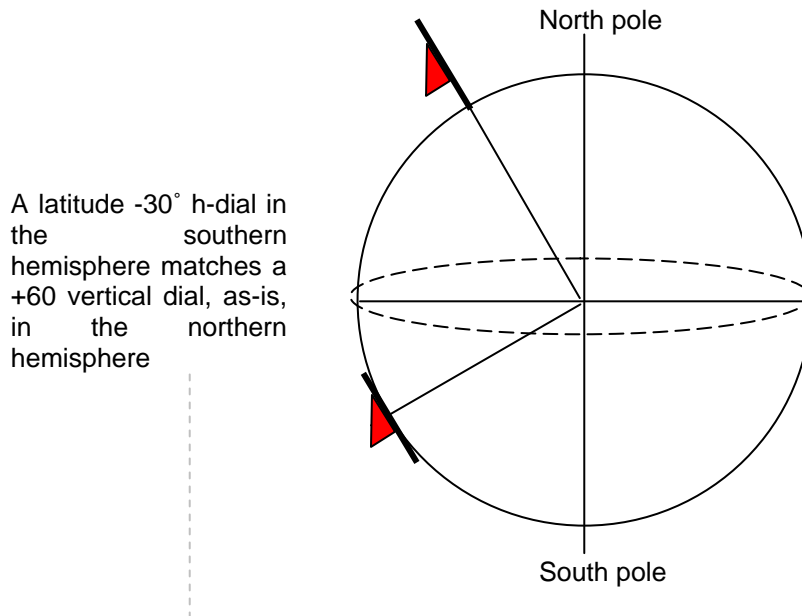


NORTH AND SOUTH HEMISPHERE RELATIONSHIPS



So the analemma for a latitude -30° horizontal dial is the same as a latitude $+60$ vertical dial. This is a latitude : co-latitude relationship. Same drafting of coordinates, differences is latitude : co-latitude.

The spreadsheets for the analemma:
and:

illustrating-shadows.xls
analemma.xls

as well as their Open Office versions:
and:

illustrating-shadows.ods
analemma.ods

were designed for the northern hemisphere. Using the about notes and concepts, they can be used for the southern hemisphere as well.

Another concept to consider. When the sun is slow, it is more to the east, so shadows are more to the west. Whether that is more to the left or more to the right, depends on where the viewer is standing.