World Meteorological Organization

Working together in weather, climate and water

WMO OMM

General Introduction to WMO GPCs and associated Lead Centres

Peer Hechler

WMO

Aim of talk

To provide some more specific information on WMO's Long-range Forecasting System

Relevant keywords of the talk:

WMO Global Producing Centres, Lead Centre for LRF
Multi Model Ensembles, Lead Centre for Standard
Verification System for LRF

WMO LRF System

Three level system to provide science-based climate information to end users:

<u>Global level</u>

WMO Global Producing Centres for Long-range Forecasting (GPCs)

<u>Regional level</u>

WMO Regional Climate Centres (RCCs)

Regional Climate Outlook Forums (RCOFs)

<u>National level</u>

National Meteorological and Hydrological Services (NMHSs)

WMO Global Producing Centres

Purpose:

Provision of long-range (seasonal) prediction information to
RCCs, RCOFs, NMHSs

Note: Other centres produce equivalent products (e.g. IRI, APCC) !

Currently, there are **12 designated WMO GPCs**:

Beijing, ECMWF, Exeter, Melbourne, Montreal, Seoul, Tokyo, Toulouse,
Washington, Moscow, Pretoria, CPTEC

WMO Global Producing Centres

GPC Minimum Products:

Variables: Temperature, precipitation, Sea Surface Temperature

Format: Probabilities for tercile categories

Range: At least 4 months

Coverage: Global

Issue frequency: At least quarterly (*all GPCs have at least monthly issue*)

Many GPCs provide additional variables (e.g. pressure), products (e.g. ensemble mean anomalies) and longer range

WMO Lead Centres associated to GPCs

WMO OMM

Lead Centre for Standard Verification Scheme for LRF

- Communication of GPCs LRF expected skill to users

  – Defined verification scores

  – Provision of verification softwares

  – Display individual GPC verification Scores

WMO Lead Centres associated to GPCs

Lead Centre for LRF Multi Model Ensembles

- Provision of GPC LRF Multi Model Ensembles

    - Collection of GPC digital forecasts

    - Running and displaying GPC LRF Multi Model Ensembles

    - Possibility of provision of products for specific geographical areas, such as RCOF areas!

Thank you
Merci
Спасибо
Gracias
شكرا
谢 谢