

Seasonal Climate Prediction for the Winter 2015/16

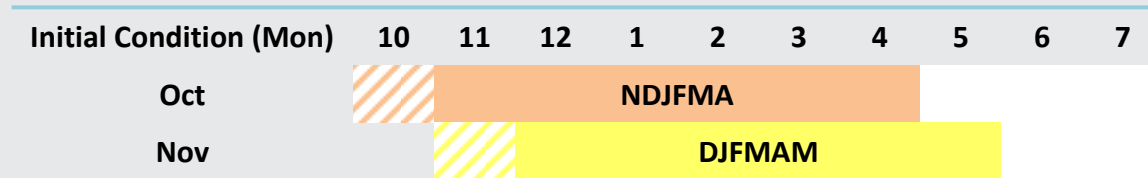
Vladimir Kryjov and Climate Prediction Team

APEC Climate Center



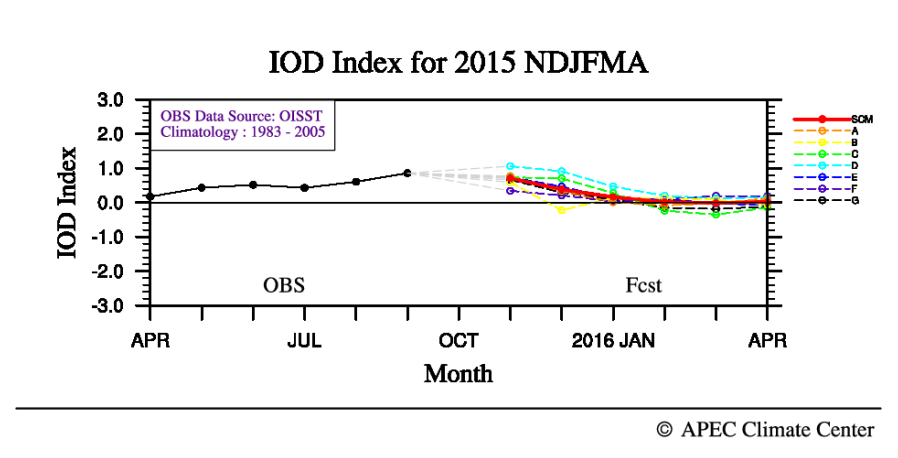
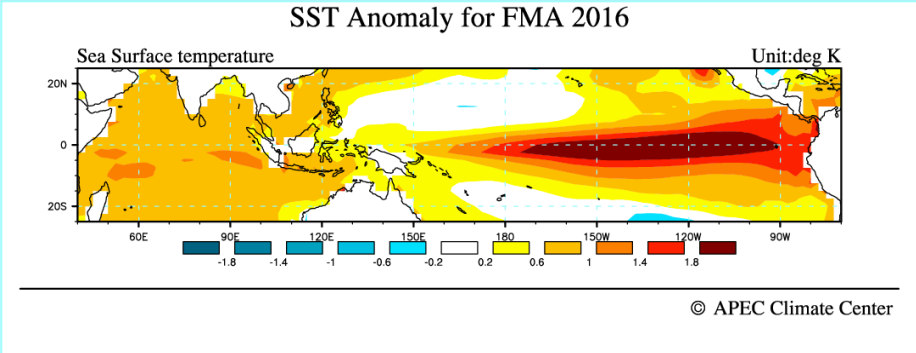
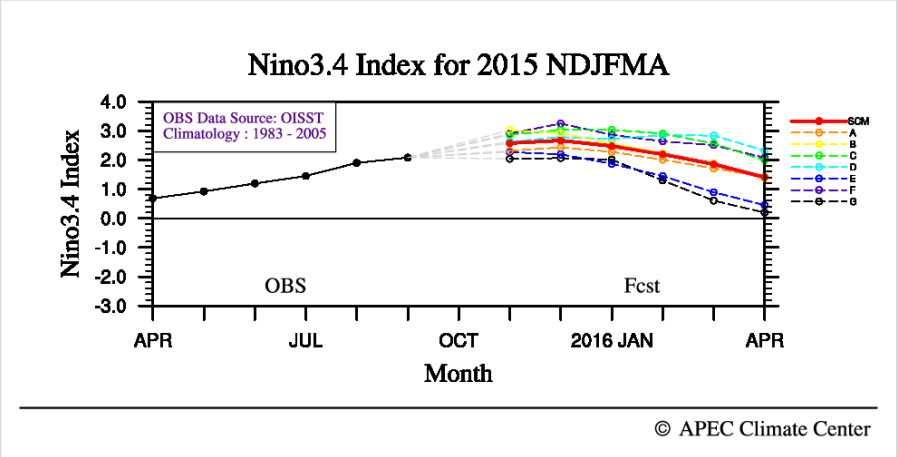
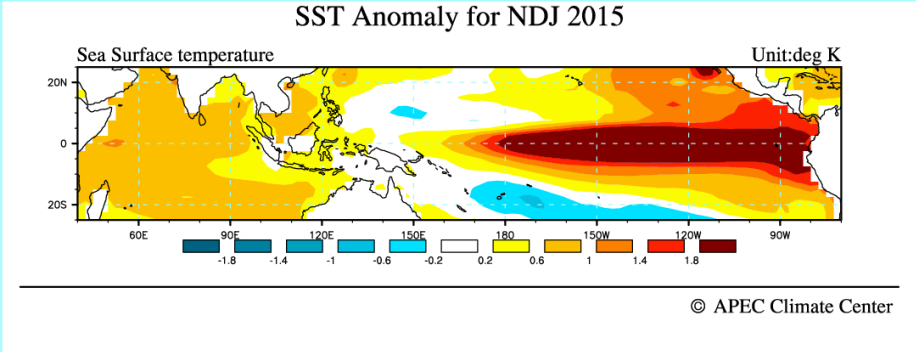
Participating Models (2015DJF)

6-month MME forecast system



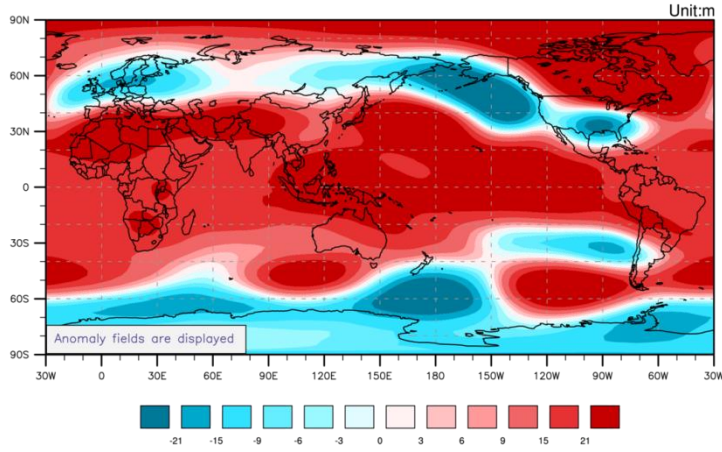
Institute	Model Name	AGCM/resolution	OGCM/resolution	Ensemble number
APCC	APCC (CCSM3)	CAM3/T85L26	POP1.3/Gxlv3_L40	10
NCEP	NCEP CFSV2	GFS/T126L64	MOM3/L40	20
BOM	POAMA	BAM v3.0d/ T47L17	ACOM2/ 0.5-1.5lat x 2lon L25	30
NASA	NASA	GEOS-5AGCM/ L72	MOM4/L40	11
MSC	CANCM3	AGCM3/T63L31	OGCM4/L40	10
MSC	CANCM4	AGCM4/T63L35	OGCM/L40	10
CMCC	CMCC_SPS	ECHAM5.3/T63L19	OPA8.2/L31	9

ENSO Prediction



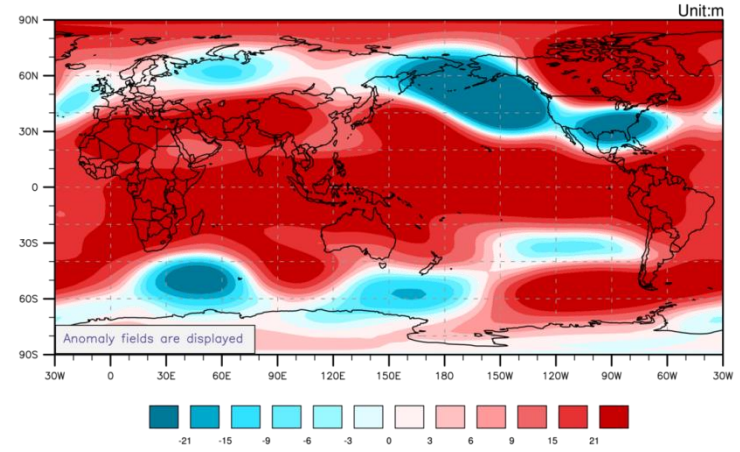
500hPa Geopotential Height Anomaly (Prediction:SCM)

Geopotential height at 500 mb for DEC 2015



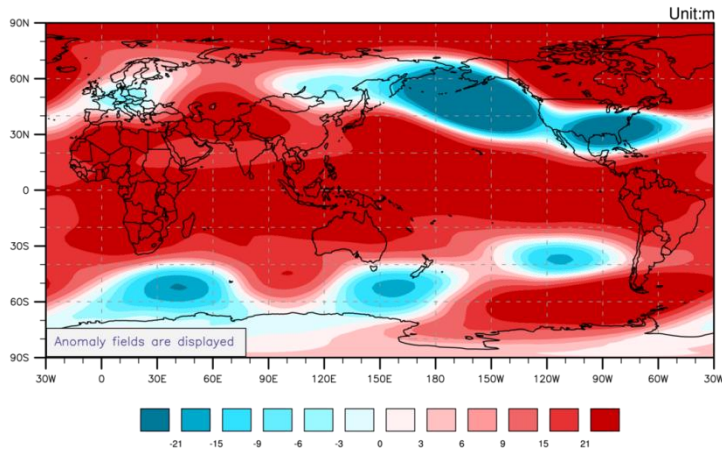
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Geopotential height at 500 mb for JAN 2016



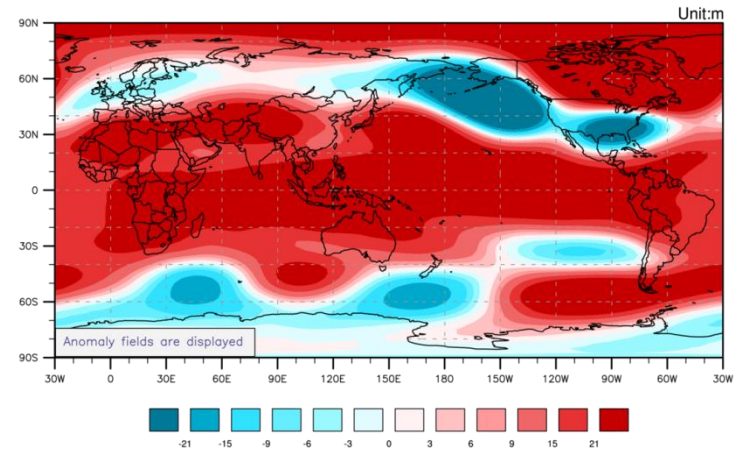
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Geopotential height at 500 mb for FEB 2016



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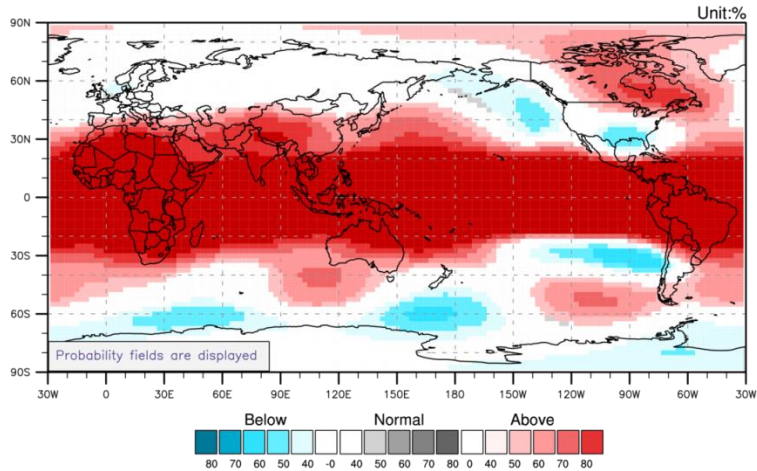
Geopotential height at 500 mb for December 2015-February 2016



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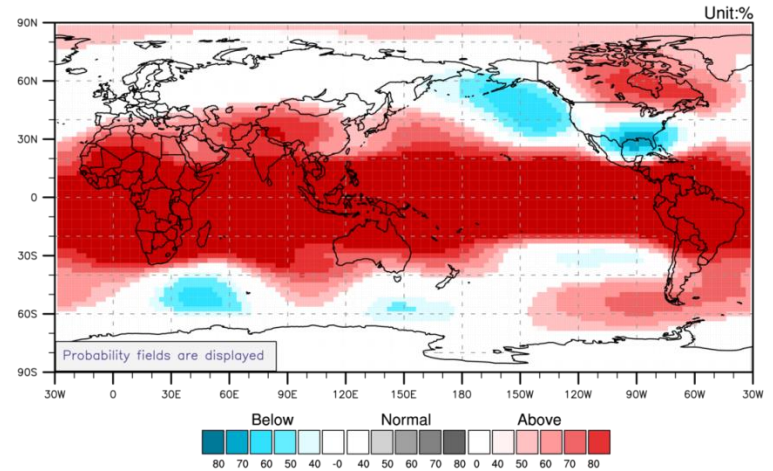
500hPa Geopotential Height Anomaly (Prediction:GAUS)

Geopotential height at 500 mb for DEC 2015



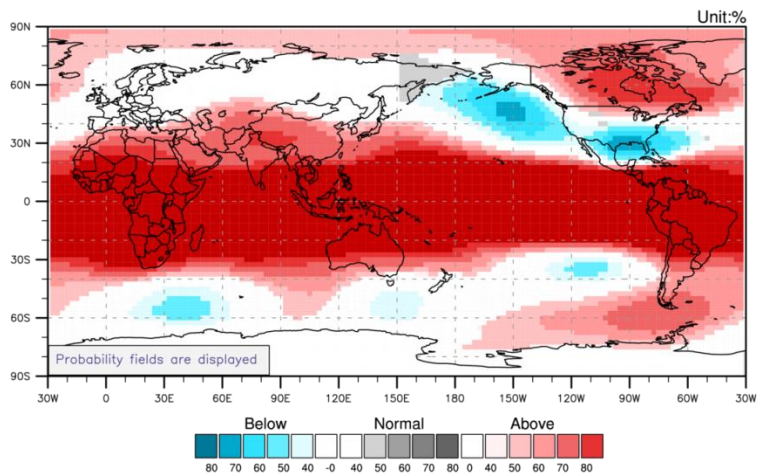
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Geopotential height at 500 mb for JAN 2016



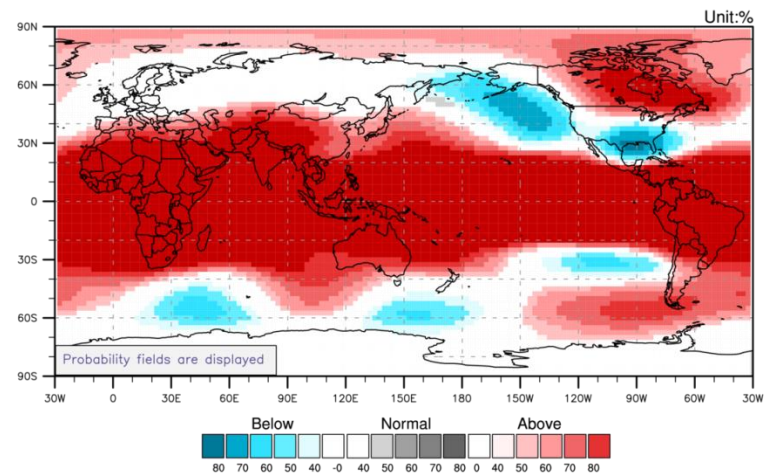
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Geopotential height at 500 mb for FEB 2016



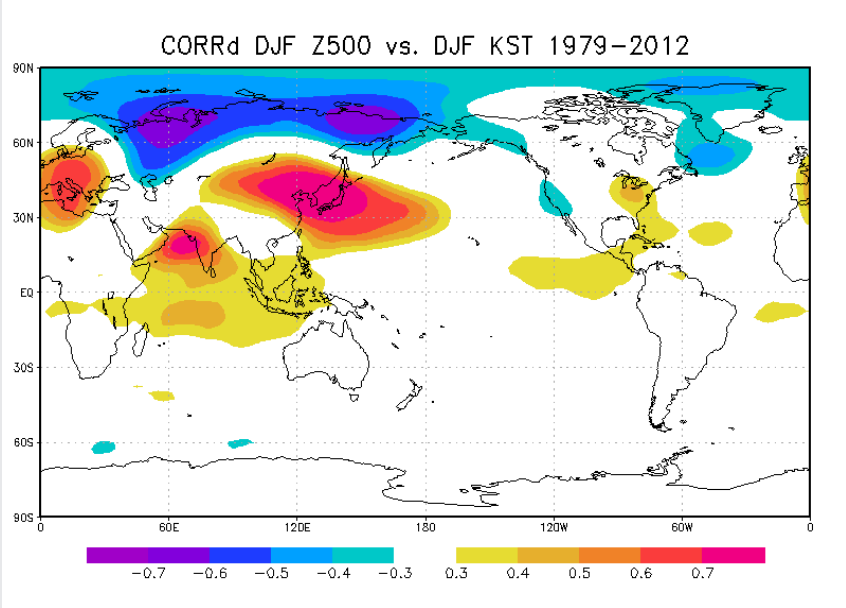
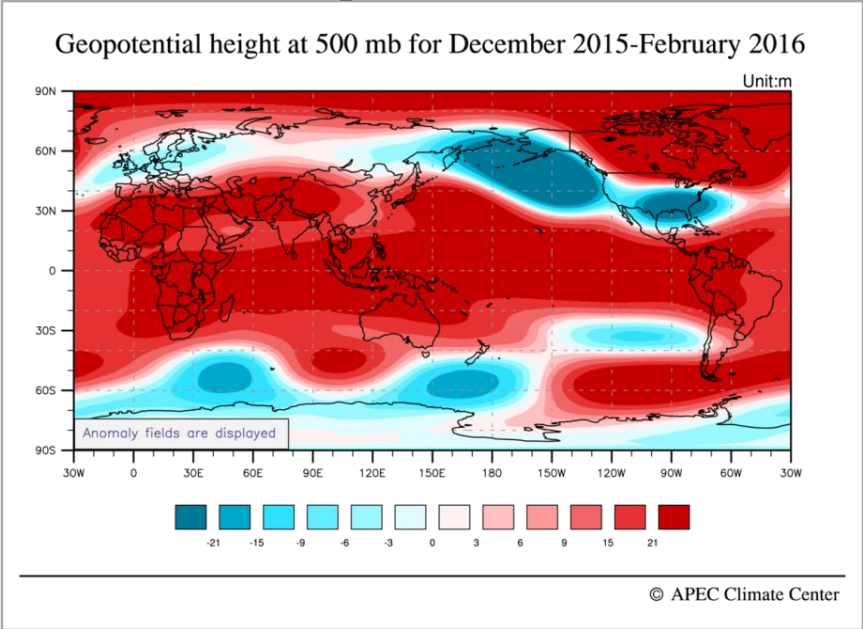
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Geopotential height at 500 mb for December 2015-February 2016



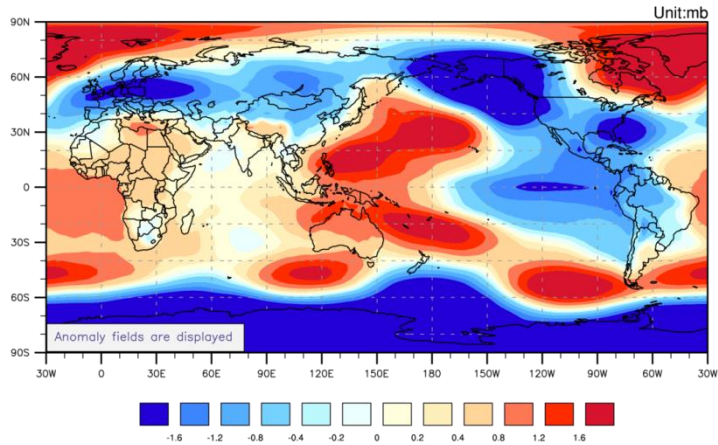
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DJF Z500: prediction vs. correlation with SKT



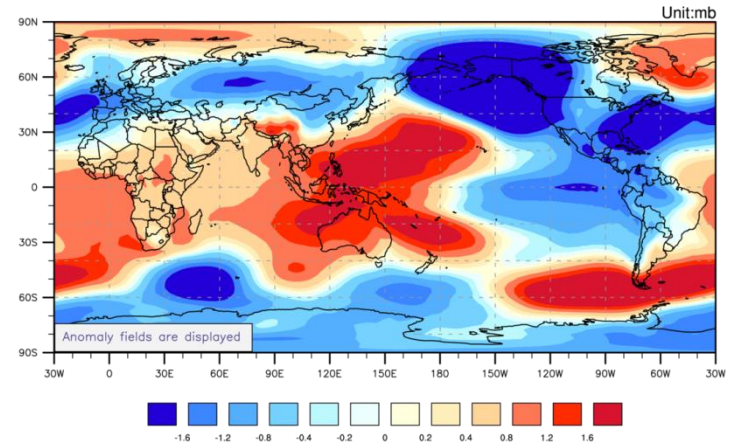
Sea Level Pressure Anomaly (Prediction:SCM)

Sea Level Pressure for DEC 2015



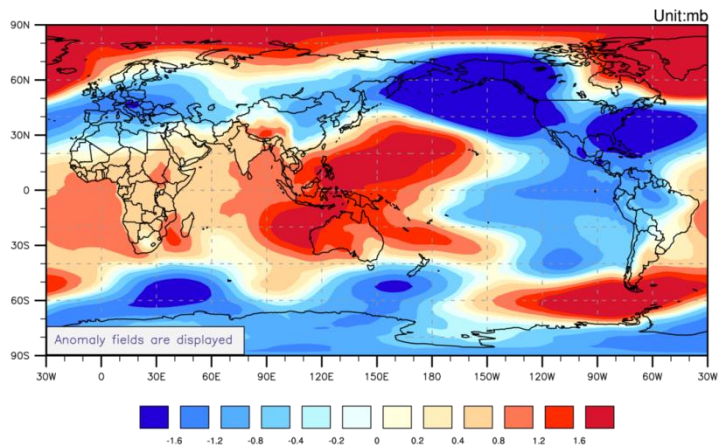
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Sea Level Pressure for JAN 2016



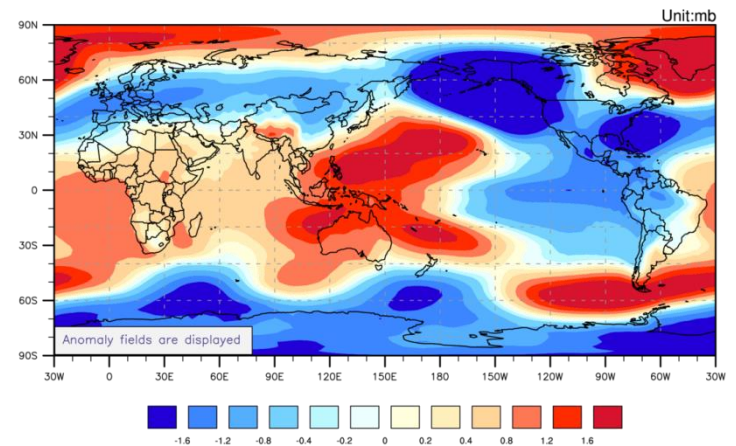
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Sea Level Pressure for FEB 2016



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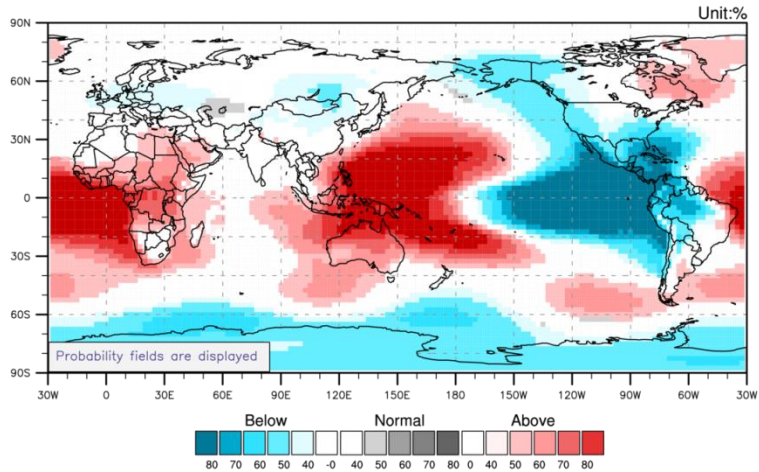
Sea Level Pressure for December 2015-February 2016



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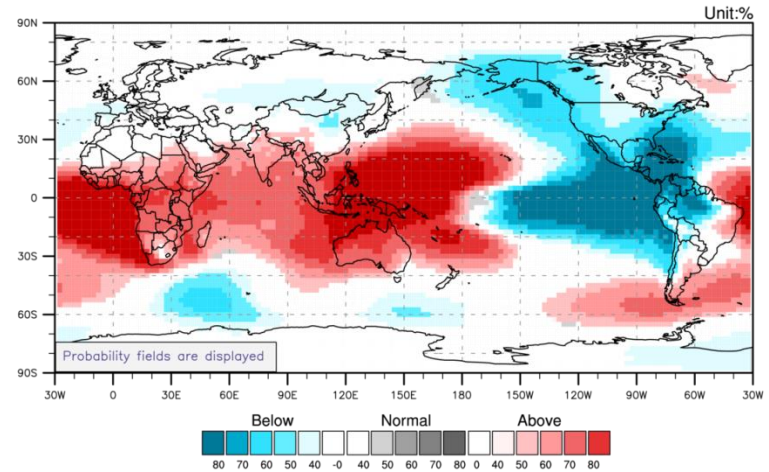
Sea Level Pressure Anomaly (Prediction:GAUS)

Sea Level Pressure for DEC 2015



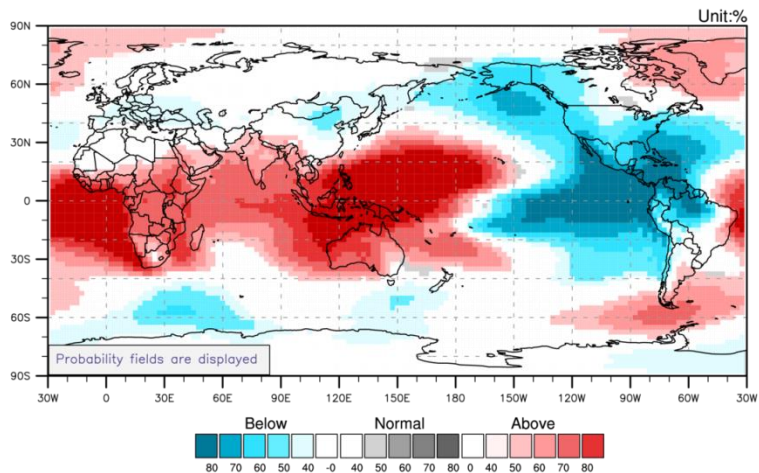
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Sea Level Pressure for JAN 2016



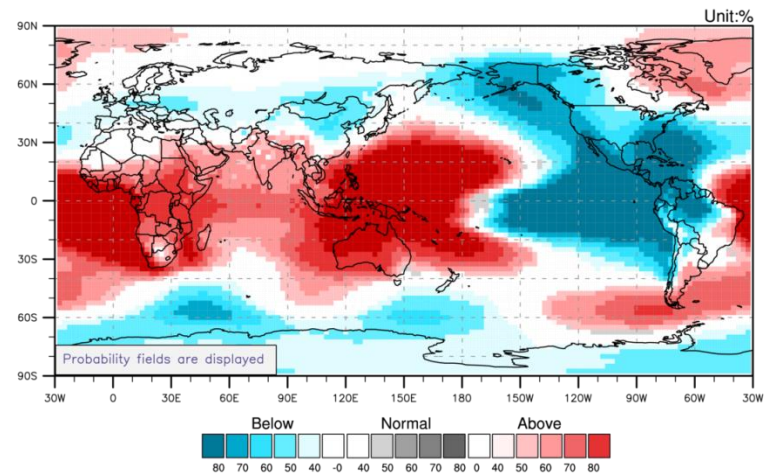
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Sea Level Pressure for FEB 2016



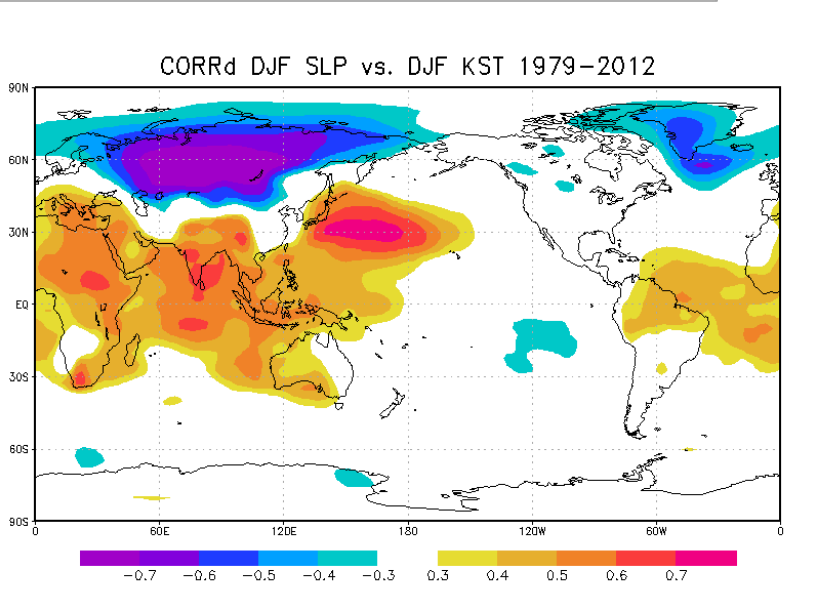
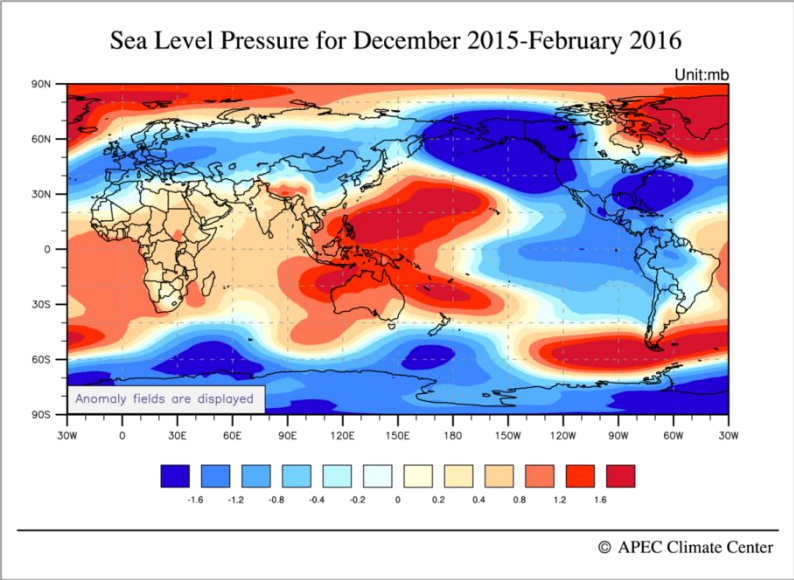
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Sea Level Pressure for December 2015-February 2016



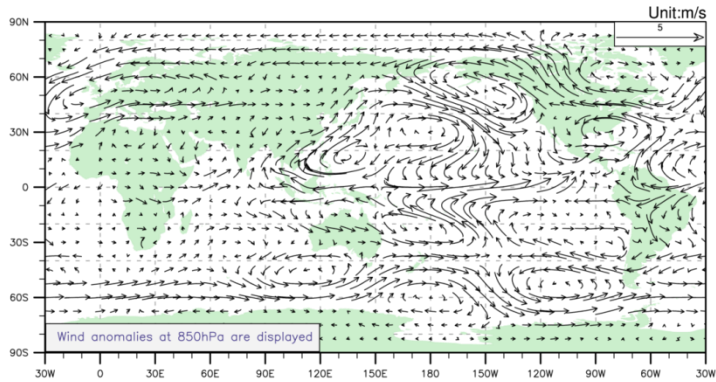
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DJF SLP: Prediction vs. correlation with SKT



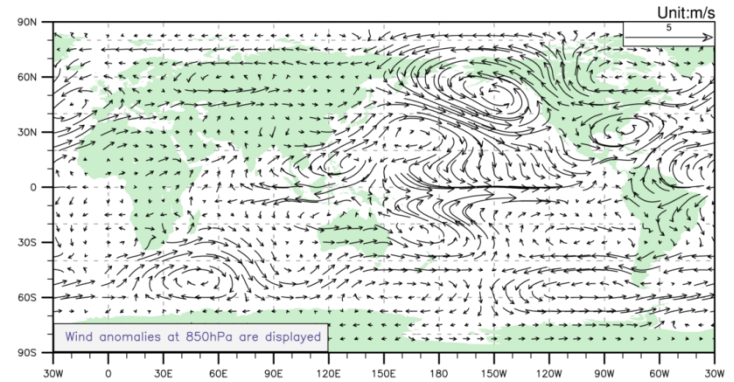
850hPa Wind Anomaly (Prediction:SCM)

Wind at 850hPa for DEC 2015



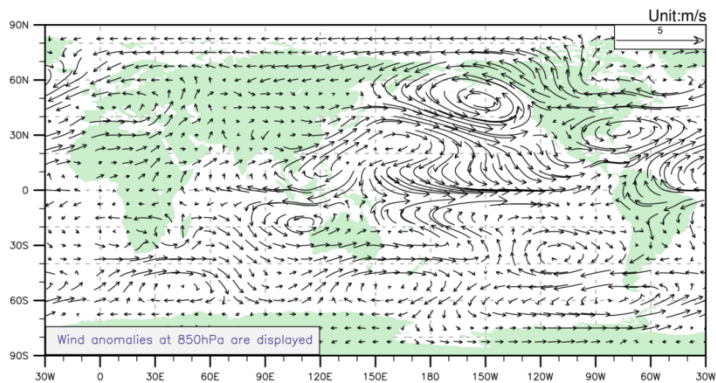
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Wind at 850hPa for JAN 2016



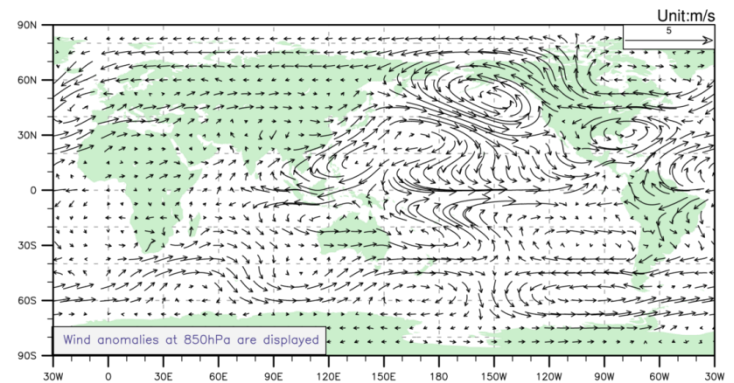
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Wind at 850hPa for FEB 2016



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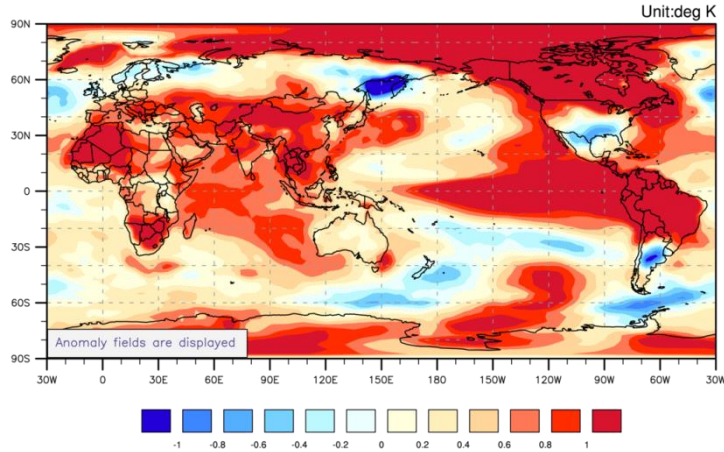
Wind at 850hPa for DJF 2015



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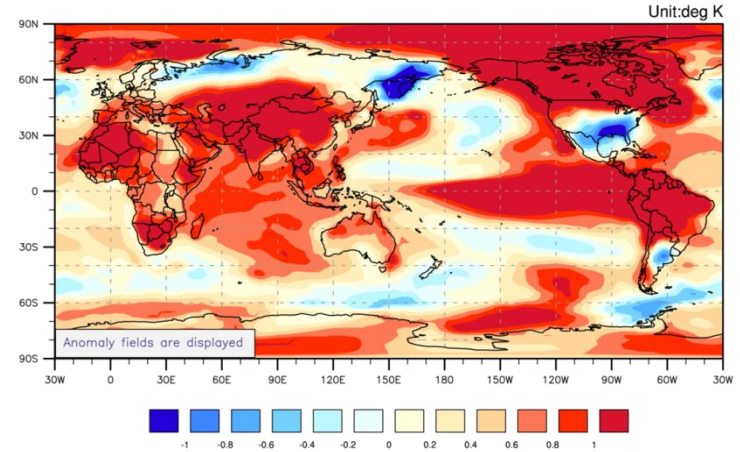
2m Temperature Anomaly (Prediction:SCM)

Temperature at 2m for DEC 2015



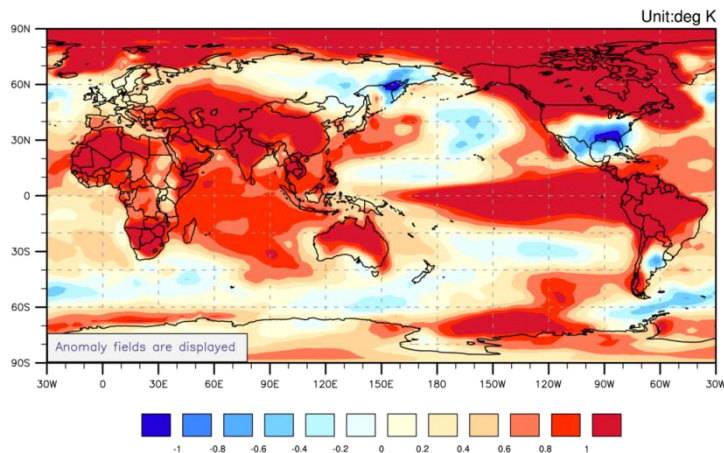
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Temperature at 2m for JAN 2016



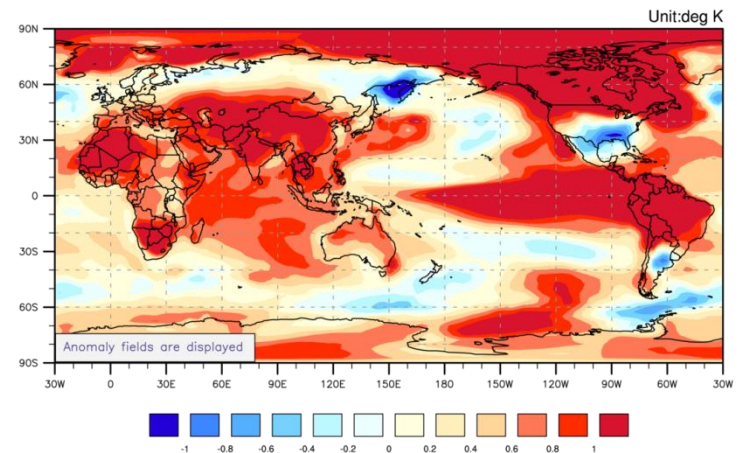
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Temperature at 2m for FEB 2016



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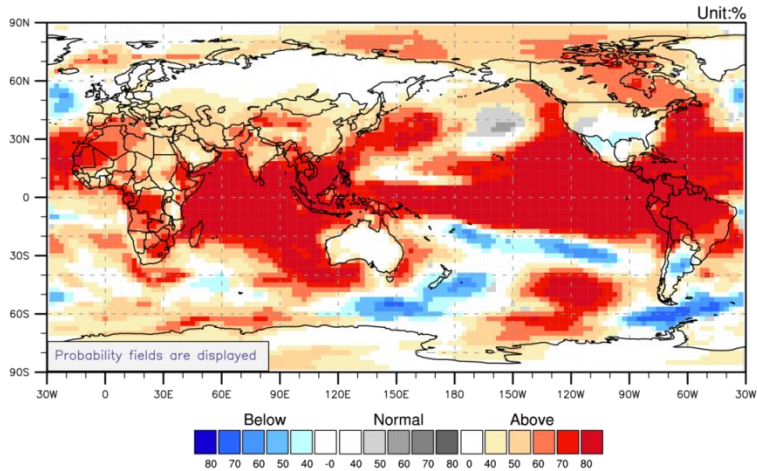
Temperature at 2m for December 2015-February 2016



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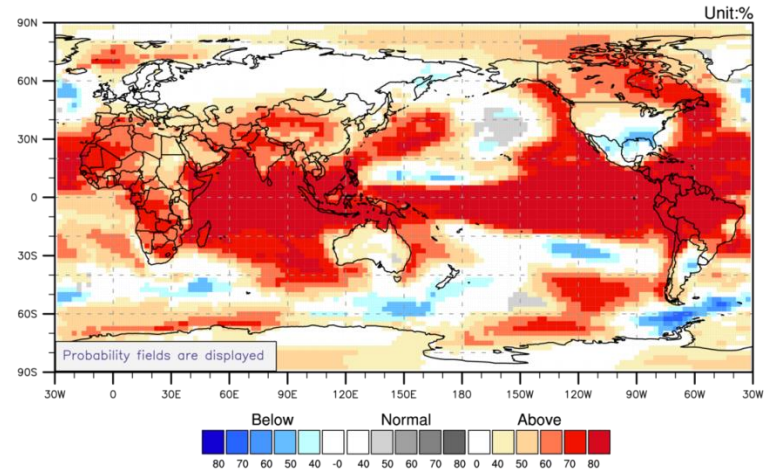
2m Temperature Anomaly (Prediction:GAUS)

Temperature at 2m for DEC 2015



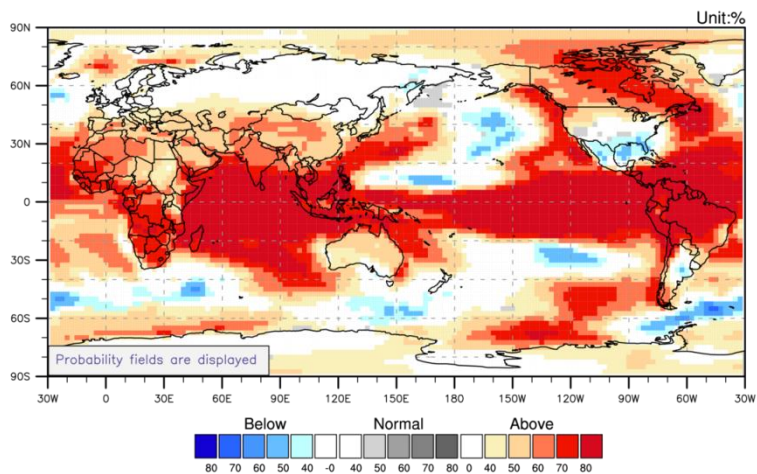
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Temperature at 2m for JAN 2016



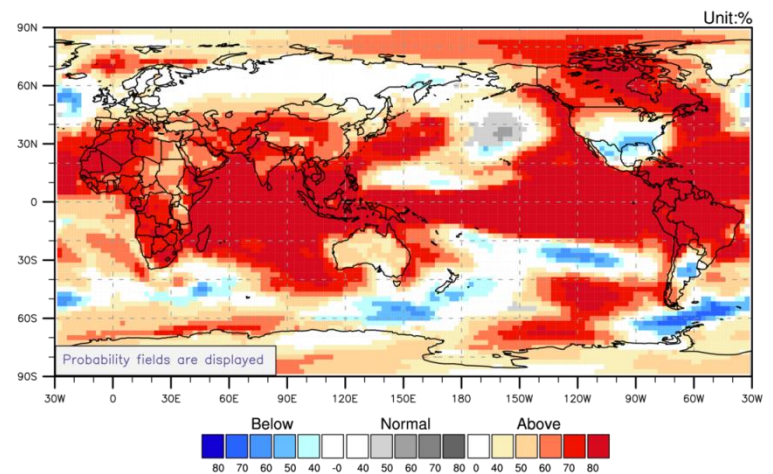
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Temperature at 2m for FEB 2016



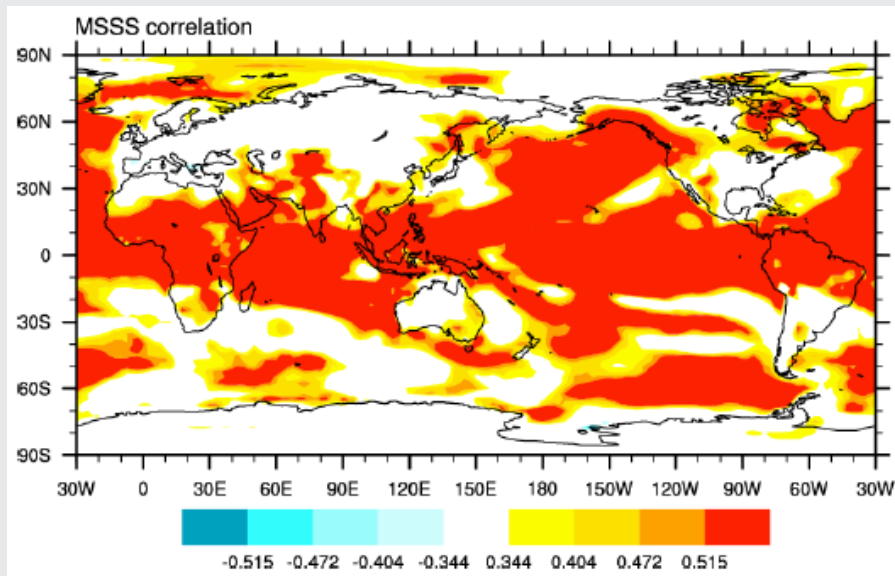
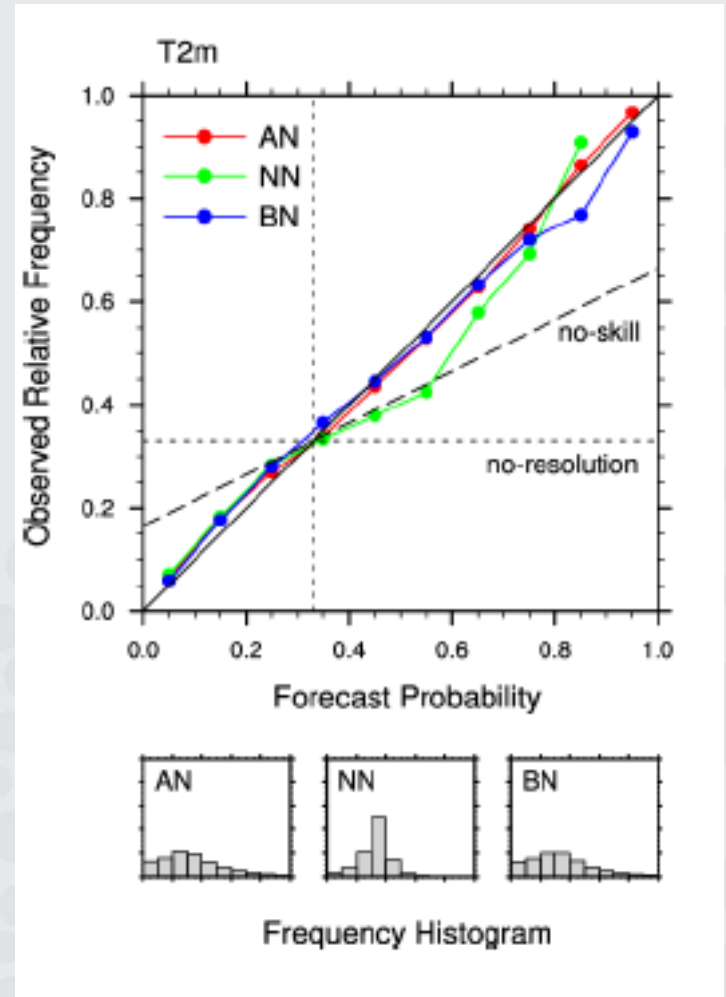
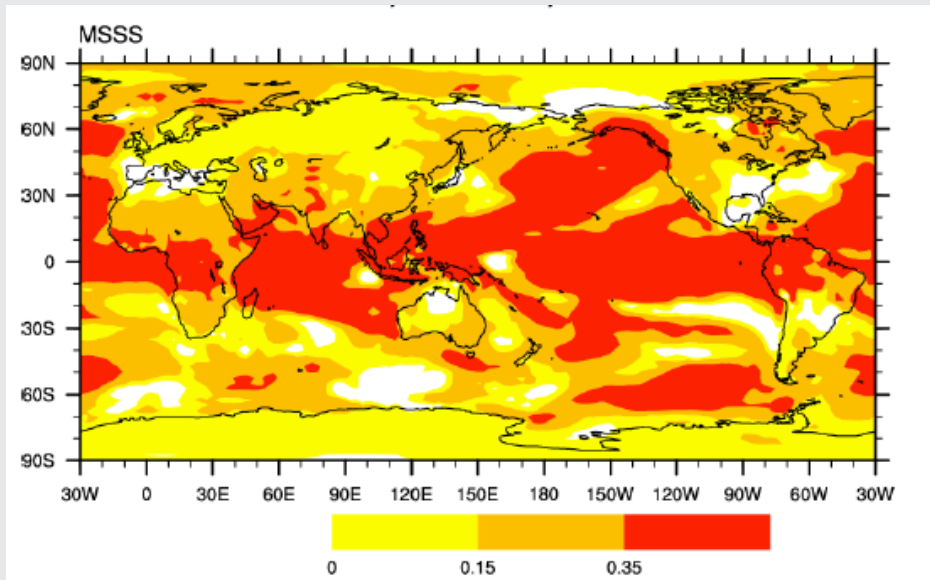
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Temperature at 2m for December 2015-February 2016

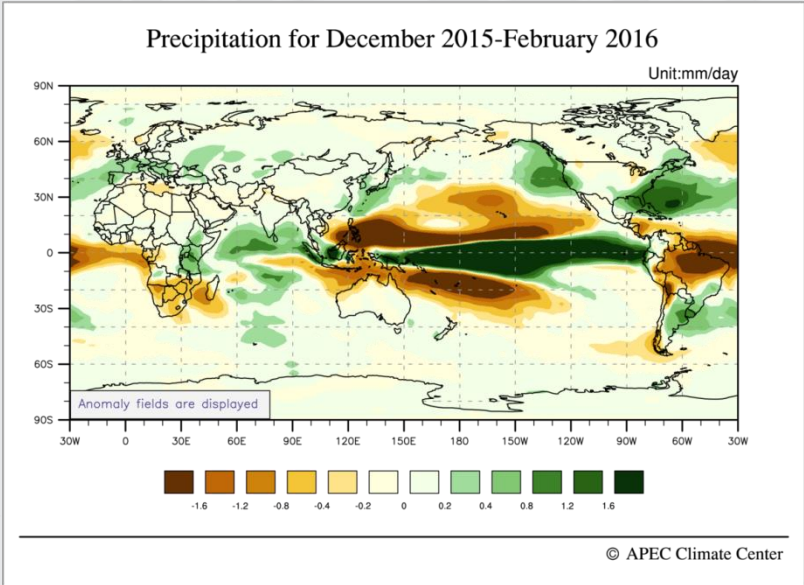
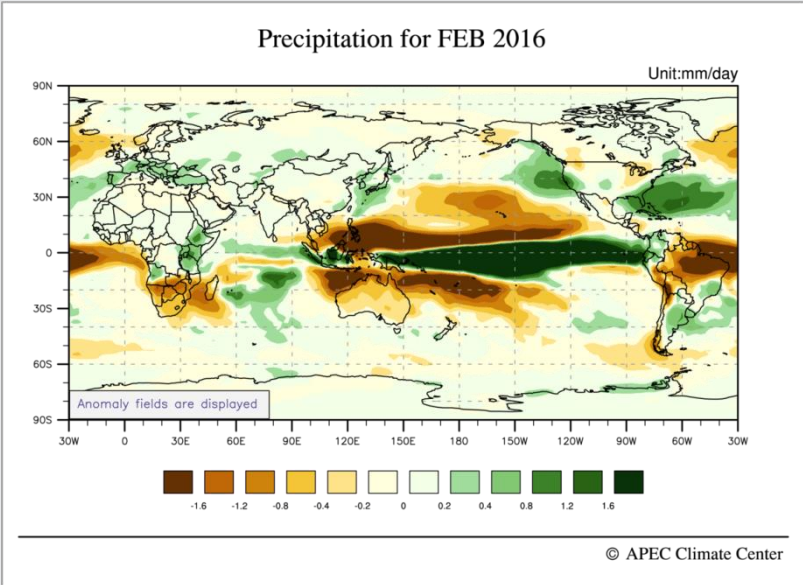
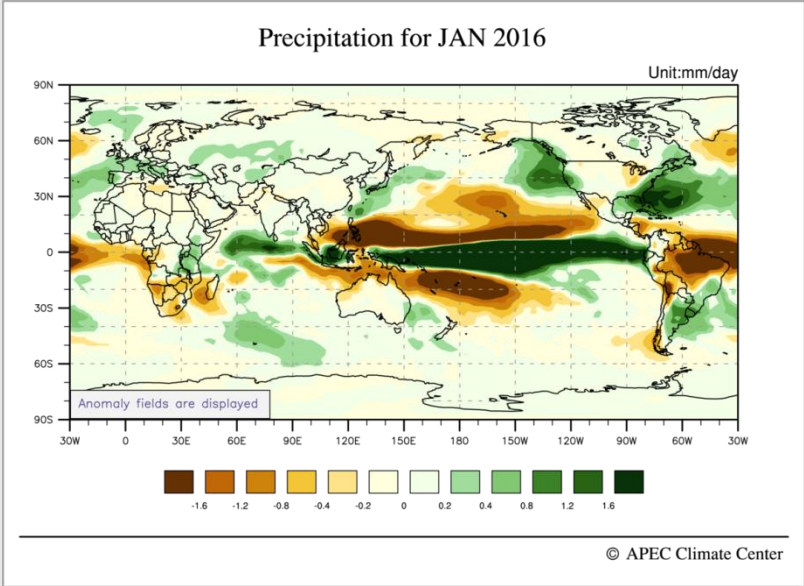
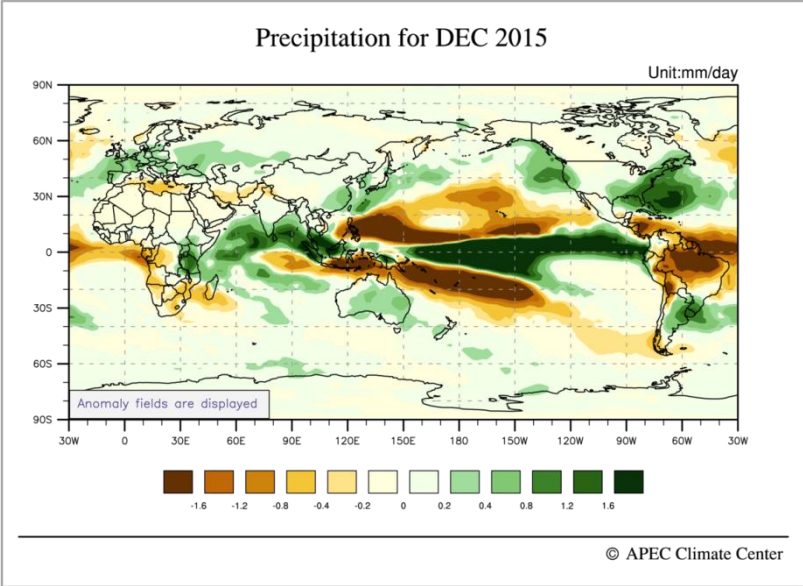


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2m Temperature Anomaly Verification (1982-2005)

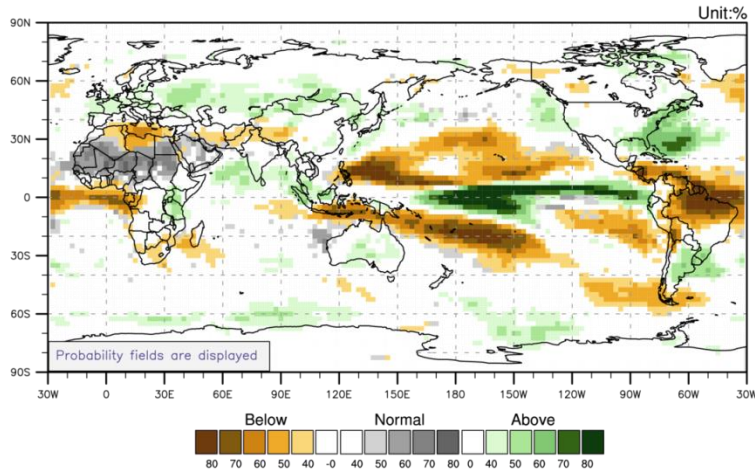


Precipitation Anomaly (Prediction:SCM)



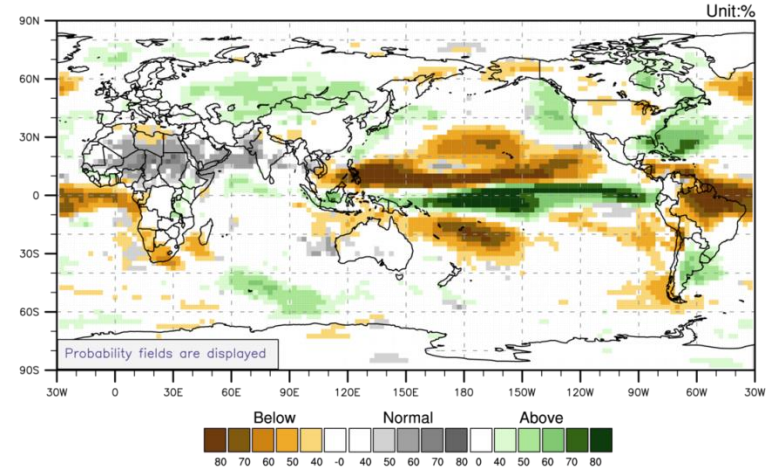
Precipitation Anomaly (Prediction:GAUS)

Precipitation for DEC 2015



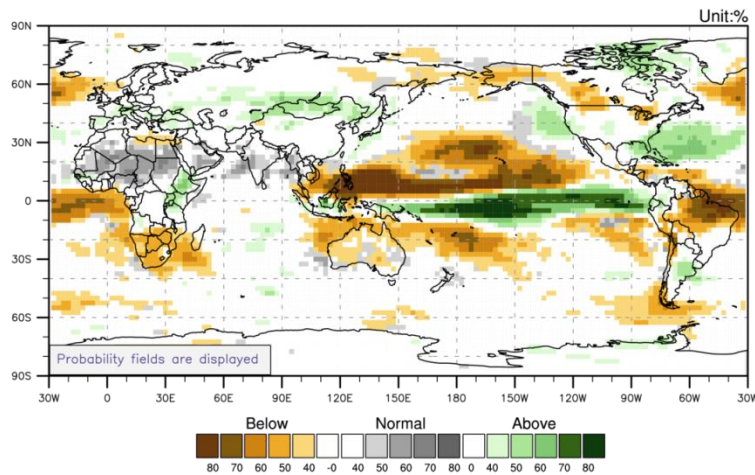
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Precipitation for JAN 2016



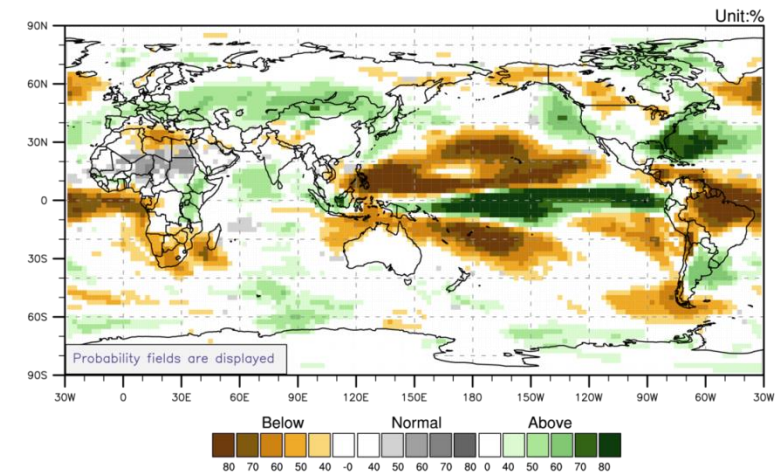
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Precipitation for FEB 2016



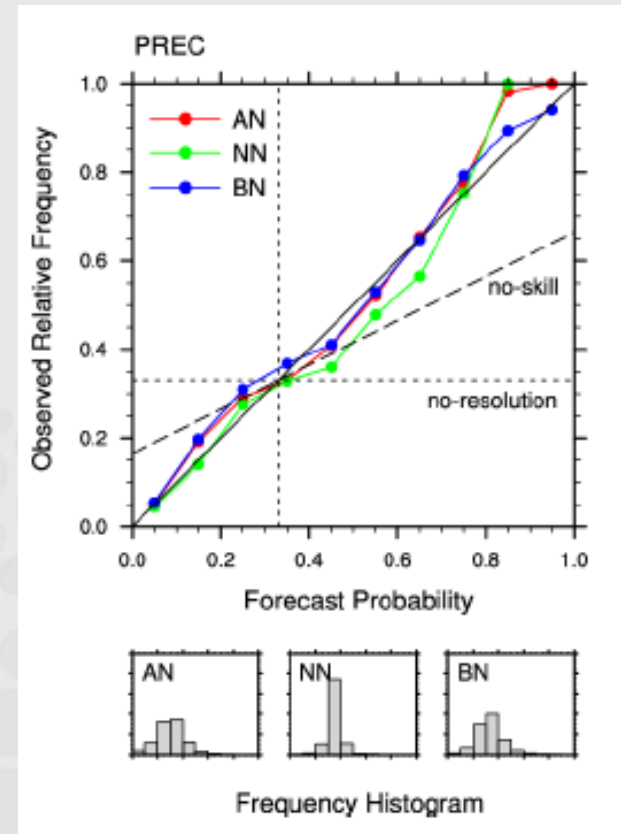
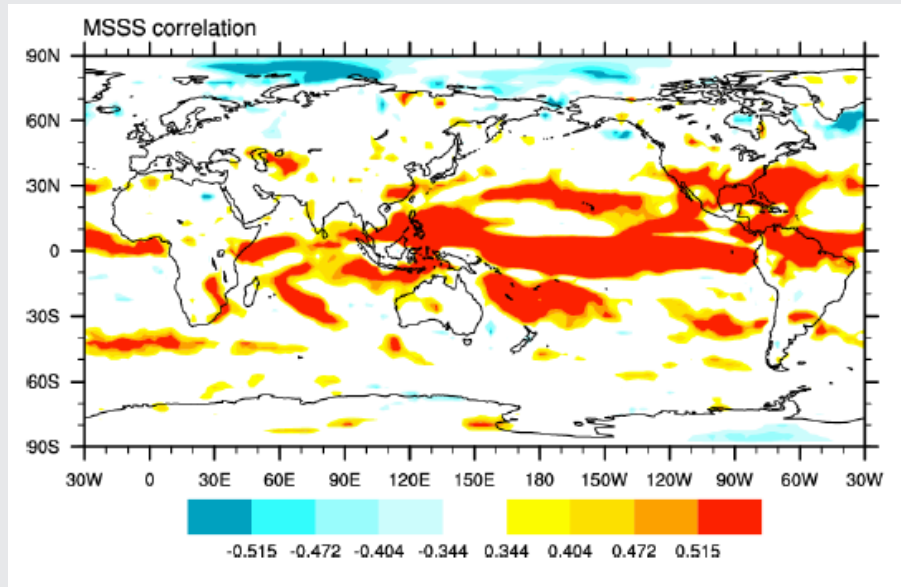
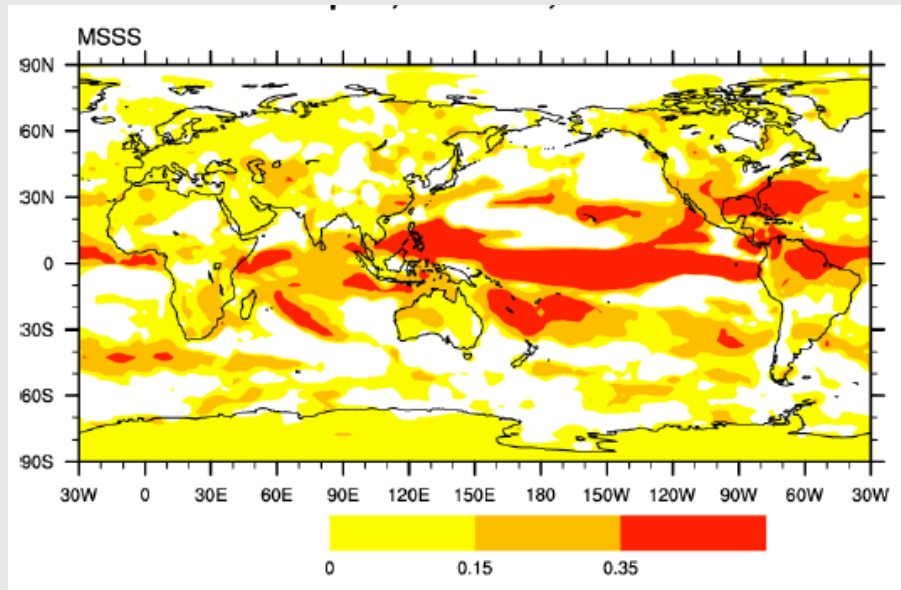
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Precipitation for December 2015-February 2016

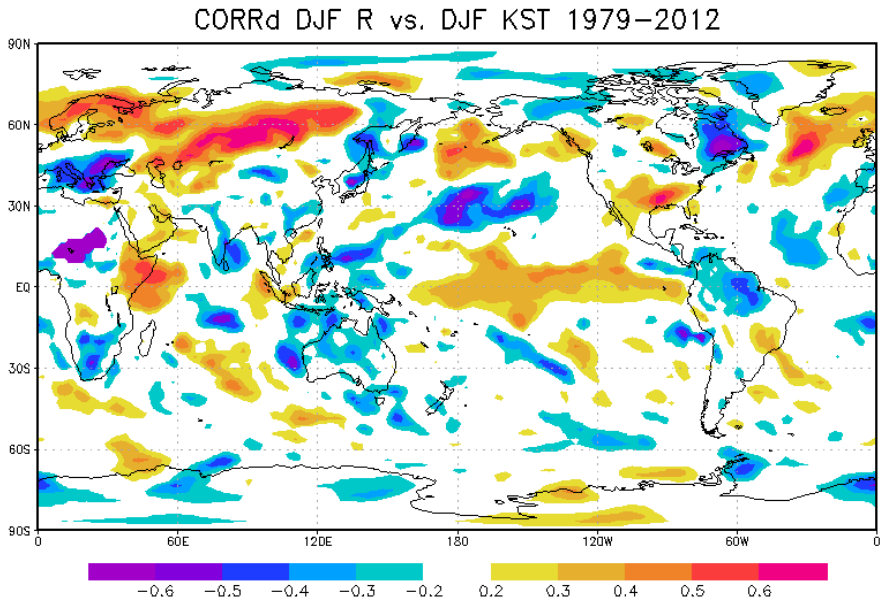
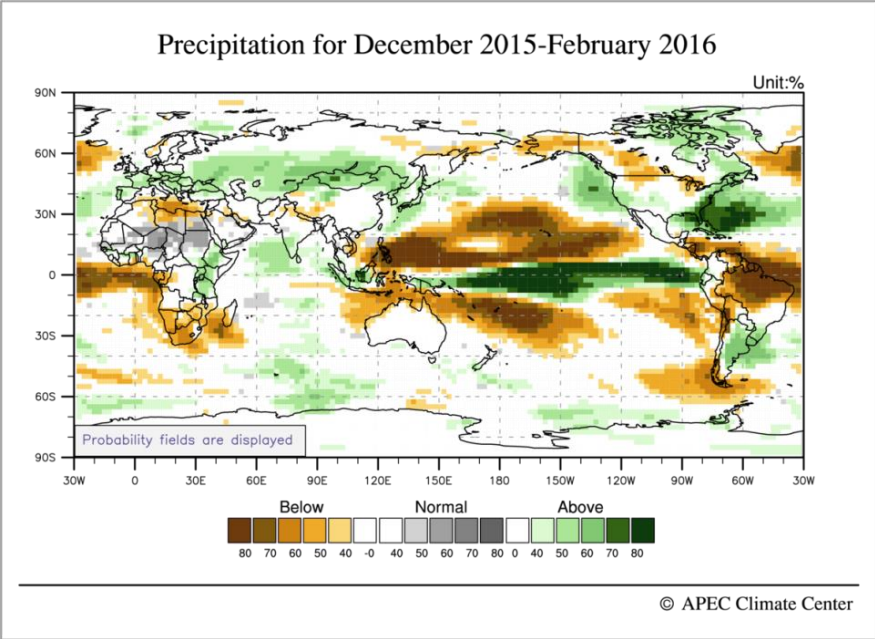


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Precipitation Anomaly Verification (1982-2005)



DJF R: Prediction vs. correlation with SKT



Summary

For the forthcoming winter 2015/16, APCC MME predicts a further development of the strong El-Nino episode, with the mature phase being achieved in the last quarter of 2015.

Probability for above normal temperature over East Asia is strongly enhanced (70%) in the south and slightly enhanced (>40%) in the north.

Probability for above normal precipitation is slightly enhanced in the northern regions of East Asia. Meanwhile, no forecast signal is distinct for the southern regions.

The presented seasonal outlook for winter 2015/2016 is based on the model simulations initiated with conditions of late September – early October 2015, a two month lead. When October initialization applied, prediction may need some slight corrections.



Thank you