

## Horizontal Shadow Plane Sundial

Latitude: 54.0° N/S

Earliest Sunrise: 3:26 a.m. Latest Sunset: 8:34 p.m.

E-W Dimension: 1000 mm

Local Time	X	Y	Local Time	X	Y	Local Time	X	Y			
12:00	0.0	-500.0									
11:55	12:05	8.8	-500.0	8:25	3:35	500.0	-453.2	4:55	7:05	500.0	180.1
11:50	12:10	17.7	-500.0	8:20	3:40	500.0	-432.8	4:50	7:10	500.0	194.9
11:45	12:15	26.5	-500.0	8:15	3:45	500.0	-413.0	4:45	7:15	500.0	209.8
11:40	12:20	35.4	-500.0	8:10	3:50	500.0	-393.7	4:40	7:20	500.0	224.9
11:35	12:25	44.3	-500.0	8:05	3:55	500.0	-375.0	4:35	7:25	500.0	240.3
11:30	12:30	53.3	-500.0	8:00	4:00	500.0	-356.8	4:30	7:30	500.0	256.0
11:25	12:35	62.3	-500.0	7:55	4:05	500.0	-339.1	4:25	7:35	500.0	271.9
11:20	12:40	71.3	-500.0	7:50	4:10	500.0	-321.7	4:20	7:40	500.0	288.2
11:15	12:45	80.5	-500.0	7:45	4:15	500.0	-304.8	4:15	7:45	500.0	304.8
11:10	12:50	89.7	-500.0	7:40	4:20	500.0	-288.2	4:10	7:50	500.0	321.7
11:05	12:55	99.0	-500.0	7:35	4:25	500.0	-271.9	4:05	7:55	500.0	339.1
11:00	1:00	108.4	-500.0	7:30	4:30	500.0	-256.0	4:00	8:00	500.0	356.8
10:55	1:05	117.9	-500.0	7:25	4:35	500.0	-240.3	3:55	8:05	500.0	375.0
10:50	1:10	127.5	-500.0	7:20	4:40	500.0	-224.9	3:50	8:10	500.0	393.7
10:45	1:15	137.3	-500.0	7:15	4:45	500.0	-209.8	3:45	8:15	500.0	413.0
10:40	1:20	147.2	-500.0	7:10	4:50	500.0	-194.9	3:40	8:20	500.0	432.8
10:35	1:25	157.3	-500.0	7:05	4:55	500.0	-180.1	3:35	8:25	500.0	453.2
10:30	1:30	167.6	-500.0	7:00	5:00	500.0	-165.6	3:30	8:30	500.0	474.2
10:25	1:35	178.0	-500.0	6:55	5:05	500.0	-151.2	3:25	8:35	500.0	496.0
10:20	1:40	188.6	-500.0	6:50	5:10	500.0	-137.0	3:20	8:40	482.1	500.0
10:15	1:45	199.5	-500.0	6:45	5:15	500.0	-122.9	3:15	8:45	461.3	500.0
10:10	1:50	210.6	-500.0	6:40	5:20	500.0	-109.0				
10:05	1:55	221.9	-500.0	6:35	5:25	500.0	-95.1				
10:00	2:00	233.5	-500.0	6:30	5:30	500.0	-81.4				
9:55	2:05	245.5	-500.0	6:25	5:35	500.0	-67.7				
9:50	2:10	257.7	-500.0	6:20	5:40	500.0	-54.1				
9:45	2:15	270.3	-500.0	6:15	5:45	500.0	-40.5				
9:40	2:20	283.2	-500.0	6:10	5:50	500.0	-27.0				
9:35	2:25	296.6	-500.0	6:05	5:55	500.0	-13.5				
9:30	2:30	310.4	-500.0	6:00	6:00	500.0	0.0				
9:25	2:35	324.7	-500.0	5:55	6:05	500.0	13.5				
9:20	2:40	339.4	-500.0	5:50	6:10	500.0	27.0				
9:15	2:45	354.7	-500.0	5:45	6:15	500.0	40.5				
9:10	2:50	370.7	-500.0	5:40	6:20	500.0	54.1				
9:05	2:55	387.2	-500.0	5:35	6:25	500.0	67.7				
9:00	3:00	404.5	-500.0	5:30	6:30	500.0	81.4				
8:55	3:05	422.6	-500.0	5:25	6:35	500.0	95.1				
8:50	3:10	441.4	-500.0	5:20	6:40	500.0	109.0				
8:45	3:15	461.3	-500.0	5:15	6:45	500.0	122.9				
8:40	3:20	482.1	-500.0	5:10	6:50	500.0	137.0				
8:35	3:25	500.0	-496.0	5:05	6:55	500.0	151.2				
8:30	3:30	500.0	-474.2	5:00	7:00	500.0	165.6				

## Horizontal Shadow Plane Sundial

Latitude: 54.0° N/S

Earliest Sunrise: 3:26 a.m. Latest Sunset: 8:34 p.m.

E-W Dimension: 3000 mm

Local Time	X	Y	Local Time	X	Y	Local Time	X	Y			
12:00	0.0	-1500.0									
11:55	12:05	26.5	-1500.0	8:25	3:35	1500.0	-1359.5	4:55	7:05	1500.0	540.4
11:50	12:10	53.0	-1500.0	8:20	3:40	1500.0	-1298.3	4:50	7:10	1500.0	584.6
11:45	12:15	79.5	-1500.0	8:15	3:45	1500.0	-1238.9	4:45	7:15	1500.0	629.4
11:40	12:20	106.2	-1500.0	8:10	3:50	1500.0	-1181.2	4:40	7:20	1500.0	674.8
11:35	12:25	132.9	-1500.0	8:05	3:55	1500.0	-1125.1	4:35	7:25	1500.0	721.0
11:30	12:30	159.8	-1500.0	8:00	4:00	1500.0	-1070.5	4:30	7:30	1500.0	768.0
11:25	12:35	186.8	-1500.0	7:55	4:05	1500.0	-1017.2	4:25	7:35	1500.0	815.8
11:20	12:40	214.0	-1500.0	7:50	4:10	1500.0	-965.2	4:20	7:40	1500.0	864.6
11:15	12:45	241.4	-1500.0	7:45	4:15	1500.0	-914.3	4:15	7:45	1500.0	914.3
11:10	12:50	269.0	-1500.0	7:40	4:20	1500.0	-864.6	4:10	7:50	1500.0	965.2
11:05	12:55	296.9	-1500.0	7:35	4:25	1500.0	-815.8	4:05	7:55	1500.0	1017.2
11:00	1:00	325.2	-1500.0	7:30	4:30	1500.0	-768.0	4:00	8:00	1500.0	1070.5
10:55	1:05	353.7	-1500.0	7:25	4:35	1500.0	-721.0	3:55	8:05	1500.0	1125.1
10:50	1:10	382.6	-1500.0	7:20	4:40	1500.0	-674.8	3:50	8:10	1500.0	1181.2
10:45	1:15	411.9	-1500.0	7:15	4:45	1500.0	-629.4	3:45	8:15	1500.0	1238.9
10:40	1:20	441.7	-1500.0	7:10	4:50	1500.0	-584.6	3:40	8:20	1500.0	1298.3
10:35	1:25	471.9	-1500.0	7:05	4:55	1500.0	-540.4	3:35	8:25	1500.0	1359.5
10:30	1:30	502.7	-1500.0	7:00	5:00	1500.0	-496.8	3:30	8:30	1500.0	1422.7
10:25	1:35	534.0	-1500.0	6:55	5:05	1500.0	-453.7	3:25	8:35	1500.0	1488.1
10:20	1:40	565.9	-1500.0	6:50	5:10	1500.0	-411.0	3:20	8:40	1446.2	1500.0
10:15	1:45	598.4	-1500.0	6:45	5:15	1500.0	-368.8	3:15	8:45	1383.8	1500.0
10:10	1:50	631.7	-1500.0	6:40	5:20	1500.0	-326.9				
10:05	1:55	665.8	-1500.0	6:35	5:25	1500.0	-285.4				
10:00	2:00	700.6	-1500.0	6:30	5:30	1500.0	-244.1				
9:55	2:05	736.4	-1500.0	6:25	5:35	1500.0	-203.1				
9:50	2:10	773.1	-1500.0	6:20	5:40	1500.0	-162.2				
9:45	2:15	810.9	-1500.0	6:15	5:45	1500.0	-121.5				
9:40	2:20	849.7	-1500.0	6:10	5:50	1500.0	-81.0				
9:35	2:25	889.8	-1500.0	6:05	5:55	1500.0	-40.5				
9:30	2:30	931.2	-1500.0	6:00	6:00	1500.0	0.0				
9:25	2:35	974.0	-1500.0	5:55	6:05	1500.0	40.5				
9:20	2:40	1018.3	-1500.0	5:50	6:10	1500.0	81.0				
9:15	2:45	1064.2	-1500.0	5:45	6:15	1500.0	121.5				
9:10	2:50	1112.0	-1500.0	5:40	6:20	1500.0	162.2				
9:05	2:55	1161.7	-1500.0	5:35	6:25	1500.0	203.1				
9:00	3:00	1213.5	-1500.0	5:30	6:30	1500.0	244.1				
8:55	3:05	1267.7	-1500.0	5:25	6:35	1500.0	285.4				
8:50	3:10	1324.3	-1500.0	5:20	6:40	1500.0	326.9				
8:45	3:15	1383.8	-1500.0	5:15	6:45	1500.0	368.8				
8:40	3:20	1446.2	-1500.0	5:10	6:50	1500.0	411.0				
8:35	3:25	1500.0	-1488.1	5:05	6:55	1500.0	453.7				
8:30	3:30	1500.0	-1422.7	5:00	7:00	1500.0	496.8				