Introduction of TCC
&
Outline and scope of this seminar

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Tokyo Climate Center
Japan Meteorological Agency

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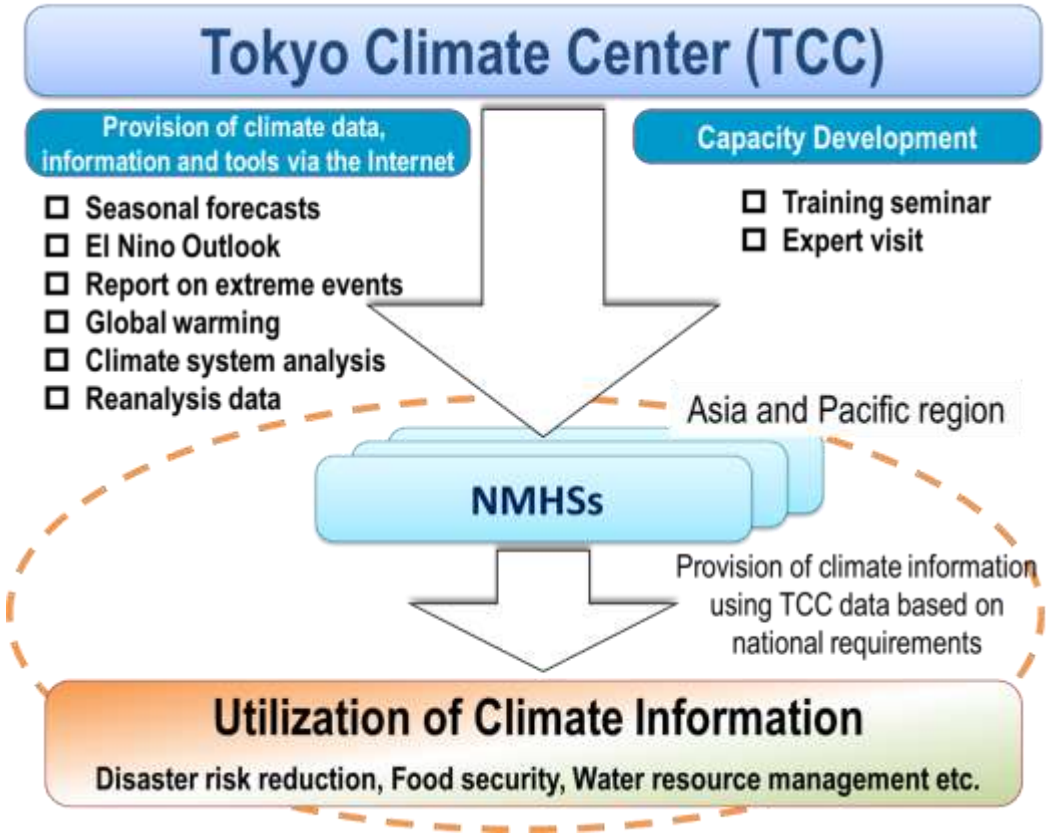
http://ds.data.jma.go.jp/tcc/tcc/index.html

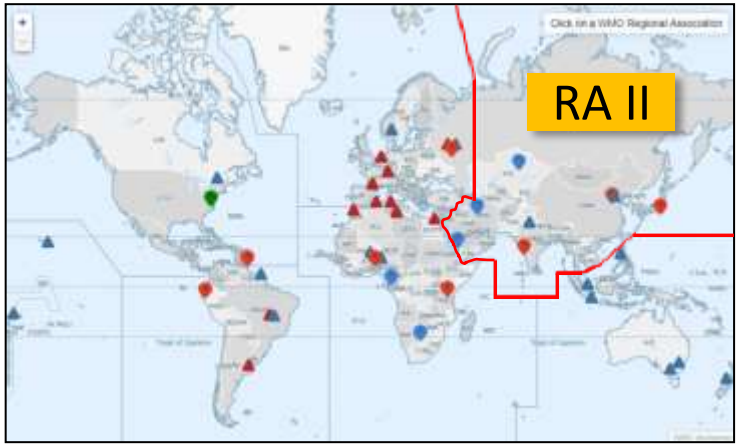
Contents

- Introduction of TCC
- Outline and scope of this seminar

Tokyo Climate Center (TCC)

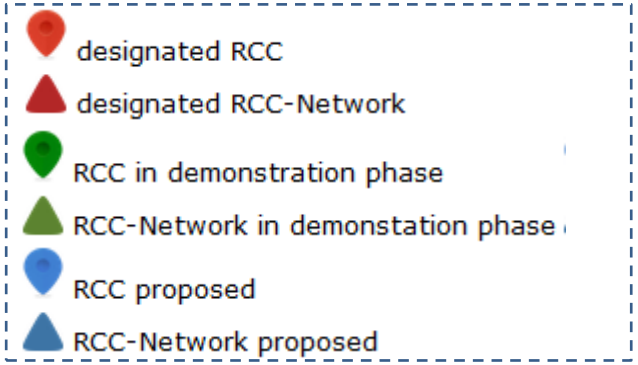
- TCC serves as a WMO Regional Climate Center in the RA II.
- TCC supports NMHSs through data/information provision and capacity development activities.





Current status of establishment of RCC

TCC was designated as RCCs in RA II in 2009.



TCC Website

気象庁 Japan Meteorological Agency

Tokyo Climate Center
WMO Regional Climate Center in RA II (Asia)

WMO

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What are WMO RCCs

WMO RCCs are centres of excellence...

RCC Functions

- Operational Activities for Long-range Forecasting
- 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 December 2017
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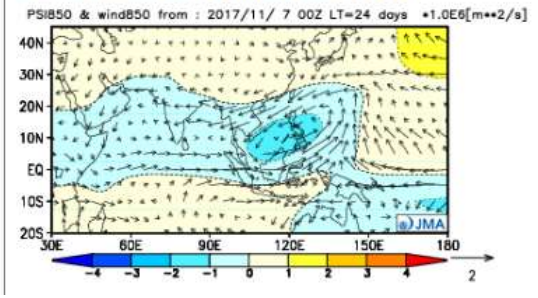
Monthly Discussion on Seasonal Climate Outlook No.45 is issued on 24 November 2017.



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.

GPC Tokyo

Products of long-range forecast from Global Producing Center (GPC) Tokyo are available. These products are based on JMA's ensemble prediction system.

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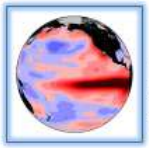

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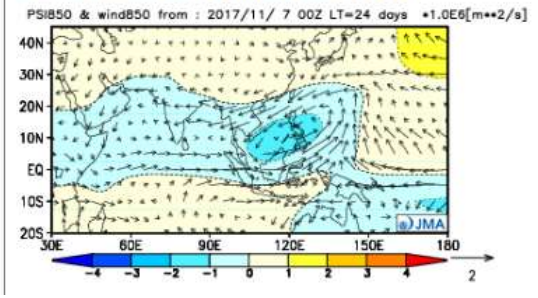

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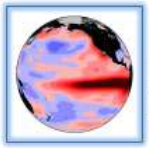

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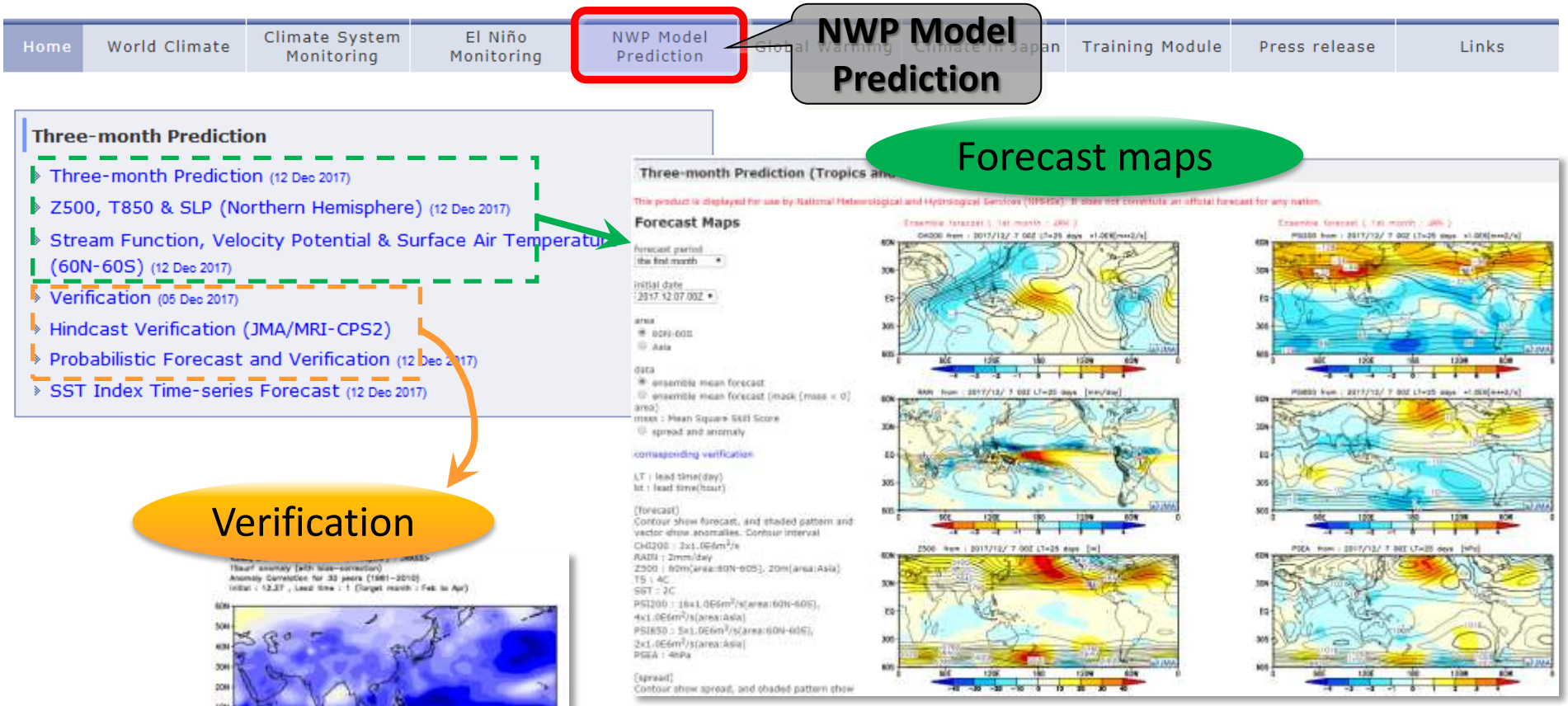

- Various forecast maps and verification results based on hindcast experiments are available on this page.

Description of JMA's Seasonal EPS: http://ds.data.jma.go.jp/tcc/tcc/products/model/outline/cps2_description.html

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Main products

Latest news of TCC's activities

Update information on TCC products

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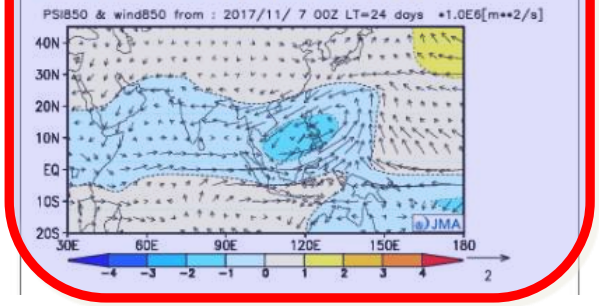

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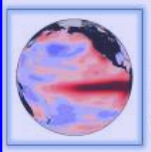

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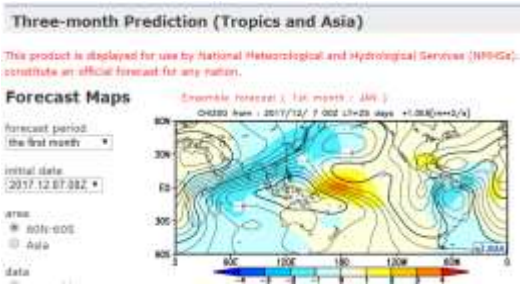
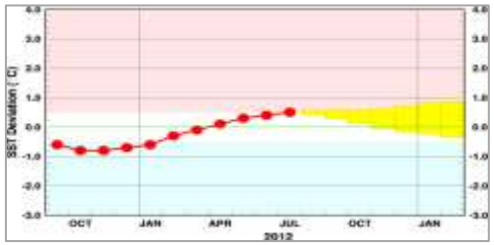
Examples of climate information, data, tool and products

[Monitoring of Extreme Climate Events]

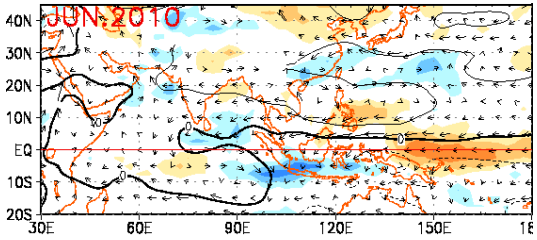


[Seasonal Forecast maps]

[Climate database]

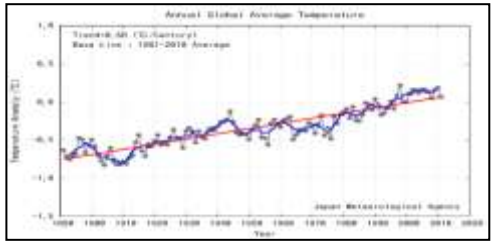


[El Niño outlook]



[Asian Monsoon Monitoring]

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



[Global Average Surface Temperature Anomalies]

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

TCC Annual Training Seminar

As part of TCC's capacity-building activity in its role as RCC, TCC holds annual training seminars on the application of its climate monitoring and prediction products.

	Theme	Participants
Nov. 2008	Climate Information and Forecasting	13: CHN, HKG, IND, IDN, IRN, KOR (2), LAO, MYS, MNG, PHL, THA, VNM
Dec. 2009	Climate Analysis using Reanalysis Data	11: BGD, IDN, LAO, MYS, MNG, PAK, PNG, PHL, LKA, THA, VNM
Jan. 2011	Application of Seasonal Forecast Gridded Data to Seasonal Forecast Products	19: BGD, HKG, IDN, KAZ, LAO, MYS, MDV, MMR, NPL, PAK, PHL(2), QAT, SGP, LKA, THA, UZB, VNM
Nov. 2011	One month Forecast Products	13: BGD, KHM, HKG, IDN, LAO, MYS, MNG, MMR, PAK, PHL, LKA, THA, VNM
Nov. 2012	Climate Analysis Information	12: BGD, HKG, IDN (2), LAO, MYS, MNG, MMR, NPL, PHL, LKA, THA, VNM
Nov. 2013	Seasonal Forecast Products	16: BGD, KHM, HKG, IDN (3), LAO, MYS, MNG, MMR, NPL, PNG, PHL, LKA, THA, VNM
Jan. 2015	Global Warming Projection Information	13: BGD, KHM, IDN, HKG, LAO, MYS, MNG, MMR, NPL, PHL, LKA, THA, VNM
Nov. 2015	One-month Forecast	15: BGD, KHM, IDN, HKG, LAO, MYS, MNG, MMR, NPL, PAK, PHL, SGP, LKA, THA, VNM
Nov. 2016	Primary Modes of Global Climate Variability and Regional Climate	14: BGD, KHM, IDN, HKG, LAO, MYS, MNG, MMR, PAK, PHL, SGP, LKA, THA, VNM
Jan. – Feb. 2018	**Seasonal Forecast**	**19: BGD, BTN, FJI, HKG, IDN, LAO, MYS, MNG, MMR, PAK, PHL (3), SGP, ALB, LKA, THA, VNM**

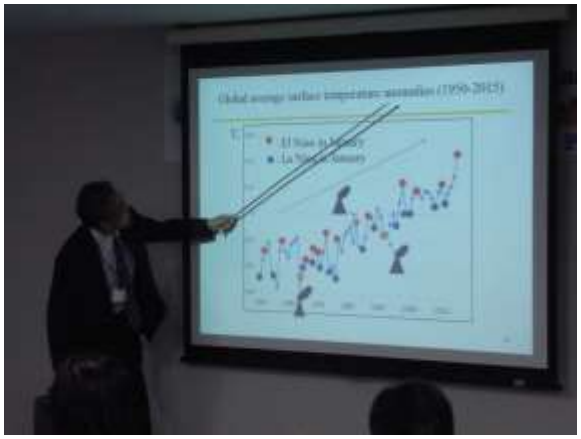
Seasonal Forecast

One-month Forecast

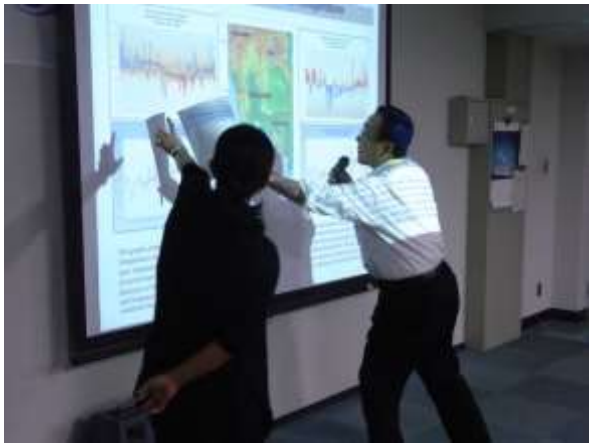
Climate Analysis

Global Warming Projection

Lecture and Exercise session



Presentation on results of the exercise



TCC Training Seminar on Primary Modes of Global Climate Variability and Regional Climate (14-18 November 2016)

Contents

- Introduction of TCC
- Outline and scope of this seminar

Purpose of this Seminar and its schedule

Purpose

- To familiarize the participants with outputs of JMA's numerical prediction model and tools for seasonal prediction
- To assist the participants in improving skills in generating seasonal prediction products using statistical downscaling methods

Schedule

See p. ii of the textbook for more detailed information

Day 1 (29th Jan.)	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 (30th Jan.)	Seasonal Forecasting	lecture
	Variability in the tropical oceans and its impact on the climate	lecture
	Introduction of seasonal ensemble prediction system	lecture
	Introduction and operation of iTacs (Advanved)	exercise
	Introduction of seasonal forecast guidance	lecture
Day 3 (31st Jan.)	Seasonal Forecast - Producing guidance and verification	exercise
	Interpretation of guidance, verification result and outputs from NWP	lecture
Day 4 (1st Feb.)	Generating seasonal forecast for your own country - Preparation of the presentation	exercise
	Presentation by participants	**presentation!**
Day 5 (2nd Feb.)	Presentation by participants (cont.)	**presentation!**

- **Please keep in mind that toward the end of the seminar, you will be requested to make a brief presentation on seasonal forecast for your own country. The details will be shown in Day 2.**

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**.

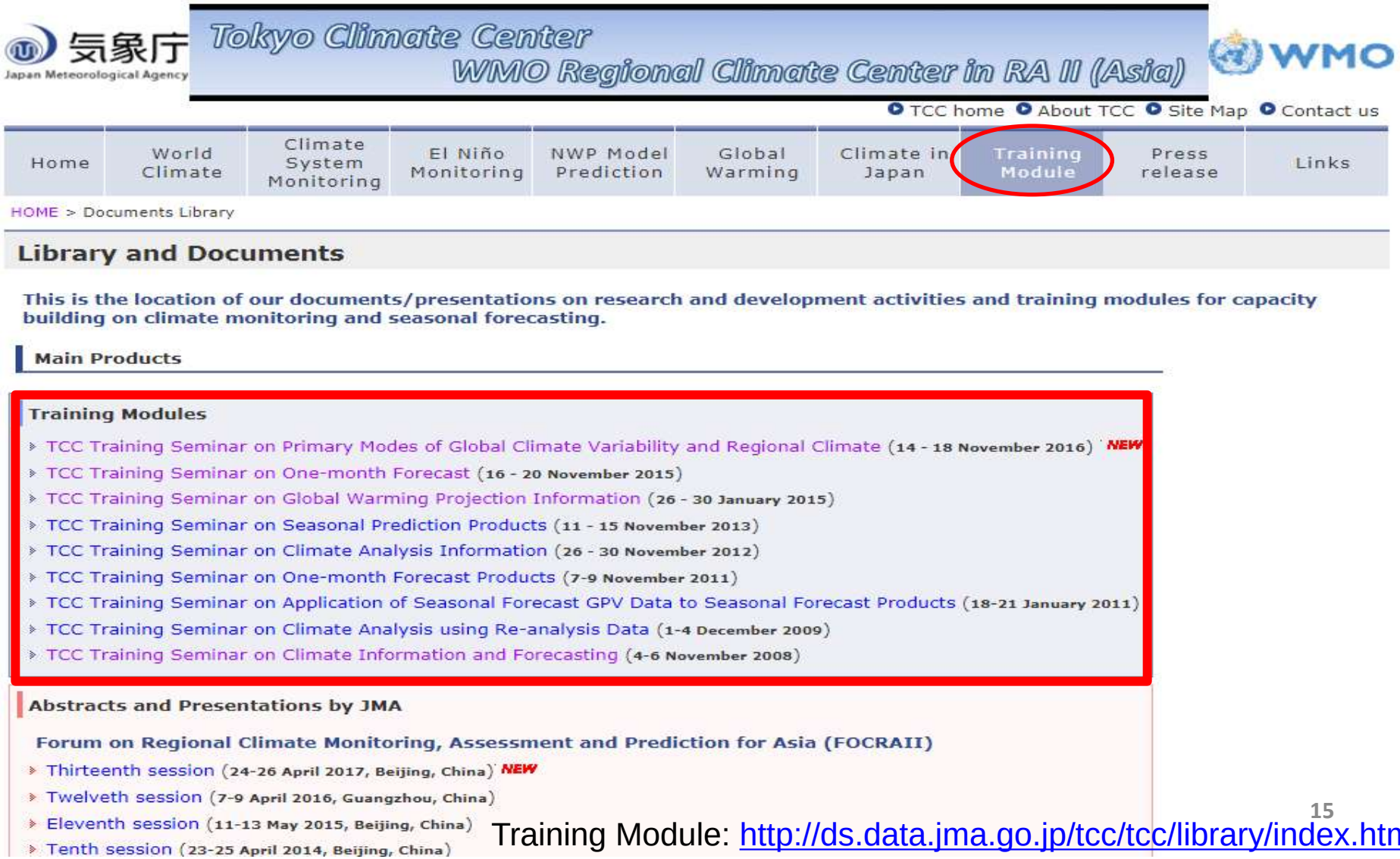
[Format of presentation session]
All speakers are allocated 15 minutes of presentation, followed by 3 minutes of question and answer time.

[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. 1st Feb.)	15:00-15:20	Viet Nam
	15:20-15:40	Thailand
	15:40-16:00	Sri Lanka
	16:00-16:20	Solomon Islands
	Coffee Break	
	16:40-17:00	Singapore
	17:00-17:20	Philippines (3)
	17:20-17:40	Pakistan
	17:40-18:00	Nepal
	18:00-18:20	Myanmar
Day 5 (Fri. 2nd Feb.)	09:30-09:50	Mongolia
	09:50-10:10	Malaysia
	10:10-10:30	Laos
	10:30-10:50	Indonesia
	Coffee Break	
	11:10-11:30	Hong Kong
	11:30-11:50	Fiji
	11:50-12:10	Bhutan
	12:10-12:30	Bangladesh

Training Module on the website

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



Training Module: http://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!