

# Sentinel-2A Relays Colourful Imagery from Space



Just four days after being sent into orbit, Europe's Sentinel-2A satellite recently delivered its first images of Earth, offering a glimpse of the 'colour vision' that it will provide for the Copernicus environmental monitoring programme. With a swath width of 290km, the satellite's first acquisition began in Sweden. It then made a strip-like observation through central Europe and the Mediterranean region, ending in Algeria.

The data was relayed in real time to Italy's Matera ground station. While northern and central Europe were mostly cloudy, Italy's sunny weather allowed the teams to get their first glimpse of the multispectral instrument's capabilities over the northwestern part of the country and the French Riviera. With a ground resolution of 10m per pixel, the images show

individual buildings in Milan, agricultural plots along the River Po and ports along the southern French coast.

## Wide Spectrum of Applications

The Director of ESA's Earth Observation Programmes, Volker Liebig, commented Sentinel-2 will enable the organisation to provide data for the programme's land monitoring services and will be the base for a wide spectrum of applications reaching from agriculture to forestry, environmental monitoring to urban planning. The multispectral imager is being calibrated during the commissioning phase – which will take about three months to complete – but the quality of these first images already exceeded expectations.

In addition to demonstrating the imager's high resolution, this initial data also foreshadows the mission's land-monitoring applications in areas such as agriculture, inland and coastal waters and land-cover mapping.

The imager's 13 spectral bands, from the visible and the near infrared to the shortwave infrared at different spatial resolutions, take land monitoring to a higher level. This weekend's activities also demonstrated that the operational processor works flawlessly, paving the way for the mission's systematic data generation to come.

Sentinel-2A is the second satellite for Europe's Copernicus programme, following the Sentinel-1A radar satellite launched last year. Designed as a two-satellite mission, Sentinel-2 will provide optical imagery on a five-day revisit cycle once its twin, Sentinel-2B, is launched in 2016.