

# VYUZITI METEOROLOGIE PRI OBCHODOVANI S ENERGETICKYMI KOMODITAMI

Ladislav Brezina, 9.3.2016

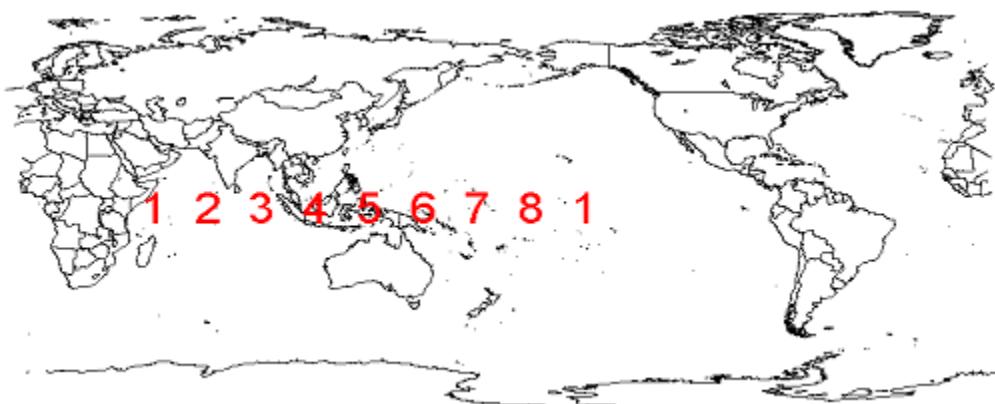
# Ezpada

- Zalozena 2004, registrovana ve Svycarsku
- Pobocky – Praha, Zug a Mnichov
- Cca. 70 zamestnancu
- Hlavni cinnosti je obchod s energetickymi komoditami
- V soucasne dobe hledame 2 Junior Meteorology do kancelare v Praze
- Kontakt: [ladislav.brezina@ezpada.com](mailto:ladislav.brezina@ezpada.com)

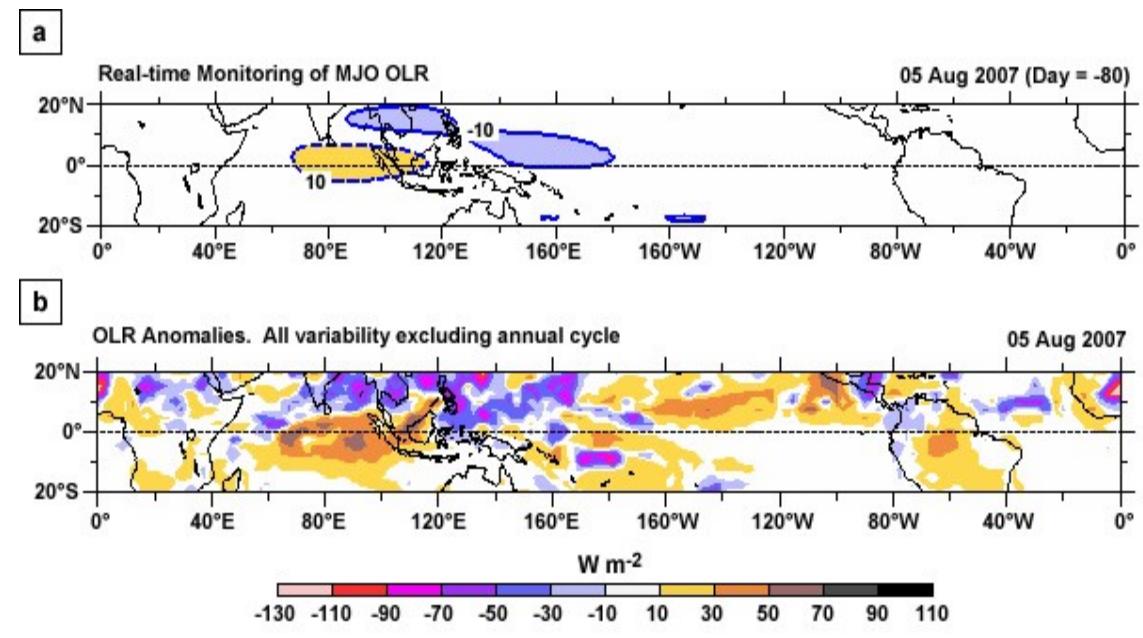
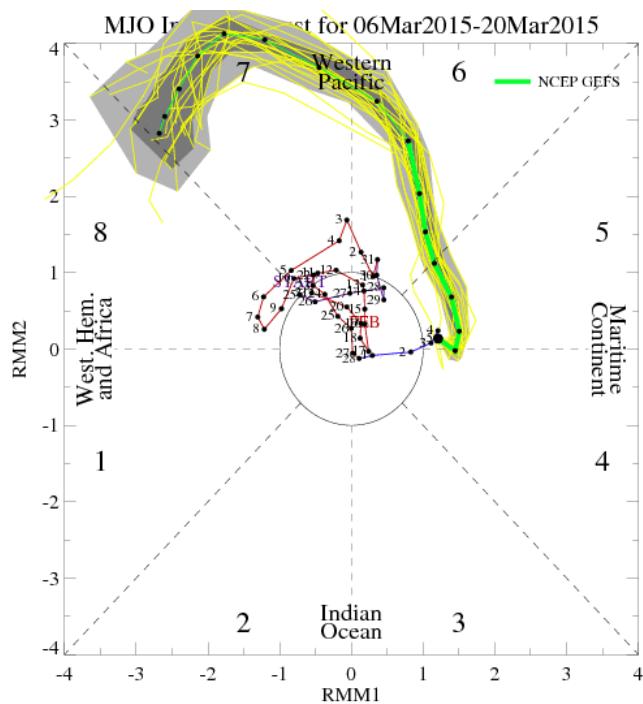
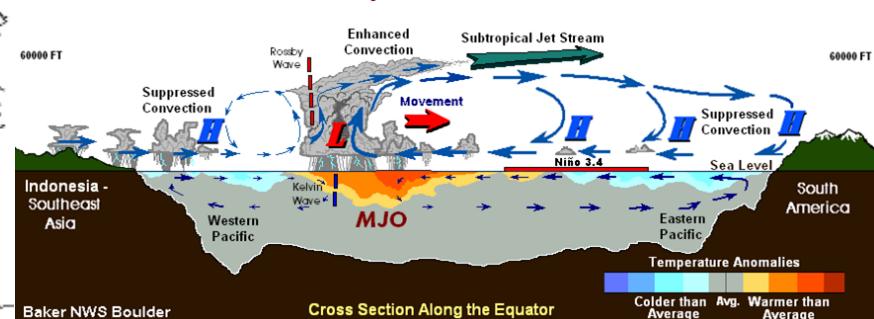
# TÝDENNÍ A MĚSÍČNÍ PŘEDPOVĚDI POČASÍ

Vliv teleconnections na kvalitu dlouhodobých  
předpovědí

# MJO

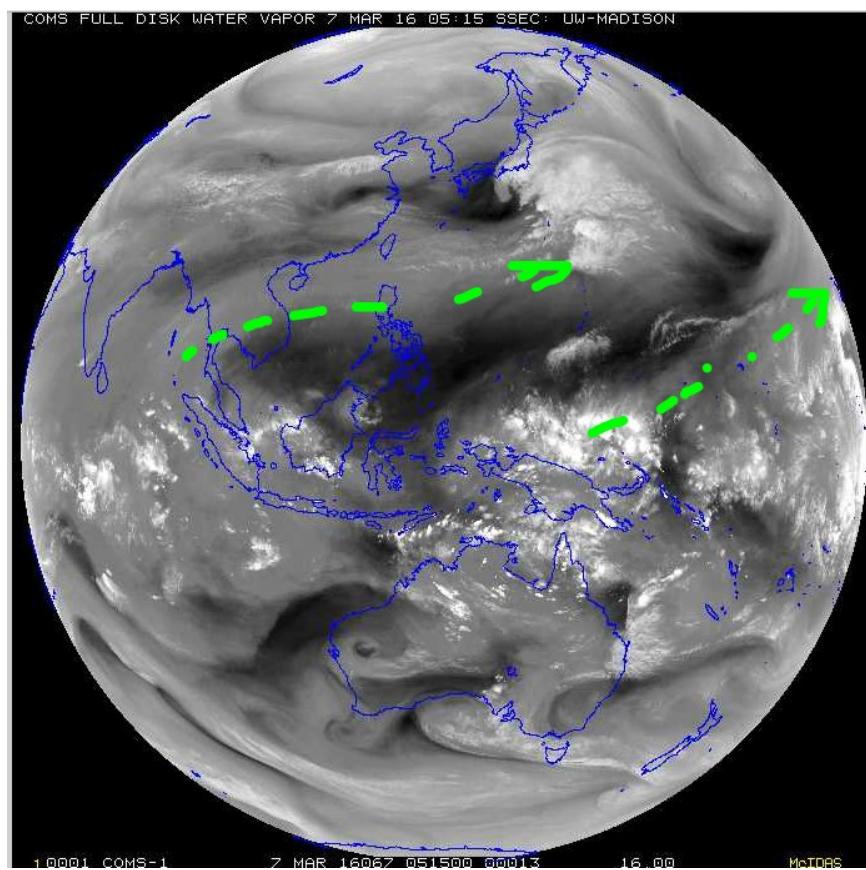
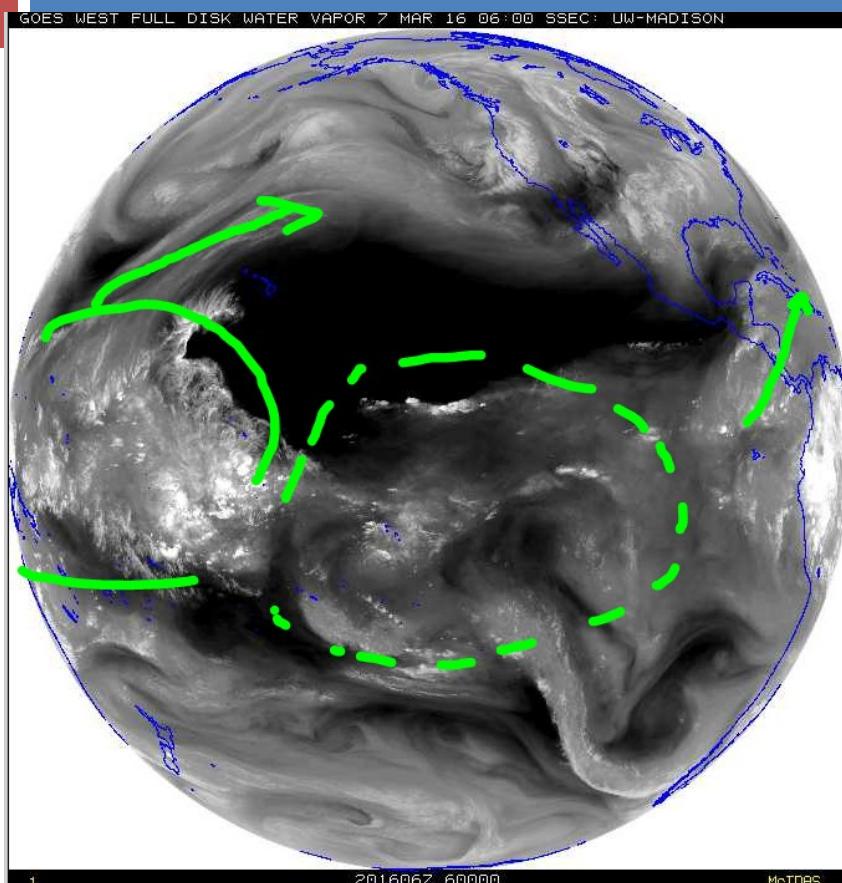


**Madden-Julian Oscillation (MJO)  
in the Tropical Pacific Ocean**



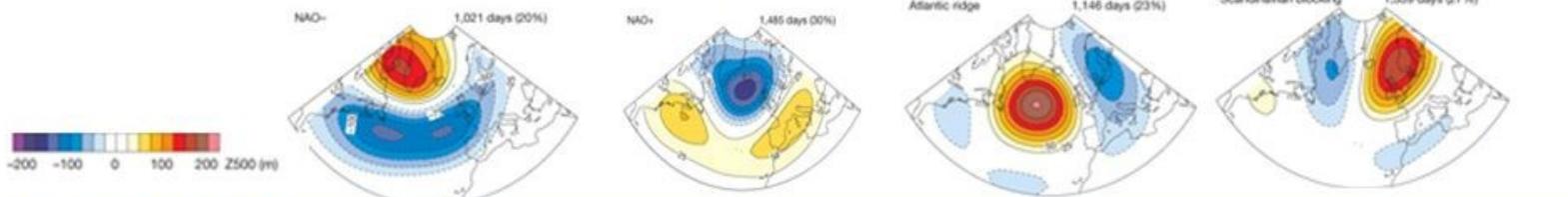
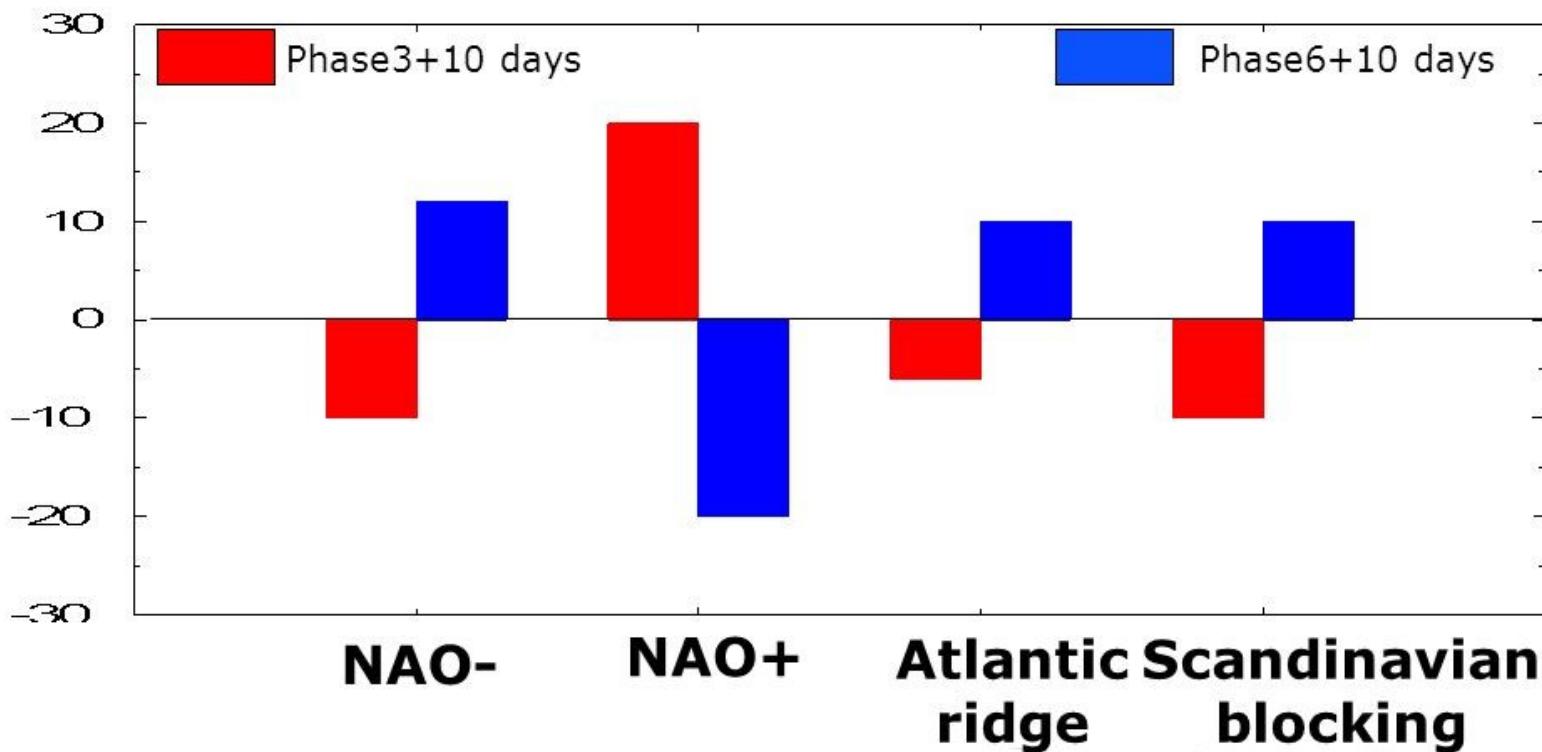
Australian Bureau of Meteorology

# MJO

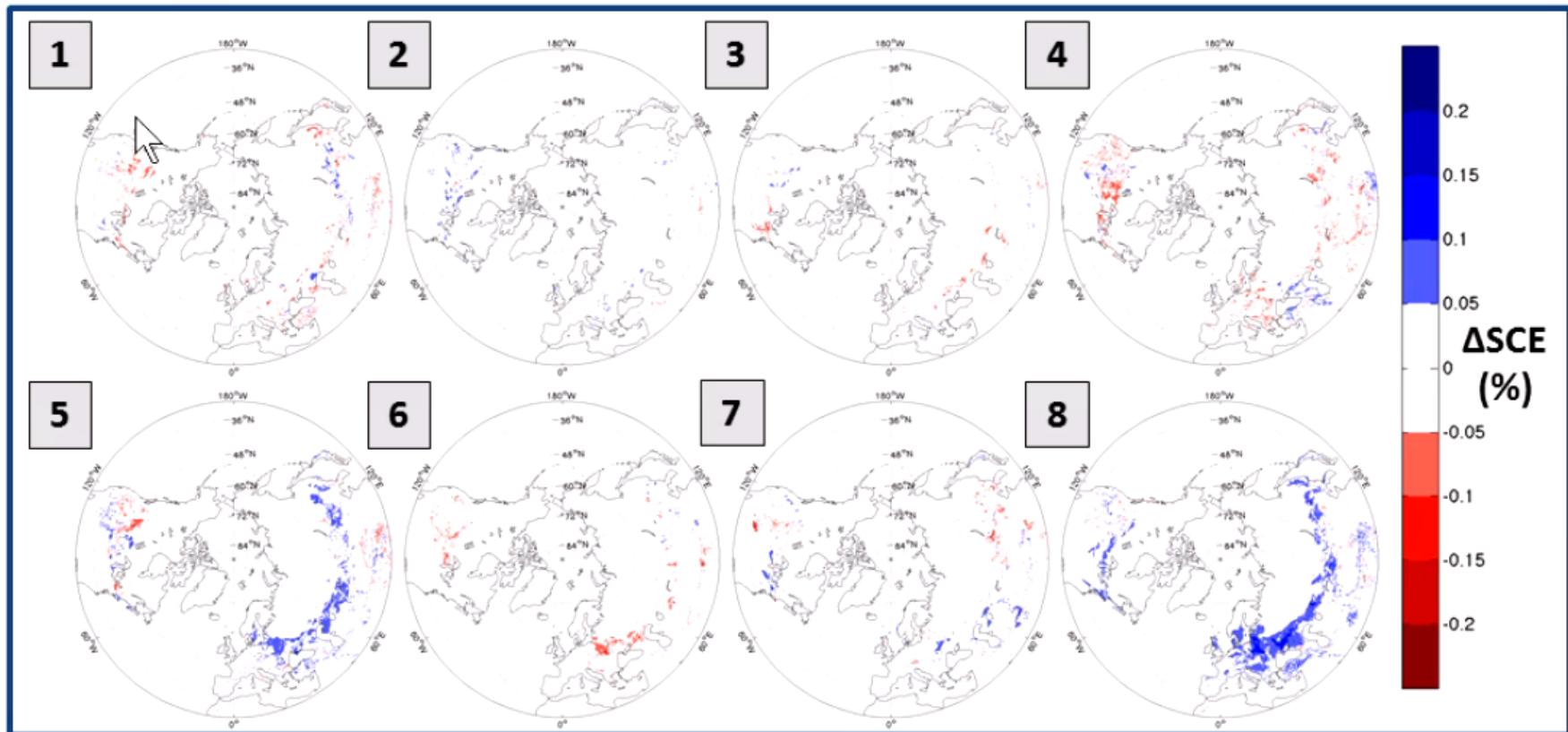


# MJO vs NAO

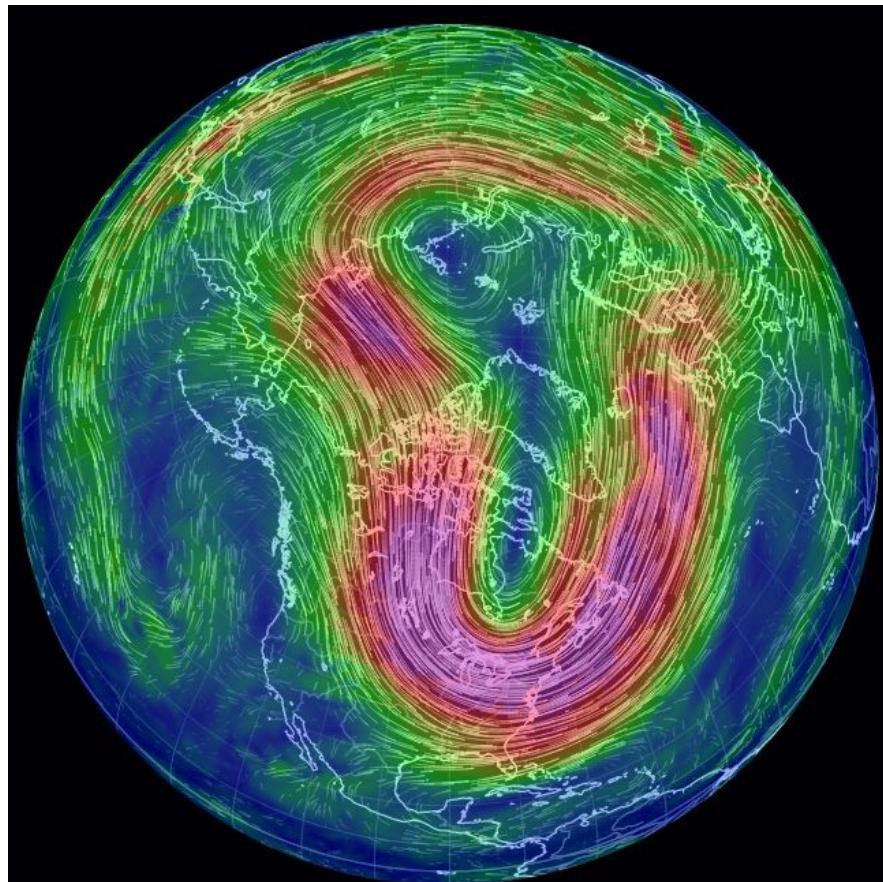
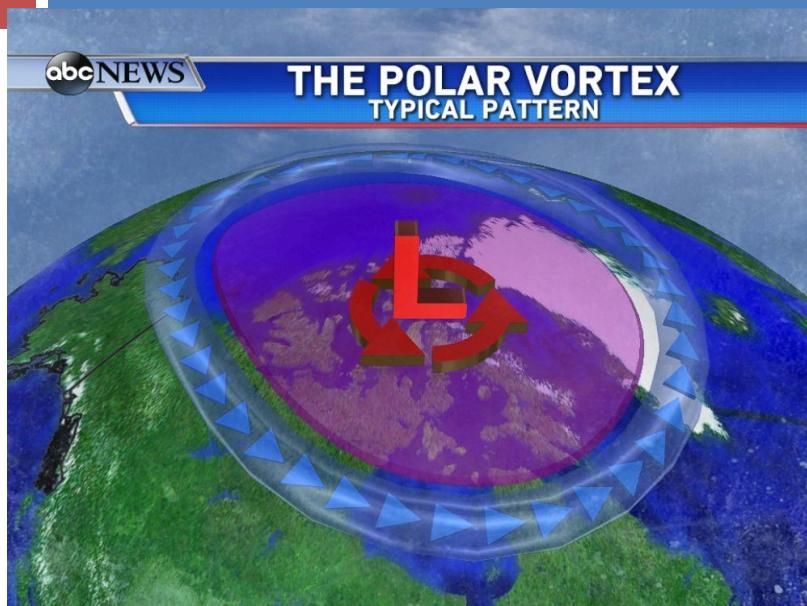
## Impact on weather regimes in hindcasts



# Impact of MJO on pan-Arctic terrestrial snow



# Sudden Stratospheric warming

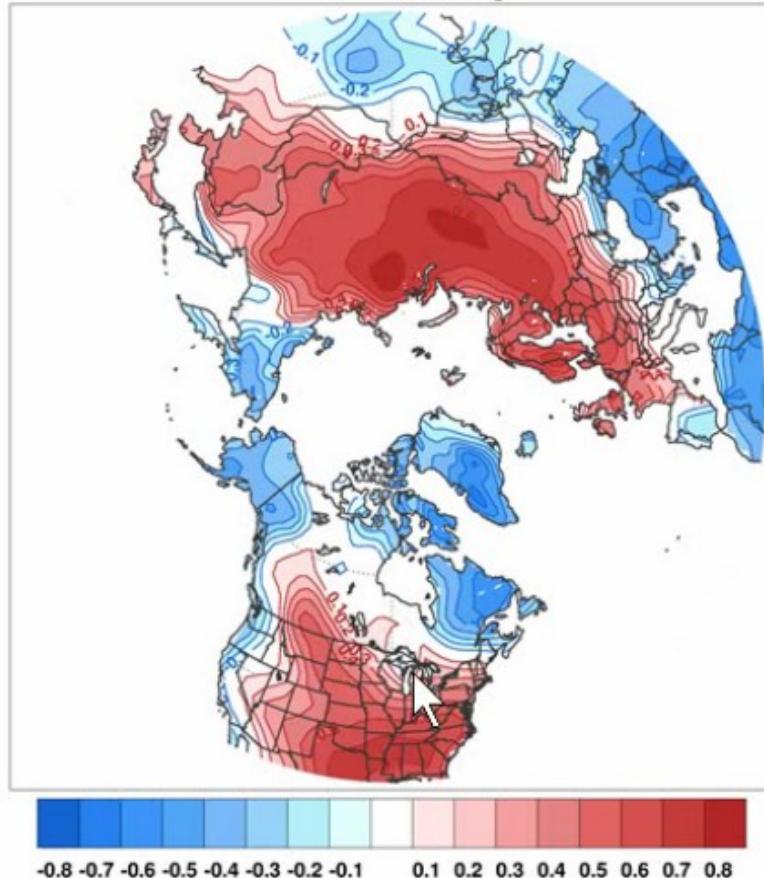


# Outline (extratropical NH perspective)

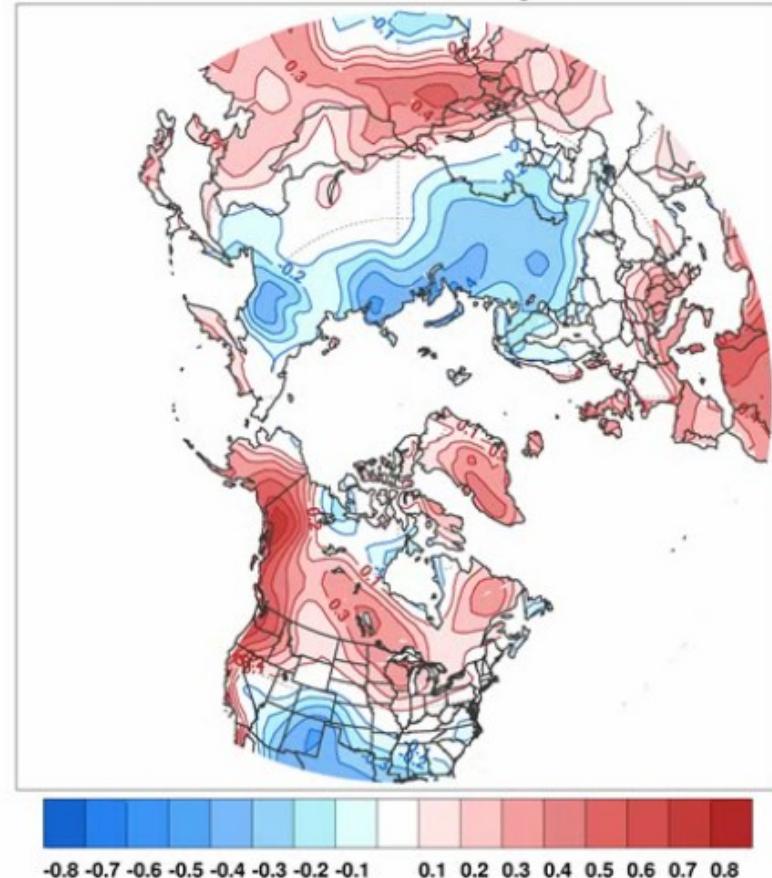
- ENSO is the cornerstone of winter seasonal forecasting, yet it provides little skill of Northern Hemisphere land-surface temperatures
- Troposphere-stratosphere coupling and the Arctic Oscillation show much greater potential for skillful prediction of winter land surface temperatures.
- Analysis of troposphere–stratosphere coupling puts the limit of predictability in October.

# Correlations with surface temperature

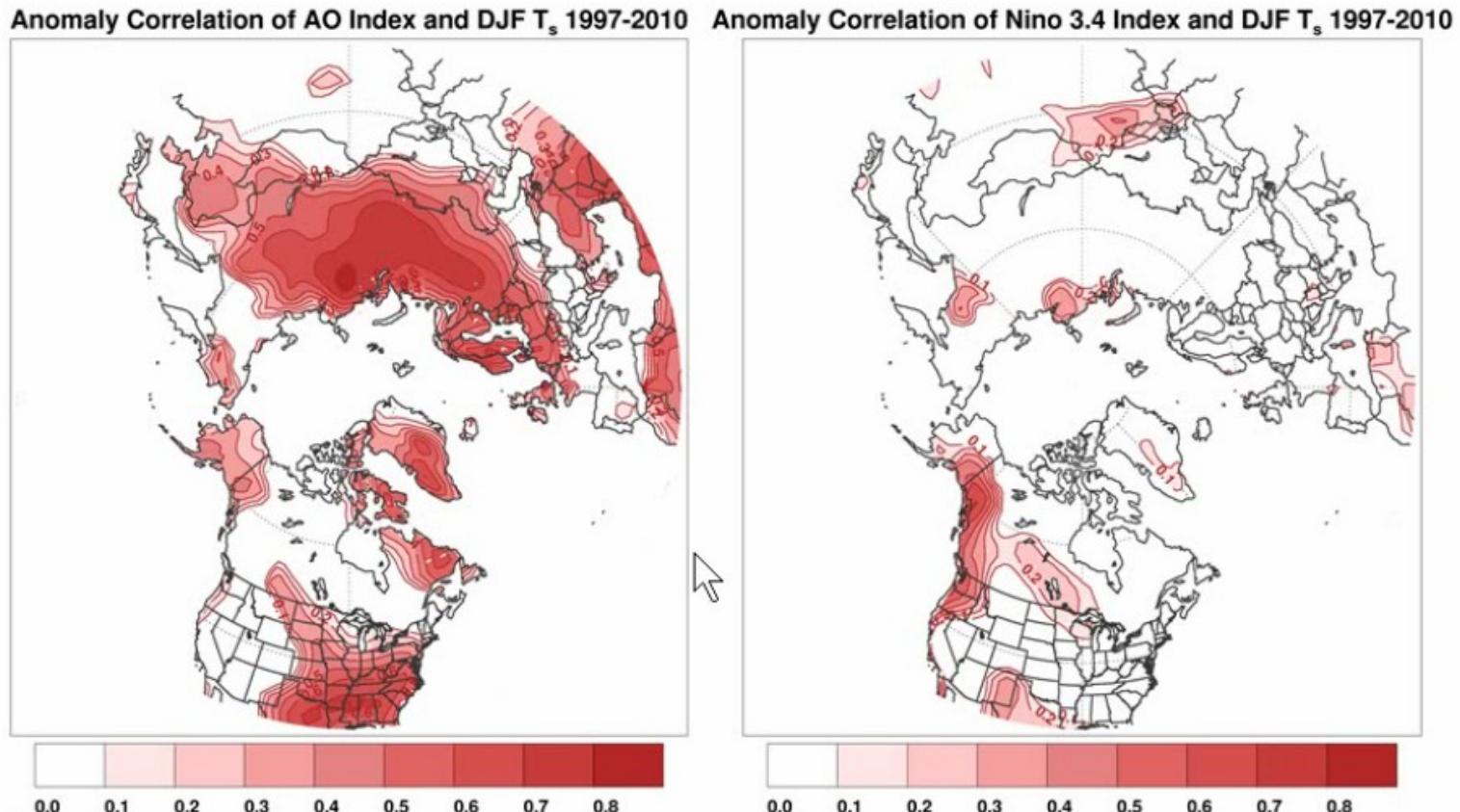
Corr of DJF AO and DJF  $T_s$  1997-2010



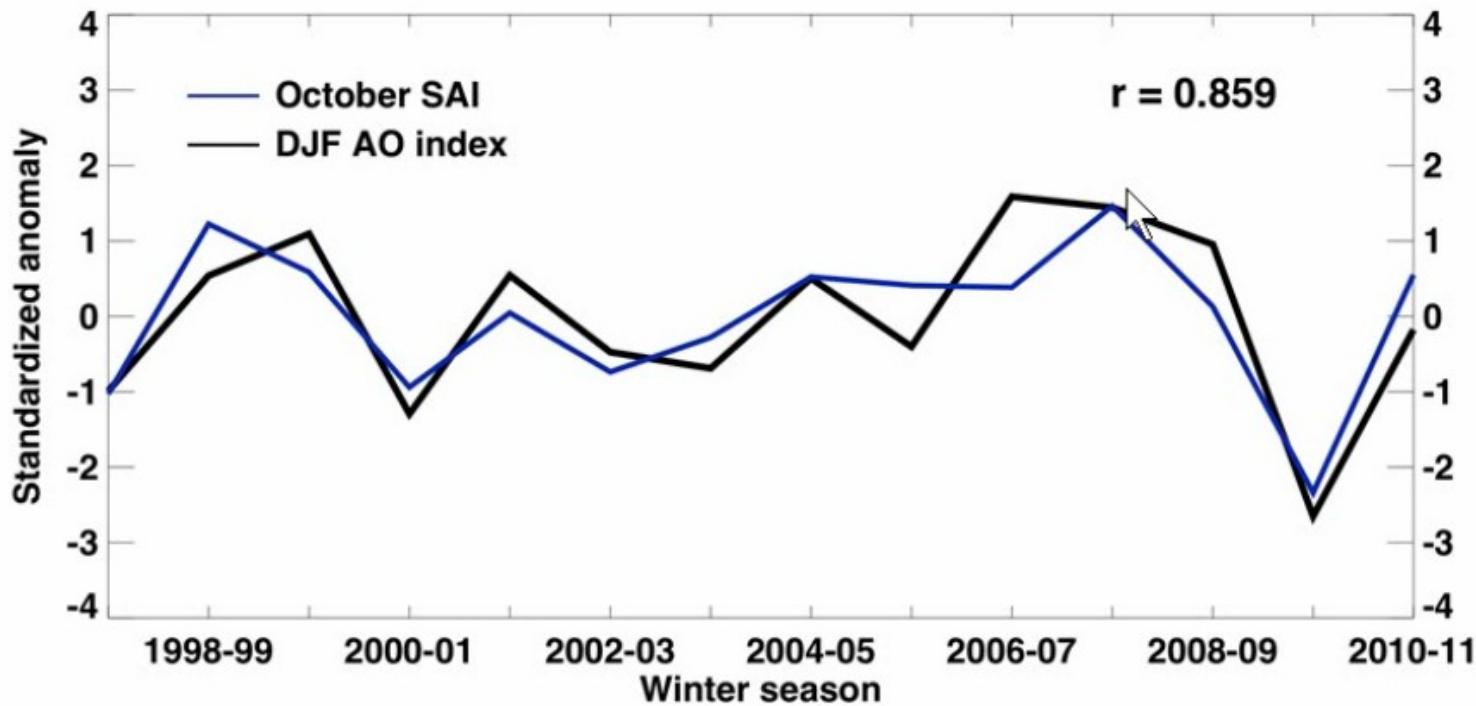
Corr of DJF ENSO and DJF  $T_s$  1997-2010



# Anomaly correlations of cross validated hindcasts



# Snow Advance Index (SAI)



- Uses daily values
- Limited to equatorward of  $60^{\circ}\text{N}$
- Measures rate of change of snow cover

Cohen and Jones (2011)

# Snow Forced Cold Signal

