employed at Blue Hill and Washington. In this work, the National Bureau of Standards has been most helpful, especially through the determination of the cut-off curves of samples of yellow and red Schott glass that they believed to be similar in character to screens employed in our regular published measurements.

It was hoped that from these measurements the transmission of our own screens could be determined with the required accuracy. During the month just passed a great deal of time was consumed in trying out different combinations of transmissions in the hope that a combination would be found that would seem to be adapted to Blue Hill screens.

Dr. Brooks computed, from the tests made with the Bureau of Standards' screens, the transmission of the yellow screen to be 0.868, and that of the red screen to be 0.833. When these coefficients were applied to Blue Hill measurements, the results obtained were unsatisfactory.

The results obtained from the transmission coefficients employed by Mr. Hand in reducing measurements obtained at Washington (see this REVIEW for April, 1937, p. 156), also were inadequate when applied to Blue Hill measurements. A great many combinations of transmission coefficients were then tried out, with the result that with a value very close to Dr. Brooks' computed value for the yellow screen, or 0.863, and a transmission coefficient of 0.852 for the red screen, fairly consistent results were obtained.

Commencing with the seventeenth, in the table for May, which accompanies this note, the values of β computed from the differences, I_m-I_r, and also from the differences, I_y-I_r, are given in the columns headed $\frac{I_y}{.851+c}$ and $\frac{I_r}{.840+c}$. While the results are not all that could be wished, neither set of values is persistently higher than the other, so that it seems fair to assume that some of the irregularities are due in part, at least, to irregularities in the sky conditions during the time the measurements were being made.

This assumption is supported by notes on sky conditions during solar observations. The sky on the twenty-first, twenty-fourth, and thirty-first was unusually free from haze, and the differences between the two sets of β values were not great.

It is hoped that at some time in the not distant future it will be possible to obtain accurate determinations of the cut-off curves of the glass screens OG_1 and OR_2 now in use at Blue Hill, without too much interruption to the observational program.

SOLAR RADIATION OBSERVATIONS DURING MAY 1937

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.

Table 1 shows that solar radiation intensities averaged above normal for May at Washington and Madison, and below normal at Lincoln and Blue Hill. Although there was an appreciable amount of dust in the atmosphere at Lincoln, the skies for May at that station showed a decided improvement over those of the preceding month.

Whereas nearly all stations showed a deficiency in the amount of total solar and sky radiation during April, table 2 shows an excess at all stations for May with the exceptions of Riverside and Ithaca.

Table 3 shows an increase in the moisture content of the atmosphere over any preceding month of the year.

Polarization observations made at Washington on 8 days give a mean of 58 percent with a maximum of 64 percent on the eleventh. At Madison, observations made on 6 days give a mean of 56 percent with a maximum of 62 percent on the nineteenth. All of these values are close to the corresponding normals for the month.

TABLE 1.—*Solar radiation intensities during May 1937*

[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.				*1.0	P. M.				
	e	5.0	4.0	3.0	2.0		2.0	3.0	4.0	5.0	e
	mm	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm.*
May 1	5.16		0.88	1.04	1.20	1.44					3.45
May 2	7.29					1.40					6.02
May 3	5.36			1.07	1.23	1.42					3.63
May 4	6.76	0.72	.88	1.03	1.22	1.44	1.13				4.37
May 7	6.02	.54	.70	.90	1.06	1.40					6.27
May 10	8.81					1.46	.64				5.36
May 11	5.56				1.23	1.44	1.09				4.37
May 21	7.29		0.94	1.04	1.20						6.27
Means		(.63)	.85	1.02	1.19	1.43	.95				
Departures		.00	+.13	+.18	+.18	+.15	+.02				

MADISON, WIS.

May 5	5.56			0.94	1.25	1.56					9.47
May 6	4.75			1.10	1.30	1.49					5.56
May 7	5.79				1.12	1.43					4.95
May 8	7.04				1.18	1.45					6.76
May 10	6.02		0.82	.87	1.14	1.42					6.27
May 12	10.21					1.28					10.59
May 17	5.79		.92		1.30	1.47					6.02
May 19	5.16		.84		1.37	1.54					6.76
May 28	10.59					1.40					11.38
Means			.86	.97	1.24	1.45					
Departures			+.04	+.06	+.13	+.08					

LINCOLN, NEBR.

May 5	7.87		0.60	0.75							8.18
May 6	7.04	0.50	.55	.61	0.85						5.79
May 7	7.57		.65	.79	1.07						6.76
May 12	7.29	.63	.81	.95	1.14	1.48					6.76
May 15	8.81			.66	.95						10.59
May 17	4.48				1.03						9.47
May 18	10.21			.45	.86		0.96	0.71	0.56	0.43	10.59
May 22	9.14				1.28						6.02
May 26	12.68						1.19	1.03	.89	.78	13.61
May 27	9.83								.88	.67	12.24
May 28	14.10				.98						15.65
May 29	13.13	.65	.78	.95	1.19	1.40					13.61
Means		.59	.68	.74	1.04	(1.44)	(1.08)	(.87)	(.78	.63	
Departures		−.06	−.10	−.18	−.07	+.06	−.02	−.03	−.02	−.04	

BLUE HILL, MASS.

May 1	4.2	0.54	0.90	1.04	1.21	1.41	1.18	1.05	0.80		5.0
May 2	4.0		.92	1.04	1.17	1.43	1.18	.96	.78		3.8
May 3	4.4		1.00	1.18	1.17	1.33	1.12	.93	.83	0.60	3.6
May 4	6.3					1.28	1.02	.89	.78		3.0
May 9	7.3					1.34	1.12	.78			8.1
May 10	6.3				1.00	1.14	1.03				5.5
May 11	4.2			.96	1.13	1.38	1.10				4.4
May 12	6.1			.92	1.12	1.35					4.8
May 16	5.6				1.12	1.43	1.13				5.1
May 17	5.6					1.31	1.02				5.3
May 18	6.8			.88	1.00	1.16					6.6
May 21	7.1			.96	1.18	1.45					5.8
May 23	10.1					1.05					11.5
May 24	7.9			.96	1.13	1.33					7.5
May 25	7.9				1.11	1.34	1.14				7.7
May 29	11.5					1.20	1.04				10.5
May 30	11.9				1.05	1.32					8.4
May 31	11.5				1.00	1.20	.90	.78			10.4
Means		.54	.94	.99	1.11	1.30	1.08	.90	.80	.60	
Departures		−.27	−.05	−.09	−.02	−.07	+.01	+.01	.00	−.16	

* Extrapolated.

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	La Jolla	New Orleans	Riverside	Blue Hill	San Juan	Friday Harbor	Ithaca
	Gram-calories per square centimeter														
	cal.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
Apr. 30	686	398	457	391	582	693	463	590	554	485	586	623	527	597	455
May 7	614	543	537	562	435	698	496	568	552	467	531	422	540	403	386
May 14	481	492	508	427	376	744	570	609	540	604	590	356	620	523	262
May 21	500	468	617	392	507	634	396	651	262	551	316	495	463	513	407
May 28	518	546	528	517	415	741	459	545	405	515	458	576	549	709	550
	Departures from weekly normals														
Apr. 30	+220	−39	−17	−10	+179	+60	+73	+70	--------	+89	+18	+239	--------	+36	+120
May 7	+160	+95	+89	+136	+43	+50	+44	−20	--------	+73	−10	+44	--------	−138	−88
May 14	+9	+10	−15	−39	−41	+68	+102	−13	--------	+205	+23	−4	--------	+3	−207
May 21	−7	−23	+62	−97	+56	−38	−50	+6	--------	+141	−191	+65	--------	−27	−161
May 28	−6	+48	+17	+16	−43	+57	+43	−31	--------	+19	−82	+170	--------	+182	−19
	Accumulated departures on June 21														
	−469	−630	−1,659	+49	+2,919	+2,940	+903	+1,344	--------	+7,294	−2,205	+315	--------	+1,267	−1,652

TABLE 3.—*Total, I_m, and screened, I_y, I_r, solar radiation intensity measurements, obtained during May 1937, 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}	$\frac{I_{w=0}}{1.94}$ (Percentage of solar constant)	$\frac{I_{w=0}-I_m}{1.94}$ (Percentage of solar constant)	w	Air-mass type
1937	°	′	*m*	*gr. cal.*	*gr. cal.*	*gr. cal.*						*mm*	
May 1:													
4:14 a. m.	29	56	2.00	1.197	0.848	0.713	0.061	0.111	0.086	66.2	3.5	1.0	Pc; S aloft.
4:11 a. m.	30	32	1.96	1.197	.848	.713	.064	.116	.090	66.1	3.5	1.0	
3:21 a. m.	40	04	1.55	1.287	.932	.746	.068	.056	.062	76.7	9.3	7.2	
3:17 a. m.	40	39	1.53	1.303	.932	.746	.060	.062	.061	76.7	8.5	4.5	
1:05 a. m.	62	16	1.13	1.390	.942	.760	.052	.100	.076	79.5	7.3	3.8	
1:00 a. m.	62	49	1.12	1.465	.942	.760	.044	.100	.072	79.9	6.4	3.0	
May 2:													
1:50 a. m.	55	42	1.21	1.262	.896	.711	.086	.082	.084	77.1	11.0	18.0	PA; S aloft.
1:48 a. m.	56	00	1.20	1.253	.896	.711	.096	.086	.091	76.7	11.1	18.5	
May 3:													
3:50 a. m.	34	52	1.75	1.282	.919	.721	.038	.028	.033	79.6	12.6	23.0	Pc; NPA → S aloft.
3:47 a. m.	35	32	1.72	1.293	.919	.721	.036	.032	.034	79.7	12.1	17.6	
May 4:													
4:16 a. m.	30	07	2.00	1.217	.881	.717	.054	.068	.061	72.0	8.2	3.7	NPA; S aloft.
4:13 a. m.	30	37	1.96	1.205	.881	.717	.062	.068	.065	71.9	8.8	4.6	
3:31 a. m.	38	43	1.60	1.300	.932	.743	.051	.051	.051	77.4	9.4	6.9	
3:28 a. m.	39	18	1.58	1.297	.932	.743	.054	.054	.054	77.3	9.4	7.1	
2:53 a. m.	45	52	1.40	1.316	.943	.747	.068	.048	.058	79.7	10.8	14.2	
2:50 a. m.	46	26	1.38	1.334	.943	.747	.052	.050	.051	79.8	10.9	14.6	
May 7:													
4:56 a. m.	22	47	2.57	.927	.725	.602	.106	.098	.102	57.7	8.9	3.9	NPC; S aloft.
4:53 a. m.	23	22	2.51	.948	.725	.602	.100	.104	.102	58.3	8.4	3.6	
3:32 a. m.	39	04	1.58	1.133	.828	.668	.102	.100	.101	68.8	9.3	6.7	
3:28 a. m.	39	49	1.56	1.140	.828	.668	.101	.103	.102	68.8	8.9	5.9	
1:42 a. m.	58	40	1.17	1.283	.920	.727	.097	.073	.084	77.7	10.4	14.1	
1:37 a. m.	59	28	1.16	1.268	.920	.727	.103	.073	.088	76.8	10.3	13.9	
0:50 a. m.	65	23	1.10	1.362	.965	.760	.074	.070	.072	80.7	9.3	8.4	
0:46 a. m.	65	47	1.09	1.365	965	760	072	.070	.071	80.7	9.2	8.2	
May 10:													
0:05 p. m.	68	42	1.07	1.422	.982	.774	.046	.044	.045	84.8	10.1	15.0	NPC; S aloft.
0:09 p. m.	68	38	1.07	1.436	.982	.774	.038	.044	.041	84.8	9.2	8.8	
1:54 p. m.	57	19	1.19	1.361	.933	.751	.058	.088	.073	79.2	7.7	4.5	
1:59 p. m.	56	29	1.20	1.357	.933	.751	.060	.086	.072	79.2	7.9	4.5	
May 11:													
4:20 a. m.	30	23	1.96	1.232	.882	.711	.052	.060	.056	72.8	7.5	3.2	NPC.
4:16 a. m.	31	10	1.93	1.279	.882	.711	.048	.064	.056	73.0	8.4	3.7	
3:59 a. m.	34	21	1.77	1.270	.931	.739	.060	.036	.048	76.3	10.1	9.3	
3:56 a. m.	35	04	1.74	1.280	.931	.739	.054	.040	.047	76.7	9.9	8.8	
3:09 a. m.	44	05	1.44	1.378	950	758	056	.048	.052	78.8	9.1	6.1	
3:05 a. m.	44	50	1.41	1.343	.950	.758	.056	.054	.055	78.9	8.9	5.7	
1:50 a. m.	58	11	1.19	1.381	.986	.770	.060	.018	.039	84.0	12.0	27.2	
1:47 a. m.	58	40	1.17	1.403	.986	.770	.052	.020	.036	84.6	11.5	23.0	
3:41 p. m.	37	59	1.62	1.156	.830	.664	.088	.090	.089	70.8	10.4	10.4	
3:44 p. m.	37	24	1.64	1.161	.830	.664	.084	.086	.085	71.6	10.9	12.0	

May 1. Temp. 6 °C.; wind, NW., 7; polarization, 54 percent; visibility, 20 miles, blueness of sky, 5.
May 2. Temp. 9 °C.; wind, SE., 8; polarization, 56 percent; visibility, 30 miles, blueness of sky, 5.
May 3. Temp. 8 °C.; wind, N., 8; polarization, 58 percent; visibility, 30 miles, blueness of sky, 6.
May 4. Temp. 10 °C.; wind, SE., 9; polarization, 62 percent; visibility, 50 miles, blueness of sky, 7.
May 10. Temp. 5 °C.; wind, N., 10; polarization, 52 percent; visibility, 30 miles, blueness of sky, 5.
May 11. Temp. 9 °C.; wind, S., 6; polarization, 64 percent; visibility, 50 miles, blueness of sky, 7.

Meteorological Conditions During Solar Observations, May 1937

Date	Time from local noon	Temperature ° C.	Wind Beaufort	Visibility	Sky blue	Haze*	Cloudiness and remarks
May 1	3:15 a. m.	12.7	NE 4	9	7	1-W	
1[1]	2:29 a. m.	12.2	NE 4	9	8	1-W	Trace Cu.
1	2:09 a. m.	12.1	NE 3	8	8	1	Trace Cu.
1	0:36 p. m.	12.8	NE 3	9	8	1-NW	1 Ci.
2	3:56 a. m.	9.6	NE 5	8	8	0	3 Ci.
2	0:02 a. m.	9.9	NNE 6	9	8	0	3 Ci, Trace Ac.
2	4:31 p. m.	11.1	NNE 7	9	8	0-W	2 Ci., 1 Ac.
3	3:53 a. m.	14.4	NW 3	7	8	1	
3	0:22 a. m.	21.7	WSW 3	8	8	0	Trace Ci.
3	3:41 p. m.	25.6	NW 2	8	8	0	Trace Ci.
3	4:46 p. m.	26.6	NW 2	9	8	0	Trace Ci.
4	1:08 a. m.	25.0	W 3	8	8	0	Trace Ci., Trace Cu.
4	0:28 p. m.	25.7	W 3	8	8	0	Few Cu.
4	2:40 p. m.	26.4	WSW 3	8	8	0	Few Ci., Few Cu.
9	4:08 p. m.	19.9	WNW 1	7	8	0	1 Cu.
9	5:13 p. m.	19.6	SE 3	7	8	0	2 Cu.
10	3:47 a. m.	11.1	SSW 3	8	7	0	2 Ci, 6Ac.
10	3:23 p. m.	15.5	W 4	8	7	0	2 Ci. 5 Cu.
11	3:54 a. m.	7.8	W 5	8	8	0	1 Ci., Trace Cu.
11	0:36 a. m.	13.3	WNW 5	8	8	0	1 Ci., Trace Cu.
11[1]	0:23 p. m.	14.4	NW 4	8	8	0	Trace Ci., 1 Cu.
11	2:41 p. m.	17.2	NNW 5	9	8	0	6 Cu.
12	3:54 a. m.	17.9	S 3	7	8	1	Trace Ci.
12[1]	3:11 a. m.	20.1	S 3	7	8	1	Trace Ci., Ci., increasing.
12	2:56 a. m.	20.7	S 3	7	8	1	1 Ci.

[1] Indicates Smithsonian Observation.

Meteorological Conditions During Solar Observations, May 1937—Continued

Date	Time from local noon	Temperature ° C.	Wind Beaufort	Visibility	Sky blue	Haze*	Cloudiness and remarks
May 16	4:32 a. m.	8.2	W 3	8	8	0	3 Cicu.
16	0:05 p. m.	16.1	SE 1	9	8	0	2 Cicu.
16	2:59 p. m.	18.1	E 3	9	8	0	3 Ci.
17	2:41 p. m.	16.7	S 5	8	7	0	Few Ci., 2 Cu.
17	2:52 p. m.	16.7	S 5	8	7	0	2 Cs, Trace Cu.
18	4:32 a. m.	10.6	SSW 4	8	7	0	2 Ci., 4 Ac., Ci. over sun.
21	4:57 a. m.	11.1	NW 4	9	8	0	Trace Ci., Trace Ac.
21[1]	3:17 a. m.	13.9	WNW 3	9	8	0	1 Cu. Cu. within 2° of sun; Error due to wrong setting of watch or Cu. near sun.
21	2:58 a. m.	14.4	WNW 3	9	8	0	2 Cu.
21	0:31 a. m.	16.7	NW 3	9	8	0	Few Ci., Few Cu.
21[1]	0:21 a. m.	17.3	NW 3	9	8	0	Few Ci., Few Cu.
23	0:22 p. m.	19.5	NNW 1	6	7	2	Trace Ac.
23	3:17 p. m.	19.6	NE 3	6	6	2	5 Ci.
24	5:07 a. m.	12.9	WNW 3	7	8	1	1 Ac.
24	1:19 a. m.	19.2	WNW 3	8	8	0	Few Ac., Few Cu.
25	4:23 a. m.	14.5	WNW 5	8	7	0	Trace Ci.
29	2:44 p. m.	22.2	E 1	8	7	0-W	Trace Ci., 2 Cu.
30	0:46 p. m.	26.7	SW 1	8	7	-------	2 Ci., 2 Cu.
31	2:53 a. m.	23.3	SW 3	8	7	0	7 Ci., Thin Ci. over sun.
31	0:44 a. m.	28.3	SW 3	8	7	0	1 Ci.
31	0:22 a. m.	28.3	SW 3	8	7	0	1 Ci.

*Haze—0 Light; 1 Moderate; 2 Dense.

TABLE 3.—*Total I_m, and screened, I_v, I_r, solar radiation intensity measurements, obtained during May 1937 and determinations of the atmospheric turbidity factor, β, and water-vapor content, w=depth in millimeters, if precipitated*

BLUE HILL METEOROLOGICAL OBSERVATORY OF HARVARD UNIVERSITY

Date and hour angle, 1937	Solar altitude	Air mass	I_m	I_v	I_r	$\frac{I_v}{.851+C}$	$\frac{I_r}{.840+C}$	σ_{mean} (*)	$\frac{I_{w=0}}{1.94}$ (Percentage of solar constant)	$\frac{I_{w=0}-I_m}{1.94}$ (Percentage of solar constant)	w	Air-mass type
	° ′	m	gr. cal.	gr. cal.	gr. cal.	gr. cal.	gr. cal.				mm	
May 1:												
3:13, a	40 58	1.51	1.246	0.793	0.650	0.964	0.787	0.076	73.1	7.8	6.3	Pc.
2:08, a	52 17	1.28	1.320	.850	.668	1.018	.806	.051	81.0	11.9	9.9	Np aloft.
0:37, p	62 40	1.11	1.400	.888	.710	1.059	.857	.068	81.2	8.0	7.6	
May 2:												
3:54, a	33 25	1.81	1.196	.798	.636	.975	.768	.048	71.8	15.5	11.5	
0:09, p	63 07	1.09	1.424	.893	.716	1.065	.865	.058	82.2	7.7	7.7	Pc.
4:34, p	25 30	2.32	1.108	.721	.580	.851	.684	.052	70.5	12.5	8.2	
May 3:												
4:20, a	28 51	2.29	1.234	.800	.666	.945	.805	.055	70.2	5.6	3.7	
0:19, a	63 08	1.12	1.320	.810	.666	.939	.805	.062	81.5	12.3	11.7	Npc; S aloft.
3:44, p	35 21	1.72	1.200	.772	.608	.895	.723	.072	72.0	8.1	6.2	
4:41, p	23 30	2.50	.998	.663	.536	.768	.637	.058	70.8	18.5	11.7	
May 4:												
1:08, a	59 55	1.15	1.228	.768	.618	.906	.727	.105	74.5	10.1	9.5	
0:34, p	61 30	1.14	1.244	.797	.640	.956	.774	.083	77.0	12.0	11.4	Npc.
2:37, p	47 22	1.48	1.159	.726	.590	.906	.727	.107	70.3	9.6	8.0	S aloft.
May 9:												
4:11, p	32 10	1.87	1.160	.734	.624	.867	.746	.128	62.5	11.8	8.7	Npa.
5:16, p	19 36	2.98	.734	.548	.460	.760	.558	.116	52.4	11.4	6.7	
May 10:												
3:44, a	35 40	2.30	.960	.640	.536	.655	.557	.136	50.5	4.7	3.1	Npc.
3:26, p	40 00	1.55	1.184	.770	.614	.912	.743	.098	61.9	8.1	6.4	Npp aloft.
May 11:												
3:51, a	35 36	1.71	1.184	.774	.637	.991	.772	.130	61.9	2.1	1.6	
0:35, p	64 32	1.10	1.356	.852	.686	1.009	.831	.084	70.9	6.6	6.4	Pc.
2:43, p	47 44	1.35	1.388	.818	.658	.969	.797	.050	85.0	12.4	10.8	
May 12:												
3:51, a	35 50	1.71	1.164	.762	.620	.900	.754	.088	76.0	15.1	11.6	Pc/s aloft.
2:59, a	46 45	1.36	1.292	.788	.640	.945	.777	.084	75.5	9.6	8.4	
May 16:												
4:29, a	40 08	1.55	1.272	.822	.660	.076	.048	.062	77.1	10.1	8.1	
0:08, p	67 12	1.09	1.424	.876	.712	.125	.009	.067	81.2	5.7	5.5	Npc.
3:02, p	45 25	1.40	1.312	.812	.670	.129	.030	.080	75.2	6.1	5.2	
May 17:												
2:43, p	48 55	1.32	1.214	---------	.612	---------	.071	---------	77.7	13.7	10.6	Npc/Npp aloft.
3:55, p	35 48	1.71	1.000	.720	.572	.100	.057	.078	71.1	3.7	2.8	
May 18:												
4:29, a	30 08	1.99	.988	.660	.548	.095	.016	.056	72.6	15.3	10.9	Npc/Npp aloft.
May 21:												
4:54, a	25 24	2.35	1.063	.744	.608	.049	.112	.080	64.7	7.5	3.3	
2:55, a	47 14	1.36	1.334	.860	.684	.097	.035	.066	78.6	8.1	6.1	Npc.
0:28, a	67 11	1.09	1.420	.896	.720	.110	.010	.060	82.6	7.6	7.3	
May 23:												
0:23, p	67 45	1.08	1.040	.696	.598	.216	.236	.226	64.5	9.5	9.3	Npa/Ta aloft.
3:29, p	45 15	1.40	.976	.640	.520	.164	.215	.190	65.1	13.6	11.6	
May 24:												
5:04, a	23 53	2.46	1.040	.700	.560	.157	1.149	.153	72.0	17.1	14.6	Npc/S aloft.
1:25, a	67 54	1.08	1.312	.808	.650	.192	.175	.184	80.0	10.8	10.5	
May 25:												
4:20, a	32 10	1.87	1.138	.733	.578	.061	.102	.082	71.2	5.7	3.1	Npc.
May 29:												
2:46, p	49 44	1.30	1.072	.684	.542	.040	.064	.052	80.7	23.9	10.1	Npc.
May 30:												
0:49, p	67 04	1.09	1.268	.784	.632	.039	.188	.114	75.4	16.7	14.4	Npc.
May 31:												
2:50, a	49 24	1.31	1.108	.700	.544	.075	.127	.101	73.5	14.8	13.1	
0:19, a	69 18	1.07	1.174	.728	.576	.076	.151	.124	74.7	12.5	12.1	Np.
3:00, p	47 26	1.35	1.084	.656	.528	.075	.146	.120	72.0	15.1	13.1	

* Corrected for transmission of screens and reduced to mean solar distance.