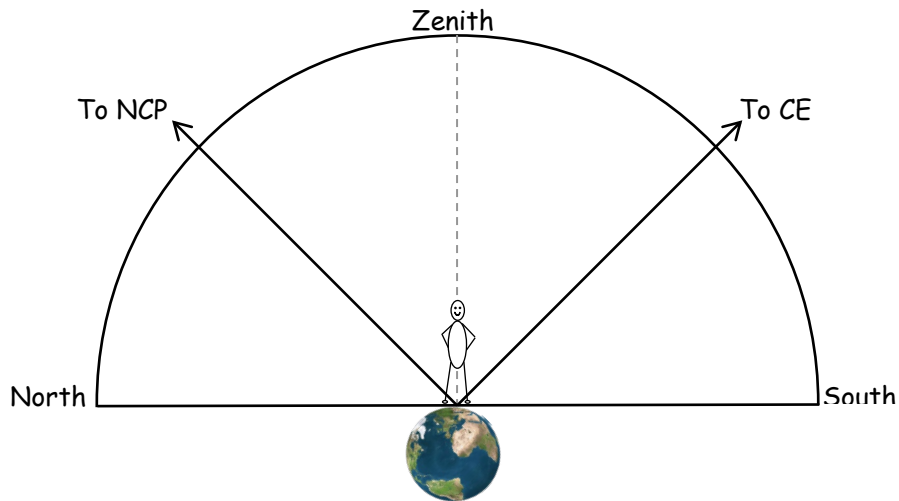


## Changes in Latitude, Changes in Altitude



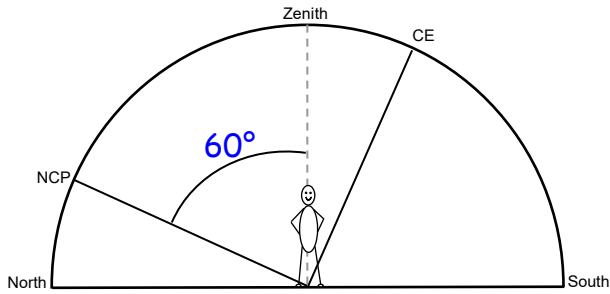
Observers on Earth see the sky "tilted" according to their latitude.

**ALTITUDE OF CELESTIAL POLE = OBSERVER'S LATITUDE**

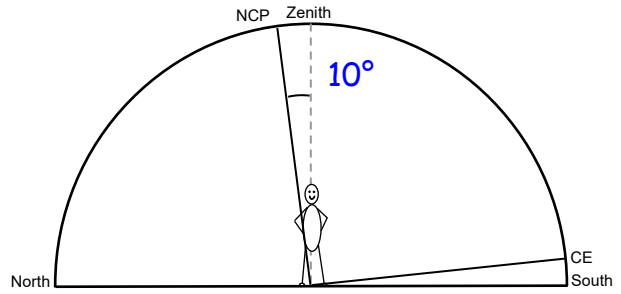
**ALTITUDE OF CELESTIAL EQUATOR = 90° - OBSERVER'S LATITUDE**

Using these facts, complete the following table<sup>16</sup> and the diagrams on the next page<sup>12</sup>:

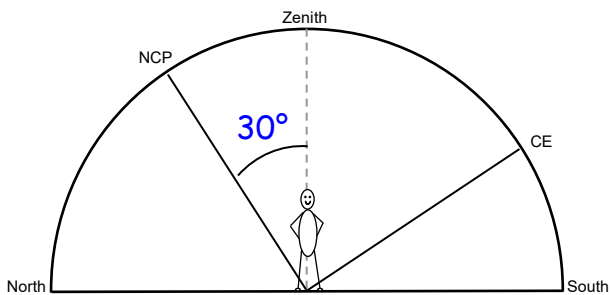
LATITUDE	ALTITUDE OF NORTH CELESTIAL POLE	ALTITUDE OF CELESTIAL EQUATOR
0° N	0°	90°
90° N	90°	0°
45° N	45°	45°
40° N	40°	50°
60° N	60°	30°
20° N	20°	70°
23.5° N	23.5°	66.5°
80° N	80°	10°



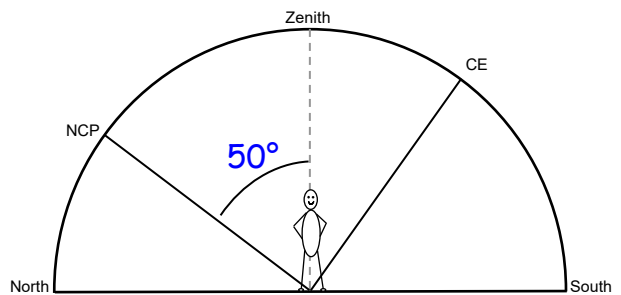
Altitude of NCP:  $30^\circ$   
 Altitude of CE:  $60^\circ$   
 Observer's Latitude:  $30^\circ N$



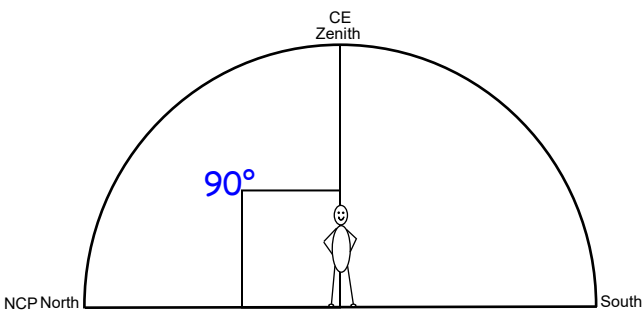
Altitude of NCP:  $80^\circ$   
 Altitude of CE:  $10^\circ$   
 Observer's Latitude:  $80^\circ N$



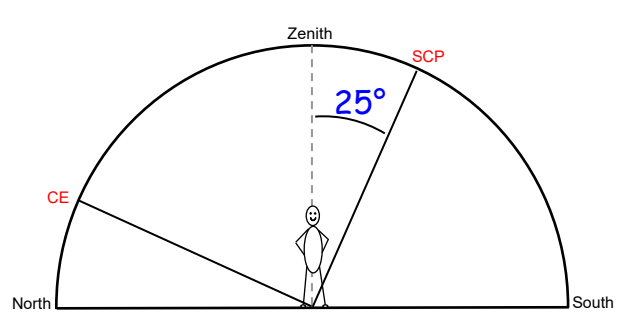
Altitude of NCP:  $60^\circ$   
 Altitude of CE:  $30^\circ$   
 Observer's Latitude:  $60^\circ N$



Altitude of NCP:  $40^\circ$   
 Altitude of CE:  $50^\circ$   
 Observer's Latitude:  $40^\circ N$



Altitude of NCP:  $0^\circ$   
 Altitude of CE:  $90^\circ$   
 Observer's Latitude: **Equator**



Altitude of SCP:  $65^\circ$   
 Altitude of CE:  $25^\circ$   
 Observer's Latitude:  $65^\circ S$