Meteorologische Zeitschrift. Braunschweig. Band 44. Mai 1927.

Baur, Franz. Bemerkungen zur Methode der Beziehungsgleichungen. p. 182–185.

Conrad, V. Zum Klima von Besançon. p. 185–186.

Deil, A. E. Der Gang der Zenitpolarisation bei negativen Sonnenhöhen in Simferopol. p. 187.

Exner, Felix M. Heilstättenklima in den österreichischen Ostalpen. p. 167–174.

Fischer, Karl. Eine grundsätzliche Frage zu Zunkers Verdunstungsformel. p. 178–179.

Köppen, W. Wechsel in der phänologischen Zeitfolge. p. 174–176.

Kugelblitze. p. 188.

Schmauss, A. Wie steht es um die meteorologischen Perioden ? p. 176–178.

Škreb, S. Formel für die Berechnung der Windgeschwindigkeit aus der Windstärke. p. 185.

Škreb, S. Verhältnis zwischen mittlerer stündlicher Regenmenge und mittlerem Dampfdruck. p. 181–182.

Troeger, H. Uber die Datierung der Zyklonenfamilien. p. 179–181.

Wagner, A. Beziehungen zwischen Sonnenschein und Bewölkung in Wien. p. 161–167.

Wegener, Kurt. Bemerkung über Frühlings- und Herbsttau. p. 188.

Physico-mathematical society of Japan. Proceedings. Tôkyô. v. 9. March, 1927.

Kobayasi, Tatuo. On the mechanism of cyclones and anticyclones. p. 45–62.

Royal meteorological society. Memoirs. London. v. 1. no. 7.

Douglas, C. K. M. On the relation between temperature changes and wind structure in the upper atmosphere.

Royal meteorological society. Quarterly journal. London. v. 53. April, 1927.

C[ave]. C. J. P. Lieut.-Col. Henry Mellish, C. B., D. L. p. 189–190. [Obituary.]

Clark, J. Edmund. Francis Campbell Bayard, LL. M. p. 188–189. [Obituary.]

Glasspoole, John. The variability of average monthly rainfall throughout the year. p. 127–147.

Mr. C. Harding. p. 187. [Obituary.]

Pick, W. H., & Wright, G. A. Mammato-cumulus cloud at Cranwell, Lincolnshire. p. 185–186.

Puri, Amar Nath. Investigations on the behaviour of hygrometric hairs. p. 115–125.

Richardson, L. F., & Proctor, Denis. Diffusion over distances ranging from 3 km. to 86 km. p. 149–151. [Abstract.]

Simpson, G. C. Thunderstorms. p. 172–176.

Thomson, A. Tropical cyclones in the central South Pacific during 1925–26. p. 178–181.

Walker, Gilbert. The Atlantic Ocean. p. 97–113.

Watson, R. A. Correlation of daily rainfall on the east and west of Scotland. p. 183–185.

Watt, R. A. Watson. The weather and its ways. III. Atmospherics and the atmosphere. p. 169–172.

Technique aéronautique. Paris. 18 année. Avril 1927.

Bureau, Robert. Le rôle des ondes électromagnétiques dans la protection de la navigation aérienne. p. 110–126.

SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING JUNE, 1927

By IRVING F. HAND

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January, 1924, **52**: 42, January, 1925, **53**: 29, and July, 1925, **53**: 318.

From Table 1 it is seen that solar radiation intensities averaged above the June normals at all three stations, particularly at Washington. At this station a measured intensity of 1.47 gr. cal. per cm.^{2} obtained at noon on the 27th exceeds the previous noon intensity for June by about 3 per cent.

Table 2 shows that the total solar and sky radiation received on a horizontal surface at both Madison and Lincoln averaged above normal, while that received at Washington was close to normal.

Skylight polarization measurements made at Madison on 11 days give a mean of 60 per cent, with a maximum of 65 per cent on the 7th. These are close to normal values for June at Madison. At Washington, measurements made on four days give a mean of 57 per cent, with a maximum of 59 per cent on the 27th. These are slightly above the corresponding averages for June at Washington.

TABLE 1.—*Solar radiation intensities during June, 1927*

[Gram-calories per minute per square centimeter of normal surface]

Washington, D. C.

Date	Sun's zenith distance										
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon
	75th mer. time	Air mass									Local mean solar time
		A. M.					P. M.				
	e.	5.0	4.0	3.0	2.0	[1] 1.0	2.0	3.0	4.0	5.0	e.
	mm.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm.*
June 1	7.57		0.71	0.85	1.00						7.57
6	7.04		0.99	1.13	1.28	1.46					8.18
8	10.59				0.74						12.24
13	8.18				1.12	1.36					11.38
16	6.27		0.91	1.02	1.18	1.38					8.18
21	13.61				0.88						15.65
27	7.57	0.87	0.98	1.11	1.24	1.48					9.14
28	11.38				0.98						13.61
29	13.61	0.64	0.78	0.87	1.00	1.32					14.60
Means		(0.76)	0.87	1.00	1.05	1.40					
Departures		+0.20	+0.22	+0.27	+0.14	+0.18					

[1] Extrapolated.

TABLE 1.—*Solar radiation intensities during June, 1927*—Contd.

Madison, Wis.

Date	Sun's zenith distance										
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon
	75th mer. time	Air mass									Local mean solar time
		A. M.					P. M.				
	e.	5.0	4.0	3.0	2.0	[1] 1.0	2.0	3.0	4.0	5.0	e.
June 3	8.18					1.12					9.47
7	9.14				1.01						9.14
11	8.48				1.13						8.48
14	5.56					1.39					6.76
15	5.56				1.16						5.56
22	11.38				1.15						11.81
23	8.18					1.43					10.59
24	6.50				1.18	1.40					13.13
27	7.29				1.16	1.33					8.48
28	9.14				1.16	1.34	1.15				14.60
29	13.61		0.87	1.00	1.14	1.28					17.37
30	17.37				1.05	1.26					17.37
Means			(0.87)	(1.00)	1.13	1.32	(1.15)				
Departures			+0.01	+0.03	+0.03	±0.00	+0.08				

Lincoln, Nebr.

June 4	10.59		0.88	0.98	1.17	1.36					9.47
7	9.47			1.04	1.22	1.45					8.18
9	11.81				1.02	1.26					12.24
10	8.48				1.25	1.45					6.27
21	10.97			0.94	1.11	1.45	1.18				9.14
23	10.21			0.97	1.16	1.43	1.15	0.98	0.84		9.83
24	13.13					1.22	0.99	0.80	0.65		14.10
25	13.13			0.92	1.12	1.43	1.21	1.05	0.89		9.47
27	14.10			0.93	1.14	1.34	1.09	0.90	0.74		17.37
28	18.59			0.98	1.16	1.43	1.14	0.98			18.59
29	15.65			0.85	1.08	1.29					14.10
Means			(0.88)	0.95	1.14	1.37	1.13	0.94	0.78		
Departures			+0.11	+0.02	+0.04	+0.01	+0.03	+0.04	+0.01		

[1] Extrapolated.

TABLE 2.—*Solar and sky radiation received on a horizontal surface*

[Gram-calories per square centimeter of horizontal surface]

Week beginning	Average daily radiation						Average daily departure from normal		
	Washington	Madison	Lincoln	Chicago	New York	Twin Falls	Washington	Madison	Lincoln
1927	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
June 4	437	617	632	515	446	627	−48	+97	+57
11	501	472	310	417	450	726	+7	−30	−200
18	410	515	627	436	388	758	−68	−13	+64
25	607	651	715	566	427	747	+94	+106	+98
Deficiency since first of year on July 1							−7,707	−4,928	−5,857