

# Sun\_2015

A.L.P.O. Solar Section Ephemeris 2015  
 EPHEMERIS FOR PHYSICAL OBSERVATIONS OF THE SUN (0 hr U.T.) - 2015  
 (Compiled by: Jeffrey D. Beish, A.L.P.O. using WIMP )

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER arcmin	R.A. hh:mm	DEC deg
			Lo	Bo	Po			
2015-Jan-01	2457023.5	2158	51.89	-2.97	2.21	32.530	18:44	-23.04
2015-Jan-02	2457024.5	2158	38.72	-3.09	1.73	32.531	18:48	-22.96
2015-Jan-03	2457025.5	2158	25.55	-3.21	1.24	32.531	18:53	-22.87
2015-Jan-04	2457026.5	2158	12.38	-3.32	0.76	32.531	18:57	-22.77
2015-Jan-05	2457027.5	2159	359.21	-3.43	0.27	32.531	19:02	-22.67
2015-Jan-06	2457028.5	2159	346.04	-3.55	-0.21	32.531	19:06	-22.56
2015-Jan-07	2457029.5	2159	332.87	-3.66	-0.69	32.530	19:10	-22.44
2015-Jan-08	2457030.5	2159	319.70	-3.77	-1.17	32.530	19:15	-22.31
2015-Jan-09	2457031.5	2159	306.54	-3.88	-1.66	32.529	19:19	-22.17
2015-Jan-10	2457032.5	2159	293.37	-3.99	-2.14	32.528	19:24	-22.03
2015-Jan-11	2457033.5	2159	280.20	-4.09	-2.61	32.527	19:28	-21.88
2015-Jan-12	2457034.5	2159	267.03	-4.20	-3.09	32.525	19:32	-21.73
2015-Jan-13	2457035.5	2159	253.86	-4.30	-3.56	32.524	19:37	-21.56
2015-Jan-14	2457036.5	2159	240.69	-4.41	-4.04	32.522	19:41	-21.39
2015-Jan-15	2457037.5	2159	227.53	-4.51	-4.51	32.521	19:45	-21.22
2015-Jan-16	2457038.5	2159	214.36	-4.61	-4.97	32.519	19:49	-21.03
2015-Jan-17	2457039.5	2159	201.19	-4.71	-5.44	32.517	19:54	-20.84
2015-Jan-18	2457040.5	2159	188.02	-4.80	-5.90	32.514	19:58	-20.65
2015-Jan-19	2457041.5	2159	174.86	-4.90	-6.36	32.512	20:02	-20.44
2015-Jan-20	2457042.5	2159	161.69	-4.99	-6.82	32.509	20:07	-20.23
2015-Jan-21	2457043.5	2159	148.52	-5.09	-7.27	32.506	20:11	-20.02
2015-Jan-22	2457044.5	2159	135.36	-5.18	-7.72	32.504	20:15	-19.79
2015-Jan-23	2457045.5	2159	122.19	-5.27	-8.17	32.500	20:19	-19.57
2015-Jan-24	2457046.5	2159	109.02	-5.36	-8.62	32.497	20:23	-19.33
2015-Jan-25	2457047.5	2159	95.86	-5.44	-9.06	32.494	20:28	-19.09
2015-Jan-26	2457048.5	2159	82.69	-5.53	-9.49	32.490	20:32	-18.84
2015-Jan-27	2457049.5	2159	69.52	-5.61	-9.92	32.487	20:36	-18.59
2015-Jan-28	2457050.5	2159	56.36	-5.69	-10.35	32.483	20:40	-18.33
2015-Jan-29	2457051.5	2159	43.19	-5.77	-10.78	32.479	20:44	-18.07
2015-Jan-30	2457052.5	2159	30.02	-5.84	-11.20	32.475	20:48	-17.80
2015-Jan-31	2457053.5	2159	16.86	-5.92	-11.61	32.470	20:52	-17.53

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER arcmin	R.A. hh:mm	DEC deg
			Lo	Bo	Po			
2015-Feb-01	2457054.5	2159	3.69	-5.99	-12.03	32.466	20:57	-17.25
2015-Feb-02	2457055.5	2160	350.53	-6.06	-12.43	32.461	21:01	-16.96
2015-Feb-03	2457056.5	2160	337.36	-6.13	-12.83	32.456	21:05	-16.68
2015-Feb-04	2457057.5	2160	324.19	-6.20	-13.23	32.452	21:09	-16.38
2015-Feb-05	2457058.5	2160	311.03	-6.27	-13.62	32.446	21:13	-16.08
2015-Feb-06	2457059.5	2160	297.86	-6.33	-14.01	32.441	21:17	-15.78
2015-Feb-07	2457060.5	2160	284.69	-6.39	-14.40	32.436	21:21	-15.47
2015-Feb-08	2457061.5	2160	271.53	-6.45	-14.77	32.431	21:25	-15.16
2015-Feb-09	2457062.5	2160	258.36	-6.51	-15.15	32.425	21:29	-14.84
2015-Feb-10	2457063.5	2160	245.19	-6.56	-15.51	32.419	21:33	-14.52
2015-Feb-11	2457064.5	2160	232.03	-6.62	-15.88	32.413	21:37	-14.20
2015-Feb-12	2457065.5	2160	218.86	-6.67	-16.23	32.407	21:41	-13.87
2015-Feb-13	2457066.5	2160	205.69	-6.72	-16.58	32.401	21:45	-13.53
2015-Feb-14	2457067.5	2160	192.52	-6.77	-16.93	32.395	21:48	-13.20
2015-Feb-15	2457068.5	2160	179.36	-6.81	-17.27	32.389	21:52	-12.86
2015-Feb-16	2457069.5	2160	166.19	-6.85	-17.61	32.382	21:56	-12.52
2015-Feb-17	2457070.5	2160	153.02	-6.89	-17.93	32.376	22:00	-12.17
2015-Feb-18	2457071.5	2160	139.85	-6.93	-18.26	32.369	22:04	-11.82
2015-Feb-19	2457072.5	2160	126.68	-6.97	-18.58	32.362	22:08	-11.47
2015-Feb-20	2457073.5	2160	113.51	-7.00	-18.89	32.355	22:12	-11.11
2015-Feb-21	2457074.5	2160	100.35	-7.04	-19.19	32.348	22:16	-10.75
2015-Feb-22	2457075.5	2160	87.18	-7.07	-19.49	32.341	22:19	-10.39
2015-Feb-23	2457076.5	2160	74.01	-7.09	-19.79	32.334	22:23	-10.02
2015-Feb-24	2457077.5	2160	60.84	-7.12	-20.08	32.327	22:27	-9.66

2015-Feb-25	2457078.5	2160	47.67	-7.14	-20.36	32.319	22:31	-9.29
2015-Feb-26	2457079.5	2160	34.49	-7.16	-20.63	32.312	22:35	-8.92
2015-Feb-27	2457080.5	2160	21.32	-7.18	-20.90	32.304	22:38	-8.54
2015-Feb-28	2457081.5	2160	8.15	-7.20	-21.17	32.296	22:42	-8.17

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER arcmin	R.A. hh:mm	DEC deg
			Lo	Bo	Po			
2015-Mar-01	2457082.5	2161	354.98	-7.21	-21.42	32.289	22:46	-7.79
2015-Mar-02	2457083.5	2161	341.81	-7.22	-21.68	32.281	22:50	-7.41
2015-Mar-03	2457084.5	2161	328.63	-7.23	-21.92	32.273	22:53	-7.03
2015-Mar-04	2457085.5	2161	315.46	-7.24	-22.16	32.265	22:57	-6.64
2015-Mar-05	2457086.5	2161	302.29	-7.25	-22.39	32.257	23:01	-6.26
2015-Mar-06	2457087.5	2161	289.11	-7.25	-22.62	32.248	23:05	-5.87
2015-Mar-07	2457088.5	2161	275.94	-7.25	-22.84	32.240	23:08	-5.48
2015-Mar-08	2457089.5	2161	262.76	-7.25	-23.05	32.232	23:12	-5.10
2015-Mar-09	2457090.5	2161	249.58	-7.25	-23.26	32.223	23:16	-4.71
2015-Mar-10	2457091.5	2161	236.41	-7.24	-23.45	32.215	23:19	-4.31
2015-Mar-11	2457092.5	2161	223.23	-7.23	-23.65	32.206	23:23	-3.92
2015-Mar-12	2457093.5	2161	210.05	-7.22	-23.83	32.198	23:27	-3.53
2015-Mar-13	2457094.5	2161	196.87	-7.21	-24.01	32.189	23:30	-3.14
2015-Mar-14	2457095.5	2161	183.70	-7.19	-24.19	32.180	23:34	-2.74
2015-Mar-15	2457096.5	2161	170.52	-7.18	-24.35	32.172	23:38	-2.35
2015-Mar-16	2457097.5	2161	157.34	-7.16	-24.51	32.163	23:41	-1.95
2015-Mar-17	2457098.5	2161	144.16	-7.14	-24.67	32.154	23:45	-1.56
2015-Mar-18	2457099.5	2161	130.97	-7.11	-24.81	32.145	23:49	-1.16
2015-Mar-19	2457100.5	2161	117.79	-7.09	-24.95	32.136	23:52	-0.77
2015-Mar-20	2457101.5	2161	104.61	-7.06	-25.08	32.127	23:56	-0.37
2015-Mar-21	2457102.5	2161	91.43	-7.03	-25.21	32.118	00:00	0.02
2015-Mar-22	2457103.5	2161	78.24	-7.00	-25.33	32.109	00:03	0.42
2015-Mar-23	2457104.5	2161	65.06	-6.97	-25.44	32.100	00:07	0.81
2015-Mar-24	2457105.5	2161	51.87	-6.93	-25.55	32.091	00:11	1.21
2015-Mar-25	2457106.5	2161	38.68	-6.89	-25.64	32.082	00:14	1.60
2015-Mar-26	2457107.5	2161	25.50	-6.85	-25.73	32.073	00:18	1.99
2015-Mar-27	2457108.5	2161	12.31	-6.81	-25.82	32.063	00:22	2.39
2015-Mar-28	2457109.5	2162	359.12	-6.77	-25.89	32.054	00:25	2.78
2015-Mar-29	2457110.5	2162	345.93	-6.72	-25.96	32.045	00:29	3.17
2015-Mar-30	2457111.5	2162	332.74	-6.67	-26.03	32.036	00:32	3.56
2015-Mar-31	2457112.5	2162	319.55	-6.62	-26.08	32.027	00:36	3.95

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER arcmin	R.A. hh:mm	DEC deg
			Lo	Bo	Po			
2015-Apr-01	2457113.5	2162	306.36	-6.57	-26.13	32.018	00:40	4.34
2015-Apr-02	2457114.5	2162	293.17	-6.51	-26.17	32.008	00:43	4.72
2015-Apr-03	2457115.5	2162	279.97	-6.46	-26.21	31.999	00:47	5.11
2015-Apr-04	2457116.5	2162	266.78	-6.40	-26.23	31.990	00:51	5.49
2015-Apr-05	2457117.5	2162	253.59	-6.34	-26.25	31.981	00:54	5.87
2015-Apr-06	2457118.5	2162	240.39	-6.28	-26.26	31.972	00:58	6.25
2015-Apr-07	2457119.5	2162	227.19	-6.22	-26.27	31.962	01:02	6.63
2015-Apr-08	2457120.5	2162	214.00	-6.15	-26.27	31.953	01:05	7.00
2015-Apr-09	2457121.5	2162	200.80	-6.09	-26.26	31.944	01:09	7.38
2015-Apr-10	2457122.5	2162	187.60	-6.02	-26.24	31.935	01:13	7.75
2015-Apr-11	2457123.5	2162	174.40	-5.95	-26.22	31.926	01:16	8.12
2015-Apr-12	2457124.5	2162	161.20	-5.87	-26.19	31.917	01:20	8.49
2015-Apr-13	2457125.5	2162	148.00	-5.80	-26.15	31.908	01:24	8.85
2015-Apr-14	2457126.5	2162	134.80	-5.73	-26.10	31.899	01:27	9.22
2015-Apr-15	2457127.5	2162	121.59	-5.65	-26.05	31.890	01:31	9.58
2015-Apr-16	2457128.5	2162	108.39	-5.57	-25.99	31.881	01:35	9.93
2015-Apr-17	2457129.5	2162	95.18	-5.49	-25.92	31.872	01:39	10.29
2015-Apr-18	2457130.5	2162	81.98	-5.41	-25.84	31.863	01:42	10.64
2015-Apr-19	2457131.5	2162	68.77	-5.33	-25.76	31.854	01:46	10.99
2015-Apr-20	2457132.5	2162	55.57	-5.24	-25.67	31.846	01:50	11.33
2015-Apr-21	2457133.5	2162	42.36	-5.15	-25.57	31.837	01:53	11.68
2015-Apr-22	2457134.5	2162	29.15	-5.07	-25.47	31.828	01:57	12.02
2015-Apr-23	2457135.5	2162	15.94	-4.98	-25.35	31.820	02:01	12.35
2015-Apr-24	2457136.5	2162	2.73	-4.89	-25.24	31.811	02:05	12.69
2015-Apr-25	2457137.5	2163	349.52	-4.80	-25.11	31.803	02:08	13.02
2015-Apr-26	2457138.5	2163	336.31	-4.70	-24.97	31.794	02:12	13.34
2015-Apr-27	2457139.5	2163	323.10	-4.61	-24.83	31.786	02:16	13.66
2015-Apr-28	2457140.5	2163	309.88	-4.51	-24.68	31.777	02:20	13.98
2015-Apr-29	2457141.5	2163	296.67	-4.42	-24.53	31.769	02:24	14.30

2015-Apr-30 2457142.5 2163 283.45 -4.32 -24.36 31.761 02:27 14.61

CALENDAR	JULIAN	ROTATION	HELIOGRAPHIC			DIAMETER	R.A.	DEC
DATE	DATE	NUMBER	Lo	Bo	Po	arcmin	hh:mm	deg
2015-May-01	2457143.5	2163	270.24	-4.22	-24.19	31.753	02:31	14.92
2015-May-02	2457144.5	2163	257.02	-4.12	-24.02	31.745	02:35	15.22
2015-May-03	2457145.5	2163	243.81	-4.02	-23.83	31.737	02:39	15.52
2015-May-04	2457146.5	2163	230.59	-3.91	-23.64	31.729	02:43	15.81
2015-May-05	2457147.5	2163	217.37	-3.81	-23.44	31.721	02:46	16.10
2015-May-06	2457148.5	2163	204.15	-3.71	-23.23	31.714	02:50	16.39
2015-May-07	2457149.5	2163	190.93	-3.60	-23.02	31.706	02:54	16.67
2015-May-08	2457150.5	2163	177.71	-3.49	-22.80	31.698	02:58	16.94
2015-May-09	2457151.5	2163	164.49	-3.39	-22.57	31.691	03:02	17.21
2015-May-10	2457152.5	2163	151.27	-3.28	-22.34	31.684	03:06	17.48
2015-May-11	2457153.5	2163	138.04	-3.17	-22.09	31.676	03:10	17.74
2015-May-12	2457154.5	2163	124.82	-3.06	-21.85	31.669	03:14	18.00
2015-May-13	2457155.5	2163	111.60	-2.95	-21.59	31.662	03:18	18.25
2015-May-14	2457156.5	2163	98.37	-2.83	-21.33	31.655	03:22	18.50
2015-May-15	2457157.5	2163	85.15	-2.72	-21.06	31.648	03:25	18.74
2015-May-16	2457158.5	2163	71.92	-2.61	-20.79	31.641	03:29	18.98
2015-May-17	2457159.5	2163	58.70	-2.49	-20.51	31.635	03:33	19.21
2015-May-18	2457160.5	2163	45.47	-2.38	-20.22	31.628	03:37	19.43
2015-May-19	2457161.5	2163	32.24	-2.26	-19.92	31.622	03:41	19.65
2015-May-20	2457162.5	2163	19.01	-2.15	-19.62	31.615	03:45	19.87
2015-May-21	2457163.5	2163	5.79	-2.03	-19.32	31.609	03:49	20.08
2015-May-22	2457164.5	2164	352.56	-1.92	-19.00	31.603	03:53	20.28
2015-May-23	2457165.5	2164	339.33	-1.80	-18.69	31.597	03:57	20.48
2015-May-24	2457166.5	2164	326.10	-1.68	-18.36	31.591	04:01	20.67
2015-May-25	2457167.5	2164	312.87	-1.56	-18.03	31.585	04:05	20.85
2015-May-26	2457168.5	2164	299.64	-1.44	-17.69	31.580	04:09	21.03
2015-May-27	2457169.5	2164	286.41	-1.32	-17.35	31.574	04:14	21.21
2015-May-28	2457170.5	2164	273.17	-1.21	-17.01	31.569	04:18	21.37
2015-May-29	2457171.5	2164	259.94	-1.09	-16.65	31.563	04:22	21.53
2015-May-30	2457172.5	2164	246.71	-0.97	-16.29	31.558	04:26	21.69
2015-May-31	2457173.5	2164	233.48	-0.85	-15.93	31.553	04:30	21.84

CALENDAR	JULIAN	ROTATION	HELIOGRAPHIC			DIAMETER	R.A.	DEC
DATE	DATE	NUMBER	Lo	Bo	Po	arcmin	hh:mm	deg
2015-Jun-01	2457174.5	2164	220.24	-0.73	-15.56	31.548	04:34	21.98
2015-Jun-02	2457175.5	2164	207.01	-0.61	-15.19	31.543	04:38	22.12
2015-Jun-03	2457176.5	2164	193.78	-0.48	-14.81	31.539	04:42	22.25
2015-Jun-04	2457177.5	2164	180.54	-0.36	-14.43	31.534	04:46	22.37
2015-Jun-05	2457178.5	2164	167.31	-0.24	-14.04	31.530	04:50	22.48
2015-Jun-06	2457179.5	2164	154.07	-0.12	-13.65	31.526	04:54	22.59
2015-Jun-07	2457180.5	2164	140.84	0.00	-13.25	31.521	04:59	22.70
2015-Jun-08	2457181.5	2164	127.60	0.12	-12.85	31.517	05:03	22.79
2015-Jun-09	2457182.5	2164	114.37	0.24	-12.45	31.514	05:07	22.88
2015-Jun-10	2457183.5	2164	101.13	0.36	-12.04	31.510	05:11	22.97
2015-Jun-11	2457184.5	2164	87.90	0.48	-11.63	31.506	05:15	23.04
2015-Jun-12	2457185.5	2164	74.66	0.60	-11.22	31.503	05:19	23.11
2015-Jun-13	2457186.5	2164	61.42	0.72	-10.80	31.499	05:23	23.18
2015-Jun-14	2457187.5	2164	48.19	0.84	-10.38	31.496	05:28	23.23
2015-Jun-15	2457188.5	2164	34.95	0.96	-9.95	31.493	05:32	23.28
2015-Jun-16	2457189.5	2164	21.71	1.08	-9.52	31.490	05:36	23.33
2015-Jun-17	2457190.5	2164	8.48	1.20	-9.09	31.487	05:40	23.36
2015-Jun-18	2457191.5	2165	355.24	1.32	-8.66	31.485	05:44	23.39
2015-Jun-19	2457192.5	2165	342.00	1.44	-8.22	31.482	05:48	23.41
2015-Jun-20	2457193.5	2165	328.77	1.55	-7.78	31.480	05:52	23.43
2015-Jun-21	2457194.5	2165	315.53	1.67	-7.34	31.478	05:57	23.44
2015-Jun-22	2457195.5	2165	302.29	1.79	-6.90	31.476	06:01	23.44
2015-Jun-23	2457196.5	2165	289.06	1.90	-6.46	31.474	06:05	23.43
2015-Jun-24	2457197.5	2165	275.82	2.02	-6.01	31.472	06:09	23.42
2015-Jun-25	2457198.5	2165	262.58	2.14	-5.56	31.470	06:13	23.40
2015-Jun-26	2457199.5	2165	249.35	2.25	-5.12	31.469	06:17	23.37
2015-Jun-27	2457200.5	2165	236.11	2.37	-4.67	31.468	06:22	23.34
2015-Jun-28	2457201.5	2165	222.87	2.48	-4.22	31.466	06:26	23.30
2015-Jun-29	2457202.5	2165	209.64	2.59	-3.76	31.465	06:30	23.25
2015-Jun-30	2457203.5	2165	196.40	2.70	-3.31	31.464	06:34	23.20

CALENDAR JULIAN ROTATION HELIOGRAPHIC DIAMETER R.A. DEC

DATE	DATE	NUMBER	Lo	Bo	Po	arcmin	hh:mm	deg
2015-Jul-01	2457204.5	2165	183.16	2.81	-2.86	31.464	06:38	23.14
2015-Jul-02	2457205.5	2165	169.93	2.93	-2.40	31.463	06:42	23.07
2015-Jul-03	2457206.5	2165	156.69	3.04	-1.95	31.463	06:46	23.00
2015-Jul-04	2457207.5	2165	143.45	3.14	-1.50	31.462	06:51	22.92
2015-Jul-05	2457208.5	2165	130.22	3.25	-1.04	31.462	06:55	22.83
2015-Jul-06	2457209.5	2165	116.98	3.36	-0.59	31.462	06:59	22.74
2015-Jul-07	2457210.5	2165	103.75	3.47	-0.14	31.462	07:03	22.64
2015-Jul-08	2457211.5	2165	90.51	3.57	0.31	31.463	07:07	22.53
2015-Jul-09	2457212.5	2165	77.28	3.68	0.77	31.463	07:11	22.42
2015-Jul-10	2457213.5	2165	64.04	3.78	1.22	31.464	07:15	22.30
2015-Jul-11	2457214.5	2165	50.81	3.88	1.67	31.464	07:19	22.17
2015-Jul-12	2457215.5	2165	37.58	3.98	2.12	31.465	07:23	22.04
2015-Jul-13	2457216.5	2165	24.34	4.08	2.56	31.466	07:27	21.90
2015-Jul-14	2457217.5	2165	11.11	4.18	3.01	31.467	07:32	21.75
2015-Jul-15	2457218.5	2166	357.88	4.28	3.45	31.469	07:36	21.60
2015-Jul-16	2457219.5	2166	344.64	4.38	3.90	31.470	07:40	21.45
2015-Jul-17	2457220.5	2166	331.41	4.47	4.34	31.472	07:44	21.28
2015-Jul-18	2457221.5	2166	318.18	4.57	4.78	31.474	07:48	21.11
2015-Jul-19	2457222.5	2166	304.95	4.66	5.21	31.476	07:52	20.94
2015-Jul-20	2457223.5	2166	291.71	4.75	5.65	31.478	07:56	20.76
2015-Jul-21	2457224.5	2166	278.48	4.84	6.08	31.480	08:00	20.57
2015-Jul-22	2457225.5	2166	265.25	4.93	6.51	31.482	08:04	20.38
2015-Jul-23	2457226.5	2166	252.02	5.02	6.94	31.485	08:08	20.18
2015-Jul-24	2457227.5	2166	238.79	5.11	7.36	31.487	08:12	19.97
2015-Jul-25	2457228.5	2166	225.56	5.19	7.79	31.490	08:16	19.76
2015-Jul-26	2457229.5	2166	212.33	5.27	8.21	31.493	08:20	19.55
2015-Jul-27	2457230.5	2166	199.11	5.36	8.62	31.496	08:23	19.33
2015-Jul-28	2457231.5	2166	185.88	5.44	9.04	31.499	08:27	19.10
2015-Jul-29	2457232.5	2166	172.65	5.52	9.45	31.502	08:31	18.87
2015-Jul-30	2457233.5	2166	159.42	5.59	9.85	31.506	08:35	18.63
2015-Jul-31	2457234.5	2166	146.20	5.67	10.26	31.510	08:39	18.39

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER	R.A.	DEC
			Lo	Bo	Po	arcmin	hh:mm	deg
2015-Aug-01	2457235.5	2166	132.97	5.74	10.66	31.513	08:43	18.14
2015-Aug-02	2457236.5	2166	119.74	5.82	11.06	31.517	08:47	17.89
2015-Aug-03	2457237.5	2166	106.52	5.89	11.45	31.521	08:51	17.64
2015-Aug-04	2457238.5	2166	93.29	5.96	11.84	31.525	08:55	17.38
2015-Aug-05	2457239.5	2166	80.07	6.03	12.22	31.530	08:59	17.11
2015-Aug-06	2457240.5	2166	66.85	6.09	12.61	31.534	09:02	16.84
2015-Aug-07	2457241.5	2166	53.62	6.16	12.98	31.539	09:06	16.56
2015-Aug-08	2457242.5	2166	40.40	6.22	13.36	31.543	09:10	16.29
2015-Aug-09	2457243.5	2166	27.18	6.28	13.73	31.548	09:14	16.00
2015-Aug-10	2457244.5	2166	13.96	6.34	14.09	31.553	09:18	15.71
2015-Aug-11	2457245.5	2166	0.74	6.40	14.45	31.558	09:21	15.42
2015-Aug-12	2457246.5	2167	347.51	6.46	14.81	31.563	09:25	15.12
2015-Aug-13	2457247.5	2167	334.29	6.51	15.16	31.568	09:29	14.82
2015-Aug-14	2457248.5	2167	321.07	6.56	15.51	31.574	09:33	14.52
2015-Aug-15	2457249.5	2167	307.86	6.62	15.86	31.579	09:37	14.21
2015-Aug-16	2457250.5	2167	294.64	6.66	16.20	31.585	09:40	13.90
2015-Aug-17	2457251.5	2167	281.42	6.71	16.53	31.591	09:44	13.58
2015-Aug-18	2457252.5	2167	268.20	6.76	16.86	31.597	09:48	13.27
2015-Aug-19	2457253.5	2167	254.99	6.80	17.19	31.603	09:51	12.94
2015-Aug-20	2457254.5	2167	241.77	6.84	17.51	31.609	09:55	12.62
2015-Aug-21	2457255.5	2167	228.55	6.88	17.82	31.615	09:59	12.29
2015-Aug-22	2457256.5	2167	215.34	6.92	18.13	31.621	10:03	11.95
2015-Aug-23	2457257.5	2167	202.12	6.95	18.44	31.628	10:06	11.62
2015-Aug-24	2457258.5	2167	188.91	6.99	18.74	31.634	10:10	11.28
2015-Aug-25	2457259.5	2167	175.69	7.02	19.03	31.641	10:14	10.94
2015-Aug-26	2457260.5	2167	162.48	7.05	19.32	31.648	10:17	10.59
2015-Aug-27	2457261.5	2167	149.27	7.08	19.61	31.655	10:21	10.25
2015-Aug-28	2457262.5	2167	136.06	7.10	19.89	31.662	10:25	9.90
2015-Aug-29	2457263.5	2167	122.85	7.13	20.16	31.669	10:28	9.54
2015-Aug-30	2457264.5	2167	109.63	7.15	20.43	31.676	10:32	9.19
2015-Aug-31	2457265.5	2167	96.42	7.17	20.70	31.683	10:36	8.83

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER	R.A.	DEC
			Lo	Bo	Po	arcmin	hh:mm	deg
2015-Sep-01	2457266.5	2167	83.21	7.18	20.95	31.691	10:39	8.47

2015-Sep-02	2457267.5	2167	70.01	7.20	21.21	31.698	10:43	8.11
2015-Sep-03	2457268.5	2167	56.80	7.21	21.45	31.705	10:46	7.74
2015-Sep-04	2457269.5	2167	43.59	7.22	21.70	31.713	10:50	7.38
2015-Sep-05	2457270.5	2167	30.38	7.23	21.93	31.721	10:54	7.01
2015-Sep-06	2457271.5	2167	17.17	7.24	22.16	31.729	10:57	6.64
2015-Sep-07	2457272.5	2167	3.97	7.25	22.39	31.736	11:01	6.26
2015-Sep-08	2457273.5	2168	350.76	7.25	22.61	31.744	11:04	5.89
2015-Sep-09	2457274.5	2168	337.55	7.25	22.82	31.752	11:08	5.51
2015-Sep-10	2457275.5	2168	324.35	7.25	23.03	31.761	11:12	5.14
2015-Sep-11	2457276.5	2168	311.14	7.25	23.23	31.769	11:15	4.76
2015-Sep-12	2457277.5	2168	297.94	7.24	23.42	31.777	11:19	4.38
2015-Sep-13	2457278.5	2168	284.74	7.23	23.61	31.785	11:22	4.00
2015-Sep-14	2457279.5	2168	271.53	7.22	23.79	31.794	11:26	3.61
2015-Sep-15	2457280.5	2168	258.33	7.21	23.97	31.802	11:30	3.23
2015-Sep-16	2457281.5	2168	245.13	7.20	24.14	31.810	11:33	2.85
2015-Sep-17	2457282.5	2168	231.93	7.18	24.31	31.819	11:37	2.46
2015-Sep-18	2457283.5	2168	218.72	7.16	24.46	31.828	11:40	2.07
2015-Sep-19	2457284.5	2168	205.52	7.14	24.62	31.836	11:44	1.69
2015-Sep-20	2457285.5	2168	192.32	7.12	24.76	31.845	11:48	1.30
2015-Sep-21	2457286.5	2168	179.12	7.10	24.90	31.854	11:51	0.91
2015-Sep-22	2457287.5	2168	165.92	7.07	25.03	31.863	11:55	0.52
2015-Sep-23	2457288.5	2168	152.72	7.04	25.16	31.871	11:58	0.13
2015-Sep-24	2457289.5	2168	139.52	7.01	25.28	31.880	12:02	-0.26
2015-Sep-25	2457290.5	2168	126.33	6.98	25.39	31.889	12:05	-0.65
2015-Sep-26	2457291.5	2168	113.13	6.95	25.50	31.898	12:09	-1.04
2015-Sep-27	2457292.5	2168	99.93	6.91	25.60	31.907	12:13	-1.42
2015-Sep-28	2457293.5	2168	86.73	6.87	25.69	31.916	12:16	-1.81
2015-Sep-29	2457294.5	2168	73.54	6.83	25.78	31.925	12:20	-2.20
2015-Sep-30	2457295.5	2168	60.34	6.79	25.86	31.934	12:23	-2.59

CALENDAR	JULIAN	ROTATION	HELIOGRAPHIC			DIAMETER	R.A.	DEC
DATE	DATE	NUMBER	Lo	Bo	Po	arcmin	hh:mm	deg
2015-Oct-01	2457296.5	2168	47.14	6.74	25.93	31.944	12:27	-2.98
2015-Oct-02	2457297.5	2168	33.95	6.70	26.00	31.953	12:31	-3.37
2015-Oct-03	2457298.5	2168	20.75	6.65	26.05	31.962	12:34	-3.76
2015-Oct-04	2457299.5	2168	7.56	6.60	26.11	31.971	12:38	-4.14
2015-Oct-05	2457300.5	2169	354.36	6.54	26.15	31.980	12:42	-4.53
2015-Oct-06	2457301.5	2169	341.17	6.49	26.19	31.989	12:45	-4.91
2015-Oct-07	2457302.5	2169	327.97	6.43	26.22	31.999	12:49	-5.30
2015-Oct-08	2457303.5	2169	314.78	6.37	26.24	32.008	12:53	-5.68
2015-Oct-09	2457304.5	2169	301.59	6.31	26.26	32.017	12:56	-6.06
2015-Oct-10	2457305.5	2169	288.39	6.25	26.27	32.026	13:00	-6.44
2015-Oct-11	2457306.5	2169	275.20	6.19	26.27	32.035	13:04	-6.82
2015-Oct-12	2457307.5	2169	262.01	6.12	26.26	32.045	13:07	-7.20
2015-Oct-13	2457308.5	2169	248.82	6.05	26.25	32.054	13:11	-7.57
2015-Oct-14	2457309.5	2169	235.63	5.98	26.23	32.063	13:15	-7.94
2015-Oct-15	2457310.5	2169	222.44	5.91	26.20	32.072	13:18	-8.32
2015-Oct-16	2457311.5	2169	209.24	5.84	26.16	32.081	13:22	-8.69
2015-Oct-17	2457312.5	2169	196.05	5.76	26.12	32.090	13:26	-9.05
2015-Oct-18	2457313.5	2169	182.86	5.68	26.07	32.099	13:30	-9.42
2015-Oct-19	2457314.5	2169	169.67	5.60	26.01	32.108	13:33	-9.78
2015-Oct-20	2457315.5	2169	156.48	5.52	25.95	32.117	13:37	-10.14
2015-Oct-21	2457316.5	2169	143.29	5.44	25.87	32.126	13:41	-10.50
2015-Oct-22	2457317.5	2169	130.10	5.36	25.79	32.135	13:45	-10.86
2015-Oct-23	2457318.5	2169	116.92	5.27	25.70	32.144	13:48	-11.21
2015-Oct-24	2457319.5	2169	103.73	5.18	25.60	32.153	13:52	-11.56
2015-Oct-25	2457320.5	2169	90.54	5.10	25.50	32.162	13:56	-11.91
2015-Oct-26	2457321.5	2169	77.35	5.00	25.39	32.171	14:00	-12.26
2015-Oct-27	2457322.5	2169	64.16	4.91	25.27	32.180	14:04	-12.60
2015-Oct-28	2457323.5	2169	50.98	4.82	25.14	32.188	14:07	-12.94
2015-Oct-29	2457324.5	2169	37.79	4.72	25.00	32.197	14:11	-13.27
2015-Oct-30	2457325.5	2169	24.60	4.63	24.86	32.206	14:15	-13.60
2015-Oct-31	2457326.5	2169	11.41	4.53	24.71	32.214	14:19	-13.93

CALENDAR	JULIAN	ROTATION	HELIOGRAPHIC			DIAMETER	R.A.	DEC
DATE	DATE	NUMBER	Lo	Bo	Po	arcmin	hh:mm	deg
2015-Nov-01	2457327.5	2170	358.23	4.43	24.55	32.223	14:23	-14.25
2015-Nov-02	2457328.5	2170	345.04	4.33	24.38	32.231	14:27	-14.57
2015-Nov-03	2457329.5	2170	331.85	4.23	24.21	32.240	14:31	-14.89
2015-Nov-04	2457330.5	2170	318.67	4.12	24.02	32.248	14:35	-15.20

2015-Nov-05	2457331.5	2170	305.48	4.02	23.83	32.256	14:39	-15.51
2015-Nov-06	2457332.5	2170	292.30	3.91	23.63	32.264	14:43	-15.82
2015-Nov-07	2457333.5	2170	279.11	3.81	23.43	32.272	14:47	-16.12
2015-Nov-08	2457334.5	2170	265.93	3.70	23.21	32.280	14:51	-16.41
2015-Nov-09	2457335.5	2170	252.74	3.59	22.99	32.288	14:55	-16.70
2015-Nov-10	2457336.5	2170	239.56	3.48	22.76	32.296	14:59	-16.99
2015-Nov-11	2457337.5	2170	226.38	3.36	22.52	32.304	15:03	-17.27
2015-Nov-12	2457338.5	2170	213.19	3.25	22.28	32.311	15:07	-17.54
2015-Nov-13	2457339.5	2170	200.01	3.14	22.03	32.319	15:11	-17.82
2015-Nov-14	2457340.5	2170	186.82	3.02	21.77	32.326	15:15	-18.08
2015-Nov-15	2457341.5	2170	173.64	2.91	21.50	32.334	15:19	-18.34
2015-Nov-16	2457342.5	2170	160.46	2.79	21.22	32.341	15:23	-18.60
2015-Nov-17	2457343.5	2170	147.28	2.67	20.94	32.348	15:27	-18.85
2015-Nov-18	2457344.5	2170	134.09	2.55	20.65	32.355	15:31	-19.09
2015-Nov-19	2457345.5	2170	120.91	2.43	20.35	32.362	15:36	-19.33
2015-Nov-20	2457346.5	2170	107.73	2.31	20.05	32.369	15:40	-19.56
2015-Nov-21	2457347.5	2170	94.55	2.19	19.73	32.375	15:44	-19.79
2015-Nov-22	2457348.5	2170	81.37	2.07	19.41	32.382	15:48	-20.01
2015-Nov-23	2457349.5	2170	68.19	1.95	19.09	32.388	15:52	-20.23
2015-Nov-24	2457350.5	2170	55.00	1.82	18.75	32.395	15:57	-20.43
2015-Nov-25	2457351.5	2170	41.82	1.70	18.41	32.401	16:01	-20.64
2015-Nov-26	2457352.5	2170	28.64	1.58	18.07	32.407	16:05	-20.83
2015-Nov-27	2457353.5	2170	15.46	1.45	17.71	32.413	16:09	-21.02
2015-Nov-28	2457354.5	2170	2.28	1.33	17.35	32.419	16:14	-21.21
2015-Nov-29	2457355.5	2171	349.10	1.20	16.99	32.425	16:18	-21.38
2015-Nov-30	2457356.5	2171	335.92	1.07	16.61	32.430	16:22	-21.55

CALENDAR DATE	JULIAN DATE	ROTATION NUMBER	HELIOGRAPHIC			DIAMETER arcmin	R.A. hh:mm	DEC deg
			Lo	Bo	Po			
2015-Dec-01	2457357.5	2171	322.75	0.95	16.24	32.436	16:26	-21.71
2015-Dec-02	2457358.5	2171	309.57	0.82	15.85	32.441	16:31	-21.87
2015-Dec-03	2457359.5	2171	296.39	0.69	15.46	32.446	16:35	-22.02
2015-Dec-04	2457360.5	2171	283.21	0.57	15.06	32.451	16:39	-22.16
2015-Dec-05	2457361.5	2171	270.03	0.44	14.66	32.456	16:44	-22.29
2015-Dec-06	2457362.5	2171	256.85	0.31	14.25	32.461	16:48	-22.42
2015-Dec-07	2457363.5	2171	243.68	0.18	13.84	32.465	16:52	-22.54
2015-Dec-08	2457364.5	2171	230.50	0.05	13.42	32.470	16:57	-22.66
2015-Dec-09	2457365.5	2171	217.32	-0.07	13.00	32.474	17:01	-22.76
2015-Dec-10	2457366.5	2171	204.15	-0.20	12.57	32.478	17:06	-22.86
2015-Dec-11	2457367.5	2171	190.97	-0.33	12.14	32.482	17:10	-22.95
2015-Dec-12	2457368.5	2171	177.79	-0.46	11.70	32.486	17:14	-23.03
2015-Dec-13	2457369.5	2171	164.62	-0.59	11.26	32.490	17:19	-23.11
2015-Dec-14	2457370.5	2171	151.44	-0.71	10.82	32.494	17:23	-23.17
2015-Dec-15	2457371.5	2171	138.27	-0.84	10.37	32.497	17:28	-23.23
2015-Dec-16	2457372.5	2171	125.09	-0.97	9.92	32.500	17:32	-23.29
2015-Dec-17	2457373.5	2171	111.92	-1.10	9.46	32.503	17:36	-23.33
2015-Dec-18	2457374.5	2171	98.74	-1.22	9.00	32.506	17:41	-23.37
2015-Dec-19	2457375.5	2171	85.57	-1.35	8.54	32.509	17:45	-23.40
2015-Dec-20	2457376.5	2171	72.39	-1.48	8.07	32.512	17:50	-23.42
2015-Dec-21	2457377.5	2171	59.22	-1.60	7.60	32.514	17:54	-23.43
2015-Dec-22	2457378.5	2171	46.05	-1.73	7.13	32.516	17:59	-23.44
2015-Dec-23	2457379.5	2171	32.87	-1.85	6.66	32.519	18:03	-23.43
2015-Dec-24	2457380.5	2171	19.70	-1.98	6.19	32.520	18:08	-23.42
2015-Dec-25	2457381.5	2171	6.53	-2.10	5.71	32.522	18:12	-23.41
2015-Dec-26	2457382.5	2172	353.36	-2.22	5.23	32.524	18:16	-23.38
2015-Dec-27	2457383.5	2172	340.18	-2.34	4.75	32.525	18:21	-23.35
2015-Dec-28	2457384.5	2172	327.01	-2.46	4.27	32.527	18:25	-23.31
2015-Dec-29	2457385.5	2172	313.84	-2.59	3.79	32.528	18:30	-23.26
2015-Dec-30	2457386.5	2172	300.67	-2.71	3.30	32.529	18:34	-23.20
2015-Dec-31	2457387.5	2172	287.50	-2.82	2.82	32.530	18:39	-23.13

GLOSSARY OF TERMS IN HEADING

- Calendar Date - Terrestrial Dates starting with January 1st and ending December 31st of each year.
- Julian Date - Julian day number starting with January 1st and ending December 31st of each year.
- Rotation Number - Carrington Rotation Number for the date of observation.
- Lo - Heliographic longitude of center of the solar disk.

Bo	- Heliographic latitude of center of the solar disk.
Po	- Position angle of the northern extremity of the axis of rotation.
Diameter	- Apparent Diameter of the solar disk in minutes of arc.
R.A.	- The Geocentric Right Ascension of the center of the solar disk in hours and minutes (hh:mm).
Dec	- The Declination of the center of the solar disk in degrees.