## Surface wetness based on the shape of the land

The high resolution of elevation data now available makes it possible to pick out subtle features in the land including ridges, hollows and likely flow paths, allowing for an initial assessment of areas more likely to be wet compared to others.

Maps illustrating potential topographic wetness for an area around Southam, Warwickshire can be seen on the UKSO map viewer with a static image presented below. This surfaces provide a useful first assessment but as mentioned, should not be used in isolation of other factors and information.

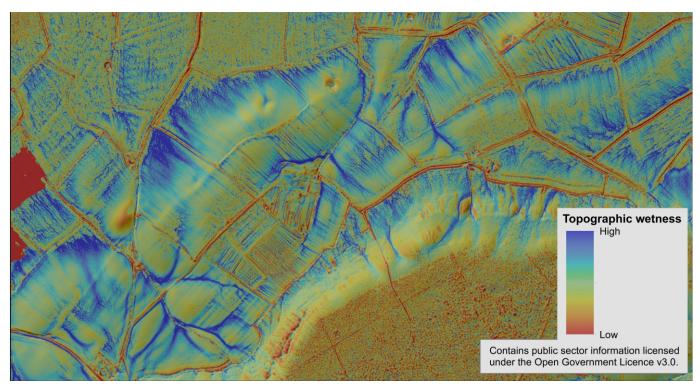


Figure 1 Topographic wetness potential calculated from Environment Agency 2 m LiDAR surface elevation data

Wetter areas are associated with portions of the land surrounded by steeper slopes – ridges will have low topographic wetness values, compared to for example topographic hollows which will have a high topographic wetness potential.

Combining this information with other data including past and present weather conditions, the underlying geology, soil type and vegetation cover will provide a better informed and more reliable assessment.

Knowing where these areas are likely to be provides an opportunity to reconsider which crops are best planted or avoided and also which areas are likely best avoided during wetter periods to avoid increases in damage and enhanced levels of soil erosion.

The surfaces presented can be created for any elevation data that you have. High resolution elevation coverage data will soon be available for free for the whole of the UK.

If you have any questions or are interested in finding out more about how you can apply these techniques to your land, get in touch at <a href="mailto:enquiries@bgs.ac.uk">enquiries@bgs.ac.uk</a>