



Star at infinite distance

$D(1)$ & $D(2)$ are parallel lines

$D(1)$

$D(2)$

S'

Body height
over
Observer's
Horizon

Star's Sub-point

Fold

GREAT CIRCLE ON EARTH SURFACE

Zenith distance of
the star as seen
from observer

Observer's
Zenith

Observer

Geocentric Angular
separation. True
value = $67^{\circ}34'12''$

Center

Observer's Horizon

C'