3	53.1	53	
44	48.0	50.0	48	-14.0
46	47.1	50.0	47	
48	47.2	50.0	47	
50	47.2	49.5	46	
52	47.0	49.5	46	
54	47.2	50.0	47	
56	48.5	51.9	49	
58	49.0	53.0	51	
7 00	49.9	54.1	52	-14.0
02	47.1	54.1	50	
04	45.8	52.1	47	
06	45.9	51.2	47	
08	46.8	53.0	49	
10	48.9	54.2	51	
12	49.9	54.9	53	
14	49.4	53.0	51	-14.0
16	47.9	50.0	48	
18	47.8	50.3	48	
20	48.5	50.0	48	
22	49.5	50.0	49	
24	50.6	51.9	51	
26	48.3	50.6	48	
28	49.1	51.9	50	
30	48.8	51.5	49	-14.0
32	49.9	52.5	51	
34	51.0	54.0	53	
36	50.7	52.7	51	
38	51.6	53.5	53	
40	52.5	54.5	55	
42	51.7	53.0	53	
44	51.2	52.0	52	-14.0
46	51.0	53.1	53	
48	51.5	53.0	53	
50	51.8	52.1	52	
52	50.0	50.3	49	
54	47.0	52.0	48	
56	47.1	52.0	48	
58	44.9	56.0	50	
8 00	48.0	54.0	51	-14.0

Observer—R. R. T.

Correction to local mean time is — 2m 26s. 90° torsion = 14.'6.
Torsion head at oh oom read 34° and at 9h 25m read 36°.
Observers—R. R. T. and J. V., who alternated from 4h 12m to 4h 22m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, February 22, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	42.2	39.8	22 55	-16.8
02	43.1	41.2	53	
04	44.6	41.3	52	
06	46.0	43.3	50	
08	46.9	44.8	48	
10	47.6	45.3	47	
12	47.2	46.8	46	
14	49.8	48.2	43	-15.5
16	50.1	48.9	42	
18	49.3	48.1	43	
20	46.5	45.3	48	
22	46.2	45.1	48	
24	45.9	45.3	48	
26	46.0	45.1	48	
28	42.8	42.0	53	
30	46.3	45.0	48	-14.7
32	46.6	45.3	48	
34	47.3	46.2	47	
36	48.2	47.1	45	
38	50.0	47.3	44	
40	49.6	47.5	44	
42	49.3	46.7	45	
44	49.1	46.8	45	-14.3
46	48.3	45.8	46	
48	46.9	44.7	48	
50	47.3	45.6	47	
52	47.9	45.8	47	
54	49.0	47.2	45	
56	50.8	48.2	42	
58	49.0	47.8	44	
9 00	49.8	48.5	43	-14.0
02	48.1	47.3	45	
04	48.6	47.3	45	
06	48.9	48.0	44	
08	48.8	46.1	46	
10	47.6	46.2	47	
12	47.4	46.3	47	
14	47.6	47.0	46	-13.8
16	48.8	47.3	45	
18	47.3	46.8	47	
20	48.0	46.4	46	
22	47.6	45.8	47	
24	47.2	45.2	48	
26	46.3	43.6	50	
28	49.9	47.3	44	
30	50.4	48.3	43	-13.5
32	46.1	44.4	50	
34	47.2	46.7	47	
36	48.3	47.0	46	
38	48.2	47.3	46	
40	49.7	47.4	44	
42	48.6	47.2	45	
44	49.0	46.6	45	-13.5
46	49.3	47.1	45	
48	48.8	48.0	45	
50	49.8	46.7	45	
52	49.0	45.4	47	
54	49.2	45.1	47	
56	49.7	45.3	46	
58	50.1	44.9	46	
10 00	50.0	45.2	22 46	-13.3
02	51.1	46.4	44	
04	51.1	47.2	44	
06	52.3	47.9	42	
08	51.7	48.0	43	
10	51.8	48.2	42	
12	50.2	47.5	44	
14	49.0	46.8	46	-13.2
16	47.3	45.8	48	
18	47.1	45.6	48	
20	46.2	45.1	50	
22	47.2	46.7	48	
24	48.2	47.6	46	
26	49.2	47.3	46	
28	49.8	47.9	45	
30	49.6	47.3	45	-13.2
32	49.9	47.6	45	
34	49.5	47.5	45	
36	49.6	47.4	45	
38	49.9	48.1	44	
40	50.2	48.1	44	
42	50.0	48.3	44	
44	50.1	48.8	44	-13.1
46	49.8	47.6	45	
48	49.6	48.7	44	
50	49.9	48.6	44	
52	49.4	48.0	45	
54	49.4	48.2	45	
56	49.5	47.7	45	
58	48.7	47.1	46	
11 00	48.9	47.5	46	-13.1
02	49.3	47.9	45	
04	49.9	47.9	45	
06	50.2	47.7	45	
08	49.8	47.3	46	
10	50.2	47.2	45	
12	49.9	47.2	46	
14	48.9	46.2	47	-13.0
16	51.2	48.3	44	
18	51.2	49.0	43	
20	51.4	48.9	43	
22	51.7	48.8	43	
24	51.0	48.2	44	
26	51.1	48.7	44	
28	50.7	48.8	44	
30	52.3	47.5	44	-13.0
32	51.9	47.2	44	
34	51.6	46.5	45	
36	51.0	46.3	46	
38	50.9	46.4	46	
40	51.2	47.3	45	
42	51.6	47.8	44	
44	51.8	48.1	44	-12.9
46	52.2	48.0	44	
48	52.3	48.1	44	
50	52.1	48.4	44	
52	52.3	49.2	43	
54	52.5	48.9	43	
56	52.4	48.8	43	
58	53.8	48.4	42	
12 00	51.6	49.7	43	-12.5

Correction to local mean time is — 2m 39.5s. 90° torsion = 14.′57.
Torsion head read 36° and 14° at beginning and end respectively.
Observer—H. H. N.

Tuesday, February 23, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	45.9	46.9	22 27	-19.4
02	44.6	45.3	24	
04	44.8	45.8	25	
06	43.9	44.0	23	
08	42.8	44.2	22	
10	44.8	45.3	25	
12	44.5	45.8	25	
14	47.2	49.1	29	-20.0
16.3	47.6	49.9	30	
18	48.5	50.1	31	
20	49.2	50.1	32	
22	45.9	47.4	27	
24.4	45.1	46.2	25	
26	49.2	50.2	32	
28	49.1	50.8	32	
30	43.8	45.2	24	-20.0
32	39.8	41.0	17	
34	38.8	39.9	16	
36	40.2	41.4	18	
38	32.2	32.8	05	
40	35.8	37.8	12	
42	37.8	38.4	14	
44	37.2	38.1	13	-19.8
46	39.7	40.2	17	
48	40.3	41.1	18	
50	41.2	44.1	21	
52	40.8	43.8	20	
54	41.7	45.2	22	
56	42.8	46.1	24	
58	42.5	46.9	24	
13 00	43.1	46.8	25	-19.7
02	42.4	45.8	23	
04	44.3	47.3	26	
06	44.6	47.1	26	
08	45.1	48.8	28	
10	43.7	46.3	25	
12	47.7	50.0	31	
14	46.8	49.8	30	-19.7
16	45.4	48.3	27	
18	46.7	49.3	29	
20	44.2	47.0	25	
22	43.5	45.8	24	
24	43.1	45.0	23	
26	44.4	49.3	27	
28	44.1	46.0	25	
30	42.7	44.1	22	-19.6
32	37.2	39.9	14	
34	33.1	35.5	08	
36	32.1	33.9	06	
38	31.8	33.9	05	
40	29.1	31.7	02	
42	29.8	32.2	03	
44	28.1	30.2	00	-19.3
46	28.8	31.4	01	
48	28.5	30.3	00	
50	28.1	30.3	00	
52	31.1	33.2	04	
54	33.4	35.8	08	
56	36.2	38.2	12	
58	38.3	40.7	16	
14 00	42.1	43.4	22 21	-19.0
02	44.8	45.8	25	
04	45.7	46.3	26	
06	46.7	47.3	28	
08	48.2	48.7	30	
10	48.2	48.4	30	
12	48.5	48.9	30	
14	48.0	48.4	30	-19.0
16	47.2	48.2	30	
18	46.9	48.1	29	
20	47.2	48.6	29	
22	49.2	50.1	32	
24	49.1	49.9	32	
26	48.9	49.7	31	
28	48.7	49.1	31	
30	48.4	48.9	30	-19.0
32	47.4	48.0	29	
34	47.4	47.9	29	
36	48.1	48.6	30	
38	49.8	50.0	32	
40	50.2	50.8	33	
42	49.8	50.0	32	
44	49.3	50.1	32	-18.9
46	49.1	49.5	31	
48	46.9	47.9	28	
50	45.2	46.0	25	
52	43.0	43.2	22	
54	43.0	43.6	22	
56	44.0	44.9	24	
58	45.9	46.8	27	
15 00	45.8	46.8	27	-18.9
02	45.7	46.8	26	
04	46.0	47.4	27	
06	46.8	47.9	29	
08	47.3	48.7	30	
10	49.2	50.1	32	
12	49.3	50.3	32	
14	50.1	50.9	33	-18.8
16	49.2	50.2	32	
18	49.2	50.1	32	
20	49.8	50.4	33	
22	49.2	50.0	32	
24	49.6	50.3	32	
26	49.8	50.9	33	
28	49.4	50.8	33	
30	48.3	49.7	31	-18.8
32	45.8	47.0	27	
34	44.3	45.4	24	
36	43.7	44.6	23	
38	43.2	44.2	23	
40	41.5	42.9	20	
42	41.2	42.1	19	
44	41.9	42.3	20	-18.8
46	39.9	40.9	17	
48	39.1	40.0	16	
50	37.8	38.0	13	
52	37.4	38.1	13	
54	37.9	38.4	14	
56	36.7	37.2	12	
58	37.8	38.8	14	
16 00	40.2	40.9	18	-18.6

Correction to local mean time is — 1m 06s. 90° torsion = 16.′91.
Torsion head read 30° and 40° at beginning and end respectively.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	38.3	36.0	22 40	-22.0
02	37.5	35.0	41	
04	36.3	33.5	43	
06	34.3	31.2	47	
08	28.0	26.0	56	
10	38.5	35.8	40	
12	27.0	24.8	57	
14	30.0	28.0	52	-21.6
16	31.0	28.3	51	
18	33.0	31.9	47	
20	34.0	31.6	46	
22	32.0	29.5	50	
24	31.6	29.3	50	
26	32.0	29.7	50	
28	31.6	29.4	50	
30	32.8	30.8	48	-21.1
32	33.4	32.0	47	
34	29.5	28.3	53	
36	28.8	27.6	54	
38	30.8	30.0	50	
40	32.5	31.3	48	
42	32.3	31.0	48	-21.0
44	31.8	30.6	49	
46	32.8	32.0	47	
48	32.6	31.3	48	
50	33.6	32.3	46	
52	33.8	32.4	46	
54	33.5	32.7	46	
56	33.6	32.5	46	
58	34.3	33.5	45	-20.5
1 00	35.0	34.0	44	
02.5	34.7	34.0	44	
04	34.7	33.8	44	
06	34.3	33.7	45	
08	34.0	33.1	45	
10	32.3	31.6	48	
12	32.3	31.8	48	
14	33.2	32.8	46	-20.1
16	33.3	32.3	46	
18	32.8	32.0	47	
20	33.1	32.3	47	
22	33.5	32.7	46	
24	33.5	33.0	46	
26	33.3	32.9	46	
28	33.2	32.9	46	
30	32.6	32.3	47	-20.0
32	32.9	32.6	47	
34	33.0	32.4	47	
36	32.6	32.2	47	
38	32.8	32.2	47	
40	33.0	32.2	47	
42	32.6	32.0	47	
44	33.3	32.6	46	-19.7
46	33.3	32.3	46	
48	33.2	32.3	47	
50	33.5	32.6	46	
52	33.3	32.5	46	
54	32.6	32.3	47	
56	32.0	31.3	48	
58	31.3	30.6	49	
2 00	30.8	30.0	22 50	-19.4
02	30.2	29.0	51	
04	30.2	29.5	51	
06	30.0	29.4	51	
08	30.6	30.3	50	
10	32.0	31.5	48	
12	32.6	32.1	47	
14	33.5	32.8	46	-19.1
16	34.6	33.6	44	
18	36.3	35.5	42	
20	38.8	37.8	38	
22	39.3	38.3	37	
24	38.1	37.3	39	
26	35.5	34.9	43	
28	33.5	33.3	46	
30	32.5	32.3	47	-18.9
32	32.0	31.3	48	
34	31.2	30.8	49	
36	30.3	29.6	51	
38	31.0	30.6	50	
40	31.6	30.9	49	
42	30.6	29.8	51	
44	30.1	29.1	52	-18.9
46	31.7	30.7	49	
48	32.6	31.5	48	
50	33.4	32.3	46	
52	34.0	33.3	45	
54	33.6	32.8	46	
56	34.0	33.0	45	
58	32.6	31.8	47	
3 00	33.0	32.3	46	-18.8
02	33.2	32.7	46	
04	33.3	33.0	46	
06	34.2	33.3	45	
08	32.9	31.7	47	
10	29.5	28.9	52	
12	29.4	28.6	52	
14	29.3	28.4	53	-18.6
16	30.3	29.9	51	
18	31.3	30.9	49	
20	34.1	33.8	45	
22	37.7	37.2	39	
24	33.8	33.6	45	
26	27.1*b*		55	
28	25.6	25.5	58	
30	26.6	26.1	57	-18.4
32	28.0	27.0	55	
34	29.7	28.3	52	
36	26.7	25.7	57	
38	35.0	33.5	44	
40	35.1	33.6	44	
42	33.5	31.7	47	
44	34.3	31.6	22 46	-18.1
46	24.5	23.3	23 00	
48	23.6	22.6	02	
50	21.0	19.6	06	
52	21.0	20.0	06	
54	14.8	12.2	17	
56*	40.0	37.0	28	
58	54.3	44.5	11	-18.0

Observer—W. J. P.

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	54.3	52.4	23 05	
02	61.6	59.5	22 53	
04	62.3	60.2	52	
06	60.3	58.0	56	
08	60.5	58.3	55	
10	60.4	58.6	55	
12	60.6	59.0	55	
14	62.8	61.0	51	-18.0
16	65.6	63.5	47	
18	65.6	63.5	47	
20	65.6	63.9	47	
22	65.0	64.1	47	
24	64.5	63.3	48	
26	65.0	63.6	47	
28	66.1	64.6	46	
30	68.8	67.6	42	-17.9
32	68.2	67.0	42	
34	67.2	66.0	44	
36	68.1	64.5	44	
38	67.2	65.1	45	
40	66.9	64.9	45	
42	66.5	65.0	45	
44	64.0	62.1	50	-17.8
46	63.8	63.0	49	
48	66.5	65.0	45	
50	68.5	67.3	42	
52	71.7	70.3	37	
54	70.4	69.4	39	
56	67.3	65.6	44	
58	63.9	62.6	49	
5 00	62.5	61.3	51	-17.7
02	64.3	62.7	49	
04	61.3	60.3	53	
06	60.0	59.2	55	
08	61.7	60.6	53	
10	63.6	63.0	49	
12	65.0	64.6	47	
14	65.3	64.5	47	-17.6
16	65.1	64.0	47	
18	65.0	64.0	47	
20	69.0	67.6	41	
22	69.0	67.9	41	
24	67.3	66.8	44	
26	66.9	65.3	45	
28	66.5	65.3	45	
30	65.0	64.0	47	-17.5
32	64.3	63.3	49	
34	66.5	66.0	45	
36	67.3	66.5	44	
38	64.5	64.0	48	
40	64.6	63.5	48	
42	64.0	63.0	49	
44	65.3	64.0	47	-17.4
46	64.2	62.7	49	
48	64.5	63.7	48	
50	62.3	61.6	52	
52	62.0	60.5	53	
54	60.6	59.5	55	
56	59.0	57.5	22 57	
58	56.0	54.0	23 02	
6 00	49.8	49.0	23 11	-17.4
02	45.8	44.0	18	
04	45.0	43.8	19	
06	48.5	46.6	14	
08	54.5	52.0	05	
10	53.0	51.3	07	
12	55.2	54.4	02	
14	52.0*b*		07	-17.2
16	48.6	48.0	13	
18	49.6	48.4	12	
20	48.3	47.5	14	
22	44.6	44.0	19	
24	43.3	42.0	22	
26	42.3	41.0	23	
28	45.6	44.0	18	
30	46.3	45.7	17	-17.2
32	47.0	45.6	16	
34	46.5	44.4	18	
36	47.0	44.5	17	
38	49.2	47.3	13	
40	50.0	48.3	12	
42	53.3	51.1	07	
44	52.0	49.7	09	-17.0
46	46.8	45.0	17	
48	51.9	49.8	09	
50	54.0	51.0	23 06	
52	60.0	57.5	22 57	
54	48.8	45.3	23 15	
56	41.2	38.5	26	
58.7	34.3	32.9	36	
7 00	35.3	33.6	35	-17.0
02	31.2	30.0	41	
04	37.0	29.3	37	
06	25.0	22.0	52	
08	29.5	27.0	45	
10	38.0	30.3	35	
12	34.0	32.0	37	
14	31.3	29.3	41	-17.0
16	32.0	29.6	40	
18	34.6	33.2	36	
20	37.0	34.5	33	
22	30.2	26.0	45	
24	32.0	29.2	41	
26	29.0	26.5	45	
28	24.0	23.5	52	
30	23.3	21.5	54	-16.9
32	26.5	24.3	49	
34	34.0	31.3	38	
36	38.0	36.3	30	
38	42.3	40.0	24	
40	42.5	41.0	23	
42	42.0	40.3	24	
44	37.0	36.0	31	
46	45.0	44.3	19	-16.5
48	49.6	49.0	11	
50	53.0	52.0	06	
52	53.3	50.7	07	
54	51.1	48.9	10	
56	49.3	47.0	13	
58	49.5	46.8	13	

Observers—W. J. P. and J. V., who alternated from 7h 46m to 7h 52m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	52.0	48.0	23 10	-15.8
02	56.8	52.1	03	
04	53.0	49.4	08	
06	53.0	49.0	09	
08	53.5	52.0	06	
10	53.0	49.6	08	
12	56.3	54.6	02	
14	56.0	55.0	23 02	-15.7
16	58.3	55.2	22 60	
18	57.2	54.8	61	
20	65.9	63.1	47	
22	71.0	67.8	40	
24	67.0	64.5	46	
26	63.1	61.1	51	
28	70.7	67.6	40	
30	69.3	65.8	43	-15.2
32	65.2	62.9	48	
34	65.2	62.8	48	
36	64.0	61.5	50	
38	67.0	64.9	45	
40	70.1	67.0	41	
42	70.6	68.9	39	
44	68.0	65.0	44	-15.0
46	68.9	65.9	43	
48	70.1	68.6	40	
50	68.3	67.3	42	
52	68.0	65.1	44	
54	67.1	66.6	44	
56	69.7	64.9	43	
58	70.2	66.0	42	
9 00	68.2	65.6	44	-14.4
02	66.1	62.5	48	
04	71.2	67.8	39	
06	71.2	68.2	39	
08	70.0	68.0	40	
10	69.0	66.0	43	
12	72.7	69.4	37	
14	74.1	72.4	34	-14.3
16	68.9	68.0	41	
18	70.0	68.9	40	
20	73.8	72.5	34	
22	73.3	73.1	34	
24	64.8	63.8	48	
26	68.7	68.5	41	
28	70.9	70.6	38	
30	73.8	73.3	33	-14.3
32	72.8	71.9	35	
34	70.9	70.9	37	
36	70.9	70.4	38	
38	73.9	73.1	33	
40	73.3	71.2	35	
42	74.1	73.1	33	
44	76.1	75.3	30	-14.1
46	72.2	68.8	38	
48	72.2	69.0	38	
50	75.0	72.1	33	
52	77.9	74.1	29	
54	75.3	72.8	32	
56	71.9	69.8	37	
58	73.9	71.8	34	

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
10 00	73.1	70.3	22 36	-13.9
02	75.8	73.7	31	
04	68.2	66.1	43	
06	69.7	67.2	41	
08	74.8	71.0	34	
10	74.1	70.1	35	
12	74.9	71.0	34	
14	72.0	68.3	38	-13.3
16.8	77.7	71.3	32	
18*	48.3	36.2	32	
20	46.2	36.2	34	
22	45.9	33.8	36	
24	48.2	36.3	32	
26	46.0	32.0	37	
28	45.2	32.3	37	
30	44.9	32.3	37	
32	39.0	36.6	39	-12.5
34	41.6	37.1	37	
36	39.1	36.7	39	
38	38.7	35.0	40	
40	39.2	36.8	38	
42	36.2	33.2	44	
44	35.3	32.9	44	-12.2
46	38.2	35.3	40	
48	38.0	36.0	40	
50	37.9	36.4	40	
52	36.2	35.0	42	
54	37.6	36.7	40	
56	37.0	35.3	41	
58	37.3	35.6	41	
11 00	40.1	38.1	37	-12.0
02	39.1	36.3	39	
04	42.9	40.0	33	
06	43.2	41.2	32	
08	43.7	42.0	31	
10	39.8	38.0	37	
12	38.7	37.9	38	
14	43.1	42.7	31	-11.9
16.3	42.7	40.5	33	
18	43.6	42.0	31	
20	43.9	42.0	31	
22	47.3	45.3	25	
24	48.1	46.8	24	
26	47.1	45.2	26	
28	44.3	41.9	30	
30	45.3	42.7	29	-11.6
32	45.0	42.5	29	
34	47.5	45.0	26	
36	47.2	45.8	25	
38	47.0	44.2	27	
40	44.8	42.2	30	
42	44.6	42.7	30	
44	44.1	42.5	30	-11.2
46	43.8	41.9	31	
48	46.0	44.0	27	
50	47.8	44.9	25	
52	47.0	44.1	27	
54	45.0	41.9	30	
56	46.1	43.7	28	
58	44.7	42.9	29	

Observer—J. V.

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	45.7	44.0	22 28	-11.1
02	47.8	45.3	25	
04	44.4	42.0	30	
06	47.9	45.0	25	
08	46.4	43.7	27	
10	46.0	43.2	28	
12	45.2	42.2	29	
14	45.6	42.3	29	-11.0
16	48.0	43.8	26	
18	48.0	43.0	27	
20	49.5	45.2	24	
22	48.1	44.5	25	
24	47.8	45.0	25	
26	44.0	41.5	31	
28	49.4	47.1	22	
30	49.9	48.1	21	-10.8
32	50.0	48.5	21	
34	50.2	49.2	20	
36	48.5	47.9	22	
38	48.9	48.2	22	
40	46.5	45.6	26	
42	45.9	45.0	27	
44	45.5	44.4	27	-10.3
46	45.0	42.0	30	
48	43.2	39.9	33	
50	44.9	41.8	30	
52	42.8	41.0	32	
54	43.0	41.5	32	
56	42.1	39.5	34	
58	42.0	39.7	34	
13 00	42.5	39.3	34	-10.0
02	43.0	37.5	34	
04	41.9	38.0	35	
06	41.2	37.0	37	
08	40.0	36.2	38	
10	40.0	36.8	38	
12	39.0	36.3	39	
14	39.1	36.1	39	-9.8
16	37.5	35.1	41	
18	37.1	35.5	41	
20	40.9	38.1	36	
22	42.1	39.3	34	
24	42.0	40.3	33	
26	41.8	39.8	34	
28	42.1	39.8	34	
30	42.9	40.8	32	-9.3
32	43.1	40.0	33	
34	42.5	40.0	33	
36	44.0	40.8	32	
38.4	44.9	42.0	30	
40	43.8	41.1	32	
42	42.1	39.9	34	
44	42.2	39.9	34	-9.1
46	40.1	36.9	37	
48	41.1	37.9	36	
50	45.0	42.1	30	
52	43.0	39.8	33	
54	40.3	37.2	37	
56	41.7	38.1	35	
58	42.0	39.0	34	

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	38.9	36.8	22 39	-9.0
02	38.9	37.2	38	
04	39.0	37.6	38	
06	39.9	38.9	36	
08	40.8	39.9	35	
10	40.8	40.0	35	
12	40.6	40.0	35	
14	39.9	39.2	36	-8.9
16	40.1	38.3	37	
18	40.9	39.8	35	
20	40.8	39.9	35	
22	39.7	39.2	37	
24	39.3	38.2	37	
26	40.1	39.0	36	
28	40.6	39.1	36	
30	40.7	39.0	36	-8.8
32	42.1	38.3	35	
34	43.7	39.0	33	
36	44.1	39.9	32	
38	44.6	40.1	32	
40	46.0	38.0	32	
42	45.0	37.8	33	
44	44.1	37.9	34	-8.4
46	43.8	38.0	34	
48	43.3	37.9	34	
50	43.5	38.0	34	
52	43.0	37.7	35	
54	42.6	37.6	35	
56	42.5	37.6	35	
58	41.9	37.2	36	
15 00	41.2	37.8	36	-8.2
02	41.0	38.2	36	
04	40.3	37.8	37	
06	39.0	37.0	38	
08	40.2	38.3	37	
10	41.0	39.5	35	
12	40.8	39.7	35	
14	40.0	38.7	36	-8.2
16	39.9	37.0	37	
18	40.3	37.0	37	
20	40.0	37.1	38	
22	40.0	37.5	37	
24	39.9	37.2	38	
26	39.7	37.2	38	
28	39.5	36.8	38	
30	39.0	36.8	39	-8.0
32	37.9	37.5	39	
34	38.2	38.2	38	
36	38.7	38.7	37	
38	39.0	38.8	37	
40	38.4	38.0	38	
42	38.8	38.6	37	
44	39.7	39.3	36	-7.9
46	40.9	39.8	35	
48	41.3	40.3	34	
50	41.2	40.5	34	
52	41.2	40.5	34	
54	41.1	40.5	34	
56	41.0	40.7	34	
58	40.9	40.2	34	

Observers—J. V. and R. R. T., who alternated from 15h 50m to 16h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	41.6	39.2	22 35	−7.0
02	41.6	39.2	35	
04	41.5	39.2	35	
06	41.2	39.1	35	
08	40.8	38.7	36	
10	40.8	37.8	36	
12	40.9	39.1	35	
14	40.8	39.0	35	−6.8
16	40.8	39.2	35	
18	40.8	39.1	35	
20	40.5	39.1	36	
22	40.5	39.2	36	
24	40.0	39.1	36	
26	40.0	39.3	36	
28	40.3	39.6	35	
30	40.2	39.8	35	−6.2
32	40.2	39.5	36	
34	39.9	39.1	36	
36	39.2	37.7	37	
38	38.8	38.1	38	
40	38.0	37.5	39	
42	37.8	37.2	39	
44	37.7	36.9	39	−6.0
46	37.8	37.2	39	
48	38.5	38.0	38	
50	38.8	38.1	38	
52	39.2	38.7	37	
54	40.1	39.2	36	
56	39.8	39.0	36	
58	39.0	38.5	37	
17 00	38.2	38.0	38	−5.8
02	37.9	37.6	39	
04	37.8	37.2	39	
06	37.8	37.2	39	
08	38.0	37.5	39	
10	38.3	37.7	38	
12	39.2	38.8	37	
14	40.2	39.2	36	−5.6
16	40.4	39.2	36	
18	40.3	39.3	36	
20	40.0	38.8	36	
22	39.9	38.6	37	
24	40.2	38.9	36	
26	39.8	38.2	37	
28	40.2	38.9	36	
30	40.1	38.9	36	−5.5
32	40.2	39.0	36	
34	39.9	38.8	36	
36	39.6	38.8	37	
38	39.7	38.9	36	
40	39.2	38.6	37	
42	38.9	38.0	38	
44	38.3	37.6	39	−5.4
46	38.3	37.2	39	
48	38.3	37.2	39	
50	38.2	37.6	39	
52	38.2	37.5	39	
54	37.9	37.1	39	
56	37.9	37.2	39	
58	37.9	37.2	39	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	38.0	37.3	22 39	−5.4
02	37.8	37.2	39	
04	37.7	37.0	39	
06	37.9	37.0	40	
08	37.9	37.7	40	
10	38.2	36.9	40	
12	38.2	37.0	40	
14	38.2	37.2	40	−5.2
16	38.1	37.3	40	
18	38.0	37.2	40	
20	38.0	37.2	40	
22	38.0	37.5	40	
24	38.2	37.8	39	
26	38.7	38.0	39	
28	38.8	38.1	38	
30	38.8	38.1	38	−5.3
32	38.7	37.8	39	
34	38.6	37.7	39	
36	38.3	37.4	39	
38	38.1	37.1	40	
40	38.0	37.1	40	
42	38.0	37.2	40	
44	37.9	37.1	40	−5.3
46	37.8	37.2	40	
48	38.1	37.8	39	
50	38.1	37.9	39	
52	38.1	37.9	39	
54	38.4	38.1	39	
56	38.2	37.8	39	
58	38.2	37.8	39	
19 00	38.2	37.8	39	−5.3
02	38.2	37.7	39	
04	38.2	37.7	39	
06	38.5	37.9	39	
08	39.3	38.9	37	
10	39.8	39.2	37	
12	39.2	38.9	38	
14	39.1	38.9	38	−5.8
16	38.8	38.3	38	
18	38.9	38.2	38	
20	39.2	38.8	38	
22	40.0	39.2	37	
24	39.2	38.8	38	
26	38.7	38.1	38	
28	37.9	37.4	40	
30	37.8	37.2	40	−6.0
32	38.2	37.7	39	
34	38.3	37.9	39	
36	38.7	38.2	38	
38	38.8	38.2	38	
40	38.9	38.2	38	
42	38.9	38.2	38	
44	39.4	38.8	37	
46	39.9	39.0	37	
48	40.0	39.0	37	
50	40.1	39.0	37	
52	39.9	38.3	37	
54	39.8	38.2	38	
56	39.3	38.2	38	
58	38.9	38.0	38	

Observer—R. R. T.

Wednesday, February 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	38.4	37.6	22 39	−6.1
02	37.9	37.7	39	
04	37.9	37.7	39	
06	38.3	38.0	39	
08	38.5	38.1	39	
10	38.6	38.2	38	
12	39.2	37.9	38	
14	39.3	38.0	38	−6.1
16	39.3	38.1	38	
18	39.7	38.2	38	
20	39.7	38.2	38	
22	39.7	38.1	38	
24	39.2	38.2	38	
26	39.0	37.9	38	
28	38.8	37.4	39	
30	38.9	37.5	39	−6.4
32	39.2	37.4	39	
34	39.2	37.8	38	
36	39.1	37.8	38	
38	39.9	38.4	37	
40	39.9	38.8	37	
42	40.1	38.8	37	
44	40.1	38.8	37	−6.7
46	39.9	38.1	38	
48	40.1	38.3	37	
50	40.9	39.3	36	
52	41.7	39.9	35	
54	42.7	41.1	33	
56	43.5	42.1	32	
58	44.2	43.1	30	
21 00	44.8	44.0	29	−6.9
02	45.2	44.1	29	
04	44.9	43.8	29	
06	44.8	43.7	29	
08	45.0	43.8	29	
10	45.3	44.0	29	
12	45.4	44.2	28	
14	45.2	44.0	29	−7.0
16	45.2	44.0	29	
18	45.0	44.0	29	
20	45.2	44.1	29	
22	45.2	44.1	29	
24	45.8	44.8	28	
26	45.5	44.3	28	
28	45.2	44.2	29	
30	45.8	44.6	28	−7.3
32	45.8	44.4	28	
34	45.0	44.2	29	
36	44.8	44.1	29	
38	44.6	44.1	29	
40	44.8	44.1	29	
42	45.2	44.6	28	
44	47.0	46.2	26	−7.6
46	48.1	47.7	24	
48	52.8*a*		16	
50	57.6	56.2	10	
52	60.8	60.2	22 04	
54	65.8	64.7	21 57	
56	65.3	65.1	57	
58	64.0	62.8	59	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	64.0	62.3	21 60	−7.9
02	61.9	60.2	22 03	
04	62.8	61.0	22 02	
06	64.5	63.4	21 59	
08	62.7	62.0	22 01	
10	58.2	58.0	08	
12	56.8	56.8	10	
14	56.9	56.1	10	−8.0
16	56.8	56.1	10	
18	55.0	54.2	13	
20	53.0	52.4	16	
22	49.9	49.3	21	
24	49.4	48.3	22	
26	49.1	48.1	23	
28	50.0	49.4	21	
30	49.9	49.6	21	−8.2
32	50.7	49.6	20	
34	51.2	49.2	20	
36	54.7	52.8	15	
38	56.8	51.1	14	
40	50.3	44.2	24	
42	47.9	39.9	30	
44	42.8	35.3	38	−8.8
46	42.0	35.7	38	
48	31.5	28.8	22 52	
50	29.1	19.7	23 01	
52	29.9	19.7	23 00	
54	36.2	27.4	22 49	
56	51.1	12.2	49	
58	54.0	16.7	44	
23 00	60.2	24.8	32	−8.9
02	54.9	24.3	37	
04	49.9	16.8	47	
06	52.1	22.2	41	
08	57.9	20.2	38	
10	48.9	6.0	56	
12	40.9	20.2	51	
14	42.3	18.1	52	−8.9
16	46.7	25.1	43	
18	49.3	29.1	37	
20	50.3	28.9	37	
22	40.3	17.9	53	
24	49.8	29.0	37	
26	49.2	26.7	39	
28	47.9	26.1	41	
30	54.6	36.1	28	−8.8
32	58.0	40.3	22	
34	51.0	39.3	28	
36	46.6	31.1	38	
38	48.8	33.2	35	
40	44.7	30.2	40	
42	50.7	36.7	30	
44	52.9	39.8	26	−8.8
46	50.8	38.3	29	
48	47.9	36.1	33	
50	46.0	33.8	39	
52	45.0	33.3	38	
54	44.3	33.2	38	
56	43.6	33.2	39	
58	42.3	32.6	40	
24 00	41.8	32.8	40	

Correction to local mean time is + 9.5s.
Torsion head read 31.5° at beginning and ending.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, February 25, 1904 — Magnet scale erect									Friday, February 26, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	52.4	53.9	22 37	-17.7	18 00	54.7	55.0	22 40	-16.3	20 00	39.9	34.4	22 42	-6.7	22 00	41.2	39.8	22 36	-5.3
02	51.7	53.8	37		02	54.9	55.2	40		02	40.1	39.0	38		02	40.7	39.1	37	
04	52.6	54.5	38		04	55.0	55.3	41		04	40.1	39.1	38		04	41.2	39.9	36	
06	52.3	54.2	38		06	54.4	54.9	40		06	40.1	39.2	38		06	41.2	40.3	36	
08	52.1	54.2	37		08	54.2	54.9	40		08	40.7	39.8	37		08	42.3	41.1	34	
10	52.2	54.4	38		10	54.2	55.0	40		10	40.8	39.9	37		10	41.9	40.6	35	
12	52.7	54.9	39		12	53.9	54.9	39		12	41.0	40.1	36		12	40.8	39.7	37	
14	52.9	54.9	39	-17.9	14	53.5	54.8	39	-16.1	14	41.0	40.3	36	-6.1	14	41.6	40.2	36	-5.2
16	53.1	55.0	39		16	54.0	55.0	40		16	40.9	40.1	36		16	40.9	39.8	37	
18	54.2	55.7	40		18	54.3	55.3	40		18	41.4	40.8	35		18	40.2	39.0	38	
20	53.1	54.8	39		20	54.7	55.8	41		20	41.8	41.3	35		20	39.8	38.4	39	
22	53.0	54.8	39		22	54.8	55.8	41		22	42.8	42.0	33		22	38.6	37.7	40	
24	53.2	55.0	39		24	55.2	55.8	41		24	42.8	42.2	33		24	38.5	37.7	40	
26	53.5	55.0	39		26	54.9	55.2	40		26	42.4	41.9	34		26	38.6	37.5	40	
28	52.8	54.2	38		28	54.9	55.2	40		28	42.4	41.8	34		28	37.9	37.0	41	
30	52.3	54.2	38	-17.8	30	55.1	55.4	41	-16.0	30	42.4	42.0	34	-5.5	30	37.4	36.8	42	-5.1
32	52.9	55.0	39		32	55.1	55.7	41		32	42.8	42.2	33		32	37.3	36.6	42	
34	53.0	55.1	39		34	55.0	55.7	41		34	42.6	42.0	34		34	37.2	36.5	42	
36	53.1	55.2	39		36	55.2	55.7	41		36	42.5	42.2	34		36	37.7	37.0	41	
38	52.8	55.0	39		38	55.4	55.9	41		38	43.5	43.0	32		38	38.0	37.4	41	
40	50.7	53.0	35		40	55.5	55.9	42		40	44.2	43.9	31		40	38.0	37.6	41	
42	49.5	51.6	33		42	55.9	56.4	42		42	44.0	43.8	31		42	37.9	37.3	41	
44	48.0	49.6	31	-17.3	44	55.8	56.7	42		44	44.2	43.9	31	-5.5	44	38.1	37.6	41	-5.1
46	46.7	48.2	28		46	55.6	56.4	42		46	44.3	44.1	31		46	38.2	37.6	40	
48	46.8	48.2	29		48	55.7	56.3	42		48	44.7	44.2	30		48	38.0	37.8	40	
50	47.2	48.1	29		50	55.8	56.5	42		50	44.8	44.2	30		50	38.1	37.9	40	
52	47.2	47.9	28		52	56.0	56.9	43		52	45.4	45.0	29		52	37.6	37.0	41	
54	48.4	48.8	30		54	56.2	57.0	43		54	45.7	45.1	29		54	37.0	36.8	42	
56	49.8	50.2	33		56	56.1	56.9	43		56	46.4	45.9	28		56	36.7	36.2	43	
58	50.9	51.2	34		58	55.1	57.0	42		58	45.2	44.7	29		58	36.4	36.1	43	
17 00	51.2	51.8	35	-17.0	19 00	55.0	56.9	42	-15.6	21 00	44.9	44.3	30	-5.7	23 00	37.4	37.0	42	-5.0
02	52.9	53.7	38		02	54.7	56.4	41		02	44.9	44.5	30		02	37.8	37.5	41	
04	54.2	55.0	40		04	54.1	56.4	41		04	43.7	43.1	32		04	37.5	37.5	41	
06	55.6	56.1	42		06	53.9	55.9	40		06	43.3	43.0	32		06	36.4	36.1	43	
08	57.4	58.0	45		08	54.1	55.8	40		08	43.0	42.6	33		08	36.5	36.1	43	
10	57.9	58.6	45		10	54.2	56.0	41		10	41.5	41.1	35		10	36.6	36.0	43	
12	57.2	57.9	44		12	54.3	55.9	41		12	40.1	39.8	38		12	36.5	36.2	43	
14	57.7	57.9	45	-17.0	14	54.1	55.8	40	-15.3	14	39.6	39.1	38	-5.7	14	36.2	36.0	43	-5.0
16	57.8	58.0	45		16	54.1	55.9	40		16	39.7	39.0	38		16	36.1	35.9	43	
18	57.4	57.8	44		18	54.8	56.2	41		18	39.8	39.5	38		18	36.3	36.0	43	
20	57.8	58.0	45		20	55.1	56.8	42		20	42.0	41.6	34		20	36.9	36.3	43	
22	57.6	57.9	45		22	55.1	56.8	42		22	42.6	42.0	34		22	36.9	36.5	42	
24	57.3	58.0	44		24	55.3	57.0	42		24	44.2	44.0	31		24	36.8	36.4	43	
26	56.7	57.6	44		26	55.1	56.8	42		26	47.3	46.4	26		26	36.0	35.2	44	
28	56.2	57.0	43		28	55.2	56.7	42		28	48.8	47.3	25		28	35.2	35.0	45	
30	56.1	56.9	43	-16.8	30	54.2	55.8	41	-15.0	30	48.6	46.3	26	-5.7	30	36.1	35.7	44	-5.0
32	56.1	56.9	43		32	54.0	55.2	40		32	48.0	45.4	27		32	37.8	37.0	41	
34	56.0	56.9	43		34	53.8	54.9	39		34	45.2	43.3	31		34	37.9	37.1	41	
36	55.9	56.9	43		36	52.0	54.0	37		36	47.3	45.4	27		36	37.2	36.5	42	
38	55.3	57.0	42		38	52.2	54.3	38		38	46.7	44.4	29		38	36.5	35.9	43	
40	55.0	56.8	42		40	52.8	54.4	38		40	46.5	44.6	29		40	36.1	35.5	44	
42	55.2	56.9	42		42	53.1	54.7	39		42	45.8	44.0	29		42	36.4	35.9	43	
44	55.3	57.0	42	-16.7	44	53.9	55.0	39	-15.0	44	46.0	44.0	29	-5.5	44	37.0	36.8	42	-5.0
46	55.8	56.6	42		46	54.9	56.0	41		46	44.0	41.9	33		46	37.8	37.3	41	
48	55.1	56.8	42		48	55.4	56.4	42		48	41.8	40.0	30		48	37.5	37.1	41	
50	54.4	55.9	41		50	55.4	56.4	42		50	42.5	40.9	34		50	37.3	37.0	42	
52	54.2	55.4	40		52	55.2	56.1	41		52	41.4	40.1	36		52	37.0	36.8	42	
54	54.3	55.8	40		54	55.2	56.2	41		54	42.0	40.3	35		54	37.4	37.1	42	
56	54.4	55.4	40		56	55.7	56.8	42		56	41.3	40.0	36		56	38.9	37.4	40	
58	54.5	54.9	40		58	55.9	56.7	42		58	42.1	40.8	35		58	38.7	38.2	40	
					20 00	55.9	56.6	42	-14.9						24 00	38.7	38.3	39	

Correction to local mean time is + 15s.
Torsion head read 30° at beginning and ending.
Observer—R. R. T.

Correction to local mean time is + 39s.
Torsion head read 27° at beginning and ending.
Observer—H. H. N.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, February 28, 1904					Magnet scale erect					Sunday, February 28, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	54.0	56.1	22 45		2 00	49.1	56.0	22 41	-11.9	4 00.4	53.8	51.0	22 45		6 00	52.9	52.5	22 44	-9.5
02	54.0	55.8	45	-14.5	02	49.3	56.2	41		02	53.1	52.0	45		02	53.9	53.5	43	
04	53.5	56.3	45		04	50.0	56.0	42		04	52.5	52.2	45		04	52.6	52.3	45	
06	53.1	57.0	45		06	50.0	56.3	42		06	53.0	52.8	44		06	51.5	51.2	46	
08	52.2	57.0	44		08	50.8	56.8	43		08	52.0	51.8	45		08	51.2	51.0	47	
10	53.0	56.0	44		10	51.2	56.3	43		10	52.0	51.9	45		10	51.7	51.2	46	
12	52.0	58.8	45		12	51.1	55.6	42		12	52.0	51.9	45		12	52.4	52.0	45	
14	56.2	58.2	48	-13.8	14	50.8	54.9	41	-11.4	14	52.8	52.5	44	-10.0	14	52.0	52.0	45	-9.3
16	50.2	58.2	43		16	51.6	53.2	41		16	53.5	53.1	43		16	53.0	52.3	44	
18	50.5	58.0	43		18	52.0	53.8	41		18	53.2	53.0	44		18	53.3	53.3	43	
20	50.5	57.2	43		20	52.8	54.2	42		20	52.8	52.7	44		20	53.0	52.7	44	
22	50.8	57.0	43		22	52.9	54.9	43		22	52.8	52.7	44		22	52.3	52.3	45	
24	51.2	56.7	43		24	52.9	54.8	43		24	53.1	52.9	44		24	52.3	52.0	45	
26	50.0	57.2	42		26	53.0	54.9	43		26	53.4	53.1	43		26	52.3	52.2	45	
28	50.0	57.0	42	-13.3	28	53.2	55.2	43		28	53.3	53.3	43		28	52.0	52.0	45	
30	50.5	57.0	43		30	53.4	55.1	43	-11.3	30	53.0	53.0	44	-10.0	30	52.6	52.5	45	
32	51.6	57.8	44		32	53.7	54.5	43		32	53.7	53.4	43		32	51.8	51.2	46	
34	52.7	58.0	45		34	53.5	54.0	43		34	54.8	54.6	41		34	49.8	49.2	49	
36	52.7	58.5	46		36	53.9	54.2	43		36	54.1	54.0	42		36	50.7	50.3	48	
38	52.0	58.0	45		38	53.7	54.1	43		38	53.1	53.0	44		38	52.2	52.2	45	
40	52.9	58.6	46		40	53.0	54.0	42		40	53.8	53.5	43		40	52.7	52.3	45	
42	53.0	58.6	46		42	53.0	54.3	42		42	54.9	54.8	41		42	53.0	52.9	44	
44	52.6	58.0	45	-13.0	44	53.0	54.5	43	-11.1	44	54.0	54.0	42	-10.0	44	53.0	52.7	44	-9.3
46	50.8	58.2	44		46	52.0	55.0	42		46	53.0	52.8	44		46	52.9	52.3	44	
48	50.9	57.7	44		48	52.0	55.0	42		48	53.0	52.8	44		48	52.2	52.2	45	
50	51.2	57.1	43		50	52.0	55.0	42		50	53.8	53.6	43		50	52.6	52.2	45	
52	51.8	57.4	44		52	52.5	55.5	43		52.3	52.8	52.3	45		52	52.2	51.8	45	
54	51.9	57.0	44		54	53.1	55.7	44		54	52.2	52.0	45		54	52.2	52.0	45	
56	51.1	56.7	43		56	52.8	54.9	43		56	53.0	52.8	44		56	52.1	51.9	45	
58	50.8	56.0	42		58	53.1	54.9	43		58	53.1	53.0	44		58	52.2	52.0	45	
1 00	50.8	56.0	42	-12.9	3 00	54.0	55.5	44	-11.0	5 00	52.1	52.0	45	-9.9	7 00	52.5	52.1	45	-9.2
02	52.3	56.1	43		02	53.2	56.0	44		02	52.0	51.5	46		02	52.5	52.0	45	
04	54.0	57.8	46		04	52.0	55.2	42		04	52.9	52.8	44		04	52.5	52.0	45	
06	54.1	57.8	46		06	51.3	55.0	42		06	53.8	53.5	43		06	53.0	52.7	44	
08	53.7	57.0	45		08	52.0	55.0	42		08	52.9	52.2	45		08	52.0	51.9	45	
10	53.3	56.0	44		10	52.0	55.2	42		10	52.1	52.1	45		10	52.0	52.0	45	
12	53.9	55.7	44		12.4	52.1	55.7	43		12	52.8	52.5	44		12	52.2	52.2	45	
14	54.1	55.2	44	-12.6	14	51.8	55.2	42	-10.9	14	53.1	53.0	44	-9.8	14	53.0	52.0	45	-9.1
16	53.0	55.7	44		16	51.5	56.0	43		16	55.0	54.2	41		16	53.0	52.7	44	
18	52.0	55.0	42		18	51.9	55.5	43		18	57.0	56.0	38		18	53.2	53.0	44	
20	51.8	53.7	41		20	52.5	56.0	43		20	55.0	54.9	41		20	52.2	52.1	45	
22	51.5	52.8	40		22	52.7	55.9	44		22.3	54.9	54.8	41		22	52.1	52.0	45	
24	52.3	51.1	40		24	52.6	56.0	44		24	52.5	52.0	45		24	54.0	53.8	42	
26	50.4	51.9	39		26	51.8	54.8	42		26	51.3	51.0	47		26	54.0	53.9	42	
28	50.2	52.1	39		28	52.1	54.8	42		28	53.5	53.1	43		28	53.7	53.0	43	
30	50.3	53.0	39	-12.2	30	52.9	54.9	43	-10.7	30	54.5	54.3	42	-9.8	30	53.1	53.1	44	
32	50.0	53.2	39		32	53.0	55.2	43		32	53.1	52.3	44		32	53.5	53.5	43	
34	49.1	53.0	38		34	53.4	55.7	44		34	53.2	52.2	44		34	53.0	52.9	44	
36	48.8	52.3	38		36	52.2	54.8	42		36	53.0	52.7	44		36	53.1	52.9	44	
38	48.8	52.3	38		38	51.0	53.8	41		38	52.2	52.2	45		38	52.9	52.9	44	
40	49.7	53.0	39		40	52.0	54.0	42		40	53.6	53.0	43		40	52.3	52.3	45	
42	50.2	53.4	40		42	52.5	54.7	42		42	54.2	54.0	42		42	54.2	54.0	42	
44	50.1	53.1	39	-12.0	44	53.1	55.1	43	-10.5	44	52.8	52.1	45	-9.7	44	54.1	53.9	42	-9.0
46	50.4	53.9	40		46	52.7	54.8	43		46	51.8	51.6	46		46	53.7	53.2	43	
48	51.8	54.2	42		48	53.0	55.0	43		48	53.0	53.0	44		48	53.0	53.0	44	
50	52.8	54.9	43		50	53.2	55.0	43		50	52.0	52.0	45		50	53.3	53.2	43	
52	52.5	54.2	42		52	53.0	54.4	43		52	51.2	51.0	47		52	54.0	52.1	44	
54	50.0	56.7	42		54	50.0	57.0	42		54	52.0	51.9	45		54	54.0	53.0	43	
56	49.4	56.2	41		56	50.0	56.9	42		56	52.2	52.0	45		56	54.0	54.0	42	
58	49.1	56.0	41		58	49.8	52.0	38		58	51.7	51.2	46		58	54.3	53.9	42	
															8 00	54.0	53.9	42	-9.0

Observer—J. V.

Correction to local mean time is + 17.5s.
Torsion head at 23h 30m read 22° and at 9h 31m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Monday, February 29, 1904 — Magnet scale erect									Tuesday, March 1, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	53.5	55.6	22 47	−13.0	10 00	54.4	54.7	22 47	−10.2	12 00	52.9	51.3	22 45	−1.2	14 00	54.9	50.3	22 44	−2.7
02	51.6	53.9	45		02	54.5	54.7	47		02	53.2	51.5	44		02	55.0	49.3	45	
04	52.2	53.9	45		04	55.1	55.3	48		04	56.1	49.5	44		04	56.5	49.1	44	
06	54.0	55.6	48		06	54.3	54.6	47		06	55.8	50.2	43		06	55.8	50.0	44	
08	55.3	56.8	50		08	53.6	54.0	46		08	56.0	50.2	43		08	55.2	50.0	44	
10	54.6	56.4	49		10	53.1	53.4	45		10	57.0	50.7	42		10	55.3	49.4	44	
12	57.3	58.2	52		12	53.7	54.0	46		12	57.3	51.8	41		12	56.0	49.1	44	
14	55.7	57.1	50	−12.4	14	54.1	54.7	47	−10.0	14	57.0	52.3	41	−1.7	14	56.0	49.2	44	−2.9
16	56.0	57.3	50		16	52.6	53.0	45		16	56.9	52.7	40		16.2	56.0	48.9	44	
18	55.8	57.2	50		18	52.5	52.9	44		18	57.4	52.2	40		18	55.4	48.3	45	
20	56.1	57.3	51		20	54.1	54.3	47		20	57.0	51.8	41		20	55.7	48.4	45	
22	55.9	57.1	50		22	54.1	54.4	47		22	55.8	51.1	43		22	56.0	48.5	45	
24	56.2	57.3	51		24	53.6	54.0	46		24	55.0	51.7	43		24	55.5	47.7	46	
26	56.3	57.6	51		26	53.7	53.9	46		26	55.2	51.6	43		26	54.4	47.4	47	
28	57.1	57.9	52		28	52.6	52.9	44		28	54.8	50.7	44		28	54.2	48.2	46	
30	56.8	57.5	51	−11.8	30	51.8	52.1	43	−10.0	30	55.0	50.4	44	−2.0	30	53.9	49.0	46	−3.0
32	56.4	57.3	51		32	53.5	54.1	46		32	55.0	50.3	44		32	52.2	48.5	47	
34	56.9	57.6	51		34	53.6	54.3	46		34	54.3	50.3	44		34	51.1	48.8	48	
36	55.7	56.2	49		36	53.1	53.4	45		36	54.2	49.8	45		36	50.7	46.8	50	
38	55.0	55.8	49		38	53.1	53.7	45		38	54.8	50.8	44		38	51.8	47.0	49	
40	55.1	56.0	49		40	53.6	53.9	46		40	55.3	52.0	42		40	57.8	48.0	44	
42	57.1	57.7	52		42	53.3	53.8	46		42	56.0	52.1	42		42	51.7	46.1	50	
44	56.4	57.0	51	−11.7	44	52.8	53.1	45	−9.8	44	55.9	52.1	42	−2.1	44	51.9	47.3	49	−3.0
46	55.2	55.9	49		46	53.7	53.9	46		46	56.2	52.0	42		46	52.0	48.7	48	
48	54.6	55.1	48		48	53.1	53.6	45		48	56.0	52.8	41		48	52.3	49.2	47	
50	55.4	55.8	49		50	55.2	55.8	49		50	56.0	51.8	42		50	53.0	49.7	46	
52	55.7	56.2	49		52	54.7	55.0	48		52	56.1	51.6	42		52	53.4	48.7	47	
54	55.1	55.7	49		54	52.6	52.9	44		54	57.0	51.9	41		54	52.9	49.0	47	
56	55.5	56.0	49		56	51.0	51.2	42		56	55.7	51.8	42		56	52.3	49.4	47	
58	55.1	55.6	49		58	51.9	52.2	43		58	55.7	51.8	42		58	53.5	50.6	45	
9 00	54.9	55.1	48	−11.3	11 00	52.8	53.0	45	−9.3	13 00	55.9	51.7	42	−2.1	15 00	53.0	50.2	46	−3.1
02	54.3	54.8	47		02	52.6	52.9	44		02	54.6	52.2	43		02	51.8	50.9	46	
04	53.2	53.8	46		04	51.9	52.2	43		04	54.2	52.3	43		04	52.2	51.3	45	
06	53.0	53.4	45		06	51.5	51.8	43		06	54.0	53.0	43		06	53.0	51.9	44	
08	53.1	53.7	45		08	51.1	51.5	42		08	53.8	53.0	43		08	52.0	51.5	45	
10	53.6	53.9	46		10	51.6	51.9	43		10	54.0	52.4	43		10	51.7	50.6	46	
12	53.8	54.0	46		12	52.0	52.4	44		12	53.2	52.4	44		12	51.4	50.9	46	
14	54.1	54.2	47	−11.0	14	52.0	52.8	44	−9.3	14	52.7	52.0	44	−2.2	14	51.3	50.8	47	−3.1
16	53.9	53.9	46		16	51.9	52.5	44		16	52.9	51.0	45		16	52.7	50.9	45	
18	53.6	53.9	46		18	51.3	51.9	43		18	53.0	50.8	45		18	53.9	51.8	44	
20	54.0	54.2	47		20	51.1	51.4	42		20	53.1	50.2	46		20	53.9	52.0	44	
22	53.8	54.0	46		22	49.5	50.9	40		22	53.9	50.5	45		22	54.0	52.0	43	
24	53.9	54.2	46		24	49.1	49.5	39		24	55.9	51.3	42		24	53.3	51.7	44	
26	53.7	54.0	46		26	49.5	49.7	39		26	54.6	51.2	44		26	52.9	51.2	45	
28	53.9	54.1	46		28	51.4	51.7	42		28	55.0	51.2	43		28	52.3	50.9	46	
30	54.1	54.2	47	−10.8	30	53.0	53.7	45	−9.0	30	54.5	52.2	43	−2.5	30	53.0	51.9	44	
32	54.1	54.1	47		32	50.7	51.2	42		32	54.9	52.1	43		32	52.6	52.0	44	−3.3
34	53.8	53.9	46		34	49.8	50.3	40		34	53.9	52.5	43		34	52.7	50.9	45	
36	53.7	53.9	46		36	52.2	52.7	44		36	53.0	51.8	44		36	51.0	49.4	48	
38	53.7	53.9	46		38	52.4	52.9	44		38	51.9	50.8	46		38	51.0	48.3	49	
40	Overl'k'd				40	52.1	52.7	44		40	51.8	50.7	46		40	49.7	47.2	51	
42	53.1	53.4	45		42	50.9	51.2	42		42	51.2	50.0	47		42	49.7	47.0	51	
44	53.1	53.3	45		44	50.2	50.8	41	−9.0	44	53.2	51.4	44	−2.8	44	47.4	44.7	54	−3.2
46	52.9	53.0	45	−10.4	46	50.6	50.7	41		46	54.2	50.2	45		46	45.6	42.9	57	
48	53.8	54.0	46		48	50.7	51.2	42		48	55.0	50.9	44		48	44.9	43.0	58	
50	53.1	53.5	45		50	51.8	52.0	43		50	54.2	50.8	44		50	43.2	42.0	60	
52	52.6	52.9	44		52	51.7	51.9	43		52	53.9	48.1	47		52	48.3	45.6	53	
54	53.1	53.4	45		54	51.3	52.0	43		54	53.8	47.9	47		54	50.2	44.1	53	
56	54.1	54.2	47		56	51.4	52.0	43		56	54.1	49.6	45		56	48.6	43.3	55	
58	54.2	54.4	47		58	51.9	52.3	44		58	55.0	50.6	44		58	52.0	46.3	49	
					12 00	51.2	51.9	42	−8.5						16 00	50.2	46.1	51	−3.2

Correction to local mean time is — 28.5s.
Torsion head at 7h 40m read 22° and at 12h 30m read 22°.
Observer—H. H. N.

Correction to local mean time is — 39s. 90° torsion = 10.'63.
Torsion head at 11h 25m read 25° and at 16h 25m read 33°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 2, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	60.3	65.0	22 48	-10.4
02	63.4	70.1	55	
04	66.9	70.8	58	
06	64.0	68.8	22 54	
08	70.6	72.3	23 02	
10	72.3	76.8	07	
12	72.7	76.1	23 07	
14	66.9	69.5	22 57	-9.8
16	70.9	73.1	23 03	
18	67.1	70.7	22 58	
20	69.1	70.1	59	
22	63.1	64.8	50	
24	58.2	59.8	43	
26	64.0*a*		50	
28	67.8	69.8	22 58	
30	73.9	76.9	23 08	-9.0
32	67.8	69.2	22 58	
34	68.3	70.9	59	
36	65.4	66.7	54	
38	65.2	66.2	53	
40	60.9	62.1	47	
42	60.9	62.7	47	
44	62.2	64.1	49	-6.8
46	68.0	70.7	22 59	
48	70.8	72.7	23 03	
50	70.8	72.1	23 02	
52	67.8	69.8	22 58	
54	66.1	67.7	55	
56	65.3	66.8	54	
58	64.0	65.2	51	
1 00	63.1	63.9	50	-8.0
02	62.8	63.4	49	
04	61.9	62.3	47	
06	60.6	61.2	46	
08	60.9	61.8	46	
10	61.6	62.7	47	
12	63.3	64.3	50	
14	64.0	65.0	51	-7.7
16	63.5	64.1	50	
18	63.1	63.9	50	
20	62.8	63.3	49	
22	61.7	62.2	47	
24	60.2	61.2	45	
26	59.4	60.2	44	
28	58.7	59.1	42	
30	59.1	59.2	43	-7.2
32	59.2	59.8	43	
34	60.5	60.8	45	
36	61.0	61.1	46	
38	61.3	61.8	47	
40	61.5	61.9	47	
42	61.1	61.8	46	
44	60.2	61.1	45	-7.0
46	60.1	60.9	45	
48	60.3	61.1	45	
50	61.0	61.9	46	
52	62.0	62.6	48	
54	62.7	62.9	49	
56	62.1	62.2	47	
58	61.1	61.2	46	
2 00	60.2	60.7	22 45	-6.8
02	60.2	60.9	45	
04	60.3	60.9	45	
06	59.7	59.9	44	
08	59.2	59.4	43	
10	59.2	60.2	44	
12	59.9	60.8	45	
14	60.0	60.9	45	-6.7
16	59.9	60.7	45	
18	59.2	60.2	44	
20	59.0	59.7	43	
22	59.3	60.3	44	
24	59.9	61.0	45	
26	58.9	59.8	43	
28	57.6	58.8	41	
30	57.8	58.4	41	-6.3
32	58.2	58.9	42	
34	59.1	59.9	43	
36	60.3	60.8	45	
38	61.2	61.4	46	
40	61.5	61.8	47	
42	61.1	61.7	46	
44	60.0	60.4	44	-6.2
46	59.0	60.0	43	
48	60.1	60.9	45	
50	62.0	62.8	48	
52	63.0	63.8	49	
54	64.2	64.9	51	
56	63.9	64.2	50	
58	62.9	63.3	49	
3 00	62.7	63.3	49	-6.1
02	62.0	63.0	48	
04	61.1	62.2	47	
06	61.1	62.1	47	
08	60.7	61.2	46	
10	59.8	60.3	44	
12	59.9	60.4	44	
14	59.6	60.3	44	-5.9
16	60.1	60.9	45	
18	59.9	60.9	45	
20	59.9	61.0	45	
22	59.9	61.0	45	
24	58.8	59.9	43	
26	58.5	59.4	42	
28	60.3	61.1	45	
30	62.7	63.4	49	-5.8
32	63.1	63.4	49	
34	62.8	63.1	49	
36	62.0	62.1	47	
38	61.4	61.8	47	
40	60.9	61.2	46	
42	61.3	62.0	47	
44	62.2	62.8	48	-5.8
46	63.8	64.0	50	
48	62.7	65.8	51	
50	62.2	64.9	50	
52	61.0	63.4	48	
54	58.7	61.0	44	
56	57.9	60.1	43	
58	58.1	60.2	43	

Observer—R. R. T.

Wednesday, March 2, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	58.1	60.2	22 43	-5.6
02	58.3	60.8	43	
04	58.3	60.5	43	
06	58.2	60.4	43	
08	58.7	60.4	43	
10	58.6	60.3	43	
12	59.9	61.6	45	
14	60.9	62.3	47	-5.3
16	61.0	61.9	46	
18	60.9	62.0	46	
20	60.3	61.7	46	
22	60.1	62.7	46	
24	60.7	62.0	46	
26	59.7	61.0	45	
28	59.5	60.9	44	
30	60.2	61.8	46	-5.2
32	60.3	62.0	46	
34	60.3	62.2	46	
36	59.0	60.8	44	
38	57.3	58.8	41	
40	59.1	60.0	43	
42	62.9	63.8	49	
44	65.2	66.7	53	-5.1
46	65.1	66.1	53	
48	62.8	63.4	49	
50	60.2	61.0	45	
52	61.9	63.0	48	
54	64.2	65.6	52	
56	65.7	66.5	54	
58	62.0	62.8	48	
5 00	59.2	60.4	44	-5.0
02	60.0	61.0	45	
04	59.9	60.7	45	
06	61.2	61.7	46	
08	62.9	63.4	49	
10	61.7	62.0	47	
12	61.3	62.0	47	
14	60.2	60.9	45	-5.0
16	60.8	62.1	46	
18	63.7	64.8	51	
20	61.4	62.8	47	
22	59.8	60.4	44	
24	58.8	59.2	43	
26	62.8	63.1	49	
28	64.3	65.1	52	
30	65.0	65.8	53	-5.0
32	64.1	64.8	51	
34	63.2	63.8	50	
36	62.3	62.8	48	
38	62.9	63.7	49	
40	63.7	64.0	50	
42	62.8	63.2	49	
44	63.2	64.0	50	-5.0
46	61.7	62.4	47	
48	60.3	61.3	45	
50	64.7	65.2	52	
52	66.2	67.4	55	
54	62.3	63.2	48	
56	61.9	62.3	47	
58	60.0	60.8	45	
6 00	58.8	59.3	22 43	-4.9
02	59.1	60.0	43	
04	60.2	62.6	46	
06	63.8	65.8	52	
08	64.2	66.2	52	
10	62.7	64.0	49	
12	61.1	62.1	47	
14	58.9	60.2	43	-4.8
16	59.4	60.9	44	
18	59.2	60.9	44	
20	60.3	61.9	46	
22	61.1	62.3	47	
24	61.6	62.8	48	
26	60.8	62.0	46	
28	60.1	61.6	45	
30	61.9	62.8	48	-4.7
32	63.2	63.9	50	
34	60.1	60.8	45	
36	57.2	57.9	40	
38	59.2	59.4	43	
40	61.8	62.7	48	
42	63.0	63.9	49	
44	60.1	60.9	45	-4.6
46	59.1	60.1	43	
48	59.0	60.1	43	
50	59.1	62.8	46	
52	60.8	64.0	48	
54	57.7	61.0	43	
56	56.9	59.8	41	
58	60.1	62.8	46	-4.5
7 00	60.0	63.2	47	
02	58.3	61.7	44	
04	59.0	61.8	45	
06	59.9	61.1	45	
08	59.3	61.3	45	
10	58.8	61.8	45	
12	58.9	61.1	44	
14	57.8	59.8	42	-4.3
16	58.8	60.0	43	
18	56.6	57.8	40	
20	59.6	60.0	44	
22	62.8	62.8	49	
24	63.0*b*		49	
26	56.3	56.8	39	
28	58.7	60.1	43	
30	62.5	63.9	49	-4.3
32	60.8	61.0	46	
34	58.4	59.1	42	
36	59.0	59.7	43	
38	57.8	57.9	41	
40	57.4	58.9	41	
42	57.0	57.2	40	
44	57.8	59.1	42	-4.5
46	62.1	63.1	48	
48	61.0	61.9	46	
50	57.7	58.9	41	
52	61.1	62.2	47	
54	61.8	62.7	48	
56	60.0	60.8	45	
58	57.9	58.8	41	

Observers—R. R. T. and H. H. N., who alternated from 7h 40m to 7h 50m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 2, 1904					Magnet scale erect				Wednesday, March 2, 1904					Magnet scale erect			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	61.4	61.7	22 47	−4.3	10 00	63.2	64.0	22 50	−4.0	12 00	38.3	39.9	22 11	−5.1	14 00	43.7	44.5	22 19	−7.0
02	61.0	61.9	46		02	62.2	62.8	48		02	41.5	44.0	17		02	50.1	50.6	29	
04	59.6	61.3	45		04	60.9	61.5	46		04	41.0	44.4	17		04	51.2	51.6	31	
06	63.2	65.1	51		06	62.2	62.6	48		06	42.3	43.8	17		06	51.8	52.5	32	
08	59.3	59.9	43		08	62.6	62.9	48		08	41.8	42.0	16		08	53.6	54.0	34	
10	60.6	61.0	45		10	62.7	63.4	49		10	41.2	42.7	16		10	54.6	54.8	36	
12	61.9	63.6	48		12	61.9	62.6	48		12	41.7	43.4	17		12	55.9	56.2	38	
14	61.7	62.8	48	−4.3	14	64.5	64.8	51	−4.0	14	43.2	45.1	19	−5.2	14	56.0	56.8	38	−7.1
16	59.2	59.6	43		16	61.9	63.0	48		16	42.8	43.9	18		16	56.7	57.2	30	
18	57.6	58.9	41		18	63.3	63.3	49		18	47.5	48.6	25		18	55.0	56.1	37	
20	60.7	61.9	46		20	60.6	61.6	46		20	42.4	44.0	18		20	55.4	56.3	38	
22	61.0	62.4	47		22	61.3	62.2	47		22	44.0	46.1	21		22	56.8	58.2	40	
24	57.3	58.9	41		24	62.0	62.5	48		24	43.8	45.6	20		24	58.1	59.5	42	
26	61.6	63.1	48		26	65.1	65.3	52		26	42.6	43.9	18		26	57.6	58.7	41	
28	59.8	61.3	45		28	59.2	61.1	44		28	40.5	42.2	15		28	55.8	57.0	38	
30	59.0	59.6	43	−4.1	30	60.9	61.8	46	−4.0	30	41.1	42.6	16	−5.5	30	55.3	56.1	37	−7.2
32	59.7	60.2	44		32	57.8	58.3	41		32	43.7	45.3	20		32	53.1	53.5	34	
34	58.6	59.0	42		34	57.6	59.9	42		34	46.0	48.7	24		34	50.5	51.2	30	
36	61.6	62.7	47		36	60.6	61.1	45		36	51.5	52.9	32		36	49.0	50.3	29	
38	58.9	59.4	43		38	59.1	59.8	43		38	54.9	57.6	38		38	48.8	49.6	27	
40	61.3	62.2	47		40	59.6	59.9	44		40	55.1	56.3	37		40	48.3	49.0	26	
42	59.9	60.5	44		42	56.9	57.3	40		42	56.8	57.6	40		42	48.9	49.5	27	
44	60.4	61.3	45		44	57.4	58.0	41	−4.0	44	59.0	60.1	43	−5.6	44	51.1	51.8	31	−7.3
46	59.8	60.4	44		46	58.1	59.8	42		46	58.7	59.9	43		46	52.7	53.2	33	
48	60.3	61.2	45	−4.1	48	59.2	59.9	43		48	60.3	61.4	45		48	53.8	54.2	35	
50	61.8	63.6	48		50	56.3	56.8	39		50	59.3	60.3	44		50	54.0	54.7	35	
52	61.3	62.7	47		52	53.6	54.0	34		52	57.2	58.8	41		52	54.6	55.1	36	
54	62.2	63.9	49		54	55.3	56.4	38		54	56.4	57.9	40		54	55.3	55.7	37	
56	62.5	63.4	49		56	56.6	57.8	40		56	57.1	58.2	40		56	55.0	55.4	37	
58	60.2	62.3	46		58	59.3	60.2	44		58	56.5	57.8	40		58	55.8	56.1	38	
9 00	61.3	63.2	48	−4.0	11 00	58.1	58.5	41	−4.1	13 00	56.4	57.9	40	−6.0	15 00	55.5	55.8	37	−7.5
02	61.9	62.7	48		02	58.9	59.4	43		02	55.6	57.2	38		02	55.2	55.6	37	
04	60.6	62.3	46		04	56.2	57.3	39		04	53.3	55.1	35		04	54.0	54.3	35	
06	61.1	62.0	47		06	55.7	56.1	38		06	51.2	52.8	32		06	53.0	54.2	35	
08	62.0	62.9	48		08	54.7	55.2	36		08	51.6	53.0	32		08	53.8	54.3	35	
10	62.2	62.8	48		10	53.7	54.1	35		10	52.5	53.8	33		10	51.2	51.8	31	
12	59.2	61.9	45		12	57.9	58.2	41		12	53.0	54.3	34		12	51.1	51.7	31	
14	62.0	64.1	49	−4.0	14	58.0	58.4	41	−4.3	14	53.1	54.4	34	−6.3	14	50.4	51.2	30	−7.7
16	61.0	64.8	49		16	51.7	52.1	31		16	53.4	54.7	35		16	49.2	49.7	27	
18	61.7	63.2	48		18	51.8	52.0	31		18	54.3	55.7	36		18	46.8	47.3	24	
20	59.1	63.5	46		20	51.4	52.2	31		20	55.4	56.6	38		20	46.2	46.8	23	
22	59.3	62.4	45		22	52.3	53.0	32		22	55.2	56.4	38		22	46.6	47.0	23	
24	60.7	62.9	47		24	54.1	54.9	36		24	54.8	56.0	37		24	46.7	47.3	24	
26	60.3	62.8	47		26	55.8	56.2	38		26	55.3	56.8	38		26	45.3	46.0	21	
28	58.2	60.7	43		28	55.5	55.9	37		28	56.3	57.5	39		28	45.7	46.2	22	
30	57.5	60.7	43	−4.0	30	55.4	56.2	38	−4.7	30	54.1	55.3	36	−6.5	30	46.8	47.6	24	−7.9
32	64.5	66.0	52		32	57.4	58.5	41		32	40.4	50.7	28		32	47.6	48.2	25	
34	63.5	66.7	52		34	58.1	59.1	42		34	46.1	47.0	23		34	49.9	51.0	29	
36	59.8	62.2	46		36	58.6	59.8	43		36	43.6	44.8	19		36	52.0	52.7	32	
38	60.1	63.3	47		38	59.1	60.2	43		38	43.0	43.9	18		38	51.8	52.3	32	
40	62.8	65.9	51		40	58.5	59.8	43		40	43.8	44.6	19		40	52.1	52.6	32	
42	58.4	61.2	44		42	53.9	56.4	36		42	46.2	46.8	23		42	51.3	51.7	31	
44	59.7	62.1	46	−4.0	44	50.6	52.2	31	−4.9	44	46.3	47.0	23	−6.6	44	52.0	52.4	32	−7.9
46	64.2	66.8	53		46	50.7	52.8	31		46	45.8	46.2	22		46	52.1	52.7	32	
48	60.2	62.7	46		48	55.6	57.8	39		48	48.7	49.8	27		48	51.7	52.5	32	
50	61.0	63.3	47		50	56.0	58.1	39		50	52.3	52.8	32		50	49.9	50.3	29	
52	62.7	65.1	50		52	53.8	56.9	37		52	46.5	47.0	23		52	48.7	49.0	27	
54	60.4	62.0	46		54	51.1	53.2	32		54	43.7	44.0	19		54	47.3	48.4	25	
56	60.8	62.1	46		56	54.0	56.3	36		56	43.6	44.1	19		56	47.7	48.0	26	
58	62.7	64.2	49		58	40.8	41.9	15		58	46.6	46.8	23		58	48.0	48.8	26	

Observer—H. H. N.

Observers—H. H. N. and J. V., who alternated from 15h 48m to 16h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 2, 1904					Magnet scale erect					Wednesday, March 2, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	46.7	47.7	22 24	-7.9	18 00	54.3	57.0	22 37	-10.0	20 00	42.5	45.2	22 19	-10.9	22 00	44.3	55.1	22 33	-11.9
02	45.0	45.8	21		02	54.6	56.0	37		02	41.8	43.2	17		02	43.6	53.8	32	
04	43.8	46.1	20		04	55.2	56.2	37		04	41.0	43.1	16		04	40.5	49.0	25	
06	44.8	46.6	22		06	55.3	57.0	38		06	37.0	37.1	08		06	42.5	51.0	29	
08	44.0	47.2	21		08	54.9	56.2	37		08	36.2	38.5	22 08		08	45.3	53.1	33	
10	44.9	47.6	22		10	54.2	55.8	36		10	27.0	30.7	21 55		10.4	48.2	53.9	35	
12	45.7	47.7	23		12	54.1	55.5	36		12	25.3	31.0	21 54		12	49.0	54.2	36	
14	44.6	47.3	22	-8.0	14	53.5	55.2	35	-10.0	14	42.5a		22 17		14	49.3	53.9	36	-12.0
16	47.0	48.0	25		16	52.4	55.9	35		16*	23.1	31.5	23 08		16	51.7	56.3	40	
18	48.0	48.8	26		18	52.5	55.7	35		18	23.2	70.0	23 38		18	51.8	57.0	41	
20	50.5	51.8	30		20	51.6	55.2	34		20	Lost				20	51.1	56.0	39	
22	51.1	52.0	31		22	51.6	55.0	34		22*	62.0	62.0	26 07		22	49.4	54.3	37	
24	52.6	53.7	33		24	53.0	55.4	35		24*	48.8	59.0	24 50		24	47.9	51.2	33	
26	54.0	54.8	35		26	53.9	56.2	36		26	47.5	69.0	56		26	45.5	49.9	30	
28	54.3	55.0	36		28	54.0	57.0	37		28*	31.0	55.3	60		28	46.0	50.2	31	
30	54.2	55.7	36	-8.5	30	55.0	57.2	38	-10.2	30	12.5	48.5	24 40	-10.9	30	46.8	51.2	32	-12.1
32	54.9	55.2	36		32	55.2	58.5	39		32*	17.4	51.1	22 49		32	47.2	52.0	33	
34	55.2	55.5	37		34	55.5	59.0	40		34*	20.0	59.0	21		34	47.9	53.0	34	
36	55.3	55.8	37		36	55.7	59.2	40		36	11.7	56.1	12		36	48.8	54.7	36	
38	54.0	54.7	35		38	55.2	59.0	40		38	22.0	50.0	22 16		38	49.5	55.1	37	
40	53.6	54.1	34		40	54.0	58.5	38		40	11.0	38.8	21 58		40	50.0	55.1	38	
42	54.9	55.9	37		42	54.5	59.0	39		42	12.0	39.1	59		42	50.0	55.6	38	
44	53.7	55.3	36	-9.0	44	54.5	59.0	39	-10.3	44	9.5	36.9	21 55	-10.9	44	50.3	56.0	39	-12.2
46	52.9	56.0	35		46	54.0	58.8	38		46	18.8	38.1	22 04		46	51.0	56.0	39	
48	53.2	56.5	36		48	52.1	57.0	36		48	16.1	41.1	04		48	51.2	55.7	39	
50	52.5	55.3	35		50	51.0	55.4	33		50	19.7	49.0	13		50	51.5	55.4	39	
52	52.5	55.0	34		52	50.5	53.9	32		52	41.0	63.0	22 41		52	51.7	55.3	39	
54	51.2	54.0	32		54	50.7	53.2	31		54	61.8	74.5	23 06		54	50.8	54.5	38	
56	51.7	53.2	32		56	50.2	52.9	31		56*	32.2	78.0	33		56	50.5	53.5	37	
58	51.9	52.9	32		58	53.0	55.3	35		58	17.2	62.2	23 09		58	49.8	52.5	36	
17 00	52.8	53.6	33	-9.3	19 00	50.8	52.8	31	-10.3	21 00.3	10.8	43.0	22 49	-11.0	23 00	49.0	52.4	35	-12.5
02.3	53.2	56.1	36		02	50.0	53.1	31		02	14.1	57.0	23 02		02	50.1	52.8	36	
04	54.0	57.0	37		04	50.1	52.3	30		04	16.4	46.0	22 55		04	50.5	54.1	37	
06	53.0	56.5	36		06	50.1	52.9	31		06	15.1	45.7	54		06	49.5	53.9	36	
08	51.9	55.3	34		08.3	50.0	53.2	31		08*	17.6	48.5	07		08	47.0	51.5	33	
10	51.0	55.0	33		10	49.0	52.5	30		10	21.0	53.1	13		10	47.0	52.1	33	
12	50.9	55.1	33		12	49.2	53.2	30		12	24.0	54.0	17		12	47.0	52.4	33	
14	52.3	56.1	35	-9.6	14	49.0	52.2	29	-10.4	14	22.8	50.1	12	-11.0	14	46.0	51.2	32	-12.6
16	53.0	56.2	36		16	48.1	53.2	29		16	26.2	51.8	17		16	45.0	52.1	31	
18	51.3	56.9	35		18	49.0	53.5	30		18	29.0	53.0	20		18	44.7	51.6	31	
20	55.8	57.0	38		20	49.9	54.0	31		20	30.1	52.8	20		20	45.0	51.8	31	
22	54.0	58.9	38		22	50.0	54.0	32		22	32.0	53.2	22		22	45.0	51.6	31	
24	54.7	59.7	40		24	50.3	53.0	31		24	35.0	54.8	26		24	46.0	52.0	32	
26	54.0	59.0	39		26	50.2	53.0	31		26	35.0	52.8	24		26	46.2	52.2	33	
28	53.1	58.6	38		28	49.5	52.0	30		28	36.0	53.0	25		28	46.1	51.3	32	
30	52.3	57.5	36	-9.7	30	49.8	51.9	30	-10.6	30	37.2	54.2	27	-11.2	30	46.5	52.0	33	-12.8
32	52.0	56.3	35		32	49.0	51.5	29		32	42.0	56.7	33		32	47.9	52.0	34	
34	52.5	56.4	35		34	49.7	51.2	29		34	40.5	54.0	29		34	48.8	52.8	35	
36	53.1	56.0	36		36	48.5	49.5	27		36	38.5	50.2	25		36	48.1	52.0	34	
38	52.3	56.2	35		38	47.9	48.5	26		38	38.2	49.2	24		38	48.0	51.1	33	
40.3	53.0	56.7	36		40	48.0	48.9	26		40	38.4	49.7	24		40	48.7	51.2	34	
42	53.2	57.0	36		42	49.0	49.3	27		42	41.7	52.0	29		42	47.9	51.5	33	
44	53.2	57.4	37	-9.8	44	48.3	48.9	26	-10.8	44	42.7	51.9	30	-11.3	44	46.7	50.4	31	-13.0
46	53.8	57.0	37		46	46.2	48.3	24		46	42.0	53.1	30		46	45.7	50.2	31	
48	53.1	58.7	38		48	45.7	48.0	23		48	44.0	56.1	34		48	45.3	49.3	30	
50	54.8	58.8	39		50	45.8	47.5	23		50	48.4	59.8	40		50	43.0	47.8	27	
52	54.1	58.0	38		52	45.0	47.0	22		52	48.0	58.9	39		52	41.5	46.4	24	
54	54.0	58.0	38		54	44.1	45.8	20		54	45.7	56.2	35		54	38.8	44.7	21	
56	54.1	57.8	38		56	44.0	46.0	21		56	46.0	57.3	36		56	36.2	40.0	15	
58	54.0	57.0	37		58	43.0	45.5	19		58	44.0	55.1	33		58	43.0	45.2	25	
															24 00	41.1	47.9	25	

Observer—J. V.

Correction to local mean time is — 48.5s.
Torsion head at 0h 00m read 18° and at 24h 18m read 18°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, March 3, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	29.6	28.8	22 42	-18.9
02	29.2	28.3	43	
04	29.9	29.7	41	
06	29.2	28.7	42	
08	30.1	29.8	41	
10	30.9	30.6	39	
12	30.0	28.8	41	
14	31.1	30.3	39	-18.3
16	31.4	30.5	39	
18	32.5	31.2	38	
20	32.0	30.8	38	
22	31.9	30.8	38	
24	32.3	31.1	38	
26	32.4	31.0	38	
28	32.3	31.2	38	
30	32.4	31.3	38	-18.0
32	32.3	31.2	38	
34	31.9	31.0	38	
36	31.1	30.3	30	
38	32.0	31.3	38	
40	32.2	31.4	38	
42	32.5	31.4	38	
44	30.2	29.6	41	-17.2
46	30.8	29.7	40	
48	30.1	29.6	41	
50	30.0	29.1	41	
52	30.6	29.9	40	
54	30.0	29.6	41	
56	30.1	29.7	41	
58	29.6	29.1	42	
17 00	29.4	28.0	42	-17.3
02	30.2	29.9	40	
04	30.5	30.2	40	
06	30.3	29.9	40	
08	29.8	29.2	41	
10	30.3	29.9	40	
12	30.4	30.1	40	
14	30.0	30.4	40	-17.0
16	30.3	30.0	40	
18	29.6	29.3	41	
20	29.8	29.2	41	
22	29.8	29.3	41	
24	29.9	29.3	41	
26	29.7	29.1	41	
28	29.8	29.0	41	
30	29.4	28.8	42	-16.9
32	29.1	28.7	42	
34	29.1	28.6	42	
36	29.0	28.7	42	
38	29.0	28.6	42	
40	28.2	28.0	44	
42	27.6	27.3	45	
44	28.4	28.0	43	-16.5
46	28.7	28.2	43	
48	28.9	28.4	43	
50	28.7	28.3	43	
52	29.0	28.8	42	
54	29.0	27.2	43	
56	28.6	28.6	43	
58	28.9	28.7	42	
18 00	29.0	28.7	22 42	-16.3
02	28.8	28.6	43	
04	29.1	28.8	42	
06	29.2	28.9	42	
08	29.4	29.0	42	
10	29.7	29.2	41	
12	30.3	29.8	40	
14	30.8	30.3	40	-16.3
16	31.3	30.8	39	
18	31.0	30.6	39	
20	31.0	30.7	39	
22	31.3	31.1	39	
24	30.0	29.5	41	
26	30.1	29.4	41	
28	30.2	29.3	41	
30	30.3	29.6	41	-16.3
32	30.4	29.8	40	
34	29.7	29.1	41	
36	29.9	29.4	41	
38	30.5	29.9	40	
40	30.8	30.2	40	
42	30.6	30.0	40	
44	30.5	29.9	40	-16.3
46	30.6	30.1	40	
48	30.4	30.1	40	
50	30.8	30.3	40	
52	31.3	31.0	39	
54	31.0	31.0	39	
56	31.5	31.3	38	
58	32.2	31.6	38	
19 00	32.0	31.8	38	-16.2
02	33.7	33.4	35	
04	33.7	33.1	35	
06	33.3	32.9	36	
08	33.3	33.0	36	
10	32.5	32.1	37	
12	32.3	31.7	37	
14	31.9	31.2	38	-16.1
16	35.2	33.9	33	
18	36.8	36.2	30	
20	36.6	35.8	31	
22	37.3	36.8	30	
24	36.0	35.2	31	
26	36.0	35.3	32	
28	35.9	34.9	32	
30	35.4	34.7	33	-16.0
32	35.0	35.0	32	
34	36.4	35.5	31	
36	37.5	36.6	30	
38	37.1	36.7	30	
40	37.0	36.7	30	
42	37.2	36.4	30	
44	37.0	36.4	30	-15.9
46	35.7	35.3	32	
48	35.7	36.2	31	
50	36.5	36.2	31	
52	36.8	35.7	31	
54	36.2	34.9	32	
56	36.2	35.1	32	
58	35.9	34.3	32	
20 00	36.2	35.7	31	-16.0

Correction to local mean time is — 1m 18s.
Torsion head at 15h 35m read 18° and at 20h 10m read the same.
Observer—H. H. N.

Friday, March 4, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	45.5	66.0	22 46	-19.2
02*	65.3	74.7	23 35	
04*	42.0	50.2	49	
06	8.7	26.1	23 04	
08*	41.1	55.9	22 56	
10*	52.2	69.1	23 35	
12	52.0	62.2	30	
14	39.1	51.0	11	-19.0
16	56.0	64.0	34	
18	49.8	59.8	26	
20	43.0	50.8	13	
22	41.0	47.7	09	
24	41.8	49.9	12	
26	38.1	42.7	03	
28	35.4	40.6	00	
30	37.8	42.3	03	-19.0
32	43.5	47.9	23 12	
34	37.0	38.0	22 59	
36	31.7	35.3	52	
38	19.5	30.0	39	
40	40.5	35.3	22 59	
42	37.2	42.0	23 02	
44	27.0	32.0	22 46	-19.0
46	25.0	30.1	43	
48	23.8	26.8	40	
50	19.0	22.0	22 32	
52	37.5	41.0	23 01	
54	37.0	38.9	22 59	
56	24.5	29.0	42	
58	22.0	28.0	39	
21 00	30.7	36.7	53	-19.2
02	26.1	32.0	45	
04	31.3	35.3	52	
06	28.2	34.7	49	
08	26.3	29.8	44	
10	23.0	26.0	38	
12	17.0	21.3	30	
14	15.9	20.8	29	-19.1
16	18.8	21.5	32	
18	19.1	22.0	32	
20	19.0	21.0	31	
22	20.0	21.8	33	
24	20.7	22.0	33	
26	20.4	22.0	33	
28	19.7	21.8	32	
30	19.7	21.4	32	-19.0
32	20.0	21.9	33	
34.5	21.0	23.0	34	
36.5	21.7	23.3	35	
38	21.3	23.5	34	
40	22.4	24.0	36	
42	20.7	22.0	33	
44	20.6	21.3	33	-19.0
46	20.3	21.3	33	
48	21.0	21.8	33	
50	19.0	22.9	33	
52	18.6	21.2	31	
54	18.9	21.9	31	
56	18.4	21.3	31	
58	18.5	21.0	31	-18.8
22 00	18.0	21.0	22 31	
02	18.5	21.9	32	
04	17.9	21.3	31	
06	18.5	21.8	32	
08	19.2	21.9	32	
10	20.2	22.8	34	
12	19.8	22.2	33	
14	20.0	22.9	33	-18.8
16	19.3	23.0	33	
18	19.0	22.7	33	
20	18.9	22.7	33	
22	20.0	23.0	34	
24	22.0	24.8	37	
26	22.8	25.0	37	
28	22.8	25.0	37	
30	22.1	24.0	36	-18.7
32	20.1	23.0	34	
34	20.3	22.7	34	
36	20.0	22.3	33	
38	20.3	22.9	34	
40	20.4	22.5	33	
42	18.9	20.0	30	
44	18.7	20.1	30	
46	18.6	20.0	30	
48	18.9	19.6	30	
50	19.4	20.7	31	
52	17.1	18.8	28	
54	18.5	19.0	29	
56	17.0	18.0	27	
58	16.8	17.2	27	
23 00	16.2	16.9	26	-18.8
02	15.0	16.2	24	
04	16.2	17.1	26	
06	16.2	17.0	26	
08	16.0	16.8	26	
10	15.5	16.0	25	
12	16.3	17.3	26	
14	17.3	17.9	27	-18.8
16	17.8	19.4	29	
18	17.3	19.9	29	
20	15.8	18.0	26	
22	15.7	18.0	26	
24	16.2	18.2	27	
26	17.0	19.0	28	
28	17.0	19.3	28	
30	19.1	21.0	31	-18.8
32	21.0	21.8	33	
34	21.0	21.3	33	
36	21.0	23.7	35	
38	21.0	23.8	35	
40	22.3	24.5	37	
42	23.5	25.9	39	
44	25.0	27.1	41	-18.8
46	25.5	27.1	41	
48	25.8	27.1	41	
50	25.0	26.7	41	
52	21.8	22.7	35	
54	27.2	28.5	44	
56	29.3	33.0	49	
58	30.2	33.2	50	
24 00	31.0	32.5	50	-18.8

Correction to local mean time is — 1m 15.5s.
Torsion head at 19h 25m read 16° and at 24h 20m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, March 8, 1904					Magnet scale erect				Wednesday, March 9, 1904					Magnet scale inverted			
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	53.2	54.8	22 39	-20.2	14 00	52.0	52.5	22 36	-19.0	0 00	50.3	48.9	22 45	-20.2	2 00	47.9	47.6	22 48	-19.2
02	52.6	54.7	39		02	55.2	55.7	41		02	50.2	49.1	45		02	48.3	48.0	48	
04	51.9	52.0	36		04	48.8	49.2	31		04	50.1	49.0	45		04	47.4	47.1	49	
06	52.3	52.5	37		06	48.0*b*		30		06	50.0	49.1	45		06	47.8	47.7	48	
08	51.8	53.4	37		08	46.5	47.1	28		08	50.6	49.7	44		08	47.7	47.7	49	
10	51.6	52.1	36		10	46.3	47.5	28		10	50.9	49.8	44		10	47.6*b*		49	
12	50.8	51.3	34		12	47.6	48.0	29		12	51.0	50.2	44		12	46.9	46.7	50	
14	54.2	54.9	40	-20.0	14	47.7	48.3	30	-19.0	14	51.7	50.8	43	-20.5	14	47.2	46.9	50	-19.1
16	53.1	53.9	38		16	47.0	48.2	29		16	51.4	50.7	43		16	47.8	47.5	49	
18	52.2	52.9	37		18	46.1	47.3	28		18	50.9	50.3	44		18	47.8	47.6	48	
20	52.9	53.7	38		20	45.4	46.9	27		20	51.4	50.8	43		20	48.6	48.4	47	
22	52.3	53.2	37		22	45.9	47.3	28		22	51.2	50.7	43		22	48.7	48.2	47	
24	54.8	55.6	41		24	44.6	45.8	25		24	50.9	50.3	44		24	48.3	48.1	48	
26	57.1	57.8	44		26	44.8	46.0	26		26	50.6	50.1	44		26	48.3	48.2	48	
28	59.1	60.3	48		28	45.8	46.6	27		28	50.4	49.9	45		28	48.2	48.0	48	
30	57.6	59.4	46	-19.9	30	45.2	46.5	26	-19.0	30	50.7	50.3	44	-20.5	30	48.2	48.0	48	-19.0
32	55.5	57.0	43		32	44.6	45.3	25		32	50.9	50.3	44		32	48.6	48.3	47	
34	53.1	54.4	39		34	43.3	44.5	23		34	50.8	50.3	44		34	48.9	48.5	47	
36	54.3	55.6	41		36	44.1	45.0	24		36	50.2	50.0	45		36	48.8	48.6	47	
38	55.7	56.6	43		38	44.7	45.8	25		38	50.2	49.9	45		38	48.2	47.9	48	
40	53.2	55.0	39		40	44.7	45.4	25		40	51.0	50.8	43		40	47.8	47.4	49	
42	51.8	53.4	37		42	47.6	48.5	30		42	51.2	50.9	43		42	48.7	48.4	47	
44	51.7	52.6	36	-19.9	44	48.0	49.2	31	-18.9	44	50.4	50.1	44	-20.4	44	49.0	48.8	46	-19.0
46	53.4	54.7	39		46	47.5	48.2	29		46	49.4	49.2	46		46	49.3	49.0	46	
48	52.9	54.9	39		48	47.3	48.1	29		48	49.8	49.3	45		48	49.2	48.8	46	
50	54.2	56.0	41		50	49.4	49.8	32		50	49.2	48.8	46		50	48.9	48.5	47	
52	57.1	58.3	45		52	49.2	49.9	32		52	48.7	48.4	47		52	48.9	48.6	47	
54	58.7	59.8	47		54	48.5	49.3	31		54	49.4	49.1	46		54	49.1	48.7	46	
56	55.7	56.9	43		56	49.6	49.8	32		56	49.8	49.3	45		56	48.2	47.9	48	
58	53.9	55.3	40		58	48.9	49.8	32		58	49.8	49.6	45		58	48.3	48.1	48	
13 00	53.8	54.9	40	-19.9	15 00	49.0	49.7	32	-18.7	1 00	50.3	50.1	44	-20.1	3 00	48.1	47.8	48	-18.7
02	55.4	56.5	42		02	50.2	50.9	34		02	50.9	50.6	44		02	47.9	47.7	48	
04	56.2	56.7	43		04	50.1	50.4	33		04	51.0	50.7	43		04	47.1	46.9	50	
06	55.3	56.6	42		06	51.2	51.9	35		06	51.1	51.0	43		06	48.3	48.0	48	
08	53.1	54.0	38		08	52.9	53.2	38		08	51.2	51.0	43		08	49.2	48.9	46	
10	54.3	55.2	40		10	53.0	53.4	38		10	51.9	51.6	42		10	50.8	50.6	44	
12	55.0	55.9	41		12	51.8	52.6	36		12	53.0	52.8	40		12	51.4	51.1	43	
14	53.5	54.2	39	-19.6	14	51.5	51.8	35	-18.5	14	54.1	54.3	38	-19.9	14	49.9	49.5	45	-18.6
16	53.4	54.3	39		16	51.7	52.1	36		16	55.2	55.0	37		16	49.0	48.8	46	
18	51.5	52.7	36		18	50.8	51.2	34		18	55.4	55.1	37		18	47.9	47.7	48	
20	48.8	50.3	32		20	47.6	47.9	29		20	55.1	54.8	37		20	48.4	48.3	47	
22	49.8	50.7	33		22	47.4	47.8	29		22	54.4	54.1	38		22	48.9	48.6	47	
24	49.7	50.4	33		24	47.2	47.9	29		24	54.0	53.8	39		24	49.2	49.1	46	
26	50.0	50.9	33		26	48.6	48.9	31		26	53.2	53.0	40		26	49.2	48.9	46	
28	50.8	51.8	35		28	49.0*a*		31		28	53.1	52.6	40		28	48.8	48.6	47	
30	53.3	54.1	39	-19.5	30	49.6	49.8	32	-18.4	30	52.8	52.4	41	-19.9	30	49.2	48.9	46	-18.2
32	53.9	54.4	39		32	50.2	50.7	33		32	51.1	50.8	43		32	48.1	48.0	48	
34	55.8	57.0	43		34	50.6	51.0	34		34	49.9	49.4	45		34	48.8	48.6	47	
36	54.7	55.9	41		36	51.3	52.0	35		36	49.5	49.2	46		36	49.1	48.8	46	
38	53.1	53.9	38		38	48.3	49.0	31		38	48.8	48.7	47		38	48.9	47.7	47	
40	53.5	54.4	39		40	49.8	50.6	33		40	48.8	48.8	47		40	47.3	46.8	50	
42	53.8	54.2	39		42	50.5	51.2	34		42	49.0	48.7	47		42	46.4	46.1	51	
44	53.5	53.9	39	-19.1	44	50.5	51.3	34	-18.3	44	48.9	48.8	47	-19.6	44	47.2	46.8	50	-18.1
46	53.8	54.6	39		46	49.3	49.9	32		46	48.4	47.9	48		46	47.9	47.7	48	
48	53.6	53.8	39		48	50.0	50.3	33		48	46.8	46.5	50		48	47.2	46.9	50	
50	53.2	53.7	38		50	49.8	50.1	33		50	47.0	46.8	50		50	47.3	47.0	49	
52	54.3	54.6	40		52	50.3	50.4	33		52	47.3	47.2	49		52	48.8	48.3	47	
54	52.9	53.4	38		54	51.8	52.1	36		54	47.2	47.1	49		54	48.5	48.2	47	
56	53.0	53.6	38		56	51.9	52.4	36		56	47.0	46.3	50		56	48.0	47.7	48	
58	52.9	53.8	38		58	51.0	51.7	35		58	47.3	47.1	49		58	47.6	47.2	49	
					16 00	51.2	51.4	35	-18.3										

Correction to local mean time is — 2m 44s.
Torsion head at 11h 30m read 19° and at 16h 40m read the same.
Observer—H. H. N.

Observer—H. H. N.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 9, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
4 00	48.9	48.2	22 47	-18.0
02	50.0	49.7	45	
04	49.6	49.1	46	
06	48.3	47.9	48	
08	47.8	47.4	49	
10	47.6	47.2	49	
12	48.3	47.9	48	
14	47.6	47.4	49	-18.0
16	47.7	47.4	49	
18	48.4	48.1	48	
20	48.8	48.5	47	
22	49.4	49.1	46	
24	49.9	49.6	45	
26	50.4	49.9	45	
28	47.9	47.4	49	
30	46.3	45.4	51	-18.0
32	46.9	46.1	50	
34	48.8	48.1	47	
36	49.3	48.7	46	
38	48.5	47.7	48	
40	47.1	46.2	50	
42	48.3	47.5	48	
44	47.1	46.3	50	-18.0
46	47.2	46.9	50	
48	47.1	46.4	50	
50	46.0	45.8	51	
52	46.5	46.1	50	
54	48.2	47.6	48	
56	49.1	48.6	47	
58	48.3	47.8	48	
5 00	48.2	47.7	48	-18.0
02	48.2	47.9	48	
04	47.4	47.1	49	
06	47.2	46.0	50	
08	47.3	47.1	49	
10	47.0	46.7	50	
12	48.9	48.2	47	
14	49.9	49.7	45	-17.9
16	50.1	49.6	45	
18	49.3	49.1	46	
20	48.8	48.6	47	
22	47.9	47.3	49	
24	47.8	47.3	49	
26	46.5	46.1	50	
28	46.4	46.3	50	
30	47.2	47.0	49	-17.9
32	47.3	46.9	49	
34	47.9	47.5	48	
36	46.0*b*		51	
38	50.2	50.0	45	
40	47.0	46.8	50	
42	46.7	46.6	50	
44	46.8	46.6	50	-17.7
46	47.3	46.8	50	
48	47.8	47.5	49	
50	46.8	46.4	50	
52	46.5	46.4	50	
54	46.2	45.9	51	
56	49.0	48.8	46	
58	48.1	47.5	48	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00	43.7	43.2	22 55	-17.6
02	39.8	39.1	23 01	
04	44.9	44.3	22 53	
06	48.2	47.7	48	
08	46.7	46.1	50	
10	46.2	45.9	51	
12	48.7	48.1	47	
14	51.4	51.1	43	-17.5
16	46.8	45.4	51	
18	41.7	40.8	59	
20	41.9	41.3	58	
22	43.3	42.9	56	
24	45.8	45.2	52	
26	48.7	48.3	47	
28	Light failed			
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50				
52				
54				
56				
58				
7 00				
02				
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Correction to local mean time is — 2m 47s.
Torsion head at 0h 00m read 19° and at 6h 30m read 18°.
Observer—H. H. N.

Thursday, March 10, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	44.9	45.8	22 32	-23.4
02	43.1	45.3	30	
04	43.2	44.4	30	
06	43.5	44.6	30	
08	44.6	45.7	32	
10	43.8	45.9	31	
12	44.4	46.2	32	
14	44.5	46.2	32	-23.0
16	45.3	46.9	33	
18	47.4	48.3	36	
20	48.9	50.2	38	
22	48.3	49.5	38	
24	48.5	51.2	39	
26	48.9	50.7	39	
28	50.8	54.0	43	
30	50.7	53.8	43	-23.3
32	51.2	55.0	44	
34	51.6	54.9	44	
36	51.3	54.6	44	
38	51.2	54.4	44	
40	51.1	54.3	44	
42	50.2	54.2	43	
44	51.2	53.8	43	-23.3
46	51.8	54.7	44	
48	52.2	55.9	45	
50	52.3	56.4	46	
52	52.2	56.5	46	
54	52.6	55.7	46	
56	52.8	54.5	45	
58	52.0	54.7	44	
17 00	51.4	53.7	43	-23.3
02	51.2	52.9	42	
04	50.1	50.9	40	
06	49.3	49.8	38	
08	48.2	48.6	37	
10	47.5	47.8	35	
12	47.4	48.0	36	
14	47.6	48.9	36	-23.2
16	47.4	48.6	36	
18	47.3	48.8	36	
20	47.8	49.7	37	
22	48.1	49.7	38	
24	48.2	50.0	37	
26	47.8	49.9	37	
28	48.1	49.7	38	
30	47.7	49.8	37	-23.1
32	46.6	49.1	36	
34	47.0	49.6	37	
36	48.2	49.7	38	
38	46.8	48.7	36	
40	47.0	47.5	35	
42	47.1	47.9	35	
44	46.6	47.0	34	-23.0
46	46.5	46.8	34	
48	47.2	47.5	35	
50	46.8	48.7	36	
52	48.3	50.2	38	
54	50.1	53.8	42	
56	51.1	53.3	43	
58	50.6	53.4	42	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	49.7	52.4	22 41	-22.9
02	50.7	52.3	42	
04	51.8	54.8	44	
06	53.9	54.6	46	
08	52.7	53.8	44	
10	53.3	54.2	45	
12	54.0	55.3	46	
14	54.7	55.4	47	-22.7
16	54.9	55.8	48	
18	54.7	55.3	47	
20	52.8	54.1	45	
22	51.9	52.7	43	
24	51.1	51.3	41	
26	49.6	51.2	40	
28	48.2	49.0	37	
30	47.7	48.2	36	-22.7
32	47.2	47.9	35	
34	46.2	47.0	34	
36	45.7	46.5	33	
38	45.8	46.4	33	
40	45.7	46.5	33	
42	45.5	46.2	33	
44	45.3	46.1	32	-22.4
46	45.4	45.6	32	
48	45.7	46.3	33	
50	45.6	47.8	34	
52	47.5	48.4	36	
54	47.6	48.5	36	
56	47.2	48.0	35	
58	49.0	49.9	38	
19 00	50.5	51.6	41	-22.3
02	53.7	54.8	46	
04	53.1	54.3	45	
06	58.7	59.3	53	
08	60.2	60.9	56	
10	59.6	60.3	55	
12	59.4	59.9	54	
14	57.7	58.0	52	-22.1
16	57.9	58.3	52	
18	56.8	57.3	50	
20	55.9	56.0	48	
22	56.1	56.3	49	
24	57.4	58.2	52	
26	58.3	58.7	53	
28	62.2	62.7	59	
30	61.8	62.1	58	-22.1
32	59.3	59.5	54	
34	58.8	59.0	53	
36	59.6	60.1	55	
38	59.5	59.9	54	
40	59.4	60.0	54	
42	58.3	58.8	53	
44	57.9	58.6	53	-22.0
46	57.6	59.7	53	
48	57.8	59.5	53	
50	57.6	58.5	52	
52	58.2	60.3	22 54	
54	63.1	64.0	23 00	
56	61.4	61.9	22 57	
58	59.8	61.0	56	
20 00	60.9	61.7	57	-22.0

Correction to local mean time is — 3m 33.5s. 90° torsion = 20.′41.
Torsion head at 15h 20m read 15° and at 20h 30m read 13°.
Observer—H. H. N.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, March 11, 1904 — Magnet scale inverted										Sunday, March 13, 1904 — Magnet scale erect									
time	Scale Scale Left	Scale Scale Right	East East nation.	C.	time	Scale Scale Left	Scale Scale Right	East East nation	C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	58.8	57.6	22 19	-20.1	22 00	64.9	55.8	22 16	-19.3	0 00†	47.8	45.8	22 32		2 00	56.4	57.0	22 48	-24.0
02	58.5	57.4	20		02	58.8	49.4	25		02.4	56.1	61.7	51	-28.7	02	56.5	57.3	48	
04	59.2	58.1	18		04	59.5	51.9	23		04	57.7	61.8	52		04	55.8	56.7	47	
06	60.1	59.3	17		06	61.8	51.1	22		06	58.1	61.9	53		06	55.9	56.7	47	
08	59.9	58.7	17		08	56.1	46.9	22 30		08	57.9	61.3	52		08	56.0	56.8	47	
10	58.3	57.6	20		10	32.8	21.7	23 08		10	55.9	58.8	48		10	55.7	56.1	46	
12	58.9	58.3	18		12	49.8	43.2	22 37		12	54.9	57.1	46		12	56.0	56.0	46	
14	60.3	59.9	16	-20.1	14	55.3	46.5	30	-19.0	14	53.8	55.9	44	-28.0	14	55.1	55.8	45	-23.8
16	60.4	59.7	16		16	56.7	46.6	29		16	51.8	53.9	41		16	54.7	55.0	44	
18	59.8	59.3	17		18	59.3	51.2	24		18	51.0	53.3	40		18	54.9	56.0	45	
20	59.8	59.2	17		20	58.1	50.3	25		20	49.8	52.2	38		20	59.0a		51	
22	58.4	57.9	19		22	54.2	47.6	30		22	49.9	52.1	38		22	57.0	57.8	48	
24	60.9	59.6	16		24	54.7	47.1	30		24	49.0	50.9	37		24	59.2	60.0	52	
26	60.8	59.9	16		26	57.8	50.9	25		26	48.1	50.1	36		26	61.2	61.2	54	
28	60.3	59.2	17		28	57.9	51.8	24		28	48.1	50.3	36		28	61.0	61.2	54	
30	60.2	59.5	16	-20.2	30	57.7	51.7	24	-18.8	30	48.1	49.8	35	-27.0	30	60.5	61.1	54	-23.5
32	61.8	60.6	14		32	56.9	51.2	26		32	48.0	50.6	36		32	60.9	63.1	56	
34	63.3	61.6	12		34	58.8	54.3	22		34	46.3	48.8	33		34	60.1	62.0	54	
36	66.8	65.7	06		36	57.8	53.6	23		36	46.1	48.6	33		36	60.7	62.8	55	
38	69.6	65.3	05		38	46.8	43.8	39		38	46.1	48.2	32		38	61.0	62.8	56	
40	71.8	69.4	00		40	55.2	51.0	27		40	47.2	49.1	34		40	58.1	60.1	51	
42	70.9	68.6	01		42	47.9	45.4	37		42	47.8	49.5	35		42	59.9	62.0	54	
44	69.5	67.2	03	-20.1	44	40.0	46.0	36	-18.7	44	48.3	50.2	36	-26.3	44	61.3	63.2	56	-23.2
46	70.0	67.3	03		46	49.9	46.2	35		46	49.8	50.9	37		46	60.2	62.9	55	
48	68.6	65.9	05		48	49.7	47.1	34		48	50.2	51.2	38		48	59.2	62.2	54	
50	67.4	65.2	06		50	46.1	43.4	40		50	51.1	52.0	39		50	60.0	63.2	55	
52	67.1	65.6	06		52	46.8	43.2	40		52	53.1	53.8	42		52	61.1	63.8	56	
54	67.0	65.5	06		54	47.6	46.1	37		54	55.6	56.1	46		54	59.7	62.2	54	
56	63.5	61.6	12		56	46.2	43.7	40		56	56.8	56.8	48		56	59.3	62.2	54	
58	59.2	57.8	18		58	42.8	39.9	46		58	56.1	56.8	47		58	60.1	61.8	54	
21 00	56.5	54.8	23	-20.0	23 00	45.5	44.3	40	-18.7	1 00	56.2	56.5	47	-25.8	3 00	60.4	62.0	54	-23.0
02	58.8	57.1	20		02	50.2	47.4	34		02	58.0	59.2	50		02	61.5	63.1	56	
04	51.8	50.6	30		04	49.6	46.3	35		04	58.9	59.8	52		04	63.6	64.9	22 59	
06	50.5	49.1	32		06	50.2	46.8	34		06	57.0	57.9	49		06	66.1	68.0	23 01	
08	50.9	49.2	32		08	47.6	45.5	37		08	57.8	58.7	50		08	68.1	69.7	07	
10	52.3	50.4	30		10	49.8	47.1	34		10	58.8	59.3	51		10	67.2	69.3	06	
12	50.6	49.2	32		12	47.3	45.5	38		12	57.8	58.1	40		12	64.9	66.8	02	
14	51.3	49.9	31	-19.8	14	49.6	47.7	34	-18.2	14	57.0	57.4	48	-25.4	14	65.2	66.8	02	-22.9
16	50.8	49.5	32		16	47.9	45.6	37		16	57.6	58.0	49		16	65.2	66.9	23 02	
18	51.6	51.1	30		18	50.8	49.1	32		18	57.8	58.4	50		18	63.9	65.2	22 60	
20	54.4	53.6	26		20	52.9	50.7	29		20	57.9	58.8	50		20	61.9	63.0	56	
22	59.9	58.0	18		22	52.0	50.6	30		22	58.1	59.0	50		22	61.8	62.8	56	
24	63.5	60.7	13		24	52.2	50.9	30		24	58.8	59.7	51		24	63.0	63.9	58	
26	62.8	58.3	15		26	46.9	46.2	37		26	59.7	60.3	53		26	61.6	62.0	56	
28	45.8	40.0	22 43		28	45.2	44.0	40		28	61.6	62.5	22 56		28	60.8	61.8	55	
30	34.6	13.8	23 12	-19.6	30	46.3	45.4	38	-18.0	30	64.4	65.9	23 01	-25.0	30	59.8	61.1	53	-22.8
32	32.0	8.1	19		32	45.7	44.9	39		32	65.1	66.9	02		32	60.2	61.1	54	
34	30.2	11.8	23 17		34	46.4	45.8	38		34	67.2	68.0	04		34	59.8	60.9	53	
36	48.2	31.1	22 48		36	46.9	46.3	37		36	68.9	69.9	07		36	60.1	61.9	54	
38	36.3	26.5	23 01		38	45.4	45.1	39		38	68.6	69.8	07		38	61.6	62.9	56	
40	60.0	51.5	22 23		40	43.1	42.5	43		40	67.1	67.8	04		40	61.1	62.1	55	
42	58.9	50.3	25		42	44.2	43.5	42		42	64.8	65.5	23 01		42	59.8	60.7	53	
44	48.2	38.7	42	-19.5	44	44.5	44.0	41	-18.0	44	63.7	64.8	22 59	-24.6	44	57.8	59.0	50	-22.7
46	65.4	53.0	17		46	44.4	43.9	41		46	61.7	63.0	56		46	57.5	58.3	49	
48	54.6	44.2	22 33		48	44.3	43.8	41		48	62.1	63.2	57		48	56.2	57.1	47	
50	26.8	18.3	23 15		50	45.6	45.0	39		50	62.9	63.9	58		50	55.8	56.8	47	
52	25.3	20.1	23 15		52	44.7	44.5	40		52	62.7	63.8	58		52	53.1	53.9	42	
54	53.3	40.4	22 37		54	42.6	42.3	44		54	60.5	61.5	54		54	53.9	54.2	43	
56	58.7	48.8	26		56	41.8	41.2	45		56	57.9	58.9	50		56	55.4	56.4	46	
58	68.2	53.7	15		58	41.2	40.4	46		58	56.9	57.6	48		58	57.1	58.6	49	
					24 00	40.6	39.9	47											

Correction to local mean time is — 3m 47.5s.
Torsion head at 19h 15m read 13° and at 0h 00m read 14°.
Observer—H. H. N.

Observer—R. R. T.
† Scale inverted for this reading.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, March 13, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00.1	49.6	45.2	22 50	-22.2
02	48.9	44.4	51	
04	47.6	43.8	53	
06	47.8	44.6	52	
08	46.8	44.2	53	
10	46.2	44.7	53	
12	44.2	43.1	56	
14	46.9	45.3	52	-22.0
16	45.7	44.8	54	
18	42.7	41.9	58	
20	44.2	43.8	56	
22	45.8	45.2	53	
24	45.7	44.8	54	
26	45.3	44.6	54	
28	44.3	43.2	56	
30	45.8	44.7	54	-22.0
32	46.7	44.9	53	
34	47.3	45.8	52	
36	46.8	44.6	53	
38	47.1	43.5	53	
40	46.8	43.1	54	
42	46.7	43.2	54	
44	46.4	43.2	54	-22.0
46	50.2	48.3	47	
48	50.8	48.1	47	
50	48.3	46.2	50	
52	44.9	43.2	56	
54	44.0	41.7	57	
56	51.9	48.7	46	
58	54.8	52.2	40	
5 00	47.3	43.8	22 53	-22.0
02	38.4	36.3	23 06	
04	36.2	34.6	09	
06	38.5	36.5	06	
08	40.3	37.8	03	
10	40.8	37.4	03	
12	40.4	36.1	04	
14	34.3	31.0	13	-21.9
16	35.4	32.1	12	
18	37.2	33.9	09	
20	40.2	37.8	23 03	
22	47.7	44.2	22 52	
24	54.9	52.2	40	
26	53.8	52.6	41	
28	46.4	45.6	52	
30	45.3	43.9	54	-21.8
32	43.9	42.2	57	
34	46.1	44.9	53	
36	43.8	42.1	22 57	
38	39.8	37.6	23 04	
40	40.8	39.7	23 01	
42	47.1	46.0	22 52	
44	47.8	46.2	22 51	-21.6
46	40.0	38.5	23 03	
48	34.7	33.2	11	
50	41.9	39.7	23 00	
52	46.2	45.2	22 53	
54	42.0	41.2	59	
56	48.0	46.7	50	
58	51.9	50.0	45	
6 00		50.0*b*	22 46	-21.3
02	32.9	32.4	23 13	
04	38.0	36.6	23 06	
06	45.2	44.0	22 55	
08	39.9	39.8	23 02	
10	46.7	45.2	22 52	
12	37.2	36.2	23 07	
14	44.8	41.3	22 57	-21.0
16	38.6	37.1	23 05	
18	43.3	41.9	22 58	
20	43.8	42.8	22 56	
22	36.0	34.8	23 09	
24	36.2	35.0	09	
26	42.0	40.9	00	
28	38.9	37.2	05	
30	37.2	34.3	08	-21.0
32	36.2	35.0	23 09	
34	45.9	43.1	22 55	
36		29.2*a*	23 19	
38	31.8	30.1	16	
40	38.4	35.9	06	
42	30.8	27.9	18	
44	29.8	29.1	18	-20.9
46	29.9	29.2	18	
48		35.7*a*	08	
50	32.0	30.6	15	
52	34.3	32.4	12	
54	34.9	33.5	11	
56	28.5	26.8	21	
58	30.1	29.0	18	
7 00		Light		-20.8
02	28.7	26.1	22	
04	25.1	24.2	26	
06	29.4	27.2	20	
08	29.1	25.9	21	
10	28.8	27.2	21	
12	31.0	27.7	18	
14	34.3	30.4	14	-20.8
16	36.2	33.7	10	
18	36.2	33.2	10	
20	38.2	34.2	08	
22	37.4	34.1	23 09	
24	56.9	52.1	22 39	
26	29.0	26.7	23 21	
28	47.7	44.5	22 52	
30	51.2	47.8	47	-20.8
32	43.5	40.6	59	
34	50.2	47.8	48	
36	48.2	45.8	51	
38	48.2	46.1	51	
40	48.7	47.0	50	
42	49.9	49.0	47	
44	52.0	50.2	44	-20.8
46	49.8	47.9	48	
48	51.4	49.4	46	
50	49.4	47.1	49	
52	50.2	47.3	48	
54	53.8	51.2	42	
56	48.8	45.7	50	
58	49.1	47.0	49	
8 00	50.2	47.8	48	-20.7

Correction to local mean time is — 24.5s.
Torsion head at 0h 00m read 14° and at 8h 20m read the same.
Observer—R. R. T.

Monday, March 14, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	33.5	42.5	22 57	-28.4
02	34.0	39.5	55	
04	35.1	37.1	54	
06	38.3	39.0	58	
08	37.3	39.5	58	
10	27.0	32.0	44	
12	35.2	39.0	56	
14	37.0	39.4	57	-28.0
16	33.9	37.8	54	
18	35.8	39.0	56	
20	37.1	39.0	57	
22	35.0	35.9	53	
24	34.2	36.7	53	
26	30.3	36.8	50	
28	37.1	39.0	57	
30	37.3	38.5	57	-27.2
32	37.3	39.0	57	
34	35.7	37.2	55	
36	32.8	34.9	51	
38	32.8	34.0	50	
40	33.0	34.3	51	
42	34.6	35.3	52	
44	34.9	35.3	53	-26.8
46	34.1	34.8	51	
48	33.0	33.4	50	
50	31.8	32.5	48	
52	33.8	34.3	51	
54	33.7	34.6	51	
56	32.6	34.1	50	
58	31.0	32.2	47	
9 00	33.7	34.5	51	-26.2
02	35.2	36.6	54	
04	35.8	37.0	55	
06	34.0	35.3	52	
08	33.0	34.5	50	
10	37.0	38.6	57	
12	36.8	37.4	56	
14	32.8	34.1	50	-26.0
16	32.1	34.1	50	
18	31.7	32.9	48	
20	31.8	33.4	49	
22	31.2	33.0	48	
24	32.2	33.2	49	
26	35.0	36.6	54	
28	32.1	33.0	48	
30	29.1	30.3	44	-25.4
32	31.5	33.0	48	
34	28.5	30.8	44	
36	29.0	31.9	45	
38	31.4	34.8	50	
40	31.0	34.6	49	
42	35.4	38.6	56	
44	32.0	35.2	50	-25.0
46	28.9	31.0	44	
48	31.2	36.2	50	
50	25.8	28.3	40	
52	28.4	31.0	44	
54	33.0	38.6	54	
56	35.8	36.2	54	
58	32.1	32.9	48	
10 00	31.0	31.3	22 46	-24.6
02	30.8	31.0	46	
04	30.2	31.7	46	
06	28.8	30.4	44	
08	29.0	31.7	45	
10	29.0	32.1	45	
12	28.2	31.2	44	
14	27.9	30.9	44	-24.4
16	28.1	31.0	44	
18	29.2	32.1	46	
20	28.1	32.1	45	
22	27.7	31.2	44	
24	27.2	31.8	44	
26	27.9	31.3	44	
28	28.1	32.2	45	
30	27.1	30.8	43	-24.0
32	27.7	31.1	44	
34	25.8	30.0	41	
36	26.0	30.0	41	
38	26.2	29.2	41	
40	27.2	30.3	42	
42.5	28.2	30.9	44	
44	28.5	31.0	44	-24.0
46	26.9	30.5	42	
48	27.1	30.0	42	
50	27.9	29.8	43	
52	27.9	30.0	43	
54	27.8	30.2	43	
56	28.0	30.9	44	
58	28.4	31.0	44	
11 00	28.8	30.0	44	-23.7
02	28.5	28.7	42	
04	27.5	29.0	42	
06	27.3	29.0	42	
08	29.0	30.0	44	
10	28.8	29.7	43	
12	28.8	30.1	44	
14	28.0	30.1	43	-23.5
16	27.1	30.8	43	
18	26.1	29.2	41	
20	26.9	30.9	43	
22	26.9	31.0	43	
24	27.8	31.8	44	
26	26.1	31.0	42	
28	25.0	30.1	41	
30	23.8	27.9	38	-23.2
32	22.9	26.0	36	
34	24.0	26.1	35	
36	25.2	28.1	39	
38	25.7	28.4	40	
40	27.2	29.0	42	
42	25.8	28.0	40	
44	25.1	27.8	39	-23.0
46	25.8	28.7	40	
48	26.9	29.8	42	
50	28.0	30.9	44	
52	28.0	31.1	44	
54	27.9	30.9	44	
56	26.0	32.2	43	
58	26.0	31.2	42	
12 00	26.0	32.0	43	

Correction to local mean time is — 59.5s.
Torsion head at 7h 48m read 14° and at 12h 21m read 15°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, March 15, 1904					Magnet scale inverted					Wednesday, March 16, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	41.1	38.0	22 38	-26.0	14 00	44.0	40.4	22 34	-23.8	0 00*	56.1	57.9	22 43	-27.6	2 00	57.2	57.8	22 44	-26.1
02	40.7	39.7	37		02	42.4	42.0	34		02	55.9	57.7	43		02	57.9	58.2	44	
04	40.0	38.1	39		04	42.0	40.3	36		04	56.0	58.0	43		04	57.7	58.1	44	
06	40.7	35.8	40		06	42.9	39.9	35		06	56.2	58.4	44		06	57.2	57.9	44	
08	41.0	35.5	40		08	42.6	39.9	36		08	56.1	57.7	43		08	57.2	58.1	44	
10	40.1	37.0	40		10	43.0	40.9	34		10	56.2	58.5	44		10	57.8	58.4	45	
12	40.0	37.1	40		12	42.9	40.6	35		12	55.1	58.3	42		12	57.1	58.0	44	
14	40.8	37.0	39	-26.0	14	41.9	40.6	36	-23.3	14	55.2	58.3	42	-27.3	14	57.1	58.3	44	-26.0
16	39.8	38.0	39		16	41.2	38.9	37		16	54.9	58.1	42		16	56.3	58.8	44	
18	42.8	40.0	35		18	39.0	37.2	40		18	55.1	58.1	42		18	56.6	58.8	44	
20	42.0	39.8	36		20	38.8	36.8	41		20	55.6	58.0	43		20	56.6	58.8	44	
22	40.9	38.2	38		22	38.0	37.0	41		22	55.9	57.9	43		22	56.8	58.7	44	
24	39.9	37.2	40		24	39.0	38.1	40		24	56.0	57.7	43		24	56.8	58.2	44	
26	39.8	37.2	40		26	40.2	40.0	37		26	56.6	57.8	43		26	56.2	57.8	43	
28	39.1	37.5	40		28	40.1	39.4	38		28	57.2	58.1	44		28	56.2	57.8	43	
30	36.8	36.4	43	-25.9	30	40.2	38.2	39	-23.0	30	57.6	59.1	45	-27.2	30	55.7	57.2	42	-25.9
32	36.9	35.6	43		32	41.2	39.0	37		32	58.8	60.7	47		32	56.1	56.9	42	
34	36.9	35.9	43		34	43.2	40.2	35		34	60.2	62.1	50		34	56.7	57.3	43	
36	37.4	36.4	42		36	45.3	41.9	32		36	60.8	62.5	50		36	57.2	57.7	44	
38	37.2	37.1	42		38	44.9	42.2	32		38	59.2	61.8	48		38	57.7	57.8	44	
40	38.0	37.2	41		40	45.4	41.3	32		40	58.7	61.0	47		40	57.6	57.8	44	
42	39.8	38.0	39		42	45.0	40.0	33		42	58.2	60.8	47		42	57.1	57.7	44	
44	37.8	36.9	42	-25.6	44	45.0	40.1	33	-23.0	44	58.7	61.0	47	-27.2	44	56.9	57.6	43	-25.8
46	38.1	36.9	41		46	45.0	41.0	33		46	58.8	61.0	48		46	57.2	57.4	43	
48	38.1	37.0	41		48	44.0	39.2	35		48	58.1	60.1	46		48	57.4	57.8	44	
50	37.3	36.9	42		50	43.0	37.8	37		50	58.3	60.4	47		50	57.1	57.6	44	
52	37.0	36.5	42		52	43.0	38.0	36		52	58.3	60.3	47		52	56.7	57.1	43	
54	38.1	36.9	41		54	43.7	38.8	36		54	57.9	59.9	46		54	56.9	57.5	43	
56	38.0	37.8	41		56	42.2	37.6	38		56	57.9	59.9	46		56	57.0	57.4	43	
58	38.0	36.9	42		58	41.1	37.8	38		58	58.1	60.2	46		58	58.1	58.8	45	
13 00	37.9	36.4	42	-25.2	15 00	41.9	37.0	38	-22.8	1 00	58.2	60.2	46	-27.0	3 00	50.0	59.3	46	-25.4
02	38.0	35.0	43		02	42.2	38.2	37		02	59.1	60.8	48		02	58.6	59.0	46	
04	38.0	35.2	43		04	42.0	38.0	37		04	59.5	61.1	48		04	59.0	59.0	46	
06	38.3	35.8	42		06	41.8	37.0	38		06	59.2	60.7	48		06	59.9	60.1	48	
08	38.9	36.2	41		08	41.1	37.0	39		08	59.0	60.3	47		08	60.0	60.2	48	
10	39.0	36.5	41		10	41.0	37.3	39		10	58.7	59.8	46		10	59.7	60.3	48	
12	38.8	36.3	41		12	40.2	37.7	39		12	57.8	59.2	45		12	59.1	59.9	47	
14	39.0	36.8	41	-25.0	14	40.9	37.1	39	-22.7	14	57.2	58.3	44	-26.9	14	59.1	60.0	47	-25.2
16	39.5	36.9	40		16	42.1	36.9	38		16	56.8	58.1	44		16	59.9	60.3	48	
18	40.5	37.5	39		18	41.8	36.0	39		18	57.0	58.0	44		18	60.3	60.9	49	
20	41.0	38.9	38		20	42.0	37.3	38		20	56.8	57.7	43		20	60.5	61.3	49	
22	42.0	39.0	36		22	42.2	39.1	36		22	56.3	57.2	42		22	60.8	61.8	50	
24	41.9	38.8	37		24	42.5	39.2	36		24	56.9	57.5	43		24	60.9	61.8	50	
26	41.0	37.7	38		26	42.0	39.9	36		26	56.9	57.1	43		26	60.2	60.9	48	
28	41.0	37.8	38		28	42.0	40.0	36		28	56.7	56.8	42		28.7	59.6	60.0	47	
30	42.2	39.4	36	-24.7	30	41.8	39.6	36	-22.6	30	56.2	56.8	42	-26.7	30	58.8	59.0	47	-25.0
32	43.8	40.2	34		32	41.0	40.2	36		32	56.2	56.8	42		32	58.0	58.0	44	
34	44.9	40.0	34		34	41.3	39.8	36		34	56.3	57.1	42		34	57.7	58.0	44	
36	43.1	41.1	34		36	41.3	39.8	37		36	56.2	57.0	42		36	57.4	58.0	44	
38	42.8	40.1	35		38	41.3	39.0	37		38	56.1	57.0	42		38	57.8	58.3	44	
40.4	43.1	39.7	35		40	40.9	38.6	38		40	56.1	56.9	42		40	57.3	58.0	44	
42	45.0	40.9	33		42	40.9	37.8	38		42	56.1	56.9	42		42	57.2	57.9	44	
44	45.1	41.5	32	-24.1	44	40.4	38.1	39	-22.5	44	56.2	57.2	42	-26.4	44	57.0	57.8	44	-25.0
46	44.2	40.1	34		46	41.3	36.3	39		46	56.0	57.2	42		46	57.1	58.1	44	
48	43.1	39.0	36		48	40.9	35.8	40		48	56.2	57.2	42		48	57.7	58.7	45	
50	42.2	39.2	36		50	40.9	35.3	40		50	56.8	57.2	43		50	57.8	58.7	45	
52	42.1	39.9	36		52	41.0	34.8	41		52	57.1	57.8	44		52	57.3	58.2	44	
54	43.2	39.7	35		54	41.0	34.2	41		54	57.8	58.2	44		54	57.6	58.1	44	
56	43.8	40.8	34		56	42.0	35.9	39		56	57.7	58.3	44		56	57.9	58.3	45	
58	43.9	41.0	34		58	43.0	36.8	38		58	57.2	58.0	44		58	58.2	58.3	45	
					16 00	40.2	40.1	37											

Correction to local mean time is — 9.5s.
Torsion head at 12h 00m read 14° and at 16h 35m read 13°.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 16, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	58.6	58.8	22 46	-25.0
02	57.7	58.0	44	
04	57.2	57.5	44	
06	58.1	58.3	45	
08	58.2	58.8	45	
10	59.0	59.2	46	
12	59.2	59.5	47	
14	59.2	59.8	47	-25.0
16	58.8	59.7	46	
18	58.3	59.1	46	
20	57.9	59.0	45	
22	58.6	59.5	46	
24	59.7	60.6	48	
26	59.9	60.8	48	
28.3	59.2	59.9	47	
30	58.8	59.7	46	-24.8
32	59.1	59.9	47	
34	59.8	60.6	48	
36	59.1	59.9	47	
38	58.9	59.1	46	
40	59.2	59.8	47	
42	60.1	60.4	48	
44	60.2	60.9	48	-24.8
46	60.2	60.9	48	
48	59.6	60.4	48	
50	59.0	60.0	47	
52	59.8	60.8	48	
54	60.3	61.8	49	
56	61.3	62.3	51	
58	59.3	60.2	47	
5 00	58.8	59.8	47	-24.8
02	60.1	61.5	49	
04	59.7	60.6	48	
06	58.8	59.7	46	
08	58.3	59.3	46	
10	57.0	57.8	44	
12	57.6	58.5	44	
14	62.8	63.2	52	-24.4
16	63.3	63.8	53	
18	61.2	61.4	50	
20	61.0	61.7	50	
22.3	60.9	61.8	50	
24	60.0	61.0	48	
26	63.6	64.0	55	
28	63.2	63.4	53	
30	62.1	62.1	51	-24.3
32	61.4	62.1	50	
34	62.1	62.7	51	
36	62.1	62.5	51	
38	61.6	62.0	51	
40	61.8	62.2	51	
42	61.2	61.8	50	
44	60.8	61.7	50	
46	61.3	62.0	50	-24.0
48	60.7	61.2	49	
50	61.1	61.8	50	
52	61.7	62.2	51	
54	62.0	62.3	51	
56	60.9	61.9	50	
58	61.3	61.9	50	
6 00	62.4	63.3	22 52	-24.0
02	61.3	61.9	50	
04	62.1	62.7	51	
06	62.6	63.3	52	
08	63.0	63.6	53	
10	61.0	61.7	50	
12	60.9	60.9	49	
14	62.0	62.2	51	-24.0
16	62.7	63.2	52	
18	60.9	61.0	49	
20	61.4	62.0	50	
22	63.1	63.4	53	
24	62.2	62.7	51	
26	61.6	62.0	51	
28	61.9	62.6	51	
30	61.0	61.7	50	-24.0
32	61.0	61.3	50	
34	62.9	63.1	52	
36	61.7	62.0	51	
38	61.2	61.7	50	
40	61.5	62.0	50	
42	61.9	62.1	51	
44	61.9	62.1	51	-24.0
46	62.0	62.5	51	
48	62.0	62.2	51	
50	61.3	61.8	50	
52	61.0	61.4	50	
54	61.1	61.8	50	
56	60.2	60.4	48	
58	62.0	62.7	51	
7 00	63.3	64.0	53	-24.0
02	61.0	61.3	50	
04	61.0	61.1	49	
06	62.0	62.9	51	
08	60.9	61.4	50	
10	59.0	60.0	47	
12	62.5	63.3	52	
14	61.6	62.3	51	-24.0
16	63.1	64.0	53	
18	60.1	61.5	49	
20	60.0	60.8	48	
22	62.7	63.8	53	
24	60.2	61.4	49	
26	61.7	63.3	52	
28	60.3	62.1	50	
30	62.7	64.8	54	-24.0
32	62.8	64.3	53	
34	58.6	60.8	47	
36	60.6	62.9	50	
38	60.0	62.1	49	
40	59.9	62.1	49	
42	61.1	63.2	51	
44	60.0	61.8	49	-24.0
46	60.7	62.8	50	
48	60.9	62.8	51	
50	59.8	61.8	49	
52	61.2	63.1	51	
54	60.9	62.2	50	
56	59.8	60.8	48	
58	60.9	61.3	50	

Observer—R. R. T.

Wednesday, March 16, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	62.2	63.1	22 52	-23.9
02	60.2	60.2	48	
04	61.2	61.8	50	
06	61.6	62.1	51	
08	61.3	61.9	50	
10	61.0	61.0	49	
12	60.4	61.2	49	
14	61.8	62.2	51	
16	60.2	61.0	49	
18	Magnet			
20	centered			
22				
24	61.5	61.8	50	
26	60.1	60.3	48	
28	61.0	61.5	50	-23.5
30	61.9	62.3	51	
32	60.2	60.8	48	
34	58.8	60.1	47	
36	59.7	61.3	48	
38	60.6	62.1	50	
40	60.0	61.6	49	
42	60.4	61.7	49	
44	61.3	62.1	50	
46	60.6	61.4	49	-22.9
48	61.0	61.7	50	
50	60.5	61.7	50	
52	59.9	61.0	48	
54	61.8	62.6	51	
56	62.5	63.3	52	
58	60.5	61.3	49	
9 00	58.3	59.3	46	-23.0
02	59.4	60.2	47	
04	59.3	59.7	47	
06	58.6	59.6	46	
08	58.7	60.5	47	
10	60.6	61.6	50	
12	60.1	61.6	48	
14	61.6	62.3	51	-23.2
16	60.3	61.0	49	
18	59.8	60.8	48	
20	60.3	61.0	49	
22	60.3	60.6	48	
24	60.5	61.1	49	
26	60.3	61.0	49	
28	59.1	59.6	47	
30	59.6	60.0	47	
32	60.3	60.6	48	-23.3
34	60.3	60.6	48	
36	60.5	61.1	49	
38	60.6	61.5	49	
40	60.7	61.8	50	
42	60.6	61.5	49	
44	59.8	60.6	48	-23.5
46	59.1	60.1	47	
48	60.3	60.6	48	
50	60.4	60.8	49	
52	61.2	61.6	50	
54	61.7	62.0	51	
56	61.6	62.0	51	
58	60.4	60.8	49	
10 00	60.2	60.3	22 48	-23.5
02	60.4	60.6	48	
04	59.8	60.0	48	
06	58.8	59.3	46	
08	59.3	59.6	47	
10	59.4	59.8	47	
12	59.3	59.5	47	
14	58.7	59.3	46	-23.5
16	58.0	58.3	45	
18	57.8	58.3	44	
20.2	57.6	58.3	44	
22	57.7	58.4	45	
24	58.5	59.3	46	
26	59.0	60.0	47	
28	58.5	59.3	46	
30	58.3	59.3	46	-23.4
32	58.2	59.0	45	
34	58.3	59.0	45	
36	58.3	58.8	45	
38	58.3	58.5	45	
40	57.8	57.8	44	
42	57.9	57.9	44	
44	57.5	57.6	44	-23.3
46.2	57.5	57.9	44	
48	57.3	57.9	44	
50	57.0	57.3	43	
52	56.7	57.1	43	
54	56.8	57.0	43	
56	56.8	57.0	43	
58	57.3	57.9	44	
11 00	57.4	57.8	44	-23.2
02	56.3	56.9	42	
04	56.0	56.3	42	
06	56.3	56.7	42	
08	56.0	56.6	42	
10	56.5	56.9	42	
12	56.6	57.0	43	
14	57.0	57.3	43	-23.1
16	57.3	57.4	44	
18	56.5	57.0	42	
20	56.1	56.5	42	
22	55.1	55.5	40	
24	54.7	54.7	39	
26	55.0	55.3	40	
28	55.1	55.3	40	
30	55.6	55.8	41	-23.0
32	55.1	55.3	40	
34	54.3	54.7	39	
36	53.8	54.2	38	
38	54.0	54.4	39	
40	54.6	55.2	40	
42	54.6	55.0	40	
44	54.6	55.2	40	-23.0
46	54.8	55.3	40	
48	54.6	55.3	40	
50	54.1	54.5	39	
52	54.0	54.2	38	
54	53.1	53.3	37	
56	53.6	53.7	38	
58	53.3	53.3	37	

Observers—R. R. T. and W. J. P., who alternated from 8h 14m to 8h 24m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 16, 1904					Magnet scale erect				Wednesday, March 16, 1904					Magnet scale erect			
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00.3	58.6	58.7	22 45	-23.0	14 00	46.6	47.0	22 27	-22.0	16 00	46.2	48.7	22 28	-21.9	18 00	51.8	54.0	22 36	-21.4
02	53.8	54.0	38		02	47.7	48.0	27		02	47.5	49.0	29		02	51.0	55.4	37	
04	54.3	55.1	39		04	49.1	49.4	31		04	45.9	47.8	27		04	48.3	54.5	34	
06	54.8	55.5	40		06	49.3	49.5	31		06	45.1	47.3	26		06	47.1	52.5	32	
08	53.9	55.1	39		08	48.8	49.2	30		08	45.2	46.7	26		08	47.3	53.0	32	
10	53.0	54.6	38		10	48.3	48.6	29		10	43.5	44.9	23		10	47.6	54.7	34	
12	53.8	55.3	39		12	48.6	49.6	31		12	41.2	43.7	20		12	47.0	55.2	34	
14	54.6	55.0	40	-22.8	14	49.0	49.6	31	-22.1	14	41.9	45.3	22	-21.2	14	47.2	55.8	34	-21.6
16	52.0	53.0	36		16	47.5	48.3	29		16	42.6	46.4	23		16	47.0	57.2	35	
18	51.0	51.6	34		18	47.3	48.2	28		18	42.7	46.8	24		18	49.0	58.3	38	
20	49.8	50.2	32		20	48.3	49.3	30		20	41.9	46.0	22		20	49.5	57.6	38	
22	51.0	51.1	34		22	48.0	49.0	30		22	40.9	45.3	21		22	49.6	58.0	38	
24	52.3	52.9	36		24	47.3	48.2	28		24	40.1	45.0	20		24	48.4	57.0	36	
26	58.0	59.8	46		26	47.0	47.7	28		26	41.0	45.6	22		26	47.9	56.1	35	
28	57.6*a*		44		28	46.1	46.9	26		28	42.8	47.9	25		28	49.5	56.5	37	
30	53.0*a*		37	-22.6	30	46.1	46.6	26	-22.0	30	43.0	48.0	25	-21.3	30	49.0	55.0	35	-21.8
32	55.6*a*		41		32	46.5	46.7	27		32	39.9	44.2	19		32	46.3	53.0	31	
34	56.9*b*		43		34	47.5	47.8	28		34	40.8	45.0	21		34	45.7	51.0	29	
36	54.0*b*		38		36	48.0	48.0	29		36	42.1	45.0	22		36	46.5	52.0	31	
38	50.6	51.3	33		38	46.6	46.6	27		38	42.3	44.2	21		38	47.8	52.9	32	
40	50.5	51.0	33		40	48.3	48.6	29		40	40.0	42.9	18		40	45.8	49.1	28	
42	52.6	52.8	36		42	50.0	50.0	32		42	39.8	41.8	18		42	46.0	49.0	28	
44	51.1	51.3	34	-22.6	44	47.0	47.0	27	-22.0	44	38.0	40.0	15	-21.4	44.2	46.8	48.2	28	-21.8
46	50.0	50.3	32		46	46.0	46.4	26		46	37.8	40.0	14		46	47.0	48.2	28	
48	49.0	49.0	30		48	47.3	47.5	28		48	41.8	43.2	20		48	47.9	49.0	29	
50	49.8	50.0	32		50	45.8	46.0	25		50	43.8	44.5	23		50	49.3	50.2	32	
52	51.0	51.0	34		52	45.1	45.3	24		52	44.8	45.1	24		52	47.0	49.0	29	
54	49.0	49.4	31		54	45.8	46.3	26		54	44.2	45.2	24		54	46.9	47.7	28	
56	48.3	48.3	29		56	45.0	45.6	25		56	42.0	43.2	20		56	47.2	47.8	28	
58	48.5	48.7	30		58	44.0	45.0	23		58	41.0	42.0	19		58	46.8	47.8	28	
13 00	48.8	49.0	30	-22.4	15 00	44.0	45.0	23	-22.0	17 00	42.5	42.8	20	-21.4	19 00	47.8	48.5	29	-21.9
02	47.0	47.3	28		02	43.5	44.9	23		02	43.0	44.8	22		02	49.0	51.5	32	
04	47.1	48.0	28		04	43.2	44.5	22		04	42.0	44.0	21		04	49.0	51.0	32	
06	50.0	51.3	33		06	43.0	44.3	22		06	42.3	44.5	22		06	47.9	51.2	31	
08	51.0	52.0	34		08	43.0	44.4	22		08	41.7	43.9	21		08	47.5	51.3	31	
10	49.3	50.1	32		10	43.3	44.4	22		10	39.9	42.2	18		10	48.0	52.0	32	
12	48.3	49.1	30		12	43.6	44.9	23		12	40.0	43.0	19		12	48.3	51.0	31	
14	48.0	48.6	29	-22.2	14	43.6	45.0	23	-22.0	14	42.6	46.2	23	-21.5	14	49.0	54.2	34	-21.9
16	47.7	48.3	29		16	43.8	45.0	23		16	44.0	47.8	26		16	49.0	54.0	34	
18	48.6	49.4	30		18	44.9	45.3	24		18	43.0	45.9	22		18	44.5	53.5	30	
20	49.7	50.3	32		20	44.9	45.2	24		20	45.8	49.1	28		20	44.2	53.8	30	
22	50.0	50.6	32		22	44.3	44.5	23		22	42.0	52.4	28		22	43.8	52.7	29	
24	50.7	51.0	33		24	44.6	45.3	24		24	45.0	50.0	28		24	44.0	52.8	29	
26	49.8	50.6	32		26	43.5	44.3	22		26	45.8	49.8	29		26	43.6	52.2	29	
28	48.3	48.9	30		28	42.5	43.1	21		28	43.8	48.2	26		28	43.0	52.0	28	
30	46.8	47.6	28	-22.3	30	43.6	44.5	22	-22.0	30	45.2	47.9	26	-21.2	30	43.8	51.2	28	-21.9
32	45.8	46.1	26		32	43.7	44.3	22		32	47.0	50.0	30		32	43.2	51.7	28	
34	47.5	48.1	29		34	45.1	45.9	25		34	48.0	50.4	31		34	43.3	51.8	28	
36	48.8	49.0	30		36	45.9	46.6	26		36	49.1	52.3	33		36	43.8	50.9	28	
38	49.7	50.0	32		38	46.5	46.9	27		38	50.6	53.9	36		38	44.9	51.1	29	
40	50.3	50.6	33		40	46.3	47.1	27		40	50.8	53.9	36		40	46.0	51.2	30	
42	51.9	52.1	35		42	46.6	47.6	28		42	49.4	52.9	34		42	45.8	51.9	30	
45	49.9	50.6	32	-22.3	44	48.8	50.0	31	-22.0	44	49.2	51.8	33	-21.2	44	45.1	50.8	29	-21.9
46	50.2	50.6	33		46	49.6	50.0	32		46	48.9	52.0	33		46	44.5	49.9	28	
48	51.9	52.5	35		48	47.8	48.6	29		48	51.0	52.3	34		48	46.3	51.0	30	
50	52.2	53.0	36		50	47.8	48.6	29		50	52.8	54.0	37		50	46.9	51.1	30	
52	54.4	55.0	39		52	47.0	48.6	29		52	52.0	52.9	36		52	46.9	52.1	31	
54	54.5	55.0	39		54	46.3	49.5	29		54	51.3	53.0	35		54	46.3	52.0	31	
56	50.9	52.0	34		56	46.8	50.0	29		56	51.7	53.1	36		56	45.5	52.0	30	
58	47.0	47.9	28		58	45.2	47.6	26		58	52.2	52.5	36		58	45.8	52.0	30	

Observers—W. J. P. and J. V., who alternated from 15h 52m to 16h 02m.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 16, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	46.2	52.1	22 31	-22.0
02	44.8	53.0	30	
04	46.1	53.2	31	
06	45.3	52.3	30	
08	46.0	53.0	31	
10	49.0	55.0	35	
12	55.1	60.1	44	
14	57.0	63.1	48	-22.0
16	54.5	58.8	42	
18	52.6	59.0	41	
20	56.8	57.5	43	
22	49.0	51.5	32	
24	49.2	51.5	32	
26	49.2	45.4	28	
28	48.5	54.3	34	
30	56.2	60.6	22 45	-22.1
32	62.1	77.8	23 03	
34*	52.0	63.5	17	
36	57.1	60.1	19	
38	48.0	56.9	23 09	
40	36.0	48.8	22 53	
42	27.5	40.9	40	
44	24.2	36.1	34	-22.1
46	21.3	34.9	31	
48	17.1	21.8	17	
50	19.0	26.2	22	
52	17.5	29.0	23	
54	23.0	31.2	29	
56	19.0	31.0	26	
58	19.0	28.0	24	
21 00	16.5	24.9	19	-22.1
02	19.9	26.0	23	
04	18.0	25.1	20	
06	18.2	25.0	20	
08	18.2	26.0	21	
10	20.2	26.2	23	
12	23.9	28.5	28	
14	24.0	32.0	31	-22.2
16	25.0	32.0	31	
18	14.5	26.3	19	
20	12.8	23.2	15	
22	17.2	26.5	21	
24	16.5	27.9	22	
26	24.2	26.0	26	
28	17.6	27.2	22	
30	20.9	32.0	28	-22.2
32	23.0	31.9	30	
34	22.9	31.2	29	
36	25.0	31.3	31	
38	24.0	29.2	28	
40	22.3	25.7	24	
42	23.5	26.9	26	
44	19.8	22.9	20	-22.3
46	20.6	26.0	23	
48	21.8	24.1	23	
50	23.0	26.7	26	
52	17.2	23.2	18	
54	22.2	29.8	28	
56	16.5	22.2	17	
58	22.1	28.9	27	
22 00	23.0	28.1	22 27	-22.4
02	23.2	27.0	26	
04	23.2	29.2	28	
06	21.9	24.8	23	
08	20.0	24.2	21	
10	22.0	25.9	24	
12	26.0	31.2	32	
14	23.1	23.8	23	-22.5
16	27.0	31.0	32	
18	23.1	26.0	25	
20	25.0	29.3	29	
22	27.9	31.0	33	
24	27.2	31.1	32	
26	27.0	32.0	33	
28	25.0	30.0	30	
30	25.8	31.0	31	-22.6
32	25.1	32.3	32	
34	27.0	34.0	34	
36	30.0	36.8	39	
38	28.2	35.0	36	
40	27.9	31.7	34	
42	29.9	38.8	40	
44	28.0	36.7	37	-22.7
46.5	32.9	36.9	41	
48	32.0	36.0	40	
50.5	33.0	36.7	41	
52	31.8	35.0	39	
54	39.4	38.0	47	
56	37.8	38.8	47	
58	33.0	35.2	40	
23 00	34.2	36.0	42	-22.8
02	32.8	34.3	39	
04	31.3	33.2	37	
06	32.9	35.0	40	
08	32.6	35.2	40	
10	30.0	32.7	36	
12	31.8	33.0	38	
14	31.0	31.7	36	-22.8
16	29.9	31.7	35	
18	29.3	31.3	34	
20	30.0	32.0	35	
22	33.3	35.0	40	
24	35.2	36.1	42	
26	31.0	33.0	37	
28	32.0	34.3	39	
30	33.1	36.0	41	-22.9
32	33.2	36.5	41	
34	30.9	34.1	38	
36	31.0	34.2	38	
38	30.8	34.1	38	
40	31.0	34.2	38	
42	31.0	34.6	38	
44	32.2	35.0	39	-22.9
46	32.8	34.1	39	
48	32.1	33.5	38	
50	32.2	34.0	39	
52	32.1	34.0	38	
54	31.2	36.0	39	
56	32.0	36.9	41	
58	30.6	35.0	38	
24 00	30.6	35.0	38	

Correction to local mean time is + 3.5s. 90° torsion = 27.′47.
Torsion head at 0h 00m read 11° and at 24h 25m read 23°.
Observer—J. V.

Thursday, March 17, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	50.8	49.8	22 40	-26.9
02	50.8	50.0	40	
04	51.0	50.2	40	
06	51.3	50.3	40	
08	51.7	50.2	40	
10	53.1	48.7	40	
12	53.3	49.2	39	
14	54.1	50.2	38	-26.3
16	53.2	50.4	38	
18	52.3	50.2	39	
20	52.7	50.7	38	
22	53.8	52.0	36	
24	52.8	51.2	38	
26	52.9	52.1	37	
28	52.8	51.9	37	
30	52.2	51.8	38	-25.9
32	52.3	51.3	38	
34	52.2	51.1	38	
36	51.8	51.0	39	
38	51.3	50.2	40	
40	51.0	50.0	40	
42	51.3	50.2	40	
44	51.4	50.4	40	-25.4
46	52.3	50.8	39	
48	52.9	51.2	38	
50	53.6	52.0	36	
52	54.2	52.0	36	
54	54.8	52.5	35	
56	54.8	52.7	35	
58	54.7	52.7	35	
17 00	54.3	52.6	36	-25.0
02	53.9	52.8	36	
04	53.9	53.1	35	
06	53.8	53.0	36	
08	53.8	53.1	36	
10	53.7	53.1	36	
12	53.7	53.1	36	
14	53.4	53.0	36	-24.9
16	53.5	52.8	36	
18	53.3	52.8	36	
20	53.0	52.7	36	
22	52.9	52.7	36	
24	52.8	51.7	38	
26	52.3	51.5	38	
28	52.2	51.4	38	
30	52.1	51.0	39	-24.8
32	52.2	51.2	38	
34	51.9	51.3	38	
36	52.0	51.3	38	
38	52.1	51.6	38	
40	52.2	51.7	38	
42	52.2	51.9	38	
44	52.0	51.8	38	-24.5
46	52.2	51.6	38	
48	52.2	51.3	38	
50	52.1	51.2	38	
52	52.1	51.1	38	
54	52.3	51.2	38	
56	52.1	50.8	39	
58	52.2	50.8	39	
18 00	52.0	50.6	22 39	-24.2
02	52.1	50.6	39	
04	51.9	50.8	39	
06	51.8	50.9	39	
08	51.8	51.1	39	
10	51.2	51.2	39	
12	51.8	51.2	39	
14	51.9	51.7	38	-24.0
16	51.9	51.6	38	
18	52.2	51.7	38	
20	52.1	51.4	38	
22	52.1	51.4	38	
24	52.2	51.5	38	
26	52.3	51.7	38	
28	52.2	51.3	38	
30	52.0	51.3	38	-24.0
32	52.1	51.6	38	
34	52.1	51.6	38	
36	51.9	51.2	39	
38	51.7	50.7	39	
40	51.1	50.7	40	
42	50.9	50.2	40	
44	50.9	50.4	40	-23.9
46	51.2	51.0	39	
48	51.2	51.2	39	
50	51.1	50.8	40	
52.3	51.1	50.8	40	
54	51.0	50.8	40	
56	51.2	50.8	39	
58	52.2	51.5	38	
19 00	53.1	52.2	37	-23.9
02	53.0	52.8	36	
04	53.1	52.2	37	
06	52.8	52.0	37	
08	52.2	51.9	38	
10	52.0	51.2	38	
12	52.1	51.3	38	
14	51.8	50.9	39	-23.9
16	51.9	50.8	39	
18	51.9	50.8	39	
20	51.2	50.3	40	
22	51.6	50.0	40	
24	51.2	49.9	40	
26	50.9	49.6	41	
28	50.3	49.2	41	
30	50.3	49.2	41	-23.8
32	50.4	49.6	41	
34	50.3	49.4	41	
36	50.8	49.5	41	
38	50.5	49.3	41	
40	50.9	50.0	40	
42	50.8	50.0	40	
44	50.8	49.3	41	-23.7
46	51.3	49.7	40	
48	50.8	49.3	41	
50	50.9	49.4	41	
52	50.5	49.3	41	
54	51.0	49.3	41	
56	50.9	49.3	41	
58	50.9	49.9	40	
20 00	50.9	49.8	40	-23.7

Correction to local mean time is — 18s. 90° torsion = 26.′53.
Torsion head at 15h 15m read 13° and at 20h 20m read 15°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, March 18, 1904					Magnet scale erect					Sunday, March 20, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	53.8	55.0	22 41	-23.3	22 00	42.0	48.2	22 26	-21.9	0 00*	54.2	47.9	23 40	-18.2	2 00	47.9	47.7	23 45	-16.4
02	52.0	55.2	39		02	42.1	48.2	26		02	53.9	48.1	40		02	47.4	47.1	46	
04	51.7	56.0	40		04	41.2	48.4	26		04	53.9	48.3	40		04	47.2	47.1	46	
06	50.2	56.7	39		06	42.0	48.8	26		06	52.8	47.8	41		06	47.4	47.2	46	
08	49.9	56.2	38		08	41.1	48.2	25		08	52.3	47.3	42		08	47.1	46.9	46	
10	50.3	56.0	39		10	40.8	47.6	25		10	52.6	47.9	41		10	47.1	46.3	47	
12	51.2	55.4	39		12	41.0	48.0	25		12	52.9	48.6	40		12	47.3	46.9	46	
14	52.0	55.2	39	-23.4	14	41.1	46.8	24	-21.5	14	52.7	48.3	41	-18.0	14	46.8	46.2	47	-16.3
16	53.0	54.1	39		16	43.0	45.7	25		16	52.2	48.3	41		16	46.3	46.1	48	
18	52.9	54.9	40		18	44.0	46.1	26		18	52.2	48.3	41		18	46.9	46.6	47	
20	52.7	54.1	39		20	44.9	46.2	27		20	52.3	49.2	40		20	46.8	46.7	47	
22	52.3	54.2	39		22	44.8	46.0	26		22	52.4	49.2	40		22	47.2	47.0	46	
24	52.0	53.1	38		24	45.1	46.7	27		24	51.9	48.9	41		24	47.2	47.0	46	
26	51.1	52.3	36		26	46.0	46.1	28		26	51.3	48.7	42		26	47.8	47.2	46	
28	50.3	52.1	36		28	45.2	48.8	29		28	51.5	48.8	41		28	48.3	47.9	45	
30	49.3	51.3	34	-23.7	30	46.7	51.0	32	-21.3	30	51.9	49.2	41	-17.9	30	48.9	48.1	44	-16.1
32	49.8	50.4	34		32	46.1	51.0	31		32	52.6	50.2	40		32	49.2	48.4	44	
34	48.0	49.7	32		34	45.2	50.2	30		34	52.9	50.8	39		34	49.1	48.7	43	
36	47.1	49.5	31		36	45.2	49.8	30		36	53.2	50.9	38		36	50.0	49.5	42	
38	46.9	50.0	31		38	45.1	49.0	29		38	53.0	51.1	38		38	50.1	49.8	42	
40	46.4	50.0	31		40	46.0	48.0	29		40	52.3	50.8	39		40	50.1	49.7	42	
42	46.5	50.0	31		42	42.1	43.2	22		42	52.0	50.8	40		42	50.1	49.7	42	
44	46.5	50.3	31	-23.7	44	40.0	40.2	18	-21.1	44	52.0	50.8	40	-17.7	44	49.8	49.4	42	-16.0
46	46.7	51.3	32		46	40.8	42.2	20		46	52.7	51.1	39		46	49.8	49.2	42	
48	46.2	51.0	32		48	42.1	44.5	23		48	52.2	50.9	39		48	49.9	49.2	42	
50	46.2	51.0	32		50	39.0	40.1	17		50	52.7	51.7	38		50	49.7	49.1	43	
52	46.1	51.0	31		52	43.5	47.2	26		52	52.1	51.3	39		52	49.0	48.8	43	
54	47.1	52.0	33		54	43.2	47.4	26		54	51.4	50.7	40		54	49.0	48.8	43	
56	48.1	50.9	33		56	41.6	45.0	23		56	51.1	50.6	40		56	49.9	49.5	42	
58	49.1	51.0	34		58	43.3	47.1	26		58	52.0	51.2	39		58	50.3	50.1	41	
21 00	49.5	50.3	34	-23.2	23 00	43.1	48.2	27	-20.9	1 00	52.7	52.0	38	-17.2	3 00	50.1	49.9	42	-16.0
02	48.3	51.8	34		02	43.1	49.0	28		02	53.2	52.9	37		02	49.4	49.2	43	
04	48.2	50.8	33		04	43.0	49.2	28		04	53.3	52.9	37		04	49.8	49.2	42	
06	49.0	50.5	33		06	42.0	49.0	27		06	53.9	53.3	36		06	49.8	49.2	42	
08	49.7	50.6	34		08	39.1	46.2	22		08	54.1	53.7	36		08	48.8	48.4	44	
10	49.0	51.0	34		10	38.7	46.2	22		10	53.3	53.1	37		10	48.2	48.0	45	
12	49.4	50.2	34		12	38.5	44.2	20		12	53.0	52.7	37		12	48.3	48.1	44	
14	49.7	50.3	34	-23.0	14	38.7	45.0	21	-20.6	14	52.2	52.1	38	-16.9	14	48.9	48.6	44	-16.0
16	49.5	50.8	34		16	41.0	46.5	24		16	51.4	51.0	40		16	49.0	48.6	44	
18	49.9	50.3	34		18	48.9	51.0	34		18	50.9	50.4	41		18	48.7	48.1	44	
20.3	49.1	49.9	33		20	45.9	52.0	32		20	50.7	50.2	41		20	48.5	48.2	44	
22	48.8	50.0	33		22	55.9	59.6	46		22	50.3	50.1	41		22	48.2	48.0	45	
24	49.2	50.0	33		24	60.6	61.7	51		24	50.2	50.1	41		24	47.8	47.6	45	
26	49.6	49.8	33		26	61.2	65.8	55		26	50.2	50.0	41		26	47.2	47.1	46	
28	48.3	50.0	32		28	56.7	60.0	47		28	50.7	50.2	41		28	47.5	47.2	46	
30	48.1	50.1	32	-22.9	30	51.8	57.0	41	-20.5	30	50.9	50.7	40	-16.8	30	47.9	47.7	45	-16.0
32	48.9	50.0	33		32	52.2	57.5	41		32	51.0	50.5	40		32	48.8	48.1	44	
34	47.9	49.1	31		34	45.0	51.5	31		34	51.1	50.7	40		34	49.3	48.9	43	
36	48.0	49.0	31		36	47.2	57.2	37		36	51.2	50.8	41		36	50.8	50.2	41	
38	47.6	49.3	31		38	42.6	47.8	26		38	51.0	50.3	41		38	51.8	51.1	40	
40	48.2	48.7	31		40	45.0	49.8	30		40	49.6	49.1	43		40	52.0	51.5	39	
42	47.9	48.6	31		42	46.8	50.7	32		42	49.3	48.9	43		42	50.3	50.0	41	
44	48.1	48.8	31		44	47.0	49.9	31	-20.5	44	49.8	49.2	42	-16.5	44	48.1	47.9	45	-16.0
46	46.2	47.7	29		46	46.8	49.5	31		46	50.0	49.1	42		46	47.2	47.0	46	
48	47.0	48.8	30		48	47.4	49.0	31		48	49.8	49.0	43		48	48.8	48.7	44	
50	46.2	47.8	29		50	47.0	48.0	30		50	49.5	49.0	43		50	50.1	49.9	42	
52	47.0	47.8	30		52	46.8	47.3	29		52	49.8	49.7	42		52	51.1	50.6	40	
54	46.2	46.9	28		54	45.2	51.2	31		54	49.8	49.3	42		54	53.1	52.9	37	
56	45.7	46.1	27		56	46.3	51.8	32		56	48.5	48.1	44		56	52.9	52.3	38	
58	42.5	48.2	26		58	47.1	51.1	32		58	48.2	48.1	45		58	50.8	50.2	41	-16.0
					24 00	48.2	52.0	34											

Correction to local mean time is — 11.5s.
Torsion head at 19h 27m read 16° and at 24h 23m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, March 20, 1904					Magnet scale erect					Monday, March 21, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	57.3	58.8	23 44	-16.0	6 00	71.7	73.1	24 06	-16.9	8 00	High				10 00				
02	58.3	59.2	45		02	72.1	73.8	07		02	winds				02				
04	58.8	59.7	45		04	70.8	71.7	04		04	prevented				04				
06	59.1	59.5	46		06	70.8	72.1	05		06	reaching				06				
08	59.0	59.2	45		08	71.3	72.1	05		08	observatory				08				
10	59.2	59.4	46		10	70.2	70.9	03		10					10				
12	59.9	60.2	47		12	69.3	69.8	24 02		12					12				
14	60.7	61.0	48	-16.0	14	67.6	68.1	23 59	-16.9	14					14				
16	61.3	62.0	49		16	67.7	68.3	23 59		16					16				
18	61.7	62.2	50		18	68.2	69.0	24 00		18					18				
20	61.6	62.1	50		20	69.2	70.1	02		20					20				
22	61.3	61.8	49		22	70.6	71.4	04		22					22				
24	61.4	61.9	49		24	70.0	70.8	03		24					24				
26	61.9	62.1	50		26	69.2	70.1	02		26					26				
28	62.2	62.4	50		28	69.1	70.2	02		28					28				
30	62.8	62.9	51	-16.1	30	69.1	69.8	01	-16.9	30					30				
32	62.7	63.0	51		32	69.5	70.9	02		32					32				
34	62.3	62.9	51		34.5	68.7	69.7	01		34					34				
36	61.3	61.9	49		36	67.4	68.8	24 00		36					36				
38	60.1	60.0	47		38	67.1	68.0	23 58		38					38				
40	60.1	60.4	47		40	68.7	69.1	24 01		40					40				
42	60.5	61.0	48		42	70.0	70.9	03		42					42				
44	60.2	60.5	47	-16.3	44	72.1	73.0	06	-17.0	44					44				
46	61.1	61.4	49		46	72.9	74.0	08		46					46				
48	62.3	62.9	51		48	71.7	72.2	05		48					48				
50	62.9	63.3	52		50	72.1	72.3	06		50					50				
52	63.0	63.3	52		52	74.9	75.8	11		52					52				
54	62.8	63.3	51		54	73.9	74.7	09		54					54				
56	63.1	64.0	52		56	72.0	73.3	06		56					56				
58	63.8	64.9	54		58	71.7	72.3	06		58					58				
5 00	64.6	65.8	55	-16.7	7 00	70.2	71.4	04	-17.0	9 00					11 00				
02	64.2	65.0	54		02	72.2	72.7	24 06		02					02				
04	65.5	66.1	56		04*	32.9	38.8	23 14		04					04				
06	66.1	66.8	57		06	30.4	35.3	09		06					06				
08	66.1	66.7	57		08	30.0	34.9	23 08		08					08				
10	66.9	67.2	58		10	24.0	28.2	22 59		10					10				
12	66.2	67.1	57		12	24.3	28.8	22 59		12					12				
14	65.9	66.9	57	-16.8	14	28.0	31.0	23 04	-17.0	14					14				
16	65.0	65.8	55		16	29.1	32.0	06		16					16				
18	65.0	65.8	55		18	28.7	31.1	05		18					18				
20	65.1	66.1	55		20	28.0	30.9	23 04		20					20				
22	65.0	66.3	55		22	25.0	27.3	22 59		22					22				
24	66.0	67.4	23 57		24	24.1	26.7	58		24					24				
26	67.6	68.8	24 00		26	23.1	25.3	56		26					26				
28	67.7	68.8	24 00		28	23.1	25.3	56		28					28				
30	67.1	68.3	23 59	-16.8	30	24.5	26.0	57	-16.9	30					30				
32	66.9	67.9	23 58		32	24.9	26.3	58		32					32				
34.6	67.6	69.0	24 00		34	24.1	25.4	56		34					34				
36	67.6	69.1	00		36	22.5	24.1	54		36					36	45.3	44.0	22 42	-16.8
38	67.8	69.2	00		38	21.9	23.2	53		38					38	46.1	45.0	40	
40	68.0	69.1	24 00		40	22.3	22.9	53		40					40	46.2	44.8	40	
42	66.9	67.9	23 58		42	22.6	23.8	54		42					42	47.0	44.7	40	
44	66.2	67.2	57	-16.8	44	21.2	21.8	51	-17.0	44					44	48.0	44.9	39	-16.8
46	67.2	68.2	59		46	22.7	23.8	54		46					46	48.1	45.1	39	
48	67.0	67.9	58		48	25.0	25.4	57		48					48	48.2	44.5	39	
50	67.0	68.0	58		50	19.8	19.8	49		50					50	46.4	45.9	40	
52	67.2	68.7	23 59		52	23.5	24.4	55		52					52	46.0	45.5	40	
54	67.7	68.8	24 00		54	23.90		55		54					54	46.1	45.1	40	
56	68.1	69.3	00		56	21.0	21.5	51		56					56	46.1	45.1	40	
58	69.7	71.1	03		58	22.8	23.2	54		58					58	48.3	43.1	40	
					8 00	21.2	21.9	51	-17.0						12 00	49.0	44.0	39	-16.6

Correction to local mean time is — 51s. 90° torsion = 17.′58.
Torsion head at 0h 00m read 27° and at 9h 00m read 30°.
Observer—R. R. T.

Correction to local mean time is — 1s.
Torsion head at 11h 05m read 28° and at 12h 30m read 27°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, March 22, 1904					Magnet scale erect					Wednesday, March 23, 1904					Magnet scale inverted				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	39.7	41.1	22 46	-16.2	14 00	39.2	40.0	22 45	-14.4	0 00.4	50.4	44.2	22 41	-18.8	2 00	47.8	46.7	22 41	-15.0
02	39.8	41.8	47		02	39.6	40.2	45		02	50.1	44.3	41		02	47.9	46.7	41	
04	40.2	41.9	47		04	39.2	39.8	44		04	49.2	43.5	42		04	47.8	46.6	41	
06	40.0	41.3	46		06	26.3	45.6	39		06	48.0	45.8	41		06	47.4	46.7	41	
08	39.8	41.0	46		08	27.8	44.8	40		08	48.2	45.8	41		08	47.1	46.5	42	
10	40.3	41.7	47		10	27.4	43.5	38		10	48.1	45.8	41		10	47.2	46.8	41	
12	40.7	42.2	47		12	27.8	43.0	38		12	47.8	45.8	42		12	47.1	46.7	41	
14	40.7	42.3	48	-15.8	14	28.8	43.1	39		14	47.9	44.3	43	-17.9	14	47.2	46.8	41	-15.0
16	40.7	42.1	47		16	29.3	43.0	39	-14.2	16	48.3	44.0	43		16	47.0	46.7	42	
18	40.7	42.1	47		18	29.8	42.7	39		18	47.7	43.9	43		18	47.2	46.7	41	
20	40.8	42.3	48		20	30.1	42.1	39		20	48.3	44.0	43		20	47.9	47.2	40	
22	40.8	42.3	48		22	35.8	36.8	40		22	48.2	44.5	42		22	48.3	47.6	40	
24.5	40.9	42.3	48		24	35.6	36.7	39		24	48.6	45.1	42		24	48.7	47.9	39	
26	41.0	41.9	47		26	35.4	36.4	39		26	48.2	45.0	42		26	49.0	48.3	39	
28	40.7	41.7	47		28	35.3	36.3	39		28	47.8	44.7	42		28	49.0	48.2	39	
30	40.7	41.6	47	-15.4	30	35.6	36.8	39	-14.1	30	48.1	45.8	41	-17.0	30	48.7	47.9	39	-15.0
32	41.3	42.2	48		32	35.7	36.8	39		32	48.0	45.8	41		32	48.3	47.6	40	
34	41.9	42.9	49		34	35.6	36.8	39		34	48.3	46.0	41		34	48.0	47.3	40	
36	40.7	41.8	47		36	35.6	36.8	39		36	48.8	46.2	40		36	47.8	46.9	41	
38	39.6	40.2	45		38	35.8	37.0	40		38	48.8	46.8	40		38	47.3	46.2	42	
40	40.2	41.1	46		40	36.0	37.2	40		40	49.3	47.6	39		40	47.5	46.1	42	
42	39.9	40.7	46		42	36.1	37.1	40		42	49.6	47.8	39		42	47.8	46.2	41	
44	39.0	39.9	44	-15.2	44	35.9	37.1	40	-14.0	44	49.3	48.2	39	-16.3	44	47.6	47.1	42	-15.0
46	39.3	40.2	45		46	35.9	36.9	40		46	49.1	47.8	39		46	47.9	46.3	41	
48	40.3	41.2	46		48.4	35.2	36.5	39		48	48.3	47.2	40		48	48.1	47.0	40	
50	39.9	40.8	46		50	35.2	36.4	39		50	47.8	46.7	41		50	48.3	47.4	40	
52	39.2	40.2	45		52	35.2	36.7	39		52	47.1	46.3	42		52	48.3	47.8	40	
54	39.8	40.5	46		54	35.1	36.3	38		54	46.3	45.6	43		54	47.9	47.3	40	
56	40.0	40.8	46		56	34.8	36.0	38		56	45.7	45.0	44		56	47.6	47.2	41	
58	39.8	40.6	46		58	35.1	36.3	38		58	45.7	45.1	44		58	47.2	46.9	41	
13 00	39.6	40.0	45	-15.0	15 00	35.8	36.8	40	-14.0	1 00	46.1	45.4	43	-15.7	3 00	47.1	46.4	42	-15.0
02	39.7	40.1	45		02	36.7	37.7	41		02	46.0	45.8	43		02	46.9	46.4	42	
04	40.1	40.7	46		04	37.1	38.0	41		04	45.7	45.7	43		04	46.9	46.3	42	
06	40.2	41.1	46		06	37.1	38.0	41		06	45.8	45.3	44		06	46.9	46.3	42	
08	40.1	40.7	46		08	37.4	38.3	42		08	45.8	45.2	44		08	46.8	46.1	42	
10	39.3	40.1	45		10	37.6	38.6	42		10	45.9	45.3	44		10	47.0	46.3	42	
12	39.2	40.0	45		12	37.6	38.2	42		12	46.3	45.4	43		12	47.3	46.8	41	
14	38.9	39.7	44	-14.9	14	37.1	37.8	41	-14.0	14	46.9	45.9	42	-15.2	14	47.8	47.0	41	-14.9
16	38.1	39.2	43		16	36.4	37.3	40		16	47.3	46.3	42		16	47.8	47.1	41	
18	38.0	39.0	43		18	36.2	37.1	40		18	47.9	46.5	41		18	47.9	47.2	40	
20	38.1	39.0	43		20	36.2	36.8	40		20	48.2	46.8	40		20	48.0	47.0	40	
22	38.3	39.3	43		22	36.1	36.7	40		22	48.8	47.1	40		22	48.0	47.0	40	
24	38.8	39.8	44		24	35.8	36.2	39		24	49.1	47.2	40		24	48.3	46.3	41	
26	38.4	39.3	43		26	35.4	36.1	38		26	49.2	47.4	39		26	48.2	46.3	41	
28	38.2	39.0	43		28	35.5	36.0	38		28	48.8	46.9	40		28	48.0	46.3	41	
30	38.8	39.3	44	-14.8	30	35.8	36.3	39	-13.9	30	47.9	46.3	40	-15.2	30	47.8	46.3	41	-14.9
32	39.9	40.6	46		32	35.7	36.3	39		32	47.4	46.0	42		32	47.8	46.2	41	
34	40.0	40.3	46		34	35.3	36.1	38		34	47.1	45.9	42		34	47.4	46.0	42	
36	39.1	39.9	44		36	35.1	35.7	38		36	47.0	45.9	42		36	47.2	46.1	42	
38	38.7	39.8	44		38	34.8	35.4	38		38	47.5	46.4	41		38	47.1	45.9	42	
40	39.0	40.3	45		40	34.9	35.4	38		40	47.7	46.7	41		40	47.4	45.8	42	
42	39.2	40.5	45		42	35.3	35.8	38		42	47.8	46.8	41		42	47.3	45.8	42	
44	39.2	40.8	45	-14.7	44	35.6	36.2	39	-13.9	44	47.8	46.8	41	-15.2	44	47.1	45.6	42	-14.9
46	39.2	40.7	45		46	35.6	36.2	39		46	48.0	47.1	40		46	47.0	45.6	42	
48	38.5	39.9	44		48	36.0	36.7	40		48	48.0	47.1	40		48	47.2	45.8	42	
50	38.2	39.3	43		50	36.6	37.2	40		50	48.1	47.3	40		50	47.2	45.9	42	
52	38.6	39.5	44		52	37.8	38.2	42		52	47.9	47.2	40		52	47.2	46.0	42	
54	38.1	38.9	43		54	38.1	38.8	43		54	48.0	46.9	41		54	47.2	45.8	42	
56	38.5	39.2	43		56	38.1	38.8	43		56	48.0	46.8	41		56	46.8	45.4	43	
58	39.1	39.9	44		58	37.7	38.2	42		58	47.9	46.7	41		58	46.7	45.3	43	
					16 00	37.1	37.7	41	-13.9										

Correction to local mean time is — 37s. 90° torsion = 16.′01.
Torsion head at 11h 30m read 24° and at 16h 20m read 22°.
Observer—R. R. T.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 23, 1904					Magnet scale inverted					Wednesday, March 23, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	46.6	45.6	22 43	-14.9	6 00	35.9	35.2	22 59	-14.8	8 00	42.5	40.0	22 50	-14.2	10 00	44.5	42.3	22 47	-15.0
02	46.7	45.8	42		02	36.3	35.2	59		02	43.9	40.0	49		02	44.8	41.1	48	
04	46.8	45.8	42		04	37.2	36.3	57		04	43.1	39.4	50		04	45.2	41.0	47	
06	46.8	46.0	42		06	37.9	36.9	56		06	42.4	39.2	51		06	45.9	41.0	47	
08	47.2	46.2	42		08	39.0	38.0	55		08	42.3	39.2	51		08	45.9	40.7	47	
10	47.2	46.6	41		10	40.3	39.1	53		10	42.5	40.0	50		10	45.8	41.8	46	
12	47.0	46.3	42		12	40.9	40.1	51		12	42.5	41.0	50		12	45.5	41.8	47	
14	46.8	46.0	42	-14.9	14	39.4	38.8	54	-14.8	14	42.8	41.9	49	-14.6	14	45.2	42.0	47	-15.2
16	46.4	45.6	43		16	36.2	35.0	59		16	43.3	41.8	48		16	46.0	41.9	46	
18	46.1	45.2	44		18	37.1	36.4	57		18	42.3	41.6	49		18	46.1	41.9	46	
20	46.3	45.2	43		20	37.7	36.8	57		20	42.2	40.9	50		20	46.2	41.8	46	
22	46.3	45.0	44		22	38.8	37.7	55		22	41.9	40.8	50		22	45.4	42.5	46	
24	46.3	45.2	43		24	37.4	36.6	57		24	41.8	40.2	51		24	45.3	42.2	46	
26	46.8	45.9	42		26	37.1	35.9	58		26	42.1	40.1	50		26	45.3	42.3	46	
28	46.9	45.7	42		28	36.2	35.1	59		28	42.7	40.0	50		28	44.3	43.0	47	
30.3	46.2	44.9	44	-14.9	30	36.1	34.9	22 59	-14.8	30	42.1	40.9	50	-14.7	30	44.7	42.5	47	-15.3
32	46.0	44.7	44		32	34.1	32.7	23 03		32	42.1	40.0	51		32	44.9	42.5	46	
34	45.8	44.5	44		34	35.8	34.0	23 00		34	42.2	39.9	51		34	44.8	42.8	46	
36	45.3	44.2	45		36	36.2	35.1	22 59		36	42.6	40.5	50		36	45.1	43.6	46	
38	45.8	44.6	44		38	38.5	37.2	56		38	42.8	41.2	49		38	45.0	43.6	46	
40	45.8	44.7	44		40	39.2	38.2	54		40	42.3	41.0	50		40	45.1	43.2	46	
42	46.0	44.9	44		42	39.7	38.3	54		42	41.3	40.2	51		42	44.7	43.9	46	
44	47.0	45.6	42	-14.9	44	39.4	38.3	54	-14.7	44	42.0	39.0	51		44	44.7	44.1	45	-15.6
46	47.8	45.9	42		46	38.1	37.2	56		46	42.1	38.7	52		46	46.2	43.8	44	
48	47.0	45.1	43		48	37.9	37.2	56		48	42.9	38.8	51		48	46.3	44.2	44	
50	45.9	44.1	44		50	36.7	35.8	22 58		50	42.7	38.8	51		50	45.7	44.1	45	
52	45.7	43.9	45		52	33.0	32.2	23 04		52	44.0	38.6	50		52	45.3	43.9	45	
54	46.1	44.7	44		54	34.5	33.2	02		54	43.7	39.0	50		54	45.8	43.1	45	
56	46.9	45.2	43		56	35.3	33.7	01		56	44.0	39.6	49		56	45.3	43.9	45	
58	46.0	44.8	44		58	36.1	34.4	23 00		58	45.2	39.8	48		58	44.9	43.9	45	
5 00	45.3	44.2	45	-14.9	7 00	36.9	35.2	22 58	-14.4	9 00	44.9	39.0	49	-14.6	11 00	44.8	44.2	45	-15.9
02	44.3	43.3	46		02	37.4	36.0	57		02	44.2	38.9	50		02	45.0	43.8	45	
04	44.1	43.0	47		04	37.2	36.0	58		04	44.0	39.2	50		04	46.2	43.6	45	
06	44.7	43.2	46		06	36.7	35.3	58		06	44.0	40.0	49		06	46.1	44.0	44	
08	45.4	44.3	45		08	37.9	36.8	56		08	43.9	40.0	49		08	46.9	44.0	44	
10	45.2	44.0	45		10	37.9	36.0	57		10	43.9	40.0	49		10	46.4	44.0	44	
12	45.5	43.3	45		12	37.2	35.8	58		12	44.2	39.9	49		12	46.1	44.0	44	
14	44.8	42.6	46	-14.9	14	37.2	36.0	58	-14.3	14	44.2	39.8	49	-14.6	14	46.4	43.9	44	-16.0
16	44.8	43.2	46		16	38.2	37.4	56		16	45.0	38.6	49		16	46.8	43.0	45	
18	45.0	43.6	46		18	40.2	39.2	53		18	44.8	38.0	50		18	47.0	42.9	45	
20	44.8	43.2	46		20	40.4	39.2	52		20	44.1	39.0	50		20	47.3	43.2	44	
22	44.1	42.6	47		22	39.4	38.3	54		22	44.8	40.2	48		22	47.5	44.0	43	
24	43.3	42.2	48		24	36.2	35.4	59		24	45.0	40.0	48		24	47.9	44.7	42	
26	44.0	42.8	47		26	36.0	35.0	59		26	44.1	39.5	49		26	46.7	44.6	44	
28	46.0	45.0	44		28.5	38.4	37.6	55		28	43.0	39.5	50		28	46.3	44.1	44	
30	47.2	46.5	42	-14.8	30	40.0	39.3	53	-14.2	30	42.8	39.8	50	-14.8	30	47.5	45.4	42	
32	45.7	45.0	44		32	40.0	39.3	53		32	44.0	39.9	49		32.2	49.2	45.9	40	
34	42.7	42.3	48		34	36.8	35.6	22 58		34	44.4	40.0	49		34	50.0	45.3	40	
36	42.7	42.2	48		36	34.9	34.1	23 01		36	43.9	40.6	49		36	49.2	45.2	41	
38	45.0	44.2	45		38	37.1	35.2	22 58		38	44.8	41.1	48		38	48.5	44.4	42	
40	45.0	44.3	45		40	40.0	37.9	54		40	45.0	41.9	47		40	48.0	43.9	43	
42	42.9	42.4	48		42	42.2	38.5	52		42	45.0	42.1	47		42	47.1	43.0	44	
44	41.1	40.3	51	-14.8	44	41.8	37.8	53	-14.2	44	44.8	41.3	46	-14.9	44	47.0	42.8	45	-16.5
46	40.7	40.1	52		46	41.2	38.0	53		46	42.9	42.8	48		46	46.3	43.0	45	
48	41.3	40.7	51		48	41.6	38.7	52		48	43.0	42.0	48		48	46.3	43.0	45	
50	43.7	43.1	47		50	41.6	38.7	52		50	42.8	42.0	48		50	46.9	44.5	43	
52	46.2	45.4	43		52	41.1	39.3	52		52	42.8	42.5	48		52	47.0	44.2	44	
54	45.9	45.3	44		54	40.7	39.5	52		54	43.5	42.8	47		54	46.6	44.2	44	
56	41.8	41.3	50		56	40.9	39.1	52		56	43.8	42.3	48		56	47.0	45.1	43	
58	36.8	36.2	58		58	41.2	39.3	52		58	43.9	42.9	47		58	47.8	46.9	41	

Observers—R. R. T. and J. V., who alternated from 7h 32m to 7h 42m.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 23, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	49.2	48.1	22 39	−16.9
02	51.0	48.0	37	
04	51.0	48.9	37	
06	49.8	48.2	38	
08	48.1	47.0	40	
10	50.0	42.8	42	
12	51.0	42.8	41	
14	51.8	44.0	40	−17.0
16	53.1	44.6	38	
18	52.9	45.3	38	
20	52.3	45.1	39	
22	51.2	45.0	40	
24	50.8	45.0	40	
26	51.2	45.2	39	
28	51.0	45.7	39	
30	50.3	45.8	40	−17.2
32	51.2	44.3	40	
34	51.2	45.0	40	
36	51.1	44.9	40	
38	51.0	44.2	40	
40	50.0	44.0	41	
42	50.0	44.0	41	
44	50.5	44.0	41	−17.4
46	50.9	44.5	40	
48	50.5	45.0	40	
50	50.3	46.0	40	
52	50.8	46.9	38	
54	51.0	47.2	38	
56	51.8	47.8	37	
58	52.3	47.8	36	
13 00	53.1	47.5	36	
02	52.5	47.6	36	−17.6
04	52.6	47.1	37	
06	52.8	47.0	37	
08	52.7	47.2	37	
10	53.9	47.8	35	
12	53.0	48.8	35	
14	53.2	48.0	36	−17.8
16	52.0	48.8	36	
18	52.0	48.1	36	
20	52.2	47.5	37	
22	52.0	48.1	36	
24	53.2	48.6	35	
26	54.0	49.0	34	
28	54.0	49.0	34	
30	55.0	49.1	33	−18.0
32	55.0	49.0	33	
34	55.0	48.4	34	
36	55.0	49.2	33	
38	54.2	49.1	34	
40	55.8	49.9	32	
42	55.0	50.8	32	
44	54.2	51.0	32	−18.0
46	53.9	51.0	33	
48	54.1	51.8	32	
50	56.0	52.3	30	
52	56.0	52.5	30	
54	56.0	52.5	30	
56	56.9	53.5	28	
58	57.0	52.9	29	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	56.0	52.0	22 30	−18.0
02	54.3	52.8	31	
04	53.9	53.3	31	
06	54.0	53.8	30	
08	54.2	53.0	30	
10	54.7	53.0	30	
12	55.0	52.8	30	
14	54.9	52.7	31	−18.0
16	55.0	52.8	30	
18	55.8	52.4	30	
20	54.3	52.3	31	
22	53.5	51.9	32	
24	53.0	51.1	33	
26	53.0	51.0	33	
28	52.4	50.8	34	
30	52.0	50.8	34	−18.0
32	52.0	50.0	35	
34	51.9	50.5	35	
36	52.0	51.0	34	
38	52.9	51.6	33	
40	52.8	50.4	34	
42	52.0	49.8	35	
44	52.3	49.1	35	−18.1
46	53.3	49.5	34	
48	55.0	48.4	34	
50	55.8	49.0	33	
52	55.7	50.6	32	
54	57.2	51.0	30	
56	57.0	51.8	30	
58	58.0	53.0	28	
15 00	59.1	54.0	26	−18.2
02	60.1	54.0	26	
04	60.0	53.0	26	
06	60.1	53.6	26	
08	61.0	53.0	26	
10	59.9	52.4	27	
12	59.4	52.5	27	
14	59.0	52.6	27	−18.5
16	58.2	52.0	28	
18	58.9	51.0	29	
20	57.0	51.1	30	
22	56.7	51.3	30	
24	55.9	51.1	31	
26	54.0	49.2	34	
28	51.1	48.0	37	
30	51.3	49.7	36	−18.6
32	53.9	50.4	33	
34	55.0	53.5	30	
36	56.9	54.4	28	
38	59.0	55.0	26	
40	58.5	57.0	24	
42	59.2	57.0	24	
44	57.9	55.2	26	−18.7
46	56.2	55.0	28	
48	55.3	54.3	29	
50	54.2	53.8	30	
52	53.6	53.2	31	
54	53.0	52.9	32	
56	53.5	51.3	33	
58	52.8	50.8	34	

Wednesday, March 23, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	52.6	49.6	22 35	−18.2
02	52.4	49.6	35	
04	52.7	50.1	34	
06.4	53.3	50.6	34	
08.1	53.3	50.6	34	
10.4	53.6	51.1	33	
12	53.8	50.6	33	
14	53.2	50.8	33	−18.0
16	52.6	50.7	34	
18	52.6	50.8	34	
20	52.6	51.1	34	
22	52.6	51.2	34	
24	52.7	51.2	34	
26	52.6	51.1	34	
28	52.7	51.3	33	
30	53.1	51.9	33	−17.9
32	53.1	52.3	32	
34	53.0	51.9	33	
36	52.6	51.6	33	
38	53.1	52.0	33	
40	53.2	52.3	32	
42	53.3	52.8	32	
44	53.2	52.6	32	−17.8
46	52.7	52.3	33	
48	53.0	52.5	32	
50	52.8	52.4	32	
52	52.6	52.3	33	
54	52.2	51.6	34	
56	51.7	51.1	34	
58	52.1	51.2	34	
17 00	52.3	51.3	34	−17.7
02	52.1	51.4	34	
04	52.2	51.5	34	
06	52.3	51.8	33	
08	52.4	51.9	33	
10	52.6	52.0	33	
12	52.7	52.1	33	
14	53.1	52.3	32	−17.6
16	53.3	52.7	32	
18	53.3	52.4	32	
20	52.7	51.4	33	
22	52.5	51.6	33	
24	53.1	52.3	32	
26	52.8	52.0	33	
28	52.6	51.7	33	
30	52.6	51.8	33	−17.5
32	52.7	51.9	33	
34	52.6	51.8	33	
36	52.6	51.9	33	
38	52.8	52.2	33	
40	52.6	51.9	33	
42	52.6	52.0	33	
44	52.5	52.1	33	−17.5
46	52.4	51.9	33	
48	52.2	51.7	34	
50	52.0	51.6	34	
52	52.0	51.6	34	
54	51.8	51.2	34	
56	51.6	51.0	35	
58	51.6	50.9	35	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	51.6	51.0	22 35	−17.6
02	51.3	50.9	35	
04	51.3	50.7	35	
06	51.2	50.7	35	
08	51.2	50.8	35	
10	51.1	50.7	35	
12	51.1	50.9	35	
14	51.1	50.9	35	−17.5
16	51.4	51.2	34	
18	51.7	51.3	34	
20	51.6	51.3	34	
22	51.6	51.4	34	
24	51.9	51.8	34	
26	52.2	51.9	33	
28	52.2	51.8	33	
30	52.3	51.8	33	−17.6
32	52.2	51.9	33	
34	52.2	51.8	33	
36	52.1	51.8	34	
38	52.1	51.6	34	
40	52.3	51.7	33	
42	52.4	51.8	33	
44	51.8	51.5	34	−17.6
46	52.0	51.4	34	
48	52.3	51.6	34	
50	52.3	51.9	33	
52	53.0	51.8	33	
54	53.3	52.1	32	
56	52.8	51.3	33	
58	53.3	52.3	32	
19 00	53.6	52.3	32	−17.6
02	53.9	53.0	31	
04	53.4	52.9	32	
06	53.1	52.8	32	
08	53.0	52.8	32	
10	53.2	52.8	32	
12	53.3	53.2	32	
14	53.3	53.0	32	−17.5
16	54.3	53.8	30	
18	53.9	53.5	31	
20	53.2	52.8	32	
22	53.8	53.4	31	
24	54.3	54.0	30	
26	54.3	53.9	30	
28	53.7	53.7	31	
30	55.8	55.4	28	−17.5
32	55.3	54.9	28	
34	56.5	55.8	27	
36	56.3	55.3	27	
38	57.1	56.2	26	
40	57.2	55.8	26	
42	58.3	56.6	25	
44	57.8	56.2	26	−17.6
46	58.2	57.0	25	
48	58.9	57.0	24	
50	58.1	56.7	25	
52	59.0	57.6	24	
54	57.8	56.3	26	
56	58.0	56.6	25	
58	58.5	57.3	24	

Observers—J. V. and W. J. P., who alternated from 15h 46m to 15h 58m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 23, 1904 — Magnet scale inverted									Thursday, March 24, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	59.3	58.0	22 23	-17.7	22 00	59.3	58.0	22 23	-18.0	16 00	47.9	48.8	22 36	-20.7	18 00	47.2	47.8	22 35	-19.0
02	59.5	58.1	23		02	60.3	58.6	22		02.2	47.6	48.3	36		02	48.1	48.4	36	
04	59.0	57.8	23		04	60.3	58.9	22		04	47.7	48.3	36		04	49.1	49.2	37	
06	58.5	57.5	24		06	58.4	57.2	24		06	48.1	48.9	36		06	49.2	49.7	38	
08	58.8	57.9	24		08	58.3	57.6	24		08	47.4	48.0	35		08	49.1	49.4	38	
10	61.0	59.4	20		10	57.5	57.0	25		10	48.1	48.3	36		10	48.7	48.9	37	
12	61.5	60.3	19		12	57.0	56.8	26		12	48.2	48.8	36		12	47.9	48.3	36	
14	61.0	60.3	20	-17.9	14	55.7	55.5	28	-18.2	14	48.2	48.8	36	-20.2	14	47.9	48.2	36	-19.0
16	62.3	61.3	18		16	55.3	55.0	28		16	47.5	47.8	35		16	48.1	48.4	36	
18	63.0	62.0	17		18	55.5	55.3	28		18	47.3	47.8	35		18	48.2	48.7	36	
20	62.2	60.7	19		20	56.1	55.7	27		20	47.1	47.9	35		20	48.4	48.8	36	
22	61.0	60.2	20		22	55.0	54.8	29		22	46.8	47.7	34		22	47.9	48.7	36	
24	58.9	58.8	23		24	54.4	53.9	30		24	45.9	47.0	33		24	48.5	48.0	37	
26	57.2	57.1	25		26	53.8	53.3	31		26	46.2	47.7	34		26	49.1	49.6	38	
28	58.1	57.8	24		28	54.8	54.1	30		28	45.9	47.1	33		28	49.1	49.7	38	
30	57.3	56.3	26	-18.0	30	55.7	54.9	28	-18.3	30	45.0	46.2	32	-19.7	30	49.1	49.4	38	-19.0
32	56.9	56.0	26		32	55.8	55.0	28		32	45.5	46.8	33		32	48.8	49.4	37	
34	56.3	55.9	27		34	56.3	55.3	27		34	46.2	47.8	34		34	48.2	48.9	36	
36	57.4	56.4	26		36	55.6	54.5	20		36	46.3	47.9	34		36	48.6	49.0	37	
38	57.3	56.3	26		38	55.8	54.8	28		38	46.9	48.2	35		38	48.6	48.9	37	
40	57.0	55.6	27		40	56.1	55.3	28		40	47.2	48.4	35		40	48.7	49.0	37	
42	57.2	55.8	26		42	56.7	56.0	27		42	46.9	48.2	35		42	49.6	49.9	38	
44	58.5	57.2	24	-18.0	44	55.8	55.3	28	-18.4	44	46.9	48.0	35	-19.3	44	49.1	49.4	38	-19.0
46	58.3	56.9	25		46	54.0	53.5	31		46	46.5	47.3	34		46	49.2	49.6	38	
48	58.3	57.0	25		48	53.6	53.2	31		48	46.2	47.1	33		48	49.0	49.3	37	
50	58.6	57.7	24		50	53.0	52.4	32		50	46.0	47.3	33		50	49.3	49.8	38	
52	62.3	61.1	18		52	53.3	53.0	32		52	46.2	46.9	33		52	48.9	49.3	37	
54	61.5	60.3	19		54	54.3	53.7	30		54	46.7	47.0	34		54	48.3	50.1	38	
56	61.1	59.3	20		56	52.8	52.3	33		56	46.6	47.1	34		56	48.8	50.8	38	
58	61.9	59.3	20		58	53.3	52.7	32		58	46.6	46.9	34		58	48.7	50.8	38	
21 00	62.2	60.5	19	-18.0	23 00	52.1	51.6	34	-18.4	17 00	46.7	47.0	34	-19.1	19 00	49.2	51.3	30	-19.0
02	62.0	60.5	19		02	52.1	51.9	33		02	46.5	46.9	34		02	48.3	50.7	38	
04	63.4	61.8	17		04	52.6	52.3	33		04	46.7	47.1	34		04	49.0	50.9	30	
06	63.7	60.5	18		06	52.7	52.2	33		06	46.7	47.0	34		06	48.3	50.2	38	
08	67.8	64.2	11		08	52.2	51.6	34		08	46.0	46.2	33		08	47.9	49.3	36	
10	66.3	62.7	14		10	52.1	51.8	34		10	47.1	47.3	34		10	48.5	49.7	37	
12	60.1	58.9	22		12	52.1	52.0	33		12	46.9	47.3	34		12	48.8	49.8	38	
14	57.0	54.3	28	-18.0	14	52.1	51.0	33	-18.5	14	46.3	47.0	33	-19.1	14	49.7	50.5	30	-19.0
16	65.0	61.6	16		16	52.1	51.8	34		16	45.1	45.8	32		16	49.3	50.3	38	
18	60.7	57.3	22		18	52.3	51.6	34		18	45.7	46.0	32		18	50.0	50.8	39	
20	61.0	58.3	22		20	52.3	51.4	34		20	46.0	46.2	33		20	49.9	50.6	39	
22	59.0	57.5	23		22	52.8	51.9	33		22	46.0	46.6	33		22	49.0	50.5	39	
24	55.6	52.0	31		24	52.5	51.4	34		24	46.2	46.7	33		24	49.7	50.4	39	
26	51.0	49.2	36		26	52.2	51.0	34		26	45.8	46.4	33		26	48.7	49.3	37	
28	50.3	56.6	24		28	51.8	50.6	35		28	45.1	45.8	32		28	48.0	48.8	36	
30	60.8	67.2	07	-18.0	30	53.8	52.8	31	-18.5	30	45.2	45.8	32	-19.0	30	47.3	48.1	35	-19.0
32	66.6	63.7	13		32	53.3	52.3	32		32	44.0	45.1	31		32	47.2	48.1	35	
34	63.6	62.0	16		34	53.5	52.4	32		34	45.1	45.2	31		34	46.9	47.7	35	
36	61.8	59.2	20		36	53.6	52.4	32		36	45.0	45.3	31		36	47.1	47.8	34	
38	54.3	51.5	32		38	53.0	52.6	32		38	44.8	45.1	31		38	47.0	47.3	34	
40	54.3	52.0	32		40	53.2	52.1	32		40	45.2	45.3	31		40	47.1	47.4	34	
42	54.8	51.8	31		42	53.6	52.3	32		42	45.7	46.1	32		42	47.1	47.4	34	
44	61.2	58.8	21	-18.0	44	53.6	52.6	32	-18.5	44	45.8	46.1	32	-19.0	44	47.3	47.8	35	-19.0
46	62.0	60.3	19		46.4	53.0	52.2	32		46	45.0	46.2	32		46	46.9	47.3	34	
48	59.5	57.6	23		48	53.0	52.1	33		48	46.0	47.0	34		48	46.4	47.1	34	
50	59.2	57.6	23		50	52.0	52.1	33		50	47.0	47.3	34		50	45.0	46.6	33	
52	59.3	57.6	23		52	53.8	52.9	31		52	46.8	47.1	34		52	44.9	45.7	31	
54	58.3	56.3	25		54	54.1	53.5	31		54	47.1	47.3	34		54	43.3	44.2	20	
56	57.7	56.0	26		56	54.3	53.5	30		56	47.2	47.6	35		56	42.8	43.0	28	
58	58.3	56.7	25		58	54.2	53.2	31		58	47.0	47.3	34		58	42.8	43.6	28	
					24 00	54.2	53.1	31	-18.5						20 00	42.8	43.3	28	-19.0

Correction to local mean time is — 24s.
Torsion head at 0h 00m read 25° and at 24h 20m read the same.
Observer—W. J. P.

Correction to local mean time is + 22.5s. 90° torsion = 17.′59.
Torsion head at 15h 30m read 31° and at 20h 20m read 35°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, March 25, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	39.4	39.1	22 24	-23.0
02	39.2	38.8	24	
04	39.1	38.5	24	
06	39.1	38.8	24	
08	40.8	40.1	22	
10	41.3	40.2	21	
12	42.4	40.6	20	
14	42.3	40.7	20	-22.7
16	43.7	41.4	18	
18	42.0	39.2	21	
20	43.3	41.0	19	
22	41.4	40.3	21	
24	41.0	41.1	20	
26	42.8	40.7	20	
28	42.4	40.6	20	
30	41.2	39.0	22	-22.5
32	42.9	40.2	20	
34	40.0	38.9	23	
36	38.7	38.1	25	
38	40.5	37.3	24	
40	37.8	36.6	27	
42	41.7	39.5	21	
44	43.5	41.0	19	-22.3
46	42.1	40.3	20	
48	43.3	42.4	18	
50	43.5	42.7	17	
52	43.2	42.6	18	
54	42.5	42.1	19	
56	42.1	41.7	19	
58	44.3	42.9	17	
21 00	43.5	42.1	18	-22.0
02	42.8	41.3	19	
04	43.6	42.8	17	
06	42.1	40.4	20	
08	41.5	39.7	21	
10	41.3	40.8	21	
12	41.7	39.6	21	
14	41.6	39.3	22	-22.0
16	41.1	30.0	22	
18	40.3	38.5	23	
20	39.7	38.6	24	
22	40.8	30.5	22	
24	40.0	38.8	24	
26	39.8	38.2	24	
28	40.0	38.3	24	
30	42.0	40.2	20	-21.7
32	42.2	40.7	20	
34	43.4	42.8	17	
36	43.6	42.3	18	
38	45.3	43.2	16	
40	44.1	42.7	17	
42	44.1	43.6	16	
44	43.3	43.1	17	-21.4
46	43.4	42.2	18	
48	43.2	42.7	18	
50	43.0	42.2	18	
52	44.9	42.4	17	
54	42.7	41.2	19	
56	41.0	40.6	20	
58	41.8	40.0	21	
22 00	42.1	40.3	22 20	-21.2
02	42.5	40.2	20	
04	42.3	41.5	19	
06	43.1	42.3	18	
08	42.1	41.0	20	
10	43.8	42.9	17	
12	41.0	40.5	21	
14	41.9	41.3	20	-21.0
16	42.3	41.8	19	
18	39.9	39.4	23	
20	37.7	36.8	27	
22	38.6	38.0	25	
24	44.0	42.5	17	
26	37.6	36.3	27	
28	37.8	36.3	27	
30	38.4	37.5	26	-20.7
32	35.8	34.9	30	
34	35.9	34.7	30	
36	36.1	34.6	30	
38	36.3	35.4	29	
40	35.9	35.5	29	
42	35.0	34.3	31	
44	34.5	33.4	32	-20.3
46	33.4	32.4	34	
48	33.0	32.1	34	
50	32.3	31.5	35	
52	32.2	30.1	36	
54	31.6	30.4	36	
56	31.9	30.8	36	
58	31.9	30.4	36	
23 00	32.3	31.1	35	-20.0
02	30.8	29.9	37	
04	32.2	30.5	36	
06	31.9	30.2	36	
08	32.4	30.8	36	
10	33.4	30.7	35	
12	33.8	29.5	36	
14	32.3	29.6	36	-20.0
16	31.8	20.6	37	
18	31.8	28.7	38	
20	32.6	29.8	36	
22	32.8	30.1	36	
24	31.8	29.3	37	
26	33.3	31.5	34	
28	33.4	31.2	34	
30	33.5	30.6	35	-20.0
32	29.6	27.7	40	
34	29.5	27.8	40	
36	31.8	20.3	37	
38	30.7	28.0	30	
40	32.2	30.1	36	
42	30.8	28.2	39	
44	30.6	27.5	40	-19.8
46	31.9	28.2	38	
48	31.1	27.6	39	
50	30.7	27.2	40	
52	31.6	28.5	38	
54	32.0	28.8	37	
56	31.9	29.0	37	
58	32.6	20.2	36	
24 00	32.3	28.3	37	-19.7

Sunday, March 27, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	42.3	45.8	22 21	-25.9
02	44.0	47.0	23	
04	44.2	46.8	23	
06	46.7	49.2	27	
08	45.9	47.9	26	
10	48.2	50.9	30	
12	53.8	54.7	37	
14	57.1	58.1	42	-25.0
16	60.3	60.9	47	
18	62.1	63.9	51	
20	63.2	63.8	52	
22	64.7	65.3	54	
24	63.7	64.0	52	
26	64.0	64.0	52	
28	61.3	61.9	48	
30	61.3	62.0	49	-24.9
32.2	61.2	61.7	48	
34	60.2	60.8	47	
36	60.7	61.3	48	
38	59.3	60.8	46	
40	59.7	60.6	46	
42	60.2	60.8	47	
44	61.1*a*		48	-23.7
46	55.3*b*		39	
48	55.6	56.7	40	
50	56.3	57.5	41	
52	58.8	59.6	45	
54	56.3	57.4	41	
56	58.0	59.1	44	
58	58.6	59.8	45	
1 00	58.9	59.9	45	-23.0
02	58.0	59.0	44	
04	60.9	61.8	48	
06	57.1	58.8	43	
08	58.7	59.1	45	
10	62.1	63.4	51	
12	66.1	67.1	57	
14	63.1	63.8	52	-22.8
16	57.2	57.9	43	
18	61.7	62.5	50	
20	59.3	60.2	46	
22	61.8	62.7	50	
24	62.8	63.8	52	
26	61.1	62.1	49	
28	61.2	62.2	49	
30	64.9	65.8	55	-22.3
32	63.6	64.7	53	
34	63.0	63.7	52	
36	63.4	64.0	52	
38	60.8	61.8	40	
40	59.6	60.3	46	
42	59.8	60.7	47	
44	59.2	60.2	46	-22.0
46	61.1	61.5	49	
48	65.1	66.6	22 56	
50	68.1	69.2	23 00	
52	63.4	64.4	22 53	
54	67.2	68.3	59	
56	67.2	68.7	50	
58	66.7	67.9	58	
2 00	66.2	67.0	22 57	-21.9
02	64.1	65.0	54	
04	65.2	66.0	56	
06	62.3	62.8	51	
08	60.6	61.3	48	
10	59.9	60.3	47	
12	59.0	59.8	46	
14	58.0	58.7	44	-21.3
16	59.8	60.2	47	
18	57.7	58.3	44	
20	59.3	60.1	47	
22	63.7	64.3	53	
24	62.2	63.0	22 51	
26	68.2	69.8	23 01	
28	65.1	66.1	22 56	
30	59.0	59.9	46	-21.0
32	55.9	57.8	42	
34	58.8	60.8	47	
36	61.1	63.1	50	
38	58.7	60.8	47	
40	58.2	59.9	46	
42	55.0	57.0	41	
44	55.0	56.9	40	-20.9
46	61.7	62.8	22 51	
48.5	69.1	71.2	23 03	
50	75.1	76.0	12	
52*	39.9	46.4	12	
54	35.1	40.9	23 04	
56	27.0	33.5	22 52	
58	25.2	31.9	50	
3 00	26.3	32.8	51	-20.6
02	26.4	32.8	51	
04	28.1	33.8	53	
06	28.8	34.1	54	
08	27.1	32.0	51	
10	25.8	31.1	50	
12	27.9	33.2	53	
14	31.1	36.2	22 58	-20.3
16	36.3	41.0	23 06	
18	31.3	35.0	22 57	
20	28.9	33.7	54	
22	26.7	30.8	50	
24	27.4	31.2	51	
26	21.5	25.5	42	
28	22.9	26.7	44	
30	24.1	26.8	45	-20.0
32	31.5	33.2	22 56	
34	34.2	36.4	23 01	
36	33.1	35.7	22 59	
38	32.1	33.9	22 57	
40	35.0	36.8	23 02	
42	39.0	41.2	08	
44	34.7	36.0	23 01	-20.0
46	27.0	29.3	22 49	
48	28.2	31.8	22 52	
50	33.8	36.7	23 01	
52	34.9	37.6	02	
54	34.8	37.2	23 02	
56	33.2	35.2	22 59	
58	29.8	31.8	54	

Correction to local mean time is + 19.5s.
Torsion head at 19h 30m read 35° and at 24h 00m read the same.
Observer—H. H. N.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, March 27, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00*	49.0	47.4	23 02	-19.8
02	48.1	47.1	23 02	
04	52.4	51.9	22 56	
06	50.2	48.8	23 00	
08	47.5	46.2	04	
10	45.1	44.0	08	
12.4	44.3	42.9	09	
14	45.4	43.7	08	-19.7
16	48.8	46.7	23 03	
18	50.8	48.9	22 59	
20	49.2	47.7	23 02	
22	50.0	48.3	00	
24	50.0	48.8	00	
26	48.0	47.1	03	
28	48.9	48.2	23 01	
30	51.2	50.6	22 58	-19.4
32	48.3	47.9	23 02	
34	47.0	46.1	04	
36	44.3	42.1	10	
38	41.1	40.8	13	
40	42.1*a*		12	
42	47.8	47.8	23 02	
44	52.0	51.2	22 57	-19.3
46	48.3	47.6	23 02	
48	49.8	49.1	00	
50	48.1	47.2	03	
52	44.8	44.8	07	
54	45.1*b*		07	
56	46.7	45.3	06	
58	46.1	45.6	06	
5 00	43.7	42.9	10	-19.3
02	46.0	45.3	23 06	
04	51.0	50.5	22 58	
06	45.8	45.3	23 06	
08	46.8	45.1	23 06	
10	61.1	57.8	22 45	
12	69.4	68.9	29	
14	53.0*b*		22 55	-19.1
16	27.8*a*		23 34	
18	44.2*b*		09	
20	33.5*b*		25	
22	27.3	27.3	35	
24	49.0	48.2	02	
26	44.1	43.2	10	
28	43.1	41.6	12	
30	48.9	48.2	02	-19.0
32	48.3	48.0	03	
34	44.1	43.1	10	
36	36.2	35.3	22	
38	34.7	33.3	25	
40	42.2	40.8	13	
42	48.0	46.7	04	
44	50.8	47.2	01	-18.9
46	31.1	29.1	31	
48	47.8	46.2	04	
50	46.9	46.1	04	
52	47.2	46.9	04	
54	34.4	33.6	25	
56	42.2*b*		12	
58	31.1	30.2	30	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00	29.1	28.5	23 33	-18.9
02	24.4	22.2	42	
04	40.9	40.5	14	
06	34.8	32.8	25	
08	31.9	31.1	23 29	
10	51.9	50.9	22 58	
12	42.8	42.1	23 12	
14	36.0	35.1	23	-18.9
16	36.9	35.0	22	
18	36.2	35.1	23	
20	35.7	34.1	24	
22	34.6	33.2	25	
24	33.7	32.4	27	
26	38.3	36.6	20	
28	37.2	35.7	22	
30	34.3	32.6	26	-18.8
32	36.2	34.8	23	
34	35.1	33.5	25	
36	33.5	33.1	26	
38	31.0	30.2	31	
40	37.8	37.2	20	
43	39.2	37.8	18	
44	41.0	38.7	16	
46	43.3	40.8	13	
48	42.9	39.1	14	
50	40.3	38.9	17	
52	43.7	42.2	12	
54	43.1	42.1	12	
56	40.9	39.8	16	
58	41.0	40.1	15	
7 00	47.4	45.8	06	-18.8
02	37.5*b*		20	
04	35.9	34.2	24	
06	41.3	39.6	16	
08	42.7	41.2	13	
10	44.3	42.5	11	
12	36.2	34.1	24	
14	36.9	35.7	22	-18.7
16	40.8	39.8	16	
18	42.2	39.3	15	
20	36.2	33.8	24	
22	39.2	36.0	20	
24	34.1	31.1	28	
26	35.0	29.9	28	
28	30.9	25.3	35	
30	42.1	38.6	16	
32	34.9	30.3	28	-18.3
34	36.3	34.6	24	
36	32.9	30.1	30	
38	31.9	26.7	33	
40	23.9	18.8	46	
42	22.8	20.1	46	
44	16.6	14.2	55	-18.3
46	20.9	16.4	50	
48	27.1	26.1	38	
50	22.9	18.8	47	
52	25.2	21.3	43	
54	26.8	22.3	41	
56	30.2	25.6	36	
58	31.3	26.7	34	
8 00	31.7	25.8	34	-18.3

Correction to local mean time is — 9s. 90° torsion = 12.'84.
Torsion head at 0h 00m read 86° and at 10h 10m read 45°.
Observer—R. R. T.

Monday, March 28, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	Fibre			
02	broken;			
04	had to			
06	remove			
08	torsion			
10	new fibre			
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50	56.8	59.8	22 46	-10.3
52	57.9	59.7	47	
54	55.6	57.9	43	
56	54.2	56.5	41	
58	53.3	55.9	40	
9 00	53.3	55.7	40	-10.7
02	52.9	56.0	40	
04	54.4	56.7	42	
06	54.8	56.4	42	
08	54.6	56.2	41	
10	57.0	58.5	45	
12	57.6	59.3	46	
14	58.1	59.9	47	-10.7
16	58.2	60.1	47	
18	56.1	58.1	44	
20	56.8	58.3	45	
22	57.2	58.4	45	
24	56.1	57.7	44	
26	55.2	57.0	42	
28	54.2	55.8	41	
30	54.1	56.3	41	-10.3
32	54.9	58.2	43	
34	58.0	59.9	47	
36	57.6	59.1	46	
38	58.3	60.1	47	
40	55.0	56.8	42	
42.2	57.0	57.9	44	
44	49.1	51.7	34	-10.2
46	49.2	50.9	33	
48	50.9	52.2	35	
50	49.6	50.8	33	
52	51.2	53.0	36	
54	56.0	57.9	44	
56	57.3	58.9	46	
58	57.7	58.5	46	
12 00	56.1	57.2	43	-9.7

Correction to local mean time is + 28s. 90° torsion = 9.'03.
Torsion head at 10h 45m read 294° and at 12h 20m read 297°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, March 29, 1904 — Magnet scale inverted								Wednesday, March 30, 1904 — Magnet scale erect							
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	54.8	53.2	22 22	-4.4	14 00	65.8	65.3	22 02	-3.0	0 00*	25.1	28.1	22 34	-9.0	2 00	28.0	33.0	22 39	-9.4
02	54.6	52.7	23		02	68.5	67.8	21 57		02	28.0	38.0	44		02	29.2	34.1	41	
04	57.0	55.0	19		04	68.0	67.7	21 58		04	26.6	32.3	38		04	30.1	34.2	42	
06	53.9	52.3	23		06	64.4	63.9	22 03		06	24.2	34.1	37		06	31.2	35.2	43	
08	49.2	47.1	31		08	61.0	60.4	09		08	18.1	27.1	27		08	31.0	34.7	43	
10	49.8	48.2	30		10	58.9	58.3	12		10	17.0	32.0	30		10	33.0	37.1	46	
12	52.0*a*		25		12	58.0	57.8	13		12	21.0	31.0	32		12	32.6	36.8	46	
14	52.3	51.8	25	-4.6	14	60.6	60.0	09	-2.9	14	10.9	25.9	21	-9.3	14	31.7	36.2	44	-9.5
16	48.2	48.2	31		16	60.2	59.6	10		16	18.1	27.0	27		16	32.8	37.9	47	
18	48.8	48.8	30		18	59.1	58.1	12		18	15.0	31.5	28		18	33.0	38.8	48	
20	48.2	48.2	31		20	57.1	56.4	14		20	16.1	33.1	30		20	37.5	43.0	54	
22	46.1	45.6	34		22	55.3	54.3	18		22	12.0	29.5	24		22	39.0	43.4	56	
24	46.9	46.1	33		24	56.1	55.2	16		24	14.8	31.9	28		24	38.0	42.9	55	
26	48.1	47.2	32		26	53.0	51.8	22		26	14.8	31.0	28		26	37.0	41.6	53	
28	47.9	47.2	32		28	52.8	51.0	22		28	20.0	34.0	34		28	33.0	38.0	48	
30	48.1	47.6	31	-4.3	30.2	51.8	50.2	24	-2.8	30	15.3	20.8	27	-9.5	30	35.8	37.1	48	-9.6
32	49.3	48.3	30		32	50.8	50.1	25		32	13.3	26.3	23		32	35.9	39.0	50	
34	50.3	49.5	28		34	51.1	50.2	24		34	13.3	25.9	22		34	37.2	40.8	52	
36	49.9	49.2	28		36	51.9	51.0	23		36	15.7	27.0	25		36	38.2	41.0	53	
38	49.0	48.6	29		38	52.6	51.3	22		38	17.1	27.9	27		38	38.0	41.1	54	
40	50.9	49.8	27		40	53.2	52.2	21		40	25.2	35.2	39		40	37.7	40.5	53	
42.4	49.8	49.8	28		42	54.1	52.2	20		42	26.5	35.2	40		42	39.0	42.0	55	
44	49.7	49.3	28	-4.3	44	54.9	52.7	19	-2.8	44	26.0	34.3	30	-9.8	44	38.8	41.2	54	-9.8
46	51.1	50.7	26		46	54.9	52.1	19		46	24.0	33.2	36		46	39.0	41.5	54	
48	52.0	51.7	24		48	54.2	52.2	20		48	21.7	30.9	33		48	39.0	42.0	55	
50	51.1	50.7	26		50	56.0	54.0	17		50	18.2	26.0	27		50	39.9	43.1	56	
52	50.4	50.2	27		52	55.1	54.4	17		52	18.0	25.3	26		52	40.0	43.2	56	
54	50.9	50.7	26		54	55.0	54.1	18		54	14.0	22.8	21		54	40.3	42.9	56	
56	51.5	51.0	25		56	55.3	55.0	17		56	17.8	24.8	25		56	40.7	42.2	56	
58	51.1	50.9	26		58	55.3	54.9	17		58	20.0	28.0	30		58	42.4	43.4	22 59	
13 00	51.6	51.0	25	-4.0	15 00	55.1	54.9	17	-2.7	1 00	20.8	28.0	31	-9.7	3 00	43.2	44.2	23 00	-10.0
02	51.9	51.2	25		02	56.1	55.3	16		02	24.2	32.0	36		02	44.8	47.6	04	
04	53.5	52.6	22		04	56.0	54.8	16		04	23.8	31.0	35		04	40.0	51.0	10	
06	56.1	54.2	19		06	56.8	55.2	15		06	22.0	29.8	32		06	48.2	50.2	08	
08	55.4	53.8	20		08	56.8	55.4	15		08	23.0	30.7	34		08	42.6	45.1	23 00	
10	55.0	53.1	21		10	55.0	53.8	18		10	23.1	30.3	33		10	37.0	41.0	22 53	
12	56.1	53.9	19		12	54.8	53.2	18		12	24.1	31.1	35		12	38.1	42.2	54	
14	55.5	53.1	20	-3.7	14	55.0	53.8	17	-2.8	14	22.9	20.0	32	-9.6	14	30.9	44.2	22 57	-10.1
16	55.3	52.7	20		16	55.1	53.7	17		16	23.5	28.9	33		16	44.0	48.0	23 04	
18	54.0	51.2	23		18	54.0	53.0	19		18	22.3	27.2	30		18	49.2	54.8	13	
20	52.3	49.7	25		20	53.7	53.0	19		20	22.1	27.0	30		20	54.1	58.2	19	
22	51.2	48.4	27		22	53.2	52.0	20		22	23.6	27.8	32		22	58.0	61.6	25	
24	51.3	49.1	26		24	53.2	52.2	20		24	24.1	28.2	32		24.4	57.3	59.9	23	
26	51.8	50.0	25		26	53.8	52.5	19		26	25.5	29.2	34		26	59.0	61.0	25	
28	51.8	50.7	25		28	54.5	53.0	18		28	26.0	29.0	35		28	50.3	60.1	25	
30	51.8	50.7	25	-3.5	30	54.2	52.9	19	-3.0	30	25.9	28.9	34	-9.3	30	58.1	59.2	23	-10.3
32	51.8	50.2	25		32	53.7	52.3	19		32	27.0	30.5	37		32	54.1	56.0	17	
34	52.1	51.1	24		34	53.3	52.5	19		34	27.0	30.4	36		34	54.0	56.0	17	
36	51.8	50.5	24		36	53.8	52.6	19		36	27.1	31.0	37		36	48.0	49.8	08	
38	51.5	50.2	25		38	53.7	52.9	19		38	30.8	34.0	42		38.2	46.8	48.8	06	
40	52.1	50.9	24		40	53.3	52.7	19		40.4	32.0	34.7	44		40	45.7	47.5	04	
42	52.8	51.7	23		42	53.9	53.2	18		42	31.0	34.5	44		42	44.9	46.0	02	
44	52.9	51.8	22	-3.2	44	53.9	53.2	18	-3.0	44	30.8	33.5	42	-9.4	44	47.4	49.0	07	-10.4
46	52.7	51.2	23		46	54.9	54.0	17		46	31.8	35.0	44		46	45.2	47.1	03	
48	53.1	52.1	22		48	54.3	53.9	17		48	30.0	33.4	42		48	46.0	48.0	05	
50	53.1	52.7	21		50	53.9	53.3	18		50	30.2	33.0	41		50	45.2	46.8	23 03	
52	51.8	51.1	24		52	53.8	53.0	18		52	26.6	33.3	39		52	43.0	44.2	22 59	
54	55.3*a*		18		54	54.3	53.8	17		54	26.0	31.4	36		54	42.1	43.0	22 58	
56	57.8	57.1	14		56	54.0	53.2	18		56	26.0	31.9	37		56	43.8	44.9	23 01	
58	60.1	59.4	11		58	54.0	53.3	18		58	26.3	32.0	37		58	45.0	46.0	02	
					16 00	53.5	53.1	18	-3.0										

Correction to local mean time is — 7s. 90° torsion = 16.′48.
Torsion head at 11h 25m read 254° and at 16h 20m read 290°.
Observer—R. R. T.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 30, 1904					Magnet scale erect					Wednesday, March 30, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	46.8	47.3	23 05	-10.5	6 00	54.0	56.3	23 17		8 00	35.5	37.2	22 47	-10.3	10 00	26.6	29.6	22 34	-10.0
02	47.8	49.0	07		02	54.1	56.1	17		02	32.8	34.5	43		02	26.6	29.1	34	
04	48.9	50.3	09		04	50.1	52.1	11		04	31.7	34.3	42		04	27.3	30.2	35	
06	48.0	49.0	07		06	46.2	49.2	06		06	30.3	31.8	39		06	26.7	29.3	34	
08	44.5	46.2	02		08	43.9	47.0	02		08	33.0	34.8	43		08	26.5	29.0	33	
10	46.0	48.0	05		10	43.0	46.0	23 00		10	31.3	33.0	41		10	27.3	29.6	34	
12	44.8	46.0	23 02		12	39.0	42.3	22 54		12	30.3	32.0	39		12	27.5	29.7	35	
14	40.8	44.0	22 58	-10.5	14	42.5	45.5	23 00	-10.0	14	29.2	30.7	37	-10.0	14	27.9	30.2	35	-10.1
16	38.9	41.3	54		16	41.9	44.0	22 58		16	29.5	31.3	38		16	28.0	30.8	36	
18	38.0	40.8	53		18	40.8	42.3	56		18	29.3	32.3	38		18	28.3	30.7	36	
20	36.9	39.2	51		20	38.0	40.2	52		20	31.3	32.6	40		20	26.3	29.7	34	
22	37.0	40.0	51		22	34.2	37.0	46		22	34.0	35.5	45		22	27.1	30.3	35	
24	36.5	38.6	50		24	32.0	34.0	42		24	34.8	35.6	45		24	27.0	30.3	35	
26	40.2	43.0	56		26	28.9	32.0	38		26	31.6	32.6	41		26	27.6	30.5	35	
28	41.0	44.0	22 58		28	29.0	32.3	38		28	33.3	34.6	43		28	27.2	29.7	34	
30	43.9	46.2	23 02	-10.4	30	34.2	37.1	46	-10.1	30	31.6	32.6	41	-10.0	30	26.5	29.0	33	-10.2
32	43.2	45.0	23 00		32	36.8	38.9	50		32	29.2	30.3	37		32	26.3	28.7	33	
34	40.0	40.8	22 55		34	36.0	38.2	49		34	29.2	31.3	38		34	26.5	29.3	34	
36	38.0	39.0	51		36	36.0	38.2	49		36.6	32.3	32.5	41		36	26.2	29.1	33	
38	38.5	39.0	52		38	36.1	38.2	46		38	31.3	31.6	39		38	26.0	28.0	32	
40	39.6	40.0	53		40	32.9	38.0	51		40	31.7	32.0	40		40	25.6	27.6	31	
42	38.0	38.2	51		42	37.0	40.2	46		42	26.8	28.0	33		42	25.6	27.3	31	
44	35.8	36.0	47	-10.3	44	34.0	37.0	42	-10.2	44	30.3	31.1	38	-10.0	44	25.6	28.3	32	
46	34.0	35.9	46		46	31.1	34.4	32		46	30.3	31.3	38		46	25.6	28.6	32	-10.2
48	34.5	36.0	46		48	26.0	27.0	22 39		48	33.8	34.0	43		48	25.0	28.3	31	
50	33.0	34.0	43		50	29.0	33.0	23 01		50	30.6	32.2	39		50	26.0	28.6	32	
52	32.0	33.0	42		52	44.8	45.1	23 05		52	30.8	30.9	38		52	26.6	28.6	33	
54	33.2	34.0	44		54	47.0	48.0	22 50		54	30.8	27.6	36		54	26.2	28.0	32	
56	37.3	38.8	50		56	37.3	38.2	48		56	29.0	30.5	37		56	26.3	27.0	31	
58	41.1	41.8	56		58	36.0	37.3	48		58	25.2	27.2	31		58	25.8	27.6	32	
5 00	43.1	43.9	22 59	-10.3	7 00	32.0	33.0	42	-10.3	9 00	26.8	28.5	33	-10.0	11 00	26.0	27.4	32	-10.3
02	45.4	46.2	23 03		02	31.3	32.9	41		02	34.6	35.6	45		02	25.0	26.4	30	
04	48.6	49.2	08		04	32.1	32.8	41		04	32.0	33.6	42		04	24.3	26.0	29	
06	51.0	51.0	12		06	35.0	36.0	46		06	27.9	30.6	36		06	23.7	25.2	28	
08	51.0	51.8	11		08	35.9	37.0	48		08	31.3	32.9	40		08	24.0	25.5	28	
10	51.8	52.0	12		10	34.1	38.1	47		10	29.3	31.6	38		10	23.3	24.7	27	
12	46.5	47.0	23 04		12	30.0	36.0	42		12	24.7	28.0	31		12	22.7	24.7	27	
14	42.8	44.0	22 59		14	30.8	36.2	43	-10.2	14	23.8	26.5	29		14	24.0	25.6	29	-10.3
16	42.0	42.6	57		16	27.2	35.0	39		16	25.8	28.3	32		16	23.0	24.3	26	
18	40.0	41.0	54		18	27.0	35.0	39		18	27.3	30.6	35	-10.0	18	22.7	24.1	26	
20	37.1	38.0	50		20	31.3	40.3	47		20	36.8	38.0	49		20	23.3	25.3	28	
22	40.0	41.8	55		22	31.0	30.0	45		22	27.0	20.0	34		22	24.1	26.1	29	
24	36.0	38.1	49		24	21.0	28.0	29		24	26.9	29.8	34		24	24.3	26.0	29	
26	32.3	33.9	43		26	24.7	27.0	31		26	28.5	31.3	37		26	22.3	24.0	26	
28	32.8	37.8	46		28	30.2	30.6	38		28	25.8	20.1	33		28	18.7	22.3	22	
30	37.0	38.0	50	-10.0	30	32.0	37.1	44	-10.5	30	24.8	28.0	31	-10.0	30	18.8	23.3	22	-10.4
32	40.0	43.0	22 56		32	31.0	35.0	42		32	25.1	28.5	32		32	15.6	19.7	17	
34	43.6	44.8	23 00		34	32.0	36.0	44		34	27.6	30.2	35		34	15.6	19.0	17	
36	52.0	53.1	13		36	30.8	34.0	41		36	27.1	29.6	34		36	20.0	22.7	23	
38	57.1	59.0	22		38	32.1	35.0	43		38	25.8	27.6	32		38	19.6	22.6	23	
40	61.2	63.0	28		40	38.2	41.2	53		40	25.3	27.4	31		40	22.7	24.6	26	
42	63.98		31		42	33.8	36.0	45		42	28.3	30.5	36		42	22.5	24.3	26	
44	62.2	64.5	30	-10.0	44	31.2	34.1	41		44	27.3	30.6	35	-10.0	44	22.8	25.0	27	-10.5
46	64.0	66.8	33		46	32.5	35.2	43		46	27.9	31.3	36		46	23.3	26.5	28	
48	64.1	65.1	32		48	37.6	39.5	51		48	26.5	30.3	34		48	25.3	28.6	32	
50	63.0	64.5	31		50	36.9	39.0	50		50	24.5	28.2	31		50	25.7	28.8	32	
52	61.0	62.0	27		52	35.3	38.0	48		52	25.1	29.1	32		52	24.3	27.1	30	
54	57.9	59.0	22		54	31.8	33.2	41		54	26.5	30.0	34		54	24.0	26.8	29	
56	57.1	59.1	22		56	31.4	32.6	40		56	28.6	31.3	37		56	23.5	25.6	28	
58	55.6	58.2	20		58	32.5	34.0	42		58	27.0	31.3	37		58	22.5	25.6	27	

Observers—J. V. and W. J. P., who alternated from 7h 48m to 7h 58m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 30, 1904					Magnet scale erect				Wednesday, March 30, 1904					Magnet scale erect		
Chr'r time	Scale readings Left	Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	23.6	27.0	22 29	-10.5	14 00	17.0	19.0	22 17	-10.2	16 00	13.8	14.9	22 11	-10.0	18 00	18.8	19.2	22 18	-9.8
02	23.3	26.6	28		02	17.7	19.7	18		02	15.7	16.8	14		02	17.6	17.9	16	
04	22.6	26.0	28		04	19.0	21.0	20		04	16.1	16.9	14		04	16.7	16.9	15	
06	23.0	25.7	28		06	10.6	21.0	21		06	15.9	16.7	14		06	16.0	16.7	14	
08	22.3	24.2	26		08	18.5	20.0	19		08	17.1	17.7	16		08	15.9	16.3	14	
10	23.3	25.5	28		10	17.7	18.9	18		10	17.9	18.5	17		10	15.8	16.4	14	
12	21.2	24.0	25		12	17.3	18.6	17		12	18.5	19.3	18		12	15.8	16.8	14	
14	21.2	23.2	24	-10.5	14	17.3	18.9	18	-10.2	14	18.9	19.7	19	-10.0	14	16.2	17.2	14	-9.8
16	21.8	23.6	25		16	18.3	19.6	19		16	19.1	19.8	19		16	14.9	15.9	12	
18	20.6	22.5	23		18	19.3	21.0	21		18	19.2	19.9	19		18	14.7	15.8	12	
20	19.8	22.0	22		20	19.3	21.1	21		20	19.7	20.1	20		20	14.8	15.6	12	
22	21.5	22.7	24		22	19.9	22.0	22		22	20.4	20.9	21		22.4	14.9	15.8	12	
24	19.7	21.6	22		24	19.3	20.9	21		24	20.9	21.1	22		24	15.3	15.8	13	
26	20.6	21.6	22		26	10.3	21.1	21		26	21.2	21.7	22		26	15.5	16.0	13	
28	19.0	19.5	20		28	18.8	20.0	19		28	22.0	22.3	23		28	14.3	14.9	11	
30	16.6	17.6	16	-10.5	30	18.7	20.1	19	-10.2	30	22.0	22.4	23	-9.9	30	14.3	14.9	11	-9.9
32	14.6	16.7	14		32	18.2	19.1	18		32	20.9	21.9	22		32	13.9	14.3	10	
34	17.7	18.8	18		34	17.8	18.8	18		34	20.0	20.9	20		34	13.0	13.6	09	
36	15.6	16.6	15		36	17.3	18.0	16		36	19.1	19.8	19		36	13.0	13.2	09	
38	10.5	11.5	07		38	18.3	19.0	18		38	18.7	19.1	18		38	12.8	13.1	08	
40	14.6*a*		12		40	16.0	16.7	14		40	18.8	19.0	18		40	13.1	13.3	09	
42	28.0*b*		33		42	17.4	17.8	16		42	18.8	19.2	18		42	13.8	14.1	10	
44	15.5*b*		14	-10.5	44	16.0	16.6	14	-10.2	44	18.1	18.8	17	-9.9	44	13.0	13.3	09	-10.0
46	14.3	15.0	12		46	15.2	16.2	14		46	17.3	17.9	16		46	14.0	14.9	11	
48	11.4	11.6	07		48	16.0	16.6	14		48	16.2	16.8	14		48	13.2	16.2	11	
50	18.3	18.6	18		50	14.3	14.7	12		50	15.2	16.2	13		50	13.8	16.8	12	
52	24.3	25.0	28		52	14.2	14.8	12		52	15.9	17.1	14		52	10.9	13.9	08	
54	22.8	23.8	26		54	14.6	15.0	12		54	15.9	17.1	14		54	11.7	14.0	08	
56	23.3	24.3	27		56	15.0	15.6	13		56	16.9	18.5	16		56	14.2	16.8	12	
58	22.5	23.9	26		58	15.5	16.0	14		58	17.9	19.3	18		58	14.4	17.2	13	
13 00	22.0	23.0	25	-10.3	15 00	16.8	17.5	16	-10.2	17 00	17.8	19.2	18	-9.8	19 00	17.8	20.8	18	-10.0
02	19.3	20.4	20		02	17.9	18.5	17		02	18.0	19.3	18		02	15.8	19.0	15	
04	19.2	20.0	20		04	12.7*b*		09		04	18.3	19.8	18		04	15.3	17.8	14	
06	19.0	20.0	20		06	12.0	12.0	08		06	18.9	20.3	19		06	13.1	15.3	10	
08	20.6	21.6	22		08	11.8*b*		07		08	19.7	20.5	20		08	13.8	15.4	11	
10	18.6	20.5	20		10	10.6	11.0	06		10	20.1	20.8	20		10	17.1	18.8	16	
12	18.9	20.1	20		12	11.3	11.6	07		12	20.0	20.3	20		12	14.2	16.1	12	
14	17.9	20.1	19	-10.3	14	11.9	12.3	08	-10.3	14	19.6	19.9	20	-9.8	14	13.1	14.3	10	-10.0
16	19.0	21.6	21		16	13.0	13.2	09		16	19.2	19.6	19		16	12.7	13.4	08	
18	21.6	23.8	25		18	13.3	13.7	10		18	19.5	19.8	19		18	11.1	12.0	06	
20	21.1	23.0	24		20	13.6	14.2	10		20	19.1	19.8	19		20	13.1	14.2	09	
22	20.3	21.7	22		22	15.3	15.7	13		22	19.0	19.9	19		22	13.8	15.0	11	
24	20.6	22.1	23		24	15.0	15.0	12		24	18.9	19.7	19		24	13.9	15.3	11	
26	21.0	21.8	23		26	16.5	17.2	15		26	18.8	19.2	18		26	17.1	19.0	16	
28	21.7	22.8	24		28	17.3	17.7	16		28	18.2	19.0	18		28	17.3	18.9	16	
30	17.8	19.7	18	-10.2	30	17.2	18.0	16	-10.5	30	17.7	18.2	16	-9.8	30	15.4	16.9	13	-10.0
32	17.3	18.7	17		32	17.7	18.0	17		32	17.5	18.1	16		32	14.0	15.2	11	
34	18.9	19.9	20		34	16.6	17.2	15		34	17.7	18.3	17		34	17.1	17.9	15	
36	19.0	20.2	20		36	19.2	19.8	19		36	17.9	18.8	17		36	18.1	19.1	17	
38	16.9	18.0	16		38	19.3	19.8	19		38	18.3	19.2	18		38	15.2	16.3	13	
40	17.8	19.1	18		40	19.8	20.4	20		40	18.1	19.0	17		40	17.8	18.9	17	
42	19.0	20.3	20		42	17.5	17.9	16		42	17.9	18.4	17		42	17.4	19.2	17	
44	17.5	19.1	18	-10.2	44	16.2	17.0	15	-10.5	44	17.5	17.9	16	-9.8	44	16.3	17.3	14	-10.2
46	14.6	15.5	13		46	16.3	17.3	15		46	17.3	17.8	16		46	16.8	18.0	15	
48	18.3	20.5	20		48	17.1	18.7	17		48	16.8	17.2	15		48	16.0	17.8	14	
50	20.2	21.5	22		50	13.7	15.8	12		50	18.0	18.2	17		50	15.9	17.2	14	
52	13.2	14.8	11		52	11.5	12.0	08		52	19.7	19.9	19		52	15.3	15.8	12	
54	16.7	19.3	17		54	11.6	12.8	08		54	19.6	20.0	19		54	12.8	13.9	09	
56	16.8	19.3	17		56	13.1	14.2	10		56	19.8	20.1	20		56	12.2	12.7	07	
58	15.7	18.6	16		58	12.6	13.8	09		58	19.3	19.7	19		58	19.2	19.7	19	

Observers—W. J. P. and R. R. T., who alternated from 15h 36m to 15h 46m.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, March 30, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
20 00	22.2	22.8	22 23	-10.3
02	23.1*b*		24	
04	25.3	26.8	29	
06	25.2	26.8	29	
08	31.6	32.3	22 38	
10	49.7*a*		23 06	
12	55.9	57.8	17	
14	57.5	63.7	23	-10.4
16	52.6	62.7	18	
18	45.9	53.2	06	
20	44.7	48.1	23 01	
22	23.6	28.8	22 29	
24	28.1	30.8	34	
26	28.1	31.8	35	
28	20.7	26.9	25	
30	31.0	33.4	38	-10.5
32	32.7	35.4	41	
34	39.9	41.3	51	
36	37.9	40.3	22 49	
38	46.2*a*		23 00	
40	46.9	49.9	04	
42	46.1	47.9	23 02	
44	38.9*b*		22 49	-10.7
46	34.9	34.9	42	
48	38.1	39.4	48	
50	40.0	43.2	53	
52	38.1	41.8	22 50	
54	52.9	54.7	23 10	
56	22.7	26.1	22 26	
58	25.4	28.4	30	
21 00	37.0	39.0	22 47	-10.8
02	50.2	52.2	23 08	
04	37.9	41.7	22 50	
06	24.2	24.9	26	
08	15.2	16.0	12	
10	20.9	20.9	20	
12	17.8	19.2	17	
14	30.3*b*		35	
16	22.8	23.1	24	-10.9
18	20.0	20.6	19	
20	13.9	15.2	10	
22	19.0	20.3	18	
24	20.3	22.1	21	
26	20.3	21.4	20	
28	20.0	20.8	20	
30	14.7	16.2	12	-11.0
32	9.9	10.8	04	
34	9.6	10.7	22 03	
36	7.2	7.8	21 59	
38	6.8	7.8	50	
40	6.4	7.3	21 58	
42	9.1	9.3	22 02	
44	7.8	10.2	22 02	-11.1
46*	42.6	47.1	23 02	
48	49.8	54.1	13	
50	50.6	55.2	15	
52	43.3	48.3	04	
54	49.0	53.4	12	
56	49.6	53.7	13	
58	47.8	50.8	09	
22 00	49.1	51.8	23 11	-11.2
02	52.8	55.9	17	
04	57.0	59.7	23	
06	51.8	54.9	15	
08	49.1	51.3	10	
10	54.1	56.0	18	
12	57.1	59.3	23	
14	55.7	57.9	21	-11.3
16	51.9	54.7	15	
18	54.2	56.9	19	
20	56.2	58.2	21	
22	54.3	56.4	18	
24	51.0	53.1	13	
26	52.0	54.3	15	
28	54.3	56.5	18	
30	55.0	56.9	19	-11.5
32	54.2	55.8	18	
34	55.2	56.0	19	
36	55.1	55.9	19	
38	55.7	56.2	19	
40	54.9	55.5	18	
42	52.9	53.8	15	
44	55.5	56.1	19	-11.7
46	56.3	56.9	20	
48	54.8	55.7	18	
50	55.7	56.2	19	
52	55.9	56.7	20	
54	54.8	55.8	18	
56	54.2	55.2	17	
58	54.6	55.9	18	
23 00	56.8	58.0	22	-11.8
02	57.0	58.1	22	
04	56.5	56.9	20	
06	57.2	57.8	22	
08	57.3	57.8	22	
10	57.6	57.9	22	
12	57.7	58.1	22	
14	57.0	57.8	22	-11.9
16	57.1	57.8	22	
18	58.2	59.1	23	
20	56.4	57.1	20	
22	54.7	55.8	18	
24	54.1	55.0	17	
26	55.1	55.8	18	
28	53.1	53.9	15	
30.3	53.1	53.8	15	-12.0
32	52.1	53.2	14	
34	52.0	54.1	14	
36	52.8	53.8	15	
38	51.5	52.3	13	
40	52.0	53.1	14	
42	53.2	54.5	16	
44	51.2	52.5	13	-12.1
46	49.8	51.0	10	
48	50.5	51.8	12	
50	50.7	52.0	12	
52	52.2	53.8	14	
54	52.2	53.8	14	
56	52.2	53.9	14	
58	53.8	55.1	17	
24 00	55.3	56.3	19	-12.4

Correction to local mean time is + 11m 58.5s. 90° torsion = 16.′68.
Torsion head at 0h 00m read 278° and at 24h 20m read 304°.
Observer—R. R. T.

Thursday, March 31, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
16 00	49.9	48.7	22 24	-14.6
02	49.8	48.8	24	
04	49.5	48.3	24	
06	49.1	48.0	25	
08	49.1	47.4	25	
10	48.9	47.2	26	
12	49.0	47.3	25	
14	48.2	46.9	26	-14.2
16	47.4	46.0	28	
18	46.5	45.2	29	
20	45.5	44.6	30	
22	45.3	44.6	30	
24	44.6	44.1	31	
26	44.2	43.8	32	
28	44.4	43.9	32	
30	44.9	44.2	31	-13.8
32	44.2	43.9	32	
34	44.2	44.0	32	
36	44.8	44.2	31	
38	45.1	44.5	30	
40	46.1	44.6	30	
42	44.5	43.9	32	
44	44.5	44.0	32	-13.3
46	44.5	43.9	32	
48	44.4	44.0	32	
50	44.6	44.1	31	
52	44.8	44.2	31	
54	45.1	44.7	30	
56	45.2	44.3	31	
58	45.4	44.8	30	
17 00	45.8	44.9	30	-13.2
02	45.8	44.9	30	
04	45.9	45.1	29	
06	45.4	44.8	30	
08	45.6	44.8	30	
10	45.2	44.6	30	
12	45.0	44.3	31	
14	46.1	45.2	20	-13.0
16	46.9	45.9	28	
18	47.1	46.1	28	
20.4	47.3	46.2	28	
22	47.9	46.9	26	
24	48.4	47.1	26	
26	49.2	48.2	24	
28	49.7	48.8	24	
30	49.3	48.2	24	-12.9
32	48.3	47.2	26	
34	48.7	47.2	26	
36	48.2	47.1	26	
38	47.9	46.8	27	
40	47.9	46.9	26	
42	47.0	46.1	28	
44	46.3	45.3	29	-12.8
46	45.9	45.0	30	
48	45.8	44.7	30	
50	45.3	44.3	30	
52	45.0	44.8	30	
54	45.6	44.5	30	
56	45.3	44.2	31	
58	45.3	44.2	31	
18 00	45.8	45.0	22 30	-12.6
02	45.8	44.9	30	
04	45.9	45.2	29	
06	45.5	44.9	30	
08	45.9	45.1	29	
10	45.9	45.2	29	
12	46.2	45.3	29	
14	46.4	45.7	29	-12.4
16	46.8	46.0	28	
18	47.2	46.4	27	
20	47.9	46.9	26	
22	49.0	47.9	25	
24	48.8	47.3	26	
26	48.4	47.2	26	
28	48.0	46.9	26	
30	47.8	46.7	27	-12.2
32	47.1	46.2	28	
34	45.9	45.1	29	
36	44.0	43.0	33	
38	44.2	43.2	32	
40	43.2	42.4	34	
42	43.3	42.7	33	
44	44.9	44.2	31	-12.1
46	43.2	42.9	33	
48	43.6	43.2	33	
50	44.5	44.0	32	
52	45.0	44.6	30	
54	45.9	45.2	29	
56	46.1	45.3	29	
58	46.2	45.7	29	
19 00	46.7	46.0	28	-12.0
02	46.8	46.2	28	
04	46.8	46.0	28	
06.4	46.7	45.8	28	
08	46.2	45.7	29	
10	46.2	45.9	29	
12	46.6	46.1	28	
14	46.2	46.0	28	-12.0
16	46.1	46.0	29	
18	46.0	45.8	29	
20	45.9	45.6	29	
22	45.5	45.1	30	
24	45.9	45.2	29	
26	45.9	45.6	29	
28	44.9	44.2	31	
30	45.2	44.8	30	-12.0
32	45.1	44.7	30	
34	45.2	44.1	31	
36	45.2	44.2	31	
38	45.8	44.9	30	
40	45.8	45.2	29	
42	45.7	45.2	30	
44	45.0	44.6	30	-11.9
46	44.8	44.1	31	
48	44.9	44.3	31	
50	45.7	44.9	30	
52	46.2	45.7	29	
54	46.3	45.9	28	
56	46.2	45.9	29	
58	46.8	46.1	28	
20 00	46.4	45.2	29	-11.7

Correction to local mean time is + 43.5s.
Torsion head at 15h 30m read 303° and at 20h 15m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, April 1, 1904 — Magnet scale erect									Sunday, April 3, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	42.9	43.2	21 36	-6.3	22 00	48.3	64.4	22 25	-4.3	0 00*	57.8	51.7	22 16	-8.9	2 00	17.9	9.8	23 32	-5.8
02	34.8	35.9	24		02	29.1	47.2	21 57		02	47.9	44.8	29		02	20.8	12.1	28	
04	26.9	28.8	12		04	40.4	52.9	22 10		04	47.7	43.1	31		04	28.9	21.0	14	
06	32.0*b*		18		06	24.6	41.3	21 49		06	44.1	39.3	36		06	34.8	27.0	05	
08	26.7	28.2	11		08	13.2	27.1	28		08	31.9	23.2	22 59		08	35.8	28.1	23 03	
10	33.0	33.4	21 20		10	8.9	21.3	21		10*	43.0*a*		24 14		10	37.5	30.6	00	
12*	42.6	77.9	22 26		12	7.3	19.6	18		12*	60.6	48.8	22 58		12	37.1	29.1	01	
14*	8.7	52.8	22 10	-6.0	14	8.0	19.3	21 18	-4.2	14	73.0	57.0	42	-8.6	14	36.9	29.7	23 01	-5.4
17*5	32.7	56.9	23 40		16	42.9	59.0	22 17		16*	30.7	18.2	23		16	38.9	31.7	22 58	
18	25.1	64.5	23 40		18.4	43.5	58.4	17		18	22.2	11.0	35		18	41.1	34.8	54	
20*4	69.1*a*		21 45		20	43.3	57.3	16		20	22.9	11.3	34		20	40.9	35.8	53	
23*	46.2	57.3	22 21		22	42.1	56.0	14		22*	48.1	32.9	41		22	38.2	32.8	22 57	
25*	10.7	69.6	22 58		24	44.0	56.9	16		24	45.9	31.9	22 43		24	35.1	28.3	23 03	
27*	15.6	49.8	19 51		26	44.1	55.3	15		26	27.9	16.9	23 09		26	33.6	28.2	05	
29*7	16.2	22.2	23 21	-5.7	28	41.4	52.9	11		28*	54.7	48.7	48		28	33.9	29.2	23 04	
31*8	12.8	65.0	22 13		30	39.1	49.4	06	-4.1	30*	49.3	25.3	23 56	-7.7	30	37.2	32.4	22 58	-5.3
32	Lost				32	38.2	48.8	05		32*	71.0	54.7	24 29		32	34.9	30.8	23 02	
34*	24.6	63.2	21 37		34	38.9	48.9	06		34	52.8	35.9	58		34	36.2	32.1	22 60	
36	31.3	66.1	21 45		36	39.1	48.4	05		36	65.0*a*		26		36	37.2	32.7	58	
38*2	28.1	77.3	22 58		38	40.0	48.7	06		38*	25.0*b*		24 05		38	39.8	35.9	54	
41*6	18.9	44.8	21 38		40	39.2	47.3	05		40*	68.2	31.9	25 18		40	37.8	34.0	57	
42	30.1	49.9	50		42	40.1	47.6	06		43*	60.5	46.1	22 33		42	40.0	36.4	53	
44	11.9	32.8	21 23	-5.3	44	39.7	46.8	05	-4.0	44.5	59.2	39.6	39	-7.0	44	40.9	37.2	52	-5.3
46*4	20.7	56.0	22 54		46	40.2	47.5	06		46	50.0	35.1	22 50		46	36.1	33.1	22 59	
48*	42.9	72.6	23 55		48	44.3	50.9	12		48	30.9	15.1	23 20		48	34.3	31.6	23 02	
50.3	51.3	70.1	24 00		50	44.8	50.9	12		50	24.3	6.0	33		50	36.8	33.7	22 58	
52*7	40.1	64.5	22 27		52	43.3	49.2	09		52*	40.4	23.0	56		52	35.3	33.0	23 00	
54	11.2	30.2	21 37		54	42.8	50.0	10		54	47.2	38.0	39		54	36.1	34.2	22 58	
56	43.6	71.9	22 35		56	41.9	48.1	08		56	70.1	58.1	05		56	34.8	32.2	23 01	
58	16.9	49.8	21 57		58	42.3	48.2	08		58	69.1	55.0	08		58	32.8	30.2	04	
21 00*	28.1	61.1	23 11	-5.0	23 00	42.8	48.5	08	-4.0	1 00	50.8	41.3	33	-6.7	3 00	32.0	30.1	04	-5.1
02.1	52.9	78.1	23 44		02	39.3	45.2	03		02	59.2	51.7	23 19		02	25.8	23.2	15	
03*8	44.6	73.8	22 12		04	42.1	47.0	07		04	74.8	67.2	22 54		04	23.8	21.6	18	
06	51.1	73.1	22 16		06	37.6	42.8	22 00		06	74.7	64.9	56		06	25.9	24.2	14	
08	32.7	60.2	21 52		08	36.7	39.7	21 57		08	74.6	65.2	56		08	23.2	21.8	18	
10	27.0	49.0	21 38		10	39.5	42.9	22 02		10*	38.2	22.7	44		10	21.9	20.8	20	
12*	8.6	40.7	22 35		12	44.7	49.1	10		12.5	33.2	20.1	22 50		12	20.9	19.2	22	
14	18.0	46.7	47	-4.9	14	55.9	57.7	26	-4.0	14	20.6	8.2	23 00	-6.3	14	23.2	21.6	18	-5.0
16	10.8	42.1	37		16	73.7	76.9	22 55		16	29.7	14.2	22 58		16	25.0	23.5	15	
18*	19.2	58.8	28		18*	58.1	61.9	24 08		18	42.5	27.0	38		18	24.8	23.2	16	
20	17.1	52.9	22		20.3	61.3	70.2	24 17		20	33.4	19.0	22 51		20	24.9	23.3	15	
22	9.6	47.2	22 11		22*	45.5	65.4	22 58		22	24.4	10.9	23 04		22	24.2	22.8	16	
24*	19.1	54.2	21 54		24	47.0	71.0	23 03		24	34.7	21.6	22 48		24	24.0	22.7	17	
26	22.1	56.8	59		26	56.3	74.8	23 14		26	35.9	22.7	46		26	27.0	25.8	12	
28	19.6	51.7	53		28*	63.0	75.3	24 09		28	49.3	35.9	25		28	29.1	28.0	08	
30	16.2	48.8	48	-4.7	31*	50.5	67.1	54	-3.8	30.3	50.9	40.0	21	-6.0	30	29.8	28.5	08	-5.0
32	16.7	47.4	47		32	34.3	54.1	31		32	44.1	34.6	30		32	29.8	29.2	07	
34	24.2	53.3	58		34	29.1	43.5	24 18		34	35.8	27.1	22 43		34	29.9	29.2	07	
36	23.2	49.9	21 54		36	7.4	18.2	23 41		36	12.9	7.2	23 16		36	31.0	28.6	06	
38	28.0	52.9	22 00		38*	24.8	38.2	23 09		38*3	61.4	51.3	23 11		38	32.8	30.8	03	
40	32.6	56.7	07		40*2	15.2	37.5	22 29		40*	52.9	47.8	22 34		40	32.0	30.1	04	
42	33.1	55.9	07		42	15.8	37.9	30	-3.7	42	57.4	46.9	31		42	30.1	28.1	08	
44	31.8	52.0	03	-4.5	44*	46.7	64.4	22 06		44	58.7	49.2	29	-5.9	44	27.1	25.4	12	-4.9
46	39.8	59.1	14		46*	49.1	66.5	22 48		46	45.3	34.9	22 50		46	27.7	26.1	11	
48	42.9	61.8	19		48*	62.9	73.8	23 45		48	40.2	26.9	23 01		48	28.9	27.0	09	
50	44.2	62.1	20		50	47.9	67.1	23 28		50	23.2	14.1	24		50	27.9	25.7	11	
52	48.1	66.7	22 27		52	22.2	35.8	22 44		52	17.7	8.5	33		52	28.0	25.9	11	
54	26.9	45.6	21 54		54	70.1	78.2	23 54		54	25.0	15.8	21		54	26.0	23.9	14	
56	21.2	41.8	21 46		56*	25.6	39.4	24 07		56	26.6	18.1	18		56	25.2	23.2	15	
58	33.2	51.7	22 04		58*	49.2	61.3	25 18		58	17.2	8.1	33		58	24.8	23.0	16	
					24 00	43.8	47.2	03	-3.6										

Correction to local mean time is — 7s.
Torsion head at 19h 30m read 332° and at 24h 00m read the same.
Observer—R. R. T.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, April 3, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00*6	48.1	49.6	23 38	-4.4
02	48.9	50.4	40	
04	47.8	50.8	39	
06	49.2	51.8	41	
08	48.2	51.1	40	
10	47.6	50.6	39	
12	50.3	53.9	44	
14	51.8	54.9	46	-4.3
16	50.8	54.2	44	
18	55.2	58.3	51	
20	56.2	59.2	52	
22	59.1	61.7	57	
24	61.0	62.8	23 59	
26	69.7	70.8	24 12	
28	73.6	75.2	24 19	
30	41.8	46.9	23 31	-4.2
32	49.2	54.2	43	
34	47.3	52.8	40	
36	38.6	46.4	29	
38	38.9	44.3	27	
40	38.7	44.8	27	
42	38.3	46.2	28	
44	38.2	44.6	27	-4.0
46	31.1	39.2	17	
48	35.9	44.8	25	
50	37.5	46.9	28	
52	35.6	44.1	24	
54	36.7	42.8	24	
56	42.8	50.5	35	
58	38.7	46.8	29	
5 00	37.2	45.7	27	-4.0
02	46.2	52.9	39	
04	51.7	59.8	23 49	
06	59.4	67.1	24 01	
08	62.3	69.2	05	
10	64.0	68.9	06	
12	70.1	75.8	16	
14	66.1	72.1	24 10	-4.0
16	53.1	60.7	23 51	
18	43.1	50.9	36	
20	37.7	44.3	26	
22	31.8	37.8	16	
24.6	27.2	32.7	09	
26	35.4	40.8	22	
28	30.3	36.2	14	
30	25.1	31.8	06	-3.8
32	29.0	33.2	11	
34	35.1	38.4	19	
36	48.1	51.2	40	
38	54.3	58.8	23 50	
40	59.7	66.0	24 00	
42	63.6	67.2	04	
44	68.7	72.5	24 13	-3.7
46*	49.2	49.7	25 14	
48*	23.1	24.0	23 22	
50.6	41.1	48.1	23 55	
53	45.4	53.2	24 02	
54	50.0	55.3	07	
56	46.2	50.9	01	
58	47.8	54.1	04	
6 00	49.0	55.8	24 07	-3.3
02	53.2	61.2	14	
04	48.5	55.9	07	
06	60.4	67.2	25	
08	63.6	74.9	33	
10	62.2	69.9	28	
12	57.3	64.1	20	
14	57.8	65.9	24 22	-3.3
16	37.9	45.2	23 50	
18	28.1	36.0	35	
20	22.9	30.5	26	
22	27.2	32.7	32	
24	37.2	41.0	46	
26	29.0	33.9	34	
28	28.9	33.3	34	
30	33.1	38.0	40	-3.3
32	27.0	30.8	30	
34	20.3	24.3	20	
36.7	22.0	25.9	22	
38	21.3	25.1	21	
40	27.9	33.3	33	
42	35.2	37.9	42	
44	16.3	19.6	13	-3.3
46	22.7	23.8	21	
48	19.1	21.8	23 17	
50*	27.7	36.2	22 53	
52	39.1	43.8	23 08	
54	47.2	53.3	23 22	
56	24.2	27.8	22 43	
58	17.8	21.8	22 34	
7 00	45.8	47.3	23 16	-3.2
02	43.3	48.0	14	
04	49.0	53.0	23	
06	55.6	57.9	32	
08	58.7	62.1	37	
10	58.2	61.0	36	
12	58.6	60.9	36	
14	53.5	57.1	30	-3.2
16	49.8	52.8	23	
18	57.6	63.9	38	
20	52.8	52.8	26	
22	40.3	44.1	09	
24	54.6	59.8	32	
26	47.1	48.9	18	
28	53.9	55.2	28	
30	64.1	67.2	46	-3.1
32	55.3	62.2	35	
34	42.2	46.9	13	
36	59.3	62.4	38	
38	62.9	67.8	45	
40	36.0	37.2	00	
42	38.1	44.5	07	
44	44.7	50.0	17	-3.0
46	67.2	72.1	52	
48	58.3	59.9	35	
50	56.3	59.8	34	
52	50.2	53.7	24	
54	48.4	51.8	21	
56	49.2	58.2	27	
58	47.2	52.9	21	
8 00	49.8	55.8	26	-3.0

Correction to local mean time is + 64s.
Torsion head at 0h 00m read 352° and at 9h 00m read the same.
Observer—R. R. T.

Monday, April 4, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	56.0	53.7	23 43	-8.7
02	61.2	55.3	38	
04	50.2	47.1	53	
06	52.3	48.1	51	
08	45.9	43.2	59	
10	54.1	50.6	47	
12.4	63.8	60.3	32	
14	61.9	57.2	36	-8.0
16	53.2	49.9	48	
18	66.7	62.0	28	
20	63.1	59.9	33	
22	65.2	59.2	32	
24	68.4	61.0	28	
26*	53.9	46.1	01	
28	45.4	38.9	13	
30	44.2	36.9	16	-7.2
32	43.7	37.5	15	
34	51.8	45.1	03	
36	45.9	39.3	12	
38	44.9	39.4	13	
40	36.7	33.1	24	
42	42.3	37.8	16	
44	38.3	35.6	21	-6.7
46	33.2	28.3	31	
48	34.3	30.2	28	
50	33.2	29.8	30	
52	31.8	27.3	33	
54	36.3	33.3	24	
56	41.2	35.5	19	
58	34.3	31.8	27	
9 00	48.1	44.1	23 07	-6.0
02	55.8	53.1	22 54	
04	62.6	59.8	43	
06	52.2	50.0	59	
08	56.3	53.1	53	
10	58.8	55.3	22 50	
13	49.3	48.2	23 03	
14	54.2	50.0	22 57	-5.8
16	62.9	60.9	42	
18	67.0	64.3	36	
20	62.3	61.9	42	
22	53.3	50.2	58	
24.6	57.9	54.4	51	
26	53.0	49.7	22 58	
28	51.8	48.7	23 00	
30	48.3	44.9	06	-5.2
32	49.7	46.8	23 03	
34	52.2	50.0	22 59	
36	49.6	46.5	23 04	
38	43.0	40.9	13	
40	42.1	40.2	14	
42	43.4	41.0	13	
44	42.2	39.9	15	-5.0
46	40.9	39.4	16	
48	38.9	37.3	19	
50	39.3	38.0	18	
52	39.9	38.0	18	
54	37.6	36.1	21	
56	37.6	36.1	21	
58	35.0	34.3	25	-4.4
10 00	35.0	34.1	23 25	-4.4
02	38.2	35.8	21	
04	45.1	43.1	10	
06	41.7	41.0	14	
08	46.1	44.3	08	
10	47.1	43.9	23 08	
12	52.8	49.9	22 58	
14	52.0	47.8	23 01	-4.0
16	52.5	49.5	22 59	
18	57.4	53.0	52	
20	55.1	51.7	55	
22	57.2	55.0	51	
24	56.3	53.8	53	
26	57.7	55.6	50	
28	54.0	52.9	55	
30	51.2	50.7	59	-3.9
32	51.8	50.6	22 59	
34	49.1	48.3	23 03	
36	53.8	52.8	22 55	
38	59.1	58.1	47	
40	63.7	62.0	40	
42	67.7	66.7	34	
44	67.3	65.2	35	-3.9
46	71.0	68.4	30	
48	69.8	68.1	31	
50	69.9	69.0	30	
52	71.0	69.8	29	
54	73.0	72.3	25	
56	69.8	69.3	30	
58	70.8a		28	
11 00*	40.9	31.1	14	-3.7
02	38.8	29.3	17	
04	35.3	27.9	21	
06	36.4	28.3	20	
08	36.2	28.1	20	
10	38.8	28.1	18	
12	35.1	25.4	23	
14	32.9	21.7	27	-3.4
16	29.9	20.0	31	
18	28.4	17.7	34	
20	22.0	12.8	43	
22	20.9	12.0	45	
24	22.2	13.1	43	
26	21.7	13.8	42	
28	18.9	11.3	46	
30	23.2	15.9	40	-3.4
32	19.8	13.3	44	
34	16.3	12.3	48	
36	23.4	20.0	36	
38	23.3	20.9	36	
40	23.4	21.1	35	
42	26.9	24.6	30	
44	24.1	22.8	34	-3.3
46	20.4	18.9	40	
48	24.9	23.9	32	
50	26.2	25.8	30	
52	23.8	23.6	33	
54	22.8	20.7	36	
56	22.1	19.3	38	
58	24.3	19.1	36	
12 00	25.7	21.1	34	-3.1

Correction to local mean time is — 1m 20.5s. 90° torsion = 16.′00.
Torsion head at 8h 35m read 355° and at 12h 25m read 360°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, April 5, 1904 — Magnet scale erect										Wednesday, April 6, 1904 — Magnet scale inverted									
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	51.0	53.9	22 40	−5.1	14 00	47.2	49.3	22 35	−4.0	0 00*	57.5	56.7	22 20		2 00	31.0	30.9	23 01	−10.4
02	47.9	50.9	35		02	47.3	49.9	35		02	59.9	57.0	18		02	30.7	29.8	02	
04	47.1	49.8	33		04	48.0	50.0	36		04	59.0	56.0	20		04	31.1	30.0	02	
06	47.8	50.8	35		06	49.3	51.4	38		06	58.5	56.9	19		06	31.2	30.1	02	
08	48.6	51.7	36		08	50.8	52.3	40		08	58.9	54.9	21		08	31.0	30.0	23 02	
10	48.3	51.1	35		10	50.7	52.9	40		10	58.4	54.0	22		10	32.5	32.0	22 59	
12	47.2	49.7	33		12	48.6	50.1	36		12	55.0	50.0	27		12	32.0	32.0	23 00	
14	44.0	47.7	30	−5.0	14	48.0	49.8	36	−4.0	14	49.4	45.3	36	−11.9	14	30.3	30.3	02	−10.1
16	43.8	46.3	28		16	47.8	49.5	35		16	46.3	51.0	34		16	30.5	30.0	02	
18	46.1	48.7	32		18	47.0	48.9	34		18	50.2	43.8	36		18	32.2	30.8	23 00	
20	49.5	52.1	37		20	48.1	49.6	35		20	49.4	43.5	37		20	33.2	32.0	22 59	
22	50.3	52.8	38		22	48.1	49.3	35		22	53.0	46.3	32		22	33.0	31.1	23 00	
24	48.0	49.2	34		24	48.1	49.2	35		24	50.0	43.3	37		24	33.5	32.0	22 58	
26	44.2	46.9	29		26	49.1	50.1	37		26	51.3	45.0	34		26	34.0	32.8	58	
28	50.9	53.3	40		28	48.9	50.0	36		28	Lost				28	34.0	33.0	57	
30	48.3	51.2	36	−4.7	30	47.2	48.8	34	−3.9	30	48.2	47.0	35	−10.8	30	33.1	32.8	22 58	
32	45.3	48.1	31		32	46.5	47.2	32		32	49.8	46.8	34		32	30.4	30.1	23 02	
34	49.1	51.3	36		34	46.7	47.7	33		34	49.4	47.0	34		34	28.0	27.0	07	
36	53.2	56.0	43		36	46.8	47.7	33		36	45.8	44.7	39		36	27.0	26.8	08	
38	50.4	53.3	39		38	43.9	45.1	29		38	45.4	43.4	40		38	25.8	25.0	10	
40	50.0	52.3	38		40	44.9	45.8	30		40	45.8	45.0	39		40	25.0	24.0	11	
42	48.8	51.2	36		42	45.4	46.4	31		42	44.1	43.0	42		42	25.2	24.9	11	
44	49.1	51.4	37	−4.4	44	44.2	45.0	29	−3.9	44	43.8	42.2	42	−10.9	44	29.2	28.8	04	−10.0
46	51.1	53.0	40		46	43.2	44.7	28		46	46.9	44.0	39		46	31.2	31.1	01	
48	49.3	51.3	37		48	42.5	43.6	27		48	49.2	46.1	35		48	31.8	31.0	01	
50	49.7	50.7	36		50	42.1	43.1	26		50	48.2	46.0	36		50	31.0	30.0	02	
52	48.0	49.1	34		52	41.2	42.4	25		52	46.3	44.0	39		52	32.2	31.0	00	
54	49.2	50.3	36		54	40.2	42.2	24		54	46.5	44.6	38		54	32.5	31.0	23 00	
56	48.1	49.3	34		56	40.9	41.4	24		56	45.2	43.0	41		56	33.2	32.1	22 59	
58	44.8	46.8	30		58	40.5	42.2	24		58	44.0	42.0	42		58	31.0	30.1	23 02	
13 00	45.0	46.3	30	−4.2	15 00	41.9	43.1	26	−3.9	1 00	43.0	40.5	44	−10.9	3 00	29.2	28.5	05	−10.0
02	46.0	47.8	32		02	42.1	43.4	26		02	43.0	40.7	44		02	27.1	26.9	07	
04	46.1	47.1	31		04	42.9	43.9	28		04	37.8*b*		50		04	28.0	27.1	07	
06	47.2	48.0	33		06	44.0	45.8	30		06	39.0	37.0	50		06	26.9	26.0	08	
08	43.7	45.0	28		08	45.1	47.2	32		08	36.9	36.4	52		08	25.0	24.8	11	
10	41.1	42.2	23		10	44.6	46.6	31		10	36.0	34.1	22 55		10	24.0	23.7	12	
12	45.1	45.9	30		12	45.8	47.5	32		12	30.2	28.1	23 04		12	24.0*a*		12	
14	45.1	45.9	30	−4.0	14	45.9	47.7	33	−3.9	14	28.8	26.2	07	−10.8	14	26.0	25.9	09	−10.0
16	42.2	43.2	25		16	44.3	45.3	30		16	27.0	24.0	11		16	26.9	26.5	08	
18	43.9	45.1	28		18	43.2	44.8	29		18	24.1	19.0	16		18	26.0	25.8	09	
20	45.1	46.7	30		20	42.5	43.7	27		20	14.5*b*		27		20	25.0	24.8	11	
22	45.5	47.3	31		22	41.9	43.1	26		22	19.2	19.0	20		22	25.0	24.2	11	
24	46.8	48.2	33		24	43.0	44.9	28		24	28.9	27.8	05		24	24.5	23.7	12	
26	46.8	48.8	33		26	42.7	44.0	28		26	30.9	29.9	23 02		26	25.9	24.8	10	
28	46.9	48.2	33		28	42.8	44.2	28		28	34.7	34.5	22 56		28	25.4	25.0	10	
30	47.0	48.4	33	−4.0	30	43.1	44.2	28	−3.9	30	38.1	37.6	50	−10.7	30	25.0	24.1	11	−10.0
32	46.0	47.3	31		32	44.8	45.9	31		32	32.9	31.0	60		32	24.8	24.2	11	
34	46.8	47.6	32		34	44.0	45.1	30		34	36.0	34.1	55		34	24.8	24.2	11	
36	47.4	47.9	32		36	45.1	46.0	31		36	33.0	31.7	59		36	26.7	26.2	08	
38	46.1	46.9	31		38	47.1	47.9	34		38	34.0	32.3	22 58		38	27.8	27.0	07	
40	46.8	47.3	31		40	47.7	48.2	35		40	31.9	30.2	23 01		40	28.0	26.8	07	
42	47.0	47.9	33		42	48.2	49.0	36		42	35.0	33.0	22 56		42	27.0	25.6	09	
44	48.9	49.3	35	−4.0	44	49.1	49.6	37	−3.9	44	34.6	32.7	57	−10.6	44	27.0	25.5	09	−10.0
46	47.2	48.1	33		46	50.8	51.1	40		46	33.3	32.0	59		46	30.0	27.9	04	
48	48.2	49.2	35		48	50.0	51.0	39		48	35.9	35.8	54		48	32.0	29.0	02	
50	49.8	51.1	38		50	49.2	50.5	38		50	37.3	35.0	53		50	29.5	27.2	05	
52	50.3	51.9	39		52	49.1	50.1	38		52	33.9	32.5	22 58		52	28.0	26.0	08	
54	49.3	51.0	37		54	48.2	49.3	36		54	29.6	28.5	23 04		54	27.9	25.6	08	
56	48.7	50.3	36		56	47.3	48.5	35		56	30.9	29.8	02		56	30.0	28.2	23 04	
58	48.2	50.2	36		58	47.9	49.0	36		58	28.7	27.9	05		58	38.0	34.5	22 53	
					16 00	47.7	48.7	36	−3.9										

Correction to local mean time is — 1m 31.5s. 90° torsion = 13.′78. Observer—J. V.
Torsion head at 11h 20m read 352° and at 16h 20m read 331°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 6, 1904					Magnet scale inverted					Wednesday, April 6, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	38.0	35.5	22 52	-10.0	6 00	35.9	24.8	24 31	-9.9	8 00	51.1	46.1	23 02	-10.0	10 00	59.6	58.8	22 45	-9.2
02	33.2	32.8	22 58		02	40.8	30.9	22		02	51.0	47.6	23 01		02	60.3	59.7	44	
04	24.5	23.8	23 12		04	54.0	44.2	02		04	54.0	49.8	22 56		04	61.0	59.9	43	
06.4	25.0*b*		11		06	50.2	42.1	24 06		06	58.0	54.6	50		06	61.8	61.0	42	
08	24.0	23.1	13		08	55.0	46.0	23 59		08	55.4	52.3	54		08	61.6	60.7	42	
10	21.0	20.0	18		10	55.2	49.0	57		10	56.0	52.5	53		10	60.5	59.9	44	
12	19.8*a*		19		12	58.0	52.0	23 52		12	58.0	55.3	49		12	60.3	59.7	44	
14	24.2	23.8	12	-10.0	14	52.1	46.9	24 01	-9.9	14	56.5	53.3	52	-9.8	14	60.0	59.4	44	-9.2
16	27.1	26.0	08		16	52.8	46.1	01		16	58.2	55.4	49		16	59.3	58.5	46	
18	27.0	26.0	08		18	51.0	46.0	24 02		18	59.3	56.7	47		18	59.3	58.5	45	
20	21.1	21.0	17		20	61.1	54.2	23 48		20	59.4	57.2	46		20	61.3	61.0	42	
22	18.0	17.0	22		22	66.1	61.2	39		22	61.9	59.9	42		22	62.4	61.6	41	
24	16.9	16.0	24		24	67.1	60.1	39		24	62.2	59.6	42		24	Lost			
26	23.1	22.0	14		26	68.1	62.0	37		26	61.6	59.0	43		26	63.5	63.0	39	
28	26.1	25.8	09		28	68.1	63.0	36		28	59.0	58.2	46		28	63.6	62.3	39	
30	24.5	23.1	12	-10.0	30	65.0	61.0	40	-10.0	30	59.0	57.8	46	-9.6	30	62.9	61.6	40	-9.1
32	20.0	18.7	20		32	63.0	59.5	42		32	58.5	56.3	48		32	61.9	60.7	42	
34	17.0	15.5	24		34	70.1	66.1	32		34	57.0	54.8	50		34	61.6	61.1	42	
36	14.7	13.0	28		36	70.0	66.7	31		36	57.3	55.6	50		36	61.8	61.1	42	
38	15.0	13.2	28		38	65.9	63.8	37		38	60.6	58.7	44		38	62.6	62.0	40	
40	18.0	11.8	26		40	65.8	63.2	37		40	57.6	55.3	50		40	62.3	61.6	41	
42	12.0	11.6	31		42	73.7	70.0	26		42	59.0	56.9	47		42	61.8	61.2	41	
44	7.2	6.0	40	-9.9	44	77.8	75.0	19		44.3	59.4	57.6	46	-9.5	44	61.2	60.6	42	-9.0
46	10.1	9.0	35		46*	46.2	35.1	14		46	57.0	55.1	50		46	62.0	61.3	41	
48.4	14.2	13.2	28		48	47.1	39.0	10		48	56.3	54.5	51		48	62.4	61.9	40	
50.5	20.1	18.9	19		50	49.0	41.8	07		50	58.1	56.4	48		50	62.2	61.5	41	
52	21.2	20.0	18		52	48.0	40.2	09		52	57.3	55.6	50		52	63.3	62.8	39	
54	21.0	19.9	18		54	47.0	40.9	09		54	57.5	56.2	49		54	54.6	53.6	53	
56	20.6	20.2	18		56	43.2	37.8	14		56	56.2	55.2	51		56	64.3	63.3	38	
58	19.6	19.6	19		58	32.1	26.2	32		58	56.0	54.8	51		58	64.0	63.2	38	
5 00	15.9*b*		25	-10.0	7 00	26.0	22.0	40	-10.0	9 00	56.2	55.7	50	-9.5	11 00	63.3	62.3	39	-9.0
02	14.0	12.5	29		02	31.0	28.7	31		02	57.8	56.3	48		02	62.6	61.8	40	
04	13.1	12.8	30		04	47.0	41.0	09		04	59.0	57.3	47		04	63.0	62.7	29	
06	12.6	12.1	30		06	44.8	38.0	13		06	57.4	55.2	50		06	60.7	60.5	43	
08	13.2	12.2	30		08	44.0	38.0	14		08	56.6	54.6	51		08	61.0	60.5	43	
10	10.6	9.8	34		10	38.9	31.9	22		10	58.6	56.8	47		10	61.0	60.1	43	
12	8.0	7.0	38		12	37.0	30.0	23 25		12	59.9	57.2	46		12	58.6	57.8	47	
14	10.0	9.0	35	-10.0	14	54.9	47.9	22 57	-10.0	14	55.8	54.3	52	-9.5	14	59.0	58.3	46	-9.0
16	8.0	9.0	36		16	42.0	34.0	23 18		16	56.8	55.1	50		16	58.9	58.6	46	
18	8.0	6.7	38		18	39.0	30.0	24		18	57.4	56.6	48		18	60.9	60.9	42	
20*	35.1	26.8	38		20	45.1	37.4	13		20	58.3	57.1	47		20	63.8*a*		38	
22	35.0	26.1	39		22	49.1	42.8	06		22	59.6	58.6	45		22	64.2	64.0	37	
24	36.2	27.2	37		24	52.0	46.1	23 01		24	58.8	57.8	46		24	63.3	63.1	39	
26	38.1	31.0	32		26	58.0	51.9	22 52		26	58.2	57.2	47		26	63.2	62.8	39	
28	37.9	30.2	33		28	57.1	51.1	22 53		28	60.5	59.5	44		28	63.3	62.9	39	
30	33.9	27.0	39	-9.9	30	52.0	46.0	23 01	-10.0	30	60.6	59.3	44	-9.4	30	65.6	65.1	36	-8.9
32	30.0	22.0	46		32	52.1	46.5	23 01		32	60.1	58.6	45		32	65.9	65.0	35	
34	25.9	20.0	50		34	60.0	53.5	22 49		34	59.9	58.8	45		34	65.3	64.6	36	
36	26.0	20.2	50		36	62.0	58.0	44		36	60.0	59.9	44		36	67.3	66.2	33	
38	24.3	19.2	52		38	63.9	59.9	41		38	59.2	58.4	46		38	66.8	65.8	34	
40	28.0	22.5	47		40	65.0	61.5	39		40	58.6	57.8	47		40	67.0	65.5	34	
42	25.2	30.2	43		42	65.5	59.9	40		42	58.7	58.3	46		42	63.0	62.1	40	
44	28.0	23.4	46	-9.9	44	66.5	61.8	37	-10.1	44	58.9	58.3	46	-9.3	44	64.6	63.6	37	-8.8
46	22.0	18.0	55		46	64.0	59.6	41		46	59.3	58.6	46		46	64.3*a*		37	
48.5	22.0	16.0	57		48	62.8	58.0	43		48	59.0	58.3	46		48	68.6*a*		30	
50	21.9	19.1	54		50	57.3	52.8	52		50	59.7	59.3	45		50	69.1	68.6	30	
52	18.2	16.8	23 59		52	57.0	53.0	52		52	60.6	60.3	43		52	68.2	67.8	31	
54*	39.0	34.9	24 21		54	55.0	50.2	22 55		54	60.3	60.0	43		54	70.6	70.2	28	
56	33.0	25.5	33		56	51.8	47.2	23 00		56	60.6	59.5	44		56	71.0	70.6	27	
58	30.1	22.2	38		58	49.9	46.0	03		58	59.6	58.5	45		58	69.6	69.0	29	

Observers—J. V. and W. J. P., who alternated from 7h 56m to 8h 02m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 6, 1904					Magnet scale inverted					Wednesday, April 6, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	68.0	67.4	22 32	-8.6	14 00	63.1	58.6	22 10	-8.0	16 00	20.6	19.3	22 32	-7.8	18 00	26.1	25.1	22 23	-7.2
02	67.3	66.5	33		02	66.0	61.6	06		02	25.9	25.3	23		02	25.8	24.4	23	
04	70.0	69.6	28		04	67.6	63.3	03		04	26.4	25.1	22		04	25.3	24.1	24	
06	70.6	70.2	27		06	63.1	59.9	09		06	25.3	23.5	24		06	24.7	23.1	25	
08	70.0	69.7	28		08	60.1	56.9	14		08	24.7	22.9	25		08	23.8	22.1	27	
10	70.0	69.5	29		10	56.0	52.3	21		10	24.3	23.6	25		10	22.1	20.8	29	
12	68.3	68.1	31		12	55.1	51.8	22		12	26.9	24.3	23		12	21.9	20.6	30	
14	69.9	69.5	29	-8.4	14	61.3	59.1	11	-7.9	14	36.7	33.8	08	-7.4	14	21.1	19.9	31	-7.1
16.3	71.8	71.5	26		16	65.3	61.6	06		16	36.2	33.3	08		16	20.8	19.3	31	
18	69.9	69.3	29		18	66.1	62.2	22 05		18	28.7	27.0	19		18	19.8	18.7	33	
20	69.7	69.3	29		20	73.0	70.0	21 53		20	25.0	22.8	25		20	19.3	18.3	33	
22	71.6	71.3	26		22*	51.0	45.2	47		22	25.2	22.2	26		22	19.1	18.1	34	
24	71.4	71.2	26		24	50.0	49.3	45		24	24.1	20.8	28		24	18.8	17.9	34	
26	73.0	72.5	24		26	45.0	38.3	21 58		26	22.2	19.1	30		26	18.2	17.2	35	
28	74.8	73.6	22		28	32.2	25.3	22 18		28	24.8	21.8	26		28	18.2	17.3	35	
30	72.8	71.6	25	-8.2	30	30.7	24.7	19	-7.8	30	20.8	19.1	32	-7.3	30	18.9	18.0	34	-7.1
32	73.1	72.6	24		32	31.0	26.0	18		32	14.9	13.1	41		32	19.9	19.0	32	
34	74.1	73.7	22		34	32.5	27.3	16		34	18.2	16.8	35		34	20.5	19.4	32	
36*	63.0	58.2	11		36	32.0	36.5	22 09		36	23.9	23.0	26		36	20.8	19.8	31	
38	66.6	63.0	04		38	47.3	41.3	21 53		38	24.8	23.8	25		38	21.3	20.9	30	
40	64.0	58.8	09		40	45.6	40.8	21 55		40	25.2	23.2	25		40	21.3	20.9	30	
42	55.0	48.6	24		42	38.2	33.5	22 06		42	21.3	20.1	30		42	20.8	20.0	31	
44	56.5	49.5	22	-8.1	44	38.8	35.0	05		44	22.3	21.2	29	-7.3	44	20.8	20.1	31	-7.1
46	54.3	48.3	25		46	34.6	28.4	13	-7.8	46	23.3	21.8	27		46	20.9	20.4	30	
48	55.2	49.5	24		48	24.0	19.3	29		48	22.5	22.0	28		48	20.9	20.3	30	
50	50.6	45.6	30		50	21.6	16.6	33		50	22.3	22.0	28		50	20.4	20.1	31	
52	53.9	49.3	25		52	21.2	16.2	33		52	19.0	18.7	33		52	19.9	19.5	32	
54	58.5	53.9	18		54	22.6	18.0	31		54	16.9	16.1	37		54	19.2	19.0	33	
56	60.0	56.5	14		56	21.6	17.0	32		56	17.9	17.9	35		56	18.3	18.0	34	
58	59.0	53.6	17		58	24.3	20.0	28		58	18.2	17.9	34		58	17.9	17.6	35	
13 00	60.0	56.0	15	-8.2	15 00	23.6	19.7	29	-7.5	17 00	18.2	18.0	34	-7.4	19 00	17.5	17.1	36	-7.1
02	66.1	62.1	22 05		02	22.8	19.0	30		02	17.1	16.4	37		02	17.1	17.1	36	
04	70.0	66.0	21 59		04	22.6	19.0	30		04	16.8	16.5	37		04	16.9	16.9	36	
06	71.3	67.6	21 57		06	20.7	17.0	33		06	20.9	19.9	31		06	17.0	17.0	36	
08	69.3	65.2	22 00		08	23.2	19.2	30		08	20.7	19.7	31		08	17.8	17.3	35	
10	61.3	57.4	13		10	24.7	21.3	27		10	20.1	19.1	32		10	18.6	18.1	34	
12	54.4	49.4	24		12	24.7	21.1	27		12	20.9	19.9	31		12	19.0	18.4	33	
14	49.3	44.0	32	-8.1	14	25.9	21.1	26	-7.8	14	21.2	20.1	30	-7.4	14	18.6	18.1	34	-7.1
16	56.1	51.1	22		16	27.3	23.3	23		16	21.3	20.2	30		16	19.1	18.4	33	
18	56.2	50.5	22		18	27.0	23.3	23		18	22.1	21.1	29		18	19.4	18.9	33	
20	60.3	54.8	15		20	28.1	24.6	22		20	22.9	22.1	27		20	19.9	19.2	32	
22	65.8	61.8	06		22	28.6	24.8	21		22	22.7	22.0	28		22	19.2	18.9	33	
24	66.8	63.3	04		24	24.5	21.5	27		24	22.7	22.2	28		24	18.3	17.9	34	
26	66.8	62.8	04		26	24.6	23.2	25		26	23.1	22.1	27		26	18.2	18.0	34	
28	64.9	61.2	07		28	21.8	19.0	31		28	23.8	22.2	27		28	18.5	18.1	34	
30	62.6	58.9	10	-8.1	30	19.3	16.7	34	-7.7	30	23.8	22.5	26	-7.2	30	18.9	18.7	33	-7.1
32	60.3	57.1	14		32	17.8	16.0	36		32	23.2	21.8	27		32	18.9	18.6	33	
34	60.3	56.5	14		34	24.3	21.3	27		34	22.5	21.6	28		34	18.9	18.3	34	
36	60.0	56.3	14		36	25.5	23.6	24		36	21.9	21.1	29		36	18.8	18.3	34	
38	63.8	60.8	08		38	21.9	19.6	30		38	22.4	21.9	28		38	19.8	19.1	32	
40	65.5	61.7	06		40	19.3	17.8	34		40	23.3	22.4	27		40	20.1	19.6	32	
42	68.7	65.5	22 00		42	18.0	16.5	36		42	24.0	22.7	26		42	19.9	19.2	32	
44	70.9	67.5	21 57	-8.1	44	18.3	17.1	35	-7.8	44	23.8	22.3	27	-7.2	44	20.7	20.0	31	-7.1
46	68.1	65.0	22 01		46	19.5	17.6	34		46	24.1	22.7	26		46	21.9	21.5	29	
48	66.0	62.1	05		48	21.6	19.8	30		48	24.9	23.8	25		48	21.6	20.9	30	
50	61.9	58.6	11		50	26.3	25.0	23		50	25.3	24.2	24		50	20.1	19.2	32	
52	59.4	55.4	16		52	26.5	25.3	22		52	25.2	24.1	24		52	18.8	17.8	34	
54	58.5	54.3	17		54	22.0	20.3	30		54	26.7	24.7	22		54	17.2	16.7	36	
56	59.9	56.3	14		46	20.8	19.2	31		56	24.9	24.0	24		56	17.0	16.1	37	
58	58.3	54.5	17		58.1	21.0	20.2	30		58	25.5	24.7	23		58	20.7	19.9	31	

Observers—W. J. P. and R. R. T., who alternated from 15h 56m to 16h 06m.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 6, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	27.0	26.7	22 21	-7.1	22 00	27.1	26.8	22 21	-7.1
02	20.9	20.2	31		02	27.2	27.0	20	
04	19.9	19.1	32		04	27.1	27.1	20	
06	19.2	18.9	33		06	26.9	26.9	21	
08	17.9	17.3	35		08	26.2	26.1	22	
10	16.9	16.2	37		10	25.9	25.5	22	
12	16.4	15.9	38		12	25.6	25.0	23	
14	16.4	15.9	38	-7.1	14	25.0	24.5	24	-7.1
16	16.3	15.9	38		16	23.9	23.3	26	
18	16.2	15.8	38		18	23.0	22.3	27	
20	16.2	15.3	38		20	22.5	21.9	28	
22	16.3	15.8	38		22	22.9	22.1	27	
24	17.0	16.1	37		24	23.2	23.0	26	
26	16.4	15.8	38		26	24.2	23.8	25	
28	15.3	14.9	39		28	25.5	25.1	23	
30	14.3	13.9	41	-7.0	30	27.1	26.3	21	-7.1
32	15.0	14.1	40		32	27.1	26.1	21	
34	16.0	15.4	38		34.2	28.0	27.0	20	
36	15.1	14.8	39		36	29.1	28.1	18	
38	14.2	13.7	41		38	29.0	28.1	18	
40	16.7	13.1	39		40	29.2	28.7	17	
42	14.2	13.7	41		42	29.9	29.1	16	
44	15.0	14.1	40	-7.0	44	29.9	29.1	16	-7.0
46	15.3	14.9	39		46	30.1	30.0	16	
48	15.8	15.1	39		48	30.1	30.0	16	
50	16.8	15.9	37		50	30.9	30.9	14	
52	16.2	15.7	38		52	31.4	30.6	14	
54	15.9	15.1	38		54	30.9	30.2	15	
56	15.9	15.2	38		56	34.9	34.7	08	
58	14.9	14.5	40		58	39.9	38.7	01	
21 00	15.7	15.2	39	-7.0	23 00	32.0	27.8	16	-7.0
02	16.9	16.0	37		02	13.0	9.7	45	
04	16.9	16.0	37		04*	42.1	36.2	53	
06	16.3	15.7	38		06	44.3	41.2	22 47	
08	15.9	15.1	38		08*	65.7	52.2	23 33	
10	15.1	14.2	40		10	57.9	46.1	44	
12	15.7	14.9	39		12	59.1	50.6	39	
14	16.1	15.2	38	-7.0	14	68.8	66.0	20	-7.0
16	15.1	14.5	40		16	66.1	61.1	26	
18	15.0	14.2	40		18*	43.2	30.2	10	
20	16.4	15.6	38		20	36.1	22.0	22	
22	18.0	17.2	35		22	32.2	19.8	26	
24	18.7	18.1	34		24	46.2	36.8	02	
26	20.0	19.6	32		26	18.7*b*		38	
28	21.7	21.1	29		28	26.9	24.6	27	
30	22.9	21.9	28	-7.0	30*	38.3	28.0	23 48	-7.0
32	23.5	22.7	26		32*	57.0	45.2	22 40	
34	23.9	22.9	26		34	53.2	43.8	44	
36	24.0	23.1	26		36	63.0	52.8	29	
38	24.2	23.4	25		38	68.8	59.3	19	
40	24.1	23.3	26		40	69.9	59.1	19	
42	24.0	23.2	26		42	67.3	57.4	22	
44	24.2	23.2	26	-7.0	44	67.9	58.6	21	-7.0
46	24.7	23.9	25		46	61.9	53.2	30	
48	24.8	24.1	24		48	58.1	50.9	34	
50	25.0	24.7	24		50	49.8	42.1	48	
52	25.4	25.1	23		52	52.8	43.9	44	
54	25.9	25.7	22		54	53.8	46.6	41	
56	26.2	26.1	22		56	50.7	44.3	45	
58	26.8	26.5	21		58	44.7	38.0	55	
					24 00	52.6	46.0	43	-7.0

Correction to local mean time is — 1m 46.5s. 90° torsion = 16.′64.
Torsion head at 0h 00m read 336° and at 24h 05m read 344°.
Observer—R. R. T.

Thursday, April 7, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00*	49.9	50.5	22 00	-11.9	18 00	60.4	65.9	22 19	-10.2
02	53.8	54.0	06		02	59.4	65.0	17	
04	53.0	54.0	06		04	59.0	64.8	17	
06	53.8	59.8	11		06	57.8	63.9	15	
08	55.5	60.2	12		08	55.0	60.3	10	
10	56.0	59.8	12		10	56.6	61.2	12	
12	52.5	60.0	10		12	58.0	63.1	15	
14	52.0	58.3	08	-11.9	14	57.4	62.0	13	-10.1
16	52.0	58.9	08		16	56.3	61.0	12	
18	53.0	59.0	09		18	54.2	58.9	08	
20	50.8	56.0	05		20	53.0	58.0	07	
22	53.8	59.3	22 10		22	55.3	59.8	10	
24	47.0	49.0	21 57		24	54.4	58.3	08	
26	51.0	55.0	22 04		26	54.5	59.0	08	
28	55.0	59.8	11		28	55.3	59.8	10	
30	55.2	59.2	11	-11.5	30	55.2	59.9	10	-10.1
32	55.2	58.2	10		32	55.9	59.9	10	
34	54.1	57.9	09		34	54.0	58.9	08	
36	51.7	55.9	06		36	55.3	59.0	09	
38	50.7	54.1	03		38	54.5	58.8	08	
40	47.0	53.0	22 00		40	50.9	55.5	03	
42	41.5	48.3	21 52		42	50.0	53.2	00	
44	41.3	49.1	52	-11.1	44	49.0	57.2	22 03	-10.0
46	39.9	46.0	48		46	47.9	50.8	21 56	
48	37.0	45.1	45		48	48.1	51.0	21 57	
50	37.8	46.0	47		50.5	51.2	53.2	22 01	
52	32.0	39.0	37		52	57.3	59.0	10	
54	37.0	44.2	44		54	73.0	75.9	36	
56	39.3	45.3	47		56	70.0	78.0	35	
58	39.8	45.0	47		58	65.0	73.7	28	
17 00	39.0	42.2	44	-11.0	19 00*	38.0	48.1	25	-10.0
02	40.5	45.0	48		02	32.7	50.8	23	
04	40.0	43.0	46		04	29.0	43.3	22 14	
06	44.1	47.1	52		06	9.2	13.2	21 35	
08	44.0	47.0	52		08	7.0	11.2	32	
10	48.3	50.1	58		10	14.9	21.9	46	
12	49.6	50.0	59		12	13.5	15.0	40	
14	49.0	49.8	58	-10.9	14	22.1	22.2	52	-9.9
16	45.8	48.3	54		16	21.3	30.6	58	
18	45.8	48.0	54		18	14.1	27.0	50	
20	45.0	47.8	53		20	16.0	25.7	50	
22	43.3	46.0	50		22	17.2	27.5	53	
24	47.0	49.3	56		24	18.3	22.9	50	
26	47.2	50.1	57		26	8.5	17.8	38	
28	49.0	51.3	21 59		28	7.6	15.9	28	
30	49.8	51.2	22 00	-10.8	30*	49.8	59.8	35	
32	51.9	54.0	03		32	48.2	56.8	31	
34	53.3	55.3	06		34	51.9	57.8	35	
36	53.1	54.9	05		36	55.0	60.5	39	
38	51.8	52.7	22 02		38	58.0	63.0	44	
40	49.0	50.2	21 58		40	58.9	63.2	44	
42	52.3	54.1	22 04		42	61.5	66.0	48	
44	57.1	57.5	10	-10.5	44	62.2	66.8	50	-10.7
46	59.0	59.5	13		46	61.3	65.3	48	
48	55.8	63.0	13		48	62.9	67.8	51	
50	56.1	62.4	13		50	65.0	70.7	55	
52	54.9	61.8	12		52	65.8	70.1	55	
54	56.5	62.2	13		54	64.9	69.8	54	
56	59.8	65.9	18		56	66.0	70.2	55	
58	60.0	66.0	19		58	66.0	69.0	54	
					20 00	64.5	68.1	52	

Correction to local mean time is — 2m 08.5s. 90° torsion = 15.′78.
Torsion head at 5h 35m read 344° and at 20h 20m read 8°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, April 8, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	56.0	55.6	22 23	−15.0
02	57.0	55.8	22	
04	56.8	55.2	23	
06	58.6	57.3	20	
08	60.0	57.8	18	
10	61.8	57.3	18	
12	62.0	58.6	16	
14	62.5	59.7	15	−15.0
16	61.9	59.1	16	
18	62.0	59.2	16	
20	62.5	60.0	15	
22	63.0	60.7	14	
24	64.1	60.9	13	
26	65.1	62.1	11	
28	65.9	62.8	10	
30	66.1	62.5	10	−15.0
32	65.3	63.0	10	
34	65.6	63.0	10	
36	65.0	62.8	11	
38	65.0	62.8	11	
40	63.8	62.3	12	
42	63.5	62.0	13	
44	66.2	64.2	09	
46	68.0	67.8	04	−15.0
48	69.2	68.9	03	
50	71.2	69.4	22 01	
52	74.5	72.7	21 56	
54	75.2	73.0	55	
56*	60.9	56.0	51	
58	57.7	50.7	58	
21 00	58.9	57.9	51	−15.0
02	58.3	52.8	56	
04	57.4	51.0	58	
06	57.4	51.8	57	
08	56.2	50.7	59	
10	56.0	50.3	60	
12	56.2	50.8	21 59	
14	55.1	50.6	22 00	−15.0
16	53.3	49.8	02	
18	53.5	50.2	02	
20	50.9	47.5	06	
22	50.1	49.3	05	
24	49.8	48.2	06	
26	50.0	48.0	06	
28	50.7	48.0	06	
30	50.2	47.8	06	−15.1
32	52.9	48.0	04	
34	52.9	48.7	03	
36	52.0	49.0	04	
38	51.0	41.7	22 10	
40	58.2	56.8	21 53	
42	63.8	60.0	46	
44	66.8	63.1	41	−15.1
46	63.2	59.9	21 46	
48	54.9	49.9	22 01	
50	46.0	37.8	17	
52	41.0	37.0	22 22	
54	60.2	54.2	21 53	
56	52.3	46.1	22 06	
58	46.0	42.0	14	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	46.2	41.8	22 14	−15.1
02	48.4	44.8	10	
04	50.5	48.0	06	
06	50.0	46.7	07	
08	52.9	47.7	04	
10	50.7	46.1	07	
12	51.2	45.8	07	
14	52.0	48.8	22 04	−15.1
16	54.8	51.8	21 59	
18	53.8	51.9	22 00	
20	54.2	56.8	21 56	
22	54.0	50.8	22 01	
24	51.9	49.4	04	
26	52.1	50.0	03	
28	49.0	47.5	07	
30	50.8	48.8	05	−15.5
32	50.0	48.0	06	
34	51.1	48.0	05	
36	48.9	46.9	08	
38	53.8	50.8	01	
40	48.0	47.2	08	
42	46.8	46.0	10	
44	44.7	43.5	14	−15.8
46	49.2	48.0	07	
48	45.2	44.2	13	
50	46.5	46.0	11	
52	46.0	45.7	11	
54	46.0	45.5	11	
56	47.0	46.2	10	
58	46.0	45.2	11	
23 00	46.0	45.2	11	−16.0
02	46.9	45.8	10	
04	47.6	46.1	10	
06	47.0	45.0	11	
08	45.4	43.5	13	
10	46.9	44.9	11	
12	47.7	44.1	11	
14	46.1	43.0	13	−16.0
16	44.0	40.2	17	
18	41.5	38.0	21	
20	41.2	38.0	21	
22	42.0	39.0	19	
24	40.8	38.0	21	
26	43.2	41.8	16	
28	45.2	43.0	14	
30	45.8	44.1	12	−16.2
32	46.8	44.0	12	
34	47.1	44.2	11	
36	47.1	43.1	12	
38	48.0	44.3	11	
40	48.9	45.6	09	
42	48.8	45.2	09	
44	49.1	47.0	08	−16.5
46	48.5	47.8	07	
48	49.0	48.0	07	
50	54.0	52.5	00	
52	47.8	45.8	10	
54	46.8	44.0	12	
56	45.2	43.0	14	
58	45.0	42.9	14	
24 00	45.5	43.0	14	−16.1

Correction to local mean time is —2m 51.5s. 90° torsion = 12.′12.
Torsion head at 19h 32m read 9° and at 24h 24m read 17°.
Observer—J. V.

Sunday, April 10, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	58.2	59.7	22 42	−16.3
02	58.1	58.9	41	
04	58.2	59.2	41	
06	57.7	58.3	40	
08	58.8	59.5	42	
10	57.3	58.0	40	
12	57.6	58.3	40	
14	57.9	58.2	40	−15.8
16	58.9	59.7	42	
18	59.8	60.3	44	
20	60.4	61.0	45	
22	60.7	61.1	45	
24	61.0	61.3	45	
26	62.0	62.3	47	
28	62.1	62.8	47	
30	61.1	61.8	46	−15.0
32	60.4	61.1	45	
34	60.9	61.3	46	
36	61.2	61.9	46	
38	62.0	62.7	47	
40	62.1	62.7	47	
42	62.8	63.2	48	
44	63.1	63.6	49	−14.7
46	63.3	64.0	49	
48	63.1	63.8	49	
50	62.1	62.8	48	
52	67.9*a*		56	
54	66.9	67.9	55	
56	68.1	69.8	22 58	
58	70.6	70.9	23 00	
1 00	69.8	70.2	00	−14.0
02	71.0	71.9	02	
04	71.1	71.7	02	
06	69.6	70.8	23 00	
08	67.9	68.8	22 57	
10	66.9	67.2	55	
12	65.3	66.0	53	
14	63.2	63.6	49	−13.8
16	61.2	61.7	46	
18	61.7	62.0	47	
20	60.7	61.0	45	
22	59.8	60.0	44	
24	61.8	62.0	47	
26	61.8	62.3	47	
28	62.3	62.8	48	
30	59.5	60.3	44	−13.4
32	58.2	58.8	42	
34	58.7	59.1	43	
36	57.6	57.9	41	
38	57.0	57.2	40	
40	57.3	57.7	40	
42	57.0	57.3	40	
44	55.8	56.8	39	−13.2
46	54.7	55.2	36	
48	54.8	55.3	36	
50	55.8	56.2	38	
52	57.9	58.7	42	
54	56.1	56.3	38	
56	56.4	57.4	40	
58	56.2	57.8	40	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	49.2	49.8	22 28	−13.0
02	52.9	54.3	34	
04	59.8*a*		44	
06	69.3	69.3	59	
08	69.2*b*		59	
10	60.9	61.2	46	
12	57.6	59.8	43	
14	50.3	52.1	31	−12.8
16	48.1	50.1	28	
18	47.1	49.0	26	
20	50.1	52.3	31	
22	52.9	54.0	34	
24	52.1	54.6	34	
26	56.8	58.3	41	
28	54.0	55.3	36	
30	40.2	50.9	22	−12.4
32	45.9	47.9	24	
34	39.8	42.9	16	
36	36.2	38.1	09	
38	37.7	38.8	11	
40	39.6	40.7	14	
42	42.1	42.9	17	
44	45.7	46.1	23	−12.3
46	49.0	49.3	28	
48	50.0	51.7	31	
50	50.0	51.1	30	
52	50.7	52.1	31	
54	49.9	51.1	30	
56	48.9	50.1	29	
58	47.3	48.0	26	
3 00	44.9	45.8	22	−12.1
02	42.7	43.8	19	
04	45.1	46.1	23	
06	48.5	49.0	27	
08	46.8	46.8	24	
10	41.1	42.1	16	
12	39.2	39.5	13	
14	37.8	37.9	10	−12.1
16	40.8	41.0	15	
18	44.6	44.8	21	
20	49.8*a*		29	
22	53.9	54.3	36	
24	56.0	56.4	39	
26	58.8	59.0	44	
28	60.5	61.0	46	
30	60.2	61.0	46	−12.0
32	61.9	62.2	48	
34	61.8	61.8	48	
36	63.2	63.8	51	
38	65.1	65.3	22 54	
40	69.2	69.4	23 00	
42	75.3	75.7	10	
44*	41.0	47.8	16	
46	49.2	55.2	28	
48	52.1	57.1	32	
50	53.0	58.3	34	
52	50.8	56.1	30	
54	46.0	50.2	22	
56	42.7	46.1	16	
58	39.4	42.3	10	

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, April 10, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00*	52.0	46.1	23 19	-11.7
02	51.9	44.7	20	
04	51.5	45.1	20	
06	48.9	42.2	24	
08	41.9	34.9	35	
10	27.9	22.6	23 56	
12	19.2	13.8	24 10	
14*	44.7	31.9	22	-11.7
16	48.2	36.9	15	
18	55.7	44.9	03	
20	46.9	36.3	17	
22	46.5	33.1	19	
24	40.2	29.8	27	
26	44.2	32.7	22	
28	34.4	27.7	33	
30	34.0	22.7	24 38	-11.7
32*	49.9	32.9	25 11	
34*	54.8	28.8	26 06	
36	69.0	44.8	25 43	
38*	41.1	11.4	25 08	
40	47.7	23.0	24 54	
42	48.3	20.1	55	
44*	55.9	32.1	29	
46	75.7	47.5	01	-11.3
48	60.8	34.7	24 23	
50	27.2	6.5	25 11	
52	50.8	33.3	24 32	
54	31.1	7.2	25 08	
56*	44.3	23.7	26 39	
58*	70.5	54.9	25 18	
5 00	44.7	26.2	26 01	
02*	32.8	14.1	25 08	
04*4	30.9	37.0	26 05	
06	40.9	24.1	26 07	
08	69.1	53.2	25 22	
10*	63.9	47.7	24 49	
12	65.9	50.1	45	
14	67.2	58.1	38	-11.1
16	62.3	57.6	43	
18	68.7	63.2	33	
20	69.2	66.1	31	
22*	43.1	34.5	16	
24	49.2	37.8	09	
26	54.9	43.2	00	
28	52.7	44.4	24 01	
30	55.7	47.6	23 56	-11.0
32	63.3	56.1	43	
34	62.3	55.2	45	
36	72.7	66.1	28	
38	73.2	65.3	29	
40	68.3	60.2	36	
42	71.9	61.8	32	
44	78.7	68.1	22	-11.0
46	69.4	57.1	28	
48	68.2	55.8	40	
50	69.8	61.1	35	
52	72.9	64.0	30	
54	64.8	56.8	42	
56	61.5	57.6	44	
58	73.2	71.2	24	
6 00*	47.8	39.2	23 15	-11.0
02.3	51.5	46.2	06	
04	48.0	43.0	11	
06	43.9	39.0	18	
08	46.3	40.9	15	
10	45.6	41.9	14	
12	41.0	37.7	21	
14	41.9	38.3	20	-10.9
16	45.0	40.9	16	
18	48.8	44.7	10	
20	50.0	45.4	08	
22	51.0	47.1	06	
24	52.8	48.7	23 03	
26	57.3	52.2	22 57	
28	55.8	52.1	59	
30	58.8	55.2	54	-10.9
32	56.9	53.1	57	
34	58.9	56.3	53	
36	57.8	55.1	22 55	
38	53.1	49.2	23 03	
40	58.9	55.2	22 54	
42.7	59.4	56.6	52	
44	58.7	55.2	54	-10.9
46	59.9	57.0	52	
48	60.8	56.7	51	
50	58.1	56.2	54	
52	65.1	62.9	43	
54	67.1	62.6	42	
56	67.7	65.9	38	
58	62.9	61.3	46	
7 00	63.2	61.7	46	-10.9
02	55.5	51.7	59	
04	65.0	63.1	43	
06	58.7	58.1	52	
08	55.0	52.7	59	
10	66.8	66.1	39	
12	59.8	58.6	51	
14	60.7*a*		48	
16	70.1	70.1	33	
18	60.1	59.1	50	
20	59.0	58.1	52	
22	57.0	56.0	55	
24	58.9	57.9	52	
26	64.9	63.2	43	
28	64.8	64.8	42	
30	56.9	56.1	55	-10.8
32	54.6	54.2	59	
34	56.1	55.3	56	
36	58.1	57.9	53	
38	58.8	57.3	53	
40	60.1	59.0	51	
42	58.9	57.2	53	
44	56.3	54.3	57	-10.7
46	60.1	58.6	51	
48	59.0	57.1	53	
50	62.0	60.0	48	
52	64.8	63.1	44	
54	63.9	61.9	45	
56	64.9	62.9	44	
58	65.9	63.9	42	
8 00	68.1	66.8	38	-10.6

Correction to local mean time is — 28s. 90° torsion = 14.'25.
Torsion head at 0h 00m read 17° and at 9h 25m read 341°.
Observer—R. R. T.

Monday, April 11, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	49.1	51.8	23 45	-14.0
02	54.1	54.9	52	
04	53.0	54.2	50	
06	54.6	55.9	53	
08	57.2	58.1	57	
10	57.2	59.7	58	
12	56.3	57.3	56	
14	57.2	58.4	57	-13.2
16	58.8	60.5	00	
18	57.1	59.0	57	
20	52.6	55.1	51	
22	48.2	52.2	45	
24	35.1	38.1	24	
26	30.5	33.2	16	
28	26.0	20.7	23 08	
30	15.3	18.1	22 52	-12.8
32	9.9	12.9	44	
35*	52.7	61.5	23	
36	43.0	49.9	06	
38	49.2	54.0	14	
40	56.1	60.8	25	
42	57.1	61.7	26	
44	51.9	57.2	19	-12.3
46	46.1	49.8	08	
48	50.1	53.1	14	
50	57.9	61.2	26	
52	59.5	63.0	29	
54	58.3	61.8	27	
56	60.0	63.7	30	
58	60.2	64.2	31	
9 00	66.2	69.2	39	-12.3
02	63.3	66.6	35	
04	61.8	64.8	32	
06	62.2	60.1	29	
08	63.1	64.8	33	
10	64.2	66.9	36	
12	66.1	68.2	38	
14	66.3	68.1	38	-12.4
16	65.8	66.7	37	
18	64.1	65.1	34	
20	65.4	65.9	36	
22	67.2	67.7	39	
24	68.8	69.1	41	
26	70.0	70.4	43	
28	71.0	71.8	45	
30	73.0	73.8	48	-13.0
32	76.2	76.9	53	
34*	46.6	50.3	54	
36	46.2	51.2	55	
38	47.4	51.8	56	
40	49.3	53.7	59	
42	49.1	53.5	59	
44	47.2	51.2	55	-13.3
46	45.0	48.1	51	
48	41.7	45.2	46	
50	42.1	46.1	48	
52	41.7	45.4	46	
54	39.7	43.2	43	
56	35.8	36.2	35	
58	35.0	38.8	36	
10 00	36.1	39.7	22 38	-13.8
02	36.9	39.9	38	
04	38.8	41.8	42	
06	41.3	43.9	45	
08	42.2	44.7	46	
10	42.1	44.3	46	
12	41.6	43.6	45	
14	41.4	43.1	44	-14.0
16	40.9	42.2	44	
18	40.6	43.0	44	
20	41.1	43.2	44	
22	40.0	42.3	43	
24	39.9	41.9	42	
26	39.2	41.1	41	
28	37.6	39.7	39	
30	36.2	38.0	36	-14.2
32	35.3	36.9	35	
34	35.2	36.5	34	
36	36.9	37.8	37	
38	38.4	39.3	39	
40	39.0	40.3	40	
42	38.7	39.9	40	
44	37.9	39.1	39	-14.3
46	36.9	37.8	37	
48	35.9	36.6	35	
50	35.3	36.0	34	
52	36.2	36.8	36	
54	37.2	37.8	37	
56.3	37.1	37.4	37	
58	36.1	36.8	35	
11 00	35.9	36.3	35	-14.3
02	38.8	39.3	40	
04	39.6	40.2	41	
06	39.2	40.2	41	
08	39.6	40.9	41	
10	40.0	41.3	42	
12	40.0	41.7	42	
14	39.1	40.7	41	-14.4
16	37.1	38.9	38	
18	36.1	37.3	36	
20	36.3	37.6	36	
22	35.1	36.9	35	
24	34.6	36.0	34	
26	35.3	36.3	34	
28	33.0	33.8	31	
30	32.8	33.2	30	-14.7
32	32.3	32.8	29	
34	31.7	32.1	28	
36	33.7	34.1	31	
38	34.0	34.3	32	
40	34.0	34.6	32	
42	34.2	34.8	32	
44	34.3	35.0	33	-14.9
46	34.2	34.5	32	
48	35.0	35.3	33	
50	36.1	36.1	35	
52	36.3	36.8	36	
54	35.8	36.0	35	
56	35.3	35.9	34	
58	36.6	36.8	36	
12 00	36.3	36.7	36	-15.0

Correction to local mean time is — 1m 03s. 90° torsion = 14.'29.
Torsion head at 7h 35m read 14° and at 12h 15m read 24°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, April 12, 1904					Magnet scale inverted					Wednesday, April 13, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	53.9	51.7	22 41	-19.8	14 00	57.2	57.0	22 34	-19.8	0 00*	40.2	40.9	22 26	-22.9	2 00	43.8	45.2	22 32	-23.5
02	52.8	50.8	42		02	57.3	57.0	34		02	38.9	39.2	24		02	38.8	40.0	24	
04	51.2	50.6	44		04	57.4	57.2	34		04	37.7	38.0	22		04	37.8	38.7	23	
06	52.3	50.9	43		06	57.1	57.1	34		06	36.5	38.0	21		06	38.8	40.0	24	
08	52.1	50.4	43		08	57.0	56.4	34		08	37.3	39.2	23		08	40.0	42.8	28	
10	52.2	50.9	43		10	56.3	55.8	36		10	37.0	38.0	22		10	43.9	44.8	32	
12	52.1	51.0	43		12	57.0	56.0	35		12	36.8	39.2	22		12	42.2	43.0	30	
14	52.2	50.8	43	-20.0	14	57.2	56.3	34	-19.8	14	37.0	39.0	22	-22.9	14	46.0	47.0	36	-23.3
16	52.2	51.3	42		16	57.8	56.1	34		16	37.2	40.3	23		16	42.2	43.8	30	
18	53.0	52.1	41		18	57.3	55.7	35		18	37.7	40.5	24		18	46.2	46.9	36	
20	53.8	52.6	40		20	57.1	55.6	35		20	37.6	40.4	24		20	45.0	45.3	34	
22	53.8	52.6	40		22	56.8	55.1	36		22	38.1	40.8	24		22	45.3	46.9	35	
24	53.5	52.1	41		24	56.7	55.0	36		24	39.2	42.0	26		24	49.5	51.1	42	
26	54.0	53.0	40		26	56.7	55.2	36		26	38.8	40.3	24		26	47.0	49.4	38	
28	55.1	54.0	38		28	57.2	56.2	34		28	35.0	37.0	19		28	45.0	46.9	35	
30	55.1	54.2	38	-20.0	30	57.1	56.0	35	-19.8	30	35.2	37.2	20	-23.0	30	44.0	45.1	32	-23.0
32	55.2	54.9	37		32	57.8	55.2	35		32	38.5	38.9	23		32	44.0	44.9	32	
34	55.6	55.1	37		34	57.2	55.9	35		34	40.0	40.3	26		34	44.2	46.5	34	
36	55.2	55.2	37		36	56.9	55.5	35		36	38.0	38.3	22		36	49.0	51.0	41	
38	55.0	54.3	38		38	57.0	55.3	35		38	38.9	39.7	24		38	51.0	53.8	45	
40	54.0	53.4	39		40	57.8	55.9	34		40	39.0	39.7	24		40	52.0	55.2	47	
42	53.3	52.3	41		42	58.0	56.0	34		42	41.1	42.1	28		42	53.2	55.0	48	
44	54.0	52.9	40	-20.0	44	57.9	55.8	34	-19.7	44	42.8	43.2	30	-23.2	44	49.7	51.0	42	-22.8
46	53.2	51.9	41		46	56.2	55.0	36		46	44.2	44.7	32		46	50.1	52.2	43	
48	53.1	51.9	41		48	55.9	54.1	37		48	46.0	46.8	36		48	45.5	47.7	36	
50	52.3	51.1	42		50	55.2	54.0	38		50	42.2	43.0	30		50	47.2	48.5	38	
52.2	53.1	52.3	41		52	55.5	54.0	38		52	39.8	40.9	26		52	50.7	51.8	43	
54	54.1	53.1	39		54	57.6	55.9	34		54	38.1	39.2	23		54	50.9	52.9	44	
56	55.9	54.2	37		56	62.0	60.3	28		56	38.8	39.8	24		56	50.9	53.0	44	
58	55.9	'54.2	37		58	65.1	64.0	22		58	38.9	39.8	24		58	51.8	52.1	44	
13 00	56.5	54.9	36	-20.0	15 00	65.1	64.2	22	-19.7	1 00	39.9	41.0	26	-23.2	3 00	58.8	60.3	56	-22.6
02	57.9	56.0	34		02	64.0	63.3	24		02	37.8	45.8	28		02	53.7	55.0	48	
04	58.3	56.8	33		04	62.9	62.0	26		04	37.0	45.7	28		04	58.0	58.4	54	
06	58.2	56.1	34		06	60.8	59.9	29		06	36.9	44.3	26		06	57.3	58.2	53	
08	58.0	56.5	34		08	60.4	59.3	30		08	36.2	43.2	25		08	57.8	58.0	54	
10	57.8	56.1	34		10	59.0	58.0	32		10	29.0	36.1	14		10	53.0	54.0	47	
12	57.3	56.1	34		12	58.9	57.7	32		12	31.3	37.9	17		12	53.7	54.8	48	
14	56.0	55.4	36	-20.0	14	59.8	58.5	31	-19.6	14	34.9	40.3	22		14	57.2	57.8	53	-22.6
16	56.0	55.0	36		16	58.8	56.9	33		16	36.9	42.1	25	-23.4	16	59.0	60.6	57	
18	55.8	54.7	37		18	58.7	57.1	33		18	38.0	43.1	26		18	58.7	60.0	56	
20	57.0	55.8	35		20	59.0	57.2	32		20	38.0	42.9	26		20	59.8	61.0	57	
22	57.8	57.0	33		22	58.3	56.6	33		22	39.0	43.2	27		22	55.8	57.1	51	
24	58.0	57.7	33		24	56.3	54.5	36		24	38.8	43.2	27		24	55.0	56.0	50	
26	58.3	58.0	32		26	56.1	54.2	37		26	39.0	43.2	27		26	56.1	56.8	51	
28	57.0	56.8	34		28	56.8	55.1	36		28	35.0	38.2	20		28	57.2	57.5	53	
30	56.2	55.7	36	-19.9	30	57.7	56.2	34	-19.6	30	36.0	39.9	22	-23.5	30	57.0	57.2	52	-22.8
32	56.6	55.7	35		32	57.7	57.0	34		32	36.8	40.0	23		32	56.9	58.1	53	
34	57.4	56.9	34		34	54.0	53.8	39		34	35.6	38.2	21		34	59.0	60.0	22 56	
36	58.0	57.0	33		36	54.8	54.1	38		36	33.5	36.2	17		36	63.2	64.2	23 03	
38	59.8	58.8	30		38	55.3	55.1	37		38	34.1	36.1	18		38	69.8	75.3	16	
40	58.3	57.1	33		40	55.0	55.0	37		40	32.8	34.7	16		40	72.8	74.0	18	
42	56.4	55.3	36		42	55.8	55.2	36		42	32.8	35.0	16		42	74.2	75.4	20	
44	57.4	56.7	34	-19.8	44	57.9	57.2	33	-19.5	44	35.4	38.0	20	-23.5	44	73.4	75.0	19	-22.8
46	57.8	57.1	33		46	58.3	58.2	32		46	35.7	38.2	21		46	71.5	73.5	16	
48	57.8	57.1	33		48	58.2	58.2	32		48	34.1	37.1	18		48	73.8	75.3	20	
50	57.1	56.9	34		50	59.8	59.8	30		50	35.4	38.0	20		50	72.0	74.2	17	
52	57.4	57.0	34		52	59.3	59.0	31		52	36.5	39.2	22		52	71.6	73.5	16	
54	57.8	57.0	33		54	59.8	59.3	30		54	39.3	41.9	26		53	73.9	76.2	20	
56	57.7	57.1	33		56	60.4	60.0	29		56	41.9	44.3	30		56	75.2	77.0	22	
58	57.7	57.2	33		58	59.6	58.9	30		58	45.5	46.3	35		58	75.8	77.0	23	
					16 00	58.9	57.9	32	-19.5										

Correction to local mean time is — 1m 43s. 90° torsion = 16.'03. Observer—J. V.
Torsion head at 11h 25m read 40° and at 16h 20m read 31°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 13, 1904					Magnet scale erect					Wednesday, April 13, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	70.2	72.1	23 14	-22.8	6 00	23.3	24.6	22 47	-22.8	8 00	52.3	52.5	23 32	-22.2	10 00	22.9	24.0	22 46	-21.9
02	68.0	72.5	13		02	25.9	27.2	51		02	52.0	53.5	32		02	21.6	22.6	44	
04	67.9	71.5	12		04	26.8	28.0	52		04	52.2	54.0	33		04	18.8	20.0	40	
06	70.3	74.0	16		06	28.0	29.6	54		06	49.7	52.5	30		06	26.3	27.1	51	
08	72.6	75.3	19		08	28.4	30.2	55		08	44.6	46.2	20		08	26.6	27.0	51	
10*	44.0	51.0	24		10	29.5	31.0	57		10	Overl'k'd				10	26.6	27.5	52	
12	44.8	51.1	24		12	31.1	33.0	22 60		12	41.5	44.2	16		12	28.6	29.5	55	
14	43.3	48.9	22	-22.9	14	32.0	34.3	23 01		14	48.4	50.5	27	-22.0	14	25.5	25.9	50	-21.8
16	37.3	43.1	12		16	34.1	37.0	05		16	41.9	44.3	17		16	26.7	27.6	52	
18	37.9	43.1	13		18	35.0	38.2	07		18	42.3	44.0	17		18	23.1	23.9	46	
20	38.0	43.1	13		20	36.1	40.1	09		20	48.5	50.1	27		20	25.6	26.2	50	
22	42.0	47.3	19		22	38.1	42.1	12		22	43.5	45.6	19		22	24.6	25.3	48	
24	47.0	52.0	27		24	41.0	43.0	15		24	43.3	44.5	18		24	24.3	25.6	48	
26	44.3	48.3	22		26	39.0	44.0	14		26	43.3	46.3	20		26	23.6	24.0	47	
28	39.1	43.2	14		28	36.0	41.0	10		28	45.2	47.8	22		28	22.0	22.3	44	
30	33.0	37.4	23 04	-22.8	30	35.2	40.2	08		30	41.8	43.8	16	-22.0	30	24.2	24.4	47	-21.6
32	29.9	32.2	22 58		32	34.3	38.8	06		32	43.6	45.6	19		32	21.0	21.2	42	
34	28.0	30.4	55		34	33.8	38.0	06		34	40.6	42.6	14		34	18.5	19.1	39	
36	27.8	30.2	22 55		36	38.3	42.0	12		36	36.7	38.6	08		36	18.4	18.9	39	
38	32.6	34.9	23 02		38	43.1	46.8	20		38	34.6	36.0	05		38	19.0	19.9	40	
40	35.0	37.2	06		40	47.8	51.0	27		40	31.7	36.6	23 03		40	18.3	18.7	38	
42	41.0	43.6	16		42	38.8	45.3	15		42	31.6	32.1	22 59		42	17.3	18.3	37	
44	38.9	41.2	12	-22.8	44	45.0	48.0	22	-22.1	44	37.0	39.5	23 09	-22.0	44	17.3	18.3	37	-21.5
46	37.9	38.6	09		46	49.0	51.2	28		46	40.4	43.5	15		46	18.3	19.0	38	
48	38.8	39.1	10		48	57.0	60.1	41		48	39.5	42.1	13		48	17.1	17.9	37	
50	37.1	37.1	08		50	58.0	60.8	42		50	42.5	45.8	18		50	16.0	17.4	36	
52	33.0	33.1	23 01		52	47.3	50.7	26		52	40.1	43.1	14		52	17.3	18.7	38	
54	31.0	31.0	22 58		54.4	46.5	49.0	24		54	34.6	38.3	06		54	18.2	19.6	39	
56	30.2	31.2	57		56	52.9	54.0	33		56	39.8	41.6	13		56	19.9	21.0	41	
58	29.1	29.8	55		58	59.7	61.0	44		58	36.4	37.0	07		58	18.6	20.1	40	
5 00	28.5	29.9	55	-22.8	7 00	56.2	64.0	44	-22.0	9 00	36.9	37.4	08	-22.0	11 00	19.6	20.5	41	-21.4
02	28.9	29.2	55		02	52.6	53.0	32		02	34.0	35.2	04		02	20.3	21.3	42	
04	29.0	29.8	55		04	49.8	52.0	29		04	37.3	37.5	08		04	19.4	20.6	41	
06	27.2	28.7	53		06	45.5	46.8	22		06	33.1	33.6	02		06	17.3	17.6	36	
08	26.5	28.0	52		08	54.0	58.4	38		08	32.6	33.0	01		08	14.5	15.5	33	
10	24.9	25.9	49		10	63.0	65.2	50		10	32.2	32.2	00		10	14.1	14.5	32	
12	22.8	23.4	46		12	59.8	61.1	44		12	33.0	33.0	23 01		12	16.9	17.5	36	
14	23.3	24.2	46	-22.9	14	59.1	61.3	44	-22.3	14	31.0	31.8	22 58	-22.0	14	17.2	19.0	38	-21.3
16	23.1	24.0	46		16	56.4	58.3	39		16	34.6	34.9	23 04		16.9	17.4	17.4	36	
18	23.2	24.0	46		18	56.0	59.7	40		18	31.3	32.7	00		18	19.7	20.3	41	
20	22.2	23.4	45		20	54.0	56.9	36		20	31.6	32.8	23 00		20	18.0	18.6	38	
22	23.2	24.0	46		22	54.0	57.0	36		22	31.6	32.3	22 59		22	17.9	18.3	38	
24	21.9	22.0	44		24	56.3	58.2	39		24	29.3	30.9	56		24	20.6	22.2	43	
26	21.1	22.0	43		26	56.2	60.7	41		26	27.6	29.0	54		26	20.6	21.3	42	
28	19.1	17.8	38		28	63.0	65.0	50		28	28.0	29.7	54		28	18.3	19.1	39	
30	17.9	19.1	38	-22.8	30	57.2	59.2	41	-22.3	30	28.1	29.6	54	-22.0	30	15.9	16.8	35	-21.2
32	18.1	19.3	39		32	53.2	54.8	34		32	26.1	27.0	51		32	16.0	16.4	35	
34	20.2	20.9	56		34	54.0	55.3	35		34	26.0	26.6	51		34	14.0	14.7	32	
36	18.0	18.0	38		36	57.3	58.1	40		36	25.4	26.8	50		36	11.8	12.8	29	
38	14.9	16.0	33		38	56.0	56.0	37		39	29.5	30.3	56		38.3	11.5	12.6	28	
40	11.1	12.0	27		40	56.1	58.2	39		40	27.3	28.7	22 53		40	12.7	13.7	30	
42	10.8	11.2	26		42	58.8	60.1	42		42	31.3	34.0	23 00		42	13.4	14.2	31	
44	13.9	13.9	31	-22.8	44	61.5	63.0	47	-22.2	44	27.8	29.7	22 54	-22.0	44	10.9	11.7	27	-21.1
46	17.0	17.2	36		46	61.2	61.9	46		46	30.3	32.3	58		46	12.2	12.9	29	
48	19.7	20.7	41		48	52.3	53.2	32		48	29.2	30.7	56		48	11.1	11.7	27	
50	19.0	20.2	40		50	56.9	57.0	39		50	27.0	28.9	53		50	7.8	9.1	22	
52	18.3	19.0	38		52	62.6	62.8	48		52	27.3	29.0	53		52	7.6	9.6	23	
54	20.1	20.3	41		54	54.5	56.2	36		54	25.0	27.0	50		54	7.5	9.6	23	
56	19.0	19.8	40		56	54.3	54.3	34		56	25.6	27.3	51		56	8.2	10.0	24	
58	20.0	21.4	42		58	47.0	47.1	23		58	22.9	24.9	47		58	8.0	9.8	23	

Observers—J. V. and W. J. P., who alternated from 7h 56m to 8h 06m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 13, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
12 00	11.4	12.8	22 28	-21.0
02	7.8	8.8	22	
04	9.8	9.8	25	
06	10.3	10.8	26	
08	14.0	14.6	32	
10	14.0	14.2	32	
12	11.3	11.9	27	
14	11.3	13.1	28	-21.0
16	11.3	12.6	28	
18	10.1	12.4	27	
20	10.5	12.3	27	
22	7.5	10.2	23	
24	6.4	9.6	22	
26*	40.0	42.8	25	
28	37.8	40.6	22	
30	41.0	44.0	27	-20.8
32	42.3	45.0	28	
34	41.7	44.3	28	
36	40.3	42.6	25	
38	41.2	42.7	26	
40	38.6	40.6	22	
42	40.2	41.5	24	
44	38.6	40.0	22	-20.8
46	37.6	39.3	20	
48	36.8	38.7	19	
50	38.6	41.3	23	
52	41.9	43.2	27	
54	43.0	44.0	20	
56	42.9	43.5	28	
58	42.3	42.6	27	
13 00	41.0	42.3	25	-20.8
02	41.3	42.7	26	
04	41.8	42.7	26	
06	43.6	45.5	30	
08	42.6	43.6	28	
10	41.3	42.4	26	
12	39.4	40.0	22	
14	42.1	43.2	27	-20.9
16	40.6	41.4	24	
18	30.8	40.4	23	
20	38.2	39.7	21	
22	38.3	41.1	22	
24	41.6	43.9	27	
26	38.0	41.2	22	
28	36.2	39.8	20	
30	36.5	42.0	22	-21.0
32	37.3	43.0	23	
34	34.0	38.6	17	
36	28.3	32.5	08	
38	25.0	32.7	05	
40	29.8	35.0	11	
42	33.2	38.6	16	
44	32.8	30.8	17	-21.0
46	33.3	40.7	18	
48	37.8	43.3	24	
50	40.9	45.3	28	
52	41.9	46.3	29	
54	37.3	40.1	21	
56	36.3	37.3	18	
58	35.8	37.6	18	
14 00	37.3	39.8	22 20	-21.0
02	35.6	39.8	19	
04	36.7	39.1	20	
06	33.6	37.0	16	
08	33.8	37.6	16	
10	37.6	40.8	22	
12	31.2	35.2	12	
14	30.3	33.3	10	-20.8
16	30.6	35.6	12	
18	34.5	39.4	18	
20	37.3	42.5	23	
22	39.7	43.3	25	
24	39.6	43.3	25	
26	37.3	40.5	21	
28	35.6	39.4	19	
30	35.6	39.2	19	-20.8
32	32.0	35.6	13	
34	30.3	33.9	10	
36	34.0	37.0	16	
38	33.3	36.2	14	
40	36.5	38.3	19	
42	33.3	35.4	14	
44	33.3	34.8	13	-20.6
46	37.3	39.9	21	
48	33.6	37.0	16	
50	33.3	34.8	13	
52	38.9	30.7	22	
54	35.3	36.3	16	
56	29.8	31.9	08	
58	30.2	32.2	09	
15 00	28.2	31.3	07	-20.6
02	32.6	34.6	13	
04	26.4	28.7	03	
06	25.3	26.6	22 01	
08	21.6	23.6	21 56	
10	26.0	27.2	22 02	
12	29.9	31.0	08	
14	33.3	34.5	13	-20.5
16	36.6	37.5	18	
18	38.1	39.2	21	
20	36.6	37.2	18	
22	40.5	41.3	24	
24	40.5	42.0	25	
26	35.5	35.8	16	
28	33.8b		13	
30	28.0	28.2	04	-20.5
32	33.0	34.3	13	
34	33.3	34.8	13	
36	30.6	32.3	09	
38	30.7	32.5	10	
40	31.5	33.5	11	
42	31.0	33.0	10	
44	31.1	33.0	10	-20.5
46	31.8	33.0	11	
48	29.7	31.0	08	
50	29.7	31.2	08	
52	31.6	33.0	11	
54	31.0	31.5	09	
56	31.3	32.3	10	
58	30.0	30.8	08	

Wednesday, April 13, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	30.9	31.0	22 08	-20.5
02	31.9	32.1	10	
04	31.0	31.0	08	
06	32.9	34.0	12	
08	33.9	34.3	14	
10	37.1	38.0	19	
12	46.2	46.7	33	
14	42.8	44.4	28	-20.3
16	42.8	44.1	28	
18	41.0	42.3	25	
20	40.1	41.0	24	
22	41.0	44.5	27	
24	36.7	39.1	20	
26	36.2	37.1	18	
28	38.0	38.9	20	
30	36.5	37.4	18	-20.0
32	34.9	35.1	15	
34.2	35.2	36.1	16	
36	35.3	37.0	17	
38	34.2	35.0	14	
40	32.8	33.4	12	
42	29.9	31.0	08	
44	31.0	32.3	10	-20.0
46	28.8	31.9	08	
48	26.1	28.7	22 03	
50	24.1	26.0	21 59	
52	24.0	25.0	21 58	
54	25.1	26.1	22 00	
56	27.0	27.3	03	
58	25.2b		22 00	
17 00	13.8	14.0	21 42	-19.7
02	20.1	21.7	53	
04	24.0	25.9	21 50	
06	27.8	29.8	22 05	
08	28.3	31.9	07	
10	26.5	29.5	04	
12	25.2	27.9	02	
14	26.3	28.9	03	-19.6
16	25.9	29.1	03	
18	26.1	28.9	03	
20	27.4	29.2	04	
22	29.0	29.9	06	
24	26.0	27.0	02	
26	27.3	28.3	04	
28	25.0	25.3	00	
30	24.9	25.4	22 00	-19.6
32	23.0	24.8	21 58	
34	24.0	25.3	59	
36	22.1	23.8	56	
38	23.9	24.9	58	
40	23.2	24.4	57	
42	22.1	23.8	56	
44	20.9	22.3	54	-19.7
46	20.2	21.1	52	
48	22.8	24.3	21 57	
50	25.5	26.9	22 01	
52	26.6	28.7	03	
54	31.8	33.3	11	
56	32.1	33.3	11	
58	33.6	35.3	14	
18 00	33.6	34.8	22 14	-19.6
02	34.1	35.9	15	
04	34.1	35.8	15	
06	32.9	34.9	13	
08	33.5	35.0	14	
10	32.7	34.0	12	
12	31.8	32.8	11	
14	31.2	32.3	10	-19.6
16	32.6	33.0	12	
18	32.8	33.4	12	
20	34.1	35.0	14	
22	33.7	34.8	14	
24	33.3	34.6	13	
26	33.0	34.0	13	
28	33.0	33.9	12	
30	34.3	35.5	15	-19.6
32	36.1	36.5	17	
34	36.1	36.9	17	
36	36.3	37.2	18	
38	36.3	37.2	18	
40	36.8	37.8	19	
42	37.7	38.9	20	
44	38.7	39.9	22	-19.7
46	30.1	39.9	22	
48	38.1	38.7	20	
50	37.1	38.0	19	
52	37.1	37.8	19	
54	37.3	38.0	19	
56	37.2	37.8	19	
58	36.9	37.2	18	
19 00	36.6	37.8	18	-19.8
02	36.1	37.7	18	
04	36.0	36.9	17	
06	36.0	36.8	17	
08	35.8	36.9	17	
10	34.2	35.0	14	
12	36.8	38.7	19	
14	42.1	45.3	29	-19.8
16	37.6	40.8	22	
18	38.2	41.0	22	
20	36.6	38.8	19	
22	37.7	42.0	23	
24	41.1	46.0	28	
26	33.9	39.1	17	
28	28.4	28.8	05	
30	30.0	34.8	11	-19.9
32	30.9	35.8	12	
34	35.0	39.1	18	
36	37.4	42.9	23	
38	40.8	45.7	28	
40	36.9	41.1	21	
42	36.1	40.9	20	
44	36.0	38.0	19	-20.0
46	38.7	41.8	23	
48	32.7	35.8	14	
50	32.7	35.8	14	
52	37.9	41.8	23	
54	37.2	40.9	21	
56	38.1	41.3	22	
58	40.8	44.1	27	

Observers—W. J. P. and R. R. T., who alternated from 15h 58m to 16h 08m.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 13, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	41.2	44.9	22 28	-20.0
02	41.1	44.3	27	
04	41.2	43.9	27	
06	40.7	43.9	26	
08.6	42.1	44.8	28	
10	41.9	44.2	28	
12	40.8	43.3	26	
14	36.5	38.3	19	-20.0
16	39.9	40.7	23	
18	39.2	41.2	23	
20	37.7	38.8	20	
22	39.8	46.3	28	
24	38.5	40.0	22	
26	38.1	39.0	20	
28	41.1	41.9	25	
30	40.0	40.7	23	-20.0
32	42.2	44.0	28	
34	43.3	44.9	29	
36	43.2	44.9	29	
38	42.7	44.1	28	
40	43.9	45.5	30	
42	45.3	47.0	32	
44	46.7	48.0	34	-20.0
46	46.1	47.3	33	
48	44.0	45.4	30	
50	42.6	44.0	28	
52	42.8	44.0	28	
54	43.9	45.0	30	
56	44.9	46.0	31	
58	44.2	45.4	30	
21 00	44.1	45.0	30	-20.0
02	45.0	45.4	31	
04	45.0	46.0	32	
06	46.3	46.9	33	
08.2	46.8	47.5	34	
10	47.2	48.0	35	
12	48.0	48.8	36	
14	49.1	49.8	38	-20.0
16	48.0	48.9	36	
18	48.8	49.1	37	
20	48.1	49.0	36	
22	47.9	48.7	36	
24	47.7	48.4	35	
26	47.1	47.8	34	
28	46.1	46.6	33	
30	46.2	46.8	33	-20.0
32	46.6	46.8	33	
34	46.2	46.2	33	
36	47.0	47.1	34	
38	45.3	45.9	32	
40	45.7	46.0	32	
42	46.1	46.7	33	
44	47.8	48.2	35	-20.1
46	46.3	47.0	33	
48	46.1	46.8	33	
50	45.7	46.2	32	
52	43.7	44.2	29	
54	42.1	42.8	27	
56	41.0	41.9	25	
58	42.1	43.1	27	
22 00	44.0	44.8	22 30	-20.1
02	43.9	45.2	30	
04	45.0	46.1	32	
06	45.0	46.7	32	
08	46.3	48.0	34	
10	47.3	48.8	35	
12	46.0	48.3	35	
14	45.8	47.0	33	-20.2
16	46.1	47.3	33	
18	47.2	48.8	35	
20	46.3	47.8	34	
22	46.6	47.8	34	
24	47.0	48.1	35	
26	46.0	47.3	33	
28	45.5	46.8	32	
30	45.1	46.2	32	-20.2
32	46.6	47.0	34	
34	50.2	51.0	39	
36	40.4	49.1	30	
38	47.9	48.8	36	
40	40.9	49.2	31	
42	47.3	48.0	35	
44	46.1	47.0	33	
46	46.2	47.1	33	-20.2
48	47.6	48.2	35	
50	47.8	48.3	35	
52	47.9	48.7	36	
54	48.2	49.2	36	
56	48.7	49.3	37	
58	48.0	48.9	36	
23 00	47.8	48.9	36	-20.2
02	48.8	49.2	37	
04	49.1	50.0	38	
06	49.9	50.8	39	
08	50.7	51.3	40	
10	50.8	51.9	41	
12	49.7	50.3	38	
14	48.7	49.2	37	
16	48.2	49.0	36	-20.2
18	48.0	48.7	36	
20	47.9	48.2	35	
22	48.9	49.2	37	
24	49.1	49.8	38	
26	49.6	50.0	38	
28	50.0	50.6	39	
30	50.3	51.0	39	-20.2
32	50.2	50.7	39	
34	50.0	50.3	39	
36	49.9	50.3	39	
38	50.2	50.9	39	
40	51.0	51.4	40	
42	51.9	52.1	42	
44	52.0	52.5	42	-20.2
46	52.0	52.1	42	
48	52.0	52.9	43	
50	52.8	53.0	43	
52	52.6	53.0	43	
54	52.7	53.1	43	
56	52.3	53.0	43	
58	52.2	52.9	42	
24 00	53.0	53.9	44	-20.3

Correction to local mean time is — 1m 16s.
Torsion head at 0h 00m read 35° and at 24h 10m read the same.
Observer—R. R. T.

Thursday, April 14, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	60.9	55.9	22 20	-19.1
02	59.9	56.9	20	
04	59.9	57.2	20	
06	60.0	57.9	20	
08	59.5	57.6	20	
10	59.8	57.8	20	
12	60.2	58.7	19	
14	60.0	58.5	19	-19.1
16	60.3	58.9	18	
18	61.0	59.0	18	
20	61.3	59.4	17	
22	63.1	61.3	14	
24	63.3	61.6	14	
26	63.2	61.6	14	
28	63.2	62.0	14	
30	64.0	62.6	13	-19.1
32	64.5	62.9	12	
34	65.0	63.8	11	
36	65.0	64.0	11	
38	64.2	63.8	12	
40	63.9	63.0	12	
42	62.3	61.8	15	
44	60.5	60.2	17	-19.2
46	58.9	58.2	20	
48	58.1	57.0	22	
50	57.4	56.2	23	
52	57.4	55.0	24	
54	57.1	55.0	24	
56	56.8	55.0	24	
58	56.1	54.1	25	
17 00	55.0	52.6	28	-19.2
02	55.4	53.2	27	
04	54.2	51.1	29	
06	54.2	50.5	30	
08	53.0	50.0	31	
10	52.8	50.2	31	
12	51.5	49.3	33	
14	51.1	49.1	33	-19.2
16	51.2	49.5	33	
18	51.1	49.9	33	
20	51.7	50.2	32	
22	51.0	50.8	32	
24	52.0	51.5	31	
26	52.3	50.0	32	
28	53.2	50.2	31	
30	53.2	49.8	31	-19.1
32	54.0	50.1	30	
34	54.3	50.7	30	
36	54.9	51.0	29	
38	54.9	51.6	28	
40	55.3	53.8	26	
42	56.8	53.2	26	
44	57.3	53.1	25	-19.1
46	58.0	54.2	24	
48	57.4	55.1	24	
50	58.3	55.1	23	
52	58.2	55.0	23	
54	58.0	55.8	22	
56	58.8	55.9	22	
58	58.1	56.0	22	
18 00	57.9	57.1	22 22	-19.2
03	57.8	58.1	21	
04	58.3	57.9	21	
06	58.9	57.3	21	
08	59.0	57.2	21	
10	58.7	57.2	21	
12	60.0	56.3	21	
14	59.3	56.0	22	-19.2
16	59.4	56.2	21	
18	59.8	56.2	21	
20	59.1	56.0	22	
22	59.0	56.1	22	
24	58.9	56.0	22	
26	58.7	55.5	22	
28	58.1	54.2	24	
30	57.6	54.9	24	-19.2
32	56.9	54.9	24	
34	56.9	53.5	25	
36	56.5	53.8	25	
38	57.0	53.9	25	
40	55.3	53.0	27	
42	54.3	52.9	28	
44	53.0	51.1	30	-19.2
46	52.2	51.2	31	
48	51.8	51.0	31	
50	50.0	50.2	33	
52	51.8	50.5	32	
54	51.7	50.9	31	
56	51.8	51.8	31	
58	52.2	52.0	30	
19 00	52.8	52.8	29	-19.3
02	52.9	52.0	30	
04	53.1	52.2	29	
06	53.0	52.1	30	
08	53.0	52.2	29	
10	53.8	51.8	29	
12	54.2	51.0	29	
14	53.2	51.1	30	-19.3
16	52.3	50.3	31	
18	52.8	50.0	31	
20	52.3	49.4	32	
22	52.0	48.5	33	
24	51.4	48.2	34	
26	51.5	48.5	34	
28	50.4	47.4	35	
30	48.9	46.2	37	
32	48.4	46.8	37	
34	48.0	44.8	39	
36	50.8	46.0	36	
38	52.0	47.8	34	
40	53.5	49.2	31	
42	54.0	50.5	30	
44	54.2	51.1	29	-19.8
46	53.0	49.7	31	
48	52.6	49.5	32	
50	52.9	49.2	32	
52	52.0	48.8	33	
54	50.5	48.0	35	
56	49.0	47.8	36	
58	49.0	48.1	36	
20 00	49.5	49.1	35	

Correction to local mean time is — 55s.
Torsion head at 15h 30m read 33° and at 20h 19m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, April 15, 1904 — Magnet scale erect									Sunday, April 17, 1904 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	36.8	39.2	22 22	-23.0	22 00	34.0	34.4	22 16	-24.2	0 00*	50.0	49.3	22 36	-19.2	2 00	50.9	50.1	22 34	-17.9
02	38.9	41.7	25		02	33.0	34.0	14		02	50.1	49.5	36		02	51.0	49.7	35	
04	40.0	42.5	27		04	34.0	34.8	16		04	49.2	47.9	38		04	50.8	49.3	35	
06	40.9	43.0	28		06	34.4	35.0	16		06	48.3	47.2	39		06	50.4	49.1	36	
08	41.0	43.8	28		08	35.0	35.5	17		08	47.8	46.3	40		08	50.3	49.1	36	
10	39.0	41.1	25		10	37.2	37.8	21	-24.4	10	46.7	45.7	41		10	50.5	49.2	35	
12	37.2	39.9	22		12	37.2	37.8	21		12	46.0	45.1	42		12	50.8	49.8	35	
14	33.2	36.7	17	-23.2	14	37.7	38.0	21		14	46.0	45.1	42	-18.9	14	50.8	49.9	35	-17.8
16	33.4	36.9	17		16	37.2	38.1	21		16	46.0	45.7	42		16	50.3	49.2	36	
18	34.7	37.3	18		18	37.7	38.2	21		18	46.3	46.0	41		18	40.8	48.6	36	
20	35.5	38.9	20		20	37.0	39.0	22		20	46.3	46.0	41		20	48.9	47.7	38	
22	36.0	38.6	20		22	38.2	40.0	23		22	45.9	45.4	42		22	48.9	47.7	38	
24	36.0	39.0	21		24	39.0	41.0	25		24	45.0	45.3	42		24	48.4	47.0	39	
26	36.3	38.2	20		26	39.0	41.0	25		26	45.8	45.3	42		26	48.6	47.0	39	
28	35.4	37.3	19		28	39.8	41.5	26		28	45.9	45.4	42		28	48.2	46.7	39	
30	35.2	36.8	18	-23.6	30	40.1	42.1	26	-24.4	30	46.2	45.8	42	-18.9	30	47.9	46.1	40	-17.6
32	35.9	36.8	19		32	41.2	42.3	27		32	46.7	46.2	41		32	48.7	47.2	39	
34	35.4	36.2	18		34	42.1	42.4	27		34	47.0	46.3	41		34	48.8	47.1	39	
36	34.5	34.8	16		36	40.1	41.0	25		36	46.2	45.8	42		36	49.2	47.9	38	
38	34.0	35.1	16		38	39.3	40.9	25		38	45.7	45.0	43		38	48.0	47.7	38	
40	31.9	36.3	16		40	37.7	38.2	21		40	45.9	45.1	42		40	48.8	47.6	38	
42	32.0	36.1	15		42	36.1	37.0	19		42	46.0	45.4	42		42	48.1	47.1	39	
44	32.0	36.1	15	-23.9	44	35.7	36.1	18	-24.3	44	46.4	45.7	42	-18.7	44	47.4	46.6	40	-17.3
46	31.9	35.3	15		46	35.0	35.9	18		46	47.2	45.9	41		46	47.8	46.2	40	
48	34.0	37.2	18		48	36.8	37.2	20		48	47.1	46.0	41		48	47.6	46.1	40	
50	33.2	36.6	17		50	36.9	37.7	20		50	47.1	46.1	41		50	47.1	45.9	41	
52	34.0	36.2	17		52	37.7	38.3	22		52	47.9	46.9	39		52	47.6	46.3	40	
54	34.0	37.0	18		54	38.0	38.8	22		54	48.0	47.2	39		54	47.0	46.0	41	
56	35.8	37.2	19		56	38.0	39.0	22		56	48.0	47.4	39		56	46.9	45.8	41	
58	36.2	37.8	20		58	38.4	39.1	23		58	48.0	47.8	39		58	46.2	45.1	42	
21 00	37.3	38.9	22	-24.0	23 00	38.9	39.8	24	-24.3	1 00	48.0	47.8	39	-18.3	3 00	45.6	44.2	43	-17.2
02	37.9	39.0	22		02	39.4	40.2	24		02	48.2	47.7	39		02	45.0	43.0	45	
04	37.2	38.2	21		04	40.0	40.9	25		04	48.2	47.7	39		04	44.7	42.9	45	
06	38.0	39.6	23		06	39.9	40.5	25		06	48.2	47.8	38		06	44.5	42.8	45	
08	38.3	40.1	24		08.5	39.5	40.3	25		08	48.4	47.8	38		08	44.0	43.1	45	
10	38.9	40.3	24		10	39.2	40.0	24		10	48.1	47.3	39		10	44.8	43.3	45	
12	38.1	39.9	23		12	39.3	40.2	24		12	47.9	47.0	39		12	46.1	44.8	43	
14	38.9	40.0	24	-24.2	14	39.1	41.9	26	-23.3	14	47.9	47.1	39	-18.1	14	47.2	45.7	41	-17.2
16	37.3	39.0	22		16	38.3	40.2	24		16	48.7	47.2	39		16	40.0	47.2	38	
18	36.9	38.2	21		18	38.7	40.3	24		18	49.0	47.8	38		18	48.2	46.9	39	
20	36.3	37.8	20		20	37.2	41.5	24		20	49.0	47.7	38		20	47.8	46.2	40	
22	36.9	38.1	21		22	38.0	42.0	25		22	48.3	47.3	39		22	46.9	45.8	41	
24	37.4	38.3	21		24	38.9	43.0	26		24	47.9	47.1	39		24	46.9	45.9	41	
26	38.9	39.9	24		26	40.2	44.0	28		26	47.1	46.7	40		26	47.7	46.8	40	
28	39.6	40.9	25		28	41.0	44.9	29		28	46.0	45.8	42		28	47.6	45.1	41	
30	39.9	40.9	25	-24.2	30	42.0	45.7	31	-24.2	30	45.5	45.1	43	-18.0	30	45.8	43.3	44	-17.0
32	39.7	40.0	24		32	42.7	45.9	32		32	45.7	45.0	43		32	44.8	42.7	45	
34	39.8	40.1	25		34	42.2	45.2	31		34	45.9	45.1	42		34	43.0	40.3	48	
36	39.8	40.2	25		36	41.9	45.0	30		36	46.1	45.7	42		36	42.8	40.3	49	
38	39.8	40.0	25		38	41.5	44.8	30		38	47.0	46.2	41		38	41.7	39.3	50	
40	39.8	40.1	25		40	41.8	44.8	30		40	47.1	46.7	40		40	40.0	38.1	53	
42	37.8	39.8	23		42	41.9	44.8	30		42	47.7	47.1	30		42	30.7	37.9	53	
44	36.3	38.1	20	-24.3	44	41.9	44.7	30	-24.3	44	48.3	48.0	38		44	38.9	37.2	54	-17.0
46	35.4	36.8	19		46	41.2	44.2	29		46	49.0	48.9	37	-17.9	46	38.0	36.2	56	
48	35.9	36.8	19		48	41.1	44.0	29		48.4	49.7	49.7	36		48	37.0	35.2	57	
50	35.8	36.9	19		50	41.0	43.7	28		50	49.2	49.1	37		50	37.5	36.0	56	
52	35.2	36.3	18		52	40.9	43.0	28		52	49.0	48.9	37		52	37.3	36.0	56	
54	35.0	35.5	17		54	40.7	42.8	27		54	48.8	48.3	38		54	37.2	36.0	56	
56	35.1	35.7	18		56	41.0	42.8	28		56	48.9	48.8	37		56	36.7	35.6	57	
58	34.5	35.0	16		58	41.8	43.5	29		58	50.3	49.9	35		58	35.8	34.3	59	
					24 00	42.5	44.1	30	-24.0										

Correction to local mean time is — 1m 06.5s.
Torsion head at 19h 20m read 34° and at 24h 17m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, April 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	69.7	74.3	23 00	-16.8
02	70.0	74.8	01	
04	70.2	75.0	01	
06	70.6	75.0	01	
08	70.0	74.3	00	
10	71.7	72.1	00	
12	72.5	73.1	01	
14	73.1	73.7	02	-16.8
16	73.8	74.9	04	
18	74.1	75.1	04	
20	75.0	76.0	06	
22	76.2	77.1	07	
24	77.2	78.0	09	
26*	38.1	43.1	07	
28	39.1	44.8	09	
30	39.3	45.0	10	-16.7
32	40.2	45.3	10	
34	44.1	45.3	14	
36	40.1	44.9	10	
38	41.7	46.0	12	
40	42.8	47.2	14	
42	43.1	47.3	14	
44	43.0	46.9	14	-16.7
46	43.5	47.5	15	
48	45.1	48.9	17	
50	45.3	48.9	17	
52	44.7	48.1	16	
54	44.2	47.1	15	
56	44.8	47.2	16	
58	44.0	46.0	14	
5 00	42.9	44.7	12	-16.7
02	42.9	45.9	13	
04	44.7	47.7	16	
06	45.1	47.9	16	
08	44.1	46.0	14	
10	44.8	47.4	16	
12	43.8	45.3	13	
14	43.6	46.8	14	-16.5
16	44.3	46.9	15	
18	43.2	45.7	13	
20	42.1	44.7	11	
22	40.9	43.8	10	
24	40.2	42.7	08	
26	41.1	42.9	09	
28	42.2	44.1	11	
30	40.1	41.8	08	-16.3
32.2	45.0	47.0	16	
34	45.1	46.1	15	
36	41.9	44.8	11	
38	40.1	43.3	09	
40	41.5	44.7	11	
42	42.0	45.2	12	
44	41.7	45.7	12	-16.1
46	42.8	45.9	13	
48	41.0	44.6	11	
50	41.2	44.1	10	
52	41.9	44.0	11	
54	42.1	44.1	11	
56	43.5	44.9	13	
58	42.0	43.1	10	
6 00	43.0	44.0	23 12	-16.0
02	43.1	44.2	12	
04	45.0	46.0	15	
06	44.2	45.2	14	
08	41.6	42.7	10	
10	40.3	42.0	08	
12	40.1	41.9	08	
14	41.0	42.3	09	-15.9
16	39.9	40.7	07	
18	38.8	39.7	05	
20	37.9	38.9	04	
22	40.0	40.6	07	
24	39.8	40.3	06	
26	39.1	39.9	05	
28	42.2	43.2	10	
30	40.1	41.0	07	-15.9
32	37.8	38.1	03	
34	36.9	37.4	02	
36	37.1	37.7	02	
38	36.9	37.4	02	
40	37.6	38.0	03	
42	38.3	38.8	04	
44	36.3	37.0	01	-15.8
46	36.3	37.6	23 01	
48	35.0	36.0	22 59	
50	35.8	36.8	23 00	
52	32.1	33.1	22 54	
54	35.8	37.0	23 00	
56	34.6	35.4	22 58	
58	35.0	36.0	59	
7 00	34.1	36.1	58	-15.7
02	29.0*a*		49	
04	34.1	34.4	57	
06	17.0*b*		30	
08	15.7*a*		28	
10	33.6	34.8	57	
12	34.3*a*		22 57	
14	44.8	45.6	23 14	-15.3
16	47.7	48.8	19	
18	46.1	46.3	23 16	
20	32.6*b*		22 54	
22	32.2	32.8	22 54	
24	37.1	37.8	23 02	
26	41.1	41.9	08	
28	46.2	47.8	23 17	
30	31.3	32.7	22 54	-15.0
32	29.2	30.7	50	
34	30.3	30.9	51	
36	32.0	32.8	54	
38	31.1	32.0	53	
40	30.8	31.5	52	
42	28.9	29.3	40	
44	27.9	28.9	48	-14.7
46	29.1	30.7	50	
48	29.2	31.0	51	
50	29.8	32.2	52	
52	29.8	32.0	52	
54	29.1	31.0	50	
56	29.1	30.7	50	
58	27.7	28.9	48	
8 00	28.9	30.0	50	-14.1

Correction to local mean time is — 1m 26s.
Torsion head at 0h 00m read 36° and at 8h 00m read the same.
Observer—R. R. T.

Monday, April 18, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	42.9	40.2	23 16	
02	41.8	38.8	18	
04	42.3	40.4	16	
06	45.2	43.8	11	-17.0
08	45.4	44.1	11	
10	48.0	45.5	08	
12	43.8	43.3	13	
14	44.1	42.1	14	-17.0
16	44.2	40.9	15	
18	46.2	41.1	23 13	
20	55.6	52.0	22 57	
22	53.1	51.1	59	
24	60.2	56.2	50	
26	61.7	58.2	47	
28	65.0	62.8	40	
30	72.3	69.8	29	-17.1
32*	54.0	52.1	20	
34	52.1	51.2	22	
36	54.0	52.2	19	
38	52.9	50.6	22	
40	54.7	53.7	18	
42	53.9	51.5	20	
44	48.0	46.5	29	-17.0
46	40.3	39.2	41	
48	35.0	34.2	49	
50	38.3	35.8	45	
52	37.0	35.2	46	
54.3	65.0*b*		22 01	
56*	55.8	51.8	21 47	
58	38.3	35.0	22 14	
9 00	40.3	37.7	11	-17.0
02	40.0	37.0	11	
04	38.5	36.0	13	
06	38.4	35.1	14	
08	42.0	40.0	07	
10	46.0	44.8	00	
12	42.8	42.0	22 04	
14	47.0	46.1	21 58	-16.9
16	47.0	46.0	58	
18	49.0	47.0	21 55	
20	31.0	40.0	22 07	
22	42.2	40.0	22 06	
24	50.4	48.0	21 53	
26	55.3	54.2	21 45	
28	34.1	29.8	22 21	
30	36.9	33.0	15	-16.9
32	45.5	41.8	02	
34	32.2	28.9	23	
36	29.0	22.0	31	
38	22.1	17.0	40	
40	18.8	12.0	47	
42	23.0	19.4	37	
44	34.9	30.0	20	-16.8
46	34.9	29.2	20	
48	38.2	24.8	21	
50	22.8	17.9	39	
52	24.2	21.0	35	
54	20.0	16.9	42	
56	13.9	9.1	52	
58*	27.2	21.1	59	
10 00	27.8	22.2	22 58	-16.1
02	33.0	31.0	46	
04	37.0	35.9	39	
06	35.0	33.0	43	
08	37.1	35.2	40	
10	36.0	36.0	40	
12	37.0	36.0	39	
14	29.2	28.0	52	-15.6
16	30.4	28.0	51	
18	35.1	34.0	42	
20	40.2	38.8	35	
22	47.0	45.8	24	
24	49.9	47.6	20	
26	47.6	46.9	22	
28	44.3	43.2	28	
30	48.3	47.1	22	-15.2
32	44.3	42.8	28	
34	44.0	41.8	19	
36	48.2	46.7	22	
38	51.1	50.0	17	
40	51.5	50.5	16	
42	48.1	46.5	22	
44	43.2	42.5	20	-15.0
46	44.0	42.8	28	
48	41.9	40.2	32	
50	41.0	39.8	33	
52	44.1	43.1	28	
54	47.5	46.2	23	
56	49.8	48.8	19	
58	52.0	50.5	16	
11 00	44.0	42.7	28	-14.8
02	45.9	48.0	23	
04	48.0	46.0	22	
06	49.7	49.3	18	
08	51.0	50.5	16	
10	47.1	47.0	22	
12	42.8*b*		29	
14	39.2	38.2	35	-14.7
16	40.2	40.0	33	
18	39.9*a*		33	
20	43.0	42.0	29	
22	40.0	39.5	34	
24	34.8	34.0	42	
26	31.0	30.3	48	
28	33.0	32.5	44	
30	40.1	39.6	33	-14.5
32	37.6*b*		37	
34	41.5	41.0	31	
36	40.3	39.2	33	
38	50.0	48.0	19	
40	47.2	47.1	22	
42	44.0	43.9	27	
44.3	38.2*b*		36	-14.2
46	40.3	39.9	33	
48	42.9	42.0	29	
50	45.3	45.1	24	
52	47.5	48.7	20	
54	43.0*b*		28	
56	43.7	43.1	27	
58	53.1	50.0	14	

Correction to local mean time is — 1m 57.5s. 90° torsion = 16.'13.
Torsion head at 7h 25m read 33° and at 12h 26m read 53°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, April 19, 1904					Magnet scale erect					Wednesday, April 20, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00*	49.8	51.2	23 04	-16.3	14 00	58.9	60.1	23 18	-16.0	0 00	55.7	52.1	22 18	-17.7	2 00	32.0	30.3	22 53	-16.7
02	50.3	52.0	05		02	50.0	60.5	19		02	56.3	52.1	17		02	33.6	31.1	51	
04	52.0	53.8	08		04	58.0	60.0	18		04	56.6	53.0	16		04	31.7	29.1	54	
06	53.5	54.9	10		06	56.9	57.8	15		06	57.0	53.0	16		06	32.9	30.7	52	
08	54.6	55.8	12		08	55.9	57.1	14		08	56.9	52.4	16		08	33.2	30.7	52	
10	55.0	55.8	12		10	50.3	52.0	05		10	56.9	52.3	16		10	32.9	30.2	53	
12	55.2	56.5	13		12	54.2	56.0	12		12	56.1	52.3	17		12	31.0	29.2	54	
14	56.0	57.0	14	-16.3	14	54.8	56.2	12	-15.9	14.2	55.2	51.4	18	-17.3	14	32.8	30.0	53	-16.4
16	55.3	56.0	12		16	51.9	54.0	08		16	54.3	50.8	20		16	29.9	27.2	22 57	
18	55.9	56.7	13		18	50.1	51.2	04		18	54.0	50.7	20		18	27.9	25.8	23 00	
20	56.1	57.0	14		20	47.9	49.0	01		20	54.1	51.1	20		20	25.0	22.9	05	
22	55.4	56.2	13		22	46.0	48.1	23 00		22	56.4	53.5	16		22	23.6	21.2	07	
24	55.8	56.9	13		24	46.8	48.1	22 59		24	56.9	54.1	15		24	23.2	20.6	08	
26	55.0	56.1	12		26	45.9	47.0	58		26	56.3	54.0	16		26	25.3	22.7	04	
28	57.2	58.7	16		28	46.8	47.9	22 59		28	56.8	54.1	15		28	24.4	22.0	06	
30	57.2	58.3	16	-16.2	30	47.2	47.8	23 00		30	57.0	54.0	14	-17.1	30	23.9	21.2	07	-16.0
32	57.7	50.0	17		32	48.3	49.5	02		32	58.8	56.8	11		32	21.3	18.9	11	
34	57.0	58.1	15		34	47.5	48.5	23 00		34	60.1	58.4	09		34	18.0	15.7	16	
36	56.5	57.9	15		36	45.5	46.2	22 57		36	62.2	60.6	06		36	18.1	15.9	15	
38	56.1	57.3	14		38	43.9	45.1	55		38	62.8	61.0	05		38	18.7	17.2	14	
40	56.9	57.5	15		40	44.9	45.0	56		40	63.2	61.8	04		40	21.5	20.0	10	
42	56.6	57.0	14		42	43.2	44.1	53		42	63.9	62.0	03		42	25.0	23.9	04	
44	56.0	57.4	15	-16.2	44	43.2	44.1	53	-16.0	44	63.2	61.5	04	-17.0	44	26.0	24.9	02	
46	55.8	56.0	13		46	44.0	45.0	55		46	62.9	61.1	05		46	27.1	26.0	00	-15.9
48	56.0	56.5	13		48	43.2	44.0	53		48	63.5	61.5	04		48	24.7	24.0	04	
50	57.9	58.1	16		50	41.3	42.1	50		50	61.1	59.3	08		50	23.1	22.7	06	
52	59.0	59.3	18		52	36.7	37.0	43		52	59.6	57.8	10		52	23.1	22.2	07	
54	58.7	59.1	18		54	35.3	36.1	41		54	58.9	57.0	11		54	25.1	24.1	23 04	
56	57.5	57.9	16		56	36.0	37.0	42		56	55.4	53.7	16		56	29.8	28.9	22 56	
58	57.6	57.9	16		58	34.3	35.8	40		58	54.2	52.5	18		58	30.4	30.0	55	
13 00	57.2	57.5	15	-16.1	15 00	32.8	34.0	37	-16.0	1 00	52.4	50.6	21	-17.0	3 00	20.3	20.0	56	
02	57.1	57.9	15		02	31.3	32.2	35		02	51.8	49.3	23		02	28.8	28.1	22 58	-15.9
04	58.1	58.9	17		04	29.9	30.5	32		04	50.2	48.2	25		04	27.1	26.8	23 00	
06	58.0	58.7	17		06	27.5	28.1	29		06	50.3	48.1	25		06	28.9	28.2	22 57	
08	58.0	58.9	17		08	26.1	27.0	27		08	49.9	47.8	26		08	29.7	29.1	56	
10	60.0	61.0	20		10	25.5	26.2	26		10	40.7	47.7	26		10	29.8	29.2	56	
12	59.5	60.5	19		12	22.3	23.0	20		12	51.1	48.8	24		12	31.2	30.0	53	
14	60.7	61.0	20	-16.1	14	23.1	24.0	22	-16.0	14	51.2	49.0	23	-16.9	14	33.2	32.8	50	-15.0
16	62.6	63.0	24		16	26.2	27.8	27		16	52.0	50.0	22		16	34.6	34.2	48	
18	64.0	64.8	26		18	27.3	29.0	29		18	53.3	51.0	20		18	34.9	34.4	48	
20	64.8	65.8	28		20	30.1	31.2	33		20	54.2	51.8	19		20	35.3	34.8	47	
22	63.3	64.2	25		22	29.9	30.8	33		22	52.4	49.7	22		22	36.0	35.5	46	
24	63.1	64.2	25		24	26.1	27.9	27		24	51.8	49.3	23		24	34.5	34.0	48	
26	64.5	65.2	27		26	26.1	28.0	27		26	50.0	47.8	25		26	33.0	32.3	51	
28	63.2	64.9	26		28	23.0	24.5	22		28	49.5	47.0	26		28	32.6	32.0	51	
30	62.1	64.5	24	-16.0	30	23.0	25.0	23	-16.0	30	47.7	45.1	20	-16.8	30	33.0	32.7	51	-15.8
32	62.0	63.0	23		32	22.9	24.7	22		32	45.8	43.0	32		32	35.4	35.0	47	
34	61.0	62.0	22		34	23.7	25.2	23		34	45.1	42.8	33		34	36.1	35.7	46	
36	60.3	61.8	21		36	22.7	24.3	22		36	43.8	41.1	36		36	35.0	34.2	48	
38	61.2	62.5	22		38	20.0	21.5	18		38	43.9	42.1	35		38	33.9	33.2	50	
40	60.9	61.8	21		40	17.1	19.1	13		40	40.7	38.6	40		40	32.9	32.2	51	
42	59.2	59.8	18		42	13.7	15.2	08		42	30.9	37.2	42		42	33.6	33.1	50	
44	58.2	59.0	17	-16.0	44	13.7	15.4	08	-16.0	44	38.3	35.7	44	-16.8	44	34.7	34.1	48	
46	59.1	59.7	18		46	13.9	15.5	08		46	36.0	33.1	48		46	37.8	37.0	43	-15.7
48	59.9	60.1	19		48	8.0	10.9	22 00		48	34.4	32.1	50		48	35.1	34.6	47	
50	59.9	60.2	19		50	6.5	8.4	21 57		50	33.8	31.8	51		50	40.8	40.8	38	
52	59.9	60.0	19		52*	35.0	40.0	54		52	33.4	31.2	51		52	38.9	38.1	42	
54	57.8	58.1	16		54	32.8	38.0	51		54	33.8	31.4	51		54	37.0	36.8	44	
56	58.2	58.9	17		56	29.9	33.7	46		56	34.0	32.0	50		56	37.0	36.7	44	
58	59.0	59.6	18		58	29.9	34.0	46		58	32.8	30.0	53		58	36.4	36.0	45	
					16 00	29.0	32.9	44	-16.0										

Correction to local mean time is —2m 22.5s.
Torsion head at 11h 28m read 42° and at 16h 26m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 20, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	36.3	35.9	22 45	-15.5
02	36.3	36.1	45	
04	36.0	35.9	46	
06	36.2	36.0	45	
08	36.1	36.0	46	
10	38.0	37.7	43	
12	37.2	36.8	44	
14	38.8	38.1	42	-15.4
16	33.1	32.8	50	
18	36.0	35.2	46	
20	36.8	36.4	45	
22	36.3	36.0	45	
24	35.7	35.0	47	
26	33.2	32.9	50	
28	33.0	32.3	51	
30	31.1	30.4	54	-15.3
32	33.1	32.5	51	
34	35.1	34.3	48	
36	36.0	35.3	46	
38	33.6	32.7	50	
40	39.0	38.1	42	
42	35.8	35.2	46	
44	32.7	32.1	51	-15.2
46	34.0	34.2	48	
48	30.8	30.8	54	
50	28.9	28.9	57	
52	27.9	27.9	58	
54	27.3	27.2	59	
56	28.3	27.9	58	
58	31.8	31.6	52	
5 00	32.7	32.0	51	-15.2
02	33.7	33.1	50	
04	31.7	30.4	53	
06	30.5	28.3	22 56	
08	25.4	24.1	23 03	
10	22.2	20.6	09	
12	25.5	23.9	23 03	
14	30.0	28.5	22 56	-15.0
16	32.0	30.9	53	
18	31.0	30.0	54	
20	28.8	27.4	58	
22	28.3	27.1	59	
24	28.3	27.1	59	
26	28.1	26.9	59	
28	30.3	29.1	56	
30	32.4	31.2	52	-15.0
32	33.8	32.5	50	
34	33.9	32.3	50	
36	33.1	31.8	51	
38	30.8	29.3	55	
40	29.1	28.1	57	
42	33.2	31.8	51	
44	36.0	35.0	46	
46	34.0	33.8	49	-15.0
48	27.2	26.9	60	
50	29.8	29.2	56	
52	32.2	31.7	52	
54	34.0	33.8	49	
56	34.4	34.1	48	
58	37.2	37.0	44	
6 00	34.1	33.0	22 50	-15.0
02	29.0	28.0	57	
04	30.8	29.3	55	
06	30.7	30.0	55	
08	31.0	30.0	54	
10	34.1	34.0	49	
12	35.8	35.0	47	
14	34.3	33.1	49	-15.0
16	33.1	31.8	51	
18	31.0	29.2	55	
20	29.3	27.9	57	
22.4	28.8	27.0	58	
24	30.1	29.0	56	
26	34.1	32.7	50	
28	33.9	32.7	50	
30	33.1	32.0	51	-15.0
32	34.0	32.9	50	
34.3	33.8	32.8	50	
36	35.3	34.6	47	
38	34.5	33.9	48	
40	33.1	32.7	50	
42	29.8	28.8	22 56	
44	27.0	25.7	23 01	-15.0
46	28.4	26.8	22 59	
48	29.1	28.0	22 57	
50	25.8	24.2	23 03	
52	27.2	25.8	23 00	
54	28.9	27.8	22 58	
56	29.3	28.2	57	
58	27.4	26.7	60	
7 00	30.8	29.2	55	-15.2
02	32.0	31.1	53	
04	32.5	31.7	52	
06	32.8	31.8	51	
08	33.0	32.0	51	
10	31.0	29.8	54	
12	28.0	27.0	59	
14	30.8	29.9	54	-15.0
16	33.2	32.1	51	
18	32.8	31.2	52	
20	34.1	32.9	50	
22	35.1	33.7	48	
24	30.8	29.9	54	
26	27.9	26.4	60	
28	31.1	29.9	54	
30	34.9	34.0	48	-15.0
32	33.7	33.0	50	
34	30.0	29.3	56	
36	32.0	32.0	52	
38	33.9	33.2	50	
40	33.3	32.2	51	
42	28.9	28.2	57	
44	32.1	30.6	53	-15.0
46	33.2	32.2	51	
48	33.0	31.8	51	
50	29.7	27.2	58	
52	29.7	27.9	57	
54	30.2	28.9	56	
56	31.5	30.3	54	
58	30.6	29.0	55	

Wednesday, April 20, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	30.4	29.1	22 56	-15.0
02	30.8	28.8	55	
04	30.5	28.8	56	
06	33.0	30.0	52	
08	34.2	32.8	50	
10	32.7	32.5	51	
12	32.0	30.6	53	
14	34.4	33.6	49	-14.8
16	35.3	33.9	48	
18	34.3	33.0	49	
20	34.6	33.3	49	
22	35.3	34.0	48	
24	33.8	33.0	50	
26	33.1	32.5	51	
28	29.6	28.4	57	
30	29.5	29.0	56	-14.8
32	30.6	29.8	55	
34	29.4	28.3	57	
36	32.9	32.2	51	
38	33.3	33.0	50	
40	32.5	31.8	52	
42	31.6	31.3	53	
44	30.8	30.3	54	-14.8
46	32.0	31.0	53	
48	31.8	31.0	53	
50	32.6	32.0	51	
52	34.0	33.3	49	
54	32.8	31.8	51	
56	32.3	31.5	52	
58	33.6	33.0	50	
9 00	34.4	33.6	49	-14.8
02	34.3	33.3	49	
04	34.0	33.3	49	
06	33.3	33.2	50	
08	33.6	32.5	50	
10	31.3	30.3	54	
12	32.3	31.0	52	
14	35.3	34.4	47	-14.7
16	36.3	34.7	46	
18	33.5	31.9	51	
20	34.3	33.0	49	
22	33.8	32.3	50	
24	34.3	33.0	49	
26	36.6	35.0	46	
28	36.2	35.0	46	
30	36.7	35.1	46	-14.6
32	35.0	34.0	48	
34	34.4	32.6	50	
36	34.3	32.6	50	
38	36.4	33.7	47	
40	34.0	31.4	51	
42	34.4	32.0	50	
44	34.6	32.0	50	-14.6
46	33.6	31.1	51	
48	36.1	33.8	47	
50	36.6	35.0	46	
52	34.0	33.0	49	
54	34.3	33.3	49	
56	33.4	32.6	50	
58	33.0	31.5	52	
10 00	30.1	28.7	22 56	-14.6
02	29.4	28.0	57	
04	32.0	30.0	53	
06	33.5	31.8	51	
08	35.0	33.3	48	
10	37.0	35.5	45	
12	38.5	37.0	43	
14	40.0	38.3	41	-14.5
16	39.6	38.0	41	
18	38.0	36.6	44	
20	36.0	34.3	47	
22	35.8	34.2	47	
24	36.3	34.0	47	
26	36.6	34.4	46	
28	37.0	34.4	46	
30	36.3	34.0	47	-14.3
32	35.3	32.6	49	
34	35.3	32.8	49	
36	36.3	32.4	48	
38	37.2	35.3	45	
40	37.3	35.3	45	
42	35.7	34.3	47	
44	35.4	34.0	48	-14.2
46.2	35.6	34.8	47	
48	36.0	34.4	47	
50	35.2	34.3	48	
52	35.6	34.6	47	
54	35.3	34.6	47	
56	35.2	34.0	48	
58	34.6	33.6	48	
11 00	35.3	34.5	47	-14.1
02	35.9	35.3	46	
04	36.4	36.1	45	
06	36.6	36.5	45	
08	36.0	35.6	46	
10	36.1	35.9	46	
12	35.5	35.3	47	
14	35.0	34.5	48	-14.1
16	35.3	35.3	47	
18	35.3	35.3	47	
20	35.4	35.2	47	
22	35.1	34.6	47	
24	35.0	34.7	47	
26.2	34.7	34.3	48	
28	35.3	35.3	47	
30	36.3	36.1	45	-14.1
32	36.8	36.3	45	
34	37.8	37.3	43	
36	39.0	37.6	42	
38	35.8	34.7	47	
40	36.4	35.3	46	
42	36.6	35.7	45	
44	38.2	37.2	43	-14.0
46	39.7	38.6	41	
48	41.3	40.0	38	
50	40.6	39.5	39	
52	39.3	38.3	41	
54	39.6	38.8	41	
56	39.4	39.3	41	
58	40.5	39.5	39	

Observers—R. R. T. and W. J. P., who alternated from 7h 56m to 8h 06m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 20, 1904					Magnet scale inverted					Wednesday, April 20, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	40.1	39.3	22 40	-14.0	14 00	46.0	44.7	22 31	-14.2	16 00	45.2	44.9	22 32	-14.4	18 00	42.6	42.2	22 36	-14.2
02	40.1	39.3	40		02	45.3	44.3	32		02	45.1	44.3	32		02	41.0	40.8	38	
04	40.3	39.5	40		04	45.3	44.5	32		04	44.3	43.9	33		04	40.1	40.0	39	
06	40.3	39.8	39		06	45.3	44.1	32		06	45.0	44.2	32		06	40.4	40.1	39	
08	39.3	38.7	41		08	45.1	44.1	32		08	45.0	44.7	32		08	41.1	41.0	38	
10	39.3	39.1	41		10	45.0	43.9	32		10	45.3	45.0	32		10	42.0	41.9	36	
12	40.3	39.4	40		12	44.5	43.3	33		12	45.6	45.2	31		12	42.3	42.2	36	
14	39.3	39.8	40	-14.0	14	44.5	43.3	33	-14.2	14	45.9	45.9	30	-14.1	14	42.0	41.9	36	
16	40.1	39.5	40		16	44.3	43.7	33		16	46.9	46.3	29		16	42.5	42.1	36	
18	40.4	40.2	39		18	45.0	44.7	32		18	46.8	46.4	29		18	43.0	42.8	35	
20	41.0	40.3	38		20	45.4	45.3	31		20	46.7	46.2	29		20	43.0	42.7	35	
22	41.0	40.4	38		22	44.7	44.3	32		22	46.2	46.2	30		22	42.3	42.0	36	
24	41.3	40.3	38		24	46.0	45.6	30		24	47.9	47.0	28		24	42.0	41.4	37	
26	41.0	39.9	39		26	47.5	47.3	28		26	47.9	47.2	28		26	42.3	41.0	37	
28	40.2	39.3	40		28	47.3	47.1	28		28	47.9	47.2	28		28	40.9	40.3	38	
30	41.0	40.1	38	-14.1	30	47.3	47.2	28	-14.3	30	46.5	46.2	29	-14.0	30	41.3	41.0	38	-14.3
32	40.3	39.6	40		32	48.3	48.0	27		32	46.1	45.6	30		32	42.8	42.3	35	
34	40.3	39.3	40		34	48.0	48.3	26		34	45.8	45.2	31		34	44.2	43.8	33	
36	41.3	40.6	38		36	48.8	48.4	26		36	45.3	45.0	31		36	45.3	45.0	31	
38	42.1	41.8	36		38	51.0	50.3	23		38	45.9	45.3	31		38	45.9	45.3	31	
40	40.8	40.6	38		40	50.1	49.8	24		40	46.0	45.9	30		40	45.8	45.4	31	
42	39.3	39.0	41		42	49.3	49.0	25		42	45.3	45.0	31		42	45.4	45.1	31	
44	40.6	40.0	39	-14.2	44	48.1	47.9	27	-14.3	44	44.2	44.0	33	-14.0	44	44.8	44.3	32	-14.2
46	43.6	43.0	34		46	48.3	47.8	27		46	44.7	44.1	32		46	44.5	44.1	32	
48	45.2	45.0	31		48	47.8	47.1	28		48	45.0	44.7	32		48	44.5	44.1	32	
50	46.0	44.4	31		50	48.2	47.4	27		50	45.2	45.0	32		50	44.6	44.1	32	
52	46.5	45.8	30		52	42.6	41.7	36		52	44.8	44.8	32		52	44.9	44.9	32	
54	45.8	44.5	31		54	48.6	47.9	26		54	45.0	44.7	32		54	45.1	45.0	32	
56	41.3	41.0	38		56	49.8	48.8	25		56	45.2	44.9	32		56	44.8	44.6	32	
58	43.2	42.3	35		58	50.0	49.3	24		58	45.1	44.9	32		58	44.0	44.0	33	
13 00	43.6	42.6	34	-14.3	15 00	48.1	47.5	27	-14.4	17 00	45.7	45.3	31	-14.0	19 00	44.0	43.8	33	-14.3
02	42.8	41.8	36		02	46.6	46.0	29		02	45.5	45.2	31		02	43.1	43.0	35	
04	42.3	41.3	36		04	46.0	45.3	31		04	45.1	45.0	32		04	42.2	42.1	36	
06	41.3	40.3	38		06	47.5	46.6	28		06	44.8	44.1	32		06	42.4	42.2	36	
08	40.9	40.0	39		08	46.0	44.8	31		08	44.3	44.0	33		08	42.1	41.9	36	
10	41.5	40.6	38		10	46.2	45.3	30		10	44.3	44.1	33		10	42.0	41.8	36	
12	43.0	42.3	35		12	48.2	47.3	27		12	44.2	44.0	33		12	41.9	41.8	36	
14	43.3	41.1	36	-14.3	14	50.0	48.6	25	-14.5	14	43.8	43.2	34	-14.1	14	41.6	41.2	37	-14.3
16	45.8	44.8	31		16	49.6	48.2	25		16	43.0	42.8	35		16	41.2	41.0	38	
18	47.0	46.4	29		18	40.4	47.9	26		18	43.1	42.9	35		18	41.0	41.0	38	
20	47.7	46.9	28		20	48.0	46.6	28		20	43.5	43.0	34		20	40.8	40.7	38	
22	48.0	47.8	27		22	46.0	44.5	31		22	43.2	43.0	34		22	40.1	40.0	39	
24	48.2	47.6	27		24	44.8	43.6	33		24	43.2	43.0	34		24	39.2	39.2	41	
26	49.7	49.3	24		26	45.3	44.3	32		26	43.9	43.8	33		26	39.9	39.8	40	
28	51.6	51.0	22		28	47.3	45.7	29		28	44.3	44.1	33		28	40.2	40.0	39	
30	51.8	51.3	21	-14.2	30	48.5	47.3	27	-14.6	30	46.2	46.0	30	-14.2	30	41.9	41.8	36	-14.5
32	51.3	51.0	22		32	48.8	47.8	26		32	47.2	46.9	28		32	42.0	41.9	36	
34	52.3	51.7	20		34	48.0	47.2	27		34	47.0	46.3	29		34	42.4	42.2	36	
36	54.3	53.7	17		36	46.0	45.3	31		36	45.0	44.8	32		36	43.5	43.3	34	
38	53.3	52.4	19		38	45.2	44.9	32		38	43.8	43.4	34		38	43.1	43.0	35	
40	51.1	50.3	22		40	44.3	43.6	33		40	43.8	43.4	34		40	43.8	43.6	34	
42	54.3	53.7	17		42	43.3	43.3	34		42	43.8	43.4	34		42	43.9	43.3	34	
44	52.6	52.3	20	-14.3	44	44.3	44.0	33	-14.6	44	44.0	43.9	33	-14.2	44	44.9	44.7	32	-14.7
46	52.0	51.8	21		46	44.5	44.0	33		46	43.2	43.2	34		46	44.8	44.4	32	
48	51.0	50.8	22		48	44.6	44.3	32		48	43.2	42.9	35		48	44.1	43.9	33	
50	47.8	47.6	27		50	45.2	45.2	31		50	44.9	44.8	32		50	42.9	42.5	35	
52	46.7	45.5	30		52	45.2	45.0	31		52	45.1	45.0	32		52	42.0	41.3	37	
54	52.0	51.2	21		54	45.0	44.9	32		54	45.2	44.9	32		54	41.1	40.8	38	
56	52.3	50.9	21		56	44.3	44.0	33		56	44.8	44.0	32		56	41.0	40.9	38	
58	46.5	45.2	30		58	44.7	44.3	32		58	43.8	43.2	34		58	41.4	41.0	37	

Observers—W. J. P. and J. V., who alternated from 15h 46m to 16h 00m.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 20, 1904 — Magnet scale inverted									Thursday, April 21, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	41.5	41.1	22 37	-14.8	22 00	46.1	46.0	22 30	-14.9	16 00	54.2	56.2	22 27	-11.8	18 00	55.7	55.9	22 28	-10.9
02	40.3	40.2	39		02	47.1	46.8	28		02	54.2	56.0	27		02	55.2	55.7	28	
04	40.7	40.5	38		04	48.3	48.0	27		04	54.2	56.0	27		04	55.0	55.3	27	
06	41.3	41.1	37		06	47.0	46.8	28		06	54.8	56.1	28		06	55.3	55.9	28	
08	41.5	41.2	37		08	46.0	45.3	31		08	55.0	56.8	28		08	55.8	56.0	28	
10	41.8	41.1	37		10	46.7	46.0	29		10	55.0	56.3	28		10	56.0	56.4	29	
12	42.7	42.1	36		12	46.0	45.9	30		12	54.5	56.0	27		12	56.7	56.8	30	
14	41.9	41.3	37	-14.8	14	46.0	45.8	30	-14.9	14	54.2	55.8	27	-11.5	14	56.2	56.8	30	-10.9
16	41.1	40.9	38		16	44.9	44.4	32		16	55.1	56.9	29		16	56.2	56.2	29	
18	42.1	41.3	37		18	44.2	44.0	33		18	55.7	57.0	29		18	56.1	56.2	29	
20	42.8	42.1	36		20	43.9	43.7	33		20	54.6	56.0	28		20	56.2	56.8	30	
22	43.9	42.9	34		22	43.0	42.8	35		22	53.1	54.3	25		22	56.7	57.0	30	
24	44.0	43.0	34		24	42.4	42.1	36		24	52.0	53.1	23		24	56.8	57.1	30	
26	45.0	44.2	32		26	43.1	42.9	35		26	51.7	52.6	23		26	57.0	57.4	31	
28	46.0	45.5	30		28	43.5	43.1	34		28	52.3	53.2	24		28	57.6	58.0	32	
30	46.9	46.1	29	-14.8	30	43.2	43.0	34	-14.9	30	53.9	54.9	26	-11.4	30	56.2	56.8	30	-10.9
32	46.1	45.6	30		32	42.9	42.9	35		32	55.2	56.0	28		32	56.1	56.7	29	
34	46.0	45.2	31		34	42.7	42.2	36		34	56.0	56.9	29		34	58.1	58.5	32	
36	48.0	47.2	27		36	42.3	42.1	36		36	56.0	56.9	29		36	57.8	58.1	32	
38	46.1	46.0	30		38	42.1	42.0	36		38	58.1	58.9	33		38	57.7	57.9	32	
40	45.2	44.2	32		40	41.5	41.2	37		40	58.8	59.5	34		40	57.4	57.8	31	
42	43.8	41.8	35		42	41.2	41.1	38		42	59.0	59.9	34		42	57.3	57.8	31	
44	44.0	42.1	35	-14.8	44	41.2	41.1	38	-14.9	44	59.2	60.1	34	-11.2	44	57.0	57.3	30	-11.0
46	43.8	42.5	34		46.2	40.8	40.2	38		46	59.3	60.4	35		46	57.1	57.3	31	
48	46.1	44.4	31		48	40.9	40.4	38		48	59.4	60.0	34		48	57.3	57.8	31	
50	46.2	43.9	32		50	40.9	40.7	38		50	59.1	59.8	34		50	57.2	57.6	31	
52	45.2	42.9	33		52	41.0	40.8	38		52	58.8	59.1	33		52	57.2	57.5	31	
54	43.0	41.0	36		54	41.0	40.8	38		54	59.2	59.7	34		54	57.1	57.2	30	
56	44.9	42.9	33		56	41.5	41.0	37		56	59.1	59.7	34		56	57.0	57.0	30	
58	43.7	42.0	35		58	42.3	42.0	36		58	59.1	60.0	34		58	56.8	57.0	30	
21 00	45.8	43.9	32	-14.8	23 00	42.5	42.1	36	-14.9	17 00	59.3	59.9	34	-11.1	19 00	56.8	57.0	30	-11.0
02	44.8	42.5	34		02	42.0	41.5	37		02	59.4	59.8	34		02	56.1	56.3	29	
04	46.5	44.9	30		04	40.9	40.7	38		04	59.0	59.2	34		04	56.1	56.3	29	
06	43.4	41.2	36		06	40.0	39.9	40		06	58.9	59.0	33		06	56.3	57.0	30	
08	45.3	43.2	33		08	39.8	39.4	40		08	58.8	59.0	33		08	56.9	57.2	30	
10	43.8	41.1	36		10	40.2	39.9	39		10	58.9	59.0	33		10	57.0	57.7	31	
12	43.1	41.1	36		12	41.7	41.0	37		12	58.8	59.0	33		12	57.0	57.2	30	
14	42.1	40.5	37	-14.9	14	42.8	42.4	35	-14.9	14	59.1	59.3	34	-11.0	14	57.0	57.0	30	-11.0
16	44.1	42.9	34		16	43.1	42.9	35		16	59.3	60.0	34		16	57.3	58.0	31	
18	43.2	41.6	36		18	42.8	42.1	36		18	60.1	60.7	36		18	57.8	58.2	32	
20	43.9	42.1	35		20	41.0	40.7	38		20	60.1	60.7	36		20	58.0	58.2	32	
22	44.1	42.8	34		22	40.0	39.8	40		22	59.0	59.7	34		22	58.0	58.1	32	
24	45.2	42.0	34		24	39.1	39.0	41		24	58.1	59.9	33		24	58.0	58.0	32	
26	42.2	40.5	37		26	38.3	38.1	42		26	58.1	58.8	32		26	58.0	58.0	32	
28	41.3	40.8	38		28	38.0	37.9	43		28	58.4	59.0	33		28	58.0	58.1	32	
30	42.5	42.0	36	-14.9	30	37.9	37.5	43	-14.9	30	58.6	59.1	33	-11.0	30	58.3	58.7	33	-11.1
32	44.9	44.1	32		32	37.2	37.1	44		32	58.9	59.3	34		32	58.7	59.0	33	
34	42.9	42.3	35		34	36.9	36.8	44		34	58.7	59.0	33		34	58.9	59.3	34	
36	43.7	43.1	34		36	36.5	36.3	45		36	58.3	59.0	33		36	58.9	59.3	34	
38	43.0	42.8	35		38	36.2	36.0	45		38	58.3	58.9	33		38	58.4	58.9	33	
40	43.0	42.9	35		40	36.3	36.0	45		40	58.4	58.9	33		40	58.1	58.8	33	
42	43.1	43.0	35		42	36.4	36.1	45		42	58.3	58.7	33		42	58.1	58.7	33	
44	44.0	43.9	33	-14.9	44	37.0	36.8	44	-14.8	44	58.7	59.0	33	-10.9	44	58.2	58.8	33	
46	45.2	45.1	31		46	37.8	37.2	43		46	58.9	58.9	33		46	58.2	58.9	33	
48	44.9	44.7	32		48	38.8	38.2	42		48	58.6	58.8	33		48	58.4	59.0	33	
50	44.0	43.9	33		50	40.1	39.8	40		50	58.3	58.8	33		50	58.9	59.2	33	
52	43.0	42.4	35		52	41.8	41.1	37		52	58.2	58.2	32		52	59.1	59.8	34	
54	42.0	41.2	37		54	42.9	42.1	35		54	57.6	57.9	32		54	59.9	60.1	35	
56	44.1	43.7	33		56	43.0	42.5	35		56	56.9	57.2	30		56	60.0	60.4	35	
58	45.2	44.8	32		58	42.3	42.0	36		58	56.0	56.2	29		58	60.1	60.4	35	
					24 00	42.0	41.0	37							20 00	59.8	60.7	35	

Correction to local mean time is + 1m. 90° torsion = 16.′49.
Torsion head at 0h 00m read 42° and at 24h 21m read 35°.
Observer—J. V.

Correction to local mean time is + 2m 26.5s.
Torsion head at 15h 35m read 38° and at 20h 12m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, April 22, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	55.4	54.0	22 19	-13.0	22 00	58.8	55.3	22 16	-13.7
02	55.2	54.1	19		02	58.1	54.0	17	
04	53.7	52.7	22		04	57.0	53.2	18	
06	53.0	52.1	23		06	56.9	53.2	19	
08	53.7	52.2	22		08	57.8	54.8	17	
10	55.3	54.0	19		10	58.9	55.9	15	
12	52.2	50.6	24		12	56.4	54.8	18	
14	52.9	50.7	24	-13.0	14	59.4	58.0	13	-13.7
16	53.9	52.9	21		16	60.0	59.1	12	
18	55.3	53.7	19		18	61.2	60.7	10	
20	56.1	55.8	17		20	61.9	60.7	09	
22	55.9	55.0	18		22	61.5	60.8	09	
24	51.9	51.0	24		24	62.1	61.3	08	
26	51.1	50.0	26		26	61.9	60.9	09	
28	51.0	49.7	26		28	60.0	59.1	12	
30	50.6	49.2	27	-13.0	30	61.0	60.2	10	-13.9
32	45.9	44.8	34		32	63.1	61.2	08	
34	45.0	42.0	37		34	63.1	61.2	08	
36	42.7	39.8	40		36	61.8	60.0	09	
38	38.8	35.3	47		38	60.9	59.2	11	
40	40.4	38.3	43		40	60.2	58.9	12	
42	48.9	48.3	29		42	60.8	59.2	11	
44	46.7	44.1	34	-13.1	44	59.9	59.0	12	-13.9
46	39.2	34.8	47		46	60.8	59.2	11	
48	57.3	50.2	21		48	60.1	58.7	12	
50	52.9	48.2	26		50	58.0	56.1	16	
52	53.3	47.8	26		52	56.9	55.1	17	
54	58.3	52.3	18		54	56.7	54.5	18	
56	61.9	57.0	12		56	55.2	53.8	19	
58	61.9	57.6	11		58	55.1	53.1	20	
21 00	62.9	58.3	10	-13.2	23 00	54.3	53.0	21	-14.0
02	63.5	58.6	09		02	56.9	54.9	17	
04	63.6	58.9	09		04	56.3	54.9	18	
06	63.9	59.1	08		06	57.4	55.9	16	
08	63.8	59.3	08		08	55.1	54.0	19	
10	63.9	59.6	08		10	55.3	54.1	19	
12	63.1	59.2	09		12	55.8	54.9	18	
14	63.3	59.6	09	-13.2	14	55.0	54.2	19	-14.2
16	64.0	59.6	08		16	54.4	53.9	20	
18	63.9	59.4	08		18	52.7	52.1	23	
20	63.9	60.0	08		20	51.8	51.0	24	
22	63.9	60.1	08		22	53.9	53.1	21	
24	63.4	60.1	08		24	52.0	51.3	24	
26	63.2	60.0	08		26	56.9	55.9	16	
28	63.2	60.1	08		28	51.9	51.9	24	
30	63.4	60.5	08	-13.3	30.4	51.4	50.0	26	-14.3
32	63.0	60.9	08		32	50.7	49.6	26	
34	62.3	60.1	09		34	50.1	49.2	27	
36	61.9	59.8	10		36	49.7	48.1	28	
38	61.7	59.8	10		38	48.0	47.1	30	
40	61.9	60.0	10		40	47.3	46.7	31	
42	61.7	59.8	10		42	47.1	46.5	32	
44	61.5	59.2	10	-13.5	44	47.0	46.0	32	-14.7
46	62.1	58.9	10		46	47.1	46.2	32	
48	63.0	58.9	09		48	46.1	45.9	33	
50	62.7	58.8	10		50	47.8	47.2	30	
52	61.3	58.0	12		52	47.8	47.1	31	
54	60.3	57.1	13		54	46.7	46.1	32	
56	59.8	56.3	14		56	47.1	46.1	32	
58	59.1	55.8	15		58	48.1	47.9	30	
					24 00	46.7	45.8	32	-14.8

Correction to local mean time is + 2m 09s. 90° torsion = 14.'95.
Torsion head at 19h 30m read 38° and at 24h 20m read 42°.
Observer—R. R. T.

Sunday, April 24, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	47.1	47.9	22 33	-14.7	2 00	37.0	37.2	22 16	-13.9
02	46.7	47.8	32		02	37.2	37.8	17	
04	47.1	47.9	33		04	37.4	38.1	17	
06	47.1	47.8	32		06	38.8	39.2	19	
08	47.0	47.6	32		08	38.7	39.1	19	
10	46.8	47.3	32		10	39.2	39.9	20	
12	46.3	47.2	31		12	40.2	40.9	22	
14	46.0	46.8	31	-14.3	14	41.1	42.0	23	-13.8
16	45.2	46.1	30		16	42.0	42.5	24	
18	43.9	44.8	28		18	41.2	42.0	23	
20	43.9	44.8	28		20	41.8	42.2	24	
22	42.9	43.7	26		22	42.8	43.0	25	
24	42.1	43.0	25		24	43.0	43.1	26	
26	41.7	42.2	24		26	43.9	44.0	27	
28	41.7	42.2	24		28	43.9	44.4	27	
30	41.1	42.0	23	-14.3	30	44.1	44.9	28	-13.7
32	40.9	41.8	23		32	44.2	45.0	28	
34	41.3	42.1	24		34	45.1	45.9	29	
36	41.1	41.8	23		36	45.2	45.9	29	
38	41.0	41.3	23		38	45.1	45.9	29	
40	40.9	41.0	22		40	45.9	46.2	30	
42	41.5	42.0	24		42	45.9	46.2	30	
44	41.3	42.0	23	-14.2	44	47.0	47.4	32	-13.6
46	41.8	42.3	24		46	47.7	48.2	33	
48	41.5	42.2	24		48	48.4	49.1	34	
50	41.1	41.9	23		50	48.1	48.9	34	
52	40.8	41.8	23		52	47.6	48.2	33	
54	39.9	40.3	21		54	47.3	48.0	33	
56	39.0	39.8	20		56	48.9	49.1	35	
58	38.7	39.2	19		58	49.5	50.0	36	
1 00	39.2	40.0	20	-14.2	3 00	49.2	49.8	36	-13.6
02	40.1	41.0	22		02	47.9	48.7	34	
04	40.4	41.3	22		04	47.0	47.6	32	
06	41.0	41.9	23		06	46.2	47.0	31	
08	39.9	40.9	21		08	47.7	48.3	33	
10	38.3	39.1	19		10	48.2	49.0	34	
12	38.2	39.0	19		12	49.1	49.8	36	
14	38.7	39.2	19	-14.1	14	50.1	50.9	37	-13.4
16	39.0	40.0	20		16	50.2	51.1	37	
18	41.2	42.3	24		18	50.8	51.8	39	
20	42.0	43.0	25		20	51.7	52.3	40	
22	42.8	43.3	26		22	53.1	54.4	42	
24	42.0	42.9	24		24	55.1	56.1	45	
26	40.1	40.9	22		26	55.4	56.5	46	
28	39.3	40.3	20		28	56.0	56.9	46	
30	39.2	40.0	20	-14.0	30	54.9	55.8	45	-13.2
32	38.6	39.2	19		32	54.3	55.4	44	
34	39.1	39.9	20		34	53.2	54.8	43	
36	39.1	39.9	20		36	51.9	52.9	40	
38	39.0	39.8	20		38	49.2	50.6	36	
40	38.3	39.1	20		40	47.2	48.5	33	
42	39.0	39.7	20		42	46.9	47.8	32	
44	39.3	40.0	20	-13.9	44	47.1	48.1	33	-13.2
46	39.3	40.1	20		46	47.1	47.8	32	
48	38.0	38.9	18		48	47.3	48.3	33	
50	37.1	37.9	17		50	49.8	50.7	37	
52	36.3	37.0	15		52	54.1	55.0	44	
54	35.7	36.3	14		54	57.3	58.0	48	
56	36.5	36.9	16		56	59.3	59.7	51	
58	37.0	37.2	16		58	61.8	62.1	55	

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, April 24, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	41.8	37.0	23 03	-13.2
02	40.2	35.6	06	
04	38.3	34.2	08	
06	37.9	34.1	09	
08	37.0	34.0	09	
10	39.6	36.5	05	
12	40.0	37.5	04	
14	40.3	38.0	04	-12.7
16	41.1	39.3	02	
18	41.1	39.9	01	
20	41.1	39.9	01	
22	41.8	41.0	00	
24	42.0	41.2	00	
26	41.9	41.2	00	
28	41.4	41.0	00	
30	41.1	40.7	01	-12.8
32	40.0	39.2	03	
34	38.2	37.3	06	
36	37.0	36.1	08	
38	37.0	36.1	08	
40	36.9	36.1	08	
42	37.7	36.7	07	
44	38.5	37.6	05	-12.9
46	39.0	37.9	05	
48	37.9	37.1	06	
50	38.0	36.9	06	
52	37.6	36.9	06	
54	39.0	38.0	04	
56	40.2	39.5	02	
58	40.3	39.9	23 02	
5 00	42.1	41.6	22 59	-12.8
02	42.0	40.6	23 00	
04	39.8	38.8	23 03	
06	42.9	41.8	22 59	
08	47.2	46.6	51	
10	49.5	48.7	48	
12	52.8	51.3	43	
14	50.4	49.9	22 46	-12.7
16	42.0	40.4	23 00	
18	50.3	49.0	22 47	
20	47.8	47.6	22 50	
22	29.1	29.1	23 19	
24	25.3	24.9	26	
26	30.8	30.5	17	
28	37.7	36.9	06	
30	37.0	36.2	08	-12.4
32	39.2	38.4	04	
34	39.6	38.9	23 04	
36	43.1	41.7	22 58	
38	45.2	44.2	55	
40	43.8	42.8	57	
42	42.9	41.9	58	
44	43.9	42.8	57	-12.0
46	42.2	41.7	22 59	
48	39.1	38.1	23 04	
50.6	38.7	37.9	05	
52	36.2	35.2	09	
54	34.8	33.2	12	
56	31.8	31.0	16	
58	35.0	34.6	10	
6 00	36.8	35.5	23 08	-11.3
02	36.2	35.4	09	
04	37.0	36.3	08	
06	37.7	36.4	07	
08	39.8	38.5	04	
10	42.0	40.1	01	
12	41.5	40.1	01	
14	39.9	37.8	04	-11.0
16	42.2	40.7	23 00	
18	42.9	40.9	22 59	
20	45.9	45.0	22 54	
22	41.0	40.0	23 01	
24	39.0	37.9	05	
26	38.1	37.0	06	
28	38.1	36.3	07	
30	35.8	34.0	10	-10.8
32	37.1	34.2	09	
34	40.3	38.0	04	
36	40.8	38.1	03	
38	41.2	38.9	23 02	
40	46.9	45.0	22 53	
42	46.6	45.0	22 53	
44	42.5	41.0	23 00	-10.1
46	40.9	39.0	23 02	
48	45.0	42.0	22 57	
50	47.9	45.6	52	
52	44.9	42.9	56	
54	43.9	41.9	58	
56	43.3	41.2	59	
58	43.1	41.9	22 58	
7 00	39.9	37.9	23 04	-10.2
02	37.5	35.9	07	
04	33.9	32.1	13	
06	33.9	32.3	13	
08	33.7	32.2	13	
10	33.0	31.9	14	
12	34.7	33.7	11	
14	23.7	22.1	29	-10.0
16	29.8	28.0	20	
18	37.3	35.0	08	
20	40.9	39.2	23 02	
22	45.3	43.9	22 55	
24	42.9	41.8	22 59	
26	41.9	41.0	23 00	
28	40.1	39.1	03	
30	41.0	39.2	23 02	-9.6
32	46.1	45.1	22 54	
34	46.0	45.4	53	
36	49.5	49.0	48	
38	61.0*a*		29	
40	63.2*b*		22 26	
42	38.0	36.9	23 06	
44	35.8	35.4	09	-9.2
46	36.9	33.2	23 10	
48	42.1	41.6	22 59	
50	39.0	37.6	23 05	
52	43.1	42.8	22 58	
54	45.0	44.2	55	
56	47.8	47.1	50	
58	49.7	49.1	48	
8 00	46.7	45.6	53	-8.9

Correction to local mean time is + 2m 07s. 90° torsion = 14.′54.
Torsion head at 0h 00m read 38° and at 9h 05m read 33°.
Observer—R. R. T.

Monday, April 25, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	48.8	49.8	22 43	-14.6
02	48.0	49.0	42	
04	50.2	51.7	46	
06	52.0	54.2	49	
08	49.6	51.7	45	
10	48.8	51.0	44	
12	55.3	57.1	54	
14	45.4	48.3	39	-14.6
16	46.1	48.3	40	
18	45.6	47.6	39	
20	39.3	41.7	30	
22	44.8	48.0	39	
24	52.7	54.0	50	
26	48.9	59.9	51	
28	48.9	50.2	44	
30	48.0	48.5	42	-14.6
32	46.0	48.2	40	
34	50.1	51.4	46	
36	50.1	51.9	46	
38	53.3	55.2	51	
40	53.2	54.0	50	
42	53.8	54.1	22 50	
44	62.2	63.0	23 04	-14.6
46	60.1	60.3	23 00	
48	56.9	57.6	22 56	
50	55.0	55.0	22 52	
52	60.7	61.4	23 02	
54	58.7	59.7	22 59	
56	55.2	55.9	53	
58	52.9	54.1	50	
9 00	50.9	52.7	47	-14.3
02	49.1	50.2	44	
04	47.8	49.1	42	
06	45.6	46.9	38	
08	44.0	46.2	37	
10	40.9	43.8	32	
12	42.4	44.6	34	
14	43.5	46.0	36	-14.1
16	44.9	46.9	38	
18	48.9	50.5	44	
20	49.0	50.8	44	
22	49.5	50.8	45	
24	49.4	50.8	45	
26	47.1	48.9	41	
28	48.5	50.2	43	
30	43.3	44.7	35	-14.0
32	46.8	48.3	40	
34	44.9	46.1	37	
36	44.2	45.3	36	
38	49.0	50.0	44	
40	44.1	45.8	36	
42	43.1	44.0	34	
44	43.0	44.1	34	-14.0
46	41.2	42.3	31	
48	40.1	40.5	29	
50	40.2	41.1	30	
52	41.7	42.2	32	
54	40.1	40.9	30	
56	39.0	39.9	28	
58	40.9	41.9	31	
10 00	42.1	43.0	22 33	-13.8
02	43.3	44.2	34	
04	44.2	44.9	36	
06	42.7	43.2	33	
08	41.8	42.1	32	
10	42.3	43.0	33	
12	44.8	45.0	36	
14	44.1	44.8	36	-13.7
16	43.6	43.9	34	
18	43.0	43.4	34	
20	43.7	44.0	35	
22.4	43.1	44.0	34	
24	44.2	44.8	36	
26	45.3	45.9	37	
28	44.8	45.4	37	
30	43.8	44.3	35	-13.4
32	43.1	43.3	34	
34	42.0	42.8	32	
36	43.3	43.9	34	
38	45.0	45.2	37	
40	44.0	44.2	35	
42	46.0	46.3	38	
44	45.1	46.0	37	-13.2
46	42.8	43.5	34	
48	43.3	44.7	35	
50	45.5	46.7	38	
52	40.2	48.0	40	
54	45.0	46.8	38	
56	43.1	44.9	35	
58	42.0	44.0	33	
11 00	43.0	44.9	35	-13.0
02	44.1	46.2	37	
04	42.8	45.0	35	
06	43.3	46.1	36	
08	43.2	45.9	36	
10	46.8	49.1	41	
12	45.3	47.3	39	
14	41.9	44.4	34	-13.0
16.4	45.1	46.8	38	
18	45.2	47.7	39	
20	41.1	43.2	32	
22	48.2	50.1	43	
24	42.6	43.6	34	
26	40.0	41.0	30	
28	40.5	41.9	30	
30	39.2	40.8	29	-12.9
32	39.1	40.2	28	
34	38.9	40.0	28	
36	40.0	41.0	30	
38	40.0	41.1	30	
40	41.1	42.2	31	
42	43.3	44.3	35	
44	41.9	42.2	32	-12.8
46	40.1	41.7	30	
48	39.1	40.3	28	
50	39.1	40.0	28	
52	39.5	40.4	28	
54	40.1	41.2	30	
56	42.0	42.6	32	
58	41.5	42.9	32	
12 00	40.7	41.9	31	-12.4

Correction to local mean time is — 5s. 90° torsion = 16.′80.
Torsion head at 7h 35m read 24° and at 12h 15m read 26°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, April 26, 1904 — Magnet scale inverted					Wednesday, April 27, 1904 — Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	46.2	44.4	22 48	-14.1	14 00	40.0	38.8	22 57	-14.3
02	49.2	48.3	43		02	32.0	31.8	23 09	
04	46.9	45.2	47		04	35.2	34.1	05	
06	45.1	44.1	49		06	34.0	33.2	06	
08	48.8	46.9	44		08	35.2	34.0	05	
10	48.9	47.0	44		10	34.2	33.2	06	
12	49.0	46.9	44		12	33.8	32.0	08	
14	50.6	48.3	42	-14.1	14	34.2	32.0	07	-14.3
16	53.3	51.2	37		16	31.8	30.7	10	
18	54.9	52.2	35		18	32.3	31.1	09	
20	54.0	50.8	37		20	28.2	26.4	16	
22	53.2	51.9	37		22	28.1	26.3	16	
24	53.2	52.0	37		24	27.8	25.6	17	
26	56.9	54.0	32		26	27.8	26.0	17	
28	59.0	58.0	27		28	27.4	26.5	17	
30	62.0	59.0	24	-14.3	30	31.0	30.0	11	-14.3
32	62.7	60.5	22		32	36.3*a*		23 02	
34	61.5	60.0	24		34	43.5	43.3	22 51	
36	59.1	58.0	27		36	45.2	44.4	49	
38	57.7	57.0	29		38	50.8	49.8	40	
40	54.9	53.0	34		40	54.6	53.1	35	
42	52.6	50.9	38		42	55.1	55.0	33	
44	56.2	55.9	31	-14.4	44	56.8	56.3	30	
46	63.2	62.1	21		46	53.7	53.1	35	
48	62.9	59.2	23		48	55.8	53.7	33	
50	59.5	57.0	28		50	56.3	55.3	32	
52	55.2	52.9	34		52	56.0	55.3	32	
54	58.3	55.1	30		54	55.2	54.7	33	
56	57.0	55.0	31		56	58.0	57.0	29	
58	54.5	52.9	35		58	60.0	59.7	25	
13 00	53.0	50.8	38	-14.3	15 00	64.0	62.1	20	-14.1
02	51.2	49.9	40		02	63.6	61.8	21	
04	50.8	49.8	40		04	61.0	59.1	25	
06	50.9	49.3	40		06	61.1	59.8	24	
08	49.0	47.8	43		08	58.9	57.1	28	
10	47.7	47.0	45		10	58.9	56.3	29	
12	45.0	43.5	50		12	58.0	56.0	30	
14	42.9	42.2	52	-14.4	14	57.9	56.7	29	-14.2
16	43.9	43.8	50		16	58.0	56.8	29	
18	46.1	45.0	48		18	54.2	52.8	35	
20	50.0	49.2	41		20	54.9	50.1	37	
22	48.8	48.0	43		22	52.1	51.0	38	
24	51.3	50.8	39		24	52.0	50.2	39	
26	53.5	53.2	35		26	51.2	49.5	40	
28	53.2	53.0	36		28	50.4	48.1	42	
30	53.0	52.1	37	-14.4	30	48.9	47.4	44	-14.2
32	52.0	51.0	38		32	49.8	48.5	42	
34	50.6	50.1	40		34	53.2	51.1	37	
36	49.7	48.3	42		36	53.1	51.2	37	
38	48.0	46.9	45		38	54.1	52.8	35	
40	45.9	44.9	48		40	52.8	51.0	38	
42	46.1	45.8	47		42	53.4	50.9	37	
44	46.2	46.0	47	-14.3	44	55.1	53.7	34	-14.3
46	48.7*a*		43		46	60.0	57.1	27	
48	49.1	48.9	42		48	60.0	57.8	27	
50	48.3	47.8	44		50	62.0	59.8	24	
52	47.2	47.0	45		52	61.0	59.2	25	
54	44.8	44.1	50		54	64.2	62.0	20	
56	45.0*a*		48		56	64.3	62.9	19	
58	43.3	42.7	52		58	61.2	59.9	24	
					16 00	58.8	57.2	28	-14.4
0 00*	55.5	56.7	23 18	-18.6	2 00	70.2	70.3	23 41	-19.3
02	56.0	57.0	19		02	69.8	70.1	40	
04	57.0	59.1	21		04	70.2	70.8	42	
06	58.8	59.9	23		06	70.1	70.6	41	
08	58.5	59.3	23		08	70.7	71.1	42	
10	59.1	60.1	24		10	71.1	71.7	43	
12	58.9	59.8	24		12	72.0	72.6	44	
14	58.3	59.1	23	-18.6	14	72.1	72.7	44	-19.4
16	57.0	57.4	20		16	71.2	72.1	43	
18	57.8	58.1	21		18	70.3	71.0	42	
20	58.2	58.9	22		20	69.2	70.0	40	
22	59.8	60.1	24		22	69.5	70.1	40	
24	60.5	60.9	26		24	69.9	70.3	41	
26	61.2	61.7	27		26	70.1	70.9	42	
28	61.7	62.0	27		28	71.1	71.6	43	
30	62.9	63.1	29	-18.8	30	71.2	71.8	43	-19.4
32	63.2	63.3	30		32	71.1	71.3	43	
34	63.1	63.1	30		34	71.1	71.8	43	
36	63.7	63.9	31		36	72.8	72.8	45	
38	63.8	64.0	31		38	74.0	74.1	47	
40	64.1	64.1	31		40	74.8	74.8	48	
42	64.3	64.7	32		42	73.8	74.0	47	
44	64.2	64.4	31	-19.0	44	73.9	73.9	47	-19.5
46	65.2	65.7	33		46	73.8	74.1	47	
48	65.7	66.0	34		48	74.0	74.9	48	
50	65.9	66.0	34		50	73.8	74.3	47	
52	64.9	65.0	32		52	74.1	74.6	48	
54	64.9	65.1	32		54	73.3	74.1	47	
56	64.9	65.1	32		56	74.0	75.0	48	
58	65.1	65.3	33		58	73.9	74.8	48	
1 00	66.0	66.5	35	-19.2	3 00	75.0	76.1	49	-19.5
02	66.0	67.0	35		02	74.1	75.2	48	
04	65.0	66.0	34		04	72.1	72.9	45	
06	64.0	64.9	32		06	72.2	73.2	45	
08	65.5	66.2	34		08	73.1	74.1	46	
10	66.8	67.2	36		10	73.1	74.0	46	
12	67.8	68.1	37		12	71.9	72.8	44	
14	68.6	69.0	39	-19.2	14	72.5	73.1	45	-19.4
16	68.7	69.1	39		16	73.8	74.0	47	
18	69.4	69.8	40		18	74.1	74.9	48	
20	69.2	69.2	39		20	76.7	77.3	52	
22	69.1	69.1	39		22	77.1	78.1	53	
24	68.3	68.7	38		24	76.3	77.0	51	
26	67.7	67.7	37		26	76.1	77.0	51	
28	67.8	67.8	37		28	76.7	77.1	52	
30	67.9	68.0	37	-19.2	30	76.0	77.1	51	-19.2
32	69.8	69.9	40		32	74.7	75.3	49	
34	69.6	69.9	40		34	75.9	76.8	51	
36	69.9	70.0	40		36	77.3	78.0	53	
38	70.0	70.0	41		38	77.5	78.3	53	
40	70.3	70.8	41		40	76.0	76.3	23 50	
42	70.9	71.0	42		42*	52.7	57.1	22 53	
44	70.7	70.9	42	-19.2	44	53.3	56.9	53	-19.0
46	70.2	70.9	42		46	55.0	57.9	55	
48	70.6	70.9	42		48	56.2	58.9	57	
50	70.1	70.2	41		50	57.9	60.1	22 59	
52	71.9	71.9	44		52	62.1	63.8	23 05	
54	72.9	73.0	45		54	62.3	64.7	06	
56	73.1	73.1	46		56	60.9	62.9	04	
58	72.0	72.2	44		58	60.9	63.0	04	

Correction to local mean time is — 9.5s.
Torsion head at 11h 29m read 48° and at 16h 23m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 27, 1904					Magnet scale erect					Wednesday, April 27, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	62.4	64.1	23 06	-18.9	6 00	59.2	59.9	23 00	-17.8	8 00	60.0	61.1	23 02	-13.9	10 00	48.1	50.0	22 44	-12.0
02	62.2	64.1	06		02	55.5	56.9	22 55		02	57.3	59.2	22 58		02	50.1	51.0	47	
04	60.3	62.1	03		04	58.0	58.5	22 58		04	58.7	59.9	23 00		04	50.1	51.0	47	
06	60.8	62.3	03		06	61.0	61.8	23 03		06	56.6	57.9	22 57		06	49.9	50.1	46	
08	61.2	63.0	04		08	56.2	57.7	22 56		08	54.0	54.9	53		08	48.0	48.8	43	
10	63.2	65.1	08		10	60.2	61.3	23 02		10	53.1	55.1	52		10	47.0	49.1	43	
12	63.0	64.8	07		12	61.0	62.2	23 04		12	55.0	55.8	54		12	46.8	47.1	41	
14	62.1	63.5	05	-18.8	14	55.3	57.2	22 55	-17.3	14	54.8	56.1	54	-13.2	14	49.0	49.3	45	-12.0
16	62.1	63.1	05		16	54.0	55.0	53		16	54.4	54.9	53		16	51.9	53.1	50	
18	61.3	62.9	04		18	50.0	52.1	47		18	57.9	58.8	59		18	49.9	50.9	47	
20	64.2	65.3	08		20	43.9	44.7	36		20	57.8	58.2	58		20	47.8	49.0	43	
22	62.7	63.2	06		22	50.0	52.3	22 47		22	58.2	58.5	59		22	48.2	48.3	43	
24	68.7	69.2	15		24	62.9	64.9	23 07		24	57.1	59.0	22 58		24	47.9	49.2	44	
26	67.1	67.9	13		26	63.2	64.3	23 07		26	57.9	59.9	23 00		26.5	50.1	52.1	48	
28	65.0	65.8	09		28	58.2	59.3	22 59		28	58.9	59.9	23 00		28	49.8	51.3	47	
30	64.0	64.8	08	-18.4	30	61.0	62.9	23 04	-16.9	30	57.0	57.9	22 57	-13.0	30	46.9	47.2	42	
32	62.1	62.9	05		32	62.4	64.7	23 07		32	55.7	56.0	55		32	47.0	47.3	42	-11.9
34	60.3	61.0	02		34	52.4*b*		22 49		34	53.2	54.1	51		34	48.0	48.5	43	
36	62.1	62.8	05		36	48.9	49.8	44		36	54.8	55.4	54		36	48.0	48.9	44	
38	63.8	64.2	07		38	54.2	54.5	51		38	55.8	57.2	56		38	45.6	46.3	40	
40	61.4	62.1	04		40	56.4	58.0	22 57		40	54.0	55.0	53		40	43.3	44.8	37	
42	62.6	63.3	06		42	63.8	65.4	23 08		42	54.1	55.9	54		42	44.2	45.5	38	
44	64.5	65.0	08	-18.2	44	59.1	59.3	23 00		44	52.9	53.2	50	-13.0	44	45.4	46.0	39	-11.8
46	64.9	65.9	09		46	53.9	54.2	22 52	-16.3	46	52.0	52.8	50		46	45.1	46.0	39	
48	68.9	69.7	16		48	57.9	58.2	22 58		48	54.0	54.9	53		48	46.0	47.1	41	
50	68.5	69.0	15		50	59.1	61.0	23 01		50	52.8	53.7	51		50	45.9	47.0	40	
52	62.1	64.0	23 06		52	54.2	56.2	22 54		52	55.7	56.4	55		52	47.9	48.4	43	
54	58.1	59.2	22 59		54	57.0	58.7	22 58		54	52.0	52.9	50		54	48.0	48.9	44	
56	57.1	58.1	57		56	60.9	62.9	23 04		56	54.9	55.2	54		56	47.0	47.2	42	
58	56.0	57.2	56		58	53.1	54.1	22 51		58	54.0	54.9	53		58	46.6	47.0	41	
5 00	56.1	57.0	56	-18.2	7 00	62.2	62.9	23 05	-15.8	9 00	52.0	53.4	50	-12.7	11 00	45.5	46.4	40	-11.8
02	56.9	57.9	57		02	58.4	58.9	22 59		02	50.0	50.4	46		02	47.2	47.7	42	
04	57.3	57.9	22 57		04	59.7	60.3	23 01		04	55.2	56.0	55		04	50.7	51.0	47	
06	59.0	60.3	23 00		06	58.2	58.9	22 59		06	56.0	56.2	56		06	48.0	48.3	43	
08	66.0	67.1	12		08	59.3	61.1	23 02		08	55.9	57.0	22 56		08	46.0	48.0	41	
10	65.1	65.5	09		10	60.8	61.2	03		10	59.9	60.6	23 02		10	44.3	45.0	38	
12	60.2	60.8	23 02		12	58.9	59.8	23 00		12	56.1	57.0	22 56		12	46.9	47.0	41	
14	55.2	56.0	22 54	-18.2	14	55.6	56.0	22 55	-15.4	14	53.8	55.3	53	-12.4	14	45.0	46.5	39	-11.8
16	53.1	53.8	51		16	56.0	57.0	56		16	52.1	54.1	51		16	43.6	44.9	37	
18	56.7	56.9	22 56		18.4	55.6	56.3	55		18	51.2	54.8	51		18	54.2	55.7	54	
20	59.1	59.1	23 00		20	56.7	57.2	56		20	49.1	50.5	46		20	50.1	52.7	22 48	
22	61.1	61.8	23 03		22	55.3	56.0	54		22	50.0	51.3	47		22	57.2	60.7	23 00	
24	58.2	58.2	22 58		24	56.3	57.0	56		24	51.9	52.8	50		24	53.2	57.7	22 55	
26	58.9	58.9	22 59		26	55.7	56.0	22 55		26	52.1	53.2	50		26	37.0	41.0	29	
28	59.3	59.8	23 00		28	60.8	61.8	23 04		28	51.0	52.0	48		28	39.2	43.9	33	
30	58.1	58.9	22 59	-18.2	30	57.0	58.0	22 57	-15.0	30	49.8	50.9	46	-12.3	30	41.3	44.2	35	-11.9
32	59.8	60.1	23 01		32.5	53.9	54.8	52		32	51.4	52.4	49		32	39.3	42.1	32	
34	59.1	59.9	23 00		34	55.2	56.2	55		34	51.4	52.9	49		34	41.1	44.5	35	
36	58.7	59.0	22 59		36	54.3	55.1	22 53		36	52.3	54.0	51		36	41.0	44.2	35	
38	59.9	60.3	23 01		38	59.1	60.5	23 01		38	52.9	54.0	51		38	40.1	43.2	33	
40	56.7	57.9	22 57		40	58.8	59.4	00		40	49.4	50.6	46		40	41.0	44.0	34	
42	59.1	59.7	23 00		42	60.1	61.1	02		42	50.1	51.1	47		42	39.9	42.0	33	
44	55.1	55.8	22 54	-18.0	44	58.6	59.9	23 00		44	52.0	52.8	50	-12.1	44	43.1	46.0	38	-12.0
46	57.2	57.9	22 57		46	53.2	54.0	22 51	-14.3	46	53.1	54.0	52		46	43.7	46.0	38	
48	59.1	59.4	23 00		48	55.2	57.1	55		48	51.2	52.0	48		48	44.3	46.6	39	
50	60.0	61.0	02		50	56.2	58.0	57		50	51.7	52.2	49		50	41.4	44.0	35	
52	61.1	61.8	03		52	57.5	58.9	58		52	51.8	52.9	50		52	42.7	44.7	36	
54	64.9	65.2	23 09		54	55.9	57.2	56		54	50.1	51.7	47		54	43.2	44.8	37	
56	54.0	55.0	22 52		56	57.2	58.0	58		56	51.8	53.2	50		56	43.9	45.1	38	
58	59.9	60.6	23 02		58	55.0	57.0	55		58	50.1	52.4	48		58	42.8	43.9	36	

Observers—R. R. T. and J. V., who alternated from 7h 48m to 7h 58m.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, April 27, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	38.6	40.0	22 30	-12.0
02	40.7	42.3	33	
04	40.3	41.5	32	
06	34.8	36.0	23	
08	34.2	35.4	22	
10	35.0	35.9	23	
12	36.1	36.9	25	
14	36.2	37.2	25	-12.1
16	37.0	37.9	26	
18	35.7	36.0	24	
20	36.3	36.8	25	
22.4	36.9	37.4	26	
24	37.0	37.1	26	
26	40.5*a*		31	
28	41.1	41.7	33	
30	40.2	40.9	31	-12.2
32	39.8*a*		30	
34	43.0*a*		35	
36	39.0*b*		29	
38	38.6	38.8	29	
40	37.9	38.8	28	
42	37.5	38.0	27	
44	37.9	38.1	27	-12.2
46.3	34.0	35.8	22	
48	31.1	31.1	17	
50	28.0*b*		12	
52	27.0	27.5	11	
54	29.4	29.9	14	
56	31.0	31.3	17	
58	32.0	32.4	18	
13 00	33.6	34.0	21	-12.3
02	35.3	36.0	24	
04	37.3	37.8	27	
06	39.2	40.0	30	
08	40.0	40.8	31	
10	40.0	40.9	31	
12	40.9	41.3	32	
14	41.8	42.3	34	-12.2
16	40.9	42.0	33	
18	41.0	42.1	33	
20	41.4	42.4	34	
22	41.2	42.5	34	
24	41.8	42.4	34	
26	41.2	42.2	33	
28	40.1	41.0	32	
30	39.9	40.6	31	-12.3
32	40.3	41.1	32	
34	40.8	41.3	32	
36	41.0	41.8	33	
38	41.2	41.8	33	
40	40.8	41.1	32	
42	40.3	41.0	32	
44	40.4	41.0	32	-12.3
46	40.9	41.1	32	
48	41.9	42.0	34	
50	41.2	41.7	33	
52	41.2	41.9	33	
54	40.4	41.0	32	
56	40.2	40.3	31	
58	40.0	40.1	31	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	40.3	40.4	22 31	-12.3
02	39.9	40.1	31	
04	39.6	39.8	30	
06	39.2	39.2	30	
08	39.1	39.3	30	
10	39.2	39.3	30	
12	38.8	39.0	29	
14	37.3	37.5	27	-12.4
16	37.0	37.0	26	
18	37.0	37.3	26	
20	37.5	37.9	27	
22	37.3	37.8	27	
24	37.1	37.3	26	
26	37.4	37.6	27	
28	37.8	37.9	27	
30	37.7	37.8	27	
32.4	38.0	38.1	28	-12.5
34	37.3	37.4	27	
36	37.3	37.5	27	
38	37.1	37.3	26	
40	37.1	37.2	26	
42	36.8	37.0	26	
44	37.0	37.1	26	-12.5
46	36.1	36.2	25	
48	35.1	35.7	24	
50	34.1	34.8	20	
52	33.9	34.0	21	
54	33.6	33.8	21	
56	33.4	33.8	21	
58	33.1	33.5	20	
15 00	33.0	33.3	20	-12.6
02	33.2	33.3	20	
04	32.8	33.0	20	
06	31.9	32.0	18	
08	32.0	32.2	18	
10	31.9	32.0	18	
12	31.2	31.9	18	
14	30.9	31.0	17	-12.7
16	30.9	30.9	17	
18	31.1	31.3	17	
20	31.1	31.2	17	
22	30.8	31.0	17	
24	31.2	32.0	18	
26	32.2	32.7	19	
28	32.9	33.1	20	
30	32.9	33.1	20	-12.7
32	32.7	33.0	20	
34	32.8	33.0	20	
36	33.0	33.4	20	
38	33.4	34.0	21	
40	33.3	34.0	21	
42	33.9	34.2	21	
44	33.2	33.9	21	-12.7
46	33.6	34.0	21	
48	33.8	34.1	21	
50	33.8	34.1	21	
52	33.6	34.0	21	
54	33.9	34.1	22	
56	34.3	35.0	22	
58	34.0	34.7	22	

Wednesday, April 27, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	35.0	35.6	22 24	-12.6
02	35.0	35.6	24	
04	34.6	35.2	23	
06	34.9	35.6	24	
08	35.3	35.6	24	
10	35.2	35.8	24	
12	35.5	36.0	24	
14	35.9	36.3	25	-12.6
16	36.0	36.3	25	
18	36.3	36.7	26	
20	36.0	36.6	25	
22	37.0	37.5	27	
24	37.3	38.1	27	
26	37.2	38.0	27	
28	36.8	37.8	27	
30	37.2	38.2	27	-12.6
32	36.8	38.1	27	
34	37.0	38.5	27	
36	37.0	38.3	27	
38	38.1	38.8	28	
40	37.8	39.5	29	
42	38.5	40.0	30	
44	38.8	40.5	30	-12.7
46	39.2	40.8	31	
48.2	38.5	39.7	30	
50	38.9	40.1	30	
52	38.8	39.8	30	
54	38.9	39.8	30	
56.3	38.8	39.6	30	
58	39.0	39.7	30	
17 00	39.0	39.6	30	-12.9
02	39.0	39.6	30	
04	39.3	39.8	30	
06	39.3	40.2	31	
08	39.9	40.7	32	
10	39.8	40.6	32	
12	39.1	40.6	31	
14	40.3	40.7	32	-13.0
16	40.5	40.8	32	
18	40.1	40.3	32	
20	39.5	41.6	32	
22	39.8	42.0	33	
24	40.3	42.3	33	
26	40.2	42.3	33	
28	40.2	42.2	33	
30	40.0	41.6	33	-13.1
32	40.6	41.6	33	
34	41.0	42.8	34	
36	42.3	43.9	36	
38	38.3	37.0	27	
40	39.8	41.6	32	
42	39.3	40.8	31	
44	39.0	40.7	31	-13.2
46.7	40.0	41.2	32	
48	40.3	41.5	33	
50	40.3	41.6	33	
52	39.8	40.5	32	
54	39.4	40.5	31	
56	39.3	40.4	31	
58	38.5	39.6	30	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	39.3	40.6	22 21	-13.4
02	40.5	41.8	33	
04	41.0	42.3	34	
06	39.6	41.3	32	
08	39.9	41.3	32	
10	41.1	42.3	34	
12	41.9	43.0	35	
14	41.8	42.6	35	-13.6
16	42.6	43.2	36	
18	42.5	43.3	36	
20	42.2	42.8	35	
22	42.4	42.8	35	
24	42.3	42.6	35	
26	42.0	42.6	35	
28	41.9	42.6	35	
30	42.0	42.6	35	-13.8
32	42.1	42.6	35	
34	42.3	43.0	35	
36	42.3	43.1	36	
38	42.3	43.5	36	
40	42.6	43.8	36	
42	42.5	43.5	36	
44	42.3	43.6	36	-14.0
46	42.6	43.6	36	
48	42.5	43.5	36	
50	43.0	44.2	37	
52	43.0	44.0	37	
54	42.8	43.7	36	
56	43.4	44.0	37	
58	43.6	44.2	38	
19 00	43.5	44.0	37	-14.2
02	43.3	44.0	37	
04	43.0	44.0	37	
06	43.3	44.3	37	
08	43.1	44.5	38	
10	43.0	44.3	37	
12	42.6	43.8	37	
14	42.5	43.7	36	-14.4
16	42.6	44.0	37	
18	42.4	43.8	36	
20	42.4	43.7	36	
22	42.0	43.3	36	
24	42.0	43.3	36	
26	43.3	44.5	38	
28	43.6	44.5	38	
30	43.6	44.3	38	-14.6
32	41.8	42.5	35	
34	40.3	40.8	32	
36	40.4	41.0	33	
38	41.5	42.3	34	
40	41.6	42.4	35	
42	41.3	42.3	34	-14.9
44	41.0	42.1	34	
46	41.6	42.6	35	
48	41.6	42.8	35	
50	41.5	42.3	34	
52	42.0	43.1	35	
54	42.5	43.3	36	
56	43.3	44.2	37	
58	43.5	43.8	37	

Observers—J. V. and W. J. P., who alternated from 15h 52m to 16h 02m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Thursday, April 28, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	53.0	51.9	22 27	-13.6
02	52.8	51.3	28	
04	52.8	51.1	28	
06	53.5	51.9	26	
08	54.7	53.1	24	
10	55.5	54.1	23	
12	55.7	54.7	22	
14	55.1	54.6	23	-13.4
16	55.1	54.8	23	
18	54.9	54.9	23	
20	54.7	54.2	24	
22	52.7	52.7	26	
24	52.0	51.7	28	
26	52.4	51.9	27	
28	52.7	52.0	27	
30	52.7	52.1	27	-13.3
32	52.9	51.9	27	
34	53.2	52.1	27	
36	54.1	53.0	25	
38	55.1	54.2	23	
40	55.8	55.0	22	
42	56.0	55.5	22	
44	55.4	55.1	22	-13.3
46	55.9	54.9	22	
48	57.0	56.2	20	
50	56.3	55.9	21	
52	54.0	53.8	24	
54	52.1	51.3	28	
56	52.6	51.9	27	
58	54.1	53.6	25	
17 00	51.9	51.1	28	-13.4
02	59.1	58.8	17	
04.2	58.8	58.3	17	
06	55.1	54.0	24	
08	51.8	50.6	29	
10	49.2	48.3	33	
12	49.9	49.1	31	
14	51.8	51.0	28	-13.3
16	53.8	52.9	25	
18	55.1	54.2	23	
20	56.4	55.9	21	
22	56.8	56.1	21	
24	54.0	54.0	24	
26	53.2	52.8	26	
28	53.2	53.2	26	
30	52.6	52.2	27	-13.0
32	52.9	52.7	26	
34	52.9	52.5	26	
36	53.0	53.0	26	
38	53.9	53.7	25	
40	54.1	54.0	24	
42	53.9	53.9	24	
44	52.1	51.9	28	-12.9
46	51.4	51.2	29	
48	52.0	51.8	28	
50	53.8	53.0	25	
52	54.8	53.9	24	
54	55.2	54.1	23	
56	55.9	54.9	22	
58	55.0	54.1	24	
18 00	55.2	54.7	22 23	-13.0
02	54.9	54.1	24	
04	54.6	53.9	24	
06	54.8	54.0	24	
08	56.0	55.2	22	
10	56.1	55.8	21	
12	55.0	54.3	23	
14	54.0	53.4	25	-13.1
16	53.9	53.2	25	
18	54.0	53.8	24	
20	54.1	53.6	25	
22	53.0	52.1	27	
24	52.0	51.1	28	
26	51.9	51.0	28	
28	53.1	52.2	27	
30	55.7	54.8	22	-13.3
32	57.1	56.8	20	
34	58.2	58.0	18	
36.4	58.0	57.7	18	
38	57.0	56.5	20	
40	57.0	56.2	20	
42	56.9	56.1	20	
44	56.1	56.0	21	
46	57.1	55.7	21	
48	57.0	56.3	20	
50	56.8	56.1	21	
52	56.7	56.0	21	
54	57.0	56.3	20	
56	57.3	57.0	19	
58	57.9	57.2	19	
19 00	57.9	57.2	19	-13.9
02.4	58.1	58.0	18	
04	58.4	58.1	18	
06	59.1	59.0	16	
08	60.0	59.6	15	
10	59.7	59.1	16	
12	58.2	58.0	18	
14	57.9	57.9	18	-14.0
16	58.0	58.0	18	
18	57.9	57.5	18	
20	57.1	57.0	20	
22	56.8	56.3	20	
24	56.1	56.0	21	
26	55.9	55.8	22	
28	55.1	54.7	23	
30	56.9	56.4	20	-14.1
32	53.0	52.6	26	
34	53.9	53.7	25	
36	53.3	52.8	26	
38	53.1	52.9	26	
40	53.2	52.9	26	
42	53.3	53.1	26	
44	52.9	52.6	26	-14.4
46	52.4	52.2	27	
48	53.1	53.0	26	
50	54.8	53.9	24	
52	54.8	53.9	24	
54	55.5	54.7	23	
56	56.3	55.8	21	
58	56.4	55.8	21	
20 00	56.0	55.8	21	-14.7

Correction to local mean time is — 30s. 90° torsion = 17.′58.
Torsion head at 15h 40m read 49° and at 20h 20m read 40°.
Observer—R. R. T.

Wednesday, April 27, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
20 00	43.2	43.8	22 37	-15.0
02	42.6	42.9	36	
04	42.3	42.4	35	
06	42.3	42.6	35	
08	42.3	42.4	35	
10	42.0	42.4	35	
12	42.0	42.6	35	
14	41.9	42.5	35	-15.2
16	42.2	42.8	36	
18	42.0	42.7	35	
20	42.3	42.6	35	
22	42.6	43.4	36	
24	42.8	43.4	36	
26	43.0	43.6	37	
28	43.3	43.8	37	
30	43.1	43.8	37	-15.5
32	43.3	43.8	37	
34	43.6	43.9	37	
36	43.8	44.0	38	
38	43.6	43.9	37	
40	43.7	43.7	37	
42	43.6	43.8	37	
44	43.5	43.9	38	
46	43.4	44.1	38	-15.8
48	43.7	44.5	38	
50	45.2	45.6	40	
52	45.6	46.1	41	
54	45.6	46.0	41	
56	45.3	45.8	40	
58	45.2	45.4	40	
21 00	44.8	45.3	40	-16.0
02	44.1	45.6	39	
04	44.5	45.0	39	
06	44.6	44.8	39	
08	44.7	44.7	39	
10	44.8	44.9	39	
12	44.8	44.9	39	
14	44.7	45.1	40	-16.0
16	44.7	45.0	39	
18	44.8	45.1	40	
20	44.6	44.8	39	
22	44.6	44.9	39	
24	44.9	45.0	40	
26	44.8	45.0	40	
28	44.9	45.0	40	
30	44.6	44.7	39	-16.2
32	44.5	44.7	39	
34	44.4	44.8	39	
36	44.3	44.7	39	
38	43.6	44.0	38	
40	43.0	43.3	37	
42	43.3	43.8	37	
44	43.7	44.3	38	-16.5
46	43.8	44.6	38	
48	44.1	44.9	39	
50	43.8	44.7	38	
52	43.6	44.1	38	
54	43.3	44.0	37	
56	43.1	43.6	37	
58	43.0	43.3	37	
22 00	43.0	43.0	22 36	-16.6
02	42.8	43.3	36	
04	42.7	43.3	36	
06	42.6	43.0	36	
08	42.3	42.9	36	
10	42.1	42.7	36	
12	41.6	42.4	35	
14	41.5	42.1	35	-16.9
16	41.1	41.5	34	
18	41.6	42.2	35	
20	41.8	42.6	35	
22	41.7	42.3	35	
24	41.6	42.1	35	
26	41.8	42.2	35	
28	41.6	42.0	35	
30	41.8	42.2	35	-17.0
32	42.1	42.2	35	
34	42.3	42.3	36	
36	42.0	42.2	35	
38	42.0	42.2	35	
40	42.5	42.7	36	
42	43.0	43.3	37	
44	43.3	43.6	37	-17.2
46	43.3	43.7	37	
48	43.3	43.8	37	
50	43.3	43.9	38	
52	43.1	43.3	37	
54	43.0	43.6	37	
56	42.6	43.1	36	
58	42.3	43.1	36	
23 00	42.3	42.8	36	-17.4
02	42.0	42.6	36	
04	41.1	41.7	34	
06	40.8	41.0	33	
08	39.3	39.9	31	
10	39.6	40.5	32	
12	36.8	37.3	27	
14	38.3	38.6	29	-17.5
16	36.5	37.0	27	
18	38.0	38.6	29	
20	37.0	37.2	27	
22	37.4	38.0	28	
24	36.8	37.7	28	
26	37.1	38.1	28	
28	38.3	39.1	30	
30	37.2	38.0	28	-17.6
32	36.2	36.8	26	
34	35.3	36.2	25	
36	35.9	36.8	26	
38	35.3	36.3	25	
40	35.3	36.0	25	
42	35.6	36.0	25	
44	35.7	36.0	25	-17.8
46	35.5	35.8	25	
48	35.3	35.6	25	
50	35.6	36.0	25	
52	35.3	36.0	25	
54	35.5	36.3	26	
56	35.0	36.0	25	
58	35.0	36.0	25	
24 00	34.8	36.0	25	-18.0

Correction to local mean time is + 21.5s. 90° torsion = 19.′19.
Torsion head at 0h 00m read 57° and at 24h 15m read 42°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, April, 29, 1904					Magnet scale erect					Sunday, May 1, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	33.8	36.2	21 48	-14.9	22 00	35.7	38.2	21 51	-16.2	0 00*	47.1	44.9	22 29	-16.8	2 00	26.0	24.0	23 02	-17.5
02	34.3	37.1	49		02	34.0	35.1	47		02	52.0	49.0	22		02	24.2	21.0	06	
04	35.0	37.2	21 50		04	37.3	39.2	53		04	47.0	45.3	29		04	27.8	24.0	23 01	
06	42.0	44.8	22 01		06	38.2	40.0	54		06	42.3	39.0	38		06	30.4	26.4	22 57	
08	45.0	47.9	06		08	35.7	36.1	49		08	45.9	44.0	31		08	35.1	32.5	48	
10	51.7	56.9	18		10	34.8*a*		48		10	47.2	46.9	27		10	37.1	34.1	46	
12	52.0	56.0	18		12	36.1*b*		50		12	47.8	46.8	27		12	37.3	34.1	45	
14	49.9	54.1	14	-15.0	14	32.9*b*		44	-16.5	14	44.5	43.4	32	-17.0	14	39.0	36.0	42	-17.5
16	47.3	51.3	10		16	32.0	33.2	44		16	44.5	44.0	32		16	36.2	33.3	47	
18	47.1	51.1	10		18	36.1	37.3	50		18	46.8	46.7	28		18	35.0	31.9	49	
20	46.4	49.8	08		20	37.0	37.3	51		20	48.4	47.9	26		20	28.3	26.1	58	
22	43.9	49.9	06		22	34.0	34.9	47		22	46.3	46.1	29		22	32.0	28.2	54	
24	41.1	46.1	22 01		24	35.2	36.1	49		24	46.9	46.6	28		24	30.1	27.9	56	
26	37.2	41.0	21 54		26	36.0	37.0	50		26	45.8	45.2	30		26	30.1	27.9	56	
28	39.0	42.1	56		28	28.0	29.8	38		28	46.8	46.0	28		28	28.3	25.7	22 59	
30	38.0	41.3	55	-15.3	30	30.0	30.7	40	-16.8	30	48.0	47.3	26	-17.1	30	26.2	24.7	23 01	-17.7
32	37.0	40.7	54		32	35.1	35.3	48		32	48.4	47.6	26		32	23.9	21.7	05	
34	32.9	36.5	21 47		34	33.0	34.0	46		34	48.1	47.2	26		34	22.1	20.0	23 08	
36	40.8	45.8	22 01		36	32.2	34.2	45		36	49.0	48.1	25		36	27.3	25.3	22 60	
38	51.2	53.0	15		38	35.2	39.2	51		38	47.2	46.1	28		38	28.9	26.9	57	
40	43.2	45.9	22 03		40	35.2	38.0	50		40	45.6	44.9	30		40	30.3	29.2	55	
42	37.1	41.0	21 54		42	34.8	37.8	50		42	38.9	37.7	41		42	31.2	29.0	54	
44	33.3	35.9	47	-15.6	44	37.9	42.3	56	-16.9	44	39.0	37.0	42	-17.2	44	32.0	30.2	52	-17.7
46	28.0	34.8	42		46	40.1	44.2	59		46	38.9	37.0	42		46	28.7	27.2	57	
48	26.2	33.2	40		48	36.0	40.1	52		48	42.0	41.0	36		48	29.2	27.9	56	
50	33.0	39.2	50		50	38.8	45.0	21 59		50	43.0	42.2	34		50	32.0	30.2	52	
52	31.9	36.1	46		52	47.0	51.2	22 10		52	44.1	43.7	32		52	33.2	31.9	50	
54	28.7	32.3	41		54	45.4	51.0	08		54	46.1	44.7	30		54	32.5	31.0	52	
56	35.1	39.1	51		56	42.8	48.6	22 05		56	47.2	45.9	28		56	31.0	29.6	54	
58	32.1	36.6	47		58	38.9	43.1	21 57		58	47.0	45.9	28		58	28.9	27.0	22 57	
21 00	34.0	39.1	50	-15.8	23 00	44.7	49.3	22 07	-17.0	1 00	46.3	45.8	29	-17.3	3 00	24.8	23.9	23 03	-17.8
02	39.2	45.3	59		02	46.0	49.6	08		02	45.9	45.0	30		02	24.1	22.9	04	
04	37.0	43.0	56		04	46.2	49.8	08		04	46.8	45.5	29		04	25.7	24.0	23 02	
06	38.1	44.0	21 57		06	55.9	58.5	23		06	46.8	45.9	28		06	29.0	27.5	22 57	
08	41.2	46.2	22 02		08	Lost				08	46.0	45.1	30		08	29.0	27.1	57	
10	40.2	45.5	22 00		10	59.2	62.0	28		10	46.2	45.5	29		10	28.0	26.3	59	
12	37.7	42.0	21 55		12	58.2	60.9	26		12	46.7	45.8	29		12	39.0	37.9	41	
14	37.0	40.2	53	-16.0	14	58.3	60.2	26	-17.0	14	46.9	46.0	28	-17.3	14	30.0	29.0	55	-17.7
16	36.9	41.0	54		16	56.7	59.0	24		16	47.0	46.1	28		16	29.2	28.6	56	
18	39.2	42.8	57		18	54.1	55.2	19		18	47.8	46.9	27		18	29.0	28.8	22 56	
20	40.9	43.9	59		20	58.4	60.5	26		20	47.3	46.9	27		20	24.6	24.2	23 03	
22	41.0	44.1	60		22	60.6	62.2	29		22	47.0	46.4	28		22	23.0	23.0	05	
24	39.3	42.3	57		24	57.0	58.8	24		24	47.0	45.9	28		24	21.0*b*		08	
26	38.0	40.9	55		26	56.0	57.8	22		26	46.6	45.2	29		26	18.8	18.8	12	
28	37.0	39.2	53		28	56.8	57.8	23		28	43.9	43.0	33		28	15.0	15.0	18	
30	37.2	39.8	53	-16.0	30	55.6	56.0	20	-17.2	30	43.4	41.9	34	-17.5	30	15.7	15.4	17	-17.5
32	37.0	38.8	52		32	56.9	58.1	23		32	44.2	43.1	33		32	15.8	15.7	17	
34	38.3	40.2	54		34	53.2	55.1	18		34	45.9	44.7	30		34	15.0	14.3	18	
36	36.3	38.2	51		36	52.0	53.5	16		36	47.1	46.9	27		36	10.2*b*		25	
38	40.0	41.0	56		38	56.2	57.7	22		38	48.0	45.2	28		38	9.5	9.2	27	
40	42.1	43.0	60		40	55.8	56.2	21		40	48.6	47.0	26		40	10.2	9.8	26	
42	41.9	42.9	59		42	56.8	57.5	23		42	43.0	42.0	34		42	9.7	8.9	27	
44	39.2	40.3	55	-16.1	44	55.9	56.2	21	-17.3	44	35.8	34.0	46	-17.6	44	7.2	7.0	30	-17.3
46	38.1	40.2	54		46	55.3	56.1	20		46	35.4	33.5	47		46	9.8	9.7	26	
48	39.1	42.2	57		48	56.8	58.2	23		48	31.0	29.6	54		48	6.9	6.8	30	
50	39.3	42.1	57		50	58.5	58.9	25		50	32.0	31.0	52		50*	41.8	35.1	43	
52	39.0	42.0	56		52	53.9	54.7	18		52	34.8	33.6	48		52	38.1	32.5	48	
54	38.9	42.0	56		54	50.9	52.0	14		54	37.5	35.0	44		54	43.0	37.2	40	
56	38.0	41.0	55		56	51.9	52.9	15		56	39.0	35.8	43		56	42.3	37.0	41	
58	34.9	37.1	49		58	52.4	53.0	16		58	31.1	29.9	53		58	40.0	35.2	44	
					24 00	51.1	52.0	14	-17.4										

Correction to local mean time is — 56.5s. 90° torsion = 18.′27.
Torsion head at 19h 29m read 40° and at 20h 25m read 51°.
Observer—J. V.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, May 1, 1904					Magnet scale erect					Monday, May 2, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	64.0	67.2	23 39	-16.2	6 00	53.7	55.3	24 20	-14.8	8 00*	58.1	54.1	22 36	-12.4	10 00	64 3	63.7	22 24	-10.8
02	63.0	67.7	38		02	48.1	50.8	12		02	57.5	54.1	27		02	66.0	65.2	22	
04	59.4	66.0	34		04	43.2	44.0	03		04	57.0	55.8	35		04	65.9	65.1	22	
06	55.7	61.1	27		06	48.5	49.0	11		06	59.3	57.1	33		06	67.1	66.1	20	
08	56.0	61.3	28		08	47.5	48.4	10		08.5	60.0	58.1	31		08	68.9	68.5	17	
10	60.8	66.0	35		10	51.1	52.9	16		10	60.1	58.0	32		10	69.4	69.2	16	
12	59.6	64.7	33		12	52.8	55.0	10		12	62.8	60.8	27		12	67.0	66.7	19	
14	63.2	69.7	40	-16.5	14	46.9	47.4	08	-13.8	14	65.0	62.9	24	-12.1	14	68.8	68.8	16	-10.6
16	63.0	60.0	39		16	45.1	47.0	07		16	64.2	62.1	25		16	70.3	70.0	14	
18	71.0	76.0	51		18	42.3	44.1	02		18	62.0	60.8	27		18	68.0	67.5	18	
20	70.9	75.3	23 50		20	51.3	52.6	16		20	62.0	60.1	29		20	69.8	69.8	15	
22*	30.0	48.0	24 03		22	51.3	52.8	16		22	61.5	59.2	30		22	69.4	68.5	16	
24	42.0	50.3	08		24	52.2	54.8	18		24	60.8	59.0	30		24	67.8	66.9	19	
26	42.0	48.2	24 06		26	50.0	51.5	14		26	61.3	59.8	20		26	61.4	60.2	20	
28	36.0	41.1	23 55		28	49.9	51.0	14		28	61.9	60.3	28		28	66.9	65.9	20	
30	36.2	37.1	52	-16.0	30	51.0	52.6	16	-13.2	30	61.0	60.3	28	-12.0	30	67.1	66.0	20	-10.2
32	27.0	32.9	41		32	52.3	54.1	18		32.2	62.8	60.2	28		32	67.7	65.2	20	
34	27.1	32.3	41		34	46.1	48.0	08		34	61.0	60.8	28		34	72.0	70.0	13	
36	26.0	32.0	40		36	44.0	46.3	05		36	62.8	61.2	27		36	74.5	72.0	08	
38	23.8	28.0	35		38	46.2	47.1	08		38	60.1	59.0	31		38	72.4	70.8	12	
40	21.8	26.3	32		40	43.8	46.0	05		40	59.3	57.8	32		40	74.2	73.2	09	
42	21.0	25.2	31		42	42.8	44.1	02		42	62.4	60.8	28		42	77.7*a*		02	
44	22.0	25.5	32	-15.8	44	41.1	43.2	00	-12.8	44	63.9	62.8	25	-11.8	44	78.0	78.0	02	-10.0
46	28.5	31.2	41		46	43.3	45.3	04		46	66.1	65.3	21		46*	53.0	49.9	33	
48	37.7	40.8	56		48	41.0	43.2	24 00		48	68.1	67.2	18		48	52.9	50.0	33	
50	34.0	38.0	52		50	39.3	41.0	23 57		50	70.4	69.6	14		50	48.0	45.8	39	
52	24.8	28.2	36		52	35.9	37.8	52		52	69.9	69.0	16		52	47.9	45.5	40	
54	13.1	16.0	17		54	35.0	37.0	51		54	69.5	68.8	16		54	48.0	45.9	30	
56	14.0	16.0	18		56	37.8	39.8	55		56	69.5	68.8	16		56	45.6	41.4	45	
58	16.5	18.0	21		58	40.0	41.7	58		58	67.6	66.0	20		58	42.7	38.8	50	
5 00	19.1	21.7	26	-15.8	7 00	40.1	41.9	50	-12.6	9 00	63.0	61.3	27	-11.6	11 00	41.8	38.1	51	-9.9
02	22.2	24.2	31		02	39.0	40.9	57		02	64.1	63.1	25		02	45.3	42.1	45	
04	22.8	24.0	31		04	37.3	39.1	54		04	60.1	58.2	32		04	44.3	41.2	46	
06	23.2	24.2	32		06	37.7	39.8	55		06	55.8	54.1	38		06	45.4	42.1	45	
08	24.7	25.0	31		08	39.2	40.7	57		08	58.3	57.6	34		08	45.3	42.2	45	
10	25.8	27.8	36		10	30.0	40.8	23 58		10	60.0	59.8	30		10	45.3	41.1	46	
12	25.6	26.1	35		12	41.8	42.1	24 00		12	61.2	60.2	29		12	47.5	43.4	42	
14	27.0	27.0	37		14	42.8	43.0	02	-12.5	14	64.7	63.1	24	-11.3	14	50.5	46.6	37	-9.8
16	20.0	20.8	40	-15.6	16.3	44.1	44.3	04		16	60.3	68.5	16		16	51.0	48.1	36	
18	29.8	30.3	42		18	44.5	44.8	04		18	70.7	69.7	14		18	52.0	48.8	34	
20	31.0*a*		43		20	47.8	48.8	10		20	73.1	72.5	10		20	55.1	51.1	30	
22	31.1	31.5	44		22	50.7	51.9	15		22	60.6	60.3	16		22	50.2	56.0	23	
24	28.0	28.8	30		24	47.0	47.0	00		24	67.0	66.9	10		24	58.7	56.3	23	
26	28.0	28.3	38		26	47.0	47.3	08		26	68.0	67.1	18		26	53.8	50.1	32	
28	27.0	27.9	37		28	44.0	45.2	04		28	66.4	65.4	21		28	51.0	43.1	40	
30	26.2	27.1	36	-15.3	30	47.3	48.8	10	-12.4	30	64.3	63.8	24	-11.0	30	51.9	49.1	34	
32	25.7	26.0	35		32	52.5	52.7	17		32	62.1	61.3	28		32.5	53.2	50.4	32	-9.6
34	21.0*b*		27		34	58.0	50.1	26		34	61.0	60.2	20		34	49.9	47.8	37	
36	18.2*a*		23		36	50.0	60.0	20		36	67.8	67.0	10		36	51.9	49.3	34	
38	24.0	25.1	33		38	50.8	60.1	28		38	60.2	59.7	30		38	50.5	48.3	36	
40	30.0	32.8	23 44		40	54.9	55.8	21		40	60.0	60.1	20		40	52.4	48.8	34	
42	42.0	42.3	24 00		42	53.7	54.1	10		42	58.7	57.5	33		42	45.1	43.0	44	
44	51.0*a*		14	-15.0	44	53.1	54.0	18	-12.1	44	57.0	57.3	34	-10.9	44	44.1	42.5	45	-9.6
46	51.7	52.2	16		46	55.1	55.4	21		46	53.1	52.1	42		46	40.2	48.7	37	
48	50.1	51.0	14		48	59.4	60.2	28		48	54.7	53.0	40		48	55.8	52.8	28	
50	49.6	40.8	12		50	62.6	63.0	33		50	56.7	55.0	36		50	63.1	60.0	17	
52	47.1	48.2	09		52	62.7	64.0	34		52	58.1	57.1	34		52	61.3	60.1	18	
54	50.0	50.4	13		54	68.2	68.3	42		54	59.0	58.8	32		54	60.1	59.8	10	
56	55.5	57.1	23		56*	49.2	52.8	57		56	61.7	61.0	28		56	55.6	55.3	26	
58	60.5	62.0	30		58	49.0	53.5	57		58	62.1	61.5	27		58	50.4*b*		34	
					8 00	49.0	53.0	57	-11.8						12 00	46.0	44.9	42	-9.6

Correction to local mean time is — 8s. 90° torsion = 16.′35.
Torsion head at 0h 00m read 51° and at 8h 45m read 49°.
Observer—J. V.

Correction to local mean time is + 3m 46s. 90° torsion = 16.′54.
Torsion head at 7h 35m read 58° and at 12h 20m read 45°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, May 3, 1904					Magnet scale erect					Wednesday, May 4, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	49.6	50.9	22 10	-12.0	14 00	44.6	51.1	22 07	-10.7	0 00*	33.1	29.2	22 42	-15.9	2 00	70.0	67.0	22 22	-16.4
02	51.1	52.9	13		02	47.0	53.8	11		02	35.0	32.0	38		02	69.1	65.9	24	
04	52.9	55.4	17		04	48.3	54.7	13		04	32.0	27.0	22 45		04	69.2	66.0	23	
06.2	55.9	57.4	20		06	50.6	56.3	16		06	20.3	18.1	23 01		06	68.8	67.0	24	
08	54.5	55.9	18		08	54.3	59.7	21		08	22.2	20.3	22 58		08	68.1	65.0	25	
10	56.8	58.5	22		10	55.9	60.8	23		10	28.0	22.3	52		10	67.8	64.8	25	
12	55.8	56.9	20		12	56.8	60.3	24		12	26.8	25.2	50		12	67.0	64.5	26	
14	54.2	55.9	18	-11.9	14	56.1	59.5	22	-10.7	14	35.2	32.0	38	-16.2	14	66.0	63.3	28	-16.3
16	56.1	56.8	20		16	53.5	57.7	19		16	32.8	30.9	41		16.3	64.9	62.2	30	
18	53.0*b*		15		18	53.1	56.8	18		18	29.2	20.5	52		18	63.6	61.8	31	
20	51.2	52.8	13		20	54.1	57.0	19		20	46.8	45.6	19		20	60.0	58.0	37	
22	57.0	57.3	21		22	56.3	58.0	21		22	51.7	49.5	12		22	61.0	59.0	35	
24	57.8	58.9	23		24	56.3	57.9	21		24	45.6	42.9	22		24	60.7	58.9	36	
26	52.3	54.8	16		26	55.7	57.4	20		26	43.1	41.9	24		26	57.8	54.9	41	
28	50.5	53.2	13		28	55.7	57.7	21		28	40.2	37.1	30		28	55.2	52.3	45	
30	52.8	54.8	16	-11.7	30	55.1	57.0	20	-10.6	30	48.9	45.2	17	-16.3	30	53.0	50.6	48	-16.4
32	51.9	54.4	15		32	53.1	55.9	17		32	49.1	47.1	15		32	51.8	49.2	50	
34	47.3	48.7	07		34	51.9	53.9	15		34	43.1	42.0	24		34	49.9	46.9	54	
36	48.2	49.6	08		36	49.6	51.7	11		36	36.5	34.0	36		36	47.0	44.8	22 58	
38	46.0	48.1	06		38	49.8	52.1	12		38	31.2	29.4	43		38	38.8	37.7	23 10	
40	46.1	47.7	05		40	49.8	52.1	12		40	25.9	22.5	22 53		40	38.2	36.9	11	
42	47.8	48.9	08		42	51.7	53.8	14		42	17.0	15.2	23 06		42	31.0	28.9	23	
44	50.3	52.0	12	-11.3	44	51.9	53.3	14	-10.5	44	33.1	29.1	22 42	-16.7	44	29.1	27.3	25	-16.4
46	49.8	51.1	11		46	50.1	52.0	12		46	37.0	35.1	34		46	30.0	28.2	24	
48	45.5	46.4	04		48	48.1	50.8	09		48	32.4	29.1	43		48	32.9	32.1	18	
50	47.0	48.3	06		50	47.3	49.9	08		50	36.2	34.6	35		50	30.0	27.9	24	
52	45.1	47.4	04		52	46.1	49.0	06		52	38.9	36.9	32		52	28.8	27.1	26	
54	48.6	51.9	10		54	47.7	50.3	09		54	37.3	36.1	33		54	29.3	27.2	25	
56	49.2	52.8	12		56	49.7	52.4	12		56	44.7	43.6	22		56	23.5	20.3	35	
58	48.3	52.9	11		58	48.7	51.3	10		58	42.4	30.1	27		58	18.7	17.3	41	
13 00	49.1	52.7	12	-11.0	15 00	48.8	51.1	10	-10.7	1 00	41.0	38.1	29	-16.7	3 00	17.3	15.9	44	-16.2
02	54.6	58.0	20		02	46.9	48.8	07		02	33.9	31.9	39		02	25.0	22.0	33	
04	52.2	56.0	17		04	46.1	48.4	06		04	30.0	26.0	47		04	33.0	31.7	19	
06	50.2	54.1	14		06	44.5	46.3	03		06	44.9	39.0	25		06	33.8	32.9	17	
08	47.1	51.4	09		08	43.7	45.1	01		08	49.0	47.0	16		08	28.8	27.9	25	
10	52.7	58.1	19		10	43.9	46.1	22 02		10	43.0	39.8	26		10	25.3	23.9	31	
12	48.1	53.0	11		12	41.8	44.4	21 59		12.4	35.9	33.2	37		12	27.5	26.9	27	
14	48.7	54.8	13	-10.7	14	41.1	44.1	59	-10.8	14	34.1	31.8	39	-16.8	14	31.8	30.1	21	-16.0
16	44.0	47.8	04		16.3	41.1	43.9	58		16	32.2	25.5	22 46		16	31.0	29.5	22	
18	45.6	48.6	06		18	41.3	43.8	58		18*	38.8	30.8	23 15		18	31.5	30.0	21	
20	51.1	54.2	14		20	41.1	43.9	21 58		20	41.9	34.5	10		20	30.5	29.1	23	
22	53.3	55.9	17		22	42.0	44.8	22 00		22	9.3	7.0	57		22	30.0	28.0	24	
24	51.0	54.9	15		24	42.2	45.1	22 00		24	23.1	19.1	36		24.5	29.0	28.0	25	
26	49.1	52.7	22 12		26	41.2	44.8	21 59		26	24.1	19.1	36		26	30.7	29.0	23	
28	39.3	43.1	21 56		28	41.0	43.3	58		28	14.0	11.3	50		28	32.8	31.0	19	
30	36.2*b*		48	-10.8	30	39.6	42.8	56	-11.0	30	43.1	35.8	23 08	-16.7	30	35.0	34.0	15	-16.0
32	31.8	33.1	43		32	40.5	43.1	21 57		32	52.1	48.0	22 51		32	37.0	35.8	12	
34	39.0*a*		21 53		34	42.1	44.9	22 00		34	39.0	33.9	23 12		34	38.8	37.2	10	
36	43.1	44.9	22 01		36	42.9	45.2	22 01		36	42.2	40.0	23 05		36	39.0	37.8	10	
38	42.3	46.3	01		38	40.9	43.5	21 58		38	54.8	51.0	22 46		38	38.7	37.3	10	
40	41.9	47.3	22 02		40	40.1	42.3	56		40	54.0	50.9	47		40	38.0	37.0	11	
42	39.9	45.9	21 59		42	40.1	41.3	56		42	56.9	54.0	43		42	36.2	32.1	16	
44	42.9	48.8	22 04	-10.7	44	41.1	42.5	57	-11.0	44	46.2	43.8	59	-16.6	44.3	38.2	37.7	10	-15.8
46.5	45.9	52.1	09		46	39.3	41.0	55		46	47.7	44.0	58		46	38.3	38.0	10	
48	47.8	53.3	11		48	37.8	39.1	52		48	57.6	54.1	42		48	38.0	37.5	10	
50	46.6	53.1	10		50	37.8	38.8	52		50	59.9	58.0	37		50.6	37.5	37.0	11	
52	41.9	47.1	22 02		52	38.3	39.9	53		52	55.0	52.8	45		52	38.4	38.2	09	
54	37.8	44.8	21 57		54	38.8	39.8	53		54	50.3	49.9	51		54	40.8	40.0	06	
56	41.6	48.2	22 02		56	40.9	41.8	57		56	60.7	59.0	36		56	42.0	41.8	04	
58	44.0	49.9	21 56		58	42.2	43.1	59		58	66.5	65.0	26		58	42.8	42.0	03	
					16 00	42.3	43.4	59	-11.0										

Correction to local mean time is + 3m 31.5s. 90° torsion = 16.'64. Observer—J. V.
Torsion head at 11h 30m read 69° and at 16h 15m read 63°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 4, 1904					Magnet scale inverted					Wednesday, May 4, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	42.2	41.9	23 04	-15.3	6 00	36.0*b*		23 13	-11.8	8 00.2	51.2	50.3	22 50	-10.3	10 00	58.2	56.7	22 39	-9.5
02	40.8	40.5	06		02	33.8	33.8	16		02	51.8	50.5	49		02	56.8	55.3	42	
04	37.0	36.9	12		04	35.8	35.1	14		04	51.2	50.3	50		04	57.2	56.0	41	
06	34.8	34.3	15		06	37.5	37.1	11		06	52.0	50.8	49		06	57.5	56.2	40	
08	35.9	35.0	14		08	39.0	38.0	09		08	52.6	51.6	48		08	57.6	56.1	40	
10	36.9	36.8	12		10	42.5	42.0	03		10	52.8	51.8	47		10	58.2	56.8	39	
12	38.1	37.8	10		12	42.0	41.4	04		12	53.0	51.8	47		12	59.3	57.3	38	
14	37.0	36.7	12	-15.1	14	40.1	39.2	07	-11.2	14	53.1	51.8	47	-10.2	14	59.0	57.6	38	-9.6
16	36.5	35.9	13		16	41.6	40.8	23 05		16	52.5	51.3	48		16	58.5	57.2	39	
18	34.8	34.2	15		18	46.0	44.7	22 58		18	53.0	51.6	47		18	57.9	56.5	40	
20	33.1	32.8	18		20	49.9	48.7	52		20	Lost				20	58.0	56.5	40	
22	32.9	32.1	18		22	51.8	51.1	49		22	Lost				22	58.0	56.6	40	
24	35.2	34.9	14		24	48.5	48.2	54		24	Lost				24	57.0	55.6	41	
26	40.7	39.9	06		26	45.5	45.2	58		26	Lost				26	57.3	56.1	40	
28	40.7	39.7	06		28	49.3	49.0	52		28	52.7	51.6	48		28	59.0	57.6	38	
30	36.0	34.1	14	-14.8	30	52.5	52.1	47	-10.7	30	53.8	52.6	46	-10.1	30	59.7	58.3	37	-9.5
32	34.5	34.2	16		32	49.9	48.0	22 53		32	53.3	52.8	46		32	59.1	57.6	38	
34	26.5	26.2	28		34	36.0*b*		23 13		34	54.0	53.1	46		34	57.3	56.1	40	
36	24.1	23.8	32		36	32.8	32.0	19		36	53.6	52.6	46		36	57.1	56.1	41	
38	24.9	24.0	31		38	42.8	42.0	03		38	53.1	52.7	46		38	57.2	56.2	40	
40	27.2	27.1	27		40	42.2	40.0	05		40	53.3	52.8	46		40	56.1	55.1	42	
42	33.0	32.2	18		42	39.8	39.5	07		42	53.5	52.9	46		42	58.4	58.0	38	
44	34.9	34.1	15	-14.4	44	42.3	42.0	03	-10.2	44	52.2	51.8	48	-10.0	44	60.3	59.7	35	-9.3
46	36.0	35.1	14		46	44.4	43.3	01		46	51.6	51.3	49		46	60.2	59.5	36	
48	35.6	35.3	14		48	43.3	43.0	02		48	52.9	52.7	46		48	60.3	59.5	36	
50	35.0	34.8	15		50	41.9	41.0	04		50	52.8	52.7	47		50	60.0	59.4	36	
52	34.8	34.5	15		52	44.3	42.9	23 01		52	53.9	53.4	45		52	60.6	60.0	35	
54	34.5	34.2	16		54	48.2	47.0	22 55		54	54.7	54.3	44		54	59.8	59.3	36	
56	35.7	35.2	14		56	49.0	48.0	53		56	54.5	54.3	44		56	58.5	57.5	38	
58	35.2	35.0	14		58	49.0	48.5	53		58	53.9	52.5	46		58	61.1	60.5	34	
5 00	35.2	35.0	14	-14.0	7 00	51.5	51.0	49	-10.0	9 00	54.0	53.3	46	-9.8	11 00	58.1	57.9	38	-9.0
02	35.9	35.8	13		02	51.1	50.4	50		02.2	54.6	54.3	44		02	58.0	57.3	39	
04	36.9	36.8	12		04	49.8	49.5	52		04	54.3	53.3	45		04	60.1	59.7	36	
06	37.0	37.0	11		06	50.0	49.8	52		06	53.8	52.8	46		06	60.0	60.0	35	
08	36.0	35.9	13		08	49.0	48.9	53		08	53.8	52.9	46		08	60.0	59.6	36	
10	Lost				10	49.0	48.5	53		10	54.6	53.6	44		10	58.9	58.7	37	
12	37.5	37.2	11		12	45.0	44.0	22 60		12	55.3	54.4	43		12	59.5	59.5	36	
14	37.3	37.0	11	-13.6	14	39.8	39.2	23 08	-10.0	14	54.7	53.7	44	-9.6	14	60.3	60.1	35	-8.6
16	35.1	35.0	14		16	45.0*a*		22 59		16	54.7	53.7	44		16	60.8	60.3	34	
18	37.7	37.0	11		18	45.0	44.2	60		18	55.3	54.3	43		18	60.2	59.6	36	
20	39.1	39.0	08		20	46.2	45.0	58		20	55.2	54.0	44		20	61.2	60.8	34	
22	41.2	41.0	05		22	46.8	46.0	22 57		22	55.2	54.0	44		22	60.3	59.9	35	
24	40.1	39.8	07		24	42.9	41.9	23 03		24	55.8	54.6	43		24	60.8	60.6	34	
26	40.2	40.0	06		26	48.9	48.0	22 54		26	55.8	55.0	43		26	62.3	61.9	32	
28	40.8	40.0	06		28	50.2	49.2	52		28	58.1	57.3	39		28.3	60.3	59.7	35	
30	39.0	37.9	09	-13.0	30	51.0	50.4	50		30	58.6	57.8	38	-9.3	30	60.6	59.9	35	-8.6
32	36.0	35.2	14		32	51.1	50.8	50		32	59.0	58.4	37		32	60.6	61.2	34	
34	36.9	36.0	12		34	52.0	51.0	49		34	60.0	59.0	36		34	61.3	61.0	34	
36	37.0	36.5	12		36	53.2	52.0	47		36	60.0	59.4	36		36	63.3	62.6	31	
38	38.3	37.8	10		38	53.2	52.2	47		38	58.4	57.3	39		38	63.1	62.3	31	
40	39.3	38.8	08		40	52.5	50.8	48		40	40.4	47.0	22 54		40	61.3	60.5	34	
42	39.2	38.9	08		42	52.0	51.0	49	-10.2	42	37.3	36.6	23 11		42	63.3	62.6	31	
44	40.8	40.1	06	-12.5	44	52.6	51.1	48		44	47.6	44.7	22 57	-9.3	44	65.3	64.6	28	-8.5
46	42.2	41.5	04		46	52.4	51.2	48		46.3	55.3	54.3	43		46	63.2	62.6	31	
48	39.8	39.0	08		48	53.8	53.0	46		48	56.3	55.2	42		48	61.7	61.3	33	
50	41.0	40.3	06		50	54.9	53.2	45		50	56.1	55.3	42		50	64.1	63.3	30	
52	39.9	39.2	08		52	52.0	51.5	48		52	56.9	55.7	41		52	68.5	67.7	23	
54	38.8	38.3	09		54	52.9	51.0	47		54	57.6	56.7	40		54	68.0	66.8	24	
56	40.3	39.8	07		56	52.2	50.8	49		56	58.4	57.3	39		56	66.0	65.3	27	
58	42.3	42.1	03		58	51.9	51.0	49		58	58.1	56.9	39		58	66.5	65.2	26	

Observers—J. V. and W. J. P., who alternated from 7h 52m to 8h 02m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 4, 1904					Magnet scale inverted					Wednesday, May 4, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	65.3	64.3	22 28	-8.5	14 00	54.2	48.0	22 08	-8.6	16 00	48.2	46.8	22 13	-8.5	18 00	45.0	42.1	22 20	-8.7
02	65.0	64.0	28		02	54.7	50.3	06		02	48.2	46.8	13		02.3	43.8	41.6	21	
04	66.8	66.0	25		04	49.3	43.7	15		04	47.6	45.8	15		04	43.1	40.2	23	
06	67.0	65.9	25		06	47.0	42.6	18		06	47.6	46.3	14		06	41.8	39.0	25	
08	66.3	65.3	26		08	47.8	43.6	16		08	45.4	43.8	18		08	41.0	38.2	26	
10	66.0	65.6	26		10	46.3	41.6	19		10	44.8	43.8	18		10	40.9	38.0	26	
12	67.3	66.9	24		12	43.6	39.6	23		12	44.3	43.3	19		12	40.7	38.2	26	
14	67.5	67.0	24	-8.4	14	47.0	42.8	18	-8.6	14	43.6	42.6	20	-8.5	14	40.7	38.9	26	-8.8
16	65.0	64.3	28		16	50.0	46.9	12		16	43.6	43.0	20		16	39.8	38.8	26	
18	66.9	66.0	25		18	50.3	47.6	11		18	43.7	43.0	20		18	39.4	37.9	27	
20	68.0	67.6	23		20	53.5	50.0	07		20	43.6	43.3	20		20	39.1	38.7	27	
22	70.0	69.3	20		22	54.6	51.0	05		22	43.1	42.8	21		22	39.9	39.2	26	
24	69.3	68.9	21		24	54.3	50.5	06		24	43.0	42.8	21		24	40.8	39.1	25	
26	70.0	69.5	20		26	56.8	53.3	02		26	42.2	41.8	22		26	40.2	39.2	26	
28	71.0	70.4	18		28	57.4	54.6	00		28	41.5	41.0	23		28	39.7	38.1	27	
30	69.3	68.8	21	-8.3	30	54.5	51.6	05	-8.7	30	41.3	41.0	23	-8.5	30	39.8	38.1	27	-8.9
32	70.7	70.3	19		32	55.1	52.6	04		32	42.0	41.4	23		32	39.6	39.3	26	
34	70.3	69.9	19		34	57.3	55.0	00		34	43.2	42.0	21		34	40.2	40.2	25	
36	72.4	71.6	16		36	55.2	53.6	03		36	44.0	43.3	20		36	40.9	40.1	24	
38	72.0	71.5	17		38	55.6	54.0	02		38	43.6	42.7	20		38	40.3	39.9	25	
40	73.3	72.9	15		40	55.5	54.5	02		40	43.3	42.5	21		40	39.3	39.0	27	
42	73.2	73.0	15		42	54.0	53.0	04		42	44.0	42.5	20		42	37.9	37.7	29	
44	75.3	75.3	11	-8.4	44	52.6	51.3	06	-8.8	44	44.1	42.5	20	-8.5	44	36.9	36.3	31	-9.0
46	74.6	74.0	12		46	53.0	52.0	06		46	45.5	44.3	18		46	36.9	35.8	31	
48	75.0	75.0	12		48	53.5	52.3	05		48	47.5	46.0	15		48	36.6	36.1	31	
50	72.5	71.0	17		50	52.3	51.3	22 07		50	48.1	47.2	13		50	37.1	36.6	30	
52	72.2	72.2	16		52	57.3	56.6	21 59		52	47.9	47.3	13		52	38.0	36.7	29	
54	74.0	73.6	14		54	58.7	57.5	57		54	46.3	45.6	16		54	38.1	36.1	30	
56	78.0a		07		56	59.7	58.9	55		56	45.4	45.0	17		56	38.5	36.1	29	
58	76.7	76.5	09		58	58.6	57.8	57		58	44.3	44.3	18		58	39.0	36.4	29	
13 00	78.0	77.3	08	-8.4	15 00	59.3	58.0	56	-8.8	17 00	44.6	44.3	18	-8.6	19 00	40.2	37.2	27	-9.0
02	76.8	76.1	10		02.2	60.2	59.6	54		02	44.6	43.9	19		02	41.0	37.7	26	
04	77.3	76.3	09		04	63.0	61.8	50		04	44.8	43.8	18		04	41.4	38.8	25	
06*	53.3	48.7	08		06	65.2	64.3	46		06	45.0	44.2	18		06	42.1	39.3	24	
08	50.2	48.0	11		08	66.2	65.3	45		08	44.9	44.3	18		08	42.6	40.0	23	
10	47.8	46.2	14		10	66.8	65.8	44		10	44.0	43.0	20		10	42.8	40.2	23	
12	52.8	49.8	07		12	67.3	67.1	43		12	42.3	41.3	22		12	42.9	40.6	23	
14	48.3	47.6	13	-8.3	14	67.3	66.0	44	-8.8	14	46.2	45.8	16	-8.7	14	43.3	41.9	21	-9.0
16	49.2	48.8	11		16	67.3	66.6	43		16	45.3	44.3	18		16	44.6	43.1	19	
18	49.4	48.6	11		18	65.6	65.0	46		18	39.3	38.5	27		18	45.7	44.7	17	
20	51.3	50.6	08		20	63.3	62.6	49		20	39.7	38.3	27		20	46.9	45.9	15	
22	54.8	52.3	04		22	62.3	61.8	51		22	40.3	38.8	26		22	47.8	46.8	14	
24	50.6	47.6	11		24	60.3	59.9	54		24	41.0	39.1	25		24	47.4	46.7	14	
26	48.3	46.5	14		26	60.9	60.3	53		26	40.0	38.6	26		26	46.9	46.7	14	
28	48.3	45.6	14		28	60.2	59.8	54		28	38.7	37.5	28		28	47.1	46.2	15	
30	51.3	47.0	11	-8.4	30	60.6	60.0	53	-8.5	30	38.2	37.1	29	-8.8	30	47.9	46.3	14	-9.1
32	51.3	48.6	10		32	61.5	61.3	52		32	38.9	37.3	28		32	48.8	47.1	13	
34	50.3	47.9	11		34	58.6	58.6	56		34	40.0	38.2	27		34	49.3	47.1	12	
36	49.7	46.1	13		36	58.0	58.0	21 57		36	42.0	40.1	24		36	50.2	47.1	12	
38	53.6	50.3	06		38	56.2	55.6	22 00		38	43.0	41.1	22		38	50.9	47.1	11	
40	51.0	49.7	09		40	55.2	55.0	02		40	43.6	41.9	21		40	51.2	47.1	11	
42	49.6	47.4	12		42	52.5	52.2	06		42	44.1	42.0	20		42	51.8	46.9	11	
44	51.3	48.3	10	-8.5	44	52.3	52.3	06	-8.5	44	45.2	43.8	18	-8.6	44	52.0	47.3	10	-9.2
46	45.7	44.1	18		46	51.8	51.3	07		46	45.9	44.3	17		46	52.8	47.7	09	
48	49.7	46.0	13		48	50.3	49.7	10		48	45.8	44.0	18		48	53.0	48.1	09	
50	48.3	47.3	22 13		50	51.0	50.3	09		50	45.9	43.0	18		50	54.2	48.1	08	
52	59.1	54.5	21 59		52	49.7	48.3	11		52	45.3	43.2	19		52	53.9	49.0	07	
54	59.0	53.8	21 60		54	47.3	46.3	14		54	45.8	42.4	19		54	53.8	50.1	06	
56	52.6	47.8	22 09		56	46.6	45.6	16		56	45.4	43.1	19		56	54.2	51.2	05	
58	52.6	46.3	10		58	47.6	46.4	14	-8.5	58	44.8	42.7	19		58	54.0	52.0	05	

Observer—W. J. P.

Observers—W. J. P. and R. R. T., who alternated from 17h 22m to 17h 32m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 4, 1904 — Magnet scale inverted									Thursday, May 5, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00.1	54.0	52.9	22 04	-9.3	22 00	39.0*b*		22 27	-10.2	16 00	42.6	42.6	22 32	-9.9	18 00	40.8	41.0	22 36	-9.6
02	54.7	52.5	04		02	39.7	38.2	27		02	42.1	42.4	31		02	41.3	41.8	37	
04	53.8	52.0	05		04	47.1	44.7	16		04	41.0	41.0	31		04	41.9	42.0	38	
06	53.3	51.2	06		06	48.7	46.3	13		06	40.8	40.8	20		06.5	42.1	42.4	38	
08	53.9	51.9	05		08	49.7	45.9	13		08	30.9	40.1	28		08.2	42.3	42.8	39	
10	53.7	52.1	05		10	50.7	48.8	10		10	40.1	40.3	28		10	42.1	42.8	30	
12	53.3	52.1	05		12	51.1	44.1	13		12	40.0	40.8	29		12	42.1	42.4	38	
14	52.9	51.9	06	-9.7	14	45.9	41.6	19	-10.3	14	40.2	40.6	20	-9.8	14	42.0	42.3	38	-9.7
16	53.7	52.1	05		16	45.1	35.6	25		16	41.0	41.2	30		16	42.4	42.6	39	
18	52.2	50.9	07		18	61.3	44.5	05		18	41.2	41.8	31		18	42.3	42.8	39	
20	50.0	50.2	09		20	53.2	44.0	12		20	41.2	41.4	31		20	42.2	42.7	39	
22	50.6	49.5	10		22	50.9	36.7	19		22	40.2	40.6	20		22	42.1	42.5	39	
24	50.8	49.7	09		24	48.9	35.8	22		24	38.0	38.3	26		24	42.4	42.8	40	
26	51.1	49.9	09		26	51.9	39.8	16		26	48.1	48.2	32		26	42.1	43.0	40	
28	50.2	40.2	10		28	50.9	39.7	17		28	Lost				28	43.5	43.8	41	
30	49.7	48.1	11	-9.9	30	58.1	45.2	07	-10.6	30	38.2	39.0	27	-9.8	30	43.0	44.0	42	-9.7
32	49.9	48.2	11		32	49.3	33.6	23		32	38.1	39.0	27		32	43.8	43.9	42	
34	49.8	48.2	11		34	51.0	34.9	21		34	38.3	38.9	27		34	43.0	43.0	41	
36	49.9	48.2	11		36	50.7	36.7	19		36	38.0	38.2	27		36	42.1	42.4	40	
38	50.7	48.9	10		38	52.3	36.9	18		38	37.7	37.8	26		38	42.0	42.2	40	
40	51.9	50.1	08		40	51.1	39.6	17		40	37.5	37.9	26		40	42.0	42.2	40	
42	53.3	51.7	06		42	50.1	34.8	21		42	38.2	38.8	28		42.2	42.2	42.8	41	
44	54.3	52.0	05	-9.9	44	46.3	34.9	24	-10.8	44	39.0	40.0	30	-9.6	44.4	42.0	42.5	40	-9.8
46	53.7	51.2	06		46	50.5	37.6	19		46	41.0	41.1	32		46	42.1	42.4	41	
48	52.0	40.9	08		48	48.1	40.8	18		48	41.7	42.0	34		48	42.2	42.6	41	
50	50.4	48.3	11		50	54.5	45.5	10		50	41.0	41.1	32		50	42.1	42.8	41	
52	50.8	48.7	10		52	37.8	27.1	37		52	40.0	40.2	31		52	42.0	42.2	41	
54	47.0	45.8	15		54	23.8	14.1	58		54	40.1	40.2	31		54	42.0	42.0	40	
56	46.8	45.2	16		56	38.1	21.6	41		56	40.2	40.7	31		56	42.0	42.2	41	
58	47.7	46.1	14		58	37.8	23.7	40		58	30.9	40.1	31		58	42.0	42.3	41	
21 00	44.7	43.1	10	-9.9	23 00	27.1	12.3	57	-10.8	17 00	40.2	40.7	31	-9.3	19 00	41.0	42.2	41	-9.9
02	45.5	43.8	18		02	48.0	32.0	25		02	41.3	41.8	33		02	41.7	42.0	41	
04	44.2	42.1	20		04	56.9	42.6	10		04	42.1	42.7	35		04	41.2	41.8	40	
06	43.0	41.2	22		06	55.9	42.7	11		06	42.2	42.3	35		06	41.2	41.9	40	
08	44.2	43.1	20		08	52.0	39.0	16		08	41.1	41.2	33		08	41.5	42.0	41	
10	44.1	43.1	20		10	49.8	38.1	19		10	40.5	40.7	32		10	41.8	42.0	41	
12	45.2	43.3	19		12	51.4	40.1	16		12.6	40.0	41.0	33		12	41.0	42.0	41	
14	42.9	42.0	21	-10.0	14	48.1	40.1	19	-10.9	14	41.0	41.2	33	-9.2	14	41.8	42.0	42	-10.0
16	44.1	42.4	20		16	34.4	22.0	44		16	41.5	41.0	34		16	41.8	42.0	42	
18	44.1	42.1	20		18	31.0	19.3	48		18	41.5	41.8	34		18	41.9	42.1	42	
20	43.9	41.4	21		20	39.8	25.2	37		20	41.5	41.9	35		20	41.3	42.0	41	
22	43.1	40.2	23		22	45.0	31.6	28		22	41.9	42.0	35		22	42.0	42.2	42	
24	43.3	40.2	23		24	41.1	29.2	33		24	42.1	42.3	36		24	42.0	42.1	42	
26	43.0	40.2	23		26	35.5	24.9	41		26	42.7	42.8	37		26	41.0	42.0	42	
28	42.4	40.2	23		28	33.9	26.2	41		28	41.1	41.8	35		28	41.8	41.8	42	
30	42.4	40.2	23	-10.0	30	36.9	22.1	42	-10.9	30	40.0	40.1	33	-9.3	30	41.5	41.8	42	-10.1
32	42.0	30.0	24		32	39.0	28.0	35		32	39.3	39.8	32		32	41.5	41.8	42	
34	41.8	38.7	25		34	43.9	35.0	26		34	39.8	39.9	32		34	41.8	42.0	43	
36	40.3	38.0	27		36	33.1	25.0	42		36	40.0	40.1	33		36	41.8	42.0	43	
38	39.4	37.3	28		38	32.5	25.2	43		38	40.4	40.7	34		38.5	42.0	42.1	43	
40	39.8	37.2	28		40	36.8	20.0	36		40	40.2	40.5	34		40	42.0	42.3	43	
42	38.9	36.5	29		42	34.1	28.1	39		42	40.1	40.1	33		42	42.0	42.5	44	
44	39.0	36.3	29	-10.1	44	37.7	30.1	35	-11.0	44	40.0	40.1	33	-9.5	44	42.0	42.2	44	-10.2
46	39.1	37.0	28		46	41.2	34.3	29		46	40.0	40.1	34		46	41.0	42.1	44	
48	39.4	37.7	28		48	43.1	36.2	26		48	40.2	40.5	34		48	41.0	42.1	44	
50	39.1	37.7	28		50	44.4	38.3	23		50	40.0	41.1	35		50	41.7	42.1	44	
52	39.0	37.3	28		52	35.1	27.3	39		52	41.2	41.5	36		52	41.2	42.0	43	
54	42.0	40.1	24		54	30.8	24.1	45		54	41.4	41.8	36		54	41.5	42.0	43	
56	40.9	39.1	25		56	26.9	20.1	51		56	41.0	41.9	36		56	41.8	42.2	44	
58	44.0	40.7	22		58	30.8	24.5	45		58	40.8	40.9	35		58	41.8	42.2	44	
					24 00	32.9	28.1	40	-11.0						20 00	41.9	42.7	45	-10.3

Correction to local mean time is + 3m 34s. 90° torsion = 18.′96.
Torsion head at 0h 00m read 63° and at 24h 05m read 67°.
Observer—R. R. T.

Correction to local mean time is — 1m 38.5s. 90° torsion = 17.′74.
Torsion head at 15h 40m read 67° and at 20h 21m read 346°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, May 6, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	39.2	38.0	22 28	-11.0	22 00	47.3	46.1	22 16	-11.2
02	39.3	37.9	28		02	44.5	43.7	20	
04	39.7	38.1	28		04	45.5	45.0	18	
06	40.0	38.7	27		06	47.1	46.7	16	
08	40.2	38.9	27		08	44.8	44.0	19	
10	40.0	38.5	28		10	49.9	49.2	11	
12	39.9	38.4	28		12	49.9	49.7	11	
14	39.2	38.0	28	-11.0	14	49.4	48.8	12	-11.2
16	39.1	38.0	29		16	49.1	48.6	12	
18	39.0	37.9	29		18	49.8	49.2	11	
20	38.8	37.7	29		20	49.7	49.0	12	
22	38.0	37.1	30		22	48.1	46.9	14	
24	38.2	37.5	30		24	51.0	49.9	10	
26	38.3	37.5	30		26	49.7*b*		11	
28	39.0	38.1	29		28	48.2	48.1	14	
30	39.5	38.8	28	-11.0	30	53.1	50.8	08	-11.3
32	39.5	38.9	28		32	43.8	41.1	22	
34	40.1	39.5	27		34	40.2	31.0	33	
36	39.8	39.0	27		36	53.1	43.1	14	
38	39.7	39.0	27		38	51.2	41.2	17	
40	40.1	39.6	27		40	51.9	42.1	15	
42	40.6	39.9	26		42	51.5	41.0	17	
44	39.8	39.0	27	-11.1	44	50.2	42.3	17	-11.3
46	39.9	39.0	27		46	48.2	44.1	17	
48	40.3	39.9	26		48	41.1	34.9	29	
50	41.1	40.9	25		50	48.9	41.0	19	
52	41.4	41.0	24		52	52.0	45.8	12	
54	41.9	41.3	24		54	50.8	46.0	13	
56	42.0	41.8	23		56	53.0	32.9	22	
58	43.1	42.6	22		58	53.0	41.9	15	
21 00	43.0	42.8	22	-11.1	23 00	53.0	42.2	14	-11.4
02	44.0	43.1	21		02	55.1	44.0	11	
04	45.1	44.9	18		04	45.8	35.3	26	
06	45.3	45.3	18		06	41.2	33.3	31	
08	47.2	46.9	15		08.3	45.9	40.6	21	
10	47.6	47.1	15		10	30.5	27.9	43	
12	46.1	45.9	17		12	38.0	27.0	38	
14	45.2	44.9	18	-11.2	14	46.3	38.3	23	-11.5
16	45.2	45.0	18		16	45.0	35.9	22 26	
18	44.8	44.3	19		18*	57.3	56.0	23 02	
20	44.0	43.2	21		20	68.0	51.0	22 57	
22	43.2	43.1	21		22*	49.1	44.8	11	
24	43.2	43.1	21		24	47.7	37.8	17	
26	43.9	43.3	21		26	25.0	18.8	50	
28	44.0	43.7	20		28	22.1	14.0	56	
30	44.0	43.9	20	-11.2	30	41.0	31.2	28	-11.5
32	44.5	44.4	19		32	47.0	41.3	15	
34	45.1	44.5	19		34	41.0	34.3	25	
36	44.2	43.5	20		36	37.7	32.0	30	
38	45.0	44.2	19		38	34.3	29.8	34	
40	44.2	44.0	20		40	31.3	26.9	39	
42	43.1	42.0	22		42	32.6	27.2	37	
44	41.2	40.2	25	-11.2	44	35.9	29.2	33	-11 6
46	41.8	40.2	25		46	37.0	31.5	31	
48	42.9	41.1	23		48	32.0	28.1	37	
50	43.0	42.0	22		50	37.0	33.3	29	
52	42.2	42.0	23		52	26.7	26.0	43	
54	43.1	42.2	22		54	21.7	15.1	55	
56	42.2	41.9	23		56	17.9	15.3	58	
58	45.0	44.2	19		58	27.1	20.2	47	
					24 00	35.0	28.0	35	-11.6

Correction to local mean time is — 1m 02.5s.
Torsion head at 19h 33m read 66° and at 24h 23m read 67°.
Observer—J. V.

Sunday, May 8, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	50.6	52.1	22 24	-11.3	2 00	52.8	53.5	22 27	-10.0
02	49.1	51.6	23		02	55.2	55.9	31	
04	49.2	51.9	23		04	56.0	56.9	32	
06	50.3	52.1	24		06	55.0	56.8	31	
08	50.6	52.2	24		08	55.3	57.0	32	
10	50.0	51.2	23		10	54.7	57.1	31	
12	49.2	50.8	22		12	55.1	58.1	32	
14	49.8	51.1	23	-10.9	14	56.2	59.3	34	-10.0
16	49.7	51.1	23		16	57.2	60.9	36	
18	50.1	51.9	24		18	58.8	62.1	38	
20	51.2	53.1	26		20	57.8	61.2	37	
22	51.5	53.1	26		22	58.2	61.9	38	
24	51.1	52.8	25		24	59.0	62.3	39	
26	51.6	52.8	26		26.2	58.5	61.3	38	
28	51.1	52.3	25		28	61.8	64.1	42	
30	50.8	51.7	24	-10.8	30	62.9	65.2	44	-10.0
32	51.2	53.0	26		32	62.0	64.2	43	
34	51.6	53.3	26		34	61.1	63.1	41	
36	52.2	54.2	27		36	61.7	63.2	42	
38	52.3	54.5	27		38	62.8	64.0	43	
40	50.8	53.1	25		40	64.1	65.2	45	
42	51.1	53.1	26		42	64.0	65.2	45	
44	50.2	52.7	24	-10.6	44	62.4	63.8	43	-9.9
46	50.0	52.8	24		46	60.6	62.9	40	
48	50.1	52.8	24		48	59.7	61.3	39	
50	50.0	52.3	24		50	60.0	61.4	39	
52	50.1	52.2	24		52	60.5	61.3	39	
54	50.1	52.3	24		54	61.6	62.6	41	
56	49.7	51.9	23		56	63.0	64.1	43	
58	49.9	51.0	23		58	64.1	65.3	45	
1 00	48.5	49.7	21	-10.4	3 00	65.9	66.9	48	-9.9
02	47.9	49.3	20		02	67.1	68.2	50	
04	48.3	50.2	21		04	67.1	68.9	50	
06	48.9	50.8	22		06	64.9	66.9	47	
08	49.2	50.8	22		08	65.5	68.0	48	
10	48.8	50.0	21		10	66.8	69.3	50	
12	49.8	51.6	23		12	68.1	70.9	53	
14	51.0	53.8	26	-10.3	14	69.2	72.0	54	-9.8
16	50.9	53.1	25		16	70.0	72.9	56	
18	49.3	51.9	23		18	70.1	73.1	56	
20	48.6	51.0	22		20	70.8	73.3	57	
22	48.3	50.2	21		22	71.1	73.5	57	
24	48.1	50.8	21		24	72.0	74.0	58	
26	47.2	50.0	20		26	73.1	75.0	22 60	
28	47.6	49.5	20		28	73.6	75.1	23 00	
30	47.0	49.0	19	-10.2	30	74.2	75.8	01	-9.8
32	47.1	49.0	19		32	75.0	76.1	02	
34	47.2	48.3	18		34	75.3	77.2	03	
36	47.5	48.0	18		36	76.1	78.2	05	
38	49.0	49.6	21		38	76.5	79.0	06	
40	49.6	49.9	22		40	76.3	78.4	05	
42	50.8	50.9	23		42*	47.4	50.5	05	
44	50.1	50.8	23	-10.1	44	49.1	50.8	06	-9.7
46	48.1	49.2	20		46	49.1	50.3	06	
48	47.9	49.6	20		48	49.9	50.7	07	
50	48.1	49.4	20		50	53.9	53.9	12	
52	48.3	49.2	20		52	54.1	54.9	14	
54	48.8	49.1	20		54	55.2	56.9	16	
56	49.3	49.8	21		56	54.8	56.2	15	
58	50.9	51.1	24		58	54.5	56.1	15	

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, May 8, 1904 — Magnet scale inverted					Monday, May 9, 1904 — Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	51.7	49.8	23 16		6 00	51.6	50.7	23 15	-8.1
02	50.0	48.7	18		02	52.1	50.2	15	
04	49.4	47.0	20		04	48.4	47.2	20	
06	49.7	47.1	19		06	48.8	47.2	20	
08	49.0	45.9	21		08	48.9	48.2	19	
10	50.8	47.8	18		10	50.4	49.6	17	
12	50.5	47.8	18		12	49.5	49.2	18	
14	47.9	46.1	22	-9.3	14	48.4	47.9	20	-8.0
16	45.4	43.1	26		16	50.1	49.4	17	
18	46.7	44.7	24		18	51.0	50.1	16	
20	48.8	47.2	20		20	50.9	49.3	16	
22	49.5	48.2	19		22	50.3	49.1	17	
24	49.3	47.8	19		24	49.3	48.1	19	
26	46.8	44.9	23		26	48.0	46.7	21	
28	43.2	40.8	29		28	48.2	47.2	20	
30	40.1	37.8	34	-9.3	30	45.2	43.6	26	-7.8
32	37.9	35.9	37		32	44.5	42.4	27	
34	37.0	34.8	39		34	44.7	43.7	26	
36	40.2	38.5	34		36	45.1	43.8	26	
38	37.1	36.1	38		38	44.3	43.0	27	
40	38.9	37.2	36		40	50.3	48.9	18	
42	37.9	37.0	37		42	46.1	45.0	24	
44	38.4	37.1	36	-9.2	44	47.1	46.2	22	-7.7
46	36.6	35.1	39		46	52.0	51.2	14	
48	33.5	32.2	44		48	54.0	53.2	11	
50	34.8	33.2	42		50	52.3	51.1	14	
52	37.8	37.2	36		52	52.1	51.3	14	
54	41.2	40.3	31		54	48.9	47.8	19	
56	42.3	41.3	30		56	50.8	50.0	16	
58	38.7	38.2	35		58	48.9	47.9	19	
5 00	35.0	35.0	40	-9.1	7 00	50.1	49.0	18	-7.3
02	32.3	32.0	45		02	50.9	49.7	16	
04	32.0	31.5	46		04	47.8	47.1	21	
06	34.8	34.1	41		06	51.1	50.1	16	
08	37.8	37.4	36		08	52.2	51.8	14	
10	38.0	37.7	36		10	51.9	51.9	14	
12	37.3	37.0	37		12	55.3	55.1	09	
14	35.6	34.6	40	-9.0	14	53.8	53.2	11	-7.2
16	32.4	31.3	45		16	56.1	55.7	08	
18	31.2	30.1	47		18	53.3	52.9	12	
20	28.9	27.9	51		20	54.3	54.0	10	
22	27.2	26.6	53		22	58.3	57.6	04	
24	32.0	30.6	46		24	57.8	57.3	05	
26	35.3	34.6	40		26	57.0	56.2	06	
28	37.0	35.7	38		28	59.1	58.7	03	
30	37.8	37.0	37	-8.9	30	60.8	59.9	01	-7.0
32	36.3	35.3	39		32	59.9	59.2	02	
34	38.2	37.7	36		34	58.2	57.1	05	
36	40.3	39.9	32		36	60.0	59.3	23 02	
38	40.2	39.9	32		38	61.3	60.9	22 59	
40	42.1	41.1	30		40	63.2	63.0	56	
42	37.1	36.2	38		42	64.1	63.7	55	
44	34.5	34.1	41	-8.6	44	66.9	65.1	52	-6.8
46	37.7	37.2	37		46	74.1	73.2	40	
48	43.9	42.3	28		48	77.0	76.8	35	
50	47.4	46.6	22		50	72.5*b*		22 42	
52.2	40.4	39.4	33		52	59.6*b*		23 02	
54	48.0	47.8	19		54	48.8*b*		19	
56	50.8	49.8	16		56	56.3*a*		07	
58	50.5	49.1	17		58	61.0	60.1	23 00	
					8 00	62.9	61.7	22 57	-6.3
8 00.4	54.9	56.2	22 56	-6.8	10 00	47.0	49.4	22 44	-5.0
02	54.1	56.8	56		02	47.3	50.0	45	
04	52.2	56.3	54		04	47.3	49.9	45	
06	49.1	54.2	50		06	47.1	49.7	45	
08	48.3	53.7	49		08	47.9	50.3	46	
10	49.0	53.3	49		10	47.6	50.3	46	
12	51.7	55.8	53		12	49.0	51.1	47	
14	52.7	56.3	54	-6.7	14	47.9	50.2	46	-5.0
16	53.7	56.9	56		16	46.6	48.9	44	
18	53.2	56.1	54		18	47.2	49.9	45	
20	50.6	53.4	50		20	47.9	49.8	45	
22	49.2	52.2	48		22	47.3	49.2	44	
24	50.2	53.1	50		24	47.1	48.9	44	
26	51.6	54.1	52		26	47.8	49.3	45	
28	51.1	53.3	51		28	47.8	49.4	45	
30	51.9	53.8	52	-6.4	30	47.0	48.4	44	-4.8
32	51.2	53.7	51		32	48.7	49.8	46	
34	52.2	54.3	52		34	47.7	48.7	44	
36	51.7	53.7	52		36	45.7	47.1	42	
38	52.9	54.6	53		38	45.0	46.1	40	
40	52.3	54.2	52		40	46.6	47.3	42	
42	52.3	53.9	52		42	47.0	47.7	43	
44	50.6	51.9	49	-6.1	44	48.3	49.0	45	-4.8
46	49.8	52.0	49		46	46.9	48.4	44	
48	48.9	51.5	48		48	44.8	46.1	40	
50	49.3	51.8	48		50	43.2	45.0	38	
52	49.8	51.1	48		52	43.0	44.9	38	
54	47.3	49.7	45		54	48.2	49.9	46	
56	44.8	46.6	40		56	44.2	45.8	39	
58	46.0	47.2	42		58	44.0	45.7	39	
9 00	52.1	53.1	51	-6.0	11 00	44.2	46.0	40	-4.6
02	55.1	57.2	57		02	44.1	47.1	40	
04	54.1	55.3	55		04	44.0	47.0	40	
06	49.0	50.0	46		06	44.3	47.0	40	
08	47.1	48.8	44		08	43.9	46.3	40	
10	50.1	52.0	49		10	44.2	46.7	40	
12	51.6	52.1	50		12	44.6	46.9	40	
14	51.0	52.1	50	-5.9	14	43.8	46.2	39	-4.3
16	48.3	49.3	45		16	44.2	46.7	40	
18	48.2	49.3	45		18	44.1	46.4	40	
20	48.6	49.4	46		20	44.2	46.3	40	
22	48.3	49.2	45		22	44.1	46.3	40	
24	49.1	50.1	47		24	44.0	46.2	40	
26	49.8	50.3	47		26	42.8	45.1	38	
28	49.1	49.9	46		28	43.2	45.6	38	
30	48.8	50.1	46	-5.7	30	43.3	45.4	38	-4.2
32	49.1	50.0	46		32	43.0	45.0	38	
34	49.5	50.9	48		34	43.1	45.0	38	
36	48.3	50.2	46		36	43.2	44.9	38	
38	49.0	52.0	48		38	43.2	44.8	38	
40	51.0	52.8	50		40	43.3	44.7	38	
42	48.9	49.8	46		42	43.0	44.0	37	
44	48.0	50.1	46	-5.3	44	43.0	43.9	37	-4.0
46	47.2	49.3	44		46	43.1	44.1	37	
48	47.9	49.6	45		48	43.1	43.9	37	
50	48.5	50.4	46		50	42.7	43.9	37	
52	48.1	50.7	46		52	43.0	44.0	37	
54	48.1	50.8	46		54	42.7	43.1	36	
56	48.1	50.7	46		56	42.1	43.1	36	
58	47.6	49.9	45		58	42.2	43.3	36	
					12 00	42.3	43.2	36	-4.0

Correction to local mean time is + 23s. 90° torsion = 17.'58.
Torsion head at oh 00m read 67° and at 8h 15m read 62°.
Observer—R. R. T.

Correction to local mean time is + 4s.
Torsion head at 7h 30m read 62° and at 12h 15m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, May 10, 1904 — Magnet scale inverted									Wednesday, May 11, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	54.7	52.7	22 36	-3.9	14 00	67.2	66.7	22 16	-2.8	0 00*	50.2	51.0	22 38	-4.5	2 00	55.1	55.8	22 46	-5.0
02	55.9	55.0	34		02	67.0	66.2	16		02	50.1	50.9	38		02	56.1	56.6	47	
04	58.6	57.4	30		04	67.0	66.2	16		04	50.0	50.5	38		04	56.8	57.1	48	
06	57.9	56.2	31		06	67.8	67.1	15		06	49.8	50.3	38		06	58.1	58.3	50	
08	55.4	54.0	35		08	66.7	55.9	17		08	49.7	50.2	37		08	58.7	59.0	51	
10	56.6	55.2	33		10	66.8	66.1	17		10	49.8	50.2	38		10	58.9	59.1	52	
12	56.8	55.1	33		12	66.1	65.2	18		12	49.9	50.3	38		12	59.9	60.1	53	
14	55.3	53.8	35	-3.9	14	69.9	69.0	12	-2.6	14	50.2	50.8	38	-4.4	14	60.2	60.5	54	-5.0
16	53.2	52.0	38		16	69.7	69.1	12		16	50.5	50.8	38		16	60.0	60.3	53	
18	54.1	53.0	37		18	70.0	69.2	12		18	51.0	51.2	39		18	60.5	60.8	54	
20	55.0	53.1	36		20	70.6	70.3	10		20	51.0	51.2	39		20	59.3	60.0	53	
22	55.0	53.1	36		22	72.0	72.0	08		22	51.1	51.5	40		22	60.7	61.0	54	
24	54.9	53.0	36		24	71.2	71.0	09		24	50.9	51.2	39		24	61.1	61.2	55	
26	54.7	53.1	36		26	70.9	70.3	10		26	51.6	52.0	40		26	60.3	61.0	54	
28	55.6	54.0	35		28	72.0	71.0	08		28	52.0	52.6	41		28	60.0	60.2	53	
30	56.7	55.4	33	-3.8	30	73.7	73.1	06	-2.3	30	52.0	52.6	41	-4.6	30	60.2	61.0	54	-5.1
32	56.4	55.2	33		32.1	73.7	73.1	06		32	52.2	52.8	41		32	60.8	61.2	55	
34	56.1	55.0	34		34	72.9	72.5	07		34	52.0	52.3	41		34	60.7	61.1	55	
36	56.8	55.9	32		36	70.7	69.9	10		36	52.8	53.1	42		36	61.4	62.0	56	
38	58.0	57.5	30		38	72.0	71.0	08		38	53.0	53.2	42		38	62.8	63.1	58	
40	58.3	57.9	30		40	72.1	71.0	08		40	52.9	53.4	42		40	62.3	62.9	57	
42	58.5	58.0	29		42	73.1	72.7	06		42	53.0	53.7	43		42	62.4	63.0	58	
44	59.2	58.6	28	-3.8	44	74.9	73.5	04	-2.1	44	52.9	53.5	42	-4.8	44	62.9	63.1	58	-5.1
46	59.1	58.0	29		46	74.8	73.3	05		46	53.2	53.9	43		46	63.0	63.1	58	
48	58.7	57.7	29		48	76.2	74.8	02		48	54.7	55.0	45		48	63.1	63.3	58	
50	59.3	58.1	29		50	77.3	76.0	01		50	55.0	55.7	46		50	63.0	63.1	58	
52	59.4	58.3	28		52	77.9	76.4	00		52	55.0	55.7	46		52	63.1	63.3	58	
54	59.6	58.7	28		54	77.1	76.0	22 00		54	55.1	55.3	46		54	63.2	63.8	59	
56	59.3	58.2	29		56	78.5	77.4	21 58		56	54.8	55.0	45		56	63.5	63.7	59	
58	60.2	59.3	27		58	76.8	75.9	22 01		58	54.8	55.0	45		58	63.0	63.1	58	
13 00	60.7	60.2	26	-3.5	15 00	74.0	73.1	05	-2.0	1 00	54.0	54.2	44	-4.9	3 00	62.3	62.8	57	-5.1
02	60.1	59.2	27		02	74.0	73.1	05		02	53.9	53.9	44		02	61.7	61.8	56	
04	60.9	60.0	26		04	75.8	73.2	04		04	53.1	53.5	43		04	61.0	61.1	55	
06	61.7	61.0	24		06	76.3	75.0	02		06	52.9	53.2	42		06	60.9	61.0	55	
08	63.1	62.1	22		08	78.0	73.0	02		08	52.7	53.0	42		08	59.9	60.1	53	
10	61.5	60.9	25		10	78.1	76.4	00		10	52.5	53.0	42		10	59.3	59.7	52	
12	60.3	59.8	27		12	75.3	75.0	03		12	52.8	53.0	42		12	58.3	58.9	51	
14	63.1	62.3	22	-3.2	14	73.1	72.2	07	-1.9	14	52.8	53.1	42	-5.0	14	58.1	58.8	51	-5.1
16	64.0	63.1	21		16	72.0	71.7	08		16	52.0	53.0	41		16	59.0	59.6	52	
18	63.6	63.1	21		18	71.2	71.0	09		18	51.7	52.2	40		18	59.0	59.2	52	
20	62.0	61.1	24		20	70.0	70.0	11		20	50.0	51.8	40		20	59.8	60.0	53	
22	64.6	63.8	20		22	68.8	68.3	13		22	50.8	51.4	39		22	60.4	60.7	54	
24	65.2	64.8	19		24	67.8	67.8	14		24	51.1	51.7	40		24	60.2	60.5	54	
26	64.0	64.2	20		26	66.8	66.3	16		26	52.7	53.0	42		26	58.0	58.2	50	
28	62.8	62.1	23		28	65.9	65.3	18		28	51.9	52.2	41		28	57.9	58.0	50	
30	62.0	61.5	24	-3.0	30	63.3	63.2	22	-1.8	30	52.2	52.8	41	-5.0	30	57.9	57.9	50	-5.0
32.2	64.6	63.8	20		32	63.8	63.6	21		32	52.8	53.0	42		32	57.9	58.3	50	
34	64.0	63.6	21		34	64.6	64.2	20		34	52.5	52.8	42		34	58.0	58.9	51	
36	64.6	64.0	20		36	64.0	64.0	20		36	52.2	52.8	41		36	58.9	59.8	52	
38	64.7	64.1	20		38	63.8	63.2	21		38	52.2	52.8	41		38	59.2	60.1	53	
40	63.0	62.1	23		40.2	63.3	63.1	22		40	52.2	52.8	41		40	58.8	59.6	52	
42	64.3	63.5	21		42	63.0	62.8	22		42	52.5	52.9	42		42	58.8	59.2	52	
44	66.8	65.8	17	-2.9	44	63.8	63.6	21	-1.7	44	52.9	52.9	42	-5.0	44	58.1	58.8	51	-4.8
46	64.8	63.9	20		46	63.1	62.7	22		46	51.9	52.1	41		46	57.8	58.1	50	
48	63.0	62.0	23		48	63.3	62.8	22		48	52.0	52.1	41		48	58.2	59.0	51	
50	64.8	63.5	20		50	63.1	62.4	22		50	52.1	52.5	41		50	59.7	60.0	53	
52	66.1	64.5	18		52	63.0	62.3	22		52	53.0	53.2	42		52	60.5	60.8	54	
54	64.5	63.3	21		54	62.2	61.9	23		54	53.0	53.3	42		54	61.1	61.6	55	
56	65.2	64.0	19		56	62.8	62.2	23		56	53.8	53.9	44		56	61.1	61.4	55	
58	67.0	66.0	16		58	62.7	62.1	23		58	55.1	55.2	46		58	60.8	60.9	54	
					16 00	62.7	61.5	23	-1.5										

Correction to local mean time is — 31.5s. 90° torsion = 16.'99. Observer—J. V.
Torsion head at 1h 35m read 74° and at 16h 15m read 67°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 11, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	61.1	61.2	22 55	-4.4
02	62.2	62.3	57	
04	63.1	63.8	58	
06	63.3	63.8	22 59	
08	64.9	65.1	23 01	
10	65.9	66.0	02	
12	64.2	64.8	23 00	
14	62.0	62.0	22 56	-4.2
16	61.9	62.0	56	
18	63.3	64.0	59	
20	63.3	63.9	59	
22	62.1	62.8	57	
24	61.8	62.0	56	
26	63.0	63.2	22 58	
28.3	67.1	67.8	23 05	
30	69.8	70.0	09	-4.1
32	68.9	69.1	07	
34	69.6	69.9	08	
36	64.6	64.8	01	
38	71.0*a*		10	
40	76.2	76.8	19	
42	68.9	70.0	08	
44	65.7	66.1	02	-4.1
46	70.1	71.0	10	
48	71.4	72.1	12	
50	74.0	75.4	16	
52*	43.0	48.1	24	
54	47.6	51.3	30	
56	51.0	56.3	36	
58	48.9	52.2	32	
5 00	43.8	47.6	24	-4.1
02	39.8	43.4	18	
04	35.0	38.0	10	
06	32.0	34.0	04	
08	29.2	31.7	23 00	
10	28.8	30.4	22 59	
12	30.1	32.2	23 01	
14	30.9	32.9	02	-4.2
16	33.8	35.8	07	
18	32.0	33.3	03	
20	31.2	33.0	03	
22	33.4	35.0	06	
24	30.0	31.8	01	
26	32.0	33.8	04	
28	34.5	36.5	08	
30	34.8	36.6	08	-4.3
32	40.0	42.7	17	
34	43.0	44.9	21	
36	42.9	44.9	21	
38	42.9	45.0	21	
40	40.0	42.0	17	
42	40.2	42.2	17	
44	37.6	38.9	12	-4.5
46	34.8	36.2	08	
48	34.1	36.0	07	
50	34.2	35.8	07	
52	33.1	34.8	05	
54	34.8	36.0	08	
56	33.3	35.1	06	
58	33.0	34.2	05	
6 00	32.1	33.0	23 03	-4.7
02	32.5	33.6	04	
04	34.6	35.7	07	
06	33.3	34.8	06	
08	33.0	34.0	05	
10	30.3	31.0	23 00	
12	27.9	29.0	22 57	
14	29.9	30.9	60	-4.8
16	27.8	29.0	57	
18	27.4	28.3	56	
20	28.3	29.2	57	
22	28.4	29.2	57	
24	27.3	28.5	56	
26	26.3	27.2	54	
28	27.0	27.9	55	
30	28.3	29.0	57	-4.8
32	26.3	27.1	54	
34	26.1	27.0	54	
36	25.5	26.1	53	
38	26.8	27.2	55	
40	28.0	28.8	57	
42	27.8	28.1	56	
44	26.8	27.0	54	-4.7
46	26.2	26.8	54	
48	26.0	26.3	53	
50	24.8	25.0	51	
52	24.1	24.2	50	
54	25.0	25.3	52	
56	25.8	26.3	53	
58	25.3	26.0	52	
7 00	24.2	25.0	51	-4.2
02	25.6	26.0	53	
04	25.0	25.3	52	
06	24.9	25.1	51	
08	26.0	26.5	53	
10	24.4	25.3	51	
12	25.0	25.7	52	
14	24.8	25.3	51	-3.8
16	24.8	25.2	51	
18	24.9	25.5	52	
20	24.8	25.1	51	
22	23.9	24.5	50	
24	22.9	23.8	49	
26	22.9	23.7	49	
28	22.9	23.7	49	
30	23.6	24.0	50	-3.5
32	24.0	25.0	51	
34	23.2	23.8	49	
36	23.2	23.9	49	
38	22.8	23.2	48	
40	23.4	23.8	49	
42	23.2	23.8	49	
44	22.9	23.4	48	-3.2
46	23.0	23.3	48	
48	22.9	23.1	48	
50	23.1	23.8	49	
52	22.8	23.1	48	
54	23.9	24.5	50	
56	24.3	25.0	51	
58	23.0	24.1	49	

Observer—J. V.

Wednesday, May 11, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	22.7	23.5	22 48	-2.9
02	21.5	22.2	46	
04	22.0	22.3	47	
06	22.8	23.0	48	
08	22.0	22.5	47	
10	22.8	22.8	48	
12	22.2	22.2	47	
14	22.8	23.0	48	-2.5
16	23.4	23.6	49	
18	23.1	23.6	49	
20	22.0	22.2	47	
22	21.2	21.2	46	
24	21.8	22.2	47	
26	22.3	22.6	47	
28	22.3	22.6	47	
30	22.6	23.0	48	-2.0
32	23.0	23.6	49	
34	22.3	23.3	48	
36	22.3	23.5	48	
38	21.8	23.6	48	
40	21.0	22.8	47	
42	20.6	22.6	46	
44	22.2	22.6	47	
46	20.5	21.8	45	-2.0
48	18.8	20.4	43	
50	19.5	20.6	44	
52	20.0	20.9	44	
54	19.3	20.0	43	
56	20.3	21.0	44	
58	23.0	23.8	49	
9 00	21.0	22.0	46	-2.0
02	18.5	18.8	41	
04	23.3*a*		22 49	
06	32.0	32.2	23 03	
08	21.9	23.3	22 48	
10	14.2	15.8	36	
12	12.8	13.0	32	
14	22.0	22.0	47	-2.0
16	24.9	26.1	52	
18	16.7	18.0	39	
20	9.6	9.7	37	
22	12.1	13.2	32	
24	22.0	22.6	47	
26	22.8	23.0	48	
28	26.2	27.0	54	
30	22.8	24.4	22 49	-2.0
32	33.0	33.7	23 04	
34	34.0	31.6	01	
36	30.3	31.7	23 01	
38	26.1	27.3	22 54	
40	19.1	19.7	43	
42	21.9*a*		47	
44	26.0	26.0	53	-2.1
46	25.7	26.1	53	
48	21.3	21.6	46	
50	18.8	19.3	42	
52	19.8	20.2	44	
54	19.6	20.0	43	
56	17.0	17.6	39	
58	16.4	16.6	38	
10 00	16.6	17.0	22 39	-2.5
02	17.9	18.3	41	
04	17.4	17.6	40	
06	14.4	14.6	35	
08	11.8	12.0	31	
10	13.3	13.4	33	
12	16.3	16.4	38	
14	15.6	16.3	37	-2.7
16	16.7	18.0	39	
18	18.0	18.6	41	
20	17.6	18.8	41	
22	17.3	18.7	40	
24	17.9	19.0	41	
26	18.5	19.6	42	
28	19.5	20.6	44	
30	18.8	19.8	42	-3.0
32	18.5	19.7	42	
34	18.6	19.6	42	
36	18.3	20.0	42	
38	18.5	19.6	42	
40	19.0	20.4	43	
42	18.8	20.6	43	
44	18.3	19.4	42	-3.2
46	16.5	18.1	39	
48	15.3	17.3	38	
50	14.9	17.4	38	
52	13.8	15.6	35	
54	13.6	15.6	35	
56	12.8	14.5	34	
58	11.8	13.8	32	
11 00	11.0	13.0	31	-3.3
02	11.6	13.0	32	
04	11.7	12.3	31	
06	11.9	12.8	32	
08	12.6	13.1	32	
10	13.5	14.5	34	
12	12.8	13.0	32	
14	13.3	14.0	34	-3.3
16	14.0	14.2	34	
18	14.0	14.3	34	
20	12.1	12.7	32	
22	11.1	12.1	30	
24	13.6	13.8	34	
26	14.6	15.3	36	
28	14.6	15.0	36	
30	12.3	12.4	32	-3.3
32	11.9	12.1	31	
34	11.6	11.9	31	
36	10.7	11.3	30	
38	11.7	12.3	31	
40	13.3	14.0	34	
42	13.3	14.1	34	
44	12.8	13.3	33	-3.3
46	12.3	13.0	32	
48	11.8	12.4	31	
50	10.6	11.8	30	
52	11.8	12.2	31	
54	11.6	12.3	31	
56	11.3	11.8	30	
58	11.3	11.8	30	

Observers—J. V. and W. J. P., who alternated from 8h 00m to 8h 10m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 11, 1904					Magnet scale erect					Wednesday, May 11, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	11.3	11.5	22 30	-3.5	14 00	30.3	31.6	22 10	-3.3	16 00	26.4	27.6	22 04	-3.8	18 00	29.9	31.3	22 10	-3.5
02	10.3	11.0	29		02	31.6	32.6	12		02	26.9	27.9	04		02	29.9	31.1	09	
04	9.7	10.3	28		04	31.3	31.6	11		04	25.6	26.4	02		04	30.8	32.0	11	
06	9.3	9.9	27		06	31.4	32.0	11		06	25.3	26.6	02		06	30.1	31.2	10	
08	10.6	10.0	28		08	37.8	38.2	21		08	25.6	26.6	02		08	31.1	32.2	11	
10	9.3	10.3	28		10	31.3	32.0	11		10	24.1	25.0	22 00		10	31.9	32.8	12	
12	8.5	8.8	26		12	32.6	32.8	13		12	23.0	23.9	21 58		12	32.0	32.9	12	
14	8.0	9.7	26	-3.5	14	33.5	33.7	14	-3.3	14	23.6	24.5	21 59	-3.9	14	31.9	32.8	12	-3.6
16	8.5	9.0	26		16	34.0	34.6	15		16	24.3	24.7	22 00		16	32.0	32.9	12	
18	8.8	9.8	27		18	34.7	34.9	16		18	26.8	27.3	04		18	32.1	32.9	12	
20	9.6	10.6	28		20	33.8	34.0	15		20	28.0	28.6	06		20	31.9	32.3	12	
22	8.8	10.0	27		22	33.3	34.0	14		22	27.6	28.0	05		22	31.1	31.8	11	
24	7.8	8.8	25		24	33.3	33.7	14		24	26.6	27.3	04		24	31.2	31.7	11	
26	7.5	8.2	24		26	33.0	33.6	14		26	26.6	27.5	04		26	31.0	31.2	10	
28	7.6	8.3	25		28	33.3	34.0	14		28	29.3	29.6	08		28	30.9	31.1	10	
30	8.1	9.3	26	-3.5	30	33.0	34.0	14	-3.5	30	27.1	28.1	05	-3.9	30	30.4	31.0	10	-3.9
32	9.3	10.2	27		32	34.5	35.5	16		32	24.1	24.8	22 00		32	30.0	30.0	09	
35	8.6	9.6	26		34	34.6	35.3	16		34	23.6	24.0	21 59		34	29.2	29.4	08	
36	8.7	9.5	26		36	32.8	33.6	14		36	23.0	23.9	58		36	28.9	29.1	07	
38	9.0	10.0	27		38	32.0	32.6	12		38	22.8	23.2	58		38	28.6	29.0	07	
40	8.6	9.6	26		40	30.0	30.5	09		40	23.9	24.3	59		40	27.7	28.1	05	
42	6.6	7.6	23		42	28.3	29.0	06		42	23.8	24.2	59		42	26.9	27.3	04	
44*	40.6	46.8	30	-3.3	44	28.4	28.7	06	-3.5	44	22.6	23.0	57	-3.9	44	26.9	27.2	04	
46	35.0	38.8	19		46	27.4	27.6	05		46	20.5	21.0	54		46	27.7	28.0	05	
48	36.8	39.7	22		48	27.6	28.6	05		48	18.7	19.6	52		48	28.0	28.6	06	
50	37.7	40.3	23		50	28.5	29.0	06		50	19.6	20.3	53		50	27.9	28.3	06	
52	34.3	37.3	18		52	29.3	30.1	08		52	20.6	20.7	54		52	27.9	28.1	05	
54	33.0	35.8	16		54	27.3	28.1	05		54	20.6	20.8	54		54	28.0	28.3	06	
56	33.3	35.6	16		56	28.3	30.6	08		56	20.8	21.1	54		56	27.9	28.4	06	
58	33.8	35.6	16		58	30.3	32.3	11		58	21.7	21.7	56		58	26.6	26.9	03	
13 00	32.6	34.6	14	-3.3	15 00	32.8	34.7	14	-3.6	17 00	22.5	22.7	57	-3.8	19 00	26.7	27.0	04	-4.0
02	32.5	34.2	14		02	34.6	36.6	17		02	22.9	23.1	58		02	27.2	27.9	05	
04	32.3	34.0	14		04	33.6	35.6	16		04	22.9	23.5	21 58		04	29.5	30.0	08	
06	33.8	34.8	15		06	33.6	35.3	16		06	24.3	24.3	22 00		06	30.8	31.0	10	
08	35.3	36.3	18		08	33.3	35.0	15		08	26.0	27.0	03		08	31.2	31.8	11	
10	36.0	37.0	19		10	32.0	33.8	13		10	27.0	27.6	04		10	31.8	32.2	12	
12	35.6	36.4	18		12	29.7	31.7	10		12	26.0	26.8	03		12	31.6	32.2	12	
14	34.8	35.6	17	-3.4	14	29.9	31.0	09	-3.6	14	27.8	28.6	06	-3.8	14	32.1	33.0	12	-4.0
16	35.3	36.3	18		16	28.4	30.0	07		16	27.8	28.6	06		16	32.2	33.9	13	
18	34.0	34.8	16		18	28.9	30.6	08		18	25.7	26.9	03		18	32.2	33.7	13	
20	32.3	33.3	13		20	30.0	32.0	10		20	25.5	26.5	02		20	32.3	33.4	13	
22	31.6	33.0	12		22	30.0	31.6	10		22	26.2	27.2	03		22	31.8	32.8	12	
24	31.2	32.0	11		24	29.3	31.0	09		24	27.5	28.5	05		24	31.0	31.9	11	
26	31.0	31.8	11		26	30.4	31.6	10		26	29.3	30.8	09		26	30.2	31.0	10	
28	31.0	31.3	10		28	32.0	33.3	13		28	30.2	31.7	10		28	30.2	31.1	10	
30	32.0	32.6	12	-3.5	30	32.6	34.0	14	-3.6	30	30.1	31.3	10	-3.7	30	30.8	31.8	11	-4.2
32	33.8	34.0	15		32	34.0	35.3	16		32	28.8	29.8	08		32	31.2	31.9	11	
34	34.0	34.8	16		34	34.5	35.9	17		34	28.8	29.8	08		34	32.0	32.7	12	
36	36.8	37.0	19		36	33.7	35.1	16		36	28.1	28.9	06		36	32.1	33.0	12	
38	36.0	36.3	18		38	31.0	32.6	12		38	28.2	29.2	06		38	31.1	32.1	11	
40	34.0	34.0	15		40	27.3	29.0	06		40	29.3	30.4	08		40	31.1	32.0	11	
42	Lost				42	25.6	26.3	02		42	30.1	30.9	09		42	32.0	32.9	12	
44	33.1	33.6	14	-3.5	44	25.6	26.6	03	-3.7	44	29.1	30.1	08	-3.6	44	33.0	33.9	14	-4.4
46	32.3	35.6	15		46	25.4	26.6	02		46	30.1	31.7	10		46	33.2	34.9	15	
48	31.7	32.2	12		48	27.3	28.7	05		48	30.3	31.9	10		48	33.2	34.6	15	
50	32.2	32.8	12		50	26.8	27.6	04		50	31.9	33.0	12		50	33.1	34.0	14	
52	31.6	32.4	12		52	26.9	28.3	05		52.4	32.7	33.8	14		52	34.1	35.1	16	
54	30.6	31.6	10		54	26.5	27.5	04		54	32.7	33.8	14		54	35.5	36.4	18	
56	30.6	31.6	10		56	26.3	27.5	04		56	31.3	32.7	12		56	36.1	37.0	19	
58	29.9	30.8	09		58	26.0	27.6	04		58	30.5	32.0	11		58	36.0	37.0	19	

Observer—W. J P.

Observers—W. J. P. and R. R. T., who alternated from 17h 14m to 17h 24m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 11, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	36.7	37.4	22 20	-4.7
02	37.8	38.1	21	
04	38.2	38.9	22	
06	39.1	40.1	24	
08	39.0	39.9	23	
10	38.3	39.1	22	
12	37.5	38.1	21	
14	36.9	37.4	20	-4.8
16	36.3	37.1	19	
18	36.2	37.1	19	
20	36.0	37.0	19	
22	36.4	37.1	19	
24	35.8	36.7	18	
26	36.5	37.1	19	
28	37.5	38.1	21	
30	36.9	37.9	20	-4.9
32	35.7	36.9	18	
34	35.3	36.5	18	
36	35.3	36.6	18	
38	35.3	36.4	18	
40	35.9	37.0	19	
42	36.8	37.7	20	
44	38.1	38.9	22	-4.9
46	37.3	38.1	21	
48	38.0	38.8	22	
50	37.1	37.9	20	
52	37.0	37.8	20	
54	36.3	37.1	19	
56	37.1	37.8	20	
58	37.1	37.8	20	
21 00	38.0	38.8	22	-5.0
02	38.1	39.1	22	
04	37.8	38.8	22	
06	37.3	38.1	21	
08	37.3	38.0	20	
10	36.7	37.2	19	
12	36.2	36.9	19	
14	36.4	36.9	19	-5.0
16	35.9	36.1	18	
18.2	35.6	36.0	18	
20	35.2	35.8	17	
22	35.6	35.9	18	
24	35.9	36.0	18	
26	35.1	35.4	17	
28	34.9	35.2	16	
30	34.1	34.5	15	-5.0
32	34.4	35.0	16	
34	35.1	35.8	17	
36	36.0	37.1	19	
38	36.8	37.4	20	
40	38.8	39.8	23	
42	37.4	38.2	21	
44	36.3	37.0	19	-5.0
46	36.8	37.1	19	
48	37.9	38.8	22	
50	38.8	39.6	23	
52	39.2	40.0	24	
54	39.5	40.0	24	
56	39.1	39.9	24	
58	38.0	38.8	22	
22 00	38.3	38.9	22 22	-5.2
02	40.9	41.4	26	
04	37.2	38.0	20	
06	37.4	37.8	20	
08	38.0	38.3	21	
10	38.0	38.2	21	
12	36.3	36.6	19	
14	35.1	35.7	17	-5.3
16	37.8	38.3	21	
18	37.2	37.9	20	
20	36.0	36.6	18	
22	35.9	36.4	18	
24	36.1	36.9	19	
26	35.8	36.3	18	
28	34.5	35.0	16	
30	34.3	34.9	16	-5.4
32	34.0	34.5	15	
34.2	34.1	34.5	15	
36	34.0	34.0	15	
38	34.0	34.2	15	
40	32.8	33.0	13	
42	33.0	33.4	14	
44	33.1	33.7	14	-5.7
46	33.9	34.0	15	
48	34.1	34.6	15	
50	33.9	34.3	15	
52	33.9	34.7	15	
54	34.2	35.1	16	
56	33.4	34.3	15	
58	33.1	33.9	14	
23 00	33.1	34.0	14	-5.8
02	32.2	33.1	13	
04	32.1	33.0	12	
06	32.0	33.0	12	
08	32.0	32.9	12	
10	31.9	32.3	12	
12	31.7	32.0	12	
14	31.7	32.3	12	-5.8
16	30.9	31.7	11	
18	30.2	30.8	09	
20	29.8	30.7	09	
22	29.9	30.4	09	
24	30.1	30.4	09	
26	29.1	29.3	07	
28	29.1	29.7	08	
30	27.1	27.1	04	-5.7
32	27.5	27.9	05	
34	28.1	28.8	06	
36	29.6	30.1	08	
38	30.1	30.8	09	
40	31.0	32.0	11	
42	31.9	32.9	12	
44	31.7	32.8	12	-5.8
46	31.6	32.3	12	
48	31.2	32.0	11	
50	32.8	33.3	13	
52	32.9	33.3	14	
54	33.8	34.8	15	
56	35.1	36.3	18	
58	37.2	37.9	20	
24 00	37.8	39.8	22	-5.8

Correction to local mean time is — 2s. 90° torsion = 12.′73.
Torsion head at oh oom read 67° and at 24h 15m read 63°.
Observer—R. R. T.

Thursday, May 12, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00*	43.0	35.1	21 17	-3.3
02	46.9	39.8	10	
04	48.5	38.7	10	
06	48.1	39.0	10	
08	46.1	37.0	13	
10	45.0	36.4	14	
12	42.0	35.0	17	
14	39.8	33.7	20	-3.5
16	39.8	33.2	21	
18	38.1	32.5	22	
20	36.0	31.2	25	
22	36.9	33.2	23	
24	39.0	34.9	20	
26	37.3	34.7	21	
28	35.8	32.1	25	
30	35.3	32.0	25	
32	35.8	31.0	26	
34	34.8	31.1	26	-3.8
36	34.0	31.2	27	
38	37.0	33.7	22	
40	37.6	35.0	21	
42	38.1	36.1	20	
44	41.0	38.0	16	-3.9
46	44.0	39.1	13	
48	43.0	38.9	14	
50	41.1	37.2	16	
52	40.0	36.2	18	
54	39.0	36.0	19	
56	37.2	34.2	22	
58	36.0	32.5	24	
17 00	35.7	29.7	27	-4.0
02	34.8	30.2	27	
04	31.8	27.2	32	
06	34.0	30.2	28	
08	27.0	25.9	36	
10	21.8	20.1	45	
12	24.1	22.3	42	
14	24.8	22.2	41	-4.3
16	25.5	22.1	40	
18	23.2	19.9	44	
20	18.7	15.9	51	
22	21.0	20.6	45	
24	21.4	20.4	45	
26	24.1	21.6	42	
28	28.8	26.9	34	
30	36.3	32.7	24	-4.5
32	35.2	32.0	25	
34	30.0	27.8	33	
36	27.0	23.8	38	
38	35.9	33.0	24	
40	34.5	31.5	26	
42	28.8*b*		33	
44	23.5	22.0	42	-4.7
46	25.0	22.9	40	
48	29.2	18.0	41	
50	25.7	24.5	38	
52	24.8	22.5	41	
54	23.2	21.2	43	
56	21.7	20.6	45	
58	19.7	19.1	48	
18 00	19.8	17.9	21 48	-4.7
02	22.2	21.3	44	
04	30.2	29.1	32	
06	35.4	33.7	24	
08	33.9	30.9	27	
10	24.1	22.0	42	
12	20.9	18.6	47	
14	16.9	14.8	53	-4.7
16	19.1	17.1	49	
18	15.5	12.2	56	
20	18.7	15.1	51	
22	18.0	13.3	54	
24	15.2	12.6	21 56	
26*	50.0	43.2	22 06	
28	59.2	40.8	22 00	
30	71.6	51.0	21 42	-4.8
32*	43.9	29.8	25	
34	39.8	15.0	40	
36	26.4	16.8	49	
38	31.0	20.2	42	
41	31.0	22.3	41	
42	27.2	18.8	46	
44	30.9	22.7	40	-4.5
46	35.0	26.2	35	
48	35.2	21.3	38	
50	32.0	23.0	39	
52	31.0	22.8	40	
54	33.2	24.9	37	
56	29.9	20.9	43	
58	29.2	20.8	43	
19 00	33.0	23.5	38	-4.8
02	32.1	21.7	40	
04	31.9	20.8	41	
06	28.0	19.0	46	
08	31.2	21.2	42	
10	33.2	24.2	38	
12	31.2	22.6	40	
14	32.0	24.2	38	-5.0
16	32.2	25.0	38	
18	35.1	26.2	35	
20	38.3	30.0	29	
22	43.9	40.0	17	
24	45.3	35.2	20	
26	44.6	35.4	20	
28	45.3	35.9	19	
30	44.7	35.9	19	-5.3
32	43.7	33.9	22	
34	41.0	32.0	25	
36	41.8	33.8	23	
38	43.7	35.9	20	
40	46.2	37.2	17	
42	48.0	40.1	14	
44	52.9	45.8	05	-5.5
46	50.0	44.0	09	
48	45.8	41.9	14	
50	47.5	42.3	12	
52	49.2	44.8	09	
54	50.0	46.1	07	
56	54.0	39.0	10	
58	52.9	38.9	11	
20 00	56.0	42.1	06	-5.8

Correction to local mean time is — 55s. 90° torsion = 15.′54.
Torsion head at 15h 28m read 63° and at 21h 12m read 75°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, May 13, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	Lost				22 00	56.1	62.0	21 54	-6.0
02	37.3	43.0	21 25	-3.9	02	55.0	61.2	53	
04	35.2	43.1	23		04	58.8	64.9	59	
06	36.0	42.0	23		06	57.5	63.1	56	
08	35.0	41.2	22		08	58.2	63.9	57	
10	33.2	40.0	19		10	58.2	63.2	57	
12	32.9	39.9	19		12	58.0	63.9	57	
14	8.3	58.0	14		14	56.2	60.3	53	-6.2
16	15.0	55.3	17	-3.8	16	52.8	56.0	47	
18	6.0	52.3	07		18	47.6	51.1	39	
20	36.0	44.1	24		20	44.3	47.0	33	
22	32.0	41.4	19		22	41.1	45.2	29	
24	34.0	42.1	21		24	41.0	43.1	28	
26	37.8	47.5	28		26	36.0	42.0	23	
28	41.8	52.2	35		28	33.2	37.1	17	
30	43.0	52.0	36	-4.4	30	29.8	34.2	12	- 6.4
32	38.9	52.1	33		32	28.2	36.1	12	
34	39.1	48.9	31		34	32.4	38.7	17	
36	40.2	50.2	32		36	27.9	37.6	13	
38	43.0	52.3	36		38	43.8	50.5	36	
40	46.8	55.2	42		40	42.9	48.0	33	
42	44.3	48.0	34		42	45.2	52.8	38	
44	44.1	51.3	36	-5.0	44	48.1	55.2	43	-6.7
46	44.0	50.2	36		46	49.9	61.9	49	
48	48.3	53.5	42		48	47.9	55.8	21 43	
50	50.0	55.2	44		50	61.1	67.0	22 02	
52	50.4	54.0	44		52	66.9	78.1	15	
54	49.2	53.0	42		54	72.3*b*		22 15	
56	48.9	53.7	42		56	55.0*a*		21 48	
58	48.7	53.8	42		58*	46.9	48.0	22 32	
21 00	48.1	52.6	41	-5.2	23 00*	14.1	47.5	54	-6.8
02	45.7	51.1	38		02	6.0	24.0	22 29	
04	46.8	50.1	38		04*	35.8	45.9	21 60	
06	46.1	50.3	37		06	49.0	55.1	22 17	
08	48.2	51.1	39		08	36.0	44.0	21 58	
10	50.0	51.2	41		10	40.2	48.1	22 05	
12	50.0	54.0	43		12	32.3	41.8	21 54	
14	52.0	57.8	48	-5.5	14	39.8	48.8	22 05	-6.8
16	52.9	57.2	48		16.3	40.9	49.9	07	
18	52.9	57.9	48		18.6	48.0	58.3	19	
20	50.1	54.8	44		20	51.0	64.1	26	
22	50.5	55.1	44		22	43.8	57.3	15	
24	51.1	55.1	45		24	62.8	75.3	44	
26	51.9	55.0	45		26	54.0	65.2	29	
28	53.1	55.8	47		28	44.1	58.0	16	
30.3	53.1	56.1	47	-5.8	30	54.1	68.1	32	-7.0
32	54.8	55.1	48		32	45.8	55.8	15	
34	55.1	56.0	49		34	36.8	47.4	22 02	
36	56.1	56.8	50		36	29.0	40.1	21 50	
38	58.8	59.0	54		38	37.2	45.8	22 01	
40	58.1	59.2	54		40	29.0	39.2	21 49	
42	59.0	60.2	55		42	35.0	37.1	52	
44	59.9	61.6	57	-6.0	44	35.8	42.9	21 57	-7.0
46	60.1	60.5	56		46	38.2	45.0	22 01	
48	59.9	62.4	58		48	37.0	43.8	21 59	
50	56.6	65.1	57		50	32.2	37.9	21 50	
52	55.5	61.8	54		52	35.9	48.0	22 01	
54	55.8	61.5	54		54	33.0	56.9	06	
56	58.7	64.2	58		56	35.0	58.0	09	
58	57.0	63.1	56		58	44.8	65.0	22	
					24 00	44.0	67.8	23	-7.0

Correction to local mean time is — 1m 17.5s.
Torsion head at 19h 58m read 81° and at 24h 27m read the same.
Observer—J. V.

Sunday, May 15, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	39.1	37.9	22 22	-8.7	2 00	25.9	21.8	22 45	-8.8
02	38.7	38.0	22		02	24.9	22.0	46	
04	38.0	37.2	23		04	26.2	24.0	43	
06	37.9	37.3	23		06	26.9	24.9	42	
08	37.1	36.8	24		08	27.1	25.4	41	
10	34.9	34.5	28		10	27.1	24.9	42	
12	34.3	34.1	29		12	28.0	26.1	40	
14	34.9	34.9	28	-7.9	14	26.9	25.0	42	-8.9
16	33.1	32.9	31		16	22.3	21.2	48	
18	33.8	33.2	30		18	25.0	23.8	44	
20	34.8	34.1	28		20	23.8	22.1	46	
22	35.7	35.3	27		22	22.0	20.4	49	
24	36.6	36.2	25		24	22.6	20.9	48	
26	35.1	35.0	28		26	23.5	22.0	47	
28	34.8	34.0	29		28	22.8	21.1	48	
30	35.8	35.0	27	-8.0	30	23.7	22.1	46	-9.0
32	36.0	35.5	26		32	22.7	21.3	48	
34	36.9	36.0	25		34	21.3	21.1	49	
36	37.5	36.9	24		36	22.3	22.1	48	
38	37.5	36.6	24		38	23.3	23.0	46	
40	37.3	35.9	25		40	22.2	21.9	48	
42	37.7	36.1	25		42	20.1	20.0	51	
44	35.5	34.1	28	-8.1	44	16.1	15.8	58	-9.0
46	34.2	32.9	30		46	15.9	14.9	22 58	
48	35.8	34.0	28		48	12.2	11.0	23 04	
50	38.0	36.8	24		50	7.2	6.8	11	
52	36.8	34.9	26		52*	44.7	39.6	10	
54	36.0	34.0	28		54	46.2	41.1	08	
56	36.0	33.9	28		56	46.0	41.9	08	
58	36.8	34.9	26		58	45.2	40.9	09	
1 00	39.0	36.9	23	-8.2	3 00	44.4	39.9	10	-9.0
02	37.0	34.9	26		02	45.6	40.9	09	
04	31.8	29.8	34		04	47.5	42.8	06	
06	26.7	25.5	41		06	48.0	43.2	05	
08	26.0	24.4	43		08	47.4	43.8	05	
10	24.1	22.9	46		10	46.7	43.1	06	
12	24.2	22.8	46		12	45.9	42.7	07	
14	26.8	25.5	41	-8.3	14	45.5	42.6	07	-9.0
16	30.0	28.1	37		16	46.0	43.5	06	
18	32.2	31.0	33		18	46.5	44.4	05	
20	29.1	28.0	38		20	45.8	43.3	06	
22	31.0	29.9	35		22	44.0	41.1	10	
24	30.9	29.7	35		24	41.9	39.2	13	
26	30.1	28.9	36		26	43.1	41.2	10	
28	35.0	33.5	29		28	45.2	42.9	07	
30	33.0	30.9	32	-8.6	30	45.3	42.4	08	-8.9
32	34.2	33.3	29		32	42.2	40.5	12	
34	33.4	32.9	30		34	41.0	39.0	14	
36	34.1	33.7	29		36	41.1	39.8	13	
38	34.0	33.8	29		38	44.2	42.0	09	
40	32.1	32.0	32		40	46.8	45.5	04	
42	30.1	29.9	35		42	47.0	46.2	03	
44	30.3	28.0	37	-8.8	44	47.9	46.2	03	-8.9
46	31.3	29.0	35		46	48.0	47.0	02	
48	29.5	26.8	38		48	47.8	46.0	03	
50	29.7	26.9	38		50	48.6	47.9	23 01	
52	26.9	23.3	43		52	52.6	50.7	22 55	
54	29.3	26.6	39		54	54.0	52.3	53	
56	25.7	22.9	44		56	53.1	52.0	22 54	
58	27.1	24.5	42		58	47.5	47.3	23 02	

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, May 15, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	66.9	68.8	23 14	-8.2
02	72.2	73.1	22	
04	72.9	74.0	23	
06	71.7	72.2	21	
08	68.2	69.2	16	
10	64.1	65.2	09	
12	62.2	64.0	07	
14	61.6	63.7	06	-8.5
16	62.0	63.2	06	
18	67.2	68.0	14	
20	72.0	73.3	22	
22	72.3	73.2	22	
24	72.9	73.3	23	
26	74.5	75.0	25	
28	76.9	78.0	29	
30	74.0	75.4	25	-8.5
32	74.7	75.3	26	
34	76.9	77.0	28	
36	77.9	78.0	30	
38*	37.2	43.2	33	
40	38.8	44.6	35	
42	37.1	42.1	32	
44	25.8	30.9	14	-8.6
46	16.7	22.1	00	
48	16.9	21.8	00	
50	20.7	24.8	05	
52	36.0	40.1	29	
54	35.0	40.3	28	
56	32.3	37.6	24	
58	33.0	37.3	25	
5 00	32.9	36.3	24	-8.4
02	35.9	38.1	28	
04	46.0	47.9	23 43	
06	61.8	62.0	24 07	
08	74.9	76.8	28	
10*	52.4	56.1	32	
12	45.3	49.1	21	
14	41.5	43.9	14	-8.3
16	37.0	40.0	24 07	
18	26.5	30.4	23 51	
20	20.9	24.3	42	
22	23.2	28.0	23 47	
24	32.8	37.3	24 02	
26	35.6	38.5	05	
28	35.0	40.0	06	
30	38.9	44.1	12	-8.1
32	41.0	45.8	15	
34	49.9	53.7	28	
36	58.7	61.3	41	
38	50.4	53.0	28	
40	50.0	52.9	28	
42	51.0	53.8	29	
44	51.7	57.0	32	-7.8
46	53.7	58.0	34	
48	52.1	57.2	32	
50	52.4	57.0	33	
52	41.2	43.0	24 13	
54	23.0	26.2	23 45	
56	23.1	25.9	45	
58	32.1	34.2	23 59	
6 00	50.2	53.3	24 28	-7.2
02	53.2	54.8	32	
04	36.0	40.8	07	
06	39.1*a*		08	
09	54.7	54.8	33	
10	52.8	55.2	32	
12	50.5	52.9	28	
14	34.0	36.1	24 02	-6.8
16	30.8	34.2	23 58	
18	36.4	39.9	24 07	
20	41.7	42.9	13	
22	44.3	47.2	18	
24	34.9	39.1	05	
26	43.7	45.0	16	
28	38.0	39.0	07	
30	37.2	39.1	24 07	-6.2
32	12.4*b*		23 26	
34	13.2	15.9	23 30	
36	38.3	45.2	24 12	
38	43.2	45.1	24 10	
40	24.0	27.3	23 47	
42	26.2	31.6	23 52	
44	36.5	38.1	24 05	-6.0
46	34.9	37.1	24 03	
48	28.9	32.3	23 55	
50	41.4	45.0	24 15	
52	48.0	49.7	24 23	
54	29.6	31.2	23 54	
56	10.3	11.7	24	
58*	31.6	35.8	07	
7 00	47.8	49.2	30	-5.7
02	53.0	54.1	38	
04	41.0	41.9	19	
06	29.9	33.2	23 04	
08	26.0	28.0	22 56	
10	27.5	29.0	22 58	
12	30.0	32.5	23 03	
14	34.2	37.0	10	-5.3
16	34.3	36.9	10	
18	27.4	30.8	23 00	
20	25.6	28.9	22 57	
22	20.0	24.0	48	
24	14.9	19.1	41	
26	25.0	26.8	22 55	
28	48.9	49.9	23 32	
30	45.7	49.2	28	-5.1
32	24.3	38.0	23 03	
34	9.2	10.3	22 29	
36	7.0	8.5	26	
38	11.1	12.4	32	
40	16.2	18.7	41	
42	18.1	19.5	44	
44	16.9	18.0	41	-4.8
46	15.0	16.1	38	
48	14.0	15.1	37	
50	14.2	16.0	38	
52	15.0	17.1	39	
54	13.3	15.1	36	
56	10.3	12.2	32	
58	11.1	13.1	33	
8 00	14.0	15.2	37	-4.7

Correction to local mean time is + 6.5s.
Torsion head at oh oom read 79° and at 8h 24m read the same.
Observer—J. V.

Monday, May 16, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	55.9	55.7	22 56	-7.9
02	55.3	55.1	57	
04	56.6	56.3	55	
06	58.1	57.7	52	
08	58.2	57.8	52	
10	58.1	57.6	53	
12	56.9	56.1	55	
14	57.9	56.2	54	-7.8
16	57.9	57.0	53	
18	56.8	55.2	56	
20	56.1	54.9	56	
22	57.9	57.0	53	
24	59.6	58.0	51	
26	59.8	58.2	51	
28	58.9	57.3	52	
30	57.8	56.8	53	-7.1
32	57.2	56.7	54	
34	58.1	57.3	53	
36	59.9	59.2	50	
38	60.1	59.7	49	
40	59.8	59.1	50	
42.5	59.1	58.7	51	
44	58.6	57.9	52	-6.6
46	57.1	56.3	54	
48	57.5	56.9	54	
50	58.1	57.7	52	
52	59.9	59.1	50	
54	59.1	58.2	51	
56	57.9	56.2	54	
58	58.1	56.9	53	
9 00	58.2	57.7	52	-5.9
02	58.1	57.2	53	
04	58.3	57.1	53	
06	58.3	57.1	53	
08	58.2	57.1	53	
10	59.8	59.1	50	
12	62.1	61.1	47	
14	62.7	62.1	45	-5.0
16	60.2	60.0	49	
18	58.3	57.8	52	
20	58.8	58.6	22 51	
22	53.0	51.9	23 01	
24	56.8	56.1	22 55	
26	59.8	59.0	50	
28	62.8	62.1	46	
30	65.9	64.3	41	-4.8
32	65.0	63.9	42	
34	62.8	61.1	46	
36	59.1	57.3	52	
38	59.0	57.8	52	
40.4	58.1	57.1	53	
42	59.3	58.1	51	
44	62.1	60.9	47	-4.3
46	62.8	61.2	46	
48	63.4	61.1	46	
50	63.9	61.2	45	
52	63.7	61.5	45	
54	63.1	60.3	46	
56	61.9	59.2	48	
58	61.8	59.0	4c	
10 00	62.3	59.8	22 48	-4.1
02	63.0	59.2	47	
04	63.1	59.6	47	
06	63.1	59.9	47	
08	62.1	59.1	48	
10	60.9	58.1	50	
12	62.9	59.1	48	
14	62.7	60.0	47	-4.1
16.6	62.3	60.1	47	
18	60.8	58.6	50	
20	60.3	58.7	50	
22	60.9	58.9	49	
24	60.2	58.7	50	
26	65.7	64.0	42	
28	68.7	66.8	37	
30	68.2	66.1	38	-4.0
32	66.9	65.0	40	
34	64.7	63.2	43	
36	61.6	60.3	48	
38	60.2	59.2	50	
40	59.7	58.2	51	
42	60.9	60.1	48	
44	60.2	59.7	49	-4.0
46	61.1	60.2	48	
48	59.1	59.0	51	
50	59.0	58.1	52	
52	59.7	59.0	50	
54	58.1	57.7	52	
56	58.1	57.4	53	
58	60.0	59.1	50	
11 00	63.1	62.7	45	-4.0
02	62.2	60.8	47	
04	63.3	62.0	45	
06	65.8	63.0	42	
08	63.3	61.8	45	
10	61.9	60.0	48	
12	60.3	59.0	50	
14	61.8	60.3	48	-4.0
16	63.8	62.2	44	
18	65.0	63.8	42	
20	63.9	62.8	44	
22	63.0	61.9	45	
24	64.5	62.7	44	
26	62.5	61.3	46	
28	64.2	63.5	43	
30	64.2	63.8	43	-4.5
32	64.5	63.2	43	
34	64.9	63.6	43	
36	65.1	64.1	42	
38	64.2	63.0	44	
40	63.5	62.2	45	
42	63.9	62.7	44	
44	64.5	63.3	43	-4.8
46	64.8	63.7	43	
48	64.9	63.7	42	
50	64.0	62.9	44	
52	64.1	63.1	44	
54	66.9	66.0	39	
56	67.8	66.7	38	
58	67.4	65.8	39	
12 00	66.9	65.8	39	-5.0

Correction to local mean time is — 7s. 90° torsion = 17.'62.
Torsion head at 7h 50m read 79° and at 12h 20m read 69°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, May 17, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	50.2	50.9	22 53	−3.0
02	51.1	51.9	54	
04	49.3	51.3	22 52	
06	54.2	56.9	23 01	
08	57.7	58.8	05	
10	57.0	58.8	04	
12	58.8	60.8	07	
14	56.1	57.1	02	−2.9
16	56.1	57.4	02	
18	58.2	59.9	06	
20	56.1	57.1	23 02	
22	52.9	54.1	22 57	
24	53.6	55.7	22 59	
26	54.2	56.2	23 00	
28	55.1	57.1	02	
30	62.8	64.3	13	−2.8
32	62.0	63.8	12	
34	61.9	63.7	12	
36	62.2	63.1	12	
38	62.3	64.5	13	
40	65.5	67.1	18	
42	69.2	70.9	23	
44	70.9	73.5	27	−2.6
46	68.5	71.0	23	
48	67.7	68.9	21	
50	66.8	66.8	18	
52	63.1	64.3	13	
54	62.2	65.0	13	
56	61.1	62.8	11	
58	57.7	59.1	05	
13 00	56.9	59.1	04	−2.3
02	58.0	59.1	05	
04	55.4	58.1	02	
06	55.4	58.1	02	
08	53.8	56.4	23 00	
10	52.2	56.3	22 58	
12	46.9	49.9	49	
14	43.2	47.8	45	−2.2
16	39.9	45.1	40	
18	38.1	43.9	38	
20	36.7	41.8	35	
22	36.8	41.8	35	
24	38.8	43.1	38	
26	39.1	43.3	38	
28	38.2	42.8	37	
30	40.7	44.4	40	
32	39.9	44.6	40	−2.0
34	40.2	45.1	40	
36	44.0	48.2	46	
38	43.9	48.1	46	
40	44.7	48.4	46	
42	44.1	48.8	46	
44	45.1	49.4	48	−2.0
46	44.9	49.1	47	
48	46.1	50.1	49	
50	45.6	49.6	48	
52	43.7	47.5	45	
54	42.2	45.9	42	
56	42.0	45.1	42	
58	43.3	46.1	44	
14 00	46.0	49.2	22 48	−1.9
02	47.0	50.3	50	
04	44.8	48.1	46	
06	45.0	48.1	46	
08	42.8	45.9	43	
10	42.3	46.3	43	
12	41.9	45.8	42	
14	45.2	48.9	47	−1.9
16	48.1	52.2	52	
18	48.9	53.0	53	
20	52.1	56.1	58	
22	50.7	54.9	56	
24	47.1	50.2	50	
26	46.9	51.0	50	
28	44.5	48.1	46	
30	44.9	47.9	46	−1.7
32	40.1	43.8	39	
34	42.7	46.2	43	
36	44.9	47.9	46	
38	35.1	38.5	31	
40	41.8	42.7	40	
42	43.9	45.8	44	
44	43.6	45.0	43	−1.4
46	42.2	44.7	42	
48	39.3	41.8	37	
50	45.9	48.1	47	
52	44.9	48.0	46	
54	40.6	43.7	40	
56	42.1	45.3	42	
58	39.1	42.1	37	
15 00	38.7	41.2	36	−1.4
02	39.7	42.1	38	
04	41.1	43.9	40	
06	37.0	40.0	34	
08	36.9	39.2	33	
10	36.2	38.4	32	
12	34.9	37.4	30	
14	33.2	35.1	27	−1.3
16	32.8	33.7	26	
18	32.3	33.8	25	
20	33.1	34.6	26	
22	33.4	34.6	27	
24	33.2	34.1	26	
26	32.8	33.3	25	
28	32.1	32.8	24	
30	31.9	32.8	24	−1.2
32	32.2	32.5	24	
34	35.0	35.3	28	
36	35.3	35.9	29	
38	36.8	37.1	31	
40	36.7	37.4	32	
42	37.3	38.0	32	
44	39.3	39.9	36	−1.2
46	39.1	39.8	35	
48	38.9	39.8	35	
50	39.1	40.0	35	
52	39.2	40.0	36	
54	38.2	41.1	36	
56	38.7	42.1	37	
58	37.3	39.9	34	
16 00	35.7	38.8	32	−1.2

Wednesday, May 18, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	40.0	37.8	22 15	−8.8
02	40.9	39.1	13	
04	37.2	34.5	20	
06	41.1	37.2	14	
08	45.1	40.1	09	
10	46.6	43.1	06	
12	45.9	41.9	07	
14	45.3	41.9	08	−8.8
16	46.2	42.8	06	
18	47.2	43.0	05	
20	46.0	42.5	06	
22	47.2	44.6	04	
24	45.0	41.3	08	
26	40.2	36.7	16	
28	33.0	31.0	26	
30	25.9	23.2	37	−8.7
32	16.1	14.0	52	
34	19.9	19.2	45	
36	17.0	14.8	51	
38	21.8	20.0	43	
40	17.1	10.2	55	
42	20.8	17.9	22 46	
44*5	40.1	37.0	23 07	−8.6
46	47.2	43.9	22 56	
48	65.0	58.0	31	
50	57.8	48.3	22 44	
52	37.0	17.8	23 25	
54	63.7	44.9	22 42	
56	52.9	31.0	23 02	
58	47.9	31.3	23 06	
1 00	73.3	55.8	22 26	−8.3
02	57.8	37.4	22 53	
04	46.0	31.1	23 07	
06	52.2	37.1	22 58	
08	67.9	46.8	38	
10	68.6	50.3	34	
12	68.8	51.0	34	
14	51.9	35.6	22 59	−8.2
16	44.3	20.8	23 17	
18*	54.0	33.3	23 50	
20*4	52.0	29.0	22 48	
22	62.8	37.0	33	
24	56.0	33.0	42	
26	59.0	37.0	36	
28	61.8	40.8	31	
30	56.3	36.2	30	−8.0
32	58.0	38.0	36	
34	55.5	37.0	39	
36	48.9	31.1	49	
38	50.6	34.1	45	
40	47.2	31.3	50	
42	41.2	26.1	22 59	
44	40.4	24.8	23 00	−7.9
46	48.9	28.3	22 51	
48	41.2	27.0	58	
50	41.0	27.1	22 58	
52	37.0	23.1	23 04	
54	31.9	17.1	13	
56	30.2	17.0	14	
58	33.2	20.9	09	
2 00	36.0	24.2	23 04	−7.7
02	40.2	28.2	22 58	
04	39.2	27.7	59	
06	39.8	28.0	58	
08	39.1	28.2	59	
10	39.9	29.0	22 58	
12	36.9	27.0	23 01	
14	37.1	28.1	00	−7.7
16	37.2	25.2	02	
18	31.3	24.9	07	
20	31.0	25.2	07	
22	28.0	22.8	12	
24	27.9	23.1	12	
26	29.9	24.7	09	
28	25.9	21.1	15	
30	22.2	18.3	20	−7.6
32	16.9	14.2	27	
34	10.2	8.1	37	
36	10.7	8.0	37	
38	16.1	14.8	27	
40	18.8	12.0	27	
42	13.0	11.3	32	
44	16.9	15.5	26	−7.5
46	21.1	18.3	21	
48	19.3	16.1	24	
50	12.0	9.0	35	
52*	29.7	27.8	50	
54	29.0	27.8	51	
56	29.1	27.9	50	
58	26.0	24.8	55	
3 00	36.7	36.3	38	−7.4
02	45.4	42.5	26	
04	59.0	58.1	23 03	
06	67.5	65.1	22 51	
08	73.2	72.3	41	
10	67.8*b*		22 49	
12	56.1*b*		23 07	−7.3
14	42.1	42.0	29	
16	32.9	32.7	44	
18	40.9	39.1	32	
20	46.3	44.9	24	
22	47.4	46.0	22	
24	44.9	44.5	25	
26	42.5	42.1	29	
28	45.5	45.2	24	
30	45.0	42.0	27	−7.2
32	41.8	39.9	31	
34	38.1	37.0	36	
36	38.3	36.8	36	
38	30.0	28.3	50	
40	32.8	30.8	45	
42	32.7	30.5	46	
44	36.7	33.9	40	−7.1
46	40.1	36.9	35	
48	41.7	38.2	33	
50	36.1	32.2	42	
52	26.2	23.7	56	
54	30.3	27.3	50	
56	28.7	30.3	49	
58	30.8	30.0	48	

Correction to local mean time is — 17s. 90° torsion = 12.′17.
Torsion head at 11h 40m read 75° and at 16h 20m read 64°.
Observer—R. R. T.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 18, 1904					Magnet scale inverted					Wednesday, May 18, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	35.0	32.8	23 42	-7.0	6 00	55.1	54.3	23 09	-5.9	8 00	65.8	62.0	22 55		10 00	25.3	24.5	22 57	-4.5
02	32.0	30.0	23 46		02	55.1	63.9	10		02	64.0	61.2	57		02	36.0	33.8	42	
04	24.8	20.4	24 00		04	56.8	55.9	07		04	69.4	67.0	22 48		04	36.0	36.0	40	
06	21.0	17.7	05		06	56.9	56.1	06		06	61.5	57.1	23 02		06	25.7	25.5	22 56	
08	24.0	19.9	01		08	60.0	59.2	02		08	67.3	63.3	22 53		08	23.0	22.3	23 01	
10	22.0	19.0	24 03		10	60.9	59.8	23 00		10	71.7	69.3	44		10	28.5	27.2	22 53	
12	25.3	20.9	23 59		12	64.3	61.8	22 56		12	63.0	60.2	58		12	29.3	29.3	50	
14	32.7	27.8	48	-7.0	14	70.3	69.8	45	-5.8	14	65.6	63.0	54	-5.3	14	29.3	28.3	51	-4.3
16	39.8	36.1	36		16	66.0	65.3	52		16	64.8	63.1	55		16	35.5	34.5	22 42	
18	36.9	35.2	39		18	64.5	63.9	54		18	65.5	63.5	54		18	22.5	22.1	23 02	
20	36.2	28.0	45		20	65.8	64.9	53		20	64.6	62.6	55		20*	44.0	38.0	28	
22	29.0	26.0	52		22	66.5	64.8	52		22	65.2	62.7	55		22	39.0	36.8	33	
24	31.2	28.9	48		24	67.9	65.1	51		24	65.6	64.2	53		24	50.4	48.0	15	
26	32.2	30.3	46		26	68.9	66.0	49		26	64.0	61.5	22 57		26	52.0	49.2	23 13	
28	31.9	29.5	47		28	62.9	61.9	22 57		28	61.3	59.3	23 00		28	65.3	59.7	22 54	
30	31.2	29.0	48	-6.9	30.3	49.2	47.7	23 19	-5.8	30	64.6	63.0	22 55	-5.0	30	65.3	61.3	53	-4.3
32	27.1	25.0	54		32	50.1	47.8	18		32	64.3	62.1	56		32*	44.3	33.6	29	
34	27.1	25.2	54		34	55.0	51.9	11		34	62.8	60.9	58		34	42.2	39.8	25	
36	28.7	26.1	52		36	59.2	57.0	04		36	69.3	65.7	49		36	39.0	38.2	29	
38	27.8	25.0	53		38	60.3	58.3	23 02		38	64.3	63.2	22 55		38	40.6	39.0	27	
40	27.8	25.8	53		40	62.2	60.0	22 59		40	59.7	56.8	23 04		40	44.0	39.2	24	
42	26.1	24.8	55		42	61.2	59.3	23 01		42	64.3	60.6	22 57		42	39.3	37.0	30	
44	27.8	25.7	53	-6.9	44	61.8	59.7	00	-5.7	44	55.3	50.5	23 12	-5.0	44	41.6	32.8	31	-4.2
46	30.9	28.2	49		46	58.9	56.2	05		46	50.8	47.0	23 18		46	42.3	29.3	34	
48	36.0	33.6	40		48	60.8	58.2	02		48	67.2	65.4	22 51		48	34.6	29.4	40	
50	31.3	28.4	48		50	62.9	59.0	00		50	73.8	71.3	41		50	30.2	25.6	46	
52	33.0	31.8	44		52	58.3	55.3	06		52	72.6	70.2	43		52	34.3	27.4	41	
54	34.4	34.3	41		54	58.3	55.0	06		54	70.6	67.2	47		54	28.3	20.8	51	
56	32.7	31.9	44		56	57.1	54.0	08		56	70.6	67.0	47		56	27.2	20.1	53	
58	35.2	34.1	41		58	58.0	56.0	06		58	69.1	64.6	50		58	26.8	22.2	51	
5 00	35.0	34.1	40	-6.7	7 00	61.0	58.0	23 02	-5.7	9 00	67.6	62.5	53	-4.8	11 00	34.2	28.6	40	-4.0
02	37.8	37.0	36		03	63.0	60.0	22 59		02	68.0	63.6	52		02	36.9	30.1	37	
04	40.0	38.2	34		04	64.0	60.5	58		04	72.2	68.6	45		04	33.6	27.8	42	
06	44.2	42.9	27		06	64.2	61.0	22 57		06	74.6	71.3	41		06	37.7	34.5	33	
08	44.7	44.2	26		08	61.2	58.2	23 01		08*	43.3	33.8	36		08	37.0	35.6	33	
10	44.9	44.1	25		10	62.8	60.7	22 58		10	36.9	36.3	39		10	32.4	32.0	39	
12	43.5	43.2	27		12	56.6	54.0	23 08		12	32.0	30.3	48		12	32.4	31.0	40	
14	47.6	46.9	21	-6.4	14	54.0	51.0	12	-5.7	14	27.1	26.6	54	-4.9	14	41.6	37.6	28	-3.8
16	53.3	52.9	12		16	60.7	57.8	23 02		16	29.8	28.9	50		16	41.0	37.1	29	
18	57.3	55.9	06		18	62.0	59.8	22 60		18	41.1	38.3	34		18	42.2	38.8	26	
20	56.6	55.3	07		20	62.5	60.2	22 59		20	41.0	38.3	34		20	46.5	43.5	19	
22	55.1	54.7	09		22	60.8	58.3	23 02		22	29.0	27.7	52		22	47.0	43.5	19	
24	56.3	55.8	07		24	60.3	57.2	23 03		24	24.3	23.0	22 60		24	45.4	41.8	21	
26	56.2	56.1	07		26	63.2	61.0	22 58		26	24.0	21.7	23 01		26	42.6	39.0	26	
28	51.8*b*		14		28	64.0	61.0	57		28	29.6	28.8	22 51		28	39.0	35.8	31	
30	51.8	51.2	14	-6.1	30	64.0	61.0	22 57	-5.8	30	32.0	29.5	48	-4.9	30	36.3	33.0	35	
32	54.9	54.0	09		32	61.2	59.1	23 01		33	33.8	31.8	45		32	35.8	32.6	36	-3.8
34	60.2	59.6	23 01		34	60.0	56.9	23 04		34	32.3	31.3	46		34	35.6	32.6	36	
36	67.0*a*		22 50		36	63.0	60.2	22 58		36	27.3	26.0	55		36	36.3	33.6	35	
38	67.5	67.1	50		38	63.9	61.0	56		38	26.8	25.3	56		38	34.2	32.0	38	
40	63.8	63.2	56		40	62.9	61.6	22 58		40	26.8	24.3	56		40	33.0	30.8	40	
42	63.0	62.9	56		42	59.3	57.8	23 03		42	32.8	31.3	46		42	32.6	30.6	40	
44	64.8*a*		53	-6.0	44	59.0	57.5	04	-5.8	44	33.1	30.8	46	-4.8	44	33.8	31.8	38	-3.6
46	69.3	68.2	47		46	59.0	55.3	06		46	30.9	28.5	50		46	34.0	32.3	38	
48	69.2	68.3	47		48	60.8	57.8	23 02		48	31.6	30.2	48		48	34.3	32.3	38	
50	64.8	64.2	54		50	63.8	60.8	22 57		50	32.3	30.3	47		50	34.6	33.0	37	
52	64.3	64.1	22 54		52	61.2	60.8	22 57		52	30.3	28.3	50		52	34.3	32.6	37	
54	59.0*b*		23 02		54	58.0	55.8	23 06		54	25.6	24.3	57		54	34.2	32.5	38	
56	50.7	50.0	16		56	63.3	60.2	22 58		56	24.6	24.0	22 58		56	35.1	33.3	36	
58	52.1	50.9	14		58	65.0	62.2	55	-5.7	58	23.0	22.4	23 01		58	36.3	34.3	34	

Observers—J. V. and W. J. P., who alternated from 8h 06m to 8h 12m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 18, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	36.4	34.6	22 34	-3.6	14 00	38.6	37.6	22 30	-3.0
02	36.3	35.8	33		02	38.3	37.5	30	
04	38.5	37.1	30		04	40.0	38.7	28	
06	39.5	38.0	29		06	41.9	41.5	24	
08	39.3	37.6	30		08	43.0	42.7	23	
10	38.9	37.3	30		10	49.0	43.5	17	
12	38.8	37.3	30		12	44.4	44.3	20	
14	37.5	36.3	32	-3.6	14	44.6	44.0	20	-3.0
16	37.0	35.6	33		16	47.6	46.5	16	
18	37.3	36.0	32		18	44.1	43.6	21	
20	37.6	36.2	32		20	51.7	51.3	09	
22	37.1	35.5	33		22	57.1	56.0	22 01	
24	38.2	37.3	31		24	58.6	58.3	21 58	
26	37.6	36.6	32		26	60.2	59.4	56	
28	37.6	36.5	32		28	59.0	58.5	58	
30	36.8	35.8	33	-3.5	30	60.3	59.3	56	-2.9
32	38.2	37.3	31		32	62.6	61.3	53	
34	38.3	37.3	30		34	60.6	59.1	56	
36	37.3	36.3	32		36	60.3	59.4	56	
38	37.3	36.5	32		38	64.0	61.6	51	
40	37.6	36.9	31		40	62.6	60.8	53	
42	38.2	37.4	30		42	67.0	66.3	45	
44	38.2	37.3	31	-3.6	44	67.3	66.1	45	-2.8
46	37.6	36.9	31		46	65.8	63.9	48	
48	37.8	36.9	31		48	67.0	65.6	46	
50	37.5	36.6	32		50	62.6	61.3	53	
52	37.4	36.3	32		52	60.1	58.3	21 57	
54	38.3	37.3	30		54	57.6	56.6	22 00	
56	38.3	38.3	30		56	63.0	60.3	21 53	
58	38.1	37.6	30		58	53.0	51.8	22 08	
13 00	37.3	36.5	32	-3.6	15 00	48.6	46.3	15	-2.8
02	38.0	37.5	31		02.4	45.3	44.3	19	
04	38.8	38.2	29		04	42.8	41.5	24	
06	38.9	38.1	29		06	43.6	42.3	22	
08	38.5	37.3	30		08	44.8	43.2	21	
10	38.9	38.2	29		10	44.1	43.0	22	
12	39.6	38.5	29		12	41.8	40.0	26	
14	39.9	39.1	28	-3.6	14	43.3	41.3	23	-2.8
16	39.4	39.1	28		16	40.9	39.6	27	
18	40.0	39.3	28		18	41.3	39.8	26	
20	40.1	39.8	27		20	40.9	40.3	26	
22	34.6	34.6	36		22	41.3	41.0	25	
24	39.3	39.1	28		24	44.3	43.8	21	
26	39.8	39.6	28		26	41.3	41.0	25	
28	40.6	40.6	26		28	44.3	43.8	21	
30	40.3	40.1	27	-3.5	30	45.3	44.6	19	-2.9
32	40.1	39.8	27		32	46.0	45.6	18	
34	39.3	39.3	28		34	45.6	45.3	19	
36	38.6	38.3	30		36	45.2	45.0	19	
38	39.6	39.3	28		38	45.7	45.3	18	
40	40.9	40.5	26		40	46.6	46.3	17	
42	41.0	40.8	26		42	49.3	49.2	13	
44	40.3	40.1	27	-3.3	44	50.3	49.7	11	-3.0
46	39.8	39.2	28		46.3	47.6	47.0	16	
48	34.0	33.8	37		48	46.2	45.5	18	
50	39.3	39.0	28		50	47.0	46.3	17	
52	39.3	39.0	28		52	48.5	48.3	14	
54	39.1	38.2	29		54	50.3	50.2	11	
56	38.6	38.3	30		56	47.2	46.3	16	
58	39.5	38.2	29		58	44.5	43.5	21	

Wednesday, May 18, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	43.9	43.3	22 21	-3.1	18 00	37.2	36.8	22 32	-3.8
02	45.3	44.7	19		02	37.9	37.1	31	
04	45.6	45.0	19		04	40.1	38.9	28	
06	46.3	45.7	18		06.3	41.8	41.1	25	
08	47.6	46.8	16		08	44.7	44.0	20	
10	47.8	47.2	15		10	46.8	46.2	17	
12	46.3	45.3	18		12	48.2	47.2	15	
14	45.8	44.9	19	-3.3	14	49.0	48.1	14	-3.5
16	44.6	43.6	20		16	49.1	47.2	14	
18	46.0	44.8	19		18	50.4	47.9	13	
20	49.5	48.3	13		20	50.3	47.2	13	
22	48.3	46.6	15		22	51.3	48.5	12	
24	49.3	47.8	14		24	50.1	47.1	14	
26	49.3	47.7	14		26	49.9	48.2	13	
28	51.6	49.9	10		28	48.3	46.9	15	
30	53.5	51.8	07	-3.5	30	46.3	45.8	18	-3.3
32	51.0	49.6	11		32	39.1	36.6	30	
34	52.6	51.3	08		34	38.8	35.0	32	
36	55.3	54.3	04		36	47.6	44.7	17	
38	57.0	56.1	01		38	50.3	48.9	12	
40	56.3	55.5	02		40	50.7	49.1	12	
42	54.7	54.3	04		42	51.8	47.1	12	
44	53.0	52.7	07	-3.7	44	53.9	47.2	10	-3.1
46	52.9	52.4	07		46	37.9	30.1	36	
48	53.6	53.3	06		48	51.5	38.8	19	
50	55.3	54.9	03		50	55.2	30.9	22	
52	56.4	56.2	01		52	63.9	33.3	22 14	
54	57.3	57.0	00		54	77.9	46.8	21 52	
56	57.3	57.1	00		56*	44.1	9.0	51	
58	56.8	56.6	01		58	43.4	8.1	52	
17 00	56.8	56.8	01	-3.9	19 00	41.1	6.8	55	-3.0
02	57.6	57.2	00		02	40.9	7.8	54	
04	57.6	56.7	00		04	40.2	8.8	54	
06	57.0	55.8	01		06	40.3	10.7	53	
08	57.3	56.0	01		08	37.8	9.7	55	
10	57.1	56.2	01		10	36.7	9.4	21 56	
12	57.0	56.1	01		12	33.5	7.2	22 01	
14	57.6	56.5	00	-4.0	14*5	68.1	37.9	10	-3.0
16	57.0	56.0	01		16	64.0	36.9	14	
18	56.3	55.8	02		18	64.3	36.2	14	
20	56.6	55.1	02		20	62.4	37.1	15	
22	55.0	53.3	05		22	62.9	35.8	16	
24	53.6	52.0	07		24	61.0	35.2	18	
26	53.6	51.0	08		26	61.9	37.2	15	
28	53.3	51.0	08		28	50.5	28.7	31	
30	51.6	50.0	10	-4.0	30	56.9	37.8	19	-2.9
32	51.7	50.0	10		32	61.2	41.9	12	
34	51.0	49.1	11		34	61.0	42.3	12	
36	50.3	49.3	12		36	53.2	36.7	22	
38	51.8	50.3	10		38	60.0	47.1	09	
40	50.6	50.2	11		40	58.2	44.0	22 13	
42	52.3	51.1	09		42	65.6	53.0	21 60	
44	52.8	51.9	08	-4.0	44	71.1	59.0	51	-2.9
46	51.9	50.6	09		46	67.8	55.9	56	
48	46.6	46.2	17		48	68.2	55.8	21 56	
50	46.3	46.1	17		50	63.2	50.8	22 04	
52	44.0	43.0	22		52	61.6	51.1	05	
54	41.6	40.8	25		54	58.7	48.1	09	
56	39.7	38.8	28		56	59.9	51.7	05	
58	39.3	38.2	29		58	60.9	52.7	04	

Observer—W. J. P.

Observers—W. J. P. and R. R. T., who alternated from 17h 38m to 17h 48m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 18, 1904 — Magnet scale inverted									Thursday, May 19, 1904 — Magnet scale erect								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	59.1	51.0	22 07	-3.0	22 00	49.4	48.9	22 16	-3.4	16 00	31.0	35.8	21 42	-4.3	18 00	49.9	51.1	22 09	-5.3
02	62.9	56.0	00		02.4	51.9	51.0	12		02	31.2	35.8	42		02	47.0	48.1	22 04	
04	60.8	53.1	22 04		04	50.8	50.1	14		04	33.2	38.2	46		04	44.0	45.3	21 60	
06	63.7	57.8	21 58		06	50.8	49.8	14		06	33.3	38.1	46		06	41.7	42.0	55	
08	61.7	54.3	22 02		08	51.8	50.7	13		08	34.8	39.0	47		08	41.0	41.9	54	
10	59.3	58.1	01		10	52.0	51.1	12		10.5	36.9	40.9	51		10	41.0	41.7	54	
12	54.6	48.9	12		12	51.9	51.0	12		12	38.0	42.1	52		12	41.0	42.2	55	
14	58.1	52.2	06	-3.0	14	52.1	51.2	12	-3.4	14	40.0	43.9	55	-4.6	14	38.1	40.0	51	-5.4
16	59.2	54.1	04		16	52.2	51.5	12		16	40.3	44.4	56		16	32.9	34.2	42	
18	57.9	52.9	06		18	53.1	52.1	10		18	41.6	45.1	21 58		18	31.9	33.5	41	
20	54.5	49.7	11		20	53.8	52.9	09		20	43.8	47.8	22 01		20	33.8	36.0	44	
22	54.2	49.8	11		22	54.0	53.3	09		22	44.3	49.1	03		22	37.0	38.8	49	
24	55.9	50.9	09		24	54.1	53.2	09		24	46.0	49.7	05		24	37.5	39.2	50	
26	55.0	50.9	10		26	51.3	50.9	13		26	46.1	49.9	05		26	36.2	38.8	48	
28	56.2	52.1	08		28	53.7	53.0	09		28	45.8	50.0	05		28	37.0	39.1	49	
30	53.9	49.3	12	-3.0	30	55.2	54.9	07	-3.3	30	43.0	47.3	00	-4.7	30	42.0	42.8	56	-5.7
32	53.9	50.2	11		32	55.7	55.2	06		32	45.1	48.0	02		32	42.2	43.7	21 57	
34	55.7	52.8	08		34	51.9	51.0	12		34	44.3	46.9	22 01		34	46.2	47.0	22 03	
36	55.0	51.1	10		36	51.7	50.9	12		36	40.0	43.1	21 55		36	47.7	49.3	06	
38	56.0	52.8	08		38	52.3	51.7	11		38	37.9	41.0	51		38	51.2	49.2	08	
40	54.8	51.6	10		40	52.2	51.7	12		40	38.1	40.2	51		40	48.0	49.2	22 06	
42	54.5	51.3	10		42	52.6	51.9	11		42	38.9	41.0	52		42	41.86		21 55	
44	52.1	49.6	13	-3.1	44	52.9	52.1	11	-3.2	44	38.3	40.8	52	-4.8	44.3	40.0	40.3	21 52	-5.8
46	51.1	49.2	14		46	53.1	52.7	10		46	38.3	40.3	51		46	44.7	45.1	22 00	
48	48.9	46.9	18		48	51.9	51.0	12		48	35.2	37.3	46		48	48.9	49.2	06	
50	49.3	47.6	17		50	50.7	50.0	14		50	35.8	37.7	47		50	47.0	48.0	22 04	
52	49.8	47.9	16		52	50.8	50.2	14		52	39.0	40.8	52		52	43.9	45.1	21 59	
54	49.9	48.5	16		54	51.0	50.4	13		54	38.1	40.8	51		54	44.8	45.2	22 00	
56.3	50.9	49.2	14		56	50.7	50.1	14		56	40.3	42.8	55		56	45.9	46.0	02	
58	52.7	51.0	12		58	50.0	49.3	15		58	42.5	44.9	21 58		58	52.9	53.1	13	
21 00	50.7	49.4	14	-3.2	23 00	49.8	49.1	16	-3.2	17 00	43.8	46.3	22 00	-4.9	19 00	56.2	56.7	18	-6.0
02	50.2	49.0	15		02	49.1	48.0	17		02	44.5	47.0	01		02	55.0	57.1	17	
04	50.4	49.3	15		04	47.8	46.9	19		04	44.9	46.8	01		04	50.6	52.1	10	
06	54.1	52.9	09		06	47.3	46.0	20		06	45.1	46.8	02		06	48.0	52.0	08	
08	56.2	55.2	06		08	46.4	45.1	21		08	45.0	46.0	22 01		08	51.9	54.0	12	
10	56.3	56.0	05		10	47.0	45.8	20		10	43.7	44.1	21 58		10	53.2	55.0	14	
12	53.8	52.9	09		12	46.9	45.9	20		12	38.1	38.9	50		12	51.8	53.2	12	
14	54.3	53.2	09	-3.2	14	46.7	45.3	21	-3.1	14	35.1	37.4	46	-5.0	14	52.7	54.0	13	-6.0
16.5	54.0	52.9	09		16	46.1	45.2	22		16	32.0	33.4	41		16	50.0	51.9	09	
18	56.0	54.3	06		18	45.2	44.6	22		18	31.0	32.2	39		18	47.9	48.6	05	
20	57.1	56.3	04		20	44.8	44.0	23		20	31.7	33.2	40		20	46.2	47.1	03	
22	55.6	54.2	07		22	45.0	44.3	23		22	36.1	37.0	47		22	45.6	46.1	22 01	
24	52.3	51.1	12		24	45.8	45.1	22		24	41.0	42.2	55		24	42.8	44.7	21 58	
26	50.8	49.9	14		26	46.2	45.6	21		26	42.9	44.2	21 58		26	36.9	39.1	49	
28	50.4	49.9	14		28	46.9	46.1	20		28	44.2	45.9	22 00		28	36.4	40.7	50	
30	50.9	50.1	14	-3.3	30	47.0	46.1	20	-3.2	30	46.2	46.9	02	-5.2	30	35.0	39.1	48	-6.0
32	50.1	49.3	15		32	46.0	45.2	22		32	45.0	45.8	01		32	34.1	37.0	45	
34	50.1	49.3	15		34	44.1	42.9	25		34	46.7	47.5	04		34	30.1	32.2	38	
36	50.2	49.3	15		36	42.1	41.0	28		36	48.8	49.2	06		36	32.0	32.7	40	
38	50.1	49.2	15		38	41.4	39.9	29		38	50.9	51.0	09		38	28.2	28.8	34	
40	51.0	50.2	14		40	42.1	40.7	28		40	54.0	56.2	16		40	29.0	29.3	35	
42	52.8	51.9	11		42	44.0	42.3	25		42	59.8	60.0	24		42	31.0	31.4	38	
44	53.5	52.5	10	-3.3	44	45.3	43.9	23	-3.3	44	60.6	60.8	25	-5.2	44	29.0	30.0	36	-6.1
46	52.8	51.7	11		46	47.1	45.3	20		46	59.8	59.0	23		46	26.3	30.0	34	
48	51.3	50.6	13		48	48.0	46.1	19		48	57.6	57.8	20		48	24.0	27.1	30	
50	51.7	50.7	13		50	47.4	46.0	20		50	55.3	56.1	17		50	31.0	38.3	44	
52	51.1	50.3	13		52	46.0	44.8	22		52	53.2	54.2	14		52	36.8	39.9	50	
54	51.1	50.2	14		54	44.1	42.6	25		54	54.0	55.2	15		54	40.8	45.2	57	
56	50.8	49.9	14		56	41.8	40.5	28		56	51.3	52.7	11		56	42.0	45.2	58	
58	50.0	49.2	15		58	39.9	38.1	32		58	51.8	52.8	12		58	42.1	46.0	59	
					24 00	38.8	36.8	34	-3.6						20 00	42.9	43.9	58	

Correction to local mean time is — 1.5s. 90° torsion = 19.'62.
Torsion head at 0h 00m read 65° and at 24h 12m read 67°.
Observer—R. R. T.

Correction to local mean time is + 2s. 90° torsion = 16.'92.
Torsion head at 15h 38m read 69° and at 20h 21m read 83°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, May 20, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00*	59.0	56.2	21 41	-4.3
02	56.1	49.3	21 49	
04	42.1	42.0	22 06	
06	42.8	41.4	06	
08	42.0	39.8	08	
10	45.8	42.9	02	
12	47.8	43.0	22 00	
14	54.0	47.0	21 52	-4.1
16	51.0	40.0	22 00	
18	47.0	14.7	23	
20	45.3	27.0	22 15	
22*	53.1	37.3	21 02	
24*	55.0	36.0	52	
26	75.0	55.2	21	
28	75.3	57.2	19	
30*	53.0	34.8	07	-4.0
32	51.4	37.3	06	
34	39.0	24.1	26	
36	27.1	12.0	45	
38	28.0	12.2	44	
40	19.9	7.0	55	
42	20.1	8.0	54	
44	21.1	9.7	52	-4.0
46	20.7	8.7	53	
48	20.5	9.8	52	
50	20.0	9.9	52	
52	20.0	10.5	52	
54	19.0	10.0	53	
56	17.0	9.0	55	
58	15.0	7.4	21 58	
21 00	43.2	32.5	22 00	-4.2
02	43.1	31.5	01	
04	42.0	31.1	02	
06	39.8	28.8	06	
08	37.2	28.2	08	
10	31.0	27.3	14	
12	36.1	27.0	10	
14	35.0	27.0	11	-4.3
16	36.2	28.9	08	
18	34.9	28.0	10	
20	33.9	27.1	12	
22	33.0	27.1	12	
24	32.0	26.3	14	
26	30.4	26.0	15	
28	30.3	26.1	15	
30	33.0	29.5	10	-4.4
32	32.2	29.0	11	
34	33.0	30.0	10	
36	32.2	29.3	11	
38	32.3	29.8	11	
40	33.2	31.0	09	
42	35.5	32.9	06	
44.9	34.0	30.2	09	-4.5
46	33.0	30.0	10	
48	32.0	28.9	12	
50	33.9	30.8	09	
52	32.1	30.0	11	
54	30.9	29.0	12	
56	30.0	26.8	15	
58	31.8	28.1	12	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	32.0	28.5	22 12	-4.6
02	32.7	29.0	11	
04	Lost			
06	35.2	31.0	07	
08	35.8	29.9	08	
10	24.8	15.2	28	
12*	25.8	17.0	48	
14	19.1	10.0	22 59	-4.8
16*	52.6	40.0	23 12	
18	53.4	43.2	09	
20	42.3	36.7	23 23	
22	67.1	57.9	22 47	
24*	54.1	43.3	19	
26	61.9	52.9	22 06	
28	66.0	56.8	21 59	
30	70.2	61.0	53	-5.0
32	68.0	59.0	21 56	
34	62.0	54.0	22 04	
36	60.0	52.8	07	
38	58.0	51.0	10	
40	56.1	49.5	13	
42	55.2	49.4	14	
44	52.9	47.9	16	-5.1
46	47.1	42.0	26	
48	44.6	40.0	29	
50	46.2	41.7	27	
52	48.8	45.1	22	
54	50.2	46.0	20	
56	48.7	44.2	23	
58	48.1	44.2	23	
23 00	46.7	43.0	25	-5.3
02	43.0	41.1	30	
04	43.8	40.9	29	
06	45.2	42.9	26	
08	46.3	44.8	24	
10	45.8	44.2	25	
12	44.2	42.9	27	
14	43.2	42.1	29	-5.5
16	43.0	42.1	29	
18	44.0	43.5	27	
20	44.7	43.7	26	
22	43.0	41.9	29	
24	40.5	39.1	33	
26	39.9	38.3	34	
28	40.0	38.9	34	
30	40.2	38.9	34	-5.7
32	39.3	38.4	35	
34	37.7	37.0	37	
36	37.0	36.2	38	
38	37.6	36.8	37	
40	37.0	36.6	38	
42	37.0	36.2	38	
44	37.8	37.0	37	-5.8
46	37.0	36.0	38	
48	35.0	34.0	41	
50	35.1	34.1	41	
52	35.8	34.2	41	
54	38.2	34.9	38	
56	37.1	40.0	35	
58	40.3	37.8	34	
24 00	39.2	37.0	36	-5.9

Correction to local mean time is — 4s. 90° torsion = 18.′24.
Torsion head at 19h 35m read 83° and at 24h 21m read 89°.
Observer—J. V.

Sunday, May 22, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	30.1	34.2	22 08	-6.0
02	21.8	26.9	21 55	
04	21.1	24.6	53	
06	21.8	24.2	53	
08	25.0	27.3	58	
10	23.5	26.2	56	
12	24.8	27.3	58	
14	24.8	26.9	58	-6.0
16	25.0	26.9	21 58	
18	27.8	29.4	22 02	
20	31.1	31.8	06	
22	34.1	36.2	12	
24	37.9	39.6	18	
26	42.1	43.8	24	
28	40.8	42.1	22	
30	44.1	45.4	27	-6.0
32	43.5	45.2	27	
34	53.8	54.8	42	
36	53.3	54.1	41	
38	53.0	54.1	41	
40	65.0	66.0	60	
42	59.3	62.3	53	
44	36.2	41.5	18	-6.0
46	44.7	48.0	30	
48	48.0	53.1	36	
50	43.1	48.8	29	
52	48.1	52.1	36	
54	47.0	52.9	35	
56	46.7	53.8	36	
58	54.0	61.7	48	
1 00	56.2	62.2	50	-6.0
02	58.7	63.3	22 53	
04	68.0	72.2	23 07	
06	66.9	71.9	23 06	
08	61.6	66.7	22 58	
10	58.0	61.5	51	
12	57.1	59.9	49	
14	56.0	58.1	47	-6.0
16	56.0	58.7	47	
18	58.5	61.4	51	
20	59.3	62.0	52	
22	58.3	61.2	51	
24	60.3	62.7	54	
26	62.2	64.3	56	
28	63.6	65.9	22 59	
30	66.1	68.1	23 02	-6.0
32	69.5	71.8	08	
34	73.2	75.0	14	
36	74.2	75.9	15	
38	74.2	76.0	15	
40	73.0	74.5	13	
42	72.9	74.0	12	
44	73.3	74.8	13	-6.0
46	71.2	72.9	10	
48	68.9	70.1	06	
50	66.3	67.8	02	
52	65.9	67.0	01	
54	68.1	69.0	05	
56	71.5	72.8	10	
58	75.2	76.2	16	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	74.9	75.3	23 15	-5.9
02	73.2	73.6	12	
04	72.2	73.9	12	
06	69.0	71.2	07	
08	66.7	69.2	04	
10	67.3	70.0	05	
12	67.3	69.9	05	
14	69.1	71.1	07	-5.9
16	69.9	72.7	09	
18	71.0	73.4	10	
20	71.8	74.1	12	
22	70.5	73.0	10	
24	69.2	71.8	08	
26	68.8	71.0	07	
28	70.1	72.4	09	
30	71.0	73.0	10	-5.7
32	70.8	72.3	09	
34	70.0	71.9	08	
36	70.1	71.2	08	
38	72.2	73.9	12	
40	74.1	75.2	14	
42	75.2	76.3	16	
44	76.8	77.9	18	-5.7
46*3	52.6	58.4	21	
48	53.1	57.8	20	
50	55.8	58.9	23	
52	56.9	60.7	26	
54	59.2	63.0	29	
56	57.8	61.3	27	
58	56.0	59.3	24	
3 00	54.3	57.9	22	-5.5
02	54.1	57.2	21	
04	51.9	55.0	17	
06	50.1	53.3	15	
08	50.3	53.4	15	
10	49.9	52.1	14	
12	47.8	50.1	10	
14	47.2	49.8	10	-5.5
16	45.8	48.1	07	
18	44.9	47.0	05	
20	43.9	46.1	04	
22	42.1	44.4	23 01	
24	40.3	42.4	22 58	
26	39.8	40.5	56	
28	40.1	41.7	58	
30	40.1	41.9	58	-5.4
32	40.1	41.9	58	
34	41.1	42.3	22 59	
36	42.0	43.1	23 00	
38	41.1	42.6	22 59	
40	41.3	42.7	59	
42	40.2	41.5	58	
44	39.2	40.6	56	-5.3
46	40.2	41.1	57	
48	41.3	42.4	59	
50	41.1	42.3	59	
52	41.3	42.5	22 59	
54	42.7	43.6	23 01	
56	42.3	43.0	00	
58	42.5	43.7	01	

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, May 22, 1904					Magnet scale inverted					Monday, May 23, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	62.9	61.6	23 04	-5.2	6 00	71.8	70.3	22 50	-4.0	8 00	55.1	55.3	22 54	-5.3	10 00	37.7	42.3	22 30	-3.2
02	64.2	63.1	02		02	72.3	71.1	49		02	50.8	52.8	22 48		02	33.3	38.0	23	
04	65.1	63.8	01		04	72.6	71.2	49		04	59.8	61.1	23 02		04	32.1	35.9	20	
06	64.0	63.0	02		06	71.5	70.1	51		06	57.6	61.7	01		06	29.0	33.9	16	
08	63.1	61.9	04		08	71.2	70.2	51		08	62.2	66.6	08		08	43.0	48.0	38	
10	64.2	62.9	02		10	72.3	71.0	50		10	65.8	71.0	14		10	43.8	47.8	39	
12	65.9	64.6	00		12	72.7	71.1	49		12	69.2	71.2	17		12	39.1	43.2	32	
14	65.8	64.1	00	-5.1	14	72.9	71.3	49	-3.9	14	73.6	75.8	24	-5.0	14	43.2	44.0	35	-3.0
16	65.1	64.1	01		16	72.8	72.0	48		16	74.7	78.0	27		16	37.6	39.1	27	
18	64.3	63.6	02		18	72.1	71.7	49		18	73.5	77.3	25		18	35.2	37.0	24	
20	64.8	64.0	23 01		20	72.0	71.5	49		20	65.1	69.8	23 13		20	39.7	40.9	30	
22	66.2	65.8	22 58		22	72.1	71.6	49		22	56.3	61.1	22 59		22	38.1	40.7	29	
24	67.5	67.2	56		24	72.0	71.2	50		24	56.0	57.3	56		24	36.6	38.0	26	
26	68.1	67.8	55		26	72.0	71.1	50		26	43.1	47.9	38		26	33.9	35.1	21	
28	67.3	66.9	57		28	72.5	71.8	49		28	44.4	47.3	39		28	31.8	34.8	19	
30	67.9	67.7	56	-5.0	30	72.9	72.1	48	-3.9	30	49.2	53.4	48	-4.9	30	41.1	43.0	33	-2.6
32	68.8	68.3	54		32.2	72.8	71.8	48		32	52.8	58.6	54		32	35.0	36.9	23	
34	69.7	68.9	53		34	73.1	72.1	48		34	48.1	52.8	46		34	33.1	34.8	20	
36	69.1	68.2	54		36	74.0	73.1	47		36	42.0	48.0	38		36	32.9	34.9	20	
38	70.2	69.3	53		38	73.9	73.1	47		38	43.2	49.0	39		38	36.3	38.3	26	
40	72.0	71.1	50		40	73.3	72.8	47		40	48.7	54.0	48		40	29.1	31.8	15	
42	72.8	71.5	49		42	74.1	72.2	47		42	42.3	46.3	37		42	33.1	33.9	20	
44	72.3	71.4	49	-5.0	44	75.0	73.1	46	-4.0	44	34.3	37.6	23	-4.8	44	29.9	31.1	15	-2.2
46	72.3	71.5	49		46	75.0	73.1	46		46	30.8	33.6	18		46	28.3	31.2	14	
48	73.1	72.2	48		48	74.0	72.9	47		48	40.3	45.9	35		48	29.0	32.0	15	
50	70.9	69.2	52		50	74.8	73.1	46		50	48.8	51.9	46		50	28.8	32.5	15	
52	72.0	71.0	50		52	74.1	72.2	47		52	44.9	47.7	40		52	28.9	32.0	15	
54	70.7	69.8	52		54	73.7	72.1	48		54	44.1	46.9	38		54	23.0	26.3	06	
56	71.9	71.1	50		56	74.8	73.1	46		56	38.9	42.3	31		56	23.3	28.1	07	
58	73.1	72.3	48		58	74.4	72.7	47		58	39.1	42.1	31		58	24.7	29.0	09	
5 00	73.0	71.6	48	-4.9	7 00	74.9	72.9	46	-3.8	9 00	35.4	38.0	25	-4.4	11 00	29.9	34.8	18	-2.0
02	73.0	71.2	49		02	73.2	71.7	48		02	33.1	36.9	22		02	33.8	37.8	23	
04	73.0	71.3	49		04	73.7	71.4	48		04	29.7	33.2	16		04	35.8	39.0	26	
06	73.1	71.8	48		06	72.9	71.1	49		06	29.5	32.1	15		06	40.5	44.1	33	
08	73.3	72.1	48		08	73.9	72.8	47		08	34.1	35.4	22		08	43.3	46.1	37	
10	73.3	72.2	48		10	73.0	72.0	48		10	36.1	39.0	26		10	38.9	40.9	30	
12	73.7	72.6	47		12	72.8	71.7	49		12	39.9	42.7	32		12	38.1	40.3	28	
14	73.3	72.5	48	-4.8	14	74.1	73.5	46	-3.3	14	37.9	39.8	28	-4.2	14	38.5	40.9	29	-2.0
16	71.9	71.2	50		16	74.1	73.5	46		16	35.9	39.2	26		16	34.3	38.6	24	
18	74.0	72.2	47		18	74.2	73.8	46		18	36.1	39.2	26		18	29.9	33.2	16	
20	72.9	71.1	49		20	74.3	73.3	46		20	41.1	45.7	35		20	30.8	34.1	18	
22	73.3	72.1	48		22	74.9	74.1	45		22	46.9	50.1	43		22	24.5	28.0	22 08	
24	73.8	72.2	47		24	74.3	73.8	46		24	44.9	47.2	39		24	19.1	22.0	21 59	
26	72.3	71.1	49		26	75.0	73.9	45		26	41.8	44.7	35		26	13.1	15.9	50	
28	71.5	70.2	51		28	75.6	74.1	44		28	36.1	37.9	25		28	12.3	14.8	48	
30	70.9	69.7	52	-4.7	30	76.0	74.0	44	-2.9	30	33.2	36.1	21	-4.0	30	17.3	19.9	21 56	-2.2
32	71.6	70.3	51		32	75.2	73.9	45		32	35.0	37.0	24		32	29.1	31.0	22 14	
34	70.0	68.9	53		34	75.6	74.0	44		34	32.9	34.2	20		34.5	41.8	42.5	33	
36	71.1	70.0	51		36	75.0	73.9	45		36	27.0	28.1	10		36	42.1	42.8	34	
38	71.3	70.1	51		38	75.8	73.5	45		38	27.0	29.6	11		38	43.2	43.9	35	
40	72.7	71.1	49		40	76.0	74.7	44		40	36.7	37.2	25		40	47.2	48.1	42	
42	72.9	71.2	49		42	74.0	72.3	47		42	48.1	48.7	43		42	50.3	51.2	47	
44	72.3	71.1	49	-4.3	44	74.9	73.1	46	-2.2	44	49.1	51.7	46	-3.8	44	53.3	54.0	51	-2.2
46	71.0	69.9	52		46	74.9	74.0	45		46	47.2	49.7	43		46	47.0	47.8	41	
48	71.7	70.3	50		48	73.4	73.0	47		48	40.8	43.1	33		48	37.2*b*		25	
50	71.9	70.8	50		50	72.7	71.5	49		50.6	31.4	32.0	17		50	21.1	22.9	22 02	
52	70.8	69.6	52		52	75.0	74.4	45		52	24.6	26.2	07		52	19.8	21.1	21 59	
54	71.5	70.3	51		54	74.7	73.8	46		54	20.3	21.8	00		54	17.2	19.1	56	
56	71.2	70.2	51		56	74.9	74.1	45		56	30.1	32.7	16		56	16.0	17.1	21 53	
58	71.9	70.7	50		58	76.3	75.8	43		58	41.1	47.1	36		58	25.8	26.8	22 08	
					8 00	73.7	72.9	47	-1.9						12 00	29.5*a*		13	-2.0

Correction to local mean time is — 22s. 90° torsion = 18.′60.
Torsion head at 0h 00m read 90° and at 8h 20m read 85°.
Observer—R. R. T.

Correction to local mean time is — 41.5s. 90° torsion = 19.′62.
Torsion head at 7h 40m read 85° and at 12h 20m read 91°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, May 24, 1904					Magnet scale inverted					Wednesday, May 25, 1904					Magnet scale erect				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00*	48.8	47.9	23 29	-2.4	14 00	59.6	57.9	22 40	-1.7	0 00	39.8	40.0	22 27	-4.6	2 00	54.9	55.0	22 50	-4.8
02	48.9	46.9	29		02	56.9	54.7	45		02	39.0	39.9	26		02	55.0	55.0	50	
04	49.5	47.2	29		04	59.7	57.0	41		04	38.2	39.1	25		04	53.0	53.3	47	
06	49.7	47.1	28		06	57.8	55.1	44		06	38.3	39.2	25		06	52.0	52.6	46	
08	49.2	47.2	29		08	57.9	55.4	44		08.3	39.1	40.0	26		08	52.0	53.0	46	
10	46.4	43.5	34		10	57.3	55.0	44		10	39.1	40.0	26		10	53.5	54.4	49	
12	44.8	42.0	36		12	58.7	55.9	42		12	39.1	39.9	26		12	55.2	55.8	51	
14	50.3	47.7	28	-2.0	14	61.0	58.8	38	-1.7	14	39.5	39.8	26	-4.9	14	55.9	59.0	54	-4.8
16	47.2	45.2	32		16	62.2	59.2	37		16	39.3	40.0	26		16	58.0	59.1	56	
18	52.0	49.8	24		18	66.0	62.1	32		18	38.9	39.1	25		18	59.2	60.2	58	
20	51.8	49.0	25		20	66.7	62.8	31		20	38.1	38.8	24		20	58.1	59.0	56	
22	50.9	49.1	26		22	64.3	60.8	34		22	37.9	38.0	24		22	55.0	56.3	51	
24	51.9	48.9	25		24	65.0	61.9	33		24	37.0	37.2	22		24	52.9	53.8	48	
26	55.0	53.1	20		26	66.0	62.0	32		26	36.1	36.3	21		26	53.0	54.0	48	
28	59.0	58.2	12		28	67.9	63.7	29		28	34.8	35.1	19		28	53.7	54.8	49	
30	62.1	61.2	08	-2.0	30	70.0	66.2	26	-1.8	30	34.0	34.3	18	-5.0	30	54.9	56.0	51	-4.8
32	62.9	62.3	06		32	70.1	66.0	26		32	33.8	34.2	17		32	55.1	56.5	52	
34	62.7	62.1	06		34	71.5	68.0	23		34	32.7	33.0	16		34	55.9	57.1	53	
36	63.0	62.9	05		36	74.2	70.6	19		36	32.8	33.0	16		36	56.5	58.0	54	
38	59.9	59.2	11		38	72.0	68.3	22		38	34.0	34.8	18		38	56.9	58.2	54	
40	61.0	60.5	09		40	69.1	65.8	27		40	35.0	35.8	20		40	57.2	58.8	55	
42	65.8	64.9	02		42	65.9	62.3	32		42	34.8	35.7	19		42	57.6	58.8	55	
44	65.8	64.3	23 02	-2.0	44	62.1	59.2	37	-1.9	44	33.0	33.8	16	-5.0	44	56.7	58.0	54	-4.7
46	67.4	66.1	22 60		46	60.4	58.1	39		46	33.2	34.1	17		46	56.0	57.3	53	
48	68.2	67.2	58		48	60.9	58.1	39		48	35.8	36.5	21		48	55.2	56.2	52	
50	70.5	68.8	55		50	63.1	62.0	34		50	36.9	37.9	23		50	54.2	55.0	50	
52	69.2	67.9	57		52	62.9	61.1	35		52	38.0	39.0	24		52	54.3	55.2	50	
54	68.0	66.7	59		54	65.9	64.6	30		54	39.0	40.7	26		54	55.2	56.0	51	
56	67.9	67,0	22 59		56	75.8	73.3	15		56	42.0	43.2	31		56	55.2	56.0	51	
58	60.1	59.5	23 10		58	76.4	74.3	14		58	43.0	44.9	33		58	55.0	55.5	51	
13 00	65.3	64.0	03	-1.9	15 00	72.7	71.3	19	-2.0	1 00	45.2	46.8	36	-5.0	3 00	55.1	55.9	51	-4.7
02	64.9	63.8	03		02	78.0	77.0	11		02	42.3	46.2	33		02	56.0	56.1	52	
04	64.9	63.5	04		04	76.4	75.1	14		04	47.9	49.0	40		04	58.0	58.2	55	
06	65.2	64.2	03		06*	53.1	48.7	12		06	48.9	50.5	42		06	57.8	58.0	55	
08	66.0	65.2	23 02		08.5	52.2	48.6	12		08	50.0	51.2	43		08	57.0	57.3	54	
10	68.3	67.5	22 58		10	52.8	48.2	12		10	50.8	52.1	45		10	57.8	58.1	55	
12	70.2	69.2	55		12	56.9	51.5	06		12	51.2	53.0	46		12	56.0	56.8	52	
14	70.0	68.9	56	-1.9	14	59.8	53.0	03	-2.0	14	51.9	53.3	46	-5.0	14	56.7	57.2	53	-4.7
16	68.8	67.5	58		16	56.8	51.4	06		16	51.8	52.9	46		16	56.7	57.2	53	
18	68.8	67.1	58		18	55.2	50.0	22 09		18	50.8	51.9	45		18	56.0	56.9	52	
20	70.1	69.1	55		20	62.1	57.7	21 57		20	52.8	53.9	48		20	55.9	57.0	52	
22	69.7	67.9	56		22	59.2	54.5	22 02		22	52.4	54.0	48		22	55.9	56.8	52	
24	67.2	66.3	22 60		24	61.9	57.0	21 58		24	53.3	54.9	49		24	55.3	56.4	52	
26	63.8	62.1	23 06		26	61.9	56.3	21 58		26	51.1	52.8	46		26	55.5	56.8	52	
28	66.8	65.2	01		28	59.9	55.1	22 01		28	48.2	49.8	41		28	56.0	57.0	53	
30	66.1	65.3	01	-1.8	30	61.8	57.9	21 57	-2.0	30	49.4	49.9	42	-4.9	30	55.9	56.9	52	-4.7
32	67.1	66.2	00		32	64.8	60.7	53		32	49.0	49.3	41		32	55.6	56.9	52	
34	65.2	63.7	23 03		34	62.3	57.2	21 58		34	49.1	49.2	41		34	55.2	56.1	51	
36	69.0	66.5	22 58		36	59.5	54.0	22 02		36	49.5	50.0	42		36	54.7	55.2	50	
38	68.6	66.9	58		38	69.0	64.7	21 46		38	50.2	51.0	43		38	53.8	55.0	49	
40	74.7	72.9	48		40	64.9	59.9	53		40	52.8	53.3	47		40	53.2	54.3	48	
42	75.1	73.5	48		42	63.1	58.2	56		42	56.0	57.0	53		42	53.2	54.3	48	
44	74.6	73.1	48	-1.8	44	62.8	59.0	56	-2.0	44	57.1	59.0	55	-4.9	44	52.5	53.8	47	-4.5
46	75.0	73.0	48		46	63.0	59.2	55		46	57.2	58.9	55		46	52.2	53.2	47	
48	77.9	76.6	43		48	61.2	59.1	57		48	57.3	58.0	54		48	52.3	53.8	47	
50*	53.3	49.6	52		50	60.9	58.9	21 57		50	57.5	58.9	55		50	53.0	54.1	48	
52	53.9	51.7	50		52	58.7	56.2	22 01		52	56.0	56.1	52		52	52.0	53.1	46	
54	54.8	52.5	48		54	59.1	56.7	00		54	55.7	56.1	52		54	52.1	53.2	46	
56	56.9	54.7	45		56	58.4	56.5	01		56	55.3	55.8	51		56	53.9	55.0	49	
58	59.9	58.8	39		58	56.9	54.8	04		58	54.9	55.1	50		58	55.7	56.9	52	
					16 00	58.9	57.3	00	-2.0										

Correction to local mean time is — 1m 19.5s. 90° torsion = 18.′60. Observer—J. V.
Torsion head at 11h 35m read 93° and at 16h 15m read 96°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 25, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	55.6	56.9	22 52	−4.4
02	56.0	57.1	53	
04	56.5	57.8	54	
06	56.5	57.8	54	
08	57.0	58.0	54	
10	56.0	57.1	53	
12	56.1	57.2	53	
14	57.2	58.0	54	−4.3
16	56.9	57.2	54	
18	56.0	56.1	52	
20	54.9	54.9	50	
22	54.9	55.1	50	
24	55.3	56.0	51	
26	55.2	56.0	51	
28	55.9	56.7	52	
30	58.2	59.0	56	−4.2
32	59.0	59.2	57	
34	57.1	57.5	54	
36	56.0	56.2	52	
38	56.0	56.2	52	
40	57.0	57.8	54	
42	58.0	58.2	55	
44	57.7	58.0	55	−4.0
46	55.8	56.1	52	
48	55.7	56.4	52	
50	56.6	57.4	54	
52	57.9	59.0	56	
54	57.2	58.1	54	
56	56.1	57.2	53	
58	54.0	55.0	50	
5 00	53.0	54.3	48	−3.9
02	55.7	56.9	52	
04	56.3	57.9	54	
06	54.5	55.9	51	
08	53.2	54.5	48	
10	53.2	54.4	48	
12	52.8	54.0	48	
14	51.3	53.0	46	−3.7
16	55.8	56.2	52	
18	55.7	57.0	52	
20	52.8	53.8	48	
22	53.9	55.3	50	
24	56.9	57.7	54	
26	56.0	56.3	52	
28	56.9	57.3	54	
30	57.4	57.9	54	−3.6
32	56.4	56.6	53	
34	57.0	57.8	54	
36	59.7	60.1	58	
38	58.5	59.1	56	
40	57.1	57.8	54	
42	56.0	56.0	52	
44	56.8	57.0	53	−3.5
46	57.0	57.7	54	
48	58.2	59.2	56	
50	57.5	57.8	54	
52	57.0	57.4	54	
54	60.4	60.9	59	
56	57.8	58.0	55	
58	55.0	55.5	51	
6 00	57.8	58.0	22 55	−3.4
02	58.9	59.0	22 56	
04	63.2	63.8	23 04	
06	57.5	58.2	22 55	
08	57.7	58.0	55	
10	58.9	59.5	22 57	
12	61.0	61.2	23 00	
14	59.2	59.9	22 58	−3.3
16	62.0	63.2	23 02	
18	63.9	64.9	05	
20	63.8	64.9	05	
22	62.9	63.8	23 03	
24	58.8	60.0	22 57	
26	57.4	58.2	22 55	
28	61.0	62.0	23 01	
30	56.1	57.1	22 53	−3.2
32	55.9	56.3	52	
34	54.2	55.0	50	
36	53.2	54.9	49	
38	58.7	59.2	56	
40	58.0	58.9	56	
42	60.2	60.9	22 59	
44	60.9	62.3	23 01	−3.2
46	61.8	62.1	01	
48	61.9	63.0	02	
51	64.0	65.0	05	
52.4	61.9	62.3	02	
54	62.0	63.0	02	
56	62.9	63.9	04	
58	62.7	63.8	03	
7 00	60.7	61.4	00	−3.1
02	61.2	61.7	23 00	
04	59.8	60.7	22 58	
06	62.0	63.0	23 02	
08	61.2	62.2	23 01	
10	57.9	58.9	22 56	
12	57.8	58.2	55	
14	58.0	58.5	55	−3.0
16	57.2	58.0	54	
18	57.0	57.1	54	
20	54.3	55.1	50	
22	54.8	55.2	50	
24	53.8	54.8	49	
26	52.2	52.9	46	
28	50.5	51.5	44	
30	50.3	51.1	44	−3.0
32	52.8	54.0	48	
34	54.8	55.0	50	
36	52.1	52.9	46	
38	50.4	52.0	44	
40	50.8	52.1	45	
42	52.5	54.1	48	
44	51.7	53.8	47	−3.0
46	51.0	52.9	46	
48	50.9	52.3	45	
50	50.8	52.8	45	
52.5	49.3	50.5	42	
54	50.3	51.8	44	
56	46.0	48.0	38	
58	45.1	48.2	37	

Observers—J. V. and W. J. P., who alternated from 7h 56m to 8h 06m.

Wednesday, May 25, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	54.5	55.6	22 50	−3.0
02	48.3	49.7	41	
04	53.3	56.7	22 50	
06	60.3	63.3	23 01	
08	62.6	65.5	23 05	
10	57.1	59.6	22 56	
12	56.8	59.0	22 55	
14	60.6	62.1	23 00	−3.0
16	60.4	62.6	23 01	
18	59.6	61.6	22 59	
20	57.0	58.3	54	
22	55.8	57.5	53	
24	51.9	54.6	48	
26	50.3	52.4	45	
28	58.2	59.4	22 56	
30	61.0	62.6	23 01	−3.0
32	63.3	64.8	23 04	
34	55.8	57.6	22 53	
36	58.0	59.7	56	
38	52.0	53.6	47	
40	52.6	54.1	48	
42	57.0	57.8	54	
44	51.0	53.4	46	−3.0
46	50.0	50.6	43	
48	57.3	58.3	55	
50	55.0	56.5	52	
52	52.6	54.2	48	
54.3	57.6	59.0	56	
56	56.0	57.1	53	
58	55.0	56.0	51	
9 00	55.4	57.8	53	−2.9
02	57.3b		54	
04	53.6	53.6	22 48	
06	61.0	61.5	23 00	
08	62.4	62.6	02	
10	63.4	63.6	23 04	
12	60.3	61.0	22 59	
14	57.0	57.2	54	−2.8
16	55.6	55.8	52	
18	56.1	56.5	52	
20	51.8	52.0	46	
22	51.3	51.6	45	
24	52.3	52.8	46	
26	49.9	50.3	43	
28	51.5	51.8	45	
30	50.9	51.5	44	−2.7
32	50.3	50.7	43	
34	50.6	51.5	44	
36	48.6	49.5	41	
38	48.3	48.9	40	
40	49.8	50.2	42	
42	49.8	50.2	42	
44	48.1	48.6	40	−2.6
46	47.0	47.5	38	
48	49.8	50.1	42	
50	49.4	50.0	42	
52	48.9	49.1	41	
54	51.8	52.6	46	
56.3	50.0	50.2	43	
58	49.1	49.6	41	
10 00	50.8	51.1	22 44	−2.6
02	50.6	50.8	44	
04	53.0	53.6	48	
06	55.0	55.3	51	
08	53.1	53.6	48	
10	53.2	53.6	48	
12	53.5	53.6	48	
14	55.6	56.0	52	−2.6
16	54.0	54.5	49	
18	54.5	55.0	50	
20	55.6	56.0	52	
22	55.2	55.6	51	
24	52.3	52.6	46	
26	51.3	51.9	45	
28	50.5	50.9	44	
30	50.2	50.6	43	−2.6
32	51.0	51.3	44	
34	50.1	50.3	43	
36	47.7	48.3	39	
38	46.9	47.8	38	
40	48.0	48.3	40	
42	49.5	49.8	42	
44	51.0	51.3	44	−2.5
46	49.2	49.9	42	
48	46.6	46.8	37	
50	45.0	45.0	35	
52	43.5	43.6	32	
54	47.8	48.1	39	
56	47.6	47.8	39	
58	48.0	48.2	40	
11 00	47.8	48.2	39	−2.5
02	47.5	47.5	39	
04	48.0	48.3	40	
06	46.6	46.6	37	
08	45.8	46.2	36	
10	45.8	46.2	36	
12	43.6	44.1	33	
14	44.5	44.8	34	−2.5
16	45.5	46.3	36	
18	46.3	47.3	38	
20	46.1	46.9	37	
22	45.4	46.0	36	
24	44.8	45.6	35	
26	45.3	46.0	36	
28	44.5	45.3	34	
30	42.6	43.6	32	−2.5
32	42.0	42.6	30	
34	38.5	39.6	25	
36	36.3	37.0	21	
38	40.3a		27	
40	41.5	41.9	30	
42	37.8	38.5	24	
44	36.9	37.5	22	−2.5
46	37.9	38.5	24	
48	38.8	39.8	26	
50	41.3	42.5	30	
52	42.4	43.3	31	
54	42.1	43.1	31	
56	40.5	41.6	28	
58	39.0	40.0	26	

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 25, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	40.5	41.0	22 28	-2.5
02	42.5	43.1	31	
04	42.3	42.8	31	
06	43.0	43.6	32	
08	41.8	42.5	30	
10	42.5	42.8	31	
12	40.3	40.8	28	
14	40.8	41.6	29	-2.5
16	41.3	41.9	29	
18	39.9	40.5	27	
20	39.5	40.0	26	
22	36.6	36.8	22	
24	35.5	35.6	20	
26	34.6	35.0	19	
28	33.6	33.8	17	
30	34.3	34.5	18	-2.5
32	36.3	36.6	21	
34	39.7	40.3	27	
36	43.0	43.5	32	
38	43.6	44.0	33	
40	43.3	43.6	32	
42	41.5	42.0	30	
44	40.0	40.0	27	-2.5
46	37.4	37.7	23	
48	37.7	37.9	23	
50	38.6	38.6	25	
52	38.0	38.5	24	
54	36.8	37.2	22	
56	35.8	36.1	20	
58	35.9	35.9	20	
13 00	33.8	34.0	17	-2.6
02	32.6	32.6	15	
04	33.0	33.2	16	
06	31.8	31.8	14	
08	33.3	33.5	16	
10	28.5	28.8	09	
12	33.5	33.8	17	
14	42.8	43.0	31	-2.5
16	38.6	39.3	25	
18	39.3	40.6	27	
20	43.2	43.8	32	
22	44.7	45.6	35	
24	37.0	38.0	23	
26	36.1	36.8	21	
28	33.8	35.4	18	
30	39.3	40.0	26	-2.6
32	36.4	37.0	22	
34	41.3	41.6	29	
36	41.3	41.6	29	
38	37.0	38.0	23	
40	35.4	36.6	20	
42	35.0	35.6	19	
44	39.7	40.8	27	-2.7
46	44.3*b*		34	
48	32.0*a*		14	
50	35.6	35.6	20	
52	34.3	34.8	18	
54	33.0	34.1	17	
56	32.0	32.3	14	
58	31.3	31.6	13	
14 00	35.2	36.0	22 20	-2.8
02	36.2	36.8	21	
04	33.7	34.4	17	
06	35.3	36.1	20	
08	30.4	31.6	13	
10	32.0	32.5	14	
12	28.8	29.3	10	
14	30.6	31.0	12	-2.4
16	30.3	31.0	12	
18	34.5	34.9	18	
20	36.1	36.3	21	
22	33.3	34.0	17	
24	35.0	35.3	19	
26	32.8	33.6	16	
28	33.0	33.9	16	
30	34.3	34.5	18	-3.0
32	35.3	35.5	20	
34	34.4	34.4	18	
36	32.7	33.3	16	
38	32.6	33.0	16	
40	32.0	32.6	15	
42	31.9	32.1	14	
44	31.8	32.2	14	-3.0
46	32.5	33.0	15	
48	32.5	33.0	15	
50	32.0	32.5	14	
52	32.0	32.3	14	
54	31.3	31.6	13	
56	31.8	32.1	14	
58	31.3	32.1	14	
15 00	32.8	33.0	16	-3.2
02	33.8	34.1	17	
04	31.8	31.8	14	
06	30.6	31.0	12	
08	29.3	29.7	10	
10	29.0	30.5	11	
12	30.8	31.6	13	
14	32.0	32.6	15	-3.3
16	32.2	33.0	15	
18	31.6	32.6	14	
20	31.8	32.8	15	
22	31.9	33.0	15	
24	32.4	33.4	16	
26	34.3	34.6	18	
28	34.4	35.0	18	
30	32.6	32.8	15	-3.3
32	31.0	31.4	13	
34	28.3	29.2	09	
36	29.8	30.4	11	
38	29.5	30.3	11	
40	29.8	30.2	11	
42	29.3	29.6	10	
44	29.4	29.9	10	-3.5
46	29.6	29.6	10	
48	28.6	28.6	09	
50	29.0	29.0	10	
52	30.3	30.3	12	
54	30.3	30.3	12	
56	29.7	29.9	11	
58	31.2	31.2	13	

Observer—W. J. P.

Wednesday, May 25, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	32.3	32.5	22 15	-3.6
02	34.0	34.0	17	
04	33.8	34.0	17	
06	32.3	32.5	15	
08	32.3	32.3	15	
10	31.3	31.9	14	
12	33.5	34.0	17	
14	34.3	34.6	18	-3.8
16	33.9	34.2	17	
18	33.5	34.2	17	
20	33.6	33.9	17	
22	33.6	34.0	17	
24	33.3	33.7	17	
26	31.0	31.5	13	
28	31.3	32.0	14	
30	34.3	34.6	18	-3.8
32	34.0	34.3	18	
34	33.3	33.5	16	
36	32.7	33.0	16	
38	34.8	35.5	19	
40	36.3	36.5	21	
42	35.9	36.3	21	
44	34.9	35.3	19	-3.9
46	33.9	34.1	17	
48	32.2	32.6	15	
50	32.5	32.8	15	
52	30.5	30.8	12	
54	28.3	28.6	08	
56	28.0	28.3	08	
58	28.3	28.5	08	
17 00	27.0	27.0	06	-4.0
02	27.2	27.2	07	
04	25.7	26.0	04	
06	25.3	25.3	04	
08	24.4	24.6	02	
10	24.5	24.8	03	
12	24.7	24.7	03	
14	26.1	26.3	05	-4.0
16	26.0	26.2	05	
18	26.8	27.2	06	
20	29.4	30.0	11	
22	29.4	29.9	10	
24	26.0	26.6	05	
26	25.1	25.9	04	
28	27.9	28.8	08	
30.2	27.8	28.2	08	-3.9
32	27.5	28.1	08	
34	27.2	27.9	07	
36	27.0	27.2	07	
38	28.8	29.1	09	
40	29.6	30.0	11	
42	31.3	31.9	14	
44	28.2	29.2	09	-3.9
46	27.2	27.9	07	
48	27.1	27.9	07	
50	26.2	27.3	06	
52	25.3	26.9	05	
54	25.2	26.9	05	
56	24.8	26.3	04	
58	25.0	26.5	04	
18 00	25.0	26.4	22 04	-3.9
02	24.7	25.9	04	
04	24.5	26.0	04	
06	24.6	25.9	04	
08	23.9	25.1	02	
10	23.1	24.3	01	
12	23.2	24.4	01	
14	23.3	24.4	01	-3.9
16	23.7	24.8	02	
18	23.2	24.1	01	
20	23.2	24.1	01	
22	23.6	24.1	01	
24	23.8	24.2	02	
26	24.1	24.5	02	
28	23.3	23.9	01	
30	23.1	23.5	01	-3.9
32	23.9	24.1	02	
34	24.0	24.3	02	
36	24.5	24.9	03	
38	24.2	24.9	02	
40	23.6	24.1	01	
42	24.1	25.0	02	
44	24.1	25.1	03	-3.9
46	24.6	25.7	03	
48	24.8	25.8	04	
50	25.9	26.8	05	
52	27.5	28.8	08	
54	29.6	30.9	11	
56	29.6	30.9	11	
58	30.1	31.8	12	
19 00	30.9	32.1	14	-3.9
02	31.7	33.1	15	
04	31.2	33.3	14	
06	31.3	33.0	14	
08	32.2	33.7	16	
10	32.4	33.7	16	
12	31.3	32.0	14	
14	29.1	29.9	10	-4.0
16	30.2	31.3	12	
18	30.1	31.0	12	
20	29.8	30.7	11	
22	31.8	32.2	14	
24	30.7	31.1	12	
26	30.2	30.8	12	
28	29.2	29.9	10	
30	30.8	31.3	13	-4.0
32	29.0	29.9	10	
34	26.3	27.1	06	
36	26.3	27.1	06	
38	27.1	29.0	08	
40	27.1	29.1	08	
42	25.7	27.9	06	
44	26.3	28.2	07	-4.0
46	25.8	27.8	06	
48	25.8	27.7	06	
50	26.9	27.8	07	
52	25.9	27.8	06	
54	26.0	27.7	06	
56	25.9	27.7	06	
58	25.1	26.3	04	

Observers—W. J. P. and R. R. T., who alternated from 17h 14m to 17h 24m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, May 25, 1904 — Magnet scale erect					Thursday, May 26, 1904 — Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	25.8	27.0	22 05	-4.1	22 00	18.3	19.1	21 53	-4.9
02	25.8	27.1	05		02	18.6	19.9	54	
04	26.3	27.9	07		04	21.1	23.0	58	
06	25.3	26.4	04		06	20.1	22.8	58	
08	25.6	27.0	05		08	18.0	20.3	54	
10	27.3	29.0	08		10	17.1	19.3	53	
12	29.3	31.1	11		12	17.3	19.3	53	
14	27.1	28.9	08	-4.2	14	18.2	20.1	54	-4.9
16	23.9	25.8	03		16	17.9	20.9	54	
18	23.8	24.9	02		18	19.7	22.9	58	
20	24.1	25.2	03		20	18.0	21.1	55	
22	23.0	24.7	01		22	18.8	21.8	56	
24	23.1	25.0	02		24	17.3	20.5	54	
26	22.9	24.8	01		26	19.1	22.2	21 56	
28	24.7	26.6	04		28	22.3	25.0	22 01	
30	26.1	28.7	07	-4.2	30	22.9	26.1	02	-5.0
32	24.6	26.7	04		32	24.1	27.8	05	
34	26.3	29.1	08		34	25.6	29.1	07	
36	31.0	33.1	14		36	26.8	30.2	09	
38	31.1	33.0	14		38	26.7	30.1	08	
40	33.2	35.1	18		40	26.9	30.1	09	
42	33.0	35.1	17		42	29.1	32.0	12	
44	33.1	34.0	17	-4.3	44	32.1	35.2	17	-5.0
46	31.1	33.1	14		46	35.0	37.8	21	
48	30.1	32.5	13		48	35.4	38.0	22	
50	27.3	29.9	09		50	34.2	36.8	20	
52	27.6	29.9	09		52	33.2	35.7	18	
54	28.1	30.2	10		54	31.1	33.7	15	
56	28.0	30.2	10		56	31.1	33.8	15	
58	29.1	31.1	11		58	31.1	33.9	15	
21 00	31.6	33.1	15	-4.3	23 00	29.9	32.7	13	-5.0
02	31.0	33.0	14		02	33.1	35.8	18	
04	29.6	31.7	12		04	35.1	37.8	21	
06	30.1	31.9	13		06	37.6	40.3	25	
08	28.0	30.0	10		08	41.1	43.9	31	
10	26.1	27.3	06		10	43.1	46.0	34	
12	28.1	29.6	09		12	45.3	48.1	37	
14	25.5	26.6	05	-4.4	14	46.7	49.0	39	-5.1
16	25.7	26.6	05		16	44.8	45.9	35	
18	24.3	25.1	22 03		18	42.3	43.9	32	
20	20.8	21.8	21 58		20	42.0	43.3	31	
22	20.7	21.2	57		22	40.3	42.1	29	
24	21.3	23.2	59		24	39.5	40.7	27	
26	20.9	21.7	21 58		26	43.0	43.9	32	
28	20.4	29.0	22 03		28	47.0	47.8	38	
30	20.0	20.8	21 56	-4.7	30	48.0	49.0	40	-5.2
32	20.0	21.7	57		32	44.6	46.4	35	
34	19.5	21.1	56		34	39.2	40.4	26	
36	20.1	21.8	57		36	36.9	38.7	23	
38	19.0	20.8	55		38	37.8	39.7	25	
40	15.7	17.9	50		40	38.8	41.1	27	
42	18.8	20.5	55		42	41.2	43.9	31	
44	18.1	20.5	54	-4.8	44	42.1	44.9	32	-5.3
46	16.1	17.7	50		46	43.6	45.4	34	
48	17.8	18.8	53		48	43.8	45.8	34	
50	19.9	20.8	56		50	44.1	45.9	35	
52	20.0	20.9	56		52	42.7	44.3	32	
54	21.2	21.9	58		54	42.9	44.7	33	
56	21.0	21.2	57		56	43.8	45.0	34	
58	20.1	20.8	56		58	44.9	45.9	35	
					24 00	45.2	46.3	36	-5.4
					16 00	40.2	38.1	22 19	-3.0
					02	40.9	38.9	18	
					04	41.1	39.0	18	
					06	41.7	39.2	17	
					08	42.3	40.1	16	
					10	42.0	40.0	16	
					12	40.7	39.1	18	
					14	40.0	38.8	19	-3.0
					16	40.8	39.1	18	
					18	41.1	40.0	17	
					20	40.8	39.9	17	
					22	40.9	40.0	17	
					24	40.8	39.7	17	
					26	41.3	40.1	17	
					28	41.7	40.0	16	
					30	41.9	40.2	16	-3.0
					32	42.2	40.9	15	
					34	40.7	39.2	18	
					36	39.8	38.2	19	
					38	41.0	39.8	17	
					40	41.1	39.9	17	
					42	41.0	39.7	17	
					44	41.0	40.0	17	-3.0
					46	41.9	40.5	16	
					48	41.9	40.6	16	
					50	41.3	40.0	17	
					52	42.1	40.1	16	
					54	42.1	40.0	16	
					56	44.1	42.1	13	
					58	44.1	42.0	13	
					17 00	44.0	42.0	13	-3.0
					02	43.1	41.0	15	
					04	42.7	40.6	15	
					06	43.0	41.0	15	
					08	43.2	41.9	14	
					10	43.2	42.3	14	
					12	44.7	43.1	12	
					14	45.2	44.1	10	-3.0
					16	46.9	45.9	08	
					18	47.7	46.3	07	
					20	48.6	47.0	05	
					22	47.9	46.0	07	
					24	46.0	44.1	10	
					26	45.7	43.8	10	
					28	45.8	44.0	10	
					30	45.5	43.9	10	-3.0
					32	45.1	43.2	11	
					34	44.5	42.8	12	
					36	44.0	42.0	13	
					38	43.0	41.0	15	
					40	42.9	41.0	15	
					42	42.3	40.9	15	
					44	41.8	40.0	16	-3.0
					46	42.1	40.6	16	
					48	43.7	40.1	15	
					50	43.2	40.1	15	
					52	42.5	39.1	16	
					54	40.8	38.0	19	
					56	40.1	37.9	19	
					58	39.9	37.2	20	
					18 00	40.0	37.7	22 20	-3.0
					02	40.4	38.3	19	
					04	40.1	38.0	19	
					06	40.0	37.9	19	
					08	41.1	38.9	18	
					10	41.0	38.8	18	
					12	40.9	38.5	18	
					14	41.9	39.2	17	-3.3
					16	41.5	38.8	18	
					18	41.0	38.1	18	
					20	40.0	37.7	20	
					22	38.8	36.5	22	
					24	39.0	36.9	21	
					26	38.5	36.9	21	
					28	38.2	36.8	22	
					30	38.9	37.1	21	-3.0
					32	39.3	38.0	20	
					34	37.9	37.2	22	
					36	39.7	38.4	19	
					38	40.1	39.0	18	
					40	41.2	40.0	17	
					42	44.2	43.8	11	
					44	43.8	42.9	12	
					46	43.3	42.8	13	
					48	42.8	42.1	14	
					50	41.9	41.1	15	
					52	42.1	41.8	15	
					54	42.0	41.7	15	
					56	41.8	41.5	15	
					58	42.1	39.0	17	
					19 00	42.1	41.9	15	-4.0
					02	42.2	42.1	14	
					04	43.8	43.5	12	
					06	43.2	43.0	13	
					08	42.0	41.4	15	
					10	41.3	40.9	16	
					12	42.2	41.9	15	
					14	43.1	42.7	13	
					16	45.0	44.5	10	
					18	46.0	45.2	09	
					20	47.0	46.0	08	
					22	48.8	48.0	05	
					24	50.3	49.9	02	
					26	50.7	50.1	01	
					28	49.1	47.1	05	
					30	48.1	48.0	05	-4.2
					32	45.8	45.3	09	
					34	45.2	45.1	10	
					36	47.3	47.1	06	
					38	48.0	48.0	05	
					40	46.1	45.9	08	
					42	47.3	46.9	06	
					44	48.0	47.7	05	-4.2
					46	49.1	48.5	04	
					48	50.0	49.7	02	
					50	50.1	50.0	02	
					52	50.2	50.1	22 02	
					54	52.3	51.4	21 59	
					56	52.0	50.9	60	
					58	54.1	53.1	56	
					20 00	52.5	51.2	59	-4.3

Correction to local mean time is + 25.5s. 90° torsion = 20.'87.
Torsion head at 0h 00m read 100° and at 24h 13m read 102°.
Observer—R. R. T.

Correction to local mean time is — 7s. 90° torsion = 19.'53.
Torsion head at 15h 29m read 102° and at 20h 24m read 106°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, May 27, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
20 00	36.3	36.9	22 13	−1.4
02	36.3	37.8	14	
04	37.0	39.0	16	
06	37.1	38.9	16	
08	36.0	37.9	14	
10	37.0	39.5	16	
12	38.0	40.5	18	
14	36.7	39.0	15	−1.3
16	35.5	37.8	13	
18	34.0	36.0	11	
20	35.8	37.1	13	
22	37.8	39.2	16	
24	38.9	40.1	18	
26	36.9	38.1	15	
28	35.4	36.8	13	
30	34.2	36.0	11	−1.3
32	34.0	35.0	10	
34	35.7	36.0	12	
36	36.2	37.0	13	
38	37.1	37.9	15	
40	37.0	37.9	15	
42	36.8	37.2	14	
44	34.2	35.8	11	−1.2
46	33.7	35.1	10	
48	32.8	34.2	09	
50	32.9	35.0	09	
52	32.8	34.9	09	
54	34.1	36.0	11	
56	36.1	38.3	14	
58	38.6	40.9	18	
21 00	38.9	41.0	19	−1.2
02	37.8	39.8	17	
04	38.8	39.9	18	
06	38.8	40.7	18	
08	37.2	39.1	16	
10	37.8	39.2	16	
12	37.5	38.9	16	
14	37.2	38.2	15	−1.1
16	36.1	37.2	13	
18	36.3	37.1	14	
20	33.3	33.7	09	
22	30.8	31.2	05	
24	30.9	31.1	05	
26	36.7	37.7	14	
28	30.8	31.3	05	
30	37.3	37.9	15	−1.1
32.3	40.8	42.1	21	
34	37.2*b*		14	
36	31.9*b*		06	
38	32.6	32.9	07	
40	33.7	33.9	09	
42	35.2	36.0	12	
44	36.1	36.5	13	−1.1
46	36.2	37.5	14	
48	38.8	39.0	17	
50	44.2	45.9	27	
52	51.1	50.3	36	
54	47.9	49.1	32	
56	49.0	49.1	33	
58	41.9	43.8	23	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	34.9	36.3	22 12	−1.0
02	28.9	30.1	02	
04	28.0	30.5	02	
06	28.0	30.5	22 02	
08	26.2	29.1	21 59	
10	25.1	28.1	58	
12	21.1	24.0	51	
14	23.8	26.1	55	−1.0
16	20.7	23.9	51	
18	22.9	25.3	54	
20	23.7	26.2	21 55	
22	26.8	29.6	22 00	
24	27.9	29.5	01	
26	29.1	31.0	03	
28	29.0	31.0	03	
30	29.2	30.9	03	−1.0
32	32.9	34.2	22 09	
34	27.0	28.3	21 59	
36	22.9	24.1	53	
38	21.1	23.3	51	
40	20.0	22.0	49	
42	20.7	22.5	50	
44	20.8	22.3	50	−1.0
46	19.9	21.1	48	
48	19.8	20.9	48	
50	19.8	20.5	48	
52	21.1	21.7	50	
54	21.4	22.0	50	
56	18.1	19.1	45	
58	20.9	21.2	49	
23 00	18.2	19.5	46	−1.0
02	16.3	16.5	42	
04	18.1	18.5	45	
06	18.0	18.3	44	
08	18.9	19.1	46	
10	15.0	15.5	40	
12	13.0	13.1	36	
14	12.9	13.6	37	−1.0
16	11.7	12.3	35	
18	12.1	13.2	36	
20	11.9	12.7	35	
22	10.3	11.9	34	
24	10.9	11.9	34	
26	10.2	11.2	33	
28	10.4	11.8	34	
30	11.0	12.0	34	−1.0
32	11.2	12.8	35	
34	13.5	14.8	38	
36	13.7	14.8	38	
38	14.2	15.0	39	
40	16.0	16.8	42	
42	17.2	17.9	44	
44	14.1*b*		38	−1.0
46	13.7	14.1	38	
48	15.1	16.0	40	
50	16.5	17.2	42	
52	17.1	17.9	44	
54	18.6	19.1	46	
56	18.1	19.0	45	
58	16.4	17.9	43	
24 00	16.9	18.1	44	−1.0

Correction to local mean time is — 16.5s. 90° torsion = 22.′23.
Torsion head at 19h 15m read 102° and at 24h 34m read 101°.
Observer—R. R. T.

Sunday, May 29, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	40.0	39.2	22 27	+0.2
02	38.8	38.1	28	
04	38.8	38.1	28	
06	37.9	35.9	31	
08	37.9	36.0	31	
10	38.8	37.1	29	
12	40.9	38.8	26	
14	35.6	33.2	35	+0.1
16	34.0	32.2	37	
18	36.0	34.0	34	
20	35.9	33.1	35	
22	34.9	32.8	36	
24	35.2	33.2	35	
26	35.3	34.0	34	
28	35.2	33.3	35	
30	33.2	31.8	38	0.0
32	27.9	26.6	46	
34	27.1	25.9	47	
36	27.8	26.2	46	
38	27.3	26.2	47	
40	28.0	26.6	46	
42	26.5	25.1	48	
44	25.5	24.3	50	0.0
46	27.2	25.9	47	
48	29.9	28.0	44	
50	28.9	27.8	44	
52	28.7	27.9	44	
54	27.1*b*		46	
56	26.9*b*		47	
58	26.0	25.8	48	
1 00	24.8	24.2	50	−0.1
02	21.2	21.0	56	
04	22.6	20.9	55	
06	24.4	23.1	52	
08	22.5	20.5	22 55	
10	13.0	11.9	23 09	
12	14.9	14.7	06	
14	11.0	9.2	13	−0.1
16	7.0	6.1	19	
18*	45.8	37.9	36	
20	58.0	50.9	17	
22	68.7	60.8	23 01	
24	78.1	70.2	22 46	
26	69.*cb*		54	
28	70.1	70.0	52	
30	69.*ob*		22 54	−0.1
32	63.5	62.9	23 03	
34	63.0	61.8	04	
36	64.0	63.0	02	
38	62.9	62.1	04	
40	62.8	62.0	04	
42	62.8	61.9	04	
44	58.0	55.1	23 14	−0.1
46	71.3	67.3	22 53	
48	72.9	68.9	51	
50	72.0	67.9	22 52	
52	60.8	58.1	23 09	
54	58.9	55.5	12	
56	56.1	53.6	16	
58	55.2	52.6	18	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	56.8	54.0	23 15	−0.1
02	57.8	54.4	14	
04	55.3	52.0	18	
06	52.8	49.7	22	
08	51.9	49.0	23	
10	56.3	53.0	16	
12	58.7	56.9	11	
14	53.8	51.0	20	−0.1
16	52.2	51.1	21	
18	51.1	49.6	23	
20	50.6	49.1	24	
22	53.9	52.1	19	
24	56.0	54.1	16	
26	52.9	51.5	20	
28	53.2	51.9	20	
30	53.0	51.8	20	−0.1
32	51.1	49.7	23	
34	52.7	51.1	21	
36	52.9	51.1	21	
38	49.1	48.4	26	
40	46.1	45.1	31	
42	50.0	49.2	24	
44	49.9	48.0	26	0.0
46	44.0	42.0	35	
48	39.0	37.9	42	
50	37.1	36.3	45	
52	39.6	39.0	40	
54	44.2	43.2	34	
56	45.2	45.0	32	
58	46.1	45.4	30	
3 00	46.1	45.8	30	0.0
02	48.0	46.9	28	
04	50.9	50.0	23	
06	49.1	48.4	26	
08	50.0	49.3	24	
10	50.9	50.0	23	
12	53.1	52.0	20	
14	49.1	48.8	26	−0.1
16	43.5	42.9	35	
18	43.1	42.5	35	
20	42.2	41.9	36	
22	44.1	44.0	33	
24	50.8	50.5	23	
26	51.3	49.9	23	
28	46.9	44.9	30	
30	39.9	38.0	41	−0.1
32	31.9	30.5	23 53	
34	22.2	21.5	24 08	
36	21.2	20.1	10	
38	25.1	23.0	24 04	
40	31.5	30.9	23 53	
42	37.0	35.8	45	
44	37.2	36.1	45	−0.2
46	37.9	36.8	44	
48	37.7	36.2	44	
50	37.6	36.0	44	
52	35.9	33.8	23 48	
54	27.5	25.1	24 01	
56	23.0	20.8	08	
58	25.0	23.0	04	

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, May 29, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 01*6	58.1	61.9	24 01		6 00	38.4	38.5	23 27	-0.4
02	58.8	61.9	02		02.5	7.0*b*		22 38	
04	58.6	63.1	03		04	9.0	10.0	42	
06	58.9	63.1	03		06	19.2	20.9	22 58	
08	60.1	64.7	05		08	25.8	26.0	23 08	
10	60.9	65.3	06		10	23.0	24.9	05	
12	62.0	65.9	07		12	31.0	34.1	18	
14	58.9	63.0	03	0.0	14	31.9	33.8	19	-0.5
16	58.8	62.5	24 02		16	23.0	25.2	05	
18	53.0	55.9	23 52		18	23.0	25.9	05	
20	51.0	54.2	50		20	23.1	26.3	06	
22	52.0	56.0	52		22	28.9	31.1	14	
24	55.3	58.2	56		24	27.9	30.0	12	
26	51.0	55.9	23 51		26	26.1	29.0	10	
28.3	57.8	63.0	24 02		28	26.2	29.9	11	
30	68.0	71.5	16	-0.1	30	26.2	23.9	06	-0.4
32	72.3	75.5	23		32.3	26.0	28.2	10	
34	67.1	70.0	15		34	27.1	29.2	11	
36	59.9	62.2	24 03		36	22.0	24.0	03	
38	55.4	59.1	23 57		38	27.0	27.1	10	
40	57.8	61.1	24 00		40	31.8	33.0	18	
42	68.0	71.1	16		42	23.8	26.3	23 06	
44	58.7	61.9	24 02	-0.2	44	20.3	21.0	22 59	-0.3
46	52.0	55.7	23 52		46	25.0	26.0	23 07	
48	53.7	57.5	54		48	24.0	24.2	23 05	
50	46.9	50.2	43		50	20.0	20.9	22 59	
52	47.0	52.1	23 45		52	27.0	28.3	23 10	
54	58.7	62.0	24 02		54	27.0	27.9	10	
56	50.8	56.0	23 51		56	22.9	23.8	04	
58	37.6	41.8	29		58	22.1	24.1	23 03	
5 00	38.8	42.1	30	-0.2	7 00	16.0	18.7	22 54	-0.2
02	45.9	46.9	40		02	8.9	10.1	42	
04	56.3	57.8	57		04	18.0	20.5	57	
06	48.0	48.5	43		06	19.1	20.9	22 58	
08	48.4	49.5	44		08	22.1	24.1	23 03	
10	39.9	42.1	32		10	20.2	22.8	23 01	
12	48.0	49.0	43		12	17.2	19.1	22 56	
14	41.7	44.0	34	-0.2	14	17.8	19.9	22 57	-0.1
16	39.8	44.9	34		16	21.4	24.1	23 03	
18	41.0	45.2	35		18	36.0	37.0	24	
20	40.3	44.3	34		20	28.0	28.2	23 11	
22	46.8	49.5	43		22	15.8	16.2	22 52	
24	45.0	48.0	40		24	16.1	17.0	53	
26	47.2	50.9	44		26	19.1	20.0	58	
28	53.0	57.2	54		28	19.8	21.8	60	
30	51.0	54.8	50	-0.2	30	13.8	14.2	49	0.0
32	36.9	41.0	28		32	13.8	14.8	30	
34	39.1	42.9	32		34	13.9	15.1	22 50	
36	28.8	30.0	13		36	27.2	27.3	23 10	
38	20.1	22.9	01		38	36.9	37.2	23 25	
40	29.0	29.9	13		40	20.0	21.0	22 59	
42	32.0	34.2	19		42	19.3	19.9	22 58	
44	29.0	29.1	13	-0.3	44	21.4	21.7	23 01	+0.1
46	29.2	31.2	14		46	17.0	18.1	22 55	
48	33.5	34.4	20		48	15.9	16.0	52	
50	24.1	24.2	05		50	16.1	17.0	22 53	
52	24.9	25.2	23 06		52	22.7	22.9	23 03	
54	18.9	19.5	22 57		54	21.3	22.1	01	
56	22.9	24.3	23 04		56	22.8	23.8	23 04	
58	33.0	33.5	19		58	18.9	21.0	22 58	+0.2
					8 00	17.0	19.1	55	

Correction to local mean time is — 54.5s.
Torsion head at 0h 00m read 102° and at 8h 20m read the same.
Observer—R. R. T.

Monday, May 30, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	58.2	57.9	22 50	-3.4	10 00	68.2	65.0	22 37	-4.0
02	76.7	74.3	23		02	64.1	61.8	43	
04	59.3*b*		48		04	63.0	61.2	44	
06	62.9	61.0	44		06	66.1	63.9	39	
08	64.3	61.0	43		08	67.0	64.1	38	
10	58.1	53.3	54		10	70.0	67.8	33	
12	61.1	57.8	48		12	66.9	66.0	37	
14	62.8	59.8	45	-3.7	14	65.9	64.1	39	-4.0
16	61.4	58.9	47		16	65.7	63.0	40	
18	58.9	53.6	53		18	68.0	66.8	36	
20	61.9	58.2	47		20	65.2	63.2	40	
22	60.5	56.1	50		22	64.2	63.1	42	
24	62.1	57.2	48		24	65.9	63.8	40	
26	58.0	53.2	54		26	66.0	64.3	39	
28	57.7	51.9	55		28	67.0	64.9	38	
30	56.7	54.6	54	-3.9	30	65.3	64.1	40	-4.1
32	69.5	65.7	35		32	65.9	64.8	39	
34	56.2	54.1	55		34	65.9	64.3	39	
36	62.5	59.1	46		36	66.6	64.6	38	
38	75.3	72.8	25		38	66.7	65.0	38	
40	63.7	62.1	22 43		40	66.0	64.3	39	
42	49.7	45.2	23 07		42.4	65.5	63.3	40	
44	61.1	56.8	22 49	-3.9	44	65.7	62.9	40	-4.0
46	68.0	63.7	38		46	66.1	64.7	39	
48	60.3	56.2	50		48	67.1	66.1	37	
50	60.1	55.2	51		50	68.1	67.4	35	
52	57.8	53.0	54		52	66.7	65.9	37	
54	56.6	51.3	57		54	65.5	64.7	39	
56	58.5	53.1	22 54		56	65.8	64.9	39	
58	52.9	49.8	23 01		58	64.8	64.2	40	
9 00	51.1	47.9	04	-3.9	11 00	63.9	63.4	42	-4.0
02	49.3	47.7	05		02	63.9	63.0	42	
04	49.9	49.3	04		04	65.1	64.2	40	
06	52.0	51.0	23 00		06	64.9	63.3	41	
08	56.1	55.2	22 54		08	66.0	64.5	39	
10	54.1	53.2	57		10	68.0	67.0	35	
12	54.1	52.1	58		12	70.8	69.2	31	
14	55.1	54.9	55	-3.9	14	71.9	71.1	29	-3.9
16	58.8	58.4	49		16	67.1	66.2	37	
18	60.3	59.9	47		18	67.7	66.9	36	
20	62.8	62.8	43		20.3	67.3	67.0	36	
22	63.9	63.5	41		22	67.0	66.1	37	
24	63.1	63.1	42		24	67.2	66.3	37	
26	62.1	61.7	44		26	66.0	64.9	39	
28	60.9	60.1	46		28	65.9	65.1	38	
30	59.1	58.1	49	-4.0	30	68.9	67.8	34	-3.9
32	61.1	59.6	47		32	68.4	66.9	35	
34	62.0	60.3	45		34	70.0	68.7	32	
36	61.5	60.9	45		36	67.8	66.9	36	
38	63.7	63.6	42		38	68.0	66.8	36	
40	65.1	64.0	40		40	67.7	67.0	36	
42	62.0	60.6	45		42	67.7	66.8	36	
44	61.8	60.1	46	-4.0	44	68.8	67.4	34	-3.9
46	61.9	61.2	45		46	67.9	66.9	36	
48	65.8	64.5	39		48	66.8	66.0	37	
50	66.1	65.3	38		50	64.9	63.5	40	
52	66.7	65.3	38		52	67.4	67.0	36	
54	67.1	65.6	37		54	69.8	69.2	32	
56	66.3	65.4	38		56	72.8	71.6	28	
58	68.9	66.9	35		58	72.1	71.6	28	
					12 00	69.1	67.6	34	-4.0

Correction to local mean time is + 32s.
Torsion head at 7h 25m read 104° and at 12h 14m read the same.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, May 31, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	50.9	51.7	22 35	−0.3
02	49.6	50.1	33	
04	48.7	49.3	32	
06	50.2	51.4	34	
08	50.1	50.7	34	
10	47.2	47.6	29	
12	45.3	46.2	26	
14	44.8	45.5	26	0.0
16	45.9	48.2	28	
18	48.0	50.3	32	
20	51.1	54.0	37	
22	52.2	54.2	38	
24	53.8	55.0	40	
26	52.7	54.1	38	
28	51.4	52.3	36	
30	52.3	53.3	38	+0.1
32	48.8	49.1	31	
34	49.0	49.6	32	
36	50.1	50.9	34	
38	50.0	50.2	33	
40	48.3	49.1	31	
42	50.0	50.5	33	
44	48.7	49.1	31	+0.2
46	47.1	48.1	29	
48	48.3	50.1	32	
50	50.3	52.0	35	
52	51.1	52.8	36	
54	50.1	52.0	35	
56	49.3	51.1	33	
58	47.8	49.5	31	
13 00	45.9	48.0	28	+0.7
02	43.9	48.1	27	
04	46.4	48.4	29	
06	45.9	48.0	28	
08	45.3	47.2	27	
10	45.3	47.1	27	
12	45.6	47.1	27	
14	46.6	48.3	29	+0.9
16	47.0	48.1	29	
18	46.1	48.2	29	
20	46.1	48.0	28	
22	43.8	45.9	25	
24	41.1	43.8	21	
26	38.1	40.4	16	
28	34.4	37.5	11	
30	35.0	37.0	11	+1.1
32	35.9	38.0	12	
34	34.1	36.2	10	
36	36.9	38.9	14	
38	32.3	34.2	07	
40	30.9	32.0	04	
42	32.1	33.1	06	
44	33.1	34.2	07	+1.1
46	33.8	34.7	08	
48	35.9	37.1	12	
50	35.8	37.0	12	
52	37.8	39.5	15	
54	39.5	40.5	17	
56	40.2	41.1	18	
58	41.5	42.4	20	
14 00	42.8	43.1	22 22	+1.0
02	42.8	43.1	22	
04	43.9	44.6	24	
06	43.1	43.8	23	
08	42.2	42.9	21	
10	39.9	40.9	18	
12	40.1	41.2	18	
14	39.3	40.9	18	+0.9
16	38.0	39.3	15	
18	39.1	39.9	17	
20	38.1	38.9	15	
22	38.1	38.9	15	
24	36.7	37.6	13	
26	36.2	37.1	12	
28	37.7	38.1	14	
30	37.8	38.9	15	+0.9
32	37.6	38.2	14	
34	38.3	39.9	16	
36	39.0	40.1	17	
38	37.9	39.6	15	
40	37.1	38.4	14	
42	37.1	38.3	14	
44	36.9	37.9	13	+0.9
46	37.5	38.1	14	
48	36.8	37.4	13	
50	35.1	36.0	10	
52	33.6	34.1	08	
54	33.1	33.4	07	
56	33.7	34.1	08	
58	33.9	34.6	08	
15 00	33.8	34.2	08	+1.1
02	33.9	34.7	08	
04	33.3	33.9	07	
06	33.9	34.7	08	
08	35.9	36.6	11	
10	35.0	35.3	10	
12	33.0	33.8	07	
14	30.4	30.9	03	+1.4
16	29.8	30.1	02	
18	29.1	29.4	00	
20	29.6	29.9	01	
22	31.7	32.1	05	
24	31.9	32.9	05	
26	31.2	32.8	05	
28	32.0	32.9	05	
30	35.2	36.3	11	+1.8
32	36.2	37.9	13	
34	35.0	36.8	11	
36	34.9	36.8	11	
38	33.9	35.7	09	
40	34.8	36.5	11	
42	36.9	38.6	14	
44	37.0	38.6	14	+2.0
46	35.0	37.5	11	
48	34.2	37.1	10	
50	31.0	33.7	05	
52	31.0	33.4	05	
54	31.1	33.8	05	
56	30.3	32.8	04	
58	31.1	33.4	05	
16 00	32.9	35.2	08	+2.0

Wednesday, June 1, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	35.6	32.1	22 15	−2.6
02	33.0	31.0	18	
04	32.9	31.0	18	
07	34.8	33.9	14	
08	28.7	28.1	24	
10	27.1	26.9	26	
12	26.8	25.4	27	
14	19.4	19.3	38	−2.8
16	14.2	13.3	47	
18	21.0	18.1	38	
20	23.9	21.1	33	
22	27.1	22.1	30	
24	23.2	17.1	37	
26	22.2	17.0	38	
28	24.9	22.0	32	
30	21.9	17.8	37	−2.9
32	25.9	23.1	30	
34	29.0	25.1	26	
36	28.9	22.9	28	
38	18.0	16.0	42	
40*	39.0	37.0	22 59	
42	28.0	27.3	23 16	
44	39.2	38.9	22 58	−2.8
46	50.9	49.9	40	
48	57.0	55.3	31	
50	59.1	56.8	28	
52	61.1	59.0	25	
54	60.3	58.3	26	
56	58.2	56.9	29	
58	51.0	49.4	40	
1 00	50.8	49.1	41	−2.7
02	54.1	52.5	35	
04	58.9	57.9	27	
06	59.0	58.1	27	
08	57.6	56.0	30	
10	52.2	51.8	37	
12	48.5	48.0	43	
14	41.9	41.4	54	−2.5
16	43.8	43.0	51	
18	42.3	41.0	22 54	
20	37.7	36.8	23 01	
22	35.0	33.7	05	
24	37.5	36.5	01	
26	34.9	33.1	06	
28	31.0	29.5	12	
30	27.2	26.0	17	−2.4
32	28.9	26.6	16	
34	33.2	32.8	07	
36	34.3	33.5	06	
38	34.2	33.1	06	
40	32.8	30.9	09	
42	31.2	29.9	11	
44	33.0	31.9	08	−2.4
46	35.0	32.8	06	
48	37.2	35.4	23 02	
50	43.1	40.2	22 54	
52	45.0	43.0	50	
54	46.9	45.3	47	
56	45.0	44.0	49	
58	42.7	41.3	53	
2 00	40.2	39.2	22 57	−2.1
02	39.5	38.3	58	
04	38.6	38.0	22 59	
06	35.8	35.3	23 03	
08	36.0	35.0	23 03	
10	39.9	38.5	22 58	
12	40.2	39.0	57	
14	42.9	41.1	53	−2.2
16	43.0	41.2	53	
18	41.2	39.2	56	
20	42.3	40.9	54	
22	40.3	38.4	22 58	
24	37.1	35.3	23 02	
26	37.0	35.9	02	
28	36.0	34.7	04	
30	35.9	34.0	04	−2.3
32	33.9	32.8	07	
34	35.3	33.9	05	
36	36.2	34.9	04	
38	36.1	34.9	04	
40	36.8	35.4	03	
42	37.0	36.1	02	
44	37.9	37.2	00	−2.5
46	37.0	36.5	02	
48	35.1	34.9	04	
50	37.1	35.9	02	
52	28.2	27.8	15	
54	26.6	25.2	19	
56	25.2	23.7	21	
58	23.0	22.2	24	
3 00	20.3	20.1	28	−2.5
02	22.0	21.9	25	
04	23.4	23.1	23	
06	24.2	23.7	22	
08	23.0	22.2	24	
10	21.9	21.5	25	
12	24.9	24.7	20	
14	26.1	25.2	19	−2.5
16	25.2	24.9	20	
18	25.8	25.1	20	
20	28.0	27.5	16	
22	28.0	27.6	16	
24	27.1	26.0	18	
26	23.8	22.0	24	
28	21.8	20.2	26	
30	16.7	14.2	35	−2.4
32	13.7	11.7	40	
34	15.0	13.0	38	
36	17.0	15.0	34	
38	19.8	17.9	30	
40	20.9	18.8	28	
42	20.1	18.2	30	
44	18.1	16.9	32	−2.3
46	11.5	10.3	42	
48*	37.7	33.0	48	
50	34.1	28.8	55	
52	31.8	28.0	57	
54	32.3	29.1	56	
56	33.2	30.1	54	
58	31.3	28.3	57	

Correction to local mean time is + 17.5s. 90° torsion = 19.′22.
Torsion head at 11h 25m read 104° and at 16h 15m read 97°.
Observer—R. R. T.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 1, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	34.1	33.1	23 51	-2.2
02	37.9	36.0	46	
04	40.0	37.6	43	
06	43.7	41.5	37	
08	43.0	40.9	38	
10	36.9	35.5	47	
12	30.9	29.2	57	
14	35.0	31.9	52	-2.2
16	36.1	32.9	50	
18	37.0	34.0	48	
20	36.6	33.2	49	
22	35.0	32.1	52	
24	35.3	33.8	50	
26	35.8	33.7	50	
28	30.3	28.1	23 58	
30	29.1	27.8	24 00	-2.2
32	25.8	24.7	04	
34	20.8	18.8	13	
36	23.6	21.1	09	
38	27.0	25.0	24 03	
40	31.5	28.2	23 57	
42	31.5	29.3	56	
44	32.6	30.1	55	-2.3
46	32.1	29.0	23 56	
48	25.8	23.1	24 06	
50	30.7	27.0	23 59	
52	34.4	32.0	52	
54	37.0	33.2	49	
56	39.0	36.3	45	
58	36.7	32.5	50	
5 00	36.8	33.7	49	-2.3
02	38.9	33.7	47	
04	42.0	38.2	41	
06	43.0	38.8	40	
08	49.6	45.8	29	
10	56.0	53.0	19	
12	50.5	49.1	26	
14	45.3	44.0	34	-2.3
16	42.8	41.8	38	
18	41.3	40.8	40	
20	39.9	39.6	42	
22	36.8	35.5	48	
24	34.9	32.6	51	
26	36.0	34.9	49	
28	39.0	36.9	45	
30	41.3	40.7	40	-2.4
32	38.2	38.2	44	
34	38.2	37.9	45	
36	36.7	36.0	47	
38	33.9	33.9	51	
40	35.7	35.5	48	
42	38.0	36.8	46	
44	38.8	37.5	44	-2.4
46	40.0	39.2	42	
48	41.2	41.1	40	
50.3	43.7	43.0	36	
52	42.8	43.1	37	
54	43.9	43.1	36	
56	38.2	37.8	45	
58	36.8	36.1	47	
6 00	32.0	31.2	23 55	-2.2
02	29.1	28.3	23 59	
04	28.8	27.1	24 01	
06	24.2	23.1	08	
08	23.1	22.7	08	
10	28.1	27.4	01	
12	26.0	24.2	05	
14	22.9	22.2	09	-2.0
16	26.0	25.0	04	
18	28.6	27.1	24 01	
20	32.9	30.3	23 55	
22	38.9	38.0	44	
24	51.7	49.8	25	
26	47.0	44.1	23 33	
28	25.8*b*		24 04	
30	28.0*a*		24 01	
32	64.1	64.1	23 04	
34	60.1	59.9	10	
36	66.8*b*		00	
38	38.8	38.8	44	
40	55.0*a*		18	
42	61.2	60.8	19	
44	61.6	60.5	09	-1.7
46	64.5	63.1	04	
48	61.7	59.0	10	
50	58.0	55.6	16	
52	56.9	56.1	16	
54	56.1	55.0	18	
56	58.0	58.0	14	
58	61.0	60.9	08	
7 00	58.8	58.1	13	-1.8
02	62.2	60.0	09	
04	59.3	57.7	13	
06	55.3	54.9	18	
08	60.6	59.9	10	
10	58.3	57.1	14	
12	59.6	58.7	12	
14	58.1	57.2	14	-1.5
16	56.8	56.2	16	
18	56.5	55.2	17	
20	58.3	57.8	14	
22	61.7	60.1	09	
24	63.2	62.9	06	
26	64.9	64.0	04	
28	63.1	61.5	07	
30	64.2	64.1	04	-1.3
32	62.8	61.8	07	
34	63.8	63.5	23 05	
36	70.2	69.3	22 55	
38	69.8	69.2	56	
40	70.2	69.3	55	
42	69.5	68.1	57	
44	69.2	67.9	57	-1.1
46	70.2	69.0	56	
48	70.1	69.0	22 56	
50	65.2	63.1	23 04	
52	62.1	60.0	09	
54.3	68.1	64.7	01	
56	62.2	59.9	09	
58	64.0	62.7	06	

Observer—J. V.

Wednesday, June 1, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	67.6	66.6	23 00	-1.0
02	66.0	64.9	02	
04	67.3	65.0	01	
06	61.3	60.7	09	
08	63.2	63.0	06	
10	65.9	65.2	02	
12	61.3	61.0	09	
14	64.8	64.0	04	-0.8
16	67.0	66.8	00	
18	66.3	66.0	23 01	
20	69.5*a*		22 56	
22	67.1	66.6	23 00	
24	70.6	70.3	22 54	
26	69.3	68.5	22 57	
28	66.3	65.6	23 02	
30	67.8	67.8	22 58	-0.8
32	67.3	66.8	23 00	
34	65.6	65.0	02	
36	66.0	66.0	02	
38	66.1	66.0	23 02	
40	69.2	69.0	22 57	
42	69.3	68.9	57	
44	68.7	68.3	22 58	-0.8
46	63.5	63.0	23 06	
48	70.0	69.9	22 55	
50	70.6	70.3	55	
52	70.3	70.3	55	
54	70.0	69.8	55	
56	76.4	76.2	45	
58	76.8	76.3	45	
9 00	71.0	70.3	54	-0.8
02	71.0	70.3	54	
04	70.5	70.3	55	
06	71.5	71.3	53	
08	71.5	70.8	54	
10	69.8	69.3	56	
12	68.6	68.0	58	
14	70.6	70.3	55	-0.8
16	69.6	69.3	56	
18	71.0	70.9	54	
20	72.0	71.7	52	
22	71.0	70.9	53	
24	70.6	69.6	55	
26	71.0	69.9	55	
28	71.6	71.4	53	
30	71.2	70.0	55	-0.9
32	72.5	72.0	52	
34	72.8	72.2	52	
36	72.1	71.3	53	
38	70.8	70.0	55	
40	70.0	69.8	56	
42	72.6	72.0	52	
44	73.3	72.8	51	-0.8
46	71.0	71.0	54	
48	70.1	70.0	55	
50	73.6*a*		50	
51*	42.5	37.3	42	
54	32.0	30.8	22 56	
56	24.5	23.3	23 08	
58	31.0	30.3	22 57	
10 00	34.3	32.6	22 53	-0.8
02	34.1	33.0	52	
04	31.5	30.5	56	
06	33.9	32.3	53	
08	34.8	34.0	51	
10	35.6	34.6	50	
12	33.6	32.3	54	
14	33.5	32.8	53	-0.8
16	33.5	32.5	53	
18	32.3	31.8	55	
20	34.0	32.8	53	
22	34.6	33.3	52	
24	33.8	32.5	53	
26	33.5	32.8	53	
28	35.5	35.1	50	
30	35.0	34.3	51	-0.6
32	33.3	32.5	54	
34	33.9	32.3	53	
36	33.5	33.3	53	
38	34.5	34.3	51	
40	35.6	35.3	50	
42	34.6	34.5	51	
44	34.2	34.0	52	-0.5
46	35.2	35.0	50	
48	35.5	35.5	49	
50	35.3	35.0	50	
52	36.9	36.8	48	
54	37.1	36.8	48	
56	36.0	35.6	49	
58	35.3	34.8	50	
11 00	Lost			
02	37.0	36.6	48	-0.3
04	38.0	37.3	46	
06	36.4	36.2	48	
08	38.0	37.0	46	
10	30.3	38.6	44	
12	38.3	37.5	46	
14	39.6	38.8	44	-0.3
16.2	39.2	38.3	44	
18	40.3	40.0	42	
20	39.6	39.4	43	
22	37.6	37.3	47	
24	38.0	37.3	46	
26	38.5	38.3	45	
28	38.0	37.6	46	
30	39.0	39.0	44	-0.4
32	38.6	38.6	45	
34	39.0	39.0	44	
36	40.3	40.0	42	
38	40.6	40.3	42	
40	40.3	39.7	43	
42	41.2	40.8	41	
44	40.6	40.5	42	-0.4
46	39.2	39.0	44	
48	38.0	37.6	46	
50	38.0	37.8	46	
52	39.0	38.7	44	
54	39.6	39.3	44	
56	40.1	39.9	43	
58	40.5	40.6	42	

Observers—J. V. and W. J. P., who alternated from 8h 00m to 8h 10m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 1, 1904					Magnet scale inverted					Wednesday, June 1, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	39.9	39.6	22 43	−0.3	14 00	47.9	47.7	22 31	−0.3	16 00	56.3	56.1	22 18	−1.2	18 00	47.4	46.8	22 33	−1.4
02	39.7	39.5	43		02	48.1	48.0	31		02	55.8	55.6	19		02	48.1	46.9	32	
04	39.6	39.2	44		04	48.8	48.6	30		04	56.0	55.7	19		04.1	48.0	47.0	32	
06	39.8	39.4	43		06	49.1	48.9	29		06	56.0	56.0	18		06	48.7	47.9	31	
08	40.3	39.8	43		08	48.5	48.3	30		08	56.3	56.1	18		08	48.8	48.1	31	
10	40.3	39.8	43		10	48.0	47.8	31		10	56.0	56.0	18		10	49.8	49.2	29	
12	40.5	40.3	42		12	48.2	47.8	31		12	54.9	54.8	20		12	50.1	49.6	29	−1.0
14	40.3	39.6	43	−0.3	14	48.1	47.9	31	−0.3	14	54.6	54.5	21		14	50.9	50.1	28	
16	40.1	39.5	43		16	48.5	48.3	30		16	54.3	54.3	21		16	51.0	50.1	28	
18	40.6	40.3	42		18	48.6	48.6	30		18	53.9	53.8	22		18	50.1	50.1	28	
20	41.2	40.8	41		20	49.6	49.3	28		20	53.0	53.0	23		20	51.1	50.3	27	
22	42.6	42.0	39		22	49.5	49.2	29		22	52.6	52.5	24		22	51.4	50.5	27	
24	43.2	42.8	38		24	49.6	49.5	28		24	52.0	52.0	25		24	51.9	50.8	26	
26	43.2	42.9	38		26	50.0	49.7	28		26	52.3	52.0	25		26	52.3	51.1	26	
28	43.0	42.6	38		28	49.6	49.6	28		28	51.5	51.3	26		28	53.2	52.1	24	
30	42.8	42.5	39	−0.2	30	50.2	50.0	27		30	51.3	51.0	26	−1.5	30	54.1	53.0	23	−0.8
32	43.1	42.8	38		32	51.3	51.0	26	−0.5	32	51.8	51.5	25		32	55.4	54.1	21	
34	44.3	44.2	36		34	51.3	51.2	26		34	52.2	52.0	25		34	56.1	54.9	20	
36	45.3	45.0	35		36	50.1	50.0	28		36	52.5	52.1	24		36	56.7	55.3	19	
38	44.6	44.0	36		38	49.0	48.8	29		38	52.3	52.0	25		38	56.5	55.6	19	
40	44.0	43.6	37		40	51.3	51.0	26		40	51.7	51.3	26		40	56.5	55.4	19	
42	44.2	44.0	36		42	51.6	51.2	25		42	51.1	50.6	27		42	56.0	55.0	20	
44	44.6	44.4	36	−0.1	44	50.6	50.5	27	−0.7	44	50.4	50.1	28	−1.8	44	55.1	54.4	21	−0.9
46	44.8	44.6	36		46	51.8	51.3	25		46	49.7	49.3	29		46	55.1	54.2	21	
48	44.9	44.6	36		48	52.2	52.0	24		48	50.0	49.7	29		48	55.1	54.7	21	
50	45.0	44.9	35		50	49.3	49.0	29		50	50.2	50.0	28		50	55.4	55.0	20	
52	45.2	45.0	35		52	48.0	48.0	31		52	49.6	49.4	29		52	55.9	55.2	20	
54	45.4	45.2	34		54	48.6	48.6	30		54	49.3	49.1	29		54	55.9	55.2	20	
56	45.6	45.6	34		56	49.3	49.0	29		56	49.3	49.0	30		56	57.8	57.2	17	
58	45.8	45.6	34		58	49.3	49.3	29		58	49.3	49.1	29	−2.0	58	58.8	58.1	16	
13 00	46.2	46.1	33	−0.1	15 00	48.8	48.7	30	−1.0	17 00	49.3	49.1	29		19 00	59.2	58.8	14	−1.0
02	46.4	46.4	33		02	49.0	49.0	29		02	49.0	48.8	30		02	60.1	59.0	14	
04	47.0	46.9	32		04	49.6	49.6	28		04	49.1	48.9	30		04	60.7	59.5	13	
06	46.3	46.0	33		06	49.6	49.5	28		06	48.5	48.2	31		06	61.1	60.0	12	
08	45.8	45.8	34		08	50.5	50.3	27		08	48.1	47.9	31		08	61.0	60.0	12	
10	46.0	45.7	34		10	51.3	51.3	26		10	47.9	47.7	32		10	61.1	60.0	12	
12	46.0	46.0	34		12	51.9	51.6	25		12	48.0	47.8	32		12	61.1	60.0	12	
14	46.3	46.3	33	0.0	14	52.7	52.3	24	−1.0	14	48.5	48.2	31	−2.0	14	60.9	60.0	12	−0.9
16.9	47.0	46.9	32		16	52.5	52.3	24		16	48.8	48.6	30		16	61.3	60.2	12	
18	47.2	47.2	32		18	52.3	52.3	24		18	48.6	48.3	31		18	61.2	60.5	12	
20	47.6	47.4	31		20	53.0	52.6	23		20	48.1	47.6	32		20	60.9	60.1	12	
22	47.7	47.5	31		22	64.0	63.6	06		22	48.3	48.0	31		22	60.9	60.1	12	
24	47.6	47.5	31		24	55.1	55.0	20		24	48.0	47.7	32		24	60.5	59.9	13	
26	47.9	47.9	31		26	56.0	55.6	19		26	48.5	48.2	31		26	60.5	59.8	13	
28	48.0	47.9	31		28	57.3	57.1	16		28	48.7	48.3	30		28	60.9	59.8	12	
30	48.0	47.8	31	−0.1	30	56.6	56.5	18	−1.1	30	46.6	46.3	33	−2.0	30	60.9	59.9	12	−0.7
32	47.8	47.3	31		32	57.0	56.6	17		32	46.1	45.8	35		32	60.9	59.9	12	
34	47.6	47.3	32		34	56.6	56.5	18		34	46.2	45.5	35		34	60.2	59.3	14	
36	47.0	46.9	32		36	57.0	57.0	17		36	45.7	45.3	35		36	59.8	59.1	14	
38	46.5	46.3	33		38	55.8	55.6	19		38	45.2	44.9	36		38	59.3	59.0	14	
40	46.3	46.0	34		40	55.4	55.0	20		40	44.3	44.2	37		40	59.0	58.4	15	
42	46.3	46.1	33		42	55.3	55.0	20		42	44.3	43.9	38		42	58.0	57.0	17	
44	47.5	47.0	32	−0.2	44	55.3	55.1	20	−1.2	44	44.4	44.0	37	−2.0	44	56.4	56.1	19	−0.4
46	48.2	47.8	30		46	55.3	55.0	20		46	44.9	44.5	37		46	56.3	55.7	19	
48	48.6	48.4	30		48	55.3	55.1	20		48	45.0	44.8	36		48	57.0	56.7	18	
50	49.2	49.0	29		50	55.1	54.9	20		50	45.8	45.6	35		50	56.1	56.0	19	
52	49.0	48.9	29		52	55.3	55.0	20		52	46.3	45.9	34		52	56.7	56.1	19	
54	48.3	48.0	30		54	56.3	56.3	18		54	46.8	46.0	34		54	57.1	56.9	18	
56	48.1	48.0	30		56	57.1	57.0	17		56	46.6	45.9	34		56	57.2	56.9	18	
58	48.0	47.8	31		58	56.9	56.9	17		58	47.1	46.0	34		58	56.8	56.1	19	

Observer—W. J. P.

Observers—W. J. P. and R. R. T., who alternated from 17h 34m to 17h 48m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 1, 1904 — Magnet scale inverted					Thursday, June 2, 1904 — Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	56.3	55.8	22 19	−0.5	22 00	55.3*b*		22 21	
02	55.8	54.3	21		02	57.1	56.1	19	−0.7
04	55.1	54.0	22		04	57.0	56.2	19	
06	54.5	53.6	22		06	57.8	57.1	18	
08	55.8	55.0	20		08	57.3	56.9	18	
10	57.3	56.8	18		10	57.5	56.9	18	
12	57.7	57.1	17		12	56.1	55.5	20	
14	55.3	55.3	21	−0.7	14	55.4	54.6	22	−0.5
16	55.1	54.5	21		16	54.0	52.8	24	
18	55.1	54.5	21		18	53.0	52.1	25	
20	55.3	54.9	21		20	52.8	51.8	26	
22	54.2	53.1	23		22	52.1	50.3	27	
24.2	53.1	52.2	25		24	50.0	48.2	31	
26	52.9	52.2	25		26	48.8	46.1	33	
28	53.8	53.0	24		28	49.1	46.6	33	
30	52.2	51.8	26	−0.9	30	49.3	47.0	32	−0.2
32	49.3	48.6	31		32	49.4	47.5	32	
34	49.2	48.7	31		34	49.5	47.8	32	
36	49.8	49.2	30		36	49.1	47.2	32	
38	53.7	53.3	23		38	49.0	47.3	32	
40	55.4	55.0	21		40	49.1	47.7	32	
42	55.1	54.7	21		42	50.0	48.1	31	
44	55.8	55.2	20	−0.9	44	46.3	44.7	36	−0.5
46	54.9	54.2	22		46	50.2	48.7	30	
48	55.0	53.3	22		48	57.4	48.1	25	
50	55.1	54.1	22		50	47.1	29.8	48	
52	54.7	53.6	22		52	60.8	47.1	23	
54	56.6	55.6	19		54	54.0	41.9	32	
56	57.1	55.8	19		56	51.2	41.2	35	
58	58.1	57.5	17		58	52.2	45.7	31	
21 00	57.4	56.2	18	−0.8	23 00	58.7	49.6	23	−0.9
02	56.8	55.7	19		02	56.1	47.8	26	
04	56.9	56.0	19		04	50.4	43.7	34	
06	56.8	56.1	19		06	55.1	49.0	26	
08	55.8	54.1	21		08	58.9	52.7	21	
10	55.0	51.8	24		10	57.1	51.3	23	
12	60.1	56.9	16		12	58.8	53.0	20	
14	60.0	56.7	16	−0.7	14	57.8	51.7	22	−1.0
16	60.0	57.1	16		16	55.8	50.1	25	
18	60.1	57.8	15		18	57.0	51.5	23	
20	59.9	59.7	13		20	60.5	56.1	16	
22	58.8	55.9	18		22	53.9	51.1	26	
24	57.2	55.0	20		24	57.2	52.3	22	
26	55.9	53.2	22		26	58.9	54.1	19	
28	55.0	52.2	23		28	59.0	54.0	19	−1.4
30	54.9	52.2	24	−0.7	30	55.7	50.7	25	
32	54.8	53.3	23		32	53.8	49.9	27	
34	57.1	55.7	19		34	56.0	51.2	24	
36	55.8	52.8	22		36	56.8	52.1	23	
38	59.7	57.2	16		38	57.2	52.8	21	
40	59.8	57.6	16		40	56.3	52.0	23	
42	59.0	56.9	17		42	56.9	52.2	22	
44	56.1	53.9	21	−0.8	44	56.9	52.8	22	−1.5
46	56.0	53.5	22		46	55.1	51.1	25	
48	55.3	53.0	23		48	53.9	50.5	26	
50	53.8	51.1	26		50	53.0	49.5	28	
52	51.9	49.0	29		52	52.9	49.9	27	
54	50.2	48.7	30		54	52.9	50.0	27	
56	51.7	50.4	28		56	52.5	49.8	28	
58	55.8	55.1	21		58	50.3	47.8	31	
					24 00	49.0	46.2	34	−1.7
					16 00	57.2	58.0	22 24	−1.0
					02	58.1	59.1	26	
					04.5	59.9	60.5	28	
					06	61.2	62.1	30	
					08	62.9	64.1	33	
					10	64.4	65.2	35	
					12	65.2	65.7	36	
					14	64.0	65.1	35	−1.2
					16	62.8	63.8	33	
					18	61.2	62.9	31	
					20	59.9	61.0	28	
					22	59.8	61.0	28	
					24	58.3	59.1	26	
					26	56.9	58.1	24	
					28	56.7	57.9	24	
					30	57.0	58.0	24	−1.2
					32	57.0	57.8	24	
					34	56.9	57.4	23	
					36	57.9	58.0	24	
					38	56.1	56.8	22	
					40	55.9	56.2	22	
					42	55.8	55.9	21	
					44	57.8*a*		24	−1.4
					46	60.2	60.3	28	
					48	60.9	61.1	29	
					50	60.3	60.8	29	
					52	59.2	59.0	27	
					54	58.8	59.8	27	
					56	61.0	62.0	30	
					58	62.8	63.8	33	
					17 00	62.0	62.8	32	−1.7
					02	61.9	63.0	32	
					04	61.0	62.1	30	
					06	60.3	61.8	29	
					08	62.7	64.0	33	
					10	65.1	66.1	36	
					12	64.8	65.0	36	
					14	63.7	64.8	34	−1.8
					16	60.2	61.0	20	
					18	59.7	60.2	28	
					20	57.9	58.2	25	
					22	56.7	57.3	23	
					24	54.7	55.1	20	
					26	53.2	54.0	18	
					28	53.8	54.9	19	
					30	54.0	55.2	19	−1.8
					32	55.0	56.3	21	
					34	54.8	56.0	20	
					36	55.7	57.1	22	
					38	55.9	57.1	22	
					40	54.9	56.1	21	
					42	54.2	56.0	20	
					44	54.7	56.3	21	−1.8
					46	54.2	57.8	22	
					48	54.8	58.0	22	
					50	54.0	57.7	22	
					52	54.8	57.1	21	
					54	54.8	57.4	22	
					56	55.0	57.5	22	
					58	54.4	56.0	21	
					18 00	55.3	57.4	22 22	−1.5
					02	56.0	58.5	23	
					04	55.9	58.0	23	
					06	55.6	56.2	21	
					08	53.1	55.0	18	
					10	53.0	54.9	18	
					12	53.5	55.2	19	
					14	54.0	55.9	20	−1.1
					16	54.9	56.1	21	
					18	55.0	55.9	20	
					20	54.4	55.3	20	
					22	54.3	55.2	20	
					24	54.0	54.9	19	
					26	53.8	54.9	19	
					28	54.4	55.4	20	
					30	55.2	55.9	21	−1.0
					32	56.2	57.0	22	
					34	57.7	58.1	24	
					36	57.8	58.2	25	
					38	57.1	57.3	23	
					40	56.9	57.3	23	
					42	56.8	57.1	23	
					44	56.1	56.9	22	−0.9
					46	56.1	56.9	22	
					48	56.1	57.1	22	
					50	56.2	57.4	23	
					52	56.2	57.7	23	
					54	56.9	58.0	24	
					56	57.7	58.8	25	
					58	58.2	59.3	26	
					19 00	58.3	59.5	26	−0.8
					02	57.9	58.8	25	
					04	58.3	59.1	26	
					06	59.1	59.9	27	
					08	59.8	60.2	28	
					10	60.0	60.4	28	
					12	60.5	60.9	29	
					14	61.0	61.0	29	−0.8
					16	60.9	61.1	29	
					18	60.9	61.0	29	
					20	59.4	59.8	27	
					22	57.3	57.9	24	
					24	56.1	57.1	22	
					26	56.1	57.0	22	
					28	57.0	57.7	24	
					30	57.0	58.8	25	−0.9
					32	59.1	58.4	26	
					34	58.4	59.1	26	
					36	58.0	58.9	25	
					38	57.8	58.6	25	
					40	57.3	58.2	24	
					42	56.8	58.8	24	
					44	56.2	57.8	23	−0.9
					46	56.0	57.3	22	
					48	55.3	56.9	22	
					50	55.2	56.5	21	
					52	55.8	56.9	22	
					54	56.8	57.0	23	
					56	57.0	57.8	24	
					58	57.0	58.0	24	
					20 00	57.8	58.5	25	−1.0

Correction to local mean time is + 39.5s. 90° torsion = 19.′53.
Torsion head at 0h 00m read 97° and at 24h 15m read 72°.
Observer—R. R. T.

Correction to local mean time is + 1s.
Torsion head at 15h 36m read 72° and at 20h 11m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, June 3, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	41.5	39.4	22 14	+1.8
02	41.1	39.3	15	
04	41.1	39.8	14	
06	43.3	40.4	12	
08	43.5	41.1	11	
10	43.3	41.1	12	
12	43.2	41.1	12	
14	43.2	41.2	12	+1.2
16	42.9	40.8	12	
18	42.0	40.5	13	
20	42.8	41.0	12	
22	43.0	41.0	12	
24	41.6	40.1	14	
26	40.9	40.5	15	
28	40.8	39.1	15	
30	40.7	39.1	15	+1.0
32	40.0	39.8	15	
34	40.1	38.9	15	
36	40.3	39.8	15	
38	38.4	37.9	18	
40	38.3	37.1	19	
42	37.7	36.4	20	
44	38.8	36.4	19	+0.6
46	38.9	37.4	18	
48	37.9	36.1	20	
50	36.8	35.0	22	
52	36.9	35.3	21	
54	36.6	35.0	22	
56	37.2	36.5	20	
58	38.2	37.2	19	
21 00	38.7	37.3	18	+0.2
02	38.7	37.2	18	
04	38.1	37.0	19	
06	37.9	36.5	20	
08	37.8	37.6	20	
10	37.4	36.0	20	
12	37.8	35.8	20	
14	38.9	36.6	19	0.0
16	38.2	36.7	19	
18	37.8	35.9	20	
20	37.1	35.1	21	
22	36.8	35.0	22	
24	36.4	34.8	22	
26	35.0	33.9	24	
28	34.2	33.5	25	
30	33.2	32.9	26	−0.2
32	32.9	32.2	27	
34	32.9	32.3	27	
36	33.2	33.1	26	
38	32.9	32.8	26	
40	32.2	32.1	28	
42	32.1	31.7	28	
44	31.8	30.9	29	−0.5
46	32.2	31.7	28	
48	33.5	31.0	27	
50	32.3	30.0	29	
52	33.5	30.9	27	
54	35.8	33.7	23	
56	34.0	33.6	24	
58	31.8	30.9	29	
22 00	29.9	28.1	22 32	−0.8
02	29.1	27.9	33	
04	31.9	31.2	28	
06	29.1	29.0	32	
08	26.9	26.2	36	
10	29.1	28.1	33	
12	34.0	33.7	25	
14	35.0	33.9	24	−0.8
16	37.8	35.6	20	
18	26.7	24.9	37	
20	29.7	24.3	36	
22	34.0	29.0	28	
24	36.2	32.0	24	
26	36.8	32.4	24	
28	32.2	28.8	30	
30	36.2	33.0	24	−0.9
32	38.9	37.6	18	
34	35.2	33.9	24	
36	31.2	30.9	29	
38	29.7	29.0	32	
40	34.0	33.5	25	
42	32.8	31.2	28	
44	31.0	28.8	31	−0.9
46	31.3	30.3	30	
48	30.7	28.5	32	
50	30.3	29.2	31	
52	30.1	29.9	31	
54	31.9	31.0	29	
56	32.9	32.5	27	
58	32.1	31.5	28	
23 00	32.1	31.0	28	−0.8
02	33.9	32.1	26	
04	33.2	32.2	27	
06	31.8*b*		28	
08	35.9	35.8	22	
10	29.0	28.8	32	
12	29.9	29.9	31	
14	31.2	30.8	29	−0.9
16	30.1	29.5	31	
18	29.0	28.2	33	
20	27.0	26.9	36	
22	27.0	26.2	36	
24	25.2	24.9	39	
26	26.2	25.1	38	
28	26.5	25.0	38	
30	26.8	24.9	27	−0.9
32	26.3	24.9	38	
34	26.9	25.2	37	
36	28.1	27.0	35	
38	28.0	26.0	36	
40	28.1	27.7	34	
42	28.5	28.0	34	
44	28.1	27.7	34	−0.9
46	29.0	27.0	34	
48	29.1	27.4	34	
50	29.1	27.4	34	
52	29.2	27.5	33	
54	29.2	27.3	34	
56	28.8	27.5	34	
58	28.0	26.8	35	
24 00	27.5	26.2	36	−0.7

Sunday, June 5, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	52.8	53.8	22 35	−0.3
02	54.1	54.4	36	
04	55.9	56.9	39	
06	54.1	55.3	37	
08	52.2	53.2	34	
10	51.7	52.8	33	
12	46.2	48.3	25	
14	48.1	50.0	28	−0.4
16	38.8	40.0	13	
18	40.8	42.3	16	
20	42.7	43.4	18	
22	40.7	48.2	21	
24	33.3	40.9	09	
26	34.9	42.1	11	
28	35.8	42.0	12	
30	43.8	49.9	24	−0.6
32	54.0	65.4	45	
34	55.1	64.0	44	
36	48.1	57.7	34	
38	51.1	62.3	40	
40.5	55.1	66.1	46	
42	56.2	68.9	49	
44	50.1	62.6	39	−0.7
46	52.9	63.9	42	
48	54.1	64.7	44	
50	54.5	64.9	45	
52	51.1	61.3	39	
54	51.6	61.0	39	
56	53.8	63.0	42	
58	56.2	64.3	45	
1 00	53.2	61.0	41	−0.8
02	56.5	64.2	46	
04	61.1	68.5	53	
06	65.7	73.1	22 60	
08	67.2	74.9	23 02	
10*	46.5	55.5	05	
12	46.8	55.8	06	
14	47.2	57.9	23 08	−0.8
16	41.2	51.3	22 58	
18	42.0	50.7	22 58	
20	43.5	52.1	23 00	
22	42.0	50.0	22 58	
24	41.3	49.7	57	
26	41.1	48.4	56	
28	41.1	48.2	55	
30.1	42.8	49.7	58	−0.7
32	42.9	49.0	22 57	
34	46.1	51.9	23 02	
36	47.0	52.1	03	
38	45.2	50.0	23 00	
40	42.2	46.9	22 55	
42	40.2	44.9	52	
44	40.1	44.4	52	−0.7
46	39.9	44.6	52	
48	41.1	46.1	54	
50	43.1	47.9	57	
52	44.5	49.1	22 59	
54	45.8	49.8	23 00	
56	43.3	47.2	22 56	
58	42.2	46.2	55	
2 00	43.8	47.9	22 57	−0.6
02	44.8	47.9	58	
04	45.7	48.9	22 60	
06	47.9	51.0	23 03	
08	46.7	49.8	01	
10	46.1	49.0	00	
12	47.1	49.9	02	
14	47.7	50.3	02	−0.6
16	47.1	50.8	02	
18	46.1	49.4	23 00	
20	45.1	48.8	22 59	
22	45.7	49.0	60	
24	45.3	48.3	59	
26	43.1	46.1	55	
28	42.7	45.8	55	
30	42.2	45.1	54	−0.3
32	42.6	45.9	22 55	
34	52.1	55.2	23 09	
36	42.4	46.8	22 55	
38	24.0	28.1	26	
40	16.9	19.1	14	
42	16.2	18.1	12	
44	14.7	17.2	10	−0.2
46	24.0	26.3	25	
48	32.9	36.1	40	
50	41.1	45.0	22 53	
52	45.3	49.9	23 00	
54	45.5	48.2	22 59	
56	46.0	49.0	23 00	
58	45.6	48.9	22 59	
3 00	48.0	50.2	23 02	−0.1
02	47.8	50.2	02	
04	50.8	53.2	07	
06	48.9	52.7	05	
08	53.7	55.8	11	
10	58.9	60.9	19	
12	61.9	63.8	24	
14	61.3	62.9	23	0.0
16	57.7	59.8	17	
18	57.1	59.2	16	
20	57.2	59.6	17	
22	59.2	61.8	20	
24	58.3	60.9	19	
26	57.1	59.3	17	
28	54.8	57.1	13	
30	55.0	57.2	13	0.0
32	55.7	59.1	15	
34	53.2	56.1	11	
36	57.7	59.8	23 17	
38	44.1	46.8	22 57	
40	46.2	48.1	22 59	
42	51.8	54.0	23 08	
44	51.2	53.9	08	+0.1
46	51.2	54.4	08	
48	52.7	55.2	10	
50	49.6	52.8	06	
52	48.1	50.7	03	
54	47.5	50.4	02	
56	47.8	49.9	02	
58	47.2	49.3	01	

Correction to local mean time is — 2.5s.
Torsion head at 19h 42m read 72° and at 24h 13m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, June 5, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	58.3	57.2	23 03	+0.3
02	60.8	59.8	22 59	
04	62.8	61.2	56	
06	62.1	61.0	57	
08	63.0	62.1	55	
10	63.8	62.9	54	
12	64.1	63.3	53	
14	63.9	63.0	54	+0.9
16	65.0	64.2	52	
18	65.8	64.9	51	
20	64.9	64.0	52	
22	65.2	64.0	52	
24	64.6	63.1	53	
26	65.2	63.8	52	
28	65.2	63.7	52	
30	66.1	64.1	51	+1.0
32	66.1	64.9	50	
34	65.9	64.8	51	
36	62.9	61.5	56	
38	62.0	60.8	22 57	
40	59.4	58.2	23 01	
42	61.1	60.2	22 58	
44	60.1	59.1	60	+0.8
46	61.2	60.2	58	
48	64.5	63.2	53	
50	63.4	62.1	55	
52	61.9	61.1	57	
54	60.4	59.2	59	
56	60.9	60.0	22 58	
58	59.7*b*		23 00	
5 00	54.2	53.7	09	+0.3
02	56.9	55.9	05	
04	54.2	53.0	09	
06	57.1	56.2	04	
08	56.1	55.6	06	
10	57.9	57.0	03	
12	55.8	54.9	06	
14	54.1	52.7	10	+0.1
16	56.9	55.5	05	
18	54.9	53.1	08	
20	58.8	57.1	02	
22	60.9	58.1	00	
24	60.7	58.0	23 00	
26	64.6	60.8	22 55	
28	58.0	57.3	23 03	
30	50.0	47.1	17	+0.1
32	43.9	40.2	27	
34	49.8	47.0	17	
36	35.5	33.7	39	
38	40.0	37.9	32	
40	34.0	33.1	41	
42	35.0	34.9	38	
44	39.9*b*		31	0.0
46	33.1	32.7	42	
48	22.9	22.2	58	
50	29.7	28.7	48	
52	33.3	33.0	41	
54	35.8	35.1	23 38	
56	21.3	20.1	24 01	
58	30.7	29.0	23 46	
6 00	24.1	20.0	23 59	0.0
02	36.9	34.0	38	
04	28.9	26.9	50	
06	34.5*b*		39	
08	39.6	37.9	32	
10	38.8	37.5	33	
12	41.9	38.9	30	
14	42.2	40.0	29	0.0
16	39.8	36.1	34	
18	42.9	39.3	29	
20.5	38.7	34.2	36	
22	56.2	50.4	10	
24	41.0	38.5	31	
26	58.0	53.9	06	
28	45.7	41.2	25	
30	45.3	39.3	27	0.0
32	40.9	36.9	32	
34	34.1	30.2	43	
36	39.9	37.9	32	
38	38.9	35.8	35	
40	28.9	25.2	51	
42	31.9	26.6	48	
44	30.3	25.7	49	+0.2
46	28.9	24.1	52	
48	41.5	37.9	31	
50	30.8	27.8	47	
52	37.1	34.8	37	
54	42.1	39.0	30	
56	41.9	39.8	29	
58	46.8	45.4	21	
7 00	49.4	47.0	18	+0.2
02	44.1	41.0	26	
04	36.0	33.4	39	
06	49.7	46.1	18	
08	47.5	44.1	21	
10	38.1	33.3	37	
12	42.6	38.0	30	
14	46.9	42.1	23	+0.1
16	50.2	47.1	17	
18	52.2	48.3	14	
20	51.2	47.8	16	
22	54.2	51.1	11	
24	50.8	48.0	16	
26	48.8	44.6	20	
28	51.1	47.2	16	
30	50.2	46.2	18	0.0
32	50.3	47.1	17	
34	50.0	45.9	18	
36	54.2	49.3	12	
38	58.9	54.8	04	
40	60.0	56.0	02	
42	61.2	56.0	23 01	
44	63.6	58.1	22 58	+0.2
46	64.0	57.8	58	
48	65.0	58.8	56	
50	65.9	58.3	56	
52	65.3	58.1	56	
54	65.3	58.3	56	
56	64.9	58.2	57	
58	66.1	60.1	54	
8 00	67.8	61.3	52	+0.8

Correction to local mean time is — 38s.
Torsion head at 0h 00m read 72° and at 8h 15m read the same.
Observer—R. R. T.

Monday, June 6, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
8 00*	51.1	52.8	22 56	+6.4
02	50.8	52.7	56	
04	49.3	52.2	54	
06	50.3	53.8	56	
08	50.9	53.8	57	
10.2	51.7	54.5	58	
12	51.7	54.2	58	
14	52.8	55.0	59	+6.2
16	50.9	52.8	56	
18	47.1	49.1	50	
20	48.2	49.9	52	
22	51.1	53.0	56	
24	51.8	53.8	58	
26	53.1	55.0	59	
28	49.9	52.0	55	
30	46.8	48.1	49	+6.2
32	46.1	47.3	48	
34	47.9	48.9	51	
36	49.2	50.9	53	
38	49.0*b*		52	
40	18.5	24.1	22 08	
42*	52.7	56.8	21 29	
44*	53.2	55.3	23 08	+6.2
46	53.0	60.9	23 13	
48	37.7	39.9	22 44	
50	36.4	42.8	46	
52	31.9	37.5	38	
54	37.1	44.1	47	
56	39.6	49.9	54	
58	21.9	31.9	26	
9 00	35.2	43.0	45	+6.3
02	38.1	46.2	50	
04	33.7	41.8	42	
06	41.1	48.1	53	
08	40.0	46.8	52	
10	39.9	47.1	52	
12	41.1	47.4	53	
14	40.9	46.8	52	+6.7
16	45.5	50.0	58	
18	42.9	47.8	22 54	
20	51.3	57.4	23 09	
22	46.0	54.1	02	
24	53.3	57.8	23 10	
26	42.2	47.4	22 54	
28	46.0	50.8	59	
30	44.9	49.7	58	+7.0
32	42.8	45.6	53	
34	40.3	41.9	48	
36	39.1	41.1	46	
38	41.1	43.8	50	
40	37.3	39.2	43	
42	37.3	38.2	42	
44	36.3	37.1	41	+7.1
46	34.5	37.3	40	
48	43.0	45.6	53	
50	43.7	45.4	53	
52	40.5	42.0	48	
54	45.2	48.8	57	
56	44.8	48.4	56	
58	41.2	45.9	52	
10 00	47.7	50.2	23 00	+7.2
02	44.1	46.6	22 54	
04	41.8	45.1	52	
06	40.3	43.0	49	
08	34.4	37.0	39	
10	31.8	33.0	34	
12	32.1	33.1	34	
14	31.1	33.2	34	+7.2
16	28.8	30.8	30	
18	35.0	35.3	38	
20	35.9	37.1	41	
22	47.1	48.9	59	
24	37.7	39.9	44	
26	37.1	39.1	43	
28	36.3	37.2	41	
30	33.9	34.9	37	+7.2
32	33.1	34.2	36	
34	31.4	33.1	34	
36	28.9	32.9	32	
38	29.9	33.0	33	
40	32.5	34.6	36	
42	29.3	32.9	32	
44	27.2	33.5	31	+7.0
46	32.0	36.9	37	
48	33.5	39.9	41	
50	26.7	34.2	31	
52	27.1	32.3	30	
54	27.9	33.9	32	
56	27.9	34.2	32	
58	27.3	33.7	31	
11 00	35.2	40.6	43	+7.1
02	41.7	47.0	22 53	
04	50.3	57.7	23 08	
06	54.4	65.1	17	
08	45.1	55.5	23 02	
10	40.8	49.9	22 54	
12	32.1	40.1	40	
14	32.6	38.9	39	+7.7
16	29.1	35.8	34	
18	26.1	32.8	30	
20	24.2	31.1	27	
22	26.0	33.0	30	
24	24.2	30.8	27	
26	25.9	31.2	28	
28	28.9	34.1	22 33	
30	38.6	43.0	47	+8.1
32	38.2	45.3	49	
34	34.1	41.0	42	
36	35.7	43.4	45	
38	43.5	49.0	56	
40	45.2	51.4	59	
42	42.9	47.9	55	
44	43.9	47.3	55	+8.6
46	38.1	42.1	46	
48	33.8	37.4	39	
50	34.9	39.9	42	
52	32.9	36.1	38	
54	32.2	35.9	37	
56	35.9	39.0	42	
58	31.1	34.8	35	
12 00	32.2	34.0	35	+8.8

Correction to local mean time is — 1m 04.5s. 90° torsion = 18.'90.
Torsion head at 7h 30m read 76° and at 12h 18m read 63°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, June 7, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00*	50.0	46.0	22 41	+9.8
02	52.8	48.9	37	
04	50.1	47.1	40	
06	48.8	45.8	42	
08	49.2	46.1	42	
10	47.3	44.1	45	
12	52.3	49.1	37	
14	51.8	49.4	37	+9.7
16	57.2	55.2	29	
18	59.3a		24	
20	65.7	63.5	16	
22	64.0	62.0	18	
24	63.6	59.8	20	
26	55.7	50.6	34	
28	42.9	38.9	22 53	
30	36.1	33.1	23 03	+9.3
32	33.0	27.2	10	
34	29.4	25.2	14	
36	27.0	22.5	18	
38	24.2	20.0	23	
40	27.0	22.0	19	
42	28.1	23.2	17	
44	31.3	27.3	11	+9.2
46	37.9	34.7	23 01	
48	46.1	42.9	22 48	
50	51.9	47.8	39	
52	54.0	49.8	36	
54	52.9	48.9	37	
56	50.7	47.2	41	
58	49.1	46.7	42	
13 00	43.9	41.9	50	+9.1
02	39.0	36.0	22 59	
04	34.7	32.6	23 05	
06	32.2	29.8	09	
08	34.6	29.8	07	
10	18.5	15.0	31	
12	14.3	9.4	39	
14	12.5	8.3	41	+9.1
16	11.1	6.6	44	
18*	61.0	49.0	38	
20	65.9	51.2	33	
22	53.9	42.7	49	
24	56.0	45.1	46	
26	52.9	42.3	50	
28	54.5	45.1	47	
30	57.9	48.8	41	+9.0
32	56.9	47.9	43	
34	58.8	50.0	40	
36	60.3	52.6	37	
38	60.3	52.7	36	
40	61.8	55.7	33	
42	66.0	60.1	26	
44	62.0	58.9	30	+8.7
46	65.3	61.0	26	
48	65.7	62.2	25	
50	66.0	62.8	24	
52	66.8	64.6	22	
54	72.0	70.5	14	
56	66.3	65.9	22	
58	63.1	60.1	29	
14 00	59.5	57.1	23 34	+8.1
02	61.1	58.8	31	
04	64.9	62.7	25	
06	71.4	69.2	15	
08	73.2	70.0	13	
10	78.5	75.0	05	
12	79.3	75.1	23 04	
14*	55.6	47.8	22 58	+8.0
16	56.8	48.3	57	
18	62.0	54.2	48	
20	63.8	55.9	46	
22	63.9	56.2	45	
24	64.2	57.9	44	
26	64.9	57.9	43	
28	66.0	59.9	41	
30	65.7	60.1	41	+8.0
32	64.7	58.3	43	
34	60.0	55.1	50	
36	61.1	54.8	49	
38	61.7	56.6	47	
40	65.8	59.6	41	
42	70.4	64.9	34	
44	68.1	64.8	36	+8.0
46	71.3	68.5	30	
48	72.0	69.2	29	
50	74.9	72.2	25	
52	74.1	72.0	25	
54	75.8	73.1	23	
56	72.2	69.8	29	
58	69.1	67.9	32	
15 00	67.0	65.3	36	+8.0
02	73.0	69.6	28	
04	74.9	73.0	24	
06	71.9	70.5	28	
08	63.1	62.1	42	
10	62.3	60.8	44	
12	64.6	62.9	40	
14	66.4	63.9	38	+8.0
16	69.5	67.8	33	
18	71.8	69.8	29	
20	70.9	69.8	30	
22	72.9	71.0	28	
24	74.9	72.7	24	
26*	54.2	49.2	15	
28	54.8	52.3	12	
30	56.7	52.8	10	+7.9
32	55.4	52.1	12	
34	59.3	55.8	06	
36	62.9	58.2	22 01	
38	65.1	60.9	21 57	
40	69.1	64.1	52	
42	69.2	63.0	52	
44	73.1	67.0	46	+7.8
46*	49.6	43.0	33	
48	51.0	43.2	32	
50	53.2	45.7	29	
52	49.8	42.8	33	
54	48.4	41.1	36	
56	44.0	36.2	43	
58	36.3	29.1	55	
16 00	36.3	34.1	51	+7.6

Wednesday, June 8, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	43.0	45.0	22 32	+1.5
02	43.0	44.1	32	
04	43.0	44.1	32	
06	43.0	44.1	32	
08	42.8	44.1	32	
10	42.9	43.5	31	
12	42.2	42.9	30	
14	41.8	42.1	29	+1.6
16	41.2	41.7	28	
18	40.8	40.9	28	
20.3	40.3	40.7	27	
22	41.1	41.1	28	
24	41.2	41.8	29	
26	41.8	41.9	29	
28	41.6	41.9	29	
30	41.1	41.2	28	+1.4
32	41.0	41.1	28	
34	41.5	41.9	29	
36	41.2	41.8	29	
38	42.0	42.1	29	
40	42.1	42.1	30	
42	41.8	41.9	29	
44	41.5	41.7	29	+1.5
46	41.1	41.5	28	
48	41.8	41.9	29	
50	42.0	42.3	30	
52	42.8	43.1	31	
54	43.3	43.9	32	
56	43.2	44.0	32	
58	43.1	44.0	32	
1 00	42.9	43.3	31	+1.6
02	42.7	43.3	31	
04	42.8	43.2	31	
06	43.4	43.7	32	
08	44.8	45.0	34	
10	45.9	45.9	36	
12	46.1	46.2	36	
14	46.1	46.2	36	+1.6
16	45.8	46.2	36	
18	45.7	46.0	36	
20	45.7	45.9	36	
22	45.9	46.0	36	
24	45.6	45.8	35	
26	45.1	45.3	35	
28	45.0	45.1	34	
30	45.0	45.1	34	+1.5
32	44.2	45.0	34	
34	44.2	45.1	34	
36	44.4	45.1	34	
38	45.5	46.1	3(	
40	45.9	46.2	3(	
42	46.1	46.3	36	
44	46.3	46.7	37	+1.4
46	47.7	48.0	39	
48	48.2	49.0	40	
50	49.0	49.9	41	
52	49.9	50.8	43	
54	49.2	50.1	42	
56	49.0	49.9	41	
58	49.7	50.7	42	
2 00	48.9	50.0	22 41	+1.5
02	48.3	49.3	40	
04	49.2	50.1	42	
06	49.0	50.2	42	
08	47.5	48.3	39	
10	47.2	48.2	39	
12	48.3	49.1	40	
14	49.1	50.0	42	+1.6
16	48.8	49.8	41	
18	49.1	50.0	42	
20	49.1	50.3	42	
22	48.9	49.9	41	
24	49.1	50.0	42	
26	49.6	50.4	42	
28	48.7	49.1	40	
30	47.9	48.9	40	+1.6
32	48.2	49.4	40	
34	48.3	49.6	40	
36	48.2	49.2	40	
38	47.3	48.1	39	
40	47.8	48.8	40	
42	48.6	49.3	41	
44	46.8	47.5	38	+1.8
46	44.1	45.3	34	
48	43.9	45.3	34	
50	44.5	45.9	35	
52	47.0	48.0	38	
54	49.5	50.9	43	
56	51.0	52.1	45	
58	50.9	51.8	44	
3 00	50.9	51.4	44	+1.8
02	52.3	52.9	46	
04	52.1	52.5	46	
06	53.8	54.0	48	
08	53.0	53.8	48	
10	55.0	55.2	50	
12	56.1	56.8	52	
14	54.2	54.8	50	+1.9
16	55.7	56.1	52	
18	57.2	57.8	54	
20	56.7	57.0	53	
22	56.5	57.0	53	
24	55.1	56.0	51	
26	56.1	56.4	52	
28	59.1	59.8	57	
30	58.4	59.8	22 57	+2.0
32	61.3	63.3	23 02	
34	62.2	64.0	03	
36	63.5	65.3	05	
38	62.9	64.8	04	
40	63.9	65.9	06	
42	64.3	66.8	07	
44	64.2	66.0	06	+2.1
46	66.1	67.8	09	
48	67.1	68.9	11	
50	68.2	69.6	12	
52	69.5	70.5	14	
54	68.9	69.9	13	
56	68.2	69.7	12	
59	66.1	68.1	09	

Correction to local mean time is — 1m 31.5s. 90° torsion = 15.′46. Observer—J. V.
Torsion head at 11h 35m read 72° and at 16h 10m read 50°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 8, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	66.8	67.8	23 10	+2.1
02	69.8	70.3	14	
04	70.9	71.8	16	
06	68.8	69.1	12	
08.4	65.8	66.1	08	
10	67.8	68.9	11	
12	67.8	68.9	11	
14	66.2	68.9	10	+2.2
16	64.0	65.1	05	
18	63.8	64.9	05	
20	68.9	69.2	12	
22	71.2	72.0	16	
24	74.9	75.2	22	
26	77.2	78.1	26	
28	75.7	76.0	23	
30	75.1	75.1	22	+2.2
32	69.5	70.0	14	
34	73.7*a*		20	
36	78.0	78.2	27	
38*	52.8	56.9	24	
40	54.0	58.6	27	
42	54.2	58.0	27	
44	56.2	59.0	29	+2.5
46	56.2	58.8	29	
48	56.5	58.9	29	
50	59.0	61.2	33	
52	59.2	61.9	34	
54	60.2	62.8	35	
56	60.8	62.9	36	+2.7
58	60.2	61.9	34	
5 00	56.1	58.1	28	
02	61.0	62.1	35	
04	64.9	66.9	42	
06	66.1	67.6	44	
08	62.2	64.0	38	
10	61.4	62.8	36	
12	65.0	65.9	41	
14	64.7	65.7	41	+2.8
16	65.0	65.1	41	
18	64.1	66.0	41	
20	72.6	73.8	54	
22	71.8	73.6	53	
24	72.9	74.8	55	
26	62.1	65.2	38	
28	57.2	61.0	32	
30	74.9	77.1	58	+2.9
32	62.8	63.8	38	
34	54.8	57.0	26	
36	56.9	58.2	29	
38	59.3	61.0	33	
40	59.9	61.0	34	
42	57.0	57.8	29	+3.0
44	51.1	52.1	20	
46	49.0	50.2	16	
48	56.1	56.7	27	
50	57.9	58.1	30	
52	57.2	57.8	29	
54	56.5	57.0	28	
56	53.0	53.8	23	
58	51.1*a*		19	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
6 00	58.5*a*		23 31	+3.0
02	60.3	60.4	34	
04	53.2*b*		22	
06	48.2	48.8	15	
08	49.0	49.5	16	
10	49.1	49.9	16	
12	47.0	47.7	13	
14	49.1	49.8	16	+3.0
16	54.2	55.1	24	
18	53.9	54.9	24	
20	53.8	54.2	24	
22	51.5	52.1	20	
24	50.7	51.2	19	
26	50.0	50.3	18	
28	48.2	48.4	15	
30	51.9	52.0	20	+3.1
32.5	54.8	56.1	26	
34	55.0*b*		25	
36	52.0	52.8	21	
38	53.8	54.1	24	
40	54.0	54.2	24	
42	57.0	57.9	29	
44	51.1	52.0	20	+3.2
46	51.8	53.1	21	
48	50.3	51.8	19	
50	50.8	51.4	19	
52	56.0	57.0	28	
54	51.6	52.9	21	
56	48.9	49.0	15	
58	46.3	47.1	12	
7 00	48.8	50.2	17	+3.4
02	54.1	55.0	24	
04	47.5	47.9	14	
06	45.8	46.2	11	
08	46.9	47.8	13	
10	48.0	48.3	14	
12	45.9	46.9	12	
14	46.0	46.9	12	+3.9
16	45.9	46.1	11	
18	42.1	42.8	06	
20	45.0	45.7	10	
22	43.8*b*		08	
24	42.8	43.8	07	
26	44.8	45.0	09	
28	39.8	40.5	02	
30	41.0	42.1	04	+4.2
32	42.3	43.2	06	
34	41.1	42.8	05	
36	38.6	39.9	00	
38	39.9	41.1	03	
40	38.2	39.4	00	
42	38.2	39.9	00	
44	38.0	40.0	23 00	+4.3
46.6	36.8	38.5	22 58	
48	38.2	40.0	23 00	
50	36.8	38.2	22 58	
52	37.1	38.1	58	
54	35.9	36.8	56	
56	35.2	36.0	55	
58	37.0	38.1	58	

Wednesday, June 8, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	33.7	35.0	22 53	+4.5
02	32.8	34.0	52	
04	37.3	38.3	58	
06	36.9	38.0	58	
08	36.8	38.0	58	
10	36.4	37.6	57	
12	35.8	37.1	56	
14	35.5	37.0	56	+4.7
16	34.0	35.1	53	
18	36.0	36.6	56	
20	35.6	36.8	56	
22	34.5	35.5	54	
24	36.3	36.6	56	
26	33.8	34.5	53	
28	35.0	35.9	55	
30	36.6	37.2	57	+5.0
32	37.0	37.5	57	
34	34.8	35.0	54	
36	36.7	37.6	57	
38	37.3	37.5	58	
40	35.2	36.0	55	
42	36.3	37.0	57	
44	34.3	35.0	53	+4.8
46	34.9	35.5	54	
48	33.8	34.6	53	
50	34.8	35.6	54	
52	33.2	33.8	52	
54	34.2	34.8	53	
56	37.0	37.0	57	
58	37.0	37.0	57	
9 00	37.4	37.6	22 58	+4.5
02	38.5	39.0	23 00	
04	36.9	37.3	22 57	
06	37.6	37.6	58	
08	36.6	37.0	57	
10	34.2	34.8	53	
12	35.4	35.8	22 55	
14	38.2	38.6	23 00	+4.6
16	34.0	34.6	22 53	
18	34.6	34.8	54	
20	36.2	36.4	22 56	
22	38.8	39.6	23 01	
24	38.1	38.8	23 00	
26	35.3	35.8	22 55	
28	34.4	35.0	54	
30	35.5	35.6	55	+4.9
32	36.2	36.8	57	
34	35.6	35.8	55	
36	33.3	33.6	52	
38	34.0	34.6	53	
40	34.8	35.4	54	
42	33.0	33.3	51	
44	32.0	32.0	50	+5.0
46	32.6	33.1	51	
48	33.3	33.4	52	
50	32.5	33.1	51	
52	32.3	33.0	50	
54	34.6	34.8	54	
56	33.4	33.6	52	
58	31.3	31.4	48	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
10 00	35.3	35.8	22 55	+5.3
02	34.0	34.3	53	
04	32.6	32.8	51	
06	33.0	33.3	51	
08	33.2	33.6	52	
10	33.2	33.8	52	
12	32.8	33.3	51	
14	31.3	32.0	49	+5.6
16	36.4	36.6	57	
18	31.6	32.0	49	
20	31.3	31.6	49	
22	33.0	33.5	52	
24	34.8	35.0	54	
26	36.4	36.8	57	
28	30.5	30.6	47	
30	31.2	31.5	49	+5.8
32	31.0	31.2	48	
34	30.6	31.0	48	
36	30.5	30.8	47	
38	30.5	31.0	48	
40	30.2	31.0	47	
42	29.5	29.9	46	
44	29.7	30.0	46	+5.8
46	30.3	30.9	47	
48	29.3	29.5	46	
50	28.7	29.0	45	
52	28.3	28.5	44	
54	29.0	29.5	45	
56	29.3	29.7	46	
58	28.3	28.6	44	
11 00	28.0	28.3	44	+5.6
02	27.3	27.7	43	
04	27.5	27.5	43	
06	27.8	28.0	43	
08	27.7	28.0	43	
10	26.6	27.0	42	
12	27.3	27.6	43	
14	27.3	28.0	43	+5.5
16	25.6	26.0	40	
18	25.5	26.0	40	
20	27.0	27.3	42	
22	26.3	26.9	41	
24	26.6	27.0	42	
26	26.3	27.0	41	
28	26.5	27.0	42	
30	27.3	27.8	43	+5.2
32	25.6	26.0	40	
34	24.3	25.0	38	
36	25.3	26.3	40	
38	24.6	25.6	39	
40	23.0	24.2	37	
42	23.0	23.7	36	
44	23.8	24.6	38	+5.0
46	23.5	24.3	37	
48	23.0	23.6	36	
50	23.8	24.6	38	
52	26.0	26.3	41	
54	26.3	26.8	41	
56	25.5	25.8	40	
58	25.3	25.5	40	

Observer—J. V.

Observers—J. V. and W. J. P., who alternated from 8h 06m to 8h 16m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 8, 1904					Magnet scale erect					Wednesday, June 8, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	25.3	26.0	22 40	+5.0	14 00	17.8	17.8	22 28	+4.5	16 00.2	11.1	12.2	22 18	+5.3	18 00	10.2	11.8	22 18	+5.3
02	25.0	25.5	39		02	16.8	17.0	26		02	10.3	10.9	17		02	10.2	12.0	18	
04	24.8	25.0	39		04	15.0	15.3	24		04	10.1	10.8	17		04	10.6	12.1	18	
06	24.6	25.0	39		06	15.7	15.7	25		06	9.3	9.7	15		06	10.8	12.1	18	
08	24.0	24.8	38		08	15.0	15.3	24		08	9.1	9.9	15		08	10.2	11.9	18	
10	24.3	25.0	38		10	11.9	12.0	19		10	10.0	10.8	17		10	10.9	12.2	19	
12	23.6	24.3	37		12	12.0	12.3	19		12	11.7	12.4	19		12	12.2	13.9	21	
14	22.8	23.6	36	+5.0	14	11.0	11.3	17	+4.6	14	14.2	15.2	23	+5.3	14	12.0	13.1	20	+5.1
16	23.8	24.6	38		16	15.8	16.2	25		16	17.1	18.1	28		16	12.2	14.0	21	
18	23.8	24.5	38		18	16.3	16.6	26		18.6	20.7	21.1	33		18	12.5	14.1	22	
20	23.3	24.0	37		20	16.5	16.8	26		20	21.1	21.9	34		20	11.9	13.1	20	
22	23.0	23.6	36		22	16.8	16.9	26		22	20.8	21.2	33		22	11.2	12.4	19	
24	21.8	22.6	34		24	17.0	17.2	27		24	19.1	19.7	31		24	11.9	12.7	20	
26	20.8	21.3	33		26	16.3	16.6	26		26	16.2	17.2	27		26	12.9	13.6	21	
28	20.6	21.0	32		28	15.7	15.9	25		28	14.8	14.8	23		28	14.9	15.7	25	
30	20.2	20.6	32	+4.9	30	14.3	14.3	22	+4.9	30	12.3	13.1	20	+5.4	30	15.8	16.8	26	+4.8
32	20.0	20.6	32		32	14.8	15.0	23		32	13.5	14.4	22		32	17.2	17.2	28	
34	**20.3**	**20.7**	**32**		**34**	**13.8**	**14.0**	**22**		34	11.1	12.3	19		34	17.1	17.2	28	
36	20.6	21.0	32		36	13.8	13.8	22		36	9.2	10.1	15		36	16.3	16.8	27	
38	20.3	20.6	32		38	14.0	14.0	22		38	10.3	10.9	17		38	15.8	15.9	26	
40	20.0	20.3	31		40	13.6	13.7	21		40	11.2	11.9	18		40	15.6	16.1	26	
42	19.6	19.8	31		42	14.2	14.3	22		42	13.5	13.9	22		42	15.9	16.3	26	
44	19.4	19.8	30	+4.8	44	13.8	15.7	22		44	13.1	13.5	21	+5.6	44	15.7	16.2	26	+4.6
46	19.7	20.0	31		46	13.2	13.4	21	+5.0	46	13.2	13.6	21		46.4	15.9	17.2	27	
48	19.8	20.2	31		48	12.3	12.8	21		48	13.0	13.2	21		48	16.1	18.0	27	
50	20.3	20.6	32		50	12.3	12.6	20		50	13.1	13.7	21		50	17.1	19.0	29	
52	20.8	21.2	33		52	12.2	12.5	19		52	13.2	13.8	22		52	18.2	19.7	30	
54	20.3	20.8	32		54	12.4	12.6	20		54	13.9	14.3	22		54	18.9	20.6	32	
56	20.1	20.6	32		56	12.0	12.3	19		56	13.1	13.9	22		56	19.1	20.8	32	
58	20.6	20.8	32		58	11.9	12.1	19		58	13.0	13.8	22		58	18.9	20.4	32	
13 00	19.2	19.8	30	+4.6	15 00	12.6	12.8	20	+5.2	17 00	13.0	13.9	22	+5.5	19 00	18.9	20.2	31	+4.1
02	19.3	19.6	30		02	13.3	13.4	21		02	13.0	13.2	21		02	19.0	19.8	31	
04	19.5	19.7	31		04	14.2	14.2	22		04	12.9	13.1	21		04	18.3	19.1	30	
06	18.8	18.9	29		06	13.5	13.8	22		06	12.6	13.1	21		06	18.2	18.9	30	
08	19.0	19.1	30		08	13.8	14.2	22		08	12.2	12.7	20		08	18.4	18.9	30	
10	18.5	18.6	29		10	13.0	13.3	22		10	12.4	12.9	20		10	18.1	18.3	29	
12	18.8	19.1	30		12	12.5	12.8	21		12	13.0	13.5	21		12	17.3	18.0	28	
14	18.9	19.0	30	+4.5	14	12.1	12.3	19	+5.3	14	13.1	14.0	22	+5.5	14	17.2	17.9	28	+4.0
16	18.8	19.0	30		16	11.4	11.4	18		16	13.0	14.1	22		16	16.0	17.1	27	
18	18.6	18.8	29		18	11.0	11.2	18		18	12.7	13.9	21		18	15.6	16.8	26	
20	18.8	19.0	30		20	10.3	10.7	17		20	12.6	13.6	21		20	16.2	17.8	27	
22	19.5	19.6	30		22	10.3	10.3	16		22	12.1	13.1	20		22	17.9	19.1	30	
24	19.8	20.0	31		24	9.1	9.4	15		24	11.8	12.8	19		24	18.7	20.0	31	
26	19.3	19.9	31		26	8.2	8.4	13		26	11.3	12.4	19		26	19.1	20.7	32	
28	19.9	20.3	32		28	7.3	7.5	12		28	11.1	12.1	19		28	19.1	20.7	32	
30	19.3	19.8	30	+4.4	30	7.8	7.9	13		30	10.9	12.1	18	+5.7	30	19.1	20.5	32	+3.9
32	19.4	19.9	31		32	8.0	8.0	13		32	11.1	11.8	18		32	19.3	21.4	33	
34	19.0	19.3	30		34	8.5	8.9	14		34	11.0	11.0	18		34	20.0	21.9	34	
36	19.6	19.9	31		36	10.2	10.4	16		36	10.3	10.9	17		36	20.1	21.5	34	
38	20.0	20.3	32		38	12.7	13.1	20		38	10.1	10.5	17		38	19.8	21.1	33	
40	19.6	19.8	31		40	13.6	14.0	22		40	9.7	10.3	16		40	19.8	20.9	33	
42	19.5	19.5	30		42	13.5	13.7	22		42	9.2	10.1	16		42	19.9	21.0	33	
44	19.2	19.2	30	+4.5	44	13.8	14.0	22	+5.3	44	10.0	10.7	17	+5.8	44	19.8	20.9	33	+3.7
46	18.8	18.8	30		46	14.0	14.3	22		46	10.2	11.1	17		46	19.8	20.5	32	
48	18.5	18.5	29		48	13.2	13.3	21		48	11.2	11.2	18		48	19.5	20.1	32	
50	18.3	18.3	29		50	12.6	13.0	20		50	11.0	11.7	18		50	19.1	19.5	31	
52	17.5	17.5	27		52	12.7	13.1	20		52	10.3	11.1	17		52	18.8	19.1	30	
54	16.9	16.9	26		54	12.3	12.7	20		54	10.3	11.2	17		54	18.2	18.9	30	
56	17.3	17.3	27		56	12.5	13.1	20		56	10.2	11.2	17		56	17.9	18.2	29	
58	17.8	18.0	28		58	12.3	12.8	20		58	10.2	11.3	17		58	17.9	18.4	29	

Observers—W. J. P. and R. R. T., who alternated from 15h 52m to 16h 04m.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 8, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	17.9	18.9	22 30	+3.5	22 00	17.5	18.0	22 29	+3.1
02	18.1	20.9	31		02	17.8	18.7	30	
04	19.1	21.4	33		04	18.0	18.9	30	
06	19.0	21.1	32		06	18.3	19.1	30	
08	18.9	21.0	32		08	18.7	19.5	31	
10	18.1	20.2	31		10	18.9	19.7	32	
12	17.8	20.0	31		12	18.9	19.8	32	
14	18.5	20.8	32	+3.5	14	19.0	20.0	32	+3.0
16	18.6	20.6	32		16	19.1	20.1	32	
18	18.9	20.8	32		18	18.9	20.1	32	
20	20.0	21.5	34		20	18.9	20.0	32	
22	20.3	22.1	34		22	19.1	20.1	32	
24	19.8	21.1	33		24	19.1	20.1	32	
26	17.8	19.1	30		26	19.1	20.1	32	
28	17.1	18.2	28		28	19.1	20.3	32	
30	17.1	18.3	29	+3.5	30	19.8	20.9	33	+2.9
32	18.1	18.9	30		32	20.2	21.1	34	
34	18.2	21.1	32		34	20.6	21.4	34	
36	19.1	21.9	33		36	20.9	21.8	35	
38	18.5	21.2	32		38	21.0	21.8	35	
40	16.9	19.8	30		40	21.1	21.9	35	
42	15.8	18.4	28		42	21.4	22.0	35	
44	16.0	18.9	28	+3.4	44	21.8	22.4	36	+2.9
46	15.6	19.2	28		46	22.0	22.8	36	
48.4	15.5	18.8	28		48	22.3	23.2	37	
50	16.1	19.0	28		50	23.0	23.7	38	
52	17.1	19.3	30		52	23.1	23.8	38	
54	17.0	19.1	29		54	23.0	23.7	38	
56	16.1	18.9	28		56	22.3	23.3	37	
58	16.1	18.7	28		58	22.2	23.4	37	
21 00	15.7	18.1	28	+3.3	23 00	22.1	23.3	37	+2.8
02	14.9	17.0	26		02	22.5	23.4	37	
04	14.5	16.7	26		04	22.6	23.7	38	
06	14.1	16.3	25		06	22.9	23.8	38	
08	14.1	16.2	25		08	22.9	23.9	38	
10	14.2	16.8	25		10	23.0	23.8	38	
12	14.6	16.7	26		12	23.1	23.9	38	
14	14.6	16.0	25	+3.2	14	23.1	23.9	38	+2.8
16	14.3	16.0	25		16	23.7	24.3	39	
18	14.2	15.9	25		18	24.7	25.1	40	
20	14.9	16.1	25		20	25.1	25.3	41	
22	15.2	16.6	25		22	24.8	25.0	40	
24	15.0	16.2	26		24	24.8	25.0	40	
26	15.0	16.6	26		26	24.9	25.2	41	
28	16.3	17.2	27		28	24.9	25.3	41	
30	18.1	18.9	30	+3.2	30	25.0	25.4	41	+2.5
32	18.7	19.1	31		32	25.1	25.4	41	
34	18.7	19.1	31		34	25.1	25.8	41	
36	19.0	19.5	31		36	26.0	26.3	42	
38	18.2	19.1	30		38	27.0	27.8	44	
40	17.3	18.2	29		40	27.2	28.0	45	
42	17.8	18.4	30		42	27.5	28.1	45	
44	18.0	18.6	30	+3.2	44	27.3	28.1	45	+2.2
46	17.8	18.1	29		46	27.1	27.9	45	
48	17.2	18.0	29		48	26.8	28.0	44	
50	17.1	17.9	29		50	26.6	27.7	44	
52	17.0	17.4	28		52	26.1	27.2	43	
54	16.9	17.3	28		54	25.3	26.4	42	
56	16.9	17.3	28		56	25.1	26.1	42	
58	17.1	17.8	28		58	25.0	26.1	42	
					24 00	24.9	26.0	41	+2.1

Correction to local mean time is + 07.5s. 90° torsion = 17.′94.
Torsion head at 0h 00m read 60° and at 24h 20m read 41°.
Observer—R. R. T.

Thursday, June 9, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	42.0	40.4	22 25	+2.5	18 00	44.3	42.2	22 21	+2.0
02	41.9	40.2	25		02	44.1	42.1	21	
04	42.5	39.0	26		04	43.7	41.1	22	
06	42.1	38.9	26		06	42.9	40.8	23	
08	42.5	39.0	26		08	42.1	40.2	24	
10	42.7	39.3	25		10	42.1	40.7	23	
12	42.4	39.8	25		12	42.6	41.2	22	
14	42.5	40.0	25	+2.6	14	42.6	41.8	22	+2.1
16	43.0	40.3	24		16	42.1	41.6	23	
18	44.0	41.8	22		18	41.9	40.9	23	
20	43.9	42.8	22		20	41.9	40.2	24	
22	45.2	43.2	20		22	42.0	41.8	22	
24	45.9	43.9	19		24	41.9	40.8	23	
26	45.0	43.3	20		26	42.0	40.6	23	
28	44.9	43.2	21		28	42.1	40.9	23	
30	45.0	43.3	20	+2.6	30	41.9	40.1	24	+2.1
32	44.9	42.8	21		32	41.4	39.9	25	
34	43.2	41.8	23		34	41.1	39.9	24	
36	43.1	41.0	24		36	41.2	39.8	24	
38	43.0	41.0	24		38	41.3	40.1	24	
40	42.2	40.2	25		40	42.5	41.1	22	
42	42.2	40.2	25		42	43.0	41.9	21	
44	42.2	40.8	24	+2.5	44	43.0	41.0	22	+2.1
46	42.1	40.5	24		46	42.9	41.9	21	
48	42.5	40.9	24		48	42.1	41.5	22	
50	42.5	40.9	24		50	41.9	41.3	23	
52	42.7	40.9	24		52	41.8	41.2	23	
54	42.2	40.8	24		54	41.1	41.1	23	
56	41.9	40.2	25		56	42.1	40.9	23	
58	41.9	40.8	24		58	42.6	41.1	22	
17 00	41.5	40.5	25	+2.2	19 00	42.2	41.1	22	+2.1
02	41.9	41.2	24		02	42.1	41.0	22	
04	41.9	41.2	24		04	42.1	40.9	22	
06	42.0	41.8	23		06	41.2	40.7	23	
08	42.0	41.7	24		08	41.6	40.9	23	
10	42.0	41.3	24		10	41.7	41.1	23	
12	41.1	40.3	25		12	41.2	41.0	23	
14	41.7	41.2	24	+2.1	14	42.0	41.3	22	+2.1
16	41.2	40.6	25		16	41.9	41.6	22	
18	41.8	40.9	24		18	41.9	41.1	22	
20	41.3	40.6	25		20	42.1	41.9	21	
22	41.8	40.8	24		22	42.2	42.1	21	
24	42.2	41.0	24		24	42.5	42.4	21	
26	43.5	42.5	21		26	42.2	41.9	21	
28	44.0	42.1	21		28	42.6	41.9	21	
30	44.7	43.3	20	+2.1	30	42.2	41.3	22	+2.0
32	45.2	43.9	19		32	42.2	41.3	22	
34	44.9	43.9	20		34	42.3	41.2	22	
36	44.1	43.5	20		36	42.9	41.9	21	
38	42.8	42.1	22		38	43.8	42.3	20	
40	42.2	42.0	22		40	42.9	41.5	21	
42	42.0	41.4	23		42	43.0	41.9	21	
44	42.5	41.1	23	+2.1	44	43.1	42.2	20	+2.0
46	42.9	41.0	23		46	43.8	42.8	19	
48	43.9	41.9	21		48	44.0	43.0	19	
50	44.1	42.1	21		50	45.0	44.6	17	
52	43.9	41.9	21		52	44.8	44.2	17	
54	43.9	41.9	20		54	44.8	44.2	17	
56	44.9	42.9	20		56	44.8	44.2	17	
58	44.9	42.8	21	+2.0	58	43.9	43.5	18	
					20 00	44.3	40.9	20	+2.0

Correction to local mean time is + 15s. 90° torsion = 17.′78.
Torsion head at 15h 37m read 42° and at 20h 19m read 60°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, June 10, 1904 — Magnet scale erect					Sunday, June 12, 1904 — Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	49.0	49.6	22 30	+4.8	22 00	49.4	50.4	22 30	+3.0
02	48.7	49.9	30		02	48.9	50.1	30	
04	47.1	50.3	28		04	48.0	49.0	28	
06	47.0	50.1	28		06	46.2	47.1	25	
08	46.3	49.6	27		08	44.7	45.3	23	
10	46.0	49.0	27		10	43.1	43.9	20	
12	45.9	48.9	26		12	42.1	43.1	19	
14	45.9	48.9	26	+4.5	14	42.1	42.9	19	+3.0
16	45.7	48.3	26		16	41.7	42.7	18	
18	45.0	47.9	25		18	41.0	41.9	17	
20	44.3	47.1	24		20	40.9	41.6	17	
22	44.3	47.0	24		22	40.2	41.0	16	
24	44.8	47.0	24		24	39.8	41.0	15	
26	44.8	47.0	24		26	39.1	40.2	14	
28	45.0	46.9	24		28	39.8	40.3	15	
30	45.3	47.1	25	+4.1	30	39.9	40.6	15	+2.8
32	44.9	46.9	24		32	40.0	40.9	15	
34	43.2	45.2	21		34	40.1	41.1	16	
36	42.1	44.2	20		36	40.7	41.8	17	
38	42.6	44.9	21		38	41.0	42.0	17	
40	43.2	45.6	22		40	42.0	42.8	19	
42	44.0	46.1	23		42	43.0	43.2	20	
44	44.2	46.3	23	+4.0	44	43.1	43.5	20	+2.7
46	44.1	46.8	23		46	43.4	43.9	20	
48	44.2	46.8	24		48	43.2	43.9	20	
50	44.1	46.1	23		50	43.3	43.7	20	
52	44.0	45.9	22		52	43.5	43.7	20	
54	44.1	45.9	23		54	43.7	43.9	21	
56	44.3	45.9	23		56	43.8	44.1	21	
58	44.2	45.3	22		58	43.1	44.0	20	
21 00	44.1	'45.1	22	+4.0	23 00	42.4	43.9	20	+2.7
02	44.0	45.7	22		02	42.6	42.9	19	
04	44.2	45.9	23		04	41.8	42.0	18	
06	44.1	45.7	22		06	40.9	41.0	16	
08	44.0	45.9	22		08	40.0	40.1	15	
10	45.0	46.4	24		10	39.5	39.8	14	
12	45.9	46.3	24		12	39.1	39.5	14	
14	46.9	48.2	27	+3.9	14	39.5	40.0	14	+2.8
16	47.8	49.1	28		16	40.9	41.5	17	
18	48.1	49.8	29		18	39.9	40.9	16	
20	48.8	49.9	30		20	40.1	41.1	16	
22	49.3	50.5	30		22	40.3	40.7	16	
24	50.0	51.0	31		24	39.3	40.3	15	
26	50.0	50.8	31		26	39.7	40.4	15	
28	50.0	50.6	31		28	40.4	41.2	16	
30	50.2	50.9	31	+3.7	30	41.0	42.0	17	+2.7
32	50.1	51.0	31		32	42.8	44.2	20	
34	50.0	50.9	31		34	43.0	44.7	21	
36	50.3	51.1	32		36	42.9	45.0	21	
38	50.6	51.4	32		38	43.2	45.2	21	
40	50.2	51.0	32		40	43.8	45.1	22	
42	49.9	51.0	31		42	44.0	45.2	22	
44	49.8	50.8	31		44	45.1	46.0	24	+2.7
46	49.2	51.2	31	+3.3	46	46.1	47.3	25	
48	49.1	51.1	31		48	46.2	47.7	26	
50	49.3	51.2	31		50	45.0	46.1	24	
52	50.0	51.0	31		52	44.8	45.5	23	
54	50.0	51.1	31		54	45.8	46.1	24	
56	49.8	50.9	31		56	45.5	48.0	25	
58	49.6	50.7	31		58	44.9	49.4	26	
					24 00	45.9	49.2	27	+2.8
0 00*	52.5	51.2	22 23	+2.0	2 00	34.9	34.0	22 50	+2.1
02	52.1	50.8	24		02	36.0	35.0	48	
04	52.0	50.9	24		04	35.8	35.2	48	
06	52.0	50.5	24		06	34.9	34.2	50	
08	52.0	50.8	24		08	33.9	33.2	52	
10	51.8	49.9	24		10	32.1	31.6	54	
12	52.5	51.1	23		12	32.1	31.8	54	
14	51.1	50.2	25	+1.9	14	31.8	31.0	55	+2.6
16	50.9	49.7	25		16	31.1	30.1	56	
18	49.1	48.1	28		18	31.4	30.8	55	
20	47.2	46.1	31		20	31.1	30.5	56	
22	46.2	45.8	32		22	31.3	30.9	55	
24	46.8	45.9	31		24	31.2	31.0	55	
26	46.0	45.1	33		26	31.1	30.4	56	
28	45.5	44.8	33		28	30.9	30.0	56	
30	45.9	45.1	33	+1.9	30	30.5	29.1	57	+2.6
32	47.0	46.0	31		32	29.5	27.8	22 59	
34	46.6	45.7	32		34	28.3	26.3	23 01	
36	46.2	45.1	32		36	28.8	25.1	02	
38	44.9	43.9	34		38	28.1	26.1	02	
40	44.0	43.1	36		40	28.1	26.7	01	
42	41.2	40.7	40		42	29.0	27.1	00	
44	42.1	41.1	39	+2.0	44	28.9	27.1	00	+2.5
46	41.0	40.0	40		46	28.9	26.9	00	
48	38.9	38.2	44		48	28.5	26.8	23 01	
50	37.7	37.1	45		50	29.9	27.5	22 59	
52	38.1	37.8	45		52	29.2	27.5	23 00	
54	38.0	37.1	45		54	28.0	25.9	02	
56	37.1	36.7	46		56	27.9	25.7	02	
58	36.3	35.7	48		58	27.2	25.1	03	
1 00	34.2	33.3	51	+1.9	3 00	27.1	25.0	03	+2.2
02	33.0	32.1	53		02	27.8	25.7	02	
04	32.9	32.0	53		04	28.8	26.7	01	
06	35.2	35.0	49		06	29.2	27.1	23 00	
08	38.0	37.1	45		08	30.6	29.0	22 57	
10	39.1	38.9	43		10	31.6	30.0	56	
12	40.2	39.1	42		12	31.8	30.0	56	
14	37.9	37.0	46	+1.8	14	32.0	30.0	56	+2.1
16	36.9	36.1	47		16	30.9	29.2	57	
18	36.8	35.9	47		18	30.0	28.2	58	
20	37.9	36.9	46		20	30.2	28.5	58	
22	38.0	37.0	45		22	30.3	28.1	22 58	
24	39.0	38.1	44		24	29.1	27.0	23 00	
26	38.1	36.9	45		26	28.1	26.0	22 59	
28	37.9	36.8	46		28	29.0	26.8	23 00	+2.0
30	37.2	38.9	44	+1.9	30	29.9	27.1	22 59	
32	36.0	34.2	49		32	29.9	27.2	22 59	
34	35.5	34.9	49		34	28.3	26.1	23 01	
36	34.2	32.8	52		36	27.0	25.0	03	
38	37.0	35.7	47		38	25.0	23.1	06	
40	32.3	31.1	54		40	22.0	20.9	11	
42	32.9	31.9	53		42	20.9	19.2	13	
44	32.3	31.6	54	+2.0	44	21.1	20.0	12	+2.0
46	32.1	30.9	55		46	22.0	20.4	11	
48	32.3	31.0	55		48	23.9	23.0	07	
50	32.8	31.8	53		50	26.9	25.1	03	
52	34.3	33.8	51		52	27.7	26.1	02	
54	35.1	34.3	50		54	28.0	26.4	01	
56	33.8	33.1	52		56	23.8	21.8	08	
58	33.9	33.2	52		58	20.0	18.2	14	

Correction to local mean time is — 57s.
Torsion head at 19h 39m read 59° and at 24h 31m read the same.
Observer—J. V.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, June 12, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	18.1	16.9	23 17	+2.0
02	21.0	19.3	12	
04	23.1	22.9	08	
06	23.1	22.9	08	
08	22.9	22.0	09	
10	21.8	21.0	11	
12	20.8	20.1	12	
14	23.0	22.3	09	+1.8
16	23.9	23.0	07	
18	23.0	22.8	08	
20	23.0	22.9	08	
22	22.9	22.8	08	
24	20.9	20.7	11	
26	20.0	19.9	13	
28	19.1	19.0	14	
30	20.6	20.0	12	+1.8
32	21.0	20.9	11	
34	22.0	21.2	10	
36	21.6	20.3	11	
38	20.2	19.1	13	
40	20.8	19.9	12	
42	21.1	20.0	12	
44	20.6	19.7	12	+1.7
46	19.9	17.1	15	
48	19.0	16.3	17	
50	19.0	16.8	16	
52	16.3	14.9	20	
54	15.0	12.5	23	
56	15.0	12.2	23	
58	16.1	14.0	21	
5 00	14.9	11.9	23	+1.6
02	13.3	11.0	25	
04	10.8	9.9	28	
06	11.2	10.0	28	
08	13.1	12.1	24	
10	13.3	12.7	24	
12	9.1	8.9	30	
14*5	32.9	28.0	35	+1.7
16	30.3	27.2	38	
18	29.9	27.2	38	
20	32.6	30.2	34	
22	34.0	31.0	32	
24	33.0	30.2	34	
26	31.9	29.0	35	
28	33.2	31.0	33	
30	34.8	32.1	31	+1.7
32	41.5	38.2	21	
34	41.0	39.0	20	
36	37.2	36.1	26	
38	33.5	32.1	32	
40	33.6	31.9	32	
42	39.3	37.1	23	
44	39.1	38.1	23	+1.7
46	41.9	39.1	20	
48	40.0	38.1	22	
50	39.1	38.3	22	
52	44.1	42.9	15	
54	42.1	40.8	18	
56	43.1	41.9	16	
58	45.0	43.9	14	
6 00	46.8	45.5	23 11	+1.8
02	44.8	43.9	14	
04	41.3	40.1	19	
06	44.9	43.7	14	
08	43.5	42.1	16	
10	43.0	41.9	17	
12	45.5	44.0	13	
14	42.9	40.9	17	+1.8
16	44.1	43.9	14	
18	51.0	49.9	04	
20	48.3	47.8	08	
22	43.5	43.3	15	
24	40.8	38.3	21	
26	42.8	41.9	17	
28	50.3	49.2	05	
30	43.9*b*		14	+1.8
32	43.9	42.3	15	
34	42.5	40.9	18	
36	45.3	44.1	13	
38	47.1	45.8	10	
40	47.1	45.8	10	
42	45.9	44.2	12	
44	48.8	46.8	08	+1.9
46	47.6	45.5	10	
48	48.6	46.1	09	
50	48.9	46.8	08	
52	51.9	50.0	03	
54	44.9	43.8	14	
56	46.1	45.0	12	
58	50.9	49.2	05	+2.0
7 00	46.0	43.3	13	
02	48.0	46.9	09	
04	47.2	45.9	10	
06	48.2	47.0	08	
08	46.0	44.9	12	
10	45.0	44.9	13	
12	46.1	45.0	12	
14	49.0	48.8	06	+2.1
16	45.1	44.6	13	
18	48.9*a*		06	
20	51.3	51.2	03	
22	45.9	45.8	11	
24	40.1	40.1	20	
26	50.1	48.1	06	
28.4	47.0*b*		09	
30	44.9	44.5	13	+2.2
32	Over'l'k'd			
34	50.3	48.1	23 06	
36	55.6	54.1	22 57	
38	53.1	52.9	23 00	
40	48.0	46.0	09	
42	40.9	40.6	19	
44	52.9	51.9	01	+2.3
46	48.9	48.0	23 07	
48	55.0	53.6	22 58	
50	48.0	46.2	23 09	
52	52.2	51.7	02	
54	53.3	51.9	01	
56	52.9	51.1	02	
58	53.2	52.1	01	
8 00	52.0	51.1	02	+2.7

Correction to local mean time is — 1m 22s. 90° torsion = 19.'03.
Torsion head at 0h 00m read 59° and at 8h 17m read 53°.
Observer—J. V.

Monday, June 13, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	50.9	48.7	23 07	+4.8
02	50.9	49.2	07	
04	51.0	48.9	07	
06	51.4	49.3	06	
08	51.1	49.2	06	
10	50.9	49.2	07	
12	48.3	46.8	10	
14	46.2	44.9	14	+5.0
16	45.9	45.1	14	
18	50.8	49.8	06	
20	53.9	52.1	23 02	
22	59.9	58.6	22 52	
24	59.5	58.2	53	
26	61.3	60.3	50	
28	55.1	54.8	22 59	
30	52.5	50.9	23 04	+5.8
32	59.8	59.1	22 52	
34	54.9	54.2	60	
36	57.1	56.8	56	
38	57.9	56.9	55	
40	55.0*a*		59	
42	59.8	59.2	52	
44	58.6	57.9	54	+6.1
46	58.1	57.1	55	
48	61.9	61.1	49	
50	62.0	61.1	49	
52	59.9	59.2	52	
54	58.0	57.2	55	
56	64.2	62.7	45	
58	61.8	60.5	49	
9 00	59.6	58.9	52	+6.7
02	59.5	58.3	53	
04	61.1	60.7	50	
06	61.2	60.2	50	
08	60.2	59.1	52	
10	60.9	60.1	50	
12	61.2	60.9	49	
14	62.8	62.0	47	+7.0
16	62.7	61.3	48	
18	62.9	61.9	47	
20	65.0	64.0	44	
22	64.2	63.9	45	
24	63.2	62.7	46	
26	62.6	62.1	47	
28	63.8	63.0	46	
30	65.2	64.7	43	+7.0
32	64.9	64.6	44	
34.6	63.9	63.9	45	
36	64.0	63.5	45	
38	62.8	62.1	47	
40	62.0	62.0	48	
42	62.3	61.9	48	
44	62.0	61.0	49	+7.0
46	62.7	61.7	48	
48	63.1	62.1	47	
50	62.1	61.3	48	
52	64.9	64.0	44	
54	63.4	62.2	47	
56	63.4	62.1	47	
58	63.2	62.1	47	
10 00	64.1	62.8	22 46	+6.7
02	63.9	62.3	46	
04	63.1	62.0	47	
06	64.9	63.8	44	
08	65.1	63.9	44	
10	64.4	63.2	45	
12	65.9	64.4	43	
14	64.3	62.8	45	+6.1
16	64.0	62.5	46	
18	66.0	65.1	42	
20	66.3	65.2	42	
22	65.9	65.2	42	
24	65.2	64.7	43	
26	65.5	65.0	43	
28	66.0	65.7	42	
30	66.7	66.1	41	+6.1
32	66.9	66.2	41	
34	66.9	66.2	41	
36	66.0	65.1	42	
38	66.1	65.1	42	
40	66.5	65.0	42	
42	65.9	64.1	43	
44	66.1	64.3	43	+6. 0
46	66.0	64.0	43	
48	65.2	63.2	44	
50	64.1	62.3	46	
52	64.2	62.5	46	
54	63.1	61.3	48	
56	63.3	61.6	47	
58	63.4	61.9	47	
11 00	63.2	61.5	47	+5.7
02	63.9	62.0	46	
04	64.6	62.7	45	
06	64.9	63.0	45	
08	65.2	63.2	44	
10	65.1	63.1	44	
12	65.8	63.9	43	
14	65.9	64.0	43	+5.5
16	66.0	63.8	43	
18	67.0	64.9	42	
20	68.0	65.8	40	
22	68.9	66.5	39	
24	69.0	66.8	39	
26	69.0	67.1	38	
28	70.2	68.6	36	
30	70.4	68.4	36	+5.3
32	69.7	68.2	37	
34	68.7	67.2	38	
36	69.1	67.8	38	
38	69.2	68.0	37	
40	69.5	68.2	37	
42	68.7	67.9	38	
44	68.1	67.6	39	+5.1
46	68.0	66.6	39	
48	67.6	66.2	40	
50	67.0	66.0	41	
52	67.3	66.0	41	
54	67.9	66.2	40	
56	67.9	66.3	40	
58	67.8	66.2	40	
12 00	66.9	66.0	41	+5.0

Correction to local mean time is — 1m 44s. 90° torsion = 18.'06.
Torsion head at 7h 50m read 53° and at 12h 20m read 49°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, June 14, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	52.6	54.2	22 35	+1 0	14 00	46.1	47.2	22 24	+0.7
02	52.2	54.6	35		02	46.7	47.4	25	
04	52.3	54.5	35		04	46.3	47.4	24	
06	52.9	54.8	36		06	46.9	47.8	25	
08	52.1	54.4	35		08	47.0	47.8	25	
10	51.1	52.0	32		10	46.9	47.6	25	
12	50.4	52.9	32		12	46.7	47.9	25	
14	50.8	53.1	32	+0.9	14	46.9	48.0	25	+0.8
16	51.0	53.3	33		16	46.3	47.7	25	
18	50.3	52.6	32		18	46.1	47.4	24	
20	49.9	52.1	31		20	42.9	44.1	19	
22	50.3	52.1	31		22	43.5	44.7	20	
24	51.1	52.9	33		24	44.0	44.9	21	
26	51.7	53.4	33		26	44.7	45.6	22	
28	51.2	53.1	33		28	44.8	45.3	22	
30	50.9	52.6	32	+0.8	30	45.2	46.1	23	+0.9
32	50.1	52.1	31		32	45.7	46.8	24	
34	49.2	51.7	30		34	46.2	47.1	24	
36	49.1	51.8	30		36	47.1	48.0	26	
38	50.0	52.9	32		38	46.1	47.1	24	
40	50.2	53.0	32		40	46.9	47.8	25	
42	50.2	52.7	32		42	48.7	49.2	28	
44	50.1	52.0	31	+0.7	44	48.7	49.2	28	+0.9
46	50.1	53.0	32		46	49.1	49.8	28	
48	48.8	51.3	30		48	49.9	50.6	30	
50	48.1	50.3	28		50	50.1	50.9	30	
52	48.7	50.8	29		52	49.9	50.3	30	
54	49.5	51.2	30		54	49.8	50.5	30	
56	50.3	52.1	31		56	50.1	50.8	30	
58	50.6	52.1	32		58	49.8	50.2	30	
13 00	50.2	51.9	31	+0.7	15 00	49.1	49.9	29	+0.9
02	49.2	50.1	29		02	50.0	50.7	30	
04	48.9	49.6	28		04	48.4	49.1	27	
06	49.2	50.2	29		06	47.4	47.9	26	
08	50.0	51.1	30		08	47.1	47.7	25	
10	50.2	51.3	31		10	47.0	47.4	25	
12	49.8	50.8	30		12	47.7	48.0	26	
14	49.2	50.0	29	+0.7	14	47.2	47.9	26	+0.8
16	48.0	49.0	27		16	47.7	48.1	26	
18	47.5	48.5	26		18	48.2	49.0	27	
20	48.7	49.7	28		20	47.3	48.0	26	
22	47.9	48.9	27		22	47.9	48.8	27	
24	49.1	50.1	29		24	47.5	48.2	26	
26	49.6	50.1	29		26	46.2	47.1	24	
28	49.5	50.0	29		28	47.2	48.2	26	
30	50.3	50.9	30	+0 7	30	47.8	48.8	27	+0.7
32	49.6	49.9	29		32	47.9	48.8	27	
34	49.8	49.8	29		34	47.9	48.9	27	
36	49.1	49.4	28		36	47.9	48.8	27	
38	49.0	49.0	28		38	47.1	47.9	26	
40	48.3	48.8	27		40	46.9	47.7	25	
42	48.2	48.6	27		42	47.1	48.0	26	
44	48.2	48.9	27	+0.7	44	49.1	49.9	29	+0.4
46	48.2	49.2	27		46	50.4	51.4	31	
48	48.1	49.1	27		48	51.9	53.0	33	
50	47.9	48.9	27		50	52.6	53.9	34	
52	47.2	48.2	26		52	51.1	52.1	32	
54	46.4	47.4	25		54	49.2	50.1	29	
56	46.6	47.7	25		56	46.3	47.1	24	
58	46.2	47.2	24		58	43.7	44.0	20	
					16 00	40.3	41.1	15	+0.2

Correction to local mean time is + 19.5s.
Torsion head at 12h 00m read 51° and at 16h 15m read the same.
Observer—J. V.

Wednesday, June 15, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	54.0	53.7	22 41	+1.3	2 00	46.0	45.8	22 54	+1.0
02	51.0	50.9	46		02	46.3	46.0	53	
04	49.8	49.4	48		04	45.1	45.0	55	
06	47.0	46.5	52		06	42.1	42.0	22 60	
08	45.3	45.2	55		08	41.0	40.9	23 01	
10	44.0	43.8	57		10	37.1	36.9	08	
12	42.9	42.9	58		12	35.1	35.0	11	
14	43.6	43.4	22 57	+1.2	14	34.9	34.1	11	+1.0
16	42.1	41.9	23 00		16	34.2	33.0	13	
18	41.9	41.1	23 00		18	34.9	34.0	12	
20	42.9	41.8	22 59		20	31.1	30.8	17	
22	46.0	45.4	54		22	31.1	30.9	17	
24	45.1	44.4	55		24	34.1	33.8	12	
26	45.1	44.5	55		26	35.1	34.0	11	
28	44.2	43.9	56		28	35.0	34.1	11	
30	43.0	42.2	59	+1.2	30	39.0	38.8	04	+1.0
32	42.8	42.7	58		32	37.0	36.3	08	
34	46.0	45.8	54		34	38.9	38.1	05	
36	47.1	46.8	52		36	40.2	39.6	03	
38	47.6	47.1	51		38	39.2	38.1	05	
40	48.1	47.1	51		40	37.0	36.0	08	
42	45.9	45.0	54		42	35.8	35.0	10	
44	46.0	45.9	53	+1.1	44	36.9	36.2	08	+1.0
46	42.6	41.1	60		46	39.6	38.8	04	
48	43.6	42.2	58		48	39.8	39.1	04	
50	44.0	43.1	57		50	36.3	36.1	09	
52	45.0	44.7	55		52	33.9	33.1	13	
54	45.8	45.0	54		54	33.4	33.0	14	
56	45.3	44.5	55		56	34.0	33.8	13	
58	44.1	43.9	56		58	35.8	35.3	10	
1 00	45.3	44.1	55	+1.1	3 00	37.4	37.1	23 07	+1.0
02	46.0	45.8	54		02	49.0	48.8	22 49	
04	45.9	45.1	54		04	40.3	39.9	23 03	
06	43.9	43.1	22 57		06	41.2	40.8	23 01	
08	41.8	41.0	23 01		08	43.3	42.9	22 58	
10	41.1	40.1	02		10	47.0	46.1	53	
12	39.8	39.1	04		12	49.9	49.2	48	
14	39.8	39.6	03	+1.1	14	51.1	50.9	46	+1.0
16	42.1	41.6	00		16	50.9	50.7	46	
18	40.1	39.3	03		18	46.8	46.5	22 52	
20	40.0	39.7	03		20	41.9	40.9	23 01	
22	40.0	39.2	03		22	32.9*b*		14	
24	39.8	39.0	04		24	20.0*b*		34	
26	38.2	36.8	07		26	10.8	10.5	49	
28	36.9	36.8	08		28	18.5	17.1	38	
30	40.7	39.9	23 02	+1.1	30	26.1	24.3	26	+1.0
32	43.8	43.3	22 57		32	31.0	28.8	19	
34	42.5	41.9	59		34	32.9	30.2	16	
36	44.0	43.9	57		36	33.1	31.0	15	
38	44.2	44.1	56		38	34.8	32.2	13	
40	44.2	44.1	56		40	35.7	33.8	11	
42	43.8	43.6	57		42	36.2	34.2	10	
44	44.1	43.9	56	+1.0	44	36.3	34.8	10	+1.1
46	45.7	45.2	54		46	37.9	36.0	08	
48	47.0	46.9	52		48	39.0	37.1	06	
50	47.8	47.2	51		50	38.8	37.0	06	
52	48.2	48.1	50		52	34.8	32.8	12	
54	48.8	48.4	49		54	30.4	29.0	19	
56	47.9	47.9	50		56	27.0	25.5	24	
58	46.9	46.8	52		58	26.1	24.7	26	

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 15, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
02	21.8	20.0	33	
4 00	24.8	23.0	23 28	+1.1
04	20.0	18.8	35	
06	18.9	17.9	37	
08	21.1	20.9	33	
10	26.3	25.8	25	
12	31.1	30.0	18	
14	30.9	29.2	18	+1.2
16	26.2	25.9	25	
18	20.8	20.2	33	
20	17.1	16.3	39	
22	15.0	14.2	43	
24	15.0	14.2	43	
26	15.9	15.2	41	
28	13.8	13.7	44	
30	12.8	12.2	46	+1.2
32	12.0	11.9	47	
34	13.1	12.5	46	
36	14.2	13.6	44	
38	16.3	15.7	40	
40	18.9	18.0	37	
42	18.2	17.7	37	
44	18.3	18.0	37	+1.4
46	17.3	17.1	39	
48	14.5	14.1	43	
50	15.5	15.2	42	
52	16.9	16.7	39	
54	15.0	15.0	42	
56	12.6	12.2	46	
58	10.5*b*		49	
5 00	12.2	12.2	46	+1.5
02	18.9	18.8	36	
04	14.1	14.1	43	
06	14.0	14.0	44	
08	13.2	13.1	45	
10	14.9	14.8	42	
12	14.1	13.9	44	
14	15.9	15.8	41	+1.8
16	17.1	16.0	40	
18	15.2	14.3	43	
20	15.2	14.2	43	
22	15.2	14.1	43	
24	18.3	18.1	37	
26	13.9	13.3	44	
28	15.2	14.8	42	
30	13.2	12.9	45	+1.8
32	14.0	12.7	45	
34	14.2	13.1	44	
36	14.7	14.1	43	
38	16.9	16.0	40	
40	18.6	18.2	37	
42	22.5	22.0	31	
44	24.1	22.9	29	
46	22.2	20.3	32	
48	19.0	17.0	37	
50	16.9	14.9	41	
52	17.8	14.8	40	
54	22.9	19.2	33	
56	28.8	26.0	23	
58	32.0	29.7	17	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
02	22.1	20.2	32	
6 00	29.9	26.7	23 21	+1.7
04	17.3	16.2	39	
06	18.9	18.7	36	
08	22.0	21.0	32	
10	23.8	22.8	29	
12	21.3	19.6	34	
14	10.2	9.8	50	+1.7
16	13.2	11.1	46	
18	15.9	14.8	42	
20	16.8	15.0	41	
22	19.8	19.0	35	
24	20.0	19.8	34	
26	17.8	17.3	38	
28	17.6	17.1	38	
30	18.3	17.9	37	+1.6
32	20.0	19.3	35	
34	20.1	18.1	36	
36	20.8	19.8	34	
38	20.0	18.1	36	
40	19.0	17.7	37	
42	19.5	17.9	36	
44	20.2	19.9	34	+1.6
46	21.2	20.4	33	
48	23.2	22.9	29	
50	26.0	25.1	26	
52	26.9	26.0	24	
54	32.8	31.0	16	
56	33.0	31.8	15	
58	26.8	26.6	24	
7 00	26.8	25.4	24	+1.6
02	Lost			
04	Lost			
06.9	21.3	21.1	32	
08	21.0	20.8	33	
10	23.3	23.1	29	
12	18.5	18.1	37	
14	24.5*a*		27	+1.5
16	27.0	26.3	24	
18	26.9	26.0	24	
20	24.0	23.7	28	
22	27.3	26.0	24	
24	19.9	18.5	36	
26	21.2	20.9	33	
28	22.0	21.4	32	
30	25.8	24.0	27	+1.7
32	23.0	22.9	30	
34	19.3	18.9	36	
36	20.0	19.9	34	
38	19.8	18.9	35	
40	23.8	23.7	28	
42	20.2	17.9	36	
44	22.0	21.9	31	+1.8
46	24.7	23.6	28	
48	27.8	26.1	23	
50	30.9	30.0	18	
52	27.2	27.0	23	
54	28.9	28.0	21	
56	30.1	29.5	19	
58	29.0	28.6	20	

Observer—J. V.

Wednesday, June 15, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
8 00	32.3	31.1	23 16	+1.9
02	32.9	32.2	15	
04	32.1	30.9	16	
06	38.0	36.6	07	
08	36.8	35.9	08	
10	36.4	35.5	09	
12	39.2	38.0	05	
14	40.5	38.6	04	+2.0
16	39.0	36.9	06	
18	36.1	35.0	10	
20	43.0	40.6	00	
22	31.2	30.2	17	
24	39.0	38.5	05	
26	34.2	34.0	12	
28	29.9	28.5	20	
30	35.6	34.4	11	+2.2
32	27.5	26.2	23	
34	34.3	33.1	13	
36	34.3	33.0	13	
38	32.4	30.4	16	
40	40.3	38.6	04	
42	39.0	36.1	07	
44	41.3	39.8	23 02	+2.3
46	45.8	44.3	22 55	
48	42.0	40.2	23 01	
50	44.5	42.7	22 57	
52	47.2	45.2	53	
54	47.8	46.0	52	
56	46.7	45.2	54	
58	53.9	51.5	43	
9 00	55.1	53.8	40	+2.5
02	54.0	52.9	42	
04	54.0	52.6	42	
06	57.6	56.9	36	
08	55.6	54.8	39	
10	54.4	53.1	41	
12	54.7	53.1	41	
14	55.2	53.8	40	+2.5
16	54.5	52.5	42	
18	55.7	53.2	40	
20	57.1	55.6	37	
22	55.3	54.1	40	
24	55.2	53.0	41	
26	50.3	48.7	48	
28	49.3	47.4	50	
30	51.1	50.3	46	+2.5
32	56.0	54.3	39	
34	56.9	55.3	37	
36	51.3	49.3	47	
38	50.1	48.5	48	
40	51.6	50.6	45	
42	54.1	52.9	42	
44	52.3	51.8	44	+2.5
46	55.0	53.8	40	
48	56.5	55.0	38	
50	53.5	53.0	42	
52	54.6	52.8	41	
54	53.7	53.1	42	
56	56.5	55.3	38	
58	47.5	47.3	51	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
10 00	52.8	52.5	22 43	+2.5
02	52.0	51.3	45	
04	47.6	46.9	51	
06	53.6*a*		41	
08	57.0	56.7	36	
10	56.0	56.0	38	
12	57.0	56.5	37	
14	58.3	58.0	34	+2.6
16	57.0	56.0	37	
18	54.3	53.3	41	
20	53.3	52.3	43	
22	50.7	50.2	46	
24	51.8	50.3	46	
26	51.8	50.6	45	
28	53.0	51.0	44	
30	54.3	51.6	42	+2.5
32	54.0	51.3	43	
34	54.3	50.8	43	
36	53.3	50.2	44	
38	56.1	53.3	40	
40	59.8	56.2	34	
42	57.6	54.6	37	
44	50.3	47.3	49	+2.6
46	55.1	50.6	43	
48	51.6	48.3	47	
50	54.1	49.6	44	
52	53.6	52.8	42	
54	50.8	50.3	46	
56	50.6	50.1	46	
58	52.0	50.9	45	
11 00	49.3	48.9	48	+2.6
02	50.6	50.2	46	
04	48.3	48.1	50	
06	48.3	48.0	50	
08	53.0	52.4	43	
10	55.0	54.3	40	
12	52.0	52.0	44	
14	52.3	52.3	43	+2.6
16	51.6	51.3	45	
18	52.3	51.3	44	
20	49.6	49.4	48	
22	53.6	53.0	42	
24	54.9	53.1	41	
26	57.7	57.0	36	
28	60.3	59.3	32	
30	61.0	59.0	31	+2.5
32	59.8	57.1	34	
34	57.5	55.3	37	
36	57.0	55.5	37	
38	57.3	55.6	37	
40	56.6	55.2	38	
42	58.3	55.3	36	
44	57.3	52.8	39	+2.5
47	58.5	54.3	37	
48	58.1	53.8	38	
50	58.3	54.5	37	
52	54.1	51.2	43	
54	53.1	49.3	45	
56	54.0	50.0	44	
58	54.0	50.8	43	

Observers—J. V. and W. J. P., who alternated from 8h 06m to 8h 16m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 15, 1904					Magnet scale inverted					Wednesday, June 15, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	54.0	50.3	22 44	+2.7	14 00	63.6	62.4	22 27	+3.8	16 00	58.6	56.2	22 35	+4.2	18 00	77.5	76.3	21 25	+4.8
02	54.2	49.9	44		02	61.5*b*		29		02	58.8	56.3	35		02	75.4	73.1	21 29	
04	57.3	53.0	39		04	58.3	57.3	35		04	57.8	55.1	37		04	55.0	52.2	22 01	
06	58.2	54.1	37		06	48.4	48.0	50		06	52.2	49.9	46		06*	52.7	50.1	21 24	
08	57.5	54.0	38		08	46.3	45.3	54		08	51.9	49.8	46		08	54.9	52.1	21	
10	58.0	55.2	37		10	45.6	45.3	54		10	55.0	52.8	41		10	58.0	55.3	16	
12	61.2	59.2	31		12	47.3	46.1	52		12	55.1	53.1	40		12	64.1	61.7	21 06	
14	63.1	62.0	27	+2.9	14	64.0	62.6	26	+3.8	14	58.1	56.6	36	+4.3	14	69.9	68.2	20 57	+4.3
16	63.3	60.6	28		16	57.0	56.0	37		16	56.5	55.0	38		16	72.3	70.4	53	
18	65.8	60.8	26		18	60.6	59.2	32		18	55.7	53.6	40		18	74.0	72.5	50	
20	66.7	62.3	24		20	61.3	60.4	30		20	56.7	54.3	38		20	76.5	75.2	46	
22	67.9	64.6	22		22	60.5	59.9	31		22	51.9	50.3	45		22	76.3	75.1	46	
24	66.7	65.3	22		24	59.8	59.0	32		24	51.1	49.2	47		24	75.0	73.9	48	
26	68.2	66.2	20		26	59.9	57.9	33		26	51.9	49.7	46		26	76.9	74.8	46	
28	72.0	69.0	15		28	49.8	48.8	48		28	55.3	53.1	40		28	74.1	72.3	50	
30	71.0	68.7	16	+3.0	30	48.0	46.6	51	+3.9	30	55.8	53.6	40	+4.6	30	75.1	73.3	49	+4.0
32	68.8	67.2	19		32	48.3	47.1	51		32	54.0	52.8	42		32	73.8	71.5	51	
34	69.3	64.3	21		34	50.4	49.3	47		34	53.2	51.0	44		34	72.0	70.3	53	
36	71.0	67.2	17		36	47.5	47.0	51		36	55.9	53.1	40		36	67.9	66.5	60	
38	70.1	65.9	19		38	48.6	47.5	50		38	58.7	56.2	35		38	68.8	66.9	59	
40	69.6	65.7	19		40	50.3	49.7	47		40	57.1	54.6	38		40	70.9	68.8	56	
42	61.7	59.3	30		42	51.8	50.4	45		42	49.7	46.8	50		42	72.9	70.8	52	
44	65.7	63.3	24	+3.1	44	51.0	49.5	47	+3.9	44	56.1	55.0	38	+4.7	44	72.4	69.5	54	+3.9
46	66.9	64.6	22		46	51.4	50.3	46		46	65.1	64.7	24		46	72.2	70.2	53	
48	65.8	63.4	24		48	54.1	53.6	41		48	68.1	66.9	20		48	71.2	69.1	55	
50	66.6	64.1	23		50	55.7	54.3	39		50	62.3	62.1	28		50	72.8	71.1	52	
52	65.0	61.5	26		52	57.9	57.3	35		52	59.1	55.9	35		52*	52.7	47.6	45	
54	67.3	64.3	22		54	56.0	55.3	38		54	57.9	55.1	37		54	54.3	49.7	42	
56	63.8	59.0	29		56	53.3	53.2	42		56	60.7	57.9	32		56	53.6	49.2	43	
58	65.5	60.0	27		58	56.3	55.3	38		58	63.9	61.1	27		58	53.1	49.1	43	
13 00	64.6	59.8	28	+3.3	15 00	52.2	51.5	44	+4.0	17 00	74.8	71.1	11	+4.7	19 00	52.2	42.1	50	+3.8
02	53.5	48.0	22 46		02	54.3	54.0	40		02	75.8	73.7	08		02	49.7	45.6	49	
04	44.3	38.5	23 01		04	56.0	55.1	38		04	74.0	72.1	11		04	49.1	45.5	49	
06	47.3	44.9	22 53		06	58.6	57.1	35		06	74.6	73.1	10		06	48.2	45.0	50	
08	44.9	42.6	57		08	58.0	57.0	35		08	77.8	76.0	05		08	49.4	46.6	48	
10	46.8	44.6	54		10	57.3	56.5	36		10*	53.9	51.5	03		10	45.7	41.3	55	
12	48.2	47.8	50		12	58.3	57.3	35		12	55.8	53.3	22 00		12	46.9	42.8	53	
14	50.2	49.5	47	+3.5	14	57.6	57.3	35	+4.1	14	56.3	54.0	21 59	+4.7	14	45.3	40.5	20 56	+3.8
16	51.8	51.2	45		16	55.0	54.8	39		16	53.5	51.2	22 03		16	40.9	37.9	21 02	
18	55.9	55.0	39		18	51.5	51.5	45		18	53.6	50.2	22 04		18	39.5	36.3	04	
20	60.0*a*		31		20	50.0	49.3	48		20	56.9	53.9	21 59		20	39.7	36.9	21 03	
22	65.3	64.0	24		22	47.0	45.6	53		22	56.1	53.7	21 59		22	53.1	49.3	20 43	
24	65.9	65.3	23		24	46.0	45.5	54		24	44.5	39.1	22 20		24	53.8	49.8	42	
26	66.2	64.3	23		26	44.3	43.3	57		26	31.3	26.8	40		26	52.8	49.0	43	
28	58.3	57.6	35		28	45.8	44.6	55		28	32.9	29.4	37		28	54.2	50.7	41	
30	50.8	48.5	48	+3.8	30	48.0	47.0	51	+4.0	30	41.1	36.9	24	+4.8	30	61.1	57.9	30	+3.7
32	46.6	46.2	53		32	52.0	50.6	45		32	37.4	33.7	30		32	54.8	51.0	41	
34	49.0	47.5	50		34	56.6	55.0	38		34	40.9	36.2	25		34	49.9	47.1	47	
36	54.1	53.1	41		36	54.0	52.5	42		36	36.0	32.1	32		36	51.3	48.7	45	
38	62.3	60.7	29		38	56.8	54.7	38		38	32.2	28.9	38		38	49.9	46.1	48	
40	61.3	59.2	31		40	56.8	54.5	38		40	29.8	27.0	41		40	47.0	44.0	52	
42	56.8	54.8	38		42	56.1	52.2	40		42	34.4	34.0	32		42	47.0	43.1	53	
44	56.2	53.6	39	+3.8	44	52.8	51.4	44	+4.0	44	36.0	35.3	30	+4.9	44	45.9	42.3	54	+3.7
46	64.3	61.5	27		46	53.3	51.0	44		46	35.8	35.0	30		46	46.2	44.0	53	
48	70.8	69.4	15		48	52.6	50.3	45		48	36.8	35.0	22 29		48	43.7	41.1	20 57	
50	72.6	71.0	13		50	52.6	50.1	45		50	56.0	54.1	21 59		50	39.8	37.8	21 03	
52	74.8	73.3	09		52	53.1	50.6	44		52	61.2	58.7	52		52	37.9	36.2	06	
54	71.0	70.6	14		54	54.1	51.5	43		54	68.3	66.9	39		54	40.0	38.2	21 02	
56	71.0	70.3	15		56	54.7	52.1	42		56	68.9	68.1	38		56	42.3	40.9	20 58	
58	65.3	64.0	24		58	56.3	53.5	39		58	74.1	73.8	30		58	43.2	41.9	57	

Observers—W. J. P. and R. R. T., who alternated from 15h 38m to 15h 52m.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 15, 1904					Magnet scale inverted					Thursday, June 16, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	44.1	42.9	20 55	+3.7	22 00	44.9	32.7	21 19	+4.2	16 00*	32.1	32.8	21 25	+1.0	18 00	18.9	21.1	21 06	0.0
02	43.3	42.4	56		02	48.1	36.6	13		02	32.8	34.2	27		02	16.8	18.2	21 02	
04	44.7	43.1	55		04	42.9	30.1	22		04	29.1	31.1	22		04	14.6	17.4	20 60	
06	45.1	44.7	53		06	41.9	30.9	22		06	29.2	31.7	22		06*	29.1	30.4	42	
08	46.8	45.3	51		08	44.2	33.6	18		08	31.8	33.2	26		08	28.2	34.1	44	
10	43.4	42.9	56		10	41.3	31.9	22		10	28.2	30.1	20		10	30.3	35.9	48	
12	45.0	44.1	54		12	39.9	30.8	24		12	26.3	29.6	18		12	32.8	38.1	51	
14	42.2	41.9	58	+3.8	14	35.9	27.3	30	+4.1	14	27.4	30.8	20	+0.6	14	32.9	38.2	51	+0.1
16	43.1	42.6	56		16	35.7	27.8	30		16	24.0	28.1	15		16	33.9	35.0	50	
18	44.0	43.2	55		18	33.8	27.3	32		18	19.0	23.1	07		18	28.9	35.1	46	
20	44.9	44.1	54		20	28.1	21.9	40		20	25.2	32.0	19		20	28.9	34.0	45	
22	44.9	44.0	54		22	30.1	24.9	36		22.6	30.0	32.1	23		22	25.7	31.0	40	
24	47.2	46.1	50		24	27.9	22.5	40		24	24.8	29.0	17		24	25.1	30.2	39	
26	49.9	47.9	47		26	31.8	26.0	34		26	17.8	20.0	21 04		26	25.0	30.3	39	
28	50.4	49.9	45		28	24.0	18.0	47		28	13.0	16.7	20 57		28	25.0	29.3	38	
30	50.0	49.0	46	+3.9	30	18.1	13.2	55	+4.0	30	9.8	13.0	52	+0.4	30	25.2	30.7	40	+0.2
32	48.9	47.0	48		32	17.8	13.1	55		32	12.3	13.7	20 55		32	27.3	32.0	42	
34	55.3	53.5	38		34	18.3	14.3	54		34	16.3	19.9	21 03		34	30.2	34.3	46	
36	59.2	58.4	31		36	20.3	16.2	51		36	22.0	22.9	10		36	33.0	37.0	51	
38	55.6	54.9	37		38	17.2	12.9	56		38	25.2a		14		38	36.8	39.3	55	
40	53.8	53.0	40		40	14.9	11.0	59		40	28.0	28.7	19		40	37.1	40.1	56	
42	63.3	61.4	26		42	16.9	12.8	56		42	27.0	28.1	18		42	36.5	39.2	55	
44	66.8	63.2	22	+4.1	44	16.9	13.8	56	+4.0	44	41.0	41.0	39	+0.3	44	35.2	38.2	53	+0.2
46	72.1	69.2	20 13		46	17.2	14.1	55		46	45.7	46.3	47		46	34.8	38.3	53	
48*	58.0	53.0	19 57		48	14.0	11.3	60		48	43.0	45.8	44		48	33.9	37.0	51	
50	49.3	41.1	20 13		50	14.4	12.0	59		50	40.0	44.0	40		50	37.0	40.2	20 56	
52	53.1	52.0	01		52	14.7	12.5	58		52	43.3	47.5	46		52	40.0	42.8	21 01	
54	52.0	48.0	05		54	14.8	12.2	58		54	43.3	48.1	46		54	46.0	48.9	10	
56	49.2	43.9	11		56	16.0	13.9	56		56	43.2	46.2	45		56	46.8	49.2	11	
58	48.7	43.2	12		58	17.8	15.1	54		58	43.1	45.3	44		58	49.8	52.5	16	
21 00	52.2	43.4	09	+4.0	23 00	15.9	14.1	56	+3.8	17 00	46.2	47.0	48	+0.1	19 00	51.6	54.0	19	+0.2
02	43.9	36.1	21		02	13.9	12.0	59		02	48.1	49.8	51		02	53.7	56.0	22	
04	46.8	44.1	13		04	14.6	12.4	58		04	48.1	51.9	53		04	55.0	57.8	24	
06	34.0	30.8	33		06	16.7	14.5	55		06	50.8	51.9	55		06	51.3	54.1	18	
08	43.9	40.0	18		08	18.9	16.8	52		08	47.8	50.3	51		08	51.8	54.0	19	
10	38.2	34.6	27		10	17.9	15.8	53		10	43.9	45.0	44		10	52.7	55.3	20	
12	38.9	32.9	27		12	15.9	13.3	57		12	46.5	48.0	49		12	51.9	55.5	20	
14	35.8	31.1	31	+3.9	14	17.0	14.8	55	+3.7	14	46.9	49.9	50	0.0	14	48.7	52.0	15	+0.2
16	34.7	31.8	32		16	20.1	18.8	49		16	49.3	52.3	54		16	47.4	50.9	13	
18	32.1	27.9	37		18	20.4	19.0	49		18	46.2	51.0	51		18	56.2	57.2	25	
20	31.5	28.9	36		20	18.0	16.9	52		20	44.9	48.3	48		20	63.1	68.1	39	
22	37.8	30.2	30		22	16.2	15.7	55		22	49.0	54.1	55		22	58.9	62.8	31	
24	22.4	15.2	54		24	18.1	17.7	52		24	49.0	55.0	56		24	65.0	66.0	38	
26	26.1	21.2	47		26	22.1	21.8	45		26	51.8	56.1	21 59		26	63.0	63.2	35	
28	25.4	19.5	49		28	20.8	19.3	48		28	52.0	57.8	22 01		28	49.0	50.7	14	
30	19.3	13.9	58	+4.1	30	15.8	15.1	55	+3.4	30	50.9	53.2	21 56	0.0	30	46.3	47.8	10	+0.1
32	20.1	14.2	20 57		32	15.8	14.1	56		32	55.9	59.8	22 05		32	45.9	48.0	09	
34	16.7	10.3	21 02		34	17.3	16.0	54		34	53.1	56.8	22 01		34	45.2	47.8	09	
36	15.2	10.5	04		36	20.8	18.7	49		36	50.1	54.1	21 56		36	40.2	42.2	00	
38*	66.4	51.6	30		38	23.0	21.1	45		38	52.0	56.5	60		38	45.0	46.1	07	
40	72.1	55.9	22		40	25.4	23.8	41		40	52.5	56.1	60		40	40.9	41.9	01	
42	71.5	58.0	20		42	29.2	28.1	35		42	46.9	50.8	51		42	40.8	44.6	03	
44	74.0	58.2	21 18	+4.1	44	30.1	29.0	33	+3.1	44	51.7	54.8	58	0.0	44	39.9	42.9	21 01	0.0
46*	62.7	42.0	20 57		46	27.9	27.1	36		46	42.6	45.1	43		46	31.0	34.9	20 47	
48	61.0	41.9	59		48	24.8	24.1	41		48	29.9	33.9	24		48	22.0	27.9	35	
50	63.9	43.1	56		50	25.5	24.8	40		50	26.8	29.8	19		50	26.0	32.3	20 41	
52	64.3	47.3	52		52	25.0	24.1	41		52	29.9	31.2	22		52	43.8	49.8	21 09	
54	63.7	47.6	20 52		54	22.4	22.0	45		54	31.7	34.7	27		54	43.2	50.1	09	
56	53.8	42.3	21 04		56	19.9	19.1	49		56	29.9	33.0	24		56	51.2	56.5	20	
58	49.3	36.7	12		58	19.0	18.9	50		58	23.8	25.8	13		58	49.1	53.8	16	
					24 00	16.9	15.3	54	+3.0						20 00	55.0	58.0	24	0.0

Correction to local mean time is — 35s. 90° torsion = 15.′36.
Torsion head at oh oom read 51° and at 24h 20m read 50°.
Observer—R. R. T.

Correction to local mean time is — 0.5s. 90° torsion = 17.′14.
Torsion head at 15h 44m read 50° and at 20h 16m read 49°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, June 17, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	46.2	45.8	22 20	−0.5
02	52.1	51.0	11	
04	51.8	51.0	11	
06	45.5	44.2	22	
08	49.0	47.8	16	
10	54.2	53.0	08	
12	58.3	57.2	01	
14	58.9	57.4	22 01	−0.7
16	59.9	58.2	21 59	
18	59.9	58.6	21 59	
20	55.9	54.0	22 06	
22	52.3	51.0	11	
24	51.7	50.2	12	
26	51.0	49.9	13	
28	51.5	50.5	12	
30	49.9	48.8	15	−0.8
32	48.0	46.9	18	
34	47.9	46.3	18	
36	46.9	45.8	19	
38	43.6	42.9	24	
40	44.9	43.9	22	
42	45.8	44.6	21	
44	45.2	44.7	22	−1.0
46	45.7	44.1	22	
48	45.9	45.2	21	
50	45.8	45.3	21	
52	46.0	45.5	20	
54	44.9	44.9	22	
56	42.5	42.3	26	
58	41.9	41.2	27	
21 00	41.8	41.3	27	−1.0
02	39.9	39.3	30	
04	40.0	39.5	30	
06	40.2	41.1	28	
08	39.9	39.1	30	
10	41.2	40.0	28	
12	45.0	44.3	22	
14	45.3	44.9	21	−1.0
16	49.3	48.0	16	
18	51.0	50.8	22 12	
20	61.1	59.0	21 58	
22	58.3	56.9	22 02	
24	54.5	53.5	07	
26	52.6	51.1	11	
28	52.5	51.6	10	
30	52.1	50.9	11	−1.0
32	50.6	50.1	13	
34	49.1	48.3	16	
36	50.3	49.2	14	
38	51.8	50.3	12	
40	50.9	50.3	13	
42	51.5	51.0	12	
44	50.4	50.2	13	−1.0
46	50.1	49.9	14	
48	50.8	50.0	13	
50	51.3	51.1	12	
52	53.1	52.9	09	
54	52.6	51.8	10	
56	53.2	52.8	09	
58	52.1	51.8	11	
22 00	52.0	51.3	22 11	−1.0
02	52.1	51.1	11	
04	52.0	51.1	11	
06	51.9	50.1	12	
08	51.8	50.6	12	
10	50.8	49.9	13	
12	50.3	49.9	13	
14	52.1	51.3	11	−1.0
16	54.8	53.9	07	
18	56.7	55.5	04	
20	51.4	50.8	12	
22	55.8	55.0	05	
24	52.9	52.8	09	
26	52.0	51.3	11	
28	52.9	52.1	10	
30	51.0	50.0	13	−1.0
32	47.9	46.8	18	
34	46.2	44.9	21	
36	45.0	43.7	22	
38	44.5	42.3	24	
40	45.3	43.6	22	
42	44.1	42.9	24	
44	43.9	42.1	24	−1.1
46	45.0	43.7	22	
48	46.2	45.9	20	
50	49.1	48.2	16	
52	46.9	45.7	19	
54	46.8	45.1	20	
56	43.3	41.9	25	
58	40.7	38.9	30	
23 00	38.0	36.1	34	−1.1
02	36.8	35.3	36	
04	36.1	35.0	36	
06	35.6	34.3	37	
08	36.6	35.3	36	
10	37.0	36.0	35	
12	36.8	35.9	35	
14	38.1	36.9	33	−1.1
16	40.3	39.9	29	
18	40.2	36.0	32	
20	43.0	41.9	26	
22	45.0	43.9	22	
24	46.1	45.0	21	
26	45.5	44.7	21	
28	43.1	41.2	26	
30	42.0	40.6	27	−1.2
32	40.8	39.3	29	
34	39.9	38.8	30	
36	39.8	38.8	30	
38	40.3	39.2	30	
40	41.2	40.2	28	
42	42.0	40.6	27	
44	46.9	45.2	20	−1.2
46	41.3	39.5	29	
48	42.1	40.0	28	
50	42.7	40.1	27	
52	41.0	39.2	29	
54	39.1	37.6	32	
56	37.8	36.1	34	
58	36.7	35.5	35	
24 00	35.0	34.0	38	−1.2

Correction to local mean time is — 55s. 90° torsion = 17.′30.
Torsion head at 19h 36m read 48° and at 24h 18m read 55°.
Observer—J. V.

Sunday, June 19, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	59.0	59.8	22 33	+0.9
02	59.1	60.8	34	
04	59.8	61.1	34	
06	60.2	61.6	35	
08	60.4	61.8	36	
10	59.9	61.0	34	
12	59.8	60.5	34	
14	59.2	60.1	33	+0.6
16	60.6	61.1	35	
18	60.8	61.3	35	
20	60.6	61.2	35	
22	60.9	61.3	36	
24	60.7	61.9	36	
26	61.7	62.1	37	
28	61.3	62.0	36	
30	60.9	61.8	36	+0.8
32	60.5	61.4	35	
34	58.9	59.4	32	
36	55.3	56.1	27	
38	58.9	59.9	33	
40	55.0	56.1	27	
42	56.9	57.7	30	
44	58.0	59.0	31	+0.9
46	58.0	59.1	31	
48	57.1	58.5	30	
50	54.9	56.1	27	
52	53.7	54.1	24	
54	52.8	54.0	23	
56	52.2	53.8	23	
58	53.1	54.2	24	
1 00	54.1	55.4	25	+0.9
02	55.1	56.2	27	
04	55.1	56.9	27	
06	56.6	57.8	29	
08	56.1	57.4	29	
10	56.1	57.2	28	
12	56.2	57.0	28	
14	56.0	56.8	28	+0.9
16	55.5	56.2	27	
18	56.1	57.0	28	
20	57.1	58.1	30	
22	57.1	58.1	30	
24	57.8	58.2	31	
26	57.8	58.9	31	
28	57.9	58.8	31	
30	57.2	58.3	30	+1.0
32	56.0	57.1	28	
34	55.1	56.1	27	
36	54.1	55.1	25	
38	53.2	55.2	25	
40	52.7	53.3	23	
42	51.9	52.1	21	
44	53.2	54.0	24	+1.2
46	53.2	53.9	24	
48	53.1	53.9	24	
50	52.1	52.5	22	
52	50.3	51.0	19	
54	49.3	49.8	17	
56	48.0	49.2	16	
58	51.0	52.0	20	
2 00	52.7	53.1	22 23	+1.8
02	52.9	53.7	23	
04	49.9	50.3	18	
06	51.3	52.0	20	
08	53.0	53.2	23	
10	53.0	54.0	24	
12	53.9	55.1	25	
14	53.1	54.1	24	+2.0
16	53.2	54.2	24	
18	56.0	57.3	28	
20	59.2	60.7	34	
22	61.0	62.0	36	
24	60.0	60.3	34	
26	57.2	58.0	30	
28	58.0	59.1	31	
30	60.0	60.3	34	+2.0
32	60.3	61.1	35	
34	60.1	60.9	35	
36	59.9	60.2	34	
38	60.0	60.5	34	
40	61.1	61.9	36	
42	60.9	61.0	35	
44	61.2	61.9	36	+1.9
46	62.3	63.1	38	
48	62.2	63.0	38	
50	64.0	64.2	40	
52	68.2	68.8	47	
54	66.0	66.9	44	
56	64.3	65.0	41	
58	64.4	65.8	42	
3 00	67.8	68.9	47	+2.0
02	70.3	70.8	50	
04	69.8	70.3	49	
06	66.2	67.0	44	
08	63.2	64.0	39	
10	62.9	63.2	38	
12	66.7	66.9	45	
14	64.0	64.1	40	+2.1
16	65.0	65.6	42	
18	64.2	65.2	41	
20	68.8	69.1	48	
22	69.0	70.1	49	
24	66.2	66.9	44	
26	63.6	64.3	40	
28	63.1	63.9	39	
30	63.1	63.2	39	
32	64.3	65.0	41	
34	65.9	66.5	43	
36	68.7	69.7	48	
38	71.2	72.2	52	
40	72.2	72.9	53	
42	73.3	74.2	55	
44	72.5	73.5	54	+2.8
46	72.8	73.9	55	
48	73.9	75.8	22 57	
50	77.1	78.1	23 01	
52*	53.5	57.8	00	
54	54.9	58.7	02	
56	54.8	57.7	23 01	
58	51.9	55.0	22 57	

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, June 19, 1904					Magnet scale inverted					Monday, June 20, 1904					Magnet scale erect				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	54.0	50.0	22 59	+3.4	6 00	33.0	30.1	23 31	+3.9	8 00	Lost				10 00	43.9	46.8	22 53	+11.8
02	54.8	50.7	58		02	30.9	28.8	34		02	48.1	50.9	22 60	+ 8.1	02	43.5	46.8	53	
04	54.1	50.9	58		04	35.1	33.0	27		04	42.3	46.8	52		04	43.6	46.9	53	
06	53.9	51.0	22 59		06	37.2	35.8	23		06	43.2	47.2	53		06	43.0	46.1	52	
08	51.0	49.0	23 02		08	36.0	35.0	25		08	40.2	43.9	48		08	43.1	46.0	22 52	
10	50.0	48.0	04		10	33.9	33.1	28		10	39.3	42.7	46		10	48.8	50.9	23 00	
12	49.9	47.5	04		12	30.8	29.9	33		12	37.6	41.8	44		12	46.9	48.9	22 57	
14	49.9	47.7	04	+3.2	14	32.9*b*		29	+3.2	14	38.1	41.4	44	+ 8.2	14	47.2	48.4	57	+12.1
16	48.9	46.7	06		16	30.0	28.0	35		16	38.1	41.1	44		16	47.3	48.9	57	
18	49.0	47.0	05		18	31.9	31.8	31		18	38.8	41.9	45		18	46.8	47.9	56	
20	47.9	46.0	07		20	33.2	31.8	30		20	37.9	40.2	43		20	47.9	48.5	57	
23	47.9	46.8	06		22	32.9	31.3	30		22	37.8	40.4	43		22	45.6	46.0	54	
24	47.2	45.9	08		24	39.0	37.8	20		24	38.8	41.9	45		24	44.2	44.9	52	
26	46.9	45.2	09		26	35.9	34.0	26		26	38.0	41.0	44		26	45.7	46.0	54	
28	43.3	41.5	14		28	38.4	36.5	22		28	38.1	40.9	44		28	45.9	46.1	54	
30	37.9	36.8	22	+3.4	30	40.8	38.3	19	+3.0	30	38.9	41.0	44	+ 8.2	30	44.0	45.1	52	
32	37.9	36.1	23		32	41.0	39.9	17		32	39.1	41.2	45		32	43.1	44.0	50	
34	40.0	38.2	19		34	38.1	36.9	22		34	40.2	42.7	47		34	41.4	42.1	47	
36	42.0	40.4	16		36	36.7	36.1	24		36	39.5	41.8	46		36	42.7	43.7	50	
38	40.9	39.7	17		38	37.1	37.0	23		38	41.2	43.1	48		38	43.0	44.0	50	
40	43.3	41.9	14		40	41.9	41.0	16		40	42.3	44.0	50		40	45.0	46.0	53	
42	49.0	45.3	07		42	42.8	42.1	14		42	42.5	43.9	50		42	46.1	47.4	55	+12.7
44	45.0	43.9	11	+3.8	44	42.1	41.0	16	+2.9	44	43.2	44.8	51	+ 9.0	44	46.3	47.2	55	
46	45.9	42.6	11		46	39.2	39.0	19		46	43.7	45.0	51		46	46.3	46.8	55	+12.6
48	39.1	38.1	20		48	43.5	42.2	14		48	44.0	44.9	51		48	47.0	47.9	56	
50	39.3	37.7	20		50	44.8	43.8	11		50	48.7	49.1	59		50	46.1	47.0	55	
52	36.9	35.1	24		52	44.9	44.0	11		52	47.3	48.2	57		52	46.1	47.3	55	
54	38.1	37.1	22		54	42.9	42.0	14		54	48.9	50.0	59		54	44.7	45.7	53	
56	38.8	37.9	21		56	44.1	44.0	12		56	48.7	49.4	59		56	44.6	45.7	53	
58	41.9	40.1	16		58	40.9	38.9	18		58	47.4	48.3	57		58	47.1	48.0	56	
5 00.5	40.8	39.0	18	+4.1	7 00	41.9	40.6	16	+2.7	9 00	47.1	47.8	56	+ 9.8	11 00	46.8	47.2	56	
02	41.1	39.9	17		02	43.8	42.1	13		02	47.3	49.8	58		02	45.8	47.7	55	+11.9
04	38.0	36.3	23		04	43.0	42.0	14		04	48.8	50.1	59		04	41.4	43.1	48	
06	36.0	35.0	25		06	39.9	39.1	19		06	45.8	46.9	55		06	44.9	46.4	53	
08	39.0	38.3	20		08	40.9	40.0	17		08	45.0	45.8	22 53		08	46.0	48.1	56	
10	25.0	24.9	42		10	39.1	39.0	20		10	50.1	50.9	23 01		10	44.8	46.9	54	
12	23.7	22.0	45		12	40.0	38.2	19		12	46.3	47.0	22 55		12	45.0	46.3	53	
14	24.0	23.2	44	+4.3	14	37.7	36.9	22	+2.5	14	44.9	46.4	53	+10.1	14	42.1	43.3	49	+11.0
16	25.5	25.1	41		16	43.9*a*		12		16	46.0	47.1	55		16	41.7	43.8	49	
18	33.0	32.8	29		18	46.1	44.2	10		18	43.0	43.9	50		18	43.0	44.9	51	
20	39.9	38.0	20		20	38.2	37.8	21		20	44.0	45.0	52		20	46.1	47.9	56	
22	45.0*a*		10		22	46.1	45.1	09		22	45.1	45.3	53		22	46.8	48.0	56	
24	51.0	50.0	01		24	40.9	40.1	17		24	41.9	43.1	49		24.5	44.1	45.8	52	
26	50.9	49.9	02		26	51.0*a*		01		26	44.2	45.0	52		26.3	42.0	42.8	48	
28	41.0*b*		16		28	48.0*b*		05		28	42.0	43.8	49		28	44.2	44.9	52	+10.1
30	36.2*b*		24		30	37.3	36.9	23	+2.6	30	42.0	43.9	49	+10.7	30	44.7	45.9	53	
32	31.2	31.1	32	+4.2	32	43.0	41.0	15		32	42.1	44.1	50		32	39.0	40.1	44	
34	29.9	28.8	35		34	40.8	40.0	18		34	46.9	47.4	56		34	37.3	38.4	41	
36	28.1	27.0	38		36	44.0	42.0	13		36	45.8	48.0	55		36	38.1	38.1	42	
38	27.3	26.1	39		38	44.8	43.9	11		38	43.2	45.5	51		38	40.8	44.8	49	
40	27.0	25.0	40		40	46.0	45.0	09		40	45.9	48.6	56		40	38.1	38.9	42	
42	29.0	26.5	37		42	46.1	44.3	10		42	47.0	48.9	57		42	37.5	38.8	42	
44	23.1	21.0	46	+4.1	44	45.0	44.0	11	+2.7	44	40.5	42.0	46	+11.0	44	35.0	36.2	38	+ 9.5
46	19.8	16.6	52		46	45.2	44.2	11		46	41.2	43.2	48		46	35.2	36.2	38	
48	17.8	14.2	56		48	43.8	42.1	13		48	42.0	44.1	49		48	36.2	37.0	39	
50	22.8	20.2	47		50	46.0	44.8	10		50	38.6	41.4	45		50	35.1	35.8	37	
52	20.3	18.9	50		52	48.9	48.0	05		52	39.1	41.9	45		52	34.0	34.4	35	
54	24.2	21.5	45		54	50.1	45.9	05		54	42.2	45.4	51		54	36.5	36.9	39	
56	25.1	22.4	44		56	42.1	41.1	16		56	43.9	45.7	52		56	35.9	36.8	39	
58	30.0	28.8	35		58	47.8	46.0	07		58	43.7	45.2	51		58	35.1	36.1	38	
					8 00	51.2	49.9	01	+2.9						12 00	36.5	37.5	40	+ 9.0

Correction to local mean time is — 26s. 90° torsion = 18.′46
Torsion head at 0h 00m read 57° and at 8h 17m read 46°
Observer—J. V.

Correction to local mean time is + 6s.
Torsion head at 7h 45m read 50° and at 12h 30m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, June 21, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00*	55.1	53.1	22 37	+13.0
02	56.3	53.9	36	
04	57.8	54.9	34	
06	58.1	55.8	33	
08	58.2	55.9	32	
10	58.0	56.1	32	
12	57.1	55.2	34	
14	56.1	54.3	35	+13.0
16	55.4	54.8	36	
18	54.9	54.0	37	
20	54.2	53.1	38	
22	52.9	51.9	40	
24	53.9	53.0	38	
26	56.0	55.2	35	
28	52.8	52.2	40	
30	54.0	53.2	38	+13.1
32	53.9	53.1	38	
34	51.4	51.1	42	
36	51.3	51.0	42	
38	50.2	50.0	43	
40	49.8	49.3	44	
42	48.0	46.7	48	
44	49.9	49.7	44	+13.0
46	53.0	51.6	40	
48	56.1	54.8	35	
50	57.4	55.9	33	
52	59.9	58.7	29	
54	60.0	58.5	29	
56	59.9	58.2	29	
58	58.9	57.1	31	
13 00	59.4	58.1	30	+12.9
02	59.2	57.5	30	
04	60.7	59.5	28	
06	61.7	60.1	26	
08	60.1	58.7	29	
10	62.1	60.6	26	
12	63.3	62.2	24	
14	60.9	60.0	27	+13.0
16	61.4	60.0	27	
18	60.4	59.0	28	
20	59.8	58.2	29	
22	59.0	57.5	31	
24	57.6	56.1	33	
26	55.9	54.2	36	
28	55.0	53.8	37	
30	55.5	54.0	36	+13.0
32	54.9	53.1	37	
34	53.9	53.1	38	
36	55.0	55.0	36	
38	56.1	56.0	34	
40	54.7	54.5	36	
42	56.2	56.2	34	
44	55.3	55.0	36	+13.4
46	56.9	55.2	34	
48	56.9	55.8	34	
50	57.2	56.0	33	
52	56.7	55.1	34	
54	56.8	55.3	34	
56	57.8	56.1	33	
58	58.2	57.0	32	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	59.0	57.9	22 30	+13.9
02	59.4	57.4	30	
04	59.2	57.2	31	
06	58.5	56.6	32	
08	57.5	55.9	33	
10	57.8	56.1	33	
12	58.3	57.4	31	
14	57.8	57.1	32	+14.0
16	58.4	57.0	31	
18	58.9	57.8	30	
20	59.9	58.7	29	
22	59.2	58.3	30	
24	59.7	58.3	29	
26	60.4	59.2	28	
28	59.8	58.9	29	
30	59.8	59.1	29	+14.5
32	60.1	58.9	29	
34	61.9	60.5	26	
36	60.9	59.1	28	
38	60.1	58.9	29	
40	59.8	58.1	30	
42	58.9	57.6	31	
44	59.7	58.0	30	+15.0
46	59.5	58.2	30	
48	58.9	58.8	30	
50	59.9	59.6	28	
52	62.1	61.9	25	
54	65.3	64.1	20	
56	64.9	63.6	21	
58	65.9	64.3	20	
15 00	66.1	65.0	19	+15.3
02	68.2	67.5	16	
04	69.8	69.3	13	
06	73.5	72.9	07	
08	76.4	75.9	02	
10*	51.2	46.2	01	
12	51.8	44.2	02	
14	50.8	43.3	22 03	+15.7
16	52.9	46.0	21 60	
18	52.7	46.1	60	
20	56.1	50.2	54	
22	55.9	50.2	54	
24	53.8	48.8	57	
26	53.9	49.3	56	
28	53.2	49.0	21 57	
30	50.9	47.1	22 00	+15.7
32	54.2	48.1	21 57	
34	54.8	49.6	55	
36	54.2	49.7	56	
38	52.9	48.9	57	
40	52.0	47.8	21 59	
42	49.3	46.1	22 02	
44	47.8	44.7	05	+15.6
46	48.9	45.3	22 03	
48	55.9	51.8	21 53	
50	60.1	55.9	46	
52	59.0	54.4	48	
54	54.9	52.2	53	
56	58.5	56.0	47	
58	61.8	59.2	42	
16 00	61.0	58.5	43	+15.1

Correction to local mean time is — 16s. 90° torsion = 15.′48.
Torsion head at 11h 30m read 53° and at 16h 25m read 46°.
Observer—J. V.

Wednesday, June 22, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	56.1	58.1	22 13	+9.0
02	56.5	59.0	14	
04	56.0	58.5	13	
06	55.3	58.9	13	
08	55.0	58.8	13	
10	59.1	59.9	17	
12	58.1	61.1	17	
14	59.9	62.1	19	+8.6
16	61.9	64.7	23	
18	62.1	65.3	23	
20	63.2	66.0	25	
22	64.0	65.9	25	
24	65.1	66.8	27	
26	66.0	67.3	28	
28	66.3	67.9	29	
30	66.9	68.1	29	+8.0
32	65.5	65.9	26	
34	61.2	62.0	20	
36	60.1	61.0	18	
38	61.2	62.0	20	
40	62.3	64.0	22	
42	64.9	66.2	26	
44	67.1	69.0	30	+8.0
46	68.1	69.8	32	
48	66.6	68.0	29	
50	65.0	66.0	26	
52	68.7	69.8	32	
54	68.9	70.0	32	
56	68.3	69.2	31	
58	68.1	68.4	30	
1 00	67.9	68.7	31	+7.9
02	66.3	67.7	28	
04	65.5	66.9	27	
06	64.9	65.9	26	
08	64.2	66.0	26	
10	64.4	66.0	26	
12	63.5	64.8	24	
14	65.1	66.8	27	+8.0
16	66.9	67.0	28	
18	68.1	68.9	31	
20	65.9	66.8	27	
22	66.1	66.7	28	
24	67.1	67.5	29	
26	70.0	70.2	33	
28	71.0a		35	
30	74.1	74.6	40	+7.9
32	74.1	75.1	40	
34	75.0	75.9	42	
36	75.1	76.0	42	
38	73.7	74.0	39	
40	72.0	72.3	36	
42	71.0	71.9	35	
44	71.0	71.2	35	+7.9
46	70.7	71.7	35	
48	70.9	71.8	35	
50	72.1	72.8	37	
52	74.1	74.8	40	
54	76.1	76.5	43	
56	77.8	78.0	46	
58*	46.9	51.1	44	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
2 00	46.8	52.1	22 45	+8.0
02	46.9	53.0	46	
04	48.7	54.8	49	
06	51.9	57.2	53	
08	53.9	59.1	56	
10	55.2	60.1	58	
12	55.1	59.6	58	
14	52.0	56.5	53	+8.1
16	53.0	57.1	54	
18	54.2	58.1	56	
20	54.1	57.9	56	
22	56.0	59.1	58	
24	56.0	58.9	58	
26	53.9	57.0	54	
28	56.9	58.0	58	
30	57.2	60.0	22 60	+8.0
32	57.8	60.1	23 00	
34	59.0	61.1	02	
36	57.9	60.3	00	
38	58.0	59.9	00	
40	60.1	62.1	04	
42	60.5	62.2	04	
44	61.1	63.0	05	+8.1
46	63.2	64.9	08	
48	63.2	64.6	08	
50	64.0	65.2	09	
52	65.0	66.8	11	
54	64.1	65.8	10	
56	63.1	65.1	08	
58	63.9	65.8	09	
3 00	64.1	66.0	10	+8.2
02	65.0	66.9	11	
04	65.1	67.0	11	
06	64.0	66.0	10	
08	64.3	66.2	10	
10	64.2	66.5	10	
12	64.7	66.2	10	
14	64.9	66.3	10	+8.5
16	65.2	66.9	11	
18	66.1	67.3	11	
20	66.0	67.7	12	
22	66.0	67.8	12	
24	66.1	68.0	13	
26	66.1	67.9	13	
28	66.7	67.9	13	
30	66.1	67.1	12	+8.8
32	65.9	67.0	12	
34	66.5	67.7	13	
36	66.0	67.1	12	
38	66.2	67.2	12	
40	66.8	67.8	13	
42	67.3	68.1	14	
44	68.9	69.3	16	+9.0
46	71.9	73.1	21	
48	74.0	74.9	24	
50	71.9	72.2	21	
52	69.1	70.0	17	
54	68.0	68.9	15	
56	65.0	66.0	10	
58	62.0	63.0	06	

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 22, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	62.9	64.0	23 07	+ 9.1
02	64.9	66.2	10	
04	65.0	66.0	10	
06	65.2	66.8	11	
08	66.9	67.5	13	
10	68.0	68.3	15	
12	68.2	68.9	15	
14	67.0	68.0	14	+ 9.3
16	69.3	70.1	17	
18	69.1	70.1	17	
20	66.2	66.8	12	
22	63.3	64.1	08	
24	64.0	65.0	09	
26	63.1	64.1	07	
28	63.8	64.3	08	
30	63.5	64.1	08	+ 9 8
32	61.9	62.0	05	
34	61.3	62.7	05	
36	62.9	64.0	07	
38	63.0	64.1	07	
40	62.9	64.1	07	
42	63.9	65.1	09	+10.0
44	63.0	63.9	07	
46	60.9	61.3	04	
48	59.9	60.0	02	
50	58.2	59.0	00	
52	60.9	61.1	03	
54	63.7	63.9	08	
56	63.1	64.1	07	
58	61.0	63.2	06	
5 00	63.8	65.8	09	+10.5
02	62.9	66.0	09	
04	64.1	67.0	10	
06	65.8	66.8	12	
08	62.1	63.2	06	
10	64.3	66.1	10	
12	65.8	69.1	13	
14	64.0	67.9	11	+10.8
16	66.5	69.0	14	
18	72.0	74.0	22	
20	74.1	76.0	25	
22*	42.0	45.0	35	
24	34.0	40.3	25	
26	34.9	40.8	26	
28	35.9	41.2	27	
30	35.0	40.2	26	+10.9
32	37.4	43.1	30	
34	38.2	43.3	31	
36	39.2	45.0	33	
38	40.3	45.9	35	
40	41.9	46.9	37	
42	42.9	48.0	38	
44	41.9	47.0	37	+11.0
46	42.0	46.0	36	
48	44.0	48.1	39	
50	45.9	48.8	41	
52	45.0	47.9	40	
54	47.1	50.2	43	
56	47.2	50.7	44	
58	44.2	48.1	39	
6 00	43.1	46.6	23 37	+11.1
02	40.3	43.8	33	
04	37.0	40.0	27	
06	35.0	37.2	24	
08	33.9	36.1	22	
10	32.9	34.8	20	
12	31.0	32.0	16	
14	28.0	29.6	12	+11.3
16	25.9	27.9	09	
18	24.9	26.1	07	
20	22.9	24.0	23 04	
22	19.0	20.3	22 58	
24	17.9	19.2	56	
26	17.0	19.8	56	
28	18.1	19.5	56	
30	17.0	18.4	55	+11.3
32	16.9	18.0	54	
34	16.4	17.3	53	
36	14.9	14.9	50	
38	13.9	14.0	49	
40	12.3	13.0	47	
42	12.8	13.1	47	
44	13.9	14.1	49	+11.7
46	16.2	17.0	53	
48	15.0	16.0	51	
50	16.2	17.0	53	
52.5	16.9	17.9	54	
54	17.0	18.1	22 54	
56	23.8	24.3	23 05	
58	24.0	24.5	05	
7 00	21.1	23.0	02	+12.1
02	20.9	21.2	23 00	
04	17.1	18.3	22 55	
06	18.6	19.1	22 56	
08	22.1	23.1	23 02	
10	21.0	22.0	01	
12	22.8	22.9	03	
14	21.2	21.2	00	+12.2
16	21.8	22.1	01	
18	21.1	22.0	23 01	
20	20.1	21.3	22 60	
22	19.9	20.9	59	
24	18.0	20.0	57	
26	17.8	18.5	55	
28	19.1	22.0	22 59	
30	19.8	23.2	23 01	+12.5
32	19.0	22.0	22 59	
34	19.2	22.0	59	
36	14.0	17.3	51	
38	14.0	17.1	51	
40	16.7	19.5	55	
42.3	14.1	16.1	51	
44	15.4	18.1	53	+12.1
46	16.9	19.1	55	
48	16.0	18.2	54	
50	15.2	17.9	53	
52	14.5	17.0	52	
54	14.1	16.2	51	
56	15.3	17.1	52	
58	15.1	17.9	53	

Wednesday, June 22, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.
h m	d	d	° ′	°
8 00	15.6	17.6	22 53	+12.0
02	17.1	18.0	54	
04	18.6	20.2	57	
06	18.2	19.5	57	
08	17.2	18.1	54	
10	16.5	17.5	54	
11	16.2	17.3	53	
14	18.6	19.6	57	+12.3
16	20.2	21.1	59	
18	18.6	19.0	22 56	
20	22.3	22.6	23 02	
22	18.8	19.1	22 57	
24	19.0	20.2	58	
26	18.6	19.3	57	
28	18.0	18.6	56	
30	15.3	16.0	51	+12.6
32	14.3	14.8	50	
34	13.4	13.8	48	
36	13.5	14.1	49	
38	15.1	15.5	51	
40	14.7	15.3	50	
42	15.0	15.2	51	
44	16.1	16.3	52	+13.0
46	16.9	17.1	54	
48	16.3	16.9	53	
50	16.3	16.3	53	
52	14.6	15.1	50	
54	14.3	14.6	50	
56	15.6	16.0	52	
58	16.6	17.2	54	
9 00	17.3	17.6	54	+13.4
02	15.1	15.7	51	
04	14.9	15.3	51	
06	13.4	14.2	49	
08	17.5	18.2	55	
10	14.6	15.6	51	
12	14.5	15.3	50	
14	12.6	13.5	47	+13.6
16	12.8	14.0	48	
18	13.1	14.0	48	
20	13.6	14.9	49	
22	13.3	14.3	49	
24	13.1	14.0	48	
26	13.2	14.0	48	
28	14.3	15.1	50	
30	13.6	13.8	48	+13.8
32	12.1	12.8	46	
34	11.7	12.5	46	
36	12.6	13.0	47	
38	13.6	14.6	49	
40	13.1	13.2	48	
42	13.0	13.8	48	
44	12.5	12.6	47	+13.8
46	11.2*b*		44	
48	11.1	11.6	45	
50	12.6	12.8	47	
52	10.5*b*		43	
54	11.0	11.2	44	
56	12.0	12.3	46	
58	12.0	12.6	46	
10 00	14.6	15.0	22 50	+13.8
02	14.2	14.8	50	
04	11.3	11.7	45	
06	11.3	11.5	45	
08	12.3	12.8	47	
10	12.7	13.1	47	
12	12.0	12.6	46	
14	13.0	13.3	48	
16	13.7	13.8	48	+14.0
18	11.6	12.3	46	
20	12.6	13.1	47	
22	12.3	12.5	46	
24	12.1	12.5	46	
26	11.9	12.6	46	
28	11.6	12.0	46	
30	12.0	12.9	46	+14.8
32	12.8	13.0	47	
34	13.0	13.0	47	
36	12.2	12.3	46	
38	13.3	13.7	48	
40	13.3	13.4	48	
42	12.3	13.0	47	
44	10.8	11.4	44	+15.0
46	11.2	11.6	45	
48	11.0	12.0	45	
50	11.0	12.1	45	
52	10.5	10.7	44	
54	13.3	14.1	48	
56	15.8	16.2	52	
58	15.0	15.3	51	
11 00	12.6	13.1	47	+14.8
02	10.8	11.3	44	
04	8.3	8.7	40	
06	8.3	9.2	41	
08	10.4	10.8	44	
10	10.3	11.0	44	
12	8.5	9.0	41	
14	7.4	8.0	39	+14.3
16	9.0	9.0	41	
18	8.8	8.8	41	
20	8.3	9.0	40	
22	8.2	8.8	40	
24	9.0	9.8	42	
26	9.3	10.1	42	
28	8.0	8.8	40	
30	7.6	8.6	40	+13.8
32	6.9	7.7	38	
34*	43.2	48.0	39	
36	44.7	45.0	38	
38	45.2	45.6	38	
40	46.5	46.6	40	
42	45.6	45.8	39	
44	44.9	45.2	38	+14.0
46	45.1	45.3	38	
48	46.2	46.5	40	
50	45.6	46.0	39	
52	44.7	45.2	38	
54	44.3	44.7	37	
56	43.9	44.8	37	
58	42.9	43.3	35	

Observers—J. V. and W. J. P., who alternated from 7h 52m to 8h 02m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 22, 1904					Magnet scale erect					Wednesday, June 22, 1904					Magnet scale erect				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	43.1	44.0	22 36	+14.5	14 00	35.6	36.3	22 24	+15.6	16 00	19.9	20.8	21 59	+15.1	18 00	34.0	34.8	22 21	+13.8
02	43.5	44.3	36		02	33.8	34.5	21		02	20.8	21.6	22 00		02	33.9	34.1	21	
04	43.0	44.0	36		04	30.8	30.9	16		04	21.2	22.1	01		04	33.8	34.1	20	
06	42.8	43.0	35		06	31.0	32.0	17		06	23.5	24.0	04		06	33.6	34.1	20	
08	43.2	43.6	35		08	37.3	37.7	26		08	24.1	25.2	06		08	34.1	34.9	21	
10	42.9	43.0	35		10	34.5*b*		21		10	20.5	20.8	22 00		10	34.5	35.1	22	
12	42.0	42.3	33		12	30.5	30.9	16		12	19.6	20.2	21 58		12	34.2	34.9	22	
14	42.3	42.6	34	+15.0	14	32.3	32.5	18	+15.5	14	22.6	23.5	22 03	+14.8	14	34.1	34.7	21	
16	41.2	41.6	32		16	31.9	32.3	18		16	22.3	23.8	03		16	34.9	35.2	22	
18	41.2	41.8	32		18	31.4	31.9	17		18	24.5	25.1	06		18	35.1	35.5	23	
20	42.0	42.1	33		20	31.3	31.3	16		20	24.6	25.1	06		20	35.2	35.8	23	
22	41.8	42.1	33		22	32.0	32.0	18		22	25.2	26.2	08		22	35.3	35.8	23	
24	42.0	42.4	34		24	31.6	31.9	17		24	26.2	27.0	09		24	35.1	35.5	23	
26	40.8	41.0	32		26	28.6	29.0	12		26	28.1	28.8	12		26	35.1	35.5	23	
28	40.2	40.3	30		28	26.6	26.6	09		28	28.8	29.2	13		28	35.1	35.7	23	
30	41.0	41.2	32	+15.2	30	30.0	30.6	15	+15.2	30	29.2	30.0	14	+14.7	30	35.2	35.9	23	+13.3
32	40.2	40.7	31		32	24.0	24.7	05		32	30.7	31.2	16		32	35.1	35.9	23	
34	41.0	41.3	32		34	24.0	24.5	05		34	32.1	32.9	18		34	35.1	35.9	23	
36	39.0	39.3	29		36	22.6	23.2	03		36	32.9	33.4	19		36	35.2	35.9	23	
38	38.0	38.2	27		38	25.3	26.0	07		38	33.1	33.9	20		38	35.8	36.1	24	
40	35.6	36.3	24		40	26.8	27.0	09		40	32.2	33.1	18		40	36.0	36.2	24	
42	35.5	36.0	23		42	25.1	25.3	07		42	31.1	32.2	17		42	36.0	36.3	24	
44	33.0	33.7	20	+15.0	44	24.6	24.8	06	+15.3	44	30.2	31.8	16	+14.5	44	36.1	36.2	24	
46	29.8	31.0	15		46	25.7	26.0	08		46	30.2	31.7	16		46	36.1	36.3	24	
48	31.0	31.6	16		48	25.8	26.1	08		48	29.9	31.1	15		48	36.3	36.7	25	
50	36.5	37.1	25		50	25.3	25.3	07		50	30.1	31.3	16		50	37.3	37.9	26	
52	36.0	36.5	24		52	26.3	26.3	09		52	29.1	30.3	14		52	36.1	36.2	24	
54	32.9	34.0	20		54	26.3	26.3	09		54	29.3	30.8	14		54	36.0	36.0	24	
56	32.3	32.6	18		56	26.0	26.0	08		56	29.6	30.7	15		56	35.9	36.1	24	
58	35.6	36.0	24		58	26.1	26.3	08		58	31.0	32.0	17		58	35.9	36.0	24	
13 00	34.4	35.6	22	+15.8	15 00	26.0	26.0	08	+15.1	17 00	32.1	32.9	18	+14.1	19 00	35.9	36.1	24	+12.9
02	32.5	33.5	19		02	26.4	26.5	09		02	35.0	35.4	22		02	35.9	36.2	24	
04	33.4	34.1	20		04	25.3	25.4	07		04	35.5	36.0	23		04	35.3	35.9	23	
06	32.0	32.3	18		06	25.3	25.3	07		06	34.0	34.2	21		06	35.1	35.6	23	
08	32.8	33.8	20		08	24.2	24.2	05		08	34.8	35.3	22		08	34.6	35.0	22	
10	39.3	40.0	29		10	24.6	24.8	06		10	36.1	36.2	24		10	33.8	34.1	20	
12	41.0	41.5	32		12	24.0	24.3	05		12	35.9	36.1	24		12	33.1	33.4	19	
14	34.3	34.6	21	+16.0	14	24.7	25.0	06	+15.2	14	36.6	37.0	25	+14.0	14	32.8	33.1	19	+12.6
16	33.3	34.5	20		16	22.0	23.0	03		16	37.5	37.9	26		16	32.8	33.0	19	
18	38.0	38.9	28		18	21.5	21.7	01		18	37.9	38.1	27		18	32.4	32.6	18	
20	38.2	38.7	28		20	21.0	22.1	01		20	38.6	39.0	28		20	32.2	32.2	18	
22	35.7	36.7	24		22	22.3	22.6	02		22	40.3	41.0	31		22	32.3	32.9	18	
24	36.6	37.2	25		24	21.6	22.3	02		24	41.7	42.2	33		24	33.6	34.0	20	
26	37.0	37.5	26		26	22.6	22.8	03		26	41.7	42.1	33		26	34.3	34.9	22	
28	35.9	36.6	24		28	23.2	23.9	04		28	41.1	41.9	32		28	35.0	35.3	22	
30	36.6	37.0	25	+15.8	30	23.3	24.1	04	+15.3	30	41.2	41.9	32	+14.0	30	35.2	36.0	23	+12.2
32	38.3	38.5	28		32	24.5	25.0	06		32	41.2	41.9	32		32	35.5	35.9	23	
34	37.3	37.5	26		34	22.8	23.8	04		34	41.9	42.3	33		34	35.3	35.8	23	
36	38.0	38.0	27		36	21.8	22.3	02		36	40.9	41.7	32		36	35.6	35.8	23	
38	37.7	38.9	28		38	23.0	23.2	04		38	40.3	41.9	32		38	35.7	36.0	24	
40	38.6	39.0	28		40	25.0	25.3	07		40	40.0	41.1	31		40	35.6	36.0	24	
42	36.6	36.6	25		42	22.3	22.5	02		42	38.9	40.3	29		42	36.0	36.3	24	
44	34.0	34.6	21	+15.3	44	20.8	21.5	00	+15.0	44	38.3	39.9	29	+13.9	44	35.9	36.3	24	+12.0
46	34.4	34.8	22		46	24.2	24.8	06		46	38.2	39.1	28		46	35.2	36.0	23	
48	34.0	34.3	21		48	23.6	24.3	05		48	37.4	38.1	26		48	35.1	35.8	23	
50	33.8	34.1	20		50	22.8	23.2	03		50	36.0	36.2	24		50	34.6	35.1	22	
52	35.3	35.9	23		52	24.0	24.2	05		52	34.8	35.0	22		52	33.9	34.6	21	
54	35.6	36.0	24		54	23.3	24.0	04		54	35.0	35.1	22		54	33.9	34.7	21	
56	36.6	37.0	25		56	21.0	22.3	01		56	34.3	34.9	22		56	34.1	34.9	21	
58	37.0	37.3	26		58	21.0	21.4	00		58	34.0	34.1	21		58.7	34.3	35.1	22	

Observer—W. J. P.

Observers—W. J. P. and R. R. T., who alternated from 16h 00m to 16h 14m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 22, 1904					Magnet scale erect					Thursday, June 23, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	35.0	35.6	22 23	+11.7	22 00	36.0	36.7	22 24	+10.4	16 00	48.9	44.2	21 36	+13.6	18 00	42.0	41.0	21 45	+10.1
02	35.2	36.0	23		02	36.0	36.0	24		02	47.8	43.2	37		02	43.7	42.1	43	
04	35.1	35.8	23		04	35.7	35.7	23		04	46.9	43.3	38		04	43.3	42.2	43	
06	34.7	35.3	22		06	35.0	35.1	22		06	46.0	42.9	39		06	42.9	41.9	44	
08	35.1	35.9	23		08	34.3	34.9	22		08	45.9	42.5	39		08	41.8	40.5	45	
10	35.2	36.0	23		10	34.1	34.7	21		10	44.3	41.9	41		10	41.9	40.2	46	
12	35.1	35.8	23		12	34.0	34.4	21		12	44.1	41.7	41		12	41.9	40.2	46	
14	35.1	35.9	23	+11.6	14	33.2	34.0	20	+10.5	14	44.1	41.0	42	+12.7	14	40.1	39.1	48	+ 9.7
16	35.3	35.9	23		16	33.2	34.3	20		16	43.1	40.7	43		16	39.1	38.1	50	
18	35.5	35.9	23		18	33.8	34.4	21		18	42.1	41.1	44		18	38.5	37.7	50	
20	35.0	35.2	22		20	33.7	34.9	21		20	42.8	41.8	42		20	38.9	38.0	50	
22	35.1	35.1	22		22	34.0	34.9	21		22	43.1	42.2	42		22	39.1	38.9	49	
24	35.2	35.7	23		24	35.0	35.5	22		24	42.0	41.8	43		24	39.6	39.0	49	
26	35.4	35.9	23		26	35.3	36.1	23		26	41.1	41.1	44		26	39.8	38.9	49	
28	35.3	35.9	23		28	35.0	35.8	23		28	41.1	41.1	44		28	39.0	38.0	50	
30	35.1	35.6	23	+11.3	30	34.9	35.3	22	+10.1	30	42.0	41.9	43	+12.1	30	39.9	39.0	48	+ 9.1
32	35.2	36.2	23		32	33.1	34.1	20		32	42.8	42.0	42		32	40.5	40.1	47	
34	36.0	36.9	24		34	32.1	33.2	18		34	41.9	41.2	44		34	41.3	40.9	46	
36	36.1	37.0	25		36	32.2	33.7	19		36	41.2	41.0	44		36	43.1	42.8	43	
38	35.5	36.3	24		38	32.7	33.9	20		38	41.1	40.9	45		38	44.2	43.9	41	
40	35.6	36.2	24		40	33.0	34.2	20		40	41.1	40.9	45		40	43.2	43.0	43	
42	35.0	35.8	23		42	33.0	34.2	20		42	41.9	41.1	44		42	42.9	42.2	44	
44	34.2	35.1	22	+11.1	44	32.9	34.1	20	+10.0	44	41.2	42.3	44	+11.6	44	42.0	41.1	45	+ 8.9
46	33.1	34.0	20		46	32.2	34.3	19		46	42.9	41.7	43		46	42.9	41.9	44	
48	32.1	32.9	18		48	32.1	33.0	18		48	42.9	41.9	43		48	44.8	43.9	40	
50	32.2	32.7	18		50	31.1	32.9	18		50	42.5	41.8	43		50	45.9	45.0	39	
52	32.6	33.9	19		52	31.5	33.0	18		52	42.2	41.9	43		52	46.9	45.8	38	
54	32.8	33.3	19		54	30.2	31.9	16		54	41.9	41.1	44		54	47.0	45.9	38	
56	33.1	33.8	20		56	29.9	31.2	15		56	41.1	41.0	45		56	46.0	45.0	39	
58	33.9	34.4	21		58	29.1	30.9	14		58	40.0	39.9	46		58	45.5	44.9	40	
21 00	34.1	35.1	22	+11.0	23 00	30.0	31.1	15	+ 9.8	17 00	39.9	39.2	47	+11.2	19 00	46.0	45.1	39	+ 8.7
02	33.5	34.3	20		02	29.8	31.1	15		02	39.9	39.1	47		02	46.1	45.8	39	
04	32.1	33.1	18		04	30.2	31.8	16		04	40.1	39.2	47		04	45.5	45.0	40	
06	31.7	32.8	18		06	30.9	32.1	17		06	40.7	39.8	46		06	44.9	44.7	40	
08	31.1	32.2	17		08	30.6	31.9	16		08	40.3	39.8	47		08	44.9	44.8	40	
10	31.6	33.0	18		10	30.8	31.8	16		10	39.9	39.2	47		10	44.9	44.8	40	
12	33.1	34.1	20		12	31.6	32.5	18		12	39.0	38.3	49		12	44.9	44.8	40	
14	33.8	34.7	21	+11.0	14	32.9	33.5	19	+ 9.6	14	38.9	38.5	49	+11.1	14	45.9	45.9	39	
16	33.1	34.0	20		16.4	33.5	34.6	21		16	38.1	38.1	50		16	45.9	45.6	39	+ 8.2
18	32.7	33.8	19		18	34.2	35.1	22		18	38.2	38.0	50		18	46.0	45.9	39	
20	31.9	32.8	18		20	34.6	35.2	22		20	38.9	38.2	49		20	45.5	45.1	40	
22	30.0	31.7	16		22	35.0	35.7	23		22	40.2	39.9	47		22	44.1	44.0	42	
24	29.8	30.2	14		24	35.2	36.0	23		24	41.3	41.0	45		24	43.9	43.2	42	
26	28.4	29.1	12		26	35.9	36.3	24		26	41.6	41.0	45		26	43.3	43.0	43	
28	28.0	28.8	12		28	36.0	36.3	24		28	41.1	40.3	46		28	43.2	42.5	44	
30	28.0	28.9	12	+11.0	30	36.3	36.9	25	+ 9.7	30	40.1	39.5	47	+10.9	30	43.0	42.3	44	+ 8.0
32	27.9	28.0	12		32	36.2	37.6	25		32	39.2	39.1	48		32	43.0	42.0	44	
34	27.3	28.8	11		34	36.4	37.5	25		34	38.7	38.2	49		34	43.1	42.3	44	
36	28.1	29.1	12		36	36.6	37.6	26		36	38.8	38.6	49		36	44.0	43.2	43	
38	29.4	30.5	14		38	36.3	37.3	25		38	39.0	38.9	49		38	45.0	44.2	41	
40	30.0	31.0	15		40	36.3	37.3	25		40	39.9	39.3	48		40	45.2	44.7	41	
42	30.3	31.3	16		42	36.6	37.3	25		42	39.5	39.0	48		42	45.9	44.8	40	
44	32.2	33.0	18	+10.7	44	36.8	37.6	26	+ 9.7	44	39.9	39.4	48	+10.5	44	45.9	44.9	40	+ 7.8
46	32.9	33.8	20		46	37.1	38.8	27		46	39.9	39.8	47		46	46.0	45.1	40	
48	33.1	34.0	20		48	37.1	38.9	27		48	39.8	39.3	48		48	46.8	45.8	38	
50	32.6	34.8	20		50	37.5	39.1	27		50	40.0	39.8	47		50	47.1	46.0	38	
52	34.6	35.4	22		52	37.1	39.0	27		52	40.8	40.0	46		52	47.0	45.6	38	
54	35.1	36.1	23		54	37.3	39.1	27		54	41.0	40.0	46		54	48.0	47.8	36	
56	35.8	36.9	24		56	37.6	39.2	28		56	41.9	40.9	45		56	49.1	48.9	34	
58	36.0	36.9	24		58	37.1	39.1	27	+ 9.8	58	42.1	41.0	45		58	51.0	50.4	32	
					24 00	38.0	40.0	28							20 00	51.9	51.1	30	+ 7.6

Correction to local mean time is — 1m 06s. 90° torsion = 17.′49
Torsion head at 0h 00m read 46° and at 24h 15m read 53°.
Observer—R. R. T.

Correction to local mean time is — 5s. 90° torsion = 18.′21.
Torsion head at 15h 42m read 54° and at 20h 20m read 39°.
Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, June 24, 1904					Magnet scale erect					Sunday, June 26, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	44.0	45.3	22 20		22 00	46.0	46.8	22 22	+8.8	0 00*	50.1	49.5	21 51	+5.8	2 00	31.1	29.9	22 21	+5.2
02	44.1	45.5	20		02	45.9	46.0	22		02	50.2	49.0	51		02	31.1	29.4	21	
04	44.8	45.9	21		04	45.0	45.7	21		04	49.9	48.7	51		04	31.0	29.0	22	
06	44.8	46.1	21		06	45.1	45.4	20		06	48.9	47.8	53		06	30.1	28.9	22	
08	45.0	46.1	21		08	43.7	44.1	18		08	50.5	49.7	50		08	28.9	26.8	25	
10	45.4	46.6	22		10	42.3	42.9	16		10	50.0	48.3	52		10	28.0	26.1	26	
12	45.9	46.9	22	+7.6	12	43.0	43.1	17		12	47.7	46.8	55		12	28.0	26.8	26	
14	46.0	47.0	23		14	40.9	41.8	14	+8.3	14	46.0	45.2	57	+5.8	14	28.9	27.0	25	+5.2
16	46.1	46.9	23		16	43.0	43.9	18		16	48.0	47.0	54		16	29.9	28.1	23	
18	46.0	46.2	22		18	43.2	44.0	18		18	48.1	47.2	54		18	32.1	31.0	19	
20	45.4	46.0	21		20	42.8	43.1	17		20	48.2	47.9	53		20	29.3	28.9	23	
22	45.1	45.3	20		22	44.0	44.7	19		22	48.7	47.9	53		22	28.1	27.8	25	
24	44.7	45.1	20		24	42.0	42.5	16		24	49.8	48.0	52		24	29.2	28.2	24	
26	44.0	44.9	19		26	42.9	43.4	17		26	49.7	48.1	52		26	28.9	27.9	24	
28	44.0	44.5	19		28	43.1	43.9	18		28	48.0	46.6	54		28	26.5	25.8	28	
30	44.1	44.7	19	+7.9	30	46.9	47.1	23	+8.0	30	48.3	47.4	54	+5.8	30	27.0	25.9	27	+5.1
32	44.9	45.1	20		32	49.0	49.1	26		32	50.9	49.3	50		32	31.0	30.0	21	
34	44.8	45.1	20		34	51.0	51.2	30		34	50.0	48.9	51		34	33.9	32.9	16	
36	44.1	44.9	19		36	50.1	50.1	28		36	48.0	47.1	54		36	32.5	32.0	18	
38	44.1	44.8	19		38	47.2	47.8	24		38	47.9	46.9	54		38	29.0	28.1	24	
40	44.4	44.8	20		40	45.0	45.1	20		40	48.1	47.0	54		40	30.7	29.1	22	
42	44.3	44.8	19		42	44.2	44.9	19		42	47.9	46.9	54		42	30.0	29.2	22	
44	44.7	44.8	20	+8.0	44	45.8	46.1	22	+7.9	44	47.9	46.9	54	+5.9	44	27.9	26.9	26	+5.1
46	45.0	45.1	20		46	45.5	45.6	21		46	47.0	46.0	56		46	26.1	25.1	29	
48	44.9	45.1	20		48	44.2	44.8	19		48	48.9	48.1	53		48	26.0	25.1	29	
50	44.2	44.9	19		50	44.3	45.0	20		50	55.1	54.7	43		50	25.9	24.9	29	
52	44.2	44.9	19		52	45.3	45.9	21		52	54.0	52.0	46		52	25.0	23.9	30	
54	44.2	44.6	19		54	45.0	46.8	22		54	56.9	56.5	40		54	24.3	23.5	31	
56	44.4	44.9	20		56	44.1	45.0	19		56	55.1	54.7	43		56	23.0	22.1	34	
58	44.2	45.0	20		58	45.8	46.1	22		58	52.0	51.0	48		58	22.1	21.5	35	
21 00	44.1	45.0	19	+8.2	23 00	47.0	48.0	24	+7.8	1 00	51.1	50.8	49	+5.9	3 00	22.9	22.0	34	+5.0
02	44.0	45.1	19		02	46.1	47.1	23		02	50.0	49.3	51		02	21.8	21.0	35	
04	43.9	45.3	20		04	46.7	47.5	24		04	50.1	49.8	50		04	21.1	20.7	36	
06	44.1	45.4	20		06	47.1	48.0	24		06	49.1	48.1	53		06	21.0	20.1	37	
08	44.9	45.8	21		08	47.1	48.4	24		08	47.7	47.5	54		08	21.9	21.7	35	
10	44.8	45.9	21		10	47.3	48.8	25		10	47.3	46.1	55		10	21.9	21.1	35	
12	45.8	46.9	22		12	47.8	49.1	26		12	47.5	46.7	55		12	21.9	21.2	35	
14	44.9	46.8	22	+8.3	14	48.1	49.3	26	+7.8	14	48.2	47.2	54	+5.8	14	23.2	23.0	32	+5.0
16	45.3	46.3	22		16	49.0	50.0	27		16	48.7	47.1	54		16	24.8	24.0	31	
18	45.8	46.9	22		18	49.3	50.1	28		18	48.8	47.0	54		18	26.0	25.7	28	
20	45.7	46.1	22		20	50.3	50.4	29		20.5	49.0	46.9	54		20	28.8	27.9	24	
22	45.8	45.9	22		22	51.1	52.0	30		22	48.5	45.9	55		22	30.1	29.2	22	
24	44.6	44.9	20		24	51.0	52.1	30		24	49.8	45.0	54		24	31.0	30.1	21	
26	42.5	43.0	17		26	52.2	53.0	32		26	48.1	44.1	56		26	30.8	29.8	21	
28	42.3	43.1	17		28	51.1	52.0	30		28	47.9	44.0	21 57		28	29.9	29.2	22	
30	42.9	44.1	18	+8.7	30	52.1	53.8	33	+7.5	30	44.9	41.1	22 01	+5.6	30	29.5	28.8	23	+5.0
32	43.1	45.0	19		32	52.8	54.9	34		32	44.0	40.9	02		32	27.9	27.1	26	
34	42.0	43.9	17		34	53.0	55.0	34		34	42.5	39.0	05		34	25.9	25.0	29	
36	42.9	44.2	18		36	53.1	55.1	35		36	41.8	38.9	06		36	24.0	23.7	31	
38	44.1	45.4	20		38	53.7	55.3	35		38	40.8	37.8	07		38	22.0	21.0	35	
40	45.2	46.7	22		40	53.1	55.1	35		40	40.1	37.5	08		40	18.1	18.0	41	
42	46.0	47.0	23		42	52.4	54.1	33		42	39.8	37.9	08		42	16.1	15.8	44	
44	46.0	47.0	23	+8.7	44	51.8	53.3	32	+7.3	44	39.9	37.3	08	+5.4	44	14.0	13.3	48	+5.0
46	42.0	42.8	16		46	51.8	53.4	32		46	38.3	36.1	10		46	13.5	13.3	48	
48	47.2	47.7	24		48	51.1	52.8	31		48	35.7	33.7	14		48	18.8	18.2	40	
50	47.7	48.0	25		50	51.0	52.3	30		50	34.0	32.0	17		50	18.2	18.0	40	
52	47.3	47.9	24		52	50.3	51.9	30		52	33.1	30.9	19		52	13.0	12.0	49	
54	47.1	47.6	24		54	50.2	51.3	29		54	32.0	31.2	19		54	12.0	11.2	51	
56	46.1	47.0	23		56	50.0	51.1	29		56	30.1	28.1	23		56	11.8	11.0	51	
58	45.5	46.3	22		58	50.0	51.0	29		58	27.7	25.8	27		58	11.1	10.9	52	
					24 00	49.8	50.9	29											

Correction to local mean time is — 26s.
Torsion head at 16h 52m read 40° and at 24h 13m read the same.
Observer—J. V.

Observer—J. V.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Sunday, June 26, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00*	50.0	50.7	22 51	+5.9
02	50.8	52.1	52	
04	52.3	53.1	55	
06	51.9	53.2	54	
08	51.3	53.0	54	
10	51.1	52.8	53	
12	51.1	52.1	53	
14	50.7	52.1	53	+5.1
16	50.2	52.0	52	
18	50.0	51.0	51	
20	49.0	50.2	50	
22	50.0	51.8	52	
24	51.1	52.3	53	
26	52.0	53.1	54	
28	52.3	53.7	55	
30	53.8	54.2	57	+5.0
32	54.4	55.1	58	
34	55.8	56.1	22 60	
36	57.3	59.0	23 03	
38	60.8	62.0	08	
40	59.9	61.0	07	
42	59.0	59.7	05	
44	59.1	60.9	06	+4.9
46	59.1	60.8	06	
48	58.8	59.3	04	
50	61.0	61.9	08	
52	63.0	63.8	11	
54	63.0	64.8	12	
56	64.9	67.0	15	
58	66.1	68.3	17	
5 00	67.2	69.9	20	+4.8
02	67.1	69.1	19	
04	68.3	69.1	20	
06	68.2	69.9	20	
08	69.0	70.3	21	
10	69.9	70.9	22	
12	69.7	70.4	22	
14	69.9	71.0	22	+4.8
16	71.5	72.9	25	
18	70.0	71.9	23	
20	69.1	71.0	22	
22	67.4	68.3	18	
24	69.2	70.9	22	
26	69.7	70.3	22	
28	67.0	67.0	17	
30	69.8	71.2	23	+4.7
32	70.9	71.5	24	
34*	43.0	48.2	35	
36	46.3	51.1	40	
38	44.0	48.1	35	
40	45.0	49.0	37	
42	46.1	50.0	38	
44	47.2	51.1	40	+4.7
46	46.8	50.3	39	
48	45.3	49.2	37	
50	47.3	50.8	40	
52	46.0	49.0	38	
54	45.2	48.4	37	
56	45.0	48.0	36	
58	43.9	46.3	34	
6 00	44.0	46.2	23 34	+4.8
02	42.0	45.1	31	
04	46.9	49.0	38	
06	50.0	51.9	43	
08	52.7	54.9	48	
10	51.5	52.8	45	
12	49.9	50.8	42	
14	48.1	49.0	39	+4.8
16	43.0	44.7	32	
18	40.8	41.9	28	
20	40.9	41.9	28	
22	41.9	43.1	30	
24	39.1	41.0	26	
26	46.1	48.5	37	
28	46.1	48.0	37	
30	44.7	46.1	34	+4.8
32	43.0	45.0	32	
34	43.8	44.9	33	
36	41.1	42.5	29	
38	40.0	41.0	27	
40	40.1	41.6	27	
42	42.2	43.1	30	
44	42.1	42.5	30	+4.8
46	40.1	40.2	26	
48	39.9	40.3	26	
50	36.9	38.0	22	
52	43.1	43.7	31	
54	42.7	43.6	31	
56	44.1	45.0	33	
58	45.1	45.5	34	
7 00	42.5	43.1	30	+4.7
02	40.1	41.2	27	
04	38.6	39.0	24	
06	37.0	38.8	22	
08	40.9a		27	
10	42.1	42.1	29	
12	39.2	39.8	25	
14	39.9	40.1	26	+4.7
16	44.1	44.8	33	
18	43.9	44.0	32	
20	44.3	44.9	33	
22	48.1	48.3	39	
24	43.4	44.6	32	
26	42.0	42.3	29	
28	42.9	43.1	31	
30	40.7	40.9	27	
32	43.0	43.7	31	
34	40.2	40.8	27	
36	39.1	40.0	25	
38	45.0	46.6	35	
40	45.0	45.6	34	
42	45.2	46.0	35	
44	42.0	43.3	30	+2.4
46	38.9	40.0	25	
48	36.3	37.7	21	
50	38.8	39.8	25	
52	37.0	37.3	21	
54	33.6	34.5	16	
56	34.0	36.0	18	
58	33.9	35.2	17	+4.9

Correction to local mean time is — 1m 00s. 90° torsion = 13.′42.
Torsion head at 0h 00m read 40° and at 8h 17m read 42°.
Observer—J. V.

Monday, June 27, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00*	54.7	54.5	23 25	+10.2
02	59.3	59.1	18	
04	62.0	60.0	15	
06	60.6	56.8	18	
08	55.2	51.3	27	
10	62.8	55.8	17	
12	72.2	66.5	23 02	
14	74.9	69.1	22 58	+10.1
16	68.3	62.0	23 08	
18	64.9	59.8	23 13	
20	76.3	71.8	22 54	
22*	45.9	34.1	52	
24	52.9	43.6	39	
26	48.0	38.4	47	
28	50.2	42.6	42	
30	48.1	40.8	45	+10.9
32	41.0	34.8	22 55	
34	28.9	21.2	23 15	
36	27.7	21.9	16	
38	33.4	27.0	23 07	
40	40.8	35.8	22 54	
42	37.0	33.1	23 00	
44	31.9	27.9	08	+11.2
46	24.9	27.8	13	
48	17.8	13.7	30	
50	25.1	23.1	17	
52	22.2	15.8	25	
54	25.9	25.0	15	
56	29.1	24.0	13	
58	24.0	18.3	23 21	
9 00	40.8	31.0	22 58	+11.8
02	39.1	30.2	23 00	
04	42.4	38.0	22 52	
06	37.1	30.0	23 02	
08	31.9	26.9	23 08	
10	38.1	35.0	22 57	
12	42.1	37.2	22 52	
14	28.4	24.8	23 13	+12.0
16	26.0	22.3	17	
18	36.8	32.1	23 01	
20	44.6	40.2	22 48	
22	48.1	44.9	42	
24	51.8	49.1	36	
26	54.1	50.8	32	
28	52.1	48.2	36	
30	44.0	42.1	47	+12.0
32	48.1	45.2	41	
34	55.0	51.6	31	
36	58.0	53.9	27	
38	61.0	56.3	23	
40	56.2	50.2	31	
42	57.2	49.3	31	
44	58.9	52.0	28	+12.0
46	58.1	52.2	28	
48	67.0	61.5	14	
50	71.9	64.1	08	
52	65.1	57.9	18	
54	54.9	46.4	35	
56	47.0	39.9	46	
58	38.9	34.0	22 58	
10 00	33.1	28.1	23 07	+12.2
02	18.1	11.2	32	
04*	63.3	49.1	45	
06	52.4	45.5	57	
08	70.0	61.1	31	
10	74.8	66.3	23	
12	74.7	67.8	22	
14	72.9	66.1	24	+12.8
16	62.8	56.8	40	
18	69.4	64.0	29	
20	65.0b		32	
22	63.9	63.7	33	
24	72.1	61.4	29	
26	72.7	62.0	28	
28	69.9	58.2	33	
30	55.9	47.6	52	+13.0
32	61.5	55.9	41	
34	74.7	69.8	20	
36*	53.9	51.1	23 02	
38	59.2	56.5	22 53	
40	63.9	58.8	48	
42	70.2	66.2	37	
44	61.1	57.3	51	+13.1
46	55.4	51.8	60	
48	59.9	54.1	54	
50	63.0	60.8	47	
52	69.5	65.9	38	
54	72.3	68.7	33	
56	76.3	72.1	28	
58	76.3	71.7	28	
11 00	72.7	69.0	33	+13.3
02	62.9	59.1	48	
04	61.9	57.2	50	
06	61.9	58.6	50	
08	63.7	60.2	47	
10	68.8	66.0	38	
12	78.1	74.1	24	
14*	49.8	42.9	40	+13.7
16	45.7	38.9	46	
18	37.1	32.1	22 59	
20	21.1	18.2	23 22	
22	20.5	16.1	24	
24	17.8	16.2	26	
26	23.1	19.8	19	
28	25.8	21.1	16	
30	18.9	14.5	27	+13.9
32	14.1	13.1	23 32	
34	54.5	49.1	22 32	
36	56.0	53.3	27	
38	50.1	44.5	39	
40	53.8	44.3	36	
42	61.3	50.1	26	
44	69.3	54.9	15	+14.0
46	70.1	52.9	16	
48	68.5	52.3	18	
50	68.4	51.2	19	
52	64.8	53.3	20	
54	63.6	54.0	21	
56	56.2	45.9	33	
58	49.9	46.6	37	
12 00	48.3	41.2	43	+14.0

Correction to local mean time is — 1m 46s. No torsion observations.
Torsion head at 8h 00m read 43° and at 12h 05m read 33°.
Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Tuesday, June 28, 1904 — Magnet scale erect										Wednesday, June 29, 1904 — Magnet scale inverted									
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	46.2	47.8	22 29	+21.2	14 00	42.0	43.0	22 22	+20.0	0 00*	51.8	50.9	22 25	+5.1	2 00	34.0	33.2	22 53	+4.9
02	44.9	45.2	26		02	42.2	43.7	22		02	50.7	50.0	27		02	35.1	35.1	50	
04.3	45.3	46.4	27		04	42.7	43.8	23		04	51.1	50.2	26		04	33.3	32.8	54	
06	46.1	46.4	28		06	42.0	46.1	24		06	51.8	50.7	25		06	34.7	34.1	52	
08	46.0	46.4	28		08	43.1	44.1	23		08	52.2	51.2	24		08	35.1	35.1	50	
10	46.2	47.1	28		10	45.3	46.0	27		10	52.4	51.7	24		10	37.8	37.2	47	
12	46.8	47.0	29		12	47.0	47.6	29		12	52.4	51.8	24		12	33.2	32.1	54	
14	44.0	44.4	24	+20.9	14	46.3	47.0	28	+20.0	14	52.0	51.2	25	+5.0	14	30.9	30.1	22 58	+4.9
16	43.9	44.2	24		16	43.5	44.0	24		16	51.3	50.9	25		16	24.1	23.9	23 08	
18	43.5	44.4	24		18	44.0	45.1	25		18	51.4	50.9	25		18	21.7	20.8	12	
20	45.0	45.9	26		20	44.0	44.6	25		20	51.8	51.1	25		20	24.1	22.9	09	
22	45.0	46.1	26		22	43.2	44.1	23		22	52.8	52.2	23		22	24.4	23.1	08	
24	45.9	46.1	27		24	42.0	44.0	22		24	52.7	52.0	23		24	22.2	21.1	12	
26	45.2	46.2	27		26	41.1	43.2	21		26	52.1	51.8	24		26	19.7	18.1	16	
28	45.9	47.9	29		28	41.4	42.2	21		28	52.6	51.9	24		28	16.0	15.2	21	
30	45.2	47.0	27	+20.4	30	40.2	41.1	19	+19.9	30	53.1	52.6	23	+5.0	30	17.7	16.9	18	+5.0
32	45.9	46.9	28		32	40.1	42.0	19		32	53.0	52.1	23		32	17.9	17.8	18	
34	47.2	48.9	30		34	40.4	42.2	20		34	52.7	52.1	23		34	19.1	18.1	16	
36	48.0	49.7	32		36	39.4	40.9	18		36	51.0	50.3	26		36	23.9	23.0	09	
38	47.7	49.1	31		38	41.0	42.0	20		38	50.1	49.2	28		38	23.9	23.1	09	
40	47.8	48.9	31		40	41.1	42.2	20		40	48.8	47.8	30		40	22.9	21.9	10	
42	47.1	48.3	30		42	41.9	42.1	21		42	48.2	47.4	30		42	22.9	21.7	10	
44	46.7	48.0	29	+20.1	44	42.3	42.9	22	+19.7	44	48.0	47.8	30	+4.9	44	23.9	22.2	10	+5.0
46	41.7	42.3	21		47	41.8	41.7	20		46	48.1	47.9	30		46	23.5	23.0	09	
48	46.9	48.0	29		48	41.1	42.0	20		48	48.8	48.3	29		48	23.8	23.1	09	
50	47.2	47.8	30		50	40.1	40.5	18		50	48.9	48.2	29		50	21.9	20.2	13	
52	45.3	46.0	26		52	40.1	41.0	18		52	48.8	48.0	30		52	20.8	19.1	14	
54	45.8	46.3	27		54	41.0	41.9	20		54	48.0	47.2	31		54	18.2	17.3	18	
56	47.1	48.0	30		56	39.2	40.9	18		56	49.0	48.2	29		56	18.9	18.2	16	
58	46.5	47.0	28		58	40.5	40.9	19		58	48.0	47.5	31		58	21.4	20.2	13	
13 00	46.0	46.9	28	+20.0	15 00	40.2	41.0	19		1 00	47.8	47.0	31	+4.9	3 00	22.1	21.1	12	+5.0
02	45.1	46.2	26		02	40.1	41.1	19		02	47.9	47.1	31		02	23.8	22.1	10	
04	45.1	45.8	26		04	40.8	41.8	20		04	47.9	47.1	31		04	22.5	21.4	11	
06	45.5	46.2	27		06	41.3	42.1	20		06	47.2	46.7	32		06	20.3	19.2	15	
08	46.2	47.3	28		08	40.8	42.0	20		08	47.1	46.4	32		08	19.9	19.0	15	
10	47.1	48.1	30		10	40.5	41.4	19	+19.0	10	46.1	45.4	34		10	19.6	18.9	15	
12	48.0	49.0	31		12	39.3	40.8	18		12	44.9	44.3	36		12	19.0	18.2	16	
14	47.6	48.0	30	+20.0	14	39.9	41.0	19		14	44.7	43.9	36	+4.8	14	16.9	16.2	20	+5.1
16	46.8	47.1	29		16	40.2	41.8	19		16	43.8	43.2	37		16	16.0	14.9	21	
18	43.3	44.0	23		18	40.0	41.9	19		18	43.1	43.1	38		18	16.8	15.3	20	
20	42.5	42.9	22		20	39.0	39.0	16		20	43.3	43.1	38		20	16.9	15.3	20	
22	43.8	44.0	24		22	38.1	38.2	15		22	43.4	43.0	38		22	15.8	14.7	22	
24	44.8	45.8	26		24	38.1	38.4	15		24	41.7	41.1	41		24	15.5	14.7	22	
26	46.8	47.0	29		26	37.1	37.9	14		26	38.9	38.3	45		26	16.0	15.7	21	
28.6	48.1*a*		30		28	38.1	38.4	15		28	40.2	39.8	43		28	16.7	16.1	20	
30	48.9	49.1	32	+20.0	30	37.1	37.9	14	+18.3	30	39.4	38.7	44	+4.8	30	17.8	17.1	18	+5.3
32	48.9	49.5	31		32	36.9	36.9	13		32	39.9	39.1	44		32	19.0	17.4	17	
34	48.1	48.8	31		34	36.2	37.5	13		34	39.9	39.8	43		34	18.6	17.5	17	
36	46.0	46.2	27		36	35.9	36.9	12		36	40.7	40.2	42		36	17.3	16.4	19	
38	45.8	46.0	27		38	38.7	39.0	16		38	40.5	40.0	42		38	18.0	17.1	18	
40	49.0*a*		32		40	37.7	38.0	14		40	40.8	40.1	42		40	18.0	16.9	18	
42	48.0	49.0	31		42	37.7	38.2	14		42	41.4	40.3	42		42	17.8	16.9	18	
44	45.9	46.8	28	+20.0	44	36.0	36.7	12	+17.8	45	41.9	41.0	41	+4.9	44	18.0	17.0	18	+5.8
46	46.1	47.0	28		46	36.1	37.1	12		46	42.0	41.0	40		46	19.3	18.0	16	
48	47.0	48.4	30		48	34.5	35.8	10		48	41.9	40.7	41		48	18.3	17.7	17	
50	47.1	48.1	30		50	34.1	35.3	09		50	40.8	39.3	43		50	16.9	16.2	20	
52	47.2	48.1	30		52	35.1	36.3	11		52	39.9	38.6	44		52	18.0	17.2	18	
54	48.0	49.0	31		54	37.3	38.2	14		54	35.9	34.9	50		54	18.9	18.1	16	
56	48.7	49.8	32		56	35.2	36.0	11		56	34.8	33.9	52		56	18.1	17.2	18	
58	46.7	47.3	29		58	36.8	36.8	13	+17.0	58	32.8	31.9	55		58	19.5	18.9	15	

Correction to local mean time is — 36s.
Torsion head at 11h 42m read 52° and at 16h 17m read the same.
Observer—J. V.

Observer—R. R. T.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 29, 1904					Magnet scale inverted					Wednesday, June 29, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	18.9	18.9	23 16		6 00	54.9	53.1	23 31	+6.9	8 00	53.7	50.1	22 47	+8.8	10 00	55.0	53.6	22 43	+ 9.6
02	17.0	16.3	20		02	52.9	50.9	34		02	54.9	51.1	46		02	52.5	51.5	47	
04	17.1	16.8	19		04	52.1	49.9	35		04	54.1	51.1	46		04	53.2	53.2	45	
06	19.1	18.2	16		06	45.3	42.8	46		06	52.8	49.7	48		06	54.5	54.0	44	
08	18.9	18.0	17		08	47.2	44.4	43		08	54.0	51.0	46		08	57.5	56.7	39	
10	15.1	14.0	23		10	48.1	45.3	42		10	55.0	52.1	45		10	56.5	55.7	41	
12	12.8	12.1	26		12	48.2	45.5	42		12	53.5	50.4	47		12	54.7	54.2	43	
14	13.0	12.7	25	+6.0	14	49.0	46.2	41	+7.1	14	52.1	49.6	49		14	52.6	52.3	46	+10.0
16	13.4	13.1	25		16	48.8	46.3	41		16	53.7	50.2	47	+9.0	16	54.0	53.3	45	
18	12.0	12.0	27		18	49.7	47.0	40		18	54.8	51.7	45		18	54.8	54.0	43	
20	9.8	9.1	31		20	49.2	47.5	40		20	51.5	49.9	49		20	54.6	53.6	43	
22	10.0	9.1	31		22	46.5	44.9	44		22	46.0	44.7	58		22	55.6	54.5	42	
24	13.0	11.9	26		24	47.4	45.9	42		24	49.8	48.2	52		24.3	55.3	54.8	42	
26	13.0	12.1	26		26	50.2	49.1	38		26	50.9	48.8	50		26	55.2	54.7	42	
28	12.1	11.2	27		28	52.9	50.9	34		28	51.0	49.2	50		28	55.0	54.5	43	
30	10.5	10.1	29	+6.1	30	53.8	51.3	33	+7.3	30	59.0	56.7	38	+9.1	30	54.3	53.9	44	+10.2
32	10.2	9.8	30		32	55.3	53.3	30		32	58.8	57.0	38		32	55.3	55.3	42	
34	11.8	11.2	28		34	55.9	54.1	29		34	55.0	53.1	44		34	56.0	56.0	41	
36	10.2	10.0	30		36	54.2	52.9	31		36	54.4	52.4	45		36	56.0	55.3	41	
38	9.9	9.1	31		38	53.0	51.5	33		38	55.9	54.1	42		38	56.0	55.0	41	
40	10.3	9.9	30		40	51.0	50.1	36		40	59.3	57.1	37		40	54.6	54.3	43	
42	10.8	9.9	29		42	51.8	50.0	36		42	50.8	48.1	51		42	55.6	54.3	42	
44	9.8	9.0	31	+6.1	44	60.1	59.9	21	+7.7	44	51.2	48.9	50	+9.2	44	54.3	53.8	44	+10.5
46	8.1	7.4	34		46	60.8	59.2	21		46	52.8	50.6	47		46	54.8	54.3	43	
48	9.1	8.7	32		48	57.1	55.2	27		48	51.1	49.3	50		48	53.1	52.3	46	
50	9.9	9.2	31		50	56.8	55.0	28		50	48.2	46.3	55		50	53.0	52.0	46	
52	8.8	8.1	32		52	54.1	53.7	31		52	51.8	49.6	49		52	54.5	53.9	44	
54	7.5	6.6	35		54	53.9	52.8	32		54	48.3	48.7	52		54	55.6	55.2	42	
56	8.7	7.4	33		56	59.0	57.2	24		56	48.8	47.7	53		56	57.4	57.3	39	
58	9.1	8.3	32		58	68.0	65.9	10		58	47.0	46.1	22 56		58	58.0	57.8	38	
5 00	10.9	10.9	28	+6.2	7 00	72.5	72.0	02		9 00	44.2	42.9	23 00	+9.8	11 00	55.2	54.6	42	+10.8
02	12.0	11.7	27		02	66.1	64.1	13		02	46.8	45.6	22 56		02	51.2	51.0	48	
04	8.9	8.7	32		04	68.3	66.1	10		04	49.0	47.4	53		04	52.2	51.3	48	
06*	60.0	49.7	29		06	70.8	69.2	06		06	51.2	50.2	49		06	55.2	54.3	43	
08	60.1	51.0	28		08	73.3	71.9	23 01		08	55.7	55.0	42		08	58.5	58.0	37	
10	62.1	53.9	24		10	77.1	75.1	22 56		10	58.0	57.4	38		10	56.3	56.0	41	
12	59.9	51.1	28		12	77.2	76.0	55		12	57.2	56.2	40		12	52.8	52.3	46	
14	60.2	52.6	27	+6.3	14	76.4	75.5	56	+8.1	14	51.7	51.0	48	+9.6	14	52.8	52.6	46	+11.0
16	60.9	53.8	25		16	75.3	74.0	58		16	48.3	47.3	54		16	53.1	52.6	46	
18	60.7	54.0	25		18	74.4	73.5	22 59		18	Lost				18	55.2	55.0	42	
20	58.0	51.2	30		20	74.0	73.0	23 00		20	51.3	50.3	49		20	56.0	55.3	41	
22	57.1	51.0	31		22	74.8	73.7	22 59		22	49.7	49.0	51		22	55.2	54.3	43	
24	56.0	50.1	32		24	75.8	74.8	57		24	50.3	48.6	51		24	55.0	55.0	42	
26	56.0	50.1	32		26	77.9	77.2	54		26	51.8	50.2	49		26	57.5	57.0	39	
28	59.1	54.0	27		28*	54.0	46.2	50		28	51.8	50.3	49		28	59.1	58.3	36	
30	59.9	55.1	25	+6.6	30	55.6	49.1	46	+8.2	30	51.0	49.4	50	+9.5	30	59.5	59.0	36	+11.2
32	56.9	51.2	31		32	54.1	49.2	48		32	52.3	51.3	47		32	59.5	59.0	36	
34	52.7	48.2	36		34	52.3	47.8	50		34	53.0	52.2	46		34	58.5	58.3	37	
36	48.1	43.9	43		36	50.4	46.0	53		36	51.3	49.7	49		36	58.0	57.3	38	
38	48.4	44.5	42		38	52.0	47.8	50		38	51.1	50.2	49		38	57.3	56.8	39	
40	52.1	48.3	37		40	51.3	47.2	51		40	52.3	51.9	47		40	59.0	58.6	36	
42	50.0	47.2	39		42	49.2	45.8	54		42	52.0	50.3	48		42	59.7	59.0	36	
44	47.9	45.1	42	+6.7	44	50.2	45.8	53	+8.7	44	51.5	50.0	49	+9.6	44	60.0	59.3	35	+11.5
46	45.4	43.2	46		46	51.8	47.9	50		46	51.3	50.8	49		46	60.0	59.8	35	
48	45.0	42.6	47		48	51.1	47.3	51		48	53.1	52.6	46		48	60.2	59.2	35	
50	45.1	43.2	46		50	52.6	48.5	49		50	52.9	51.7	46		50	59.6	59.0	36	
52	44.8	43.0	46		52	52.9	49.1	49		52	51.3	50.0	49		52	58.3	57.6	38	
54	45.9	45.6	43		54	52.8	49.0	49		54	53.1	51.5	46		54	58.7	58.5	37	
56	52.8	51.1	34		56	52.9	49.2	49		56	55.1	53.5	43		56	58.3	58.0	37	
58	56.5	54.0	29		58	53.0	49.3	48		58	54.1	52.3	45		58	58.0	57.8	38	

Observer—R. R. T.

Observers—R. R. T. and W. J. P., who alternated from 8h 42m to 9h 00m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 29, 1904					Magnet scale inverted					Wednesday, June 29, 1904					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	58.0	57.0	22 38		14 00	39.4	38.2	22 09	+11.8	16 00	39.9	39.0	22 08		18 00	34.8	33.9	22 16	
02	58.0	57.0	38		02	39.7	38.3	09		02	40.5	40.1	07	+12.2	02	37.1	37.0	12	+12.0
04	57.0	56.3	40		04	40.0	39.0	08		04	39.9	39.7	07		04	32.9	32.3	19	
06	57.5	57.3	39	+11.6	06	42.3	41.3	04		06	40.0	39.8	07		06	33.9	33.5	17	
08	58.6	58.4	37		08	42.2	40.8	05		08	40.2	40.0	07		08	33.1	32.9	18	
10	57.4	57.0	39		10	42.0	40.8	05		10	41.3	41.3	05		10	33.8	33.5	17	
12	57.8	57.0	39		12	42.0	41.5	04		12	43.6	42.9	22 02		12	32.5	32.0	19	
14	59.3	58.3	36	+11.6	14	42.0	41.0	05	+11.8	14	46.1	45.3	21 58	+12.0	14	31.9	31.8	20	+12.2
16	59.1	58.2	37		16	43.3	42.7	02		16	49.5	49.1	52		16	32.1	31.9	20	
18	60.4	59.5	35		18	41.6	40.9	05		18	49.9	49.9	51		18	32.9	32.1	19	
20	61.3	60.3	33		20	40.9	40.4	06		20.5	49.3*b*		53		20	32.3	32.1	19	
22	62.0	61.0	32		22	41.4	41.3	05		22	48.1	47.7	55		22	31.8	31.1	20	
24	62.6	61.9	31		24	42.0	41.6	04		24	46.0	45.7	58		24	31.3	31.0	21	
26	64.3	63.6	28		26	42.5	42.0	04		26	45.8	45.1	58		26	30.5	30.0	22	
28	67.3	66.5	24		28	43.7	43.3	02		28	45.0	44.2	60		28	30.1	29.2	23	
30	68.5	67.8	22	+11.6	30	42.0	41.5	04	+11.7	30	44.9	44.2	60	+12.0	30	30.6	29.9	22	+14.4
32	67.3	66.8	24		32	43.1	42.9	22 02		32	45.0	44.2	60		32	31.1	30.9	21	
34	67.0	66.6	24		34	45.3	45.1	21 59		34	45.7	45.0	21 59		34	32.1	31.8	20	
36	68.6	67.8	22		36	46.5	46.3	57		36	44.0	43.0	22 02		36	32.6	32.0	19	
38	69.3	68.4	21		38	48.5	48.3	54		38	42.0	41.1	04		38	32.1	31.9	20	
40	68.0	67.2	23		40	48.0*a*		54		40	43.1	42.8	22 02		40	31.3	31.0	20	
42	67.6	67.0	23		42	47.2	47.2	56		42	45.5	44.7	21 59		42	31.0	30.2	22	
44	68.0	67.3	23	+11.8	44	48.3	47.3	55	+12.0	44	47.3	46.1	56	+11.9	44	30.0	29.3	23	+12.3
46	67.6	67.3	23		46	46.6	45.9	57		46	46.4	46.0	21 57		46	28.9	28.2	25	
48	67.0	66.0	24		48	47.2	46.0	57		48	44.2	44.0	22 00		48	28.4	27.9	26	
50	66.1	66.1	25		50	46.0	45.2	58		50	46.5	46.1	21 57		50	28.9	28.1	25	
52	66.5	66.3	24		52	47.7	46.3	56		52	45.0	44.3	60		52	29.1	28.9	24	
54	68.0	67.3	23		54	47.2	46.2	56		54	46.3	45.9	21 57		54	29.1	29.0	24	
56	68.4	68.0	22		56	50.5	49.0	52		56	44.8	43.7	22 00		56	29.1	28.9	24	
58	68.8	68.6	21		58	53.0	51.1	48	+12.3	58	44.9	44.0	22 00		58	29.0	28.9	24	
13 00	67.8	67.6	22	+12.0	15 00	50.0	49.0	52		17 00	47.9	47.7	21 55	+12.0	19 00	28.9	28.5	25	+12.1
02	67.5	67.3	23		02	49.0	48.2	54		02	50.9	50.0	51		02	28.2	28.0	26	
04	68.1	67.8	22		04	48.5	47.6	54		04	52.0	51.8	48		04	28.1	27.9	26	
06	68.4	68.3	21		06	48.0	46.6	56		06	51.9	50.9	49		06	28.3	28.0	26	
08	68.9	68.7	21		08	48.0	47.0	55		08	51.1	50.2	50		08	29.0	28.5	25	
10	69.8	69.6	19		10	48.5	48.2	54		10	49.9	49.0	52		10	28.9	28.1	25	
12	69.6	69.5	20		12	51.3	50.0	50		12	50.0	49.2	52		12	28.7	28.0	25	
14	70.3	70.1	18	+11.7	14	47.0	46.0	21 57	+12.6	14	51.9	50.9	49	+12.0	14	29.6	28.0	24	+12.1
16	71.0	71.0	17		16	43.3	43.1	22 02		16	50.3	49.9	51		16	29.8	28.7	24	
18	72.2	72.2	15		18	45.0	44.6	21 59		18	50.2	49.5	52		18	30.0	29.0	23	
20	72.6	72.6	15		20	49.0	47.5	54		20	49.5	49.1	52		20	30.0	28.9	24	
22	73.6	73.3	14		22	47.3	46.0	56		22	48.2	47.9	54		22	30.0	28.9	24	
24	72.3	72.2	15		24	50.0	49.5	52		24	47.1	46.7	21 56		24	29.3	28.0	25	
26	73.4	73.0	14		26	45.3	44.7	21 59		26	44.2	42.8	22 02		26	29.1	28.0	25	
28	74.3	74.3	12		28	42.3	41.1	22 04		28	43.3	43.0	02		28	29.2	28.2	25	
30	74.3	74.0	12	+11.6	30	40.5	39.8	07	+12.9	30	43.7	43.1	02		30	29.5	28.4	24	+12.0
32	74.8	74.3	12		32	41.9	41.0	05		32	43.9	43.7	01		32	29.3	28.7	24	
34	74.0	73.7	13		34	41.9	41.1	05		34	43.0	42.9	02		34	29.1	28.3	25	
36	76.4	76.2	09		36	41.2	40.4	06		36	42.3	42.0	04		36	29.0	28.0	25	
38	75.8	75.3	10		38	41.1	40.6	06		38	41.9	41.0	22 05		38	29.0	28.0	25	
40	76.0	75.7	10		40	41.3	40.8	05		40	45.2	45.0	21 59		40	28.7	27.9	25	
42	76.8	76.8	08	+11.5	42	42.9	42.3	03		42	39.1	39.0	22 08		42	28.4	28.0	26	
44	76.7	76.3	09		44	39.3	38.5	08	+12.8	44	38.8	37.5	10	+12.1	44	28.5	27.9	26	+11.3
46	74.0	73.0	13		46	39.0	38.6	09		46	36.1	35.9	13		46	28.9	28.1	25	
48*	37.5	36.3	12		48	39.4	38.8	08		48	36.9	36.0	13		48	28.8	28.0	25	
50	38.2	37.4	10		50	39.0	38.2	09		50	36.9	36.7	12		50	28.2	27.6	26	
52	43.6	41.6	03		52	39.0	38.7	09		52	36.0	35.9	13		52	28.0	27.2	26	
54	45.0	43.9	00		54	39.0	38.8	09		54	35.9	35.7	14		54	27.9	27.0	27	
56	42.3	41.3	04		56	39.3	38.8	08		56	36.7	36.1	13		56	27.8	27.0	27	
58	39.7	39.0	08		58	40.8	40.3	06		58	36.6	36.0	13		58	27.8	27.0	27	

Observer—W. J. P.

Observers—W. J. P. and J. V., who alternated from 15h 58m to 16h 12m.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Wednesday, June 29, 1904 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	28.1	27.7	22 26	+10.8
02	28.3	27.9	26	
04	28.0	27.5	26	
06	27.0	26.9	28	
08	27.0	26.9	28	
10	27.1	26.6	28	
12	27.6	26.9	27	
14	28.3	27.9	26	+10.2
16	29.0	28.1	25	
18	29.1	28.1	25	
20	29.1	28.7	24	
22	30.0	29.2	23	
24	30.2	29.9	23	
26	29.9	29.2	23	
28	29.8	29.1	24	
30	29.1	28.9	24	+ 9.9
32	28.3	28.1	26	
34	27.9	27.5	26	
36	27.9	27.5	26	
38	29.0	28.9	24	
40	29.9	29.8	23	
42	30.2	30.1	22	
44	30.9	30.7	21	+ 9.2
46	30.8	30.0	22	
48	30.2	29.5	23	
50	30.1	29.2	23	
52	30.0	29.8	23	
54	30.2	30.0	22	
56	31.3	31.0	21	
58	32.1	31.5	20	
21 00	32.1	31.9	20	+ 8.8
02	31.1	30.9	21	
04	31.3	30.9	21	
06	32.1	32.0	20	
08	33.3	33.2	18	
10	33.8	33.2	17	
12	33.5	33.1	18	
14	33.9	33.1	17	+ 8.8
16	33.5	32.9	18	
18	33.9	33.2	17	
20	34.0	33.9	17	
22	34.1	33.9	16	
24	39.9	39.4	08	
26	35.9	35.5	14	
28	37.1	36.9	12	
30	38.7	38.0	10	+ 8.9
32	39.3	38.7	08	
34	39.2	38.4	09	
36	39.1	38.1	09	
38	38.9	37.7	10	
40	37.5	36.9	11	
42	37.2	37.0	12	
44	36.9	36.2	12	+ 9.0
46	36.1	36.0	13	
48	35.7	35.1	14	
50	35.3	35.2	14	
52	35.8	35.6	14	
54	36.8	36.2	12	
56	37.1	36.9	12	
58	37.7	37.1	11	
22 00	36.9	36.5	22 12	+7.9
02	36.8	36.2	12	
04	36.9	36.6	12	
06	36.9	36.8	12	
08	37.1	36.9	12	
10	37.0	36.9	12	
12	36.1	36.0	13	
14	35.9	35.3	14	+7.0
16	35.2	35.2	14	
18	36.5	36.0	13	
20	36.2	36.1	13	
22	36.0	35.5	14	
24	35.9	35.2	14	
26	36.1	35.9	13	
28	39.0	37.3	10	
30	41.0	38.9	07	+6.1
32	42.3	40.1	05	
34	38.0	36.5	11	
36	39.9	38.8	08	
38	37.3	35.9	12	
40	39.1	37.1	10	
42	38.2	37.1	11	
44	37.9	37.1	11	+6.0
46	38.2	37.8	10	
48	39.9	38.8	08	
50	37.0	36.0	12	
52	37.0	36.2	12	
54	36.0	35.2	14	
56	34.9	33.8	16	
58	34.1	32.9	17	
23 00	34.0	32.8	17	+5.8
02	34.1	33.0	17	
04	34.1	32.8	17	
06	34.3	33.1	17	
08	34.6	32.8	17	
10	38.1	37.1	11	
12	41.9	40.9	05	
14	42.0	40.9	05	+5.2
16	41.9	40.9	05	
18	38.5	38.1	10	
20	35.1	34.0	16	
22	33.0	31.1	20	
24	41.7	37.8	07	
26	35.2	32.8	16	
28	36.9	33.9	14	
30	43.0	42.1	03	+5.0
32	42.0	39.0	06	
34	45.9	38.0	04	
36	26.0	18.1	22 35	
38*	49.8	24.0	23 24	
40	78.0	24.3	23 02	
42	70.7	64.8	22 36	
44	61.9	48.0	56	+5.0
46	79.0	75.0	21	
48*	47.0	42.0	13	
50	41.0	35.5	23	
52	46.0	40.8	15	
54	40.0	35.9	24	
56	18.7	18.8	54	
58	48.0	40.0	14	
24 00	50.9	43.7	09	+4.9

Correction to local mean time is — 58s. 90° torsion = 19.′21.
Torsion head at oh oom read 51° and at 24h 20m read 53°.
Observer—J. V.

Thursday, June 30, 1904 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	50.2	52.2	22 19	
02	50.9	52.1	19	
04	51.8	53.0	21	
06	50.7	52.2	19	+6.0
08	50.0	51.3	18	
10	48.8	50.1	16	
12	47.5	49.2	14	
14	46.8	48.2	13	+6.0
16	47.0	48.8	14	
18	47.1	49.1	14	
20	47.4	49.1	14	
22	47.8	50.1	16	
24	48.6	50.0	16	
26	48.9	49.9	16	
28	48.8	49.3	16	
30	48.6	49.1	16	+5.8
32	48.7	49.3	16	
34	49.6	50.3	17	
36	50.0	50.0	17	
38	50.1	51.1	18	
40	50.8	51.9	20	
42	51.2	52.1	20	
44	51.1	52.0	20	+5.9
46	51.1	51.9	20	
48	51.2	51.9	20	
50	51.8	52.1	21	
52	51.2	51.9	20	
54	51.1	51.8	20	
56	50.8	51.0	19	
58	50.0	50.3	18	
17 00	49.6	51.2	18	+5.8
02	48.1	50.2	16	
04	48.5	50.3	17	
06	50.0	51.3	19	
08	51.0	52.4	20	
10	49.3	50.8	18	
12	49.3	50.7	18	
14	51.2	53.1	21	+5.7
16	51.0	52.8	21	
18	52.8	54.0	23	
20	54.1	55.0	25	
22	55.9	56.3	28	
24	56.0	56.3	28	
26	56.0	56.9	28	
28	56.6	57.7	29	
30	57.0	58.0	30	+5.6
32	57.6	58.2	30	
34	58.2	58.9	31	
36	58.8	59.2	32	
38	58.0	58.8	31	
40	57.3	57.9	30	
42	54.5	54.9	26	
44	50.6	51.1	19	+5.6
46	48.6	49.0	16	
48	48.1	48.1	15	
50	47.2	47.9	14	
52	46.8	47.3	13	
54	46.6	47.4	13	
56	46.9	48.0	14	
58	47.8	48.8	16	
18 00	47.7	49.1	22 16	+5.4
02	47.7	48.9	16	
04	47.2	48.2	15	
06	47.1	48.1	15	
08	46.6	47.2	14	
10	45.1	46.1	12	
12	44.0	45.2	10	
14	42.8	44.1	08	+5.5
16	41.3	43.0	07	
18	40.9	42.0	05	
20	40.1	41.7	04	
22	39.6	41.1	03	
24	39.1	40.8	03	
26	38.8	40.3	02	
28	38.2	40.0	02	
30	38.1	39.4	01	+5.4
32	37.6	39.1	00	
34	37.1	38.8	00	
36	37.1	38.5	22 00	
38	36.9	38.1	21 59	
40	37.0	38.1	59	
42	36.5	37.8	59	
44	36.2	37.6	58	+5.4
46	36.8	38.0	59	
48	36.8	38.0	59	
50	36.8	37.9	59	
52	36.1	37.7	58	
54	36.6	37.8	58	
56	35.1	36.1	21 56	
58	36.9	38.7	22 00	
19 00	37.8	39.9	02	+5.2
02	38.9	40.9	03	
04	40.0	42.0	05	
06	40.6	42.2	06	
08	40.0	41.9	05	
10	39.7	41.2	04	
12	40.0	41.9	05	
14	40.6	42.0	06	+5.2
16	40.7	41.9	06	
18	40.9	41.8	06	
20	41.8	43.0	07	
22	42.3	43.8	08	
24	43.8	45.0	10	
26	43.9	45.3	11	
28	44.2	45.9	12	
30	44.6	45.9	12	+5.1
32	44.9	46.0	12	
34	44.6	46.0	12	
36	43.8	45.1	11	
38	42.7	44.0	09	
40	41.2	42.3	06	
42	40.0	41.1	05	
44	38.6	40.1	03	+5.0
46	37.3	38.9	01	
48	37.2	38.7	01	
50	38.1	39.4	02	
52	39.2	40.8	04	
54	39.7	40.9	04	
56	39.8	41.1	05	
58	40.2	41.9	06	
20 00	40.0	41.8	06	+4.9

Correction to local mean time is — 1m 26s. 90° torsion = 17.′76.
Torsion head at 15h 35m read 53° and at 20h 15m read 36°.
Observer—Not noted.

Tabulation of magnetic declinations observed at Teplitz Bay—Continued

Friday, July 1, 1904					Magnet scale inverted				Friday, July 1, 1904					Magnet scale inverted			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	46.9	43.2	21 37	+4.1	22 00	11.1	9.4	22 19	+5.3	21 00	54.3	49.9	33	+4.8	23 00	45.4	43.9	09	+7.0
02	45.1	42.5	39		02	9.2	9.2	20		02	50.0	45.9	40		02	47.9	45.9	22 06	
04	45.2	52.2	39		04*	34.2	30.8	28		04	45.1	40.3	48		04	52.1	51.1	21 58	
06	47.3	42.9	37		06	35.3	30.1	28		06	51.1	47.0	38		06	55.5	53.9	53	
08	50.1	45.9	32		08	37.9	32.5	24		08	47.3	44.0	43		08	57.0	54.9	51	
10	51.1	47.2	30		10	40.9	35.9	19		10	53.2	50.8	33		10	57.7	56.1	50	
12	52.8	48.8	28		12	44.1	38.9	14		12	47.8	42.2	44		12	56.8	55.3	51	
14	52.9	48.8	28	+4.2	14	44.0	40.2	13		14	47.9	43.0	44	+4.9	14	58.3	57.4	48	+6.9
16	52.9	49.1	28		16	44.9	40.4	12		16	46.0	37.7	49		16	60.2	59.0	46	
18	54.1	51.0	25		18	37.0	33.9	24		18	48.1	44.9	42		18	59.9	57.9	47	
20	56.0	53.1	22		20	27.9	24.1	38		20	50.1	44.1	20 41		20	57.8	56.1	50	
22	55.5	52.1	23		22	28.0	25.1	38		22	37.8	30.9	21 01		22	54.2	52.1	56	
24	57.1	54.9	20		24	32.0	28.5	32		24	45.4	36.8	20 50		24	51.2	49.9	60	
26	57.2	55.2	19		26	28.3	25.0	37		26	47.1	40.1	46		26	56.7	54.3	52	
28	57.7	55.6	19		28	27.0	24.5	39		28	59.5	51.2	28		28	59.8	58.5	46	
30	57.9	56.2	18	+4.3	30	34.1	31.9	27	+6.7	30	53.3	46.3	37	+5.0	30	63.9	62.6	40	+6.4
32	60.2	58.0	15		32	40.1	37.1	18		32	43.2	34.7	20 54		32	65.2	64.0	38	
34	57.8	55.0	19		34	41.9	38.9	16		34	35.1	28.2	21 05		34	65.1	63.8	38	
36	54.4	52.1	24		36	36.9	34.5	23		36	46.3	39.2	20 48		36	62.9	61.3	42	
38	55.0	53.1	23		38	38.0	36.2	21		38	50.3	42.9	42		38	59.1	58.2	47	
40	56.2	54.3	21		40	42.8	40.5	14		40	45.0	37.0	50		40	55.1	53.9	54	
42	61.1	59.0	13		42	43.1	41.8	12		42	37.1	34.0	20 59		42	56.4	55.2	52	
44	65.0	63.2	07	+4.5	44	47.1	46.0	22 06	+6.9	44	33.1	28.2	21 07	+5.1	44	60.0	59.3	46	+6.2
46	63.2	61.5	21 10		46	52.1	51.1	21 58		46	28.1	24.4	14		46	61.0	60.3	44	
48	75.3	72.0	20 52		48	54.5	52.9	55		48	21.1	15.0	26		48	58.7	58.1	47	
50	75.1	69.1	54		50	54.3	52.3	55		50*	37.5	30.0	42		50	54.9	53.0	54	
52	77.8	71.8	50		52	53.0	50.5	21 58		52	38.2	35.0	38		52	51.5	51.1	58	
54*	48.9	41.1	44		54	49.9	48.1	22 02		54	30.9	26.9	50		54	51.7	51.0	58	
56	59.9	51.9	27		56	47.0	45.8	06		56	28.9	25.8	21 52		56	57.6	56.8	49	
58	59.4	52.3	27		58	46.1	44.2	08		58	18.2	18.1	22 06		58	57.7	56.2	50	

Correction to local mean time is — 4s. 90° torsion = 18.′18.
Torsion head at 19h 36m read 57° and at 24h 14m read 56°.
Observer—Not noted.

REDUCTIONS FROM DECLINATION OBSERVATIONS AT TEPLITZ BAY

Diurnal Variation

For the purpose of determination of empirical formulæ to express the diurnal variation in the magnetic declination it was decided, in accordance with the general present tendency in magnetic reductions, to include all of the observed values without elimination of any as "disturbances". The few observations made between September 28 and October 4, 1903, are not, however, included in the discussion as it was deemed that some time was necessary before the routine and stability of observation could be properly established.

The scheme of work carried out, as per program on page 17, was such that continuous observations were made throughout one day of each week. On each of four of the remaining days of the week observations were made for four hours continuously, and on one other day of the week for eight hours continuously. These latter observations were so made as to cover, when taken together, twenty-four hours numbered consecutively. There was thus obtained in each week the equivalent of two days' continuous observation. The means of the thirty observed values of the magnetic declination from one hour to the succeeding hour, as per the tabulation of pages 41 to 274, have been taken as corresponding to the half hours local mean time. Strictly speaking account should be taken of the chronometer corrections on local mean time but as these were usually very small and varied in sign the resulting error is much below the order of accuracy of the results arrived at and may, therefore, be disregarded. In order to have the mean values correspond strictly to the mean epoch of the period under discussion, the series was divided into intervals of four weeks each. Thus we have for each period, with few exceptions, eight mean values for every hour, each resulting from thirty observations. The means of these means have been taken as the hourly values applying to the mean epoch of the period in question.

The resulting hourly values of the declination for each interval and for the mean of the whole period during October 4, 1903, to July 1, 1904, at the Teplitz Bay station are exhibited in the following tabulations, which are arranged according to local mean time, civil reckoning, from midnight through twenty-four hours. Figures 5 to 15 show these values graphically, the mean observed declinations being indicated by circles joined by broken lines; the smooth curves shown on these figures represent the computed values resulting from the analytical expressions for the diurnal variations deduced from the same (see pages 290 to 291).

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, October 4 to October 30, 1903

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
4, 11, 18, 25				4, 11, 18, 25				5, 12, 19, 26			
/	/	/	/	/	/	/	/	/	/	/	/
40.4	41.5	45.4	45.2	52.8	67.4	73.4	52.9	33.9	33.2	33 7	35.4
....	....	....	....	....	....	....	....	48.7	33.7	26.1	21.1
28.0	36.5	40.3	28.5	39.0	50.1	58.9	63.8	44.7	27.0	27.2	17.1
32.1	29.1	34.0	31.4	36.4	38.4	34.9	31.0	68.8	48.1	47.9	45.7
				Wednesday							
				7, 14, 21, 28							
32.3	32.0	36.7	44.6	39.1	50.9	45.1	44.5	44.9	33.9	20.2	22.5
48.1	53.0	123.0	145.9	126.2	80.7	77.5	81.9	65.9	45.3	44.0	31.7
33.2	34.5	37.9	35.6	36.6	36.6	36.7	36.4	36.4	35.8	34.3	33.0
33.0	35.5	48.7	53.4	46.3	57.5	63.9	50.6	35.3	29.8	28.7	28.2
35.2	37.4	52.3	54.9	53.8	54.5	55.8	51.6	47.3	35.8	32.8	29.3

Tabulation of mean hourly magnetic declinations at Teplitz Bay

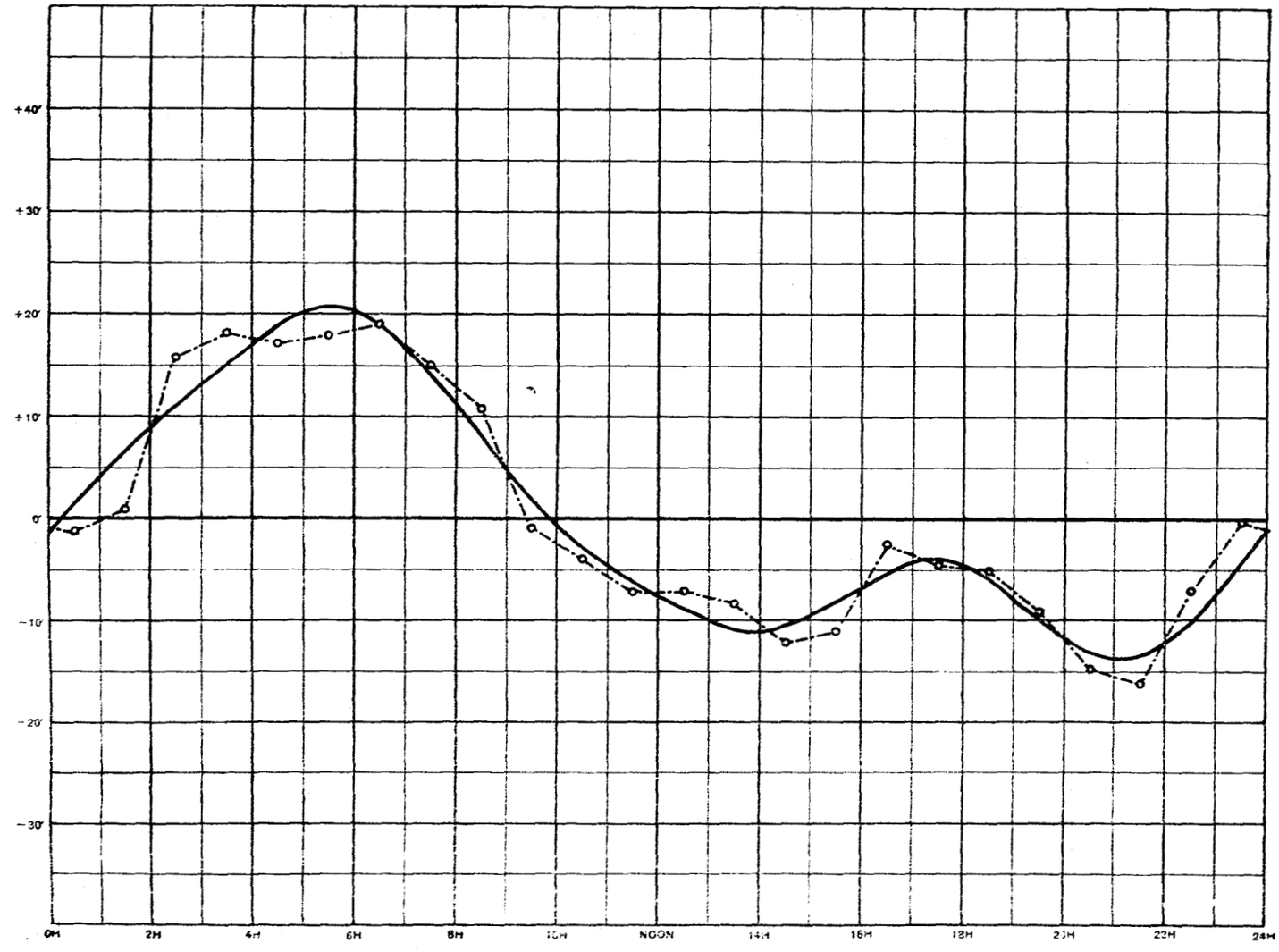
Four weeks, October 4 to October 30, 1903—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
6, 13, 20, 27				8, 15, 22, 29				9, 16, 23, 30			
/	/	/	/	/	/	/	/	/	/	/	/
17.0	06.8	08.7	10.0	03.3	00.3	20.9	19.0	26.2	27.8	32.5	33.7
28.9	52.0	33.8	26.9	26.4	62.2	40.5	41.2	21.5	29.0	13.3	26.9
29.1	29.0	28.0	28.2	88.9	95 9	81.2	77.0	....	....	....	....
26.1	19.3	36 5	35.7	50.6	11.9	23.3	14.2	15.2	13.9	24.3	21.5
				Wednesday							
				7, 14, 21, 28							
16.8	19.9	12.1	19.1	23.5	20.2	21.0	27.8	20.0	09.9	57.6	46.4
62.5	45.2	24.7	37.9	26.8	15.8	13.8	—03.1	31.4	20.9	27.0	53.8
31.3	29.9	28.0	27.9	27.7	28.4	28.6	27.3	27.7	29.6	32.2	42.5
23.3	22.8	21.9	18.8	24.8	21.3	21.6	17.6	11.6	10.8	19.4	27.6
29.4	28.1	24.2	25.6	34.0	32.0	31.4	27.6	21.9	20.3	29.5	36.1

Mean value for the whole period, 22° 36.′7 E.

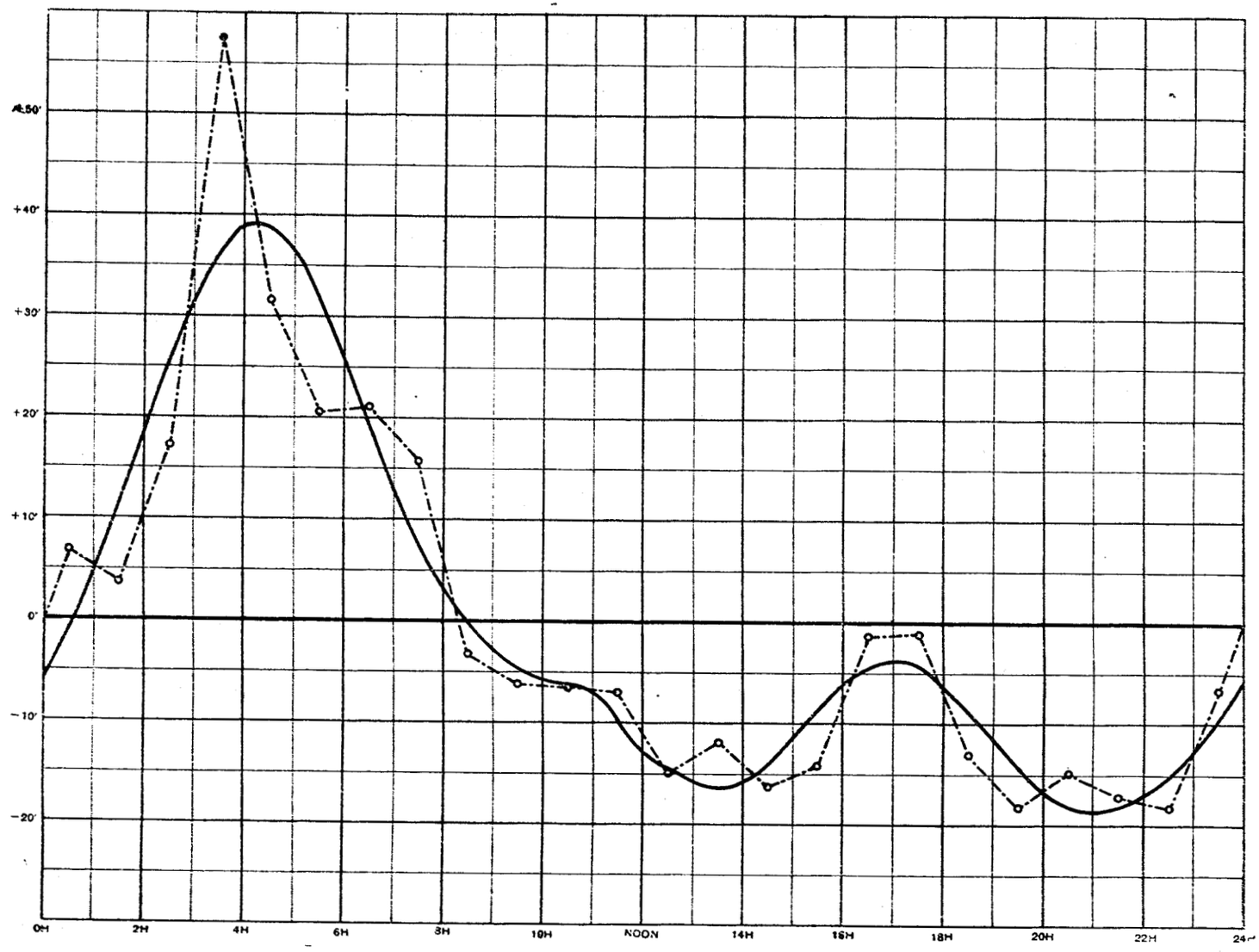
FIGURE 5



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD OCTOBER 4, 1903, TO OCTOBER 30, 1903

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 6



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD
NOVEMBER 1, 1903, TO NOVEMBER 28, 1903

(Observed mean values shown by circles joined by broken line ; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, November 1 to November 28, 1903

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
1, 8, 15, 22				1, 8, 15, 22				2, 9, 16, 23			
′	′	′	′	′	′	′	′	′	′	′	′
139.5	124.7	135.7	305.7	193.0	146.4	182.2	177.5	58.7	66.9	53.1	51.8
39.5	48.2	45.3	63.2	71.9	79.1	66.6	64.4	43.3	38.8	36.3	35.7
33.8	42.4	48.9	47.1	51.5	45.4	44.5	42.4	38.6	40.1	39.3	36.9
28.7	34.7	68.1	137.1	118.2	96.6	104.1	63.3	31.4	27.2	27.2	23.7
				Wednesday							
				4, 11, 18, 25							
56.9	55.8	53.4	42.0	49.7	57.4	55.6	48.2	47.5	39.2	57.1	70.8
70.2	29.8	93.5	154.1	79.8	47.7	53.8	64.9	51.5	50.6	40.8	41.0
47.5	50.6	50.4	69.0	48.0	46.9	22.4	31.0	67.6	56.6	61.7	51.3
35.8	40.5	40.3	40.6	39.4	41.3	37.9	33.9	31.4	27.7	28.6	30.8
56.5	53.3	67.0	107.4	81.4	70.1	70.9	65.7	46.2	43.4	43.0	42.8

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, November 1 to November 28, 1903—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14 5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
3, 10, 17, 24				5, 12, 19, 26				6, 13, 20, 27			
′	′	′	′	′	′	′	′	′	′	′	′
18.8	45.4	33.1	35.0	34.0	35.2	24.6	24.5	46.2	50.3	35.3	39.8
32.3	48.0	48.5	40.1	56.8	69.7	44.3	35.3	....	....	...	....
39.6	22.6	07.3	40.1	34.4	29.3	27.8	24.8	44.5	37.2	44.4	54.9
25.0	39.8	44.4	45.3	34.2	35.4	34.8	33.1	32.8	32.2	26.8	49.6
				Wednesday							
				4, 11, 18, 25							
26.7	28.0	34.1	20.8	134.3	77.3	21.4	30.3	29.9	30.2	21.7	26.9
52.7	54.8	39.8	54.1	42.8	71.0	74.9	54.0	40.4	20.6	22.5	43.6
50.8	34.2	29.6	18.0	16.1	26.1	25.3	23.4	18.2	25.5	40.1	53.3
32.0	30.1	29.1	30.1	33.6	43.5	40.2	24.4	31.5	30.5	29.0	32.8
34.7	37.9	33.2	35.4	48.3	48.4	36.7	31.2	34.8	32.4	31 4	43.0

Mean value for the whole period, 22° 49.′8 E.

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, November 29 to December 26, 1903

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
29, 6, 13, 20				29, 6, 13, 20				30, 7, 14, 21			
/	/	/	/	/	/	/	/	/	/	/	/
43.0	46.6	48.1	46.6	60.2	87.0	73.9	84.1	39.0	31.4	30.5	31.2
93.4	66.3	56.5	54.1	56.5	60.0	46.0	41.1	28.6	19.1	24.7	23.5
40.6	37.5	39.4	41.4	43.7	55.7	77.5	55.2	62.5	60.2	49.4	44.0
35.6	35.1	46.3	88.8	73.1	77.3	92.6	50.6	65.0	63.1	61.2	43.7
Wednesday											
2, 9, 16, 23											
37.6	47.0	49.7	71.5	81.5	83.6	88.6	105.4	110.3	75.7	74.0	65.7
50.4	53.5	50.7	59.0	81.5	53.5	49.1	52.4	44.8	36.1	26.9	27.3
47.4	50.6	53.4	48.8	48.5	61.8	56.4	49.0	42.3	36.5	37.3	33.2
45.8	50.6	51.9	43.5	48.9	52.8	49.5	64.6	53.9	35.6	25.6	32.7
49.2	48.4	49.5	56.7	61.7	66.5	66.7	62.8	55.8	44.7	41.2	37.7

Tabulation of mean hourly magnetic declinations at Teplitz Bay

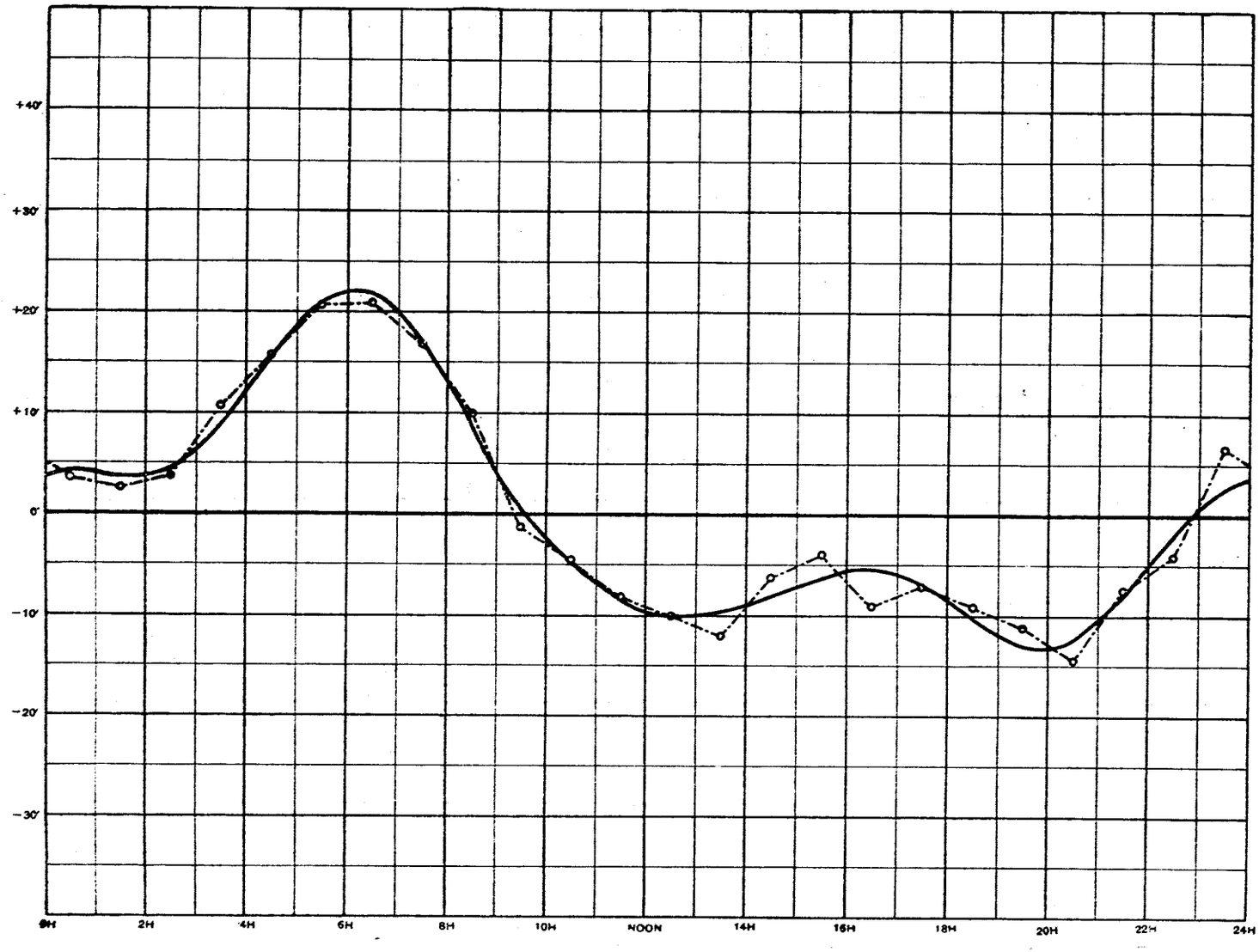
Four weeks, November 29 to December 26, 1903—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
1, 8, 15, 22				3, 10, 17, 24				4, 11, 18, 25			
/	/	/	/	/	/	/	/	/	/	/	/
27.1	18.5	32.9	41.0	35.2	30.8	31.4	26.3	18.6	49.6	14.6	80.7
36.1	31.8	43.5	62.2	32.7	31.9	33.5	34.6	33.4	34.9	33.2	37.1
41.0	39.2	39.8	37.3	38.5	39.1	38.9	38.4	33.7	28.2	30.6	39.6
34.5	34.1	36.9	34.1	37.3	36.8	37.6	37.4	....	....	....	....
Wednesday											
2, 9, 16, 23											
44.7	44.5	68.4	54.1	30.2	48.7	32.5	23.0	23.3	25.2	36.7	32.3
30.8	35.8	30.2	33.1	43.9	43.5	44.8	41.0	37.8	38.2	45.2	46.3
36 4	36.0	33.2	40.8	39.0	38.6	38.5	38.5	35.6	54.6	40.6	42.0
36.9	30.1	30.8	31.4	35.9	40.2	36.3	37.7	36.2	37.5	91.5	88.4
35.9	33.8	39.5	41.8	36.6	38.7	36.7	34.6	31.2	38.3	41.8	52.3

Mean value for the whole period, 22° 45.′9 E.

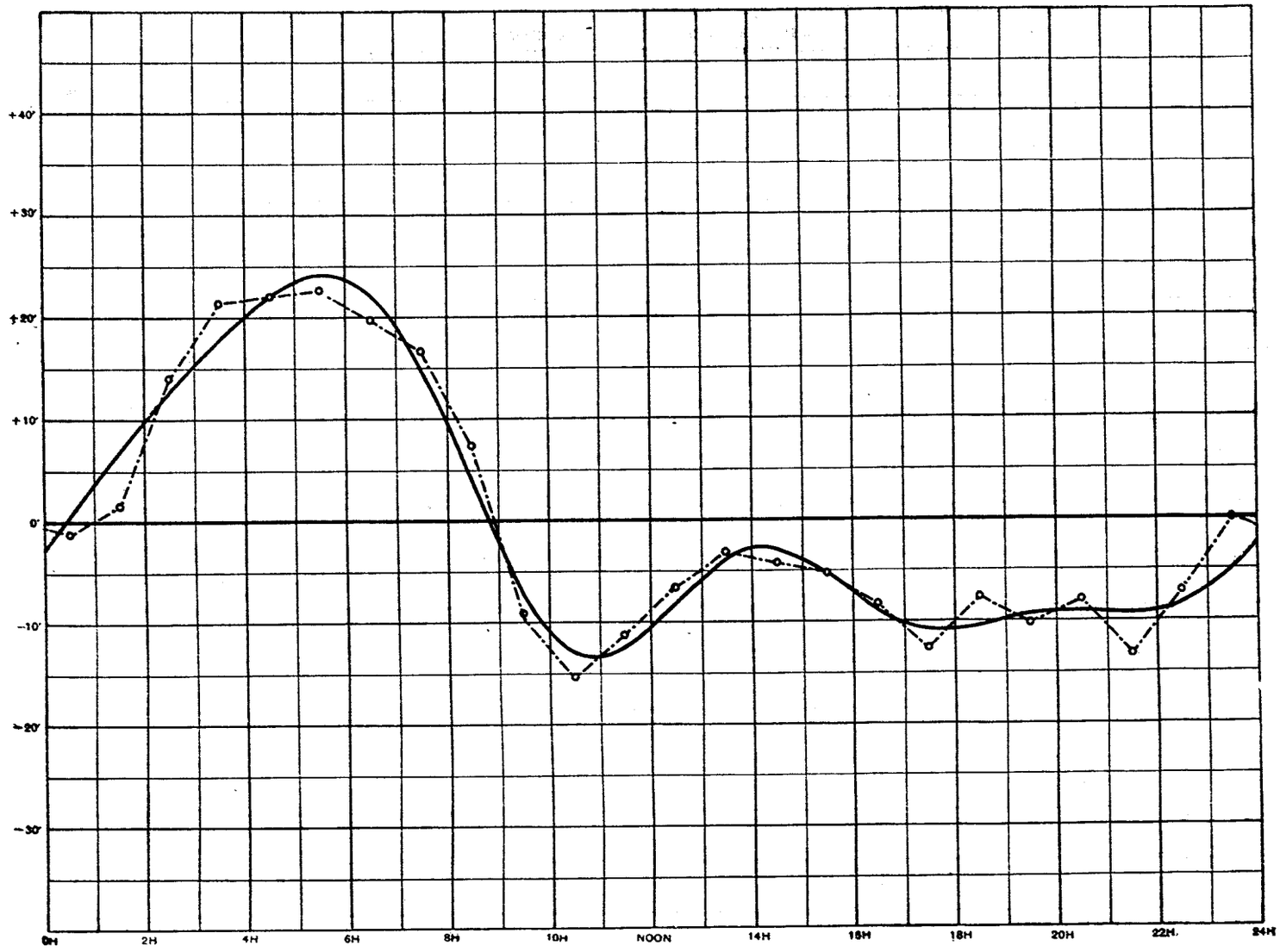
FIGURE 7



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD NOVEMBER 29, 1903, TO DECEMBER 26, 1903

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 8



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD DECEMBER 27, 1903, TO JANUARY 23, 1904

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, December 27, 1903, to January 23, 1904

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
27, 3, 10, 17				27, 3, 10, 17				28, 4, 11, 18			
/	/	/	/	/	/	/	/	/	/	/	/
....	....	....	....	....	....	....	....	....	....	....	....
66.2	66.6	66.4	75.2	73.5	101.0	80.7	77.9	44.7	40.6	49.6	43.2
41.7	32.8	110.4	142.1	143.1	123.4	109.1	90.9	105.2	66.6	43.6	36.6
50.5	70.9	59.6	49.4	48.7	51.8	54.6	49.8	38.7	38.4	38.6	40.0
				Wednesday							
				30, 6, 13, 20							
39.2	40.3	44.5	44.2	34.8	36.5	41.8	67.9	53.4	08.0	01.3	31.8
34.4	37.6	42.7	59.6	70.0	76.0	76.9	58.3	35.3	29.6	18.0	27.7
48.7	51.1	64.1	67.1	71.8	55.9	62.9	60.3	64.7	43.8	30.5	31.5
38.3	38.4	38.9	38.2	39.1	38.9	38.3	37.2	36.2	36.3	37.1	37.1
45.6	48.2	60.9	68.0	68.7	69.1	66.3	63.2	54.0	37.6	31.2	35.4

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, December 27, 1903, to January 23, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
29, 5, 12, 19				31, 7, 14, 21				1, 8, 15, 22			
/	/	/	/	/	/	/	/	/	/	/	/
31.7	32.1	31.8	31.4	34.9*b*	25 5*b*	50.5*b*	46.9*b*	77.0*a*	53.6*a*	29.1*a*	61.4*a*
31.9	54.6	59.3	37.0	44.0	39.1	40.0	41.3	39.9	38.5	38 7	42.4
30.1	32.5	31.7	44.5	37.3	36.7	36.9	35.8	29.9	27.2	39.2	31.2
48.3	46.6	45.3	44.8	37.9	34.6	38.6	37.1	34.2*c*	32.1*c*	58.5*c*	55.7*c*
				Wednesday							
				30, 6, 13, 20							
66.0	77.3	76.0	82.9	62.0	38.5	37.6	33.3	29.1	28.8	33.3	34.5
45.4	40.0	34.3	30.1	30.3	37.4	43.8	34.2	28.1	21.3	45.3	24.6
29.3	29.9	26.5	28.2	28.7	31.0	34.3	42.9	49.0	39.0	43 2	86.1
37.2	34.2	32.6	32.0	31.0	29.5	30.1	19.1	22.9	24.6	29.2	37.1
40.0	43.4	42.2	41.4	38.3	34.0	39.0	36.3	38.8	33.1	39.6	46.6

a Thursday, December 31, 1903 *b* Friday, January 1, 1904 *c* Saturday, January 23, 1904

Mean value for the whole period, 22° 46.′7 E.

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, January 24 to February 20, 1904

22° plus tabular quantity, east

h 0 5	*h* 1 5	*h* 2 5	*h* 3 5	*h* 4 5	*h* 5 5	*h* 6 5	*h* 7 5	*h* 8 5	*h* 9 5	*h* 10 5	*h* 11 5
Sunday				Sunday				Monday			
24, 31, 7, 14				24, 31, 7, 14				25, 1, 8, 15			
′	′	′	′	′	′	′	′	′	′	′	′
46 2	49 3	50 3	51 6	58 0	57 1	50 3	41 0	38 5	37 8	35 0	31 1
39 1	102 5	121 5	123 0	66 6	62 8	65 6	48 2	37 9	36 0	27 5	29 5
86 8	72 4	60 2	55 2	56 4	73 4	64 8	64 5	71 3	46 2	33 0	22 2
52 1	41 2	43 6	45 3	62 5	76 4	79 8	57 0	91 0	56 4	33 5	36 0
				Wednesday							
				27, 3, 10, 17							
41 7	42 7	42 7	42 1	44 2	44.2	45 0	46 7	43 7	37 5	35 1	28 6
83 8	61 0	67 4	57 5	80 8	65 8	52 6	35 4	36 6	34 7	35 5	35 2
43 7	47 9	49 4	58 7	71 3	72 1	66 9	72 5	52 1	44 4	32 8	31 8
55 4	53 1	72 0	56 2	106 0	49 8	96 0	44 8	64 0	34 7	33 3	37 1
56 1	58 8	63 4	61 2	68 2	62 7	65 1	51 6	54 4	41 0	33 2	31 4

Tabulation of mean hourly magnetic declinations at Teplitz Bay

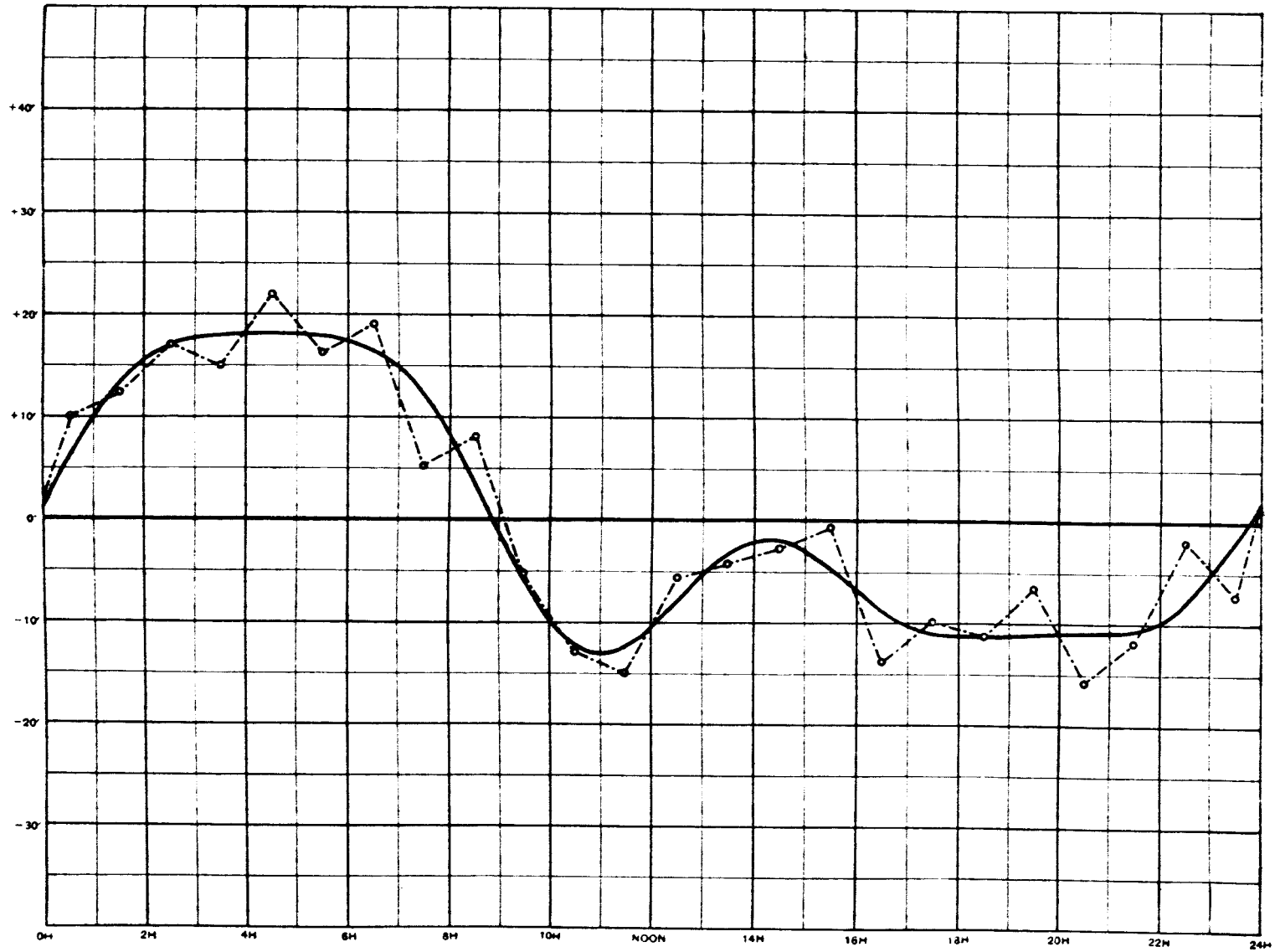
Four weeks, January 24 to February 20, 1904—Continued

22° plus tabular quantity, east

h 12 5	*h* 13 5	*h* 14 5	*h* 15 5	*h* 16 5	*h* 17 5	*h* 18 5	*h* 19 5	*h* 20 5	*h* 21 5	*h* 22 5	*h* 23 5
Tuesday				Thursday				Friday			
26, 2, 9, 16				28, 4, 11, 18				29, 5, 12, 19			
′	′	′	′	′	′	′	′	′	′	′	′
101 6	104 5	100 1	102 9	33 2	23 7	10 7	11 5	41 8	40 8	36 6	37 3
52 7	62 4	59 5	46 2	34 2	33 4	32 8	30 8	14 8	19 9	59 4	40 5
12 2	22 3	33 0	56 0	35 9	38 7	35 5	83 9	43 6	45 1	41 9	37 8
31 3	28 5	19 4	39 1	34 2	40 6	41 6	36 0	36 1	37 1	38 1	38 1
				Wednesday							
				27, 3, 10, 17							
32 2	28 9	28 6	30 7	32 4	34 4	36 6	35 2	32 4	31 2	32 3	36 1
37 2	35 4	35 2	34 0	35 0	34 9	33 1	48 5	31 3	39 0	51 6	36 6
34 8	30 5	46 6	23 7	26 0	38 0	42 5	39 3	30 1	24 4	48 9	50 0
25 4	23 4	26 8	33 9	29 4	48 0	46 9	33 8	15 0	38 7	44 3	35 4
40 9	42 0	43 6	45 8	32 5	36 5	35 0	39 9	30 6	34 5	44 1	39 0

Mean value for the whole period, 22° 46′3 E

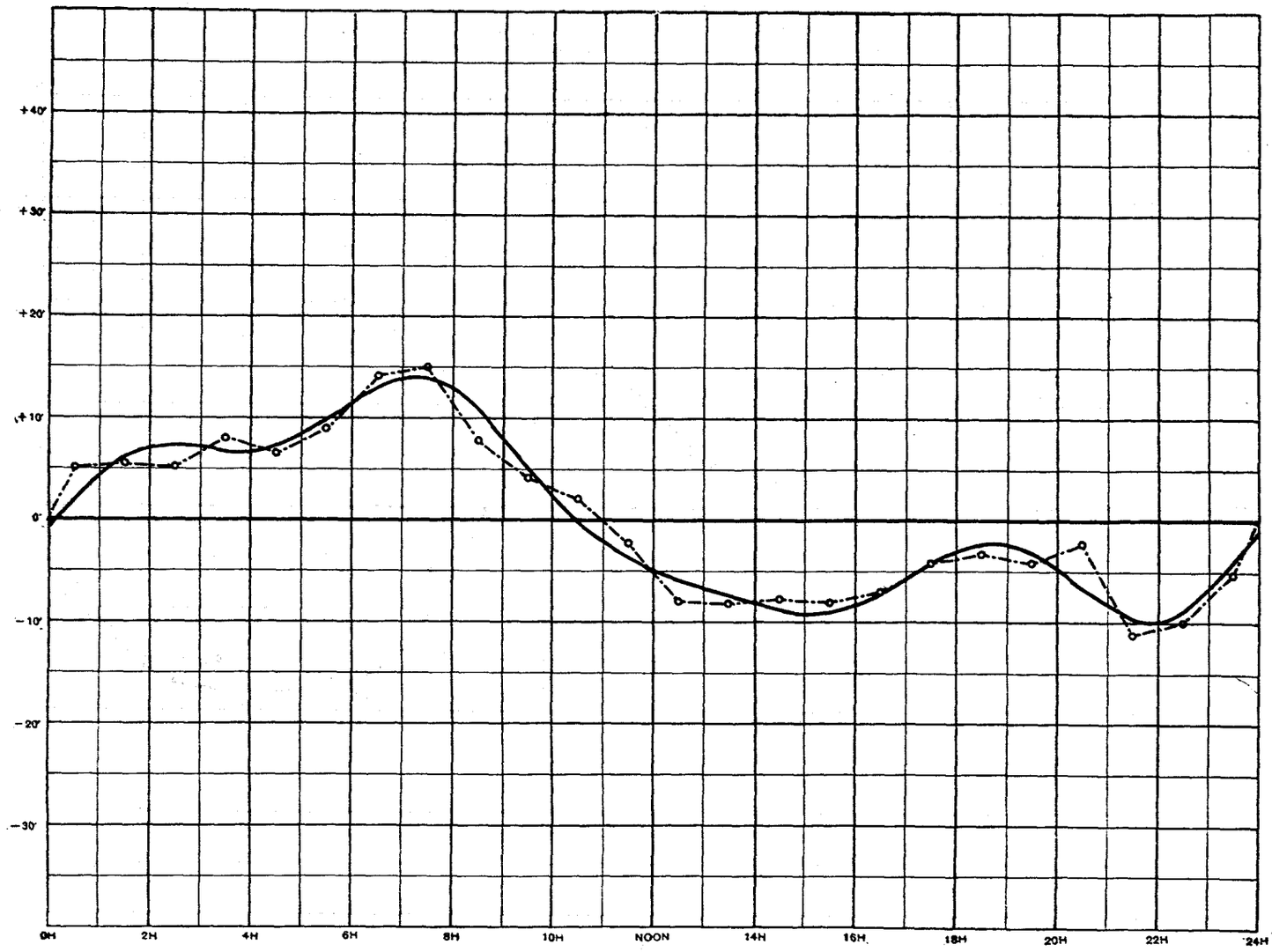
FIGURE 9



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD JANUARY 24, 1904, TO FEBRUARY 20, 1904

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 10



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD FEBRUARY 21, 1904, TO MARCH 19, 1904

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, February 21 to March 19, 1904

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
21, 28, 6, 13				21, 28, 6, 13				22, 29, 7, 14			
′	′	′	′	′	′	′	′	′	′	′	′
48.8	52.3	50.9	54.5	50.9	53.8	51.1	50.4	46.8	45.9	45.1	44.3
44.1	41.3	42.5	42.6	43.8	44.0	45.1	43.7	49.5	46.0	45.7	42.6
....	....	....	....	....	....	....	....	....	....	....	....
40.7	54.5	51.4	54.6	52.5	58.1	67.1	59.6	53.0	49.6	43.8	41.7
				Wednesday							
				24, 2, 9, 16							
47.9	46.5	46.8	54.4	47.9	49.6	74.6	91.5	50.7	37.1	37.8	30.0
56.0	46.6	45.1	46.2	46.1	47.8	45.8	44.2	45.6	47.5	44.7	35.7
44.4	43.9	47.8	47.4	48.1	48.8	....	....	....	....	....	....
45.1	43.7	43.7	46.1	46.8	49.8	50.8	50.3	49.4	48.5	45.2	40.6
46.7	47.0	46.9	49.4	48.0	50.3	55.8	56.6	49.2	45.8	43.7	39.2

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, February 21 to March 19, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
23, 1, 8, 15				25, 3, 10, 17				26, 4, 11, 18			
′	′	′	′	′	′	′	′	′	′	′	′
22.5	16.6	28.6	24.7	36.0	42.2	41.0	40.7	33.5	32.3	39.5	42.2
42.5	44.2	46.0	48.2	39.7	41.7	40.2	32.5	63.4	35.2	32.1	33.4
40.0	38.4	29.1	33.5	39.5	37.6	39.0	53.0	12.9	36.4	31.7	38.1
40.3	37.2	36.1	38.0	38.2	37.3	38.7	39.7	35.4	31.5	25.8	32.4
				Wednesday							
				24, 2, 9, 16							
27.3	35.1	35.2	36.4	36.4	37.6	39.4	38.1	37.0	22.7	23.4	38.1
27.4	29.4	34.2	28.8	30.3	36.4	36.1	27.4	53.4	29.8	35.5	31.0
....	....	....	....	....	....	....	....	....	....	....	....
36.2	31.5	27.8	25.2	22.0	28.9	32.4	30.1	38.2	24.1	33.5	38.4
33.7	33.2	33.9	33.5	34.6	37.4	38.1	37.3	39.1	30.3	31.6	36.2

Mean value for the whole period, 22° 41.′6 E.

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, March 20 to April 16, 1904

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
20, 27, 3, 10				20, 27, 3, 10				21, 28; 4, 11			
′	′	′	′	′	′	′	′	′	′	′	′
99.9	100.6	104.3	102.9	109.0	118.2	123.6	62.2	....	....	....	....
42.1	50.8	51.5	55.3	63.7	70.5	80.3	89.1	....	....	....	42.3
77.6	58.0	61.9	73.2	98.8	107.8	97.0	87.1	87.8	64.0	50.0	33.1
46.8	45.5	30.2	48.6	154.8	132.5	60.4	48.9	64.6	43.1	39 7	35.2
Wednesday											
23, 30, 6, 13											
41.5	41.4	40.7	41.6	43.2	47.2	57.5	55.0	50.0	48 5	46.0	43.3
30.1	36.3	50.8	67.7	55.0	69.5	52.3	43.0	39.5	35.1	33.3	26.8
33.7	59.8	62.1	67.5	78.3	107.3	100.4	61.2	49.5	46.4	42.0	36.7
24.6	23.3	37.0	63.0	69.8	43.0	73.8	98.4	76.6	56.5	43 6	33.0
49.5	52.0	54.8	65.0	84 1	87.0	80.7	68.1	61.3	48.9	42.4	35.8

Tabulation of mean hourly magnetic declinations at Teplitz Bay

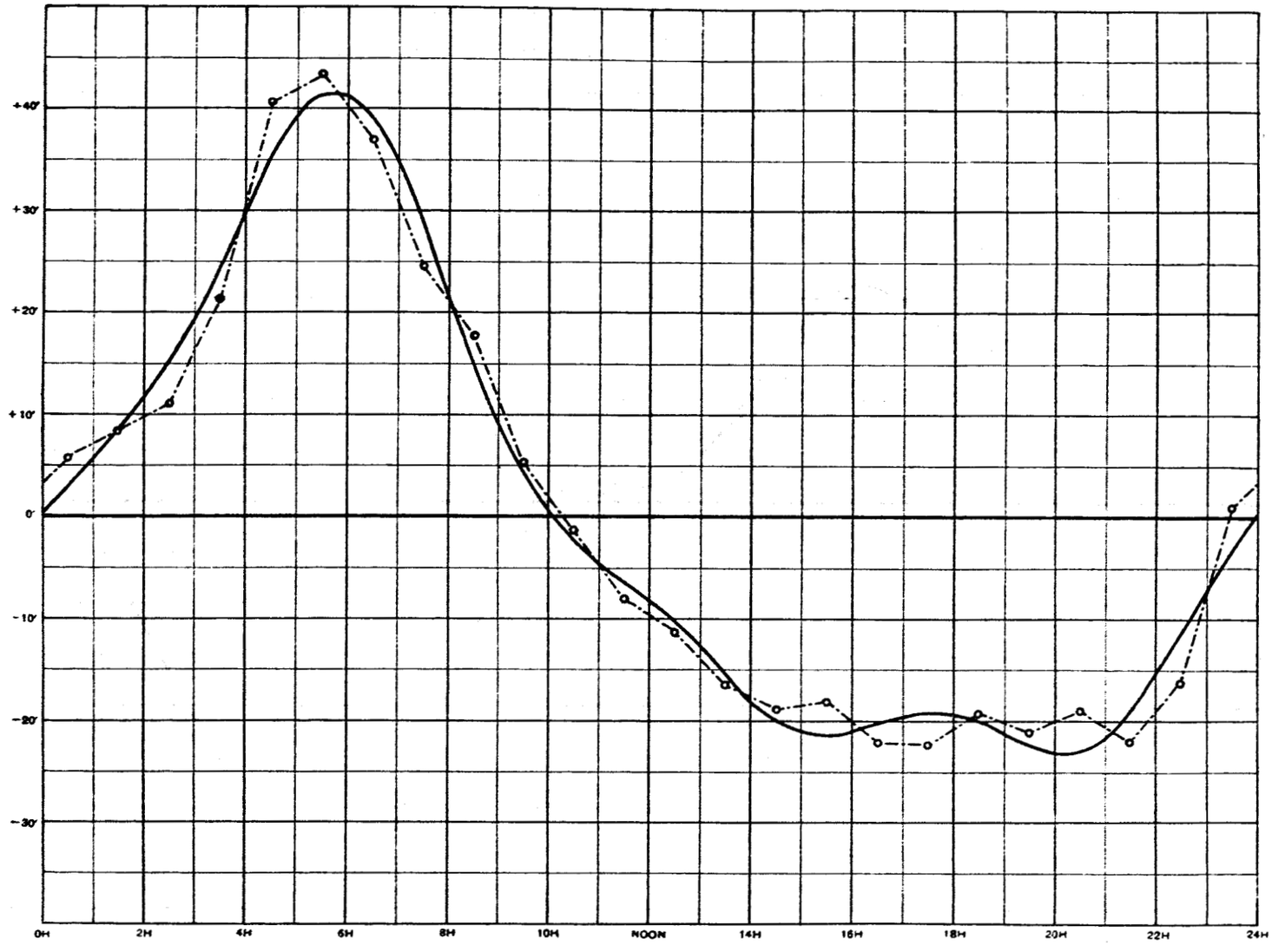
Four weeks, March 20 to April 16, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
22, 29, 5, 12				24, 31, 7, 14				25, 1, 8, 15			
′	′	′	′	′	′	′	′	′	′	′	′
46.5	44.3	39.6	40.1	34.5	32.9	37.1	35.2	20.8	19.8	27.1	37.0
27.6	21.6	15.4	17.9	29.3	28.3	29.3	29.3	12.4	13.3	02.9	74.3
35.1	32.2	32.2	32.1	00.4	01.5	11.6	—10.8	10.2	01.7	06.8	12.3
40.2	34.0	34.0	32.3	18.1	28.2	25.2	32.5	19.6	21.7	21.4	27 4
Wednesday											
23, 30, 6, 13											
39.2	33.6	31.9	29.3	33.4	33.3	33.7	28.4	22.6	22.0	28.2	32.6
21.7	19.6	17.2	12.6	17.6	18.1	12.0	13.3	47.6	31.7	77.9	77.2
23.5	10.3	12 2	28.8	27.2	28.0	30.9	33.0	37.4	30.5	19.4	56.5
25.6	21.4	16.4	10.7	12.8	01.2	15.9	19.6	27.2	32.8	33.9	39.6
32.4	27.1	24.9	25.5	21.7	21.4	24.5	22.6	24.7	21.7	27.2	44.6

Mean value for the whole period, 22° 43.′7 E.

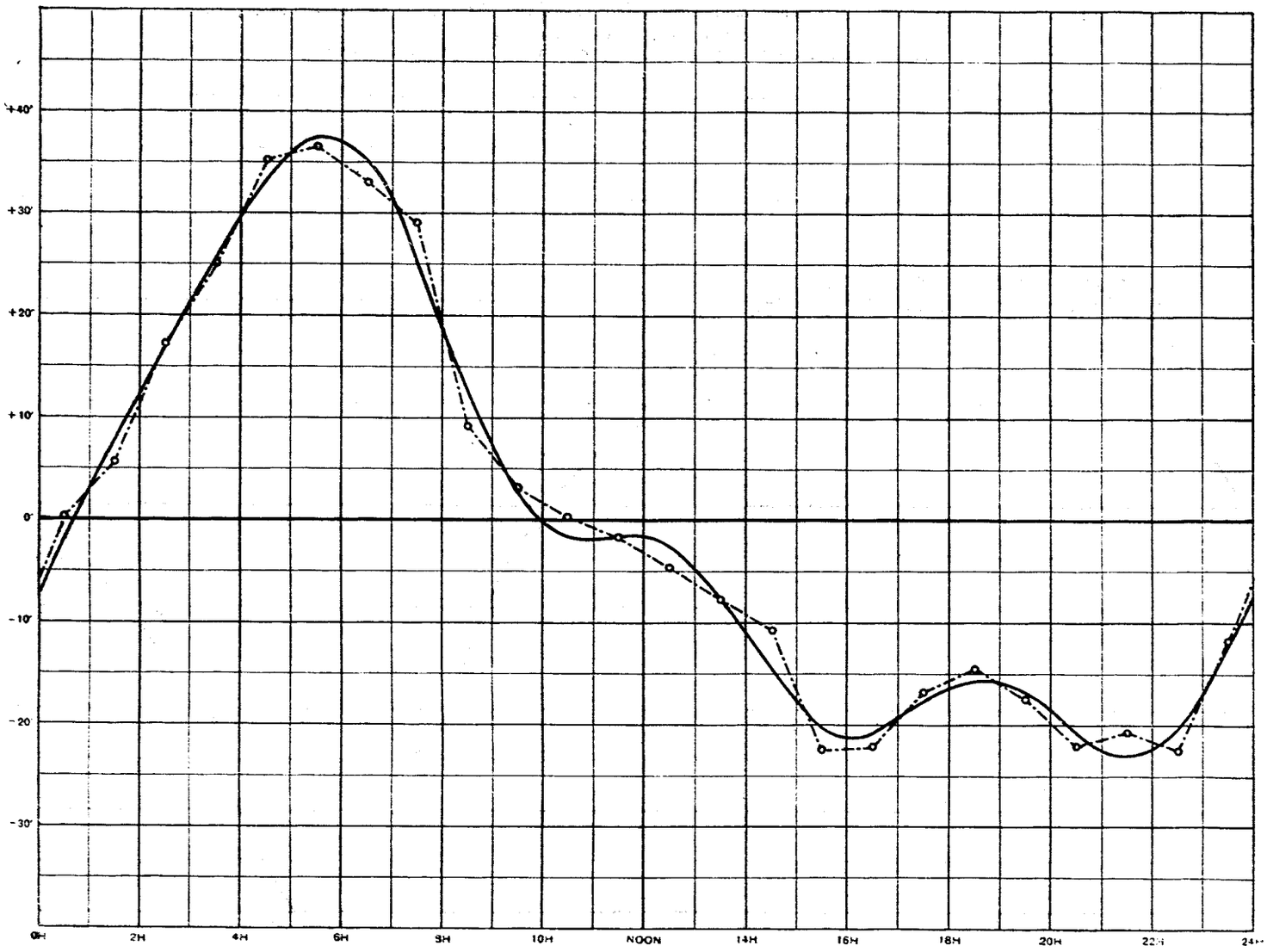
FIGURE 11



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD MARCH 20, 1904, TO APRIL 16, 1904

(Observed mean values shown by circles joined by broken line ; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 12



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD APRIL 17, 1904, TO MAY 14, 1904

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, April 17 to May 14, 1904

20° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
17, 24, 1, 8				17, 24, 1, 8				18, 25, 2, 9			
′	′	′	′	′	′	′	′	′	′	′	′
40.6	38.8	38.2	47.9	68.8	72.1	64.7	54.6	43.9	19.5	31.0	29.0
25.8	19.9	27.0	39.9	64.1	61.9	61.7	61.2	47.8	37.1	35.2	32.9
30.3	35.2	55.5	76.6	99.9	108.2	127.2	137.2	26.7	27.2	22.7	35.2
24.3	21.4	38.6	61.2	89.0	95.9	79.1	63.9	50.5	47.1	43.4	38.4
Wednesday											
20, 27, 4, 11											
13.1	33.8	61.8	49.2	48.9	54.2	54.0	53.3	51.9	49.3	47.4	44.4
87.5	99.3	104.3	93.3	65.8	59.7	57.2	57.8	54.9	50.1	43.1	39.1
36.6	52.8	54.5	76.9	75.2	69.3	61.7	51.9	46.9	43.6	38.5	32.6
41.1	41.9	54.6	52.7	67.3	68.8	56.5	50.0	46.8	46.7	38.8	32.1
37.4	42.9	54.3	62.2	72.4	73.8	70.3	66.2	46.2	40.1	37.5	35.5

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, April 17 to May 14, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
19, 26, 3, 10				21, 28, 5, 12				22, 29, 6, 13			
′	′	′	′	′	′	′	′	′	′	′	′
73.5	80.4	59.3	16.4	29.6	32.9	30.0	32.3	25.3	09.7	13.5	25.3
34.6	44.0	53.4	31.1	24.8	25.1	22.2	21.5	—02.8	—04.5	—08.1	20.1
13.1	05.9	15.1	—01.3	29.6	34.1	39.8	42.4	27.0	20.1	15.8	34.3
32.1	21.5	08.5	15.0	—40.5	—22.3	—16.5	—36.6	—29.7	—11.4	—14.1	10.5
Wednesday											
20, 27, 4, 11											
37.6	27.1	28.9	30.0	30.9	32.8	34.6	36.2	34.0	34.2	34.2	39.9
24.9	31.5	26.1	19.7	27.2	31.8	35.2	35.9	37.1	38.6	35.8	27.8
19.0	09.8	06.3	—02.6	18.5	21.4	26.7	14.4	08.7	23.7	22.1	33.6
24.5	14.0	11.6	09.5	—00.3	06.5	08.4	12.5	20.1	19.9	17.2	11.4
32.4	29.3	26.2	14.7	15.0	20.4	22.6	19.8	15.0	16.3	14.6	25.4

Mean value for the whole period, 22° 37.1′ E.

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Four weeks, May 15 to June 11, 1904

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				**Sunday**				**Monday**			
15, 22, 29, 5				15, 22, 29, 5				16, 23, 30, 6			
′	′	′	′	′	′	′	′	′	′	′	′
26.3	36.1	51.7	65.9	79.9	130.3	123.2	53.4	52.8	49.3	47.6	43.6
21.6	62.2	73.5	63.9	55.5	49.6	48.2	46.0	50.4	25.7	22.0	19.2
39.3	63.7	84.6	101.5	118.5	88.0	66.2	59.1	48.8	47.0	38.9	35.7
33.0	57.2	51.8	70.2	55.7	82.6	94.3	71.5	48.8	52.4	38.8	44.1
				Wednesday							
				18, 25, 1, 8							
31.3	52.7	79.9	90.0	109.2	69.4	61.7	60.4	54.7	49.5	48.4	34.0
23.2	46.4	51.5	50.9	53.0	52.5	58.8	49.1	53.4	47.0	43.7	31.7
33.9	55.6	63.9	92.7	113.3	102.0	96.0	66.2	59.0	54 1	51.7	44.2
29.8	36.3	40.4	59.2	80.9	95.1	80.9	65.4	55.4	54.6	49.0	40.5
29.8	51.3	62.2	74.3	83.2	83.7	78.7	58.9	52.9	47.4	42.5	36.6

Tabulation of mean hourly magnetic declinations at Teplitz Bay

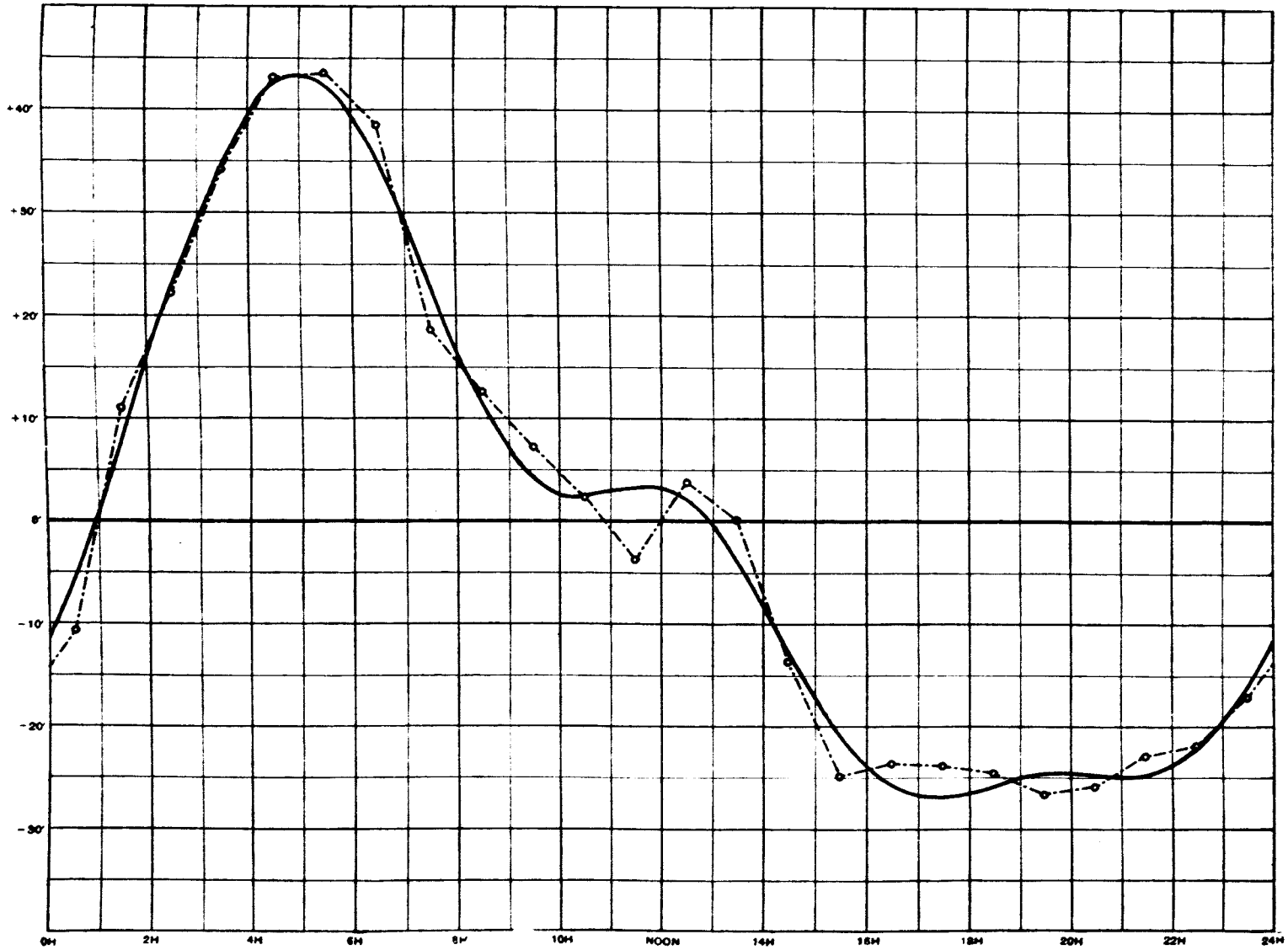
Four weeks, May 15 to June 11, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				**Thursday**				**Friday**			
17, 24, 31, 7				19, 26, 2, 9				20, 27, 3, 10			
′	′	′	′	′	′	′	′	′	′	′	′
67.9	46.5	44.8	31.1	—05.9	03.5	—02.3	—05.1	—11.6	09.9	23.9	33.0
74.7	55.1	32.4	01.8	16.6	13.3	17.7	06.8	13.6	15.8	—04.6	—20.4
32.9	18.6	14.9	07.5	27.7	24.6	21.8	25.0	15.8	24.0	28.7	33.0
47.2	89.4	48.4	09.0	23.6	22.4	22.7	20.7	24.3	28.8	19.6	19.6
				Wednesday							
				18, 25, 1, 8							
31.3	28.9	04.7	19.7	10.1	09.6	15.5	06.6	09.4	11.8	11.8	22.8
25.5	21.3	15 9	13.0	15.4	06.4	03.7	09.9	08.4	00.2	04.5	30.8
38.5	31.7	28.6	20.9	24.4	33.2	24.0	14.6	22.1	20.5	27.7	24.5
34.4	29.7	22.5	18.8	21.8	18.9	24.2	30.6	30.5	27.6	33.7	41.0
44.0	40.2	26.5	15.2	16.7	16.5	15.9	13.6	14.1	17.3	18.2	23.0

Mean value for the whole period, 22° 40.′1 E.

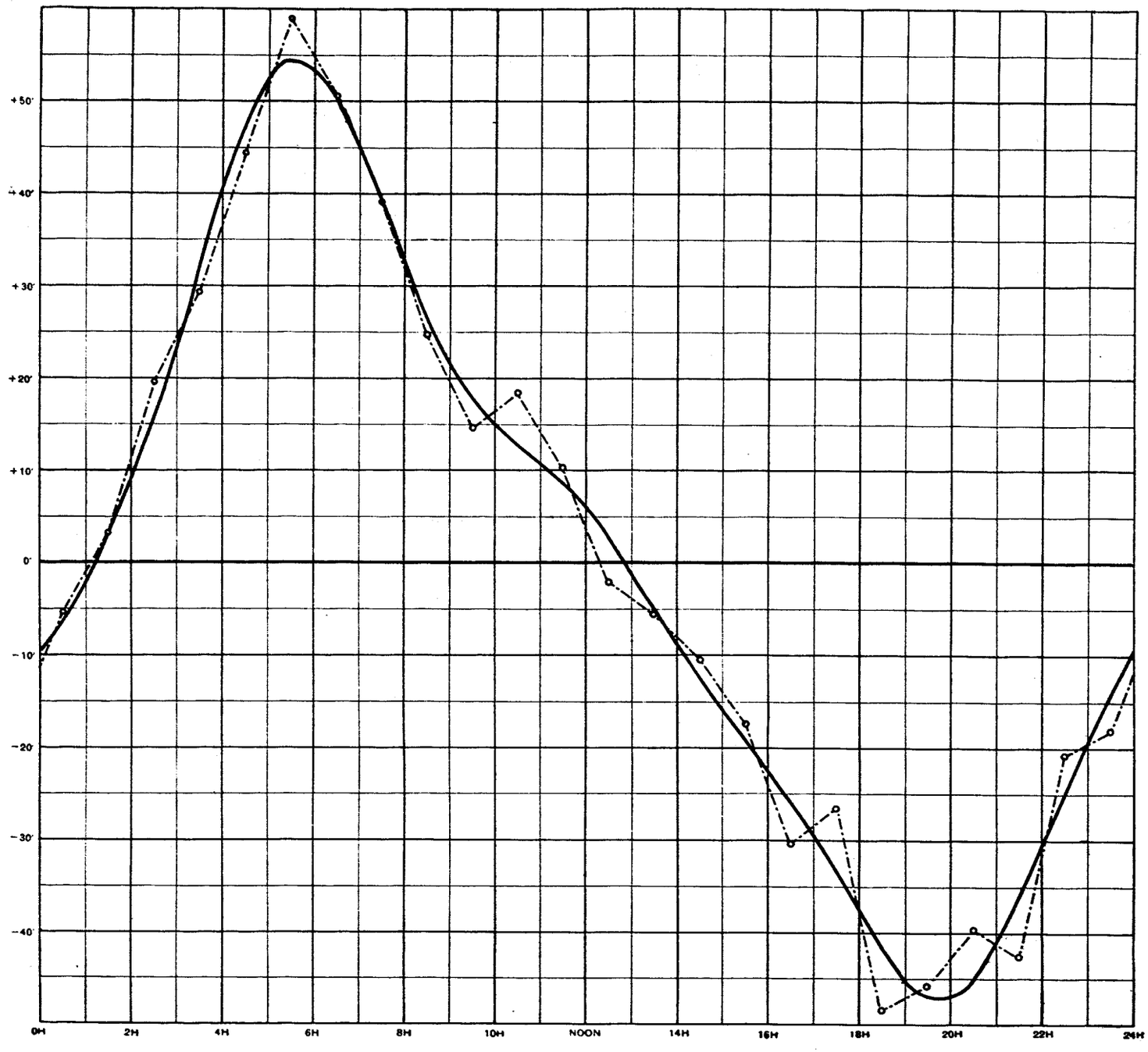
FIGURE 13



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD MAY 15, 1904, TO JUNE 11, 1904

(Observed mean values shown by circles joined by broken line : computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 14



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE PERIOD JUNE 12, 1904, TO JULY 1, 1904

(Observed mean values shown by circles joined by broken line ; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Three weeks, ending series, June 12 to July 1, 1904

22° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11 5
Sunday				Sunday				Monday			
12, 19, 26				12, 19, 26				13, 20, 27			
′	′	′	′	′	′	′	′	′	′	′	′
33·7	49.1	57.2	62.8	73.1	86.0	72 2	67.0	58.6	47.4	44.0	40.5
31.6	25.7	32.7	48.8	71.1	92.4	82.3	72.7	47.9	52.4	53.9	46.5
—08.5	03.3	25.2	35.7	60.3	88.5	92 7	87.5	67.3	43·4	72.0	45.3
				Wednesday							
				15, 22, 29							
54.7	57.7	67.5	70.6	97.9	98.4	93.0	88.0	65.6	42.0	42 6	41.0
23.6	34.2	60.0	72.6	68.6	87.1	63.2	56.6	53.7	48.1	46.9	39.9
26.5	40.7	67.4	77.4	87.4	93.6	92.8	54.6	48.1	48 0	42.8	39.6
26.9	35.1	51.7	61.3	76.4	91.0	82.7	71.1	56.9	46.9	50.4	42.1

Tabulation of mean hourly magnetic declinations at Teplitz Bay

Three weeks, ending series, June 12 to July 1, 1904—Continued

22° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22 5	*h* 23.5
Tuesday				Thursday				Friday			
14, 21, 28				16, 23, 30				17, 24, 1			
′	′	′	′	′	′	′	′	′	′	′	′
32.0	27.8	25.5	26.7	—37.0	—13.9	—67.2	—46.7	15.7	15.0	16.3	30.1
36.5	32.0	28.5	—01.7	—17 4	—12.7	—15.4	—20 4	20.2	20.8	20 4	29.4
27.7	28.4	21.6	15.2	17.6	21.8	03.8	06.2	—45.7	—58.4	17.2	—09 3
				Wednesday							
				15, 22, 29							
26.5	35.1	41.4	42.7	37.1	11.1	—61.5	—68.0	—83.0	—70.8	—17.2	—11.0
28.6	24.2	12.5	03·9	10.7	26.6	22.9	21.8	22.2	17.8	20.0	23.0
28.8	13.3	00.5	01.6	—00.1	01.0	20.8	25.2	24.2	14.1	12.0	21.5
30.0	26.8	21.7	14.7	01.8	05.6	—16.1	—13.6	—07.7	—10.2	11.4	14.0

Mean value for the whole period, 22° 32.′1 E.

Summary of mean hourly magnetic declinations at Teplitz Bay

From observations between October 4, 1903, and July 1, 1904

22° plus tabular quantity, east

Period 1903–1904	*h* 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5	*h* 12.5
	′	′	′	′	′	′	′	′	′	′	′	′	′
Oct. 4 to Oct. 30....	35.2	37.4	52.3	54.9	53.8	54.5	55.8	51.6	47.3	35.8	32.8	29.3	29.4
Nov. 1 to Nov. 28....	56.5	53.3	67.0	107.4	81.4	70.1	70.9	65.7	46.2	43.4	43.0	42.8	34.7
Nov. 29 to Dec. 26...	49.2	48.4	49.5	56.7	61.7	66.5	66.7	62.8	55.8	44.7	41.2	37.7	35.9
Dec. 27 to Jan. 23....	45.6	48.2	60.9	68.0	68.7	69.1	66.3	63.2	54.0	37.6	31.2	35.4	40.0
Jan. 24 to Feb. 20....	56.1	58.8	63.4	61.2	68.2	62.7	65.1	51.6	54.4	41.0	33.2	31.4	40.9
Feb. 21 to M'ch 19...	46.7	47.0	46.9	49.4	48.0	50.3	55.8	56.6	49.2	45.8	43.7	39.2	33.7
M'ch 20 to Apr. 16...	49.5	52.0	54.8	65 0	84.1	87.0	80.7	68.1	61.3	48.9	42.4	35.8	32.4
Apr. 17 to May 14...	37.4	42.9	54.3	62.2	72.4	73.8	70 3	66.2	46.2	40.1	37.5	35 5	32.4
May 15 to June 11...	29.8	51.3	62.2	74.3	83.2	83.7	78.7	58.9	52.9	47.4	42.5	36.6	44.0
June 12 to July 1....	26.9	35.1	51.7	61.3	76.4	91.0	82.7	71.1	56.9	46.9	50.4	42.1	30.0
Oct. 4 to July 1	43.3	47.4	56.3	66.0	69.8	70.9	69.3	61.6	52.4	43.2	39.8	36.6	35.3

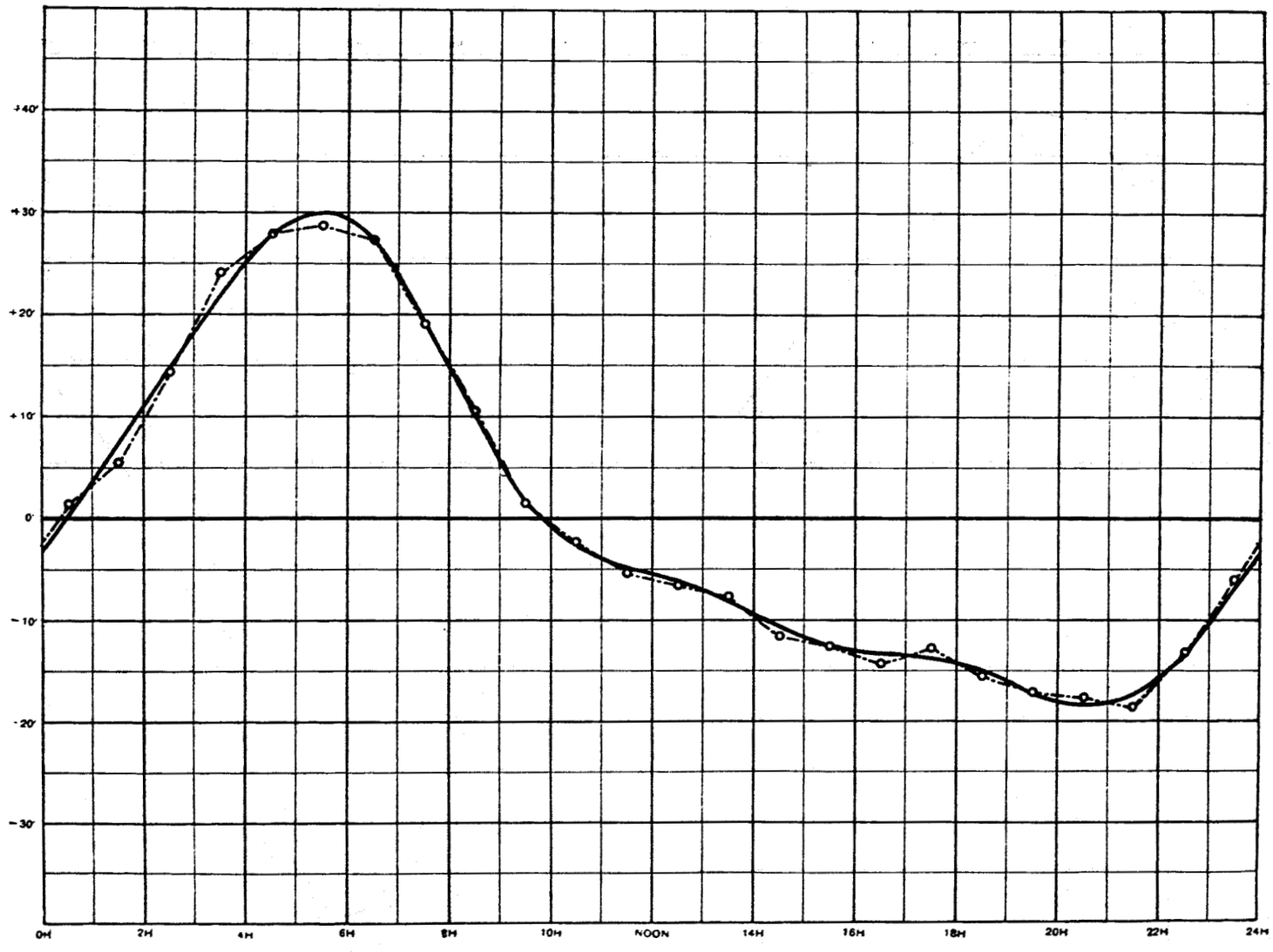
Summary of mean hourly magnetic declinations at Teplitz Bay

From observations between October 4, 1903, and July 1, 1905—Continued

22° plus tabular quantity, east

Period 1903–1904	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5	Period means
	′	′	′	′	′	′	′	′	′	′	′	′
Oct. 4 to Oct. 30	28.1	24.2	25.6	34 0	32.0	31.4	27.6	21.9	20.3	29.5	36.1	36.7
Nov. 1 to Nov. 28....	37.9	33.2	35.4	48.3	48.4	36.7	31.2	34.8	32.4	31.4	43.0	49.8
Nov. 29 to Dec. 26...	33.8	39.5	41.8	36.6	38.7	36.7	34.6	31.2	38.3	41.8	52.3	45.9
Dec. 27 to Jan. 23....	43.4	42.2	41.4	38.3	34.0	39.0	36.3	38.8	33.1	39.6	46.6	46.7
Jan. 24 to Feb. 20 ...	42.0	43.6	45.8	32.5	36.5	35.0	39.9	30.6	34.5	44.1	39.0	46.3
Feb. 21 to M'ch 19...	33.2	33.9	33.5	34.6	37.4	38.1	37.3	39.1	30 3	31.6	36.2	41.6
M'ch 20 to Apr. 16...	27.1	24.9	25.5	21.7	21.4	24.5	22.6	24.7	21.7	27.2	44.6	43.7
Apr. 17 to May 14 ..	29.3	26.2	14.7	15.0	20 4	22.6	19.8	15.0	16.3	14.6	25.4	37.1
May 15 to June 11...	40.2	26.5	15.2	16.7	16.5	15.9	13.6	14.1	17.3	18.2	23.0	40.1
June 12 to July 1.....	26.8	21.7	14.7	01.8	05.6	-16.1	-13.6	-07.7	-10.2	11.4	14 0	32.1
Oct. 4 to July 1.....	34.2	31.6	29.4	27.9	29.1	26.4	24.9	24.2	23.4	28.9	36.0	42.0

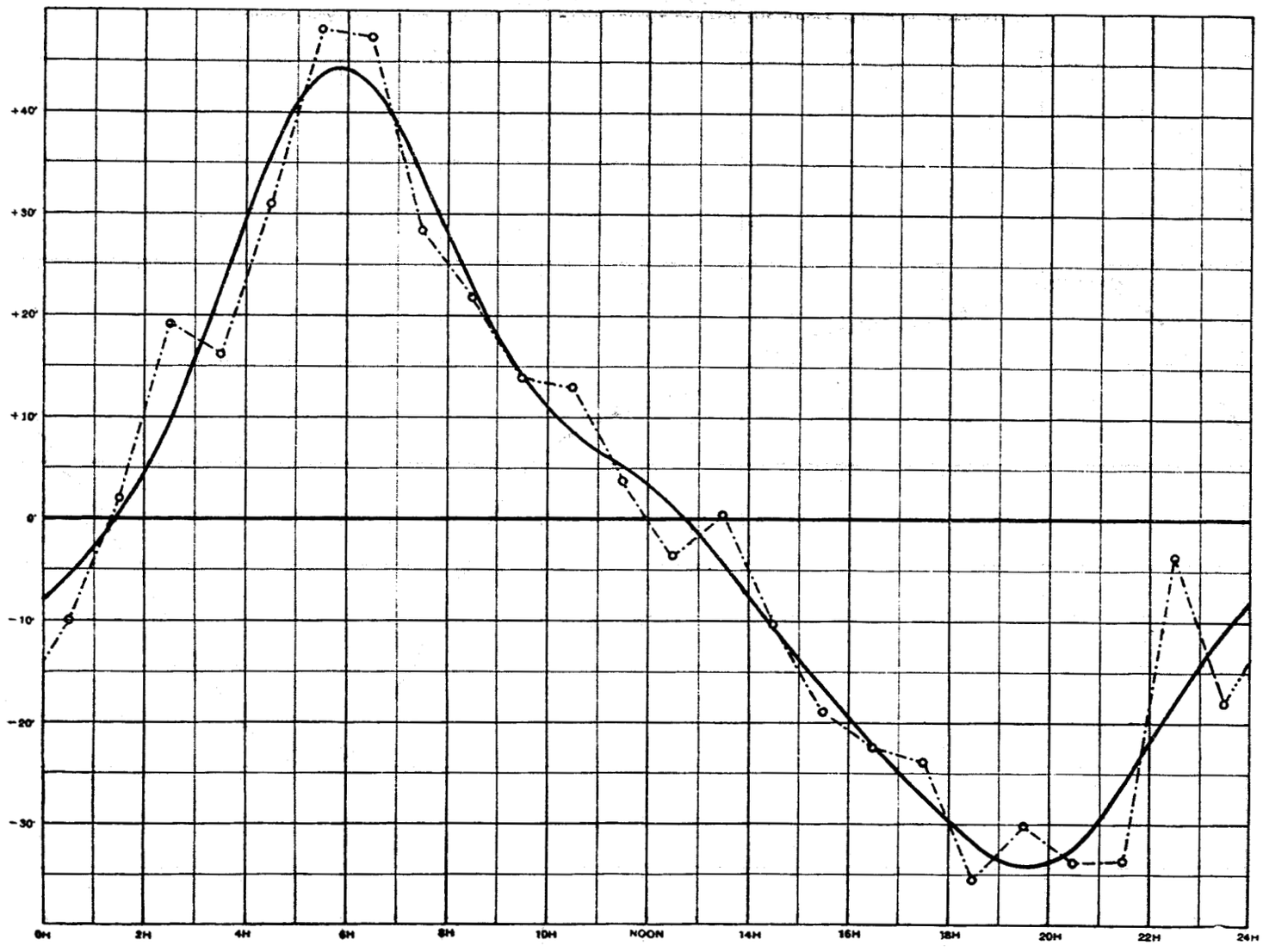
FIGURE 15



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE WHOLE PERIOD OF OBSERVATION, OCTOBER 4, 1903, TO JULY 1, 1904

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 16



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE MONTH OF JULY, 1908,
AS INTERPOLATED FROM ENTIRE SERIES

(Interpolated values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Unfortunately the observations at Teplitz Bay cover only nine months of the year. In order to arrive at an approximation of the diurnal variation in magnetic declination for the missing months, values have been interpolated, by formulæ based on Bessel's periodic function, dependent upon all of the observations made. The hourly means of all the mean observed hourly values have been obtained for all of the observations in each calendar month and these considered as representing the mean course of the declination for that month. This disregards the fact that the mean hourly declinations are not always evenly distributed during the month; the errors, however, arising from such an assumption are certainly less than those to be expected in the resulting interpolations.

The interpolation formulæ used have been developed by A. Bravais in his memoir "Sur la manière de représenter les variations diurnes ou annuelles des éléments météorologiques par des series trigonométriques".* In the case in hand three values, t_0, t_1, and t_2, are missing in each of the cycles of twelve equidistant ordinates, t_0, t_1, t_2, t_3, ... t_{11}. For this case using the auxiliary values

$$x = t_0 + t_2 \text{ and } y = t_0 - t_2,$$

Bravais deduces

$$x = 6.929 \left(\frac{g_0 + g_2}{2}\right) + 3.694\, g_1,$$

$$y = 1.75 \left(\frac{g_0 - g_2}{2}\right), \text{ and}$$

$$t_1 = 3.694 \left(\frac{g_0 + g_2}{2}\right) + 2.970\, g_1.$$

In these equations the values of g_0, g_1, and g_2 are as follows:

$$g_0 = 0.533\, t_{11} + 0.0383\,(t_5 + t_7) + \frac{1}{7}(-t_3 - t_4 + t_6 - t_8 - t_9 + t_{10}),$$

$$g_1 = 0.0383\,(t_6 + t_8) + \frac{1}{7}(t_3 - t_4 - t_5 + t_7 - t_9 - t_{10} + t_{11}), \text{ and}$$

$$g_2 = 0.533\, t_3 + 0.0383\,(t_7 + t_9) + \frac{1}{7}(t_4 - t_5 - t_6 + t_8 - t_{10} - t_{11}).$$

By the aid of these formulæ and the known hourly values of the magnetic declination for the nine months from October, 1903, to June, 1904, both monthly hourly and mean monthly values have been interpolated for the months of July, August, and September, 1903.

Inasmuch as these interpolations were to be carried out directly from the observed quantities and not from the hourly variations on the mean monthly values, all of the observed hourly declinations have been reduced to one epoch, namely, 1904.0, by means of the annual change in declination as determined on page 305. Thus the interpolated values all apply to the epoch 1904.0. The reduced observed monthly hourly and mean monthly declinations, as also the interpolated values obtained for the three missing months, are contained in the following tabulation. The interpolated quantities for the three months of July, August, and September are shown graphically in figures 16 to 18 in which the interpolations are indicated by circles connected by broken lines; the smooth curves show the computed values of the diurnal variation resulting from the discussion of the same by means of Bessel's periodic function.

* Voyages de la Commission Scientifique du Nord en Scandinavie, en Laponie, au Spitzberg et aux Feröe, pendent les années 1838, 1839 et 1840, published by the French Government under direction of M. Paul Gaimard, President of the Commission. The memoir comprises chapter V of volume II on meteorology, pages 291 to 332.

Tabulation of monthly mean hourly magnetic declinations at Teplitz Bay

All values reduced to mean epoch 1904 0

22° 41′ plus tabular quantity, east

Month	h 0.5	h 1.5	h 2.5	h 3·5	h 4.5	h 5.5	h 6.5	h 7.5	h 8.5	h 9.5	h 10.5	h 11.5	h 12.5
	′	′	′	′	′	′	′	′	′	′	′	′	′
July*.....	-22.6	-10.4	06.5	03.8	18.3	35.7	34.8	15.9	09.0	01.4	00.4	-08.9	-16.2
August*.....	-18.5	-11.9	05.6	-04.0	06.0	23.4	27.4	10.0	07.1	-00.5	-01.5	-10.6	-20.0
September*.....	-09.1	-07.8	08.6	04.9	06.7	16.6	21.5	10.1	05.8	-01.8	-03.0	-10.2	-18.2
October	-04.3	-02.1	12.8	15.4	14.3	15.1	16.3	12.1	07.8	-03.7	-06.7	-10.2	-10.1
November	15.0	12.6	24.9	60.6	39.1	32.0	31.2	27.8	05.4	02.1	01.6	01.5	-05.3
December.	08.2	07.0	08.5	15.8	18.0	19.6	22.1	20.2	17.0	01.2	-03.0	-02.9	-02.1
January.....	03.9	13.4	25.0	30.7	27.0	26.6	23.5	15.7	09.6	00.0	-05.4	-06.9	03.2
February	15.9	10.1	12.2	11.1	23.0	18.7	24.5	16.8	13 6	00.5	-05.9	-07.6	-11.5
March.....	07 5	09.7	11.9	15.2	15.5	21.2	25.7	15 1	05.0	03.3	00.1	-04.1	-06.8
April.....	00.5	04.1	09.6	17.1	38.0	36.6	28.1	22.1	16.4	02.6	-01.7	-07.8	-06.3
May.....	-13.4	02.0	16.7	27.3	39.3	37.5	32.0	19.6	04.1	-01.2	-05.6	-10.2	-08.1
June.....	-15.6	-04.3	07.5	21.3	34.4	47.4	41.0	25.6	11.7	04.9	04.8	-01.9	-10.9
October to March...	07 7	08.4	15.9	24.8	22.8	22.2	23.9	18 0	09.7	00.6	-03.2	-05.0	-05.4
April to September..	-13.1	-04.7	09.1	11.7	23.8	32.8	30.8	17.2	09.0	00.9	-01.1	-08.3	-13.3
Mean of year	-02.7	01.9	12.5	18.3	23.3	27.5	27.3	17.6	09.4	00.7	-02.2	-06.6	-09.4

Tabulation of monthly mean hourly magnetic declinations at Teplitz Bay—Continued

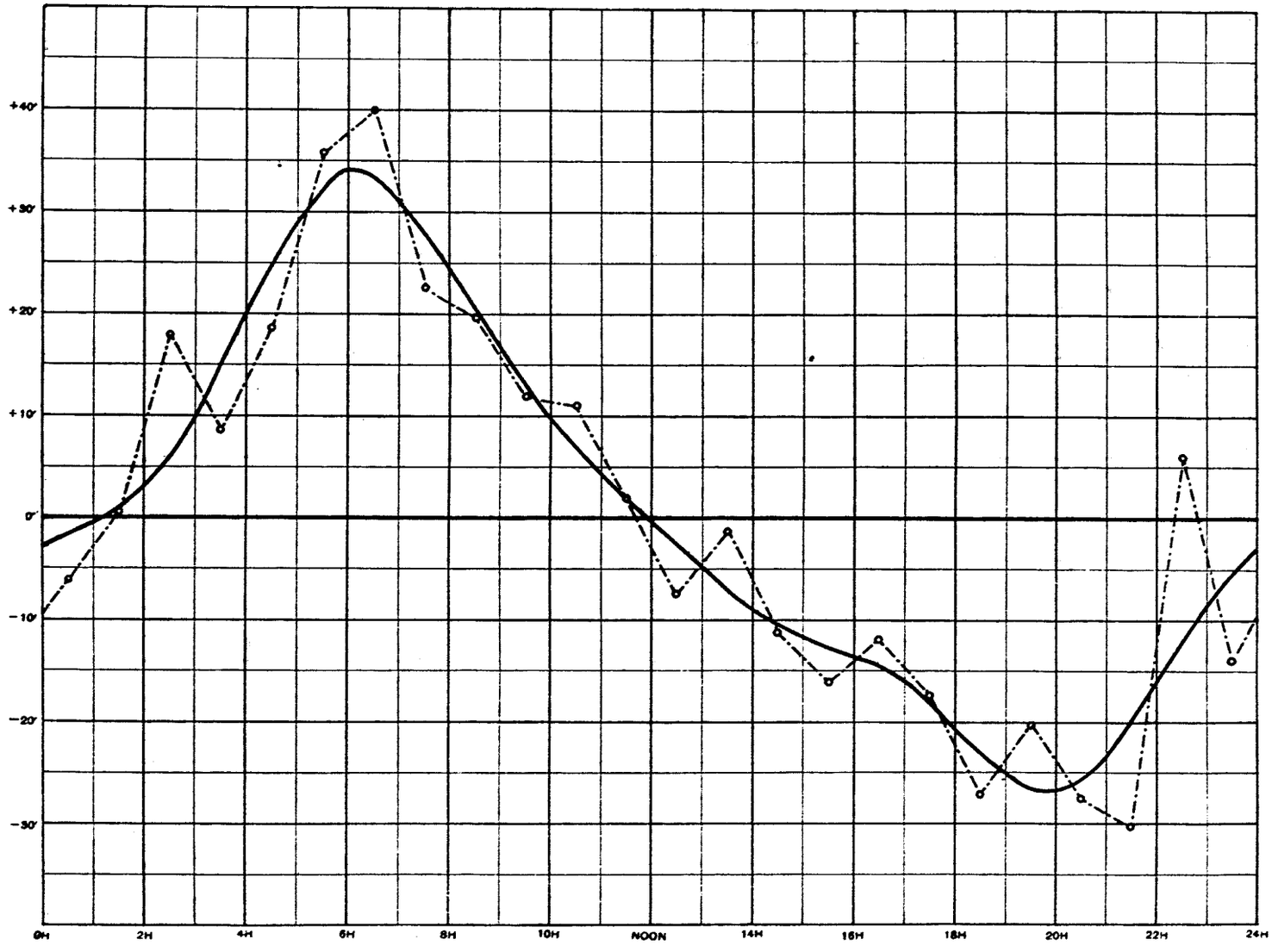
All values reduced to mean epoch 1904.0

22° 41′ plus tabular quantity, east

Month	h 13.5	h 14.5	h 15.5	h 16.5	h 17.5	h 18.5	h 19.5	h 20.5	h 21.5	h 22.5	h 23.5	Monthly means
	′	′	′	′	′	′	′	′	′	′	′	′
July*.....	-12 2	-23.1	-31.4	-35.1	-36.4	-48.1	-42.8	-46.4	-46.2	-16.2	-30.4	-12.6
August*.....	-13.8	-23.9	-28.5	-24.5	-29.9	-39.6	-32.7	-40.2	-42.6	-06.4	-26.4	-12.4
September*.....	-13.7	-21.7	-22.4	-11.1	-18.7	-24.4	-21.3	-27.9	-31.3	-04.7	-15.8	-07.9
October.	-11.4	-15.3	-13.9	-05.5	-14.1	-11.7	-14.7	-18.2	-18.2	-09.4	-04.0	-03.2
November	-02.1	-06.8	-04.6	08.3	08.4	-03.3	-08.8	-05.2	-07.6	-08.6	03.0	09.2
December.....	-02.7	01.7	04.2	-01.2	-01.9	-03.8	-06.1	-04.5	-01.6	-01.2	10.8	05.1
January	05.1	03.5	02.5	-06.9	-08.9	-05.6	-07.5	-06.5	-09.4	-00.9	02.5	05.6
February..... ..	-10.1	-06.4	-05.1	-08.5	-02.7	-02.8	02.0	-11.7	-09.5	01.5	-02.1	02.8
March.....	-09.2	-11.7	-12.1	-10.9	-09.8	-09.3	-10.4	-05.7	-13.7	-06.0	-02.5	00.8
April.....	-08.1	-10.4	-18.1	-21.8	-20.5	-17.5	-18.2	-20.9	-23.4	-25.4	-07.3	-01.3
May.....	-19.2	-26.7	-33.4	-38.4	-34.7	-32.2	-37.4	-38.1	-32.5	-34.2	-24.3	-08.8
June	-09.7	-18.8	-29.1	-33.5	-31.0	-44.7	-43.4	-39.7	-40.4	-26.5	-24.1	-07.4
October to March...	-05.1	-05.8	-04.8	-04.1	-04.8	-06.1	-07.6	-08.6	-10.0	-04.1	01.3	03.4
April to September..	-12.8	-20.8	-27.2	-27.4	-28.7	-34.4	-32.6	-35.5	-36.1	-19.0	-21.4	-08.4
Mean of year	-08.9	-13.3	-16.0	-15.8	-16.7	-20.2	-20.1	-22.1	-23.0	-11.5	-10.0	-02.5

*These are the months for which values are interpolated.

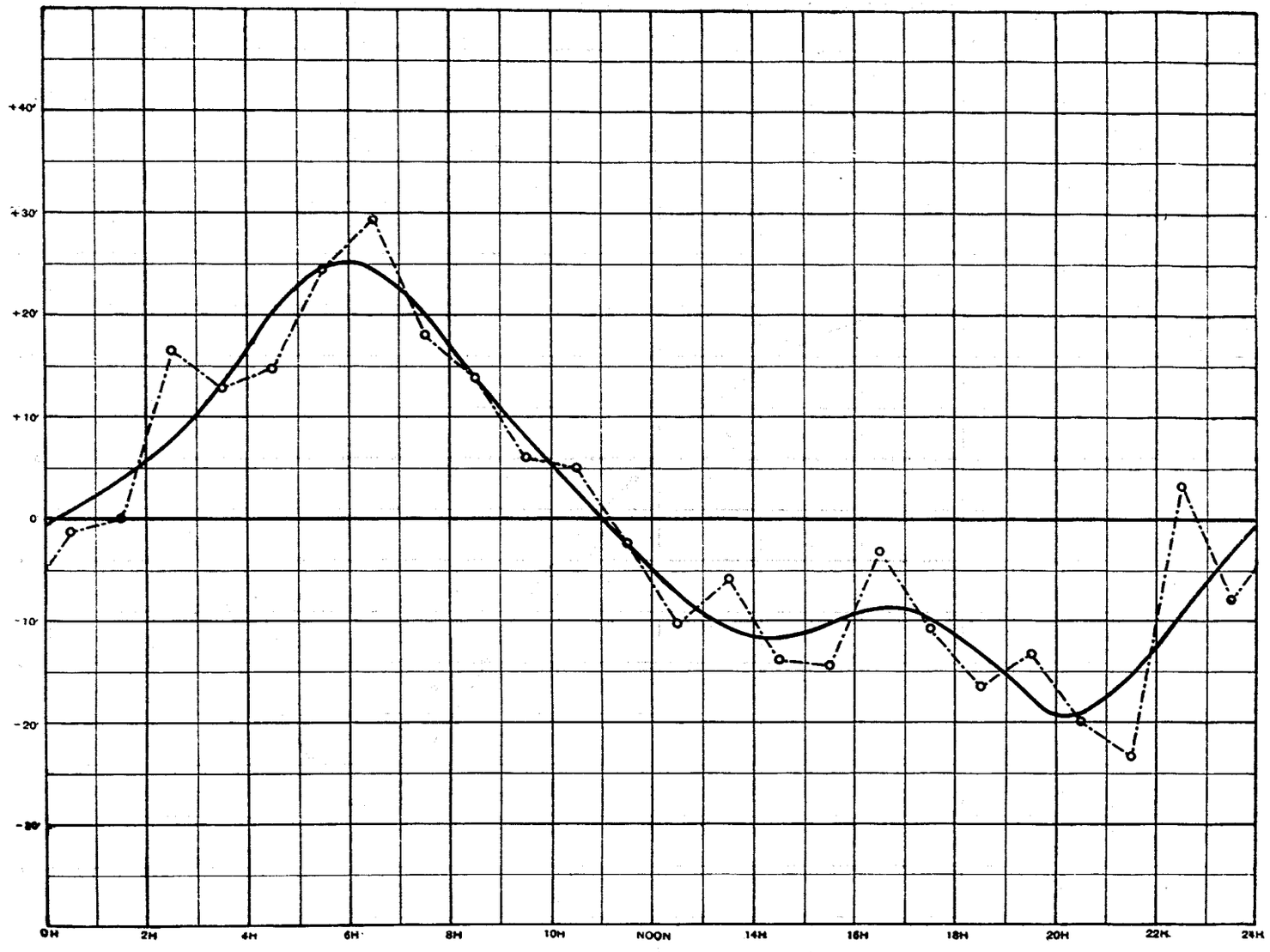
FIGURE 17



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE MONTH OF AUGUST, 1903,
AS INTERPOLATED FROM ENTIRE SERIES

(Interpolated values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

FIGURE 18



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE MONTH OF SEPTEMBER, 1903,
AS INTERPOLATED FROM ENTIRE SERIES

(Interpolated values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

The analytical expressions representing the diurnal variation in magnetic declination for the four-week periods from October 4, 1903, to July 1, 1904, and for the interpolated months of July, August, and September have been deduced from Bessel's periodic function.* This function is represented in the general case by the following formula :

$$D = A + B_1 \sin(\theta + C_1) + B_2 \sin(2\theta + C_2) + B_3(3\theta + C_3) + B_4(4\theta + C_4) + \ldots . B_n(n\theta + C_n)$$

For a series of twenty-four equidistant observations, $t_1, t_2, t_3, t_4, t_5, \ldots\ldots t_{23}, t_{24}$, in the cycle the numerical computations may be made directly from the following equations :

$$A = \frac{1}{24}(t_1 + t_2 + t_3 + t_4 + t_5 + \ldots\ldots t_{24})$$

$$12a_1 = 0.966(t_1 - t_{11} - t_{13} + t_{23}) + 0.866(t_2 - t_{10} - t_{14} + t_{22}) + 0.707(t_3 - t_9 - t_{15} + t_{21}) + 0.500(t_4 - t_8 - t_{16} + t_{20}) + 0.259(t_5 - t_7 - t_{17} + t_{19}) - t_{12} + t_{24}$$

$$12b_1 = 0.259(t_1 + t_{11} - t_{13} - t_{23}) + 0.500(t_2 + t_{10} - t_{14} - t_{22}) + 0.707(t_3 + t_9 - t_{15} - t_{21}) + 0.866(t_4 + t_8 - t_{16} - t_{20}) + 0.966(t_5 + t_7 - t_{17} - t_{19}) + t_6 - t_{18}$$

$$12a_2 = 0.866(t_1 - t_5 - t_7 + t_{11} + t_{13} - t_{17} - t_{19} + t_{23}) + 0.500(t_2 - t_4 - t_8 + t_{10} + t_{14} - t_{16} - t_{20} + t_{22}) - t_6 + t_{12} - t_{18} + t_{24}$$

$$12b_2 = 0.500(t_1 + t_5 - t_7 - t_{11} + t_{13} + t_{17} - t_{19} - t_{23}) + 0.866(t_2 + t_4 - t_8 - t_{10} + t_{14} + t_{16} - t_{20} - t_{22}) + t_3 - t_9 + t_{15} - t_{21}$$

$$12a_3 = 0.707(t_1 - t_3 - t_5 + t_7 + t_9 - t_{11} - t_{13} + t_{15} + t_{17} - t_{19} - t_{21} + t_{23}) - t_4 + t_8 - t_{12} + t_{16} - t_{20} + t_{24}$$

$$12b_3 = 0.707(t_1 + t_3 - t_5 - t_7 + t_9 + t_{11} - t_{13} - t_{15} + t_{17} + t_{19} - t_{21} - t_{23}) + t_2 - t_6 + t_{10} - t_{14} + t_{18} - t_{22}$$

$$12a_4 = 0.500(t_1 - t_2 - t_4 + t_5 + t_7 - t_8 - t_{10} + t_{11} + t_{13} - t_{14} - t_{16} + t_{17} + t_{19} - t_{20} - t_{22} + t_{23}) - t_3 + t_6 - t_9 + t_{12} - t_{15} + t_{18} - t_{21} + t_{24}$$

$$12b_4 = 0.866(t_1 + t_2 - t_4 - t_5 + t_7 + t_8 - t_{10} - t_{11} + t_{13} + t_{14} - t_{16} - t_{17} + t_{19} + t_{20} - t_{22} - t_{23})$$

and other expressions of like character for terms of higher order. For most practical purposes the series is not in general improved by the addition of terms beyond the fourth. On the solution of these equations by substitution of the observed values the term-coefficients and angles may be determined by the following :

$$B_1 = \sqrt{a_1^2 + b_1^2} \qquad \tan C_1 = a_1 / b_1$$

$$B_2 = \sqrt{a_2^2 + b_2^2} \qquad \tan C_2 = a_2 / b_2$$

$$B_3 = \sqrt{a_3^2 + b_3^2} \qquad \tan C_3 = a_3 / b_3$$

$$B_4 = \sqrt{a_4^2 + b_4^2} \qquad \tan C_4 = a_4 / b_4$$

* First published by Bessel in the Literary Gazette of Jena in 1814; also published in his paper in Astronomische Nachrichten, No. 136, May, 1828. See also Bravais' memoir referred to above and C. A. Schott in Appendix No. 8 of the Report of the Superintendent of the United States Coast and Geodetic Survey for 1890.

In the case of a cycle of twelve equidistant observations:

$$A = \frac{1}{12}(t_1 + t_2 + t_3 + t_4 + \ldots\ldots t_{12})$$

$$6a_1 = 0.866\,(t_1 - t_5 - t_7 + t_{11}) + 0.500\,(t_2 - t_4 - t_8 + t_{10}) - t_6 + t_{12}$$

$$6b_1 = 0.500\,(t_1 + t_5 - t_7 - t_{11}) + 0.866\,(t_2 + t_4 - t_8 - t_{10}) + t_3 - t_9$$

$$6a_2 = 0.500\,(t_1 - t_2 - t_4 + t_5 + t_7 - t_8 - t_{10} + t_{11}) - t_3 + t_6 - t_9 + t_{12}$$

$$6b_2 = 0.866\,(t_1 + t_2 - t_4 - t_5 + t_7 + t_8 - t_{10} - t_{11})$$

$$6a_3 = -t_2 + t_4 - t_6 + t_8 - t_{10} + t_{12}$$

$$6b_3 = +t_1 - t_3 + t_5 - t_7 + t_9 - t_{11}$$

$$6a_4 = 0.500\,(-t_1 - t_2 - t_4 - t_5 - t_7 - t_8 - t_{10} - t_{11}) + t_3 + t_6 + t_9 + t_{12}$$

$$6b_4 = 0.866\,(t_1 - t_2 + t_4 - t_5 + t_7 - t_8 + t_{10} - t_{11})$$

On the evaluation of these equations the coefficients B_1, B_2, B_3, ... B_n, and the angles C_1, C_2, C_3, ... C_n are found as before.*

The results of the discussions for the various periods from the observed and interpolated hourly declinations are as follows, the probable error of a single representation being indicated by the "plus or minus" quantity at the end of each formula:

FORMULÆ REPRESENTING DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY

October 4 to October 30, 1903:

$D = 22^\circ\ 36.'7 + 13.'67 \sin(\theta + 2^\circ\ 31') + 6.'98 \sin(2\theta + 282^\circ\ 25') + 1.'33 \sin(3\theta + 16^\circ\ 46') + 1.'55 \sin(4\theta + 62^\circ\ 47') \pm 0.'37$

November 1 to November 28, 1903:

$D = 22^\circ\ 49.'8 + 19.'74 \sin(\theta + 11^\circ\ 44') + 14.'03 \sin(2\theta + 303^\circ\ 01') + 3.'91 \sin(3\theta + 285^\circ\ 42') + 3.'13 \sin(4\theta + 145^\circ\ 38') \pm 0.'94$

November 29 to December 26, 1903:

$D = 22^\circ\ 45.'9 + 13.'13 \sin(\theta + 6^\circ\ 09') + 4.'97 \sin(2\theta + 270^\circ\ 44') + 4.'50 \sin(3\theta + 103^\circ\ 12') + 2.'00 \sin(4\theta + 78^\circ\ 58') \pm 0.'24$

December 27, 1903, to January 23, 1904:

$D = 22^\circ\ 46.'7 + 13.'96 \sin(\theta + 9^\circ\ 40') + 8.'60 \sin(2\theta + 295^\circ\ 59') + 3.'97 \sin(3\theta + 159^\circ\ 26') + 2.'01 \sin(4\theta + 330^\circ\ 00') \pm 0.'35$

January 24 to February 20, 1904:

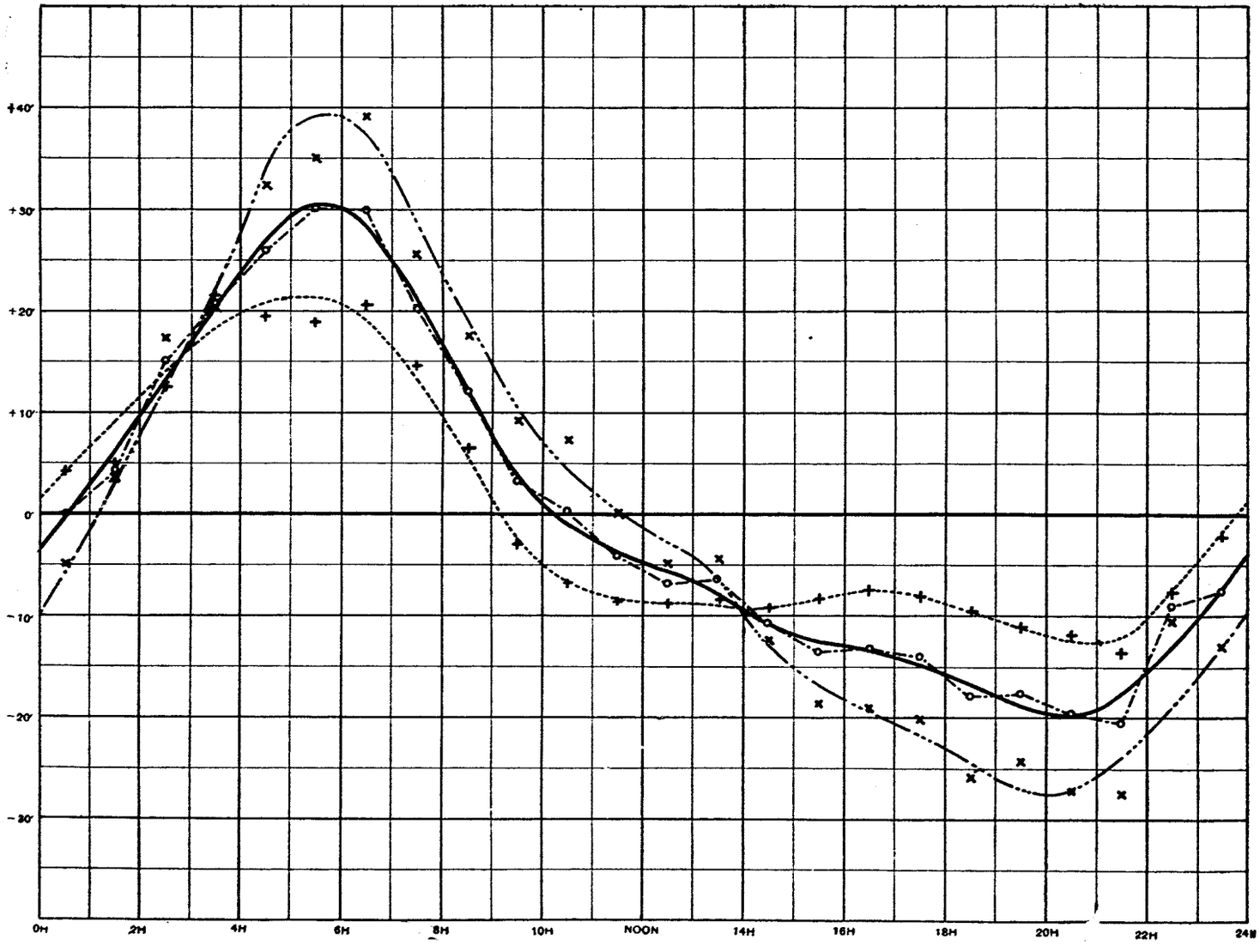
$D = 22^\circ\ 46.'3 + 13.'54 \sin(\theta + 15^\circ\ 04') + 7.'72 \sin(2\theta + 317^\circ\ 17') + 2.'19 \sin(3\theta + 126^\circ\ 14') + 2.'79 \sin(4\theta + 318^\circ\ 22') \pm 0.'48$

February 21 to March 19, 1904:

$D = 22^\circ\ 41.'6 + 9.'47 \sin(\theta + 357^\circ\ 48') + 3.'65 \sin(2\theta + 247^\circ\ 46') + 2.'38 \sin(3\theta + 4^\circ\ 04') + 2.'34 \sin(4\theta + 346^\circ\ 42') \pm 0.'24$

* These solutions are given by C. A. Schott in Appendix No. 8 of the Report of the Superintendent of the United States Coast and Geodetic Survey for 1890.

FIGURE 19



DIURNAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY FOR THE YEAR JULY, 1903, TO JUNE, 1904
SHOWING THE SUMMER AND WINTER RANGES

(Mean observed values shown by circles joined by broken line ; mean winter values shown by vertical crosses ; mean summer values shown by inclined crosses ; the respective computed values shown by continuous curves.)

March 20 to April 16, 1904:

$$D = 22^\circ\ 43.'7 + 27.'93 \sin (\theta + 0^\circ\ 26') + 7.'96 \sin (2\theta + 274^\circ\ 24') + 2.'67 \sin (3\theta + 149^\circ\ 03') + 3.'56 \sin (4\theta + 65^\circ\ 34') \pm 0.'39$$

April 17 to May 14, 1904:

$$D = 22^\circ\ 37.'1 + 25.'51 \sin (\theta + 353^\circ\ 22') + 8.'81 \sin (2\theta + 287^\circ\ 10') + 3.'37 \sin (3\theta + 224^\circ\ 52') + 3.'81 \sin (4\theta + 24^\circ\ 14') \pm 0.'27$$

May 15 to June 11, 1904:

$$D = 22^\circ\ 40.'1 + 30.'31 \sin (\theta + 350^\circ\ 15') + 9.'14 \sin (2\theta + 308^\circ\ 51') + 6.'64 \sin (3\theta + 223^\circ\ 42') + 1.'50 \sin (4\theta + 31^\circ\ 56') \pm 0.'39$$

June 12 to July 1, 1904:

$$D = 22^\circ\ 32.'1 + 41.'83 \sin (\theta + 341^\circ\ 19') + 8.'65 \sin (2\theta + 309^\circ\ 04') + 4.'57 \sin (3\theta + 156^\circ\ 34') + 3.'88 \sin (4\theta + 100^\circ\ 30') \pm 0.'53$$

For whole observational series, October 4, 1903, to July 1, 1904:

$$D = 22^\circ\ 42.'0 + 20.'52 \sin (\theta + 357^\circ\ 14') + 7.'69 \sin (2\theta + 294^\circ\ 16') + 1.'50 \sin (3\theta + 177^\circ\ 59') + 1.'51 \sin (4\theta + 47^\circ\ 52') \pm 0.'12$$

For the year, July 1, 1903, to June 30, 1904, from monthly grouping of observations and interpolations therefrom:

$$D = 22^\circ\ 38.'5 + 21.'11 \sin (\theta + 354^\circ\ 18') + 6.'90 \sin (2\theta + 291^\circ\ 26') + 1.'75 \sin (3\theta + 156^\circ\ 48') + 1.'62 \sin (4\theta + 58^\circ\ 51') \pm 0.'20$$

Month of July, 1903 (interpolated values):

$$D = 22^\circ\ 24.'9 + 32.'62 \sin (\theta + 341^\circ\ 59') + 5.'95 \sin (2\theta + 291^\circ\ 36') + 4.'79 \sin (3\theta + 154^\circ\ 30') + 2.'73 \sin (4\theta + 84^\circ\ 45') \pm 0.'75$$

Month of August, 1903 (interpolated values):

$$D = 22^\circ\ 25.'8 + 24.'66 \sin (\theta + 343^\circ\ 19') + 4.'26 \sin (2\theta + 273^\circ\ 14') + 3.'59 \sin (3\theta + 116^\circ\ 51') + 2.'63 \sin (4\theta + 86^\circ\ 04') \pm 0.'90$$

Month of September, 1903 (interpolated values):

$$D = 22^\circ\ 30.'9 + 17.'95 \sin (\theta + 351^\circ\ 52') + 5.'09 \sin (2\theta + 272^\circ\ 49') + 2.'25 \sin (3\theta + 72^\circ\ 56') + 2.'28 \sin (4\theta + 90^\circ\ 30') \pm 0.'66$$

In all of these expressions the angle θ counts from 15° as 0.5 hour A. M. local mean time. The formulæ have been carried to terms of the fourth order only, as little or no improvement results from the further extension of the function. Graphical representations to scale of these formulæ, together with the quantities from which they are deduced, are given by figures 5 to 19.

A comparison of the diurnal variations—represented by the four sine terms of the analytical expressions—with the observed quantities at the mean local half hours, is given by the following tabulation wherein the observed, interpolated, and computed values on mean of day are indicated by the letters *O*, *I*, and *C* respectively. As a criterion of the accuracy of the formulæ for diurnal variation, a column showing differences of observed and computed variations is added ((*O*–*C*) or (*I*–*C*)). In these tabulations a plus sign indicates the variation to be to the east of mean declination for day, while a minus sign indicates the variation to be to the west of mean declination for day. The extreme values on the half hours for each period, both observed and computed, are indicated by bold-face type.

Tabulation of observed and computed diurnal variation of magnetic declination at Teplitz Bay

Local mean time	Month of July			Month of August			Month of September			October 4 to October 30			November 1 to November 28		
	I	*C*	*I—C*	*I*	*C*	*I—C*	*I*	*C*	*I—C*	*O*	*C*	*O—C*	*O*	*C*	*O—C*
h	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0.5	—10.0	— 5.4	— 4.6	— 6.1	— 1.7	— 4.4	— 1.2	+ 1.0	— 2.2	— 1.5	+ 1.4	— 2.9	+ 6.7	— 0.8	+ 7.5
1.5	+ 2.2	+ 0.4	+ 1.8	+ 0.5	+ 1.0	— 0.5	+ 0.1	+ 3.8	— 3.7	+ 0.7	+ 6.4	— 5.7	+ 3.5	+11.8	— 8.3
2.5	+19.1	+ 9.8	+ 9.3	+18.0	+ 5.9	+12.1	+16.5	+ 7.7	+ 8.8	+15.6	+10.8	+ 4.8	+17.2	+25.8	— 8.6
3.5	+16.4	+22.8	— 6.4	+ 8.4	+14.6	— 6.2	+12.8	+13.6	— 0.8	+18.2	+15.2	+ 3.0	**+57.6**	+36.4	+21.2
4.5	+30.9	+36.0	— 5.1	+18.4	+24.8	— 6.4	+14.6	+20.2	— 5.6	+17.1	+18.9	— 1.8	+31.6	**+38.8**	— 7.2
5.5	**+48.3**	**+43.6**	+ 4.7	+35.8	+32.1	+ 3.7	+24.5	**+24.5**	0.0	+17.8	**+20.6**	— 2.8	+20.3	+31.8	—11.5
6.5	+47.4	+42.4	+ 5.0	**+39.8**	**+33.1**	+ 6.7	**+29.4**	+24.3	+ 5.1	**+19.1**	+18.9	+ 0.2	+21.1	+19.2	+ 1.9
7.5	+28.5	+33.7	— 5.2	+22.4	+28.0	— 5.6	+18.0	+20.0	— 2.0	+14.9	+13.9	+ 1.0	+15.9	+ 7.1	+ 8.8
8.5	+21.6	+22.6	— 1.0	+19.5	+20.0	— 0.5	+13.7	+13.8	— 0.1	+10.6	+ 7.5	+ 3.1	— 3.6	— 0.5	— 3.1
9.5	+14.0	+13.7	+ 0.3	+11.9	+12.5	— 0.6	+ 6.1	+ 7.9	— 1.8	— 0.9	+ 1.6	— 2.5	— 6.4	— 3.9	— 2.5
10.5	+13.0	+ 8.5	+ 4.5	+10.9	+ 6.9	+ 4.0	+ 4.9	+ 2.6	+ 2.3	— 3.9	— 3.0	— 0.9	— 6.8	— 6.4	— 0.4
11.5	+ 3.7	+ 5.2	— 1.5	+ 1.8	+ 2.2	— 0.4	— 2.3	— 2.4	+ 0.1	— 7.4	— 6.4	— 1.0	— 7.0	—10.2	+ 3.2
12.5	— 3.6	+ 1.2	— 4.8	— 7.6	— 2.5	— 5.1	—10.3	— 7.3	— 3.0	— 7.3	— 9.1	+ 1.8	—15.1	—14.7	— 0.4
13.5	+ 0.4	— 4.5	+ 4.9	— 1.4	— 7.1	+ 5.7	— 5.8	—10.8	+ 5.0	— 8.6	—10.8	+ 2.2	—11.9	—16.6	+ 4.7
14 5	—10.5	—10.8	+ 0.3	—11.5	—10.7	— 0.8	—13.8	—11.8	— 2.0	—12.5	—10.6	— 1.9	—16.6	—14.0	— 2.6
15.5	—18.8	—16.7	— 2.1	—16.1	—12.9	— 3.2	—14.5	—10.3	— 4.2	—11.1	— 8.3	— 2.8	—14.4	— 8.7	— 5.7
16.5	—22.5	—22.0	— 0.5	—12.1	—14.9	+ 2.8	— 3.2	— 8.8	+ 5.6	— 2.7	— 5.4	+ 2.7	— 1.5	— 4.5	+ 3.0
17.5	—23.8	—27.1	+ 3.3	—17.5	—18.4	+ 0.9	—10.8	— 9.8	— 1.0	— 4.7	— 4.2	— 0.5	— 1.4	— 4.7	+ 3.3
18.5	**—35.5**	—31.8	— 3.7	—27.2	—23.0	— 4.2	—16.5	—13.5	— 3.0	— 5.3	— 6.0	+ 0.7	—13.1	— 9.2	— 3.9
19.5	—30.2	**—34.2**	+ 4.0	—20.3	**—26.4**	+ 6.1	—13.4	—17.6	+ 4.2	— 9.1	— 9.9	+ 0 8	**—18.6**	—14.8	— 3.8
20.5	—33.8	—32 4	— 1.4	—27.8	—25.7	— 2.1	—20.0	**—18.9**	— 1.1	—14.8	—13.3	— 1.5	—15.0	**—18.4**	+ 3.4
21.5	—33.6	—26.2	— 7.4	**—30.2**	—20.1	—10.1	**—23.4**	—15.6	— 7.8	**—16.4**	**—13.6**	— 2.8	—17.4	**—18.4**	+ 1.0
22.5	— 3.6	—18.0	+14.4	+ 6.0	—12.2	+18.2	+ 3.2	— 9.4	+12.6	— 7.2	—10.2	+ 5.0	—18.4	—15.4	— 3.0
23.5	—17.8	—10.8	— 7.0	—14.0	— 5.5	— 8.5	— 7.9	— 3.2	— 4.7	— 0.6	— 4.5	+ 3.9	— 6.8	— 9.8	+ 3.0

Tabulation of observed and computed diurnal variation of magnetic declination at Teplitz Bay—Continued

Local mean time	November 29 to December 26			December 27 to January 23			January 24 to February 20			February 21 to March 19			March 20 to April 16		
	O	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*
h	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0.5	+ 3.3	+ 4.2	— 0.9	— 1.1	+ 0.4	— 1.5	+ 9.8	+ 6.3	+ 3.5	+ 5.1	+ 2.0	+ 3.1	+ 5 8	+ 3.1	+ 2.7
1.5	+ 2.5	+ 3.6	— 1.1	+ 1.5	+ 6.6	— 5.1	+12.5	+13.3	— 0.8	+ 5.4	+ 6.1	— 0.7	+ 8.3	+ 8.1	+ 0.2
2.5	+ 3.6	+ 4.5	— 0.9	+14.2	+12.6	+ 1.6	+17.1	+17.1	0.0	+ 5.3	+ 7.2	— 1.9	+11.1	+14.7	— 3.6
3.5	+10.8	+ 8.9	+ 1.9	+21.3	+17.8	+ 3.5	+14.9	**+18.0**	— 3.1	+ 7.8	+ 6.6	+ 1.2	+21.3	+24.5	— 3.2
4.5	+15.8	+15.6	+ 0.2	+22.0	+22.1	— 0.1	**+21.9**	+17.8	+ 4.1	+ 6.4	+ 7.2	— 0.8	+40.4	+35.2	+ 5.2
5.5	+20.6	+21.0	— 0.4	**+22.4**	**+24.2**	— 1.8	+16.4	+17.8	— 1.4	+ 8.7	+ 9.9	— 1.2	**+43.3**	**+41.4**	+ 1.9
6.5	**+20.8**	**+21.6**	— 0.8	+19.6	+22.1	— 2.5	+18.8	+16.4	+ 2.4	+14.2	+13.0	+ 1.2	+37.0	+39.0	— 2.0
7.5	+16.9	+16.8	+ 0.1	+16.5	+14.8	+ 1.7	+ 5.3	+11.8	— 6.5	**+15.0**	**+13.7**	+ 1.3	+24.4	+28.5	— 4.1
8.5	+ 9.9	+ 8.6	+ 1.3	+ 7.3	+ 3.7	+ 3.6	+ 8.1	+ 3.3	+ 4.8	+ 7.6	+10.7	— 3.1	+17.6	+15.1	+ 2 5
9.5	— 1.2	+ 0.4	— 1.6	— 9.1	— 7.0	— 2.1	— 5.3	— 6.2	+ 0.9	+ 4.2	+ 5.2	— 1.0	+ 5.2	+ 4.1	+ 1.1
10.5	— 4.7	— 5.5	+ 0.8	**—15.5**	**—12.9**	— 2.6	—13.1	—12.3	— 0.8	+ 2.1	— 0.1	+ 2.2	— 1.3	— 2.4	+ 1.1
11.5	— 8.2	— 8.8	+ 0.6	—11.3	—12.5	+ 1.2	—14.9	**—12.4**	— 2.5	— 2.4	— 3.7	+ 1.3	— 7.9	— 6.3	— 1.6
12.5	—10.0	—10.1	+ 0.1	— 6.7	— 8.0	+ 1.3	— 5.4	— 7.9	+ 2.5	— 7.9	— 5.8	— 2.1	—11.3	—10.5	— 0.8
13.5	—12.1	— 9.8	— 2.3	— 3.3	— 3.8	+ 0.5	— 4.3	— 3.3	— 1.0	— 8.4	— 7.4	— 1.0	—16.6	—15.7	— 0.9
14.5	— 6 4	— 8.3	+ 1.9	— 4.5	— 3.0	— 1.5	— 2.7	— 2.1	— 0.6	— 7.7	— 8.8	+ 1.1	—18.8	—19.9	+ 1 1
15.5	— 4.1	— 6.4	+ 2.3	— 5.3	— 5.6	+ 0.3	— 0.5	— 4.7	+ 4.2	— 8.1	— 9.0	+ 0.9	—18.2	—21.3	+ 3.1
16.5	— 9.3	— 5.6	— 3.7	— 8.4	— 9.0	+ 0.6	—13.8	— 8.6	— 5.2	— 7.0	— 7.2	+ 0.2	—22.0	—20.2	— 1.8
17.5	— 7.2	— 7 2	0.0	—12.7	—10.8	— 1.9	— 9.8	—11.0	+ 1.2	— 4.2	— 4.2	0.0	**—22.3**	—19.0	— 3.3
18.5	— 9.2	—10.5	+ 1.3	— 7.7	—10.5	+ 2.8	—11.3	—11.3	0.0	— 3.5	— 2.4	— 1.1	—19.2	—20.0	+ 0.8
19.5	—11.3	**—13.2**	+ 1.9	—10.4	— 9.5	— 0.9	— 6.4	—10.9	+ 4 5	— 4.3	— 3.4	— 0.9	—21.1	—22.4	+ 1.3
20.5	**—14.7**	—12.6	— 2.1	— 7.9	— 9.2	+ 1.3	**—15.7**	—10.9	— 4.8	— 2.5	— 6.8	+ 4.3	—19.0	**—22.8**	+ 3.8
21.5	— 7.6	— 8.1	+ 0.5	—13.6	— 9.2	— 4.4	—11.8	—10.6	— 1.2	**—11.3**	**— 9.6**	— 1.7	—22.0	—18.9	— 3.1
22.5	— 4.1	— 1.9	— 2.2	— 7.1	— 8.3	+ 1.2	— 2.2	— 7.9	+ 5.7	—10.0	— 8.8	— 1.2	—16.5	—11.3	— 5.2
23.5	+ 6.4	+ 2.8	+ 3.6	— 0.1	— 5.0	+ 4.9	— 7.3	— 1.8	— 5.5	— 5.4	— 4.1	— 1.3	+ 0.9	— 3.1	+ 4.0

Tabulation of observed and computed diurnal variation of magnetic declination at Teplitz Bay—Continued

Local mean time	April 17 to May 14			May 15 to June 11			June 12 to July 1			October 4 to July 1			Mean Year		
	O	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*	*O*	*C*	*O*—*C*
h	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0.5	+ 0.3	— 1.8	+ 2.1	—10.3	— 5.6	— 4.7	— 5.2	— 6.2	+ 1.0	+ 1.3	+ 0.3	+ 1.0	— 0.2	— 0.1	— 0.1
1.5	+ 5.8	+ 8.0	— 2.2	+11.2	+ 7.8	+ 3.4	+ 3.0	+ 2.8	+ 0.2	+ 5.4	+ 7.4	— 2.0	+ 4.3	+ 6.1	— 1.8
2.5	+17.2	+16.9	+ 0.3	+22.1	+22.3	— 0.2	+19.6	+15.9	+ 3.7	+14.3	+14.7	— 0.4	+15.0	+12.9	+ 2.1
3.5	+25.1	+25.5	— 0.4	+34.2	+34 9	— 0.7	+29.2	+32.6	— 3.4	+24.0	+22.0	+ 2.0	+20.7	+20.4	+ 0.3
4.5	+35 3	+33.4	+ 1.9	+43.1	+42.5	+ 0.6	+44.3	+47.6	— 3.3	+27.8	+27.9	— 0.1	+25.8	+27.2	— 1 4
5.5	**+36.7**	**+37.7**	— 1.0	**+43.6**	**+42.6**	+ 1.0	**+58.9**	**+54.3**	+ 4.6	**+28.9**	**+30.1**	— 1.2	**+30.0**	**+30.4**	— 0.4
6.5	+33.2	+35.0	— 1.8	+38.6	+35.1	+ 3.5	+50.6	+50.4	+ 0.2	+27.3	+27.1	+ 0.2	+29.8	+28.2	+ 1.6
7.5	+29.1	+25.2	+ 3.9	+18.8	+23.1	— 4.3	+39.0	+39.0	0.0	+19.6	+19.4	+ 0.2	+20.1	+21.0	— 0.9
8.5	+ 9.1	+12.5	— 3.4	+12.8	+11.6	+ 1.2	+24.8	+26.5	— 1.7	+10.4	+ 9.9	+ 0.5	+11.9	+11.8	+ 0.1
9.5	+ 3.0	+ 2.6	+ 0.4	+ 7.3	+ 4.5	+ 2.8	+14.8	+17.8	— 3.0	+ 1.2	+ 1.9	— 0.7	+ 3 2	+ 3.9	— 0.7
10.5	+ 0.4	— 1.4	+ 1.8	+ 2.4	+ 2.8	— 0.4	+18.3	+12.9	+ 5.4	— 2.2	— 2.8	+ 0.6	+ 0.3	— 1.0	+ 1.3
11.5	— 1.6	— 1.5	— 0.1	— 3.5	+ 3.4	— 6.9	+10.0	+ 8.7	+ 1.3	— 5.4	— 5.0	— 0.4	— 4.2	— 3.6	— 0.6
12.5	— 4.7	— 2.6	— 2.1	+ 3.9	+ 2.0	+ 1.9	— 2.1	+ 2.6	— 4.7	— 6.7	— 6.4	— 0.3	— 6.9	— 5.6	— 1.3
13.5	— 7.8	— 7.5	— 0.3	+ 0.1	— 3 6	+ 3.7	— 5.3	— 5.2	— 0.1	— 7.8	— 8 4	+ 0.6	— 6.4	— 8.1	+ 1.7
14.5	—10.9	—14.8	+ 3.9	—13.6	—12.4	— 1.2	—10.4	—12.6	+ 2.2	—10.4	—10.6	+ 0.2	—10 8	—10.6	— 0 2
15.5	—22.4	—20.2	— 2.2	—24.9	—20.9	— 4 0	—17.4	—19.0	+ 1.6	—12.6	—12.4	— 0.2	—13.5	—12.5	— 1 0
16.5	—22.1	—20.7	— 1.4	—23.4	—25.8	+ 2.4	—30.3	—25.4	— 4.9	—14.1	—13.2	— 0.9	—13.3	—13.6	+ 0.3
17.5	—16.7	—17.8	+ 1.1	—23.6	**—26.8**	+ 3.2	—26.5	—33.3	+ 6.8	—12.9	—13.9	+ 1.0	—14.2	—14.8	+ 0.6
18.5	—14.5	—15.5	+ 1.0	—24.2	—25.5	+ 1.3	**—48.2**	—41.6	— 6.6	—15.6	—15.2	— 0 4	—17.8	—16.7	— 1.1
19.5	—17 3	—16.8	— 0.5	**—26.5**	—24.6	— 1.9	—45.7	**—46.7**	+ 1.0	—17.1	—17.2	+ 0.1	—17.6	—18.9	+ 1.3
20.5	—22.1	—20.8	— 1.3	—26.0	—24.6	— 1.4	—39.8	—45.1	+ 5.3	—17.8	**—18.4**	+ 0.6	—19.6	**—19.6**	0.0
21.5	—20.8	**—23.1**	+ 2.3	—22.8	—24.6	+ 1.8	—42.3	—36.6	— 5.7	**—18.6**	—17.3	— 1.3	**—20 5**	—17.5	— 3.0
22.5	**—22.5**	—20.2	— 2.3	—21.9	—22.3	+ 0.4	—20.7	—25.0	+ 4.3	—13.1	—13.1	0.0	— 9.0	—12.7	+ 3.7
23.5	—11.7	—12.2	+ 0.5	—17.1	—16.0	— 1.1	—18.1	—14.5	— 3.6	— 6.0	— 6.8	+ 0.8	— 7.6	— 6.4	— 1.2

Characteristics of Diurnal Variation in Magnetic Declination at Teplitz Bay

The characteristic features of the curves, figures 5 to 19, representing the total diurnal variation in magnetic declination for the various periods discussed are summarized in the tabulation following. In this summary a plus sign denotes a departure to the east of the mean value, while a negative sign denotes a departure to the west of the mean value. The epochs of mean declination are designated I and II, the former being the passage of mean in course of westward movement, and the latter in course of eastward movement of the needle.

Period	Principal phase					Secondary phase					Epochs of mean declination	
	Maximum		Minimum		Total range	Maximum		Minimum		Total range		
	L.M.T.	Am't	L.M.T.	Am't		L.M.T.	Am't	L.M.T.	Am't		I	II
1903–1904	*h*	′	*h*	′	′	*h*	′	*h*	′	′	*h*	*h*
July (interpolated)	5.8	+44 3	19.6	−34.1	78.4	*	*	*	*	*	12.8	1.5
August (interpolated)	6.0	+34.0	19.9	−26.8	60.8	*	*	*	*	*	12.0	1.2
September (interpolated)	6.1	+25.1	20.2	−19.4	44.5	16.8	— 8.7	14.3	−11.8	3.1	11.0	0.2
October 4 to October 30	5.6	+20.8	21.1	−13.7	34.5	17.4	— 3.9	13.8	−11.1	7.2	9.8	0.3
November 1 to November 28	4.2	+39.2	21.0	−18.6	57.8	17.0	— 3.8	13.5	−16.3	12.5	8.4	0.6
November 29 to December 26	6.2	+21.9	19.8	−13.3	35.2	16.4	— 5.4	12.5	−10.1	4.7	9.6	22.9
December 27 to January 23	5.6	+24.0	18.0	−10.8	34.8	14.2	— 2.7	11.0	−13.3	10.6	8.8	0.4
January 24 to February 20	5.2	+18.1	18.2	−11.3	29.4	14.3	— 2.0	11.0	−13.0	11.0	8.9	23.8
February 21 to March 19	7.3	+14.0	21.8	— 9.9	23.9	18.7	— 2.2	15.1	— 9.1	6.9	10.5	0.1
March 20 to April 16	5.6	+41.4	20.2	−23.0	64.4	17.7	−19.1	15.5	−21.2	2.1	10.1	0.0
April 17 to May 14	5.5	+37.4	21.4	−23.1	60.5	18.6	−15.7	16.0	−21.2	5.5	9.9	0.7
May 15 to June 11	5.0	+43.1	21.1	−25.1	68.2	20.0	−24.5	17.3	−26.8	2.3	12.9	0.9
June 12 to July 1	5.4	+54.2	19.8	−47.1	101.3	*	*	*	*	*	12.8	1.2
Summer mean—Oct. to March.	5.7	+39.2	20.1	−27.5	66.7	*	*	*	*	*	11.6	1.2
Winter mean—April to Sept.	5.4	+21.2	20.9	−12.6	33.8	16.7	— 9.2	14.2	— 7.4	1.8	9.2	23.8
Mean of year	5.6	+30.4	20.4	−19.8	50.2	*	*	*	*	*	10.2	0.5

* For these intervals the secondary phases, while indicated, have their crests no longer definitely marked.

From the above it at once appears that the principal maximum and minimum of east declination occur at earlier and later times respectively than for stations in lower latitudes. The morning extreme is reached almost always between 5 and 6 o'clock. The afternoon extreme varies between 6 and 10 o'clock without any very systematic cycle dependent upon the chronological order of the periods; in the half-yearly means, however, it is earlier for the winter season than for the summer season by about one hour. The increase in diurnal range

from winter to summer is quite pronounced. In the half-yearly means this difference in range is quite clearly shown by the curves of figure 19, in which the October to March mean is indicated by the dotted line and the April to September mean by the broken line.

In general the curves show also a secondary maximum and minimum between the two principal extremes of day; in several cases the minimum of this second wave exceeds the principal western deviation in amount. As will be noted, this secondary wave is very prominent in the winter season; with the approach of the summer months it becomes less and less pronounced until in midsummer, though still recognizable, the critical points are no longer definitely marked. In general the time interval between the minimum and maximum of this wave is about two and one-half hours; it is, as a whole, earliest in midwinter, with its center at about one-half hour past noon, from which time, with the advancing season, it is carried forward with diminishing range until the disappearance of the crests, when its center is at about 5 P. M. to 6 P. M. By reason of this transposition as a whole the effect is practically eliminated in the year's mean and very greatly smoothed out in the winter's mean. These secondary extremes are much more pronounced and of greater yearly range, though practically of the same period as for the same feature when noted at stations in lower latitudes; it is, however, superimposed on the mean curve later in the day. Thus for the Girard College observations at Philadelphia, Bache* found the extremes of a similar effect for the winter at 9.7 hours and 13.2 hours, and for the summer at 10.2 hours and 13.2 hours, the seasonal ranges being respectively 0.′71 and 0.′15.

The change of the epochs of mean declination with the season is very marked and, in general, very regular, being earliest in winter at 9 hours and 23 hours and latest in summer at 13 hours and 1.5 hour local time. In the half-yearly means the epoch I is later in summer than in winter by 2.4 hours, and epoch II by 1.4 hours. On the average for the year epoch I is at 10.2 hours A. M., a time, which as will be seen later, agrees well with that for the same event at stations widely distributed over the Earth.

In order to make a proper comparison of the total solar-diurnal variation in magnetic declination for the mean year at Teplitz Bay with the corresponding phenomenon for stations elsewhere on the Earth, particularly in the Arctic Regions, a compilation of the mean hourly variations on the mean of year has been prepared for some twenty-four additional locations. In all cases where the published records have been immediately available the observed means have been taken without elimination of the so-called "disturbances" in order that the results may be strictly intercomparable. When, as is the case for many of the stations, the mean observed quantities do not apply to the local mean hours, the values have been plotted to scale and the hourly values taken from the smooth curves drawn through the points plotted. The departures from mean as shown in the tabulation are all referred to the north-seeking end of the needle, a plus sign indicating a movement to the east and a minus sign a movement to the west of the mean position. The words "maximum" and "minimum" are used in the sense of eastern and western elongations respectively. The stations are arranged in the decreasing order of northerly magnetic inclination for the purpose of bringing out clearly the relation between magnetic dip and range of the diurnal variation in declination. The geographical positions, series of observations from which results are taken, the mean dips over the periods of observa-

* Discussion of the magnetic and meteorological observations made at the Girard College Observatory, Philadelphia, in 1840, 1841, 1842, 1843, 1844, and 1845, by A. D. Bache. Part II. Smithsonian Contributions to Knowledge. Washington, June, 1862.

tion, as also the approximate corresponding mean sun-spot frequencies according to Dr. Wolf and Professor Wolfer,* are as follows:

Number	Station	Latitude	Longitude east of Greenwich	Magnetic inclination	Magnetic latitude	Observations	Approximate mean sun-spot frequency
		° ′	° ′	° ′	° ′		
1	Fort Conger, Grinnell Land..	81 44 N	295 16	85 01 N	80 06 N	Aug., 1882, to July, 1883....	59
2	Kingua Fjord, Cumberland Sound.	66 36 N	292 41	83 51 N	77 50 N	Oct., 1882, to Sept., 1883....	60
3	Teplitz Bay, Rudolph Island..	81 47 N	58 09	83 12 N	76 35 N	Oct., 1903, to June, 1904...	(80)
4	Saagastyr, Siberia.	73 23 N	126 36	83 09 N	76 29 N	Jan., 1883, to Dec., 1883....	64
5	Fort Rae, Great Slave Lake, Canada	62 39 N	244 46	82 54 N	76 01 N	Oct., 1882, to Sept., 1883 ...	60
6	Ooglaamie, Alaska.....	71 18 N	203 20	81 24 N	73 10 N	Sept., 1882, to Aug. 1883....	60
7	Cape Thordsen, Spitzbergen..	78 28 N	15 42	80 27 N	71 24 N	Sept., 1882, to Aug., 1883...	60
8	Jan Mayen Island.....	71 00 N	351 32	79 00 N	68 45 N	Sept., 1882, to July, 1883....	60
9	Karmakul Bay, Novaia Zemlia.	72 23 N	52 42	78 43 N	68 15 N	Oct., 1882, to Aug., 1883....	60
10	Bossekop, Norway.....	69 58 N	23 15	76 26 N	64 14 N	Aug., 1882, to July, 1883....	59
11	Sitka, Alaska.....	57 03 N	224 40	75 55 N	63 21 N	Irregular series, 1848 to 1862	(60)
12	Toronto, Canada..... .	43 39 N	280 36	75 15 N	62 14 N	July, 1842, to June, 1848...	51
13	Sodankläa, Finland.....	67 24 N	26 36	74 48 N	61 29 N	Sept., 1882, to Aug., 1883...	60
14	Ekaterinburg, Siberia	56 49 N	60 38	70 39 N	54 55 N	Jan., 1893, to Dec., 1893 .	83
15	De Bilt, Netherlands.	52 06 N	5 11	66 51 N	49 28 N	Jan., 1903, to Dec., 1903...	(60)
16	Los Angeles, United States....	34 03 N	241 45	59 30 N	40 20 N	Oct., 1882, to Oct., 1889....	36
17	Key West, United States.....	24 33 N	278 12	54 32 N	35 04 N	March, 1860, to March, 1866.	57
18	Zi-ka-wei, China..... ..	31 12 N	121 36	45 42 N	27 08 N	Jan., 1901, to Dec., 1901....	(10)
19	Colába, India	18 54 N	72 49	21 30 N	11 09 N	Jan., 1901, to Dec., 1901....	(10)
20	St. Helena Island.....	15 57 S	354 20	21 59 S	11 25 S	Sept., 1842, to Aug., 1847..	38
21	Buitenzorg, Java..	6 11 S	106 50	30 33 S	16 27 S	Jan., 1904, to Dec., 1904....	(80)
22	South Georgian Island	54 31 S	324 00	48 58 S	29 53 S	Sept., 1882, to Aug., 1883 ..	60
23	Cape of Good Hope, Africa....	33 56 S	18 29	53 21 S	33 54 S	April, 1841, to June, 1846...	29
24	Mauritius Island.	20 06 S	57 33	54 51 S	35 23 S	Jan., 1883, to Dec., 1883....	64
25	Hobarton, Tasmania	42 52 S	147 28	70 36 S	54 51 S	Jan., 1841, to Sept., 1848....	49

The references for each of the above series are as follows:

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* As collected and plotted by Mr. W. Ellis in his paper on the relation between diurnal range of magnetic declination and horizontal force and solar spots (Proceedings of the Royal Society. Volume 63, pp. 64–78). The values after 1896 are exterpolations based on Mr. Ellis' curves; these are indicated by enclosure in parentheses.

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Tabulation of the mean yearly total solar-diurnal variation in magnetic declination at various stations

[Eastern deflection of north-seeking end from mean is indicated by a plus sign; western deflection by a minus sign.]

Local mean time, civil reckoning	1—Fort Conger, Grinnell Land	2—Kingua Fjord, Cumberland Sound	3—Teplitz Bay, Rudolph Island	4—Ssgastyr, Siberia	5—Fort Rae, Great Slave Lake	6—Uglaamie, Alaska	7—Cape Thordsen, Spitzbergen	8—Jan Mayen Island	9—Karmakul Bay, Novaia Zemlia	10—Rossekop, Norway	11—Sitka, Alaska	12—Toronto, Canada	13—Sodankla, Finland
h	′	′	′	′	′	′	′	′	′	′	′	′	′
1	+38.7	+11.7	+ 3.1	— 6.2	—11.0	—11.2	+ 1.8	+ 7.0	+11.8	+ 8.7	+ 0.2	+ 0.6	+ 5.1
2	+36.2	+15.8	+ 9.8	+ 0.7	— 6.6	— 3.3	+ 6.2	+10.7	+12.8	+ 9.7	+ 1.0	+ 0.5	+ 4.8
3	+33.2	+18.0	+17.1	+ 6.7	+ 0.8	+ 3.9	+10.7	+13.8	+11.4	+ 9.9	+ 1.4	+ 0.8	+ 4.7
4	+29.4	+19.1	+23.9	+11.6	+ 7.4	+ 7.9	+16.2	+15.6	+ 9.5	+ 8.7	+ 2.0	+ 1.2	+ 4.4
5	+24.7	+19.3	+29.4	+13.9	+13.6	+15.4	+22.2	+15.0	+ 7.4	+ 6.0	+ 2.9	+ 1.8	+ 4.0
6	+18.6	+20.1	+30.1	+14.3	+21.0	+22.1	+25.3	+11.2	+ 5.6	+ 4.2	+ 4.2	+ 2.7	+ 3.2
7	+ 8.6	+19.9	+24.9	+13.2	+26.2	+26.9	+22.3	+ 7.8	+ 4.9	+ 3.1	+ 5.3	+ 3.5	+ 2.6
8	— 0.5	+17.4	+16.9	+ 9.7	+29.4	+26.3	+17.0	+ 5.7	+ 2.5	+ 1.8	+ 6.0	+ 3.8	+ 2.1
9	—12.1	+10.8	+ 7.7	+ 4.3	+25.5	+20.1	+11.4	+ 3.0	+ 1.3	+ 0.7	+ 5.3	+ 3.0	+ 1.6
10	—23.2	+ 3.7	+ 1.1	+ 1.3	+16.8	+ 7.4	+ 6.9	+ 2.0	— 0.2	— 0.6	+ 3.0	+ 0.8	+ 0.7
11	—37.9	+ 1.3	— 2.6	— 1.8	+ 8.0	— 1.0	+ 4.3	0.0	— 2.0	— 2.9	+ 0.6	— 2.0	— 1.7
12	—43.1	— 9.0	— 4.9	— 4.1	— 0.9	— 6.5	+ 2.0	— 2.3	— 4.3	— 5.2	— 2.1	— 4.2	— 4.0
13	—51.1	—15.1	— 6.5	— 5.3	— 4.0	— 7.4	— 0.5	— 4.3	— 7.3	— 6.8	— 3.2	— 5.0	— 5.8
14	—50.8	—21.2	— 9.6	— 5.9	— 8.1	— 7.6	— 6.2	— 6.0	— 9.9	— 7.6	— 4.2	— 4.8	— 6.5
15	—46.1	—20.4	—11.9	— 5.9	—10.6	— 7.9	— 9.9	— 7.0	—11.5	— 7.9	— 4.6	— 3.8	— 6.4
16	—34.2	—20.6	—12.9	— 5.3	—11.3	— 9.6	—12.1	— 8.2	—11.4	— 7.6	— 4.6	— 2.5	— 5.4
17	—19.9	—23.6	—14.0	— 3.7	—12.1	— 9.9	—14.3	—10.4	—10.8	— 7.4	— 2.8	— 1.3	— 4.8
18	— 4.1	—19.4	—15.7	— 2.4	—12.9	— 9.7	—16.5	—13.1	— 9.5	— 6.0	— 3.2	— 0.3	— 3.0
19	+ 3.1	—16.1	—17.8	— 1.9	—12.5	— 8.0	—18.3	—14.2	— 8.0	— 6.6	— 2.4	+ 0.2	— 2.8
20	+13.0	—15.5	—19.6	— 2.3	—11.0	— 6.1	—19.8	—13.4	— 6.0	— 5.3	— 1.4	+ 0.7	— 1.8
21	+19.0	— 8.8	—19.1	— 5.0	—12.0	— 8.7	—19.4	—10.1	— 3.2	— 1.6	— 0.8	+ 1.2	+ 1.0
22	+27.3	— 0.6	—15.6	— 7.3	—11.9	—10.5	—15.4	— 5.3	+ 1.0	+ 0.1	— 0.4	+ 1.3	+ 1.0
23	+35.3	+ 3.9	—10.2	— 9.1	—11.9	— 8.9	—10.0	— 1.5	+ 6.0	+ 5.3	— 0.6	+ 1.2	+ 2.8
24	+35.9	+ 9.2	— 3.6	— 9.5	—12.0	—13.7	— 3.9	+ 4.0	+ 9.9	+ 7.3	— 0.6	+ 0.8	+ 4.2
Maximum L. M. T ..	0.7 H	5.9 H	5 6 H	5.5 H*	8.1 H	7.3 H	4.8 H	4.3 H	1.9 H	2.7 H	8.2 H	7.8 H	1.3 H
Maximum Amount ..	+39.′0	+20.′2	+30.′5	+14.′3	+29.′5	+27.′4	+25.′6	+15.′6	+12.′8	+ 9.′9	+ 6.′1	+ 3.′9	+ 5.′2
Minimum L. M. T	13.4 H	16.8 H	20.4 H	23.7 H*	18.3 H	0.3 H	19.4 H	19.3 H	15.7 H	15.0 H	15.4 H	13.3 H	14.4 H
Minimum Amount .	—52.′0	—23.′7	—19.′7	— 9.′7	—13.′0	—13.′9	—20.′0	—14.′3	—12.′0	— 8.′0	— 4.′7	— 5.′2	— 6.′6
Total observed range.....	91.′0	43.′9	50.′2	24.′0	42.′5	41.′3	45.′6	29.′9	24.′8	17.′9	10.′8	9.′1	11.′8
Calculated range..	85.′3	56.′7	50.′3	46.′1	43.′2	30.′0	24.′8	19.′2	18.′4	13.′3	12.′5	10.′9	11.′1
Summer range, S..	100.′4	45.′1	66.′7	29.′0	...	45.′8	54.′7	33.′0	30.′5	20.′8	....	11.′9	13.′6
Winter range, W..	80.′7	42.′7	33.′8	19.′7	...	38.′4	36.′6	26.′8	21.′4	15.′1	...	6.′5	10.′9
Ratio $\frac{S}{W}$	1.24	1.06	1.97	1.47	....	1.19	1.49	1.23	1.43	1.38	....	1.83	1.25
Epochs of mean declination I.....	7.9 H	11.2 H	10.2 H	10.2 H	11.9 H	10.9 H	11.7 H	11.0 H	9.9 H	9.6 H	11.2 H	10.3 H	10.3 H
Epochs of mean declination II	18.5 H	22.2 H	0.5 H	1.9 H	2.9 H	2.4 H	23.7 H	23.1 H	21.8 H	22.0 H	0.7 H	18.5 H	20.7 H

*At this station a pronounced second maximum and minimum at 19.3 H and 14.6 H of — 1.′8 and — 6.′0 respectively.

Tabulation of the mean yearly total solar-diurnal variation in magnetic declination at various stations

[Eastern deflection of north-seeking end from mean is indicated by a plus sign; western deflection by a minus sign.]

Local mean time, civil reckoning	14—Ekaterinberg, Siberia	15—De Bilt, Netherlands	16—Los Angeles, United States	17—Key West, United States	18—Zi-ka-wei, China	19—Colába, India	20—St. Helena Island	21—Buitenzorg, Java	22—South Georgia Island	23—Cape of Good Hope, Africa	24—Port Louis, Mauritius Island	25—Hobarton, Tasmania
h	′	′	′	′	′	′	′	′	′	′	′	′
1	+ 1.0	+ 0.9	0.0	0.0	+ 0.1	+ 0.1	+ 0.1	0.0	— 0.8	+ 0.5	0.0	— 1.0
2	+ 0.9	+ 2.8	+ 0.1	0.0	+ 0.1	+ 0.1	+ 0.1	+ 0.1	— 1.0	+ 0.5	0.0	— 0.7
3	+ 0.9	+ 0.8	+ 0.2	+ 0.1	+ 0.2	0.0	+ 0.1	+ 0.2	— 1.2	+ 0.5	0.0	— 0.5
4	+ 1.0	+ 1.0	+ 0.3	+ 0.2	+ 0.2	0.0	0.0	+ 0.2	— 1.4	+ 0.4	— 0.1	— 0.4
5	+ 1.3	+ 1.5	+ 0.6	+ 0.4	+ 0.2	0.0	+ 0.1	+ 0.1	— 1.4	+ 0.4	— 0.1	— 0.7
6	+ 1.9	+ 2.0	+ 1.3	+ 1.0	+ 0.5	+ 0.4	+ 0.4	+ 0.1	— 1.5	+ 0.3	— 0.2	— 1.1
7	+ 3.0	+ 2.4	+ 2.4	+ 2.1	+ 1.0	+ 0.8	+ 0.1	— 0.4	— 1.6	0.0	— 0.6	— 2.0
8	+ 3.6	+ 2.7	+ 3.1	+ 2.5	+ 1.7	+ 1.1	— 0.8	— 1.3	— 2.3	— 1.0	— 1.6	— 3.0
9	+ 3.7	+ 2.0	+ 2.6	+ 2.2	+ 1.8	+ 0.7	— 1.1	— 1.8	— 2.6	— 2.2	— 2.6	— 3.5
10	+ 2.6	0.0	+ 1.1	+ 1.1	+ 1.1	0.0	— 0.8	— 1.8	— 2.0	— 2.8	— 2.7	— 2.8
11	+ 0.5	— 2.6	— 0.8	— 0.2	— 0.1	— 0.8	+ 0.2	— 1.2	— 0.5	— 2.2	— 1.9	— 0.9
12	— 2.0	— 4.5	— 2.2	— 1.4	— 1.3	— 1.2	+ 0.8	— 0.3	+ 1.6	— 0.8	— 0.1	+ 1.4
13	— 4.2	— 5.0	— 2.7	— 2.1	— 1.7	— 1.0	+ 0.7	+ 0.5	+ 3.1	+ 0.4	+ 1.5	+ 3.6
14	— 5.1	— 4.3	— 2.6	— 2.2	— 1.6	— 0.5	+ 0.4	+ 1.0	+ 3.7	+ 1.3	+ 2.7	+ 4.7
15	— 4.8	— 2.8	— 2.0	— 1.9	— 1.1	— 0.1	0.0	+ 1.4	+ 3.5	+ 1.3	+ 2.9	+ 4.6
16	— 3.6	— 1.5	— 1.1	— 1.3	— 0.5	+ 0.2	— 0.4	+ 1.3	+ 2.4	+ 1.0	+ 2.3	+ 3.5
17	— 2.1	— 0.4	— 0.5	— 0.8	0.0	+ 0.2	— 0.6	+ 0.9	+ 1.5	+ 0.4	+ 1.1	+ 2.2
18	— 0.9	0.0	— 0.2	— 0.4	0.0	0.0	— 0.4	+ 0.5	+ 1.0	+ 0.2	+ 0.2	+ 1.2
19	— 0.3	+ 0.3	0.0	— 0.2	— 0.1	— 0.1	— 0.1	+ 0.4	+ 0.5	+ 0.2	0.0	+ 0.5
20	0.0	+ 1.0	0.0	+ 0.1	— 0.1	— 0.1	+ 0.1	+ 0.2	+ 0.4	+ 0.2	— 0.1	— 0.2
21	+ 0.3	+ 1.2	+ 0.1	+ 0.2	— 0.1	— 0.1	+ 0.2	+ 0.1	+ 0.2	+ 0.3	— 0.2	— 0.8
22	+ 0.5	+ 1.3	+ 0.1	+ 0.2	— 0.1	0.0	+ 0.3	0.0	— 0.4	+ 0.3	— 0.2	— 1.3
23	+ 0.8	+ 1.5	+ 0.1	+ 0.2	— 0.1	0.0	+ 0.3	— 0.1	— 0.5	+ 0.4	— 0.2	— 1.5
24	+ 1.0	+ 1.3	0.0	+ 0.1	0.0	+ 0.1	+ 0.2	0.0	— 0.7	+ 0.4	— 0.1	— 1.4
Maximum L. M. T.	8.6 H	8.2 H	8.1 H	8.2 H	8.7 H	8.1 H	12.4 H	15.3 H	14.4 H	14.8 H	15.3 H	14.4 H
Maximum Amount	+ 3.′8	+ 2.′7	+ 3.′1	+ 2.′5	+ 1.′8	+ 1.′1	+ 0.′8	+ 1.′4	+ 3.′7	+ 1.′4	+ 2.′6	+ 4.′8
Minimum L. M. T.	14.2 H	12.9 H	13.2 H	13 6 H	13 3 H	11.9 H	9.2 H	9.5 H	9.2 H	10.0 H	9.7 H	8.8 H
Minimum Amount	— 5.′1	— 5.′0	— 2.′8	— 2.′2	— 1.′8	— 1.′2	— 1.′2	— 1.′9	— 2.′6	— 2.′8	— 2.′8	— 3.′6
Total observed range	8.′9	7.′7	5.′9	4.′7	3.′6	2.′3	2.′0	3.′3	6.′3	4.′2	5.′4	8.′4
Calculated range	8.′2	5.′9	4.′1	3.′8	2.′9	2.′5	2.′5	2.′9	3.′4	3.′4	3.′8	7.′1
Summer range, S.	13.′5	10.′1	7.′7	6.′6	5.′2	4.′0	4.′3	4.′3	8.′8	6.′3	7.′0	11.′3
Winter range, W.	5.′2	5.′8	4.′6	3.′6	2.′2	0.′9	2.′4	2.′9	4.′3	3.′8	5.′8	5.′6
Ratio $\frac{S}{W}$	2.60	1.74	1.67	1.83	2.36	4.44	1.79	1.48	2.05	1.66	1.21	2.02
Epochs of mean declination I	11.2 H	10.0 H	10.6 H	10.8 H	10.9 H	10.0 H	(7.1 H)	(21.6 H)	(21.2 H)	(6.9 H)	(19.0 H)	(19.6 H)
Epochs of mean declination II	20.0 H	(17.8 H)	(19.1 H)	(19.7 H)	(16.9 H)	(15.3 H)	10.8 H	12.4 H	11.3 H	12.6 H	12.1 H	11.4 H

An inspection of the mean yearly ranges in diurnal variation for the stations of the above tabulation indicates that these ranges are in some way dependent upon the values of the respective magnetic dips, the greater ranges being associated with the greater inclinations. Dr. Bauer* has announced a law covering this apparent interrelation, namely, that the mean value, d, for the year of the total diurnal amplitude of the magnetic declination is a function of the magnetic latitude, φ', which may be in the general case expressed mathematically as

$$d = k \sec^2 \varphi',$$

in which the value of φ' is derived from the magnetic inclination, I, in accordance with the well-known formula

$$\tan \varphi' = 0.5 \tan I;$$

k is a constant depending upon the position of the particular series under discussion in the sun-spot cycle. Dr. Bauer's preliminary value of k is 2.'58. Pending greater elaboration by him it has seemed desirable in connection with above compilation to determine values of k by grouping these stations in order of the approximate sun-spot frequencies given on page 297. Accordingly values have been derived by the method of least squares from groupings of stations as indicated in the following summary of results :

Grouping stations number	Mean sun-spot frequency for grouping	Resulting value of k
		′
3, 14, and 21.....	81	2.71
1, 2, 4 to 11, 13, 15, 17, 22, and 24..	60	2.52
12, 16, 18, 19, 20, 23, and 25.....	32	2.36

The ranges for the individual stations of the groupings have been calculated using the above values of k and the results placed against the actually observed quantities for each station. The agreement between the observed and computed ranges is, in the main, quite satisfactory.

Magnetic Disturbances

As already stated, those days of observation on which particularly great disturbances in magnetic declination occurred may be readily noted by reference to the tabulation of circle readings of the magnet for the days on which the horizontal circle was shifted (see pages 20 to 26). In view of the fact that no continuous observations were made either for magnetic inclination or intensity in connection with those for declination, it has not been deemed worth while to attempt any general discussion or comparison of these disburbances. As will be noted from the miscellaneous remarks (pages 32 to 40), the magnetic storms were very frequently associated with the aurora borealis. On the other hand, the auroral displays were not always accompanied by magnetic disturbances, and *vice versa*.

The observations of November 1, 1903, between midnight and 8 A. M., local mean time are of particular interest, as they cover the final portion of the great magnetic storm of October

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*A remarkable law, by L. A. Bauer. Journal of Terrestrial Magnetism. Volume II, p. 70. Cincinnati, 1897. Also United States magnetic declination tables and isogonic charts for 1902, by L. A. Bauer. U. S. Department of Commerce and Labor, Coast and Geodetic Survey, O. H. Tittmann, Superintendent. 2d edition, p. 51. Washington, 1903.

31 to November 1, 1903.* The extreme values of declination observed at Teplitz Bay during this period were 37° 31′ E at 4:01 A. M. and 20° 13′ E at 5:49 A. M., local mean time, the greatest range thus being 17° 18′ in 1.8 hour. During the same absolute period the records of the Cheltenham Magnetic Observatory of the United States Coast and Geodetic Survey show an extreme range of 32′, while the maximum range for the entire storm at this point was about three times as much, viz., 97. 1. From this comparison it appears highly probable that during the maximum violence of this disturbance on October 31, 1903, the extreme range in magnetic declination at Teplitz Bay may have been as much as 52°.

The highest value observed during the entire series was 37° 31′ E, as above, on November 1, 1903; the lowest, 19° 51′ at 8:27 P. M. on June 15, 1904. The absolute observed range was, therefore, 17° 40′. The unusual character and magnitude of the disturbance of October 31, 1903, is thus at once apparent.

Secular Change in Magnetic Declination

The only previous observations of the declination of the magnetic needle at Teplitz Bay available for use in determining the secular change in this element are those made by Commander Cagni, of the Italian Expedition of 1899 and 1900. His observations as reported by Professor Palazzo† have been corrected for diurnal variation as determined from the preceding discussion. The following table gives a synopsis of these determinations so reduced (the corrections on account of diurnal variation are the mean values over the respective periods of observation):

Date	No. of observ'ns	Local mean time	Mean observed east declination	Correction diurnal variation	Mean reduced east declination	Resulting mean values
1899		*h m h m*	° ′	′	° ′	° ′
August 28.....	6	14 30 – 15 50	21 03.9	+ 11.6	21 15.5	21 15.6
August 30.....	4	10 39 – 11 58	16.4	— 0.6	15.8	
1900						
July 11.....	9	14 46 – 18 38	21 14.8	+ 23.1	21 37.9	21 25.0
July 14..	8	16 19 – 17 58	00.9	+ 25.7	26.6	
July 18.....	5	11 07 – 12 00	16.1	— 4.5	11.6	
July 19..	3	14 35 – 15 09	16.6	+ 12.8	29.4	
July 24.....	8	9 24 – 11 34	27.1	— 8.6	18.5	
August 2..	8	9 41 – 11 13	34.1	— 8.0	26.1	

The resulting mean values of 21° 15.′6 and 21° 25.′0 correspond to mean of day for the epochs 1899.66 and 1900.55 respectively.

Unfortunately the multitudinous duties of the various members of the Ziegler Expedition field force prohibited making observations at the Italian station until just shortly prior to the

* Journal of Terrestrial Magnetism and Atmospheric Electricity, volume IX, 1904, pp. 25–33; also Annalen der Hydrographie und maritimen Meteorologie, 1904, Heft III, pp. 112–127.

† Osservazioni Scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi. Milan, 1903. Pp. 453–462. (Relazione sulle osservazioni magnetiche fatta dal Professore Luigi Palazzo.)

final retreat south. As a result but one set of declination observations at Commander Cagni's station could be made. This set is herewith given in its entirety :

Station : Italian station, Teplitz Bay — *Date :* June 23, 1904
Instrument : Magnetometer IIII — Observer : W. J. P.
Mark : Magnetic observatory
Magnet : No. 4 — Line of detorsion : 54°

Chron. time	Scale	Scale readings			Horizontal circle readings			
		Left	Right	Mean			Mark	Magnet
h m		*d*	*d*	*d*			° ′	° ′
11 00	E	56.3	58.9	57.60	Before	A	347 57.7	94 08.7
02	E	58.6	60.3	59.45		B	167 56.7	274 07.5
04	E	57.3	58.9	58.10	After	A	347 57.9	94 08.2
06	E	54.9	56.9	55.90		B	167 56.9	274 07.5
10	I	51.5	49.9	50.70	Means.....		347 57.30	94 07.98
12	I	51.4	50.0	50.70				
14	I	52.4	51.2	51.80				
16	I	52.3	50.8	51.55				
18	I	50.7	49.4	50.05				
20	I	56.0	44.2	50.10				
22	I	57.0	45.3	51.15				
24	I	57.0	46.0	51.50				
28	E	57.0	57.9	57.45				
30	E	56.8	57.9	57.35				
32	E	56.3	57.3	56.80				
34	E	55.9	56.9	56.40				

	d
Scale erect, mean	57.38
Scale inverted, mean.....	50.94
Axis.....	54 .16

	d
Mean scale reading, erect.	57.38
Axis.....	54.16
Scale—Axis.....	+ 3.22
Reduction to axis.....	+5.′06
Circle reading.....	94° 07.′98
Magnetic S. M. reading..	94 13.0
Mark reading	347 57.30
Azimuth of mark*.....	275 46.75
True S. M. reading	72 10.6
Magnetic declination, east	22 02.4
Diurnal variation.....	— 9.1
Mean declination, east...	21 53.3

	h m
Mean chron. time.....	11 17.0
Chron. cor. on L. M. T. ...	0.0
Local mean time.....	11 17.0

Remarks :

Calm and clear

Temperature : + 12.°0

At end line of detorsion 57°

*Counted from south around by west from 0° to 360°.

Owing to the fact that no suitable instrument was available, observations at the observatory simultaneous with the above could not be made. The observations nearest in point of time at the hut are those of June 22 and June 23. Correcting the two-minute readings of June 22 between 20 hours and 24 hours for diurnal variation a mean value of 22° 51′ results. In like manner, the observations on June 23 between 16 hours and 20 hours give a mean value of 22° 19′. It thus appears, since the average value during the period June 12 to July 1 is 22° 32′, that, while the general magnetic conditions preceding the observations at the Italian station by thirteen to fourteen hours were such as to give declinations high by about 19′, the conditions six to seven hours later were such as to give declinations low by about 13′. It therefore seems quite probable that between 11 and 12 A. M. the magnetic conditions were about normal, and hence a direct comparison with the preceding may be made.

As already noted, Commander Cagni's results at about the same season of year were 21° 15.′6 and 21° 25.′0 for the epochs 1899.66 and 1900.55, or in the mean 21° 20.′3 for 1900.10. The result above for epoch 1904.48 is 21° 53.′3; hence the apparent effect in the elapsed interval of 4.4 years due to secular variation is an increase of east declination of 33′. Assuming a linear change over the interval, the secular change in magnetic declination in the region of Teplitz Bay may be taken as about

$$+7.'5 \text{ per year.}$$

It may be noted that this value is of the same magnitude as those deduced by Dr. Solander* for Mossel Bay and Cape Thordsen, Spitzbergen, for the periods 1873.5 to 1899.7 and 1883.2 to 1899.7, viz., 7.′3 and 7.′8 *decreasing west* declination respectively. The geographical positions of these stations are: Mossel Bay, 79° 53′ north latitude and 16° 04′ east longitude; Cape Thordsen, 78° 28′ north latitude and 15° 42′ east longitude.

* Missions scientifiques pour la mesure d'un arc de méridian au Spitzberg entreprises en 1899-1902 sous les auspices des gouvernements Suédois et Russe—Mission Suédois. Tome II Déterminations magnétiques faites au Spitzberg pendent l'été 1899, par E. Solander. Stockholm, 1903, p. 50.

Annual Variation in Magnetic Declination

By means of the preceding value of the annual rate of secular variation in magnetic declination at Teplitz Bay the monthly mean hourly declinations and means were reduced to epoch 1904.0 as per tabulation on page 288. By the use of Bessel's periodic function in the particular case of a cycle of twelve equidistant observations the following expression has been obtained, after the methods detailed on page 290, as representing the annual variation:

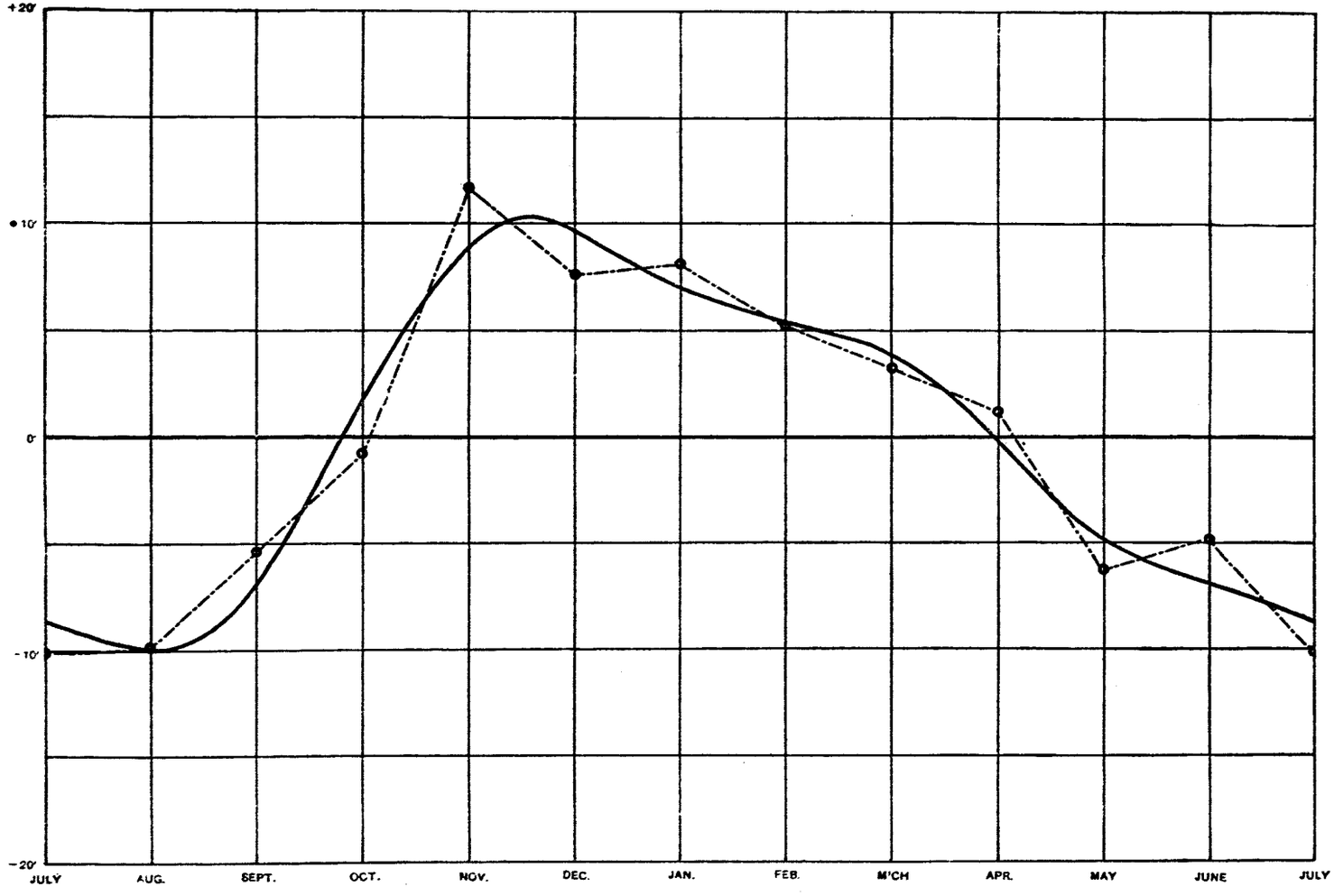
$$D = 22^\circ\ 38.'5 + 9.'27 \sin(\theta + 244^\circ\ 59') + 2.'32 \sin(2\theta + 141^\circ\ 07') + 1.'41 \sin(3\theta + 4^\circ\ 45') \pm 0.'33^*$$

In this formula the angle θ counts from the middle of June as 0°, no account being taken of the inequality in length of months. The addition of a fourth term results in no improvement, as in this case the probable error is identical with that above. It may be noted that the range of variation on the mean of year is unusually large, the maximum deflection early in December being + 10.'2 while the opposite extreme about the middle of August is — 10.'0. The computed and observed values are shown graphically to scale in figure 20. The following summary of variations on the mean yearly value will serve further to indicate the agreement between the observed (*O*) and computed (*C*) quantities, easterly deviations being denoted by a plus sign, and *vice versa*:

Month	*O*	*C*	*O-C*	Month	*O*	*C*	*O-C*
	′	′	′		′	′	′
June..... ...	— 4.8	— 6.8	+2.0	December....	+7.6	+9.7	—2.1
July.	—10.1	— 8.6	—1.5	January.....	+8.1	+7.0	+1.1
August	— 9.9	—10.0	+0.1	February	+5.3	+5.4	—0.1
September...	— 5.4	— 6.8	+1.4	March.....	+3.3	+3.9	—0.6
October.....	— 0.7	+ 1.8	—2.5	April.....	+1.2	0.1	+1.3
November....	+11.7	+ 9.0	+2.7	May.....	—6.3	—4.4	—1.9

*The probable error of a single representation is ± 0.'33.

FIGURE 20



ANNUAL VARIATION IN MAGNETIC DECLINATION AT TEPLITZ BAY

(Increasing ordinates up denote increasing east declination. The observed means are shown by circles joined by broken line; the computed values are shown by the continuous curve.)

INCLINATION

Instrument and Methods

Observations for dip were made, as already stated, with the United States Coast and Geodetic Survey Cassela dip circle No. 5676. For the various standardization observations before and after the work of the Expedition see pages 11 and 12. The instrument was mounted in the observing hut on pier *D* (figure 2) September 28, 1903. Except for observation and cleaning and use at the Italian magnetic station on June 6, 20, and 27, 1904, it remained undisturbed. On the last three occasions it was returned to its pier immediately after the completion of the observations.

During the winter the needles were turned on the agates by means of wooden pliers. Proximity of the hand produced condensation which froze on the needles; this appeared, though slight, even while the blades were being rubbed with several thicknesses of tissue paper. Ice crystals continually formed on the instrument, and the frosted roof contributed a constant downpour of fine particles. A linen hood, conical in shape, was suspended from the roof and covered the instrument and top of pier *D* when not in use. About December 22 a paper hood was substituted with better success.

The bar magnets and four needles were kept outside of the observatory in a canvas-covered box, which is shown on the plat as *magnet box No. 1*. This box was secured to a post about 1.5 meter from the ground and could be used as a table or shelf on which the needles were magnetized in good weather. During the winter, when light and weather were both unfavorable, the needles were magnetized in the west end of the observatory. The bar magnets were returned immediately after the operation to magnet box No. 1.

On October 5, before commencing observations, needle 3 was observed upon, while declination magnet No. 4 was reversed several times at its stowing place. Needle 3 was kept oscillating in the magnetic meridian. The same operation was repeated on two subsequent occasions during the winter. On June 7 the same observation was again made, and also with the needle in the magnetic prime vertical. In all these observations no effect was detected on the oscillating dip needle.

A small adjusting pin was kept in a vertical hole on pier *D*. As it was necessary to use this pin to unloosen the stops on the horizontal circle before observing, the fact of its removal before each day's work is not noted. During the dip observations it was placed on top of the east window (south end). The needle not being observed upon was kept on the north end of the east plate of the observatory.

Time was noted by watch *P*, which was always hung on the middle stud of the south wall of the hut. On one occasion, November 30, chronometer Negus 1809 was used and was placed at foot of pier *M* against the north side.

Observations were made after the order prescribed for use in the field operations of the United States Coast and Geodetic Survey. This observing scheme is indicated by the following specimen set taken at random from the Teplitz Bay series:

Station: Teplitz Bay *Date:* January 18, 1904 *Observer:* W. J. P.

Dip circle No. 5676 Needle No. 3

End of needle marked A down

Circle east		Circle west		Circle west		Circle east	
Needle face east		Needle face west		Needle face east		Needle face west	
S	N	S	N	S	N	S	N
° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
82 53	82 55	83 21	83 10	83 27	83 26	83 13	83 15
52	55	15	10	23	19	11	13
82 52.5	82 55.0	83 18.0	83 10.0	83 25.0	83 22.5	83 12.0	83 14.0
82° 53.′75		83° 14.′0		83° 23.′75		83° 13.′0	
83° 03.88				83° 18.′38			

Mean: 83° 11.′13

Polarities reversed: end of needle marked B down

Circle east		Circle west		Circle west		Circle east	
Needle face east		Needle face west		Needle face east		Needle face west	
S	N	S	N	S	N	S	N
° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
83 28	83 29	83 11	83 07	83 27	83 23	83 03	83 00
35	35	03	03	27	23	02	00
83 31.5	83 32.0	83 07.0	83 05.0	83 27.0	83 23.0	83 02.5	83 00.0
83° 31.′75		83° 06.′0		83° 25.′0		83° 01.′25	
83° 18.′88				83° 13.′12			

Mean: 83° 16.′0

Resulting dip: 83° 13.′6

	h m
Chron. time of beginning	14 58
Chron. time of ending.....	15 45
Mean chronometer time.....	15 22
Chron. correction on L. M. T....	+ 02
Local mean time.....	15 24
Magnetic meridian reads.....	24° 19′

	Circle in mag. prime vertical	° ′
Circle N.	Needle S end.....	25 24
	Needle N end.....	25 58
Circle S.	Needle N end.....	22 23
	Needle S end.....	23 31
	Mean.....	24 19

When observing with two needles the observations with first polarity of the first needle were immediately followed by the complete determination with the second needle (polarities of both needles being reversed at the same time), after which observations with the second polarity of the first needle were made. By this arrangement the final means from each needle correspond to practically the same epoch of time. As will be noted from the above specimen, two settings were made on each end of the needle in every position except in those cases where these differed by ten minutes or more of arc, when an additional observation was made and the mean of the three readings taken.

RESULTS

Only the final results for each needle and their means are shown in the tabulation following, the mean values being adopted without correction (see page 12). The time is the mean of the times noted at beginning and end, and is expressed in local mean time, reckoned from midnight throughout the twenty-four hours. The observer is indicated by the initials (see page 17).

Tabular summary of observations of magnetic inclination at Teplitz Bay

Date	L. M. T.	Needle 3	Needle 4	Mean	Observer	Remarks
1903	*h m*	° ′	° ′	° ′		
Oct. 5	16 28	83 16.4 N	83 17.3 N	83 16.8 N	W. J. P.	
12	11 18	36.6	28.3	32.4	Do.	Magnetic meridian as determined October 5.
19	15 24	08.8	10.2	09.5	Do.	
29	12 34	10.6	08.4	09.5	Do.	
30	15 27	11.1	12.7	11.9	Do.	
Nov. 20	17 02	13.6	08.7	11.2	Do.	
30	19 52	15.9	10.8	13.4	Do.	
Dec. 3	15 06	10.7	12.6	11.6	Do.	
4	10 10	14.4	14.4	14.4	Do.	
7	14 30	09.9	11.8	10.8	Do.	Corrected for observation in magnetic azimuth 1°.
19	10 36	11.5	22.6	17.0	Do.	
21	14 59	16.2	18.8	17.5	Do.	
25	11 22	09.8	13.2	11.5	Do.	
26	8 30	13.7	12.8	13.2	Do.	
1904						
Jan. 5	9 32	11.3	13.0	12.2	Do.	
9	9 50	10.5	18.2	14.4	Do.	
14	14 34	08.3	05.4	06.8	Do.	Aurora in north of large extent, but not brilliant.
15	9 42	12.4	08.0	10.2	Do.	
18	15 24	13.6	13.0	13.3	Do.	
19	10 01	12.4	09.6	11.0	Do.	
25	14 11	12.2	13.5	12.8	Do.	
26	10 02	12.6	10.0	11.3	Do.	

Tabular summary of observations of magnetic inclination at Teplitz Bay—Continued

Date	L. M. T.	Needle 3	Needle 4	Mean	Observer	Remarks
1904	*h m*	° ′	° ′	° ′		
Feb. 1	14 32	11.2	17.5	14.4	Do.	
2	10 32	12.9	08.4	10.6	Do.	
8	14 18	08.6	10.4	09.5	Do.	
15	20 10	12.4	04.2	08.3	R. R. T.	
22	16 12	10.6	08.9	09.8	W. J. P.	
24	20 44[a]	19.6[a]	13.7[a]	16.6[a]	R. R. T.	
29	15 04[a]	10.5[a]	07.0[a]	08.8[a]	Do.	Revolver not taken to hut.
Mar. 1	10 30	09.1	10.7	09.9	Do.	Do.
18	11 06	16.7	12.2	14.4	Do.	Revolver removed.
19	16 32	11.0	17.9	14.4	Do.	Do.
24	7 41	12.2	09.4	10.8	Do.	Do.
28	15 08	83 14.8 N	83 13.2 N	83 14.0 N	R. R. T.	Do.
29	9 52	15.1	12.6	13.8	W. J. P.	Do.
April 1	10 48	16.7	14.4	15.6	R. R. T.	Do.
4	14 20	11.3	10.9	11.1	W. J. P.	Do.
5	9 54	13.2	14.4	13.8	Do.	Do.
11	15 29	05.7	14.2	10.0	Do.	Do.
12	9 58	16.3	14.7	15.5	Do.	Do.
18	14 46	15.4	83 15.9	83 15.6	Do.	Revolver left in usual place over night.
19	9 44	01.5	82 55.5	82 58.5	Do.	Revolver removed.
25	14 20	17.6	83 15.5	83 16.6	Do.	Do.
26	9 20	11.0	12.8	11.9	Do.	Do.
May 2	14 06	06.7	10.7	08.7	Do.	Revolver permanently removed.
3	9 16	09.5	12.8	11.2	Do.	
9	15 12	08.9	16.6	12.8	Do.	
10	9 58	12.6	19.2	15.9	Do.	
16	15 04	10.6	08.4	09.5	Do.	
17	10 00	13.2	15.1	14.2	Do.	
23	15 31	07.5	10.5	09.0	Do.	
24	10 20	11.8	14.6	13.2	Do.	
30	15 12	08.6	06.9	07.8	Do.	
31	10 00	14.4	15.0	14.7	Do.	

[a] Needles No. 1 and No. 2.

Tabular summary of observations of magnetic indications at Teplitz Bay—Continued

Date	L. M. T.	Needle 3	Needle 4	Mean	Observer	Remarks
1904	*h m*	° ′	° ′	° ′		
June 6	15 24*	01.3*	03.5*	02.4*	Do.	See foot-note.
6	15 22	17.3	12.0	14.6	Do.	
7	10 04	13.4	14.5	14.0	Do.	
13	15 30	14.0	11.5	12.8	Do.	
14	9 46	15.2	14.8	15.0	Do.	
20	15 30*	01.9*	04.7*	03.3*	Do.	
20	15 28	09.6	12.0	10.8	Do.	
21	10 03*	11.2*	08.1*	09.6*	Do.	
21	9 53	12.0	18.0	15.0	Do.	
27	16 18*	09.8*	19.4*	14.6*	Do.	
27	16 18	18.2	20.4	19.3	Do.	

* These observations were made at Italian station.

NOTE.—When the observations of June 20 at the Italian station were being made an iron bolt was found at the foot of the pier; needle was not affected while it was being removed, but probably the observations of June 6 are vitiated.

The following monthly mean values for magnetic dip result from these observations:

Epoch	No. obs'ns each needle	Dip by		Resulting mean dip
		Needle No. 3	Needle No. 4	
		° ′	° ′	° ′
1903.80	5	83 16.70 N	83 15.38 N	83 16.0 N
1903.80	4[a]	11.72[a]	12.15[a]	11.9[a]
1903.90	2	14.75	09.75	12.3
1903.95	7	12.31	15.17	13.7
1904.04	8	11.66	11.34	11.5
1904.12	7[b]	12.26[b]	10.02[b]	11.1[b]
1904.22	6	13.15	12.67	12.9
1904.28	9	12.08	12.03	12.1
1904.37	10	10.48	12.98	11.7
1904.46	7	14.24	14.74	14.5

[a] Omitting October 12, 1903. [b] Including two values, needles No. 1 and No. 2.

In adopting a mean value from this summary it has been deemed best to reject the observations of October 12, 1903, as probably defective, owing to improper setting for the magnetic meridian. From the remaining sixty sets of observations with two needles each the resulting inclination at Teplitz Bay is—

83° 12.'4 for epoch 1904.13.

Secular Change in Magnetic Inclination

Observations were made for inclination, as noted in the tabulation of dip results, at the Italian magnetic station of 1899 and 1900. In order to have the resulting values apply to the same mean time at both stations observations were first made at the Italian station with one polarity of the marked end of each needle; the instrument was then transferred to pier *D* in the observing hut, where complete sets with each needle were made, and finally the comparison was completed by observing with second polarity of the marked end of each needle at the Italian station. Assuming a linear change in diurnal variation over the period of observation, the mean results at the two stations are directly comparable. The mean resulting difference in magnetic dip between the two locations is 7.′3 as adopted from the following tabulation of the comparisons:

Date	Local mean time	Mean dip observed at Italian station	Local mean time	Mean dip observed at Ziegler station	Δ I Ziegler station to Italian station	Weight
1904	*h m*	° ′	*h m*	° ′	′	
June 6	15 24	83 02.4 N	15 22	83 14.6 N	—12.2	1
June 20	15 30	03.3	15 28	10.8	— 7.5	2
June 27	16 18	14.6	16 18	19.3	— 4.7	2
Whence weighted difference adopted.....					— 7.3	

The comparison of June 6 is given weight of one against two for each of the other comparisons by reason of the observer's note regarding discovery of iron bolt at foot of pier on June 20. There being no reason to assume any change in local magnetic conditions at so isolated and unfrequented a locality, we may assume the same difference at the time of the Italian Expedition.

Commander Cagni's observations resulted as follows:*

Date	Number of determinations	Mean observed inclination
August 21, 22, 1899	4	83° 25.′0 N
July 10, 16, 17, 23, 1900	9	83 01.2

whence the mean value 83° 13.′1 N for the epoch 1900.09. Referred to the Ziegler Polar Expedition station, this becomes 83° 13.′1 + 7.′3 = 83° 20.′4. The value for the epoch 1904.13, as above, is 83° 12.′4 N. Both of these series are uncorrected for diurnal variation. Each, however, consists of observations made at various parts of the day, so that the means may be assumed as applying practically to mean of day at their respective epochs. Thus in four years the northerly magnetic inclination in the region of Teplitz Bay has *decreased* 8′. Hence the rate of change in magnetic inclination due to secular variation, assuming this effect to be a linear function during the elapsed interval, is

— 2′ per year.

This value is, while of the same sign, considerably smaller than that taken by Professor Palazzo as a result of his discussion of Commander Cagni's observations, viz., — 24′. He, however, considers this determination as not very reliable, owing to the short period between the inclination observations, and also the great variation between the individual values obtained.

* Osservazioni scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi, 1899–1900. Milan, 1903. Pp. 462–475. (Relazione sulle osservazioni magnetiche fatta dal Professore Luigi Palazzo.)

The annual rate above deduced is further confirmed by the fact that it is of practically the same order as values obtained at other Arctic stations. Thus, for example, for Cape Thordsen and Mossel Bay, Spitzbergen, Dr. Solander* has deduced the annual rates of *increase* in magnetic inclination as 0.′4 and 0.′8 for the periods 1883.2 to 1899.7 and 1873.5 to 1899.7 respectively.

HORIZONTAL INTENSITY

Instrument, Methods, and Results

Observations for horizontal intensity were made, as already stated, with magnetometer No. IIII loaned by the United States Coast and Geodetic Survey. For the various standardization observations with this instrument before and after the work of the expedition, as also for the constants and methods of reduction used, see pages 6 to 11. Determinations were made generally on Monday afternoons and Tuesday mornings, but it was not possible before the advent of daylight to adhere strictly to this program. In these observations for intensity the time of a set of fifty oscillations was observed in the usual manner before and after deflection observations. Sometimes these were repeated; at other times the final set of oscillations was lost, owing to the failure to transit of the selected scale division.

The fortieth division, being near the middle of the scale, was the one whose transit was chosen. The initial amplitude of the oscillation was usually made about one degree in order to increase the probability of the transit of the fiftieth oscillation. The amplitude of swing was noted at the beginning and end, in scale divisions, but is not published for lack of space. The time was noted by mean time chronometer Negus No. 1809, which was carried to the observatory for the purpose. It was always placed at the foot and touching the north side of pier *M* (figure 2). This chronometer was compared daily with the sidereal chronometer Negus No. 1769, which was used in the astronomic observations. Determinations of the torsional effect of the four suspension fibers were made before the first and after the last oscillation sets. The temperature was noted at the beginning, middle, and end by a Centigrade thermometer, the bulb of which projected into the magnet-house of the magnetometer. This same thermometer was used in the deflection observations, readings being taken before and after each set.

Magnet No. 2 was suspended during deflection observations. A solid brass bar with a carrier supported magnet No. 4 at thirty and forty centimeters from the center. Eight settings were made and the time and temperature noted as usual. Magnet No. 2 was kept in magnet box No. 2 outside of the hut (shown on plat) and was brought into the observatory immediately after preceding oscillation observations. From fifteen to thirty minutes elapsed before it was observed upon. After deflection, and before the subsequent oscillation observations, it was returned to magnet box No. 2.

The observation specimens, pages 314 and 315, which together yield an absolute value of the horizontal intensity, *H*, will serve to make clear the method of observation and computation. In the tabulation of results given below, each value of *H* is deduced from two or more such sets of oscillation and one set of deflection observations made in the order stated above.

By the aid of the specimens the accompanying tabulation of the condensed original notes may be readily interpreted. The times given are local mean reckoned from midnight through twenty-four hours. The mean deflection angles observed at thirty and forty centimeters are given in the two columns under heading *u*. The columns *t* and *t′* show the mean temperature readings for the deflection and oscillation observations respectively. The mean time of one oscillation corrected for the rate of chronometer appears under column headed *T′*. The effect of ninety degrees of torsion in the suspension is given in the column *v*. The column headed *H* gives the finally reduced values for horizontal intensity expressed in gammas, one gamma being 0.00001 C. G. S. unit. The resulting values of the magnetic moment of magnet No. 4 at *t* degrees and at twenty degrees Centigrade are shown in the last two columns respectively. Reference to pages 8 and 10 will serve to explain the remaining headings.

*See reference, page 305.

Station: Teplitz Bay *Date:* March 19, 1904 *Observer:* R. R. T.

Instrument: Magnetometer IIII Magnet: No. 4, inverted

Chronometer Negus 1809, daily rate gaining 2.s37 on mean time

Oscillation number	Chronometer time	Temp. t'	Extreme scale reading		Time of 50 oscillations
	h m s	°	*d*	*d*	
0	7 35 49.8	— 14.7	59 3	23.0	
3	36 20.2				
6	50.8				
9	37 21.2				
12	51.2				
15	38 22.1	— 14.7	57.1	26.6	
					m s
50	44 15.0		56.3	31.0	8 25.2
53	48.2				28.0
56	45 15.4				24.6
59	48.9				27.7
62	46 16.2				25.0
65	50.3	— 14.7	55.3	33.2	28.2
Means	7 41.3	— 14.70	57.0	28.4	8 26.45

Formulæ: $T^2 = T'^2\left(1+\frac{h}{f}\right)\left(1-(t'-t)q\right)\left(1+\mu\frac{H}{m}\right)$; $m(H+X)^{\dagger} = \frac{\pi^2 K}{T^2}$

Coefficient of torsion. One div. = 1.′57

Tors. circle	Scale		Mean.	Diff's
°	*d*	*d*	*d*	*d*
19	40.8	39.8	40.30	10.30
109	30.4	29.6	30.00	19.80
289	50.9	48.7	49.80	9.90
19	40.6	39.2	39.90	

Mean v = *d* 10.00 = ′ 15.7

L. M. L. oscillations *h m* = 11 29

$(t'-t)$ = — 0.°75

	s
Time of 1 oscil.	10.1290
Corr'n for rate*	— 0.0003
T'	10.1287
log T'^2	2.01111
" $\left(1+\frac{h}{f}\right)$	0.00126
" $[1-(t'-t)q]$	0.00006
" $\left(1+\mu\frac{H}{m}\right)$	0.00037
" T^2	2.01280
" $\pi^2 K$	3.45257
" $m(H+X)$	1.43977

Remarks:

Chr. to L. M. T. = + 3^h 48.^{m}0

Revolver removed to magnet box

* Plus for losing rate and minus for gaining rate.

† See page 10.

DEFLECTIONS WITH MAGNETOMETER No. IIII

Station: Teplitz Bay *Date:* March 19, 1904 *Observer:* R. R. T.

Magnet No. 4 deflecting at right angles to magnet No. 2 suspended

Magnet	North end	Circle readings							
		I. Distance $r = 30$ cm.				II. Distance $r = 40$ cm.			
		No.	A	B	Mean	No.	A	B	Mean
			° ′	′	′		° ′	′	′
East	E	1	94 02.5	02.2	02.35	2	77 25.0	24.5	24.75
	W	4	37 01.5	01.5	01.50	3	54 05.2	04.5	04.85
	$2u$		57° 00.′85				23° 19.′90		
West	W	5	37 26.5	26.2	26.35	6	54 05.5	05.0	05.25
	E	8	95 31.2	30.8	31.00	7	77 47.5	47.0	47.25
	$2u$		58° 04.′65				23° 42.′00		

Formulæ: $\frac{H}{m} = \left[\frac{2\left(1+\frac{P}{r^3}+\text{-}\right)}{r^3\left(1+\frac{2\mu}{r^3}\right)}\right] \frac{1}{\text{Sin } u} = \frac{C}{\text{Sin } u}$; $\log H \overset{\dagger}{=} \frac{1}{2}\left(\log \frac{H}{m} + \log m\,(H+X)\right) + 255\,\gamma$

	I	II
	° ′	° ′
$2u$ (mean)	57 32.75	23 30.95
u	28 46.4	11 45.5

	h m		°
Began at	8 45	Temp.	— 14.0
Ended at	9 51	"	— 13.9
Mean	9 18.0	$t =$	— 13.95
Chr. to L. M. T.	+ 3 48.0		
L. M. T.	13 06.0		

Remarks: Revolver removed to magnet box

Set	I	II
$\log C$	5.86924	5.49476
" Sin u	9.68246	9.30917
$\log \frac{H}{m}$	6.18678	6.18559
$\log m\,(H+X)$	1.43960*	1.43960*
" $\sqrt{H\,(H+X)}$	8.81319	8.81260
H	6759 γ	6750 γ
$\log m_4$	2.64345	
Reduction to 20°	— 0.00441	
$\log m_{20}$	2.63904	
m_{20}	435.55	

* Mean from four sets oscillations before and after deflections: 1.43977, 1.43959, 1.43974, and 1.43930.

† See page 10.

Tabular summary of observations of magnetic horizontal intensity at Teplitz Bay

Date	Local mean time	u		Centigrade temperature		$\log \frac{H}{m}$	
		$r = 30$ cm.	$r = 40$ cm.	t	t'	$r = 30$ cm.	$r = 40$ cm.
1903	h m	° ′	° ′	°	°		
October 12.....	17 31	28 65.0	11 56.4	— 1.80	— 0.62	6.18222	6.17872
22.....	14 59	13.6	40.6	+ 8.00	+ 5.78	9387	8802
29.....	15 07	29.4	36.8	— 1.55	— 2.48	9041	9059
30.....	11 04	26.9	35.1	— 4.50	— 6.09	9106	9171
November 9.....	16 34	28 49.0	11 47.3	—18.30	—19.95	6.18630	6.18461
16.....	16 19	48.4	43.5	—15.60	—16.88	8636	8685
20.....	12 06	46.7	41.6	—12.00	—14.28	8666	8791
30.....	20 33	47.8	43.2	— 4.60	— 6.12	8622	8675
December 1.....	9 33	28 46.0	11 39.8	— 7.80	—10.35	6.18672	6.18891
3.....	11 37	50.25	44.4	— 7.50	— 9.48	8574	8610
4.....	16 28	34.4	37.7	— 4.10	— 4.83	8931	9010
7.....	17 48	63.55	46.22	—12.60	—13.51	8282	8511
25.....	7 03	48.6	45.25	—18.50	—19.93	8639	8585
26.....	11 06	45.9	43.8	—14.25	—15.26	8691	8663
1904							
January 7.....	11 58	28 44.9	11 44.8	—12.15	—14.02	6.18708	6.18596
9.....	14 47	45.7	42.4	—12.70	—12.92	8691	8745
14.....	11 23	47.7	46.8	—22.40	—24.48	8669	8501
15.....	12 12	47.3	42.5	—15.25	—16.82	8660	8745
18.....	17 20	43.0	42.5	— 2.40	— 2.23	8728	8713
19.....	7 02	43.3	41.0	— 5.00	— 6.36	8727	8810
25.....	16 40	42.0	40.2	— 5.65	— 6.66	8759	8861
26.....	7 04	45.9	45.1	— 9.60	—12.15	8679	8572
February 1.....	20 05	28 48.9	11 44.3	—13.95	—15.73	6.18621	6.18632
2.....	7 43	54.3	46.4	—17.25	—21.11	8505	8513
22.....	19 46	53.3	48.5	— 9.45	— 8.78	8509	8367
29.....	20 52	45.2	44.75	— 2.15	— 2.46	8676	8574
March 1.....	6 33	28 42.7	11 47.9	— 4.55	— 5.78	6.18740	6.18390
18.....	15 57	41.3	47.0	—22.80	—23.24	8818	8490
19.....	13 06	46.4	45.5	—13.95	—13.61	8678	8559
24.....	12 16	57.0	42.0	—17.30	—18.01	8443	8780
29.....	7 20	45.8	42.7	— 5.25	— 6.10	8670	8707
April 4.....	16 52	28 29.8	11 35.75	— 3.85	— 2.70	6.19038	6.19130
5.....	6 55	50.7	47.7	— 7.00	— 7.97	8562	8408
11.....	17 27	31.4	39.8	—15.50	—15.59	9029	8910
12.....	7 10	52.7	45.4	—23.55	—22.75	8558	8589
18.....	16 54	44.7	39.4	—16.25	—14.50	8724	8937
19.....	6 40	34.9	35.4	—20.50	—19.78	8960	9193
25.....	17 07	27.7	35.3	—12.90	—12.48	9108	9180
26.....	6 51	45.8	42.8	—17.40	—17.30	8700	8731
May 2.....	16 32	28 25.9	11 34.6	—12.40	—11.63	6.19149	6.19222
3.....	7 00	64.9	43.1	—14.30	—12.60	8256	8706
9.....	16 21	33.66	39.3	— 4.15	— 4.04	8948	8912
10.....	6 38	40.2	38.0	— 6.30	— 6.02	8802	8998
16.....	16 42	38.2	39.7	— 8.25	— 7.32	8853	8898
17.....	7 35	71.4	51.3	— 8.00	— 7.00	8093	8193
23.....	17 08	24.7	35.3	— 5.25	— 4.40	9159	9161
24.....	7 00	46.2	41.6	— 4.25	— 4.76	8658	8772
30.....	16 49	29.1	36.6	— 0.90	+ 0.83	9046	9070
31.....	7 15	58.5	47.1	— 4.95	— 3.60	8378	8439
June 6.....	20 22	28 45.6	11 42.6	+ 5.05	+ 6.70	6.18649	6.18687
7.....	7 58	53.4	50.6	+ 6.65	+ 9.45	8466	8198
13.....	17 19	30.9	38.4	+ 2.15	+ 3.52	8996	8952
14.....	7 58	44.8	41.1	+ 0.25	+ 1.20	8680	8791
20.....	17 22	12.4	30.8	+ 9.90	+10.72	9410	9400
21.....	7 28	13.1	54.2	+ 8.25	+11.14	8014	7978
27.....	20 48	28.5	36.9	+ 9.80	+10.86	9033	9025
June 28*.....	0 42*	28 12.85*	11 27.3*	+ 4.35*	+ 6.63*	6.19413*	6.19629*

*Observations at the Italian station of 1899 and 1900; the results

Tabular summary of observations of magnetic horizontal intensity at Teplitz Bay

T'	Effect 90° torsion v	log $m(H+X)$	log $\sqrt{H(H+X)}$	H	log m_t	log m_{20}	Observer
s	$'$			γ			
10.2304	25.72	1.43061	8.80554	6646	2.64209	2.63926	W. J. P.
1291	25.40	3905	1500	6786	4067	3911	Do.
1276	22.84	3941	1496	6786	4111	3831	Do.
1148	23.77	4033	1586	6799	4106	3788	Do.
10.1070	28.44	1.44049	8.81297	6756	2.64423	2.63925	Do.
1164	25.03	4001	1331	6761	4341	3878	Do.
1424	26.29	3762	1245	6748	4190	3774	Do.
1382	22.42	3844	1246	6748	4270	3950	Do.
10.1467	22.62	1.43756	8.81269	6752	2.64161	2.63800	Do.
1562	23.33	3677	1134	6731	4216	3857	Do.
1420	24.13	3804	1387	6769	4082	3768	Do.
1637	27.54	3582	0989	6710	4276	3852	Do.
1112	25.94	4034	1323	6760	4383	3883	Do.
1651	25.34	3586	1132	6731	4131	3686	Do.
10.1242	17.46	1.43992	8.81322	6760	2.64343	2.63925	Do.
1544	16.73	3755	1237	6747	4193	3768	Do.
1116	19.63	4071	1328	6760	4410	3859	Do
1176	16.42	4056	1379	6768	4344	3886	Do.
1436	12.35	3897	1309	6758	4262	3971	Do.
1333	12.62	3967	1368	6767	4272	3947	Do.
1414	11.26	3912	1361	6765	4217	3884	Do.
1417	12.26	3881	1254	6749	4298	3913	Do.
10.1391	13.29	1.43896	8.81261	6750	2.64304	2.63863	Do.
1258	16.19	3966	1237	6747	4402	3918	Do.
1830	13.39	3548	0993	6710	4234	3851	Do.
1834	13.48	3544	1085	6724	4138	3850	R. R. T.
10.1423	13.93	1.43881	8.81223	6745	2.64333	2.64014	Do.
0776	22.88	4351	1502	6787	4514	3958	Do.
1322	15.40	3960	1289	6755	4345	3904	Do.
1245	16.96	4000	1306	6757	4363	3878	Do.
1224	16.31	4034	1361	6765	4339	4011	W. J. P.
10.0851	14.78	1.44388	8.81736	6822	2.64307	2.63997	Do.
1590	21.34	3678	1082	6724	4278	3927	Do.
0809	15.76	4391	1680	6813	4364	3902	Do.
0956	17.63	4251	1412	6773	4504	3938	Do.
1002	15.64	4243	1537	6792	4370	3899	Do.
0404	18.78	4719	1896	6846	4468	3942	Do.
0672	15.30	4521	1832	6836	4336	3908	Do.
0974	18.94	4224	1470	6782	4420	3934	Do.
10.0530	16.66	1.44635	8.81910	6848	2.64370	2.63949	Do.
1374	18.34	3904	1192	6740	4385	3949	Do.
0831	16.69	4379	1655	6810	4385	4071	Do.
1126	17.49	4118	1509	6788	4274	3932	Do.
0946	17.22	4279	1577	6798	4362	3995	Do.
1518	17.36	3789	0966	6707	4510	4146	Do.
0506	19.27	4645	1902	6847	4390	4062	Do.
1469	18.13	3814	1264	6751	4222	3907	Do.
0855	20.33	4348	1703	6817	4301	4029	Do.
1413	20.97	3857	1133	6731	4400	4076	Do.
10.1318	17.70	1.43976	8.81322	6760	2.64327	2.64133	Do.
2220	18.04	3216	0774	6678	4133	3959	Do.
0900	17.90	4328	1651	6809	4334	4102	Do.
1156	18.76	4095	1416	6774	4349	4092	Do.
0499	17.14	4683	2044	6869	4284	4153	Do.
1871	17.41	3521	0758	6676	4456	4303	Do.
1358	16.94	3945	1487	6784	4120	3987	Do.
10.1540*	17.57*	1.43793*	8.81657*	6810*	2.63794*	2.63591*	Do.

are for two complete sets each of deflections and oscillations.

The following monthly mean values for the logarithm of the magnetic moment of magnet No. 4 at 20° Centigrade (m_{20}) and for magnetic horizontal intensity (H) result from these observations:

Epoch	Number determinations	Resulting mean values	
		log m_{20}	H
			γ
1903.81	4	2.63864	6754
1903.88	4	3882	53
1903.95	6	3808	42
1904.04	8	3894	59
1904.12	4	3870	33
1904.21	5	3953	62
1904.29	8	3931	98
1904.37	10	4012	84
1904.46	7	4104	64

The above mean values of H, each being made up of determinations made at different times on the days of observation, may be taken practically as applying to mean of day. As will be noted, the difference between the extreme values is but sixty-five gammas, which, considering the frequent and rapid fluctuations of this element in high latitudes, is quite satisfactory. From the fifty-six determinations as grouped together in the above tabulation the resulting horizontal intensity at Teplitz Bay is

6768 γ for epoch 1904.16.

Secular Change in Magnetic Horizontal Intensity

Observations were made for horizontal intensity, as noted in the tabulation of results, at the magnetic station of the Italian Expedition of 1899 and 1900. Unfortunately opportunity was afforded only upon this one occasion for observation there. The value obtained seems somewhat unsatisfactory in view of the unusually low value of the magnetic moment of magnet No. 4 resulting. A close inspection of the observational data does not, however, disclose any irregularities of greater amount than the similar work at the hut indicates should be expected in this region. It is furthermore confirmed in that the result given is derived from two sets of deflection as well as oscillation observations.

For the purpose of reduction to mean of day a mean curve for diurnal variation in magnetic horizontal intensity was deduced from the International Observations of 1882 to 1883 at the stations Ssgastyr, Siberia; Cape Thordsen, Spitzbergen; Jan Mayen Island; Karmakul Bay, Novaia Zemlia, and Bossekop, Norway. Applying diurnal variation corrections so obtained, the determination at the Italian station on June 28, 1904, becomes 6810 γ + 50 γ = 6860 γ. The nearest corresponding observation at the Ziegler Expedition station in point of time (being but four hours before) is that of the preceding date; reduced for diurnal variation, the resulting value is 6784 γ + 8 γ = 6792 γ. From these two determinations it appears that the horizontal intensity at the Ziegler Expedition station is about 68 γ smaller than at the Italian station.

Inasmuch as Commander Cagni's observations were, with but one exception, made during afternoon hours, his values have also been reduced approximately to mean of day by the same diurnal variation curve (the corrections given are mean values over periods of observation). These results are as follows, the observed quantities being taken from Professor Palazzo's discussion :*

Date	No. of determinations	Local mean time	Mean observed value	Correction diurnal variation	Reduced mean value	Resulting mean H
1899		*h m h m*	γ	γ	γ	γ
August 29.....	2	14 31 - 17 30	6842	— 41	6801	6805
August 30.....	4	14 46 - 18 02	6848	— 41	6807	
1900						
July 12.....	1	17 07 - 17 31	6895	— 42	6853	
July 13..... ...	4	15 41 - 18 35	6892	— 41	6851	
July 14..	8	9 08 - 12 30	6835	— 6	6829	
July 14.....	1	15 37 - 16 01	6876	— 43	6833	6823
July 24..... ...	8	15 10 - 18 35	6831	— 39	6792	
July 25...	8	15 23 - 18 30	6881	— 39	6842	
August 3.....	8	14 40 - 18 09	6849	— 40	6809	

The resulting mean values of 6805γ and 6823γ correspond to mean of day for the epochs 1899.66 and 1900.55 respectively. From these the magnetic horizontal intensity at the Italian station for the epoch 1900.10 is 6814γ. Referred to the Ziegler Expedition station, this becomes $6814\gamma - 68\gamma = 6746\gamma$. At the latter location the value derived was 6768γ for the epoch 1904.16. Hence the horizontal intensity of the earth's magnetic field has, in the region of Teplitz Bay, in a period of four years *increased* 22γ (0.00022 C. G. S.). Hence, assuming a linear change during the elapsed interval, the rate of change in magnetic horizontal intensity due to secular variation is

$$+6\gamma \text{ (0.00006 C. G. S.) per year.}$$

This rate of increase confirms that adopted by Professor Palazzo in his discussion above referred to, namely, $+9\gamma$. At the stations Mossel Bay ($\varphi = 79^\circ\ 53'$ N ; $\lambda = 16^\circ\ 04'$ E) and Cape Thordsen ($\varphi = 78^\circ\ 28'$ N ; $\lambda = 15^\circ\ 42'$ E) for the periods 1873.5 to 1899.7 and 1883.2 to 1899.7 Dr. Solander† has deduced the annual rates -10γ and -3γ respectively.

*Osservazioni scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi, 1899-1900. Milan, 1903. Pp. 475-500. (Relazione sulle osservazioni magnetiche fatta dal Professore Luigi Palazzo.)

†See reference, page 305.

Summary Showing Values of the Magnetic Elements and their Secular Variations at Teplitz Bay

The following summarizes the mean results obtained by the expedition at the Teplitz Bay station. In the case of the declination the value applies to the mean of both day and year; this may be said to be practically the case likewise for the inclination and intensity.

A—Declination

Epoch	Easterly declination	Annual rate of secular change 1900–1904
	° ′	′
1904.00	22 38.5	+ 7½

B—Inclination

Epoch	Northerly inclination	Annual rate of secular change 1900–1904
	° ′	′
1904.13	83 12.4	— 2

C—Intensity

Epoch	Horizontal component *H*	Vertical component *Z*	Total intensity *F*	Annual rate of secular change 1900–1904		
				H	*Z*	*F*
	γ	γ	γ	γ	γ	γ
1904.16	6768	56806	57208	+ 6	—238	—235

° ′

Latitude of the station is 81 47.5 N.
Longitude of the station is 58 09 E.

OBSERVATIONS AT ALGER ISLAND

Site and Observatory

The stay at Alger Island (Camp Ziegler) being of uncertain duration, dependent upon the arrival of the relief expedition, the observing quarters were of less permanent character than those at Teplitz Bay. The site of the magnetic station is, as shown in figure 21, some 289.5 meters due north of the astronomic pier. To test for local disturbance observations were made at four points to the magnetic north, east, west, and south, respectively, and each distant about 91 meters from the site proposed. These gave indications of local magnetic attraction, in the maximum, about 30′. Apparently, therefore, the local conditions are more uniform than is the case at the Teplitz Bay site. The construction and dimensions of the observatory are shown in detail by the plan and sections of figure 22. The construction proved very serviceable despite its temporary character. The central pier is of coniferous drift-wood about 20 centimeters in diameter, 1.75 meter long, and is sunk some 0.4 meter in frozen gravel, thus leaving a clear height of about 1.3 meter. Towards the close of the work a second and similar pier was erected, as shown in the figure, the intention being to mount the dip circle on the same. No use was, however, made of it, the central pier serving for all of the observations. Great care was exercised that no magnetic material was used in building the observatory. The pier will undoubtedly remain in good condition for a long time, so that the station may be reoccupied if future opportunity offers.

The geographical position of this station is latitude 81° 21′ 30″ N and longitude $3^h\ 44^m\ 22^s$ (56° 05.′5) E.

DECLINATION

Methods

The methods of observation and record were substantially the same as for the Teplitz Bay series. The regular declination work was begun June 26, 1905, and continued, so far as possible, in accordance with the program of observation outlined on page 17, until July 1, 1905.

The azimuth mark used was the south astronomic meridian mark, distant about 3,910 meters. From sun observations with the Repsold circle at the astronomic station on July 16, 19, 20, 26, and 28, 1905, on which days ten determinations were made (see astronomic notes), the azimuth of this mark as referred to the magnetic station pier is 359° 59.′27.

So far as this short series of observations goes there is no very decided evidence of pier twist with changes in temperature, as was the case for the Teplitz Bay series.

The observers are indicated by their initials as per list on page 17.

As for the later observations at Teplitz Bay a suspension of four fibers was used (see page 19).

The following values for axis are used in the final reductions (see page 18):

Week ending at 8 A. M. Sunday	Number of determinations	Mean axis value *d*
July 2, 1905	9	53.54
July 9, 1905	7	53.62
July 16, 1905	8	53.10
July 23, 1905	8	53.13
July 30, 1905	8	53.50

Records

The original notes and results have been tabulated in the same manner as the Teplitz Bay series (see pages 19 and 20). The readings of azimuth mark will be found on page 322. The readings corresponding to the position of the telescope appear under the heading, *Circle reading of magnet.* Where the telescope with circle has been shifted during declination observations this fact has been denoted in the table of resulting declinations by an asterisk at the time of

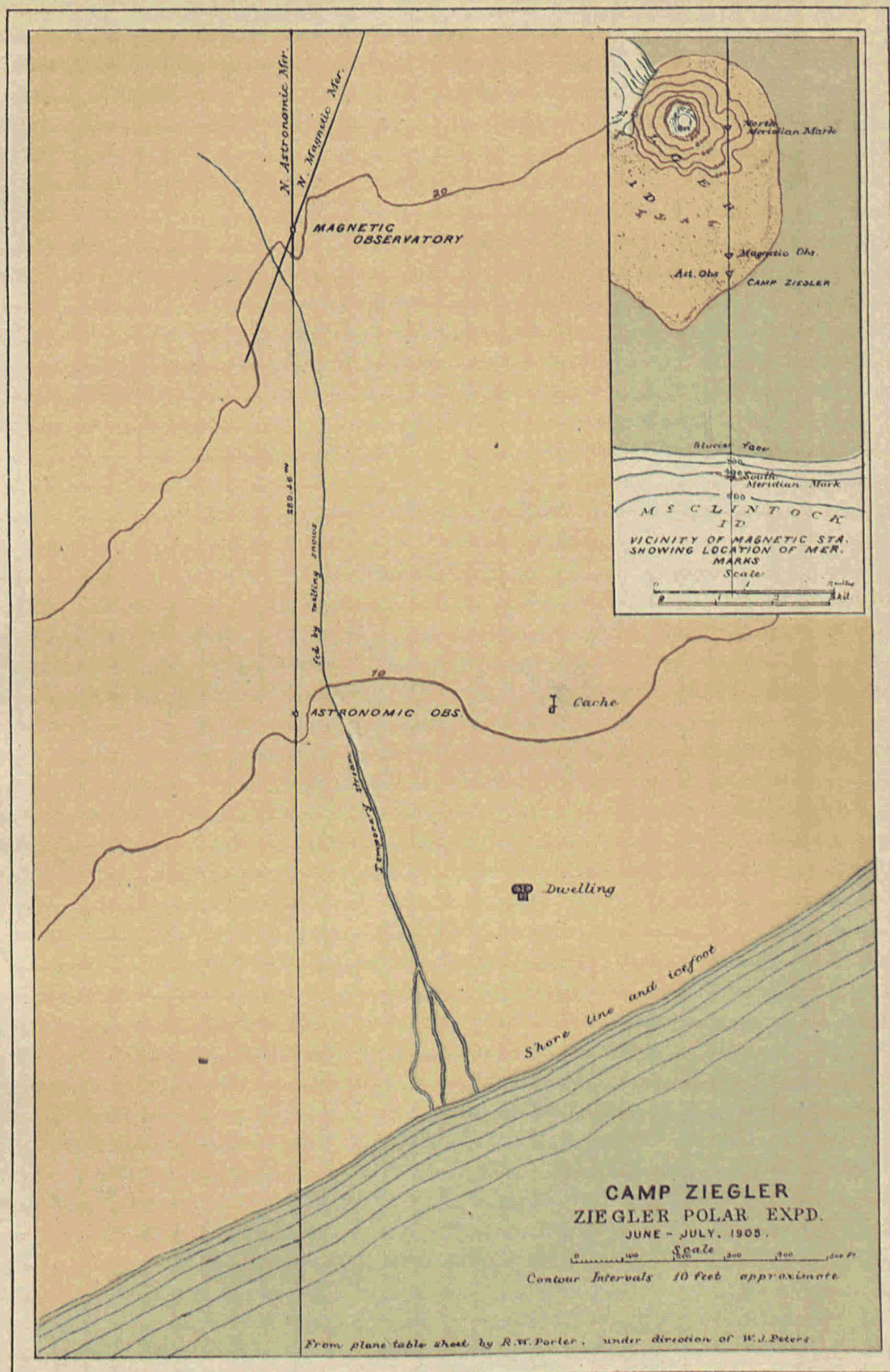
observation first following the change; in these cases the values are omitted in table on page 322 and tabulated separately on page 323. In the various tabulations the values enclosed in parentheses are interpolated, these being cases where conditions prevented observation of the corresponding quantities.

TABULATIONS OF RECORDS

Circles readings of azimuth mark, magnet, and true south at Alger Island

Pointing	Date	Azimuth mark	Circle reading of magnet	Circle reading true south
	1905	° ′	° ′	° ′
B A	June 26	59 38.8	80 18.1	59 39.5
B A	27	59 37.7	79 55.9	59 38.4
B.....	28	59 37.2	80 27.0	59 38.0
B A	29	59 36.4	79 10.0	59 37.2
B.....	30	59 35.5	.....	59 36.2
B.....	July 2	59 36.8	.....	59 37.6
.....	3	(59 37.0)	80 16.9	(59 37.7)
B.....	4	59 37.2	80 17.6	59 37.9
B.....	5	59 37.0	.....	59 37.7
B.....	6	59 37.9	.....	59 38.6
A	7	59 36.3	.....	59 37.1
B A	8	59 36.5	.....	59 37.2
A	10	59 35.8	80 32.9	59 36.6
B A	11	59 35.2	79 37.0	59 35.9
B A	12	59 35.6	.....	59 36.4
B A	14	59 37.0	79 11.9	59 37.7
B A	16	59 36.2	.....	59 36.9
B A	17	59 36.4	.....	59 37.1
B A	18	59 36.0	80 00.0	59 36.7
B A	19	59 36.3	.....	59 37.1
B A	20	59 37.3	79 50.6	59 38.0
.....	21	(59 38.1)	79 57.0	(59 38.8)
A	23	59 38.8	.....	59 39.6
B A	24	59 38.9	.....	59 39.6
B A	25	59 38.0	79 10.8	59 38.7
B.....	26	59 38.8	.....	59 39.6
B A	27	59 38.5	79 44.6	59 39.2
B.....	28	59 38.8	80 03.8	59 39.6
.....	30	(59 38.8)	.....	(59 39.6)

FIGURE 21


N. Astronomic Mer.
N. Magnetic Mer.
MAGNETIC OBSERVATORY
30
ASTRONOMIC OBS.
10
Cache
Dwelling
Shore line and ice foot
North Meridian Mark
Magnetic Obs.
Ast. Obs.
CAMP ZIEGLER
Glacier Face
South Meridian Mark
M c C L I N T O C K I.
VICINITY OF MAGNETIC STA. SHOWING LOCATION OF MER. MARKS
Scale
CAMP ZIEGLER
ZIEGLER POLAR EXPD.
JUNE - JULY, 1903.
Scale
Contour Intervals 10 feet approximate
From plane table sheet by R.W. Porter, under direction of W.J. Peters

Circle readings of magnet for days on which circle was shifted at Alger Island

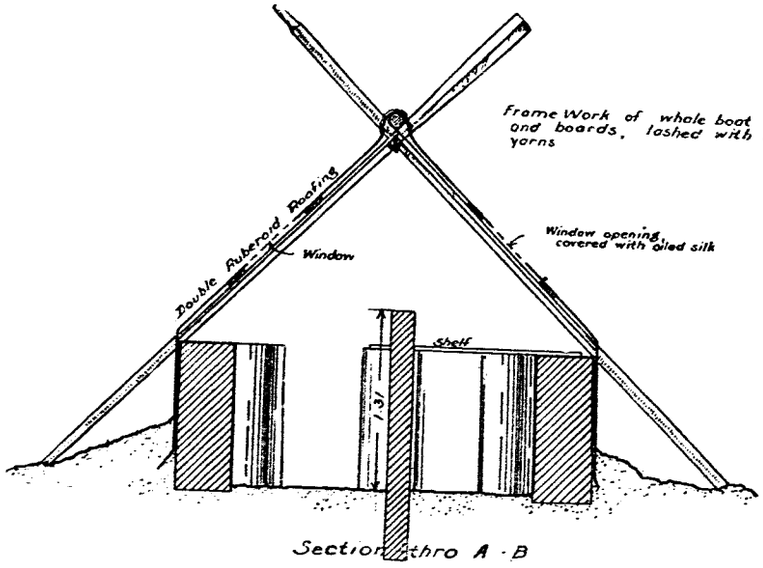
Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet	Date	Chr'r time	Circle reading of magnet
1905	h m	° ′	1905	h m	° ′	1905	h m	° ′
June 30	20 00	79 58.0	July 8	3 44	82 35.2	July 23	1 38	81 17.0
	21 44	78 33.0		3 54	81 08.2		1 40	82 38.0
	21 52	79 31.8		4 04	81 03.0		1 47	83 50.5
	22 20	80 56.7		4 30	81 58.0		1 50	82 14.0
	22 22	79 39.9		4 38	82 52.0		1 52	81 35.0
				4 40	81 45.8		1 54	80 04.0
July 2	0 00	80 12.1		5 00	80 52.8		2 06	83 01.8
	3 08	80 50.8		5 08	81 44.9		2 08	82 08.5
	4 10	80 00.5		5 28	80 39.0		2 22	80 01.9
	6 54	80 48.0		6 08	79 53.0		2 24	80 51.7
5	0 01	79 43.9		6 40	80 51.0		2 54	81 27.0
	4 52	80 37.0		6 52	81 47.2		3 58	81 58.8
	5 30	81 32.0		7 10	80 49.8		4 04	81 23.0
	5 40	82 27.8		7 46	79 57.9		6 00	82 39.5
	5 56	83 17.0		7 58	81 05.2		6 16	81 33.8
	6 16	82 26.3	12	0 00	80 12.2		7 02	80 46.8
	6 38	81 09.9		3 14	81 11.9	24	8 00	80 52.5
	7 08	80 12.2		9 26	80 15.8		9 00	79 32.0
	14 12	79 22.0		16 34	79 27.2		9 02	79 54.1
	20 42	80 28.3		17 58	80 30.7		9 04	80 48.5
	20 54	79 42.7		20 20	79 31.3		9 16	79 40.2
	21 04	79 21.8	16	0 03	79 45.8		9 20	80 32.0
	23 42	79 28.9		1 58	80 25.0		9 26	80 16.5
	23 52	80 01.0		3 56	81 03.1		9 28	79 58.8
6	16 00	79 17.3		5 54	80 04.2		9 32	81 08.0
	17 02	79 45.0	17	8 00	80 27.0		9 46	80 25.8
	17 28	79 22.9		11 42	79 43.0		10 02	81 14.2
	17 30	78 36.5	19	0 00	79 36.8		10 18	80 45.0
	17 40	77 36.8		0 44	80 30.7		10 22	80 06.0
	18 08	78 34.9		0 56	81 37.2		10 26	80 48.8
	19 10	79 38.6		1 00	80 21.7		10 40	81 19.5
	19 54	78 25.3		11 46	79 21.0		10 48	81 43.0
	20 00	79 19.8		23 44	80 12.8		10 52	81 53.5
7	20 00	79 56.5	23	0 00	80 13.3		11 18	82 34.2
	21 42	79 58.2		0 46	81 41.9		11 42	82 21.8
	21 44	78 14.8		0 50	80 09.0		11 44	81 14.5
	22 24	79 08.5		1 10	82 16.8	26	0 00	81 30.2
	22 40	80 10.5		1 12	83 00.2		0 18	80 33.8
	23 28	79 24.1		1 16	81 50.5		3 26	81 35.2
8	0 00	80 33.5		1 18	80 51.5		4 26	80 46.1
	2 50	81 40.0		1 20	82 38.0	30	0 00	79 45.3
	3 10	80 50.2		1 22	81 26.0		2 46	80 24.7
	3 26	81 55.9		1 36	82 28.0		3 54	80 49.8

NOTES ACCOMPANYING DECLINATION OBSERVATIONS AT ALGER ISLAND

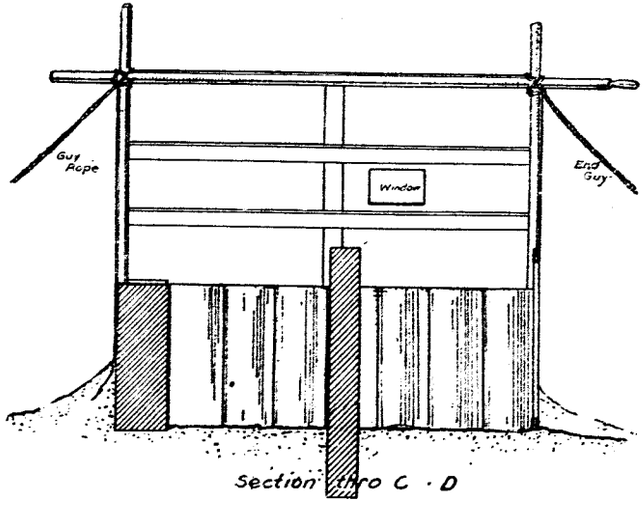
June, 1905.—26, cloudy.—27, light west wind, sky clear except in west; 27: 14: 24.5, scale increases to 76^d.1.—28: 01: 28, scale increases to 50^d.8.—29, calm and clear to cloudy at end; 29: 16: 52, scale decreases to 35^d.0, where it remains quiescent for several seconds.—30, calm; 30: 21: 12, scale decreases to 21^d.3, increases to 22^d.6, decreases to 21^d.5; 30: 22: 04, magnet checked with adjusting pin; 30: 22: 12, scale increases to 41^d.0 and returns to reading at 22: 12.

July, 1905.—2, west wind, clouds and fog; 2: 03: 06, reading 79^d.0 estimated; 2: 06: 48, one oscillation, then decreases.—3, southwest wind with low clouds and fog.—4, calm, cloudy; 4: 03: 15, wind rising.—5, west-southwest wind, drifting snow; 5: 01: 54, magnet oscillating vertically; 5: 02: 30, vertical oscillations of magnet have ceased; 5: 03: 00, heavy southwest wind; 5: 06: 56, wind continues with drifting snow and rain; 5: 07: 10.3, magnet checked with adjusting pin; 5: 14: 44, wind increasing in velocity, drifting snow and sand; 5: 19: 04, high south wind; 5: 20: 48.3, magnet checked with adjusting pin; 5: 23: 40, scale decreases to 0^d, returns to 14^d.0, then decreases.—6, calm, cloudy, light rain.—7, light wind, foggy and cloudy, sun shining at end; 7: 21: 46, magnet checked with adjusting pin; 7: 21: 48, scale increasing rapidly without oscillation; 7: 21: 54, scale has remained at this reading for about one half minute.—8, calm and cloudy.—10, sun shining, low fog; 10: 08: 52, scale increases irregularly to 49^d.0 and then decreases to reading at 8: 54; 10: 09: 16, scale increases rapidly and passes beyond line of sight; 10: 10: 56, 10: 58, and 11: 18, scale decreases irregularly.—11, clear, light northeast wind; 11: 12: 00, checked magnet with adjusting pin after this reading.—12, cloudy; 12: 04: 50, strong southeast wind, accompanied with rain; 12: 06: 30, rain has ceased, wind quieter; 12: 06: 56, scale decreasing very slowly; 12: 10: 30, calm and cloudy; 12: 16: 00, southwest wind, intermittent sunshine; 12: 19: 00, cloudy and calm; 12: 21: 30, drizzling rain and fog, wind rising; 12: 22: 58, scale quiescent for 10 seconds, then increases; 12: 23: 02, scale quiescent for 10 seconds, then increases to 45^d.0; 12: 23: 14, scale quiescent, then decreases.—14, calm to northwest wind to calm, low fog in beginning, rain at end.—16: 00: 00, clear with northwest wind; 16: 01: 00, cloudy and foggy; 16: 01: 50, thick fog and northwest wind; 16: 03: 30, north wind, clearing; 16: 05: 30, fresh northwest wind, clearing and sunshine.—17, calm and cloudy; 17: 10: 22 and 10: 24, scale increases almost imperceptibly.—18, sky overcast, calm; 18: 14: 56, scale quiescent for 10 seconds, then increases slowly to 15^d.0.—19, sky clear, northwest wind; 19: 02: 18, thick fog rises; 19: 05: 20, fog disappears, sky cloudy; 19: 07: 04, scale decreases to 55^d.0; 19: 10: 30, wind has shifted and is now from west; 19: 14: 42, light snow; 19: 18: 10, wind very light.—20, westerly wind, cumulus clouds.—21, high southwest wind, rain.—23, southwest squalls, foggy; 23: 00: 16, scale increasing rapidly; 23: 01: 14, scale read 75^d.0 at one time; 23: 01: 26, amplitude of oscillation has spontaneously decreased; 23: 01: 56, magnet checked with adjusting pin; 23: 02: 06, after shifting circle scale decreased from 60^d.0; 23: 02: 32, checked magnet after this reading with adjusting pin; 23: 06: 20, rainfall light and intermittent.—24, light northwest wind, cloudy; 24: 08: 40, checked magnet after this observation with adjusting pin; 24: 08: 56, scale rapidly increasing; 24: 10: 22, checked magnet after this observation with adjusting pin; 24: 10: 56, checked magnet after this observation with adjusting pin; 24: 11: 54, checked magnet after this observation with adjusting pin.—25, calm, cloudy, foggy, light rain.—26: 00: 00, cloudy, fresh northwest wind; 26: 06: 00, wind now from west; 26: 14: 00, intermittent sunshine, high cumulo-stratus and cirro-cumulus clouds; 26: 17: 40, calm, cloudy; 26: 20: 50, calm, low, thick fog; 26: 22: 18, fog lifts, sun appears; 26: 23: 10, clear sky, a thick fog is slowly coming in from the sea.—27, calm and cloudy.—28: 20: 00, calm, clear; 28: 20: 40, cloudy; 28: 21: 50, thick fog; 28: 22: 20, scale remains quiescent at the greater reading.—30, thick fog, calm.

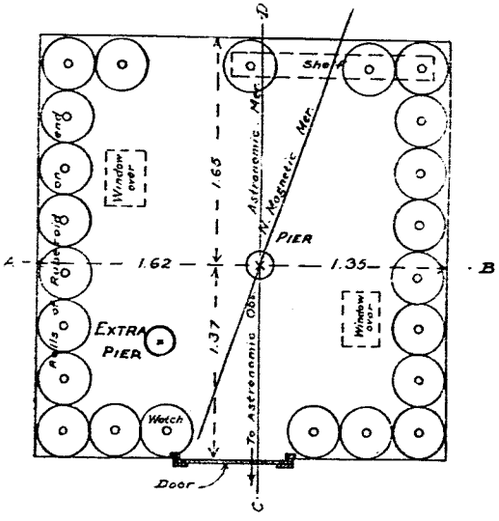
FIGURE 22



Section thro A · B

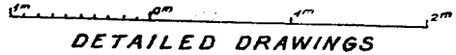


Section thro C · D



Plan.

Scale



DETAILED DRAWINGS OF MAGNETIC OBSERVATORY, CAMP ZIEGLER

Dimensions given in Meters.

MAGNETIC OBSERVATIONS

TABULATION OF MAGNETIC DECLINATIONS

OBSERVED AT

ALGER ISLAND STATION

FRANZ JOSEF ARCHIPELAGO

JUNE 26, 1905, TO JULY 30, 1905

NORTH LATITUDE: 81° 21.'5

LONGITUDE EAST OF GREENWICH: $3^h\ 44^m$

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Tabulation of magnetic declinations observed at Alger Island Station

Monday, June 26, 1905 — Magnet scale erect									Tuesday, June 27, 1905 — Magnet scale inverted								
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00					10 00	47.0	47.3	20 29	+9.2	12 00.5	59.2	58.8	20 09	+15.5	14 00	59.3	58.9	20 09	+12.0
02					02	47.8	48.3	30		02	58.8	58.1	10		02	59.6	59.0	08	
04					04	48.7	49.1	31		04	58.2	57.7	11		04	61.4	61.0	05	
06					06	49.0	49.4	32		06	58.1	57.8	11		06	61.0	60.8	06	
08					08	49.3	49.7	32		08	58.9	58.2	10		08	62.1	61.8	04	
10					10	49.6	50.0	33		10	59.1	58.8	09		10	62.8	62.3	03	
12					12	49.2	49.6	32		12	58.9	58.5	09		12	64.2	64.1	20 01	
14					14	49.2	49.6	32	+9.5	14	58.0	57.6	11	+15.6	14	67.5	66.9	19 56	+11.4
16					16	48.8	49.2	32		16	57.3	57.1	12		16	69.1	68.8	53	
18					18	48.2	48.6	31		18	58.7	58.7	09		18	68.1	68.1	54	
20					20	47.0	47.3	29		20	59.1	59.1	09		20	70.0a		52	
22					22	47.3	47.9	29		22	59.1	58.9	09		22	74.1a		45	
24					24	47.9	48.2	30		24	59.4	59.2	08		24	76.0a		42	
26					26	48.3	48.8	31		26	58.3	57.9	10		26	75.3	75.1	43	
28					28	47.4	47.8	29		28	57.9	57.7	11		28	75.1	74.8	44	
30	52.5	55.6	20 39	+7.7	30	48.0	48.6	30	+9.7	30	57.4	57.1	12	+15.6	30	74.9	74.7	44	+11.0
32	52.3	55.0	39		32	48.0	48.0	30		32	57.6	57.4	11		32	76.0	75.6	42	
34	52.7	55.5	40		34	48.2	48.4	30		34	56.8	56.2	13		34	69.8	69.2	19 52	
36	52.0	54.3	38		36	48.4	48.7	31		36	54.0	54.5	16		36	65.2	64.0	20 00	
38	53.6	55.6	40		38	48.3	48.6	31		38	55.8	55.0	15		38	63.2	62.8	03	
40	52.8	55.6	40		40	47.8	48.0	30		40	56.0	56.7	12		40	61.1	60.7	06	
42	53.2	55.1	40		42	47.8	48.0	30		42	57.2	56.9	12		42	59.9	59.2	08	
44	53.6	56.0	41	+8.0	44	47.7	48.1	30	+9.6	44	58.1	58.0	10	+15.4	44	62.9	62.1	03	+10.3
46	55.0	56.7	42		46	48.3	48.7	31		46	58.8	58.2	10		46	62.9	62.8	20 03	
48	57.6	59.8	47		48	48.0	48.1	30		48	58.0	58.8	09		48	67.0	67.0	19 56	
50	55.5	57.3	43		50	46.6	46.8	28		50	60.3	59.8	07		50	60.1	68.8	53	
52	55.2	57.2	43		52	46.0	46.3	27		52	59.0	58.5	09		52	66.4	66.2	19 57	
54	56.5	58.0	44		54	45.6	45.9	26		54	59.7	58.1	09		54	63.6	63.3	20 02	
56	54.6	56.3	42		56	44.0	44.3	24		56	59.1	58.1	10		56	60.7	60.1	07	
58	54.3	56.2	41		58	44.3	44.6	24		58	61.2	60.4	06	+15.2	58	59.1	58.0	00	
9 00	56.8	58.0	45	+8.3	11 00	44.0	44.6	24	+9.5	13 00	62.8	62.1	04		15 00	59.2	59.0	00	+10.1
02	51.8	54.3	38		02	43.9	44.5	24		02	63.0	62.8	02		02	59.3	59.0	00	
04	51.6	53.0	37		04	44.4	45.1	25		04	65.1	64.4	00		04	59.0	59.2	08	
06	53.3	55.2	40		06	45.3	46.0	26		06	63.5	62.8	02		06	59.9	59.2	08	
08	50.7	51.6	35		08	46.5	47.2	28		08	63.2	62.1	03		08	60.4	60.2	07	
10	49.6	50.5	33		10	47.8	48.5	30		10	64.2	63.2	01		10	60.1	59.9	07	
12	51.0	51.6	35		12	46.7	48.1	29		12	65.2	64.8	00		12	59.8	59.3	08	
14	50.0	51.6	34	+8.6	14	43.8	44.3	24	+9.3	14	63.7	63.3	02	+14.0	14	59.5	59.1	09	+10.0
16	46.0	46.4	27		16	41.6	42.6	21		16	60.6	59.2	08		16	58.0	58.6	00	
18	51.0	51.2	35		18	42.3	43.2	22		18	62.0	61.4	05		18	59.2	58.9	09	
20	53.8	54.8	40		20	43.6	44.7	24		20	65.1	65.0	00		20	62.4	61.7	04	
22	53.2	54.3	39		22	43.3	44.6	24		22	65.0	64.8	00		22	63.0	63.7	01	
24	50.1	50.5	34		24	43.3	44.2	23		24	64.1	64.0	01		24	64.8	64.3	20 00	
26	49.3	49.7	32		26	41.6	43.2	21		26	62.6	63.0	20 02		26	65.0	65.8	19 58	
28	49.3	50.0	32		28	41.3	42.6	20		28	66.7	65.0	19 57		28	66.0	66.7	57	
30	49.9	50.4	33	+9.0	30	41.8	43.2	21	+9.2	30	62.1	61.7	20 04	+13.7	30	68.0	67.0	55	+10.1
32	50.2	51.0	34		32	43.3	44.6	24		32	58.2	58.1	10		32	68.0	68.6	54	
34	49.4	50.0	33		34	43.3	44.6	24		34	54.0	54.0	16		34	70.0	70.1	51	
36	49.2	49.5	32		36	41.2	42.3	20		36	56.6	55.8	13		36	74.0	72.8	47	
38	49.4	49.5	32		38	39.2	40.3	17		38	58.0	57.0	11		38	73.2	72.0	47	
40	49.0	49.2	32		40	37.6	39.2	15		40	61.2	61.0	06		40	73.2	72.0	47	
42	50.0	50.3	33		42	38.0	39.4	15		42	60.3	59.0	07		42	74.0	73.6	46	
44	49.6	50.0	33	+9.0	44	35.6	36.6	11	+9.1	44	58.2	58.2	10		44	71.1	70.8	50	+10.2
46	49.4	50.0	33		46	31.8	33.0	05		46	56.0	55.0	14	+12.7	46	70.5	70.1	51	
48	49.7	50.2	33		48	34.5	35.3	09		48	56.4	56.2	13		48	69.0	67.0	19 54	
50	48.8	49.4	32		50	36.4	37.4	12		50	54.5	54.1	16		50	63.7	63.0	20 02	
52	48.0	48.3	31		52	36.6	37.6	13		52	57.1	56.5	12		52	61.4	60.8	06	
54	48.3	49.2	31		54	35.2	36.3	11		54	57.0	57.7	11		54	61.2	60.6	06	
56	48.7	49.3	32		56	34.7	36.0	10		56	55.2	55.0	15		56	61.0	61.0	05	
58	46.8	47.6	29		58	35.6	36.9	11	+9.1	58	59.2	59.1	09		58	61.8	61.2	05	
					12 00	35.3	36.5	11							16 00	61.0	59.0	07	+10.5

Correction to local mean time is — 21s.
Torsion head at 8h 30m read 246° and at 13h 50m read the same.
Observer—W. J. P.

Correction to local mean time is — 30s.
Torsion head at 12h 00m read 258° and at 16h 20m read the same.
Observer—J. V.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, June 28, 1905					Magnet scale erect				Thursday, June 29, 1905					Magnet scale inverted			
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	Lost				2 00.5	51.0	52.9	20 46	+5.5	16 00	43.6	41.3	19 50		18 00	19.5	19.0	20 29	+13.0
02	Lost				02	55.2	56.6	53		02	44.8	42.7	48	+15.0	02	19.5	18.0	30	
04	37.5	37.8	20 24	+6.0	04	55.3	56.3	53		04	47.5	45.7	44		04	20.0	18.8	29	
06	35.8	36.4	22		06	51.3	53.0	47		06	48.5	47.1	42		06	22.0	20.6	26	
08	39.8	40.2	28		08	48.2	50.2	42		08	49.3	47.7	40		08	22.3	21.0	25	
10	39.0	39.5	26		10	49.3	51.5	44		10	49.0	47.7	41		10	21.3	19.8	27	
12	38.3	39.4	26		12	58.0	60.0	58		12	50.7	48.7	39		12	21.3	20.1	27	
14	36.3	37.0	22	+6.0	14	52.8	53.4	48	+5.2	14	49.8	48.5	40	+15.2	14	19.7	18.7	29	+13.0
16	31.8	33.2	16		16	49.0	49.5	42		16	52.3	51.0	36		16	18.5	17.5	31	
18	31.2	32.0	15		18	49.5	50.5	44		18	54.3	53.3	33		18	21.3	20.3	26	
20	31.2	33.2	16		20	46.5	47.6	39		20	55.0	54.1	32		20	21.8	21.0	26	
22	30.8	33.0	15		22	46.0	46.2	37		22	55.3	54.3	31		22	24.3	23.0	22	
24	31.1	33.1	15		24	46.6	47.8	39		24	55.5	54.7	31		24	24.7	23.9	21	
26	32.0	33.8	17		26	Lost				26	56.9	56.0	29		26	26.8	26.3	18	
28	33.3	35.7	19		28	46.5	47.8	39		28	56.0	55.3	30		28	30.0	29.5	13	
30	34.3	36.3	20	+6.0	30	44.6	45.5	36	+5.1	30	56.3	55.8	29	+15.1	30	33.0	32.3	08	+13.0
32	35.4	36.0	21		32	44.3	45.0	35		32	57.8	57.3	27		32	34.3	33.7	06	
34	35.3	37.1	22		34	46.7	47.2	39		34	58.2	57.3	27		34	34.5	34.0	06	
36	34.0	35.4	20		36	49.4	50.0	43		36	57.5	56.6	28		36	34.1	33.6	06	
38	34.2	36.3	20		38	48.4	49.5	42		38	55.0	53.8	32		38	34.1	33.6	06	
40	37.0	38.4	24		40	48.4	50.0	42		40	50.0	48.6	40		40	34.0	33.1	07	
42	39.3	40.4	28		42	50.3	52.0	45		42	46.6	46.3	45		42	33.6	32.6	08	
44	38.0	40.2	26	+5.9	44	52.0	54.2	48	+5.0	44	44.6	44.3	48	+14.8	44	33.3	32.5	08	+13.0
46	37.8	40.4	26		46	55.1	56.8	20 53		46	41.8	41.4	52		46	31.3	30.6	11	
48	37.3	40.3	26		48	60.3	61.6	21 01		48	41.0	40.6	54		48	29.8	28.8	14	
50	38.5	40.5	27		50	62.9	64.1	05		50	40.5	40.3	19 54		50	28.0	27.2	16	
52	37.3	39.7	26		52	62.0	62.9	21 03		52	36.7*b*		20 00		52	26.5	25.3	19	
54	38.5	40.5	27		54	59.3	61.0	20 59		54	35.5	35.5	02		54	26.4	25.3	19	
56	40.9	42.3	30		56	57.5	59.8	57		56	33.0	32.3	07		56	27.6	26.7	17	
58	46.0	48.1	39		58	57.0	59.5	56		58	30.6	30.0	10		58	29.0	27.5	16	
1 00	46.1	48.4	39	+5.6	3 00	57.7	59.3	57	+5.0	17 00	31.1	30.6	09	+14.1	19 00	29.3	27.5	15	+12.6
02	53.0	55.9	50		02	57.8	59.3	57		02	33.0	31.9	07		02	27.6	26.3	18	
04	55.6	58.0	54		04	59.0	59.7	58		04	29.0	27.6	13		04	25.8	24.8	20	
06	58.0	59.7	57		06	59.3	60.6	59		06	25.1	23.6	20		06	24.0	23.0	23	
08	53.3	55.7	51		08	58.2	59.0	57		08	20.8	20.0	26		08	21.3	20.6	27	
10	51.5	54.3	48		10	59.0	59.2	58		10	20.6	19.6	26		10	19.6	19.0	30	
12	50.5	52.3	46		12	59.7	60.2	20 59		12	20.3	19.1	27		12	20.0	19.0	29	
14	50.7	52.0	46	+5.6	14	60.1	61.0	21 00	+5.0	14	19.5	18.3	28	+13.8	14	20.1	19.5	29	+12.1
16	48.3	49.6	42		16	61.3	62.3	02		16	16.3	15.7	33		16	20.2	19.6	20	
18	47.0	48.3	40		18	61.6	62.8	03		18	16.7	15.3	33		18	20.8	20.3	28	
20	45.8	47.4	38		20	60.5	61.7	01		20	15.7	14.7	34		20	20.3	19.8	29	
22	43.7	45.2	35		22	59.3	61.7	00		22	15.0	14.1	35		22	20.6	19.0	29	
24	42.5	43.3	32		24	59.5	62.1	01		24	16.9	15.7	33		24	19.5	18.8	30	
26	45.2	45.6	36		26	59.8	62.6	21 01		26	19.2	18.1	29		26	23.5	22.6	24	
28	50.0*a*		44		28	58.0	60.5	20 58		28	19.3	18.0	29		28	24.2	22.0	24	
30	55.7	58.0	54	+5.5	30	56.0	58.2	55	+5.1	30	17.6	17.0	31	+13.2	30	23.3	21.7	25	+11.8
32	56.7	58.0	55		32	55.0	56.5	52		32	18.0	16.6	31		32	22.0	20.7	27	
34	56.0	58.0	54		34	54.5	55.8	52		34	19.1	17.6	30		34	20.1	19.0	30	
36	48.3	49.7	42		36	55.6	57.0	53		36	20.1	18.7	28		36	20.1	19.1	30	
38	48.0	50.0	42		38	55.6	57.0	53		38	20.3	18.6	28		38	21.6	20.6	27	
40	49.0	49.3	42		40	57.0	58.3	55		40	21.7	20.3	26		40	20.9	20.3	28	
42	46.7	47.5	39		42	56.0	58.0	54		42	20.1	19.7	27		42	21.3	20.5	28	
44	52.0	53.7	48	+5.5	44	55.3	57.3	53	+5.2	44	21.0	19.6	27	+13.0	44	21.3	20.6	28	+11.5
46	54.3	56.3	52		46	56.5	59.0	56		46	20.5	19.8	27		46	21.2	20.6	28	
48	55.0	56.3	52		48	56.6	60.0	56		48	19.2	17.2	30		48	21.8	21.0	27	
50	55.8	57.2	54		50	54.8	58.0	54		50	23.3	22.7	23		50	22.0	21.3	27	
52	52.0	53.6	48		52	56.6	60.0	20 56		52	24.0	23.0	22		52	22.3	21.5	26	
54	48.5	50.3	42		54	58.3	62.3	21 00		54	20.9	19.6	27		54	21.6	20.6	28	
56	46.7	49.2	40		56	54.0	57.2	20 52		56	20.3	19.1	28		56	21.2	20.3	28	
58	47.4	49.8	41		58	53.0	56.7	51		58	18.7	17.5	30		58	22.0	20.8	27	+11.2
					4 00	56.6	59.8	56	+5.2						20 00	21.8	21.0	27	

Correction to local mean time is — 31s.
No torsion observations made.
Observer—W. J. P.

Correction to local mean time is — 20.6s. 90° torsion = 22.'67.
Torsion head at 16h 00m read 260° and at 20h 20m read 242°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Friday, June 30, 1905					Magnet scale erect				Sunday, July 2, 1905					Magnet scale erect				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	45.3	48.0	20 11	+9.5	22 00	10.8	22.8	18 58	+6.5	0 00*	41.3	42.1	20 16	+2.5	2 00	59.0	60.1	20 44	+1.2
02	42.0	44.7	06		02	11.0	23.3	18 58		02	36.2	37.5	20 08		02	61.7	62.3	48	
04	38.7	40.8	20 00		04	22.3	22.8	10 07		04	28.5	29.6	19 56		04	62.3	63.3	49	
06	37.7	39.5	19 58		06	15.8	16.5	18 57		06	30.5	31.0	19 59		06	62.3	63.4	49	
08	36.8	38.8	57		08	21.8*a*		19 06		08	32.3	33.6	20 02		08	61.6	62.7	48	
10	37.0	38.7	57		10	33.0*a*		23		10	34.8	35.5	06		10	63.0	64.2	50	
12	36.9	38.5	57		12	32.8	35.3	25		12	33.6	34.3	04		12	63.3	64.4	51	
14	37.0	38.6	57	+9.5	14	39.3	41.2	35	+6.5	14	34.0	34.4	04	+1.5	14	63.0	64.0	50	+1.2
16	34.8	36.4	54		16	50.0	55.6	19 54		16	35.0	35.6	06		16	62.3	63.3	49	
18	31.4	33.3	48		18	54.3	60.2	20 01		18	41.3	41.5	16		18	62.6	63.6	50	
20	28.2	29.6	43		20*5	26.2	35.5	45		20	42.1	42.5	17		20	62.5	63.1	49	
22	25.4	26.3	38		22*	40.4	61.6	20 00		22	40.9	42.5	16		22	61.2	62.0	47	
24	24.3	25.3	37		24	24.6	38.8	19 30		24	43.3	44.5	19		24	61.0	62.0	47	
26	25.3	26.2	38		26	20.7	36.3	24		26	44.7	46.0	22		26	60.3	61.3	46	
28	24.6	25.3	37		28	27.6	30.6	25		28	44.6	46.6	22		28	60.0	60.2	45	
30	24.3	24.8	36	+9.2	30	33.8	36.8	35	+5.6	30	45.3	45.7	22	+1.5	30	59.0	59.5	43	+1.3
32	25.3	25.6	38		32	42.2	46.8	50		32	48.0	49.3	27		32	58.4	59.3	43	
34	26.0	26.6	39		34	40.3	43.8	46		34	52.3	54.7	34		34	59.0	59.2	43	
36	23.3	24.1	35		36	45.2	49.5	54		36	59.9	63.8	20 48		36	59.8	60.6	45	
38	21.0	22.8	33		38	25.5	29.5	23		38	69.5	71.0	21 01		38	59.8	60.6	45	
40	19.6	20.3	29		40	14.0	19.0	06		40	66.0*b*		20 54		40	61.3	62.1	47	
42	22.2	22.9	33		42	19.5	24.6	14		42	58.0	58.5	42		42	65.0	65.9	53	
44	23.8	24.9	36	+8.8	44	19.0	23.4	13		44	54.5	54.6	36	+1.4	44	64.6	65.0	52	+1.3
46	27.5	27.7	41		46	18.8	22.6	12	+5.2	46	52.0	53.0	33		46	62.0	62.9	48	
48	27.2	27.6	41		48	22.8	26.2	18		48	62.5	63.0	49		48	61.5	62.1	48	
50	30.6	30.9	46		50	18.2	20.9	10		50	66.1	67.6	55		50	62.0	62.3	48	
52	32.6	32.6	49		52	24.0	27.4	20		52	54.3	55.6	37		52	63.6	64.2	51	
54	30.3	30.8	46		54	20.8	33.0	20		54	54.2	55.8	37		54	65.8	66.3	54	
56	28.6	28.8	43		56	34.5	37.3	36		56	57.8	58.3	42		56	66.9	67.3	56	
58	29.0	29.0	43		58	32.8	34.8	33		58	61.1	61.5	47		58	68.9	69.0	20 59	
21 00	32.7	32.7	49	+8.2	23 00	32.5	35.0	33	+5.0	1 00	62.8	63.8	50	+1.3	3 00	71.0	71.2	21 02	+1.3
02	33.3	33.6	50		02	35.7	37.7	37		02	55.3	57.0	39		02	72.6	73.1	05	
04	30.8	31.3	46		04	36.5	38.4	38		04	49.8	51.0	30		04	75.8	76.6	10	
06	20.1	20.4	44		06	38.8	40.0	42		06	49.4	50.5	29		06	78.0	79.0	14	
08	26.5	26.9	40		08	39.0	40.4	42		08	47.7	48.4	26		08*	57.3	60.0	21	
10	25.3*b*		38		10	42.6	44.0	48		10	46.9	47.5	25		10	Lost			
12	22.3*a*		33		12	30.2	42.2	44		12	45.7	46.6	23		12	60.0	63.0	26	
14	23.3*a*		34	+7.5	14	36.3	38.0	38	+4.0	14	40.9	51.0	30	+1.3	14	60.2	63.2	26	+1.6
16	26.2	26.6	39		16	36.0	37.8	38		16	48.1	48.4	26		16	61.6	64.0	28	
18	30.6	32.3	47		18	30.0	42.0	43		18	48.3	49.2	27		18	62.3	65.3	29	
20	26.3	20.8	42		20	35.6	37.2	37		20	48.8	49.3	27		20	64.0	67.0	32	
22	18.3	18.8	27		22	35.7	37.3	37		22	45.0	45.6	22		22	64.0	66.8	32	
24	31.3	35.9	50		24	34.6	35.9	35		24	46.2	46.6	23		24	62.3	65.5	30	
26	13.0	21.5	25		26	28.6	31.2	27		26	46.6	47.0	24		26	61.1	62.8	26	
28	16.8	24.8	30		28	26.0	28.3	22		28	45.6	46.6	23		28	58.0	59.3	21	
30	16.3	22.5	28	+7.1	30	28.2	31.3	26	+4.6	30	47.0	48.0	25	+1.3	30	56.2	57.8	19	+2.0
32	17.3	23.7	30		32	30.8	31.6	20		32	49.1	50.2	28		32	55.6	57.3	18	
34	24.3	32.0	42		34	25.5	26.8	21		34	53.2	54.0	35		34	55.9	56.8	18	
36	28.5	33.3	46		36	19.5	20.6	11		36	51.2	52.3	32		36	54.3	55.3	15	
38	30.2	37.8	51		38	26.7	30.7	25		38	55.7	56.7	39		38	53.0	54.3	13	
40	23.0	30.5	40		40	35.2	36.2	36		40	52.3	53.3	33		40	52.6	53.8	13	
42	8.0	16.0	10 17		42	36.8	38.2	30		42	56.9	57.0	40		42	52.3	53.3	12	
44*	40.2	54.8	18 47	+6.8	44	34.8	35.3	35	+4.5	44	60.3	60.3	45	+1.3	44	48.5	49.0	21 06	+2.0
46	38.2	48.6	41		46	27.2	29.3	24		46	61.6	61.6	47		46	43.0	43.6	20 57	
48	45.0	50.6	18 55		48	27.2	28.7	24		48	61.3	61.5	47		48	42.0	43.0	20 56	
50	52.5	68.3	19 08		50	28.0	29.3	25		50	61.7	62.3	48		50	47.0	47.6	21 04	
52*	28.4	45.6	30		52	32.7	33.5	32		52	62.0	62.3	48		52	48.6	49.6	21 06	
54	43.5	57.3	51		54	36.2	36.8	37		54	61.5	61.8	47		54	42.8	44.3	20 58	
56	29.8	41.6	28		56	41.2	42.3	45		56	59.3	59.6	44		56	38.5	39.3	20 50	
58	24.3	37.0	20		58	42.8	43.3	47		58	58.9	59.8	44		58	44.5	46.0	21 00	
					24 00	44.5	45.2	50	+4.3										

Correction to local mean time is —24s. 90° torsion = 18.′59.
Torsion head at 20h 00m read 249° and at 24h 00m read 252°.
Observer—W. J. P.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Sunday, July 2, 1905 — **Magnet scale inverted**

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	56.6	52.5	21 12	+2.0
02	60.3	55.8	21 06	
04	68.3	64.0	20 53	
06	72.6	68.6	46	
08	77.5	74.6	38	
10*	46.0	45.2	35	
12	39.3	33.7	50	
14	33.5	29.2	58	+2.0
16	35.4	31.6	54	
18	42.2	36.6	45	
20	40.5	36.3	47	
22	43.0	39.0	42	
24	36.6	33.3	20 52	
26	32.0	28.1	21 00	
28	32.7	29.0	20 58	
30	32.8	29.7	58	+2.1
32	35.9	32.5	53	
34	33.5	30.3	57	
36	32.3	29.5	58	
38	32.2	29.5	20 58	
40	31.4	29.0	21 00	
42	30.3	28.5	01	
44	30.4	29.0	21 00	+2.2
46	36.1	34.2	20 52	
48	33.0	31.2	56	
50	34.8	34.0	53	
52	38.5	37.2	48	
54	35.5	34.2	52	
56	35.0	33.8	53	
58	37.2	36.1	50	
5 00	40.9	40.0	44	+2.3
02	38.6	37.3	47	
04	40.2	39.5	44	
06	45.0	44.2	37	
08	42.2	41.0	42	
10	42.8	41.6	41	
12	41.8	41.5	42	
14	35.6	35.0	51	+2.5
16	39.1	37.4	47	
18	40.4	38.6	45	
20	38.8	38.1	47	
22	40.9	39.4	44	
24	40.5	39.6	44	
26.6	43.0	41.6	40	
28	40.6	39.0	44	
30	39.0	37.3	47	+2.3
32	30.0	38.5	46	
34	36.0	35.1	51	
36	35.5	34.6	52	
38	33.8	33.0	54	
40	31.3	31.1	58	
42	31.0	30.1	59	
44	32.2	31.2	57	+2.3
46	32.1	31.6	57	
48	37.3	36.6	49	
50	34.4	33.0	54	
52	37.3	36.3	49	
54	30.0	38.2	46	
56	38.7	38.0	47	
58	37.3	36.9	49	
6 00	37.7	37.3	20 48	+2.4
02	41.5	41.1	42	
04	48.6	47.6	31	
06	50.2	49.6	29	
08	40.0*a*		20 44	
10	23.2	22.8	21 11	
12	32.0	31.4	20 57	
14	25.0	24.0	21 08	
16	31.8	30.0	20 58	+2.3
18	30.0	28.9	21 01	
20	29.2	28.9	21 01	
22	30.8	30.6	20 58	
24	33.3	32.5	55	
26	37.9	37.2	48	
28	38.7	38.6	46	
30	40.1	39.6	44	+2.4
32	37.2	37.2	48	
34	43.0*a*		39	
36	46.5	46.0	34	
38	48.2	47.6	32	
40	47.5	47.2	33	
42	44.9	44.0	37	
44	41.0	40.6	43	+2.2
46	43.8	43.0	39	
48	31.6	31.0	20 58	
50.7	29.9	29.5	21 00	
52	29.0*b*		01	
54*	27.2	21.2	56	
56	49.0	47.3	19	
58	63.1	57.4	00	
7 00	57.0	53.8	21 08	+2.3
02	78.0	74.6	20 35	
04	75.3	71.0	40	
06	77.8	74.0	35	
08	66.2	65.0	20 52	
10	52.0	49.6	21 15	
12	77.8	69.3	20 39	
14	67.0	63.2	52	+2.6
16	70.6	68.1	46	
18	70.6	67.6	46	
20	65.6	63.3	53	
22	70.2	68.1	46	
24	66.0	64.3	52	
26	68.8	66.3	48	
28	66.6	65.0	51	
30	65.9	64.0	52	+3.1
32	65.1	63.2	54	
34	65.1	64.0	53	
36	64.0	63.0	55	
38	65.2	64.4	53	
40	64.0	63.3	55	
42	67.8	66.4	49	
44	68.5	67.8	47	+3.6
46	67.0	66.6	50	
48	60.5	68.3	46	
50	68.6	67.4	48	
52	67.3	66.6	49	
54	68.7	68.0	47	
56	68.2	67.2	48	
58	68.7	68.2	47	
8 00	69.7	69.1	46	+4.0

Correction to local mean time is — 29.2s. 90° torsion = 18.′23.
Torsion head at 0h 00m read 252° and at 8h 10m read 249°.
Observer—W. J. P.

Monday, July 3, 1905 — **Magnet scale inverted**

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	Lost			
02	57.4	52.5	20 37	+1.6
04	56.2	55.5	36	
06	58.0	56.6	34	
08	61.5	60.9	28	
10	62.5	61.8	26	
12	63.6	62.5	25	
14	62.8	61.8	26	+2.0
16	61.6	60.3	28	
18	61.5	60.5	28	
20	62.5	61.6	26	
22	60.6	60.2	29	
24	62.6	61.8	26	
26	64.6	64.0	23	
28	65.9	64.5	21	
30	68.8	67.4	17	+2.2
32	71.2	70.3	13	
34	71.4	70.4	12	
36	69.4	68.5	16	
38	68.8	68.3	16	
40	65.6	65.0	21	
42	64.8	63.6	23	
44	61.8	61.0	28	
46	61.0	60.5	29	
48	60.6	60.2	29	+2.2
50	58.8	58.0	32	
52	57.4	56.4	35	
54	55.2	54.3	38	
56	59.9	58.0	32	
58	61.0	60.2	29	
9 00	63.0	62.8	25	+2.2
02	60.3	59.8	30	
04	58.5	58.5	32	
06	55.3	54.9	38	
08	54.0	53.3	40	
10	55.0	54.5	38	
12	55.5	55.3	37	
14	56.3	55.6	37	+2.3
16.5	54.9	54.8	38	
18	55.3	54.6	38	
20.5	56.8	55.0	37	
22	54.6	54.3	39	
24	56.5	56.0	36	
26	58.2	57.2	34	
28	57.6	57.3	34	
30	57.3	56.6	35	+2.5
32	59.2	58.5	32	
34	61.2	60.6	29	
36	62.3	61.3	28	
38	62.0	61.0	28	
40	63.2	62.5	26	
42	63.8	62.5	25	
44	63.2	62.4	26	+2.6
46	63.6	63.0	25	
48	64.4	63.8	24	
50	65.4	64.4	23	
52	67.3	66.3	20	
54	66.4	65.9	21	
56	65.2	64.5	23	
58	63.5	63.5	26	
10 00	62.8	62.5	20 27	+2.6
02	60.6	60.0	30	
04	59.9	59.3	32	
06	60.1	59.5	31	
08	59.5	59.3	32	
10	57.7	57.2	35	
12	56.8	54.3	38	
14	57.2	56.4	36	+2.6
16	57.0	56.6	36	
18	56.2	55.3	38	
20	55.0	54.8	39	
22	56.2	56.0	37	
24	59.3	59.3	32	
26	57.8	57.4	35	
28	56.3	56.1	37	
30	55.8	55.1	39	+2.8
32	55.8	55.4	38	
34	55.3	54.8	39	
36	54.9	54.6	40	
38	53.6	53.4	41	
40	55.0	54.6	39	
42	56.5	56.3	37	
44	59.6	57.0	34	+2.9
46	57.3	57.0	36	
48	57.5	57.3	36	
50	57.5	57.0	36	
52	56.5	56.2	37	
54	57.0	56.6	36	
56	58.0	57.5	35	
58	58.1	55.4	37	
11 00	59.3	59.0	33	+2.6
02	60.3	60.0	31	
04	61.2	61.0	30	
06	62.0	61.9	29	
08	62.6	62.3	28	
10	63.6	63.2	26	
12	65.3	65.3	23	
14	64.6	64.3	25	+2.6
16	63.0	62.8	27	
18	61.0	61.0	30	
20	59.3	59.0	33	
22	56.4	55.8	38	
24	55.6	55.6	39	
26	56.8	56.6	37	
28	56.0	55.8	38	
30	55.3	55.0	39	+2.6
32	55.9	55.7	38	
34	55.3	54.9	40	
36	53.0	52.2	44	
38	51.8	51.2	45	
40	57.2	57.0	37	
42	52.5	52.3	44	
44	52.0	51.8	44	+2.7
46	52.0	51.7	45	
48	52.5	52.3	44	
50	53.0	52.6	43	
52	52.0	51.7	45	
54	51.6	51.3	46	
56	52.5	52.0	44	
58	53.3	53.0	43	
12 00	53.5	53.0	43	+2.8

Correction to local mean time is — 33s. 90° torsion = 20.′27.
Torsion head at 8h 00m read 270° and at 12h 20m read 255°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Tuesday, July 4, 1905					Magnet scale erect					Wednesday, July 5, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	39.9	40.7	20 19	+ 8.2	14 00	34.7	36.2	20 11	+12.6	0 01*	40.6	37.5	20 29	+2.0	2 00	17.8	17.0	21 03	
02	39.8	40.0	18		02	35.3	37.2	12		02	41.0	38.2	28		02	16.2	15.4	05	
04	38.3	38.6	16		04	36.0	37.6	13		04	44.0	40.3	24		04	15.6	14.6	07	+2.0
06	37.1	37.5	14		06	37.3	39.1	16		06	45.3	42.6	21		06	14.1	13.4	09	
08	35.9	36.3	12		08	39.3	40.7	18		08	46.6	44.0	19		08	13.6	13.0	09	
10	36.2	36.6	12		10	40.0	41.2	19		10	50.0	48.0	13		10	14.2	13.9	08	
12	34.5	34.9	10		12	39.9	41.1	19		12	52.1	49.9	10		12	15.0	14.7	07	
14	33.6	33.8	08	+ 8.8	14	41.1	42.6	21	+12.8	14	51.8	49.2	11	+2.2	14	13.9	13.0	09	+2.0
16	35.6	36.0	12		16	40.7	41.9	20		16	49.0	47.0	15		16	12.9	12.7	10	
18	36.9	37.3	14		18	40.5	41.0	19		18	48.1	46.1	16		18	12.7	12.2	11	
20	36.6	36.7	13		20	39.2	40.2	18		20	48.1	46.1	16		20	13.7	13.2	09	
22	34.9	35.7	11		22	37.9	38.9	16		22	48.4	46.5	16		22	14.4	13.7	08	
24	31.8	32.4	06		24	36.9	37.7	14		24	48.6	46.0	16		24	16.5	15.0	05	
26	30.5	31.0	04		26	34.6	35.1	10		26	47.0	45.2	18		26	16.9	16.2	04	
28	31.0	31.8	05		28	33.0	33.6	08		28	47.0	45.6	18		28	17.6	17.0	03	+1.9
30	32.6	33.6	08	+ 9.2	30	34.1	34.8	10	+12.3	30	47.1	45.7	18	+2.5	30	19.2	18.7	21 00	
32	33.5	34.2	09		32.5	36.5	37.1	13		32	49.1	48.0	14		32	23.9	22.9	20 54	
34	31.0	31.6	05		34	37.3	38.0	15		34	51.6	50.0	10		34	25.9	25.3	50	
36	31.6	32.3	06		36	39.1	40.0	18		36	56.0	54.6	20 04		36	26.3	25.9	49	
38	34.6	35.3	10		38	39.0	40.0	18		38	59.2	58.0	19 58		38	26.5	26.0	49	
40	36.6	37.4	14		40	39.9	40.9	19		40	61.1	60.2	55		40	26.0	25.5	50	
42	36.3	37.0	13		42	40.2	41.2	20		42	61.1	60.1	55		42	25.1	24.6	51	
44	35.6	36.3	12	+ 9.2	44	40.5	41.7	20		44	60.0	59.0	57		44	23.0	22.7	54	+1.8
46	35.6	36.4	12		46	42.6	43.3	23		46	60.0	59.2	57	+2.2	46	22.0	21.5	56	
48	34.6	35.6	11		48	41.7	42.0	21	+11.4	48	59.1	58.5	19 58		48	23.3	22.9	54	
50	34.4	35.3	10		50	40.5	40.9	20		50	57.4	56.8	20 01		50	27.3	26.5	48	
52	33.8	34.5	09		52	42.3	42.8	22		52	54.5	54.0	05		52	32.5*a*		39	
54	34.7	35.5	11		54	41.6	42.3	21		54	51.0	50.8	10		54	35.1	34.8	36	
56	34.8	35.1	11		56	40.6	41.6	20		56	48.3	47.8	15		56	35.1	34.7	36	
58	34.3	35.0	10		58	40.3	40.9	19		58	47.8	47.0	16		58	33.4	32.9	38	
13 00	32.5	33.0	07	+ 9.0	15 00	40.3	40.9	19	+10.6	1 00	47.0	46.7	17		3 00	31.9	31.3	41	+1.8
02	30.6	31.5	04		02	40.6	41.3	20		02	47.0	46.9	17	+2.0	02	31.9	31.6	40	
04	30.8	31.6	05		04	41.0	41.5	20		04	48.1	47.8	15		04	31.9	31.2	41	
06	28.8	29.9	02		06	41.2	41.8	21		06	48.2	47.9	15		06	33.1	32.2	39	
08	27.5	28.7	00		08	40.7	41.3	20		08	49.0	48.8	14		08	34.2	33.8	37	
10	27.3	28.9	20 00		10	41.0	41.3	20		10	49.8	49.6	12		10	32.2	32.0	40	
12	26.0	26.5	19 57		12	40.9	41.1	20		12	50.0	49.6	12		12	30.1	30.0	43	
14	25.6	27.5	57	+ 9.0	14	40.6	40.9	20	+10.0	14	50.9	50.7	10		14	30.0	29.7	44	+1.8
16	26.1	28.0	19 58		16	39.8	40.0	18		16	52.9	52.5	08	+2.0	16	30.5	29.9	43	
18	28.3	30.1	20 01		18	40.6	40.6	19		18	51.2	50.8	10		18	31.0	30.3	42	
20	20.9	30.1	03		20	40.8	41.0	20		20	Lost				20	30.4	29.5	43	
22	28.4	34.2	05		22	40.3	40.5	19		22	Lost				22	27.2	26.7	48	
24.4	29.3	34.5	06		24	41.1	41.3	20		24	39.0*b*		29		24	27.3	26.8	48	
26	31.0	35.6	08		26	41.0	41.3	20		26	32.5	32.5	39		26	28.8	28.0	46	
28	32.2	36.0	10		28	40.8	41.1	20		28	27.5*b*		47		28	29.8	28.9	44	+2.0
30	33.3	37.6	11	+10.0	30	40.3	40.9	19	+ 9.2	30	24.8*b*		51		30	29.3	28.7	45	
32	34.0	38.1	12		32	39.8	40.0	18		32	23.8	23.2	53	+2.0	32	29.4	28.4	45	
34	34.9	38.3	13		34	40.0	40.3	19		34	23.0	22.8	54		34	30.4	29.4	43	
36	35.0	38.3	13		36	39.3	39.8	18		36	24.0	23.5	53		36	27.5	26.9	48	
38	35.2	38.0	13		38	38.6	39.1	16		38	23.9	23.2	53		38	28.6	27.4	46	
40	35.5	38.1	13		40	38.8	39.2	17		40	25.1	24.8	51		40	28.3	27.7	46	
42	35.8	38.0	14		42	38.2	38.6	16		42	25.1	24.5	51		42	25.8	25.1	50	+2.1
44	35.7	37.9	13	+11.0	44	37.8	38.0	15	+ 8.8	44	25.0	24.6	51		44	27.2	26.7	48	
46	36.0	38.0	14		46	38.3	38.6	16		46	24.3	24.0	52	+2.0	46	30.5*a*		42	
48	36.0	38.0	14		48	39.1	39.3	17		48	26.1	25.7	50		48	31.0	30.0	42	
50	36.3	38.3	14		50	39.2	39.4	17		50	25.8	25.0	50		50	30.8	29.6	43	
52	35.6	38.6	14		52	39.4	39.4	17		52	23.8	23.2	53		52	29.0	27.8	46	
54	35.1	37.0	12		54	39.0	39.8	17		54	21.8	21.1	20 57		54	26.8	25.4	49	
56	35.5	37.0	12		56	39.3	39.6	17		56	19.8	19.1	21 00		56	24.0	23.3	20 53	+2.2
58	34.8	36.3	11		58	40.0	40.3	19		58	19.1	18.7	01		58	19.8	19.5	21 00	
					16 00	39.8	40.5	19	+ 8.1										

Correction to local mean time is about —40s. 90° torsion = 18.′09. Observer—A. F.
Torsion head at 12h 00m read 258° and at 16h 15m read 253°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 5, 1905					Magnet scale inverted					Wednesday, July 5, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	16.3	15.2	21 06		6 00	53.5	48.3	23 44	+3.0	8 00	51.5	50.4	20 39	+2.5	10 00	61.2	60.9	20 23	+3.0
02	21.0	19.4	20 59		02	56.0	50.2	40		02	49.6	48.6	42		02	60.1	59.7	25	
04	25.2	24.2	52		04	61.3	53.5	33		04	51.3	50.6	39		04	60.0	59.3	25	
06	29.2	28.5	45		06	60.9	54.1	33		06	50.6	49.9	40		06	58.7	58.3	27	
08	30.5	29.9	43		08	63.2	59.3	27		08	56.6	55.3	31		08	59.6	58.9	26	
10	30.2	29.6	43		10	62.3	57.0	30		10	56.6	55.2	31		10	59.3	59.0	26	
12	28.9	28.0	46		12	67.3	64.0	20		12	57.3	56.5	29		12	59.0	58.4	26	
14	28.0	26.9	47	+2.3	14	71.0	69.0	23 14	+3.0	14	58.0	55.3	30		14	60.3	60.1	24	+3.2
16	26.2	25.2	50		16*	51.0	46.8	22 56		16	59.0	58.3	27		16	60.6	60.0	24	
18	27.2	26.2	48		18	41.8	38.0	23 10		18	59.8	59.3	25		18	60.3	60.0	24	
20	28.3	27.4	47		20	29.0	24.4	23 31		20	60.6	60.5	24	+2.7	20	61.0a		23	
22	30.8	29.5	43		22	50.9	44.8	22 58		22	59.6	58.8	26		22	66.1	65.1	16	
24	31.9	31.0	41		24	53.8	50.3	51		24	59.6	59.4	25		24	65.7	64.3	17	
26	31.5	29.9	42		26	52.9	49.3	52		26	54.4	54.0	33		26	62.9	61.7	21	
28	30.6	29.4	43		28	49.5	47.0	57		28	53.0	52.5	36		28	58.6	57.5	28	
30	31.4	30.5	42	+2.4	30	61.2	58.5	39	+3.1	30	60.2	60.0	24	+2.7	30	56.6	55.6	30	+3.5
32	31.9	30.2	42		32	72.1	67.0	24		32	63.3	61.9	20		32	59.0	57.6	27	
34	30.7	29.4	43		34	72.0	68.5	23		34	56.6	54.3	32		34	62.0	60.8	22	
36	31.4	29.9	42		36	75.0	73.0	17		36	41.8	39.8	54		36	65.3	63.7	17	
38	33.0	31.7	40		38*	39.0	32.3	22 00		38.3	52.3	52.0	37		38	67.8	66.8	13	
40	32.8	31.0	40		40	41.3	35.6	21 56		40	57.3	55.6	30		40	67.2	66.2	14	
42	30.3	29.2	44		42	38.1	33.5	22 00		42	60.1	59.3	25		42	60.0	50.8	25	
44	28.0	26.6	47	+2.5	44	43.5	37.0	21 53	+3.1	44	61.0	60.0	24	+2.8	44	66.1	56.8	30	+3.8
46	20.3	19.1	20 59		46	55.3	51.6	32		46	63.3	62.6	20		46	56.8	56.8	29	
48	15.2	14.5	21 07		48	61.3	56.1	24		48	65.5	64.4	17		48	60.6	60.0	24	
50	10.2	9.3	15		50	62.3	57.0	23		50	65.2	64.3	17		50	63.0	62.8	20	
52*	39.8	35.8	24		52	67.2	62.4	15		52	66.6	65.8	15		52	64.0	63.1	19	
54	36.3	32.3	30		54	64.4	59.5	19		54	67.0	66.0	14		54	63.3	62.0	20	
56	31.5	27.2	37		56	63.8	59.2	20		56	67.2	66.3	14		56	63.0	62.6	20	
58	34.2	30.3	33		58	61.6	57.0	23	+3.0	58	66.3	65.6	15		58	65.0	61.3	20	
5 00	31.8	28.0	36	+2.5	7 00	68.0	64.0	13		9 00	66.2	65.1	16	+2.8	11 00	62.5	62.5	20	+4.0
02	26.1	22.8	45		02	72.6	63.0	10		02	66.0	64.8	16		02	62.6	62.3	21	
04	20.8	16.0	55		04	75.6	72.4	00		04	65.6	64.3	17		04	62.3	62.0	21	
06	17.0	13.8	59		06	75.2	71.8	21 01		06	65.3	64.6	17		06	62.6	62.6	20	
08	17.1	13.8	21 59		08*	43.6	35.1	20 57		08	65.6	65.0	16		08	63.5	63.3	19	
10	16.3	12.8	22 01		10	38.5	38.3	58		10	64.3	63.8	18		10	62.9	62.1	20	
12	14.9	11.8	02		12	43.0	42.0	52		12	63.8	63.3	19		12	63.6	63.1	19	
14	13.0	9.5	06	+2.6	14	50.6	50.3	40		14	63.4	62.6	20	+2.7	14	60.6	60.2	24	+4.0
16	13.3	10.0	05		16	53.3	51.6	36	+2.8	16	63.1	62.3	20		16	60.1	59.9	24	
18	13.5	10.7	04		18	47.0	45.8	46		18	62.5	61.5	21		18	61.0	61.0	23	
20	14.6	11.3	03		20	48.1	47.6	44		20	62.8	61.5	21		20	60.6	60.2	24	
22	16.3	13.3	22 00		22	50.3	50.0	40		22	61.8	60.8	22		22	61.8	61.5	22	
24	18.3	15.4	21 57		24	57.8	57.0	29		24	61.0	60.5	23		24	60.8	60.6	23	
26	11.0	10.1	22 07		26	53.3	52.8	35		26	61.0	60.5	23		26	60.8	60.4	24	
28	8.0	5.5	13		28	54.4	53.9	34		28	60.5	60.0	24		28	61.0	60.6	23	
30*	37.5	31.9	24	+2.8	30	50.8	50.0	39	+2.7	30	61.0	60.0	24	+2.7	30	61.0	60.4	23	+4.0
32	37.9	32.4	23		32	49.3	48.7	42		32	59.5	58.9	26		32	59.5	59.2	26	
34	31.9	27.2	32		34	44.9	44.6	48		34	59.9	59.3	25		34	58.8	58.3	27	
36	27.7	21.5	40		36	43.0	42.3	52		36	60.1	59.6	25		36	57.3	56.5	29	
38	15.8	9.7	22 58		38	42.5	42.3	52		38	60.3	60.0	24		38	57.5	56.8	29	
40*	44.0	39.8	23 08		40	38.0	37.5	20 59		40	60.6	60.3	24		40	60.0	59.6	25	
42	42.0	38.2	11		42	34.6	34.0	21 05		42	60.0	59.9	25		42	63.0	62.3	20	
44	29.0	24.3	32	+3.0	44	31.0a		10	+2.6	44	59.6	59.3	26	+2.8	44	63.0	62.3	20	+4.1
46	22.3	20.8	41		46	34.1	34.0	05		46	59.9	58.4	26		46	63.4	62.0	20	
48	27.3	23.9	34		48	36.0a		21 02		48	59.3	58.6	26		48	62.3	61.1	22	
50	22.9	20.5	40		50	41.5	41.3	20 54		50	59.5	58.6	26		50	61.7	60.3	23	
52	18.5	15.2	23 48		52	35.3	35.0	21 04		52	60.0	58.8	26		52	63.6	62.3	20	
54	7.5	5.0	24 04		54	45.0	45.0	20 48		54	60.0	58.8	26		54	63.7	62.5	19	
56*	44.0	38.1	23 59		56	45.3	45.1	48		56	61.3	60.2	23		56	60.0	59.2	25	
58	48.8	42.2	52		58	49.5	49.1	41		58	60.6	59.9	24		58	63.3	62.5	20	

Observers—A. F. and W. J. P., who alternated from 6h 08m to 6h 22m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 5, 1905					Magnet scale inverted				Wednesday, July 5, 1905					Magnet scale inverted			
Chr'r time	Scale readings Left	Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	69.0	68.8	20 10	+4.0	14 00	63.9	63.2	20 19	+4.1	16 00	33.1	31.8	20 18	+3.5	18 00	46.7	44.9	19 56	+3.0
02	68.3	68.0	12		02	65.1	64.8	17		02	33.8	32.1	17		02	46.5	45.3	56	
04	64.3	63.8	18		04	67.4	67.1	13		04	34.1	32.4	16		04	46.6	45.5	56	
06	66.8	66.2	14		06	70.5*a*		08		06	33.7	32.2	17		06	46.3	45.4	56	
08	63.6	62.4	20		08	75.0	74.3	20 02		08	33.6	32.1	17		08	46.0	45.0	57	
10	60.9	59.9	24		10	78.0*a*		19 56		10	33.8	32.9	16		10	45.6	44.6	58	
12	61.6	60.3	23		12*	49.0	44.2	55		12	34.2	33.2	16		12	45.2	44.2	58	
14	60.6	59.6	24	+4.1	14	48.8	44.9	55	+4.4	14	34.3	33.1	16		14	44.5	43.6	59	
16	60.0	59.2	25		16	48.2	43.7	56		16	34.0	32.7	16	+3.8	16	44.9	44.2	58	+3.0
18	60.0	59.3	25		18	46.2	42.2	19 59		18	32.5	30.9	19		18	45.3	44.6	58	
20	60.2	59.3	25		20	45.3	41.2	20 01		20	31.2	29.4	21		20	45.5	44.7	58	
22	60.0	59.1	25		22	46.0	42.6	19 59		22	31.2	29.8	20		22	45.5	44.9	58	
24	60.3	59.5	25		24	46.5	42.9	19 58		24	32.4	30.3	19		24	46.0	45.3	57	
26	60.6	59.8	24		26	44.3	40.8	20 02		26	32.6	30.8	19		26	46.1	45.4	57	
28	60.1	59.1	25		28	44.4	41.0	01		28.3	32.6	31.1	18		28	45.9	45.3	56	
30	60.0	59.0	25	+4.1	30	44.7	41.7	01	+4.4	30	32.2	30.8	19	+3.9	30	45.6	45.0	57	
32	60.2	59.4	25		32	44.6	42.0	00		32	31.9	30.7	19		32	45.7	45.2	57	+2.7
34	60.0	59.2	25		34	43.8	41.1	02		34	31.6	30.4	20		34	45.5	44.9	58	
36	61.0	60.2	24		36	42.6	40.0	04		36	31.5	30.5	20		36	44.6	44.1	59	
38	60.0	59.1	25		38	42.2	39.9	04		38	31.5	30.2	20		38	44.5	43.8	59	
40	63.5	53.3	27		40	40.8	38.9	06		40	31.3	30.1	20		40	45.0	44.2	58	
42	60.8	59.8	24		42	40.5	39.0	06		42	31.3	30.2	20		42	44.9	44.3	19 58	
44	60.5	59.3	25	+3.9	44	39.2	37.8	08	+4.1	44	32.0	30.9	19	+3.9	44	44.3	43.6	20 00	+2.5
46	60.3	59.7	24		46	37.1	35.9	11		46	32.5	31.4	18		46	43.3	42.6	01	
48	62.1	60.9	22		48	37.6	36.5	10		48	32.0	31.0	19		48	42.6	41.9	02	
50	62.3	61.1	22		50	37.5	36.4	10		50	32.1	31.4	19		50	41.9	41.2	03	
52	62.9	61.8	21		52	37.7	36.8	10		52	32.7	31.8	18		52	41.1	40.3	04	
54	62.5	61.8	21		54	38.1	37.2	09		54	33.0	32.1	17		54	40.3	39.6	06	
56	63.0	62.1	20		56	38.7	37.6	09		56.3	32.5	31.7	18		56	39.5	38.5	07	
58	63.6	63.1	19		58	39.0	38.0	08		58	32.1	31.2	19		58	38.0	37.4	09	
13 00	64.4	63.9	18	+4.0	15 00	38.3	37.6	09	+3.8	17 00	31.8	30.8	19	+3.6	19 00	Missed			
02	64.4	63.9	18		02	37.9	37.3	09		02	31.8	30.9	19		02	38.0	37.5	09	+2.5
04	64.2	63.7	18		04	37.4	36.7	10		04	32.1	31.5	18		04	39.0	38.6	08	
06	64.0	63.5	19		06	37.1	36.2	11		06	32.4	31.8	18		06	40.0	39.5	06	
08	63.4	63.0	19		08	36.8	35.7	12		08	32.8	32.0	18		08	40.9	40.3	05	
10	61.0	60.8	23		10	35.2	34.8	14		10	33.0	32.6	17		10	41.6	41.1	04	
12	61.8	61.6	22		12	34.8	33.9	14		12	33.1	32.8	17		12	42.0	41.3	03	
14	60.5*b*		24		14	33.9	32.7	16		14	34.0	33.7	15	+3.4	14	42.0	41.2	03	+2.4
16	59.0	58.8	26	+4.0	16	32.1	31.1	19	+3.5	16	34.8	34.2	14		16	42.2	41.4	03	
18	60.5	60.2	24		18	31.9	30.8	19		18	35.2	34.7	14		18	42.6	41.6	02	
20	61.5*a*		22		20	31.1	30.3	20		20	34.6	33.9	15		20	42.9	41.8	02	
22	65.8	65.3	16		22	30.9	29.9	21		22	35.0	34.2	14		22	43.6	42.3	01	
24	66.1	65.8	15		24	31.3	30.2	20		24	35.9	34.9	13		24	44.3	43.0	20 00	
26	68.5*a*		11		26	32.0	30.8	19		26	36.6	35.7	12		26	45.1	43.9	19 58	
28	70.4	70.0	08		28	31.1	30.2	20		28	36.6	35.7	12		28	46.0	44.6	57	
30	70.5	70.2	08	+4.0	30	30.8	30.3	20	+3.4	30	37.0	36.0	11	+3.3	30	45.3	43.8	58	+2.3
32	72.9	72.3	05		32	30.7	30.0	21		32	38.0	37.0	10		32	45.0	43.8	19 59	
34	73.3	73.0	04		34	29.8	29.0	22		34	39.2	38.0	08		34	44.6	43.1	20 00	
36	73.7	73.1	04		36	30.2	30.0	21		36	40.5	39.2	06		36	45.2	43.3	19 59	
38	71.8*b*		06		38	30.9	30.5	20		38	41.9	40.9	04		38	45.3	43.3	19 59	
40	69.8	69.3	09		40	31.4	30.8	20		40	43.5	42.8	20 01		40	44.2	42.2	20 01	
42	70.1	69.5	09		42	32.0	31.9	18		42	45.0	44.5	19 58		42	43.8	42.0	01	
44	69.5	69.1	10		44	32.7	31.8	18	+3.5	44	45.3	44.8	58		44	42.2	40.2	04	+2.3
46	70.5	70.0	08	+4.0	46	33.0	31.9	18		46	45.0	44.3	58	+3.1	46	41.5	40.0	04	
48	67.0	66.0	14		48	33.1	32.0	17		48	45.0	44.1	58		48	41.3	40.3	04	
50	69.3	68.7	10		50	33.4	32.0	17		50	45.1	44.2	58		50	40.1	38.9	06	
52	70.2	69.8	09		52	33.4	32.1	17		52	44.9	43.9	59		52	38.4	37.6	09	
54	66.0	65.4	16		54	33.1	31.9	17		54.2	45.3	44.3	58		54	37.7	37.0	10	
56	63.3	62.7	20		56	33.1	32.0	17		56	45.8	44.9	57		56	37.6	37.0	10	
58	63.8	63.1	19		58	33.0	31.8	18		58	46.6	44.9	57		58	37.3	36.8	10	

Observers—W. J. P. and A. F., who alternated from 12h 48m to 12h 58m.

Observers—A. F. and W. J. P., who alternated from 17h 46m to 18h 00m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 5, 1905					Magnet scale inverted					Thursday, July 6, 1905					Magnet scale erect				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	37.1	37.1	20 10	+2.2	22 00	26.0	23.5	20 29	+2.0	16 00*	38.0	38.5	19 14	+8.0	18 00	64.3	66.6	18 17	+7.0
02	38.6	37.7	09		02	27.3	25.3	27		02	37.0	38.3	14		02	65.8	66.6	18	
04	39.0	38.0	08		04	27.3	25.3	27		04	34.7	37.1	11		04	67.4	69.3	21	
06	39.2	38.3	08		06	30.9	29.0	21		06	34.3	35.3	09		06	72.0	74.6	29	
08	39.6	38.6	07		08	28.5	26.5	25		08	31.0	38.0	09		08*	37.0	43.6	36	
10	39.6	38.8	07		10	31.0	29.0	21		10	36.6	41.4	16		10	39.0	45.6	39	
12	38.0	36.6	10		12	33.5	32.0	17		12	32.0	33.0	19 06		12	41.8	48.0	43	
14	39.0	38.0	08	+2.1	14	33.5	32.5	16	+2.0	14	10.5	12.0	18 32	+7.8	14	36.6	42.6	34	+6.5
16	39.0	38.2	08		16	33.0	32.0	17		16	6.8	7.6	26		16	27.6	37.8	23	
18	39.8	38.4	07		18	29.6	28.6	22		18	12.2	16.2	37		18	28.2	36.5	23	
20	35.1	34.3	14		20	29.6	28.6	22		20	22.6	29.8	18 56		20	37.8	44.5	37	
22	35.0	32.5	16		22	30.0	29.1	22		22	35.5	41.3	19 15		22	36.8	43.4	35	
24	27.5	26.0	26		24	35.5	34.3	13		24	32.6	38.6	10		24	23.3	30.5	14	
26.5	23.6	22.0	33		26	37.9	36.8	10		26	34.0	39.3	12		26	23.3	31.2	15	
28	24.5	23.6	31		28	36.5	35.7	12		28	38.4	43.5	19		28	23.2	29.4	14	
30	23.3	22.6	32	+2.0	30	37.4	36.6	10	+2.0	30	47.3	53.6	34	+7.5	30	20.7	26.2	09	+6.0
32	29.5	28.3	23		32	39.4	39.0	07		32	54.4	60.3	44		32	16.2	22.0	02	
34	31.5	31.3	19		34	38.3	35.9	10		34	55.4	60.0	45		34	19.2	25.0	07	
36	34.7	34.6	14		36	39.0	32.6	20		36	48.9	55.0	36		36	18.3	23.3	18 05	
38	42.0	40.4	04		38	39.3	35.6	10		38	45.0	48.0	28		38	11.5	17.3	17 55	
40	17.6	11.4	20 46		40	44.6	40.0	02		40	48.3	50.0	32		40	10.2	10.6	48	
42*	50.6	30.8	21 11		42	45.2	42.0	20 00		42	54.5	58.8	43		42	12.3	17.2	17 55	
44	45.3	35.5	11	+2.0	44	50.0	46.0	19 53	+2.0	44	48.8	51.5	33	+7.4	44	16.9	19.3	18 01	+5.6
46	49.5	37.3	07		46	55.0	53.0	44		46	48.6	51.5	33		46	16.9	21.5	02	
48	55.6	39.4	21 00		48	55.8	53.0	19 43		48	59.8	62.6	51		48	20.0	24.1	07	
50	53.0	47.8	20 56		50	43.9	41.7	20 01		50	53.5	56.0	40		50	22.8	27.0	11	
52	72.5	61.5	30		52	51.3	47.3	19 51		52	56.0	59.3	45		52	29.8	34.6	23	
54*	56.2	42.6	20 12		54	50.0	47.8	52		54	56.3	59.0	45		54	25.0	28.6	14	
56	62.6	55.0	19 57		56	49.5	47.5	52		56	57.2	59.8	46		56	21.0	24.1	08	
58	69.0	60.6	47		58	48.0	46.4	54		58	63.9	66.0	19 56		58	25.2	29.0	15	
21 00	80.0	63.0	37	+2.0	23 00	48.6	46.8	53	+2.0	17 00	73.8	74.6	20 11	+7.2	19 00	35.0	37.3	29	+5.3
02	73.8	61.3	43		02	50.5	49.1	50		02*	56.2	58.8	12		02	49.0	52.5	18 52	
04*	70.0	59.3	27		04	50.6	49.2	50		04	56.0	57.5	11		04	58.0	67.6	19 11	
06	68.0	58.0	29		06	48.2	47.0	54		06	48.8	56.2	03		06	67.7	71.5	21	
08	64.9	56.3	33		08	50.0	49.2	50		08	54.0	57.4	10		08	73.5	79.0	32	
10	61.0	53.0	39		10	47.3	46.3	19 55		10	50.0	58.2	20 07		10*	38.6	49.6	45	
12	52.6	45.2	52		12	42.3	41.0	20 03		12	34.3	44.5	19 44		12	44.5	49.5	50	
14	53.8	45.6	19 50	+2.1	14	35.0	34.3	14	+2.0	14	35.6	48.0	48	+7.3	14	48.0	53.0	55	+5.2
16	43.8	36.5	20 05		16	33.0	31.3	18		16	35.3	48.0	48		16	50.0	54.6	58	
18	23.0	19.0	35		18	35.0	33.6	14		18	24.8	36.6	30		18	42.6	58.6	55	
20	16.0	10.0	48		20	38.3	37.0	09		20	26.9	37.3	33		20	30.0	35.0	27	
22	21.0	14.5	41		22	34.2	32.6	16		22	Lost				22	28.0	32.0	23	
24	16.0	10.5	48		24	30.3	28.0	22		24	27.0	37.6	33		24	23.0	24.9	13	
26	17.0	10.3	47		26	30.3	28.3	22		26	16.3	18.0	19 09		26	14.3	17.1	19 00	
28	41.6	36.3	07		28	33.2	31.0	18		28*	14.6	28.0	18 54		28	9.3	12.3	18 53	
30	39.8	32.0	12	+2.1	30	29.3	28.0	23	+2.0	30*	Lost			+7.2	30	14.7	31.4	19 12	+5.2
32	34.7	24.3	22		32	32.0	30.6	19		32	Lost				32	26.3	32.3	22	
34	31.0	26.0	24		34	24.4	23.0	31		34	24.0	35.5	18 20		34	40.6	44.3	42	
36	33.0	28.0	20		36	11.6	11.3	50		36	8.0	18.0	17 54		36	38.6	42.2	39	
38	29.8	24.3	26		38	10.0*b*		52		38	8.8	12.1	50		38	37.1	37.6	34	
40	32.3	27.2	22		40	13.5*b*		20 47		40*	40.3	46.6	42		40	34.4	36.4	31	
42	37.3	33.3	13		42*	11.0	9.0	21 00		42	40.0	46.5	42		42	36.8	38.6	35	
44	34.5	31.0	17	+2.0	44	9.5	7.0	02	+2.0	44	32.6	38.8	30		44	36.0	38.6	34	+5.4
46	33.3	30.0	19		46	11.2	7.8	21 01		46	21.8	28.6	14	+7.1	46.6	22.0	22.9	11	
48	31.5	28.3	21		48	13.2	10.6	20 57		48	23.7	27.8	14		48	16.3	19.3	04	
50	29.6	26.6	24		50	9.3	5.5	21 04		50	36.5	41.9	36		50	17.5	18.5	19 04	
52	28.6	25.6	26		52*	28.0	19.3	10		52	46.4	51.3	51		52	8.2*b*		18 49	
54	28.0	25.3	26		54	26.0	19.7	12		54	49.2	52.0	54		54*	37.3	44.5	27	
56	28.2	25.3	26		56	32.3	25.4	02		56	50.5	54.3	17 56		56	42.9	50.6	18 36	
58	28.6	26.0	25		58	23.8	18.0	15		58	58.0	60.4	18 07		58	60.3	65.3	19 01	
					24 00	26.3	20.0	11							20 00*	43.0	56.6	31	+5.6

Correction to local mean time is —49s. 90° torsion = 17.′77.
Torsion head at 0h 10m read 252° and at 24h 00m read 249°.
Observer—W. J. P.

Correction to local mean time is + 1m 02s.
Torsion head at beginning and ending read 252°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Friday, July 7, 1905					Magnet scale inverted					Sunday, July 9, 1905					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00*	31.9	30.0	20 55	+10.2	22 00	50.8	47.3	18 45	+9.0	0 00*	29.0	29.3	20 18		2 00	38.3	39.0	20 33	+4.1
02	35.0	33.3	50		02	45.4	42.9	18 52		02	30.3	30.8	20		02	38.0	38.8	32	
04	36.3	34.6	48		04	36.0	31.6	19 09		04	32.3	32.5	23		04	33.8	34.8	26	
06	37.6	36.6	45		06	29.8	26.3	18		06	32.8	33.4	24		06	29.8	29.9	19	
08	45.7	44.0	33		08	23.2	19.8	28		08	33.2	33.6	25		08	23.0	23.6	09	
10	48.2	46.8	29		10	22.5	19.6	29		10	29.9	30.1	19		10	20.6	21.6	05	
12.5	53.3	52.0	21		12	25.4	22.0	25		12	29.0	29.6	18		12	19.1	20.3	03	
14	56.6	54.3	16	+10.5	14	25.0	21.0	26	+8.6	14	27.0	27.3	15	+4.1	14	21.3	22.6	07	+4.5
16	55.6	54.0	18		16	22.3	19.0	30		16	25.8	26.0	13		16	20.8	22.1	20 06	
18	53.6	52.0	21		18	19.0	14.2	36		18	24.6	25.6	12		18	15.6	17.5	19 58	
20	57.0	55.2	15		20	12.5	9.5	44		20	20.9	21.7	06		20	12.4	13.8	53	
22	55.0	52.6	19		22	10.3	7.8	48		22	23.9	24.2	10		22	13.3	15.3	55	
24	50.6	48.8	26		24*	44.0	36.0	19 53		24	27.2	27.8	15		24	15.2	17.9	19 58	
26	48.6	48.0	28		26	34.5	27.0	20 07		26	28.3	29.0	17		26	20.8	21.3	20 05	
28	46.6	45.2	32		28	28.0	22.2	16		28	25.3	26.0	12		28	23.6	25.8	11	
30	49.5	47.8	27	+ 9.9	30	24.0	18.1	22	+8.2	30	24.6	25.0	11	+4.2	30	29.8	31.8	21	+4.8
32	50.4	49.3	25		32	24.6	19.0	21		32	22.6	23.3	08		32	34.6	38.0	29	
34	51.3	49.7	24		34	24.2	19.2	21		34	23.8	24.2	10		34	39.6	42.4	37	
36	46.4	45.7	31		36	23.6	18.6	22		36	24.0	24.8	10		36	45.6	47.9	46	
38	45.6	44.4	33		38	16.0	9.5	36		38	23.9	24.8	10		38	50.3	52.0	52	
40	43.2	42.2	36		40*	49.3	43.4	45		40	22.0	22.5	07		40	52.8	54.8	57	
42	39.4	37.8	43		42	63.8	56.6	23		42	24.0	24.3	10		42	53.2	55.3	57	
44	37.5	36.3	46		44	62.3	56.3	24		44	25.9	26.1	13		44	47.3	50.5	49	
46	41.6	41.1	39		46	58.1	52.0	31	+8.0	46	24.0	24.3	10	+4.2	46	53.3	56.2	20 58	+5.0
48	47.0	46.0	30		48	61.4	56.0	25		48	27.8	28.0	16		48	74.8	83.6	21 36	
50	45.8	44.0	33		50	62.0	56.5	25		50	24.0	24.8	10		50*	33.8	39.8	36	
52	44.2	42.3	36		52	61.5	56.2	25		52	23.9	23.9	10		52	34.6	38.3	36	
54	42.6	40.6	38		54	52.7	50.7	29		54	26.6	27.2	14		54	46.6	54.0	58	
56	39.4	37.3	43		56	55.6	51.2	34		56	28.3	28.6	17		56	43.0	48.8	51	
58	36.5	34.7	48		58	54.6	50.2	35		58	29.3	29.8	18		58	36.3	41.5	40	
21 00	34.6	33.2	20 50		23 00	52.8	49.3	37	+7.6	1 00	26.9	27.9	15	+4.2	3 00	31.3	36.6	32	+5.0
02	28.2	26.5	21 01	+ 9.8	02	58.6	55.6	28		02	24.0	24.9	10		02	31.3	37.3	33	
04	29.3	28.3	20 58		04	65.3	61.4	18		04	22.0	22.5	07		04	25.6	30.6	23	
06	30.6	29.5	20 56		06	66.1	63.0	16		06	19.6	20.2	03		06	26.0	30.5	23	
08	27.0	26.0	21 02		08	63.3	60.3	20		08	18.5	19.0	02		08	20.1	22.3	21 12	
10	26.6	25.2	21 03		10	65.0	61.5	18		10	18.3	19.3	02		10*	38.0	42.3	20 52	
12	31.8	30.2	20 55		12	62.3	59.8	22		12	20.5	21.2	05		12	47.6	51.9	21 07	
14	32.0	30.7	54	+10.0	14	71.5	68.5	20 08		14	24.6	25.0	11	+4.0	14	45.2	49.4	03	+5.1
16	30.3	29.9	56		16	78.1	76.0	19 57	+7.0	16	23.3	24.0	09		16	43.8	47.3	00	
18	29.0	28.0	20 59		18	75.3	72.9	20 01		18	28.3	28.8	17		18	46.6	49.0	04	
20	28.2	27.0	21 00		20	72.5	69.7	06		20	21.0	21.8	06		20	46.8	50.9	06	
22	27.0	26.3	02		22	68.1	65.6	13		22	23.0	23.5	09		22	55.0	58.3	18	
24	22.0	21.4	09		24	74.0	72.0	20 03		24	25.5	25.9	12		24	67.0	69.0	36	
26	20.0	18.2	14		26	79.0	78.0	19 54		26	27.4	27.9	16		26*	30.0	39.0	49	
28	24.0	20.6	08		28*	55.6	51.6	47		28	26.5	26.6	14		28	34.4	43.0	55	
30	25.3	20.9	21 07	+10.0	30	57.2	53.6	44	+6.6	30	23.2	23.6	09	+4.0	30	29.8	37.6	21 48	+5.2
32	36.5	29.0	20 52		32	54.6	51.2	48		32	19.5	20.2	03		32	33.8	49.5	22 00	
34	43.6	40.5	20 38		34	51.5	48.0	53		34	21.0	21.5	06		34	46.8	52.3	12	
36	75.3	61.3	19 56		36	50.3	46.6	55		36	24.7	25.1	11		36	55.5	61.8	27	
38	42.6	36.3	20 42		38	48.0	44.3	19 59		38	29.1	30.6	19		38	64.3	72.3	43	
40	43.2	39.8	38		40	46.0	43.0	20 01		40	34.8	36.9	28		40	70.8	77.8	51	
42*	74.0	39.6	20 16		42	47.3	44.0	00		42	39.8	40.6	35		42	64.0	71.2	22 41	
44*	41.0	5.0	19 26	+ 9.4	44	47.0	44.3	00	+6.6	44	44.3	45.0	42	+4.1	44*	52.3	59.0	23 01	+5.5
46	54.8	50.6	18 39		46	44.3	44.1	02		46	46.8	48.0	47		46	45.3	53.1	22 51	
48	58.0*a*		31		48	36.8	33.6	16		48	50.6	51.9	53		48	58.6	62.0	23 08	
49.2	70.4*b*		11		50	27.5	25.5	30		50	51.5	52.6	54		50	55.3	55.7	23 01	
52	41.3*b*		18 57		52	24.0	21.6	35		52	49.1	50.1	50		52	24.5*b*		22 12	
54	20.5	16.5	19 33		54	26.3	23.4	32		54	47.3	47.9	47		54*	47.0	58.8	21 30	
56	18.8	16.0	34		56	34.0	31.0	20		56	45.6	46.6	44		56	20.3	33.0	20 49	
58	30.5	30.5	14		58	31.0	29.2	24		58	42.3	43.8	40		58	55.0	68.0	21 43	
					24 00	28.2	27.0	28	+7.0										

Correction to local mean time is —0.3*s*.
Torsion head at beginning and ending read 252°.
Observer—W. J. P.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Sunday, July 9, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	21.8	15.2	22 26	+6.0
02	40.1	20.1	03	
04*	30.5	26.2	22 00	
06	02.8	61.8	21 12	
08	61.1	54.3	19	
10	49.0*a*		33	
12	56.1	55.5	22	
14	47.8	43.5	38	+6.5
16	36.1	31.2	21 57	
18	15.0	12.5	22 28	
20	18.7	14.2	24	
22	32.2	30.1	22 01	
24	50.0	48.2	21 33	
26	32.2	31.1	22 00	
28	14.5	13.8	28	
30*	48.1	43.7	33	+6.7
32	41.9	32.0	22 47	
34	15.3	12.8	23 23	
36	Lost			
38*	55.5*a*		23 12	
40*	53.5	49.8	22 12	
42	02.5	56.4	00	
44	57.0	52.3	07	
46	50.3	45.0	18	+7.2
48	52.4	49.9	12	
50	55.0	40.0	18	
52	46.4	42.0	23	
54	61.1	55.0	22 02	
56	65.2	61.1	21 54	
58	74.0	72.0	38	
5 00*	51.1	44.0	25	
02	55.0	47.6	19	+7.2
04	38.8	32.7	21 44	
06	19.2	14.5	22 13	
08*	43.0	37.3	29	
10	33.7	30.1	42	
12	56.8	48.7	22 09	
14	70.2	61.8	21 48	
16	72.2	69.8	40	+7.4
18	72.5	69.7	40	
20	70.5	68.0	43	
22	67.8*b*		45	
24	74.0	72.4	37	
26	77.5*a*		30	
28*	42.4	34.8	25	
30	38.6	33.0	30	+7.4
32	37.8	32.6	31	
34	39.0	33.2	29	
36	42.9	38.2	22	
38	45.1	40.3	19	
40	48.5	43.3	14	
42	54.5	49.1	04	
44	55.6	51.8	21 02	+7.4
46	57.0	53.4	20 59	
48	58.0	54.5	20 58	
50	56.1	53.9	21 00	
52	57.8	55.0	20 57	
54	59.5	57.0	55	
56	60.4	58.8	52	
58	58.6	57.8	55	
6 00	61.7	60.4	20 50	+ 7.8
02	66.0	62.3	45	
04	69.0	67.1	39	
06	72.5	71.7	33	
08*	51.3	46.1	24	
10	54.0	49.8	18	
12	57.3	55.5	11	
14	63.4	60.0	03	+ 8.0
16	63.0	58.5	05	
18	60.5	56.5	08	
20	54.8	51.0	17	
22	50.1	45.8	25	
24	50.0	46.0	25	
26	51.1	47.7	22	
28	48.3	45.1	27	
30	47.8	44.8	27	+ 8.3
32	41.0	38.0	38	
34	31.0	27.3	20 54	
36	18.9	15.8	21 13	
38	9.8	7.5	20	
40*	40.4	35.5	38	
42	33.5	23.4	21 53	
44	25.5	21.6	22 01	+ 8.7
46	29.0	22.3	21 58	
48	22.1	13.8	22 10	
50	15.8	9.0	18	
52*	48.0	44.8	22 21	
54	65.8	63.5	21 53	
56	59.0	57.4	22 03	
58	58.2	53.6	06	+ 9.1
7 00	59.8	57.0	22 02	
02	64.5	61.3	21 55	
04	69.2	66.3	48	
06	79.1	77.0	32	
08	78.1	74.4	35	
10*	44.0	39.3	31	
12	46.5	42.1	27	
14	48.7	45.1	23	
16	46.4	42.3	27	+ 9.4
18	45.1	42.1	28	
20	41.3	39.5	33	
22	42.9	41.0	31	
24	45.8	42.9	27	
26	44.2	42.0	29	
28	46.5	45.0	25	
30	48.2	47.0	22	+ 9.7
32	48.0	47.5	22	
34	48.9	48.3	21	
36	50.7	49.1	18	
38	50.0	47.8	20	
40	57.3	53.8	21 10	
42	70.8	65.2	20 50	
44	79.0	74.3	37	+ 9.8
46*	47.0	37.8	38	
48	37.8	29.4	20 52	
50	28.8	20.7	21 06	
52	29.4	22.1	04	
54	20.7	11.8	19	
46	23.9	17.0	13	
58*	61.0	43.2	30	
8 00	58.8	43.2	32	+10.1

Correction to local mean time is — 3.0s.
Torsion head at beginning and end read 252°.
Observers—W. J. P. and A. F., who alternated from 4h 04m to 4h 14m.

Monday, July 10, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	Lost			
02	52.0	54.0	20 56	+13.0
04	42.8	45.3	42	
06	54.3	56.0	59	
08	53.8	55.6	59	
10	49.0	50.5	51	
12	52.6	55.2	57	
14	46.2	47.8	46	+12.7
16	40.0	41.6	37	
18	46.5	48.5	20 47	
20.3	54.8	56.6	21 00	
22	44.0	45.3	20 43	
24	51.8	54.3	56	
26	36.1	39.1	20 32	
28	59.9	60.0	21 07	
30	47.3	50.3	20 49	+12.5
32	43.7	44.1	41	
34	37.8	40.2	34	
36	36.5	38.7	32	
38	33.3	34.8	26	
40	31.9	33.3	24	
42	30.1	31.2	20	
44	28.7	29.7	18	+12.5
46	31.2	32.0	22	
48	33.4	34.0	25	
50	26.2	26.8	14	
52	34.5*a*		26	
54	45.0	46.5	44	
56	29.0	29.3	18	
58	42.0	43.6	40	
9 00	40.8	40.8	36	+12.9
02	39.3	39.3	34	
04	33.6	34.8	26	
06	35.9	36.6	29	
08	30.4	30.8	20	
10	33.6	33.8	25	
12	25.5	25.6	12	
14	25.3	26.3	13	+13.1
16	52.0*a*		20 54	
18	65.0*b*		21 14	
20	27.8	29.9	20 17	
22	45.1	45.6	20 43	
24	57.2	59.2	21 03	
26	43.7	45.6	20 42	
28	44.5	45.7	43	
30	48.1	49.5	48	+13.5
32	43.0	43.1	39	
34	35.6	36.8	29	
36	37.7	39.3	32	
38	28.6	31.0	19	
40	40.9*b*		36	
42	32.5*a*		23	
44	47.5	48.4	47	+13.6
46	34.8	37.0	28	
48	37.8	40.2	33	
50	43.0	44.3	40	
52	41.6	42.0	37	
54	38.3	38.8	32	
56	37.3	38.0	30	
58	37.4	37.6	30	
10 00	39.8	39.9	20 34	+13.5
02	41.0	44.0	38	
04	33.7	33.8	24	
06	42.5	44.4	40	
08	41.5	46.0	20 40	
10	11.1	13.6	19 51	
12	31.6	34.8	20 24	
14	30.2	33.0	21	+13.5
16	33.6	42.8	31	
18	41.2	42.8	37	
20	46.2	48.4	46	
22	46.5	48.0	45	
24	41.9	46.0	40	
26	35.2	37.8	29	
28	44.0	47.0	43	
30	21.6	24.2	07	+14.0
32	20.3	25.3	07	
34	28.0	31.0	18	
36	35.6	38.6	29	
38	35.9	37.3	29	
40	26.2	28.0	14	
42	37.1	38.8	30	
44	41.2	41.8	36	+14.5
46	31.3	32.3	21	
48	29.1	29.2	17	
50	32.5	35.0	24	
52	32.9	33.9	23	
54	39.6	42.0	35	
56	53.0*b*		54	
58	43.8	46.0	41	
11 00	26.0*b*		12	+15.0
02	22.6	24.0	07	
04	29.8	34.2	21	
06	39.2	42.5	35	
08	17.2	21.6	20 01	
10	6.9	9.9	19 44	
12	19.0	20.3	20 02	
14	18.5	20.5	01	
16	22.6	25.0	20 08	
18	17.3*b*		19 58	
20	14.3	17.1	19 55	
22	27.0	32.1	20 17	
24	37.1	38.5	30	
26	36.4	36.8	28	
28	20.3	22.6	04	
30	27.6	28.0	14	+16.0
32	36.2	37.0	28	
34	25.7	28.9	13	
36	25.0	26.8	11	
38	21.0	22.0	04	
40	24.2	25.2	09	
42	30.5	32.1	20	
44	32.8	34.0	23	+16.5
46	30.0	31.6	19	
48	25.1	26.1	10	
50	29.3	30.3	17	
52	26.8	27.6	13	
54	24.4	25.4	09	
56	27.3	28.2	14	
58	28.6	29.8	16	+17.1
12 00	30.3	31.1	18	

Correction to local mean time is — 4.6s. 90° torsion = 17.'87.
Torsion head at 8h 00m read 252° and at 12h 15m read 267°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Tuesday, July 11, 1905					Magnet scale inverted					Wednesday, July 12, 1905					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
12 00	61.0	24.5	20 17	+12.1	14 00	39.3	39.3	20 23	+11.5	0 00*	Lost				2 00	66.0	66.9	20 57	+7.1
02	46.6	43.4	14		02	39.9	39.1	22		02	37.1	43.5	20 16	+6.8	02	66.0	66.8	57	
04	44.5	41.3	17		04	39.6	39.0	23		04	36.6	42.5	14		04	61.8*b*		50	
06	44.0	41.6	17		06	39.5	39.0	23		06	36.2	41.9	14		06	57.0	58.1	43	
08	44.5	42.0	17		08	40.0	34.5	26		08	37.0	42.1	14		08	60.1	63.0	49	
10	46.0	43.6	14		10	42.5	42.1	18		10	37.1	42.1	15		10	57.0	63.0	47	
12	46.4	44.0	14		12	44.6	44.4	15		12	37.5	42.0	15		12	61.5	62.8	50	
14	44.6	42.6	16	+12.5	14	45.4	44.9	14	+11.7	14	37.8	42.5	15		14	57.6	58.5	44	
16	44.8	43.0	16		16	46.0	45.5	13		16	39.1	43.3	17	+6.8	16	54.9	56.0	39	+7.4
18	45.3	43.6	15		18	46.0	45.6	12		18	40.6	44.3	19		18	58.9	60.0	46	
20	44.0	43.2	16		20	43.6	43.3	16		20	39.9	44.3	19		20	54.5	56.0	39	
22	46.2	44.9	13		22	43.3	43.1	17		22	38.1	40.8	15		22	54.1	55.5	38	
24	48.0	47.0	10		24	43.8	43.6	16		24	37.8	41.0	14		24	57.3*a*		42	
26	48.0	47.0	10		26	45.3	45.1	14		26	36.5	39.7	12		26	64.0	65.0	54	
28	Lost				28	46.8	46.4	11		28	35.8	38.2	10	+6.9	28	64.1	65.1	54	
30	47.0	46.2	11	+12.3	30	47.0	47.0	11	+12.0	30	36.4	39.2	12		30	65.3	66.8	56	+7.4
32	47.6	46.6	10		32	47.4	47.4	10		32	38.0	40.6	14		32	65.9	66.8	56	
34	46.6	45.6	12		34	48.0	48.0	09		34	38.3	41.2	15		34	64.5	65.5	54	
36	47.9	47.0	10		36	43.7	43.5	16		36	38.8	41.0	15		36	64.8	65.8	55	
38	52.8	52.1	02		38	47.0	46.8	11		38	37.9	39.9	14		38	64.0	64.9	54	
40	50.8	50.6	05		40	45.5	45.1	13		40	36.6	38.7	11		40	62.9	63.8	52	
42	50.8	50.3	05		42	45.0	45.0	14		42	33.7	35.1	06		42	63.0	63.7	52	
44	43.0	42.7	17	+12.3	44	45.2	45.2	14		44	31.9	33.8	04		44	63.5	64.0	52	
46	51.8	51.5	20 04		46	45.7	45.5	13	+12.0	46	30.8	32.3	02	+6.9	46	64.9	65.4	55	+7.3
48	56.1	55.8	19 57		48	46.0	45.5	13		48	30.5	32.0	01		48	64.0	64.4	53	
50	54.5	54.1	59		50	44.5	44.3	15		50	30.3	32.0	01		50	64.2	64.8	54	
52	57.0	56.3	19 56		52	43.6	43.6	16		52	30.6	32.0	02		52	64.5	65.0	54	
54	51.0	50.6	20 05		54	43.3	42.7	17		54	30.4	31.8	01		54	65.7	66.5	20 56	
56	51.7	51.3	04		56	43.5	43.1	16		56	30.1	31.2	20 00		56	67.7	68.8	21 00	
58	52.2	52.0	03		58	42.6	41.7	18		58	29.1	30.4	19 59		58	71.1	72.0	05	
13 00	54.3	54.0	00	+12.1	15 00	41.6	40.9	20	+11.8	1 00	28.1	29.2	57	+6.8	3 00	73.7	73.7	08	+7.3
02	48.0	48.0	09		02	42.2	41.5	19		02	28.0	29.3	57		02	73.9	74.8	09	
04	50.0	50.0	06		04	43.4	42.6	17		04	28.0	29.0	57		04	74.6	75.5	10	
06	47.6	47.0	10		06	42.7	42.3	18		06	26.0	26.8	54		06	75.0	76.1	11	
08	48.5	47.8	09		08	42.5	41.6	19		08	25.1	25.9	52		08	74.4	75.6	10	
10	49.2	48.8	08		10	42.0	41.5	19		10	24.2	25.0	51		10	76.5	77.3	13	
12	48.1	47.6	09		12	43.0	43.0	17		12	23.9	24.5	50		12	78.0	79.5	16	
14	48.5	48.2	09	+12.0	14	44.8	42.6	16		14	22.9	23.3	49		14*	37.5	42.0	14	
16	43.4	42.7	17		16	42.1	41.3	19	+11.5	15	22.2	22.8	48	+6.8	16	38.2	43.1	16	+7.2
18	47.3	47.0	10		18	40.8	40.1	21		18	22.0	22.5	47		18	40.0	44.0	18	
20	46.5	46.1	12		20	40.3	40.2	21		20	21.5	22.0	46		20	44.0	47.4	24	
22	46.0	45.6	12		22	42.0	41.6	19		22	22.5	23.0	48		22	46.4	50.2	28	
24	45.6	45.2	13		24	42.2	41.8	18		24	23.6	24.1	50		24	48.2	52.1	31	
26	45.1	44.4	14		26	41.6	41.2	20		26	24.7	25.0	51		26	47.8	51.8	30	
28	44.6	44.0	15		28	40.9	40.2	21		28	25.0	25.4	52		28	48.2	51.8	31	
30	44.3	43.7	15	+11.5	30	41.7	41.0	20	+11.3	30	26.0	26.3	54	+6.7	30	46.7	49.6	28	+7.2
32	42.7	42.2	18		32	41.0	40.3	21		32	26.1	26.9	54		32	44.0	46.9	23	
34	43.5	43.0	17		34	44.6	41.1	17		34	26.6	27.2	55		34	43.2	46.2	22	
36	44.2	43.7	16		36	43.6	43.1	16		36	27.2	28.0	19 56		36	45.0	47.9	25	
38	43.1	42.5	17		38	43.8	43.3	16		38	29.9	30.8	20 00		38	44.1	47.1	24	
40	42.6	41.6	18		40	43.6	43.1	16		40	31.4	32.1	02		40	44.9	47.5	25	
42	41.2	40.4	20		42	43.0	42.6	17		42	31.5	32.3	02		42	45.6	48.0	26	
44	39.6	39.2	23		44	42.3	42.1	18		44	34.2	35.0	07	+6.8	44	50.6	53.0	34	
46	40.4	39.8	22	+11.4	46	44.0*a*		15	+11.5	46.5	36.0	36.8	10		46	52.0	54.5	36	+7.2
48	40.9	40.2	21		48	44.3	44.3	15		48	38.3*a*		13		48	46.0	48.3	26	
50	40.3	39.9	22		50	42.5	42.5	18		50	43.0*a*		20		50	42.8	45.5	21	
52	41.0	40.4	21		52	41.6	41.6	19		52	47.4	48.5	28		52	39.2	42.1	16	
54	40.3	39.9	22		54	42.0	42.0	18		54	53.8*a*		37		54	39.1	41.3	15	
56	44.2	43.9	15		56	43.0	42.6	17		56	58.4*a*		44		56	38.7	40.6	14	
58	39.0	38.6	23		58	42.7	42.5	18		58	64.2*a*		53		58	39.0	41.0	15	
					16 00	43.8	43.5	16	+11.8										

Correction to local mean time is — 10.5s.
Torsion head at 12h 00m read 249° and at 16h 00m read the same.
Observer—W. J. P.

Observer—A. F.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 12, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	42.5	44.0	21 20	+7.1
02	42.5	43.9	20	
04	39.0	41.2	15	
06	40.7	42.8	18	
08	44.8	46.6	24	
10	42.6	44.5	20	
12	42.4	44.5	20	
14	39.8	41.5	16	+7.0
16	37.8	39.0	12	
18	39.6	40.8	15	
20	41.8	43.0	19	
22	44.0	44.9	22	
24	46.2	47.1	25	
26	47.0	47.4	26	
28	44.3	45.2	22	
30	44.2	45.2	22	
32	43.7	44.9	22	+6.9
34	42.5	44.0	20	
36	37.1	39.4	12	
38	31.4	32.4	02	
40	32.6	33.0	04	
42	32.3	34.0	04	
44	35.2	36.8	09	
46	34.9	37.0	08	+6.7
48	32.9	35.0	05	
50	32.7	34.4	05	
52	30.5	32.0	01	
54	32.9	33.9	04	
56	33.5	34.9	06	
58	35.2	36.2	08	
5 00	35.6	37.0	09	+6.2
02	34.5	35.8	07	
04	32.7	33.9	04	
06	31.8	32.9	21 03	
08	28.2	29.9	20 58	
10	25.7	27.0	54	
12	25.0	26.2	52	
14	26.5	27.8	55	+5.9
16	26.0	27.0	54	
18	26.2	27.0	54	
20	25.1	25.1	51	
22	24.0	24.9	50	
24	23.8	24.8	50	
26	24.3	25.1	51	
28	25.9	26.6	53	
30	24.8	25.8	52	+5.6
32	21.5	22.8	47	
34	23.2	24.3	49	
36	24.2	25.1	51	
38	23.5	24.2	49	
40	25.4	26.1	52	
42	26.5	27.8	55	
44	26.1	27.0	54	
46	25.9	27.1	54	+5.5
48	25.6	26.4	53	
50	23.3	24.6	50	
52	21.3	22.2	46	
54	20.6	21.5	45	
56	20.0	20.0	44	
58	17.1*b*		39	
6 00	12.8	13.8	20 33	+5.4
02	19.1	20.1	43	
04	18.0	18.7	41	
06	12.9	14.0	33	
08	24.5*a*		20 51	
10	35.4	37.5	21 09	
12	27.8	28.4	20 56	
14	32.3	33.3	21 04	
16	35.0	36.0	08	
18	36.1	37.0	10	
20	35.1	36.1	08	+5.5
22	36.1	36.9	10	
24	43.5	44.9	22	
26	40.3	41.0	16	
28	44.8	45.1	23	
30	40.1	41.1	16	+5.5
32	46.0	46.1	24	
34	42.0	42.5	18	
36	42.1	43.0	19	
38	43.8	44.3	21	
40	39.5	40.5	15	
42	46.0	46.7	25	
44	39.7	41.3	16	+5.7
46	40.1	40.5	15	
48	39.9	40.1	15	
50	38.3	38.5	12	
52	45.0*b*		23	
54	36.8	37.3	10	
56	36.2*b*		09	
58	35.3	35.3	08	
7 00	32.0*b*		21 02	+6.1
02	26.9	27.6	20 55	
04	30.9	31.2	21 01	
06	31.5	31.8	21 02	
08	28.8	29.5	20 58	
10	25.0	25.8	20 52	
12	30.9	32.9	21 02	
14	31.3	32.0	02	+6.9
16	31.0	32.8	02	
18	29.8	32.0	21 01	
20	24.6	26.1	20 52	
22	27.1	27.8	20 55	
24	29.1	32.1	21 00	
26	27.2	28.5	20 56	
28	28.9	30.3	59	
30	25.2	26.3	20 52	+7.1
32	30.6	31.4	21 01	
34	34.3	35.5	21 07	
36.4	26.0	27.1	20 54	
38	27.0	28.5	56	
40	22.2	23.8	48	
42	23.3	24.6	50	
44	24.8	25.8	52	+7.1
46	19.0	20.0	43	
48	20.5	20.9	45	
50	16.6	17.6	39	
52	20.6	21.8	45	
54	24.7	25.3	51	
56	20.6	20.7	44	
58	20.8	22.6	46	

Wednesday, July 12, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
8 00	26.5	27.0	20 54	+7.1
02	21.3	22.3	46	
04	27.8	29.0	57	
06	29.0	29.5	58	
08	28.0	28.5	20 56	
10	30.3	31.3	21 00	
12	27.0*b*		20 54	
14	28.4	28.6	57	+7.0
16	28.2	28.6	20 57	
18	30.3	30.8	21 00	
20	32.6	33.6	04	
22	30.8	31.7	21 01	
24	28.8	29.8	20 58	
26	31.0*b*		21 01	
28	22.2	23.6	20 48	
30	27.6	28.6	56	+7.0
32	24.4	25.3	20 51	
34	29.3	31.1	21 00	
36	31.3	32.2	02	
38	29.8	30.6	00	
40	32.4	33.6	21 04	
42	29.0	30.6	20 59	
44	29.0	29.6	58	+7.0
46	26.0	26.6	54	
48	25.8	27.0	54	
50	23.8	24.2	50	
52	23.3	24.6	50	
54	24.0	24.5	50	
56	24.3	24.6	50	
58	23.0	23.2	48	
9 00	21.2	21.5	46	+6.8
02	20.0	20.9	44	
04	18.0	19.4	42	
06	18.7	19.0	42	
08	16.2	17.0	38	
10	15.7	16.7	38	
12	14.2	14.8	35	+6.6
14	15.2	15.6	36	
16	15.3	15.6	36	
18	17.0	17.5	39	
20	22.9	23.6	48	
22	16.0	17.3	38	
24	7.8	8.2	25	
26*	43.2	44.8	25	
28	43.9	44.3	25	
30	50.8	51.5	36	+6.6
32	50.0	50.8	35	
34	57.8	58.0	47	
36	50.0	51.6	36	
38	45.0	46.0	28	
40	38.0	38.6	16	
42	38.1	38.6	16	
44	38.2	39.8	17	
46	42.2	43.2	23	+6.5
48	39.3	39.8	18	
50	36.6	37.0	14	
52	38.5	39.3	17	
54	47.0	47.6	30	
56	57.1	57.9	46	
58	53.9	55.1	42	
10 00	47.0	48.2	20 31	+ 6.5
02	44.2	45.2	26	
04	40.8	41.2	20	
06	45.0	47.2	28	
08	53.1	53.6	40	
10	51.5	52.6	38	
12	47.0	48.3	31	
14	45.3	46.0	28	+ 7.0
16	42.0	42.8	23	
18	43.5	43.8	24	
20	46.6	46.8	29	
22	47.3	47.8	31	
24	45.1	45.4	27	
26	43.9	44.3	25	
28	45.3	45.9	28	
30	45.5	45.9	28	+ 7.2
32	47.0	47.4	30	
34	44.4	45.0	26	
36	45.5	45.5	28	
38	46.2	46.6	29	
40	43.1	44.3	25	
42	38.5	38.8	17	
44	40.0	40.3	19	+ 8.0
46	40.1	40.5	19	
48	41.5	42.5	22	
50	43.6	44.1	25	
52	42.3	42.9	23	
54	45.0	46.9	28	
56	45.2	46.8	28	
58	39.8	41.4	20	
11 00	38.0	40.0	17	+ 9.0
02	41.8	43.6	23	
04	42.6	43.6	24	
06	37.5	38.5	16	
08	39.3	40.9	19	
10	43.0	44.2	24	
12	40.0	41.3	20	
14	40.7	42.3	21	+ 9.8
16	44.0	44.8	26	
18	45.5	46.3	28	
20	44.3	45.1	26	
22	42.5	43.3	23	
24	42.7	43.1	23	
26	41.2	41.7	21	
28	37.6	38.4	16	
30	37.9	39.5	17	+10.4
32	29.7	30.0	20 03	
34	24.8	25.6	19 56	
36	23.6	24.3	54	
38	23.6	24.6	54	
40	23.7	25.5	55	
42	22.0	24.0	52	
44	20.0	22.0	49	+10.8
46	20.0	21.5	48	
48	20.6	21.0	49	
50	22.3	24.0	52	
52	22.3	24.0	52	
54	23.5	24.9	19 54	
56	27.1	28.5	20 00	
58	31.8	32.6	07	

Observers—A. F. and W. J. P., who alternated from 6h 04m to 6h 14m.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 12, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
12 00	32.9	34.6	20 09	+10.4
02	33.0	34.0	09	
04	33.0	34.0	09	
06	35.5	36.1	12	
08	37.7	38.8	16	
10	38.1	39.1	17	
12	37.8	38.7	16	
14	40.1	41.0	20	+10.2
16	40.2	41.3	20	
18	40.0	41.3	20	
20	42.0	43.0	23	
22	43.1	43.9	24	
24	43.0	43.4	24	
26	42.6	43.3	23	
28	43.5	44.0	25	
30	43.5	43.8	24	+10.1
32	43.6	44.3	25	
34	44.5	44.8	26	
36	44.9	45.1	27	
38	45.3	45.9	28	
40	42.8	43.1	23	
42	49.0	49.6	34	
44	51.3	51.5	37	+10.2
46	50.0	50.6	35	
48	46.4	46.4	29	
50	45.5	46.0	28	
52	43.7	44.1	25	
54	43.2	44.0	24	
56	43.5	44.5	25	
58	44.0	44.8	26	
13 00	44.6	45.1	26	+11.0
02	46.1*a*		28	
04	45.5	45.5	28	
06	44.3	44.8	26	
08	44.1	44.6	26	
10	45.2	46.0	28	
12	46.2	46.7	29	
14	47.0	47.6	30	+11.0
16	48.0	48.2	31	
18	46.7	47.0	30	
20	46.0	46.5	29	
22	45.5	45.9	28	
24	44.8	45.1	26	
26	46.0	46.1	28	
28	46.1	47.7	29	
30	45.7	46.2	28	
32	44.6	45.1	26	+12.8
34	44.2	44.8	26	
36	44.0	44.4	25	
38	43.9	44.1	25	
40	42.5	43.0	23	
42	43.2	43.9	24	+13.4
44	42.8	43.3	24	
46	40.6	41.3	20	
48	40.7	41.5	21	
50	41.4	42.1	22	
52	41.5	42.1	22	
54	41.8	42.2	22	
56	40.8	41.1	20	
58	39.5	40.0	18	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
14 00	38.8	39.2	20 17	+13.6
02	38.3	39.0	17	
04	38.2	39.1	17	
06	39.0	39.5	18	
08	44.5*a*		26	
10	44.5	45.8	27	
12	45.0	46.0	28	
14	40.0	41.0	20	+13.6
16	34.9	36.1	12	
18	35.1	35.6	12	
20	37.8	38.5	16	
22	41.5*a*		21	
24	42.2	43.0	23	
26	40.2	41.3	20	
28	39.1	40.3	18	
30	39.7	40.4	19	+13.2
32	39.3	40.3	19	
34	37.7	38.3	16	
36	38.5	39.4	17	
38	34.8	35.1	11	
40	32.1	32.9	20 07	
42	27.1	28.0	19 59	
44	27.2	28.4	20 00	
46	27.6	29.1	00	+12.6
48	27.5	29.0	00	
50	27.8	29.5	01	
52	27.3	28.9	00	
54	30.2	31.0	04	
56	31.0	32.0	06	
58	31.0	33.3	06	
15 00	30.8	32.1	05	
02	30.7	32.1	05	+11.7
04	30.9	32.1	06	
06	30.7	31.8	05	
08	31.1	31.9	06	
10	32.3	33.4	08	
12	33.6	34.7	10	
14	35.1	36.2	12	+11.3
16	33.9	34.9	10	
18	32.5	34.3	09	
20	34.1	35.7	11	
22	35.0	36.6	12	
24	32.1	34.8	08	
26	33.3	34.5	09	
28	34.3	35.3	11	
30	34.9	36.2	12	+10.9
32	33.1	34.0	09	
34	32.8	33.9	08	
36	33.2	34.5	09	
38	33.7	34.9	10	
40	33.4	35.4	10	
42	31.2	33.0	06	
44	29.9	31.3	04	
46	32.5	33.9	08	+10.0
48	32.0	33.0	07	
50	32.9	34.0	08	
52	33.0	34.1	09	
54	32.6	34.2	08	
56	32.2	33.5	08	
58	31.4	32.8	06	

Observers—W. J. P. and A. F., who alternated from 12h 48m to 12h 58h.

Wednesday, July 12, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination.	Temp. C.
h m	d	d	° ′	°
16 00	31.0	32.0	20 06	+9.6
02	29.0	30.3	02	
04	28.7	29.8	02	
06	29.1	30.0	02	
08	30.8	31.8	05	
10	30.1	31.0	20 04	
12	26.7	27.5	19 59	
14	22.0	23.1	51	
16	21.5	22.2	50	+9.1
18	20.8	21.2	49	
20	20.1	20.9	48	
22	18.0	18.5	45	
24	17.2	18.0	44	
26	17.3	18.0	44	
28	15.0	15.5	40	
30	12.2*b*		35	+8.9
32	7.1*b*		27	
34*	36.0	41.0	28	
36	33.0	37.0	22	
38	27.5	33.0	15	
40	27.6	31.9	14	
42	19.3	22.2	19 00	
44	18.2	22.1	18 59	
46	15.0	19.5	54	+8.7
48	11.8	14.8	48	
50	12.1	15.0	49	
52	14.6	18.1	18 53	
54	22.1	25.5	19 05	
56	27.3	29.7	12	
58	34.3	37.0	23	
17 00	40.0	43.1	33	+8.4
02	47.3	50.0	44	
04	53.5	55.9	53	
06	56.3	58.9	58	
08	57.0	58.5	19 58	
10	58.9	60.0	20 01	
12	63.5	65.0	08	
14	64.2	66.0	10	
16	64.2	66.5	10	
18	67.5	68.8	14	+8.3
20	67.1	68.3	14	
22	67.1	68.7	14	
24	63.0	64.8	08	
26	60.2	61.9	20 03	
28	56.5*b*		19 56	
30	55.0	55.5	54	+8.1
32	56.6	57.0	19 57	
34	59.0	59.5	20 00	
36	59.3	60.1	01	
38	62.1	63.0	06	
40	64.2	65.5	09	
42	65.2	66.3	11	
44	65.6	66.7	11	
46	65.0	66.1	10	+7.5
48	64.0	65.5	09	
50	66.5	68.0	13	
52	70.7	72.0	19	
54	72.0	73.0	21	
56	75.0	76.1	26	
58*	35.3	41.0	31	

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
18 00	36.3	41.9	20 32	+7.1
02	36.0	40.8	31	
04	35.5	39.9	30	
06	36.2	40.3	31	
08	35.7	40.0	30	
10	35.0	39.2	29	
12	33.3	37.0	26	
14	34.9	36.1	27	
16	29.2	32.2	19	+7.0
18	27.2	30.6	16	
20	26.8	29.6	15	
22.9	23.6	25.6	10	
24	22.2	24.8	08	
26	21.2	23.0	06	
28	19.6	21.8	03	
30	18.6	20.8	02	+7.0
32	19.0	20.9	02	
34	18.0	19.5	20 00	
36	16.6	18.2	19 58	
38	18.3	21.1	20 02	
40	21.9	23.1	06	
42	23.8	25.0	09	
44	25.3	26.8	12	
46	25.8	27.5	13	+6.9
48	26.6	28.0	14	
50	29.1	30.9	18	
52	27.5	29.3	16	
54	27.5	29.1	15	
56	28.6	30.0	17	
58	28.3	30.2	17	
19 00	29.1	31.3	18	+6.5
02	29.8	32.0	19	
04	28.6	30.2	17	
06	29.0	31.0	18	
08	28.8	30.0	17	
10	31.0	33.0	21	
12	28.8	30.0	17	
14	25.3	26.6	11	+6.5
16	22.5	23.7	07	
18	20.9	22.1	05	
20	19.2	20.3	20 02	
22	17.0	18.4	19 59	
24	15.0	16.1	55	
26	10.5	11.9	48	
28	12.0	13.0	51	
30	10.3	11.6	19 48	+6.5
32	18.4	19.3	20 00	
34	14.9	16.1	19 55	
36	10.6	11.6	19 48	
38	18.2	19.0	20 00	
40	21.1	21.8	04	
42	23.2	24.0	08	
44	24.2	25.0	10	+6.5
46	24.5	25.3	10	
48	25.0	25.6	11	
50	25.8	26.4	12	
52	25.6	26.2	12	
54	25.6	25.6	11	
56	25.3	26.0	11	
58	24.1	24.8	09	

Observers—A. F. and W. J. P., who alternated from 18h 00m to 18h 12m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 12, 1905					Magnet scale erect					Friday, July 14, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	°	°	h m	d	d	° ′	°	h m	d	d	° ′	°
20 00	22.5	23.0	20 07	+6.3	22 00	58.9	60.9	20 06	+4.4	20 00	39.5	38.8	19 56	+4.0	22 00	34.5	34.3	20 04	+4.0
02	21.7	22.3	06		02	65.4	67.5	16		02	38.0	36.7	19 59		02	34.2	33.9	04	
04	21.9	22.5	06		04	63.0	65.8	13		04	34.5	33.0	20 05		04	33.3	33.0	06	
06	21.8	22.2	06		06	68.3	71.0	21		06	34.0	32.1	06		06	32.7	32.3	06	
08	20.5	20.9	03		08	68.3	71.1	21		08	27.5	26.4	15		08	33.0	32.6	06	
10	18.6	18.9	20 00		10	76.0	78.0	32		10	29.0	28.0	13		10	33.3	33.0	06	
12	15.8	16.0	19 56		12	73.3	76.1	29		12	29.2	27.6	13		12	34.0	32.3	06	
14	11.9	12.7	50	+6.1	14	73.8	76.8	30	+4.3	14	30.1	29.0	11	+4.0	14	33.3	32.9	06	+4.0
16	7.3	7.8	43		16	74.0	76.6	30		16	27.9	26.1	15		16	32.3	32.3	07	
18	7.3	7.7	43		18	68.0	72.0	21		18	25.3	23.8	19		18	32.0	31.5	08	
20*	43.0	48.0	43		20	61.5	65.3	20 11		20	24.5	23.0	20		20	31.6	30.6	09	
22	42.5	47.0	42		22	53.3	55.7	19 57		22	28.4	26.6	14		22	30.0	29.2	11	
24	41.3	45.2	39		24	50.4	52.4	52		24	22.0	20.5	24		24	30.4	29.9	10	
26	40.7	44.9	39		26	50.2	52.8	52		26	22.1	21.0	24		26	31.1	30.2	10	
28	44.6	48.2	44		28	51.3	53.1	19 54		28	22.3	21.4	23		28	32.8	31.8	07	
30	46.4	50.0	47	+5.8	30	56.8	59.0	20 02	+4.1	30	21.6	20.6	24	+4.0	30	32.2	31.2	08	+4.0
32	46.2	49.6	47		32	57.0	59.1	02		32	19.5	19.0	27		32	32.3	31.7	07	
34	48.1	51.1	49		34	65.6	67.0	16		34	19.1	18.2	28		34	34.5	34.0	20 04	
36	49.9	53.1	52		36	59.5	61.5	20 06		36	18.3	17.5	30		36	37.5	37.1	19 59	
38	48.9	51.9	51		38	55.5	56.0	19 59		38	17.5	17.0	31		38	42.0	41.8	52	
40	47.3	50.2	48		40	58.3	61.0	20 05		40	17.3	16.2	31		40	40.0	39.2	19 55	
42	47.3	49.9	48		42	66.8	67.1	16		42	18.6	17.8	29		42	36.0	35.8	20 01	
44	47.2	49.5	47		44	73.8	74.6	28	+4.0	44	18.8	18.1	29		44	37.0	36.3	00	
46	46.6	49.0	47	+5.5	46	59.0	60.6	20 06		46	18.6	18.3	28	+4.0	46	36.2	35.6	01	+4.0
48	46.1	48.3	46		48	45.6	46.6	19 44		48	19.0	18.3	28		48	34.0	33.3	05	
50	47.1	49.2	47		50	49.0	50.3	49		50	20.0	18.8	27		50	32.2	31.0	08	
52	46.0	48.5	46		52	44.6	45.5	42		52	22.0	21.6	23		52	33.0	32.1	07	
54	45.7	47.8	45		54	39.7	42.3	36		54	22.2	21.3	23		54	32.9	31.9	07	
56	46.0	47.9	45		56	36.1	36.9	29		56	21.5	21.3	24		56	31.2	30.4	09	
58	45.2	46.8	44		58	36.6	36.6	29		58	20.0	19.6	26		58	33.0	32.2	06	
21 00	41.2	43.3	38	+5.2	23 00	44.0	45.0	41	+4.0	21 00	22.8	22.1	22	+4.0	23 00	34.9	33.9	04	+3.8
02	39.1	41.0	34		02	43.2	43.2	39		02	23.8	23.4	21		02	34.8	33.8	04	
04	38.5	40.1	33		04	41.9	42.5	38		04	22.1	21.8	23		04	34.6	33.2	04	
06	41.3	43.0	38		06	45.0	45.6	43		06	22.0	21.1	24		06	36.9	35.2	01	
08	40.8	42.6	37		08	44.3	44.3	41		08	23.0	23.0	22		08	36.1	34.5	02	
10	42.1	43.7	39		10	50.08		19 50		10	22.0	21.2	24		10	36.2	35.0	02	
12	43.5	45.0	41		12	59.0	59.5	20 04		12	23.8	23.3	21		12	36.0	34.6	02	
14	46.6	47.6	46	+5.0	14	57.5	57.5	20 02	+3.9	14	24.5	24.2	19	+4.0	14	35.4	34.0	03	+3.8
16	47.5	48.3	47		16	52.0	52.6	19 54		16	26.2	26.1	16		16	35.3	33.9	03	
18	49.2	50.1	49		18	60.9	62.3	20 08		18	26.7	26.3	16		18	34.2	32.8	05	
20	48.9	49.0	48		20	60.5	61.1	07		20	28.3	28.1	13		20	33.5	32.0	06	
22	46.0	47.1	45		22	58.0	58.5	03		22	29.9	29.5	11		22	32.9	31.2	07	
24	44.0	45.0	41		24	55.4	56.6	00		24	31.0	30.8	09		24	32.2	30.6	08	
26	44.6	46.0	43		26	57.0	58.4	02		26	31.4	31.1	09		26	32.3	31.0	08	
28	43.4	44.4	40		28	58.4	59.0	04		28	33.0	32.6	06		28	32.0	30.6	08	
30	44.5	45.5	42	+4.8	30	57.8	58.6	03	+3.8	30	33.0	32.8	06	+4.0	30	30.3	29.3	11	+3.8
32	44.0	45.0	41		32	55.8	56.8	00		32	31.8	31.2	08		32	30.3	29.3	11	
34	44.3	45.0	42		34	55.6	56.8	00		34	31.1	31.1	09		34	31.9	31.0	08	
36	43.8	44.6	41		36	56.0	57.0	00		36	31.9	31.8	08		36	33.2	32.6	06	
38	46.1	47.5	45		38	60.8	61.1	07		38	31.8	31.7	08		38	34.5	33.6	04	
40	47.8	48.5	47		40	61.0	62.0	08		40	34.1	34.1	04		40	34.0	32.4	06	
42	48.0	48.5	47		42	59.0	59.6	05		42	35.6	35.2	02		42	32.0	30.5	09	
44	49.4	50.3	50	+4.6	44	61.3	62.1	08		44	36.5	36.0	01	+4.0	44	32.0	30.4	09	+3.6
46	50.9	52.0	52		46	64.5	65.3	13	+3.7	46	35.0	34.3	03		46	35.0	32.5	08	
48	52.8	54.3	56		48	71.8	72.0	24		48	32.4	32.1	07		48	33.0	31.6	07	
50	53.1	54.3	56		50	70.9	71.9	24		50	35.1	35.0	20 03		50	33.1	31.9	06	
52	54.7	55.6	19 58		52	68.2	68.5	19		52	38.2	38.0	19 58		52	33.1	31.5	07	
54	60.1	61.5	20 07		54	70.4	70.6	22		54	38.2	37.6	19 58		54	31.8	30.3	09	
56	57.6	58.0	02		56	68.9	69.9	20		56	34.0	34.0	20 04		56	29.2	27.9	13	
58	58.3	59.3	04		58	65.7	66.3	15		58	34.1	33.7	04		58	27.0	26.0	16	
					24 00	63.3	63.6	11	+3.7						24 00	25.3	24.7	18	+3.5

Correction to local mean time is 0s.
Torsion head at beginning and ending read 252°.
Observer—W. J. P.

Correction to local mean time is —19s. 90° torsion = 18.′05.
Torsion head at 20h 00m read 252° and at 24h 15m read 242°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Sunday, July 16, 1905					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
0 00	Lost				2 00	49.3	51.8	20 43	+2.5
03*	49.0	50.5	20 04	+4.1	02	48.3	50.6	41	
04	49.2	50.8	04		04	48.3	50.6	41	
06	50.2	51.6	05		06	46.2	48.8	38	
08	51.6	53.2	08		08	45.8	47.9	37	
10	53.2	54.6	10		10	46.0	48.0	37	
12	54.7	55.9	12		12	45.8	47.8	37	
14	55.7	56.8	14	+4.0	14	44.9	48.2	36	+2.5
16	54.5	55.2	11		16	50.8	53.0	45	
18	52.8	53.7	09		18	50.1	52.0	43	
20	53.8	54.5	10		20	48.8	51.2	42	
22	53.8	54.2	10		22	50.1	52.1	43	
24	50.6	51.2	05		24	49.6	51.6	42	
26	47.8	48.1	00		26	48.8	51.0	41	
28	48.0	48.6	01		28	49.8	51.4	42	
30	50.0	50.6	04	+4.0	30	50.1	51.6	43	+2.5
32	51.8	52.0	07		32	50.0	51.5	42	
34	54.9	56.2	12		34	51.5	53.0	45	
36	56.8	57.6	15		36	52.8	54.0	47	
38	58.4	58.8	17		38	53.5	54.6	48	
40	59.3	59.5	18		40	54.8	55.8	50	
42	57.5	58.2	16		42	53.8	54.6	48	
44	56.3	56.7	14	+4.0	44	51.6	52.6	45	+2.3
46	56.0	56.4	13		46	50.9	51.9	44	
48	56.0	56.2	13		48	51.0	52.0	44	
50	58.3	58.6	17		50	51.8	52.6	45	
52	59.0	59.4	18		52	53.6	54.8	48	
54	60.0	60.2	19		54	55.7	56.3	51	
56	60.8	60.8	20		56	55.3	56.0	50	
58	61.5	61.7	22		58	56.0	56.4	51	
1 00	61.9	62.0	22	+3.5	3 00	56.8	57.4	52	+2.0
02	61.0	61.0	21		02	57.1	57.5	53	
04	60.1	60.3	19		04	57.0	57.1	52	
06	60.3	60.6	20		06	57.0	57.3	52	
08	60.9	61.1	21		08	56.5	56.5	51	
10	61.0	61.3	21		10	55.6		50	
12	61.5	61.7	21		12	56.8	56.9	52	
14	61.0	61.0	20	+3.1	14	58.2	58.6	20 54	+2.0
16	64.0	64.0	25		16	62.9*a*		21 01	
18	63.1	63.5	24		18	67.4	67.4	08	
20	63.8	64.0	25		20	63.8	64.4	03	
22	64.0	64.3	25		22	62.5	62.9	01	
24	63.0	63.2	24		24	62.4	62.6	01	
26	63.0	63.2	24		26	65.6	66.0	06	
28	64.3	64.6	26		28	69.2	69.6	11	
30	64.6	64.8	26	+2.9	30	72.1	72.8	16	+2.0
32	67.1	67.3	30		32	72.0	72.6	16	
34	63.5	63.9	24		34	71.0	71.9	14	
36	69.4	69.6	34		36	69.8	70.2	12	
38	67.8	68.4	31		38	71.0	71.2	14	
40	67.3	67.6	30		40	72.8	73.1	17	
42	68.2	68.4	32		42	71.3	71.5	14	
44	69.9	70.5	34	+2.5	44	70.0	70.2	12	+2.0
46	71.3	71.6	36		46	70.0	70.0	12	
48	72.1	72.5	38		48	69.0	69.2	11	
50	73.0	73.1	39		50	70.3	71.0	13	
52	73.3	73.6	39		52	75.0	75.1	20	
54	75.0	75.0	42		54	77.3	77.3	23	
56	76.9	76.9	45		56*	53.9	54.5	25	
58*	51.3	51.5	46		58	56.8	57.8	30	

Sunday, July 16, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°
4 00	48.5	47.8	21 31	+3.1	6 00	18.5	15.0	21 20	+7.6
02	46.8	46.6	33		02	35.6	34.7	20 51	
04	44.8	43.9	37		04	36.5	34.8	20 51	
06	41.2	41.0	42		06	30.0	26.0	21 02	
08.2	37.8	36.9	48		08	36.2	33.7	20 52	
10	35.6	34.9	51		10	36.6	33.8	51	
12	36.8	36.5	49		12	38.6	36.6	47	
14	38.4	37.9	47	+4.0	14	40.2	38.0	45	
16	39.2	38.6	46		16	41.5	39.5	43	+8.1
18	40.7	40.0	43		18	41.8	39.9	42	
20	41.0	40.3	43		20	43.0	41.1	40	
22	40.8	39.9	43		22	42.1	40.6	41	
24	44.1	43.2	38		24	43.3	41.8	39	
26	46.0	45.7	34		26	43.8	42.0	39	
28	46.8	46.6	33		28	44.5	42.7	38	
30	45.6	45.0	35	+4.8	30	44.1	42.8	38	+8.5
32	41.8	41.3	41		32	45.2	44.0	36	
34	41.6	40.9	42		34	44.3	42.0	38	
36	42.5	41.3	41		36	45.0	44.0	36	
38	46.8	46.1	34		38	45.0	45.0	35	
40	42.8	42.0	40		40	45.8	44.2	36	
42	38.7	37.4	47		42	45.6	44.8	35	
44	35.7	35.2	51		44	45.5	44.5	35	
46	37.1	36.8	48	+5.0	46	45.7	44.7	35	+8.6
48	37.3	37.0	48		48	45.0	45.0	35	
50	39.0	38.2	45		50	44.8	44.2	36	
52	40.5	40.2	43		52	45.3	44.2	36	
54	40.6	40.1	43		54	44.0	43.0	38	
56	42.1*a*		40		56	42.1	41.2	40	
58	45.5*a*		35		58	42.5	41.8	40	
5 00	47.0	47.5	31	+5.5	7 00	42.5	41.0	40	+8.0
02	46.5	46.0	34		02	42.0	41.5	40	
04	44.2	43.7	37		04	42.4	41.9	40	
06	45.0	44.4	36		06	41.7	41.7	40	
08	43.8	43.1	38		08	41.7	41.4	40	
10	45.8	45.0	35		10	44.0	43.8	37	
12	48.0	47.5	31		12	45.0	44.8	35	
14	50.7	50.0	27	+6.1	14	44.8	44.6	35	
16	52.6*a*		23		16	44.8	44.2	36	+7.7
18	54.0	53.4	22		18	45.0	44.5	35	
20	56.2	55.6	18		20	45.6	45.6	34	
22	56.1	55.5	18		22	46.7	46.0	33	
24	57.2	56.9	16		24	47.0	46.8	32	
26	60.2*a*		11		26	45.8	45.8	34	
28	61.0	60.5	10		28	46.1	45.8	33	+7.8
30	61.5*a*		09	+6.5	30	45.6	45.3	34	
32	63.9	63.1	06		32	46.8	46.3	32	
34	64.3	62.6	21 06		34	45.3	45.0	34	
36	68.5	67.1	20 59		36	46.6	46.0	33	
38	68.9	68.0	58		38	46.8	46.3	32	
40	69.0	68.0	58		40	47.5	47.0	31	
42	68.7	67.6	59		42	48.3	47.9	30	
44	69.9	69.2	56		44	48.4	48.0	30	+7.9
46	74.1	74.0	50	+7.0	46	49.0	48.8	28	
48	68.8*b*		58		48	49.2	49.0	28	
50	70.5*a*		55		50	49.0	48.7	28	
52	78.0*a*		43		52	50.2	50.0	26	
54*	39.0	36.2	48		54	50.2	49.9	27	
56	37.2	34.9	50		56	54.0	53.4	21	
58	42.7	38.2	43		58	52.3	51.5	24	
					8 00	48.5	47.8	30	+8.0

Observer—W. J. P.

Correction to local mean time is —20s. 90° torsion = 18.'70.
Torsion head at 0h 00m read 242° and at 8h 00m read 269°.
Observers—W. J. P. and A. F., who alternated from 4h 00m to 4h 10m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Monday, July 17, 1905					Magnet scale inverted					Tuesday, July 18, 1905					Magnet scale erect				
Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.	Chr'r time	Scale readings		East declination	Temp. C.
	Left	Right				Left	Right				Left	Right				Left	Right		
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00*	51.3	50.5	20 53	+6.1	10 00	66.3	65.9	20 31	+ 8.8	12 00	45.5	46.3	20 12	+8.0	14 00	38.1	39.3	20 01	+9.0
02	52.4	51.8	51		02	65.5	65.5	31		02	46.0	46.5	12		02	35.4	36.0	19 56	
04	52.0	51.3	52		04	65.1	65.0	33		04	45.0	45.3	11		04	32.8	33.6	52	
06	53.4	53.1	50		06	64.7	64.5	34		06	44.3	44.9	10		06	32.9	33.5	52	
08	54.5	54.3	48		08	64.7	64.7	34		08	44.6	44.7	10		08	33.6	34.0	53	
10	54.0	53.9	49		10	64.8	64.2	34		10	44.7	44.7	10		10	33.1	35.0	53	
12	54.2	54.2	48		12	64.5	64.1	34		12	44.2	44.6	10		12	32.9	35.1	53	
14	55.0	55.0	47	+6.1	14	62.8	62.2	37	+10.1	14	44.3	44.6	10	+8.2	14	32.9	35.0	53	
16.5	54.3	54.0	48		16	62.2	62.2	38		16	44.5	44.7	10		16	33.3	35.4	54	+9.0
18	54.6	54.1	48		18	62.1	61.9	38		18	44.3	44.6	10		18	33.3	35.0	54	
20	54.8	54.2	48		20	61.9	61.5	38		20	43.3	43.6	08		20	31.6	33.0	51	
22	54.5	54.0	48		22	63.5*a*		36		22	42.3	42.5	06		22.2	29.9	32.1	49	
24	55.1	54.6	48		24	65.0*a*		33		24	41.8	42.1	06		24	30.8	32.4	49	
26	54.6	54.3	48		26	68.3	68.0	28		26	41.5	41.9	05		26	28.5	30.9	47	
28	56.2	55.5	46		28	67.5	67.1	30		28	40.0	40.5	03		28	25.6	27.6	42	
30	56.1	55.2	46	+6.5	30	66.6	66.3	31	+11.0	30	39.3	39.8	02	+8.7	30	25.5	26.3	41	+9.0
32	56.7	56.1	45		32	67.2	67.1	30		32	38.8	39.3	20 01		32	23.3	25.0	38	
34	56.0	55.8	46		34	66.6	66.2	31		34	37.5	38.4	19 59		34	22.0	23.8	36	
36	54.4	54.2	48		36	66.8	66.8	31		36	37.5	38.1	19 59		36	19.8	21.5	32	
38	55.5	54.9	47		38	67.1	66.7	31		38	39.5	40.5	20 03		38	18.2	19.8	30	
40	56.2	55.8	46		40	68.3	68.0	29		40	39.6	40.4	03		40	15.3	17.3	26	
42	57.1	56.7	44		42	68.0	67.8	29		42	37.6	38.6	00		42	14.5	15.9	24	
44	56.7	56.1	45	+6.8	44	66.8	66.5	31	+11.0	44	38.0	39.0	00		44	13.5	14.9	22	+8.9
46	57.5	57.3	44		46	67.3	66.8	30		46	38.1	39.2	20 00	+8.7	46	12.6	14.0	21	
48	58.8	58.6	42		48	67.8	67.3	30		48	36.3	37.5	19 58		48	13.0	14.0	21	
50	59.3	59.0	41		50	64.9	64.6	34		50	35.0	36.0	56		50	13.5	14.5	22	
52	59.2	59.2	41		52	64.6	64.4	34		52	37.5	38.3	19 59		52	12.8	13.5	20	
54	59.1	59.0	41		54	67.4	67.1	30		54	38.8	40.0	20 02		54	13.3	13.6	21	
56	59.3	58.9	41		56	66.6	66.2	32		56	37.0	38.0	19 59		56	14.2	14.2	22	
58	60.0	59.4	40	+7.0	58	65.6	65.1	33		58	37.8	39.1	20 00		58	13.0	13.3	20	
9 00	59.3	58.9	41		11 00	64.5	64.2	35	+11.0	13 00	38.5	39.2	20 01	+8.9	15 00	14.0	14.0	22	+8.6
02	60.0	59.2	41		02	68.1	67.9	29		02	37.1	38.3	19 59		02	12.0	12.2	19	
04	60.6	59.9	40		04	68.3	68.3	29		04	37.2	38.0	19 59		04	16.0	16.2	25	
06	59.2	58.4	42		06	68.2	68.1	29		06	37.8	38.5	20 00		06	16.6	17.0	26	
08	61.1	60.6	39		08	69.3	68.9	28		08	37.0	37.8	19 59		08	17.0	17.8	27	
10	60.6	60.2	40		10	71.4	71.2	24		10	35.5	36.3	56		10	18.5	18.8	29	
12	60.6	59.8	40		12	72.9	72.5	22		12	34.4	35.2	55		12	17.8	18.2	28	
14	60.3	60.0	40	+7.0	14	71.6	69.6	25		14	35.3	36.3	56	+9.0	14	17.8	18.2	28	+8.6
16	64.8	64.3	33		16	71.8	71.4	24	+11.0	16	36.4	37.0	58		16	16.6	16.8	26	
18	63.0	62.6	36		18	76.2	75.8	17		18	34.3	35.0	54		18	12.9	13.2	20	
20	64.1	63.7	34		20	73.8	72.6	21		20	33.9	34.5	54		20	13.0	13.9	21	
22	62.3	62.0	37		22	69.8	69.0	27		22	34.3	35.0	54		22	15.8	16.5	25	
24	61.6	61.1	38		24	68.6	67.2	30		24	34.3	35.1	54		24	18.0	18.5	28	
26	59.6	59.1	41		26	71.6	70.3	25		26	32.1	33.0	51		26	18.4	18.8	29	
28	60.2	59.8	40		28	73.0	71.8	23		28	33.9	34.7	54		28	17.9	18.5	28	
30	62.3	61.7	37	+6.8	30	72.1	71.2	24	+11.1	30	35.2	35.8	56	+9.0	30	15.8	15.8	25	+8.6
32	62.3	62.0	37		32	66.8	65.4	33		32	34.5	34.9	54		32	21.2	22.0	34	
34	63.2	62.8	36		34	71.8	71.2	24		34	31.5	32.1	50		34	25.7	26.3	31	
36	66.3	65.6	31		36	77.0	75.8	16		36	32.1	32.2	50		36	26.5	27.8	42	
38	67.0	67.0	29		38	77.0	75.6	17		38	32.8	33.8	52		38	26.3	26.8	42	
40	68.1	67.6	28		40	78.0	77.3	15		40	34.0	34.2	54		40	22.9	23.0	36	
42	69.0	68.6	27		42*	53.3	51.5	10		42	34.8	35.9	55		42	29.0	29.1	46	
44	70.6	70.5	24	+7.1	44	47.0	46.2	19	+11.0	44	34.8	35.8	55	+9.1	44	30.2	30.6	48	+8.8
46	70.7	70.4	24		46	46.6	45.3	20		46	34.2	35.3	54		46	30.5	31.8	49	
48	69.9	69.6	25		48	44.0	42.5	25		48	36.4	37.1	19 58		48	27.6	28.4	44	
50	70.6	70.4	24		50	46.0	45.0	21		50	37.8	38.6	20 00		50	27.1	27.5	43	
52	70.8	70.5	24		52	43.5	42.3	25		52	38.3	39.7	01		52	27.0	27.0	42	
54	69.3	69.3	26		54	42.0	41.0	28		54	39.3	40.4	07		54	28.3	29.7	46	
56	68.0	67.8	28		56	39.0	38.2	32		56	39.8	40.2	03		56	29.5	29.9	47	
58	68.1	67.9	27		58	38.6	38.2	32		58	39.0	40.0	02		58	28.9	30.6	47	
					12 00	41.9	40.2	28	+10.6						16 00	32.8	34.5	53	+8.8

Correction to local mean time is — 22.5s. 90° torsion = 18.′02.
Torsion head at 8h 00m read 272° and at 12h 59m read 250°.
Observer—W. J. P.

Correction to local mean time is about — 15s. 90° torsion = 17.′40.
Torsion head at 12h 00m read 246° and at 16h 25m read 255°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 19, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination ° ′	Temp. C.
h m	d	d		
0 00*	62.3	61.9	19 46	+5.0
02	60.2	58.5	50	
04	59.3	58.4	51	
06	54.8	52.0	59	
08	55.4	52.3	19 59	
10	52.8	48.2	20 04	
12	47.8	43.6	11	
14	41.8	37.2	21	
16	40.6	36.7	22	+5.0
18	43.2	39.9	18	
20	44.7	41.5	15	
22	44.9	41.2	16	
24	42.9	39.1	19	
26	38.3	35.5	25	
28	37.8	35.1	26	
30	40.0	37.1	23	+5.6
32	41.5	38.2	20	
34.5	40.5	37.8	22	
36	40.5	37.8	22	
38	41.6	37.5	21	
40	40.9	39.3	20	
42	37.7	30.8	20 29	
44*	44.4	42.6	21 09	
46	38.0	36.7	18	+4.2
48	36.9	31.5	23	
50	27.1	24.0	21 37	
52	11.0	10.5	22 00	
54	24.0	18.1	21 44	
56*	54.7	45.0	22 05	
58	78.0*a*		21 21	
1 00*	41.5	34.0	21 09	+4.2
02	53.0	47.5	20 49	
04	48.5	42.0	57	
06	50.8	46.0	52	
08	50.9	45.7	52	
10	50.1	45.1	53	
12	49.1	45.0	20 54	
14	45.2	41.0	21 00	
16	42.2	37.5	05	+4.0
18	38.8	35.1	10	
20	36.5	33.0	14	
22	39.8	36.9	21 08	
24	47.8	44.3	20 56	
26	48.9	45.8	20 54	
28	45.3	42.0	21 00	+3.7
30	42.3	39.2	04	
32	39.8	37.4	07	
34	40.5	37.5	07	
36	42.8	40.2	03	
38	44.6	42.1	21 00	
40	45.7	44.8	20 57	
42	45.1	43.5	58	
44	46.0	43.4	20 58	
46	44.2	42.5	21 01	+3.7
48	43.5	42.0	00	
50	44.1	42.7	21 00	
52	44.9	43.1	20 59	
54	44.6	43.1	20 59	
56	43.5	42.3	21 01	
58	43.8	42.6	00	
2 00	45.5	44.5	20 57	+3.9
02	44.9	44.2	20 58	
04	42.7	42.0	21 02	
06	41.8	41.1	03	
08	41.7	41.3	03	
10	41.3	41.3	03	
12	40.4*b*		05	
14	38.2*b*		08	+4.1
16	36.1	35.5	12	
18	34.0	33.8	15	
20	34.1	34.1	14	
22	35.3	35.1	13	
24	37.0	36.5	10	
26	37.7	37.2	09	
28	38.2	38.0	08	
30	40.4	40.0	05	+4.0
32	42.2	41.9	21 02	
34	44.4	43.9	20 59	
36	44.0	43.5	20 59	
38	42.1	42.1	21 02	
40	42.5	42.1	02	
42	43.5	43.2	00	
44	40.5	40.1	05	
46	39.6	39.2	06	+3.5
48	40.0	39.8	05	
50	40.8	40.5	04	
52	42.0	41.6	02	
54	42.7	42.2	01	
56	41.6	41.0	03	
58	39.9	39.1	06	
3 00	38.1	38.1	08	+3.0
02	37.5	37.3	09	
04	37.0	36.8	10	
06	37.1	36.6	10	
08	34.5	33.9	14	
10	31.4	30.7	19	
12	30.8	30.1	20	
14	29.5	28.6	22	+2.8
16	26.3	25.8	27	
18	27.6	26.7	25	
20	30.5	30.1	20	
22	31.9	31.6	18	
24	31.4	30.6	20	
26	32.8	31.8	17	
28	35.2	34.5	13	
30	34.5	33.8	14	+2.6
32	34.9	34.0	14	
34	37.0	36.5	10	
36	38.0	37.4	09	
38	38.2	37.8	08	
40	38.5	37.8	08	
42	42.8*a*		21 01	
44	46.3	45.8	20 56	
46	46.4	45.9	56	+2.6
48	46.0	45.2	56	
50	45.5	44.6	57	
52	46.7	45.8	55	
54	48.8	47.7	52	
56	48.0	47.1	53	
58	47.1	46.5	54	

Observer—A. F.

Wednesday, July 19, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination ° ′	Temp. C.
h m	d	d		
4 00	48.0	48.0	20 52	+2.4
02	50.2	50.2	49	
04	50.2	50.0	49	
06	52.8	52.5	45	
08	52.8	52.3	46	
10	53.0	52.5	45	
12	53.5	53.0	44	
14	52.4	52.0	46	
16	53.7	53.0	44	+2.3
18	59.5	59.5	34	
20	52.2	51.2	47	
22	46.2	45.3	56	
24	44.1	43.3	59	
26	47.2	46.4	54	
28	50.3	49.8	50	
30	50.7	49.9	49	+2.2
32	51.5	50.7	48	
34	51.6	50.9	48	
36	52.7	51.8	46	
38	53.0	52.6	45	
40	50.3	49.7	50	
42	49.0	48.4	52	
44	47.3	46.7	54	
46	49.1	48.0	52	+2.2
48	51.8	51.1	47	
50	54.0	53.5	44	
52	57.5	56.6	38	
54	57.2	57.2	38	
56	55.5*b*		41	
58	53.7	53.3	44	
5 00	54.8	54.5	42	+2.2
02	53.8	53.1	44	
04	50.0	49.2	50	
06	49.8	49.2	50	
08	50.3	50.0	49	
10	49.5*b*		50	
12	50.5	50.0	49	
14	51.1	50.8	48	+2.4
16	52.5	51.7	46	
18	52.8	52.1	46	
20	52.3	51.8	46	
22.3	52.8	52.0	46	
24	55.0	54.8	42	
26	53.4	53.0	44	
28	51.2*a*		48	
30	54.7	53.5	43	+2.9
32	51.5	51.0	48	
34	54.6	53.8	43	
36	54.5	53.9	43	
38	55.3	54.6	42	
40	51.9	51.2	47	
42	52.4	51.2	47	
44	50.0	49.9	50	
46	52.3	51.7	46	+3.0
48	53.1	52.5	45	
50	52.7	52.0	46	
52	52.8	52.1	46	
54	53.0	52.5	45	
56	53.6	52.8	44	
58	53.0	52.6	45	
6 00	51.5	50.8	20 48	
02	51.2	51.0	48	
04	52.0	51.5	47	
06	53.1	52.0	46	
08	52.7	51.4	46	
10	52.1	51.2	47	+3.0
12	51.6	50.3	48	
14	51.2	50.2	48	
16	52.6	51.0	47	+3.0
18	53.5	53.0	44	
20	50.0	49.7	50	
22	49.1	48.5	51	
24	53.0	52.3	45	
26	53.0	52.5	45	
28	52.0	51.2	47	
30	53.2	52.6	45	+3.1
32	52.6	51.9	46	
34	53.1	52.3	45	
36	53.6	52.5	45	
38	53.0	52.0	46	
40	52.0	51.3	47	
42	51.0	49.4	49	
44	54.3	53.0	44	+3.0
46	55.9	54.8	41	
48	56.1	55.5	40	
50	59.1	58.7	36	
52	59.1	58.3	36	
54	56.3	55.6	40	
56	53.3	52.5	45	
58	48.5	48.2	52	
7 00	50.9	49.9	49	+3.0
02	59.0	58.3	36	
04	57.0	57.0	38	
06	57.6*a*		38	
08	60.4	60.0	34	
10	54.2*b*		43	
12	51.6	50.9	48	
14	48.5*b*		52	+3.0
16	47.0	46.8	54	
18	50.0*a*		50	
20	56.0	55.2	41	
22	55.2	54.5	42	
24	56.1	55.5	40	
26	53.2	52.0	45	
28	49.3	48.7	51	
30	52.3	51.6	46	+3.1
32	50.8	49.8	49	
34	51.6	50.4	48	
36	50.6	49.9	49	
38	50.5	50.2	49	
40	52.8	52.2	46	
42	51.6	51.0	47	
44	51.5	50.6	48	
46	53.2	52.2	45	+3.1
48	50.8	51.1	48	
50	54.2	52.6	44	
52	52.5	50.5	47	
54	53.2	52.2	45	
56	50.2	49.6	50	
58	47.2	45.6	55	

Observers—A. F. and W. J. P., who alternated from 5h 58m to 6h 08m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 19, 1905					Magnet scale inverted					Wednesday, July 19, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	43.2	41.7	21 01	+3.0	10 00	61.6	61.3	20 32	+5.0	12 00	40.0	38.8	20 06	+5.3	14 00	26.8	26.6	20 25	+5.7
02	38.0	37.1	09		02	60.1	60.0	34		02	39.4	38.0	06		02	25.8	25.5	27	
04	41.2	40.6	04		04	64.0	62.8	28		04	37.6	35.8	10		04	24.7	24.3	29	
06	36.3	34.3	12		06	64.6	63.3	28		06	38.5	37.0	08		06	24.3	24.0	29	
08	33.8	31.6	17		08	63.5	62.5	29		08	37.8	36.4	09		08	25.3	25.1	28	
10	40.4	39.6	05		10	64.8	63.8	27		10	36.4	34.2	12		10	25.0	24.8	28	
12	34.9	34.0	14		12	63.5	62.8	29		12	35.6	34.2	12		12	23.8	23.4	30	
14	37.9	37.0	09	+2.7	14	64.3	63.4	28		14	34.0	32.2	15	+5.5	14	24.0	23.7	30	+5.8
16	34.0	33.2	15		16	65.0	63.8	27	+5.0	16	34.0	33.2	15		16	24.9	24.9	28	
18	38.1	37.6	21 09		18	65.8	64.8	25		18	34.8	33.2	14		18	26.1	25.5	27	
20	47.1	45.8	20 55		20	65.1	64.0	27		20	37.0	36.0	10		20	27.1	26.9	25	
22	45.0	42.8	59		22	65.1	64.1	27		22	34.0	33.2	14		22	27.3*a*		24	
24	47.6	45.1	55		24	66.9	65.6	24		24	34.8	33.1	14		24	29.6	29.3	21	
26	53.2	49.8	47		26	67.5	66.0	23		26	34.6	33.8	14		26	30.0	29.8	20	
28	52.0	49.0	49		28	65.1	63.9	27		28	35.4	34.2	13		28	30.9	30.5	19	
30	56.0	52.3	43	+2.6	30	65.9	64.1	26	+5.0	30	32.6	31.3	17	+5.5	30	31.0	30.7	19	+5.9
32	59.0	56.0	38		32	67.8	65.8	23		32	33.5	32.6	16		32	32.9	32.5	16	
34	59.0	55.8	38		34	68.2	66.6	22		34	35.0	33.6	13		34	33.7	33.4	15	
36	62.1	59.6	32		36	66.9	64.9	24		36	35.1	33.8	13		36	33.1	32.7	16	
38	63.2	60.9	31		38	66.0	64.0	26		38	34.0	33.9	13		38	32.0	31.6	17	
40	65.2	62.2	28		40	67.5	66.1	23		40	36.7	35.2	11		40	30.1	29.7	20	
42	60.1	57.9	35		42	64.0	63.0	28		42	35.4	33.8	13		42	28.4	28.0	23	
44	63.5	61.5	30	+3.0	44	63.6	62.5	29	+5.0	44	37.8	36.8	09		44	28.0	27.7	24	+6.0
46	62.2	60.0	32		46	66.0	65.0	25		46	38.0	36.4	09	+5.3	46	27.9	27.5	24	
48	65.6	63.4	27		48	66.8	66.0	24		48	35.0	33.5	14		48	27.7	27.4	24	
50	64.0	63.1	27		50	67.8	66.8	22		50	35.7	34.2	12		50	28.7	28.4	22	
52	62.8	61.1	31		52	67.5	67.0	22		52	35.2	34.0	13		52	30.2	29.0	20	
54	62.1	60.1	32		54	68.0*a*		21		54	33.2	32.0	16		54	32.8	31.8	17	
56	56.6	55.1	40		56	64.3	63.8	28		56	35.8	34.3	12		56	32.2	32.0	17	
58	56.2	54.8	41		58	69.6	69.1	19		58	28.8	28.0	23		58	32.1	31.9	17	
9 00	50.6	49.8	49	+4.0	11 00	64.0	63.6	28	+5.1	13 00	26.5	25.8	26	+5.4	15 00	30.8	30.6	19	+5.8
02	51.5	50.3	48		02	68.5	67.0	22		02	25.4	24.4	28		02	30.2	29.9	20	
04	51.0	48.3	20 50		04	66.9	66.0	24		04	23.3	22.8	31		04	30.1	29.9	20	
06	44.8	42.4	21 00		06	66.8	66.1	24		06	22.2	21.8	33		06	30.2	30.0	20	
08	48.2	46.2	20 54		08	66.6	65.5	24		08	21.2	20.3	35		08	31.0	30.7	19	
10	47.5	45.5	55		10	67.9	66.5	22		10	22.3	21.0	33		10	31.4	31.0	18	
12	47.2	45.6	55		12	69.6	69.0	19		12	24.8	23.5	20		12	31.2	30.8	19	
14	45.0	43.3	20 59	+4.5	14	72.0	71.4	15	+5.4	14	25.5	24.3	28		14	30.8	30.6	19	+5.7
16	43.8	42.0	21 01		16	70.6	70.1	18		16	25.7	24.6	28	+5.5	16	29.8	29.6	21	
18	47.6	45.8	20 55		18	69.1	68.4	20		18	25.1	24.3	28		18	30.1	29.9	20	
20	49.6	47.2	52		20	69.0	67.6	21		20	25.2	24.4	28		20	30.2	30.0	20	
22	52.8	51.2	46		22	69.0	67.6	20		22	26.0	25.4	27		22	31.6	31.3	18	
24	54.5	52.8	44		24	71.8	70.0	17		24	28.9	27.8	23		24	32.5	32.1	17	
26	54.0	53.5	44		26	71.0	68.9	18		26	31.0	30.6	18		26	32.5	32.2	16	
28	58.0	57.8	37		28	68.2	66.9	22		28	34.8	33.5	14		28	32.9	32.7	16	
30	60.0	59.1	34	+4.6	30	67.0	65.6	24	+5.4	30	34.0	34.0	13	+5.5	30	33.3	33.1	15	+5.6
32	61.2	60.4	32		32	66.6	65.2	24		32	37.0	37.0	08		32	32.8	32.3	16	
34	62.0	61.8	31		34	67.2	66.2	23		34	38.1	37.5	08		34	31.8	31.2	18	
36	64.8	64.0	27		36	68.6	68.0	21		36	39.3	38.6	06		36	32.3	32.1	17	
38	64.6	63.8	27		38	70.6	70.0	18		38	39.9	38.9	05		38	32.9	32.6	16	
40	67.0	66.8	23		40	74.1	73.5	12		40	38.9	38.6	07		40	32.3	32.0	17	
42	63.2	62.8	29		42	75.0	74.3	11		42	37.5	36.7	09		42	32.6	32.2	16	
44	61.0	60.5	33	+5.0	44	79.0	79.0	04	+5.2	44	35.5	34.8	12		44	33.7	33.3	15	+5.5
46	63.6	62.1	29		46*	41.0	39.8	04		46	33.5	33.0	15	+5.5	46	35.5	35.1	12	
48	60.3	60.2	34		48	41.2	40.0	04		48	33.6	33.0	15		48	37.8	37.1	00	
50	59.3	59.2	35		50	42.0	40.6	02		50	32.5	31.9	17		50	39.6	39.0	06	
52	58.0	57.9	37		52.5	43.3	42.0	00		52	30.5	30.1	20		52	40.5	40.0	20 04	
54	63.0	62.6	29		54	42.9	41.5	01		54	28.3*b*		23		54	45.3*a*		19 56	
56	64.2	63.2	28		56	42.4	40.8	02		56	26.8	26.8	25		56	49.5	49.1	50	
58.3	61.2	60.8	32		58	43.0	41.6	01		58	26.5	26.3	26		58	51.9	50.8	47	

Observer—W. J. P.

Observers—W. J. P. and A. F., who alternated from 12h 28m to 12h 38m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 19, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	51.8	51.5	19 46	+5.5
02	52.3	52.3	45	
04	52.0	52.4	45	
06	52.5	52.1	45	
08	53.4	52.9	44	
10	54.0	53.8	43	
12	53.2	53.0	44	
14	52.3	52.3	45	
16	48.9	48.9	50	+5.4
18	47.6	47.3	53	
20	47.0	46.8	54	
22	45.9	45.5	56	
24	45.1	44.8	57	
26	44.1	43.7	19 58	
28	43.4	43.0	20 00	
30	44.5	44.0	19 58	+5.3
32	44.4	44.1	19 58	
34	42.3*b*		20 01	
36	39.6	39.0	06	
38	35.4*b*		12	
40	34.2	33.9	14	
42	36.0	35.8	11	
44	34.8	34.5	13	+5.1
46	33.7	33.5	15	
48	33.5	33.2	15	
50	35.5	35.2	12	
52	37.3	37.0	09	
54	38.0	37.7	08	
56	36.5	36.1	10	
58	34.5	34.1	13	
17 00	33.7	33.2	15	+5.0
02	34.0	33.8	14	
04	34.8	34.2	13	
06	34.5	34.1	13	
08	33.5	33.0	15	
10	32.3	32.0	17	
12	32.9	32.5	16	
14	32.9	32.4	16	+5.0
16	32.3	32.1	17	
18	32.1	32.1	17	
20	33.0	33.0	16	
22	35.0	34.5	12	
24	36.0	35.6	11	
26	37.0	36.7	09	
28	37.2	36.9	09	
30	38.2	37.8	08	+5.0
32	38.8	38.2	07	
34	38.1	37.8	08	
36	38.0	37.4	08	
38	38.1	37.6	08	
40	38.5	38.0	07	
42	39.5	39.0	06	
44	40.7	40.0	04	+5.0
46	40.3	39.5	05	
48	39.2	38.6	06	
50	37.3	36.9	09	
52	36.0	35.3	11	
54	35.8	35.1	12	
56	36.6	35.6	10	
58	36.9	36.2	10	+5.2
18 00	36.6	36.5	20 10	
02	36.2	35.9	11	
04	35.8	35.2	12	
06	33.9	33.1	15	
08	33.2	32.5	10	
10	33.6	33.2	15	
12	35.1	34.5	13	
14	35.9	35.2	12	+5.8
16	35.1	34.8	12	
18	34.6	34.0	13	
20	34.6	33.8	14	
22	33.6	33.0	15	
24	32.2	32.0	17	
26	31.0	30.3	19	
28	30.8	30.1	20	
30	30.5	30.0	20	+5.6
32	30.5	30.0	20	
34	30.0	29.5	21	
36	29.4	28.5	22	
38	29.1	28.0	22	
40	28.8	28.3	22	
42	29.2	28.7	22	
44	29.8	29.1	21	+5.5
46	30.5	29.8	20	
48	31.0	30.5	19	
50	31.3	31.0	18	
52	31.2	31.0	18	
54	31.6	31.3	18	
56	31.4	31.3	18	
58	31.2	30.8	19	
19 00	31.6	31.2	18	+5.7
02	32.3	32.0	17	
04	33.1	32.6	16	
06	33.6	33.2	15	
08	33.8	33.3	15	
10	33.3	33.0	15	
12	32.8	32.3	16	
14	32.3	32.0	17	+5.9
16	32.2	32.0	17	
18	32.2	31.9	17	
20	32.1	31.8	17	
22	32.2	31.8	17	
24	32.5	31.9	17	
26	33.3	32.2	16	
28	32.8	32.4	16	
30	32.9	32.5	16	+5.6
32	33.2	33.0	15	
34	34.1	33.8	14	
36	34.2	33.8	14	
38	33.8	33.5	15	
40	33.0	32.8	16	
42	31.9	31.9	17	
44	31.3	31.3	18	
46	32.3	32.1	17	+5.3
48	34.0	33.8	14	
50	35.3	35.0	12	
52	36.7	36.6	10	
54	37.3	37.1	09	
56	37.2	37.0	09	
58	37.5	37.3	09	

Wednesday, July 19, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	37.3	37.3	20 09	+5.2
02	37.5	37.3	09	
04	37.5	37.3	09	
06	37.6	37.4	08	
08	38.0	37.8	08	
10	38.0	37.8	08	
12	37.8	37.6	08	
14	37.2	37.0	09	+5.1
16	37.0	36.8	09	
18	37.2	36.6	09	
20	37.6	37.2	09	
22	38.8	38.0	07	
24	38.0	37.5	08	
26	37.7	37.3	08	
28	37.5	37.3	08	
30	37.5	37.2	09	+5.0
32	37.5	37.2	09	
34	38.5	37.6	08	
36	38.3	38.0	07	
38	38.2	38.0	07	
40	38.4	37.7	08	
42	37.8	37.1	08	
44	37.3	37.0	09	
46	37.1	36.7	09	
48	36.9	36.5	10	
50	36.6	36.0	10	
52	36.1	35.8	11	
54	35.9	35.6	11	
56	35.9	36.0	11	
58	35.6	36.0	11	
21 00	36.1	35.6	11	+4.8
02	35.6	35.0	12	
04	35.5	35.0	12	
06	35.5	35.0	12	
08	35.6	35.2	12	
10	36.2	35.8	11	
12	37.2	36.8	09	
14	38.3	37.9	07	+4.3
16	39.1	38.6	06	
18	38.6	38.2	07	
20	37.4	37.2	09	
22	36.7	36.4	10	
24	37.6	37.2	09	
26	38.8	38.3	07	
28	39.0	38.6	06	
30	39.3	38.8	06	+4.1
32	38.5	38.2	07	
34	37.7	37.1	09	
36	37.2	36.6	09	
38	37.5	36.8	09	
40	38.6	37.8	07	
42	40.0	39.2	05	
44	41.0	40.0	04	+4.0
46	40.2	39.3	05	
48	39.9	39.0	05	
50	39.0	38.3	07	
52	38.9	38.1	07	
54	37.8	37.2	08	
56	36.8	36.2	10	
58	35.6	35.2	12	
22 00	35.2	34.5	20 13	+4.0
02	34.2	33.4	14	
04	33.2	33.0	15	
06	33.0	32.5	16	
08	33.2	32.8	16	
10	32.6	32.3	16	
12	33.2	32.9	16	
14	33.3	33.2	15	+4.0
16	30.6	30.0	20	
18	27.2	26.5	25	
20	24.5	24.0	29	
22	24.0	23.7	30	
24	24.3	24.1	29	
26	23.7	23.5	30	
28	22.8	22.8	31	
30	22.8	22.7	32	+4.0
32	22.6	22.6	32	
34	21.6	21.5	34	
36	21.0	20.6	35	
38	19.8	19.5	37	
40	19.5	19.1	37	
42	19.8	18.5	37	
44	16.3	16.1	42	+4.0
46	15.8	15.3	43	
48	14.5	14.1	45	
50	13.3	12.6	47	
52	12.5	12.0	48	
54	12.2	12.0	48	
56	12.5	12.2	48	
58	13.2	13.0	47	
23 00	14.5	14.1	45	+3.9
02	15.8	15.2	43	
04	17.5	17.2	40	
06	19.1	18.9	37	
08	21.0	20.2	35	
10	22.0	21.6	33	
12	22.1	21.9	33	
14	21.6	21.0	34	+3.8
16	21.7	21.3	34	
18	23.2	22.8	31	
20	22.5	22.2	32	
22	21.5	21.3	34	
24	19.6	18.8	37	
26	16.5	16.3	42	
28	15.0	13.8	45	
30	13.4	12.5	47	+3.6
32	11.6	12.3	49	
34	11.1	10.6	50	
36	11.6	11.0	50	
38	11.3	11.0	50	
40	10.3	9.6	52	
42	8.2	7.8	55	
44*2	40.8	38.6	57	+3.4
46	39.6	37.6	58	
48	39.2	37.6	59	
50	39.1	37.5	59	
52	39.0	37.0	59	
54	39.6	38.0	58	
56	39.5	37.6	59	
58	39.1	37.6	20 59	
24 00	37.7	35.7	21 01	+3.4

Observers—A. F. and W. J. P., who alternated from 17h 48m to 17h 56m.

Correction to local mean time is — 14s.

Torsion head at oh oom read 255° and at 24h 20m read the same.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Thursday, July 20, 1905					Magnet scale erect					Friday, July 21, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
16 00	48.9	49.6	20 06	+7.5	18 00	50.3	50.3	20 08	+6.4	20 00	53.5	50.7	20 20	+2.0	22 00	63.3	60.8	20 07	+1.5
02	49.2	50.0	07		02	50.0	50.0	08		02	53.2	50.3	20		02	63.1	61.5	06	
04	50.0	50.4	08		04	49.6	49.8	07		04	52.9	50.5	20		04	64.8	62.6	04	
06	50.8	51.3	09		06	49.1	49.3	06		06	50.6	48.3	24		06	62.3	59.8	09	
08	50.5	51.3	09		08	48.6	48.8	06		08	49.2	47.0	26		08	59.5	57.5	12	
10	Lost				10	49.0	49.0	06		10	47.0	45.0	29		10	62.3	59.9	08	
12	50.2	50.8	08		12	49.0	49.1	06		12	45.1	43.1	33		12	59.9	58.9	11	
14	49.9	50.6	08		14	49.3	49.7	07	+6.1	14	46.1	44.4	31	+1.9	14	61.0	59.5	10	+1.5
16	49.3	50.2	07	+7.5	16	50.1	50.7	08		16	49.0	48.0	26		16	59.1	58.0	13	
18	48.8	49.3	06		18	51.1	51.9	10		18	55.1	54.1	16		18	60.0	59.5	11	
20	48.9	49.2	06		20	52.3	53.0	12		20	56.8	55.6	14		20	58.6	58.1	13	
22	48.9	49.3	06		22	52.2	53.0	12		22	55.6	54.3	16		22	58.4	57.5	14	
24	49.7	50.1	08		24	53.0	53.6	13		24	51.1	50.3	22		24	59.1	58.9	12	
26	50.3	50.9	09		26	53.6	54.0	14		26	52.6	51.7	20		26	59.3	59.1	12	
28	50.3	50.6	08		28	54.0	54.5	14		28	54.1	53.0	18		28	59.1	58.9	12	
30	50.1	50.5	08	+7.5	30	54.1	54.8	15	+5.8	30	56.6	55.6	14	+1.6	30	57.8	57.2	15	+1.5
32	50.3	50.5	08		32	53.9	54.1	14		32	56.9	56.0	14		32	54.5	53.8	20	
34	51.0	51.1	09		34	53.3	53.7	13		34	55.8	55.0	15		34	57.2	56.6	16	
36	54.0*a*		14		36	53.5	53.8	13		36	55.1	54.3	16		36	56.2	55.6	17	
38	55.1	55.3	16		38	53.4	53.8	13		38	55.0	54.3	17		38	60.0	60.0	11	
40	55.4	55.8	16		40	53.0	53.3	13		40	55.0	54.5	17		40	59.1	58.8	13	
42	54.3	54.5	15		42	52.6	53.0	12		42	57.0	55.9	14		42	61.8	61.0	09	
44	52.5	52.8	12	+7.0	44	52.2	52.8	12	+5.5	44	57.6	56.6	13	+1.6	44	59.1	59.0	12	+1.5
46	51.3	51.7	10		46	51.5	52.0	10		46	58.5	57.1	12		46	60.3	60.3	10	
48	51.1	51.6	10		48	51.7	52.1	11		48	57.3	56.5	13		48	60.0	60.0	11	
50	51.8	52.1	11		50	52.2	52.8	12		50	58.7	57.3	12		50	61.2	61.2	09	
52	51.8	52.0	11		52	52.3	53.0	12		52	57.8	56.6	13		52	61.3	61.1	09	
54	52.3	52.5	12		54	52.5	53.0	12		54	56.8	55.2	15		54	60.0	59.3	12	
56	52.7	52.9	12		56	52.0	52.6	11		56	56.2	54.5	16		56	60.2	59.8	11	
58	54.0	54.1	14		58	52.0	52.8	12		58	56.0	54.6	16		58	59.2	58.8	13	
17 00	55.0	55.1	16	+6.8	19 00	52.0	52.9	12	+5.1	21 00	55.0	52.9	18		23 00	59.1	58.9	13	+1.6
02	55.6	55.8	17		02	52.5	53.5	12		02	56.0	53.3	17	+1.6	02	57.8	57.6	15	
04	56.0	56.2	17		04.2	54.2	55.0	15		04	54.6	51.8	20		04	56.6	56.3	17	
06	55.4	56.0	17		06	54.9	56.0	16		06	54.8	52.3	19		06	56.7	56.3	17	
08	54.8	55.2	16		08	55.5	56.0	17		08	53.1	51.1	21		08	58.6	58.3	14	
10	54.3	54.6	15		10	55.3	56.3	17		10	53.5	51.3	21		10	53.9	53.9	21	
12	54.8	54.8	15		12	51.1	55.9	13		12	53.9	51.7	20		12	Overl'k'd			
14	54.3	54.6	15	+6.7	14	54.7	55.5	16	+5.1	14	54.0	52.3	20	+1.6	14	57.2	57.1	16	+1.7
16	54.0	54.2	14		16	53.1	53.7	13		16	56.1	54.3	17		16	56.0*a*		18	
18	53.4	54.0	14		18	53.1	53.6	13		18	57.8	55.9	14		18	58.2*a*		15	
20	53.2	53.8	13		20	52.0	52.4	11		20	55.6	53.1	18		20	56.8	56.4	17	
22	53.5	53.8	13		22	53.0	53.2	13		22	57.0	53.7	16		22	56.6	56.6	17	
24	53.2	53.8	13		24	52.3	52.8	12		24	58.0	55.0	15		24	59.6	59.3	13	
26	53.5	54.0	13		26	52.1	52.6	11		26	60.3	56.9	12		26	58.4	58.4	14	
28	53.0	53.6	13		28	50.9	51.3	10		28	58.5	54.5	15		28	58.7	58.6	14	
30	53.3	54.1	13	+6.6	30	50.3	50.9	09	+5.0	30	58.2	55.5	15	+1.5	30	59.9	59.5	12	+1.8
32	53.6	54.0	14		32	49.0	49.4	06		32	57.5	53.5	17		32	57.6	57.0	16	
34	53.3	53.9	13		34	50.0	50.3	08		34	60.0	56.5	12		34	60.0	59.8	12	
36	53.3	53.6	13		36	49.0	49.2	06		36	60.6	57.9	11		36	67.0	66.5	02	
38	52.8	52.8	12		38	49.0	49.0	06		38	58.1	54.9	15		38	64.8	63.8	05	
40	52.2	52.3	11		40	50.3	50.3	08		40	55.8	52.2	19		40	64.8	64.0	05	
42	52.1	52.2	11		42	49.6	49.8	07		42	57.9	55.3	15		42	58.8	58.1	15	
44	52.1	52.5	11	+6.5	44	50.5	50.5	08	+5.1	44	58.8	56.0	14	+1.5	44	61.0	60.6	11	+1.8
46	52.8	53.0	12		46	51.7	51.9	11		46	59.5	57.3	12		46	65.3	64.3	05	
48	53.0	53.1	12		48	51.8	51.8	11		48	59.5	57.3	12		48	62.5	61.3	09	
50	52.2	52.5	11		50	52.7	53.0	12		50	60.9	58.2	10		50	59.7	59.3	13	
52	52.0	52.3	11		52	54.8	55.0	15		52	62.9	60.3	07		52	58.2	57.6	16	
54	51.6	51.9	10		54	55.6	56.0	17		54	63.2	60.8	07		54	56.9	56.3	18	
56	51.0	51.0	09		56	57.5	58.0	20		56	62.5	60.3	08		56	56.0	55.0	20	
58	51.0	51.0	09		58	58.9	59.7	22	+5.2	58	64.8	62.5	04		58	52.0	51.3	26	
					20 00	60.0	60.5	24							24 00	53.8	53.1	23	+1.7

Correction to local mean time is — 13s.
Torsion head at 16h 00m read 255° and at 20h 15m read the same.
Observer—W. J. P.

Correction to local mean time is — 8s. 90° torsion = 16.'81.
Torsion head at 20h 00m read 282° and at 24h 15m read 252°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Sunday, July 23, 1905					Magnet scale erect					Sunday, July 23, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	44.0	46.3	20 21	+3.0	2 00	35.1	39.0	19 58	+3.4	4 00.6	75.6	72.0	21 47		6 00*	37.0	34.8	23 27	
02	37.8	39.2	11		02	68.0	68.0	20 48		02	75.1	71.9	47		02	27.3	22.4	44	+2.9
04	31.6	33.3	01		04	61.0*a*		20 37		04*	64.0	56.8	32	+3.0	04	55.8	49.0	01	
06	34.6	35.8	06		06*	36.8	37.2	22 57		06	66.3	59.9	28		06	48.7	41.5	23 12	
08	44.2	44.6	20		08*	26.0	31.0	21 50		08	67.5	60.6	26		08	61.5	54.5	22 52	
10	48.1	50.1	28		10	14.0	20.3	32		10	76.1	62.5	18		10	45.6	41.3	23 15	
12	52.0	54.0	34		12	26.0	34.5	53		12	74.0	68.1	15		12	56.2	44.0	23 05	
14	45.2	46.0	22	+3.1	14	19.0	26.2	41	+3.3	14	74.1	68.8	15		14	78.2	72.5	22 25	+3.0
16	40.0*a*		13		16	16.3	24.2	37		16	71.3	67.0	18	+3.1	16*	43.7	38.9	13	
18	60.0	60.6	45		18	5.0	10.3	17		18.5	61.8	51.8	37		18	32.5	26.0	32	
20	46.8	49.5	26		20	16.0	24.8	21 38		20	67.5	64.5	23		20	28.4	22.2	38	
22	37.8	39.8	11		22*	9.0	16.0	19 19		22	64.6	60.5	29		22	41.9	36.1	22 16	
24	33.6	35.5	04		24*	41.0	54.2	21 03		24	63.0	59.4	31		24	59.1	54.8	21 48	
26	31.2	32.0	00		26	42.0	53.0	03		26	58.9	55.3	37		26	66.0	62.0	37	
28	33.1	35.3	04		28	45.5	56.0	08		28	63.5	61.0	29		28	59.9	56.8	46	
30	36.5	38.0	09	+3.1	30	41.6	51.6	21 02	+3.2	30	59.8	55.6	36	+3.0	30	57.5	53.3	50	+3.1
32	38.7	39.0	11		32	32.0	42.3	20 47		32	53.9	50.8	45		32	56.5	53.5	21 51	
34	34.0*b*		20 04		34	31.3	35.8	41		34	44.7	42.5	58		34	42.1	38.8	22 14	
36	23.1	24.5	19 48		36	29.3	34.3	39		36	51.6	48.1	48		36	26.2	24.1	38	
38	18.5	18.8	40		38	34.5	39.6	20 47		38	52.0	49.5	21 47		38	20.6	18.2	47	
40	16.4	17.2	19 37		40	45.5	50.0	21 04		40	42.0	40.7	22 02		40	39.9	33.8	20	
42	32.6	33.2	20 02		42	41.8	46.4	20 58		42	34.2	33.3	14		42	37.5	33.1	22	
44	16.0	17.2	19 36	+3.1	44	45.8	49.4	21 03		44	23.0	21.2	32	+2.9	44	42.9	39.8	22 13	
46*	35.5	48.3	21 45		46	42.8	46.2	20 59		46	34.0	32.2	15		46	60.7	57.0	21 45	+3.2
48	16.8	21.2	21 09		48	41.9	46.1	20 58		48	40.3	37.0	22 06		48	62.5	60.1	41	
50*5	48.0	51.0	20 24		50	50.5	55.9	21 12		50	55.8	52.3	21 42		50	58.0	56.5	48	
52	47.0	50.3	22		52	58.3	62.6	24		52	55.8	51.0	21 43		52	58.9	45.2	56	
54	39.3	42.8	10		54*	53.9	64.0	21 56		54	35.5	34.0	22 12		54	62.2	52.5	48	
56	37.3	40.0	07		56	58.3	63.8	22 00		56	22.2	20.0	34		56	77.5	56.0	33	
58	47.9*a*		21		58	47.3	53.5	21 43		58	15.0	12.9	45		58	76.5	60.1	30	+3.2
1 00	49.3	57.0	29	+3.1	3 00	43.2	48.9	36	+3.0	5 00	21.8*a*		32	+2.8	7 00	79.0	67.1	23	
02	68.5	74.8	58		02	32.0	39.0	20		02	35.5	31.8	14		02*	46.9	36.0	26	
04	45.0	52.8	23		04	35.0	40.0	23		04	24.5*b*		28		04	47.0	36.5	27	
06	48.0	56.0	28		06	40.8	45.4	32		06	13.5	11.0	48		06	47.5	37.3	24	
08	50.6	57.8	20 31		08	42.0	48.8	35		08	30.5*a*		19		08	46.5	33.0	28	
10*	41.8	47.8	22 24		10	38.3	43.8	28		10	34.5	32.8	14		10	43.1	29.7	33	
12*	31.3	51.0	23 02		12	41.5	46.5	33		12	37.2	35.9	22 09		12	41.1	28.9	36	
14	10.0	43.0	22 39	+3.1	14	36.0	40.4	24	+2.9	14	49.0	48.0	21 51		14	48.8	33.8	26	+3.4
16*	30.3	46.3	21 48		16	29.3	33.0	13		16	40.8	38.8	22 04	+2.8	16	54.2	40.9	16	
18*	50.8	54.0	21 11		18	29.7	32.2	13		18	32.0*b*		16		18	61.9	41.3	10	
20*	35.5	46.3	22 39		20	34.9	37.9	21		20	27.5	25.8	25		20	65.2	45.5	04	
22*	42.2	49.0	21 35		22	37.0	39.0	24		22	30.9	27.9	22 21		22	66.8	46.0	02	
24	35.0	39.0	21		24	39.6	42.6	29		24	44.7	42.5	21 58		24	66.7	47.2	01	
26	29.2	32.3	11		26	41.0	43.8	31		26	38.5	37.8	22 07		26	66.0	50.0	21 00	
28	31.0	32.6	13		28	46.0	47.8	38		28	42.1	38.6	04		28	68.6	49.5	20 58	
30	32.7	36.1	21 17	+3.2	30	59.2	61.4	21 59	+2.8	30	43.2	40.6	01	+2.9	30	74.3	56.0	48	+3.4
32	22.5	22.8	20 58		32	61.0	63.3	22 02		32	37.6	35.1	10		32	74.0	56.5	48	
34	17.1	18.1	20 51		34	54.6	58.0	21 52		34	38.7	35.9	22 08		34	67.3	56.2	20 54	
36*	40.5	40.5	22 29		36	46.3	48.1	38		36	46.6	42.2	21 57		36	63.5	49.0	21 02	
38*	34.6	45.2	21 17		38	40.3	41.9	29		38	51.5	49.9	47		38	58.8	44.9	09	
40*	63.0	80.0	23 27		40	34.8	37.0	20		40	52.8	51.2	45		40	57.4	44.8	10	
41.5	51.0	67.2	08		42	30.8	33.1	14		42	54.4	53.1	42		42	60.1	47.2	06	
44	46.0	76.0	23 11	+3.3	44	40.6	43.9	30	+2.8	44	55.2	53.0	42	+2.9	44	61.0	49.3	04	
46	5.0	28.3	22 01		46	52.6	55.9	49		46	45.3	43.0	21 58		46	62.3	51.2	01	+3.6
47*9	15.0	49.8	23 38		48	55.8	57.2	53		48	30.5*b*		22 19		48	61.0	49.6	04	
50*	31.0	58.8	22 22		50	45.1	46.2	36		50	28.5	26.8	24		50	60.1	45.0	08	
52*	26.8	56.5	21 37		52	48.0	50.2	21 41		52	17.8	15.8	40		52	57.5	47.0	09	
54*	38.0	69.0	20 25		54	62.3	66.8	22 05		54	10.5	9.1	51		54	55.4	46.5	11	
56	30.3	34.8	19 52		56	76.0	78.0	25		56	12.1	10.6	49		56	57.9	49.2	07	
58	28.5	42.0	56		58*	46.2	48.8	10		58	7.5	7.5	55		58	56.9	48.2	08	
															8 00	58.9	56.0	00	

Observers—W. J. P. and A. F., who alternated from 3h 58m to 4h 08m.

Correction to local mean time is —6s.

Torsion head at 0h 00m read 252° and at 9h 25m read the same.

Observer—A. F.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Monday, July 24, 1905					Magnet scale erect					Tuesday, July 25, 1905					Magnet scale inverted				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00*	39.8	41.5	20 53	+7.5	10 00	22.8	24.2	19 59	+8.6	12 00	45.6	44.6	19 45	+6.5	14 00	28.4	28.3	20 12	+4.3
02	39.2	45.6	56		02*	46.2	54.8	21 30		02	42.2	40.6	51		02	28.1	28.0	12	
04	33.6	37.1	44		04	68.9	72.6	22 02		04	40.5	40.1	53		04	27.5	27.0	13	
06	37.1	41.6	51		06	60.8	64.8	21 49		06	37.9	37.0	19 57		06	25.2	24.8	17	
08	17.8	22.6	21		08	60.1	76.0	57		08	34.5	33.8	20 02		08	25.2	24.6	17	
10	10.2	15.8	09		10	62.0	69.2	54		10	29.6	28.6	10		10	24.2	24.0	18	
12	11.1	20.1	13		12	52.8	62.8	21 41		12	24.4	23.8	18		12	23.9	23.3	19	
14	17.7	29.3	26	+8.0	14	Lost				14	26.8	25.5	15	+6.0	14	23.1	22.5	20	+4.9
16	9.0	11.9	05		16	23.8	35.8	20 57	+9.0	16	27.0	26.2	14		16	22.3	21.7	22	
18	Lost				18*	20.0	38.6	27		18	26.3	24.7	16		18	20.6	20.3	24	
20	25.6	28.6	32		20	11.2	32.8	16		20	28.0	27.5	13		20	21.3	21.3	23	
22	12.0	20.2	14		22*	28.2	52.8	06		22	29.1	27.8	12		22	25.0	23.3	18	
24	17.8	25.0	22		24	52.6	55.1	20 27		24	23.0	21.6	21		24	24.8	24.8	17	
26	12.5	17.5	12		26*	53.5	58.0	21 13		26	22.0	21.0	22		26	24.3	24.1	18	
28	18.6	24.6	23		28	55.8	58.1	14	+9.4	28	16.8	16.0	30		28	25.2	25.2	16	
30	32.7	35.3	42	+8.0	30	52.0	56.0	10		30	14.1	13.1	35	+5.4	30	27.2	27.0	14	+5.1
32	17.8	27.8	25		32	54.3	63.5	21 18		32	15.3	14.5	33		32	25.8	25.2	16	
34	19.4	20.6	28		34	43.8	48.8	20 58		34	13.8	13.3	35		34	24.8	24.5	18	
36	33.3	48.0	53		36	58.0	65.3	21 22		36	16.0	15.0	32		36	25.6	25.3	16	
38	21.5	36.2	34		38	64.8	78.5	38		38	16.0	15.2	32		38	25.4	25.0	16	
40	22.8	38.5	37		40*	54.8	61.0	47		40	15.8	14.8	32		40	25.3	25.0	17	
42	26.9	28.0	32		42	56.3	64.8	51		42	14.7	14.0	34		42	24.5	24.1	18	
44	24.1	25.7	28	+8.0	44	56.8	66.6	21 53		44	16.2	15.6	31	+5.0	44	24.2	24.0	18	+5.2
46	20.0	24.6	24		46	61.0	73.0	22 01	+9.5	46	20.8	19.6	24		46	24.3	24.1	18	
48	34.3	39.0	46		48*	56.0	65.8	15		48	22.3	21.6	22		48	23.2	22.7	20	
50	21.3	24.4	25		50	64.0	73.1	27		50	23.1	23.0	20		50	23.6	23.4	19	
52	18.2	23.0	21		52*	63.0	71.6	36		52	22.5	22.1	20		52	24.8	24.5	18	
54	10.9	16.0	20 10		54	57.8	58.3	21		54	21.7	21.3	22		54	25.3	25.3	16	
56	54.8	57.8	21 17		56	68.2	80.0	46		56	19.2	19.0	26		56	25.9	25.5	16	
58	11.2	12.3	20 07		58	64.5	72.8	38		58	19.3	19.0	26		58	25.9	25.5	16	
9 00*	28.0	38.1	19 20	+8.0	11 00	60.3	71.7	34	+9.5	13 00	20.1	18.8	26	+4.5	15 00	25.3	24.9	17	+5.2
02*	70.6	75.8	20 45		02	55.3	71.1	29		02	21.3	20.7	23		02	25.7	25.1	16	
04*	32.8	47.2	48		04	48.5	69.5	22		04	22.9	22.3	21		04	25.5	25.0	16	
06	7.5	30.2	14		06	47.1	59.8	14		06	24.2	23.5	19		06	26.2	26.0	15	
08	22.1	24.7	22		08	39.6	54.6	04		08	25.3	24.6	17		08	28.0	26.5	13	
10	26.2	39.4	36		10	40.3	63.0	11		10	28.7	28.5	11		10	27.3	26.7	14	
12	20.0	28.5	23		12	37.5	57.0	04		12	35.3	34.3	20 01		12	27.1	26.5	14	
14	8.0	15.6	20 04	+8.0	14	48.8	59.7	15	+9.5	14	43.3	43.1	19 48	+4.0	14				
16*	36.8	46.4	19 42		16	68.6	81.0	47		16.5	52.0	51.1	35		16	27.3	26.3	14	+5.1
18	57.8	71.5	20 18		18*	45.5	52.3	47		18	53.0	52.5	33		18	27.6	26.6	14	
20*	38.8	57.8	44		20	35.2	50.2	38		20	54.9	53.9	31		20	29.1	28.0	11	
22	42.0	71.2	20 57		22	33.2	56.0	41		22	55.2	54.1	30		22	30.1	29.1	10	
24	52.3	77.8	21 10		24	19.3	39.3	17		24	52.8	51.5	34		24	30.9	30.2	08	
26*	23.5	43.0	20 05		26	16.0	35.2	11		26	51.0	49.8	37		26	32.2	31.8	06	
28*	36.2	48.3	02	+8.1	28	19.2	31.4	10		28	50.6	49.4	38		28	34.1	33.2	03	
30	54.7	72.3	20 35		30	26.5	31.1	16	+9.2	30	49.6	48.8	39	+4.0	30	35.8	34.9	20 01	+5.3
32*	43.0	59.1	21 24		32	30.8	43.8	29		32	48.3	47.2	41		32	37.2	36.6	19 58	
34	37.2	50.2	21 13		34	32.2	44.5	31		34	51.9	51.3	35		34	37.8	37.0	57	
36	28.0	38.4	20 56		36	26.9	36.1	20		36	52.0	50.5	36		36	37.1	36.5	19 58	
38	18.8	25.3	39		38	21.3	33.3	14		38.5	52.0	50.8	35		38	34.5	34.1	20 02	
40	25.8	34.2	52		40	20.0	24.2	22 05		40	50.0	50.0	38		40	33.2	32.8	04	
42	10.1	20.9	29		42*	20.7	24.2	21 45		42	48.5	48.0	40		42	33.2	32.6	04	
44	6.3	15.2	21		44*	43.0	52.0	26	+9.0	44	45.1	45.1	45	+4.0	44	31.6	30.8	07	+5.5
46*	31.0	41.8	19		46	31.0	45.0	11		46	42.6	42.2	50		46	29.8	28.5	10	
48	31.0	40.5	18		48	36.5	39.7	21 11		48	40.2	38.6	54		48	27.1	26.1	14	
50	27.8	37.8	14		50	25.9	34.9	20 59		50	41.8	41.8	19 50		50	25.5	24.6	17	
52	24.2	30.8	20 05		52	22.2	43.2	21 02		52	33.8	33.0	20 04		52	24.3	23.7	18	
54	10.0	17.6	19 44		54	35.2	56.2	23		54	34.3	34.1	02		54	24.6	23.8	18	
56	Lost				56	33.0	34.5	04		56	31.9	31.9	06		56	23.6	22.0	20	
58	20.2	24.8	58		58	31.3	36.6	04		58	30.3	29.1	10		58	23.1	22.4	20	
					12 00	36.6	42.6	13	+8.9						16 00	23.3	22.5	20	+5.3

Correction to local mean time is — 5s.
Torsion head read 252° at beginning and ending.
Observer—W. J. P.

Correction to local mean time is + 6s. 90° torsion = 17.'13.
Torsion head at 12h 00m read 261° and at 16h 20m read 258°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 26, 1905					Magnet scale erect				Wednesday, July 26, 1905					Magnet scale erect			
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
0 00*	45.2	52.0	21 43	+4.0	2 00	46.8	47.2	20 44	+3.9	4 00	39.0	41.2	21 35	+3.8	6 00	50.3	51.0	21 02	+4.1
02	33.4	42.4	26		02	50.8*a*		50		02	36.8	38.0	30		02	52.0	53.0	05	
04	20.8	30.7	07		04	54.2	54.8	56		04	31.8	33.2	23		04	51.2	52.0	04	
06	31.1	39.9	22		06	55.3	56.0	58		06	29.5	30.9	19		06	52.0	52.5	05	
08	35.3	40.1	26		08	55.0	55.8	57		08	28.5	30.0	17		08.1	50.6	51.9	03	
10	25.4	30.8	21 11		10	54.2	55.2	56		10	32.0	33.2	23		10	50.5	51.7	03	
12	16.4	21.1	20 56		12	50.8	51.1	50		12	32.3	33.0	23		12	50.9	52.6	04	
14	22.0	26.3	21 04	+4.1	14	36.2*b*		27		14	27.3	29.2	16	+3.8	14	49.6	50.6	21 01	+4.2
16	9.4	13.9	20 45		16	24.4	26.5	10	+3.9	16	27.8	29.0	16		16	47.9	49.3	20 59	
18*	37.8	40.0	31		18	25.8	27.1	12		18	25.8	27.5	13		18	45.1	46.8	20 55	
20	21.2	22.5	04		20	24.2	26.2	10		20	22.7	24.2	21 08		20	49.3	51.6	21 02	
22	23.2	25.0	08		22	25.0	26.3	10		22	11.5	13.8	20 51		22	48.5	50.0	21 00	
24	23.3	24.8	08		24	29.8	31.8	19		24	6.5	7.5	43		24	45.5	47.0	20 55	
26	27.8	29.9	16		26	31.2	32.4	20		26*	41.8	44.2	20 50		26	45.7	46.1	20 54	
28	30.9	33.2	20		28	34.2	34.7	24		28	49.2	52.8	21 03		28	49.3	49.9	21 00	
30	31.2	33.7	21	+4.1	30	31.0	32.0	20	+3.6	30	45.2	48.8	20 56	+3.9	30	47.8	48.9	20 58	+4.5
32	33.0	35.3	24		32	31.8	32.3	20		32	46.0	48.5	57		32	52.0	52.8	21 05	
34	35.0	37.3	27		34	35.2	36.4	26		34	44.8	47.8	55		34	44.3	45.0	20 52	
36	34.8	37.2	27		36	40.8	41.2	35		36	42.7	46.0	52		36	39.9	40.8	46	
38	44.2	45.0	40		38	43.0	44.1	38		38	42.3	45.7	52		38	42.3	43.9	20 50	
40	46.0	48.0	44		40	52.0	53.2	20 53		40	39.4	42.9	47		40	52.3	52.5	21 05	
42	49.4	50.8	49		42	63.3*a*		21 10		42	36.4	39.1	42		42	42.9	43.0	20 50	
44	52.5	53.8	20 54	+4.1	44	66.8	67.3	15		44	39.0	42.0	47		44	41.0	41.6	47	+4.6
46	56.0	57.8	21 00		46	57.2	58.8	01	+3.4	46	39.8	42.9	47	+4.0	46	34.1	36.2	38	
48	51.1	52.3	20 51		48	56.2	58.2	00		48	39.0	41.0	45		48	30.8	32.2	32	
50	45.8	46.9	43		50	62.5	64.5	10		50	40.5	42.5	48		50	36.2	37.5	40	
52	44.2	45.2	40		52	68.8	70.9	20		52	36.6	38.5	41		52	36.5	37.0	40	
54	42.5	43.8	38		54	69.7	71.3	21		54	36.0	37.7	40		54	31.3	32.9	33	
56	42.2	43.2	37		56	64.0	64.9	11		56	38.0	40.4	44		56	36.0	36.8	40	
58	41.2	42.2	36		58	61.0	62.0	07		58	40.2	41.8	47		58	30.1	31.2	30	
1 00	38.6	39.9	32	+4.1	3 00	64.0	65.0	12	+3.4	5 00	38.8	40.3	44	+4.0	7 00	32.9	33.1	34	+4.6
02	38.6	39.6	32		02	67.7	68.5	17		02	37.8	39.1	43		02	34.0	35.3	37	
04	40.0	41.1	34		04	69.0	69.8	19		04	39.8	41.4	46		04	30.8	33.8	33	
06	41.0	42.0	35		06	69.2	70.4	20		06	41.0	42.9	48		06	27.0	28.1	26	
08	41.0	42.1	35		08	67.8	69.0	18		08	41.0	42.7	48		08	32.3	33.7	34	
10	43.5	44.4	39		10	68.8	69.9	19		10	46.1	47.8	56		10	27.5	28.0	26	
12	46.8	47.9	44		12	74.0	75.2	27		12	41.2	42.5	48		12	26.3	27.9	25	
14	48.0	48.9	46	+4.0	14	71.9	73.5	24		14	43.4	45.0	52		14	34.0	35.9	38	+4.8
16	52.7*a*		53		16	67.2	68.7	17	+3.7	16	47.6	49.0	58	+4.0	16	35.4	36.6	39	
18	55.2	56.0	57		18	69.5	70.4	20		18	47.2	48.2	57		18	32.8	34.2	35	
20	53.9	54.2	55		20	67.1	68.5	17		20	44.7	45.0	54		20	38.3	42.3	46	
22	51.2	51.8	51		22	71.0	72.8	23		22	47.8	48.8	58		22.9	32.0	34.3	35	
24	55.8	56.5	20 58		24	77.0	77.8	32		24	46.2	47.5	20 56		24	36.7	37.0	40	
26	58.0	58.5	21 02		26*	37.8	41.2	34		26	49.5	50.8	21 01		26	37.6	39.6	43	
28	62.5*a*		08		28	41.2	44.8	39		28	46.2	47.2	20 56		28	36.0	37.9	40	
30	62.5	63.2	09	+4.1	30	43.6	46.8	43	+3.8	30	46.6	47.6	56	+4.1	30	37.7	38.9	43	+4.8
32	61.5	61.7	07		32	43.0	46.2	42		32	47.5	48.3	58		32	36.9	38.5	42	
34	60.2	60.5	05		34	43.2	46.0	42		34	45.2	46.5	20 54		34	37.7	39.3	43	
36	63.0	63.7	10		36	39.6	42.8	36		36	49.4	50.2	21 01		36	38.4	40.0	44	
38	60.7	61.2	06		38	37.0	39.2	32		38	47.0	48.5	20 57		38	38.8	40.3	44	
40	58.4	59.0	02		40	45.4	46.5	44		40	47.5	48.6	20 58		40	41.3	42.0	48	
42	61.0	62.0	07		42	48.9	50.5	50		42	48.5	49.9	21 00		42	38.8	39.6	44	
44	65.8	67.2	15		44	47.1	49.0	47	+3.8	44	51.6	52.9	04		44	36.7	38.5	41	+4.8
46	68.2	69.0	18	+4.0	46	48.4	50.2	49		46	49.2	50.6	01	+4.1	46	40.0	41.0	46	
48	60.0	61.2	21 05		48	48.8	50.0	49		48	51.1	52.7	04		48	42.8	42.8	50	
50	50.7*b*		20 50		50	44.5	45.8	42		50	51.0	52.2	04		50	36.0	37.0	40	
52	46.0	46.5	43		52	39.8	41.2	35		52	49.0	50.0	00		52	39.4	40.2	45	
54	47.2	48.0	45		54	36.3	37.9	30		54	49.8	50.7	01		54	36.0	36.6	40	
56	47.6	48.1	45		56	38.3	40.8	34		56	51.1	52.3	04		56	30.3	31.1	31	
58	48.5	48.9	47		58	40.2	42.2	36		58	50.8	52.0	03		58	31.7	32.4	33	

Observer—A. F.

Observers—A. F. and W. J. P., who alternated from 6h 02m to 6h 12m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 26, 1905					Magnet scale erect					Wednesday, July 26, 1905					Magnet scale erect				
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°	h m	d	d	° ′	°
8 00	30.7	32.0	20 32	+4.5	10 00	28.1	28.5	20 27	+4.8	12 00	23.2	23.6	20 19	+6.3	14 00	22.1	22.6	20 18	+7.9
02	28.6	29.7	28		02	29.0	29.0	28		02	22.8	23.6	19		02	21.8	22.3	17	
04	27.3	28.1	26		04	28.5	29.2	28		04	21.7	22.9	18		04	20.5	21.1	15	
06	28.1	28.5	27		06	27.9	28.2	26		06	20.8	23.2	17		06	21.0	21.6	16	
08	27.2	28.0	26		08	28.3	28.6	27		08	21.0	23.0	17		08	21.0	21.5	16	
10	28.1	29.0	27		10.5	28.3	29.1	28		10	20.8	22.6	17		10	21.1	21.7	16	
12	27.0	27.4	25		12	28.8	29.5	28		12	20.3	22.0	16		12	21.5	22.1	17	
14	27.2	27.2	25	+4.5	14	28.3	28.7	27	+5.1	14	20.5	22.6	16		14	21.5	22.0	17	
16	26.6	26.8	24		16	28.0	28.5	27		16	20.5	22.4	16		16	20.9	21.2	16	+8.2
18	26.1	26.9	24		18	28.0	28.1	26		18	21.8	23.3	18	+6.6	18	20.2	21.0	15	
20	26.0	26.5	24		20	27.8	27.9	26		20	21.8	23.5	18		20	20.9	21.2	16	
22	26.8	27.2	25		22	29.1	29.1	28		22	23.0	24.5	20		22	21.0	21.8	16	
24	26.6	27.6	25		24	29.5	29.5	29		24	24.2	25.8	22		24	21.9	22.4	17	
26	25.3	26.9	23		26	29.3	29.6	29		26	24.0	25.3	21		26	22.7	23.2	18	
28	26.3	28.7	26		28	30.3	30.3	30		28	22.0	23.6	18		28	22.6	23.2	18	
30	25.9	28.5	25	+4.4	30	30.2	30.2	30	+5.6	30	19.9	21.3	15	+7.0	30	22.3	23.0	18	+8.7
32	25.6	28.0	25		32	29.1	29.5	28		32.5	18.5	20.5	13		32	22.4	23.2	18	
34	26.4	29.0	26		34	28.0	29.3	28		34	18.3	20.0	12		34	23.1	23.9	19	
36	25.3	27.7	24		36	29.1	29.6	28		36	18.3	20.0	12		36	23.0	23.7	19	
38	25.5	27.9	24		38	28.1	28.9	27		38	18.6	20.0	13		38	22.5	23.2	18	
40	25.8	28.1	25		40	29.0	30.1	29		40	18.9	20.3	13		40	22.0	22.6	18	
42	25.0	26.9	23		42	29.3	30.0	29		42	19.0	20.4	13		42	22.9	23.4	19	
44	25.2	27.5	24	+4.4	44	29.1	30.0	29	+6.0	44	17.5	19.3	11		44	22.1	22.8	18	
46	25.5	27.9	24		46	27.8	28.8	27		46	17.0	18.3	10	+7.4	46	22.6	23.0	18	+9.0
48	25.6	27.0	24		48	26.7	27.5	25		48	17.3	18.9	11		48	22.9	23.3	19	
50	28.0	28.9	27		50	25.9	26.8	24		50	17.9	19.2	12		50	22.8	22.9	18	
52	29.5	31.0	30		52	25.4	26.3	23		52	17.5	18.9	11		52	21.9	22.2	17	
54	28.9	30.2	29		54	25.4	26.3	23		54	16.3	17.5	09		54	21.6	22.0	17	
56	28.6	30.1	28		56	25.2	26.0	23		56	15.8	16.9	08		56	21.7	22.0	17	
58	29.3	30.0	29		58	24.9	25.7	22		58	13.4	14.9	05		58	21.9	22.2	17	
9 00	29.0	31.0	30	+4.2	11 00	24.2	25.0	21	+6.1	13 00	11.9	12.9	02	+7.3	15 00	22.6	23.0	18	+9.1
02	30.0	31.0	30		02	24.5	24.7	21		02	11.6	12.4	01		02	23.3	23.7	19	
04	30.2	31.6	31		04	25.0	25.2	22		04	12.0	12.9	02		04	23.7	23.9	20	
06	27.8	30.7	28		06	25.1	25.3	22		06	12.2	12.9	02		06	23.0	23.3	19	
08	29.6	32.5	31		08	26.1	26.9	24		08	12.7	13.3	03		08	22.0	22.3	18	
10	27.3	29.8	27		10	26.9	27.0	25		10	13.1	13.8	04		10	21.7	21.9	17	
12	27.0	29.4	27		12	26.6	27.0	25		12	13.6	14.3	04		12	22.1	22.5	18	
14	28.0	30.6	28	+4.2	14	26.3	26.9	24	+6.2	14	13.8	14.8	05		14	22.2	22.9	18	
16	28.3	30.4	28		16	26.5	26.9	24		16	14.2	15.2	06	+7.2	16	22.3	22.6	18	+9.1
18	29.0	30.8	29		18	25.8	26.1	23		18	15.6	16.5	08		18	22.2	22.5	17	
20	28.5	30.5	29		20	26.0	26.2	24		20	18.0	19.1	12		20	22.0	22.4	17	
22	30.2	32.0	31		22	26.2	26.6	24		22	17.9	19.0	11		22	21.9	22.2	17	
24	29.9	31.9	31		24	24.6	25.0	21		24	18.2	18.9	12		24	21.4	21.9	16	
26	29.0	30.0	29		26	25.0	25.8	22		26	19.2	20.0	13		26	21.9	22.2	17	
28	28.5	29.3	28		28	25.0	25.3	22		28	19.7	20.4	14		28	22.3	22.7	18	
30	27.9	29.0	27	+4.4	30	24.9	25.1	22	+6.4	30	20.2	21.2	15	+7.2	30	23.0	23.0	19	+8.9
32	28.0	29.0	27		32	24.9	25.3	22		32	21.0	22.5	17		32	22.8	23.0	18	
34	27.0	28.0	26		34	24.1	24.6	21		34	22.7	24.4	19		34	22.7	23.0	18	
36	27.3	28.0	26		36	24.2	24.8	21		36	24.0	25.3	21		36	22.9	23.0	18	
38	28.0	28.8	27		38	24.0	24.8	21		38	23.1	24.8	20		38	23.0	23.0	19	
40	26.8	27.8	25		40	23.0	23.8	19		40	23.0	24.2	20		40	22.5	23.0	18	
42	27.7	28.9	27		42	23.9	24.3	20		42	23.1	24.4	20		42	22.0	22.4	17	
44	27.3	28.8	26	+4.5	44	25.3	25.5	22	+6.4	44	23.1	24.7	20	+7.6	44	22.2	23.6	18	
46	29.0	30.0	29		46	22.9	23.5	19		46	23.0	24.3	20		46	21.4	21.9	16	+8.8
48	29.1	30.0	29		48	22.6	22.9	18		48	23.7	25.0	21		48	22.2	22.4	18	
50	28.4	29.5	28		50	23.1	23.4	19		50	23.3	24.4	20		50	22.0	22.2	17	
52	29.0	29.9	29		52	25.6	26.2	23		52	22.0	23.0	18		52	21.3	21.7	16	
54	27.9	28.7	27		54	26.1	26.6	24		54	21.4	22.2	17		54	21.0	21.4	16	
56	27.2	28.1	26		56	24.9	25.3	22		56	21.4	22.3	17		56	21.6	22.1	17	
58	27.5	28.0	26		58	23.9	24.3	20		58	21.8	22.1	17		58	22.2	22.9	18	

Observer—W. J. P.

Observers—W. J. P. and A. F., who alternated from 12h 06m to 12h 16m.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Wednesday, July 26, 1905					Magnet scale erect
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	
h m	d	d	° ′	°	
16 00	22.8	23.3	20 19	+8.6	
02	23.0	23.5	19		
04	22.6	23.0	18		
06	22.4	23.0	18		
08	21.5	22.0	17		
10	21.2	21.8	16		
12	21.8	22.2	17		
14	21.7	22.2	17		
16	22.0	22.4	17	+8.5	
18	23.3	24.0	20		
20	23.6	24.0	20		
22	24.2	24.6	21		
24	24.0	24.5	20		
26	21.8*a*		17		
28	19.2	19.8	13		
30	18.8	19.0	12	+8.4	
32	19.4	19.7	13		
34	20.5	20.5	15		
36	20.9	21.0	15		
38	21.1	21.3	16		
40	21.3	21.4	16		
42	21.5	21.7	16		
44	21.0	21.3	16	+8.4	
46	19.9	20.3	14		
48	19.8	20.3	14		
50	19.2	19.9	13		
52	19.0	19.3	13		
54	18.8	19.3	12		
56	18.4	18.9	12		
58	18.4	19.0	12		
17 00	18.1	18.8	11	+8.3	
02.4	17.8	18.8	11		
04	17.7	18.4	11		
06	17.3	18.0	10		
08	17.4	18.6	11		
10	18.0	19.0	12		
12	18.8	19.7	13		
14	19.1	20.0	13		
16	19.2	20.0	13	+8.1	
18	19.3	20.0	13		
20	19.0	19.6	13		
22	18.7	19.6	12		
24	18.2	19.5	12		
26	18.0	19.1	12		
28	17.8	18.9	11		
30	18.0	19.3	12	+8.0	
32	18.0	19.0	12		
34	18.0	19.0	12		
36	18.7	19.6	12		
38	18.9	19.9	13		
40	18.8	19.6	13		
42	19.0	19.4	13		
44	19.4	20.0	13	+8.0	
46	20.0	20.4	14		
48.3	20.3	20.9	15		
50	20.6	21.1	15		
52	20.2	21.1	15		
54	20.4	21.3	15		
56	20.3	21.1	15		
58	20.1	20.7	14		

Wednesday, July 26, 1905					Magnet scale erect
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	
h m	d	d	° ′	°	
18 00	20.9	21.0	20 15	+8.0	
02	21.0	21.3	16		
04	21.2	21.5	16		
06	21.6	22.0	17		
08	22.0	22.3	17		
10	22.3	22.8	18		
12	22.9	23.0	18		
14	23.3	23.5	19	+8.0	
16	23.4	23.6	19		
18	23.2	23.4	19		
20	23.3	23.4	19		
22	23.4	23.4	19		
24	23.3	23.6	19		
26	23.3	23.5	19		
28	23.3	23.5	19		
30	23.3	23.8	19	+7.6	
32	23.5	23.6	19		
34	23.3	23.7	19		
36	23.1	23.1	19		
38	23.2	23.2	19		
40	23.0	23.3	19		
42	22.6	23.0	18		
44	21.9	22.3	17	+7.2	
46	21.8	22.2	17		
48	21.0	21.9	16		
50	20.9	21.3	16		
52	21.1	21.5	16		
54	21.6	21.9	17		
56	21.8	22.1	17		
58	21.3	21.9	16		
19 00	20.9	21.5	16	+7.0	
02	20.5	21.0	15		
04	20.0	20.3	14		
06	19.4	19.9	13		
08	19.2	19.8	13		
10	19.3	20.1	13		
12	20.0	20.5	14		
14	20.6	21.0	15	+6.8	
16	20.6	21.1	15		
18	20.9	21.2	16		
20	20.6	21.2	15		
22	20.3	21.0	15		
24	20.3	21.1	15		
26	20.4	21.1	15		
28	20.5	21.3	15		
30	21.0	21.6	16	+6.6	
32	21.8	21.8	17		
34	21.9	22.0	17		
36	21.6	21.8	17		
38	21.4	21.6	16		
40	21.1	21.3	16		
42	21.1	21.3	16		
44	21.1	21.5	16	+6.2	
46	21.6	21.8	17		
48	22.0	22.2	17		
50	21.0	22.3	17		
52	21.8	22.2	17		
54	22.2	22.9	18		
56	22.2	23.0	18		
58	21.8	22.6	17		

Wednesday, July 26, 1905					Magnet scale erect
Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.	
h m	d	d	° ′	°	
20 00	22.0	22.7	20 18	+6.1	
02	21.5	21.7	16		
04	20.9	21.1	16		
06	20.8	21.1	15		
08	20.9	21.3	16		
10	20.5	21.1	15		
12	19.9	20.7	14		
14	19.3	20.1	13	+6.0	
16	18.9	19.5	13		
18	18.5	19.0	12		
20	18.3	18.9	12		
22	18.2	18.8	12		
24	18.0	18.5	11		
26	17.4	17.9	10		
28	16.5	17.0	09		
30	15.9	16.4	08	+5.6	
32	15.8	16.2	08		
34	15.6	16.1	07		
36	16.1	16.3	08		
38	17.0	17.1	09		
40	17.9	18.0	11		
42	17.8	17.9	10		
44	16.8	16.9	09	+5.5	
46	15.9	16.1	08		
48	14.8	15.0	06		
50	14.2	14.3	05		
52	14.1	14.4	05		
54	14.3	14.7	05		
56	14.7	14.9	06		
58	14.7	15.1	06		
21 00	14.8	15.1	06		
02	14.8	15.5	06	+5.3	
04	14.9	15.6	06		
06	15.1	15.6	07		
08	15.3	15.9	07		
10	15.9	16.3	08		
12	16.3	16.8	08		
14	16.8	17.3	09	+5.2	
16	16.8	17.2	09		
18	15.6	16.2	07		
20	15.5	16.5	08		
22	16.6	17.2	09		
24	18.8	19.5	12		
26	19.3	20.3	14		
28	20.4	21.2	15		
30	21.0	21.6	16	+5.0	
32	21.6	22.5	17		
34	22.2	23.0	18		
36	22.5	23.2	18		
38	22.3	23.1	18		
40	22.0	22.8	18		
42	21.9	22.5	17		
44	21.4	22.1	17	+4.8	
46	21.0	21.8	16		
48	20.8	21.6	16		
50	21.0	21.8	16		
52	21.0	21.6	16		
54	20.1	20.9	15		
56	19.3	20.0	13		
58	20.5	21.3	15		

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
22 00	20.9	21.5	20 16	+4.8
02	20.8	21.8	16	
04	20.3	21.3	15	
06	21.0	21.8	16	
08	21.2	22.0	16	
10	20.9	21.8	16	
12	21.7	22.3	17	
14	22.0	22.9	18	+4.8
16	22.0	22.9	18	
18	20.6	21.1	15	
20	21.0	22.0	16	
22	20.6	21.5	16	
24	20.3	21.3	15	
26	21.0	22.1	16	
28	19.9	20.6	14	
30	20.1	21.0	15	+5.0
32	20.8	21.8	16	
34	21.0	22.2	16	
36	20.3	21.1	15	
38	21.0	21.6	16	
40	21.0	21.6	16	
42	21.8	22.2	17	
44	22.6	23.4	19	+5.1
46	22.3	23.0	18	
48	22.5	23.0	18	
50	22.3	22.9	18	
52	22.2	22.6	18	
54	22.0	22.3	17	
56	22.8	23.3	19	
58	21.8	22.3	17	
23 00	20.7	21.3	15	+5.6
02	19.8	20.8	14	
04	19.0	19.8	13	
06	17.7	18.6	11	
08	17.0	18.1	10	
10	17.3	18.0	10	
12	19.5	19.7	13	
14	16.2	16.4	08	
16	16.8	17.0	09	+6.0
18	15.3	15.9	07	
20	16.0	16.0	08	
22	15.0	15.0	06	
24	15.3	15.3	07	
26	14.9	15.1	06	
28	15.5	15.9	07	
30	17.4	17.8	10	+6.0
32	19.1	19.3	13	
34	21.6	22.8	17	
36	21.8	22.6	17	
38	23.1	23.9	19	
40	20.6	21.2	15	
42	22.7	24.0	19	
44	25.3	26.8	23	+5.9
46	21.9	23.3	18	
48	18.3	19.2	12	
50	16.3	17.0	08	
52	16.0	16.6	08	
54	16.4	17.1	09	
56	17.8	18.6	11	
58	19.3	19.7	13	+6.0
24 00	20.2	20.8	15	

Observers—A. F. and W. J. P., who alternated from 17h 40m to 17h 50m.

Correction to local mean time is — 12s.

Torsion head read 258° at beginning and ending.

Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Thursday, July 27, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
16 00	53.6	52.0	20 06	+6.2
02	52.6	51.9	08	
04	53.6	52.6	06	
06	54.1	53.0	05	
08	54.7	53.5	04	
10	54.7	53.6	04	
12.1	54.8	53.8	04	
14	53.8	52.7	20 06	+6.0
16	62.8	61.6	19 52	
18	52.0	51.0	20 08	
20	51.6	50.6	09	
22.4	52.5	51.5	08	
24	52.6	51.9	08	
26	52.6	52.0	07	
28	53.0	52.0	07	
30	52.8	52.2	07	+6.0
32	52.8	52.1	07	
34	52.9	52.2	07	
36	52.3	51.9	08	
38	52.2	52.0	08	
40	52.6	52.3	07	
42	52.8	52.5	07	
44	52.9	52.6	07	+5.8
46	53.9	53.5	05	
48	54.6	54.5	04	
50	56.0	54.9	02	
52	56.1	55.0	02	
54	55.8	55.0	02	
56	56.0	55.1	02	
58	56.2	55.8	20 02	
17 00	58.8	57.8	19 58	+5.6
02	61.3	60.8	54	
04	64.6	62.6	50	
06	63.0	61.2	52	
08	62.1	60.1	53	
10	60.1	58.9	56	
12	60.0	58.6	56	
14	58.8	57.2	58	+5.5
16	58.1	57.0	59	
18	57.6	57.0	19 59	
20	57.3	56.5	20 00	
22	56.0	55.3	02	
24	54.3	53.5	05	
26	52.9	52.2	07	
28	51.9	51.2	08	
30	52.3	51.8	08	+5.2
32	52.0	51.3	08	
34	50.8	50.1	10	
36	49.6	49.0	12	
38	48.8	48.0	13	
40	48.3	47.9	14	
42	49.1	47.6	14	
44	48.1	47.8	14	+5.2
46	47.8	47.2	15	
48	48.9	48.1	13	
50	49.1	48.5	13	
52	49.7	49.0	12	
54	50.8	50.1	10	
56	51.3	51.0	09	
58	50.9	50.3	10	
18 00	51.6	51.3	20 09	+5.1
02	51.8	51.6	08	
04	51.7	51.3	08	
06	51.9	51.1	08	
08	51.4	50.6	09	
10	51.1	50.3	10	
12	52.6	52.2	07	
14	54.4	53.6	05	+5.1
16	54.4	53.7	05	
18	54.2	54.0	04	
20	54.8	54.3	04	
22	54.0	53.8	05	
24	53.8	53.8	05	
26	53.3	53.1	06	
28	53.6*a*		05	
30	54.0	53.3	05	+5.0
32	50.8	50.6	10	
34	50.2	49.9	11	
36	50.0	50.0	11	
38	49.3	49.1	12	
40	48.1	47.8	14	
42	48.4	48.0	14	
44	50.0	49.8	11	
46	52.6	52.2	07	+4.8
48	53.6	53.0	06	
50	51.8	51.1	09	
52	50.3	50.1	11	
54	49.9	49.3	12	
56	49.7	49.3	12	
58	49.8	49.3	12	
19 00	50.0	49.6	11	+4.6
02	49.0	48.9	13	
04	48.0	47.8	14	
06	48.2	47.8	14	
08	48.2	47.9	14	
10	47.5	46.9	15	
12	47.3	46.8	16	
14	47.8	47.0	15	+4.6
16	48.5	47.9	14	
18	48.7	48.0	14	
20	49.0	48.3	13	
22	49.0	48.2	13	
24	49.5	49.0	12	
26	50.5	49.9	11	
28	52.3	51.7	08	
30	53.8	52.8	06	+4.5
32	52.3	51.6	08	
34	51.6	50.8	09	
36	50.9	50.1	10	
38	50.7	50.0	10	
40	50.9	50.3	10	
42	51.9	51.4	08	
44	54.2	53.2	05	+4.4
46	55.6	54.9	03	
48	55.6	55.4	02	
50	56.1	55.2	02	
52	56.0	55.2	02	
54	56.0	55.3	02	
56	56.0	55.2	02	
58	56.3	55.3	02	
20 00	56.6	55.6	01	+4.2

Correction to local mean time is — 10s.
Torsion head read 258° at beginning and ending.
Observer—W. J. P.

Friday, July 28, 1905 — Magnet scale erect

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
20 00	53.0	55.2	20 25	+9.4
02	53.5	55.6	26	
04	54.3	56.5	27	
06	55.2	59.2	30	
08	55.6	59.6	31	
10	55.0	57.0	28	
12	53.8	55.7	26	
14	53.0	54.8	25	+9.6
16	52.9	54.9	25	
18	53.1	55.0	25	
20	53.5	55.0	25	
22	53.8	55.0	26	
24	53.2	54.6	25	
26	53.0	54.2	24	
28	53.8	54.7	25	
30	53.3	54.5	25	+9.8
32	53.5	54.5	25	
34	51.8	52.6	22	
36	49.9	50.5	19	
38	44.3	45.3	11	
40	42.3	42.4	07	
42	41.8	42.1	06	
44	41.7	42.3	06	+9.6
46	42.3	43.0	07	
48	43.3	44.3	09	
50	44.2	44.8	10	
52	43.1	43.8	08	
54	40.3	41.5	20 04	
56	37.2	37.8	19 59	
58	34.6	35.1	55	+8.8
21 00	34.0	34.7	54	
02	33.2	33.9	53	
04	32.0	32.6	51	
06	32.4	32.9	51	
08	34.2	34.5	54	
10	33.7	34.0	53	
12	29.0*b*		46	
14	27.8	27.8	44	+8.0
16	29.2	29.2	46	
18	30.9	31.1	49	
20	31.8	32.1	50	
22	33.8	34.2	54	
24	36.7	37.0	19 58	
26	37.9	38.1	20 00	
28	34.9	35.3	19 55	
30	32.3	32.3	51	+6.8
32	33.2	33.6	53	
34	35.3	35.8	19 56	
36	37.6	38.1	20 00	
38	40.5	41.0	04	
40	39.8	40.2	03	
42	38.3	38.5	20 00	
44	37.6	37.9	19 59	+6.2
46	37.5	37.8	59	
48	34.9*b*		55	
50	30.5*b*		48	
52	28.5	28.9	45	
54	29.7	29.9	47	
56	29.5	29.9	47	
58	30.3	30.5	48	
22 00	30.6	30.8	19 48	+5.8
02	31.3	31.7	50	
04	31.2	31.4	49	
06	30.2	30.2	48	
08	30.9	31.1	49	
10	33.0	33.0	52	
12	35.0	35.0	55	
14	37.2	37.4	59	+5.3
16	37.2	37.3	19 59	
18	39.8*a*		20 03	
20	42.2	42.6	07	
22	45.2*a*		11	
24	57.0*a*		30	
26	61.2*a*		36	
28	63.2	64.0	40	
30	64.1	64.7	41	+5.1
32	66.5	68.2	46	
34	56.8*b*		29	
36	43.9*b*		20 09	
38	37.3*b*		19 59	
40	27.3	27.8	43	
42	30.6*a*		48	
44	33.8*a*		53	+5.0
46	31.8*a*		50	
48	28.6	29.1	46	
50	31.3*a*		49	
52	31.8	31.9	50	
54	31.2	31.6	50	
56	30.5	31.0	48	
58	32.0	32.6	51	
23 00	30.9	31.5	49	+5.0
02	32.0	32.3	51	
04	34.7	35.0	55	
06	31.5	32.5	50	
08	30.0	30.5	48	
10	29.0	29.6	46	
12	29.0	29.8	48	
14	31.0	31.8	50	+4.8
16	32.6	33.3	52	
18	34.6	35.0	55	
20	36.8	37.1	58	
22	36.9	37.1	58	
24	37.0	37.6	19 59	
26	39.0	39.3	20 02	
28	41.7	42.0	06	
30	43.8	44.3	09	+4.3
32	46.0	46.4	13	
34	46.4	46.6	13	
36	45.6	45.9	12	
38	43.8	44.3	09	
40	40.9	41.5	05	
42	38.1	38.7	20 00	
44	37.0	37.0	19 58	+4.1
46	38.2	38.4	20 00	
48	39.4	39.6	02	
50	40.6*a*		04	
52	42.2	42.2	06	
54	43.2	43.5	08	
56	43.1	43.2	08	
58	40.0	40.8	04	
24 00	38.0	38.3	00	+4.0

Correction to local mean time is — 10s. 90° torsion = 18.′33.
Torsion head at 20h 00m read 258° and at 24h 20m read 252°.
Observer—W. J. P.

Tabulation of magnetic declinations observed at Alger Island Station—Continued

Sunday, July 30, 1905 — Magnet scale inverted

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
0 00*	50.6	49.0	20 12	+4.2
02	53.0	51.2	08	
04.5	50.2	49.3	12	
06	47.6	46.0	16	
08	47.3	46.5	16	
10	49.0	47.5	14	
12	48.2	47.2	15	
14	48.2	47.1	15	+4.5
16	48.1	47.3	15	
18	48.3	47.3	15	
20	49.1	48.1	13	
22	45.8	45.5	18	
24	43.8	43.0	22	
26	43.6	43.5	21	
28	39.6	39.0	28	
30	40.1	40.0	27	+4.5
32	47.6	47.5	15	
34	49.3	47.6	14	
36	41.2	40.8	25	
38	44.1	43.1	21	
40	47.0	46.5	16	
42	47.0	46.0	17	
44	44.9	44.2	20	
46	47.8*a*		15	
48	51.0	50.1	10	
50	51.3	50.5	10	
52	53.9	53.0	06	
54	52.6	52.0	08	
56	52.7	51.9	08	
58	51.4	50.9	09	
1 00	50.8	50.0	11	+4.9
02	51.0	50.1	10	
04	50.1	49.6	12	
06	49.7	49.1	12	
08	49.5	49.0	12	
10	50.0	49.5	12	
12	50.1	49.9	11	
14	50.2	50.1	11	
16	50.3	50.0	11	+5.0
18	50.1	49.5	12	
20	50.3	49.5	11	
22	52.0	51.5	08	
24	54.3	53.1	05	
26	51.5	50.3	10	
28	49.5	48.4	13	
30	48.5	47.7	14	+5.0
32	48.7	47.6	14	
34	52.8	51.1	08	
36	55.3	54.5	04	
38	53.5	52.6	06	
40	53.7	52.8	06	
42	51.6	51.0	09	
44	50.3	49.3	12	+5.0
46	48.6	47.6	14	
48	45.0	44.0	20	
50	45.2	44.1	20	
52	45.6	44.3	19	
54	47.4	46.4	16	
56	47.3	46.3	16	
58	48.7	47.8	14	
2 00	47.3	46.3	20 16	+5.0
02	45.4	44.0	20	
04	43.3	42.7	22	
06	40.6	40.2	26	
08	36.1	35.9	33	
10	29.6	29.5	43	
12	26.0	24.6	50	
14	19.7	18.9	20 59	+5.0
16	19.6	18.2	21 00	
18	23.9	22.3	20 53	
20	26.7	25.0	49	
22	25.9	24.0	51	
24	27.8	26.0	48	
26	27.3	25.3	48	
28	30.9	28.4	43	
30	36.6	34.1	34	+5.0
32	38.0	36.2	31	
34	36.2	34.3	34	
36	34.2	32.4	37	
38	34.3	32.0	38	
40	29.0	26.2	46	
42	23.0	18.5	20 57	
44	14.6	9.0	21 11	
46*	35.3	30.1	18	+5.0
48	45.5	39.9	02	
50	46.6	41.3	00	
52	44.1	39.1	04	
54	36.0	31.0	16	
56	33.5	29.1	20	
58	37.8	33.1	14	
3 00	37.0	32.9	14	+5.0
02	38.8	34.8	11	
04	40.1	36.8	09	
06	39.5	36.0	10	
08	36.3	33.0	15	
10	32.1	29.3	21	
12	30.8	28.6	22	
14	28.0	25.9	27	+5.0
16	29.0	26.3	26	
18	31.1	28.5	22	
20	30.1	27.7	24	
22	29.0	27.0	25	
24	28.8	26.6	26	
26	31.4	29.3	22	
28	30.9	29.1	22	
30	29.3	27.5	24	+5.0
32	29.0	27.2	25	
34	30.6	29.0	22	
36	32.0	30.3	20	
38	33.0	31.3	19	
40	33.5	32.0	18	
42	33.0	31.7	18	
44	31.0	30.0	21	+5.0
46	30.4	29.3	22	
48	32.0	31.0	20	
50	33.2	32.2	18	
52	34.0	33.3	16	
54*	52.6	51.0	13	
56	52.6	51.0	13	
58	50.8	49.2	16	

Observers—W. J. P. and A. F., who alternated from 3h 58m to 4h 08m.

Sunday, July 30, 1905 — Magnet scale erect.

Chr'r time	Scale readings Left	Scale readings Right	East declination	Temp. C.
h m	d	d	° ′	°
4 00	56.7	58.8	21 17	+5.4
02	57.0	59.0	17	
04	54.5	56.8	13	
06	53.8	55.3	12	
08	53.0	55.0	11	
10	48.1	49.2	21 02	
12	41.2	42.1	20 52	
14	38.8	40.0	20 48	+5.6
16	47.2	48.0	21 01	
18	52.3	54.0	10	
20	49.9	51.8	06	
22	47.3	48.9	02	
24	48.4	49.8	03	
26	49.5	50.9	05	
28	50.3	51.5	06	
30	49.2	49.9	04	+5.7
32	49.1	50.2	04	
34	49.0	49.9	04	
36	50.2	50.8	06	
38	55.0	55.8	13	
40	54.0	54.8	12	
42	53.3	54.2	10	
44	56.2	57.4	15	
46	58.5	59.5	19	+5.5
48	56.2	57.6	16	
50	55.9	56.8	15	
52	55.3	56.5	14	
54	56.7	57.8	16	
56	56.2	57.3	15	
58	55.8	56.9	15	+5.3
5 00.5	55.8	56.9	15	
02	54.8	55.9	13	
04	55.0	56.2	13	
06	55.2	56.4	14	
08	56.8	57.3	16	
10	53.0	54.2	21 10	
12	41.5	43.5	20 53	
14	35.0	36.0	42	+5.2
16	34.2	35.4	41	
18	39.9	41.5	50	
20	39.2	40.0	48	
22	42.3	44.5	54	
24	43.8	44.7	56	
26	42.3	43.2	20 53	
28	47.0	47.9	21 01	
30	44.8	46.0	20 58	+5.1
32	49.5	50.6	21 05	
34	47.0	48.2	01	
36	50.7	52.3	07	
38	52.5	54.0	10	
40	51.0	52.4	07	
42	51.6	52.5	08	
44	49.0	50.0	04	
46	47.8	49.1	02	+5.1
48	48.7*b*		21 03	
50	44.8*a*		20 57	
52	51.5*a*		21 07	
54	51.8*b*		08	
56	47.5*a*		01	
58	57.4*b*		16	
6 00	45.3	47.3	20 59	+5.3
02	49.7	50.1	21 04	
04	47.5	48.5	02	
06	49.3	50.1	04	
08	48.4	49.6	21 03	
10	44.0	44.8	20 56	
12	45.2	46.0	58	
14	40.0	41.0	50	
16	41.0*a*		20 51	+5.5
18	47.2	47.6	21 01	
20	50.0	51.5	21 06	
22	44.0	45.4	20 56	
24	50.3	51.2	21 06	
26	40.2	41.8	20 51	
28	45.0	45.6	57	
30	39.2	40.2	48	+5.7
32	40.8	41.2	51	
34	36.0	37.2	44	
36	34.2	35.0	40	
38	31.2	32.1	36	
40	33.8	35.4	40	
42	38.8	40.4	48	
44	36.0	37.2	44	
46	37.8	39.3	47	+5.8
48	36.0	37.0	43	
50	35.3	36.1	42	
52	32.7	33.5	38	
54	33.2	34.1	39	
56	35.1	36.5	42	
58	37.7	38.8	46	
7 00	39.1	39.5	48	+6.0
02	39.5	40.0	49	
04	40.2	40.8	50	
06	43.5	44.0	55	
08	40.0	41.0	50	
10	32.7	34.0	38	
12	33.7	34.5	40	
14	36.2	36.8	44	+6.2
16	36.2	37.0	44	
18	37.8	38.7	46	
20	35.3	36.0	42	
22	33.8	34.2	40	
24	32.3*b*		37	
26	29.2*b*		32	
28	27.0	27.8	29	
30	28.7	29.0	31	+6.6
32	34.0	35.8	41	
34	38.8	40.7	48	
36	38.5	39.0	47	
38	31.6	32.8	37	
40	30.7	31.5	35	
42	29.4	30.2	33	
44	33.1	34.8	39	
46	34.8	35.8	42	+6.9
48	33.6	34.6	40	
50	31.0	32.0	36	
52	28.8	30.0	32	
54	30.0	31.0	34	
56	31.2	32.3	36	
58	36.0	37.0	44	
8 00	37.5	39.0	46	+7.1

Correction to local mean time is — 10s.
Torsion head at beginning and ending read 252°.
Observer—A. F.

REDUCTIONS FROM DECLINATION OBSERVATIONS AT ALGER ISLAND

Diurnal Variation

In deriving an expression representing the diurnal variation in magnetic declination over the period of observation at Alger Island the same methods have been used as in the case of the Teplitz Bay series (see pages 275 to 294). A tabulation of the resulting mean magnetic declinations as deduced from the observations between June 26 and July 31, 1905, is given on the following page.

The analytical expression representing the daily variation of the east declination of the needle as deduced from these means is

$$D = 20^\circ\ 28.'4 + 34.'70 \sin(\theta + 3^\circ\ 15') + 11.'55 \sin(2\theta + 292^\circ\ 31') + 7.'94 \sin(3\theta + 232^\circ\ 25') + 1.'73 \sin(4\theta + 150^\circ\ 43') \pm 0.'65,*$$

the angle θ counting from 15° as 0.5 hour A. M. A graphical representation to scale of this formula, together with the mean values from which it is deduced, is given in figure 23. The agreement between the individual observed means and values computed for the corresponding times is given in the following summary, in which the observed and computed values are represented by letters *O* and *C* respectively, easterly deviation from the mean value for the whole period being indicated by a plus sign, and *vice versa*, and extremes being in bold-face type.

Summary of observed and computed diurnal variation of magnetic declination at Alger Island for period June 26 to July 31, 1905

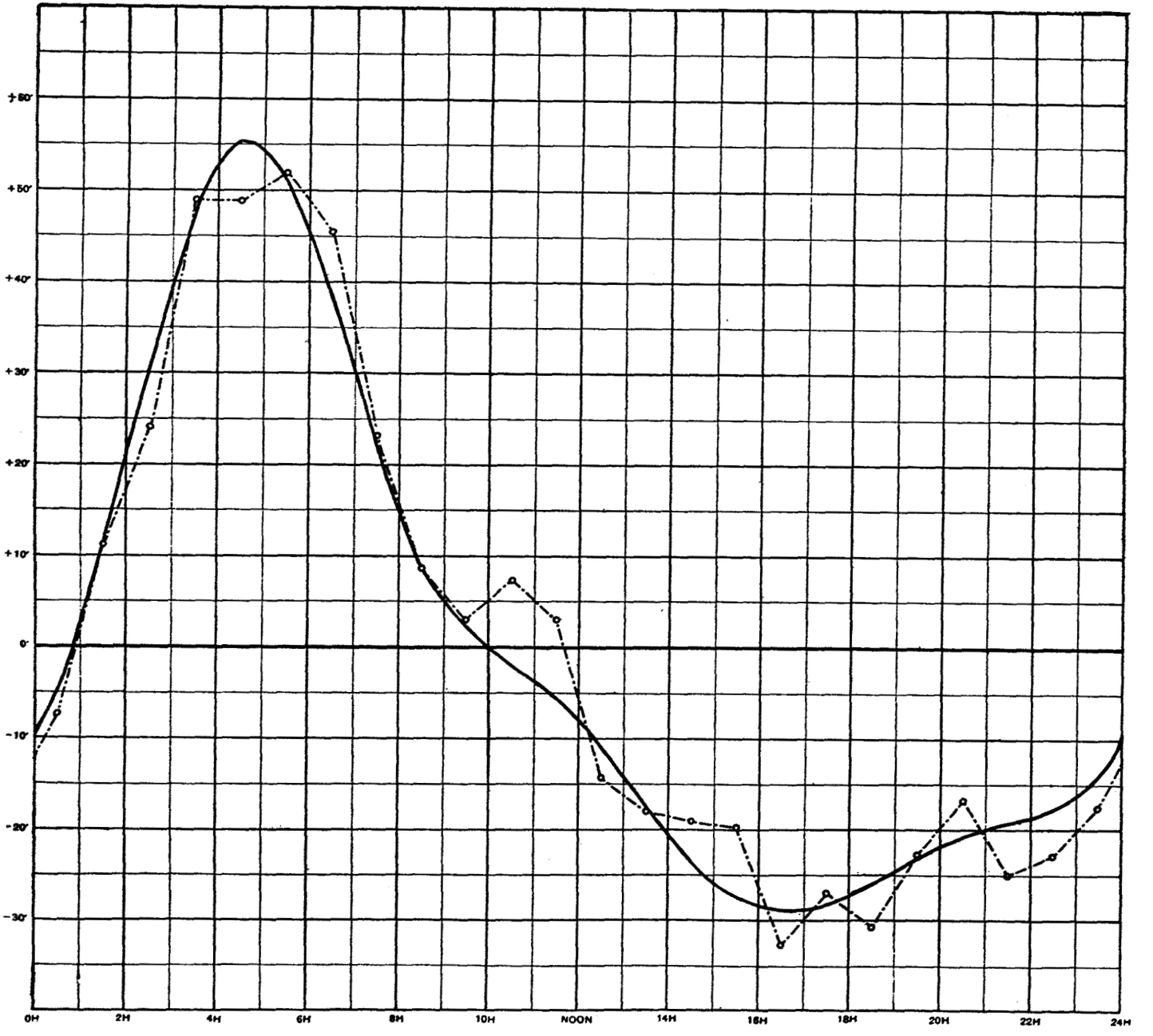
L. M. T.	*O*	*C*	*O-C*	L. M. T.	*O*	*C*	*O-C*
h	′	′	′	*h*	′	′	′
0.5	− 7.4	− 4.9	− 2.5	12.5	− 14.4	− 10.9	− 3.5
1.5	+ 10.8	+ 11.0	− 0.2	13.5	− 18.2	− 17.4	− 0.8
2.5	+ 23.8	+ 30.5	− 6.7	14.5	− 19.0	− 23.3	+ 4.3
3.5	+ 48.7	+ 47.3	+ 1.4	15.5	− 19.7	− 27.2	+ 7.5
4.5	+ 48.6	**+55.0**	− 6.4	16.5	**−32.5**	**−28.7**	− 3.8
5.5	**+51.6**	+ 51.0	+ 0.6	17.5	− 27.1	− 28.0	+ 0.9
6.5	+ 45.4	+ 38.1	+ 7.3	18.5	− 30.5	− 25.8	− 4.7
7.5	+ 23.2	+ 22.5	+ 0.7	19.5	− 22.7	− 23.0	+ 0.3
8.5	+ 8.6	+ 10.0	− 1.4	20.5	− 16.7	− 20.5	+ 3.8
9.5	+ 2.8	+ 2.5	+ 0.3	21.5	− 25.2	− 19.1	− 6.1
10.5	+ 7.4	− 1.6	+ 9.0	22.5	− 23.0	− 17.8	− 5.2
11.5	+ 2.9	− 5.5	+ 8.4	23.5	− 17.5	− 14.1	− 3.4

For a value of magnetic declination at Alger Island, practically referring to mean of day, the mean of the tabulated observational means may be taken, viz :

20° 28.′4 E for the epoch 1905.53.

* This quantity is the probable error of a single representation.

FIGURE 23



DIURNAL VARIATION IN MAGNETIC DECLINATION AT ALGER ISLAND FOR THE PERIOD JUNE 26, 1905, TO JULY 31, 1905

(Observed mean values shown by circles joined by broken line; computed values shown by the continuous curve. Increasing ordinates up denote increasing east declination.)

Tabulation of mean hourly magnetic declinations at Alger Island

Five weeks, entire series, June 26 to July 31, 1905

20° plus tabular quantity, east

h 0.5	*h* 1.5	*h* 2.5	*h* 3.5	*h* 4.5	*h* 5.5	*h* 6.5	*h* 7.5	*h* 8.5	*h* 9.5	*h* 10.5	*h* 11.5
Sunday				Sunday				Monday			
2, 9, 16, 23, 30				2, 9, 16, 23, 30				26, 3, 10, 17, 24			
′	′	′	′	′	′	′	′	′	′	′	′
26.7	34.5	49.0	74.0	53.2	47.8	52.6	49.6	....	33.8	29.6	19.2
14.0	21.3	40.5	109.7	125.8	87.3	63.6	81.5	26.3	30.7	35.7	37.1
11.7	29.3	43.9	68.0	101.4	70.4	42.3	32.6	38.1	34.5	28.4	12.3
15.5	93.5	71.9	97.1	107.8	136.3	138.4	69.7	46.1	33.5	32.6	24.4
15.2	11.9	49.6	79.3	69.0	62.3	51.0	40.8	27.7	25.2	94.3	120.2
				Wednesday							
				28, 5, 12, 19, 26							
23.5	45.5	47.7	56.8	....	....	....	....	....	...	....	....
11.6	38.2	57.2	45.5	55.4	160.7	150.2	51.1	27.5	22.3	22.7	22.1
10.1	03.9	51.8	80.6	74.0	52.2	68.2	54.4	55.6	32.6	26.2	09.0
37.1	60.1	64.8	68.6	47.0	46.1	45.6	46.5	48.8	40.7	26.0	15.2
44.2	53.5	45.2	91.7	59.8	56.5	52.6	38.6	25.9	28.0	26.8	21.8
21.0	39.2	52.2	77.1	77.0	80.0	73.8	51.6	37.0	31.2	35.8	31.3

Tabulation of mean hourly magnetic declinations at Alger Island

Five weeks, entire series, June 26 to July 31, 1905—Continued

20° plus tabular quantity, east

h 12.5	*h* 13.5	*h* 14.5	*h* 15.5	*h* 16.5	*h* 17.5	*h* 18.5	*h* 19.5	*h* 20.5	*h* 21.5	*h* 22.5	*h* 23.5
Tuesday				Thursday				Friday			
27, 4, 11, 18, 25				29, 6, 13, 20, 27				30, 7, 14, 21, 28			
′	′	′	′	′	′	′	′	′	′	′	′
10.1	06.5	— 02.0	00.5	— 17.0	26.6	18.1	26.6	— 14.4	— 29.5	— 31.6	— 25.6
10.7	08.0	17.2	18.5	— 36.5	— 72.9	—103.6	— 43.0	33.5	19.5	00.7	10.2
09.5	15.0	15.8	18.1	....	..	....	...	20.2	10.4	05.1	06.9
04.4	— 03.4	— 21.4	— 25.9	10.0	13.0	10.5	12.6	18.4	14.5	11.5	13.8
19.0	— 07.7	17.4	10.6	05.1	05.2	08.6	09.0	17.5	— 07.1	01.9	00.0
				Wednesday							
				28, 5, 12, 19, 26							
....	....	....	....	....	....	....	...	....	....	....	....
22.1	14.6	04.8	17.2	18.4	08.1	— 00.8	03.5	21.5	13.3	09.1	31.1
22.9	25.3	13.0	08.2	— 28.1	06.9	15.2	06.5	— 10.5	— 13.1	04.4	03.1
13.0	20.7	22.6	13.0	— 05.2	11.0	17.2	14.9	08.9	08.5	31.4	46.4
14.3	12.9	17.2	17.7	15.8	12.8	17.7	15.8	10.3	12.7	16.5	12.0
14.0	10.2	09.4	08.7	— 04.1	01.3	— 02.1	05.7	11.7	03.2	05.4	10.9

INCLINATION

Instrument, Methods, and Results

The same instrument and methods were used in the determinations of magnetic dip at the Alger Island station as at Teplitz Bay (see pages 307 to 309). The observations were made on the central pier in the observatory, the magnetometer at such times being removed from its place. The results obtained are exhibited in the following table:

Summary of observations of magnetic inclination at Alger Island

Date	L. M. T.	Needle 3	Needle 4	Mean	Observer
1905	*h m*	° ′	° ′	° ′	
June 26.....	14 56	82 45.7	82 46.4	82 46.0	W. J. P.
27.....	9 54	46.7	43.6	45.2	Do.
July 10.....	16 09	40.3	43.6	42.0	Do.
11.....	9 59	48.2	48.1	48.2	Do.
17.....	13 56	44.8	46.2	45.5	Do.
18.....	10 30	47.7	48.5	48.1	Do.
24.....	14 26	46.4	48.1	47.2	Do.
25.....	10 16	42.7	45.0	43.8	Do.

From the above the mean value of the magnetic inclination at Alger Island, practically applying to mean of day, is

82° 45.′8 N for the epoch 1905.53.

HORIZONTAL INTENSITY

Instrument, Methods, and Results

The instrument and methods used at the Alger Island station were the same as at Teplitz Bay, already described in detail on pages 313 to 315. The following tabulation summarizes the work at this station; the various column headings are explained on page 313.

Summary of observations of magnetic intensity at Alger Island

Date	Local mean time	u		Centigrade temperature		$\log \frac{H}{m}$		T^v
		$r = 30$ cm.	$r = 40$ cm.	t	t'	$r = 30$ cm.	$r = 40$ cm.	
1905	*h m*	° ′	° ′	°	°			*s*
June 26	19 38	26 50.3	10 57.0	+ 6.00	+ 7.90	6.21410	6.21562	9.83990
27	7 18	26 58.0	11 04.0	+ 9.55	+10.27	6.21210	6.21098	9.83224
July 10	19 15	26 40.0	10 57.7	+10.50	+12.37	6.21658	6.21506	9.82239
11	7 25	27 00.4	11 02.5	+10.25	+12.00	6.21149	6.21193	9.85422
17	18 36	26 43.4	10 57.9	+ 4.85	+ 6.30	6.21587	6.21507	9.80942
18	8 32	27 01.6	11 06.4	+ 5.70	+ 5.59	6.21132	6.20951	9.83258
24	18 39	26 54.9	11 03.0	+ 3.80	+ 4.74	6.21302	6.21177	9.79750
25	8 32	27 10.1	11 15.6	+ 4.00	+ 3.52	6.20925	6.20368	9.83218

Summary of observations of magnetic intensity at Alger Island—Continued

Date	Effect 90° torsion v	$\log m(H+X)$	$\log \sqrt{H(H+X)}$	H	$\log m_t$	$\log m_{20}$	Observer
1905	′			γ			
June 26	19.52	1.46503	8.83995	7172	2.64078	2.63896	W. J. P.
27	19.75	1.46561	8.83857	7151	2.64283	2.64147	Do.
July 10	18.10	1.46674	8.83128	7194	2.64115	2.63991	Do.
11	18.62	1.46387	8.83779	7138	2.64187	2.64060	Do.
17	17.63	1.46781	8.84164	7199	2.64180	2.63983	Do.
18	17.12	1.46568	8.83805	7142	2.64340	2.64154	Do.
24	16.92	1.46887	8.84063	7183	2.64391	2.64180	Do.
25	19.30	1.46549	8.83598	7110	2.64541	2.64333	Do.

From these results the mean value of the magnetic horizontal intensity at Alger Island, practically applying to mean of day, is

7161 γ for the epoch 1905.53.

Summary of Magnetic Elements at Alger Island

The following shows in one view the mean results obtained by the expedition at the Alger Island station, all the values applying practically to mean of day:

Epoch	East declination	Northerly inclination	Horizontal intensity	Vertical intensity	Total intensity
	° ′	° ′	γ	γ	γ
1905.53	20 28	82 46	7161	56395	56848

° ′

Latitude of station is 81 21.5 N.
Longitude of station is 56 05.5 E.

MISCELLANEOUS OBSERVATIONS

A—Tromsoe, Norway

The magnetic station was located on the east side of Tromsoe Sound about fifty feet from the shore line and on the edge of the cultivated field opposite the city of Tromsoe. Very little time was available for work at this station; as a result only declinations could be observed with magnetometer No. IIII. The mark used was a house appearing over point of Tromsoe Island in true azimuth 195° 40.′9 west of south and distant about five miles.

Latitude N	Longitude east of Greenwich	Date	Local mean time	Observed declination
° ′	° ′	1903	*h m*	° ′
68 39	18 50	June 27	13 59	7 01.7 W
			14 56	7 00.3

Observers—R. W. Porter, W. J. Peters, and R. R. Tafel.

B—Archangel, Russia

The magnetic station was located on the south point of a low, flat, sandy island covered with small willows in the Dwina River about west-southwest of the old prison in Solomba. The taller and middle spire of the Archangel cathedral is in true azimuth from the magnetic station 344° 20.′3 west of south. Complete observations were made with magnetometer No. IIII and dip circle No. 5676. In the following summary of the results at this station all instrumental corrections have been made, but no corrections for diurnal variations are applied.

Latitude N	Longitude east of Greenwich	Date	Local mean time	Observed declination	Local mean time	Observed dip*	Observed horizontal intensity	Observed log m_{20}
° ′	° ′	1903	*h m*	° ′	*h m*	° ′	γ	
64 34	40 40	July 3	13 17	7 22.7 E	15 50	73 54.1 N	.....	.....
			18 26	7 28.8	15 48	74 00.6	.....	.....
		July 4	12 18	7 27.3	15 18	.. .. .	14528	2.64048
			13 32	7 25.0	17 42	.. .. .	14538	2.64054
			18 31	7 25.8	.. ..	.. .. .	.....	.....

Observers—W. J. Peters and R. W. Porter. * Needles Nos. 3 and 4 respectively.

C—Barents Sea

Observations were made on the floating ice in Barents Sea. For declination observations a C. L. Berger and Sons' alt-azimuth instrument with compass needle attached in tube under telescope (see figure 2 of astronomic notes) was used. The methods and results obtained are exhibited in the following summary:

Date	Mark	Mean watch time	Mean altitude vertical circle R and L	Mean horizontal circle reading	Pointings	Resulting declination
1903		*h m s*	° ′	° ′		° ′
August 1.....	Needle.....	16 54 55	.. ...	0 00.0	1	
	⊙ Sun...	17 10 21	9 52.1	293 34.0	2	17 42.8 E
	Needle.....	17 24 56	.. ...	359 24.0	1	
	⊙ Sun....	17 34 21	8 53.6	298 31.5	4	17 60.2
	Needle.....	17 53 01	.. ...	357 42.1	5	
	⊙ Sun ...	18 21 56	7 04.8	307 39.4	4	17 51.8
	Needle.....	18 34 55	.. ...	356 08.1	5	
			Weighted mean value.....			17 48.0 E

The error of the watch on Greenwich mean time was + 4^m 57^s. A midnight altitude of the sun on the same date, together with the above time observations, gives :

Latitude 77° 06′ N.
Longitude 52° 15.′1 E of Greenwich.

The magnetic observing tent was set up about six hundred feet distant from the alt-azimuth instrument in a direction S 10° W, and dip observations were made with dip circle No. 5676 in the usual manner, giving the following results :

Date	Local mean time	Observed inclination		
		Needle No. 3	Needle No. 4	Mean
1903	*h m*	° ′	° ′	° ′
August 1...	22 31	81 01.7 N	81 05.2 N	81 03.4 N

Observers—W. J. Peters and R. W. Porter.

D—Determinations on Plane Table Traverse

In the course of the plane table traverse work from Teplitz Bay to Cape Flora Mr. R. W. Porter made the following declination observations :

Place	Latitude N	Longitude east of Greenwich	Local mean date	Azimuth determined how	No. needle pointings	Mean observed declination
	° ′	° ′	1904 *h*			° ′
Cape Norway.....	81 12	55 34	April 18, 12.4	Theodolite No. II.....	1	25 52 E
Hooker Island station XXI....	80 21	53 12	June 19, 12.1	Theodolite and azimuth obs. on station XX...	7	19 41.7
Rubini Rock.....	80 19	52 48	June 23, 22.0	Theodolite and azimuth obs. on station A.....	5	17 29.7
Cape Flora.....	79 57	49 58	July 9-19.....	Plane table needle stations B, D, E, L, K, M.	6	14 57

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SECTION B

NOTES AND SKETCHES

OF THE

AURORA BOREALIS

BY

ANTHONY FIALA

Commander of the Expedition

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PLATES

1	December 23, 1903, 3:30 P. M.	11	January 23, 1904, 9:50 P. M.
2	December 23, 1903, 4:10 P. M.	12	January 23, 1904, 9:56 P. M.
3	December 23, 1903, 4:40 P. M.	13	January 23, 1904, 10:03 P. M.
4	December 23, 1903, 5:15 P. M.	14	January 23, 1904, 10:06 P. M.
5	December 23, 1903, 11:40 P. M.	15	January 23, 1904, 10:09 P. M.
6	December 23, 1903, 12:00 P. M.	16	January 23, 1904, 10:13 P. M.
7	January 2, 1904, 8:00 P. M.	17	January 23, 1904, 10:20 P. M.
8	January 2, 1904, 8:30 P. M.	18	January 23, 1904, 10:24 P. M.
9	January 2, 1904, 9:00 P. M.	19	January 23, 1904, 10:28 P. M.
10	January 23, 1904, 9:36 P. M.		

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AURORAL OBSERVATIONS

Remarks Regarding Sketches

On a previous Polar expedition I had made many attempts to photograph the aurora, but without material success. By long exposure some small effects of the light with that of the stars on the sensitive plates could be obtained. These, however, were without value as a matter of record, as this phenomenon is so rapid in its variations that to depict the same correctly instantaneous photographs are necessary. This is not possible, owing to the insufficient light. Accordingly recourse had to be taken to sketching.

In connection with the work at the magnetic observatory a number of sketches of the aurora were made, using for the purpose a board with compass attached for orientation. The cardinal points indicated on the plates are accordingly magnetic. The drawings were made upon black sheets of paper, upon each of which a circle representing the horizon was previously drawn in chalk. The sheets were so placed together and pinned at the corners that they could be torn off as the sketches were completed. A pin at the center represented the zenith point. Having had some experience in rapid sketching, it did not take long to place on the paper rough chalk sketches of the beautiful auroral light, using the board as a plane table, and drawing in the circle of the chalk horizon the display that was taking place in the heavens overhead.

Owing to numerous other duties and on account of the generally prevalent bad weather opportunities for sketching were few. The attendant physical difficulties for work of this kind in the open air, under the flickering light of a small lantern, without shelter of any kind, and with a temperature of from 30° to 50° Fahrenheit below zero, may be readily imagined. In spite of these difficulties some very interesting and, it is believed, representative sketches were secured. The results of this work are shown by plates numbers 1 to 19, the titles of which give the dates and times of the phenomena so recorded.

In order to make as complete a record as possible of this phenomenon during the time the Expedition was at work, the various auroral notes have been gathered together from the meteorologic records for both the Teplitz Bay and Cape Flora stations. The notes at Camp Abruzzi between October, 1903, and March, 1904, as also for those at Cape Flora, were collected by Sergeant Francis Long, Weather Observer. Those between October, 1904, and February, 1905, were made by different members of the party, chiefly by Messrs. Peters, Porter, and Dr. Seitz. The times given are local mean, civil reckoning through twenty-four hours for the respective stations. The first figure entered indicates the day of the month, those following the hour and minute, thus: 21: 18: 10 means the 21st day of the month at local mean time $18^h\ 10^m$ or $6^h\ 10^m$ P. M. Directions given in these notes are all true, and not magnetic as in the cases of the sketches. The references are to the beginning and ending of the display, the extent of the same and the altitude, thus: 21: 18: 10 to 20: 20, E to W, about 60°, means that an aurora was observed on the 21st day of the particular month under which the note comes between $18^h\ 10^m$ and $20^h\ 20^m$, and that it extended from east to west at an altitude of about 60°. In connection with these notes reference should also be made to such references of auroræ as are contained in the notes accompanying the declination results at Teplitz Bay on pages 32 to 40, as these are not included in the following.

AURORÆ OBSERVED AT CAMP ABRUZZI, TEPLITZ BAY, RUDOLPH ISLAND

October, 1903—3: 21: 00 to 22: 00, E to W, about 35° to 40°.—21: 19: 10 to 20: 40, E to W, about 25° to 40°.—30: 21: 20 to 22: 10, SE to NW.—31: 21: 45 to 22: 10 from 60° to 90°.

November, 1903—1: 05: 00 to 6: 15; 1: 16: 15 to 18: 00.—4: 16: 45 to 17: 30, E to W.—10: 17: 15 to 19: 10, E to W.—11: 16: 00 to 22: 00, E to W, about 35°.—12: 15: 00 to 16: 25, E to W.—14: 20: 50 to 21: 10, W to E.—15: 22: 30 to 23: 10.—17: 14: 30 to 22: 10, E to W.—18: 04: 00 to 10: 30; 18: 14: 00 to 21: 10.—19: 10: 30 to 10: 50, E to W and N; 19: 14: 30 to 16: 00; 19: 19: 35 to 21: 10.—22: 21: 10 to 21: 50.—23: 22: 45 to 24: 00.—25: 16: 30 to 17: 10.—26: 20: 00 to 21: 00 from 30° to 45°.

December, 1903—2: 07: 00 to 8: 15.—8: 15: 55 to 17: 00, E to W; 8: 19: 10 to 21: 10.—12: 20: 00 to 21: 30.—13: 07: 45 to 18: 30.—14: 07: 45 to 9: 10; 14: 19: 30 to 24: 00.—17: 19: 30 to 24: 00.—18: 11: 45 to 12: 30; 18: 19: 00 to 23: 10.—19: 23: 00 to 24: 00.—20: 19: 30 to 20: 15.—21: 07: 30 to 9: 00; 21: 19: 50 to 21: 50.—22: 19: 50 to 20: 30.—23: 07: 45 to 8: 15; 23: 11: 45 to 17: 00; 23: 22: 40 to 24: 00.—24: 20: 00 to 22: 30.—28: 22: 30 to 24: 00.

January, 1904—2: 19: 45 to 21: 00.—4: 10: 10 to 10: 20; 4: 12: 00 to 12: 40.—5: 07: 55 to 8: 25.—7: 22: 30 to 23: 40.—9: 23: 15 to 24: 00.—10: 07: 00 to 8: 40; 10: 14: 10 to 16: 25.—11: 07: 30 to 8: 10; 11: 15: 25 to 17: 00; 11: 22: 10 to 23: 25.—12: 15: 50 to 18: 10; 12: 19: 20 to 22: 25.—13: 11: 00 to 11: 25; 13: 12: 00 to 12: 40; 13: 14: 40 to 24: 00.—14: 11: 50 to 12: 40; 14: 22: 30 to 23: 10.—15: 12: 00 to 16: 00; 15: 16: 30 to 20: 10.—20: 12: 10 to 12: 35 in S.—23: 22: 00 to 24: 00.—24: 00: 00 to 00: 30.—25: 19: 30 to 21: 10.—28: 19: 15 to 19: 25; 28: 19: 40 to 19: 55.—30: 19: 45 to 20: 10; 30: 20: 30 to 20: 50.—31: 20: 15 to 20: 45.

February, 1904—1: 15: 10 to 15: 40, E to W.—5: 18: 10 to 18: 40; 5: 22: 20 to 23: 00.—6: 21: 00 to 24: 00.—7: 07: 45 to 8: 15; 7: 19: 15 to 24: 00.—8: 15: 30 to 17: 00; 8: 18: 00 to 24: 00.—9: 19: 55 to 20: 25.—11: 19: 00 to 24: 00.—12: 21: 30 to 24: 00.—16: 19: 15 to 21: 00; 16: 22: 00 to 24: 00.—18: 19: 00 to 21: 10; 18: 22: 00 to 24: 00.—23: 20: 25 to 20: 35; 23: 22: 15 to 23: 00.

March, 1904—2: 19: 40 to 20: 20.—16: 21: 35 to 22: 00.

October, 1904—19, aurora in E.—28, fine aurora.

November, 1904—2, light aurora 3 days.—4, aurora SE to SW.—7, light aurora in SE and W.—9, light aurora, ESE to SW.—10, light aurora, E to W.—12, very light aurora, E to SW.—13, light aurora, SE to middle SW.—16, light aurora, SSW to SSE.—17, brilliant aurora, E to W, entire southern hemisphere.—26, light aurora.—27, aurora SE to W.—29, light aurora, 18 : 30, WNW to E, and 20 : 00, ESE to WSW.

December, 1904—1, aurora NE to WNW; wide auroral bands over S (SSE to SSW).—2, slight auroral display in flashes in N (NNE to NNW).—3, straight auroral band over horizon, SSE to SSW, with light dashes in E, during P.M.—4, auroral dashes from 12:45, NW to NE; magnificent aurora from 20: 15 to 21:30; bands SE to WSW changed to waving streams of all colors moving W to E, fading to a faint ribbon across sky, followed by flashes.—5, A.M., light aurora, W to NNE, plain band; noon, wide, uncolored arch across zenith, E to W; P.M., clear aurora NE to E.—6, A.M, aurora, E to W, center zenith.—12, P.M., light band, E to W.—14, 12 : 00, light dashes in W and "auroral smoke" N to NNE; 18 : 00, dashes in W and band, W to E; 20: 00, band over S horizon, remained steady until 21: 15, then lengthened to W and worked N, expanding, waving, coloring and fading, until at 21: 35 reached zenith;

corona then formed, remaining overhead until 21:46, when corona disappeared and bands gradually faded; this display was brightest and sharpest in E, less distinct and not so highly colored in W; gave a very distinct light.—15, A. M., fine NE to SW arch overhead, faded slowly; 5:00, in S from E to W, arch and corona at zenith; 8:45, rays all direct from zenith; 12:00 to 15:00, uncolored arch zenith ESE to WNW, clearer in W; "auroral smoke" in N and NNE.—16, A. M., rays N to W from zenith; 12:00, light rays in NW (N to W), "auroral smoke," ENE to NNE.—18, A. M., light band NNE to NE; 20:20 to 21:30, band across sky, E to SSW.—20; 20:00, band from W to zenith; ribbon, NE to zenith.—26: 12:00, aurora in W to zenith.—28: 17:00, flames in E, bands across SW; 22:00, aurora in S.—29: 08:00, wide band, SE to SW, 45° either side zenith.—30, heavy, dull aurora over N half of sky, convoluted.

January, 1905—1: 12: 30, dashes in W, swinging around until W to E, then changing to brilliant sashes and streamers, working down to W to SE at 14: 30; 1: 20: 00, light band, SE to SW.—2: 20: 00, band in W.—3: 08: 00, very light dashes in NE about 45° toward zenith; 3: 20: 00, large aurora, E to W, widely spread in E into several moving bands.—4: 13: 00 to 20: 00, band, E to W; 4: 20: 00, clear auroral display, corona at zenith with waving streamers, E and W.—8: 12: 00, light aurora in N.—11: 10: 00, rays, zenith to W and E; 11: 12: 00, light band, SE to SW; 11: 17: 30, band, SE to SSW; 11: 20: 00, band, SE to SW.—12: 22: 00, display in S, convoluted band, ribbon E to W.—13: 08: 00, dashes and band, E to W; 13: 20: 00, glow E to SE; 13: 21: 25, convoluted bands in S zenith.—14: 12: 00, dashes in NNE; 14: 22: 30, bright rays and bands over S half sky, E to W and zenith.—17: 10: 00, dashes in W; 17: 11: 00, band NE to W; 17: 13: 00, band E to W.—25: 20: 00, aurora[1] curtain, E to WSW to SE to SSW to S, movement E.—26: 20: 00, band, E to SW, 20° altitude.—27: 18: 00, band, E to SW, 45° altitude; 27: 19: 30, aurora in E, convoluted, 248° to 315° azimuth, streamers to 68° azimuth and 50° altitude.

February, 1905—1: 20: 00, light band, E to W.—3: 20: 00, dashes in W and E with bands connecting.—6: 20: 00, light band, straight E to SW, altitude 15°.—7: 20: 00, band, E to SSW; convoluted aurora, E to S of zenith.—8: 20: 00, band, E to W; 8: 22: 00, convoluted aurora, E to SW; 8: 23: 25, glow and "smoke" in SSE.—9: 08: 00, dashes in NE; 9: 17: 00, bands, E to W, converging in W; 9: 18: 00, moving bands, E to SW.—14: 19: 45, fine display swinging over entire sky; 14: 20: 00, orange-colored corona, large cloud-like aurora covering zenith about 15° on each side, trail to SW tinged with colors.—21: 20: 00, band, E to SW, light glow and bands in E.

Auroræ Observed at Elmwood, Cape Flora, Northbrook Island

October, 1904—18: 19: 15 to 21: 00.—19: 19: 00 to 20: 00.—23: 21: 00 to 21: 40.—24: 19: 00, ending during night.—28: 19: 00 to 19: 55.

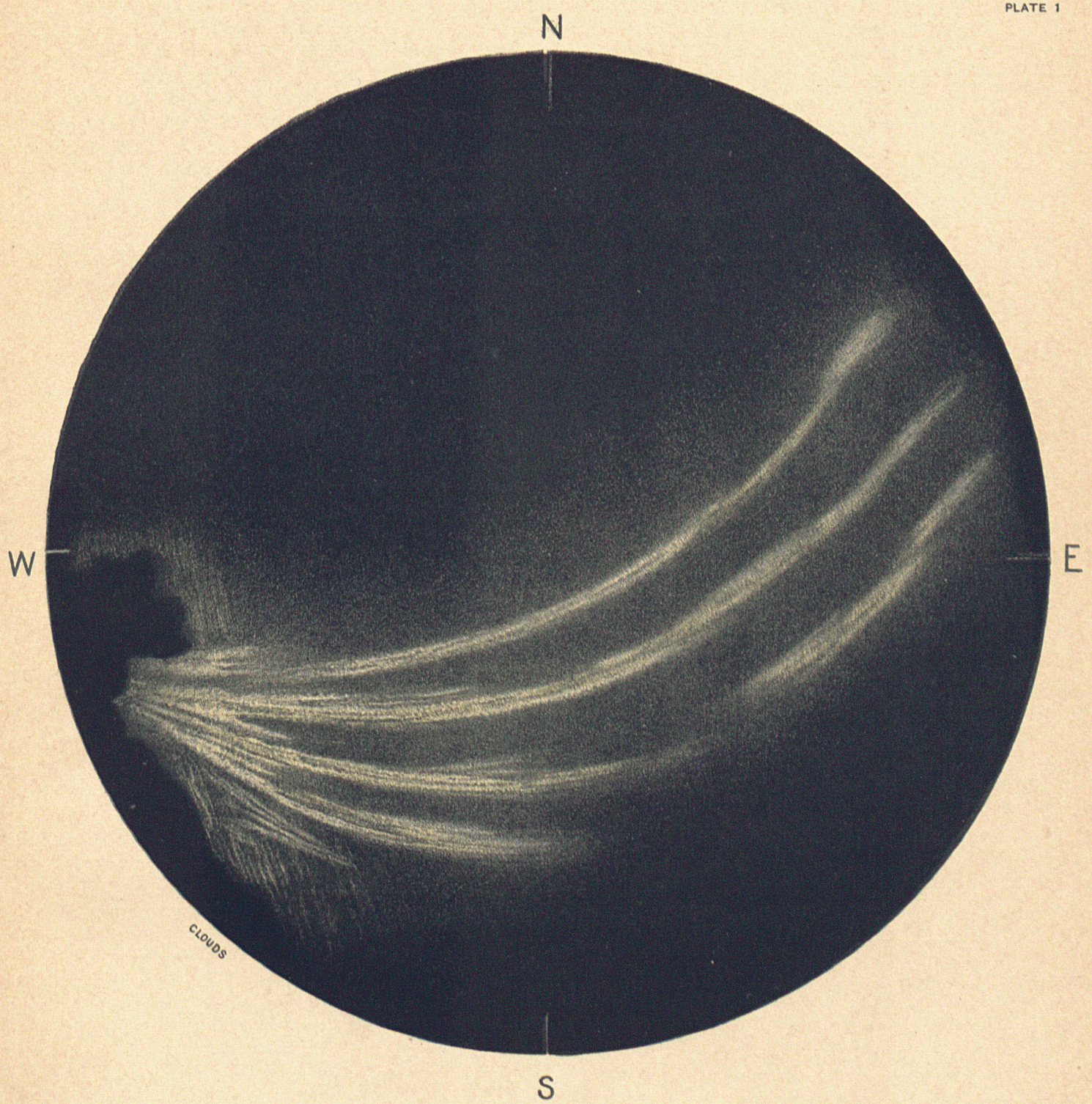
November, 1904—2: 18: 10, ending during night.—4: 17: 15, ending during night.—5: 16: 50 to 6: 05: 00, E to W.—6: 19: 40 to 22: 30.—7: 18: 30 to 20: 15.—9: 17: 50 to 22: 30.—12: 20: 50 to 21: 30.—18: 12: 40 to 16: 30, E to W.—29: 15: 00 to 22: 10.—30: 07: 00 to 21: 25.

December, 1904—1: 16: 00 to 21: 00, E to W.—5: 11: 20 to 17: 00.—6: 15: 10 to 16: 55, E to W.—9: 13: 30 to 13: 50, E to W.—14: 01: 00, ending during night; 14: 19: 00 to 19: 55, E to W.—15: 08: 00 to 8: 30.—18: 22: 10 to 23: 00, E to W.—26: 14: 00 to 19: 30, E to W.—28: 15: 10 to 21: 30, E to W.—29: 19: 20 to 20: 00, E to W, 50°.

January, 1905—1: 13: 10 to 16: 20, E to W, about 65°—2: 19: 00 to 20: 10, E to W, about 55°.—4: 08: 50 to 9: 30, about 35° ; 4: 18: 10 to 23: 50, about 45°.—5: 19: 30 to 22: 00, E to W, about 10°.—7: 19: 30 to 21: 00, E to W, about 30°.—8, from 3: 00 and during early morning, E to W, about 60°.—11: 09: 00 to 10: 00, E to W, about 60°; 11: 14: 30 to 19: 00, E to W, about 55°.—12: 16: 00 to 16: 30, about 55°.—13: 19: 30 to 21: 00, about 45°.—14: 12: 30 continued to 19: 50, between 30° and 90° ; 14: 20: 35 to 21: 50.—17: 14: 00 to 15: 30.—22: 15: 10 to 16: 00.—25: 16: 10 to 24: 00, between 30° and 48°.—26: 14: 00 to 22: 30, 90°.—27: 14: 00 to 15: 15, between 60° and 70°.

February, 1905—1: 17: 00 to 17: 40, E to W, about 70°.—3: 18: 00 to 22: 00, about 70°.—4: 21: 20 to 22: 30.—5: 17: 00 to 19: 30, E to W, about 60° to 70°.—6: 18: 30 to 19: 20, E to W, about 80°.—9: 21: 00 to 24: 00.—10: 17: 00 to 23: 00, about 65° to 70°.—12: 18: 00 to 24: 00, E to W, between 60° and 80°.—14: 18: 30 to 20: 40.—19: 18: 40 to 20: 50.—21: 19: 00 to 21: 30, between 50° and 55°.—28: 19: 10 to 21: 00.

March, 1905—1: 19: 40 to 21: 30.



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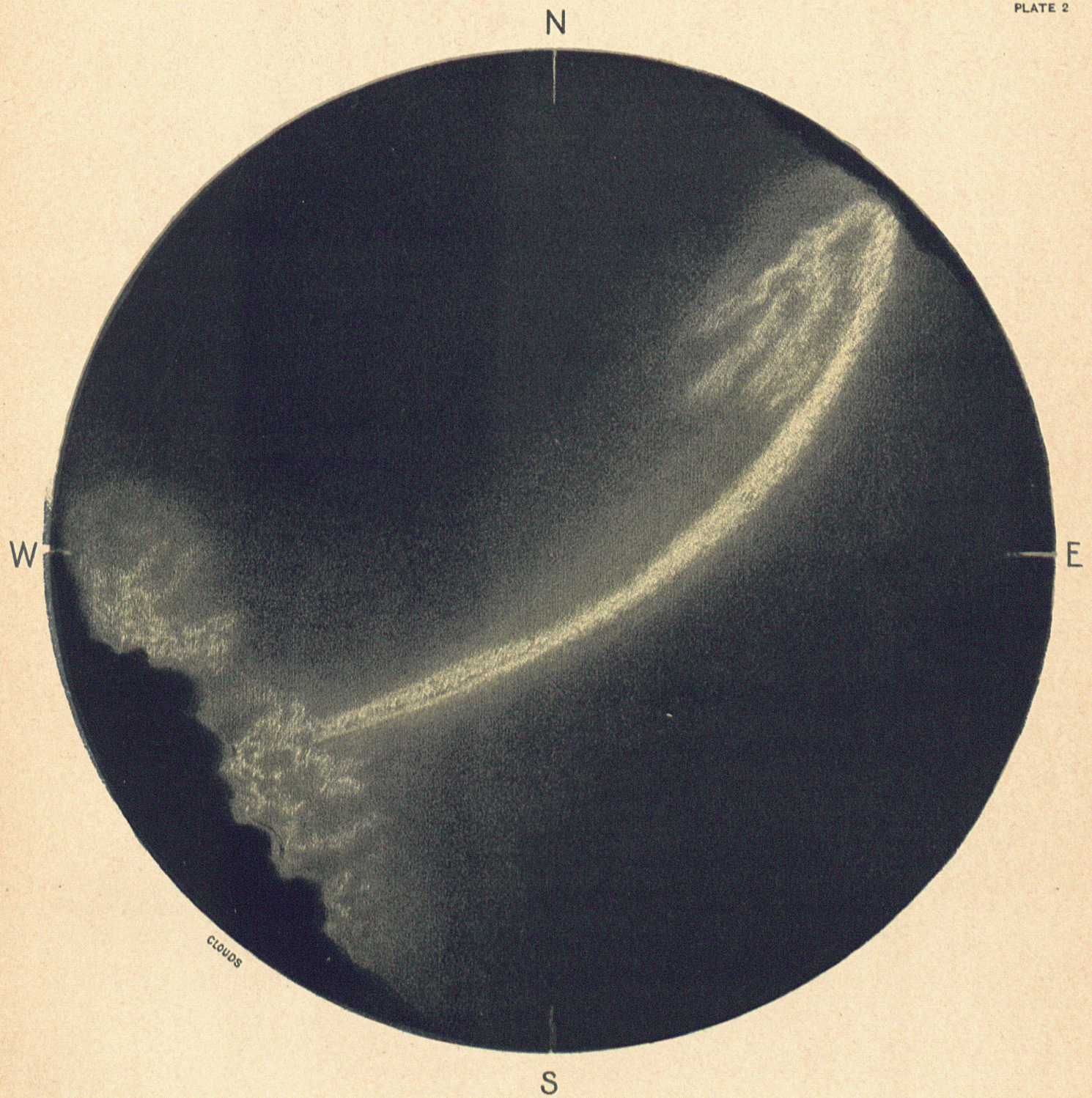

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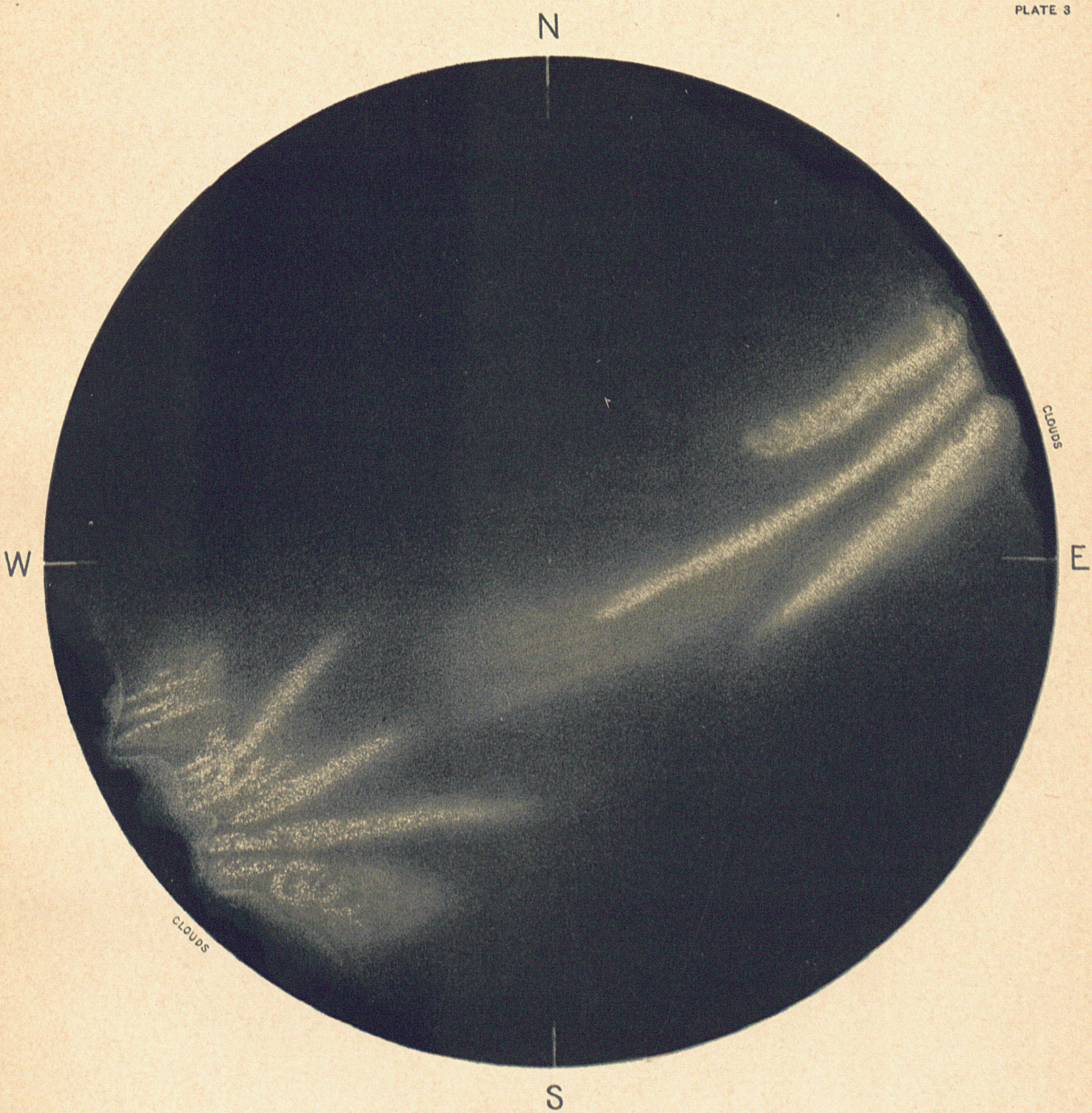

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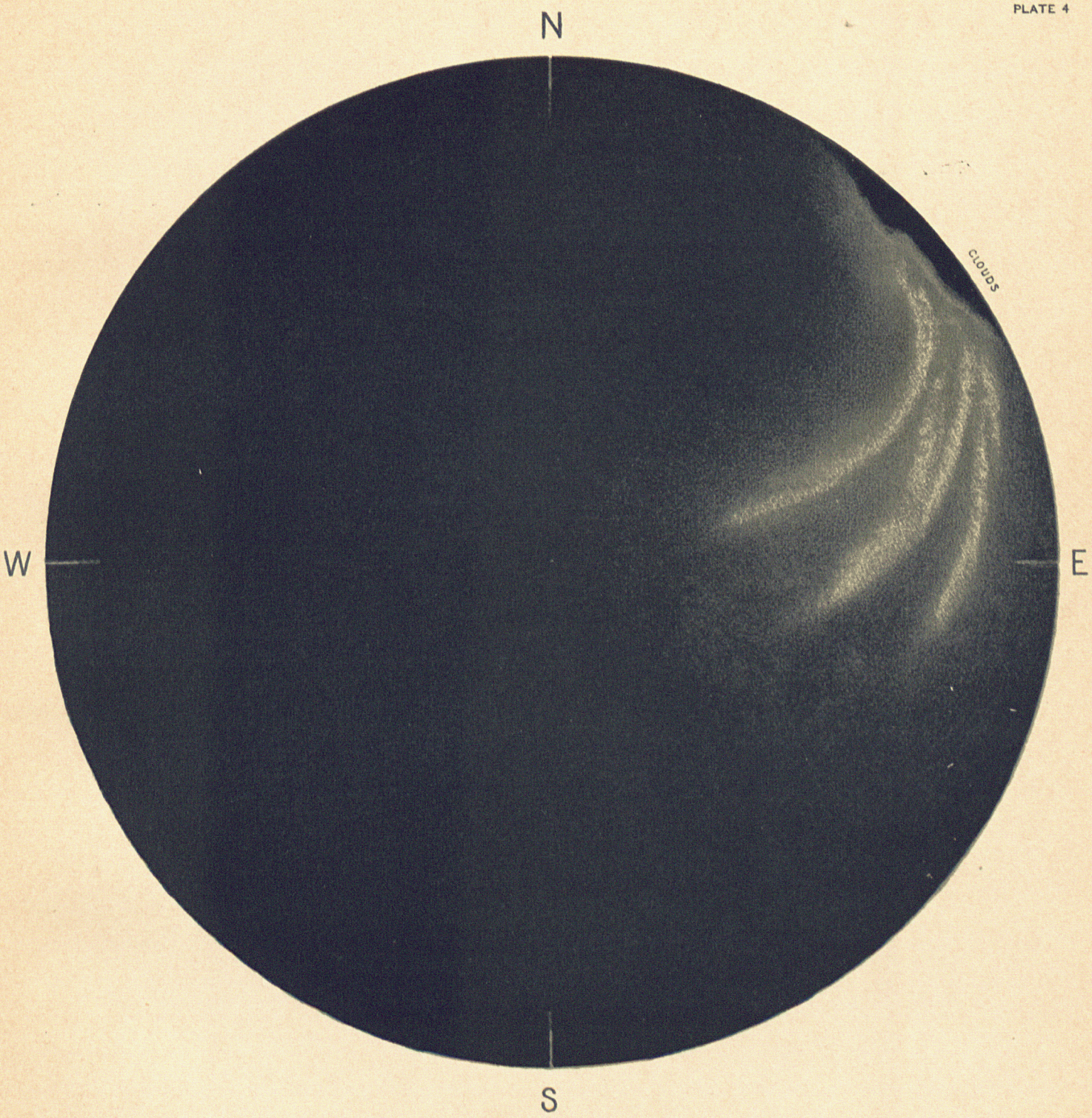

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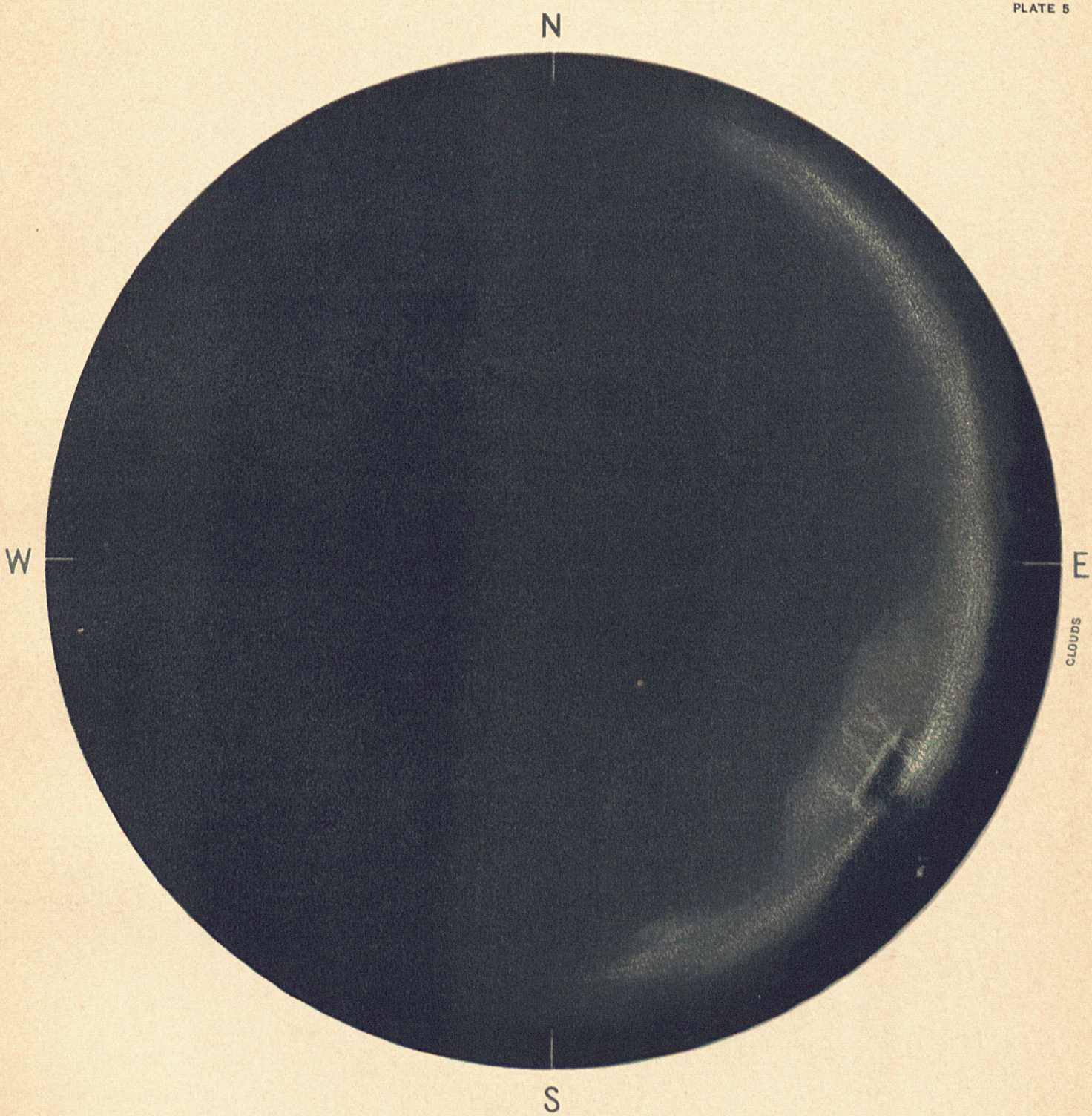

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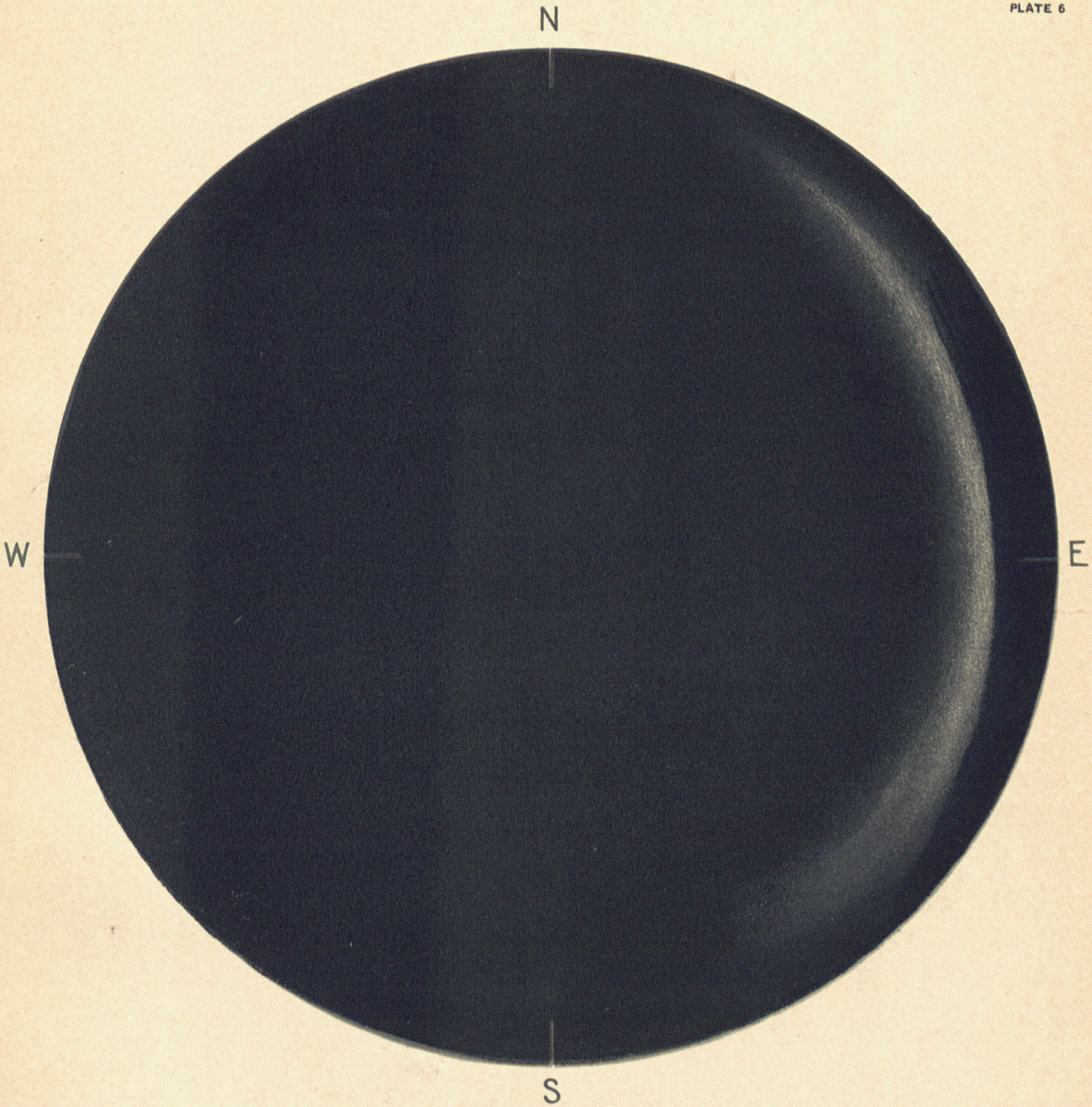

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LAST APPEARANCE

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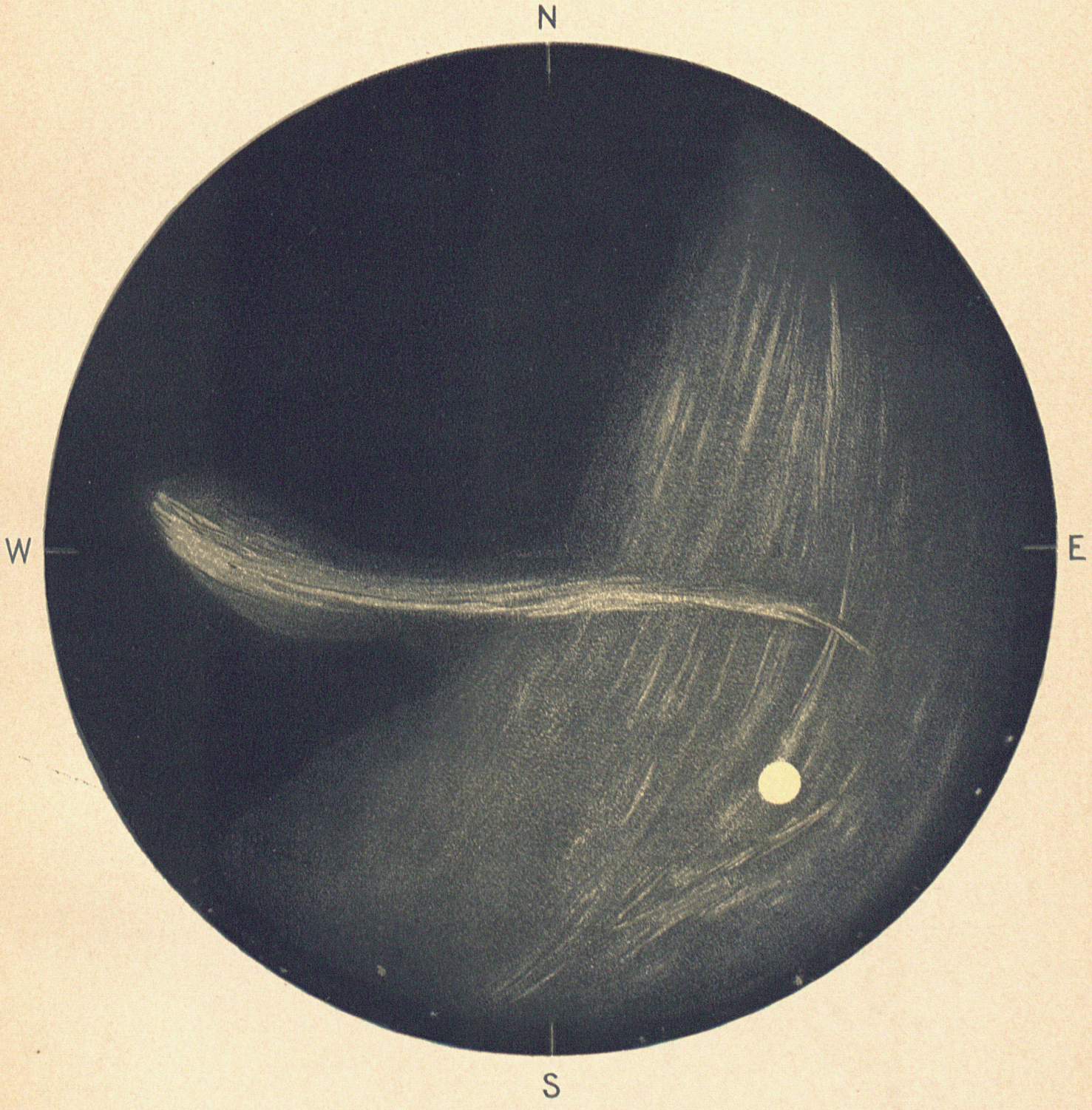
JANUARY 2, 1904, 20 HR. 30 MIN.



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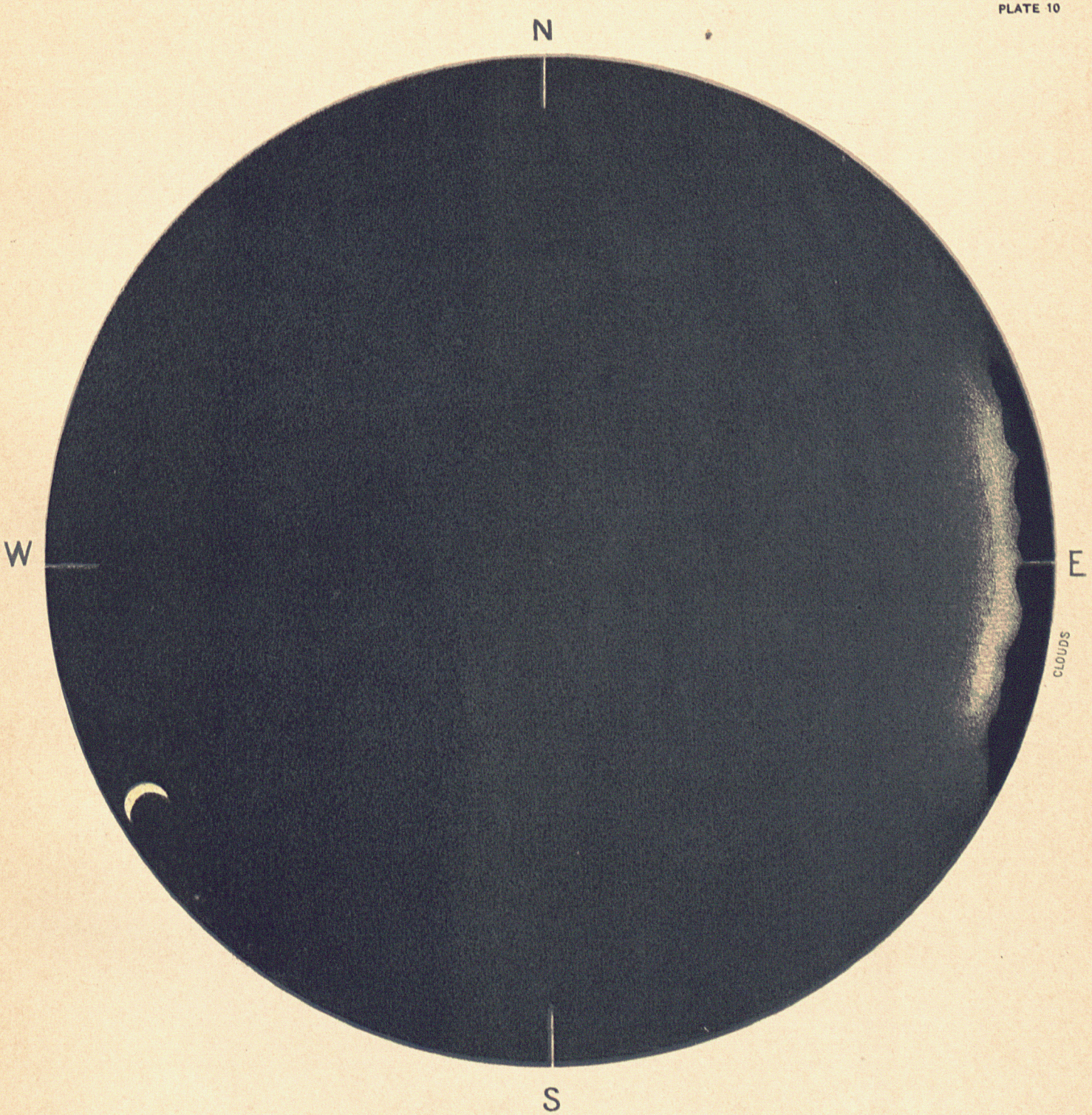

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FIRST APPEARANCE

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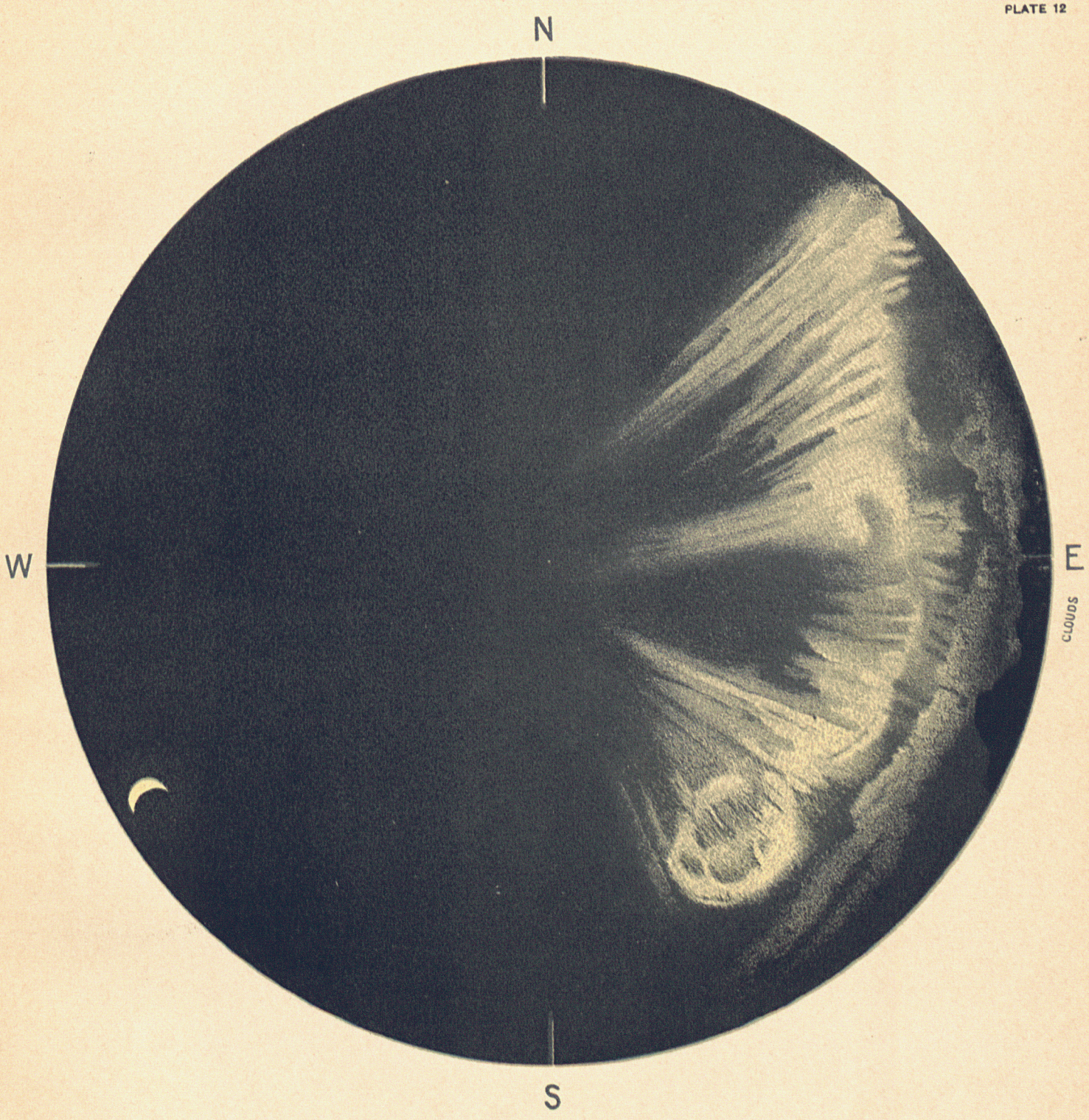

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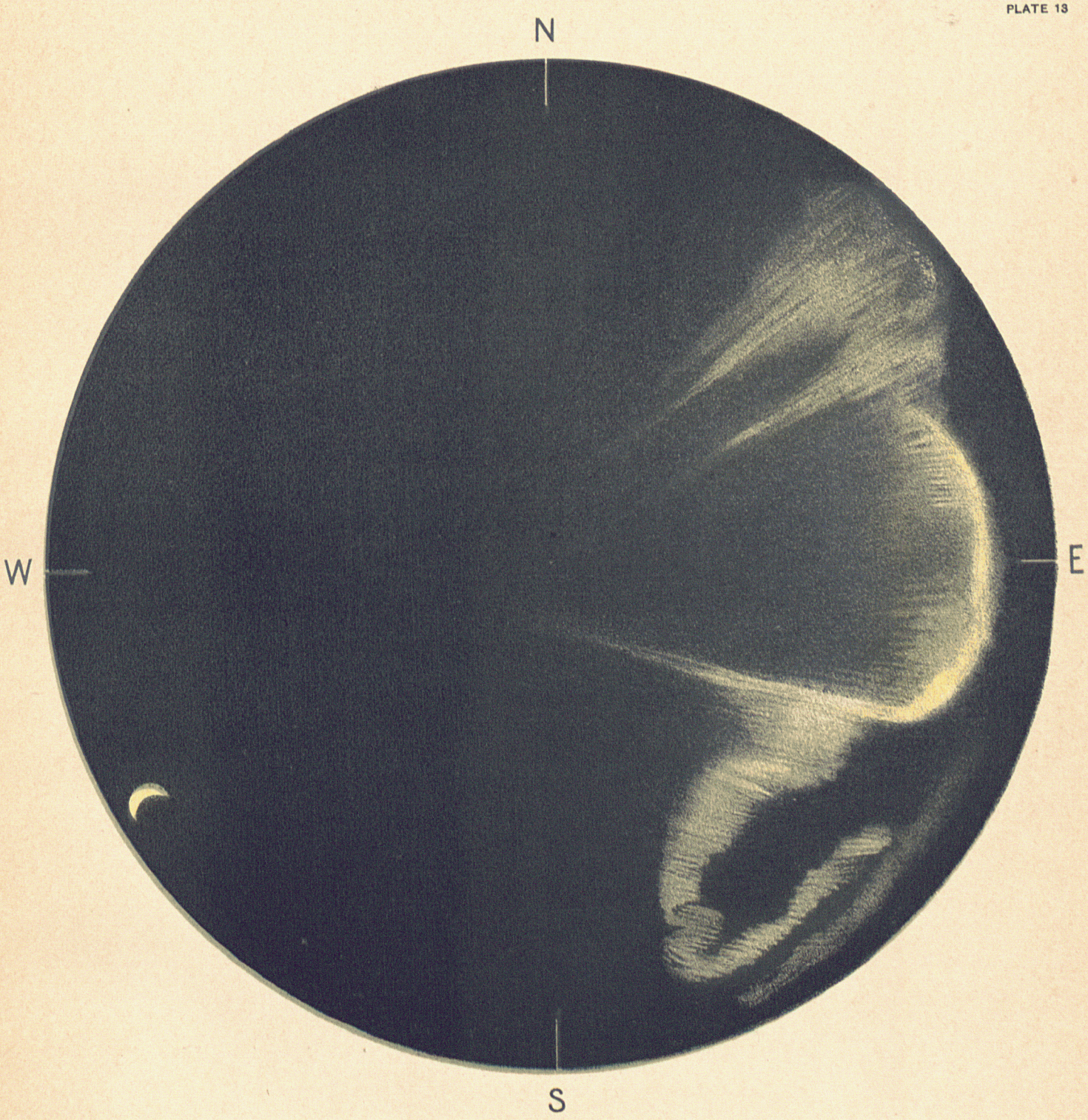

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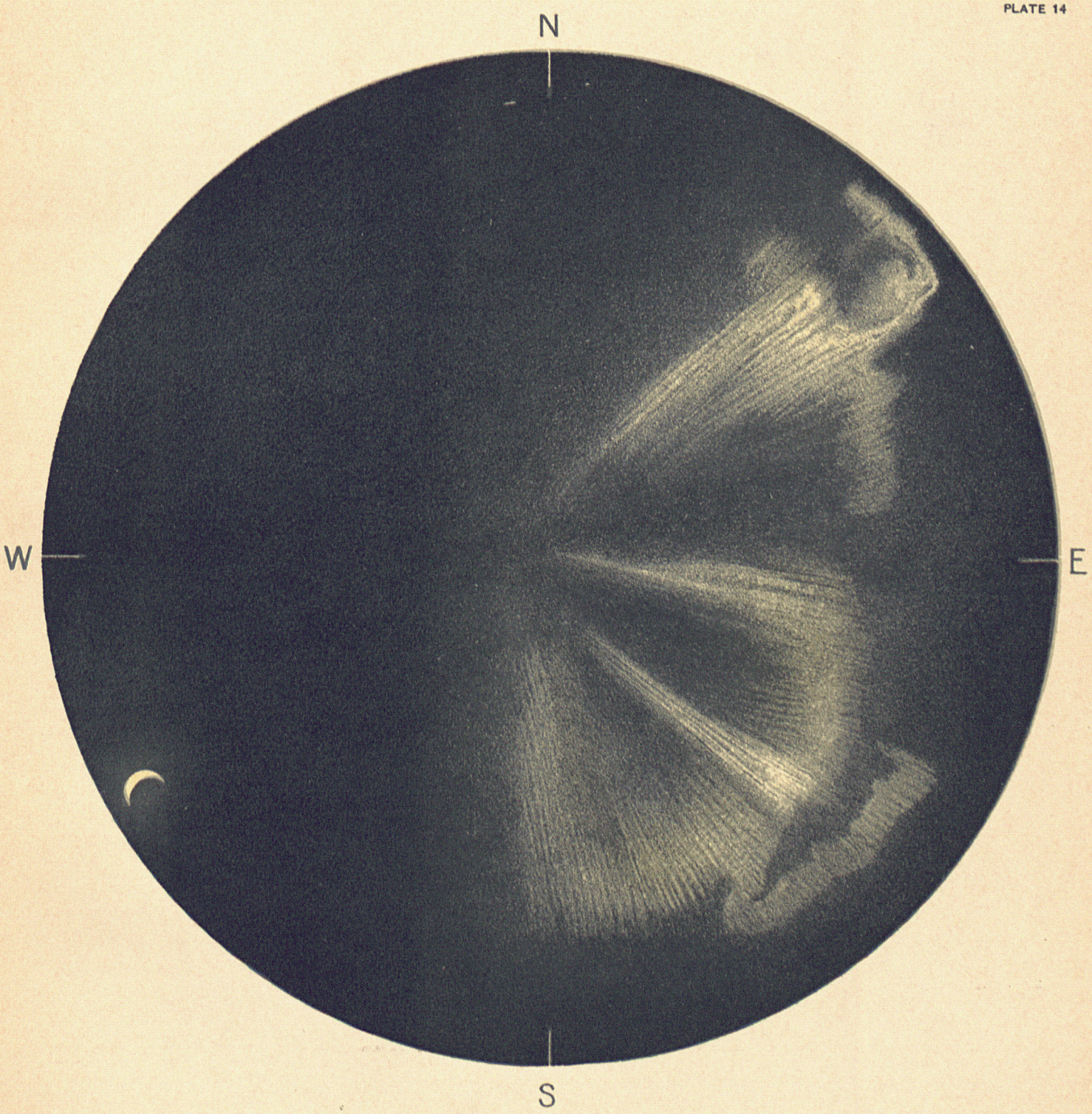

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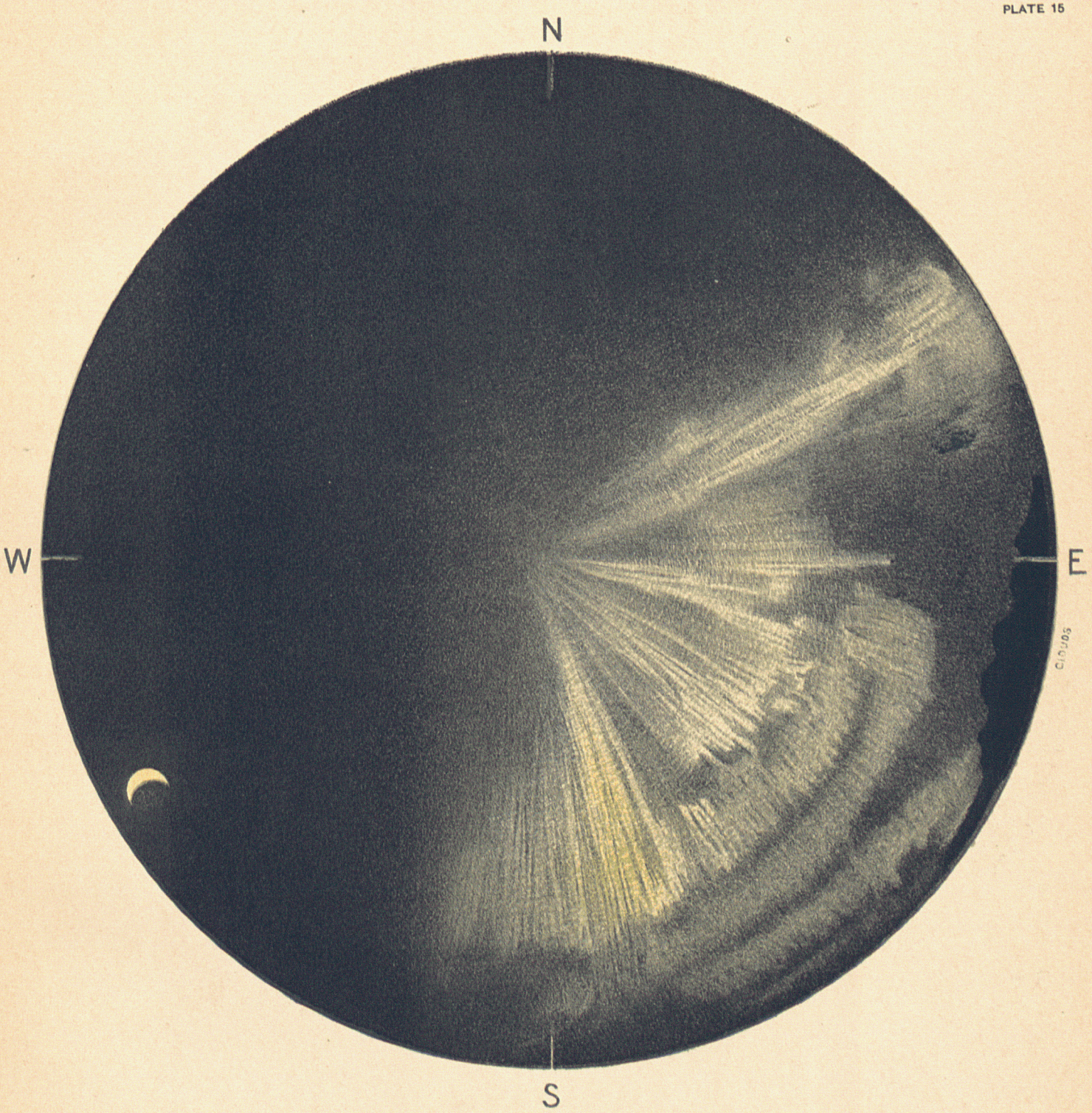

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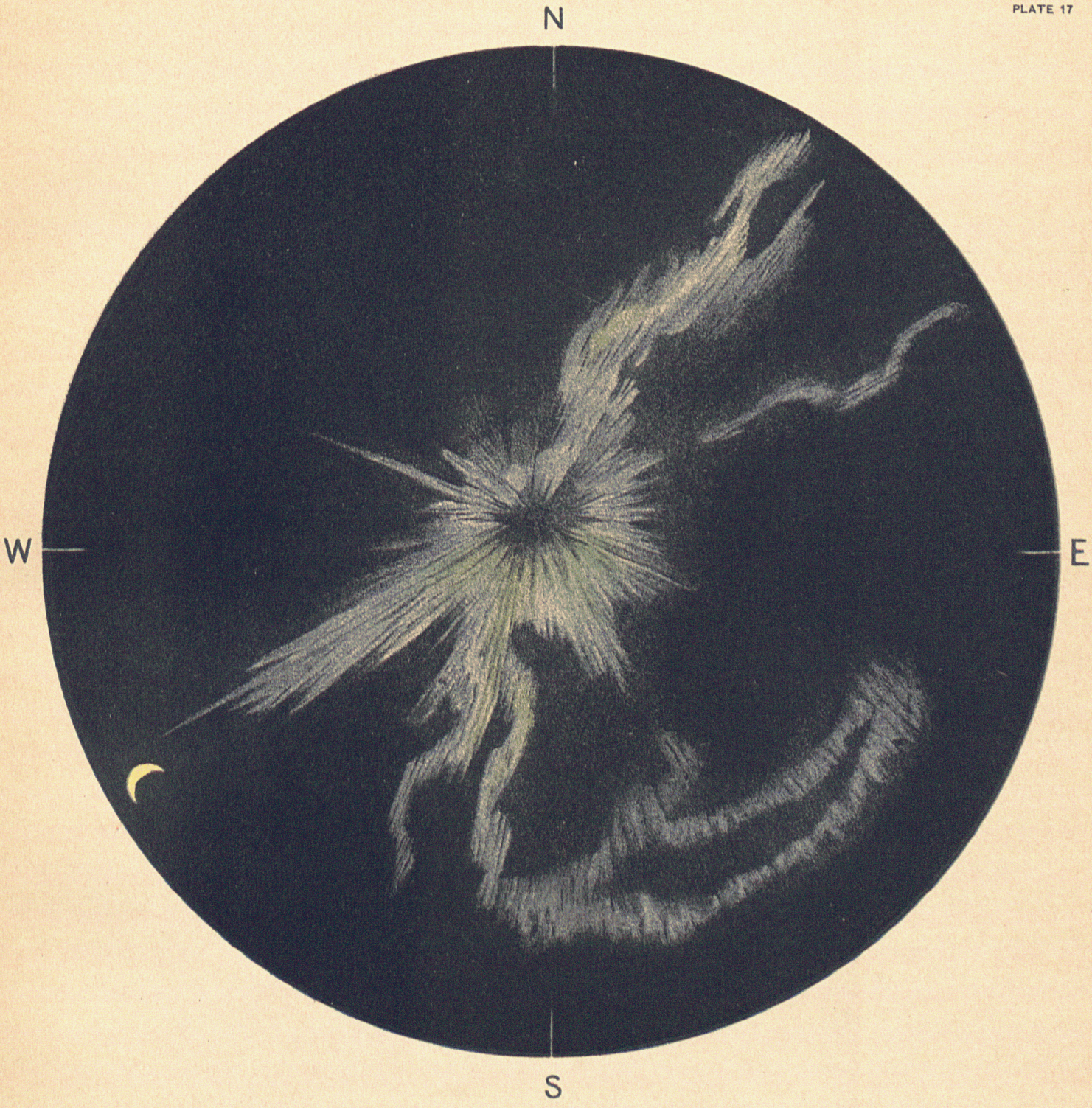

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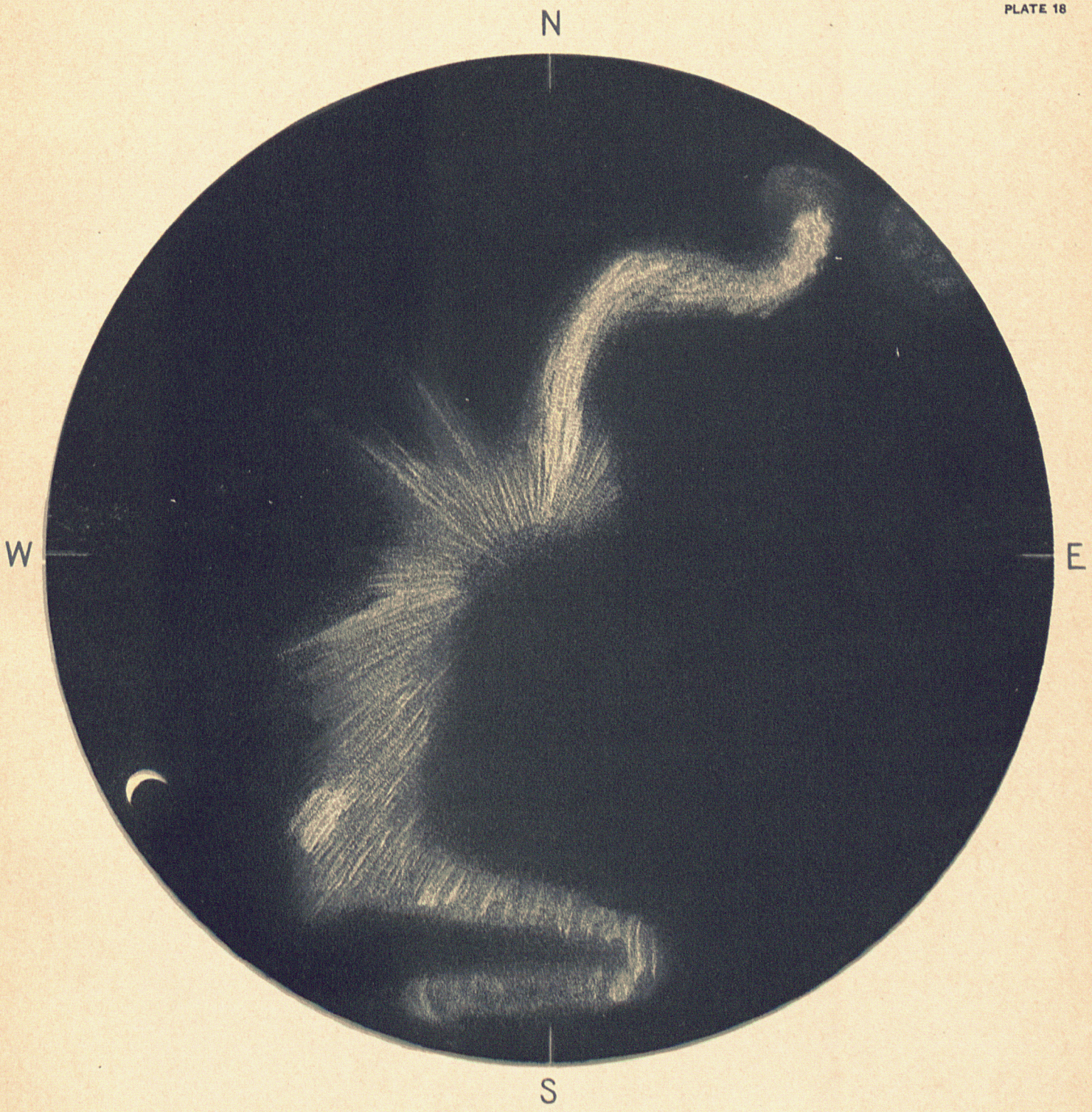

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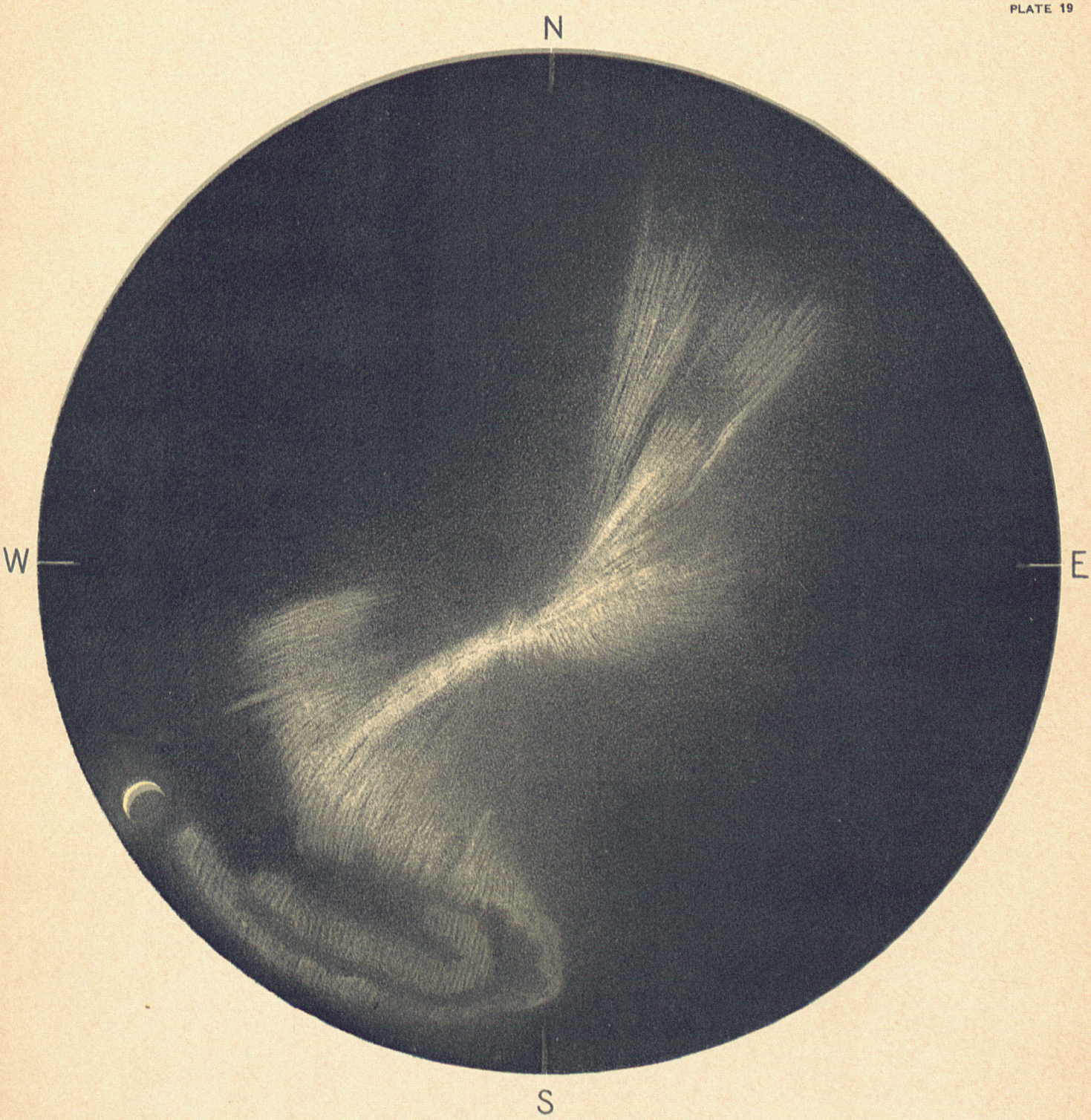

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SECTION C

METEOROLOGICAL OBSERVATIONS

AND

COMPILATIONS

BY

W. J. PETERS

In Charge of Scientific Work of the Expedition

AND

J. A. FLEMING

Department Terrestrial Magnetism, Carnegie Institution of Washington

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METEOROLOGICAL OBSERVATIONS

Instruments, Stations, and Methods

The instrumental outfit for the meteorological work consisted of two barometers; two barographs; several aneroids; a nephoscope; maximum, minimum, wet, and dry bulb thermometers; thermograph; two anemometers, and a single register for recording wind velocities. The greater part of this outfit was loaned the Expedition through the courtesy of Professor Willis Moore, of the United States Weather Bureau, and General A. W. Greeley, of the United States Signal Corps.

Observations were made at Teplitz Bay, Rudolph Island, by Mr. Francis Long, a trained observer from the United States Weather Bureau, from September, 1903,* to the end of April, 1904, when one division of the Expedition left for Cape Flora, Northbrook Island. At this time the instruments were distributed between the two parties; those left at Teplitz Bay were afterward read or kept in working order by Mr. Spencer W. Stewart and consisted of a mercurial barometer; maximum, minimum, dry, and wet bulb thermometers, and an anemometer with register for wind velocities. Owing to the many duties devolving upon the small party left at Teplitz Bay, Mr. Stewart could not make observations very regularly or systematically; in consequence after April 30, 1904, only the results for wind movement have been incorporated in this report. Mr. Long personally superintended the transportation of the instruments destined for Cape Flora. These included an aneroid barometer; maximum, minimum, dry, and wet bulb thermometers, and an anemometer without register.

On arrival at Teplitz Bay, in the fall of 1903, an instrument shelter was set up close to the original site used by the Italian Expedition for their meteorological observations (see figure 1 of "Section A" for a map of the Teplitz Bay station showing respective locations). This shelter was constructed in conformity with the regulations of the United States Weather Bureau, being about 1.5 meter above the surface of the ground, and is very clearly shown in figure 1. In it were installed, exposed, wet bulb, maximum and minimum thermometers, and the thermograph. These were all placed at the same level, namely, about 10½ meters above the sea. The anemometer was fixed on the astronomical observatory (see figure 1 as also figure 1 of "Section E"), some 100 meters from the shelter-house and about 22 meters above sea level. The mercurial barometer and aneroid, together with the barograph, were installed in the living-house at 9.35 meters above sea level.

Records were made daily at 8 A. M., noon, and 8 P. M., local mean time. The true direction of the wind was determined by eye observations of the weather vane. Observations with the nephoscope were found to be impracticable: during the winter the darkness prohibited any attempt; during the period of daylight the clouds were of such a character and were so low, really not more than fogs, that they presented no well-defined points on which to observe.

At Cape Flora ("Elmwood" of the Jackson-Harmsworth Expedition of 1894 to 1897) a valuable series of observations extending from May 21, 1904, to July 30, 1905, was made by Mr. Long. An improvised instrument shelter, following as closely as possible the regulations of the United States Weather Bureau, was constructed from boxes in which were installed

* Prior to this time and during the voyage of the S. Y. "America" north from Tromso, Mr. Long made regularly daily observations. These covering, as they do, a region already frequently reported upon meteorologically, are not recorded in this volume.

maximum, minimum, dry, and wet bulb thermometers. An aneroid barometer was installed in the living-house 15.1 meters above sea level. Wind motions were determined by dial readings of the anemometer at 8 A. M., noon, and 8 P. M., local mean time, the true directions being estimated by eye from weather vane. Temperature and other observations were also made at the same times. The elevation of the top of the anemometer staff, which was mounted on the storehouse, was about 20 meters above sea level. It may be noted that the wind is locally affected at Cape Flora by the proximity of bluffs 350 meters high. This is especially noticeable when open water affords another means of determining the wind direction.

RECORDS

The various meteorological instruments were compared with standard instruments before embarking and corrections determined. Unfortunately the difficulties and exigencies of the retreat in 1905 were such as to necessitate abandoning practically the entire meteorological outfit. Accordingly only the initial comparisons were available for the correction of the records. This is to be regretted, especially so in the case of the barometers.

The corrected records at the Teplitz Bay and Cape Flora stations are given on pages 375 to 471; the final summaries and reductions resulting will be found on pages 472 to 482. In view of the fact that all of the records, in conformity with the standards used by the United States Weather Bureau, have been made in the Fahrenheit scale for temperature and in the English measure for wind and atmospheric pressure, these systems have been retained in the various compilations. As will be noted, no records are given for relative humidity, vapor pressure, or dew point; this is owing to the fact that with the insufficient apparatus available no reliable results could be obtained under the condition of prevailing low temperatures.

In addition to the work at these two principal stations numerous irregular observations were made as time permitted at various points. Of these only the records made on the sledge trips are here recorded as being of interest in indicating the conditions of travel in the Archipelago (see pages 483 to 487).

Observations preceding 12 hours of September 22, 1903, were made on board the "America" in Teplitz Bay; after that time they were made at the final station, Camp Abruzzi, Teplitz Bay. The times of observation preceding 12 hours of September 28 are 45 M. M. T. east; on and after that time local mean time is used; aneroid barometer used through September 21; mercurial barometer after that date.

The following abbreviations are used in the tabulations:

T—trace of precipitation
R—rain
S^d—dry snow
C—calm
S^m—moist snow
S^l—sleet
H—hail
DN—during night

Cloud classifications:

A-Cu—alto-cumulus
Ci—cirrus
Ci-S—cirro-stratus
Cu-N—cumulo-nimbus
Fr-N—fracto-nimbus
N—nimbus
S-Cu—strato-cumulus
*—fog
A-S—alto-stratus
Ci-Cu—cirro-cumulus
Cu—cumulus
Fr-Cu—fracto-cumulus
Fr-S—fracto-stratus
S—stratus
H—haze
**—dense fog

Cloud characters appearing in parentheses, thus (Ci-Cu), refer to upper clouds, all other references being to lower clouds. A totally clouded sky is counted as amount of cloudiness ten, a perfectly clear sky being counted zero. Otherwise the tabulations are explained sufficiently by the column headings.

FIGURE 1

INSTRUMENT SHELTER AT TEPLITZ BAY

(A—instrument shelter ; B—remains meteorological station of Italian Expedition ; C—astronomical observatory)

METEOROLOGICAL OBSERVATIONS

TABULATION OF DAILY METEOROLOGICAL OBSERVATIONS

RECORDED AT

TEPLITZ BAY STATION, RUDOLPH ISLAND

FRANZ JOSEF ARCHIPELAGO

SEPTEMBER 1, 1903, TO APRIL 30, 1904

NORTH LATITUDE: 81° 47.'5

LONGITUDE EAST OF GREENWICH: 57° 56'

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Tabulation of daily meteorological observations at Teplitz Bay during the month of September, 1903

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	30.05	...	29.96	+ 33.0	...	+ 33.0	+ 35.9	+ 25.8	....	+ 35.5	+ 26.0	+ 30.8	10.1
2	29.74	29.70	29.48	+ 29.0	+ 31.0	+ 30.0	+ 35.0	+ 24.4	+ 31.5	+ 31.5	+ 28.4	+ 29.7	10.6
3	29.54	29.55	29.65	+ 33.4	+ 34.0	+ 33.5	+ 33.4	+ 30.0	+ 34.0	+ 35.0	+ 33.4	+ 32.5	5.0
4	29.74	29.84	29.88	+ 29.5	+ 29.0	+ 22.0	+ 35.0	+ 28.9	+ 29.0	+ 29.5	+ 22.0	+ 28.5	13.0
5	29.92	29.94	29.98	+ 31.0	+ 32.5	+ 32.0	+ 31.0	+ 22.0	+ 33.0	+ 34.8	+ 29.0	+ 28.4	12.8
6	29.88	29.90	29.78	+ 33.0	+ 29.0	+ 29.0	+ 33.2	+ 25.8	+ 34.0	+ 34.0	+ 28.5	+ 29.9	8.2
7	29.58	29.56	29.56	+ 30.0	+ 30.0	+ 27.0	+ 30.0	+ 28.8	+ 32.4	+ 32.4	+ 26.0	+ 29.2	6.4
8	29.56	29.62	29.66	+ 28.1	+ 27.0	+ 28.0	+ 30.2	+ 27.0	+ 28.2	+ 29.0	+ 25.0	+ 27.6	5.2
9	29.63	29.65	29.67	+ 26.0	+ 26.0	+ 23.0	+ 29.0	+ 26.0	+ 26.0	+ 26.0	+ 22.9	+ 26.0	6.1
10	29.76	29.80	29.86	+ 19.0	+ 21.0	+ 22.0	+ 24.0	+ 18.8	+ 22.3	+ 24.8	+ 19.0	+ 21.8	6.0
11	29.94	29.95	29.86	+ 23.5	+ 18.0	+ 21.0	+ 25.0	+ 17.8	+ 24.5	+ 25.0	+ 18.0	+ 21.4	7.2
12	29.50	29.52	29.55	+ 31.5	+ 30.5	+ 28.0	+ 31.5	+ 21.0	+ 32.0	+ 32.0	+ 26.0	+ 26.5	11.0
13	29.46	29.53	29.68	+ 30.0	+ 21.0	+ 21.0	+ 31.3	+ 27.7	+ 30.0	+ 30.0	+ 17.2	+ 24.2	14.1
14	29.78	29.82	29.86	+ 21.0	+ 21.0	+ 19.0	+ 24.2	+ 21.0	+ 22.4	+ 22.4	+ 19.0	+ 21.6	5.2
15	29.90	29.94	29.95	+ 19.0	+ 21.0	+ 14.0	+ 21.0	+ 14.8	+ 21.0	+ 21.0	+ 13.0	+ 17.0	8.0
16	29.86	29.86	29.75	+ 22.1	+ 27.0	+ 27.0	+ 22.1	+ 12.9	+ 27.0	+ 27.0	+ 22.1	+ 20.0	14.1
17	29.62	29.68	29.96	+ 33.5	+ 31.2	+ 13.8	+ 33.5	+ 27.0	+ 33.5	+ 33.5	+ 13.8	+ 23.6	19.7
18	29.92	29.84	29.96	+ 15.0	+ 16.0	+ 15.0	+ 15.0	+ 8.0	+ 16.3	+ 18.2	+ 12.7	+ 13.1	10.2
19	30.04	30.01	29.72	+ 10.0	+ 15.0	+ 19.0	+ 15.0	+ 4.6	+ 15.0	+ 19.0	+ 10.0	+ 11.8	14.4
20	29.38	29.40	29.42	+ 20.0	+ 19.5	+ 20.0	+ 20.0	+ 19.0	+ 20.5	+ 21.0	+ 17.2	+ 19.1	3.8
21	29.50	29.68	29.84	+ 14.0	+ 13.0	+ 3.0	+ 20.5	+ 14.0	+ 14.0	+ 14.0	+ 3.0	+ 11.8	17.5
22	29.93	29.90	29.85	+ 4.5	+ 4.4	+ 3.0	+ 4.5	+ 1.0	+ 5.0	+ 7.5	+ 2.0	+ 4.2	6.5
23	29.75	29.73	29.65	+ 6.5	+ 6.5	+ 12.0	+ 6.5	0.0	+ 7.0	+ 12.5	+ 6.5	+ 6.2	12.5
24	29.59	29.63	29.70	0.0	+ 8.0	+ 8.0	+ 12.5	— 2.3	+ 8.0	+ 8.0	— 4.0	+ 4.2	16.5
25	29.70	29.69	29.71	+ 3.0	+ 7.4	+ 8.0	+ 7.0	0.0	+ 7.5	+ 8.0	+ 3.0	+ 4.0	8.0
26	29.75	29.74	29.66	+ 11.5	+ 11.0	+ 22.0	+ 11.5	+ 7.2	+ 11.5	+ 22.0	+ 11.1	+ 14.6	14.8
27	29.69	29.66	29.67	+ 25.0	+ 22.5	+ 26.0	+ 25.0	+ 22.0	+ 25.0	+ 26.0	+ 22.0	+ 24.0	4.0
28	29.81	29.83	29.86	+ 21.0	+ 22.5	+ 19.0	+ 28.2	+ 21.0	+ 23.1	+ 23.1	+ 18.0	+ 23.1	10.2
29	29.94	29.99	30.04	+ 20.0	+ 19.0	+ 20.5	+ 23.8	+ 14.9	+ 20.0	+ 20.5	+ 18.0	+ 19.4	8.9
30	30.06	30.08	30.04	+ 7.6	+ 11.4	+ 17.0	+ 20.0	+ 7.6	+ 11.5	+ 17.0	+ 6.0	+ 13.0	14.0
Sum....	892.52	863.04	893.21	+630.7	+605.4	+615.8	+714.8	+516.7	+645.2	+720.2	+514.8	+607.2	304.0
Mean...	29.75	29.76	29.77	+ 21.0	+ 20.2	+ 20.5	+ 23.8	+ 17.2	+ 22.3	+ 24.0	+ 17.2	+ 20.2	10.1

Tabulation of daily meteorological observations at Teplitz Bay during the month of September, 1903—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND											
								8H				12H				20H			
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.00	...	.00	.00	...	.. ..	.. ..	S	20	24	SE	...	...	...	...	S	15	30	S
2	.00	.00	.03	.03	S[d]	12 10	16 10	SE	26	30	SE	SE	38	48	SE	SE	50	60	SE
3	.00	.00	.04	.04	R	14 45	19 15	SE	23	59	SE	SE	30	30	SE	SE	15	30	SE
4	.09	.00	.00	.09	S[m]	0 15	5 00	S	5	15	S	SW	12	20	SW	E	7	15	E
5	.00	.00	.00	.00	...	.. ..	.. ..	SE	12	23	SE	SE	15	19	SE	SE	15	22	SE
6	.00	T	.04	.04	S[m]	11 00	.. ..	SE	6	30	SE	SE	15	20	SE	SE	21	36	SE
7	.03	.01	.02	.06	S[m]	8 45	3 00	SE	15	30	SE	S	4	15	SE	SW	5	15	SW
8	.03	.00	.00	.03	S[m]	.. ..	6 00	NW	15	15	NW	SW	15	20	SW	SW	12	18	SW
9	.02	.00	.00	.02	S[d]	0 00	7 05	SW	5	15	SW	SW	5	6	SW	SW	5	12	SW
10	.00	.00	.00	.00	...	.. ..	.. ..	W	2	17	W	SE	10	10	SE	SE	6	8	SE
11	.00	.00	.00	.00	S[d]	21 10	.. ..	E	7	10	E	E	20	20	E	E	20	23	E
12	.39	T	T	.39	S[d]	.. ..	8 30	E	15	30	E	SE	30	30	SE	SE	12	30	SE
13	T	T	T	T	S[m]	7 30	8 40	SW	3	18	SW	W	6	20	SW	W	19	24	W
14	.00	.00	.00	.00	...	.. ..	.. ..	W	12	20	W	W	13	15	W	N	5	20	N
15	.00	.00	.00	.00	...	.. ..	.. ..	E	2	4	SE	E	2	3	E	E	8	8	E
16	.00	T	T	T	S[m]	9 40	.. ..	S	14	20	S	S	12	24	S	S	5	24	S
17	.15	.08	.08	.31	S[m]	.. ..	13 15	S	2	15	S	S	1	2	S	N	8	24	N
18	.00	.09	.09	.18	S[d]	8 40	12 40	SW	5	12	SW	SE	6	6	SE	E	6	20	E
19	.01	T	.01	.02	S[d]	6 30	9 00	E	4	16	E	SW	5	6	SW	S	15	15	S
20	.00	.00	T	T	S[d]	19 20	.. ..	SE	10	20	SE	SE	20	26	SE	E	5	25	E
21	.08	.08	.01	.17	S[d]	.. ..	13 30	NE	30	33	NE	NE	5	36	NE	NE	24	36	NE
22	.00	.00	.00	.00	S[d]	22 00	.. ..	NW	5	31	NW	NW	0	0	...	N	2	15	N
23	T	T	.06	.06	S[d]	.. ..	18 00	E	2	4	E	NE	8	8	NE	SW	8	17	SW
24	.04	T	T	.04	S[m]	2 00	8 30	SE	3	15	SE	E	8	8	E	E	8	24	E
25	.00	.00	.03	.03	S[d]	13 00	23 00	E	12	26	E	N	26	29	N	NE	15	30	NE
26	T	T	T	T	S[d]	7 05	9 10	NE	12	26	NE	N	8	25	N	E	28	48	E
27	.00	.00	.00	.00	S[d]	21 00	.. ..	E	24	38	E	E	38	42	E	E	40	45	E
28	.07	.00	.00	.07	S[d]	.. ..	1 10	E	10	42	E	SE	5	12	SE	SE	3	7	SE
29	T	T	.01	.01	S[m]	6 00	18 40	SE	5	8	SE	NE	2	5	E	S	12	12	S
30	.00	.00	.38	.38	S[d]	13 40	.. ..	E	24	26	E	SE	10	26	E	E	44	46	E
Sum....	.91	.26	.80	1.97	...	.. ..	.. ..	...	330	672	...	...	369	531	...	...	438	739	...
Mean...	...	...	...	...	...	.. ..	.. ..	E	11.0	22.4	SE	SE	12.7	18.3	SE	E	14.6	24.6	E

Tabulation of daily meteorological observations at Teplitz Bay during the month of September, 1903—Continued

Observer: FRANCIS LONG

Date	Clouds										Remarks
	8h			12h			20h				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	0	...	...	0	...	...	Few	(Cu)	S	1	
2	2 6	(A-Cu) S-Cu	SE SE	10	S-Cu	SE	10	S-Cu	SE	10	
3	6 4	S-Cu S	SE SE	6 4	S-Cu S	SE SE	10	N	SE	10	
4	10	S	S	2 5	(Cl-Cu) S-Cu	SW SW	1	S	E	6	Fog 10:00 to 11:15.
5	10	S	SE	5 1	(A-S) S-Cu	SE SE	10	S	SE	9	
6	10	S	SE	10	N*	SE	10	N*	SE	10	Light fog from 10:50.
7	10	S	SE	10	N*	S	10	S*	SW	10	Light fog to 2:00.
8	10	S	NW	10	S	SW	10	S	S	10	
9	10	S	SW	10	S	SW	10	S	SW	10	
10	10	S	SW	10	S	SW	10	S	SE	10	
11	10	S	E	3 1 2	(Cl-S) (Cl-Cu) S	W W W	10	S	E	9	
12	10	N	E	5	S-Cu	SE	10	S	SE	7	
13	10	N*	SW	10	S	W	10	S	W	10	Light fog 5:00 to 9:00.
14	10	S	W	10	S	W	2	S	NE	7	
15	2	S	N	2 2 1	(Cl-S) (Cl-Cu) S-Cu	NE NE NE	1	S	E	4	
16	4 4	(A-Cu) S-Cu	S S	10	S*	S	10	N*	S	10	
17	10	N*	S	10	N*	S	2	S	N	8	
18	10	S	SW	10	N*	SE	2	S	NE	7	Light fog 6:30 to 10:30; dense fog 12:40 to 14:00.
19	10	N*	E	10	S	SW	10	N*	S	10	
20	2	S	SE	3	S	SE	10	N	E	5	
21	10	N*	NE	10	N*	NE	2	S	NE	6	
22	Few	S	NW	0	...	...	10	S	N	1	Changed to Camp Abruzzi after 12:00.
23	10	S	E	10	N	NE	10	N	SW	10	
24	10	N	SE	7	S	E	10	S	E	9	
25	5 5	(A-S) S	E	10	S	N	10	N	NE	10	
26	10	N	NE	10	S	N	10	S	E	10	
27	10	S	E	10	S	E	3 6	S-Cu S	E E	10	
28	4 5	(A-S) S	SE SE	6 4	(A-S) S	SE SE	3 3 3	(A-S) (A-Cu) S	SE SE SE	9	
29	10	N	SE	10	N	NE	10	S	S	10	
30	1	S-Cu	E	10	S	SE	10	N	E	8	
Sum....	250	...	...	249	...	..	238	...	...	246	
Mean...	8.3	...	...	8.3	...	. .	7.9	...	...	8.2	

Tabulation of daily meteorological observations at Teplitz Bay during the month of October, 1903

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.951	30.015	30.139	+ 14.0	+ 17.5	+ 22.0	+ 19.2	+ 13.0	+ 19.4	+ 22.4	+ 13.3	+ 17.7	9.4
2	30.183	30.195	30.218	+ 22.1	+ 20.0	+ 16.2	+ 22.6	+ 20.2	+ 22.1	+ 22.1	+ 16.0	+ 19.3	6.6
3	30.237	30.259	30.278	+ 14.2	+ 17.0	+ 7.6	+ 16.0	+ 11.2	+ 17.4	+ 19.6	+ 4.8	+ 12.2	14.8
4	30.248	30.241	30.246	+ 10.0	+ 12.0	+ 3.0	+ 10.0	+ 3.0	+ 16.0	+ 15.9	+ 3.0	+ 9.5	13.0
5	30.185	30.194	30.175	+ 8.9	+ 4.0	+ 9.5	+ 13.1	+ 1.0	+ 10.0	+ 10.0	+ 1.8	+ 7.0	12.1
6	30.046	29.972	29.832	+ 16.2	+ 15.8	+ 17.2	+ 16.2	+ 9.5	+ 16.2	+ 17.2	+ 15.8	+ 13.4	7.7
7	29.782	29.792	29.797	+ 8.5	+ 7.8	— 5.0	+ 17.5	+ 8.5	+ 8.5	+ 8.5	— 5.0	+ 6.2	22.5
8	29.833	29.870	29.930	— 12.6	— 13.0	— 14.0	— 5.0	— 17.0	— 9.0	— 9.0	— 15.0	— 11.0	12.0
9	29.996	30.011	30.044	— 8.0	— 14.0	— 4.0	— 7.9	— 16.0	— 8.0	— 3.6	— 15.6	— 9.8	12.4
10	30.019	29.957	29.831	+ 3.0	+ 1.0	— 4.2	+ 3.5	— 4.0	+ 3.0	+ 3.0	— 4.2	— 0.4	7.7
11	29.560	29.466	29.328	+ 4.0	+ 3.4	+ 3.5	+ 4.0	— 7.0	+ 4.0	+ 4.0	+ 2.6	— 1.5	11.0
12	29.663	29.751	29.867	0.0	+ 2.2	+ 5.0	+ 3.5	— 1.0	+ 2.2	+ 5.0	0.0	+ 2.0	6.0
13	29.877	29.901	29.950	+ 12.0	+ 9.0	+ 11.0	+ 12.0	+ 5.0	+ 12.9	+ 13.1	+ 6.0	+ 9.0	8.1
14	29.994	29.993	29.949	+ 9.0	+ 10.0	+ 16.0	+ 12.6	+ 4.0	+ 10.0	+ 16.0	+ 7.0	+ 10.0	12.0
15	29.836	29.832	29.848	+ 12.8	+ 10.4	+ 4.0	+ 17.2	+ 12.4	+ 12.8	+ 13.0	+ 4.0	+ 10.6	13.2
16	29.909	29.910	29.871	— 4.0	— 1.6	+ 4.0	+ 4.0	— 5.0	— 1.6	+ 4.4	— 4.9	— 0.3	9.4
17	29.752	29.776	29.819	+ 6.0	+ 6.0	+ 2.4	+ 9.2	0.0	+ 6.1	+ 9.5	+ 2.2	+ 4.8	9.5
18	29.811	29.816	29.837	— 7.5	— 10.8	— 10.5	+ 5.0	— 11.5	— 7.0	— 7.0	— 12.0	— 3.5	17.0
19	29.784	29.776	29.758	— 16.4	— 10.0	— 9.0	— 10.5	— 16.8	— 10.0	— 9.0	— 18.0	— 13.5	9.0
20	29.733	29.671	29.610	— 2.0	— 1.0	— 0.4	— 2.0	— 9.0	— 1.0	— 0.4	— 4.0	— 4.7	— 8.6
21	29.723	29.768	29.877	— 1.0	— 0.4	+ 2.0	0.0	— 10.6	+ 2.8	+ 3.0	— 3.0	— 3.8	13.6
22	29.987	29.997	29.927	+ 1.0	+ 4.0	+ 5.0	+ 4.2	— 1.9	+ 4.0	+ 7.6	— 0.4	+ 2.8	9.5
23	29.819	29.749	29.791	+ 10.0	+ 8.0	+ 7.6	+ 10.0	+ 3.6	+ 10.0	+ 10.0	+ 6.4	+ 6.8	6.4
24	29.713	29.676	29.659	+ 8.2	+ 10.8	+ 7.4	+ 10.1	+ 4.3	+ 11.0	+ 11.0	+ 5.0	+ 7.6	6.7
25	29.731	29.743	29.696	+ 8.0	+ 6.0	+ 12.0	+ 13.1	+ 4.2	+ 8.0	+ 12.0	+ 4.0	+ 8.6	9.1
26	29.589	29.526	29.445	+ 15.6	+ 16.4	+ 13.0	+ 17.2	+ 11.6	+ 17.0	+ 19.6	+ 12.0	+ 15.6	8.0
27	29.350	29.337	29.303	+ 6.4	+ 6.4	+ 11.6	+ 16.0	+ 6.3	+ 8.0	+ 11.8	+ 5.0	+ 10.5	11.0
28	29.309	29.328	29.359	+ 16.0	+ 16.0	+ 14.4	+ 16.0	+ 10.8	+ 16.1	+ 17.0	+ 14.2	+ 13.9	6.2
29	29.423	29.428	29.469	+ 8.8	+ 8.0	+ 6.5	+ 16.0	+ 7.9	+ 9.0	+ 8.8	+ 6.5	+ 11.2	9.5
30	29.533	29.557	29.620	+ 2.0	+ 2.2	+ 4.0	+ 6.5	0.0	+ 2.6	+ 4.0	+ 1.5	+ 3.2	6.5
31	29.595	29.534	29.541	+ 5.0	+ 8.0	+ 0.4	+ 5.0	— 3.0	+ 8.1	+ 8.0	0.0	+ 2.6	11.1
Sum....	924.171	924.041	924.014	+170.2	+171.1	+158.2	+274.3	+ 33.7	+220.6	+267.5	+ 49.0	+156.0	319.6
Mean...	29.812	29.808	29.807	+ 5.5	+ 5.5	+ 5.1	+ 8.8	+ 1.1	+ 7.1	+ 8.6	+ 1.6	+ 5.0	10.3

Tabulation of daily meteorological observations at Teplitz Bay during the month of October, 1903—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind											
								8h				12h				20h			
	8h	12h	20h	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.46	.04	.04	.54	S[d]	.. ..	10 00	E	48	60	E	E	24	48	E	SE	15	48	E
2	.00	.00	.00	.00	...	.. ..	.. ..	SE	15	25	SE	E	24	29	E	W	10	35	SE
3	.00	.00	.00	.00	...	.. ..	.. ..	SE	28	30	SE	SE	24	36	SE	N	4	36	SE
4	.00	.00	.00	.00	...	.. ..	.. ..	SE	8	8	SE	W	4	17	SE	NE	2	20	SE
5	.00	.00	.00	.00	...	.. ..	.. ..	E	15	24	SE	S	5	20	SE	S	9	20	SW
6	.00	.00	.01	.01	S[d]	18 00	21 00	SSW	30	34	SW	SW	36	38	SW	SW	36	40	SW
7	.05	T	.01	.06	S[d]	1 30	15 00	W	5	36	SW	NW	5	8	W	N	13	15	N
8	.00	.00	.00	.00	...	.. ..	.. ..	SW	1	24	SW	NE	2	2	NE	E	3	15	E
9	.00	.00	.00	.00	...	.. ..	.. ..	E	2	5	E	E	2	2	E	C	0	0	C
10	.00	.00	.00	.00	...	.. ..	.. ..	E	12	12	E	E	26	34	E	E	6	35	E
11	.14	.09	.18	.41	S[d]	5 00	21 55	NE	12	26	NE	E	15	26	NE	NE	18	24	NE
12	T	.00	.00	T	...	.. ..	.. ..	NW	24	34	NW	W	24	30	W	SE	3	34	NW
13	.00	.00	.00	.00	...	.. ..	.. ..	SE	14	24	SE	E	8	15	E	N	8	18	SE
14	.00	.00	.07	.07	S[d] S[d]	13 45 15 55	15 30 21 10	S	2	24	S	SE	1	5	SSE	S	8	8	S
15	T	.00	.00	T	...	.. ..	.. ..	NE	3	15	NE	N	2	6	N	N	2	10	N
16	.00	.00	.00	.00	...	.. ..	.. ..	SW	1	5	SW	E	3	5	E	E	4	4	E
17	.00	.00	.00	.00	...	.. ..	.. ..	SE	24	30	SE	E	36	42	E	N	15	42	E
18	.00	.00	.00	.00	...	.. ..	.. ..	W	3	24	N	NW	2	3	NW	E	17	26	E
19	.00	.00	.00	.00	...	.. ..	.. ..	NE	15	16	NE	N	5	15	NE	NE	8	39	NE
20	.10	T	T	.10	S[d]	4 00	8 20	NE	20	27	NE	E	30	30	E	NE	18	30	NE
21	.00	.00	.00	.00	...	.. ..	.. ..	SE	1	24	NE	SE	6	15	E	NE	5	15	NE
22	.00	.00	.00	.00	...	.. ..	.. ..	E	30	37	E	E	5	24	E	E	26	30	E
23	?	?	?	?	S[d] S[d]	2 00 21 10	19 50	E	60	62	E	E	62	72	E	SE	26	72	E
24	?	.00	.01	.01	S[d] S[d]	.. .. 13 30	6 30 20 10	SE	24	48	SE	SE	14	36	SE	SE	3	30	SE
25	T	.00	.02	.02	S[d]	14 00	20 30	W	12	14	W	E	5	12	E	NE	2	12	NE
26	T	.00	?	?	S[d]	13 30	.. ..	SE	12	17	SE	ESE	30	34	ESE	ESE	40	42	ESE
27	?	.00	T	?	S[d] S[m]	.. .. 19 40	10 00	NE	30	60	NE	E	26	36	NE	E	5	36	NE
28	.07	T	T	.07	S[m]	.. ..	9 10	W	12	21	E	E	3	10	W	SE	5	15	SE
29	.00	.00	.00	.00	...	.. ..	.. ..	SE	5	15	SE	SSE	2	8	SSE	SE	4	8	SE
30	.00	.00	.00	.00	...	.. ..	.. ..	E	2	8	SE	S	1	4	S	S	5	6	S
31	.00	.00	.00	.00	...	.. ..	.. ..	SW	14	14	SW	W	29	35	W	NE	12	36	W
Sum....	.82	.13	.34	1.29	...	.. ..	.. ..	...	484	803	...	...	461	697	...	...	332	801	...
Mean...	...	...	...	...	...	.. ..	.. ..	SE	15.6	25.9	SE	E	14.9	22.5	E	NE	10.7	25.8	E

Tabulation of daily meteorological observations at Teplitz Bay during the month of October, 1903—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	N	E	2 4 2	(A–Cu) S–Cu S	S E E	10	S	SE	10	
2	10	S	SE	10	S	E	10	S	W	10	
3	5 4	(A–S) S	SE SE	5 1	(Cl–S) S	E SE	Few	S	N	5	Dense fog from 22:40.
4	2 2	(Cl–Cu) S	E SE	Few 2	(A–S) S	E E	Few	S–Cu	E	1	Dense fog to 5:00.
5	Few	S	E	0	...	...	10	S	S	3	
6	5 5	(A–S) S	SW SW	10	S	SW	10	N	SW	10	
7	10	N	W	10	N	NW	1	S	N	9	
8	4 1	(A–Cu) S	E E	0	...	...	Few	S	E	2	
9	10	S*	E	Few	S*	E	10	S*	...	4	Light fog 5:30 to 10:40; 18:30 to 21:00.
10	10	S	E	0	...	...	0	...	...	2	Sun dog 11:10 to 11:40.
11	10	N*	NE	10	N*	E	10	N*	NE	10	Light fog 5:00 to 21:55.
12	10	S	NW	10	S	W	10	S	NE	10	
13	10	S	SE	1	(Cl–Cu)	E	4 1	(Cl–Cu) S	N N	4	
14	4 5	S–Cu S	S S	10	S	SE	10	N	S	10	
15	4 4	(A–S) S	NE NE	10	S	N	4 1	(Cl–S) S	N N	10	
16	10	S*	SW	10	S*	E	10	S*	E	10	Light fog 7:00 to 20:30.
17	5 5	S–Cu S	SE SE	10	S	E	3	S–Cu	N	10	
18	Few	S	SW	5 Few	(A–S) S	E E	10	S	E	7	
19	7	S	E	3 5	(Cl–S) S	E E	10	S	NE	8	
20	10	N	NE	10	S	E	10	S	NE	9	Drifting snow 8:20 to 11:30.
21	8	S	E	4 2	(Cl–Cu) S	E E	Few	S	NE	6	
22	0	...	...	8	S	E	2	S	E	6	High east winds and drifting snow all night; ship parted hawsers about 22:00.
23	10	S	E	10	S	E	8	S	SE	10	High winds and drifting snow.
24	10	S	SE	10	S	SE	10	N	SE	10	
25	8	S–Cu	W	2 4 2	(A–Cu) S–Cu S	W W W	10	N	NE	10	
26	10	S	SE	10	S	ESE	10	S	ESE	10	Drifting snow from 13:30.
27	10	S	NE	10	S	E	10	N	E	10	Drifting snow to 10:00.
28	10	N	W	10	S	E	10	S	SE	10	
29	10	S	SE	10	S	SSE	10	S	SE	10	
30	10	S	E	10	S	S	10	S	S	10	
31	10	S	SW	10	S	W	10	S	NE	10	
Sum....	258	...	...	232	...	...	224	...	...	246	
Mean...	8.3	...	...	7.5	...	...	7.2	...	...	7.9	

Tabulation of daily meteorological observations at Teplitz Bay during the month of November, 1903

Observer: FRANCIS LONG

Date	Reduced Barometer			Reading of Fahrenheit Thermometer			Self-registering Fahrenheit Thermometers						
							8h		12h	20h		Mean of extremes	Range
	8h	12h	20h	8h	12h	20h	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.571	29.548	29.485	— 15.0	— 16.6	— 17.8	+ 0.4	— 18.0	— 15.0	— 15.0	— 17.8	— 8.8	18.4
2	29.416	29.409	29.465	— 17.2	— 14.0	— 17.9	— 17.1	— 20.0	— 14.0	— 14.0	— 18.2	— 17.0	6.0
3	29.528	29.530	29.514	— 22.0	— 21.0	— 19.0	— 17.9	— 28.2	— 21.0	— 18.5	— 22.0	— 23.0	10.3
4	29.471	No obs.	29.542	— 23.2	...	— 24.4	— 17.0	— 26.4	...	— 22.0	— 27.8	— 22.4	10.8
5	29.561	29.554	29.591	— 21.0	— 18.1	— 19.4	— 21.0	— 27.2	— 18.0	— 15.4	— 21.0	— 21.3	11.8
6	29.566	29.570	29.524	— 14.0	— 16.5	— 20.0	— 10.9	— 19.8	— 14.0	— 14.0	— 21.6	— 16.2	10.7
7	29.329	29.303	29.334	— 20.0	— 19.6	— 26.0	— 19.0	— 23.0	— 18.3	— 18.2	— 26.2	— 22.2	8.0
8	29.423	29.480	29.639	— 27.4	— 26.6	— 32.0	— 25.0	— 29.3	— 26.4	— 26.4	— 32.9	— 29.0	7.9
9	29.680	29.673	29.645	— 38.0	— 38.0	— 31.0	— 32.0	— 42.0	— 37.0	— 31.0	— 39.0	— 36.5	11.0
10	29.657	29.674	29.733	— 42.2	— 43.9	— 46.0	— 31.0	— 42.9	— 42.2	— 42.2	— 46.2	— 38.6	15.2
11	29.780	29.789	29.820	— 42.0	— 44.0	— 38.0	— 42.0	— 47.0	— 42.0	— 38.0	— 46.1	— 42.5	9.0
12	29.701	29.735	29.894	— 20.0	— 24.9	— 35.5	— 20.0	— 38.0	— 20.0	— 20.0	— 39.6	— 29.8	19.6
13	29.751	29.663	29.309	— 11.6	+ 7.2	+ 8.2	— 10.8	— 36.0	+ 7.2	+ 9.0	— 11.6	— 13.5	45.0
14	28.956	28.960	29.402	+ 23.5	+ 27.4	— 19.0	+ 24.0	— 10.2	+ 27.4	+ 27.4	— 19.0	+ 4.2	46.4
15	29.284	29.007	28.762	— 17.0	— 11.0	— 20.0	— 16.0	— 25.1	— 10.8	— 10.8	— 20.0	— 18.0	14.3
16	29.060	29.245	29.339	— 30.0	— 30.0	— 17.4	— 20.0	— 30.0	— 30.0	— 17.4	— 30.4	— 23.9	13.0
17	29.216	29.198	29.280	— 13.6	— 13.1	— 21.2	— 9.0	— 17.4	— 13.0	— 13.0	— 22.6	— 15.8	13.6
18	29.536	29.567	29.657	— 27.0	— 23.0	— 22.4	— 21.2	— 34.2	— 23.0	— 22.4	— 27.0	— 27.7	13.0
19	29.726	29.750	29.745	— 21.0	— 28.0	— 25.0	— 21.0	— 26.1	— 21.0	— 21.0	— 28.0	— 24.5	7.0
20	29.642	29.598	29.353	— 11.9	— 7.6	— 7.9	— 11.9	— 25.0	— 7.6	— 4.2	— 11.9	— 14.6	20.8
21	29.062	29.123	29.197	+ 14.0	+ 25.0	+ 23.0	+ 14.0	— 7.9	+ 25.4	+ 25.4	+ 14.0	+ 8.8	33.3
22	29.093	29.303	29.613	+ 19.0	+ 0.5	— 16.0	+ 24.0	+ 17.0	+ 19.0	+ 19.0	— 16.0	+ 4.0	40.0
23	29.614	29.560	29.516	+ 18.0	+ 19.5	+ 17.9	+ 18.0	— 16.0	+ 20.0	+ 20.0	+ 16.0	+ 2.0	36.0
24	29.497	29.536	29.535	+ 19.5	+ 18.0	+ 10.4	+ 20.1	+ 16.5	+ 20.8	+ 20.8	+ 10.0	+ 15.4	10.8
25	29.557	29.600	29.661	+ 6.8	+ 3.0	0.0	+ 10.0	+ 6.8	+ 6.8	+ 6.8	0.0	+ 5.0	10.0
26	29.609	29.684	29.714	+ 6.5	+ 8.2	+ 9.0	+ 6.8	— 2.5	+ 9.0	+ 10.1	+ 5.0	+ 3.8	12.6
27	29.772	29.709	29.702	+ 4.4	+ 4.0	+ 1.0	+ 11.8	+ 3.1	+ 4.5	+ 4.5	0.0	+ 5.9	11.8
28	29.730	29.758	29.810	+ 9.4	+ 15.0	+ 11.0	+ 10.2	+ 1.6	+ 15.2	+ 18.0	+ 9.0	+ 9.8	16.4
29	29.711	29.642	29.282	+ 6.2	+ 7.6	+ 5.6	+ 11.0	+ 6.0	+ 8.0	+ 8.0	+ 5.6	+ 8.3	5.4
30	29.075	29.065	29.241	+ 8.5	+ 7.2	+ 2.4	+ 9.1	+ 3.8	+ 8.8	+ 8.8	+ 2.0	+ 5.6	7.1
Sum....	884.574	855.233	885.304	—298.3	—253.3	—387.4	—203.4	—537.4	—201.2	—185.7	—483.3	—372.5	495.2
Mean...	29.486	29.491	29.510	— 9.9	— 8.7	— 12.9	— 6.8	— 17.9	— 6.9	— 6.2	— 16.1	— 12.4	16.5

Tabulation of daily meteorological observations at Teplitz Bay during the month of November, 1903—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND											
								8H				12H				20H			
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.00	.00	.00	.00	...	.. ..	.. ..	N	8	12	N	NW	5	8	NW	NW	12	15	NW
2	.00	.00	.00	.00	...	.. ..	.. .	NE	5	15	NE	NE	12	14	NE	NE	10	20	NE
3	.00	.00	.00	.00	...	.. ..	.. ..	NE	10	12	NE	NE	8	10	NE	NW	5	15	NW
4	.00	.00	.00	.00	...	.. ..	.. ..	NW	5	15	NW	...	...	...	...	N	4	12	N
5	.00	.00	.00	.00	...	.. ..	.. ..	E	1	14	N	SE	2	3	E	W	5	12	W
6	.00	.00	.00	.00	...	.. ..	.. ..	NW	1	12	NW	NW	3	6	NW	NW	5	6	NW
7	.00	.00	.00	.00	...	.. ..	.. ..	NE	3	8	NE	NE	5	5	NE	NW	2	6	NW
8	.00	.00	.00	.00	...	.. ..	.. ..	NE	2	6	NE	NE	8	10	NE	E	3	10	E
9	.00	.00	.00	.00	...	.. ..	.. ..	E	1	3	E	NE	1	2	NE	E	1	4	E
10	.00	.00	.00	.00	...	.. ..	.. ..	NE	5	8	NE	E	6	12	E	E	3	15	E
11	.00	.00	.00	.00	...	.. ..	.. ..	E	2	4	E	NE	2	2	E	SE	4	4	SE
12	.00	.00	.00	.00	...	.. ..	.. ..	SSW	12	16	SSW	W	5	12	SSW	E	4	15	SSW
13	.00	.00	.00	.00	...	.. ..	.. ..	SE	32	36	SE	SSE	30	42	SSE	S	48	52	S
14	.00	.01	T	.01	R 8 40 / S^m 9 15 / S^d 16 00		9 15 / 12 10 / 20 25	S	10	52	S	SW	10	12	S	W	22	26	W
15	T	T	.14	.14	S^d 7 00 / S^d 12 30		8 50 / 17 30	NE	2	20	NE	ESE	29	31	E	N	14	32	N
16	.00	.00	.00	.00	...	.. ..	.. ..	N	20	27	N	W	15	20	W	SW	10	20	W
17	.00	T	T	T	S^d	1 00	4 20	W	10	28	W	W	10	15	W	NE	9	12	N
18	.00	.00	.00	.00	...	.. ..	.. ..	NE	5	12	NW	W	5	8	W	SE	4	8	SE
19	.00	.00	.00	.00	...	.. ..	.. ..	SW	5	10	SW	SE	3	5	S	SE	8	8	SE
20	.00	.00	.12	.12	S^d	13 40	.. ..	S	5	10	S	SE	15	16	SE	SSE	36	42	SSE
21	.15	.01	.10	.26	S^d .. .. / S^d 10 00		3 00 /	S	24	52	S	S	23	30	S	S	15	28	S
22	.16	.03	.00	.19	S^m	.. ..	10 20	SSE	20	52	SSE	SW	20	42	SW	N	7	42	SW
23	.04	.15	.02	.21	S^m	3 30	16 15	ESE	28	35	ESE	ESE	30	39	ESE	S	33	48	SE
24	.00	.00	.00	.00	S^m	20 35	.. ..	ESE	24	48	ESE	ESE	24	29	SE	ESE	36	46	ESE
25	.15	.00	.00	.15	S^m	.. ..	10 00	ESE	8	60	ESE	W	8	38	SE	N	36	38	SE
26	.00	.00	.00	.00	...	.. ..	.. ..	E	36	58	E	E	36	48	E	SE	40	56	SE
27	.00	.00	.00	.00	...	.. ..	.. ..	SE	15	48	SE	E	48	49	E	SE	27	60	SE
28	.00	.00	.00	.00	...	.. ..	.. ..	SE	30	48	SE	E	35	35	E	SE	36	48	SE
29	.00	.00	.04	.04	S^m	17 10	22 30	ESE	48	56	ESE	SE	60	60	SE	ESE	60	66	ESE
30	.10	.03	.02	.15	S^d	3 30	16 10	SE	36	76	ESE	NE	10	15	NE	W	23	23	W
Sum....	.60	.23	.44	1.27	...	.. ..	.. ..	...	413	853	...	...	468	618	...	...	522	789	...
Mean...	...	...	...	...	...	.. ..	.. ..	NE	13.8	28.4	NE	NE	16.1	21.3	E	SE	17.4	26.3	SE

Tabulation of daily meteorological observations at Teplitz Bay during the month of November, 1903—Continued

Observer: FRANCIS LONG

Date	Clouds										Remarks
	8h			12h			20h				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	2	S	N	0	...	...	10	S	NW	1	
2	8	S*	NE	2 4	(A-Cu) S	NE NE	Few	S	E	6	
3	4	S	NE	3 6	(A-S) S	NE NE	10	S	NW	8	
4	0	...	...	...	...	...	0	...	...	1	
5	10	S	E	10	S	SE	Few	S	E	7	
6	10	S	NW	10	S	NW	0	...	...	8	
7	Few	(Cl-S)	N	10	S	NE	0	...	...	6	Paraselene 1:00 to 9:00.
8	0	...	...	Few	S	E	0	...	...	0	Lunar halos 0:30 to 4:00.
9	0	...	...	Few	S	...	0	...	...	0	
10	0	...	...	0	...	...	0	...	...	0	Light haze 8:30 to 10:00.
11	0	...	...	0	...	...	0	...	...	0	
12	10	S	S	Few	S	SE	0	...	...	7	Light haze from 21:00; "America" nipped first time.
13	10	S	SE	10	S	SSE	10	S	S	10	Light haze to 4:00; high wind and drifting snow.
14	10	S	S	10	N	SW	10	S	W	10	
15	10	N*	NE	10	S*	ESE	3 1	(Cl) S	N N	10	Light fog 5:00 to 16:00; drifting snow 10:10 to 24:00.
16	1	S	N	0	...	...	3	S	SW	2	
17	2	S	W	10	S*	W	0	...	...	5	Drifting snow 1:00 to 4:20; light fog 10:20 to 13:00.
18	0	...	...	3	S	W	0	...	...	1	
19	...	H	...	0	...	...	0	...	...	0	Light haze 7:00 to 9:10.
20	10	S	S	10	S	SE	10	N	SSE	10	Drifting snow from 15:00; high winds from south-southeast.
21	10	S	S	10	N	S	10	N	S	10	
22	10	N	SSE	10	S	SW	Few	S	N	7	
23	10	N	ESE	10	N	ESE	2	S	S	10	Heavy drifting snow 6:00 to 16:15.
24	6	S	ESE	2	S	SE	10	S	ESE	7	Very high winds from east-southeast after 23:00.
25	10	N	ESE	10	S	W	0	...	...	7	High winds and drifting snow to 10:00.
26	10	S	E	10	S	E	Few	S	SE	7	High east wind and drifting snow from 12:40.
27	Few	S	SE	Few	S	E	0	...	...	1	High winds and drifting snow to 5:00.
28	1	S	SE	10	S	E	10	S	SE	10	High east to southeast winds.
29	10	S	ESE	10	S	SE	10	N	ESE	10	High east to southeast winds.
30	10	N	SE	10	N	NE	10	S	W	10	
Sum....	164	...	...	180	...	...	109	...	...	171	
Mean...	5.7	...	...	6.2	...	...	3.6	...	...	5.7	

Tabulation of daily meteorological observations at Teplitz Bay during the month of December, 1903

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.295	29.236	29.223	+ 1.4	+ 2.2	— 6.0	+ 2.4	+ 1.0	+ 2.8	+ 2.8	— 6.4	— 1.8	9.2
2	29.279	29.293	29.367	— 11.2	— 12.0	— 11.2	— 6.0	— 11.2	— 11.2	— 10.0	— 13.0	— 9.5	7.0
3	29.392	29.429	29.462	— 2.0	— 2.2	+ 2.0	— 2.0	— 16.0	— 1.6	+ 2.0	— 4.0	— 7.0	18.0
4	29.442	29.455	29.536	+ 4.0	+ 2.0	— 6.0	+ 4.5	0.0	+ 4.8	+ 4.8	— 6.4	— 0.8	11.2
5	29.674	29.692	29.655	— 10.0	— 10.8	— 7.5	— 6.0	— 15.2	— 10.0	— 7.5	— 10.0	— 10.6	9.2
6	29.698	29.765	29.940	— 18.0	— 25.2	— 35.0	— 7.5	— 18.0	— 18.0	— 18.0	— 36.0	— 21.8	28.5
7	30.161	30.223	30.260	— 27.5	— 25.0	— 22.4	— 27.5	— 35.0	— 24.8	— 21.9	— 29.0	— 28.4	13.1
8	30.305	30.332	30.397	— 21.2	— 20.2	— 14.8	— 19.2	— 23.9	— 19.5	— 14.8	— 22.1	— 19.4	9.1
9	30.556	30.669	30.700	— 17.5	— 19.0	— 19.2	— 14.8	— 19.0	— 15.1	— 15.1	— 21.0	— 17.9	6.2
10	30.845	30.818	30.727	— 15.0	— 13.8	— 9.2	— 12.2	— 20.0	— 13.8	— 9.2	— 17.0	— 14.6	10.8
11	30.561	30.478	30.430	— 8.0	— 4.0	— 4.0	— 8.0	— 9.2	— 3.8	— 3.2	— 8.0	— 6.2	6.0
12	30.243	30.235	30.306	— 6.0	— 6.0	— 4.0	— 4.0	— 8.0	— 5.8	— 3.6	— 9.2	— 6.4	5.6
13	30.240	30.169	30.056	— 9.2	— 7.9	— 14.5	— 3.8	— 9.4	— 7.6	— 4.2	— 14.5	— 9.2	10.7
14	29.959	30.011	30.089	— 18.0	— 22.0	— 18.0	— 8.4	— 18.0	— 14.5	— 14.5	— 22.8	— 15.6	14.4
15	30.130	30.083	29.945	— 23.8	— 20.0	— 23.5	— 18.0	— 24.0	— 20.0	— 20.0	— 25.3	— 21.6	7.3
16	29.970	30.048	30.292	— 23.0	— 20.0	— 19.0	— 22.8	— 25.4	— 20.0	— 16.2	— 24.0	— 20.8	9.2
17	30.330	30.356	30.317	— 18.0	— 12.2	— 10.9	— 18.0	— 21.0	— 12.2	— 6.4	— 19.0	— 13.7	14.6
18	30.125	30.068	30.017	— 16.0	— 16.0	— 18.5	— 4.9	— 18.1	— 15.9	— 14.9	— 18.5	— 11.7	13.6
19	29.914	29.911	29.875	— 16.0	— 18.4	— 27.0	— 15.5	— 21.0	— 16.0	— 16.0	— 28.0	— 21.8	12.5
20	29.862	29.855	29.849	— 28.4	— 27.0	— 19.0	— 27.0	— 32.0	— 23.0	— 17.0	— 28.0	— 24.5	15.0
21	29.735	29.646	29.628	— 24.0	— 23.2	— 20.4	— 19.0	— 27.0	— 22.8	— 20.0	— 25.0	— 23.0	8.0
22	29.695	29.670	29.644	— 23.8	— 22.0	— 18.0	— 20.4	— 24.0	— 22.0	— 18.0	— 25.2	— 21.6	7.2
23	29.732	29.724	29.770	— 20.0	— 18.2	— 18.9	— 17.6	— 22.0	— 17.0	— 16.0	— 22.0	— 19.0	6.0
24	29.847	29.878	29.931	— 25.0	— 24.0	— 28.9	— 18.5	— 27.8	— 20.4	— 20.4	— 30.0	— 24.2	11.5
25	29.738	29.713	29.657	— 13.8	— 14.0	— 15.0	— 13.8	— 29.1	— 13.8	— 13.8	— 16.0	— 21.4	15.3
26	29.763	29.788	29.813	— 20.0	— 23.2	— 22.1	— 15.0	— 20.4	— 20.0	— 20.0	— 25.6	— 20.3	10.6
27	29.722	29.649	29.461	— 14.5	— 15.0	— 17.5	— 14.0	— 22.1	— 12.0	— 12.0	— 17.5	— 17.0	10.1
28	29.221	29.221	29.336	— 18.9	— 19.8	— 17.0	— 17.5	— 20.0	— 18.9	— 16.0	— 21.0	— 18.5	5.0
29	29.663	29.692	29.743	— 15.0	— 15.8	— 18.0	— 15.0	— 18.5	— 14.5	— 11.2	— 20.0	— 15.6	8.8
30	29.721	29.686	29.565	— 17.9	— 20.0	— 14.0	— 17.6	— 21.2	— 17.9	— 14.0	— 21.4	— 17.7	7.4
31	29.339	29.290	29.193	— 10.0	— 10.0	— 4.0	— 8.1	— 14.0	— 8.0	— 3.8	— 10.0	— 8.9	10.2
Sum....	926.157	926.083	926.184	—486.3	—482.7	—481.5	—395.2	—589.5	—432.5	—368.1	—595.9	—490.5	331.3
Mean...	29.876	29.874	29.877	— 15.7	— 15.6	— 15.5	— 12.7	— 19.0	— 14.0	— 11.9	— 19.2	— 15.8	10.7

Tabulation of daily meteorological observations at Teplitz Bay during the month of December, 1903—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND											
								8H				12H				20H			
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.00	T	T	T	Sd	9 50	16 10	SW	22	30	SW	W	17	24	SW	W	15	24	W
2	.00	.00	.00	.00	...	.. ..	.. ..	W	5	20	W	NW	5	10	W	W	15	15	W
3	.00	.00	.00	.00	...	.. ..	.. ..	W	30	35	W	W	20	36	W	W	20	36	W
4	.00	T	T	T	Sd	11 50	12 30	SW	14	23	W	W	8	20	W	N	11	20	W
5	.00	.00	.00	.00	...	.. ..	.. ..	E	4	15	N	E	2	3	E	S	3	5	E
6	.00	.00	.00	.00	...	.. ..	.. ..	N	8	9	N	N	5	6	N	N	6	7	N
7	.00	.00	.00	.00	...	.. ..	.. ..	N	6	12	N	C	0	8	N	N	8	18	N
8	.00	.00	.00	.00	...	.. ..	.. ..	NE	5	27	NE	SE	15	20	SE	E	15	20	E
9	.00	.00	.00	.00	...	.. ..	.. ..	SE	38	48	E	E	60	60	E	E	58	60	E
10	.00	.00	.00	.00	...	.. ..	.. ..	SE	12	53	E	SE	24	36	SE	SE	36	42	SE
11	.00	.00	.00	.00	...	.. ..	.. ..	SE	38	48	SE	ESE	48	52	ESE	E	39	54	E
12	.00	.00	.00	.00	...	.. ..	.. ..	E	70	72	E	E	72	72	E	E	50	84	E
13	.00	.00	.00	.00	...	.. ..	.. ..	E	5	36	E	E	10	15	E	E	24	28	E
14	.00	.00	.00	.00	...	.. ..	.. ..	E	34	42	E	E	24	45	E	E	36	38	E
15	.00	.00	.00	.00	...	.. ..	.. ..	E	33	36	E	E	15	35	E	E	35	42	E
16	.00	.00	.00	.00	...	.. ..	.. ..	E	62	72	E	SE	62	72	SE	W	12	72	ESE
17	.00	.00	.00	.00	...	.. ..	.. ..	ESE	60	60	ESE	ESE	48	60	SE	SE	20	60	SE
18	.00	.00	.00	.00	...	.. ..	.. ..	E	36	36	E	SW	23	48	E	S	4	48	E
19	.00	.00	.00	.00	...	.. ..	.. ..	E	22	24	E	S	14	24	E	E	32	48	E
20	.00	.00	.00	.00	...	.. ..	.. ..	E	48	50	E	E	48	48	E	SE	25	58	SE
21	.00	.00	.00	.00	...	.. ..	.. ..	E	8	30	E	NE	2	10	NE	SE	15	19	SE
22	.00	.00	.00	.00	...	.. ..	.. ..	ESE	46	46	ESE	E	48	50	E	ESE	60	70	ESE
23	.00	.00	.00	.00	...	.. ..	.. ..	E	46	66	ESE	E	42	54	E	E	12	54	E
24	.00	.00	.00	.00	...	.. ..	.. ..	NE	23	25	NE	NE	5	20	NE	NE	5	41	NE
25	.00	.00	.00	.00	...	.. ..	.. ..	NNE	17	36	NE	NE	28	32	NE	NE	30	32	NE
26	.00	.00	.00	.00	...	.. ..	.. ..	NE	14	33	NE	NE	4	15	NE	NE	5	15	NE
27	.00	.00	.00	.00	...	.. ..	.. ..	SE	23	25	SE	SE	32	35	SE	SE	48	48	SE
28	.00	.00	.00	.00	...	.. ..	.. ..	SSE	82	84	SSE	SE	72	84	SSE	SE	72	84	SSE
29	.00	.00	.00	.00	...	.. ..	.. ..	S	8	60	SE	S	12	20	S	E	5	20	S
30	.00	.00	.00	.00	...	.. ..	.. ..	E	3	6	E	E	2	5	E	S	8	11	S
31	T	T	.04	.04	Sd Sd	6 00 13 30	8 30	SE	36	38	SE	SE	33	36	SE	S	34	49	S
Sum....	.00	.00	.04	.04	...	.. ..	.. ..	...	858	1197	...	....	800	1055	...	....	758	1222	...
Mean...	...	...	...	...	...	.. ..	.. ..	E	27.7	38.6	E	E	25.8	34.0	E	E	24.5	39.4	E

Tabulation of daily meteorological observations at Teplitz Bay during the month of December, 1903—Continued

Observer: FRANCIS LONG

DATE	CLOUDS									Av. daily cloudiness	REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	10	S	SW	10	N	W	2	S-Cu	W	10	
2	0	...	...	0	...	...	1 2	(Cl) S	W W	5	
3	10	S	W	8	S	W	10	S	W	8	
4	10	S	SW	10	N	W	6 4	(A-S) S	N N	10	Lunar halo 22:00 to 24:00.
5	10	S	E	4	(A-S)	E	6 4	(A-S) S	S S	7	
6	0	...	...	0	...	...	0	...	...	1	
7	0	...	...	0	...	...	0	...	...	0	Lunar halos 0:30 to 7:00 and 12:30 to 13:00.
8	0	...	...	0	H	...	0	...	...	0	Lunar halo 1:30 to 7:55.
9	0	...	...	0	...	...	0	...	...	2	Drifting snow.
10	0	...	...	0	...	...	10	S	SE	6	High east to southeast winds.
11	10	S	SE	10	S	ESE	10	S	E	10	High winds and drifting snow.
12	10	S	E	10	S	E	0	...	...	8	Heavy drift to 19:00.
13	0	...	...	0	...	...	Few	(Cl-S)	E	1	
14	0	*	...	0	*	...	0	...	...	1	
15	0	...	...	Few	S	E	0	...	...	0	Drifting snow to 11:45.
16	0	...	...	0	...	...	4	S	W	2	
17	0	...	...	6	S	ESE	2	S	SE	4	
18	0	...	...	0	...	...	0	...	...	1	Light fog 11:45 to 24:30.
19	0	H	...	0	...	...	0	...	...	0	
20	4 2	(A-S) S	E E	4	S	E	0	...	...	3	
21	0	...	...	0	H	...	0	...	...	0	Light haze 10:10 to 13:00.
22	Few	Cu	ESE	0	...	...	Few Few	(Cl) S-Cu	ESE ESE	0	
23	2	S	E	0	...	...	2	S-Cu	E	2	
24	2	S	NE	2	S	NE	0	...	...	2	
25	10	S	NE	2	S	NE	4	S	NE	4	
26	0	H	...	0	H	...	2	S H	SE	1	Light haze from 7:00.
27	4	S	SE	Few	S-Cu	SE	3	S-Cu	SE	2	Drifting snow.
28	10	S	SSE	10	S	SE	3 4	S-Cu S	SE SE	7	
29	0	...	...	0	...	...	0	*	...	1	Light fog from 16:50.
30	4	S*	S	0	...	...	0	...	...	1	Light fog to 9:00; light haze from 21:30.
31	10	N	SE	5 3	(A-S) S*	SE SE	10	N	S	10	Light haze to 2:30; light fog 9:00 to 18:00.
Sum....	108	...	...	84	...	...	89	...	...	109	
Mean...	3.5	...	...	2.7	...	...	2.9	...	...	3.5	

Tabulation of daily meteorological observations at Teplits Bay during the month of January, 1904

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.286	29.338	29.273	— 10.0	— 17.5	— 9.8	+ 3.8	— 10.0	— 10.0	— 9.8	— 18.0	— 7.1	21.8
2	29.186	29.304	29.564	— 11.0	— 24.0	— 30.0	— 6.4	— 11.2	— 11.0	— 11.0	— 31.0	— 18.7	24.6
3	29.564	29.354	29.287	— 28.4	— 18.0	— 15.4	— 28.4	— 33.6	— 18.0	— 14.2	— 28.4	— 23.9	19.4
4	29.603	29.662	29.639	— 27.5	— 30.0	— 23.1	— 15.4	— 29.4	— 27.5	— 23.0	— 32.0	— 23.7	16.6
5	29.410	29.541	29.862	— 21.0	— 29.0	— 37.0	— 18.8	— 23.1	— 21.0	— 21.0	— 38.0	— 28.4	19.2
6	29.552	29.317	29.036	— 21.0	— 15.0	— 8.0	— 21.0	— 40.0	— 15.0	— 8.0	— 22.6	— 24.0	32.0
7	29.060	29.129	29.233	— 15.0	— 20.0	— 24.1	+ 4.0	— 15.0	— 15.0	— 15.0	— 27.2	— 11.6	31.2
8	29.289	29.248	29.148	— 23.5	— 21.8	— 16.8	— 23.0	— 27.1	— 21.0	— 16.7	— 24.2	— 21.9	10.4
9	29.173	29.162	29.151	— 17.0	— 16.9	— 24.0	— 14.6	— 22.0	— 16.2	— 16.2	— 24.3	— 19.4	9.7
10	29.366	29.425	29.448	— 22.0	— 25.0	— 30.1	— 22.0	— 30.0	— 22.0	— 22.0	— 31.0	— 26.5	9.0
11	29.467	29.492	29.604	— 29.8	— 37.0	— 45.4	— 28.0	— 31.0	— 29.8	— 29.8	— 46.0	— 37.0	18.0
12	29.704	29.732	29.701	— 46.0	— 47.2	— 50.0	— 45.0	— 48.0	— 46.0	— 46.0	— 50.9	— 48.0	5.9
13	29.772	29.823	29.871	— 49.9	— 50.2	— 48.0	— 49.9	— 52.0	— 49.8	— 48.0	— 52.0	— 50.0	4.0
14	29.954	29.977	30.032	— 47.8	— 47.0	— 40.0	— 47.8	— 50.0	— 46.0	— 40.0	— 50.0	— 45.0	10.0
15	29.921	29.902	29.891	— 26.9	— 24.0	— 24.0	— 26.9	— 42.2	— 24.0	— 23.4	— 26.9	— 32.8	18.8
16	29.665	29.494	29.267	— 10.0	— 3.0	+ 11.0	— 10.0	— 24.0	— 3.0	+ 12.2	— 10.0	— 5.9	36.2
17	29.404	29.485	29.476	+ 4.0	+ 3.0	0.0	+ 12.2	+ 3.2	+ 4.0	+ 4.0	— 1.0	+ 5.6	13.2
18	29.381	29.379	29.410	+ 11.9	+ 10.2	+ 11.9	+ 14.0	0.0	+ 12.0	+ 12.0	+ 10.0	+ 7.0	14.0
19	29.468	29.455	29.369	+ 11.8	+ 14.0	+ 10.0	+ 12.2	+ 8.8	+ 14.0	+ 14.2	+ 7.7	+ 11.0	6.5
20	29.155	29.156	29.136	+ 11.0	+ 18.0	+ 15.0	+ 11.2	+ 8.9	+ 19.0	+ 22.0	+ 11.0	+ 15.4	13.1
21	28.693	28.570	28.843	+ 15.0	+ 23.5	— 6.0	+ 15.5	+ 3.0	+ 24.0	+ 30.8	— 6.0	+ 12.4	36.8
22	28.250	28.243	28.370	+ 26.0	+ 25.1	— 5.0	+ 26.0	— 10.0	+ 26.0	+ 26.0	— 5.0	+ 8.0	36.0
23	28.724	28.823	28.997	— 11.0	— 12.0	— 13.0	— 5.0	— 11.0	— 11.0	— 11.0	— 15.0	— 10.0	10.0
24	29.168	29.227	29.264	+ 8.2	+ 2.0	0.0	+ 8.2	— 18.0	+ 8.0	+ 8.2	0.0	— 4.9	26.2
25	29.414	29.412	29.446	— 2.5	— 4.0	— 7.0	+ 3.0	— 2.5	— 2.1	— 2.1	— 7.0	— 2.0	10.0
26	29.500	29.552	29.619	— 14.0	— 15.0	— 16.0	— 7.0	— 15.0	— 14.0	— 14.0	— 19.0	— 13.0	12.0
27	29.651	29.673	29.749	— 18.0	— 19.0	— 24.0	— 15.4	— 20.0	— 16.0	— 16.0	— 25.0	— 20.2	9.6
28	29.904	29.952	29.993	— 27.0	— 25.0	— 26.0	— 22.0	— 28.2	— 25.0	— 23.8	— 27.6	— 25.1	6.2
29	29.905	29.857	29.852	— 22.2	— 21.6	— 22.4	— 21.6	— 26.9	— 20.2	— 20.2	— 23.2	— 23.6	6.7
30	29.949	29.988	30.082	— 23.0	— 23.0	— 23.0	— 22.0	— 25.0	— 22.8	— 21.4	— 26.8	— 24.1	5.4
31	30.225	30.266	30.349	— 25.0	— 28.0	— 28.0	— 21.2	— 29.6	— 24.0	— 24.0	— 30.2	— 25.7	9.0
Sum....	912.763	912.938	913.962	—461.6	—477.4	—548.2	—361.3	—650.9	—403.4	—347.2	—669.6	—513.1	501.5
Mean...	29.444	29.449	29.483	— 14.9	— 15.4	— 17.7	— 11.7	— 21.0	— 13.0	— 11.2	— 21.6	— 16.6	16.2

Tabulation of daily meteorological observations at Teplitz Bay during the month of January, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND											
								8H				12H				20H			
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.09	.00	.00	.09	S^d	.. ..	6 30	W	20	34	W	W	20	20	W	W	15	49	W
2	.00	.00	.00	.00	...	.. ..	.. ..	E	15	16	E	NE	15	23	NE	NW	7	23	NE
3	.00	.00	.00	.00	...	.. ..	.. ..	E	5	8	W	E	36	40	ESE	E	9	47	E
4	.00	.00	.00	.00	...	.. ..	.. ..	N	5	34	N	N	10	12	N	E	5	12	N
5	.00	.00	.00	.00	...	.. ..	.. ..	E	15	15	E	ENE	23	24	ENE	NW	8	29	ENE
6	.06	.05	.09	.20	S^d	4 00	.. ..	ESE	23	23	ESE	ESE	24	42	ESE	SE	4	42	ESE
7	.10	T	T	.10	S^d S^d	.. .. 11 45	4 30 12 15	NE	16	24	NW	NE	15	15	NE	W	18	35	NE
8	.00	.00	.00	.00	...	.. ..	.. ..	E	45	48	ESE	ESE	42	48	ESE	E	28	50	ESE
9	.00	.00	.00	.00	...	.. ..	.. ..	S	2	26	E	S	1	5	S	E	28	34	E
10	.00	.00	.00	.00	...	.. ..	.. ..	NE	8	48	E	NE	4	15	E	E	3	13	E
11	.00	.00	.00	.00	...	.. ..	.. ..	NE	22	30	NE	ENE	36	36	ENE	N	5	38	N
12	.00	.00	.00	.00	...	.. ..	.. ..	NE	8	14	N	N	10	12	N	N	25	25	N
13	.00	.00	.00	.00	...	.. ..	.. ..	N	14	24	N	ENE	2	10	N	E	1	10	N
14	.00	.00	.00	.00	...	.. ..	.. ..	C	0	3	N	C	0	3	SE	ESE	4	4	ESE
15	.01	T	.00	.01	S^d	5 30	8 20	S	10	10	S	SW	17	20	SW	SE	8	20	SW
16	.10	.07	.09	.26	S^d	3 00	21 00	SE	26	35	SE	S	24	27	SE	S	15	27	SE
17	.10	.04	T	.14	S^m	1 40	12 10	S	3	16	S	W	11	12	SW	W	1	12	SW
18	.06	T	.09	.15	S^m S^m	5 00 12 40	9 30	SW	20	34	SW	SW	20	24	SW	W	17	28	W
19	.09	.00	.00	.09	S^m	.. ..	1 00	S	12	20	S	S	12	15	S	SE	35	37	SE
20	.00	.00	T	T	S^m	19 15	.. ..	S	50	54	S	S	33	50	S	W	15	50	S
21	.30	.24	.00	.54	S^m	.. ..	10 10	S	60	72	S	S	48	72	S	W	8	72	S
22	.00	.00	.00	.00	...	.. ..	.. ..	S	30	60	S	S	45	48	S	S	50	75	S
23	.00	.00	.00	.00	...	.. ..	.. ..	SE	12	65	S	S	10	15	SE	E	8	15	SE
24	T	.08	T	.08	S^d	7 00	12 05	SE	15	32	SE	SE	6	30	SE	E	52	54	SE
25	.00	.00	.00	.00	...	.. ..	.. ..	SE	18	52	E	ESE	15	28	E	E	18	28	E
26	.00	.00	.00	.00	...	.. ..	.. ..	E	29	40	E	E	30	36	E	NE	5	36	E
27	.00	.00	.00	.00	...	.. ..	.. ..	NE	2	20	NE	NE	5	8	NE	NE	14	14	NE
28	.00	.00	.00	.00	...	.. ..	.. ..	E	3	12	E	NE	3	5	NE	E	5	7	E
29	.00	.00	.00	.00	...	.. ..	.. ..	E	22	35	E	E	36	42	E	E	38	48	E
30	.00	.00	.00	.00	...	.. ..	.. ..	E	24	47	E	ESE	15	26	E	NE	12	35	NE
31	.00	.00	.00	.00	...	.. ..	.. ..	E	24	29	NE	E	15	28	E	E	12	28	E
Sum....	.91	.48	.27	1.66	...	.. ..	.. ..	...	558	980	...	...	583	791	...	...	473	997	...
Mean...	...	...	...	...	...	.. ..	.. ..	E	18.0	31.6	E	S	18.8	25.5	E	E	15.3	32.2	E

Tabulation of daily meteorological observations atta Bay during the month of January, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS									Av. daily cloudiness	REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	0	...	...	2 1	(Cl-S) S H	W W	10	S-Cu	W	8	Lunar halo 7:45 to 8:30.
2	10	S*	E	0	...	...	Few	(Cl) H	SE	1	
3	5 3	(A-S) S*	E E	5 3	(A-S) S*	E E	4 2	(A-S) S	E E	8	Light fog 7:00 to 18:00; drifting snow 10:45 to 14:35.
4	1	*	...	0	...	...	0	...	...	1	Lunar halo 23:10 to 24:00.
5	2 2	(Cl-S) S H	E E	Few	S H	ENE	2	(Cl) H	NW	1	Lunar halo to 1:00; light haze 6:10 to 24:00.
6	10	N*	ESE	10	N*	ESE	10	N*	SE	10	Light fog from 6:00.
7	10	S*	NE	10	N*	NE	0	...	...	8	Light fog to 16:00.
8	Few	S	E	Few	S	ESE	10	S	E	5	Drifting snow 6:00 to 16:40.
9	10	S	S	10	S	S	0	*	...	8	Light fog 17:00 to 21:00.
10	0	...	...	0	...	...	0	H	...	0	Haze 18:40 to 20:40.
11	0	...	...	0	...	...	0	...	...	0	Haze from 22:00.
12	10	S H	NE	4	S*	N	0	...	...	6	Haze to 8:15; light fog 8:15 to 13:30.
13	0	*	...	Few	S	SE	0	*	...	0	Light fog 6:00 to 9:10 and from 18:40.
14	0	...	...	0	...	...	0	*	...	0	Generally light fog.
15	10	N*	S	Few	S	SE	0	...	...	6	Light fog to 8:25.
16	10	N*	SE	10	N*	S	10	N*	S	10	Light fog 3:00 to 20:30.
17	10	N*	S	10	N*	W	6	S*	W	9	Light fog 3:30 to 22:30.
18	10	N*	SW	10	S*	SW	10	N*	W	10	Generally foggy.
19	10	S*	S	10	S	S	10	S	SE	9	Light fog to 8:30; drifting snow from 19:30.
20	10	S	S	5 4	(A-S) S	S S	10	N	W	8	Drifting snow to 11:00.
21	10	N	S	10	S	S	Few	S	W	8	
22	10	S	S	10	S	S	7	S	S	10	
23	Few	S	SE	Few	S	SE	4	S	SE	2	Variable winds.
24	10	N	SE	10	N*	SE	0	...	...	7	
25	7	S	SE	10	S	ESE	3 1	(Cl-S) S	E E	6	
26	0	...	...	2	S	SE	2 2	(Cl-S) (A-S)	E E	1	
27	4	S	E	2 2	(A-S) S H	SE SE	Few	(Cl)	E	3	Light haze 9:25 to 14:00.
28	0	...	...	0	...	...	0	...	...	0	
29	0	...	...	0	...	...	0	...	...	0	Drifting snow.
30	0	...	...	0	...	...	0	...	...	0	
31	0	...	...	0	...	...	0	...	...	0	
Sum....	164	...	...	140	...	...	103	...	...	145	
Mean...	5.3	...	...	4.5	...	...	3.3	...	...	4.7	

Tabulation of daily meteorological observations at Tepli Teplitz Bay during the month of February, 1904

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	30.473	30.509	30.575	— 29.0	— 28.2	— 27.0	— 27.6	— 31.1	— 26.0	— 25.0	— 30.6	— 28.0	6.1
2	30.486	30.441	30.552	— 23.2	— 21.8	— 23.0	— 23.0	— 27.4	— 20.6	— 20.0	— 25.0	— 23.7	7.4
3	30.540	30.506	30.430	— 22.0	— 20.0	— 16.0	— 18.0	— 25.0	— 11.4	— 11.9	— 24.0	— 18.2	13.6
4	30.424	30.376	30.376	— 19.0	— 20.0	— 19.0	— 14.9	— 19.0	— 19.0	— 18.9	— 21.0	— 18.0	6.1
5	30.128	30.049	29.922	— 15.0	— 17.0	— 12.0	— 15.0	— 20.0	— 15.0	— 11.2	— 17.0	— 15.6	8.8
6	29.921	29.932	30.044	— 12.0	— 12.2	— 17.0	— 11.8	— 14.0	— 10.0	— 10.0	— 17.0	— 13.5	7.0
7	30.001	29.978	29.982	— 19.0	— 14.0	— 20.0	— 18.6	— 21.0	— 14.0	— 14.0	— 20.0	— 17.5	7.0
8	30.149	30.188	30.084	— 15.0	— 21.0	— 4.0	— 15.0	— 24.1	— 15.0	— 4.0	— 22.0	— 14.0	20.1
9	30.253	30.266	30.300	— 11.0	— 9.9	— 16.0	— 4.0	— 17.2	— 7.0	— 7.0	— 17.8	— 10.9	13.8
10	30.154	30.067	29.881	— 12.0	— 11.0	— 10.0	— 12.0	— 17.0	— 11.0	— 10.0	— 12.2	— 13.5	7.0
11	29.690	29.640	29.651	— 19.0	— 19.0	— 37.0	— 9.1	— 19.0	— 18.5	— 18.5	— 37.0	— 23.0	27.9
12	29.807	29.870	29.964	— 41.9	— 43.0	— 42.5	— 37.0	— 42.2	— 41.8	— 39.8	— 43.6	— 40.3	6.6
13	29.911	29.805	29.695	— 35.0	— 26.0	— 12.0	— 35.0	— 43.0	— 25.0	— 11.0	— 35.0	— 27.0	32.0
14	29.524	29.479	29.661	— 4.0	+ 4.0	— 24.0	— 2.9	— 6.0	+ 4.0	+ 4.0	— 24.0	— 10.0	28.0
15	29.724	29.729	29.749	— 27.0	— 32.0	— 36.0	— 24.0	— 31.8	— 27.0	— 27.0	— 43.0	— 33.5	19.0
16	29.905	29.976	29.999	— 41.0	— 43.0	— 40.1	— 35.0	— 43.4	— 33.0	— 33.0	— 44.2	— 38.6	11.2
17	29.770	29.590	29.282	— 21.0	— 19.0	— 7.5	— 21.0	— 40.0	— 18.6	— 5.3	— 21.0	— 22.6	34.7
18	29.252	29.347	29.622	— 22.2	— 32.1	— 36.9	+ 4.0	— 22.2	— 22.2	— 22.2	— 36.9	— 16.4	40.9
19	29.911	29.945	29.928	— 42.0	— 42.0	— 24.9	— 42.0	— 44.6	— 41.9	— 24.9	— 44.2	— 34.8	19.7
20	29.596	29.529	29.497	— 19.0	— 14.0	— 9.9	— 18.0	— 24.9	— 13.6	— 4.0	— 19.0	— 14.4	20.9
21	29.744	29.708	29.567	— 12.0	— 9.0	— 4.0	— 5.6	— 17.4	— 8.3	— 1.0	— 13.0	— 9.2	16.4
22	29.438	29.354	29.283	+ 6.2	+ 6.0	+ 14.0	+ 7.0	— 6.4	+ 6.2	+ 14.6	+ 2.6	+ 4.1	21.0
23	29.479	29.666	29.945	— 15.0	— 25.0	— 27.5	+ 16.4	— 15.0	— 15.0	— 15.0	— 27.5	— 5.6	43.9
24	29.245	28.970	29.002	— 5.0	+ 20.0	+ 5.0	— 5.0	— 31.5	+ 20.0	+ 23.1	— 5.0	— 4.2	54.6
25	29.165	29.226	29.472	— 9.0	— 15.0	— 16.8	+ 5.0	— 9.0	— 9.0	— 9.0	— 17.4	— 6.2	22.4
26	29.419	29.316	29.185	+ 5.0	+ 16.5	+ 24.1	+ 5.2	— 17.0	+ 16.8	+ 25.6	+ 5.0	+ 4.3	42.6
27	29.619	29.691	29.665	— 15.0	— 20.0	— 16.0	+ 24.1	— 15.0	— 15.0	— 15.0	— 25.0	— 0.4	49.1
28	29.676	29.731	29.840	— 3.5	— 5.2	— 6.9	— 3.5	— 16.0	— 3.0	— 3.0	— 7.4	— 9.5	13.0
29	29.470	29.234	29.326	+ 4.0	+ 23.5	+ 22.6	+ 4.0	— 9.9	+ 24.0	+ 30.2	+ 4.0	+ 10.2	40.1
Sum....	864.874	864.118	864.479	—493.6	—449.4	—440.3	—332.3	—670.1	—369.9	—263.2	—638.2	—450.0	640.9
Mean...	29.823	29.797	29.810	— 15.5	— 15.2	— 23.8	— 11.5	— 23.1	— 12.8	— 9.1	— 22.0	— 15.5	22.1

Tabulation of daily meteorological observations at Teplitz Bay during the month of February, 1904—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind											
								8h				12h				20h			
	8h	12h	20h	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.00	.00	.00	.00	...	.. ..	.. ..	E	4	24	E	E	4	15	NE	NE	12	17	E
2	.00	.00	.00	.00	...	.. ..	.. ..	E	8	24	E	ENE	21	30	ENE	SE	4	30	ENE
3	.00	.00	.00	.00	...	.. ..	.. ..	E	25	35	E	E	46	46	E	E	58	60	E
4	.00	.00	.00	.00	...	.. ..	.. ..	E	44	59	E	E	48	51	E	NE	5	58	E
5	T	T	.00	T	S[d]	7 30	8 15	NE	20	20	NE	NE	20	26	NE	E	40	41	E
6	.00	.00	.00	.00	...	.. ..	.. ..	NE	12	42	E	E	36	48	E	E	10	48	E
7	.00	T	T	T	S[d]	11 00	12 30	NE	15	20	E	SE	5	16	E	E	1	16	E
8	.00	.00	.00	.00	...	.. ..	.. ..	S	4	20	S	E	5	16	E	SE	30	48	SE
9	.00	.00	.00	.00	...	.. ..	.. ..	S	10	48	SSE	SE	3	24	SE	NE	3	24	SE
10	.00	.00	.02	.02	S[d]	15 40	.. ..	W	15	17	W	W	17	17	W	SW	15	25	SW
11	.09	.05	T	.14	S[d]	.. ..	12 45	N	8	29	N	NE	10	12	N	N	14	30	N
12	.00	.00	.00	.00	...	.. ..	.. ..	N	5	17	N	N	1	3	N	N	1	5	N
13	.00	.01	.10	.11	S[d]	10 00	20 45	SE	16	16	SE	S	10	16	SE	SW	23	24	SW
14	.02	.05	.03	.10	S[d]	1 00	16 45	SW	16	36	SW	SW	30	35	SW	NE	10	35	SW
15	.00	.00	.00	.00	...	.. ..	.. ..	W	3	20	N	C	0	10	W	E	6	19	E
16	.00	.00	.00	.00	...	.. ..	.. ..	N	12	24	N	N	3	20	N	N	1	20	N
17	.00	.00	.00	.00	...	.. ..	.. ..	SE	36	38	SE	SE	48	48	SE	SE	48	54	SE
18	.00	.00	.00	.00	...	.. ..	.. ..	W	20	52	SE	W	16	20	W	W	8	24	W
19	.00	.00	.00	.00	...	.. ..	.. ..	E	1	14	W	C	0	4	N	S	8	12	S
20	.00	.00	.00	.00	...	.. ..	.. ..	SE	48	63	SE	E	42	60	SE	S	12	60	SE
21	.00	.00	.00	.00	...	.. ..	.. ..	N	2	15	S	E	25	28	E	E	58	58	E
22	.00	.00	.00	.00	...	.. ..	.. ..	S	32	60	E	SE	48	50	SE	S	36	50	SE
23	T	T	.00	T	S[d]	7 00	9 00	NW	20	47	S	NW	15	24	NW	NE	8	24	NW
24	.00	.07	.01	.08	S[d]	9 30	14 30	SSE	50	66	SSE	SSW	36	48	SSE	W	18	48	SSW
25	.00	.00	.00	.00	...	.. ..	.. ..	W	20	29	W	W	20	24	W	NW	10	25	W
26	.03	.10	.12	.25	S[m]	5 00	18 50	S	12	13	W	SE	12	17	S	W	24	28	W
27	.00	.00	.00	.00	...	.. ..	.. ..	NW	15	48	W	NW	12	20	NW	S	3	20	NW
28	.02	T	.00	.02	S[m]	5 00	9 20	S	5	16	S	W	10	20	W	SE	1	20	W
29	.06	.15	.01	.22	...	.. ..	.. ..	E	52	60	E	S	36	56	E	W	11	56	E
Sum....	.22	.43	.29	.94	...	.. ..	.. ..	...	530	972	...	...	579	804	...	...	478	979	...
Mean...	...	...	...	...	...	.. ..	.. ..	E	18.3	33.5	E	E	20.0	27.7	E	E	16.5	33.8	E

Tabulation of daily meteorological observations at Teplitz Bay during the month of February, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS									Av. daily cloudiness	REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	0	...	...	0	...	...	0	...	...	0	Lunar halo 21:10 to 22:00, 22 degrees.
2	10	S	E	10	S	E	4 Few	(Cl-S) S	E SE	7	
3	0	...	...	Few	S	E	10	S	E	1	Drifting snow from 5:30.
4	1	S	E	3 2	(A-S) S	E E	10	S	NE	5	
5	10	N	NE	10	S	NE	0	...	...	10	Variable winds; drifting snow 18:00 to 21:50.
6	10	S	NE	4	S	E	0	...	...	6	
7	10	S	E	10	N	SE	2	S	E	8	
8	0	...	...	0	...	...	0	...	...	0	Variable winds.
9	0	...	...	0	...	...	0	...	...	0	
10	3 2	(A-S) S	SE SE	9	S	W	10	N	SW	10	
11	10	N	N	10	N*	NE	0	...	...	7	Light fog 8:20 to 13:30.
12	0	...	...	0	...	...	0	H	...	1	
13	3	S	SE	10	N	S	10	N	SW	8	
14	10	N	SW	10	N	SW	10	S	NE	10	
15	10	S	W	9	S	W	0	...	...	7	
16	0	...	...	0	H	...	0	...	...	1	
17	10	S	SE	10	S	SE	10	S	SE	10	
18	3 6	S-Cu S	W W	3 4	S-Cu S	W W	0	...	...	5	
19	0	...	...	0	...	...	0	H	...	0	Light haze 18:10 to 21:15.
20	10	S	SE	10	S	E	4	S	S	10	
21	10	S	N	4 4	(A-S) S	E E	7	S	E	8	Drifting snow from 16:00.
22	10	S	S	5 4	S-Cu S	SE SE	10	S	S	10	Drifting snow.
23	10	N*	NW	Few	S-Cu	NW	0	...	...	3	Light fog 6:30 to 22:00.
24	10	S	SSE	10	N	SSW	2	S-Cu	W	9	
25	0	...	...	0	...	...	0	...	...	0	
26	10	N	S	10	N	SE	5 3	S-Cu S	W W	10	
27	Few	S-Cu	NW	Few	S	NW	10	S	S	3	
28	10	N	S	10	S	W	10	S	SE	10	
29	10	N	S	10	N	S	4	S-Cu	W	10	Light fog 9:30 to 16:00.
Sum....	178	...	...	171	...	...	121	...	...	169	
Mean...	6.1	...	...	5.9	...	...	4.2	...	...	5.8	

Tabulation of daily meteorological observations at Teplitz Bay during the month of March, 1904

Observer: FRANCIS LONG

Date	Reduced Barometer			Reading of Fahrenheit Thermometer			Self-registering Fahrenheit Thermometers						
							8h		12h	20h		Mean of extremes	Range
	8h	12h	20h	8h	12h	20h	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.139	29.108	29.366	+ 22.9	— 13.0	— 9.0	+ 22.9	+ 12.2	+ 22.9	+ 22.9	— 9.0	+ 7.0	31.9
2	29.202	29.357	29.732	+ 9.9	— 9.2	— 29.0	+ 10.0	— 9.0	+ 10.0	+ 10.0	— 29.0	— 9.5	39.0
3	30.212	30.209	29.349	— 34.0	— 31.0	— 9.0	— 29.0	— 36.2	— 30.0	— 8.6	— 37.0	— 22.8	28.4
4	29.411	29.550	29.982	— 12.0	— 15.0	— 24.0	+ 17.0	— 12.0	— 11.4	— 12.0	— 24.0	— 3.5	41.0
5	30.239	30.181	29.806	— 35.0	— 32.1	— 10.2	— 24.0	— 35.8	— 32.1	— 10.2	— 35.0	— 23.0	25.6
6	29.331	29.229	29.058	— 4.0	— 1.0	+ 1.0	— 4.0	— 11.5	+ 1.0	+ 1.5	— 4.0	— 5.0	13.0
7	29.013	...	...	— 11.0	...	— 17.0	+ 1.0	— 12.0	...	— 11.0	— 17.0	— 8.0	18.0
8	...	...	...	— 19.0	...	— 20.5	— 17.0	— 23.0	...	— 19.0	— 23.5	— 20.2	6.5
9	...	...	...	— 18.5	...	— 23.0	— 18.0	— 22.5	...	— 18.5	— 23.0	— 20.5	5.0
10	...	...	...	— 29.0	...	— 31.0	— 23.0	— 29.0	...	— 28.5	— 31.5	— 27.2	8.5
11	...	...	29.441	— 18.0	...	— 14.0	— 18.0	— 31.0	...	— 12.9	— 18.0	— 22.0	18.1
12	29.476	29.519	29.649	— 29.4	— 36.0	— 45.0	— 15.0	— 33.0	— 29.4	— 29.4	— 45.0	— 30.0	30.0
13	29.670	29.681	29.703	— 44.0	— 43.0	— 44.0	— 41.0	— 46.8	— 42.9	— 43.0	— 46.0	— 43.9	5.8
14	29.720	29.735	29.719	— 37.0	— 40.0	— 42.2	— 34.0	— 44.0	— 33.3	— 33.3	— 44.0	— 38.6	10.7
15	29.720	29.728	29.749	— 44.5	— 38.0	— 46.0	— 42.0	— 46.1	— 37.5	— 37.5	— 48.0	— 42.8	10.5
16	29.792	29.794	29.797	— 50.2	— 45.0	— 43.2	— 46.0	— 51.4	— 44.0	— 41.2	— 50.2	— 46.3	10.2
17	29.703	29.624	29.542	— 42.1	— 37.4	— 42.6	— 42.0	— 46.8	— 37.0	— 35.6	— 42.7	— 41.2	11.2
18	29.675	29.680	29.679	— 49.0	— 42.8	— 28.9	— 42.6	— 50.0	— 41.0	— 28.9	— 49.0	— 39.4	21.1
19	29.511	29.512	29.464	— 3.4	— 9.6	— 9.0	— 3.0	— 29.0	— 2.0	— 2.0	— 12.4	— 15.5	27.0
20	29.571	29.605	29.274	— 35.0	— 31.9	— 8.2	— 9.0	— 35.0	— 31.5	— 8.0	— 36.0	— 22.0	28.0
21	28.640	28.526	28.378	— 4.6	+ 2.0	+ 8.4	— 4.0	— 8.9	+ 2.5	+ 8.4	— 4.6	— 0.2	17.3
22	28.504	28.616	28.893	— 3.0	— 4.0	— 13.2	+ 9.0	— 3.0	— 1.0	— 1.0	— 13.2	— 2.1	22.2
23	29.191	29.291	29.424	— 19.9	— 24.3	— 25.0	— 13.2	— 20.0	— 19.9	— 19.9	— 25.0	— 19.1	11.8
24	29.712	29.806	29.907	— 27.8	— 30.9	— 37.0	— 25.0	— 28.0	— 27.8	— 27.8	— 37.0	— 31.0	12.0
25	29.760	29.725	29.763	— 32.9	— 28.5	— 20.0	— 32.0	— 39.0	— 28.0	— 20.0	— 32.9	— 29.5	19.0
26	29.960	30.012	30.142	— 24.0	— 24.2	— 22.9	— 20.0	— 30.0	— 21.9	— 21.8	— 25.6	— 25.0	10.0
27	30.438	30.443	30.173	— 29.0	— 27.0	— 6.1	— 22.9	— 30.0	— 26.0	— 6.0	— 30.9	— 18.4	24.9
28	29.560	29.488	29.301	+ 15.0	+ 23.8	+ 23.9	+ 15.0	— 6.0	+ 24.0	+ 25.0	+ 15.0	+ 9.5	31.0
29	29.023	28.986	29.009	+ 25.5	+ 25.0	+ 10.0	+ 26.0	+ 22.0	+ 25.9	+ 25.9	+ 10.0	+ 18.0	16.0
30	29.575	29.771	30.054	— 8.0	— 16.5	— 22.4	+ 10.0	— 8.0	— 8.0	— 8.0	— 23.6	— 6.8	33.6
31	30.122	30.038	29.936	— 7.5	— 3.0	+ 5.0	— 7.0	— 25.0	— 3.0	+ 5.0	— 7.5	— 10.0	30.0
Sum....	797.870	769.214	798.290	—598.5	—532.6	—594.1	—420.8	—767.8	—421.3	—385.4	—799.6	—589.0	617.3
Mean...	29.551	29.585	29.566	— 19.3	— 20.5	— 19.2	— 13.6	— 24.8	— 16.2	— 12.4	— 25.8	— 19.0	19.9

Between March 7 and 11, 1904, observer was with party on trip to Cape Fligely; the thermometer readings during this interval have been taken from the thermograph records.

Tabulation of daily meteorological observations at Teplitz Bay during the month of March, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND											
								8H				12H				20H			
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*					
1	.06	.12	.08	.26	S^m S^m	6 45 13 45	10 50 16 30	S	3	30	W	ENE	20	30	W	E	1	26	NE
2	.05	.01	.00	.06	S^d	4 30	10 10	W	8	24	E	N	16	20	N	N	12	24	N
3	.00	.00	.00	.00	S^m	23 00	.. ..	SE	3	20	N	E	8	13	SE	SSE	68	72	SSE
4	.15	.06	.00	.21	S^m	.. ..	11 30	NW	36	63	SSE	NW	48	48	NW	NW	24	48	NW
5	.00	.00	.00	.00	...	.. ..	.. ..	NE	1	26	NW	E	1	2	N	SE	30	48	SE
6	.00	T	.00	T	...	.. ..	.. ..	SE	16	48	SE	E	3	20	SE	NE	...	...	...
7	.00	...	...	...	...	.. ..	.. ..	E	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	T	...	S^d	19 30	20 40	...	...	...	...	...	...	...	...	E	...	...	...
12	T	.00	.00	T	...	.. ..	.. ..	N	15	20	N	E	2	20	N	C	0	20	N
13	.00	.00	.00	.00	...	.. ..	.. ..	C	0	6	E	E	1	2	E	E	1	6	E
14	.00	.00	.00	.00	...	.. ..	.. ..	E	3	5	N	N	3	5	N	N	1	5	N
15	.00	.00	.00	.00	...	.. ..	.. ..	SE	2	6	SE	E	6	12	E	NE	9	15	E
16	.00	.00	.00	.00	...	.. ..	.. ..	N	1	3	N	C	0	3	N	E	3	5	E
17	.00	.00	.00	.00	...	.. ..	.. ..	NE	1	4	E	C	0	5	NE	C	0	5	NE
18	.00	.00	.00	.00	S^d	22 00	.. ..	C	0	0	C	N	1	2	N	S	1	5	NE
19	.14	.00	.02	.16	S^d S^d S^d	.. .. 15 00 16 45	D. N. 15 50 21 10	S	10	34	S	W	3	12	S	S	8	12	S
20	T	.00	.04	.04	S^d	17 10	.. ..	C	0	15	S	E	3	3	E	E	60	70	E
21	.60	.22	.14	.96	S^d	.. ..	17 50	E	60	72	E	E	60	72	E	SE	15	72	E
22	T	.04	.01	.05	S^m	6 00	14 40	N	6	15	SE	NE	12	15	NE	NE	24	30	NE
23	.00	.00	.00	.00	...	.. ..	.. ..	NE	16	26	NE	NE	20	22	NE	N	28	30	N
24	.00	.00	.00	.00	...	.. ..	.. ..	N	24	28	N	NW	20	26	N	NW	4	26	N
25	.00	.00	.00	.00	...	.. ..	.. ..	C	0	6	NW	C	0	1	N	E	16	16	E
26	.00	.00	.00	.00	...	.. ..	.. ..	N	10	25	E	C	0	15	N	N	5	16	N
27	.00	.00	.00	.00	...	.. ..	.. ..	NE	6	10	N	E	2	5	E	S	15	16	S
28	.15	.01	.07	.23	S^m S^m	1 10 13 30	9 05	W	16	24	S	W	20	25	W	W	16	25	W
29	.22	.04	.25	.51	S^m S^m	.. .. 14 05	13 15 21 15	W	5	15	W	S	2	6	W	NW	12	16	NW
30	.04	.00	.00	.04	...	.. ..	.. ..	NE	28	58	NE	NE	16	34	NE	E	8	34	NE
31	.00	.00	.00	.00	S^m	21 15	.. ..	SSE	10	12	SSE	SSE	10	12	SSE	SSE	11	15	SSE
Sum....	1.41	.50	.61	2.52	...	.. ..	.. ..	...	280	595	...	...	277	430	...	...	372	657	...
Mean...	...	...	...	...	...	.. ..	.. ..	NE E	10.8	22.9	N	E	10.7	16.5	N	E	14.9	26.3	N NE

Tabulation of daily meteorological observations at Teplitz Bay during the month of March, 1904—Continued

Observer: FRANCIS LONG

Date	Clouds									Av. daily cloudiness	Remarks
	8h			12h			20h				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	10	N*	S	10	S	NE	5 2	(A–S) S	E E	9	Light fog to 10:50.
2	10	N*	W	10	S	N	0	...	...	5	Light fog to 10:00; lunar halo 19:30 to 21:10.
3	Few	S	E	Few	S	E	10	S	SSE	5	
4	10	N	NW	10	S	NW	10	S	NW	10	
5	0	...	...	2	S	E	10	S	SE	4	
6	10	S	SE	8	S	SE	10	S	SE	10	
7	4	S-Cu	E	...	...	...	...	...	...	...	Party left for north at 11:00.
8	...	...	...	...	...	...	...	...	...	...	
9	...	...	...	...	...	...	...	...	...	...	
10	...	...	...	...	...	...	...	...	...	...	
11	...	...	...	...	...	...	10	N	E	8	Party returned at 17:00.
12	0	...	...	0	...	...	0	...	...	0	
13	0	...	...	0	...	...	Few	S	SE	1	
14	0	...	...	0	...	...	Few	S	SE	1	Variable winds.
15	Few	S	SE	0	...	...	0	...	...	0	
16	Few	S	SE	0	H	...	0	H	...	0	Light haze from 9:00; water clouds over ice.
17	2	(A–S)	E	4	(A–S) H	E	2	S	NE	2	Light haze 9:00 to 14:00.
18	0	...	...	0	...	...	10	S*	S	2	
19	10	S	S	10	S	W	10	N*	S	10	Light fog from 13:30.
20	0	...	...	Few Few	(A–S) S H	SE SE	10	N	E	7	Light fog to 1:00; solar halo 11:15 to 13:30.
21	10	N	E	10	N	E	10	S	SE	10	
22	10	N	N	10	N*	NE	10	S*	NE	9	Light fog 8:50 to 22:00.
23	7	S	NE	4 1	S-Cu S	NE NE	10	S	N	7	Light drifting.
24	3	S-Cu	N	Few	S-Cu	E	0	...	...	0	Light drifting to 10:00.
25	0	...	...	0	...	...	0	...	...	0	Party left for north at 10:00; solar halo 10:10 to 11:15.
26	0	...	...	0	...	...	0	...	...	0	
27	0	...	...	Few	(A–S) H	E	10	S	S	5	Party returned at 17:30.
28	10	N	W	10	S	W	10	N	W	10	
29	10	N	W	10	N	S	10	N	NW	10	
30	10	S	NE	Few	S	E	0	...	...	5	Drifting snow to 4:00.
31	0	...	...	Few	(A–S)	W	10	S	SSE	5	
Sum....	116	...	...	89	...	...	159	...	...	135	
Mean...	4.3	...	...	3.4	...	...	5.9	...	...	5.0	

Tabulation of daily meteorological observations at Teplitz Bay during the month of April, 1904

Observer: FRANCIS LONG

DATE	REDUCED BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.852	29.817	29.787	+ 18.5	+ 23.5	+ 24.0	+ 18.5	+ 5.0	+ 23.5	+ 25.0	+ 18.5	+ 15.0	20.0
2	29.692	29.646	29.612	+ 24.0	+ 24.3	+ 22.0	+ 25.9	+ 23.0	+ 24.5	+ 25.0	+ 22.0	+ 24.0	3.9
3	29.546	29.569	29.562	+ 24.0	+ 21.9	+ 22.0	+ 26.0	+ 21.0	+ 24.1	+ 24.1	+ 20.9	+ 23.4	5.1
4	29.548	29.602	29.520	+ 8.0	+ 2.9	+ 5.0	+ 22.0	+ 7.8	+ 8.0	+ 8.0	— 3.0	+ 9.5	25.0
5	29.229	29.287	29.438	+ 25.0	+ 3.0	— 18.0	+ 26.0	+ 5.0	+ 25.4	+ 25.4	— 18.0	+ 4.0	44.0
6	29.692	29.723	29.691	— 26.0	— 19.1	— 9.9	— 18.0	— 28.0	— 18.1	— 9.2	— 27.0	— 18.6	18.8
7	29.766	29.841	29.955	— 19.0	— 16.5	— 23.9	— 10.0	— 21.0	— 16.0	— 16.0	— 24.5	— 17.2	14.5
8	29.970	29.992	29.992	— 23.0	— 16.1	— 20.0	— 20.3	— 27.5	— 15.5	— 13.4	— 23.0	— 20.4	14.1
9	29.962	29.957	29.914	— 17.6	— 13.9	— 19.4	— 17.6	— 26.2	— 13.2	— 10.0	— 19.4	— 18.1	16.2
10	29.790	29.725	29.610	— 15.0	— 12.0	— 9.8	— 15.0	— 22.1	— 11.0	— 8.3	— 15.0	— 15.2	13.8
11	29.485	29.462	29.498	— 15.0	— 15.4	— 26.0	— 6.2	— 16.0	— 15.4	— 12.2	— 26.2	— 16.2	20.0
12	29.701	29.741	29.725	— 35.4	— 37.0	— 33.8	— 26.0	— 36.6	— 35.4	— 31.9	— 37.0	— 31.5	11.0
13	29.575	29.561	29.549	— 23.0	— 17.8	— 19.0	— 23.0	— 33.8	— 17.6	— 17.4	— 23.0	— 25.6	16.4
14	29.475	29.485	29.485	— 17.4	— 16.8	— 27.0	— 17.0	— 19.0	— 16.6	— 16.6	— 27.2	— 21.9	10.6
15	29.302	29.297	29.385	— 32.2	— 32.9	— 34.0	— 27.0	— 36.3	— 29.0	— 29.0	— 35.0	— 31.6	9.3
16	29.422	29.504	29.536	— 14.9	— 10.0	— 6.0	— 14.9	— 34.0	— 10.0	— 5.1	— 14.9	— 19.6	28.9
17	29.484	29.465	29.477	— 4.5	— 4.0	— 5.0	— 3.0	— 6.0	— 3.1	+ 1.0	— 10.2	— 4.6	11.2
18	29.571	29.625	29.860	— 13.2	— 4.0	— 23.6	— 3.8	— 13.4	— 3.7	— 3.7	— 23.6	— 13.6	19.9
19	30.096	30.085	29.799	— 26.0	— 18.1	— 3.0	— 23.6	— 33.1	— 17.2	— 2.1	— 26.0	— 17.6	31.0
20	29.323	29.331	29.489	0.0	+ 1.6	+ 2.0	0.0	— 3.0	+ 2.0	+ 4.0	0.0	+ 0.5	7.0
21	29.557	29.521	29.563	+ 3.9	+ 4.0	+ 3.0	+ 6.2	— 1.7	+ 5.0	+ 8.2	+ 3.0	+ 3.2	9.9
22	29.779	29.850	29.946	— 7.5	— 3.0	— 3.0	+ 3.0	— 8.5	— 3.0	— 2.0	— 7.5	— 2.8	11.5
23	29.963	29.966	29.938	— 5.0	+ 1.0	— 4.0	— 3.0	— 11.0	+ 2.0	+ 2.0	— 4.6	— 4.5	13.0
24	29.842	29.833	29.789	— 1.0	+ 3.9	— 4.0	0.0	— 6.1	+ 4.0	+ 4.0	— 4.3	— 1.0	10.1
25	29.741	29.718	29.692	— 6.0	— 3.0	— 6.5	— 4.0	— 7.8	— 2.8	— 3.0	— 6.5	— 5.3	5.0
26	29.704	29.705	29.688	— 16.5	— 16.0	— 16.7	— 6.5	— 18.5	— 15.0	— 12.8	— 18.0	— 12.5	12.0
27	29.594	29.585	29.554	— 15.0	— 13.2	— 19.0	— 12.8	— 21.0	— 12.8	— 8.9	— 19.0	— 15.0	12.1
28	29.617	29.668	29.757	— 18.0	— 11.9	— 17.9	— 18.0	— 22.5	— 10.0	— 9.6	— 18.0	— 16.0	12.9
29	29.909	29.951	30.042	— 16.0	— 13.0	— 14.0	— 15.8	— 21.4	— 13.0	— 11.8	— 16.0	— 16.6	9.6
30	30.062	...	...	— 12.2	...	...	— 12.2	— 17.0	...	...	...	...	...
Sum....	890.249	860.512	860.853	—207.6	—285.6	—285.5	—170.1	—429.7	—159.9	— 96.3	—382.5	—265.8	436.8
Mean...	29.675	29.673	29.685	— 9.2	— 7.2	— 9.8	— 5.7	— 14.3	— 5.5	— 3.3	— 13.2	— 9.2	15.1

Tabulation of daily meteorological observations at Teplitz Bay during the month of April, 1904—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind											
								8h				12h				20h			
	8h	12h	20h	Total	Character	Beginning	Ending	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction	Direction	Velocity	Max. vel. since last obs.	Direction
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*	*Mi.*			*Mi.*	*Mi.*			*Mi.*	*Mi.*	
1	.08	.03	.00	.11	Sm Sm Sm	.. 9 30 20 50	6 30 10 40 23 30	SSE	10	13	SSE	SW	11	12	SW	WSW	8	12	WSW
2	.14	.01	.09	.24	Sm Sm Sm	1 30 4 00 18 55	2 25 14 15	S	5	8	WSW	S	2	8	S	SE	5	8	SSE
3	.22	.03	.08	.33	Sm Sm	.. .. 16 45	10 25	SW	6	12	SE	SSE	3	5	S	SSW	4	5	S
4	.12	.03	.06	.21	Sd Sd	.. .. 15 45	13 30 20 15	SE	4	5	S	SE	2	5	E	ESE	32	35	ESE
5	.01	.04	.00	.05	Sd	6 30	9 55	SW	15	34	ESE	NW	12	24	WNW	N	16	24	WNW
6	.00	.00	.00	.00	...	.. ..	.. ..	NE	4	20	N	NW	1	6	E	NE	6	25	E
7	.00	.00	.00	.00	...	.. ..	.. ..	E	2	17	E	E	2	4	NE	N	4	4	NW
8	.00	.00	.00	.00	...	.. ..	.. ..	NE	1	4	NE	E	1	4	NE	E	3	6	N
9	.00	.00	.00	.00	...	.. ..	.. ..	E	2	5	NNW	N	1	3	SE	NE	1	3	SE
10	.00	.00	.00	.00	...	.. ..	.. ..	E	2	6	NNE	E	1	2	N	N	2	6	N
11	.00	.00	.00	.00	...	.. ..	.. ..	NE	20	30	NE	NE	24	36	NE	NE	12	36	NE
12	.00	.00	.00	.00	...	.. ..	.. ..	N	9	16	N	NW	6	12	N	W	6	12	N
13	.00	.00	.00	.00	...	.. ..	.. ..	W	16	17	NNW	W	20	22	W	W	16	24	NW
14	.00	.00	.00	.00	...	.. ..	.. ..	W	15	20	WSW	W	12	15	W	N	3	15	W
15	.00	.00	.00	.00	...	.. ..	.. ..	E	6	11	SE	N	10	15	N	SE	4	15	N
16	.00	.00	.00	.00	...	.. ..	.. ..	S	4	12	SSW	W	11	15	SW	SW	11	20	SW
17	.00	.00	.00	.00	...	.. ..	.. ..	N	23	24	N	NE	5	12	NE	W	20	28	ENE
18	.00	.00	.00	.00	...	.. ..	.. ..	NE	11	24	NE	S	2	20	NE	N	15	20	NNW
19	.00	.00	.00	.00	...	.. ..	.. ..	N	1	15	N	NE	2	8	NW	ESE	30	32	SE
20	.00	.00	.00	.00	...	.. ..	.. ..	ESE	60	61	ESE	E	52	66	E	E	48	66	E
21	.00	.00	.00	.00	...	.. ..	.. ..	ESE	38	48	E	E	36	48	E	SE	15	42	ESE
22	.00	.00	.00	.00	...	.. ..	.. ..	NNE	15	20	ENE	S	1	8	SE	W	2	8	SE
23	.00	.00	.00	.00	...	.. ..	.. ..	E	2	5	N	C	0	2	SE	NE	5	10	N
24	.00	.00	.00	.00	...	.. ..	.. ..	SE	8	8	SE	E	2	10	SE	E	11	20	E
25	.00	.00	.00	.00	...	.. ..	.. ..	N	13	30	ENE	NNE	5	12	N	N	10	12	N
26	.00	.00	.00	.00	...	.. ..	.. ..	NW	12	15	N	W	8	12	NW	NW	8	12	NW
27	.00	.00	.00	.00	...	.. ..	.. ..	SE	2	8	NW	SE	5	6	SE	N	1	6	SE
28	.00	.00	.00	.00	...	.. ..	.. ..	C	0	1	N	C	0	1	NE	N	10	12	N
29	.00	.00	.00	.00	...	.. ..	.. ..	N	8	12	N	NW	6	8	N	NE	...	...	...
30	.00	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...	...	...	...	...	...	...
Sum....	.57	.14	.23	.94	...	.. ..	.. ..	...	314	501	...	...	243	401	...	...	308	518	...
Mean...	...	...	...	...	...	.. ..	.. ..	N E	10.8	17.3	N	E	8.4	13.8	NE	N	11.0	18.5	N

Tabulation of daily meteorological observations at Teplitz Bay during the month of April, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	S*	SE	10	S	SW	10	S*	WSW	10	Light fog to 9:15 and from 19:30; grinding ice heard to west from 19:00 to 20:00.
2	10	N*	S	10	S	W	10	N*	SE	10	Light fog to 10:10 and from 19:00.
3	10	N*	SW	10	S	SE	10	N*	SSW	10	Light fog to 10:10 and from 16:10.
4	10	N*	S	10	N	SW	10	N*	ESE	10	Light fog to 9:00; 13:15 to 20:40; ice moving out of bay at 19:30.
5	10	N	SW	3 Ci-S W 2 Ci-Cu W 2 S W			0	...	...	8	Ice came in at 5:30; open water south of Cape Auk at 7:30.
6	0	...	...	Few	A-S	E	5 A-S NE 4 S NE			5	Ice moving out 8:45.
7	0	...	...	0	...	...	1	A-S	N	1	Open water 17:50 to 19:00.
8	0	...	...	Few	Ci	N	Few	Ci	N	0	
9	3	A-S H	NE	1 Ci-Cu NW 4 S H W			6 A-S NE 1 S NE			5	
10	1 Ci SE 4 A-S SE 1 S H SE			6 A-S E 3 S H E			10	S*	NE	8	Haze and fog all day.
11	0	...	...	Few	Ci-S	NE	0	*	...	1	Drifting snow; light fog from 13:00.
12	0	...	...	0	*	...	Few	S-Cu	...	2	Drifting ice from north; generally foggy.
13	0	*	...	10	S*	W	4	S*	W	4	Ice drift to 6:00; fog from 5:00.
14	5 A-S W 5 S* W			Few Ci N Few S-Cu N			0	...	...	3	Ice opened 50 yards southwest one-eighth mile from shore; fog to 9:45.
15	0	...	...	0	...	...	0	...	...	0	
16	2	S	W	2 S-Cu W 6 S* W			10	S*	SW	7	Ice moving in from southwest, 3:00; light fog from 8:45.
17	Few A-Cu N 2 S-Cu N 2 S N			0	...	...	0	*	...	1	Light fog from 17:00; drifting snow.
18	3	S-Cu*	NE	0	*	...	0	...	...	2	Light fog to 15:50.
19	0	...	...	0	...	...	10	S	ESE	4	Drifting snow from 16:00.
20	10	S	ESE	3 S-Cu E 6 S E			0	...	...	5	Heavy drifting ice moving out during A. M.
21	3 S-Cu ESE 3 S ESE			Few A-Cu E 3 S-Cu E 3 S E			4	S-Cu	SE	5	Large lead half mile out; fog from 21:00.
22	0	...	...	4 S-Cu SE 2 S SE			1	S-Cu	W	4	
23	Few	Ci-Cu	W	0	...	...	5 A-Cu NW 3 S-Cu NW 1 S NW			4	
24	5 A-Cu SE 4 S-Cu SE			5 A-Cu E 4 S-Cu E			5 S-Cu E 5 S* E			9	Light fog from 13:15.
25	10	S*	N	10	S*	NE	10	S	N	10	Light fog to 16:00.
26	1	S	NW	2	S	N	Few	S	NW	2	
27	Few	S-Cu H	...	Few	S-Cu H	...	0	...	...	1	Light haze 6:00 to 13:00.
28	0	...	...	0	...	...	0	...	...	0	
29	3	S-Cu	SE	Few	S-Cu	SE	Few	S-Cu	E	1	Observer left Camp Abruzzi for Cape Flora at 20:00.
30	0	...	...	...	...	...	...	...	...	...	
Sum....	117	...	...	121	...	...	125	...	...	132	
Mean...	3.9	...	...	4.2	...	...	4.3	...	...	4.6	

METEOROLOGICAL OBSERVATIONS

TABULATION OF DAILY METEOROLOGICAL OBSERVATIONS

RECORDED AT

CAPE FLORA STATION, NORTHBROOK ISLAND

FRANZ JOSEF ARCHIPELAGO

MAY 21, 1904, TO JULY 30, 1905

NORTH LATITUDE: 79° 57′

LONGITUDE EAST OF GREENWICH: 49° 59′

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Tabulation of daily meteorological observations at Cape Flora during the month of May, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...
21	29.70	29.68	29.72	+ 16.5	+ 16.7	+ 18.0	+ 17.1	+ 13.2	+ 17.4	+ 19.0	+ 15.1	+ 16.1	5.8
22	29.62	29.62	29.60	+ 15.0	+ 17.0	+ 19.0	+ 19.0	+ 11.0	+ 18.0	+ 19.0	+ 1.0	+ 10.0	18.0
23	29.66	29.74	29.84	+ 15.5	+ 16.3	+ 18.0	+ 19.0	+ 10.5	+ 16.3	+ 22.5	+ 12.2	+ 16.5	12.0
24	29.87	29.90	30.05	+ 16.5	+ 18.4	+ 14.2	+ 18.0	+ 10.0	+ 19.0	+ 21.4	+ 14.2	+ 15.7	11.4
25	30.20	30.20	30.20	+ 19.5	+ 20.0	+ 18.0	+ 20.0	+ 11.0	+ 20.0	+ 20.0	+ 17.9	+ 15.5	9.0
26	30.14	30.08	30.006	+ 17.0	+ 18.5	+ 20.4	+ 18.0	+ 15.0	+ 18.8	+ 20.4	+ 16.6	+ 17.7	5.4
27	29.86	29.84	29.83	+ 29.0	+ 33.1	+ 34.1	+ 29.0	+ 20.0	+ 35.6	+ 35.6	+ 29.0	+ 27.8	15.6
28	29.84	29.84	29.75	+ 33.8	+ 34.4	+ 31.0	+ 34.1	+ 31.2	+ 35.0	+ 35.0	+ 30.6	+ 32.8	4.4
29	29.72	29.74	29.70	+ 33.0	+ 30.4	+ 25.0	+ 34.0	+ 31.0	+ 32.3	+ 32.3	+ 24.0	+ 29.0	10.0
30	29.72	29.74	29.81	+ 20.1	+ 20.5	+ 15.8	+ 25.0	+ 19.0	+ 20.5	+ 20.5	+ 15.0	+ 20.0	10.0
31	29.87	29.89	29.93	+ 20.5	+ 22.0	+ 22.5	+ 21.0	+ 14.7	+ 22.2	+ 24.5	+ 20.0	+ 19.6	9.8
Sum....	328.20	328.27	328.44	+236.4	+247.3	+236.0	+254.2	+186.6	+255.1	+270.2	+195.6	+220.7	111.4
Mean...	29.84	29.84	29.86	+ 21.5	+ 22.5	+ 21.5	+ 23.1	+ 17.0	+ 23.2	+ 24.6	+ 17.8	+ 20.1	10.1

Tabulation of daily meteorological observations at Cape Flora during the month of May, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
2	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
3	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
4	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
5	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
6	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
7	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
8	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
9	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
10	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
11	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
12	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
13	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
14	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
15	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
16	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
17	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
18	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
19	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
20	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
21	.00	T	T	T	S^m S^m	1 00 10 30	6 30 13 15	E	...	NE	38	NE	108
22	.00	.00	.00	.00	...	.. ..	.. ..	NE	136	W	34	W	156
23	.00	.00	.00	.00	...	.. ..	.. ..	W	228	WNW	75	E	119
24	.00	.00	.00	.00	...	.. ..	.. ..	NE	181	NE	42	NE	76
25	T	.00	T	T	S^m S^m S^m	7 45 17 00 20 50	9 30 18 10 24 00	SE	63	SE	40	SE	63
26	.00	.00	T	T	S^m S^m	17 30 20 40	18 10	SSE	114	SE	39	ESE	94
27	.52	.02	T	.54	S^m S^m	.. .. 15 28	10 35 15 50	ENE	197	SW	20	WSW	38
28	T	T	.35	.35	...	.. ..	.. ..	SE	42	SE	84	SE	54
29	.20	.00	.02	.22	S^m S^m S^m	4 40 11 25 15 18	5 00 14 10	W	104	W	15	W	58
30	.00	T	T	T	S^m S^m S^m	.. .. 16 30 21 00	4 15 19 10	W	138	W	57	W	112
31	.01	T	.00	.01	S^m S^m	.. .. 18 00	11 10 20 30	W	111	WSW	15	W	31
Sum.....	.73	.02	.37	1.12	...	.. ..	.. ..	...	1314	...	459	...	909
Mean.....	...	...	...	...	...	.. ..	.. ..	W	131.4	W	41.7	W	82.6

Tabulation of daily meteorological observations at Cape Flora during the month of May, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	
3	...	...	...	...	...	...	...	...	...	...	
4	...	...	...	...	...	...	...	...	...	...	
5	...	...	...	...	...	...	...	...	...	...	
6	...	...	...	...	...	...	...	...	...	...	
7	...	...	...	...	...	...	...	...	...	...	
8	...	...	...	...	...	...	...	...	...	...	
9	...	...	...	...	...	...	...	...	...	...	
10	...	...	...	...	...	...	...	...	...	...	
11	...	...	...	...	...	...	...	...	...	...	
12	...	...	...	...	...	...	...	...	...	...	
13	...	...	...	...	...	...	...	...	...	...	
14	...	...	...	...	...	...	...	...	...	...	
15	...	...	...	...	...	...	...	...	...	...	
16	...	...	...	...	...	...	...	...	...	...	
17	...	...	...	...	...	...	...	...	...	...	
18	...	...	...	...	...	...	...	...	...	...	
19	...	...	...	...	...	...	...	...	...	...	
20	...	...	...	...	...	...	...	...	...	...	
21	10	S	E	10	N	NE	4	S-Cu	NE	8	Fog to 11:30.
22	2	(Cl)	E	3 3	Cl-Cu S-Cu	W W	6 3	S-Cu S	W W	6	
23	10	S-Cu	W	3 3	(Cl-Cu) S-Cu	W W	4 2	(Cl-Cu) S-Cu	E E	5	
24	3 4	(A-Cu) S-Cu	NE NE	3	S-Cu	NE	1	S-Cu	NE	4	
25	10	N	SE	10	S	SE	10	S	...	9	
26	10	S	...	10	S	...	10	S	...	10	Fog from 20:50.
27	10	N*	NE	10	S	SW	10	S	...	10	Fog to 10:15.
28	2 8	S-Cu S	SE SE	10	S	SE	10	N*	SE	9	Fog from 15:10.
29	10	S	W	5 5	(A-S) S	W W	10	S	W	10	Fog to 12:40.
30	10	S	W	10	S	W	10	N	W	10	
31	10	N	...	10	S	...	10	S	...	10	
Sum....	99	....	...	95	...	...	90	...	...	91	
Mean...	9.0	...	...	8.6	...	...	8.2	...	...	8.3	

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.98	29.96	29.92	+ 18.0	+ 18.0	+ 18.2	+ 22.8	+ 17.8	+ 21.4	+ 21.4	+ 17.0	+ 19.9	5.8
2	29.82	29.80	29.82	+ 27.0	+ 29.0	+ 30.0	+ 27.0	+ 17.8	+ 29.1	+ 31.0	+ 27.1	+ 24.4	13.2
3	29.88	29.90	29.92	+ 28.0	+ 27.0	+ 22.4	+ 31.0	+ 27.8	+ 28.0	+ 28.0	+ 21.2	+ 26.1	9.8
4	29.97	29.96	29.99	+ 24.5	+ 25.0	+ 24.0	+ 24.7	+ 21.2	+ 26.0	+ 27.1	+ 23.5	+ 24.2	5.9
5	29.96	29.95	29.95	+ 26.5	+ 28.0	+ 30.3	+ 26.5	+ 21.0	+ 30.0	+ 33.2	+ 27.0	+ 27.1	12.2
6	30.02	30.02	30.08	+ 30.6	+ 31.6	+ 28.0	+ 33.1	+ 27.0	+ 32.2	+ 32.2	+ 28.0	+ 30.0	6.1
7	30.17	30.19	30.22	+ 26.5	+ 27.6	+ 30.9	+ 28.0	+ 25.2	+ 28.6	+ 31.0	+ 25.0	+ 28.0	6.0
8	30.19	30.17	29.99	+ 32.0	+ 33.0	+ 30.1	+ 33.0	+ 28.0	+ 33.0	+ 33.0	+ 28.0	+ 30.5	5.0
9	29.90	29.85	29.70	+ 26.0	+ 32.4	+ 32.0	+ 30.1	+ 22.5	+ 32.4	+ 33.0	+ 26.0	+ 27.8	10.5
10	29.69	29.68	29.70	+ 32.0	+ 34.0	+ 32.0	+ 33.5	+ 31.0	+ 36.0	+ 36.2	+ 32.0	+ 33.6	5.2
11	29.70	29.72	29.74	+ 32.0	+ 33.4	+ 32.8	+ 32.4	+ 31.0	+ 34.8	+ 34.8	+ 31.0	+ 32.9	3.8
12	29.78	29.79	29.84	+ 35.0	+ 36.0	+ 32.1	+ 36.8	+ 32.0	+ 37.3	+ 38.0	+ 32.0	+ 35.0	6.0
13	29.77	29.70	29.62	+ 34.0	+ 35.0	+ 33.2	+ 35.8	+ 33.1	+ 35.7	+ 37.0	+ 33.2	+ 35.0	3.9
14	29.45	29.43	29.37	+ 31.5	+ 33.0	+ 32.0	+ 33.5	+ 29.5	+ 33.8	+ 33.8	+ 31.0	+ 31.6	4.3
15	29.39	29.42	29.43	+ 32.6	+ 32.2	+ 30.0	+ 33.8	+ 30.5	+ 32.5	+ 32.8	+ 30.0	+ 31.9	3.8
16	29.52	29.55	29.66	+ 28.0	+ 30.0	+ 27.0	+ 30.3	+ 26.8	+ 30.5	+ 31.0	+ 27.0	+ 28.9	4.2
17	29.67	29.68	29.64	+ 26.0	+ 26.0	+ 27.0	+ 27.5	+ 21.8	+ 27.5	+ 27.5	+ 25.0	+ 24.6	5.7
18	29.60	29.61	29.63	+ 30.5	+ 32.5	+ 31.0	+ 31.0	+ 25.5	+ 32.8	+ 32.8	+ 30.0	+ 29.2	7.3
19	29.74	29.76	29.86	+ 34.0	+ 36.0	+ 36.0	+ 34.0	+ 30.5	+ 36.0	+ 37.3	+ 34.0	+ 33.9	6.8
20	29.86	29.86	29.84	+ 42.0	+ 34.8	+ 38.0	+ 43.0	+ 34.0	+ 42.8	+ 43.0	+ 34.0	+ 38.5	9.0
21	29.86	29.86	29.87	+ 33.0	+ 38.0	+ 32.6	+ 39.4	+ 29.0	+ 39.0	+ 39.0	+ 32.0	+ 34.2	10.4
22	29.91	29.92	29.95	+ 41.0	+ 42.0	+ 35.0	+ 43.8	+ 30.0	+ 43.0	+ 47.3	+ 35.0	+ 38.6	17.3
23	30.08	30.10	30.18	+ 35.0	+ 36.6	+ 36.5	+ 35.0	+ 28.4	+ 37.7	+ 37.7	+ 34.0	+ 33.0	9.3
24	30.22	30.22	30.19	+ 32.0	+ 33.0	+ 37.0	+ 37.4	+ 31.5	+ 33.0	+ 38.8	+ 32.0	+ 35.2	7.3
25	30.09	30.08	30.04	+ 32.3	+ 33.0	+ 32.0	+ 37.8	+ 29.0	+ 33.0	+ 33.0	+ 31.0	+ 33.4	8.8
26	29.98	29.98	29.94	+ 32.8	+ 34.2	+ 32.5	+ 35.0	+ 30.0	+ 34.8	+ 35.0	+ 31.0	+ 32.5	5.0
27	29.87	29.86	29.89	+ 34.0	+ 36.0	+ 32.8	+ 34.0	+ 29.8	+ 36.3	+ 39.0	+ 32.0	+ 34.4	9.2
28	29.86	29.85	29.80	+ 33.0	+ 32.8	+ 32.5	+ 33.5	+ 29.5	+ 34.0	+ 34.0	+ 31.0	+ 31.8	4.5
29	29.76	29.74	29.64	+ 33.5	+ 35.2	+ 37.0	+ 33.8	+ 30.0	+ 35.3	+ 40.4	+ 33.5	+ 35.2	10.4
30	29.59	29.60	29.48	+ 32.1	+ 34.0	+ 34.0	+ 40.5	+ 31.0	+ 34.0	+ 35.2	+ 32.0	+ 35.8	9.5
Sum....	895.28	895.21	894.90	+935.4	+969.3	+938.9	+998.0	+832.2	+1000.5	+1033.5	+885.5	+937.2	216.2
Mean...	29.84	29.84	29.83	+ 31.2	+ 32.3	+ 31.3	+ 33.3	+ 27.7	+ 33.4	+ 34.5	+ 29.5	+ 31.2	7.2

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	S^m	22 30	.. ..	ENE	41	E	40	E	75
2	.15	.00	.02	.17	S^m	.. ..	7 30	E	202	E	65	SE	156
					S^m	15 32	19 15						
					S^m	10 10	.. ..						
3	.10	T	.00	.10	S^m	.. ..	5 00	E	215	ESE	69	ENE	93
					S^m	7 00	9 00						
4	.00	.00	.00	.00	...	.. ..	.. ..	ENE	70	E	25	NE	45
5	.02	T	.00	.02	S^m	4 15	9 00	SE	75	NE	46	NE	125
6	.00	.00	.00	.00	...	.. ..	.. ..	SE	117	SE	51	SE	94
7	.00	.00	.00	.00	...	.. ..	.. ..	SE	137	SSE	29	SE	22
8	.00	T	T	T	S^m	11 19	12 20	W	47	SW	18	SW	58
					S^m	22 28	.. ..						
9	.04	.01	.02	.07	S^m	.. ..	6 30	SW	102	SW	44	W	87
					S^m	9 30	12 50						
					R	15 00	16 50						
10	.01	T	.00	.01	S^m	2 00	3 00	NW	99	E	21	W	26
					S^m	9 30	10 10						
					S^m	20 40	21 05						
11	T	.00	.00	T	S^m	10 20	10 40	SE	76	SE	31	E	85
12	T	.00	.00	T	S^m	0 40	1 20	C	13	E	3	C	24
					S^m	3 20	4 00						
13	.00	.00	.00	.00	...	.. ..	.. ..	ENE	65	E	57	ENE	184
14	.15	.06	.01	.22	S^m	3 10	14 30	NE	289	NE	76	WNW	114
15	.04	T	.02	.06	S^m	6 10	9 00	SW	135	NW	68	NW	162
					S^m	13 40	15 00						
					S^m	18 15	.. ..						
16	.12	.01	T	.13	S^m	.. ..	8 10	NW	271	WNW	97	W	162
					S^m	11 30	12 20						
17	.00	.00	.00	.00	...	.. ..	.. ..	NW	127	W	29	WNW	39
18	.00	T	T	T	S^m	11 30	11 40	SE	98	E	70	SE	166
					S^m	12 35	13 10						
					R	23 40	.. ..						
19	.10	.00	.00	.10	R	.. ..	6 30	E	250	SE	81	E	120
20	.00	.00	.00	.00	...	.. ..	.. ..	E	134	SE	76	E	112
21	.00	.00	.00	.00	...	.. ..	.. ..	E	191	E	63	SE	108
22	.00	.00	.00	.00	...	.. ..	.. ..	W	22	W	26	E	40
23	.00	.00	.00	.00	...	.. ..	.. ..	SE	154	SE	31	N	33
24	.00	.00	.00	.00	...	.. ..	.. ..	SE	57	SE	51	E	113
25	.00	.00	.00	.00	...	.. ..	.. ..	SE	263	SE	81	SE	110
26	.00	.00	T	T	S^m	10 10	12 40	W	111	SW	25	SW	67
27	.00	.00	.00	.00	...	.. ..	.. ..	W	62	W	16	W	38
28	.00	.00	.00	.00	...	.. ..	.. ..	SE	60	SE	50	SE	105
29	.00	.00	.00	.00	R	22 03	22 18	SE	133	SE	31	SW	42
30	.02	T	.04	.06	R	11 30	13 30	W	147	W	36	S	50
					S^m	13 30	14 30						
					S^m	18 20	.. ..						
Sum.....	.75	.08	.11	.94	...	.. ..	.. ..	...	3763	...	1406	...	2655
Mean.....	...	...	...	...	...	.. ..	.. ..	SE	125.4	SE	46.9	SE	88.5

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	S	...	5 5	(A-S) S	... ...	7	S-Cu	E	9	
2	10	S	S	...	**	...	10	S	SE	10	Fog 10:00 to 12:40.
3	10	S*	E	10	S	ESE	10	S	ENE	10	Fog to 9:10.
4	10	S	E	10	S	...	3 6	S-Cu S	NE NE	10	
5	10	N	NE	2 2 2	(Cl-S) (Cl-Cu) S-Cu	NE NE NE	9	S	E	6	
6	10	S*	SE	5 5	(A-S) S	SE SE	10	S*	SE	10	Fog 5:00 to 9:30 and 17:00 to 22:00.
7	10	S	...	10	S*	...	10	S*	...	10	Fog from 11:30.
8	10	S	...	10	N	...	10	S	SW	10	Fog to 1:10.
9	10	S	SW	10	S*	SW	10	S	SW	10	Fog 11:10 to 16:20.
10	10	S	NW	10	S	...	10	S	...	10	
11	10	S	SE	10	S	SE	...	**	...	10	Dense fog from 16:30.
12	...	**	...	...	**	...	...	**	...	10	Dense fog.
13	10	S	NE	3 2 1	(A-Cu) S-Cu S	E E E	10	S	ENE	8	Dense fog to 2:30.
14	10	N*	NE	10	N*	NE	4 6	S-Cu S	NW NW	10	Fog 3:10 to 14:30.
15	10	N*	SW	10	S	NW	10	N*	NW	10	Generally light fog.
16	10	N*	NW	10	N	WNW	4 4	S-Cu S	W W	8	Fog to 7:00.
17	6 2	S-Cu S	NW NW	10	S	W	10	S	WNW	10	
18	1 3 3	(Cl-S) (A-Cu) S-Cu	W W W	10	S	E	10	S	SE	9	
19	10	S	E	4 3 2	(A-Cu) S-Cu S	SE SE SE	Few	S-Cu	E	9	
20	0	...	...	Few	S	NE	0	...	...	...	Fog from 21:00.
21	0	...	...	0	...	...	0	...	...	...	Fog to 4:20.
22	0	...	...	0	...	...	0	...	...	...	
23	10	S	SE	10	S*	SE	10	S	N	10	Fog 2:20 to 6:45 and 10:10 to 17:00.
24	...	**	...	...	**	...	Few Few	(Cl-Cu) S	E E	8	Fog 0:30 to 19:00.
25	10	S*	SE	...	**	...	...	**	...	10	Generally foggy.
26	10	S*	W	10	N*	W	...	**	...	10	Fog 8:00 to 24:00.
27	...	**	...	...	**	...	...	**	...	10	Generally foggy.
28	...	**	...	10	S	SE	...	**	...	10	Fog to 9:10 and from 17:00.
29	10	S*	SE	10	S*	SE	1 4 3	(Cl-Cu) S-Cu S	SW SW SW	8	Fog to 13:30.
30	10	S*	W	10	N*	W	10	N*	S	10	Generally light fog.
Sum....	225	...	...	211	...	...	181	...	...	255	
Mean...	8.7	...	...	8.4	...	...	7.5	...	...	9.4	

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.50	29.60	29.76	+ 35.0	+ 33.0	+ 32.0	+ 35.0	+ 31.5	+ 35.0	+ 35.0	+ 31.2	+ 33.1	3.8
2	29.82	29.86	29.86	+ 36.0	+ 37.5	+ 32.0	+ 37.3	+ 29.5	+ 37.5	+ 38.0	+ 30.0	+ 33.8	8.5
3	29.74	29.74	29.74	+ 33.0	+ 34.0	+ 33.5	+ 33.0	+ 29.5	+ 34.0	+ 34.0	+ 32.0	+ 31.8	4.5
4	29.78	29.78	29.91	+ 33.0	+ 33.6	+ 36.0	+ 33.9	+ 32.0	+ 33.6	+ 37.0	+ 32.0	+ 34.5	5.0
5	29.97	29.97	29.93	+ 35.7	+ 37.0	+ 33.0	+ 36.5	+ 32.5	+ 39.3	+ 40.0	+ 32.0	+ 36.0	8.0
6	29.84	29.81	29.76	+ 30.8	+ 34.0	+ 33.1	+ 33.2	+ 28.0	+ 34.0	+ 36.0	+ 30.8	+ 32.0	8.0
7	29.63	29.57	29.52	+ 36.0	+ 35.0	+ 34.0	+ 36.5	+ 32.0	+ 36.0	+ 36.0	+ 34.0	+ 34.2	4.5
8	29.57	29.60	29.67	+ 34.4	+ 35.5	+ 39.0	+ 34.8	+ 32.5	+ 35.5	+ 43.0	+ 34.4	+ 37.8	10.5
9	29.71	29.72	29.73	+ 40.3	+ 39.0	+ 37.5	+ 40.5	+ 31.2	+ 40.8	+ 43.0	+ 37.5	+ 37.1	11.8
10	29.75	29.74	29.64	+ 35.0	+ 37.5	+ 33.0	+ 40.0	+ 29.0	+ 37.5	+ 37.5	+ 33.0	+ 34.5	11.0
11	29.63	29.69	29.69	+ 36.5	+ 37.0	+ 35.5	+ 37.0	+ 32.8	+ 38.0	+ 42.8	+ 35.0	+ 37.8	10.0
12	29.63	29.58	29.58	+ 35.0	+ 34.0	+ 33.3	+ 36.0	+ 32.0	+ 35.0	+ 35.5	+ 33.0	+ 34.0	4.0
13	29.60	29.61	29.62	+ 34.0	+ 35.6	+ 33.0	+ 34.8	+ 31.2	+ 36.9	+ 37.0	+ 33.0	+ 34.1	5.8
14	29.65	29.66	29.72	+ 35.5	+ 37.0	+ 33.5	+ 36.5	+ 32.0	+ 38.0	+ 38.0	+ 33.0	+ 35.0	6.0
15	29.75	29.74	29.59	+ 36.8	+ 34.4	+ 33.0	+ 38.0	+ 32.4	+ 36.8	+ 39.0	+ 32.5	+ 35.7	6.6
16	29.44	29.38	29.33	+ 39.5	+ 37.0	+ 35.0	+ 40.0	+ 26.0	+ 39.5	+ 39.5	+ 33.0	+ 33.0	14.0
17	29.24	29.28	29.44	+ 34.5	+ 33.5	+ 33.0	+ 35.4	+ 33.0	+ 35.0	+ 35.0	+ 33.0	+ 34.2	2.4
18	29.60	29.66	29.74	+ 36.0	+ 38.4	+ 43.5	+ 36.0	+ 32.0	+ 38.4	+ 44.7	+ 35.0	+ 38.4	12.7
19	29.85	29.86	29.87	+ 43.0	+ 45.5	+ 42.1	+ 47.0	+ 40.0	+ 47.1	+ 54.0	+ 40.0	+ 47.0	14.0
20	29.90	29.89	29.88	+ 40.0	+ 41.8	+ 42.0	+ 42.1	+ 37.0	+ 43.0	+ 51.0	+ 39.0	+ 44.0	14.0
21	29.78	29.75	29.70	+ 40.8	+ 41.0	+ 35.0	+ 42.0	+ 31.5	+ 41.8	+ 41.8	+ 34.0	+ 36.8	10.5
22	29.67	29.66	29.65	+ 30.0	+ 32.5	+ 30.5	+ 35.0	+ 30.0	+ 32.5	+ 33.0	+ 29.0	+ 32.0	6.0
23	29.56	29.54	29.49	+ 32.5	+ 34.0	+ 33.4	+ 33.0	+ 27.2	+ 34.5	+ 35.8	+ 29.4	+ 31.5	8.6
24	29.34	29.43	29.52	+ 32.5	+ 32.0	+ 35.0	+ 36.0	+ 25.0	+ 33.1	+ 39.0	+ 29.0	+ 32.0	14.0
25	29.54	29.58	29.54	+ 34.0	+ 36.5	+ 33.5	+ 35.0	+ 33.5	+ 37.9	+ 37.9	+ 33.0	+ 35.4	4.9
26	29.55	29.57	29.66	+ 34.5	+ 35.0	+ 35.0	+ 35.0	+ 33.2	+ 35.4	+ 35.9	+ 33.5	+ 34.6	2.7
27	29.63	29.63	29.61	+ 40.1	+ 34.5	+ 39.5	+ 43.0	+ 33.5	+ 41.0	+ 41.0	+ 33.2	+ 38.1	9.8
28	29.54	29.56	29.63	+ 38.0	+ 36.3	+ 35.0	+ 40.0	+ 34.0	+ 38.0	+ 40.0	+ 33.5	+ 36.8	6.5
29	29.70	29.74	29.76	+ 36.0	+ 34.8	+ 34.0	+ 37.0	+ 33.5	+ 37.0	+ 43.0	+ 34.0	+ 38.2	9.5
30	29.80	29.83	29.90	+ 34.0	+ 38.0	+ 33.4	+ 34.6	+ 29.5	+ 38.0	+ 42.1	+ 33.0	+ 35.8	12.6
31	29.97	29.98	29.99	+ 34.0	+ 34.0	+ 32.0	+ 34.5	+ 32.9	+ 34.4	+ 34.5	+ 31.0	+ 32.8	3.5
Sum....	919.68	920.01	920.43	+1106.4	+1118.9	+1083.3	+1148.6	+979.9	+1154.5	+1220.0	+1026.0	+1102.0	253.7
Mean...	29.67	29.68	29.69	+ 35.7	+ 36.1	+ 34.9	+ 37.1	+ 31.6	+ 37.2	+ 39.4	+ 33.1	+ 35.5	8.2

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	T	.00	.00	T	Sm	.. ..	21 00	W	94	NW	86	NW	186
2	.00	.00	.00	.00	...	.. ..	.. ..	WNW	147	W	42	W	67
3	.02	T	T	.02	Sm R	1 08 11 10	9 00	N	116	NW	46	NW	111
4	.00	.00	.00	.00	R	.. ..	0 40	NW	125	NW	33	W	47
5	.00	.00	.00	.00	...	.. ..	.. ..	NW	33	W	14	S	31
6	.00	.00	.00	.00	...	.. ..	.. ..	W	39	W	13	ENE	30
7	.02	.01	.04	.07	R R	1 04 8 45	2 35	ESE	32	ESE	38	NE	38
8	.01	.00	.00	.01	R	.. ..	21 40	NW	65	NW	60	NE	87
9	.00	.00	.00	.00	...	.. ..	.. ..	S	23	WNW	14	S	32
10	.00	.00	.02	.02	R	14 55	17 10	W	45	W	14	N	33
11	.00	.00	.00	.00	...	.. ..	.. ..	NNW	166	NW	55	NW	59
12	.00	.00	.02	.02	R	15 15	18 30	NW	67	NW	35	NW	67
13	.00	.00	.00	.00	...	.. ..	.. ..	NW	80	NW	25	NW	42
14	.00	.00	T	T	...	.. ..	.. ..	SE	41	SE	17	SE	101
15	.00	.00	.00	.00	...	.. ..	.. ..	NW	119	NW	47	N	162
16	.10	.05	.16	.31	R R R	0 48 10 40 19 00	6 15 14 15	NE	238	NE	102	NE	246
17	.25	.01	.03	.29	R R R	.. .. 10 00 13 30	6 15 11 30 21 40	ESE	273	ESE	125	ESE	242
18	.01	T	.00	.01	R	10 40	11 10	E	204	E	47	ESE	101
19	.00	.00	.00	.00	...	.. ..	.. ..	N	160	NW	10	SE	16
20	.00	.00	.00	.00	...	.. ..	.. ..	SSE	29	W	12	SE	25
21	.00	.00	.00	.00	...	.. ..	.. ..	E	23	C	10	SSE	25
22	.00	.00	.00	.00	Sm	22 10	.. ..	W	40	S	16	ESE	26
23	.01	.00	.00	.01	Sm	.. ..	1 30	C	42	SW	18	N	36
24	.00	.00	.00	.00	R R	17 55 19 30	18 15 20 20	NE	257	NE	163	E	177
25	T	.00	.00	T	...	.. ..	.. ..	SE	241	SE	57	ESE	112
26	.00	.00	.00	.00	...	.. ..	.. ..	ESE	159	ESE	61	C	83
27	.01	.02	.30	.33	R	5 00	.. ..	NE	40	NE	62	NE	154
28	.20	T	.00	.20	R	.. ..	8 55	W	87	W	20	NW	72
29	.00	.00	.00	.00	...	.. ..	.. ..	N	117	S	15	W	26
30	.00	.00	T	T	Sm	16 00	18 00	W	40	C	9	NW	34
31	.00	.00	.00	.00	...	.. ..	.. ..	NW	63	SW	13	E	42
Sum.....	.63	.09	.57	1.29	...	.. ..	.. ...	...	3205	...	1279	...	2510
Mean.....	...	...	...	...	...	.. ..	.. ..	NW	103.4	NW	41.3	NW	81.0

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1904—Continued

Observer: FRANCIS LONG

Date	Clouds 8h Amount	8h Character	8h Dir. from	12h Amount	12h Character	12h Dir. from	20h Amount	20h Character	20h Dir. from	Av. daily cloudiness	Remarks
1	6 3	S-Cu S	W W	6 2	S-Cu S	NW NW	4 4	S-Cu S	NW NW	8	
2	5 4	S-Cu S	NW NW	5 4	S-Cu S	W W	10	S	W	10	Fog from 20:45.
3	10	N**	N	10	N**	NW	10	S	NW	10	Fog to 18:10.
4	10	S*	NW	10	S*	NW	6 4	S-Cu S	W W	10	Fog 2:15 to 13:20 and from 23:00.
5	10	S	NW	0	*	...	5	S*	S	7	Generally light fog.
6	10	S*	W	10	S*	W	10	S	NE	9	Fog to 14:50.
7	10	S	E	10	N	E	10	N	NE	10	
8	3 6	S-Cu S	NW NW	5 4	S-Cu S	NW NW	3 Few 2	(Cl-S) (A-Cu) S-Cu	NE NE NE	5	
9	0	...	...	Few	(A-Cu)	NW	0	...	...	0	
10	2 Few	(A-Cu) S	W W	9	S	W	10	S	N	7	Fog from 20:30.
11	5 4	S-Cu S	NW NW	5 4	S-Cu S	NW NW	Few	S-Cu	NW	5	Fog to 5:20 and from 23:00.
12	10	S	NW	10	S*	NW	...	**	...	10	Generally foggy.
13	10	S*	NW	...	**	NW	10	S*	NW	10	Fog to 21:00.
14	10	S*	SE	10	S*	SE	10	N*	SE	10	Fog 1:30 to 20:50.
15	2 2 4	(Cl-S) (Cl-Cu) S	NW NW NW	3 2 Few	(Cl-S) (Cl-Cu) S-Cu	E E NW	3 6	S-Cu S	N N	9	
16	10	S	NE	10	N	NE	10	N	NE	10	High northeast gale from 9:30.
17	10	S	ESE	10	S	ESE	10	N*	ESE	10	High east-southeast gale; fog from 12:30.
18	10	S	SE	3 6	S-Cu S	E E	2 2 2	(Cl-S) (Cl-Cu) S-Cu	NE NE NE	8	Fog to 7:00.
19	1 Few 1	(Cl-Cu) (A-Cu) S-Cu	N N N	Few Few	(Cl-Cu) S	NW NW	7 2	S-Cu S	N N	2	
20	1 2 Few	(Cl-Cu) (A-Cu) S-Cu	N N N	4 2	(A-Cu) S-Cu	W W	Few	S	N	4	
21	4 2	(A-Cu) S-Cu	W W	Few 2 6	(Cl-S) (A-S) S	W W W	...	**	...	6	Fog from 17:00.
22	10	S*	W	10	S*	S	10	S	SE	10	Generally foggy.
23	10	S	...	10	S	E	Few	S	SE	4	Fog to 4:30.
24	4 4	S-Cu S	NE NE	1 4 3	(Cl-Cu) S-Cu S	NE NE NE	10	N*	E	10	Fog from 16:30.
25	10	S*	SE	4 6	S-Cu S	SE SE	10	S	ESE	10	Fog to 9:30.
26	10	S	ESE	10	S	ESE	10	S	...	10	
27	10	N	NE	10	N*	NE	10	N	NE	10	Fog 11:00 to 12:40.
28	5 4	(A-S) S	W W	10	S*	W	10	S	NW	10	Fog 11:50 to 13:00.
29	2 Few	(Cl-S) S	N N	2 3 2	(Cl-Cu) (A-S) S	W W S	10	S	W	4	
30	2 Few	(Cl-Cu) S-Cu	W W	1 4 2	(Cl-S) (A-Cu) S	NW NW NW	10	S	...	4	
31	...	**	...	...	**	...	...	**	...	10	Dense fog from 7:00.
Sum....	238	...	...	234	...	...	222	...	...	242	
Mean...	7.9	...	...	8.1	...	...	7.9	...	...	7.8	

Tabulation of daily meteorological observations at Cape Flora during the month of August, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.91	29.90	29.83	+ 35.0	+ 34.0	+ 30.0	+ 35.0	+ 30.0	+ 36.0	+ 36.0	+ 30.0	+ 33.0	6.0
2	29.60	29.58	29.43	+ 33.5	+ 33.4	+ 33.2	+ 33.5	+ 30.0	+ 33.5	+ 34.0	+ 32.6	+ 32.0	4.0
3	29.37	29.30	29.27	+ 34.5	+ 34.5	+ 33.0	+ 35.5	+ 33.0	+ 34.5	+ 35.0	+ 33.0	+ 34.2	2.5
4	29.29	29.36	29.50	+ 30.5	+ 30.4	+ 29.0	+ 33.0	+ 30.0	+ 30.5	+ 32.8	+ 29.0	+ 31.0	4.0
5	29.49	29.50	29.52	+ 33.0	+ 34.0	+ 33.6	+ 33.0	+ 27.0	+ 34.0	+ 34.4	+ 32.4	+ 30.7	7.4
6	29.60	29.67	29.67	+ 35.0	+ 36.5	+ 40.0	+ 35.0	+ 33.0	+ 36.8	+ 41.0	+ 35.0	+ 37.0	8.0
7	29.80	29.84	29.82	+ 36.0	+ 39.0	+ 36.5	+ 40.0	+ 33.6	+ 40.0	+ 42.3	+ 36.0	+ 38.0	8.7
8	29.71	29.65	29.54	+ 35.0	+ 33.1	+ 35.0	+ 36.5	+ 34.0	+ 35.0	+ 35.0	+ 33.0	+ 34.8	3.5
9	29.56	29.58	29.64	+ 34.0	+ 36.0	+ 35.0	+ 35.1	+ 33.0	+ 36.8	+ 38.0	+ 34.0	+ 35.5	5.0
10	29.78	29.84	29.93	+ 34.0	+ 37.0	+ 37.0	+ 36.0	+ 27.5	+ 37.4	+ 41.4	+ 34.0	+ 34.4	13.9
11	29.91	29.88	29.84	+ 40.0	+ 40.5	+ 38.0	+ 42.0	+ 34.0	+ 42.1	+ 43.2	+ 38.0	+ 38.6	9.2
12	29.84	29.83	29.81	+ 35.0	+ 36.9	+ 37.0	+ 40.0	+ 33.8	+ 37.1	+ 41.1	+ 34.0	+ 37.4	7.3
13	29.84	29.90	30.04	+ 35.0	+ 35.0	+ 31.0	+ 37.0	+ 34.0	+ 35.0	+ 35.0	+ 31.0	+ 34.0	6.0
14	30.26	30.28	30.24	+ 32.5	+ 35.0	+ 33.0	+ 35.0	+ 28.0	+ 36.8	+ 38.1	+ 32.0	+ 33.0	10.1
15	30.12	30.12	30.10	+ 37.0	+ 43.5	+ 39.0	+ 39.2	+ 30.0	+ 44.0	+ 47.8	+ 37.0	+ 38.9	17.8
16	30.06	30.04	30.00	+ 38.0	+ 43.0	+ 36.0	+ 40.0	+ 32.0	+ 43.0	+ 45.0	+ 36.0	+ 38.5	13.0
17	29.99	29.98	29.97	+ 38.0	+ 38.0	+ 39.0	+ 38.6	+ 35.0	+ 39.0	+ 46.0	+ 38.0	+ 40.5	11.0
18	29.95	29.95	29.94	+ 36.5	+ 37.4	+ 35.0	+ 40.0	+ 31.0	+ 41.2	+ 41.2	+ 35.0	+ 36.1	10.2
19	29.95	29.96	29.96	+ 35.0	+ 36.9	+ 34.0	+ 36.2	+ 33.9	+ 38.0	+ 38.0	+ 34.0	+ 36.0	4.1
20	29.94	29.90	29.95	+ 36.0	+ 35.1	+ 33.5	+ 36.0	+ 32.0	+ 36.0	+ 36.0	+ 32.9	+ 34.0	4.0
21	29.99	30.00	30.02	+ 30.0	+ 31.0	+ 30.8	+ 33.9	+ 28.9	+ 31.0	+ 32.2	+ 29.0	+ 31.4	5.0
22	30.09	30.14	30.17	+ 33.0	+ 33.5	+ 34.5	+ 33.0	+ 29.0	+ 34.0	+ 38.9	+ 31.2	+ 34.0	9.9
23	30.22	30.25	30.26	+ 36.0	+ 37.0	+ 33.8	+ 40.0	+ 34.0	+ 40.0	+ 41.0	+ 33.0	+ 37.0	8.0
24	30.24	30.22	30.19	+ 33.5	+ 36.0	+ 32.0	+ 33.8	+ 27.0	+ 37.0	+ 45.0	+ 32.0	+ 36.0	18.0
25	30.15	30.13	30.06	+ 30.0	+ 36.5	+ 33.0	+ 32.0	+ 24.1	+ 36.5	+ 42.8	+ 30.0	+ 33.4	18.7
26	30.04	30.00	30.04	+ 30.0	+ 29.0	+ 29.5	+ 33.0	+ 25.0	+ 31.0	+ 31.8	+ 25.0	+ 29.0	8.0
27	30.10	30.14	30.16	+ 29.0	+ 33.0	+ 30.0	+ 29.5	+ 28.0	+ 33.2	+ 34.0	+ 29.5	+ 31.0	6.0
28	30.21	30.23	30.28	+ 31.0	+ 29.1	+ 26.0	+ 31.0	+ 29.0	+ 32.1	+ 32.1	+ 26.0	+ 29.0	6.1
29	30.30	30.30	30.27	+ 24.0	+ 24.0	+ 21.5	+ 26.0	+ 20.5	+ 24.0	+ 25.0	+ 21.5	+ 23.2	5.5
30	30.26	30.26	30.28	+ 30.0	+ 31.0	+ 32.0	+ 30.1	+ 19.0	+ 31.0	+ 32.0	+ 29.5	+ 25.5	13.0
31	30.22	30.16	29.98	+ 32.0	+ 32.8	+ 27.0	+ 32.0	+ 30.0	+ 32.8	+ 32.8	+ 27.0	+ 29.9	5.8
Sum....	927.79	927.89	927.71	+1042.0	+1082.1	+1027.9	+1090.9	+929.3	+1109.3	+1168.9	+990.6	+1047.0	259.7
Mean...	29.93	29.93	29.93	+ 33.6	+ 34.9	+ 33.2	+ 35.2	+ 29.7	+ 35.8	+ 37.7	+ 32.0	+ 33.8	8.4

Tabulation of daily meteorological observations at Cape Flora during the month of August, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	S	52	SW	14	SE	64
2	.02	.01	.04	.07	S^m R	5 00 7 00	7 00	SE	179	E	77	E	150
3	.40	.12	T	.52	R R	.. .. 13 45	12 40 14 00	E	193	ESE	64	SE	59
4	.50	.04	.00	.54	S^m	0 30	11 10	NW	71	NW	86	W	137
5	T	T	.02	.02	S^m R	10 10 20 30	20 30 21 30	NE	98	ESE	40	ESE	110
6	.01	.00	.00	.01	...	.. ..	.. ..	ESE	212	ESE	64	NE	139
7	.00	.00	.00	.00	...	.. ..	.. ..	SE	287	ESE	40	SE	131
8	.00	.04	T	.04	S^m S^m S^m	9 20 18 50 20 55	12 40 19 46	NE	206	WNW	91	ENE	129
9	.04	.00	.00	.04	S^m	.. ..	3 00	SE	141	SE	28	C	53
10	.00	.00	.00	.00	...	.. ..	.. ..	SE	39	SSE	36	C	35
11	.00	.00	.04	.04	R	13 35	17 30	NE	89	E	98	E	258
12	.00	T	.00	T	R	9 40	9 55	SE	200	NE	22	N	73
13	.15	.02	.01	.18	R R	0 15 17 00	9 00 23 00	SSE	174	SSE	47	W	74
14	T	.00	.00	T	...	.. ..	.. ..	SE	46	SE	79	SE	92
15	.00	.00	.00	.00	...	.. ..	.. ..	E	33	SE	8	C	74
16	.00	.00	.00	.00	...	.. ..	.. ..	NE	14	C	7	N	10
17	.00	.00	.00	.00	...	.. ..	.. ..	S	20	SSE	14	C	14
18	.00	.00	T	T	R R	17 00 21 30	17 20 22 20	E	21	SE	31	SE	39
19	.03	.00	.00	.03	R	20 15	21 30	C	27	E	8	SE	47
20	.25	.02	.00	.27	R	4 00	9 20	SE	202	E	70	E	134
21	.00	.00	.00	.00	...	.. ..	.. ..	ESE	161	E	41	NE	108
22	.00	.00	.00	.00	...	.. ..	.. ..	NE	162	SE	47	NE	72
23	.00	.00	.00	.00	...	.. ..	.. ..	SW	205	SE	15	SE	60
24	.00	.00	.00	.00	...	.. ..	.. ..	SE	26	W	4	W	17
25	.00	.00	.00	.00	...	.. ..	.. ..	E	12	C	8	C	13
26	.00	.00	.00	.00	...	.. ..	.. ..	E	34	E	55	E	164
27	.00	.00	.00	.00	...	.. ..	.. ..	E	271	E	88	E	122
28	.00	.00	.00	.00	...	.. ..	.. ..	E	100	SE	39	E	91
29	.00	T	T	T	S^d S^d S^d	10 35 14 00 15 35	13 00 14 20 16 00	E	79	ESE	48	SE	91
30	.03	.04	.01	.08	S^m S^m R	6 00 17 15 18 00	13 30 18 00 21 00	E	75	E	78	SE	98
31	.01	T	.00	.01	R	7 30	9 10	SE	47	SE	55	ESE	194
Sum.....	1.44	.29	.12	1.85	...	.. ..	.. ..	...	3476	...	1402	...	2852
Mean.....	...	...	...	...	...	.. ..	.. ..	SE	112.1	SE	45.2	SE	92.0

Tabulation of daily meteorological observations at Cape Flora during the month of August, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS 8H Amount	8H Character	8H Dir. from	12H Amount	12H Character	12H Dir. from	20H Amount	20H Character	20H Dir. from	Av. daily cloudiness	REMARKS
1	...	**	...	...	**	...	...	**	...	10	Dense fog 0:00 to 24:00.
2	10	N*	SE	10	N*	E	10	N**	E	10	Generally foggy.
3	10	N**	E	10	N*	ESE	10	S*	...	10	Generally foggy.
4	10	N*	NW	3 6	S-Cu S	NW NW	2	S-Cu	W	8	Fog 0:00 to 10:40.
5	3 7	S-Cu S	E E	10	N*	ESE	10	N*	ESE	10	Fog 11:00 to 24:00.
6	10	S*	ESE	0	...	...	10	S	NE	5	Fog 0:00 to 10:10.
7	2 2	(A-Cu) S-Cu	SE SE	0	...	...	10	S	SE	5	
8	10	S	NE	10	N	NW	10	E	ENE	10	
9	...	**	...	5	S*	SE	...	...	...	5	Generally foggy.
10	0	...	...	0	...	...	2 2	(Ci-Cu) (Cu)*	NW NW	2	Fog 14:50 to 21:30.
11	2 1	(Cu) S	NE NE	10	S	E	10	S	E	8	
12	10	S	SE	2 7	S-Cu S	NE NE	Few 2 6	(Ci-S) S-Cu S	SE SE SE	10	
13	10	N**	SE	...	**	...	10	N*	W	10	Fog 5:00 to 24:00.
14	0	...	...	...	*	...	4 2	(A-Cu) S-Cu	SW SW	6	Dense fog 0:00 to 2:00; fog 11:30 to 17:45.
15	4 2	(A-Cu) S-Cu	E E	4 4	(A-Cu) S-Cu	SE SE	4 Few	(Cu) S	SE SE	3	
16	Few Few Few	(Ci-S) (Ci-Cu) S	NE NE NE	Few	(Ci-S)	SW	Few 2 4	(Ci-S) (Ci-Cu) S	SW SW SW	5	
17	10	S	S	8	S	SE	Few	S-Cu	S	5	Fog 12:30 to 15:20.
18	2 2	(A-Cu) S-Cu	E E	4 5	(S-Cu) S	SE SE	10	S	SW	8	
19	10	S	...	10	S	0	10	S	SE	10	
20	10	N	SE	10	S	E	Few	S	E	9	
21	10	S	SE	10	S	E	4	S-Cu	NE	7	
22	8	S-Cu	NE	8	S-Cu	E	5 2	S-Cu S	NE NE	8	
23	0	...	...	0	...	...	0	...	...	0	
24	0	...	...	2	...	...	0	...	...	2	
25	0	...	...	0	...	...	2 Few	(Ci-S) (A-S)	S S	8	
26	2 4 1	(A-S) S-Cu S	NE NE E	4 5	S-Cu S	E E	4 5	S-Cu S	E E	8	
27	4 5	S-Cu S	E E	4 Few Few	Ci-S Ci-Cu S	E E E	10	S	E	6	
28	Few 2 2 1	(Ci-S) (Ci-Cu) S-Cu S	E E E E	4 3	S-Cu S	SE SE	8	S-Cu	E	6	
29	10	S	E	10	N	ESE	10	S*	SE	10	Fog 16:50 to 24:00.
30	10	N	E	10	N	E	10	N	SE	10	
31	10	S*	SE	10	S*	SE	10	S	ESE	8	Fog 5:00 to 15:00.
Sum....	196	...	...	186	...	...	200	...	...	222	
Mean...	6.8	...	...	6.6	...	...	6.9	...	...	7.2	

Tabulation of daily meteorological observations at Cape Flora during the month of September, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.68	29.58	29.56	+ 33.0	+ 33.0	+ 32.0	+ 33.0	+ 24.2	+ 33.2	+ 33.2	+ 31.0	+ 28.7	9.0
2	29.56	29.52	29.58	+ 32.0	+ 31.5	+ 28.5	+ 33.0	+ 31.0	+ 32.0	+ 32.0	+ 28.5	+ 30.8	4.5
3	29.46	29.48	29.55	+ 28.0	+ 30.0	+ 28.0	+ 28.5	+ 24.0	+ 30.0	+ 32.0	+ 28.0	+ 28.0	8.0
4	29.64	29.70	29.67	+ 26.0	+ 25.0	+ 23.0	+ 28.0	+ 25.0	+ 26.0	+ 26.0	+ 22.0	+ 25.0	6.0
5	29.56	29.52	29.54	+ 23.0	+ 25.5	+ 23.5	+ 23.0	+ 19.0	+ 26.0	+ 26.0	+ 21.0	+ 22.5	7.0
6	29.55	29.62	29.72	+ 24.0	+ 20.5	+ 25.5	+ 24.0	+ 22.0	+ 24.0	+ 25.5	+ 19.0	+ 22.2	6.5
7	29.77	29.81	29.84	+ 22.2	+ 22.0	+ 20.0	+ 25.5	+ 21.2	+ 23.5	+ 23.5	+ 19.0	+ 22.2	6.5
8	29.82	29.81	29.72	+ 22.0	+ 23.0	+ 21.0	+ 22.0	+ 19.0	+ 25.0	+ 25.0	+ 20.0	+ 22.0	6.0
9	29.62	29.59	29.52	+ 20.8	+ 22.0	+ 28.0	+ 21.0	+ 17.9	+ 22.0	+ 28.0	+ 20.0	+ 23.0	10.1
10	29.53	29.56	29.58	+ 29.0	+ 26.5	+ 23.4	+ 29.0	+ 26.0	+ 29.0	+ 29.0	+ 23.4	+ 26.2	5.6
11	29.60	29.66	29.74	+ 19.0	+ 18.0	+ 20.0	+ 23.4	+ 16.0	+ 19.9	+ 20.0	+ 15.5	+ 19.4	7.9
12	29.82	29.88	29.89	+ 23.0	+ 24.0	+ 22.0	+ 23.2	+ 19.0	+ 24.0	+ 24.0	+ 21.0	+ 21.5	5.0
13	29.88	29.89	29.73	+ 21.0	+ 23.0	+ 28.0	+ 23.0	+ 19.3	+ 23.5	+ 28.0	+ 20.2	+ 23.6	8.7
14	29.54	29.52	29.48	+ 30.0	+ 31.0	+ 30.0	+ 30.0	+ 27.0	+ 31.0	+ 31.0	+ 27.0	+ 29.0	4.0
15	29.52	29.60	29.68	+ 23.5	+ 23.9	+ 20.0	+ 30.0	+ 23.5	+ 26.2	+ 26.2	+ 20.0	+ 25.0	10.0
16	29.77	29.82	29.56	+ 23.0	+ 21.0	+ 25.0	+ 23.0	+ 19.1	+ 23.5	+ 25.0	+ 20.0	+ 22.0	5.9
17	29.62	29.58	29.33	+ 21.0	+ 21.0	+ 25.4	+ 27.0	+ 18.0	+ 21.0	+ 25.4	+ 18.0	+ 22.5	9.0
18	29.34	29.42	29.42	+ 18.0	+ 16.6	+ 15.6	+ 25.4	+ 17.0	+ 18.0	+ 18.0	+ 14.0	+ 19.7	11.4
19	29.32	29.41	29.54	+ 15.0	+ 14.6	+ 11.0	+ 16.0	+ 15.6	+ 15.0	+ 16.0	+ 10.0	+ 13.0	6.0
20	29.29	29.26	29.25	+ 17.0	+ 20.1	+ 17.0	+ 17.0	+ 10.5	+ 20.1	+ 23.0	+ 16.0	+ 16.8	12.5
21	29.58	29.67	29.73	+ 7.0	+ 12.0	+ 16.0	+ 17.0	+ 3.5	+ 12.0	+ 17.0	+ 7.0	+ 10.2	13.5
22	29.74	29.84	29.93	+ 14.0	+ 16.0	+ 12.0	+ 16.0	+ 13.0	+ 16.0	+ 18.1	+ 12.0	+ 15.0	6.1
23	29.84	29.83	29.62	+ 20.0	+ 20.0	+ 20.5	+ 20.0	+ 9.0	+ 20.0	+ 20.5	+ 17.8	+ 14.8	11.5
24	28.98	28.98	28.98	+ 31.0	+ 31.5	+ 28.0	+ 31.0	+ 20.0	+ 31.5	+ 31.5	+ 27.6	+ 25.8	11.5
25	28.79	28.81	28.93	+ 21.0	+ 19.0	+ 11.0	+ 28.0	+ 20.0	+ 21.0	+ 21.0	+ 9.0	+ 18.5	19.0
26	29.44	29.53	29.73	+ 6.0	+ 9.0	+ 10.0	+ 11.0	+ 3.5	+ 9.0	+ 10.0	— 2.0	+ 4.5	13.0
27	30.04	30.10	30.12	+ 12.0	+ 15.0	+ 15.0	+ 12.0	+ 9.0	+ 15.0	+ 17.9	+ 11.0	+ 13.4	8.9
28	29.50	29.32	29.44	+ 27.0	+ 29.0	+ 14.0	+ 27.5	+ 14.0	+ 30.0	+ 30.0	+ 14.0	+ 22.0	16.0
29	29.45	29.45	29.48	+ 15.8	+ 16.0	+ 14.5	+ 19.0	+ 11.5	+ 16.4	+ 16.4	+ 14.0	+ 15.2	7.5
30	29.50	29.54	29.56	+ 18.0	+ 19.2	+ 20.0	+ 18.0	+ 12.4	+ 19.2	+ 20.0	+ 18.0	+ 16.2	7.6
Sum....	886.75	887.30	887.42	+642.3	+658.9	+627.9	+704.5	+530.2	+683.0	+719.2	+542.0	+618.7	264.2
Mean...	29.56	29.58	29.58	+ 21.4	+ 22.0	+ 20.9	+ 23.5	+ 17.7	+ 22.8	+ 24.0	+ 18.1	+ 20.6	8.8

Tabulation of daily meteorological observations at Cape Flora during the month of September, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.10	.02	.00	.12	S^m	2 00	9 10	SSE	406	SSE	31	SE	72
2	.02	.04	T	.06	S^m	5 00	12 30	SSE	131	SE	8	SE	31
3	.05	.00	.04	.09	S^d S^d	4 00 17 30	6 40 19 30	SE	37	SW	41	NW	44
4	.00	.00	.00	.00	...	.. ..	.. ..	WNW	175	NW	47	NW	131
5	.00	.00	.00	.00	...	.. ..	.. ..	NW	249	NW	80	NW	210
6	.00	.00	.00	.00	...	.. ..	.. ..	NW	215	NW	63	NW	139
7	.00	.00	.00	.00	...	.. ..	.. ..	NW	208	NW	79	NW	160
8	.00	.00	.00	.00	...	.. ..	.. ..	N	158	N	11	N	33
9	.00	.00	T	T	S^d	14 00	14 40	SE	44	SE	50	NE	50
10	.00	.00	.00	.00	...	.. ..	.. ..	C	23	NE	27	E	63
11	.00	.00	.00	.00	S^d	20 25	20 50	N	130	N	67	NW	81
12	T	.00	.00	T	S^d	13 10	13 40	NW	197	NW	62	NW	180
13	.00	.00	.02	.02	S^d S^d	12 40 18 40	14 00	NW	188	NW	48	NW	80
14	.15	.00	.04	.19	S^d S^d	.. .. 8 30	5 00 13 30	NW	72	NW	14	NW	12
15	.00	.00	.00	.00	...	.. ..	.. ..	ENE	125	E	68	NE	128
16	.00	.00	.00	.00	...	.. ..	.. ..	WNW	173	WSW	52	W	116
17	.00	.00	.00	.00	S^m	16 30	21 00	W	126	WNW	55	W	110
18	T	.00	.00	T	S^d	20 45	.. ..	NNW	120	NW	56	NW	76
19	.02	.00	.00	.02	S^d	.. ..	1 30	W	166	NW	79	NW	112
20	.00	.00	.02	.02	S^d	16 10	.. ..	E	54	E	55	E	145
21	.06	.00	.00	.06	S^d	.. ..	5 00	NW	304	NW	44	NW	70
22	.00	.00	.00	.00	...	.. ..	.. ..	NW	115	NW	32	N	60
23	.00	T	.01	.01	S^m S^m	10 10 19 00	11 30	W	223	W	79	E	94
24	.60	.04	.00	.64	S^m	.. ..	11 30	E	195	C	6	NW	35
25	T	.00	.00	T	...	.. ..	.. ..	NE	136	NE	90	NW	200
26	.00	.00	.00	.00	...	.. ..	.. ..	WNW	397	N	103	W	210
27	.00	.00	.00	.00	...	.. ..	.. ..	C	250	N	49	SW	21
28	.10	.02	T	.12	S^d	3 00	12 40	SW	170	W	70	W	200
29	.00	.00	.00	.00	...	.. ..	.. ..	WNW	339	NW	91	NW	162
30	.00	.00	.00	.00	S^m	16 00	.. ..	W	224	NW	51	W	60
Sum.....	1.10	.12	.13	1.35	...	.. ..	.. ..	...	5350	...	1608	...	3085
Mean.....	...	...	...	...	...	.. ..	.. ..	NW	178.3	NW	53.6	NW	102.8

Tabulation of daily meteorological observations at Cape Flora during the month of September, 1904—Continued

Observer: FRANCIS LONG

Date	Clouds									Remarks
	8h			12h			20h			
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	N	SSE	10	S	...	10	S	SE	10	
2	10	N	SSE	10	N	SE	10	S*	SE	10	Fog 18:30 to 24:00.
3	4 4	(A-Cu) S-Cu	SE SE	10	S	SW	10	S	NW	10	Fog 0:00 to 4:30.
4	10	S	NW	4 5	(S-Cu) S	NW NW	8	S-Cu	NW	8	
5	4 6	(S-Cu) S	NW NW	10	S-Cu	NW	10	S-Cu	NW	10	High northwest winds.
6	10	S	NW	7	S-Cu	NW	10	S	NW	9	
7	10	S	NW	2 4	(Cl-Cu) S-Cu	NW NW	10	S	NW	8	
8	10	S	N	2 4 2	(A-Cu) S-Cu S	N N N	10	S	N	9	
9	4 4	(A-Cu) S-Cu	SE SE	4 5	(A-Cu) S-Cu	SE SE	10	S	...	10	
10	4 4	(A-Cu) S-Cu	N N	10	S	NE	10	S	E	9	
11	2 4	(A-Cu) S-Cu	N N	1 5	(A-Cu) S-Cu	N N	10	S	NW	7	
12	10	S	NW	3 7	(S-Cu) S	NW NW	3 6	(S-Cu) S	NW NW	8	
13	4 3 1	(A-Cu) S-Cu S	NW NW NW	10	S	NW	10	N*	NW	9	Fog 15:40 to 24:00.
14	10	S*	NW	10	N*	NW	...	**	...	10	Generally foggy.
15	10	S	ENE	4 6	(S-Cu) S	E E	3 5	(S-Cu) S	NE NE	9	Fog 0:00 to 6:00.
16	10	S	NW	8	S	WSW	8	S	W	8	
17	10	S	W	10	S	W	10	N	W	10	
18	3 6	(S-Cu) S	NNW NNW	10	S	NW	10	S	NW	10	
19	3 1	S-Cu S	W W	3	S-Cu	NW	3	S-Cu	NW	3	
20	10	S	E	10	S	E	10	N*	E	10	Fog 16:30 to 24:00.
21	3	S-Cu	NW	3 6	(S-Cu) S	NW NW	9	S	NW	7	
22	2 2	(Cl-Cu) S-Cu	NW NW	0	...	...	Few	S	N	1	
23	10	S	W	10	S	W	10	N	E	10	
24	10	N*	E	...	**	...	10	S	NW	10	Foggy to 18:00.
25	2 3	(Cl-Cu) S-Cu	NE NE	2 6	(Cl-Cu) S-Cu	NE NE	10	S	NW	8	High northeast wind shifting to northwest at 14:00.
26	Few	(Cl-Cu)	NW	Few	S	N	Few	S-Cu	W	3	High northwest gale to 5:30. Party left for Camp Abruzzi at 11:30.
27	0	...	...	Few	Cl-S	NW	10	S	SW	3	
28	10	N*	SW	10	N*	W	Few	S	W	7	Fog 6:00 to 15:00.
29	0	...	...	0	...	...	3	S	NW	1	High west to northwest wind all night.
30	2 5	(A-Cu) S-Cu	W W	10	S	NW	10	S	W	8	
Sum....	230	...	...	223	...	...	238	...	...	235	
Mean...	7.7	...	...	7.7	...	...	8.2	...	...	7.8	

Tabulation of daily meteorological observations at Cape Flora during the month of October, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.58	29.66	29.68	+ 21.0	+ 22.5	+ 18.0	+ 21.0	+ 17.0	+ 22.5	+ 22.5	+ 17.0	+ 19.8	5.5
2	29.56	29.58	29.40	+ 14.0	+ 14.0	+ 13.0	+ 18.0	+ 12.0	+ 14.0	+ 15.0	+ 11.0	+ 14.5	7.0
3	29.28	29.36	29.35	+ 25.0	+ 28.0	+ 23.0	+ 25.2	+ 13.0	+ 28.0	+ 28.0	+ 23.0	+ 20.5	15.0
4	29.00	28.93	28.77	+ 21.0	+ 24.0	+ 28.0	+ 23.0	+ 19.0	+ 26.0	+ 28.0	+ 27.0	+ 23.5	9.0
5	28.74	28.82	29.02	+ 24.0	+ 23.3	+ 20.8	+ 28.0	+ 23.2	+ 24.0	+ 24.0	+ 20.0	+ 24.0	8.0
6	29.14	29.22	29.28	+ 20.0	+ 21.2	+ 21.2	+ 23.6	+ 19.0	+ 21.2	+ 21.2	+ 18.6	+ 21.1	5.0
7	29.28	29.30	29.30	+ 24.0	+ 25.0	+ 23.4	+ 24.0	+ 20.0	+ 25.0	+ 25.3	+ 22.2	+ 22.6	5.3
8	29.20	29.20	29.23	+ 27.0	+ 28.0	+ 30.0	+ 27.3	+ 20.1	+ 29.0	+ 30.0	+ 25.2	+ 25.0	9.9
9	28.98	28.89	28.84	+ 25.0	+ 25.0	+ 25.6	+ 30.0	+ 24.0	+ 25.0	+ 26.2	+ 24.0	+ 27.0	6.0
10	29.07	29.17	29.43	+ 18.6	+ 19.0	+ 9.0	+ 25.6	+ 18.0	+ 19.0	+ 19.0	+ 9.0	+ 17.3	16.6
11	29.60	29.67	29.70	+ 5.5	+ 10.0	+ 15.0	+ 9.0	+ 5.0	+ 10.0	+ 15.0	+ 4.0	+ 9.5	11.0
12	29.43	29.23	29.20	+ 26.0	+ 31.5	+ 31.0	+ 26.4	+ 12.0	+ 31.5	+ 33.0	+ 22.1	+ 22.5	21.0
13	28.90	28.87	29.12	+ 27.5	+ 28.0	+ 9.5	+ 31.5	+ 27.0	+ 28.0	+ 28.0	+ 9.0	+ 20.2	22.5
14	29.33	29.34	28.92	+ 2.9	+ 5.0	+ 10.0	+ 9.5	— 1.0	+ 5.0	+ 10.0	+ 2.1	+ 4.5	11.0
15	28.90	28.96	29.38	+ 12.0	+ 10.5	+ 10.5	+ 12.0	+ 8.0	+ 17.0	+ 17.0	+ 7.0	+ 12.0	10.0
16	29.70	29.72	29.65	+ 9.9	+ 13.4	+ 24.0	+ 10.5	+ 2.5	+ 13.4	+ 24.0	+ 8.2	+ 13.2	21.5
17	29.52	29.54	29.53	+ 33.5	+ 32.5	+ 32.8	+ 34.0	+ 24.0	+ 33.5	+ 33.5	+ 31.8	+ 29.0	10.0
18	29.54	29.55	29.55	+ 27.0	+ 24.0	+ 9.5	+ 32.8	+ 27.0	+ 27.0	+ 27.0	+ 7.0	+ 19.9	25.8
19	29.68	29.78	29.93	+ 7.0	+ 3.0	+ 5.0	+ 9.5	+ 4.0	+ 8.0	+ 8.0	0.0	+ 4.8	9.5
20	29.86	29.85	29.68	+ 4.0	+ 6.0	+ 3.0	+ 8.0	+ 2.0	+ 7.0	+ 9.0	+ 2.0	+ 5.5	7.0
21	29.38	29.36	29.36	+ 17.4	+ 21.0	+ 9.5	+ 18.0	+ 2.0	+ 21.0	+ 21.0	+ 9.0	+ 11.5	19.0
22	29.48	29.45	29.34	+ 4.0	+ 5.5	+ 2.0	+ 9.5	+ 2.0	+ 5.5	+ 10.2	+ 2.0	+ 6.1	8.2
23	29.62	29.76	29.88	— 2.0	— 6.0	0.0	+ 4.0	— 4.0	— 2.0	0.0	— 7.0	— 1.5	11.0
24	29.82	29.82	29.64	— 1.0	0.0	+ 3.0	0.0	— 4.6	0.0	+ 3.0	— 3.0	— 0.8	7.6
25	29.10	29.09	29.30	+ 12.0	+ 10.0	+ 3.0	+ 12.0	+ 3.0	+ 12.0	+ 12.0	+ 3.0	+ 7.5	9.0
26	29.60	29.71	29.71	— 5.0	— 5.8	— 7.0	+ 4.0	— 5.0	— 4.0	— 4.0	— 7.0	— 1.5	11.0
27	29.67	29.70	29.72	— 3.0	— 2.1	— 1.0	0.0	— 1.2	+ 0.2	+ 0.2	— 5.0	— 2.4	5.2
28	29.71	29.72	29.76	+ 2.0	+ 2.5	— 4.0	+ 2.0	— 3.0	+ 3.0	+ 3.0	— 4.4	— 0.7	7.4
29	29.70	29.74	29.75	— 6.8	— 5.5	— 4.1	— 3.2	— 9.2	— 4.8	— 3.2	— 8.8	— 6.2	6.0
30	29.52	29.45	28.90	+ 5.0	+ 6.5	+ 11.0	+ 6.0	— 4.0	+ 6.9	+ 11.0	+ 5.0	+ 3.5	15.0
31	28.40	28.48	28.60	+ 10.0	+ 7.1	— 2.0	+ 20.0	+ 9.5	+ 10.5	+ 10.5	— 2.0	+ 9.0	22.0
Sum....	910.29	911.92	910.92	+407.5	+427.1	+372.7	+501.2	+281.3	+462.4	+507.4	+272.0	+380.0	358.0
Mean...	29.36	29.42	29.38	+ 13.1	+ 13.8	+ 12.0	+ 16.2	+ 9.1	+ 14.9	+ 16.4	+ 8.8	+ 12.3	11.5

Tabulation of daily meteorological observations at Cape Flora during the month of October, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.03	T	.00	.03	S^m	.. ..	9 10	E	86	ENE	51	E	149
2	.00	.00	.00	.00	...	.. ..	.. ..	E	548	E	179	E	370
3	.00	T	.00	T	S^m	9 00	10 30	E	452	E	55	E	...
4	.00	.00	T	T	S^m	11 00	12 40	ENE	...	ENE	...	NE	1406
5	.00	.00	.00	.00	...	.. ..	.. ..	N	282	N	143	NE	144
6	.20	.00	.01	.21	S^d S^m	D. N. 19 00	7 30 21 00	NNE	174	C	7	E	33
7	T	.00	.00	T	...	.. ..	.. ..	E	106	SE	66	E	138
8	.00	.04	.02	.06	S^m R	9 40 15 00	12 30 21 20	E	228	E	104	SE	168
9	.15	.20	.40	.75	S^m	D. N.	21 10	ESE	262	SE	73	W	112
10	.02	.00	.00	.02	...	.. ..	.. ..	WNW	326	W	80	W	168
11	.00	.00	.01	.01	S^m	13 30	16 15	NW	174	NW	46	E	68
12	.00	.04	T	.04	S^m	10 00	13 00	SE	329	SE	125	SW	135
13	.00	.00	.00	.00	...	.. ..	.. ..	S	103	E	63	NW	64
14	.00	.00	.06	.06	S^d	18 15	D. N.	W	243	W	42	E	120
15	.04	.00	.02	.06	S^d	12 50	15 00	C	271	E	32	NE	115
16	.00	.00	.00	.00	...	.. ..	.. ..	E	57	SSW	10	ESE	83
17	.00	T	.01	.01	R R	11 40 12 08	11 46 12 25	ESE	110	E	21	ENE	33
18	.00	.00	.00	.00	...	.. ..	.. ..	N	95	N	...	NE	114
19	.00	.00	.00	.00	...	.. ..	.. ..	N	270	W	42	W	37
20	.00	.00	.00	.00	...	.. ..	.. ..	E	94	E	74	E	163
21	.00	.02	.09	.11	S^d	9 15	16 30	SE	34	S	19	NE	56
22	.00	.00	.00	.00	...	.. ..	.. ..	NE	179	W	12	NE	175
23	.00	.00	.00	.00	...	.. ..	.. ..	NW	293	N	60	N	116
24	.00	.00	.00	.00	...	.. ..	.. ..	W	139	NW	29	E	59
25	.00	.02	T	.02	S^d	9 40	12 30	E	389	E	159	NW	115
26	.00	.00	.00	.00	...	.. ..	.. ..	NW	286	NE	88	N	92
27	.00	.00	.00	.00	...	.. ..	.. ..	NE	109	NE	62	NE	97
28	.00	.00	.00	.00	...	.. ..	.. ..	NW	162	NW	57	N	69
29	.00	.00	T	T	S^d	18 30	D. N.	NE	68	NE	16	E	60
30	.05	.00	.40	.45	S^d	16 00	.. ..	E	199	E	41	E	236
31	.50	.15	.02	.67	S^d	.. ..	13 00	WNW	334	NW	111	NW	184
Sum.....	.99	.47	1.04	2.50	...	.. ..	.. ..	...	6402	...	1867	...	4879
Mean.....	...	...	...	...	...	.. ..	.. ..	E	213.4	E	64.4	E	162.6

Tabulation of daily meteorological observations at Cape Flora during the month of October, 1904—Continued

Observer: FRANCIS LONG

Date	Clouds 8h Amount	8h Character	8h Dir. from	12h Amount	12h Character	12h Dir. from	20h Amount	20h Character	20h Dir. from	Av. daily cloudiness	Remarks
1	10	N	E	4 3	(A–S) S–Cu	W W	10	S	E	7	Drifting snow from 16:00.
2	2 2 2	(Cl–Cu) (A–Cu) S	E E E	2 2 3	(Cu) S–Cu S	E E E	10	S	E	8	Drifting snow and heavy east gale.
3	10	S*	E	10	S	E	10	S	E	10	East gale to 5:00; fog 5:30 to 10:40.
4	10	S*	ENE	10	N*	ENE	10	S*	NE	10	High winds; drifting snow 11:00 to 12:40; fog to 21:00.
5	10	S	N	10	S	N	10	S	NE	10	Drifting snow.
6	2 2 4	(A–Cu) S–Cu S	NE NE NE	2 3 3	(A–Cu) S–Cu S	N N N	10	N	E	10	
7	10	S	E	10	S	SE	10	S	E	10	Light drifting snow from 16:00.
8	2 3 3	(A–Cu) (A–S) S	E E E	10	N	E	10	N	SE	10	High east wind and drifting snow to 13:00.
9	10	N	ESE	10	N	SE	10	N	W	10	Drifting snow 5:00 to 9:30.
10	2 8	S–Cu S	WNW NW	8	S	W	Few	S–Cu	W	6	Generally west gale.
11	3	S–Cu	NW	10	S	NW	10	S	E	8	
12	10	S	SE	10	N	SE	10	S	SW	10	High southeast wind and drift to 9:15.
13	...	**	...	10	S	E	9	S	NW	8	Dense fog to 9:30.
14	4	S	W	4 3	(A–S) S	W W	10	N	E	6	
15	4 5	(A–S) S	E E	10	S	E	0	...	...	7	
16	10	S*	E	10	S*	SSW	10	S*	ESE	10	Light fogs 6:00 to 13:30 and 17:00 to 24:00.
17	...	**	...	...	**	...	...	**	...	10	Generally foggy.
18	10	S	E	...	**	...	0	...	...	7	Fog early A. M. and 10:00 to 15:00.
19	Few	S	N	0	...	...	0	...	...	0	Solar halo 11:50 to 12:20.
20	Few	(A–S)	E	0	...	...	0	...	...	2	Fog from 18:30.
21	10	S	SE	10	N*	S	10	(S)	NE	10	Fog 9:15 to 17:00.
22	3 3	(A–S) S	NE NE	3 6	(A–Cu) S	W W	10	S	NE	8	Sun disappears for winter.
23	Few	S	NW	Few	S	N	3 5	(A–Cu) S	N N	1	Very clear and cold.
24	5 3	(A–S) S	W W	4 2	(A–Cu) S	W NW	2	(Cl)	E	5	
25	10	S	E	10	N*	E	10	S*	NW	10	East gale to 11:00; fog 10:00 to 13:00 and 17:00 to 21:00.
26	Few Few	(Cl–S) (A–S)	NW NW	0	...	...	0	...	...	1	High drifting wind to 9:00.
27	9	S	NE	10	S	NE	10	S	NE	10	
28	10	S	NW	10	S	NW	Few	Cl–S	N	7	
29	1	S	E	4 4	(A–Cu) S	E E	10	N	E	8	
30	10	S	E	10	S	E	10	N	E	10	Drifting from 16:00.
31	10	N	WNW	10	N	NW	10	S	NW	10	
Sum....	212	...	...	230	...	...	219	...	...	239	
Mean...	7.3	...	...	7.9	...	...	7.1	...	...	7.7	

Tabulation of daily meteorological observations at Cape Flora during the month of November, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	28.91	29.04	29.12	— 10.0	— 9.0	— 9.0	— 2.0	— 10.0	— 9.0	— 9.0	— 12.0	— 7.0	10.0
2	29.22	29.30	29.38	— 12.0	— 12.0	— 11.0	— 9.0	— 13.5	— 11.5	— 10.5	— 13.4	— 11.2	4.5
3	29.36	29.39	29.36	— 6.0	— 7.1	— 5.0	— 6.0	— 12.0	— 6.0	— 5.0	— 7.1	— 8.5	7.0
4	29.48	29.52	29.58	— 4.0	— 1.2	— 4.0	— 4.0	— 7.0	— 1.0	0.0	— 6.0	— 3.5	7.0
5	29.61	29.70	29.68	— 8.0	— 10.0	— 9.0	— 2.2	— 11.0	— 7.0	— 7.0	— 14.0	— 8.1	11.8
6	29.60	29.66	29.68	— 7.0	— 7.0	— 11.0	— 1.0	— 10.2	— 3.0	— 3.0	— 13.9	— 7.4	12.9
7	29.74	29.80	29.82	— 14.0	— 16.0	— 18.0	— 9.0	— 17.0	— 14.2	— 14.2	— 21.6	— 15.3	12.6
8	29.79	29.81	29.88	— 8.0	— 12.5	— 10.0	— 8.0	— 19.1	— 7.0	— 7.0	— 12.5	— 13.0	12.1
9	29.88	29.94	29.98	— 9.5	— 15.0	— 18.0	— 9.0	— 13.6	— 9.5	— 9.5	— 20.0	— 14.5	11.0
10	29.86	29.84	29.76	— 6.2	— 10.0	— 6.8	— 6.2	— 20.0	— 6.2	— 6.2	— 10.4	— 13.1	13.8
11	29.59	29.58	29.56	— 6.0	— 8.0	— 1.5	— 3.0	— 11.4	— 2.0	— 1.5	— 8.0	— 6.4	9.9
12	29.56	29.62	29.66	0.0	0.0	— 5.0	0.0	— 4.0	0.0	+ 1.2	— 5.0	— 1.9	6.2
13	29.56	29.53	29.57	— 14.0	— 15.0	— 7.5	— 4.0	— 16.0	— 14.0	— 7.5	— 15.0	— 10.0	12.0
14	29.52	29.32	28.72	— 10.1	— 9.4	+ 23.0	— 7.5	— 12.2	— 9.4	+ 23.0	— 14.9	+ 4.0	37.9
15	28.56	28.64	28.74	0.0	— 7.6	— 16.8	+ 29.2	— 1.1	0.0	0.0	— 17.0	+ 6.1	46.2
16	28.72	28.70	28.60	— 20.0	— 20.0	— 21.0	— 17.0	— 20.4	— 19.8	— 19.8	— 23.4	— 20.2	6.4
17	28.76	28.88	29.02	— 6.0	— 6.0	— 8.0	— 6.0	— 22.0	— 5.0	— 5.0	— 9.2	— 13.5	17.0
18	29.12	29.18	29.17	— 15.8	— 16.1	— 10.8	— 8.0	— 17.3	— 10.0	— 8.5	— 18.0	— 13.0	10.0
19	29.16	29.20	29.22	— 18.0	— 15.0	— 21.5	— 9.0	— 19.2	— 14.5	— 14.0	— 21.5	— 15.2	12.5
20	29.40	29.56	29.56	— 22.0	— 15.0	— 11.0	— 17.0	— 24.0	— 14.0	— 9.5	— 19.5	— 16.8	14.5
21	29.52	29.56	29.42	— 18.2	— 17.8	— 8.5	— 9.5	— 21.0	— 11.0	— 8.5	— 19.2	— 14.8	12.5
22	29.33	29.40	29.42	— 12.0	— 16.0	— 19.1	— 9.5	— 13.0	— 12.0	— 12.0	— 19.1	— 14.3	9.6
23	29.40	29.02	28.94	— 14.0	— 11.0	— 16.0	— 14.0	— 23.0	— 10.0	— 7.5	— 16.0	— 15.2	15.5
24	29.10	29.17	29.16	— 21.0	— 24.0	— 30.0	— 16.0	— 22.5	— 20.0	— 20.0	— 30.0	— 23.0	14.0
25	29.13	29.20	29.24	— 31.0	— 28.0	— 24.0	— 30.0	— 32.8	— 28.0	— 24.0	— 31.0	— 28.4	8.8
26	29.36	29.43	29.43	— 24.0	— 22.5	— 31.0	— 22.5	— 24.5	— 22.4	— 22.0	— 32.1	— 27.0	10.1
27	29.52	29.54	29.48	— 25.0	— 23.5	— 21.0	— 25.0	— 31.6	— 22.6	— 21.0	— 25.0	— 26.3	10.6
28	29.42	29.50	29.53	— 16.0	— 13.0	— 11.2	— 15.2	— 21.0	— 13.0	— 9.2	— 16.0	— 15.1	11.8
29	29.64	29.66	29.70	— 20.1	— 20.8	— 16.2	— 9.0	— 21.4	— 20.0	— 16.0	— 22.0	— 15.5	13.0
30	29.70	29.76	29.80	— 24.0	— 21.0	— 14.0	— 16.2	— 24.0	— 20.0	— 13.0	— 24.0	— 18.5	11.0
Sum....	881.52	882.45	882.18	—401.9	—409.5	—372.9	—265.6	—515.8	—342.1	—266.2	—516.8	—385.8	392.2
Mean...	29.38	29.42	29.41	— 13.4	— 13.7	— 12.4	— 8.9	— 17.2	— 11.4	— 8.9	— 17.2	— 12.9	13.1

Tabulation of daily meteorological observations at Cape Flora during the month of November, 1904—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	S[d]	0 00	8 00	NW	295	NW	93	NW	243
2	T	T	.00	T	S[d]	7 00	9 00	NE	205	NW	58	NW	79
3	.00	.00	.04	.04	S[d]	16 00	.. ..	SE	190	SE	78	SE	54
4	.02	.00	.00	.02	...	.. ..	.. ..	ESE	280	SE	57	SE	189
5	.00	.00	.00	.00	...	.. ..	.. ..	SE	134	SE	120	C	5
6	.00	.00	.00	.00	...	.. ..	.. ..	SE	45	E	21	C	3
7	.00	.00	.00	.00	...	.. ..	.. ..	E	25	C	11	C	14
8	.00	.00	.00	.00	...	.. ..	.. ..	E	34	E	53	E	156
9	.00	.00	.00	.00	...	.. ..	.. ..	E	233	E	70	C	54
10	.00	.00	.00	.00	...	.. ..	.. ..	SE	114	NE	54	NE	88
11	.00	.00	T	T	S[d]	19 30	D. N.	NE	88	NE	32	SE	106
12	.01	.00	.00	.01	...	.. ..	.. ..	SE	97	SE	44	W	89
13	.00	.00	T	T	S[d]	19 30	20 30	C	27	C	2	SE	21
14	T	.04	.62	.66	S[d]	10 15	D. N.	SE	29	SE	89	SSE	141
15	.02	.00	.00	.02	...	.. ..	.. ..	W	43	W	49	W	63
16	.00	.00	.00	.00	...	.. ..	.. ..	NW	194	NW	109	NW	47
17	.00	.00	.00	.00	S[d]	0 00	7 00	NE	296	NE	72	NE	158
18	.00	.00	.00	.00	...	.. ..	.. ..	N	213	C	53	NE	47
19	.00	.00	.00	.00	...	.. ..	.. ..	N	286	NE	27	NE	235
20	.00	.00	.00	.00	...	.. ..	.. ..	NE	418	NNE	160	NE	101
21	.00	.00	.01	.01	S[d]	18 00	D. N.	E	244	W	26	W	74
22	.02	.00	.00	.02	...	.. ..	.. ..	W	150	N	53	C	108
23	T	.02	T	.02	S[d]	7 00	13 00	SW	51	SSW	33	SE	65
24	.00	.00	.00	.00	S[d]	10 00	15 30	NNE	220	N	91	N	130
25	.00	T	T	T	S[d]	11 30	13 40	N	243	N	69	NE	151
26	.00	.00	.00	.00	...	.. ..	.. ..	NNE	466	NW	110	N	187
27	.00	.00	.00	.00	...	.. ..	.. ..	NW	249	WNW	102	W	144
28	.01	.04	.06	.11	S[d]	7 10	18 20	NE	180	NE	76	NE	124
29	.00	.00	.00	.00	...	.. ..	.. ..	C	109	C	0	N	5
30	.00	.00	.00	.00	...	.. ..	.. ..	C	6	C	5	ESE	22
Sum.....	.08	.10	.73	.91	...	.. ..	.. ..	...	5164	...	1817	...	2903
Mean.....	...	...	...	...	...	.. ..	.. ..	SE	172.1	NE	60.6	NE	96.8

Tabulation of daily meteorological observations at Cape Flora during the month of November, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	S	NW	3 5	(A-S) S	NW NW	10	S	NW	10	Gales A. M. and P. M.
2	10	N	NE	3 2	(A-S) S	NW NW	0	...	...	4	Strong wind to 1:00.
3	Few	S	SE	5 4	(A-S) S	SE SE	10	N	SE	8	Strong southeast wind from 16:00.
4	5 4	(A-S) S	SE SE	5 4	(A-S) S	SE SE	0	...	...	8	Strong southeast wind to early A. M.
5	0	...	...	0	...	...	0	...	...	0	
6	0	...	...	Few	S	E	0	...	...	0	Fog 9:00 to 12:30.
7	10	S	E	10	S*	...	0	...	...	3	
8	Few 2	(A-S) S	E E	Few Few	(A-S) S	E E	0	...	...	1	
9	0	...	...	0	...	...	0	...	...	0	
10	2	S	SE	3 1	(A-Cu) S	NE NE	2	S	NE	2	
11	2	S	NE	10	S	NE	10	N	SE	8	Light haze 17:00 to 21:00.
12	10	S	SE	10	S	SE	0	H	...	7	
13	0	...	...	Few	S	SE	10	N	SE	3	
14	10	S	SE	10	N	SE	10	N	SSE	10	
15	10	S	W	10	S	W	10	S	W	10	
16	10	S	NW	10	S	NW	10	S	NW	10	Drifting snow P. M.
17	10	S	NE	9	S	NE	3 5	S-Cu S	NE NE	9	Drifting snow to 7 A. M.
18	Few	S	N	0	...	...	0	...	...	0	
19	0	...	...	0	...	...	0	...	...	0	
20	0	...	...	0	...	...	0	...	...	1	Open water to west in Meyers channel.
21	Few	S	E	2	S	E	10	N	W	9	
22	10	S	W	Few	S	E	0	...	...	1	Open water to west and south.
23	10	N	SW	10	N	SSW	0	*	...	6	Fog 14:00 to 21:00.
24	4	S	NE	10	S	N	0	*	...	7	Drifting snow 10:00 to 15:30; fog 17:00 to 21:00.
25	2 1	(A-S) S	E E	10	N	N	10	S	NE	8	Drifting snow 14:00 to 21:00.
26	2 2	(A-S) S	NNE NNE	Few	S-Cu	NW	10	S	N	6	
27	2 8	S-Cu S	NW NW	10	S	WNW	10	S	W	10	
28	10	N	NE	10	N	NE	10	S	NE	10	
29	Few	S	...	Few	S	...	0	...	...	0	
30	2	S	E	Few Few	(A-S) S	... ...	0	...	...	0	
Sum....	148	...	...	156	...	...	130	...	...	151	
Mean...	4.9	...	...	5.2	...	...	4.3	...	...	5.0	

Tabulation of daily meteorological observations at Cape Flora during the month of December, 1904

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.92	30.01	30.08	— 15.2	— 16.0	— 15.0	— 14.0	— 20.0	— 14.0	— 14.0	— 18.2	— 17.0	6.0
2	30.02	30.01	29.92	— 16.0	— 17.0	— 15.0	— 14.0	— 16.2	— 14.2	— 12.4	— 18.0	— 15.2	5.6
3	29.83	29.83	29.82	— 6.5	— 7.0	— 9.0	— 5.6	— 18.2	— 5.0	— 5.0	— 10.4	— 11.6	13.2
4	29.79	29.82	29.84	— 7.2	— 9.0	— 8.0	— 6.1	— 11.0	— 7.2	— 7.2	— 10.0	— 8.6	4.9
5	29.79	29.79	29.54	— 12.0	— 12.1	— 8.2	— 4.0	— 16.0	— 12.0	— 8.0	— 15.1	— 10.0	12.0
6	29.46	29.40	29.28	— 24.0	— 22.5	— 25.1	— 8.0	— 24.0	— 22.2	— 22.2	— 26.0	— 17.0	18.0
7	29.00	28.94	28.84	— 22.4	— 21.0	— 15.6	— 22.0	— 25.6	— 21.0	— 14.4	— 22.4	— 20.0	11.2
8	28.93	29.04	29.12	— 8.0	— 10.5	— 7.0	— 7.2	— 17.0	— 8.0	— 6.2	— 12.0	— 11.6	10.8
9	29.38	29.52	29.55	— 10.2	— 15.0	— 7.0	— 7.0	— 13.6	— 8.2	— 4.1	— 15.0	— 9.6	10.9
10	29.50	29.46	29.52	+ 8.0	+ 6.9	+ 5.0	+ 8.0	— 10.6	+ 8.0	+ 8.0	+ 3.0	— 1.3	18.6
11	29.40	29.39	29.36	+ 6.8	+ 4.4	+ 7.4	+ 6.8	+ 3.0	+ 6.8	+ 8.0	+ 3.0	+ 5.5	5.0
12	29.36	29.45	29.48	+ 6.5	+ 6.2	+ 5.0	+ 10.0	+ 6.9	+ 6.5	+ 7.2	+ 4.0	+ 7.0	6.0
13	29.44	29.46	29.46	+ 7.0	+ 2.4	+ 2.9	+ 13.0	+ 2.9	+ 7.0	+ 7.0	— 6.5	+ 3.2	19.5
14	29.50	29.54	29.63	+ 5.0	+ 4.6	+ 1.4	+ 13.8	— 0.6	+ 6.9	+ 6.9	— 1.1	+ 6.4	14.9
15	29.58	29.62	29.66	+ 3.9	— 4.0	— 10.0	+ 6.7	— 2.1	+ 5.3	+ 5.3	— 11.0	— 2.2	17.7
16	29.64	29.64	29.66	— 19.0	— 18.1	— 15.0	— 10.0	— 20.0	+ 17.0	— 15.0	— 22.2	— 2.6	39.2
17	29.57	29.58	29.52	— 14.0	— 14.0	— 18.1	— 12.4	— 20.0	— 10.2	— 10.2	— 20.0	— 15.1	9.8
18	29.61	29.64	29.67	— 16.0	— 16.2	— 20.0	— 16.0	— 26.0	— 15.2	— 15.0	— 21.0	— 20.5	11.0
19	29.64	29.58	29.48	— 17.0	— 16.0	— 15.0	— 16.2	— 24.9	— 16.0	— 15.0	— 20.0	— 20.0	9.9
20	29.45	29.46	29.52	...	— 28.0	— 27.2	...	...	— 15.0	— 26.0	— 29.2	— 22.1	14.2
21	29.56	29.66	29.66	— 23.5	— 23.4	— 24.2	— 23.4	— 27.6	— 22.1	— 20.0	— 24.4	— 23.8	7.6
22	29.63	29.67	29.66	— 27.2	— 27.4	— 29.0	— 20.0	— 28.2	— 27.0	— 25.2	— 29.1	— 24.6	9.1
23	29.51	29.50	29.42	— 26.4	— 25.0	— 27.1	— 22.4	— 29.1	— 24.6	— 22.4	— 28.2	— 25.8	6.7
24	29.41	29.44	29.50	— 30.0	— 30.0	— 32.0	— 26.5	— 30.3	— 27.6	— 27.6	— 32.0	— 29.2	5.5
25	29.54	29.54	29.62	— 29.5	— 31.0	— 28.0	— 29.0	— 34.1	— 29.0	— 28.0	— 33.6	— 31.0	6.1
26	29.63	29.74	29.87	— 30.0	— 29.0	— 35.0	— 28.0	— 34.1	— 29.0	— 29.0	— 36.0	— 32.0	8.0
27	29.90	29.94	29.90	— 27.1	— 26.0	— 26.3	— 26.6	— 37.0	— 20.0	— 18.2	— 28.0	— 27.6	18.8
28	29.80	29.88	29.92	— 25.2	— 25.0	— 27.5	— 20.3	— 28.0	— 23.1	— 23.1	— 29.0	— 24.6	8.7
29	29.95	30.04	29.96	— 25.5	— 20.1	— 15.3	— 15.4	— 29.0	— 18.2	— 15.3	— 26.0	— 22.2	13.7
30	29.55	29.39	29.18	+ 3.0	+ 7.0	+ 12.5	+ 3.0	— 15.3	+ 7.0	+ 3.0	— 12.5	— 4.2	22.3
31	29.21	29.15	29.22	— 10.5	— 8.0	— 17.0	+ 12.8	— 12.0	— 8.0	— 8.0	— 17.0	— 2.1	29.8
Sum....	916.50	917.13	916.86	—402.2	—439.8	—442.4	—280.0	—557.7	—332.3	—346.1	—563.9	—429.4	394.7
Mean...	29.56	29.58	29.58	— 13.4	— 14.2	— 14.3	— 9.3	— 18.6	— 10.7	— 11.2	— 18.2	— 13.9	12.7

Tabulation of daily meteorological observations at Cape Flora during the month of December, 1904—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind					
								8h		12h		20h	
	8h	12h	20h	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.01	T	.01	S^d	8 50	12 20	E	180	E	69	E	98
2	.00	.00	T	T	S^d	7 55	D. N.	E	167	E	65	E	103
3	.01	.00	.01	.02	S^d	18 10	D. N.	ENE	202	E	49	E	20
4	.01	T	.02	.03	S^d S^d	8 25 13 35	10 30 21 10	ESE	174	ESE	26	ESE	47
5	T	.00	.00	T	...	.. ..	.. ..	C	114	C	0	N	97
6	.00	.00	.00	.00	...	.. ..	.. ..	NW	258	N	68	N	190
7	.00	.00	.00	.00	...	.. ..	.. ..	ESE	277	NW	78	NE	179
8	.00	.00	.00	.00	...	.. ..	.. ..	N	115	N	12	NE	67
9	.00	.00	.00	.00	S^d	D. N.	.. ..	N	249	C	39	N	152
10	.04	.05	.15	.24	S^d	.. ..	D. N.	E	256	E	68	SE	114
11	.01	.00	.02	.03	S^m	17 20	.. ..	E	144	E	64	ESE	85
12	.40	.06	.01	.47	S^m	.. ..	12 50	E	200	E	45	C	61
13	.00	.00	.00	.00	...	.. ..	.. ..	ENE	164	E	50	C	29
14	.00	.00	.00	.00	...	.. ..	.. ..	ENE	63	ESE	52	E	44
15	.00	.00	.00	.00	...	.. ..	.. ..	NNE	57	NNE	47	C	46
16	.00	.00	.00	.00	...	.. ..	.. ..	C	4	C	9	C	0
17	.00	.00	.00	.00	...	.. ..	.. ..	C	5	C	1	NNE	195
18	.00	.00	.00	.00	...	.. ..	.. ..	N	208	NNE	125	N	327
19	.00	T	T	T	S^d S^d	12 00 19 30	12 20 22 00	NW	45	NW	15	SE	32
20	.00	.00	.00	.00	...	.. ..	.. ..	...	...	N	173	W	181
21	.00	.00	.00	.00	...	.. ..	.. ..	N	225	W	86	NNE	156
22	.00	.00	.00	.00	...	.. ..	.. ..	NW	272	NW	69	NW	92
23	.00	.00	.00	.00	...	.. ..	.. ..	NNW	179	WNW	73	NW	153
24	.00	.00	.00	.00	...	.. ..	.. ..	NW	269	NW	64	NNE	192
25	.00	.00	.00	.00	...	.. ..	.. ..	NNE	97	NE	63	NE	80
26	.00	.00	.00	.00	...	.. ..	.. ..	NE	184	NE	65	E	138
27	.00	.00	.00	.00	...	.. ..	.. ..	N	170	NW	40	NW	168
28	.00	.00	.00	.00	...	.. ..	.. ..	N	250	C	95	E	116
29	.00	.00	.00	.00	...	.. ..	.. ..	W	93	E	33	NE	16
30	.12	.10	.40	.62	S^d	D. N.	.. ..	NW	153	WNW	84	WNW	195
31	.15	.01	.10	.26	S^d S^d	.. .. 11 15	D. N. 13 00	E	197	E	72	E	136
Sum.....	.74	.23	.71	1.68	...	.. ..	.. ..	...	4971	...	1799	...	3509
Mean.....	...	...	...	...	...	.. ..	.. ..	E	165.7	E	58.0	E	113.2

Tabulation of daily meteorological observations at Cape Flora during the month of December, 1904—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from	Av. daily cloudiness	
1	10	S	E	10	N	E	3 4	(A–S) S	E E	8	Drifting snow 8:50 to 12:40.
2	0	*	...	0	*	...	10	N*	E	1	Fog to 24:00.
3	10	S*	ENE	10	S*	E	10	N*	E	9	Fog to 24:00.
4	10	S*	ESE	10	S	ESE	10	N*	ESE	10	
5	0	...	...	0	...	...	10	S	N	1	Brisk north winds; drifting snow from 17:40.
6	0	...	...	Few	S	E	0	...	...	0	
7	10	S	ESE	7	S	NW	10	S	NE	7	High north wind and drifting to 8:00.
8	10	S	N	2 6	S–Cu S	E N	5	S	NE	7	
9	2	S–Cu	SE	Few	S	...	10	S	N	2	
10	10	N	E	10	N	E	10	N	SE	10	
11	10	S	E	10	S	E	10	N	SE	9	
12	10	N	E	10	N	E	10	S	...	7	
13	10	S	ESE	Few	S	E	0	H	...	2	Light haze 13:40 to 24:00.
14	Few	S–Cu	E	Few	S	E	Few	S	...	0	
15	0	...	...	0	...	...	10	S H	...	1	Light haze 13:25 to 24:00.
16	0	H	...	0	H	...	...	H	...	1	Light haze all day.
17	Few	S H	...	Few	S H	...	0	...	...	1	Light haze to 14:30; drifting snow 14:30 to 16:00.
18	Few	S	N	0	...	...	0	...	...	0	
19	0	...	...	10	N	NW	10	N	SE	7	
20	...	...	...	0	...	...	4	S*	W	6	Fog 14:00 to 21:00.
21	10	S	N	10	S	W	5 3	(A–S) S	NNE NNE	7	Fresh brisk winds.
22	3 3	(A–S) S	NW NW	4 2	(A–S) S	NW NW	Few	S–Cu	NW	2	Open water south and southwest.
23	4 2	(A–S) S–Cu	NW NW	4 4	(A–S) S	WNW WNW	10	S	NW	7	
24	2 Few	(Ci–S) S	NW NW	Few	S–Cu	NW	0	...	...	0	
25	4 2 Few	(Ci–S) (A–S) S–Cu	NE NE NE	Few 1	(A–S) S	NW NW	2	Ci–S	NE	2	Open water south and southwest; lunar halo 7:30 to 10:15, 22 degrees.
26	0	...	...	0	...	...	0	...	...	0	Open water to south.
27	0	...	...	0	...	...	0	...	...	0	
28	0	...	...	0	...	...	0	...	...	0	
29	0	...	...	0	...	...	4	(Ci–S) H	NE	2	
30	10	N	NW	10	N	WNW	10	N	WNW	10	
31	10	S	E	10	N	E	4	S*	E	7	
Sum....	142	...	...	130	...	...	164	...	...	126	
Mean...	4.7	...	...	4.2	...	...	5.5	...	...	4.1	

Tabulation of daily meteorological observations at Cape Flora during the month of January, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.45	29.54	29.59	— 29.0	— 31.0	— 29.0	— 16.5	— 29.0	— 27.0	— 27.0	— 34.0	— 25.2	17.5
2	29.44	29.42	29.26	— 30.0	— 29.0	— 28.0	— 29.0	— 30.0	— 28.0	— 28.0	— 30.0	— 29.0	2.0
3	29.02	28.98	28.90	— 27.5	— 25.2	— 28.0	— 27.5	— 28.5	— 25.0	— 18.0	— 28.0	— 23.2	10.5
4	28.93	28.98	29.00	— 38.0	— 34.0	— 33.4	— 26.4	— 41.0	— 34.0	— 30.0	— 38.0	— 33.7	14.6
5	28.98	28.96	28.94	— 31.0	— 35.0	— 34.1	— 27.5	— 35.0	— 31.0	— 29.4	— 37.0	— 32.2	9.5
6	28.86	28.87	28.90	— 20.0	— 17.0	— 19.1	— 20.0	— 39.0	— 17.0	— 14.5	— 23.2	— 26.8	24.5
7	29.04	29.14	29.18	— 32.0	— 23.0	— 21.0	— 19.1	— 33.1	— 23.0	— 19.2	— 34.0	— 26.6	14.9
8	29.30	29.38	29.38	— 30.0	— 32.0	— 31.0	— 17.3	— 30.0	— 30.0	— 30.0	— 32.0	— 24.6	14.7
9	29.24	29.24	29.06	— 30.0	— 28.0	— 27.0	— 29.0	— 31.5	— 24.2	— 24.2	— 30.0	— 27.8	7.3
10	28.90	28.90	28.88	— 31.0	— 28.4	— 23.2	— 28.2	— 31.8	— 27.2	— 20.1	— 31.0	— 26.0	11.7
11	28.88	28.98	28.98	— 20.0	— 22.0	— 22.2	— 14.2	— 28.0	— 16.2	— 15.4	— 22.2	— 21.1	13.8
12	29.12	29.18	29.28	— 20.0	— 17.5	— 18.0	— 5.2	— 22.2	— 17.0	— 13.0	— 20.6	— 13.7	17.0
13	29.32	29.40	29.44	— 21.0	— 18.0	— 24.0	— 15.1	— 21.0	— 18.0	— 18.0	— 24.0	— 19.6	8.9
14	29.47	29.52	29.58	— 29.0	— 29.0	— 31.0	— 16.0	— 30.0	— 28.4	— 28.0	— 33.6	— 24.8	17.6
15	29.64	29.68	29.48	— 32.0	— 27.0	— 30.0	— 31.0	— 38.0	— 27.0	— 27.0	— 34.0	— 32.5	11.0
16	29.22	29.35	29.64	— 18.2	— 16.5	— 17.5	— 18.0	— 32.4	— 12.6	— 12.6	— 21.0	— 22.5	19.8
17	30.14	30.28	30.37	— 23.5	— 25.6	— 25.0	— 16.2	— 28.0	— 23.0	— 23.0	— 29.0	— 22.6	12.8
18	30.00	29.85	29.67	— 13.0	— 2.0	+ 13.0	— 13.0	— 26.0	— 2.0	+ 13.0	— 13.0	— 6.5	39.0
19	29.62	29.60	29.61	+ 19.0	+ 16.0	— 1.5	+ 21.0	+ 12.0	+ 19.0	+ 20.0	— 1.5	+ 9.8	22.5
20	29.74	29.82	29.93	— 22.0	— 22.0	— 22.0	— 1.5	— 22.0	— 21.0	— 20.0	— 23.6	— 12.6	22.1
21	29.76	29.66	29.42	— 26.0	— 16.0	— 12.0	— 17.5	— 28.0	— 16.0	— 12.0	— 26.0	— 20.0	16.0
22	29.20	29.20	29.22	— 21.8	— 23.5	— 19.0	— 12.0	— 22.0	— 21.1	— 19.0	— 25.0	— 18.5	13.0
23	28.92	28.68	28.19	— 11.5	— 9.8	— 5.0	— 11.0	— 20.0	— 9.0	— 3.8	— 11.5	— 11.9	16.2
24	28.10	28.28	28.56	— 18.0	— 26.0	— 28.0	— 5.0	— 18.0	— 18.0	— 18.0	— 28.0	— 16.5	23.0
25	28.93	29.10	29.39	— 22.4	— 25.0	— 24.0	— 22.0	— 31.0	— 21.0	— 21.0	— 27.0	— 26.0	10.0
26	29.55	29.66	29.82	— 25.6	— 27.0	— 28.0	— 23.8	— 26.6	— 23.3	— 23.3	— 31.0	— 27.2	7.7
27	29.83	29.85	29.68	— 23.5	— 27.0	— 21.0	— 18.5	— 32.0	— 23.5	— 21.0	— 27.8	— 25.2	13.5
28	28.92	28.68	28.46	— 8.0	0.0	+ 11.0	— 8.0	— 28.0	0.0	+ 11.0	— 8.0	— 8.5	39.0
29	28.46	28.51	28.52	+ 8.0	+ 8.1	— 4.0	+ 11.0	+ 8.0	+ 9.0	+ 9.0	— 4.0	+ 3.5	15.0
30	28.40	28.42	28.45	— 5.0	— 4.0	— 0.5	+ 1.9	— 6.0	— 1.0	+ 6.5	— 6.0	+ 0.2	12.5
31	28.60	28.68	...	— 5.5	— 10.2	...	— 2.0	— 6.6	— 5.5	...	...	— 4.3	4.6
Sum....	904.98	905.79	876.78	—637.5	—606.6	—582.5	—456.6	—774.7	—542.0	—456.0	—734.0	—595.6	482.2
Mean...	29.19	29.22	29.23	— 20.6	— 19.6	— 19.4	— 14.7	— 25.0	— 17.5	— 15.2	— 24.5	— 19.2	15.6

Tabulation of daily meteorological observations at Cape Flora during the month of January, 1905—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	NE	39	C	7	ESE	66
2	.00	.00	.00	.00	...	.. ..	.. ..	E	261	E	91	E	182
3	.00	.00	.00	.00	...	.. ..	.. ..	E	185	E	8	NNE	101
4	.00	.00	.00	.00	...	.. ..	.. ..	N	522	N	45	NE	192
5	.00	.00	.00	.00	...	.. ..	.. ..	NNE	152	NNE	70	NNE	259
6	.00	T	.01	.01	S^{d}	10 45	14 00	NE	401	E	66	E	209
7	.00	.00	.00	.00	...	.. ..	.. ..	E	222	E	74	E	120
8	.00	.00	.00	.00	...	.. ..	.. ..	SW	230	W	65	NE	136
9	.00	.00	.00	.00	...	.. ..	.. ..	NNE	369	N	104	SW	203
10	.00	.00	.00	.00	...	.. ..	.. ..	N	158	NE	135	NE	217
11	.00	.00	.00	.00	...	.. ..	.. ..	NE	309	N	184	NE	270
12	.00	.00	.00	.00	...	.. ..	.. ..	NE	320	NE	28	SW	26
13	.00	.00	.00	.00	...	.. ..	.. ..	C	23	E	14	C	4
14	.00	.00	.00	.00	...	.. ..	.. ..	C	2	C	0	C	1
15	.00	.00	.00	●	...	.. ..	.. ..	C	2	ESE	3	E	118
16	.00	.00	.00	.00	...	.. ..	.. ..	E	421	E	99	NE	179
17	.00	.00	.00	.00	...	.. ..	.. ..	E	66	C	15	E	14
18	.03	.40	.08	.51	S^{m}	D. N.	18 30	ESE	75	NE	43	E	82
19	.00	.00	.09	.09	S^{m}	15 30	.. ..	C	145	SE	10	SE	89
20	.40	.00	.00	.40	S^{m}	.. ..	D. N.	ESE	265	ESE	75	E	151
21	.00	.00	.00	.00	...	.. ..	.. ..	NNE	70	N	47	NW	97
22	.00	.00	.00	.00	...	.. ..	.. ..	W	172	C	14	SE	23
23	.15	.20	.40	.75	S^{m}	D. N.	18 00	E	119	E	106	ESE	302
24	.00	.00	.00	.00	...	.. ..	.. ..	NNE	220	SE	53	NW	210
25	.00	.00	.00	.00	...	.. ..	.. ..	NW	372	NW	120	NW	205
26	.00	.00	.00	.00	...	.. ..	.. ..	NW	292	N	98	N	100
27	.00	.00	.00	.00	...	.. ..	.. ..	C	50	C	11	SE	86
28	.00	.00	.40	.40	S^{m}	12 40	.. ..	E	493	E	160	ESE	290
29	.55	.12	.09	.76	S^{m} S^{m}	.. .. 12 40	11 35 18 15	SE	328	E	125	ENE	187
30	.35	.06	.08	.49	S^{m}	D. N.	17 30	N	292	NE	118	NNE	182
31	.00	.00	...	T	S^{d}	14 40	17 00	SE	48	SE	40	...	...
Sum.....	1.48	.78	1.15	3.41	...	.. ..	.. ..	...	6623	...	2028	...	4301
Mean.....	...	...	...	...	...	.. ..	.. ..	E	213.6	E	65.4	E	143.4

Tabulation of daily meteorological observations at Cape Flora during the month of January, 1905—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H			Av. daily cloudiness	
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	0	H	...	0	...	...	0	...	...	0	Haze 5:30 to 9:30.
2	0	...	...	0	...	...	0	...	...	0	
3	0	H	...	0	H	...	8	S	NNE	2	Haze 5:00 to 16:50.
4	0	...	...	0	...	...	0	...	...	0	
5	0	...	...	Few	S-Cu	NNE	0	...	...	0	Open water south of Cape Flora.
6	10	S	NE	10	N*	E	10	S*	E	10	Fog 9:35 to 21:00.
7	4 2	(A-S) S*	E E	4	S	E	0	...	...	3	Fog 5:30 to 10:00.
8	Few	S-Cu	SW	Few	S-Cu	W	10	S	NE	4	
9	0	...	...	Few	S	...	10	S	SW	2	
10	10	S	N	10	S	...	10	S	...	10	
11	0	...	...	Few	S-Cu	...	Few	S-Cu	...	0	
12	Few	S-Cu	...	Few	S	...	0	H	...	0	Haze from 13:40.
13	Few	S H	...	Few	S	...	0	...	...	0	Lunar halo 15:00 to 16:10, 22 degrees in south-southeast.
14	0	...	...	0	...	...	0	...	...	0	
15	0	...	...	Few	S	...	4 1	(Cl-S) S	E E	2	
16	2 3	(A-S) S	E E	10	S	E	2	(Cl-S)	NE	4	
17	0	...	...	0	...	...	0	...	...	0	Lunar halo 21:10 to 22:00, about 30 degrees.
18	10	N	ESE	10	N	NE	10	S	E	10	
19	10	S*	...	10	S*	...	10	N*	SE	10	Fog from 5:00.
20	10	S*	ESE	10	S	ESE	0	...	...	6	Fog to 10:30; drifting snow to 9:00.
21	2	S	E	Few	S	E	10	S*	NW	2	Fog from 18:00.
22	0	...	...	Few	S	...	Few Few	(A-S) S	E E	2	
23	10	N*	E	10	N*	E	10	S*	ESE	10	Fog from 5:00; barometer 28.19 inches at 18:00; drifting snow 9:50 to 18:00.
24	10	S*	NNE	10	S*	SE	10	S*	NW	10	Fog all day.
25	10	S*	...	10	S*	NW	0	...	...	7	Fog to 15:00; drifting snow.
26	10	S*	NW	0	...	...	0	...	...	2	Heavy water clouds rising in south.
27	0	...	...	0	...	...	10	S	SE	3	
28	10	S	E	10	S	E	10	N	ESE	10	Drifting snow.
29	10	N	SE	10	S	E	10	S	ENE	10	
30	10	N	N	10	N	NE	10	S	NNE	10	Drifting snow to 17:00.
31	10	S	SE	10	S	SE	...	...	...	10	
Sum....	143	...	...	134	...	...	145	...	...	139	
Mean...	4.6	...	...	4.3	...	...	4.8	...	...	4.5	

Tabulation of daily meteorological observations at Cape Flora during the month of February, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	28.92	29.00	29.14	— 10.0	— 13.0	— 22.0	— 10.0	— 19.0	— 10.0	— 10.0	— 22.0	— 16.0	12.0
2	29.18	29.24	29.32	+ 6.0	+ 10.0	+ 3.0	+ 6.0	— 23.0	+ 10.0	+ 10.0	0.0	— 6.5	33.0
3	29.34	29.40	29.48	+ 3.5	— 1.5	— 10.8	+ 6.0	+ 1.0	+ 3.8	+ 3.8	— 11.0	— 2.5	17.0
4	29.41	29.36	29.26	— 2.5	— 1.4	— 1.0	+ 5.0	— 14.0	0.0	0.0	— 4.0	— 4.5	19.0
5	29.20	29.16	29.12	— 6.5	— 1.5	+ 1.8	0.0	— 10.2	0.0	+ 1.8	— 10.0	— 4.2	12.0
6	29.12	29.15	29.22	— 8.0	— 8.4	— 14.0	+ 1.8	— 10.0	— 8.0	— 8.0	— 15.0	— 6.6	16.8
7	29.23	29.24	29.26	— 23.0	— 23.5	— 4.5	— 14.0	— 25.0	— 20.0	— 3.0	— 25.0	— 14.0	22.0
8	29.36	29.42	29.52	+ 1.5	+ 2.0	— 2.0	+ 1.5	— 10.0	+ 2.0	+ 2.0	— 2.5	— 4.0	12.0
9	29.46	29.46	29.49	— 3.5	— 5.0	— 9.2	+ 2.0	— 5.0	— 3.0	— 3.0	— 9.6	— 3.8	11.6
10	29.46	29.52	29.58	— 8.2	— 7.2	— 16.0	— 6.2	— 10.0	— 7.2	— 7.2	— 17.1	— 11.6	10.9
11	29.63	29.69	29.82	— 14.0	— 7.4	— 10.0	— 6.2	— 19.0	— 7.1	— 5.0	— 11.2	— 12.0	14.0
12	29.78	29.81	29.82	— 19.5	— 20.0	— 22.4	— 9.9	— 25.0	— 18.6	— 18.6	— 29.0	— 19.4	19.1
13	29.66	29.66	29.65	— 22.0	— 25.0	— 26.0	— 17.2	— 28.5	— 15.1	— 15.1	— 29.0	— 22.0	13.9
14	29.64	29.68	29.78	— 20.0	— 20.0	— 21.4	— 20.0	— 31.0	— 20.0	— 18.2	— 25.0	— 24.6	12.8
15	29.86	29.95	29.92	— 20.0	— 19.0	— 14.0	— 20.0	— 28.0	— 16.0	— 10.0	— 22.0	— 19.0	18.0
16	29.67	29.64	29.46	— 9.2	— 9.5	— 9.0	— 9.2	— 18.0	— 9.0	— 9.0	— 12.2	— 13.5	9.0
17	29.23	29.22	29.28	+ 6.0	+ 6.0	+ 6.0	+ 6.0	— 9.0	+ 6.0	+ 7.2	+ 5.8	— 0.9	16.2
18	29.28	29.32	29.35	+ 3.2	+ 3.0	— 3.0	+ 6.2	+ 3.0	+ 3.8	+ 3.8	— 3.0	+ 1.6	9.2
19	29.40	29.42	29.48	— 4.0	— 1.0	— 1.0	+ 2.0	— 8.0	0.0	+ 0.8	— 5.0	— 3.0	10.0
20	29.54	29.58	29.64	— 5.2	+ 1.5	— 5.0	+ 2.0	— 11.6	+ 3.0	+ 3.0	— 8.2	— 4.3	14.6
21	29.64	29.65	29.52	— 10.0	— 15.0	— 6.0	+ 3.4	— 11.0	— 8.6	— 6.0	— 20.1	— 8.4	23.5
22	28.88	28.82	28.60	— 3.0	— 5.0	0.0	— 2.5	— 13.6	— 1.4	0.0	— 7.2	— 6.8	13.6
23	28.62	28.78	29.12	— 7.0	— 10.0	— 8.0	+ 1.9	— 7.0	— 7.0	— 7.0	— 9.1	— 3.6	11.0
24	29.58	29.71	30.00	— 16.0	— 16.0	— 21.0	— 7.0	— 17.0	— 15.1	— 14.2	— 21.0	— 14.0	14.0
25	30.02	30.00	29.82	— 17.0	— 11.0	— 12.0	— 12.6	— 24.0	— 11.0	— 10.0	— 18.0	— 17.0	14.0
26	29.52	29.42	29.35	— 10.0	— 12.0	— 4.0	— 8.0	— 12.0	— 8.0	— 4.0	— 12.0	— 8.0	8.0
27	29.14	29.12	29.04	+ 6.0	+ 5.0	+ 5.0	+ 6.0	— 6.0	+ 8.0	+ 13.2	+ 2.2	+ 3.6	19.2
28	29.12	29.26	29.26	+ 3.5	+ 4.0	— 10.0	+ 5.0	+ 1.0	+ 4.0	+ 4.6	— 10.0	— 2.5	15.0
Sum....	822.89	823.68	824.30	—208.9	—200.9	—236.5	— 88.0	—389.9	—144.5	— 98.1	—350.2	—247.5	421.4
Mean...	29.39	29.42	29.44	— 7.5	— 7.2	— 8.4	— 3.1	— 13.9	— 5.2	— 3.5	— 12.5	— 8.8	15.1

Tabulation of daily meteorological observations at Cape Flora during the month of February, 1905—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	E	270	E	24	E	51
2	.00	.02	.01	.03	S[d]	10 00	13 30	ESE	175	E	50	E	84
3	.00	.00	.00	.00	...	.. ..	.. ..	E	151	NE	45	C	8
4	.00	.00	.18	.18	S[m]	13 25	20 15	ENE	86	NE	48	E	160
5	T	.00	.00	.00	...	.. ..	.. ..	NE	203	NE	55	E	188
6	.00	.00	.00	.00	...	.. ..	.. ..	E	130	E	24	C	1
7	.00	.00	.00	.00	S[d]	21 30	.. ..	C	5	W	14	E	28
8	.04	T	.00	.04	S[d]	.. ..	9 30	E	42	E	46	NE	12
9	.00	.00	.00	.00	...	.. ..	.. ..	ESE	145	E	49	E	102
10	.00	.00	.00	.00	...	.. ..	.. ..	ESE	176	ESE	46	C	14
11	.00	.00	.00	.00	...	.. ..	.. ..	E	76	E	26	SE	87
12	.00	.00	.00	.00	...	.. ..	.. ..	C	49	E	5	C	2
13	.00	.00	.00	.00	...	.. ..	.. ..	NE	73	NE	100	C	52
14	.00	.00	.00	.00	...	.. ..	.. ..	E	104	E	69	SE	130
15	.00	.00	.00	.00	...	.. ..	.. ..	ESE	181	ESE	64	ESE	220
16	.00	.00	.00	.00	...	.. ..	.. ..	SE	373	ESE	131	ESE	252
17	.00	.00	.00	.00	...	.. ..	.. ..	SE	429	ESE	142	ESE	260
18	.00	.00	.00	.00	...	.. ..	.. ..	ESE	318	ESE	67	E	85
19	.00	.00	.00	.00	...	.. ..	.. ..	E	248	E	77	E	183
20	.00	.00	.00	.00	...	.. ..	.. ..	C	195	NE	45	N	123
21	.00	.00	.00	.00	...	.. ..	.. ..	SE	149	C	3	ENE	49
22	.00	.06	.04	.10	S[m]	13 30	19 55	E	303	E	114	SE	142
23	.06	.00	.30	.36	S[m]	D. N.	.. ..	NW	122	NW	111	NW	361
24	.25	.00	.00	.25	S[m]	.. ..	D. N.	NW	288	NW	117	NW	187
25	.00	.00	.00	.00	...	.. ..	.. ..	C	78	ENE	18	E	183
26	.25	.10	.40	.75	S[m]	D. N.	.. ..	E	477	E	130	E	287
27	.30	.08	.24	.62	S[m]	.. ..	17 30	ENE	257	ENE	86	E	216
28	.00	.00	.00	.00	...	.. ..	.. ..	C	46	C	3	NNE	115
Sum.....	.90	.26	1.17	2.33	...	.. ..	.. ..	...	5149	...	1709	...	3582
Mean.....	...	...	...	...	...	.. ..	.. ..	E	183.9	E	61.0	E	127.9

Tabulation of daily meteorological observations at Cape Flora during the month of February, 1905—Continued

Observer: FRANCIS LONG

DATE	CLOUDS									Av. daily cloudiness	REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	10	S	E	10	S	...	0	...	...	6	
2	10	S*	ESE	10	N*	E	0	*	...	8	Fog from 1:20; drifting 10:00 to 14:00.
3	10	S	E	9	S	E	0	...	...	5	
4	10	S*	ENE	10	S*	NE	10	N*	E	10	
5	0	...	...	0	...	...	4	(A–S)	E	2	
6	10	S*	E	10	S*	E	0	*	...	9	Fog 4:00 to 20:40.
7	Few	S	E	2	S	E	10	S*	E	5	Fog from 13:10.
8	10	N*	E	10	S	E	10	S*	NE	10	Fog 10:00 to 20:20.
9	5 2	(A–S) S	... E	10	S	E	3 3	(A–S) S	E E	8	Drifting snow 11:15 to 11:40.
10	10	S*	ESE	4 5	(A–S) S	E E	0	...	...	9	Fog 4:30 to 10:00.
11	4 4	(A–S) S	E E	5 5	(A–S) S	E E	4	(A–S)H	SE	8	Lunar halo 18:20 to 19:00; haze 19:00 to 23:30.
12	4 2	(A–Cu) S	E E	0	...	...	0	...	...	0	
13	0	...	...	0	...	...	0	...	...	0	Drifting snow.
14	Few	S	E	0	...	...	0	...	...	0	Lunar halo from 18:30.
15	0	...	...	1 1	(A–S) S	ESE ESE	0	...	...	0	Lunar halo to 2:00; also 17:30 to 18:40, 22 degrees.
16	10	S	SE	4 Few	(A–Cu) S	ESE ESE	10	S	ESE	4	Drifting snow and high east to southeast winds.
17	10	S*	SE	10	S*	ESE	4 5	(A–Cu) S*	ESE ESE	10	Fog from 5:00; drifting snow.
18	10	S	ESE	5	(A–S)*	ESE	Few	(Cl–S)	E	7	Lunar halo 19:30 to 21:30; fog to 5:00 and 9:15 to 16:30.
19	Few	S–Cu*	E	Few	(A–S)*	E	Few	S–Cu	E	1	Full moon.
20	Few	S	E	0	...	...	0	...	...	0	
21	Few	(A–S)	E	Few	(A–S)	E	0	...	...	0	
22	10	S*	E	...	**	...	10	S	SE	10	Foggy all day.
23	10	N*	NW	10	N*	NW	10	N*	NW	10	Foggy all day; drifting snow.
24	10	S*	NW	10	S*	NW	0	...	...	6	Fog to 13:30; drifting snow to 17:00.
25	Few	S	E	5 1	(A–S) S	E E	10	S	E	7	Open water south and west.
26	10	N*	E	10	N*	E	10	N*	E	10	Fog from 5:00; heavy drifting.
27	10	N*	ENE	10	N*	ENE	10	S	E	10	Fog to 17:00; drifting snow to 17:40.
28	10	S	...	10	S	...	0	...	...	8	Drifting snow from 18:30.
Sum....	181	...	...	167	...	...	113	...	...	163	
Mean...	6.5	...	...	6.2	...	...	4.0	...	...	5.8	

Tabulation of daily meteorological observations at Cape Flora during the month of March, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.62	29.74	29.84	— 20.0	— 18.0	— 22.0	— 9.6	— 21.0	— 18.0	— 15.6	— 25.0	— 17.3	15.4
2	29.64	29.54	29.40	— 16.5	— 12.0	— 8.0	— 16.5	— 23.2	— 12.0	— 8.0	— 17.2	— 15.6	15.2
3	29.48	29.48	29.65	— 7.5	— 8.9	— 10.0	— 4.0	— 13.6	— 7.0	— 6.2	— 10.0	— 8.8	9.6
4	29.64	29.42	29.36	+ 1.0	+ 8.0	— 16.0	+ 1.0	— 11.0	+ 8.0	+ 18.0	— 16.0	+ 1.0	34.0
5	29.41	29.50	29.62	— 17.0	— 13.0	— 14.0	— 16.0	— 24.0	— 12.9	— 12.2	— 18.0	— 18.1	11.8
6	29.76	29.82	29.84	— 23.0	— 20.0	— 11.0	— 14.0	— 26.0	— 19.8	— 11.0	— 23.0	— 18.5	15.0
7	29.52	29.38	29.10	— 11.0	— 7.0	— 3.0	— 10.0	— 12.2	— 7.0	— 3.0	— 10.0	— 7.6	9.2
8	29.10	29.16	29.28	— 7.0	— 8.5	— 14.0	— 1.2	— 7.0	— 7.0	— 7.0	— 14.2	— 7.7	13.0
9	29.37	29.52	29.66	— 22.2	— 21.0	— 22.0	— 13.6	— 22.4	— 21.0	— 19.0	— 23.0	— 18.3	9.4
10	29.76	29.84	29.76	— 26.0	— 25.0	— 24.2	— 21.0	— 30.0	— 22.0	— 21.0	— 29.0	— 25.5	9.0
11	29.52	29.58	29.58	+ 4.0	+ 5.2	+ 9.9	+ 4.0	— 25.0	+ 6.1	+ 10.0	+ 3.1	— 7.5	35.0
12	29.51	29.50	29.49	+ 6.0	+ 5.2	+ 4.0	+ 11.0	+ 6.0	+ 6.9	+ 7.0	+ 1.0	+ 6.0	10.0
13	29.45	29.39	29.34	+ 5.0	+ 1.0	— 1.0	+ 7.9	+ 1.0	+ 5.2	+ 5.2	— 3.9	+ 2.0	11.8
14	29.38	29.46	29.60	+ 2.0	+ 4.0	— 7.2	+ 3.0	— 3.0	+ 4.0	+ 4.0	— 8.0	— 2.0	12.0
15	29.78	29.90	29.94	— 12.0	— 11.0	— 7.0	— 7.2	— 14.1	— 11.0	— 6.0	— 12.0	— 10.0	8.1
16	29.95	30.02	30.09	— 1.0	+ 4.0	— 1.0	0.0	— 10.0	+ 4.1	+ 4.0	— 5.0	— 3.0	14.1
17	30.12	30.14	30.14	0.0	— 1.8	— 7.0	+ 2.2	— 10.1	+ 1.4	+ 2.0	— 7.0	— 4.0	12.3
18	30.03	30.08	30.09	— 17.0	— 16.0	— 19.0	— 5.2	— 20.0	— 12.3	— 12.3	— 21.0	— 13.1	15.8
19	30.06	30.08	30.02	— 12.8	— 12.0	— 8.2	— 12.5	— 20.2	— 10.0	— 8.2	— 12.8	— 14.2	12.0
20	29.76	29.72	29.59	— 11.0	— 9.2	0.0	— 7.6	— 12.4	— 9.0	0.0	— 13.0	— 6.5	13.0
21	29.48	29.54	29.59	+ 10.0	+ 9.2	— 10.8	+ 10.0	— 1.0	+ 11.0	+ 11.0	— 10.8	+ 0.1	21.8
22	29.62	29.69	29.78	— 2.5	0.0	— 3.0	— 2.5	— 14.6	0.0	+ 1.2	— 3.0	— 6.7	15.8
23	29.64	29.63	29.69	+ 22.5	+ 22.0	+ 25.0	+ 22.5	— 6.0	+ 23.4	+ 25.0	+ 18.0	+ 9.5	31.0
24	29.56	29.54	29.43	+ 24.0	+ 32.0	+ 33.0	+ 26.0	+ 21.0	+ 32.0	+ 33.0	+ 23.0	+ 27.0	12.0
25	29.62	29.57	29.46	+ 26.0	+ 25.0	+ 27.2	+ 33.0	+ 18.0	+ 26.5	+ 27.2	+ 23.0	+ 25.5	15.0
26	29.40	29.52	29.54	+ 14.9	+ 11.1	+ 3.0	+ 27.2	+ 12.1	+ 17.0	+ 17.0	+ 3.0	+ 15.1	24.2
27	29.85	30.02	30.11	— 20.0	— 23.0	— 27.0	+ 3.0	— 21.0	— 20.0	— 17.6	— 27.0	— 12.0	30.0
28	30.00	29.98	29.84	— 17.5	— 14.2	— 14.8	— 17.5	— 27.0	— 14.0	— 10.0	— 18.0	— 18.5	17.0
29	29.62	29.66	29.76	— 5.2	— 7.8	— 24.0	— 5.2	— 17.2	— 4.5	— 4.5	— 24.0	— 14.2	19.5
30	29.76	29.77	29.80	— 25.0	— 25.0	— 30.0	— 22.0	— 30.1	— 25.0	— 25.0	— 30.0	— 26.0	8.1
31	29.78	29.78	29.72	— 27.0	— 20.0	— 29.0	— 27.0	— 36.2	— 20.0	— 14.4	— 29.0	— 25.3	21.8
Sum....	919.19	919.97	920.11	—185.8	—146.7	—231.1	— 61.8	—400.2	—106.9	— 36.4	—338.8	—214.2	501.9
Mean...	29.65	29.68	29.68	— 6.0	— 4.7	— 7.5	— 2.0	— 12.9	— 3.4	— 1.2	— 10.9	— 6.9	16.2

Tabulation of daily meteorological observations at Cape Flora during the month of March, 1905—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	SW	434	N	84	C	56
2	.00	.00	.00	.00	...	.. ..	.. ..	E	92	E	144	ENE	176
3	.00	.00	.00	.00	...	.. ..	.. ..	NE	204	C	30	W	98
4	.00	T	.15	.15	S^{m}	11 30	16 30	NE	77	SW	131	NW	33
5	.00	.00	.00	.00	...	.. ..	.. ..	WNW	333	WNW	102	W	220
6	.00	.00	.00	.00	...	.. ..	.. ..	C	160	SW	25	ESE	123
7	.00	.00	.00	.00	...	.. ..	.. ..	E	468	E	170	E	340
8	.25	.04	T	.29	S^{m}	D. N.	.. ..	SE	320	SE	58	E	48
9	.00	.00	.00	.00	S^{m}	.. ..	0 40	NE	249	NE	141	NE	80
10	.00	.00	.00	.00	...	.. ..	.. ..	C	18	C	13	C	1
11	.00	.00	.28	.28	S^{m}	13 40	D. N.	ESE	282	ENE	110	E	246
12	.25	.00	.00	.25	...	.. ..	.. ..	E	380	E	118	E	242
13	.00	.00	.00	.00	...	.. ..	.. ..	E	314	ENE	110	ESE	164
14	.12	.04	.00	.16	S^{m}	D. N.	11 30	C	40	N	8	N	130
15	.00	.00	.00	.00	...	.. ..	.. ..	NW	302	NW	40	SSW	33
16	.00	.01	.01	.02	S^{m}	10 40	13 00	C	20	WNW	15	C	35
17	.00	.00	.00	.00	...	.. ..	.. ..	NE	43	NE	82	E	130
18	.00	.00	.00	.00	...	.. ..	.. ..	S	48	C	12	E	6
19	.00	.00	.03	.03	S^{d}	17 30	22 50	NW	2	NW	20	WNW	40
20	.02	.00	.00	.02	...	.. ..	.. ..	C	51	WSW	14	NE	47
21	.45	.01	.00	.46	S^{d}	D. N.	8 45	NW	44	NW	31	NW	59
22	.04	.00	.00	.04	S^{d}	5 00	9 15	E	16	E	32	C	7
23	.00	.00	.00	.00	...	.. ..	.. ..	E	141	E	34	ENE	88
24	.25	T	.02	.27	S^{m} R	4 00 13 30	8 30 21 30	ENE	81	WSW	29	W	94
25	T	T	.04	.04	S^{m}	11 30	18 30	NW	160	NW	27	NW	50
26	.00	.00	.03	.03	S^{m}	16 30	19 40	NW	125	C	36	C	14
27	.00	.00	.00	.00	...	.. ..	.. ..	NE	243	NE	100	C	81
28	.00	.00	.00	.00	...	.. ..	.. ..	NW	111	N	16	C	24
29	.00	.00	.00	.00	...	.. ..	.. ..	N	42	N	35	NNW	118
30	.00	.00	.00	.00	...	.. ..	.. ..	N	130	NW	57	N	100
31	.00	.00	.00	.00	...	.. ..	.. ..	C	25	N	7	W	65
Sum.....	1.38	.10	.56	2.04	...	.. ..	.. ..	...	4955	...	1831	...	2948
Mean.....	...	...	...	...	...	.. ..	.. ..	E	159.8	E	59.1	E	95.1

Tabulation of daily meteorological observations at Cape Flora during the month of March, 1905—Continued

Observer: FRANCIS LONG

Date	Clouds 8h Amount	8h Character	8h Dir. from	12h Amount	12h Character	12h Dir. from	20h Amount	20h Character	20h Dir. from	Av. daily cloudiness	Remarks
1	0	...	...	0	...	...	0	...	...	0	Drifting snow to 6:30.
2	5 5	(A-S) S	E E	10	S	E	10	S	ENE	10	
3	Few	(A-S)	E	0	...	...	0	...	...	0	
4	5 4	(A-S) S	NE NE	10	N*	SW	0	...	...	9	Drifting snow from 17:30.
5	10	S	NW	4	S-Cu*	WNW	0	...	...	4	Heavy gales and drifting snow; fog 10:30 to 14:00.
6	0	...	...	10	S	W	10	S	ESE	8	
7	10	S*	E	10	S*	E	10	S*	E	10	Generally foggy; gales and drifting snow.
8	10	N	SE	10	N	SE	10	S	E	10	Drifting snow to 9:00.
9	2	S-Cu	NE	Few	(A-Cu)	NE	0	...	...	0	Drifting snow to 13:30.
10	Few	S	...	0	...	...	4	(A-S)H	N	1	Haze from 18:40.
11	2 3	(A-Cu) S-Cu	SE SE	4 1	(A-Cu) S-Cu	E E	10	N	E	7	Drifting snow to 12:00.
12	4 4	(A-Cu) S-Cu	E E	10	S	E	5 2	(A-S) S	E E	8	High wind and drifting snow to 17:00.
13	3 5	(A-S) S	E E	4 2	(A-Cu) S-Cu	E E	9	S	NE	7	
14	10	N	...	10	S	...	0	...	...	6	
15	0	...	...	Few	(A-Cu)	NE	2 6	(A-Cu) S-Cu	SSW SSW	1	
16	10	S	...	10	N*	...	Few	(Cu)	E	8	Variable winds.
17	4 2	(A-Cu) S-Cu	NE NE	6 Few	(A-Cu) (A-Cu	NE NE	3 2 Few	(Cl-S) (A-S) S-Cu	E E E	5	
18	0	...	...	Few	(A-S)	N	4	(A-S)	E	0	Light variable winds.
19	3 2 Few	(Cl-S) (A-S) S	N N N	4 2	(Cl-Cu) (Cu)	N N	10	N*	...	8	Fog from 16:00.
20	3 2 2	(Cl-Cu) (A-S) S	S S S	10	S	...	10	S*	...	9	Fog 10:00 to 11:30; 16:30 to 24:00; light variable winds.
21	10	N*	NW	3 4	(Cu) S-Cu	N N	3 3	(A-S) S	NW NW	8	Fog 4:00 to 9:00; variable winds.
22	10	N	...	10	S	E	...	**	...	10	Fog from 15:00; light variable winds.
23	10	S	E	9	S	S	10	S*	...	10	Fog 10:00 to 11:15 and 15:30 to 24:00.
24	10	N*	...	10	S*	...	10	N*	...	10	Fog to 22:30.
25	10	S	NW	10	N	...	10	S*	...	10	Fog from 14:30.
26	4 4	(A-Cu) S-Cu	NW NW	2 2 2	(Cl-Cu) (A-Cu) S-Cu	W W W	10	S	...	8	Fog 15:00 to 23:50.
27	0	...	...	0	...	...	0	...	...	0	Open water southwest.
28	0	...	...	0	...	...	5 1	(A-S) S	N N	1	
29	Few Few	(Cl-S) S	N E	0	...	...	0	...	...	0	
30	0	...	...	0	...	...	0	...	...	0	
31	0	...	...	0	...	...	0	...	...	0	
Sum....	168	...	...	169	...	...	159	...	...	168	
Mean...	5.4	...	...	5.5	...	...	5.3	...	...	5.4	

Tabulation of daily meteorological observations at Cape Flora during the month of April, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.66	29.67	29.70	— 33.0	— 30.0	— 33.0	— 25.0	— 34.8	— 30.0	— 29.0	— 33.0	— 29.9	9.8
2	29.69	29.70	29.75	— 36.0	— 33.0	— 40.0	— 30.0	— 39.2	— 33.0	— 29.2	— 40.0	— 34.6	10.8
3	29.72	29.74	29.74	— 35.0	— 31.0	— 38.0	— 35.0	— 43.0	— 30.5	— 26.2	— 38.0	— 34.6	16.8
4	29.66	29.52	29.36	— 28.0	— 29.0	— 6.0	— 28.0	— 40.5	— 19.0	— 6.0	— 29.0	— 23.2	34.5
5	29.47	29.54	29.52	+ 3.0	+ 6.0	+ 9.0	+ 4.0	— 6.0	+ 8.4	+ 13.4	+ 3.2	+ 3.7	19.4
6	29.70	29.82	29.84	+ 5.2	+ 4.6	+ 3.5	+ 9.0	+ 4.6	+ 5.2	+ 5.2	+ 2.0	+ 5.5	7.0
7	29.78	29.78	29.86	+ 6.0	+ 8.4	+ 17.0	+ 10.0	+ 1.2	+ 8.5	+ 18.5	+ 6.0	+ 9.8	17.3
8	30.06	30.17	30.22	+ 21.2	+ 20.0	+ 13.0	+ 22.0	+ 16.0	+ 22.4	+ 22.4	+ 12.9	+ 17.6	9.5
9	30.30	30.38	30.50	+ 11.0	+ 13.0	+ 14.0	+ 14.2	+ 9.0	+ 13.0	+ 17.0	+ 11.0	+ 13.0	8.0
10	30.66	30.76	30.78	+ 4.0	+ 5.0	+ 7.2	+ 14.0	+ 4.0	+ 5.0	+ 7.2	+ 2.2	+ 8.1	11.8
11	30.78	30.82	30.78	— 1.0	+ 3.0	— 4.5	+ 7.5	— 8.0	+ 5.0	+ 7.6	— 5.0	— 0.2	15.6
12	30.68	30.71	30.64	— 4.0	+ 5.0	— 5.0	+ 2.0	— 11.0	+ 5.0	+ 9.0	— 5.0	— 1.0	20.0
13	30.54	30.56	30.48	— 6.0	+ 4.5	+ 8.4	— 5.0	— 10.0	+ 4.5	+ 8.4	— 8.0	— 0.8	18.4
14	30.24	30.18	30.00	+ 6.0	+ 10.0	+ 17.6	+ 12.2	+ 2.0	+ 10.0	+ 17.6	+ 4.2	+ 9.8	15.6
15	29.96	29.97	29.96	+ 21.0	+ 23.0	+ 23.4	+ 22.0	+ 15.0	+ 23.0	+ 26.8	+ 20.0	+ 20.9	11.8
16	30.14	30.24	30.28	+ 6.0	+ 3.0	+ 0.2	+ 23.5	— 1.0	+ 6.0	+ 7.0	— 2.0	+ 10.8	25.5
17	30.25	30.27	30.32	— 2.0	— 1.0	+ 1.2	+ 2.6	— 3.0	+ 1.2	+ 7.0	— 2.0	+ 2.0	10.0
18	30.16	30.14	30.01	— 2.0	— 2.0	— 3.0	+ 1.2	— 11.0	0.0	0.0	— 3.0	— 4.9	12.2
19	29.92	29.97	29.98	+ 2.0	+ 4.4	+ 2.0	+ 2.2	— 5.6	+ 6.2	+ 6.2	+ 1.0	+ 0.3	11.8
20	30.04	30.10	30.18	+ 3.9	+ 6.0	+ 4.0	+ 5.0	0.0	+ 6.8	+ 12.5	+ 3.0	+ 6.2	12.5
21	30.20	30.26	30.30	— 1.2	+ 4.0	— 2.5	+ 3.0	— 11.0	+ 4.8	+ 5.8	— 3.0	— 2.6	16.8
22	30.28	30.34	30.34	— 3.0	0.0	+ 1.0	— 2.5	— 7.0	0.0	+ 7.8	— 4.0	+ 0.4	14.8
23	30.32	30.34	30.34	— 2.5	+ 2.9	+ 1.0	+ 1.0	— 4.6	+ 3.0	+ 7.6	— 2.5	+ 1.5	12.2
24	30.36	30.41	30.44	+ 3.6	+ 9.0	+ 3.0	+ 3.0	— 6.0	+ 9.0	+ 13.0	+ 3.6	+ 3.5	19.0
25	30.44	30.46	30.38	— 1.2	+ 4.0	+ 2.2	+ 3.5	— 2.0	+ 4.0	+ 6.7	— 1.2	+ 2.4	8.7
26	30.17	30.10	29.95	+ 1.0	+ 4.5	+ 17.0	+ 5.0	0.0	+ 4.5	+ 17.0	+ 1.0	+ 8.5	17.0
27	29.82	29.84	29.87	+ 23.0	+ 27.0	+ 29.0	+ 24.0	+ 17.0	+ 27.0	+ 29.6	+ 23.0	+ 23.3	12.6
28	29.92	29.98	30.03	+ 29.0	+ 28.5	+ 27.9	+ 30.0	+ 24.2	+ 30.0	+ 30.0	+ 27.9	+ 27.1	5.8
29	29.93	29.90	29.90	+ 25.0	+ 24.5	+ 31.5	+ 28.0	+ 23.1	+ 25.0	+ 32.0	+ 23.0	+ 27.5	9.0
30	29.90	29.94	29.96	+ 30.0	+ 29.5	+ 31.0	+ 32.0	+ 23.9	+ 31.1	+ 33.0	+ 28.0	+ 28.4	9.1
Sum....	902.75	903.61	903.41	+ 46.0	+123.8	+132.1	+155.4	—103.7	+156.1	+277.9	— 3.7	+ 98.5	423.3
Mean...	30.09	30.12	30.11	+ 1.5	+ 4.1	+ 4.4	+ 5.2	— 3.5	+ 5.2	+ 9.3	— 0.1	+ 3.3	14.1

Tabulation of daily meteorological observations at Cape Flora during the month of April, 1905—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	W	93	SW	32	NE	73
2	.00	.00	.00	.00	...	.. ..	.. ..	NE	95	C	60	C	...
3	.00	.00	.00	.00	...	.. ..	.. ..	C	13	C	0	C	1
4	.00	.00	.00	.00	...	.. ..	.. ..	E	16	NE	88	SE	327
5	.00	.00	.00	.00	...	.. ..	.. ..	SE	323	SE	154	SE	271
6	.00	.00	.00	.00	...	.. ..	.. ..	SE	318	ESE	102	ESE	174
7	.00	.00	.00	.00	S^m	15 40	21 40	SE	393	SE	196	SE	329
8	.04	.00	.00	.04	...	.. ..	.. ..	SE	266	SE	100	E	223
9	.00	.00	.00	.00	...	.. ..	.. ..	E	380	E	99	ENE	315
10	.00	.00	.00	.00	...	.. ..	.. ..	SE	423	SE	120	SE	237
11	.00	.00	.00	.00	...	.. ..	.. ..	NE	146	C	7	W	24
12	.00	.00	.00	.00	...	.. ..	.. ..	C	22	C	4	SE	40
13	.00	.00	.02	.02	S^m	12 40	21 30	SE	54	C	19	E	63
14	.01	.00	.00	.01	...	.. ..	.. ..	ENE	160	E	40	NE	162
15	.15	.08	.25	.48	S^d S^d	D. N. 8 15	D. N. 21 30	NE	88	ENE	10	W	146
16	.02	.00	.00	.02	...	.. ..	.. ..	NE	302	N	53	N	75
17	.00	.00	.00	.00	...	.. ..	.. ..	N	244	NNE	100	C	168
18	.00	.00	.00	.00	...	.. ..	.. ..	E	108	E	68	ENE	232
19	.00	.00	.00	.00	...	.. ..	.. ..	E	395	NE	93	NE	230
20	.00	.00	.00	.00	...	.. ..	.. ..	ENE	212	ENE	88	E	72
21	.00	.00	.00	.00	...	.. ..	.. ..	C	12	C	5	C	21
22	.00	.00	.00	.00	...	.. ..	.. ..	E	12	E	19	W	0
23	.00	.00	.00	.00	...	.. ..	.. ..	W	47	W	68	NW	66
24	.00	.00	.00	.00	...	.. ..	.. ..	N	40	C	20	C	4
25	.00	.00	.00	.00	...	.. ..	.. ..	E	66	E	48	E	142
26	.00	.00	.01	.01	S^d	19 00	22 00	ENE	322	E	130	SE	254
27	.40	.04	T	.44	S^m	0 30	13 20	SE	110	SSE	86	E	44
28	.01	.00	.01	.02	S^m S^m	0 30 15 00	D. N.	E	96	SE	53	E	51
29	.40	.04	.04	.48	S^m S^m	.. .. 19 35	17 30 20 30	SE	196	E	72	C	100
30	T	T	.04	.04	S^m S^m	9 00 14 00	11 30 19 00	S	37	S	24	E	35
Sum.....	1.03	.16	.37	1.56	...	.. ..	.. ..	...	4989	...	1958	...	3879
Mean.....	...	...	...	...	...	.. ..	.. ..	SE	166.3	E	65.3	E	133.8

Tabulation of daily meteorological observations at Cape Flora during the month of April, 1905—Continued

Observer: FRANCIS LONG

DATE	CLOUDS										REMARKS
	8H			12H			20H			Av. daily cloudiness	
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	0	...	...	3 Few	(A-S) S-Cu	SW SW	Few	S	NE	1	
2	0	...	...	0	...	...	0	...	...	0	
3	0	...	...	0	...	...	0	...	...	0	Open water to south.
4	4 3	(A-S) S	E E	10	S	NE	10	S	SE	9	Drifting snow.
5	10	S	SE	Few 2	(A-Cu) S-Cu	SE SE	10	S	SE	8	
6	3 5	(Ci-Cu) S-Cu	SE SE	Few	(Ci-Cu)	ESE	4	(A-S)	ESE	4	Drifting snow to 9:00.
7	2 2	(Ci-Cu) S-Cu	SE SE	3 2 Few	(Ci-Cu) (Cu) S-Cu	SE SE SE	10	N	SE	7	Drifting snow from 9:00.
8	10	S	SE	10	S	SE	1 2	Ci-Cu S	E E	8	Drifting snow from 9:00.
9	Few	S-Cu	E	0	...	...	0	...	...	0	
10	0	...	...	0	...	...	0	...	...	0	Drifting snow to 12:30.
11	0	...	...	0	...	...	0	...	...	0	
12	0	...	...	0	...	...	0	...	...	0	
13	0	*	...	10	S	...	10	N	...	7	Fog 1:00 to 11:00.
14	3 7	(S-Cu) S	S ENE	2 2 1	(Ci-S) Cu S	E E E	10	S	NE	8	
15	10	S	NE	10	N	ENE	10	N	...	10	
16	2 Few Few	(Ci-S) (Ci-Cu) S-Cu	SW SW NE	Few	Ci-S	SW	0	...	...	1	Very fine weather.
17	4	S-Cu	N	Few	S-Cu	NNE	0	...	...	1	Open water south and southwest.
18	4 3	(A-S) S	E E	10	S*	E	10	S*	...	8	Fog from 10:00.
19	1 1	(Ci-Cu) S-Cu	E E	2	Cu	E	3	S-Cu	NE	2	High east to northeast wind all day.
20	0	...	...	0	...	...	0	...	...	0	
21	7 1	(A-Cu) S-Cu	E E	8	S-Cu	E	...	**	...	8	Dense fog from 17:10.
22	...	**	...	...	**	...	10	S	...	10	Dense fog to 17:30.
23	Few	(Ci-S)	NE	2	(Ci-Cu)	N	Few	(Cu)	N	1	
24	0	...	...	Few	(Ci-Cu)	N	10	S	...	4	
25	0	*	...	0	...	...	2 3	(Ci-Cu) S	NE S	1	Fog 7:00 to 10:00.
26	7	(A-S)	ENE	7	(A-S)	E	10	N	...	8	
27	10	N*	SE	10	N*	...	10	S*	...	10	Fog from 12:30.
28	10	S*	...	10	S	...	10	N*	...	10	Fog to 10:00 and from 16:00.
29	10	N*	SE	10	N*	...	10	N*	...	10	Fog all day.
30	10	S*	...	10	S	...	10	S	...	10	Fog to 11:00.
Sum....	129	...	...	124	...	...	155	...	...	146	
Mean...	4.4	...	...	4.3	...	...	5.3	...	...	4.9	

Tabulation of daily meteorological observations at Cape Flora during the month of May, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	29.88	29.87	29.88	+ 25.0	+ 27.0	+ 27.0	+ 32.0	+ 24.2	+ 27.0	+ 33.0	+ 24.0	+ 28.5	9.0
2	29.74	29.78	29.78	+ 29.5	+ 31.4	+ 32.0	+ 30.0	+ 24.6	+ 31.0	+ 32.0	+ 28.0	+ 28.3	7.4
3	29.68	29.70	29.62	+ 32.0	+ 32.4	+ 33.0	+ 32.0	+ 30.0	+ 32.4	+ 33.0	+ 31.1	+ 31.5	3.0
4	29.62	29.66	29.62	+ 21.0	+ 25.2	+ 25.0	+ 33.0	+ 20.1	+ 25.2	+ 26.9	+ 21.0	+ 26.6	12.9
5	29.44	29.39	29.41	+ 26.0	+ 21.4	+ 18.8	+ 26.0	+ 24.0	+ 26.0	+ 26.0	+ 18.0	+ 22.0	8.0
6	29.48	29.56	29.65	+ 17.0	+ 14.0	+ 15.9	+ 18.8	+ 14.2	+ 17.0	+ 22.0	+ 13.6	+ 17.8	8.4
7	29.60	29.60	29.57	+ 22.0	+ 25.0	+ 20.0	+ 22.0	+ 15.0	+ 25.6	+ 26.5	+ 18.0	+ 20.8	11.5
8	29.22	29.23	29.08	+ 17.0	+ 23.0	+ 32.0	+ 20.0	+ 14.0	+ 23.0	+ 32.0	+ 17.0	+ 23.0	18.0
9	28.97	29.04	29.14	+ 33.0	+ 28.4	+ 23.0	+ 33.0	+ 30.0	+ 35.0	+ 35.0	+ 22.0	+ 28.5	13.0
10	29.19	29.28	29.40	+ 24.0	+ 25.0	+ 25.8	+ 24.0	+ 22.0	+ 25.6	+ 29.0	+ 23.4	+ 25.5	7.0
11	29.58	29.67	29.82	+ 16.0	+ 15.4	+ 13.0	+ 26.0	+ 16.0	+ 18.0	+ 18.0	+ 13.0	+ 19.5	13.0
12	29.92	30.00	30.08	+ 11.0	+ 10.4	+ 15.4	+ 13.0	+ 10.0	+ 14.0	+ 24.0	+ 10.0	+ 17.0	14.0
13	30.00	29.97	29.82	+ 15.4	+ 20.0	+ 30.0	+ 15.4	+ 10.0	+ 20.0	+ 30.0	+ 15.4	+ 20.0	20.0
14	29.66	29.62	29.46	+ 31.0	+ 31.0	+ 30.0	+ 31.0	+ 29.1	+ 31.4	+ 31.4	+ 30.0	+ 30.2	2.3
15	29.28	29.31	29.28	+ 33.0	+ 33.0	+ 33.0	+ 33.0	+ 29.0	+ 33.4	+ 34.0	+ 30.0	+ 31.5	5.0
16	29.18	29.19	29.24	+ 33.0	+ 36.0	+ 33.5	+ 35.0	+ 31.0	+ 37.0	+ 38.8	+ 32.0	+ 34.9	7.8
17	29.34	29.46	29.53	+ 20.4	+ 18.4	+ 13.0	+ 33.9	+ 20.0	+ 20.4	+ 20.4	+ 12.6	+ 23.2	21.3
18	29.54	29.57	29.60	+ 11.5	+ 11.5	+ 11.0	+ 13.0	+ 10.0	+ 13.2	+ 14.0	+ 10.0	+ 12.0	4.0
19	29.44	29.50	29.47	+ 15.0	+ 21.1	+ 24.0	+ 15.0	+ 10.2	+ 22.1	+ 25.8	+ 14.0	+ 18.0	15.6
20	29.40	29.51	29.59	+ 25.0	+ 26.5	+ 28.5	+ 28.5	+ 24.0	+ 26.6	+ 29.0	+ 25.0	+ 26.5	5.0
21	29.32	29.61	29.68	+ 28.0	+ 28.5	+ 27.0	+ 28.9	+ 25.2	+ 28.6	+ 29.0	+ 26.2	+ 27.1	3.8
22	29.68	29.71	29.70	+ 29.0	+ 28.5	+ 24.0	+ 29.0	+ 26.0	+ 29.0	+ 29.8	+ 24.0	+ 26.9	5.8
23	29.66	29.69	29.74	+ 22.5	+ 24.5	+ 24.0	+ 24.0	+ 21.0	+ 25.0	+ 26.1	+ 22.0	+ 23.6	5.1
24	29.69	29.78	29.81	+ 24.0	+ 24.0	+ 20.0	+ 24.0	+ 21.0	+ 25.0	+ 25.1	+ 20.0	+ 22.6	5.1
25	29.79	29.87	29.88	+ 17.0	+ 22.0	+ 18.8	+ 20.0	+ 16.0	+ 22.0	+ 25.1	+ 17.0	+ 20.6	9.1
26	29.88	29.92	29.97	+ 21.0	+ 21.5	+ 20.0	+ 23.0	+ 15.0	+ 25.0	+ 34.1	+ 20.0	+ 24.6	19.1
27	29.92	29.97	29.95	+ 25.0	+ 25.1	+ 25.0	+ 25.0	+ 17.1	+ 27.1	+ 35.0	+ 24.6	+ 26.0	17.9
28	29.91	29.96	29.98	+ 22.0	+ 20.4	+ 20.0	+ 25.1	+ 19.5	+ 22.5	+ 22.5	+ 19.0	+ 22.0	6.1
29	29.97	30.01	30.00	+ 22.0	+ 23.0	+ 24.0	+ 22.0	+ 18.0	+ 23.0	+ 24.0	+ 20.0	+ 21.0	6.0
30	29.95	29.93	29.89	+ 26.0	+ 26.0	+ 27.0	+ 28.0	+ 23.1	+ 26.4	+ 32.2	+ 24.1	+ 27.6	9.1
31	29.95	29.96	30.08	+ 24.0	+ 28.0	+ 27.0	+ 27.8	+ 23.8	+ 28.8	+ 35.0	+ 23.8	+ 29.4	11.2
Sum....	917.88	919.32	919.72	+718.3	+747.6	+740.7	+791.4	+633.1	+786.3	+878.7	+648.8	+756.7	304.5
Mean...	29.61	29.66	29.67	+ 23.2	+ 24.1	+ 23.9	+ 25.5	+ 20.4	+ 25.4	+ 28.3	+ 20.9	+ 24.4	9.8

Tabulation of daily meteorological observations at Cape Flora during the month of May, 1905—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind					
								8h		12h		20h	
	8h	12h	20h	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	.00	.00	.00	...	.. ..	.. ..	E	190	E	78	ESE	197
2	.25	.04	.04	.33	S^m	D. N.	21 29	ESE	300	E	73	ENE	112
3	.01	T	.08	.09	S^m S^m	10 30 14 00	10 45 19 00	ESE	167	ESE	47	SE	51
4	.00	.00	.00	.00	...	.. ..	.. ..	W	143	W	31	NW	...
5	.04	T	.00	.04	S^d S^d	D. N. 10 00	D. N. 11 00	SW	37	N	100	NW	134
6	.00	.00	.00	.00	...	.. ..	.. ..	NW	195	NW	49	NW	94
7	.00	.03	.01	.04	S^m	10 26	13 30	C	42	SSE	18	E	87
8	.00	.00	.08	.08	S^m	14 30	.. ..	E	367	E	103	E	189
9	.10	.02	.02	.14	S^m	.. ..	10 35	C	148	SW	38	SW	90
10	.00	.00	.00	.00	...	.. ..	.. ..	ENE	80	E	31	C	28
11	.00	.00	.00	.00	...	.. ..	.. ..	NE	129	NE	103	NE	140
12	.00	.00	.00	.00	...	.. ..	.. ..	N	189	N	59	C	13
13	T	T	.04	.04	S^d S^m	D. N. 11 00	D. N.	SSE	44	SE	28	SSW	78
14	.02	T	.00	.02	S^m	.. ..	9 10	SSE	80	SE	23	SSE	96
15	.00	.00	.01	.01	S^m S^m	14 20 18 26	14 40 D. N.	SSW	100	SW	41	SSW	50
16	.02	.00	.00	.02	...	.. ..	.. ..	C	30	C	4	C	11
17	.00	T	.00	T	S^d S^d S^d	8 40 12 14 21 45	10 35 12 30 D. N.	NW	115	NW	62	NW	151
18	.02	.00	.00	.02	...	.. ..	.. ..	NW	251	NW	95	NW	159
19	.00	.02	.08	.10	S^d	10 00	17 00	NE	235	W	106	SSE	115
20	.30	.04	.00	.34	S^m	D. N.	10 30	E	196	E	130	ENE	224
21	.00	.00	.00	.00	...	.. ..	.. ..	E	295	E	89	ENE	176
22	.00	.00	.00	.00	...	.. ..	.. ..	NE	191	ENE	65	NE	128
23	.08	T	.06	.14	S^d S^d	D. N. 15 00	8 30 22 00	NE	206	NE	64	NE	111
24	.04	.02	.00	.06	S^d S^d	10 20 22 35	11 30 22 50	ENE	220	ENE	58	NW	89
25	T	.00	.00	T	...	.. ..	.. ..	NW	115	NE	56	NW	161
26	.00	.00	.00	.00	...	.. ..	.. ..	NW	245	NE	36	N	60
27	.00	.00	.00	.00	...	.. ..	.. ..	N	82	N	29	N	35
28	.00	.00	T	T	S^d S^d	14 13 19 10	14 23 21 40	NW	108	NW	55	NW	76
29	T	T	.00	T	S^d	7 30	9 10	W	85	WSW	33	WSW	73
30	.00	T	.04	.04	S^d	11 00	15 10	E	50	E	55	W	106
31	.00	.00	T	T	S^d	16 15	17 30	W	133	NW	39	SW	50
Sum.....	.88	.17	.46	1.51	...	.. ..	.. ..	...	4768	...	1798	...	3084
Mean.....	...	...	...	...	...	.. ..	.. ..	NW	153.8	E	58.0	NW	102.8

Tabulation of daily meteorological observations at Cape Flora during the month of May, 1905—Continued

Observer: FRANCIS LONG

Date	Clouds									Av. daily cloudiness	Remarks
	8h			12h			20h				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	10	S	E	10	S	E	10	S	ESE	10	
2	10	N	ESE	10	N	...	10	N*	...	10	Fog from 15:10.
3	10	S	ESE	...	**	...	10	S*	...	10	Generally foggy.
4	10	S	W	2 1	(A-Cu). S-Cu	N W	10	S	...	10	Fog to 4:00.
5	3 5	S-Cu S	NE NE	5 Few	(A-Cu) S	N N	2	S-Cu	NW	5	
6	2	S-Cu	NW	Few	S-Cu	NW	Few	S-Cu	NW	1	Very fine weather.
7	10	S	...	10	N	SSE	10	S-Cu	NW	10	
8	10	S	E	2 2 4	(A-Cu) A-S S-Cu	E E E	10	N	E	10	
9	10	N*	...	10	S	...	10	S	...	10	
10	10	S	...	10	S	E	10	S	...	10	Light winds.
11	10	S	NE	10	S	NE	10	S	NE	10	Drifting snow 4:35 to 15:40.
12	Few	S-Cu	N	Few	S-Cu	N	0	...	...	0	
13	10	S	SSE	10	N*	SE	10	N*	SSW	10	Fog from 11:00.
14	10	N*	SSE	10	S*	SE	10	S	SSE	10	Fog from 14:40.
15	10	S	...	10	S	SW	10	N*	SSW	10	
16	4 3	(A-Cu) S-Cu	W W	4 4	(A-Cu) S-Cu	SE SE	4 5	(A-S) S	... ...	8	
17	10	S	NW	4 4	S-Cu S	NW NW	4 4	(A-Cu) S-Cu	NW NW	8	Snow drifting during P. M.
18	3 3	(A-Cu) S-Cu	W NW	3 3	(A-Cu) S-Cu	NW NW	2 Few	(A-Cu) S-Cu	NW NW	4	Open water south and southwest 8:00 to 24:00.
19	5 5	(A-S) S	NE NE	10	N	W	10	S	SSE	10	Open water south and southwest.
20	10	N	E	10	S	E	2 2 3	(Cl-Cu) S-Cu S	NE NE NE	8	Open water south and southwest.
21	3 6	S-Cu S	E E	3 7	S-Cu S	E E	3 6	S-Cu S	E E	9	Open water southeast, south, and southwest.
22	2 3 Few	(Cl-Cu) S-Cu S	NE NE NE	2 3 Few	(Cl-Cu) S-Cu S	NE NE NE	10	S	NE	6	Open water south and southeast.
23	10	N	NE	2 3 1	(Cl-Cu) S-Cu S	NE NE NE	10	N	NE	8	Open water southeast to south to southwest off island.
24	2 3 Few	(Cl-S) S-Cu S	NE ENE E	10	S	ENE	10	S	NW	8	Open water south and southwest; drifting 10:30 to 12:15.
25	2 3	(Cl-Cu) S-Cu	NW NW	2 Few	(Cl-Cu) S-Cu	NE NE	2 1	(Cl-Cu) S-Cu	NW NW	5	
26	2 2 Few	(Cl-S) (Cl-Cu) S	NW NW NW	3 2	(Cl-S) Cl-Cu	NE NE	2 1 2	(Cl-S) (Cl-Cu) S	N N N	5	
27	1	Cl-S	N	Few	(Cl-S)	N	2 2	A-Cu S-Cu	N N	2	
28	10	S	NW	10	S	NW	10	N	NW	10	
29	10	N	W	10	S	W	10	S	WSW	10	
30	10	S	E	10	N	E	3 6	S-Cu S	N N	10	
31	2 3 1	(A-Cu) S-Cu S	W W W	0	...	...	4 4	S-Cu S	SW SW	5	
Sum....	248	...	...	216	...	...	246	...	...	242	
Mean...	8.0	...	...	7.2	...	...	7.9	...	...	7.8	

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	30.07	30.08	30.08	+ 26.2	...	+ 32.4	+ 28.8	+ 22.0	...	+ 35.0	+ 23.0	+ 28.5	13.0
2	30.02	30.02	30.00	+ 29.2	...	+ 27.8	+ 32.4	+ 27.0	...	+ 29.4	+ 27.0	+ 29.7	5.4
3	29.90	29.92	29.92	+ 26.5	...	+ 28.0	+ 27.4	+ 25.0	...	+ 32.0	+ 26.5	+ 28.5	7.0
4	29.94	29.98	30.01	+ 30.0	...	+ 30.0	+ 31.0	+ 27.0	...	+ 37.0	+ 29.0	+ 32.0	10.0
5	29.98	30.00	30.00	+ 26.5	...	+ 27.4	+ 30.0	+ 26.1	...	+ 29.0	+ 26.0	+ 28.0	4.0
6	29.94	29.96	29.96	+ 29.0	...	+ 29.2	+ 29.9	+ 26.5	...	+ 34.8	+ 28.2	+ 30.6	8.3
7	29.93	29.91	29.95	+ 29.0	...	+ 28.5	+ 30.0	+ 28.0	...	+ 33.0	+ 27.1	+ 30.0	5.9
8	29.91	...	29.92	+ 28.1	...	+ 26.0	+ 30.0	+ 27.2	...	+ 33.0	+ 26.0	+ 29.5	7.0
9	29.82	...	29.82	+ 26.5	...	+ 26.0	+ 27.9	+ 25.0	...	+ 29.0	+ 25.0	+ 27.0	4.0
10	29.78	...	29.62	+ 27.0	...	+ 26.0	+ 28.1	+ 23.9	...	+ 27.0	+ 24.0	+ 26.0	4.2
11	29.41	...	29.18	+ 34.0	...	+ 33.8	+ 34.0	+ 24.0	...	+ 35.0	+ 33.0	+ 29.5	11.0
12	29.27	...	29.38	+ 34.0	...	+ 33.0	+ 34.0	+ 32.0	...	+ 34.0	+ 32.0	+ 33.0	2.0
13	29.39	...	29.67	+ 32.0	...	+ 32.2	+ 33.0	+ 31.2	...	+ 37.0	+ 32.0	+ 34.1	5.9
14	29.85	...	29.92	+ 32.0	...	+ 32.2	+ 33.0	+ 27.1	...	+ 39.0	+ 30.0	+ 33.0	11.9
15	29.74	...	29.54	+ 34.0	...	+ 33.8	+ 34.0	+ 30.0	...	+ 35.0	+ 32.0	+ 32.5	5.0
16	29.42	...	29.52	+ 31.1	...	+ 30.4	+ 33.8	+ 30.0	...	+ 33.0	+ 29.0	+ 31.4	4.8
17	29.48	...	29.46	+ 27.5	...	+ 29.0	+ 30.4	+ 26.2	...	+ 30.0	+ 27.0	+ 28.3	4.2
18	29.15	...	29.16	+ 28.5	...	+ 30.0	+ 28.5	+ 26.2	...	+ 32.0	+ 28.5	+ 29.1	5.8
19	29.24	...	29.36	+ 28.9	...	+ 29.0	+ 30.0	+ 26.6	...	+ 32.0	+ 28.0	+ 29.3	5.4
20	29.28	...	29.30	+ 33.0	...	+ 32.0	+ 33.0	+ 27.8	...	+ 33.0	+ 30.0	+ 30.4	5.2
21	29.28	...	29.34	+ 32.0	...	+ 32.0	+ 32.0	+ 30.0	...	+ 36.1	+ 30.0	+ 33.0	6.1
22	29.22	...	29.33	+ 31.5	...	+ 32.0	+ 32.0	+ 30.0	...	+ 37.3	+ 30.0	+ 33.6	7.3
23	29.36	...	29.40	+ 28.0	...	+ 29.0	+ 33.0	+ 26.0	...	+ 31.0	+ 27.0	+ 29.5	7.0
24	29.34	...	29.38	+ 33.0	...	+ 31.0	+ 33.6	+ 28.0	...	+ 35.0	+ 30.0	+ 31.5	7.0
25	29.48	...	29.54	+ 32.0	...	+ 34.0	+ 32.5	+ 28.8	...	+ 42.0	+ 32.0	+ 35.4	13.2
26	29.52	...	29.56	+ 32.4	...	+ 33.5	+ 35.0	+ 31.2	...	+ 34.0	+ 31.0	+ 33.0	4.0
27	29.56	...	29.68	+ 32.0	...	+ 30.0	+ 33.5	+ 27.2	...	+ 35.0	+ 30.0	+ 31.1	7.8
28	29.76	...	29.94	+ 32.5	...	+ 31.0	+ 32.5	+ 30.1	...	+ 34.6	+ 30.0	+ 32.3	4.6
29	30.00	...	30.10	+ 31.0	...	+ 30.0	+ 32.4	+ 29.0	...	+ 32.0	+ 29.0	+ 30.7	3.4
30	30.14	...	30.18	+ 31.0	...	+ 33.0	+ 31.0	+ 29.0	...	+ 33.0	+ 29.0	+ 31.0	4.0
Sum....	889.18	...	890.22	+908.4	...	+912.2	+946.7	+828.1	...	+1009.2	+861.3	+921.5	194.4
Mean...	29.64	...	29.67	+ 30.3	...	+ 30.4	+ 31.6	+ 27.6	...	+ 33.6	+ 28.7	+ 30.7	6.5

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1905—Continued

Observer: FRANCIS LONG

DATE	PRECIPITATION							WIND					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.00	...	.00	.00	...	.. ..	.. ..	SW	85	...	...	C	119
2	.00	...	T	T	S^d S^d	19 05 21 50	20 10 22 40	SW	11	...	...	SSW	95
3	T	...	.04	.04	S^m S^m	8 30 16 00	12 10	S	62	...	...	S	64
4	.03	...	.00	.03	S^m	.. ..	7 05	C	37	...	...	E	40
5	.00	...	.00	.00	...	.. ..	.. ..	ESE	117	...	...	E	127
6	T	...	T	T	S^d S^d R	4 10 6 45 14 00	4 20 7 10 14 10	E	66	...	...	E	51
7	.00	...	.00	.00	...	.. ..	.. ..	N	16	...	...	NE	115
8	.00	...	.01	.01	H	18 00	18 40	N	15	...	...	NE	85
9	.00	...	.00	.00	...	.. ..	.. ..	NW	95	...	...	NW	139
10	.00	...	.01	.01	S^d	18 40	.. ..	SW	89	...	...	SE	106
11	.05	...	.02	.07	S^d S^m S^m	.. .. 2 50 15 27	0 50 10 45 16 27	SE	172	...	...	SW	74
12	.01	...	.00	.01	H S^m	3 03 3 30	3 30 4 10	SSW	118	...	...	SW	102
13	.01	...	.01	.02	S^m S^d	3 00 12 30	6 40 13 30	SW	57	...	...	W	101
14	.00	...	.00	.00	...	.. ..	.. ..	W	115	...	...	SW	107
15	.00	...	.00	.00	...	.. ..	.. ..	W	82	...	...	W	112
16	.05	...	.04	.09	S^d S^d S^d	1 00 7 30 20 15	4 12 14 00 23 44	W	184	...	...	WNW	292
17	.02	...	.01	.03	S^d S^d	4 04 10 30	4 30 11 30	W	262	...	...	W	256
18	.30	...	.40	.70	S^d	3 10	18 00	W	251	...	...	WNW	222
19	.00	...	.00	.00	...	.. ..	.. ..	N	241	...	...	N	192
20	.00	...	.01	.01	S^d	16 00	20 10	WNW	203	...	...	W	300
21	T	...	.00	T	S^m S^m	3 50 7 15	4 10 7 56	W	247	...	...	WSW	198
22	.01	...	.01	.02	S^d S^d	2 40 6 55	3 30 9 40	WSW	127	...	...	NW	139
23	.01	...	.00	.01	S^d	0 30	3 40	NW	204	...	...	NW	145
24	.00	...	T	T	S^m	9 09	10 00	NW	102	...	...	N	72
25	.00	...	.00	.00	S^m	21 30	23 20	NW	81	...	...	SW	65
26	.01	...	.00	.01	...	.. ..	.. ..	NW	49	...	...	WNW	77
27	.00	...	T	T	S^m S^m	11 00 22 30	0 30 23 00	ENE	53	...	...	E	45
28	T	...	.00	T	...	.. ..	.. ..	ENE	52	...	...	C	33
29	.00	...	.00	.00	...	.. ..	.. ..	C	10	...	...	W	35
30	.00	...	.00	.00	S^m	22 00	23 30	W	51	...	...	W	62
Sum.....	.50	...	.56	1.06	...	.. ..	.. ..	...	3254	...	...	...	3570
Mean.....	...	...	...	...	...	.. ..	.. ..	W	108.5	...	...	W	119.0

Tabulation of daily meteorological observations at Cape Flora during the month of June, 1905—Continued

Observer: FRANCIS LONG

DATE	CLOUDS									Av. daily cloudiness	REMARKS
	8H			12H			20H				
	Amount	Character	Dir. from	Amount	Character	Dir. from	Amount	Character	Dir. from		
1	10	S	SW	...	...	...	Few 1 2	(Ci-S) (Ci-Cu) S	W W W	5	
2	3 6	S-Cu S	SW SW	...	...	...	10	N	SSW	9	
3	10	S	S	...	...	...	10	N	S	10	
4	10	S	...	...	...	...	8	S	E	9	Fog 1:00 to 2:00 and 3:00 to 3:20.
5	10	S	ESE	...	...	...	10	S	E	10	
6	10	S	...	...	...	...	10	S	E	10	
7	10	S	...	...	...	...	4 5	(A-S) S	N N	9	
8	2 2 3 1	(Ci-Cu) (Cu) (A-S) S	E E E E	...	...	...	10	S	E	10	Hail 18:00 to 18:40.
9	10	S	NW	...	...	...	10	S	NW	10	
10	6 2	(A-S) S-Cu	... W	...	...	...	10	N*	SE	10	Fog from 16:30.
11	10	S	SE	...	...	...	10	N	SW	10	Fog to 6:30 and 8:30 to 21:00.
12	10	S*	SSW	...	...	...	10	S	SW	10	Hail 3:03 to 3:30; fog 2:00 to 11:00.
13	2 7	(A-Cu) S	SW SW	...	...	...	3 5	S-Cu S	W W	8	Fog 3:00 to 6:30.
14	3 1 2	(Ci-S) (Ci-Cu) S-Cu	W W W	...	...	...	10	S	SW	9	
15	...	**	...	...	...	...	10	S	W	10	Generally foggy.
16	10	N	W	...	...	...	10	S	NW	10	Fog 1:00 to 3:20, 10:20 to 11:30, and 22:40 to 23:15.
17	3 5	S-Cu S	W W	...	...	...	10	S	W	8	
18	10	N	W	...	...	...	10	S	W	10	Heavy snow 3:10 to 5:15.
19	3 6	S-Cu S	N N	...	...	...	4 4	S-Cu S	N N	8	
20	4 4	S-Cu S	W W	...	...	...	10	N	W	8	
21	3 6	S-Cu S	W W	...	...	...	10	S	SW	10	
22	10	N	WSW	...	...	...	2 2 1	(Ci-Cu) S-Cu S	NW NW NW	7	Fog 8:30 to 9:00.
23	10	S	NW	...	...	...	3 5	S-Cu S	NW NW	8	
24	4 5	(A-S) S	NW NW	...	...	...	4 3	(A-Cu) S	N N	8	
25	10	S	NW	...	...	...	...	**	...	7	Fog 3:30 to 22:30.
26	10	S	NW	...	...	...	2 3	(A-Cu) S-Cu	N NW	8	Winds very light.
27	10	S	ENE	...	...	...	10	S	E	10	Fog 2:00 to 3:15.
28	10	S	...	...	...	...	10	S	...	10	Light winds.
29	10	S	...	...	...	...	10	S*	...	10	Fog 11:00 to 21:00.
30	10	S	W	...	...	...	10	S	...	10	Light west winds.
Sum....	273	...	...	...	...	...	261	...	...	271	
Mean...	9.4	...	...	...	...	...	9.0	...	...	9.0	

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1905

Observer: FRANCIS LONG

DATE	ANEROID BAROMETER			READING OF FAHRENHEIT THERMOMETER			SELF-REGISTERING FAHRENHEIT THERMOMETERS						
							8H		12H	20H		Mean of extremes	Range
	8H	12H	20H	8H	12H	20H	Max.	Min.	Max.	Max.	Min.		
	In.	*In.*	*In.*	°	°	°	°	°	°	°	°	°	°
1	30.14	...	30.12	+ 30.0	...	+ 30.2	+ 33.0	+ 28.0	...	+ 32.8	+ 28.0	+ 30.5	5.0
2	30.04	...	30.00	+ 32.0	...	+ 33.0	+ 32.0	+ 29.1	...	+ 35.6	+ 30.0	+ 32.4	6.5
3	29.84	...	29.83c	+ 34.0	...	+ 33.5	+ 34.0	+ 32.0	...	+ 35.0	+ 32.0	+ 33.5	3.0
4	29.76	...	29.78	+ 33.5	...	+ 33.0	+ 34.8	+ 30.2	...	+ 37.8	+ 30.0	+ 33.9	7.8
5	29.67	...	29.46	+ 33.0	...	+ 34.0	+ 33.0	+ 30.0	...	+ 34.0	+ 32.0	+ 32.0	4.0
6	29.71	...	29.84	+ 34.0	...	+ 33.3	+ 34.0	+ 33.0	...	+ 35.6	+ 32.0	+ 33.8	3.6
7	29.89	...	29.90	+ 30.0	...	+ 35.2	+ 33.3	+ 28.0	...	+ 40.6	+ 30.0	+ 34.3	12.6
8	29.85	...	29.76	+ 40.5	...	+ 37.4	+ 40.5	+ 34.0	...	+ 50.4	+ 37.4	+ 42.2	16.4
9	29.83	...	29.94	+ 41.0	...	+ 37.0	+ 41.0	+ 36.0	...	+ 48.9	+ 37.0	+ 42.4	12.9
10	30.00	...	29.98	+ 42.0	...	+ 34.0	+ 45.0	+ 36.0	...	+ 43.2	+ 34.0	+ 39.5	11.0
11	29.90	...	29.92	+ 34.0	...	+ 34.6	+ 37.0	+ 31.0	...	+ 40.0	+ 32.0	+ 35.5	9.0
12	29.86	...	29.95	+ 36.0	...	+ 34.0	+ 36.8	+ 34.0	...	+ 36.0	+ 33.0	+ 34.9	3.8
13	29.93	...	29.95	+ 35.0	...	+ 37.0	+ 35.0	+ 33.0	...	+ 38.6	+ 34.0	+ 35.8	5.6
14	29.82	...	29.84	+ 36.0	...	+ 33.6	+ 38.0	+ 34.5	...	+ 36.8	+ 33.0	+ 35.5	5.0
15	29.98	...	29.96	+ 33.0	...	+ 30.0	+ 33.8	+ 31.0	...	+ 38.0	+ 29.1	+ 33.6	8.9
16	29.95	...	30.00	+ 30.0	...	+ 33.0	+ 30.0	+ 26.0	...	+ 35.0	+ 29.0	+ 30.5	9.0
17	30.03	...	30.10	+ 34.0	...	+ 33.5	+ 34.0	+ 29.0	...	+ 35.0	+ 32.0	+ 32.0	6.0
18	30.06	...	30.06	+ 34.0	...	+ 31.0	+ 34.0	+ 31.0	...	+ 41.0	+ 30.0	+ 35.5	11.0
19	29.97	...	29.96	+ 30.0	...	+ 33.0	+ 31.0	+ 27.0	...	+ 35.6	+ 29.0	+ 31.3	8.6
20	29.98	...	30.04	+ 34.0	...	+ 32.4	+ 36.0	+ 31.0	...	+ 36.0	+ 29.0	+ 32.5	7.0
21	29.98	...	29.87	+ 34.0	...	+ 33.0	+ 34.0	+ 30.0	...	+ 34.4	+ 32.0	+ 32.2	4.4
22	29.75	...	29.74	+ 34.0	...	+ 34.0	+ 34.0	+ 33.0	...	+ 36.4	+ 33.6	+ 34.7	3.4
23	29.58	...	29.82	+ 35.0	...	+ 33.5	+ 35.4	+ 33.2	...	+ 36.9	+ 33.0	+ 35.0	3.7
24	29.96	...	29.84	+ 31.0	...	+ 30.0	+ 33.5	+ 30.0	...	+ 41.0	+ 30.0	+ 35.5	11.0
25	29.60	...	29.87	+ 34.9	...	+ 35.0	+ 35.0	+ 30.0	...	+ 37.6	+ 32.0	+ 33.8	7.6
26	29.90	...	30.00	+ 35.9	...	+ 31.0	+ 36.8	+ 34.0	...	+ 35.9	+ 30.0	+ 33.4	6.8
27	29.94	...	29.99	+ 32.0	...	+ 36.9	+ 32.0	+ 27.0	...	+ 42.2	+ 32.0	+ 39.6	15.2
28	29.88	...	29.94	+ 33.0	...	+ 33.0	+ 37.0	+ 32.0	...	+ 37.9	+ 32.1	+ 35.0	5.9
29	29.92	...	30.02	+ 33.0	...	+ 34.0	+ 33.5	+ 32.0	...	+ 36.9	+ 32.0	+ 34.4	4.9
30	30.01	...	...	+ 35.0	...	...	+ 36.5	+ 29.0	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum....	896.73	...	867.48	+1023.8	...	+973.1	+1053.9	+934.0	...	+1105.1	+919.2	+1005.2	219.6
Mean...	29.89	...	29.91	+ 34.1	...	+ 33.6	+ 35.1	+ 31.1	...	+ 38.1	+ 31.7	+ 34.7	7.6

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1905—Continued

Observer: FRANCIS LONG

Date	Precipitation							Wind					
								8H		12H		20H	
	8H	12H	20H	Total	Character	Beginning	Ending	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.	Direction	Wind mov. since last obs.
	In.	*In.*	*In.*	*In.*		*h m*	*h m*		*Mi.*		*Mi.*		*Mi.*
1	.01	...	.02	.03	Sm	9 00	11 10	C	86	...	...	S	60
2	T	...	.02	.02	Sm Sm Sm	7 00 11 30 20 40	8 50 13 35	SSW	92	...	...	S	77
3	.02	...	.09	.11	Sm R Sm	.. .. 8 45 11 00	6 00 11 00 15 00	E	68	...	...	S	26
4	.00	...	.02	.02	Sm	15 00	16 30	SE	13	...	...	SW	33
5	.16	...	.30	.46	Sm Sm R	D. N. 14 45 16 00	D. N. 16 00 20 30	ESE	73	...	...	E	284
6	.01	...	.02	.03	Sm R	11 30 19 00	16 15 20 50	W	76	...	...	E	89
7	T	...	.00	T	...	.. ..	.. ..	C	134	...	...	C	35
8	.00	...	.00	.00	...	.. ..	.. ..	C	8	...	...	N	63
9	.00	...	.00	.00	...	.. ..	.. ..	C	62	...	...	N	81
10	.00	...	.00	.00	...	.. ..	.. ..	C	76	...	...	E	118
11	.00	...	.00	.00	...	.. ..	.. ..	E	314	...	...	E	237
12	.02	...	.01	.03	R R	3 00 8 48	4 30 9 30	E	54	...	...	E	112
13	.00	...	.00	.00	...	.. ..	.. ..	C	28	...	...	C	12
14	.00	...	.00	.00	...	.. ..	.. ..	C	8	...	...	NW	68
15	.00	...	.00	.00	...	.. ..	.. ..	NW	135	...	...	W	112
16	T	...	T	T	Sm	7 30	8 40	W	31	...	...	W	62
17	.00	...	.00	.00	...	.. ..	.. ..	C	39	...	...	W	18
18	.00	...	.00	.00	Sm	23 00	.. ..	C	37	...	...	W	27
19	T	...	T	T	Sm Sm	.. .. 10 15	1 10 10 35	W	98	...	...	WNW	170
20	.00	...	.00	.00	Sm	0 30	14 10	W	122	...	...	W	150
21	.00	...	.08	.08	R	15 45	20 50	W	128	...	...	C	50
22	.25	...	.04	.29	R R	3 00 6 00	9 50	NW	60	...	...	N	68
23	.58	...	.01	.59	R	.. ..	9 00	W	92	...	...	W	136
24	.00	...	.00	.00	R	22 25	.. ..	W	111	...	...	E	88
25	.08	...	.00	.08	R	.. ..	D. N.	NE	135	...	...	WNW	107
26	.00	...	.00	.00	...	.. ..	.. ..	C	53	...	...	SE	26
27	.00	...	.00	.00	...	.. ..	.. ..	E	96	...	...	E	151
28	.15	...	.01	.16	R	2 00	8 50	SE	249	...	...	SE	104
29	.00	...	.00	.00	...	.. ..	.. ..	SE	117	...	...	C	84
30	.00	...	...	...	...	.. ..	.. ..	SE	7	...	...	...	...
31	...	...	...	...	...	.. ..	.. ..	...	...	...	...	...	...
Sum.....	1.28	...	0.62	1.90	...	.. ..	.. ..	....	2602	...	...	...	2648
Mean.....	...	...	...	...	...	.. ..	.. ..	C	86.7	...	...	E	91.3

Tabulation of daily meteorological observations at Cape Flora during the month of July, 1905—Continued

Observer: FRANCIS LONG

Date	Clouds 8h Amount	8h Character	8h Dir. from	12h Amount	12h Character	12h Dir. from	20h Amount	20h Character	20h Dir. from	Av. daily cloudiness	Remarks
1	10	N*	...	...	...	...	10	S	S	10	Fog 7:00 to 15:00.
2	10	N	SSW	...	...	...	10	S	S	10	Light south to southwest winds.
3	10	S*	...	...	...	...	...	**	...	10	Generally foggy.
4	10	S	...	...	...	...	...	**	...	10	Fog from 11:00.
5	10	S	ESE	...	...	...	10	N*	E	10	Fog from 10:00.
6	3 4	(A-Cu) S*	W W	...	...	...	10	N**	...	7	Fog 9:30 to 11:00, 16:00 to 17:30, and 5:30 to 24:00.
7	Few Few 8	(Ci-S) (A-Cu) S	... N ...	...	...	...	4 4	(A-Cu) S	E ...	8	Fog 7:00 to 13:30.
8	2 1 2 Few	(Ci-S) (Ci-Cu) (A-S) S	E E E ...	...	...	...	Few Few 2	(Ci-S) (Ci-Cu) S-Cu	N N N	2	
9	0	...	...	...	...	...	Few	(A-Cu)*	N	1	Fog 18:30 to 22:00.
10	Few	(Ci-S)	N	...	...	...	10	S*	E	6	Fog from 10:00.
11	...	*	...	...	...	...	10	S	E	7	Fog to 15:40.
12	10	S	E	...	...	...	...	**	...	10	Fog from 15:40.
13	10	S*	...	...	...	...	10	S	...	10	Fog to 14:30.
14	10	S*	...	...	...	...	10	S	W	8	Fog to 14:00.
15	10	S	NW	...	...	...	...	**	...	10	Dense fog from 5:30.
16	10	N*	...	...	...	...	10	S	...	10	Dense fog to 8:40.
17	10	S	...	...	...	...	4 4	S-Cu S	W W	10	Light winds.
18	2 Few Few	(Ci) S-Cu S	N N N	...	...	...	10	S	W	4	Fog 20:30 to 21:15.
19	10	S	W	...	...	...	2 3 3	(Ci-S) S-Cu S	NW NW NW	9	
20	3 6	S-Cu S	W W	...	...	...	10	S	W	8	Fog to south all day.
21	10	S	W	...	...	...	10	N*	...	10	Foggy; light variable winds.
22	10	N**	...	...	...	...	10	N**	...	10	Generally foggy.
23	10	N**	W	...	...	...	10	S	W	8	Fog to 13:20 and 16:30 to 16:50.
24	...	**	...	...	...	...	10	S*	E	6	Fog from 5:00.
25	10	N*	...	...	...	...	4 3	S-Cu S	NW WNW	8	Fog to 18:00.
26	10	S*	...	...	...	...	...	**	...	10	Fog from 2:00.
27	10	S*	E	...	...	...	3 1	(A-Cu) S	E E	2	Fog to 10:00.
28	10	N*	SE	...	...	...	...	**	...	7	Fog 8:00 to 19:30.
29	...	**	...	...	...	...	...	**	...	10	Fog all day.
30	0	...	...	...	...	...	...	...	...	...	Dense fog A. M.
31	...	...	...	...	...	...	...	...	...	...	
Sum....	221	...	...	...	...	...	187	...	...	231	
Mean...	8.2	...	...	...	...	...	8.5	...	...	8.0	

* Light fog. ** Dense fog.

Cloud characters enclosed in parentheses, thus (Ci-Cu), refer to upper clouds, all other references being to lower clouds.

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METEOROLOGICAL OBSERVATIONS

TABULATION OF DAILY WIND RECORDS

REGISTERED AT

TEPLITZ BAY STATION, RUDOLPH ISLAND

FRANZ JOSEF ARCHIPELAGO

SEPTEMBER 1, 1903, TO MAY 26, 1905

NORTH LATITUDE: 81° 47.'6

LONGITUDE EAST OF GREENWICH: 57° 56'

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Tabulation of hourly wind records at Teplitz Bay during the month of September, 1903

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	9	13	11	10	9	8	20	17	23	26	27	21	18	14	12	11	6	21	11	10	15	18	18	13	361
2	22	25	13	8	10	19	17	26	32	28	41	43	32	28	31	36	32	35	38	51	51	41	36	34	729
3	32	29	25	27	23	24	27	29	22	23	26	27	28	25	19	22	22	21	21	19	15	17	16	9	548
4	7	7	8	9	6	6	6	4	7	10	12	13	15	12	9	8	9	7	5	7	7	6	5	11	196
5	14	14	14	18	17	12	11	12	16	13	11	14	18	14	16	12	10	12	14	14	15	17	22	19	349
6	26	28	28	22	17	14	10	7	6	13	15	14	17	14	20	18	15	12	28	28	18	24	23	18	435
7	15	24	28	22	16	13	12	13	12	4	5	4	5	4	4	5	7	10	11	9	6	10	10	11	260
8	11	10	8	6	10	10	8	12	12	16	15	17	16	16	15	15	11	13	12	15	11	14	9	11	293
9	11	11	10	7	6	5	3	5	5	3	3	4	4	4	4	4	4	6	9	6	7	8	9	10	148
10	11	9	6	4	4	3	3	3	3	5	5	5	3	2	3	4	4	3	3	5	7	8	5	3	111
11	2	4	8	6	6	7	7	7	8	8	7	18	18	13	13	10	8	13	13	20	17	21	22	25	281
12	20	18	17	13	15	14	17	21	18	25	24	24	23	19	11	8	13	13	12	15	14	12	13	15	394
13	16	16	13	10	10	5	4	3	2	12	15	12	8	11	12	15	19	20	19	18	16	15	14	13	298
14	14	14	13	15	14	13	13	12	11	13	12	15	11	10	9	8	8	7	6	6	3	3	2	2	234
15	2	3	1	2	2	3	2	2	2	2	2	2	3	4	4	4	7	5	7	7	8	8	7	7	96
16	10	15	15	15	12	12	12	15	21	19	20	14	12	12	12	10	8	8	7	6	8	9	10	11	293
17	12	11	11	12	11	5	5	3	1	2	2	1	2	9	18	21	22	19	12	10	10	10	8	9	226
18	8	8	5	2	2	1	3	5	5	5	5	6	4	4	2	7	10	14	4	6	11	9	4	2	132
19	3	5	5	6	4	4	3	5	4	3	4	5	6	5	7	7	10	12	12	14	15	18	14	14	185
20	11	13	11	12	14	15	11	12	14	17	23	22	19	15	15	17	17	17	16	13	2	2	3	1	312
21	3	8	12	8	18	18	21	30	32	34	31	16	12	20	24	18	20	15	17	22	29	27	19	8	462
22	6	8	9	8	7	4	4	7	5	..	..	..	2	9	2	4	5	2	2	2	3	2	1	0	92
23	1	0	3	2	1	0	0	2	4	6	8	7	7	10	11	12	16	11	10	10	10	8	7	13	159
24	8	8	3	2	1	1	4	3	1	2	3	9	5	4	17	13	19	16	13	10	7	7	11	17	184
25	8	10	6	9	19	27	17	15	13	14	22	25	22	22	18	16	14	13	11	13	13	12	9	20	368
26	23	23	21	19	11	15	18	16	11	20	16	9	8	9	12	22	42	41	30	23	27	26	27	32	501
27	34	35	31	32	25	26	29	23	23	16	27	39	26	12	6	5	4	23	27	32	28	30	27	23	583
28	17	9	8	4	9	6	5	10	6	3	4	1	6	5	6	5	5	5	3	3	5	7	7	8	147
29	7	7	7	8	6	4	5	5	5	2	1	2	3	4	4	3	7	5	4	9	8	5	6	4	121
30	4	2	16	26	21	14	11	21	9	10	14	16	9	9	34	39	39	39	38	42	42	40	38	30	563
Means	12.2	12.9	12.2	11.5	10.9	10.3	10.3	11.5	11.1	12.2	13.8	14.0	12.1	11.3	12.3	12.6	13.8	14.6	13.8	14.8	14.3	14.5	13.4	13.1	302.9

Total movement during month, 9061 miles; mean daily movement, 302.9 miles; average hourly movement, 12.6 miles

Tabulation of hourly wind records at Teplitz Bay during the month of October, 1903

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	23	22	25	30	41	50	47	50	44	13	24	29	28	28	24	22	20	17	14	16	15	15	15	8	620
2	6	8	9	16	16	21	23	23	16	18	18	22	12	21	21	5	2	7	4	6	8	5	7	5	299
3	3	2	2	3	3	13	13	20	26	17	23	22	21	16	15	11	7	6	4	4	4	3	2	2	242
4	2	1	1	1	2	1	2	5	10	14	4	4	4	4	3	6	5	2	1	2	3	1	1	5	84
5	6	5	4	6	5	6	6	15	13	6	4	4	3	6	7	6	8	8	7	8	9	12	13	13	180
6	13	15	15	17	27	29	29	32	33	37	37	37	33	36	36	35	35	31	28	33	34	29	23	15	689
7	13	15	12	8	9	10	8	7	6	5	5	5	7	6	7	8	10	12	9	14	19	22	3	7	227
8	3	1	2	6	13	6	2	1	1	2	1	2	3	3	3	2	1	2	6	3	2	2	2	2	71
9	1	2	2	4	4	3	2	2	2	1	2	2	1	1	1	3	2	2	1	0	2	3	3	3	49
10	3	2	3	4	3	6	5	10	9	11	21	29	29	31	26	6	4	5	4	4	3	6	3	7	234
11	4	8	10	18	15	19	9	13	15	21	22	15	15	19	17	21	21	20	19	21	23	25	28	29	427
12	29	26	29	28	30	28	26	25	29	26	26	23	21	19	19	16	15	11	7	3	5	6	8	16	471
13	15	16	18	20	19	20	17	18	14	6	5	5	11	12	9	7	5	4	6	6	4	3	6	10	256
14	20	16	6	10	4	4	4	3	2	2	4	1	3	1	1	2	2	2	2	6	10	11	10	9	135
15	12	11	10	9	3	5	6	3	3	6	3	2	2	2	1	1	3	5	7	2	2	4	4	3	109
16	3	4	2	2	1	2	3	1	2	2	2	3	1	1	1	2	0	1	3	3	2	2	4	7	54
17	11	13	20	24	20	17	13	16	29	38	38	35	34	38	36	32	15	17	7	6	15	10	7	3	494
18	6	6	8	12	3	2	2	3	2	1	2	2	6	5	6	8	7	19	19	23	13	7	5	6	173
19	4	5	7	9	11	14	13	15	15	10	9	6	7	8	13	16	21	21	36	13	8	8	10	15	294
20	13	22	21	25	21	19	24	22	17	18	16	23	27	24	23	12	13	11	14	14	19	8	5	7	418
21	6	3	2	3	3	4	1	1	7	3	3	4	3	2	1	3	2	7	4	8	5	6	3	10	94
22	16	28	30	24	23	27	30	37	22	8	10	5	25	18	10	14	23	37	20	24	41	53	47	43	615
23	47	45	44	51	49	55	57	58	62	62	61	63	67	67	63	54	49	62	64	51	13	21	39	45	1249
24	43	45	48	40	41	38	29	19	32	14	18	16	12	13	8	6	6	7	3	3	4	2	1	3	451
25	3	4	4	11	15	14	13	11	10	10	10	7	3	4	3	3	2	4	1	2	6	9	13	12	174
26	11	8	8	4	8	9	11	15	25	26	26	30	31	29	31	32	33	32	33	40	41	43	44	45	615
27	50	54	52	48	41	32	34	34	31	29	26	22	23	17	12	13	3	5	4	5	3	5	2	6	551
28	5	8	5	6	13	16	5	6	5	5	1	3	2	2	4	4	8	10	5	5	3	4	14	5	144
29	3	4	6	6	7	3	2	5	2	5	2	2	1	2	2	3	1	3	3	4	4	5	3	2	80
30	4	1	2	4	2	2	1	2	1	3	1	1	1	1	1	1	3	4	5	6	7	7	6	7	73
31	7	9	6	6	7	9	10	12	14	17	25	30	30	32	33	23	14	13	12	13	10	9	9	9	359
Means	12.4	13.2	13.3	14.7	14.8	15.6	14.4	15.6	16.1	14.1	14.5	14.6	15.0	15.1	14.1	12.2	11.0	12.5	11.4	11.2	10.9	11.2	11.0	11.6	320.4

Total movement during month, 9931 miles; mean daily movement, 320.4 miles; average hourly movement, 13.4 miles

Tabulation of hourly wind records at Teplitz Bay during the month of November, 1903

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	9	6	6	4	4	5	6	6	7	5	4	6	6	7	5	8	12	12	13	13	12	13	12	11	192
2	10	10	11	10	7	8	8	10	10	13	11	11	14	14	10	13	11	10	11	10	9	8	6	7	242
3	8	5	6	8	8	6	6	9	8	7	8	10	12	13	10	10	9	6	4	4	7	7	9	9	189
4	13	12	10	6	5	5	5	4	5	1	2	1	3	5	5	6	8	10	10	4	7	8	9	1	145
5	4	3	5	5	3	4	2	1	1	2	2	2	2	1	3	3	3	4	5	5	7	6	2	2	77
6	1	2	2	5	6	6	8	7	4	4	4	3	3	4	2	2	1	2	4	5	2	2	2	5	86
7	4	6	4	3	2	2	3	3	1	2	2	2	3	3	1	2	1	1	3	2	1	1	1	1	54
8	2	2	1	3	5	4	2	2	3	4	8	9	7	7	5	3	4	1	2	3	2	1	2	3	85
9	1	1	1	1	0	1	2	1	1	2	1	1	0	2	1	3	2	3	3	1	2	3	4	5	42
10	6	7	8	6	6	5	5	5	3	10	10	8	3	3	4	3	3	1	1	3	3	4	2	2	111
11	2	0	0	0	0	0	0	2	2	0	1	1	1	1	1	2	2	2	1	4	6	6	8	10	52
12	8	10	11	13	14	12	14	13	10	8	8	5	5	5	6	5	3	4	2	1	1	1	1	2	162
13	3	2	3	10	25	28	35	34	35	34	33	32	27	27	30	37	36	41	43	47	50	50	49	34	754
14	29	26	22	22	18	19	16	9	11	9	7	9	12	20	21	21	19	22	20	22	18	13	12	10	407
15	10	7	4	5	5	5	2	2	8	8	21	20	29	11	17	21	22	19	15	15	14	12	10	7	289
16	7	8	5	6	10	14	22	25	18	16	16	17	11	11	7	4	11	14	16	14	12	14	13	12	303
17	15	15	16	12	14	23	14	9	7	8	10	12	4	2	1	3	7	11	12	10	9	5	7	5	231
18	3	4	5	2	4	5	8	8	4	7	5	5	4	6	5	4	5	6	5	4	7	7	7	8	128
19	8	8	7	7	8	7	6	6	3	4	3	3	4	6	6	5	4	7	7	7	6	7	7	5	141
20	5	6	5	6	6	7	6	6	7	5	6	12	17	24	28	33	34	30	35	38	41	47	45	48	497
21	45	32	32	31	33	28	23	29	29	25	19	19	18	14	3	6	5	5	10	16	32	33	32	34	553
22	32	40	40	44	49	48	43	46	41	36	30	24	17	14	8	8	4	3	5	9	4	3	2	2	552
23	2	2	2	11	19	20	24	28	30	38	32	35	40	42	36	36	28	37	36	37	26	20	25	30	636
24	17	20	36	44	41	37	33	29	25	17	22	24	26	32	33	37	40	40	36	37	35	34	37	51	783
25	40	25	23	12	19	12	23	12	32	31	16	11	11	32	21	9	11	15	14	13	13	8	9	8	420
26	24	37	46	54	49	45	46	46	46	41	41	34	43	43	43	46	45	48	52	45	38	32	38	41	1023
27	43	40	34	39	35	14	25	13	17	28	41	48	51	55	50	49	53	47	46	40	42	30	36	43	919
28	45	48	43	37	32	36	40	35	31	29	26	25	36	30	43	45	37	25	39	41	32	34	42	39	870
29	48	48	38	42	46	42	44	50	48	46	20	54	62	58	51	50	43	26	8	37	61	59	53	45	1079
30	43	42	35	27	6	5	3	3	3	4	12	12	9	9	8	10	14	16	19	19	24	25	25	25	398
Means	16.2	15.8	15.4	16.1	16.0	15.1	15.8	15.1	15.0	14.8	14.0	15.2	16.0	16.7	15.5	16.1	15.9	15.6	15.9	16.9	17.4	16.4	16.9	16.8	380.7

Total movement during month, 11420 miles; mean daily movement, 380.7 miles; average hourly movement, 15.9 miles

Tabulation of hourly wind records at Teplitz Bay during the month of December, 1903

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.
1	30	27	29	29	27	26	27	24	23	23	20	18	20	20	19	17	20	21	20	16	17	16	18	16	523
2	13	13	12	11	10	8	9	8	8	7	8	9	7	8	7	8	9	10	11	12	13	11	11	10	233
3	7	4	2	5	12	20	25	33	32	29	24	20	23	18	19	17	17	16	20	20	17	12	12	9	413
4	11	11	13	12	13	14	14	19	17	16	11	11	9	8	10	9	10	9	11	9	10	8	9	12	276
5	13	5	2	2	3	3	6	6	1	3	1	2	4	3	2	1	4	3	4	3	3	5	2	2	83
6	2	5	4	8	9	8	8	8	6	5	6	6	5	5	4	5	4	4	5	5	6	5	6	6	135
7	7	7	10	9	7	8	7	9	4	1	0	0	1	5	13	16	16	5	2	4	10	14	23	23	201
8	25	25	3	6	5	4	4	4	6	4	7	16	14	9	4	7	7	4	9	15	20	25	22	6	251
9	15	9	27	41	43	43	38	34	31	26	21	52	25	41	33	40	40	36	40	52	50	51	48	46	882
10	42	36	18	27	26	29	34	13	17	14	22	27	29	31	34	38	39	37	40	39	36	36	36	34	734
11	36	38	37	34	38	38	40	45	44	48	48	49	51	52	48	48	50	47	45	45	48	49	54	55	1087
12	56	54	57	58	62	62	68	68	66	68	72	74	78	72	77	76	72	67	66	60	51	51	46	42	1523
13	36	26	34	21	14	5	5	4	3	2	4	11	2	5	3	8	8	21	17	19	23	37	36	28	372
14	20	10	6	12	16	18	30	37	38	30	31	32	34	25	10	10	8	7	9	37	36	33	34	32	555
15	29	31	34	38	39	35	26	33	31	29	30	27	28	27	38	32	34	32	25	32	41	37	17	48	773
16	41	46	51	25	26	16	16	53	66	62	66	65	68	70	68	63	42	11	6	10	10	17	24	35	957
17	19	11	15	19	29	35	34	53	57	46	42	40	50	47	35	13	10	26	16	23	8	8	11	34	681
18	20	17	32	21	20	34	30	36	35	30	39	43	16	14	16	22	8	12	5	4	1	2	5	5	467
19	3	4	4	7	16	16	20	22	22	15	16	15	25	24	34	36	38	42	38	37	31	39	38	37	579
20	35	38	43	39	42	38	41	47	44	42	38	44	45	36	41	49	53	37	14	28	23	20	9	5	851
21	6	11	12	5	11	10	5	6	1	5	7	2	3	2	14	15	11	12	16	17	18	27	33	30	279
22	31	26	33	36	38	38	41	43	43	38	18	25	52	54	51	50	32	14	10	57	60	49	17	14	870
23	16	41	22	14	28	38	44	38	49	50	54	48	43	23	18	16	8	17	17	12	17	5	7	8	633
24	7	7	5	6	10	12	15	16	13	11	7	5	14	3	15	23	31	33	39	26	4	6	14	31	353
25	22	13	14	10	6	3	11	19	20	24	28	27	27	26	27	26	25	23	25	26	29	29	29	27	516
26	28	28	26	25	23	20	17	16	14	10	6	5	7	6	7	4	4	2	2	5	6	8	8	6	283
27	6	6	7	7	4	15	21	25	26	27	30	33	30	36	44	44	40	43	45	48	46	54	54	61	752
28	66	72	71	70	72	82	77	82	88	83	77	75	71	71	71	71	71	71	71	71	71	71	71	65	1761
29	57	54	49	16	17	24	36	28	10	7	12	8	7	13	9	9	4	5	3	5	4	4	4	5	390
30	4	4	3	5	3	3	4	3	3	4	4	2	4	3	2	3	1	2	7	9	9	12	16	18	128
31	17	16	17	23	28	31	33	36	35	34	33	34	40	44	42	42	42	39	39	37	28	25	22	21	758
Means	23.2	22.4	22.3	20.7	22.5	23.7	25.4	28.0	27.5	25.6	25.2	26.6	26.8	25.8	26.3	26.4	24.5	22.8	21.8	25.3	24.1	24.7	23.7	24.9	590.3

Total movement during month, 18299 miles; mean daily movement, 590.3 miles; average hourly movement, 24.6 miles

Tabulation of hourly wind records at Teplitz Bay during the month of January, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	26	28	28	25	20	23	21	22	16	17	16	17	23	18	17	17	20	21	18	17	14	15	16	14	469
2	14	14	12	8	8	8	9	11	17	18	19	12	11	10	10	7	5	4	6	7	7	6	6	5	234
3	3	2	4	6	6	3	5	4	5	6	29	38	38	40	33	24	16	24	20	13	11	7	7	18	362
4	21	28	24	17	14	4	7	8	11	10	7	9	8	6	3	3	2	5	8	4	8	6	8	5	226
5	4	3	5	3	2	5	9	12	15	16	18	21	25	26	18	15	9	11	12	9	7	4	4	4	257
6	5	9	12	13	12	7	14	19	21	34	39	29	23	15	9	14	14	11	4	4	2	2	1	8	321
7	12	15	12	20	20	16	13	15	14	13	14	14	18	19	23	22	25	18	28	28	11	9	11	9	399
8	8	5	8	5	10	23	39	46	45	45	42	42	47	47	44	46	46	41	37	29	23	24	19	20	741
9	19	7	9	12	13	11	6	2	1	2	3	1	4	0	11	25	30	26	30	29	29	26	30	32	358
10	31	41	42	47	18	5	10	8	7	6	3	4	3	4	3	7	4	2	2	3	2	4	1	5	262
11	6	10	3	7	3	9	21	22	23	28	32	33	37	37	27	12	12	10	9	8	11	9	10	12	391
12	12	12	10	11	12	10	12	9	8	10	7	9	7	6	11	12	15	13	21	22	18	17	12	11	287
13	8	7	4	5	4	9	8	12	9	7	1	2	3	3	4	4	1	2	2	1	0	1	2	3	102
14	0	0	0	1	0	0	0	0	1	0	1	1	1	2	2	1	3	1	3	4	2	3	4	4	34
15	4	6	7	9	8	8	9	9	12	14	15	18	14	14	16	11	8	8	8	9	6	7	8	9	237
16	9	4	8	13	25	25	30	30	27	22	21	21	20	22	21	22	21	24	26	17	15	12	10	6	451
17	5	4	4	3	6	5	1	3	2	3	6	8	8	8	5	2	4	4	1	1	1	1	3	20	108
18	19	24	24	25	28	29	30	24	23	20	20	21	20	20	21	24	23	21	23	18	15	13	15	15	515
19	17	18	16	10	14	11	11	13	10	12	13	13	15	12	16	22	20	26	29	31	36	35	32	35	467
20	36	45	40	41	38	40	44	48	48	47	42	33	30	28	29	24	26	27	31	25	9	5	6	5	747
21	4	2	7	37	34	45	59	68	64	62	54	48	49	42	29	22	25	21	18	14	6	8	17	27	762
22	20	14	47	57	51	33	40	33	33	41	42	40	37	26	36	44	63	65	57	55	53	56	45	27	1015
23	34	26	30	24	27	23	23	15	13	13	13	11	9	10	11	11	10	7	7	7	3	4	5	6	342
24	4	11	23	18	25	12	7	15	17	25	10	6	40	50	33	26	43	48	52	51	50	48	41	32	687
25	23	15	16	23	17	16	8	16	13	25	18	18	20	24	19	22	24	19	16	17	20	24	26	23	462
26	27	31	26	36	36	25	18	23	30	34	31	28	26	6	8	5	8	20	16	13	4	8	11	8	478
27	12	7	8	11	7	6	2	2	6	5	3	4	3	3	8	4	4	1	0	7	7	2	2	5	119
28	5	6	9	3	6	3	4	3	4	4	4	3	3	6	2	3	5	6	6	7	3	4	2	11	112
29	13	9	8	19	27	25	25	26	30	33	37	39	42	43	41	42	44	43	41	40	41	39	41	40	788
30	34	34	37	35	36	34	29	26	24	17	11	15	12	6	3	9	8	25	30	28	6	5	8	12	484
31	3	8	20	21	11	14	18	19	20	4	3	10	14	10	15	13	14	14	9	9	12	15	11	15	302
Means	14.1	14.4	16.2	18.2	17.4	15.7	17.2	18.2	18.4	19.1	18.5	18.3	19.7	18.2	17.0	16.6	17.8	18.3	18.4	17.0	13.9	13.5	13.4	14.4	403.8

Total movement during month, 12519 miles; mean daily movement, 403.8 miles; average hourly movement, 16.8 miles

Tabulation of hourly wind records at Teplitz Bay during the month of February, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.
1	9	7	9	8	5	3	8	4	3	6	7	4	7	5	4	6	6	3	15	8	9	9	8	7	160
2	11	6	8	7	11	14	7	5	15	15	27	14	12	8	8	7	5	8	8	6	4	6	23	24	259
3	18	28	11	13	11	23	30	30	33	33	38	41	45	48	45	40	42	43	52	58	54	48	49	43	876
4	40	43	44	47	48	47	47	45	39	49	48	48	49	52	56	49	40	30	28	11	10	9	11	7	897
5	9	15	14	12	9	9	13	18	23	23	21	21	21	13	8	13	26	28	27	36	37	26	14	7	443
6	16	14	27	35	31	29	26	14	23	38	44	43	39	32	13	8	8	6	2	7	12	10	10	11	498
7	7	7	5	9	10	16	4	11	11	15	7	4	7	6	5	3	2	1	1	1	1	4	2	7	146
8	6	3	2	4	11	14	9	4	4	6	9	5	2	1	2	5	6	17	7	17	10	6	6	10	166
9	31	35	28	39	39	19	18	8	20	15	8	15	4	2	5	5	4	6	6	3	1	2	4	5	322
10	8	5	5	4	6	12	16	16	14	15	14	16	20	22	17	15	20	22	21	23	20	22	23	22	378
11	24	24	22	12	10	12	12	9	8	8	5	7	9	12	10	17	9	11	10	11	12	12	8	6	280
12	5	6	4	3	4	2	2	6	1	3	2	1	3	1	2	1	1	2	2	1	1	1	3	2	59
13	3	4	5	7	5	7	10	12	14	12	10	11	13	14	13	14	18	20	18	21	17	18	18	20	304
14	20	17	20	21	29	31	27	22	23	25	28	25	29	24	10	12	10	10	9	10	11	15	19	17	464
15	16	12	7	12	18	15	8	4	7	5	1	0	4	3	2	2	3	6	15	4	6	11	21	23	205
16	18	17	15	14	15	16	17	14	5	9	14	3	7	0	1	3	1	1	2	1	2	1	2	4	182
17	18	26	29	34	35	35	32	31	39	37	45	51	53	48	41	39	37	41	42	44	35	43	45	40	920
18	45	41	42	28	21	15	15	19	19	18	19	20	20	19	20	19	19	14	15	11	10	10	11	8	478
19	4	1	1	0	0	2	3	1	0	2	1	2	0	1	2	0	0	2	2	6	10	12	32	42	126
20	46	53	51	61	57	42	41	50	48	55	53	44	45	51	53	47	51	39	31	18	11	12	12	12	983
21	9	8	6	0	1	7	6	2	10	20	19	24	33	31	25	32	37	41	44	46	55	54	57	52	619
22	52	43	42	42	43	38	43	34	23	38	46	44	46	44	44	42	38	38	39	38	42	43	43	36	981
23	32	37	33	28	16	14	17	19	21	20	21	17	16	16	14	8	9	13	9	7	5	1	5	9	387
24	11	24	42	49	55	57	59	57	45	37	26	27	31	28	31	23	23	25	26	25	20	20	17	15	773
25	15	15	20	20	22	19	20	20	21	20	18	19	24	17	21	21	20	19	16	13	10	11	8	4	413
26	3	1	2	4	5	8	10	11	11	13	14	12	13	14	13	14	14	17	23	25	22	16	18	24	307
27	43	37	34	30	24	22	20	19	18	17	16	11	6	4	3	2	2	3	4	3	4	6	14	7	349
28	3	4	4	3	3	2	1	4	14	14	14	12	11	10	6	5	3	3	2	1	3	5	6	9	142
29	17	23	26	24	36	49	54	56	52	45	37	38	32	27	20	20	17	13	8	14	12	18	22	24	684
Mean	18.6	19.2	19.2	19.7	20.0	20.0	19.8	18.8	19.4	21.1	21.1	20.0	20.7	19.1	17.0	16.3	16.2	16.6	16.7	16.2	15.4	15.6	17.6	17.1	441.4

Total movement during month, 12801 miles; mean daily movement, 441.4 miles; average hourly movement, 18.4 miles

Tabulation of hourly wind records at Teplitz Bay during the month of March, 1904

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	15	18	12	5	4	2	7	3	4	2	14	22	21	17	16	11	9	8	6	1	1	8	3	8	217
2	12	12	9	10	3	9	11	10	9	9	10	17	20	19	12	11	19	15	14	11	10	14	15	14	295
3	15	10	8	6	5	0	2	3	2	7	10	8	6	7	2	22	43	58	61	65	54	32	19	20	465
4	25	35	40	38	33	33	37	39	41	40	39	36	37	36	38	34	33	28	30	28	25	22	22	17	786
5	16	15	12	11	8	3	2	1	1	2	2	1	4	3	2	17	25	40	41	32	39	43	45	41	406
6	35	30	24	16	10	10	9	13	15	15	8	3	4	1	4	4	3	3	5	6	4	6	6	8	242
7	12	11	7	14	20	17	13	14	15	19	22	22	10	11	4	19	21	24	15	13	14	12	13	18	360
8	11	4	9	11	10	14	17	18	13	11	17	8	7	7	6	5	4	4	1	3	1	0	0	0	181
9	0	0	1	0	4	5	6	6	8	7	8	9	8	8	9	9	9	12	12	9	7	6	9	7	159
10	4	5	5	4	4	5	4	2	3	5	3	1	0	0	0	0	0	3	5	4	5	5	3	2	72
11	5	6	7	5	4	2	8	6	7	7	9	8	8	12	19	18	22	20	12	2	1	0	1	0	189
12	4	3	3	6	8	2	5	16	4	8	19	6	7	6	2	3	2	0	1	0	0	1	2	2	110
13	5	1	3	1	3	4	4	1	0	2	0	1	2	1	3	3	2	2	2	1	3	2	2	3	51
14	2	2	3	2	2	3	3	3	4	3	1	3	1	1	2	1	2	1	2	1	3	2	1	3	51
15	1	1	2	2	0	1	1	2	2	3	8	3	5	6	12	10	9	7	5	9	1	3	1	1	95
16	2	2	1	3	1	1	0	1	1	0	2	0	1	2	0	2	0	3	3	1	3	2	3	3	37
17	2	2	2	1	2	1	1	3	3	2	0	2	1	1	2	2	0	1	2	0	2	6	4	7	49
18	11	10	3	1	0	1	3	1	0	1	1	1	3	3	1	2	1	2	1	1	15	19	22	19	122
19	24	25	23	21	20	27	22	13	9	4	8	3	1	2	1	1	0	1	1	5	8	7	8	7	241
20	10	13	12	11	10	6	0	1	0	1	1	3	3	2	2	7	16	49	59	61	66	62	59	68	522
21	72	68	62	58	51	46	64	65	61	51	43	51	65	61	55	53	49	41	30	23	10	5	4	5	1093
22	11	7	5	4	7	5	9	6	7	4	9	13	18	18	22	20	21	27	29	28	24	19	19	17	349
23	18	17	18	22	20	17	15	18	19	16	17	19	19	22	22	26	26	27	26	25	25	28	27	24	513
24	25	21	22	22	24	22	22	21	22	21	19	17	17	16	12	11	10	9	8	4	4	5	5	4	363
25	4	1	1	4	1	1	1	0	0	0	1	0	1	0	1	0	0	0	0	8	19	24	6	5	78
26	1	0	0	1	2	2	4	11	8	10	2	0	2	1	2	13	8	3	4	5	1	6	7	9	102
27	7	7	3	2	7	7	9	7	0	0	0	2	5	8	10	8	7	6	10	15	16	19	15	12	182
28	10	15	14	13	13	9	12	18	22	22	20	19	19	18	18	19	18	19	17	15	13	12	7	5	367
29	5	6	7	4	3	3	8	5	6	1	4	2	5	4	6	14	10	12	12	10	14	24	42	48	255
30	48	47	53	47	23	23	22	28	30	27	18	14	9	9	14	19	18	14	8	5	3	2	2	1	484
31	4	5	8	7	7	6	7	10	10	13	11	12	11	12	14	12	12	11	11	11	11	11	10	10	236
Means	13.4	12.9	12.2	11.4	10.0	9.3	10.6	11.1	10.5	10.1	10.5	9.9	10.3	10.1	10.1	12.1	12.9	14.5	14.0	13.0	13.0	13.1	12.3	12.5	279.7

Total movement during month, 8672 miles; mean daily movement, 279.7 miles; average hourly movement, 11.7 miles

Tabulation of hourly wind records at Teplitz Bay during the month of April, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	10	9	6	6	3	4	8	9	10	8	7	8	8	9	6	4	6	5	6	7	7	3	4	5	158
2	5	4	4	3	4	5	4	5	7	7	5	2	3	2	2	2	3	5	7	6	6	5	5	8	109
3	8	7	7	6	6	5	5	6	5	2	2	3	4	4	4	2	2	3	4	4	5	3	2	4	103
4	3	2	0	0	0	0	2	2	3	4	2	2	4	8	16	19	23	25	30	27	29	21	16	18	256
5	18	18	18	19	17	16	16	14	15	18	12	13	11	11	13	15	14	15	15	16	15	13	11	10	353
6	10	11	14	8	2	2	4	4	3	4	3	1	5	9	14	19	23	21	17	11	11	6	3	7	212
7	1	5	1	2	1	6	3	2	1	2	3	2	1	1	2	2	1	2	2	4	2	3	1	3	53
8	2	3	3	2	2	1	3	1	3	0	1	1	0	2	1	0	0	7	1	3	3	3	3	2	47
9	2	4	2	0	2	0	1	2	2	1	2	1	2	0	2	1	1	2	2	1	2	3	3	4	42
10	2	3	2	3	2	2	0	2	2	2	0	1	1	3	2	2	2	3	6	2	2	2	3	4	53
11	5	8	12	6	12	14	13	24	31	33	14	21	10	17	9	10	14	12	7	12	6	7	7	9	313
12	4	8	8	10	14	10	11	10	11	10	8	6	7	4	5	4	2	2	6	7	6	9	9	10	181
13	9	9	11	10	14	15	15	15	16	17	19	21	20	22	21	20	18	18	18	16	17	16	16	17	390
14	18	17	19	18	17	17	18	16	14	14	12	10	11	10	9	9	10	10	8	3	6	6	4	2	278
15	3	3	4	2	5	2	3	4	2	1	6	9	13	9	6	3	4	3	4	3	6	7	7	6	115
16	7	8	6	5	7	9	7	4	6	12	11	14	11	6	8	10	15	17	17	16	13	11	10	6	236
17	7	6	3	12	10	8	6	16	6	6	8	10	10	9	3	5	14	18	13	18	4	2	3	9	206
18	11	17	20	18	18	18	21	21	14	4	5	2	4	5	8	12	19	17	16	15	14	13	12	8	312
19	9	11	4	5	3	2	3	1	1	5	2	2	0	3	2	19	24	30	29	29	31	35	38	33	321
20	38	41	40	40	46	54	58	60	61	63	54	53	59	53	52	47	41	42	47	47	45	42	38	35	1156
21	32	28	32	32	38	37	39	39	40	40	38	38	37	30	17	6	5	12	20	10	10	11	11	15	617
22	15	16	19	14	8	5	11	13	5	6	4	1	4	2	3	1	1	2	1	2	1	2	2	4	142
23	2	4	3	2	3	2	3	2	2	2	1	0	4	4	7	6	1	4	4	6	5	5	2	4	78
24	6	6	5	7	5	2	3	6	8	5	3	2	5	5	11	13	18	19	15	14	15	22	21	18	234
25	22	27	28	29	28	26	22	16	12	10	11	5	5	5	5	5	6	6	8	8	13	12	10	7	326
26	7	6	6	5	6	8	6	9	9	10	9	9	9	8	6	4	5	6	6	6	7	5	4	1	157
27	3	2	1	1	1	1	4	2	3	3	3	5	5	3	2	2	1	1	1	1	1	1	0	0	47
28	0	1	0	0	0	0	0	0	1	1	0	0	0	4	7	7	1	5	7	9	11	9	9	10	81
29	8	9	6	7	5	5	8	9	7	7	7	5	6	4	3	3	2	3	2	2	1	2	3	1	115
30	2	3	2	2	3	4	2	2	3	2	3	3	4	2	6	2	3	4	5	2	3	2	2	3	69
Means	9.0	9.9	9.5	9.1	9.1	9.3	10.0	10.5	10.1	10.0	8.5	8.3	8.8	8.5	8.4	8.8	9.3	10.6	10.8	10.2	9.9	9.4	8.6	8.8	225.3

Total movement during month, 6761 miles; mean daily movement, 225.3 miles; average hourly movement, 9.4 miles

Tabulation of hourly wind records at Teplitz Bay during the month of May, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	3	2	3	1	1	3	2	2	2	3	7	6	8	3	3	5	9	15	8	8	7	12	12	9	134
2	9	8	9	14	7	11	12	12	9	9	11	10	11	10	13	11	10	8	9	12	14	12	11	9	251
3	9	11	12	12	12	12	12	12	12	11	11	11	8	8	8	11	12	13	15	14	11	10	6	6	259
4	9	10	10	8	1	1	2	2	1	3	3	3	2	3	3	2	5	4	2	2	1	2	1	0	80
5	2	2	1	4	3	2	4	5	7	12	12	11	10	15	13	13	5	3	4	2	3	3	2	2	140
6	2	1	5	3	5	8	8	9	10	9	12	14	8	8	14	21	14	13	22	10	3	5	3	3	210
7	4	2	1	1	1	1	2	2	2	1	2	1	2	1	1	3	4	6	3	3	3	4	5	2	57
8	1	4	2	6	7	6	5	6	5	6	5	6	6	8	6	6	6	8	8	11	10	15	14	15	172
9	15	14	13	14	12	13	11	11	12	10	12	13	16	14	13	14	13	9	9	4	3	4	4	3	256
10	4	2	2	10	10	11	10	11	11	12	12	12	10	6	3	1	1	3	1	1	2	3	6	9	153
11	11	11	11	15	16	13	15	16	17	19	20	18	14	14	12	13	12	9	12	14	11	10	12	4	319
12	4	4	2	3	3	2	1	7	10	6	12	15	24	16	18	20	18	16	21	18	15	17	19	16	287
13	14	5	8	6	5	5	3	4	3	4	4	1	5	5	5	4	3	3	3	2	1	1	1	2	97
14	4	8	4	8	7	7	8	5	0	1	1	1	0	17	16	17	17	14	18	19	19	17	16	15	239
15	21	20	19	19	18	19	20	21	18	15	18	19	22	22	24	21	20	16	17	20	28	33	29	23	502
16	14	13	13	14	16	14	15	13	18	20	19	15	19	18	19	16	18	17	17	18	16	11	14	10	377
17	8	6	8	8	12	11	12	13	12	13	9	7	8	7	7	4	6	6	6	2	5	8	6	5	189
18	8	4	5	5	3	1	8	10	10	11	12	11	10	10	9	9	11	8	6	3	4	1	1	7	167
19	7	5	4	7	11	17	20	23	24	21	21	13	7	14	16	17	17	18	18	15	17	16	14	16	358
20	13	10	8	6	7	7	7	7	10	8	4	14	17	16	12	7	8	8	5	3	4	4	7	8	200
21	9	9	9	9	13	11	15	13	9	8	21	27	25	29	24	12	9	10	11	9	3	12	12	11	320
22	12	11	11	11	9	9	11	8	15	20	24	31	34	31	35	38	39	37	41	39	40	38	38	38	620
23	42	43	45	43	44	38	33	28	28	21	13	10	12	14	16	17	18	22	24	23	31	30	23	27	645
24	20	35	38	28	31	25	17	8	10	11	9	9	11	13	15	15	12	12	9	10	9	6	6	4	363
25	4	4	5	4	2	5	8	9	12	11	13	14	14	14	17	18	16	16	17	16	15	17	17	17	285
26	17	16	14	13	14	14	15	16	16	15	17	16	16	16	14	14	12	12	13	12	13	12	13	11	341
27	11	12	13	15	20	20	22	23	21	24	23	21	21	23	23	22	22	17	15	17	14	10	8	7	424
28	6	6	6	8	5	3	6	4	6	6	4	0	1	5	7	10	12	12	16	16	15	15	19	17	205
29	14	16	18	20	22	25	18	12	7	7	7	8	13	16	14	11	7	3	2	1	3	9	13	16	282
30	16	7	9	7	4	2	0	9	9	9	9	9	8	8	8	7	8	12	14	13	14	14	14	13	223
31	12	13	11	12	12	12	10	11	10	10	8	6	7	7	4	4	4	1	3	1	3	4	2	3	170
Means	10.5	10.1	10.3	10.8	10.7	10.6	10.7	10.7	10.8	10.8	11.5	11.4	11.9	12.6	12.6	12.4	11.9	11.3	11.9	10.9	10.9	11.5	11.2	10.6	268.5

Total movement during month, 8325 miles; mean daily movement, 268.5 miles; average hourly movement, 11.2 miles

Tabulation of hourly wind records at Teplitz Bay during the month of June, 1904

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	2	2	1	1	4	4	3	3	7	6	6	6	5	8	10	10	12	6	4	4	3	3	9	7	226
2	7	11	14	14	10	7	7	25	20	6	10	28	26	32	33	26	30	12	21	16	15	22	24	20	436
3	12	23	27	23	21	23	10	7	7	7	3	3	4	4	5	4	3	3	9	9	14	15	11	6	253
4	5	8	4	4	5	7	9	11	9	10	8	6	9	9	8	7	6	6	4	7	6	7	6	11	172
5	12	11	13	13	13	13	13	4	0	3	1	2	2	3	3	3	1	1	2	1	4	17	16	12	163
6	6	7	14	9	3	7	15	18	22	17	12	14	11	11	7	2	1	3	1	1	7	4	8	9	209
7	6	2	2	1	1	0	1	1	2	4	1	4	4	4	4	4	6	7	6	7	7	8	7	8	97
8	9	9	7	7	8	8	5	6	9	7	10	13	13	15	14	13	13	16	14	12	11	11	12	15	257
9	11	16	17	16	19	22	23	24	22	21	20	21	23	22	21	18	18	17	16	14	12	10	9	8	420
10	12	9	10	8	9	8	10	8	9	10	8	8	8	8	8	6	5	7	5	6	5	6	4	2	179
11	6	4	6	7	7	6	7	8	7	6	9	5	5	5	4	3	3	1	1	1	1	2	3	6	113
12	5	5	6	9	11	11	9	11	10	10	12	10	11	11	10	10	10	8	7	8	7	8	9	10	218
13	13	13	13	15	15	14	17	16	14	18	13	16	9	4	9	15	19	26	29	31	26	21	24	24	414
14	22	24	22	23	15	20	31	20	29	33	29	37	40	40	36	42	48	40	27	25	27	24	22	20	696
15	17	18	18	17	28	23	24	21	22	23	22	20	18	15	12	7	4	3	5	4	1	0	0	7	329
16	7	6	7	8	8	12	14	15	15	17	19	20	19	21	20	21	22	22	23	23	23	22	21	20	405
17	21	19	20	18	17	18	16	12	16	17	9	7	15	15	15	14	14	15	14	13	12	11	11	11	350
18	11	11	9	7	8	6	6	3	3	2	2	3	2	2	1	1	1	2	8	3	6	9	7	9	122
19	6	2	3	1	3	9	19	18	16	14	24	25	24	23	22	20	18	21	20	19	19	22	19	15	382
20	13	11	13	13	9	1	3	2	3	1	5	8	14	14	15	11	2	5	2	4	13	18	9	4	193
21	2	9	17	12	3	2	2	0	1	1	4	8	8	3	2	2	5	1	1	0	1	1	2	5	92
22	0	2	1	1	0	1	9	4	1	3	6	3	1	3	2	3	3	2	0	3	0	2	1	1	52
23	2	3	2	2	0	1	2	3	2	1	2	1	1	2	5	8	8	7	5	6	6	5	4	5	83
24	5	7	4	5	5	5	6	9	8	7	8	8	7	8	9	8	8	8	8	7	3	4	7	8	162
25	7	12	12	13	10	11	14	13	14	16	18	16	11	12	10	10	9	7	7	9	9	7	8	7	262
26	7	8	8	8	8	8	8	8	7	6	7	5	4	5	6	3	6	6	5	4	4	3	4	3	141
27	3	3	1	1	1	2	0	1	1	1	1	0	0	0	0	0	1	1	0	0	0	1	1	1	20
28	1	0	0	1	1	0	0	0	0	1	1	0	2	1	1	4	4	3	6	7	7	9	9	9	67
29	8	7	7	4	3	3	3	2	2	1	2	1	0	1	0	3	2	2	3	7	16	18	16	13	124
30	12	6	23	28	26	16	4	9	8	8	10	7	7	9	10	9	9	8	7	8	12	12	8	8	264
Means	8.3	8.9	10.0	9.6	12.4	8.9	9.7	9.4	9.5	9.2	9.4	10.2	10.1	10.3	10.1	9.6	9.7	8.9	8.7	8.6	9.2	10.1	9.7	9.5	230.0

Total movement during month, 6901 miles; mean daily movement, 230.0 miles; average hourly movement, 9.6 miles

Tabulation of hourly wind records at Teplitz Bay during the month of July, 1904

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	5	3	2	1	0	1	4	6	8	10	12	15	14	16	16	16	14	13	10	9	4	6	6	2	193
2	7	13	11	9	7	8	7	9	7	6	8	6	7	9	10	7	6	7	6	5	7	4	6	5	177
3	9	7	3	8	7	8	9	6	7	8	9	8	9	10	9	10	11	11	10	8	8	8	5	6	194
4	5	5	6	5	3	6	5	8	9	10	11	13	11	11	11	10	9	9	7	4	5	6	5	3	177
5	2	1	1	2	2	3	2	3	4	4	4	4	4	5	7	8	7	9	9	11	11	11	12	12	138
6	13	9	9	9	8	10	7	8	6	5	4	4	2	1	2	2	1	4	8	9	9	20	14	20	184
7	7	8	23	23	18	11	17	12	15	9	10	8	6	6	4	5	2	5	3	5	11	12	14	12	246
8	13	10	9	7	6	8	10	13	18	5	11	10	10	8	2	4	2	2	2	2	4	2	2	1	161
9	0	1	0	2	1	2	3	5	3	9	8	5	7	7	3	6	6	3	2	1	0	1	0	1	76
10	0	1	0	2	2	3	2	4	4	3	3	4	4	5	6	5	4	4	4	5	5	3	4	4	81
11	2	0	0	1	4	5	7	9	8	9	7	5	5	6	7	6	6	6	7	7	8	6	9	8	138
12	6	5	6	5	7	5	7	9	9	9	9	11	11	11	11	10	10	8	8	9	10	10	11	11	208
13	8	9	8	8	7	5	5	4	6	6	6	7	7	6	7	6	4	4	4	5	8	7	8	8	153
14	5	4	7	6	5	4	5	4	2	3	1	2	3	7	5	12	14	11	5	6	9	6	6	10	142
15	12	7	12	13	7	6	7	6	12	9	9	6	19	25	28	28	39	19	23	12	19	17	18	18	371
16	17	28	50	48	39	37	46	50	47	53	53	60	60	58	55	54	54	55	56	60	60	65	62	60	1227
17	60	51	49	50	51	49	41	20	38	43	53	57	57	54	50	35	40	47	51	46	45	47	40	31	1105
18	25	30	33	31	35	35	18	29	34	35	33	30	28	29	27	31	29	25	20	16	18	17	11	3	622
19	1	1	4	1	3	4	4	3	3	3	1	1	7	1	2	0	2	0	3	1	1	1	2	6	55
20	3	4	3	2	2	1	0	1	1	3	3	4	3	4	3	4	5	3	3	5	5	5	3	4	74
21	3	5	6	7	4	5	4	6	6	9	7	10	8	6	6	5	5	4	7	9	8	4	5	4	143
22	3	3	2	0	0	0	0	1	0	0	1	0	3	1	1	1	1	3	3	0	4	3	3	2	35
23	1	0	0	2	1	0	1	1	1	1	2	5	2	1	4	7	8	6	6	7	11	8	7	8	90
24	8	10	9	7	7	6	10	10	15	12	8	5	7	12	6	9	9	9	3	4	7	4	5	6	188
25	5	4	4	3	3	10	10	12	13	8	7	6	19	27	14	6	16	8	10	12	5	5	1	3	211
26	3	3	2	3	5	3	0	4	4	3	2	2	3	4	2	4	3	2	2	1	2	2	1	1	61
27	2	1	0	1	2	1	1	4	4	3	1	2	2	2	2	3	2	4	7	5	4	9	3	4	69
28	4	7	6	3	1	2	3	11	4	3	4	16	20	19	21	20	18	17	17	17	6	5	8	7	239
29	7	7	7	8	9	7	5	5	4	4	4	4	4	5	7	9	9	10	8	9	7	7	9	8	163
30	10	14	16	17	15	15	18	18	16	19	20	19	17	15	14	12	10	10	8	8	7	8	7	9	322
31	10	12	12	14	13	11	11	12	13	11	10	9	7	8	9	9	8	7	9	9	10	8	8	7	237
Means	8.3	8.5	9.7	9.6	8.8	8.7	8.7	9.5	10.4	10.2	10.4	10.9	11.8	12.2	11.3	11.1	11.4	10.5	10.4	9.9	10.3	10.2	9.5	9.2	241.3

Total movement during month, 7480 miles; mean daily movement, 241.3 miles; average hourly movement, 10.1 miles.

Tabulation of hourly wind records at Teplitz Bay during the month of August, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.	Mi.
1	6	6	4	6	5	6	12	12	11	15	10	8	11	12	13	7	6	6	6	7	7	5	4	3	188
2	0	4	5	2	2	7	9	8	6	9	12	11	10	8	14	17	17	16	17	20	17	15	15	15	256
3	15	16	14	15	21	20	17	19	17	12	17	17	16	19	20	21	18	16	15	12	14	14	13	12	390
4	9	12	10	7	6	3	4	2	3	2	3	3	3	1	0	2	6	8	12	13	15	14	14	14	166
5	14	14	15	17	15	12	12	12	9	9	8	9	8	8	7	5	3	1	1	0	1	3	1	0	184
6	1	2	4	9	10	12	14	13	10	15	19	19	15	16	10	6	3	4	4	6	4	9	7	9	221
7	10	7	3	4	10	10	11	13	7	3	0	3	3	4	3	3	4	3	4	7	12	7	4	8	143
8	19	16	12	17	21	29	32	30	27	28	30	29	29	29	23	32	28	31	34	35	31	26	7	22	617
9	34	37	26	41	33	25	19	14	21	16	12	14	11	7	9	6	7	4	2	1	1	2	1	1	344
10	0	2	0	0	0	0	0	1	1	1	3	3	6	5	5	5	3	3	4	5	4	5	4	5	65
11	4	2	4	3	4	4	2	4	6	3	0	2	2	1	3	2	3	1	2	2	9	6	14	13	96
12	19	21	19	8	10	27	17	14	8	8	12	13	6	13	13	7	10	13	15	17	16	18	20	24	348
13	20	22	25	26	20	18	25	25	21	25	26	19	9	11	14	15	14	18	17	20	25	25	22	22	484
14	24	22	24	21	20	16	9	9	10	10	6	5	6	1	7	7	7	6	3	2	3	2	2	4	226
15	2	3	3	1	2	1	4	3	6	5	1	4	4	1	1	1	1	2	1	1	2	4	2	7	62
16	7	14	7	3	2	1	1	3	3	2	1	1	2	1	4	3	2	1	3	0	5	7	7	8	88
17	4	8	14	8	8	14	10	7	10	5	2	4	3	4	2	1	1	2	2	2	3	2	1	0	117
18	1	0	1	2	0	0	0	1	3	0	1	2	4	1	2	2	2	2	3	1	0	3	1	0	32
19	3	1	1	3	2	1	4	2	4	3	4	2	3	6	5	4	6	6	5	9	13	15	10	4	116
20	3	3	3	4	2	4	3	3	5	4	4	4	3	5	2	2	3	7	11	4	4	11	10	10	114
21	9	7	7	8	10	9	11	7	8	5	13	22	26	16	15	15	11	13	23	23	17	12	10	9	306
22	10	8	10	8	7	4	6	9	11	7	5	6	8	8	5	7	9	13	9	10	18	19	9	5	211
23	3	1	1	3	4	1	2	2	2	3	2	2	4	2	6	7	5	6	7	7	6	7	8	6	97
24	7	4	5	6	7	7	7	7	6	6	5	5	3	4	5	4	5	5	5	5	5	4	3	5	125
25	6	5	4	5	4	3	4	4	4	5	5	7	7	7	6	5	3	4	3	3	4	4	1	1	104
26	1	3	0	0	0	0	0	1	2	4	2	1	0	2	1	1	2	3	2	4	5	4	2	2	42
27	2	2	2	0	1	2	2	2	3	4	8	17	5	14	18	13	13	10	13	15	13	3	6	6	174
28	3	2	3	2	1	0	3	3	7	1	5	5	9	15	17	18	7	9	20	15	6	3	3	2	159
29	0	1	1	3	1	0	1	0	0	1	0	1	1	2	1	0	4	9	10	6	11	13	14	12	92
30	7	4	3	1	0	0	1	1	0	1	1	2	3	1	1	1	1	4	8	9	8	10	10	9	86
31	10	12	10	17	18	17	14	19	19	21	18	16	15	18	20	23	21	17	17	15	18	14	24	29	422
Means	8.2	8.4	7.7	8.1	7.9	8.2	8.3	8.1	8.1	7.5	7.6	8.3	7.6	7.8	8.1	7.8	7.3	7.8	9.0	8.9	9.6	9.2	8.0	8.6	196.0

Total movement during month, 6075 miles; mean daily movement, 196.0 miles; average hourly movement, 8.2 miles

Tabulation of hourly wind records at Teplitz Bay during the month of September, 1904

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	10	9	11	30	37	41	41	48	44	42	44	44	45	44	44	41	40	33	36	32	24	17	18	23	798
2	23	24	26	29	27	19	18	23	24	24	29	26	25	25	29	32	29	29	29	33	36	35	37	37	668
3	33	33	38	37	37	36	29	28	29	24	25	29	28	28	30	33	33	21	17	22	24	28	36	42	720
4	40	40	38	34	30	40	30	21	9	6	7	12	15	20	16	14	17	17	19	21	22	22	23	25	538
5	27	27	26	25	25	24	22	23	22	21	22	21	19	19	20	20	20	15	16	15	15	14	19	16	493
6	13	14	14	16	15	15	14	15	15	14	11	10	13	11	8	9	11	13	16	17	16	11	11	16	318
7	16	18	21	18	19	20	19	20	18	20	19	18	14	14	12	13	12	11	11	10	11	9	6	7	356
8	7	5	4	2	3	6	3	2	1	0	1	3	4	1	1	0	4	7	6	6	5	4	2	1	78
9	0	0	1	0	0	1	0	1	0	1	1	1	1	0	1	4	4	3	3	2	2	5	3	3	37
10	4	1	2	1	3	3	3	4	1	2	3	1	1	1	1	3	2	2	2	2	6	7	6	4	65
11	5	7	12	11	14	19	13	10	9	6	6	16	15	16	16	14	13	10	12	12	14	12	11	6	279
12	5	6	10	11	12	9	9	9	10	10	9	10	13	12	13	14	13	11	11	13	14	15	12	15	266
13	14	13	14	13	11	7	9	6	3	3	1	1	2	5	7	6	8	6	6	6	7	7	4	3	162
14	3	3	5	3	4	3	4	7	6	4	4	1	6	4	7	5	5	9	5	8	15	7	10	6	134
15	6	8	6	5	4	3	10	9	13	6	12	13	10	5	18	15	20	15	7	8	5	5	6	8	217
16	7	9	9	12	12	9	9	10	12	16	18	12	7	14	15	9	5	6	8	5	6	6	5	1	222
17	1	2	4	11	17	20	14	18	19	18	15	12	11	8	9	8	7	6	5	7	9	8	4	4	237
18	4	5	2	5	5	7	2	2	2	1	4	6	7	9	8	8	6	6	8	10	14	12	9	11	153
19	10	9	11	12	10	13	15	14	16	13	14	15	15	14	8	5	2	1	2	3	3	6	5	6	222
20	6	4	4	7	6	8	4	4	3	3	3	1	3	1	1	4	1	3	6	5	4	5	9	14	109
21	13	10	12	10	9	3	3	0	10	12	10	12	11	11	9	14	14	13	14	15	12	13	13	13	256
22	13	14	14	15	16	14	8	2	6	5	7	5	4	6	9	4	5	5	4	3	3	5	7	6	180
23	9	11	9	14	14	12	12	10	10	14	13	11	9	7	9	12	13	14	11	6	4	2	1	17	244
24	25	32	33	40	41	40	38	36	30	27	20	15	6	3	3	6	3	5	22	28	30	35	34	37	589
25	36	40	42	43	45	46	41	42	42	43	42	35	35	36	38	43	48	50	44	33	34	48	50	48	1004
26	44	44	36	35	35	31	22	16	18	18	21	16	9	7	15	13	10	9	6	5	9	7	3	4	433
27	3	3	3	0	2	4	7	4	4	3	2	2	2	1	3	5	4	4	4	4	5	8	13	17	107
28	20	23	27	27	30	31	34	33	33	32	32	29	22	23	26	29	27	22	15	16	13	11	22	18	595
29	16	26	25	23	21	20	21	22	23	24	22	21	18	19	18	16	13	13	12	12	12	10	9	8	424
30	8	7	6	6	6	7	6	6	7	7	7	6	5	7	7	4	3	4	3	3	1	1	1	1	119
Means	14.0	14.9	15.5	16.5	17.0	17.0	15.3	14.8	14.6	14.0	14.1	13.5	12.5	12.4	13.4	13.4	13.1	12.1	12.0	12.1	12.5	12.5	13.0	13.9	334.1

Total movement during month, 10023 miles; mean daily movement, 334.1 miles; average hourly movement, 13.9 miles

Tabulation of hourly wind records at Teplitz Bay during the month of October, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	1	2	1	3	2	1	3	1	0	3	0	1	1	1	2	2	2	2	2	4	5	12	10	24	85
2	27	33	32	25	27	34	35	31	37	32	35	32	30	36	38	45	48	47	50	46	44	54	58	58	934
3	59	61	60	60	63	56	53	62	61	58	57	56	53	52	48	48	47	45	43	42	42	40	40	34	1240
4	31	30	28	40	46	44	45	45	45	45	45	36	42	47	54	22	17	25	26	17	15	27	35	39	846
5	47	65	64	63	60	51	30	29	10	14	14	23	18	33	16	13	47	52	48	48	27	14	23	16	825
6	24	28	32	31	26	14	14	15	11	15	14	13	12	9	10	3	8	8	6	3	2	3	4	4	309
7	5	3	3	4	5	3	3	5	6	4	1	2	7	8	4	12	14	16	13	10	10	6	7	7	158
8	9	10	9	8	15	16	21	18	14	14	19	18	22	25	21	21	21	16	20	20	17	20	21	18	413
9	15	12	8	24	32	31	28	19	26	28	30	30	30	24	27	26	27	33	32	26	18	19	17	17	579
10	16	10	4	4	6	9	12	14	21	24	23	22	20	18	20	21	21	23	22	22	22	19	19	19	411
11	20	23	24	21	20	19	19	21	21	18	18	16	17	14	15	11	9	10	10	11	9	10	7	7	370
12	10	7	8	7	8	16	19	24	22	24	24	29	33	44	50	55	25	42	46	39	36	28	18	17	631
13	11	13	14	17	24	21	14	5	1	0	0	0	6	5	4	6	6	6	12	12	13	16	18	16	240
14	16	21	20	19	18	18	19	21	16	14	10	3	2	2	3	3	4	7	10	5	5	11	15	9	271
15	4	5	4	5	4	8	7	5	5	4	3	5	3	1	2	1	4	2	6	5	4	8	9	5	109
16	2	1	1	2	1	4	5	6	7	7	8	8	8	9	12	8	4	3	5	7	10	20	21	24	183
17	23	20	17	21	13	13	16	17	15	14	15	16	13	14	16	15	16	15	12	12	10	12	10	6	351
18	6	4	4	6	7	13	10	9	9	5	8	7	6	5	8	9	13	13	12	8	7	10	8	7	194
19	8	10	10	15	17	16	13	14	10	6	6	1	3	1	1	1	3	1	2	2	2	1	5	5	153
20	6	5	6	6	7	5	6	8	6	6	0	0	9	8	7	9	8	9	3	4	7	6	7	10	148
21	9	7	6	10	9	8	9	10	11	11	9	8	10	14	11	10	11	8	12	11	12	6	1	1	214
22	8	9	4	6	6	7	7	7	6	8	6	4	4	4	3	1	4	2	3	5	6	4	2	1	117
23	0	0	3	13	9	12	14	14	13	8	1	4	5	8	5	4	4	4	3	5	4	5	8	9	155
24	16	19	18	19	24	17	13	10	10	8	13	8	6	6	4	5	5	5	3	4	7	5	5	5	235
25	6	5	4	4	2	3	10	23	25	12	18	11	9	35	42	47	50	44	47	47	47	36	28	25	580
26	26	22	20	16	13	10	7	4	6	5	4	9	8	3	3	1	1	0	0	2	1	2	1	0	164
27	0	0	0	0	0	1	0	0	2	1	1	0	1	1	1	4	2	3	2	2	2	2	1	0	26
28	2	1	1	1	2	3	3	1	4	2	1	2	2	2	3	2	8	11	7	5	2	1	0	4	70
29	3	4	2	3	3	3	3	7	6	6	7	8	7	8	8	8	7	8	8	7	6	5	5	6	138
30	3	3	5	3	2	4	4	5	4	5	7	8	10	9	8	10	14	16	27	35	39	42	50	53	366
31	52	40	59	60	59	52	52	61	66	65	65	66	70	74	73	69	70	69	65	62	54	34	28	29	1304
Means	15.0	15.3	15.2	16.6	17.1	16.5	15.9	16.5	16.0	15.0	14.9	14.4	15.1	16.8	16.7	15.9	16.8	17.6	18.0	17.0	15.6	15.4	15.5	15.3	384.2

Total movement during month, 11909 miles; mean daily movement, 384.2 miles; average hourly movement, 16.0 miles

Tabulation of hourly wind records at Teplitz Bay during the month of November, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	40	45	47	43	42	38	36	34	33	34	35	38	35	32	34	32	35	35	27	24	21	23	24	23	810
2	22	18	15	15	12	9	11	11	7	2	4	6	3	2	4	3	1	1	3	6	7	8	8	9	187
3	9	8	11	10	11	9	9	9	10	9	20	19	24	22	25	24	25	30	29	29	30	32	35	31	470
4	34	36	36	34	35	35	29	22	25	28	29	29	31	29	28	27	26	24	20	20	21	16	21	20	655
5	13	7	6	9	12	10	2	2	2	3	3	2	0	0	1	5	5	6	4	2	1	1	0	2	98
6	4	1	0	3	1	0	0	0	1	0	0	1	1	4	3	4	5	6	3	4	3	4	4	3	55
7	3	4	4	4	4	5	3	3	2	3	3	2	2	3	3	3	2	2	0	1	0	1	0	0	57
8	0	0	0	0	1	0	0	1	2	1	1	0	1	0	1	1	0	1	1	1	1	1	2	1	17
9	1	2	2	2	5	4	4	3	1	3	1	0	1	0	0	1	0	0	2	1	5	19	23	11	91
10	7	8	7	7	6	2	2	1	0	2	1	2	1	1	2	2	0	1	1	2	3	6	8	7	79
11	24	28	28	26	26	25	20	23	26	30	27	12	23	20	25	27	24	24	34	36	39	33	32	34	646
12	34	24	18	17	15	14	18	13	20	23	41	43	39	26	16	18	21	19	14	7	4	6	4	17	471
13	22	22	28	39	36	33	34	27	14	5	21	16	26	27	27	23	15	11	14	15	13	6	7	4	485
14	7	8	9	8	13	9	3	2	4	6	4	12	9	13	24	37	44	48	55	58	57	60	56	58	604
15	58	60	55	47	31	24	20	19	22	18	23	25	28	26	24	24	20	21	20	24	24	25	23	24	685
16	28	28	27	28	31	30	28	28	29	25	26	25	25	23	22	22	19	16	16	18	16	13	17	14	554
17	9	7	8	11	12	12	24	29	27	28	30	33	32	27	23	20	22	22	23	16	13	10	8	13	459
18	15	12	13	8	9	15	20	18	13	11	11	7	7	10	10	8	4	5	5	7	8	10	9	8	243
19	6	5	1	6	7	6	6	4	4	5	8	4	8	11	9	7	7	6	3	4	4	2	8	23	154
20	6	10	12	8	4	3	2	6	3	7	16	16	14	12	16	17	30	32	33	29	20	12	8	7	323
21	6	6	5	7	6	7	2	0	1	1	0	1	6	7	9	9	10	11	9	9	9	9	8	5	143
22	6	6	7	6	4	9	5	3	1	2	1	0	2	0	1	0	0	0	0	1	0	0	2	4	60
23	5	7	7	8	9	10	12	11	9	6	7	4	3	0	5	12	13	5	1	13	14	7	12	4	184
24	14	17	14	15	13	14	16	15	14	7	5	5	3	3	6	6	6	5	6	9	8	11	12	11	235
25	10	11	15	10	12	6	7	8	19	5	5	6	39	45	47	43	49	47	33	17	8	10	6	9	467
26	5	22	11	11	8	3	22	33	21	11	33	31	27	28	33	23	18	11	6	5	10	12	19	19	422
27	8	12	10	15	20	25	25	21	21	22	16	11	7	8	8	2	0	3	0	0	0	0	0	0	234
28	2	8	8	8	9	7	3	1	1	0	0	0	1	5	5	6	4	5	5	4	3	3	2	3	93
29	2	5	5	3	4	2	4	2	3	2	1	2	2	1	1	1	1	1	1	0	1	0	0	0	44
30	2	0	0	1	0	0	0	0	2	2	2	1	4	4	4	3	4	2	3	5	6	6	4	4	59
Mean	13.4	14.2	13.6	13.6	13.3	12.2	12.2	11.6	11.2	10.0	12.5	11.8	13.5	13.0	13.9	13.7	13.7	13.3	12.4	12.2	11.6	11.5	12.1	12.3	302.8

Total movement during month, 9084 miles; mean daily movement, 302.8 miles; average hourly movement, 12.6 miles

Tabulation of hourly wind records at Teplitz Bay during the month of December, 1904

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	1	1	1	1	2	2	2	3	3	16	27	32	38	34	31	26	29	31	30	35	35	33	33	22	468
2	20	35	34	33	9	10	35	30	39	38	40	35	28	35	31	29	18	13	15	13	13	16	13	11	593
3	12	17	45	42	35	37	37	36	37	15	26	32	22	26	23	21	20	30	32	12	24	30	27	29	667
4	22	20	19	25	33	20	27	31	25	19	13	11	16	20	9	13	20	27	11	4	4	4	2	3	398
5	1	2	1	1	2	1	2	1	0	2	6	12	16	12	13	11	17	12	11	13	24	14	14	19	207
6	30	24	26	32	36	20	30	27	29	27	31	36	30	21	9	19	20	24	38	42	44	43	41	39	718
7	33	39	44	50	46	62	67	66	59	45	32	26	25	42	45	45	58	54	55	37	31	39	31	26	1057
8	30	48	46	52	54	57	58	49	55	55	53	34	38	39	51	38	24	27	12	9	12	13	33	38	925
9	32	28	23	19	12	9	7	10	10	14	14	12	11	12	11	10	6	3	2	2	2	7	11	17	284
10	21	13	8	42	31	22	16	14	15	32	31	33	27	23	25	29	29	19	9	17	52	44	58	53	663
11	52	48	42	41	28	15	11	36	29	51	45	22	35	34	30	51	49	50	25	25	42	44	44	47	896
12	49	55	51	34	40	44	40	45	45	43	46	41	42	44	30	20	20	13	30	30	31	33	31	31	888
13	29	29	31	29	32	37	39	37	29	31	28	31	42	47	48	47	48	47	43	37	35	34	36	36	882
14	45	46	45	42	42	47	42	41	39	34	34	31	26	20	19	23	22	18	13	13	10	10	9	3	674
15	9	11	9	11	9	4	2	2	1	2	1	3	1	3	2	2	2	2	0	1	0	0	1	1	79
16	0	1	2	2	5	3	4	6	20	19	2	0	3	1	2	1	2	0	2	1	2	1	2	1	82
17	6	17	19	10	3	1	1	1	2	1	6	10	10	8	8	10	8	9	12	16	15	15	27	20	235
18	9	10	20	29	27	24	20	9	6	4	3	3	3	3	1	4	8	5	2	2	2	1	2	3	200
19	1	2	2	2	1	2	2	0	3	1	1	0	2	2	2	2	2	2	1	2	1	1	0	1	35
20	1	1	1	1	2	2	2	1	4	1	1	0	0	1	3	4	8	6	3	10	10	12	10	12	96
21	2	0	7	15	16	18	19	20	22	16	11	15	12	12	13	17	13	13	16	12	16	16	17	17	335
22	8	7	5	4	12	5	4	2	1	2	4	7	5	6	6	8	8	8	9	8	7	11	10	7	154
23	8	12	11	11	17	18	16	15	16	17	17	14	12	13	15	19	18	16	18	19	15	12	13	14	356
24	9	4	5	6	7	7	5	7	9	9	4	2	2	1	1	1	0	0	1	0	1	0	1	0	82
25	0	0	0	1	0	0	0	0	2	1	1	5	0	2	8	2	1	0	0	1	2	1	1	0	28
26	1	1	1	0	1	3	4	2	1	3	16	16	13	22	17	14	16	17	18	17	18	17	10	8	236
27	7	4	6	5	3	2	1	1	1	1	3	7	9	13	16	13	14	10	8	11	10	12	6	19	182
28	19	17	19	17	16	11	15	9	8	5	4	0	1	1	2	1	2	1	1	1	2	1	2	1	156
29	1	4	6	6	5	2	1	3	1	2	2	1	1	1	2	3	3	5	8	9	13	14	16	14	123
30	15	14	13	12	13	7	3	15	13	10	9	5	8	1	1	10	13	13	13	10	14	8	6	6	232
31	9	2	2	2	2	4	2	2	8	12	7	15	7	9	8	7	5	6	3	7	6	7	6	11	149
Means	15.5	16.5	17.5	18.6	17.5	16.0	16.6	16.8	17.2	17.0	16.7	15.8	15.6	16.4	15.5	16.1	16.2	15.5	14.2	13.4	15.9	15.9	16.5	16.4	389.7

Total movement during month, 12080 miles; mean daily movement, 389.7 miles; average hourly movement, 16.2 miles

Tabulation of hourly wind records at Teplitz Bay during the month of January, 1905

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	13	7	18	17	16	11	9	3	1	1	1	2	3	2	1	3	2	1	2	1	1	1	2	6	124
2	10	9	8	8	4	4	8	8	7	7	4	6	1	2	1	1	2	3	2	1	4	1	3	4	108
3	3	2	2	2	2	3	3	1	1	1	2	3	4	2	4	1	8	10	12	11	12	9	5	4	107
4	3	2	2	1	1	1	0	1	1	6	4	3	4	4	5	6	4	5	4	6	7	9	4	5	88
5	5	5	4	4	3	4	4	4	2	1	0	1	1	0	2	1	1	0	1	0	0	1	1	11	56
6	27	24	5	5	5	8	19	22	26	25	33	47	27	18	39	27	18	11	25	23	28	14	14	12	502
7	11	14	11	47	45	20	12	25	44	52	51	52	52	48	38	50	47	35	60	42	31	41	28	27	883
8	36	33	39	42	50	51	56	53	31	12	16	36	42	48	47	55	56	50	51	54	57	58	38	15	1026
9	15	7	6	7	6	8	6	5	4	4	3	2	4	5	8	8	10	10	11	11	9	7	18	24	198
10	21	26	25	27	27	20	9	7	14	23	24	24	10	7	6	4	3	2	2	3	6	8	9	5	312
11	15	11	11	12	8	6	8	5	6	4	9	12	4	4	4	3	3	3	2	2	2	2	4	2	142
12	3	2	1	1	2	2	2	2	2	2	1	2	3	3	2	2	6	4	2	2	2	3	3	5	59
13	5	3	3	1	1	2	2	2	1	1	3	2	4	2	2	2	2	1	3	2	2	3	2	2	53
14	1	3	1	4	4	5	4	1	3	2	1	3	2	1	2	2	2	2	2	3	3	2	2	2	57
15	2	3	2	2	2	3	1	1	2	1	1	3	1	1	1	2	2	2	11	30	26	41	45	46	231
16	43	40	36	43	47	45	50	46	37	28	38	39	29	29	19	17	31	11	12	21	16	9	10	5	701
17	5	2	3	3	3	2	2	3	1	2	2	3	4	5	5	10	10	10	10	12	11	11	9	9	137
18	14	15	14	17	15	14	15	13	13	17	21	23	25	17	13	9	8	11	15	17	19	20	17	14	376
19	14	8	7	10	13	3	6	8	8	8	6	5	4	6	7	15	27	33	22	11	11	20	12	11	275
20	11	7	9	5	4	21	16	32	21	6	11	11	6	2	2	1	2	2	2	4	4	5	3	2	189
21	6	5	4	2	4	6	5	2	3	9	9	12	14	16	16	16	14	19	17	15	14	10	10	10	238
22	9	5	4	5	5	4	2	2	3	2	4	4	4	5	8	6	7	7	7	9	10	11	11	10	144
23	9	12	12	11	10	12	11	14	19	24	28	25	24	35	40	45	46	53	53	57	65	66	70	64	805
24	61	56	56	54	28	29	35	32	36	41	44	43	45	45	49	47	46	41	40	36	34	38	44	55	1035
25	58	48	46	48	47	38	28	25	24	33	32	29	32	27	22	19	17	13	17	14	12	16	15	13	673
26	14	15	18	20	21	20	18	18	17	15	14	11	12	9	8	11	12	9	9	3	4	1	2	4	285
27	7	8	4	4	4	6	5	6	5	5	5	5	7	5	4	5	4	7	10	12	10	12	12	15	167
28	19	27	28	28	33	39	38	43	49	54	55	63	63	65	63	57	55	59	59	57	60	58	59	49	1180
29	53	57	57	65	70	66	63	54	52	57	63	56	65	61	63	66	71	72	77	67	63	70	59	53	1500
30	42	16	26	50	39	11	12	10	15	32	16	15	14	25	23	19	10	10	10	12	11	7	10	7	442
31	11	15	13	13	11	15	21	19	15	20	18	18	16	22	20	18	27	22	23	22	19	19	19	16	432
Means	17.6	15.7	15.3	18.0	17.1	15.5	15.2	15.1	14.9	16.0	16.7	18.1	17.0	16.8	16.9	17.0	17.8	16.7	18.5	18.1	17.8	18.5	17.4	16.4	404.0

Total movement during month, 12525 miles; mean daily movement, 404.0 miles; average hourly movement, 16.8 miles

Tabulation of hourly wind records at Teplitz Bay during the month of February, 1905

Date	For the hour preceding — Wind Movement																								Daily total
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	17	17	19	17	17	16	18	19	18	14	13	11	9	5	5	3	9	9	5	6	7	5	3	4	266
2	4	4	5	7	8	6	9	14	17	21	25	24	16	23	26	30	33	30	31	32	32	27	27	28	479
3	25	27	22	23	22	22	19	19	19	20	19	14	16	24	25	21	19	17	12	16	20	13	10	12	456
4	10	4	12	16	5	10	8	6	8	17	20	22	18	27	28	18	16	16	12	24	40	43	43	47	470
5	45	44	41	38	38	38	37	33	33	34	37	34	35	31	35	30	34	39	38	37	30	19	35	36	851
6	38	44	42	40	43	46	41	33	29	24	23	24	24	22	20	20	18	17	14	12	7	8	7	3	599
7	7	8	7	5	7	7	7	7	10	9	7	4	7	6	5	8	8	5	7	4	2	3	4	5	149
8	5	3	4	5	3	3	4	5	6	4	4	5	4	5	1	3	5	6	3	4	4	5	4	3	98
9	4	3	3	4	5	3	4	3	3	3	4	4	5	6	10	4	6	5	5	21	38	42	33	31	249
10	30	33	26	8	12	15	42	41	38	30	29	25	29	27	29	27	29	25	8	17	35	32	12	20	619
11	29	33	31	25	25	26	22	22	26	20	25	27	28	26	27	30	29	29	27	24	11	3	5	8	558
12	10	4	4	1	4	8	5	4	0	3	5	12	13	15	13	11	6	12	7	3	3	6	3	5	157
13	3	4	5	6	11	11	13	10	9	3	6	6	6	6	9	6	5	16	10	11	14	8	9	4	191
14	9	14	10	16	8	14	8	4	5	18	10	9	15	16	18	16	18	16	18	10	4	4	4	5	269
15	13	8	5	7	4	4	7	12	14	13	12	6	10	8	16	19	19	17	11	11	15	23	25	26	305
16	26	27	30	29	26	24	27	34	39	43	46	47	49	49	44	41	45	46	45	51	54	51	45	38	956
17	40	44	45	45	43	47	49	47	58	62	56	44	46	45	45	45	44	47	48	48	54	58	56	58	1174
18	45	45	45	45	45	45	45	45	40	39	41	39	39	34	33	32	33	32	26	38	37	31	25	28	907
19	27	25	28	26	27	24	28	35	34	36	38	27	24	20	18	19	24	13	5	6	10	10	14	13	531
20	10	9	6	9	8	8	2	4	5	8	7	9	9	9	9	8	10	9	9	12	11	14	13	11	209
21	9	11	10	2	5	5	4	7	9	6	9	12	15	14	18	24	28	27	26	28	25	22	26	26	368
22	30	32	33	39	35	32	33	29	21	33	38	39	42	37	45	47	52	49	51	48	44	44	31	37	921
23	32	26	42	54	51	49	50	53	49	33	30	42	35	38	42	45	45	41	40	41	41	43	43	45	1010
24	45	45	45	45	45	45	45	45	44	43	41	39	36	35	33	31	26	23	14	20	19	13	7	7	791
25	12	13	8	11	12	6	14	15	9	5	3	4	6	3	4	4	3	5	8	6	10	6	10	17	194
26	16	30	36	44	50	55	62	61	59	62	61	59	60	60	53	53	56	49	46	47	41	57	51	50	1218
27	56	53	55	56	58	66	55	60	66	71	73	72	68	66	50	52	57	73	65	54	53	54	59	55	1447
28	49	39	31	33	37	33	26	26	30	30	28	28	35	45	47	49	59	41	5	16	41	50	47	11	836
Mean	23.1	23.2	23.2	23.4	23.4	23.9	24.4	24.8	24.9	25.1	25.4	24.6	25.0	25.1	25.3	24.9	26.3	25.5	21.3	23.1	25.1	24.8	23.2	22.6	581.4

Total movement during month, 16278 miles; mean daily movement, 581.4 miles; average hourly movement, 24.2 miles

Tabulation of hourly wind records at Teplitz Bay during the month of March, 1905

Date	Wind Movement																							Daily total
	For the hour preceding																							
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	10	17	20	15	13	11	12	11	15	14	11	11	9	11	12	9	9	9	7	9	9	9	6	4	263
2	5	5	3	2	4	3	3	3	4	7	8	19	25	22	24	24	24	27	27	20	35	38	38	34	404
3	31	29	33	35	33	27	33	35	40	36	20	7	7	8	11	7	3	1	4	3	8	9	7	4	431
4	5	9	12	17	17	15	14	14	19	21	23	29	30	34	35	37	37	40	23	18	18	22	25	25	539
5	26	30	30	34	31	27	27	31	29	35	31	19	13	10	10	6	10	20	16	15	15	15	13	13	506
6	13	12	13	13	6	6	5	3	7	10	12	8	8	8	3	4	4	4	9	10	20	17	17	17	229
7	16	23	26	22	22	22	22	23	24	27	48	49	49	48	55	59	66	68	73	62	64	70	66	68	1072
8	74	78	75	75	75	75	70	65	63	62	14	15	22	31	24	29	44	44	41	44	45	44	43	44	1196
9	46	48	45	45	45	34	20	25	35	33	40	45	18	9	9	10	13	17	20	19	21	20	10	3	630
10	9	7	6	3	4	5	5	4	7	6	4	10	8	7	10	13	13	10	13	11	14	15	13	10	207
11	14	6	15	37	36	42	41	38	36	40	33	33	29	27	26	23	24	29	31	33	35	35	36	40	739
12	40	37	33	30	29	28	29	36	39	39	37	36	37	34	33	33	36	35	29	28	32	33	31	30	804
13	24	24	24	23	22	19	20	22	21	20	29	31	33	14	39	19	11	9	10	30	25	48	53	43	613
14	36	43	42	40	40	40	35	30	18	28	7	3	7	5	9	7	7	6	7	2	3	2	7	8	432
15	9	9	7	7	5	6	6	6	5	4	6	7	6	8	8	5	2	4	7	8	12	11	11	9	168
16	8	11	13	12	11	10	9	7	6	9	10	10	5	3	7	8	6	4	4	4	3	7	9	11	187
17	11	7	8	12	15	17	13	13	12	10	9	10	10	8	5	5	7	7	8	8	7	4	6	3	215
18	2	3	1	3	4	6	5	5	3	2	3	2	3	7	5	5	3	3	4	6	6	6	4	1	92
19	6	1	0	0	0	0	0	0	0	0	4	7	8	8	8	9	7	10	9	11	14	15	17	15	149
20	17	17	17	15	18	16	13	13	12	11	13	15	17	17	15	13	14	18	16	12	11	11	12	18	351
21	19	23	24	22	18	17	16	10	7	7	5	5	2	3	5	5	0	0	0	0	0	0	0	0	188
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	3	2	5	10	27
23	6	5	3	2	4	4	7	10	12	10	8	10	10	11	10	9	10	12	11	13	12	12	13	19	223
24	17	17	19	14	18	18	17	21	22	18	21	21	15	15	17	17	18	20	20	18	14	11	17	15	420
25	10	9	8	12	9	9	5	3	1	4	3	2	3	5	7	4	3	1	4	4	3	3	4	8	124
26	5	3	5	7	8	7	10	3	4	10	22	20	20	23	12	6	4	3	7	7	9	13	16	11	235
27	11	11	13	16	18	19	21	21	17	15	13	13	10	8	7	6	3	3	3	4	5	7	8	9	261
28	9	12	16	18	19	15	14	17	18	14	14	11	10	13	12	13	10	13	12	10	10	10	12	11	313
29	10	10	9	10	10	11	10	13	10	9	8	8	9	9	8	10	7	9	9	9	6	6	5	4	209
30	3	6	3	2	2	1	1	3	0	1	0	2	6	9	9	8	7	5	4	5	4	3	2	1	87
31	2	1	1	2	0	1	3	1	1	0	1	2	5	5	6	3	0	6	5	4	4	2	1	0	56
Means	15.9	16.5	16.9	17.6	17.3	16.5	15.7	15.7	15.7	16.2	14.7	14.8	14.0	13.5	14.2	13.1	13.0	14.1	14.1	13.9	15.1	16.1	16.4	15.7	366.8

Total movement during month, 11370 miles; mean daily movement, 366.8 miles; average hourly movement, 15.3 miles

Tabulation of hourly wind records at Teplitz Bay during the month of April, 1905

Date	Wind Movement																								Daily total
	For the hour preceding																								
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	2	0	2	2	3	2	2	2	5	6	2	9	12	10	0	0	0	0	0	0	0	0	0	0	59
2	1	1	1	6	2	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	17
3	1	0	1	1	2	1	1	1	2	12	5	1	5	8	7	2	2	2	1	0	1	3	5	5	69
4	5	4	5	6	3	3	1	2	0	0	0	0	0	1	3	13	15	35	28	27	57	60	55	51	374
5	39	27	34	19	24	28	27	29	26	28	24	22	22	16	12	2	12	10	12	33	34	33	32	33	578
6	35	38	39	34	35	30	30	29	29	26	31	32	28	32	29	32	28	27	29	27	33	36	34	34	757
7	36	37	36	38	37	36	33	28	37	46	47	53	60	53	54	58	55	56	64	65	57	54	50	47	1137
8	44	41	40	40	35	32	30	28	29	30	30	33	30	31	29	27	36	39	37	37	37	37	36	34	822
9	35	35	26	25	28	33	35	37	36	37	39	35	35	35	34	28	30	36	21	37	35	37	35	26	790
10	31	23	35	36	25	15	20	23	20	24	12	16	17	19	16	16	20	20	18	15	15	14	14	13	477
11	12	12	12	12	12	10	10	10	5	2	3	2	7	4	1	1	1	3	4	4	4	6	4	4	145
12	5	4	5	5	6	5	5	6	4	5	3	3	2	2	1	4	5	4	6	4	4	5	7	6	106
13	9	8	8	8	7	9	10	15	17	17	16	19	19	19	20	21	22	22	21	22	22	23	22	22	398
14	22	21	20	18	21	21	22	17	17	17	20	19	16	15	17	11	11	10	11	11	10	11	9	8	375
15	6	8	6	8	8	7	8	8	8	7	5	6	9	7	5	1	2	3	11	22	28	30	31	25	259
16	27	27	26	20	18	15	18	37	38	26	13	11	7	9	3	13	25	15	9	7	5	25	28	29	451
17	30	33	31	28	29	27	28	23	9	6	6	2	0	1	1	6	5	1	0	0	0	0	0	0	266
18	0	0	0	1	10	7	1	6	9	2	5	20	17	26	28	28	26	28	29	28	28	27	29	25	380
19	21	15	25	26	27	35	35	33	32	33	33	33	32	23	19	20	13	16	18	30	29	27	27	22	624
20	18	14	15	11	12	13	12	10	8	6	6	7	5	4	1	2	1	1	3	0	2	3	1	3	158
21	5	3	3	5	5	2	3	6	6	6	6	7	2	0	3	4	4	5	5	4	5	5	4	6	104
22	3	4	5	4	6	4	3	4	5	7	6	7	9	8	8	7	9	7	8	8	7	7	9	9	154
23	8	10	9	10	11	12	12	12	14	12	12	11	12	12	12	12	10	7	7	10	12	11	9	8	255
24	6	6	3	4	3	3	1	1	1	1	3	2	4	5	4	3	3	2	3	5	3	5	5	4	80
25	6	4	5	3	5	4	6	7	8	9	7	9	9	10	7	9	11	11	12	9	9	8	10	10	188
26	10	10	10	11	12	10	10	13	12	16	13	13	17	15	17	20	24	23	25	29	26	26	26	25	413
27	24	23	20	17	20	21	18	18	17	16	13	14	14	14	14	15	16	16	18	17	17	16	15	14	407
28	12	10	11	14	14	13	10	7	2	2	2	0	4	5	7	7	5	9	7	4	5	4	6	6	166
29	2	1	3	1	1	3	1	2	3	1	2	4	3	1	2	7	7	7	4	4	5	6	4	7	81
30	14	13	12	10	9	9	11	15	15	16	15	18	16	18	16	14	14	10	8	9	9	9	8	7	295
Means	15.6	14.4	14.9	14.1	14.3	13.7	13.5	14.3	13.8	13.9	12.6	13.6	13.8	13.5	12.3	12.8	13.7	14.2	14.0	15.6	16.6	17.6	17.2	16.1	346.2

Total movement during month, 10385 miles; mean daily movement, 346.2 miles; average hourly movement, 14.4 miles.

Tabulation of hourly wind records at Teplitz Bay during the month of May, 1905

Date	Wind Movement — For the hour preceding																							Daily total
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
	Mi.	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
1	4	6	9	6	6	7	5	4	11	13	13	13	15	20	15	21	25	26	27	26	26	26	25	26	375
2	28	23	23	21	21	19	24	26	26	24	28	29	28	28	28	23	19	16	20	21	24	19	16	6	540
3	7	11	5	1	5	1	6	3	2	6	2	2	3	5	8	11	11	9	12	13	17	16	17	17	190
4	19	16	15	12	8	8	8	9	10	10	13	11	8	9	9	10	9	7	7	5	4	4	5	6	222
5	4	3	4	6	13	18	19	20	21	21	21	21	17	16	17	18	18	17	15	14	13	11	11	11	349
6	12	13	14	15	16	16	17	18	19	19	18	17	17	18	16	16	19	17	15	16	13	13	21	22	397
7	26	26	20	11	6	7	4	4	7	7	15	18	17	16	14	12	11	8	9	8	7	6	20	18	297
8	10	9	7	10	16	18	20	24	25	23	22	23	25	23	22	26	24	21	22	22	21	22	22	22	479
9	18	19	20	23	23	22	20	18	21	17	15	13	12	7	5	5	2	3	4	14	16	17	17	14	345
10	14	11	11	13	15	12	12	12	12	11	10	10	9	7	5	4	3	1	1	3	3	4	2	1	186
11	3	1	7	7	7	9	8	7	6	5	5	5	6	6	8	9	10	9	11	12	12	12	14	14	193
12	15	14	14	12	13	12	12	10	10	10	8	8	8	7	10	10	8	4	3	2	4	6	8	8	216
13	9	9	11	11	12	12	12	12	15	14	16	16	14	13	13	16	18	17	16	16	17	18	19	18	344
14	19	19	19	21	18	20	19	19	21	21	19	21	20	16	14	17	16	18	20	23	20	22	23	21	466
15	20	20	19	18	20	17	17	16	16	13	12	10	10	11	13	14	10	10	9	12	12	11	11	14	335
16	14	13	13	12	10	9	8	6	4	2	2	0	3	0	3	5	6	3	3	7	7	6	6	8	150
17	9	12	10	11	7	6	7	7	7	5	7	6	7	7	8	8	9	9	9	8	8	8	9	7	191
18	7	7	7	7	8	7	7	7	6	6	7	7	7	7	6	7	6	5	6	6	5	5	2	1	146
19	1	1	3	7	12	17	16	10	10	21	24	28	28	31	22	23	27	33	28	28	28	27	27	25	477
20	25	24	23	19	18	15	16	18	18	18	19	22	21	18	16	14	8	8	15	24	25	28	28	30	470
21	27	33	26	26	23	8	7	4	25	25	17	18	20	19	18	20	18	18	19	21	21	19	21	16	469
22	18	26	29	29	29	32	27	29	33	34	37	35	29	32	36	37	37	33	34	35	31	32	39	38	771
23	39	41	35	38	40	39	39	32	37	25	28	28	31	33	33	39	39	32	21	17	17	16	12	12	723
24	14	21	26	20	18	17	14	14	16	11	13	14	9	12	13	15	17	14	15	15	16	24	32	35	415
25	34	35	32	34	27	37	39	27	22	25	31	31	35	34	27	27	27	26	21	20	12	9	9	9	630
26	8	7	6	5	7	10	11	10	9	10	8	6	..	..	..	..	..	..	..	..	..	..	..	..	97
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...
Means	15.5	16.2	15.7	15.2	15.3	15.2	15.2	14.1	15.7	15.2	15.8	15.8	15.3	15.8	15.2	16.3	15.9	14.6	14.5	15.5	15.2	15.2	16.6	16.0	371.5

Total movement during 25½ days, 9473 miles; mean daily movement, 371.5 miles; average hourly movement, 14.9 miles

Reduction of Observations at Teplitz Bay

Summary of mean monthly daily records at Teplitz Bay

October, 1903, to April, 1904

Month	Reduced barometer			Reading of Fahrenheit thermometer			Precipitation			
	8H	12H	20H	8H	12H	20H	8H	12H	20H	Total
	In.	*In.*	*In.*	°	°	°	*In.*	*In.*	*In.*	*In.*
October	29.812	29.808	29.807	+ 5.5	+ 5.5	+ 5.1	.82	.13	.34	1.29
November	29.486	29.491	29.510	— 9.9	— 8.7	—12.9	.60	.23	.44	1.27
December	29.876	29.874	29.877	—15.7	—15.6	—15.5	.00	.00	.04	.04
January	29.444	29.449	29.483	—14.9	—15.4	—17.7	.91	.48	.27	1.66
February	29.823	29.797	29.810	—17.0	—15.5	—15.2	.22	.43	.29	.94
March	29.551*	29.585*	29.566*	—19.3	—20.5	—19.2	1.41	.50	.61	2.52
April	29.675	29.673	29.685	— 9.2	— 7.2	— 9.8	.57	.14	.23	.94
Means	29.667	29.668	29.677	—11.5	—11.1	—12.2	.65	.27	.32	1.24

* No observations from 7th to 11th.

Summary of mean monthly daily records at Teplitz Bay—Continued

October, 1903, to April, 1904

Month	Self-registering Fahrenheit thermometers						
	8H		12H	20H		Mean of extremes	Range
	Max.	Min.	Max.	Max.	Min.		
	°	°	°	°	°	°	°
October	+ 8.8	+ 1.1	+ 7.1	+ 8.6	+ 1.6	+ 5.0	10.3
November	— 6.8	—17.9	— 6.9	— 6.2	—16.1	—12.4	16.5
December	—12.7	—19.0	—14.0	—11.9	—19.2	—15.8	10.7
January	—11.7	—21.0	—13.0	—11.2	—21.6	—16.6	16.2
February	—11.5	—23.1	—12.8	— 9.1	—22.0	—15.5	22.1
March	—13.6	—24.8	—16.2	—12.4	—25.8	—19.0	19.9
April	—15.7	—14.3	— 5.5	— 3.3	—13.2	— 9.2	15.1
Means	— 9.0	—17.0	— 8.8	— 6.5	—16.6	—11.9	15.8

Tabular summary of percentages of observed wind directions at Teplitz Bay

September, 1903, to December, 1903

Direction	September, 1903						October, 1903						November, 1903						December, 1903					
	8H		12H		20H		8H		12H		20H		8H		12H		20H		8H		12H		20H	
	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
N	..	..	7	7	10	10	..	3	6	3	16	6	7	10	..	..	13	10	6	10	3	6	10	6
NNE	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..
NE	7	7	10	7	7	7	16	19	3	13	23	19	23	20	24	21	7	3	10	13	13	13	10	10
ENE	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
E	30	27	14	21	30	30	23	19	45	39	19	26	13	10	14	24	13	10	39	39	32	39	32	35
ESE	..	..	..	..	..	..	..	..	3	3	3	3	13	17	10	3	7	7	6	10	6	3	3	6
SE	27	33	34	36	23	23	29	32	13	13	19	23	13	10	14	14	20	27	16	13	19	19	19	16
SSE	..	..	..	..	..	..	..	..	3	6	..	..	3	3	3	3	3	3	3	3	..	3	..	3
S	13	10	10	7	13	13	3	3	6	3	10	6	10	10	3	10	10	7	3	..	6	3	13	10
SSW	..	..	..	..	..	..	3	..	..	..	..	..	3	3	..	3	..	3	..	..	..	..	..	..
SW	10	10	14	18	13	13	10	16	3	3	3	6	3	3	7	3	3	3	6	3	3	3	..	..
WSW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
W	7	7	7	3	3	3	13	3	10	13	3	3	3	3	17	10	10	13	6	10	10	10	13	13
WNW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NW	7	7	3	..	..	..	3	3	6	3	..	3	7	10	7	7	13	13	..	..	3	..	..	.
NNW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Calm	..	..	..	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	3	..	..	.

Tabular summary of percentages of observed wind directions at Teplitz Bay—Continued

January, 1904, to April, 1904

Direction	January, 1904						February, 1904						March, 1904						April, 1904					
	8H		12H		20H		8H		12H		20H		8H		12H		20H		8H		12H		20H	
	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.	Obs.	Max.
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
N	6	13	6	10	6	13	14	14	7	14	10	10	19	23	12	35	15	24	17	28	7	17	28	25
NNE	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	3	3	3	..	..	..
NE	16	10	16	13	10	13	10	3	7	7	17	..	19	8	12	15	11	20	14	10	10	21	17	4
ENE	..	..	10	6	..	3	..	..	3	..	..	3	..	..	4	..	..	..	..	7	..	..	..	4
E	29	29	13	19	39	26	21	28	24	24	21	31	11	19	35	19	26	24	17	7	21	14	10	11
ESE	3	6	13	10	3	10	..	..	..	..	..	..	..	..	..	..	..	..	7	7	..	..	7	7
SE	13	6	3	13	10	13	10	14	17	17	14	17	11	12	..	8	7	4	10	10	7	17	10	14
SSE	..	..	..	..	..	..	3	7	..	3	..	..	4	8	4	4	7	8	3	3	3	..	..	4
S	23	23	23	16	6	10	17	14	7	3	14	3	7	12	4	4	11	8	7	3	10	7	..	4
SSW	..	..	..	..	..	..	..	..	3	..	..	3	..	..	..	..	..	..	..	3	..	..	3	..
SW	3	3	6	10	..	6	3	3	3	3	7	10	..	..	..	..	..	..	7	..	3	7	3	4
WSW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	3	4
W	3	6	6	3	19	6	14	17	14	17	14	14	11	8	8	12	4	4	7	..	14	7	14	4
WNW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	4
NW	..	3	..	..	6	..	7	..	7	7	3	7	4	8	8	4	11	8	3	3	14	7	3	11
NNW	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	4
Calm	3	..	3	..	..	..	..	..	7	..	..	..	15	4	15	..	7	..	3	..	7	..	..	..

Diurnal Variation in Temperature

The thermograms obtained at Teplitz Bay from October 1, 1903, to April 30, 1904, at which latter date the thermograph failed, have been reduced to the standard of the thermometer used in the daily observations. By graphical methods the mean daily thermograms for each month of record have been deduced; the diurnal inequalities indicated by these monthly mean daily curves are shown in the following summary, values greater than the mean of day being indicated by plus quantities, and *vice versa*. The mean monthly values for the corresponding period October, 1899, to April, 1900, as obtained by the Italian Expedition* are entered herewith for the sake of comparison, the quantities having been reduced to Fahrenheit scale.

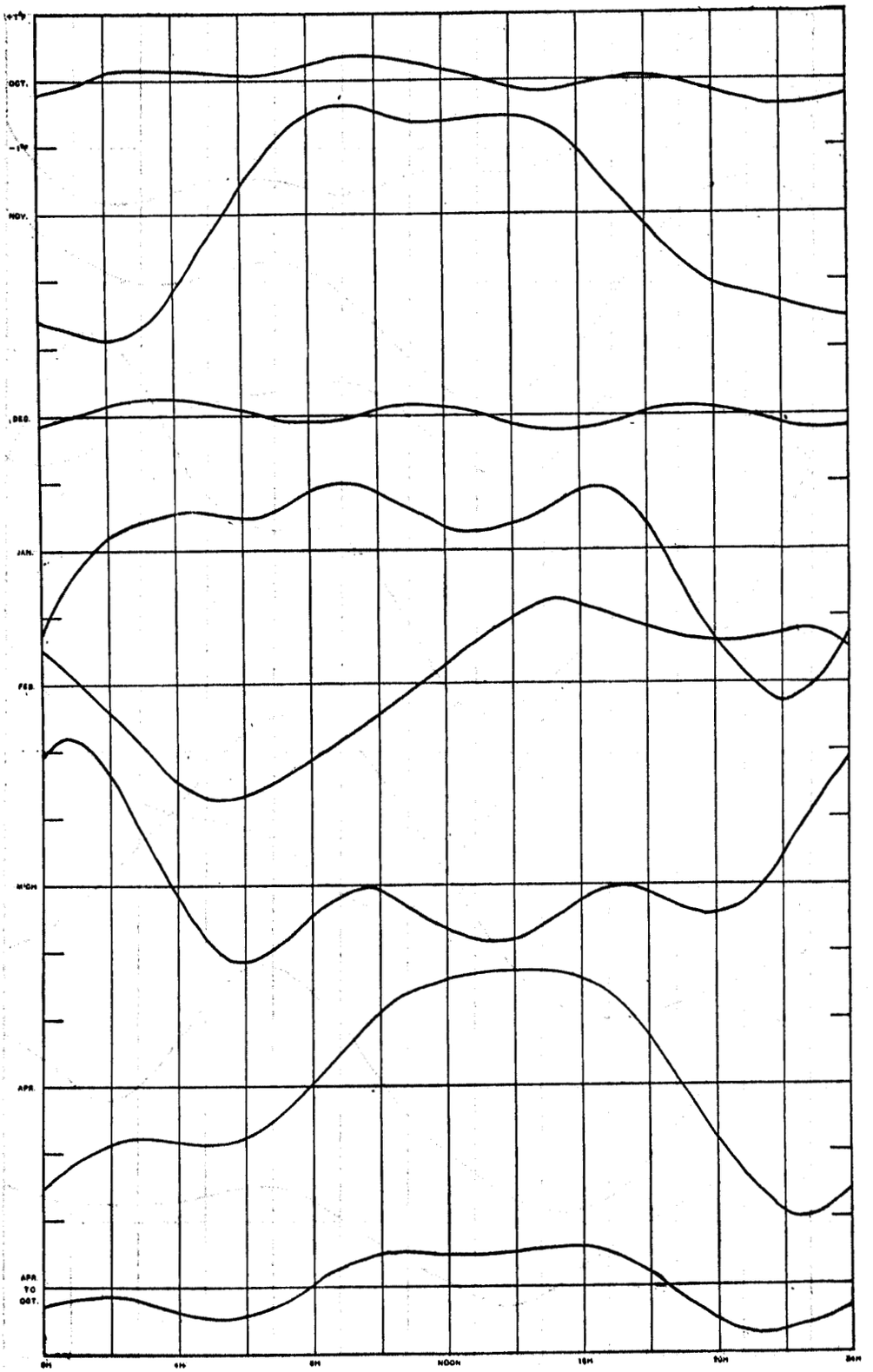
Summary of mean monthly diurnal variation in temperature at Teplitz Bay
From thermograms October, 1903, to April, 1904

Local mean time	Month of							October to April
	October, 1903	November, 1903	December, 1903	January, 1904	February, 1904	March, 1904	April, 1904	
h	°*F*	°*F*	°*F*	°*F*	°*F*	°*F*	°*F*	°*F*
0	— 0.01	— 1.15	+ 0.17	— 1.15	+ 0.74	+ 1.77	— 1.39	— 0.15
2	+ 0.03	— 1.56	— 0.24	+ 0.26	— 0.56	+ 2.16	— 1.01	— 0.13
4	+ 0.02	— 1.21	+ 0.51	+ 0.31	— 1.41	— 0.74	— 0.89	— 0.49
6	+ 0.22	— 0.20	— 0.13	+ 0.56	— 1.57	— 0.86	— 0.49	— 0.36
8	+ 0.19	+ 1.90	+ 0.02	+ 1.03	— 1.11	— 0.33	— 0.23	+ 0.21
10	+ 0.25	+ 1.05	+ 0.01	+ 0.50	— 0.63	— 0.28	+ 1.16	+ 0.29
12	+ 0.22	+ 1.78	+ 0.14	+ 0.52	+ 0.42	— 0.62	+ 1.70	+ 0.59
14	— 0.06	+ 1.95	— 0.12	+ 0.64	+ 0.91	— 0.62	+ 1.51	+ 0.60
16	— 0.30	+ 0.45	— 0.29	+ 0.18	+ 1.16	— 0.39	+ 1.59	+ 0.34
18	+ 0.19	— 0.37	+ 0.08	+ 1.12	+ 0.84	— 0.16	+ 0.90	+ 0.37
20	— 0.20	— 1.07	+ 0.18	— 1.76	+ 0.73	— 0.18	— 0.98	— 0.47
22	— 0.57	— 1.53	— 0.38	— 2.22	+ 0.52	+ 0.28	— 1.89	— 0.83
Mean monthly values....	+ 5.30	—11.84	—15.71	—15.92	—15.91	—18.98	— 8.86	—11.70
Monthly values 1899-1900	+ 6.01	+ 1.72	— 1.55	— 8.57	—16.92	—18.31	— 6.70	— 6.33

The above series being of only seven months' duration, no very elaborate reductions are possible. Analytical expressions representing the daily variation in temperature have been derived from the results by means of Bessel's periodic function (see page 289) to terms of the third order. The resulting amplitudes and phase angles are shown in the following tabulation, while the curves computed from the same are shown in figure 2.

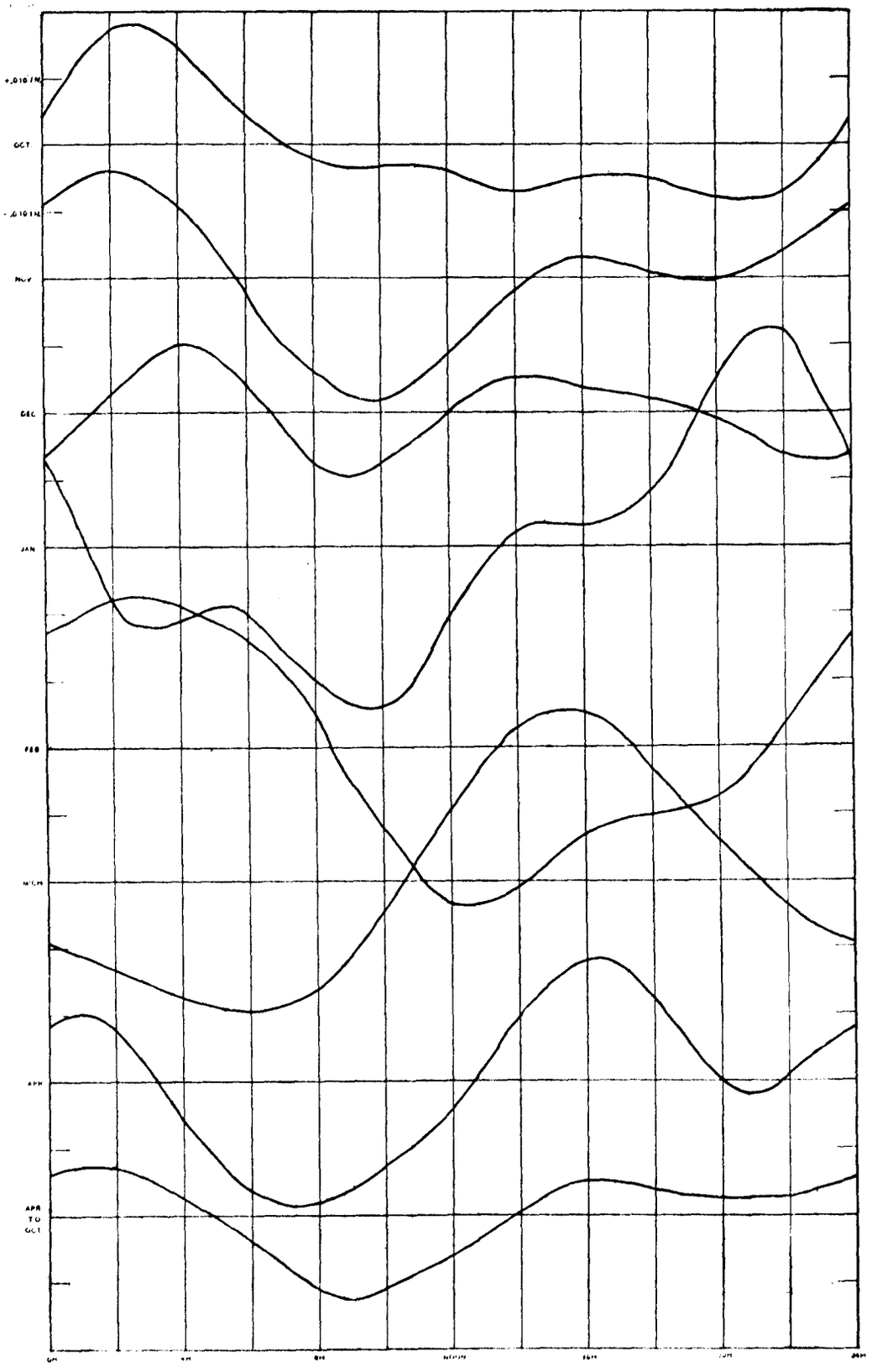
* Osservazioni scientifiche esquite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi, 1899–1900. Milan, 1903. Pp. 331–357. (Relazione sulle osservazioni meteorologiche fatta dal Professore Giovanni Battista Rizzo.)

FIGURE 2



DIURNAL VARIATION IN TEMPERATURE AT TEPLITZ BAY
(Increasing ordinates up denote increasing temperatures.)

FIGURE 3



DIURNAL VARIATION IN ATMOSPHERIC PRESSURE AT TEPLITZ BAY
(Increasing ordinates up denote increasing pressure.)

Summary of amplitudes and phase angles of periodic functions representing the diurnal variation in temperature at Teplitz Bay

$$\Delta t = B_1 \sin(\theta + C_1) + B_2 \sin(2\theta + C_2) + B_3 \sin(3\theta + C_3)$$

Month	Amplitudes			Phase angles		
	B_1	B_2	B_3	C_1	C_2	C_3
1903-1904	°F	°F	°F	° ′	° ′	° ′
October	0.24	0.04	0.15	320 42	274 22	349 35
November	1.76	0.21	0.34	274 34	209 03	122 53
December	0.08	0.04	0.17	7 50	276 38	297 18
January	1.08	0.70	0.51	298 55	322 00	18 52
February	1.26	0.40	0.18	182 27	77 37	101 19
March	0.86	0.64	0.65	90 16	78 02	41 35
April	1.65	0.45	0.32	254 37	0 53	4 07
October to April.....	0.53	0.19	0.23	257 52	31 45	34 23

NOTE.—In these expressions the angle θ is to be reckoned from 0 hour A. M. as 0°.

Diurnal Variation in Atmospheric Pressure

The barograms made at Teplitz Bay during the period of regular daily observation have been reduced to the standard of the mercurial barometer used. By graphical methods the mean daily curves for each month have been deduced; the diurnal inequalities so obtained are exhibited in the table following, pressure greater than the mean of day being indicated by plus signs, and *vice versa*. The mean monthly values for the corresponding period October, 1899, to April, 1900, as obtained by the Italian Expedition* are entered for the sake of comparison, the quantities having been reduced to English measure.

Summary of mean monthly diurnal variation in atmospheric pressure at Teplitz Bay

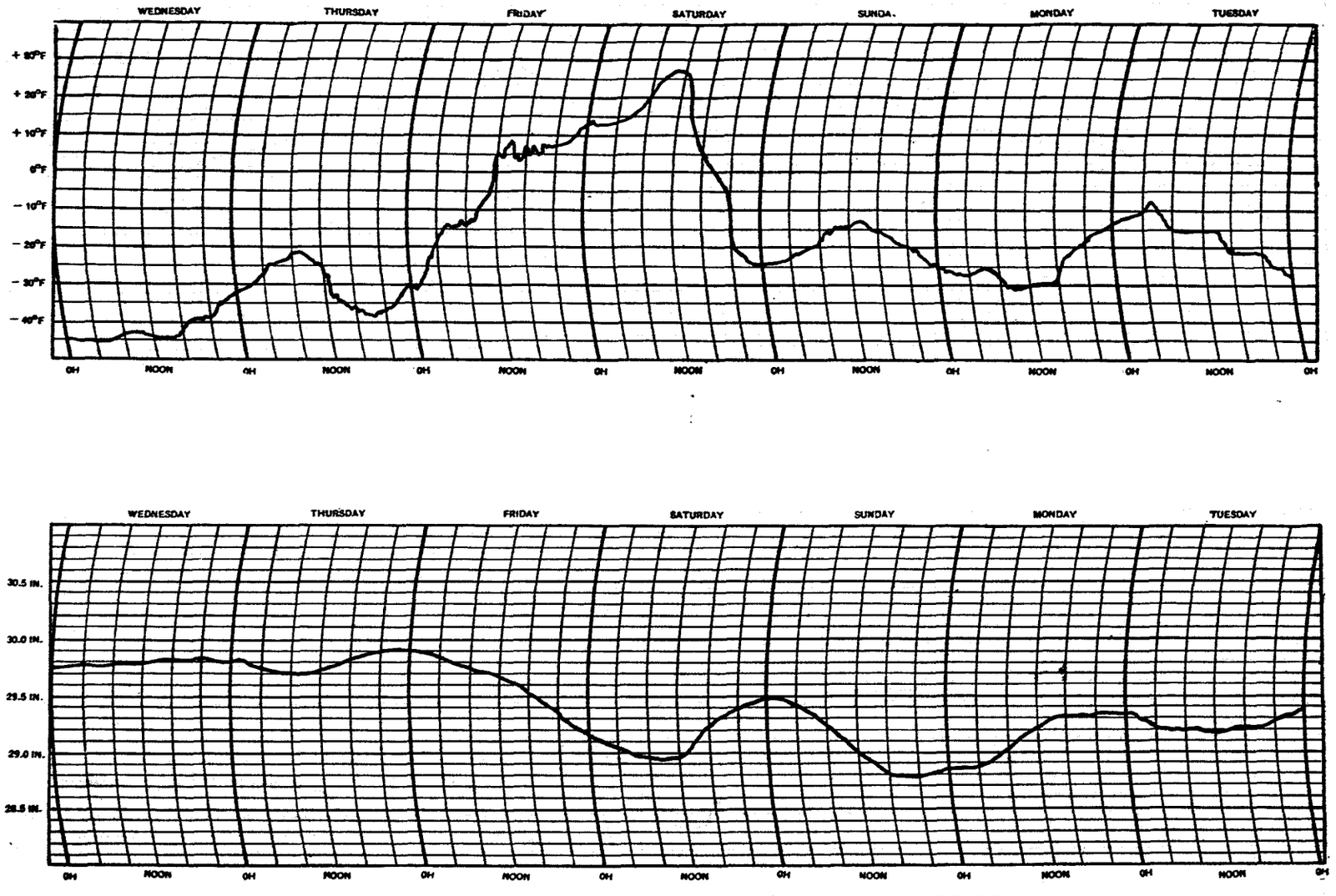
From barograms October, 1903, to April, 1904

Local mean time	Month of							October to April
	October, 1903	November, 1903	December, 1903	January, 1904	February, 1904	March, 1904	April, 1904	
h	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*
0	+.005	+.018	—.020	+.015	+.024	—.004	+.008	+.007
2	+.015	+.013	+.009	—.012	+.016	—.013	+.009	+.005
4	+.017	+.010	+.010	—.006	+.022	—.019	—.008	+.004
6	+.003	.000	+.002	—.016	+.016	—.015	—.016	—.004
8	—.001	—.017	—.006	—.015	+.008	—.021	—.017	—.010
10	—.001	—.015	—.001	—.028	—.017	.000	—.013	—.011
12	—.005	—.012	—.008	—.010	—.018	+.009	—.007	—.007
14	—.007	—.005	+ 012	+.003	—.023	+.027	+.013	+.003
16	—.004	+.003	+.001	.000	—.012	+.017	+.014	+.003
18	—.006	—.001	.000	+.012	—.010	+.026	+.011	+.005
20	—.006	+ 007	—.005	+.024	—.005	+.003	+.002	+.003
22	—.008	—.006	+.001	+.032	—.001	—.008	—.002	+.001
Mean monthly values...	29.813	29.503	29.882	29.459	29.815	29.605	29.670	29.678
Monthly values 1899-1900	29.553	29.698	30.064	30.027	30.188	29.993	29.914	29.920

In view of the fact that observations for only seven months of the year are available, no very elaborate reduction of the above diurnal variation quantities has been attempted. Analytical expressions representing the daily variation in atmospheric pressure indicated by these results have been derived by means of Bessel's periodic function (see page 289) to terms of the third order. The resulting amplitudes and phase angles are shown in the following tabulation, and the diurnal variation curves computed from the same are represented graphically in figure 3.

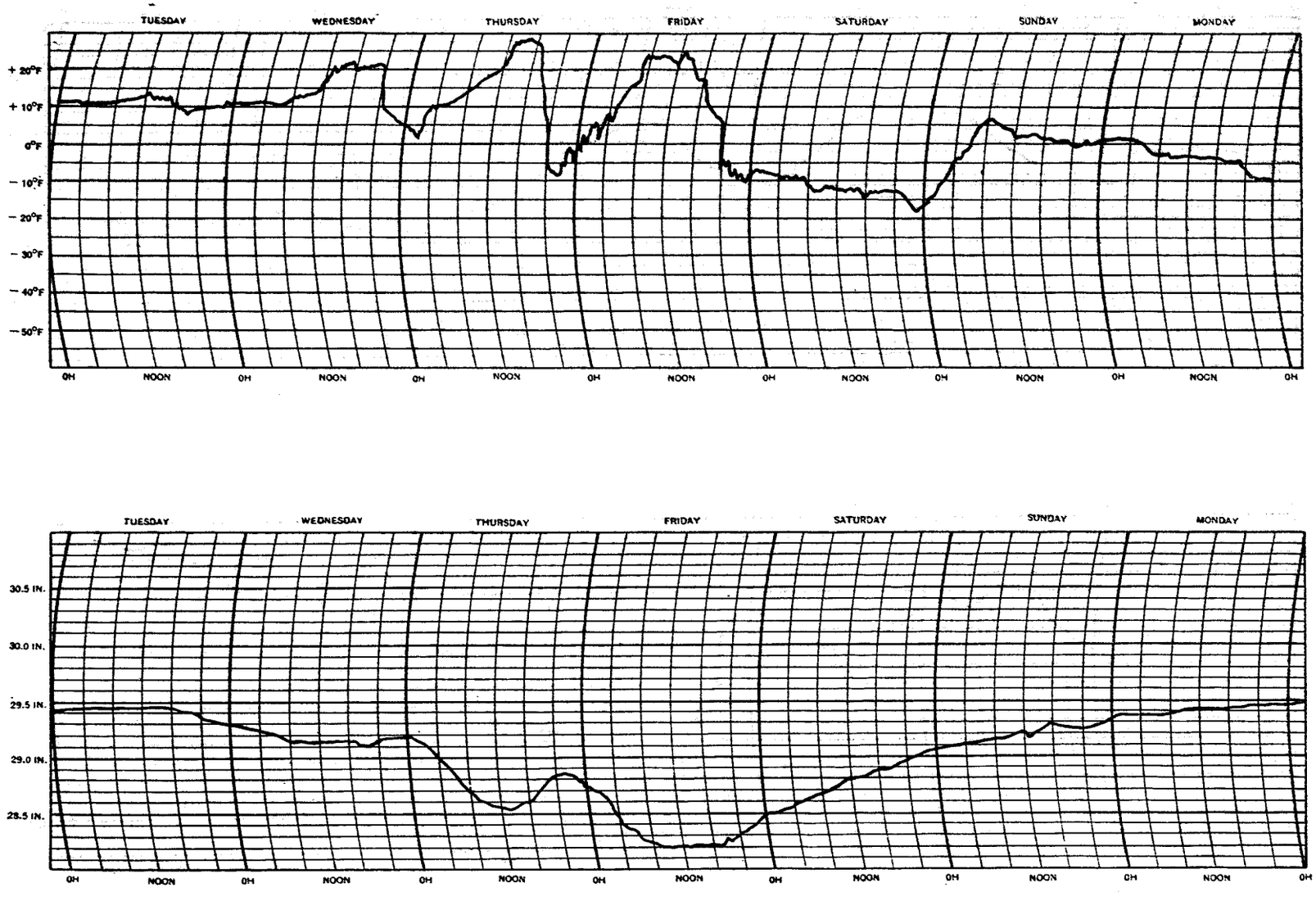
* Osservazioni scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi, 1899–1900. Milan, 1903. Pp. 331–357. (Relazione sulle osservazioni meteorologiche fatta dal Professore Giovanni Battista Rizzo.)

FIGURE 5



BAROGRAM AND THERMOGRAM FOR THE PERIOD NOVEMBER 11 TO NOVEMBER 17, 1903, AT TEPLITZ BAY

FIGURE 6



BAROGRAM AND THERMOGRAM FOR PERIOD JANUARY 19 TO JANUARY 25, 1904, AT TEPLITZ BAY

Summary of amplitudes and phase angles of periodic functions representing the diurnal variation in atmospheric pressure at Teplitz Bay

$$\Delta p = B_1 \sin(\theta - C_1) - B_2 \sin(2\theta - C_2) - B_3 \sin(3\theta - C_3)$$

Month	Amplitudes			Phase angles		
	B_1	B_2	B_3	C_1	C_2	C_3
1903–1904	*In.*	*In.*	*In.*	° ′	° ′	° ′
October	.009	.006	.003	34 02	358 55	343 09
November	.011	.008	.000	97 26	358 28	351 15
December	.000	.007	.003	310 14	332 42	252 02
January	.022	.004	.008	142 24	168 41	189 28
February	.021	.004	.003	52 06	309 06	98 08
March	.021	.006	.000	209 02	12 19	352 24
April	.012	.009	.003	164 15	15 19	56 19
October to April....	.007	.004	.000	126 42	356 16	.....

NOTE.—In these expressions the angle θ counts from 0 hour A. M. as 0^h.

Daily Wind Movement

Tabulation of mean monthly diurnal wind movement recorded at Teplitz Bay

September 1, 1903, to May 25, 1905

Month	Wind movement for the hour preceding											
	1H	2H	3H	4H	5H	6H	7H	8H	9H	10H	11H	12H	13H
1903	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
September	12.2	12.9	12.2	11.5	10.9	10.3	10.3	11.5	11.1	12.2	13.8	14.0	12.1
October	12.4	13.2	13.3	14.7	14.8	15.6	14.4	15.6	16.1	14.1	14.5	14.6	15.0
November	16.2	15.8	15.4	16.1	16.0	15.1	15.8	15.1	15.0	14.8	14.0	15.2	16.0
December	23.2	22.4	22.3	20.7	22.5	23.7	25.4	28.0	27.5	25.6	25.2	26.6	26.8
1904													
January	14.1	14.4	16.2	18.2	17.4	15.7	17.2	18.2	18.4	19.1	18.5	18.3	19.7
February	18.6	19.2	19.2	19.7	20.0	20.0	19.8	18.8	19.4	21.1	21.1	20.0	20.7
March	13.4	12.9	12.2	11.4	10.0	9.3	10.6	11.1	10.5	10.1	10.5	9.9	10.3
April	9.0	9.9	9.5	9.1	9.1	9.3	10.0	10.5	10.1	10.0	8.5	8.3	8.8
May	10.5	10.1	10.3	10.8	10.7	10 6	10.7	10.7	10.8	10.8	11.5	11.4	11.9
June	8.3	8.9	10.0	9.6	12.4	8.9	9.7	9.4	9.5	9.2	9.4	10.2	10.1
July	8.3	8.5	9.7	9.6	8.8	8.7	8.7	9.5	10.4	10.2	10.4	10.9	11.8
August	8.2	8.4	7.7	8.1	7.9	8.2	8.3	8.1	8.1	7.5	7.6	8.3	7.6
September	14.0	14.9	15.5	16.5	17.0	17.0	15.3	14.8	14.6	14.0	14.1	13.5	12.5
October	15.0	15.3	15.2	16.6	17.1	16.5	15.9	16.5	16.0	15.0	14.9	14.4	15.1
November	13.4	14.2	13.6	13.6	13.3	12.2	12.2	11.6	11.2	10.0	12.5	11.8	13.5
December	15.5	16.5	17.5	18.6	17.5	16.0	16.6	16.8	17.2	17.0	16.7	15.8	15.6
1905													
January	17.6	15.7	15.3	18.0	17.1	15.5	15.2	15.1	14.9	16.0	16.7	18.1	17.0
February	23.1	23.2	23.2	23.4	23.4	23.9	24.4	24.8	24.9	25.1	25.4	24.6	25.0
March	15.9	16.5	16.9	17.6	17.3	16.5	15.7	15.7	15.7	16.2	14.7	14.8	14.0
April	15.6	14.4	14.9	14.1	14.3	13.7	13.5	14.3	13.8	13.9	12.6	13.6	13.8
May	15.5	16.2	15.7	15.2	15.3	15.2	15.2	14.1	15.7	15.2	15.8	15.8	15.3
Mean of all	14.3	14.5	14.6	14.9	14.9	14.4	14.5	14.8	14.8	14.6	14.7	14.8	14.9
Mean year 1904	12.4	12.8	13.1	13.5	13.4	12.7	12.9	13.0	13.0	12.8	13.0	12.7	13.1

Tabulation of mean monthly diurnal wind movement recorded at Teplitz Bay—Continued

September 1, 1903, to May 25, 1905

Month	Wind movement for the hour preceding											Average daily total
	14H	15H	16H	17H	18H	19H	20H	21H	22H	23H	24H	
1903	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*	*Mi.*
September	11.3	12.3	12.6	13.8	14.6	13.8	14.8	14.3	14.5	13.4	13.1	302.9
October	15 1	14.1	12.2	11.0	12.5	11.4	11.2	10.9	11.2	11 0	11.6	320.4
November	16.7	15.5	16.1	15.9	15.6	15.9	16.9	17.4	16.4	16.9	16.8	380.7
December	25.8	26.3	26.4	24.5	22.8	21.8	25.3	24.1	24.7	23.7	24.9	590.3
1904												
January	18.2	17.0	16.6	17.8	18.3	18 4	17 0	13.9	13.5	13.4	14.4	403.8
February	19.1	17.0	16.3	16.2	16.6	16.7	16.2	15.4	15.6	17.6	17.1	441.4
March	10.1	10.1	12.1	12.9	14.5	14.0	13.0	13.0	13.1	12.3	12.5	279.7
April	8.5	8.4	8.8	9.3	10.6	10.8	10.2	9.9	9.4	8.6	8.8	225.3
May	12.6	12.6	12.4	11.9	11.3	11.9	10.9	10.9	11.5	11.2	10.6	268.5
June	10.3	10.1	9.6	9.7	8.9	8.7	8.6	9.2	10.1	9.7	9.5	230.0
July	12.2	11.3	11.1	11.4	10.5	10.4	9.9	10.3	10.2	9.5	9.2	241.3
August	7.8	8.1	7.8	7.3	7.8	9.0	8.9	9.6	9.2	8.0	8.6	196.0
September	12.4	13.4	13.4	13.1	12.1	12.0	12.1	12.5	12.5	13.0	13.9	334.1
October	16.8	16.7	15.9	16.8	17.6	18.0	17.0	15.6	15.4	15.5	15.3	384.2
November	13.0	13.9	13.7	13.7	13.3	12.4	12.2	11.6	11.5	12.1	12.3	302.8
December	16.4	15.5	16.1	16.2	15.5	14.2	13.4	15.9	15.9	16.5	16.4	389.7
1905												
January	16.8	16.9	17.0	17.8	16.7	18.5	18.1	17.8	18.5	17.4	16.4	404.0
February	25.1	25.3	24.9	26.3	25.5	21.3	23.1	25.1	24.8	23.2	22.6	581.4
March	13.5	14.2	13.1	13.0	14.1	14.1	13.9	15.1	16.1	16.4	15.7	366.8
April	13.5	12.3	12.8	13.7	14.2	14.0	15.6	16.6	17.6	17.2	16.1	346.2
May	15.8	15.2	16.3	15.9	14.6	14.5	15.5	15.2	15.2	16.6	16.0	371.5
Mean of all	14.8	14.4	14.5	14.7	14.6	14.4	14.5	14.5	14.6	14.4	14.4	350.5
Mean year 1904	13.1	12.8	12.8	13.0	13.1	13 0	12.4	12 3	12.3	12.3	12.4	308.1

Reduction of Observations at Cape Flora

Summary of mean monthly daily records at Cape Flora

June, 1904, to July, 1905

Month	Reduced barometer			Reading of Fahrenheit thermometer			Precipitation			
	8H	12H	20H	8H	12H	20H	8H	12H	20H	Total
	In.	*In.*	*In.*	°	°	°	*In.*	*In.*	*In.*	*In.*
June	29.84	29.84	29.83	+31.2	+32.3	+31.3	.75	.08	.11	.94
July	29.67	29.68	29.69	+35.7	+36.1	+34.9	.63	.09	.57	1.29
August	29.93	29.93	29.93	+33.6	+34.9	+33.2	1.44	.29	.12	1.85
September	29.56	29.58	29.58	+21.4	+22.0	+20.9	1.10	.12	.13	1.35
October	29.36	29.42	29.38	+13.1	+13.8	+12.0	.99	.47	1.04	2.50
November	29.38	29.42	29.44	−13.4	−13.7	−12.4	.08	.10	.73	.91
December	29.56	29.58	29.58	−13.4	−14.2	−14.3	.74	.23	.71	1 68
January	29.19	29.22	29.23	−20.6	−19.6	−19 4	1.48	.78	1.15	3 41
February	29.39	29.42	29.44	− 7.5	− 7.2	− 8.4	.90	.26	1.17	2.33
March	29.65	29 68	29 68	− 6.0	− 4.7	− 7.5	1.38	.10	.56	2.04
April	30.09	30.12	30.11	+ 1.5	+ 4.1	+ 4.4	1.03	.16	.37	1.56
May	29.61	29.66	29.67	+23.2	+24.1	+23.9	.88	17	.46	1.51
June	29.64	.....	29.67	+30.3	.....	+30 4	.50	....	.56	1.06
July	29.89	.....	29.91	+34 1	.....	+33.6	1.28	....	.62	1.90
Mean June, 1904, to May, 1905	29.602	29.629	29.630	+ 8.2	+ 9.0	+ 8.2	.95	.24	.59	1.78

Summary of mean monthly daily records at Cape Flora—Continued

June, 1904, to July, 1905

Month	Self-registering Fahrenheit thermometer						
	8H		12H	20H		Mean of extremes	Range
	Max.	Min.	Max.	Max.	Min.		
	°	°	°	°	°	°	°
June	+33.3	+27.7	+33.4	+34.5	+29.5	+31.2	7.2
July	+37.1	+31.6	+37.2	+39.4	+33.1	+35.5	8.2
August	+35.2	+30.0	+35.8	+37.7	+3 .0	+33.8	8.4
September	+23 5	+17.7	+22.8	+24.0	+18.1	+20.6	8 8
October	+16.2	+ 9.1	+14.9	+16.4	+ 8 8	+12.3	11.5
November	− 8.9	−17.2	−11.4	− 8.9	−17.2	−12 9	13.1
December	− 9.3	−18.6	−10.7	−11.2	−18.2	−13.9	12.7
January	−14.7	−25.0	−18.7	−15.2	−24.5	−19.5	16.1
February	− 3 1	−13.9	− 5.2	− 3.5	−12.5	− 8.8	15.1
March	− 2.0	−12.9	− 3.4	− 1.2	−10.9	− 6.9	16.2
April	+ 5.2	− 3.5	+ 5.2	+ 9.3	− 0.1	+ 3.3	14.1
May	+25.5	+20.4	+25.4	+28.3	+20.9	+24.4	9.8
June	+31.6	+27.6	.....	+33.6	+28.7	+30.7	6.5
July	+35.1	+31.1	. .	+38.1	+31.7	+34.7	7.6
Mean June, 1904, to May, 1905	+11.5	+ 3.8	+10.4	+12.5	+ 4.9	+ 8.3	11.8

Tabular summary of percentages of observed wind directions at Cape Flora
May, 1904, to December, 1904

Direction	May, 1904			June, 1904			July, 1904			Aug., 1904			Sept., 1904			Oct., 1904			Nov., 1904			Dec., 1904		
	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
N	..	..	..	..	..	3	10	..	10	..	..	6	7	13	7	10	10	10	10	10	10	20	10	13
NNE	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	7	3	..	7	6	10
NE	18	18	18	3	7	7	10	10	13	16	3	10	3	7	7	10	10	23	17	17	23	3	6	13
ENE	19	..	..	10	..	7	..	..	3	..	..	3	3	..	..	3	6	3	..	..	..	10	..	..
E	9	..	9	17	27	20	6	3	6	29	26	19	7	7	10	29	29	35	13	10	3	20	29	23
ESE	..	..	9	..	3	..	10	10	16	6	16	6	..	..	..	6	..	3	3	..	3	7	6	6
SE	18	27	18	33	30	23	6	6	10	29	26	29	7	7	7	6	10	3	20	17	17	..	..	6
SSE	9	..	..	..	3	..	3	..	..	3	10	..	7	3	..	..	..	..	..	..	3	..	..	..
S	..	..	..	..	..	3	3	6	6	6	..	..	..	..	..	3	3	..	..	..	..	..	..	..
SSW	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..	..	..
SW	..	9	..	7	10	10	..	6	..	3	3	..	3	3	3	..	..	3	3	..	..	..	..	..
WSW	..	9	9	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..
W	36	27	36	17	13	13	19	19	10	..	3	10	13	7	17	6	13	10	7	7	13	3	3	3
WNW	..	9	..	..	3	7	3	3	..	..	3	..	13	3	..	6	..	..	..	3	..	..	6	3
NW	..	..	..	10	3	3	23	29	23	3	3	..	27	43	50	13	13	10	10	13	10	17	16	10
NNW	..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	..	..	..	..	..	..	3	..	..
Calm	..	..	..	3	..	3	3	6	3	3	6	16	7	3	..	3	3	..	10	17	17	10	16	13

Tabular summary of percentages of observed wind directions at Cape Flora
January, 1905, to July, 1905

Direction	Jan., 1905			Feb., 1905			March, 1905			April, 1905			May, 1905			June, 1905			July, 1905		
	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H	8H	12H	20H
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
N	10	16	3	..	..	4	6	16	6	7	3	3	6	10	6	10	..	7	..	..	10
NNE	13	3	10	..	..	4	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..
NE	13	13	17	7	18	4	16	10	6	13	7	10	13	13	10	..	..	7	3	..	..
ENE	..	..	3	7	7	4	3	6	6	10	7	7	6	6	10	7	..	..	..	..	..
E	23	29	23	32	39	39	19	16	19	23	23	23	16	23	6	3	..	13	13	..	24
ESE	6	6	10	18	18	11	3	..	6	..	3	3	6	3	3	3	..	..	3	..	..
SE	6	10	10	11	..	11	3	3	..	27	17	20	..	6	3	3	..	3	13	..	7
SSE	..	..	..	..	..	..	..	..	..	..	3	..	6	3	6	..	..	..	..	..	..
S	..	..	..	..	..	..	3	..	..	3	3	..	..	..	..	3	..	3	..	..	10
SSW	..	..	..	..	..	..	..	..	3	..	..	..	3	..	6	3	..	3	3	..	..
SW	3	..	7	..	..	..	3	6	..	..	3	..	3	6	6	13	..	17	..	..	3
WSW	..	..	..	..	..	..	..	6	..	..	..	..	..	3	3	3	..	3	..	..	..
W	3	3	..	..	4	..	..	..	13	7	3	10	10	6	3	23	..	20	23	..	21
WNW	..	..	..	..	..	..	3	6	3	..	..	..	..	..	..	3	..	10	..	..	7
NW	6	3	10	7	7	7	19	16	10	..	..	3	19	16	26	17	..	7	7	..	3
NNW	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Calm	16	16	7	18	7	18	19	13	23	10	23	20	10	3	10	7	..	7	33	..	14

Diurnal Variation in Atmospheric Pressure

The barograms at Cape Flora have been reduced to the aneroid barometer used at this station and the mean daily curves for each month deduced graphically. The values of the diurnal variation thus obtained are given in the following tabulation, pressures greater than mean of day being indicated by plus signs, and *vice versa*.

Summary of mean monthly diurnal variation in atmospheric pressure at Cape Flora

From barograms June, 1904, to May, 1905

Local mean time	Month of												Year
	June, 1904	July, 1904	Aug., 1904	Sept., 1904	Oct., 1904	Nov., 1904	Dec., 1904	Jan., 1905	Feb., 1905	M'ch, 1905	Apr., 1905	May, 1905	June, 1904, to May, 1905
h	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*
0	+ .002	.000	— .001	+ .018	— .009	— .001	+ .009	+ .001	+ .008	— .009	— .010	+ .009	+ .001
2	+ .003	— .009	— .004	+ .007	+ .002	— .020	+ .001	+ .008	— .002	— .004	— 007	— .012	— .003
4	+ .004	— .011	— .010	— .006	— .007	— .019	— .004	+ .002	— .016	+ .002	— .007	— .014	— .007
6	+ .002	— .014	— .002	— .014	— .015	— .022	— .005	— .002	— .016	— .010	— .009	— .031	— .011
8	+ .004	— .013	+ .003	— .023	— .027	— .028	— .011	— .013	— .030	— .020	— .013	— .038	— .017
10	— .001	— .006	— .005	— .016	— .003	— .015	— .006	+ .001	— .017	— .006	— .005	— .015	— .008
12	+ .001	— .002	+ .006	— .004	+ .026	+ .003	+ .009	+ .013	— .002	+ .006	+ .015	+ .008	+ .007
14	+ .004	+ .007	+ .005	+ .008	+ .025	+ .016	+ .007	+ .004	+ .008	+ .015	+ .010	+ .018	+ .011
16	+ .005	+ .015	+ .006	+ .011	+ .014	+ .015	+ .008	+ .008	+ .011	+ .009	+ .009	+ .021	+ .011
18	— .004	+ .010	— .001	+ .009	+ .014	+ .023	+ .008	— .003	+ .014	+ .007	+ .004	+ .023	+ .009
20	— .009	+ .011	.000	.000	— .007	+ .027	.000	— .012	+ .020	+ .010	+ .009	+ .021	+ .006
22	— .010	+ .010	+ .001	+ .012	— .009	+ .022	— .015	— .001	+ .023	+ .002	.000	+ .008	+ .004
Mean monthly values	29.839	29.680	29.926	29.581	29.391	29.412	29.576	29.206	29.419	29.671	30.105	29.647	29.621

As the above results depend upon an aneroid barometer on which correction to standard was obtained only before and not after the completion of the work, and as the constancy of adjustment of the instrument is in doubt, it has not been thought advisable to make any extended reductions from the Cape Flora results. Formulæ representing the diurnal variation have been derived from the observations, as above, by means of Bessel's periodic function (see page 289) to terms of the third order. The resulting amplitudes and phase angles are shown in the following table, and the curves computed from the same are represented in figure 4.

Summary of amplitudes and phase angles of periodic functions representing the diurnal variation in atmospheric pressure at Cape Flora

$$\Delta p = B_1 \sin(\theta + C_1) + B_2 \sin(2\theta + C_2) + B_3 \sin(3\theta + C_3)$$

Month	Amplitudes			Phase angles		
	B_1	B_2	B_3	C_1	C_2	C_3
1904–1905	*In.*	*In.*	*In.*	° ′	° ′	° ′
June	.004	.004	.003	324 47	2 29	83 09
July	.014	.000	.000	179 10	. . . .	151 42
August	.004	.000	.003	224 07	104 02	138 59
September	.014	.009	.003	145 59	39 28	110 19
October	.016	.013	.006	219 37	29 16	289 20
November	.026	.000	006	177 24	158 12	221 47
December	006	.006	.003	202 56	17 21	4 14
January	000	.009	.000	259 13	38 27	303 41
February	.022	.003	.003	158 44	79 00	213 43
March	.010	.006	.006	191 57	5 30	254 54
April	.011	000	.006	209 37	40 22	253 55
May	.027	.007	.003	177 27	42 45	273 01
Year	.011	.006	.000	184 31	33 41	240 57

NOTE.—In these expressions the angle θ counts from 0 hour A. M. as 0°.

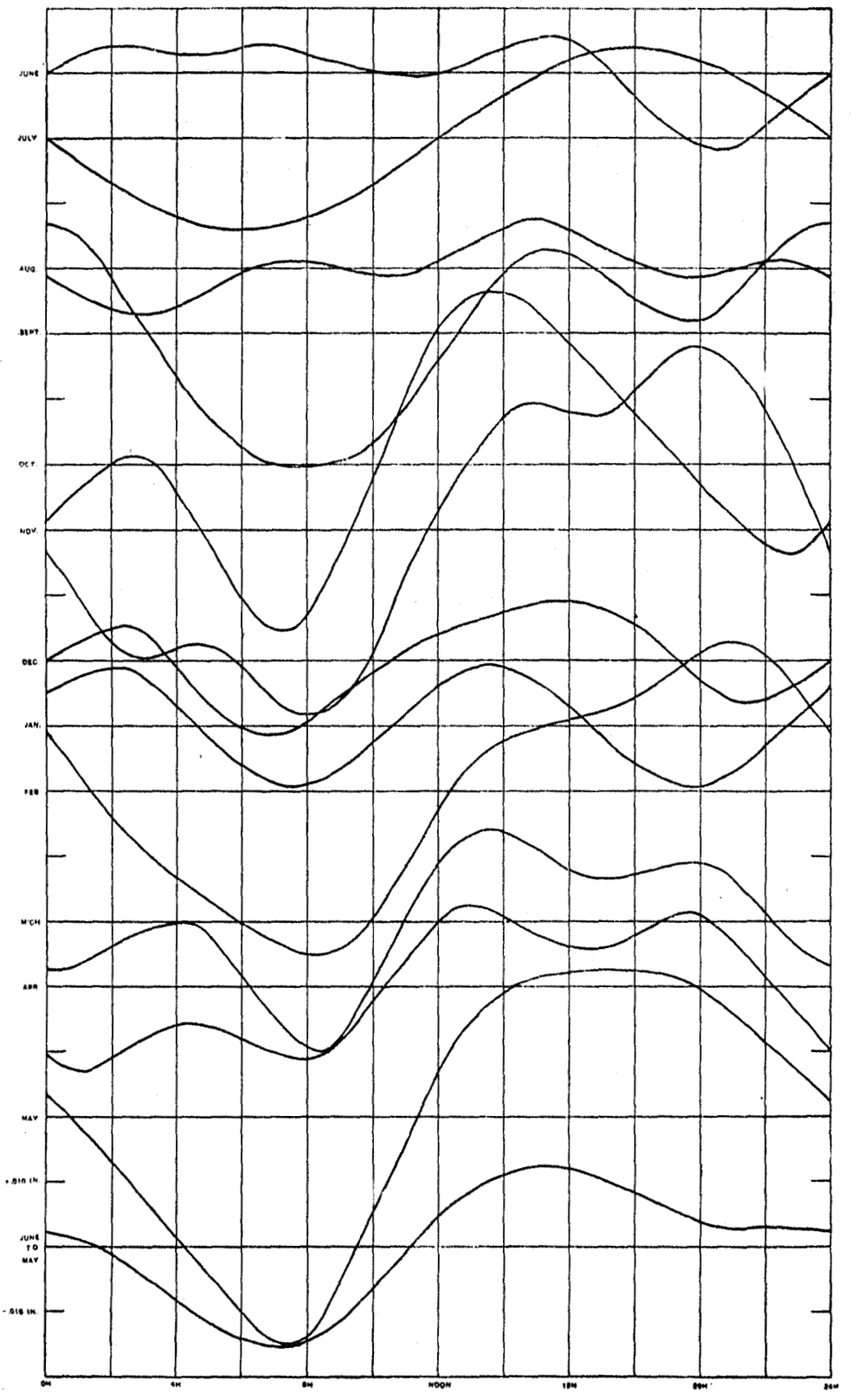
GENERAL REMARKS

It is of interest to note that the corrections necessary to the means of the daily observations made at 8 A. M., noon, and 8 P. M. to obtain the mean results from continuous registration of atmospheric pressure and temperature are small. Thus at Teplitz Bay this correction over the period of observation to reduce the mean of the three daily readings of thermometers to mean thermogram is —0.10° F; corresponding correction for atmospheric pressure is —.005 inch. At Cape Flora, where only barograms were made, the correction is —.003 inch.

In connection with storm periods it was found that the temperature was even a better means of forecasting than the barometer, sudden and rapid rising of temperature being almost always accompanied by severe storms. Typical storm thermograms and barograms recorded at Teplitz Bay are shown in figures 4 and 5.

As will be seen from the tabulations of percentages of observed wind directions, the prevailing winds at Teplitz Bay are from the east; during September to December, 1903, in general from the east and southeast; during January and February, 1904, in general from the east and south; during March and April, 1904, generally from the north and east. At Cape Flora, as already stated, the proximity of the high cliffs interferes with the winds; as recorded the prevailing winds during October to April are from the east and northeast, during May to July from the west and northwest, while during August and September they are variable with no very decided preponderance of direction. The summary of hourly wind movements at Teplitz Bay does not indicate any very characteristic diurnal variation over the mean period of record.

FIGURE 4



DIURNAL VARIATION IN ATMOSPHERIC PRESSURE AT CAPE FLORA
(Increasing ordinates up denote increasing pressures.)

Miscellaneous Observations

As already stated, meteorological observations were made at fixed stations other than those reported upon above. These are for the most part only occasional and irregular, for which reasons it has not seemed desirable to make any attempt to compile them for publication. However, the observations made in the course of the several sledge trips are valuable and of interest as affording some general gauge as to the conditions of travel in the archipelago during periods of relatively high temperatures, such as were encountered by the parties on these trips.

Meteorological observations on march north from Cape Flora to Teplitz Bay

September 27 to November 20, 1904

Observers: Anthony Fiala and Charles Seitz, M. D.

Date	L. M. T.	Fahrenheit temperature	Prevailing wind	Remarks
1904	*h m*	°		
Sept. 27	.....	....	SW	Camped in high drifting wind at Camp Point
28	A. M.	+14	SW	Cloudy; high drifting wind
29	A. M.	+16	W	Clear; first attempt to cross De Bruyne Sound; obliged to return
30	8 00	+16	W	Cloudy; drifting wind; impossible to cross sound
Oct. 1	8 00	+21	SE	Cloudy; high drifting wind
2	.....	Rising	SE	Cloudy; storm continued
3	.....	....	SE	Cloudy; storm continued; maximum + 34°
4	.....	Falling	SE	Cloudy; ice in sound grinding its way seaward
5	6 00	+26	N	Clear; light airs from north; many open lanes in sound; all
	12 00	+23	....	ice broken and in motion
6	9 00	+19	....	Misty; calm
	12 00	+23	....	
7	A. M.	+23	SE	Dense mist; snowing; light breeze
8	12 00	+26	SE	Misty; sleeting; variable airs
9	12 00	+26	SE	Misty; snowing
10	12 00	+16	NW	Clear; high drifting winds all night
	18 00	+10	NW	
11	9 00	— 1	....	Clear; impossible to cross sound
	18 00	+ 9	S	
12	9 00	+ 9	SE	Cloudy; high drifting wind and rising temperature
	17 30	+31	....	
13	12 00	+27	N	Clear; light breeze
14	8 00	0	N	Misty
	12 00	— 2	....	
	P. M.	— 4	....	
15	8 00	+11	SE	Clear; strong breeze; ice in motion
16	6 00	— 4	SW	Heavy mist
	12 00	+ 8	....	
17	9 00	+31	Var.	Cloudy; heavy rain; sound open in several places
18	9 00	+27	WSW	
	18 00	+ 5	WNW	Sound filled with ice from NW
19	8 30	— 2	N	Lanes in sound freezing over; clear
	17 30	— 4	...	Minimum — 6°
20	10 30	0	SE	Minimum — 8°; clear; light breeze
	17 00	+ 2	SE	Minimum — 5°; light breeze
21	5 00	+ 6	SW	Minimum + 1°; cloudy; drifting wind
	10 00	+20	SW	
	17 00	+14	NW	

Meteorological observations on march north from Cape Flora to Teplitz Bay—Continued

Date	L. M. T.	Fahrenheit temperature	Prevailing wind	Remarks
1904	*h m*	°		
Oct. 22	6 00	0	....	Sun disappears for the winter; minimum — 12°
	8 00	+14	....	Left Camp Point at 6:00
	17 00	+ 4	NE	Cloudy; camped on ice cake De Bruyne Sound
23	6 00	....	NW	Clear; full moon; minimum — 5°
	15 30	— 9	N	Clear; camp at Hooker Island
24	8 00	0	....	Clear; minimum — 1°
	18 00	— 7	SW	Minimum — 9°; light breeze; camp at Hooker Island Glacier
25	A. M.	+ 4	NE	Minimum — 12°; cloudy; drifting wind
	16 00	+ 3	NE	Cloudy; high wind; storm bound
26	A. M.	— 9	N	Foggy; minimum — 13°
	16 00	— 9	....	Foggy; minimum — 19°
27	A. M.	—23	....	Reached channel ice; camped Allen Young Sound; hazy;
	15 00	— 4	..	minimum — 27°
28	A. M.	0	SE	Foggy; minimum — 5°
	P. M.	— 4	....	Camp at Cape Bréresford, Bliss Island
29	A. M.	—23	....	Clear; minimum — 23°
	P. M.	....	....	Arrived Camp Ziegler, Alger Island
30	....	+ 4	NW	Cloudy; storm bound at Camp Ziegler
31	....	+15	E	Minimum 0°; strong easterly gale
Nov. 1	...	....	E	Minimum — 11°; strong easterly gale
2	.....	....	NW	Partly clear; wind in gusts; minimum — 18°
3	.....	— 9	W	Partly clear; minimum — 29°
4	A M.	— 5	E	Strong east wind in gusts; minimum — 10°
	14 00	— 5	....	Minimum — 7°
5	A. M.	—20	...	Clear
	16 30	—17	....	Camp at Cape Triest
6	15 00	+ 9	....	Camp at Weiner Neustaft Island
7	8 00	—21	....	Reached Kane Lodge on Greely Island
9	8 00	—19	....	Clear; minimum — 29°
	15 00	—21	....	Cloudy; camp on Kuhn Island
10	7 30	—13	....	Clear; minimum — 26°; rough ice
	15 00	—13	....	Cloudy; foggy
11	8 00	—13	....	Foggy; minimum — 18°
	13 00	— 4	NE	Rough ice
12	8 30	— 5	ENE	Strong wind; minimum — 7°
	13 00	— 6		
13	8 30	—17	N	Partly clear; minimum — 18°
	12 00	—22	....	Camp at Coburg Island
14	9 00	—17	....	Clear; minimum — 23°
	12 00	—11	E	Cloudy; camp at Hohenloh Island
15	7 00	+23	W	Cloudy; drifting; storm bound
	12 00	+ 9	W	
16	17 00	—11	SW	Cloudy; flashes of auroræ
17	.....	Rising	SW	Cloudy; foggy; storm bound
18	A. M.	Falling	WSW	Cloudy
	14 00	—24	W	Clear; minimum — 24°
19	8 00	....	W	Clear; minimum — 26°
20	.. ..	....	....	Arrived at Camp Abruzzi; misty

Meteorological observations on sledge trip south from Teplitz Bay to Cape Flora

April 30 to May 16, 1904

Observer: FRANCIS LONG

Date	Mean temperature	Prevailing wind	Remarks
1904	°		
April 30	—10	.....	Clear; left Teplitz Bay at 7:45 P. M.
May 1	—10	.....	Clear
2	—16	.....	Clear
3	—12	NW	Cloudy; drifting wind
4	— 8	SE	Clear; light breeze
5	— 2	NE	Clear; strong breeze
6	+ 4	NE	Clear; strong breeze
7	+ 7	.....	Cloudy and misty
8	+ 5	SE	Fog; light breeze; snowing
9	+ 8	SE	Cloudy and foggy
10	+25	SSW	Cloudy and foggy; light breeze
11	+16	SE	Partly cloudy; light air
12	+14	. ....	Partly cloudy
13	+13	.....	Clear
14	+ 8	NE	Misty; light breeze
15	+ 4	NE	Clear; drifting wind
16	+10	NE	Drifting wind; arrived at Cape Flora at 9 A. M.

Meteorological observations on sledge trip north from Teplitz Bay

March 16 to April 1, 1905

Date	Local time of observation	Fahrenheit temperature		Barometer	Wind		Remarks
		Exposed	Minimum		Direction	Force	
1905	*h m*	°	°	*In.*			
March 16	20 00	+ 5	....	....	SW	Light	Cloudy all day; distance traveled about 14 miles, leaving Camp Abruzzi during A. M.
17	6 30	—15	—16	....	NW	Light	Clear morning; north wind at 15h; traveled about 10 miles
	16 00	—22					
18	6 30	—13.5	—25	....	NW	Breeze	Fog
	12 00	—12					
19	5 30	—16	—19.5	....	....	Calm	Misty A. M.; clear P. M.; sunshine; parhelion
20	5 20	— 5	—21	29.9	SE	Breeze	Snowing; misty; at noon thermometer + 10°, with south wind and heavy snow
	17 00	+ 3					
21	5 20	+ 4	+ 1.5	29.8	SW	Light	Fog; cloudy
	15 00	—14					
22	5 30	—13.5	—23	....	....	.....	Cloudy
23	6 30	— 3	—13	29.88	SE	Breeze	Cloudy; snowing; ice pressure; sunshine P. M. to 18h; bearing on Cape Fligely 140° SW; began retreat
	17 00	+ 7					
24	7 30	+23.5	+ 3 5	29.8	SSE	Breeze	Cloudy; snowing; thermometer at noon + 28°; ice under pressure during A. M. and at intervals during P. M.
	14 00	+30.5					
25	6 30	— 3	— 4	29.85	....	.....	Clear in early A. M.; clouds stratified in east; cloudy and snowing after 8h.
26	6 30	— 9	—10	29.82	....	....	Sunshine all day; high cirrus clouds; dark clouds to east
	16 00	—23.5					
27	6 30	—30	—31	29.94	W	Breeze	Hazy; sunshine during day; drifting snow
28	5 30	—15	—29	30.02	SW	Breeze	Hazy; blowing and drifting all day; no sunshine; land not visible
	15 00	—10					
29	6 00	—11.5	—14	29.68	W	Ab't 30 mi.	Sun shining; hazy at distance; drift and fog; strong breeze
	19 30	—31.5					
30	7 00	—28.5	—37.5	29.78	SW	20 to 30 mi.	Sun shining through flying drifts; wind in gusts
	13 00	—30					
31	6 30	—35	—39.5	29.82	SW	15 to 20 mi.	Strong wind; temperature falling on the march
April 1	7 00	—39	—45	....	....	Calm	Clear sky; sun shining; reached Camp Abruzzi
	12 00	....	....	29.78			

Meteorological observations on sledge trip south from Teplitz Bay to Alger Island
May 26 to June 19, 1905

Date	Local time of observation	Fahrenheit temperature			Barometer	Wind		Remarks
		Exposed	Minimum	Maximum		Direction	Force	
1905	*h m*	°	°	°	*In.*			
May 26	9 00	+18.8	+11.5	+25	....	N	.....	Left Camp Abruzzi at 16h 45m; sun shining; alto-cumulus clouds
	12 00	+19.2	+16.5	+20	29.92	N		
27	4 00	+25	....	....	....	W	.. ..	Cloudy; stratus clouds horizon
	12 00	+24	+19.6	+29	29.96	WSW	.....	Alto-cumulus clouds; sun shining overhead
28	4 00	+21	....	....	....	W	Light	Cloudy; snowing
	16 00	+22	+22	+23.5	29.95	W	Light	
29	6 00	+24	....	....	....	W	Light	Cloudy; snowing
	16 30	+21	+21	+31.5	30.01	SW	Light	Hazy; bad vision
30	7 00	+27	+25.5	+27	....	SE	.....	Cloudy
	17 30	....	....	....	29.94	....	.....	Clear
31	6 30	+29	+27	+29.5	29.93	SE	.....	Cloudy
	17 30	+28	+26.5	+30.5	30.04	SW	.....	Sun out at 21h; fine wavy light cirrus clouds overhead
June 1	6 30	+27	....	....	30.03	SE	15 to 20 mi.	Cloudy; wind started at 6h from SE; drifting
	22 00	+28.5	+26	+30.5	30.30	SE		
2	8 45	+28	+27.5	+30.5	29.98	SW	. .....	Cloudy; windy A. M. drifting; wind shifting to SE
	20 30	+28	+27	+29	29.99	SE		
3	7 00	+26.5	+25.5	+29	29.96	SW	.....	Driving wind from SW, moist, at times filled with hail that cut like a knife; cloudy
	19 00	+27	+25.5	+29.5	29.97	SW		
4	4 15	+29	....	....	29.96	SW	....	Cloudy
	22 30	+32	+28	+35	....	Calm		
5	9 00	+30	+30	+36	30.12	Calm	.....	Cloudy
	21 00	....	....	....	30.12			
6	9 30	+31	+30	+44.5	30.03	Calm	.....	Cloudy; light snow
	24 00	+29.5	+29	+40	....	Calm		
7	9 00	+32	+30	+36	29.96	Calm	. .. ..	Cloudy; open water holes fill air with vapor
	20 00	+31	+31	+38.5	29.96	Calm		
8	10 00	+36	+32	+37.5	29.98	Calm	.....	Cloudy; alto-cumulus at zenith; stratus-nimbus, denoting open water, all around the horizon
	22 00	....	....	....	29.98	Calm		
9	10 00	+27	+21	+29	29.90	N	Strong breeze	Cloudy; sunlight through alto-cumulus and cirro-cumulus from 3h to 6h; cloudy at 22h
	22 00	....	....	....	29.86	N	Strong breeze	
10	11 30	+29.5	+29.5	+41.5	29.94	Variable	Light	Cloudy; sunlight through cumulo-stratus from 6h to 9h
	23 50	+26	+25	+30	29.72	SE	Light	
11	6 30	+29	+25	+30	29.58	SE	20 to 40 mi.	Cloudy; drifting wind from SE, veering toward 24h to SSW, varied with downpours rain and hail
	24 00	+33	+30	+38	29.38	SSW	20 to 30 mi.	
12	5 30	+33	+32	+34	29.41	SSW	30 to 40 mi.	Cloudy; raining in squalls during day; rain-soaked snow makes wet traveling
	21 00	+33	+32	+36	29.48	SSW		
13	11 00	+41	....	+44	29.54	....	....	Cloudy
	22 00	+32	+31.5	+43	29.74	....	Light	
14	10 00	+34	+30	+35	29.94	SW	15 to 20 mi.	Cloudy; sunshine intermittently between 7h 30m and 9h; spots on sun; strong SW breeze all A. M.
	21 00	+33	+33	+43	29.93	SE		
15	12 00	+34	+34	+36	29.78	SE	.. ..	Cloudy; thick fog; bad traveling
	22 30	+33.5	+33	+39	29.56	SE		
16	.....	. ..	. .	....	....	SSW	20 to 60 mi.	Thermometers in canoe; did not attempt to open on account drift and rain; cloudy; storm from SSW irregular, from 20 to 60 miles velocity; rain, hail, sleet, snow; maximum velocity about 20h
17	00 30	+30	+30	+36	29.56	S	25 to 50 mi.	Cloudy; storm with lower temperatures; wind varying from S to SW; drifting
	19 00	...	+26	.. .	26.56	SW		
18	6 00	+28	+27	+30	29.28	SSW	40 to 60 mi.	Cloudy; drifting; storm worst during early A. M.
	12 00	+31	+31	+27	29.23	SW		
19	3 00	+28	+27	+31	29.28	NE	.....	Cloudy; arrived at Alger Island, Camp Ziegler.
	12 00	+31	+29.5	+33.5	29.76	NE		

These observations were taken on a mapping trip by A. Fiala.

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SECTION D

TIDAL OBSERVATIONS

AND

REDUCTIONS

BY

W. J. PETERS

In Charge of Scientific Work of the Expedition

AND

L. P. SHIDY

Chief of Tidal Division, United States Coast and Geodetic Survey

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FIGURE 1

TIDE GAUGE AT CAPE FLORA

FIGURE 2

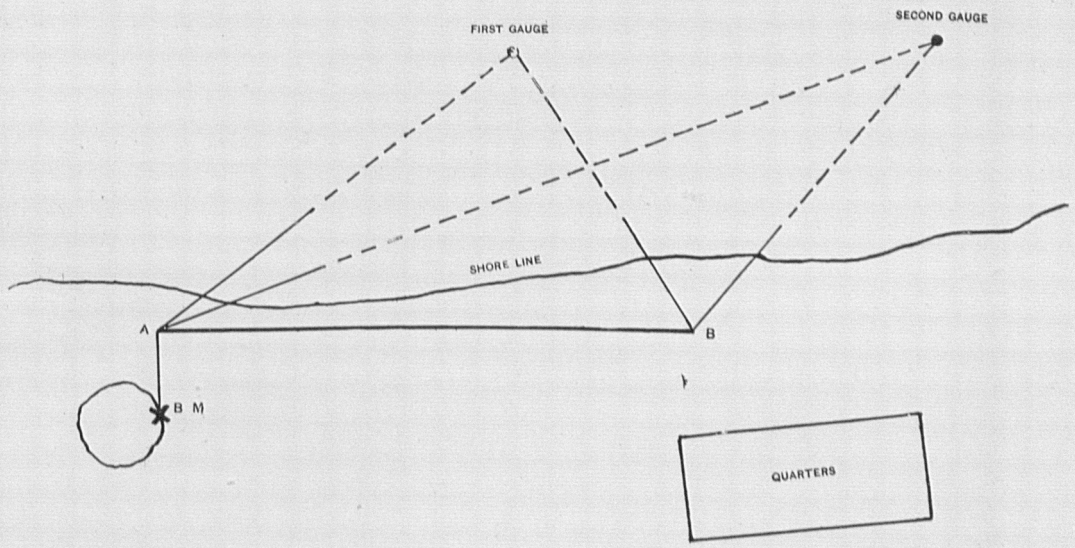
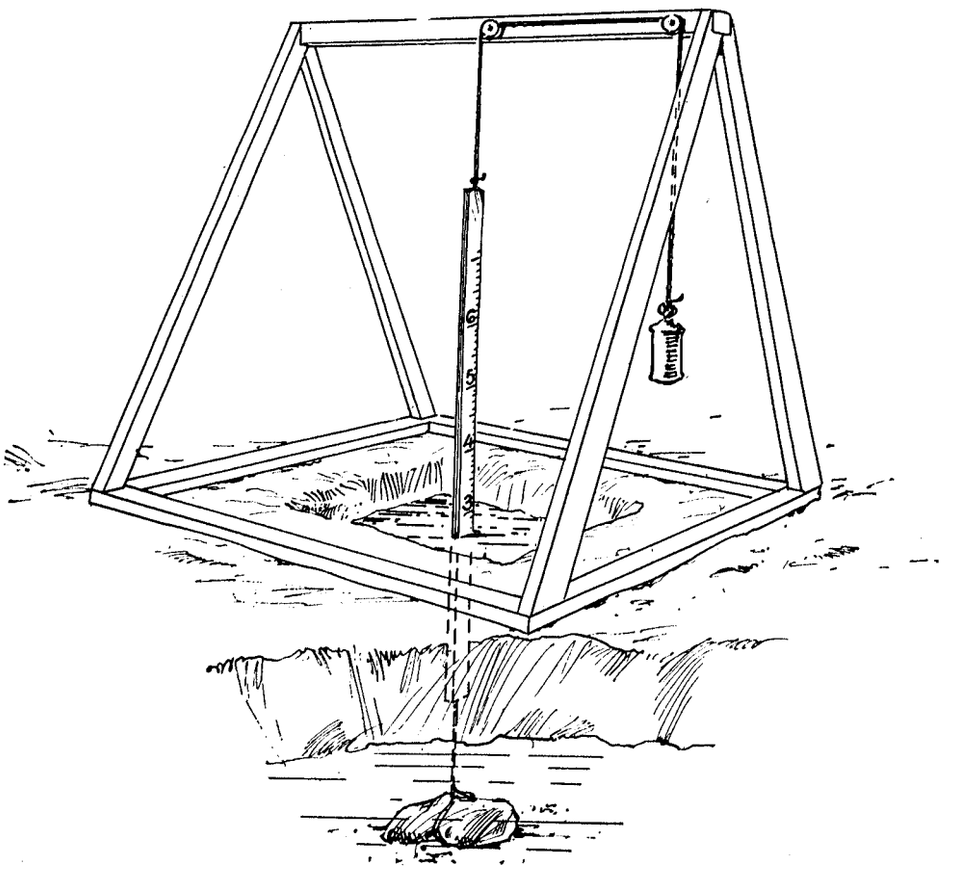


DIAGRAM OF BASE LINE AND BENCH MARK AT CAPE FLORA

FIGURE 3



TIDE GAUGE AT TEPLITZ BAY

TIDAL OBSERVATIONS

Station Data and Methods

During the Expedition two valuable series of tide observations were secured, one at Cape Flora, Northbrook Island, and the other at Teplitz Bay, Rudolph Island, in Franz Josef Archipelago. The tides at Cape Flora were observed from May 21 to August 31, 1904, and at Teplitz Bay from April 1 to June 3, 1904.

The gauge at Cape Flora was a plain wooden staff, graduated to feet and tenths, which was wedged in between boulders on the shore (see figure 1). A gale having destroyed the gauge, a new one was set up in the same manner on July 18.

The gauge at Teplitz Bay (see figure 3) consisted of a heavy wooden framework supporting two pulleys; a wire, attached at one end to a lead weight of 149 pounds lying on basaltic rock at the bottom of the sea 35 feet below the surface, passed over the two pulleys and terminated in a counterpoise weighing 49 pounds. A light, graduated wooden rod six feet long was attached firmly to the wire to serve as a tide staff. The staff remained stationary, while the framework and ice on which it rested rose and fell with the tide.

At Cape Flora a bench mark was established on a large basaltic boulder near the shore and marked by a painted cross. The base line $A\ B = 262.5$ feet in figure 2, and angles were measured to the bench mark and different positions of the tide gauge. The bench mark corresponds to a reading of 14.65 feet on first staff and to 14.70 feet on second staff. The series was all reduced to the first tide staff, on which mean sea level corresponds to a reading of 6.076 feet.

At Teplitz Bay two bench marks were established. Bench Mark 1 is on a boulder near the shore, and Bench Mark 2 is the top of the capstone of the astronomical brick pier. The latter is 50.99 feet above the former as determined by spirit levels on April 30, 1904. The relation of Bench Mark 1 to tide staff was not constant, as the frame of the gauge slowly sank into the ice, and was considerably tilted at the close of the observations. The following table shows the results of various levels between tide staff and Bench Mark 1, only one station of the instrument being necessary.

Date	Local time	Bench Mark 1 above zero of gauge
1904	*h*	*Ft.*
April 2	12	14.19
7	10	14.05
8	9.5	14.07
15	12	14.09
19	12	14.05
22	3	Gauge broke and reset
Mean April 2 to 22..		14.09
April 22	12	14.56
24	12	14.59
26	12	14.59
28	17	14.58
April 30	..	14.58
May 5	15	14.56
9	9	14.63
10	..	14.60
14	17.3	14.60
17	18	14.64
23	13	14.67
29	9	14.69
31	17.5	14.66
June 2	9	14.68
4	0	14.70
Mean April 22 to June 4.....		14.62

The heights of the whole series were reduced so as to make the mean difference between the zero of the corrected staff and Bench Mark 1 correspond to 14.62 feet, which gives a mean sea-level reading of 4.133 feet on the corrected staff.

Elevation of bench marks above various tide planes

Station	Cape Flora Bench Mark	Teplitz Bay	
		Bench Mark 1	Bench Mark 2
	Ft.	*Ft.*	*Ft.*
Highest tide observed..	7.22	9.31	60.30
Mean high water....	8.08	9.90	60.89
Mean sea level.....	8.57	10.49	61.48
Mean low water.....	9.05	11.03	62.02
Lowest tide observed ..	10.02	11.76	62.75

FIGURE 4

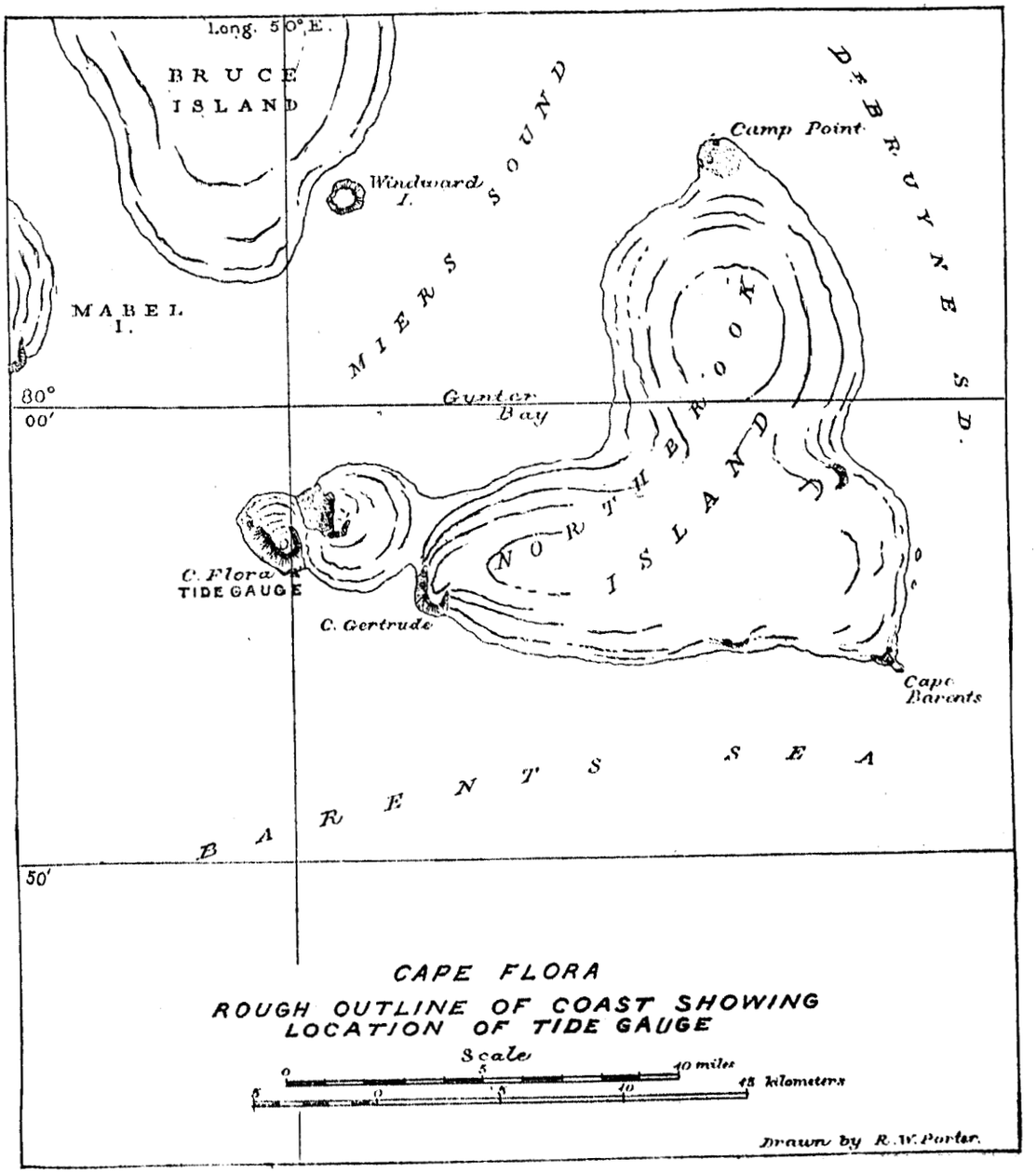
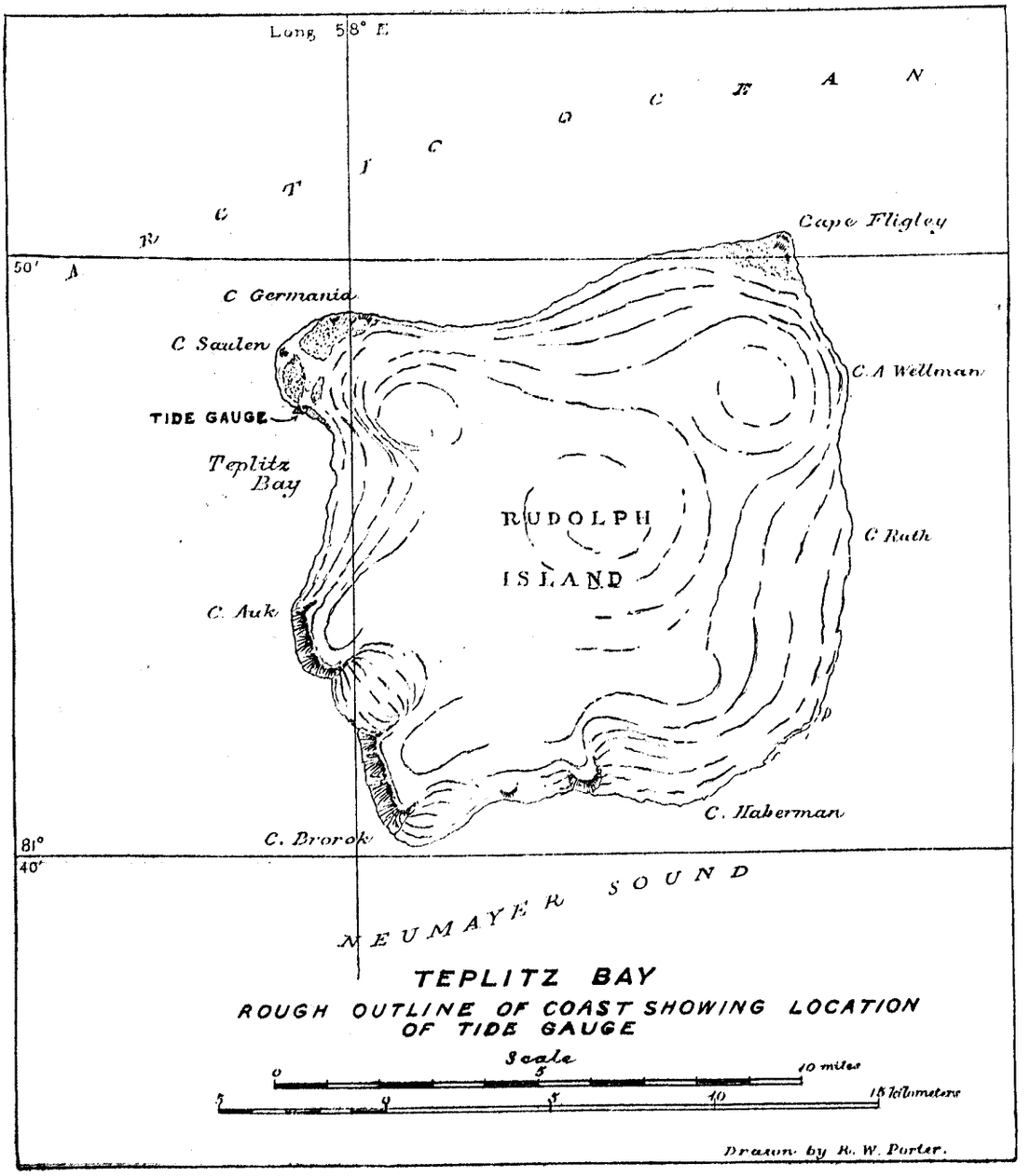

Long. 50° E.
BRUCE ISLAND
Windward I.
MABEL I.
MIERS SOUND
Camp Point
DE BRUYNE SD.
80°
00'
Gunter Bay
NORTHBROOK ISLAND
C. Flora
TIDE GAUGE
C. Gertrude
Cape Barents
BARENTS SEA
50'
CAPE FLORA
ROUGH OUTLINE OF COAST SHOWING
LOCATION OF TIDE GAUGE
Scale
0 5 10 miles
0 5 10 15 kilometers
Drawn by R. W. Porter.

FIGURE 5


Long. 58° E.
Cape Fligley
50'
C Germania
C Saulen
TIDE GAUGE
Teplitz Bay
C A Wellman
RUDOLPH ISLAND
C Ruth
C. Auk
C. Haberman
C. Brorok
81°
40'
NEUMAYER SOUND
TEPLITZ BAY
ROUGH OUTLINE OF COAST SHOWING LOCATION OF TIDE GAUGE
Scale
0
5
10 miles
5
0
5
10
15 kilometers
Drawn by R. W. Porter.

Records

The following are the original uncorrected readings of the tide gauges at Cape Flora and Teplitz Bay. The high and low water observations are denoted by the letters "H" and "L", respectively, and following the reading. A swell or light swell, if noted at observation, is denoted by an asterisk (*) or dagger (†). At Cape Flora, no wind register being available, the anemometer dial readings in miles were recorded, as also the true direction; the anemometer dial read from zero to 990 miles. For the Teplitz Bay results the wind velocities and true directions are given. The times are local mean civil reckoning through twenty-four hours. The tide gauge at Cape Flora is in approximate north latitude 79° 57′ and longitude 49° 59′ (3h 19m 56s) east of Greenwich, while the gauge at Teplitz Bay is in north latitude 81° 47.′5 and longitude 57° 56′ (3h 51m 43s) east. The observations at Cape Flora were made by W. J. Peters, Francis Long, Charles E. Rilliet, Anton Vedoe, and J. E. Moulton. The observations at Teplitz Bay were made by Francis Long, Spencer W. Stewart, Robert R. Tafel, John Vedoe, and W. J. Peters. The various observers are noted in the tabulation of observations by their respective initials. The observer is noted only for the first and last observation of his watch.

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TIDAL OBSERVATIONS

TABULATION OF TIDE GAUGE READINGS

RECORDED AT

CAPE FLORA STATION, NORTHBROOK ISLAND

FRANZ JOSEF ARCHIPELAGO

MAY 21, 1904, TO AUGUST 31, 1904

NORTH LATITUDE: 79° 57′

LONGITUDE EAST OF GREENWICH: 49° 59′

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Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 21, 1904		
h m	*Feet*		*Miles*	
8 12	5.53	E	234	F. L.
9 12	5.65	E		
57	5.88	E		
10 57	6.17	NE		
11 57	6.48	NE	272	
12 07	6.47*	ENE		
17	6.46*	ENE		
27	6.53*	ENE		
37	6.59*	ENE		
47	6.59*	ENE		
57	6.59*	ENE		
13.07	6.59*	ENE		
57	6.70*H	NE		
14 27	6.68*	NE		
57	6.59*	NE		
15 57	6.41*	NE	344	
16 57	6.10	E		
17 57	5.97*	E		
18 57	5.84	E		
19 57	5.69	NE	380	F. L.
20 57	5.64	E		J. E. M.
21 07	5.64L	E		
17	5.65	E		
27	5.65	E		
37	5.69	E		
47	5.73	E		
57	5.76	E		
22 57	5.84	E		
23 57	6.02	ESE	411	J. E. M.
Fresh to brisk and high easterly winds all day.				
		May 22, 1904		
0 57	6.20	ESE		J. E. M.
1 57	6.29	ESE		
2 07	6.30	E		
17	6.30	E		
27	6.32	E		
37	6.32	E		
47	6.32H	E		
57	6.32	E		
3 57	6.16	ENE	444	
4 57	5.96	NE		
5 57	5.78	NE		
6 57	5.65	NE		
7 57	5.49L	E	516	
8 57	5.55	E		J. E. M.
9 57	5.70	SE		F. L.
10 57	5.95	SW		
11 57	6.20	W	550	
12 57	6.45	W		
13 57	6.70	WNW		
14 07	6.69*	WNW		
17	6.68*	W		
27	6.68*	W		
37	6.68*	W		
47	6.65*	W		
57	6.63*	W		
15 07	6.63*	W		
17	6.71*H	W		
27	6.67*	WNW		F. L.
		May 22, 1904		
15 37	6.63*	WNW		F. L.
47	6.61*	W		
57	6.60*	W	634	
16 57	6.40*	W		
17 57	6.20	W		
18 57	6.00	W		
19 57	5.80	W	706	F. L.
20 57	5.68	W		J. E. M.
21 57	5.62L	W		
22 57	5.72	W		
23 57	5.85	W	789	J. E. M.
Brisk to high easterly to westerly winds all day.				
		May 23, 1904		
0 57	6.02	W		J. E. M.
1 57	6.18	NW		
2 07	6.22	NW		
17	6.26	NW		
27	6.28	NW		
37	6.30	NW		
47	6.31	NW		
57	6.32	NW		
3 07	6.33	NW		
17	6.33H	NW		
27	6.33	NW		
37	6.32	NW		
47	6.31	NW		
57	6.30	NW	86	
4 57	6.14	W		
5 57	5.99	NW		
6 57	5.86	NW		
7 57	5.74	W	934	J. E. M.
8 57	5.62	NW		F. L.
9 57	5.60L	NW		
10 57	5.73	NW		
11 57	5.89	WNW	19	
12 57	6.08	W		
13 57	6.30	SE		
14 57	6.40	SE		
16 02	6.42H	SW	82	
57	6.32	E		
17 57	6.20	E		
18 57	5.97	E		
19 57	5.78	E	138	F. L.
20 57	5.55	E		J. E. M.
21 07	5.53	E		
17	5.50	E		
27	5.49	E		
37	5.47	E		
47	5.45	E		
22 07	5.40	E		
07	5.40	E		
17	5.38	E		
27	5.37	E		
37	5.36L	E		
47	5.35	E		
57	5.35	E		
23 57	5.45	E	186	J. E. M.
Brisk to high northwest shifting to southeast and east winds.				

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 24, 1904		
h m	*Feet*		*Miles*	
0 57	5.60	E		J. E. M.
1 57	5.73	E		
2 57	5.91	SE		
3 57	6.05	SE	286	
4 57	6.12H	E		
5 57	6.10	ENE		
6 57	5.95	E		
7 57	5.79	NE	319	J. E. M.
8 57	5.65	NE		F. L.
9 57	5.55	NE	335	
10 57	5.54L	NE		
11 07	5.55	NE		
17	5.58	E		
27	5.59	NE		
37	5.60	NE		
47	5.60	NE		
57	5.62	NE	361	
12 57	5.70	NW		
13 57	5.89	SW		
14 57	6.05	NW		
15 57	6.20	SW	398	
16 57	6.27	SW		
17 07	6.28H	SE		
17	6.27	SE		
27	6.24	SE		
37	6.22	ESE		
47	6.21	ESE		
57	6.20	ESE		
18 57	6.06	ESE		
19 57	5.74	NE	437	F. L.
20 57	5.54	NE		J. E. M.
21 57	5.30	NE		
22 57	5.22	NE		
23 07	5.19	NE		
17	5.15	NE		
27	5.14	E		
37	5.12	E		
47	5.11	E		
23 57	5.10	E	472	J. E. M.
		May 25, 1904		
0 07	5.07L	E		J. E. M.
17	5.07	E		
27	5.08	E		
37	5.09	E		
47	5.10	E		
57	5.11	E		
1 57	5.20	E		
2 57	5.41	E		
3 57	5.60	E	475	
4 57	5.79	ESE		
5 57	5.92	ESE		
6 07	5.94H	ESE		
17	5.94	ESE		
27	5.94	ESE		
37	5.93	ESE		
47	5.92	ESE		
57	5.89	ESE		
7 57	5.79	SE	500	J. E. M.
8 57	5.63	SE		F. L.
9 57	5.49	SE		
10 57	5.39	SE		F. L.
		May 25, 1904		
h m	*Feet*		*Miles*	
11 57	5.33	SE	540	F. L.
12 57	5.31L	SE		
13 07	5.34	SE		
17	5.36	SE		
27	5.40	SE		
37	5.41	SE		
47	5.46	SE		
57	5.49	SE		
15 01	5.69	SE		
57	5.89	SE	570	
16 57	6.00	SE		
17 57	6.06	SE		
18 07	6.10H	SE		
17	6.10	SE		
27	6.06	SE		
37	6.02	SE		
47	6.00	SE		
57	6.01	SE		
19 07	6.00	SE		
57	5.85	SE	603	F. L.
20 57	5.60	WSW		J. E. M.
21 57	5.35	WSW		
22 57	5.13	WSW		
23 57	4.96	SW	641	J. E. M.
		May 26, 1904		
0 17	4.92	SW		J. E. M.
27	4.91	SW		
37	4.90	SW		
47	4.90	SW		
57	4.89	ESE		
1 07	4.87L	ESE		
17	4.87	ESE		
27	4.88	ESE		
37	4.90	ESE		
47	4.92	ESE		
57	4.96	ESE		
2 57	5.10	SE		
3 57	5.35	SE	682	
4 57	5.62	SE		
5 57	5.84	SE		
6 07	5.87	SE		
17	5.90	SE		
27	5.92	SE		
37	5.95	SE		
47	5.99	SE		
57	6.01	SE		
7 07	6.02	SE		
17	6.04	SE		
27	6.05	SE		
37	6.07	SE		
47	6.08H	SE		
57	6.08	SE	717	
8 07	6.06	SE		
17	6.03	SE		J. E. M.
57	5.97	SE		F. L.
10 02	5.79	SE		
57	5.62	SE		
11 57	5.50	SE	75	
12 57	5.48	SE		
13 57	5.46L	SE		
14 07	5.48	SE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 26, 1904		
h m	*Feet*		*Miles*	
14 17	5.51	SE		F. L.
27	5.56	SE		
37	5.60	SE		
47	5.62	SE		
57	5.62	SE		
15 57	5.83	SE		
16 57	6.02	ESE	798	
17 57	6.19	SE		
18 57	6.28	SE		
19 37	6.30H	ESE		
47	6.28	ESE		
57	6.25	ESE	850	
20 07	6.22	ESE		
17	6.21	ESE		
27	6.19	ESE		F. L.
57	6.10	ESE		J. E. M.
21 57	5.83	ESE		
22 57	5.55	ESE		
23 57	5.33	ESE	814	J. E. M.
		May 27, 1904		
0 57	5.20	ESE		J. E. M.
1 57	5.12	ESE		
2 07	5.11	ESE		
17	5.10L	ESE		
27	5.10	ESE		
37	5.12	ESE		
47	5.15	ESE		
57	5.19	ESE		
3 57	5.43	ESE	974	
4 57	5.74	ESE		
5 57	6.05	ENE		
6 57	6.24	ENE		
7 27	6.37	ENE		
37	6.39	ENE		
47	6.40	ENE		
57	6.41	ENE	57	
8 07	6.42	ENE		
17	6.43	ENE		
27	6.44H	ENE		
37	6.44	ENE		
47	6.43	ENE		
57	6.41	ENE		J. E. M.
9 07	6.40	S		F. L.
10 04	6.24	SSW		
57	6.05	SSW		
11 57	5.85	SW	77	
12 57	5.72	SW		
13 57	5.66	SW		
14 07	5.63	SW		
17	5.61	SW		
27	5.61	SW		
37	5.61	SW		
47	5.61	SW		
57	5.60L	SW		
15 07	5.65	SW		
17	5.70	SW		
27	5.70	SW		
37	5.71	SW		
47	5.79	SW		
57	5.80	SW	97	F. L.
		May 27, 1904		
16 57	5.96	SW		F. L.
17 57	6.14	SW		
18 57	6.30	WSW		
19 57	6.32H	WSW	115	F. L.
20 57	6.31	SW		J. E. M.
21 07	6.29	SW		
17	6.24	SW		
27	6.19	SW		
22 07	6.00	S		
57	5.74	S		
23 57	5.46	S	120	J. E. M.
		May 28, 1904		
0 57	5.21	SE		J. E. M.
1 57	5.09	NE		
2 07	5.04	NE		
17	5.03	NE		
27	5.02	NE		
37	5.00	NE		
47	4.99L	NE		
57	4.99	NE		
3 07	5.01	NE		
17	5.03	NE		
27	5.07	NE		
57	5.21	NE	139	
4 57	5.50	E		
5 57	5.85	SE		
6 57	6.09	SE		
7 57	6.39	SE	157	J. E. M.
8 57	6.60	SE		F. L.
9 07	6.60	SE		
17	6.54	SE		
27	6.61H	SE		
37	6.54	SE		
47	6.59	SE		
57	6.60	SE		
10 07	6.55	SE		
17	6.52	SE		
27	6.51	SE		
37	6.50	SE		
47	6.42	SE		
57	6.40	SE		
11 57	6.20	SE	196	
12 57	5.98	SE		
13 57	5.81	SE		
14 57	5.75	SE		
15 07	5.74L	SE		
17	5.78	SE		
27	6.61H	SE		
37	6.54	SE		
47	5.83	ESE		
57	5.88	ESE	241	
16 57	6.03	ESE		
17 57	6.22	SE		
18 57	6.42	SE		
19 57	6.60	SE	295	
20 57	6.70H	ESE		F. L.
21 57	6.55	ESE		J. E. M.
22 57	6.26	SE		
23 57	5.90	SE	354	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 29, 1904		
h m	*Feet*		*Miles*	
0 57	5.61	S		J. E. M.
1 57	5.40	SW		
2 27	5.32	SW		
37	5.30	SW		
47	5.27	SW		
57	5.25L	SW		
3 07	5.25	SW		
17	5.26	SW		
27	5.28	SW		
37	5.30	SW		
47	5.34	SW		
57	5.36	SW	386	
4 57	5.48	SW		
5 57	5.90	NW		
6 57	6.18	W		
7 57	6.50	W	399	J. E. M.
8 57	6.70	W		F. L.
9 57	6.80H	W		
10 07	6.80	W		
17	6.77	W		
57	6.69	W		
11 57	6.44	W	414	
12 57	6.20	W		
14 00	5.98	W		
57	5.81	W		
15 57	5.80L	W	440	
16 07	5.81	W		
17	5.83	W		
58	5.90	W		
17 57	6.04	W		
18 57	6.29	W		
19 57	6.48	W	472	F. L.
20 57	6.57	NW		J. E. M.
21 27	6.60	NW		
37	6.61	NW		
47	6.62H	NW		
57	6.62	NW		
22 07	6.61	NW		
17	6.60	NW		
27	6.57	NW		
57	6.50	NW		
23 57	6.12	NW	524	J. E. M.
		May 30, 1904		
0 57	5.70	NW		J. E. M.
1 57	5.50	NW		
2 57	5.29	NW		
3 07	5.28	NW		
17	5.24	NW		
27	5.20	NW		
37	5.20	NW		
47	5.20	NW		
57	5.20	NW	563	
4 07	5.18	NW		
17	5.17L	NW		
27	5.18	NW		
37	5.20	NW		
47	5.20	NW		
57	5.23	NW		
5 57	5.51	NW		
6 57	5.83	NW		
7 57	6.19	NW	610	J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 30, 1904		
h m	*Feet*		*Miles*	
8 57	6.53	W		J. E. M.
9 57	6.70	WNW		F. L.
10 07	6.74	WNW		
17	6.79	WNW		
27	6.80	W		
37	6.79	W		
47	6.80	W		
57	6.80H	W		
11 07	6.80	W		
17	6.79	W		
27	6.73	W		
12 02	6.63	W	667	
57	6.40	W		
13 57	6.15	W		
14 57	5.89	W		
15 57	5.71	W		
16 57	5.69	W		
17 07	5.68L	W		
17	5.71	W		
57	5.80	W		
18 57	5.94	W		
19 57	6.11	W	779	F. L.
20 57	6.30	W		J. E. M.
22 07	6.42	W		
17	6.46	W		
27	6.48H	W		
37	6.48	W		
47	6.46	W		
57	6.44	W		
23 07	6.42	W		
57	6.20	W	820	J. E. M.
		May 31, 1904		
0 57	5.94	W		J. E. M.
1 57	5.55	W		
2 57	5.19	WNW		
3 57	5.12	WNW	863	
4 07	5.10	NW		
17	5.09	NW		
27	5.09	NW		
37	5.07L	NW		
47	5.07	NW		
57	5.08	NW		
5 07	5.10	NW		
17	5.12	NW		
57	5.21	NW		
6 57	5.55	WNW		
7 57	5.90	WNW	890	J. E. M.
8 57	6.30	W		F. L.
9 57	6.62	W		
10 57	6.77	W		
11 07	6.78	W		
17	6.79	W		
27	6.81H	W		
37	6.80	W		
47	6.76	W		
57	6.74	W	905	
12 57	6.60	W		
13 57	6.30	W		
14 57	6.01	W		
15 57	5.81	W	932	
16 57	5.66	W		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 31, 1904		
h m	*Feet*		*Miles*	
17 27	5.62	W		F. L.
37	5.60L	W		
47	5.62	W		
57	5.69	W		
18 57	5.76	W		
19 57	6.00	W	936	F. L.
20 57	6.19	W		J. E. M.
21 57	6.35	W		
22 57	6.43	W		
23 07	6.43H	W		
17	6.43	W		
27	6.42	W		
37	6.40	W		
47	6.37	W		
57	6.33	NW	953	J. E. M.
		June 1, 1904		
0 57	6.14	NE		J. E. M.
1 57	5.80	NE		
2 57	5.44	NE		
3 57	5.25	NE	963	
4 57	5.15	NE		
5 07	5.13	NE		
17	5.13L	NE		
27	5.13	NE		
37	5.15	NE		
47	5.13	NE		
57	5.16	NE		
6 07	5.20	NE		
57	5.38	ENE		
7 57	5.70	ENE	977	J. E. M.
8 57	6.04	E		F. L.
9 57	6.40	E		
10 57	6.68	E		
11 57	6.72	E		
12 07	6.73	E		
17	6.79H	E		
27	6.76	E		
37	6.70	E		
47	6.69	E	27	
57	6.66	E		
14 01	6.42	E		
57	6.10	ENE		
15 57	5.90	ESE	50	
16 57	5.69	E		
17 57	5.63	E		
18 07	5.61	E		
17	5.60	E		
27	5.60L	E		
37	5.60	E		
47	5.61	E		
57	5.63	E		
19 57	5.80	E	102	F. L.
20 57	6.00	E		J. E. M.
21 57	6.16	E		
22 57	6.32	E		
23 47	6.40	E		
57	6.40H	E	168	J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 2, 1904		
h m	*Feet*		*Miles*	
0 07	6.40	E		J. E. M.
17	6.39	E		
27	6.35	E		
57	6.24	E		
1 57	6.08	ENE		
2 57	5.70	ENE		
3 57	5.49	ENE	234	
4 57	5.37	ENE		
5 47	5.30	ENE		
57	5.29L	ENE		
6 07	5.30	ENE		
17	5.32	ENE		
27	5.36	ENE		
37	5.37	ENE		
57	5.41	E		
7 57	5.63		304	J. E. M.
8 57	5.98	E		F. L.
9 57	6.30	E		
10 57	6.60	E		
11 57	6.70	E		
12 37	6.79	E		
47	6.76	E		
57	6.80	E		
13 07	6.80H	E		
17	6.75	E		
14 07	6.61	E		
57	6.40	E		
15 57	6.14	SE	442	
16 57	5.92	SE		
17 57	5.81	SE		
18 37	5.72L	SE		
47	5.73	SE		
57	5.73	SE		
19 07	5.78	SE		
57	5.81	SE	525	F. L.
21 07	5.95	ESE		J. E. M.
57	6.12	ESE		
22 57	6.30	ESE		
23 57	6.39	ESE	591	J. E. M.
		June 3, 1904		
0 07	6.40	ESE		J. E. M.
17	6.40	ESE		
27	6.41	ESE		
37	6.44H	ESE		
47	6.42	ESE		
57	6.38	E		
1 57	6.20	E		
2 57	5.98	E		
3 57	5.71	E	672	
4 57	5.59	E		
5 57	5.42	E		
6 07	5.40	E		
17	5.39	E		
27	5.39	E		
37	5.39L	E		
47	5.40	E		
57	5.42	E		
7 07	5.44	E		
57	5.53	E	749	J. E. M.
8 57	5.78	E		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 3, 1904		
h m	*Feet*		*Miles*	
9 57	6.03	ESE		F. L.
11 00	6.32	ESE		
57	6.56	ESE	809	
12 57	6.67H	ESE		
13 07	6.67	ESE		
17	6.64	ESE		
27	6.64	SE		
37	6.64	SE		
47	6.63	SE		
57	6.60	ESE		
14 57	6.42	ESE		
15 57	6.20	SE	862	
16 57	5.96	ESE		
17 57	5.81	E		
18 57	5.69	ESE		
19 07	5.65L	E		
17	5.68	NE		
27	5.69	NE		
57	5.70	ENE	902	
20 57	5.73	E		F. L.
21 57	5.93	E		
22 57	6.05	E		J. E. M.
23 57	6.19	E	933	J. E. M.
		June 4, 1904		
0 17	6.20	E		J. E. M.
27	6.21	E		
37	6.23	E		
47	6.24	E		
57	6.25	E		
1 07	6.25H	E		
17	6.25	E		
27	6.24	E		
37	6.23	E		
47	6.22	E		
57	6.20	E		
2 57	6.09	ENE		
3 57	5.86	ENE	954	
4 57	5.63	E		
5 57	5.54	E		
6 27	5.50	E		
37	5.48	E		
47	5.44	E		
57	5.44	E		
7 07	5.44	E		
17	5.44	E		
27	5.42L	E		
37	5.43	E		
47	5.45	E		
57	5.48	E	972	J. E. M.
8 57	5.60	ENE		F. L.
9 57	5.88	E		
10 57	6.10	E		
11 57	6.30	E	7	
12 57	6.50	E		
13 07	6.50	E		
17	6.50	E		
27	6.51	E		
37	6.52	E		
47	6.52	E		
57	6.54H	E		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 4, 1904		
h m	*Feet*		*Miles*	
14 07	6.54	E		F. L.
17	6.52	E		
57	6.41	E		
15 57	6.27	E	31	
16 57	6.02	E		
17 57	5.88	E		
18 57	5.70	E		
19 27	5.65	E		
37	5.64	E		
47	5.61	E		
57	5.60	NE	52	
20 07	5.60	NE		
17	5.60	NE		
27	5.60L	NE		
37	5.60	NE		
47	5.60	NE		
57	5.60	NE		
21 07	5.60	NE		
17	5.63	NE		F. L.
57	5.65	ENE		J. E. M.
22 57	5.80	ENE		
23 57	5.93	NW	71	J. E. M.
		June 5, 1904		
0 57	6.09	E		J. E. M.
1 07	6.10	E		
17	6.10H	E		
27	6.10	E		
37	6.10	E		
47	6.07	E		
57	6.05	E		
2 57	5.97	N		
3 57	5.86	N	97	
4 57	5.72	N		
5 57	5.60	N		
6 57	5.50	N		
7 07	5.50	N		
17	5.50	N		
27	5.50	N		
37	5.44	N		
47	5.43L	N		
57	5.43	SE	127	
8 07	5.44	SE		
17	5.47	SE		J. E. M.
57	5.52	E		F. L.
9 57	5.70	NE		
10 57	5.90	NE		
11 57	6.10	NE	173	
12 57	6.30	NE		
13 57	6.40	NE		
14 07	6.40	NE		
17	6.40	NE		
27	6.41	NE		
37	6.41H	NE		
47	6.41	NE		
57	6.40	NE		
15 57	6.31	NE	233	
16 57	6.10	E		
17 57	5.94	E		
18 57	5.75	NE		
19 57	5.63	NE	298	F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 5, 1904		
h m	*Feet*		*Miles*	
20 07	5.61	NE		F. L.
17	5.60	NE		
27	5.60	NE		
37	5.58	NE		
47	5.55	NE		
57	5.58	NE		
21 07	5.52	E		
17	5.52	E		
27	5.52	E		
37	5.52	E		
47	5.52	E		
21 57	5.51	E		
22 07	5.51	E		
17	5.50L	E		F. L.
27	5.54	E		J. E. M.
37	5.59	E		
47	5.60	E		
57	5.61	E		
23 57	5.72	E	353	J. E. M.
		June 6, 1904		
1 00	5.89	ENE		J. E. M.
30	5.93	ENE		
40	5.93	ENE		
50	5.94	ENE		
2 00	5.96	ENE		
10	5.99	ENE		
20	6.00H	ENE		
30	6.00H	ENE		
40	6.00H	ENE		
50	6.00H	ENE		
3 00	5.95H	ENE		
10	5.97H	ENE		
20	6.00H	ENE		
30	6.00H	ENE		
40	6.00H	ENE		
50	5.92	ENE		
4 00	5.93	E	391	
10	5.93	E		
20	5.90	E		
5 00	5.84	ESE		
6 00	5.70	ESE		
7 00	5.60	ESE		
30	5.55	ESE		
40	5.52	ESE		
50	5.49L	ESE		
8 00	5.50	ESE	415	
10	5.50	ESE		
20	5.50	ESE		
30	5.50	ESE		
40	5.50	ESE		
50	5.50	ESE		
9 00	5.50	ESE		
10	5.50	ESE		
20	5.50	ESE		
30	5.50	ESE		
40	5.50	ESE		
50	5.50	ESE		
10 00	5.52	ESE		
10	5.59	ESE		J. E. M.
11 00	5.70	SE		F. L.
		June 6, 1904		
12 00	5.90	SE	466	F. L.
13 00	6.07	ESE		
14 00	6.25	SE		
15 00	6.30	SE		
10	6.30	SE		
20	6.30	SE		
30	6.32H	SE		
40	6.30	SE		
50	6.29	SE		
16 00	6.25	SE	518	
17 00	6.06	SE		
18 00	5.95	SE		
19 00	5.73	SE		
20 00	5.59	SE	560	F. L.
21 00	5.50	ESE		J. E. M.
22 00	5.39	ESE		
10	5.39L	ESE		
20	5.39	ESE		
30	5.40	ESE		
40	5.41	ESE		
50	5.42	ESE		
23 00	5.45	ESE		
24 00	5.50	SE	612	J. E. M.
		June 7, 1904		
1 00	5.60	ESE		J. E. M.
2 00	5.69	ESE		
3 00	5.80	ESE		
4 00	5.81H	SE	650	
10	5.81H	SE		
20	5.81H	SE		
30	5.81H	SE		
40	5.81H	SE		
50	5.81H	SE		
5 00	5.77	SE		
6 00	5.68	SE		
7 00	5.55	SE		
8 00	5.49	SE	697	J. E. M.
9 00	5.40	SE		F. L.
10	5.39	SE		
20	5.40	SE		
30	5.40	SE		
40	5.38	SE		
50	5.34L	SE		
10 00	5.39	SE		
10	5.40	SE		
20	5.43	SE		
11 05	5.47	SE		
12 00	5.60	SE	726	
13 00	5.70	SE		
14 00	5.86	SE		
15 00	5.96	SE		
50	6.04	SE		
16 00	6.05H	SE	740	
10	6.01	SE		
20	6.01	SE		
30	6.01	SE		
40	5.99	SE		
50	6.00	SE		
17 00	6.00	SE		
10	6.00	SE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 7, 1904			
h m	*Feet*		*Miles*	
17 20	5.99	SE		F. L.
30	5.94	SE		
18 00	5.85	SE		
19 00	5.68	SE		
20 00	5.51	SE	748	
21 00	5.39	SE		F. L.
22 00	5.22	SE		J. E. M.
10	5.21	SE		
20	5.21	SE		
30	5.20	SE		
50	5.17	SE		
23 00	5.15L	SE		
10	5.15	SE		
20	5.20	SE		
24 00	5.23	SE	735	J. E. M.
	June 8, 1904			
1 00	5.30	W		J. E. M.
2 00	5.39	W		
3 00	5.54	W		
4 00	5.66	NW	782	
10	5.69	NW		
20	5.70	NW		
30	5.71	NW		
40	5.73	NW		
50	5.73	NW		
5 00	5.73	W		
10	5.75	W		
20	5.75	W		
30	5.75H	W		
40	5.75	W		
50	5.75	W		
6 00	5.73	W		
7 00	5.63	W		
8 00	5.58	W	795	J. E. M.
9 00	5.46	W		F. L.
10 00	5.42	W		
10	5.41	W		
20	5.41	W		
30	5.42	W		
40	5.41	W		
50	5.40L	W		
11 00	5.41	W		
10	5.41	W		
20	5.46	W		
30	5.46	W		
40	5.49	W		
50	5.50	SW		
12 00	5.50	SW	813	
13 00	5.61	SW		
14 00	5.73	SW		
15 00	5.90	W		
16 00	6.01	SW	838	
50	6.10H	SW		
17 00	6.04	WSW		
10	6.04	WSW		
20	6.05	SW		
30	6.01	SW		
40	6.04	SW		
50	6.01	SW		
18 00	6.00	SW		
19 00	5.89	SW		
20 00	5.70	SW	871	F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 8, 1904			
h m	*Feet*		*Miles*	
21 00	5.57	SW		J. E. M.
22 00	5.40	SW		
23 00	5.30	SW		
10	5.27	SW		
20	5.25	SW		
30	5.24	SW		
40	5.23	SW		
50	5.20	SW		
24 00	5.20L	SW	896	J. E. M.
	June 9, 1904			
0 10	5.20	SW		J. E. M.
20	5.20	SW		
30	5.23	SW		
40	5.23	SW		
50	5.23	SW		
1 00	5.25	SW		
2 00	5.38	SW		
3 00	5.55	SW		
4 00	5.75	SW	934	
5 00	5.90	SW		
6 00	5.96	SW		
10	6.00	SW		
20	6.00	SW		
30	5.99	SW		
40	6.00H	SW		
50	6.00	SW		
7 00	5.99	SW		
10	5.97	SW		
8 00	5.90	SW	973	J. E. M.
9 00	5.84	SW		F. L.
10 00	5.80	SW		
11 00	5.72*	SW		
10	5.72*	SW		
20	5.71*	SW		
30	5.70*	SW		
40	5.72*	SW		
50	5.70*	SW		
12 00	5.70*	SW	27	
10	5.69*	SW		
20	5.64L*	SW		
30	5.64*	SW		
40	5.70*	SW		
50	5.72*	SW		
13 00	5.73*	SW		
14 00	5.90	SW		
15 00	6.00	SW		
16 00	6.11*	W	72	
17 00	6.22	SW		
50	6.22	SW		
18 00	6.23	SW		
10	6.26	SW		
20	6.27	SW		
30	6.28H	SW		
40	6.27	SW		
50	6.20	SW		
19 00	6.20	SW		
10	6.19	SW		
20 01	6.12	W	114	
21 00	5.90	W		F. L.
22 00	5.67	SW		J. E. M.
23 00	5.52	SW		J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 10, 1904		
h m	*Feet*		*Miles*	
0 10	5.47	W	140	J. E. M.
1 00	5.36L	W		
2 00	5.42	W		
3 00	5.51	W		
4 00	5.81	W	180	
5 00	6.03	W		
6 00	6.15	SW		
10	6.20	SW		
20	6.22	SW		
30	6.23	SW		
40	6.24	SW		
50	6.26	SW		
7 00	6.30	NW		
10	6.30	NW		
20	6.31	NW		
30	6.31	NW		
40	6.30	NW		
50	6.33H	NW		
8 00	6.33	NW	213	
10	6.30	NW		
9 00	6.22	NW		J. E. M.
10 00	6.11	NE		F. L.
11 06	6.00	E		
12 00	5.91	E	234	
13 00	5.88	E		
10	5.83	E		
20	5.90	E		
30	5.90	E		
40	5.87	E		
50	5.89	E		
14 00	5.84L	E		
10	5.90	E		
20	5.90	E		
30	5.91	E		
40	5.93	E		
50	5.94	E		
15 00	5.99	NE		
16 00	6.11	NE	251	
17 00	6.23	N		
18 00	6.31	W		
50	6.32	W		
19 00	6.35H	W		
10	6.33	W		
20	6.32	W		
30	6.31	W		
40	6.30	W		
20 00	6.30	W	260	
10	6.23	W		
21 00	6.14	W		
22 00	5.89	NE		F. L.
23 00	5.68	E		J. E. M.
24 00	5.49	E	274	J. E. M.
		June 11, 1904		
0 50	5.36	E		J. E. M.
1 00	5.36	E		
10	5.33	E		
20	5.33	E		
30	5.33	E		
40	5.33	E		
50	5.32	E		J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 11, 1904		
h m	*Feet*		*Miles*	
2 00	5.30L	E		J. E. M.
10	5.32	E		
20	5.36	E		
3 00	5.44	E		
4 00	5.60	ESE	294	
5 00	5.89	ESE		
6 00	6.19	ESE		
7 00	6.39	ESE		
30	6.46	ESE		
40	6.46	ESE		
50	6.50	ESE		
8 00	6.51	ESE	336	
10	6.52H	ESE		
20	6.52H	ESE		
30	6.49H	ESE		
40	6.49H	ESE		
50	6.52H	ESE		
9 00	6.49	ESE		
10	6.47	ESE		J. E. M.
10 00	6.39	SE		F. L.
11 00	6.22	SE		
12 00	6.14	SE	367	
13 00	6.00	SE		
14 00	5.92L	SE		
10	5.92	SE		
20	5.94	SE		
30	5.98	SE		
40	5.99	SE		
50	5.97	SE		
15 00	6.00	SE		
16 00	6.10	ESE	402	
17 00	6.24	ESE		
18 00	6.39	E		
19 00	6.49	E		
30	6.49H	E		
40	6.49	E		
50	6.45	E		
20 00	6.42	E	452	
10	6.44	E		
20	6.42	E		
21 00	6.34	E		F. L.
22 00	6.12	E		J. E. M.
23 00	5.88	E		
24 00	5.63	E	465	J. E. M.
		June 12, 1904		
1 00	5.45	Calm		J. E. M.
10	5.43	Calm		
20	5.40	Calm		
30	5.39	Calm		
40	5.34	Calm		
50	5.34	Calm		
2 00	5.34	Calm		
10	5.33	Calm		
20	5.32	Calm		
30	5.32	Calm		
40	5.31L	Calm		
50	5.31	Calm		
3 00	5.33	Calm		
10	5.35	Calm		
20	5.37	Calm		J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 12, 1904			
h m	*Feet*		*Miles*	
4 00	5.50	Calm	465	J. E. M.
5 00	5.73	Calm		
6 00	6.05	Calm		
7 00	6.35	Calm		
8 00	6.50	Calm		
10	6.52	Calm	465	
20	6.57	Calm		
30	6.59	Calm		
40	6.59	Calm		
50	6.56	Calm		
9 00	6.60H	Calm		
10	6.55	Calm		
20	6.60	Calm		
30	6.58	Calm		J. E. M.
40	6.52	Calm		F. L.
10 00	6.52	Calm		
11 00	6.38	Calm		
12 03	6.20	E[1]	468	
13 00	6.05	SW		
14 00	5.90	SW		
10	5.89	SW		
20	5.84	SW		
30	5.84	SW		
40	5.83	SW		
50	5.83	SW		
15 00	5.82	SW		
10	5.82L	SW		
20	5.82	SW		
30	5.89	SW		
40	5.90	SW		
50	5.90	SW		
16 00	5.92	SW	483	
17 00	6.10	Calm		
18 00	6.23	Calm		
19 00	6.40	Calm		
20 00	6.41	Calm	492	
10	6.44H	Calm		
20	6.44H	Calm		
30	6.44H	SW[2]		
40	6.44H	SW[2]		
50	6.41H	SW[2]		
21 00	6.42H	SW[2]		
10	6.44H	SW[2]		
20	6.41	SW[2]		
30	6.40	SW		F. L.
22 00	6.28	ENE		J. E. M.
23 00	5.97	ENE		
24 00	5.70	ENE	500	J. E. M.
[1]Very light.				
[2]Light.				
Dense fog all day and night.				
	June 13, 1904			
1 00	5.48	ENE		J. E. M.
2 00	5.32	ENE		
10	5.28	ENE		
20	5.23L	ENE		
30	5.23L	ENE		
40	5.30L	ENE		
50	5.27L	ENE		J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 13, 1904			
h m	*Feet*		*Miles*	
3 00	5.27L	E		J. E. M.
10	5.25L	E		
20	5.23L	E		
30	5.30	E		
40	5.30	E		
50	5.32	E		
4 00	5.35	E	515	
5 00	5.57	E		
6 00	5.86	E		
7 00	6.21	ENE		
8 00	6.50	ENE	552	
10	6.56	ENE		
20	6.59	ENE		
30	6.64	ENE		
40	6.64	ENE		
50	6.69	ENE		
9 00	6.74H	ENE		J. E. M.
10	6.70H	NE		F. L.
20	6.70H	NE		
30	6.74H	NE		
40	6.73	NE		
50	6.73	NE		
10 00	6.70	NE		
11 00	6.62	ENE		
12 00	6.42	E	614	
13 00	6.24	ENE		
14 00	6.10*	ENE		
15 00	6.02*	ENE		
40	5.95L*	ENE		
16 00	5.99*	ENE	699	
10	6.02*	ENE		
20	6.05*	ENE		
30	6.07*	ENE		
40	6.11*	ENE		
50	6.13*	ENE		
17 00	6.13*	ENE		
18 00	6.35*	ENE		
19 00	6.51*	ENE		
20 00	6.63*	ENE	798	
21 00	6.71H*	ENE		
22 00	6.70	ENE		F. L.
23 00	6.40	ENE		J. E. M.
24 00	6.10	ENE	917	J. E. M.
	June 14, 1904			
1 00	5.85	ENE		J. E. M.
2 00	5.60	ENE		
3 00	5.50L	ENE		
4 00	5.50	ENE	22	
5 00	5.64	ENE		
6 00	5.83	ENE		
7 00	6.23	NE		
8 00	6.55	NE	97	J. E. M.
9 00	6.90	NE		F. L.
10	6.94*	NE		
20	6.95*	NE		
30	7.01H*	NE		
40	7.01*	NE		
50	7.00*	NE		
10 00	7.00	NE		
11 00	6.93	NE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 14, 1904		
h m	*Feet*		*Miles*	
12 00	6.80	NE	173	F. L.
13 00	6.54	NE		
14 00	6.34	NE		
15 00	6.24	NE		
16 00	6.08	NE	240	
20	6.04L	NE		
30	6.04	NE		
40	6.14	NE		
50	6.15	NE		
17 00	6.20	NE		
18 00	6.34	NE		
19 05	6.55	NE		
20 00	6.65	WNW	287	F. L.
21 00	6.80H	NE		J. E. M.
22 00	6.80	NE		
10	6.77	NE		
20	6.75	NE		
30	6.72	NE		
40	6.71	NE		
50	6.70	NE		
23 00	6.68	NE		
24 00	6.43	NW	330	J. E. M.
		June 15, 1904		
1 00	6.12	NE		J. E. M.
2 00	5.83	NE		
3 00	5.63	NE		
40	5.52	NE		
50	5.51	NE		
4 00	5.50	NE	370	
10	5.50	NE		
20	5.48L	NE		
30	5.48	NE		
40	5.50	NE		
50	5.52	NE		
5 00	5.55	NE		
6 00	5.75	NE		
7 00	6.10	SW		
8 00	6.35	SW	422	J. E. M.
9 00	6.69	SW		F. L.
40	6.83	SW		
50	6.90	SW		
10 00	6.94	WSW		
10	6.95	W		
20	6.94	NW		
30	6.97	NW		
40	7.00	NW		
50	7.01H	NW		
11 00	7.00	NW		
10	6.97	NW		
12 00	6.88	NW	490	
13 00	6.68	NW		
14 00	6.39	NW		
15 00	6.17	NW		
16 00	6.00	NW	567	
40	5.96	NW		
50	5.94L	NW		
17 00	5.94L	NW		
10	5.99L	NW		
20	5.94L	NW		
30	5.94L	NW		
40	6.00	NW		
50	6.00	NW		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 15, 1904		
h m	*Feet*		*Miles*	
18 00	6.01	NW		F. L.
19 00	6.17	NW		
20 00	6.30	NW	652	F. L.
21 00	6.47	NW		
22 00	6.63	NW		
10	6.63	NW		
20	6.63	NW		
30	6.63	NW		
40	6.68H	NW		
50	6.68	NW		
23 00	6.64	NW		
10	6.59	NW		F. L.
24 00	6.47	NW	731	J. E. M.
		June 16, 1904		
1 00	6.18	NW		J. E. M.
2 00	5.80	NW		
3 00	5.60	NW		
4 00	5.35	NW	830	
30	5.32	NW		
40	5.32	NW		
50	5.30	NW		
5 00	5.27	NW		
10	5.24	NW		
20	5.24L	NW		
30	5.24	NW		
40	5.30	NW		
50	5.30	NW		
6 00	5.33	NW		
7 00	5.60	NW		
8 00	5.91	NW	923	J. E. M.
9 00	6.30	NW		F. L.
10 00	6.60	NW		
11 00	6.80	NW		
50	6.90H	NW		
12 00	6.89*	NW	30	
10	6.89*	NW		
20	6.83*	NW		
30	6.82	WNW		
40	6.80*	WNW		
50	6.75	WNW		
13 00	6.70	WNW		
14 00	6.43	WNW		
15 00	6.15	WNW		
16 00	5.94	WNW	120	
17 00	5.81	NW		
10	5.74	NW		
20	5.73	NW		
30	5.71	NW		
40	5.71	NW		
50	5.71	NW		
18 00	5.70L	NW		
10	5.73	NW		
20	5.74	NW		
30	5.75	NW		
40	5.80	NW		
50	5.80	NW		
19 00	5.80	NW		
20 00	6.00	W	192	F. L.
21 00	6.20	W		J. E. M.
22 00	6.45	W		
23 00	6.55	W		
24 00	6.56	NW	237	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 17, 1904		
h m	*Feet*		*Miles*	
0 10	6.57H	NW		J. E. M.
20	6.57	NW		
30	6.52	NW		
40	6.46	NW		
50	6.41	NW		
1 00	6.40	NW		
2 00	6.12	NW		
3 00	5.76	NW		
4 00	5.50	NW	285	
5 00	5.30	NW		
6 00	5.29	NW		
10	5.29L	NW		
20	5.29	NW		
30	5.31	NW		
40	5.52	NW		
50	5.32	NW		
7 00	5.36	NW		
8 00	5.70	NW	319	J. E. M.
9 00	6.10	W		F. L.
10 00	6.44	W		
11 00	6.80	W		
12 00	6.93H	W	348	
10	6.93	W		
20	6.90	W		
30	6.91	W		
40	6.92	W		
50	6.90	W		
13 00	6.84	W		
14 00	6.70	W		
15 00	6.33	W		
16 00	6.08	WNW	376	
17 00	5.80	NW		
50	5.70	NW		
18 00	5.68	NW		
10	5.69L	NW		
20	5.60L	Calm		
30	5.61L	Calm		
40	5.60L	Calm		
50	5.64	Calm		
19 00	5.64	Calm		
10	5.65	W		
20 00	5.70	WNW	387	F. L.
21 00	5.94	NW		J. E. M.
22 00	6.21	NW		
23 00	6.40	SE		
24 00	6.56	SE	398	J. E. M.
		June 18, 1904		
0 10	6.56	SE		J. E. M.
20	6.60H	SE		
30	6.58H	SE		
40	6.60H	SE		
50	6.53	SE		
1 00	6.53	SE		
2 00	6.32	SE		
3 00	6.05	SE		
4 00	5.70	SE	439	
5 00	5.55	SE		
6 00	5.41	E		
10	5.36	E		
20	5.34L	E		J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 18, 1904		
h m	*Feet*		*Miles*	
6 30	5.38	E		J. E. M.
40	5.41	E		
50	5.38	E		
7 00	5.42	SE		
8 00	5.59	SE	485	J. E. M.
9 00	5.89	SE		F. L.
10 00	6.20	SE		
11 08	6.55	E		
12 00	6.75	E	555	
10	6.78	E		
20	6.80	E		
30	6.82	E		
40	6.82	E		
50	6.84	E		
13 00	6.87H	E		
10	6.87	E		
20	6.82	E		
30	6.80	E		
14 00	6.74	E		
15 00	6.49	E		
16 00	6.18	SE	627	
17 00	5.90	SE		
18 00	5.65	SE		
40	5.55	SE		
50	5.54	SE		
19 00	5.54	SE		
10	5.50L	SE		
20	5.52L	SE		
30	5.50L	SE		
40	5.51L	SE		
50	5.50L	SE		
20 00	5.53	SE	721	
10	5.53	SE		
21 00	5.64	SE		F. L.
22 00	5.85	SE		J. E. M.
23 00	6.05	SE		
24 00	6.20	SE	805	J. E. M.
		June 19, 1904		
0 10	6.21	SE		J. E. M.
20	6.29	SE		
30	6.30	SE		
40	6.33	SE		
50	6.33	SE		
1 00	6.33	SE		
10	6.33	SE		
20	6.35H	SE		
30	6.35	SE		
40	6.33	SE		
50	6.30	SE		
2 00	6.28	SE		
3 00	6.13	E		
4 00	5.81	E	892	
5 00	5.60	E		
6 00	5.46	E		
30	5.35	E		
40	5.34	E		
50	5.33	E		
7 00	5.30	E		
10	5.28L	E		
20	5.30	E		J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 19, 1904			
h m	*Feet*		*Miles*	
7 30	5.32	E		J. E. M.
40	5.33	E		
50	5.35	E		
8 00	5.39	E	971	
9 00	5.50	E		J. L. M.
10 00	5.80	E		F. L.
11 00	6.10	E		
12 00	6.40	SE	62	
13 00	6.59	SE		
50	6.68H	E		
14 00	6.68	E		
10	6.63	E		
20	6.61	E		
30	6.61	E		
40	6.60	E		
50	6.60	E		
15 00	6.55	E		
16 00	6.24	E	128	
17 00	5.94	E		
18 00	5.70	E		
19 00	5.59	E		
10	5.54	SE		
20	5.52	SE		
30	5.50	SE		
40	5.44	SE		
50	5.45	SE		
20 00	5.45	SE	182	
10	5.40L	E		
20	5.40	E		
30	5.47	E		F. L.
21 00	5.42	Calm		J. E. M.
22 00	5.60	Calm		
23 00	5.79	Calm		
24 00	6.06	Calm		J. E. M.
	June 20, 1904			
1 00	6.20	E		J. E. M.
10	6.22	E		
20	6.22	E		
30	6.26	E		
40	6.31H	E		
50	6.29	E		
2 00	6.28	E		
10	6.24	E		
3 00	6.20	E		
4 00	6.18	E	240	
5 00	6.00	E		
6 00	5.82	E		
7 00	5.65	E		
10	5.62	E		
20	5.60	E		
30	5.60	E		
40	5.55	E		
8 00	5.55	E	316	
10	5.50L	E		
20	5.59	E		
30	5.59	E		
40	5.54	E		
50	5.59	E		
9 00	5.61	E		J. E. M.
10 00	5.70	E		F. L.
11 00	6.06	E		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 20, 1904			
h m	*Feet*		*Miles*	
12 00	6.33	SE	392	F. L.
13 00	6.60	SE		
14 00	6.71	SE		
10	6.73	SE		
20	6.75H	SE		
30	6.75	SE		
40	6.72	SE		
50	6.74	SE		
15 00	6.70	SE		
16 00	6.60	SE	452	
17 00	6.32	E		
18 00	6.04	E		
19 14	5.81	E		
20 00	5.68	E	504	
10	5.65	E		
20	5.61	E		
30	5.60	E		
40	5.60	E		
50	5.54	E		
21 00	5.51L	E		
10	5.53	E		F. L.
22 00	5.56	ESE		J. E. M
23 00	5.63	ESE		
24 00	5.81	ESE	577	J. E. M.
	June 21, 1904			
1 00	6.07	ESE		J. E. M.
2 00	6.25	SE		
10	6.27	SE		
20	6.33	SE		
30	6.39	SE		
40	6.39	SE		
50	6.39	SE		
3 00	6.43H	SE		
10	6.41H	SE		
20	6.43H	SE		
30	6.43H	SE		
40	6.41	SE		
50	6.42	SE	641	
4 00	6.38	SE		
10	6.38	SE		
20	6.32	SE		
30	6.30	SE		
5 00	6.26	SE		
6 00	6.11	SE		
7 00	5.94	SE		
8 00	5.81	E	695	
30	5.80	E		
40	5.80	E		
50	5.80	E		
9 00	5.76	E		
10	5.74	E		
20	5.73L	E		J. E. M.
30	5.74L	E		F. L.
40	5.73L	E		
50	5.75	E		
10 00	5.75	E		
11.00	5.92	E		
12 00	6.09	E	758	
13 00	6.41	E		
14 00	6.60	E		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 21, 1904		
h m	*Feet*		*Miles*	
15 00	6.71	E		F. L.
30	6.72H	SE		
40	6.70	SE		
50	6.71	SE		
16 00	6.71	SE	814	
10	6.71	SE		
20	6.70	SE		
30	6.67	SE		
40	6.60	SE		
50	6.60	SE		
17 00	6.60	SE		
18 00	6.33	SE		
19 00	6.04	SE		
20 00	5.82	SE	866	
21 00	5.63	E		F. L.
50	5.52	E		J. E. M.
22 00	5.47	E		
10	5.47	E		
20	5.47	E		
30	5.45	E		
40	5.43	E		
50	5.43L	E		
23 00	5.43	E		
10	5.49	E		
24 00	5.58	E	884	J. E. M.
		June 22, 1904		
1 00	5.80	Calm		J. E. M.
2 00	6.03	Calm		
3 00	6.23	Calm		
4 00	6.36	Calm		
5 00	6.38H	Calm		
6 00	6.30	Calm		
7 00	6.16	E	888	
8 00	6.09	E		
9 00	5.95	W		J. E. M.
10 00	5.80L	W		F. L.
11 00	5.88	W		
10	5.88	W		
20	5.91	W		
12 00	6.00	W	914	
13 00	6.10	W		
14 00	6.40	SW		
15 00	6.50	SW		
40	6.60	W		
50	6.60	W		
16 00	6.60	SW	930	
10	6.60	SW		
20	6.62	SW		
30	6.62	SW		
40	6.62	SW		
50	6.63H	SW		
17 00	6.61	SW		
10	6.60	SW		
20	6.58	SW		
18 00	6.40	SE		
19 00	6.12	SE		
20 00	5.90	SE	954	
21 00	5.70	SE		
22 00	5.50	SE		F. L.
30	5.48	SE		J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 22, 1904		
h m	*Feet*		*Miles*	
22 40	5.44	SE		J. E. M.
50	5.43	SE		
23 00	5.41	SE		
10	5.41	SE		
20	5.41	SE		
30	5.37	SE		
40	5.34L	SE		
50	5.34	SE	18	
24 00	5.37	SE		J. E. M.
		June 23, 1904		
0 10	5.39	SE		J. E. M.
1 00	5.53	SE		
2 00	5.72	SE		
3 00	5.94	SE		
4 00	6.13	SE	78	
5 00	6.28	SE		
10	6.30	SE		
20	6.30	SE		
30	6.31	SE		
40	6.32	SE		
50	6.33	SE		
6 00	6.31	SE		
10	6.33	SE		
20	6.34H	SE		
30	6.34	SE		
40	6.31	SE		
50	6.31	SE		
7 00	6.30	SE		
10	6.28	SE		
8 00	6.16	SE	118	
9 00	6.00	SE		J. E. M.
10 05	5.90	SE		F. L.
20	5.88	SE		
30	5.84	SE		
40	5.80	SE		
50	5.80	SE		
11 00	5.76	SE		
10	5.80	SE		
20	5.80	SE		
30	5.73L	SE		
40	5.73	SE		
50	5.79	SE		
12 00	5.78	SE	149	
10	5.80	SE		
13 00	5.86	SE		
14 00	6.05	Calm		
15 00	6.18	SE		
16 00	6.30	SE	164	
17 00	6.35	NE		
40	6.38	NE		
50	6.37	NE		
18 00	6.39	NE		
10	6.34	NE		
20	6.39	NE		
30	6.39H	NNW		
40	6.29	W		
50	6.25	SW		
19 00	6.21	WNW		
20 00	6.00	NW	182	
21 00	5.70	N		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 23, 1904			
h m	*Feet*		*Miles*	
22 00	5.45	N		J. E. M.
23 00	5.26	N		
10	5.25	N		
20	5.25	N		
30	5.23	N		
40	5.23	N		
50	5.19	N		
24 00	5.17	N	170	J. E. M.
	June 24, 1904			
0 10	5.16	N		J. E. M.
20	5.15	N		
30	5.13L	N		
40	5.28	N		
50	5.15	N		
1 00	5.19	SE		
10	5.19	SE		
20	5.22	SE		
2 00	5.30	SE		
3 00	5.50	SE		
4 00	5.76	SE	207	
5 00	6.00	SE		
10	6.03	SE		
20	6.07	SE		
30	6.12	SE		
40	6.15	SE		
50	6.20	SE		
6 00	6.19	SE		
10	6.21	SE		
20	6.23	SE		
30	6.25	SE		
40	6.25	SE		
50	6.25	SE		
7 00	6.27	SE		
10	6.25	SE		
20	6.28H	SE		
30	6.25	SE		
40	6.22	SE		
50	6.22	SE		
8 00	6.18	SE	239	
9 00	6.08	SE		J. E. M.
10 00	5.94	E		F. L.
11 00	5.83	E		
12 00	5.75	E	290	
10	5.70	SE		
20	5.72	SE		
30	5.72	SE		
40	5.70	SE		
50	5.70	SE		
13 00	5.70	SE		
05	5.67L	SE		
10	5.71	SE		
20	5.74	SE		
14 00	5.80	SE		
15 18	5.99	SE		
16 00	6.10	SE	343	
17 00	6.24	SE		
18 00	6.29	SE		
50	6.30H	SE		
19 00	6.30H	E		
10	6.24H	E		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 24, 1904			
h m	*Feet*		*Miles*	
19 20	6.27H	E		F. L.
30	6.30H	E		
40	6.22	E		
50	6.20	E		
20 00	6.19	E	403	
21 00	5.90	E		F. L.
22 00	5.64	E		J. E. M.
23 00	5.39	E		
24 00	5.20	E	487	J. E. M.
	June 25, 1904			
0 20	5.18	E		J. E. M.
30	5.16	E		
40	5.14	E		
50	5.12	E		
1 00	5.10	SE		
10	5.10	SE		
20	5.13	SE		
30	5.09L	SE		
40	5.12	SE		
50	5.12	SE		
2 00	5.15	SE		
3 00	5.32	SE		
4 00	5.63	ESE	578	
5 00	5.85	ESE		
6 00	6.10	ESE		
50	6.23	ESE		
7 00	6.29	ESE		
10	6.31	ESE		
20	6.31	ESE		
30	6.32	ESE		
40	6.33	ESE		
50	6.39	ESE		
8 00	6.39	ESE	666	
10	6.39	ESE		
20	6.40H	ESE		
30	6.40	ESE		
40	6.37	ESE		
50	6.34	E		
9 00	6.32	E		J. E. M.
10 00	6.20	ESE		F. L.
11 01	6.05	ESE		
12 00	5.84	ESE	747	
13 00	5.74	ESE		
40	5.73	ESE		
50	5.70L	ESE		
14 00	5.72L	SE		
10	5.70L	SE		
20	5.78	ESE		
30	5.74	ESE		
40	5.80	ESE		
50	5.81	E		
15 00	5.78	E		
10	5.87	ESE		
16 00	6.00	ESE	814	
17 00	6.11	ESE		
18 00	6.24	ESE		
19 00	6.34	SE		
20 00	6.34H	SE	857	
10	6.34	SE		
20	6.30	SE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		June 25, 1904		
h m	*Feet*		*Miles*	
20 30	6.30	SE		F. L.
40	6.30	SE		
50	6.21	SE		
21 00	6.21	SE		F. L.
22 00	5.98	SE		J. E. M.
23 00	5.67	SE		
24 00	5.40	E	891	J. E. M.
		June 26, 1904		
1 00	5.27	ENE		J. E. M.
10	5.23	ENE		
20	5.23	ENE		
30	5.20	ENE		
40	5.20	ENE		
50	5.19	ENE		
2 00	5.17L	ENE		
10	5.17	E		
20	5.20	E		
30	5.20	E		
40	5.19	E		
50	5.20	E		
3 00	5.21	E		
4 00	5.42	E	929	
5 00	5.70	E		
6 00	6.01	SE		
7 00	6.31	SE		J. L. M.
8 00	6.46	SW	968	F. L.
10	6.49	SW		
20	6.50	W		
30	6.51	W		
40	6.50	W		
50	6.50	W		
9 00	6.50	W		
10	6.51	W		
20	6.54H	W		
30	6.51	W		
40	6.49	W		
50	6.44	W		
10 00	6.44	W		
11 00	6.30	W		
12 00	6.10	SW	3	
13 00	5.94	SW		
14 00	5.80	SW		
10	5.80	SW		
20	5.80	W		
30	5.80	W		
40	5.76	W		
50	5.74L	W		
15 00	5.74	W		
10	5.76	SW		
16 00	5.84	SW	42	
17 00	6.00	SW		
18 00	6.14	SW		
19 00	6.25	W		
20 00	6.40	W	70	
10	6.40	W		
20	6.40H	W		
30	6.40	SW		
40	6.40	SW		
50	6.35	SW		
21 00	6.34	SW		F. L.
		June 26, 1904		
h m	*Feet*		*Miles*	
21 10	6.32	SW		F. L.
22 00	6.23	SW		J. E. M.
23 00	5.99	SW		
24 00	5.67	SW	94	J. E. M.
		June 27, 1904		
1 00	5.50	W		J. E. M.
30	5.39	W		
40	5.37	W		
50	5.33	W		
2 00	5.32	W		
10	5.31	W		
20	5.29	W		
30	5.27	W		
40	5.27	W		
50	5.27	W		
3 00	5.25	W		
10	5.24L	W		
20	5.27	W		
30	5.30	W		
40	5.32	W		
50	5.32	W		
4 00	5.32	W	116	
5 00	5.59	W		
6 00	5.91	W		
7 00	6.20	W		
8 00	6.53	W	132	J.E. M.
9 05	6.70	W		F. L.
10	6.72	W		
20	6.72	W		
30	6.78H	W		
40	6.74	W		
50	6.76	W		
10 00	6.76	W		
10	6.72	W		
11 00	6.64	W		
12 00	6.43	W	148	
13 00	6.20	W		
14 00	6.05	W		
15 00	5.93	W		
10	5.91	W		
20	5.91	W		
30	5.92	W		
40	5.90	W		
50	5.90L	W		
16 00	5.90	W	165	
10	5.91	W		
20	5.92	W		
17 00	6.00	W		
18 00	6.16	W		
19 00	6.30	W		
20 00	6.45	W	186	F. L.
21 00	6.57H	W		J.E. M.
10	6.55	W		
20	6.54	W		
30	6.53	W		
40	6.53	W		
50	6.52	W		
22 00	6.52	W		
23 00	6.34	W		
24 00	6.07	W	194	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 28, 1904			
h m	*Feet*		*Miles*	
1 00	5.75	W		J. E. M.
2 00	5.57	W		
3 00	5.42	ESE		
10	5.39	ESE		
20	5.36	ESE		
30	5.36	ESE		
40	5.35L	ESE		
50	5.37	ESE		
4 00	5.40	ESE	215	
10	5.39	ESE		
20	5.40	ESE		
30	5.42	ESE		
40	5.46	ESE		
5 00	5.53	ESE		
6 00	5.75	ESE		
7 00	6.11	ESE		
8 00	6.44	SE	246	J. E. M.
9 00	6.75	SE		F. L.
50	6.90	SE		
10 00	6.90	SE		
10	6.90	SE		
20	6.92H	SE		
30	6.92	SE		
40	6.91	SE		
50	6.91	SE		
11 00	6.90	SE		
12 00	6.72	SE	296	
13 00	6.46	SE		
14 00	6.30	SE		
15 00	6.10	SE		
50	6.01	SE		
16 00	5.98	SE	353	
10	5.95	SE		
20	5.95	SE		
30	5.98	SE		
40	5.98	SE		
50	5.94	SE		
17 00	5.94L	SE		
10	5.94	SE		
20	6.00	SE		
18 00	6.10	SE		
19 00	6.23	SE		
20 00	6.40	SE	401	F. L.
21 00	6.58	SE		J. E. M.
22 00	6.63	SE		
20	6.64H	SE		
30	6.63	SE		
40	6.61	SE		
50	6.39	SE		
23 00	6.51	SE		
24 00	6.32	SE	450	J. E. M.
	June 29, 1904			
1 00	6.07	SE		J. E. M.
2 00	5.81	SE		
3 00	5.66	SE		
30	5.56	SE		
40	5.53	SE		
50	5.52	SE		
4 00	5.51	SE	498	
10	5.50L	SE		J. E. M.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 29, 1904			
h m	*Feet*		*Miles*	
4 20	5.53	SE		J. E. M.
30	5.54	SE		
40	5.52	SE		
50	5.54	SE		
5 00	5.60	SE		
6 00	5.72	SE		
7 00	6.03	SE		
8 00	6.42	SE	534	J. E. M.
9 00	6.71	SE		F. L.
10 00	7.00	SE		
20	7.00	SE		
30	7.03	SE		
40	7.05	SE		
50	7.07	SE		
55	7.10H	SE		
11 00	7.09	SE		
10	7.06	SE		
20	7.04	SE		
12 00	7.01	SE	565	
13 00	6.80	SE		
14 00	6.53	SE		
15 00	6.30	SE		
16 00	6.15	NE	590	
40	6.10	NE		
50	6.09L	NE		
17 00	6.10	NE		
10	6.11	NE		
20	6.11	NE		
30	6.10	SE		
40	6.10	SE		
50	6.14	SE		
18 00	6.20	SE		
19 00	6.30	S		
20 00	6.49	SW	607	
21 00	6.65	ENE		F. L.
22 00	6.78	ENE		J. E. M.
10	6.80	ENE		
20	6.82	ENE		
30	6.84	ENE		
40	6.80	ENE		
50	6.87H	ENE		
23 00	6.84	E		
10	6.80	E		
20	6.78	E		
24 00	6.70	E	682	J. E. M.
	June 30, 1904			
1 00	6.51	E		J. E. M.
2 00	6.15	NW		
3 00	6.01	NW		
4 00	5.75	NW	721	
10	5.73	NW		
20	5.70	NW		
30	5.70	NW		
40	5.72	NW		
50	5.72	NW		
5 00	5.70	W		
10	5.69L	W		
20	5.70L	W		
30	5.69L	W		
40	5.72	W		J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	June 30, 1904			
h m	*Feet*		*Miles*	
5 50	5.73	W		J. E. M.
6 00	5.80	W		
7 00	6.01	W		
8 00	6.32	W	754	J. E. M.
9 00	6.32	W		F. L.
10 00	6.97	W		
11 10	7.15	W		
20	7.20H	W		
30	7.19	SW		
40	7.19	SW		
50	7.14	SW		
12 00	7.10	SW	790	
13 00	6.99	SW		
14 00	6.77	SW		
15 00	6.52	SW		
16 00	6.34	SW	823	
17 00	6.24	SW		
10	6.20	SW		
20	6.20	SW		
25	6.19	S		
30	6.20	S		
35	6.16L	S		
40	6.20	S		
50	6.20	S		
18 00	6.20	S		
10	6.20	S		
20	6.21	S		
30	6.24	S		
19 00	6.24	S		
20 00	6.44	S	840	
21 00	6.64	S		
22 00	6.81	S		F. L.
50	6.92	W		J. E. M.
23 00	6.90	W		
10	6.90	W		
20	6.93	W		
30	6.96H	W		
40	6.92	W		
50	6.92	W		
24 00	6.90	W	862	J. E. M.
	July 1, 1904			
1 00	6.75	W		J. E. M.
2 00	6.50	W		
3 00	6.23	W		
4 00	6.02	W	899	
5 00	5.89	W		
10	5.85	W		
20	5.83L	W		
30	5.85	W		
40	5.87	W		
50	5.88	W		
6 00	5.90	W		
7 00	5.98	W		
8 00	6.21	W	934	J. E. M.
9 00	6.65	NW		F. L.
10 00	6.80	NW		
11 00	7.09	NW		
10	7.04	NW		
20	7.08†	NW		
30	7.10†	NW		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 1, 1904			
h m	*Feet*		*Miles*	
11 40	7.12	NW		F. L.
50	7 14H†	NW		
12 00	7.10	NW	30	
10	7.12	NW		
20	7.12	NW		
30	7.10	NW		
40	7.09	NW		
50	7.05	NW		
13 00	7.04	NW		
14 00	6.84*	NNW		
15 00	6.52*	NNW		
16 00	6.30*	NNW	136	
17 00	6.06*	NNW		
18 00	5.90	NNW		
10	5.90	NNW		
20	5.86	NNW		
30	5.84	NNW		
40	5.83L	NNW		
50	5.85	NNW		
19 00	5.90	NNW		
20 00	5.95	NW		
21 00	6.12	NW	216	F. L.
22 00	6.25	NW		J. E. M.
23 00	6.41	NW		
24 00	6.53	NW		J. E. M.
	July 2, 1904			
0 10	6.51	NW	257	J. E. M.
20	6.52	NW		
30	6.54H	NW		
40	6.52	NW		
50	6.50	NW		
1 00	6.48	NW		
2 00	6.34	NW		
3 00	6.06	NW		
4 00	5.80	NW	301	
5 00	5.69	NW		
6 00	5.61	NW		
10	5.60	NW		
20	5.57	NW		
30	5.55L	NW		
40	5.60	NW		
50	5.61	NW		
7 00	5.63	NW		
10	5.65	WNW		
8 00	5.74	WNW	363	J. E. M.
9 00	6.08	WNW		F. L.
10 00	6.35	WNW		
11 00	6.62	NW		
12 00	6.82	NW	405	
10	6.82	W		
20	6.88	W		
30	6.84	W		
40	6.90H	W		
50	6.90	W		
13 00	6.84	W		
10	6.90	W		
20	6.82	W		
14 00	6.80	W		
15 00	6.52	W		
16 00	6.24	W	431	F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 2, 1904		
h m	*Feet*		*Miles*	
17 00	6.00	W		F. L.
18 00	5.80	W		
19 00	5.72	W		
10	5.73	W		
20	5.75	W		
30	5.70L	W		
40	5.70	W		
50	5.72	W		
20 00	5.74	W	472	
21 00	5.90	W		F. L.
22 00	6.04	W		J. E. M.
23 00	6.21	W		
24 00	6.34	W	521	J. E. M.
		July 3, 1904		
0 30	6.37	NW		J. E. M.
40	6.39	NW		
50	6.41	NW		
1 00	6.40	NW		
10	6.36	NW		
20	6.40	NW		
30	6.42H	NW		
40	6.39	NW		
50	6.39	NW		
2 00	6.36	NW		
3 00	6.19	NW		
4 00	5.94	WNW	594	
5 00	5.81	WNW		
6 00	5.67	WNW		
7 00	5.59L	NW		
10	5.63	NW		
20	5.65	NW		
30	5.69	NW		
40	5.70	NW		
50	5.71	NW		
8 00	5.73	N	588	J. E. M.
9 02	5.92	N		F. L.
10 00	6.20	N		
11 00	6.50	NW		
12 00	6.74	NW	634	
13 05	6.90H	NW		
10	6.89	NW		
20	6.85	NW		
30	6.90	NW		
40	6.84	NW		
50	6.82	NW		
14 00	6.82	NW		
10	6.80	NW		
15 00	6.65	NW		
16 00	6.44	W	682	
17 00	6.15	W		
18 00	5.91	NW		
19 00	5.80	NW		
10	5.76	NW		
20	5.80	NW		
30	5.76	NW		
40	5.73	NW		
50	5.73	NW		
20 00	5.71L	NW	745	
10	5.76	NW		
20	5.78	NW		
21 00	5.80	NW		F. L.
22 00	5.93	NW		J. E. M.
23 00	6.04	NW		
24 00	6.28	WNW	790	J. E. M.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 4, 1904		
h m	*Feet*		*Miles*	
1 00	6.40	W		J. E. M.
10	6.41	W		
20	6.43	W		
30	6.40	W		
40	6.43H	W		
50	6.40	W		
2 00	6.37	W		
10	6.36	W		
20	6.35	W		
3 00	6.27	W		
4 00	6.12	NW	830	
5 00	5.93	NW		
6 00	5.85	NW		
7 00	5.78	NW		
10	5.73	NW		
20	5.75	NW		
30	5.73	NW		
40	5.73	NW		
50	5.72L	NW		
8 00	5.78	NW	870	
10	5.80	NW		
20	5.83	NW		
9 00	5.88	NW		J. E. M.
10 00	6.12	NW		F. L.
11 00	6.34	NW		
12 00	6.54	NW	903	
13 00	6.74	NW		
10	6.72	NW		
20	6.74	NW		
30	6.77	NW		
40	6.79	NW		
50	6.80H	NW		
14 00	6.75	NW		
10	6.71	NW		
15 00	6.69	NW		
16 00	6.45	NW	924	
17 00	6.25	NW		
18 00	6.00	NW		
19 00	5.83	NW		
20 00	5.74	NW	950	
10	5.70	W		
20	5.70	W		
30	5.70	W		
40	5.69L	W		
50	5.71	W		
21 00	5.75	W		
10	5.72	W		
20	5.74	W		
30	5.77	W		F. L.
22 00	5.79	W		J. E. M.
23 00	5.90	W		
24 00	6.03	W	960	J. E. M.
		July 5, 1904		
1 00	6.20	NW		J. E. M.
10	6.25	NW		
20	6.26	NW		
30	6.25	NW		
40	6.28	NW		
50	6.30	NW		
2 00	6.30	NW		
10	6.30	NW		
20	6.31	NW		
30	6.33H	NW		
40	6.31H	NW		J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 5, 1904			
h m	*Feet*		*Miles*	
2 50	6.33H	NW		J. E. M.
3 00	6.30	NW		
10	6.29	NW		
20	6.27	NW		
30	6.25	NW		
4 00	6.16	NW	971	
5 00	6.02	NW		
6 00	5.90	NW		
7 00	5.81	NW		
8 00	5.78	NW	983	
10	5.78	NW		
20	5.76L	NW		
30	5.80	NW		
40	5.79	NW		
50	5.82	NW		
9 00	5.83	NW		J. E. M.
10 00	5.96	W		F. L.
11. 00	6.14	W		
12 00	6.39	W	7	
13 00	6.52	W		
14 00	6.61	SW		
10	6.62	SW		
20	6.66H	SW		
30	6.63	SW		
40	6.64	SW		
50	6.66	SW		
15 00	6.61	SW		
10	6.60	SW		
16 00	6.50	S	25	
17 00	6.25	S		
18 00	6.04	S		
19 00	5.93	S		
20 00	5.74	S	38	
10	5.71	S		
20	5.70	S		
30	5.70	S		
40	5.74	S		
50	5.72	S		
21 00	5.70	S		
10	5.64	S		
20	5.63L	S		
30	5.66	S		
40	5.64	S		
50	5.63	S		
22 00	5.64	S		F. L.
23 00	5.73	SE		J. E. M.
24 00	5.86	SE	56	J. E. M.
	July 6, 1904			
1 00	5.99	S		J. E. M.
50	6.13	S		
2 00	6.15	S		
10	6.18	S		
20	6.18	S		
30	6.17	S		
40	6.20	S		
50	6.20	S		
3 00	6.20	S		J. E. M.
	July 6, 1904			
h m	*Feet*		*Miles*	
3 10	6.21	S		J. E. M.
20	6.22	S		
30	6.23H	S		
40	6.21	S		
50	6.20	S		
4 00	6.20	S	66	
10	6.21	S		
20	6.21	S		
30	6.20	S		
40	6.19	S		
50	6.16	S		
5 00	6.11	S		
6 00	6.01	SW		
7 00	5.93	SW		
8 00	5.92	W	77	
10	5.92	W		
20	5.92	W		
30	5.91L	W		
40	5.91L	W		
50	5.91L	W		
9 00	5.91L	W		
10	5.93	W		
20	5.93	W		
30	5.94	W		
35	5.90	W		
40	5.92	W		
50	5.91	W		
10 00	5.92	W		J. E. M.
11 00	6.13	W		F. L.
12 00	6.30	W	90	
13 00	6.46	W		
14 00	6.60	SSE		
10	6.60	SSE		
20	6.61	SSE		
30	6.60	SSE		
40	6.61	SSE		
50	6.63H	SSE		
15 00	6.62	SSE		
10	6.61	SSE		
20	6.62	SSE		
30	6.62	SSE		
40	6.62	SSE		
50	6.62	SSE		
16 00	6.60	SSE	107	
17 00	6.50	ENE		
18 00	6.31	ENE		
19 00	6.14	ENE		
20 00	5.98	ENE	120	
21 00	5.90	ENE		F. L.
20	5.84	ENE		J. E. M.
30	5.83	ENE		
40	5.83	ENE		
50	5.81	ENE		
22 00	5.80L	ENE		
10	5.80L	ENE		
20	5.81	ENE		
30	5.83	ENE		
40	5.83	ENE		
50	5.84	ENE		
23 00	5.84	ENE		
24 00	5.93	ENE	127	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 7, 1904			
h m	*Feet*		*Miles*	
1 00	6.09	ENE		J. E. M.
2 00	6.30	ENE		
3 00	6.43	W		
10	6.43	W		
20	6.43	W		
30	6.46	W		
40	6.49	W		
50	6.50	W		
4 00	6.50	W	137	
10	6.50	W		
20	6.53H	W		
30	6.53H	W		
40	6.51	W		
50	6.50	W		
5 00	6.49	W		
10	6.49	W		
6 00	6.48	W		
7 00	6.40	ESE		
8 00	6.37	ESE	152	J. E. M.
9 00	6.33	ENE		F. L.
10	6.32	ENE		
20	6.31	ENE		
30	6.32	E		
40	6.30	E		
50	6.30	E		
58	6.28L	E		
10 00	6.30	E		
10	6.30	E		
20	6.31	E		
30	6.32	E		
40	6.33	E		
50	6.37	E		
11 00	6.40	E		
12 00	6.50	ESE	190	
13 00	6.63	ESE		
14 00	6.79	NE		
15 03	6.88	NE		
30	6.90	NE		
40	6.90	NE		
50	6.91H	NE		
16 00	6.91H	NE	212	
10	6.90	NE		
20	6.89	NE		
30	6.88	NE		
40	6.90	NE		
50	6.89	NE		
17 00	6.84	NE		
18 00	6.71	NE		
19 00	6.50	NE		
20 10	6.28	NE	228	
21 00	6.05	NE		F. L.
40	6.05	NE		J. E. M.
50	6.03	NE		
22 00	6.03	NE		
10	6.02	NE		
20	6.01	NE		
30	6.00	NE		
40	6.00	NE		
50	5.97	NE		
23 00	5.97	NE		
10	5.99	NE		
20	5.95L	NE		J. E. M.
30	5.95L	NE		
40	5.95L	NE		
50	5.95L	NE		
24 00	5.98	NE	244	J. E. M.
	July 8, 1904			
0 10	6.00	NE		J. E. M.
1 00	6.04	E		
2 00	6.12	E		
3 00	6.38	SE		
4 00	6.53	SE	264	
5 00	6.63	SE		
10	6.66	SE		
20	6.68	SE		
30	6.70H	SE		
40	6.70H	SE		
50	6.70H	SE		
6 00	6.70H	SE		
10	6.69	SE		
20	6.66	SE		
30	6.63	SE		
40	6.62	SE		
7 00	6.59	NW		
8 00	6.53	NW	293	J. E. M.
9 00	6.50	W		F. L.
10 00	6.43	SW		
10	6.42	SW		
20	6.41	WNW		
30	6.40	WNW		
40	6.45	WNW		
50	6.42	WNW		
11 00	6.42	NW		
10	6.38L	NW		
20	6.38L	NW		
30	6.44	NW		
40	6.43	NW		
50	6.46	NW		
12 00	6.47	NW	353	
13 00	6.56	NW		
14 00	6.64	NW		
15 00	6.75	NW		
16 00	6.82	NW	389	
10	6.83	NW		
20	6.84H	NW		
30	6.84H	NW		
40	6.84H	NW		
50	6.82	NW		
17 00	6.78	NW		
18 03	6.76	NE		
19 00	6.65	NE		
20 00	6.40	NE	440	
21 00	6.24	SW		F. L.
22 00	6.07	SW		J. E. M.
23 00	5.90	SW		
10	5.90	SW		
20	5.90	SW		
30	5.91	SW		
40	5.89	SW		
50	5.84	SW		
24 00	5.80	S	449	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 9, 1904		
h m	*Feet*		*Miles*	
0 10	5.83	S		J. E. M.
20	5.80L	S		
30	5.83	S		
40	5.83	S		
50	5.81	S		
1 00	5.84	S		
2 00	5.96	S		
3 00	6.14	S		
4 00	6.38	S	456	
5 00	6.50	S		
10	6.58	S		
20	6.60	S		
30	6.60	S		
40	6.62	S		
50	6.63	S		
6 00	6.63	S		
10	6.65	S		
20	6.68	S		
30	6.68	S		
40	6.68	S		
50	6.68	S		
7 00	6.70H	S		
10	6.70H	S		
20	6.65	S		
30	6.62	S		
40	6.62	S		
50	6.60	S		
8 00	6.60	S	463	
9 00	6.58	S		J. E. M.
10 00	6.50	S		F. L.
11 00	6.43	S		
12 00	6.34L	S	477	
10	6.36L	S		
20	6.36L	S		
30	6.34L	S		
40	6.34L	SW		
50	6.33L	SW		
13 00	6.40	WSW		
10	6.41	WNW		
14 00	6.43	N		
15 00	6.50	N		
16 00	6.63	W	494	
17 00	6.67	S		
18 00	6.68H	S		
05	6.69H	S		
10	6.68H	S		
20	6.65	S		
30	6.61	S		
40	6.61	S		
50	6.60	S		
19 00	6.56	S		
20 00	6.44	S	509	
21 00	6.25	S		F. L.
22 00	6.03	S		J. E. M.
23 00	5.89	S		
24 00	5.78	S	535	J. E. M.
		July 10, 1904		
0 10	5.73	S		J. E. M.
20	5.71	S		J. E. M.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 10, 1904		
h m	*Feet*		*Miles*	
0 30	5.70L	S		J. E. M.
40	5.70L	S		
50	5.70L	S		
1 00	5.70L	S		
10	5.70L	S		
20	5.69L	S		
30	5.70L	S		
40	5.72	S		
50	5.73	S		
2 00	5.77	S		
3 00	5.85	SW		
4 00	6.08	SW		
5 00	6.33	SW	544	
6 00	6.55	SW		
7 00	6.70	W		
10	6.71	W		
20	6.72	W		
30	6.73	W		
40	6.73	W		
50	6.74	W		
8 00	6.74	W	554	
10	6.75	W		
20	6.76	W		
25	6.78H	W		
30	6.75	W		
40	6.73	W		
50	6.70	W		
9 00	6.70	W		J. E. M.
10 00	6.66	W		F. L.
11 00	6.53	W		
12 00	6.40	W	568	
13 00	6.34	W		
10	6.31	W		
20	6.30L	W		
30	6.30L	W		
40	6.32	W		
50	6.31	W		
14 00	6.34	W		
10	6.36	W		
20	6.36	W		
30	6.34	W		
40	6.41	W		
50	6.42	W		
15 00	6.41	W		
16 00	6.51	E	584	
17 00	6.63	E		
18 00	6.70	E		
44	6.80	E		
50	6.71	E		
19 00	6.70	E		
10	6.76	E		
20	6.74	E		
25	6.80H	E		
30	6.73	W		
40	6.71	W		
50	6.73	N		
20 00	6.69	N	601	
21 00	6.50	N		F. L.
22 00	6.30	NW		J. E. M.
23 00	6.08	NW		
24 00	5.88	NW	647	J. E. M.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 11, 1904		
h m	*Feet*		*Miles*	
1 00	5.75	NW		J. E. M.
10	5.75	NW		
20	5.70	NW		
30	5.68	NW		
40	5.65L	NW		
50	5.65L	NW		
2 00	5.65L	NW		
10	5.65L	NW		
20	5.64L	NW		
30	5.64L	NW		
40	5.67	NW		
50	5.70	NW		
3 00	5.70	NW		
4 00	5.97	NW	696	
5 00	6.28	NW		
6 00	6.53	NW		
7 00	6.80	NW		
8 00	6.89	NW	767	J. E. M.
50	6.94H	NW		F. L.
9 00	6.94H	NW		
10	6.93H	NW		
20	6.90H	NW		
30	6.93H	NW		
40	6.94H	NW		
50	6.90	NW		
10 00	6.86	NW		
10	6.85	NW		
11 00	6.70	NW		
12 00	6.60	NW	822	
13 00	6.45	NW		
14 00	6.44	NW		
20	6.30L	NW		
15 15	6.39	NW		
16 00	6.42	W	863	
17 00	6.54	W		
18 00	6.66	W		
19 00	6.78	NW		
20 00	6.80H	NW	881	
21 00	6.73	NW		
22 00	6.54	NW		F. L.
23 00	6.28	NW		J. E. M.
24 00	5.99	NW	909	J. E. M.
		July 12, 1904		
1 00	5.80	NW		J. E. M.
2 00	5.65	NW		
10	5.63	NW		
20	5.63	NW		
30	5.60L	NW		
40	5.60L	NW		
50	5.60L	NW		
3 00	5.60L	NW		
10	5.63	NW		
20	5.68	NW		
30	5.70	NW		
40	5.70	NW		
50	5.71	NW		
4 00	5.74	NW	925	
5 00	6.05	NW		
6 00	6.39	NW		
7 00	6.76	NW		J. E. M.
8 00	6.95	NW	948	J. E. M.
9 00	7.16	NW		F. L.
10	7.14	NW		
15	7.19	NW		
20	7.20H	NW		
30	7.14	NW		
40	7.11	NW		
50	7.14	NW		
10 00	7.15	NW		
10	7.10	NW		
11 00	7.02	NW		
12 00	6.83	NW	983	
13 00	6.60	W		
14 00	6.48	W		
10	6.43	W		
20	6.40	W		
30	6.40	W		
40	6.30L	W		
50	6.34L	W		
15 00	6.34L	W		
10	6.30L	W		
20	6.39	NW		
30	6.39	NW		
16 00	6.40	NW	36	
17 00	6.50	NW		
18 00	6.70	W		
19 03	6.76	W		
20 00	6.86	NW		
21 00	6.89	W		
10	6.84	W		
20	6.89H	W		
30	6.83	W		
40	6.78	W		
50	6.80	W		
22 00	6.74	W		F. L.
23 00	6.50	NW		J. E. M.
24 00	6.23	NW	94	J. E. M.
		July 13, 1904		
1 00	5.98	NW		J. E. M.
2 00	5.73	NW		
3 00	5.67	NW		
10	5.65	NW		
20	5.60	NW		
30	5.63	NW		
40	5.63	NW		
50	5.60L	NW		
4 00	5.62	NW	127	
10	5.65	NW		
20	5.67	NW		
30	5.67	NW		
40	5.70	NW		
50	5.77	NW		
5 00	5.85	NW		
6 00	6.20	NW		
7 00	6.55	NW		
8 00	6.88	NW	140	J. E. M.
9 00	7.10	NW		F. L.
30	7.14	NW		
40	7.20	NW		
50	7.20	NW		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 13, 1904			
h m	*Feet*		*Miles*	
9 56	7.24H	NW		F. L.
10 00	7.22	NW		
10	7.21	NW		
20	7.20	NW		
30	7.18	NW		
40	7.20	NW		
50	7.18	NW		
11 00	7.11	NW		
12 00	6.91	NW	165	
13 21	6.61	NW		
14 00	6.50	NW		
15 00	6.30	NW		
16 00	6.24	NW	189	
10	6.24	NW		
20	6.25	NW		
30	6.21L	NW		
40	6.24	NW		
50	6.30	NW		
17 00	6.30	NW		
18 00	6.50	NW		
19 00	6.61	NW		
20 00	6.80	NW	207	
21 00	6.90	NW		F. L.
22 00	6.90	NW		J. E. M.
10	6.91	NW		
20	6.93H	NW		
30	6.90	NW		
40	6.85	NW		
50	6.83	NW		
23 00	6.80	NW		
24 00	6.52	NW	212	J. E. M.
	July 14, 1904			
1 00	6.18	NW		J. E. M.
2 00	5.92	NE		
3 00	5.72	NE		
4 00	5.63	E	221	
10	5.63	E		
20	5.61L	E		
30	5.61L	E		
40	5.66	E		
50	5.68	E		
5 00	5.70	E		
6 00	6.00	SE		
7 00	6.31	SE		
8 00	6.69	SE	248	J. E. M.
9 00	7.00	SE		F. L.
10 00	7.20	SE		
10	7.21	SE		
16	7.24	SE		
20	7.21	SE		
30	7.20	SE		
40	7.26H	SE		
50	7.26H	SE		
11 00	7.20	SE		
12 00	7.08	SE	265	
13 00	6.76	SE		
14 00	6.54	SE		
15 00	6.30	SE		
16 00	6.14	ESE	310	
20	6.13	ESE		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 14, 1904			
h m	*Feet*		*Miles*	
16 30	6.10L	ESE		F. L.
40	6.10L	ESE		
50	6.13	ESE		
17 00	6.15	ESE		
18 00	6.25	ESE		
19 00	6.40	SE		
20 00	6.68	SE	366	
21 00	6.83	SE		F. L.
22 00	6.93	SE		J. E. M.
10	6.90	SE		
20	6.93	SE		
30	6.94H	SE		
40	6.90	SE		
50	6.88	SE		
23 00	6.87	SE		
24 00	6.73	SE	413	J. E. M.
	July 15, 1904			
1 00	6.39	SE		J. E. M.
2 00	6.08	SE		
3 00	5.80	SE		
4 00	5.64	SE	460	
10	5.63	SE		
20	5.61	SE		
30	5.56	SE		
40	5.53	SE		
50	5.52L	SE		
5 00	5.58	NNE		
10	5.61	NNE		
6 00	5.72	NNE		
7 00	6.05	NNE		
8 00	6.38	NE	485	J. E. M.
9 00	6.80	NW		F. L.
10 00	7.11	NE		
10	7.14	NE		
20	7.20	NE		
30	7.20	NE		
40	7.22	NE		
50	7.24	NE		
55	7.25	NE		
11 00	7.24	NE		
10	7.29	NE		
14	7.30	NW		
20	7.30	WNW		
23	7.33H	NW		
30	7.30	NW		
40	7.25	NW		
50	7.29	NW		
12 00	7.29	NW	532	
13 00	7.10	NW		
14 00	6.70	NW		
15 00	6.48	NW		
16 00	6.24*	N	604	
17 00	6.10*	N		
10	6.09*	N		
20	6.10*	N		
30	6.10*	N		
40	6.10*	N		
46	6.06L*	N		
50	6.05L*	N		
18 00	6.10	N		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 15, 1904		
h m	*Feet*		*Miles*	
19 00	6.24	N		F. L.
20 00	6.50	N	694	
21 00	6.73	N		F. L.
22 00	6.91	N		J. E. M.
23 00	7.02	N		
10	7.10H	N		
20	7.10H	N		
30	7.05	N		
40	7.03	N		
50	7.00	N		
24 00	6.94	N	755	J. E. M.
		July 16, 1904		
1 00	6.72	N		J. E. M.
2 00	6.48	N		
3 00	6.15	N		
4 00	5.88	N	865	
50	5.75	N		
5 00	5.70L	N		
10	5.70L	N		
20	5.73	N		
30	5.69	N		
40	5.63	N		
50	5.68	N		
6 00	5.74	NE		
7 00	5.93	E		
8 00	6.28	E	932	
9 00	6.67	E		J. E. M.
10 15	7.09*	ENE		F. L.
11 00	7.28*	ENE		
12 00	7.38H*	NE	44	
13 00	7.31*	ENE		
14 00	6.96*	E		
15 00	6.72*	E		
16 00	6.40*	E	164	
17 00	6.26*	E		
18 00	6.22*	NE		
19 00	6.19L*	NE		
20 00	6.39*	NE	290	
21 00	6.50	NE		F. L.
22 12	6.82*	NE		J. E. M.
23 00	7.02*	NE		
24 00	7.11*	NE	340	J. E. M.

High northeast gale from about 9:30 a. m. to midnight.
Tide reading taken from shore with field glasses.

		July 17, 1904		
1 00	6.93*	E		J. E. M.
2 00	6.74*	E		
3 00	6.46*	E		
4 00	6.22*	E	441	
5 00	6.05*	E		
6 00	5.89*	E		
7 00	6.02*	E		
8 00	6.34*	ESE	563	J. E. M.

Dial read 688 miles at 12 noon and 930 miles at 8:00.
Tide gauge carried away by high east to southeast gales and swells.

		July 18, 1904		
h m	*Feet*		*Miles*	
8 40	6.10	E		F. L.
9 00	6.30	E		
10 00	6.54	E		
11 06	6.89	E		
12 00	7.13	E	191	
13 00	7.22	E		
14 00	6.21	E		
15 00	6.94	E		
16 00	6.64	E	236	
17 00	6.30	E		
18 00	6.10	E		
10	6.02	NE		
20	6.00	NE		
30	5.96	NE		
40	5.90	NE		
50	5.90	NE		
55	5.86	NE		
19 00	5.91	NE		
10	5.85	NE		
12	5.81	NE		
20	5.84	ESE		
30	5.80	ESE		
20 00	5.80	ESE	292	
21 00	5.84	E		F. L.
22 00	6.03	E		J. E. M.
23 00	6.22	E		
24 00	6.43	E	323	J. E. M.

Dial read 44 miles at 8:00.
July 18-August 31 subtract 0.05 feet to reduce readings to old gauge.
A new gauge was erected about 250 feet from where the old one had stood.

		July 19, 1904		
1 00	6.64	E		J. E. M.
10	6.66	E		
20	6.72	E		
30	6.72	E		
40	6.73H	E		
50	6.72H	E		
2 00	6.73H	E		
10	6.70	E		
20	6.69	E		
30	6.64	E		
3 00	6.60	E		
4 00	6.40	E	400	
5 00	6.19	E		
6 00	6.01	E		
7 00	5.90	ESE		
10	5.88	ESE		
20	5.84	ESE		
30	5.79L	ESE		
40	5.82	ESE		
50	5.80	ESE		
8 00	5.79	ESE	452	
10	5.79	ESE		
14	5.75	ESE		J. E. M.
20	5.82	ESE		F. L.
30	5.84	N		
9 00	5.93	NW		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 19, 1904		
h m	*Feet*		*Miles*	
10 00	6.14	NW		F. L.
11 00	6.40	NW		
12 00	6.65	NW	462	
13 00	6.81	NW		
14 00	6.91	NW		
10	6.91	NW		
16	6.96H	NW		
20	6.91	NE		
30	6.93	E		
40	6.89	E		
50	6.90	SE		
15 00	6.88	SE		
16 00	6.61	SE	472	
17 00	6.30	SE		
18 00	6.02	Calm		
19 01	5.78	SE		
20 00	5.60	SE	478	
10	5.58	SE		
20	5.51L	SE		
30	5.51L	SE		
40	5.52	SE		
50	5.49	SE		
21 00	5.52	SE		
22 00	5.62	SE		
23 00	5.78	SE		
24 00	5.99	SE	492	F. L.
		July 20, 1904		
1 00	6.24	SE		J. E. M.
2 00	6.41	SE		
10	6.43	SE		
20	6.47	SE		
30	6.43	SE		
40	6.44	SE		
50	6.50H	SE		
3 00	6.50H	SE		
10	6.48H	SE		
20	6.48H	SE		
30	6.45H	SE		
40	6.47H	SE		
50	6.50H	SE		
4 00	6.44	SE		
10	6.40	SE	500	
5 00	6.22	SSE		
6 00	5.97	SE		
7 00	5.88	SE		J. E. M.
8 00	5.85	SSE	507	F. L.
40	5.80	SSE		
47	5.77L	SSE		
50	5.80	SSE		
9 00	5.81	SSE		
10 07	5.90	SE		
11 00	6.10	SE		
12 00	6.34	W		
13 00	6.50	W		
14 00	6.74	W		
50	6.76	N		
15 00	6.80H	E		
10	6.80H	E		
20	6.76	E		
30	6.74	E		F. L.
		July 20, 1904		
h m	*Feet*		*Miles*	
15 40	6.47	E		F. L.
50	6.65	E		
16 00	6.64	E	526	
17 00	6.45	SE		
18 00	6.16	SE		
19 00	5.90	SE		
20 00	5.69	SE	544	
10	5.62	SE		
20	5.60	SE		
30	5.56	SE		
40	5.59	SE		
50	5.54	SE		
21 00	5.54	SE		
10	5.50	SE		
20	5.50	SE		
30	5.44	SE		
40	5.45	SE		
50	5.43L	E		
22 00	5.49	E		
10	5.49	E		F. L.
23 00	5.57	E		J. E. M.
24 00	5.51	E	551	J. E. M.
		July 21, 1904		
1 00	5.95	E		J. E. M.
2 00	6.21	E		
3 00	6.38	E		
10	6.40	E		
20	6.40	E		
30	6.42	E		
40	6.42	E		
50	6.45H	E		
4 00	6.43	E	557	J. E. M.
10	6.42	E		F. L.
20	6.40	E		
30	6.38	E		
5 00	6.38	E		
6 00	6.27	E		
7 00	6.14	SE		
8 00	6.12	SE	567	
9 00	6.00	E		
10 05	6.01	E		
10	6.00	E		
20	5.96L	SW		
30	6.00L	SW		
36	5.96L	SW		
40	6.01	SW		
50	6.02	S		
11 00	6.05	E		
12 00	6.20	Calm	577	
13 00	6.44	NE		
14 00	6.60	NE		
15 00	6.70	Calm		
16 07	6.72H	E	587	
10	6.69	E		
20	6.66	E		
30	6.66	E		
40	6.66	E		
50	6.62	E		
17 00	6.59	E		
18 00	6.40	S		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 21, 1904		
h m	*Feet*		*Miles*	
19 00	6.18	S		F. L.
20 00	5.98	SSE	602	
21 00	5.80	SSE		F. L.
22 00	5.66	SSE		A. V.
17	5.61	SSE		
20	5.60	SSE		
30	5.62	SSE		
40	5.55L	SSE		
50	5.55L	SSE		
23 00	5.57	SSE		
10	5.60	SSE		
20	5.62	SSE		
24 00	5.63	SW	610	A. V.
		July 22, 1904		
1 00	5.82	Calm		A. V.
2 00	6.02	SW		A. V.
3 00	6.27	SW		C. E. R.
52	6.42	SW		
4 00		WSW	627.5	
10	6.48	W		
20	6.49	W		
30	6.49	W		
40	6.52	Calm		
50	6.52	W		
5 00	6.55	W		
10	6.60	W		
20	6.58	W		
30	6.62H	W		
40	6.60	W		
50	6.58	W		
6 00	6.59	W		
10	6.57	W		
20	6.55	W		
7 00	6.52	W		
55	6.35	W		
8 00		W	641.7	
9 00	6.27	W		C. E. R.
10 00	6.25	S		F. L.
11 00	6.24	SW		
10	6.22	SW		
20	6.20L	SSW		
30	6.20L	SSW		
40	6.22	SSW		
50	6.22	S		
12 00	6.23	S	658	
10	6.28	S		
20	6.30	NE		
13 00	6.39	S		
14 00	6.54	S		
15 00	6.70	S		
16 00	6.83	S	668	
50	6.80	S		
17 00	6.75	S		
10	6.75	S		
20	6.80H	S		
25	6.80H	S		
30	6.75H	S		
40	6.80H	S		
50	6.72	S		
18 00	6.70	SE		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 22, 1904		
h m	*Feet*		*Miles*	
19 04	6.55	E		F. L.
20 00	6.28	ESE	684	
21 00	6.10	S		F. L.
22 00	5.93	Calm		A. V.
23 00	5.81	ESE		
24 00	5.65L	ESE	696	A. V.
		July 23, 1904		
0 10	5.70	ESE		A. V.
20	5.68	ESE		
30	5.68	ESE		
40	5.70	ESE		
50	5.72	ESE		
1 00	5.73	ESE		
2 00	5.84	Calm		
3 00	6.12	ESE		A. V.
4 00	6.40	Calm	707	C. E. R.
5 00	6.58	E		
22	6.68	E		
30	6.65	E		
40	6.68	E		
50	6.71	E		
6 00	6.69	E		
10	6.65	E		
7 00	6.70	E		
10	6.72	E		
20	6.75H	E		
30	6.76H	E		
40	6.67	E		
50	6.70	E		
8 00	6.67	Calm	726	
10	6.63	Calm		
9 00	6.58	W		C. E. R.
10 00	6.50	S		F. L.
11 00	6.40	E		
40	6.40	E		
46	6.34	E		
50	6.33	E		
12 00	6.34	E	744	
10	6.34	E		
20	6.33L	E		
30	6.35	E		
40	6.34	E		
50	6.36	SW		
13 00	6.40	SW		
14 00	6.46	S		
15 00	6.54	Calm		
16 00	6.70	S	761	
17 00	6.80	S		
30	6.81	SW		
40	6.86H	SW		
50	6.81H	SW		
18 00	6.82H	SW		
10	6.84H	SW		
20	6.84H	SW		
30	6.86H	SW		
40	6.82	SW		
50	6.80	SW		
19 00	6.80	SW		
10	6.81	SW		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		July 23, 1904		
h m	*Feet*		*Miles*	
19 20	6.79	SW		F. L.
20 00	6.70	SE	780	
21 00	6.50	N		F. L.
22 00	6.21	SE		A. V.
23 00	6.10	NE		
24 00	6.00	NE		A. V.
		July 24, 1904		
0 10	5.93	NE		A. V.
20	5.93	NE		
30	5.96	NE		
40	5.94	NE		
50	5.98	NE	832	
1 00	5.92L	NE		
10	5.95	NE		
20	5.98	NE		
30	6.00	NE		
2 00	6.03	NE		
3 00	6.15	NE		A. V.
4 00	6.40	NE	932	C. E. R.
5 00	6.65	NE		
6 00	6.85	NE		
30	6.93	NE		
7 00	7.05	E		
30	7.18	E		
40	7.20H	E		
50	7.10	NE		
8 00	7.05	NE	47	
9 05	7.00*	NE		
17	6.97*	NE		C. E. R.
10 00	6.94*	NE		F. L.
11 00	6.84*	NE		
12 00	6.69*	NE	210	
10	6.62	NE		
20	6.61*	NE		
30	6.61*	NE		
40	6.60*	NE		
50	6.56*	NE		
13 00	6.60*	NE		
10	6.54*	NE		
20	6.54*	NE		
30	6.50L*	NE		
40	6.52L*	NE		
50	6.50L*	NE		
14 00	6.53	NE		
15 00	6.62	NE		
16 00	6.71*	NE		
17 00	6.80	ENE		
18 00	6.90	ENE		
50	6.93*	E		
19 00	6.96H*	E		
20 00	6.88*	E	387	
21 00	6.72*	E		F. L.
22 00	6.48*	E		A. V.
23 00	6.22*	E		
24 00	6.02*	E	413	A. V.
		July 25, 1904		
1 00	5.90L*	E		A. V.
2 00	5.92*	E		
3 00	5.95*	E		A. V.
		July 25, 1904		
4 00	6.08*	E	553	C. E. R.
5 00	6.29*	E		
6 00	6.56*	E		
7 00	6.82	E		
8 00	6.98*	E	628	
9 00	7.02H*	E		C. E. R.
20	7.01H*	E		F. L.
30	6.96*	E		
10 00	6.91*	E		
11 05	6.84*	E		
12 00	6.60*	E	685	
13 00	6.50*	SE		
30	6.50*	ESE		
40	6.47*	ESE		
50	6.43*	ESE		
14 00	6.40*	ESE		
10	6.40*	ESE		
20	6.40*	ESE		
30	6.39*	ESE		
40	6.37L*	ESE		
50	6.39*	ESE		
15 00	6.41*	ESE		
10	6.41*	ESE		
20	6.41*	ESE		
30	6.40*	ESE		
40	6.43*	ESE		
50	6.44*	ESE		
16 00	6.50*	ESE	737	
17 00	6.61*	ESE		
18 00	6.77*	ESE		
19 00	6.82*	ESE		
20 00	6.90H*	ESE	797	
10	6.90H*	ESE		
20	6.81*	ESE		
30	6.82*	ESE		
40	6.82*	ESE		
50	6.80*	ESE		
21 00	6.80*	ESE		F. L.
22 00	6.65	E		A. V.
23 00	6.43	E		
24 00	6.10	ESE	808	A. V.
		July 26, 1904		
1 00	6.04	ESE		A. V.
10	5.99	ESE		
20	5.96	ESE		
30	5.93	ESE		
40	5.93	ESE		
50	5.88	ESE		
2 00	5.89	ESE		
10	5.85L	ESE		
20	5.87L	ESE		
30	5.85L	ESE		
40	5.88	ESE		
50	5.88	ESE		
3 00	5.87	ESE		
10	5.90	ESE		A. V.
4 00	5.95	SE	911	C. E. R.
5 00	6.18	SE		
6 00	6.48	SE		
7 00	6.74	SE		C. E. R.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 26, 1904			
h m	*Feet*		*Miles*	
8 00	7.00	SE	956	C. E. R.
9 00	7.12	SE		C. E. R.
30	7.16*	E		F. L.
35	7.20H	E		
40	7.20H	E		
50	7.15	E		
10 00	7.15	E		
10	7.12	E		
11 00	7.00	ESE		
12 00	6.80	ESE	27	
13 14	6.60	ESE		
14 00	6.46	ESE		
10	6.44	ESE		
20	6.40	ESE		
30	6.40	ESE		
40	6.38	ESE		
50	6.35	ESE		
15 00	6.34	ESE		
10	6.34	ESE		
20	6.33	ESE		
30	6.30L	ESE		
40	6.29L	ESE		
50	6.32L	ESE		
16 00	6.30L	ESE	72	
10	6.30L	ESE		
20	6.32	ESE		
17 00	6.38	SE		
18 00	6.50	SE		
19 00	6.64	ESE		
20 00	6.76	Calm	110	
21 00	6.80H	Calm		
10	6.81H	Calm		
20	6.81H	Calm		
30	6.79H	Calm		
40	6.80H	Calm		
50	6.77	Calm		
22 00	6.70	Calm		F. L.
23 00	6.50	Calm		A. V.
24 00	6.24	Calm	116	A. V.
	July 27, 1904			
1 00	6.03	Calm		A. V.
2 00	5.83	Calm		
30	5.79	Calm		
40	5.79	Calm		
50	5.77	Calm		
3 00	5.80	Calm		
10	5.79	SE		
20	5.74L	SE		
30	5.76L	SE		
40	5.76L	Calm		
50	5.73L	Calm		A. V.
4 00	5.78	Calm	124	C. E. R.
20	5.82	Calm		
30	5.88	W		
5 00	5.95	W		
6 00	6.28	W		
7 00	6.60	W		
8 05	6.88	NE	150	
9 00	7.02	N		C. E. R.
35	7.10	NE		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 27, 1904			
h m	*Feet*		*Miles*	
9 40	7.12	NE		F. L.
50	7.12	NE		
10 00	7.14	NE		
10	7.16	NE		
14	7.20H	NE		
20	7.14H	NE		
30	7.19H	NE		
40	7.20H	NE		
50	7.10	NE		
11 00	7.10	NE		
12 00	6.94	NE	212	
13 00	6.70	NE		
14 00	6.50	NE		
15 00	6.31	NE		
16 00	6.25L	NE	306	
10	6.27L	NE		
20	6.25L	NE		
30	6.25L	NE		
40	6.25L	NE		
50	6.30	NE		
17 00	6.30	NE		
18 00	6.41	E		
19 00	6.54	ENE		
20 00	6.74	NE	366	
21 00	6.82	NE		F. L.
40	6.87H	NE		A. V.
50	6.85H	NE		
22 00	6.84H	NE		
10	6.86H	NE		
23	6.80	NE		
30	6.81	NE		
40	6.81	NE		
50	6.79	NE		
23 00	6.74	SW		
24 00	6.51	SW	400	A. V.
	July 28, 1904			
1 00	6.12	SW		A. V.
2 00	6.02	SW		
3 00	5.92	S		A. V.
4 00	5.80	W	422	C. E. R.
20	5.75	W		
30	5.74	W		
40	5.73L*	W		
50	5.74	W		
5 05	5.76	W		
20	5.80	W		
30	5.85	W		
6 00	6.02	NW		
7 00	6.35	NW		
8 00	6.65	N	453	C. E. R.
9 00	6.96	N		F. L.
10 00	7.12	W		
10	7.13	W		
20	7.17H*	W		
30	7.17H*	W		
40	7.18H*	W		
50	7.18H	W		
11 00	7.16H	W		
10	7.17H	W		
20	7.18H	W		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 28, 1904			
h m	*Feet*		*Miles*	
11 30	7.12	W		F. L.
12 02	7.08	W	473	
13 00	6.81	NW		
14 02	6.52	NW		
15 00	6.30	NW		
16 00	6.15	NW	506	
10	6.20	NW		
40	6.11	W		
50	6.10L	W		
17 00	6.10L	W		
10	6.10L	W		
20	6.10L	W		
30	6.13	W		
18 00	6.16	W		
19 00	6.33	W		
20 00	6.50	NW	545	
21 00	6.70	NW		F. L.
22 00	6.80H	NW		A. V.
40	6.80H	NW		
50	6.81H	NW		
23 00	6.79	NW		
10	6.78	NW		
20	6.74	NW		
30	6.75	NW		
40	6.71	NW		
50	6.69	NW		
24 00	6.64	NW	590	A. V.
	July 29, 1904			
1 00	6.37	NNW		A. V
2 00	6.15	NW		
3 00	5.93	NW		A. V.
4 00	5.82	N	627	C. E. R.
5 00	5.78L	N		
10	5.76L	N		
20	5.77L	N		
30	5.78L	N		
40	5.81	N		
50	5.85	N		
6 00	5.90	N		
7 00	6.20	N		
8 00	6.45	N	662	C. E. R.
9 00	6.78	NE		F. L.
10 00	7.05	SE		
11 00	7.20H	SE		
10	7.20H	S		
20	7.20H	S		
30	7.20H	S		
40	7.16	S		
50	7.15	S		
12 00	7.13	S	677	
13 15	6.87	S		
14 00	6.67	S		
15 00	6.36	S		
16 00	6.20	SW	701	
50	6.09	SW		
17 00	6.08	SW		
10	6.04L	W		
20	6.04L	W		
30	6.04L	W		
40	6.04L	W		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 29, 1904			
h m	*Feet*		*Miles*	
17 50	6.04L	W		F. L.
18 00	6.05	W		
19 00	6.15	W		
20 00	6.35	W	703	
21 00	6.56	W		F. L.
22 00	6.63	W		A. V.
23 00	6.80H	W		
40	6.74	W		
50	6.73	W		
24 00	6.71	W	713	A. V.
	July 30, 1904			
1 00	6.49	W		A. V.
2 00	6.12	W		
3 00	5.94	W		A. V.
4 00	5.80	NW	720	C. E. R.
5 00	5.70	NW		
30	5.68	NW		
40	5.66L	NW		
50	5.69	NW		
6 00	5.75	NW		
10	5.80	NW		
7 00	5.92	NW		
8 00	6.20	NW	743	
9 00	6.54	NW		C. E. R.
10 04	6.90	W		F. L.
11 00	6.96	W		
50	7.00H	Calm		
12 00	7.00H	Calm	752	
10	7.00H	Calm		
15	7.04H	Calm		
20	7.00H	Calm		
30	6.99	Calm		
40	6.94	Calm		
50	6.90	Calm		
13 00	6.90	Calm		
14 00	6.65	E		
15 00	6.34	NW		
16 00	6.10	NW	764	
17 04	5.91	W		
45	5.85	NW		
50	5.89	NW		
18 00	5.84L	NW		
10	5.83L	NW		
20	5.83L	NW		
30	5.89	NW		
40	5.86	NW		
50	5.90	NW		
19 00	5.90	NW		
20 04	6.04	NW	786	
21 00	6.25	NW		F. L.
22 00	6.39	NW		A. V.
23 00	6.52H	NW		
24 00	6.52H	NW	806	A. V.
	July 31, 1904			
0 15	6.53H	NW		A. V.
20	6.52H	NW		
30	6.51	NW		
40	6.50	NW		A. V.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	July 31, 1904			
h m	*Feet*		*Miles*	
0 50	6.49	NW		A. V.
1 00	6.45	NW		
2 00	6.22	NW		
3 00	5.91	NW		A. V.
4 00	5.74	NW	833	C. E. R.
10	5.72	NW		
20	5.69	NW		
30	5.67	NW		
40	5.67	NW		
50	5.65	NW		
5 00	5.64	NW		
10	5.58L	NW		
20	5.58L	NW		
30	5.59L	NW		
40	5.58L	NW		
50	5.58L	NW		
6 00	5.59L	NW		
20	5.58L	NW		
30	5.60	NW		
40	5.65	NW		
50	5.68	NW		
7 00	5.72	NW		
8 00	5.88	NW	849	
9 00	6.20	NW		C. E. R.
10 00	6.45	NW		F. L.
11 00	6.70	NW		
12 00	6.81H	SW	862	
10	6.82H	SW		
20	6.80H	SW		
30	6.80H	SW		
40	6.80H	SW		
50	6.80H	SW		
13 00	6.80H	SW		
10	6.71	SW		
14 00	6.54	SW		
15 00	6.30	S		
16 00	6.01	S	874	
17 09	5.81	S		
18 00	5.70	S		
10	5.70	SE		
20	5.69	SE		
30	5.68	SE		
40	5.66L	SE		
50	5.68	SE		
19 00	5.70	SE		
20 00	5.80	E	904	
21 00	6.00	E		F. L.
22 00	6.12	ESE		A. V.
23 00	6.34	ESE		
24 00	6.43	S	927	A. V.
	August 1, 1904			
0 20	6.44H	S		A. V.
30	6.44H	S		
1 00	6.40*	SW		
10	6.43*	SW		
20	6.36*	SW		
30	6.33*	SW		
2 00	6.22	SW		
3 00	6.03	SE		A. V.
4 00	5.84	S	947	C. E. R.
5 00	5.73	S		C. E. R.
6 00	5.65	S		
30	5.62L	S		
40	5.62	S		
50	5.66	S		
7 00	5.67	SW		
10	5.70	SW		
8 00	5.82	SW	956	
9 00	6.08	S		C. E. R.
10 00	6.38	S		F. L.
11 00	6.60	S		
12 00	6.79	SW	970	
13 03	6.83	SW		
10	6.87H	SW		
20	6.86	SW		
30	6.80	SW		
40	6.80	SW		
50	6.78	SW		
14 00	6.79	SW		
10	6.70	SW		
15 00	6.50	SW		
16 00	6.24	SSW	8	
17 00	6.05	SSW		
18 00	5.88	SSW		
50	5.80	SE		
19 00	5.75L	SE		
10	5.78	SE		
20	5.80	SE		
30	5.80	SE		
40	5.79	SE		
50	5.80	SE		
20 00	5.84	SE	44	
21 00	6.00	SE		F. L.
22 00	6.02	SE		A. V.
23 00	6.37	E		
24 00	6.50	SE	91	A. V.
	August 2, 1904			
1 00	6.62	SE		A. V.
10	6.63H	SE		
20	6.62	SE		
30	6.62*	SE		
40	6.60*	SE		
50	6.58*	SE		
2 00	6.54*‡	SE		
10	6.54*‡	E		
3 00	6.39*‡	E		
4 00	6.25*‡	SE	147	A. V.
5 00	6.11*‡	SE		C. E. R.
6 00	5.99*‡	SE		
10	5.95*‡	SE		
20	5.94*‡	SE		
30	5.89L*‡	SE		
40	5.95*‡	SE		
50	5.92*‡	SE		
7 00	5.94*‡	SE		
10	5.96*	SE		
8 00	6.09*	SE	223	
9 00	6.29*	SE		C. E. R.
10 00	6.50	SE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 2, 1904			
h m	*Feet*		*Miles*	
11 00	6.70	SE		F. L.
12 00	6.91	E	300	
13 00	7.03*	E		
10	7.06H*	E		
20	7.01H*	E		
30	7.06H*	E		
40	7.03*	E		
50	7.00*	E		
14 00	6.98*	E		
15 00	6.82*	E		
16 00	6.53*	E	370	
17 00	6.29*	E		
18 00	6.15*	E		
19 00	6.03*	E		
10	6.01*	E		
20	5.98*	E		
30	5.98*	E		
40	5.95L*	E		
50	5.99*	E		
20 00	6.01*	E	540	
21 00	6.10*	E		F. L.
22 00	6.14*	E		A. V.
23 00	6.43*	E		A. V.
‡Snowing.				
	August 3, 1904			
1 00	6.80*	SE		A. V.
40	6.84H*	SE		
50	6.84*	SE		
2 00	6.82*	SE		
10	6.78*	SE		
3 00	6.72*	SE		A. V.
4 00	6.56*	E	557	C. E. R.
5 00	6.42*	E		
6 00	6.36*	E		
7 00	6.30L*	E		
20	6.30*	E		
30	6.34*	E		
40	6.36*	E		
50	6.34*	E		
8 00	6.38*	E	643	
9 00	6.48*	E		C. E. R.
10 00	6.70*	ESE		F. L.
11 00	6.92*	E		
12 00	7.14*	E	707	
13 00	7.28*	E		
50	7.28*	E		
14 00	7.30H*	E		
10	7.26*	E		
20	7.22*	E		
30	7.42*	E		
40	7.20†	E		
50	7.18	E		
15 00	7.14*	ESE		
16 00	6.91	E	749	
17 00	6.65	SE		
18 06	6.39	SE		
19 00	6.30	SE		
10	6.29	SE		
20	6.25	SE		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 3, 1904			
h m	*Feet*		*Miles*	
19 30	6.23	SE		F. L.
40	6.21	SE		
50	6.20	SE		
20 00	6.20	SE	766	
10	6.13L	SE		
20	6.19	SE		
30	6.20	SE		
40	6.16	SE		
50	6.16	SE		
21 00	6.20	SE		
22 00	6.29	SE		F. L.
23 00	6.43	SE		A. V.
24 00	6.64	SE	774	A. V.
	August 4, 1904			
1 00	6.80	SW		A. V.
2 00	6.90	SW		
10	6.92H	W		
20	6.91	W		
30	6.91	W		
40	6.89	W		
50	6.88	W		
3 00	6.89	W		
10	6.87	W		A. V.
4 00	6.80	N	783	C. E. R.
5 00	6.65	N		
6 00	6.50	N		
7 00	6.41*	NW		
8 00	6.38L	NW	837	
9 00	6.38	N		C. E. R.
10 00	6.50	NW		F. L.
11 00	6.68	NW		
12 00	6.80	NW	923	
13 10	7.00	NW		
14 00	7.03H*	NW		
15 00	7.03*	NW		
10	7.01*	NW		
20	6.96*	NW		
30	6.95*	NW		
40	6.93*	NW		
50	6.90*	W		
16 00	6.85*	W	11	
17 00	6.68*	W		
18 00	6.40*	W		
19 00	6.20*	W		
20 00	6.01*	W	70	
10	5.95	W		
20	5.94	W		
24	5.92	W		
30	5.95	W		
36	5.90	W		
40	5.98	W		
46	5.90	W		
50	5.96*	W		
54	5.90	W		
57	5.88*	N		
21 00	5.88	W		
10	5.84	W		
20	5.91	W		
24	5.81L	W		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 4, 1904			
h m	*Feet*		*Miles*	
21 30	5.88	W		F. L.
40	5.84	W		
50	5.93	W		
22 00	5.96	W		F. L.
23 00	6.03	NW		A. V.
24 00	6.13	NW	115	A. V.
	August 5, 1904			
1 00	6.32	NW		A. V.
2 00	6.61	NW		
3 00	6.74H	NW		
10	6.60	NW		
20	6.69	NW		
30	6.72	NW		
40	6.68	NW		
50	6.69	NW		
4 00	6.65	E	129	A. V.
5 00	6.60	NE		C. E. R.
6 00	6.57	NE		
7 00	6.50	NE		
8 00	6.40	NE		
20	6.40L	NE	168	
9 00	6.40	NE		C. E. R.
10 00	6.50	SE		F. L.
11 00	6.68*	ESE		
12 00	6.72*	ESE	208	
13 00	6.86*	ESE		
14 00	6.96H*	ESE		
15 00	6.96H*	ESE		
10	6.94H*	ESE		
20	6.90H*	ESE		
30	6.96H*	ESE		
40	6.94*	ESE		
50	6.90*	ESE		
16 00	6.86*	ESE	260	
10	6.82*	ESE		
17 00	6.70*	ESE		
18 00	6.46*	ESE		
19 00	6.20	ESE		
20 00	6.04	ESE	318	
21 00	5.88	E		
10	5.82	E		
20	5.82*	E		
30	5.82*	E		
40	5.80*	E		
50	5.86*	E		
22 00	5.84*	E		
10	5.86*	E		F. L.
23 00	5.86*	E		A. V.
24 00	5.67L*	E	400	A. V.
	August 6, 1904			
1 00	6.16*	E		A. V.
2 00	6.36*	E		
3 00	6.48*	E		A. V.
4 00	6.52*	SE	453	C. E. R.
5 00	6.58*	SE		
6 00	6.58*	SE		
7 00	6.66H*	SE		
8 00	6.36*	SE	530	C. E. R.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 6, 1904			
h m	*Feet*		*Miles*	
9 00	6.30*	SE		C. E. R.
10 00	6.20*	ESE		F. L.
20	6.22*	ESE		
30	6.16L*	ESE		
40	6.22*	ESE		
50	6.24*	ESE		
11 00	6.20*	ESE		
10	6.20*	ESE		
20	6.30	ESE		
12 00	6.30	ESE	594	
13 00	6.40*	ESE		
14 00	6.52*	ESE		
15 00	6.62H*	E		
16 00	6.62H*	E	660	
10	6.62H*	E		
20	6.62H*	E		
30	6.58*	E		
40	6.54*	E		
50	6.58*	E		
17 00	6.54*	E		
18 00	6.44*	E		
19 00	6.16*	NE		
20 00	6.05*	NE	733	
21 00	5.86*	NE		F. L.
22 00	5.84*	NE		A. V.
23 00	5.58L*	NE		
10	5.78*	NE		
30	5.70*	NE		
40	5.72*	E		
50	5.76*	E		
24 00	5.66*	E	816	A. V.
	August 7, 1904			
1 00	5.74*	E		A. V.
2 00	6.06*	E		
3 00	6.16*	E		A. V.
4 00	6.26*	SE	900	C. E. R.
5 00	6.36*	SE		
6 00	6.44H*	SE		
7 00	6.42*	SE		
8 00	6.42*	SE	30	
9 00	6.32*	SE		C. E. R.
10 00	6.20*	SE		F. L.
11 00	6.10*	SE		
10	6.08L*	SE		
20	6.10*	SE		
30	6.09*	SE		
40	6.14*	SE		
50	6.20*	SE		
12 00	6.10*	SE	70	
10	6.12*	SE		
20	6.16*	SE		
13 00	6.24*	SE		
14 00	6.36*	ESE		
15 00	6.42*	ESE		
16 00	6.52*	ESE	122	
10	6.58*	ENE		
20	6.68H*	E		
30	6.58*	E		
40	6.52*	E		
50	6.60*	E		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 7, 1904			
h m	*Feet*		*Miles*	
17 00	6.52*	NE		F. L.
18 00	6.46*	N		
19 00	6.30*	NE		
20 00	6.14*	SE	201	
21 00	6.02*	ESE		F. L.
22 00	5.86*	E		A. V.
23 00	5.72*	E		
10	5.72*	E		
20	5.70L*	E		
30	5.78*	E		
40	5.72*	E		
50	5.76*	E		
24 00	5.78*	NE	286	A. V.
	August 8, 1904			
1 00	5.76*	NE		A. V.
2 00	5.80*	ENE		
3 00	6.06*	E		A. V.
4 00	6.30*	E	387	C. E. R.
5 00	6.44*	E		
6 00	6.60*	E		
7 00	6.66*	E		
10	6.70*	E		
20	6.64*	E		
30	6.68*	E		
40	6.82*	E		
50	6.84*	E		
8 00	6.86H*	E	407	
35	6.86*	NE		
40	6.66*	N		
50	6.70*	N		
9 00	6.58	NW		C. E. R.
10 00	6.50	NW		F. L.
11 00	6.50	NW		
12 00	6.40L	NW	498	
50	6.41L	NW		
13 00	6.41L	NW		
10	6.40L	NW		
14 00	6.40L	NW		
15 00	6.52	ENE		
16 00	6.68*	ENE	546	
17 00	6.76H*	ENE		
18 00	6.72*	E		
19 00	6.72*	ENE		
10	6.72*	ENE		
20	6.70*	ENE		
30	6.66*	ENE		
40	6.62*	ENE		
50	6.62*	ENE		
20 00	6.58*	ENE		
21 00	6.34*	NE		F. L.
22 00	6.14*	E		A. V.
23 00	5.90	E		
24 00	5.78	SE	622	A. V.
	August 9, 1904			
0 10	5.72L	SE		A. V.
20	5.72L	SE		
30	5.75	SE		
40	5.73	SE		A. V.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 9, 1904			
h m	*Feet*		*Miles*	
0 50	5.74	SE		A. V.
1 00	5.73	SE		
2 00	5.77	SE		
3 00	5.79	SE		A. V.
4 00	6.11*	SE	723	C. E. R.
5 00	6.31*	SE		
6 00	6.59*	SE		
7 00	6.69*	SE		
15	6.68	SE		
20	6.68	SE		
30	6.70	SE		
40	6.80H	SE		
50	6.77	SE		
8 00	6.74	SE	768	
10	6.71	SE		
9 00	6.65	SE		C. E. R.
10 00	6.60	SE		F. L.
11 00	6.45	SE		
12 00	6.34	SE	796	
13 00	6.22	SE		
10	6.20	SE		
20	6.20	SE		
30	6.30	SE		
40	6.19	SE		
50	6.20	SE		
55	6.17L	SE		
14 00	6.20	SE		
10	6.20	SE		
20	6.24	SE		
30	6.24	SE		
40	6.21	SSE		
50	6.21	SSE		
15 00	6.29	SSE		
16 00	6.32	SSE	821	
17 01	6.41	SSE		
18 02	6.52	SSE		
19 05	6.57	Calm		
40	6.60H	Calm		
50	6.58H	Calm		
20 00	6.60H	Calm	849	
10	6.58	Calm		
20	6.52	Calm		
30	6.56	Calm		
40	6.45	Calm		
50	6.44	Calm		
21 00	6.44	Calm		F. L.
22 00	6.20	Calm		A. V.
23 00	5.90	SE		
24 00	5.70	SE	891	A. V.
	August 10, 1904			
0 10	5.53	SE		A. V.
1 00	5.52	SE		
10	5.53	SE		
20	5.50	SE		
30	5.50	SE		
40	5.48	SE		
50	5.43L	SE		
2 00	5.44	SE		
10	5.46	SE		
20	5.50	SE		A. V.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 10, 1904			
h m	*Feet*		*Miles*	
2 30	5.48	SE		A. V.
40	5.47	SE		
50	5.48	SE		
3 00	5.47	SE		A. V.
4 00	5.64	Calm	866	C. E. R.
5 00	5.92	E		
6 00	6.22	Calm		
7 00	6.42	Calm		
8 00	6.58	SE	888	
9 00	6.65H	SE		C. E. R.
10 00	6.56	SE		F. L.
11 00	6.41	SE		
12 00	6.20	SSE	924	
13 06	6.01	SSE		
30	5.92	SSE		
40	5.94	SSE		
50	5.86	SSE		
14 00	5.88	SSE		
10	5.88	SSE		
20	5.82	SSE		
25	5.80	SSE		
30	5.79	SSE		
40	5.80	SE		
48	5.74L	SE		
50	5.79L	SE		
57	5.74L	SE		
15 00	5.79L	SE		
05	5.74L	SE		
10	5.80	SE		
20	5.81	SE		
30	5.83	NE		
40	5.80	NE		
50	5.85	NE		
16 00	5.89	NE	955	
17 00	5.96	NE		
18 00	6.10	NE		
19 00	6.22	Calm		
20 00	6.27	Calm	959	
21 00	6.32H	Calm		
10	6.30	Calm		
20	6.23	Calm		
30	6.30	Calm		
40	6.22	Calm		
50	6.20	Calm		
22 00	6.20	NE		F. L.
23 00	5.83	NW		A. V.
24 00	5.55	NW	970	A. V.
	August 11, 1904			
1 00	5.27	NW		A. V.
2 00	5.07	NE		
10	5.04	NE		
20	5.03L	NE		
30	5.08	NE		
40	5.12	NE		
50	5.16	NE		
3 00	5.10	NE		
10	5.14	NE		A. V.
4 00	5.20	SE	980	C. E. R.
5 00	5.45	SE		
6 00	5.70	SE		C. E. R.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 11, 1904			
h m	*Feet*		*Miles*	
7 00	6.04*	SE		C. E. R.
8 00	6.36*	E	58	C. E. R.
9 00	6.56*	E		F. L.
30	6.62H*	ENE		
40	6.62*	ENE		
50	6.54*	ENE		
10 00	6.52*	ENE		
10	6.50*	ENE		
20	6.50*	ENE		
30	6.48*	ENE		
40	6.52*	ENE		
50	6.46*	ENE		
11 00	6.36*	ENE		
12 00	6.12*	E	156	
13 00	5.92*	E		
14 00	5.74*	E		
15 00	5.60*	E		
10	5.56*	E		
20	5.52*	E		
30	5.54*	E		
40	5.50L*	E		
50	5.58*	E		
16 00	5.54*	E	286	
17 00	5.72*	E		
18 00	5.88*	E		
19 00	6.12*	E		
20 00	6.30*	E	414	
21 00	6.42*	ESE		F. L.
22 00	6.46H*	E		A. V.
10	6.38*	E		
20	6.20*	E		
30	6.30*	E		
40	6.28*	E		
50	6.24*	E		
23 00	6.22*	E		
24 00	5.92*	E	505	A. V.
	August 12, 1904			
1 00	5.62*	E		A. V.
2 00	5.36*	E		
3 00	5.04*	E		A. V.
4 00	5.01	SE	571	C. E. R.
10	5.03	SE		
20	5.00L	SE		
30	5.08	SE		
40	5.10	SE		
50	5.16	SE		
5 00	5.25	SE		
6 00	5.56*	SE		
7 00	5.90*	SE		
8 00	6.16*	SE	614	
9 00	6.46*	SE		C. E. R.
10 00	6.60H	SE		F. L.
10	6.55H	SE		
20	6.60H	SE		
30	6.60H	SE		
40	6.55	E		
50	6.53	E		
11 00	6.50	NE		
12 00	6.30	NE	636	
13 03	5.90	Calm		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 12, 1904			
h m	*Feet*		*Miles*	
14 00	5.70	N		F. L.
15 00	5.40	SE		
16 00	5.31	SE	667	
10	5.33	SE		
20	5.30L	SE		
30	5.37	SE		
40	5.31	SE		
50	5.39	SE		
17 00	5.41	SE		
10	5.34	SE		
20	5.41	SE		
18 00	5.52	SE		
19 00	5.76*	SE		
20 00	6.08	N	709	
21 00	6.25	N		F. L.
22 00	6.30	E		A. V.
23 00	6.40H	NW		
10	6.34	Calm		
20	6.34	SE		
30	6.30	SE		
40	6.29	SE		
24 00	6.25	Calm	778	A. V.
	August 13, 1904			
1 00	5.83	E		A. V.
2 00	5.55	ESE		
3 00	5.24*	E		A. V.
4 00	5.15*	E	800	C. E. R.
5 00	5.14L*	E		
6 00	5.37*	E		
7 00	5.64*	E		
8 00	5.98	E	883	
9 00	6.28	E		
10	6.34	E		
20	6.36	E		
30	6.40	E		
40	6.43	E		
50	6.50	E		C. E. R.
10 00	6.53*	E		F. L.
11 00	6.58*	SSE		
10	6.60H*	SSE		
20	6.58*	SSE		
30	6.53*	SSE		
40	6.52*	SSE		
50	6.50*	SSE		
12 00	6.48*	SSE	930	
13 00	6.16*	S		
14 10	5.66*	SW		
15 00	5.38*	SW		
16 00	5.23*	SW	963	
17 00	5.08*	SW		
10	5.04*	SW		
20	5.04*	SW		
30	5.02*	SW		
40	4.92L	SW		
50	5.09*	SW		
18 00	5.12*	SW		
19 00	5.30	W		
20 00	5.60	W		
21 00	5.90	WSW		F. L.
22 00	5.97	SW		A. V.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 13, 1904			
h m	*Feet*		*Miles*	
23 00	5.99	Calm		A. V.
30	6.09	SW		
40	6.12H	SW		
50	6.11	SW		
24 00	6.08	SW	28	A. V.
	August 14, 1904			
0 10	6.05	Calm		A. V.
20	6.03	Calm		
1 00	5.81	SW		
2 00	5.43	SW		
3 00	5.22	SE		A. V.
4 00	4.95	W	56	C. E. R.
5 00	4.85L	Calm		
10	4.88L	Calm		
20	4.85L	Calm		
30	4.87	Calm		
40	4.90	Calm		
6 05	5.00	Calm		
7 00	5.18	E		
8 00	5.52	SE	62	
9 00	5.90	SE		C. E. R.
10 00	6.20	SE		F. L.
11 10	6.38H*	SE		
20	6.38*	SE		
12 00	6.36*	SE	139	
10	6.30*	SE		
13 00	6.16*	SE		
14 00	5.70*	SE		
15 00	5.31	SE		
16 08	5.04	SE	196	
17 00	4.80	SE		
10	4.75	SE		
20	4.74	SE		
30	4.73	SE		
40	4.70	SE		
50	4.68L	SE		
18 00	4.70	SE		
10	4.71	SE		
20	4.79	SE		
19 00	4.82	SE		
20 00	5.08	SE	231	
21 00	5.40	SE		
22 00	5.70	SE		F. L.
23 00	5.99	Calm		A. V.
24 00	6.06	NW	251	A. V.
	August 15, 1904			
0 30	6.06	SE		A. V.
40	6.07H	SE		
50	6.03	SE		
1 00	5.98	SE		
10	5.97	S		
20	5.93	Calm		
2 00	5.74	Calm		
3 00	5.35	ESE		A. V.
4 10	5.05	Calm	252	C. E. R.
5 00	4.92	Calm		
10	4.90	Calm		
20	4.90	Calm		C. E. R.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 15, 1904			
h m	*Feet*		*Miles*	
5 30	4.88	Calm		C. E. R.
40	4.87	Calm		
50	4.82L	Calm		
6 00	4.90	Calm		
10	4.90	Calm		
20	4.92	E		
30	4.92	E		
40	4.95	E		
50	4.97	E		
7 00	5.00	E		
8 00	5.28	E	264	
9 00	5.60	Calm		C. E. R.
10 00	6.00	SE		F. L.
11 00	6.25	SE		
12 00	6.40	SE	272	
10	6.40	SE		
20	6.40	SE		
30	6.41H	SE		
40	6.36	SE		
50	6.34†	SE		
13 00	6.30†	SE		
14 00	6.04†	SE		
15 00	5.65†	SE		
16 03	5.26†	SE	322	
17 00	5.04	SE		
18 00	4.85	SE		
10	4.80	SE		
20	4.80	SE		
30	4.81	SE		
40	4.77	SE		
50	4.79	SE		
53	4.75L	SE		
19 00	4.80	SE		
10	4.80	SE		
20 00	4.95	Calm	346	
21 00	5.22	SE		
22 00	5.49	SE		F. L.
23 00	5.85	Calm		A. V.
24 00	6.02	SW	353	A. V.
	August 16, 1904			
1 00	6.10	Calm		A. V.
10	6.10	NW		
20	6.08	NW		
30	6.07	Calm		
40	6.11H	Calm		
50	6.03	Calm		
2 00	6.02	Calm		
10	5.97	Calm		
3 00	5.70	Calm		A. V.
4 00	5.45	Calm	356	C. E. R.
5 00	5.30	SE		
6 00	5.15	Calm		
45	5.10	Calm		
7 00	5.10	Calm		
10	4.97L	SE		
20	4.98	Calm		
30	5.08	Calm		
40	5.12	Calm		
50	5.18	SE		
8 00	5.24	Calm	360	C. E. R.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 16, 1904			
h m	*Feet*		*Miles*	
9 00	5.48	SW		C. E. R.
10 00	5.90	NE		F. L.
11 00	6.20	NE		
12 09	6.38	Calm		
13 00	6.43	Calm		
30	6.45H	Calm		
40	6.41	Calm		
50	6.36	NE		
14 00	6.33	NE		
15 00	6.10	NE		
16 11	5.60	NE	371	
17 00	5.30	NE		
18 00	5.10	NE		
19 08	4.94	Calm		
10	4.90L	Calm		
20	4.92L	NE		
30	4.90L	NE		
40	4.91	NE		
50	4.97	NE		
20 00	4.94	NE	377	
10	5.06	NE		
21 00	5.12	Calm		F. L.
22 00	5.40	Calm		A. V.
23 00	5.76	Calm		
24 00	6.02	N	381	A. V.
	August 17, 1904			
1 00	6.15	NE		A. V.
2 00	6.24	Calm		
10	6.28H	NE		
20	6.25	NE		
30	6.22	NE		
40	6.18	Calm		
50	6.11	Calm		
3 00	6.12	NE		A. V.
4 00	5.89	S	392	C. E. R.
5 00	5.62	S		
6 00	5.55	Calm		
45	5.42	S		
50	5.40L	Calm		
7 00	5.42	Calm		
15	5.42	Calm		
20	5.46	Calm		
30	5.41	Calm		
40	5.41	Calm		
50	5.44	Calm		
8 00	5.50	Calm	397	
9 00	5.60	S		C. E. R.
10 00	5.90	S		F. L.
11 00	6.15	SSE		
12 00	6.35	SSE	411	
13 00	6.52	S		
30	6.54	S		
40	6.59H	S		
50	6.53	S		
14 00	6.51	S		
10	6.50	Calm		
20	6.50	Calm		
30	6.45	Calm		
40	6.44	Calm		
50	6.41	Calm		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 17, 1904			
h m	*Feet*		*Miles*	
15 00	6.36	S		F. L.
16 00	6.10	S	415	
17 00	5.75	S		
18 00	5.49	S		
19 00	5.29	S		
50	5.18	S		
20 00	5.19	Calm	425	
10	5.18	Calm		
20	5.17L	Calm		
30	5.20	Calm		
40	5.19	Calm		
50	5.20	Calm		
21 00	5.20	Calm		
10	5.20	Calm		
20	5.25	Calm		
22 00	5.35	SSE		F. L.
23 00	5.62	Calm		A. V.
24 00	5.87	SE	430	A. V.
	August 18, 1904			
1 00	6.18	W		A. V.
2 00	6.30	Calm		
30	6.34	W		
40	6.33	Calm		
50	6.36H	W		
3 00	6.36	Calm		
10	6.30	Calm		
20	6.32	Calm		
30	6.31	Calm		
40	6.29	Calm		A. V.
4 15	6.18	SE	439	C. E. R.
5 00	6.05	Calm		
6 00	5.88	SE		
7 00	5.75	SE		
40	5.66L	SE		
50	5.70	Calm		
8 00	5.70	E	446	
10	5.68	E		
20	5.72	Calm		
30	5.71	Calm		
40	5.70	E		
50	5.72	Calm		
9 00	5.70	Calm		
10	5.78	E		C. E. R.
10 00	5.90	SE		F. L.
11 00	6.10	SE		
12 00	6.28	SE	477	
13 00	6.45	NE		
14 07	6.59	NE		
20	6.60	NE		
30	6.60H	NE		
40	6.60	NE		
50	6.59	NE		
15 00	6.54	SE		
16 00	6.40	SE	500	
17 00	6.12	SE		
18 00	5.93	Calm		
19 00	5.60	SE		
20 00	5.44	SE	516	
50	5.32	SE		
21 00	5.32	SE		F. L.
	August 18, 1904			
h m	*Feet*		*Miles*	
21 10	5.32	SE		F. L.
20	5.31L	SE		
30	5.33	SE		
40	5.36	SE		
50	5.39	SE		
22 00	5.40	SE		F. L.
23 00	5.52	Calm		A. V.
24 00	5.71	ESE	536	A. V.
	August 19, 1904			
1 00	6.01	Calm		A. V.
2 00	6.19	Calm		
3 00	6.32	ESE		A. V.
4 00	6.35	NE	541	C. E. R.
30	6.34	Calm		
40	6.36H	Calm		
50	6.34	Calm		
5 00	6.30	Calm		
10	6.28	Calm		
6 00	6.12	Calm		
7 00	6.00	NE		
8 00	5.90	Calm	543	
9 00	5.80	Calm		
20	5.82	Calm		
30	5.78L	Calm		
40	5.80	Calm		
50	5.83	Calm		
10 00	5.80	Calm		
10	5.84	Calm		C. E. R.
11 00	5.92	E		F. L.
12 00	6.10	E	551	
13 00	6.23	NE		
14 00	6.34	NE		
15 00	6.40	E		
10	6.40	E		
20	6.42H	E		
30	6.41	E		
40	6.40	E		
50	6.39	E		
16 00	6.38	E	560	
10	6.38	SE		
17 00	6.22	SE		
18 00	6.00	SE		
19 00	5.73	SE		
20 00	5.58	SE	598	
21 00	5.45	E		F. L.
22 00	5.35*	E		A. V.
30	5.30L*	E		
40	5.36*	E		
50	5.34*	E		
23 00	5.36*	E		
10	5.39*	E		
20	5.42*	E		
30	5.44*	E		
24 00	5.48*	ESE	662	A. V.
	August 20, 1904			
1 00	5.72*	ESE		A. V.
2 00	5.93*	ESE		
3 00	6.05*	SE		A. V.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		August 20, 1904		
h m	*Feet*		*Miles*	
4 00	6.10*	SE	720	C. E. R.
5 00	6.29H*	SE		
6 00	6.22*	SE		
7 00	6.16*	SE		
8 00	6.02*	SE	800	
9 00	5.94*	SE		C. E. R.
10 00	5.90L*	E		F. L.
10	5.90L*	E		
20	5.90L*	E		
30	5.94L*	E		
40	5.93L*	E		
50	5.90L*	E		
11 00	5.94*	E		
12 00	6.00*	E	870	
13 00	6.10*	E		
14 00	6.20*	E		
15 00	6.30*	E		
16 00	6.32*	E	946	
17 00	6.34H*	E		
10	6.28*	E		
18 00	6.16*	E		
19 00	5.96*	E		
20 00	5.74*	E	14	
21 00	5.54*	E		F. L.
22 00	5.44*	E		A. V.
23 00	5.34*	E		
10	5.34*	E		
20	5.34*	E		
30	5.32L*	E		
40	5.34*	E		
50	5.36*	E		
24 00	5.36*	NE	64	A. V.
		August 21, 1904		
1 00	5.46*	NE		A. V.
2 00	5.56*	NE		
3 00	5.82	E		A. V.
4 00	6.00	SE	117	C. E. R.
5 00	6.12	SE		
6 00	6.26H*	SE		
30	6.24H*	NE		
40	6.26H*	NE		
50	6.24H*	NE		
7 00	6.26H*	NE		
10	6.22*	NE		
20	6.20*	NE		
8 00	6.14*	NE	175	
9 00	6.04*	NE		C. E. R.
10 00	5.92*	ESE		F. L.
11 00	5.82*	ESE		
12 00	5.80L*	ESE	216	
10	5.80	SE		
20	5.82	E		
30	5.83	E		
40	5.82	E		
50	5.81	E		
13 00	5.81	E		
10	5.84	E		
14 00	5.92	E		
15 00	6.06*	NE		
16 00	6.14*	NE	265	F. L.
		August 21, 1904		
17 00	6.22*	NE		F. L.
18 00	6.26H*	NE		
19 00	6.16*	NE	324	
20 00	5.96*	NE		F. L.
21 00	5.76*	NE		A. V.
22 00	5.62*	NW		
23 00	5.52*	NW		
24 00	5.44*	NW	390	A. V.
		August 22, 1904		
1 00	5.42L*	NW		A. V.
2 00	5.50*	NW		
3 00	5.64*	NW		A. V.
4 00	5.88*	NW	436	C. E. R.
5 00	6.10*	NW		
6 00	6.24*	NW		
7 00	6.30*	NW		
8 00	6.34*	E	486	
20	6.36H*	NE		
30	6.32*	NE		
40	6.36*	NE		
50	6.28	NE		
9 00	6.22	NE		
10	6.20*	NE		C. E. R.
10 00	6.10	NE		F. L.
11 00	6.00	NW		
12 00	5.90	SE	533	
13 00	5.78*	SE		
14 00	5.75	W		
10	5.74	W		
20	5.72L	W		
30	5.80	W		
40	5.80	W		
50	5.80	W		
15 00	5.82	W		
16 00	5.90	W	556	
17 00	6.02	NW		
18 00	6.08H	W		
19 00	6.08*	NE		
20 00	6.06*	NE	605	
21 04	5.88*	NE		F. L.
22 00	5.68*	NE		A. V.
23 00	5.50*	NW		
24 00	5.38*	NE	708	A. V.
		August 23, 1904		
1 00	5.22L*	NE		A. V.
2 00	5.26*	NE		
3 00	5.36*	NW		A. V.
4 00	5.52*	W	793	C. E. R.
5 00	5.72*	W		
6 00	6.02*	W		
7 00	6.12*	SW		
8 00	6.24*	SW	810	
10	6.26H*	SW		
20	6.22*	SW		
30	6.24*	SW		
40	6.24*	SW		
50	6.22*	SW		
9 00	6.20*	SW		C. E. R.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 23, 1904			
h m	*Feet*		*Miles*	
9 10	6.16	SW		C. E. R.
20	6.18*	SW		F. L.
30	6.14	SW		
40	6.14	SW		
50	6.12	SW		
10 00	6.09	SW		
11 00	5.90	SW		
12 00	5.79	SW		
13 00	5.60	SE	825	
14 00	5.50	SE		
15 00	5.50	SE		
10	5.42L	SE		
20	5.52	SE		
30	5.60	SE		
40	5.60	SE		
50	5.60	SE		
16 00	5.61	SE	850	
17 00	5.72	SE		
18 00	5.80	SE		
19 00	5.90	SE		
20 00	6.00H	SE		
21 00	5.90	SE	885	
10	5.90	SE		F. L.
22 00	5.71	SE		A. V.
23 00	5.50	Calm		
24 00	5.35	Calm	903	A. V.
	August 24, 1904			
1 00	5.27	Calm		A. V.
2 00	5.00	SSE		
10	4.98L	SSE		
20	5.08	SSE		
30	5.07	SSE		
40	5.08	SSE		
50	5.10	Calm		
3 00	5.11	SSE		A. V.
4 00	5.20	SE	908	C. E. R.
5 00	5.50	Calm		
6 00	5.74	SE		
7 00	6.00	Calm		
8 00	6.18	SE	911	
9 00	6.30H	Calm		C. E. R.
10 00	6.28	Calm		F. L.
10	6.22	Calm		
20	6.23	SE		
30	6.18	SE		
40	6.13	Calm		
50	6.11	SW		
11 00	6.09	SW		
12 10	5.80	W	915	
13 00	5.70	S		
14 00	5.50	S		
15 07	5.50	S		
30	5.47	S		
40	5.50	S		
42	5.45	S		
50	5.49	S		
53	5.41L	S		
16 00	5.45	S	923	
10	5.50	Calm		
20	5.50	Calm		F. L.

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 24, 1904			
h m	*Feet*		*Miles*	
16 30	5.50	SE		F. L.
40	5.54	SE		
50	5.60	SE		
17 00	5.60	SE		
18 00	5.72	SE		
19 00	5.90	SE		
20 00	6.00	W	932	
21 00	6.10H	W		F. L.
22 00	6.01	Calm		A. V.
23 00	5.81	Calm		
24 00	5.56	NE	938	A. V.
	August 25, 1904			
1 00	5.40	NE		A. V.
2 00	5.22	NNW		
30	5.15	Calm		
40	5.12L	Calm		
50	5.18	SW		
3 00	5.16	W		
10	5.15	Calm		
20	5.20	Calm		
30	5.21	Calm		A. V.
4 00	5.27	Calm	943	C. E. R.
5 00	5.45	Calm		
6 00	5.67	Calm		
7 00	5.90	Calm		
8 00	6.22	E	944	
30	6.30	Calm		
40	6.34	E		
50	6.38	E		
9 00	6.39	E		
10	6.38	E		
20	6.40	E		
30	6.42	E		
40	6.13H	E		
50	6.42	E		
10 00	6.38	Calm		
10	6.40	Calm		
20	6.38	Calm		
30	6.36	Calm		
40	6.32	Calm		C. E. R.
11 00	6.32	S		F. L.
12 00	6.20	Calm	952	
13 00	5.90	S		
14 00	5.60	S		
30	5.54	S		
40	5.60	Calm		
50	5.60	Calm		
15 00	5.60	Calm		
10	5.55	Calm		
20	5.60	S		
26	5.54L	S		
30	5.55	S		
40	5.61	S		
50	5.60	S		
16 00	5.65	S	962	
17 30	5.70	S		
18 00	5.80	S		
19 00	5.94	Calm		
20 00	6.12	Calm	965	
21 00	6.30	Calm		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 25, 1904			
h m	*Feet*		*Miles*	
21 10	6.30	Calm		F. L.
20	6.35	Calm		
30	6.33	Calm		
40	6.39H	Calm		
44	6.39	Calm		
50	6.31	Calm		
22 00	6.30	Calm		F. L.
10	6.28	Calm		A. V.
20	6.26	Calm		
23 00	6.22	Calm		
24 00	6.00	SSE	968	A. V.
	August 26, 1904			
1 00	5.74	SE		A. V.
2 00	5.53	W		
3 00	5.47	NW		A. V.
4 00	5.40	NW	977	C. E. R.
10	5.42	NW		
20	5.42	NW		
30	5.38L	NW		
40	5.41	NW		
50	5.45	NW		
5 00	5.50	NW		
6 00	5.82	Calm		
7 00	6.10	NW		
8 00	6.33	E	9	
9 00	6.50	E		C. E. R.
50	6.65	SE		F. L.
10 00	6.70H	ESE		
20	6.68	ESE		
30	6.65	ESE		
40	6.60	ESE		
50	6.61	ESE		
11 00	6.61	ESE		
10	6.60	E		
12 00	6.42	E	64	
13 00	6.20	E		
14 00	5.95	E		
15 00	5.80	E		
16 00	5.64L	E	145	
10	5.64L	E		
20	5.60L	E		
30	5.68L	E		
40	5.66L	E		
50	5.66L	E		
17 00	5.64L	E		
10	5.64L	E		
20	5.70	E		
30	5.71	E		
40	5.75	E		
18 00	5.76	E		
19 00	6.00	E		
20 00	6.14	E	228	
21 00	6.22	E		
22 00	6.44H	E		F. L.
23 00	6.41	E		A. V.
10	6.37	E		
20	6.33	E		
30	6.32	E		
24 00	6.21	E	308	A. V.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
	August 27, 1904			
h m	*Feet*		*Miles*	
1 00	5.94	E		A. V.
2 00	5.72	E		
3 00	5.54*	E		A. V.
4 00	5.46*	E	400	C. E. R.
10	5.44L*	E		
20	5.46L*	E		
30	5.46L*	E		
40	5.44L*	E		
50	5.48*	E		
5 00	5.50*	E		
10	5.52*	E		
6 00	5.72*	E		
7 00	5.90*	E		
8 00	6.24*	E	499	
9 00	6.50*	E		C. E. R.
10 00	6.72*	E		F. L.
11 00	6.82H*	E		
10	6.80*	E		
20	6.76*	E		
30	6.72*	E		
40	6.72*	E		
50	6.70*	E		
12 00	6.62	E	587	
13 00	6.40†	E		
14 00	6.06†	E		
15 00	5.80†	E		
16 00	5.65†	E		
10	5.64†	E		
20	5.62†	E		
30	5.60L†	E		
40	5.60L†	E		
50	5.61L†	E		
17 00	5.60L†	E		
10	5.58L†	E		
20	5.60L*	E		
30	5.62*	E		
40	5.62*	E		
50	5.64*	E		
18 00	5.66*	E		
19 00	5.82*	E		
20 00	6.00*	E	709	
21 00	6.22*	E		F. L.
22 00	6.38	E		A. V.
23 00	6.40	E		
10	6.43H	E		
20	6.43	E		
30	6.40	E		
40	6.38	E		
50	6.34	E		
24 00	6.31	E	755	A. V.
	August 28, 1904			
1 00	6.03	E		A. V.
2 00	5.80	E		
3 00	5.64	Calm		A. V.
4 09	5.50	E	780	C. E. R.
5 00	5.42	E		
10	5.39L	E		
20	5.42	E		
40	5.40	E		
50	5.44	E		C. E. R.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		August 28, 1904		
h m	*Feet*		*Miles*	
6 00	5.49	E		C. E. R.
7 00	5.75	E		
8 00	6.02	E	809	
9 00	6.25	E		C. E. R.
10 00	6.53	E		F. L.
11 00	6.62*	E		
50	6.62*	E		
12 00	6.64H*	SE	848	
10	6.60*	SE		
20	6.58*	SE		
30	6.54*	SE		
13 00	6.40*	SE		
14 00	6.06*	SE		
15 00	5.75	SE		
16 00	5.55	SE	899	
17 00	5.33L	SE		
10	5.40	SE		
20	5.38	SE		
30	5.40	SE		
40	5.40	E		
50	5.41	E		
18 00	5.40	E		
10	5.43	E		
20	5.45	E		
19 00	5.52	E		
20 00	5.78	E	939	
21 00	5.95	SE		
22 00	6.10	SE		F. L.
23 00	6.22	SE		A. V.
24 00	6.31	SE	988	A. V.
		August 29, 1904		
0 10	6.33H	SE		A. V.
20	6.32	SE		
30	6.24	SE		
40	6.21	SE		
50	6.20	SE		
1 00	6.18	SE		
2 00	5.91	SE		
3 00	5.62	Calm		A. V.
4 00	5.48	E	13	C. E. R.
5 00	5.38	NE		
10	5.36	NE		
20	5.37	NE		
30	5.35L	N		
40	5.37	N		
6 00	5.40	NW		
10	5.44	NW		
7 00	5.60	NW		
8 00	5.80	SE	28	
9 00	6.05	E		C. E. R.
10 00	6.30	E		F. L.
11 00	6.50	E		
50	6.52	E		
12 00	6.58H	E	76	
10	6.51	E		
20	6.48	E		
30	6.45	E		
40	6.43	E		
50	6.40	E		
13 00	6.36	ESE		F. L.

Local time mean	Reading of tide staff	Wind direction	Anemometer records	Observer
		August 29, 1904		
h m	*Feet*		*Miles*	
14 00	6.10	SE		F. L.
15 00	5.73	SE		
16 00	5.51	SE	125	
17 00	5.32	SE		
10	5.31	SE		
20	5.31	SE		
30	5.30L	SE		
40	5.30L	SE		
50	5.30L	SE		
18 00	5.30L	SE		
10	5.30L	SE		
20	5.30L	SE		
30	5.32	SE		
19 14	5.38	SE		
20 00	5.52	SE	167	
21 00	5.72	SE		F. L.
22 00	5.93	SE		A. V.
23 00	6.04	Calm		
24 00	6.22	SE	194	A. V.
		August 30, 1904		
0 30	6.24H	SE		A. V.
40	6.21	SE		
50	6.23	SE		
1 00	6.20	SE		
10	6.09	SE		
20	6.10	SE		
30	6.03	SE		
40	5.97	Calm		
2 00	5.86	Calm		
3 00	5.69	Calm		A. V.
4 00	5.52	Calm	206	C. E. R.
5 00	5.40	SE		
30	5.38L	SE		
40	5.41L	SE		
50	5.42L	SE		
6 00	5.38L	SE		
10	5.40	SE		
20	5.42	Calm		
30	5.41	E		
40	5.45	E		
7 00	5.52	E		
8 00	5.70	E	243	
9 00	5.90	E		C. E. R.
10 00	6.15	E		F. L.
11 00	6.32	E		
12 00	6.42	E	320	
10	6.43	E		
20	6.43	E		
30	6.44H	E		
40	6.41	E		
50	6.40	E		
13 00	6.38	E		
14 00	6.11	ESE		
15 00	5.81	SE		
16 00	5.54	SE	383	
17 00	5.34	SE		
18 00	5.20	SE		
10	5.19L	SE		
20	5.20	SE		
30	5.20	SE		F. L.

Tabulation of tidal observations at Cape Flora, Northbrook Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer	Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
August 30, 1904					August 31, 1904				
h m	*Feet*		*Miles*		*h m*	*Feet*		*Miles*	
18 40	5.20	SE		F. L.	7 00	5.52	E		C. E. R.
50	5.21	SE			8 00	5.60	SE	465	
19 00	5.21	SE			9 00	5.80	SE		C. E. R.
10	5.25	SE			10 00	6.03	SE		F. L.
20 00	5.35	SE	418		11 00	6.29	SE		
21 00	5.60	SE		F. L.	12 00	6.40	SE	540	
22 00	5.81	Calm		A. V.	13 00	6.46H	E		
23 00	6.02	SE			10	6.44	E		
24 00	6.12H	Calm	428	A. V.	20	6.44	E		
August 31, 1904					30	6.40	E		
					40	6.40	E		
1 00	6.10	Calm		A. V.	50	6.31	E		
2 00	5.94	SE			14 00	6.30	E		
3 00	5.83	Calm		A. V.	15 00	6.20	SE		
4 00	5.64	Calm	429	C. E. R.	16 00	5.80	SE	620	
5 00	5.50	E			17 00	5.54	SE		
30	5.43	E			18 00	5.41L	SE		
40	5.41	E			19 00	5.41	SE		
50	5.41	E			20 00	5.54	SE	714	
6 00	5.40L	E			21 00	5.70	SE		F. L.
10	5.42	E			22 00	5.94	SE		A. V.
20	5.46	E		C. E. R.	23 00	6.09	SE		
					24 00	6.45H	SE	821	A. V.

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TIDAL OBSERVATIONS

TABULATION OF TIDE GAUGE READINGS

RECORDED AT

TEPLITZ BAY STATION, RUDOLPH ISLAND

FRANZ JOSEF ARCHIPELAGO

APRIL 1, 1904, TO JUNE 3, 1904

NORTH LATITUDE: 81° 47.'5

LONGITUDE EAST OF GREENWICH: 57° 56'

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Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 1, 1904		
h m	*Feet*		*Miles*	
17 00	4.05	S to SE	6	W. J. P.
18 00	4.31	SW	18	W. J. P.
19 00	4.45H	W	6	F. L.
20 00	4.33	W to SW	7	
21 00	4.19	W to SW	7	
22 00	3.55	W to SW	3	
23 00	3.05	S	4	
24 00	2.75	SE	5	F. L.
At 19:00 grinding of ice could be heard for about one hour; direction was not discernible from the dwelling.				
		April 2, 1904		
0 58	2.58L	SE	5	W. J. P.
1 58	2.59	SSW	4	S. W. S.
2 58	2.82	SW	4	
3 58	3.23	SSW	3	
4 58	3.70	SE	4	
5 58	4.05	SE	5	
6.58	4.27	S	4	
7 58	4.32H	S	5	S. W. S.
8.58	4.14	S	7	F. L.
9 58	3.73	SE	7	
10 57	3.32	S	5	
12 00	3.00	S	2	
57	2.81	S to SW	3	
13 57	2.77L	S	2	
14 57	2.93	S	2	
15 57	3.30	SE	2	
16 57	3.72	S	3	
17 57	4.12	SE	5	
18 56	4.40	SE to S	7	F. L.
19 56	4.51H	SE	6	S. W. S.
20 16	4.47	SE		
56	4.30	ESE	6	
21 56	4.00	SSE	5	
22 56	3.52	ESE	5	
23 56	3.13	SE	8	S. W. S.
Levels run at 12:00 from tide gauge to B. M. No. 1. Tide gauge reading of B. M. No. 1, 14.19 feet. Ice field extends to horizon.				
		April 3, 1904		
0 56	2.84	SE	8	S. W. S.
1 26	2.75	ESE		
41	2.72	ESE		
56	2.70	ESE	7	
2 11	2.69L	ESE		
26	2.71	ESE		
56	2.80	E	7	
3 56	3.06	S	6	
4 56	3.54	W	6	
5 56	3.98	WSW	5	
6 56	4.28	WSW	5	
7 56	4.44	SW	6	
8 26	4.46H	SW		
41	4.43	SW		
56	4.40	SW	5	S. W. S.
		April 3, 1904		
h m	*Feet*		*Miles*	
9 55	4.12	S to SW	2	F. L.
10 55	3.68	S to SW	2	
11 58	3.30	S to SE	3	
12 55	3.02	SE	4	
13 55	2.84L	S	4	
14 55	2.90	S to SW	4	
15 55	3.19	S	2	
16 55	3.53	S to SW	2	
17 55	4.00	S	3	
18 55	4.30	S	4	
19 55	4.54	S to SW	4	F. L.
20 25	4.55	S		S. W. S.
45	4.57H	SSW		
55	4.55	S	5	
21 55	4.28	SSW	3	
22 55	3.87	S	2	
23 55	3.46	WSW	4	S. W. S.
		April 4, 1904		
0 55	3.15	SE	3	S. W. S.
1 55	2.89	ESE	2	
2 25	2.82	SW	Light	
40	2.82L	E	Light	
55	2.83	SE	Light	
3 55	2.98	ESE	Light	
4 55	3.30	W	Light	
5 55	3.69	ESE	Light	
6 55	4.04	ESE	2	
7 55	4.25	SE	2	S. W. S.
8 55	4.34H	ESE	3	F. L.
9 25	4.31	E		
55	4.21	E	4	
10 55	3.90	E	2	
11 57	3.39	SE	2	
13 00	3.17	E	4	
14 00	2.91	E	8	
15 00	2.80L	E	16	
16 00	2.97	ESE	19	
17 00	3.24	E	23	
18 00	3.62	E	25	
19 00	4.04	ESE	30	
20 00	4.30	ESE	27	F. L.
21 00	4.43H	ESE	29	S. W. S.
45	4.40	E		
22 00	4.37	ESE	21	
23 00	4.12	ESE	16	
24 00	3.28	S	18	S. W. S.
Open water west to northwest at 10:00. Ice moving west out of bay within one-half mile off shore 18:30 to 19:00. Open water in south. Ice returning from southwest at 22:00.				
		April 5, 1904		
1 00	3.42	ESE	18	S. W. S.
2 00	3.15	S	18	
3 00	3.01L	S	18	
30	3.03	S	18	
4 00	3.09	S	19	
5 00	3.30	S	17	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 5, 1904		
h m	*Feet*		*Miles*	
6 00	3.66	SW	16	S. W. S.
7 00	4.02	SSW	16	
8 00	4.35	SW	14	S. W. S.
9 00	4.52H	SW	15	F. L.
10 00	4.51	WNW	18	
11 00	4.33	WNW	12	
12 04	4.00	NW	13	
13 00	3.69	NW	11	
14 00	3.41	NW	11	
15 02	3.21	NW	13	
16 00	3.20L	NW	15	
17 00	3.36	NW	14	
18 00	3.61	NW	15	
19 00	3.90	N	15	
20 00	4.20	N	16	F. L.
21 00	4.32	NNW	15	S. W. S.
50	4.40H	N		
22 00	4.39	N	13	
23 00	4.25	NNW	11	
24 00	3.99	NE	10	S. W. S.
Ice came in at 5:30; pressure continued to 5:45; 7:30 open water south of Cape Auk.				
		April 6, 1904		
1 00	3.59	NE	10	S. W. S.
2 00	3.25	N	11	
3 00	3.03	NNW	14	
35	2.97L	N		
4 00	2.98	NE	8	
5 00	3.07	NNE	2	
6 00	3.20	N	2	
7 00	3.42	ENE	4	S. W. S.
8 00	3.70	NE	4	F. L.
9 00	3.91	N	3	
10 00	4.00H	E	4	
11 00	3.97	N	3	
12 04	3.83	NW	1	
13 00	3.52	N	5	
14 00	3.31	SE	9	
15 00	3.16	S	14	
16 00	3.06L	E	19	
17 00	3.10	E	23	
18 00	3.26	E	21	
19 00	3.49	E	17	
20 00	3.72	NE	11	F. L.
21 00	3.92	E	11	S. W. S.
22 02	4.01	NNW	6	
10	4.02H	NE	3	
23 00	3.99	WSW	3	
24 00	3.89	WSW	7	S. W. S.
Ice moving out of bay in north at 8:45. Ice came in at 15:10. Ice moving out of bay in south at 18:00.				
		April 7, 1904		
1 00	3.63	W	1	S. W. S.
2 00	3.36	W	5	
3 00	3.15	NNE	1	
4 00	3.00	W	2	
10	2.97L	NNW		
5 00	2.99	NNE	1	
6 00	3.04	N	6	S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 7, 1904		
h m	*Feet*		*Miles*	
7 00	3.20	NE	3	S. W. S.
8 00	3.45	E	2	S. W. S.
9 00	3.57	NE	1	F. L.
10 00	3.71	E	2	
11 00	3.80H	E	3	
12 02	3.79	E	2	
13 00	3.69	E	1	
14 00	3.49	N	1	
15 00	3.29	E	2	
16 00	3.14	NW	2	
17 00	3.10L	NE	1	
18 00	3.11	N	2	
19 00	3.29	N	2	
20 00	3.42	N	4	F. L.
21 00	3.61	ENE	2	S. W. S.
22 00	3.74	ENE	3	
23 00	3.83H	ENE	1	
24 00	3.80	NNW	3	S. W. S.
B. M. No. 1 corresponds to tide gauge reading of 14.05 feet in morning. Open water out of bay at 17:50 to 7:00 April 8.				
		April 8, 1904		
0 59	3.67	NNW	2	S. W. S.
1 59	3.48	ENE	3	
2 59	3.29	NNW	3	
3 59	3.11	NW	2	
4 59	3.02	NNW	2	
5 59	3.00L	NNW	1	
6 59	3.10	W	3	
7 59	3.20	NE	1	S. W. S.
8 59	3.39	NE	3	F. L.
9 59	3.50	Calm		
10 59	3.62	N	1	
12 03	3.68H	E	1	
59	3.66	Calm		
13 59	3.59	NE	2	
14 59	3.46	E	1	
15 59	3.32	Calm		
16 59	3.21	Calm		
17 59	3.15L	NE	7	
18 59	3.20	N	1	
19 59	3.30	E	3	F. L.
20 59	3.40	NNE	3	S. W. S.
21 59	3.54	NE	3	
22 59	3.63	NE	3	
23 39	3.68H	NE		
59	3.67	NE	2	S. W. S.
B. M. No. 1 corresponds to tide gauge reading of 14.07 feet.				
		April 9, 1904		
0 59	3.65	NE	2	S. W. S.
1 59	3.61	NNW	4	
2 59	3.49	NNW	2	
3 59	3.34	Calm		
4 59	3.20	NE	2	
5 59	3.10	Calm		
6 59	3.09L	NNW	1	
7 59	3.13	NE	2	
8 59	3.22	N	2	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 9, 1904		
h m	*Feet*		*Miles*	
9 59	3.35	SE	1	F. L.
10 59	3.49	SE	2	
12 01	3.56	N	1	
12 59	3.66	SE	2	
13 59	3.66H	Calm		
14 59	3.60	SE	2	
15 59	3.51	N	1	
16 59	3.41	NE	1	
17 59	3.30	N	2	
18 59	3.23	N	2	
19 59	3.22L	NE	1	
21 03	3.29	N	2	F. L.
59	3.35	ENE	3	S. W. S.
22 59	3.49	NNE	3	
23 59	3.55	ENE	4	S. W. S.
		April 10, 1904		
0 59	3.62	ENE	2	S. W. S.
1 59	3.65H	NE	3	
2 59	3.63	N	2	
3 59	3.54	E	3	
4 59	3.40	SSE	2	
5 59	3.31	N	2	
6 59	3.23	Calm		
7 59	3.20L	E	2	S. W. S
8 59	3.20	E	2	F. L.
9 59	3.29	N	2	
10 59	3.42	Calm		
11 59	3.59	E	1	
13 00	3.71	SE	1	
59	3.82	SE	3	
14 59	3.87	SE	2	
19 59	3.59	S	2	
16 59	3.81	S	2	
17 59	3.70	N	3	
18 59	3.60	N	6	
19 59	3.59	N	2	F. L.
20 59	3.57	N	2	S. W. S.
21 59	3.50L	NNW	2	
22 59	3.56	SW	3	
23 59	3.69	NW	4	S. W. S.
Leave open water 14:00.				
		April 11, 1904		
0 58	3.78	NE	5	S. W. S.
1 58	3.88	NE	8	
2 58	3.96H	NNE	12	
3 58	3.94	NNW	6	
4 58	3.86	NE	12	
5 58	3.71	NE	14	
6 58	3.58	SW	13	
7 58	3.52	NE	24	S. W. S.
8 58	3.34L	NE	31	F. L.
9 58	3.36	NE	33	
10 58	3.42	NW	14	
12 04	3.58	NE	21	
58	3.72	N	10	
13 58	3.89	NE	17	
14 58	4.02	SE	9	
15 58	4.09H	N	10	
16 58	4.06	N	14	F. L.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 11, 1904		
h m	*Feet*		*Miles*	
17 58	3.96	N	12	F. L.
18 58	3.80	NE	7	
19 58	3.61	NE	12	F. L.
20 58	3.47	NE	6	S. W. S.
21 58	3.39L	NE	7	
22 58	3.41	NNE	7	
23 58	3.50	NE	9	S. W. S.
		April 12, 1904		
1 10	3.69	NNE	4	S. W. S.
58	3.78	NE	8	
2 58	3.97	N	8	
3 55	4.00	N	10	
4 58	4.03H	N	14	
5 58	3.90	N	10	
6 58	3.74	N	11	
7 58	3.55	N	10	S. W. S.
8 58	3.39	N	11	F. L.
9 58	3.30	N	10	
10 58	3.29L	N	8	
12 03	3.39	NW	6	
58	3.52	N	7	
13 58	3.78	N	4	
14 58	3.95	N	5	
15 58	4.10	SE	4	
16 58	4.16H	E	2	
17 58	4.04	W	2	
18 58	3.92	W	6	
19 58	3.71	W	7	F. L.
20 58	3.50	W	6	S. W. S.
21 58	3.40	WSW	9	
22 58	3.39L	WSW	9	
23 58	3.50	SW	10	S. W. S.
Ice drifting from the north at Cape Saule at 14:00.				
		April 13, 1904		
0 58	3.65	SW	9	S. W. S.
1 58	3.87	SW	9	
2 58	4.06	WSW	11	
3 58	4.18	WSW	10	
4 58	4.25	SW	14	
5 58	4.32H	W	15	
6 58	4.15	NNW	15	
7 58	3.94	W	15	S. W. S.
8 58	3.70	W	16	F. L.
9 57	3.53	NW	17	
10 57	3.47L	W	19	
11 57	3.50	W	21	
12 51	3.60	NW	20	
13 57	3.80	NW	22	
14 57	4.10	W	21	
15 57	4.30	W	20	
16 57	4.43H	W	18	
17 57	4.41	W	18	
18 57	4.30	W	18	
19 57	4.00	W	16	F. L.
20 57	3.71	WSW	17	S. W. S.
21 57	3.55	WSW	16	
22 57	3.40	WSW	16	
23 57	3.36L	W	17	S. W. S.
At 0h 58m staff read 3.60 feet and 3.70 feet due to swell.				

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 14, 1904		
h m	*Feet*		*Miles*	
0 57	3.50	WSW	18	S. W. S.
1 57	3.72*	W	17	
2 57	4.00	W	19	
3 57	4.22	WSW	18	
4 57	4.50H	SW	17	
5 57	4.47	WSW	17	
6 57	4.36	W	18	
7 57	4.18	W	16	S. W. S.
8 57	3.89	W	14	F. L.
9 57	3.62	W	14	
10 57	3.42	W	12	
12 01	3.39L	W	10	
57	3.49	W	11	
13 57	3.66	W	10	
14 57	3.99	NW	9	
15 57	4.21	N	9	
16 57	4.40	N	10	
17 57	4.48H	NE	10	
18 57	4.40	NW	8	
19 57	4.16	N	3	F. L.
20 57	3.85	SE	6	S. W. S.
21 57	3.51	E	6	
23 14	3.28	E	4	
57	3.21L	E	2	S. W. S.
Ice opened about 50 yards wide, southwest, one-eight mile from shore.				
		April 15, 1904		
0 57	3.30	NE	3	S. W. S.
1 57	3.50	SE	3	
2 57	3.83	ENE	4	
3 57	4.13	E	2	
4 57	4.39	E	5	
5 57	4.56H	E	2	
6 57	4.51	E	3	
7 57	4.36	E	4	S. W. S.
9 00	4.02	E	2	F. L.
10 00	3.70	E	1	
11 00	3.48	N	6	
12 03	3.36L	N	9	
13 00	3.39	N	13	
14 00	3.59	N	9	
15 00	3.90	NW	6	
16 00	4.20	NW	3	
17 00	4.49	NW	4	
18 00	4.68	NW	3	
19 00	4.69H	W	4	
20 00	4.53	SE	3	F. L.
21 00	4.23	SE	6	S. W. S.
22 00	3.85	SE	7	
23 00	3.59	ESE	7	
24 00	3.40	SE	6	S. W. S.
Tide gauge reading of B. M. No. 1, 14.09 feet at noon.				
		April 16, 1904		
1 00	3.35L	ESE	7	S. W. S.
2 00	3.50	SE	8	
3 00	3.55	ESE	6	
4 00	4.17*	ESE	5	
5 00	4.48	SSW	7	S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 16, 1904		
h m	*Feet*		*Miles*	
6 00	4.63	SW	9	S. W. S.
7 00	4.65H	S	7	S. W. S.
8 00	4.55	S	4	F. L.
9 00	4.24	SW	6	
59	3.91	SW	12	
10 59	3.58	W	11	
11 59	3.35	W	14	
12 59	3.25L	SW	11	
13 59	3.36	SE	6	
14 59	3.60	SE	8	
15 59	3.97	E	10	
16 59	4.24	SW	15	
17 59	4.42	SW	17	
18 59	4.51H	SW	17	
19 59	4.41	SW	16	F. L.
20 59	4.12	SW	13	S. W. S.
21 59	3.70	WSW	11	
22 59	3.36	WSW	10	
23 59	3.07	SSE	6	S. W. S.
Ice moving from southwest. Pressure in southwest. Ice pressure in west 7:00 to 8:15.				
		April 17, 1904		
1 00	2.97L	ESE	7	S. W. S.
2 00	2.99	ESE	6	
3 00	3.26	E	3	
4 00	3.60	E	12	
5 00	3.93	NW	10	
6 00	4.28	NW	8	
7 00	4.41	NW	6	
8 00	4.50H	N	16	S. W. S.
9 00	4.30	NE	6	F. L.
10 00	3.92	NE	6	
11 00	3.69	NE	8	
12 03	3.39	NE	10	
13 00	3.21L	E	10	
14 00	3.23	NE	9	
15 00	3.42	NE	3	
16 00	3.79	NE	5	
17 07	4.12	NE	14	
18 00	4.42	NE	18	
19 00	4.58	NE	13	
20 00	4.60H	W	18	F. L.
21 00	4.45	N	4	S. W. S.
22 00	4.10	ENE	2	
23 00	3.70	SE	3	
24 00	3.40	ENE	9	S. W. S.
Ice opened west 5:00. Ice moving northwest about 9:00.				
		April 18, 1904		
1 00	3.12	ENE	11	S. W. S.
2 00	3.12L	ENE	17	
3 00	3.26	NE	20	
4 00	3.57	NE	18	
5 00	3.98	NE	18	
6 00	4.30	NE	18	
7 00	4.53	NNE	21	
8 00	4.64H	NE	21	S. W. S.
9 01	4.53	N	14	F. L.

Tabulation of tidal observations at Teplits Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 18, 1904		
h m	*Feet*		*Miles*	
10 01	4.30	NW	4	F. L.
11 01	3.94	NW	5	
12 01	3.60	S	2	
13 01	3.41	S	4	
14 01	3.30L	SW	5	
15 01	3.34	NE	8	
16 01	3.60	N	12	
17 01	3.95	NNW	19	
18 01	4.30	N	17	
19 01	4.43	N	16	
20 01	4.50H	N	15	F. L.
21 01	4.40	N	14	S. W. S.
22 01	4.10	N	13	
23 01	3.67	N	12	
24 01	3.30	N	8	S. W. S.
		April 19, 1904		
1 00	2.98	N	9	S. W. S.
2 00	2.80L	NNE	11	
3 00	2.81	NNE	4	
4 00	2.99	N	5	
5 00	3.31	ENE	3	
6 00	3.63	NE	2	
7 00	3.90	N	3	
8 00	4.04	E	1	S. W. S.
9 00	4.05H	NW	1	F. L.
10 00	3.89	NW	5	
11 00	3.59	NW	2	
12 05	3.26	NE	2	
13 00	3.09	Calm		
14 00	2.90L	N	3	
15 00	2.92	S	2	
16 00	3.06	SE	19	
17 00	3.48	SE	24	
18 00	3.80	SE	30	
19 00	4.10	SE	29	
20 00	4.30	ESE	29	F. L.
21 00	4.36H	ESE	31	S. W. S.
22 00	4.24	ESE	35	
23 00	3.92	ESE	38	
24 00	3.62	ESE	33	S. W. S.

B. M. No. 1 corresponds to tide gauge reading of 14.05 feet today noon.

		April 20, 1904		
1 00	3.32	SSE	38	S. W. S.
2 00	3.22	SSE	41	
3 15	3.10L	E	40	
4 00	3.22	ESE	40	
5 00	3.52	ESE	46	
6 10	3.90	ESE	54	
7 10	4.25	ESE	58	
8 00	4.41	E	60	
9 10	4.60H	ENE	61	
10 00	4.51	E	63	
11 00	4.26	ESE	54	S. W. S.
12 05	3.96	E	53	F. L.
13 00	3.71	ESE	59	
14 00	3.50	ESE	53	F. L.
		April 20, 1904		
h m	*Feet*		*Miles*	
15 02	3.42L	E	52	F. L.
16 00	3.45	NE	47	
17 00	3.70	E	41	
18 00	3.95	E	42	
19 00	4.20	E	47	
20 00	4.48	E	47	F. L.
21 10	4.51H	E	45	S. W. S.
22 00	4.47	E	42	
23 00	4.25	E	38	
24 00	3.91	E	35	S. W. S.

Ice broke about one-half mile out between 19:00 and 20:00. Heavy drifting snow and fog obstructed view.

		April 21, 1904		
1 00	3.51	ESE	32	S. W. S.
2 00	3.31	ENE	28	
3 00	3.21L	E	32	
4 00	3.21	E	32	
5 00	3.32	ESE	38	
6 00	3.58	E	37	
7 05	3.92	ESE	39	
8 00	4.12	ESE	39	
9 05	4.32	ESE	40	
10 00	4.39H	ESE	40	S. W. S.
11 00	4.28	ESE	38	R. R. T.
12 00	4.01	E	38	
13 00	3.76	E	37	
14 00	3.51	E	30	
15 00	3.38	ENE	17	R. R. T.
16 00	3.30L	SE	6	W. J. P.
17 00	3.42	SW	5	
18 00	3.56	ESE	12	
19 01	3.80	ENE-ESE	20	
20 00	4.06	E	10	
21 10	4.18	S	10	W. J. P.
22 00	4.20H	S	11	S. W. S.
23 00	4.11	ENE	11	S. W. S.

Large lead one-half mile out at 16:00. Open water 4 miles at 20:00. Horizon foggy at 21:10. After observation at 23:00 wire parted below staff.

		April 22, 1904.		
3 03	3.67	ENE	19	S. W. S.
4 00	3.58L	NE	14	
5 00	3.58	NE	8	
6 00	3.70	N	5	
7 00	3.99	N	11	
8 00	4.21	NNE	13	
9 00	4.40	S	40	S. W. S.
10 00	4.48	SE	6	R. R. T.
11 00	4.50H	ESE	4	
12 00	4.38	S	1	R. R. T.
13 00	4.16	S	4	F. L.
14 00	3.91	SE	2	
15 00	3.74	SE	3	
16 00	3.70	E	1	
17 00	3.60L	E	1	
18 02	3.70	E	2	F. L.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 22, 1904		
h m	*Feet*		*Miles*	
19 00	3.81	E	1	F. L.
20 00	4.09	W	2	
21 00	4.23	E	1	
22 00	4.39	ENE	2	F. L.
23 05	4.40H	NW	2	S. W. S.
24 00	4.32	ESE	4	S. W. S.
Tide gauge reset.				
Tide gauge reading of B. M. No. 1 is 14.56 feet at noon today. This is the first reading of the gauge after resetting it last night.				
		April 23, 1904		
1 00	4.10	ESE	2	S. W. S.
2 00	3.86	N	4	
3 00	3.64	E	3	
4 00	3.46	E	2	
5 00	3.38L	E	3	
6 00	3.41	E	2	
7 00	3.53	N	3	
8 00	3.75	E	2	S. W. S.
9 00	3.99	E	2	F. L.
10 00	4.11	SE	2	
11 00	4.21	E	1	
12 02	4.29H	Calm		
13 00	4.20	SE	4	
14 00	4.02	N	4	
15 00	3.82	N	7	
16 00	3.70	N	6	
17 00	3.60	NE	1	
18 00	3.60L	N	4	
19 00	3.65	N	4	
20 00	3.80	NE	6	F. L.
21 00	4.00	N	5	S. W. S.
22 00	4.12	NE	5	
23 05	4.24	ENE	2	
24 00	4.28H	N	4	S. W. S.
		April 24, 1904		
0 59	4.26	N	6	S. W. S.
1 59	4.07	N	6	
2 59	3.88	N	5	
3 59	3.67	N	7	
4 59	3.54	NE	5	
5 59	3.47L	E	2	
6 59	3.52	E	3	
7 59	3.59	SE	6	S. W. S.
8 59	3.76	SE	8	F. L.
9 59	3.91	SE	5	
10 59	4.12	E	3	
11 59	4.20	E	2	
12 59	4.28H	E	5	
13 59	4.21	SE	5	
14 59	4.09	E	11	
15 59	3.91	E	13	
16 59	3.76	E	18	
17 59	3.64	E	19	
18 59	3.59L	E	15	
19 59	3.60	E	14	F. L.
20 59	3.70	E	15	S. W. S.
21 59	3.83	NNE	22	
22 59	4.00	NE	21	
23 59	4.09	NE	18	S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 25, 1904		
h m	*Feet*		*Miles*	
0 58	4.18H	NE	22	S. W. S.
1 58	4.14	ENE	27	
2 58	4.07	ENE	28	
3 58	3.91	ENE	29	
4 58	3.73	ENE	28	
5 58	3.58	NE	26	
6 58	3.46	NE	22	
7 58	3.43L	N	16	
8 58	3.47	NNE	12	S. W. S.
9 58	3.62	NE	10	F. L.
10 58	3.83	NE	11	
12 00	4.01	NNE	5	
58	4.18	N	5	
13 58	4.25H	NW	5	
14 58	4.24	NW	5	
15 58	4.17	NW	5	
16 58	4.00	NW	6	
17 58	3.79	N	6	
18 58	3.58	N	8	
19 58	3.48	N	8	
20 58	3.41L	N	13	F. L.
21 58	3.49	N	12	S. W. S.
22 58	3.62	N	10	
23 58	3.87	N	7	S. W. S.
		April 26, 1904		
0 58	4.00	N	7	S. W. S.
1 58	4.13	NNW	6	
2 58	4.12	NNW	6	
3 58	4.15H	NNW	5	
4 58	4.02	N	6	
5 58	3.88	NW	8	
6 58	3.68	NW	6	
7 58	3.48	NW	9	
8 58	3.42L	WNW	9	S. W. S.
9 58	3.50	NW	10	F. L.
10 58	3.65	NW	9	
11 58	3.89	W	9	
12 58	4.10	NW	9	
13 58	4.30	NW	8	
14 58	4.43H	NW	6	
15 58	4.41	W	4	
16 58	4.32	W	5	
17 58	4.12	W	6	
18 58	3.91	NW	6	
19 58	3.69	NW	6	
20 58	3.51	WNW	7	F. L.
21 58	3.48L	WNW	5	S. W. S.
22 58	3.57	NNW	4	
23 58	3.70	WNW	1	S. W. S.
Tide gauge reading of B. M. No. 1 today at noon is 14.59 feet.				
		April 27, 1904		
0 58	3.95	WNW	3	S. W. S.
1 58	4.28	N	2	
2 58	4.36	W	1	
3 58	4.41H	ENE	1	
4 58	4.39	ESE	1	
5 58	4.20	E	1	
6 58	3.96	W	4	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		April 27, 1904		
h m	*Feet*		*Miles*	
7 58	3.73	SE	2	S. W. S.
8 58	3.54	SE	3	F. L.
9 58	3.41L	SE	3	
10 58	3.50	E	3	
11 58	3.69	SE	5	
12 58	3.91	S	5	
13 58	4.21	S	3	
14 58	4.48	S	2	
15 58	4.60H	SW	2	
16 58	4.59	S	1	
17 58	4.45	S	1	
18 58	4.19	NW	1	
19 58	3.85	N	1	
20 58	3.59	NE	1	F. L.
21 58	3.40	NNE	1	S. W. S.
22 58	3.32L	Calm		
23 58	3.44	Calm		S. W. S.
		April 28, 1904		
0 57	3.67	Calm		S. W. S.
1 57	4.00	ENE	1	
2 57	4.29	Calm		
3 57	4.41	Calm		
4 57	4.48	Calm		
5 57	4.54H	Calm		
6 57	4.34	Calm		
7 57	3.98	Calm		
8 57	3.70	NE	1	S. W. S.
9 57	3.50	NE	1	F. L.
10 57	3.40L	Calm		
10 57	3.40	Calm		
11 57	3.46	Calm		
12 57	3.64	Calm		
13 57	4.00	NE	4	
14 57	4.31	NE	7	
15 57	4.51	NE	7	
16 57	4.68H	NE	6	
17 57	4.64	N	5	
18 57	4.40	N	7	
19 57	4.00	N	9	F. L.
20 57	3.61	N	11	S. W. S.
21 57	3.32	N	9	F. L.
22 57	3.08L	N	9	S. W. S.
23 57	3.13	N	10	S. W. S.
Tide gauge reading of B. M. No. 1 today at 5:00 is 14.53 **feet.**				
		April 29, 1904		
0 57	3.17	N	8	S. W. S.
1 57	3.48	N	9	
2 57	3.82	N	6	
3 57	4.15	N	7	
4 57	4.48H	N	5	
5 57	4.44	ENE	5	
6 57	4.35	N	8	
7 57	4.05	N	9	
8 57	3.70	NNW	7	S. W. S.
9 57	3.40	N	7	F. L.
10 57	3.12	NW	7	F. L.
11 57	3.06L	NW	5	F. L.
12 57	3.20	N	6	
13 57	3.49	NE	4	
14 57	3.83	NE	3	
15 57	4.20	NE	3	
16 57	4.42	NE	2	
17 57	4.57H	NE	2	
18 57	4.45	NE	2	
19 57	4.16	NE	2	
20 57	3.80	N	1	F. L.
21 57	3.31	ENE	2	S. W. S.
22 57	3.02	ENE	3	
23 57	2.82L	E	1	S. W. S.
A slight swell, but no open water in sight at 18:57.				
		April 30, 1904		
0 56	2.89	E	2	S. W. S.
1 56	3.13	E	3	
2 56	3.49	E	2	
3 56	3.94	E	2	
4 56	4.29	E	3	
5 56	4.46	E	4	
6 56	4.49H	E	2	
7 56	4.32		2	
8 56	3.95	N	3	
9 56	3.56	N	2	
10 56	3.29	N	3	
11 56	3.10	N	3	
12 56	3.07L	E	4	
13 56	3.41	N	2	
14 56	3.64	E	5	
15 56	4.12	E	2	
16 56	4.40	NNW	3	
17 56	4.60	N	3	
18 56	4.70H	N	5	S. W. S.
19 56	4.51	N	2	W. J. P.
20 56	4.18	ENE	2	R. R. T.
21 56	3.70	ENE	2	
22 56	3.36	ENE	2	
23 56	3.02	NE	3	R. R. T.
		May 1, 1904		
0 56	2.91L	NE	3	R. R. T.
1 56	3.07	NE	2	
2 56	3.21	NE	3	
3 56	3.76	ENE	1	
4 56	4.19	N	1	
5 56	4.45	SE	3	
6 56	4.63	E	2	
7 56	4.68H	NE	2	R. R. T.
8 56	4.42	E	2	S. W. S.
9 56	4.02	SSW	3	
10 56	3.66	NNW	7	
11 56	3.43		6	
12 56	3.30L	NW	8	
13 56	3.36	NNW	3	
14 56	3.63	NE	3	
15 56	4.04	N	5	
16 56	4.50	N	9	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Anemometer records	Observer
		May 1, 1904		
h m	*Feet*		*Miles*	
17 56	4.78	N	15	S. W. S.
18 56	5.03H	NNW	8	
19 56	4.95	NNW	8	S. W. S.
20 56	4.79	NW	7	J. V.
21 56	4.36	W	12	
22 56	3.94	NNW	12	
23 56	3.59	NNW	9	J. V.
Young ice opening one-half mile to the west at 16:56.				
		May 2, 1904		
0 56	3.33	NNW		J. V.
1 56	3.30L	NW		
2 56	3.40	N		
3 56	3.79	NNE	10	
4 56	4.21	N	7	
5 56	4.63	NNE	11	
6 56	4.83	N	12	
7 56	4.96H	NNE	12	J. V.
8 56	4.89	N	9	S. W. S.
9 56	4.60	NNE	9	
10 56	4.20	N	11	
11 56	3.86	N	10	
12 56	3.67	NNE	11	
13 56	3.62L	N	10	
14 56	3.73	N	13	
15 56	4.05	N	11	
16 56	4.34	N	10	
17 56	4.75	N	8	
18 56	4.96	N	9	
19 56	5.10H	N	12	
20 56	4.99	NW	14	
21 56	4.72	N	12	
22 56	4.30	N	11	
23 56	3.88	N	9	S. W. S.
		May 3, 1904		
0 56	3.61	NNE	9	J. V.
1 56	3.40L	NNE	11	
2 56	3.41	N		
3 56	3.61	N		
4 56	3.99	N		
5 56	4.40	N		
6 56	4.67	NW		
7 56	4.83	NW		
8 56	4.94H	NNW		
9 56	4.74	NW		J. V.
10 56	4.44	NW		S. W. S.
12 16	4.01	N		
56	3.84	N		
13 56	3.69	N		
14 56	3.66L	N	8	
15 56	3.81	N	8	
16 56	4.10	N	11	
17 56	4.44	N	12	
18 56	4.80	N	13	
19 56	4.92	N	15	
20 56	4.99H	NNE	14	S. W. S.
		May 3, 1904		
h m	*Feet*		*Miles*	
21 56	4.87	NNE	11	R. R. T.
22 56	4.57	E		
23 56	4.16	ESE		R. R. T.
At 0:56 ice pack moving off in westerly direction. Stationary at 12:16; has moved west about five miles.				
		May 4, 1904		
0 55	3.82	NE		R. R. T.
1 55	3.61	WSW		
2 55	3.50L	N		
3 55	3.61	ESE		
4 55	3.86	E		
5 55	4.21	E		
6 55	4.57	ENE		R. R. T.
7 55	4.82			S. W. S.
8 55	4.94H	NW		
9 55	4.92	E		
10 55	4.74	E		
12 01	4.38	ESE		
55	4.19	N		
13 59	3.94	S		
15 00	3.82L	N	3	
16 00	3.91	N	2	
17 00	4.07	SSE	5	
18 00	4.45	E	4	
19 00	4.65	SSE	2	
20 04	4.87	SE	2	S. W. S.
21 00	4.95H	E	1	J. V.
30	4.95	E	2	
22 00	4.91	E	2	
23 00	4.72	E	1	
24 00	4.37	Calm		J. V.
Ice pack returning at 21:30.				
		May 5, 1904		
1 00	4.02	NE	2	J. V.
2 00	3.78	ENE	2	
30	3.69			
3 00	3.61	NE	1	
34	3.58L			
4 00	3.60	ENE	4	
5 00	3.71	ENE	3	
6 00	4.01	NE	2	
7 00	4.28	ENE	4	
8 00	4.52	E	5	J. V.
9 00	4.70	ENE	7	S. W. S.
10 00	4.78H	N	12	
11 00	4.71	N	12	
12 06	4.48	N	11	
13 00	4.23	N	10	
14 00	4.00	ENE	15	
15 10	3.82	ENE	13	
16 00	3.82	E	13	
10	3.82L	E		
20	3.82	E		
30	3.83	E		
40	3.85	NE		S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 5, 1904		
h m	*Feet*		*Miles*	
17 00	3.90	ESE	5	S. W. S.
18 00	4.06	NNW	3	
19 00	4.28	E	9	S. W. S.
20 00	4.51	NNE	2	R. R. T.
40	4.61	E		
50	4.62	E		
21 00	4.63	ENE	3	
10	4.64	NE		
20	4.67	NNW		
30	4.69	ENE		
40	4.69H	E		
50	4.69	Calm		
22 00	4.68	Calm		
10	4.67	ENE		
20	4.65	ENE		
23 00	4.60	ENE		
24 00	4.39	E	2	R. R. T.

Ice opening in southwest one and one-half miles from gauge.
Tide reading of B. M. No. 1 at 15:00 is 14.565 feet.

		May 6, 1904		
1 00	4.11	NNE	2	R. R. T.
2 00	3.81	NE	1	
3 00	3.63	ENE	5	
10	3.61	ENE		
20	3.60	WNW		
30	3.58	WSW		
40	3.56	S		
50	3.52	SSE		
4 00	3.51L	SE	3	
10	3.52	ENE		
20	3.52	E		
30	3.52	SE		
40	3.53	NNW		
5 00	3.58	ESE	5	
6 00	3.71	ENE	8	
7 00	3.94	ENE	8	
8 00	4.21	NE	9	R. R. T.
9 00	4.39	E	10	S. W. S.
20	4.43	NE		
30	4.45	NE		
40	4.50	NE		
50	4.53	NE		
10 00	4.54	NE	9	
10	4.55	NW		
20	4.56H	NW		
30	4.56	E		
40	4.55	NE		
50	4.55	ENE		
11 00	4.54	ENE	12	
10	4.53	NE		
12 00	4.47	NE	14	
13 00	4.23	NE	8	
14 00	4.07	NNE	8	
15 00	3.87	N	14	
40	3.79	NE		
50	3.78			
16 00	3.77	NE	21	
10	3.76			S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 6, 1904		
h m	*Feet*		*Miles*	
16 20	3.74			S. W. S.
30	3.71L			
40	3.71			
50	3.73			
17 00	3.73	NNW	14	
10	3.74			
20	3.76			
18 00	3.79	NE	13	
19 00	3.98	N	22	
20 00	4.18	E	10	S. W. S.
21 00	4.30	SE	3	R. R. T.
50	4.34	NE		
22 00	4.38	NNE	5	
10	4.39	ESE		
20	4.40	ESE		
30	4.40	E		
40	4.41	NNE		
50	4.41	S		
23 00	4.42H	E	3	
10	4.41	ESE		
20	4.40	ESE		
30	4.40	ESE		
40	4.39	ESE		
24 00	4.33	NE	3	R. R. T.

Ice closed at 3:10. Lead opened one mile in northwest direction at 16:10. Open water two miles south at 21:00. Ice closed south at 22:20.

		May 7, 1904		
1 00	4.13	NE	4	R. R. T.
2 00	3.92	N	2	
3 00	3.72	SSW	1	
4 00	3.58	ENE	1	
30	3.52	ENE		
40	3.52	Calm		
50	3.51	Calm		
5 00	3.51	Calm		
10	3.50L	Calm		
20	3.51	NW		
30	3.52	NW		
40	3.53	N		
50	3.53	NE		
6 00	3.55	E	1	
7 00	3.68	Calm		
8 00	3.87	ENE	2	R. R. T.
9 00	4.04	E	2	S. W. S.
10 00	4.19	E	1	
40	4.25			
50	4.26			
11 00	4.27	E	2	
10	4.28			
20	4.28H			
30	4.27			
40	4.27			
50	4.26			
12 00	4.25	ESE	1	
13 00	4.22	E	2	
14 00	4.05	E	1	
15 00	3.91	NE	1	
16 00	3.76	NE	3	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 7, 1904			
h m	*Feet*		*Miles*	
16 50	3.66			S. W. S.
17 00	3.65	N	4	
10	3.64			
20	3.64			
30	3.63L			
40	3.64			
50	3.64			
18 00	3.64	ENE	6	
10	3.65			
19 00	3.70	ESE	3	
20 00	3.80	NNE	3	S. W. S.
21 00	3.95	ENE	3	J. V.
22 00	4.06	ENE	4	
10	4.07	ENE		
20	4.10	ENE		
30	4.11	ENE		
50	4.13	ENE		
23 18	4.17	ENE	5	
30	4.19H	ENE		
40	4.17	ENE		
50	4.16	ENE		
24 00	4.15	ENE	6	J. V.
	May 8, 1904			
0 00	4.15	ENE		J. V.
10	4.14	ENE		
1 00	4.11	ENE	1	
2 00	3.97	E	4	
3 00	3.80	E	2	
4 00	3.66	E	6	
5 00	3.58	ESE	7	
10	3.56	ESE		
20	3.55	ESE		
30	3.54	ESE		
40	3.53	ESE		
50	3.52	ESE		
6 00	3.52	E	6	
10	3.51	ESE		
20	3.51L	ESE		
30	3.51	E		
50	3.52	E		
7 00	3.55	E	5	
10	3.55	E		
20	3.56	E		
8 00	3.70	E	6	J. V.
9 00	3.84	ESE	5	S. W. S.
10 00	4.02	ESE	6	
11 00	4.14	ESE	5	
40	4.20			
50	4.23			
12 00	4.24	SE	6	
10	4.27			
20	4.29H			
30	4.28			
40	4.28			
50	4.27			
13 00	4.27	ESE	6	
14 00	4.20	SE	8	
15 00	4.05	ESE	6	
16 00	3.97	ESE	6	
17 10	3.81	ESE	6	S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 8, 1904			
h m	*Feet*		*Miles*	
17 20	3.80			S. W. S.
30	3.80			
40	3.78			
50	3.76			
18 00	3.75		8	
10	3.70L	S		S. W. S.
20	3.70			J. V.
30	3.71			J. V.
40	3.71			S. W. S.
50	3.72			
19 00	3.72	SSE	8	
20 05	3.77	ESE	10	S. W. S.
21 00	3.85	ESE	11	J. V.
22 00	3.97	ESE	15	
23 00	4.07	E	14	
10	4.07	E		
20	4.09	E		
35	4.10	E		
40	4.10	E		
50	4.11	E		
24 00	4.13H	E	15	J. V.
	May 9, 1904			
0 00	4.13H	E		J. V.
10	4.12	E		
20	4.11	E		
30	4.11	E		
40	4.11	E		
1 00	4.10	E	15	
2 00	4.09	E	14	
3 00	3.99	E	13	
4 00	3.84	E	14	
5 00	3.72	ESE	12	
6 00	3.64	ESE	13	
50	3.59	ESE		
7 00	3.57	ESE	11	
10	3.57	ESE		
20	3.57	ESE		
30	3.57	ESE		
40	3.56L	ESE		
50	3.58	ESE		
8 00	3.58	ESE	11	
10	3.59	ESE		J. V.
20	3.60			S. W. S.
9 00	3.67	ESE	12	
10 05	3.80	ESE	10	
11 00	3.94	ESE	12	
12 00	4.09	E	13	
50	4.17			
13 00	4.18	E	16	
10	4.19			
20	4.20			
30	4.21			
40	4.22			
50	4.22			
14 00	4.23	E	14	
10	4.23H			
20	4.23			
30	4.21			
40	4.20			
50	4.19			S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 9, 1904		
h m	*Feet*		*Miles*	
15 00	4.17	E	13	S. W. S.
16 05	4.08	E	14	
17 00	3.98	ESE	13	
18 00	3.85		9	
50	3.74			
19 00	3.73	S	9	
50	3.64			
20 00	3.63	N	4	
10	3.63L			
20	3.63			S. W. S.
30	3.64	E		J. V.
40	3.68			
50	3.68	NE		
21 00	3.69	E	3	
22 00	3.73	E	4	
23 15	3.88	E	4	
24 00	3.95	E	3	J. V.
Tide gauge reading of B. M. No. 1 at 9:00 was 14.635 feet.				
		May 10, 1904		
1 00	4.05	E	4	J. V.
20	4.07			
30	4.07			
40	4.07			
50	4.08	NE		
2 00	4.09		2	
15	4.10			
30	4.10H			
45	4.10			
3 00	4.09		2	
10	4.08			
20	4.06			
30	4.02			
4 00	4.00		10	
5 00	3.92	E	10	
6 00	3.79	E	11	
7 00	3.69	E	10	
8 00	3.67		11	J. V.
20	3.61			S. W. S.
30	3.60			
40	3.59			
50	3.59L			
9 00	3.60	E	11	
10	3.61			
20	3.61			
30	3.62			
10 00	3.67	ESE	12	
11 00	3.82		12	
12 00	3.95	ESE	12	
13 00	4.10	ESE	10	
14 00	4.21	ESE	6	
10	4.23	SE		
20	4.23	S		
30	4.23	S		
40	4.24H	S		
50	4.24			
15 00	4.23		3	
10	4.23			
20	4.22			S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 10, 1904		
h m	*Feet*		*Miles*	
16 00	4.20	SE	1	S. W. S.
17 00	4.11	SSW	1	
18 00	3.92	S	3	
19 00	3.78	SW	1	
20 00	3.62	N	1	
10	3.61			
20	3.60			S. W. S.
30	3.59			R. R. T.
40	3.58			
50	3.58			
21 00	3.56	ESE	2	
10	3.54L			
20	3.57			
30	3.57			
40	3.57			
50	3.58			
22 00	3.59	E	3	
23 00	3.63	ESE	6	
24 00	3.77	ESE	9	R. R. T.
Tide gauge reading of B. M. No. 1 today is 14.60 feet.				
		May 11, 1904		
1 00	3.93	ESE	11	R. R. T.
2 00	4.04	ESE	11	
50	4.10			
3 00	4.11	E	11	
10	4.14			
20	4.14H			
30	4.14			
40	4.13			
50	4.13			
4 00	4.13	E	15	
5 00	4.09	E	16	
6 00	3.99	E	13	
7 00	3.82	E	15	
8 00	3.70	E	16	
9 00	3.59	E	17	R. R. T.
10	3.59			S. W. S.
20	3.58			
30	3.57			
40	3.56			
50	3.56L			
10 00	3.56	SE	19	
10	3.57			
20	3.57			
30	3.59			
11 00	3.67	SE	20	
12 00	3.77	ESE	18	
13 00	4.01	ESE	14	
14 00	4.20	SE	14	
15 00	4.22	ESE	12	
10	4.22		1	
20	4.23			
30	4.25			
40	4.26			
50	4.26H			
16 00	4.24	SE	13	
10	4.24			
20	4.23			S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 11, 1904		
h m	*Feet*		*Miles*	
16 30	4.23			S. W. S.
17 00	4.23	ESE	12	
18 00	4.14	E	9	
19 00	3.91	ESE	12	
20 00	3.73	E	14	S. W. S.
21 00	3.59	E	11	W. J. P.
10	3.56			
20	3.55			
30	3.51			
40	3.51			
50	3.50			
22 00	3.48		10	
10	3.47L			
20	3.48			
31	3.49			
40	3.50			
50	3.50			
23 00	3.52		12	
24 00	3.60		4	W. J. P.
		May 12, 1904		
1 00	3.80	ENE	4	R. R. T.
2 00	4.02	Calm	4	R. R. T.
3 00	4.16	Calm	2	J. S. V.
30	4.20	Calm		J. S. V.
40	4.22			J. V.
50	4.24	NW		
4 00	4.26		3	
10	4.26			
20	4.29H			
30	4.27			
40	4.27			
50	4.25			
5 00	4.25	NE	3	
6 00	4.19	NE	2	
7 00	4.00	Calm		
8 00	3.81	E	7	J. V.
9 00	3.62	ESE	10	S. W. S.
40	3.58			
50	3.58			
10 00	3.58	E	6	
10	3.56			
20	3.55L			
30	3.55			
40	3.56			
50	3.56			
11 00	3.58	E	12	
12 00	3.70	E	15	
13 00	3.90	E	24	
14 00	4.17	E	16	
15 00	4.35		18	S. W. S.
16 00	4.50	E	20	R. R. T.
10	4.50			
20	4.50			
30	4.51H			
40	4.50			
50	4.50			
17 00	4.50		18	
10	4.49		1	
18 00	4.43		16	
19 00	4.20	E	21	R. R. T.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 12, 1904		
h m	*Feet*		*Miles*	
20 00	3.93		18	R. R. T.
21 00	3.70		15	
22 00	3.54	E	17	
10	3.53			
20	3.51			
30	3.50			
40	3.50			
50	3.50			
23 00	3.50	ENE	19	
10	3.49L			
20	3.50			
30	3.51			
40	3.51			
50	3.52			
24 00	3.54	NE	16	R. R. T.
		May 13, 1904		
1 00	3.69	NNE	14	R. R. T.
2 00	3.93	NNW	5	
3 00	4.18	SSW	8	
4 00	4.35	WNW	6	
50	4.44			
5 00	4.47	SW	5	
10	4.47			
20	4.48			
30	4.48H			
40	4.47			
50	4.45			
6 00	4.45	NW	5	
10	4.43			R. R. T.
7 00	4.31	NW	3	J. V.
8 00	4.05	NW	4	R. R. T.
9 00	3.89	NNW	3	S. W. S.
10 00	3.78	W	4	
11 00	3.69	W	4	
10	3.68			
20	3.65			
30	3.65L			
40	3.66			
50	3.66			
12 00	3.69	NW	1	
10	3.71			
13 00	3.96	E	5	
14 00	4.22	E	5	
15 00	4.50	E	5	
16 00	4.74	E	4	
50	4.93			
17 00	4.95	SW	3	
10	4.97			
20	4.98			
30	4.98H			
40	4.96			
50	4.94			
18 00	4.92	E	3	
10	4.90			
19 00	4.61	SW	3	
20 00	4.32	W	2	S. W. S.
21 00	4.04	ENE	1	R. R. T.
22 00	3.77	SW	1	
50	3.62			
23 00	3.61	NNW	1	
10	3.60			R. R. T.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 13, 1904			
h m	*Feet*		*Miles*	
23 20	3.59			R. R. T.
30	3.59L			
40	3.59			
50	3.60			
24 00	3.60	ESE	2	R. R. T.
	May 14, 1904			
0 10	3.61			R. R. T.
1 00	3.74	NE	4	
2 00	3.98	NNE	8	
3 00	4.31	NNE	4	
4 00	4.54	NNE	8	
50	4.72			
5 00	4.75	NNE	7	
10	4.79			
20	4.80			
30	4.80			
40	4.80			
50	4.80			
6 00	4.81H	NNE	7	
10	4.81			
20	4.80			
30	4.79			
40	4.79			
7 00	4.73	NNW	8	
8 00	4.51	NNE	5	R. R. T.
9 00	4.21		0	S. W. S.
10 00	4.01	NW	1	
11 00	3.81	NNE	2	
20	3.80	NE		
30	3.80			
40	3.80			
50	3.80			
12 00	3.79L		1	
10	3.80			
20	3.80			
30	3.82			
40	3.84			
13 00	3.91	NNE	0	
14 00	4.13	NNE	17	
15 00	4.43	NNE	16	
16 00	4.61	NNE	17	
17 00	4.89	NNE	17	S. W. S.
20	4.90	NNE		J. V.
30	4.90	NNE		
40	4.93	NNE		
50	4.95	NNE		
18 00	4.95H	NNE	14	
10	4.93			
20	4.90	NNE		
30	4.89	NNE		
40	4.85	NNE		J. V.
19 00	4.78	NNE	18	S. W. S.
20 00	4.50	NNE	19	S. W. S.
21 00	4.12	NNE	19	R. R. T.
22 00	3.81	N	17	
23 00	3.56	NNE	16	
40	3.44			
50	3.44			
24 00	3.43L		15	R. R. T.

Tide gauge reading of B. M. No. 1 is 14.60 feet at 17:20.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 15, 1904			
h m	*Feet*		*Miles*	
0 10	3.45			R. R. T.
20	3.46			
30	3.47			
40	3.47			
1 00	3.50	NNE	21	
2 00	3.70	NNW	20	
3 00	4.06	N	19	
4 00	4.21	NNE	19	
5 00	4.70	N	18	
20	4.73			
30	4.75			
40	4.79			
50	4.81			
6 00	4.82	NNE	19	
10	4.83			
20	4.84			
30	4.86H			
40	4.85			
50	4.84			
7 00	4.82	N	20	
10	4.81			
8 00	4.67	N	21	R. R. T.
9 00	4.30	N	18	S. W. S.
10 00	4.02	N	15	
11 00	3.82	N	18	
50	3.73	N		
12 00	3.72	N	19	
10	3.72			
20	3.70			
30	3.70L			
40	3.70			
50	3.71			
13 00	3.73		22	
10	3.75			
14 00	4.01		22	
15 00	4.41		24	
16 00	4.72		21	
17 00	4.95		20	S. W. S.
18 00	5.06		16	W. J. P.
10	5.08			
20	5.10			
30	5.12			
40	5.13H			
50	5.12			
19 00	5.10		17	W. J. P.
10	5.08			S. W. S.
20	5.03			
30	5.00			S. W. S.
20 00	4.89	N	20	J. V.
21 00	4.53	N	28	
22 00	4.17	N	33	
23 00	3.81	N	29	
24 00	3.61	N	23	J. V.
	May 16, 1904			
0 10	3.59	N		J. V.
20	3.59	N		
30	3.58	N		
40	3.55	N		
50	3.53L	N		
1 00	3.53	N	14	
10	3.55	N		J. V.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 16, 1904		
h m	*Feet*		*Miles*	
1 20	3.59			J. V.
30	3.61	N		
40	3.66	N		
2 00	3.69	N	13	
3 00	3.96	N	13	
4 00	4.32	N	14	
5 00	4.69	N	16	
6 00	4.93	NNE	16	
30	4.97	N		
45	4.99	N		
7 00	4.90H	N	14	
15	4.98	N		
30	4.98	N		
8 00	4.92	N	15	J. V.
9 00	4.64	N	13	S. W. S.
10 00	4.32	N	18	
11 00	4.07	N	20	
12 10	3.82	N	15	
20	3.80			
30	3.80			
40	3.79L			
50	3.80			
13 00	3.80	N	19	
10	3.82			
20	3.82			
14 00	3.91	N	18	
15 00	4.19	NW	19	
16 00	4.59		16	
17 00	4.89		18	S. W. S.
18 00	5.10	NW	17	R. R. T.
10	5.11			
20	5.15			
30	5.18			
40	5.20			
50	5.20H			
19 00	5.20		19	R. R. T.
10	5.19			S. W. S.
20	5.19			
30	5.18	N		
20 00	5.09	N	18	S. W. S.
21 00	4.82	N	16	J. V.
22 00	4.38	N	11	
23 00	4.01	N	14	
24 00	3.70	N	10	J. V.
		May 17, 1904		
1 00	3.58	N	8	J. V.
10	3.57			
20	3.54			
30	3.53			
40	3.53L			
50	3.54			
2 00	3.56	N	6	
10	3.59			
20	3.61			
3 00	3.78		8	
4 00	4.19	NNW	8	
5 00	4.51	N	12	
6 00	4.80	N	11	
7 00	5.01	N	12	
10	5.02	N		J. V.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 17, 1904		
h m	*Feet*		*Miles*	
7 20	5.03			J. V.
30	5.05	N		
50	5.05			
8 00	5.06H	N	13	J. V.
10	5.04			S. W. S.
20	5.03			
30	5.00			
40	4.95			
9 00	4.84	NNW	12	
10 00	4.53	NNW	13	
11 00	4.22	NNW	9	
12 00	3.99		7	
13 00	3.82		8	
10	3.80			
20	3.78			
30	3.75L			
40	3.76			
50	3.77		7	
14 00	3.80		7	
10	3.82			
15 00	4.02		4	
16 00	4.23		6	
17 00	4.67	NE	6	S. W. S.
18 35	4.90	ENE	6	R. R. T.
19 00	5.05			S. W. S.
10	5.07			
20	5.10			
30	5.10H			
40	5.10			
50	5.08			
20 00	5.07	ENE	2	S. W. S.
10	5.05			R. R. T.
21 00	4.90	ENE	5	
22 00	4.63	ENE	8	
23 00	4.10	NE	6	
24 00	3.74	E	5	R. R. T.

Tide gauge reading of B. M. No. 1 is 14.64 feet at 18:00.

		May 18, 1904		
0 50	3.51			S. W. S.
1 00	3.47	E	8	
10	3.44			
20	3.42			
30	3.40			
40	3.39			
50	3.38			
2 00	3.37L	ENE	4	
10	3.38			
20	3.39			
30	3.40			
40	3.41			
3 00	3.49	E	5	
4 00	3.73	NE	5	
5 00	4.12	Calm		
6 00	4.50	N	6	
7 00	4.72			
20	4.77			
30	4.80			
40	4.81			S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 18, 1904			
h m	*Feet*		*Miles*	
7 50	4.83			S. W. S.
8 00	4.87	NNE	10	
10	4.87H			
20	4.87			
30	4.86			
40	4.84			
50	4.83			
9 00	4.81	NNE	10	
10 00	4.63	N	11	
11 00	4.27	NNE	12	
12 00	4.00	NE	11	
13 00	3.80	NE	10	
30	3.71			
40	3.69			
50	3.69			
14 00	3.68	N	10	
10	3.68L			
20	3.69			
30	3.70			
40	3.71			
50	3.71			
15 00	3.72	N	9	
16 00	3.99	NW	9	
17 05	4.35	N	11	
18 00	4.69	N	8	
19 00	4.95	NW	6	
30	4.98			
40	5.00			
50	5.03			
20 00	5.05	NNW	3	S. W. S.
10	5.06			W. J. P.
20	5.09H			
30	5.08			
40	5.08			
50	5.06			
21 00	5.04	W	4	
22 00	4.82	W	1	
23 00	4.42	NE	1	
24 00	4.05	N	7	W. J. P.
	May 19, 1904			
1 00	3.76	N	7	J. V.
30	3.63			
40	3.60			
50	3.58	NW	5	
2 00	3.58			
10	3.55			
20	3.54			
30	3.52			
40	3.50L			
50	3.50			
3 00	3.51	N	4	
10	3.52			
20	3.53			
30	3.59	N		
4 00	3.68	NNE	7	
5 00	4.01	N	11	
6 00	4.37	N	17	
7 00	4.72	NNE	20	
8 00	4.94	NE	23	
10	4.99	NE		J. V.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	May 19, 1904			
h m	*Feet*		*Miles*	
8 20	4.99			J. V.
30	5.04			W. J. P.
40	5.06H			W. J. P.
50	5.04			S. W. S.
9 00	5.04	NE	24	
10	5.02			
20	5.00			
10 00	4.96	NE	21	
11 00	4.61	NE	21	
12 00	4.35	NE	13	
13 05	4.06	N	7	
14 00	3.90	N	14	
10	3.88			
20	3.86			
30	3.84			
40	3.83			
50	3.83L	N		
15 00	3.83	N	16	
10	3.84			
20	3.85			
30	3.85			
16 00	3.90	N	17	
17 00	4.14	N	17	
18 00	4.48	N	18	
19 00	4.76	N	18	
20 00	4.92	N	15	
10	4.93			S. W. S.
20	4.93			R. R. T.
30	4.96			
40	4.99			
50	5.00			
21 00	5.01H	N	17	
10	5.00			
20	5.00			
30	5.00			
40	4.99			
22 00	4.91	N	16	
23 00	4.69	N	14	
24 00	4.27	N	16	R R. T.
	May 20, 1904			
1 00	3.92	N	13	R. R. T.
2 00	3.64	NNE	10	
10	3.58		8	
20	3.54			
30	3.52			
40	3.50			
50	3.50	NW	6	
3 00	3.49			
10	3.49L			
20	3.49			
30	3.50			
40	3.50			
4 00	3.51	NNE	7	
5 00	3.71	NNW	7	
6 00	4.04	NNW	7	
7 00	4.36	NW	7	
8 00	4.63	N	7	R. R. T.
40	4.77	NNW		S. W. S.
50	4.80			
9 00	4.82	NE	7	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 20, 1904		
h m	*Feet*		*Miles*	
9 10	4.85			S. W. S.
20	4.87			
30	4.87			
40	4.88			
50	4.88H			
10 00	4.87	N	10	
10	4.85			
20	4.84			
30	4.82			
11 00	4.76	NNE	4	
12 00	4.47	NNE	14	
13 00	4.20		17	
14 00	3.95	NE	16	
15 00	3.80	NE	12	
10	3.79			
20	3.79			
30	3.78			
40	3.77L			
50	3.78			
16 00	3.78	NE	7	
10	3.79			
20	3.81			
17 00	3.92	NNE	8	
18 00	4.18	NNE	8	
19 05	4.35	NNE	5	
20 00	4.69	NNE	3	S. W. S.
21 03	4.80			W. J. P.
10	4.85			
20	4.86			
30	4.87			
40	4.88			
50	4.88H			W. J. P.
22 00	4.88	ENE	4	R. R. T.
10	4.88			
20	4.87			
30	4.81			
23 00	4.72	E	7	
24 00	4.49	E	8	R. R. T.
		May 21, 1904		
1 00	4.14	ESE	9	R. R. T.
2 00	3.86	ENE	9	
3 00	3.61	E	9	
10	3.60			
20	3.59			
30	3.59			
40	3.58			
50	3.56			
4 00	3.54L	E	9	
10	3.56			
20	3.56			
30	3.57			
40	3.59			
5 00	3.62	E	13	
6 00	3.85	E	11	
7 00	4.10	E	15	
8 00	4.42	SE	13	R. R. T.
9 00	4.64	SE	9	S. W. S.
30	4.76			
40	4.78			
50	4.79			S. W. S.

Local time mean	Reading of tide staff	Wind direction	Velocity	Observer
		May 21, 1904		
h m	*Feet*		*Miles*	
10 00	4.79	NNE	8	S. W. S.
10	4.80H			
20	4.79			
30	4.78			
40	4.78			
50	4.77			
11 00	4.77	NE	21	
12 00	4.68	NE	27	
13 00	4.44	NE	25	
14 00	4.25	NE	29	
15 00	3.92		24	
30	3.82			
40	3.81			
50	3.80			
16 00	3.79	NE	12	
10	3.78			
20	3.78L			
30	3.78			
40	3.78			
50	3.79			
17 00	3.79	E	9	
18 00	3.87	ENE	10	
19 00	4.13	E	11	
20 00	4.35	E	9	S. W. S.
21 00	4.54	ENE	3	J. V.
22 00	4.67	E	12	
10	4.68	E		
20	4.69	E		
30	4.69	NE		
40	4.70			
50	4.71H			
23 00	4.70	NE	12	
10	4.69			
20	4.67			
30	4.63			
24 00	4.58	NE	11	J. V.
		May 22, 1904		
1 00	4.36	ENE	12	J. V.
2 00	4.05	ENE	11	
3 00	3.80		11	
4 00	3.63	ENE	11	
20	3.62			
30	3.60			
40	3.59			
50	3.60			
5 00	3.60	ENE	9	
10	3.58L			
20	3.60			
30	3.60			
40	3.63			
50	3.63			
6 00	3.66	E	9	J. V.
7 00	3.87	ENE	11	R. R. T.
8 00	4.20	ENE	8	S. W. S.
9 00	4.39	ENE	15	
10 00	4.60	NE	20	
30	4.69			
40	4.71			
50	4.73			
11 00	4.74	NE	24	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 22, 1904		
h m	*Feet*		*Miles*	
11 10	4.76			S. W. S.
20	4.77			
30	4.77H			
40	4.76			
50	4.76			
12 00	4.74	NE	31	
13 00	4.61	NE	34	
14 00	4.42	NE	31	
15 00	4.18	NE	35	
16 00	3.98	NE	38	
17 00	3.86	NE	39	
10	3.84			
20	3.82			
30	3.82L			
40	3.86			
50	3.86			
18 00	3.90	NE	37	
19 00	3.98	NE	41	
20 00	4.21		39	S. W. S.
21 00	4.38	NE	40	J. V.
22 00	4.54	NE	38	
23 00	4.60	NE	38	
50	4.62			
24 00	4.63		38	J. V.
		May 23, 1904		
0 10	4.64	NE		J. V.
20	4.66			
30	4.68H			
40	4.67			
50	4.67			
1 00	4.65	NE	42	
10	4.65			
25	4.62			
30	4.58	NE		
2 00	4.39	NE	45	
3 00	4.16	NE	45	
4 00	3.95	NNE	43	
5 00	3.82	NNE	44	
30	3.77			
40	3.75			
50	3.72			
6 00	3.72	NNE	38	
10	3.72L			
20	3.72			
30	3.73			
40	3.74			
50	3.76			
7 00	3.77	ENE	33	
8 00	3.97	ENE	28	J. V.
9 00	4.18	NNE	28	S. W. S.
10 00	4.48	W	21	
11 00	4.56	N	13	
40	4.63			
50	4.65			
12 05	4.66	NNE	10	
10	4.66H			
20	4.66			
30	4.65			
40	4.65			
50	4.64			S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 23, 1904		
h m	*Feet*		*Miles*	
13 00	4.64	NNE	12	S. W. S.
14 00	4.58	NNE	14	
15 00	4.36	NNE	16	
16 00	4.16	NNE	17	
17 00	3.96	NNE	18	
10	3.94			
20	3.90			
30	3.88			S. W. S.
40	3.83			R. R. T.
50	3.80			
18 00	3.79	NNE	12	
10	3.79			
20	3.76			
30	3.72l,			
40	3.73			
50	3.73			
19 00	3.74	NE	24	
10	3.75			
20 00	3.81	NNE	23	R. R. T.
21 00	3.96	NNE	31	S. W. S.
22 00	4.15	NNE	30	J. V.
23 00	4.29	NNE	23	
24 00	4.44		27	J. V.

Tide gauge reading of B. M. No. 1 is 14.67 feet at 13:00.

		May 24, 1904		
1 00	4.50	NNE	20	J. V.
10	4.51			
20	4.52			
30	4.53H			
40	4.51			
50	4.50	NE	35	
2 00	4.49		38	
3 00	4.29	NNE	28	
4 00	4.30	NNE	31	
5 00	3.90	NNE	25	
6 00	3.76	NNE	17	
30	3.70	N		
40	3.67	N		
50	3.66			
7 00	3.65	N	19	
10	3.65L			
20	3.66			
30	3.66			
40	3.66			
50	3.68			
8 00	3.71	NNE	8	J. V.
9 00	3.81	NNE	10	S. W. S.
10 00	4.03	NNE	11	
11 00	4.35	NNE	9	
12 00	4.49	NNE	9	
30	4.52			
40	4.54			
50	4.56			
13 00	4.59	NNE	11	
10	4.60H			
20	4.59			
30	4.59			
50	4.58			S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 24, 1904		
h m	*Feet*		*Miles*	
14 00	4.57	NE	13	S. W. S.
15 00	4.51		15	
16 00	4.31		15	
17 00	4.06		12	
18 00	3.91		12	
30	3.79			S. W. S.
40	3.74			W. J. P.
50	3.70			
19 00	3.68	NE		
10	3.67	Calm		
20	3.65			
30	3.63			
40	3.61			
50	3.58			
20 00	3.56		10	
10	3.56			
20	3.56			
30	3.56L			
40	3.57			W. J. P.
50	3.57			R. R. T.
21 00	3.59	NE	9	
10	3.59			
20	3.60			
30	3.61			
22 00	3.70	NE	6	
23 00	3.89	ENE	6	
24 00	4.08	E	4	R. R. T.
		May 25, 1904		
0 30	4.13			R. R. T.
40	4.19			
50	4.21			
1 00	4.26	E	4	
10	4.27			
20	4.28			
30	4.28			
40	4.29			
50	4.30			
2 00	4.30	ESE	4	
10	4.30			
20	4.31			
30	4.31H			
40	4.30			
50	4.30			
3 00	4.30	E	5	
10	4.30			
20	4.29			
30	4.28			
40	4.25			
4 00	4.20	NE	4	
5 00	4.00	ESE	2	
6 00	3.76	SE	3	
7 00	3.60	ESE	8	
50	3.50			
8 00	3.49	SE	9	
10	3.49			R. R. T.
20	3.45			S. W. S.
30	3.45L			S. W. S.
40	3.46			J. V.
50	3.47			J. V.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 25, 1904		
h m	*Feet*		*Miles*	
9 00	3.47	ESE	12	S. W. S.
10	3.49			
10 00	3.59	SE	11	
11 05	3.83	SE	13	
12 04	4.09	SE	14	
13 00	4.26	SE	14	
14 00	4.39	SE	14	
10	4.41			
20	4.43			
30	4.45			
40	4.47			
50	4.48H			
15 00	4.47		17	
10	4.47			
20	4.46			
30	4.45			
16 00	4.40	SE	18	
17 00	4.20	SE	16	
18 00	3.95	SE	16	
19 00	3.69	SSE	17	
20 00	3.48	S	16	
10	3.45			
20	3.42			
30	3.39			S. W. S.
40	3.36			J. V.
50	3.34			
21 00	3.31L	S	15	
10	3.31			
20	3.33			
30	3.34			
40	3.34			
50	3.35			
22 00	3.37	S	17	
23 00	3.50	S	17	
24 00	3.73	S	17	J. V.
		May 26, 1904		
1 00	3.78	S	17	J. V.
2 00	4.21	S	16	
20	4.26			
30	4.27			
40	4.29			
50	4.30			
3 00	4.31	S	14	
10	4.32			
20	4.32			
30	4.35			
40	4.35			
50	4.39H			
4 00	4.38	S	13	
10	4.36			
20	4.33			
30	4.32			
5 00	4.24	S	14	
6 00	3.98	S	14	
7 00	3.83	S	15	
8 00	3.65	S	16	J. V.
9 00	3.54	SSE	16	S. W. S.
10	3.54			
20	3.53			
30	3.53L			S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 26, 1904		
h m	*Feet*		*Miles*	
9 40	3.55			S. W. S.
50	3.55			
10 00	3.58	SE	15	
10	3.59			
11 00	3.72	SE	17	
12 04	3.96	SSE	16	
13 00	4.24	SE	16	
14 00	4.52	SE	16	
15 00	4.73	SE	14	
10	4.75			
20	4.76			
30	4.77			
40	4.78			
50	4.79			
16 00	4.79H	S	14	
10	4.79			
20	4.78			
30	4.78			
40	4.77	SE	12	
17 00	4.73	SE	12	
18 07	4.50	SE		
19 00	4.20	SE	13	
20 00	3.92	SE	12	S. W. S.
21 00	3.69	SE	12	R. R. T.
20	3.63			
30	3.61			
40	3.60			
50	3.58			
22 00	3.54	ESE	13	
10	3.53L			
22	3.54			
30	3.55			
40	3.57			
50	3.59		12	
23 00	3.59	ESE	13	
24 00	3.71		13	R. R. T.
		May 27, 1904		
1 00	4.00	ESE	11	R. R. T.
2 00	4.31	SE	12	
3 00	4.57	E	13	
30	4.68			
40	4.70			
50	4.71		15	
4 00	4.71	ENE		
10	4.73			
20	4.78			
30	4.78			
40	4.80			
50	4.80H			
5 00	4.80	E	20	
10	4.79			
20	4.79			
30	4.77			
6 00	4.70	E	20	
7 00	4.42	NE	22	
8 00	4.18	E	23	R. R. T.
9 00	3.92	E	21	S. W. S.
10 00	3.81	E	24	
10	3.79			
20	3.78			S. W. S.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 27, 1904		
h m	*Feet*		*Miles*	
10 30	3.78			S. W. S.
40	3.78L			
50	3.78			
11 00	3.79	E	23	
10	3.79			
20	3.81			
12 06	4.00	ESE	21	
13 00	4.25	E	21	
14 00	4.56	E	23	
15 00	4.82	E	23	
16 00	4.99	E	22	
10	5.01			
20	5.03			
30	5.04			
40	5.04			S. W. S.
50	5.01			J. V.
17 00	5.05		22	W. J. P.
10	5.05H			J. V.
20	5.02			W. J. P.
30	5.02			J. V.
40	5.00			W. J. P.
50	4.98			J. V.
18 00	4.95	E	17	W. J. P.
10	4.91			J. V.
19 00	4.64		15	S. W. S.
20 00	4.34		17	S. W. S.
21 00	3.94		14	R. R. T.
22 00	3.69	ESE	10	
10	3.63			
20	3.61			
30	3.60			
40	3.57			
50	3.55			
23 00	3.52	SE	8	
10	3.52L			
20	3.53			
30	3.53			
40	3.53			
50	3.56			
24 00	3.59	SE	7	R. R. T.
		May 28, 1904		
1 00	3.79	SE	6	R. R. T.
2 00	4.11	SSE	6	
3 00	4.41	S	6	
4 00	4.69		8	
30	4.80			
40	4.83			
50	4.87			
5 00	4.88	SW	5	
10	4.90			
20	4.91			
30	4.91H			
40	4.91			
50	4.90			
6 00	4.89		3	
10	4.86			
7 00	4.74	SSW	6	
8 00	4.42	SE	4	R. R. T.
9 00	4.14	S	6	S. W. S.
10 00	3.92	SE	6	S. W. S.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 28, 1904		
h m	*Feet*		*Miles*	
11 02	3.80	SE	4	S. W. S.
10	3.79			
20	3.78			
30	3.78			
40	3.77			
50	3.77L			
12 00	3.77	SE		
10	3.79	Calm		
20	3.79			
30	3.81			
13 00	3.92	SE	1	
14 00	4.28	SE	5	
15 00	4.70	SE	7	
16 00	5.01	SE	10	
17 00	5.22	SE	12	
10	5.24			
20	5.25			
30	5.27			
40	5.27			S. W. S.
50	5.28H			J. V.
18 00	5.27	SE	12	
10	5.23			
20	5.20			
30	5.20			
40	5.18			
50	5.12		16	
19 00	5.10	SE		J. V.
20 00	4.72	SE	16	S. W. S.
21 00	4.35	SE	15	R. R. T.
22 00	4.00	ESE	15	
23 00	3.75	SE	19	
10	3.71			
20	3.69			
30	3.66			
40	3.61			
50	3.61L			
24 00	3.61	E	17	R. R. T.
		May 29, 1904		
0 10	3.61			R. R. T.
20	3.62			
30	3.65			
1 00	3.71	ESE	14	
2 00	4.00	E	16	
3 00	4.39	ESE	18	
4 00	4.78	E	20	
5 00	5.03	ENE	22	
10	5.08			
20	5.10			
30	5.13			
40	5.18			
50	5.20			
6 00	5.20	ESE	25	
10	5.20			
20	5.20H			
30	5.20			
40	5.20			
50	5.19			
7 00	5.17	E	18	
10	5.14		12	
8 00	4.96	SE	7	R. R. T.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 29, 1904		
h m	*Feet*		*Miles*	
9 00	4.60	SE	7	S. W. S.
10 00	4.26	SE	7	
11 00	4.06	SE	8	
40	3.96	SE		
50	3.94			
12 00	3.92	SE		
10	3.92L			
20	3.92			
30	3.93			
40	3.96			
50	3.98			
13 00	4.01	SSE	13	
14 00	4.20	SSE	16	
15 00	4.60	SE	14	
16 00	4.93	SSE	11	
17 00	5.20	SE	7	
10	5.23			
20	5.26			
30	5.30			S. W. S.
40	5.30			W. J. P.
50	5.35			
18 00	5.36	Calm		
10	5.36H			
20	5.36			
30	5.35			
40	5.35			
50	5.35			
19 00	5.31		2	
10	5.29			
20	5.26			
20 00	5.06		1	W. J. P.
21 00	4.66	E	3	J. V.
22 00	4.25	E	9	
23 00	3.88	E	13	
20	3.82			
30	3.80			
40	3.75			
50	3.70			
24 00	3.68	E	16	J. V.

Tide gauge reading of B. M. No. 1 at 9:00 is 14.69 feet.

		May 30, 1904		
0 00	3.68	E	1	J. V.
10	3.66			
20	3.64			
30	3.62			
40	3.62L			
50	3.64			
1 00	3.66	E	16	
10	3.67			
20	3.69			
2 00	3.81	S	7	
3 00	4.11	ESE	9	
4 00	4.59	ESE	7	
5 00	4.91	SW	4	
50	5.14			
6 00	5.15	SW	2	
10	5.18	Calm		
20	5.20			J. V.

Tabulation of tidal observations at Teplits Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 30, 1904		
h m	*Feet*		*Miles*	
6 30	5.22			J. V.
40	5.22			
50	5.23	ESE		
7 00	5.23			
10	5.25			
20	5.27H			
30	5.24			
40	5.22			
50	5.20			
8 00	5.19	WSW	9	J. V.
9 00	4.88	W	9	S. W. S.
10 00	4.49	W	9	
11 00	4.20	W	9	
12 00	4.00	W	9	
40	3.92			
50	3.92	W		
13 00	3.92		8	
20	3.92L			
30	3.93			S. W. S.
40	3.95			R. R. T.
50	3.97			R. R. T.
14 00	4.00	W	8	S. W. S.
15 00	4.25	SSW	8	
16 00	4.67	W	7	
17 00	5.02	SW	8	
18 00	5.25	SW	12	
40	5.34			
50	5.36			
19 00	5.36	W	14	
10	5.36			
20	5.36H			
30	5.34			S. W. S.
40	5.30			R. R. T.
50	5.28			S. W. S.
20 00	5.25	SW	13	
21 00	4.90	SW	14	S. W. S.
22 00	4.46	S	14	J. V.
23 00	4.05	S	14	
24 00	3.73		13	J. V.
		May 31, 1904		
0 20	3.65			J. V.
30	3.62			
40	3.60			
50	3.59			
1 00	3.57	SSW	12	
10	3.54			
20	3.53			
30	3.53L			
40	3.53			
50	3.55			
2 00	3.58	SSW	13	
10	3.60			
20	3.61			
30	3.63			
3 15	3.82	SSW	11	
4 00	4.12	SSW	12	
5 00	4.56	SSW	1	
50	4.81			
6 00	4.83	SSW	12	J. V.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
		May 31, 1904		
h m	*Feet*		*Miles*	
6 10	4.90			J. V.
20	4.91			
30	4.93			
40	4.98			
50	5.00			
7 00	5.05		10	
10	5.07			
20	5.12			
30	5.12H			
40	5.11			
50	5.10			
8 00	5.09	SSW	11	
10	5.07			J. V.
9 00	4.94	SW	10	S. W. S.
10 04	4.61	SW	10	
11 00	4.30	SW	8	
12 00	4.04	SW	6	
40	3.90			
13 00	3.87			
10	3.84			
20	3.82			
30	3.82L			
40	3.83			
50	3.84			
14 00	3.85	SSW	7	
10	3.86			
15 00	3.96		9	
16 00	4.32	SSE	4	
17 00	4.69	S	4	
18 00	4.91	SW	1	
40	5.07			
50	5.09			
19 00	5.10	SW	3	
10	5.10			
20	5.14			
30	5.14H			
40	5.13			
50	5.13			
20 00	5.10	SSE	1	
10	5.10			S. W. S.
21 00	5.00		3	W. J. P.
22 00	4.66		4	
23 00	4.25		2	W. J. P.
24 00	3.97	NE	3	R. R. T.

At 4:00 ice pressure about three-quarters of a mile from shore, southeast to northwest direction.

		June 1, 1904		
0 50	3.63			R. R. T.
1 00	3.60	Calm		
10	3.58			
20	3.54			
30	3.51			
40	3.51			
50	3.50			
2 00	3.49	WNW	2	
10	3.49L			
20	3.50			
30	3.51			R. R. T.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	June 1, 1904			
h m	*Feet*		*Miles*	
2 40	3.52			R. R. T.
50	3.55			
3 00	3.58		1	
4 00	3.83	SE	1	
5 00	4.21	E	4	
6 00	4.59	E	4	
7 00	4.80	ENE	3	
30	4.91			
40	4.93			
50	4.96			
8 00	4.98	E	3	
10	4.99			
20	5.00H			R. R. T.
30	4.98			S. W. S.
40	4.99			
50	4.98			
9 00	4.97	E	7	
10 03	4.71	E	6	
11 00	4.40	E	6	
12 00	4.09		6	
13 00	3.83	E	5	
40	3.75			
50	3.73			
14 00	3.71	NE	8	
10	3.71			
20	3.70L			
30	3.72			
40	3.73			
50	3.75			
15 00	3.77	NE	10	
16 00	3.98	NE	10	
17 00	4.33	ENE	12	
18 00	4.69	E	6	
19 00	4.84	ESE	4	
40	4.95			
50	4.97			
20 00	4.98	W	4	
10	4.99H			S. W. S.
20	4.98			J. V.
30	4.99			
40	4.99			
50	4.98			
21 00	4.97	E	3	
10	4.94			
20	4.90			
22 00	4.78	N	3	
23 00	4.39	NE	9	
24 00	3.97	NE	7	J. V.
	June 2, 1904			
1 00	3.68	NE	7	J. V.
50	3.54			
2 00	3.53	NE	11	
10	3.52			
20	3.51			
30	3.50			
40	3.49L			
50	3.49			
3 00	3.51	NE	14	
10	3.53			J. V.

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
	June 2, 1904			
h m	*Feet*		*Miles*	
3 20	3.54			J. V.
30	3.55			
4 00	3.64	SE	16	
5 00	4.00	NE	10	
6 00	4.40	NE	7	
7 00	4.70	NNE	7	
8 00	4.90	S	25	
10	4.94			
20	4.97			
30	4.99			J. V.
40	4.99H			S. W. S.
50	4.99			
9 00	4.98	E	20	
10	4.98			
20	4.96			
10 00	4.93	E	6	
11 00	4.67	E	10	
12 00	4.39	E	28	
13 00	4.12	E	26	
14 00	3.99		32	
10	3.97			
20	3.95			
30	3.93			
40	3.92			
50	3.92L			
15 00	3.93	E	33	
10	3.93			
20	3.94			
30	3.94			
16 00	3.98	E	26	
17 00	4.24	E	30	
18 00	4.54		12	
19 00	4.86		21	
20 00	4.97		16	
10	4.99			
20	4.99			
30	5.00	E		S. W. S.
40	5.01			R. R. T.
50	5.01			
21 00	5.02	E	15	
10	5.05H			
20	5.04			
30	5.02			
40	5.01			
50	5.00			
22 00	4.97	E	22	
23 00	4.69	E	24	
24 00	4.33	E	20	R. R. T.
	June 3, 1904			
1 00	4.01		12	R. R. T.
2 00	3.79	ENE	23	
30	3.70			
40	3.69			
50	3.68			
3 00	3.66	E	27	
10	3.64L			
20	3.66			
30	3.67			
40	3.70			
50	3.70			R. R. T.

Tabulation of tidal observations at Teplitz Bay, Rudolph Island

Local mean time	Reading of tide staff	Wind direction	Velocity	Observer	Local mean time	Reading of tide staff	Wind direction	Velocity	Observer
June 3, 1904					June 3, 1904				
h m	*Feet*		*Miles*		*h m*	*Feet*		*Miles*	
4 00	3.71	E	23	R. R. T.	15 20	3.95L			S. W. S.
5 00	3.90	ENE	21		30	3.96			
6 00	4.19	NE	23		40	3.96			
7 00	4.55	NE	10		50	3.97			
8 00	4.76	ENE	7		16 00	3.98	E	4	
30	4.84			R. R. T.	17 03	4.08	E	3	
40	4.88			S. W. S.	18 01	4.27	ESE	3	
50	4.91			R. R. T.	19 00	4.56	ESE	9	
9 00	4.94	SE	7	S. W. S.	20 00	4.78	ESE	9	
10	4.96				50	4.87			
20	4.96H				21 00	4.88	ESE	14	
30	4.95				10	4.88			
40	4.93				20	4.88H			
50	4.92				30	4.88			
10 00	4.90	N	7		40	4.87			
11 00	4.82	S	3		50	4.87			
12 00	4.56	ESE	3		22 00	4.87	E	15	
13 00	4.28	NE	4		10	4.86			
14 00	4.06	SE	4		20	4.84			
40	3.00				30	4.83			S. W. S.
50	3.99								
15 00	3.99	ESE	5		Tide gauge reading of B. M. No. 1 at 9:00 is 14.70 feet.				
10	3.98			S. W. S.					

Reduced Readings

After adjusting the foregoing original readings of the tide staves to a uniform datum, both series were plotted on profile paper, and irregularities due to storms or mistakes were smoothed out. The smoothed curves were completed so as to fill small gaps in the record, and were then tabulated as hourly heights of the sea and also as high and low waters, the readings being cut down to tenths of feet, as shown in the following tables of hourly heights of the sea.

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean

May and June, 1904

Day of month....	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	*(6.1)	6.0	5.8	5.4	5.1	5.0	5.3	5.6	5 9	6.1	6.2	6.3	6.4	6.4	6.2	5.9
1	(6.2)	6.2	6 0	5.6	5.1	4.9	5.2	5.3	5.6	5.7	5.9	6.1	6.3	6.4	6.3	6.1
2	(6.3)	6.3	6.2	5.7	5.2	4.9	5.1	5.1	5.4	5.5	5.6	5.8	6.0	6.2	6.2	6.1
3	(6.2)	6.3	6.3	5.9	5.4	5.1	5.2	5.0	5.2	5.3	5.3	5.4	5.7	6.0	6.1	6.0
4	(6.0)	6.2	6.3	6.0	5.6	5.4	5.4	5.2	5.3	5.2	5.1	5.3	5.5	5.7	5.9	5.9
5	(5.9)	6.0	6.1	6.1	5 8	5.6	5.7	5.5	5.5	5.2	5.1	5.1	5.4	5.6	5.6	5.7
6	(5.7)	5.8	6.0	6.1	5.9	5.8	6.0	5 8	5.8	5.5	5.2	5 2	5.3	5.4	5.5	5.6
7	(5.5)	5.6	5.9	6.0	5.9	6.0	6.3	6.1	6.2	5.8	5.6	5.4	5.4	5.4	5.4	5.5
8	(5.5)	5.5	5.7	5.8	5.8	6.1	6.4	6.4	6.5	6.2	5.9	5.7	5.6	5.6	5.5	5.4
9	5.6	5.6	5.6	5.6	5.6	6.0	6.4	6.6	6.7	6.5	6.3	6.0	6.0	5.8	5.6	5.5
10	5.9	5.7	5.6	5.5	5.5	5.8	6.2	6.6	6.8	6.7	6.6	6.4	6.3	6.0	5.9	5.7
11	6.2	5.9	5.7	5.5	5.4	5.6	6.0	6.4	6.7	6.8	6.8	6.7	6.6	6.3	6.1	5.9
Noon	6.4	6.2	5.9	5.6	5.3	5.5	5.8	6.2	6 4	6.7	6.8	6.8	6.7	6.6	6.3	6.1
13	6.6	6.5	6.1	5.7	5.3	5.4	5.7	5.9	6.2	6.4	6.6	6.7	6.8	6.7	6.5	6.3
14	6.7	6.7	6.3	5.9	5.5	5.5	5.6	5.8	6.0	6.1	6.3	6.4	6.6	6.6	6.6	6.4
15	6.6	6.7	6.4	6.0	5.7	5.6	5.6	5.7	5.8	5.9	6 0	6.1	6.4	6.4	6.4	6.4
16	6.4	6.6	6.4	6.2	5.9	5.8	5.8	5.9	5.8	5.7	5 8	5.9	6.1	6.2	6.2	6.3
17	6.2	6.4	6.3	6.3	6.0	6.0	6.0	6.0	5.9	5.7	5.7	5.7	5.9	6.0	6.0	6.1
18	6.0	6.2	6.2	6.2	6.1	6.2	6.1	6.2	6.1	5.8	5.6	5.6	5.8	5.8	5.9	5.9
19	5.8	6.0	6.0	6.0	6.0	6.3	6.3	6 4	6.3	5.9	5.8	5.6	5.7	5.7	5.7	5.8
20	5.7	5.8	5.8	5.8	5.9	6.2	6.4	6.6	6.5	6.1	6.0	5.8	5.8	5.7	5.6	5.6
21	5.6	5.7	5.6	5.5	5.6	6.0	6.3	6 7	6.6	6.3	6.2	6.0	5.9	5.7	5.6	5.5
22	5.7	5.6	5.4	5.3	5.3	5.8	6.1	6.5	6.6	6.4	6.4	6.2	6.1	5.9	5.7	5.5
23	5.9	5.7	5.3	5.2	5.1	5.6	5.9	6.2	6.5	6.4	6.4	6.3	6.3	6.1	5.8	5.6

*The values in parentheses are interpolated.

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

June, 1904

Day of month....	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	5.7	5.5	5.2	5.2	5.4	5.5	5.6	5.7	6.1	6.4	6.5	6.6	6.6	6.2	6.1	5.8
1	5.9	5.6	5.3	5.2	5.4	5.4	5.5	5.5	5.8	6.1	6.2	6.4	6.5	6.4	6.2	6.1
2	6.0	5.7	5.4	5.4	5.4	5.3	5.3	5 3	5.6	5.8	5.8	6.1	6.3	6.3	6.3	6.3
3	6.0	5 8	5.5	5.6	5.6	5.4	5.3	5.2	5.5	5.6	5.6	5 8	6.0	6.1	6.2	6.4
4	5.9	5.8	5.7	5.7	5.8	5.6	5.5	5.4	5.5	5.5	5.4	5.5	5.7	5.8	6.1	6.4
5	5.8	5.8	5.7	5.9	6.0	5.9	5.7	5.6	5.6	5.5	5.2	5.3	5.5	5.6	6.0	6.3
6	5.7	5.7	5.7	6.0	6.2	6.2	6 0	5.8	5.9	5.8	5.3	5.3	5.4	5.5	5.8	6.1
7	5.6	5.6	5.6	6.0	6.3	6.4	6.3	6.2	6.2	6.1	5.6	5.4	5.4	5.3	5.6	5.9
8	5.5	5.5	5.6	5 9	6.3	6.5	6.5	6.5	6.6	6.4	5 9	5.7	5.6	5.3	5.5	5.8
9	5.5	5.4	5.5	5.8	6 2	6.5	6.6	6.7	6.9	6.7	6.3	6 1	5.9	5.5	5.6	5.7
10	5.5	5.4	5.4	5.8	6.1	6 4	6 5	6.7	7.0	6.9	6.6	6.4	6.2	5.8	5.7	5.8
11	5 7	5.5	5 4	5.7	6.0	6.3	6.4	6.6	6 9	7.0	6.8	6.8	6.5	6.1	6.0	5.9
Noon	5.9	5.6	5.5	5.7	5.9	6.1	6.2	6 4	6.8	6.9	6.9	6.9	6.8	6.4	6.3	6 1
13	6.1	5.7	5.6	5.7	5.9	6.0	6.0	6.2	6.5	6.7	6.7	6.9	6.9	6.6	6.6	6.4
14	6.2	5.9	5.8	5.9	5.9	5.9	5.9	6.1	6.3	6.4	6.4	6.7	6.7	6.7	6 7	6.6
15	6.3	6.0	5.9	6.0	6.0	6.0	5.8	6.0	6.2	6.2	6.2	6 3	6.5	6.6	6.7	6.7
16	6.2	6.0	6.0	6.1	6.1	6.1	5.9	6.0	6.1	6.0	5.9	6.1	6.2	6.3	6.6	6.7
17	6.1	6.0	6.1	6.2	6.2	6.2	6.1	6.1	6.1	5.9	5.8	5.8	5.9	5.9	6.3	6.6
18	5.9	5.8	6.0	6.3	6.3	6.4	6.2	6.4	6.3	6.0	5.7	5.6	5.6	5.7	6.0	6.3
19	5.7	5.7	5.9	6.2	6.3	6.5	6.4	6.5	6.5	6.2	5.8	5.6	5.5	5.5	5.8	6.0
20	5.6	5 5	5.7	6.1	6.3	6.5	6.5	6.6	6.7	6.3	6.0	5.7	5.5	5.4	5.6	5.8
21	5.5	5.4	5.6	5.9	6.1	6.3	6.4	6.7	6.8	6.5	6.2	5.9	5.7	5.4	5.5	5 6
22	5.4	5.2	5.4	5 7	5.9	6.1	6.3	6.7	6.8	6.6	6.4	6.2	5.9	5.6	5.5	5.5
23	5.4	5.2	5.3	5.5	5.7	5.9	6.0	6.4	6.7	6.7	6.6	6.4	6.1	5.8	5.6	5.4

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

June and July, 1904

Day of month....	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	5.6	5.4	5.2	5.2	5.4	5.7	6.1	6.3	6.7	6.9	6.5	6.3	6.3	6.0	5.9	5.9
1	5.8	5.5	5.2	5.1	5.3	5.5	5.8	6.1	6.4	6.8	6.5	6.4	6.4	6.2	6.0	6.1
2	6.0	5.7	5.3	5.1	5.2	5.3	5.6	5.8	6.2	6.5	6.3	6.4	6.4	6.3	6.1	6.3
3	6.2	5.9	5.5	5.3	5.2	5.2	5.4	5.7	6.0	6.2	6.1	6.2	6.3	6.3	6.2	6.4
4	6.4	6.1	5.8	5.6	5.4	5.3	5.4	5.5	5.8	6.0	5.8	6.0	6.1	6.2	6.2	6.5
5	6.4	6.3	6.0	5.9	5.7	5.6	5.5	5.6	5.7	5.9	5.7	5.8	5.9	6.0	6.1	6.5
6	6.3	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.8	5.8	5.6	5.7	5.8	5.9	6.0	6.5
7	6.2	6.3	6.3	6.3	6.3	6.2	6.1	6.0	6.0	6.0	5.6	5.6	5.8	5.8	5.9	6.4
8	6.1	6.2	6.2	6.4	6.5	6.4	6.4	6.4	6.3	6.2	5.7	5.7	5.7	5.8	5.9	6.4
9	5.9	6.0	6.1	6.3	6.5	6.7	6.7	6.7	6.6	6.5	6.1	5.9	5.9	5.8	5.9	6.3
10	5.8	5.9	5.9	6.2	6.4	6.8	6.9	7.0	6.9	6.8	6.4	6.2	6.1	6.0	5.9	6.3
11	5.9	5.8	5.8	6.0	6.3	6.6	6.9	7.1	7.2	7.1	6.6	6.5	6.3	6.1	6.1	6.4
Noon	6.0	5.8	5.7	5.9	6.1	6.4	6.7	7.0	7.1	7.1	6.8	6.7	6.5	6.4	6.3	6.5
13	6.2	5.9	5.7	5.7	5.9	6.2	6.5	6.8	7.0	7.0	6.9	6.9	6.7	6.5	6.5	6.6
14	6.4	6.0	5.8	5.7	5.8	6.0	6.3	6.5	6.8	6.8	6.8	6.8	6.8	6.6	6.6	6.8
15	6.5	6.2	6.0	5.8	5.7	5.9	6.1	6.3	6.5	6.5	6.5	6.6	6.7	6.6	6.6	6.9
16	6.6	6.3	6.1	6.0	5.8	5.9	6.0	6.2	6.3	6.3	6.2	6.4	6.5	6.5	6.6	6.9
17	6.6	6.4	6.2	6.1	6.0	6.0	5.9	6.1	6.2	6.1	6.0	6.1	6.2	6.3	6.5	6.8
18	6.4	6.4	6.3	6.2	6.2	6.2	6.1	6.1	6.2	5.9	5.8	5.9	6.0	6.1	6.3	6.7
19	6.1	6.2	6.3	6.3	6.3	6.3	6.2	6.3	6.2	5.8	5.7	5.8	5.8	5.9	6.2	6.5
20	5.9	6.0	6.2	6.4	6.4	6.5	6.4	6.5	6.4	5.9	5.7	5.7	5.7	5.7	6.0	6.3
21	5.7	5.7	5.9	6.2	6.4	6.6	6.6	6.7	6.6	6.1	5.9	5.8	5.7	5.6	5.9	6.1
22	5.5	5.4	5.6	6.0	6.2	6.5	6.6	6.8	6.8	6.3	6.1	5.9	5.8	5.6	5.8	6.0
23	5.4	5.3	5.4	5.7	6.0	6.3	6.5	6.8	6.9	6.4	6.2	6.0	5.9	5.7	5.8	5.9

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

July, 1904

Day of month....	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	6.0	5.8	5.8	5.9	6.0	6.2	6.5	6.7	6.9	7.1	(6.8)	6.4	5.9	5.7	5.6	5.6
1	6.0	5.8	5.7	5.8	5.8	6.0	6.2	6.4	6.7	6.9	(6.8)	6.6	6.2	5.9	5.8	5.6
2	6.1	6.0	5.7	5.6	5.6	5.7	5.9	6.1	6.4	6.7	(6.6)	6.7	6.4	6.2	6.0	5.8
3	6.4	6.1	5.9	5.7	5.6	5.6	5.7	5.8	6.2	6.5	(6.5)	6.5	6.4	6.3	6.2	6.1
4	6.5	6.4	6.1	6.0	5.7	5.6	5.6	5.6	5.9	6.2	(6.3)	6.3	6.4	6.4	6.4	6.4
5	6.6	6.5	6.3	6.3	6.0	5.8	5.7	5.6	5.7	6.0	(6.1)	6.1	6.2	6.3	6.5	6.5
6	6.7	6.6	6.6	6.5	6.4	6.2	6.0	5.7	5.7	5.9	(5.9)	6.0	5.9	6.2	6.5	6.6
7	6.6	6.7	6.7	6.8	6.8	6.5	6.3	6.0	5.9	6.0	(5.8)	5.8	5.8	6.1	6.5	6.7
8	6.5	6.6	6.8	6.9	7.0	6.9	6.7	6.4	6.3	6.3	(5.9)	5.7	5.8	6.0	6.3	6.6
9	6.5	6.6	6.7	6.9	7.1	7.1	7.0	6.8	6.7	*(6.6)	6.2	5.9	5.7	6.0	6.2	6.5
10	6.4	6.5	6.7	6.9	7.2	7.2	7.2	7.1	7.0	(6.9)	6.5	6.1	5.8	5.9	6.2	6.4
11	6.4	6.4	6.5	6.7	7.0	7.2	7.2	7.3	7.3	(7.2)	6.8	6.4	6.0	6.0	6.2	6.4
Noon	6.5	6.3	6.4	6.6	6.8	6.9	7.1	7.3	7.4	(7.3)	7.1	6.6	6.3	6.2	6.2	6.3
13	6.6	6.3	6.3	6.5	6.6	6.7	6.8	7.1	7.3	(7.4)	7.2	6.8	6.5	6.4	6.3	6.3
14	6.7	6.4	6.3	6.4	6.4	6.5	6.5	6.8	7.0	(7.2)	7.2	6.9	6.7	6.6	6.5	6.4
15	6.7	6.5	6.4	6.3	6.3	6.3	6.3	6.5	6.7	(6.9)	6.9	6.8	6.8	6.7	6.7	6.5
16	6.8	6.6	6.5	6.4	6.4	6.2	6.1	6.2	6.4	(6.6)	6.6	6.6	6.6	6.7	6.8	6.6
17	6.8	6.7	6.6	6.5	6.5	6.3	6.1	6.1	6.3	(6.4)	6.3	6.3	6.4	6.6	6.8	6.8
18	6.8	6.7	6.7	6.7	6.7	6.5	6.3	6.1	6.2	(6.2)	6.0	6.0	6.1	6.4	6.7	6.8
19	6.6	6.6	6.8	6.8	6.8	6.6	6.4	6.2	6.2	(6.0)	5.8	5.7	5.9	6.1	6.5	6.8
20	6.4	6.4	6.7	6.8	6.9	6.8	6.7	6.5	6.3	(6.0)	5.7	5.6	5.6	5.9	6.2	6.6
21	6.2	6.2	6.5	6.7	6.9	6.9	6.8	6.7	6.5	(6.1)	5.8	5.4	5.5	5.8	6.0	6.4
22	6.1	6.0	6.3	6.5	6.7	6.9	6.9	6.9	6.8	(6.3)	6.0	5.6	5.4	5.6	5.9	6.2
23	5.9	5.9	6.1	6.3	6.5	6.8	6.9	7.0	7.0	(6.6)	6.2	5.7	5.5	5.5	5.8	6.0

* The values in parentheses are interpolated.

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

July and August, 1904

Day of month....	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	5.9	6.0	6.1	6.2	6.5	6.6	6.7	6.5	6.4	6.4	6.6	6.6	6.1	5.9	5.6	5.7
1	5.9	5.8	5.9	6.0	6.2	6.3	6.4	6.4	6.4	6.6	6 8	6.8	6.3	6.1	5.8	5.7
2	6.0	5 8	5.8	5.8	6.0	6.1	6.1	6.2	6.2	6.5	6.8	6.9	6.6	6.3	6.0	5.8
3	6.1	5 9	5.8	5.7	5.8	5.9	5.9	5.9	6.0	6.3	6.7	6.8	6.7	6.4	6.1	6.0
4	6.3	6.0	5.9	5.7	5.7	5.8	5.7	5.7	5.8	6.2	6.5	6.7	6.6	6.5	6.2	6.2
5	6.6	6.2	6.1	5.9	5.7	5.7	5.6	5.6	5.7	6.1	6.4	6.6	6.5	6.5	6.3	6.4
6	6.8	6.5	6.4	6.2	6.0	5.8	5.7	5.5	5.6	5.9	6.3	6.5	6.5	6.5	6.4	6.5
7	7.0	6.8	6.7	6.5	6.3	6.1	5.9	5.6	5.6	5.9	6.2	6.4	6.4	6.5	6.4	6.6
8	7.1	6.9	7.0	6.8	6.6	6.4	6.2	5.8	5.8	6.0	6.3	6.3	6.4	6.3	6.4	6.7
9	7.0	7.0	7.1	7.0	6.9	6.7	6.5	6.1	6.0	6.2	6.4	6.3	6.3	6.2	6.3	6.6
10	6.9	6.9	7.1	7.1	7.1	7.0	6.8	6.4	6.3	6.5	6.7	6.4	6.4	6.2	6 2	6.5
11	6.8	6.8	7.0	7.1	7.1	7.2	6.9	6.7	6.6	6.7	6.9	6.6	6.6	6.1	6.0	6.4
Noon	6.6	6.6	6.8	6.9	7.0	7.1	7.0	6.8	6.8	6.9	7.1	6.8	6.7	6.2	6.0	6.3
13	6.5	6.4	6.6	6.7	6.8	6.9	6.8	6.7	6.8	7.0	7.2	6.9	6.8	6.4	6.2	6.3
14	6.5	6.3	6.4	6.5	6.5	6.6	6.6	6.5	6.7	6.9	7.2	7.0	6.9	6.5	6.3	6.4
15	6 6	6.3	6.3	6.3	6.3	6.3	6.3	6.2	6.5	6.8	7.1	7.0	6.9	6.6	6.4	6.5
16	6.7	6.4	6.2	6 2	6.1	6.1	6 0	6.0	6.2	6.5	6.9	6.8	6.8	6.6	6.5	6.6
17	6.8	6.6	6.3	6.2	6.0	6.0	5.9	5.8	6.0	6.2	6.6	6.6	6.7	6.5	6.5	6.7
18	6.9	6.7	6.4	6.3	6 1	6.0	5.8	5.6	5.8	6.1	6.4	6.4	6.4	6.4	6.4	6.7
19	6.9	6.8	6.6	6.5	6.3	6.1	5.8	5.6	5.7	6.0	6.2	6.2	6.2	6.2	6.3	6.6
20	6.8	6.8	6.7	6.7	6.5	6.3	6.0	5.8	5.8	5.9	6.1	6.0	6.0	6 0	6.1	6.5
21	6.7	6.8	6.8	6.8	6.6	6.5	6.2	5.9	5.9	6.0	6.1	5.8	5.8	5.8	6.0	6.3
22	6.4	6.6	6.7	6.8	6.7	6.6	6.4	6.1	6.1	6.2	6.2	5.8	5.8	5.7	5.8	6.1
23	6.2	6.4	6.4	6.7	6.8	6.7	6.5	6.3	6.3	6.4	6.4	6.0	5.8	5.6	5 7	5.9

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

August, 1904

Day of month....	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	5.7	5.7	5.5	5.9	6.2	6 0	6.0	6 0	6.0	5.8	5.7	5.4	5.3	5.4	5.3	5.3
1	5.7	5 5	5.2	5.6	5 8	5.8	6.0	6.1	6.1	6.1	6.0	5.7	5.4	5.4	5.2	5.2
2	5 7	5.4	5.0	5 3	5.5	5.4	5.7	6.0	6.2	6.2	6.1	5.9	5.5	5.5	5.2	5.0
3	5.9	5.4	5.0	5.0	5.2	5 2	5.3	5.6	6.1	6.3	6.3	6.0	5.7	5.6	5.3	5 0
4	6.1	5.6	5.2	4.9	5.1	4.9	5.0	5.4	5.8	6.2	6.3	6.1	5.9	5.8	5.5	5.2
5	6 3	5.9	5.4	5.2	5.1	4.8	4.9	5.2	5.6	6.0	6.3	6.2	6.1	6 0	5.7	5.4
6	6.5	6.2	5.6	5.5	5.3	4.9	4.8	5.1	5.5	5.8	6.1	6.2	6.2	6.2	6.0	5 7
7	6.6	6.4	6.0	5.8	5.6	5.0	5.0	5.0	5.4	5.7	5.9	6.1	6.2	6.3	6.1	6.0
8	6.7	6.5	6.3	6.2	5 9	5 5	5.2	5.1	5.4	5.6	5.8	6.0	6.1	6.3	6.2	6.1
9	6.7	6.6	6.5	6.4	6.2	5.9	5.6	5.4	5.6	5.7	5.8	5.9	6.0	6.2	6.2	6.3
10	6.6	6.5	6.6	6.6	6.5	6.2	5.9	5.8	5.8	5 8	5.8	5.8	5.9	6.0	6.0	6.2
11	6.4	6.4	6.4	6.5	6.5	6.3	6.2	6.1	6.1	6.0	5.9	5.9	5.8	5.9	5.9	6.0
Noon	6.3	6.2	6.1	6.2	6 4	6.3	6.4	6.3	6.3	6.2	6.0	6.0	5.8	5.8	5.7	5.8
13	6.2	6.0	5.9	5.9	6 1	6.1	6.3	6.4	6.5	6 4	6.2	6.1	5.8	5.7	5.6	5.6
14	6.1	5.8	5.7	5.6	5.7	5.7	6.0	6.3	6.5	6.5	6.3	6.2	5.9	5.7	5.4	5.5
15	6.2	5.7	5.5	5.4	5.3	5.3	5 6	6.0	6.3	6.5	6.4	6.3	6.0	5.7	5.4	5.4
16	6.3	5.8	5.5	5.2	5.2	5.0	5.2	5.6	6.0	6.3	6.3	6.3	6.1	5.8	5.5	5.4
17	6.4	5.9	5.7	5.3	5.0	4.8	5.0	5.3	5.7	6.1	6.2	6.3	6.2	6.0	5.7	5.5
18	6.5	6.1	5.8	5.5	5.0	4.6	4.8	5.0	5.4	5.8	6.0	6.1	6.2	6.0	5.8	5.7
19	6.5	6.2	6.1	5.7	5.2	4.8	4.7	4.9	5 2	5.6	5.7	5.9	6.1	6.1	5.9	5.8
20	6 5	6.2	6.3	6.0	5.5	5.0	4.9	4.9	5.1	5.4	5.5	5.7	5.9	6.0	6.0	6.0
21	6.4	6.2	6.4	6.2	5.8	5.3	5.2	5.1	5.1	5.2	5.4	5.5	5.7	5.9	5.9	6.1
22	6.2	6.1	6.4	6.3	6.0	5.6	5.5	5.4	5.3	5.3	5.3	5.4	5.6	5.6	5.7	6.0
23	5.9	5.8	6.2	6.3	6.0	5.9	5.8	5.7	5.6	5 5	5.3	5.3	5.5	5.4	5.5	5.8

Hourly heights of tide, Cape Flora, Franz Josef Archipelago, Arctic Ocean—Concluded

August and September, 1904

Day of month .	25	26	27	28	29	30	31	1	2
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	5.5	5.9	6.2	6.3	6.3	6.2	6.1	6.2	(6.0)
1	5.3	5.7	5.9	6.0	6.1	6.1	6.1	*(6.2)	(6.2)
2	5.2	5.5	5.7	5.8	5.9	5.9	5.9	(6.1)	(6.2)
3	5.1	5.4	5.5	5.6	5.6	5.6	5.8	(5.9)	(6.1)
4	5.2	5.3	5.4	5.5	5.4	5.5	5.6	(5.7)	(5.9)
5	5.4	5.4	5.4	5.4	5.3	5.4	5.5	(5.5)	(5.7)
6	5.6	5.8	5.7	5.4	5.4	5.3	5.4	(5.4)	(5.5)
7	5.9	6.1	5.9	5.7	5.6	5.5	5.4	(5.4)	(5.4)
8	6.2	6.3	6.2	6.0	5.8	5.6	5.6	(5.5)	(5.4)
9	6.3	6.5	6.5	6.2	6.0	5.8	5.8	(5.7)	(5.5)
10	6.4	6.6	6.7	6.5	6.2	6.1	6.0	(5.9)	(5.7)
11	6.3	6.6	6.8	6.6	6.4	6.3	6.2	(6.0)	(5.9)
Noon	6.1	6.4	6.6	6.6	6.5	6.4	6.4	(6.2)	(6.1)
13	5.9	6.2	6.3	6.4	6.3	6.3	6.4	(6.4)	(6.2)
14	5.6	5.9	6.0	6.0	6.0	6.1	6.3	(6.4)	(6.4)
15	5.5	5.7	5.8	5.7	5.7	5 8	6.1	(6.2)	(6.4)
16	5.5	5.6	5.6	5.5	5.5	5.5	5.8	(6.0)	(6.1)
17	5.6	5.6	5.5	5.4	5.3	5.3	5.6	(5 7)	(5.8)
18	5.7	5.7	5.6	5.3	5.2	5.2	5.4	(5.4)	(5.6)
19	5.9	5.9	5.8	5.5	5.3	5.2	5.4	(5.3)	(5.4)
20	6.1	6.1	6.0	5.7	5.5	5.3	5.5	(5.3)	(5.3)
21	6.3	6.2	6.2	5.9	5.7	5.6	5.7	(5.5)	(5 4)
22	6.3	6.4	6.3	6.0	5.9	5.8	5.9	(5.7)	(5.5)
23	6.1	6.4	6.4	6.2	6.0	6.0	6.0	(5.9)	(5.7)

* The values in parentheses are interpolated.

Hourly heights of tide, Teplitz Bay, Franz Josef Archipelago, Arctic Ocean

April, 1904

Day of month....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	*(3.0)	3.2	3.6	3.9	4.2	4.5	4.5	4.4	4.2	4.2	4.2	4.0	4.0	3.9	3.7	3.9
1	(2.9)	3.0	3.3	3.6	3.9	4.2	4.2	4.2	4.2	4.3	4.3	4.2	4.2	4.0	3.8	3.8
2	(3.0)	3.0	3.1	3.4	3.7	3.8	3.9	4.0	4.1	4.3	4.4	4.3	4.4	4.3	4.0	3.9
3	(3.4)	3.3	3.3	3.3	3.5	3.6	3.7	3.8	4.0	4.2	4.5	4.5	4.6	4.5	4.4	4.2
4	(3.8)	3.7	3.5	3.5	3.6	3.5	3.6	3.7	3.9	4.1	4.5	4.6	4.7	4.8	4.7	4.7
5	(4.2)	4.1	4.0	3.8	3.8	3.6	3.6	3.6	3.7	3.9	4.4	4.6	4.8	5.0	4.9	5.0
6	(4.5)	4.5	4.4	4.2	4.2	3.8	3.6	3.5	3.6	3.8	4.2	4.4	4.8	5.0	5.1	5.2
7	(4.7)	4.7	4.7	4.5	4.6	4.0	3.8	3.6	3.6	3.8	4.1	4.3	4.6	4.9	5.0	5.2
8	(4.7)	4.7	4.9	4.7	4.9	4.3	4.0	3.8	3.7	3.7	4.0	4.1	4.5	4.7	4.9	5.1
9	(4.4)	4.6	4.8	4.8	5.0	4.5	4.1	3.9	3.8	3.8	3.9	3.9	4.2	4.4	4.6	4.8
10	(4.1)	4.2	4.5	4.7	4.9	4.6	4.3	4.1	3.9	3.8	3.9	3.8	4.1	4.1	4.2	4.4
11	(3.8)	3.7	4.1	4.4	4.7	4.5	4.4	4.2	4.0	4.0	4.0	3.8	4.0	4.0	4.0	4.1
Noon	(3.5)	3.4	3.7	4.1	4.3	4.4	4.4	4.2	4.1	4.1	4.1	3.9	4.0	3.9	3.9	3.9
13	(3.2)	3.2	3.5	3.7	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.1	4.1	4.0	3.9	3.8
14	(3.2)	3.2	3.3	3.4	3.8	3.9	4.0	4.1	4.2	4.4	4.4	4.3	4.3	4.2	4.1	3.9
15	(3.5)	3.4	3.4	3.3	3.6	3.7	3.8	4.0	4.1	4.4	4.5	4.5	4.6	4.5	4.4	4.2
16	(4.0)	3.7	3.7	3.5	3.7	3.6	3.7	3.9	4.0	4.4	4.6	4.7	4.8	4.7	4.7	4.5
17	4.5	4.2	4.0	3.7	3.9	3.7	3.6	3.8	3.9	4.3	4.6	4.7	4.9	4.9	5.0	4.8
18	4.7	4.5	4.4	4.1	4.2	3.8	3.7	3.7	3.8	4.2	4.5	4.6	4.9	5.0	5.2	5.0
19	4.8	4.8	4.8	4.5	4.5	4.1	3.8	3.8	3.8	4.1	4.3	4.4	4.8	4.9	5.2	5.1
20	4.8	4.9	5.0	4.8	4.8	4.3	4.0	3.9	3.8	4.0	4.1	4.2	4.5	4.7	5.1	4.9
21	4.5	4.7	5.0	4.9	4.9	4.5	4.2	4.0	3.8	4.0	4.0	4.0	4.2	4.4	4.8	4.6
22	4.0	4.4	4.7	4.9	4.9	4.6	4.3	4.1	3.9	4.0	3.9	3.9	4.1	4.0	4.4	4.3
23	3.5	3.9	4.3	4.6	4.8	4.6	4.4	4.2	4.0	4.1	3.9	3.9	3.9	3.8	4.1	3.9

*The values in parentheses are interpolated.

Hourly heights of tide, Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Continued

April, 1904

Day of month....	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	3.6	4.0	3.9	4.2	4.5	4.4	4.4	4.3	4.1	3.9	3.7	3.5	3.2	2.9
1	3.5	3.7	3.6	3.9	4.1	4.1	4.1	4.2	4.2	4.0	4.0	3.7	3.2	2.9
2	3.5	3.7	3.4	3.8	3.9	3.9	3.9	4.1	4.2	4.2	4.2	4.0	3.5	3.2
3	3.8	3.8	3.4	3.7	3.8	3.7	3.7	3.9	4.1	4.2	4.4	4.3	3.9	3.5
4	4.2	4.1	3.6	3.8	3.8	3.6	3.5	3.7	3.9	4.2	4.4	4.4	4.2	4.0
5	4.5	4.5	3.9	4.1	3.9	3.6	3.4	3.6	3.8	4.1	4.4	4.5	4.5	4.3
6	4.8	4.9	4.2	4.4	4.2	3.8	3.4	3.5	3.6	3.9	4.2	4.4	4.4	4.5
7	5.0	5.1	4.5	4.8	4.5	4.0	3.6	3.5	3.5	3.7	4.0	4.3	4.3	4.5
8	5.0	5.2	4.6	5.0	4.7	4.3	3.8	3.6	3.5	3.5	3.8	4.0	4.1	4.4
9	4.8	5.1	4.6	5.2	4.9	4.5	4.0	3.8	3.5	3.4	3.6	3.7	3.7	4.0
10	4.5	4.9	4.5	5.1	5.0	4.5	4.2	4.0	3.7	3.5	3.4	3.5	3.4	3.6
11	4.2	4.5	4.2	4.8	4.8	4.6	4.3	4.1	3.9	3.7	3.5	3.4	3.2	3.3
Noon	4.0	4.2	3.9	4.5	4.6	4.4	4.3	4.2	4.0	3.9	3.7	3.5	3.1	3.1
13	3.8	4.0	3.6	4.3	4.3	4.2	4.2	4.3	4.2	4.1	4.0	3.7	3.2	3.1
14	3.8	3.9	3.5	4.1	4.1	4.0	4.1	4.2	4.3	4.3	4.2	4.0	3.5	3.4
15	4.0	3.9	3.5	4.0	3.9	3.8	3.9	4.1	4.3	4.4	4.5	4.3	3.9	3.7
16	4.3	4.2	3.6	4.0	3.9	3.7	3.7	3.9	4.2	4.4	4.6	4.6	4.2	4.1
17	4.7	4.5	4.0	4.3	4.0	3.6	3.6	3.8	4.0	4.3	4.6	4.7	4.5	4.4
18	5.0	4.8	4.4	4.5	4.2	3.7	3.6	3.7	3.8	4.2	4.5	4.7	4.6	4.6
19	5.1	5.0	4.7	4.8	4.4	3.9	3.7	3.6	3.6	3.9	4.2	4.4	4.5	4.7
20	5.2	5.1	4.9	5.0	4.6	4.1	3.8	3.6	3.5	3.7	3.9	4.0	4.2	4.5
21	5.0	5.0	4.9	5.1	4.7	4.4	4.0	3.7	3.4	3.5	3.6	3.6	3.9	4.2
22	4.6	4.7	4.8	5.0	4.8	4.5	4.2	3.9	3.5	3.5	3.4	3.4	3.4	3.8
23	4.3	4.2	4.5	4.8	4.7	4.5	4.3	4.0	3.7	3.6	3.4	3.1	3.1	3.5

Hourly heights of tide, Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Continued

May, 1904

Day of month....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	3.1	3.6	3.9	4.2	4.4	4.4	4.4	4.2	4.1	4.0	3.8	3.6	3.6	3.6	3.4	3.6
1	3.0	3.4	3.6	3.9	4.1	4.2	4.2	4.1	4.2	4.1	4.0	3.8	3.7	3.8	3.5	3.5
2	3.1	3.3	3.4	3.7	3.8	3.9	3.9	4.0	4.1	4.1	4.1	4.0	4.0	4.0	3.7	3.7
3	3.3	3.5	3.5	3.6	3.7	3.7	3.7	3.8	4.0	4.1	4.1	4.2	4.2	4.3	4.0	4.0
4	3.8	3.8	3.7	3.7	3.7	3.6	3.6	3.7	3.8	4.0	4.2	4.3	4.4	4.6	4.3	4.3
5	4.2	4.3	4.1	3.9	3.8	3.6	3.5	3.6	3.7	3.9	4.1	4.3	4.5	4.8	4.6	4.7
6	4.5	4.6	4.5	4.3	4.1	3.8	3.6	3.5	3.6	3.8	4.0	4.2	4.5	4.8	4.8	4.9
7	4.7	4.9	4.7	4.6	4.3	4.0	3.7	3.6	3.6	3.7	3.8	4.0	4.3	4.7	4.8	5.0
8	4.7	5.0	4.9	4.9	4.6	4.2	3.9	3.7	3.6	3.6	3.7	3.8	4.1	4.5	4.7	4.9
9	4.4	4.9	5.0	5.0	4.8	4.4	4.1	3.9	3.7	3.6	3.6	3.6	3.9	4.2	4.3	4.6
10	4.1	4.5	4.8	5.0	4.8	4.6	4.2	4.0	3.8	3.7	3.6	3.6	3.8	4.0	4.0	4.3
11	3.7	4.2	4.5	4.8	4.8	4.6	4.3	4.1	3.9	3.8	3.7	3.6	3.7	3.9	3.8	4.1
Noon	3.5	3.9	4.1	4.5	4.6	4.5	4.3	4.2	4.1	4.0	3.8	3.7	3.7	3.8	3.7	3.9
13	3.3	3.7	3.9	4.2	4.3	4.3	4.2	4.3	4.2	4.1	4.0	3.9	4.0	3.9	3.7	3.8
14	3.4	3.7	3.7	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.0	3.9
15	3.7	3.8	3.7	3.9	3.9	3.9	3.9	4.1	4.2	4.3	4.3	4.4	4.5	4.4	4.4	4.2
16	4.1	4.1	3.9	4.0	3.8	3.8	3.8	4.0	4.1	4.2	4.3	4.5	4.8	4.6	4.7	4.6
17	4.5	4.4	4.2	4.2	4.0	3.7	3.7	3.8	4.0	4.1	4.2	4.5	5.0	4.9	4.9	4.9
18	4.8	4.7	4.5	4.4	4.1	3.8	3.6	3.7	3.9	3.9	4.1	4.4	4.9	5.0	5.1	5.1
19	5.0	5.0	4.8	4.7	4.3	4.0	3.7	3.7	3.7	3.8	3.9	4.2	4.6	4.8	5.1	5.3
20	5.0	5.1	5.0	4.9	4.5	4.2	3.8	3.8	3.6	3.6	3.7	4.0	4.3	4.5	4.9	5.1
21	4.7	5.0	5.0	5.0	4.7	4.3	4.0	3.9	3.7	3.6	3.6	3.7	4.1	4.1	4.5	4.8
22	4.3	4.7	4.9	5.0	4.7	4.4	4.1	4.0	3.8	3.6	3.5	3.6	3.8	3.8	4.2	4.4
23	3.9	4.4	4.6	4.8	4.6	4.5	4.2	4.1	3.9	3.7	3.5	3.5	3.6	3.6	3.8	4.0

Hourly heights of tide, Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Concluded

May, 1904

Day of month....	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Hours	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*	*Feet*
0	3.7	3.7	4.0	4.2	4.4	4.5	4.6	4.4	4.0	3.7	3.6	3.4	3.5	3.6	3.7
1	3.6	3.4	3.7	3.9	4.1	4.3	4.6	4.5	4.2	3.9	3.9	3.7	3.6	3.6	3.5
2	3.5	3.3	3.5	3.6	3.8	4.0	4.3	4.4	4.3	4.2	4.2	4.0	3.9	3.8	3.5
3	3.8	3.5	3.5	3.4	3.6	3.7	4.1	4.2	4.2	4.3	4.5	4.3	4.3	4.1	3.8
4	4.2	3.7	3.7	3.5	3.5	3.6	3.9	4.0	4.1	4.3	4.7	4.6	4.7	4.5	4.1
5	4.5	4.1	4.0	3.7	3.6	3.5	3.8	3.8	3.9	4.2	4.7	4.8	5.0	4.9	4.5
6	4.8	4.5	4.3	4.0	3.8	3.6	3.7	3.7	3.7	4.0	4.6	4.8	5.1	5.1	4.8
7	5.0	4.7	4.7	4.3	4.0	3.8	3.7	3.6	3.5	3.8	4.4	4.7	5.1	5.2	5.0
8	5.0	4.8	4.9	4.6	4.3	4.1	3.9	3.6	3.4	3.6	4.1	4.4	4.9	5.1	5.1
9	4.8	4.8	5.0	4.8	4.6	4.3	4.1	3.8	3.4	3.5	3.9	4.1	4.5	4.8	4.9
10	4.5	4.6	4.9	4.8	4.7	4.6	4.3	4.0	3.5	3.5	3.7	3.9	4.2	4.5	4.6
11	4.2	4.2	4.6	4.7	4.7	4.7	4.5	4.2	3.8	3.7	3.7	3.7	4.0	4.1	4.3
Noon	4.0	4.0	4.3	4.4	4.6	4.7	4.6	4.4	4.0	3.9	3.9	3.7	3.9	4.0	4.0
13	3.8	3.8	4.0	4.2	4.4	4.6	4.6	4.5	4.2	4.2	4.2	3.8	3.9	3.9	3.8
14	3.8	3.6	3.9	3.9	4.2	4.4	4.5	4.5	4.3	4.5	4.5	4.2	4.1	4.0	3.8
15	4.0	3.7	3.8	3.8	3.9	4.1	4.3	4.4	4.4	4.7	4.8	4.6	4.5	4.2	3.9
16	4.3	4.0	3.9	3.7	3.7	3.9	4.1	4.2	4.3	4.7	4.9	4.9	4.9	4.6	4.3
17	4.5	4.3	4.1	3.9	3.7	3.8	3.9	4.0	4.1	4.7	5.0	5.2	5.1	5.0	4.6
18	4.8	4.6	4.4	4.1	3.8	3.8	3.7	3.8	3.9	4.5	4.8	5.2	5.3	5.2	4.9
19	5.0	4.9	4.7	4.4	4.1	3.9	3.7	3.6	3.6	4.2	4.6	5.0	5.2	5.3	5.1
20	5.1	5.0	4.9	4.6	4.3	4.1	3.8	3.5	3.4	3.9	4.2	4.6	5.0	5.2	5.1
21	4.9	5.0	5.0	4.8	4.5	4.3	3.9	3.5	3.2	3.6	3.9	4.3	4.6	4.9	5.0
22	4.5	4.8	4.9	4.8	4.6	4.5	4.1	3.6	3.3	3.5	3.6	3.9	4.2	4.4	4.6
23	4.1	4.4	4.6	4.7	4.7	4.6	4.2	3.8	3.4	3.5	3.4	3.7	3.8	4.0	4.2

REDUCTION OF TIDES

The above hourly heights of the sea were discussed by the harmonic analysis, the process being essentially similar to that outlined by Prof. George H. Darwin, in the report of the British Association for the Advancement of Science, for the year 1883, and hence not necessary to reproduce here. The amplitudes (H) or semi-ranges of the components expressed in feet, and their epochs (κ) or component-tidal intervals expressed in degrees, as given in the table, have been corrected by a process for eliminating the small residual effect of one component upon another.

HARMONIC CONSTANTS

Cape Fiora.—Results from 104½ days, May 21, 0h to September 2, 11h, 1904, mean local civil time.

Symbol	Name of component	Speed per solar hour	Amplitude H	Epoch κ
		°	*Feet*	°
A_0	Mean sea level on tide staff No. 1..	.....	6.076	...
K_1	Luni-solar diurnal.....	15.0410686	0.224	29.9
K_2	Luni-solar semidiurnal.....	30.0821374	0.039	333.3
L_2	Smaller lunar elliptic semidiurnal..	29.5284788	0.015	296.8
M_2	Principal lunar series.....	28.9841042	0.435	278.8
M_4	Principal lunar series.....	57.9682084	0.006	189.3
M_6	Principal lunar series.....	86.9523126	0.008	161.8
N_2	Larger lunar elliptic semidiurnal...	28.4397296	0.083	245.1
O_1	Lunar diurnal.....	13.9430356	0.073	47.3
P_1	Solar diurnal.....	14.9589314	0.074	29.9
S_2	Principal solar semidiurnal.....	30.0000000	0.145	333.3
μ_2	Variational.....	27.9682084	0.010	224.4
ν_2	Larger lunar evectional.....	28.5125830	0.016	249.6

Teplitz Bay.—Results from 58 days, April 1, oh to May 28, 23h, 1904, mean local civil time, to which is added the results obtained by the expedition of the Duke of Abruzzi, 1899–1900, as taken from the scientific results of his polar expedition, published in Milan, 1903.

Symbol	Ziegler Expedition		Duke of Abruzzi	
	Amplitude H	Epoch κ	Amplitude H	Epoch κ
	Feet	°	*Feet*	°
A_0	4.133	.....	1.407	.....
K_1	0.101	25.6	0.092	11.3
K_2	0.056	229 2	0.049	230.0
L_2	0.019	197.1	.....	.....
M_2	0.509	178 0	0.472	168.4
M_4	0.005	356.7	.....	.....
M_6	0.004	264.5	.....	.....
N_2	0.097	154.8	.....	.....
O_1	0.042	49.2	0.052	354.4
P_1	0.033	25.6	0.030	11.3
S_2	0.208	229.2	0.174	230.0
μ_2	0.012	126.9	.....	.....
ν_2	0.019	157.9	.....	.....

The tides discussed by the Duke of Abruzzi consisted of three short series—September 19 to October 17, 1899, March 16 to April 3, 1900, and June 3 to 27, 1900. The record was very defective, especially for the first series, where only a few readings were obtained on most days. The values given above are the corrected mean results, taken from his published report without change, other than converting meters into feet and minutes into tenths of degrees. For the most part there is a very satisfactory agreement between the results of the two analyses.

Lunitidal Intervals

The tide follows the moon much more closely than it does the sun, so that there is a tendency for the tide to occur when the moon is in a given position in the heavens. The difference between the time of tide and the time of the moon's transit or meridian passage is called the *lunitidal interval* for the station. Both upper and lower transits of the moon are usually compared with the time of the first high water and first low water which follows the given transit; hence we may express the operation as follows:

High-water lunitidal interval = HWI = Time of H.W — ☽'s transit (1)

Low-water lunitidal interval = LWI = Time of L.W — ☽'s transit (2)

The purpose of the tabulation given below, called "First Reduction," is to compute the lunitidal intervals for high and low waters, and also to find the mean range of tide and mean half-tide level. In this work the moon's transits have been reduced to the meridians of the stations, so that all the work is expressed in local time.

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
May 21	(4 59)	[1 55]	[7 35]	9 24	(2 36)	[6.3]	[5.5]
	17 26	13 55	21 05	(8 56)	3 39	6.7	5.6
22	(5 54)	2 43	8 22	9 17	(2 28)	6.3	5.5
	18 21	14 40	21 55	(8 46)	3 34	6.7	5.6
23	(6 47)	3 22	9 37	9 01	(2 50)	6.3	5.6
	19 13	15 27	22 50	(8 40)	3 37	6.4	5.3
24	(7 39)	5 23	10 35	10 10	(2 56)	6.1	5.5
	20 05	17 10	.. ..	(9 31)	.. ..	6.3	..
25	(8 30)	6 25	0 13	10 20	4 08	5.9	5.1
	20 56	18 15	12 45	(9 45)	(4 15)	6.1	5.3
26	(9 22)	7 53	1 12	10 57	4 16	6.1	4.9
	21 48	19 21	13 28	(9 59)	(4 06)	6.3	5.4
27	(10 14)	8 33	2 27	10 45	4 39	6.4	5.1
	22 41	20 10	14 32	(9 56)	(4 18)	6.4	5.6
28	(11 07)	9 35	2 57	10 54	4 16	6.6	5.0
	23 34	20 40	15 00	(9 33)	(3 53)	6.7	5.7
29	.. ..	10 10	3 07	10 36	3 33	6.8	5.2
	(12 00)	21 55	15 34	(9 55)	(3 34)	6.6	5.8
30	0 27	10 52	4 20	10 25	3 53	6.8	5.2
	(12 53)	22 36	16 45	(9 43)	(3 52)	6.5	5.7
31	1 19	11 30	4 50	10 11	3 31	6.8	5.1
	(13 45)	23 10	17 48	(9 25)	(4 03)	6.4	5.6
June 1	2 11	.. ..	5 32	.. ..	3 21	..	5.1
	(14 36)	12 15	18 24	10 04	(3 48)	6.8	5.6
2	3 00	0 00	6 00	(9 24)	3 00	6.4	5.3
	(15 24)	12 42	18 57	9 42	(3 33)	6.8	5.7
3	3 49	0 30	6 36	(9 06)	2 47	6.4	5.4
	(16 12)	13 10	19 52	9 21	(3 40)	6.7	5.7
4	4 34	1 08	7 28	(8 56)	2 54	6.3	5.4
	(16 57)	13 48	20 44	9 14	(3 47)	6.6	5.6
5	5 18	1 22	8 00	(8 25)	2 42	6.1	5.4
	(17 40)	14 30	21 55	9 12	(4 15)	6.4	5.5
Number of observations.....				31	31	31	31
Half monthly sums				283 993	95 1004	200.0	168.0

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*Feet*	*Feet*
June 6	6 01	2 55	9 05	(9 15)	3 04	6.0	5.5
	(18 23)	15 12	22 18	9 11	(3 55)	6.3	5.4
7	6 44	4 00	9 41	(9 37)	2 57	5.8	5.4
	(19 06)	16 21	23 05	9 37	(3 59)	6.0	5.2
8	7 27	5 28	10 43	(10 22)	3 16	5.8	5.4
	(19 49)	16 57	.. ..	9 30	.. ...	6.1	..
9	8 12	6 30	0 08	(10 41)	(4 19)	6.0	5.2
	(20 34)	18 02	12 17	9 50	4 05	6.3	5.7
10	8 57	7 43	1 07	(11 09)	(4 33)	6.3	5.4
	(21 21)	19 00	13 33	10 03	4 36	6.3	5.8
11	9 46	8 30	1 45	(11 09)	(4 24)	6.5	5 3
	(22 11)	19 25	14 10	9 39	4 24	6.5	5.9
12	10 38	9 00	2 35	(10 49)	(4 24)	6.6	5.3
	(23 05)	20 25	15 00	9 47	4 22	6.5	5.8
13	11 32	9 33	2 55	(10 28)	(3 50)	6.8	5.2
	.. ..	21 21	15 48	9 49	4 16	6.7	6.0
14	(0 00)	9 59	3 30	(9 59)	(3 30)	7.0	5.5
	12 28	21 32	16 21	9 04	3 53	6.8	6.1
15	(0 58)	10 50	4 25	(9 52)	(3 27)	7.0	5.5
	13 27	22 45	17 12	9 18	3 45	6.7	5.9
16	(1 56)	11 58	5 20	(10 02)	(3 24)	6.9	5.2
	14 25	23 33	17 54	9 08	3 29	6.6	5.7
17	(2 53)	.. ..	5 52	.. ..	(2 59)	..	5.3
	15 21	12 18	18 40	(9 25)	3 19	6.9	5.6
18	(3 49)	0 30	6 35	9 09	(2 46)	6.6	5.4
	16 16	13 05	19 30	(9 16)	3 14	6.9	5 5
19	(4 44)	1 14	7 32	8 58	(2 48)	6.4	5.3
	17 10	14 00	20 35	(9 16)	3 25	6.7	5.4
20	(5 36)	2 06	8 20	8 56	(2 44)	6.3	5.5
	18 02	14 30	21 25	(8 54)	3 23	6.7	5.5
21	(6 28)	3 25	9 18	9 23	(2 50)	6.4	5.7
	18 53	15 39	22 46	(9 11)	3 53	6.7	5.4
Number of observations				31	31	31	31
Half monthly sums.....				286 887	96 1033	201.1	171 0

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
June 22	(7 18)	4 45	10 15	9 52	(2 57)	6.4	5.8
	19 44	16 22	23 43	(9 04)	3 59	6.6	5.4
23	(8 09)	6 13	11 39	10 29	(3 30)	6.3	5.7
	20 35	17 42	.. ..	(9 33)	.. ..	6.4	..
24	(9 01)	7 04	0 29	10 29	3 54	6.3	5.1
	21 27	18 22	12 52	(9 21)	(3 51)	6.3	5.7
25	(9 53)	8 17	1 23	10 50	3 56	6.4	5.1
	22 19	19 37	13 58	(9 44)	(4 05)	6.4	5.7
26	(10 45)	8 56	2 17	10 37	3 58	6.5	5.2
	23 11	20 25	14 59	(9 40)	(4 14)	6.4	5.7
27	(11 37)	9 55	3 10	10 44	3 59	6.8	5.2
	.. ..	21 18	15 53	(9 41)	(4 16)	6.6	5.9
28	0 03	10 33	3 50	10 30	3 47	6.9	5.3
	(12 28)	22 07	16 45	(9 39)	(4 17)	6.6	5.9
29	0 53	11 05	4 15	10 12	3 22	7.1	5.5
	(13 17)	22 51	17 09	(9 34)	(3 52)	6.8	6.1
30	1 41	11 28	5 16	9 47	3 35	7.2	5.7
	(14 05)	23 25	17 50	(9 20)	(3 45)	6.9	6.2
July 1	2 29	.. ..	5 45	.. ..	3 16	..	5.8
	(14 52)	12 00	19 02	9 31	(4 10)	7.1	5.8
2	3 14	0 20	6 34	(9 28)	3 20	6.5	5.5
	(15 36)	12 55	19 22	9 41	(3 46)	6.9	5.7
3	3 57	1 15	7 10	(9 39)	3 13	6.4	5.6
	(16 18)	13 17	20 06	9 20	(3 48)	6.9	5.7
4	4 40	1 32	7 49	(9 14)	3 09	6.4	5.7
	(17 01)	13 55	20 46	9 15	(3 45)	6.8	5.7
5	5 22	2 33	8 07	(9 32)	2 45	6.3	5.8
	(17 44)	14 34	21 39	9 12	(3 55)	6.6	5.6
6	6 05	3 35	8 58	(9 51)	2 53	6.2	5.9
	(18 27)	15 15	22 16	9 10	(3 49)	6.6	5.8
7	6 50	4 25	9 57	(9 58)	3 07	6.5	6.3
	(19 13)	16 00	23 18	9 10	(4 05)	6.9	5.9
Number of observations.....				31	31	31	31
Half monthly sums				286 967	96 1098	205.0	176.0

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
July 8	7 36	5 52	11 15	(10 39)	3 39	6.7	6.4
	(20 00)	16 35	.. ..	8 59	.. ..	6.8	..
9	8 25	6 59	0 15	(10 59)	(4 15)	6.7	5.8
	(20 51)	17 41	12 33	9 16	4 08	6.7	6.3
10	9 17	8 11	1 02	(11 21)	(4 11)	6.8	5.7
	(21 45)	18 44	13 35	9 27	4 18	6.8	6.3
11	10 13	8 55	2 14	(11 10)	(4 29)	6.9	5.6
	(22 42)	19 56	15 00	9 43	4 47	6.8	6.3
12	11 12	9 36	2 50	(10 54)	(4 08)	7.2	5.6
	(23 41)	20 46	15 08	9 34	3 56	6.9	6.3
13	.. ..	10 14	3 36	(10 33)	(3 55)	7.2	5.6
	12 11	21 54	16 22	9 43	4 11	6.9	6.2
14	(0 41)	10 37	4 23	(9 56)	(3 42)	7.3	5.6
	13 10	22 18	16 38	9 08	3 28	6.9	6.1
15	(1 39)	11 36	4 52	(9 57)	(3 13)	7.3	5.6
	14 08	23 21	17 46	9 13	3 38	7.1	6.1
16	(2 36)	12 06	5 37	(9 30)	(3 01)	7.4	5.6
	15 03	23 55	18 30	(8 52)	3 27	7.1	6.2
17	(3 31)	.. ..	6 18	.. ..	(3 47)	..	5.9
	15 58	[12 48]	[19 37]	([9 17])	[3 39]	[7.4]	[6.0]
18	(4 24)	[0 27]	[7 15]	[8 29]	([2 51])	[6.8]	[5.8]
	16 50	13 28	20 18	(9 04)	3 28	7.2	5.7
19	(5 16)	1 50	8 04	9 00	(2 48)	6.7	5.7
	17 41	14 25	21 02	(9 09)	3 21	6 9	5.4
20	(6 07)	3 12	8 40	9 31	(3 33)	6.4	5.7
	18 33	15 04	21 50	(8 57)	3 17	6.8	5.4
21	(6 58)	3 50	10 02	9 17	(3 04)	6.4	5.9
	19 24	15 42	23 12	(8 44)	3 48	6.7	5.5
22	(7 49)	5 36	11 00	10 12	(3 11)	6.6	6.2
	20 15	16 30	.. ..	(8 41)	.. ..	6.8	..
23	(8 41)	7 04	0 28	10 49	4 13	6.7	5.6
	21 07	18 12	12 23	(9 31)	(3 42)	6.8	6.3
Number of observations				31	30	31	30
Half monthly sums				283 995	97 848	213.7	176.4

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*Feet*	*Feet*
July 24	(9 32)	7 50	0 59	10 43	3 52	7.1	5.9
	21 58	18 45	13 46	(9 13)	(4 14)	6.9	6.4
25	(10 23)	8 59	1 28	11 01	3 30	7.0	5.8
	22 48	19 58	14 51	(9 35)	(4 28)	6.8	6.3
26	(11 12)	9 32	2 45	10 44	3 57	7.2	5.8
	23 37	21 12	15 50	(10 00)	(4 38)	6.8	6.2
27	.. ..	10 20	3 37	10 43	4 00	7.1	5.7
	(12 00)	21 48	16 30	(9 48)	(4 30)	6.8	6.2
28	0 25	10 58	4 40	10 33	4 15	7.1	5.7
	(12 48)	22 38	17 05	(9 50)	(4 17)	6.8	6.0
29	1 10	11 13	5 05	10 03	3 55	7.2	5.7
	(13 32)	23 18	17 34	(9 46)	(4 02)	6.8	6.0
30	1 54	11 41	5 29	9 47	3 35	7.0	5.6
	(14 16)	23 52	18 13	(9 36)	(3 57)	6.5	5.8
31	2 37	.. ..	5 54	.. ..	3 17	..	5.5
	(14 58)	12 27	18 40	9 50	(3 42)	6.8	5.6
Aug. 1	3 19	0 30	6 34	(9 32)	3 15	6.4	5.6
	(15 40)	12 54	19 10	9 35	(3 30)	6.8	5.7
2	4 02	1 15	6 48	(9 35)	2 46	6.6	5.9
	(16 23)	13 17	19 47	9 15	(3 24)	7.0	5.9
3	4 45	1 40	7 05	(9 17)	2 20	6.8	6.2
	(17 07)	13 41	20 35	8 56	(3 28)	7.2	6.1
4	5 30	2 27	8 10	(9 20)	2 40	6.9	6.3
	(17 53)	14 20	21 24	8 50	(3 31)	7.0	5.8
5	6 16	3 20	8 35	(9 27)	2 19	6.7	6.3
	(18 41)	14 56	22 14	8 40	(3 33)	6.9	5.8
6	7 06	5 16	10 44	(10 35)	3 38	6.5	6.1
	(19 32)	15 42	23 15	8 36	(3 43)	6.6	5.6
7	7 58	7 00	11 32	(11 28)	3 34	6.4	6.0
	(20 26)	16 30	23 30	8 32	(3 04)	6.5	5.7
8	8 54	7 44	.. ..	(11 18)	.. ..	6.7	..
	(21 23)	17 29	13 07	8 35	4 13	6.7	6.3
Number of observations.				31	31	31	31
Half monthly sums.....				286 1003	98 907	211.6	183.5

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*Feet*	*Feet*
Aug. 9	9 53	8 00	0 55	(10 37)	(3 32)	6.7	5.7
	(22 22)	19 38	14 00	9 45	4 07	6.6	6.1
10	10 52	8 55	2 12	(10 33)	(3 50)	6.6	5.4
	(23 22)	20 50	15 05	9 58	4 13	6.3	5.7
11	11 51	9 45	2 47	(10 23)	(3 25)	6.6	5.0
	.. ..	21 41	15 43	9 50	3 52	6.4	5.5
12	(0 21)	10 12	4 00	(9 51)	(3 39)	6.6	4.9
	12 49	22 50	16 18	10 01	3 29	6.3	5 2
13	(1 18)	11 02	4 29	(9 44)	(3 11)	6.5	5.1
	13 46	23 36	17 45	9 50	3 59	6.1	4.9
14	(2 13)	11 20	5 20	(9 07)	(3 07)	6.3	4.8
	14 41	.. ..	17 58	.. ..	3 17	..	4.6
15	(3 08)	0 17	5 57	9 36	(2 49)	6.0	4.8
	15 35	12 16	18 50	(9 08)	3 15	6.4	4.7
16	(4 01)	1 05	7 10	9 30	(3 09)	6.1	5.0
	16 28	12 52	19 30	(8 51)	3 02	6.4	4.9
17	(4 54)	1 58	7 22	9 30	(2 28)	6.2	5.3
	17 20	13 30	20 22	(8 36)	3 02	6.5	5.1
18	(5 46)	2 55	8 09	9 35	(2 23)	6.3	5.6
	18 12	14 30	21 00	(8 44)	2 48	6.6	5.2
19	(6 38)	4 00	9 38	9 48	(3 00)	6.3	5.7
	19 04	15 18	22 40	(8 40)	3 36	6.4	5.3
20	(7 29)	5 14	10 13	10 10	(2 44)	6.2	5.8
	19 55	16 20	23 32	(8 51)	3 37	6.3	5.3
21	(8 20)	6 29	.. ..	10 34	.. ..	6.2	..
	20 45	17 47	12 35	(9 27)	(4 15)	6.2	5.8
22	(9 09)	8 00	0 46	11 15	4 01	6.3	5.4
	21 33	19 02	14 10	(9 53)	(5 01)	6.1	5.7
23	(9 57)	8 20	1 10	10 47	3 37	6.2	5.2
	22 21	20 05	14 47	(10 08)	(4 50)	6.0	5.4
24	(10 45)	9 28	2 16	11 07	3 55	6.3	5.0
	23 08	21 02	15 30	(10 17)	(4 45)	6.1	5.4
Number of observations				31	31	31	31
Half monthly sums				287 1026	96 838	196.1	163.5

First reduction of tides at Cape Flora, Franz Josef Archipelago, Arctic Ocean—Concluded

Date	Moon's transits	Time of— High water	Time of— Low water	Lunitidal interval High water	Lunitidal interval Low water	Height of— High water	Height of— Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
Aug. 25	(11 30)	9 48	2 55	10 40	3 47	6.4	5.1
	23 52	21 35	15 44	(10 05)	(4 14)	6.3	5 5
26	.. ..	10 22	4 12	10 30	4 20	6.6	5.3
	(12 14)	22 30	16 45	(10 16)	(4 31)	6.4	5.6
27	0 35	10 52	4 24	10 17	3 49	6.8	5.4
	(12 56)	23 00	17 03	(10 04)	(4 07)	6.4	5.5
28	1 18	11 30	5 15	10 12	3 57	6.6	5.3
	(13 39)	.. ..	17 38	.. ..	(3 59)	..	5.3
29	2 00	0 08	5 22	(10 29)	3 22	6.3	5.3
	(14 21)	11 40	17 57	9 40	(3 36)	6.5	5.2
30	2 43	0 30	5 43	(10 09)	3 00	6.2	5.3
	(15 04)	12 20	18 29	9 37	(3 25)	6.4	5 1
31	3 26	0 31	5 56	(9 27)	2 30	6.1	5.4
	(15 49)	13 00	18 37	9 34	(2 48)	6.4	5.3
Sept. 1	4 12	[1 08]	[6 35]	[(9 19)]	[2 23]	[6.2]	[5.4]
	(16 36)	[13 43]	[19 18]	[9 31]	[(2 42)]	[6.4]	[5.3]
2	4 59	[1 57]	[7 26]	[(9 21)]	[2 27]	[6.2]	[5.4]
	(17 24)	[14 30]	[20 02]	[9 31]	[(2 38)]	[6.4]	[5.3]
Number of observations				17	18	17	18
Sums				162 402	52 575	108.6	96.0

Recapitulation of first reduction of Cape Flora observations

Date	High water	Low water	High water	Low water	High water	Low water
1904	*No. obs.*	*No. obs.*	*h m*	*h m*	*Feet*	*Feet*
May 21 to June 5	31	31	283 993	95 1004	200.0	168 0
June 6 to 21	31	31	286 887	96 1033	201.1	171.0
June 22 to July 7	31	31	286 967	96 1098	205.0	176 0
July 8 to 23	31	30	283 995	97 848	213.7	176 4
July 24 to Aug. 8	31	31	286 1003	98 907	211.6	183.5
Aug 9 to 24	31	31	287 1026	96 838	196.1	163 5
Aug. 25 to Sept. 2	17	18	162 402	52 575	108.6	96.0
Sum of sums	203	203	1873 6273	630 6303	1336.1	1134.4
Means	...	...	9 44.5	3 37 3	6.58	5 9

Uncorrected mean range = 6.58 ft. — 5.59 ft. = 0.99 ft.

First reduction of tides at Teplitz Bay, Franz Josef Archipelago, Arctic Ocean

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*Feet*	*Feet*
	(11 56)						
Apr. 1	0 23	[7 22]	[1 07]	6 59	(13 11)	[4.7]	[2.9]
	(12 50)	19 02	[13 29]	(6 12)	13 06	4.8	[3.2]
2	1 17	7 44	1 33	6 27	(12 43)	4.8	3.0
	(13 44)	19 46	13 52	(6 02)	12 35	4.9	3.2
3	2 11	8 21	2 10	6 10	(12 26)	4.9	3.1
	(14 38)	20 28	14 20	(5 50)	12 09	5.0	3.3
4	3 04	8 57	2 33	5 53	(11 55)	4.8	3.3
	(15 31)	21 10	14 53	(5 39)	11 49	4.9	3.3
5	3 57	9 12	3 05	5 15	(11 34)	5.0	3.5
	(16 23)	21 44	15 22	(5 21)	11 25	4.9	3.6
6	4 49	10 12	3 38	5 23	(11 15)	4.6	3.5
	(17 14)	22 10	16 16	(4 56)	11 27	4.6	3.6
7	5 39	11 21	4 30	5 42	(11 16)	4.4	3.5
	(18 03)	23 10	17 20	(5 07)	11 41	4.4	3.6
8	6 27	12 15	5 35	5 48	(11 32)	4.2	3.5
	(18 51)	23 58	18 08	(5 07)	11 41	4.2	3.7
9	7 15	.. ..	6 35	.. ..	(11 44)	..	3.6
	(19 37)	13 25	19 35	6 10	12 20	4.2	3.7
10	8 00	1 15	7 54	(5 38)	(12 17)	4.3	3.7
	(20 22)	15 25	21 02	7 25	13 02	4.4	4.0
11	8 44	2 51	9 15	(6 29)	(12 53)	4.5	3.9
	(21 05)	16 10	22 15	7 26	13 31	4.6	3.9
12	9 27	4 20	10 25	(7 15)	(13 20)	4.6	3.8
	(21 48)	16 50	22 39	7 23	13 12	4.7	3.9
13	10 10	5 00	11 22	(7 12)	(13 34)	4.8	4.0
	(22 32)	17 35	23 40	7 25	13 30	4.9	3.9
14	10 53	5 35	11 52	(7 03)	(13 20)	5.0	3.9
	(23 16)	18 05	.. ..	7 12	.. ..	5.0	..
15	11 38	6 20	0 15	(7 04)	13 22	5.1	3.7
	.. ..	18 35	12 25	6 57	(13 09)	5.3	3.9
16	(0 01)	6 50	1 15	(6 49)	13 37	5.2	3.8
	12 24	19 04	12 56	6 40	(12 55)	5.1	3.8
Number of observations				31	31	31	31
Half monthly sums				182 839	373 871	146.8	111.3

First reduction of tides at Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*h* *m*	*Feet*	*Feet*
Apr. 17	(0 47)	7 30	1 22	(6 43)	12 58	5.1	3.5
	13 11	19 40	13 25	6 29	(12 38)	5.2	3.8
18	(1 36)	8 04	1 32	(6 28)	12 21	5.2	3.7
	14 02	20 10	14 15	6 08	(12 39)	5.1	3.9
19	(2 27)	8 25	2 28	(5 58)	12 26	4.6	3.3
	14 53	20 40	14 35	5 47	(12 08)	4.9	3.4
20	(3 20)	9 14	3 13	(5 54)	12 20	5.2	3.7
	15 47	21 07	15 17	5 20	(11 57)	5.1	4.0
21	(4 15)	9 50	3 38	(5 35)	11 51	5.0	3.7
	16 43	21 50	15 55	5 07	(11 40)	4.8	3.9
22	(5 11)	10 38	4 28	(5 27)	11 45	4.6	3.6
	17 39	22 42	17 00	5 03	(11 49)	4.5	3.6
23	(6 06)	11 46	5 20	(5 40)	11 41	4.3	3.4
	18 34	23 50	17 58	5 16	(11 52)	4.3	3.6
24	(7 01)	.. ..	6 08	.. ..	11 34	..	3.5
	19 29	12 55	19 15	(5 54)	(12 14)	4.3	3.6
25	(7 56)	1 05	7 50	5 36	12 21	4.2	3.5
	20 23	14 10	20 53	(6 14)	(12 57)	4.3	3.4
26	(8 49)	3 00	8 53	6 37	12 30	4.2	3.4
	21 16	15 18	21 40	(6 29)	(12 51)	4.5	3.5
27	(9 43)	4 18	10 00	(7 02)	12 44	4.5	3.4
	22 09	16 25	22 45	(6 42)	(13 02)	4.7	3.4
28	(10 36)	4 55	11 05	6 46	12 56	4.5	3.4
	23 02	17 15	23 25	(6 39)	(12 49)	4.7	3.1
29	(11 29)	5 22	11 50	6 20	12 48	4.5	3.1
	23 56	17 58	.. ..	(6 29)	.. ..	4 6	..
30	.. ..	6 35	0 10	6 39	(12 41)	4.5	2.9
	(12 53)	18 48	12 38	(6 25)	12 42	4.7	3.1
Number of observations.....				27	27	27	27
Half monthly sums.....				151 827	317 1034	126.1	94.4

First reduction of tides at Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
May 1	0 50	7 40	0 58	6 50	(12 35)	4.7	3.0
	(13 17)	19 25	13 08	(6 08)	12 18	5.1	3.3
2	1 43	8 04	1 48	6 21	(12 31)	5.0	3.3
	(14 10)	20 02	13 45	(5 52)	12 02	5.1	3.7
3	2 37	8 45	2 23	6 08	(12 13)	5.0	3.4
	(15 03)	20 55	14 45	(5 52)	12 08	5.0	3.7
4	3 29	9 22	3 05	5 53	(12 02)	5.0	3.6
	(15 55)	21 15	15 05	(5 20)	11 36	5.0	3.9
5	4 19	10 00	3 35	5 41	(11 40)	4.8	3.6
	(16 44)	21 48	15 52	(5 04)	11 33	4.7	3.8
6	5 07	10 35	4 05	5 28	(11 21)	4.6	3.6
	(17 31)	22 55	16 48	(5 24)	11 41	4.5	3.7
7	5 55	11 20	5 00	5 25	(11 29)	4.3	3.5
	(18 17)	23 35	17 40	(5 18)	11 45	4.2	3.6
8	6 39	.. ..	6 15	.. ..	(11 58)	..	3.5
	(19 01)	12 45	18 50	6 06	12 11	4.3	3.7
9	7 22	0 38	7 15	(5 37)	(12 14)	4.2	3.6
	(19 44)	14 00	20 15	6 38	12 53	4.2	3.6
10	8 05	2 10	8 45	(6 26)	(13 01)	4.1	3.6
	(20 27)	14 45	21 15	6 40	13 10	4.3	3.6
11	8 48	3 40	9 45	(7 13)	(13 18)	4.2	3.6
	(21 10)	15 50	22 10	7 02	13 22	4.3	3.5
12	9 32	4 35	10 25	(7 25)	(13 15)	4.3	3.6
	(21 55)	16 40	22 55	7 08	13 23	4.5	3.5
13	10 18	5 20	11 23	(7 25)	(13 28)	4.5	3.7
	(22 41)	17 18	23 35	7 00	13 17	5.0	3.6
14	11 05	6 00	.. ..	(7 19)	.. ..	4.8	..
	(23 29)	17 50	12 00	6 45	(13 19)	5.0	3.8
15	.. ..	6 30	0 10	(7 01)	13 05	4.9	3.4
	11 55	18 40	12 30	6 45	(13 01)	5.1	3.7
16	(0 20)	7 10	0 58	(6 50)	13 03	5.0	3.5
	12 47	19 10	12 50	6 23	(12 30)	5.3	3.8
Number of observations				31	31	31	31
Half monthly sums				183 807	376 682	145.0	111.0

First reduction of tides at Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Continued

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
May 17	(1 14)	7 45	1 32	(6 31)	12 45	5.0	3.5
	13 41	19 42	13 30	6 01	(12 16)	5.1	3.7
18	(2 09)	8 20	2 05	(6 11)	12 24	4.9	3.3
	14 38	20 30	14 18	5 52	(12 09)	5.0	3.6
19	(3 06)	8 50	2 50	(5 44)	12 12	5.0	3.5
	15 34	21 15	15 05	5 41	(11 59)	5.0	3.8
20	(4 03)	9 45	3 20	(5 42)	11 46	4.8	3.4
	16 30	21 52	15 38	5 22	(11 35)	4.8	3.7
21	(4 58)	10 25	4 05	(5 27)	11 35	4.8	3.5
	17 25	22 45	16 35	5 20	(11 37)	4.7	3.7
22	(5 52)	11 35	4 58	(5 43)	11 33	4.7	3.5
	18 19	.. ..	17 40	.. .	(11 48)	..	3.8
23	(6 45)	0 30	6 10	6 11	11 51	4.6	3.7
	19 11	12 30	18 50	(5 45)	(12 05)	4.6	3.7
24	(7 37)	1 20	7 15	6 09	12 04	4.5	3.6
	20 03	13 30	20 20	(5 53)	(12 43)	4.5	3.5
25	(8 28)	2 15	8 35	6 12	12 32	4.3	3.4
	20 54	15 00	21 15	(6 32)	(12 47)	4.4	3.2
26	(9 20)	3 45	9 27	6 51	12 33	4.3	3.5
	21 46	16 00	22 10	(6 40)	(12 50)	4.7	3.5
27	(10 12)	4 45	10 35	6 59	12 49	4.7	3.7
	22 39	16 55	23 30	(6 43)	(13 18)	5.0	3.4
28	(11 05)	5 33	11 50	6 54	13 11	4.8	3.7
	23 32	17 45	.. ..	(6 40)	.. ..	5.2	..
29	(11 58)	6 23	0 00	6 51	(12 55)	5.1	3.5
	.. ..	18 15	12 15	(6 17)	12 43	5.3	3.9
30	0 25	7 12	0 35	6 47	(12 37)	5.2	3.6
	(12 51)	19 10	13 05	(6 19)	12 40	5.3	3.9
31	1 17	7 43	1 20	6 26	(12 29)	5.1	3.5
	(13 43)	19 35	13 40	(6 52	12 23	5.1	3.8
Number of observations.....				29	29	29	29
Half monthly sums				164 995	342 969	140.5	104.1

First reduction of tides at Teplitz Bay, Franz Josef Archipelago, Arctic Ocean—Concluded

Date	Moon's transits	Time of—		Lunitidal interval		Height of—	
		High water	Low water	High water	Low water	High water	Low water
1904	*h m*	*h m*	*h m*	*h m*	*h m*	*Feet*	*Feet*
June 1	2 10	8 28	2 00	6 18	(12 17)	4.9	3.4
	(14 35)	20 30	14 08	(5 55)	11 58	4.9	3.6
2	2 59	9 00	2 38	6 01	(12 03)	4.9	3.4
	(15 23)	21 00	14 40	(5 37)	11 41	5.0	3.8
3	3 48	9 38	3 10	5 50	(11 47)	4.9	3.6
	(16 11)	21 32	15 25	(5 21)	11 37	4.8	3.9
Number of observations.....				6	6	6	6
Sums.....				32 182	68 203	29.4	21.7

Recapitulation of first reduction of Teplitz Bay observations

Date	High water	Low water	High water	Low water	High water	Low water
1904	*No. obs.*	*No. obs.*	*h m*	*h m*	*Feet*	*Feet*
Apr. 1 to 16.....	31	31	182 839	373 871	146.8	111.3
Apr. 17 to 30....	27	27	151 827	317 1034	126.1	94.4
May 1 to 16.....	31	31	183 807	376 682	145.0	111.0
May 17 to 31...	29	29	164 995	342 969	140.5	104.1
June 1 to 3.....	6	6	32 182	68 203	29.4	21.7
Sums.....	124	124	712 3650	1476 3759	587.8	442.5
Means	..	..	6 14.0	12 24.5	4.74	3.57

Uncorrected mean range = 4.74 ft. — 3.57 ft. = 1.17 ft.

The mean lunitidal intervals (see (1) and (2)) as given by the First Reductions, are as follows:

	Cape Flora		Teplitz Bay		
	h	*m*	*h*	*m*	
HWI	9	44.5	6	13.6	(3)
LWI	3	37.3	12	23.8	(4)

The mean lunitidal interval for high water given in (3) is sometimes called the *Corrected Establishment of the Port*, while the mean lunitidal interval for high water at full and change (new) of the moon is called the *Establishment of the Port*.

The Establishment of the Port may be derived from the mean lunitidal interval as follows:
Establishment of Port = HWI + Table 24* for phase age before spring tides (5)

	Cape Flora		Teplitz Bay		
	d	*h*	*d*	*h*	
The phase age (see (34)) is	2	5.6	2	2.4	(6)
	Ratio		Ratio		
The value of $S_2 \div M_2$ is	0.333		0.409		(7)
	m		*m*		
With these values Table 24* gives .	+25.6		+29.4		(8)

and substituting these values in (5) gives

	m	*h*	*m*	
Establishment of Port for Cape Flora = HWI + 25.6 =		10	10.1	(9)
Establishment of Port for Teplitz Bay = HWI + 29.4 =		6	43.0	(10)

The mean lunitidal intervals may also be obtained from the harmonic constants by the equations:

Mean high-water lunitidal interval = HWI = $0.0345\,(M^\circ_2 - v)$ (11)
Mean low-water lunitidal interval = LWI = $0.0345\,(M^\circ_2 - w) + 6.21h$ (12)

Where v and w are such that

$$\tan v = \frac{2M_4 \sin(2M^\circ_2 - M^\circ_4) + 3M_6 \sin(3M^\circ_2 - M^\circ_6) + \ldots\ldots\ldots}{1^2M_2 + 2^2M_4 \cos(2M^\circ_2 - M^\circ_4) + 3^2M_6 \cos(3M^\circ_2 - M^\circ_6) + \ldots}$$

$$\tan w = \frac{2M_4 \sin(2M^\circ_2 - M^\circ_4) - 3M_6 \sin(3M^\circ_2 - M^\circ_6) + \ldots\ldots\ldots}{-1^2M_2 + 2^2M_4 \cos(2M^\circ_2 - M^\circ_4) - 3^2M_6 \cos(3M^\circ_2 - M^\circ_6) + \ldots}$$

From (11) and (12) we obtain:

	Cape Flora		Teplitz Bay		
	h	*m*	*h*	*m*	
HWI	9	40.9	6	11.2	(13)
LWI	3	29.7	12	23.9	(14)

A comparison of these values with those of (3) and (4) indicates a fairly satisfactory agreement, especially if we take into account the great difference in the methods used to obtain the two sets of results.

The sun's effect upon the time of the tide is to disturb the mean time of its occurrence, making it alternately earlier and later, according to the moon's phase.

The *priming of the tide* is the periodic acceleration of its time of occurrence, due to the sun's effect. At such times the lunitidal intervals are less than their mean, so that the tides occur earlier than the average. The priming of the tides occurs during the period between new or full moon and the following quadrature, beginning and ending at a time equal to the age of the phase inequality after these phases. It attains its maximum effect soon after the first and fifth octants of the moon's phase.

The *lagging of the tides* is the corresponding retardation in the time of its occurrence, the greatest effect being soon after the third and seventh octants of the moon's phase.

* Whenever any table is referred to here by number, unless otherwise stated, it is contained in Appendix 7, United States Coast and Geodetic Survey Report for 1894, for tables up to 35, and in Appendix 9, Report for 1897 of the same Survey, for tables having numbers greater than 35.

The least and greatest lunitidal intervals due to priming and lagging of the tides may be designated as Prime HWI, Prime LWI, Lag HWI, and Lag LWI. They may be derived from the mean lunitidal intervals by the following formulas:

$$\text{Prime HWI} = \text{HWI} - 127\ (S_2 \div M_2) \qquad (15)$$
$$\text{Lag HWI} = \text{HWI} + 127\ (S_2 \div M_2) \qquad (16)$$

Substituting LWI for HWI in (15) and (16) gives the corresponding values for low water. The values of $S_2 \div M_2$ are given in (7), which, being substituted in the above equations, together with the values in (3) and (4), gives:

	Cape Flora		Teplitz Bay		
	h	*m*	*h*	*m*	
Prime HWI	9	02.2	5	21.7	(17)
Lag HWI	10	26.8	7	05.5	(18)
Prime LWI	2	55.0	11	31.9	(19)
Lag LWI	4	19.6	13	15.7	(20)

The declination of the moon also makes a change in the lunitidal intervals and heights of the tide, which is usually greatest when the declination becomes a maximum, at which time the moon is not far from the tropics. Hence the tides due to the moon's declination, when at their most pronounced type, are called *tropic tides*. At the time of the tropic tides the two high or two low waters of the same day are generally unequal, and the range from the higher high water to the lower low water is called the great tropic range.

The lunitidal intervals for the tropic tides may be obtained from the mean intervals by the following equations:

$$\text{Tropic HHWI} = \text{HWI} - 2.07 \times \text{value from Table 44*} \qquad (21)$$
$$\text{Tropic LHWI} = \text{HWI} - 2.07 \times \text{value from Table 44*} \qquad (22)$$
$$\text{Tropic HLWI} = \text{LWI} - 2.07 \times \text{value from Table 44*} \qquad (23)$$
$$\text{Tropic LLWI} = \text{LWI} - 2.07 \times \text{value from Table 44*} \qquad (24)$$

In Table 44* of these equations the arguments are different for each phase of tide, the corresponding intervals being as follows:

	Cape Flora		Teplitz Bay		
	h	*m*	*h*	*m*	
Tropic HHWI	10	19.0*b*	5	58.8*a*	(25)
Tropic LHWI	8	59.9	6	24.9	(26)
Tropic HLWI	3	39.8	12	13.5	(27)
Tropic LLWI	3	22.5*b*	12	33.2*a*	(28)

The tropic intervals for the higher high water and for the lower low water are marked by the letters *a* and *b* in order to enable one to obtain the approximate time of these tides by adding the interval to the upper or lower transit of the moon as explained below. When the tropic interval (HHWI or LLWI) is marked *a* add the interval to the local time of the moon's $\begin{matrix}\text{upper}\\\text{lower}\end{matrix}$ transit, or meridian passage, for $\begin{matrix}\text{north}\\\text{south}\end{matrix}$ declination of the moon; and when it is marked *b* add the interval to the local time of the moon's $\begin{matrix}\text{upper}\\\text{lower}\end{matrix}$ transit for $\begin{matrix}\text{south}\\\text{north}\end{matrix}$ declination of the moon.

The tropic tides may be said to be formed by the combination of a semidiurnal wave with a diurnal wave. The tropic lunitidal interval of the diurnal wave may be found by the equation

$$D_1\text{HWI} = 0.0345\ (K°_1 + O°_1)\,a \qquad (29)$$

where D_1 stands for diurnal.

* See note, p. 588.

Substituting the values for K°_1 and O°_1 from the table of harmonic constants already given, we obtain :

	Cape Flora		Teplitz Bay		
	h	*m*	*h*	*m*	
D_1HWI	2	39.8*a*	2	34.9*a*	(30)

Tide Inequalities and Ranges

An *inequality* in the interval, range, or height of tide is a systematic departure of the same from the mean value at a given station. The inequality having a period of a half synodic month is the *phase inequality;* that having an anomalistic month is the *parallax inequality;* that which has the period of a tropical month causes the two high waters or two low waters of the day to differ in height, and is called the *diurnal inequality.*

The *age* of an inequality is the amount of time by which it follows its astronomical cause. The ages of the principal inequalities are given by the expressions :

$$\text{Age of phase inequality} = 0.984\ (S^\circ_2 - M^\circ_2)\ \text{hours} \quad (31)$$
$$\text{Age of parallax inequality} = 1.837\ (M^\circ_2 - N^\circ_2)\ \text{hours} \quad (32)$$
$$\text{Age of diurnal inequality} = 0.911\ (K^\circ_1 - O^\circ_1)\ \text{hours} \quad (33)$$

Substituting the values of the epochs or kappas given in the table of harmonic constants, we obtain :

	Cape Flora	Teplitz Bay	
	h	*h*	
Age of phase inequality	53.6	50.4	(34)
Age of parallax inequality	61.9	42.6	(35)
Age of diurnal inequality	−15.9	−21.5	(36)

The mean range of tide, as given by the direct summation of high and low waters, usually requires to be corrected for the longitude of the moon's ascending node, there being whole series of years during which the mean annual range is greater than an average for the lunar cycle, followed by another series of years having a smaller mean annual range than the average.

If we put Mn for the corrected mean range or rise and fall of tides, and Mn′ for the uncorrected mean range, we may find the corrected range from the equation

$$Mn = Mn' \times F\ (Mn) \quad (37)$$

The values of F (Mn) are obtained from Table 14,* using I and $(K_1 + O_1) \div M_2$ as arguments. In the present case these arguments are

	Cape Flora	Teplitz Bay
	°	°
I	18.38	18.33
	Ratio	Ratio
$(K_1 + O_1) \div M_2$	0.68	0.28

Entering Table 14* with these arguments, we find

$$\text{For Cape Flora} \ldots\ Mn = 0.99 \times 0.976 = 0.966\ \text{feet} \quad (38)$$
$$\text{For Teplitz Bay} \ldots\ Mn = 1.17 \times 0.972 = 1.138\ \text{feet} \quad (39)$$

*See note, p. 588.

The mean range of tide may also be obtained from the harmonic constants by the formula

$$\begin{aligned} Mn = 2M_2 + \frac{1}{2M_2 m^2_2}\left[S^2_2 s^2_2 + N^2_2 \nu^2_2 + \ldots + K^2_1 k^2_1 + O^2_1 o^2_1 + \ldots\right] \\ + M_2 (\cos v + \cos w) + \frac{\pi}{180} \times 2M_4 (v - w) \sin (2M^\circ_2 - M^\circ_4) \\ + 2M_6 \cos (3M^\circ_2 - M^\circ_6) - 2M_2 \end{aligned}$$

which by means of Table 22*, becomes

$$\begin{aligned} Mn = 2.04 \times \text{Table } 22^* + .035M_1 (v - w) \sin (2M^\circ_2 - M^\circ_4) \\ + M_2 (\cos v + \cos w) + 2M_6 \cos (3M^\circ_2 - M^\circ_6) - 2M_2 \end{aligned} \qquad (40)$$

in which v and w are the same as obtained for (11) and (12). By (40) the mean range of tide from the harmonic constants is

For Cape Flora . . . . . $Mn = 0.952$ feet (41)
For Teplitz Bay . . . . . $Mn = 1.100$ feet (42)

which agrees fairly well with the values given in (38) and (39).

The spring and neap ranges of tide may be obtained from the harmonic constants by the formulas

$$\begin{aligned} Sg = Mn - .536\frac{S^2_2}{M_2} + \left[1.96 - .08\left(\frac{K_1 + O_1}{M_2}\right)^2\right] \\ \times [S_2 + \mu_2 \cos (2M^\circ_2 - S^\circ_2 - \mu^\circ_2)] \end{aligned} \qquad (43)$$

$$\begin{aligned} Np = Mn - .536\frac{S^2_2}{M_2} - \left[1.96 - .08\left(\frac{K_1 + O_1}{M_2}\right)^2\right] \\ \times [S_2 + \mu_2 \cos (2M^\circ_2 - S^\circ_2 - \mu^\circ_2)] \end{aligned} \qquad (44)$$

in which the first and last letters of the words spring and neap are used as abbreviations.

From (43) and (44) we obtain:

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
Spring range $= Sg$	1.224	1.485	(45)
Neap range $= Np$	0.628	0.625	(46)

The heights of the tropic tides above mean sea level may be obtained from the harmonic constants by the following formulas:

$$\text{Tropic HHW} = 1.02\, \Delta_2 \times \text{Table } 45\dagger \qquad (47)$$
$$\text{Tropic LHW} = 1.02\, \Delta_2 \times \text{Table } 45\dagger \qquad (48)$$
$$\text{Tropic HLW} = 1.02\, \Delta_2 \times \text{Table } 45\dagger \qquad (49)$$
$$\text{Tropic LLW} = 1.02\, \Delta_2 \times \text{Table } 45\dagger \qquad (50)$$

where

$$\Delta_2 = 1.010\, M_2 + 0.27\, (S_2 + M_2) - K_2 \cos [(K^\circ_1 - O^\circ_1) \backsim (K^\circ_2 - M^\circ_2)]$$

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*See note, p. 588. †See note, p. 588.

and different arguments are used for the various tides. From (47) to (50) we obtain the following values, the heights being reckoned from mean sea level:

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
Tropic HHW	0.537	0.621	(51)
Tropic LHW	0.410	0.446	(52)
Tropic HLW	−0.153	−0.419	(53)
Tropic LLW	−0.745	−0.648	(54)

Mean sea level, as used above, is the mean of the hourly heights of the sea used for obtaining the harmonic constants, or

$$\text{MSL} = \frac{1}{n} \Sigma (h_0 + h_1 + h_2 + \ldots\ldots h_{22} + h_{23}) \qquad (55)$$

in which Σh represents the sum of all the heights throughout the series for the hour designated by the subscript, and $n = 24$ times the number of days in the series discussed. As there is usually a periodic variation in mean sea level from month to month, chiefly due to seasonal changes in the direction and velocity of winds, which roughly complete their cycle in a year, it must be borne in mind that when less than a year of record is analyzed the resulting mean sea level is not a true mean for the station.

This will be more evident from a study of the following table of mean sea levels on the 1st and 16th of each month during which observations were made:

Date	Sea level	Date	Sea level	Date	Sea level	Date	Sea level
1904	*Ft.*	1904	*Ft.*	1904	*Ft.*	1904	*Ft.*
April 1	5.92	May 16	5.83	July 1	6.20	Aug. 16	6.00
April 16	5.85	June 1	5.90	July 16	6.40	Sept. 1	5.72
May 1	5.82	June 16	6.03	Aug. 1	6.30	. . .	. . .

In the above table the heights are all referred to the tide staff at Cape Flora, that portion which was obtained from the record at Teplitz Bay having been increased by 1.73 feet, the difference between the two staves as determined from simultaneous observations; see (77). The mean of the Teplitz Bay portion of the table, viz., April 1 to June 1, is 5.86 feet on the Cape Flora staff, or 5.86 feet − 1.73 feet = 4.13 feet on Teplitz Bay staff. The corresponding mean for Cape Flora, June 1 to September 1, is 6.08 feet. The difference in the mean sea level for each of the two series is, therefore, 6.08 feet − 5.86 feet = 0.22 foot. The extreme difference in the half-monthly mean sea levels of the table is 6.40 feet − 5.82 feet = 0.58 foot, or about 7 inches, in less than three months.

Mean half-tide level is the mean of all the high and low waters for the period of observation. Abbreviating to initial letters, we have

$$\text{HTL} = \frac{1}{2} (\text{HW} + \text{LW}) \qquad (56)$$

When the harmonic constants for the station are known, the approximate value of mean half-tide level may be computed by the formula

$$\text{HTL} = \text{MSL} + \text{M}_4 \cos (2\,\text{M}^\circ_2 - \text{M}^\circ_4) - 0.04 \frac{(\text{K}_1 + \text{O}_1)^2}{\text{M}_2} \cos (\text{M}^\circ_2 - \text{K}^\circ_1 - \text{O}^\circ_1) \qquad (57)$$

The values obtained from (55), (56), and (57) are as follows :

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
From (55) MSL	6.076	4.133	(58)
From (56) HTL	6.085	4.155	(59)
From (57) HTL	6.088	4.138	(60)

By adding the values of (51), (52), (53), and (54) to those of (58) we obtain the corresponding readings upon the tide staves, thus :

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
Tropic HHW	6.613	4.754	(61)
Tropic LHW	6.486	4.579	(62)
Tropic HLW	5.923	3.714	(63)
Tropic LLW	5.331	3.485	(64)

The difference between the two tropic high waters (HHW—LHW) is called the tropic high-water diurnal inequality in height, abbreviated to tropic HWQ or often to HWQ alone, the word tropic being understood. In a similar way the tropic low-water diurnal inequality in height (HLW—LLW) is contracted to LWQ. The great tropic range (HHW—LLW) is contracted to Gc, while the small tropic range (LHW—HLW) is represented by Sc. These values from (61) to (64) are as follows :

	Cape Flora			Teplitz Bay			
	Ft.	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	
Tropic HWQ . .	6.613	− 6.486	= 0.127	4.754	− 4.579	= 0.175	(65)
Tropic LWQ . .	5.923	− 5.331	= 0.592	3.714	− 3.485	= 0.229	(66)
Tropic Gc . .	6.613	− 5.331	= 1.282	4.754	− 3.485	= 1.269	(67)
Tropic Sc . .	6.486	− 5.923	= 0.563	4.579	− 3.714	= 0.865	(68)

The difference between the mean of the higher high waters and the mean of the lower low waters for one or more months is called the great diurnal range, and is abbreviated to Gt. It may be computed as follows, when either tropic HWQ or LWQ is approximately as great as one-fourth of the mean range :

$$Gt = 0.75\ Gc + 0.25\ Mn \qquad (69)$$

The range of the diurnal wave may be found from the harmonic constants, putting 2D to represent the wave, by the formula

$$2D_1 = 2.042\ (K_1 + O_1) \qquad (70)$$

From (69) and (70) we obtain :

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
Gt	1.203	1.236	(71)
$2D_1$	0.606	0.292	(72)

The *perigean* and *apogean* ranges are due to the moon's varying distance, and may be obtained from the harmonic constants by the following formulas :

$$Pn = Mn - \frac{.481\ N^2_2}{M_2} + \left[2.1 - \frac{S^2_2\ s^2_2}{2M^2_2\ m^2_2} - \frac{.08\ (K_1 + O_1)^2}{M^2_2}\right] \times [2N + N_2 - L_2] \qquad (73)$$

$$An = Mn - \frac{.481\ N^2_2}{M_2} + \left[2.1 - \frac{S^2_2\ s^2_2}{2M^2_2\ m^2_2} - \frac{.08\ (K_1 + O_1)^2}{M^2_2}\right] \times [2N - (N_2 - L_2)] \qquad (74)$$

in which the words perigean and apogean are abbreviated to their first and last letters.

The values of the harmonic component 2N in (73) and (74) must be estimated as about 0.133 N_2, which is 0.011 feet for Cape Flora and 0.013 feet for Teplitz Bay, as this element was not evaluated from the observations. The perigean and apogean ranges are then found to be

	Cape Flora	Teplitz Bay	
	Ft.	*Ft.*	
Pn	1.103	1.274	75)
An	0.831	0.962	(76)

Simultaneous Tides

The observations were simultaneous at Cape Flora and Teplitz Bay for 14 days, from May 21 to June 3, 1904. The direct comparison of these stations during this period gives the following results:

Station	HWI		LWI		HW	LW	Mn	
	h	*m*	*h*	*m*	*Ft.*	*Ft.*	*Ft.*	
Cape Flora .	9	46.1	3	38.0	6.47	5.41	1.06	(77)
Teplitz Bay .	6	11.7	12	18.1	4.83	3.60	1.23	
Difference .	3	34.4	3	45.1	1.64	1.81	0.17	
LW diff. . .	3	45.1	.	. .	1.81	. . .	. . .	
Mean diff. .	3	39.8	.	. .	1.725	. . .	0.17	

from which it appears that the tide at Teplitz Bay is about 3h 40m earlier than at Cape Flora; the zero of the tide staff at Teplitz Bay is 1.725 feet above the zero of the staff at Cape Flora, and the mean rise and fall, or range, of tides is 0.17 feet greater at Teplitz Bay than at Cape Flora.

Nearly the same difference in time of tide at these two stations is obtained from the mean lunitidal intervals of (3) and (4), which makes Teplitz Bay about 3h 31m earlier than Cape Flora.

Cotidal Hours

The *cotidal lunar hour* of a place may be found from the expression

$$\text{Cotidal hour} = 0.483\ (\text{HWI} + \text{LWI} \pm 6.210) \pm L \qquad (78)$$

in which L is the local longitude, positive for west and negative for east longitudes. The upper or lower sign is to be used with 6.210 according to which sign will make LWI approximately equal to HWI. Substituting in (78) the values given in (3) and (4), taking $L = -3.332$ hours for Cape Flora and $L = -3.866$ hours for Teplitz Bay, we obtain:

	Cape Flora	Teplitz Bay	
	h	*h*	
Cotidal hour	6.123	2.230	(79)

RECAPITULATION

The various results which have been obtained are collected together in the following tables:

TIME RELATIONS

	Cape Flora		Teplitz Bay	
	h	*m*	*h*	*m*
Establishment of the port	10	10	6	43
Mean of all high-water lunitidal intervals	9	44	6	14
Mean of all low-water lunitidal intervals	3	37	12	24
Mean of tropic higher high-water intervals	10	19*b*	5	59*a*
Mean of tropic lower high-water intervals	9	00	6	25
Mean of tropic higher low-water intervals	3	40	12	14
Mean of tropic lower low-water intervals	3	22*b*	12	33*a*
Mean tropic high-water interval of diurnal wave	2	40*a*	2	35*a*
Prime high-water interval	9	02	5	22
Lag high-water interval	10	27	7	06
Prime low-water interval	2	55	11	32
Lag low-water interval	4	20	13	16
Cotidal hour	6	07	2	14

HEIGHT RELATIONS

	Cape Flora	Teplitz Bay
	Ft.	*Ft.*
Mean of all high waters on tide staff	6.568	4.724
Mean of all low waters on tide staff	5.602	3.586
Mean of all higher high waters on tide staff	6.599	4.743
Mean of all lower low waters on tide staff	5.396	3.507
Mean of tropic higher high water on tide staff	6.613	4.754
Mean of tropic lower high water on tide staff	6.486	4.579
Mean of tropic higher low water on tide staff	5.923	3.714
Mean of tropic lower low water on tide staff	5.331	3.485
Mean of all spring high waters on tide staff	6.697	4.897
Mean of all spring low waters on tide staff	5.473	3.412
Mean of all neap high waters on tide staff	6.399	4.467
Mean of all neap low waters on tide staff	5.771	3.842
Mean perigean high water on tide staff	6.636	4.792
Mean perigean low water on tide staff	5.533	3.518
Mean apogean high water on tide staff	6.501	4.636
Mean apogean low water on tide staff	5.670	3.674
Mean sea level on tide staff	6.076	4.133
Mean half-tide level on tide staff	6.085	4.155
Highest tide observed on tide staff	7.430	5.310
Lowest tide observed on tide staff	4.630	2.860

RANGES, INEQUALITIES, ETC.

	Cape Flora	Teplitz Bay
	Ft.	*Ft.*
Mean range or rise and fall of all tides	0.966	1.138
Mean range or rise and fall of spring tides	1.224	1.485
Mean range or rise and fall of neap tides	0.628	0.625
Mean range of the great tropic tides	1.282	1.269
Mean range of the small tropic tides	0.563	0.865

	Cape Flora	Teplitz Bay
Mean range of the tropic diurnal wave	0.606	0.292
Mean diurnal range—that is, Mean HHW — Mean LLW	1.203	1.236
Mean range of perigean tides	1.103	1.274
Mean range of apogean tides	0.831	0.962
Mean high-water tropic diurnal inequality	0.127	0.175
Mean low-water tropic diurnal inequality	0.592	0.229
Mean age of the phase tides	*2d* 5.6*h*	*2d* 2.4*h*
Mean age of the parallax tides	*2d* 13.9*h*	*1d* 18.6*h*
Mean age of the diurnal tides	−*0d* 15.9*h*	−*0d* 21.5*h*

Quantities Useful for Classifying Tides

	Cape Flora	Teplitz Bay
$M^\circ_2 - K^\circ_1 - O^\circ_1$	202°	103°
	Ratio	Ratio
$(K_1 + O_1) \div M_2$	0.68	0.28
$S_2 \div M_2$	0.33	0.41
HWQ ÷ Mn	0.13	0.16
LWQ ÷ Mn	0.62	0.21
Gc ÷ Mn	1.35	1.15
(Sg — Np) ÷ Mn	0.63	0.78
Sequence	LLW to HHW	HHW to LLW
	h *m*	*h* *m*
Duration of rise	6 07	6 15
Duration of fall	6 18	6 10

General Conclusions

A comparison of the results obtained above indicates that the type of tide at Cape Flora is quite different from that at Teplitz Bay. It is interesting to trace out resemblances between the tides of Franz Josef Archipelago and those of more accessible portions of the earth. In some of the most prominent characteristics the tides of Cape Flora resemble those of Melbourne, Australia, while those of Teplitz Bay are in a similar way like those of Sitka, Alaska. It happens that both Melbourne and Sitka are in the Pacific Ocean, although widely separated, and some one might hastily conclude that the tides of Franz Josef Archipelago are derived from that ocean. But a very little consideration of the narrow and comparatively shallow opening at Bering Strait will convince one of the extreme improbability of the Arctic tides being derived from the Pacific Ocean to any appreciable extent.

The tide wave appears to reach Franz Josef Archipelago from the Atlantic Ocean by two channels, one between Norway and Spitzbergen and the other between Spitzbergen and Greenland. The latter channel being much deeper than the former, the tide wave from the Greenland channel reaches Teplitz Bay, in the northern portion of Franz Josef Archipelago, nearly four hours before the tide wave from the Norway channel arrives at Cape Flora, in the southern portion of the archipelago. The indications are (see maps 23, 25, and 26 of Appendix 5, Report of the United States Coast and Geodetic Survey for 1904) that the tide wave advances southerly through the channels between the various islands of the group and along their eastern coasts until it meets the southern wave a few miles east of Cape Flora, although no observations have been made to establish this statement.

SECTION E

ASTRONOMICAL OBSERVATIONS AND REDUCTIONS

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ASTRONOMICAL OBSERVATIONS

INSTRUMENTS

The Repsold Circle used by the Expedition at Teplitz Bay and Alger Island was secured through the courtesy of Professor Geelmuyden, Director of the Christiania Observatory. This instrument (see figure 1) is of the alt-azimuth type, with horizontal and vertical circles of 30 centimeters and 25 centimeters diameter respectively. The telescope is of the broken type, with the eyepiece at one end of the hollow horizontal axis, the opposite end of the axis providing for the illumination of the threads. The magnifying power of the telescope is about 40.4. The horizontal circle is graduated into divisions of four minutes of arc and is provided with four verniers, the least count of each being four seconds of arc. The scale of the vertical circle, situated at the opposite end of the horizontal axis from the eyepiece, is similarly divided into four-minute divisions and provided with two micrometers, whose heads are graduated into sixty parts, giving a least count of four seconds of arc. The vertical circle is so numbered as to give nadir distances. The weight of the telescope with alidade and clamps attached is 7.7 kilograms.

The reticule is a piece of glass engraved with seven vertical lines and two horizontal ones, the latter close together. The space between two consecutive vertical lines is crossed by an equatorial star in about twelve seconds of time.

The values of the divisions of the levels were determined in June, 1905, at Alger Island and found to be as follows:

Striding level, per division of 2.0 mm.	2.″98
Alidade level, per division of 1.8 mm.	2.″16

Some of the secondary astronomical work was executed with two small 10-centimeter theodolites made by C. L. Berger and Sons, both vertical and horizontal circles being read to single minutes of arc by two verniers each. These were of the usual type of instrument (see figure 2) made for finer grade field work by this firm, with the addition of several features to render them more convenient for use in extremely low temperatures. All of the tangent and leveling screw milled heads had small ivory buttons set in the outer circumference about 3 millimeters in diameter and projecting about the same distance beyond the heads. The compass needle was mounted in a closed tube attached to the under side of the telescope, the glass ends of this tube being engraved with collimating lines. These instruments, with cases, are very light and were found extremely useful and convenient, particularly so in the field work of the Expedition.

Only two chronometers were carried; one, a mean time, and the other, a siderial time, both by Negus.

Observatory at Teplitz Bay

At the Teplitz Bay station an observatory 2.6 meters by 2.6 meters and 1.8 meter high, the floor being about one-half meter above the surface of the ground, was constructed of undressed lumber some 130 meters northwesterly from the dwelling-house (see figure 1 of "Section A" for sketch map showing its location in relation to balance of the camp). A small vestibule protected the entrance. The roof was covered with tarred paper. For the work of observation three shutters on hinges were built; two in the walls north and south of the instrument and one running the length of the roof. An exterior view of this building is shown in figure 3 (also in figure 1 of "Section C").

The pier for the Repsold Circle was built upon a large basalt boulder in an outcrop of rock and was composed of bricks laid in clear cement and surmounted by a capstone some 10 centimeters thick and 60 centimeters square. The pier was approximately 1.3 meter high and 0.5 meter square. The elevation above mean sea level of the top of the capstone is 18.739 meters.

A collimator, used also as an approximate meridian mark through the dark period, was placed in the meridian north of the instrument and about 4.6 meters from it. This collimator consisted of one of the small theodolites by C. L. Berger and Sons mounted on a rock and cement pier. In the common focus of object glass and eyepiece were two closely spaced vertical threads. This space was bisected by the middle thread of the Repsold Circle at the beginning and middle of each time set. Illumination of the collimator was effected by a bull's-eye lantern placed just back of the eyepiece. The collimator was protected by a wood box resting on the basalt ledge, this box being covered, when not in use, by a cloth bag to prevent the entry of the fine snow which was almost constantly driving during the winter.

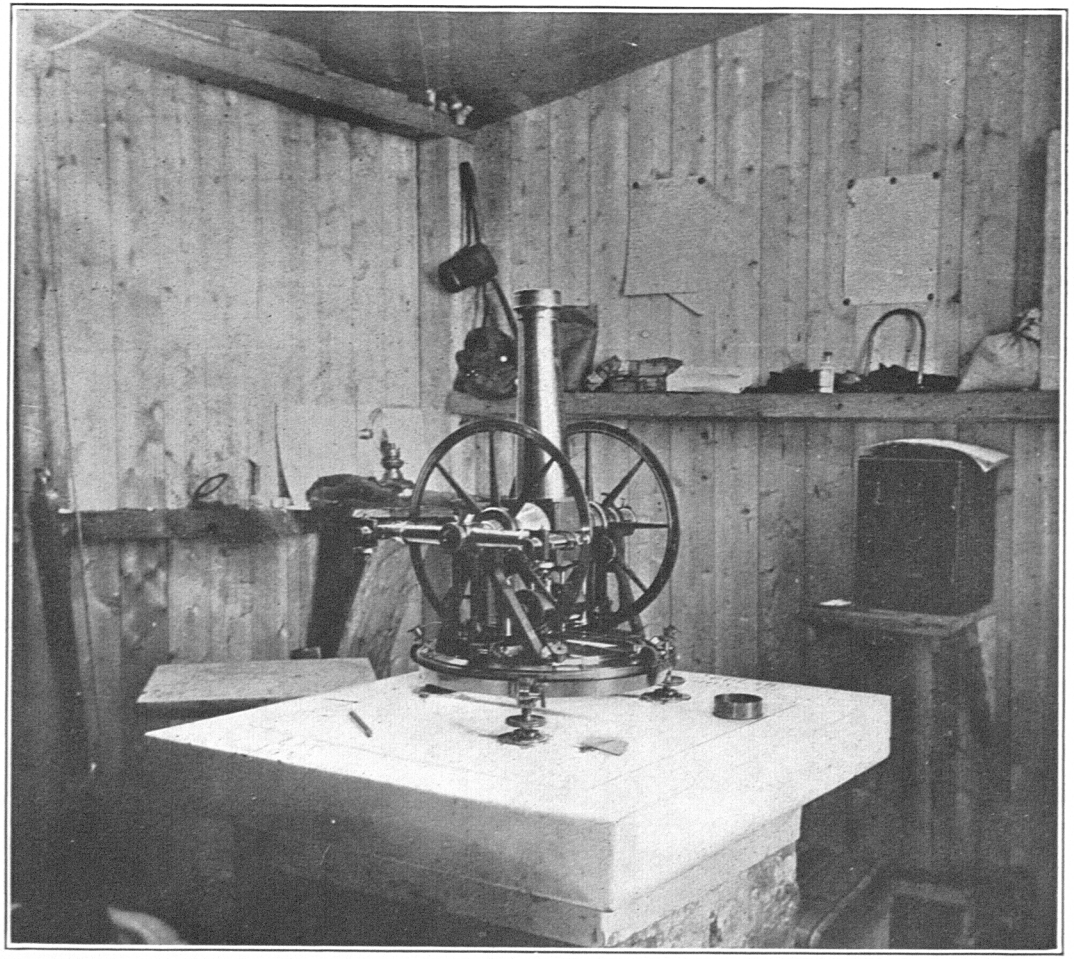
On the return of daylight (spring of 1904) a meridian mark was set up on the brow of Cape Auk 6,640 meters south of the observatory. A bull's-eye lantern at the cape was lined into the meridian in the evening by a prearranged system of rocket signals. During the first year this mark consisted of eight empty wood boxes set one on top of another and guyed with wire; snow was dug away to a rock foundation and a milk tin embedded there to mark the point. Later the boxes were replaced by a heavy plank. These marks appeared through the telescope of the Repsold Circle silhouetted against the sky.

Chronometer time was obtained while observing by means of a sounder connected with the break-circuit siderial chronometer at the dwelling; a hack-watch gave the hour and minute, while a stop-watch served to identify the second at any time. Both mean and siderial chronometers were kept at the dwelling in an insulated box, and were wound and compared regularly each morning after breakfast.

The illumination of the Repsold Circle in the usual manner through the axis of the telescope was found to be defective. Accordingly a reflector, similar to those used in small theodolites, was made of zinc; this received the rays of light from a lamp placed near the wall of the observatory and threw them into the tube of the telescope. For reversing the telescope in the wyes in low temperatures a lifting device consisting of a two-pronged hook at the end of a phosphor bronze wire operating over pulleys was resorted to. By this means it could be suspended while the frost (condensation from the breath) could be removed from the wyes and pivots.

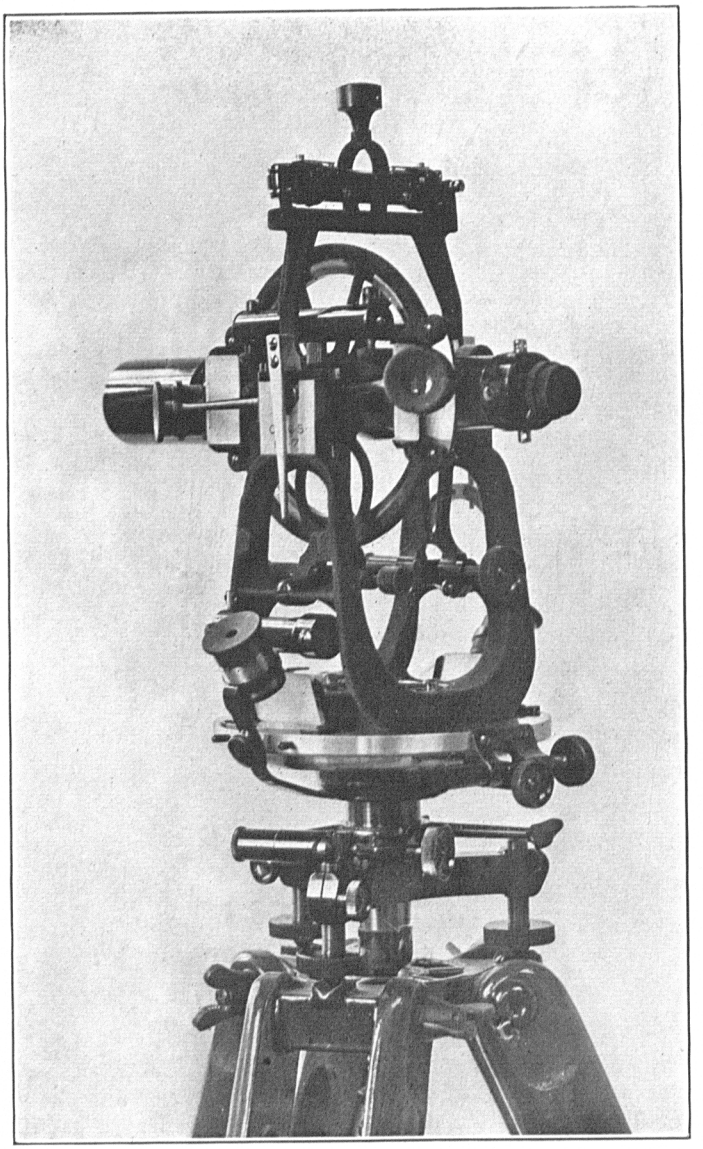
When the instrument was not in use it was covered, first, with a cone of cloth suspended from the roof, and, later, by a box of heavy paper inverted over the instrument and resting on the capstone.

FIGURE 1



VIEW OF INTERIOR OF OBSERVATORY AT TEPLITZ BAY SHOWING REPSOLD CIRCLE

FIGURE 2



10-CENTIMETER ALT-AZIMUTH INSTRUMENT

OBSERVATIONS AT TEPLITZ BAY OBSERVATORY

LATITUDE

Latitude was determined by observing star altitudes in the meridian. These observations and results are summarized in the following tabulation :

Latitude observations at Teplitz Bay

Local mean date	Siderial time	Star	Circle	Mean of vertical circle readings corrected for level	Barometer	Attached thermometer	Outside thermometer	Resulting latitude
1905	*h m s*			° ′ ″	*In.*	°*F*	°*F*	° ′ ″
April 11.38	12 42 01.5	ε Ursæ Majoris	E	154 38 12.9	30.805	+54.5	+4.0	
	47 22.0	" "	E	154 38 35.3	.....	.....	+4.0	
	54 32.0	" "	W	205 15 57.0	.....	.....	+4.0	81 47 34 4 N
	60 18.0	" "	W	205 16 24.1	.....	.....	+7.0	
	13 20 23.0	Polaris	W	170 32 54.6	.....	.....	+7.0	
	25 33.0	"	W	170 32 54.4	.....	.....	+7.0	
	29 16.0	"	W	170 32 53.8	.....	.....	+6 0	
	39 36.5	"	E	189 21 13.4	.....	.....	+6.0	81 47 35.4 N
	45 14.0	"	E	189 21 08.3	.....	.....	+6.0	
	49 23.0	"	E	189 21 07.5	.....	.....	+6.0	
	13 58 41.0	α Bootis	E	117 51 26.6	.....	.....	+6.0	
	14 03 40.0	"	E	117 51 39.7	.....	.....	+6.0	
	14 27.0	"	W	242 02 19.9	30.770	+45.0	+6.0	81 47 33.3 N
	19 54.0	"	W	242 02 31.7	.....	.....	+4.0	
	14 48 33 0	β Ursæ Minoris	W	187 12 08.9	.....	.....	+4.0	
	52 27.0	" "	W	187 12 05.6	.....	.....	+4.0	
	59 33.0	" "	E	172 41 33.5	.....	.....	+4.0	81 47 36.3 N
	63 39.5	" "	E	172 40 37.7	30.755	+42.5	+3.0	
				Adopted mean value for latitude.....				**81 47 34.9 N**

The mean value for latitude resulting agrees closely with that determined by the Italian Expedition. The Italian astronomical station was not relocated. Direct comparison of values may, however, be made by reference to the magnetic station of 1899 to 1900 which is 136.42 meters, or 4.4 seconds of arc, south of the Ziegler Expedition astronomical observatory and 1.1 second of arc south of the astronomical station observed at by the Italian party. Their finally adopted latitude was 81° 47′ 26.″2,* which referred to the station of 1905 would be 81° 47′ 29.″5 ; the two determinations thus agree within less than six seconds of arc, the mean of the two being 81° 47′ 32.″2.

*Osservazioni scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi. Milan, 1903. Pp. 105 and 447.

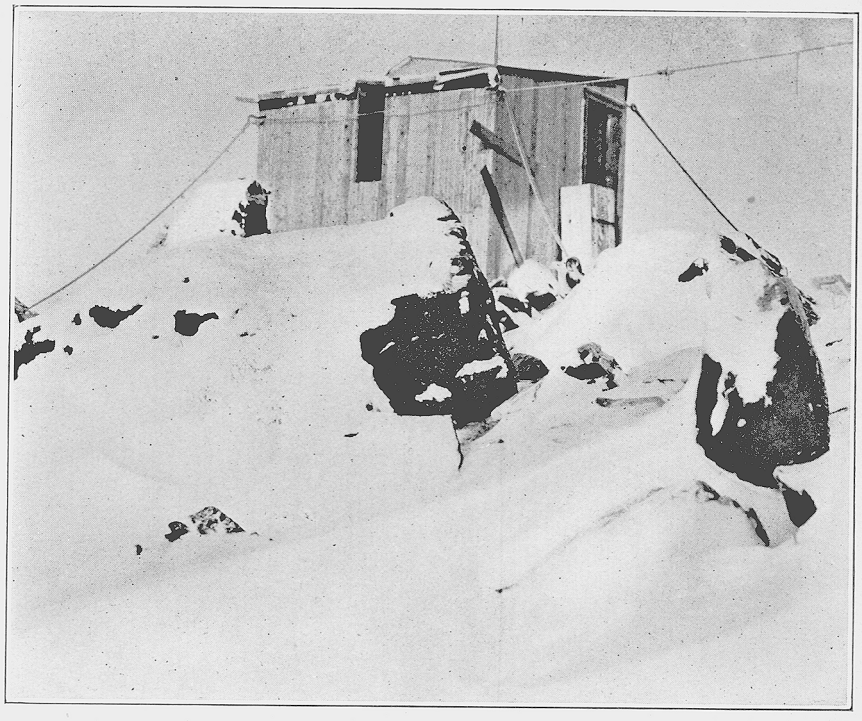
Time and Longitude

On account of the sticking of the micrometer screws in the extreme cold weather time was determined by star transits in preference to measuring star altitudes. These transits have been reduced by the usual method of least squares.* In connection with time observations, determinations of longitude were made during the winter of 1903 to 1904 by observing transits of the moon. This method was adopted in preference to the chronometric method in view of the small number of chronometers carried by the Expedition, these also being subject to many heavy shocks in navigating in the ice and exposed to very great changes of temperature. Numerous other complete transit sets were observed and reduced, but in view of the fact that they have been used primarily in the determination of corrections simply to local time, they are not published. The equatorial intervals of the reticule as determined from observations and used in the reduction of the various transit observations are as follows, the signs applying for "clamp east":

Period of observation	To November 2, 1903	November 3, 1903, to January 7, 1904	January 8, 1904, to February 19, 1904
	s	*s*	*s*
Thread I	−35.378	−35.778	−35.267
II	−23.638	−23.865	−23.504
III	−11.756	−11.904	−11.862
IV	− 0.089	+ 0.030	− 0.148
V	+11.881	+11.895	+11.821
VI	+23.619	+23.835	+23.504
VII	+35.398	+35.784	+35.476

* Text-book of geodetic astronomy, by John F. Hayford. New York, 1898.

FIGURE 3



VIEW SHOWING EXTERIOR OF OBSERVATORY AT TEPLITZ BAY

In the following tabulation of transit observations only those involving moon culminations are included :

Tabulation of transit observations at Teplitz Bay

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	Δ T	Δ p²	Remarks
					h m s	*d*	*h m s*		
Nov. 6.5	17 Tauri	U	W	7	23 44 01.64	+16.4	3 55 09.09	0.1217	
	η Tauri	U	W	7	46 37.49	+10.9	09.58	0.0129	
	λ Tauri	U	W	7	0 00 12.51	+12.4	09.58	0.0139	
	☽	U	W	7	18 21.69	+10.9	.....	.....	
	ε Tauri	U	W	6	27 51.47	+ 6.6	09.57	0.0106	Very faint
	α Tauri	U	W	7	35 15.41	+11.4	09.52	0.0033	
	ε Ursæ Minoris	L	W	7	1 00 34.94	+12.3	09.22	0.0016	Cloudy
Nov. 7.4	α Ursæ Minoris	U	W	7	21 29 43.71	+13.7	3 55 17.91	0.0020	
	4 Ursæ Minoris	L	W	7	22 13 57.00	+10.7	16.02	0.0004	
	ρ Bootis	L	W	7	32 27.26	+15.6	16.02	0.0052	
	γ Persei	U	W	7	23 02 37.41	+15.5	15.63	0.0462	
	θ Draconis	L	E	7	0 04 49.53	+ 9.5	16.13	0.0129	
	τ Herculis	L	E	7	23 35.94	+ 7.6	15.67	0.0437	
	α Tauri	U	E	7	35 12.14	+ 6.3	16.16	0.0460	
	ι Aurigæ	U	E	7	55 31.96	+ 8.3	15.91	0.0006	
	☾	U	E	7	1 20 04.90	+ 8.4	.....	.....	
	β Tauri	U	E	7	25 00.50	+ 8.8	16.02	0.0053	
	ζ Tauri	U	E	7	36 41.63	+ 6.1	15.90	0.0014	
	35 Draconis	L	E	5	58 29.09	+ 7.5	15.59	0.0098	
	χ Draconis	L	E	7	2 27 32.29	+ 6.2	15.61	0.0152	
Nov. 8.6	η Geminorum	U	E	5	2 13 47.12	+ 3.4	3 55 20.35	0.0656	
	☾	U	E	7	23 52.41	+ 3.4	.....	.....	
	γ Geminorum	U	E	7	36 52.41	+ 4.2	19.87	0.0415	
	ε Geminorum	U	E	7	42 42.57	+ 2.8	21.18	1.0527	Temp. : −40° Fahr.
	μ Ursæ Majoris	U	E	6	6 21 16.65	+ 5.4	19.40	0.3098	
	9 H Draconis	U	E	5	31 31.88	+ 2.7	20.50	0.0159	
	η Pegasi	L	E	7	43 11.50	+ 4.4	19.86	0.0402	
	β Ursæ Majoris	U	E	6	7 00 41.47	+ 4.5	19.70	0.0578	
	π Cephei	L	E	7	09 36.39	+ 5.5	20.23	0.0022	
	ν Ursæ Majoris	U	E	7	17 57.21	+ 0.1	19.70	0.1126	
	γ Cephei	L	W	7	40 14.21	+ 9.6	21.22	0.1040	
	β Leonis	U	W	7	48 48.56	+ 8.0	20.26	0.0308	
	4 H Draconis	U	W	5	8 12 10.15	+ 7.9	20.79	0.0353	Faint
	α Cassiopeiæ	L	W	7	39 47.90	+ 9.4	19.84	0.0242	
	η Cassiopeiæ	L	W	7	48 01.77	+ 9.4	19.86	0.0189	
	12 Canum Venaticorum	U	W	7	56 09.81	+ 9.3	19.90	0.0233	

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	ΔT	Δ p²	Remarks
					h m s	*d*	*h m s*		
Nov. 9.6	ξ Geminorum	U	W	7	2 44 30.77	+ 5.6	3 55 27.16	0.0240	Temp.: —38° Fahr.
	ζ Geminorum	U	W	7	3 03 01.16	+ 7.5	27.12	0.0360	
	λ Geminorum	U	W	7	17 10.70	+ 9.2	27.27	0.0025	
	☾	U	W	7	24 34.67	+12.0	.....	.....	
	α Geminorum	U	W	7	33 03.83	+ 4.7	27.45	0.0130	
	α Canis Minoris	U	W	7	38 52.63	+10.6	27.48	0.0256	
	β Germinorum	U	W	7	44 01.84	+ 12.1	27.41	0.0063	Temp.: —42° Fahr.
Nov. 10.7	β Cancri	U	E	3	4 15 48.34	+12.2	3 55 22.08	0.0001	Very faint
	☾	U	E	7	23 10.50	+10.4	.....	.....	Temp.: —47° Fahr.
	δ Cancri	U	E	4	43 43.43	+12.5	22.05	0.0015	Very faint
	ζ Hydræ	U	E	4	54 48.58	+ 10.7	22.14	0.0025	Very faint
Dec. 6.0	19 H Camelopardalis	L	E	7	13 09 53.81	+28.5	3 57 06.97	1.0234	Temp.: —25° Fahr.
	β Tauri	L	E	7	23 05.09	—17.2	11.34	0.0484	
	β Draconis	U	E	7	31 05.29	—16.7	10.97	0.0083	
	ι Herculis	U	E	7	39 35.11	—18.8	10.90	0.0240	
	ψ Draconis	U	E	7	46 28.11	—19.6	10.35	0.0787	
	δ Aurigæ	L	E	6	54 08.99	—17.8	11.37	0.0328	
	η Geminorum*	L	E	7	14 11 56.69	—19.3	11.10	0.0000	
	μ Geminorum*	L	E	7	20 00.66	—19.5	11.28	0.0292	
	☾	L	E	7	26 14.33	—19.7	.....	.....	
	γ Geminorum	L	E	7	35 01.71	—18.7	11.04	0.0034	
	ε Geminorum	L	E	7	40 52.93	—20.3	11.24	0.0171	
	R Lyræ*	U	W	7	55 14.18	— 5.0	11.06	0.0010	
	25 Camelopardalis	L	W	7	15 13 52.49	— 4.4	12.39	0.0499	
	β Cygni	U	W	7	29 40.41	— 2.0	11.23	0.0144	
	θ Cygni	U	W	7	36 41.31	— 3.5	11.15	0.0013	
	β Geminorum	L	W	6	42 18.61	— 3.4	10.84	0.0575	
Dec. 6.5	ν Aurigæ	U	E	7	1 47 41.39	— 1.0	3 57 11.54	0.0284	Temp.: —30° Fahr.
	22 Camelopardalis	U	E	6	2 11 08.51	— 0.8	11.99	0.0112	
	ν Geminorum*	U	E	6	26 06.53	+ 0.1	11.74	0.0000	Faint
	γ Geminorum	U	E	7	35 00.68	+ 0.7	11.71	0.0008	
	ξ Geminorum	U	E	7	42 44.49	+ 0.2	11.99	0.0600	Very faint
	☾	U	E	7	58 13.80	— 0.1	.....	.....	Limb "boiling" violently
	ζ Geminorum	U	E	7	3 01 15.51	.....	11.71	0.0008	
	λ Geminorum	U	E	7	15 25.11	— 0.8	11.70	0.0015	Very faint
	τ Draconis	L	E	5	20 10.22	— 1.2	12.28	0.0350	
	ι Cygni	L	E	7	30 05.40	— 1.7	11.47	0.0364	

* From American Ephemeris; all other stars from Berliner Jahrbuch.

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	Δ T	Δ p²	Remarks
					h m s	*d*	*h m s*		
Dec. 7.1	24 H Camelopardalis....	L	E	2	14 48 59.04	+ 8.6	3 57 14.03	0.0035	Atmosphere clear
	λ' Lyræ	U	E	7	55 11.11	+ 1.0	13.82	0.0126	
	γ Lyræ.....	U	E	7	58 07.82	+ 1.0	13.63	0.0020	
	δ Geminorum	L	E	7	15 17 12.51	+ 0.1	13.67	0.0001	
	ι Geminorum	L	E	7	22 35.09	+ 0.1	13.60	0.0056	
	☾.....	L	E	7	30 01.34	+ 7.4	.....	.....	
	κ Geminorum.....	L	E	7	41 28.24	+ 7.5	13.68	0.0060	
	ϵ Draconis	U	E	6	51 14.42	+ 7.5	13.78	0.0017	
	κ Cephei.....	U	W	7	16 14 48.41	+19.1	12.38	0.0060	
	γ Cygni.....	U	W	7	21 32.49	+19.3	13.79	0.0088	
	o Ursæ Majoris.....	L	W	6	25 08.65	+19.5	13.44	0.0168	
	θ Cephei.....	U	W	7	30 42.12	+19.6	13.85	0.0085	
	α Cygni.....	U	W	7	40 54.74	+22.5	13.85	0.0170	
	ι Ursæ Majoris.....	L	W	7	55 28.13	+23.2	13.64	0.0008	
	1 H Draconis	L	W	4	17 26 24.56	+21.9	13.03	0.0065	
Dec. 7.6	β Canis Minoris.....	U	E	7	3 24 43.34	+25.3	3 57 19.39	0.0001	
	ι Cygni	L	E	7	3 30 03.61	+19.9	3 57 19.22	0.0128	
	α Canis Minoris.....	U	E	7	37 03.23	+23.2	19.51	0.0167	
	β Geminorum.....	U	E	7	42 12.49	+23.5	19.30	0.0054	
	ϵ Draconis	L	E	7	51 17.91	+21.1	19.60	0.0087	
	☾..	U	E	7	4 01 25.84	+18.9	.....	.....	Edge slightly "boiling"
	ζ Cancri*	U	E	6	09 28.62	+20.2	19.34	0.0015	
	β Cancri.....	U	E	7	14 04.61	+22.4	19.67	0.0824	
	γ Cygni.....	L	E	6	21 33.30	+23.2	19.21	0.0202	
	o Ursæ Majoris.....	U	E	7	25 01.73	+20.7	19.11	0.0233	Drift rising
Dec. 30.3	50 Cassiopeiæ.....	U	W	7	21 56 44.39	+ 0.7	3 58 31.92	0.0322	
	λ Bootis.....	L	W	7	22 14 09.30	- 1.4	31.28	0.0198	
	θ Bootis.....	L	W	7	23 20.43	+ 0.3	31.45	0.0000	
	5 Ursæ Minoris*.....	L	W	4	29 02.99	.....	32.15	0.0345	
	θ Persei.....	U	W	7	38 07.53	- 2.7	31.49	0.0006	
	τ Persei.....	U	W	7	48 56.26	- 0.5	31.34	0.0072	
	δ Arietis.....	U	E	5	23 07 36.12	- 1.9	31.48	0.0004	
	ξ Arietis*.....	U	E	3	10 50.86	- 2.0	31.42	0.0012	
	☽.....	U	E	7	16 18.53	- 8.0	.....	.....	
	5 H Camelopardalis.....	U	E	7	41 44.91	- 7.6	31.64	0.0054	Hazy
Jan. 1.9	β Tauri.....	L	E	7	13 21 32.57	+ 1.0	3 58 41.76	0.0272	Atmosphere slightly hazy
	χ Aurigæ*.....	L	E	7	27 48.36	+ 1.6	41.42	0.0205	

* From American Ephemeris; all other stars from Berliner Jahrbuch.

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	ΔT	Δ p²	Remarks
					h m s	*d*	*h m s*		
Jan. 1.9	ζ Tauri	L	E	7	33 13.83	— 2.4	41.37	0.0401	Temp.: —20° Fahr.
	ι Herculis	U	E	6	38 00.95	— 2.4	41.69	0.0069	
	☽	L	E	7	49 19.07	0.0	.....	.....	
	35 Draconis	U	E	7	54 56.13	— 1.3	41.85	0.0059	
	22 H Camelopardalis	L	E	7	14 09 37.53	+ 2.2	41.99	0.0320	
	χ Draconis	U	E	7	24 00.56	+ 4.8	41.71	0.0025	
	α Lyræ	U	W	7	34 58.01	— 3.7	41.61	0.0006	
	ε Geminorum	L	W	7	39 21.01	— 3.7	41.31	0.0634	
	15 Lyncis	L	W	7	50 17.91	+ 1.2	41 77	0.0133	
	R Lyræ	U	W	7	53 41.17	— 0.3	41.71	0.0108	
	25 Camelopardalis*	L	W	7	15 12 19.89	+ 0.4	42.47	0.0240	
Jan. 2.4	ψ¹ Draconis	L	W	4	1 44 49.86	— 1.8	3 58 42.75	0.0219	
	35 Draconis	L	W	6	54 53.79	— 1.3	43.36	0.0032	
	η Geminorum	U	W	7	2 10 22.69	0.0	43.05	0.0109	
	μ Geminorum	U	W	7	18 26.80	0.0	43.12	0.0014	
	☽	U	W	7	21 49.09	0.0	.....	.....	
	γ Geminorum	U	W	7	33 27.40	0.0	43.22	0.0034	
	ξ Geminorum	U	W	7	41 11.59	— 0.5	43.10	0.0035	
	ο Draconis	L	W	7	51 00.14	0.0	43.45	0.0294	
	R Lyræ	L	W	5	53 38.78	0.0	43.34	0.0191	
	25 Camelopardalis*	U	E	6	3 12 21.76	0.0	42.82	0.0035	
	τ Draconis	L	E	6	18 36.81	0.0	41.85	0.2402	
	ρ Geminorum	U	E	7	24 13.79	— 4.6	43.07	0.0066	Probably ice on pivot (see level)
	α Geminorum	U	E	7	29 45.96	— 4.6	43.02	0.0159	
	θ Cygni	L	E	7	35 05.56	0.0	43.41	0.0331	
	δ Cygni	L	E	7	43 12.13	0.0	43.54	0.0896	
Jan. 3.5	25 Camelopardalis*	U	E	6	3 12 16.78	— 0.3	3 58 47.29	0.0001	Atmosphere clear
	ι Geminorum	U	E	7	20 59.69	+ 1.0	47.17	0.0218	
	☾	U	E	7	29 37.61	+ 2.0	.....	.....	
	α Canis Minoris	U	E	7	35 30.23	+ 4.0	47.18	0.0223	
	χ Geminorum	U	E	7	39 52.37	+ 1.1	47.62	0.0740	
	δ Cygni	L	E	6	43 08.83	— 1.1	47.64	0.0577	
	ε Draconis	L	E	7	49 39.26	— 0.5	47.20	0.0030	
	ο¹ sq. Cygni	L	E	7	4 11 47.29	— 3.5	47.13	0.0236	
	ο Ursæ Majoris	U	W	7	23 31.83	+ 2.2	47.40	0.0016	
	θ Cephei	L	W	7	29 08.26	+ 3.9	47.67	0.0347	
	α Cygni	L	W	7	39 20.51	+ 2.9	47.23	0.0062	
	6 H Cephei	L	W	7	44 08.81	+ 3.4	47.20	0.0068	
	ι Ursæ Majoris	U	W	7	51 51.81	+ 2.5	47.35	0.0002	
	σ² Ursæ Majoris	U	W	7	5 03 11.43	+ 4.1	47.17	0.0035	

* From American Ephemeris; all other stars from Berliner Jahrbuch.

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	Δ T	Δ p²	Remarks
					h m s	*d*	*h m s*		
Jan. 4.0	25 Camelopardalis*.....	L	W	7	15 12 17.23	+ 6.9	3 58 48.41	0.0016	
	ν Geminorum.....	L	W	6	20 58.28	+ 6.0	48.64	0.0000	
	χ Geminorum.....	L	W	7	39 51.44	+ 1.1	48.53	0.0106	
	δ Sagittæ.....	U	W	5	44 16.02	— 2.8	48.66	0.0003	
	☾.....	L	W	7	16 02 04.47	+ 1.0	.....	.....	
	χ Cephei	U	W	4	13 15.45	+ 2.7	47.37	0.0965	
	γ Cygni.....	U	W	7	19 56.17	+ 2.7	48.89	0.0042	
	η Cephei.....	U	E	7	44 29.60	— 0.5	48.75	0.0038	
	χ Ursæ Majoris.....	L	E	7	58 16.93	+ 1.7	48.66	0.0002	
	τ Cygni.....	U	E	7	17 12 07.69	— 2.0	48.59	0.0018	
	α Cephei.....	U	E	7	17 27.23	— 2.8	48.69	0.0007	
	1 H Draconis.....	L	E	4	24 40.84	— 2.1	48.54	0.0003	
Jan. 23.1	9 H Draconis.....	L	E	7	18 26 57.36	—30.7	3 59 52.58	0.0052	Adjusted level
	10 Lacertæ	U	E	7	35 04.66	+ 1.6	52.90	0.0046	
	ι Cephei.	U	E	7	46 24.14	+ 1.1	52.48	0.0324	Weather : clear
	β Ursæ Majoris	L	E	7	56 09.94	— 1.0	52.72	0.0040	Temp.: — 12° Fahr.
	π Cephei	U	E	7	19 04 59.69	— 0.1	53.06	0.0058	
	ν Ursæ Majoris.....	L	E	7	13 24.87	— 0.1	52.92	0.0079	
	θ Piscium*.....	U	W	5	23 11.75	+ 5.9	52.81	0.0001	
	γ Cephei.....	U	W	7	35 25.60	+ 5.9	53.00	0.0026	
	γ Ursæ Majoris	L	W	7	48 56.70	+ 1.6	52.58	0.0259	
	ω Piscium.....	U	W	7	54 28.84	+ 7.3	52.75	0.0048	
	4 H Draconis.....	L	W	6	20 07 55.46	+10.5	53.86	0.0756	
	☽.....	U	W	7	18 36.69	+ 9.7	.....	.....	
	8 Canum Venaticorum..	L	W	6	29 20.25	+11.4	52.77	0.0016	
	ζ Cassiopeiæ.....	U	....	6	31 42.45	.....	52.87	0.0010	
	δ Andromedæ.....	U	....	6	34 17.41	+ 8.1	52.95	0.0132	
Jan. 27.8	γ Tauri.....	....	....	....	11 30 30.7	.....	.....	.....	Occultation: observed emersion with Berger and Sons' alt-azimuth
	ζ Persei.....	L	E	7	11 48 03.31	+ 6.4	4 00 09.23	0.0003	Atmosphere clear
	ε Persei.	L	E	7	51 22.27	.....	09.41	0.0179	Temp. : — 28° Fahr.
	A^1 Tauri*	L	E	3	58 58.20	+ 7.1	09.39	0.0127	Faint
	19 Ursæ Minoris.....	U	E	2	12 13 22.61	+ 7.0	09.43	0.0016	
	☽.....	L	E	7	13 59.24	+ 6.9	.....	.....	Edge "boiling" slightly
	η Ursæ Minoris*	U	E	5	20 08.21	+ 7.1	09.04	0.0036	
	ε Tauri.....	L	E	4	22 57.99	+ 7.6	09.04	0.0334	
	α Tauri.....	L	E	6	30 21.87	+ 7.6	09.21	0.0014	Star dancing
	τ Tauri.....	L	E	7	36 26.27	+ 7.6	09.27	0.0004	
	9 Camelopardalis.....	L	E	7	44 30.46	+ 7.8	09.33	0.0015	

* From American Ephemeris ; all other stars from Berliner Jahrbuch.

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	ΔT	Δ p²	Remarks
					h m s	*d*	*h m s*		
Jan. 27.8	ε Ursæ Minoris.....	U	W	6	55 20.59	+14.5	08.60	0.0123	Star dancing
	19 H Camelopardalis ...	L	W	7	13 05 57.34	+14.5	08.97	0.0039	
	π Herculis.....	U	W	7	10 35.63	+15.8	09.21	0.0011	
	β Tauri.....	L	W	7	20 12.67	+14.9	09.32	0.0041	
	χ Aurigæ*.....	L	W	6	26 28 40	+15.1	09.21	0.0012	
	β Draconis.....	U	W	4	28 05.75?	+15.3	09.36	0.0050	
	θ^1 Tauri.....	.....	.....	.....	14 58 33.4	.....	.....	.....	Occulations: emersions observed with Berger and Sons' alt-azimuth
	θ^2 Tauri.....	.....	.....	.....	15 03 19.5	.....	.....	.....	
Jan. 28.3	δ^1 Tauri*	U	W	7	0 17 16.87	+ 1.0	4 00 10.61	0.0076	Atmosphere clear
	δ^3 Tauri*	U	W	6	19 49.01	.....	10.62	0.0088	Temp: —26° Fahr.
	θ^1 Tauri*	U	W	7	22 58.59	.....	10.26	0.0642	
	81 Tauri*	U	W	7	23 03.80	.....	10.53	0.0001	
	α Tauri*	U	W	7	30 17.60	.....	10.69	0.0272	
	σ^2 Tauri*	U	W	4	33 40.18	.....	10.40	0.0112	
	☽.....	U	W	6	43 42.53	+ 0.5	.....	.....	Very poor definition; frost film over lens of ocular
	ι Tauri.....	U	W	4	45 38.70	.....	10.39	0.0127	
	ε Ursæ Minoris.....	L	W	7	56 38.81	+ 2.9	10.36	0.0008	
	19 H Camelopardalis ...	U	W	5	1 06 36.70	.....	10.56	0.0001	
	111 Tauri.....	U	W	7	18 42.24	.....	10.69	0.0272	
	119 Tauri.....	U	W	7	26 28.20	+ 4.9	10.49	0.0008	Drift rising
Jan. 29.8	ζ Tauri.....	L	W	7	13 31 43.17	+ 3.8	4 00 17.02	0.0045	Atmosphere clear
	ι Herculis.....	U	W	7	36 29.19	.....	16.89	0.0022	Temp.: —25° Fahr.
	ψ^1 Draconis	U	W	....	43 17.48	+ 4.4	17.08	0.0025	
	θ Aurigæ.....	L	W	7	52 59.87	+ 4.6	17.02	0.0036	
	22 H Camelopardalis ...	L	W	7	14 08 09.71	+ 4.8	16.82	0.0034	
	☽.....	L	W	7	17 31.17	+ 7.7	.....	.....	"Boiling" vigorously
	ν Geminorum*	L	W	7	23 04.21	+ 6.2	17.29	0.1064	
	ε Geminorum.....	L	W	7	31 50.59	+ 6.2	16.83	0.0125	
	15 Lyncis..... ..	L	W	7	48 49.47	+ 6.3	16.67	0.0282	
	R Lyræ.....	U	W	7	52 08.49	.....	16.70	0.0400	
	25 Camelopardalis*.....	L	E	6	10 50.56	+ 4.2	18.29	0.0539	
	τ Draconis.....	U	E	7	17 06.86	0.0	16.82	0.0022	
	ρ Geminorum.....	L	E	7	22 43.80	.....	16.78	0.0231	
	ι Cygni.....	U	E	5	27 01.74	.....	17.01	0.0018	
	θ Cygni.....	U	E	7	33 36.63	+ 2.0	16.87	0.0034	
	β Geminorum..... ...	L	E	7	39 13.80	+ 3.0	17.04	0.0069	
Jan. 30.4	δ Aurigæ	U	E	7	1 51 23.81	0.0	4 00 19.65	0.0149	
	γ Draconis	L	E	5	54 04.65	.....	19.40	0.0024	
	ο Herculis.....	L	E	7	2 03 30.27	+ 0.8	19.58	0.0102	

* From American Ephemeris; all other stars from Berliner Jahrbuch.

Tabulation of transit observations at Teplitz Bay—Continued

November, 1903, to February, 1904

Local astronomical date	Star	Culmination	Circle	No. of threads	Chronometer time of mean thread	Level	Δ T	Δ p²	Remarks
					h m s	*d*	*h m s*		
Jan. 30.4	22 Camelopardalis.....	U	E	7	08 04.74	— 1.2	19.12	0.0233	
	μ Geminorum.....	U	E	7	16 55.26	.....	19.34	0.0152	
	χ Draconis.....	L	E	7	22 26.31	.....	19.72	0.0087	
	γ Geminorum.....	U	W	7	31 54.67	+ 5.4	19.31	0.0240	
	ε Geminorum.....	U	W	6	37 45.82	+ 7.8	19.56	0.0070	
	ξ Geminorum.....	U	W	7	39 38.66	+ 7.8	19.42	0.0024	
	θ Geminorum.....	U	W	6	46 11.98	.....	19.55	0.0050	
	☽.....	U	W	7	49 50.05	+ 5.0	.....	.....	
	ζ Geminorum.....	U	W	7	58 09.53	+ 7.0	19.28	0.0329	
	25 Camelopardalis*.....	U	W	6	3 10 06.14	.....	20.77	0.0507	
	τ Draconis.....	L	W	6	17 08.44	.....	19.98	0.0337	
	β Canis Minoris.....	U	W	5	21 41.19	+ 9.6	19.45	0.0004	
	ι Cygni.....	L	W	7	27 00.80	.....	19.71	0.0288	
Jan. 30.9	θ Geminorum.....	L	W	7	14 46 12.26	+ 6.9	4 00 21.13	0.0020	Atmosphere clear
	15 Lyncis.....	L	W	7	48 44.53	+ 6.9	21.08	0.0000	Temp.: — 28° Fahr.
	ζ Geminorum.....	L	W	7	58 08.87	+ 6.9	21.21	0.0154	
	25 Camelopardalis*.....	L	W	7	15 10 56.29	+ 5.0	20.67	0.0050	
	ι Draconis.....	U	W	5	16 57.92	+ 5.0	20.95	0.0022	
	☽.....	L	W	7	22 25.48	+ 7.2	.....	.....	Edge "boiling" moderately
	α Geminorum.....	L	W	7	28 12.69	+ 7.2	21.16	0.0051	
	χ Geminorum.....	L	W	7	38 23.13	+ 8.0	21.26	0.0285	
	β Geminorum.....	L	W	3	39 11.23	+ 8.0	20.67	0.1429	
Feb. 1.5	ε Hydræ.....	U	W	7	4 41 16.46	+10.4	4 00 27.19	0.0253	Atmosphere clear
	ζ Hydræ.....	U	W	6	49 53.85	+ 1.3	27.49	0.0194	Temp.: —26.5° Fahr.
	☽.....	U	W	7	59 33.64	+ 3.1	.....	.....	
	☾.....	U	W	7	5 01 58.41	+ 3.1	.....	.....	
	40 Lyncis.....	U	W	7	14 46.84	+ 3.9	4 00 27.47	0.0111	
	1 H Draconis.....	U	W	7	23 01.56	+ 5.6	26.63	0.0156	
	o Leonis*.....	U	W	7	35 36.34	+ 3.9	27.16	0.0354	
	π Cephei.....	L	W	7	40 04.17	+ 3.2	27.39	0.0003	
	π³ Cygni.....	L	W	2	42 48.13	+ 2.6	27.21	0.0108	
	μ Leonis*.....	U	W	6	46 52.37	+ 2.0	27.57	0.0416	
	ι Pegasi.....	L	E	7	6 02 04.64	— 1.0	27.63	0.0690	
	24 Cephei.....	L	E	7	07 28.04	— 1.8	27.57	0.0073	
	λ Ursæ Majoris.....	U	E	6	10 54.26	— 2.6	27.35	0.0000	
	30 H Ursæ Majoris.....	U	E	6	16 49.59	— 3.4	27.38	0.0002	
	3 Lacertæ.....	L	E	1	19 19.42	— 4.2	26.77	0.1682	
	9 H Draconis.....	U	E	7	26 35.63	— 4.9	27.30	0.0002	

* From American Ephemeris; all other stars from Berliner Jahrbuch.

As will be noted from the above tabulation, twenty-two Moon culminations were observed, as also three occultations of fixed stars for the determination of longitude. These have been reduced by the methods developed by Chauvenet.*

The observed corrections at the Greenwich Observatory to the Moon's positions as given by the Nautical Almanac have been kindly supplied by courtesy of the Astronomer Royal. In accordance with Peirce's method of correcting the Ephemeris, formulæ of the form $X = A + Bt + Ct^2$ for the various periods of observation have been derived by the method of least squares, and the corrections at the particular times of observation computed therefrom. The coefficients of the formulæ are as follows:

Period	No. of equations of condition	Assumed epoch	*A*	*B*	*C*
1903–1904		1903–1904	*s*	*s*	*s*
November 1 to 14.....	5	November 8.0	—0.153	—0.0231	—0.0064
November 29 to December 13..	11	December 6.5	—0.054	—0.0193	—0.0017
December 29 to January 10.....	7	January 4.0	—0.582	—0.0192	—0.0098
January 22 to February 6.....	6	January 30.0	—0.680	—0.0149	—0.0090

The corrections for declination in the case of the reduction of the occultations have been determined graphically.

The results for longitude are shown in the tabulations following, the various column headings of which indicate the steps in the computations after the notation used by Chauvenet. The mean results of this work are as follows:

Mean longitude east of Greenwich of the astronomical observatory at Teplitz Bay	*h*	*m*	*s*	*s*
Mean value derived from twenty-two Moon culminations	3	51	51.8	(± 1.3)
Mean value derived from three occultations of fixed stars	3	51	58.6	(± 1.1)
Weighted mean longitude east of Greenwich	**3**	**51**	**52.6**	**(± 1.3)**

This value is somewhat less than that obtained by the Italian Expedition when referred to the same point. As stated above, the Italian astronomical station was not relocated; a direct comparison of the values may, however, be made by reference to the magnetic station occupied by Commander Cagni. This station, which was 0.8 second of arc west† of the Italian astronomic observing point, is 6.71 meters or 0.1 second of arc west of the astronomic observatory of the Ziegler Expedition. The final result adopted from the observations of 1899 to 1900 was $3^h\ 52^m\ 16^s$ ($\pm 2^s$) east of Greenwich, which, referred to the station of 1903 to 1905, would be $3^h\ 52^m\ 15.^s3$. There is thus a difference between the two determinations of about 23 seconds of time. It may be noted that the probable errors of the two values are of about the same order.

* Practical and spherical astronomy, by William Chauvenet. Philadelphia, 1885, 5th edition, volume I, pp. 350 to 370 and 549 to 565.

† Osservazioni scientifiche esequite durante la spedizione Polare di S. A. R. Luigi Amedeo di Savoia, Duca degli Abruzzi. Milan, 1903, pp. 105 and 447.

Summary of Moon culmination observations and results for longitude

Local astronomical date	Culmination, limb, and circle	Chronometer time of transit	Time from Moon culminating stars	Time of passing threads	Reduction to center	Azimuth, collimation, and level correction	Observed right ascension of Moon's center
1903–1904		*h m s*	*h m s*	*s*	*s*	*s*	*h m s*
November 6.5.....	U II W	0 19 21.69	+3 55 09.56	76.9	−69.52	+0.47	4 13 22.20
7.6.....	U II E	1 20 04.90	+3 55 16.00	76.9	−70.56	−2.66	5 14 07.68
8.6.....	U II E	2 21 52.41	+3 55 20.47	77.6	−70.95	−2.09	6 15 59.84
9.6.....	U II W	3 23 34.67	+3 55 27.32	76.9	−70.63	−3.21	7 17 48.15
10.7.....	U II E	4 24 10.50	+3 55 22.09	76.1	−69.77	+8.20	8 18 31.02
December 6.0	L II E	14 26 14.33	+3 57 11.14	77.3	−72.10	−1.76	18 22 11.61
6.5.....	U II E	2 58 13.80	+3 57 11.77	77.4	−72.00	−1.38	6 54 12.19
7.1.....	L II E	15 30 01.34	+3 57 13.65	77.4	−71.69	−1.95	19 26 01.35
7.5.....	U II E	4 01 25.84	+3 57 19.38	76.4	−71.21	−5.04	7 57 28.96
30.3.....	U I E	23 16 18.53	+3 58 31.45	75.6	+68.01	+1.71	27 15 59.70
January 1.9.....	L I E	13 49 19.07	+3 58 41.58	78.3	+72.46	+0.72	17 49 13.83
2.4.....	U I W	2 21 49.09	+3 58 43.12	77.6	+72.80	+0.83	6 21 45.84
3.5.....	U II E	3 29 37.61	+3 58 47.18	76.9	−72.76	+0.62	7 27 12.65
4.0.....	L II W	16 02 04.47	+3 58 48.65	76.9	−72.39	+0.70	19 59 41.43
23.2.....	U I W	20 20 36.69	+3 59 52.85	73.5	+61.73	+0.93	24 21 32.20
27.8.....	L I E	12 13 59.24	+4 00 09.26	76.7	+69.10	−5.52	16 15 12.08
28.3.....	U I W	0 43 42.53	+4 00 10.52	77.2	+70.11	−2.60	4 45 00.56
29.8.....	L I W	14 17 31.17	+4 00 17.16	78.6	+72.34	−4.39	18 18 56.29
30.4.....	U I W	2 49 50.05	+4 00 19.42	77.3	+72.70	−2.50	6 51 19.67
30.9.....	L I W	15 22 25.48	+4 00 21.24	77.6	+72.82	−3.59	19 23 55.95
February 1.5.....	U I W	4 59 33.64	+4 00 27.28	75.1	+71.96	−0.40	9 01 12.48
1.5.....	U II W	5 01 58.41	+4 00 27.28	74.9	−71.96	−0.40	9 01 13.33

Summary of Moon culmination observations and results for longitude—Continued

Local astronomical date	Moon's right ascension at Greenwich mean time	x'	$-x''$	Greenwich mean time of observation	Greenwich siderial time of observation	Resulting longitude east of Greenwich
1903–1904	*h m s* *h*	*s*	*s*	*h m s*	*h m s*	*h m s* *s*
November 6.5.....	4 12 29.25 9	+1323.91	−0.33	9 22 03.58	0 21 42.03	3 51 40.2
7.6.....	5 13 21.71 10	+1119.46	−0.13	10 18 39.33	1 22 23.62	44.0
8.6.....	6 15 19.01 11	+985.96	+0.01	11 16 25.97	2 24 16.32	43.5
9.6.....	7 17 13.28 12	+850.20	+0.07	12 14 10.27	3 26 06.68	41.5
10.7.....	8 18 04.94 13	+650.89	+0.07	13 10 50.96	4 26 53.22	37.8
December 6.0.....	6 20 43.18 21	+2069.09	0.00	21 34 29.09	14 30 28.00	43.6
6.5.....	6 54 01.20 10	+257.95	0.00	10 04 17.95	3 02 20 01	52.2
7.1.....	7 24 34.96 22	+2044.24	+0.53	22 34 04.77	15 34 10.00	51.4
7.5.....	7 57 19.99 11	+215.17	+0.01	11 03 35.18	4 05 43.54	45.4
30.3.....	3 14 00.00 4	+3138.77	−3.41	4 52 15.36	23 24 03.53	56.2
January 1.9.....	5 48 34.42 19	+914.13	−0.12	19 15 14.01	13 57 17.07	56.8
2.4.....	6 19 46.32 7	+2747.13	−0.52	7 45 46.61	2 29 52.96	52.9
3.5.....	7 25 09.64 8	+2828.59	+0.60	8 47 09.19	3 35 22.18	50.5
4.0.....	7 58 55.97 21	+1055.65	+0.08	21 17 35.73	16 07 52.00	49.4
23.2.....	24 20 46.37 24	+1439.76	+0.23	0 23 59.99	20 29 41.45	50.8
27.8.....	4 12 52.98 15	+3547.73	−4.01	15 59 03.72	12 23 05.01	67.1
28.3.....	4 43 55.08 4	+1622.52	−0.79	4 27 01.73	24 53 05.86	54.7
29.8.....	6 16 35.73 17	+3277.55	−1.57	17 54 35.98	14 26 49.36	66.9
30.4.....	6 50 14.36 6	+1506.99	−0.17	6 25 06.82	2 59 23.49	56.2
30.9.....	7 21 31.07 18	+3329.97	−0.12	18 55 29.85	15 31 49.79	66.2
February 1.5.....	9 00 04.41 8	+1597.09	+0.37	8 26 37.46	5 09 07.20	65.3
1.5.....	9 00 04.41 8	+1617.04	+0.38	8 26 57.42	5 09 27.22	46.1
Mean of all.....						3 51 51.8 (±1.3)

Summary of star occultation observations and results for longitude at Teplitz Bay Observatory

$\varphi = 81° 47' 34.''9$ N $\varphi' = 81° 44' 19''$

Observations of January 27, 1904, with Berger and Sons' alt-azimuth

Star	γ Tauri		θ^1 Tauri		θ^2 Tauri	
	h m s		*h m s*		*h m s*	
Chronometer time emersion	11 29 30.70		14 58 33.40		15 03 19.50	
Chronometer correction	+ 4 00 09.17		+ 4 00 09.53		+ 4 00 09.54	
Siderial time observation, μ	15 29 39.87		18 58 42.93		19 03 29.04	
Mean time observation	19 05 45.82		22 34 14.90		22 39 00.22	
Approximate Gr. mean time observation	15 14 02		18 42 31		18 47 16	
	h m s		*h m s*		*h m s*	
Star's right ascension, α'	4 14 20.82		4 23 06.26		4 23 11.74	
	° ′ ″		° ′ ″		° ′ ″	
Star's declination, δ'	+ 15 23 38.4		+ 15 44 49.3		+ 15 39 23.3	
Moon's corrected* right ascension, α, at Gr. mean time	*h m s*	*h*	*h m s*	*h*	*h m s*	*h*
	4 08 11.32 at	13	4 17 35.93 at	17	4 17 35.93 at	17
	10 31.98	14	19 57.89	18	19 57.89	18
	12 52.97	15	22 20.17	19	22 20.17	19
	15 14.29	16	24 42.78	20	24 42.78	20
	17 35.93	17	27 05.71	21	27 05.71	21
Moon's corrected* declination, δ, at Gr. mean time	° ′ ″	*h*	° ′ ″	*h*	° ′ ″	*h*
	+ 16 15 45.2 at	13	+ 16 35 19.6 at	17	+ 16 35 19.6 at	17
	20 47.0	14	39 59.5	18	39 59.5	18
	25 43.4	15	44 33.7	19	44 33.7	19
	30 34.2	16	49 02.2	20	49 02.2	20
	35 19.6	17	53 24.9	21	53 24.9	21
Moon's horizontal parallax, π, at Gr. mean time	′ ″	*h*	′ ″	*h*	′ ″	*h*
	58 11.0 at	13	58 20.9 at	17	58 20.9 at	17
	13.5	14	23.3	18	23.3	18
	16.0	15	25.8	19	25.8	19
	18.4	16	28.2	20	28.2	20
	20.9	17	30.8	21	30.8	21
		h		*h*		*h*
Coördinate x at Gr. mean time	− 1.52402 at	13	− 1.35638 at	17	− 1.37887 at	17
	− 0.94285	14	− 0.77266	18	− 0.79516	18
	− 0.36157	15	− 0.18884	19	− 0.21132	19
	+ 0.21981	16	+ 0.39506	20	+ 0.37263	20
	+ 0.80117	17	+ 0.97892	21	+ 0.95655	21
Hourly variation in x, x' at Gr. mean time		*h*		*h*		*h*
	+ 0.58122 at	13	+ 0.58377 at	17	+ 0.58378 at	17
	+ 0.58128	14	+ 0.58382	18	+ 0.58384	18
	+ 0.58135	15	+ 0.58387	19	+ 0.58391	19
	+ 0.58138	16	+ 0.58390	20	+ 0.58395	20
	+ 0.58137	17	+ 0.58388	21	+ 0.58394	21

*See p. 612 for corrections to Nautical Almanac values.

Summary of star occulation observations and results for longitude at Teplitz Bay Observatory—Continued

$\phi = 81° 47' 34.''9$ N $\phi' = 81° 44' 19''$

Observations of January 27, 1904, with Berger and Sons' alt-azimuth

Star	γ Tauri	θ^1 Tauri	θ^2 Tauri
Coördinate y at Gr. mean time.	h	h	h
	+ 0.90113 at 13	+ 0.87001 at 17	+ 0.96324 at 17
	+ 0.98351 14	+ 0.94632 18	+ 1.03945 18
	+ 1.06580 15	+ 1.02250 19	+ 1.11550 19
	+ 1.14799 16	+ 1.09862 20	+ 1.19149 20
	+ 1.23008 17	+ 1.17458 21	+ 1.26730 21
Hourly variation in y, y' at Gr. mean time	h	h	h
	+ 0.08234 at 13	+ 0.07624 at 17	+ 0.07613 at 17
	+ 0.08229 14	+ 0.07618 18	+ 0.07605 18
	+ 0.08224 15	+ 0.07616 19	+ 0.07602 19
	+ 0.08219 16	+ 0.07612 20	+ 0.07599 20
	+ 0.08214 17	+ 0.07604 21	+ 0.07590 21
	° ′ ″	° ′ ″	° ′ ″
μ in arc	232 39 58.05	284 40 43.95	285 52 15.60
$\mu - \alpha'$	169 04 45.75	218 54 10.05	220 04 19.50
B	98 06 49.6	96 26 48.1	96 20 24.3
ξ	+ 0.02713	− 0.08994	− 0.09220
η	+ 0.98834	+ 0.97962	+ 0.97937
T_0 assumed at	h 15.25	h 18.7	h 18.8
x_0	− 0.21622	0.36398	− 0.32808
y_0	+ 1.08634	+ 0.99964	+ 1.10029
x_0'	+ 0.58136	+ 0.58386	+ 0.58390
y_0'	+ 0.08223	+ 0.07617	+ 0.07603
	° ′ ″	° ′ ″	° ′ ″
M	291 56 06.9	274 10 42.0	297 08 28.3
N	81 56 57.3	82 34 02.0	82 34 52.3
ψ	208 44 54.3	191 42 11.1	213 28 15.2
	h m s	h m s	h m s
T_0	15 15 00.00	18 42 00.00	18 48 00.00
Siderial time mean moon	20 21 23.74	20 21 23.74	20 21 23.74
Reduction	+ 02 20.31	+ 03 04.32	+ 03 05.30
μ_0	11 38 54.05	15 06 28.06	15 12 29.04
μ	15 29 39.87	18 58 42.93	19 03 29.04
$\mu_0 - \mu$	− 3 50 45.82	− 3 52 14.87	− 3 51 00.00
τ	− 01 12.44	+ 00 13.33	− 00 56.00
Resulting longitude east of Greenwich	3 51 58.3	3 52 01.5	3 51 56.00
Mean value of three determinations	h m s s 3 51 58.6 (± 1.1)		

AZIMUTH

The star transit observations were also used in determining azimuths. The results are as follows:

Azimuth of magnetic hut from astronomical observatory

Local astronomical date	Horizontal circle			Correction to measured angle account of collimation, azimuth, and level deviations*	Resulting azimuth
	Vernier	Vernier readings before sighting on hut	Vernier readings after sighting on hut		
1903–1904		° ′ ″	° ′ ″	′ ″	° ′ ″
December 2	I	84 58 28	28 59 52		
	II	60 00	60 00	—0 18	S 304 01 20 W
	III	59 04	60 36		
	IV	59 00	60 12		
December 18	I	84 57 52	29 00 28		
	II	57 40	00 16	+1 09	S 304 01 40 W
	III	56 52	00 00		
	IV	57 12	00 08		
January 27	I	84 59 36	29 00 00		
	II	59 48	00 20	—1 22	S 304 01 44 W
	III	60 08	00 52		
	IV	60 28	00 16		

After the meridian mark at Cape Auk was established, February 12, 1904, numerous measurements of the angle from it to the magnetic hut were made during the year 1904. The mean value from these observations of the included angle was 55° 58′ 28″. From the observations of the lower and upper culminations of the circumpolars ε Ursæ Minoris and 19 H Camel, respectively, on February 12, 1904, the correction to this angle on account of collimation, azimuth, and inclination of axis deviations was —0.″1. Hence the azimuth of magnetic hut from astronomic observatory by reference to the meridian mark on Cape Auk is S 304° 01′ 32″ W, a value agreeing very well with those obtained above. The resulting mean value adopted is **S 304° 01′ 34″ W.**

REMARKS

One of the difficulties encountered in observing at low temperatures was caused by the accumulation, due to the condensation from the breath and the proximity of a warm body, of small particles of frost over the different parts of the instrument. It is thought that the irregular readings of the striding level are due more to the presence of ice particles on the axis of the telescope than to any change in the inclination of the axis itself. This ice, which was being continually deposited, was removed as far as possible by dusting the pivots at each leveling and by wiping them and the wyes at the beginning and middle of each time set (when the

*As obtained from the least-square reductions.

telescope was raised out of its standards). Yet small pieces of ice or snow were bound to adhere to the pivots, and these could not be removed except by pressure sufficient to disturb the stability of the instrument. Condensation also collected on the object glass and eye piece, necessitating frequent cleaning. For the same reason as given above this could not be removed from the object glass except when the telescope was lifted out of the wyes; hence many fifth and sixth magnitude stars were lost in observing.

The strain to the body attendant on observing any length of time in low temperatures, especially if the surrounding air is at all in motion, necessitated shortening the period of time sets so far as possible. This accounts for many incomplete transits, stars coming too close together to observe them on all threads.

Upon several occasions fog accumulated in the observatory to such an extent as to effectually stop further observation (this with the shutters open). At other times, during temperatures between —40° and —50° Fahrenheit, the kerosene lamp refused to burn, and the siderial hack watch stopped soon after being exposed to the air.

ALGER ISLAND STATION

OBSERVATORY

When the retreat south was made in April of 1905, the Repsold Circle was taken from its pier at Teplitz Bay, packed in its case, and, with the chronometers, transported by dog sledges 100 miles to Alger Island. At this station the observing hut was some 2.4 meters square and 1.8 meter high, with a flat roof, and built of wire netting stretched tightly over a wood frame and covered with a heavy roofing material called "rubberoid." Wall and roof shutters were placed in the plane of the meridian, and two trap-doors hung in the east and west walls for observations out of the meridian. The pier at this point was made of an iron gasoline tank filled with sand and sunk about 0.3 meter in the frozen ground. So far as could be noted this seemed quite stable. The general location of the observing hut with reference to the balance of the camp is shown by the sketch map of figure 21 of Section A.

The south meridian mark was a tripod of oars firmly lashed together, the legs being embedded in stones, on a level outcrop of basalt from the glacier of McClintock Island. The north mark was a tripod of light iron rods situated on the spur of the mountain immediately north of the station.

The chronometers were kept in a box inside an old hydrogen-generating tank about 1.2 meter in diameter and 1.5 meter high, located 6 meters northwest of the observatory. This tank was banked up with sand and a small pyramid tent pitched over it. A manhole in the top permitted access to the interior of the tank. This arrangement gave very satisfactory temperature results in the chronometer box, the average daily range during the period May 1 to July 30, 1905, being only about 1.2° centigrade. The siderial chronometer was connected with a sounder in the observatory.

Observations at Alger Island

Solar observations only were made at this station during the summer of 1905. The continuous daylight prohibited making trustworthy determinations for longitude. A value of longitude depending upon a rough survey beginning at Teplitz Bay Observatory and ending at Cape Flora, resting at the latter place on the determinations made by the Italian Expedition, of $3^h\ 44^m\ 22^s$ east of Greenwich has been adopted.

Time

Time observations at Alger Island

Greenwich astronomical date	Chronometer No.	Mean of chronometer times			Mean of zenith readings corrected for level			Temperature—Fahr.	Aneroid barometer	A. M. or P. M.	No. of pointings
1905		*h*	*m*	*s*	°	′	″	°	*In.*		
June 26.7	1809	17	03	01.50	60	21	42.65	34.7	30.03	A. M.	3
27.0	1809	0	16	46.75	62	10	32.50	36.7	30.09	P. M.	6
28.0	1809	0	24	22.80	62	29	40.60	28.7	30.29	P. M.	6
28.7	1809	15	38	10.50	63	35	26.30	34.0	30.40	A. M.	6
29.0	1809	0	20	11.35	62	22	18.87	41.0	30.46	P. M.	6
July 2.0	1809	0	47	45.65	63	36	11.30	33.2	30.43	P. M.	4
7.0	1809	0	00	57.25	62	12	20.83	34.0	30.36	P. M.	6
10.0	1809	0	06	36.35	62	43	35.73	32.0	30.42	P. M.	6
10.7	1764	3	25	55.00	62	51	06.65	36.0	30.41	A. M.	6
11.0	1809	0	07	20.17	62	52	24.23	36.9	30.35	P. M.	6
15.7	1764	3	15	35.75	64	42	27.88	33.8	30.35	A. M.	6
16.7	1764	2	54	12.27	65	52	19.70	31.0	30.40	A. M.	4
18.7	1764	3	05	29.60	66	04	25.95	35.5	30.34	A. M.	5
19.7	1764	3	57	06.17	64	24	50.58	34.2	30.34	A. M.	6
20.0	1764	12	05	47.27	65	06	37.95	34.7	30.38	P. M.	6
20.7	1764	3	11	36.72	66	30	23.52	35.7	30.38	A. M.	6
23.7	1764	3	32	50.13	66	42	48.80	35.9	30.35	A. M.	6
24.0	1764	11	50	51.89	64	44	38.90	32.0	30.34	P. M.	6
26.0	1764	12	22	48.63	66	03	17.77	36.2	30.36	P. M.	6
26.7	1764	3	41	49.62	67	27	14.27	32.2	30.42	A. M.	6
27.7	1764	3	39	49.89	67	54	38.83	35.3	30.37	A. M.	6
28.0	1764	12	45	37.66	67	04	23.22	35.0	30.35	P. M.	6

Time observations at Alger Island—Continued

Greenwich astronomical date	Mean of observed times, corresponding to mean zenith distances			Time deduced from observed altitudes			Corrections of chronometers to local siderial time						Remarks
							No. 1809			No. 1764			
1905	*h*	*m*	*s*	*h*	*m*	*s*	*h*	*m*	*s*	*h*	*m*	*s*	
June 26.7	17	03	01.50	20	51	12.67	+3	48	11.77	..	..	.....	
27.0	0	16	49.73	4	04	56.56		48	06.83	..	..	.....	
28.0	0	24	24.63	4	12	29.51		48	04.88	..	..	.....	
28.7	15	38	07.05	19	26	13.01		48	05.96	..	..	.....	
29.0	0	20	14.24	4	08	15.08		48	00.84	..	..	.....	
July 2.0	0	47	47.16	4	35	48.26		48	01.10	..	..	.....	
7.0	0	01	01.67	3	48	50.49		47	48.82	..	..	.....	Sun's edge "jumping"
10.0	0	06	39.19	3	54	21.30		47	42.11	..	..	.....	
10.7	3	25	50.91	3	28	25.82		..	.....	+0	02	34.91	Sun "boiling" moderately
11.0	0	07	23.27	3	55	04.71		47	41.44	..	..	.....	"Boiling" violently
15.7	3	15	32.62	3	18	15.26	..	..	.....		02	42.64	Good definition
16.7	2	54	10.11	2	56	52.60	..	..	.....		02	42.49	Clouds
18.7	3	05	28.72	3	08	17.88	..	..	.....		02	49.16	Drifting
19.7	3	57	03.08	3	59	54.29	..	..	.....		02	51.21	Good
20.0	12	05	49.57	12	08	41.32	..	..	.....		02	51.75	Good
20.7	3	11	35.44	3	14	29.30	..	..	.....		02	53.86	Fair
23.7	3	32	48.53	3	35	50.76	..	..	.....		03	02.23	Fair
24.0	11	50	55.11	11	53	57.43	..	..	.....		03	02.32	Good
26.0	12	22	52.58	12	26	00.39	..	..	.....		03	07.81	Very good
26.7	3	41	48.37	3	44	57.46	..	..	.....		03	09.09	Good
27.7	3	49	49.00	3	42	59.28	..	..	.....		03	10.28	Good
28.0	12	45	39.07	12	48	53.50	..	..	.....		03	14.43	Good

LATITUDE

Latitude was determined at Alger Island by the method of circummeridian observations of the Sun, the reductions being carried out in the usual method.* The results are summarized in the following tabulation:

Summary of latitude observations at Alger Island

Greenwich astronomical date and remarks	Obs'd limb	Chronom. No. 1764 time	Observed zenith distance	Refraction and parallax	*Am*	*Bn*	Zenith distances reduced to meridian and Sun's center	Resulting latitude
1905		*h m s*	° ′ ″	″	″	″	° ′ ″	° ′ ″
June 27.8	☉	19 49 50	56 48 49.4	+ 85.8	−223 4	+0.1	57 02 17.6	
Barom.: 30.27 In.	☉	57 40	78 26.1	+ 87.5	−105.1	.....	22 8	
Therm.: + 31.°0 F.	☉	20 02 05	77 43.7	+ 87.6	− 57.8	.....	27.8	
	☉	05 18	77 16.9	+ 87.6	− 32.2	.....	26.6	
	☉	10 58	45 10.5	+ 85.5	− 5.2	.....	16.5	
	☉	16 51	45 09.0	+ 85.5	− 1.6	.....	18.6	
	☉	20 47	45 20.7	+ 85.5	− 13.1	.....	18.8	80 21 19.1 N
	☉	26 21	77 33.9	+ 87 5	− 48 5	.....	27.2	
	☉	30 14	78 11.6	+ 87.5	− 86.3	.....	27.0	
	☉	32 58	78 44.9	+ 87.5	−119.5	.....	27.2	
	☉	38 39	48 43.1	+ 85.7	−205.6	+0.1	28.9	
	☉	43 30	50 10.5	+ 85.7	−297.4	+0.1	24.5	
June 28.8	☉	19 49 30	57 23 25.4	+ 87.3	−233.0	+0.1	57 04 74.1	
Barom.: 30.44 In.	☉	53 09	22 24.1	+ 87.2	−171.0	.....	74.6	
Therm.: + 36.°6 F.	☉	56 07	21 41 4	+ 87.2	−127.6	.....	75.3	
	☉	59 11	21 01.9	+ 87.1	− 89.5	.....	73.8	
	☉	20 02 31	20 32.4	+ 87.1	− 55.6	.....	78.2	
	☉	06 07	20 06.6	+ 87.1	− 28.1	.....	79.9	80 21 18 9 N
	☉	11 45	56 47 52 4	+ 85.1	− 3.7	.....	59.5	
	☉	15 45	47 50.9	+ 85.1	− 0.2	.....	61.5	
	☉	18 37	47 50.4	+ 85.1	− 4.8	.....	56.4	
	☉	22 57	48 15.2	+ 85.1	− 23.0	.....	63.0	
	☉	26 22	48 40.4	+ 85.2	− 46.9	.....	64.4	
	☉	29 49	49 09.3	+ 85.2	− 79.4	.....	60.8	
July 9.8	☉	19 53 40	58 19 43.5	+ 91.0	−200.1	+0.1	58 02 08 8	
Barom.: 30 44 In.	☉	56 48	18 51.9	+ 91.0	−150.6	.....	06 6	
Therm.: + 34 °9 F.	☉	59 35	18 09.3	+ 90.9	−112.5	.....	02.0	
	☉	20 02 30	17 38 0	+ 90.9	− 78.5	.....	04.7	
	☉	05 17	17 16.2	+ 90.8	− 51.8	.....	09 5	
	☉	08 03	16 54.1	+ 90.8	− 30.7	.....	08.5	
	☉	21 15	57 45 07.4	+ 88.8	− 5.6	.....	16.3	80 21 20.7 N
	☉	24 33	45 17.6	+ 88.8	− 18.8	.....	13.3	
	☉	27 06	45 37.0	+ 88.9	− 34.4	.....	17.2	
	☉	29 27	45 55.2	+ 88.9	− 52.9	.....	16.9	
	☉	32 15	46 28.2	+ 89 0	− 80.1	.....	22.8	
	☉	34 58	46 55.3	+ 89.0	−111.8	.....	18.2	

*Spherical and practical astronomy, by William Chauvenet. Philadelphia, 1885, 5th edition. Pp. 233–253.

Summary of latitude observations at Alger Island—Continued

Greenwich astronomical date and remarks	Obs'd limb	Chronom. No. 1764 time	Observed zenith distance	Refraction and parallax	*Am*	*Bn*	Zenith distances reduced to meridian and Sun's center	Resulting latitude
1905		*h m s*	° ′ ″	″	″	″	° ′ ″	° ′ ″
July 15.8	☉	7 10 28	58 39 47.6	+ 92.4	−250.9	+0.1	58 52 55.2	
Barom.: 30.35 In.	☉	14 02	38 45.3	+ 92.4	−188.3	+0.1	55.5	
Therm.: + 33.°0 F.	☉	16 57	38 02.2	+ 92.3	−143.8	.....	56.7	
	☉	19 58	37 21.9	+ 92.3	−104.0	.....	56.2	
	☉	23 03	36 49.4	+ 92.2	− 70.0	.....	57.6	
	☉	25 38	36 29 5	+ 92.2	− 46.6	.....	61.1	80 21 23.1 N
	☉	42 09	67 43 3	+ 94.2	− 9.3	.....	82.2	
	☉	43 14	67 58.4	+ 94.2	− 13.6	.....	93.0	
	☉	50 44	68 39.0	+ 94.3	− 66.5	.....	80.0	
	☉	58 44	70 16.6	+ 94.4	−167.1	.. ...	78.0	
	☉	62 39	71 28 6	+ 94.5	−232.4	+0.1	84.8	
July 18.3 (lower culmination)	☉	19 27 48	78 44 15.7	+289.2	+115.1	.....	78 35 13.8	
	☉	31 19	44 59.8	+289.4	+ 76 8	.....	19.8	
Barom : 30.41 In.	☉	34 51	45 29.2	+289.6	+ 46.2	.....	18.8	
Therm.: + 34.°6 F.	☉	38 05	45 52.1	+289.8	+ 24.9	.....	20.6	
	☉	40 36	46 06.7	+290.0	+ 12 9	.....	23 4	
	☉	54 42	14 55.9	+277.0	+ 18.5	.....	37.6	80 21 23.7 N
	☉	58 14	14 44.0	+276.9	+ 39.3	.....	46.4	
	☉	60 58	14 21.8	+276.7	+ 60.8	.....	45.5	
	☉	64 04	13 54.6	+276 5	+ 90.6	.....	47.9	
	☉	67 45	13 14.6	+276.4	+133.6	.....	50.8	
July 20.8	☉	7 31 37	59 31 48.5	+ 95.3	−227.2	+0.1	59 45 23.0	
Barom.: 30.35 In.	☉	35 30	30 48.9	+ 95.3	−163.0	.....	27.5	
Therm.: + 34.°9 F.	☉	39 29	29 54.9	+ 95.2	−108.2	.....	28.2	
	☉	45 30	28 58.2	+ 95.2	− 46 6	.....	33.1	
	☉	48 06	28 39.0	+ 95.1	− 27 9	.....	32.5	
	☉	50 15	28 28.0	+ 95.1	− 16.1	.....	33.3	80 21 20.5 N
	☉	8 01 55	60 05.1	+ 97.3	− 8.7	.....	47.4	
	☉	05 22	60 22.3	+ 97.3	− 25.0	.....	48.3	
	☉	12 01	61 12.3	+ 97.4	− 80.3	.....	43.1	
	☉	14 57	61 51.4	+ 97.4	−114.5	.....	48.0	
	☉	17 31	62 26 6	+ 97.5	−149.6	.....	48 2	
Mean value latitude adopted								80 21 21.0 N

AZIMUTH

The azimuth of the south mark at Alger Island was determined during the summer of 1905 by observations of the Sun's transits. The following tabulation shows the results obtained from the ten determinations made:

Summary of south mark azimuth determinations at Alger Island

Greenwich astronomical date	Circle	Mean chronometer time on both limbs	Mean horizontal circle reading both limbs	Mean level readings	Mark readings	Local sidereal time mean set	Computed Sun's azimuth	Correction account level	Circle reading south meridian	Resulting azimuth of mark
1905		*h m s*	° ′ ″	*d*	° ′ ″	*h m s*	° ′ ″	″	° ′ ″	° ′ ″
July 15.7	L	3 34 37.68	306 50 57	−22.6	11 02 50	3 43 45.90	62 33 53.4	+ 5.0	11 03 33	359 59 16
	R	3 47 28.93	310 08 12	+ 2.3	11 02 48					
18.7	R	3 31 14.66	303 03 10	+31.5	11 02 45	3 45 36.40	65 05 05.6	− 4.7	11 04 01	359 58 43
	L	3 54 19.74	308 54 49	−11.6	11 02 43					
19.7	R	3 27 24.11	311 06 27	+30.7	11 02 43	3 34 59.69	68 45 28.6	− 5.8	11 03 42	359 59 03
	L	3 36 52.82	313 30 11	− 5.8	11 02 45					
20.0	R	11 21 17.20	66 23 31	− 0.8	11 02 45	11 29 27.14	56 41 51.6	+ 2.0	11 03 24	359 59 21
	L	11 31 53.68	69 07 06	− 7.1	11 02 46					
20.0	L	11 41 09.10	71 29 32	−28.3	11 02 45	11 48 34.85	61 35 53.1	+ 5.3	11 03 33	359 59 12
	R	11 50 17.20	73 49 30	+ 6.2	11 02 46					
20.7	L	3 32 54.72	301 32 02	− 7.9	11 02 56	3 40 21.57	68 22 43.4	− 0.7	11 03 41	359 59 11
	R	3 42 00.61	303 49 53	+11.0	11 02 49					
23.7	L	3 46 52.03	302 10 21	−40.8	11 02 45	3 55 30.93	67 27 46.9	+ 9.2	11 03 32	359 59 09
	R	3 58 05.23	305 00 52	− 0.6	11 02 37					
24.0	L	11 19 50.86	61 49 18	− 9.8	11 02 52	11 27 52.11	52 03 07.2	+ 2.4	11 03 26	359 59 23
	R	11 29 48.75	64 23 54	0.0	11 02 46					
26.0	L	11 49 11.24	67 17 42	− 7.4	11 02 49	11 59 16.21	58 01 23.5	+ 1.8	11 03 05	359 59 39
	R	12 03 05.58	70 51 19	− 0.4	11 02 39					
28.0	R	12 20 23.50	73 12 49	− 0.2	11 02 45	12 28 02.33	63 16 27.5	+ 2.9	11 03 00	359 59 43
	L	12 29 12.36	75 26 12	−13.2	11 02 41					
Mean azimuth of all determinations										359 59 16

SECTION F

MAP CONSTRUCTION

AND

SURVEY WORK

BY

RUSSELL W. PORTER
First Assistant Scientist of the Expedition

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MAPS

1	Sketch Map of Rubini Rock and Vicinity	Opposite page 630
A	The North Polar Regions	In pocket
B	Franz Josef Archipelago	In pocket
C	Part of Franz Josef Archipelago Surveyed by the Ziegler Polar Expedition, 1903-4-5	In pocket

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CONSTRUCTION OF MAPS

Remarks on Exploratory Surveys

The maps of Franz Josef Archipelago are based on exploratory surveys made by the Ziegler Polar Expedition and data obtained from the maps of Payer, Leigh Smith, Jackson, Nansen, Wellman, and the Duke of Abruzzi.

The exploratory surveys extend to all the islands between the 50th and 60th meridians and consist of a plane-table traverse, run in 1904 from Camp Abruzzi, through Kane Lodge and Camp Ziegler, to Elmwood. Additional information was obtained from an earlier trip made the same year to Kane Lodge and to Nansen's hut and further plane-table work in 1905 in the region north of Markham Sound.

The longitude of the astronomic observatory at Camp Abruzzi was obtained by the methods of moon-star culminations and star occultations. Twenty-two moon-culmination and three star-occultation observations were made during the winter of 1903–4. The resulting value, $3^h\ 51^m\ 52.^s6$ ($57^\circ\ 58'\ 09''$) east of Greenwich, is the one adopted in the map construction. Determinations resting on the chronometer alone were not used on account of the large variations in rate, supposed at the time to be due to jars caused by "bucking ice". Twenty-six out of the fifty-four stations occupied were strengthened by latitude, azimuth, and time observations made with a Berger and Sons' especially constructed 4-inch theodolite or alt-azimuth (see Section E for description). Two base lines were included, one at Camp Abruzzi, the other at Kane Lodge.

The longitudes of Camp Ziegler, Harmsworth House (Cape Tegetthoff), and Elmwood (Cape Flora), as determined by this traverse and referred to Camp Abruzzi, are:

	° ′
Camp Ziegler (Alger Island) . . .	56 08 east of Greenwich.
Harmsworth House (Cape Tegetthoff) .	57 47 east of Greenwich.
Elmwood (Cape Flora)	49 59 east of Greenwich.

These values were adopted in the new map and required Jackson's work to be shifted 3.3 nautical miles to the east, Payer's 3.6 to the west, and Wellman's 0.5 to the west.

Heights are given in feet. Except in one or two instances, the brows of the cliffs are the points measured. With the exception of Stoliczka Island (by aneroid), all heights have been found by triangulation.

During the traverse of 1904 the party went into camp at Rubini Rock (Hooker Island) for ten days during the last of June. The surrounding region seemed peculiarly well adapted for offering a safe harbor to any ship intending to pass the winter in the Archipelago. As such a harbor has never been found heretofore in Franz Josef Archipelago, where a ship can be sure of getting out the next year, a detailed map was therefore made of an area some 3 miles square (see figure 1).

Nomenclature of Geographical Features

In the nomenclature of the different geographical features, certain changes have been made, as follows:

Backs Channel has been retained for that body of water separating Karl Alexander and Jackson Islands.

De Long Fjord (Nansen) proved to be a bay and not a channel separating Leigh Smith and Frederick Jackson Islands as Nansen supposed. The name of Jackson has been retained to the island which this bay indents.

Hoffman Island was looked for on several occasions at a distance of some 20 miles under favorable atmospheric conditions but never was seen. It may be a low, snow-covered island and has been retained in the position ascribed by Wellman. Nansen dropped it from his preliminary map but Wellman's map shows his route so close to it as to preclude any reasonable doubt of its existence.

Freeden Island (Payer) has been retained on the map as the most southern island of Nansen's "Hvidtenland" because Payer saw an island in this neighborhood which he called Freeden Island. The identity of the island that Payer saw is a question that probably cannot be settled as it appeared in a direction where some islands are now known to exist. The name he gave should appear on some one of these and, as Nansen has suggested, one island of this group might very probably be the one Payer saw.

Booth, Rhodes, and Brown Fjords and the *Ward Bay* of Jackson have all been found to be channels running through to Austria Sound and separating Payer's Zichey Land into several islands.

The group of small islands indicated on Wellman's map as lying south of Markham Sound and between Hooker and McClintock Islands have all been identified, with two exceptions, viz.: Simon Newcomb Islands and Willis Moore Islands. When Jackson mapped this region he passed through Hamilton Channel in thick weather without seeing the channel which divides the land west of Hamilton Channel into two islands. We have placed Jackson's Bromwich on the northern of these two islands and Wellman's Prichett on the southern.

La Ronciere Peninsula, Cape Berghaus, and Cape Littrow, all of Payer, were found by Wellman to be islands and were given new names. The original proper names of Payer have been retained on the ground of priority.

Richthofen Peak, seen by Payer from Cape Brunn, has been located on Alger Island and not where Jackson places it. Here the Expedition found a peak, or spur, some 1,400 feet high dominating the entire neighborhood, as Payer asserts. His wood cut illustrating the peak and his description of it convinced us that the high mountain on Alger Island, and that only, could satisfy his conditions.

The Expedition concurs with the Italians that the four islands indicated by Wellman as lying northeast of Rudolph Island do not exist. The locality was crossed twice and no land found.

The word "land" has been dropped entirely as being misguiding, now that the Archipelago is known to consist only of several comparatively small islands.

In the map construction the last name only of proper names given to geographical features has been retained for the sake of brevity and clearness. The results of the survey work of the Expedition have all been made use of in constructing Maps B and C.

The map showing the Arctic regions (Map A) has been compiled by Mr. Gilbert H. Grosvenor, Editor of the National Geographic Magazine. As will be readily noted, he has entered upon the same practically all data secured in the Arctic through the year 1906. The Expedition is under great obligation to him for the thorough execution of the laborious work of compilation of data and corrections necessary in the construction of this map.

Reconnaissance of Rubini Rock and Vicinity

The traverse party crossed the ice-cap of Hooker Island the morning of June 21, 1904, and coasted down the glacier slopes in a zigzag course to Rubini Rock. The surroundings presented a far greater diversity of character as well as more vegetable and animal life than we had ever seen before in these Islands.

A good sized bay some three miles across from north to south was found here to indent the island from the British Channel. At the bottom of this bay a headland projected from the ice-cap, continuing as a low spit of land and terminating in a towering rock found later to rise almost sheer from the surface of the bay to a height of 587 feet. Jackson mistook this rock for an island which error could easily be made in the spring when he visited it. This tongue of land, on which Rubini Rock is located, divides the bay into two smaller ones of nearly equal size and into which descend two glaciers from the ice-cap. The more northerly glacier showed almost no crevassing and had absolutely no face, its surface running imperceptibly into that of the bay ice.

The other glacier, however, immediately south of our camp, was the highly crevassed glacier (No. II on map) and showed signs of more activity than is usually met with among these Islands. Along its landward margin a lateral moraine had been formed in recent times; the detritus was fresh; the rocks angular and sharp and embedded in sand and clay. There were no signs of lichens. Between the moraine and the talus back of it flowed a good sized stream which expanded into two ponds some hundred feet wide before debouching into the bay.

The winter's ice was still in the two bays, its edge on June 20 being as indicated on the map. Outside of this line, and almost surrounding Keltie Island, lay open water between the headlands of the bay in which the broken floes moved back and forth with the tide. There were no bergs floating in the bay though we were constantly expecting them to be discharged from the larger glacier. An old beach raised 28 feet above the sea level was found on the spit of land uniting Rubini Rock with the island. On this beach a base line 600 feet long was measured twice, signals erected on the prominent headlands, and the triangulation extended with the theodolite. With several points thus well determined the plane table was used to complete the map.

The inner side only of Rubini Rock retained a talus. After some search one spot was discovered where access could be had to the top. The table top of the rock towered a full hundred feet by measurement above the brows of the surrounding headlands. It was composed of sharp, angular blocks of basalt covered with a dense growth of spongy, black lichens resembling very coarse horsehair. This growth, of which there certainly was enough to last an expedition several years as fuel, was found to burn freely. Imbedded in these lichens was found part of a shed antler of an Arctic reindeer; he must have reached this plateau by some way other than the one we used.

The table top dipped toward the southwest like an amphitheater and then dropped vertically into the water. Under the southeastern cliffs the columnar structure of the basalt was very marked. And here thousands of little auks, loons, and sea gulls made their home. The slope of the talus under this rookery was covered with a luxuriant growth of grass whose roots were imbedded in ice and frozen earth.

Where the headlands and nunataks protruded from the ice-sheet several acres of exposed table land were to be seen entirely free of ice and snow. They differ in elevation from 370 to 720 feet, but all are remarkably level; the basalt is weathered and crumbled to a very coarse sand or gravel. The writer examined the rock exposures of this vicinity for glacial markings and striæ, but found none.

By the time the party was ready to leave on July 1 the accumulation of winter's snow had disappeared from the glaciers leaving their hard, blue surfaces exposed. A lake of some size had formed in one of the sags of Glacier II some 2,500 feet back from its face, and streams from the melting ice were furrowing the surface in every direction. On June 25 three points along the face of Glacier II were selected (*a*, *b*, and *c* of figure 1) and their angular distances from a fixed mark on Nunatak B were determined on four different dates, the theodolite being set up at Station B. These measurements resulted as follows:

Local astronomical date		Horizontal circle			
		Mer. mark	*a*, dist. 2,500 ft.	*b*, dist. 3,000 ft.	*c*, dist. 4,600 ft.
1904	*h*	° ′	° ′	° ′	° ′
June 25	18.4	0 00.0	31 7.4	40 29.2	40 16.4
June 26	22.9	0 00.0	8.6	31.4	17.8
June 28	1.0	0 00.0	10.0	32.6	18.4
July 1	21.7	0 00.0	14.5	39.4	21.0

Assuming the movement to be approximately normal to the lines *Ba*, *Bb*, *Bc*, the above data gives the following daily rates of flow for the intervals observed:

	d	*h*	*a*	*b*	*c*
1st interval	1	4.5	0.64 ft.	1.00 ft.	1.45 ft.
2d interval	1	2.1	0.88	1.00	0.91
3d interval	3	20.7	0.70	0.75	1.33

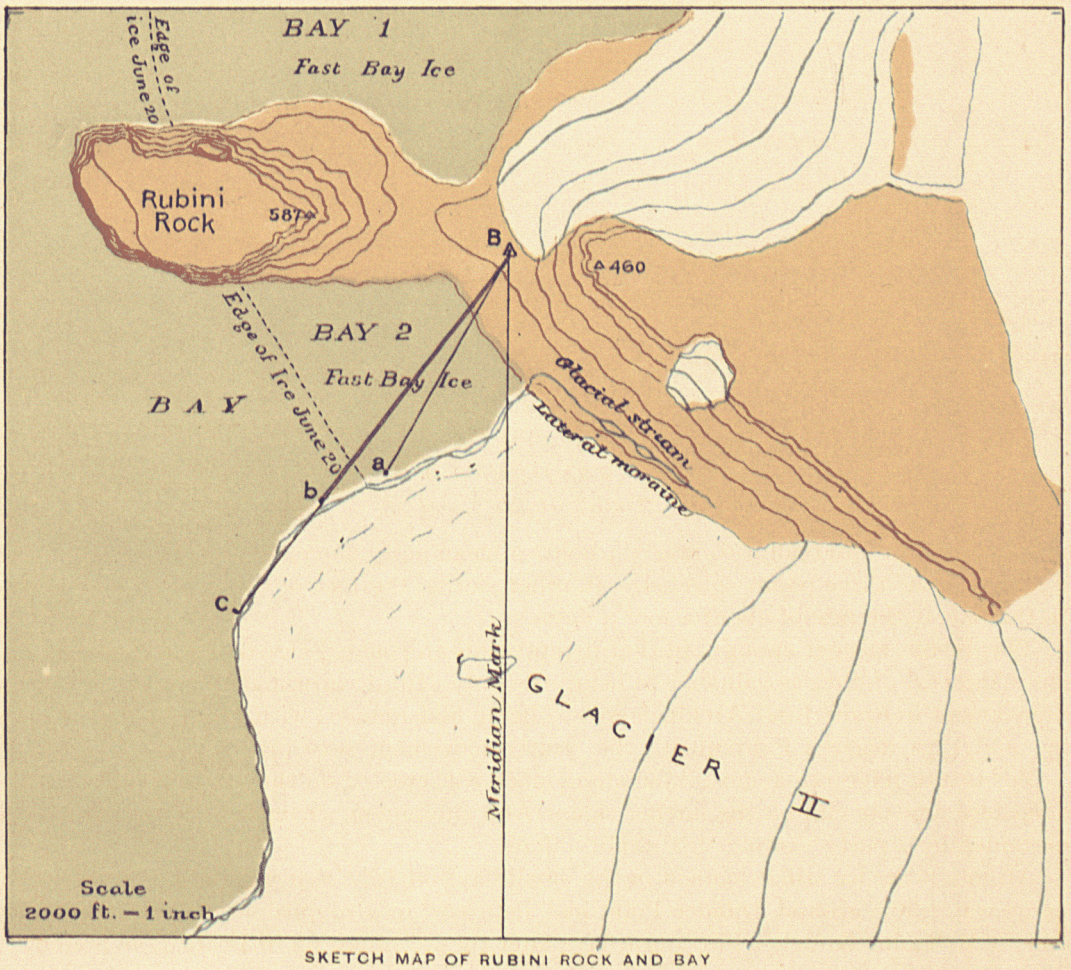
and for the entire interval of 6 days 3.3 hours a mean daily movement of 0.74 foot, 0.92 foot, 1.23 foot for the three points selected. In other words, the face of this glacier was advancing into the bay at the rate of about a foot a day.

This result, meager enough, in that it represents an isolated case of a single glacier during a short interval of time is valuable as being the only definite information, so far as known, of ice movement in Franz Josef Archipelago. (Being midsummer, with the temperature between +32 and +42 degrees Fahrenheit, the yearly movement was probably at its maximum.)

For future reference a substantial stone mark was erected on the moraine in line with the glacier face and the cliff on the farther side. Any subsequent change can therefore be readily ascertained by a party visiting this locality again.

Although the ice still remained in the small bays on July 1, it was disintegrating rapidly; a large water hole around Dundee Point had increased in size until it almost joined the open water in Mellenius Sound, while a few days later the ice broke up in De Bruyne Sound.

FIGURE 1



SKETCH MAP OF RUBINI ROCK AND BAY

A. B. GRAHAM CO., LITH., WASH., D.C.

PART OF
FRANZ JOSEF ARCHIPELAGO
SURVEYED BY THE ZIEGLER POLAR EXPEDITION 1903-4-5

Scale
1 / 600,000.
Statute Miles
5 0 5 10 15 20 25

LEGEND

- Route of survey party March-April, 1904.
- Route of survey party on plane table traverse May-July, 1904.
- Route of survey party May, 1905.
- Plane table station only.
- " " " and time observation.
- " " " " latitude "
- " " " " azimuth "
- Base line.
- Heights in feet.

Long. 55° East from Greenwich.

Surveyed and drawn by R.W. Porter under direction of W.J. Peters.

ANDREW B. GRAHAM CO., LITHOGRAPHERS, WASHINGTON, D.C.

MAP OF

FRANZ JOSEF ARCHIPELAGO

Compiled from surveys
of the
Ziegler Polar Expeditions 1901-02, 1903-5,
and from information published by
Payer (1872-74), Leigh Smith (1880-81), Jackson (1894-97),
Nansen (1895-96), Wellman (1898-99),
The Duke of the Abruzzi (1899-1900).

Scale
1 / 750,000.
Statute Miles
Kilometers
Heights in feet.

QUEEN VICTORIA SEA

Albert Edward I.
Harmsworth I.
HARMSWORTH STRAITS
Arthur I.
SMITH SD.
Alexander Island
C. Nimrod
Low land
Glaciated land 700
Bruce Fjord
C. Thomas
Glaciated slope 500
C. Johansen
C. Harmsworth
NORDENSKJOLD BAY
WEYPRECHT BAY
C. Lofley
C. Ludlow
CAMBRIDGE BAY
Smith Inlet
C. Nansen
Prince George Island
High Glaciated land
Lower glaciated slopes
C. Murray
MARKHAM BAY
Eastern Bay
Peterhead
C. Neale
C. Crowther
David I.
GREY BAY
NIGHTINGALE SOUND
Bruce I.
Mabel
Bell I.
C. Grant
C. Battenberg
C. Bruce
Somerville Bay
Low land
Armitage
C. Groevenor
Chamberlain Fjord
St. Chads Hd
High land
Eaton I.
Keltie I.
Dundee Pt.
Hooker Island
DE BRUYNE SOUND
Camp Pt.
Windward
Etheridge I.
May I.
Newton I.
Gunter Bay
C. Flora
Elmwood
Northbrook I.
Robertson Isle
C. Barents
C. Gertrude
BRITISH CHANNEL
Ommanney I.
Alexander Islands
Harley I.
Neale I.
C. Mill
Steinen
C. Norway
Nansen's Hut
C. Stokke
Queen I.
C. Gillert
C. Roosevelt
C. Armitage
C. Hardcastle
Elizabeth I.
C. Fisher
Celtes R.
C. Montfiore
C. Petigax
C. Farman
C. Cavalli
C. Armitage
C. Richthofen
C. Germania
C. Baulen
Camp Abruzzi
Tepitza Bay
C. Auk
C. Brora
C. Figley
C. Wellman
C. Rath
Rudolph I.
C. Habermann
C. Schrotter
Neumayer Sd.
Hohenloe I.
C. Bohn
C. Felder
Top Dickson Sd.
Coburg I.
Karl Alexander I.
Miriam
C. Helland
DELONG FJORD
Jackson Island
Deak I.
Kohl Sd.
Rainer I.
C. Beuermann
C. Kremenmunster
Hoffmann I.
Becker I.
Stoliczka Is.
Payer I.
ITALIAN CH.
AMERICAN CH.
Kuhn I.
C. Hellwald
Kane I.
C. Easter
Cape Bertrand
C. Frick
La Ronciere
C. Hitt
BOOTH ZIEGLER CHANNEL
C. Baldwin
C. Brisson
Brosch
Cape Demorest
Emmanuel
Coal Mine
Salisbury Island
Kane Lodge
Cape Washington
C. Tyrol
Wiener Neustadt I.
Luigi Island
Tuxedo Bay
C. Cavalli
C. Savoie
Mt. Cagni
1772
COOK CHANNEL
C. P. & O.
Champ Island
C. Kjeldsen
Ward Bay
C. Trieste
Johndorff Nbrewis
Hayes I.
C. Clare
Cape Fiume
C. Polar Gleam
Pt. Arthur
Wilton I.
C. Temple
Koettlitz I.
Parks Sound
Nansen I.
C. Bromwich I.
North I.
C. Wiener
MARKHAM SOUND
Guyot Hd.
C. Markham
C. Taylor
C. Poole
Young Sound
Richthofen Mts.
Hamilton Mts.
Mt. Moore
Louis Harbor
Cape Terra Nova
Alger I.
C. Brice
Bliss
Matilda I.
C. Beresford
Society I.
Leigh Smith I.
Brady I.
Robeson Rock
Millenius Sd.
Southern Ch.
Aberdare Ch.
C. Conway
C. Copeland
C. Borgen
Camp Ziegler
Hall Island
Basaltic Spires
McClintock Island
1623
C. Brunn
C. Dillon
1695
Aagaad I.
C. Oppolzer
Northern Ch.
Littrow I.
Schonau I.
C. Tegetthoff
Harmsworth House
Berghaus I.
Hochstetter Islands
Koldewey I.
Salm Island
1225
C. Baer
Wilczek I.
Lutke I.
C. Orge
Esquimaux Shoals
Hvidtenland Islands
Liv I.
Eva I.
Adelaide I.
Sars Sound
Freeden I.
C. Walsh
Graham Bell Island
C. Kohlsaat
C. Olney
C. Leiter
C. Lamont
Fort McKinley
Wilczek Island
2296
Wullerstorf Mountains
2409
GOULD BAY
Storm Bay
C. Hofer
Tree I.
Dawes I.
McNulta I.
Klagenfurt Is.
C. Hansa
C. Frankfurt
Orel I.
Vanderbilt Sound
C. Forahead
C. Fairbanks
C. Schmarda
Gage
C. Heller
C. Vilas
MORGAN ST.
AUSTRIA SOUND

40° 42° 44° 46° 48° 50° 52° 54° 56° 58° 60° 62° 64° 66°
82°00′ 81°00′ 80°00′ 30′

Surveyed and drawn by R.W. Porter under direction of W.J. Peters.

Long. 54° East from Greenwich.

ANDREW B. GRAHAM CO., LITHOGRAPHERS, WASHINGTON, D.C.

Map of THE NORTH POLE REGIONS

Prepared by GILBERT H. GROSVENOR,
For Scientific Report of Ziegler Polar Expedition, 1903-1905.

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SMITH SOUND REGION

0 50 100 150 Kilometers
0 50 100 Nautical Miles

Noted Explorers of the AMERICAN (Smith Sound) Route

- Elisha Kent Kane (American) 1853-55
- Isaac Israel Hayes (American) 1860-61
- Charles F. Hall (American) 1870-73
- Sir Geo. Nares (English) 1875-76
- General A. W. Greely (American) 1881-84
- R.E. Peary (American) 1891-1906

Explorers of Franz Josef Land

- Payer and Weyprecht (Austrian) 1872-4
- Leigh Smith (British) 1880-2
- Frederic Jackson (British) 1894-7
- Fridtjof Nansen (Norwegian) 1896
- Walter Wellman & Evelyn B. Baldwin (American) 1898-9
- Duke of Abruzzi (Italian) 1899-1900
- Anthony Fiala (American) 1903-1905

FRANZ JOSEPH LAND

0 10 20 30 Kilometers
0 10 20 30 Nautical Miles

Coast Explored by

- United States
- British
- Scandinavian (Norwegian, Swedish and Danish)
- German and Austrian
- Dutch
- Italian
- Russian

The Routes of the Explorers have the color of their native country.

The Circumpolar Stations of 1881-1883 are indicated thus: • *C.P. Sta.*, with name of nationality following.

Peary's Explorations:

- Over the inland ice of Greenland, 1886
- Across Greenland, 1892
- Second Crossing of Greenland, 1895
- Around Northern end of Greenland, 1900
- Trip towards North Pole, 1902
- Nearest the Pole, 1906
- Farthest West, 1906

Explorers' Routes:

- Parry (British) 1819
- Franklin and Richardson (British) 1821 & 1826
- Franklin (British) 1845-'47('48)
- McClure's (Br.) Northwest Passage, 1850-'53
- Second German North Pole Expedition, 1869-'70
- Austro-Hungarian Expedition 1872-'73
- Nordenskjöld Northeast Passage in "Vega" (Swedish) 1878-'79
- DeLong in "Jeanette" (United States) 1880-1881
- A.W. Greely (United States) 1881-84 (Cape Sabine to Cape Washington)
- Nansen in "Fram" (Norwegian) 1893-'96
- Duke of Abruzzi in "Stella Polare" (Italian) 1900
- Sverdrup in "Fram" (Norwegian) 1898, 1902
- Peary (United States)
- Ziegler Polar Expedition of 1903-'05 (A. Fiala)
- Amundsen's Northwest Passage in "Gjöa" (Norwegian) 1903-1906
- Duke of Orleans in "Belgica" 1905
- Journey's by foot, sledges or boats (with color of Explorer)

Telegraph Lines:
Railroads:
Steamship Routes:
Winter Harbors:
Average Limit of Icepack and solid Drift Ice
Tundra

Elevations and Depths are given in English Feet.

Soundings where bottom has not been reached are indicated thus: 6843

Passage to Polar Ocean discovered by American Charles Francis Hall, 1870

The inhabitable coast of Greenland is under the jurisdiction of the Danish Government

Passage discovered by American Elisha Kent Kane, 1853

The INTERIOR is entirely covered with a Glacier of a probable thickness of 1000 to 3000 feet

Kilometers 0 100 200 500 1000
Nautical Miles 0 50 100 150 200 250 300 350 400 450 500
Statute Miles 0 50 100 200 300 400 500 600