

Overview of Current & Future Earth Observation Satellites



Medium-High Resolution Optical

ESA Sentinel-2B
ESA
Bands: 13
Resolution: 10—60 m
Swath: 290 km

2014



ESA Sentinel-2A
ESA
Bands: 13 MS
Resolution: 10—60 m
Swath: 290 km

Astroterra (Spot 6)
SpotImage
Bands: 4 MS, IP
Resolution MS: 8 m
Resolution Pan: 2 m
Swath: 2 x 60 km

Seosat
Spain
Bands: 4 MS, IP
Resolution MS: 10 m
Resolution Pan: 2 m

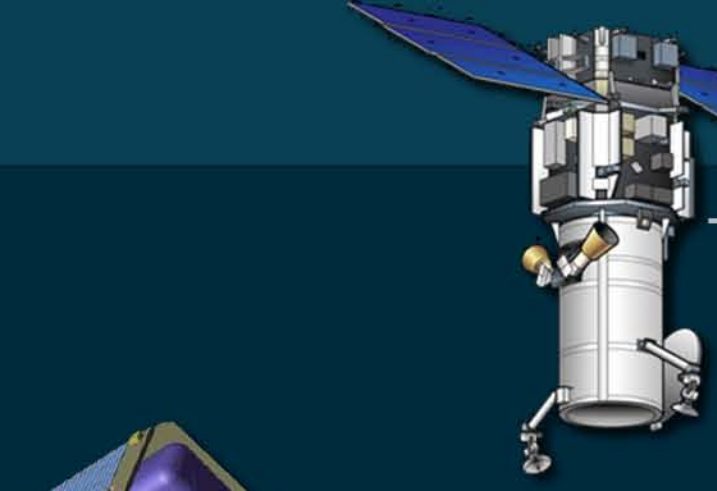
Landsat Data Continuity Mission
US
Bands: 8 MS, IP
Resolution MS: 30 m
Resolution Pan: 10 m
Swath: 180

CBERS-4
CAST/INPE
Bands: 16 MS
Resolution MS: 5—120 m
Swath: 60—866 km



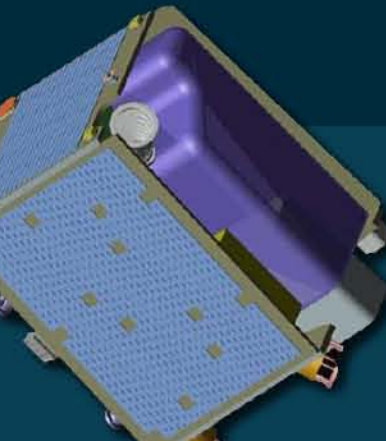
DEIMOS
Spain
Bands: 3
Resolution MS: 22 m
Swath: 300 km

CBERS-3
CAST/INPE
Bands: 16 MS
Resolution MS: 5—120 m
Swath: 60—866 km



THEOS
GISTDA
Resolution MS: 15 m
Resolution Pan: 2 m
Swath: 22—90 km

RapidEye 1—5
Bands: 5 MS
Resolution MS: 5 MS
Swath: 77 km



CBERS-2B
CAST/INPE
Bands: 10 MS, IP
Resolution MS: 20—260 m
Resolution Pan: 2.7 m
Swath: 27—890 km



ALOS
JAXA
AVNIR-2: PRISM
4 bands: 10 m, 70 km swath
2.5 m pan stereo triplet, 35 Km

Topsat
UK
Bands: 3 MS, IP
Resolution MS: 5 m
Resolution Pan: 2.5 m
Swath: 10—25 km

Beijing-1
PR. China
Bands: 3 MS, IP
Resolution MS: 32 m
Resolution Pan: 4 m
Swath: 24—600 km

IRS P5
ISRO
Bands: 1 P stereo
Resolution: 2.5 m
Swath: 30 km

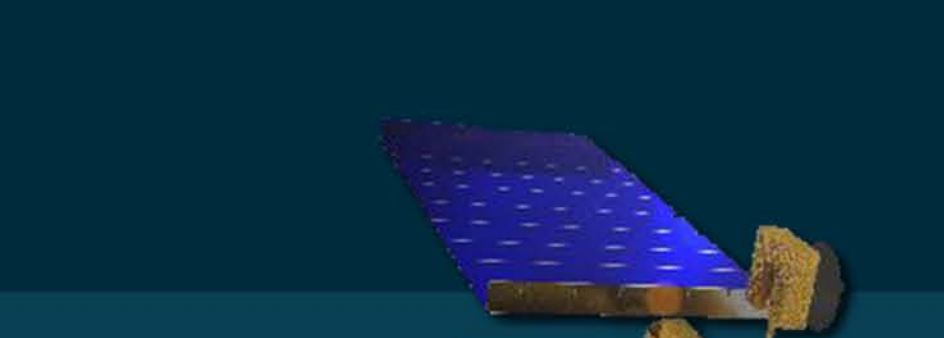
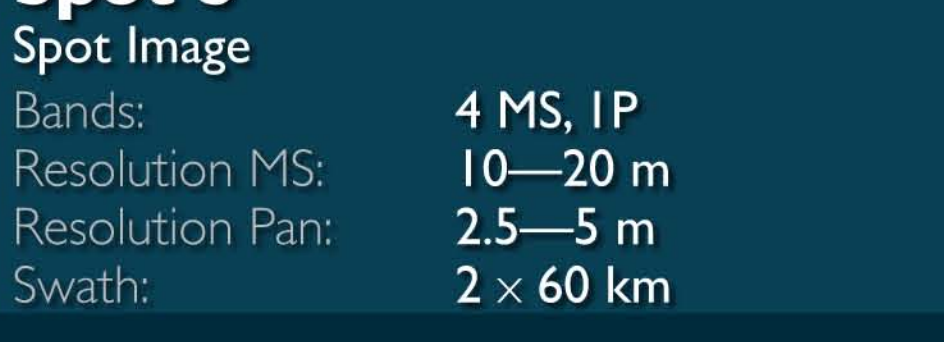
Formosat-2
NSRO
Bands: 4 MS, IP
Resolution MS: 8 m
Resolution Pan: 2 m
Swath: 24 km

Nigeriasat-1
Nigeria
Bands: 3 MS
Resolution MS: 32 m
Swath: 600 km

DMCSat-1
UK
Bands: 3 MS
Resolution MS: 32 m
Swath: 600 km

Spot 5
Spot Image
Bands: 4 MS, IP
Resolution MS: 10—20 m
Resolution Pan: 2.5—5 m
Swath: 2 x 60 km

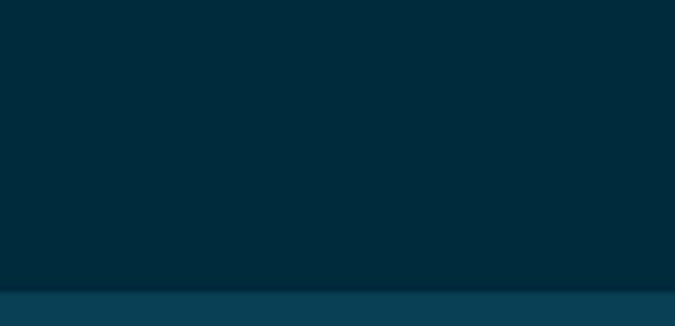
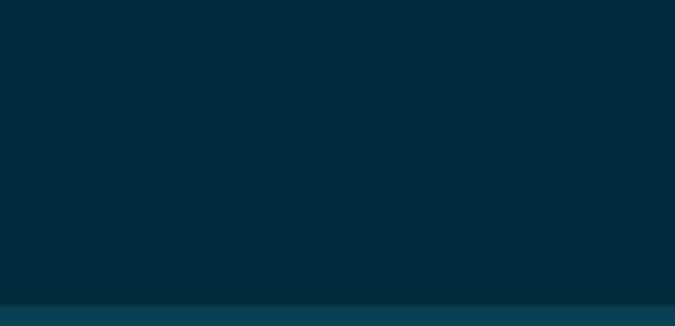
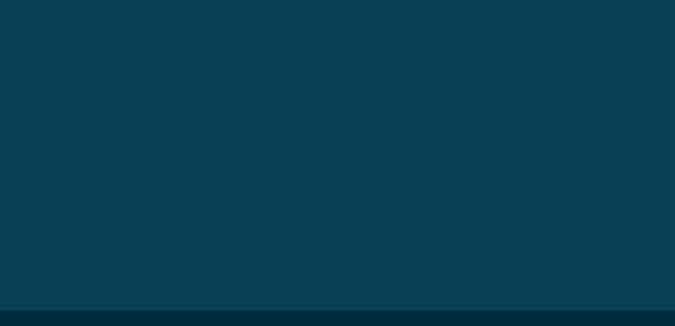
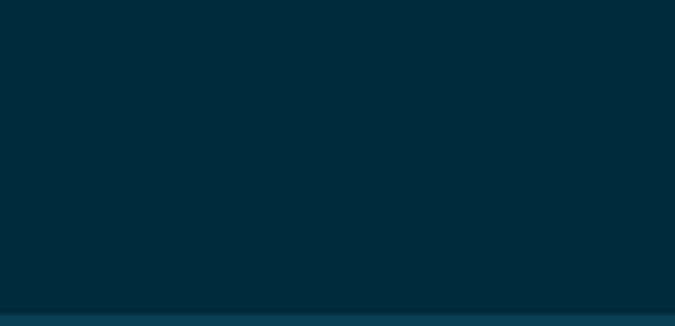
Alsat-1
Algeria
Bands: 3 MS
Resolution MS: 32 m
Swath: 600 km



TERRA/ASTER
ERSDAC
Bands: 14 MS
Resolution MS: 15—90 m
Swath: 60 km

Landsat 7
USGS
Bands: 7 MS, IP
Resolution MS: 30 m
Resolution Pan: 15 m
Swath: 180 km

Spot 4
Spot Image
Bands: 4 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km



Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km



LANDSAT – IMAGE USGS

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Spot 2
Spot Image
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Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

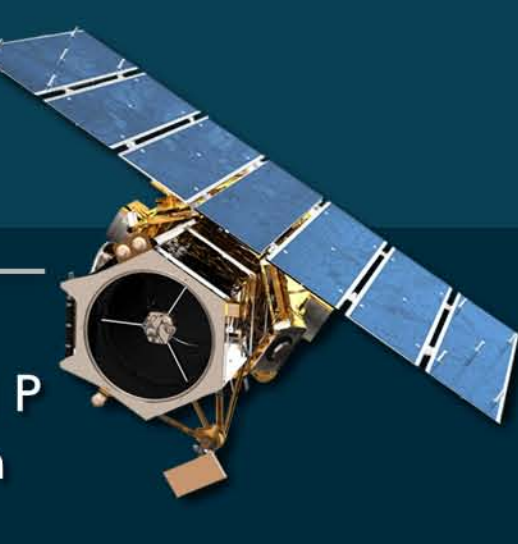
Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

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Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

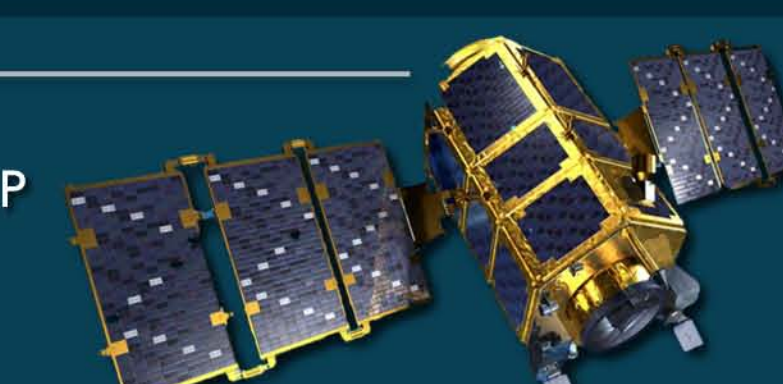
Spot 2
Spot Image
Bands: 3 MS, IP
Resolution MS: 20 m
Resolution Pan: 10 m
Swath: 2 x 60 km

Very High Resolution Optical

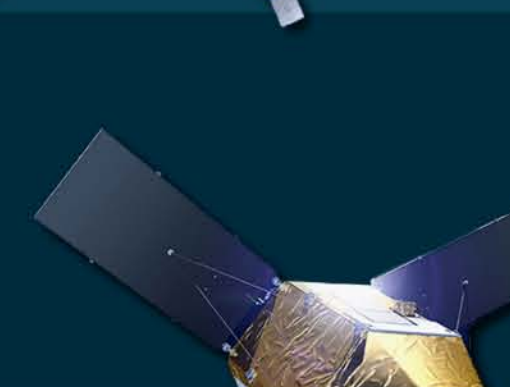
GeoEye-2
GeoEye
Bands: 4 MS, I P
Resolution Pan: 0.25 m
Swath: 15 km



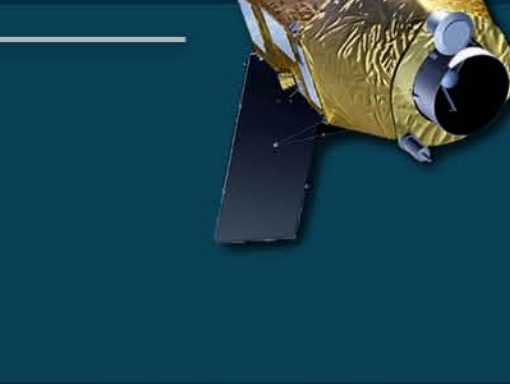
Kompsat-3
KARI
Bands: 4 MS, IP
Resolution Pan: 1 m
Resolution PAN: 15 km



Pleyades-2
CNES
Bands: 4 MS, IP
Resolution MS: 2.8 m
Resolution PAN: 0.7 m
Swath: 20 km



Pleyades-1
CNES
Bands: 4 MS, IP
Resolution MS: 2.8 m
Resolution PAN: 0.7 m
Swath: 20 km



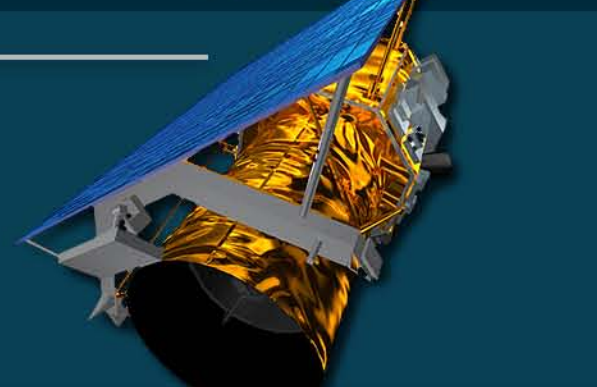
WorldView-2
DigitalGlobe
Bands: 8 MS, IP
Resolution MS: 2 m
Resolution Pan: 0.5
Swath: 16.4 km



EROS-C
ImageSat International
Bands: 4 MS, IP
Resolution MS: 2.8 m
Resolution Pan: 0.7
Swath: 11 km



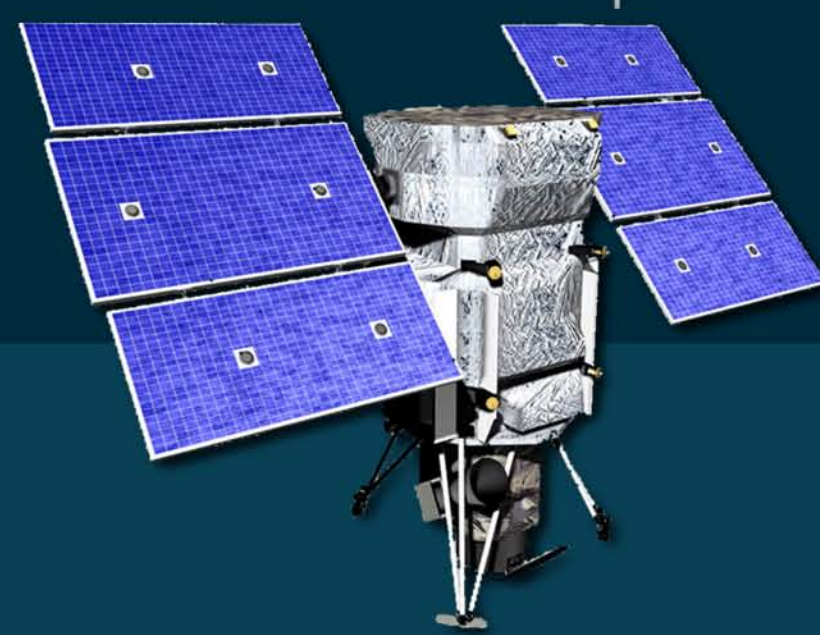
GeoEye-1
GeoEye
Bands: 4 MS, I P
Resolution MS: 2 m
Resolution Pan: 0.5
Swath: 15.2 km



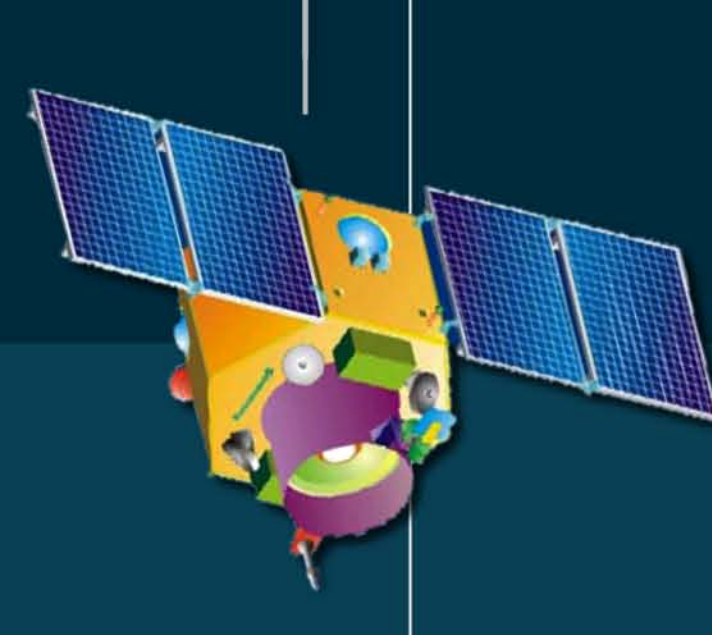
WorldView-1
DigitalGlobe
Bands: Pan
Resolution MS: 0.5 m
Swath: 17.6 km

IRS Cartosat-2
ISRO
Bands: Pan
Resolution MS: 1 m
Swath: 10 km

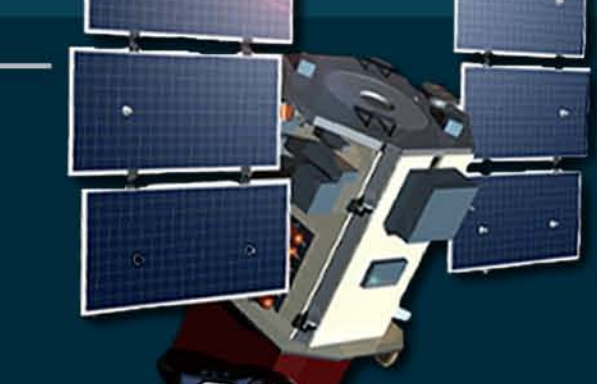
Kompsat-2
KARI
Bands: 4 MS, IP
Resolution Pan: 1 m
Swath: 15 km



EROS-B
ImageSat International
Bands: IP
Resolution: 0.7 m
Swath: 7 km



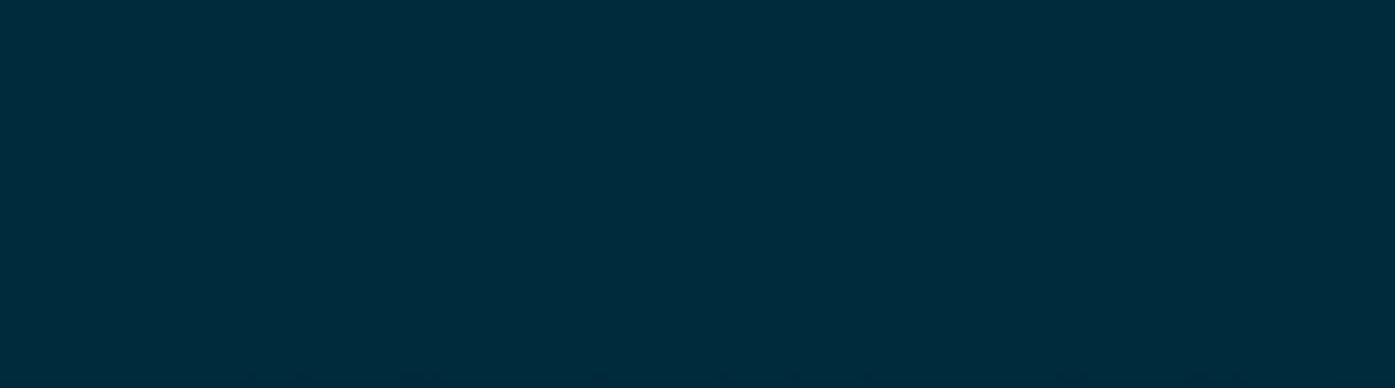
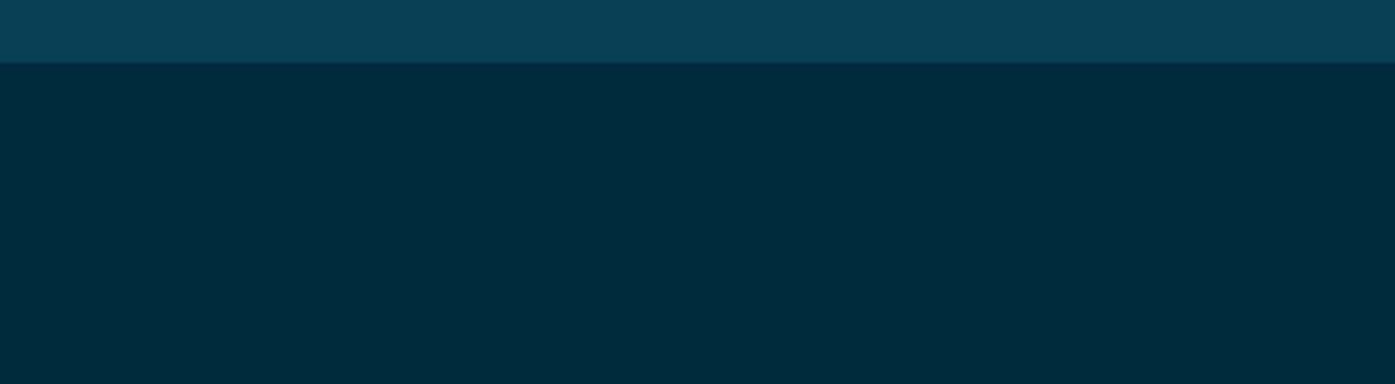
QuickBird
DigitalGlobe
Bands: 4 MS, IP
Resolution MS: 2.4 m
Resolution Pan: 0.6 m
Swath: 16.5 km



EROS-A
ImageSat International
Bands: IP
Resolution: 1.9 m
Swath: 14 km

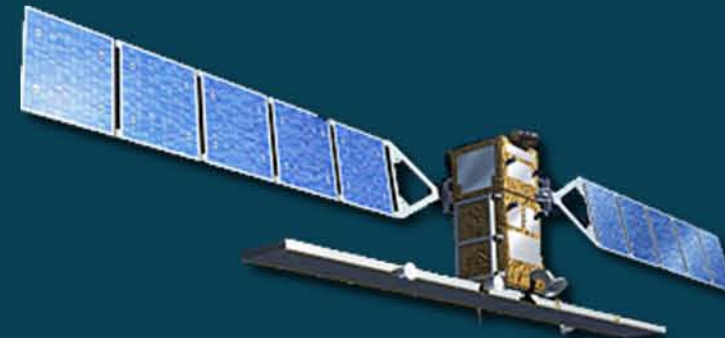


Ikonos
GeoEye
Bands: 4 MS, IP
Resolution MS: 4 m
Resolution Pan: 1 m
Swath: 11 km



Synthetic Aperture Radar

Sentinel 1B
ESA
Band: C
Resolution: 5—100 m
Swath: 80—400 km



Terrasar-X-2
Infoterra
Band: X
Resolution: 1—16 m
Swath: 4—100 km

Sentinel 1A
ESA
Band: C
Resolution: 5—100 m
Swath: 80—400 km

SAOCOM 1B
Argentina
Band: L
Resolution: 7—100 m
Swath: 50—400 km

SAOCOM 1A
Argentina
Band: L
Resolution: 7—100 m
Swath: 50—400 km

COSMO-SkyMed-4
ASI/Italian MoD
Band: X
Resolution: 1—100 m
Swath: 10—200 km

COSMO-SkyMed-3
ASI/Italian MoD
Band: X
Resolution: 1—100 m
Swath: 10—200 km

COSMO-SkyMed-1/2
ASI/Italian MoD
Band: X
Resolution: 1—100 m
Swath: 10—200 km

Radarsat-2
Canada
Band: C
Resolution: 2—100 m
Swath: 20—500 km

Terrasar-X
Infoterra
Band: X
Resolution: 1—16 m
Swath: 5—100 km

ALOS (PALSAR)
JAXA
Band: L
Resolution: 30—150 m
Swath: 7—100 km

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Axel Oddone
Grant Thompson
Eurimage