

Horizontal Shadow Plane Sundial

Latitude: 45.0° N/S

Earliest Sunrise: 4:11 a.m. Latest Sunset: 7:49 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	7.7	-500.0	8:25	3:35	482.2	-500.0	4:55	7:05	500.0	206.1
11:50	12:10	15.4	-500.0	8:20	3:40	500.0	-495.1	4:50	7:10	500.0	222.9
11:45	12:15	23.2	-500.0	8:15	3:45	500.0	-472.5	4:45	7:15	500.0	240.0
11:40	12:20	30.9	-500.0	8:10	3:50	500.0	-450.5	4:40	7:20	500.0	257.4
11:35	12:25	38.7	-500.0	8:05	3:55	500.0	-429.1	4:35	7:25	500.0	275.0
11:30	12:30	46.5	-500.0	8:00	4:00	500.0	-408.2	4:30	7:30	500.0	292.9
11:25	12:35	54.4	-500.0	7:55	4:05	500.0	-387.9	4:25	7:35	500.0	311.1
11:20	12:40	62.3	-500.0	7:50	4:10	500.0	-368.1	4:20	7:40	500.0	329.7
11:15	12:45	70.3	-500.0	7:45	4:15	500.0	-348.7	4:15	7:45	500.0	348.7
11:10	12:50	78.4	-500.0	7:40	4:20	500.0	-329.7	4:10	7:50	500.0	368.1
11:05	12:55	86.5	-500.0	7:35	4:25	500.0	-311.1	4:05	7:55	500.0	387.9
11:00	1:00	94.7	-500.0	7:30	4:30	500.0	-292.9	4:00	8:00	500.0	408.2
10:55	1:05	103.1	-500.0	7:25	4:35	500.0	-275.0				
10:50	1:10	111.5	-500.0	7:20	4:40	500.0	-257.4				
10:45	1:15	120.0	-500.0	7:15	4:45	500.0	-240.0				
10:40	1:20	128.7	-500.0	7:10	4:50	500.0	-222.9				
10:35	1:25	137.5	-500.0	7:05	4:55	500.0	-206.1				
10:30	1:30	146.4	-500.0	7:00	5:00	500.0	-189.5				
10:25	1:35	155.6	-500.0	6:55	5:05	500.0	-173.0				
10:20	1:40	164.9	-500.0	6:50	5:10	500.0	-156.8				
10:15	1:45	174.4	-500.0	6:45	5:15	500.0	-140.7				
10:10	1:50	184.0	-500.0	6:40	5:20	500.0	-124.7				
10:05	1:55	194.0	-500.0	6:35	5:25	500.0	-108.8				
10:00	2:00	204.1	-500.0	6:30	5:30	500.0	-93.1				
9:55	2:05	214.5	-500.0	6:25	5:35	500.0	-77.4				
9:50	2:10	225.2	-500.0	6:20	5:40	500.0	-61.9				
9:45	2:15	236.2	-500.0	6:15	5:45	500.0	-46.3				
9:40	2:20	247.6	-500.0	6:10	5:50	500.0	-30.9				
9:35	2:25	259.2	-500.0	6:05	5:55	500.0	-15.4				
9:30	2:30	271.3	-500.0	6:00	6:00	500.0	0.0				
9:25	2:35	283.8	-500.0	5:55	6:05	500.0	15.4				
9:20	2:40	296.7	-500.0	5:50	6:10	500.0	30.9				
9:15	2:45	310.1	-500.0	5:45	6:15	500.0	46.3				
9:10	2:50	324.0	-500.0	5:40	6:20	500.0	61.9				
9:05	2:55	338.5	-500.0	5:35	6:25	500.0	77.4				
9:00	3:00	353.6	-500.0	5:30	6:30	500.0	93.1				
8:55	3:05	369.3	-500.0	5:25	6:35	500.0	108.8				
8:50	3:10	385.8	-500.0	5:20	6:40	500.0	124.7				
8:45	3:15	403.2	-500.0	5:15	6:45	500.0	140.7				
8:40	3:20	421.3	-500.0	5:10	6:50	500.0	156.8				
8:35	3:25	440.5	-500.0	5:05	6:55	500.0	173.0				
8:30	3:30	460.8	-500.0	5:00	7:00	500.0	189.5				

Horizontal Shadow Plane Sundial

Latitude: 45.0° N/S

Earliest Sunrise: 4:11 a.m. Latest Sunset: 7:49 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	23.1	-1500.0	8:25	3:35	1446.6	-1500.0	4:55	7:05	1500.0	618.3
11:50	12:10	46.3	-1500.0	8:20	3:40	1500.0	-1485.4	4:50	7:10	1500.0	668.8
11:45	12:15	69.5	-1500.0	8:15	3:45	1500.0	-1417.4	4:45	7:15	1500.0	720.1
11:40	12:20	92.8	-1500.0	8:10	3:50	1500.0	-1351.4	4:40	7:20	1500.0	772.1
11:35	12:25	116.2	-1500.0	8:05	3:55	1500.0	-1287.2	4:35	7:25	1500.0	824.9
11:30	12:30	139.6	-1500.0	8:00	4:00	1500.0	-1224.7	4:30	7:30	1500.0	878.7
11:25	12:35	163.3	-1500.0	7:55	4:05	1500.0	-1163.8	4:25	7:35	1500.0	933.4
11:20	12:40	187.0	-1500.0	7:50	4:10	1500.0	-1104.3	4:20	7:40	1500.0	989.2
11:15	12:45	211.0	-1500.0	7:45	4:15	1500.0	-1046.1	4:15	7:45	1500.0	1046.1
11:10	12:50	235.1	-1500.0	7:40	4:20	1500.0	-989.2	4:10	7:50	1500.0	1104.3
11:05	12:55	259.5	-1500.0	7:35	4:25	1500.0	-933.4	4:05	7:55	1500.0	1163.8
11:00	1:00	284.2	-1500.0	7:30	4:30	1500.0	-878.7	4:00	8:00	1500.0	1224.7
10:55	1:05	309.2	-1500.0	7:25	4:35	1500.0	-824.9				
10:50	1:10	334.4	-1500.0	7:20	4:40	1500.0	-772.1				
10:45	1:15	360.0	-1500.0	7:15	4:45	1500.0	-720.1				
10:40	1:20	386.0	-1500.0	7:10	4:50	1500.0	-668.8				
10:35	1:25	412.5	-1500.0	7:05	4:55	1500.0	-618.3				
10:30	1:30	439.3	-1500.0	7:00	5:00	1500.0	-568.4				
10:25	1:35	466.7	-1500.0	6:55	5:05	1500.0	-519.1				
10:20	1:40	494.6	-1500.0	6:50	5:10	1500.0	-470.3				
10:15	1:45	523.1	-1500.0	6:45	5:15	1500.0	-422.0				
10:10	1:50	552.1	-1500.0	6:40	5:20	1500.0	-374.0				
10:05	1:55	581.9	-1500.0	6:35	5:25	1500.0	-326.5				
10:00	2:00	612.4	-1500.0	6:30	5:30	1500.0	-279.3				
9:55	2:05	643.6	-1500.0	6:25	5:35	1500.0	-232.3				
9:50	2:10	675.7	-1500.0	6:20	5:40	1500.0	-185.6				
9:45	2:15	708.7	-1500.0	6:15	5:45	1500.0	-139.0				
9:40	2:20	742.7	-1500.0	6:10	5:50	1500.0	-92.6				
9:35	2:25	777.7	-1500.0	6:05	5:55	1500.0	-46.3				
9:30	2:30	813.9	-1500.0	6:00	6:00	1500.0	0.0				
9:25	2:35	851.3	-1500.0	5:55	6:05	1500.0	46.3				
9:20	2:40	890.0	-1500.0	5:50	6:10	1500.0	92.6				
9:15	2:45	930.2	-1500.0	5:45	6:15	1500.0	139.0				
9:10	2:50	971.9	-1500.0	5:40	6:20	1500.0	185.6				
9:05	2:55	1015.4	-1500.0	5:35	6:25	1500.0	232.3				
9:00	3:00	1060.7	-1500.0	5:30	6:30	1500.0	279.3				
8:55	3:05	1108.0	-1500.0	5:25	6:35	1500.0	326.5				
8:50	3:10	1157.5	-1500.0	5:20	6:40	1500.0	374.0				
8:45	3:15	1209.5	-1500.0	5:15	6:45	1500.0	422.0				
8:40	3:20	1264.0	-1500.0	5:10	6:50	1500.0	470.3				
8:35	3:25	1321.6	-1500.0	5:05	6:55	1500.0	519.1				
8:30	3:30	1382.3	-1500.0	5:00	7:00	1500.0	568.4				