

Analemmatic Sundial

Latitude: 25.5° N/S

Earliest Sunrise: 5:08 a.m. Latest Sunset: 6:52 p.m.
 Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 430.5 mm
 Sunrise/Sunset Markers: X = ± 802.0 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	430.5	430.5	0.0							
11:55	12:05	21.8	430.4	431.0	21.8	8:25	3:35	806.4	254.6	845.7	825.4
11:50	12:10	43.6	430.1	432.3	43.6	8:20	3:40	819.2	246.9	855.6	839.5
11:45	12:15	65.4	429.6	434.5	65.4	8:15	3:45	831.5	239.2	865.2	853.2
11:40	12:20	87.2	428.9	437.6	87.2	8:10	3:50	843.4	231.3	874.5	866.6
11:35	12:25	108.9	428.0	441.6	108.9	8:05	3:55	854.9	223.3	883.6	879.7
11:30	12:30	130.5	426.8	446.3	130.6	8:00	4:00	866.0	215.3	892.4	892.4
11:25	12:35	152.1	425.5	451.9	152.2	7:55	4:05	876.7	207.1	900.8	904.8
11:20	12:40	173.6	424.0	458.2	173.8	7:50	4:10	887.0	198.8	909.0	916.8
11:15	12:45	195.1	422.2	465.1	195.3	7:45	4:15	896.9	190.4	916.9	928.5
11:10	12:50	216.4	420.3	472.8	216.7	7:40	4:20	906.3	181.9	924.4	939.8
11:05	12:55	237.7	418.2	481.0	238.0	7:35	4:25	915.3	173.4	931.6	950.7
11:00	1:00	258.8	415.8	489.8	259.2	7:30	4:30	923.9	164.7	938.5	961.3
10:55	1:05	279.8	413.3	499.1	280.4	7:25	4:35	932.0	156.0	945.0	971.6
10:50	1:10	300.7	410.6	508.9	301.4	7:20	4:40	939.7	147.2	951.2	981.5
10:45	1:15	321.4	407.7	519.1	322.3	7:15	4:45	946.9	138.4	957.0	991.0
10:40	1:20	342.0	404.5	529.8	343.0	7:10	4:50	953.7	129.5	962.5	1000.1
10:35	1:25	362.4	401.2	540.7	363.6	7:05	4:55	960.0	120.5	967.6	1008.9
10:30	1:30	382.7	397.7	551.9	384.1	7:00	5:00	965.9	111.4	972.3	1017.3
10:25	1:35	402.7	394.1	563.5	404.4	6:55	5:05	971.3	102.3	976.7	1025.3
10:20	1:40	422.6	390.2	575.2	424.5	6:50	5:10	976.3	93.2	980.7	1032.9
10:15	1:45	442.3	386.1	587.1	444.5	6:45	5:15	980.8	84.0	984.4	1040.2
10:10	1:50	461.7	381.9	599.2	464.3	6:40	5:20	984.8	74.8	987.6	1047.1
10:05	1:55	481.0	377.4	611.4	483.9	6:35	5:25	988.4	65.5	990.5	1053.6
10:00	2:00	500.0	372.8	623.7	503.3	6:30	5:30	991.4	56.2	993.0	1059.8
9:55	2:05	518.8	368.0	636.1	522.5	6:25	5:35	994.1	46.9	995.2	1065.5
9:50	2:10	537.3	363.1	648.5	541.5	6:20	5:40	996.2	37.5	996.9	1070.9
9:45	2:15	555.6	358.0	660.9	560.3	6:15	5:45	997.9	28.2	998.3	1075.9
9:40	2:20	573.6	352.7	673.3	578.8	6:10	5:50	999.0	18.8	999.2	1080.6
9:35	2:25	591.3	347.2	685.7	597.2	6:05	5:55	999.8	9.4	999.8	1084.8
9:30	2:30	608.8	341.5	698.0	615.2	6:00	6:00	1000.0	0.0	1000.0	1088.7
9:25	2:35	625.9	335.7	710.3	633.1	5:55	6:05	999.8	-9.4	999.8	1092.3
9:20	2:40	642.8	329.8	722.5	650.6	5:50	6:10	999.0	-18.8	999.2	1095.4
9:15	2:45	659.3	323.7	734.5	667.9	5:45	6:15	997.9	-28.2	998.3	1098.2
9:10	2:50	675.6	317.4	746.4	685.0	5:40	6:20	996.2	-37.5	996.9	1100.7
9:05	2:55	691.5	311.0	758.2	701.8	5:35	6:25	994.1	-46.9	995.2	1102.7
9:00	3:00	707.1	304.4	769.9	718.3	5:30	6:30	991.4	-56.2	993.0	1104.5
8:55	3:05	722.4	297.7	781.3	734.5	5:25	6:35	988.4	-65.5	990.5	1105.8
8:50	3:10	737.3	290.8	792.6	750.4	5:20	6:40	984.8	-74.8	987.6	1106.9
8:45	3:15	751.8	283.9	803.6	766.0	5:15	6:45	980.8	-84.0	984.4	1107.5
8:40	3:20	766.0	276.7	814.5	781.3	5:10	6:50	976.3	-93.2	980.7	1107.9
8:35	3:25	779.9	269.5	825.1	796.3	5:05	6:55	971.3	-102.3	976.7	1107.9
8:30	3:30	793.4	262.1	835.5	811.0	5:00	7:00	965.9	-111.4	972.3	1107.6

Analematic Sundial

Latitude: 25.5° N/S

Date Scale

Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 430.5 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-382.9	-375.7	-373.5	-363.6	-360.6	-348.3	-344.8	-330.1	-326.2	-309.6	-305.2
February	-277.0	-256.8	-251.5	-230.1	-224.7	-202.2	-196.5	-173.3	-167.4	-143.6	-137.5
March	-119.3	-94.9	-88.7	-63.9	-57.7	-32.8	-26.6	-1.6	4.6	29.5	35.6
April	72.6	96.9	103.0	126.9	132.8	156.2	161.9	184.8	190.4	212.4	217.7
May	243.9	263.9	268.7	287.4	291.9	309.0	313.1	328.7	332.4	346.1	349.2
June	366.1	375.0	377.0	383.5	385.0	389.1	389.6	391.1	391.3	388.5	389.8
July	385.0	378.9	377.0	368.7	366.3	355.5	352.6	339.8	336.4	321.8	317.9
August	292.9	274.7	270.1	250.6	245.7	225.2	219.9	198.4	193.0	170.7	165.0
September	130.5	107.0	101.1	77.1	71.0	46.8	40.8	16.4	10.2	-14.3	-20.5
October	-51.1	-75.6	-81.7	-106.0	-111.9	-136.0	-142.0	-165.5	-171.4	-194.3	-199.9
November	-232.9	-254.0	-259.2	-279.1	-283.9	-302.4	-306.7	-323.5	-327.4	-342.3	-345.9
December	-361.4	-371.8	-374.0	-381.6	-383.3	-388.2	-389.1	-391.1	-391.3	-390.4	-389.8

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	382.9	375.7	373.5	363.6	360.6	348.3	344.8	330.1	326.2	309.6	305.2
February	277.0	256.8	251.5	230.1	224.7	202.2	196.5	173.3	167.4	143.6	137.5
March	119.3	94.9	88.7	63.9	57.7	32.8	26.6	1.6	-4.6	-29.5	-35.6
April	-72.6	-96.9	-103.0	-126.9	-132.8	-156.2	-161.9	-184.8	-190.4	-212.4	-217.7
May	-243.9	-263.9	-268.7	-287.4	-291.9	-309.0	-313.1	-328.7	-332.4	-346.1	-349.2
June	-366.1	-375.0	-377.0	-383.5	-385.0	-389.1	-389.6	-391.1	-391.3	-388.5	-389.8
July	-385.0	-378.9	-377.0	-368.7	-366.3	-355.5	-352.6	-339.8	-336.4	-321.8	-317.9
August	-292.9	-274.7	-270.1	-250.6	-245.7	-225.2	-219.9	-198.4	-193.0	-170.7	-165.0
September	-130.5	-107.0	-101.1	-77.1	-71.0	-46.8	-40.8	-16.4	-10.2	14.3	20.5
October	51.1	75.6	81.7	106.0	111.9	136.0	142.0	165.5	171.4	194.3	199.9
November	232.9	254.0	259.2	279.1	283.9	302.4	306.7	323.5	327.4	342.3	345.9
December	361.4	371.8	374.0	381.6	383.3	388.2	389.1	391.1	391.3	390.4	389.8

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 25.5° N/S

Earliest Sunrise: 5:08 a.m. Latest Sunset: 6:52 p.m.
 Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 645.8 mm
 Sunrise/Sunset Markers: X = ± 1203.0 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	645.8	645.8	0.0							
11:55	12:05	32.7	645.6	646.4	32.7	8:25	3:35	1209.7	381.8	1268.5	1238.1
11:50	12:10	65.4	645.2	648.5	65.4	8:20	3:40	1228.7	370.4	1283.3	1259.2
11:45	12:15	98.1	644.4	651.8	98.1	8:15	3:45	1247.2	358.8	1297.8	1279.8
11:40	12:20	130.7	643.3	656.5	130.8	8:10	3:50	1265.1	347.0	1311.8	1299.9
11:35	12:25	163.3	641.9	662.4	163.3	8:05	3:55	1282.4	335.0	1325.4	1319.5
11:30	12:30	195.8	640.2	669.5	195.9	8:00	4:00	1299.0	322.9	1338.6	1338.6
11:25	12:35	228.2	638.3	677.8	228.3	7:55	4:05	1315.1	310.6	1351.3	1357.1
11:20	12:40	260.5	636.0	687.2	260.7	7:50	4:10	1330.5	298.2	1363.5	1375.2
11:15	12:45	292.6	633.4	697.7	292.9	7:45	4:15	1345.3	285.6	1375.3	1392.7
11:10	12:50	324.7	630.5	709.1	325.0	7:40	4:20	1359.5	272.9	1386.6	1409.7
11:05	12:55	356.5	627.3	721.5	357.0	7:35	4:25	1373.0	260.1	1397.4	1426.1
11:00	1:00	388.2	623.8	734.7	388.9	7:30	4:30	1385.8	247.1	1407.7	1442.0
10:55	1:05	419.7	620.0	748.7	420.5	7:25	4:35	1398.0	234.1	1417.5	1457.4
10:50	1:10	451.1	615.9	763.4	452.0	7:20	4:40	1409.5	220.9	1426.7	1472.2
10:45	1:15	482.2	611.5	778.7	483.4	7:15	4:45	1420.4	207.6	1435.5	1486.5
10:40	1:20	513.0	606.8	794.6	514.5	7:10	4:50	1430.6	194.2	1443.7	1500.2
10:35	1:25	543.7	601.9	811.0	545.4	7:05	4:55	1440.1	180.7	1451.4	1513.3
10:30	1:30	574.0	596.6	827.9	576.1	7:00	5:00	1448.9	167.1	1458.5	1525.9
10:25	1:35	604.1	591.1	845.2	606.6	6:55	5:05	1457.0	153.5	1465.1	1537.9
10:20	1:40	633.9	585.3	862.8	636.8	6:50	5:10	1464.4	139.8	1471.1	1549.4
10:15	1:45	663.4	579.2	880.7	666.8	6:45	5:15	1471.2	126.0	1476.6	1560.3
10:10	1:50	692.6	572.8	898.8	696.5	6:40	5:20	1477.2	112.1	1481.5	1570.6
10:05	1:55	721.5	566.2	917.1	725.9	6:35	5:25	1482.5	98.2	1485.8	1580.4
10:00	2:00	750.0	559.3	935.6	755.0	6:30	5:30	1487.2	84.3	1489.6	1589.6
9:55	2:05	778.2	552.1	954.1	783.8	6:25	5:35	1491.1	70.3	1492.7	1598.3
9:50	2:10	805.9	544.6	972.7	812.3	6:20	5:40	1494.3	56.3	1495.4	1606.4
9:45	2:15	833.4	536.9	991.4	840.4	6:15	5:45	1496.8	42.2	1497.4	1613.9
9:40	2:20	860.4	529.0	1010.0	868.3	6:10	5:50	1498.6	28.2	1498.8	1620.8
9:35	2:25	887.0	520.8	1028.5	895.7	6:05	5:55	1499.6	14.1	1499.7	1627.3
9:30	2:30	913.1	512.3	1047.0	922.8	6:00	6:00	1500.0	0.0	1500.0	1633.1
9:25	2:35	938.9	503.6	1065.4	949.6	5:55	6:05	1499.6	-14.1	1499.7	1638.4
9:20	2:40	964.2	494.7	1083.7	975.9	5:50	6:10	1498.6	-28.2	1498.8	1643.1
9:15	2:45	989.0	485.5	1101.8	1001.9	5:45	6:15	1496.8	-42.2	1497.4	1647.3
9:10	2:50	1013.4	476.1	1119.7	1027.5	5:40	6:20	1494.3	-56.3	1495.4	1651.0
9:05	2:55	1037.3	466.5	1137.3	1052.7	5:35	6:25	1491.1	-70.3	1492.7	1654.1
9:00	3:00	1060.7	456.6	1154.8	1077.4	5:30	6:30	1487.2	-84.3	1489.6	1656.7
8:55	3:05	1083.5	446.6	1172.0	1101.7	5:25	6:35	1482.5	-98.2	1485.8	1658.8
8:50	3:10	1105.9	436.3	1188.9	1125.6	5:20	6:40	1477.2	-112.1	1481.5	1660.3
8:45	3:15	1127.8	425.8	1205.5	1149.0	5:15	6:45	1471.2	-126.0	1476.6	1661.3
8:40	3:20	1149.1	415.1	1221.7	1172.0	5:10	6:50	1464.4	-139.8	1471.1	1661.8
8:35	3:25	1169.8	404.2	1237.7	1194.5	5:05	6:55	1457.0	-153.5	1465.1	1661.8
8:30	3:30	1190.0	393.1	1253.3	1216.6	5:00	7:00	1448.9	-167.1	1458.5	1661.4

Analemmatic Sundial

Latitude: 25.5° N/S

Date Scale

Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 645.8 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-574.4	-563.6	-560.2	-545.4	-541.0	-522.4	-517.3	-495.2	-489.3	-464.3	-457.7
February	-415.5	-385.2	-377.2	-345.1	-337.1	-303.4	-294.7	-260.0	-251.2	-215.4	-206.2
March	-179.0	-142.3	-133.0	-95.9	-86.6	-49.2	-39.9	-2.4	6.9	44.2	53.4
April	108.9	145.4	154.5	190.3	199.2	234.3	242.9	277.2	285.6	318.5	326.5
May	365.8	395.9	403.1	431.0	437.8	463.5	469.6	493.0	498.7	519.2	523.8
June	549.2	562.5	565.5	575.2	577.5	583.6	584.5	586.7	587.0	582.8	584.8
July	577.5	568.3	565.5	553.1	549.5	533.3	528.9	509.7	504.6	482.6	476.8
August	439.4	412.1	405.2	376.0	368.6	337.8	329.8	297.7	289.5	256.1	247.5
September	195.8	160.5	151.6	115.6	106.6	70.2	61.2	24.6	15.4	-21.5	-30.7
October	-76.6	-113.5	-122.5	-159.0	-167.9	-204.0	-213.0	-248.2	-257.0	-291.5	-299.9
November	-349.4	-381.1	-388.7	-418.6	-425.8	-453.5	-460.1	-485.3	-491.2	-513.5	-518.9
December	-542.1	-557.8	-561.1	-572.5	-575.0	-582.2	-583.6	-586.7	-587.0	-585.6	-584.8

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	574.4	563.6	560.2	545.4	541.0	522.4	517.3	495.2	489.3	464.3	457.7
February	415.5	385.2	377.2	345.1	337.1	303.4	294.7	260.0	251.2	215.4	206.2
March	179.0	142.3	133.0	95.9	86.6	49.2	39.9	2.4	-6.9	-44.2	-53.4
April	-108.9	-145.4	-154.5	-190.3	-199.2	-234.3	-242.9	-277.2	-285.6	-318.5	-326.5
May	-365.8	-395.9	-403.1	-431.0	-437.8	-463.5	-469.6	-493.0	-498.7	-519.2	-523.8
June	-549.2	-562.5	-565.5	-575.2	-577.5	-583.6	-584.5	-586.7	-587.0	-582.8	-584.8
July	-577.5	-568.3	-565.5	-553.1	-549.5	-533.3	-528.9	-509.7	-504.6	-482.6	-476.8
August	-439.4	-412.1	-405.2	-376.0	-368.6	-337.8	-329.8	-297.7	-289.5	-256.1	-247.5
September	-195.8	-160.5	-151.6	-115.6	-106.6	-70.2	-61.2	-24.6	-15.4	21.5	30.7
October	76.6	113.5	122.5	159.0	167.9	204.0	213.0	248.2	257.0	291.5	299.9
November	349.4	381.1	388.7	418.6	425.8	453.5	460.1	485.3	491.2	513.5	518.9
December	542.1	557.8	561.1	572.5	575.0	582.2	583.6	586.7	587.0	585.6	584.8

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 25.5° N/S

Earliest Sunrise: 5:08 a.m. Latest Sunset: 6:52 p.m.
 Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 861.0 mm
 Sunrise/Sunset Markers: X = ± 1604.0 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	861.0	861.0	0.0							
11:55	12:05	43.6	860.8	861.9	43.6	8:25	3:35	1612.9	509.1	1691.3	1650.8
11:50	12:10	87.2	860.2	864.6	87.2	8:20	3:40	1638.3	493.9	1711.1	1678.9
11:45	12:15	130.8	859.2	869.1	130.8	8:15	3:45	1662.9	478.4	1730.4	1706.4
11:40	12:20	174.3	857.7	875.3	174.3	8:10	3:50	1686.8	462.6	1749.1	1733.2
11:35	12:25	217.7	855.9	883.2	217.8	8:05	3:55	1709.8	446.7	1767.2	1759.3
11:30	12:30	261.1	853.7	892.7	261.2	8:00	4:00	1732.1	430.5	1784.8	1784.8
11:25	12:35	304.2	851.0	903.8	304.4	7:55	4:05	1753.5	414.1	1801.7	1809.5
11:20	12:40	347.3	847.9	916.3	347.5	7:50	4:10	1774.0	397.6	1818.0	1833.6
11:15	12:45	390.2	844.5	930.3	390.5	7:45	4:15	1793.7	380.8	1833.7	1856.9
11:10	12:50	432.9	840.6	945.5	433.4	7:40	4:20	1812.6	363.9	1848.8	1879.6
11:05	12:55	475.4	836.3	962.0	476.0	7:35	4:25	1830.6	346.8	1863.2	1901.5
11:00	1:00	517.6	831.7	979.6	518.5	7:30	4:30	1847.8	329.5	1876.9	1922.7
10:55	1:05	559.7	826.6	998.3	560.7	7:25	4:35	1864.0	312.1	1890.0	1943.2
10:50	1:10	601.4	821.2	1017.8	602.7	7:20	4:40	1879.4	294.5	1902.3	1962.9
10:45	1:15	642.9	815.3	1038.3	644.5	7:15	4:45	1893.9	276.8	1914.0	1981.9
10:40	1:20	684.0	809.1	1059.5	686.0	7:10	4:50	1907.4	258.9	1924.9	2000.2
10:35	1:25	724.9	802.5	1081.4	727.2	7:05	4:55	1920.1	240.9	1935.2	2017.7
10:30	1:30	765.4	795.5	1103.9	768.2	7:00	5:00	1931.9	222.8	1944.7	2034.5
10:25	1:35	805.5	788.1	1126.9	808.8	6:55	5:05	1942.7	204.7	1953.4	2050.6
10:20	1:40	845.2	780.4	1150.4	849.1	6:50	5:10	1952.6	186.4	1961.5	2065.9
10:15	1:45	884.6	772.2	1174.2	889.0	6:45	5:15	1961.6	168.0	1968.7	2080.4
10:10	1:50	923.5	763.7	1198.4	928.6	6:40	5:20	1969.6	149.5	1975.3	2094.2
10:05	1:55	962.0	754.9	1222.8	967.8	6:35	5:25	1976.7	131.0	1981.1	2107.2
10:00	2:00	1000.0	745.7	1247.4	1006.6	6:30	5:30	1982.9	112.4	1986.1	2119.5
9:55	2:05	1037.5	736.1	1272.1	1045.0	6:25	5:35	1988.1	93.7	1990.3	2131.0
9:50	2:10	1074.6	726.2	1297.0	1083.0	6:20	5:40	1992.4	75.0	1993.8	2141.8
9:45	2:15	1111.1	715.9	1321.8	1120.6	6:15	5:45	1995.7	56.3	1996.5	2151.8
9:40	2:20	1147.2	705.3	1346.6	1157.7	6:10	5:50	1998.1	37.6	1998.4	2161.1
9:35	2:25	1182.6	694.4	1371.4	1194.3	6:05	5:55	1999.5	18.8	1999.6	2169.7
9:30	2:30	1217.5	683.1	1396.1	1230.5	6:00	6:00	2000.0	0.0	2000.0	2177.5
9:25	2:35	1251.8	671.5	1420.6	1266.1	5:55	6:05	1999.5	-18.8	1999.6	2184.5
9:20	2:40	1285.6	659.6	1444.9	1301.3	5:50	6:10	1998.1	-37.6	1998.4	2190.9
9:15	2:45	1318.7	647.4	1469.0	1335.9	5:45	6:15	1995.7	-56.3	1996.5	2196.5
9:10	2:50	1351.2	634.8	1492.9	1370.0	5:40	6:20	1992.4	-75.0	1993.8	2201.3
9:05	2:55	1383.0	622.0	1516.4	1403.5	5:35	6:25	1988.1	-93.7	1990.3	2205.5
9:00	3:00	1414.2	608.8	1539.7	1436.5	5:30	6:30	1982.9	-112.4	1986.1	2208.9
8:55	3:05	1444.7	595.4	1562.6	1468.9	5:25	6:35	1976.7	-131.0	1981.1	2211.7
8:50	3:10	1474.6	581.7	1585.1	1500.8	5:20	6:40	1969.6	-149.5	1975.3	2213.7
8:45	3:15	1503.7	567.7	1607.3	1532.0	5:15	6:45	1961.6	-168.0	1968.7	2215.1
8:40	3:20	1532.1	553.5	1629.0	1562.7	5:10	6:50	1952.6	-186.4	1961.5	2215.8
8:35	3:25	1559.8	538.9	1650.3	1592.7	5:05	6:55	1942.7	-204.7	1953.4	2215.8
8:30	3:30	1586.7	524.2	1671.0	1622.1	5:00	7:00	1931.9	-222.8	1944.7	2215.1

Analematic Sundial

Latitude: 25.5° N/S

Date Scale

Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 861.0 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-765.9	-751.4	-747.0	-727.1	-721.3	-696.6	-689.7	-660.2	-652.4	-619.1	-610.3
February	-554.0	-513.5	-503.0	-460.1	-449.4	-404.5	-392.9	-346.6	-334.9	-287.2	-274.9
March	-238.6	-189.7	-177.3	-127.8	-115.5	-65.6	-53.3	-3.2	9.1	58.9	71.2
April	145.2	193.9	206.0	253.7	265.6	312.5	323.8	369.6	380.7	424.7	435.4
May	487.7	527.9	537.5	574.7	583.8	618.0	626.2	657.4	664.9	692.2	698.4
June	732.3	749.9	754.0	767.0	770.0	778.2	779.3	782.3	782.7	777.1	779.7
July	770.0	757.7	754.0	737.4	732.6	711.1	705.3	679.6	672.8	643.5	635.7
August	585.8	549.5	540.2	501.3	491.5	450.4	439.7	396.9	386.0	341.4	330.0
September	261.1	214.0	202.2	154.1	142.1	93.7	81.7	32.8	20.5	-28.7	-41.0
October	-102.2	-151.3	-163.3	-212.1	-223.9	-272.0	-284.0	-331.0	-342.7	-388.6	-399.9
November	-465.8	-508.1	-518.3	-558.1	-567.8	-604.7	-613.5	-647.1	-654.9	-684.6	-691.9
December	-722.7	-743.7	-748.1	-763.3	-766.6	-776.3	-778.2	-782.3	-782.7	-780.8	-779.7

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	765.9	751.4	747.0	727.1	721.3	696.6	689.7	660.2	652.4	619.1	610.3
February	554.0	513.5	503.0	460.1	449.4	404.5	392.9	346.6	334.9	287.2	274.9
March	238.6	189.7	177.3	127.8	115.5	65.6	53.3	3.2	-9.1	-58.9	-71.2
April	-145.2	-193.9	-206.0	-253.7	-265.6	-312.5	-323.8	-369.6	-380.7	-424.7	-435.4
May	-487.7	-527.9	-537.5	-574.7	-583.8	-618.0	-626.2	-657.4	-664.9	-692.2	-698.4
June	-732.3	-749.9	-754.0	-767.0	-770.0	-778.2	-779.3	-782.3	-782.7	-777.1	-779.7
July	-770.0	-757.7	-754.0	-737.4	-732.6	-711.1	-705.3	-679.6	-672.8	-643.5	-635.7
August	-585.8	-549.5	-540.2	-501.3	-491.5	-450.4	-439.7	-396.9	-386.0	-341.4	-330.0
September	-261.1	-214.0	-202.2	-154.1	-142.1	-93.7	-81.7	-32.8	-20.5	28.7	41.0
October	102.2	151.3	163.3	212.1	223.9	272.0	284.0	331.0	342.7	388.6	399.9
November	465.8	508.1	518.3	558.1	567.8	604.7	613.5	647.1	654.9	684.6	691.9
December	722.7	743.7	748.1	763.3	766.6	776.3	778.2	782.3	782.7	780.8	779.7

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |

Analemmatic Sundial

Latitude: 25.5° N/S

Earliest Sunrise: 5:08 a.m. Latest Sunset: 6:52 p.m.
 Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1076.3 mm
 Sunrise/Sunset Markers: X = ± 2005.0 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	1076.3	1076.3	0.0							
11:55	12:05	54.5	1076.0	1077.4	54.5	8:25	3:35	2016.1	636.4	2114.2	2063.5
11:50	12:10	109.0	1075.3	1080.8	109.1	8:20	3:40	2047.9	617.3	2138.9	2098.7
11:45	12:15	163.5	1074.0	1086.3	163.5	8:15	3:45	2078.7	597.9	2163.0	2133.0
11:40	12:20	217.9	1072.2	1094.1	217.9	8:10	3:50	2108.5	578.3	2186.3	2166.5
11:35	12:25	272.2	1069.9	1104.0	272.2	8:05	3:55	2137.3	558.3	2209.0	2199.1
11:30	12:30	326.3	1067.1	1115.8	326.4	8:00	4:00	2165.1	538.1	2230.9	2230.9
11:25	12:35	380.3	1063.8	1129.7	380.5	7:55	4:05	2191.8	517.7	2252.1	2261.9
11:20	12:40	434.1	1059.9	1145.4	434.4	7:50	4:10	2217.5	497.0	2272.5	2291.9
11:15	12:45	487.7	1055.6	1162.8	488.2	7:45	4:15	2242.2	476.0	2292.2	2321.1
11:10	12:50	541.1	1050.8	1181.9	541.7	7:40	4:20	2265.8	454.9	2311.0	2349.4
11:05	12:55	594.2	1045.4	1202.5	595.0	7:35	4:25	2288.3	433.5	2329.0	2376.9
11:00	1:00	647.0	1039.6	1224.5	648.1	7:30	4:30	2309.7	411.9	2346.1	2403.4
10:55	1:05	699.6	1033.3	1247.8	700.9	7:25	4:35	2330.0	390.1	2362.4	2429.0
10:50	1:10	751.8	1026.5	1272.3	753.4	7:20	4:40	2349.2	368.1	2377.9	2453.6
10:45	1:15	803.6	1019.2	1297.9	805.6	7:15	4:45	2367.3	346.0	2392.5	2477.4
10:40	1:20	855.1	1011.4	1324.4	857.5	7:10	4:50	2384.3	323.6	2406.2	2500.3
10:35	1:25	906.1	1003.1	1351.7	909.0	7:05	4:55	2400.1	301.2	2418.9	2522.2
10:30	1:30	956.7	994.4	1379.9	960.2	7:00	5:00	2414.8	278.6	2430.8	2543.2
10:25	1:35	1006.9	985.1	1408.6	1011.0	6:55	5:05	2428.4	255.8	2441.8	2563.2
10:20	1:40	1056.5	975.4	1438.0	1061.3	6:50	5:10	2440.7	232.9	2451.8	2582.3
10:15	1:45	1105.7	965.3	1467.8	1111.3	6:45	5:15	2452.0	210.0	2460.9	2600.5
10:10	1:50	1154.4	954.7	1498.0	1160.8	6:40	5:20	2462.0	186.9	2469.1	2617.7
10:05	1:55	1202.5	943.6	1528.5	1209.8	6:35	5:25	2470.9	163.7	2476.3	2634.0
10:00	2:00	1250.0	932.1	1559.3	1258.3	6:30	5:30	2478.6	140.5	2482.6	2649.4
9:55	2:05	1296.9	920.1	1590.2	1306.3	6:25	5:35	2485.1	117.2	2487.9	2663.8
9:50	2:10	1343.2	907.7	1621.2	1353.8	6:20	5:40	2490.5	93.8	2492.3	2677.3
9:45	2:15	1388.9	894.9	1652.3	1400.7	6:15	5:45	2494.6	70.4	2495.6	2689.8
9:40	2:20	1433.9	881.6	1683.3	1447.1	6:10	5:50	2497.6	46.9	2498.1	2701.4
9:35	2:25	1478.3	868.0	1714.2	1492.9	6:05	5:55	2499.4	23.5	2499.5	2712.1
9:30	2:30	1521.9	853.9	1745.1	1538.1	6:00	6:00	2500.0	0.0	2500.0	2721.8
9:25	2:35	1564.8	839.4	1775.7	1582.6	5:55	6:05	2499.4	-23.5	2499.5	2730.7
9:20	2:40	1607.0	824.5	1806.1	1626.6	5:50	6:10	2497.6	-46.9	2498.1	2738.6
9:15	2:45	1648.4	809.2	1836.3	1669.9	5:45	6:15	2494.6	-70.4	2495.6	2745.6
9:10	2:50	1689.0	793.5	1866.1	1712.5	5:40	6:20	2490.5	-93.8	2492.3	2751.7
9:05	2:55	1728.8	777.5	1895.6	1754.4	5:35	6:25	2485.1	-117.2	2487.9	2756.9
9:00	3:00	1767.8	761.0	1924.6	1795.7	5:30	6:30	2478.6	-140.5	2482.6	2761.2
8:55	3:05	1805.9	744.3	1953.3	1836.2	5:25	6:35	2470.9	-163.7	2476.3	2764.6
8:50	3:10	1843.2	727.1	1981.4	1876.0	5:20	6:40	2462.0	-186.9	2469.1	2767.2
8:45	3:15	1879.6	709.6	2009.1	1915.0	5:15	6:45	2452.0	-210.0	2460.9	2768.9
8:40	3:20	1915.1	691.8	2036.2	1953.3	5:10	6:50	2440.7	-232.9	2451.8	2769.7
8:35	3:25	1949.7	673.7	2062.8	1990.8	5:05	6:55	2428.4	-255.8	2441.8	2769.7
8:30	3:30	1983.4	655.2	2088.8	2027.6	5:00	7:00	2414.8	-278.6	2430.8	2768.9

Analematic Sundial

Latitude: 25.5° N/S

Date Scale

Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1076.3 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-957.3	-939.3	-933.7	-908.9	-901.6	-870.7	-862.1	-825.3	-815.5	-773.9	-762.9
February	-692.5	-641.9	-628.7	-575.2	-561.8	-505.6	-491.2	-433.3	-418.6	-359.0	-343.7
March	-298.3	-237.2	-221.6	-159.8	-144.3	-82.0	-66.6	-3.9	11.4	73.7	89.1
April	181.6	242.3	257.5	317.1	332.0	390.6	404.8	462.0	475.9	530.9	544.2
May	609.7	659.8	671.8	718.4	729.7	772.6	782.7	821.7	831.1	865.3	873.0
June	915.3	937.4	942.5	958.7	962.5	972.7	974.1	977.9	978.3	971.3	974.6
July	962.5	947.1	942.5	921.8	915.8	888.8	881.6	849.5	841.0	804.4	794.6
August	732.3	686.9	675.3	626.6	614.3	563.0	549.6	496.1	482.5	426.8	412.5
September	326.4	267.5	252.7	192.7	177.6	117.1	102.1	41.0	25.6	-35.8	-51.2
October	-127.7	-189.1	-204.2	-265.1	-279.9	-340.0	-355.0	-413.7	-428.4	-485.8	-499.8
November	-582.3	-635.1	-647.9	-697.6	-709.7	-755.9	-766.8	-808.8	-818.6	-855.8	-864.8
December	-903.4	-929.6	-935.1	-954.1	-958.3	-970.4	-972.7	-977.9	-978.3	-976.0	-974.6

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	957.3	939.3	933.7	908.9	901.6	870.7	862.1	825.3	815.5	773.9	762.9
February	692.5	641.9	628.7	575.2	561.8	505.6	491.2	433.3	418.6	359.0	343.7
March	298.3	237.2	221.6	159.8	144.3	82.0	66.6	3.9	-11.4	-73.7	-89.1
April	-181.6	-242.3	-257.5	-317.1	-332.0	-390.6	-404.8	-462.0	-475.9	-530.9	-544.2
May	-609.7	-659.8	-671.8	-718.4	-729.7	-772.6	-782.7	-821.7	-831.1	-865.3	-873.0
June	-915.3	-937.4	-942.5	-958.7	-962.5	-972.7	-974.1	-977.9	-978.3	-971.3	-974.6
July	-962.5	-947.1	-942.5	-921.8	-915.8	-888.8	-881.6	-849.5	-841.0	-804.4	-794.6
August	-732.3	-686.9	-675.3	-626.6	-614.3	-563.0	-549.6	-496.1	-482.5	-426.8	-412.5
September	-326.4	-267.5	-252.7	-192.7	-177.6	-117.1	-102.1	-41.0	-25.6	35.8	51.2
October	127.7	189.1	204.2	265.1	279.9	340.0	355.0	413.7	428.4	485.8	499.8
November	582.3	635.1	647.9	697.6	709.7	755.9	766.8	808.8	818.6	855.8	864.8
December	903.4	929.6	935.1	954.1	958.3	970.4	972.7	977.9	978.3	976.0	974.6

Southern Hemisphere

The shaded "Date" boxes identify the two extremes of the "Date Scale" that occur on the Summer and Winter Solstices.

A number of "Date Scale" configurations are available including the following "Date Line" combinations:

- | | | |
|---------|------------|--------------------|
| a) 1 | c) 1,10,20 | e) 1,5,10,15,20,25 |
| b) 1,15 | d) 1,11,21 | f) 1,6,11,16,21,26 |