

## Measuring your latitude:

The North-star's angular height above (degrees above) the horizon doesn't change over the course of the night because the North-star doesn't seem to move as the Earth rotates. Using some geometry you can show that this angle is identical to your latitude above the equator (or below the equator if you're using the Southern "star"/vacant spot).

So if you partied too hard and woke up on a deserted island (with cell phone reception) and needed to tell someone what latitude your island was – you'd want to be able to measure that angle.

So it's good to know (just in case the above happens to YOU) that:

Held at arms length...

- the width of your little finger is  $\sim 1.5^\circ$
- the width of your bottom three fingers is  $\sim 5^\circ$
- the height of your fist is  $\sim 10^\circ$
- the width of your handspan is  $\sim 20^\circ$