

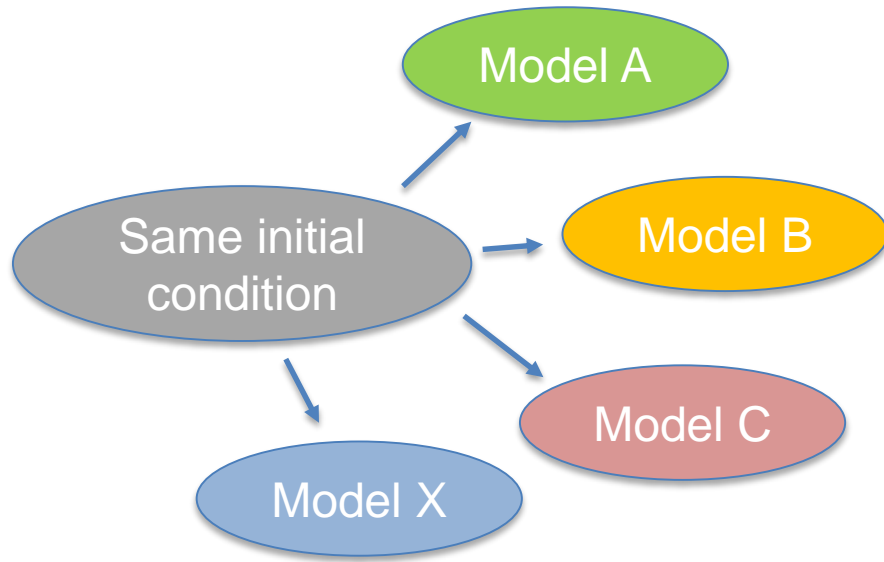
# Global model comparison

## Different models – same initial conditions

Contact point: Linus Magnusson

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# Project idea

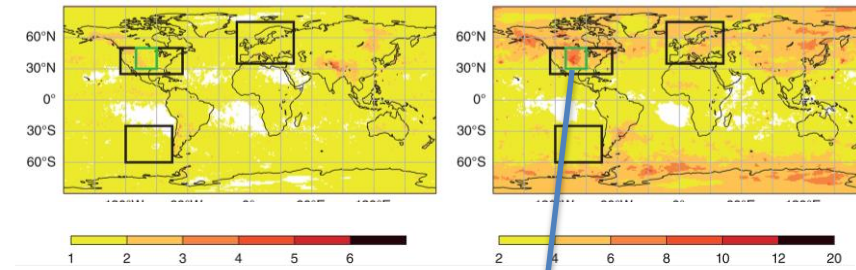


Run several models from the same initial conditions for a set of dates covering one year

Background: Results from ECMWF-IFS and NOAA/GFDL – FV3

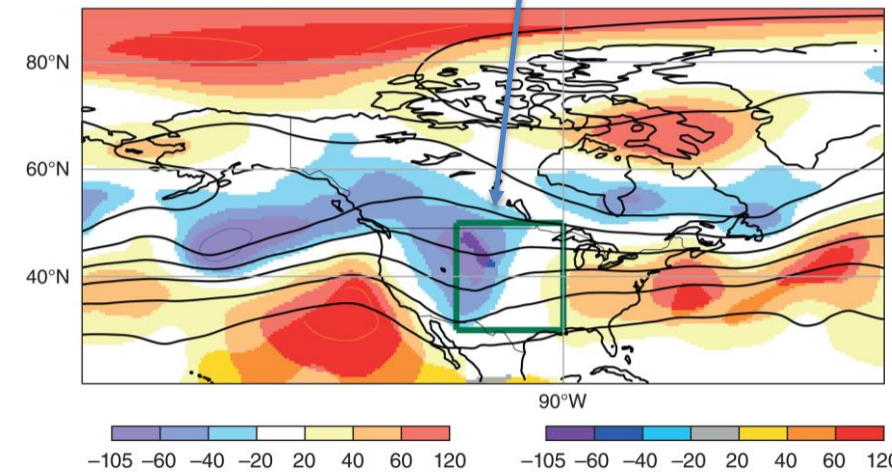
Z500 RMS difference between pairs of forecasts  
+6h +30h

Same initial conditions, different models



Where does model differences play the largest role?

Composite of z500 anomalies in cases of largest difference growth (30h-6h) - same initial conditions, different models



When does model differences play the largest role?

# Scientific scope

- Impact of model differences
  - Regional differences
  - Magnitude
  - Situation dependence
  - Compare with model uncertainty schemes from ensemble prediction systems
- Differences in systematic errors
  - Different time-scales
  - Regional differences
  - Stratosphere (?)
- Tropical cyclone predictions - tbc

# Confirmed participating institutes and contacts

- ECMWF (Linus Magnusson)
- UK Metoffice (Sean Milton, Prince Xavier)
- DWD (Martin Köhler)
- MeteoFrance (Yves Bouteloup, Laurent Descamps)
- GFDL (Jan-Huey Chen, Linjiong Zhou)
- KIAPS (Young Cheol Kwon, Ja-Rin Park)
- JMA (Munehiko Yamaguchi)
- NRL (Carolyn Reynolds, Jim Doyle)
- Open for more participants

## Additional information

Model resolutions ~10-25 km

Initialised from ECMWF initial conditions

2018-06-06 to 2019-06-06, 00UTC, every 3<sup>rd</sup> day

First results expected Q2 2020