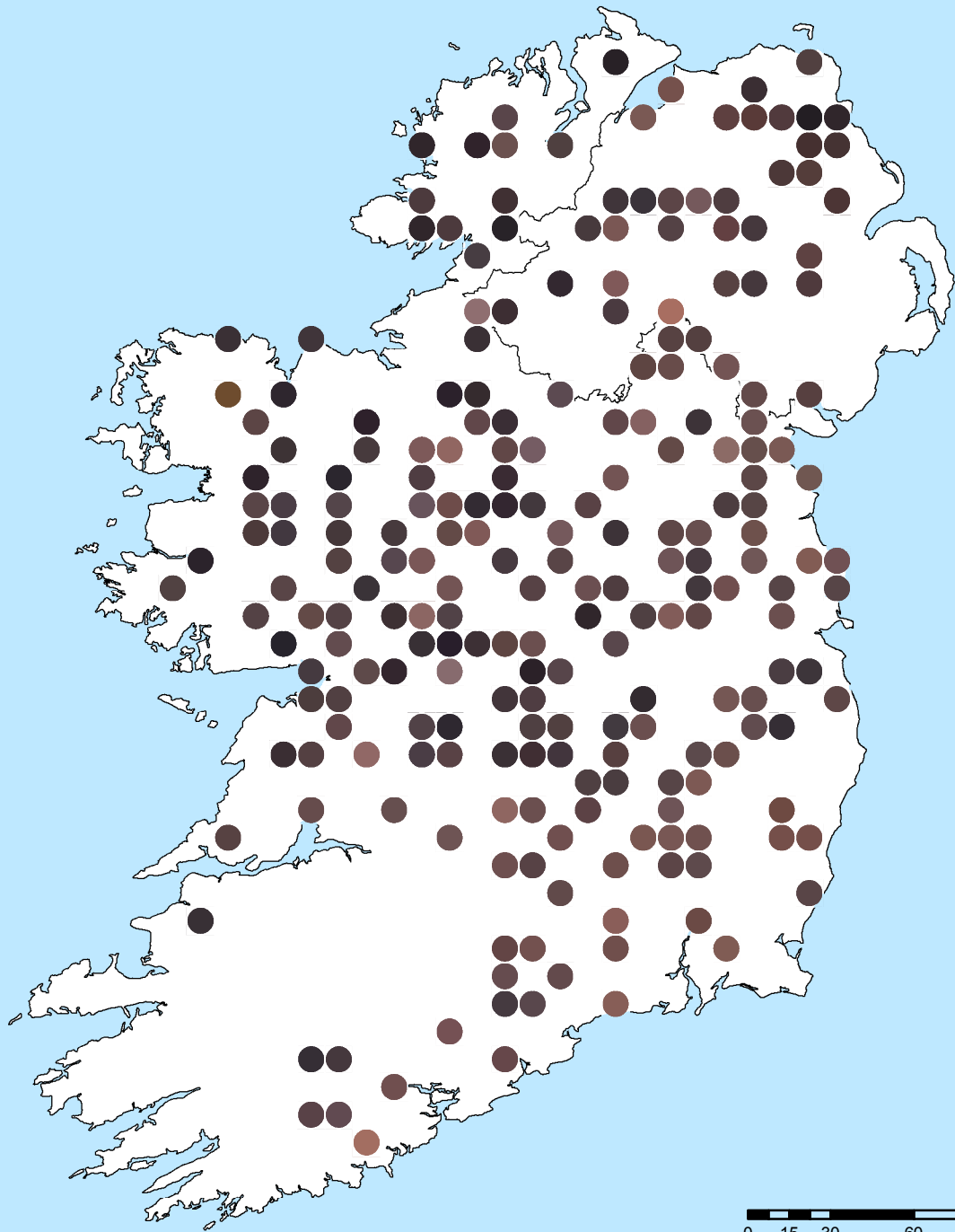


The true colours of Irish soils



This month's map shows the true colours of Irish soils as measured in 2009 by the EU LUCAS survey. Using a spectrometer (a device which measures the properties of light over the visible and near infrared spectra from 400 nm to 2500 nm), the reflectance properties of 261 soil samples in Ireland were collected. To turn these reflectance spectra in visible colours we can print we have to convert from spectra into what are known as tristimulus values, so called because the human eye is sensitive to three individual colours ranges determined by the three types of cone cells in the eye generating true colours as a combination of primary colours red (EM wavelengths of 620 to 680 nm), green (530 to 570 nm) and blue (450 to 500 nm), known also as RGB.

The true colours of each soil are plotted on the map at the location the samples were taken. Unsurprisingly the soils come in a range of brown tones with dark-coloured points associated with organic soils (peats), whereas lighter brown hues correspond to mineral soils.

This analysis was carried out in the frame of EPA funded SOLUM Project (<https://epasolumproject.wixsite.com/solum>).

IRENET95 Irish Transverse Mercator

Datasets used:
©Eurostat LUCAS 2009 TOPSOIL data
OSi Ireland Boundaries
Sources: ESRI, USGS, NOAA

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