

ERA5-Land: More than 7 decades of land surface consistency with timely updates



Climate Change

- Joaquín Muñoz Sabater -

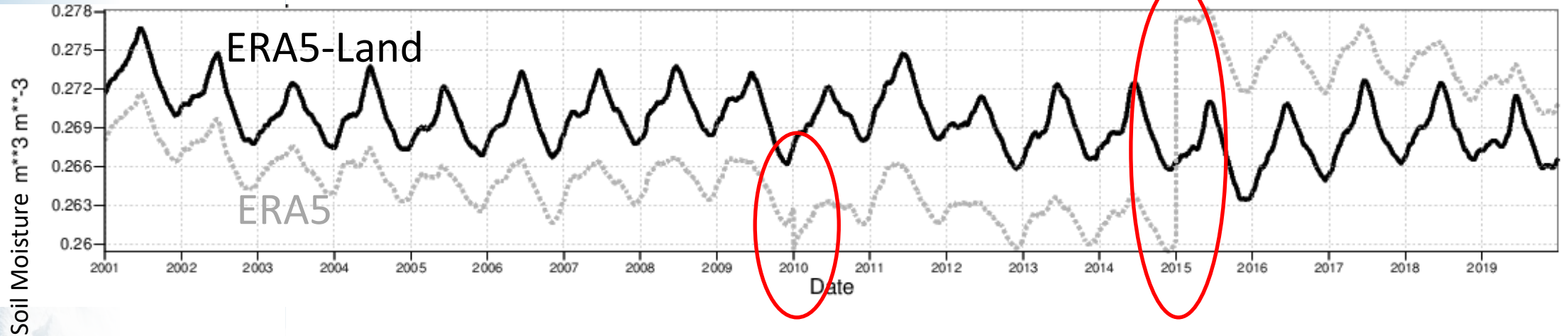
with contributions from many colleagues





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ERA5-Land: what can I do for you?



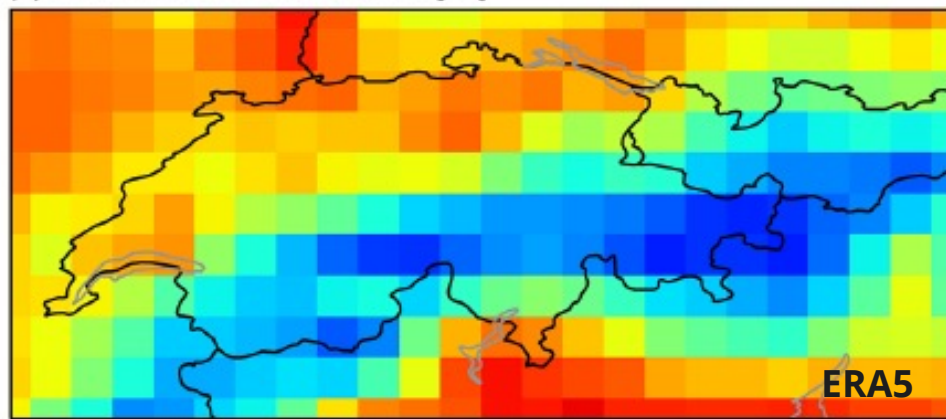
- Land surface only reanalysis – **consistent** long time series
- **Hourly** from **1950-present** (equivalent to ~650,000 global fields for a single variable)
- **5-days delay** with respect to real time (ERA5-Land-T)
- **Global scale**
- **9 km** spatial resolution
- First **operational** land-only European reanalysis (documentation, quality assurance, user support, etc.)



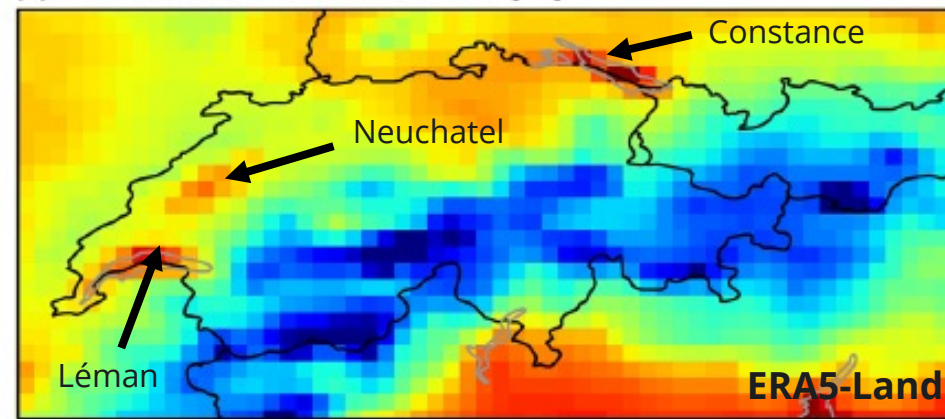
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Endless applications

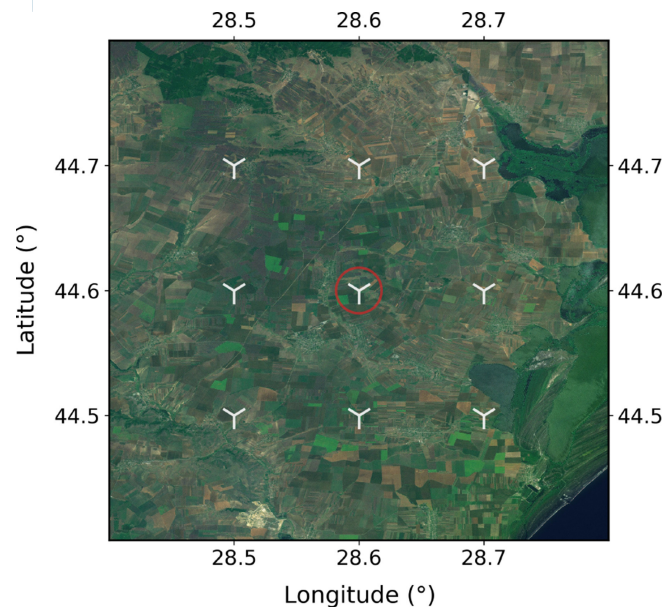
(c) ERA5 LST 2018-07-15 06UTC [°C]



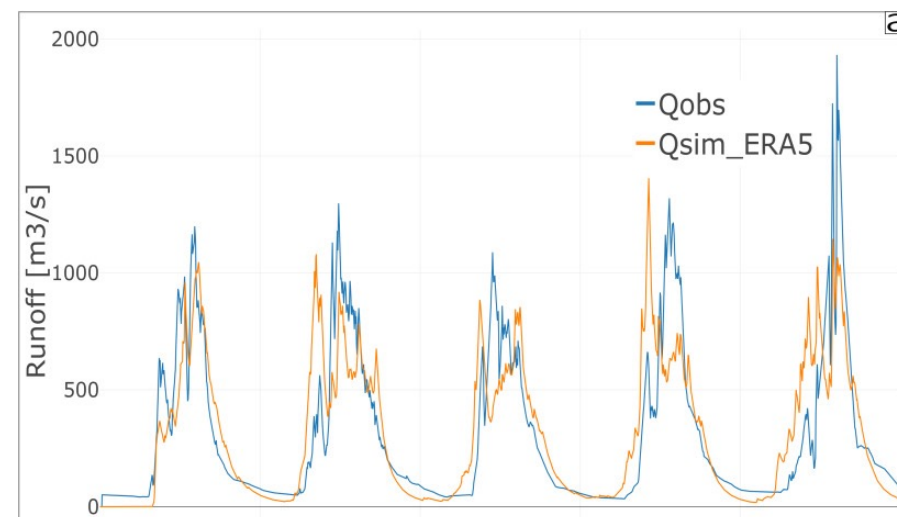
(d) ERA5-Land LST 2018-07-15 06UTC [°C]



from Muñoz-Sabater et al., 2021



from Marinšek and G. Bajt, 2020



from E. Nazeer et al., 2022

ERA5-Land paper; more than 600 citations in less than 2 years