



Landslide spatial catalogue

Aerial photographs

Optical images  
(Landsat-8, Sentinel-2)

Radar images  
(Sentinel-1, TerraSAR-X)

Available data

Landslide map

DEM

Other  
(geology, rainfall)

Digital data  
(1:10 000)

**Topographical factors**  
(elevation, slope, aspects, planar/profile curvature, surface roughness (radar))

**Hydrological factors**  
(distance to water bodies, TWI, rainfall)

**Soil factors**  
(surface soil moisture, soil moisture index (radar))

**Land cover factors**  
(land use/ forest biomass (radar))

**Geological factors**  
(geology, lineament)

**Validation sample**

**Training sample**

Landslide prediction analysis  
(with & without RDFs)

Bivariate statistical analysis  
(InfoVal method)

Multivariate statistical analysis  
(AHP)

Landslide susceptibility analysis &  
results validation

Compare the performance of RDFs for landslide susceptibility analysis of a bivariate and multivariate nature