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Canada

Update on GPCs not currently represented on WGSIP

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WMO LC-LRFMME GPCs

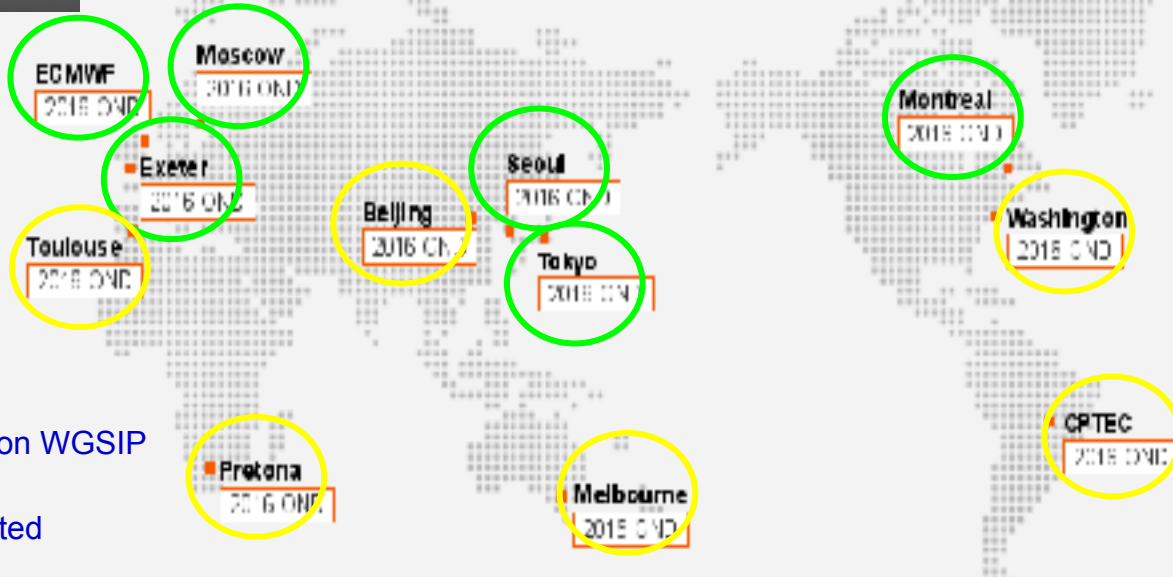
<https://www.wmolc.org/>





WMO Lead Centre for
Long-Range Forecast Multi-Model Ensemble

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Latest Forecast data



-  represented on WGSIP
-  not represented

GPC Beijing

- 2nd generation system since Dec 2013
- BCC_AGCM2.2, BCC_AVIM1.0, MOM4_L40v2, and SIS as its atmosphere, land, ocean and sea ice component
- Seasonal forecast each month for following 0-6 months
- AGCM initial conditions from NCEP analysis
- OGCM initial conditions from BCC GODASv2
- Ensemble size 24 (15 by lagged-average-forecast and 9 by singular-vector (SV) method)

GPC CPTEC

- CPTEC AGCM with persisted SST anomalies (2 tier)
- Same system since 2010
- T62L28
- Initial conditions from NCAR
- Ensemble size 15, each lagged by 1 day
- Hindcast period 1979-2001 being updated to 1979-2001 (10 members)

GPC Melbourne

- Pseudo-MME based on 3 versions of POAMA2 (standard, flux corrected, alternative shallow convection)
- Coupled with T47L26 AGCM
- 9 month range
- Single-forecast ensemble size $3 \times 11 = 33$
- Produced 2x per week, last 5 forecasts combined for ensemble size of 165
- To be replaced by GloSea5-like system

GPC Pretoria

- SAWS coupled model since 2014
- T42L19 AGCM
- 0.58° lon x $0.5-1.5^\circ$ x L25
- 9 month range
- NCEP/DOE daily atmospheric initial states
- Hindcast ocean initial states: GFDL ODA
- Real time ocean initial states: GODAS pentad ocean state anomalies added to the GFDS ODA climatology
- Ensemble size 10 for hindcasts, 40 in real time

GPC Toulouse

- System 4 since Jan 2013
- Upgrading to system 5 for Copernicus
 - T255 L91 (~75km)
 - 0.01 hPa top
 - GELATO sea ice model
 - Continues to use NEMO/ORCA1 L42 OGCM
 - 15 ensemble members for hindcasts, 51 for forecasts
 - Initial conditions lagged + perturbed
 - hindcasts 1991-2014

GPC Washington

- CFSv2 since Mar 2011
- GFS AGCM T126 (~100 km)
- MOM4 OGCM 0.5° lon x 0.25°-0.5° lat x L40
- CFSR initial conditions
- CFSR suffered instability in early 2016, affecting CFSv2 and CCSM4 NMME forecasts

