Naturwissenschaften. Berlin. 10. Jahrg. 13. Juli, 1922.
Kritzinger. Beiträge zur Aufsuchung kosmischer Grundlagen von Klimaperioden. p. 614. [Abstract.]
Wegener, Kurt. Aerologische Flugzeugaufstiege in Adlershof. p. 615. [Abstract.]

Revue scientifique. Paris. 60 année. 9 septembre, 1922.
Rouch, J. Le vent en altitude á Bayonne. p. 594–595.

Science. N. Y. v. 56. Sept. 15, 1922.
Wanser, H. M. Photoperiodism of wheat; a determining factor in acclimatization. p. 313–315.

Scientific American. N. Y. v. 127. October, 1922.
Luckiesh, M. The ultraviolet in sunlight. p. 258–259.
New tasks for the weatherman. p. 240.

Umschau. Frankfurt. 26. Jahrg. 9 Juli, 1922.
Polis, [Peter]. Die Meteorologie in den Kur- und Badeorten. p. 441–443.

Wetter. Berlin. 39. Jahrg. Juli/August, 1922.
Fischer, Rudolf. Sehr grosse Hitze im letzten Maidrittel, 1922. p. 127–128.
Fischer, Rudolf. Der Wärmewelle im Nachwinter, Frühling und Vorsommer folgt meist eine Kältewelle. p. 124–126.
Gockel, A. Die Fussnerven als Wetterpropheten. p. 128.
Knoch, K. Die Funk-Wetterstation auf Jan Mayen. p. 121–124.
Kopfmuller, A. Der Land- und Seewind am Bodensee. p. 97–107.

Zeitschrift für Gletscherkunde. Leipzig. Bd. 12. Mai, 1922.
Köppen, W. Das System in den Bodenbewegungen und Klimawechseln des Quartärs im Ostseebecken. p. 97–123.

SOLAR OBSERVATIONS.

SOLAR AND SKY RADIATION MEASUREMENTS DURING AUGUST, 1922.

By HERBERT H. KIMBALL, in Charge, Solar Radiation Investigations.

For a description of instruments and exposures, and an account of the method of obtaining and reducing the measurements, the reader is referred to this REVIEW for April, 1920, **48**:225.

From Table 1 it is seen that direct solar radiation intensities averaged slightly above the normal for August at Washington and very close to normal at Madison and Lincoln. A maximum intensity of 1.40 gram-calories per minute per square centimeter of normal surface measured at Washington at noon on August 22 is within 2 per cent of the August maximum for that station.

Table 2 shows that the total solar and sky radiation received on a horizontal surface averaged close to the August normal at both Washington and Madison, although at Washington there was a deficiency in every week except one.

Skylight polarization measurements made on eight days at Washington give a mean of 57 per cent with a maximum of 70 per cent on the 22d. These are above average values for August at Washington. At Madison, measurements made on eight days give a mean of 55 per cent with a maximum of 72 per cent on the 25th. The mean is below the average polarization, and the maximum slightly above the average maximum, for August at Madison.

TABLE 1.—*Solar radiation intensities during August, 1922.*

[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 meridian time.	Air mass.									Local mean solar time.
		A. M.					P. M.				
	e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	e.
	mm.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm.*
August 2	14.10			0.50							14.10
4	12.68				0.75						14.10
5	14.60			0.47	0.59						14.10
9	10.21	0.44	0.53	0.68	0.89	1.15					9.47
16	18.59					1.33					17.96
17	17.37	0.74	0.84	0.97	1.11	1.32	1.13	0.97	0.83	0.71	19.23
18	17.37	0.73	0.80	0.87	1.00	1.11		0.97	0.87	0.78	19.23
21	7.57	0.92	1.04	1.14	1.28	1.41	1.23				7.87
22	11.38					1.42	1.23	1.06	0.91	0.81	8.48
23	12.68	0.66	0.75	0.88	1.07	1.29					14.10
29	13.13			0.67	0.88	1.21					15.65
Means		0.70	0.79	0.77	0.95	1.28	1.20	1.00	0.87	0.77	
Departures		+0.07	+0.15	+0.02	+0.03	+0.04	+0.20	+0.16	+0.18	+0.13	

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 meridian time.	Air mass.									Local mean solar time.
		A. M.					P. M.				
	e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	e.
	mm.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm.*
August 8	7.57			1.04	1.16						8.81
9	9.14				1.06						12.24
10	9.83					1.29	0.96				11.38
15	14.10				0.80						15.65
18	13.61						1.13				13.13
19	12.24			1.01							13.61
25	9.14			1.10	1.21	1.44	1.19				7.87
26	8.81					1.42					8.81
Means				1.05	1.06	1.38	1.09				
Departures				−0.12	−0.02	+0.08	+0.06				

Lincoln, Nebr.

August 8	10.97				0.99	1.28					9.83
10	12.68		0.62	0.76	0.96	1.29					13.13
11	14.10					1.20	0.93	0.72			12.68
14	13.61				0.97	1.25					13.13
15	13.61		0.73	0.87	1.08	1.29					15.65
16	16.79		0.75	0.90	1.09	1.31					15.11
17	12.68		0.78	0.88	1.06	1.26					14.10
19	14.10		0.78	0.93	1.14	1.37	1.13	0.91	0.79	0.69	13.61
23	14.10		0.84	0.98	1.17	1.34	1.04				14.10
24	15.11	0.80	0.88	1.03	1.22						10.21
25	9.47			1.06	1.24	1.41	1.12	0.88			6.02
26	9.47					1.31	1.07	0.88	0.72	0.61	10.97
30	16.20						0.94	0.74	0.61		16.79
31	16.79						1.04	0.83	0.74	0.59	16.79
Means		(0.80)	0.77	0.93	1.09	1.30	1.04	0.83	0.72	0.63	
Departures		−0.09	−0.02	+0.04	+0.02	+0.02	−0.04	−0.06	−0.03	−0.05	

* Extrapolated.

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

Week beginning—	Average daily radiation.			Average daily departure for the week.			Excess or deficiency since first of year.		
	Washington.	Madison.	Lincoln.	Washington.	Madison.	Lincoln.	Washington.	Madison.	Lincoln.
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
July 30	470	513		−2	+37		−3874	−2294	
Aug. 6	415	433		−46	−27		−4193	−2480	
13	439	505		−2	+59		−4209	−2065	
20	529	371		+109	−54		−3448	−2444	
27	346	447		−62	+43		−3879	−2141	

MEASUREMENTS OF THE SOLAR CONSTANT OF RADIATION AT CALAMA, CHILE.

NOTE.—Owing to delay in the receipt of the data from South America, the Calama report will be published in a later issue of the REVIEW.—EDITOR.