

Update on Expert Team on  
Operational Climate Prediction  
Systems (ET-OCPS) and Lead  
Center for Long Range Forecast  
MultiModel Ensemble (LC-  
LRFMME)

M. Tolstykh on behalf of ET-OCPS

# TERMS OF REFERENCE

1. Review the *Manual on the Global Data-processing and Forecasting System* (WMO-No. 485) and recommend updates as necessary concerning sub-seasonal to decadal prediction to ensure that procedures are adequate
2. Review GPCs and Lead Centres' activities, support their developments and provide guidance as stated in the Manual
3. Evaluate applications against the designation criteria in the GDPFS Manual and make recommendations to designate new centres to INFCOM
4. Review new developments and advances in NWP and related systems, particularly with regard to long-range prediction
5. Liaise with relevant WMO Programmes, technical commissions and international organizations as required to advise on requirements for practical implementations of research advances in operational systems
6. Liaise with the Services Commission to incorporate evolving needs of the Climate Services Information System (CSIS) into the operational infrastructure, e.g., GPCs-LRF, GPCs SSF and GPCs-ADCP
7. Advance Global Seasonal Climate Update (GSCU) and Global Annual to Decadal Climate Update (GA2DCU) and their emerging requirements
8. Coordinate emerging infrastructure requirements with GDPFS designated centres

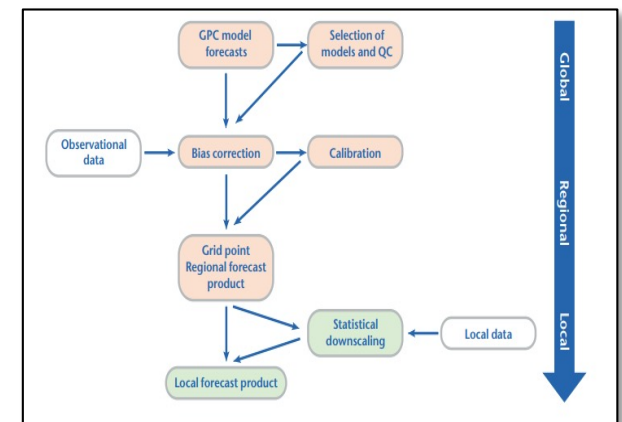
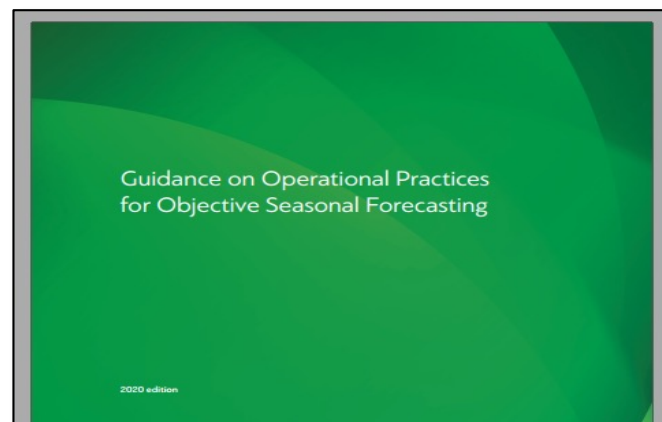
# Expert Team on Operational Climate Prediction Systems (ET-OCPS)

- ET-OCPS oversees the long-range prediction system requirements in the WMO Global Data Processing and Forecasting System (GDPFS) Manual.
- In summer of 2021, the designation requirements for Global Producing Centers for Sub-Seasonal Forecasts (GPCs-SSF) and Lead Center for Sub-Seasonal Forecasts Multi-Model Ensembles (LC-SSFMME) are included in the GDPFS Manual.
- Designation requirements for Global Producing Centers and Lead Centers for Seasonal Predictions and Annual to Decadal Climate Prediction (ADCP) are already included in the GDPFS Manual.



# Expert Team on Operational Climate Prediction Systems (ET-OCPS)

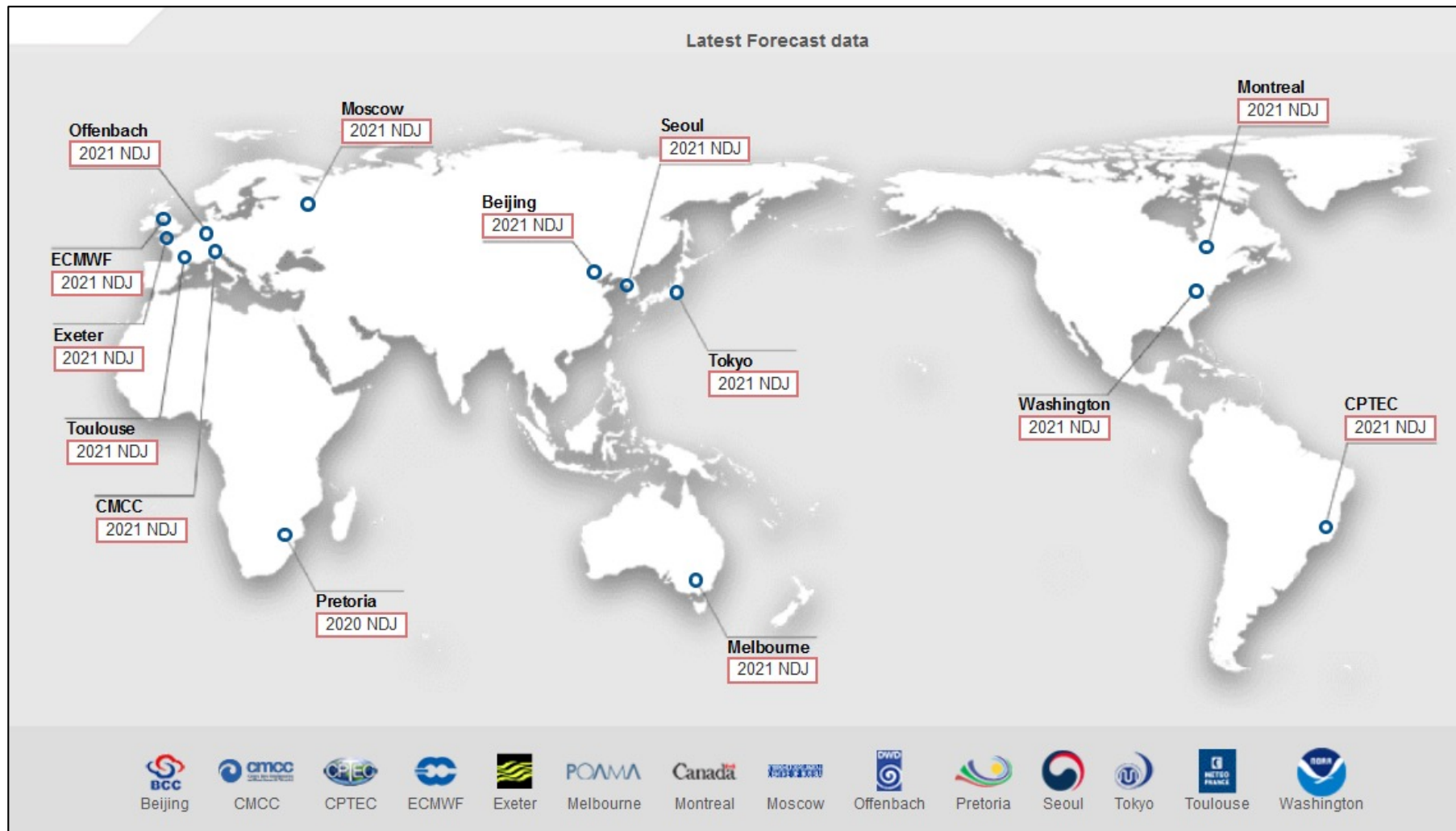
- ET-OCPS help develop “Guidance on Operational Practices for Objective Seasonal Forecasting”
- Contents of the guidance document
  - Introduction to seasonal predictions.
  - Components of a seasonal forecast system.
  - Seasonal forecast products.
  - Guidance on good practices for developing objective seasonal forecasts.



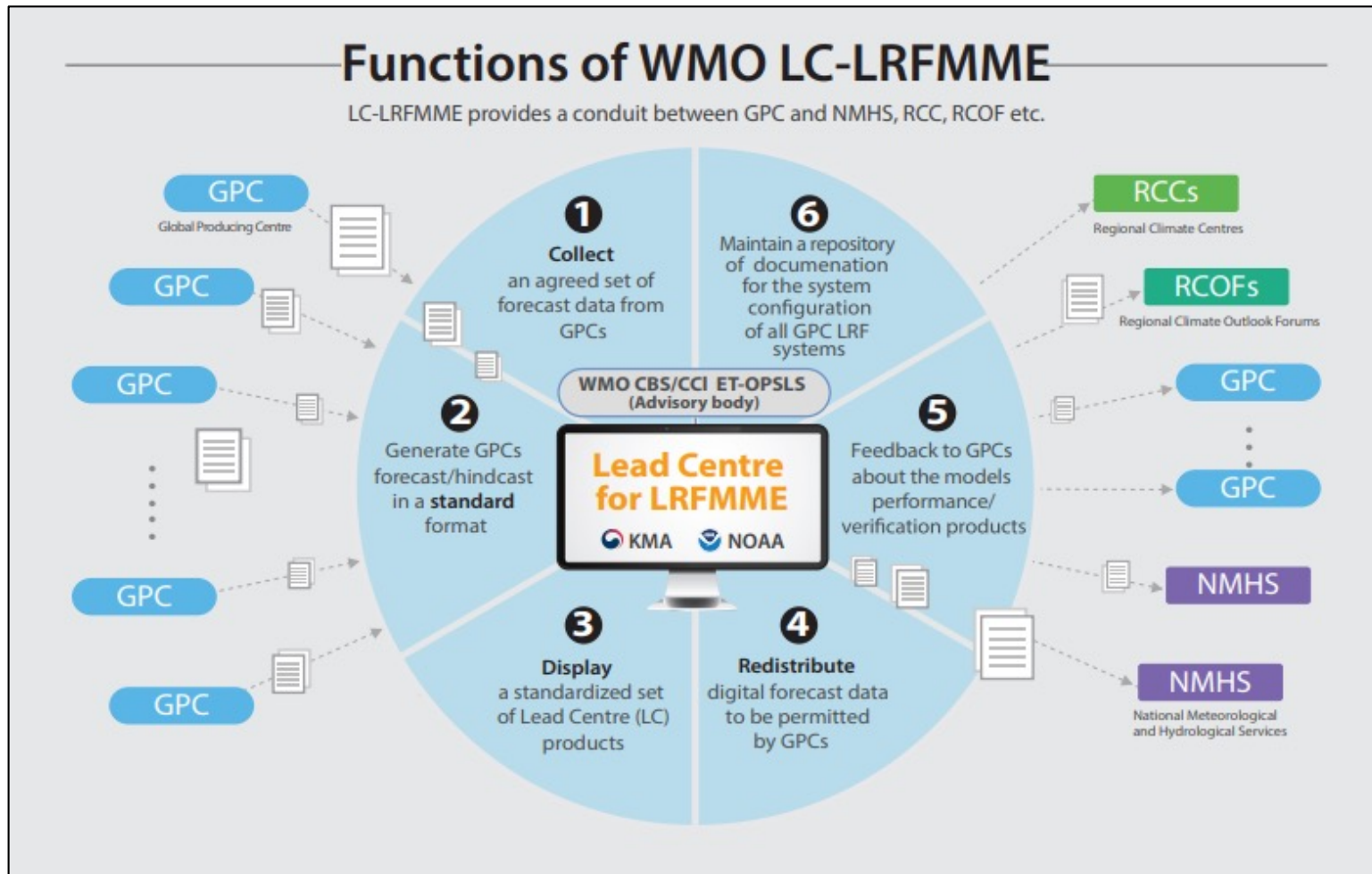
# Members

- Dr Arun KUMAR - Chair - ( USA )
- Dr Caio COELHO - Vice-chair - ( Brazil )
- Dr David A JONES ( Australia )
- Dr Kristina FRÖHLICH ( Germany )
- Dr Laura FERRANTI ( ECMWF )
- Dr Mikhail TOLSTYKH ( Russia )
- Dr Peiqun ZHANG ( China )
- Dr Silvio GUALDI ( Italy )
- Eunha Lim - Secretariat - ( WMO Secretariat )
- Mr Honda, Yuki - Secretariat - ( WMO Secretariat )
- Mr Jeffrey KNIGHT ( UK )
- Mr KOMORI, Takuya ( Japan )
- Mr Normand Gagnon ( Canada )
- Ms Juyoun LIM ( Republic of Korea )
- Pierre ETCHEVERS ( France )

# GPCs-LRF: 14 WMO designated centers



# Concept of Lead Centre for Long-Range Forecasts

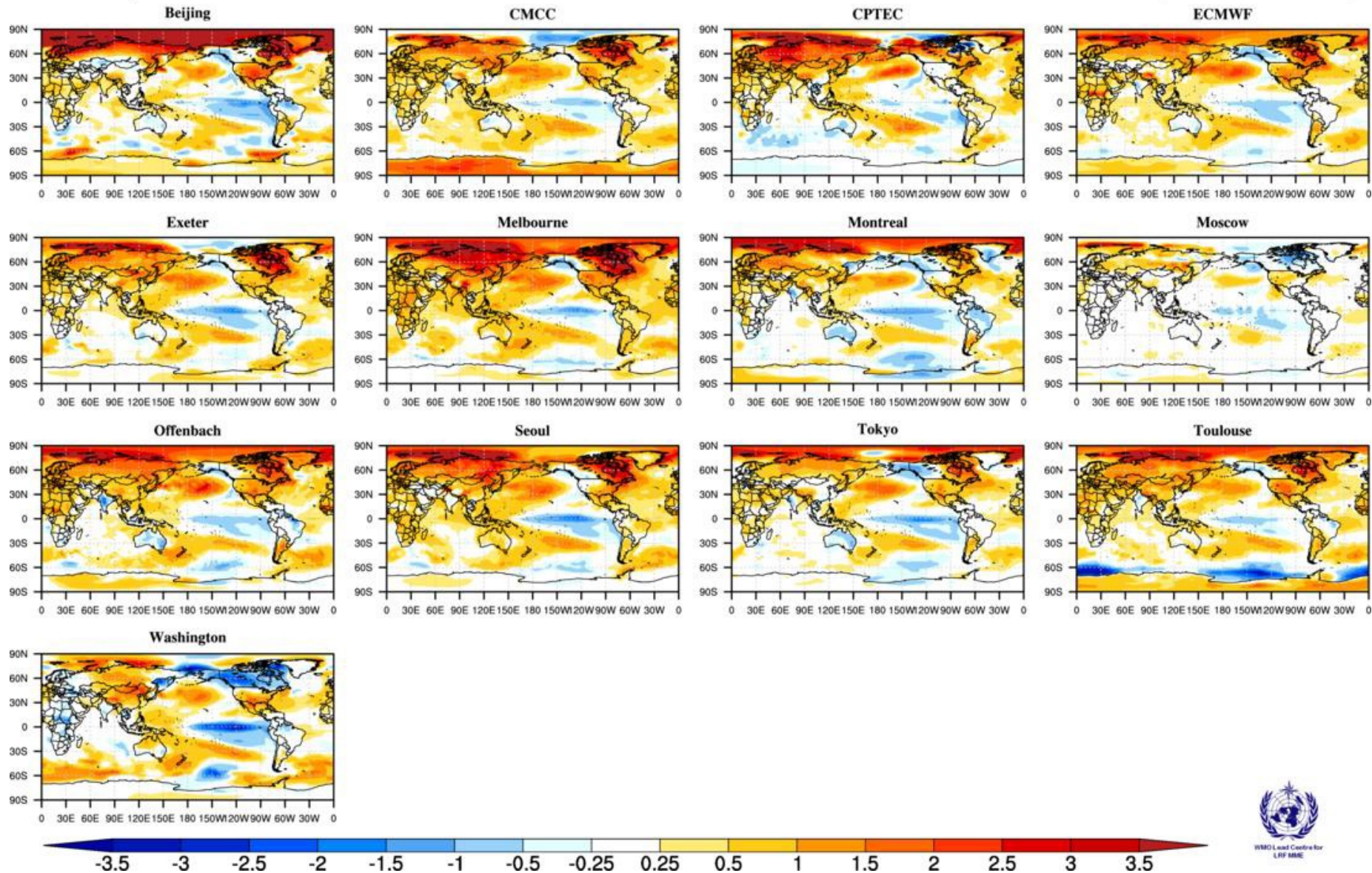


- GPCs-LRF and LC-LRFMMEs, together, provide an operational infrastructure for global seasonal forecasts.
- Similar infrastructure exists for annual to decadal predictions and is being initiated for sub-seasonal predictions.

# Seasonal Forecast Anomalies from Different GPCs WMOLC-LRFMME

Lat : -90~90, Lon : 0~360  
2m Temperature : NDJ2021

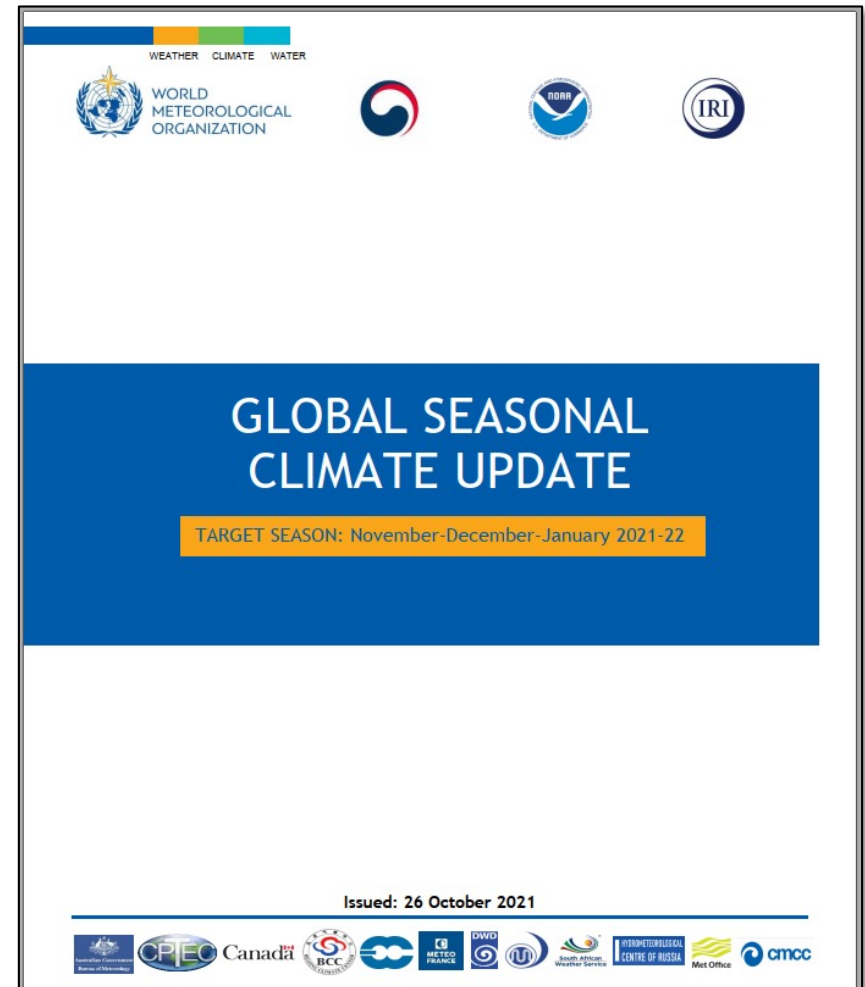
[Unit : K]  
(issued on Oct2021)





# Global Seasonal Climate Update (GSCU)

- Released every month.
- GSCU provides a summary of observed anomalies for the previous season.
- Includes outlook for the next season
  - Surface temperature.
  - Rainfall
  - Indices (e.g., ENSO)



**Thank you for attention!**