Introduction of TCC
&
Outline and scope of this seminar

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Japan Meteorological Agency

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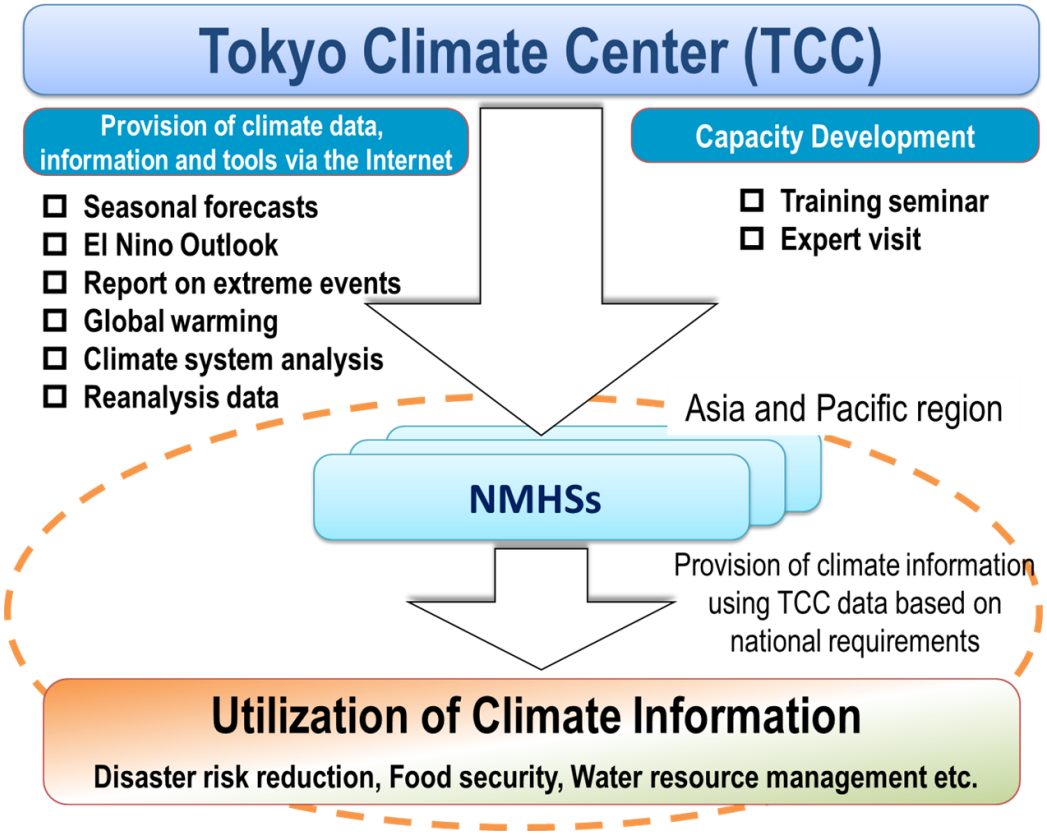
https://ds.data.jma.go.jp/tcc/tcc/index.html

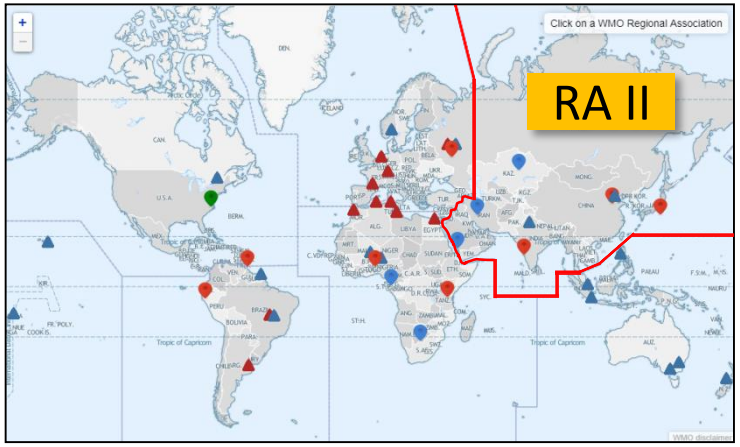
Contents

- Introduction of The Tokyo Climate Center of the Japan Meteorological Agency (TCC/JMA)
- Outline and scope of this seminar

Tokyo Climate Center of the Japan Meteorological Agency (TCC/JMA)

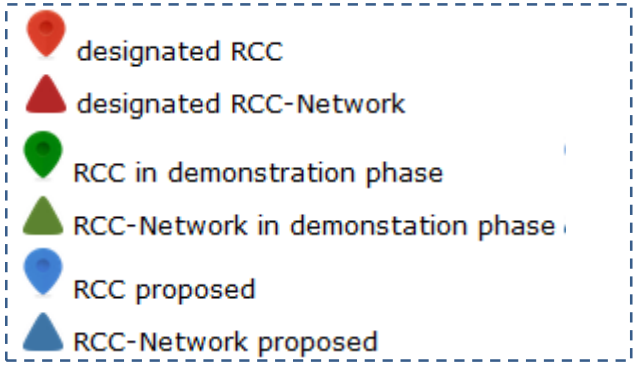
- TCC serves as a WMO Regional Climate Centre in the RA II.
- TCC supports NMHSs through data/information provision and capacity development activities.



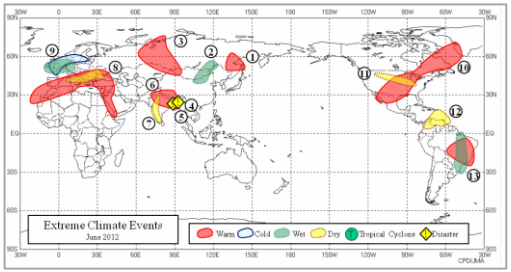


Current status of establishment of RCC

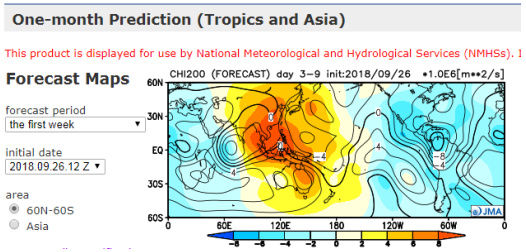
TCC was designated as RCCs in RA II in 2009.



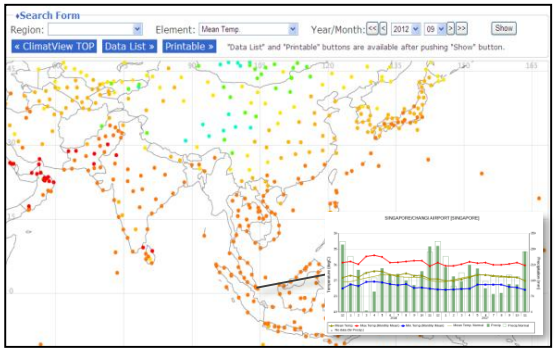
Examples of climate information, data, tool and products



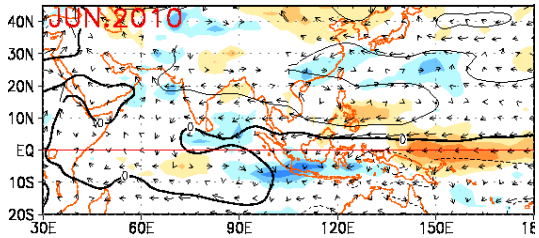
[Monitoring of Extreme Climate Events]



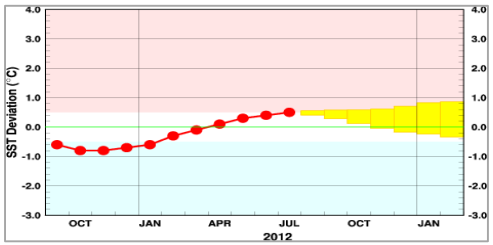
[One-month Forecast maps]



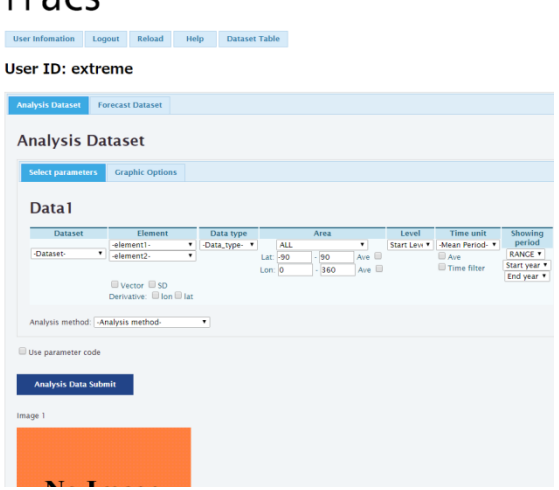
[Climate database]



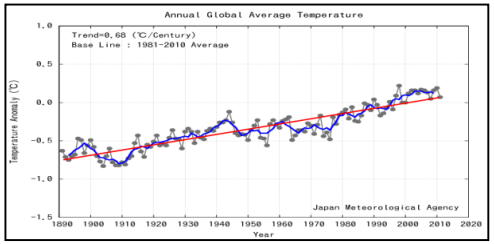
[Asian Monsoon Monitoring]



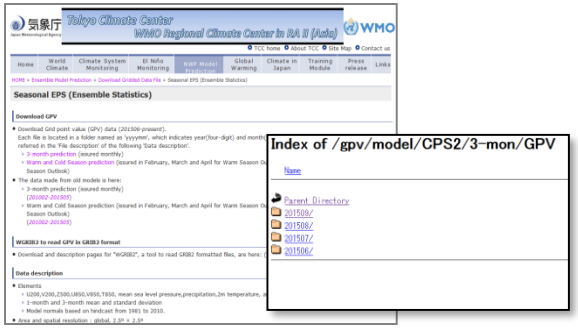
[El Niño outlook]



[Interactive Tool for Analysis of the Climate System (iTacs)]



[Global Average Surface Temperature Anomalies]



[Gridded Data(1-month, 3-month, Seasonal forecast)]

TCC Website

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WMO

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HOME

What are WMO RCCs

WMO RCCs are centres of excellence...

RCC Functions

Operational Activities for Long-range Forecasting (LRF)

Operational Activities for Climate Monitoring

Operational Data Services, to support operational LRF and climate monitoring

Training in the use of operational RCC products and services

Latest Updates

World Climate	Updated: 15 October 2019
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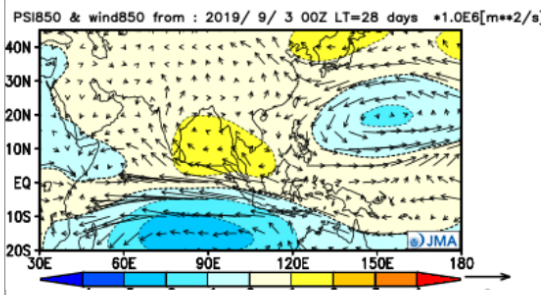
Monthly Discussion on Seasonal Climate Outlook No.67 is issued on 25 September 2019.

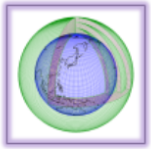


Ensemble forecast for stream function and wind vector at

Main Products

iTacs

iTacs, Interactive Tool for Analysis of the Climate System, is a web-based application to assist NMHSs to analyses extreme climate events and to monitor climate status.

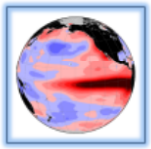


WMC Tokyo

Products of long-range forecast from World Meteorological Centre (WMC) Tokyo are available. These products are based on JMA's ensemble prediction system.

Monthly Discussion on Seasonal Climate Outlook

This is intended to assist NMHSs in the Asia-Pacific region in interpreting WMC Tokyo's three-month prediction and warm/cold season prediction products.



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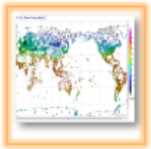

ClimatView

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TCC News

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What's New

RSS

1 October 2019 NEW

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2 September 2019

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  - Commencement of Two-week Temperature Forecast Provision
  - Sea Ice in the Sea of Okhotsk in the 2018/2019 Winter Season
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» Previous news

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TCC Website

Main products

Latest news of TCC's activities

Update information on TCC products

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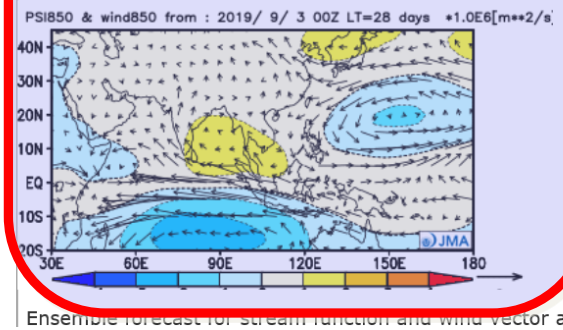

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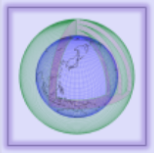

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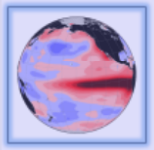

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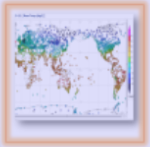

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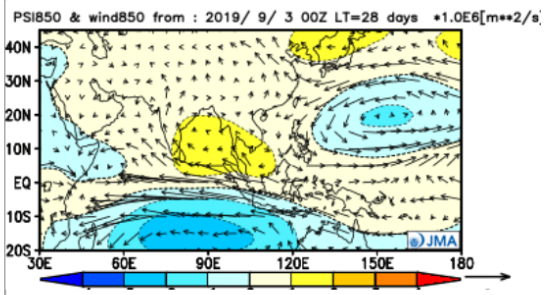

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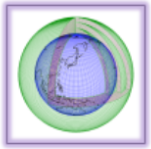

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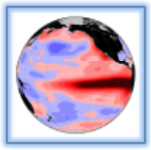

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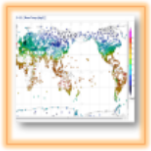

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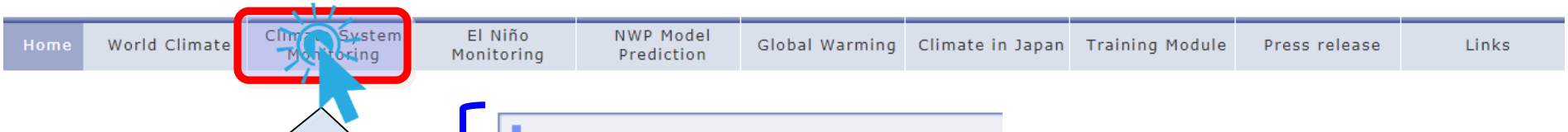
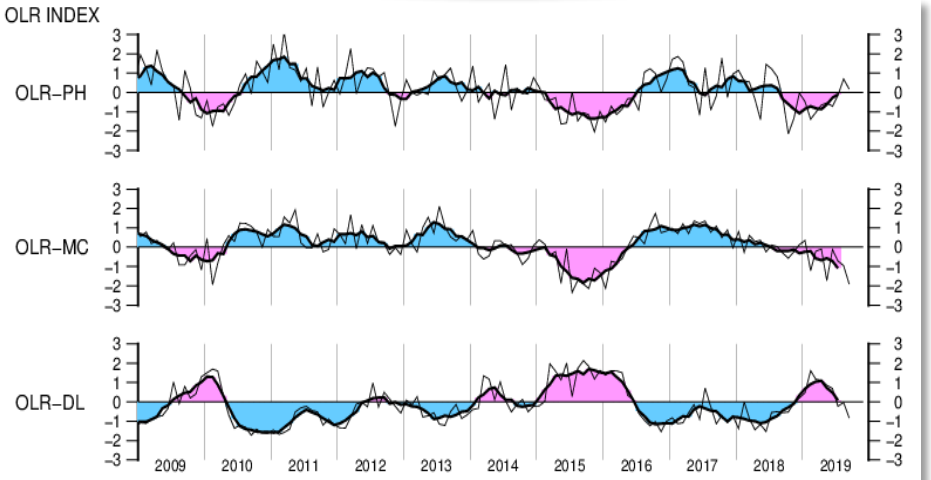


Climate System Monitoring

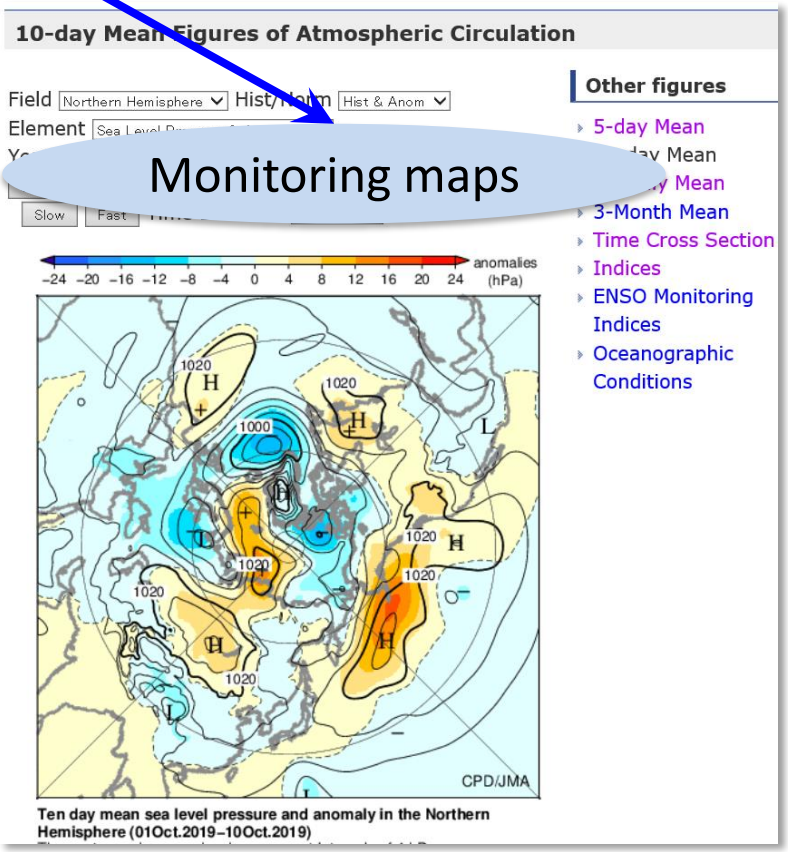
- Report on Climate System
- Monitoring and Statistical Analysis

Monitoring indices



Time–series representation of outgoing longwave radiation (OLR) indices
The thin and thick lines indicate monthly and five month running mean values, respectively.

Monitoring maps

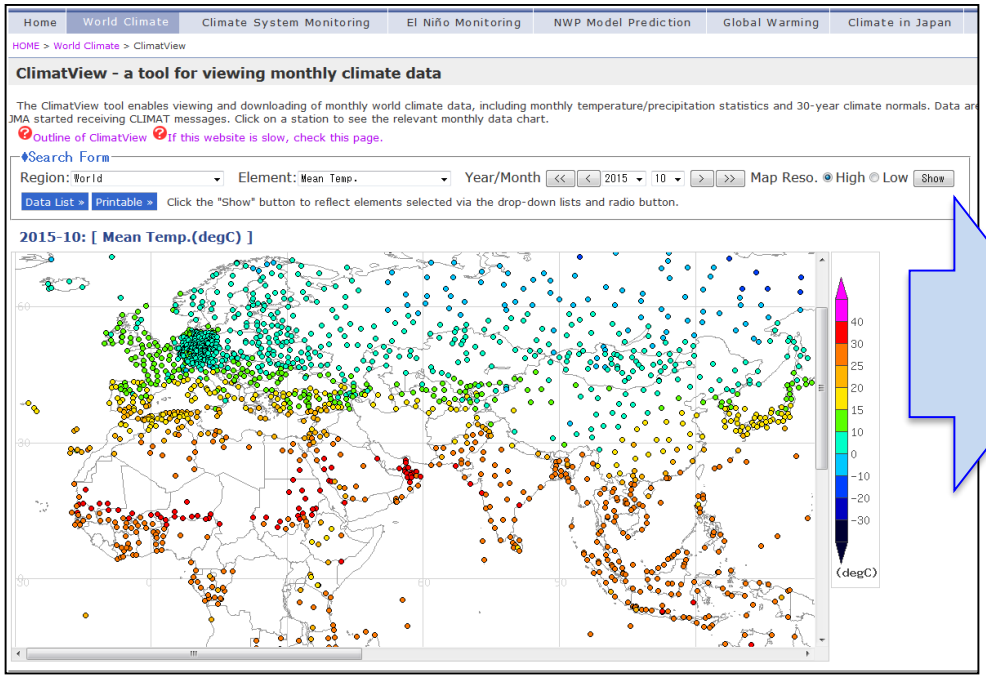


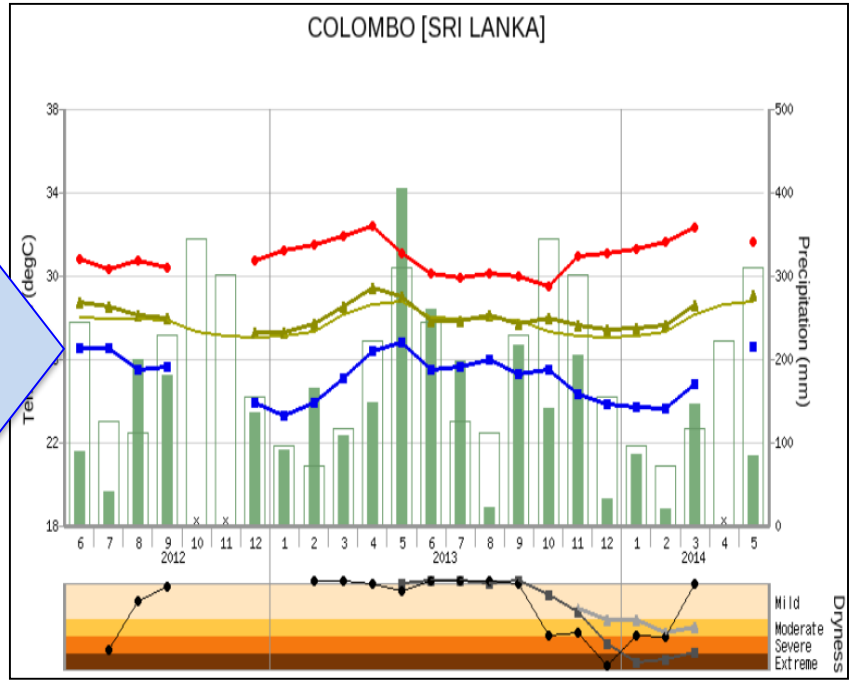
Ten day mean sea level pressure and anomaly in the Northern Hemisphere (01Oct.2019–10Oct.2019)

Description of JMA's Climate System Monitoring: https://ds.data.jma.go.jp/tcc/tcc/products/clisys/index.html

ClimatView

- Powerful tool **overviewing and downloading monthly world climate data** like
  - monthly mean temperatures
  - monthly total precipitation amounts
  - its anomaly or ratio
- **Drought monitoring information** (SPI) was newly added on March 2019.



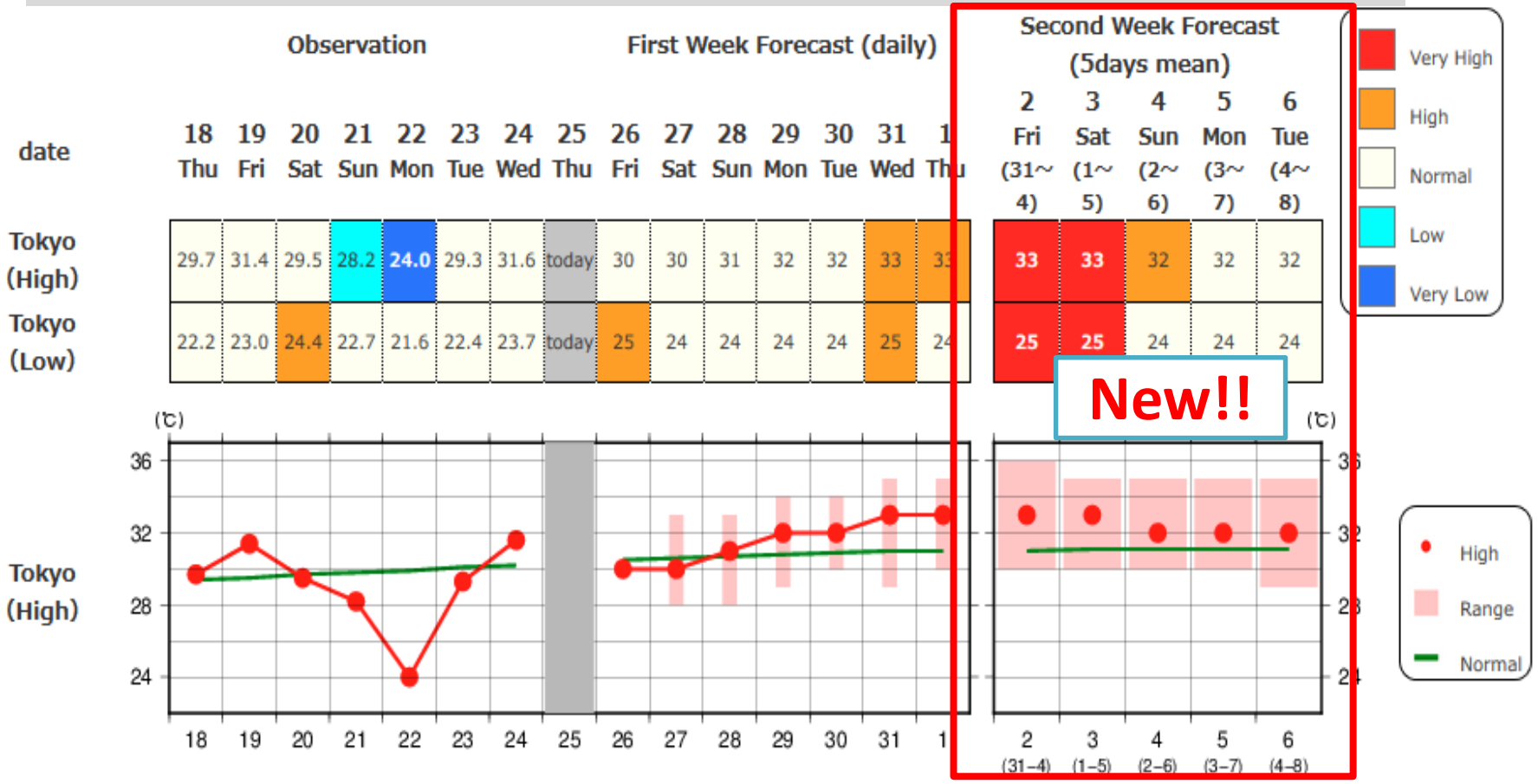


Monthly climate data over the world since 1982 are available.

Time series of monthly max., mean and min. temperatures, monthly precipitation and Standard Precipitation Index

https://ds.data.jma.go.jp/gmd/tcc/tcc/products/climate/climatview/frame.php

Improvements in our NWP technology enabled a new domestic service, **2-week temperature forecast**.
We hope that the advance in technology also benefits the whole region.



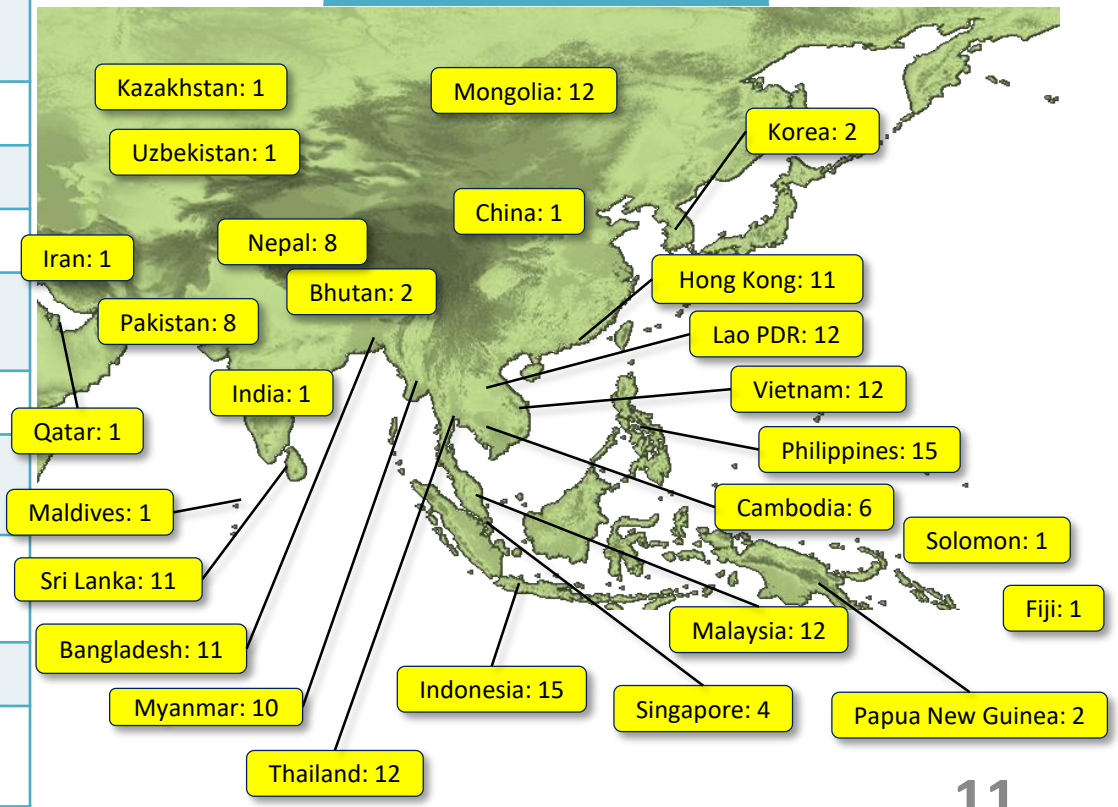
- New service allows domestic users to check **temperature value** (5day running mean) **for a specific station every day**.
- It helps with early warnings on high/low temperature extreme events.

Training Seminar

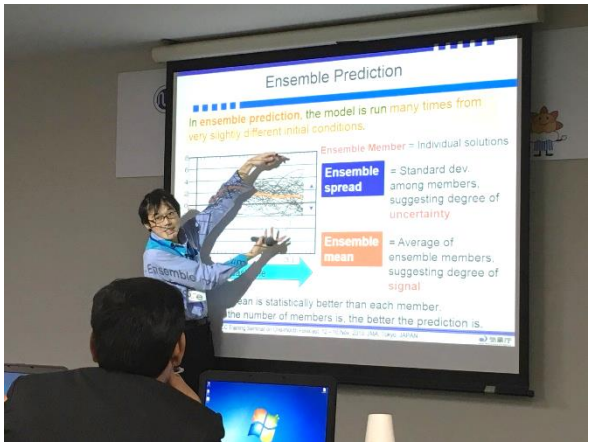
- Every year since 2008
- Experts from NMHSs in Asia-Pacific region.
- Each seminar deals with a different theme from climate analysis, long-range forecast and global warming projection.

		Theme
1	Nov. 2008	Climate Information and Forecasting
2	Dec. 2009	Climate Analysis using Reanalysis Data
3	Jan. 2011	Application of Seasonal Forecast Gridded Data to Seasonal Forecast Products
4	Nov. 2011	One month Forecast Products
5	Nov. 2012	Climate Analysis Information
6	Nov. 2013	Seasonal Forecast Products
7	Jan. 2015	Global Warming Projection Information
8	Nov. 2015	One-month Forecast
9	Nov. 2016	Primary Modes of Global Climate Variability and Regional Climate
10	Jan. – Feb. 2018	Seasonal Forecast
11	Nov. 2018	One-month Forecast
12	**Nov. 2019**	**Climate Analysis Information on Extreme Climate Events**

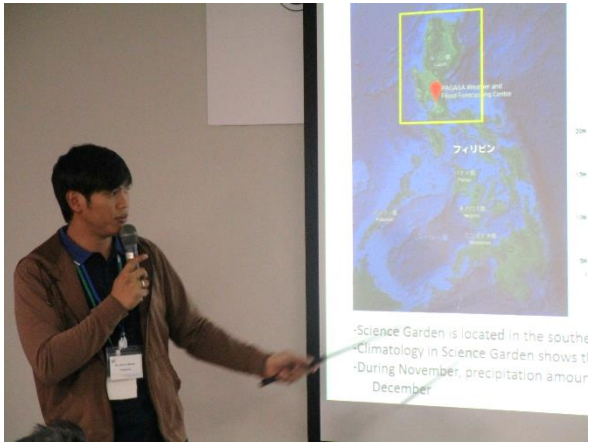
Participants



Lecture and Exercise session



Presentation on results of the exercise



TCC Training Seminar on Seasonal Forecast (12 to 16 November 2018)

Contents

- Introduction of The Tokyo Climate Center of the Japan Meteorological Agency (TCC/JMA)
- Outline and scope of this seminar

Purpose of this Seminar and its schedule

Purpose

- To familiarize the participants with TCC's climate analysis products, information and tools
- To assist the participants in improving skills in generating climate monitoring information on extreme climate events using the tools

Schedule

See p. ii of the textbook for more detailed information

Day 1 (25th Nov.)	Introduction to Climatology	lecture
	Introduction of reanalysis and the Japanese 55-year Reanalysis (JRA-55)	lecture
	Introduction and operation of iTacs (Basic)	exercise

Day 2 (26th Nov.)	Interannual to decadal variability in the tropical oceans	lecture
	Climate Analysis information	lecture
	Introduction and operation of iTacs (Advanced)	exercise
	Tokyo Climate Center Website and its products - for monitoring the world climate and ocean -	lecture
Day 3 (27th Nov.)	Climate condition at extreme climate events	Exercise
	Climate Analysis information - example of analysis of past extreme events -	lecture and exercise
	Analyzing past extreme climate events for your country and preparation for presentation	exercise
Day 4 (28th Nov.)	Analyzing past extreme climate events for your country and preparation for presentation	exercise
	Presentation by participants	**presentation!**
Day 5 (29th Nov.)	Presentation by participants	**presentation!**

- **Please keep in mind that at the end of the seminar, you will make a brief presentation on an extreme climate event of your own country.**
- **More details will be shown in Day 2 (tomorrow).**

Some remarks on presentation session

The presentation session is scheduled to be held in the evening of Day 4 (Thu.) and in the morning of Day 5 (Fri.).

[Proposed order of speakers]
In the presentation session, participants will be invited to speak **in reverse alphabetical order of country name**.

[Format of presentation session]
All speakers are allocated 15 minutes of presentation, followed by 5 minutes of question and answer time.

[Prototype of presentation material]
A prototype of presentation material will be provided on Day 2 (Tue.). You can build your presentation either using this prototype or on your own, and we allocate a slot for preparation of the presentation in Day 4 (Thu.).

Day 4 (Thu. 28th Nov.)	15:00-15:20	Viet Nam
	15:20-15:40	Thailand
	15:40-16:00	Sri Lanka
	Coffee Break	
	16:20-16:40	Philippines
	16:40-17:00	Papua New Guinea
	17:00-17:20	Pakistan
	17:20-17:40	Nepal
	17:40-18:00	Myanmar
Day 5 (Fri. 29th Nov.)	09:30-09:50	Mongolia
	09:50-10:10	Malaysia
	10:10-10:30	Lao PDR
	10:30-10:50	Indonesia
	Coffee Break	
	11:10-11:30	Hong Kong
	11:30-11:50	Bhutan
	11:50-12:10	Bangladesh

Training Module on the website

Materials and presentations of training seminars are available on the TCC website.

Training Module: https://ds.data.jma.go.jp/tcc/tcc/library/index.html

JMA staff members are waiting in the room to offer assistance if needed.

The JMA mascot; Harerun

When you have any difficulties or need help during the course of the seminar, please feel free to contact JMA staff.

We are happy to serve you!


Enjoy your stay in Tokyo !