

Analemmatic Sundial

Latitude: 35.0° N/S

Earliest Sunrise: 4:45 a.m. Latest Sunset: 7:15 p.m.
 Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 573.6 mm
 Sunrise/Sunset Markers: X = ± 648.4 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	573.6	573.6	0.0							
11:55	12:05	21.8	573.4	573.9	21.8	8:10	3:50	843.4	308.2	897.9	884.2
11:50	12:10	43.6	573.0	574.7	43.6	8:05	3:55	854.9	297.6	905.2	898.4
11:45	12:15	65.4	572.3	576.1	65.4	8:00	4:00	866.0	286.8	912.3	912.3
11:40	12:20	87.2	571.4	578.0	87.2	7:55	4:05	876.7	275.9	919.1	925.9
11:35	12:25	108.9	570.2	580.5	108.9	7:50	4:10	887.0	264.8	925.7	939.2
11:30	12:30	130.5	568.7	583.5	130.6	7:45	4:15	896.9	253.7	932.1	952.2
11:25	12:35	152.1	566.9	587.0	152.3	7:40	4:20	906.3	242.4	938.2	964.9
11:20	12:40	173.6	564.9	591.0	173.9	7:35	4:25	915.3	231.0	944.0	977.3
11:15	12:45	195.1	562.6	595.4	195.4	7:30	4:30	923.9	219.5	949.6	989.4
11:10	12:50	216.4	560.0	600.4	216.9	7:25	4:35	932.0	207.9	954.9	1001.2
11:05	12:55	237.7	557.1	605.7	238.3	7:20	4:40	939.7	196.2	960.0	1012.6
11:00	1:00	258.8	554.0	611.5	259.6	7:15	4:45	946.9	184.4	964.7	1023.8
10:55	1:05	279.8	550.7	617.7	280.8	7:10	4:50	953.7	172.5	969.2	1034.6
10:50	1:10	300.7	547.0	624.2	301.9	7:05	4:55	960.0	160.5	973.4	1045.1
10:45	1:15	321.4	543.1	631.1	322.9	7:00	5:00	965.9	148.5	977.3	1055.3
10:40	1:20	342.0	539.0	638.3	343.8	6:55	5:05	971.3	136.3	980.9	1065.2
10:35	1:25	362.4	534.6	645.9	364.5	6:50	5:10	976.3	124.1	984.2	1074.8
10:30	1:30	382.7	529.9	653.6	385.2	6:45	5:15	980.8	111.9	987.1	1084.0
10:25	1:35	402.7	525.0	661.7	405.7	6:40	5:20	984.8	99.6	989.8	1092.9
10:20	1:40	422.6	519.8	670.0	426.0	6:35	5:25	988.4	87.3	992.2	1101.5
10:15	1:45	442.3	514.4	678.4	446.2	6:30	5:30	991.4	74.9	994.3	1109.8
10:10	1:50	461.7	508.8	687.1	466.3	6:25	5:35	994.1	62.4	996.0	1117.8
10:05	1:55	481.0	502.9	695.9	486.2	6:20	5:40	996.2	50.0	997.4	1125.4
10:00	2:00	500.0	496.7	704.8	505.9	6:15	5:45	997.9	37.5	998.6	1132.7
9:55	2:05	518.8	490.4	713.8	525.4	6:10	5:50	999.0	25.0	999.4	1139.7
9:50	2:10	537.3	483.7	723.0	544.8	6:05	5:55	999.8	12.5	999.8	1146.4
9:45	2:15	555.6	476.9	732.2	563.9	6:00	6:00	1000.0	0.0	1000.0	1152.8
9:40	2:20	573.6	469.8	741.4	582.9	5:55	6:05	999.8	-12.5	999.8	1158.9
9:35	2:25	591.3	462.6	750.7	601.6	5:50	6:10	999.0	-25.0	999.4	1164.7
9:30	2:30	608.8	455.0	760.0	620.2	5:45	6:15	997.9	-37.5	998.6	1170.1
9:25	2:35	625.9	447.3	769.3	638.5	5:40	6:20	996.2	-50.0	997.4	1175.3
9:20	2:40	642.8	439.4	778.6	656.6	5:35	6:25	994.1	-62.4	996.0	1180.1
9:15	2:45	659.3	431.2	787.8	674.5	5:30	6:30	991.4	-74.9	994.3	1184.7
9:10	2:50	675.6	422.9	797.0	692.2	5:25	6:35	988.4	-87.3	992.2	1188.9
9:05	2:55	691.5	414.3	806.1	709.6	5:20	6:40	984.8	-99.6	989.8	1192.9
9:00	3:00	707.1	405.6	815.2	726.8	5:15	6:45	980.8	-111.9	987.1	1196.6
8:55	3:05	722.4	396.6	824.1	743.7	5:10	6:50	976.3	-124.1	984.2	1200.0
8:50	3:10	737.3	387.5	832.9	760.4	5:05	6:55	971.3	-136.3	980.9	1203.1
8:45	3:15	751.8	378.2	841.6	776.8	5:00	7:00	965.9	-148.5	977.3	1206.0
8:40	3:20	766.0	368.7	850.1	793.0	4:55	7:05	960.0	-160.5	973.4	1208.5
8:35	3:25	779.9	359.0	858.6	808.9	4:50	7:10	953.7	-172.5	969.2	1210.9
8:30	3:30	793.4	349.2	866.8	824.5	4:45	7:15	946.9	-184.4	964.7	1212.9
8:25	3:35	806.4	339.2	874.9	839.8						
8:20	3:40	819.2	329.0	882.7	854.9						
8:15	3:45	831.5	318.7	890.4	869.7						

Analemmatic Sundial

Latitude: 35.0° N/S

Date Scale

Semi-Major Axis (E-W): 1000 mm Semi-Minor Axis (N-S): 573.6 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-347.5	-341.0	-339.0	-330.0	-327.3	-316.1	-313.0	-299.6	-296.0	-280.9	-276.9
February	-251.4	-233.0	-228.2	-208.8	-203.9	-183.6	-178.3	-157.3	-152.0	-130.3	-124.8
March	-108.3	-86.1	-80.5	-58.0	-52.4	-29.8	-24.2	-1.4	4.1	26.7	32.3
April	65.9	88.0	93.5	115.1	120.5	141.8	146.9	167.7	172.8	192.7	197.6
May	221.3	239.5	243.9	260.8	264.9	280.5	284.1	298.3	301.7	314.1	316.9
June	332.3	340.3	342.2	348.0	349.4	353.1	353.6	355.0	355.2	352.6	353.8
July	349.4	343.8	342.2	334.6	332.5	322.7	320.0	308.4	305.3	292.0	288.5
August	265.8	249.3	245.1	227.5	223.0	204.4	199.5	180.1	175.2	154.9	149.8
September	118.5	97.1	91.7	69.9	64.5	42.5	37.1	14.9	9.3	-13.0	-18.6
October	-46.4	-68.6	-74.1	-96.2	-101.6	-123.4	-128.9	-150.2	-155.5	-176.4	-181.5
November	-211.4	-230.6	-235.2	-253.3	-257.6	-274.4	-278.4	-293.6	-297.2	-310.7	-314.0
December	-328.0	-337.5	-339.5	-346.4	-347.9	-352.3	-353.1	-355.0	-355.2	-354.3	-353.8

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	347.5	341.0	339.0	330.0	327.3	316.1	313.0	299.6	296.0	280.9	276.9
February	251.4	233.0	228.2	208.8	203.9	183.6	178.3	157.3	152.0	130.3	124.8
March	108.3	86.1	80.5	58.0	52.4	29.8	24.2	1.4	-4.1	-26.7	-32.3
April	-65.9	-88.0	-93.5	-115.1	-120.5	-141.8	-146.9	-167.7	-172.8	-192.7	-197.6
May	-221.3	-239.5	-243.9	-260.8	-264.9	-280.5	-284.1	-298.3	-301.7	-314.1	-316.9
June	-332.3	-340.3	-342.2	-348.0	-349.4	-353.1	-353.6	-355.0	-355.2	-352.6	-353.8
July	-349.4	-343.8	-342.2	-334.6	-332.5	-322.7	-320.0	-308.4	-305.3	-292.0	-288.5
August	-265.8	-249.3	-245.1	-227.5	-223.0	-204.4	-199.5	-180.1	-175.2	-154.9	-149.8
September	-118.5	-97.1	-91.7	-69.9	-64.5	-42.5	-37.1	-14.9	-9.3	13.0	18.6
October	46.4	68.6	74.1	96.2	101.6	123.4	128.9	150.2	155.5	176.4	181.5
November	211.4	230.6	235.2	253.3	257.6	274.4	278.4	293.6	297.2	310.7	314.0
December	328.0	337.5	339.5	346.4	347.9	352.3	353.1	355.0	355.2	354.3	353.8

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: 35.0° N/S

Earliest Sunrise: 4:45 a.m. Latest Sunset: 7:15 p.m.
 Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 860.4 mm
 Sunrise/Sunset Markers: X = ± 972.5 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	860.4	860.4	0.0							
11:55	12:05	32.7	860.2	860.8	32.7	8:10	3:50	1265.1	462.3	1346.9	1326.2
11:50	12:10	65.4	859.5	862.0	65.4	8:05	3:55	1282.4	446.3	1357.8	1347.5
11:45	12:15	98.1	858.5	864.1	98.1	8:00	4:00	1299.0	430.2	1368.4	1368.4
11:40	12:20	130.7	857.1	867.0	130.8	7:55	4:05	1315.1	413.8	1378.7	1388.8
11:35	12:25	163.3	855.3	870.7	163.4	7:50	4:10	1330.5	397.3	1388.6	1408.8
11:30	12:30	195.8	853.0	875.2	195.9	7:45	4:15	1345.3	380.5	1398.1	1428.3
11:25	12:35	228.2	850.4	880.4	228.4	7:40	4:20	1359.5	363.6	1407.2	1447.4
11:20	12:40	260.5	847.3	886.4	260.8	7:35	4:25	1373.0	346.5	1416.0	1466.0
11:15	12:45	292.6	843.8	893.1	293.1	7:30	4:30	1385.8	329.2	1424.4	1484.1
11:10	12:50	324.7	840.0	900.5	325.3	7:25	4:35	1398.0	311.8	1432.4	1501.8
11:05	12:55	356.5	835.7	908.6	357.4	7:20	4:40	1409.5	294.3	1439.9	1519.0
11:00	1:00	388.2	831.0	917.3	389.3	7:15	4:45	1420.4	276.6	1447.1	1535.7
10:55	1:05	419.7	826.0	926.5	421.1	7:10	4:50	1430.6	258.7	1453.8	1551.9
10:50	1:10	451.1	820.5	936.3	452.8	7:05	4:55	1440.1	240.8	1460.1	1567.7
10:45	1:15	482.2	814.7	946.7	484.3	7:00	5:00	1448.9	222.7	1465.9	1583.0
10:40	1:20	513.0	808.5	957.5	515.6	6:55	5:05	1457.0	204.5	1471.3	1597.8
10:35	1:25	543.7	801.9	968.8	546.8	6:50	5:10	1464.4	186.2	1476.2	1612.2
10:30	1:30	574.0	794.9	980.5	577.7	6:45	5:15	1471.2	167.8	1480.7	1626.0
10:25	1:35	604.1	787.5	992.5	608.5	6:40	5:20	1477.2	149.4	1484.7	1639.4
10:20	1:40	633.9	779.8	1004.9	639.0	6:35	5:25	1482.5	130.9	1488.3	1652.3
10:15	1:45	663.4	771.6	1017.6	669.3	6:30	5:30	1487.2	112.3	1491.4	1664.7
10:10	1:50	692.6	763.2	1030.6	699.4	6:25	5:35	1491.1	93.7	1494.0	1676.7
10:05	1:55	721.5	754.3	1043.8	729.2	6:20	5:40	1494.3	75.0	1496.2	1688.1
10:00	2:00	750.0	745.1	1057.2	758.8	6:15	5:45	1496.8	56.3	1497.8	1699.1
9:55	2:05	778.2	735.5	1070.8	788.1	6:10	5:50	1498.6	37.5	1499.0	1709.6
9:50	2:10	805.9	725.6	1084.5	817.1	6:05	5:55	1499.6	18.8	1499.8	1719.7
9:45	2:15	833.4	715.4	1098.3	845.9	6:00	6:00	1500.0	0.0	1500.0	1729.2
9:40	2:20	860.4	704.8	1112.2	874.3	5:55	6:05	1499.6	-18.8	1499.8	1738.3
9:35	2:25	887.0	693.8	1126.1	902.5	5:50	6:10	1498.6	-37.5	1499.0	1747.0
9:30	2:30	913.1	682.6	1140.1	930.3	5:45	6:15	1496.8	-56.3	1497.8	1755.2
9:25	2:35	938.9	671.0	1154.0	957.8	5:40	6:20	1494.3	-75.0	1496.2	1762.9
9:20	2:40	964.2	659.1	1167.9	985.0	5:35	6:25	1491.1	-93.7	1494.0	1770.2
9:15	2:45	989.0	646.9	1181.8	1011.8	5:30	6:30	1487.2	-112.3	1491.4	1777.0
9:10	2:50	1013.4	634.3	1195.5	1038.3	5:25	6:35	1482.5	-130.9	1488.3	1783.4
9:05	2:55	1037.3	621.5	1209.2	1064.4	5:20	6:40	1477.2	-149.4	1484.7	1789.4
9:00	3:00	1060.7	608.4	1222.7	1090.2	5:15	6:45	1471.2	-167.8	1480.7	1794.9
8:55	3:05	1083.5	595.0	1236.1	1115.6	5:10	6:50	1464.4	-186.2	1476.2	1800.0
8:50	3:10	1105.9	581.3	1249.4	1140.6	5:05	6:55	1457.0	-204.5	1471.3	1804.7
8:45	3:15	1127.8	567.3	1262.4	1165.2	5:00	7:00	1448.9	-222.7	1465.9	1808.9
8:40	3:20	1149.1	553.0	1275.2	1189.5	4:55	7:05	1440.1	-240.8	1460.1	1812.8
8:35	3:25	1169.8	538.5	1287.8	1213.3	4:50	7:10	1430.6	-258.7	1453.8	1816.3
8:30	3:30	1190.0	523.8	1300.2	1236.7	4:45	7:15	1420.4	-276.6	1447.1	1819.4
8:25	3:35	1209.7	508.7	1312.3	1259.7						
8:20	3:40	1228.7	493.5	1324.1	1282.3						
8:15	3:45	1247.2	478.0	1335.7	1304.5						

Analematic Sundial

Latitude: 35.0° N/S

Date Scale

Semi-Major Axis (E-W): 1500 mm Semi-Minor Axis (N-S): 860.4 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-521.3	-511.5	-508.5	-494.9	-491.0	-474.1	-469.5	-449.4	-444.1	-421.4	-415.4
February	-377.1	-349.5	-342.4	-313.2	-305.9	-275.3	-267.5	-235.9	-228.0	-195.5	-187.1
March	-162.4	-129.1	-120.7	-87.0	-78.6	-44.6	-36.3	-2.1	6.2	40.1	48.5
April	98.9	132.0	140.2	172.7	180.8	212.7	220.4	251.6	259.2	289.1	296.4
May	332.0	359.3	365.8	391.2	397.3	420.7	426.2	447.5	452.6	471.2	475.4
June	498.4	510.5	513.2	522.1	524.1	529.7	530.4	532.5	532.7	528.9	530.7
July	524.1	515.8	513.2	501.9	498.7	484.0	480.0	462.6	457.9	438.0	432.7
August	398.8	374.0	367.7	341.2	334.5	306.6	299.3	270.2	262.7	232.4	224.6
September	177.7	145.6	137.6	104.9	96.7	63.7	55.6	22.3	13.9	-19.5	-27.9
October	-69.6	-103.0	-111.2	-144.3	-152.4	-185.2	-193.3	-225.3	-233.3	-264.5	-272.2
November	-317.1	-345.8	-352.8	-379.9	-386.5	-411.6	-417.6	-440.4	-445.8	-466.0	-470.9
December	-492.0	-506.2	-509.2	-519.5	-521.8	-528.4	-529.7	-532.5	-532.7	-531.5	-530.7

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	521.3	511.5	508.5	494.9	491.0	474.1	469.5	449.4	444.1	421.4	415.4
February	377.1	349.5	342.4	313.2	305.9	275.3	267.5	235.9	228.0	195.5	187.1
March	162.4	129.1	120.7	87.0	78.6	44.6	36.3	2.1	-6.2	-40.1	-48.5
April	-98.9	-132.0	-140.2	-172.7	-180.8	-212.7	-220.4	-251.6	-259.2	-289.1	-296.4
May	-332.0	-359.3	-365.8	-391.2	-397.3	-420.7	-426.2	-447.5	-452.6	-471.2	-475.4
June	-498.4	-510.5	-513.2	-522.1	-524.1	-529.7	-530.4	-532.5	-532.7	-528.9	-530.7
July	-524.1	-515.8	-513.2	-501.9	-498.7	-484.0	-480.0	-462.6	-457.9	-438.0	-432.7
August	-398.8	-374.0	-367.7	-341.2	-334.5	-306.6	-299.3	-270.2	-262.7	-232.4	-224.6
September	-177.7	-145.6	-137.6	-104.9	-96.7	-63.7	-55.6	-22.3	-13.9	19.5	27.9
October	69.6	103.0	111.2	144.3	152.4	185.2	193.3	225.3	233.3	264.5	272.2
November	317.1	345.8	352.8	379.9	386.5	411.6	417.6	440.4	445.8	466.0	470.9
December	492.0	506.2	509.2	519.5	521.8	528.4	529.7	532.5	532.7	531.5	530.7

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: 35.0° N/S

Earliest Sunrise: 4:45 a.m. Latest Sunset: 7:15 p.m.
 Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 1147.2 mm
 Sunrise/Sunset Markers: X = ± 1296.7 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	1147.2	1147.2	0.0							
11:55	12:05	43.6	1146.9	1147.7	43.6	8:10	3:50	1686.8	616.4	1795.9	1768.3
11:50	12:10	87.2	1146.1	1149.4	87.2	8:05	3:55	1709.8	595.1	1810.4	1796.7
11:45	12:15	130.8	1144.7	1152.1	130.8	8:00	4:00	1732.1	573.6	1824.6	1824.6
11:40	12:20	174.3	1142.8	1156.0	174.4	7:55	4:05	1753.5	551.8	1838.2	1851.8
11:35	12:25	217.7	1140.3	1160.9	217.8	7:50	4:10	1774.0	529.7	1851.4	1878.4
11:30	12:30	261.1	1137.3	1166.9	261.2	7:45	4:15	1793.7	507.4	1864.1	1904.4
11:25	12:35	304.2	1133.8	1173.9	304.5	7:40	4:20	1812.6	484.8	1876.3	1929.8
11:20	12:40	347.3	1129.7	1181.9	347.7	7:35	4:25	1830.6	462.0	1888.0	1954.6
11:15	12:45	390.2	1125.1	1190.8	390.8	7:30	4:30	1847.8	439.0	1899.2	1978.8
11:10	12:50	432.9	1120.0	1200.7	433.7	7:25	4:35	1864.0	415.8	1909.8	2002.4
11:05	12:55	475.4	1114.3	1211.4	476.5	7:20	4:40	1879.4	392.3	1919.9	2025.3
11:00	1:00	517.6	1108.1	1223.0	519.1	7:15	4:45	1893.9	368.7	1929.4	2047.6
10:55	1:05	559.7	1101.3	1235.4	561.5	7:10	4:50	1907.4	345.0	1938.4	2069.3
10:50	1:10	601.4	1094.1	1248.5	603.8	7:05	4:55	1920.1	321.0	1946.7	2090.3
10:45	1:15	642.9	1086.3	1262.3	645.8	7:00	5:00	1931.9	296.9	1954.5	2110.7
10:40	1:20	684.0	1078.0	1276.7	687.5	6:55	5:05	1942.7	272.7	1961.7	2130.4
10:35	1:25	724.9	1069.2	1291.7	729.1	6:50	5:10	1952.6	248.3	1968.3	2149.6
10:30	1:30	765.4	1059.8	1307.3	770.3	6:45	5:15	1961.6	223.8	1974.3	2168.0
10:25	1:35	805.5	1050.0	1323.4	811.3	6:40	5:20	1969.6	199.2	1979.7	2185.9
10:20	1:40	845.2	1039.7	1339.9	852.0	6:35	5:25	1976.7	174.5	1984.4	2203.1
10:15	1:45	884.6	1028.9	1356.8	892.5	6:30	5:30	1982.9	149.7	1988.5	2219.6
10:10	1:50	923.5	1017.5	1374.1	932.5	6:25	5:35	1988.1	124.9	1992.0	2235.5
10:05	1:55	962.0	1005.7	1391.7	972.3	6:20	5:40	1992.4	100.0	1994.9	2250.8
10:00	2:00	1000.0	993.5	1409.6	1011.7	6:15	5:45	1995.7	75.0	1997.1	2265.5
9:55	2:05	1037.5	980.7	1427.7	1050.8	6:10	5:50	1998.1	50.0	1998.7	2279.5
9:50	2:10	1074.6	967.5	1446.0	1089.5	6:05	5:55	1999.5	25.0	1999.7	2292.9
9:45	2:15	1111.1	953.8	1464.4	1127.8	6:00	6:00	2000.0	0.0	2000.0	2305.6
9:40	2:20	1147.2	939.7	1482.9	1165.8	5:55	6:05	1999.5	-25.0	1999.7	2317.8
9:35	2:25	1182.6	925.1	1501.5	1203.3	5:50	6:10	1998.1	-50.0	1998.7	2329.3
9:30	2:30	1217.5	910.1	1520.1	1240.4	5:45	6:15	1995.7	-75.0	1997.1	2340.2
9:25	2:35	1251.8	894.6	1538.7	1277.1	5:40	6:20	1992.4	-100.0	1994.9	2350.5
9:20	2:40	1285.6	878.8	1557.2	1313.3	5:35	6:25	1988.1	-124.9	1992.0	2360.2
9:15	2:45	1318.7	862.5	1575.7	1349.1	5:30	6:30	1982.9	-149.7	1988.5	2369.3
9:10	2:50	1351.2	845.8	1594.1	1384.4	5:25	6:35	1976.7	-174.5	1984.4	2377.9
9:05	2:55	1383.0	828.7	1612.3	1419.2	5:20	6:40	1969.6	-199.2	1979.7	2385.8
9:00	3:00	1414.2	811.2	1630.3	1453.6	5:15	6:45	1961.6	-223.8	1974.3	2393.2
8:55	3:05	1444.7	793.3	1648.2	1487.4	5:10	6:50	1952.6	-248.3	1968.3	2400.0
8:50	3:10	1474.6	775.0	1665.8	1520.8	5:05	6:55	1942.7	-272.7	1961.7	2406.2
8:45	3:15	1503.7	756.4	1683.2	1553.6	5:00	7:00	1931.9	-296.9	1954.5	2411.9
8:40	3:20	1532.1	737.4	1700.3	1585.9	4:55	7:05	1920.1	-321.0	1946.7	2417.1
8:35	3:25	1559.8	718.0	1717.1	1617.7	4:50	7:10	1907.4	-345.0	1938.4	2421.7
8:30	3:30	1586.7	698.3	1733.6	1649.0	4:45	7:15	1893.9	-368.7	1929.4	2425.8
8:25	3:35	1612.9	678.3	1749.7	1679.6						
8:20	3:40	1638.3	658.0	1765.5	1709.8						
8:15	3:45	1662.9	637.3	1780.9	1739.3						

Analemmatic Sundial

Latitude: 35.0° N/S

Date Scale

Semi-Major Axis (E-W): 2000 mm Semi-Minor Axis (N-S): 1147.2 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-695.1	-682.0	-677.9	-659.9	-654.6	-632.2	-625.9	-599.2	-592.1	-561.9	-553.9
February	-502.8	-466.1	-456.5	-417.6	-407.9	-367.1	-356.6	-314.6	-303.9	-260.7	-249.5
March	-216.6	-172.2	-160.9	-116.0	-104.8	-59.5	-48.3	-2.9	8.3	53.5	64.7
April	131.8	176.0	187.0	230.2	241.0	283.6	293.9	335.4	345.5	385.5	395.1
May	442.7	479.1	487.8	521.6	529.8	560.9	568.3	596.6	603.4	628.2	633.8
June	664.6	680.6	684.3	696.1	698.8	706.2	707.3	710.0	710.3	705.2	707.6
July	698.8	687.7	684.3	669.2	664.9	645.3	640.1	616.8	610.6	584.0	576.9
August	531.7	498.7	490.3	455.0	446.0	408.8	399.1	360.2	350.3	309.9	299.5
September	237.0	194.2	183.5	139.9	128.9	85.0	74.1	29.7	18.6	-26.0	-37.2
October	-92.7	-137.3	-148.2	-192.5	-203.2	-246.9	-257.7	-300.4	-311.0	-352.7	-362.9
November	-422.8	-461.1	-470.4	-506.5	-515.3	-548.8	-556.8	-587.2	-594.4	-621.4	-627.9
December	-655.9	-674.9	-678.9	-692.7	-695.8	-704.5	-706.2	-710.0	-710.3	-708.6	-707.6

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	695.1	682.0	677.9	659.9	654.6	632.2	625.9	599.2	592.1	561.9	553.9
February	502.8	466.1	456.5	417.6	407.9	367.1	356.6	314.6	303.9	260.7	249.5
March	216.6	172.2	160.9	116.0	104.8	59.5	48.3	2.9	-8.3	-53.5	-64.7
April	-131.8	-176.0	-187.0	-230.2	-241.0	-283.6	-293.9	-335.4	-345.5	-385.5	-395.1
May	-442.7	-479.1	-487.8	-521.6	-529.8	-560.9	-568.3	-596.6	-603.4	-628.2	-633.8
June	-664.6	-680.6	-684.3	-696.1	-698.8	-706.2	-707.3	-710.0	-710.3	-705.2	-707.6
July	-698.8	-687.7	-684.3	-669.2	-664.9	-645.3	-640.1	-616.8	-610.6	-584.0	-576.9
August	-531.7	-498.7	-490.3	-455.0	-446.0	-408.8	-399.1	-360.2	-350.3	-309.9	-299.5
September	-237.0	-194.2	-183.5	-139.9	-128.9	-85.0	-74.1	-29.7	-18.6	26.0	37.2
October	92.7	137.3	148.2	192.5	203.2	246.9	257.7	300.4	311.0	352.7	362.9
November	422.8	461.1	470.4	506.5	515.3	548.8	556.8	587.2	594.4	621.4	627.9
December	655.9	674.9	678.9	692.7	695.8	704.5	706.2	710.0	710.3	708.6	707.6

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 |

Analemmatic Sundial

Latitude: 35.0° N/S

Earliest Sunrise: 4:45 a.m. Latest Sunset: 7:15 p.m.
 Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1433.9 mm
 Sunrise/Sunset Markers: X = ± 1620.9 mm

Local Time	X	Y	Z	W	Local Time	X	Y	Z	W		
12:00	0.0	1433.9	1433.9	0.0							
11:55	12:05	54.5	1433.6	1434.6	54.5	8:10	3:50	2108.5	770.5	2244.8	2210.4
11:50	12:10	109.0	1432.6	1436.7	109.1	8:05	3:55	2137.3	743.9	2263.0	2245.9
11:45	12:15	163.5	1430.9	1440.2	163.5	8:00	4:00	2165.1	717.0	2280.7	2280.7
11:40	12:20	217.9	1428.5	1445.0	218.0	7:55	4:05	2191.8	689.7	2297.8	2314.7
11:35	12:25	272.2	1425.4	1451.2	272.3	7:50	4:10	2217.5	662.1	2314.3	2348.0
11:30	12:30	326.3	1421.7	1458.6	326.5	7:45	4:15	2242.2	634.2	2330.2	2380.5
11:25	12:35	380.3	1417.3	1467.4	380.7	7:40	4:20	2265.8	606.0	2345.4	2412.3
11:20	12:40	434.1	1412.2	1477.4	434.7	7:35	4:25	2288.3	577.5	2360.0	2443.3
11:15	12:45	487.7	1406.4	1488.6	488.5	7:30	4:30	2309.7	548.7	2374.0	2473.5
11:10	12:50	541.1	1400.0	1500.9	542.2	7:25	4:35	2330.0	519.7	2387.3	2503.0
11:05	12:55	594.2	1392.8	1514.3	595.6	7:20	4:40	2349.2	490.4	2399.9	2531.6
11:00	1:00	647.0	1385.1	1528.8	648.9	7:15	4:45	2367.3	460.9	2411.8	2559.5
10:55	1:05	699.6	1376.7	1544.2	701.9	7:10	4:50	2384.3	431.2	2423.0	2586.6
10:50	1:10	751.8	1367.6	1560.6	754.7	7:05	4:55	2400.1	401.3	2433.4	2612.9
10:45	1:15	803.6	1357.8	1577.8	807.2	7:00	5:00	2414.8	371.1	2443.2	2638.4
10:40	1:20	855.1	1347.5	1595.9	859.4	6:55	5:05	2428.4	340.8	2452.2	2663.0
10:35	1:25	906.1	1336.4	1614.6	911.3	6:50	5:10	2440.7	310.4	2460.4	2686.9
10:30	1:30	956.7	1324.8	1634.1	962.9	6:45	5:15	2452.0	279.7	2467.9	2710.0
10:25	1:35	1006.9	1312.5	1654.2	1014.2	6:40	5:20	2462.0	249.0	2474.6	2732.3
10:20	1:40	1056.5	1299.6	1674.9	1065.1	6:35	5:25	2470.9	218.1	2480.5	2753.8
10:15	1:45	1105.7	1286.1	1696.0	1115.6	6:30	5:30	2478.6	187.2	2485.7	2774.5
10:10	1:50	1154.4	1271.9	1717.7	1165.7	6:25	5:35	2485.1	156.1	2490.0	2794.4
10:05	1:55	1202.5	1257.2	1739.7	1215.4	6:20	5:40	2490.5	125.0	2493.6	2813.5
10:00	2:00	1250.0	1241.8	1762.0	1264.7	6:15	5:45	2494.6	93.8	2496.4	2831.8
9:55	2:05	1296.9	1225.9	1784.6	1313.5	6:10	5:50	2497.6	62.5	2498.4	2849.4
9:50	2:10	1343.2	1209.4	1807.5	1361.9	6:05	5:55	2499.4	31.3	2499.6	2866.1
9:45	2:15	1388.9	1192.3	1830.5	1409.8	6:00	6:00	2500.0	0.0	2500.0	2882.0
9:40	2:20	1433.9	1174.6	1853.6	1457.2	5:55	6:05	2499.4	-31.3	2499.6	2897.2
9:35	2:25	1478.3	1156.4	1876.8	1504.1	5:50	6:10	2497.6	-62.5	2498.4	2911.6
9:30	2:30	1521.9	1137.6	1900.1	1550.5	5:45	6:15	2494.6	-93.8	2496.4	2925.3
9:25	2:35	1564.8	1118.3	1923.3	1596.3	5:40	6:20	2490.5	-125.0	2493.6	2938.2
9:20	2:40	1607.0	1098.5	1946.5	1641.6	5:35	6:25	2485.1	-156.1	2490.0	2950.3
9:15	2:45	1648.4	1078.1	1969.6	1686.3	5:30	6:30	2478.6	-187.2	2485.7	2961.7
9:10	2:50	1689.0	1057.2	1992.6	1730.5	5:25	6:35	2470.9	-218.1	2480.5	2972.3
9:05	2:55	1728.8	1035.8	2015.3	1774.0	5:20	6:40	2462.0	-249.0	2474.6	2982.3
9:00	3:00	1767.8	1013.9	2037.9	1817.0	5:15	6:45	2452.0	-279.7	2467.9	2991.5
8:55	3:05	1805.9	991.6	2060.2	1859.3	5:10	6:50	2440.7	-310.4	2460.4	3000.0
8:50	3:10	1843.2	968.8	2082.3	1901.0	5:05	6:55	2428.4	-340.8	2452.2	3007.8
8:45	3:15	1879.6	945.5	2104.0	1942.0	5:00	7:00	2414.8	-371.1	2443.2	3014.9
8:40	3:20	1915.1	921.7	2125.4	1982.4	4:55	7:05	2400.1	-401.3	2433.4	3021.3
8:35	3:25	1949.7	897.5	2146.4	2022.2	4:50	7:10	2384.3	-431.2	2423.0	3027.1
8:30	3:30	1983.4	872.9	2167.0	2061.2	4:45	7:15	2367.3	-460.9	2411.8	3032.3
8:25	3:35	2016.1	847.9	2187.2	2099.6						
8:20	3:40	2047.9	822.5	2206.9	2137.2						
8:15	3:45	2078.7	796.7	2226.1	2174.2						

Analemmatic Sundial

Latitude: 35.0° N/S

Date Scale

Semi-Major Axis (E-W): 2500 mm Semi-Minor Axis (N-S): 1433.9 mm

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	-868.9	-852.5	-847.4	-824.9	-818.3	-790.2	-782.4	-749.0	-740.1	-702.3	-692.4
February	-628.4	-582.6	-570.6	-522.0	-509.8	-458.9	-445.8	-393.2	-379.9	-325.8	-311.9
March	-270.7	-215.2	-201.2	-145.0	-131.0	-74.4	-60.4	-3.6	10.4	66.9	80.8
April	164.8	219.9	233.7	287.8	301.3	354.5	367.4	419.3	431.9	481.8	493.9
May	553.3	598.8	609.7	652.0	662.2	701.1	710.3	745.8	754.3	785.3	792.3
June	830.7	850.8	855.4	870.1	873.5	882.8	884.1	887.5	887.9	881.5	884.5
July	873.5	859.6	855.4	836.6	831.1	806.7	800.1	771.0	763.2	730.0	721.2
August	664.6	623.4	612.8	568.7	557.5	511.0	498.8	450.3	437.9	387.3	374.4
September	296.2	242.7	229.3	174.8	161.2	106.2	92.6	37.2	23.2	-32.5	-46.5
October	-115.9	-171.6	-185.3	-240.6	-254.0	-308.6	-322.2	-375.5	-388.8	-440.9	-453.6
November	-528.5	-576.4	-588.0	-633.1	-644.1	-686.0	-696.0	-734.1	-742.9	-776.7	-784.9
December	-819.9	-843.7	-848.7	-865.9	-869.7	-880.7	-882.8	-887.5	-887.9	-885.8	-884.5

Northern Hemisphere

Month	Date										
	1	5	6	10	11	15	16	20	21	25	26
January	868.9	852.5	847.4	824.9	818.3	790.2	782.4	749.0	740.1	702.3	692.4
February	628.4	582.6	570.6	522.0	509.8	458.9	445.8	393.2	379.9	325.8	311.9
March	270.7	215.2	201.2	145.0	131.0	74.4	60.4	3.6	-10.4	-66.9	-80.8
April	-164.8	-219.9	-233.7	-287.8	-301.3	-354.5	-367.4	-419.3	-431.9	-481.8	-493.9
May	-553.3	-598.8	-609.7	-652.0	-662.2	-701.1	-710.3	-745.8	-754.3	-785.3	-792.3
June	-830.7	-850.8	-855.4	-870.1	-873.5	-882.8	-884.1	-887.5	-887.9	-881.5	-884.5
July	-873.5	-859.6	-855.4	-836.6	-831.1	-806.7	-800.1	-771.0	-763.2	-730.0	-721.2
August	-664.6	-623.4	-612.8	-568.7	-557.5	-511.0	-498.8	-450.3	-437.9	-387.3	-374.4
September	-296.2	-242.7	-229.3	-174.8	-161.2	-106.2	-92.6	-37.2	-23.2	32.5	46.5
October	115.9	171.6	185.3	240.6	254.0	308.6	322.2	375.5	388.8	440.9	453.6
November	528.5	576.4	588.0	633.1	644.1	686.0	696.0	734.1	742.9	776.7	784.9
December	819.9	843.7	848.7	865.9	869.7	880.7	882.8	887.5	887.9	885.8	884.5

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 |