

Geophysical Data | Radiometric Ternary Image

About Tellus

Tellus is a national programme to gather geochemical and geophysical data across the island of Ireland, examining the chemical and physical properties of our soils, rocks and waters. The data will help to inform the management of Ireland's environment and natural resources. Tellus is undertaken by the Geological Survey, Ireland and is funded by the Department of Communications, Climate Action and Environment.

The airborne survey collects magnetic, gamma ray spectrometry and frequency domain electromagnetic data. This data helps measure variations in the Earth's magnetic field, natural radiation and the conductivity of rocks and soils respectively. The aircraft flies at a nominal altitude of 60 m on a 345° heading in rural areas. Flight lines were spaced 200 m apart.

Radiometric Ternary Image

The map displays a ternary image of radiometric data from airborne potassium (%), equivalent thorium (ppm) and equivalent uranium (ppm). Uranium and thorium values are multiplied by a factor of 10,000 to allow subtle variations to be resolved. A colour is assigned to each element (uranium - blue, potassium - red and thorium - green). Intermediate values of elements are represented by a combination of these colours. White colours display areas which are high in all three elements, while dark browns/blacks show areas which have low radiometric counts usually a consequence of water bodies or saturated ground and peat bogs.

Free data & maps at www.gsi.ie/tellus

