

# Status of LC-LRFMME

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

Pilot real-time sub-seasonal MME predictions

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● Global Producing Centres



# Suggestion about providing S2S plots to members

## Pilot real-time MME service for sub-seasonal forecasts

- WMO Cg-XVI(2011) requested LC-LRFMME to expand its role to include exchange of extended-range predictions.
- In the meeting of the S2S steering group (2014), it was agreed to make use of the S2S research archive of sub-seasonal forecasts to develop a real-time multi-model display at the LC-LRFMME.

\* S2S : Sub-seasonal to Seasonal Prediction Project



# Suggestion about providing S2S plots to members

## Pilot real-time MME service for sub-seasonal forecasts

- The LC-LRFMME is providing MME forecasts and its verification results through website after IPET-OPSLs and GPCs agree (2018~)

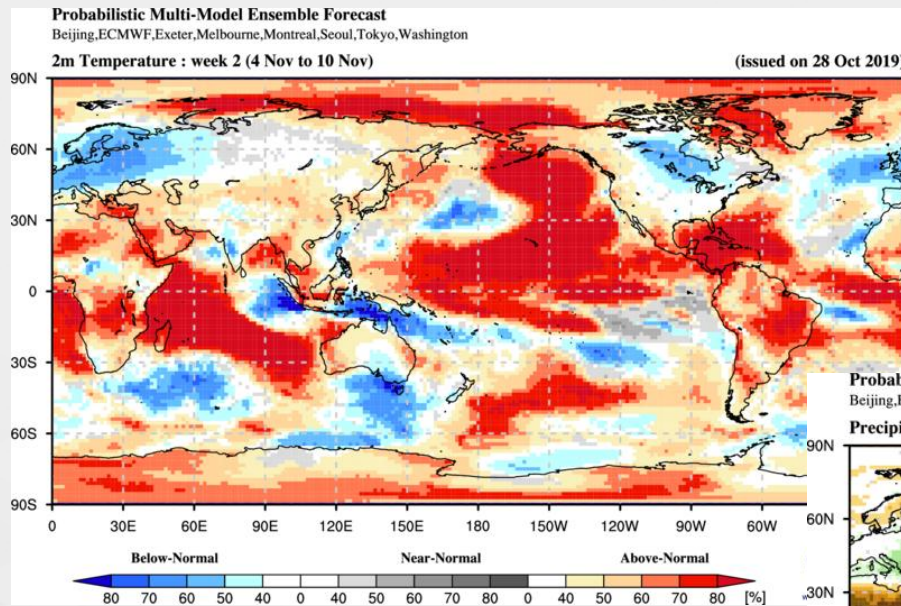
※ **IPET-OPSLs** : Inter-Programme Expert Team on Operational Predictions from Sub-seasonal to Longer-time Scales

Products/variables	Covering periods	Charts	Verification scores
<ul style="list-style-type: none"> <li>• Accumulated prec</li> <li>• Average 2m temp</li> </ul>	Weeks 1,2,3,4, 3-4,1-4	Probabilistic maps · terciles	Reliability diagrams / ROC
<b>MJO Need:</b> <ul style="list-style-type: none"> <li>• OLR</li> <li>• U850</li> <li>• U200</li> </ul>	32 days	<ul style="list-style-type: none"> <li>• Hendon and Wheeler Diagram</li> <li>• Hovmoller</li> </ul>	Temporal correlation and RMSE
<b>Velocity Potential</b>	Weeks 1,2,3,4, 3-4,1-4	Velocity potential anomaly (Ensemble mean for each period)	correlation

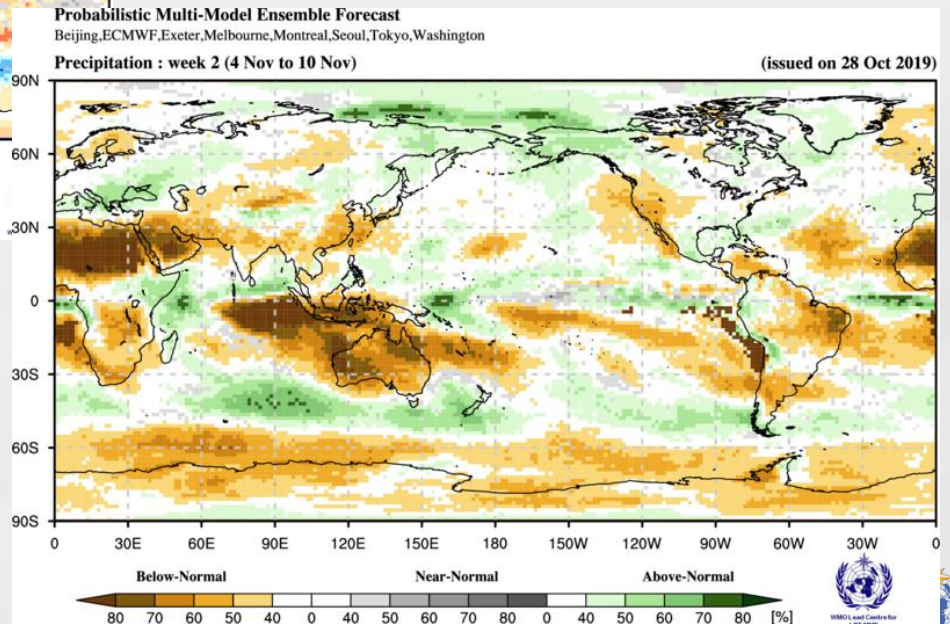


# Products : Probabilistic MME

- Probabilistic prediction map of 2m air temperature and precipitation



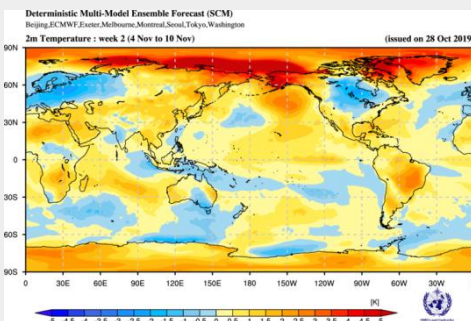
- Temp: Tercile probabilistic forecast using parametric method (Gaussian fitting)



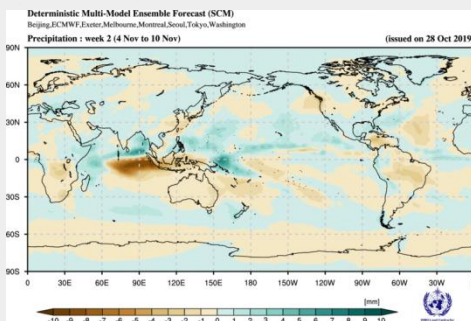
- Precip: Tercile probabilistic forecast using parametric method (Gamma fitting)

# Products : Deterministic MME

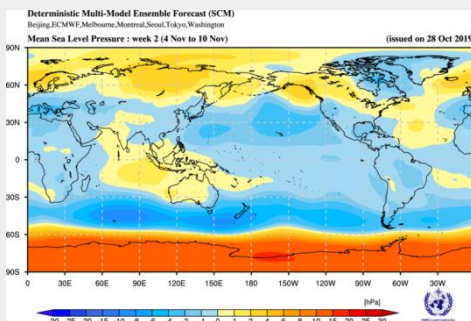
- Deterministic prediction : Simple Composite Method



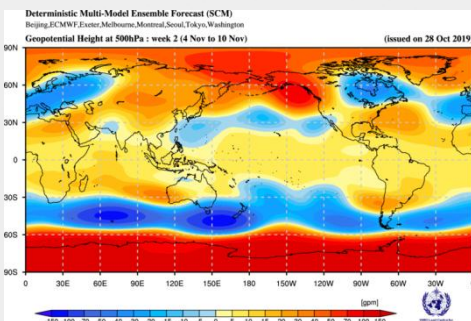
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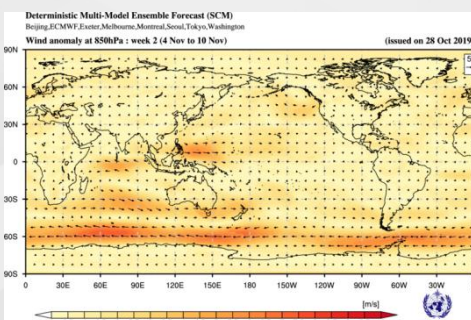
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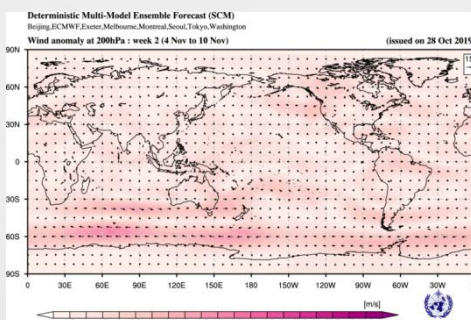
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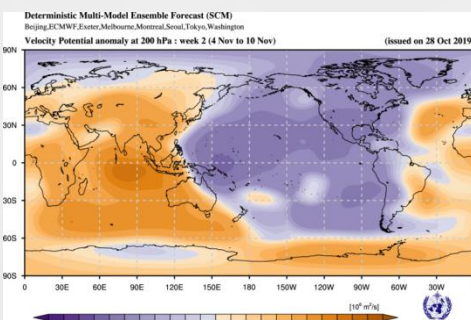
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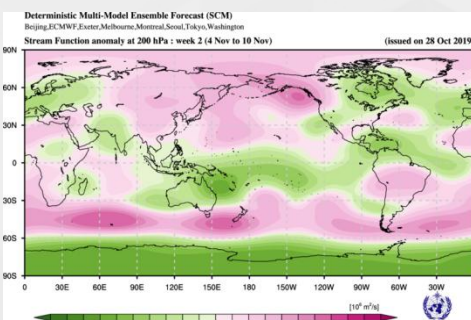
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<200hPa wind>



<200hPa velocity potential>



<200hPa stream function>

# Thank you



Climate Prediction Division  
Korea Meteorological  
Administration