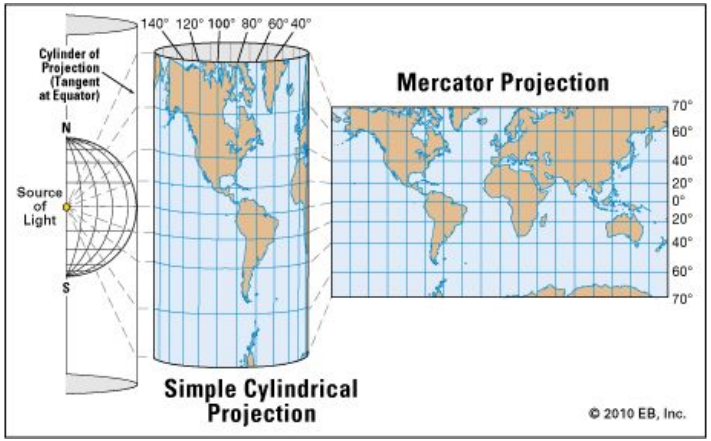
Map Visualizations

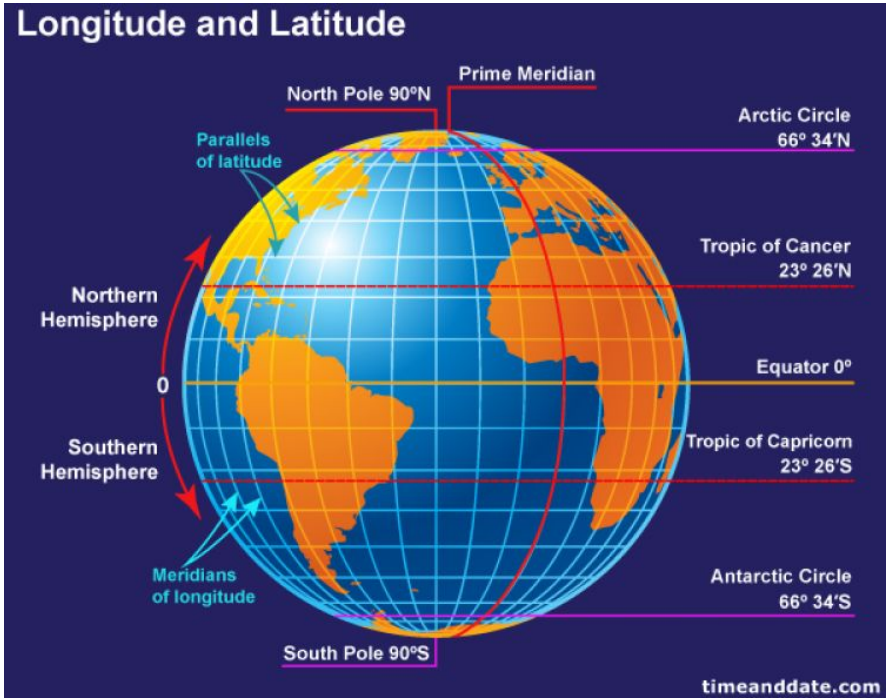
Alok Mandavgane
alokm.com

Maps: 3D to 2D

Mercator Projection



Coordinates



Tropic of Cancer Variation

https://alokm.com/tropicofcancer.html

Calculating Zero Shadow Day

https://alokm.com/zsd.html

Zero Shadow Moment

The earth is vast and round. We are all standing on different places, like ants crawling on a football. Our Sun, source of all our energy is far away from all of us. Some of us are closer than others to this huge ball of fire. Not by much, just a tiny fraction. After all the size of earth is nothing compared to how far the sun is. Do you know that you can be closest to the sun? Closer than anyone else on the earth at least. You just have to be at the right place at the right time. This will happen when you are at a Zero Shadow Moment. The Sun will be exactly overhead and your shadow will disappear. But to be fortunate enough to be closest to the sun, you have to be in the tropics, between Tropic of Cancer or Tropic of Capricorn. Then on two days in a year, You will be able to witness your shadow disappear.

https://alokm.com/astro/zsm.html

Or Use a simple image

https://alokm.com/astro/year.html

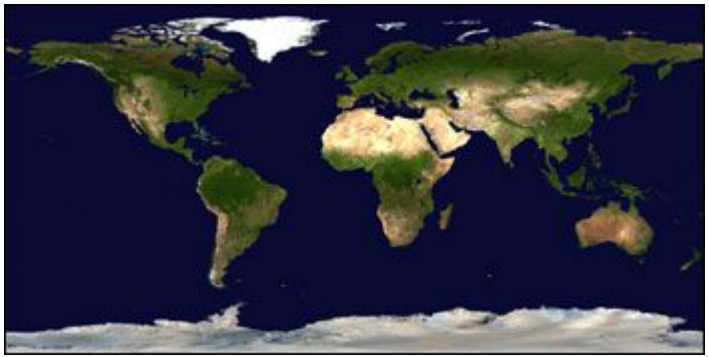
Digital Maps

Google Maps

Openstreet Maps, Yahoo Maps, Bing Maps

Or

Simply Use



Google Maps API

https://developers.google.com/maps/
Can Draw Shapes, Lines, and Overlays.

For Web, Android, iOS.

Free Usage with limits

https://developers.google.com/maps/documentation/javascript/examples/

https://developers.google.com/maps/documentation/javascript/examples/polyline-simple

https://developers.google.com/maps/documentation/javascript/examples/infowindow-simple

https://developers.google.com/maps/documentation/javascript/examples/polygon-simple

Where are we??

https://developers.google.com/maps/documentation/javascript/examples/marker-simple

Hint: [28.603842, 77.197992]

Eclipse path

https://eclipse2017.nasa.gov/sites/default/files/interactive_map/index.html

https://developers.google.com/maps/documentation/javascript/examples/polyline-simple

https://eclipse.gsfc.nasa.gov/SEpath/SEpath2001/SE2017Aug21Tpath.html

Other Examples

http://www.lizard-tail.com/isana/tracking/

Other Visualization tools