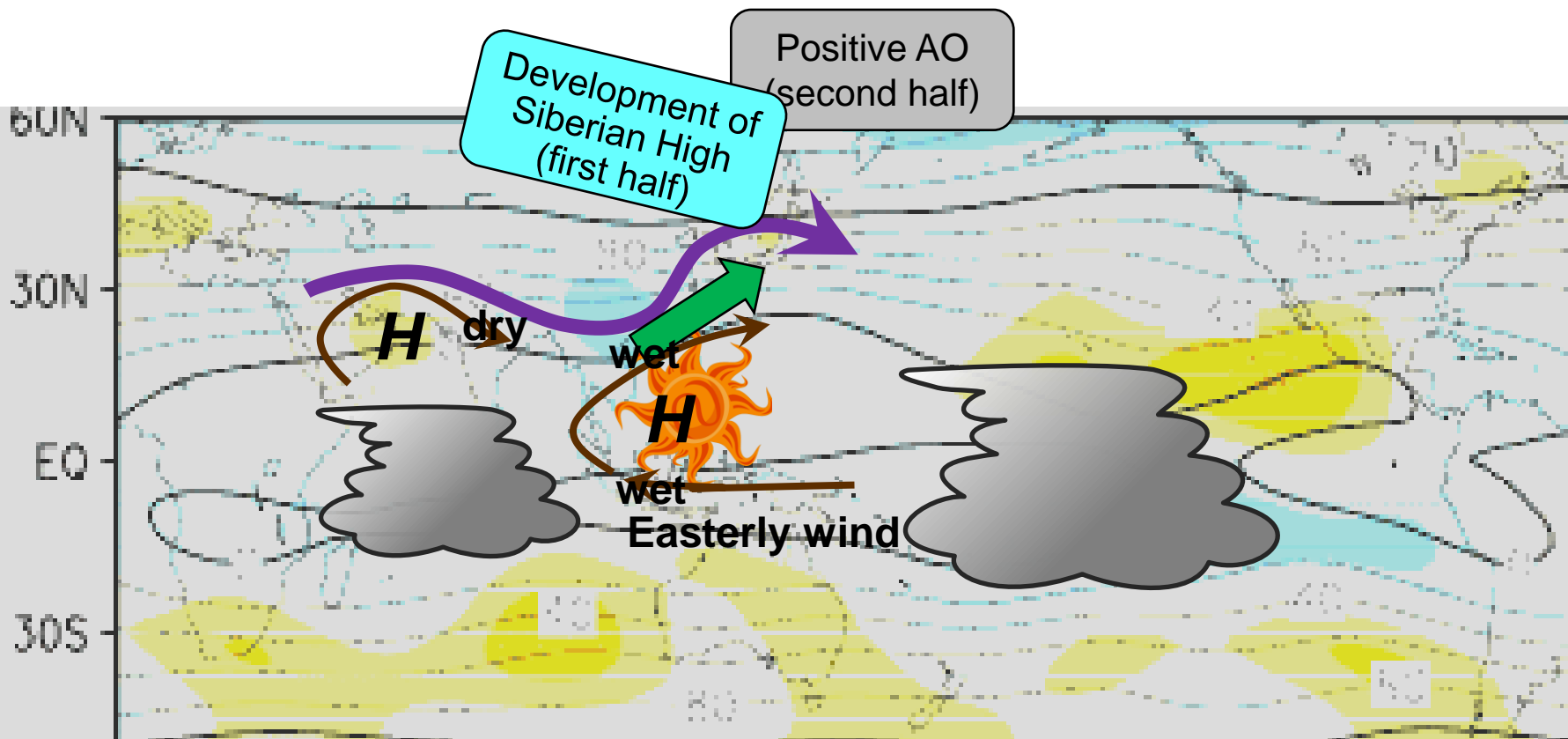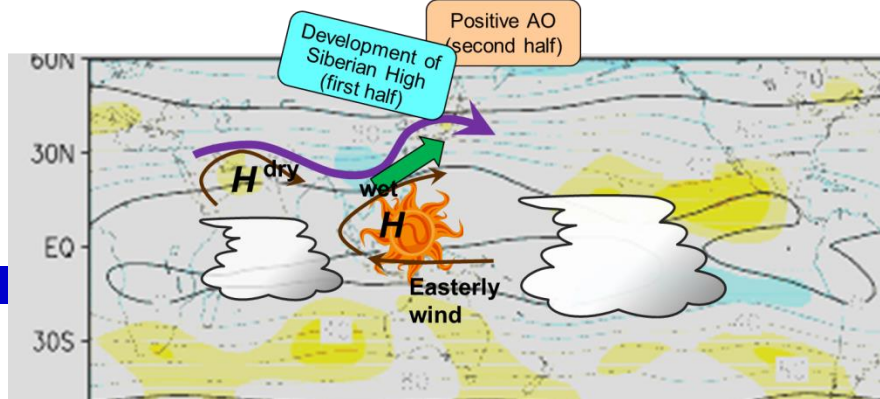# Setting of the forecasting

● Initial time of the model: 11 Nov 2015 (Wed.)
● Forecast target period: 14 Nov to 11 Dec (4 weeks mean)

● Element: **Mean temperature** and
total precipitation

(Creation of the tercile probabilistic forecast)

represented by **ten percent**

気象庁
Japan Meteorological Agency

気象庁
Japan Meteorological Agency

(Comment 1)
The meaning of the CHI and PSI

- Please referred to the backup slides in **8_Seasonal_Forecasting.ppt**

(Comment 2)
Inconsistence between correlation and BSS

✓ Scatter map (forecast vs. observation) may suggest the inconsistence.

11 years: no rain

Forecast (Guidance)

Observation
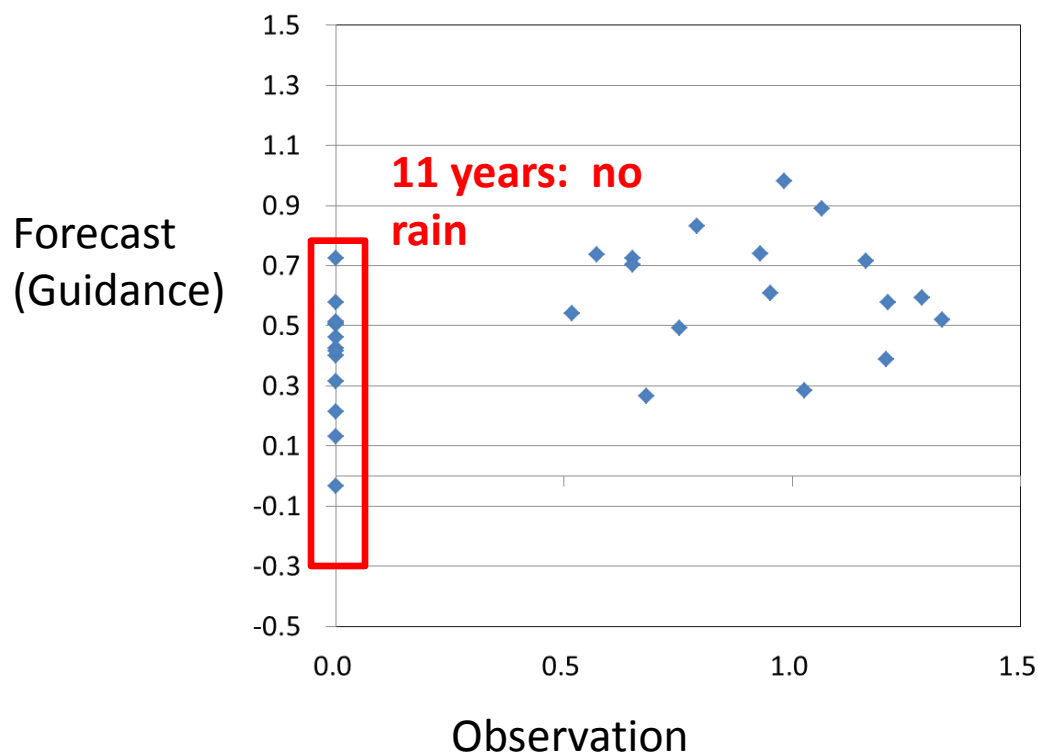
Normal	0.608
The lower limit of near normal	0.000
The upper limit of near normal	0.571

気象庁
Japan Meteorological Agency

# What is the "normal" used in seasonal forecast?

- Target of the seasonal forecast is departure from the "normal".

- In JMA, period for "normal" is 30-year (1981 to 2010) as WMO recommends.

- Arranging historical data each year in ascending order,
  - <= 10th largest ; Below normal
  - 11th to 20th largest; Normal
  - 21th largest <= ; Above normal

Time series of temperature (1981-2010)

Below normal | **Near normal** | **Above normal**

33% | 33% | 33%
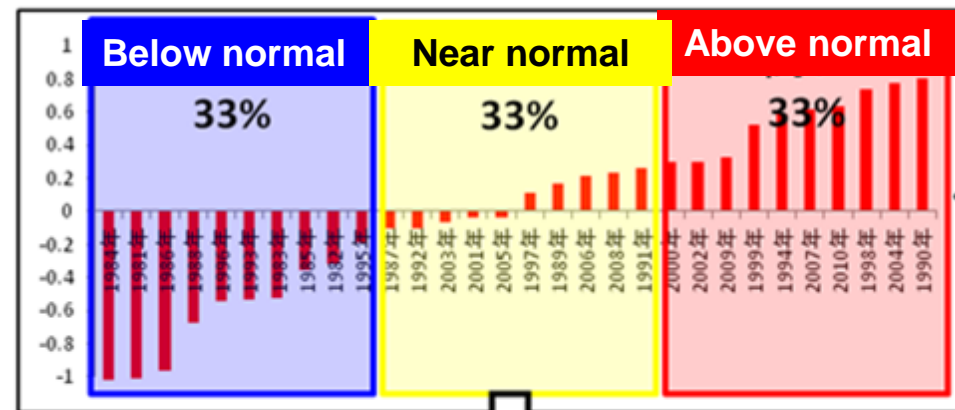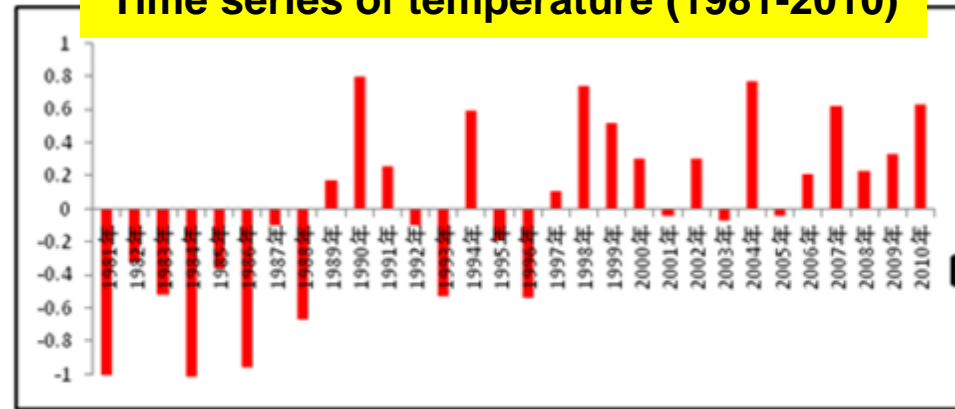
Range of Near normal: -0.1 to +0.3 °C

(Comment 2)
Inconsistence between correlation and BSS
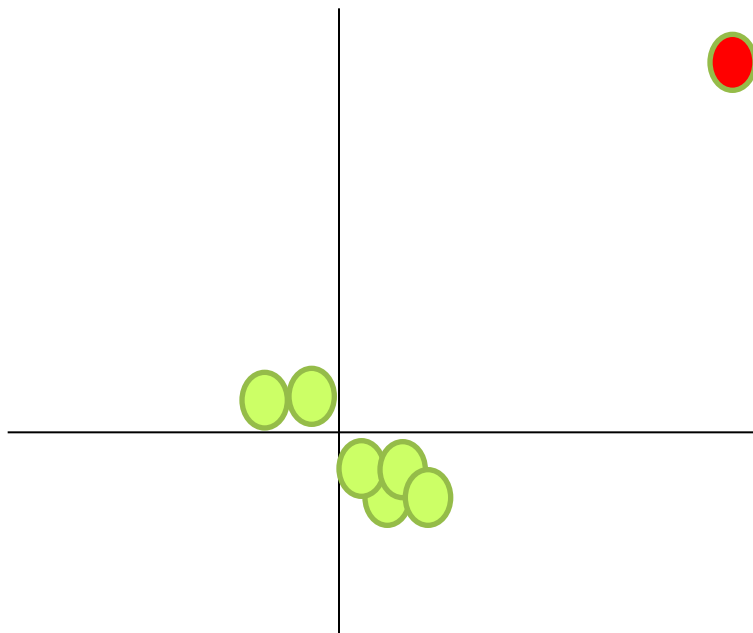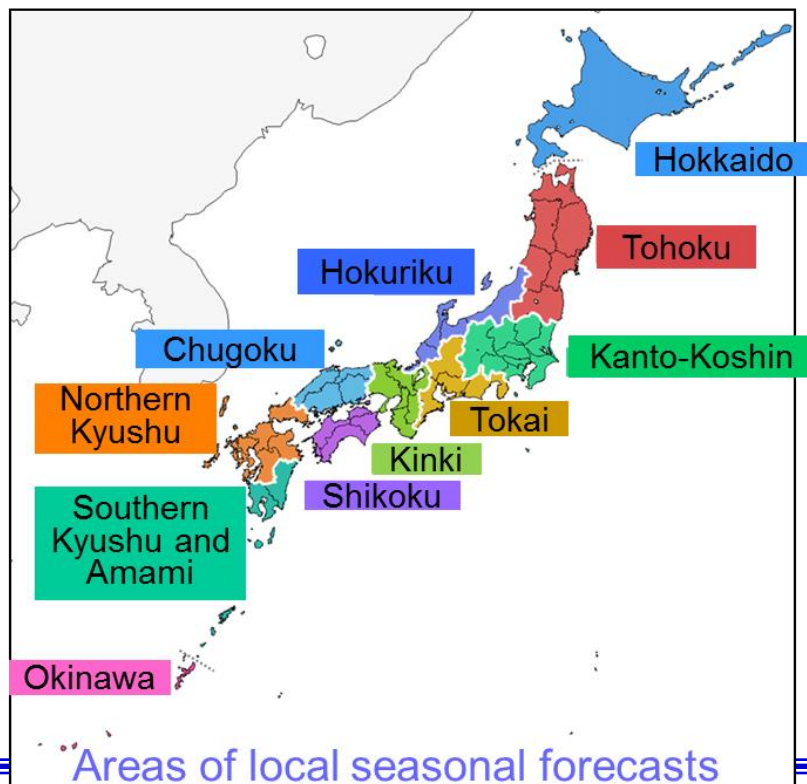
Correlation score is high.
But, is this overvaluation?

- Cannot hit almost cases
- Hit a few cases (but those anomalies are large.) >> contribute to increase the correlation score

気象庁
Japan Meteorological Agency

(Comment 3)
To improve the prediction skill

- Point -> sub-region mean

  average of the all stations in the sub-region

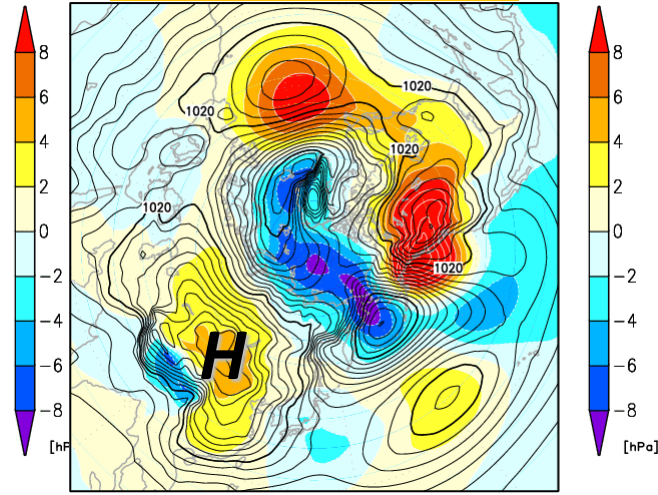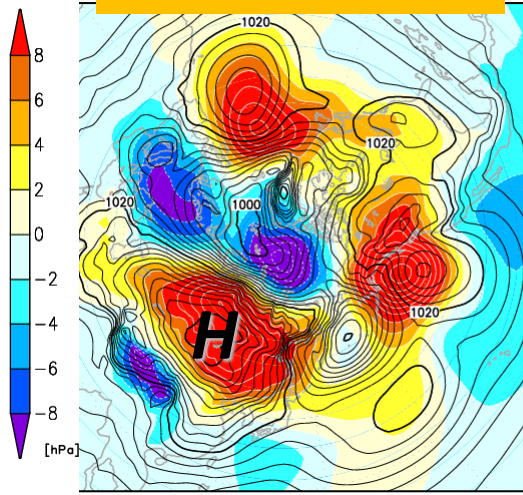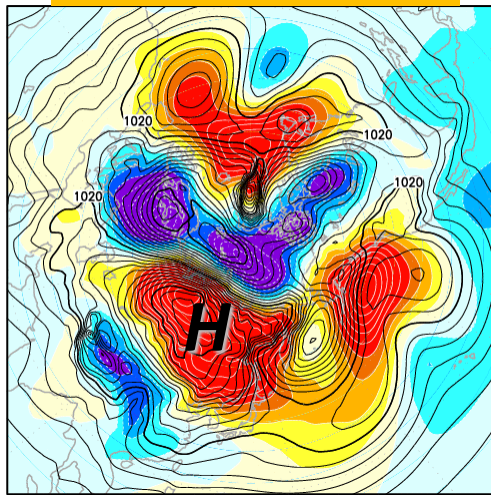Areas of local seasonal forecasts

◆ How about the latest initial; Development of the Siberian high

Init. 2015.11.18

18 to 24 Nov

21 to 27 Nov

25 Nov to 1 Dec

SLP

850 Temp.
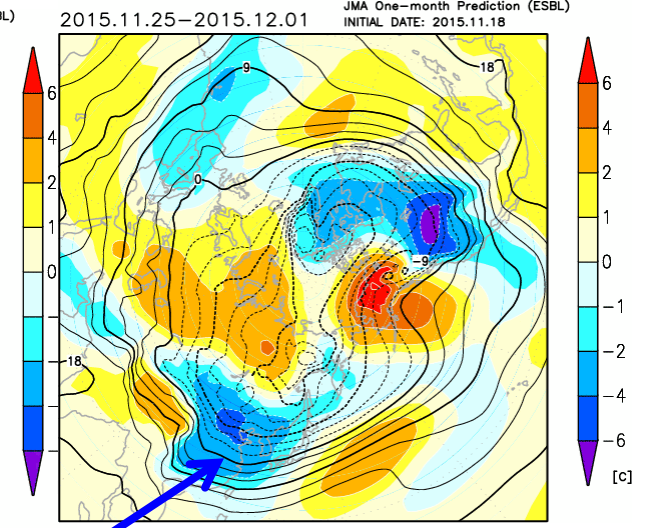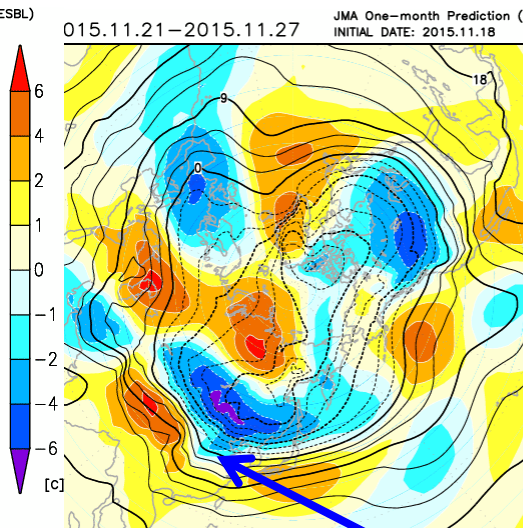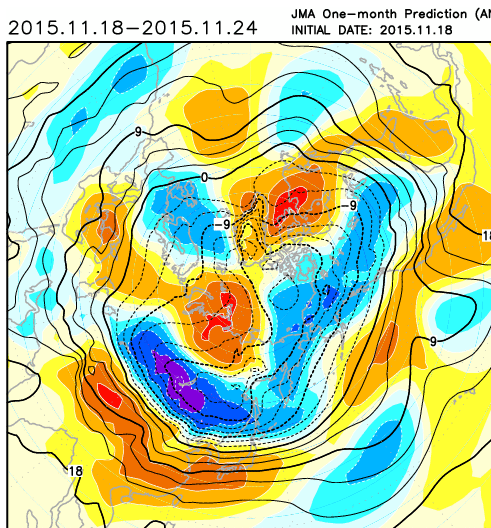
Cold air outflows southwardly

TCC Training Seminar on one-month forecast, 16

気象庁
Japan Meteorological Agency