

BRITISH
Geological Survey

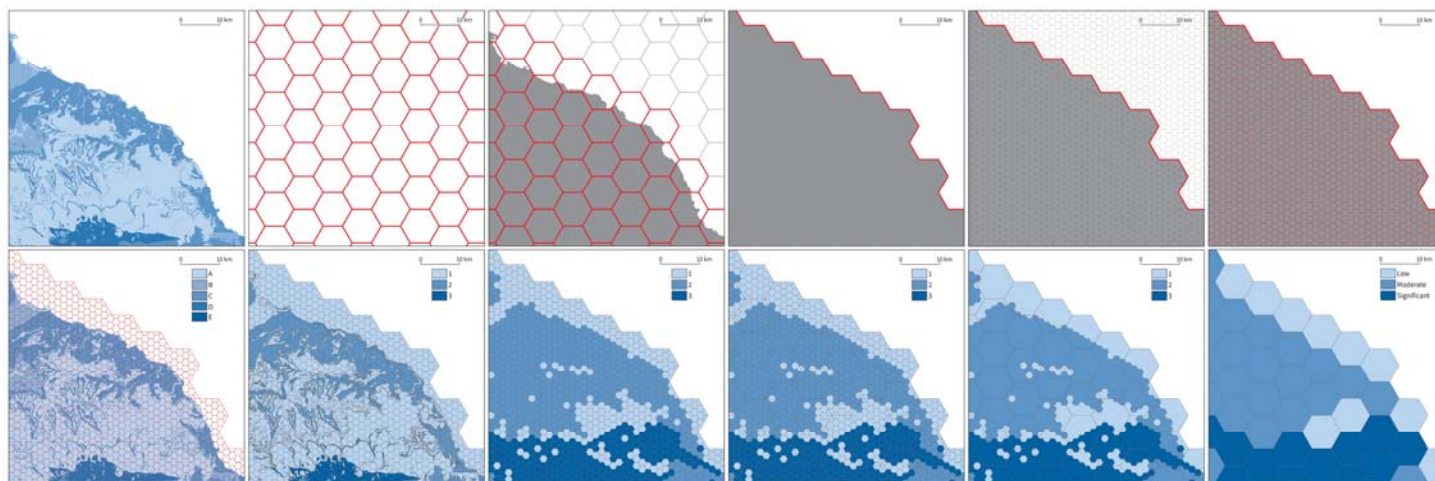
NATURAL ENVIRONMENT RESEARCH COUNCIL

BGS GeoSure 5 km Hex Grids

Clive Cartwright, Kathryn Lee, Kathrine Linley, Katy Mee, Henry Holbrook,
Ian Longhurst, Hannah Gow, and Gareth Jenkins

The BGS GeoSure 5 km Hex Grid data provides a generalised overview of the susceptibility to six naturally occurring geohazards in Great Britain: Landslides, Shrink-Swell, Soluble Rocks, Running Sand, Compressible Ground, and Collapsible Ground. The hexagon grid provides a national-scale summary of the GeoSure data product, as a free Open Government Licence dataset, available in GIS format. A more detailed version of GeoSure at 1:50 000 Scale is available to licence.

The 5 km Hex Grid data have been generalised, using a formal GIS methodology, into a vector map of interlocking hexagon cells (a side length of 5 km), with an area approximately 65 km². There are three classes included within the data: low, moderate and significant.



The GIS methodology behind the creation of the 5 km Hex Grids

OpenGeoscience

The GeoSure 5 km Hex Grids fall under BGS' OpenGeoscience portfolio of datasets and services. OpenGeoscience provides a wide range of freely available geoscience information allowing users to view maps, download data, access web services and browse our archive of photos, maps and memoirs.

www.bgs.ac.uk/opengeoscience

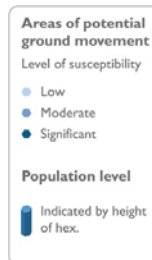
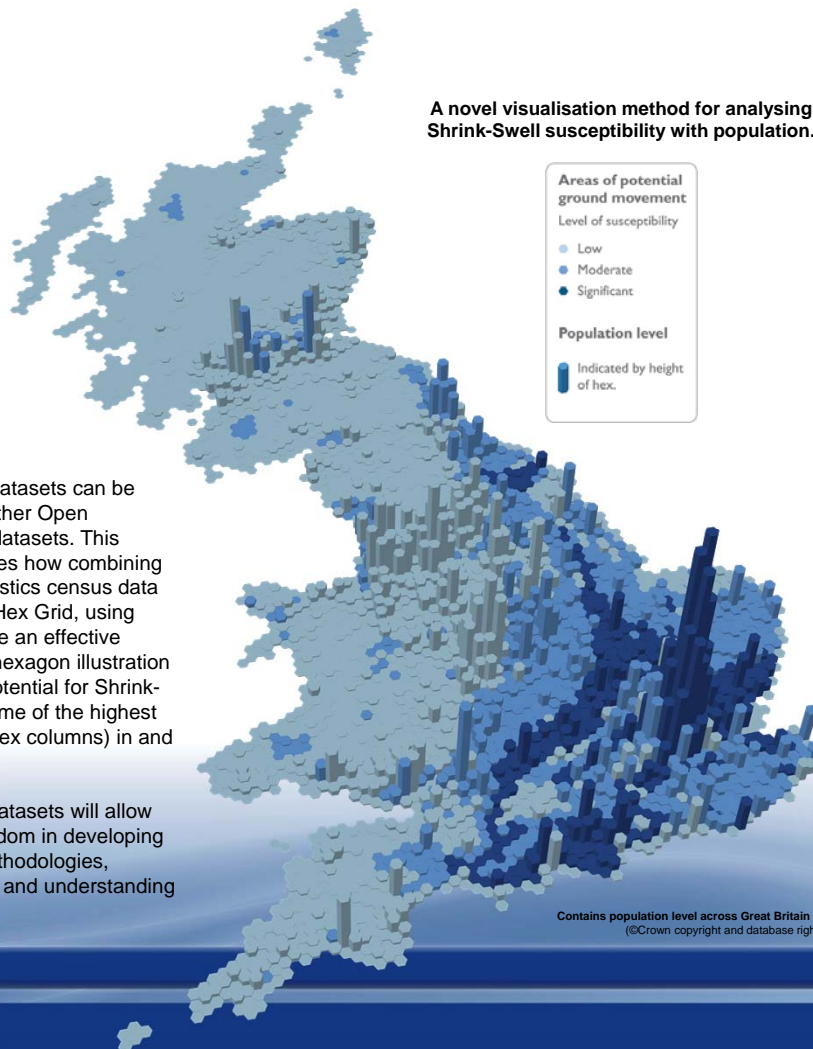
A novel visualisation method for analysing Shrink-Swell susceptibility with population.



Showing the coverage of Shrink-Swell data (blue) in a projected geographical context.

These new Hex Grid datasets can be used effectively with other Open Government Licence datasets. This illustration demonstrates how combining Office of National Statistics census data with the Shrink-Swell Hex Grid, using ArcScene, can produce an effective visualisation. The 3D hexagon illustration (right) shows a high potential for Shrink-Swell (dark blue) in some of the highest populated areas (tall hex columns) in and around London.

These free Hex Grid datasets will allow the public greater freedom in developing their own scientific methodologies, promoting a wider use and understanding of British geology.



Contains population level across Great Britain in 2011
(©Crown copyright and database right 2017)

Contact information

Clive E Cartwright. ccart@bgs.ac.uk