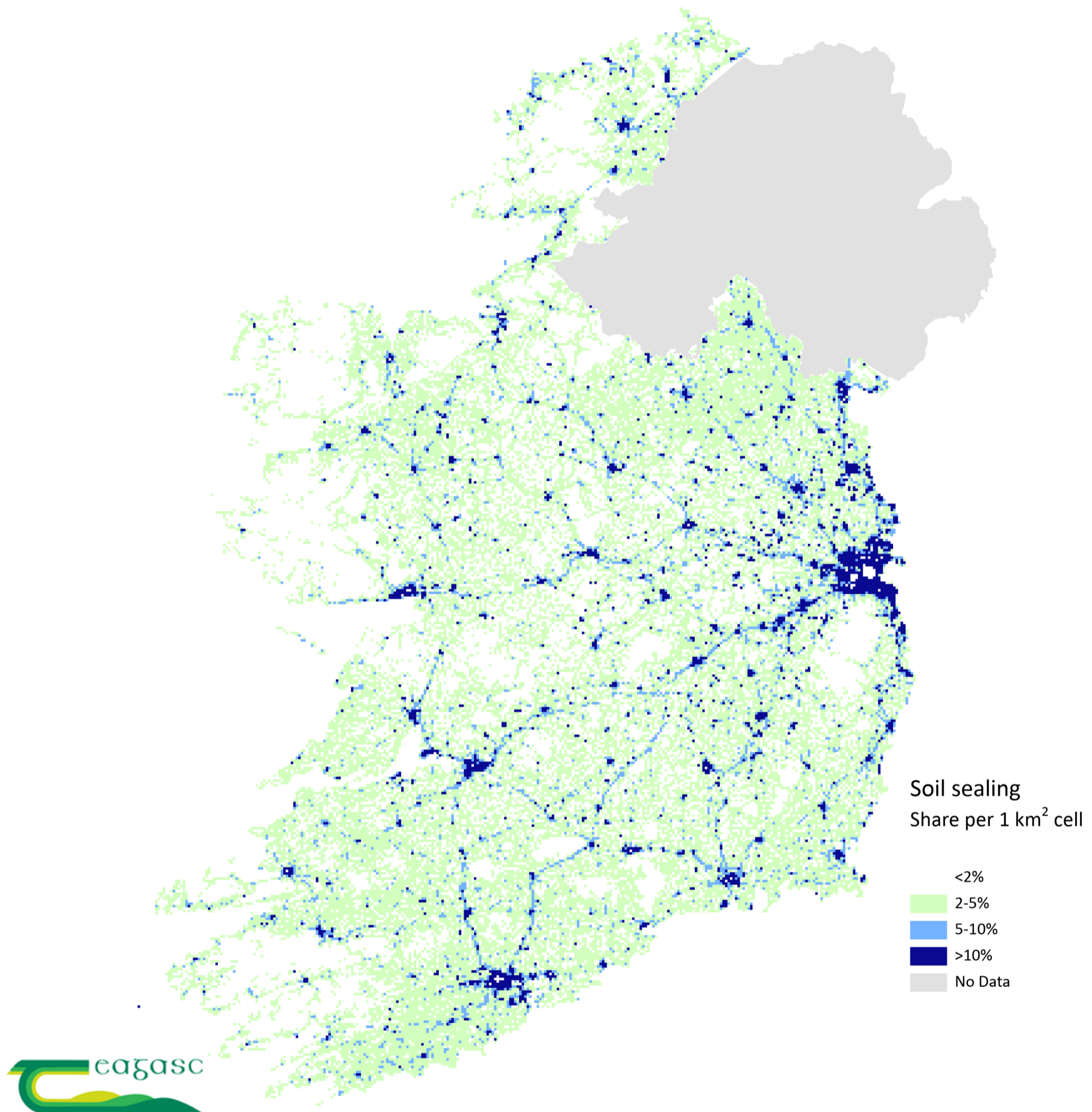


Soil sealing in Ireland



In the new Terrain AI project we will be exploring the relationship between land use and green house gas emissions. One of the topics of interest is the area and location of soil sealing- this is where the ground is covered with an artificial impervious layer such as concrete. This category include roads, buildings, yards, car parks and lots of other manmade structures. Having accurate up-to-date maps of the location and extent of soil sealing is important for lots of areas besides climate studies – such as weather forecasts and water quality studies. According to the ESA Copernicus services Ireland has very low percentage of soils sealing, only 1.2% of the country compared to Germany which has the highest amount (5.1%). Here we map a simple first attempt at looking at the degree of soil sealing in country based on an analysis of the OSI Prime 2 data. The data is presented as the percentage of area sealed per km², and clearly shows the urban centres and the road network. In the coming months we will be improving on the estimates of soils sealing using satellites and new products from Copernicus and the OSI.

<https://terrainai.com/>
<https://land.copernicus.eu/pan-european/high-resolution-layers/imperviousness>

Projection: Irish Transverse Mercator

Datasets used:
OSI Prime2

Dr Stuart Green and Dr Jesko Zimmermann
Department of Agrifood Business and Spatial Analysis
Teagasc Ashtown Research Centre