WEATHER CLIMATE WATER TEMPS CLIMAT EAU

Underpinning Climate Services



WMO OMM

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The provision of climate services is among the key priorities of WMO and partners.

Building capacities for efficient climate service generation requires basic capabilities in collecting and processing climate related data and information.



Examples of current WMO/CCI data and monitoring activities:

Data rescue to extend climate records

- New Guidelines on Best Practices for Climate Data Rescue (WMO-No. 1182, 2016)
- International Data Rescue portal (I-DARE; <u>www.idare-portal.int</u>)
- WMO assistance on data rescue implementation in Burkina Faso, Mali, Niger, Guinée, Ghana, Senegal, Cote d'Ivoire, Cameroun, Congo, Botswana, Mozambique, Uzbekistan



Examples of current WMO/CCI data and monitoring activities:

CDMS to manage climate data

- WMO CDMS Specifications (WMO-No. 1131, 2014)
- CDMS User stories (work in progress)
- Vision for an Open Source reference CDMS (Open CDMS)
- WMO assistance on CDMS implementation and operation: Bhutan, Guinée, Mali, Niger, Mozambique, Belize, Curacao, Madagascar, Bangladesh, Pacific Islands, Kazakhstan



Examples of current WMO/CCI data and monitoring activities: Generation of climate data sets

- New Guidelines for the Submission of the World Weather Records 2011+ (WMO-No. 1186, 2017 edition)
- New WMO Guidelines on the Calculation of Climate Normals (work in progress, to be issued mid 2017)
- New WMO Guidelines on Climate Data Quality Control (work in progress, to be issued by the end of 2017)
- New WMO Guidelines on Homogenisation (including tools)
- WMO Paper on Challenges in Transition Period from Conventional to Automatic Networks (work in progress, to be issued in 2017)
- Capacity building workshop for Indian Ocean rim Countries and islands (QC and homogenisation) (Nov 2015, Arusha, Tanzania)



Examples of current WMO/CCI data and monitoring activities:

Climate observations

- Best practices for the implementation of volunteer observing networks
- WMO Recognition of long-term observing stations



Examples of current WMO/CCI data and monitoring activities :

Climate monitoring

- New WMO Guidelines on Definition and Monitoring of Extreme Weather and Climate Events (work in progress; to be issued in 2017)
- Implementation of National Climate Monitoring Products (Guidelines and tools; to be issued in 2017)
- Use of remote sensing data for climate monitoring (satellite, weather radar and lightning data; work in progress)



Examples of current WMO/CCI data and monitoring activities :

<u>Climate Services Information System (CSIS) and High Quality Global</u> <u>Data Management Framework for Climate ; seamless GDPFS</u>

 Work is under progress to define and implement a system for climate information management (discoverability, accessibility, usability of climate data and products across global, regional and national levels) to feed a seamless Global Data Processing and Forecasting System

WMCs	GPCs	CMIP	RCCs	Monitoring centres	
RCOFs			CORDEX		
WMO cli	mate state	ement	ICA&D	GSCU	Data centres



The provision of climate services is among the key priorities of WMO and partners.

Homogenised and spatially interpolated data sets are key prerequisites for many climate services.



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