

This climada module contains the European winter storm (WS) hazard event sets as used in the following publication:

Schwierz, C., P. Köllner-Heck, E. Zenklusen Mutter, D. N. Bresch, P.-L. Vidale, M. Wild, C., and Schär, 2010: Modelling European winter wind storm losses in current and future climate. Climatic Change (2010) 101:485?514, doi: 10.1007/s10584-009-9712-1².

Test the module with

winterstorm_TEST

and consider `help winterstorm_TEST`

The entity in `../data/entities/WS_Europe.xls` is a dummy entity to test the hazard sets, it contains the damage function as used in the paper. Please consider using the module `GDP_entity`³ to create meaningful European country assets etc.

Further consider the module `country_risk`⁴ to generate assets (based on GDP) and hazard sets for e.g. all European countries.

Note that `winterstorm_blend_hazard_event_sets` blends the control hazard events into one (larger) hazard event set, which improves the statistics (stability) of results, but is quite a pragmatic step.

`winterstorm_compare_severity`: Compare the hazard severity of different hazard sets (calls `winterstorm_severity`). See also `winterstorm_compare`.

`winterstorm_compare`: Run a winterstorm Europe analysis for a given entity with different damage functions and different hazard event sets. See also `winterstorm_validate` and `winterstorm_compare_severity`.

`WS_intensity_correction`: correct WS intensity as documented in the paper cited above. If applied a second time, the correction is reversed. WARNING: a truly expert level code, to be used with utmost caution. See also `winterstorm_compare` and `winterstorm_compare_severity`.

¹ Formerly named `climada_module_ws_europe`, changed 20151224

² <http://www.iac.ethz.ch/doc/publications/Schwierz.pdf>

³ https://github.com/davidnbresch/climada_module_GDP_entity

⁴ https://github.com/davidnbresch/climada_module_country_risk