

A comparison of moderate and extreme ERA-5 daily precipitation with two observational data sets

Data: precipitation from ERA-5 reanalysis compared with:

- EOBS (1979-2018, Europe, station-based)
- CMORPH (2003-2016, globally, satellite-based)

Method: assessment of:

- Co-occurrence of events
- Intensity: Quantile comparison (see figure)
Whole distribution (Kullback Leibler test)

Take-home messages:

- Good agreement midlatitudes
- Reanalysis to be preferred to station gridded data where sparse input stations
- Careful in tropics for extreme precipitation

