climada module **storm europe**[1] 13 Mar 2017
https://github.com/davidnbresch/climada_module_storm_europe
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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/s10584-009-9712-1[2].

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 country_risk[3] 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 intenisty 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`.

A good source for European winter storm damage functions: Feuerstein, B., Groenemeijer, P., Dirksen, E., Hubrig, M., Holzer, A. M., Dotzek, N., 2011: Towards an improved wind speed scale and damage description adapted for Central Europe http://dx.doi.org/10.1016/j.atmosres.2010.12.026

[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_country_risk