

# Climate Outlook for 2014-15 Winter Over Korea

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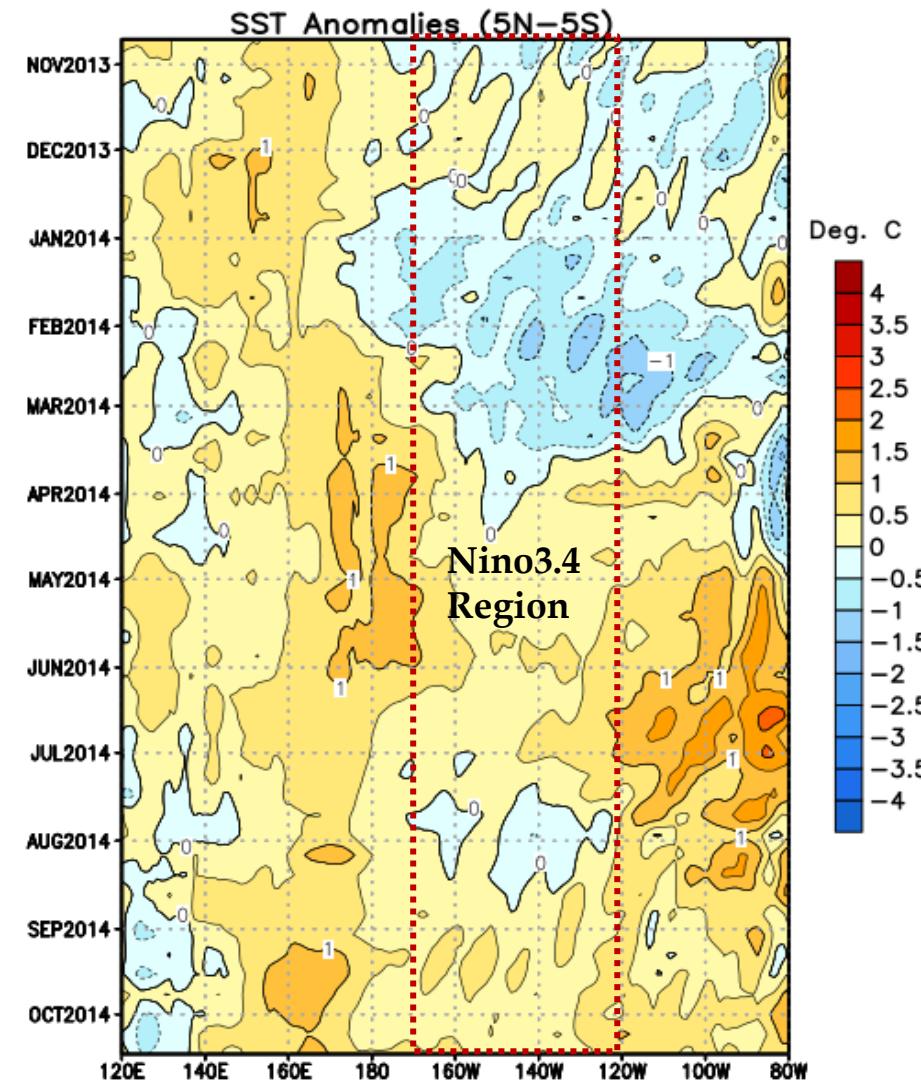
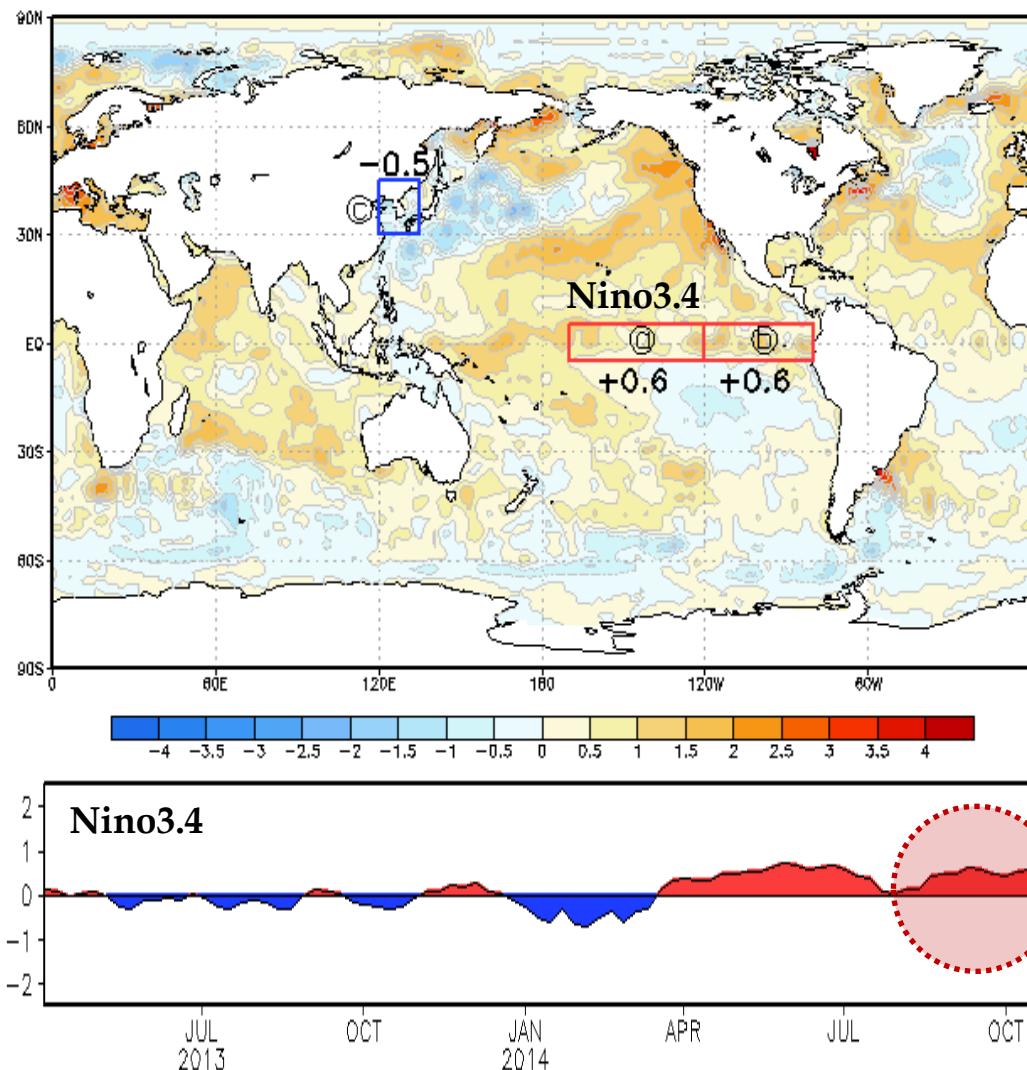


# 1. Current Conditions



# Sea Surface Temperature (SST)

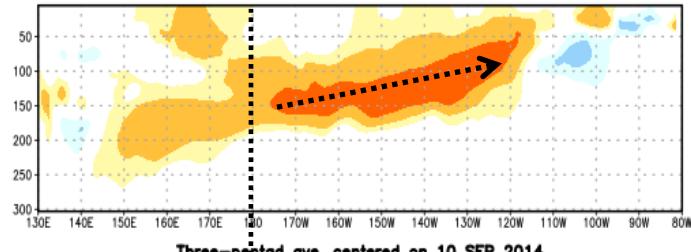
12~18 October 2014



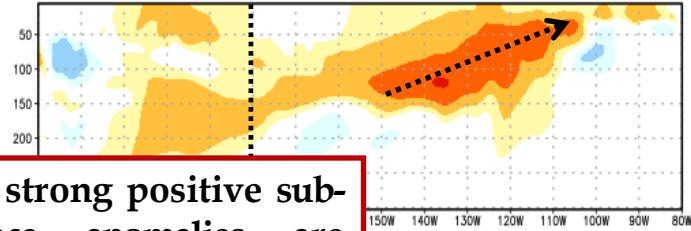
# Sub-surface Temperature & 850hPa Zonal wind

EQ. Subsurface Temperature Anomalies (deg C)

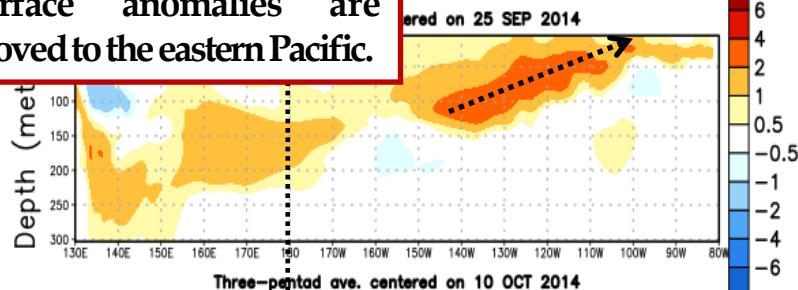
Three-pentad ave. centered on 26 AUG 2014



Three-pentad ave. centered on 10 SEP 2014

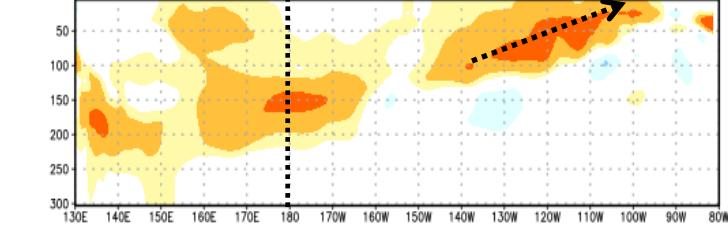


Three-pentad ave. centered on 25 SEP 2014



The strong positive sub-surface anomalies are moved to the eastern Pacific.

Three-pentad ave. centered on 10 OCT 2014



850hPa U-wind Anomalies (5°S~5°N)

JAN2014

FEB2014

MAR2014

APR2014

MAY2014

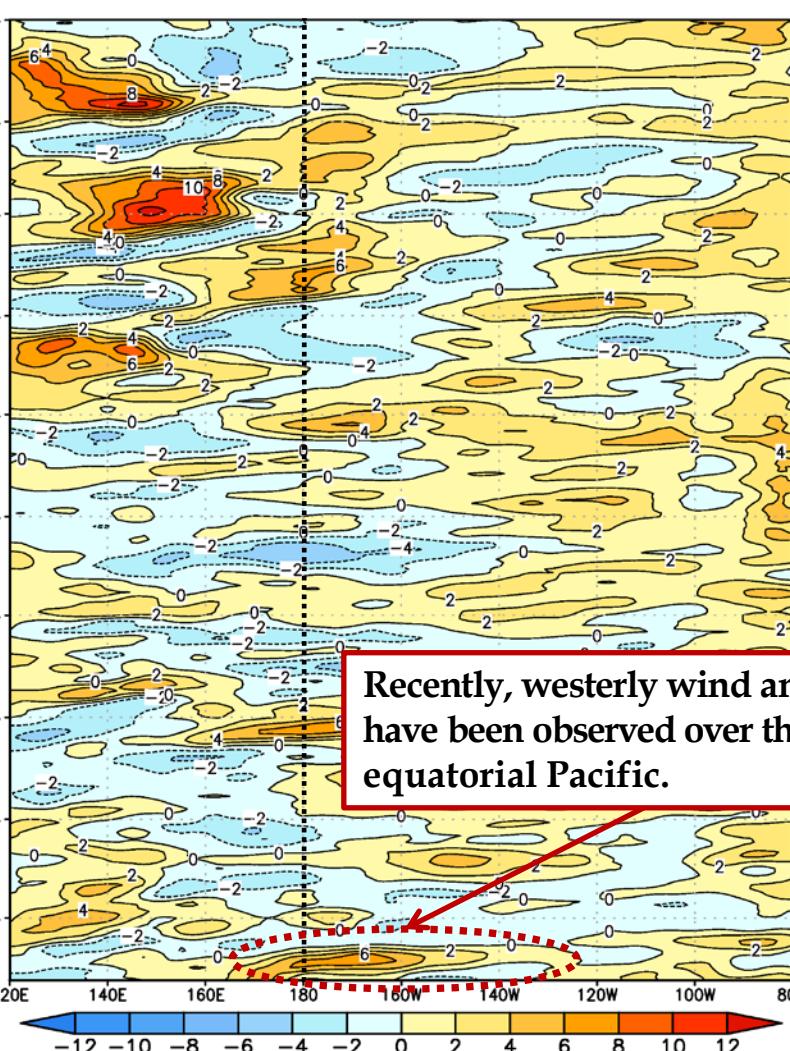
JUN2014

JUL2014

AUG2014

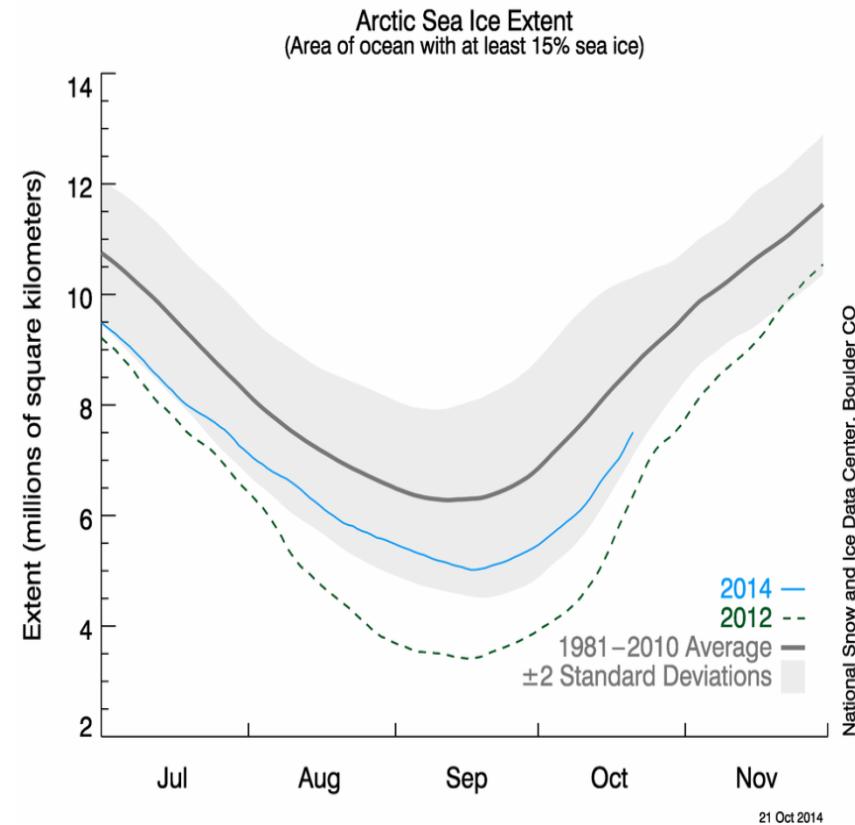
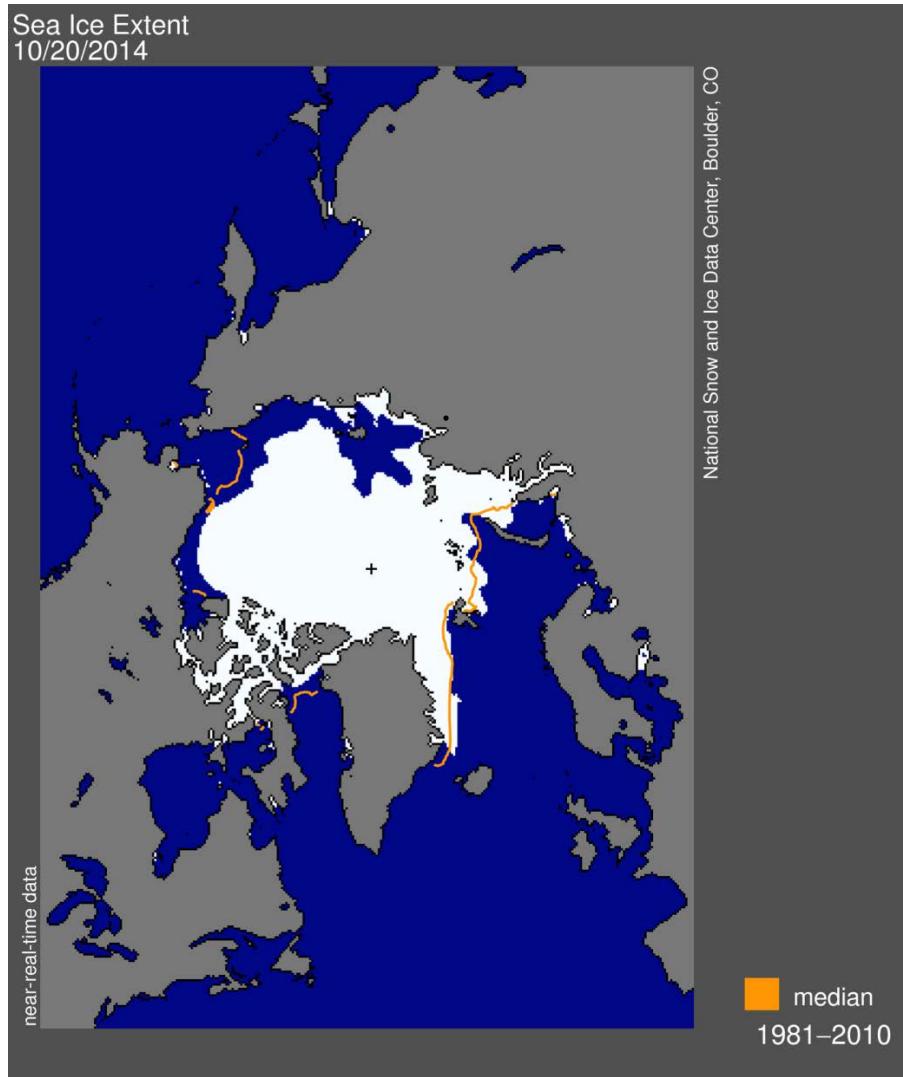
SEP2014

OCT2014



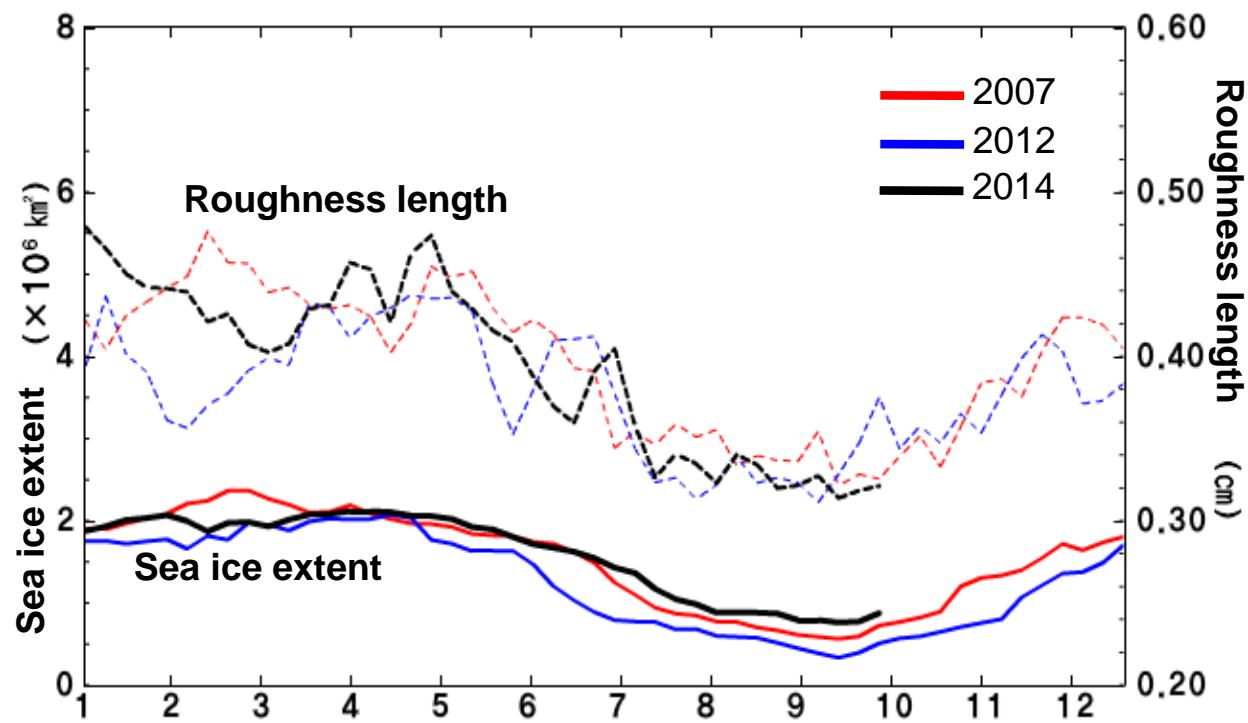
Recently, westerly wind anomalies have been observed over the central equatorial Pacific.

# Arctic Sea Ice



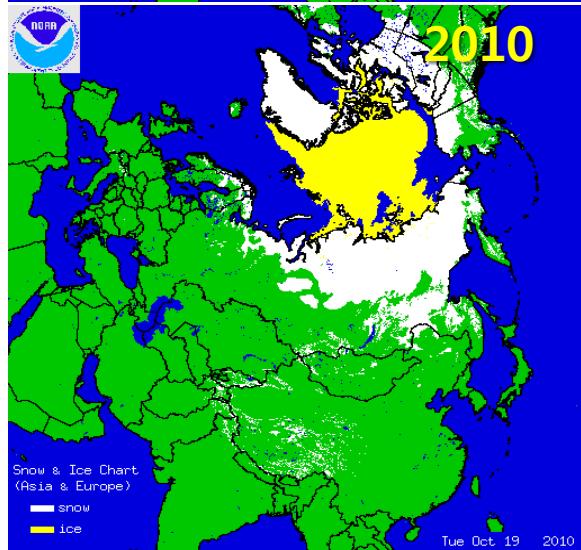
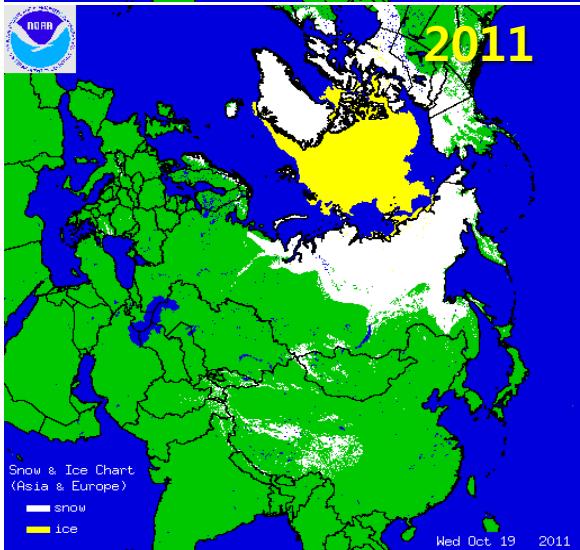
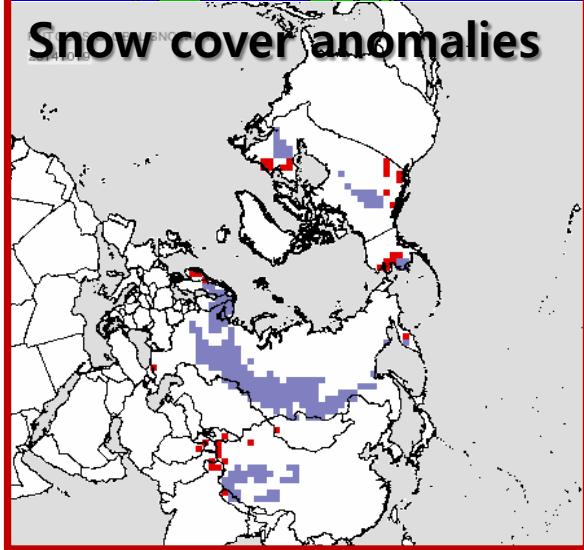
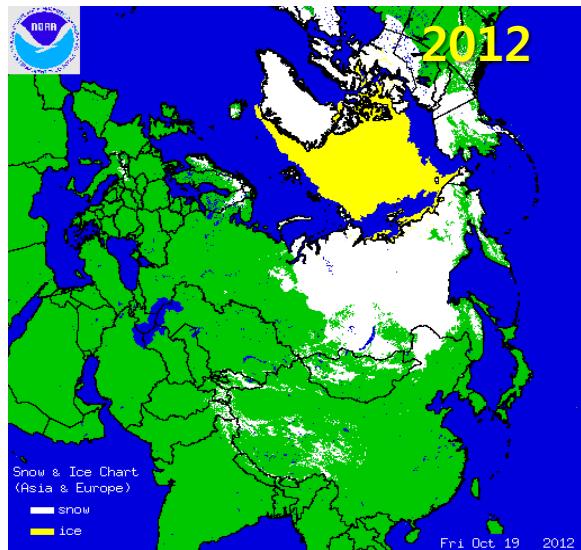
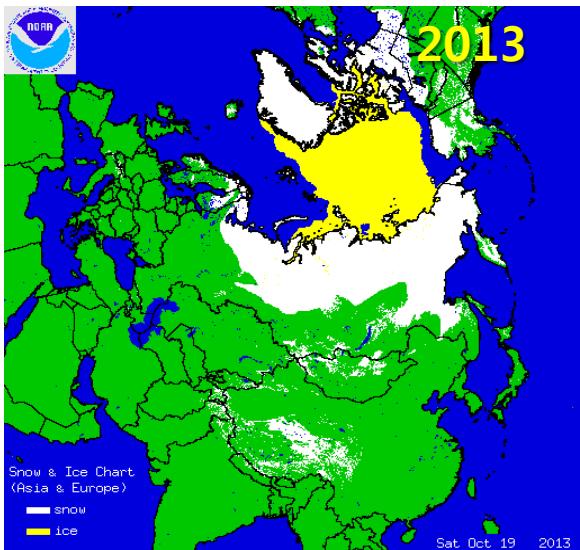
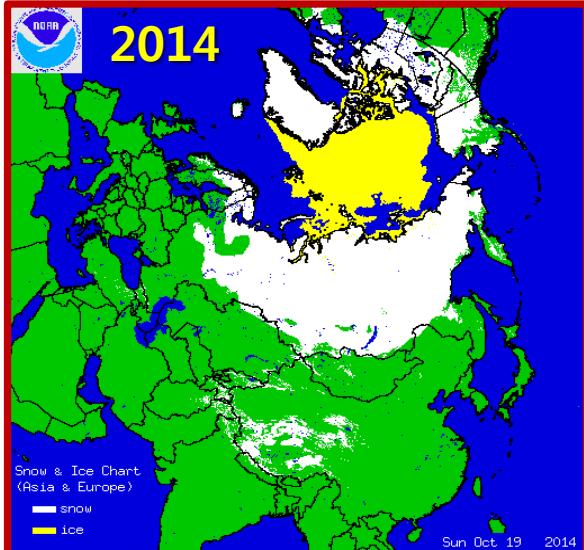
- In 2012 year, the Arctic sea ice was the lowest extend since 1979, which was the one of factors causing cold winter.

# Arctic Sea Ice (Barents Sea)



# Eurasian Snow Cover

Oct. 19

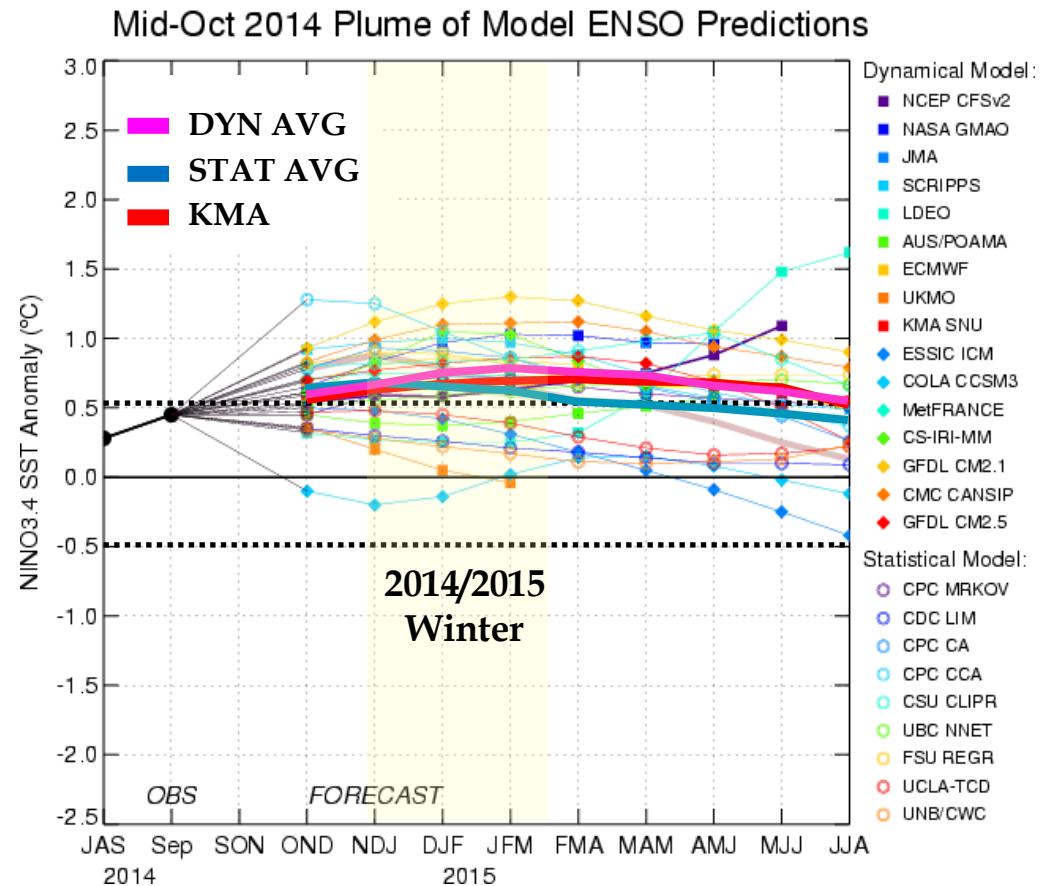
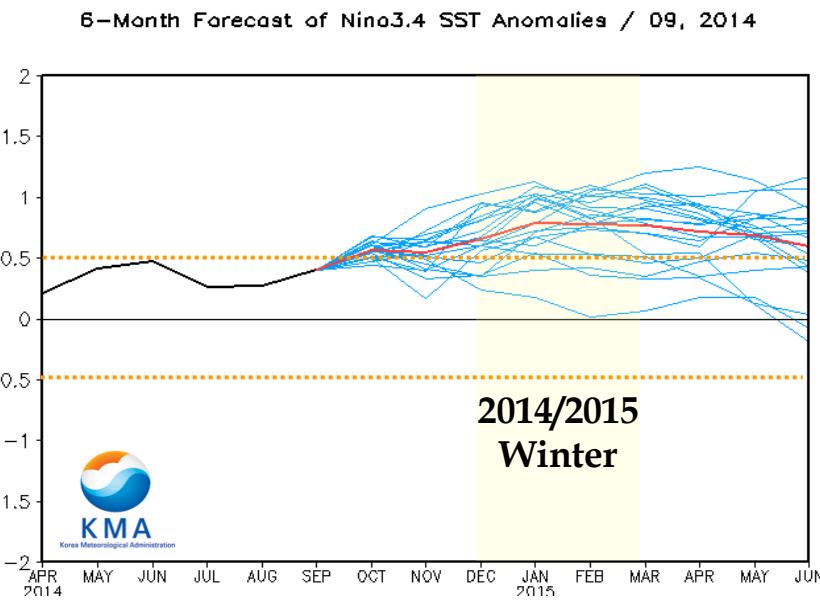


## 2. ENSO Prediction



# ENSO Prediction

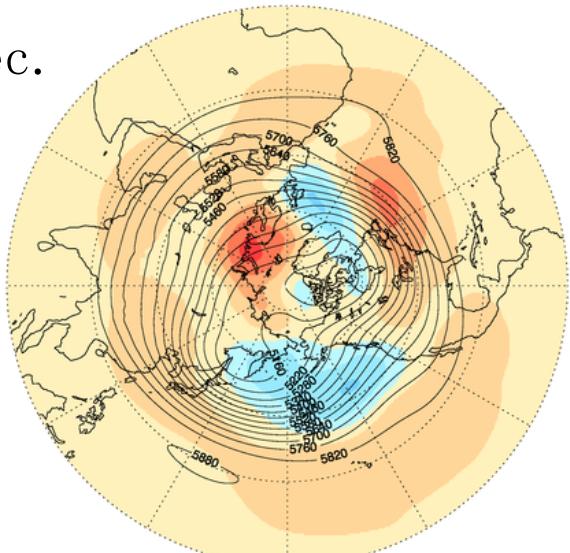
## Model Predictions for SST Anomalies in Nino 3.4



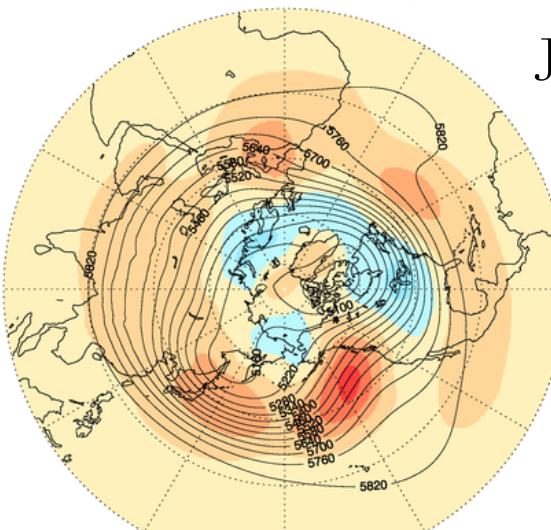
### 3. Dynamic Model Predictions (GloSea5, WMO LC-LRFMME)

# 500hPa GPH Anomalies for DJF(GloSea5)

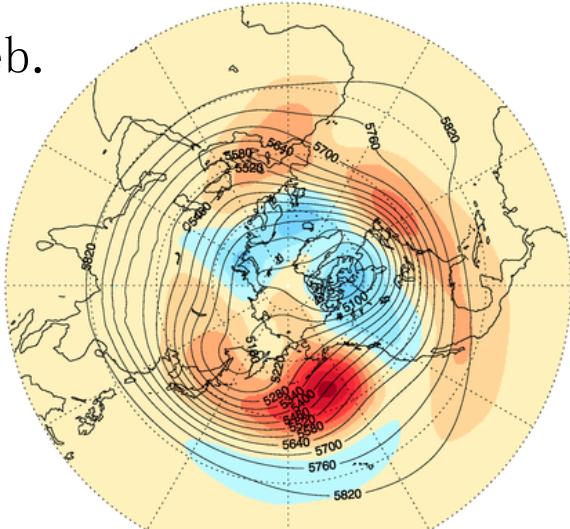
Dec.



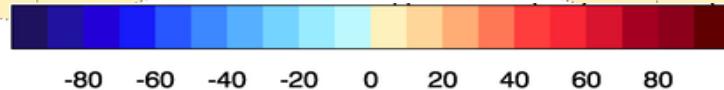
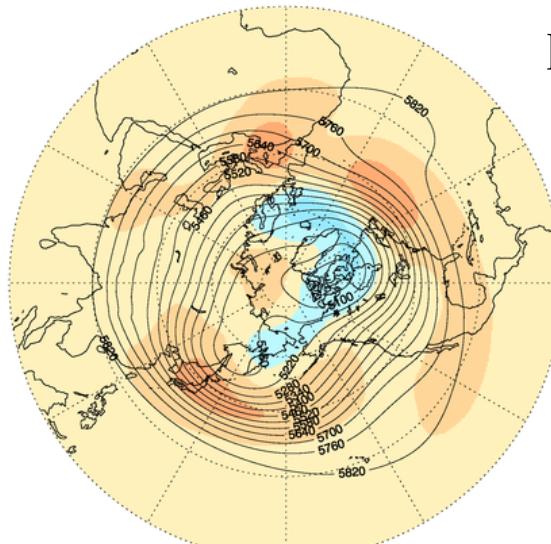
Jan.



Feb.

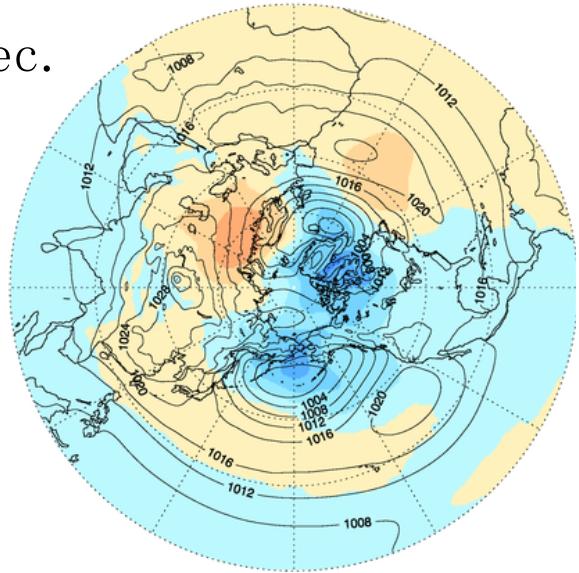


DJF

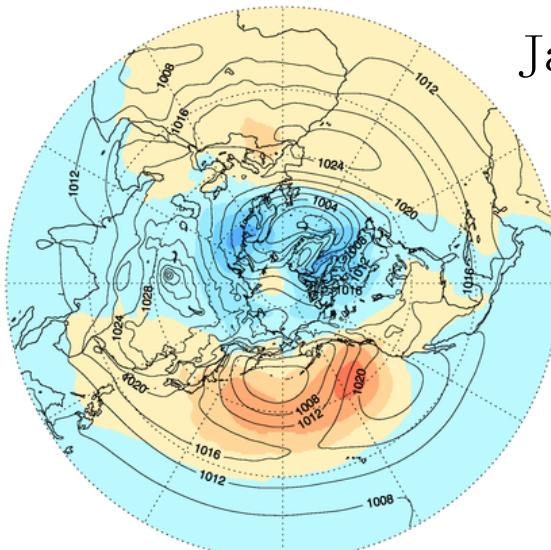


# Sea Level Pressure Anomalies for DJF(GloSea5)

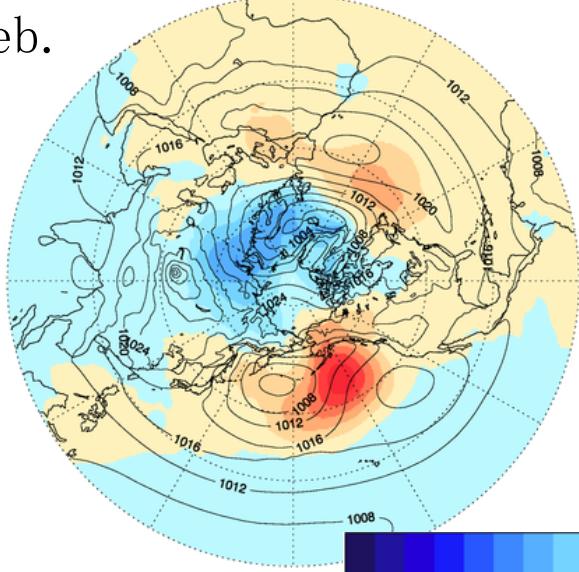
Dec.



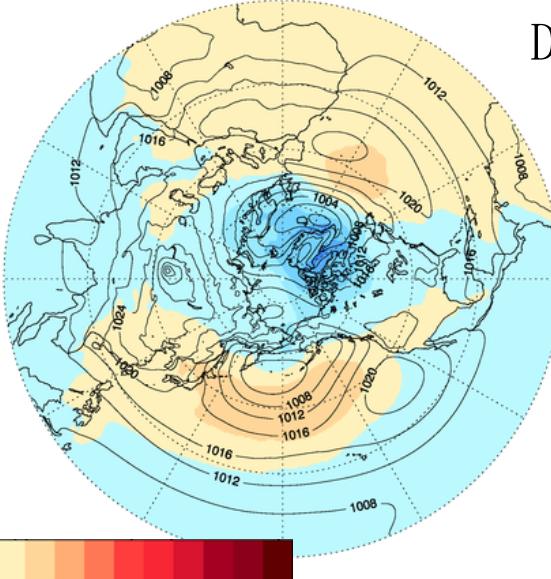
Jan.



Feb.

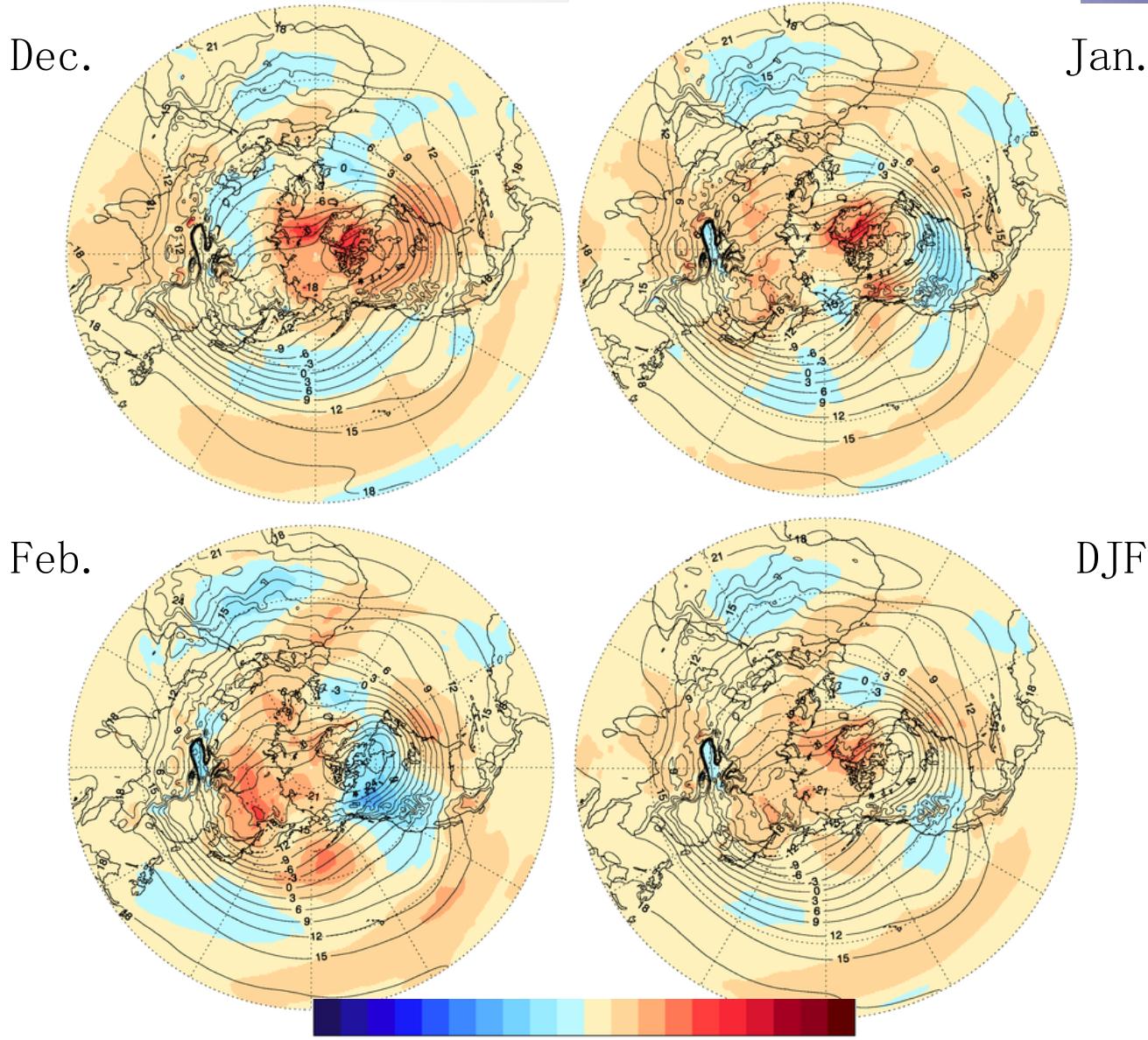


DJF

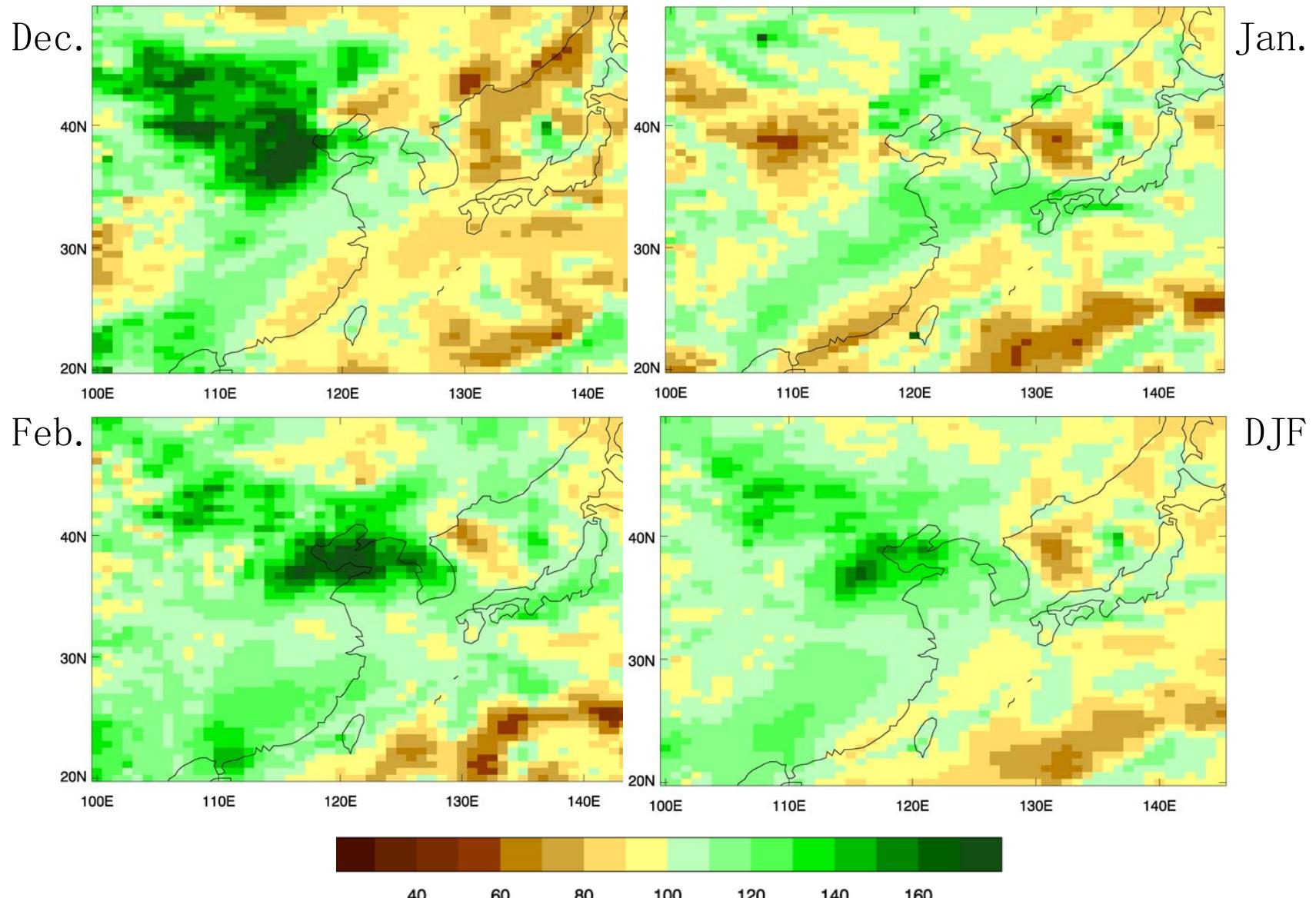


-8 -6 -4 -2 0 2 4 6 8

# 850hPa Temperature Anomalies for DJF(GloSea5)



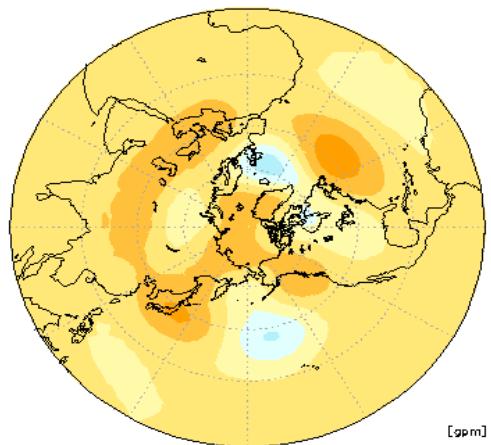
# Precipitation ratio for DJF(GloSea5)



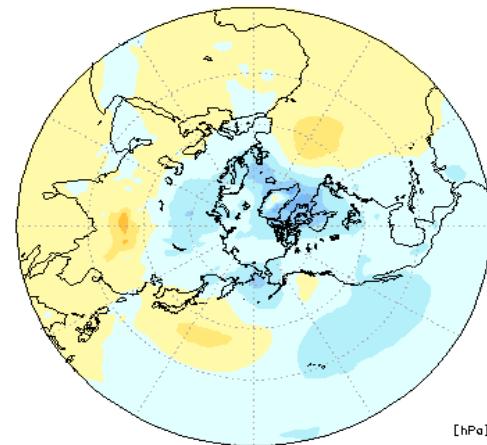
# WMO LC MME prediction for DJF

GPC\_Seoul/Washington/Melbourne/Montreal(cancm3/cancm4)/ECMWF/EXETER/Toulouse/CPTEC

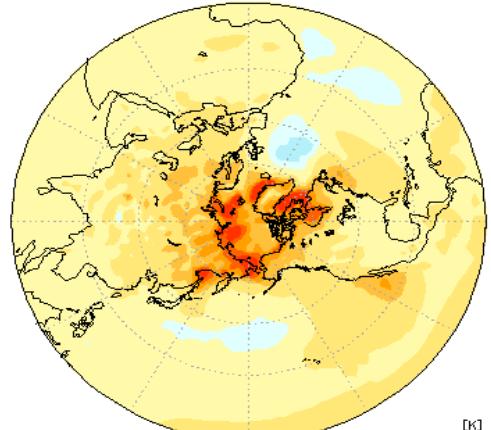
500hPa GPH



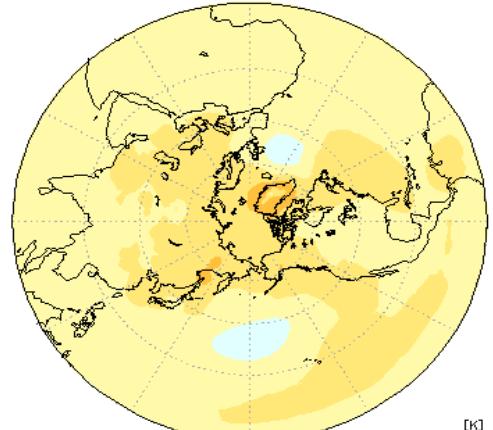
Sea level Pressure



2m Temperature



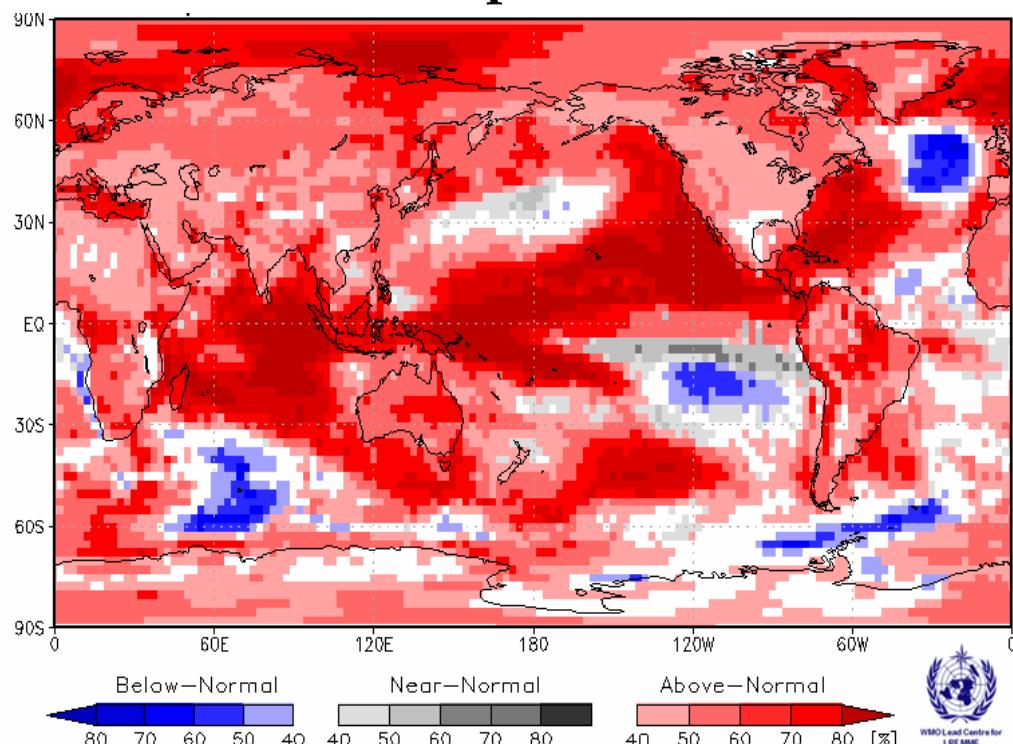
850hPa Temperature



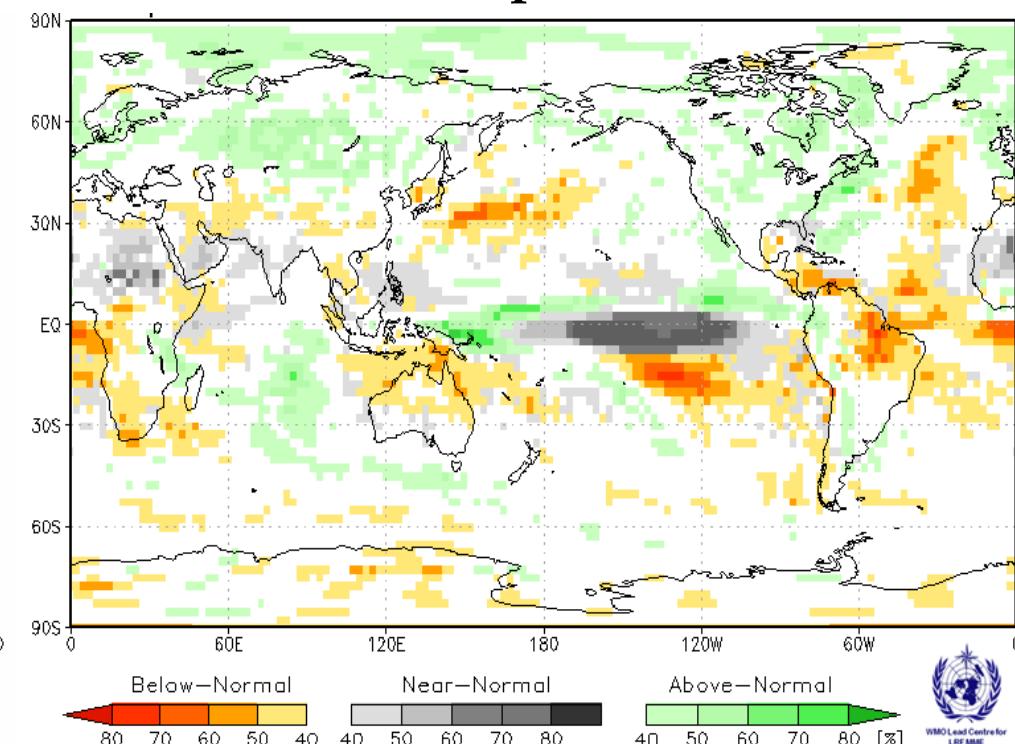
# WMO LC PMME Prediction for DJF

GPCs : Seoul, Montreal(CANCM3, CANCM4), EXTER, CPTEC, MELBOURNE

Temperature



Precipitation



# 5. Summary and conclusion

- 2014/15 winter outlook
  - ✓ The winter monsoon is expected to be weak in 2014-15 winter.
  - ✓ Above normal temperatures in Korea(20:30:50)
  - ✓ Near normal precipitation in Korea(10:60:30)
- El Nino is favored to develop in the late fall and early winter.

# Thank You !

