Consultation on Homogenization

How to implement a homogenization process in a NMHS
(Based on WMO-No. 1245 and community expertise)

WMO/SERCOM/SC-CS/ET-DDS

Date: *Day/Month/Year*

WORLD METEOROLOGICAL ORGANIZATION

1950-2025 SCIENCE for ACTION

Step 1: Prerequisites

- Efficient governance of observing network & data flow
- Compliance with WMO standards (WMO-No. 8)
- Respect of GCOS Climate Monitoring Principles
- Knowledge of datasets: metadata, QC, data rescue, Stewardship maturity matrix

Step 2: Define Vision & Objectives

- Aligned with national, regional, and global priorities
- Objectives examples:

    - Contribute to climate change research
    - Provide reliable datasets to researchers
    - Develop products and services
    - Support user sectors (energy, health, agriculture, …)

Step 3: Assess Resources

- Human: staff, expertise, training
- Technical: hardware, software, systems
- Financial: national funding, regional/global support

Step 4: Build a Pragmatic Plan

- Define tasks and responsibilities (who, what, teams)
- Identify required tools (hardware/software)
- Ensure sustainability: secure storage & archiving, update frequency, regional/global data exchange

Key Implementation Tasks

- Homogenize monthly, daily, subdaily, etc.
- Continuously expand dataset length (e.g. data rescue)
- Update homogenized data regularly
- Make available internally, nationally, regionally and globally

Key Message

Homogenization is not a one-off project, It is an ongoing process requiring:

- Governance
- Clear vision
- Resources
- Sustainability planning

Examples on needed resources

NMHS	Monthly stations	Daily stations	Man*years
Météo-France	?	?	?
DWD			
Hungary			
…			