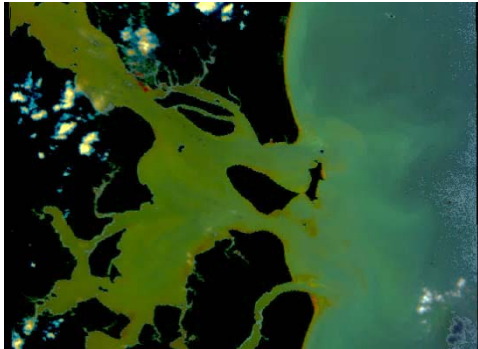


Pixalytics

Atmospheric Correction

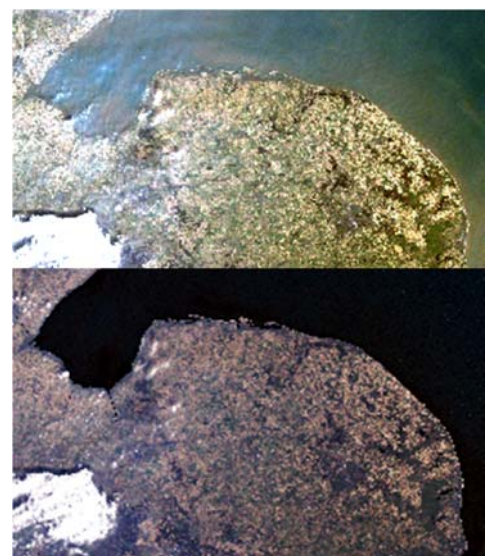


Atmospheric correction is a critical data processing activity to ensure high quality optical imagery; when an optical image is acquired the result includes both the Earth's surface and the atmosphere through which the signal must pass. This atmospheric signal causes a blurring for very high resolution data, and requires correction to maintain data consistency and confidence. This is a challenging task as the atmosphere changes every day, which requires the correction to be tailored to each day's specific conditions.

Above: Brazilian coastline: Suspended sediment within a complex estuarine and coastal environment; land is black and some cloud remain as white patches. HICO data courtesy of the US Naval Research Laboratory.

Sam is a world leading scientific expert in this field with over twenty years experience, and has developed her own bespoke atmospheric correction software. Using this unique proposition, Pixalytics can process optical data ranging from the coarse resolution global sensors, such as MODIS, to medium resolution sensors such as Landsat and the experimental HICO mission on the international space station; work is also on-going for very high resolution data sources.

Right: Pseudo true colour images on the right are a portion of a Landsat 7 scene of East Anglia and the Wash before (top) and after (bottom) atmospheric correction, with thick cloud in the bottom left. The image is stretched so that it's showing terrestrial rather than marine features and hence the water after atmospheric correction appears black. Data courtesy of the US Geological Survey.



Once atmospheric correction has been applied products such as vegetation cover and suspended sediment distribution can be calculated.

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