

# Climate Data Homogenization

## Usage within NMHSs & other organizations

**From:** WMO Expert Team on Data Development and Stewardship  
ET-DDS

**Date:** November 2025

# Information from Homogenized data producers

Between March and August 2025, 17 organizations responded to the questionnaire:

Australian Bureau of Meteorology • Environment and Climate Change Canada • Czech Hydrometeorological Institute • DWD • Météo-France • Hellenic National Meteorological Service • HungaroMet • Indonesian Agency for Meteorology Climatology and Geophysics • Latvian Environment • Slovak Hydrometeorological Institute • AEMET, Universidad de Zaragoza • Meteorological Service of Catalonia • Swedish Meteorological and Hydrological Institute • UK Met Office • Ukrainian Hydrometeorological Institute • NOAA.

These organizations reported how their homogenized datasets are used, grouped into four main categories:

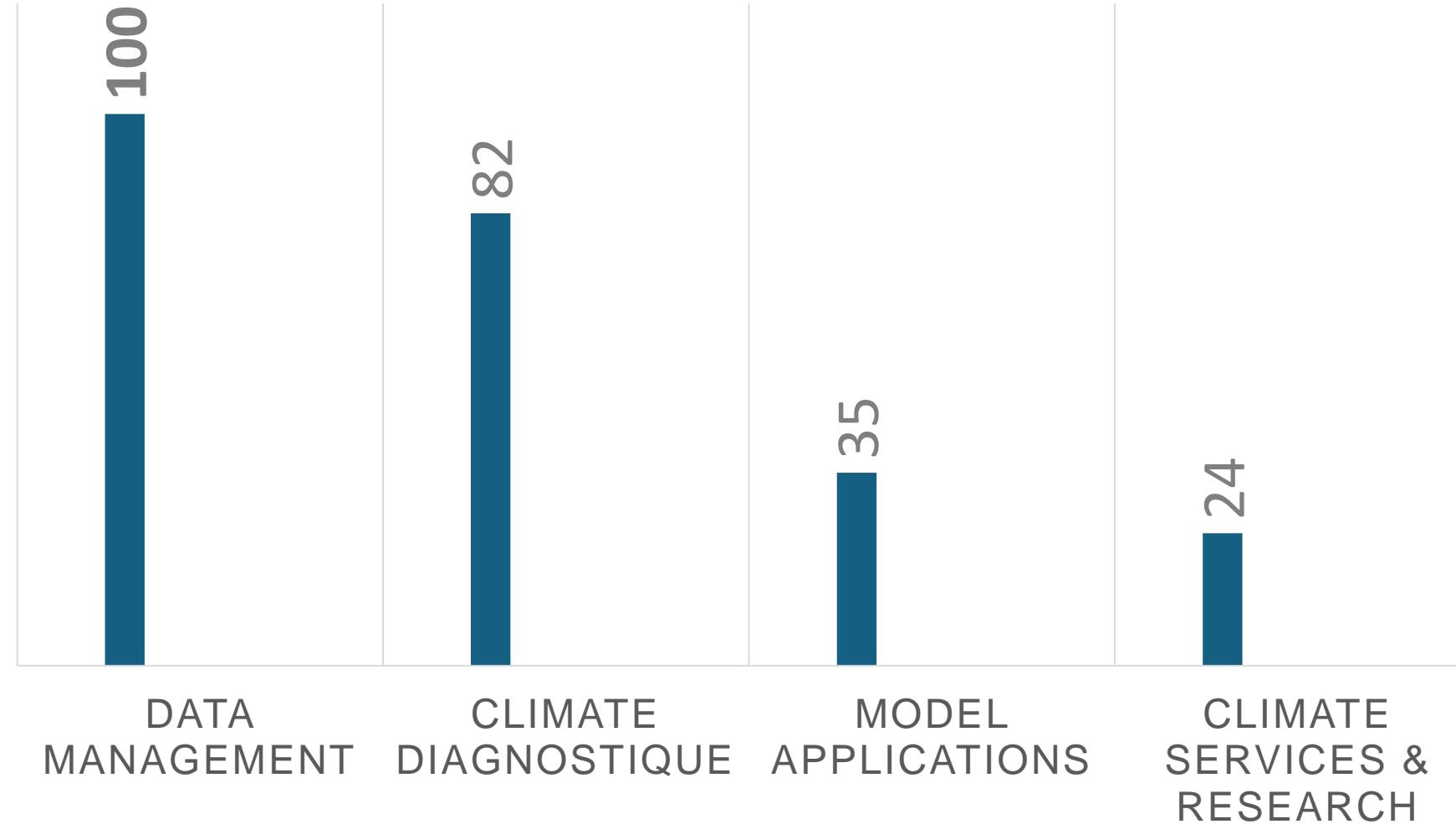
<b>Data Management</b>	Homogenized dataset catalogues, data gap filling, data rescue
<b>Climate Diagnostique</b>	Reports, trend analysis, indices, and assessments on historical and current data
<b>Model Applications</b>	Verification and calibration (climate models, reanalysis, seasonal forecasts)
<b>Climate Services &amp; Research</b>	Support to sectors such as health, energy, and agriculture; scientific analyses and studies

# Questionnaire results

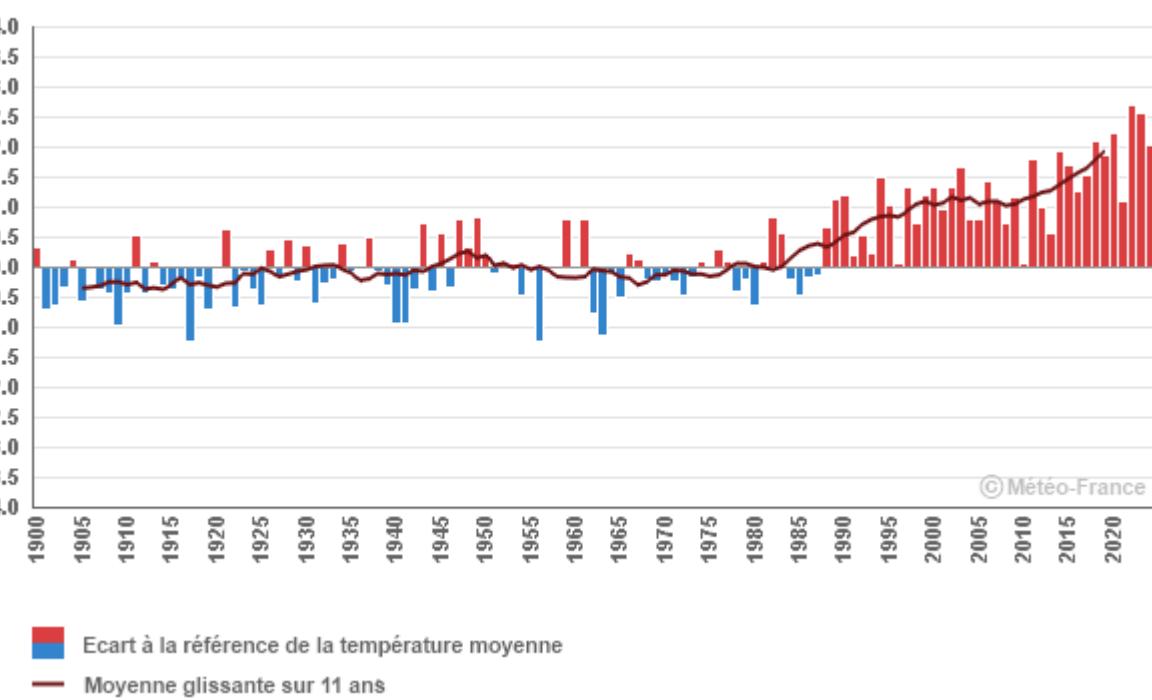
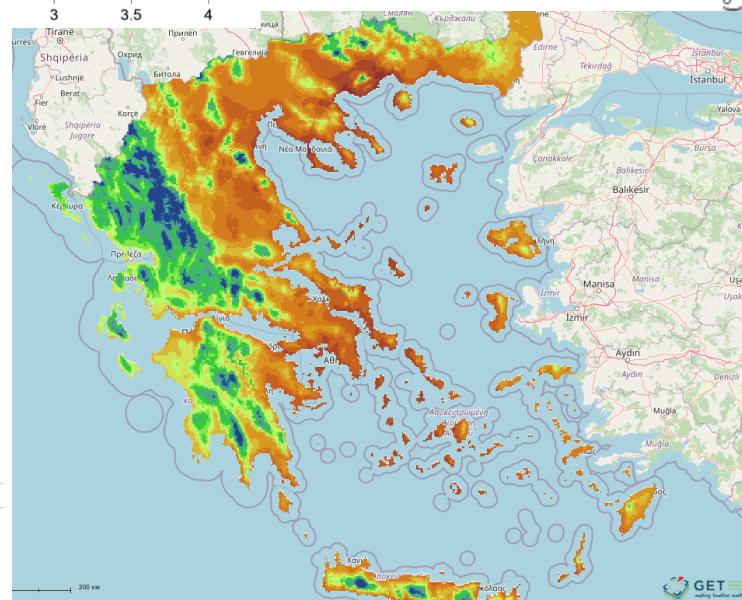
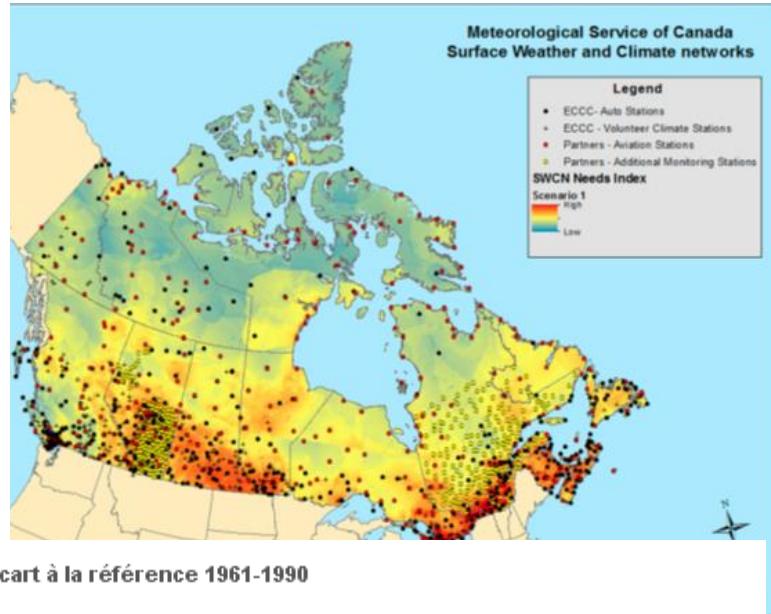
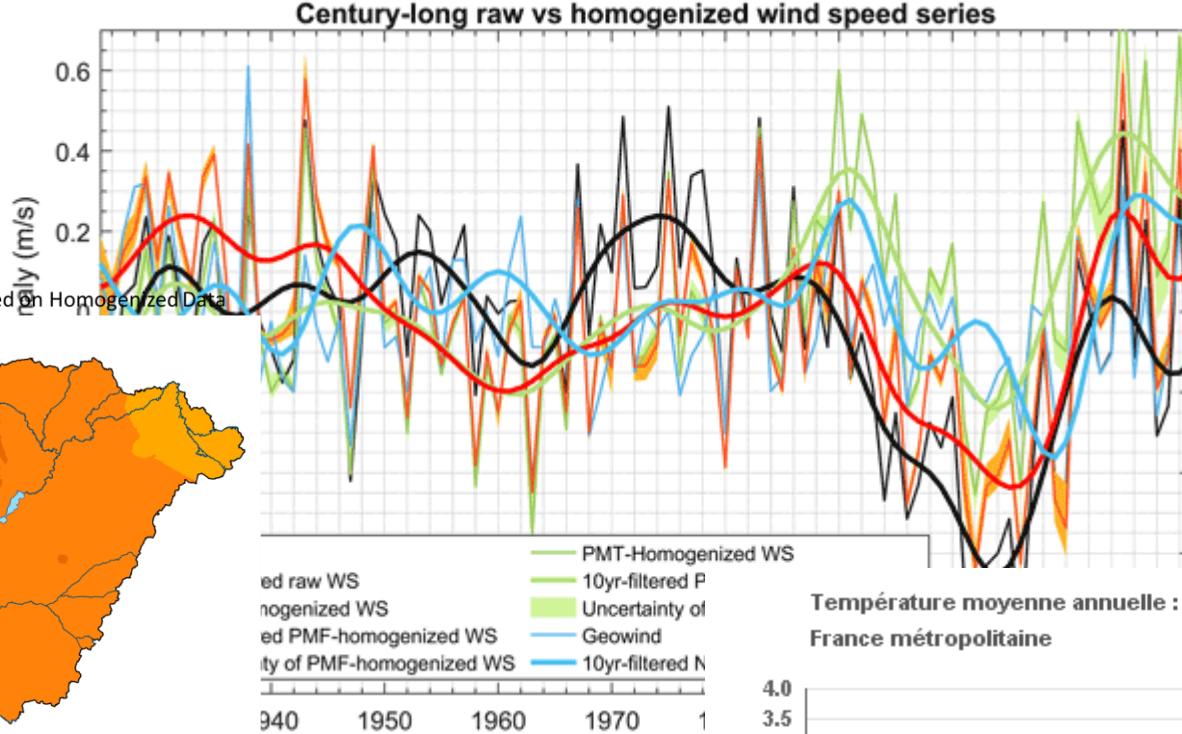
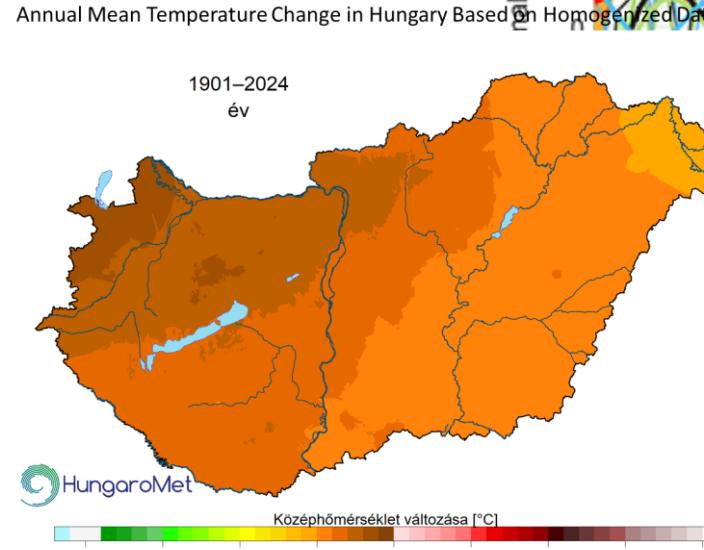
The answers to the questionnaire are available at this address:  
[https://github.com/ET-DRC/Home/blob/main/consultation/homogenization/Products\\_Homogenization\\_V7.xlsx](https://github.com/ET-DRC/Home/blob/main/consultation/homogenization/Products_Homogenization_V7.xlsx)

👉 Most organizations use homogenized data mainly for monitoring climate trends and producing reports.

## MAIN USES OF HOMOGENIZED DATA



# Samples



# Key Takeaways from the Survey

- Homogenized data are **widely produced** and used primarily for **climate diagnostics and reporting**
  - There is **growing interest** in using homogenized datasets for **model evaluation and sectoral climate services**
  - Some organizations still face **resource and coordination challenges** for sustained production and updates
  - Greater **collaboration and sharing of methodologies** could enhance data quality and usability globally
- Homogenization is not only about data correction — it's about enabling reliable climate information for decision-making and adaptation.