

# The Sundial Primer - "Dialling Guide"

created by Carl Sabanski

## Horizontal Shadow Plane Sundial

Latitude: 40.5° N/S

Earliest Sunrise: 4:28 a.m. Latest Sunset: 7:32 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	7.1	-500.0	8:25	3:35	442.9	-500.0	4:55	7:05	500.0	224.4
11:50	12:10	14.2	-500.0	8:20	3:40	463.8	-500.0	4:50	7:10	500.0	242.7
11:45	12:15	21.3	-500.0	8:15	3:45	486.0	-500.0	4:45	7:15	500.0	261.3
11:40	12:20	28.4	-500.0	8:10	3:50	500.0	-490.5	4:40	7:20	500.0	280.2
11:35	12:25	35.6	-500.0	8:05	3:55	500.0	-467.2	4:35	7:25	500.0	299.4
11:30	12:30	42.8	-500.0	8:00	4:00	500.0	-444.5	4:30	7:30	500.0	318.9
11:25	12:35	50.0	-500.0	7:55	4:05	500.0	-422.4	4:25	7:35	500.0	338.8
11:20	12:40	57.3	-500.0	7:50	4:10	500.0	-400.8	4:20	7:40	500.0	359.0
11:15	12:45	64.6	-500.0	7:45	4:15	500.0	-379.7	4:15	7:45	500.0	379.7
11:10	12:50	72.0	-500.0	7:40	4:20	500.0	-359.0				
11:05	12:55	79.5	-500.0	7:35	4:25	500.0	-338.8				
11:00	1:00	87.0	-500.0	7:30	4:30	500.0	-318.9				
10:55	1:05	94.6	-500.0	7:25	4:35	500.0	-299.4				
10:50	1:10	102.4	-500.0	7:20	4:40	500.0	-280.2				
10:45	1:15	110.2	-500.0	7:15	4:45	500.0	-261.3				
10:40	1:20	118.2	-500.0	7:10	4:50	500.0	-242.7				
10:35	1:25	126.3	-500.0	7:05	4:55	500.0	-224.4				
10:30	1:30	134.5	-500.0	7:00	5:00	500.0	-206.3				
10:25	1:35	142.9	-500.0	6:55	5:05	500.0	-188.4				
10:20	1:40	151.4	-500.0	6:50	5:10	500.0	-170.7				
10:15	1:45	160.1	-500.0	6:45	5:15	500.0	-153.1				
10:10	1:50	169.0	-500.0	6:40	5:20	500.0	-135.8				
10:05	1:55	178.1	-500.0	6:35	5:25	500.0	-118.5				
10:00	2:00	187.5	-500.0	6:30	5:30	500.0	-101.4				
9:55	2:05	197.0	-500.0	6:25	5:35	500.0	-84.3				
9:50	2:10	206.9	-500.0	6:20	5:40	500.0	-67.4				
9:45	2:15	217.0	-500.0	6:15	5:45	500.0	-50.5				
9:40	2:20	227.4	-500.0	6:10	5:50	500.0	-33.6				
9:35	2:25	238.1	-500.0	6:05	5:55	500.0	-16.8				
9:30	2:30	249.2	-500.0	6:00	6:00	500.0	0.0				
9:25	2:35	260.6	-500.0	5:55	6:05	500.0	16.8				
9:20	2:40	272.5	-500.0	5:50	6:10	500.0	33.6				
9:15	2:45	284.8	-500.0	5:45	6:15	500.0	50.5				
9:10	2:50	297.6	-500.0	5:40	6:20	500.0	67.4				
9:05	2:55	310.9	-500.0	5:35	6:25	500.0	84.3				
9:00	3:00	324.7	-500.0	5:30	6:30	500.0	101.4				
8:55	3:05	339.2	-500.0	5:25	6:35	500.0	118.5				
8:50	3:10	354.4	-500.0	5:20	6:40	500.0	135.8				
8:45	3:15	370.3	-500.0	5:15	6:45	500.0	153.1				
8:40	3:20	387.0	-500.0	5:10	6:50	500.0	170.7				
8:35	3:25	404.6	-500.0	5:05	6:55	500.0	188.4				
8:30	3:30	423.2	-500.0	5:00	7:00	500.0	206.3				

## Horizontal Shadow Plane Sundial

Latitude: 40.5° N/S

Earliest Sunrise: 4:28 a.m. Latest Sunset: 7:32 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	21.3	-1500.0	8:25	3:35	1328.6	-1500.0	4:55	7:05	1500.0	673.2
11:50	12:10	42.5	-1500.0	8:20	3:40	1391.3	-1500.0	4:50	7:10	1500.0	728.2
11:45	12:15	63.9	-1500.0	8:15	3:45	1458.0	-1500.0	4:45	7:15	1500.0	784.0
11:40	12:20	85.2	-1500.0	8:10	3:50	1500.0	-1471.4	4:40	7:20	1500.0	840.6
11:35	12:25	106.7	-1500.0	8:05	3:55	1500.0	-1401.5	4:35	7:25	1500.0	898.2
11:30	12:30	128.3	-1500.0	8:00	4:00	1500.0	-1333.5	4:30	7:30	1500.0	956.7
11:25	12:35	149.9	-1500.0	7:55	4:05	1500.0	-1267.1	4:25	7:35	1500.0	1016.3
11:20	12:40	171.8	-1500.0	7:50	4:10	1500.0	-1202.3	4:20	7:40	1500.0	1077.0
11:15	12:45	193.8	-1500.0	7:45	4:15	1500.0	-1139.0	4:15	7:45	1500.0	1139.0
11:10	12:50	216.0	-1500.0	7:40	4:20	1500.0	-1077.0				
11:05	12:55	238.4	-1500.0	7:35	4:25	1500.0	-1016.3				
11:00	1:00	261.0	-1500.0	7:30	4:30	1500.0	-956.7				
10:55	1:05	283.9	-1500.0	7:25	4:35	1500.0	-898.2				
10:50	1:10	307.2	-1500.0	7:20	4:40	1500.0	-840.6				
10:45	1:15	330.7	-1500.0	7:15	4:45	1500.0	-784.0				
10:40	1:20	354.6	-1500.0	7:10	4:50	1500.0	-728.2				
10:35	1:25	378.8	-1500.0	7:05	4:55	1500.0	-673.2				
10:30	1:30	403.5	-1500.0	7:00	5:00	1500.0	-618.9				
10:25	1:35	428.6	-1500.0	6:55	5:05	1500.0	-565.2				
10:20	1:40	454.3	-1500.0	6:50	5:10	1500.0	-512.0				
10:15	1:45	480.4	-1500.0	6:45	5:15	1500.0	-459.4				
10:10	1:50	507.1	-1500.0	6:40	5:20	1500.0	-407.3				
10:05	1:55	534.4	-1500.0	6:35	5:25	1500.0	-355.5				
10:00	2:00	562.4	-1500.0	6:30	5:30	1500.0	-304.1				
9:55	2:05	591.1	-1500.0	6:25	5:35	1500.0	-252.9				
9:50	2:10	620.6	-1500.0	6:20	5:40	1500.0	-202.1				
9:45	2:15	650.9	-1500.0	6:15	5:45	1500.0	-151.4				
9:40	2:20	682.1	-1500.0	6:10	5:50	1500.0	-100.8				
9:35	2:25	714.3	-1500.0	6:05	5:55	1500.0	-50.4				
9:30	2:30	747.5	-1500.0	6:00	6:00	1500.0	0.0				
9:25	2:35	781.9	-1500.0	5:55	6:05	1500.0	50.4				
9:20	2:40	817.4	-1500.0	5:50	6:10	1500.0	100.8				
9:15	2:45	854.3	-1500.0	5:45	6:15	1500.0	151.4				
9:10	2:50	892.7	-1500.0	5:40	6:20	1500.0	202.1				
9:05	2:55	932.6	-1500.0	5:35	6:25	1500.0	252.9				
9:00	3:00	974.2	-1500.0	5:30	6:30	1500.0	304.1				
8:55	3:05	1017.6	-1500.0	5:25	6:35	1500.0	355.5				
8:50	3:10	1063.1	-1500.0	5:20	6:40	1500.0	407.3				
8:45	3:15	1110.8	-1500.0	5:15	6:45	1500.0	459.4				
8:40	3:20	1161.0	-1500.0	5:10	6:50	1500.0	512.0				
8:35	3:25	1213.8	-1500.0	5:05	6:55	1500.0	565.2				
8:30	3:30	1269.6	-1500.0	5:00	7:00	1500.0	618.9				