



Where is my wine from? – A global exposure database for wineries and wine growing regions

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The production of a global winery and wine database is a great undertaking and was required for the evaluation of winery risk in various locations (see NH ECS Lecture MH42/NH).

The following study detailed a country wide study of wineries in 15 major wine growing locations globally in order to evaluate the ability of using existing information to detail the risk properties of the wine growing regions.

In addition parameters such as the winery types, grape types, slopes, buildings, hazard properties and land use were surveyed.

In terms of the winery locations, point-based as well as spatial land-use disaggregated polygons were used. For grape production, national and winery region data was aggregated from existing sources in each country. The value and type were assessed. For the slopes, global and regional DEMs such as ALOS, SRTM and EU-DEM were examined and converted within GIS environments. Building level information was often difficult to establish where OSM data was lacking (OpenStreetMap). Hazard parameters such as earthquake ground motion probability, weather, wind speeds, changing grape types, seasonality as well as the variability within seasons were collected with the variability being key to showing an increase or decrease in quality.

Tools that were used can be applied to other exposure datasets; and shows a methodology to aggregate exposure information with respect to industries as well as other sectors using open data.