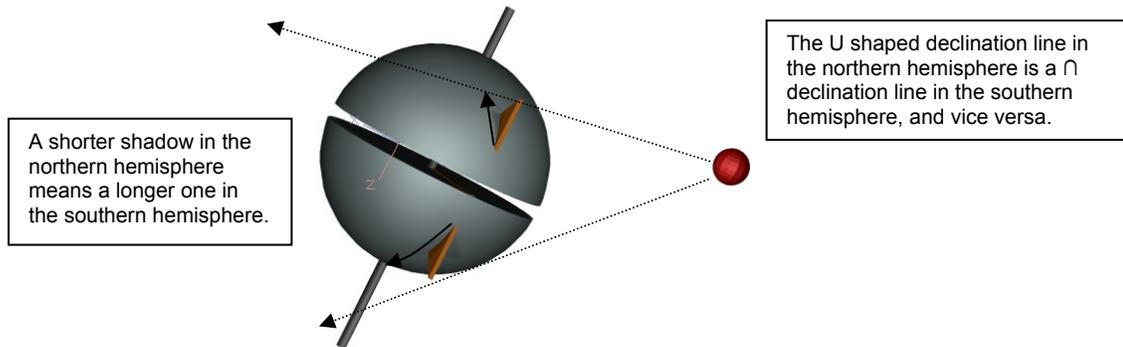


## NORTH AND SOUTH HEMISPHERE DIFFERENCES

Most books that discuss sundials, including this volume, select a hemisphere and work from that hemisphere's perspective. The benefit is that a fixed system is used and the designed dials can relate directly to the designer's location, as opposed to being more abstract. These are the differences and similarities when using a different hemisphere that that for which the book was primarily designed.



Winter and summer declinations are reversed

~ i.e. summer in the north is winter in the south,

~ i.e. short shadows in the north mean long shadows in the south

Sun moves from east to west in all cases.

The equation of time is the same.

When the word south is used, think north.

When the word north is used think south.

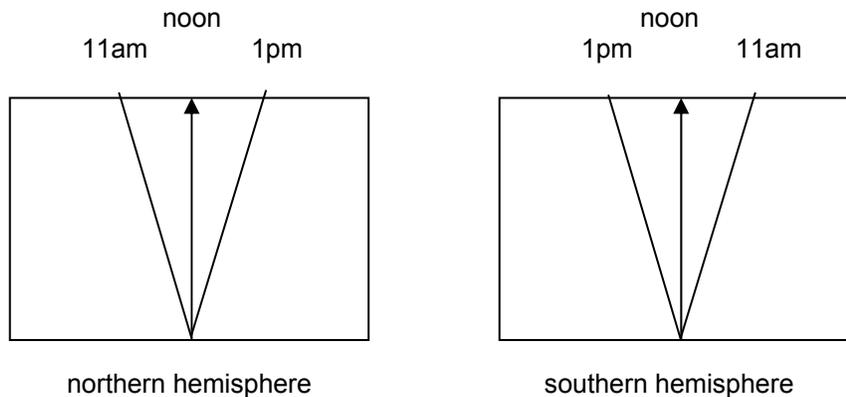
The celestial pole is north in the northern hemisphere, south in the southern hemisphere.

When a gnomon points to the equator, that means north in the southern hemisphere, and south in the northern hemisphere.

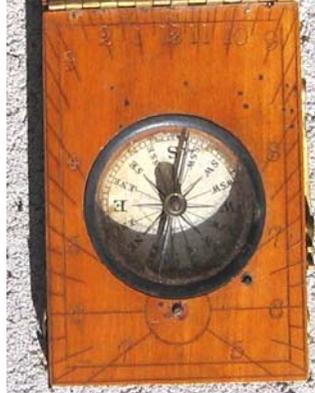
Looking at the equator, the sun moves from left to right in the northern hemisphere, and right to left in the southern hemisphere.

All formulae are the same, dial plates are the same, hour line angles are the same.

The hours are reversed. For example, below are two horizontal dials, one in each hemisphere.



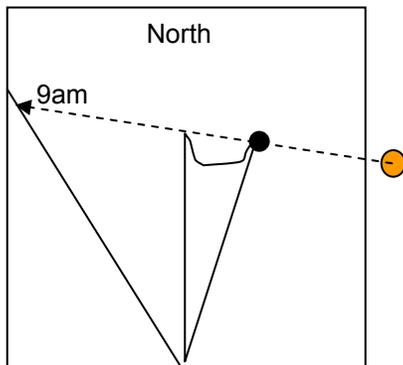
## The Southern Hemisphere – Australia and the like



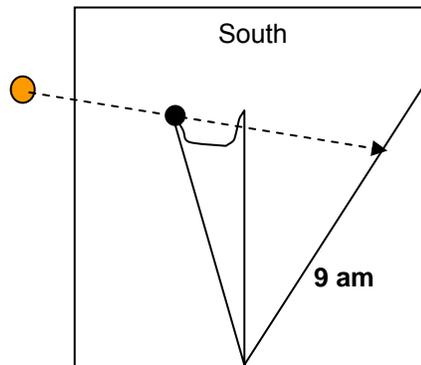
South America, South Africa, New Zealand, Australia, and other such places also have sunshine, and sun dials. Their design is exactly the same as for a northern hemisphere dial except that while the sun still rises in the east and sets in the west, things look different. In the northern hemisphere, when we

look at the sun we look south, so it rises on our left and sets on our right. Of course, you should never look at the sun without protective eye devices, however that goes without saying. In the southern hemisphere, when looking towards the sun, it still rises in the east however you are facing north now, not south. This means that the sun rises on your right and sets on your left. Since all dials with styles have their style paralleling the earth's polar axis, pointing to the celestial pole, southern hemisphere horizontal dials have their noon line and style pointing south, and while the dial design is the same, the hours are reversed. Vertical and other dials experience the same metamorphosis. Above is a garden dial in Australia, and a portable Australian sundial in the process of being repaired, and. The dial's compass head is to the south, not north, and morning hour lines are on the right, not left, the afternoon is similarly on the left, not right.

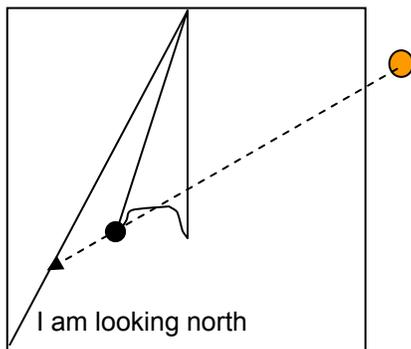
Horizontal dial in England



Horizontal dial in Australia



Vertical dial in England



Vertical dial in Australia

