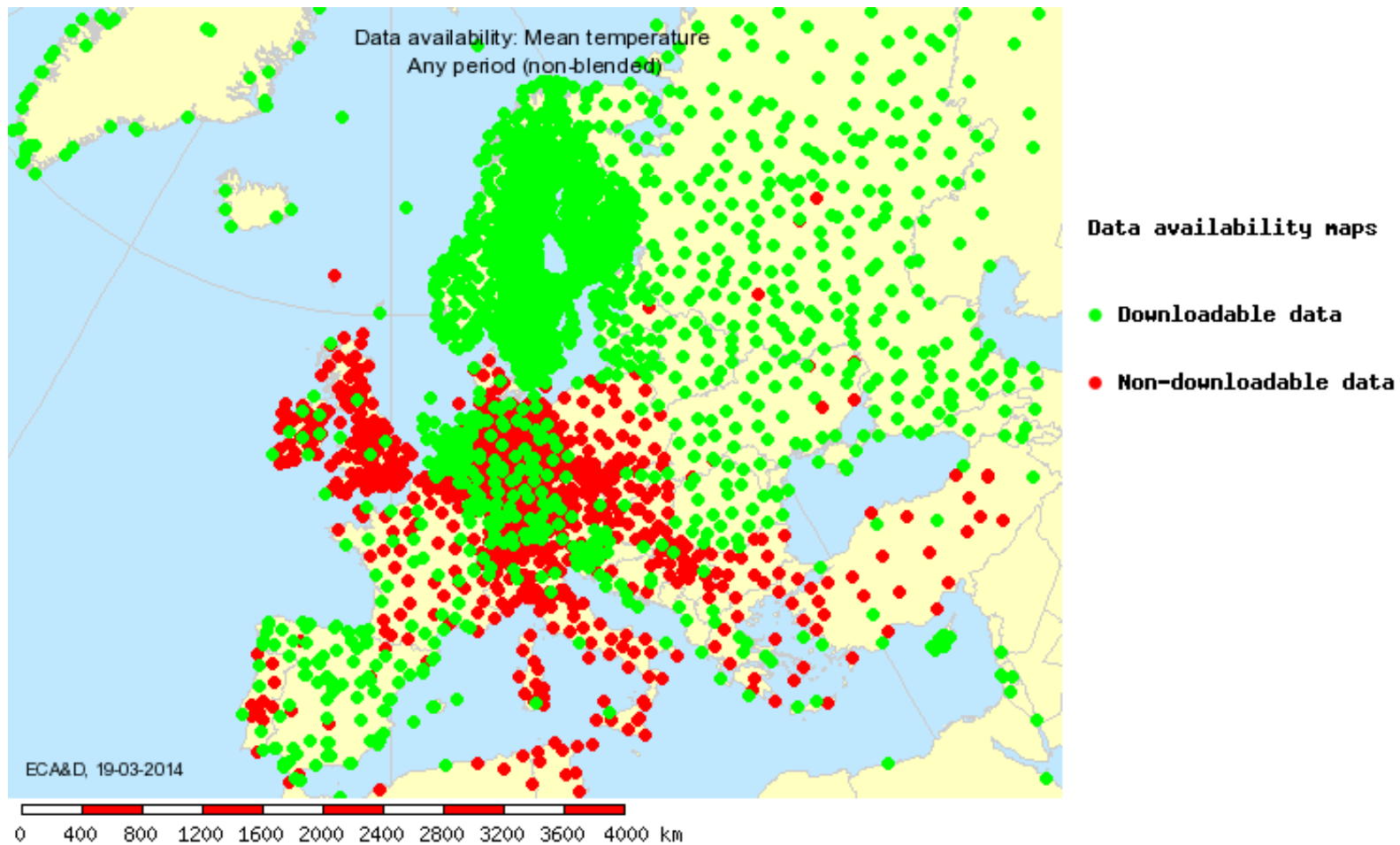
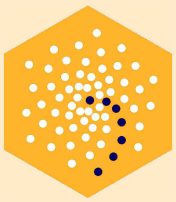


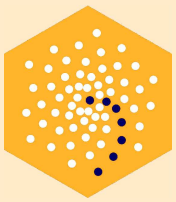
Extensions to the E-OBS dataset

Else van den Besselaar

Royal Netherlands Meteorological Institute (KNMI)

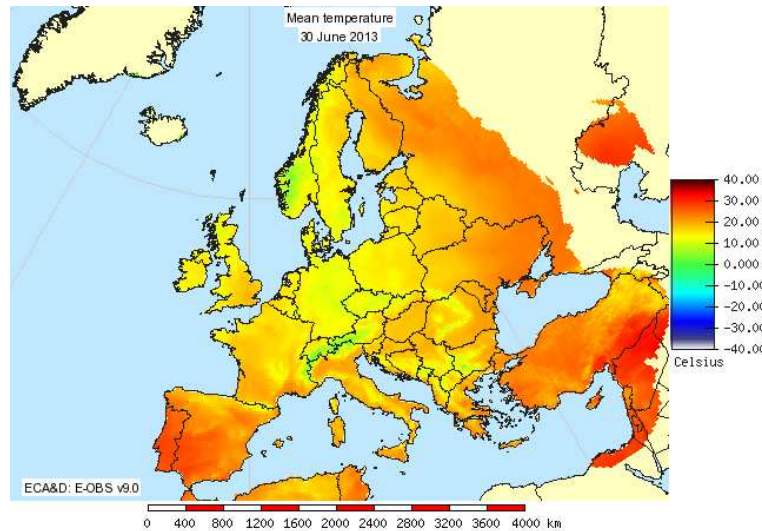


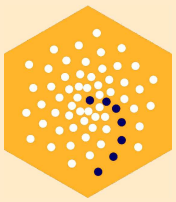
Station coverage for daily mean temperature



ECA&D: E-OBS

- Gridded version of the station data
- E-OBS v9.0 until 30 June 2013.
- E-OBS v10.0 (until 31 Dec 2013) almost ready
- Fully updated twice a year
- Monthly preliminary updates
- Available for RR, TN, TG, TX, PP





Daily updates

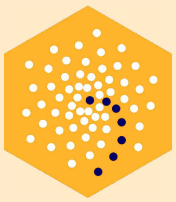
Daily updates of the E-OBS dataset

Program needs full month of data, calculating for running year:

- take E-OBS input data from previous month
- include data from GTS network from beginning of the month until yesterday
- use station climatology for remainder of the month

schematic representation:

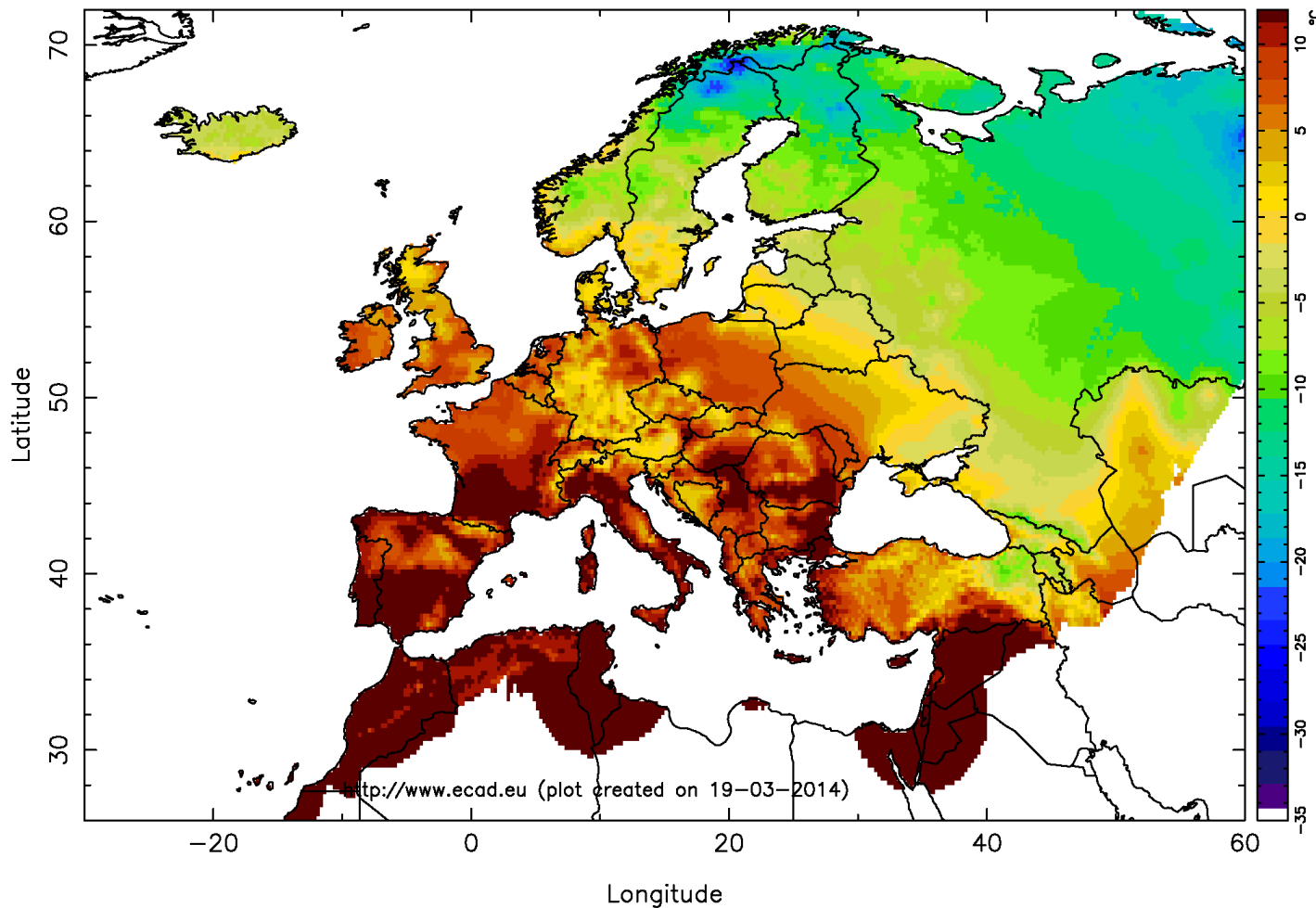


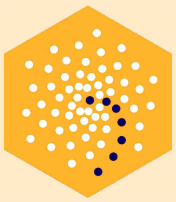


Daily updates: II

Daily mean temperature for 17 March 2014

E-OBS TG 17-03-2014





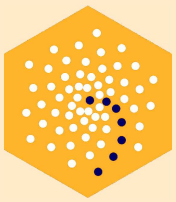
Daily updates: III

To do (at least):

- Improve scripts for combining different data to increase speed
- Check results with e.g. national daily maps
- Investigate influence of lower station density of GTS network compared to ECA&D network

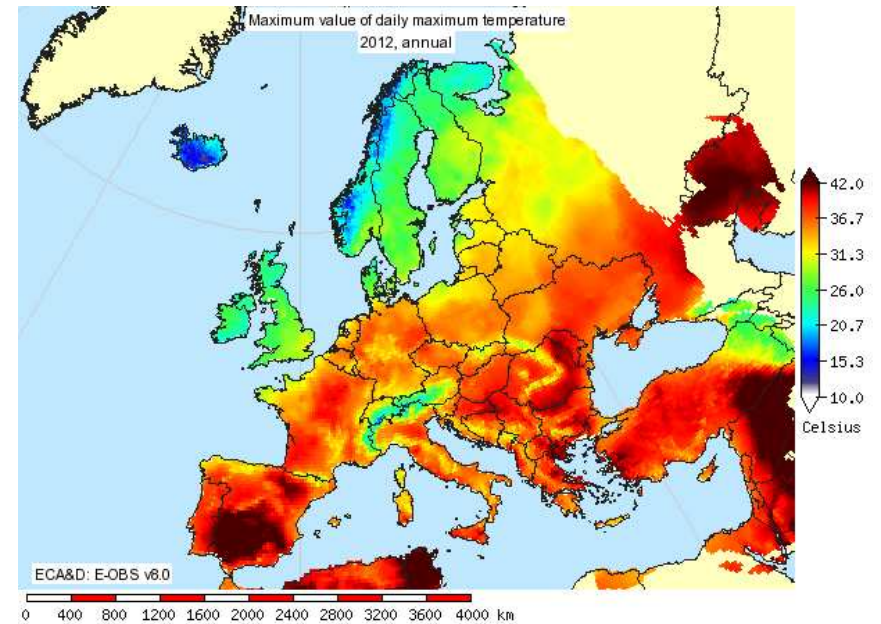
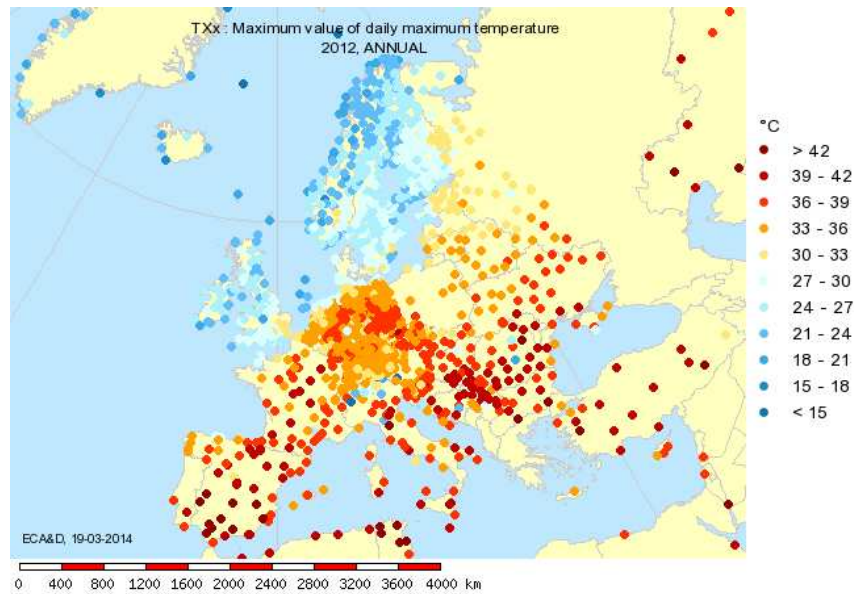
To be used in, e.g.:

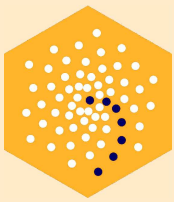
- UERRA & EUCLEIA EU projects
- CIBs on emerging extreme events
- General European climate services
- NWO Valorius project "Trend or coincidence"



Indices

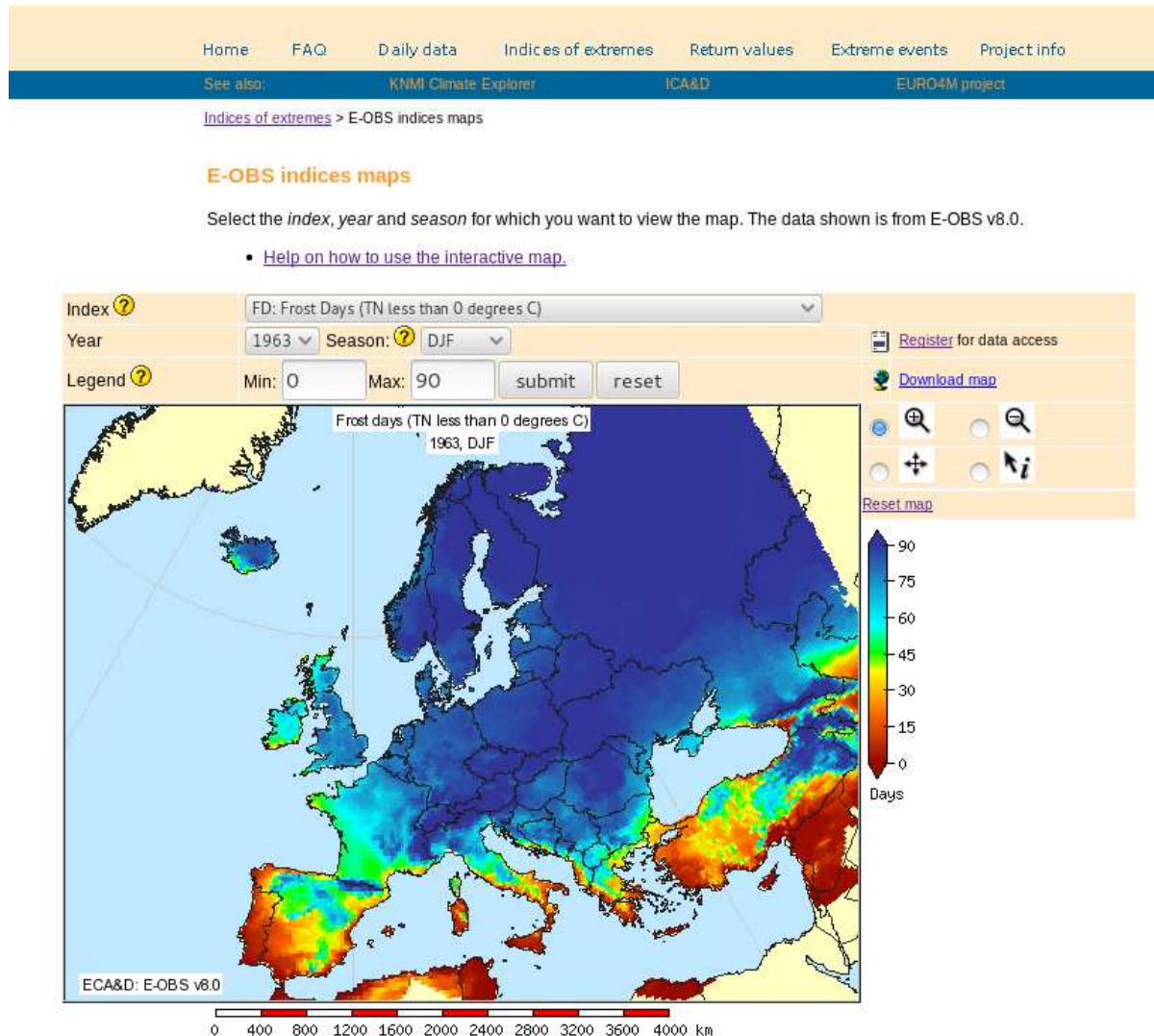
Maximum of daily maximum temperature for 2012, annual

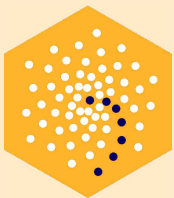




Indices: II

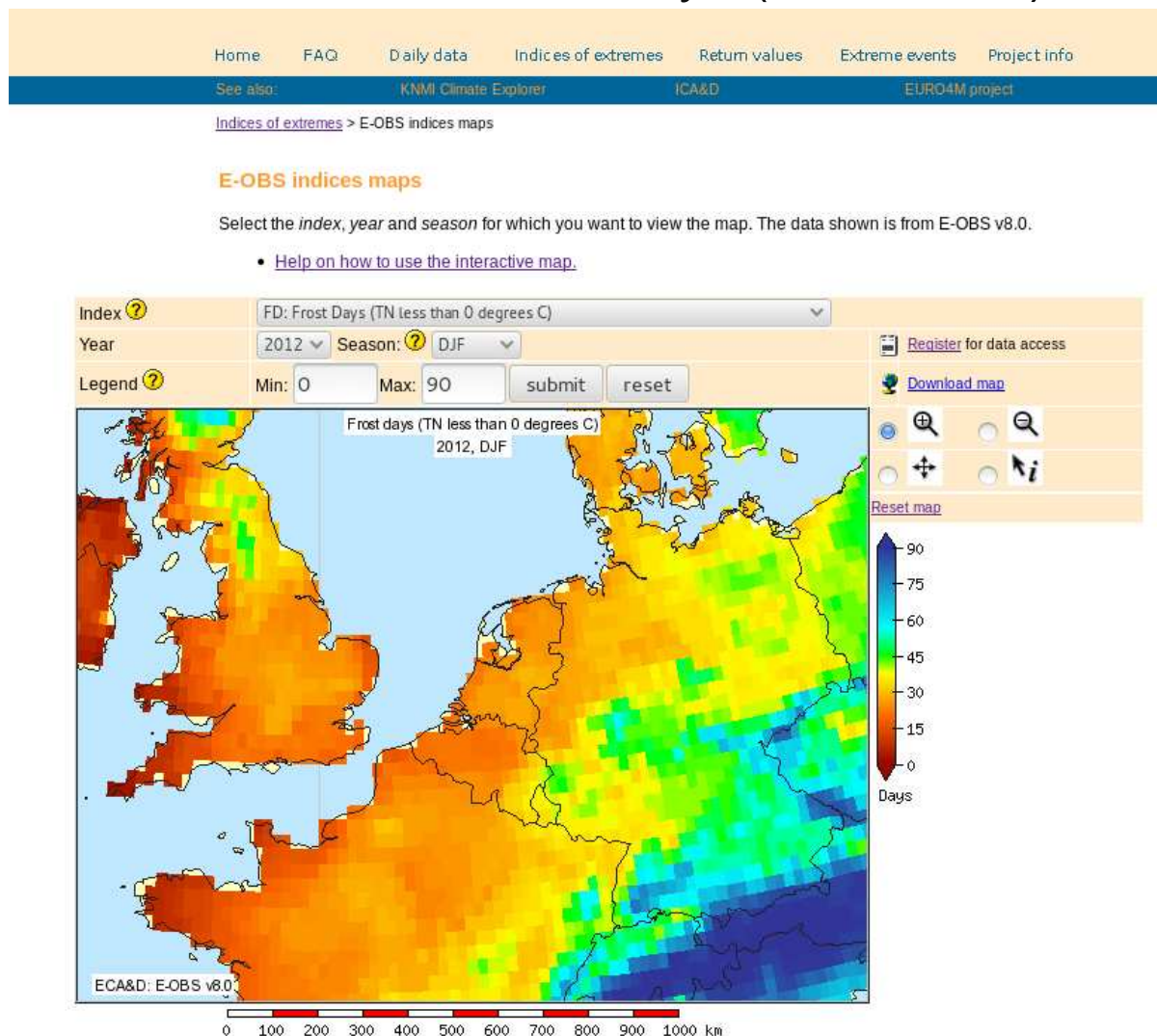
Winter 1963: frost days ($TN < 0^{\circ}C$)

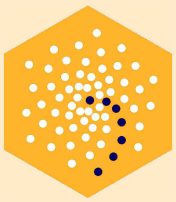




Indices: III

Winter 2012: frost days (zoomed-in)





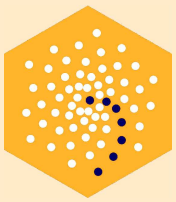
Indices: IV

To do (at least):

- Percentile-based indices
- Updates for new E-OBS version (currently v8.0)
- Compare with station data

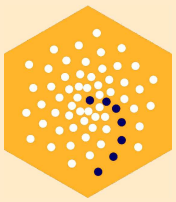
To be used in, e.g.:

- UERRA
- EUPORIAS



Other

- Improve uncertainties
- Investigate improvements of method, e.g. gridding of DTR, gridding method in mountainous regions
- Analyse influence station density changes



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