



www.aoc.co.za | info@aoc.co.za

The unique combination of rapid, large area coverage, high revisit capability and multispectral functionality makes RapidEye data a compelling and cost effective new information source.

RapidEye's constellation of five identical Earth observation satellites allows for an unrivalled freshness of imagery. Any point on Earth can be accessed, which enables rapid response for crop, environmental and emergency monitoring.

Recent users of RapidEye data include agencies from a range of sectors, e.g:

- Government
- Catchment Management
- Mining
- Oil and Gas

| Satellite Specifications | | |
|--------------------------|------------------|-------------|
| Spectral Bands | Blue | 440 – 510nm |
| | Green | 520 – 590nm |
| | Red | 630 – 685nm |
| | Red Edge | 690 – 730nm |
| | NIR | 760 – 850nm |
| Satellite Altitude | ~630km | |
| Swath at Nadir | ~77km | |
| Revisit Time | Daily | |
| Equator Crossing Time | 11.00am (approx) | |

Benefits

- Cost effective
- Rapid broad acre data capture
- Large archive of recent data
- Daily image capture capability
- 5m orthorectified products
- 'Red edge' wavelength for vegetation condition and discrimination
- True blue wavelength for quality natural colour image creation

| RapidEye Products | |
|--------------------|----------------------------------------------------------------------------------------------------------|
| Product Levels | Customised Level 3A – some terrain correction Level 1B – 'raw' |
| Pixel Size | Customised - 5m Level 3A - 5m Level 1B - 6.5m |
| Bit Depth | Image up to 12-bit, scaled to 16-bit dynamic range for delivery |
| Imaging Angle | <20 degrees off-nadir is standard |
| Projection / Datum | WG884-UTM (others available on request) |
| Data Format | 5-Band GeoTiff: 25km x 25km tiles (24km tile + 500m buffer) 3-Band ECW: Mosaiced 5-Band NITF 'raw' |
| Cloud Cover | <20% standard (any less depends on location or archive) |

Applications

Forestry

RapidEye provides rapid mapping and damage assessment, forest cover analysis, frequent monitoring and risk exposure solutions for the forestry industry.

Agriculture

RapidEye provides up to date crop information for better production management and monitoring of agricultural areas.

Engineering & Mining

Cost effective data for most project phases & regional assessment.

Energy and Infrastructure

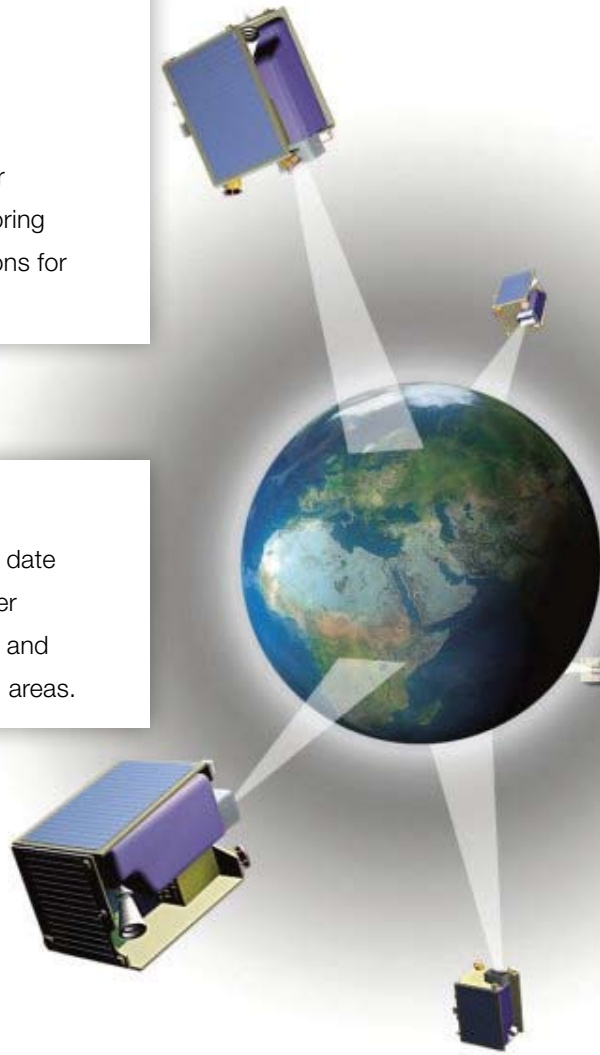
RapidEye can assist your business with the planning of telecom networks, updates of road network databases, infrastructure monitoring and damage assessment support.

Environment

RapidEye can provide up to date information about land cover and land use to provide efficient location-based services for navigation, planning and management decision making.

Security and Emergency

RapidEye provides reference information and emergency response services for efficient disaster management and security services.



Below: Imagery captured by RapidEye over Africa (Bands 351, Bands 541, Bands 431)



Advantages of RapidEye Satellite Imagery

Daily revisit capability – with 5 satellites in the RapidEye constellation capture is rapid and reliable.

A vast archive of current imagery exists. Rapid tasking for new capture can be achieved in a narrow time window and offers **minimal seasonal and interseasonal differentials between individual scenes**. This results in more consistent mosaic basemaps and more reliable delineation, interpretation and mapping of similar vegetation units.

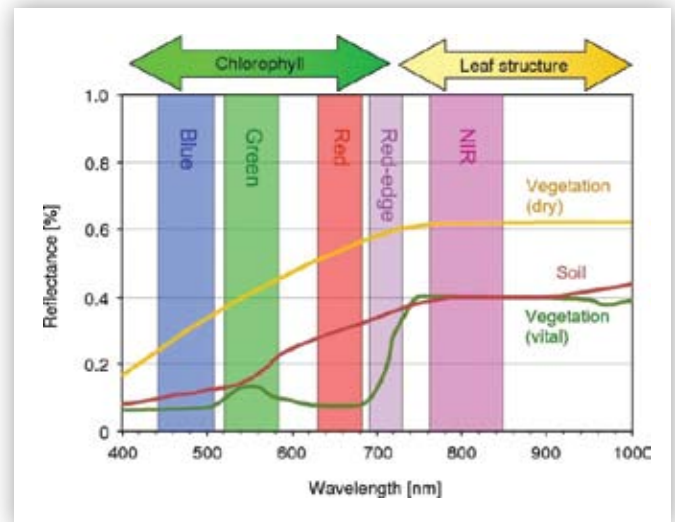
Pixel size – same spatial resolution across all multispectral bands (6.5m).

SPOT5 provides only 10m multispectral imaging capabilities across Bands 1 (Green), 2 (Red), and 3 (Near Infra-Red), and 20m resolution for Band 4 (Short Wave Infra-Red).

Higher-resolution multispectral products are usually simulated by a pan-sharpening process, which can distort the actual radiometric value of the original imagery. This is not the case with RapidEye.

Cost-effective – low unit-cost compared to other similar commercial platforms.

Spectral – 5 band imagery targeted at improved vegetation discrimination and enhanced condition mapping and monitoring applications. This is the first commercial satellite system with Red-Edge imaging capability.

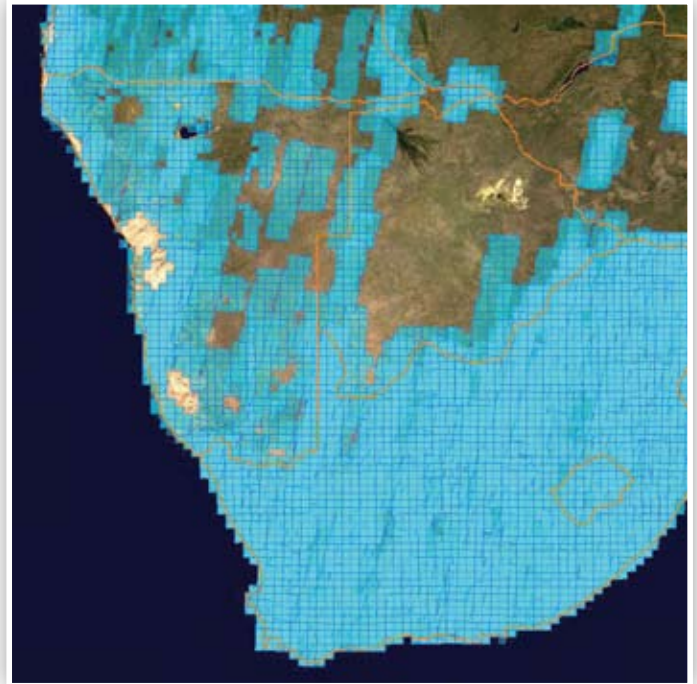
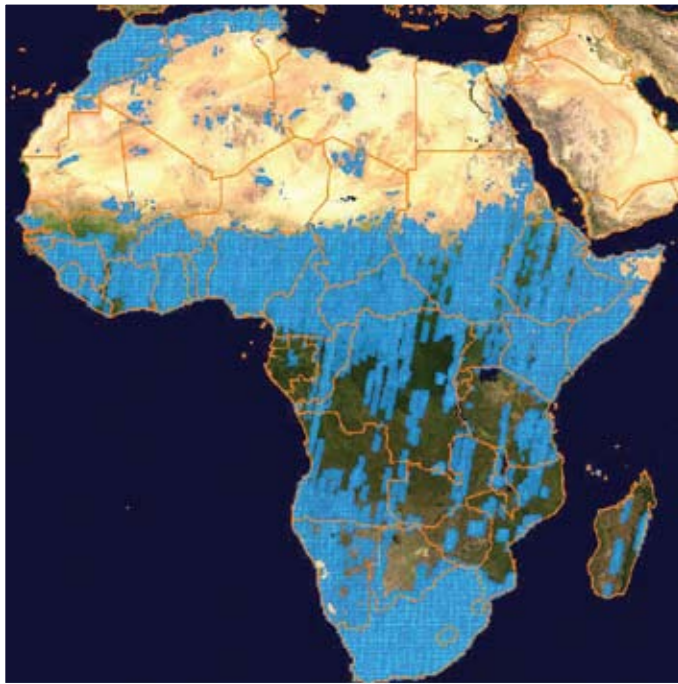


Above: The five spectral bands of RapidEye sensors

Below: Imagery captured by RapidEye over Lesotho (Bands 351, Bands 541, Bands 341)



Archive Coverage Maps (Imagery less than 20% cloud) August 2010



Check out the latest coverage maps at www.aoc.co.za/rapideye

Coverage as of May 2010

