

Condor-E Small Spacecraft with an electro-optical sensor

ADVANTAGES

- Resolution of EOS in panchromatic band > 1 m
- Possible stereophotography in one orbit
- Mass of spacecraft up to 1150 kg
- Possible re-aiming Of EOS observing line in roll and pitch
- Application of common space platform

DESIGNATION

CONDOR-E small spacecraft with an electro-optical sensor is designed for collection, storage and transmission of earth remote sensing data in visible and infra red bands of electromagnetic spectrum to ground data receiving and processing posts. The SSC optical module can be equipped with various sensors operating within panchromatic, multispectrum, near and medium IR band.

COMPOSITION

- Composition of Condor-E SSC with EOS:
- common space platform (CSP);
 - onboard control complex (OCC);
 - data collection system (DCS);
 - data transmission system (DTS);
 - propulsion plant (PP);
 - air conditioning system (ACS);
 - power generation system (PGS);
 - electro-optical camera (EOC).

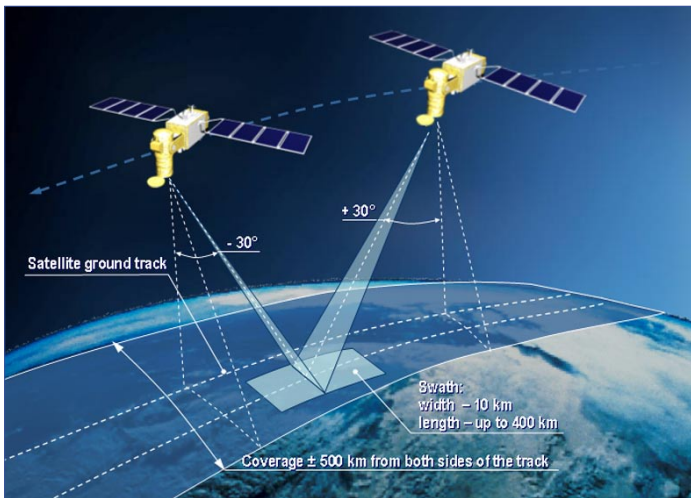
SPECIFICATIONS OF CONDOR-E SSC WITH EOS

| | |
|--|--------------------|
| Parameters of operation orbit for SSC: | |
| • altitude | ~ 500 km |
| • inclination | up to 98° |
| SSC mass | up 1,150 kg |
| EOS mass | up 350 kg |
| Data transmission rate | up to 350 Mbit/sec |
| DTS frequency band | X-band |
| SSC active life | 5 years |

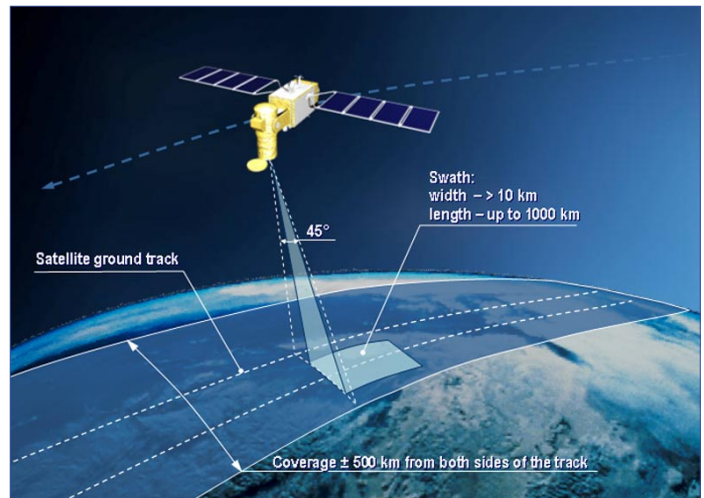
EOS SPECIFICATIONS

| | |
|----------------------------|-------------|
| Spectral bands | Visible, IR |
| Coverage | 1,000 km |
| Swath | > 12 km |
| Resolution in visible band | ≥ 1 m |
| Resolution in IR band | 5-10 m |
| Turn of EOS: | |
| • in orbital plane | ± 30° |
| • in roll | ± 45° |

SCHEME OF STRIP SURVEY



SCHEME OF CONVERGENT SURVEY/STEREOPHOTOGRAPHY



OPTICAL IMAGE SAMPLES

KVR-1000



High resolution panchromatic image, Bangkok region

KVR-1000



High resolution panchromatic image of coastal area, Istanbul



Panchromatic, high resolution image, San-Francisco, USA