

Orbit Types Reference Sheet

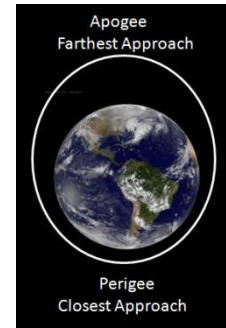
There are many types of orbits

Low Earth Orbit (LEO)
Satellites travel faster than Earth rotation
Altitude between 150 - 2000 km (88 -127 min/orbit)

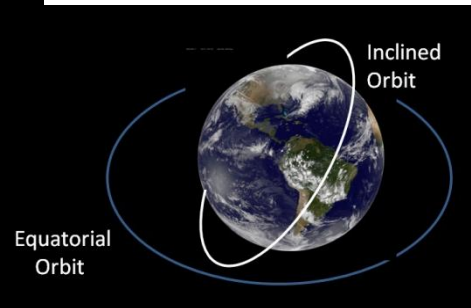
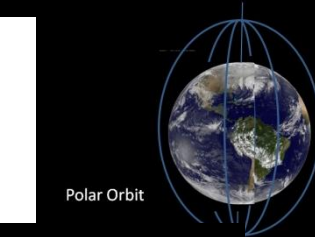
LEO

GEO

Geosynchronous Orbit (GEO)
Satellites orbital speed equals Earth rotation
Altitude = 35,786 km (24 hours)



Each type of orbit looks different from the perspective of space than from the perspective of the ground.



Equatorial Orbit

From space orbits are circular or elliptical.

What would this path look like on
FLAT EARTH?







Hmmm- Sometimes you need
to just "look" to see the
answers. They are everywhere.

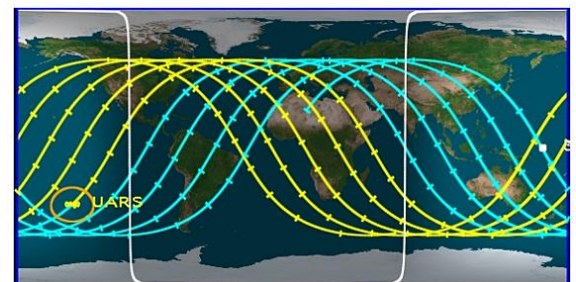


Projected onto the ground, orbits look like a sine wave pattern. This type of path is known as a ground track.

Orbit Type

Ground Track

 Polar Orbit	
 Equatorial Orbit	
 Inclined Orbit	



As Earth rotates, the orbit stays in the same place, but the ground track shifts slightly.