

KG
11365
423

*Refraction Constants
B + T + γ .
From Nov. 10, 1870 to Feb 2 1886*

Charles W. Sever, University Bookstore, Cambridge.

KG 11365.423

156/1136

1871phac-proj. 424R

1871	Date	Limits of observations (Approx.)				Hour of R.A.	Bar = F.B.	Alt. Th. = F.T.	Eat. Th. = F.Y.	Reflex of R.A.
	Apr. 26	12	13	12	35	12.0	30.30	65.0	41.6	
	Apr. 29	12	6	12	13	12.0	29.72	67.0	46.2	
	Apr. 30	12	13	12	35	12.0	29.72	66.5	44.1	
	May 1	12	13	13	18	12.0	29.93	68.0	48.3	
	May 2	12	28	-13	18	12.0	29.75	60.8	49.0	
	May 9	12	55	-13	43	12.0	29.99	73.5	47.3	
	May 10	12	35	-13	18	12.0	29.97	66.0	42.0	
	May 11	12	55	-13	18	12.5	29.95	63.0	50.0	
	May 14	13	3	-13	43	12.0	29.87	66.1	50.2	13.0
May 16, 25, 29. See end.	June 1	13	28	-	-	13.5	30.13	67.5	56.3	
	June 6	13	3	-13	28	13.0	29.93	67.8	69.1	
	June 12	13	18	-13	42	13.0	29.54	63.5	59.7	15.0
	June 14	13	43	-14	10	13.0	29.99	65.2	58.6	16.0
	June 17	13	48	-14	10	14.0	30.17	62.6	58.8	16.0
	June 19	14	5	-14	43	14.0	29.88	62.1	59.0	15.0
	June 21	13	42	-14	35	14.0	30.10	64.4	54.1	16.5
	June 25	13	48	-14	27	14.0	30.10	65.9	62.5	16.0
	June 26	13	48	-14	59	14.0	29.97	72.3	73.7	16.0
	June 27	13	55	-14	55	15.0	29.85	77.5	65.1	
	June 29	13	48	-16	59	14.0	29.93	71.0	67.4	17.0
	June 30	14	35	-16	59	15.0	30.16	67.8	62.8	17.0
	July 1	14	26	-14	59	14.0	30.25	66.2	57.8	17.0
	July 3	14	26	-14	57	14.0	30.04	73.1	71.1	17.5
	July 7	14	35	-15	29	15.0	29.82	74.3	74.8	16.0
	July 8	15	10	-15	29	16.0	29.95	78.5	72.4	
	July 9	14	27	-15	10	16.0	29.74	87.5	79.6	
	July 10	14	40	-15	29	16.0	29.86	73.2	68.6	
	July 12	14	27	-15	29	15.0	29.97	78.0	79.5	17.5
	July 13	15	29	-16	7	16.5	30.07	77.0	72.2	
	July 20	15	10	-16	12	16.0	29.88	68.2	64.1	
	July 22	15	57	-16	12	16.0	30.03	62.1	62.4	17.0
	July 23	15	10	-16	12	15.0	30.14	63.4	60.7	17.0
	July 27	15	44	-16	24	16.0	30.03	73.6	72.0	17.0
	Aug. 2	15	37	-16	55	16.5	30.12	73.0	76.1	19.0
	Aug. 3	15	37	-16	27	16.5	29.97	81.0	80.0	19.0

Est. $\frac{1}{2}$
= F. Y.

	<u>B.</u>	<u>T</u>	<u>B+T</u>	<u>Y</u>	<u>B+T+Y</u>	<u>Y'</u>	<u>B+T+Y</u>
	+ 1020-	128+0892	+ 0620	+ 1512			
	0180-	135+0045	+ 0219	+ 0264			
	0180-	133+0047	+ 0402	+ 0449			
	0487-	138+0049	+ 0038	+ 0087			
	0224-	111+0113	- 0002	+ 0092			
	0574-	160+0414	+ 0124	+ 0538			
	0545-	131+0412	+ 0585	+ 0997			
	0516-	120+0396	- 0107	+ 0289			
47.8	0299-	131+0268	- 0124	+ 0144		+ 0082	+ 0350
	0775-	136+0639	- 0645	- 0006			
	0487-	137+0350	- 1717	- 136.7			
58.1	- 0083-	122-0205	- 0932	- 1137		- 0798	- 1003
58.4	- 0574-	129+0445	- 0841	- 0396		- 0823	- 0398
55.8	0833-	118+0715	- 0858	- 0143		- 0603	+ 0112
57.0	+ 0414-	116+0298	- 0873	- 0575		- 0704	- 0406
54.4	0732-	126+0606	- 0458	+ 0148		- 0483	+ 0123
60.9	0732-	131+0601	- 1169	- 0568		- 1033	- 0432
67.3	- 0545-	155+0390	- 2095	- 1705		- 1568	- 1178
	0370-	175+0195	- 1384	- 1189			
60.0	0487-	150+0337	- 1576	- 1239		- 0957	- 0620
57.0	0818-	127+0681	- 1194	- 0513		- 0704	- 0023
57.8	0948-	132+0816	- 0771	+ 0045		- 0771	+ 0045
68.9	0646-	158+0488	- 1882	- 1394		- 1700	- 1212
72.8	0326-	163+0163	- 2186	- 2023		- 2021	- 1858
	0516-	199+0337	- 1989	- 1652			
	0210-	213-0003	- 2576	- 2579			
	0284-	158+0226	- 1675	- 1449			
74.2	0545-	177+0368	- 2568	- 2200		- 2136	- 1768
	0689-	173+0516	- 1972	- 1456			
	0414-	138+0276	- 1302	- 1026			
60.4	0631-	116+0515	- 1160	- 0645		- 0941	- 0476
59.7	0791-	122+0669	- 1017	- 0348		- 0932	- 0263
70.0	0631-	160+0471	- 1956	- 1485		- 1791	- 1320
72.0	0761-	158+0603	- 2292	- 1689		- 1956	- 1353
77.4	0545-	185+0360	- 2609	- 2240		- 2398	- 2038

1871	Date	Limits of Observa- tion. (approx.)		Height of K. A.	Bar. = F.B.	Alt. Th. = F.T.	Eat. Th. = F.j.	Height of K. A.	Eat. Th. = F.j.		
	Aug. 5	16	30	-17	11	16.5	29.73	77.0	76.0	19.0	72.1
	Aug. 9	16	59	-17	44	18.0	29.51	72.2	68.6	19.0	64.5
	Aug. 6	16	24		17 37	17.0	29.93	73.0	72.0		
	Aug. 10	16	16		17 27	18.0	30.00	69.8	70.4		
	Aug. 11	16	39		17 25	16.0	29.96	72.0	69.2	19.0	65.6
	Aug. 13	16	0		17 10	16.0	30.13	68.8	68.3	18.0	65.6
	Aug. 17	17	10		20 37	17.0	30.68	70.2	70.1	20.0	64.7
	Aug. 18	17	19		19 44	17.0	29.88	71.9	67.8	20.0	62.2
	Aug. 19	17	50		19 50	18.0	30.06	67.5	61.0	20.0	57.4
	Aug. 22	17	27		19 50	17.0	30.44	63.0	62.0	20.0	58.5
	Aug. 28	17	54		20 37	18.0	30.12	68.0	65.9	21.0	62.5
	Aug. 29	18	0			18.0	29.95	72.0	72.0		
	Aug. 31	17	28		18 20	18.0	30.08	68.0	66.2	20.0	61.9
	Sept. 1	17	54		18 20	18.0	30.25	66.0	58.0	20.0	56.9
	Sept. 2	18	14		18 40	18.0	30.17	68.7	66.4	21.0	62.6
	Sept. 3	17	41		18 40	18.0	30.25	71.3	64.9	20.0	63.9
	Sept. 6	18	3		18 54	18.0	29.93	74.4	70.0	20.0	68.0
	Sept. 7	17	41		18 54	18.0	30.04	64.3	72.0	20.0	58.4
	Sept. 8	18	28		18 40	18.0	30.44	64.8	53.6	20.0	51.4
	Sept. 10	18	18		18 47	20.0	30.18	65.0	60.7		
	Sept. 18	17	8		18 54	17.0	30.48	61.0	55.2	20.0	49.8
	Sept. 21	18	15		19 10	18.0	30.32	55.2	49.8	21.0	43.5
	Sept. 23	18	39		19 28	18.0	29.76	62.0	58.4	20.0	58.4
	Sept. 24	18	32		19 49	18.0	29.77	67.1	68.6	20.0	67.3
	Sept. 25	18	59		20 05	19.0	29.96	64.0	58.5	21.0	55.5
	Sept. 27	19	49		21 25	20.0	29.75	61.0	53.1	22.0	50.3
	Sept. 28	19	26		20 52	19.0	29.92	59.8	55.7	21.0	49.8
	Sept. 30	20	37		21 38	20.0	30.25	58.5	45.3	22.0	43.3
	Oct. 3	21	38		23 53	21.0	29.75	60.0	57.6	24.0	57.6
	Oct. 4	18	59		22 56	19.0	29.90	62.0	58.2	23.0	54.5
	Oct. 5	18	59		21 15	19.0	29.94	64.2	63.0	22.0	60.0
	Oct. 8	18	59		22 06	19.0	30.37	58.5	52.2	22.0	49.5
	Oct. 8	22	15		22 58	20.0	30.20	67.3	63.5		
	Oct. 9	20	05		23 19	20.0	30.20	67.3	63.5	23.0	55.5
	Oct. 15	20	37		22 56	20.0	30.03	64.0	52.0	22.0	48.0

B	T	B+T	γ	B+T+ γ	γ'	B+T+ γ'
+0196	-173	+0023	-2284	-2261	-1964	-1941
-0127	-155	-0282	+1675	-1957	-1335	-1617
+0487	-158	+0329	-1956	-1627		
+0588	-144	+0444	-1824	-1380		
+0530	-154	+0376	-1725	-1349	-1426	-1050
+0775	-141	+0634	-1651	-1017	-1426	-0792
+0703	-147	+0556	-1799	-1243	-1352	-0796
+0414	-154	+0260	-1609	-1349	-1142	-0883
+0674	-136	+0538	-1042	-0504	-0738	-0200
+1220	-120	+1100	-1126	-0026	-0832	-0268
+0761	-138	+0623	-1451	-0828	-1169	-0546
+0516	-154	+0361	-1956	-1595		
+0702	-138	+0565	-1476	-0911	-1117	-0552
+0948	-131	+0817	-0789	+0028	-0695	+0122
+0833	-141	+0692	-1493	-0801	-1177	-0485
+0948	-151	+0797	-1368	-0571	-1285	-0488
+0487	-164	+0323	-1791	-1468	-1626	-1303
+0646	-125	+0521	-1906	-1435	-0823	-0302
+1220	-127	+1093	-0415	+0678	-0227	+0866
+0847	-128	+0919	-1017	-0298		
+1278	-112	+1166	-0551	+0615	-0089	+1077
+1049	-090	+0959	-0089	+0870	+0455	+1414
+0238	-116	+0122	-0823	-0701	-0823	-0701
+0253	-135	+0118	-1675	-1557	-1568	-1450
+0530	-124	+0406	-0832	-0426	-0577	-0171
+0224	-112	+0112	-0373	-0267	-0133	-0021
+0472	-107	+0365	-0594	-0229	-0089	+0276
+0948	-103	+0845	+0298	+1143	+0472	+1317
+0224	-108	+0116	-0755	-0629	-0755	-0639
+0443	-116	+0327	-0806	-0479	-0491	-0164
+0502	-125	+0377	-1209	-0832	-0957	-0580
+1121	-103	+1018	-0296	+0722	-0063	+0955
+0876	-136	+0740	-1251	-0511	-0577	+0163
+0631	-124	+0507	-0279	+0228	+0064	+0571

1871	Date	Limits	Observations	Height	Bar.	Alt. Th.	Ext. Th.	Height	Ext. Th.
			(Approx.)	R.A.	F.B.	= F.T.	= P.Y.	R.A.	= F.Y.
	Oct. 16	19 14	-23 48	19.0	30.08	61.4	50.1	0.0	44.7
Oct. 22. in. and	Oct. 21	19 19	-22 47	19.0	30.20	63.9	53.6	23.0	44.8
	Oct. 23	19 14	-22 18	19.0	29.96	68.0	68.0	22.0	66.0
Oct. 20. in. and	Oct. 29	19 45	-23 31	20.0	30.09	61.9	46.0	0.0	39.9
	Oct. 31	21 42	22 37	22.0	30.13	63.0	53.6	23.0	51.8
	Nov. 2	19 19	0 41	19.0	29.93	64.0	48.3	22.0	38.3
	Nov. 5	20 17	22 10	20.0	29.97	63.0	31.7	22.0	27.5
	Nov. 6	22 4	1 2	22.0	29.97	65.0	30.0	1.0	30.0
	Nov. 7	20 31	1 29	22.0	29.87	64.0	35.6	2.0	31.6
	Nov. 9	20 32	1 38	21.0	29.92	68.2	33.8	2.0	31.6
	Nov. 12	22 1	22 58	22.0	30.34	71.0	29.7	23.0	27.7
	Nov. 13	22 1	23 23	22.0	30.34	68.9	33.9	0.0	31.8
	Nov. 19	21 25	0 41	22.0	30.43	67.0	36.8	1.0	33.7
	Nov. 22	22 10	0 6	22.0	29.66	65.2	37.1	1.0	35.8
	Nov. 23	22 15	23 31	22.0	30.30	64.3	26.7	1.0	25.8
	Nov. 25	22 26	1 38	23.0	30.24	64.0	34.9	2.0	33.8
	Nov. 28	22 15	23 48	22.0	29.95	64.8	15.0	0.0	14.2
	Nov. 29	0 2	1 11	0.0	29.78	63.7	16.6	2.0	15.8
	Dec. 1	1 5	3 0	1.0	29.98	63.7	19.0	3.0	16.0
	Dec. 2	1 5	2 0	1.0	30.27	66.8	18.6	2.0	16.7
	Dec. 5	21 47	1 3	22.0	29.71	67.0	19.2	2.0	16.3
	Dec. 6	21 42	2 0	22.0	29.95	66.2	18.7	2.0	16.0
	Dec. 9	23 31	3 0	0.0	30.22	70.0	20.0	3.0	16.9
	Dec. 11	0 33	2 28	0.0	29.82	55.8	30.2	3.0	30.2
	Dec. 12	23 14	1 30	23.0	30.16	70.0	26.4	2.0	23.5
	Dec. 17	22 44	2 45	23.0	30.22	65.9	36.1	3.0	32.1
	Dec. 18	2 42	3 20	2.0	29.89	64.9	34.0	3.0	33.0
	Dec. 20	22 29	1 5	23.0	29.60	62.0	14.0	4.0	34.0
	Dec. 24	0 6	1 2	0.0	30.26	64.3	36.8	3.0	34.0
	Dec. 27	1 2	3 40	1.0	30.07	63.0	25.2	4.0	21.6
	Dec. 28	23 31	2 33	0.0	30.50	69.9	16.2	3.0	15.2
	Dec. 29	2 21	3 4	2.0	30.13	66.9	22.8	3.0	22.4

B	T	B+T	γ	B+T+ γ	γ_i	B+T+ γ_i
+0703-	114	+0589	-0116	+0473 ¹⁰	+0249	+0938 ⁰
+0876-	124	+0752	-0415	+0337 ¹	+0341	+1093 ¹²
+0520-	138	+0392	-1626	-1234 ¹¹	-1460	-1068 ¹²
+0718-	116	+0602	+0237	+0839 ²⁰	+0768	+1370 ⁰
+0775-	120	+0655	-0415	+0240 ¹²	-0261	+0394 ¹³
+0487-	124	+0263	+0472	+0835 ¹⁹	+0908	+1271 ¹²
+0545-	120	+0425	+1493	+1918 ¹⁰	+1868	+2292 ¹²
+0545-	128	+0417	+1645	+2062 ²²	+1645	+2062 ¹
+0399-	124	+0275	+1148	+1423 ¹²	+1502	+1777 ¹²
+0472-	139	+0333	+1307	+1640 ¹¹	+1502	+1835 ¹²
+1078-	150	+0928	+1672	+2600 ¹²	+1850	+2778 ¹³
+1078-	142	+0936	+1297	+2333 ¹²	+1484	+2420 ¹²
+1206-	135	+1071	+1040	+2111 ¹²	+1316	+2387 ¹
+0092-	129	-0037	+1014	+0977 ¹²	+1130	+1093 ¹
+1020-	125	+0895	+1939	+2834 ¹²	+2021	+2916 ¹
+0934-	124	+0810	+1208	+2018 ¹²	+1307	+2117 ¹²
+0516-	127	+0393	+3007	+3396 ¹²	+3081	+3471 ¹⁰
+0268-	123	+0145	+2859	+3004 ¹	+2934	+3079 ¹
+0559-	123	+0436	+2639	+3075 ¹	+2914	+3350 ³
+0977-	134	+0843	+2677	+3520 ¹	+2849	+3692 ¹²
+0165-	135	+0030	+2621	+2651 ¹²	+2886	+2916 ¹²
+0516-	132	+0384	+2668	+3052 ¹²	+2914	+3298 ¹²
+0905-	146	+0759	+2548	+3307 ⁰	+2831	+3590 ¹
+0326-	090	+0236	+1627	+1863 ⁰	+1627	+1863 ¹
+0818-	146	+0672	+1967	+2639 ¹²	+2230	+2902 ¹²
+0905-	131	+0774	+1102	+1876 ¹²	+1457	+2231 ¹²
+0429-	128	+0301	+1288	+1589 ¹²	+1377	+1678 ¹²
+0005-	116	-0111	+3099	+2988 ¹²	+4032	+3941 ¹⁴
+0962-	125	+0537	+1040	+1877 ⁰	+1288	+2125 ¹
+0689-	120	+0569	+2075	+2644 ¹	+2402	+2971 ¹²
+1306-	146	+1160	+2895	+4055 ¹²	+2980	+4149 ¹²
+0775-	146	+0629	+2294	+2923 ¹²	+2330	+2959 ¹²

1872,	Date	Limits of Observations (Approx.)				Height of R.A.	Bar = F.B.	Alt. Th. = F.T.	Eat. Th. = F.J.	Height of R.A.	Eat. Th. = F.J.
Jan.	1	1	25	-3	15	2.0	30.50	72.0	34.3	3.5	32.8
	2	0	26	1	3	0.0	30.57	62.9	21.2	1.0	20.0
	5	2	21	4	12	2.0	29.80	71.2	35.0	4.0	32.6
	6	2	24	3	49	2.0	29.72	70.1	26.0	4.0	24.8
	8	1	25	4	21	2.0	30.30	65.9	21.6	4.0	19.6
	9	1	25	2	5	2.0	30.05	66.1	29.8	4.0	29.1
	10	2	45	5	4	3.0	30.12	63.0	33.0	5.0	31.4
	12	3	54	5	7	4.0	29.85	71.0	36.4	5.0	35.8
	13	2	57	3	59	3.0	29.76	69.0	38.0	4.0	36.5
	14	2	10	3	0	2.0	30.07	64.8	13.3	3.0	10.5
	15	3	15	4	28	3.0	30.10	70.0	16.8	5.0	15.7
	21	1	56	2	28	2.0	29.83	71.0	31.6	5.0	30.4
	23	2	56	3	23	3.0	29.67	67.7	27.5	5.0	26.5
	24	2	33	3	31	3.0	29.73	58.0	19.8	5.0	18.6
	30	1	48	6	7	(2.0	30.20	66.0	4.0)	6.0	8.2
	31	2	0	5	50	2.0	30.10	63.0	17.2	6.0	9.7
Feb.	1	1	48	3	51	2.0	30.33	68.2	15.7	4.0	11.4
	2	5	48	6	7	6.0	30.55	67.0	10.8	7.0	10.5
	4	2	56	5	50	3.0	29.95	68.0	25.9	6.0	21.9
	5	5	25	6	30	6.0	30.22	66.9	32.7	7.0	31.7
	7	1	56	5	35	2.0	30.58	65.2	24.1	6.0	18.0
	8	4	55	6	30	5.0	30.35	62.2	24.0	7.0	22.7
	12	2	57	6	30	3.0	30.07	72.0	39.9	7.0	37.9
	14	2	42	4	39	3.0	29.47	63.8	24.2	5.0	20.7
	15	4	30	5	51	5.0	29.56	63.2	20.8	6.0	18.0
	18	3	54	5	48	4.0	30.05	62.0	30.0	6.0	29.0
	19	7	3	7	37	7.0	30.14	69.0	29.0	8.0	22.0
	22	2	56	5	51	3.0	29.93	68.0	33.0	6.0	30.0
	24	4	22	7	37	4.0	29.68	68.2	30.0	8.0	45.0
	26	4	22	6	39	4.0	29.83	62.5	16.2	6.0	16.0
	27	5	7	6	40	5.0	29.69	62.9	20.1	7.0	18.1
	28	4	22	6	39	4.0	29.74	62.0	26.5	7.0	21.1
March	1	6	0	7	30	6.0	30.07	65.0	20.0	9.0	17.1
	3	5	7	7	40	5.0	29.89	69.0	31.0	8.0	26.0

B.	T.	B+T	γ	B+T+ γ	γ .	B+T+ γ .
+1306-	154+	1152+	1261+	2413	2	+1396+25483.5
+1406-	120+	1286+	2438	43724	0	+2548+28341
+0297-	151+	0146+	1199+	1345	2	+1414+15604
+0180-	146+	0034+	2003	2037	2	+2112+21460
+1020-	131+	0889+	2402+	3291	0	+2585+34740
+0660-	131+	0529+	1663+	2192	2	+1725+22540
+0761-	120+	0641+	1377+	2018	3	+1519+21605
+0370-	150+	0220+	1075+	1295	4	+1130+13505
+0238-	142+	0096+	0935+	1031	2	+1040+11360
+0689-	127+	0562+	3164+	3726	2	+3423+39850
+0732-	146+	0586+	2840+	3426	3	+2943+35295
+0341-	150+	0191+	1502+	1693	0	+1609+18005
+0107-	137-	0030+	1868+	1838	3	+1958+19285
+0196-	101+	0095+	2567+	2662	3	+2677+27725
+0876-	131+	0745+	4032+	4777	2	+3639+43846
+0732-	120+	0612+	2804+	3416	2	+3497+41090
+1063-	139+	0924+	2943+	3867	2	+3340+42640
+1377-	135+	1242	3395+	4637	6	+3423+46657
+0516-	138+	0378+	2012+	2390	3	+2375+27530
+0905-	135+	0770+	1405+	2175	6	+1493+22637
+1420-	129+	1291+	2175+	3466	2	+2731+40220
+1092-	117+	0975+	2185+	3162	5	+2303+32787
+0689-	154+	0535+	0768+	1303	3	+0944+14797
-0186-	123-	0309	2166	1857	2	+2484+21755
-0054-	121-	0175	2475+	2300	5	+2731+25560
+0660-	116+	0544+	1645+	2189	4	+1734+22780
+0790-	142+	0648+	1734+	2382	7	+1913+25610
+0487-	138+	0349+	1377+	1726	2	+1645+19940
+0123-	139-	0016-	0107-	0123	4	+0324+03088
+0341-	118+	0223+	2895+	3118	4	+2914+31376
+0137-	120+	0014+	2539+	2556	5	+2722+27097
+0210-	116+	0094+	1958+	2052	4	+2447+25417
+0689-	128+	0561+	2548+	3109	1	+2813+33740
+0429-	142+	0287+	1555+	1842	5	+2008+22908

1872	Date	Limits of observations (approx.)				Hour of R.A.	Bar = F.B.	Alt. Th. = I.T.	Ext. Th. = F.Y.	Hour of R.A.	Ext. Th. = F.Y.
	March 11	5	5	-7	37	5.0	30.08	64.1	33.0	8.0	32.7
	14	6	0	8	10	6.0	29.93	72.1	39.5	8.0	35.2
	18	6	39	8	28	6.0	29.90	66.8	25.0	8.0	21.6
	19	5	51	8	20	6.0	29.75	59.0	31.3	8.0	27.3
	21	6	56	8	55	7.0	30.00	66.0	18.5	9.0	16.6
	24	7	9	8	37	7.0	30.25	57.0	28.0	9.0	27.5
	27	7	18	8	50	7.0	30.08	69.0	34.1	9.0	31.8
	28	6	39	9	26	7.0	30.07	63.2	36.0	10.0	32.6
	April 1	8	50	9	45	9.0	29.67	64.2	29.8	9.0	(29.4)
	2	8	20	9	45	8.0	30.06	64.9	36.0	9.0	34.5
	3	6	56	8	55	7.0	29.93	71.0	40.8	9.0	36.4
	4	6	56	7	37	7.0	30.13	68.0	42.0	9.0	38.6
	6	8	50	9	45	9.0	30.16	73.2	41.4	10.0	40.8
	10	7	33	8	40	7.0	29.83	65.8	48.8	10.0	43.3
	11	8	10	8	37	8.0	30.22	71.2	44.7	10.0	40.4
	17	8	55	11	10	9.0	30.07	66.3	46.2	12.0	39.6
	18	9	20	11	10	9.0	29.75	67.0	44.5	11.0	40.4
	19	10	26	11	10	10.0	29.73	65.3	42.3	11.0	40.6
	20	11	39	12	6	11.0	30.04	71.8	58.7	12.0	56.3
	21	8	50	11	30	9.0	29.98	64.8	56.0	12.0	51.1
	22	10	10	11	11	10.0	29.92	63.4	44.5	12.0	38.4
	23	9	8	11	15	9.0	30.03	68.0	44.5	11.0	38.1
	24	10	26	-11	34	10.0	29.97	62.4	50.1	12.0	44.8
	25	10	2	12	08	10.0	29.93	61.0	49.6	12.0	48.0
	26	10	0	12	06	10.0	29.68	71.8	65.5	12.0	59.9
	27	10	1	11	58	10.0	29.99	64.0	51.8	12.0	49.2
	29	9	8	11	34	9.0	30.24	69.0	47.6	12.0	42.0
	30	10	0	12	6	10.0	30.32	67.1	51.9	12.0	46.0
	May 20	11	30	11	40	11.0	29.61	67.0	62.9	12.0	61.0
	22	11	39	11	46	11.0	30.07	67.5	60.3	13.0	56.7
	May 16	12.0		12	29	12.0	29.74	67.5	55.6	12.6	55.2
	25	12	00	12	32	13.2	30.06	69.2	62.6	14.7	62.8
	29	12	00			13.5	30.03	76.0	73.2	14.7	70.7
	Oct. 22	19	15	24	43	23.0	29.97	67.0	58.4	23.7	58.1
	30						30.34	69.5	43.0		43.0
1872	May 21					12.0	29.91	68.3	55.2	13.0	53.0

B.	T	B+T	γ	B+T+ γ	γ	B+T+ γ
+0703-	124	+0579	+1377	+19565	+1405	+19848
+0487-	154	+0333	+0803	+11366	+1182	+15158
+0443-	134	+0209	+2094	+24036	+2402	+27118
+0224-	104	+0120	+1528	+16486	+1886	+20068
+0588-	131	+0457	+2686	+31437	+2859	+33169
+0948-	097	+0851	+1823	+26747	+1868	+27199
+0703-	142	+0561	+1279	+18407	+1484	+20459
+0689-	121	+0568	+1111	+16797	+1414	+198210
+0107-	125	-0048	+1663	+16459	+1699	+16819v
+0674-	128	+0546	+1111	+16578	+1243	+17899
+0487-	150	+0337	+0690	+10277	+1075	+14129
+0775-	128	+0637	+0585	+12227	+0882	+15199
+0818-	159	+0659	+0637	+12969	+0692	+135110
+0341-	120	+0211	-0005	+02067	+0472	+068310
+0905-	147	+0758	+0349	+11078	+0725	+148310
+0689-	132	+0557	+0219	+07769	+0794	+135112
+0224-	135	+0089	+0366	+04559	+0725	+081411
+0196-	129	+0067	+0558	+062510	+0707	+077411
+0646-	153	+0493	-0849	-035611	-0645	-015212
+0559-	127	+0432	-0619	-01879	-0202	+023012
+0472-	122	+0350	+0366	+071610	+0899	+124912
+0631-	138	+0493	+0366	+08599	+0926	+141911
+0545-	118	+0427	-0116	+031110	+0341	+076812
+0487-	112	+0375	-0072	+030310	+0064	+043912
+0123-	153	-0030	-1418	-144810	+0949	-097912
+0574-	124	+0450	-0261	+018910	-0038	+041212
+0924-	142	+0792	+0099	+08919	+0585	+137712
+1049-	135	+0914	-0270	+064410	+0237	+115112
+0019-	135	-0116	¹² -002	-1318	-1042	-115812
+0689-	137	+0552	-0982	-043011	-0679	-012712
+0210-	137	+0073	-0585	-051212	-0551	-047812
+0674-	143	+0531	-1177	-064612	-1194	-066312
+0631-	169	+0462	-2054	-159212	-1849	-138712
+0545-	135	+0410	-0823	-041312	-0798	-038812
+1078-	144	+0934	+0498	+1432	+0498	+1432
+0457-	139	+0318	-0551	-023312	-0364	-004612

1872	Hogues K.A.	Bar.	Alt. Th.	Ext. Th.	Hogues K.A.	Bar.	Alt. Th.	Ext. Th.
May 24					13 10	29.84	68.8	57.6
June 3	13 0			56.0	15 30	30.06	62.0	51.5
6	14 0			53.5	14 20	29.82	64.4	53.4
9	13 20			65.0	15 5	29.83	66.0	63.5
11	13 0			72.5	15 45	29.87	70.1	67.3
17	13 0			73.0	14 45	30.16	74.8	68.4
18	13 0			73.5	14 50	30.18	76.0	68.6
19	13 20			72.6	16 20	30.17	70.9	68.20
20				72	14 56	30.22	77.7	68.1
27	14 40			66.0	16 20	30.07	67.0	64.2
30	14 50			86.0	17 30	29.98	83.2	79.8
July 1	14 30			85.2	15 40	29.84	84.1	81.8
2					15 45	29.93	80.6	70.4
3	15 40			76.8	17 0	29.86	78.2	75.0
6	14 50			75.6	17 10	30.07	75.2	69.8
7	16 0			74.4	17 30	30.15	76.0	71.3
9	15 0			76.0	17 15	30.17	76.5	71.1
11	15 15			79.5	17 20	29.90	80.6	75.6
14	15 0			78.0	17 10	30.00	78.0	74.0
15	15 20			79.2	16 55	29.93	80.8	77.9
16	16 0			74.9	17 40	29.79	79.0	74.2
20	16 30			73.5	18 50	29.97	71.5	67.8
21					17 0	29.86	78.4	69.5
22	16 0			61.0	17 30	29.83	71.3	65.0
23	16 50			66.9	19 0	29.85	72.2	65.2
24	16 15			70.0	17 12	29.86	74.2	67.9
25	16 15			69.7	17 45	30.13	72.1	66.5
27	16 0			69.2	17 45	29.85	69.5	60.3
28	16 40			67.8	17 30	30.07	72.8	66.0
29	17 00			70.9	18 00	29.87	76.0	69.9
30	17 25			65.9	18 30	30.05	71.3	64.2
August 1	16 25			66.2	19 10	30.03	67.9	62.4
4	16 40			62.9	17 50	30.23	68.5	61.9
5	16 25			68.9	18 20	30.28	69.4	65.4
6	16 30			72.4	20 20	30.23	74.1	66.7
7	16 30			75.0	20 00	30.23	75.5	71.4
8	17 30			77.9	18 50	30.22	79.2	75.8
9 10	17 50			74.2	19 30	30.08	78.2	73.3

	Hour	B	T	$(B+T)$	α	$B+T+\alpha$		Hour	$R.H.$	γ	$B+T+\gamma$
May 24	13 0	+0356	-0141	+0215	-	-		13 0	-0755	-	-0540
June 3	13 0	+0674	-0116	+0558	-0619	-0061		15 30	-0236	+0.3	+0.3
6	14 0	+0326	-0126	+0200	-0406	-0206		14 2	-0398	-	-0198
9	13 20	+0341	-0131	+0210	-1376	-1166		15 5	-1257	-	-1041
11	13 0	+0399	-0146	+0253	-1997	-1744		15 45	-1568	-	-1315
17	13 0	+0218	-0165	+0653	-2038	-1385		14 45	-1659	-	-1006
18	13 0	+0847	-0169	+0678	-2079	-1401		14 50	-1675	-	-0997
19	13 20	+0833	-0150	+0683	-2005	-1322		16 20	-1642	-	-0959
20	-	+0905	-0176	+0729	-	-		14 56	-1634	-	-0905
27	14 40	+0689	-0135	+0554	-1460	-0906		16 30	-1310	-	-0756
30	14 50	+0559	-0193	+0361	-3093	-2732		17 30	-2592	-	-2231
July 1	14 30	+0356	-0201	+0155	-3029	-2874		15 40	-2754	-	-2599
2	-	+0487	-0187	+0300	-	-		15 45	-1824	-	-1524
3	15 40	+0384	-0178	+0206	-2349	-2143		17 0	-2202	-	-1996
6	14 50	+0689	-0167	+0522	-2251	-1729		17 10	-1775	-	-1253
7	16 0	+0804	-0169	+0635	-2153	-1518		17 30	-1898	-	-1263
9	15 0	+0833	-0171	+0662	-2284	-1622		17 15	-1882	-	-1220
11	15 15	+0443	-0187	+0256	-2568	-2312		17 20	-2251	-	-1995
14	15 0	+0588	-0177	+0411	-2447	-2036		17 10	-2120	-	-1709
15	15 20	+0487	-0188	+0299	-2544	-2245		16 55	-2439	-	-2140
16	16 0	+0283	-0181	+0102	-2195	-2093		17 40	-2136	-	-2034
20	16 30	+0545	-0152	+0393	-2079	-1686		18 50	-1609	-	-1216
21	-	+0384	-0179	+0205	-	-		17 0	-1750	-	-1545
22	16 0	+0341	-0151	+0190	-1042	-0852		17 30	-1376	-	-1186
23	16 50	+0370	-0155	+0215	-1535	-1320		19 0	-1393	-	-1178
24	16 15	+0384	-0163	+0221	-1791	-1570		17 12	-1618	-	-1397
25	16 15	+0775	-0154	+0621	-1767	-1146		17 45	-1501	-	-0880
27	16 0	+0370	-0144	+0226	-1725	-1499		17 45	-0982	-	-0756
28	16 40	+0689	-0157	+0532	-1609	-1077		17 30	-1460	-	-0928
29	17 00	+0399	-0169	+0230	-1866	-1636		18 00	-1783	-	-1553
30	17 25	+0660	-0151	+0509	-1451	-0942		18 30	-1310	-	-0801
Aug. 1	16 25	+0631	-0133	+0498	-1476	-0983		19 10	-1140	-	-0667
4	16 40	+0919	-0140	+0779	-1202	-0423		17 50	-1117	-	-0333
5	16 25	+0991	-0144	+0847	-1700	-0853		18 20	-1410	-	-0563
6	16 30	+0919	-0162	+0757	-1989	-1232		20 20	-1515	-	-0761
7	16 30	+0919	-0168	+0751	-2202	-1451		20 00	-1907	-	-1156
8	17 30	+0905	-0182	+0723	-2439	-1716		18 50	-2267	-	-1544
9	17 50	+0703	-0178	+0525	-2136	-1611		19 30	-2063	-	-1538

	1872	Hour of	Bar.	Alt. Th.	Eat. Th.	Hour of	Bdr.	Alt. Th.	Eat. Th.	
Sept.	23	16 ^h 1			57.4	21 ^h 5	30.20	73.8	62.4	10
Sept.	28	19 0			59.5	22 35	30.11	65.0	53.8	Sept.
	28	21 40			54.9		30.11	65.0		
	29	No. obs.								
	30	A.R. only.								
Oct.	2	18 45			54.0	22 30	29.85	60.9	46.1	Oct.
	2	20 25			49.8		29.85	60.9		
	3	21 15			48.9	22 30	29.71	59.8	50.2	
	9	19 55			52.8	20 45	30.03	64.9	50.7	
	10	17 0			67.0	22 0	29.74	67.9	57.6	
	11	No. obs.								
	12	20 10			44.9	22 10	30.13	54.7	40.4	
	13	21 40			42.9		30.13	54.7		
	14	19 15			49.2	21 0	29.63	63.0	47.2	
	14	21 40			47.2					
	16	17 40			58.4	22 40	29.94	62.7	46.0	
	20	19 10			46.0	22 0	30.09	61.0	42.8	
	21	20 0			43.8		30.18	69.0		
	24	No. obs.								
	28	19 30			42.1	23 30	30.35	69.6	36.8	
Nov.	2	18 50			50.2	23 30	29.91	66.6	41.7	Nov.
	4	20 50			36.2	23 10	30.38	61.8	33.8	
	13	1 55			38.3	2 38	30.14	64.0	35.5	
	16	20 45			37.2	22 20	30.07	66.3	34.0	
	16	21 10			33.6	0 50	30.07	66.3	31.8	
	17	21 20			33.6	0 0	30.32	64.0	29.8	
	17	22 20			31.8	0 50	30.32	64.0	29.0	
	19	20 30			36.3	23 15	29.97	60.2	33.0	
	20	23 0			31.8	0 55	30.00	69.8	29.8	
	20	0 0			30.3		30.00	69.8		
	21	21 15			31.2	22 15	30.25	63.0	29.8	
	23	21 15			35.6	22 24	30.14	62.3	34.8	
	23				33.6	1 12	30.14	62.3	32.3	
	24	0 58			45.9	1 30	29.96	63.0	45.2	
	25	1 0			47.1	1 30	29.83	69.8	45.1	
	27	21 0			33.7	0 12	30.13	62.0	31.0	
Dec.	2	A.R. only.			41.5					Dec.
	3	0 35			36.8	2 40	29.97	62.5	34.0	
	3	1 45			34.5					
	4	23 55			28.7	0 10	30.22	63.8	28.0	

1872	Hour of D.A.	B	T	B+T	γ	B+T+ γ	Hour of D.A.	γ	B+T+ γ
Sept. 23	16 0	+0948	-0161	+0787	-1551	-0764	21 0	-1076	-0789
Sept. 28	19 0	+0746	-0128	+0618	-0916	-0298	22 35	-0432	+0186
28	21 40	+0746	-0128	+0618	-0526	+0092			
29									
30									
Oct. 2	18 45	+0370	-0112	+0258	-0449	-0191	22 30	+0228	+0486
2	20 25	+0370	-0112	+0258	-0089	+0169			
3	21 15	+0165	-0107	+0058	-0013	+0045	22 30	-0124	-0066
9	19 55	+0631	-0127		-0348	+0156	20 45	-0167	+0357
10	17 0	+0210	-0138	+0072	-1543	-1441	22 0	-0755	-0583
11									
12	20 10	+0775	-0088	+0687	+0332	+1019	22 10	+0725	+1412
12	21 40	+0775	-0088	+0687	+0507	+1194			
14	19 15	+0050	-0120	-0070	-0038	-0108	21 0	+0103	+0063
16	17 40	+0502	-0119	+0383	-0823	-0440	22 40	+0064	+0447
20	19 10	+0718	-0112	+0606	+0237	+0843	22 0	+0516	+1122
21	20 0	+0847	-0142	+0705	+0430	+1135			
24									
28	19 30	+1092	-0146	+0946	+0576	+1520	23 30	+1040	+1986
Nov. 2	18 50	+0457	-0133	+0324	-0124	+0200	23 50	+0611	+0935
4	20 50	+1135	-0115	+1020	+1093	+1113	23 10	+1307	+2327
13	1 55	+0790	-0124	+0666	+0908	+1574	2 38	+1156	+1822
16	20 45	+0689	-0132	+0557	+1005	+1562	22 20	+1288	+1845
16		+0689	-0132	+0557			0 50	+1484	+2041
17	21 20	+1049	-0124	+0925	+1325	+2250	0 0	+1663	+2588
17	22 20	+1049	-0124	+0925	+1484	+2409	0 50	+1734	+2659
19	20 30	+0545	-0109	+0436	+1084	+1520	23 15	+1377	+1813
20	23 0	+0588	-0145	+0443	+1484	+1927	0 55	+1663	+2106
20	0 0	+0588	-0145	+0443	+1618	+2061			
21	21 15	+0948	-0120	+0828	+1537	+2365	22 45	+1663	+2491
23	21 15	+0790	-0117	+0673	+1148	+1821	22 24	+1217	+1890
23		+0790	-0117	+0673			1 12	+1439	+2112
24	0 58	+0530	-0120	+0410	+0246	+0656	1 30	+0306	+0716
25	1 0	+341	-145	+196	+142	+338	1 30	+311	+457
27	21 0	+0775	-0116	+0659	+1139	+1798	0 12	+1555	+2214
Dec. 2									
3	0 35	+0545	-0122	+0423	+1040	+1463	2 40	+1288	+1711
3	1 45				+1243	+1663			
4	23 55	+0905	-0123	+0782	+1761	+2543	0 10	+1823	+2605

	1872	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.
Dec.	7	21 50			28.5	23 15	(29.95	54.8) ¹³	26.3
	7					0 0			25.8
	10	0 20			16.1		29.97	62.8	
	17	A.R. only.							
	17	A.R. only.					30.26	64.5	23.1
	19	21 0			28.4	2 0	30.20	67.9	21.9
	21	22 50			26.8	1 45	30.15	73.2	20.4
	21	0 5			23.8	2 30	30.15	73.2	16.6
	22	23 0			7.8	2 0	30.16	60.4	3.0
	23	1 50			19.6	2 50	30.00	55.0	19.3
	23					3 50	30.00	55.0	16.3
	24	22 58			6.4	23 30	30.42	56.0	5.7
	24					0 50	30.42	56.0	3.7
	25	23 6			+ 1.5	0 15	30.43	55.0	- 0.2
	30	1 15			10.8	3 0	30.47	57.2	6.8
	30					3 45	30.47	57.2	6.1
1873 Jan.	1	23 50			20.8	1 45	30.39	66.0	17.2
	1	2 55			15.2	3 50	30.39	66.0	14.2
	4	3 30			26.0	4 40	30.00	28.0	23.6
	6	0 0			29.2	2 15	30.27	61.3	25.7
	6	0 45			27.2	3 30	30.27	61.3	23.7
	6					4 30	30.27	61.3	22.0
	7	2 30			16.8	4 30	30.40	62.8	12.8
	7	3 50			14.0		30.40	63.8	
	9	0 10			28.4	2 15	29.97	63.0	25.0
	9	1 20			26.8	4 50	29.97	63.0	21.8
	12	2 50			11.9	4 40	30.55	63.0	9.5
	14	2 40			34.8	4 50	30.41	64.7	26.8
	16	2 45			13.5	4 40	30.10	61.0	45.2
	19	2 45			19.3	4 55	29.97	58.2	18.2
	22	4 0			28.8	5 25	29.94	58.6	28.0
	28	3 15			21.6	4 54	29.87	54.8	21.8
	29	1 45			5.0	4 0	30.23	56.8	+1.3
	29	3 00			3.0	5 48	30.23	56.8	- 0.2
Feb.	2	1 50			11.6	3 52	30.22	53.2	7.8
	2					5 53			6.4
	4	3 30			43.2	5 0	29.58	65.2	43.2
	5	2 00			33.0	4 9	30.23	67.9	29.1
	5	2 45			31.6				
	6	4 12			35.5	6 50	30.10	61.0	34.4

1872	Hour of R.A.	B.	I.	B+I.	γ .	B+I+ γ .	Hour of R.A.	γ .	B+I+ γ .
Dec. 7	21 50	+1516	-0088	+428	+1778	+2206	23 15	+1976	+2404
7					+2027		0 0	+2021	+2449
10	0 20	+1545	-0119	+0426	+2904	+3330			
17									
17		+962	-0144	+0818	+2266	+3084			
19	21 0	+1306	-0138	+1188	+1787	+2955	2 0	+2375	+3543
21	22 50	+0804	-0159	+0645	+1930	+2575	1 45	+2512	+3157
21	0 5	+0804	-0159	+0645	+2203	+2848	2 30	+2359	+3504
22	23 0	+0818	-0110	+0708	+366 ⁷⁵	+4383	2 0	+4127	+4835
23	1 50	+0588	-0089	+0499	+2585	+3084	2 50	+2612	+3111
23		+0588	-0089	+0499			3 50	+2886	+3385
24	22 58	+1192	-0093	+1099	+3806	+4905	23 30	+3271	+4770
24		+1192	-0093	+1099			0 50	+4060	+5159
25	23 6	+1206	-0089	+1117	+4270	+5387	0 15	+4394	+5511
30	1 15	+1264	-0098	+11 ⁶ ₆	+3395	+45 ⁶ ₁	3 0	+3768	+49 ³ ₄
30		+1264	-0098	+11 ⁶ ₆			3 45	+3834	+50 ⁰ ₀
1873 Jan. 1	23 50	+1149	-0131	+1018	+2475	+3493	1 45	+2304	+3822
1	2 55	+1149	-0131	+1018	+2989	+4007	3 50	+3081	+4099
4	3 30	+0588	+0015	+0603	+2003	+2606	4 40	+2221	+3324
6	0 0	+0977	-0113	+0864	+1716	+2580	2 15	+2030	+3874
6	0 45	+0977	-0113	+0864	+1895	+2759	3 30	+2212	+3876
6		+0977	-0113	+0864			4 30	+2366	+3530
7	2 30	+1163	-0123	+1040	+2840	+3880	4 30	+3209	+4249
7	3 50	+1163	-0 ²³ ₂₃	+1040	+3099	+4129			
9	0 10	+0545	-0120	+0425	+1787	+2212	2 15	+2094	+3519
9	1 20	+0545	-0120	+0425	+1930	+2355	4 50	+2384	+3809
12	2 50	+1377	-0120	+1257	+3294	+4551	4 40	+3515	+4772
14	2 40	+1177	-01 ² ₂₇	+10 ⁵ ₅₀	+1217	+22 ⁶ ₇	4 50	+1930	+29 ⁸ ₈
16	2 45	+20732	-0112	+0620	+0455	+1075	4 40	+0306	+0926
19	2 45	+0545	-0102	+0443	+2612	+3055	4 55	+2713	+3156
22	4 0	+0502	-0103	+0399	+1752	+2151	5 25	+1823	+2222
28	3 15	+0399	-0088	+0311	+2402	+2713	4 54	+2384	+2695
29	1 45	+0919	-0096	+0823	+3238	+4761	4 0	+4229	+5112
29	3 00	+0919	-0096	+0823	+4127	+4950	5 48	+4394	+5217
Feb. 2	1 50	+0905	-0082	+0823	+3322	+4145	3 52	+3675	+4498
2		+0905	-0082	+0823			5 03	+3806	+4659
4	3 30	-0024	-0129	-01 ⁵ ₃	+0480	+03 ² ₇	5 0	+0480	+03 ² ₇
5	2 00	+0919	-0138	+0781	+1377	+2158	4 9	+1725	+2506 ²⁵⁰⁶ ₄₄
5	2 45	+0919	-0138	+0781	+1502	+2233			
6	4 12	+0732	-0112	+0630	+1156	+1776	6 50	+1252	+1372

	1873	Hour of R.A.	Bar.	Alt. Th.	Eat. Th.	Hour of R.A.	Bar.	Alt. Th.	Eat. Th.
Feb.	8	4 15			37.9	6 40	29.67	66.0	34.0
	9	4 15			13.8	6 20	29.72	66.2	7.0
	10	4 40			9.5	6 40	30.11	51.0	9.0
	11	5 11			23.8	7 10	29.80	63.8	21.8
	13	4 30			16.8	6 30	30.20	57.5	15.4
	18								
	17	4 45			35.6	7 15	30.14	66.0	31.8
	18	4 45			28.8	6 15	30.37	65.4	28.2
	19	5 20			37.8	8 20	29.92	63.0	36.9
	20	A. Roncy.							
	22	5 15			15.2	7 10	29.52	51.2	12.5
	23	4 40			7.2	5 50	29.34	57.0	4.9
	23					6 25	29.34	51.0	8.9
	24	5 20			9.5	7 30	29.59	53.5	8.9
	25	5 35			27.8	7 40	29.76	58.1	24.8
	26	5 40			27.8	7 30	30.07	67.2	24.9
March	4	5 50			17.2	8 00	30.17	65.0	13.6
	5	5 40			21.8	8 00	30.57	62.0	18.3
	6	6 0			24.4	8 0	30.58	72.4	22.3
	8	6 10			38.5	8 40	29.67	67.0	37.2
	9	6 16			28.0	8 00	29.88	66.1	26.1
	10	6 10			28.4	8 45	30.07	63.5	24.8
	13	6 40			31.6	8 40	30.16	67.9	29.4
	16	7 15			31.8	8 40	29.67	68.2	31.7
	27	7 25			29.6	9 00	30.19	60.8	27.8
	27					10 45	30.19	60.8	25.8
	30	8 00			35.5	10 00	29.48	39.8	35.1
	30	9 00			35.2		29.48	39.8	
	31	8 00			38.2		29.84	40.0	
April	1	7 45			40.4		30.10	48.6	
	1	10 15			37.5		30.07	43.0	
	10	8 15			47.2		30.11	43.8	
	10	10 00			42.6		30.17	42.7	
	15	8 45			43.2	9 35	29.97	45.2	41.6
	16	9 45			38.8		30.13	47.9	
	16	10 50			37.2		30.14	44.2	
	21	9 20			39.2	11 15	29.72	43.9	37.2
	23	8 00			47.2		29.76	48.8	
	23	11 15			42.9		29.78	47.2	
	26	9 30			44.2	10 55	29.67	46.8	42.3

1873	Hour of R.A.	B	T	B+T	γ	B+T γ	Hour of R.A.	γ	B+T γ
Feb.	8	4 15	+0107	-0131	7 0024	+0944	6 40	+1288	+1264 +1212
	9	4 15	+0180	-0132	+0048	+3118	6 20	+3750	+3798
	10	4 40	+0746	-0073	+0673	+3515	6 40	+3563	+4236
	11	5 11	+0297	-0123	+0174	+2203	7 10	+2384	+2558
	13	4 30	+0876	-0099	+0777	+2840	6 30	+2971	+3748
	13								
	17	4 45	+0790	-0131	+0659	+1148	7 15	+1484	+2143
	18	4 45	+1121	-0130	+0991	+1752	6 15	+1805	+2796
	19	5 20	+0472	-0120	+0352	+0953	8 20	+1032	+1584
	20								
	22	5 15	-0112	-0074	-0186	+3939	7 10	+3238	+5052
	23	4 40	-0378	-0073	-0451	+3731	5 50	+3947	+3476
	23		-0378	-0073	-0451		6 25	+4042	+5591
	24	5 20	-0009	-0091	-0100	+3515	7 32	+3572	+3472
	25	5 35	+0238	-0101	+0137	+1841	7 40	+2112	+2249
	26	5 40	+0689	-0136	+0553	+1841	7 32	+2103	+2656
Mar.	4	5 50	+0833	-0128	+0705	+2804	8 00	+3136	+3541
	5	5 40	+1406	-0116	+1290	+2384	8 00	+2704	+3994
	6	6 0	+1420	-156	+1269	+2147	8 0	+2339	+3603
	8	6 10	+0107	-0135	-0028	+0890	8 40	+1005	+0977
	9	6 16	+0414	-0131	+0283	+1823	8 00	+1994	+2277
	10	6 10	+0689	-0122	+0567	+1787	8 45	+2112	+2679
	13	6 40	+0818	-0138	+0680	+1502	8 40	+1697	+2877
	16	7 15	+0107	-0138	-0038	+1484	8 40	+1493	+1463
	27	7 25	+0862	-0111	+0751	+1681	9 00	+1841	+2592
	27		+0862	-0111	+0751		10 45	+2021	+2772
	30	8 00	-0171	-0030	-0201	+1156	10 00	+1191	+0990
	30	9 00	-0171	-0030	-0201	+1182			
	31	8 00	+0356	-0031	+0325	+0917			
Apr.	1	7 45	+0732	-0064	+0668	+0725			
	1	10 15	+0639	-0043	+0646	+0979			
	10	8 15	+0746	-0046	+0700	+0133			
	10	10 00	+0833	-0042	+0791	+0532			
	15	8 45	+0545	-0052	+0493	+0480	9 35	+0620	+1113
	16	9 45	+0775	-0062	+0713	+0865			
	16	10 50	+0790	-0048	+0742	+1005			
	21	9 20	+0180	-0047	+0133	+0829	11 15	+1005	+1138
	23	8 00	+0238	-0065	+0173	+0133			
	23	11 15	+0268	-0060	+0208	+0507			
	26	9 30	+0107	-0067	+0050	+0393	10 05	+0558	+0658

1873	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.
April	27	9 30		50.4	10 35	29.92	52.1	48.0
	27				11 30	29.92	52.1	46.2
May	1	9 45		62.1	11 5	30.07	60.2	58.2
	1				12 5	30.07	60.2	58.2
	4	10 0		52.8	11 15	29.97	43.0	47.9
	4				12 30	29.97	43.0	47.2
	5	10 15		55.8	12 0	30.04	71.0	55.8
	6	10 35		57.0	11 40	30.30	57.7	48.3
	7	10 30		48.8	11 20	30.36	54.2	47.2
	8	No obs.						
	12	10 15		58.2	12 20	29.74	57.7	53.8
	12				12 50	29.74	57.7	52.3
	13	11 00		54.8	11 55	29.62	58.7	52.8
	13				13 15	29.62	58.7	48.9
	14	10 40		54.5	11 20	29.65	56.8	52.3
	15	11 00		53.7	11 50	29.78	55.4	51.2
	15				12 20	29.78	55.4	49.8
	18	11 00		47.4		29.96	56.8	51
	19	11 20		51.4	11 50	30.04	59.2	52.6
	19				13 30	30.04	59.2	47.8
	20	11 15		51.7	11 50	30.27	57.8	50.7
	25	11 35		66.0	13 0	29.95	71.2	60.9
	27	12 00		63.5	13 15	29.90	65.0	59.0
	28	12 00		74.0	13 30	29.79	52.8	51.7
	29	12 00		73.9	13 30	29.93	78.9	71.2
	31	12 30		74.0				
				54.2	13 30	30.52	59.9	57.0
June	1	11 50		72.0	13 20	30.07	70.9	66.8
	2	12 05		63.3	13 55	30.16	63.2	57.0
	4	No obs.						
	5	12 30		55.5	14 15	29.73	62.0	53.8
	5	No obs.			14 50	29.73	62.0	52.7
	9	14 30		58.2	15 05	30.03	63.8	56.8
	10	12 35		66.8	14 15	29.92	67.2	64.8
	10				14 50	29.92	67.2	64.7
	11	12 55		71.8	14 50	29.97	69.8	66.2
	11				15 25	29.97	69.8	65.3
	12	13 00		64.3	14 15	30.16	66.0	60.1
	13	13 15		71.2	14 00	29.85	71.2	68.8
	15				14 45			67.3
	16	13 30		74.5	14 30	29.77	77.4	72.0

1873	Hour of R.A.	B	T	B+T	γ	B+T γ	Hour of R.A.	γ	B+T γ
Apr 27	9 30	+ 0472	- 0077	+ 0395	- 0141	+ 0254	10 35	+ 0064	+ 0459
27		+ 0472	- 0077	+ 0395			11 30	+ 0219	+ 0614
May 1	9 45	+ 0689	- 0109	+ 0580	- 1135	- 0555	11 5	- 0806	- 0226
1		+ 0689	- 0109	+ 0580			12 5	- 0806	- 0226
4	10 0	+ 0545	- 0043	+ 0502	- 0175	+ 0327	11 15	+ 0073	+ 0575
4		+ 0545	- 0043	+ 0502			12 30	+ 0133	+ 0635
5	10 15	+ 0646	- 0150	+ 0496	- 0603	- 0107		- 0603	-
6	10 55	+ 1020	- 0100	+ 0920	- 01 ⁹³ 7	+ 0 ⁷²⁷ 575	11 40	+ 0038	+ 0958
7	10 33	+ 1106	- 0086	+ 1020	- 0005	+ 1015	11 20	+ 0133	+ 1153
8									
12	10 15	+ 0210	- 0100	+ 0110	- 0806	- 0696	12 20	- 0432	- 0322
12		+ 0210	- 0100	+ 0110			12 50	- 0305	- 0195
13	11 00	+ 0034	- 0103	- 0069	- 0517	- 0586	11 55	- 0348	- 0417
13		+ 0034	- 0103	- 0069			13 15	- 0013	- 0082
14	10 40	+ 0078	- 0096	- 0018	- 0491	- 0509	11 20	- 0305	- 0323
15	11 00	+ 0268	- 0091	+ 0177	- 0423	- 0246	11 50	- 0210	- 0083
15		+ 0268	- 0091	+ 0177			12 20	- 0089	+ 0088
18	11 00	+ 0530	- 0096	+ 0434	+ 0116	+ 0550			
19	11 20	+ 0646	- 0105	+ 0541	- 0227	+ 0314	11 50	- 0158	+ 0383
19		+ 0646	- 0105	+ 0541			13 30	+ 0382	+ 0623
20	11 15	+ 0977	- 0100	+ 0877	- 0253	+ 0624	11 50	- 0167	+ 0610
25	11 35	+ 0516	- 0151	+ 0365	- 1460	- 1095	13 0	- 1033	- 0668
27	12 00	+ 0443	- 0128	+ 0315	- 1251	+ 0936	13 15	- 0873	- 0558
28	12 0	+ 288	- 188	+ 95	- 2120	- 2025	13 30	- 1988	- 1553
29	12 05	+ 0487	- 0162	+ 0325	- 2112	- 1787	13 30	- 1807	- 1482
31	12 30	+ 1049	- 0108	+ 0941	- 0466	+ 0475	13 30	- 0193	+ 0748
June 1	11 53	+ 0689	- 0150	+ 0539	- 1756	- 1417	13 20	- 1526	- 0987
2	12 05	+ 0818	- 0121	+ 0697	- 1234	- 0587	13 55	- 0704	- 0007
4									
5	12 30	+ 0196	- 0116	+ 0080	- 0577	- 0497	14 15	- 0432	- 0352
5		+ 0196	- 0116	+ 0080			14 50	- 0339	- 0259
9	14 30	+ 0631	- 0123	+ 0508	- 0806	- 0298	15 05	- 0687	- 0179
10	12 35	+ 0472	- 0136	+ 0336	- 1526	- 1190	14 15	- 1360	- 1024
10		+ 0472	- 0136	+ 0336			14 50	- 1352	- 1016
11	12 55	+ 0545	- 0145	+ 0400	- 1939	- 1539	14 50	- 1476	- 1076
11		+ 0545	- 0145	+ 0400			15 25	- 1401	- 1001
12	13 00	+ 0818	- 0131	+ 0687	- 1318	- 0631	14 15	- 0766	- 0279
15	13 15	+ 0370	- 0151	+ 0219	- 1990	- 1671	14 50	- 1692	- 1473
15		+ 0370	- 0151	+ 0219			14 45	- 1568	- 1349
16	13 30	+ 0253	- 0175	+ 0078	- 2162	- 2034	14 30	- 1956	- 1878

	1873	Height of R.A.	Bar.	Alt. Th.	Ext. Th.	Height of R.A.	Bar.	Alt. Th.	Ext. Th.
June	17	13 15			70.6	15 45	29.89	62.5	68.8
	25	15 10			65.3	16 00	30.40	67.9	62.8
	26	14 15			73.4	15 55	30.23	73.0	68.4
	27	14 15			75.8	15 35	30.27	75.2	71.7
	29	14 15			78.2	15 15	29.91	77.3	75.0
July	30	14 15			76.2	15 15	30.01	77.5	73.9
	3	15 20			76.1	15 58	30.01	68.9	74.1
	5	14 35			73.8	15 58	29.83	81.9	71.9
	6	14 15			67.9	15 52	29.97	71.8	64.2
	6					16 25	29.97	71.3	62.8
	7	14 35			63.8	15 30	30.05	70.5	61.8
	7					15 55	30.05	70.5	60.4
	9	15 00			65.8	16 40	30.06	69.7	62.5
	10	14 45			73.0	16 20	30.07	66.4	72.2
	12	15 15			68.5	16 00	30.23	70.8	65.8
	13	14 45			71.9	16 00	30.24	67.1	72.6
	15	15 30			80.3	16 30	29.94	82.2	77.3
	20	15 30			71.1	16 55	29.94	71.8	67.2
	21	15 30			71.8	16 45	30.05	73.8	68.3
	22	15 30			74.6	16 30	30.17	77.2	72.7
	23	16 00			76.8	16 55	30.03	78.4	75.3
	24	16 00			77.1	17 00	29.94	79.8	74.9
	26	16 45			77.8	17 10	30.09	79.9	77.2
	30	16 11			81.3	17 30	30.06	84.5	78.5
August	4	16 00			71.0	18 00	30.20	72.2	77.1
	5	16 30			66.2	18 20	30.27	71.8	62.1
	6	16 00			73.0	18 00	30.22	75.7	70.1
	9	16 45			71.1	18 15	30.08	65.5	72.0
	10	16 45			67.4	18 0	30.17	74.6	67.3
	11	16 45			65.2	18 00	30.19	71.6	70.6
	12	16 45			63.7	17 30	30.23	70.6	62.3
	28	18 00			63.7	19 30	30.32	68.8	61.9
	1	19 00			67.5	20 00	29.77	72.0	65.1
	2	18 30			65.2	20 15	29.93	68.3	61.6
Sept.	3	18 15			66.0	20 00	30.07	67.9	62.8
	6	18 30			58.3	20 0	30.19	67.7	63.0
	7	15 0			60.1	20 0	30.28	68.6	59.7
	8	15 0			65.3	20 0	30.35	68.6	61.8
	9	15 0			60.8	20 0	30.42	65.3	65.0
	5	19 40			65.2	22 45	29.73	62.7	57.8
	8	19 20			52.4	22 30	29.91	54.8	54.4
Oct.									

1873	Hour of P.M.	B	T	B+T	γ	B+T γ	Hour of P.M.	γ	B+T γ
June.	17 13 15	+0429	-0118	+0311	-1841	-1530	15 45	-1692	-1381
	25 15 10	+1168	-0138	+1026	-1401	-0370	16 00	-1194	-0169
	26 14 15	+0919	-0158	+0761	-2071	-1310	15 55	-1659	-0898
	29 14 15	+0457	-0174	+0283	-2463	-2180	15 15	-2202	-1919
	30 14 15	+0602	-0175	+0427	-2300	-1873	15 15	-2112	-1635
July	3 15 20	+0602	-0207	+0395	-2292	-1894	15 58	-2128	-1733
	5 14 55	+0341	-0193	+0148	-2103	-1955	15 58	-1948	-1800
	6 14 15	+0545	-0153	+0392	-1618	-1226	15 52	-1310	-0918
	6	+0545	-0153	+0392			16 25	-1194	-0802
	7 14 35	+0660	-0148	+0512	-1277	-0765	15 30	-1109	-0597
	7	+0660	-0148	+0512			15 55	-0991	-0479
	9 15 00	+0674	-0145	+0529	-1443	-1914	16 40	-1169	-0640
	10 14 45	+0639	-0133	+0556	-2038	-1482	16 20	-1972	-1416
	12 15 15	+0919	-0149	+0770	-1667	-0897	16 00	-1443	-0673
	13 14 45	+0934	-0135	+0799	-1948	-1149	16 00	-2005	-1206
	15 15 30	+0502	-0194	+0308	-2633	-2325	16 30	-2390	-2052
	20 15 30	+0502	-0153	+0349	-1882	-1533	16 55	-1559	-1210
	21 15 30	+0660	-0161	+0499	-1939	-1440	16 45	-1651	-1152
	22 15 30	+0833	-0174	+0659	-2170	-1511	16 30	-2013	-1354
	23 16 00	+0631	-0179	+0452	-2349	-1897	16 55	-2226	-1774
	24 16 00	+0502	-0184	+0318	-2374	-2056	17 00	-2195	-1877
	26 16 45	+0718	-0185	+0533	-2431	-1898	17 10	-2382	-1849
	30 16 11	+0674	-0203	+0471	-2714	-2248	17 30	-2437	-2016
Aug.	4 16 00	+0876	-0155	+0721	-1874	-1150	18 00	-2374	-1653
	5 16 35	+0977	-0153	+0824	-1476	-0652	18 20	-1135	-0311
	6 16 20	+905	-167	+738	-2038	-1300	18 00	-1799	-1061
	9 16 45	+0703	-0130	+0573	-1882	-1309	18 15	-1756	-1333
	10 16 45	+0833	-0164	+0669	-1576	-0967	18 0	-1568	-0899
	11 16 45	+0862	-0148	+0714	-1393	-0679	18 00	-1841	-1127
	12 16 45	+0919	-0148	+0771	-1268	-0497	17 30	-1152	-0381
	28 18 00	+1049	-0141	+0908	-1268	-0360	19 30	-1117	-0209
	Sept. 1 19 00	+0253	-0154	+0099	-1584	-1485	20 00	-1384	-1285
	2 18 30	+0487	-0139	+0348	-1393	-1045	20 15	-1092	-0744
Sept.	3 18 15	+0689	-0138	+0551	-1460	-0909	20 00	-1194	-0643
	6 18 30	+0862	-0137	+0725	-0815	-0090	20 00	-1209	-0484
	7 15 0	+0991	-0130	+0861	-0966	-0105	20 00	-0932	-0071
	8 15 0	+1092	-0140	+0952	-1401	-0499	20 00	-1109	-0157
	9 15 0	+1192	-0129	+1063	-1025	+0338	20 10	-0534	+0329
	Oct 5 19 40	+0196	-0119	+0077	-1393	-1316	22 45	-0771	-0694
	8 19 50	+0457	-0088	+0369	-0313	+0056	22 30	-0483	-0114

	1873	Hour of R.A.	Bar.	Alt. Sh.	East. Sh.	Hour of R.A.	Bar.	Alt. Sh.	East. Sh.
Oct.	9	19 00			49.3	22 15	30.18	50.8	43.3
	13	19 30			45.5	21 15	30.11	53.4	43.0
	14	20 15			55.2	21 15	30.22	60.6	56.0
	15	20 15			48.8				
	17	A.R. only.							
	20	No obs.							
	21	19 40			54.1	21 0	29.91	66.2	56.8
	22	19 30			54.8	23 15	30.14	58.0	48.0
	28	21 30			45.3	22 45	29.78	50.0	43.8
	29	22 45			40.3	24 00	30.22	48.0	37.8
	30	No obs.							
Nov.	1	21 55			38.4	23 15	30.27	45.2	37.0
	2	23 15			44.6	22 00	30.10	47.2	43.5
	3	22 15			40.2	22 55	30.10	38.6	38.8
	4	21 40			40.7	23 45	29.97	45.2	40.3
	5	23 00			32.5		30.19	42.2	
	6	21 45			35.0	23 45	30.32	41.0	30.7
	9	21 59			41.5	23 30	29.75	46.8	40.9
	10	22 20			28.3	0 00	29.97	32.0	26.8
	18	23 00			27.5	0 00	28.94	32.7	27.5
	19	23 15			28.2	1 00	29.27	33.8	27.2
	22	22 30	No obs.		30.4				
	23	A.R. only.							
	1	23 12			8.1	1 00	30.74	59.4	7.8
Dec.	3								
	3	1 15			41.2		30.30	35.8	
	6	22 50			29.9	1 25	30.37	33.8	28.3
	7	22 45			26.7	2 00	30.55	29.6	23.3
	9	1 30			42.2		29.82	42.0	
	10	0 15			30.0	2 15	30.23	33.8	27.8
	10								
	15	0 00			29.3	3 10	30.38	63.1	28.3
	16	0 01			38.3	0 30	30.17	40.2	35.7
	17	3 00			34.0	1 30	30.04	39.0	31.8
	18	0 1			36.4	3 00	29.97	37.4	34.1
	21	1 15			18.8		30.27	30.0	
	22	1 20			28.2	3 10	30.40	30.2	27.4
	24	No obs.							
	28	0 10			37.7	2 30	29.60	31.0	38.1
	29	0 0			38.9	2 30	29.62	57.0	25.3

1873	Hour of R. A.	B.	T.	B+T.	γ .	B+T+ γ .	Hour of R. A.	γ .	B+T+ γ .
Oct.	9	19 00	+0847	-0072	+0775	-0046			
	13	19 30	+0746	-0053	+0663	+0281			
	14	20 15	+0905	-0110	+0795	-0051			
	15	20 15			-0005				
	17								
	20								
	21	19 40	+0457	-0132	+0325	-0458			
	22	19 30	+0790	-0101	+0689	-0517			
	28	21 30	+0268	-0067	+0199	+0298			
	29	22 45	+0905	-0062	+0843	+0733			
	30								
Nov.	1	21 55	+0977	-0052	+0925	+0899			
	2	23 15	+0732	-0060	+0672	+0357			
	3	22 15	+0732	-0026	+0706	+0741			
	4	21 40	+0545	-0052	+0493	+0698			
	5	23 00	+0862	-0040	+0822	+1422			
	6	21 45	+1049	-0035	+1014	+1199			
	9	21 59	+0224	-0057	+0167	+0628			
	10	23 20	+0545	± 0000	+0545	+1796			
	18	23 00	-0988	± 0003	-0991	+1868			
	19	23 15	-0482	-0007	-0489	+1805			
	22	22 30			+1607				
	23								
Dec.	1	23 12	+1646	-0106	+1540	+3678			
	3								
	3	1 15	+1020	-0015	+1005	+0654			
	6	22 50	+1121	-0007	+1114	+1654			
	7	22 45	+1377	-0013	+1364	+1994			
	9	1 30	+0326	-0039	+0287	+0567			
	10	0 15	+0919	-0007	+0912	+1645			
	10								
	15	0 00	+1135	-0120	+1015	+1708			
	16	0 01	+0833	-0032	+0801	+0908			
	17	3 00	+0646	-0027	+0619	+1288			
	18	0 1	+0545	-0029	+0516	+1075			
	21	1 15	+0977	+0008	+09 ⁸⁵ ₇₉	+2658			
	22	1 20	+1163	+0009	+11 ⁷² ₆₄	+1805			
	24								
	28	0 10	+0505	+0004	+0509	+0962			

	1873	Hour of R.A.	Bar.	Alt. Th.	Ent. Th.		Hour of R.A.	Bar.	Alt. Th.	Ent. Th.
Dec.	30	2 10			29.3		3 30	29.62	33.8	28.4
1874										
Jan.	15	4 00			11.2		5 00	29.57	25.3	10.3
	17	2 45	30.37	24.7	16.1		5 15	30.38	33.0	11.3
	18	2 30	30.37	32.1	25.7		5 00	30.35	29.9	23.9
	20	2 10	30.45	34.7	23.8		5 00	30.45	26.2	20.8
	26									
	28	3 45	29.55	30.0	34.3					
Feb.	1	3 45	30.32	19.3	48.3 4.8		4 30	30.32	19.3	3.2
	4	4 45			21.6		6 15	29.98	25.1	19.6
	5	3 45			9.3		5 30 5 30	30.24	22.6	
	10	4 15	29.54	28.2	26.2		6 30	29.53	27.2	22.8
	11	4 15	29.70	27.7	23.8		6 30	29.74	26.1	20.3
	12	4 28	30.15	30.5	24.1		6 45	30.15	28.3	21.8
	14	3 40	30.07	42.3	37.4		6 45	30.13	38.9	32.8
	15									
	16	5 35	29.53	39.2	34.8		6 45			33.8
	17	5 00	29.83	33.0	24.2		7 00	29.87	29.5	21.3
	18	5 00	30.27	32.9	26.3		7 00	30.27	30.0	23.6
	23									
	24	5 30	30.43	36.8	26.4		7 30	30.42	32.9	24.6
	26	5 30	30.18	34.9	24.3		6 30	29.07 30.07	22.9	23.9
March	1	6 15	29.95	40.1	37.6		8 00	29.92	40.1	36.3
	1	4 30	29.95	40.1	40.7					
	2	6 00	30.06	44.5	42.2		8 00	30.07	41.2	38.6
	3	5 45	29.91	45.7	49.3					
	4	5 45	29.54	48.3	51.2		7 45	29.62	48.1	41.7
	5	5 30			36.0		7 15	30.27	35.2	30.0
	8	6 30	29.47	39.7	34.4		8 00	29.45	38.0	32.3
	8	5 00			35.5					
	12	6 30	29.35	27.7	19.0		7 45	29.37 29.37	24.8	16.9
	16	7 00	30.34	38.8	34.2		8 15	30.34	38.9	32.6
	19									
	21	7 00	29.74	46.2	42.0		9 00	29.73	44.9	41.1
	22	6 30	29.67	42.9	37.5		9 00	29.70	39.3	34.2
	23	7 00	29.85	33.8	25.3		9 00	29.90	30.9	22.2
	24	7 15	30.13	36.9 36.9	22.3		9 00	30.14	36.2	21.2
	25	7 15	29.94	38.0	40.1		8 45	29.93	38.1	38.2
	30	6 45	29.80	43.8	44.6		10 0	29.87	41.1	37.7

Hour	Min	Sec	B	T	R	B+T+R	Hour	Min	Sec	B	T	R	B+T+R
Dec. 30	2	10	+0034		+1708		3	30	+0034	-0007	+1787		+1814
1874													
Jan 15	4	00	-0039	+0025	+3359	+3345	5	00	-0039	+0025	+3441		+3429
17	2	45	+1121	+0027	+2904	+4058	5	15	+1135	-0004	+3350		+4481
18	2	30	+1121	+0000	+2030	+3151	5	00	+1092	+0008	+2194		+3294
20	2	10	+1235	-0011	+2203	+3427	5	00	+1235	+0028	+2475		+3738
26													
38	3	45	-0069	+0008	+1261	+1200							
Feb. 1	3	45	+1049	+0047	+3956	+5052	4	30	+1049	+0047	+4108		+5208
4	4	45	+0559	+0026	+2402	+2984	6	15	+0559	+0026	+2585		+3170
5	3	45			+3534		4	30	+0934	+0036	+3534		+4504
10	4	15	-0083	+0018	+1925	+1918	6	30	-0097	+0018	+2274		+2215
11	4	15	+0151	+0016	+2203	+2370	6	30	+0210	+0022	+2521		+2753
12	4	28	+0804	+0016	+2175	+2988	6	45	+0804	+0014	+2384		+3208
14	3	40	+0689	-0040	+0987	+1636	6	45	+0775	-0027	+1396		+2144
15													
16	5	35	-0097	-0028	+1217	+1092	6	45	-0097	-0028	+1307		+1182
17	5	00	+0341	-0004	+2166	+2503	7	00	+0399	+0018	+2429		+2843
18	5	00	+0977	-0004	+1976	+2949	7	00	+0977	+0008	+2221		+3206
23													
24	5	30	+1206	-0019	+1967	+3154	7	30	+1192	-0004	+2129		+3317
26	5	30	+0775	-0012	+2157	+2920	6	30	+0689	-0004	+2194		+2879
Mar. 1	6	15	+0516	-0031	+0970	+1435	8	00	+0472	-0031	+1084		+1525
1	4	30	+0516	-0031	+0698	+1183							
2	6	00	+0674	-0049	+0567	+1192	8	00	+0689	-0036	+0882		+1535
3	5	45	+0457	-0053	-0046	+0358							
4	5	45	-0083	-0063	-0210	-0356	7	45	+0034	-0062	+0611		+0583
5	5	30	+0977	-0013	+1111	+2075	7	15	+0977	-0013	+1645		+2609
8	6	30	-0186	-0030	+1252	+1036	8	00	-0216	-0024	+1351		+1111
8	5	00	-0186	-0030	+1156	+0940							
12	6	30	-0364	+0022	+2639	+2298	7	45	-0334	+0027	+2831		+2524
16	7	00	+1078	-0026	+1270	+2322	8	15	+1078	-0027	+1414		+2465
19													
21	7	00	+0210	-0055	+0585	+0740	9	00	+0196	-0051	+0663		+0808
22	6	30	+0107	-0043	+0979	+1043	9	00	+0151	-0028	+1270		+1393
23	7	00	+0370	-0007	+2066	+2429	9	00	+0443	+0004	+2345		+2795
24	7	15	+0775	+0028	+2337	+3138	9	00	+0790	-0017	+2438		+3211
25	7	15	+0502	-0024	+0750	+1228	8	45	+0487	-0024	+0917		+1342
30	6	45	+0297	-0046	+0357	+0608	10	00	+0399	-0035	+0962		+1326

1874	Hour of R.A.	Bar.	Alt. Th.	Est. Th.	Hour of R.A.	Bar.	Alt. Th.	Est. Th.
April	1	9 15	30.13	35.2	23.7			
	2	8 15	29.85	30.2	33.4	10 20	29.85	35.0
	4	8 15	29.97	33.9	21.4	10 00	30.04	28.2
	6	8 00	30.00	43.2	39.3	10 00	30.03	41.3
	8	8 30	29.93	46.8	42.2			
	13							
	13	10 00	30.32	40.5	35.2			
	15	11 25		54.8	12 30	29.71	53.3	53.6
	16	8 45	30.07	48.9	43.2	11 00	30.16	44.2
	21							
	21	8 40		45.4	9 30	29.79	46.7	
	22	9 00	29.97	48.2	46.2	11 00	29.98	46.8
	27	9 30	29.92	45.2	42.9	11 00	29.93	44.0
	30	9 45	29.53	43.8	40.6	12 00	29.54	42.3
May	5	10 30	29.64	51.9	43.7	12 00	29.63	48.8
	7	10 45	29.97	52.1	44.1	12 15	30.50	49.8
	8							
	10	10 12	30.13	59.3	46.3	11 45	30.06	53.1
	11	10 30	30.42	55.2	46.2	12 15	30.45	50.4
	12	10 45	30.27	55.8	50.3	12 30	30.27	52.2
	13	12 00	30.02	66.1	68.2	13 00	30.00	65.2
	14	12 30	30.13	67.0	62.8			
	19	11 00	29.92	62.7	56.9	13 00	29.96	58.5
	19							
June	24	11 30	30.02	63.9	63.8	13 30	30.04	62.2
	26	11 15	29.62	66.0	60.2	13 15	29.82	61.6
	27	11 30	30.02	67.3	62.1	13 45	30.04	62.2
	28	11 45	30.06	69.8	65.4	13 45	30.07	66.8
	1	13 15	29.74	61.8	56.2	14 15		53.9
	2	12 15	30.13	62.3	56.4	14 15	30.16	57.9
	8	12 45	29.75	76.0	73.2			
	9	12 45	29.77	74.1	71.4	15 25		67.9
	10	13 00	30.07	72.2	65.3	15 00	30.10	65.4
	15							
	15	13 45	30.23	73.3	73.3			
	17	13 15	29.46	69.7	69.7			
	18	12 45	29.82	69.0	67.0	15 00	29.83	67.9
	21	13 30	30.07	63.1	62.2			64.0
	22	13 12	29.97	74.1	78.8	15 00	29.97	73.6

1874	Hour of S.A.	B	T	γ	B+T+ γ	Hour of S.A.	B	T	γ	B+T+ γ
Apr. 1	9 15	+0775	-0013	+2212	+2974					
2	8 15	+0870	-0032	+1342	+1680	10 20	+0370	-0012	+1546	+19 ⁰ 44
4	8 15	+0545	-0008	+2420	+2957	10 00	+0646	+0014	+2612	+3272
6	8 20	+0588	-0044	+0820	+1364	10 00	+0631	-0036	+1005	+1600
8	8 30	+0487	-0058	+0567	+0996					
13										
13	10 00	+1049	-0033	+1182	+2198					
15	11 25			-0517		12 30	+0165	-0082	-0415	-0332
16	8 45	+0689	-0066	+0480	+1103	11 00	+0818	-0048	+0847	+1617
21										
21	8 40			+0289		9 30	+0283	-0053	+0289	+0514
22	9 00	+0545	-0063	+0219	+0701	11 00	+0559	-0058	+0594	+1095
27	9 30	+0472	-0051	+0507	+0928	11 00	+0437	-0047	+0741	+1181
30	9 45	-0097	-0046	+0707	+0564	12 00	-0083	-0040	+0935	+1812
May 5	10 30	+0064	-0077	+0439	+0426	12 00	+0050	-0065	+0611	+0596
7	10 45	+0545	-0077	+0402	+0870	12 15	+0588	-0068	+0602	+1122
8										
10	10 12	+0631	-0105	+0211	+0737	11 45	+0674	-0081	+0357	+0950
11	10 30	+1192	-0090	+02 ¹⁹ 22	+133 ²¹ 8	12 15	+1235	-0071	+06 ²² 2	+17 ⁶⁶ 75
12	10 45	+0977	-0092	-0133	+0752	12 30	+0977	-0078	+0150	+1049
13	12 00	+0617	-0131	-1642	-1156	13 00	+0588	-0129	-1418	-0959
14	12 30	+0775	-0135	-1194	-0554					
19	11 00	+0472	-0119	-0695	-0342	13 00	+0530	-0103	-0339	+0088
19										
24	11 30	+0617	-0124	-1277	-0784	13 00	+0646	-0117	-0899	-0370
26	11 15	+0326	-0131	-0974	-0779	13 15	+0326	-0114	-0534	-0322
27	11 30	+0617	-0136	-1135	-0654	13 45	+0646	-0117	-0746	-0217
28	11 45	+0674	-0145	-1410	-0881	13 45	+0689	-0134	-1109	-0554
June 1	13 15	+0210	-0115	-0636	-0541	14 15	+0210	-0115	-0440	-0345
2	12 15	+0775	-0117	-0653	+0805	14 15	+0818	-0101	-0296	+0421
8	12 45	+0224	-0169	-2054	-1999					
9	12 45	+0258	-0162	-1907	-1816	15 25	+0253	-0162	-1618	-1527
10	13 00	+0689	-0155	-1401	-0867	15 00	+0732	-0129	-0932	-0329
15										
15	13 45	+0919	-0159	-2063	-1303					
17	13 15	-0201	-0145	-1767	-2113					
18	12 45	+0326	-0142	-1543	-1359	15 00	+0341	-0138	-1293	-1090
21	13 30	+0689	-0120	-1143	-0574					
22	13 12	+0545	-0162	-2512	-2129	15 00	+0545	-0160	-2103	-1718

1874	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.
June	23							
	23	15 15	29.75	76.0	71.8	16 40	29.73	74.0 71.2
	23							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24							
	24	13 30	29.92	71.0	67.2	16 00	29.95	67.0 61.3
	24							
	24							
	25							
	25							
	25							
	25							
	25							
	28	13 35	29.72	80.6	83.6	16 20	29.73	78.9 75.5
	28							
	28	15 55						
	29							
	30							
	30	14 9	29.93	79.2	73.2	16 50	29.97	73.4 66.3
July	1							
	1	14 25	30.07	78.4	74.3	16 15	30.07	73.8 69.2
	2							
	6	14 40	30.13	67.1	63.3	16 45	30.14	65.0 60.8
	7	14 30	29.93	75.9	73.8	16 45	29.90	72.3 68.9
	8	15 5	29.81	80.0	81.4 74.5	16 10	29.83	78.4 77.0
	13	15 50	30.07	74.1	71.7			
	14	15 15	30.14	78.6	77.4	17 10	30.14	76.2 73.7
	15	15 10	29.95	83.3	81.7	16 40	29.83	79.8 77.5
	18	15 55	30.22	77.0	72.2	17 20	30.23	74.1 69.8
	19	15 30	30.23	78.2	73.5	17 00	30.23	74.4 69.9
	21	15 40	30.00	75.9	70.8	17 15	30.00	71.9 66.7

1874	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
June 23										
23	15 15	+0224	-0169	-1939	-1884	16 40	+0196	-0162	-1890	-1856 -2248
23										
24										
24										
24										
24										
24										
24										
24										
24										
24										
24										
24	13 30	+0472	-0150	-1559	-1237	16 00	+0516	-0173 ³⁵	-1067	-0686
24										
24										
25										
25										
25										
25										
25										
25										
25	13 35	+0180	-0187	-2900	-2907	16 20	+0196	-0168 ⁸⁰	-2243	-2227
25										
25	15 55									
29										
30										
30	14 9	+0487	-0182	-2054	-1749	16 50	+0545	-0182 ⁶⁰	-1485	-1100
July 1										
1	14 25	+0689	-0179	-2144	-1634	16 15	+0689	-0173 ⁶¹	-1725	-1197
2										
6	14 40	+0775	-0135	-1234	-6594	16 45	+0790	-0171 ²⁸	-1025	-9363
7	14 30	+0487	-0169	-2103	-1785	16 45	+0443	-0172 ⁵⁵	-1700	-1412
8	15 5	+0311	-0185	-2722 ²⁷²	-2596	16 10	+0341	-0173 ⁸	-1700 -2366	-2203
13	15 50	+0689	-0162	-1981	-1404					
14	15 15	+0790	-0179	-2398	-1787	17 00	+0790	-0169 ⁹	-2095	-1474
15	15 10	+0516	-0198	-2746	-2428	16 40	+0341	-0172 ⁸⁴	-2406	-2249
18	15 55	+0905	-0173	-1972	-1240	17 20	+0919	-0172 ⁶³	-1775	-1019
19	15 50	+0919	-0178	-2079	-1338	17 00	+0919	-0172 ⁶⁴	-1783	-1028
21	15 40	+0588	-0169	-1867	-1438	17 15	+0588	-0174 ⁵⁴	-1518	-1084

1874	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.
22	16 45	30.08	76.1	71.2	17 55	30.07	70.7	65.3
23	15 40	30.08	77.1	72.5	17 55	30.09	72.2	65.8
27	15 55	30.02	78.2	74.8	18 10	30.02	73.0	68.3
28	16 15	29.98	77.0	72.6	18 10	30.00	73.2	69.3
30	16 00	29.97	76.2	73.4	18 35	30.02	72.5	67.5
2	16 05	29.76	73.6	66.0	18 30	29.77	68.1	62.4
3	16 15	30.00	69.9	64.5	18 05	30.02	64.8	58.8
4	18 15	30.17	69.5	64.7	18 35	30.17	68.9	64.4
5	16 30	30.13	72.4	64.9	18 10	30.11	67.2	60.4
5	16							
6	16 30	30.08	71.2	59.4	18 20	30.07	66.1	58.5
10	17 00	29.93	77.0	72.6	18 45	29.95	75.1	70.2
19	17 00	30.17	74.3	71.2	18 30	30.17	72.0	67.4
20	18 00	29.96	78.1	71.5	19 20	29.97	78.0	76.3
22	17 20	30.00	71.7	63.7	19 15	30.02	65.9	58.8
23	17 20	30.01	69.2	62.5	19 45	29.98	63.6	57.5
24	17 50	30.07	68.8	59.3	19 30	30.08	64.0	57.0
25	19 15			53.8	20 00	30.23	61.8	54.8
26	17 55	30.27	67.9	58.6	19 25	30.27	63.0	53.8
27	17 25	30.18	68.8	61.7	19 25	30.18	63.9	57.5
31	17 50	29.98	74.9	73.1	19 25	29.92	73.2	68.2
1	18 00	30.00	72.0	69.8	20 00	30.02	69.1	65.2
2	18 10	30.02	73.2	69.5	20 00	30.02	70.5	64.5
6	18 00	30.02	72.1	71.2	18 45	30.02	72.2	70.3
7	18 00			64.4	20 00	30.02	68.0	61.2
7								
9	18 20	30.13	70.1	64.5	20 00	30.12	67.0	57.2
10	18 45			77.0	19 10	29.93	77.2	75.8
10								
12	18 25	30.24	70.8	60.5	20 30	30.24	63.8	65.2
13	18 17	30.33	68.3	61.3				
14	18 45	30.27	69.3	62.8	20 30	30.26	67.0	60.4
3	19 48			53.6	21 45	30.15	56.0	48.2
4	20 25	30.27	56.8	47.2	22 00	30.26	57.8	44.2
5	19 00	30.23	62.3	50.6				
6	20 40	30.26	57.0	52.8	22 40	30.27	54.8	48.8
10	20 50	29.68	59.9	61.1	22 40	29.67	60.2	59.1
11								
11								

1874	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
July 22	16 45	+0703	+0169	-1890	-1356	17 55	+0689	-0149	-1401	-0861
23	15 40	+0703	-0173	-1997	-1467	17 55	+0718	-0155	-1526 -1443	-0943 -0887
27	15 55	+0617	-0178	-2186	-1747	18 10	+0617	-0158	-1651	-1192
28	16 15	+0559	-0173	-2005	-1619	18 10	+0588	-0159	-1733	-1304
30	16 00	+0545	-0170	-2071	-1696	18 35	+0617	-0156	-1585	-1124
Aug. 2	16 05	+0238	-0160	-1460	-1382 -1399	18 30	+0253	-0138	-1160	-1045
3	16 15	+0588	-0146	-1335	-0893	18 05	+0617	-0127	-0858	-0363
4	18 15	+0833	-0144	-1352	-0663	18 35	+0833	-0142	-1327	-0636
5	16 30	+0775	-0156	-1368	-0749	18 10	+0746	-0136	-0791	-0381
5										
6	16 30	+0703	-0151	-0907	-0355	18 20	+0689	-0131	-0832	-0274
10	17 00	+0487	-0173	-2005	-1691	18 45	+0516	-0166	-1807	-1457
19	17 00	+0833	-0163	-1890	-1220	18 30	+0833	-0134	-1576	-0897
20	18 00	+0530	-0177	-2406	-2053	19 20	+0545	-0177	-2303	-1940
22	17 20	+0588	-0153	-1217	-0782	19 15	+0617	-0131	-0858	-0372
23	17 20	+0602	-0143	-1169	-0710	19 45	+0539	-0122	-0746	-0309
24	17 50	+0689	-0141	-0899	-0351	19 30	+0703	-0124	-0704	-0125
25	19 15	+0919	-0115	-0603	+0201	20 00	+0919	-0115	-0517	+0887
26	17 55	+0977	-0138	-0841	-0002	19 25	+0977	-0120	-0603	+0254
27	17 25	+0847	-0141	-1100	-0394	19 25	+0847	-0124	-0746	-0023
31	17 50	+0559	-0166	-2046	-1653	19 25	+0472	-0159	-1642	-1329
Sept. 1	18 00	+0588	-0154	-1775	-1341	20 10	+0617	-0142	-1393	-0918
2	18 10	+0617	-0159	-1750	-1292	20 00	+0617	-0148	-1335	-0866
6	18 00	+0617	-0154	-1890	-1427	18 45	+0617	-0155	-1816	-1354
7	18 50	+0617	-0138	-1327	-0848	20 00	+0617	-0138	-1059	-0580
7										
9	18 20	+0775	-0146	-1335	-0766	20 00	+0761	-0135	-1059 -1012	-0416 ³³
10	18 45	+0487	-0174	-2366	-2053	19 10	+0487	-0174	-2267	-1954
10										
12	18 25	+0934	-0149	-1000	-0215	20 30	+0934	-0123	-0557 -1293	+0260 -0582
13	18 17	+1063	-0139	-1067	-0143					
14	18 45	+0977	-0143	-1194	-0360	20 30	+0962	-0135	-0991	-0164
Oct. 3	19 45	+0804	-0093	-0415	+0296	21 45	+0804	-0093	+0047	+0758
4	20 25	+0977	-0096	+0133	+1014	22 00	+0962	-0076	+0393	+1279
5	19 00	+0916	-0017	-0158	+0641					
6	20 40	+0962	-0097	-0348	+0517	22 40	+0977	-0088	-0005	+0884
10	20 50	+0123	-0108	-1050	-1035	22 40	+0107	-0109	-0882	-0884
11										
11										

1874.	Hour of R.A.	Bar.	Alt. Th.	East. Th.	Hour of R.A.	Bar.	Alt. Th.	East. Th.
11	20 00	29.83	61.1	65.4	22 45	29.82	56.2	50.4
12	20 30	29.98	58.8	49.7	22 40	30.03	52.6	45.6
15	20 45	30.16	54.8	49.2	22 50	30.16	51.7	46.9
18	20 50	29.60	56.3	44.9	22 30	29.59	52.0	44.2
19	21 20			39.7	23 20	29.86	44.2	38.2
20	20 50	30.03	54.1	55.1	22 50	30.03	54.2	53.3
21	20 45	30.36	56.2	47.3	23 00	30.36	50.7	43.3
22	20 35	30.27	59.0	54.6	23 00	30.28	54.3	48.3
26	20 45	30.15	63.0	58.4	23 20	30.12	58.0	52.1
27	22 05	29.86	59.9	58.4	23 15	29.87	59.3	56.5
28	23 45			51.2	24 30			50.1
28	24 15	29.94	57.0	50.4				
2	23 30			38.0	0 00	30.31	46.8	38.3
3	0 20			41.8	1 00	30.36	47.0	41.8
4	21 55	30.28	53.0	46.5	23 35	30.28	50.0	45.0
5	0 5			50.8	0 45	30.02	53.2	50.5
7	21 20	30.43	53.9	45.3	0 15	30.43	49.1	41.1
8	21 35	30.22	54.6	50.2	23 45	30.19	51.9	47.6
9	23 00			51.2	0 30	29.83	54.7	49.1
10	21 17	29.89	51.2	51.9	0 05	29.86	53.8	50.9
11	22 45	29.81	51.0	43.5	0 40	29.83		42.3
12	22 15	30.19	45.2	27.0 ?				
16	23 00	30.52	42.2	37.2	0 50			33.9
18	22 00	30.13	54.3	46.2	0 45	30.15	46.9	39.5
19	22 20	30.15	36.2	28.7	0 15	30.13	33.8	26.7
21	22 55	29.76	42.8	31.9	0 55	29.78	37.6	31.5
22	23 00	30.17	48.6	26.1				
24	23 05	29.29	40.1	32.6	1 30	29.14	36.2	30.8
24								
25								
26	23 20	30.28	39.7	28.4	1 35	30.34	34.0	26.7
29	1 20	29.77	42.2	31.9	2 00	29.73	39.3	31.6
30	23 40	30.38	31.1	21.5	1 40			19.2
2	23 15	30.16	42.8	34.8	1 45	30.14	39.1	32.9
3	23 15	29.84	44.9	44.4				
7	0 50	29.69	39.8	33.5				
8	22 20	29.88	66.1	33.2				
9	0 40	29.90	39.6	39.8	2 25	29.92	38.9	36.9
10	23 50	30.29	38.9	30.1	1 40	30.26	34.7	27.9

1874	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Oct. 11	20 00	+0341	-0112	-0568 -1472	-0339 -1181	22 45	+0326	-0074	-0141	+0091
12	20 30	+0559	-0103	-0080	+0376	22 41	+0631	-0079	+0272	+0824
15	20 45	+0818	-0088	-0039	+0692	22 50	+0818	-0076	+0159	+0901
18	20 50	+0005	-0094	+0332	+0246	22 50	-0009	-0077	+0393	+0307
19	21 20	+0384	-0048	+0785	+1121	23 20	+0384	-0048	+0917	+1253
20	20 50	+0631	-0085	-0543	+0003	22 50	+0631	-0086	-0390	+0155
21	20 45	+1106	-0094	+0124	+1136	23 00	+1106	-0072	+0472	+1506
22	20 35	+0977	-0104	-0500	+0373	23 00	+0991	-0086	+0038	+0943
26	20 45	+0804	-0120	-0823	-0139	23 20	+0761	-0101	-0288	+0372
27	22 05	+0384	-0108	-0823	-0547	23 15	+0399	-0105	-0662	-0368
28	23 45	+0502	-0097	-0210	+0195	24 00		-0116		-0116
28	24 15	+0502	-0097	-0141	+0264					
Nov. 2	23 30	+1034	-0258	+0935	+1911	0 01	+1034	-0058	+0903	+1834
3	0 20	+1106	-0259	+0602	+1699	1 01	+1106	-0059	+0602	+1648 ⁹
4	21 55	+0991	-0081	+0193	+1103	23 35	+0991	-0069	+0324	+1246
5	0 5	+0617	-0082	-0175	+0360	0 45	+0617	-0082	-0150	+0385
7	21 20	+1206	-0085	+0293	+1419	1 15	+1206	-0066	+0663	+1803
8	21 35	+0905	-0087	-0124	+0694	23 45	+0862	-0077	+0099	+0884
9	23 00	+0341	-0088	-0210	+0043	0 30	+0341	-0088	-0029	+0224
10	21 17	+0429	-0074	-0270	+0085	0 05	+0384	-0084	-0184	+0116
11	22 45	+0811	-0073	+0455	+0693	0 40	+0341	-0073	+0558	+0826
12	22 15	+0718	-0052	+1913	+2577					
16	23 00	+1335	-0040	+1005	+2350	0 50	+1335	-0040	+1297	+2572
18	22 00	+0775	-0086	+0219	+0908	0 45	+0804	-0059	+0803	+1548
19	22 20	+0804	-0017	+1761	+2548	0 15	+0775	-0007	+1939	+2707
21	22 55	+0238	-0042	+1475	+1671	0 55	+0265	-0022	+1511	+1757
22	23 08	+0833	-0064	+1994	+2763					
24	23 05	-0452	-0031	+1414	+0931	1 30	-0825 0378	-0017	+1573	+1178 +0731
24										
25										
26	23 20	+0991	-0030	+1787	+2748	1 35	+1078	-0008	+1939	+3009
27	1 20	+0253	-0040	+1475	+1688	2 00	+0196	-0028	+1502	+1670
30	23 40	+1135	+0004	+2411	+3550	1 40	+1135	+0004	+2621	+3760
Dec. 2	23 15	+0818	-0042	+1217	+1993	1 45	+0790	-0027	+1387	+2150
3	23 15	+0856	-0051	+0675	+0680					
7	0 50	+0137	-0030	+1334	+1441					
8	22 20	+0414	-0131	+1359	+1642					
9	0 40	+0443	-0029	+0777	+1191	2 25	+0472	-0027	+1032	+1477
10	23 50	+1006	-0027	+1636	+2615	1 40	+0962	-0011	+1832	+2783

	1874	Hour of R.A.	Bar.	Alt. Th.	Eat. Th.		Hour of R.A.	Bar.	Alt. Th.	Eat. Th.
Dec.	12	0 40	30.23	35.1	21.2		3 20	30.23	26.1	18.7
	14	0 30	29.93	29.1	14.1		1 50	29.96	22.8	11.1
	15	1 30	30.32	10.1	6.6		2 25	30.31	10.0	6.3
	16	0 50	30.20	31.1	23.8		2 55	30.18	27.9	22.7
	16									
	21	1 10	30.11	31.8	18.1		3 25	30.08	23.8	16.9
	23	0 00	30.00	10.0	33.4		3 25	29.98	36.9	31.7
	27	1 30	30.13	40.1	35.3		2 20	30.13	39.9	34.8
1875										
Jan.	5	2 30	30.18	31.8	23.7		3 50	30.21	29.1	20.4
	6									
	9	1 48	29.72	31.0	25.4					
	10	2 5	30.29	22.9	5.6					
	11	2 30			11.8		4 45	30.30	21.8	10.4
	12	2 13	30.43	26.8	15.8					
	14	2 28	29.91	31.0	20.5		5 7	29.90	22.8	
	14									
	14									
	16	2 50	29.94	23.1	15.7		5 12	29.93	21.1	10.4
	17	2 35	30.17	18.0	11.2		4 10	30.20	16.0	9.6
	17									
	17									
	17									
	18	3 25	30.02	10.0	2.8		4 00	30.02	8.0	2.2
	19	3 00	30.18	20.20	9.5		4 40	30.20	18.5	7.7
	20	3 00	30.26	21.9	8.8		4 50	30.25	18.0	6.2
	25	3 10	29.87	31.1	22.0		5 30	29.90	25.0	20.5
	26	2 5	30.03	28.7	18.0		5 10	30.02	20.2	14.7
	27	2 15	29.90	23.3	17.9		5 20	29.94	21.1	16.1
	30	3 16	29.87	30.8	26.1		5 20	29.89	28.8	22.7
Feb. 1	3 45	30.03	35.1	20.5			5 50	30.04	35.3	16.2
	2	3 50	30.30	32.6	26.3		5 30	30.29	30.8	24.8
	4	4 0	29.86	28.7	13.9		5 0	29.92	20.8	11.1
	8	3 10	29.77	23.3	11.8					
	9	4 30	29.95	8.0	-4.0		5 20	29.97	5.0	-5.3
	10	3 15	30.45	22.8	16.0					
	13	3 30	29.77	27.3	15.6		6 15	29.97	21.0	11.8
	14	4 30	29.85	22.8	7.1		5 50	29.84	18.0	5.7
	15	5 55	29.93	23.0	8.9		6 45	29.94	20.0	7.5

1874	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Dec. 12	0 40	+0919	-0012	+2438	+3345	3 20	+0919	+0022	+2668	+3609
14	0 30	+0487	+0011	+3090	+3588	1 50	+0530	+0038	+3368	+3933
15	1 30	+1049	+0084	+3787	+4920	2 25	+1034	+0084	+3815	+4933
16	0 50	+0876	+0004	+2203	+3083	2 55	+0847	+0015	+2303	+3165
16										
21	1 00	+0746	+0001	+2722	+3469	3 25	+0703	+0031	+2831	+3565
23	0 00	+0588	-0031	+1342	+1899	3 25	+0559	-0020	+1493	+2032
27	1 30	+0775	-0031	+1174	+1918	2 20	+0775	-0031	+1217	+1961
1875										
Jan 5	2 30	+0847	+0001	+2212	+3060	3 50	+0890	+0011	+2512	+3413
6										
9	1 45	+0180	+0004	+2057	+2241					
10	2 5	+1006	+0034	+3881	+4921					
11	2 30	+1020	+0039	+3304	+4363	4 45	+1020	+0039	+2432	+4491
12	2 13	+1206	+0020	+2934	+4160					
14	2 28	+0457	+0014	+2503	+2964	5 7	+0443	+0005		
14										
14										
16	2 50	+0502	+0034	+2943	+3479	5 12	+0487	+0041	+3432	+3960
17	2 35	+0833	+0053	+3359	+4245	4 10	+0876	+0061	+3506	+4443
17										
17										
17										
18	3 25	+0617	+0034	+4146	+4847	4 00	+0617	+0092	+4203	+4912
19	3 00	+0847	+0044	+3515	+4406	4 40	+0876	+0051	+3684	+4611
20	3 00	+0962	+0038	+3581	+4581	4 50	+0948	+0053	+3825	+4826
25	3 10	+0399	+0004	+2366	+2769	5 30	+0443	+0026	+2508	+2972
26	2 5	+0631	+0012	+3131	+3774	5 10	+0617	+0044	+3035	+3696
27	2 15	+0443	+0033	+2740	+3216	5 20	+0502	+0041	+2914	+3457
30	3 16	+0399	+0005	+1994	+2398	5 20	+0429	+0018	+2303	+2748
Feb 1	3 45	+0631	-0012	+2503	+3122	5 50	+0646	+0013	+2895	+3555
2	3 50	+1020	-0002	+1976	+2994	5 30	+1006	+0005	+2112	+3123
4	4 0	+0384	+0018	+3109	+3505	5 0	+0472	+0042	+3363	+3882
8	3 10	+0253	+0033	+3304	+3590					
9	4 30	+0516	+0092	+4795	+5403	5 20	+0545	+0104	+4862	+5511
10	3 15	+1235	+0035	+2914	+4184					
13	3 30	+0545	+0019	+2932	+3516	6 15	+0545	+0041	+3304	+3890
14	4 30	+0370	+0035	+3740	+4145	5 50	+0356	+0033	+3871	+4280
15	5 55	+0487	+0034	+3572	+4093	6 45	+0502	+0045	+3703	+4250

	1875	Hour of P.M.	Bar.	Att. Th.	Ext. Th.	Hour of P.M.	Bar.	Att. Th.	Ext. Th.
Feb.	16	6 0	30.08	22.0	14.9	6 45	30.07	20.3	13.7
	17	6 15	29.85	22.2	16.7	6 45	29.87	21.2	15.7
	18	4 30	30.16	24.0	12.7	7 0	30.15	18.0	9.8
	22	5 50	30.21	33.0	32.1	7 25	30.17	33.0	27.0 37.9
	23								
	24	5 15	29.82	44.0	47.2	7 40	29.86	44.8	41.6
	25								
	28	5 20	30.13	20.9	7.3	7 30	30.16	19.0	8.1
Mar.	2								
	4	6 30			19.8	7 40	30.32	25.2	18.8
	8	6 0	29.95	37.0	29.7	8 50	30.03	32.5	26.7
	9								
	11	6 30	30.03	40.6	33.2	8 45	30.04	35.8	30.2
	17	6 15	29.62	31.0	23.1	8 30	29.65	28.8	20.6
	18	6 10	29.87	28.8	19.8	8 30	29.72	23.0	17.7
	22	7 20	30.04	29.9	18.2	9 0	30.07	24.6	15.8
	23	7 0	30.32	31.7	20.5	9 25	30.32	24.1	16.2
	25	7 15	29.77	33.9	31.6	9 15	30.32	33.0	30.2
	27	7 15	29.87	45.2	41.8	9 30	29.89	43.8	40.0
	28	7 30	30.26	40.7	35.0	9 30	30.28	39.2	31.2
	29	6 45	30.33	44.1	38.4	9 45	30.32	40.2	33.8
	30	7 45	30.33	46.2	38.5	10 1	30.34	38.9	34.2
	31	7 40	31.56	44.7	35.2	9 30	30.54	40.0	34.7
Apr.	5	8 0	30.07	43.8	44.3	10 30	30.13	42.9	42.2
	6								
	7	8 30	30.37	42.8	33.3	9 30	30.38	40.0	31.2
	10	8 30	29.87	51.7	50.7	10 30	29.87	50.7	46.8
	11	9 5	30.00	51.2	41.9	9 45	29.97	49.0	40.8
	14	9 10	29.84	42.9	34.7	10 35	29.85	40.8	32.7
	15	9 0	29.83	48.4	42.9	10 30	29.83	45.2	39.8
	19	10 0	29.62	35.7	30.6				
	20	9 10	29.54	36.1	31.1	11 0	29.57	34.0	28.5
	21	9 25	29.78	36.0	31.1	11 0	29.82	33.9	28.7
	22	9 15	29.78	43.0	42.0	10 55	29.78	42.0	37.5
	24	9 45	29.52	52.0	43.5	11 15	29.52	49.1	41.7
	25	9 40	29.87	53.7	48.8	11 15	29.73	49.2	45.2
	26	10 0	30.03	50.4	46.2	10 50	30.04	49.7	43.0
	27	10 0	29.73	51.7	46.1	11 45	29.75	48.8	42.2
May	3	10 0	29.72	52.1	50.2	11 45	29.76	51.4	46.2

1875	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Feb. 16	6 0	+0703	+0038	+3017	+3758	6 45	+0689	+0044	+3127	+3860
17	6 15	+0870	+0037	+2849	+3256	6 45	+0399	+0040	+2943	+3382
18	4 30	+0818	+0030	+3219	+4067	7 0	+0804	+0053	+3488	+4345
22	5 50	+0890	-0004	+1457	+2343	7 25	+0833	-0004	+ 1513 +2348	+2117 ✓
23										
24	5 15	+0326	-0047	+0133	+0412	7 40	+0384	-0050	+0620	+0954
25										
28	5 20	+0775	+0041	+3534	+4350	7 30	+0818	+0049	+3648	+4515
Mar. 2										
4	6 30	+1049	+0325	+2567	+3641	7 40	+1049	+0025	+2658	+3732
8	6 0	+0516	-0020	+1672	+2168	8 50	+0631	-0002	+1939	+2568
9										
11	6 30	+0631	-0038	+1359	+1957	8 45	+1646	-0015	+1627	+2258
17	6 15	+0034	+0004	+2266	+2304	8 30	+0078	+0012	+2494	+2584
18	6 10	+0399	+0012	+2567	+2978	8 30	+0472	+0034	+2758	+3264
22	7 20	+0646	+0008	+2713	+3367	9 0	+0689	+0028	+2934	+3651
23	7 0	+1049	+0001	+2503	+3553	9 25	+1049	+0030	+2895	+3974
25	7 15	+0545	-0008	+1502	+2039	9 15	+0617	-0004	+1627	+2240
27	7 15	+0399	-0052	+0602	+0949	9 30	+0429	-0046	+0759	+1142
28	7 30	+0762	-0034	+1199	+2127	9 30	+0991	-0028	+1537	+2500
29	6 45	+1063	-0047	+0899	+1915	9 45	+1049	-0032	+1307	+2324
30	7 45	+1063	-0055	+0890	+1898	10 0	+1078	-0027	+1270	+2321
31	7 40	+1391	-0050	+1182	+2523	9 30	+1363	-0031	+1226	+2558
Apr. 5	8 0	+0689	-0046	+0384	+1027	10 30	+0775	-0043	+0567	+1299
6										
7	8 30	+1121	-0042	+1351	+2430	9 30	+1135	-0031	+1537	+2641
10	8 30	+0399	-0076	-0167	+0156	10 30	+0399	-0072	+0168	+0495
11	9 5	+0588	-0074	+0594	+1108	9 45	+0545	-0066	+0670	+1169
14	9 10	+0356	-0043	+1226	+1539	10 35	+0370	-0034	+1405	+1741
15	9 0	+0341	-0063	+0507	+0785	10 30	+0341	-0052	+0777	+1066
19	10 0	+00 74 ³⁴	-0015	+1591	+ 1610 +1595					
20	9 10	-0083	-0016	+1546	+1447	11 0	-0039	-0008	+1778	+1731
21	9 25	+0268	-0016	+1546	+1798	11 0	+0326	-0008	+1761	+2079
22	9 15	+0268	-0043	+0585	+0810	10 55	+0268	-0039	+0979	+1208
24	9 45	-0112	-0077	+0455	+0266	11 15	-0112	-0066	+0611	+0433
25	9 40	+0399	-0034	-0005	+0310	11 15	+0487	-0067	+0306	+0726
26	10 0	+0631	-0070	+0219	+0780	10 50	+0646	-0063	+0498	+1076
27	10 0	+0487	-0076	+0228	+0639	11 45	+0516	-0065	+0567	+1018
May. 3	10 0	+0180	-0077	-0124	-0021	11 45	+0238	-0075	+0219	+0382

1875	Hour of Obs.	Bar	Att. Th.	Ext. Th.	Hour of Obs.	Bar.	Att. Th.	Ext. Th.
4	10 20	29.65	48.2	42.0	11 15	29.66	46.1	40.5
5	10 0	29.92	57.2	57.3	11 55	29.94	55.1	51.8
10								
12	12 35	29.78	58.9	55.6				
13	11 15	30.20	61.8	58.2	13 0	30.22	60.1	54.8
17	10 50	30.22	58.2	55.2	13 0	30.24	54.7	49.7
22	11 30	29.84	69.0	73.0	12 15	29.85	69.9	69.1
23	11 30	29.98	67.9	64.2	13 20	30.00	66.1	59.7
24								
26	11 30	29.98	72.4	71.8	13 20	30.03	69.2	64.7
27	11 35	30.19	72.2	70.9	13 40	30.20	68.2	61.2
29	12 45	29.97	62.7	57.3	13 45	29.97	66.1	55.0
1	12 10	30.24	62.7	52.4				
8	12 40	30.22	67.4	63.2	14 30	30.24	63.7	58.2
10	14 40	30.12	64.1	61.1				
14	13 15	29.93	65.4	61.8	14 45	29.95	63.7	58.0
15	13 30	29.87	67.0	65.4	14 50	29.89	67.0	62.8
16								
20	13 25	30.12	69.8	70.7	15 15	30.10	68.7	60.5
21	14 0		72.4		15 15	30.07	70.2	69.7
22								
24	13 45	29.92	80.0	81.9	15 10	29.88	78.9	77.9
27	13 30	29.77	80.0	80.4	15 35	29.77	80.6	78.4
28	14 0	29.98	81.3	77.4	15 40	30.03	78.9	72.2
29								
30	14 10	30.01	77.0	73.7				
1	14 50	30.06	72.9	67.2	15 55	30.07	71.0	65.8
3	16 40	30.18	71.1	65.2				
7	14 45	30.23	74.7	67.4	17 0	30.23	69.2	64.9
8	15 30		68.4		16 45	30.29	73.1	66.9
10	15 15	29.83	75.2	71.3	16 45	29.82	73.0	69.5
11	15 0	29.84	78.3	74.1	17 0	29.87	73.0	69.7
12	15 15	29.90	73.6	68.3	16 0	29.89	70.7	64.7
31	17 0	30.07	72.9	66.7	18 0	30.09	71.9	65.3
4	16 15	30.09	73.1	64.3				
5								
7	16 20	29.97	77.8	75.4	18 15	29.98	76.4	73.9
8	16 15	30.02	76.3	72.7				
9	16 30	29.87	78.8	74.6	18 25	29.97	75.9	68.9

1875	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ	
May	4	10 20	+0078	-0063	+0585	+0600	11 15	+0092	-0054	+0716	+0754 +0678
	5	10 0	+0472	-0098	-0729	7 0355	11 55	+0502	-0089	-0261	+0152
	10										
	12	12 35	+0268	-0104	-0585	7 0421					
	13	11 15	+0876	-0115	-0806	-0045	13 0	+0905	-0108	-0517	+0280
	17	10 50	+0905	-0102	-0551	+0252	13 0	+0934	-0085	-0080	+0766
	22	11 30	+0356	-0142	-2038	-1824	12 15	+0370	-0146	-1717	-1493
	23	11 30	+0559	-0138	-1310	-0889	13 20	+0588	-0131	-0932	-0475
	24										
	26	11 30	+0559	-0156	-1857	-1454	13 20	+0631	-0143	-1352	-0864
	27	11 35	+0862	-0155	-1866	-1159	13 40	+0876	-0139	-1059	-0322
	29	12 45	+0545	-0119	-0729	-0303	13 45	+0545	-0108	-0534	-0097
June	1	12 10	+0934	-0119	-0313	+0502					
	8	12 40	+0905	-0136	-1226	-0457	14 30	+0934	-0123	-0806	+0005
	10	14 40	+0761	-0124	-1050	-0413					
	14	13 15	+0487	-0129	-1109	-0451	14 45	+0516	-0123	0704 543	0311 1158
	15	13 30	+0399	-0135	-1410	-1146	14 30	+0429	-0135	-1194	-0900
	16										
	20	13 25	+0761	-0145	-1849	-1233	15 15	+0732	-0141	-1000	-0409
	21	14 0	+0689	-0147	-1789	-1447	15 15	+0689	-0147	-1767	-1225
	22										
	24	13 45	+0472	-0185	-2762	-2475	15 10	+0414	-0181	-2439	-2206
	27	13 30	+0253	-0185	-2641	-2573	15 35	+0253	-0187	-2479	-2413
	28	14 0	+0559	-0190	-2398	-2029	15 40	+0631	-0181	-1972	-1522
	29										
	30	14 10	+0602	-0173	-2504	-2075					
July	1	14 50	+0674	-0158	-1559	-1043	15 55	+0689	-0150	-1443	-0904
	3	16 40	+0847	-0150	-1393	-0696					
	7	14 45	+0919	-0165	-1576	-0822	17 0	+0919	-0143	-1368	-0592
	8	15 30	+1006	-0158	-1659	-0811	16 45	+1006	-0158	-1535	-0687
	10	15 15	+0341	-0167	-1893	-1724	16 45	+0326	-0158	-1750	-1582
	11	15 0	+0356	-0178	-2128	-1930	17 0	+0399	-0166	-1767	-1534
	12	15 15	+0443	-0160	-1651	-1068	16 0	+0429	-0149	-1352	-1072
	31	17 0	+0689	-0158	-1518	-0987	18 0	+0718	-0150	-1401	-0833
Aug.	4	16 15	+0718	-0158	-1318	-0758					
	5										
	7	16 20	+0545	-0176	-2234	-1865	18 15	+0559	-0171	-2112	-1724
	8	16 15	+0617	-0170	-2013	-1566					
	9	16 30	+0399	-0180	-2170	-1951	18 25	+0545	-0169	-1700	-1324

1875 Hour of Bar Alt. Sh. Exp. Sh.
R. A.

Hour of Bar Alt. Sh. Exp. Sh.
R. A.

August

10 16 15 29.98 72.2 76.7
12
14 16 45 29.97 82.3 77.3
16

18 35 30.01 76.4 70.3

25 18 10 30.33 69.3 61.3
26 16 55 30.28 73.2 65.8
28 17 25 30.16 74.6 69.2
29 17 15 29.99 77.1 76.9
30 17 45 29.96 77.7 72.7
31 17 45 30.13 76.1 69.3

18 45 30.32 67.8 60.2
19 10 30.29 67.0 60.2
19 25 30.16 76.1 63.9
19 25 29.98 74.8 69.9
19 25 29.97 74.6 69.2
19 45 30.15 71.1 65.0

Sept.

1 17 40 30.19 75.1 66.7
4 18 0 29.67 79.2 78.2
5 17 45 29.88 76.1 78.1
6

19 45 30.17 69.2 63.0
19 55 29.68 77.9 74.7
19 55 29.89 72.8 66.5

7 17 55 30.02 73.0 66.8
8 18 5 30.11 73.2 69.6
13 18 25 30.34 66.6 63.8
14 18 55 30.32 68.4 62.7
25 18 40 29.93 63.2 59.4

20 0 30.04 68.5 61.2
20 10 30.12 71.3 66.1
19 15 30.35 66.9 62.7
20 25 30.30 66.9 60.0
20 10 30.17 61.0 54.0

Oct.

28 19 7 30.15 65.0 54.2
4 19 35 30.05 63.0 60.8
5 19 55 30.10 68.8 62.4
7 21 0 29.87 62.0 63.8
12

21 20 30.05 59.9 51.1
~~62.5~~
59.3

13 19 50 30.37 54.5 41.8
14 20 0 30.23 56.0 45.7
17 20 0 29.74 56.0 43.7
18 20 55 29.97 57.7 51.0
19 21 0 30.07 54.8 47.2
20 20 25 29.87 57.0 53.1
21 20 10 29.83 62.3 57.8
25 20 30 29.80 62.1 63.2
26

21 50 30.37 47.1 38.8
22 15 30.19 49.6 42.2
22 5 29.93 50.8 39.7
22 45 29.99 55.0 48.9
22 20 30.07 51.9 44.8
21 55 29.84 55.8 50.7
22 45 29.87 60.8 57.9

27 20 55 29.73 56.8 44.2
28 21 30 30.07 53.7 44.4
Nov. 2 22 10 29.79 36.2 30.5
3 22 45 29.83 40.8 33.2
4 21 45 29.73 42.1 32.8
6 21 15 30.12 44.0 57.2

22 30 29.73 49.1 42.5
23 25 29.82 35.3 29.6
0 0 29.83 38.3 31.9
23 0 29.73 38.9 30.8
23 20 30.12 40.1 34.2

1875	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Aug. 10	16 15	+0559	-0155	-2041	-1937	18 35	+0602	-0171	-1816	-1585
12										
14	16 45	+0545	-0194	-2390	-2039					
16										
25	18 10	+1063	-0143	-1067	-0147	18 45	+1049	-0137	-0974	-0062
26	16 55	+0991	-0159	-1443	-0611	19 10	+1006	-0135	-0974	-0103
28	17 25	+0818	-0164	-1725	-1071	19 25	+0818	-0146	-1285	-0613
29	17 15	+0574	-0173	-2357	-1956	19 25	+0559	-0165	-1783	-1389
30	17 45	+0530	-0176	-2013	-1659	19 25	+0545	-0164	-1725	-1344
31	17 45	+0775	-0169	-1733	-1127	19 45	+0804	-0150	-1376	-0722
Sept. 1	17 40	+0862	-0166	-1518	-0822	19 45	+0833	-0143	-1209	-0519
4	18 0	+0107	-0182	-2463	-2538	19 55	+0123	-0177	-2178	-2232
5	17 45	+0414	-0169	-2455	-2210	19 55	+0429	-0157	-1501	-1229
6										
7	17 55	+0617	-0138	-1526	-1067	20 0	+0646	-0140	-1059	-0553
8	18 5	+0746	-0159	-1758	-1171	20 10	+0761	-0151	-1468	-0858
13	18 25	+1078	-0133	-1277	-0332	19 15	+1092	-0135	-1185	-0228
14	18 55	+1049	-0140	-1185	-0276	20 25	+1020	-0135	-0957	-0072
25	18 40	+0487	-0121	-0907	-0541	20 10	+0833	-0112	-0419	+0270
28	19 7	+0804	-0128	-0466	-0210	21 20	+0660	-0108	-0202	+0350
Oct. 4	19 35	+0660	-0120	-1025	-0485	21 15	+0660	-0118	-0899	-0357
5	19 55	+0732	-0141	-1160	-0569					
7	21 0	+0399	-0116	-1277	-0994					
12										
13	19 55	+1121	-0087	+0602	+1636	21 50	+1121	-0059	+0865	+1927
14	20 0	+0919	-0093	+0263	+1089	22 15	+0862	-0068	+0567	+1361
17	20 0	+0502	-0093	+0439	+0848	22 5	+0487	-0072	+0785	+1200
18	20 55	+0545	-0100	-0193	+0252	22 45	+0574	-0089	-0013	+0472
19	21 0	+0689	-0088	+0133	+0734	22 20	+0689	-0077	+0341	+0953
20	20 25	+0399	-0097	-0373	-0071	21 55	+0356	-0092	-0167	+0097
21	20 10	+0341	-0117	-0771	-0547					
25	20 30	+1297	-0116	-1226	-1045	22 45	+0399	-0111	-0780	-0492
26										
27	20 35	+0196	-0096	+0393	+0493	23 30	+0196	-0066	+0541	+0671
28	21 30	+0689	-0084	+0375	+0980					
Nov. 2	22 10	+0283	-0017	+1600	+1866	23 25	+0326	-0013	+1681	+1974
3	22 45	+0341	-0034	+1359	+1666	0 0	+0341	-0025	+1475	+1791
4	21 45	+0196	-0039	+1396	+1553	23 0	+0196	-0027	+1573	+1742
6	21 15	+0761	-0047	+1005	+1719	23 20	+0761	-0031	+1270	+2070 +2540

	1875	Hour of P.M.	Bar	Att. Th.	Exp. Th.	Hour of P.M.	Bar	Att. Th.	Exp. Th.
Nov.	7	22 5	30.09	47.1	40.7				
	8	23 55	30.18	45.1	35.3	23 0	30.15	42.0	33.8
	9	20 50	30.30	47.0	36.9	0 10	30.29	39.1	32.5
	11	22 0	29.78	46.0	37.9	0 5	29.80	43.0	36.8
	17	22 25	29.87	32.0	27.1	0 30	29.70	29.9	24.8
	18								
	20	23 20	30.10	41.2	35.3	0 55	30.11	37.8	30.8
	21	0 0	30.19	41.2	37.4				
	22	22 50	30.67	33.7	32.1	1 15	30.67	27.0	20.0
	24	22 30	30.14	40.1	36.2				
	29	23 0	29.97	32.1	16.8	0 10	30.01	29.1	14.7
	30	23 45	30.12	18.0	1.4	0 10			1.2
Dec.	1	22 10	30.05	26.0	11.0	23 55	30.07	18.2	8.2
	2	21 55	31.37	23.1	14.8				
	6	22 15	29.72	38.6	30.6	1 35	29.71	33.0	27.0
	12	1 35	29.48	37.0	32.7	2 55	29.47	36.0	30.8
	13	0 10	29.18	37.0	33.2	2 0	29.22	35.0	31.7
	14	22 55	29.47	32.1	18.7	0 15	29.47	25.1	16.1
	15	0 45	29.70	31.4	22.4				
	18	0 0	29.74	25.0	8.3				
	1876								
Jan	3	1 48	29.97	45.3	37.4				
	4	2 0	30.43	33.0	19.1				
	5								
	5								
	7								
	10	0 20	29.52	43.2	31.3	4 25	29.58	28.0	22.4
	10	13 0	29.39	42.0	46.3				
	11	1 45	29.87	28.8	18.7	4 25	29.87	22.9	15.3
	11	13 0	29.59	20.0	13.6				
	11								
	11								
	12	2 15	29.82	28.0	21.8	4 40	29.84	24.7	17.7
	12	13 20	29.95	21.7	9.4	16 21	29.95	19.1	9.8
	13	2 0	30.14	24.7	12.3	3 2	30.14	21.0	11.3
	13	13 20	30.20	19.6	5.8	17 00	30.20	19.6	9.6
	18	14 10	29.37	43.8	32.5				
	19								
	19	14 10	29.52	43.7	36.9	17 10	29.48	39.2	36.1
	20	2 20	30.05	43.0	30.4	5 15	30.06	34.0	30.2
	20	14 20	30.05	34.1	27.9				

1875	Hour of R. A.	B	T	γ	B + T + γ	Hour of R. A.	B	T	γ	B + T + γ
Nov. 7	22 5	+0718	-0057	+0698	+1357					
8	22 55	+0847	-0051	+1174	+1970	23 0	+0847	-0039	+1307	+2115
9	20 50	+1020	-0059	+1032	+1993	0 10	+1006	-0027	+1422	+2401
11	22 0	+1268	-0054	+0944	+1158	0 5	+0297	-0043	+1040	+1294
17	22 25	+0399	\pm 0000	+1904	+2303	0 30	+0443	+0008	+2112	+2563
18										
20	23 20	+0732	-0036	+1174	+1870	1 55	+0746	-0023	+1573	+2296
21	0 0	+0718	-0036	+0987	+1669					
22	22 50	+1547	-0007	+2357	+3897 +2997	1 15	+1547	+0019	+2548	+4114
24	22 30	+0790	-0031	+1093	+1852					
29	23 0	+0545	\pm 0000	+2840	+3385	0 10	+0602	+0011	+3035	+3648
30	23 45	+1761	+0084	+4280	+6125	0 10	+0761	+0284	+4297	+5144
Dec. 1	22 10	+0660	+0045	+3377	+4082	23 55	+0689	+0052	+3639	+4380
2	21 55	+1121	+0034	+3026	+4181					
6	23 15	+0180	-0026	+1591	+1745 +1214	1 35	+0165	-0004	+1913	+2074
12	1 35	-0171	-0020	+1405	+2112	2 55	-0186	-0016	+1573	+1371
13	1 10	-0616	-0020	+1359	+0723	2 0	-0556	-0012	+1484	+0916
14	22 55	-0186	\pm 0000	+2668	+2432	0 15	-0186	+0026	+2904	+2744
15	0 45	+0151	+0002	+2330	+2483					
18	0 0	+0210	+0026	+3629	+3865					
1876										
Jan 3	1 48	+0545	-0052	+0987	+1480					
4	2 0	+1206	-0004	+2630	+3832					
5										
5										
7										
10	0 20	-0112	-0044	+1528	+1372	4 25	-0024	+0015	+2330	+2321
10	13 0	-0304	-0039	+0211	-0132					
11	1 45	+0399	+0018	+2668	+3055 +3079	4 25	+0399	+0034	+2980	+3413
11	13 0	+0429	+0045	+3136	+3610					
11										
12	2 15	+0326	+0015	+2384	+2725	4 40	+0356	+0027	+2576	+2959
12	13 20	+0516	+0037	+3525	+4080	16 21	+0516	+0049	+3488	+4053
13	2 0	+0790	+0027	+3256	+4073	3 2	+0790	+0041	+3350	+4181
13	13 20	+0876	+0047	+3862	+4785	17 00	+0876	+0047	+3506	+4429
18	14 10	-0334	-0046	-0322	-0702					
19										
19	14 10	-0112	-0046	+1032	+0874	17 10	-0245	-0028	+1102	+0829
20	2 20	+0660	-0043	+1609	+2226	5 15	+0674	-0008	+1627	+2293
20	14 20	+0674	-0008	+1832	+2498					

1876 Hourly Bar. Att. Th. Opt. Th.

Hourly Bar. Att. Th. Opt. Th.

Jan.

24									
24	14 20	30.17	24.7	10.2	17 10			11.6	
25	14 30	29.82	30.00	23.1	17 50			16.4	
26	3 0	30.18	28.8	18.1	5 30	30.21	22.7	16.2	
27	3 0	29.79	32.8	37.4	5 40	29.88	35.3	36.3	
27	14 10	30.04	33.1	30.8	17 50	29.88	35.3	36.3	
31	3 15	30.27	30.1	24.7	5 50	30.23	26.8	22.8	

Feb.

1									
2	4 30			9.1	5 20	29.82	18.0	8.2	
2	19 44	29.89	34.7	28.0					
3									
7	4 10	30.20	40.2	39.6					
7	18 32	30.38	36.8	38.0					
8	4 15	30.32	41.1	36.2					
15	16 20	29.45	38.9	31.3					
16	4 45	29.40	35.7	31.5					
16	17 0	29.51	36.4	31.0					
17	4 30	29.74	35.8	28.2	7 0	29.78	29.8	25.2	
17									
19	17 8	29.93	34.8	31.7	18 32			32.7	
19									
20	4 20	30.08	38.0	28.2	7 15	30.12	30.0	24.2	
20	17 00	30.08	38.0	19.0	18 30	30.22	23.8	21.2	
21	5 5	30.12	32.7	27.6					
22	17 8	29.78	33.4	31.3					
22	4 25	29.77	36.2	28.8	7 0	29.75	32.0	25.6	
23	4 45	29.75	21.0	6.6	5 25	29.75	18.0	4.8	
29	5 35	30.13	33.0	24.8	7 45	30.15	28.7	21.0	
29	17 00	30.16	28.7	15.0					

March

1									
2									
4	17 30	30.37	30.1	18.6	18 32			20.7	
4	20 10	30.38	29.7	21.6					
5	4 0	30.35	38.8	34.2	7 55	30.34	38.1	37.4	
6									
6	5 35	30.16	44.1	50.7	7 55	30.17	45.1	45.0	
6	17 39	30.07	43.2	43.8	18 32			47.4	
6									
6									
7	4 30	29.90	50.2	57.1	6 0	29.90	50.2	51.4	

1876	Hour of R. A.	B	T	γ	B+T+ γ	Hour of R. A.	B	T	γ	B+T+ γ
Jan 24										
24	14 20	+0833	+0027	+3451	+4311	17 10	+0833	+0027	+3322	+4182
25	14 30	+0326	+0008	+2266	+2600	17 50	+0326	+0008	+2877	+3211
26	3 0	+0847	+0012	+2722	+3581	5 30	+0890	+0035	+2895	+3820
27	3 0	+0288	+0008	+0957	+1267	5 40	+0414	-0013	+1084	+1485
27	14 10	+0646	-0004	+1573	+2215	17 30	+0414	-0013	+1377	+1778
31	3 15	+0977	+0008	+2120	+3105	5 50	+0919	+0020	+2294	+3233
Feb. 1										
2	4 30	+0326	+0053	+3553	+3932	5 20	+0326	+0053	+3637	+4018
2	19 44	+0429	-0011	+1823	+2241					
3										
7	4 10	+0876	-0032	+0794	+1638					
7	18 32	+1135	-0019	+0935	+2051					
8	4 15	+1049	-0035	+1093	+2107					
15	16 20	-0216	-0027	+1528	+1285					
16	4 45	-0290	-0015	+1511	+1206					
16	17 0	-0127	-0018	+1555	+1410					
17	4 30	+0210	-0015	+1805	+2000	7 0	+0268	+0009	+2075	+2352
17										
19	17 5	+0487	-0011	+1495	+1969	18 32	+0487	-0011	+1405	+1881
19										
20	4 20	+0703	-0024	+1805	+2484	7 15	+0761	+0008	+2166	+2935
20	17 00	+0905	+0031	+2639	+3575	18 50	+0905	+0031	+2530	+3466
21	5 5	+0761	-0004	+1859	+2616					
22	17 8	+0268	-0006	+1528	+1790					
22	4 25	+0253	-0017	+1752	+1988	7 0	+0224	+0000	+2039	+2264
23	4 45	+0224	+0041	+3787	+4062	5 25	+0224	+0053	+3956	+4233
29	5 35	+0775	-0004	+2112	+2883	7 45	+0804	+0013	+2456	+3272
29	17 00	+0818	+0012	+3007	+3837					
Mar. 1										
2										
4	17 30	+1121	+0008	+2677	+3806	18 32	+1121	+0008	+2484	+3613
4	20 10	+1135	+0009	+2402	+3546					
5	4 0	+1092	-0026	+1270	+2336	7 55	+1078	-0024	+0987	+2041
6										
6	5 35	+0818	-0047	-0167	+0604	7 55	+0833	-0051	+0324	+1106
6	17 39	+0689	-0044	+0430	+1075	18 32	+0689	-0044	+0116	+0761
6										
6										
6										
7	4 50	+0443	-0070	+0713	-0340	6 0	+443	-0070	-0227	+0146

1876	Hour of R.A.	Bar.	Alt. Th.	Exp. Th.	Hour of R.A.	Bar.	Alt. Th.	Exp. Th.
March	7	7 45	29.88	50.1	49.5			
	7							
	13	6 10	29.78	38.3	31.2	8 31	29.84	33.1
	13	18 32	29.97	25.3	20.3			
	14	4 30	30.06	31.8	27.4	5 40	30.06	31.8
	14	6 50		25.0	9 45	30.12	26.1	22.4
	14	17 10	30.12	24.5	11.8	20 48	30.11	19.8
	15	7 0		27.6	8 25	30.17	29.6	25.9
	15							
	18	6 55	29.67	28.1	13.2	7 50	29.69	20.8
	18							
	18							
	18							
	19	5 30	30 15	26.7	20.6	8 55	30.20	22.9
	19	18 0	30 32	23.1	11.0	18 32	30.32	23.1
	21	7 35	29 32	39.7	38.7	9 5	29.37	38.4
	21							
	21							
	21							
	22	5 30	29.82	39.2	32.6			
	22	17 44	30.03	31.0	24.0			
	22	18 30		24.4	19 48			27.0
	22							
	22							
	27	6 10	29.78	49.0	39.7			
	27	18 0	29.88	39.3	30.0	20 37		34.1
	27							
	27							
	29	8 55	29.42	48.1	40.8	10 1	29.43	45.3
	29	18 10	29.33	42.7	28.7	19 48		30.6
	29							
	29							
	30	7 50	29.56	41.1	33.2	10 1	29.57	37.2
	30	19 48	29.70	38.7	33.0			
April	1							
	1							
	2	5 48		49.6	6 45			47.8
	2	7 40	30.24	46.8	43.8	10 1	30.24	43.8

Omitted
Also only
to use

1876	Hour of R. A.	B	T	γ	B+T+ γ	Hour of R. A.	B	T	γ	B+T+ γ
Mar. 7	7 45	+0414	-0069	-0068	+0282					
7										
13	6 10	+0268	-0025	+1537	+1780	7 30	+0356	-0004	+1832	+2184
13	18 32	+0545	+0025	+2521	+3091					
14	4 30	+0674	+0001	+1877	+2552	5 40	+0674	+0001	+2066	+2741
14	6 50	+0761	+0022	+2094	+2877	9 45	+0761	+0022	+2330	+3113
14	17 10	+0761	+0028	+3304	+4093	20 48	+0746	+0046	+2558	+3350
15	7 0	+0833	+0009	+1859	+2701	8 25	+0833	+0009	+2012	+2854
15										
18	6 55	+0107	+0015	+3173	+3295	7 50	+0137	+0048 ²	+3525	+3708 ⁴
18										
18										
18										
19	5 30	+0804	+0020	+2494	+3318	8 55	+0876	+0034	+2877	+3787
19	18 0	+1049	+0034	+3377	+4460	18 32	+1049	+0034	+3294	+4357
21	7 35	-0408	-0030	+0873	+0435	9 5	-0334	-0025	+1182	+0823
21										
21										
21										
22	5 30	+0326	-0028	+1414	+1712					
22	17 44	+0631	+0004	+2185	+2820					
22	18 30	+0631	+0004	+2147	+2782	19 48	+0631	+0004	+1913	+2548
22										
22										
27	6 10	+0268	-0066	+0785	+0987					
27	18 0	+0414	-0028	+1645	+2031	20 37	+0414	-0028	+1279	+1665
27										
27										
29	8 55	-0260	-0062	+0690	+0868	10 1	-0245	-0032	+0899	+0602
29	18 10	-0393	-0042	+1761	+1326	19 48	-0393	-0042	+1591	+1156
29										
29										
30	7 50	-0054	-0035	+1359	+1270	10 1	-0039	-0021	+1546	+1486
30	19 48	+0151	-0026	+1377	+1502					
Apr. 1										
1										
2	5 48	+0934	-0058	+0072	+0804	6 45	+0934	-0058	+0082	+0958
2	7 40	+0934	-0058	+0430	+1306	10 1	+0934	-0046	+0953	+1841

April

1876	Hour	Bar	Att. Sh.	Exp. Sh.	Hour	Bar	Att. Sh.	Exp. Sh.
4	8 15	29.90	44.9	40.8	10 15	29.92	43.1	39.4
6	19 40	29.87	35.8	32.4				
9	8 0	29.87	41.1	37.2	10 5	29.88	39.2	34.9
9	19 44	29.84	34.4	27.8	8 15	29.97	43.6	41.8
10	7 30			43.4	18 30	29.97	39.1	34.2
10	10 20	29.98	43.0	37.9				
10	19 40	29.97	39.1	36.1	9 0	30.01	49.1	47.6
11	7 30	30.00	49.1	57.7	19 40	29.97	43.8	36.3
11	10 20	30.02	48.8	45.4	20 40	29.93	46.2	37.6
17	19 40	29.93	46.2	33.7				
17	22 58	29.93	46.2	44.3				
20	8 50	30.07	53.1	52.2				
30								

May

1	9 40	29.62	48.3	43.4	12 15	29.59	44.1	41.3
1	20 37	29.71	45.9	43.2				
3	20 37	30.07	46.9	35.7	1 12	30.12	57.2	48.8
16	10 35	31.37	59.9	52.5	13 20	30.40	53.2	47.2
16	21 59	30.43	62.9	44.8	22 58			48.7
16	1 15			51.2 51.2				
17	11 40	31.34	53.1	49.8	12 40	30.35	53.2	48.2
21	11 0	29.84	64.1	65.1	12 5			62.3
21	13 18	29.80	63.2	65.0	21 59	29.75	60.6	60.3
21	22 50			65.0				
23	11 1	30.12	60.8	56.3	13 50	30.16	54.9	49.0
23	21 59	30.17	54.0	44.0	0 0			52.3
24	10 35	30.06	63.9	67.0	13 25	30.05	62.0	56.9
24	0 1	29.97	59.8	66.1				
25	11 0	29.97	68.0	65.5	18 45	30.03	61.1	55.2
25	22 58			46.0	0 1	30.16	54.9	51.0
25	1 15			55.2				
29	22 50	29.99	60.2	48.3	0 1			57.3
29	1 12			65.2				
30	11 50	30.17	62.8	67.5	14 5	30.20	54.2	45.7
30	22 58	30.29	53.2	45.7	1 18	30.30	53.3	61.0 ✓
31	11 45	30.24	63.8	59.8	13 15	30.23	59.8	52.7
31	21 59	30.15	64.5	42.0	22 58			46.8
31	0 1			57.8	1 20			56.1 57.1

	Hour of R.A.	B	T	γ	$B+T+\gamma$	Hour of R.A.	B	T	γ	$B+T+\gamma$
Apr 6	8 15	+0443	-0057	+0690	+1082	10 15	+0472	-0043	+0811	+1240
6	19 40	+0399	-0015	+1431	+1815					
9	8 0	+0399	-0035	+1005	+1369	10 5	+0414	-0028	+1208	+1594
9	19 44	+0356	-0010	+1841	+2187					
10	7 30	+0545	-0045	+1464	+0964	8 15	+0545	-0045	+0602	+1102
10	10 20	+0559	-0043	+0944	+1460	18 30	+0545	-0027	+1270	+1788
10	19 40	+0545	-0027	+1102	+1620					
11	7 30	+0888	-0066	-0253	+0269	9 0	+0602	-0066	+0099	+0635
11	10 20	+0617	-0065	+0289	+0841	19 40	+0545	-0046	+1084	+1583
17	19 40	+0487	+0055	+1316	+1748	20 40	+0487	-0055	+0970	+1402
17	22 58	+0487	+0055	+0384	+0816					
20	8 30	+0689	-0081	-0124	+0884					
30										
May 1	9 40	+0034	-0063	+0464	+0435	12 15	-0009	-0047	+0645	+0589
1	20 37	+0165	+0054	+0480	+0591					
3	20 37	+1689	+0059	+1139	+1769	1 12	+0761	-0098	-0005	+0658 +0507
16	10 35	+1121	-0108	-0322	+0691	13 20	+1163	-0082	+0133	+1214
16	21 59	+1206	-0073	+0341	+1474	22 58	+1206	-0073	+0004	+1137
16	1 15	+1206	-0073	-0210 -1009	+0923					
17	11 40	+1078	-0089	-0089	+0900	12 40	+1092	-0082	+0047	+1057
21	11 0	+0356	-0124	-1384	-1152	12 5	+0356	-0124	-1162	-0920
21	13 18	+0297	-0121	-0957	-0781	21 59	+0224	-0110	-0982	-0868
21	22 50	+0224	-0110	-1376	-1262					
23	11 0	+0761	-0111	-0645	+0005	13 50	+0818	-0089	-0021	+0708
23	21 59	+0833	-0085	+0411	+1159	0 0	+0833	-0085	-0305	+0443
24	10 35	+0674	-0124	-1543	-0993	13 25	+0660	-0116	-0695	-0151
24	0 1	+0545	-0107	-1468	-1030					
25	11 0	+0545	-0138	-1418	-1011	13 45	+0631	-0112	-0551	-0032
25	22 58	+0818	-0089	+0237	+0966	0 1	+0818	-0089	-0193	+0536
25	1 15	+0818	-0089	-0551	+0178					
29	22 50	+0574	-0109	+0038	+0503	0 1	+0574	-0109	-0219	+0246
29	1 12	+0574	-0109	-0551	-0086					
30	11 50	+0833	-0119	-0236	+0478	14 5	+0876	-0086	+0263	+1053
30	22 58	+1606	-0082	+0263	+1187	1 18	+1020	-0082	-1042	-0104
31	11 45	+0934	-0123	-0941	-0130	13 15	+0919	-0107	-0339	+0473
31	21 59	+0804	-0087	+0585	+1302	22 58	+0804	-0087	+0168	+0885
31	0 1	+0804	-0087	-0261	+0456	1 20	+0804	-0087	-1050 -0628	-0333 +0289

1876	Hour & P.M.	Bar.	Act. Sh.	Exp. Sh.	Hour & P.M.	Bar.	Act. Sh.	Exp. Sh.
1	11 30	30.00	60.9	52.6	13 25	2998	58.6	50.6
5	13 20	29.87	63.2	57.6	0 1	2988	60.0	59.4
6	22 58	30.02	61.8	57.1	0 2			59.7
7	12 30	30.11	68.8	66.8	14 25	30.13	66.0	60.5
7	22 58	30.19	63.1	53.8	0 2			58.4
13	12 55	30.23	71.2	71.7	14 45	30.25	69.9	66.8
14	13 0	30.14	73.6	71.2	14 45	30.15	72.0	67.7
15	13 25	30.20	36.1	74.4	14 15	30.22	75.5	72.4
15	22 50			66.0	0 1	30.23	68.1	68.3
15	1 12			73.9				
10	1 13	30.03	777	74.2	4 28			83.5
10	5 7			87.2				
12	14 40	29.98	85.7	81.3	16 20	2998	82.7	78.5
12	4 30	30.01	79.1	84.9	5 7			86.2
13	13 18			92.0	14 9	2997	88.1	91.4
13	15 0			82.0				
17	13 18	30.15	88.7	87.4	14 51	30.16	83.3	82.1
17	17 5	30.17	80.3	74.8				
18	5 5	30.04	81.2	85.2	5 55			86.8
19	13 20	30.27	88.0	81.2	14 43			80.1
19	16 40	30.27	82.0	76.2				
19	5 5	29.98	80.1	87.9				
22	16 0	30.07	74.0	65.1	17 30	30.07	69.3	64.4
23								
24	15 0	29.90	74.3	72.2	17 30	29.91	70.2	63.2
24	2 55			60.0				
24	5 10			68.2	6 25	2998	68.3	71.3
25	16 10	30.06	73.1	65.0	17 40			62.8
25	5 50	30.12	67.2	63.7				
26	14 9	30.16	71.7	67.4	15 0	30.18	70.7	65.8
26	17 30	30.20	66.0	60.9				
26	5 10	30.27	64.9	67.1				
31	4 28	30.10	65.2	65.8	5 17			69.0
31	6 40			71.2				
1	15 40	30.22	72.9	67.1	17 30	30.23	69.1	64.2
1	2 55	30.30	67.8	60.1	5 7			69.4
1	6 40			73.4				
2	16 20	30.35	75.1	68.6	17 30	30.30	73.2	65.8
2	4 28	30.37	69.7	63.1	5 48			68.4

1876	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
June	11 30	+0588	-0112	-0830	+0146	13 25	+0559	-0103	-0158	+0298
	5 13 20	+0399	-0121	-0708 ⁵⁵	-0477 -0485	0 1	+0414	-0108	-0907	-0601
	6 22 58	+0617	-0115	-0713	-0211	0 2	+0617	-0115	-0932	-0430
	7 12 30	+0746	-0141	-1526	-0921	14 25	+0775	-0131	-1000	-0356
	7 22 58	+0862	-0120	-0432	+0310	0 2	+0862	-0120	-0823	-0081
	13 12 55	+0919	-0151	-1931	-1163	14 45	+0948	-0146	-1526	-0724
	14 13 0	+0790	-0160	-1890	-1260	14 45	+0804	-0154	-1601	-0951
	15 13 25	+0876	-069 -026	-2153	-1446 -1293	14 15	+0905	-0167	-1989	-1251
	15 22 30	+0919	-0138	-1460	-0679	0 1	+0919	-0138	-1651	-0870
	15 1 12	+0919	-0138	-2112	-1331					
July	10 1 13	+0631	-0176	-2136	-1681	4 28	+0631	-0176	-2892	-2437
	10 5 7	+0631	-0176	-3189	-2734					
	12 14 40	+0559	-0206	-2714	-2361	16 20	+0559	-0196	-2487	-2124
	12 4 30	+0602	-0181	-3004	-2583	5 7	+0602	-0181	-3109	-2688
	13 13 18	+0543	-0215	-3573	-3243	14 9	+0545	-0215	-3525	-3195
	13 18 0	+0545	-0215	-2771	-2241					
	17 13 18	+0804	-0200	-3205	-2601	14 51	+0818	-0198	-2779	-2159
	17 17 5	+0833	-0186	-2186	-1539					
	18 5 5	+0646	-0190	-3029	-2573	5 55	+0646	-0190	-3157	-2701
	19 13 20	+0689	-0215	-2706	-2232	14 43	+0689	-0215	-2617	-2143
	19 16 40	+0689 -0777	-0193	-2300	-1804 -3572					
	19 5 5	+0559	-0185	-3245	-2871					
	22 16 0	+0689	-0162	-1384	-0857	17 30	+0689	-0143	-1327	-0781
	23									
	24 15 0	+0443	-0163	-1972	-1692	17 30	+0457	-0147	-1226	-0916
	24 2 55	+0559	-0139	-0957	-0537					
	24 5 10	+0559	-0139	-1642	-1222	6 25	+0559	-0139	-1816	-1396
	25 16 10	+0674	-0158	-1376	-0860	17 40	+0674	-0158	-1152	-0636
	25 5 50	+0761	-0136	-1268	-0643					
	26 14 9	+0818	-0153	-1576	-0911	15 0	+0847	-0149	-1443	-0745
	26 17 30	+0876	-0131	-1033	-0288					
	26 5 10	+0977	-0128	-1551	-0702					
	31 4 28	+0732	-0129	-1443	-0840	5 17	+0732	-0129	-1709	-1106
	31 6 40	+0732	-0129	-1890	-1287					
Aug	1 15 40	+0905	-0158	-1557	-0804	17 30	+0919	-0142	-1310	-0533
	1 2 55	+1020	-0137	-0966	-0083	5 7	+1020	-0137	-1742	-0859
	1 6 40	+1020	-0137	-2071	-1188					
	2 16 20	+1092	-0166	-1675	-0749	17 30	+1020	-0159	-1443	-0582
	2 4 28	+1121	-0145	-1217	-0241	5 48	+1121	-0145	-1659	-0683

1876	Young	Bar.	Alt. H.	Exp. H.	Young	Bar.	Alt. H.	Exp. H.
	H. A.					H. A.		
2	6 39			72.0				
3	15 40	30.27	75.0	68.2	18 40	30.27	69.8	63.7
3	4 28	30.25	67.4	63.9	5 48			70.4
3	7 5			86.1				
5	16 25	30.17	80.7	79.6	18 5	30.18	78.8	75.1
6	17 5	30.16	82.9	80.7	18 30	30.18	78.9	78.3
6	5 7	30.10	77.2	80.1	5 48			82.4
7	5 18	30.05	78.9	79.8				
8	17 10	30.04	82.6	77.2	18 40	30.06	79.9	73.8
8	5 17	30.17	75.0	72.1	5 48			73.8
8	6 40			77.3				
9	17 8	30.17	79.1	72.2	18 40	30.18	77.2	69.6
9	5 8	30.23	73.1	70.3	6 40			75.2
10	17 0	30.24	80.2	73.3	18 40	30.23	75.8	69.4
10	4 28	30.27	72.8	67.9	5 7			70.5
12	17 0	30.24	82.0	74.5	18 30	30.26	77.9	72.3
12	4 28	30.24	74.9	70.8	5 7			73.1
13	16 55	30.22	81.1	75.8	18 55	30.22	78.3	72.8
13	16 55	30.22	81.1	75.8				
15	17 15	29.78	79.6	73.5	18 10	29.82	78.9	72.8
15	5 8	29.97	76.1	70.8				
21	17 5	30.01	66.8	58.3	19 0	30.03	63.8	55.8
21	5 8	29.98	61.8	56.2				
23	17 30	29.97	71.1	64.9	18 30			65.0
23	7 25	30.13	66.6	65.9				
23	17 8	30.17	70.4	60.7	19 5	30.18	65.0	57.2
24	7 35	30.04	70.6	76.1				
26	18 20	29.93	75.2	67.8	19 55	29.93	73.1	66.8
26	5 8	29.94	68.2	66.8	7 37			67.4
27	6 39	30.70	66.6	60.8	7 35			62.9
28	17 10	30.04	73.2	67.8	19 45	30.16	68.4	61.7
28	5 8			65.3	7 26	30.05	63.9	64.9
29	17 30	30.03	72.7	67.8	19 15	30.04	69.1	62.1
29	6 39	30.03	65.4	66.3	8 7			69.3
30	17 50	29.93	74.8	71.0	19 55	29.94	73.0	61.1
30	6 39	29.96	66.8	64.4	7 40			69.0
31	7 35	29.91	71.0	73.8				

1876	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Aug 2	6 39	+1121	-0145	-1956	-0980	18 40	+0977	-0145	-1268	-0436
3	15 40	+0977	-0166	-1642	-0831	18 40	+0977	-0145	-1268	-0436
3	4 28	+0948	-0136	-1285	-0473	5 48	+0948	-0136	-1824	-1012
3	7 5	+0948	-0136	-3101	-2289					
5	16 25	+0833	-0188	-2876	-1931	18 5	+0847	-0180	-2210	-1543
6	17 5	+0818	-0197	-2665	-2044	18 50	+0847	-0181 +0249	-2471	-1805 -1575
6	5 7	+0732	-0174	-2607	-2059	5 48	+0732	-0174	-2803	-2245
7	5 18	+0660	-0181	-2592	-2113					
8	17 10	+0646	-0195	-2382	-1931	18 40	+0674	-0185	-2103	-1614
8	5 17	+0833	-0166	-1964	-1297	5 48	+0833	-0166	-2103	-1436
8	6 40	+0833	-0166	-2390	-1723					
9	17 8	+0833	-0181	-1972	-1320	18 40	+0847	-0174	-1758	-1085
9	5 8	+0919	-0158	-1807	-1046	6 40	+0919	-0158	-2218	-1457
10	17 0	+0934	-0186	-2063	-1315 -1515	18 40	+0919	-0168	-1742	-0991
10	4 28	+0977	-0157	-1618	-0798	5 7	+0977	-0157	-1832	-1012
12	7 0	+0934	-0193	-2162	-1421	18 50	+0962	-0177	-1980	-1195
12	4 28	+0934	-0166	-1857	-1089	5 7	+0934	-0166	-2046	-1278
13	16 55	+0905	-0189	-2267	-1551	18 55	+0905	-0178	-2021	-1294
13	16 55	+0905	-0189	-2267	-1551					
15	17 15	+0268	-0183	-2079	-1994	18 10	+0326	-0181	-2021	-1876
15	5 8	+0545 +0597	-0169	-1857	-1481 -1627					
21	17 5	+0602	-0134	-0815	-0347	19 0	+0631	-0123	-0603	-0095
21	5 8	+0559	-0115	-0636	-0192					
22	17 30	+0545	-0150	-1368	-0973	18 30	+0545	-0150	-1376	-0981
22	7 25	+0775	-0133	-1451	-0809					
23	17 8	+0833	-0148	-1017	-0332	19 5 19 5	+0847 +0847	-0128 -0128	-0721 -0721	-0002 -0002
24	7 35	+0646	-0148	-2292	-1794					
26	18 20	+0487	-0167	-1609	-1289	19 55	+0487	-0158	-1526	-1197
26	5 8	+0502	-0139	-1526	-1163	7 37	+0502	-0139	-1576	-1213
27	6 39	+1589	-0133	-1025	+0431	7 35	+1589	-0133	-1202	+0254
28	17 10	+0646	-0159	-1609	-1122	19 45	+0674	-0140	-1100	-0566
28	5 8	+0660	-0124	-0560	-0024	7 26	+0660	-0124	-1368	-0832
29	17 30	+0631	-0157	-1609	-1135	19 15	+0646	-0142	-1135	-0631
29	6 39	+0631	-0129	-1488	-0953	8 7	+0631	-0129	-1733	-1231
30	17 50	+0487	-0165	-1874	-1552	19 55	+0502	-0158	-1050	-0706
30	6 39	+0530	-0134	-1327	-0931	7 40	+0530	-0134	-1709	-1313
31	7 35	+0457	-0150	-2103	-1796					

1876	Hour of Obs.	Bar.	Alt. Th.	Exp. Th.	Hour of Obs.	Bar.	Alt. Th.	Exp. Th.
2	17 55	29.78	73.2	65.0	20 5	29.86	68.6	60.8
2	20 40			60.2	6 39	29.98	63.6	60.0
2	1 37			61.8				
2				62.0				
3	13 18	29.97	72.5	73.5	15 37			72.4
3	18 35	29.98	71.4	63.8	20 5	30.00	68.0	60.6
8	6 39	29.97	65.1	61.2	7 37			64.5
4	5 17	29.95	67.6	53.3	7 20	29.97	64.9	58.2
6	18 5	30.06	66.8	63.3	20 0	30.07	64.1	58.8
2	19 20	29.86	61.1	53.3	21 55	29.90	56.1	47.9
2	6 40	29.89	52.1	39.0		29.88	51.0	40.3
3	18 30	29.79	57.4	52.9	21 30	29.83	57.1	52.3
3	6 50	29.82	56.7	50.9	7 37			52.7
9	19 0	30.13	54.9	44.8	20 40	30.10	49.8	40.1
9	7 0	29.90	47.7	37.3	8 50			41.2
10	19 15	29.63	56.8	56.2	21 55	29.63	53.8	52.8
10	7 0	29.74	57.9	39.5	7 40			38.8
11	18 30	30.03	52.8	43.8	19 55	30.07	51.1	40.7
12	19 25	30.20	53.9	45.1	21 55	30.18	48.1	41.8
15	19 45			32.2	22 30	29.71	36.2	30.9
15	7 26	29.79	39.2	30.7	13 20	29.80	44.1	42.9
16	20 15	29.75	49.2	42.9	22 0	29.73	47.0	41.8
16	7 30	30.11	43.7	43.7				
17	20 0	29.82	45.0	40.3	22 30	29.85	43.1	37.9
17	10 0	30.00	45.8	38.4	11 45			42.2
17	13 45			48.0				
18	20 5	30.03	53.0	46.4	22 5	30.04	49.6	42.8
18	10 0	30.02	45.8	46.0	7 30			36.9
19	20 10	30.14	53.1	46.2	22 30	30.15	31.9	42.8
						30.15		
24	21 25	29.57	61.1	54.7	23 35	29.58	57.9	50.1
24	10 00	29.57	52.9	47.6	13 5			56.7
25	20 20	29.67	58.9	48.1	23 10	29.71	51.2	43.3
26	9 21	30.07	49.9	34.4	10 0			36.8
28	21 30	30.03	49.9	39.6	10 0	30.03	40.9	27.9
28	13 13			38.1				
29	20 8	30.03	47.1	42.1	23 45	30.07	42.8	36.9
29	7 50	30.14	40.0	28.1	9 21			29.6
29	11 40	30.19	38.2	35.4				
30	20 0	30.22	51.3	48.0	22 55	30.23	48.1	39.5

1871phae.proj.1.4

1876	Month	B	T	J	B+T+J	Month	B	T	J	B+T+J		
Sept.	2	17 55	+0268	-0159	-1376	1267 -1297	20	5	+0384	-0140	-1025	-0781
	2	20 40	+384	-140	-0974	-0730	6	37	+0559	-0122	-0957	-0520
	2	7 37	+0559	-0122	-1109	-672						
	2				-1126							
	3	13 18	+0545	-0156	-2079	-1690	15	37	+0545	-0156	-1989	-1600
	3	18 35	+0559	-0152	-1277	-0870	20	5	+0588	-0138	-1008	-0558 -0560
	3	6 37	+0545	-0128	-1059	-0642	7	37	+0545	-0128	-1325	-0918
	4	5 17	+0576	-0137	-0390	-0011	7	30	+0545	-0128	-0806	-0389
	6	18 5	+0674	-0134	-1234	-0694	20	0	+0689	-0124	-0858	-0293
Oct.	2	19 20	+0384	-0112	-0390	-0118	21	55	+0443	-0093	+0073	+0423
	2	6 40	+0429	-0077	+0847	+1199 -0475	7	40	+0414	-0073	+0733	+1074
	3	18 30	+0283	-0299	-0336	-0172	21	30	+0341	-0097	-0205	-0061
	3	6 50	+0326	-0096	-0184	+0046	7	37	+0326	-0096	-0339	-0109
	9	19 0	+0775	-0089	+0341	+1027	20	40	+0732	-0068	+0750	+1414
	9	7 0	+0443	-0061	+0996	+1378	8	50	+0443	-0061	+0654	+1036
	10	19 15	+0050	-0096	-0636	-0682	21	55	+0050	-0092	-0348	-0390
	10	7 0	+0210	-0073	+0803	+0940	7	40	+0210	-0073	+0865	+1002
	11	18 30	+0631	-0080	+0430	+0981	19	55	+0689	-0073	+0698	+1314
	12	19 25	+0876	-0085	+0315	+1106	21	55	+0847	-0062	+0602	+1387
	15	19 45	+0165	-0017	+1448	+1596	22	30	+0165	-0017	+1564	+1712
	15	7 26	+0283	-0028	+1582	+1837	13	20	+0297	-0047	+0507	+0757
	16	20 15	+0224	-0067	+0507	+0664	22	0	+0196	-0059	+0602	+0739
	16	7 30	+0746	-0046	+0439	+1139						
	17	20 0	+0326	-0062	+0733	+0997	22	30	+0370	-0043	+0944	+1271
	17	10 0	+0888	-0053	+0899	+1434	11	45	+0588	-0053	+0567	+1102
	17	13 45	+0588	-0053	+0064	+599						
	18	20 5	+0631	-0081	+0202	+0752	22	5	+0646	-0068	+0516	+1094
	18	10 0	+0617	-0053	+0759	+1323	7	30	+0617	-0053	+1032	+1596
	19	20 10	+0790	-0081	+0219	+0928	22	30	+0804	+0000	+0516	+1320
	24	21 25	-0039	-0112	-0508	-0659	23	35	-0024	-0101	-0116	-0241
	24	10 00	-0039	-0081	+0099	-0021	13	5	-0039	-0081	-0679	-0799
	25	20 20	+0107	-0104	+0053	+0058	23	10	+0165	-0074	+0472	+0563
	26	9 21	+0689	-0069	+1252	+1872	10	0	+0689	-0069	+1040	+1660
	28	21 30	+0631	-0069	+0794	+1356	10	0	+0631	-0035	+1832	+2428
	28	13 13	+0631	-0035	+0926	+1522						
	29	20 8	+0631	-0059	+0576	+1148	23	45	+0689	-0042	+1032	+1679
	29	7 50	+0790	-0031	+1814	+2573	9	21	+0790	-0031	+1681	+2440
	29	11 40	+0862	-0025	+1163	+2002						
	30	20 0	+0905	-0074	+0064	+0895	23	55	+0919	-0062	+0803	+1660

	1876	Hour of Obs.	Bar.	Alt. Th.	Exp. Th.		Hour of Obs.	Bar.	Alt. Th.	Exp. Th.
Oct.	31	22 0	30.13	52.0	50.0 54.8		23 30	30.02	51.8	57.0
	31	10 0	30.07	49.9	44.8 54.8		13 30	30.07	52.3	55.9
	31	11 10			56.3					
Nov.	1	13 0	29.79	54.3	60.2					
	2	20 10	29.72	60.4	54.8					
	4	20 15	30.13	57.2	57.2		0 10	30.19	56.1	43.2
	5	19 45	30.33	54.1	46.4		23 15	30.33	45.3	37.6
	5	10 1	30.40	58.9	28.7					
	12	20 50	29.76	48.7	43.7		0 20	29.80	46.1	41.7
	12	11 42	29.83	45.0	40.6		14 10	29.84	46.1	46.9
	13	20 10	29.83	57.1	47.4		0 45			39.8
	15	22 45	30.10	43.1	35.0					
Dec.	4	23 25	30.02	36.9	32.2		2 30			30.8
	4	13 20	30.02	33.7	32.0					
	5	21 45	29.96	41.3	36.8		2 0	29.97	34.9	29.3
	5	13 20	29.94	31.6	23.2					
	6	21 40	29.76	39.9	35.1		2 30	29.72	53.0	29.7
	6	14 42	29.63	34.6	26.2					
	7	21 50	29.49	40.9	35.7		13 12	29.54	33.2	30.2
	7	23 0			35.0					
	7	15 30	29.58	36.1	33.2					
	9	13 20	29.88	20.2	4.0		15 29			7.9
	10	21 50			9.8		1 20	30.15	17.0	3.8
	12	3 0	29.73	35.2	25.2		3 55	29.73	33.1	23.9
	13	20 30	29.66	38.3	41.0		3 0	29.74	39.8	38.7
	14	1 30	29.75	39.0	36.9		2 15	29.74	39.1	36.5
	14	13 20	29.66	38.3	36.7					
	18	14 9	29.82	19.8	4.9					
	19	0 0	29.92	26.0	16.1		3 10	30.02	20.1	16.1
	19	13 20	30.24	24.8	2.6		15 29			4.4
	23	23 15	29.93	28.0	24.3		3 0	29.96	24.1	16.7
	23	13 18	30.07	20.2	5.2		15 29			8.7
	24	22 55	30.14	21.1	15.5		2 55	30.16	18.0	12.7
	24	14 9	30.21	18.0	5.8					
	26	15 30	29.92	30.3	27.2					
	27	22 58	29.93	33.7	27.6		3 15	29.97	26.1	20.2
	27	13 20	30.77	24.1	12.8					

1876	Hour of R.A.	B	T	γ	$B+T+\gamma$	Hour of R.A.	B	T	γ	$B+T+\gamma$
Oct. 31	22 0	+0631	-0077	-0107 +0759	+0447 +1373	23 30	+0617	-0073 ⁶	-0193	+0348 +035X
31	10 0	+0689	-0069	-0517 +0341	+0103 +0761	13 30	+0689	-0078	-0611	0000
31	14 10	+0689	-0078	-0645	-0034					
Nov 1	13 0	+0283	-0086	-0974	-0777					
2	20 10	+0180	-0110	-0517	-0447					
4	20 15	+0775	-0098	-0210	+0467	0 10	+0862	-0069	+0480	+1273
5	19 45	+1063	-0085	+0202	+1180	23 15	+1063	-0082	+0970	+1981
5	10 0	+1163	-0104	+1761	+2820					
12	20 50	+0238	-0065	+0489	+0612	0 20	+0297	-0054	+0611	+0854
12	11 42	+0341	-0051	+0707	+0997	14 10	+0356	-0054	+0159	+0461
13	20 10	+0341	-0073	+0116	+0384	0 45	+0341	-0073	+0777	+1045
15	22 45	+0732	-0043	+1199	+1888					
Dec. 4	23 25	+0617	-0020	+1448	+2045	2 30	+0617	-0020	+1573	+2170
4	13 20	+0617	-0007	+1466	+2076					
5	21 45	+0630	-0036	+1040	+1534	2 0	+0545	-0012	+1708	+2241
5	13 20 ⁵	+0602	+0002	+2257	+2761					
6	21 40	+0238	-0031	+1191	+1398	2 30	+0180	-0081	+1672	+1771
6	14 42	+0050	-0010	+1985	+2025					
7	21 50	-0156	-0035	+1139	+0948 +0908 +1008	13 12	-0083	-0013	+1627	+1531
7	23 0	-0156	-0035	+1199						
7	15 30	-0024	-0016	+1359	+1319					
9	13 20	+0414	+0044	+4032	+4490	15 29	+0414	+0044	+3666	+4124
10	21 50	+0804	+0057	+3488	+4349	1 20	+0804	+0057	+4051	+4912
12	3 0	+0196	-0013	+2075	+2258	3 55	+0196	-0004	+2194 +4042	+2386 +4284
13	20 30	+0092	-0025 ⁵	+0672	+0748 +0739	3 0	+0210	-0030	+0873	+1053
14	1 30	+0224	-0027	+1032	+1229	2 15	+0210	-0027	+1066	+1249
14	13 20	+0092	-0025	+1049	+1126					
18	14 9	+0326	+0046	+3947	+4319					
19	0 0	+0472	+0022	+2904	+3398	3 10	+0617	+0045	+2904	+3566
19	13 20	+0934	+0027	+4165	+5126	15 29	+0934	+0027	+3994	+4955
23	23 15	+0487	+0015	+2157	+2659	3 0	+0530	+0030	+2849	+3409
23	13 18	+0689	+0045 ⁴	+3919	+4658 ²	15 29	+0689	+0044	+3590	+4323
24	22 55	+0790	+0041	+2961	+3792	3 55	+0818 +0818	+0053	+3219	+4090
24	14 9	+0890	+0053	+3862	+4805					
26	15 30	+0472	+0007	+1895	+2374					
27	22 50	+0487	-0007	+1859	+2339	3 15	+0545	+0022	+2530	+3097
27	13 20	+0689	+0030	+3209	+3928					

1877	Hour of R.T.	Bar.	Alt. Sh.	Exp. Sh.	Hour of R.T.	Bar.	Alt. Sh.	Exp. Sh.
2	22 50	29.47	28.0	18.0	4 0	29.58	20.1	14.2
2	13 20	29.74	18.0	8.3	14 9			10.1
3	13 30	29.75	18.0	8.3	15 30			4.3
4	23 45	29.77	21.3	12.8	4 0	29.75	17.0	8.7
4	13 30	29.88	17.0	3.8				
8								
10	13 30	30.07	24.1	13.2	15 30			13.7
11	14 10	30.16	28.7	21.1	15 37			16.2
13	0 45	29.75	26.9	11.5	4 30	29.78	18.0	8.0
14	2 40	30.02	23.1	14.2	4 25	30.07	21.3	10.7
14	14 9	30.17	21.0	6.0				
15								
20	3 0	29.41	37.2	40.6	5 15	29.57	39.6	37.1
21	2 55	30.23	31.0	22.1	5 10	30.26	29.1	21.4
21								
22								
23	2 1	30.15	33.7	23.0	5 11	30.11	27.0	16.8
23	14 0	29.84	25.0	7.3	15 30	29.80	22.0	5.2
24	2 55	29.75	25.7	18.6	15 30	29.97	19.7	2.1
25	14 9	30.19	18.7	7.7	15 29			6.8
29	18 30	30.34	30.8	28.4				
30	3 0	30.43	39.0	60.3	6 5	30.42	34.1	27.9
30	19 45	30.32	33.1	35.9	15 38	30.32	30.2	28.0
1	5 15			40.7	6 10	29.85	40.9	42.8
1	15 29	30.23	36.3	41.3				
3	2 30	30.07	46.3	41.3	6 15	30.08	40.8	34.6
4	3 10	30.15	42.0	35.8	6 5	30.22	38.0	31.9
5	3 55	29.91	40.6	33.9	6 50	29.86	36.1	31.3
5	16 20	29.83	34.6	29.3	20 40	29.87	36.0	36.3
6	2 30	29.92	40.8	36.8	6 15	29.92	37.2	30.6
6	15 30	29.82	34.1	25.2	18 30			29.7
7	15 30	29.86	38.0	32.3	17 0	30.06		
8	3 20	29.97	37.7	29.8	6 45	30.09 29.99	33.0	25.3
8	16 20	29.99	31.0	17.1				17.8
10	2 55	30.06	37.8	31.8				
11	3 50	30.24	46.5	32.7	6 50	30.13	34.9	29.3
12	15 30	29.93	30.3	17.6	18 35			15.9
12	19 40			17.4				
13	3 30	30.12	28.1 25.6	15.6 25.1	4 30	30.13	24.0	15.6
14	4 5	30.32	33.1	28.2	6 50	30.23	30.2	24.4

1877	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Jan	2 22 50	-0186	+0015	+2731	+2560	4 0	-0024	+0045	+3081	+3102
	2 13 30	+0210	+0053	+3629	+3892	14 9	+0210	+0053	+3460	+3723
	3 15 30	+0224	+0053	+4098	+4375	15 30	+0224	+0053	+4003	+4280
	4 23 45	+0253	+0040	+3209	+3502	4 0	+0224	+0057	+3590	+3871
	4 13 30	+0414	+0057	+4051	+4522					
	8									
	10 13 30	+0689	+0020	+3173	+3892	15 30	+0689	+0030	+3127	+3846
	11 14 10	+0818	+0012	+2447	+3277	15 37	+0818	+0012	+2895	+3725
	13 0 45	+0224	+0019	+3331	+3574	4 30	+0268	+0053	+3657	+3978
	14 2 40	+0617	+0034	+3081	+3732	4 25	+0689	+0040	+3404	+4133
	14 14 9	+0833	+0041	+3844	+4718					
	15									
	20 3 0	-027 ⁵	-0021	+0707	+0415	5 15	-0039	-0029	+1014	+0946
	21 2 55	+0919	+0004	+2357	+3280	5 10	+0962	+0011	+2420	+3393
	21									
	22									
	23 2 0	+0804	-0007	+2275	+3072	5 10	+0746	+0019	+2840	+3605
	23 14 0	+0356	+0026	+3722	+4104	15 30	+0297	+0038	+3919	+4254
	24 2 55	+0224	+0023	+2677	+2924	15 30	+0545	+0046	+4212	+4803
	25 14 9	+0862	+0050	+3684	+4596	15 29	+0862	+0050	+3768	+4680
	29 18 30	+1078	+0005	+1787	+2870					
	30 2 0	+1206	-0027	+1618	+2797	6 5	+1192	-0008	+1832	+3016
	30 19 45	+1049	-0004	+1120	+2165 +1165	15 38	+1049	+0007	+1823	+2879
Feb.	1 5 15	+0370	-0035	+0524	+0859	6 10	+0370	-0035	+0516	+0851
	1 15 29	+0631	-0017	+0645	+1259	6 15	+0703	-0034	+1234	+1903
	3 2 30	+0689	-0055	+0645	+1279	6 5	+0905	-0024	+1475	+2356
	4 6 10	+0814	-0039	+1130	+1895	6 30	+0384	-0016	+1528	+1896
	5 3 55	+0457	-0033	+1297	+1721	20 40	+0399	-0016	+1084	+1467
	5 16 20	+0341	-0010	+1708	+2039	6 15	+0472	-0021	+1591	+2042
	6 2 30	+0472	-0034	+1040	+1478	18 30	+0326	-0008	+1672	+1990
	6 15 30	+0326	-0008	+2075	+2393	17 0	+0674	-0024	+1439	+2089
	7 15 30	+0884	-0024	+1489	+1799	6 45	+0574	-0004	+2066	+2636
	8 3 30	+0545	-0030	+1663	+2178					
	8 16 30	+0574	+0004	+2813	+3391				+2749	
	10 2 55	+0674	-0023	+1484	+2135					
	11 3 50	+0934	-0033	+1405	+2306	6 50	+0775	-0012	+1708	+2471
	12 15 30	+0487	+0007	+2767	+3261	18 35	+0487	+0007	+2924	+3418
	12 19 40	+0487	+0007	+2786	+3280					
	13 3 30	+0761	+0015	+2952	+3728	4 30	+0775	+0030	+2962	+3757
	14 4 5	+1049	-0004	+1805	+2850	6 30	+0919	+0057	+2147	+3073

1877	Hour	Bar.	Alt. Th.	Exp. Th.	Hour	Bar.	Alt. Th.	Exp. Th.
	R.A.							
15	4 45	30.17	38.3	35.2	6 45	30.15	36.1	33.4
15	5 45.5	30.24	37.0	32.9				
15	16 21	30.29	30.0	27.0				
19	4 10	29.57	34.4	19.6	17 30	29.69	20.8	14.4
20	4 0	29.73	30.2	25.7	7 0	29.71	29.7	23.0
20	17 80	29.64	28.8	29.4 29.4	19 45	29.66	28.8	29.4
20	20 40			32.4				
21	5 0	29.70	38.0	34.6	7 10	29.74	35.9	30.4
21	17 0	29.78	32.7	24.7				
22	4 15	29.86	44.0	42.1	5 5	29.87	44.0	40.4
26	17 0	30.17	35.2	26.8	18 30			27.3
26	19 40	30.23	33.9	31.2				
27	5 0	30.15	33.7	29.7	7 40	30.13	34.1	27.1
27	18 30	30.20	32.7	21.8	20 35			31.2
28	5 10	29.97	39.9	32.8	7 40	29.97	37.1	30.6
28	17 0	29.96	33.9	24.8				
1	4 55	30.13	42.0	37.9	7 40	30.13	39.6	32.8
4	5 35	29.78	43.1	37.3	7 40	29.85	39.1	32.0
5	17 30	30.04	39.0	23.2				
5								
6	5 45	30.07	30.7	23.8	7 45	30.07	29.2	21.2
7	6 10	30.17	39.0	31.7	7 30	30.18	37.0	29.9
11	6 15	30.35	38.0	30.1	8 25	30.35 30.35	34.0	26.7
15	6 30	29.62	35.8	27.1	8 30	29.65	33.0	24.4
15				23.6				
19								
20	6 50	30.19	34.2	26.9	8 50	30.18	30.6	23.5
24	7 0	30.17	44.3	43.3	9 35	30.24	42.7	38.4
29								
31	8 50	30.27	45.1	41.3	9 50	30.18	43.1	36.8
3	8 55	30.17	44.2	32.3				
9	7 50	29.97	48.6	40.3	10 50	29.97	42.3	37.4
9	20 00	29.94	41.1	37.6	1 10	29.91	45.0	48.7
10	1 15	29.82	46.9	50.7				
12	8 25	30.06	45.8	36.3	10 40	30.11	40.2	34.6
12	20 10	30.18	40.1	32.1	22 50			42.8
12	1 12	30.20	43.4	47.8				
13								
15	8 30	29.99	50.1	48.9	10 35	30.02	48.0	42.3
15	19 40	30.02	43.8	36.8				

1877	Hour of R.A.	B	I	J	B+I+J	Hour of R.A.	B	I	J	B+I+J
Feb.	15 4 45	+0833	-0025	+1182	+1990	6 45	+0804	-0016	+1342	+2130
	15 5 45	+0646	-0008	+1387	+2025	16 21	+1006	+0008	+1913	+2927
	19 4 10	-0039	-0010	+2085	+2036	17 30	+0137	+0042	+3063	+3242
	20 4 0	+0196	+0007	+2030	+2233	7 0	+0165	+0009	+2275	+3158
	20 17 80	+0064	+0012	+2512	+4268	19 45	+0092	+0012	+1699	+2449
	20 20 40	+0092	+0012	+1431	+2588					+1803
	21 5 0	+0151	-0024	+1234	+1361	7 10	+0210	-0016	+1609	+1535
	21 17 0	+0268	+0003	+2120	+2385					+1803
	22 4 15	+0384	-0047	+0576	+2391	5 5	+0399	-0047	+0725	+1077
	26 17 0	+0833	-0013	+1930	+0913	18 30	+0833	-0013	+1886	+2706
	26 19 40	+0919	-0008	+1337	+2750					
	27 5 0	+0804	-0026	+1672	+2448	7 40	+0775	-0008	+1904	+2471
	27 18 30	+0876	-0003	+2384	+2450	20 35	+0876	-0003	+1537	+2910
	28 5 10	+0545	-0031	+1396	+3257	7 40	+0545	-0020	+1591	+2116
	28 17 0	+0530	-0008	+2112	+1910					
March	1 4 55	+0775	-0039	+0944	+2634	7 40	+0775	-0029	+1396	+2142
	4 5 35	+0268	-0043	+0996	+1680	7 40	+0870	-0027	+1466	+1809
	5 17 30	+0646	+0011	+2257	+1221					
	5									
	6 5 45	+0689	+0005	+2203	+2897	7 45	+0689	+0010	+2433	+3137
	7 6 10	+0833	-0027	+1493	+2299	7 30	+0847	-0020	+1654	+2481
	11 6 15	+1092	-0024	+1636	+2704	8 25	+1092	-0008	+1939	+3023
	15 6 30	+0034	-0015	+1904	+1923	8 30	+0078	-0004	+2147	+2221
	15			+2221						
	19									
	20 6 50	+0862	-0009	+1921	+2774	8 50	+0847	+0006	+2230	+3083
	24 7 50	+0833	-0048	+0472	+1257	9 35	+0934	-0042	+0899	+1791
	29									
	31 8 50	+0977	-0051	+0645	+1571	9 50	+0847	-0048	+1040	+1844
Apr.	3 8 55	+0833	-0048	+1396	+2182					
	9 7 50	+0545	-0064	+0733	+1214	10 50	+0545	-0040	+0987	+1492
	9 20 00	+0502	-0035	+0970	+1437	1 10	+0457	-0051	+0004	+0410
	10 1 15	+0326	-0059	-0167	+0100					
	12 8 25	+0674	-0053	+1084	+1705	10 40	+0746	-0032	+1234	+1948
	12 20 10	+0847	-0031	+1457	+2273	22 50	+0876	-0045	+0516	+1347
	12 1 20	+0876	-0045	+0082	+0913					
	13									
	15 8 20	+0574	-0069	-0013	+0492	10 35	+0617	-0062	+0558	+1113
	18 19 40	+0617	-0046	+1040	+1611					

1877	Hogarth Bar	Att. Th.	Exp. Th.	Hogarth Bar	Att. Th.	Exp. Th.
16	8 50 30.02	53.0	50.3	10 40 30.04	50.8	46.6
22	9 15 30.20	49.0	46.2	11 5 30.22	47.4	43.2
22	1 10 30.17	48.6	64.0			
23	9 15 30.12	56.3	54.6	11 5 30.10	55.1	50.3
23						
24						
25	9 30 29.85	60.1	57.9	1 5 29.91	52.2	56.4
26	9 15 29.94	57.1	58.0	11 45 30.00	55.8	52.3
3	9 45 29.89	52.0	51.6	11 50 29.63	50.8	46.9
5	10 25 30.01	55.3	50.6	12 15 30.02	51.8	46.9
6	10 30 29.93	52.0	45.7	12 20 29.89	48.9	42.7
7	11 0 29.87	53.2	48.6	12 10 29.86	53.2	47.4
12	10 30 30.28	58.7	57.1	13 15 30.27	55.1	50.1
13	11 0 30.19	62.9	62.6	13 20 30.21	61.2	58.2
14	11 0 30.11	67.4	68.2	12 10 30.12	67.8	66.6
16	11 0 29.93	70.8	72.8	13 25 29.91	68.8	66.0
16	1 15 29.91	66.3	75.9			
17						
22	1 25 29.65	57.0	61.2			
22						
22						
22						
28	11 30 30.19	67.3	68.2	14 15 30.23	64.3	60.6
28	12 20 30.25	62.9	71.8			
29	11 35 30.17	71.6	71.3	12 20		68.1
29	13 50 30.17	68.9	64.8			
30	11 30 30.02	73.6	73.7	12 40		69.4
30	14 10 29.99	70.2	66.3			
31	12 15 30.02	75.2	75.2	12 45		72.2
31	13 30 30.03	74.2	70.7			
2	12 20 30.04	75.8	75.5	14 15 30.02	76.1	70.3
4	12 40 29.83	75.0	70.4	14 25 29.85	72.9	67.1
12						
14	14 0 30.12	74.6	69.6	15 40 30.13	72.2	68.3
17	13 0 30.05	74.1	72.5	15 50 30.07	69.9	64.2
18	13 25 30.04	74.1	70.8	14 42		65.8
18	15 20 30.03	70.6	64.6	15 45 30.03	70.1	64.1

1877	Hour of	B	T	γ	B+T+ γ	Hour of	B	T	γ	B+T+ γ
	A.T.									
Apr.	16 8 50	+0617	-0081	-0133	+0403	10 40	+0646	-0072	+0185	+0759
	22 9 15	+0876	-0066	+0219	+1029	11 5	+0905	-006 ^{x0}	+0480	+132 ^{x5}
	22 1 10	+0833	-0064	-1293	-0524					
	23 9 15	+0761	-0094	-0500	+0167	11 5	+0732	-0089	-0133	+0510
	23									
	24									
	25 9 30	+0370	-0108	-0780	-0518	1 5	+0467	-0078	-0653	-0274
	26 9 15	+0502	-0097	-0789	-0384	11 45	+0588	-0092	-0305	+0191
May	3 9 45	-0009	-0077	-0244	-0330	11 50	+0050	-0072	+0159	+0137
	5 10 25	+0602	-0090	-0158	+0354	12 15	+0617	-0076	+0189	+0760
	6 10 30	+0487	-0077	+0263	+0673	12 20	+0429	-0066	+0524	+0887
	7 11 0	+0399	-0082	+0012	+0329	12 10	+0384	-0078	+0116	+0422
	12 10 30	+0991	-0103	-0713	+0175	13 15	+0977	-0089	-0116	+0772
	13 11 0	+0862	-0120	-1177	-0435	13 20	+0890	-0113	-0806	-0029
	14 11 0	+0746	-0136	-1642	-1032	12 10	+0761	-0137	-1510	-0886
	16 11 0	+0487	-0149	-2021	-1683	13 25	+0467	-0141	-1460	-1144
	16 1 15	+0487	-0132	-2275	-1950					
	17									
	22 1 25	+0078	-0097	-1059	-1078					
	22									
	22									
	22									
	22									
	28 11 30	+0862	-0136	-1642	-0916	14 15	+0919	-0125	-1008	-0214
	28 ¹⁰⁵ 15 20	+0948	-0120	-1939	-1111					
	29 11 35	+0833	-0152	-1898	-1217	12 20	+0833	-0152	-1634	-0953
	29 13 50	+0833	-0142	-1360	-0669					
	30 11 30	+0617	-0160	-2095 -2123	-1638 -1646	12 40	+0617	-0160	-1742	-1285
	30 14 10	+0574	-0147	-1485	-1058					
	31 12 15	+0617	-0167	-2218	-1768	12 45	+0617	-0167	-1972	-1522
	31 13 30	+0631	-0163	-1849	-1381					
June	2 12 20	+0646	-0180	-2243	-1777	14 15	+0617	-0169	-1816	-1368
	4 12 40	+0341	-0166	-1824	-1649	14 25	+0370	-0158	-1551	-1339
	12									
	14 14 0	+0761	-0164	-1758	-1161	15 40	+0775	-0155	-1651	-1031
	17 13 0	+0660	-0162	-1997	-1499	15 50	+0689	-0146	-1310	-0767
	18 13 25	+0646	-0162	-1857	-1373	14 42	+0646	-0162	-1443	-0959
	18 15 20	+0631	-0148	-1343	-0860	15 45	+0631	-0146	-1302	-0817

	1877	Hour of R.A.	Bar.	Alt. H.	Ext. Th.	Hour of R.A.	Bar.	Alt. H.	Ext. Th.
June	19	13 20	2986	81.2	79.3	14 42			75.0
	19	15 20	2995	77.3	73.2				
	20	13 30	3014	73.8	67.5	¹⁴ 13 50	3013	69.9	62.3
	²⁷ 27	13 35	3006	71.9	63.8	¹⁴ 13 40	3007	68.8	59.7
	27	15 20			59.4	15 45	3009	66.2	58.3
	28 4	13 30	2983	72.2	71.2	14 35			67.3
July	²⁴ 25	15 50	2984	69.9	65.3				
	25	13 25	2977	78.7	82.3	15 0	2984	78.1	74.6
July	4	14 0	2997	75.1	70.2	15 20	2998	73.0	66.1
	5								
	24	15 30	3006	80.7	77.2	17 50	3005	77.1	71.2
	26	16 30	2994	77.9	67.2	17 0	2996	75.2	66.5
	29	17 5	2992	74.3	67.2	18 15	2990	72.0	66.8
	²²⁵ 25	15 30	2981	82.1	73.0	17 30	2991	75.6	68.4
August	1	15 55	3029	73.7	66.4	17 30	3030	70.2	63.7
	6	16 15	2984	76.0	72.4	18 30	2985	72.8	67.7
	7	16 40	2974	76.6	75.2	17 45	2974	76.1	73.8
	8	15 55	2978	77.8	71.2	17 15			69.3
	8	18 20	2979	73.7	69.2				
	10								
	11	16 50	3000	76.6	73.8	18 45	3002	74.3	67.8
	12	16 40	3001	76.2	76.4	18 55	3000	76.5	71.7
	14	17 20	2992	79.0	75.3	18 0	2993	76.2	74.4
	14								
	16	16 20	2982	76.8	77.3	17 30	2983	75.1	73.6
	16	20 30			70.4	23 45	2983	72.7	67.7
	21	17 30	3010	74.5	69.3				
	22	17 30	3007	78.3	71.5	20 0	3007	76.4	68.2
	22	23 50	3005	72.7	65.9				
	23	17 30	3011	79.9	74.9	19 5			72.3
	23	19 55	3011	77.7	71.3				
	24								
	26								
	27	18 25	3021	76.0	69.0	20 40			67.8
	27	22 30	3022	73.3	68.4				
	28	18 0	3013	81.0	77.9	21 0			72.8
	28	23 45	3010	76.6	72.3				
	29								
	30	17 45	3004	77.1	70.4	20 35	3007	71.4	63.5
	30	23 35	3008	67.1	59.7				

1877	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
June 19	13 20	+0384	-0190	-2552	-2358	14 42	+0516	-0174	-2202	-1860
19	15 20	+0516	-0174	-2054	-1712					
20	13 30	+0790	-0161	-1584	-0955	14 50	+0775	-0146	-1152	-0523
27	13 35	+0674	-0154	-1277	-0757	15 40	+0689	-0141	-0932	-0384
27	15 20	+0689	-0132	-0907	-0350	15 45	+0689	-0132	-0815	-0258
28 ⁴	13 30	+0341	-0155	-1890	-1704	14 35	+0356	-0146	-1568	-1358
July 24	15 50	+0356	-0146	-1401	-1191					
25	13 25	+0253	-0180	-2795	-2722	15 0	+0356	-0177	-2170	-1991
July 4	14 0	+0545	-0166	-1807	-1428	15 20	+0559	-0158	-1468	-1067
5										
24	15 30	+0674	-0188	-2382	-1896	17 50	+0660	-0173	-1890	-1403
26	16 30	+0502	-0177	-1559	-1234	17 0	+0530	-0167	-1501	-1138
29	17 5	+0472	-0163	-1559	-1250	18 15	+0443	-0154	-1526	-1287
25	15 30	+0384	-0193	-2038	-1847	17 30	+0457	-0168	-1659	-1370
25	18 40	+0457	-0168	-1543	-1254					
Aug 1	15 55	+1026	-0161	-1493	-0648	17 30	+1020	-0147	-1268	-0395
6	16 15	+0336	-0169	-2071	-1884	18 30	+0370	-0157	-1601	-1388
7	16 40	+0210	-0171	-2218	-2179	17 45	+0210	-0169	-2103	-2062
8	15 55	+0268	-0176	-1890	-1798	17 15	+0268	-0176	-1733	-1641
8	18 20	+0283	-0161	-1725	-1603					
10										
11	16 50	+0588	-0171	-2103	-1686	18 45	+0617	-0163	-1609	-1155
12	16 40	+0602	-0178	-2317	-1893	18 55	+0588	-0171	-1931	-1514
14	17 20	+0472	-0181	-2226	-1935	18 0	+0487	-0178	-2103	-1844
14										
16	16 20	+0326	-0180	-2390	-2244	17 30	+0341	-0177	-2087	-1923
16	20 30	+0341	-0157	-1824	-1640	23 45	+0341	-0157	-1601	-1417
21	17 30	+0732	-0164	-1733	-1165					
22	17 30	+0689	-0178	-1915	-1404	20 0	+0689	-0171	-1642	-1124
22	23 50	+0660	-0156	-1451	-0948					
23	17 30	+0746	-0185	-2195	-1634	19 5	+0746	-0176	-1980	-1410
23	19 55	+0746	-0176	-1898	-1328					
24										
26										
27	18 25	+0890	-0177	-1709	-0996	20 40	+0890	-0177	-1609	-0896
27	22 30	+0905	-0159	-1659	-0913					
28	18 0	+0775	-0189	-2439	-1853	21 0	+0732	-0171	-2021	-1460
28	23 45	+0732	-0171	-1980	-1419					
29										
30	17 45	+0646	-0173	-1824	-1351	20 35	+0689	-0152	-1251	-0714
30	23 35	+0703	-0135	-0932	-0364					

Sept.

1877	Hour of R.A.	Bar.	Alt. H.	Ext. H.	Hour of R.A.	Bar.	Alt. H.	Ext. H.
11	18 10	30.16	72.7	69.2	20 40	30.18	69.3	64.0
11	23 40	30.18	66.7	61.1				
12	18 5	30.16	74.3	73.9	21 10			67.8
12	23 40	30.13	67.7	65.1				
13	18 10	30.05	78.2	76.3	19 50			74.7
13	21 15	30.06	76.5	72.6				
15	18 0	30.10	78.4	74.2	19 10			71.7
15	20 55			69.5	22 0	30.11	72.8	68.6
16	18 15	30.06	78.1	75.5	20 40	30.07	76.1	72.4
16	21 25			71.4	23 40	30.05	74.0	69.3
18	18 30	29.96	68.9	60.6	20 55	30.00	65.0	56.0
18	23 35	30.01	61.3	55.6 55.0				
19	18 40	30.07	63.9	58.8	21 15	30.07	60.2	52.5
20	18 30	30.02	68.1	61.1	23 20	30.19	65.0	68.5
22	18 25	30.18	60.9	65.7	20 30	30.22	58.8	61.4
22	23 20	30.23	58.8	57.6 57.0				
23	18 30	30.17	67.0	66.5	21 38	30.17	65.0	61.4
23	23 30	30.17	63.2	57.4	0 10	30.17	62.3	57.2
24	19 20	30.18	70.8	67.9	23 24 5	30.19	69.1	63.5
25	18 50	30.15	74.1	71.3	21 40	30.16	71.0	65.7
25	23 30	30.16	68.8	63.8				
26	18 45	30.08	74.9	71.3	21 15	30.07	72.0	68.1
27	19 35	30.27	65.3	57.3	21 45	30.27	62.8	56.5
29	19 35	30.15	65.0	65.0				
30	19 35	30.22	66.1	59.7	21 35	30.22	63.6	56.7
30	23 20	30.21	61.1	55.0				
Oct.	1	19 45	30.14	69.2	21 19 55			52.3
	1	23 20	30.13	65.0				
	4							
	6	19 55	30.33	52.8	22 35	30.34	53.9	45.2
	7	19 40	30.48	59.5	22 15	30.48	55.3	44.8
	7	23 15	30.48	53.9				
	13	19 45	30.17	59.6	23 35	30.22	53.2	45.3
	14	21 20	30.23	56.1	22 50	30.22	53.4	50.9
	15	19 50	30.18	61.2				
	17	20 20	30.06	57.1	23 0	30.07	52.3	46.1
	17	23 25	30.06	53.2				
	18	19 35	30.03	60.2	23 45	30.03	55.7	48.3

1877	Hour of R.A.	B	T	γ	$B+T+\gamma$	Hour of R.A.	B	T	γ	$B+T+\gamma$
Sept.	11 18 10	+0818	-0157	-1725	-1064	20 40	+0847	-0148	-1293	-0591
	11 23 40	+0847	-0134	-1080	-0337					
	12 18 5	+0818	-0165	-2112	-1459	21 10	+0818	-0165	-1609	-0956
	12 23 40	+0775	-0146	-1384	-0755					
	13 18 10	+0660	-0178	-2308	-1826	19 50	+0660	-0178	-2178	-1696
	13 21 15	+0674	-0171	-2005	-1502					
	15 18 0	+0732	-0179	-2136	-1583	19 10	+0732	-0179	-1931	-1378
	15 20 58	+0746	-0157	-1750	-1161	22 0	+0746	-0187	-1675	-1086
	16 18 15	+0674	-0177	-2243	-1746	20 40	+0689	-0169	-1989	-1469
	16 21 25	+0660	-0162	-1907	-1409	23 40	+0660	-0162	-1733	-1235
	18 18 30	+0530	-0142	-1008	-0620	20 55	+0558	-0128	-0619	-0159
	18 23 35	+0602	-0113	-1127	-0534					
	19 18 40	+0689	-0124	-0858	-0293	21 15	+0689	-0109	-0322	+0258
	20 18 30	+0617	-0138	-1050	-0371	23 20	+0862	-0128	-1667	-0933
	22 18 25	+0847	-0112	-1435	-0700	20 50	+0905	-0103	-1075	-0273
	22 23 20	+0919	-0092	-0755	+0072					
	23 18 30	+0833	-0135	-1501	-0803	21 38	+0833	-0128	-0991	-0286
	23 23 30	+0833	-0121	-0738	-0026	0 10	+0833	-0117	-0721	-0005
	24 19 20	+0847	-0149	-1618	-0920	23 5	+0862	-0142	-1257	-0531
	25 18 50	+0804	-0162	-1898	-1256	21 40	+0818	-0150	-1435	-0767
	25 23 30	+0818	-0141	-1277	-0680					
	26 18 45	+0703	-0166	-1898	-1361	21 15	+0718	-0154	-1634	-1070
	27 19 35	+0977	-0129	-0771	+0077	21 45	+0977	-0119	-0662	+0196
	29 19 35	+0824	-0128	-1376	-0700					
	30 19 35	+0905	-0131	-0932	-0158	21 35	+0905	-0122	-0679	+0104
	30 23 20	+0890	-0112	-0534	+0244					
Oct.	1 19 45	+0790	-0143	-1352	-0705	21 35			-1752	
	1 23 20	+0775	-0128	-0941	-0294					
	4									
	6 19 55	+1063	-0096	+0082	+0049	22 25	+1078	-0085	+0306	+1299
	7 19 40	+1278	-0106	-0133	+1039	20 15	+1278	-0090	+0341	+1529
	7 23 15	+1278	-0085	+0447	+1640					
	13 19 45	+0833	-0106	-0175	+0652	23 35	+0905	-0082	+0298	+1121
	14 21 20	+0919	-0093	-0373	+0453	22 02	+0905	-0091	-0184	+0630
	15 19 50	+0847	-0113	-0662	+0072					
	17 20 20	+0674	-0097	-0184	+0393	23 0	+0689	-0078	+0228	+0839
	17 23 25	+0674	-0088	+0278	+0898					
	18 19 35	+0631	-0109	-0628	-0106	23 45	+0631	-0092	+0038	+0577

1877 *Hour of* Bar. *Alt. Th.* *Ext. Th.*

23 20 15 2993 55.6 52.6
 23 0 25 2993 53.1 49.5
 27 19 55 2997 50.8 39.3
 27 0 35 2999 41.6 38.9
 28 19 45 3006 52.2 45.6
 28 0 10 3017 45.8 39.9
 29 21 35 2989 57.2 59.6
 30 19 40 2997 56.2 50.8
 30 0 40 3002 50.1 42.5
 31

Nov.

1 19 50 3003 54.0 47.3
 3 1 20 42.0
 4 19 50 3024 51.0 42.9
 4 22 0 39.3
 6 22 0 30.23 41.3 31.8
 6 1 20 30.22 38.7 30.3
 7 22 0 30.43 48.2 39.6
 7 1 20 30.43 44.6 35.2
 12

13 22 40 30.23 43.1 34.4
 13 2 55 30.26 27.9 29.2
 14 22 45 30.28 47.8 45.8
 14 1 30 45.1
 14 2 35 30.27 47.6 45.0
 15 22 15 30.16 53.2 53.4
 15 23 15 30.17 53.3 52.6

27 3 40 30.03 48.2 43.2
 28 4 30 30.00 47.8 42.1

Dec

1 22 10 30.02 40.3 28.0
 1 2 5 21.3
 1 3 50 30.12 29.1 19.4
 2 22 15 30.37 38.1 23.6
 2 3 0 30.37 29.8 19.2
 3 23 10 30.19 39.0 32.5
 3 2 45 30.20 36.4 31.7
 6 3 10 30.03 42.1 32.9
 8 4 40 30.03 39.1 31.5

Hour of Bar. *Alt. Th.* *Ext. Th.*

22 55 2993 53.8 48.8 }?

22 35 36.1

22 25 41.2

23 20 2993 58.8 60.4

22 05 2998 54.0 46.8

1 10 3002 49.3 41.9

22 8 45.2

2 50 2993 46.1 44.7

20 50 41.2

1 30 30.28 42.0 36.0
date time bar alt. th. ext. th.

Dec 9 23 10 30.23² 39.9 29.3

9 2 55 30.24 33.7 25.3

12 23 0 30.20 43.0 37.1

12 2 40 30.22 37.8 31.8

13 0 25 29.55 44.0 44.5

13 2 35 41.7

13 3 35 29.55 43.8 41.0

15 23 30 29.88 43.3 44.3

15 1 55 29.84 43.8 42.8

16 23 30 30.11 48.9 43.8
~~38.9~~

16 3 30 30.15 44.3 36.8

17 23 35 29.87 48.1 50.3

17 2 15 47.1

17 3 25 30.23 45.9 42.1

18 23 30 30.62 43.2 27.0

18 1 20 30.60 36.2 26.0

19

20 0 0 30.37 48.6 39.6

20 3 25 30.45 39.0 32.0

25 0 50 30.03 42.1 32.9

25 3 20 29.97 36.8 29.3

26 0 20 29.90 42.8 35.3

26 3 55 29.89 37.0 30.3

27 0 15 29.97 45.1 37.2

27 3 50 29.98 41.1 31.7

1877	Hour of R.A.	B	T	γ	B+T+ γ	Hour of R.A.	B	T	γ	B+T+ γ
Oct. 23	20 15	+0487	-0091	-0330	+0066	[22-55	+0487	-0084	-0205	+0398]
23	0 25	+0487	-0081	-0063	+0343					
27	19 55	+0545	-0072	+0777	+1250	22 35	+0574	-0037	+1102	+1639
27	0 35	+0574	-0037	+1297	+1834					
28	19 45	+0818	-0078	+0272	+1012	22 25	+0833	-0053	+0654	+1434
28	0 10	+0833	-0053	+0768	+1648					
29	21 35	+0429	-0098	-0924	-0593	23 20	+0487	-0103	-0991	-0607
30	19 40	+0545	-0094	-0175	+0276	22 05	+0559	-0085	+0168	+0642
30	0 40	+0617	-0069	+0341	+1059	1 10	+0617	-0067	+0594	+1144
31										
Nov. 1	19 50	+0631	-0085	+0124	+0670	22 8	+0631	-0085	+0306	+852
3	1 20	+0487	-0054	+0385	+1018	2 50	+0487	-0054	+0698	+1131
4	19 50	+0934	-0073	+0507	+1368	20 50	+0934	-0073	+0654	+1515
4	22 0	+0991	-0043	+0777	+1725	1 30	+0991	-0043	+1111	+2059
6	22 0	+0919	-0036	+1484	+2364	Dec. 9	23 10	+0905	-0031	+1708
6	1 20	+0905	-0026	+1618	+2497	9	2 55	+0934	-0008	+2066
7	22 0	+1206	-0063	+0994	+1984	12	23 0	+0876	-0043	+1014
7	1 20	+1206	-0049	+1182	+2339	12	2 40	+0905	-0023	+1484
12						13	0 25	-0069	-0049	+0366
13	22 40	+1063	-0043	+1252	+2272	13	2 35	-0069	-0046	+0611
13	2 55	+1106	-0024	+1716	+2798	13	3 35	-0069	-0046	+0672
14	22 45	+0991	-0061	+0354	+1184	15	23 30	+0414	-0044	+0341
14	1 30	+0977	-0061	+0315	+1231	15	1 55	+0356	-0046	+0516
14	2 35	+0977	-0061	+0324	+1240	16	23 30	+0446	-0027	+0430
15	22 15	+0818	-0082	-0398	+0338	16	3 30	+0847	-0048	+1040
15	23 15	+0833	-0082	-0330	+0421	17	23 35	+0399	-0062	-0133
27						17	2 15	+0631	-0054	+0142
28	3 40	+0631	-0063	+0480	+1048	17	3 25	+0631	-0054	+0576
28	4 30	+0588	-0061	+0576	+1103	18	23 30	+1477	-0044	+1913
Dec. 1	22 10	+0617	-0032	+1823	+2408	18	1 20	+1448	-0017	+2003
1	2 5	+0761	+0011	+2439	+3201	19				
1	3 50	+0761	+0011	+2603	+3375	20	0 0	+1121	-0064	+0794
2	22 15	+1121	-0024	+2221	+3318	20	3 25	+1235	-0027	+1466
2	2 0	+1121	+0009	+2621	+3751	25	0 50	+0631	-0039	+1387
3	23 10	+0862	-0024	+1422	+2267	25	3 20	+0545	-0019	+1708
3	2 45	+0876	-0018	+1493	+2351	26	0 20	+0443	-0042	+1174
6						26	3 55	+0429	-0020	+1618
8	3 10	+0631	-0039	+1387	+1979	27	0 15	+0545	-0051	+1005
8	4 40	+0631	-0027	+1511	+2115	27	3 50	+0559	-0035	+1473

1877	Hour of R.A.	Bar.	Alt. Th.	Exp. Th.
29	4 45	29.92	41.7	29.8
29	5 50	29.87	37.8	28.2
30				
31	0 10	29.38	35.9	26.8
31	3 45	29.46	33.8	20.6
31	4 55	29.67	33.1	23.6
1878				
1	0 15	29.67	36.1	28.1
1	2 15	29.67	34.1	25.5
5	0 0	29.92	36.9	22.7
5	2 55	29.94	28.2	17.5
5	4 55	29.94	25.1	15.2
7	1 5	30.36	21.2	5.1
7	2 45	30.41	18.1	3.1
9	1 15	30.37	31.3	27.0
12	5 20	30.04	41.2	37.1
12	7 10	30.05	39.9	36.9
13	1 40	30.12	43.8	37.7
13	3 30	30.07	41.6	35.3
14	3 15	29.46	41.0	35.2
14	6 50	29.47	39.9	35.4
16	1 0	30.06	27.1	12.2
16	2 50	[30.08]	[24.5]	10.8
16	4 55	30.10	22.0	9.7
17	1 10	30.19	31.8	20.7
(19)	1 0	30.07	39.8	40.0
(19)	3 30	30.08	39.3	37.5
22	1 15	29.62	44.9	42.1
22	3 20	29.64	43.8	38.9
22	4 55	29.63	42.8	37.7
23	2 30	29.76	27.0	5.3
23	5 30	29.85	18.0	2.8
24	2 20	30.25	27.2	20.6
24	6 15	30.18	24.3	20.2
28	1 10	29.49	38.1	28.4
28	2 20	29.55	33.3	24.6
28	5 30	29.65	36.8	14.9
29	2 15	30.06	28.2	18.7
29	5 30	30.09	24.8	16.8

	Hour of R.A.	Bar.	Alt. Th.	Exp. Th.
Jan	1878			
	30 2 40	30.42	28.6	16.3
	30 6 15	30.42	23.9	12.7
Feb.	2 2 45	30.13	31.1	16.4
	2 6 15	30.15	25.4	10.8
	3 2 50	30.09	33.2	25.6
	3 6 15	30.05	30.0	19.2
	4 3 0	29.78	35.2	28.2
	4 6 15	29.77	31.7	20.4
	5 2 50	29.92	38.8	30.6
	5 6 15	29.92	33.4	23.9
	6 3 30	30.06	40.1	33.3
	6 6 40	30.05	38.1	30.9
	7 3 15	29.97	44.9	42.6
	7 7 0	29.94	42.8	36.0
	11 3 20	29.67	34.2	20.3
	11 7 15	29.74	25.6	15.9
	13 4 5	29.83	37.8	32.3
	13 6 50	[29.90]	[34.5]	30.7
	13 7 55	29.93	33.2	27.6
	14 3 0	29.98	37.9	27.9
	14 7 15	29.97	26.1	18.3
	16 3 40	29.94	39.8	32.3
	16 6 45	29.93	33.9	28.8
	18 3 35	29.92	35.2	20.0
	18 7 50	29.96	26.1	(755) 12.8
	19 4 0	30.14	33.3	21.8
	19 7 55	30.14	28.9	17.1
	24 4 50	29.80	44.2	38.5
	24 8 0	29.79	39.4	33.6
	26 4 25	29.77	38.3	36.2
	26 8 20	29.82	38.2	33.4
	27 4 55	29.83	45.6	43.4
	27 8 50	29.87	42.8	37.8
	28 5 0	29.88	46.6	44.6
	28 8 45	29.92	44.3	39.4
Mar.	4 4 50	29.47	43.2	33.6
	4 8 40	29.67	35.3	27.6
	5 5 0	30.18	41.8	36.1
	5 9 0	30.24	36.8	30.3

1877	Hour of R.A.	B	T	γ	B+T- γ
Dec 29	4 ^m 45 ^s	+0472	-0038	+1663	+2097
29	5 50	+0399	-0023	+1805	+2181
30					
31	0 10	-0319	-0016	+1930	+1595
31	3 45	-0201	-0009	+2494	+2286
31	4 55	+0107	-0004	+2221	+2324
1878					
Jan 1	0 15	+0107	-0016	+1814	+1905
1	2 15 ²⁰	+0107	-0008	+2048	+2147 ²⁴²
5	0 0	+0472	-0020	+2303	+2755 ⁵³⁷
5	2 55 ²⁹	+0502	+0014	+2776	+3292 ²²⁵
5	4 55 ²⁰	+0502	+0026	+2989	+3517 ²⁷³
7	1 5	+1106	+0040	+3928	+5074
7	2 45 ¹⁷	+1177	+0053	+4117	+5347
9	1 15	+1121	+0003	+1913	+3037
12	5 20	+0646	-0036	+1014	+1624
12	7 10 ¹⁸	+0660	-0031	+1032	+1661 ³⁷
13	1 40	+0761	-0046	+0962	+1677
13	3 30 ¹⁸	+0689 +0545	-0037	+1174	+1681 +1511 ¹⁴⁹
14	3 15	-0201	-0035	+1182	+1511 ⁰²
14	6 50 ³⁶	-0186	-0031	+1165	+0948
16	1 0	+0674	+0019	+3266	+3959 ¹⁶⁵
16	2 50 ¹⁸	[0701]	[28]	+3395	+4124 ¹⁴³
16	4 55 ²¹	+0732	+0038	+3497	+4267
17	1 10	+0862	+0001	+2484	+3347
(19)	1 0	+0689	-0030	+0759	+1418 ²³⁶
(19)	3 30 ²⁵	+0703	-0028	+0979	+1654
22	1 15	+0034	-0051	+0576	+0559 ³¹⁵
22	3 20 ²¹	+0064	-0046	+0856	+0874 ⁹⁶
22	4 55 ¹⁶	+0050	-0042	+0962	+0970
23	2 30	+0238	+0019	+3909	+4166 ⁴⁰³
23	5 30 ³⁰	+0370	+0053	+4146	+4569
24	2 20	+0948	+0018	+2494	+3460 ⁻⁵⁴
24	6 15 ³⁹	+0847	+0029	+2530	+3406 ⁴⁴⁸
28	1 10	-0156	-0024	+1787	+1607 ¹⁰²¹
28	2 20 ¹²	-0069	-0005	+2129	+2055
28	5 30 ³²	+0078	-0019	+3017	+3076 ²²⁹
29	2 15	+0674	+0014	+2668	+3356
29	5 30 ³⁵	+0718	+0027	+2840	+3585

1878	Hour of R.A.	B	T	γ	B+T- γ
Jan. 30	2 40	+1192	+0013	+2886	+4091 ³⁵⁰
30	6 15 ³⁶	+1192	+0030	+3219	+4441
Feb. 2	2 45	+0775	+0004	+2877	+3656 ⁵⁶⁷
2	6 15 ³⁵	+0804	+0024	+3395	+4223
3	2 50	+0718	-0005	+2039	+2752 ⁵³⁷
3	6 15 ³⁴	+0660	+0008	+2621	+3289
4	3 0	+0268	-0013	+1805	+2060 ⁷⁰⁶
4	6 15 ³²⁵	+0253	+0001	+2512	+2766
5	2 50	+0472	-0026	+1591	+2037 ⁶²³
5	6 15 ³⁴	+0472	-0006	+2194	+2660 ²⁰⁶
6	3 30	+0674	-0031	+1351	+1994
6	6 40 ³²	+0660	-0024	+1564	+2200
7	3 15	+0545	-0051	+0532	+1026 ⁶⁴⁵
7	7 0 ³⁷⁵	+0502	-0042	+1111	+1571
11	3 20	+0107	-0009	+2521	+2619 ⁶³⁹
11	7 15 ³⁹	+0210	+0024	+2924	+3158
13	4 5	+0341	-0023	+1439	+1757 ²⁶⁰
13	6 50 ²⁷⁵	[+0445]	[-0010]	+1582	+2017 ³²⁴
13	7 55 ¹¹	+0487	-0005	+1859	+2341
14	3 0	+0559	-0024	+1832	+2368 ⁹⁰⁴
14	7 15 ⁴²⁵	+0545	+0022	+2704	+3271
16	3 40	+0502	-0030	+1439	+1911 ⁸²⁰
16	6 45 ³¹	+0487	-0008	+1752	+2231
18	3 35 ⁴²⁵	+0472	-0013	+2548	+3007 ⁷⁶⁴
18	7 50	+0530	+0022	+3209	+3761
19	4 0	+0790	-0005	+2884	+3169 ⁴⁵⁶
19	7 55 ³⁹	+0790	+0022	+2813	+3625
24	4 50	+0297	-0048	+0890	+1139 ⁴⁴⁰
24	8 0 ³²	+0283	-0029	+1325	+1579
26	4 25	+0253	-0025	+1093 ¹³²¹	+1430 ³²²
26	8 20 ³⁹	+0326	-0025	+1342	+1643
27	8 55 ³⁹	+0341	-0053	+0464	+0752 ⁸⁵⁸
27	8 50 ³⁹	+0399	-0042	+0953	+1310
28	5 0	+0414	-0057	+0357	+0714 ⁵²¹
28	8 45 ³⁷⁵	+0472	-0048	+0811	+1235
Mar. 4	4 50	-0186	-0044	+1325	+1095 ⁸⁵⁸
4	8 40 ³⁸	+0107	-0013	+1859	+1953
5	5 0	+0847	-0028	+1102	+1911 ⁶²²
5	9 0 ⁴⁰	+0934	-0019	+1618	+2533

1878	Hour of Rt	Bar.	Alt. H.	Exo. H.	B	T	γ	B+T+ γ	A	Int. in hours	Hourly change	1878
Mar. 6	6 0	30.16	43.0	41.3	+0818	-0043	+0645	+1420	+20	2.50	+08	May
6	8 30	30.13	42.8	40.6	+0775	-0042	+0707	+1440				
16	6 0	30.05	48.9	38.4	+0660	-0066	+0899	+1493	+352	3.00	+117	
16	9 0	30.03	41.7	34.5	+0631	-0038	+1252	+1845				
19	6 0	29.70	46.8	44.0	+0151	-0058	+0411	+050 ⁴	+291	3.00	+97	
19	9 0	29.71	44.9	40.9	+0165	-0051	+0681	+0795				
20	6 10	29.76	41.8	34.5	+0238	-0038	+1243	+1443	+275	2.50	+110	June
20	8 40	29.81	38.0	32.4	+0311	-0024	+1431	+1718				
21	6 10	30.04	37.6	30.4	+0646	-0022	+1609	+2233	+239	3.00	+80	
21	9 10	30.07	35.3	28.3	+0689	-0013	+1796	+2472				
26	7 35	29.88	42.9	38.8	+0414	-0043	+0865	+1236	+306	2.00	+153	
26	9 35	29.90	42.2	35.7	+0443	-0040	+1139	+1542				
30	7 30	30.02	48.4	44.2	+0617	-0064	+0393	+0946	+319	3.75	+85	
30	11 15	29.97	44.2	39.9	+0545	-0048	+0768	+1265				
31	7 30	29.70	47.8	38.3	+0151	-0061	+0908	+0998	+151	3.67	+41	
31	11 10	29.66	41.3	36.2	+0092	-0036	+1093	+1149				
Apr. 2	8 40	29.70	48.6	42.2	+0151	-0064	+0567	+0654	+122	2.33	+52	
2	11 0	29.72	46.8	41.2	+0180	-0058	+0654	+0776				
3	8 15	29.75	50.7	42.4	+0224	-0072	+0550	+0702	+156	2.08	+75	
3	10 20	29.74	47.0	40.6	+0210	-0059	+0707	+0858				
8	8 40	30.07	50.8	42.9	+0689	-0072	+0507	+1124	+242	2.17	+112	
8	10 50	30.13	48.2	41.2	+0775	-0063	+0654	+1366				
13	9 30	29.61	53.3	49.3	+0019	-0082	-0046	-0109	+299	1.92	+156	
13	11 25	29.63	50.5	46.3	+0050	-0071	+0211	+0190				
14	9 15	29.77	57.0	48.4	+0253	-0073	+0030	+0210	+310	1.67	+166	
14	10 55	29.82	49.9	45.7	+0326	-0069	+0263	+0520				
16	10 15	30.21	53.3	42.3	+0890	-0082	+0558	+1366	+53	0.67	²⁹ +8	
16	10 55	30.21	51.0	41.8	+0890	-0073	+0602	+1419				
18	10 25	30.18	54.9	46.3	+0847	-0089	+0211	+0969	+174	1.83	+95	
18	12 15	30.13	50.4	43.7	+0775	-0071	+0439	+1143				
May 1	12 30	29.93	54.4	46.8	+0487	-0087	+0168	+0568	-44	1.50	⁻ #29	
1	14 0	29.92	52.9	47.2	+0472	-0081	+0133	+0524				
2	10 30	29.88	65.3	59.9	+0414	-0129	-0949	-0664	+222	3.58	+62	
2	14 5	29.87	62.9	57.2	+0399	-0120	-0721	-0442				July
4	10 45	29.83	67.5	59.9	+0341	-0136	-0949	-0744	-279	3.00	⁻ #93	
4	13 45	29.84	65.1	63.5	+0356	-0128	-1251	-1023				
5	12 10	29.64 ✓	63.9	58.7	+0064	-0124	-0594	-0654	³ +279	1.75	+217 +102	
5	13 55	29.74 ✓	54.4	53.4	+0210	-0087	-0398	-0275				

1878	Hour of R4	Bar.	Act. Th.	Ext. Th.	B	T	Y	B+T+Y	A	Int. in hours	Hourly changes
May 6	10 45	29.88	64.9	58.8	+0414	-0128	-0858	-0572	+46 ¹	2.67	+17 ³
6	13 25	29.90	59.3	54.0	+0443	-0105	-0449	-011 ¹			
7	11 30	29.89	63.7	58.8	+0429	-00 ¹²³ ₇₂	-0603	-0297	+263	2.58	+102
7	14 5	29.85	59.9	52.2	+0370	-00 ¹⁰⁸ ₇	-0296	-0034			
8	10 55	29.87	63.4	54.2	+0399	-0122	-0466	-0189	+123	2.50	+49
8	13 25	29.86	58.3	52.8	+0384	-0102	-0348	-0066			
June 3	12 5	29.98	68.1	61.5	+0559	-0138	-1084	-0663	+1 ⁷ ₈₄	2.33	+7 ⁸ ₇
3	14 25	29.97	64.8	59.4	+0545	-0127	-0907	-04 ⁸ ₉₉			
4	12 15	29.83	71.8	72.2	+0341	-0153	-1972	-1784	+663	3.50	+189
4	15 45	29.83	69.4	64.3	+0341	-0144	-1318	-1121			
5	12 10	29.85	71.6	64.0	+0370	-0152	-1293	-1075	+335	1.08	+310
5	13 15	[29.863]	[68.53]	60.3	[+0382]	[-0140]	-0982	-0740	+382	1.75	+218
5	15 0	29.87	63.2	56.2	+0399	-0121	-0636	-0358			
6	12 25	29.92	63.3	59.3	+0472	-0121	-0899	-0548	+472	1.83	+258
6	14 15	[29.943]	[64.03]	54.2	[+0498]	[-0108]	-0466	-0076	+290	1.08	+269
6	15 20	29.95	57.8	51.1	+0516	-0100	-0202	+0214			
9	12 45	29.75	63.2	59.2	+0224	-0121	-0890	-0787	+378	1.75	+216
9	14 30	[29.80]	[61.53]	55.6	[+0290]	[-0114]	-0585	-0409	+293	1.00	+293
9	15 30	29.82	60.6	53.8	+0326	-0110	-0432	-0116			
13	13 25	30.11	65.0	61.3	+0746	-0128	-1067	-0449	+145	1.17	+124
13	14 35	30.12	64.1	59.8	+0761	-0124	-0941	-0304			
19	13 25	29.89	72.9	68.3	+0429	-0158	-1651	-1380	+350	(1.33)	+263
19	14 45	[29.89]	[70.83]	64.2	[+0424]	[-0149]	-1310	-1030	+166	1.25	+133
19	16 0	29.89	68.8	62.3	+0429	-0141	-1152	-0864			
20	13 25	29.84	73.6	71.2	+0356	-0160	-1590	-1694	+468	2.58	+181
20	16 0	29.83	70.7	65.5	+0341	-0149	-1418	-1226			
24	13 50	29.78	73.0	68.1	+0268	-0158	-1634	-1524	+18 ⁷ ₈₈	2.58	+7 ¹ ₂
24	16 25	29.77	70.2	65.8	+0253	-014 ⁷ ₈	-1443	-133 ⁷ ₈			
25	13 50	29.78	73.4	69.7	+0268	-0160	-1767	-1659	+367	1.08	+340
25	14 55	29.82	73.0	66.0	+0326	-0158	-1460	-1292	+312	1.58	+198
25	16 30	29.84	68.9	62.8	+0356	-0142	-1194	-0980			
26	13 50	30.07	71.8	69.3	+0689	-0153	-1733	-1197	+737	2.67	+276
26	16 30	30.08	68.0	60.8	+0703	-0138	-1025	-0460			
July 1	15 0	30.07	84.0	79.6	+0689	-0201	-2576	-2088	+285	1.67	+171
1	16 40	30.07	81.8	76.2	+0689	-0192	-2300	-1803			
2	16 0	30.07	84.2	81.0	+0689	-0202	-2690	-2203	+213	1.17	+182
2	17 10	30.07	83.8	78.4	+0689	-0200	-2479	-1990			

1878	Aug. 1	Bar.	Att. Th.	Ext. Th.	B	T	Y	B+T+Y	Δ	Int. in hours	Hourly Change
July 3	14 55	30.12	86.3	83.1	+0761	-0208	-2860	-2307	+168	0.67	+251
3	15 35	[30.12]	[86.7]	81.1	[+0765]	[-0206]	-2698	-2139	+243	1.67	+146
3	17 15	30.13	83.7	78.3	+0775	-0200	-2471	-1896			
7	15 10	29.97	75.3	74.1	+0545	-0178	-2128	-1761	+307	2.08	+148
7	17 15	29.99	76.5	74.8	+0574	-0171	-1857	-1454			
8	15 20	29.98	83.0	79.9	+0559	-0197	-2601	-2239	+321	2.08	+154
8	17 25	29.97	80.8	75.9	+0545	-0188	-2275	-1918			
9	16 25	29.98	80.8	73.8	+0559	-0188	-2103	-1732	+81	1.08	+75
9	17 30	29.98	78.7	72.9	+0559	-0180	-2030	-1651			
10	15 15	29.97	80.2	72.1	+0545	-0186	-1964	-1605	+139	2.42	+57
10	17 40	30.00	76.9	71.1	+0588	-0172	-1882	-1466			
13	15 20	30.04	76.1	66.6	+0646	-0169	-1510	-1033	+305	2.50	+122
13	17 50	30.03	70.9	63.0	+0631	-0150	-1209	-0728			
15	15 20	30.11	73.1	61.0	+0746	-0158	-1042	-0454	+160	2.67	+60
15	18 0	30.13	67.8	59.7	+0775	-0137	-0932	-0294			
16	15 35	30.11	74.2	67.5	+0746	-0163	-1584	-1001	+284	2.42	+117
16	18 0	30.10	70.3	64.1	+0732	-0147	-1302	-0717			
22	15 40	29.60	74.9	68.2	+0805	-0166	-1642	-1803	+325	2.25	+144
22	17 55	29.64	70.7	65.2	+0664	-0149	-1393	-1478			
23	15 30	29.97	75.2	72.9	+0545	-0167	-2030	-1652	+679	2.75	+247
23	18 15	30.03	71.8	65.9	+0631	-0153	-1451	-973			
24	16 30	30.02	78.0	72.9	+0617	-0177	-2030	-1590	+250	1.83	+137
24	18 20	30.02	75.1	70.0	+0617	-0166	-1791	-1340			
28	16 15	30.15	78.7	73.3	+0804	-0180	-2063	-1439	+353	2.33	+152
28	18 35	30.16	78.5	69.2	+0818	-0179	-1725	-1086			
31	16 50	30.04	68.1	59.9	+0646	-0138	-0949	-441	+18	2.00	09
31	18 50	30.04	64.9	59.8	+0646	-0128	-0941	-423			
Aug. 12	17 12	29.93	77.8	71.7	+0487	-0176	-1931	-1620	+392	1.88	+209
12	19 5	29.94	74.1	67.3	+0502	-0162	-1568	-1228			
13	18 0	[30.01]	[76.0]	71.3	[+0602]	[-0169]	-1898	-1465	+182	1.00	+182
13	19 0	30.01	75.8	69.1	+0602	-0168	-1717	-1283	+42	0.42	+100
13	19 25	30.01	75.7	68.6	+0602	-0168	-1675	-1241			
14	17 5	30.06	79.1	72.8	+0674	-0188	-2021	-1535	+19	2.67	+198
14	19 45	30.07	74.3	66.9	+0689	-0163	-1535	-1009	+523		
17	19 5	30.05	76.8	67.7	+0660	-0172	-1601	-1113			
18	17 8	29.83	78.2	70.1	+0341	-0178	-1799	-1636	+447	2.78	+161
18	19 55	29.82	72.3	64.8	+0326	-0155	-1360	-1189			

	Hour of R.A.	Bar.	Alt. Th.	Ext. Th.	B	I	y	B+I+y	Δ	Int. in hours	Hourly Change
1878											
Aug. 20	17 25	29.59	75.8	71.2	-0009	-0168	-1890	-2067	+332	2.58	+129
20	20 0	29.64	72.8	68.2	+0064	-0157	-1642	-1735			
22	[17 36]	30.13	72.8	60.2	+0775	-0157	-0974	-356	+372	2.50	+149
22	20 6	30.14	65.2	56.3	+0790	-0129	-0645	+016			
25	17 35	29.75	69.8	63.2	+0224	-0145	-1226	-1147	+492	2.67	+184
25	20 15	29.83	65.5	58.9	+0341	-0130	-0866	-655			
26	17 50	29.94	72.8	63.7	+0502	-0157	-1268	-923	+403	2.42	+167
26	20 15	29.96	69.2	59.4	+0530	-0143	-0907	-520			
27	[17 30]	29.96	73.8	68.2	+0530	-0161	-1642	-1673	+467	2.47	+189
27	19 58	29.97	69.1	63.0	+0545	-0142	-1209	-806			
28	18 18	30.04	74.1	63.0	+0646	-0162	-1209	-725			
29	[17 54]	30.07	73.0	65.2	+0689	-0158	-1393	-862	+267	2.52	+106
29	20 25	30.07	68.8	62.2	+0689	-0141	-1143	-595			
31	[19 25]	30.22	76.0	68.7	+0705	-0169	-1684	-948	+65	0.90	+72
31	20 19	30.21	74.6	67.8	+0890	-0164	-1609	-883			
Sept. 1	17 50	30.50	79.3	77.8	+0588	-0182	-2431	-2025	+232	2.00	+116
1	19 50	30.01	78.1	75.2	+0602	-0177	-2218	-1793			
2	18 50	29.97	78.3	73.2	+0645	-0178	-2054	-1687	+035	1.83	+19
2	20 40	29.97	77.7	72.8	+0545	-0176	-2021	-1652			
6	17 30	30.13	74.5	68.4	+0775	-0164	-1659	-1048	+368	1.67	+220
6	19 10	30.15	70.8	64.5	+0804	-0149	-1335	-680			
7	18 0	30.25	62.2	56.8	+1235	-0117	-0687	+431	+99	1.08	+92
7	19 5	30.47	61.7	56.0	+1264	-0115	-0619	+530			
8	17 30	30.39	68.8	59.2	+1149	-0141	-0890	+118	+181	1.50	+121
8	19 0	30.39	65.4	57.2	+1149	-0129	-0721	+299			
9	19 0	30.28	67.9	62.2	+0991	-0138	-1143	-0290	+163	2.50	+65
9	21 30	30.27	65.8	60.2	+0977	-0130	-0974	-0127			
10	17 45	30.16	72.2	65.7	+0818	-0155	-1435	-0772	+77	3.25	+124
10	21 0	30.18	68.8	65.3	+0847	-0141	-1401	-695			
12	17 50	30.09	71.3	71.8	+0718	-0151	-1939	-1372	+261	3.00	+87
12	20 50	30.13	71.8	69.3	+0775	-0153	-1733	-1111			
14	18 20	29.96	72.3	63.8	+0530	-0155	-1277	-0902	+329	2.75	+120
14	21 5	29.97	67.2	60.3	+0545	-0136	-0982	-0573			
15	17 45	30.14	68.2	60.2	+0790	-0139	-0974	-0323	+637	3.17	+201
15	20 55	30.18	60.4	53.7	+0847	-0110	-0423	+0314			
16	18 25	30.33	67.9	57.0	+1063	-0138	-0704	+0221	+336	2.58	+131
16	21 0	30.30	61.7	52.8	+1020	-0115	-0348	+0557			
17	18 45	30.16	68.2	63.8	+0818	-0139	-1277	-0598	+301	2.17	+139
17	20 55	30.14	65.6	60.0	+0790	-0130	-0957	-0297			

1878	Hour of RA	Bar.	Act. Ph.	Ext. Th.	B	T	Y	B+T+Y	A	Int. in Hours	Hourly Change
Sept-18	18 15	30.07	74.9	73.6	+0689	-166	-2087	-1564	+417	2.67	+156
18	20 55	30.08	73.1	68.8	+703	-158	-1692	-1147			
19	19 0	30.13	70.2	63.7	+775	-147	-1268	-640	+221	2.50	+88
19	21 30	30.13	67.0	61.2	+775	-135	-1059	-419			
22	19 0	30.26	65.1	55.5	+962	-128	-577	+257	+281	1.42	+198
22	20 25	30.30	60.3	53.1	+1020	-109	-373	+538			
23	18 55	30.48	65.3	51.8	+1278	-129	-261	+888	+403	2.58	+156
23	21 30	30.47	56.9	47.3	+1264	-97	+124	+1291			
25	19 55	30.18	70.0	62.1	+847	-146	-1135	-434	+259	2.17	+119
25	22 5	30.18	66.3	59.2	+847	-132	-890	-175			
28	19 0	30.38	63.2	51.3	+1135	-121	-219	+795	+607	3.00	+202
28	22 0	30.35	58.8	44.1	+1092	-92	+402	+1402			
30	19 50	30.21	65.5	57.2	+890	-130	-721	+39	+235	2.17	+108
30	22 0	30.20	60.8	54.5	+876	-111	-491	+274			
Oct. 1	20 20	30.08	67.1	61.0	+703	-135	-1042	-474	+221	2.33	+95
1	22 40	30.07	64.7	58.3	+689	-127	-815	-253			
2	20 0	29.90	71.3	66.8	+443	-151	-1526	-1234	+235	2.42	+97
2	22 25	29.90	68.4	64.1	+443	-140	-1302	-999			
3	19 45	29.97	71.7	64.1	+545	-153	-1302	-910	+386	3.00	+129
3	22 45	29.97	67.8	59.7	+545	-137	-932	-524			
8	19 50	30.15	65.2	59.3	+804	-129	-899	-224	+100	0.83	+120
8	20 40	30.14	64.3	58.0	+790	-125	-789	-124			
10	20 45	29.96	58.7	51.3	+530	-103	-219	+208	+631	2.08	+303
10	22 50	30.00	55.2	44.8	+588	-90	+341	+839			
14	20 15	30.18	61.2	52.5	+847	-113	-322	+412	+183	2.67	+69
14	22 55	30.17	57.0	50.4	+833	-97	-141	+595			
15	21 0	30.07	63.1	60.8	+689	-120	-1025	-456	+203	2.08	+98
15	23 5	30.08	61.8	58.6	+703	-115	-841	-253			
16	20 0	30.07	67.1	63.7	+689	-135	-1268	-714	+431	3.08	+140
16	23 5	30.05	63.1	58.4	+660	-120	-823	-283			
21	19 30	30.10	64.2	63.3	+732	-125	-1234	-627	+495	2.67	+185
21	22 10	30.12	63.6	57.8	+761	-122	-771	-132			
22	19 35	30.15	63.5	52.6	+804	-122	-830	+352	+87	2.67	+33
22	22 15	30.13	57.7	51.5	+775	-100	-236	+439			
29	20 20	—	—	44.8			+341	+1154			
29	20 28	30.22	55.8	—	+905	-92			+347	4.35	+80
29	0 45	30.19	46.9	40.7	+862	-59	+698	+1501			

1878	Hour of RA	Bar.	Alt. Th.	Ext. Th.	B	I	V	B+I+V	A	Dist. in hours	Hourly Change.
Nov. 2	20 10	29.94	54.1	50.0	+502	-85	-107	+310	+414	4.00	+104
2	0 10	29.93	50.0	45.2	+487	-69	+306	+724			
3	20 0	30.18	51.0	59.2	+847	-73	+829	+1603			
3	0 10	30.17	40.6	33.2	+833	-33	+1359	+2159	+556	4.17	+133
4	20 15	29.97	44.8	33.7	+545	-50	+1316	+1811			
4	0 10	29.97	35.2	29.0	+545	-13	+1734	+2266	+455	3.92	+116
5	20 0	30.00	41.9	35.1	+588	-39	+1191	+1740			
5	0 10	30.01	36.9	30.8	+602	-20	+1573	+2155	+415	4.17	+100
6	20 15	29.77	42.5	34.2	+253	-41	+1270	+1482			
6	0 45	29.78	36.0	30.1	+268	-16	+1636	+1888	+406	4.50	+90
10	18 32	29.81	43.3	43.2	+311	-44	+480	+747			
10	22 0	[29.82]	[43.0]	38.1	[+321]	[-43]	+926	+1204	+457	3.47	+132
10	23 45	29.82	43.0	36.6	+326	-43	+1058	+1341	+137	1.75	+78
12	22 37	29.53	52.3	50.3	-97	-78	-133	-308		1	216
12	0 10	29.58	51.1	47.3	-24	-73	+124	+27	+335	3.55	+94
13	21 27	29.72	47.9	41.8	+180	-62	+602	+720			
13	1 35	29.84	43.0	38.1	+354	-43	+926	+1224	+544	4.13	+123
14	21 37	30.24	44.1	36.2	+934	-47	+1093	+1980			
14	0 10	30.30	39.8	32.5	+1020	-30	+1422	+2412	+432	2.55	+169
23	0 15	29.26	45.8	41.0	-497	-53	+672	+122			
23	1 35	29.30	45.2	40.3	-438	-52	+733	+243	+121	1.33	+91
24	23 0	29.86	46.8	42.5	+384	-58	+541	+867			
24	1 50	29.92	44.1	38.3	+472	-47	+908	+1333	+466	2.83	+165
26	22 30	30.13	43.1	34.6	+775	-43	+1234	+1966			
26	1 50	30.17	36.8	30.3	+833	-19	+1618	+2432	+466	3.33	+140
30	22 15	30.27	47.0	40.2	+977	-59	+741	+1659			
30	1 30	30.35	40.2	33.8	+1092	-32	+1307	+2367	+708	3.25	+218
Dec. 1	23 0	30.43	42.0	32.1	+1206	-39	+1457	+2624			
1	1 30	30.40	36.1	29.3	+1163	-16	+1708	+2855	+231	2.50	+92
3	23 20	29.58	47.3	42.4	-24	-60	+550	+466			
6	22 50	29.74	38.6	29.5	+210	-26	+1690	+1874			
6	0 15	29.75	35.3	28.2	+224	-13	+1805	+2016	+142	1.42	+100
7	22 30	29.98	36.2	23.2	+559	-17	+2287	+2799			
7	2 40	30.03	26.8	20.3	+631	+23	+2521	+3175	+376	4.17	+90
8	23 0	30.28	33.2	24.9	+991	-05	+2103	+2989			
8	2 35	30.28	26.7	20.8	+991	+20	+2475	+3486	+397	3.58	+116
11	23 55	29.64	43.7	38.0	+64	-46	+935	+953			
11	2 15	29.73	42.0	37.3	+196	-39	+996	+1153	+200	2.33	+86

	Hour of Run	Bar.	Att. Th.	Ext. Th.	B	I	Y	B+I+Y	Δ	Int. in hours	Hourly Change
1878											
Dec. 12	22 35	30.07	40.7	34.2	+689	-34	+1270	+1925	+174	3.00	+58
12	1 35	30.12	37.3	33.2	+761	-21	+1359	+2099			
14	22 45	30.06	39.6	30.2	+674	-29	+1627	+2272	+229	3.58	+64
14	2 20	30.04	32.9	27.6	+646	-04	+1859	+2501			
16	23 15	29.96	36.4	24.8	+530	-18	+2112	+2624	+552	3.42	+161
16	2 40	30.03	28.0	20.2	+631	+15	+2530	+3176			
17	22 50	30.02	36.3	26.1	+617	-17	+1974	+2594	00		
17	0 5	—	—	26.1	—	—	+1994	+2594			
18	23 0	29.92	36.2	30.2	+472	-17	+1627	+2082	+225	4.00	+56
18	3 0	29.94	31.9	28.2	+502	00	+1805	+2307			
19	22 50	30.17	33.8	25.5	+833	-07	+2048	+2874	+478	4.17	+115
19	3 0	30.23	31.1	21.3	+919	+04	+2429	+3352			
23	0 0	29.73	33.2	22.2	+196	-05	+2348	+2539	+497	5.00	+99
23	5 0	29.78	27.0	17.8	+268	+19	+2749	+3036			
24	23 40	29.64	33.4	19.8	+64	-06	+2567	+2625			
25	23 40	29.62	32.9	25.2	+34	-04	+2075	+2105	+219	1.92	+114
25	1 35	—	—	22.8	—	—	+2294	+2324	+218	3.35	+65
25	4 56	—	—	20.4	—	—	+2512	+2542			
26	0 30	29.69	33.6	24.7	+137	-06	+2120	+2251	+511	4.50	+118
26	5 0	29.68	27.2	19.2	+123	+18	+2621	+2762			
30	1 30	29.98	33.1	25.0	+559	-04	+2094	+2649	+270		
31	1 30	30.15	33.4	23.6	+804	-06	+2221	+3019	+341	3.75	+91
1879	31 5 15	30.13	29.7	19.7	+775	+09	+2576	+3360			
Jan. 5	0 50	29.61	32.8	24.1	+19	-03	+2175	+2191	+454	4.45	+102
5	5 17	29.60	26.9	19.2	+05	+19	+2621	+2645			
6	0 50	29.85	30.3	15.9	+370	+6	+2924	+3300			
7	1 32	30.16	29.8	20.6	+818	+9	+2494	+3321			
13	2 53	29.82	31.7	28.8	+326	+1	+1752	+2079			
19	14 50	29.70	34.2	21.4	+151	-9	+2420	+2562			
20	3 0	29.69	27.3	11.9	+137	+17	+3294	+3448	+360	2.17	+166
20	5 10	29.73	21.8	8.9	+196	+40	+3572	+3808			
22	5 15	30.00	33.8	28.2	+588	-7	+1805	+2386			
23	3 30	29.98	34.3	29.5	+559	-9	+1690	+2240	+395	1.67	+237
23	5 10	30.04	33.3	26.1	+646	-5	+1994	+2635			
25	2 55	29.40	40.4	40.2	-290	-33	+741	+418	+523	3.00	+174
25	5 55	29.43	40.0	34.8	-245	-31	+1217	+941			
26	3 10	30.31	24.2	6.4	+1034	+29	+3806	+4869	+234	2.75	+85
26	5 55	30.28	18.2	3.7	+991	+52	+4060	+5003			

1871phae.proj...4244

	1870	Hour of R.A.	Bar.	Alt. H.	Ent. H.	Hour of R.A.	Bar.	Alt. H.	Ent. H.
Nov.	10	h m 1 0			[29.0]	h m 0 10	30.16	[65.1] 71.0	33.5
	13	1 0	[29.873]	[67.63]	[36.83]	1 0	29.65	66.4	52.0
	15	0 0			[22.0]	0 40	[29.72] 29.79	[66.8] 70.3	34.0
	16	1 10			[23.8]	0 44	[29.907] 30.14	[61.23] 61.7	35.0
	17	1 10			[24.0]	0 48	[29.893] 30.22	[59.83] 68.0	33.7
	19	4 10			30.1	0 54	29.75	64.6	30.1
	27	1 50			47.3	1 25	29.89	68.5	47.3
	Dec	10	4 50			29.4	2 16	30.16	65.1
13		4 50			38.6	2 30	29.87	67.6	36.8
14					34.2		29.64	64.0	
18		3 0			22.7	2 50	29.88	61.0	22.7
22		3 0			16.2	3 6	30.24	64.2	16.2
26		3 30					30.12	63.5	25.3
31		3 40			[29.5]	3 40	[29.88] 29.78	[59.0] 62.9	31.6
Jan		1	3 40			19.0	3 45	29.88	61.4
	7	7 20			9.5	4 10	30.20	61.9	13.1
	10	7 40			16.3	4 20	30.20	70.0	16.3
	17	7 20			28.5	4 47	30.15	67.0	29.1
Feb.	7	7 10			22.0	6 10	30.41	70.0	22.7
	11				15.0	6 25	30.47	67.0	16.8
	20	7 20			30.0	7 0	30.10	64.0	30.4
	21	8 30			15.0		30.21	65.0	
	28	6 30			29.0	7 30	30.18	69.0	28.2
Mar	1	10 30			27.0	7 40	30.15	67.0	40.5
	2	6 0				7 40	30.19	67.9	36.6
	5	10 30			37.5	7 50	30.9709	62.8	37.7
	7	8 20			31.8	8 0	30.27	65.0	32.2
	9	8 30			46.5	8 10	30.13	66.0	48.4
	14					8 24	30.08	69.0	37.3
	19				35.0	8 47	30.27	63.0	38.6
	22					9 0	29.73	64.2	40.0
	25	10 40			29.0		29.90	60.0	
	28	9 30			29.3		30.03	58.0	
Apr	29				32.0		30.18	61.0	
	2				33.0		29.72	62.0	
	5	11 10			32.3	9 54	29.87	57.8	33.8
	6	11 30			41.7	9 58	29.97	64.0	39.8
	8				54.4		29.83	76.0	
	17	10 0			41.5		29.97	58.2	
	18	10 0			41.0		30.07	59.0	
	23				44.0		30.20	66.0	
24	12 10			45.0		30.27	54.4		

1870	Hour of R.A.	B.	V.	R.	B+V+R	Hour of R.A.	B.	V.	R.	B+V+R
Nov 10	0 10	-2118				0 10	+818	-150	+1334	+2002
13						1 0	+78	-133	-279	-334
15						0 40	+283	-147	+1288	+1424
16						0 44	+790	-112	+1199	+1877
17						0 48	+905	-138	+1316	+2083
19	4 10					0 54	+224	-126	+1636	+1734
27	1 50					1 25	+429	-140	+124	+413
Dec 10	4 50					2 16	+818	-128	+1699	+2389
13	4 50	+399	-137	+882	+1144	2 30	+399	-137	+1040	+1302
14							+64	-124	+1270	+1210
18	3 0					2 50	+414	-112	+2303	+2605
22	3 0					3 6	+934	-125	+2895	+3704
26						3 30	+761	-122	+2066	+2705
31						3 40	+268	-120	+1502	+1650
1871 Jan 1						3 45	+414	-114	+2639	+2939
7	7 20	+876	-116	+3515	+4275	4 10	+876	-116	+3182	+3942
10	7 40					4 20	+876	-146	+2886	+3616
17	7 20	+804	-135	+1778	+2447	4 47	+804	-135	+1725	+2394
Feb. 7	7 10	+1177	-146	+2366	+3397	6 10	+1177	-146	+2303	+3334
11		+1264	-135	+3007	+4136	6 25	+1264	-135	+2840	+3969
20	7 20	+732	-124	+1645	+2253	7 0	+732	-124	+1609	+2217
21						8 30	+890	-128	+3007	+3769
28	6 30	+847	-142	+1734	+2439	7 30	+847	-142	+1805	+2510
Mar 1	10 30	+804	-135	+1913	+2582	7 40	+804	-135	+716	+1385
2	6 0					7 40	+862	-138	+1058	+1782
5	10 30	+718	-119	+979	+1578	7 50	+718	-119	+962	+1561
7	8 20	+977	-128	+1484	+2333	8 0	+977	-128	+1448	+2297
9	8 30	+775	-131	+193	+837	8 10	+775	-131	+30	+674
14						8 24	+703	-142	+996	+1557
19		+977	-120	+1199	+2056	8 47	+977	-120	+882	+1739
22						9 0	+196	-125	+759	+830
25	10 40			+1734		10 40	+574	-108	+1734	+2200
28	9 30					9 30	+631	-101	+1708	+2238
29	()					[9 30]	+847	-112	+1466	+2201
Apr 5	11 10	+399	-100	+1439	+1738		+180	-116	+1377	+1441
6	11 30	+545	-124	+611	+1032	9 54	+399	-100	+1307	+1606
8						9 58	+545	-124	+777	+1098
17							+341	-169	-483	-311
18						10 0	+545	-102	+628	+1071
23						10 0	+689	-104	+672	+1257
24							+876	-134	+411	+1156
25						12 10	+977	-87	+324	+1214

	1871	Hour of R.A.	Bar.	Alt. Lh	Ent. Sh	Hour of R.A.	Bar.	Alt. Lh.	Exp. sh
May	17				51.9		29.75	67.8	
May	18	h m			51.8	h m	30.14	60.8	55.0
	20	14 0			55.2	12 51	30.10	66.5	59.2
	21				55.0	12 55	29.99	67.0	56.3
	23	14 0			61.5	13 4	30.01	66.0	54.1
	24	14 0			51.8	13 8	30.31	63.0	54.4
	25	14 40			62.8	13 15	30.26	69.2	62.6
	26				65.2	13 15	29.95	71.0	67.0
	27				58.8	13 19	30.27	64.0	52.1
	29	14 40			70.7	13 27	30.23	76.0	73.2
June	2				65.1	13 39	30.26	70.0	65.2
	3	15 10			75.4	13 46	29.92	78.5	75.0
	4				67.9	13 50	29.83	71.1	68.5
	5	15 10			56.8	13 55	29.97	64.5	57.9
	9				56.5	14 10	30.12	67.0	60.7
July	5	17 30			69.2	15 53	30.22	74.0	69.7
	17				62.0	16 40	29.75	69.0	63.4
Sept	9	20 0			50.5	20 14	30.27	63.0	53.5
	22				42.8		30.20	56.0	
Oct	17	23 30			45.0	22 43	30.20	64.3	48.4
	22	23 40			58.1	23 2	29.97	67.0	58.4
Nov	27				22.5		29.97	71.0	
May	7	12 0			44.5		29.62	64.0	
	12				54.0	12 22	29.80	65.5	57.3
	13	13 0			42.8	12 26	29.83	61.0	44.2
	15				47.0	12 31	29.85	65.0	53.7
	16	12 10			55.6	12 35	29.74	67.5	55.2
1872									
Feb	16	7 0			26.8		29.72	65.0	
	17	5 15	29.93	72.0	25.0	7 55	29.94	71.0	20.0

1871	Hour of R.A.	B	η	γ	$B+\eta+\gamma$	Hour of R.A.	B	η	γ	$B+\eta+\gamma$
May 17						(14 10) h m	+224	-137	-370	-183
May 18	14 10	+790	-111	-261	+418	12 43 h m	+790	-111	-534	+145
20	14 0	+732	-133	-551	+48	12 51	+732	-133	-890	-291
21						12 55	+574	-135	-645	-206
23	14 0	+602	-131	-1084	-413	13 4	+602	-131	-458	+13
24	14 0	+1034	-120	-261	+653	13 8	+1034	-120	-483	+431
25	14 40	+674	-143	-1194	-663	13 15	+674	-143	-1177	-646
26						13 15	+516	-150	-1543	-1177
27						13 19	+977	-124	-288	+565
29	14 40	+631	-169	-1849	-1387	13 27	+631	-169	-2054	-1592
June 2						13 39	+674	-146	-1393	-865
3	15 10	+472	-179	-2234	-1941	13 46	+472	-179	-2202	-1909
4						13 50	+341	-150	-1667	-1476
5	15 10	+545	-126	-687	-268	13 55	+545	-126	-780	-361
9						14 10	+761	-135	-1017	-391
July 5	17 30	+617	-162	-1725	-1270	15 53	+617	-162	-1767	-1312
17						16 40	+224	-142	-1243	-1161
Sept 9	20 0	+977	-116	-150	+711	20 14	+977	-116	-406	+455
22						(20 0)	+876	-93	+516	+1299
Oct 17	23 30	+588	-125	+324	+787	22 43	+588	-125	+30	+493
22	23 40	+545	-135	-798	-388	23 2	+545	-135	-823	-413
Nov. 27						(23 0)	+545	-150	+2321	+2716
1871										
May 7						12 0	+34	-124	+366	+276
12						12 22	+297	-130	-729	-562
13	13 0	+341	-112	+516	+745	12 26	+341	-112	+393	+622
15						12 31	+370	-128	-423	-181
16	12 10	+210	-136	-585	-511	12 35	+210	-136	-551	-477
1872										
Feb 16						7 0	+180	-128	+1930	+1982
17	5 15	+487	-154	+2094	+2427	7 55	+502	-150	+2548	+2900

Hourly Bar			Alt	Th	Exp	Th	Z	T	Y	Z+T+Y	A	Dist in hours	Hourly change
1883													
Oct-9	L	m											
	13	0	30.32	51.8	55.3	+1049	-76	-560	+413				
	13	15	30.30	54.0	57.0	+1020	-85	-704	+231	-182		0.25	
	16	20	30.28	55.9	56.7	+991	-93	-679	+219	-12		3.08	
	17	30	30.28	57.1	55.4	+991	-97	-568	+326	+107		1.17	
	18	30	30.28	56.0	53.9	+991	-93	-440	+458	+132		1.00	
	19	40	30.26	56.1	51.5	+962	-93	-236	+633	+175		1.17	
	22	10	30.28	54.7	47.4	+991	-88	+116	+1019	+386		2.50	
10	22	35	30.28	55.2	48.0	+991	-90	+64	+965	-54		0.42	
	13	15	30.15	55.0	64.0	+804	-89	-1293	-578				
	13	40	30.14	56.1	64.5	+790	-93	-1335	-638				
	17	40	30.13	61.6	62.0	+775	-114	-1126	-465				
	18	30	30.13	61.3	59.8	+775	-113	-941	-279				
	19	30	30.12	60.9	57.1	+761	-112	-713	-64				
	20	45	30.15	60.0	55.0	+804	-108	-534	+162				
	21	30	30.15	59.8	54.3	+804	-107	-475	+222				
	22	0	30.15	59.6	54.8	+804	-106	-517	+181				
	17	10	30.14	63.8	70.3	+790	-123	-1816	-1149				
11	17	30	30.16	64.0	68.2	+818	-124	-1642	-948				
	18	10	30.17	63.0	64.9	+833	-120	-1368	-655				
	19	30	30.18	62.8	62.1	+847	-119	-1135	-407				
	22	5	30.23	62.7	56.1	+919	-119	-628	-172				
	22	30	30.23	62.2	56.4	+919	-117	-653	+149				
	13	25	30.29	56.6	49.0	+1006	-95	-21	+890				
	13	50	30.29	56.8	49.2	+1006	-96	-38	+872				
	18	20	30.36	58.8	47.2	+1106	-103	+133	+1136				
15	18	30	30.36	58.6	46.8	+1106	-103	+168	+1171				
	20	10	30.41	55.6	44.0	+1177	-91	+411	+1497				
	22	25	30.46	52.8	39.0	+1249	-80	+847	+2016				
	22	40	30.47	52.3	38.8	+1264	-78	+865	+2051				
	13	0	30.62	49.7	43.0	+1477	-68	+498	+1907				
	13	25	30.61	50.0	43.9	+1462	-69	+421	+1814				
	13	35	30.61	50.0	44.2	+1462	-69	+393	+1786				
16	14	15	30.60	51.1	44.0	+1448	-73	+411	+1786				
	17	50	30.57	53.6	43.0	+1406	-83	+498	+1821				
	18	15	30.57	53.4	42.4	+1406	-83	+550	+1873				
	18	40	30.57	52.8	43.1	+1406	-80	+489	+1815				
	19	30	30.57	50.2	40.1	+1406	-70	+750	+2086				
	22	30	30.58	49.2	35.2	+1420	-67	+1182	+2535				

	log p R.A.	Bar	Alt. H	Exp. H	73	77	Y	73+77	Δ	Int. in Hours	Hourly Change
1883											
Oct 17	h m										
	13 5	30.63	46.0	42.1	+1491	-54	+576	+2013			
	14 15	30.61	48.0	43.8	+1462	-62	+430	+1830			
	18 15	30.60	51.0	43.7	+1448	-73	+439	+1814			
	19 25			41.3	+1448	-73	+645	+2020			
	20 45	30.61	49.9	39.0	+1462	-69	+847	+2240			
	21 15	30.61	49.2	38.6	+1462	-67	+882	+2277			
	21 30	30.60	48.9	37.5	+1448	-66	+979	+2361			
	22 30	30.60	46.0	35.0	+1448	-54	+1199	+2593			
	23 0	30.60	44.0	34.6	+1448	-47	+1234	+2635			
18	13 30	30.56	47.8	47.0	+1391	-61	+150	+1480			
	13 45	30.55	48.0	47.6	+1377	-62	+99	+1414			
	19 0	30.49	52.6	46.1	+1292	-79	+228	+1441			
	19 30	30.49	51.8	45.0	+1292	-76	+324	+1540			
	21 0	30.49	51.5	42.0	+1292	-75	+585	+1802			
	22 0	30.49	50.0	40.0	+1292	-69	+759	+1982			
	23 0	30.57	50.0	40.0	+1406	-69	+759	+2096			
22	13 50	30.39	45.1	41.8	+1149	-51	+602	+1700			
	18 15	30.36	49.5	40.8	+1106	-67	+690	+1729			
	18 30	30.36	49.4	40.2	+1106	-67	+741	+1780			
	19 0	30.36	49.0	39.2	+1106	-66	+829	+1869			
	19 30	30.36	48.6	38.5	+1106	-64	+890	+1932			
	20 0	30.37	48.2	37.2	+1121	-63	+1005	+2063			
	21 0	30.38	46.7	36.1	+1135	-57	+1102	+2180			
	22 15			34.1	+1135	-57	+1279	+2357			
	23 0	30.40	45.8	33.8	+1163	-53	+1307	+2417			
30	73 50	29.42	60.0	58.9	-260	-108	-866	-1234			
30	19 30	29.57	59.5	56.2	-39	-106	-636	-781			
	20 0	29.60	58.0	55.5	+5	-101	-577	-673			
	20 45	29.63	58.0	55.8	+50	-101	-603	-654			
	22 0	29.68	58.2	53.3	+123	-102	-390	-369			
	0 0	29.73	56.4	51.2	+196	-95	-210	-109			
	0 40	29.74	56.0	51.0	+210	-93	-193	-76			
Nov 1	14 25	29.74	50.9	47.3	+210	-73	+124	+261			
	19 30	29.78	53.2	45.0	+268	-82	+324	+510			
	20 0	29.79	51.8	44.0	+283	-76	+411	+618			
	20 40	29.80	51.3	42.5	+297	-74	+541	+764			
	22 0	29.80	50.8	40.5	+297	-72	+716	+941			
	23 40	29.76	48.9	39.8	+238	-66	+777	+949			
	0 10	29.75	47.7	40.0	+224	-61	+759	+922			

	Hour R.A.	Bar	Alt	El	B	T	γ	B+T	Δ	Int in hours	Hourly change
1883											
5	19 0	30.26	54.0	58.1	+962	-85	-798	+79			
	19 30	30.25	54.1	56.8	+948	-85	-687	+176			
	20 10	30.25	54.6	54.9	+948	-87	-526	+335			
	21 30	30.27	55.0	51.7	+977	-89	-253	+635			
	22 20	30.26	54.3	50.2	+962	-86	-124	+752			
	0 30	30.23	53.0	46.2	+919	-81	+219	+1057			
	13 0	30.02	51.1	54.8	+617	-73	-517	+27			
	13 15	30.01	51.2	55.3	+602	-74	-560	-32			
	13 40	30.00	51.9	57.2	+588	-77	-721	-210			
6	21 45	29.85	55.1	56.6	+370	-89	-670	-389			
	22 10	29.85	55.3	56.2	+370	-90	-636	-356			
	0 0	29.85	55.8	54.0	+370	-92	-449	-171			
	0 30	29.84	55.9	54.2	+356	-93	-466	-203			
	13 45	29.92	51.9	46.0	+472	-77	+237	+632			
7	19 40	29.93	52.8	46.0	+487	-80	+237	+644			
	20 0	29.94	53.1	44.7	+502	-81	+349	+770			
	21 30	29.96	51.7	41.9	+530	-76	+594	+1048			
	23 15	30.00	50.2	38.7	+588	-70	+873	+1391			
	1 15	30.02	49.0	35.5	+617	-66	+1156	+1707			
	12 45	30.02	44.8	36.8	+617	-50	+1040	+1607			
	13 0	30.02	45.0	37.1	+617	-51	+1014	+1580			
	13 35	30.01	46.9	39.0	+602	-59	+847	+1390			
8	19 30	29.95	52.8	45.4	+516	-80	+289	+725			
	20 0	29.94	52.6	44.8	+502	-79	+341	+764			
	20 30	29.94	52.5	43.8	+502	-79	+430	+853			
	21 30	29.94	52.2	42.9	+502	-78	+507	+931			
12	20 30	29.47	41.0	29.9	-186	-35	+1654	+1433			
	(21 30) ^s	29.46	40.5	29.3	-201	-33	+1708	+1474			
	22 20	29.44	37.0	29.0	-230	-20	+1734	+1484			
	23 30	29.44	36.0	29.6	-230	-16	+1681	+1435			
	1 0	29.46	35.0	29.0	-201	-12	+1734	+1521			
	1 20	29.46	33.8	28.8	-201	-7	+1752	+1544			
14	20 15	29.70	43.1	36.0	+151	-43	+1111	+1219			
	20 30	29.70	42.0	35.7	+151	-39	+1139	+1251			
	22 15	29.79	40.0	32.0	+283	-31	+1466	+1718			
	23 30	29.86	38.9	31.1	+384	-27	+1546	+1903			
	1 0	29.93	37.8	29.7	+487	-23	+1672	+2136			
	1 20	29.93	36.5	29.3	+487	-18	+1708	+2177			

Hour of R.A.	Bar	Alt 4h	Dist 4h	T ₃	T ₄	X	T ₃ +T ₄	Δ	Dist in Hours	Hourly Change
Nor 14	h m									
13 0	30.18	36.8	25.1	+847	-19	+2084	+2912			
13 15	30.18	36.9	25.8	+847	-20	+2021	+2848			
17 20 30	30.29	40.6	35.2	+1006	-33	+1182	+2155			
22 30	30.29	40.3	32.1	+1006	-32	+1457	+2431			
0 0	30.28	39.0	31.4	+991	-27	+1519	+2483			
1 30	30.28	38.8	31.0	+991	-26	+1555	+2520			
13 20	30.28	39.1	35.4	+991	-27	+1165	+2129			
21 20 50	30.15	52.3	58.7	+804	-80	-849	-125			
22 0	30.15	53.3	57.0	+804	-82	-704	+18			
0 0	30.15	53.2	54.2	+804	-82	-466	+256			
0 30	30.15	53.3	54.0	+804	-82	-449	+273			
1 15	30.14	53.2	54.1	+790	-82	-458	+250			
22 22 0	29.98	55.2	61.0	+559	-90	-1042	-573			
27 21 0	30.31	46.4	37.9	+1034	-56	+944	+1922			
23 0	30.36	44.4	34.5	+1106	-49	+1243	+2300			
0 20	30.39	43.8	32.1	+1149	-46	+1457	+2560			
2 5	30.41	43.1	31.0	+1177	-43	+1555	+2689			
13 10	30.34	39.0	26.4	+1078	-27	+1967	+3018			
13 30	30.33	39.0	27.5	+1063	-27	+1868	+2904			
28 21 0	30.14	46.3	40.0	+790	-56	+759	+1493			
23 0	30.15	45.0	38.5	+804	-51	+890	+1643			
0 15	30.16	43.1	36.6	+818	-43	+1058	+1833			
2 0	30.19	42.0	34.0	+862	-39	+1288	+2111			
13 10	30.40	35.1	18.8	+1163	-12	+2658	+3809			
13 45	30.40	34.9	19.5	+1163	-12	+2594	+3745			
Dec 3 21 30	30.28	32.0	21.8	+703	+0	+2384	+3087			
23 30	30.13	30.0	20.3	+775	+8	+2521	+3304			
1 0	30.14	29.0	19.9	+790	+11	+2558	+3359			
2 10	30.15	28.0	19.4	+804	+15	+2603	+3422			
2 35	30.14	26.8	19.2	+790	+20	+2621	+3431			
13 15	30.24	29.9	20.2	+934	+8	+2530	+3472			
13 30	30.25	29.8	21.2	+948	+9	+2438	+3395			
4 21 40	30.16	39.5	32.7	+818	-29	+1405	+2194			
23 30	30.15	39.0	30.6	+804	-27	+1591	+2368			
6 22 30	30.42	43.6	38.4	+1192	-45	+899	+2046			
23 30	30.44	43.2	36.2	+1220	-44	+1093	+2269			
1 0	30.46	42.1	32.3	+1249	-39	+1439	+2649			
2 30	30.48	41.0	31.1	+1278	-35	+1546	+2789			

1883	Hour of P.M.	Bar	Alt. H.	Ext. H.	73	71	7	B+7r	Δ	Int. in Hours	Hourly Change
6	2 45	30.49	40.6	30.9	+1292	-33	+1564	+2823			
	13 0	30.50	36.5	26.2	+1306	-18	+1985	+3273			
	13 30	30.50	36.6	26.7	+1306	-18	+1939	+3227			
10	1 20	29.88	43.0	37.2	+0414	-43	+1005	+1376			
	2 25	29.88	43.0	36.3	+414	-43	+1084	+1455			
	3 0	29.89	43.2	36.0	+429	-44	+1111	+1496			
	13 0	29.98	38.0	27.8	+559	-24	+1841	+2376			
	13 30	29.96	37.8	28.0	+530	-23	+1823	+2330			
11	1 10	29.96	35.5	23.0	+530	-14	+2275	+2791			
	1 40	29.98	35.8	23.6	+559	-15	+2221	+2765			
	2 15	29.86	36.9	27.3	+384	-20	+1886	+2250			
	14 10	30.00	36.0	24.4	+588	-16	+2147	+2719			
12	22 30	30.14	39.0	28.9	+790	-27	+1743	+2506			
	23 50	30.14	38.8	27.0	+790	-26	+1913	+2677			
	1 0	30.14	38.8	25.9	+790	-26	+2012	+2776			
	1 30	30.15	38.8	25.2	+804	-26	+2075	+2833			
	2 0	30.15	38.3	24.9	+804	-25	+2103	+2882			
	13 5	30.04	35.5	27.5	+646	-14	+1868	+2500			
	13 35	30.04	35.6	28.1	+646	-14	+1814	+2446			
13	22 30	29.84	43.1	44.7	+356	-43	+611	+924			
	23 45	29.84	43.0	40.0	+356	-43	+759	+1072			
	0 50	29.82	43.0	39.6	+326	-43	+794	+1047			
	1 50	29.80	42.9	39.8	+297	-43	+777	+1031			
	2 15	29.80	42.8	39.2	+297	-42	+829	+1084			
22	22 50	30.10	22.7	9.2	+732	+35	+3544	+4311			
	0 0	30.11	21.8	7.1	+746	+39	+3740	+4525			
	0 40	30.13	19.8	6.8	+775	+46	+3768	+4589			
	3 0	30.20	17.0	2.9	+876	+57	+4136	+5069			
	13 0	30.50	10.0	-13.0	+1306	+84	+5686	+7076			
	13 30	30.51	5.8	-13.0	+1320	+101	+5686	+7107			
26	18 20	30.05	30.8	32.1	+660	+5	+1457	+2122			
	23 0	30.08	34.4	30.7	+703	-10	+1582	+2275			
	23 30	30.09	34.0	30.2	+718	-8	+1627	+2337			
	0 0	30.10	33.9	30.2	+732	-8	+1627	+2351			
29	23 30	30.13	35.1	27.1	+775	-12	+1904	+2667			
	0 35	30.16	35.0	25.6	+818	-12	+2039	+2845			
	2 30	30.18	33.2	23.6	+847	-5	+2221	+3063			
	3 0	30.16	33.1	23.1	+818	-4	+2266	+3080			

1884	Hour of R.A.	Bar	Alt $^{\circ}$	Ext $^{\circ}$	\bar{B}	\bar{P}	\bar{Y}	$\bar{B}+\bar{P}+\bar{Y}$
Jan 3	0 0	29.60	35.2	24.0	+ 5	- 13	+2185	+2177
	1 20	29.63	34.1	22.5	+ 50	- 8	+2321	+2363
	2 20	29.65	33.0	21.7	+ 78	- 4	+2393	+2467
	4 0	29.67	32.8	21.0	+ 107	- 3	+2456	+2560
	10 0 15	29.92	36.6	28.8	+ 472	- 18	+1752	+2206
	2 0	29.96	35.0	27.5	+ 530	- 12	+1868	+2386
	3 50	29.99	33.9	26.8	+ 574	- 8	+1930	+2496
	16 1 0	30.25	27.8	15.0	+ 948	+ 16	+3007	+3971
	2 15	30.26	27.2	13.7	+ 962	+ 18	+3127	+4107
	17 1 5	30.07	35.0	22.1	+ 689	- 12	+2357	+3034
21	2 45	30.03	31.2	22.1	+ 681	+ 3	+2357	+2991
	1 0	30.15	27.8	17.4	+ 804	+ 16	+2786	+3606
	1 25	30.13	27.2	16.8	+ 775	+ 18	+2840	+3633
	2 20	30.18	25.9	14.8	+ 847	+ 22	+3026	+3895
	4 30	30.21	25.2	10.3	+ 890	+ 25	+3441	+4356
	5 0	30.21	35.7	10.0	+ 890	- 15	+3469	+4344
	22 0 55	29.97	29.9	29.7	+ 545	+ 8	+1672	+2225
	1 20	29.97	29.9	29.1	+ 545	+ 8	+1725	+2278
	2 20	29.89	29.2	28.4	452 +574	+ 10	+1787	+1345 +2371
	4 0	30.01	29.9	28.3	+ 602	+ 8	+1796	+2406
26	1 0	30.44	30.8	21.2	+1220	+ 5	+2408	+3663
	2 15	30.47	29.5	18.6	+1264	+ 10	+2677	+3951
	3 5	30.48	28.0	18.9	+1278	+ 15	+2648	+3941
	5 0	30.48	28.0	16.1	+1278	+ 15	+2904	+4197
	Feb 2 1 20	29.98	31.2	30.8	+ 559	+ 3	+1573	+2135
	2 0	29.99	31.0	28.9	+ 574	+ 4	+1743	+2321
	4 20	30.02	31.9	28.2	+ 617	+ 0	+1805	+2422
	5 20	30.03	32.0	28.4	+ 631	+ 0	+1787	+2418
	9 7 30	29.93	34.1	35.2	+ 487	- 8	+1182	+1661
	8 30	29.94	35.6	35.5	+ 502	- 14	+1156	+1641
16	4 10	30.60	36.0	30.1	+1448	- 16	+1636	+3068
	7 30	30.57	36.0	28.1	+1406	- 16	+1814	+3204
	8 5	30.56	36.0	28.1	+1391	- 16	+1814	+3189
	20 4 0	29.54	39.8	31.1	- 83	- 30	+1546	+1433
	5 0	29.61	37.2	30.5	+ 19	- 21	+1600	+1598
	5 40	29.63	36.9	29.6	+ 50	- 20	+1681	+1711
	7 0	29.73	34.0	26.7	+196	- 8	+1939	+2127
	7 40	29.75	33.0	26.2	+224	- 4	+1985	+2205

1884	Hour of R.A. h m	Bar	Alt. In	Elev. In	B	T	Y	B+T+Y
Feb 21	1 0	30.09	33.2	31.9	+ 718	- 5	+1475	+2188
	1 40	30.05	34.9	32.0	+ 660	- 12	+1466	+2114
	2 0	30.05	35.0	32.2	+ 660	- 12	+1448	+2096
	3 0	30.05	34.0	31.9	+ 660	- 8	+1475	+2127
27	4 0	30.04	35.0	29.1	+ 646	- 12	+1725	+2859
	1 0	29.68	37.1	38.1	+ 123	- 20	+0926	+1029
	1 30	29.69	37.9	38.5	+ 137	- 24	+ 890	+1003
	2 0	29.70	38.4	38.9	+ 151	- 25	+ 856	+ 982
	5 20	29.75	38.1	34.9	+ 224	- 24	+1208	+1408
	6 40	29.73	38.0	33.2	+ 196	- 24	+1359	+1531
	7 40	29.74	38.1	32.1	+ 210	- 24	+1457	+1643
	8 15	29.75	38.2	32.1	+ 224	- 25	+1457	+1656
Mar 1	1 0	29.63	25.0	16.6	+ 50	+ 26	+2859	+2935
	4 40	29.66	26.0	14.1	+ 92	+ 22	+3090	+3204
	6 0	29.70	24.8	12.2	+ 151	+ 27	+3266	+3414
3	1 0	29.42	25.9	23.6	- 260	+ 22	+2221	+1983
	1 50	29.42	27.0	23.8	- 260	+ 19	+2203	+1962
	5 45	29.53	28.2	19.4	- 97	+ 14	+2603	+2520
	6 15	29.52	27.6	19.0	- 112	+ 17	+2639	+2544
	7 20	29.54	25.9	16.4	- 83	+ 22	+2877	+2816
	8 30	29.57	24.6	13.2	- 39	+ 28	+3173	+3162
4	4 45	30.04	23.0	14.3	+ 646	+ 34	+3072	+3752
	6 30	30.11	25.0	11.7	+ 746	+ 45	+3313	+4104
	7 30	30.12	21.8	10.0	+ 761	+ 39	+3469	+4269
	7 45	30.12	21.7	10.0	+ 761	+ 39	+3469	+4269
10	1 0	29.95	35.5	33.4	+ 516	- 14	+1342	+1844
	1 45	29.96	36.0	34.1	+ 530	- 16	+1279	+1793
	2 0	29.97	36.0	34.1	+ 545	- 16	+1279	+1808
	3 0	30.02	36.4	34.2	+ 617	- 18	+1270	+1869
	3 30	30.04	36.5	34.0	+ 646	- 18	+1288	+1916
	4 45	30.10	36.7	33.2	+ 732	- 19	+1359	+2072
12	5 15	30.14	36.2	32.2	+ 790	- 17	+1448	+2221
	8 40	29.91	42.0	42.1	+ 457	- 39	+ 576	+ 994
	10 0	29.75	43.0	40.6	+ 576	- 43	+ 707	+1150
12	10 25	29.98	43.8	39.9	+ 559	- 46	+ 768	+1281
	15 7 0	29.88	40.0	33.4	+ 414	- 31	+1342	+1725
	8 10	29.90	40.0	33.5	+ 443	- 31	+1334	+1746
15	9 0	29.92	39.8	32.7	+ 472	- 30	+1405	+1847
	6 0	30.16	36.0	30.8	+ 818	- 16	+1573	+2375
	6 30	30.17	35.8	30.0	+ 833	- 15	+ 1645	+2463

1884	Hour of P.M.	Bar	Alt. H	Ext. H	B	I	V	B+B _r
Mar 16	1 0	30.10	39.9	46.4	+732	-31	+202	+903
	4 30	30.17	40.7	36.5	+833	-34	+1066	+1865
18	5 10	30.18	39.2	35.9	+847	-28	+1120	+1939
	7 0	30.18	38.0	32.5	+847	-24	+1422	+2245
	0 50	30.24	40.9	36.6	+934	-35	+1058	+1957
	1 15	30.24	41.2	37.0	+934	-36	+1023	+1921
	4 28	30.27	42.7	38.8	+977	-42	+865	+1800
	5 0	30.27	42.7	38.2	+977	-42	+917	+1852
	6 0	30.28	42.0	36.2	+991	-39	+1093	+2045
	7 0	30.30	42.0	34.2	+1020	-39	+1270	+2251
	8 0	30.32	41.8	32.2	+1049	-38	+1448	+2459
	9 0	30.34	41.2	31.3	+1078	-36	+1528	+2570
22	1 0	30.14	42.0	49.1	+790	-39	-29	+722
	1 30	30.15	44.3	50.1	+804	-48	-116	+640
	2 0	30.15	46.1	50.7	+804	-54	-167	+583
	6 30	30.18	47.1	46.7	+847	-59	+176	+964
	7 0	30.18	48.3	45.9	+847	-63	+246	+1030
	7 40	30.20	48.6	45.0	+876	-64	+324	+1136
	8 40	30.20	48.0	42.9	+876	-62	+507	+1321
	9 40	30.21	48.0	41.7	+890	-62	+611	+1439
	10 15	30.21	47.4	41.2	+890	-60	+654	+1484
	8 30	29.71	49.5	47.2	+165	-68	+133	+230
24	9 30	29.74	49.8	45.1	+210	-68	+315	+457
	10 30	29.74	49.5	43.2	+210	-68	+480	+622
	18 30	29.87	44.8	37.1	+399	-50	+1014	+1363
	19 30	29.88	44.0	38.5	+414	-47	+890	+1257
	19 50	29.88	44.5	39.5	+414	-49	+803	+1168
	21 15	29.91	45.1	45.1	+457	-51	+315	+721
	1 0	29.95	50.0	52.0	+516	-69	-279	+168
	1 30	29.94	50.8	52.1	+502	-72	-288	+142
25	4 30	29.94	53.0	54.8	+502	-81	-577	-96
	5 00	29.95	53.3	54.5	+516	-82	-491	-57
	5 30	29.96	53.8	54.0	+530	-84	-449	-3
	6 30	29.95	54.0	51.8	+516	-85	-261	+170
	7 0	29.96	53.8	50.2	+530	-84	-124	+322
	7 30	29.96	53.2	48.4	+530	-82	+30	+478
	8 30	29.98	53.7	47.3	+559	-84	+124	+599
	0 35	29.73	32.1	30.6	+196	±00	+1591	+1787
31	1 10	29.73	33.0	31.0	+196	-4	+1555	+1747

	Hour	Bar	Alt	Lat	B	U	V	T3+T4
1884	R.A.							
131	5 50	29.70	37.1	35.4	+151	-20	+1165	+1296
	6 30	29.71	36.4	34.7	+165	-18	+1234	+1381
	7 15	29.71	36.1	33.7	+165	-16	+1316	+1464
	7 45	29.71	36.2	33.1	+165	-17	+1368	+1516
	8 30	29.73	36.5	32.0	+196	-18	+1466	+1644
	9 30	29.75	36.4	30.7	+224	-18	+1582	+1788
	10 30	29.76	36.4	29.8	+238	-18	+1663	+1883
April	0 45	29.69	37.8	38.9	+137	-23	+856	+970
	1 15	29.68	38.9	39.9	+123	-27	+768	+864
	1 55	29.67	39.1	41.9	+107	-27	+594	+674
	5 30	29.67	41.3	43.8	+107	-36	+430	+501
	6 15	29.66	41.2	43.0	+92	-36	+498	+554
	8 30	29.68	41.2	37.9	+123	-36	+944	+1031
	9 0	29.69	41.2	37.2	+137	-36	+1005	+1106
12	8 20	29.76	50.0	47.1	+530	-69	+142	+603
	9 0	29.98	50.1	45.5	+559	-69	+281	+771
	10 0	29.98	49.9	43.8	+559	-69	+430	+920
	11 0	29.98	49.6	42.4	+559	-68	+550	+1041
	20 37	29.98	43.1	39.5	+559	-43	+803	+1319
	21 10	29.97	42.8	41.5	+545	-42	+628	+1131
	0 0	30.00	46.1	48.2	+588	-54	+47	+581
14	7 30	30.01	52.1	51.6	+602	-77	-244	+281
	9 0	30.04	50.7	46.1	+646	-72	+228	+802
	10 10	30.05	50.1	44.9	+660	-69	+332	+923
	11 0	30.05	49.3	43.1	+660	-67	+489	+1082
	19 45	30.04	45.2	37.6	+646	-52	+970	+1564
23	2 5	29.91	48.1	53.0	+957	-62	-364	+31
	9 30	29.90	53.5	50.8	+443	-83	-175	+185
	10 30	29.91	53.2	47.6	+457	-82	+99	+474
	11 30	29.92	52.8	45.2	+472	-80	+306	+698
	20 30	29.83	47.4	40.2	+341	-60	+741	+1022
	21 15	29.83	47.8	42.4	+341	-61	+550	+830
26	9 50	29.79	51.1	50.0	+283	-69	-107	+107
	11 30	29.86	52.1	46.4	+384	-77	+202	+509
28	7 40	29.99	52.3	48.0	+574	-78	+64	+560
	10 55	30.00	50.1	43.1	+588	-69	+489	+1008
	11 30	30.02	50.1	42.4	+617	-69	+550	+1098
	12 0	30.01	49.8	41.5	+602	-68	+628	+1162

1884	Hour R.A.	Bar	Alt. H	Ext. H	B	T	Y	B+T+Y
Apr 30	7 30	29.96	55.8	62.3	+530	-92	+1152	-714
	11 0	29.99	57.8	53.9	+574	-100	-440	+24
	11 30	30.00	56.2	53.1	+588	-94	-373	+121
	12 0	30.00	56.0	51.8	+588	-93	-261	+234
	20 40	30.10	52.0	45.6	+732	-77	+272	+927
	21 15	30.10	51.6	47.4	+732	-75	+116	+773
May 12	1 5	30.08	52.9	50.8	+703	-81	-175	+447
	11 0	29.80	56.1	54.0	+297	-93	-449	-243
	12 0	29.82	56.0	53.2	+326	-93	-381	-148
	12 45	29.83	56.0	51.4	+341	-93	-227	+21
	24 11 0	29.78	73.0	81.0	+268	-158	-2690	-2580
	12 0	29.77	74.0	78.2	+253	-162	-2463	-2372
	13 10	29.80	74.6	74.9	+297	-164	-2195	-2062
	13 45	29.81	75.0	73.2	+311	-166	-2054	-1909
	26 12 0	29.91	65.0	55.0	+457	-128	-534	-205
	13 15	29.90	62.0	53.4	+443	-116	-398	-71
	14 10	29.90	61.9	52.4	+443	-116	-313	+14
	14 30	29.90	61.1	51.9	+443	-112	-270	+61
31	12 35	30.25	59.3	54.0	+948	-105	-449	+394
	13 30	30.27	59.0	51.6	+977	-104	-244	+629
	14 30	30.29	58.0	49.9	+1006	-101	-98	+807
	June 3 13 0	29.85	67.2	70.3	+370	-136	-1816	-1582
	13 30	29.86	68.0	69.5	+384	-138	-1750	-1504
	4 13 0	30.02	72.3	71.8	+617	-155	-1939	-1477
	14 0	30.05	71.5	69.5	+660	-152	-1750	-1242
	15 0	30.04	71.1	67.0	+646	-150	-1543	-1047
	5 13 0	30.09	74.0	74.0	+718	-162	-2120	-1564
	14 0	30.11	72.9	72.0	+746	-158	-1956	-1368
	9 13 30	29.76	76.0	70.3	+238	-169	-1816	-1747
	14 30	29.78	74.0	68.9	+268	-162	-1700	-1594
	15 15	29.79	74.0	67.2	+283	-162	-1559	-1438
	14 13 30	30.52	64.0	52.4	+1335	-124	-313	+898
	14 30	30.57	62.0	50.2	+1406	-116	-124	+1166
	15 0	30.57	60.9	49.6	+1406	-112	-72	+1222
	16 13 35	30.05	67.0	73.8	+660	-135	-2103	-1578
	14 30	30.06	69.1	71.1	+674	-142	-1882	-1350
	15 30	30.08	69.2	67.3	+703	-143	-1568	-1008
	16 0	30.08	69.1	67.1	+703	-142	-1551	-990

	Hour	Bar	Alt	2nd	73	I'	Y	B+T+r
1884	R.#							
June 17	13 30	30.07	76.0	77.4	+689	-169	-2398	-1878
	14 30	30.08	75.1	73.5	+703	-166	-2079	-1543
	15 30	30.08	72.7	68.7	+703	-157	-1684	-1138
	16 0	30.08	72.5	67.9	+703	-156	-1618	-1071
18	13 30	29.97	77.0	74.9	+545	-173	-2195	-1823
	14 30	29.97	76.1	71.1	+545	-169	-1882	-1506
	15 30	30.07	75.2	68.0	+689	-166	-1626	-1103
19	15 30	29.93	72.3	67.0	+487	-155	-1543	-1211
	16 15	29.94	71.2	66.2	+502	-151	-1476	-1125
21	15 15	29.86	79.5	77.2	+384	-183	-2374	-2173
	16 15	29.88	79.4	75.3	+414	-183	-2226	-1995
23	13 10	30.14	73.0	69.5	+790	-158	-1750	-1118
	14 30	30.14	72.2	66.0	+790	-155	-1460	-825
26	13 15	30.25	67.7	60.2	+948	-137	-974	-163
	16 0	30.28	66.3	54.6	+991	-132	-500	+359
	16 40	30.28	66.1	53.8	+991	-131	-432	+428
30	15 30	30.03	77.5	73.0	+631	-145	-2038	-1582
	16 30	30.02	77.0	71.0	+617	-173	-1874	-1430
July 1	16 10	29.90	78.2	72.3	+443	-178	-1980	-1715
	16 40	29.89	77.5	72.0	+429	-175	-1956	-1702
3	15 30	30.01	76.3	67.2	+602	-170	-1559	-1127
	16 30	30.04	75.1	67.2	+646	-166	-1559	-1079
	17 0	30.05	74.7	67.0	+660	-165	-1543	-1048
10	16 20	29.87	76.8	70.1	+399	-172	-1799	-1572
	17 0	29.87	74.6	69.5	+399	-164	-1750	-1515
14	16 0	29.68	70.4	64.2	+123	-148	-1310	-1335
	17 0	29.69	69.3	63.1	+137	-143	-1217	-1223
15	15 50	29.75	71.0	65.4	+224	-150	-1410	-1336
	17 0	29.76	70.3	63.5	+238	-147	-1251	-1160
	18 0	29.75	69.1	62.1	+224	-142	-1135	-1063
16	16 30	29.71	68.2	62.1	+165	-139	-1135	-1109
	17 0	29.71	68.1	61.7	+165	-138	-1100	-1073
	17 40	29.71	67.1	61.1	+165	-135	-1050	-1020
17	17 0	29.84	73.0	67.1	+356	-158	-1551	-1353
	18 20	29.86	71.5	64.6	+384	-152	-1343	-1111
21	17 30	29.86	69.2	61.0	+384	-143	-1042	-801
	18 30	29.86	68.8	59.0	+384	-141	-873	-630
	19 0	29.87	68.2	58.1	+399	-139	-798	-538

1884	Hour R.#	Bar	Alt Lh	Ret Lh	73	T	V	B+73r
July 22	16 50	29.89	73.8	69.7	+429	-161	-1767	-1499
	18 0	29.89	73.0	68.1	+429	-158	-1634	-1363
	18 30	29.90	73.0	66.6	+443	-158	-1510	-1225
26	16 30	30.02	73.8	65.2	+617	-161	-1393	-937
	17 30	30.03	72.9	64.1	+631	-158	-1302	-829
	18 30	30.03	72.2	62.8	+631	-155	-1194	-718
28	18 0	29.97	70.7	61.6	+545	-149	-1092	-696
	19 0	29.97	70.0	61.5	+545	-146	-1084	-685
	20 15	29.98	69.1	61.3	+559	-142	-1067	-650
30	18 0	29.87	69.9	64.7	+399	-146	-1352	-1099
Aug 2	18 0	30.17	74.9	68.4	+833	-166	-1659	-992
	19 0	30.16	74.0	67.2	+818	-162	-1559	-903
	20 30	30.15	73.1	65.0	+804	-158	-1376	-730
6	18 30	30.02	74.6	72.5	+617	-171	-1997	-1491
	19 30	30.03	74.6	70.9	+631	-164	-1866	-1399
9	18 0	30.27	72.0	61.9	+977	-154	-1117	-294
	19 0	30.26	70.8	60.5	+962	-149	-1000	-187
	20 0	30.25	68.7	58.8	+948	-141	-858	-051

1885								
Jan 8	3 0	30.12	29.0	23.2	+761	+11	+2257	+3029
	4 0	30.12	30.4	20.7	+761	+6	+2484	+3251
	10 3 0	30.11	29.8	21.4	+746	+10	+2420	+3176
13	3 0	30.34	31.2	24.6	+1078	+3	+2129	+3210
14	2 40	30.58	34.7	23.1	+1420	-11	+2266	+3675
	3 30	30.52	29.7	23.2	+1335	+10	+2257	+3602
	4 30	30.55 29.55	28.8	22.3	+1377 +1377	+12	+2339	+3728 +2282
17	2 0	29.49	34.1	26.6	-156	-8	+1948	+1784
	3 30	29.50	31.6	23.2	-142	+2	+2257	+2117
18	1 30	30.17	32.8	21.2	+833	-3	+2438	+3268
	3 0	30.18	31.4	19.2	+847	+2	+2621	+3470
	3 45	30.17	29.8	18.5	+833	+9	+2686	+3528
19	2 45	30.27	27.9	19.3	+977	+15	+2612	+3604
	5 0	30.23	22.8	13.0	+919	+35	+3191	+4145
20	2 30	30.12	30.8	19.4	+761	+5	+2603	+3369

	Hour	Bar	Alt	Th	Ext	Th	B	V	R	B+V+R
1885	R.A.									
Jan 21	3 30	29.65	27.0	19.0	+78	+19	+2639	+2736		
	4 15	29.65	25.0	16.8	+78	+26	+2840	+2944		
	5 0	29.67	23.6	15.8	+107	+32	+2934	+3073		
22	1 30	30.28	18.6	1.7	+991	+51	+4251	+5293		
	2 45	30.32	16.6	-0.5	+1049	+59	+4365	+5473		
	4 0	30.32	16.0	-0.6	+1049	+61	+4356	+5466		
26	3 0	29.49	30.2	16.2	-156	+7	+2895	+2746		
	4 15	29.50	28.9	14.2	-142	+11	+3081	+2950		
	6 0	29.55	22.8	13.0	-69	+35	+3191	+3157		
27	3 0	30.14	23.8	7.7	+790	+31	+3684	+4505		
29	2 30	30.20	20.5	6.9	+876	+43	+3759	+4678		
	3 0	30.20	19.6	6.8	+876	+47	+3768	+4691		
	4 0	30.20	17.0	6.7	+876	+57	+3777	+4710		
	5 0	30.21	16.5	6.0	+890	+59	+3844	+4793		
	6 0	30.22	16.0	5.0	+905	+61	+3938	+4904		
31	3 0	30.09	30.0	23.8	+718	+8	+2203	+2929		
	4 0	30.08	28.8	21.6	+703	+12	+2402	+3117		
	5 0	30.07	25.8	18.9	+689	+23	+2648	+3360		
	6 0	30.07	23.0	15.8	+689	+34	+2934	+3657		
Feb 2	3 0	29.83	19.0	3.7	+341	+49	+4060	+4450		
	3 45	29.82	16.8	2.2	+326	+58	+4203	+4587		
	4 0	29.82	16.2	2.1	+326	+60	+4212	+4598		
	5 0	29.83	16.0	0.3	+341	+61	+4384	+4786		
3	2 45	29.74	21.8	11.8	+210	+39	+3304	+3553		
	3 0	29.76	21.0	11.3	+238	+41	+3350	+3629		
	3 45	29.76	19.2	10.1	+238	+48	+3460	+3746		
5	3 40	29.50	30.1	30.2	-142	+8	+1627	+1493		
7	3 0	29.89	24.0	15.2	+429	+30	+2989	+3448		
	3 40	29.90	23.5	14.1	+443	+32	+3090	+3565		
	5 30	29.90	20.1	12.6	+443	+45	+3229	+3717		
	6 15	29.91	19.0	10.9	+457	+49	+3386	+3892		
8	3 0	29.86	23.2	17.5	+384	+33	+2776	+3193		
12	3 10	30.06	22.1	14.8	+674	+38	+3026	+3738		
	3 40	30.06	21.0	14.1	+674	+41	+3090	+3805		
	5 30	30.06	20.0	13.1	+674	+45	+3182	+3901		
	6 30	30.06	19.0	12.6	+674	+49	+3229	+3952		
15	3 40	30.13	29.8	26.2	+775	+9	+1985	+2769		
	6 0	30.17	28.8	23.6	+833	+12	+2221	+3066		

	Hour	Bar	Alt. H	Ext. H	B	D	γ	B+D+ γ
1885	R.A.							
Feb 17	5 0	29.80	20.1	6.5	+297	+45	+3796	+4138
	6 0	29.80	17.0	5.1	+297	+57	+3928	+4282
	6 50	29.81	16.0	5.0	+311	+61	+3938	+4310
18	4 0	29.77	22.5	15.4	+253	+36	+2971	+3260
	5 0	29.77	22.1	13.2	+253	+38	+3173	+3464
	6 30	29.80	20.0	11.6	+297	+45	+3322	+3664
	7 0	29.80	19.0	11.3	+297	+49	+3350	+3696
19	3 40	29.73	24.0	14.0	+196	+30	+3099	+3325
	4 40	29.73	22.6	12.6	+196	+36	+3229	+3461
	5 40	29.72	20.2	12.0	+180	+44	+3284	+3508
21	3 40	29.85	31.0	25.2	+370	+4	+2075	+2449
	5 30	29.85	29.1	22.6	+370	+11	+2312	+2693
	6 0	29.85	29.1	21.8	+370	+11	+2384	+2765
	7 0	29.85	27.2	20.1	+370	+18	+2539	+2927
	8 20	29.84	26.1	18.3	+356	+22	+2704	+3082
23	3 40	30.17	28.0	21.6	+833	+15	+2402	+3250
	5 30	30.17	25.1	17.9	+833	+26	+2740	+3599
	6 0	30.17	24.3	17.3	+833	+29	+2795	+3657
	8 20	30.19	22.3	14.8	+862	+37	+3026	+3925
25	4 45	30.00	32.8	25.9	+588	-3	+2012	+2597
	7 15	30.05	31.2	22.6	+660	+3	+2312	+2975
	8 30	30.04	30.6	20.5	+646	+6	+2503	+3155
Mar 2	5 30	29.53	41.7	34.2	-97	-38	+1270	+1135
	6 0	29.55	41.7	33.0	-69	-38	+1377	+1270
	7 30	29.60	38.8	30.2	+5	-26	+1627	+1606
	8 20	29.60	38.6	29.2	+5	-26	+1716	+1695
3	7 30	29.89	37.6	28.7	+429	-22	+1761	+2168
	8 20	29.90	36.8	27.7	+443	-19	+1850	+2274
4	6 0	29.90	44.2	38.7	+443	-48	+873	+1268
	7 0	29.90	43.0	36.4	+443	-43	+1075	+1475
	8 20	29.93	43.0	36.3	+487	-43	+1084	+1528
6	7 30	29.98	40.2	33.5	+559	-32	+1334	+1861
	8 30	29.99	40.0	32.5	+574	-31	+1422	+1965
8	6 0	29.89	32.3	20.6	+429	-1	+2494	+2922
	7 30	29.91	27.8	18.8	+457	+16	+2658	+3131
	8 30	29.93	26.2	16.2	+487	+21	+2895	+3403
10	6 0	29.87	30.9	21.6	+399	+4	+2402	+2805
	7 20	29.87	29.0	21.9	+399	+11	+2375	+2785

	Hour of R.A.	Bar	Alt. H	Ext. H	γ	ψ	γ	$B+V+R$
885								
Mar 10	8 0	30.93	26.2	21.0	+487	+21	+2456	+2964
	8 30	30.96	25.8	18.0	+530	+23	+2731	+3284
12	7 0	30.12	27.6	9.3	+761	+17	+8534	+4312
	7 30	30.14	25.8	8.3	+790	+23	+3629	+4442
	8 0	30.15	23.3	7.2	+804	+33	+3731	+4568
14	6 30	29.89	33.8	26.6	+429	-7	+1948	+2370
	8 0	29.89	31.9	25.6	+429	0	+2039	+2468
17	6 45	29.98	32.2	18.2	+559	-1	+2713	+3271
	8 0	30.02	25.1	14.2	+617	+26	+3081	+3724
18	7 0	29.83	29.9	18.7	+341	+8	+2668	+3017
	8 0	29.81	27.8	15.7	+311	+16	+2943	+3270
	9 0	29.80	26.3	15.1	+297	+21	+2998	+3316
19	8 30	29.46	30.4	26.9	-201	+6	+1921	+1726
	9 20	29.45	30.1	20.9	-216	+8	+2466	+2258
21	6 40	29.97	27.2	14.3	+545	+18	+3072	+3635
	8 0	29.97	23.1	12.4	+545	+34	+3247	+3826
	9 0	29.97	21.0	11.3	+545	+41	+3350	+3936
23	8 0	30.03	29.6	21.2	+631	+9	+2438	+3078
	8 30	30.03	28.5	20.8	+631	+13	+2475	+3119
25	7 30	30.08	35.0	27.9	+703	-12	+1832	+2523
	8 0	30.08	33.8	26.6	+703	-7	+1948	+2644
	8 40	30.09	33.1	25.6	+718	-4	+2039	+2753
28	7 20	29.88	46.1	40.6	+414	-54	+707	+1067
	8 0	29.90	45.8	39.2	+443	-53	+829	+1219
29	8 0	30.11	34.2	26.1	+746	-9	+1994	+2731
	9 0	30.14	34.1	25.1	+790	-8	+2084	+2866
30	8 0	30.42	37.4	31.1	+1192	-22	+1546	+2716
	9 0	30.42	36.8	30.0	+1192	-19	+1645	+2818
Apr 1	7 0	30.15	50.1	48.1	+804	-69	+55	+790
	8 0	30.17	49.3	46.1	+833	-67	+228	+994
	8 30	30.17	48.0	45.0	+833	-66	+324	+1091
6	8 30	29.90	43.0	38.2	+443	-43	+917	+1317
	9 0	29.90	42.8	37.2	+443	-42	+1005	+1406
9	8 0	29.97	40.8	32.1	+545	-34	+1457	+1968
	9 30	29.97	37.1	30.4	+545	-20	+1609	+2134
14	8 30	29.98	45.7	43.1	+559	-53	+489	+995
	10 30	30.05	45.2	39.5	+660	-52	+803	+1411

1885	Hour	Bar	Alt	Th	Ecl-Th	B	I	Y	B+I+Y
	R.A.								
Apr 16	8 30	29.89	46.6	44.1	+429	-57	+402	+774	
	9 0	29.90	46.6	42.7	+443	-57	+524	+910	
25	10 0	30.11	53.2	52.0	+746	-121	-279	+346	
	11 0	30.14	62.1	50.8	+790	-116	-175	+499	
27	9 40	29.87	59.1	57.8	+399	-104	-771	-476	
	10 20	29.87	59.6	56.4	+399	-106	-653	-360	
	11 20	29.89	58.6	54.4	+429	-103	-483	-157	
	12 20	29.90	56.3	51.7	+443	-94	-253	+96	
30	10 0	29.67	59.4	58.2	+107	-106	-806	-805	
	10 45	29.67	58.2	56.1	+107	-102	-628	-623	
	11 40	29.70	57.7	53.6	+151	-100	-415	-364	
	12 10	29.72	56.8	52.6	+180	-96	-330	-246	
May 2	10 15	29.65	50.1	46.7	+78	-69	+176	+185	
	11 15	29.66	48.8	44.9	+92	-65	+332	+359	
	11 45	29.67	47.6	44.6	+107	-61	+357	+403	
	12 15	29.67	47.0	43.2	+107	-59	+480	+528	
	1 0	29.68	46.1	42.5	+123	-54	+541	+610	
3	10 0	29.87	49.1	43.0	+399	-66	+498	+831	
	11 0	29.89	46.9	40.7	+429	-58	+698	+1069	
	12 0	29.91	45.0	39.5	+457	-51	+803	+1209	
	13 0	29.91	44.5	38.8	+457	-49	+865	+1273	
9	11 0	29.64	53.0	48.2	+64	-81	+47	+30	
	12 45	29.64	52.0	46.2	+64	-77	+219	+206	
	13 20	29.64	51.8	45.0	+64	-76	+324	+312	
10	10 45	29.77	55.9	51.3	+253	-93	-219	-59	
	11 15	29.80	55.3	50.2	+297	-90	-124	+83	
	12 15	29.83	54.2	48.2	+341	-86	+47	+302	
	13 15	29.85	53.1	46.7	+370	-81	+176	+465	
11	11 0	30.02	54.2	48.4	+617	-86	+30	+561	
	12 20	30.04	51.8	46.0	+646	-76	+237	+807	
	13 20	30.04	51.1	44.0	+646	-73	+411	+984	
16	11 0	30.25	57.0	52.0	+948	-97	-279	+572	
	12 0	30.25	56.6	49.2	+948	-95	-38	+815	
	12 30	30.25	55.8	47.7	+948	-92	+90	+946	
	1 30	30.25	53.1	46.4	+948	-81	+202	+1069	
17	11 20	30.07	55.8	48.8	+689	-92	-5	+592	
21	11 50	30.27	61.8	56.0	+977	-115	-619	+243	
	12 40	30.28	60.7	55.0	+991	-111	-534	+346	
	13 15	30.26	59.1	53.6	+962	-104	-415	+443	

	Hour	Bar	Alt	Ext	Z	α	γ	$73+\alpha+\gamma$
1885	May 26	29.97	69.8	67.7	+545	-145	-1601	-1201
	12 0	29.97	69.8	69.9	+545	-145	-1783	-1383
	14 0	29.97	69.8	67.7	+545	-145	-1601	-1201
28	12 30	30.13	61.8	53.7	+775	-115	-423	+237
	13 50	30.13	61.8	51.2	+775	-115	-210	+450
	14 15	30.13	60.0	50.6	+775	-108	-158	+509
June 1	12 35	29.67	64.0	54.5	+107	-124	-491	-508
	14 20	29.70	59.2	52.2	+151	-105	-296	-250
3	13 10	30.04	63.5	57.5	+646	-122	-746	-222
	14 25	30.04	62.0	55.2	+646	-116	-551	-21
8	13 0	29.53	71.1	67.3	-97	-150	-1568	-1815
9	13 30	30.00	60.2	55.2	+588	-109	-551	-72
	15 0	30.04	59.2	53.4	+646	-105	-398	+143
10	12 40	30.21	66.8	67.2	+890	-134	-1559	-803
	14 0	30.23	67.0	63.4	+919	-135	-1243	-459
	14 40	30.24	66.3	61.4	+934	-132	-1075	-273
11	12 30	30.20	69.9	72.7	+876	-146	-2013	-1283
	13 30	30.20	68.8	65.8	+876	-141	-1443	-708
	15 0	30.21	68.1	61.7	+890	-138	-1100	-348
13	13 20	30.03	72.6	71.2	+631	-156	-1890	-1415
	14 30	30.02	72.0	68.2	+617	-154	-1642	-1179
	15 0	30.02	71.6	67.6	+617	-152	-1593	-1128
	15 20	30.02	71.0	66.6	+617	-150	-1510	-1043
14	13 20	29.86	75.6	78.1	+384	-168	-2455	-2239
	14 0	29.86	75.8	75.4	+384	-168	-2234	-2018
	15 0	29.89	75.8	72.7	+429	-168	-2013	-1752
	15 30	29.89	75.5	71.8	+429	-167	-1939	-1677
20	14 20	30.12	77.7	73.6	+761	-176	-2087	-1502
	15 0	30.14	76.6	71.4	+790	-171	-1907	-1288
21	13 30	29.98	74.5	70.6	+559	-164	-1841	-1446
22	14 0	29.82	73.7	65.2	+326	-161	-1393	-1228
	15 0	29.84	69.7	62.2	+356	-145	-1143	-932
	16 0	29.87	68.1	61.2	+399	-138	-1059	-798
23	13 30	29.90	69.7	65.4	+443	-145	-1410	-1112
	14 15	29.90	68.7	63.6	+443	-141	-1260	-958
	15 40	29.93	67.8	60.5	+487	-137	-1000	-650
24	13 45	30.14	73.2	71.7	+790	-159	-1931	-1300
	14 30	30.14	72.2	68.8	+790	-155	-1692	-1057

1885	Hour	Bar	Alt	Ext	B	D	Y	B+D+Y
RA								
June 24								
	15 15	30.14	72.0	67.5	+790	-154	-1584	-948
	16 0	30.16	71.6	66.2	+818	-152	-1476	-810
	16 40	30.16	71.2	65.5	+818	-151	-1418	-751
25	14 40	30.11	75.9	73.3	+746	-169	-2063	-1486
	16 20	30.18	75.7	70.7	+847	-168	-1849	-1170
27	15 15	30.08	77.8	72.2	+703	-176	-1972	-1445
	16 15	30.09	76.2	70.3	+718	-170	-1816	-1268
	16 45	30.09	76.0	69.6	+718	-169	-1758	-1209
July 2								
	15 0	29.82	70.7	66.1	+326	-149	-1468	-1291
	15 30	29.83	70.3	65.4	+341	-147	-1410	-1216
	16 0	29.83	69.8	64.6	+341	-145	-1343	-1147
4	16 0	30.06	74.2	69.2	+674	-163	-1725	-1214
	17 0	30.05	73.6	68.2	+660	-160	-1642	-1142
6	15 10	30.22	73.6	67.4	+905	-160	-1576	-831
	16 10	30.22	73.0	66.6	+905	-158	-1510	-768
8	15 15	30.04	80.8	78.8	+646	-188	-2512	-2054
	16 15	30.04	80.7	77.2	+646	-188	-2382	-1924
	17 15	30.04	80.5	74.3	+646	-187	-2144	-1685
11	16 0	30.04	71.3 71.3	69.2	+646	-151	-1725	-1230
	17 20	30.07	72.9	66.2	+689	-158	-1476	-945
12	16 0	30.13	75.2	66.9	+775	-167	-1535	-927
	17 20	30.11	73.3	64.1	+746	-159	-1302	-715
15	16 0	29.97	76.2	72.1	+545	-170	-1964	-1589
	16 30	29.98	75.7	71.3	+559	-168	-1898	-1507
	17 0	29.88	75.5	69.7	+414	-167	-1767	-1520
16	16 0	30.13	78.2	72.3	+775	-178	-1980	-1383
	17 20	30.13	75.8	70.4	+775	-168	-1824	-1217
	18 0	30.13	75.0	69.2	+775	-166	-1725	-1116
18	16 40	30.07	80.2	73.8	+689	-186	-2103	-1600
	17 20	30.07	78.4	71.6	+689	-179	-1923	-1413
	17 45	30.08	76.7	70.4	+703	-172	-1824	-1293
19	17 20	29.98	75.6	70.5	+559	-168	-1832	-1441
	17 50	29.98	75.4	70.6	+559	-167	-1841	-1449
20	16 50	30.00	81.6	75.1	+588	-191	-2210	-1813
21	17 0	29.83	82.6	78.6	+341	-195	-2495	-2349
	19 0	29.84	81.9	76.9	+356	-193	-2357	-2194
22	16 20	30.13	76.6	75.0	+775	-171	-2202	-1598
	18 0	30.15	76.0	71.3	+804	-169	-1898	-1263
	19 0	30.17	75.2	68.6	+833	-167	-1675	-1009

	1885	Hour	Bar	Alt	Exl	B	V	γ	B+V
		P.M.							
July 23	16	30	30.23	79.6	71.7	+919	-183	-1931	-1195
	18	0	30.23	76.2	69.3	+919	-170	-1733	-984
	18	30	30.24	75.6	670	+934	-168	-1709	-943
	19	0	30.24	75.0	68.6	+934	-166	-1675	-907
25	19	0	29.88	81.6	75.8	+414	-191	-2267	-2044
	19	20	29.88	81.4	75.8	+414	-191	-2267	-2044
27	16	40	30.15	76.2	68.6	+804	-170	-1675	-1041
	17	30	30.15	74.5	66.0	+804	-164	-1460	-820
	18	0	30.14	72.1	65.3	+790	-154	-1401	-765
	19	15	30.13	70.8	62.8	+775	-149	-1194	-568
28	16	30	29.99	76.8	71.5	+544	-172	-1915	-1513
	19	0	29.97	71.8	66.1	+545	-153	-1468	-1076
30	18	0	29.89	72.4	66.1	+429	-156	-1468	-1195
Aug 4	17	30	29.80	77.1	73.2	+297	-173	-2054	-1930
	18	15	29.80	76.0	72.2	+297	-169	-1972	-1844
	19	20	29.80	77.1	71.6	+297	-173	-1923	-1799
6	18	0	30.10	71.7	63.4	+732	-153	-1243	-664
	19	20	30.10	70.4	61.6	+732	-148	-1092	-508
	20	0	30.09	70.0	60.9	+718	-146	-1033	-461
8	17	0	30.20	72.0	66.1	+876	-154	-1468	-746
	18	0	30.20	71.6	64.1	+876	-152	-1302	-578
	19	0	30.20	69.7	63.3	+876	-145	-1234	-503
	20	0	30.18	68.2	62.4	+847	-139	-1160	-452
9	18	30	30.16	71.7	64.7	+818	-153	-1352	-687
	20	0	30.17	71.2	63.9	+833	-151	-1285	-603
11	19	0	30.10	76.3	73.1	+732	-170	-2046	-1484
	20	0	30.10	76.6	72.2	+732	-171	-1972	-1411
15	17	15	29.98	73.3	63.6	+559	-159	-1260	-860
	18	15	30.01	70.6	61.7	+602	-148	-1100	-646
	19	0	30.01	69.0	60.5	+602	-142	-1000	-540
	20	0	30.03	67.0	59.8	+631	-135	-941	-445
	21	0	30.03	66.8	59.0	+631	-134	-873	-376
16	19	0	30.27	71.1	61.3	+977	-150	-1067	-240
	20	40	30.26	67.8	59.6	+962	-137	-924	-99
18	20	0	29.87	76.1	71.1	+399	-169	-1882	-1652
19	21	0	29.77	75.3	68.2	+253	-167	-1642	-1556
20	19	0	30.08	68.9	61.9	+703	-142	-1117	-556
	20	0	30.10	68.0	59.8	+732	-138	-941	-347
	21	0	30.13	66.1	58.3	+775	-131	-815	-171

1885	Hour of R.A.	Bar	Alt. H	Ext. H	B	I	r	B+I+r
Sept-30	19 10	30.03	64.2	56.0	+631	-125	-619	-113
	21 0	30.07	62.8	52.2	+689	-119	-296	+274
Oct-1	20 0	30.11	60.1	54.2	+746	-108	-466	+172
	21 30	30.13	57.0	51.6	+775	-97	-244	+434
5	19 40	30.02	59.1	50.6	+617	-104	-158	+355
	21 40	30.03	54.3	47.2	+631	-86	+133	+678
10	20 0	30.13	58.0	54.7	+775	-101	-508	+166
	21 30	30.15	57.1	52.8	+804	-97	-348	+359
11	21 0	30.18	57.8	52.2	+847	-100	-296	+451
	22 0	30.23	56.6	49.3	+919	-95	-46	+778
12	20 30	30.30	56.3	44.6	+1020	-94	-357	+569
	21 30	30.27	53.0	42.0	+977	-81	-585	+311
14	20 40	29.61	59.0	55.1	+19	-104	-543	-628
	22 0	29.61	57.0	52.6	+19	-97	-330	-408
17	20 0	30.05	57.7	52.9	+660	-100	-356	+204
18	20 40	30.07	58.2	56.2	+689	-102	-636	-49
	21 30	30.07	58.0	55.0	+689	-101	-534	+54
19	22 30	30.22	59.2	55.1	+905	-105	-543	+257
20	20 0	30.23	61.6	60.1	+919	-114	-966	-161
	21 0	30.23	61.0	59.1	+919	-112	-882	-75
	22 30	30.23	60.7	57.6	+919	-111	-755	+53
26	21 0	30.07	54.2	48.6	+689	-86	+12	+615
	22 0	30.08	54.0	47.4	+703	-85	+116	+734
	23 30	30.10	53.6	46.3	+732	-83	+211	+860
27	21 0	30.03	57.7	55.1	+631	-100	-543	-12
	0 0	30.04	57.2	51.2	+646	-98	-210	+338
31	20 30	30.23	51.0	39.6	+631	-73	+794	+1352
Nov 4	21 0	29.97	48.7	45.1	+545	-65	+315	+795
9	21 50	29.67	56.0	50.4	+107	-93	-141	-127
10	21 0	29.67	51.1	44.2	+107	-73	+393	+427
11	21 0	29.80	52.0	49.4	+297	-77	-55	+165
	22 40	29.83	51.9	46.4	+341	-77	+202	+466
	0 0	29.80	51.6	44.6	+297	-75	+357	+579
12	21 0	29.72	53.6	48.2	+180	-83	+47	+144
15	20 40	29.70	51.1	40.6	+151	-73	+707	+785
	0 30	29.69	45.3	36.4	+137	-52	+1075	+1160
16	20 40	29.88	46.2	41.2	+414	-55	+654	+1013
17	20 40	30.07	51.9	46.4	+689	-77	+202	+814

	Hour	Min	Sec	Bar	Alt	Th	Ext	Th	B	μ	γ	$B+V+R$
885	22	0		30.87	50.6	14.1	+689	-71	+402	+1020		
17	23	45		30.07	48.2	41.7	+689	-63	+611	+1237		
28	22	0		30.11	40.8	32.2	+746	-34	+1448	+2160		
	23	0		30.11	40.7	31.7	+746	-34	+1493	+2205		
	0	0		30.08	40.1	30.2	+703	-31	+1627	+2299		
	0	30		30.07	39.0	28.6	+689	-27	+1770	+2432		
29	21	30		30.07	41.6	34.2	+689	-37	+1270	+1922		
	23	0		30.08	40.4	32.3	+703	-33	+1439	+2109		
	23	30		30.08	39.0	31.2	+703	-27	+1537	+2213		
Dec 2	23	0		29.76	34.7	28.5	+238	-11	+1778	+2005		
	0	0		29.77	35.3	27.3	+253	-13	+1886	+2126		
	0	45		29.72	35.4	26.5	+180	-14	+1958	+2124		
3	23	45		29.23	37.7	33.8	-541	-23	+1307	+743		
	0	30		29.25	37.2	32.7	-512	-21	+1405	+872		
6	21	15		29.57	40.0	29.8	-39	-31	+1663	+1593		
	0	0		29.49	36.1	25.8	-156	-16	+2021	+1849		
	0	45		29.48	35.2	25.7	-171	-13	+2030	+1846		
7	23	10		29.89	28.7	15.2	+429	+12	+2989	+3430		
	0	0		29.90	26.0	14.1	+443	+22	+3090	+3555		
	1	0		29.94	22.7	13.2	+502	+35	+3173	+3710		
8	22	15		30.19	32.6	28.5	+862	-2	+1778	-38		
12	22	30		30.63	40.0	30.7	+1491	-31	+1582	+3042		
	23	15		30.63	38.7	29.5	+1491	-26	+1690	+3155		
	2	15		30.61	32.7	26.1	+1462	-3	+1994	+3453		
15	22	30		29.87	37.0	27.5	+399	-20	+1868	+2247		
	1	15		29.98	34.1	26.8	+559	-8	+1930	+2481		
16	22	15		30.24	41.0	33.6	+934	-35	+1325	+2224		
	23	30		30.27	39.7	32.7	+977	-30	+1405	+2352		
	1	0		30.30	39.0	31.2	+1020	-27	+1537	+2510		
	2	0		30.29	36.6	29.5	+1006	-18	+1690	+2678		
	5	20		30.33	35.3	27.1	+1063	-13	+1904	+2954		
	6	20		30.33	35.0	26.2	+1063	-12	+1985	+3036		
19	0	0		29.46	37.0	33.2	-201	-20	+1359	+1138		
20	23	30		29.70	36.0	20.2	+151	+8	+2530	+2689		
	2	0		29.75	26.6	18.4	+224	+20	+2695	+2939		
	3	0		29.77	26.1	18.32333	+253	+22	+2704	+2979		
	4	15		29.79	25.8	18.0	+283	+23	+2731	+3034		
	5	0		29.80	25.8	16.1	+297	+23	+2904	+3224		
	5	45		29.80	25.8	15.0	+297	+23	+3007	+3324		

	Hour of	Bar	Alt Th	Ext Th	B	W	V	B+W+V
1885								
Dec 24								
	23 15	30.07	44.0	32.9	+689	-47	+1387	+2029
	0 15	30.07	42.0	30.2	+689	-39	+1627	+2277
	2 0	30.12	40.0	28.0	+761	-31	+1823	+2553
	2 45	30.17	37.2	26.4	+833	-21	+1967	+2779
28	1 45	29.95	35.0	33.7	+516	-12	+1316	+1820
	2 15	29.96	35.0	33.5	+530	-12	+1334	+1852
	3 15	29.97	35.1	32.1	+545	-12	+1457	+1990
	5 20	29.93	37.3	32.0	+487	-21	+1466	+1932
	6 0	29.86	37.4	30.4	+384	-22	+1609	+1971
29	3 0	29.37	38.8	33.4	-334	-26	+1342	+982
	3 45	29.37	38.8	33.2	-334	-26	+1359	+999
1886								
Jan 6								
	3 30	29.44	41.2	27.4	-230	-35	+1877	+1612
	5 0	29.43	33.6	24.8	-245	-6	+2112	+1861
	5 45	29.42	33.0	24.2	-260	-4	+2166	+1902
7	3 50	29.67	29.4	16.2	+107	+10	+2895	+3012
	5 30	29.69	24.1	14.1	+137	+30	+3090	+3257
14	3 40	30.70	21.8	13.1	+1589	+39	+3182	+4810
	4 0	30.68	21.2	13.4	+1561	+40	+3155	+4756
	5 15	30.65	18.2	10.3	+1519	+52	+3441	+5012
17	3 20	29.72	34.2	28.8	+180	-9	+1752	+1923
	3 45	29.74	33.9	28.2	+210	-8	+1805	+2007
	5 15	29.74	32.3	26.4	+210	-1	+1967	+2176
	5 50	29.74	32.0	26.2	+210	+0	+1985	+2195
23	3 30	30.30	32.1	14.2	+1020	+0	+3081	+4101
	4 0	30.30	28.8	12.4	+1020	+12	+3247	+4279
	5 20	30.32	23.8	8.8	+1049	+31	+3581	+4661
26	3 45	30.13	31.8	35.1	+775	+1	+1191	+1967
	4 10	30.14	31.9	33.8	+790	+0	+1307	+2097
	5 45	30.19	33.1	32.0	+862	-4	+1466	+2324
Feb 1	2 50	29.83	32.1	20.0	+341	+0	+2548	+2889
	3 30	29.83	31.1	18.2	+341	+4	+2713	+3058
	3 50	29.83	30.6	17.5	+341	+6	+2776	+3123
2	3 30	30.07	31.1	25.0	+689	+4	+2548	+3241

	1870	Hour of R. A.	Bar.	Alt. Th.	Exp. Th.	Hour of R. A.	Bar.	Alt. Th.	Exp. Th.
Nov.	10	1 0			29.0	0 10	30.16	65.1	33.5
	13	1 0			36.8		29.87	67.6	
	15	0 0			22.0	0 40	29.72	66.8	34.0
	16	1 10			23.8	0 44	29.90	61.2	35.0
	17	1 10			24.0	0 48	29.89	59.8	33.7
	19	4 10			30.1	0 54	29.75	64.6	30.1
	27	1 50			47.3	1 25	29.89	68.5	47.3
Dec.	10	4 50			29.4	2 16	30.16	65.1	29.4
	13	4 50			38.6	2 30	29.87	67.6	36.8
	18	3 00			22.7	2 50	29.88	61.0	22.7
	22	3 00			16.2	3 06	30.24	64.2	16.2
	26	3 30			25.3		30.12	63.5	
	31	3 40			29.5	3 40	29.88	59.0	31.6
Jan.	1	3 40			19.0	3 45	29.88	61.4	19.0
	7	7 20			9.5	4 10	30.20	61.9	13.1
	10	7 40			16.3	4 20	30.20	70.0	16.3
	17	7 20			28.5	4 47	30.15	67.0	29.1
Feb.	7	7 10			22.0	6 10	30.41	70.0	22.7
	11				15.0	6 25	30.47	67.0	16.8
	20	7 20			30.0	7 00	30.10	64.0	30.4
	21	8 30			15.0		30.21	65.0	
	28	6 30			29.0	7 50	30.18	69.0	28.2
Mar.	1	10 30			27.0	7 40	30.15	67.0	40.5
	2	6 00				7 40			36.6
	5	10 30			37.5	7 50	30.97	62.8	37.7
	7	8 20			31.8	8 00	30.27	65.0	32.2
	9	8 30			46.5	8 10	30.13	66.0	48.4
	19				35.0	8 47	30.27	63.0	38.6
	14					8 24	30.08	67.0	37.3
	22					9 00	29.73	64.2	40.0
	25	10 40			29.0				
	28	9 31			29.3		30.03	58.0	
	29				32.0		30.18	61.0	
April	5	11 10			32.3	9 04	29.87	57.8	33.8
	16	11 30			41.7	9 58	29.97	64.0	39.8
	17	10 00			41.5		29.97	58.2	
	18	10 00			41.0		30.07	59.0	
	24	12 10			44.0		30.27	54.4	
	25				44.0		30.20	66.0	

	Hour of R.A.	γ	$B+T+\gamma$		Hour of R.A.	B	T	$B+T$	γ	$B+T+\gamma$
Nov.	10 1 1	+1734	+2424		0 10	+0818	-0128	+0690	+1334	+2024
	13 1 0	+1040	+1302			+0399	-0137	+0262		
	15 0 0	+2366	+2412		0 40	+0180	-0134	+0046	+1288	+1334
	16 1 10	+2203	+2533		0 44	+0443	-0113	+0330	+1199	+1529
	17 1 10	+2185	+2507		0 48	+0429	-0107	+0322	+1316	+1638
	19 4 10	+1636	+1734		0 54	+0224	-0126	+0098	+1636	+1734
	27 1 50	+0124	+0413		1 25	+0429	-0140	+0289	+0124	+0913
Dec.	10 4 50	+1699	+2389		2 16	+0818	-0128	+0690	+1699	+2389
	13 4 50	+0882	+1144		2 30	+0399	-0137	+0262	+1040	+1302
	18 3 00	+2303	+2605		2 50	+0414	-0112	+0302	+2303	+2605
	22 3 00	+2895	+3704		3 06	+0934	-0125	+0809	+2895	+3704
	26 3 30	+2066	+2705			+0761	-0122	+0639		
	31 3 40	+1690	+2000		3 40	+0414	-0104	+0310	+1502	+1812
1871 Jan	1 3 40	+2639	+2939		3 45	+0414	-0114	+0300	+2639	+2939
	7 7 20	+3515	+4275		4 10	+0876	-0116	+0760	+3182	+3942
	10 7 40	+2886	+3616		4 20	+0876	-0146	+0730	+2886	+3616
	17 7 20	+1778	+2447		4 47	+0804	-0185	+0669	+1725	+2394
Feb.	7 7 10	+2366	+3397		6 10	+1177	-0146	+1031	+2303	+3334
	11	+3007	+4136		6 25	+1264	-0135	+1129	+2840	+3969
	20 7 20	+1645	+2253		7 00	+0732	-0124	+0608	+1609	+2217
	21 8 30	+3007	+3769			+0890	-0123	+0762		
	28 6 30	+1734	+2439		7 30	+0847	-0142	+0705	+1805	+2510
Mar.	1 10 30	+1913	+2582		7 40	+0804	-0135	+0669	+0716	+1386
	2 6 00				7 40				+1058	
	5 10 30	+0979			7 50		-0117		+0962	
	7 8 20	+1484	+2333		8 00	+0977	-0123	+0849	+1448	+2297
	9 8 20	+0193	+0837		8 10	+0775	-0131	+0644	+0030	+0674
	19	+1199	+2056		8 47	+0977	-0120	+0857	+0882	+1739
	14				8 24	+0703	-0142	+0561	+0996	+1557
	22				9 00	+0196	-0125	+0071	+0759	+0830
	25 10 40	+1734								
	28 9 30	+1708	+2238			+0631	-0101	+0530		
	29	+1466	+2201			+0847	-0112	+0735		
Apr.	5 11 10	+1439	+1738		9 54	+0399	-0100	+0299	+1307	+1606
	16 11 50	+0611	+1032		9 58	+0545	-0124	+0421	+0777	+1198
	17 10 00	+0628	+1071			+0545	-0102	+0443		
	18 10 00	+0672	+1257			+0689	-0104	+0585		
	24 12 10	+0324	+1214			+0977	-0027	+0890		
	25	+0411	+1156			+0876	-0131	+0745		

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