

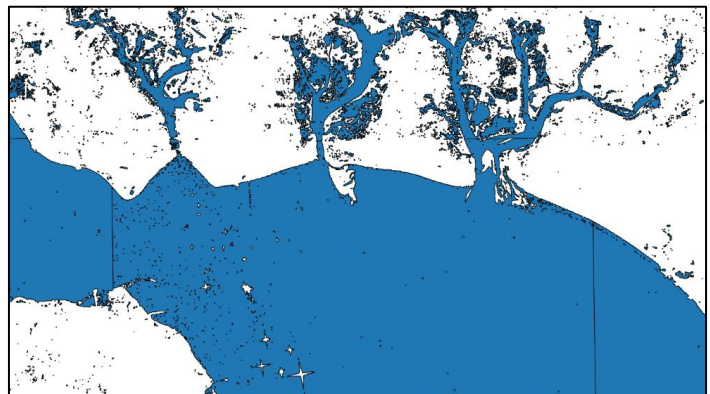
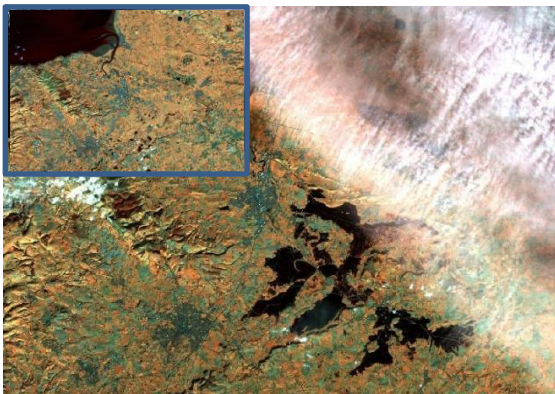
Flooding and Coastal Management



Current climate predictions forecast an increase in the frequency and severity of worldwide storm events. Catastrophic flooding in the UK in early 2014 resulted in large inland areas of the country, such as the Somerset Levels, being submerged for weeks. Many coastal towns also experienced flooding or landslides as the storms accelerated rates of coastal erosion.

Above: East Devon coastline, UK: Plumes of sediment deposited by the Exe and Teign rivers following heavy storms. Data courtesy of the USGS.

Over the last 40 years satellites have been mapping the Earth's surface and provide an unrivalled record of environmental trends. The data can be used to monitor key coastal management issues such as sediment transport, river levels and coastal erosion. In addition both the extent and depth of flood water can be derived from altimetry; see our Water Height product sheet (<http://bit.ly/10cXXwW>).



Above: Left: Landsat images showing the Somerset Levels on the 4th Nov 2013 (inset) and 23rd Jan 2014 with black areas in January image being flood water extent (data courtesy of the USGS). Right: Water extent polygons extracted from Sentinel-1 radar imagery showing the land/water boundary, wet areas on the land and non-water targets (data courtesy of Copernicus/ESA).

Pixalytics can deliver a flexible range of products to support projects. Call Sam or Andy today to discuss your requirements on +44 (0)1752 764407.

Pixalytics Ltd. www.pixalytics.com. 1 Davy Road, Plymouth Science Park, Plymouth, Devon, PL6 8BX.

T: +44 (0)1752 764407. E: enquiries@pixalytics.com