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Merging different resolution rainfall products to support landslide prediction over Nepal

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Landslides within Nepal result both from human interventions, intensive rainfall and tectonic activity. This work presents the steps taken towards the development of a Territorial landslide early warning system (Te-LEWSs) for predicting the relative probability of the occurrence of precipitation driven landslides in the west of Nepal. Since precipitation triggers may be dominated by intense short periods of rainfall focus is given to testing the use of relationships between high resolution local observed precipitation, satellite data and Numerical Weather Models output in the development of the forecasting model. Our results show the relative importance of these alongside the significance of human activity when the model is compared against observed data sets.

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