GEOHAZARD DAY 2022

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Abstract

30th of July, 2019 more than 100 landslides released in the Jølster area after a 200 year rain event that lasted a total of 6 hours. The landslides depend on the preconditions; these include topography, vegetation, soil type and local climate. Our study of the event at Jølster has been based on our own observations in the field, in addition to a wide range of literature.

The landslide that occurred in Jølster 2019, was a debris slide and the depositions at Jølster are primarily glaciofluvial. The till varied in grain size from boulders to very fine clay. When it rained the clay particles, being impermeable, made it impossible for the rain to drain through the soil.

Therefore, the landslides that were triggered by this event would not have been as destructive if the preconditions had been different. Whilst the warm climate swept across the entirety of Europe, Norway's vulnerability to the climate and landslides became apparent in the Jølster disaster. It can be concluded that each precondition has a knock-on effect, leading to an increased vulnerability of the area, responsible for the disastrous event. For example, the warm climate led to dryer soil in turn decreasing the stability of the soil and worsening the landslide event.

