

international agreement on the anemometric equivalents of this scale, with reference to its use in weather telegraphy, and a committee was appointed to prepare a report on the subject. This committee reported at the Rome, 1913, meeting of the International Meteorological Committee. A report of this meeting (Appendix 7) contains a résumé of the various wind scales in use and the anemometric equivalents recognized by various countries. The wind-scale committee recommended that the International Committee should adopt a set of equivalents in meters per second and in miles per hour (published on p. 36 of the appendix above mentioned), approximating the Simpson scale, though not agreeing with it exactly. The International Committee decided, however, that it was not yet practicable to adopt an international set of equivalents, and referred the subject back to the special committee for further consideration. In 1915 the Russian Meteorological Service announced that it had adopted a set of equivalents based on the English table, in conformity with the decisions of the Rome meeting of the International Committee (Monthly Weather Review, April, 1915, p. 183), but the announced equivalents do not exactly agree either with those of Simpson or with those proposed at the Rome meeting for international use. This subject was revived at the London, 1921, meeting of the International Committee, and Doctor Simpson was asked to undertake further investigation of the subject, which he agreed to do. This action is briefly mentioned in the report of the International Meteorological Conference held at Utrecht in 1923, but there is no record of further progress in the matter.

It would appear to be most desirable that the question of international adoption of the Beaufort Scale should form a subject for definitive action at the next meeting of the International Meteorological Committee. The extent to which the scale is recognized unofficially will, it is believed, constitute an important step toward such international adoption.—B. M. V.

FREQUENCIES OF SELECTED RELATIONS BETWEEN TEMPERATURE AND RELATIVE HUMIDITY

Dr. Moriz Topolansky presents in *Das Wetter* for January, 1925, pp. 21-23, an interesting method of setting forth certain relations between these two important climatic elements.

He plots for Vienna (years 1919-1923) the frequencies of simultaneous occurrence of selected 2 p. m. temperature and relative humidity values. Temperatures are grouped in successive 5 degree ranges and relative humidities in successive 5 per cent ranges.

Temperature-relative humidity relations at Vienna (2 p. m. values, years 1919-1923)

(Frequencies of simultaneous individual values)

Relative humidity (per cent)	Temperature, °C.										Sums
	-10	-5	0	5	10	15	20	25	30	35	
100			13	29	6	4					52
95			13	36	18	11	5				83
90			2	20	33	26	19	13			113
85			4	15	35	34	14	14	2		118
80			3	19	33	32	22	25	4		138
75			3	11	30	29	30	26	10		139
70			4	8	24	33	28	25	17	2	147
65			1	8	33	30	29	36	38	4	179
60			2	9	22	26	31	38	44	8	180
55			4	4	8	36	32	44	55	13	196
50				5	8	20	25	37	50	19	164
45				5	5	15	26	35	35	16	138
40					4	7	19	18	25	17	94
35						5	9	8	15	13	55
30						4	2	7	3	7	27
25							2	1			3
Sums		23	130	300	327	303	332	298	99	14	

Though this general method of depicting climate necessarily omits important climatic elements—perhaps wind movement is in this case the most important—nevertheless it would doubtless prove of value to many of those concerned with the physiological relations of climate.

One finds concentrated in a table of this sort many facts otherwise to be presented only at considerable length. Thus it is at once clear that at Vienna cool to moderate early afternoon temperatures are accompanied by nearly every possible relative humidity; temperatures near freezing have a tendency to be accompanied by considerable dampness; high temperatures are almost never accompanied by high humidity. Other relations are equally patent from the table.—B. M. V.

THE MARCH, 1925, POSITION OF THE GULF STREAM AND THE LABRADOR CURRENT

The following note, taken from the Coast Guard Weekly Bulletin No. 16-25, dated April 18, 1925, is of especial interest in connection with the note in this REVIEW for February, 1925, on the extraordinarily mild winter of 1924-25 in northwestern Europe.

The scientific observations made during the first cruise of the *Tampa* on the international ice patrol divulged some interesting facts. One of the most striking was the decided movement upward [northward] of the "cold wall" and another is the disappearance of the 32° line on the southern part of the Grand Banks with only a slight touch of cold water along the 44th parallel. It is very evident that the Labrador current is very weak, and that the influence of the Gulf Stream is felt farther north even to the extent of overlapping on the Banks. The absence of Arctic water, the weakness of the Labrador current, the overwhelming effect of the Gulf Stream, and the mild winter conditions off the coast of Labrador, etc., have no doubt been responsible for the total absence of bergs below latitude 46° to date. From March 26 to 31 the patrol vessel encountered about 50 per cent fog.

AMUNDSEN'S SHIPS REACH SPITZBERGEN

Press reports under date of April 25, 1925, indicate that the two supporting ships of Amundsen's airplane expedition to the North Pole have reached King Bay, Spitzbergen, thus giving evidence of an exceptionally open season in that sector of the Arctic. Usually that region can not be reached before the latter part of May at the earliest.—A. J. H.

NEW CHIEF OF THE SERVICIO METEOROLOGICO ESPAÑOL

Word has been received at the U. S. Weather Bureau, under date of March 20, 1925, announcing the withdrawal of Señor J. Cruz-Conde from his position as Chief of the Spanish Meteorological Service, a step made necessary by his appointment to an important Government post not connected with meteorology. His successor as head of the Meteorological Service is Señor Enrique Meseguer.

METEOROLOGICAL SUMMARY FOR FEBRUARY AND MARCH, 1925: CHILE, ARGENTINA, BOLIVIA, PERU, URUGUAY, AND PARAGUAY.

[Reported by Señor Julio Bustos Navarrete, Director, El Salto Observatory, Santiago, Chile. Translated by W. W. Reed, U. S. Weather Bureau, Washington]

February.—The first 15 days of the month were characterized in Chile by the establishment of an important center of high pressure opposite the coast of Arauco Province. The pressure remained low southward to Magallanes Province, frequent depressions being observed.

This condition caused persistent rains in the provinces of Cautin, Valdivia, Llanquihue and Chiloe.

In Argentina, heavy rains and electrical storms occurred in the northern and central parts during the 9th, 10th, and 11th.

In Bolivia, very heavy rains took place during the 14th, 15th, and 16th. These rains extended into the southwest, causing severe floods in the Chilean provinces of Tarapaca and Antofagasta. The Rio Loa rose to extraordinary stages, doing severe damage to various towns and nitrate factories.

On the 16th an important barometric depression appeared from the west approaching South America off the central region of Chile. On the 17th, a pronounced fall of pressure took place in the Islands of Juan Fernandez, and on the 18th the depression began to affect the continent. On the 19th there were scattered rains between Valparaiso and Valdivia. On the 20th, the depression continued its southward progress, and abundant rains occurred between the provinces of Cautin and Magallanes.

In Argentina, during the 19th and 20th, a great depression existed in the northern region, and caused violent wind storms with lightning and thunder, rain, and hailstones of large size.

During the later days of the month a notable rise of pressure took place in southern Chile, resulting in the establishment of an anticyclonic center in the latitude of Chiloe, and the return of atmospheric conditions to normal.

March.—The outstanding meteorological feature was the frequency of disturbances in the southern region of the continent.

During the first days of the month pressure was high over northern Argentina and Uruguay. At this time light rains fell in the southern part of the province of Buenos Aires and in the territory of Rio Negro; electrical storms, with hail, occurred in central La Pampa on the 3d.

From the 4th to the 6th an area of high pressure formed in the region of Chiloe. On the 7th a V-shaped depression was accompanied by electrical storms, rain, and hail in Chilean provinces from Colchagua to Malleco.

A depression appeared in the south off Cabo Raper on the 10th; it caused rains over the whole southern region on the 11th and 12th.

A moderately heavy snow fell in Magallanes on the 15th.

During the following days an anticyclone formed in the south and this condition remained until the 26th; during this period a maximum pressure of 770 mm. (30.32 inches) was recorded at Puerto Madryn on the Atlantic coast.

Scattered rains fell in Argentina on the 24th and again on the 28th to the 30th.

A depression from the west appeared off central Chile on the 27th; on the next day it affected conditions in the south, bringing violent electrical storms, with rain and hail, in the provinces from Bio-Bio to Chiloe. During the following days it moved away toward the south, its path passing near the South Shetland and South Orkney islands into the antarctic glacial sea.

On the whole the month of March was more rainy than normal in southern Chile. In Argentina and Uruguay rains were frequent and in Bolivia and the high regions of Peru they were rather abundant.

BIBLIOGRAPHY

C. FITZHUGH TALMAN, Meteorologist in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies;

- Brooks, Charles F.**
Some striking displays of coronas and iridescent clouds. 12 p. 28½ cm. [Typewritten.]
- Doie, Eleazer J.**
Studies on the effects of air temperature and relative humidity on the transpiration of Pinus strobus. Burlington. 1924. 39 p. illus. plates. 23 cm. (Univ. of Vt. & State agric. coll. Vt. agric. exper. sta. Bull. 238, July, 1924.)
- Ferguson, S. P.**
Methods for measuring humidity. p. 119-121. 24 cm. (Repr.: Journ. optic. soc. Amer. & review of sci. instrum. v. 10, no. 1, Jan., 1925.)
- Frisch, K.**
Merejää vaatlused 1923/24 talvel Eestis. n. p. n. d. 16 p. illus. 27 cm. (Beobachtungen des Meereises im Winter 1923/24 in Eesti.) (Tartu Ülikooli Eesti veekogude uurimise komisjoni väljaanne No. 1.)
- [Le Breton, T. A.]**
Dirección meteorológica. [Buenos Aires. 1924.] p. 89-93. plates (part fold.). 27 cm. (Min. agric. de la nación, República Argentina. Memoria correspondiente al ejercicio de 1923.)
- New York Edison Co.**
Weather chart, showing a comparison of clear and cloudy weather during 1921, 1922, and 1923, possibly offering an explanation for any variation in lighting bills. n. p. n. d. 1 sheet. illus. 21½ cm.
- "Weather man as a lamplighter." n. p. n. d. [2 p.] fig. 20½ cm. [Repr.: Ferguson service, April, 1924.]
- Peek, F. W., jr.**
Lightning and other transients on transmission. 13 p. illus. 30½ cm. [Amer. inst. elec. engin., Journ. v. 43, Aug., 1924.]
- [Shaw, William Napier.]**
Kalendar for 1925 ... London. 1925. unsp. 15½ cm.

RECENT PAPERS BEARING ON METEOROLOGY

The following titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

- Académie Roumaine. Bulletin de la section scientifique. Bucarest. 3 année. no. 5-6. 1925.*
- Donici (Donitch), M. N.** Semaine internationale des nuages du 24 au 30 septembre à l'Observatoire d'Astronomie Physique sis parc de Dubosarii Vechi. p. 28-35.
- American meteorological society. Bulletin. Worcester, Mass. v. 6. March, 1925.*
- Bavendick, F. J.** A dry snowfall. p. 43.
- Brooks, Charles F., & Tripp, Frances V.** Phenology: Responses of life to the advance of the seasons. p. 47-48.
- Annalen der Hydrographie und maritimen Meteorologie. Berlin. 52. Jahrgang. Dezember 1924.*
- Jakobi, N.** Photographische Methode zur Untersuchung der Konvektionsströme. p. 281-285.
- Seilkopf, Heinrich.** Die meteorologische Beratung der Überführungsfahrt des Luftschiffes LZ 126 durch die Deutsche Seewarte. p. 285-289.
- Annalen der Physik. Leipzig. Bd. 75, no. 22. 1924.*
- Müller, Aloys.** Über die Form des blauen Himmels. p. 653-656.
- Archives des sciences physiques et naturelles. Genève. v. 7. Janvier-février 1925.*
- de Perrot, Samuel.** Contribution à l'étude du vent de la Maloja. p. 56-61. [Abstract.]
- Gockel, A.** Quelques problèmes d'électricité atmosphérique résolubles par des observations au col de la Jungfrau. p. 52-53. [Abstract.]