

## Data Policy for ECA&D and E-OBS

### *1. Terms and conditions of use*

- a) Observational station data of the European Climate Assessment & Dataset (ECA&D) and the gridded observational dataset (E-OBS) are made available free of charge from <https://www.ecad.eu>.
- b) These data, which include many GCOS-defined Essential Climate Variables (ECVs) for the atmosphere near the surface, are strictly for use in non-commercial research and education projects only. Scientific results based on these data must be submitted for publication in the open literature without delay. If you are unsure about the terms “non-commercial”, “research”, and “education”, please contact the ECA&D Project Team at [eca@knmi.nl](mailto:eca@knmi.nl) for clarification.
- c) Part of the data in ECA&D is for stations which are labelled “non-downloadable”. This indicates that the daily data for these stations are not publicly available from <https://www.ecad.eu>. “Non-downloadable” daily data are used together with “downloadable” daily data to calculate derived value-added products, such as indices of extremes or daily maps of gridded data (E-OBS). The derived products are made publicly available irrespective of the “non-downloadable”/“downloadable” status of the daily data these products are based on.
- d) “Non-downloadable” daily data are also used for research projects conducted by ECA&D staff or jointly by ECA&D staff and other research groups. You can contact us for suggestions for joint research. The “non-downloadable” data may be available from the data provider directly, as well as additional data. Please direct your inquiries to obtain these data to the ECA&D Project Team ([eca@knmi.nl](mailto:eca@knmi.nl)).
- e) Although care has been taken in preparing and testing the data products, we cannot guarantee that the data are correct in all circumstances; neither do we accept any liability whatsoever for any error or omission in the data products, their availability, or for any loss or damage arising from their use.
- f) Users should help improve the quality of the data and its delivery by giving feedback where appropriate. Frequent updates are published and a version control system is in place for E-OBS.
- g) Participation in ECA&D is open to anyone maintaining daily data for stations in the region. Please contact us if you want to take part. ECA&D forms the backbone of the climate data node in the Regional Climate Centre (RCC-CD) in WMO Region VI (Europe and the Middle East).

### *2. Citation and acknowledgement*

- a) For the success of ECA&D and E-OBS we rely on the cooperation and responsiveness of the participating data holding institutions: National Meteorological and Hydrological Services

(NMHSs), observatories and universities. We would like to thank them for kindly agreeing to the release of some or all of their climate data.

b) Whenever you publish research or applications based in whole or in part on these data, you should include the following citation and acknowledgement:

c) For ECA&D:

“We acknowledge the data providers in the ECA&D project.

Klein Tank, A.M.G. and Coauthors, 2002. Daily dataset of 20th-century surface air temperature and precipitation series for the European Climate Assessment. *Int. J. of Climatol.*, 22, 1441-1453.

Data and metadata available at <https://www.ecad.eu>”

d) For E-OBS:

“We acknowledge the E-OBS dataset and the data providers in the ECA&D project

(<https://www.ecad.eu>).

Cornes, R., G. van der Schrier, E.J.M. van den Besselaar, and P.D. Jones. 2018: An Ensemble Version of the E-OBS Temperature and Precipitation Datasets, *J. Geophys. Res. Atmos.*, **123**. doi:10.1029/2017JD028200”

### 3. Rationale

a) In theory, WMO Resolution 40 on the free exchange of data produced by the NMHSs states that: “As a fundamental principle ..., WMO commits itself to broadening and enhancing the free and unrestricted international exchange of meteorological and related data and products”.

b) In practice, there are still large obstacles to data being accessible at the European scale. Even with the formal arrangements for international data exchange in place, there is still a lack of data in international repositories.

c) The station network for near-surface climate observations in Europe is managed by a large number of (predominantly) NMHSs, each of which has its own data archive and distribution policy. Data policy issues are pertinent for both the historical data and the modern data. Many NMHSs impose conditions and charge a fee for access. This arises from the need to sell the data in order to recoup the costs of making observations and preparing the data. In many countries, the NMHSs are made to cover part of their costs by their respective national governments.

d) A clear disconnect exists between NMHSs and international institutions such as the IPCC, SUBSTA, UNFCCC and related bodies such as GCOS and the GEO. UNFCCC advocates open access to data and the GEO has set principles for promoting the full and open access to existing databanks in accordance with set principles at no more than the cost of reproduction and distribution. However, these institutions do not enforce anything and leave open the possibility to charge for data by stating that national politics and legislation should be recognized.

e) The disconnect between NMHSs and international climate change research/policy is illustrated by the so-called Oslo Declaration which has been issued by the directors of the NMHSs in Europe in 2009. The declaration states that: “Recognizing the different funding

policies associated with different economic models for NMHSs and associated different official mandates, the directors of the NMHSs in Europe have reached consensus ... on progressive expansions of their set of essential data made available on a free and unrestricted basis". However, there is no mention of the international requirements for climate data and the declaration does not specify whether historical daily data (as in ECA&D) are part of the free set.

f) As a result, our data policy outlined above is a pragmatic compromise between providing full and open access on the one hand, and collecting the largest possible amount of data (and use these data in derived value-added products) on the other hand. We will build upon existing practice, but pursue our efforts for enlarging the quantity of data available within the "downloadable" category in order to guarantee traceability to the source (i.e. the daily observations that were made).

g) We accept the trade off between transparency and data quantity used for derived products. The reason is that the quality of derived products (such as the E-OBS grids) depends critically on the amount of input data. Restricting these products to only including "downloadable" station data that can be freely exchanged (less than 50% of the total) would be detrimental to the products.

h) Although not all source data of derived products can be passed onto the users, we do recognize the importance of retaining strong provenance tracking. The details of the "non-downloadable" data used in the derived products are reported and so are the contact points for obtaining these data.

24 August 2011, ECA&D Project Team

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16 September 2019  
7 June 2022