

# Climate Services for Adaptation

## Earth Information Day 2020 (30 November 2020)

Recent advances in Earth observation technology  
and data processing to support decision making



**WMO OMM**

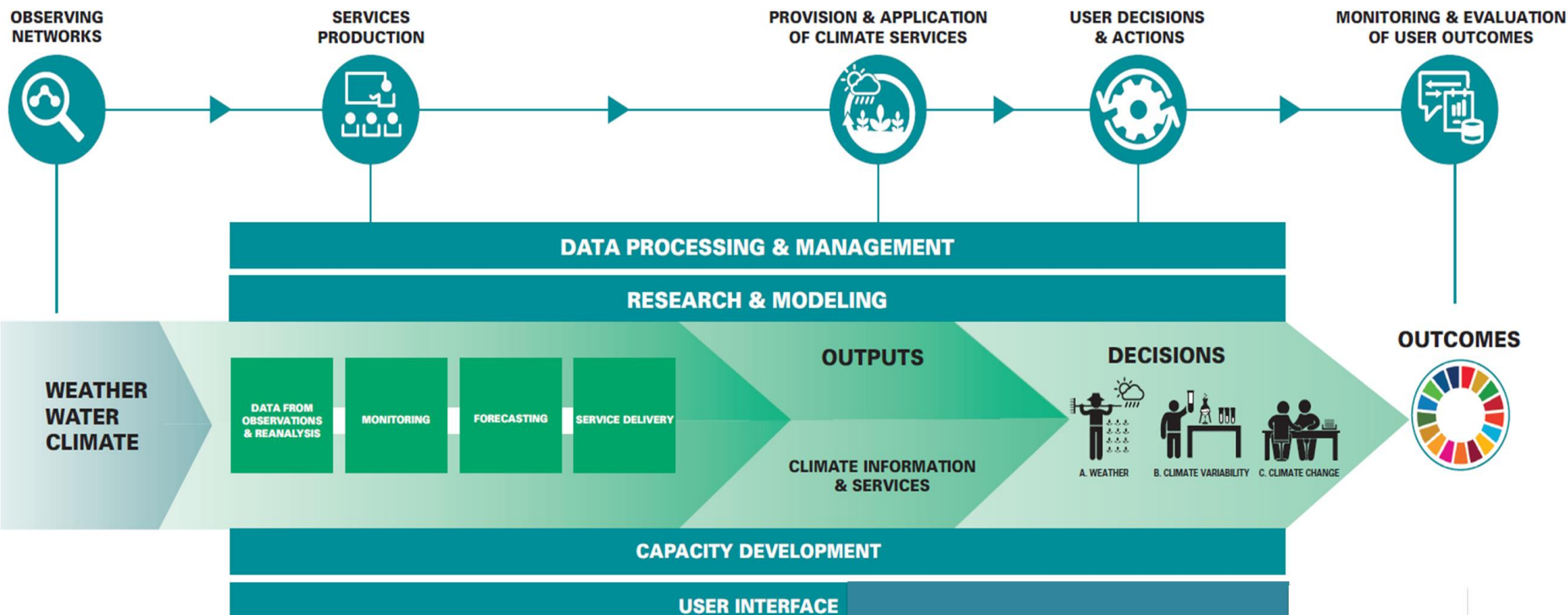
World Meteorological Organization  
Organisation météorologique mondiale

**Mariane Diop Kane**  
Programme Manager  
Regional Office for Africa

# Outline

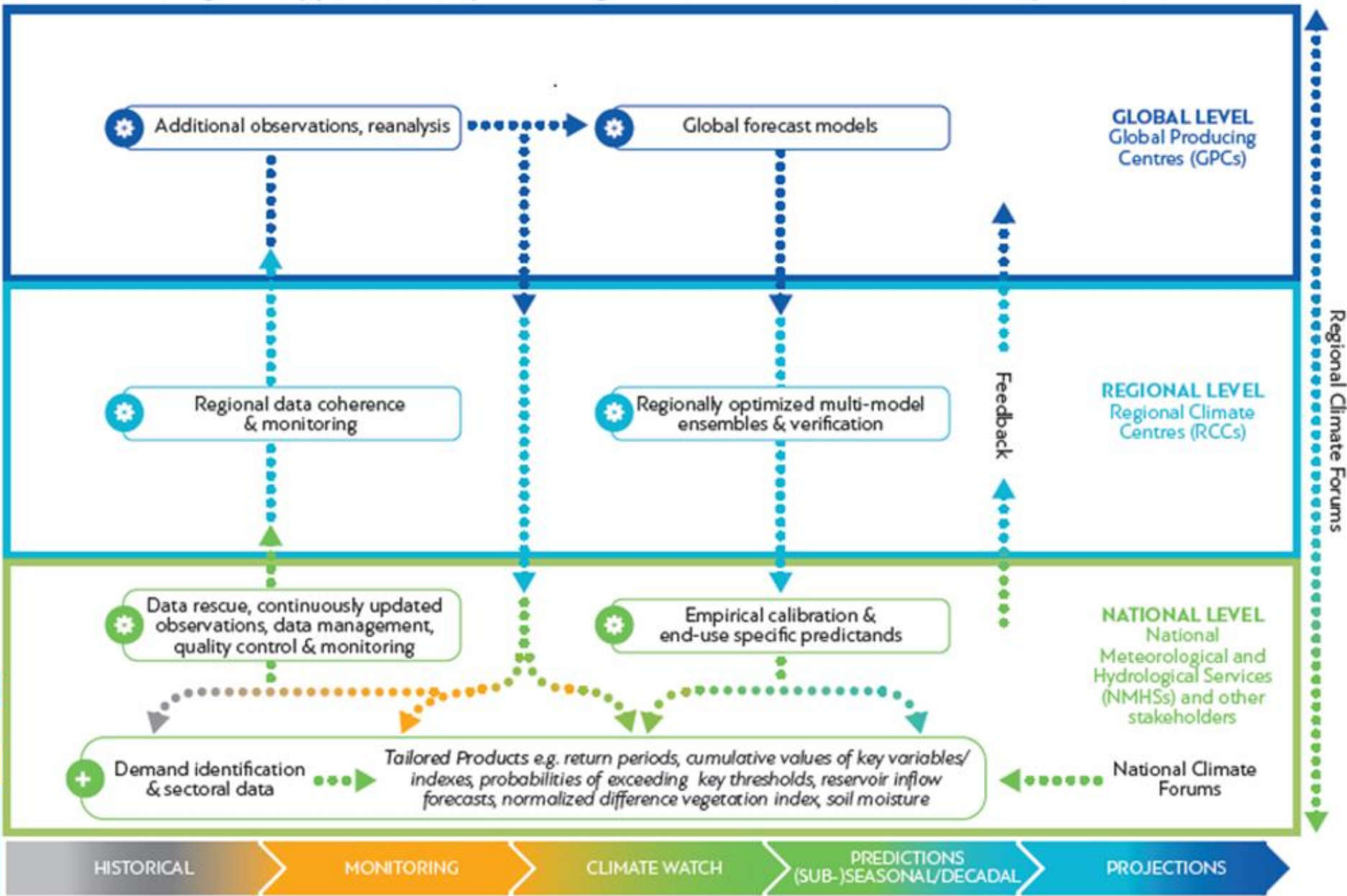
- How climate services for adaptation are generated through the Global Framework for Climate Services
- The status of elements of the climate services value chain globally
- State of climate services in Africa

# Climate Services Value Chain

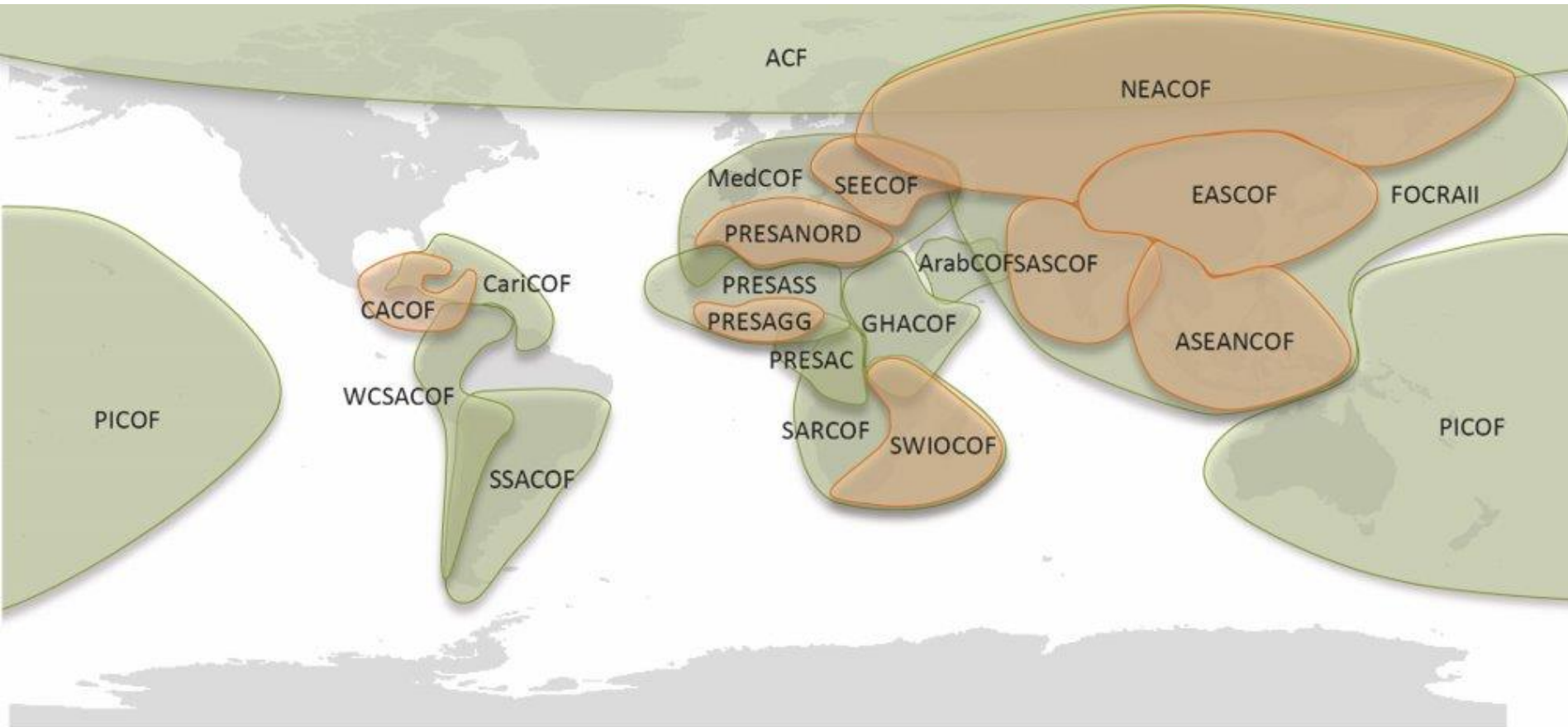


- Operational hydro-meteorological systems
  - Decision-support outputs
    - Climate-informed decisions
      - Socio-economic benefits

# A Regional Approach to Implementing the Climate Services Information System (CSIS-R)

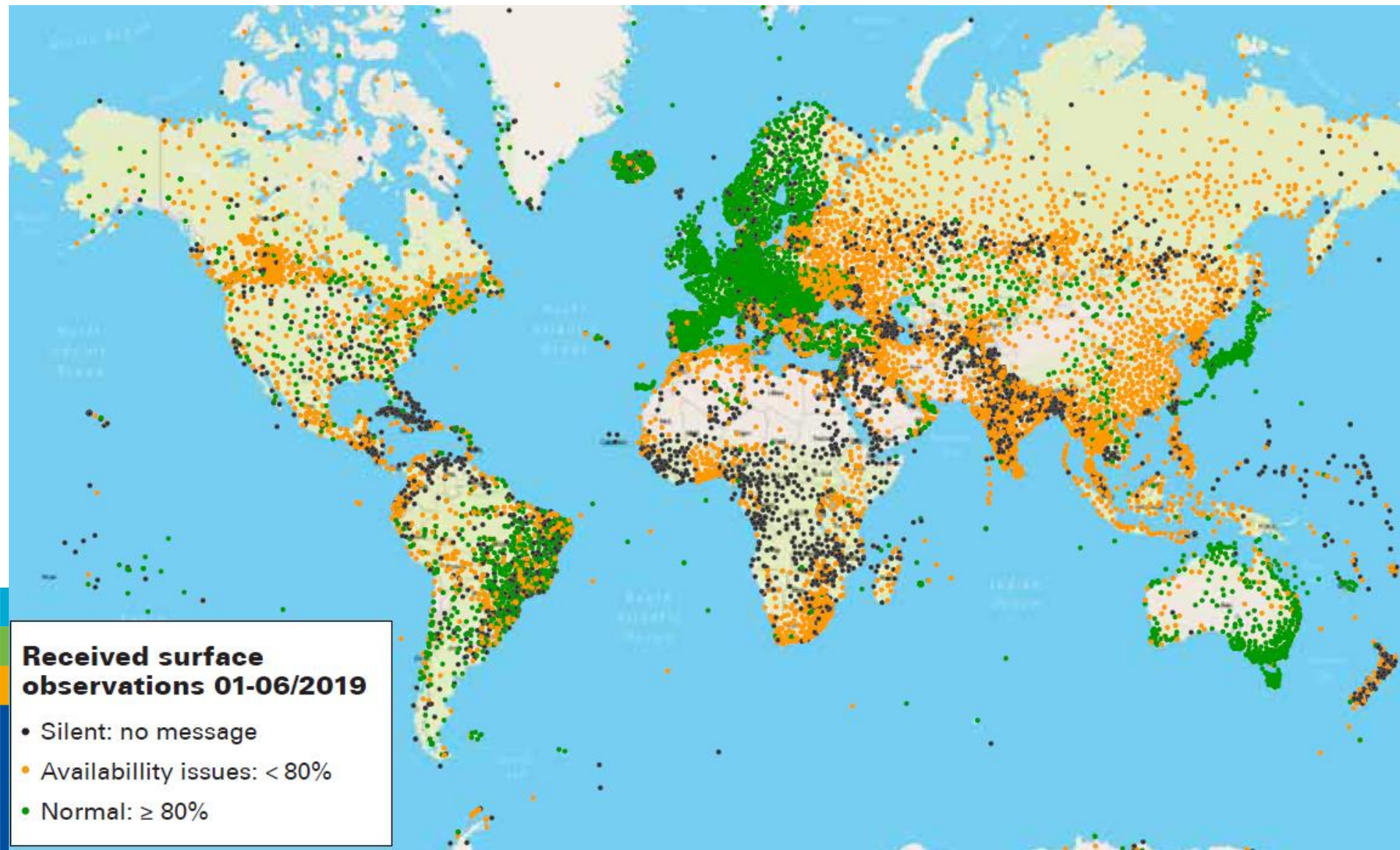


# Regional Climate Outlook Forums

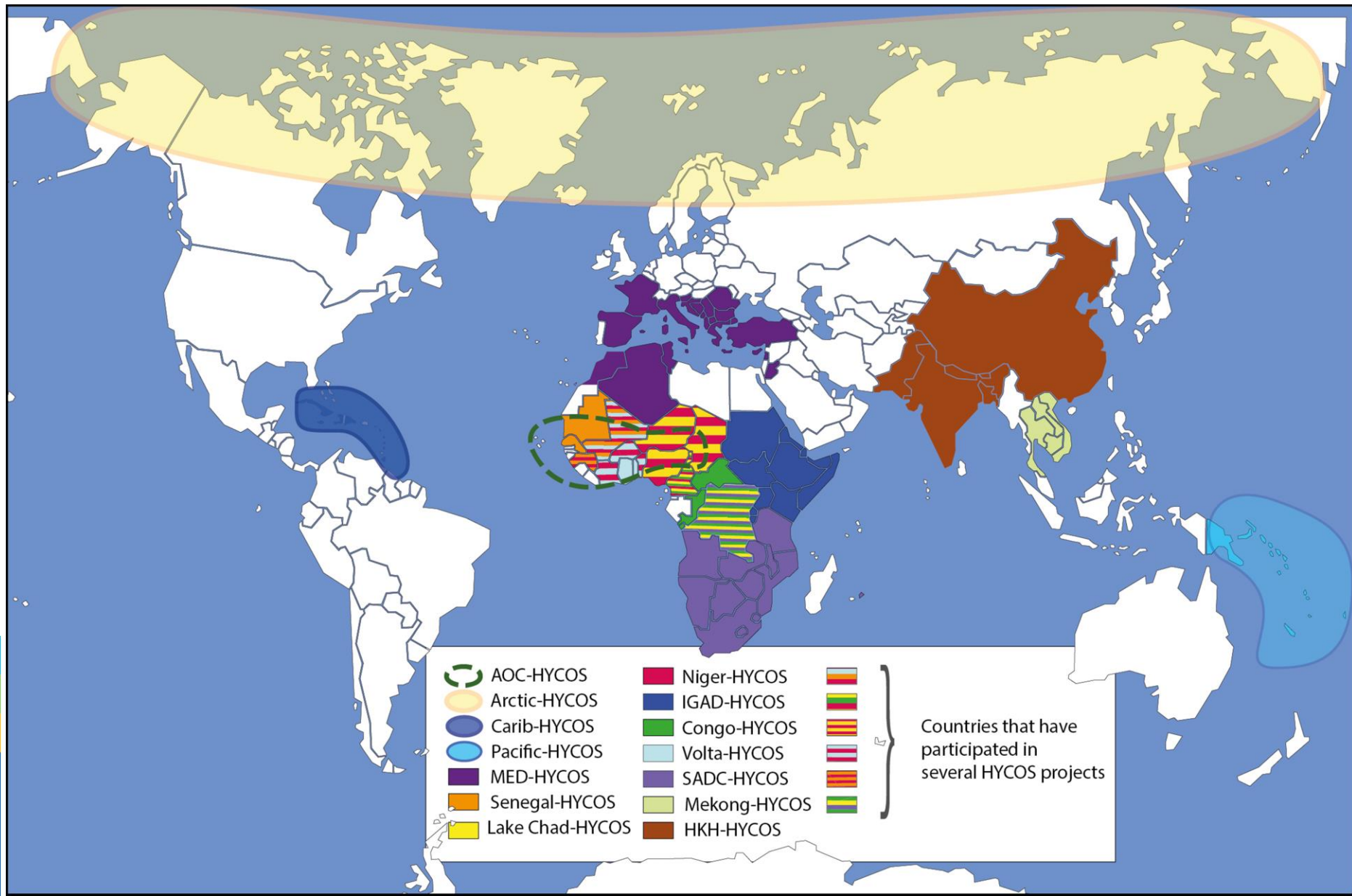




# Global Surface Station Network



# World Hydrological Cycle Observing System





# Data Rescue

## Data & Projects



## Copernicus Climate Change Data Rescue Service

In coordination with I-DARE, the Copernicus Climate Change Data Rescue Service is being developed to provide an ongoing service to facilitate land, marine and upper air data rescue by providing an upload facility to collect and display station metadata to help locate data in need of rescue.

## Search this site

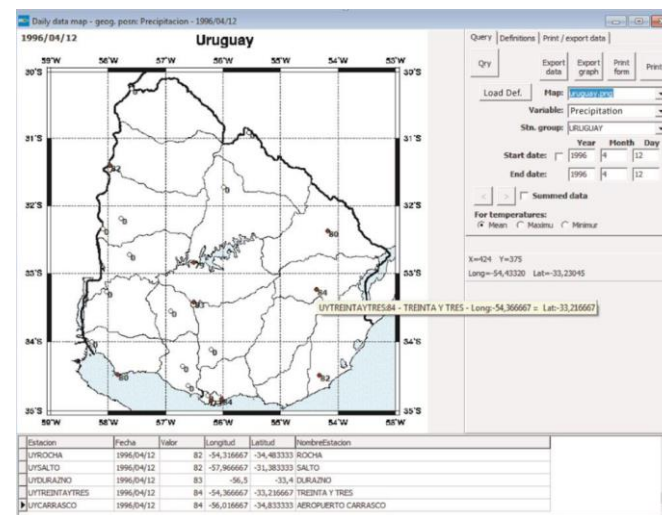
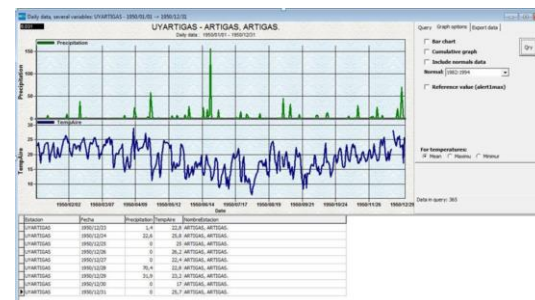




# Data Management

## Meteorological, Climatological and Hydrological Database Management System (MCH)

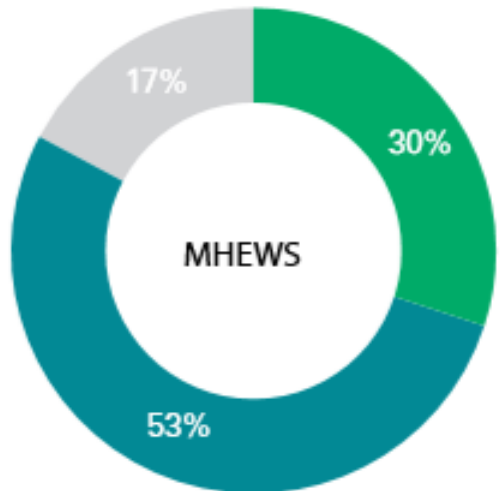
- Together with Climate Data
- Including data rescue
- Evolution towards Open CDMS



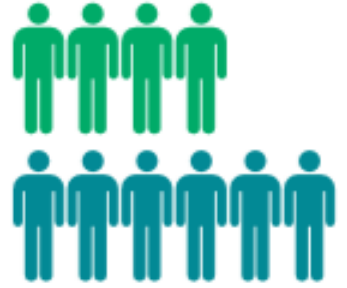
✓ Early Warning:

# The Status: AFRICA

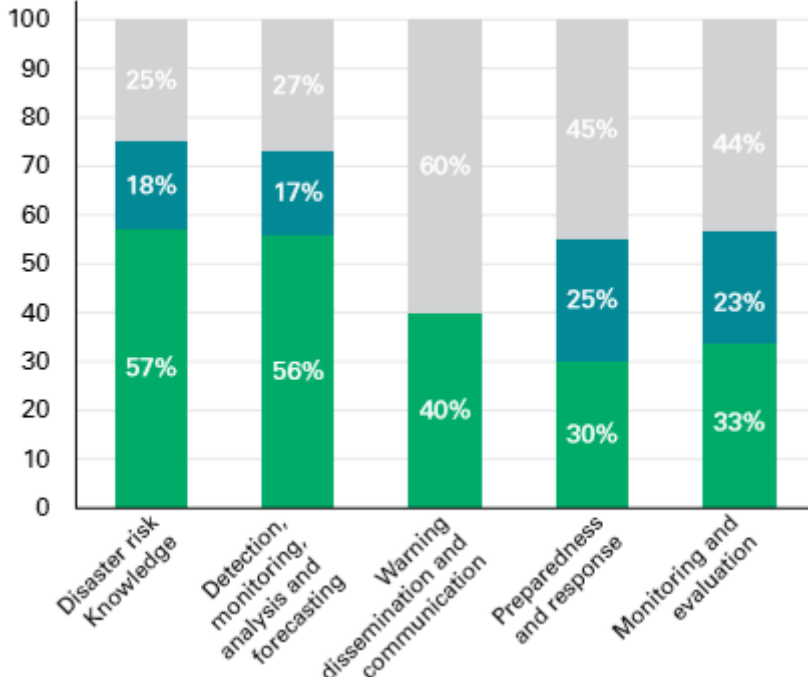
- The rate of MHEWS implementation overall is lower than in other regions
- Preparedness, and monitoring of benefits are particularly weak



44 000 in 100 000 people are covered by early warnings

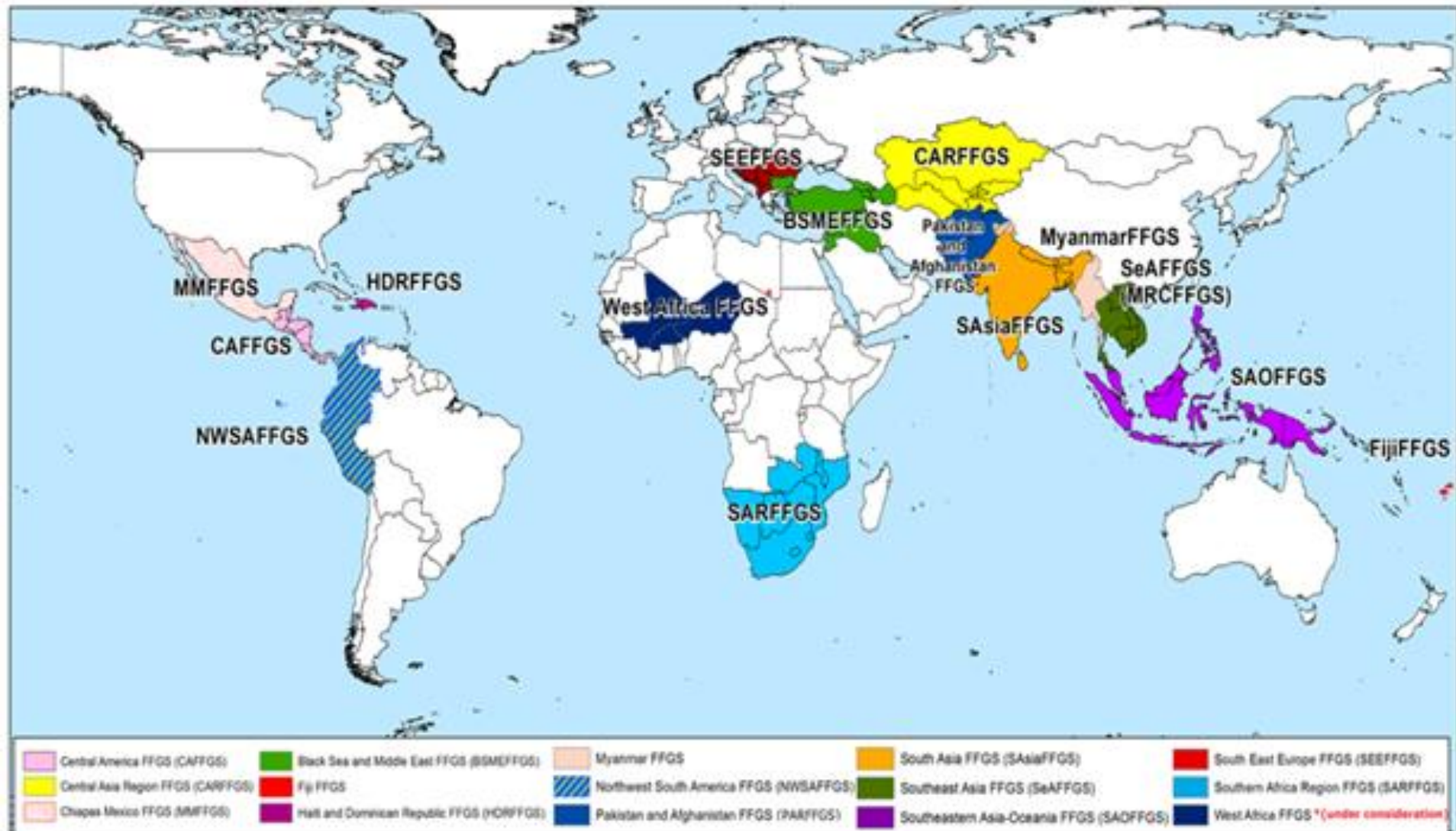


Yes No NA



Source: 2020 State of Climate Services report

# Flash Flood Guidance System





# Climate Science Basis for Climate Action



temperature (annual mean)



precipitation (annual mean)










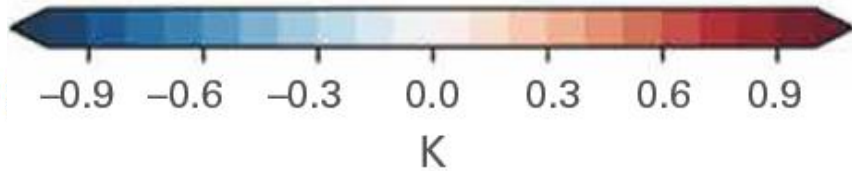
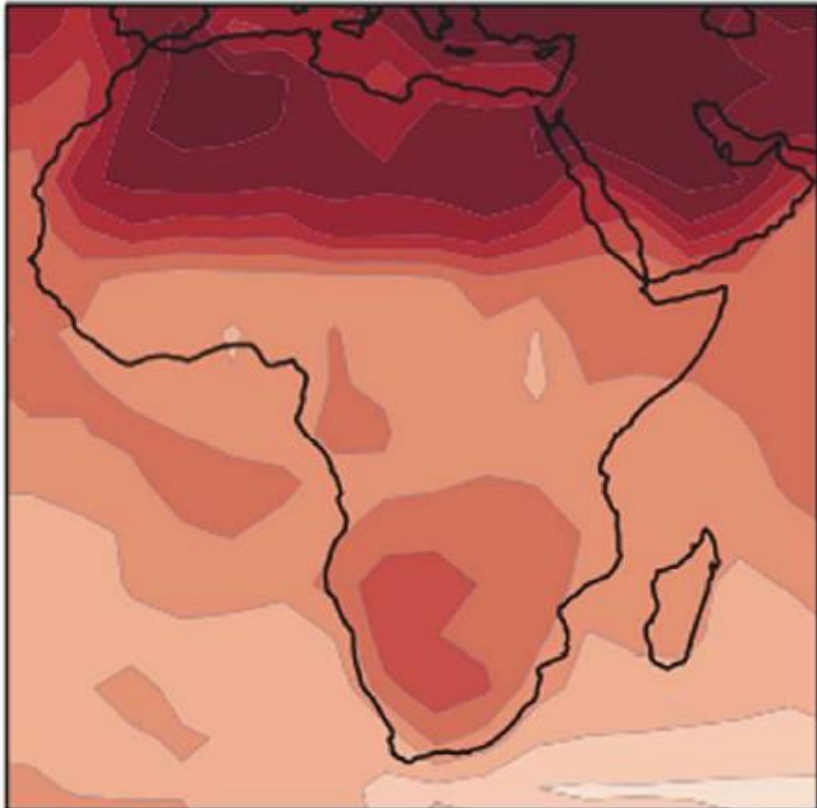
CHANGE	INDICATOR TYPE	INDICATOR	ENSEMBLE AGREEMENT
Small	Temperature	Temperature	MANY models agree on INCREASE 
Small	Temperature	Max temperature	MANY models agree on INCREASE 
Small	Temperature	Min temperature	MANY models agree on INCREASE 
Small	Temperature	Frost days	MANY models agree NO CHANGE 
Small	Temperature	Heating degree	MANY models agree NO CHANGE 
Small	Precipitation	Number of dry spells	MANY models agree on DECREASE 
Large	Temperature	Tropical nights	MANY models agree on INCREASE 
Large	Water discharge	Min water discharge	MANY models agree on INCREASE 
Small	Precipitation	Longest dry spell	SOME models agree on INCREASE 

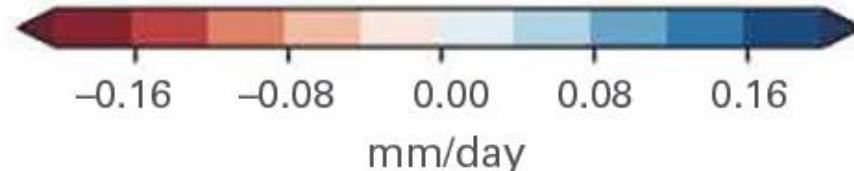
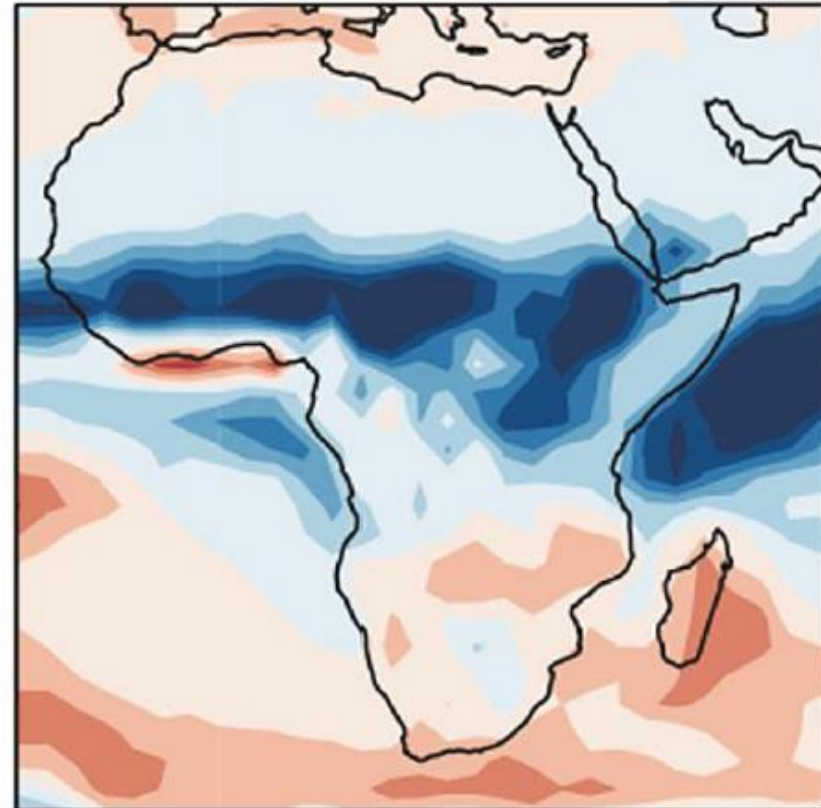
Figure 13: Main climate indicators from climate projections for Praia over the period 2041-2070 for the RCP 4.5 emissions scenario. The top shows the summary for (six) selected indicators, whereas the bottom part lists the main projected changes, ordered by those with the more robust signals (see Ensemble agreement column).

# State of the climate in Africa

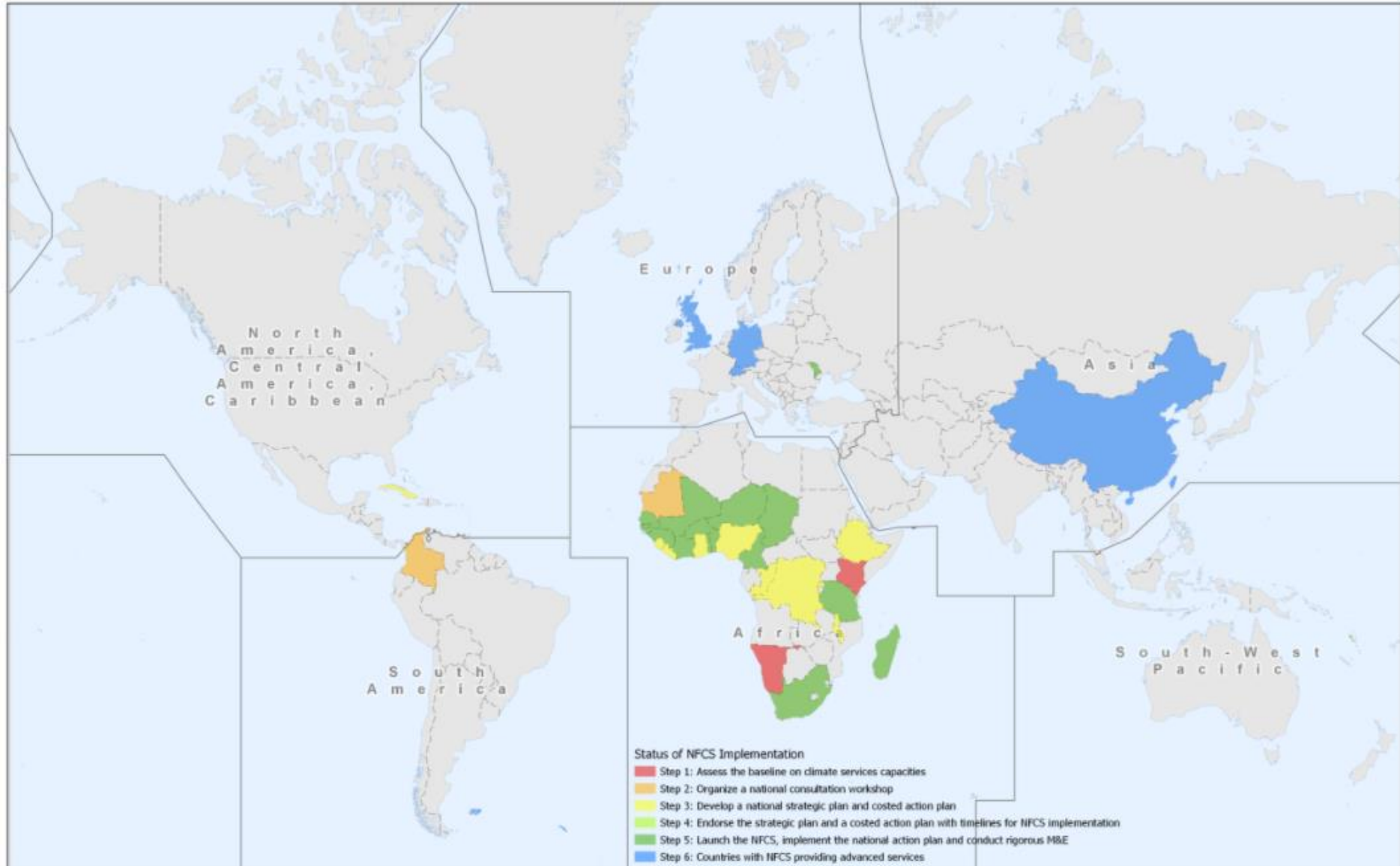
Surface temperature



Precipitation



# National Frameworks for Climate Services



Status as of January 2020



# Thank you Merci



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