

Time to Angle

hours UT	°	'
1	15	0.0
2	30	0.0
3	45	0.0
4	60	0.0
5	75	0.0
6	90	0.0
7	105	0.0
8	120	0.0
9	135	0.0
10	150	0.0
11	165	0.0
12	180	0.0
13	195	0.0
14	210	0.0
15	225	0.0
16	240	0.0
17	255	0.0
18	270	0.0
19	285	0.0
20	300	0.0
21	315	0.0
22	330	0.0
23	345	0.0
24	360	0.0

minutes UT	°	'	minutes UT	°	'
1	0	15.0	31	7	45.0
2	0	30.0	32	8	0.0
3	0	45.0	33	8	15.0
4	1	0.0	34	8	30.0
5	1	15.0	35	8	45.0
6	1	30.0	36	9	0.0
7	1	45.0	37	9	15.0
8	2	0.0	38	9	30.0
9	2	15.0	39	9	45.0
10	2	30.0	40	10	0.0
11	2	45.0	41	10	15.0
12	3	0.0	42	10	30.0
13	3	15.0	43	10	45.0
14	3	30.0	44	11	0.0
15	3	45.0	45	11	15.0
16	4	0.0	46	11	30.0
17	4	15.0	47	11	45.0
18	4	30.0	48	12	0.0
19	4	45.0	49	12	15.0
20	5	0.0	50	12	30.0
21	5	15.0	51	12	45.0
22	5	30.0	52	13	0.0
23	5	45.0	53	13	15.0
24	6	0.0	54	13	30.0
25	6	15.0	55	13	45.0
26	6	30.0	56	14	0.0
27	6	45.0	57	14	15.0
28	7	0.0	58	14	30.0
29	7	15.0	59	14	45.0
30	7	30.0	60	15	0.0

seconds UT	'	seconds UT	'
1	0.3	31	7.8
2	0.5	32	8.0
3	0.8	33	8.3
4	1.0	34	8.5
5	1.3	35	8.8
6	1.5	36	9.0
7	1.8	37	9.3
8	2.0	38	9.5
9	2.3	39	9.8
10	2.5	40	10.0
11	2.8	41	10.3
12	3.0	42	10.5
13	3.3	43	10.8
14	3.5	44	11.0
15	3.8	45	11.3
16	4.0	46	11.5
17	4.3	47	11.8
18	4.5	48	12.0
19	4.8	49	12.3
20	5.0	50	12.5
21	5.3	51	12.8
22	5.5	52	13.0
23	5.8	53	13.3
24	6.0	54	13.5
25	6.3	55	13.8
26	6.5	56	14.0
27	6.8	57	14.3
28	7.0	58	14.5
29	7.3	59	14.8
30	7.5	60	15.0