Gavilán y Anillo, Alfonso [de los Reyes]
Los huracanes y los terremotos. Guanabacoã. 1933. 48 p. 5 x 11 cm.

Gorczyński, Ladislas
Actinomètres (Pyrhéliomètres thermo-électriques et solarimètres) à lecture directe et enregistreurs pour les mesures du rayonnement solaire. Nice. n. d. 32 p. illus. 24½ cm. (Mém. IV. Suppl. au "Riviera Scientifique." Bull. de l'Assoc. des naturalistes de Nice et des Alpes-Maritimes, Année 1933.)

Haeuser, Josef
Die hydrometeorologische Furschung in Bayern. München u. Berlin. n. d. 20 p. figs. 30 cm. (Reprint: Wasserkraft u. Wasserwirtschaft 1934, Heft 18/19/20.)

Hamburg. Deutsche Seewarte. Bibliothek
Buchliste. 5. Nachtrag. 1. Februar 1921 bis 31. Dezember 1933. Hamburg. 1934. 241 p. 23½ cm.

International geodetic and geophysical union. Meteorological association
Cinquième assemblée générale. Lisbonne, septembre 1933. Procès-verbaux des seances. 1. Actes de l'Association. Paris. 1934. 62 p. 24½ cm.

Melicchia, Andrea
L' organizzazione meteorologica europea. Milano. 1934—XII. 14 p. 24½ cm. (Consiglio nazionale delle ricerche. Publicazioni del Comitato per la geodesia e la geofisica. No. 6.)

Mörikofer, W.
Probleme der Hochgebirgsmeteorologie. Bern. 1933. 12 p. 23 cm.

Mònterin, Umberto
Le variazioni periodiche dei ghiacciai Italiani. n. p. n. d. p. 17–38. pl., tab., diagr. 26½ cm. (Estratto dal Boll. del Comitato Glaciologico Italiano, n. 14, Anno 1934—XII—no. ix.)

[Nanking. Institute of Meteorology]
The institute of meteorology. Its organization and work. Pei-Chi-Ko, Nanking, China. 1935. 18 & 17 p. 8 pl. 21½ cm. [Text in Chinese and English.]

National research council
Report of the Committee on submarine configuration and oceanic circulation. T. Wayland Vaughan, Chairman. Presented at the annual meeting of the Division of geology and geography . . . April 23, 1932. (Appendix V of Annual report of Division.) 101 p. 27½ cm. (Manifolded.)

Størmer, Carl
Measurements of luminous night clouds in Norway 1933 and 1934. Oslo. 1935. 115 p., pl., tab., diagr. 23 cm. (Astrophysica norvegica. v. 1, no. 3. February 1935.)

U. S. Hydrographic office
Naval air pilot, Alaska peninsula, southern and southeastern Alaska. Corrected to June 1, 1934. Notice to aviators, no. 11, 1934. Wash., D. C. 1934. 236 p. illus., charts, tables, forms, maps (part fold.) 23½ cm. ([Publication] no. 188).

U. S. Weather bureau
The hurricane warning service. Wash., D. C. 4 p. table, map. 29 cm. 1933.

Wieland, Lillian H.
Soil erosion bibliography. Wash., D. C. 1935. 124 p. 23½ cm. (Manifolded.)

SOLAR OBSERVATIONS

SOLAR RADIATION MEASUREMENTS DURING MAY 1935

By IRVING F. HAND, *Assistant in Solar Radiation Investigations*

For a description of instruments employed and their exposures, the reader is referred to the January 1935 REVIEW, page 24.

Beginning with this issue summaries of total solar and sky radiation values obtained at San Juan, Puerto Rico (lat. 18° 28′ N., long. 66° 06′ W.) will be included in table 2.

Table 1 shows that solar radiation intensities averaged above normal at all three Weather Bureau stations.

Table 2 shows an excess in total solar and sky radiation at all stations except Washington, Madison, Lincoln, Twin Falls, and Riverside. The depletion in radiation at the first three named stations is due in large part to dust storms; Lincoln, Nebr., shows the greatest departure from normal ever recorded for that station.

Polarization measurements obtained on 4 days at Washington give a mean of 60 percent with a maximum of 63 percent on the 18th. At Madison observations made on 5 days give a mean of 59 percent with a maximum of 70 percent on the 24th. All of these values are above the May normals for the two stations.

TABLE 1.—*Solar radiation intensities during May 1935*

[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	*1.0	2.0	3.0	4.0	5.0	e
	mm	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm*
Mar. 1	3.81				1.20						3.99
May 8	5.56			1.01	1.21	1.42					6.27
May 18	4.37	0.81	0.89	1.05	1.26	1.42					3.99
May 22	3.81	.59	.78	.92	1.15	1.41					4.57
May 25	6.76				.75	1.27					5.36
May 27	9.47				.92	1.35					9.47
May 28	9.83				.81	1.25					11.38
May 29	11.38					1.27					
Means		(.70)	(.81)	.99	1.04	1.34					
Departures		+.07	+.13	+.16	+.04	+.08					

* Extrapolated.

TABLE 1.—*Solar rudiation intensities during May 1935*—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	*1.0	2.0	3.0	4.0	5.0	e
	mm	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm*
May 9	8.18					1.45					5.79
May 10	5.79	0.88	0.97	1.08	1.25	1.51					5.36
May 17	5.16		.97	1.11	1.26		1.20				5.56
May 18	6.76				1.20						4.95
May 21	7.04					1.39					6.76
May 23	4.95		1.00	1.11	1.24	1.47					5.56
May 24	6.27	.85	.95	1.10	1.14	1.43					5.56
May 25	7.29	.76	.88	1.02	1.22	1.49					5.56
May 31	9.14		.81	.97	1.19						8.48
Means		0.83	0.93	1.06	1.21	1.46	(1.20)				
Departures		+.03	+.11	+.04	+.10	+.09	+.16				

LINCOLN, NEBR.

May 6	7.29								0.70	0.53	7.32
May 9	6.02	0.71	0.77	0.84	1.30	1.48	1.25	1.04			4.95
May 21	7.29		.68	.92	1.17	1.38					8.48
May 24	6.76	.80	.93	.99	1.25	1.47					6.50
Means		(.76)	.79	.92	1.24	1.44	(1.25)	(1.04)	(.70)	(.53)	
Departures		+.10	+.01	−.01	+.12	+.06	+.15	+.14	−.11	−.15	

TABLE 1.—*Solar radiation intensities during May 1935*—Contd.

BLUE HILL, MASS.

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	*1.0	2.0	3.0	4.0	5.0	e
	mm	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm*
May 1	3.3			1.07	1.24	1.45	1.20	1.02			2.9
May 4	5.6					1.44	1.16	.90			4.0
May 5	5.4			1.03	1.21	1.44					3.2
May 6	7.1					1.35					6.3
May 8	6.1					1.43	1.12				5.2
May 9	6.1		0.95	1.05	1.15	1.39	1.04	.81			4.8
May 11	5.8		1.00	1.13	1.29	1.50	1.21	.94			3.6
May 12	4.6					1.43					4.6
May 13	7.4	0.84	.91	1.06	1.21	1.35					4.8
May 15	4.2			1.13	1.35	1.51	1.16	.94			2.8
May 16	4.6			1.06	1.27	1.48					4.6
May 17	6.5				1.18	1.40					6.8
May 18	4.6		1.09	1.21	1.35	1.42					3.3
May 19	3.6			1.20	1.35	1.48					4.0
May 20	5.0		1.09	1.19	1.31	1.38					5.0
May 22	5.2			1.07	1.29	1.48	1.13	.71	0.58		3.8
May 23	5.2					1.43	1.14	.93			6.1
May 24	4.8			1.17	1.26	1.43					3.6
May 25	5.8			1.10	1.23	1.41					4.4
May 26	5.8		.95	1.07	1.24	1.43	1.12	.89	.74		4.8
May 27	7.4			1.01	1.18	1.33					7.1
May 29	12.3					1.20					13.2
May 30	12.8		.93	1.07							9.2
May 31	11.5					1.35					11.1
Averages		.84	.99	1.10	1.26	1.41	1.14	.90	.66		

TABLE 2.—*Average daily totals of solar radiation (direct+diffuse) received on a horizontal surface*

Week beginning—	Washington	Madison	Lincoln	Chicago	New York	Fresno	Fairbanks	Twin Falls	Miami	New Orleans	Riverside	Blue Hill	Mount Washington	Friday Harbor	Ithaca	San Juan
	Gram-calories per square centimeter															
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Apr. 30	322	319	406	252	310	690	392	561	541	343	531	454		584	206	
May 7	421	430	334	482	475	691	571	632	507	388	418	543		648	512	
May 14	464	467	147	485	579	698	485	575	557	461	525	591		585	606	588
May 21	490	516	367	532	552	677	401	638	467	464	584	627		614	653	673
May 28	484	433	352	420	518	675	418	551	588	385	555	588		625	464	560
	Departures from weekly normals															
Apr. 30	−130	−123	−68	−123	−77	+73	−4	+36	+15	+8	−7					
May 7	−21	−13	−116	+106	+98	+59	+92	+48	−23	+27	−106					
May 14	−3	−10	−370	+67	+169	+43	+37	−50	+56	+95	−13					
May 21	−10	+24	−186	+78	+125	+9	−44	−7	−39	+68	+12					
May 28	−33	−62	−159	−30	+74	−8	−19	−45	+103	−94	−5					
	Accumulated departures on June 3, 1935															
	−2,912	−5,733	−7,280	+1,575	+4,291	+301	+1,841	−728	−238	−294	−3,724					

TABLE 3.—*Total I_m, and screened, I_y, I_r, solar radiation intensity measurements, obtained during May 1935, and determinations of the atmospheric turbidity factor, β, and water-vapor content, w=depth in millimeters, if precipitated*

AMERICAN UNIVERSITY, WASHINGTON, D. C.

Date and hour angle	Solar altitude	Air mass	I_m	I_y	I_r	$\beta_{I_{m-r}}$	$\beta_{I_{y-r}}$	β_{mean}	$\frac{I_{w-o}}{1.94}$ (Percentage of solar constant)	$\frac{I_{w-o}-I_m}{1.94}$ (Percentage of solar constant)	w	Air-mass type
May 22, 1935	° ′	*m*	*gr. cal.*	*gr. cal.*	*gr. cal.*						*mm*	
4:39 a. m.	28 04	2.12	1.132	0.825	0.664	0.067	0.087	0.077	67.1	7.3	6.0	Pc, Npc aloft
4:35 a. m.	28 50	2.07	1.138	.827	.666	.067	.064	.066	70.6	10.5	6.8	
May 25												
4:23 a. m.	31 23	1.92	1.050	.815	.655	.118	.074	.096	66.0	10.5	7.0	Npc
4:13 a. m.	33 42	1.80	1.091	.815	.655	.102	.080	.091	68.0	10.4	7.4	
May 27												
0:49 a. m.	69 20	1.07	1.240	.840	.647	.078	.072	.075	80.3	19.7	13.6	Npc
0:29 a. m.	71 24	1.05	1.249	.840	.649	.070	.078	.074	80.8	19.8	13.9	
May 28												
1:36 p. m.	62 59	1.12	1.118	.785	.596	.110	.076	.093	77.4	18.1	13.0	Npc, T_M
1:41 p. m.	62 12	1.13	1.123	.781	.598	.110	.086	.098	76.7	17.2	12.8	Approaching aloft
May 31												
1:47 p. m.	61 20	1.14	1.134	.830	.670	.171	.145	.156	69.3	9.1	11.7	Npc
1:57 p. m.	61 00	1.14	1.183	.832	.672	.162	.145	.154	69.4	8.4	11.4	

Atmospheric conditions:
May 22. Temperature, 16° C.; wind, NW. 16; visibility, 20 miles; polarization, 60 percent.
May 25. Temperature, 14° C.; wind, NW 10.
May 27. Temperature, 21° C.; wind, 12 S.
May 28. Temperature, 22° C.; wind, 12 SW.
May 31. Temperature, 21° C.; wind, 12 N.

BLUE HILL METEOROLOGICAL OBSERVATORY OF HARVARD UNIVERSITY

May 1, 1935												
0:17 a. m.	62 35	1.12	1.433	0.988	0.768	0.041	0.023	0.032	85.6	10.6	12.5	Pc; T_M aloft
2:32 p. m.	47 30	1.35	1.372	.946	.761	.048	.047	.048	81.0	9.2	10.2	
2:51 p. m.	44 18	1.43	1.354	.934	.756	.050	.083	.066	78.2	7.3	9.3	Pc
May 5												
4:35 a. m.	26 24	2.26	1.151	.815	.677	.052	.097	.074	72.1	11.4	6.3	NPc
May 6												
1:23 p. m.	58 40	1.17	1.279	.902	.706	.088	.060	.074	79.2	12.1	12.2	NPc–NP_A; T_G aloft
May 8												
2:50 p. m.	45 55	1.41	1.329	.904	.729	.047	.082	.064	77.2	7.5	9.5	NPc–P_A
May 9												
4:03 a. m.	33 10	1.83	1.180	.825	.678	.067	.106	.086	68.9	6.9	7.3	NPc
1:59 a. m.	54 30	1.23	1.365	.925	.740	.048	.075	.062	74.4	2.7	8.6	
0:09 p. m.	64 57	1.10	1.375	.932	.748	.067	.098	.082	77.8	5.6	11.5	
5:00 p. m.	22 29	2.60	0.875	.678	.552	.106	.95	.100	58.2	12.2	5.5	NPc–NP_A
May 11												
2:59 a. m.	44 54	1.41	1.405	.950	.765	.027	.067	.047	79.5	5.6	9.3	Pc
0:51 a. m.	63 14	1.12	1.475	.990	.788	.024	.054	.039	84.8	7.2	11.8	
0:06 p. m.	65 31	1.09	1.468	.978	.775	.020	.052	.036	85.4	8.2	12.4	
1:37 p. m.	58 00	1.18	1.398	.950	.755	.056	.062	.059	82.4	8.4	10.8	
May 12												
2:06 a. m.	53 57	1.24	1.435	.975	.785	.042	.097	.067	79.2	3.7	9.2	Pc–P_A
0:40 a. m.	60 21	1.15	1.430	.970	.780	.045	.079	.062	81.3	6.1	11.1	
May 13												
0:26 a. m.	65 25	1.10	1.345	.890	.708	.050	.100	.075	80.0	9.2	12.5	NPc
May 15												
4:39 a. m.	27 18	2.17	1.305	.920	.755	.029	.058	.044	76.6	8.5	6.2	
3:00 a. m.	45 23	1.40	1.440	----------	.800	.029	----------	.029	83.8	7.9	9.6	Pc
0:37 a. m.	65 26	1.10	1.492	1.010	.802	.024	.031	.028	86.6	8.0	12.2	
3:02 p. m.	45.02	1 41	1.361	.953	.755	.067	.045	.056	79.0	7.3	9.4	
May 16												
3:21 a. m.	41 48	1.50	1.376	.931	.759	.032	.070	.051	79.2	6.7	8.7	Pc
0:45 a. m.	64 54	1.10	1.463	.979	.787	.030	.077	.054	82.7	5.6	11.4	
0:31 a. m.	65 53	1.09	1.453	.982	.782	.034	.037	.036	85.4	8.9	12.5	
May 18												
4:07 a. m.	33 37	1.80	1.334	.923	.741	.023	.049	.036	80.8	10.4	7.8	Pc
May 20												
1:43 a. m.	58 52	1.17	1.375	.956	.762	.067	.067	.067	80.2	7.6	11.7	Pc
May 22												
4:31 a. m.	29 44	2.01	1.185	.840	.680	.042	.047	.044	75.5	12.9	7.1	
3:07 a. m.	45 10	1.41	1.390	.925	.743	.021	.068	.044	81.1	7.6	9.5	Pc
1:34 a.m.	60 28	1.15	1.415	.975	.780	.050	.064	.057	82.0	7.3	11.4	
May 23												
1:23 p. m.	62 08	1.13	1.400	.960	.783	.080	.106	.093	77.6	3.6	10.0	Pc
5:03 p. m.	23 57	2.55	1.030	.763	.630	.073	.083	.078	63.1	8.7	5.3	
May 24												
4:08 a. m.	34 17	1.77	1.285	.900	.725	.047	.057	.052	76.0	8.1	8.6	
3:28 a. m.	41 39	1.50	1.365	.952	.762	.039	.066	.052	78.7	6.5	8.7	Pc
3:09 a. m.	45 05	1.41	1.370	.952	.762	.044	.062	.053	79.4	7.0	9.4	
May 25												
3:54 a. m.	36 55	1.66	1.290	.886	.712	.038	.069	.054	76.5	8.3	8.1	
3:09 a. m.	45 10	1.40	1.305	.904	.725	.058	.075	.066	76.9	7.9	9.9	Pc
1:24 a. m.	68 04	1.08	1.368	.935	.748	.066	.100	.083	79.0	6.7	12.1	

TABLE 3.—*Total, I_m, and screened, I_y, I_r, solar radiation intensity measurements, obtained during May 1935, and determinations of the atmospheric turbidity factor, β, and water-vapor content, w=depth in millimeters, if precipitated*—Continued

Date and hour angle	Solar altitude	Air mass	I_m	I_y	I_r	$\beta_{I_{m-r}}$	$\beta_{I_{y-r}}$	β_{mean}	$\frac{I_{w-o}}{1.94}$ (Percentage of solar constant)	$\frac{I_{w-o}-I_m}{1.94}$ (Percentage of solar constant)	w	Air-mass type
May 26	° ′	*m*	*gr. cal.*	*gr. cal.*	*gr. cal.*						*mm*	
5:08 a. m.	23 20	2.52	1.139	.832	.681	.048	.062	.055	68.3	8.0	5.3	NPc
3:54 a. m.	37 01	1.66	1.318	.916	.739	.046	.062	.054	76.4	6.7	7.9	
1:46 a. m.	58 14	1.18	1.417	.964	.769	.039	.062	.050	82.4	7.5	11.0	
0:36 a. m.	67 32	1.08	1.407	.959	.762	.050	.054	.052	83.3	8.9	12.6	NPc
0:18 a. m.	68 26	1.08	1.419	.962	.777	.053	.069	.061	82.0	6.8	11.1	
2:44 p. m.	49 44	1.31	1.328	.928	.740	.058	.070	.064	81.6	11.3	10.8	
May 27												
3:22 a. m.	43 00	1.46	1.278	.901	.723	.056	.075	.066	74.5	6.9	9.3	NPc
1:05 a. m.	65 03	1.10	1.308	.913	.729	.110	.128	.119	74.8	5.6	11.5	
May 29												
2:00 a. m.	57 15	1.19	1.193	.752	.612	.066	.198	.132	70.3	7.1	11.1	TG
May 31												
1:26 p. m.	63 23	1.12	1.328	.902	.710	.059	.074	.066	78.7	8.3	12.0	NPc; TA aloft

Atmospheric conditions during solar radiation measurements. Blue Hill Observatory of Harvard University

Date and time from apparent noon	Air temperature	Wind Beaufort scale	Visibility (scale 0–10)	Sky blueness	Cloudiness and remarks
May 1935	°C.				
1; 0:27 a. m.	7.8	W 8	8–9	9	5 Cu, Frcu, no haze.
1; 2:34 p. m.	8.9	W 9	8–9	10	Few Ci, 2 Cu, light haze, pyrh. vibrating.
8; 0:42 p. m.	11.7	NW 1	8–9	9	B Cu, Stcu, light haze.
8; 2:34 p. m.	13.3	NW 4	8–9	10	3 Cu.
9; 2:28 a. m.	17.8	S 1	8–9	8	2 Cu.
9; 0:27 a. m.	18.9	SSE 2	8–9	8	Few Cu, light haze.
11; 3:29 a. m.	12.8	W 5	9	12	Few Acu, few Cu, no haze.
11; 0:22 a. m.	16.1	NW 6	9	11	Few Cu, no haze.
11; 2:32 p. m.	18.3	W 5	9	9	2 Cu, no haze.
12; 2:14 a. m.	10.7	NW 4	9	(T)4	2 Ci.
15; 5:06 a. m.	6.7	NW 5	9	10	Few Ci, few Cu, no haze, gusty.
15; 3:32 a. m.	7.2	NW 5	9	10	Few Ci, few Cu, no haze, very gusty.
15; 0:46 a. m.	10.6	NW 5	9–10	10	Few Cu, no haze, very gusty.
15; 2:31 p. m.	13.3	NW 4	9–10	11	1 Cu, no haze, gusty.
16; 3:31 a. m.	9.4	NW 3	9	11	Few Cist, light haze.
16; 0:51 a. m.	12.8	WNW 2	9	9	1 Ci, coming up fast, no haze.
17; 1:02 p. m.	13.9	NE 3	8	9	Few Ci, 5 Acu, 2 Cu, light haze.
18; 3:42 a. m.	10.0	NNW 3	9	11	Few Ci, 1 Cu, increasing, mod. smoke to N.
19; 4:16 a. m.	7.8	NW 5	9–10	9	Few Acu, 4 Cu, no haze.
19; 2:29 p. m.	13.3	WNW 6	9	9	5 Cu, Stcu, no haze.
20; 3:34 a. m.	11.1	W 5	8	8	Few Acu, 1 Cu, light haze.
20; 2:53 p. m.	17.2	WNW 6	8	8	3 Acu, 2 Cu, light haze, Cu very close.
22; 3:35 a. m.	11.1	NW 4	8–9	9	Few Acu, few Cu, light haze.
22; 0:53 a. m.	15.0	W 3 var.	8	8	Few Ci, 4 Cu, light haze.
22; 1:51 p. m.	16.7	W 3	9	9	Few Ci, 5 Cu, light haze.
23; 1:06 p. m.	11.1	SE 3	8	9	1 Acu, 6 Cu.
24; 3:37 a. m.	10.0	NW 4	8	11	Few Cu, light haze.
24; 0:47 a. m.	14.4	W 3	8–9	8	7 Cu, light water haze.
25; 4:40 a. m.	16.1	NW 3	7–8	11	4 Acu, light haze.
25; 0:56 a. m.	18.9	W 2 var.	8–9	------	Few Acu, 5 Cu.
26; 4:21 a. m.	15.6	NNE 3	8	11	0 clouds, inversion.
26; 0:45 a. m.	19.4	NE 1–2	9	9	0 clouds, light smoke N.
26; 2:25 p. m.	22.2	Var. 2	9	8	0 clouds, light haze.
27; 3:31 a. m.	22.2	SW 3	8	9	Few Ci, light haze.
27; 0:49 a. m.	26.1	W 3 var.	8	7	2 Cu, light haze.
31; 1:09 p. m.	16.7	E 4	8	8	2 Ci, few Cu, light haze, inversion, smoke E.
31; 2:22 p. m.	17.8	NE 3	8	9	3 Ci, 2 Acu, 1 Cu, inversion, fog at sea.

POSITIONS AND AREAS OF SUN SPOTS

[Communicated by Capt. J. F. Hellweg, U. S. Navy, Superintendent U. S. Naval Observatory. Data furnished by the U. S. Naval Observatory in cooperation with Harvard and Mount Wilson Observatories. The difference in longitude is measured from the central meridian, positive west. The north latitude is positive. Areas are corrected for foreshortening and are expressed in millionths of the sun's visible hemisphere. The total area for each day includes spots and groups]

Date	Eastern standard time	Heliographic: Diff. in longitude	Heliographic: Longitude	Heliographic: Latitude	Area: Spot	Area: Group	Total area for each day	Observatory
1935	*h m*	°	°	°				
May 1	13 32	−53.5	315.1	+21.0	108	--------	--------	U. S. Naval.
		−41.0	327.6	−22.0	31	--------	139	
May 2	13 49	−40.0	315.2	+21.0	62	--------	--------	Do.
		−28.0	327.2	−25.0	15	--------	--------	
		−20.0	335.2	−31.0	15	--------	92	

POSITIONS AND AREAS OF SUN SPOTS—Continued

Date	Eastern standard time	Heliographic: Diff. in longitude	Heliographic: Longitude	Heliographic: Latitude	Area: Spot	Area: Group	Total area for each day	Observatory
1935	*h m*	°	°	°				
May 3	12 15	−48.0	294.9	−21.0	--------	10	--------	Mt. Wilson.
		−28.0	314.9	+21.0	94	--------	--------	
		−15.0	327.9	−25.0	--------	6	--------	
		−9.0	333.9	−31.0	--------	85	195	
May 4	9 15	−80.0	251.4	−27.0	40	--------	--------	Do.
		−15.0	316.4	+21.0	83	--------	--------	
		+5.0	336.4	−31.0	--------	233	356	
May 6	12 15	−60.0	243.2	−27.0	217	--------	--------	Do.
		−29.0	274.2	+21.0	8	--------	--------	
		−6.0	297.2	−21.0	--------	7	--------	
		+11.0	314.2	+21.0	202	--------	--------	
		+30.0	333.2	−30.0	--------	660	1094	
May 7	14 56	−50.0	238.5	−20.0	--------	100	--------	U. S. Naval.
		−49.0	239.5	−28.5	154	--------	--------	
		+25.5	314.0	+24.0	39	--------	--------	
		+44.0	332.5	−30.0	--------	401	694	
May 8	10 46	−37.0	240.6	−20.0	--------	216	--------	Do.
		−36.5	241.1	−28.5	185	--------	--------	
		+37.0	314.6	+24.0	31	--------	--------	
		+55.0	332.6	−29.5	--------	278	710	
May 9	13 18	−27.0	236.0	−20.0	--------	139	--------	Do.
		−22.5	240.5	−28.5	123	--------	--------	
		−19.5	243.5	−21.0	--------	93	--------	
		+70.0	333.0	−29.5	--------	216	571	
May 10	13 14	−13.0	236.8	−20.0	--------	123	--------	Do.
		−9.5	240.3	−28.0	123	--------	--------	
		−5.0	244.8	−20.5	--------	93	--------	
		+76.0	325.8	−29.0	123	--------	462	
May 11	11 20	−67.0	170.6	+29.5	15	--------	--------	Do.
		−0.5	237.1	−20.0	--------	108	--------	
		+2.5	240.1	−28.0	123	--------	--------	
		+7.0	244.6	−20.5	--------	77	323	
May 12	11 15	−53.5	170.9	+29.5	23	--------	--------	Do.
		+12.5	236.9	−20.0	--------	77	--------	
		+16.0	240.4	−28.5	93	--------	--------	
		+21.0	245.4	−20.0	--------	62	255	
May 13	14 55	−40.0	169.2	+29.0	--------	31	--------	Do.
		−27.0	182.2	−20.0	--------	46	--------	
		+29.0	238.2	−20.0	39	--------	--------	
		+30.0	239.2	−28.0	123	--------	--------	
		+36.5	245.7	−20.0	46	--------	285	
May 14	13 20	−27.0	169.9	+28.0	--------	7	--------	Mount Wilson.
		−15.0	181.9	−21.0	--------	8	--------	
		+44.0	240.9	−28.0	163	--------	--------	
		+45.0	241.9	+30.0	1	--------	--------	
		+49.0	245.9	−20.0	--------	109	288	
May 15	11 38	−12.0	172.6	+28.0	15	--------	--------	U. S. Naval.
		+54.0	238.6	−27.5	123	--------	--------	
		+60.0	244.6	−20.0	46	--------	184	
May 17	10 52	+79.0	237.5	−27.5	39	--------	39	Do.
May 18	11 11	No spots			--------	--------	--------	Do.
May 19	11 34	No spots			--------	--------	--------	Do.
May 20	9 10	No spots			--------	--------	--------	Mount Wilson.
May 21	11 19	No spots			--------	--------	--------	U. S. Naval.
May 22	11 21	No spots			--------	--------	--------	Do.
May 23	9 0	No spots			--------	--------	--------	Mount Wilson.
May 24	9 20	−13.0	53.8	−20.0	--------	14	--------	Do.
		+61.0	127.8	+4.0	7	--------	21	
May 25	10 58	No spots			--------	--------	--------	U. S. Naval.
May 26	11 59	−80.0	318.8	−30.0	62	--------	62	Do.
May 27	11 11	−71.0	315.0	−29.5	108	--------	108	Do.
May 28	13 13	−57.0	314.7	−29.5	154	--------	154	Do.