Global Seasonal Climate Update – JJA 2025
Linking Global Climate Outlooks to Regional Climate Forums

TPCF-3, 3-5 June 2025, New Delhi, India

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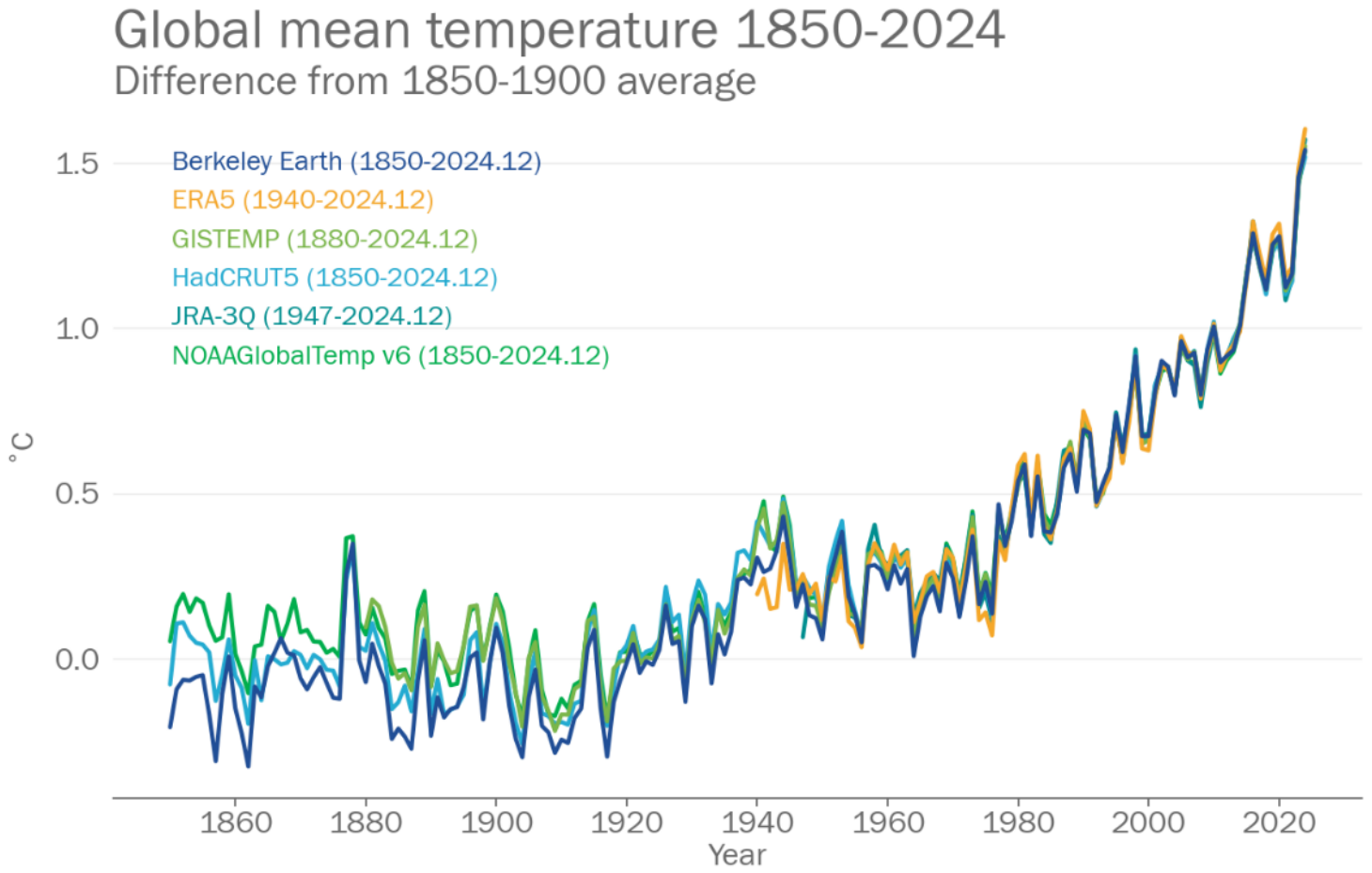
State of the Global Climate 2024

Released on 19 March 2025

2024 was the warmest year on record

1.55±0.13°C

above the 1850-1900 average.



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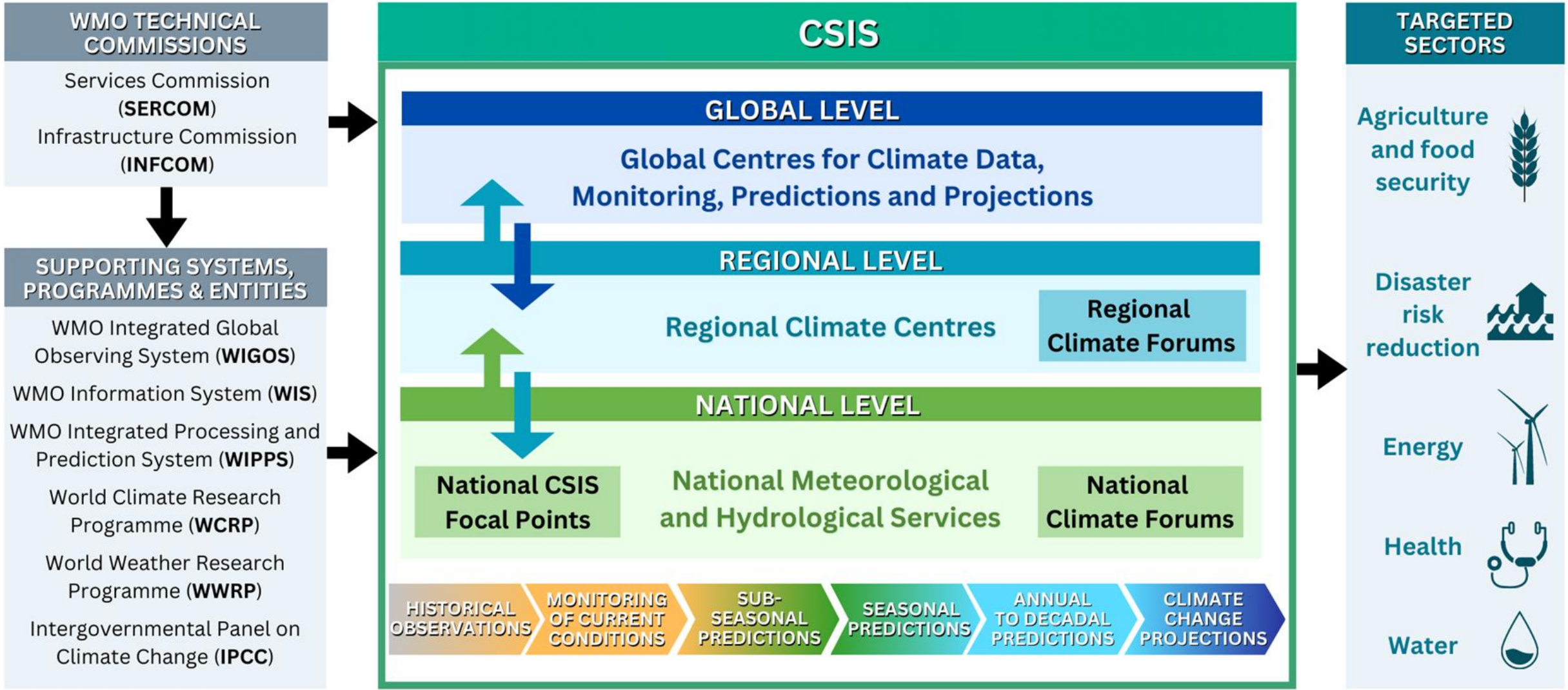
Climate Services Information System

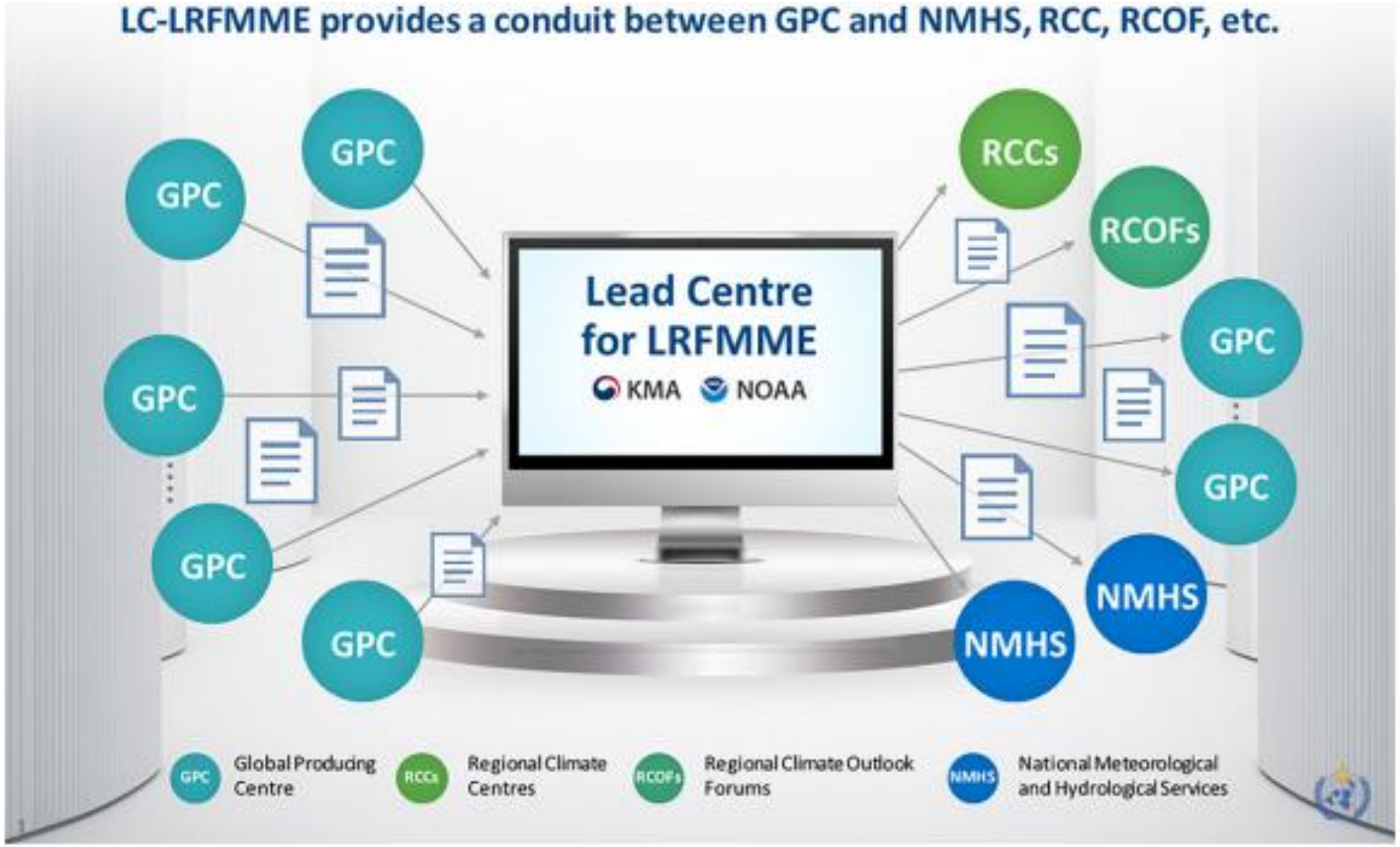
Core functions: Climate data, monitoring, prediction, projection, co-production of user-targeted climate information



WMO infrastructure for climate prediction

Seasonal to Annual timescales

15 designated WIPPS Global Producing Centres for seasonal climate prediction (GPCs-SP)



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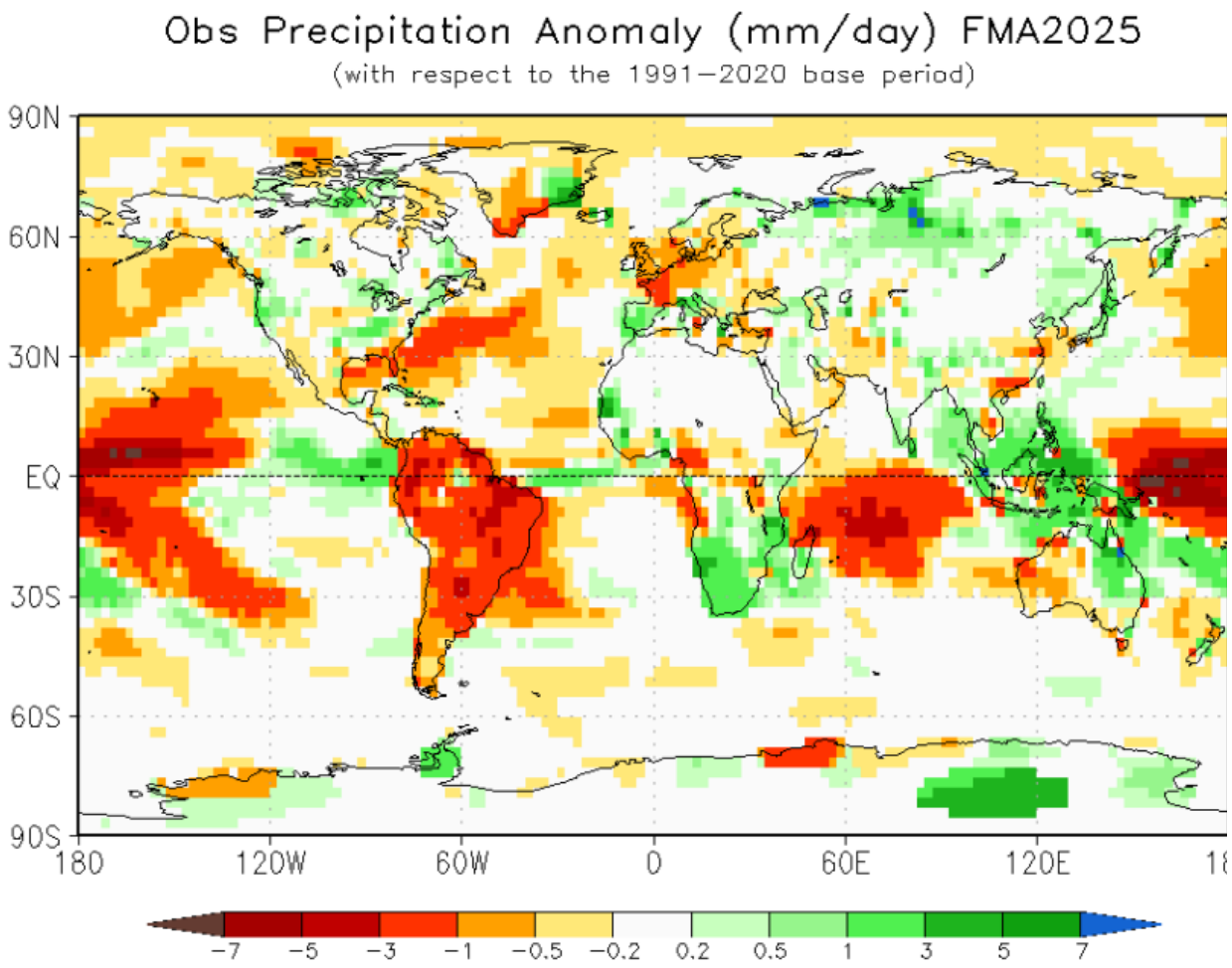
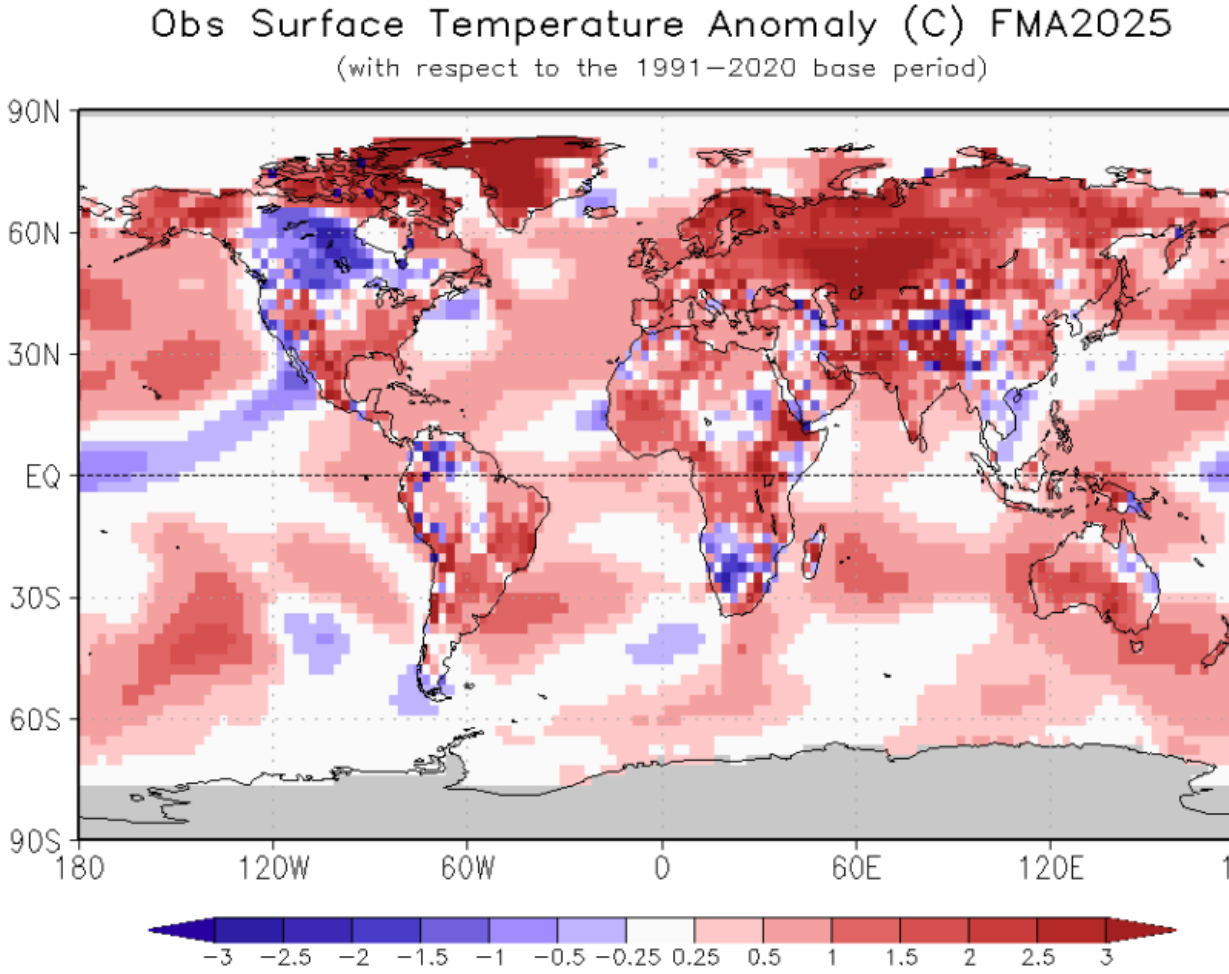
Climate Monitoring

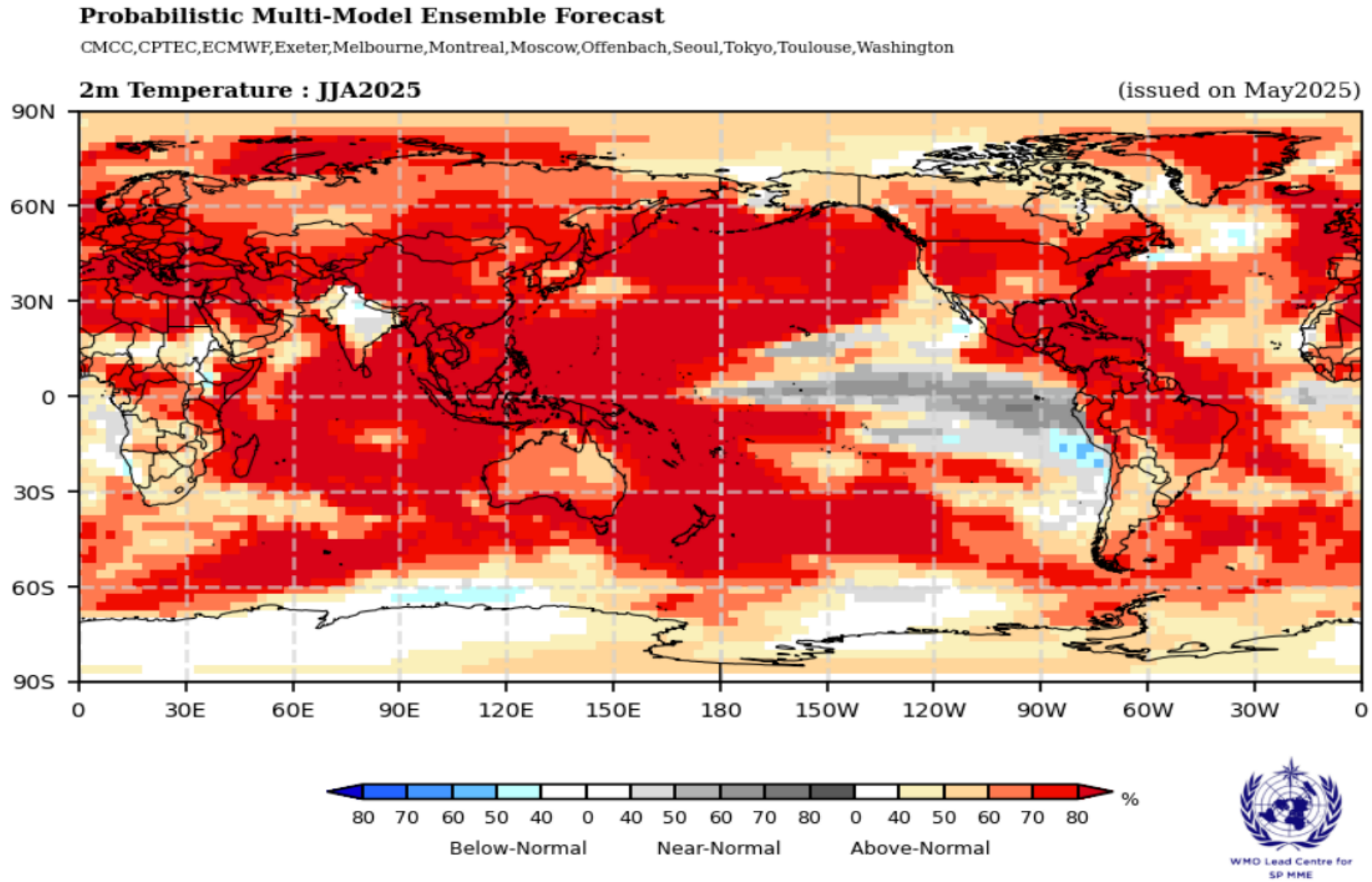
Observed Conditions FMA 2025





Global Seasonal Climate Update

Global Heat on the Rise: *Above-normal land temperatures are expected nearly everywhere between 60°S and 60°N, reinforcing the global warming trend.*



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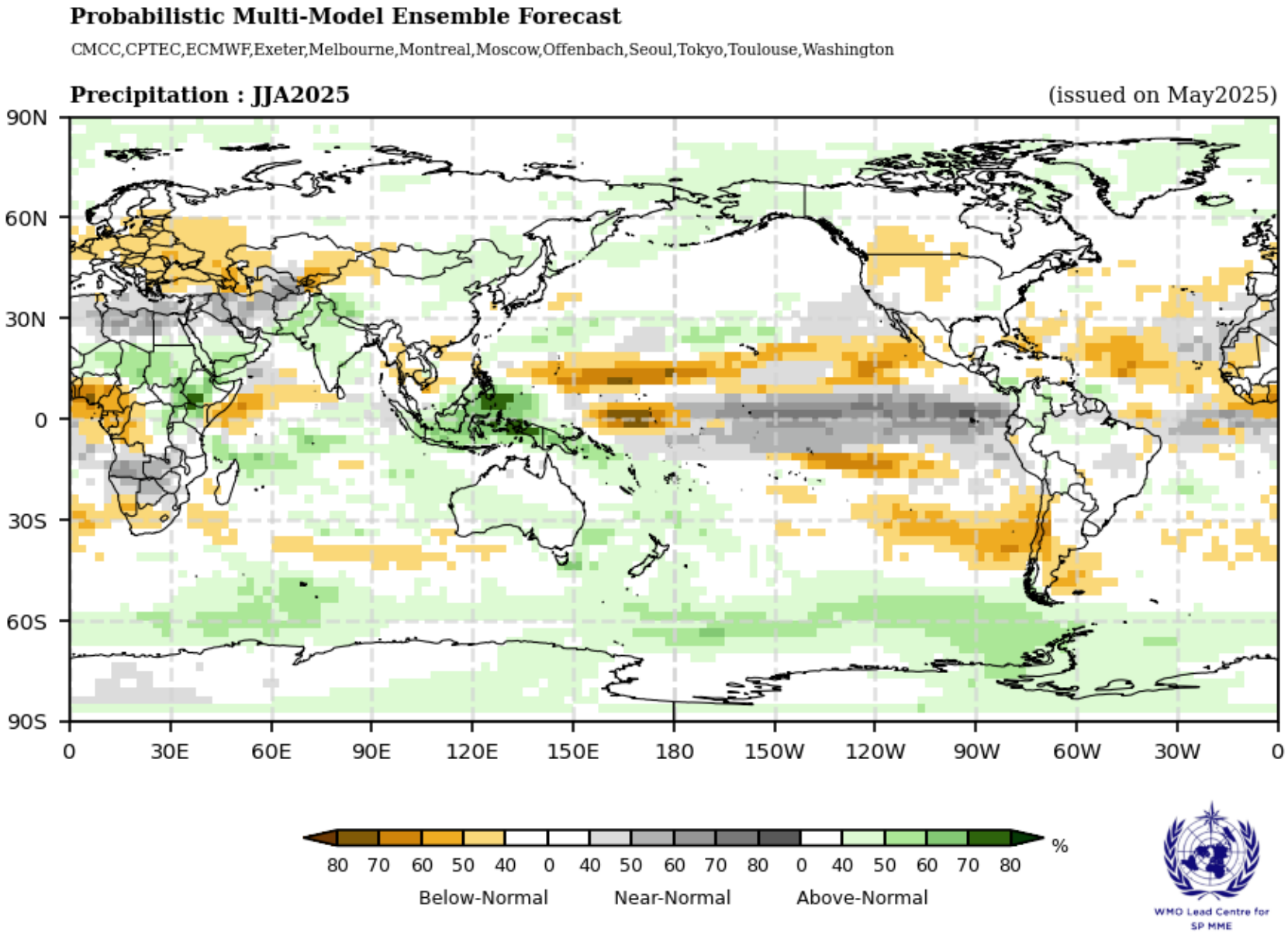
Global Seasonal Climate Update

***Rainfall Mirrors La Niña Pattern**: Although ENSO is neutral, rainfall forecasts resemble weak La Niña conditions, with drier-than-normal conditions expected from the western Pacific to Central America.*



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Global Annual to Decadal Climate Update

Global surface temperatures set to remain at or near record levels in next 5 years

Issued 28 May 2025 for the 5.year period 2025-2029

*"There is a 80% chance that at least **one of the next five years will exceed 2024** as the warmest on record."*

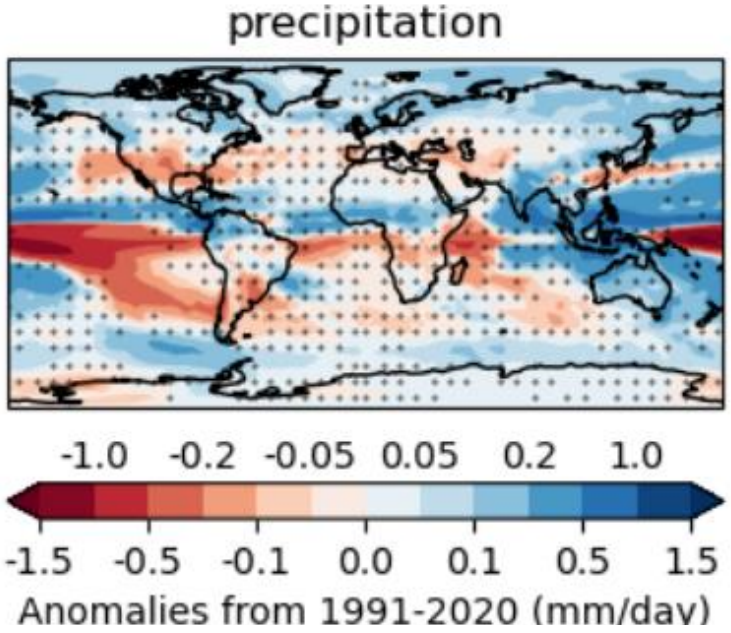
*"There is a 86% chance that at least **one of next five years will be more than 1.5°C above the 1850-1900 average**."*

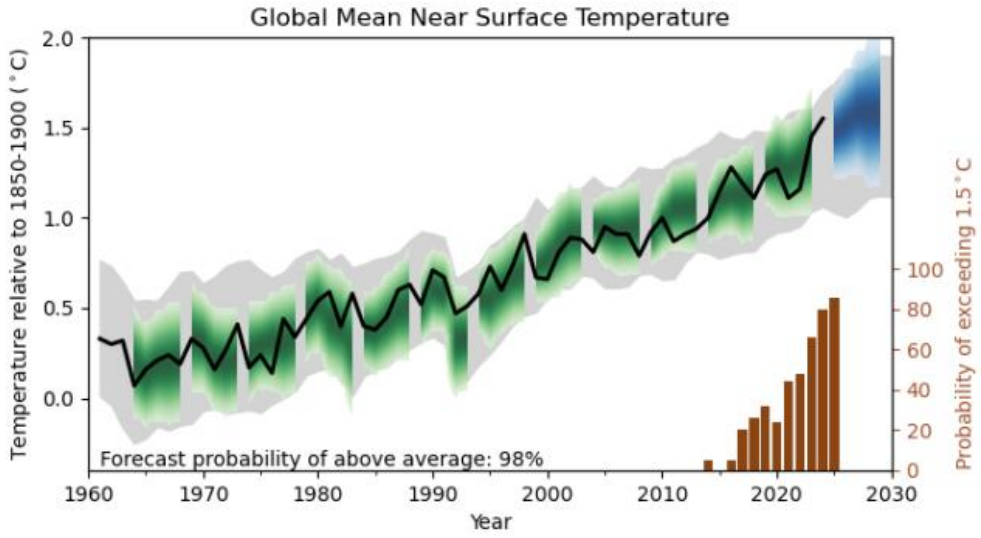
*"Long-term warming (averaged over decades) **remains below 1.5°C**."*

*"Arctic heating is predicted to continue to **outstrip global average**."*

*"Precipitation patterns **vary widely by region**."*

"South Asian region is expected to be anomalously wet in 2025-2029."





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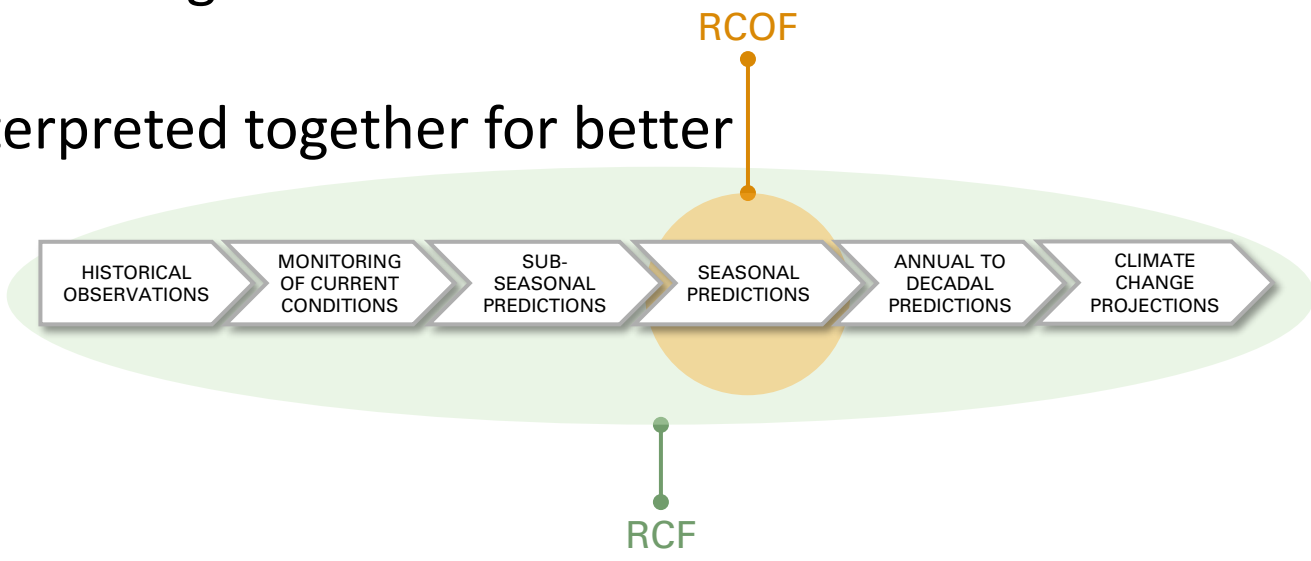
Connecting to Regional Climate Forums

- Unified platform for addressing climate risks across timescales: Early warning
- A broader suite of user-oriented climate products—addressing sub-seasonal to multi-decadal and climate change timescales —to better serve stakeholders and sectors.
- Expanding beyond rainfall and temperature probability maps to support impact-based decision-making.
- Operational and data transparency—traceability, verification, co-production, and timeliness—ensures trust in forecasts.
- Translate climate information to valuable knowledge
- Foster users' engagement.
- Seasonal and decadal forecasts must be interpreted together for better preparedness.



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WMO Global Producing Centres

Sub-seasonal climate time scale

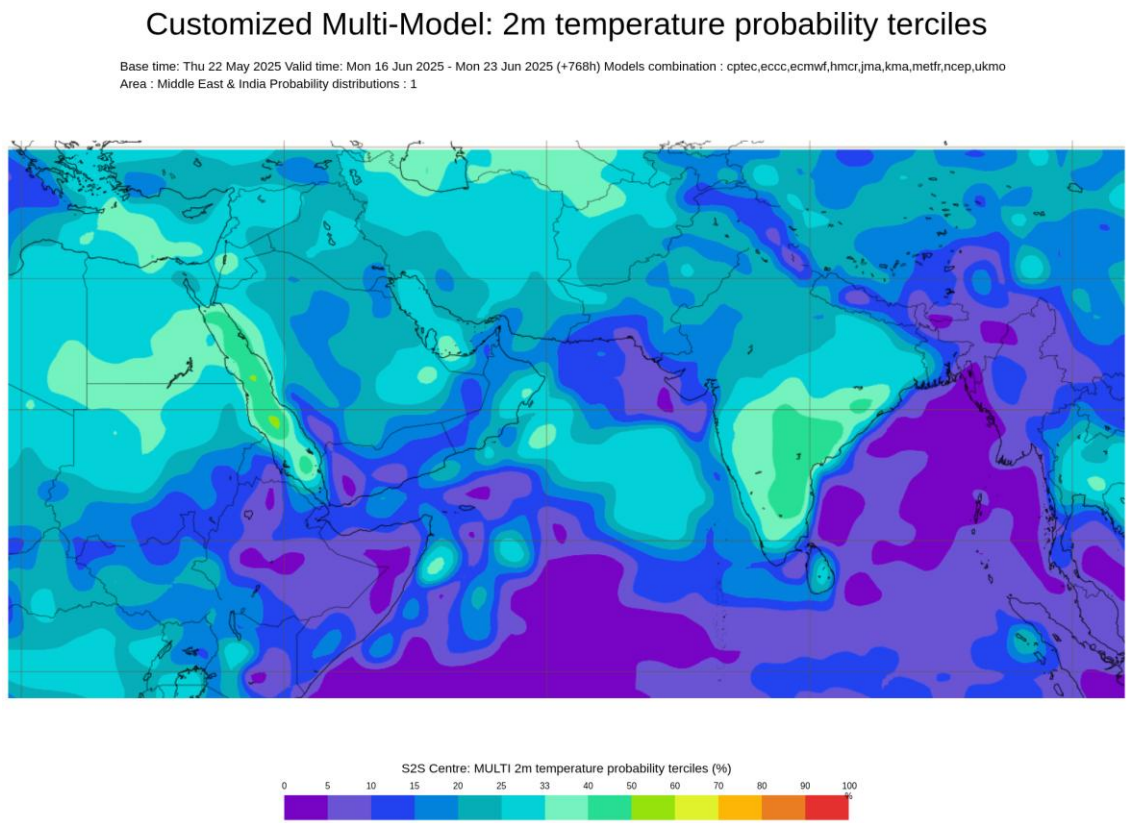
GPC-SSPs

ECMWF is WMO Lead Centre for Sub-seasonal Predictions Multi-Model Ensemble (LC-SSPMME)
https://charts.ecmwf.int/wmo/

Contributing centres

- Beijing
- Exeter
- Montreal
- Moscow
- Seoul
- Tokyo
- Toulouse
- Washington

Builds on the legacy of S2S project



Base time: 22 May; Valid from 16 to 23 June 2025 (

Strategy for implementing RCFs

- Publications:
  - ✓ ***Guidance on Operational Practices for Objective Seasonal Forecasting*** (WMO-No. 1246)
  - ✓ *WMO Guidelines for Regional Climate Outlook Forum and Regional Climate Forum Operations*
  - ✓ *Guidance on the Use and Interpretation of Climate Change Information for evolving the role of WMO Regional Climate Outlook Forums and Regional Climate Centers*
  - ✓ *WMO Guidelines on Calibration of Sub-Seasonal to Seasonal Predictions*
  - ✓ *Guidance for NMHSs on Establishing and Organizing National Climate Forums (NCFs)*
  - ✓ *Guidelines on Tailoring Climate Information for Decision Making*
- Leverage on projects funding

Questions?