

BOOKS

Amazon.com and Abebooks.com networks have many books. Here is a partial book list.

Readily available on online bookstores:-

- Sundials: History, Theory, and Practice By: Rene R. J. Rohr, 1965, translated 1970
A good grounding in the history and theory of most sundial types.
- Sundials: Their Theory and Construction By: Albert Edmund Waugh, 1973
A good book, with good reference material
- Sundials: Their Construction and Use By: R. Newton Mayall, Margaret W. Mayall
A good book, with good reference material - first published 1938, second pr 1951

Less readily available:-

- A Choice of Sundials, Winthrop W. Dolan, 1975
A good book, good graphical methods for some dials not in other books
- Sundials Australia. FOLKARD, Margaret and John WARD.
Good work on shadows and on formulae.
- Sundials - A Simplified Approach by Means of the Equatorial Dial, by Frank W Cousins
A good book, good graphical methods, 1968, also known as
- Sundials – The Art and Science of Gnomics, by Frank W Cousins, 1970
- The Art of Sundial Construction, Peter Drinkwater
Somewhat quaint language, yet with helpful insights
- Sundials And Roses Of Yesterday, Earle, Alice Morse
A somewhat nostalgic book with interesting pictures and other trivia.
- Sundials, Roy K. Marshall
- Sundials Old and New, A. P. Herbert 1967

- Astronomical Algorithms, Jean Meeus, also (uses 2000 as the epoch)
- Astronomical Formulae for Calculators, Jean Meeus (uses 1900 as the epoch)
Has formulae for the equation of time, Julian day, and a general sundial formula

- The Great Sundial Cutout Book, Robert Adzema and Mablen Jones
- The Earth Is A Sundial – Mitsumasa Anno (also printed as Anno's Sundial)

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Related books:-

- Sundials and Spheres, by Kenneth Lynch, architectural focus
- Sundials – Incised Dials or Mass Clocks, Arthur Robert Green
- Stars and Planets, Ian Ridpath

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- The Techniques of Decorative Stained Glass, Paul San Casciani
- The Art of Painting on Glass, Albinas Elskus
- The Pop-Up Book, Paul Jackson.

SOFTWARE OF INTEREST TO THE DIALIST

SHADOWS	www.shadowspro.com	most comprehensive, license is reasonable and free version covers many common needs
SUNSET	www.yoredale.uklinux.net/programs/programs.htm	sunset.xls good sunrise and sunset calculator
SUNTIMES	www.fv01.dial.pipex.com/suntimes.shtml	program has a world map and sun times

If you download an almanac, remember that you must still correct it for longitude. There are some very good spreadsheets that calculate sunrise and sunset times that are free.

SUNDIAL RELATED SOFTWARE

http://perso.wanadoo.fr/blateyron/sundials/shadowspro/gb/index.html		
http://www.sundials.co.uk		has links to software other good software exists such as ZW2000 and SUNDI, see NASS or BSS web pages.

OTHER USEFUL SOFTWARE

http://www.illustratingshadows.com/reference-spreadsheets.xls	or	www.geocities.com/illustratingshadows
reference-unknown-dial.xls		all purpose set of sheets
reference-wall-declination.xls		determine store bought dial latitude assist in wall declination determination [low cost and free spreadsheet]
http://www.software602.com/		[low cost and free CAD 2d]
http://www.cadstd.com		

CAD AND VRML SOFTWARE

http://www.imsisoft.com		TurboCAD Deluxe (can export vrml)
http://www.parallelgraphics.com/products/isb/		ISB virtual world builder (they have a free limited version)
http://www.parallelgraphics.com/products/cortona/download/iexplore/		[vrml plugin]
http://www.sim.no/products/SIM_VRMLview/		[standalone vrml browser]

WEB RESOURCES US and UK Societies have excellent web sites

http://sundials.org/	NASS	North American Sundial Society
http://www.sundialsoc.org.uk/	BSS	British Sundial Society
http://www.mysundial.ca		Sundial Primer – excellent site
http://www.stainedglasssundials.com		Stained Glass dials of the world
http://www.infraroth.de/slinks.html		The best links page

RESEARCH AND SOURCES OF FORMULAE

http://eande.lbl.gov/Task21/C2/algo1/1-11.html
http://maes.fmns.rug.nl/zonnewijzers/welcome.html
http://www.lib.berkeley.edu/ENVI/Sundials.html

ALMANACS

Misc Almanacs

<http://www.sunrisesunset.comsun.html> [freeware downloadable]
<http://www.fv01.dial.pipex.com/suntimes.shtml> [freeware downloadable]
<http://www.almanac.com/rise/index.php>
<http://www.pangolin.co.nz/almanac/index.php>
http://www.geolab.nrcan.gc.ca/geomag/home_e.shtml
http://aa.usno.navy.mil/data/docs/RS_OneYear.html
<http://aa.usno.navy.mil/AAmap.html>
<http://www.ngdc.noaa.gov/seg/geomag/declination.shtml> [magnetic dec]

Star Maps

<http://www.skymaps.com/downloads.html>
<http://www.fourmilab.to/cgi-bin/uncgi/Yourhorizon/>

BOOK CROSS REFERENCES

TOPIC	Rohr	Waugh	Dolan	Mayall	COMMENTS
<u>General concepts</u>					
Earth orbit and axis	21		9	15	
EOT	29	10	23	85	
Finding true north	34	16, and 19	75	70, and 77	
<u>DIALS</u>					
Horizontal dial geometric	52	38	90,95	99	
trig atan(sin Ø tan ha)	52	45	21,89		
longitude correction		40			
Vertical pure S geometrical	54	53		102	
trig atan(cos Ø tan ha)	65				
gnomon offset	56	76			
Vertical E or W (some call meridian) geometrical	69	65			
trig tan(ha)	68	66		107	
Vertical decliner	59	76-78	104	112	
twisting a gnomon	55	76		113	
great decliners	62	94	n/a	n/a	
Vertical declining recliner	72	106	109	122	
Analemmatic		101-106	109	186	
Shepherd		150		162	
Capuchin		161		169	
Moon	108	167			
<u>Dial furniture</u>					
Declination lines	85	139-143	119	ch ix	
Babylonian and Italic lines	89				
Suns altitude	109	139			note: Rohr has a math anomaly on page 109
Mottoes	127	124			
<u>Tables and charts</u>					
EOT	131	10, 205	23,117	87	
Sun declination angle	132	206		133	
Horizontal dial hour line angles		218-221	100-101		
LAT sunset		215			
Ceiling dial values		222			
<u>Definitions</u>					
septentrional Vert N	53				note: some people call pure east or pure west dials meridian dials
meridional Vert S	53				
oriental Vert E	53				
occidental Vert W	63				
<u>Declining Dial Definitions</u>					
difference in longitude DL & SH	79	146		237	DL and SH indicate where on earth a vertical decliner would be a horizontal dial.