

MEO - GPS



By

Dr M. Senthilkumar
Assistant Professor

Department of Computer Science
Government Arts and Science College, Avinashi - 641654

MEO

- ✓ Between two Van Allen belts - 5000 to 15000 km
- ✓ Do not place satellites in these two Van Allen belts – Protons Destroy Satellites
- ✓ Altitude: 10000 km
- ✓ Period: 6 Hours

GPS

- ✓ Placed at a distance of 20000 km
- ✓ 24 satellites
- ✓ Altitude: 20000 km
- ✓ Period: 12 Hours
- ✓ Inclination of 55 degree

GPS

- ✓ Defense of USA - Military applications – Later Civilian use
- ✓ 4 Satellites Used for an Object
- ✓ Three dimensional positions: Location, Velocity, Time
- ✓ 3 satellites for identifying Location – A, B, C
- ✓ 1 satellite for identifying Time – D

GPS

- ✓ GPS Receiver - Location of a map
- ✓ Accuracy: 15 Meters
- ✓ Car, Ship, Flight (Owner, Captain, Pilot)
- ✓ Persian Gulf War, Drones

References

- ✓ Books:
 - ✓ Data communication and Networking, 4th Edition, Behrouz A Forouzan
 - ✓ Computer Networks, 4th Edition, Andrew S. Tanenbaum
- ✓ Various relevant Websites

Thank You