Ex.2

Explanation about exercise

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Subject of the exercise

- One-month forecast using the model and the guidance
  (Creation of tercile probabilistic forecast)
- Element: Mean temperature and total precipitation

Setting of the target period for forecast

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

Assuming the issue date of 12 or 13 Nov

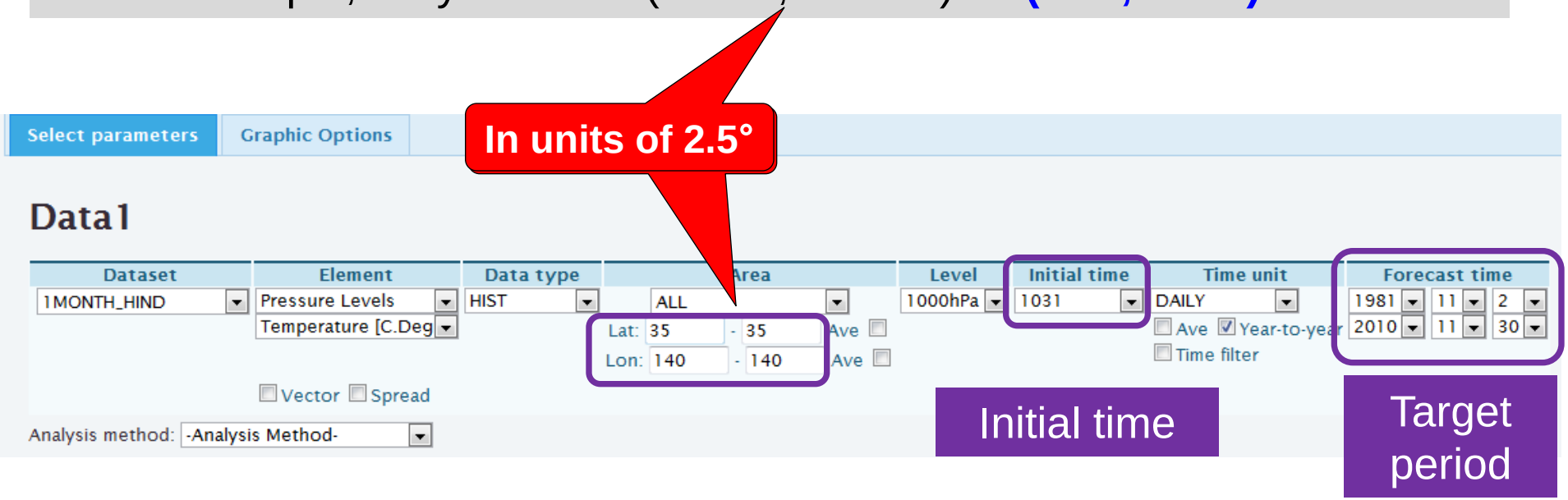
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Nov 2015	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
Dec 2015	30	1	2	3	4	5	6
	7	8	9	10	11	12	13

(Ref.)
Period of hindcast for creation of the guidance

	Hindcast	Real-time forecast
Initial time	10 Nov	11 Nov 2015
Target period	13 Nov to 10 Dec	14 Nov to 11 Dec 2015

-1day

- Reference grid of the model: **Represent in unit of 2.5°**
  - ✓ Example; Tokyo/JAPAN (35.7N, 139.8E) ➔ **(35N, 140E)**



Target point		Actual		Model	
		lat	lon	lat	lon
Bangladesh	DHAKA	23.8	90.4	25	90
Cambodia	POCHENTONG	11.6	104.8	12.5	105
Hong Kong	HONGKONG	22.3	114.17	22.5	115
Indonesia	Pondok Betung	**-6.27**	106.67	**-7.5**	107.5
Lao PDR	VIENTIANE	17.35	102.34	17.5	102.5
Malaysia	SUBANG	3.1306	101.5525	2.5	102.5
Mongolia	ULAANBAATAR	47.91861	106.8481	47.5	107.5
Myanmar	MANDALAY	21.59	96.06	22.5	95
Nepal	KATHMANDU	27.7	85.4	27.5	85
Pakistan	MULTAN	30.2	71.52	30	72.5
Philippines	Science_Garden_Quezon_City	14.645	121.042	15	120
Singapore	Changi Meteorological Station	1.36667	103.9833	2.5	105
Sri lanka	COLOMBO	6.9	79.9	7.5	80
Thailand	PHUKET	8.15	98.31	7.5	97.5
Vietnam	HaNoi	21	105.8	20	105

Correction; latitude 6.27 -> -6.27, 7.5-> -7.5

Tercile probabilities

In this exercise,
probabilities for each category are represented by **ten percent**.

Example

Below	Normal	Above
20%	40%	40%

10:10:80 10:20:70 10:30:60 20:30:50	10:40:50	Above normal
20:40:40		Above normal tendency
30:30:40 30:40:30 40:30:30	20:50:30 30:50:20	Near normal
40:40:20		Below normal tendency
50:30:20 …		Below normal

Note

- ✓ Not considered a dipole pattern (ex. 40:20:40), because of the assumption of normal distribution.
- ➢ In such case, probabilities should be close to no signal (i.e. 33:33:33), regarding with large uncertainty.

Contents of the presentation file

- Setting of the guidance (selection of predictors) and its prediction skill (i.e. correlation, BSS)
- Prediction
  - NWP model
    - Illustrate the characteristics of the predicted fields by the NWP model using the forecast map (or the other materials)
      - From large to local scale
      - Focus attention on the influence on the target point
  - Guidance
- Discussion (Interpretations using the above results)
- Conclusions; show the probabilities

Materials of NWP model