Notkun fjarkönnunargagna til að ákvarða þröskulda fyrir skriðuhættu á Íslandi. Talfan Barnie, Esther Hlíðar Jensen, Jón Kristinn Helgason, Eysteinn Már Sigurðsson, Matthew J. Roberts, Morgane Priet-Mahéo og Tinna Þórarinsdóttir. Veðurstofan – mars 2022.

Ágrip skýrsluhöfunda:

This research explores new opportunities provided by satellite products for the development of an early warning system for landslides in Iceland. We specifically explore the use of the soil-moisture content satellite products delivered by EUMETSAT for the support of an early warning system of landslides triggered by excess water and, in doing so, evaluate the feasibility of an operational early warning system supported by remote sensing data. Results demonstrate that (i) the soil moisture products from EUMETSAT show a clear relationship with in-situ soil moisture measurements currently made in Iceland, (ii) there is a clear relationship between elevated soil moisture detected from satellite and an increased landslide risk, and (iii) that the addition of estimates of soil moisture anomaly somewhat improves logistic models relating rainfall to landslide probability.