





# Fourth Japan-China-Korea Joint Conference on

# Meteorology

# 8-10 November 2009, Tsukuba, Japan

#### Fifth Circular

# 3 November 2009, edition 2.1

## **Organized by**

Meteorological Society of Japan, Chinese Meteorological Society Korean Meteorological Society

## Hosted by

Local Organizing Committee (LOC) of Japan-China-Korea Joint Conference,

Meteorological Society of Japan

Supported by Tsukuba city

Conference URL: <a href="http://www.soc.nii.ac.jp/msj/jckjc09/">http://www.soc.nii.ac.jp/msj/jckjc09/</a>

## **Table of Contents**

Background and Objectives	
Venue and Date	2
Time Table	4
Opening Plenary Session (8 November)	
Scientific Sessions (8 – 9 November)	5
Guidelines for presentation	5
Tutorial lecture (9 November)	7
Excursion: Tsukuba Science Tour (10 November)	8
Registration	9
Important Dates and Deadlines	9
Organizing Committees	
Travel Information	11
List of presentations	13
S-1 Numerical Weather Prediction	13
S-2 Monsoon	14
S-3 Atmospheric Aerosol, Gases, and Radiation	17
S-4 Future Climate Projection and Impact	
S-5 Typhoon and Meso-scale Phenomenon	20
S-6 Satellite Remote Sensing	22
S-7 Boundary Layer Meteorology	
S-8 General Session and Other Topics	
Poster Session.	25

Attached file: Application Form for Tsukuba Science Tour

# **Background and Objectives**

Meteorological Society of Japan (MSJ), Chinese Meteorological Society (CMS), and Korean Meteorological Society (KMS) have agreed to strengthen the mutual cooperation and friendship in the field of Atmospheric Science on the basis of equal benefits, organize regional activities in the field of meteorology, and widely inform the activities of the meteorological societies of Japan, China, and Korea to the world community. Based on this agreement, three international conferences have been held in the past:

- (1) First China-Korea-Japan Joint Conference on Meteorology 13-14 May 2005, Tokyo, Japan
- (2) Second Korea-Japan-China Joint Conference on Meteorology 11-13 October 2006, KINTEX, Goyang, Korea
- (3) Third China-Korea-Japan Joint Conference on Meteorology 13-16 November 2007, Beijing, China

After the consultation on the successful cooperation, the three parties have reached an agreement to continue the second round of the joint conferences once in every two years.

We encourage you to participate in the Fourth Japan-China-Korea Joint Conference on Meteorology.

## **Venue and Date**

**Venue:** Epochal Tsukuba International Congress Center, Tsukuba Japan

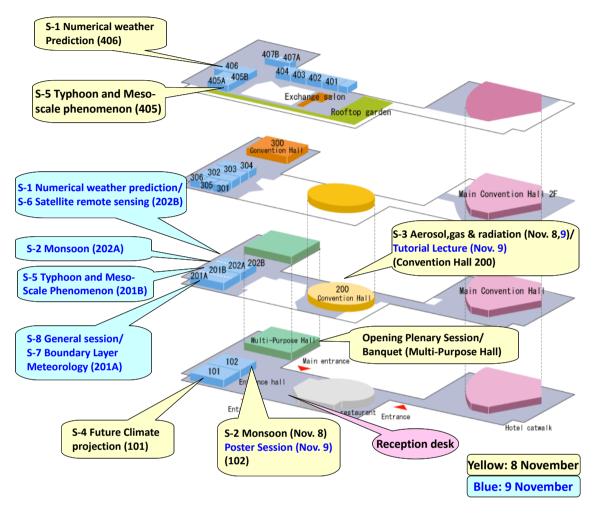
URL: <a href="http://www.epochal.or.jp/eng/index.html">http://www.epochal.or.jp/eng/index.html</a> **Date**: 8 (Sunday) -10 (Tuesday) November 2009.





Tsukuba International Congress Center © 2007 Epochal Tsukuba

# Floor and conference room guide



© 2007 Epochal Tsukuba

- Participants should visit the reception desk, which will be arranged at the first floor from 8:00 on 8 November. At the reception desk,
  - Registered participants are requested to tell their name and affiliation.
  - ➤ Participants who register on-site are requested to write their names and affiliations in the registration form, and pay registration fee at the desk by cash.
- During the conference, all participants are kindly requested to wear the identity badge. The badge serves as a pass for the conference and banquet
- Wireless internet connection (Wi-Fi) is available around the lounge deck.
- Smoking is prohibited in this conference venue, except specified smoking section.
- No food or drink allowed in the Convention Hall 200.

# **Time Table**

Date	Time	Convention	Conference	Conference	Conference	Conference		
		Hall 200	Room 101	Room 405	Room 102	Room 406		
	8:00-	Pogistration						
	9:00	Registration						
	9:00-	Opening Plenary Session						
	11:40	Invited talks						
		(Multi-Purpose Hall)						
8	11:40-	Lunch time						
Nov.	13:00							
2009	13:00-	S-3	S-4	S-5	S-2	S-1		
2009		Atmospheric	Future	Typhoon and	Monsoon	Numerical		
		Aerosol,	Climate	Meso-scale		Weather		
		Gases, and	Projection	Phenomenon		Prediction		
		Radiation	and Impact					
	18:30-	Banquet (Multi-Purpose Hall)						
	20:30	Banquet (mais r urpose rium)						

Date	Time	Convention	Conference	Conference	Conference	Conference	Poster
		Hall 200	Room 201A	Room 201B	Room 202A	Room 202B	Session
							Conference
							Room 102
	8:30-	S-3	S-8	S-5	S-2	S-1	
	12:00	Atmospheric	General	Typhoon and	Monsoon	Numerical	
		Aerosol,	Session and	Meso-scale		Weather	
		Gases, and	Other Topics	Phenomenon		Prediction	
		Radiation				(8:30-9:30)	Poster Session
						S-6	. <u>36</u> 331011
						Satellite	Posters
						Remote	should be
						Sensing	put up from
9						(10:00-12:00)	8:00 to
Nov.	12:00-	- l			16:30.		
2009	14:00	Poster Session core time(Conference Room 102) / Lunch time					
	14:00-	S-3	S-7	S-5	S-2	S-6	]
		Atmospheric	Boundary	Typhoon and	Monsoon	Satellite	
		Aerosol,	Layer	Meso-scale		Remote	
		Gases, and	Meteorology	Phenomenon		Sensing	
		Radiation				_	
	18:30- Tutorial lecture by <b>Prof. Eugenia Kalnay</b> (Convention Hall 200)					Hall 200)	
	20:00	"Introduction to data assimilation"				11011 200)	
		introduction to data assimilation					

# **Opening Plenary Session (8 November)**

Place: Multi-Purpose Hall

9:00 - 9:20 Opening Ceremony

9:20 – 9:55 **Special lecture** 

Eugenia KALNAY (University of Maryland)

Title: The future of data assimilation

9:55 – 10:10 Break



#### **Keynote lectures**

10:10 –10:40 Tatsushi TOKIOKA (JAMSTEC)

Title: Global Warming Projection Research in Japan

10:40 –11:10 **Chongyin LI** (Institute of Atmospheric Physics, Chinese

Academy of Sciences)

Title: Typhoon Track and Atmospheric ISO Pattern

11:10 –11:40 **Dong-Kyou LEE** (AOGS President, Seoul National University)
Title: Regional Climate Modeling on Extreme Climate







11:45 – Group photo

# Scientific Sessions (8 – 9 November)

# **Guidelines for presentation**

Scientific sessions take place at five oral session rooms and one poster session room. Please check information carefully for the exact time and location of the sessions. <u>A</u> tentative list of presentations is available at the end of this circular. <u>If you will make a presentation(s)</u>, please check your name and the title of the presentation(s).

## Oral presentation

#### Time allocation

The time allocated for each presentation is 15 minutes (12 minutes presentation, 3 minutes for Q&A), except keynote presentations.

### **Equipments**

Oral presentations should be presented by PC only. The session rooms are provided with a Microsoft Windows computer with a projector. Acceptable formats for presentations are Microsoft PowerPoint and PDF. The presenters are requested to bring their presentation data file on an USB memory stick, or bring their own portable computers. Please <a href="make sure that the presentation files are correctly displayed">make sure that the presentation files are correctly displayed</a>
<a href="make-sure-that-the-presentation-files-are-correctly-displayed">make-sure-that-the-presentation-files-are-correctly-displayed</a>
<a href="make-sure-that-the-presentation-files-are-correctly-displayed-before-the-session-begins">make-sure-that-the-presentation-files-are-correctly-displayed-before-the-session-begins</a>. If you use an USB memory stick to bring your presentation file, please also make sure that <a href="make-virus-that-virus-that-that-virus-that-that-that-virus-

## Poster presentation

#### Poster boards

#### Size: Width 90 cm x Height 210 cm

Posters should be displayed on the boards using push pins that will be available at the poster session room. The presenters are responsible for setting up and removing their posters.

### Poster display and core time

All posters will be displayed at the poster session room (Conference Room 102). Posters should be set up between 8:00 and 12:00 on 9 November, and remain up to 16:30. Presenters must show up in front of their posters at least for one hour during the core time of 12:00 to 14:00 on 9 November.

# **Tutorial lecture (9 November)**

After the oral sessions, a tutorial lecture especially for young scientists will be presented.

Presenter: Prof. Eugenia KALNAY (University of Maryland)

Title: Introduction to data assimilation

Time and date: 18:30 – 20:00, 9 November 2009

Location: Convention Hall 200



# **Excursion: Tsukuba Science Tour (10 November)**

On 10 November 2009, there is a Tsukuba Science Tour. If you would like to join the tour, please return the application form to the secretariat (jckjc09@mri-jma.go.jp) by 31 October (Saturday) 2009. The application form can be obtained from the conference website.

Tour Schedule (about 7 hours starting at 8 AM, including lunch)

Visiting 4 institutions. Up to 49 participants

- 8:00 Hotel Epochal Tsukuba
  - (<a href="http://www.okura.com/tw/hotels/tsukuba/index.html">http://www.okura.com/tw/hotels/tsukuba/index.html</a>, or <a href="http://www.okura.com/kr/">http://www.okura.com/kr/</a>)
- 8:10 Meteorological Research Institute
  - (http://www.mri-jma.go.jp/Welcome.html)
    - Watch Sonde Release at 8:30
- 9:45 Geophysical Survey Institute
  - (http://www.gsi.go.jp/ENGLISH/index.html)
- 11:10 University of Tsukuba
  - (http://www.tsukuba.ac.jp/chinese/index.html, or
    - http://www.tsukuba.ac.jp/korean/)
- 12:10 National Institute of Advanced Industrial Science and Technology
  - Lunch (12:15 13:00)
  - (http://www.aist.go.jp/index\_en.html)
- 15:00 Hotel Epochal Tsukuba

We have one tour for 49 people, to visit 4 institutions in Tsukuba; Meteorological Research Institute, Geological Survey Institute, University of Tsukuba and National Institute of Advanced Industrial Science and Technology (See the schedule below). Once we reach a maximum number of 49 applicants, we will inform that the seats are full for the tour. The seat is available as first come, first serve basis. We do not plan to have on-site registration for the tour at this time. You would like to apply more than one person, by specifying the number of total participants in the application form.

# Registration

On-line registration and abstract submission are over. On-site registration without a presentation and banquet tickets are still acceptable for citizens of Japan or visa waiver country. We solicit your participation to this conference.

# **Registration fees**

	Pre-registration before	Registration fee after
	February 20	February 20
Standard	<del>10,000JPY</del>	12,000JPY
Student*	2,000JPY	3,000JPY

<sup>\*</sup>Students are requested to write their supervisor's name on the registration form.

## **Banquet fees**

Additional 6,000 JPY (3,000 JPY for students) will be charged for a banquet ticket.

## Payment method

The payment of on-site registration is by cash only.

# Cancellation and refund policy

In case of cancellation, registration and banquet fees are not refunded. Cancellations should be notified to the secretariat by a written document with your name.

# **Important Dates and Deadlines**

Joint Conference: Postponed May 26-28, 2009

Fourth Circular: Additional Call for papers July 2009

Deadline of additional call for papers 31 July, 2009 (24 JST)

Fifth Circular: Session program will be fixed. Sep. $\rightarrow$  October 2009

Joint Conference 8-10 November 2009

# **Organizing Committees**

# **International Organizing Committee**

**Japan:** Yutaka KONDO The University of Tokyo (Chair person)

Hiroshi L. TANAKA University of Tsukuba (Vice chair person)

China: Fei HAN Chinese Meteorological Administration

Weimin ZHANG Chinese Meteorological Society

**Korea:** B.J. SOHN Seoul National University

Myoung-Seok SUH Kongju National University

## **Local Organizing Committee**

Yutaka KONDO The University of Tokyo (Chair person)
Hiroshi L. TANAKA University of Tsukuba (Vice chair person)
Hiroaki KONDO National Institute of Advanced Industrial Science

and Technology

Akio KITOH Meteorological Research Institute
Tetsuo NAKAZAWA Meteorological Research Institute
Masao MIKAMI Meteorological Research Institute

Kenichi UENO University of Tsukuba Takehiko SATOMURA Kyoto University

Taichu Y. TANAKA Meteorological Research Institute (Secretary)

### **LOC Secretariat**

Taichu Y. TANAKA

Meteorological Research Institute

1-1-1, Nagamine, Tsukuba 305-0052 Japan Tel: +81-29-853-8713, Fax: +81-29-855-7420

E-mail: jckjc09@mri-jma.go.jp

URL: <a href="http://www.soc.nii.ac.jp/msj/jckjc09">http://www.soc.nii.ac.jp/msj/jckjc09</a>

## **Travel Information**

#### Accommodation

A couple of hotels are available in the Tsukuba area at a reasonable price. Please make reservations by yourself in reference to the following hotel list. If you are required to have other special arrangements, please contact to the LOC.

For further information, please visit

http://www.epochal.or.jp/eng/hotels/index.html

Okura Frontier Hotel Tsukuba EPOCHAL (http://www.okura-tsukuba.co.jp/english/)

Okura Frontier Hotel Tsukuba (<a href="http://www.okura-tsukuba.co.jp/">http://www.okura-tsukuba.co.jp/</a>)

Hotel Grand Shinonome (http://www.hg-shinonome.co.jp/)

List of hotels in the vicinity of the venue:

http://www.epochal.or.jp/eng/hotels/hotel\_list.html

#### Visa information

Information of visa for visiting Japan can be found in the "Guide to Japanese Visas" at the website of Ministry of Foreign Affairs (<a href="http://www.mofa.go.jp/j\_info/visit/visa/">http://www.mofa.go.jp/j\_info/visit/visa/</a>).

# Climate of Tsukuba city

Autumn is a beautiful time with colored leaves in Tsukuba Science City. Daytime average temperature in early November is usually around 12 degrees C.

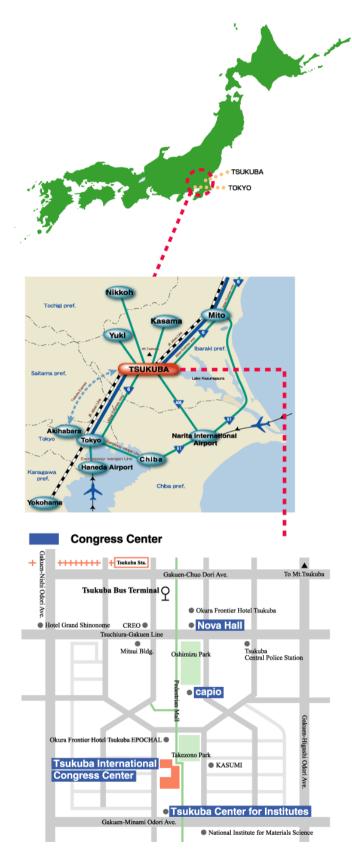
# **Transportation**

Travel arrangements should be made individually. When arriving at Narita International Airport, convenient express bus transportation is available directly from Narita to Tsukuba by the Keisei Express Line. For further information, please visit following sites.

http://www.okura-tsukuba.co.jp/eng/access.php

http://www.epochal.or.jp/eng/access/index.html

http://www.intio.or.jp/tsukuba.cb/e\_03acs.html



© Tsukuba Convention Bureau

# **List of presentations**

- Family names are written in CAPITALS.
- Asterisk (\*) denotes the corresponding author.
- First five authors are listed, and authors more than six are listed as "et al."

#### **Oral Session**

## S-1 Numerical Weather Prediction

Session Conveners: Kazuo SAITO, Xueshun SHEN, and Hyeong-Bin CHEONG

8 Nov. 13:00-14:45 Chair: Xueshun SHEN (Location: Conference Room 406)

Climate, global model and scheme

- S1-01 Daisuke NOHARA\*, Yoshikatsu YOSHIDA, Howeng KANG and Ashok KARUMURI: SEASONAL FORECAST USING A STATISTICAL DOWNSCALING METHOD: ITS VERIFICATION AND APPLICATION
- S1-02 Xueshun SHEN\*, Wei HAN, Jishan XUE, Jian SUN, Zhaorong ZHUANG, et al.: DEVELOPMENT OF NEW GLOBAL FORECAST SYSTEM IN CMA
- S1-03 Kengo MIYAMOTO\*: RENOVATION OF JMA-GSM
- S1-04 **Hiroshi L. TANAKA\* and Shinji TAKAHASHI**: NUMERICAL SIMULATION OF ARCTIC AND TROPICAL CYCLONES USING NICAM INSTALLED AT CCS
- S1-05 Xindong PENG\*, Yan CHANG, Feng XIAO and Keiko TAKAHASHI: SEMI-LAGRANGIAN COMPUTATION OF GRAVITY WAVES ON SPHERE
- S1-06 **Guoqiang XU\*, Jishan XUE, Jian SUN, Xueshun SHEN and Dehui CHEN**: THE PROGRAM STRUCTURE DESIGNING AND OPTIMIZING TESTS OF GRAPES PHYSICS
- S1-07 Mingxuan SHAO\*, Minquan XIONG, Huanzhu LIU and Hua XU: USING KERNEL NEIGHBOR NONPARAMETRIC ESTIMATION TECHNIQUE TO PREDICT WIND

**Break** 

#### 8 Nov. 15:15-17:00 Chair: Hyeong-Bin CHEONG

Typhoon, regional model and heavy rainfall

- S1-08 In-Hyuk KWON\*, Hyeong-Bin CHEONG, Hyun-Jun HAN and Hyun-Gyu KANG: TYPHOON TRACK AND INTENSITY PREDICTION WITH THE TROPICAL CYCLONE INITIALIZATION SCHEME AND WRF MODEL
- S1-09 Jian SUN\*, Xueshun SHEN, Dehui CHEN and Jishan XUE: THE OPERATIONAL MESO-SCALE NWP SYSTEM IN CMA: GRAPES\_MESO
- S1-10 Ryoji NAGASAWA\*: RADIATION PROCESS OF THE JMA NONHYDROSTATUC MODEL
- S1-11 Kazuo SAITO\*, Masaru KUNII, Masahiro HARA and Hiromu SEKO: EXPERIENCES OF MRI/JMA AT THE WWRP BEIJING OLYMPIC 2008 RESEARCH AND DEVELOPMENT PROJECT (B08RDP)
- S1-12 Masaru KUNII\*, Masahiro HARA, Kazuo SAITO and Hiromu SEKO: MESOSCALE ENSEMBLE FORECAST EXPERIMENT AND SENSITIVITY ANALYSIS OVER JAPAN AREA

- S1-13 **Hiromu SEKO\*, Kazuo SAITO, Masaru KUNII and Takemasa MIYOSHI**: MESOSCALE ENSEMBLE EXPERIMENTS OF HEAVY RAINFALL IN JAPAN AREA BY USING NHM-LETKF
- S1-14 **Ji-Hyun HA\* and Dong-Kyou LEE**: RADAR AND SURFACE DATA ASSIMILATION FOR THE SIMULATION OF HEAVY RAINFALL

# 9 Nov. 8:30-9:30 Chair: Kazuo SAITO (Location: Conference Room 202B)

Data assimilation

- S1-15 Zhaorong ZHUANG\*, Jishan XUE, Wei HAN, Yan LIU, Huijuan LU, et al.: RECENT IMPROVEMENT OF THE GLOBAL GRAPES-3DVAR ANALYSIS SYSTEM
- S1-16 Jishan XUE\* and Lin ZHANG: DEVELOPMENT OF GRAPES 4DVAR
- S1-17 Yuki HONDA\* and Ken SAWADA: NEW OPERATIONAL MESOSCALE 4D-VAR USING JMA NONHYDROSTAIC MODEL
- S1-18 **Hiromu SEKO\*, Masaru KUNII, Yoshinori SHOJI and Toshitaka TSUDA**: IMPACTS OF GPS RADIO OCCULTATION DATA OF CHAMP AND COSMIC ON THE PRECIPITATION OF HEAVY RAINFALL AND TYPHOON FORMATION

#### S-2 Monsoon

Session Conveners: Jun MATSUMOTO, Jianping LI, and Kyung-Ja HA

# 8 Nov. 13:00-15:15 Chair: Riyu LU (Location: Conference Room 102)

Monsoon seasonal change

- S2-01 Natsuko YASUTOMI\*: TIME EVOLUTION OF THE EAST ASIAN SUMMER MONSOON ANALYSED IN HIGHLY-RESOLUTED GRIDDED PRECIPITATION DATA BASED ON OBSERVED RAIN GAUGES
- S2-02 **Yoshiyuki KAJIKAWA\* and Bin WANG**: DECADAL CHANGE OF THE SOUTH CHINA SEA SUMMER MONSOON ONSET
- S2-03 **Zhiping WEN\* and Jieyi LIANG**: THE CHARACTERISTIC OF SEA SURFACE TEMPERATURE ANOMALIES IN TROPICAL OCEAN AND ITS INFLUENCES ON THE ONSET OF SOUTH CHINA SEA SUMMER MONSOON
- S2-04 **Jiangyu MAO\* and Guoxiong WU**: INFLUENCES OF THE TYPHOON CHANCHU ON THE 2006 SOUTH CHINA SEA SUMMER MONSOON ONSET
- S2-05 Yu KOSAKA, Hisashi NAKAMURA\*, Masahiro WATANABE and Masahide KIMOTO: DYNAMICS OF A WAVE-LIKE TELECONNECTION PATTERN ALONG THE SUMMERTIME ASIAN JET
- S2-06 Masato I. NODZU\*, Shin-Ya OGINO and Manabu D. YAMANAKA: GENARATION PROCESS OF STABLE LAYERS IN THE LOWER TROPOSPHERE OVER THE INLAND OF INDOCHINA PENINSULA
- S2-07 Congwen ZHU\*, Bin WANG and Weihong QIAN: WHY DO DUST STORMS DECREASE IN NORTHERN CHINA CONCURENTLY WITH THE RECENT GLOBAL WARMING?

#### **Land-atmosphere interactions**

- S2-08 Takao YOSHIKANE\*, Masayuki HARA, Hiroaki KAWASE and Fujio KIMURA: VEGETATION FRACTION EFFECT ON EARLY SUMMER LARGE RAIN BAND IN EAST ASIA
- S2-09 Jun MATSUMOTO\*, Ryoji YAMASHIMA and Kumiko TAKATA: IMPACTS OF LAND USE CHANGES BETWEEN 1700 AND 1850 ON MONSOON SEASONAL CHANGES

Break

#### 8 Nov. 15:30-17:15 Chair: Dong-Hyun CHA

#### Monsoon modeling

- S2-10 Qing BAO\*, Guoxiong WU, Yimin LIU, Jing YANG, Zaizhi WANG, et al.: SIMULATED EAST ASIAN SUMMER MONSOON IN FGOALS-S1.1
- S2-11 Myung-Seo KOO\* and Song-You HONG: DIURNAL VARIATION OF THE SIMULATED PRECIPITATION OVER EAST ASIA
- S2-12 Anmin DUAN\*, Chunghsiung SUI and Guoxiong WU: TOWARDS THE LOCAL AIR-SEA INTERACTION IN ITCZ SIMULATION
- S2-13 **Dong-Hyun CHA\* and Dong-Kyou LEE**: REGIONAL-SCALE INTERACTIONS AMONG LAND, OCEAN AND ATMOSPHERE IN REGIONAL CLIMATE SIMULATIONS OF EAST ASIAN SUMMER MONSOON
- S2-14 Wansuo DUAN\* and Mu MU: CAN THE UNCERTAINTIES ON THE MJO-RELATED EQUATORIAL ZONAL WIND FORCING CAUSE A SIGNIFICANT SPRING PREDICTABILITY BARRIER FOR EL NINO EVENTS?
- S2-15 Chaoxia YUAN\*, Tomoki TOZUKA and Toshio YAMAGATA: AN AGCM STUDY ON THE TELECONNECTION OF IOD TO THE TIBETAN PLATEAU IN EARLY WINTER
- S2-16 **Wei CHEN\*, Riyu LU and Buwen DONG**: THE IMPACT OF ATLANTIC OCEAN ON THE MULTIDECADAL FLUCTUATION OF ENSO SOUTH ASIAN MONSOON RELATIONSHIP IN A COUPLED GCM

# 9 Nov. 8:30-9:45 Chair: Jun MATSUMOTO (Location: Conference Room 202A)

#### **Tibetan Plateau**

- S2-17 **Yaoming MA\***: RECENT PROGRESS ON THE STUDY OF LAND-ATMOSPHERIC INTERACTION OVER THE TIBETAN PLATEAU AREA
- S2-18 Kenji TANIGUCHI\*, Toru TAMURA, Toshio KOIKE, Ken'ichi UENO and Xiangde XU: THE INCREASE IN ATMOSPHERIC TEMPERATURE OVER THE TIBETAN PLATEAU IN EARLY SPRING AND PRE-MONSOON SEASON
- S2-19 **Shiori SUGIMOTO\* and Kenichi UENO**: IMPACTS OF LAND-SURFACE CONDITION ON FORMATION OF LOW-LEVEL CONVERGENCE AND DEVELOPMENT OF MESOSCALE CONVECTIVE SYSTEMS OVER THE TIBETAN PLATEAU

#### **East Asian summer monsoon**

- S2-20 **Akiyo YATAGAI\*, T. N. KRISHNAMURTI, A. K. MISHRA and Anu SIMON**: USE OF A DENSE RAIN-GAUGE NETWORK OVER MONSOON ASIA FOR IMPROVING BLENDED TRMM PRODUCTS AND DOWNSCALED WEATHER MODELS
- S2-21 Hong YE\* and Riyu LU: THE INTERDECADAL CHANGE OF RELATIONSHIP BETWEEN ENSO AND EAST CHINA SUMMER RAINFALL

Break

#### 9 Nov. 10:15-11:45 Chair: WonMoo KIM

S2-22 Xuguang SUN\*, Xiuqun YANG, Shanshan ZHAO, Yimin ZHU and Yihua LIN: CONTRIBUTION OF THE INDIAN OCEAN SSTA TO THE IMPACTS OF EL NINO ON THE ATMOSPHERIC CIRCULATION OVER EAST ASIA

- S2-23 **Riyu LU\* and Zhongda LIN**: ROLE OF SUBTROPICAL PRECIPITATION ANOMALIES IN MAINTAINING THE SUMMERTIME MERIDIONAL TELECONNECTION OVER THE WESTERN NORTH PACIFIC AND EAST ASIA
- S2-24 **Zhongda LIN\***: ABRUPT NORTHWARD JUMP OF THE EAST ASIAN UPPER-TROPOSPHERIC JET STREAM IN MID-SUMMER
- S2-25 **WonMoo KIM\*, Jong-Ghap JHUN and Bin WANG**: CHANGE IN SUMMER PRECIPITATION STRUCTURE IN KOREAN PENINSULA DURING MID-1990S
- S2-26 **Yoshinori MORI and Kuranoshin KATO\***: ON THE PRECIPITATION PEAK AROUND THE NORTHWESTERN KYUSHU IN JAPAN AS THE SEASONAL TRANSITION FROM MIDSUMMER TO AUTUMN RAINFALL (AKISAME) SEASON IN EAST ASIA
- S2-27 Byung-Ju SOHN\* and Seong-Chan PARK: LONG-TERM VARIABILITY OF HADLEY AND WALKER CIRCULATION INTENSITIES SHOWN IN WATER VAPOR TRANSPORT FIELD

#### 9 Nov. 14:00-15:30 Chair: Jiangyu MAO

- S2-28 **Takeaki SAMPE\* and Shang-Ping XIE**: LARGE-SCALE DYNAMICS OF THE MEIYU-BAIU FORMATION: ROLE OF THE WESTERLY JET
- S2-29 Liang WU\*, Zhiping WEN and Ronghui HUANG: THE INFLUENCE OF AIR-SEA FLUX ON TROPICAL CYCLONE OVER WESTERN NORTH PACIFIC: THE ROLE OF MONSOON TROUGH
- S2-30 Yanjun QI\*, Renhe ZHANG, Tim LI and Min WEN: INTERACTIONS BETWEEN THE SUMMER MEAN MONSOON AND THE INTRASEASONAL OSCILLATION IN THE INDIAN MONSOON REGION
- S2-31 Rucong YU, Weihua YUAN\*, Jian LI and Yunfei FU: DIURNAL PHASE OF LATE-NIGHT AGAINST LATE-AFTERNOON OF STRATIFORM AND CONVECTIVE PRECIPITATION IN SUMMER SOUTHERN CONTIGUOUS CHINA
- S2-32 **Do-Woo KIM\*, Su-Bin OH, Sang-Min LEE, Ji-Sun LEE, Ki-Seon CHOI, et al.**: DROUGHT CLIMATOLOGY FOR KOREA
- S2-33 Sang Min LEE\*, Sang-Min LEE, Do-Woo KIM, Su-Bin OH, Hi-Ryong BYUN and Hiroshi L. TANAKA: MAPPING AFTER REGIONALIZATION ON DROUGHT CLIMATOLOGY FOR JAPAN

Break

#### 9 Nov. 16:00-17:30 Chair: Kenichi UENO

East Asian winter monsoon

- S2-34 Lin WANG\*, Wen CHEN, Wen ZHOU and Ronghui HUANG: INTERANNUAL VARIATIONS OF EAST ASIAN TROUGH AXIS AT 500HPA AND ITS ASSOCIATION WITH THE EAST ASIAN WINTER MONSOON PATHWAY
- S2-35 **Bin WANG\*, Zhiwei WU, Chih-Pei CHANG, Jian LIU, Jianping LI, et al.**: ANOTHER LOOK AT INTERANNUAL TO INTERDECADAL VARIATIONS OF THE EAST ASIAN WINTER MONSOON:
- S2-36 Cholaw BUEH\*: MECHANISM FOR THE EXTREME WEATHER OF SOUTH CHINA IN JANUARY 2008
- S2-37 Wen ZHOU\*, Johnny C.L. CHAN, Wen CHEN, Jian LING, Joaquim G. PINTO, et al.:

  SYNOPTIC-SCALE CONTROLS OF PERSISTENT LOW TEMPERATURE AND ICY WEATHER OVER
  SOUTHERN CHINA IN JANUARY 2008
- S2-38 **Peiming WU\*, Yoshiki FUKUTOMI and Jun MATSUMOTO**: THE ROLES OF TROPICAL SYNOPTIC-SCALE DISTURBANCES AND ASIAN WINTER MONSOON IN THE WIDESPREAD HEAVY RAINFALL OVER HAINAN ISLAND DURING 11 TO 14 OCTOBER 2008
- S2-39 Maoqiu JIAN\*: IMPACTS OF EAST ASIAN WINTER MONSOON AND ENSO ON WINTER RAINFALL IN SOUTH CHINA

## S-3 Atmospheric Aerosol, Gases, and Radiation

Session Conveners: Masao MIKAMI, Zifa WANG, and Maeng-Ki KIM

8 Nov. 13:00-15:00 Chair: Masao MIKAMI

(Location: Convention Hall 200)

- S3-01 **Teruyuki NAKAJIMA\***: ISSUES IN UNDERSTANDING THE AEROSOL-CLOUD-RADIATION INTERACTION PROCESSES (*Keynote: 30min.*)
- S3-02 Soon-Chang YOON\*, Sang-Woo KIM, Sang-Cheon PARK, Man-Hae KIM, V. RAMANATHAN, et al.: CHEJU ABC PLUME-ASIAN MONSOON EXPERIMENT (CAPMEX) 2008: UNMANNED-AIRCRAFT MEASUREMENT OF AEROSOLS AND CLOUDS PROPERTIES IN JEJU, KOREA (*Keynote: 30min.*)
- S3-03 Yutaka KONDO\*, Naga OHSHIMA, Nobuhiro MOTEKI, Nobuyuki TAKEGAWA and Mizuo KAJINO: TRANSPORT OF BLACK CARBON FROM THE ASIAN CONTINENT
- S3-04 Yuzo MIYAZAKI\*, Shankar AGGARWAL, Khem SINGH, Gupta PRABHAT and Kimitaka
  KAWAMURA: WATER-SOLUBLE ORGANIC CARBON AND DIACIDS IN AEROSOLS IN NEW DELHI,
  INDIA IN WINTER: CHARACTERISTICS AND FORMATION PROCESSES
- S3-05 **Tsatsral BATMUNKH\*, Jin Sang JUNG, Young J. KIM and Bulgan TUMENDEMBEREL**:

  CARBONACEOUS AEROSOLS AND THEIR OPTICAL PROPERTIES IN ULAANBAATAR, MONGOLIA
- S3-06 **Rokjin PARK\*, Minjoong KIM, Jaein JEONG, Daeok YOUN and Sangwoo KIM**: A CONTRIBUTION OF BROWN CARBON AEROSOL TO THE AEROSOL ABSORPTION AND ITS RADIATIVE FORCING IN EAST ASIA

Break

#### 8 Nov. 15:30-17:15 Chair: Maeng-Ki KIM

- S3-07 Shiro HATAKEYAMA\*, Sayuri HANAOKA, Izumi WATANABE, Takemitsu ARAKAKI, Kaori KAWANA, et al.: LEXTRA -- AERIAL OBSERVATION OF AEROSOLS AND GASES OVER THE EASTA CHINA SEA IN MARCH-APRIL, 2008
- S3-08 Makoto KOIKE\*, H. MATSUI, Y. KONDO, N. TAKAGAWA and T. ZHU: SYNOPTIC-SCALE VARIATIONS OF AEROSOLS AROUND BEIJING IN THE SUMMER 2006
- S3-09 Yutaka MATSUMI\*, Akihiro YABUSHITA, Toshiya KUMAZAWA, Jun MATSUMOTO, Masahiro NARUKAWA, et al.: INTERNAL MIXING STATES OF ATMOSPHERIC AEROSOLS STUDIED BY A LASER IONIZATION SINGLE-PARTICLE MASS SPECTROMETER DURING SPRING TIME IN OKINAWA, JAPAN
- S3-10 Enagnon A. GBAGUIDI\*, Zifa WANG, Jinnan CHEN and Chao GAO: MODELING EXPLORATION OF THE RELATIONSHIPS BETWEEN METEOROLOGICAL PARAMETERS AND HOMOGENEOUS NUCLEATION IN THE CONTINENTAL BOUNDARY LAYER OVER CHINA
- S3-11 Seong Soo YUM\* and Keunyong SONG: CCN IMPACTS ON MARINE STRATOCUMULUS CLOUD DEVELOPMENT AND THEIR NOCTURNAL/ DAYTIME CONTRASTS
- S3-12 Naga OSHIMA\*, Makoto KOIKE, Yang ZHANG and Yutaka KONDO: BLACK CARBON AGING AND ITS IMPACT ON AEROSOL PROPERTIES IN OUTFLOW FROM ANTHROPOGENIC SOURCES USING A MIXING STATE RESOLVED MODEL

# 9 Nov. 8:30-10:00 Chair: Zifa WANG (Location: Convention Hall 200)

- S3-13 Qizhong WU\* and Zifa WANG: THE EFFECT OF TRAFFIC RESTRICTION ON AIR QUALITY IN BEIJING
- S3-14 **Zifa WANG\***, **Qizhong WU**, **Xiao TANG**, **Alex GBAGUIDI**, **Wei WANG**, **et al.**: MULTI-MODELS ENSEMBLE AIR QUALITY FORECASTING SYSTEM FOR BEIJING OLYMPICS
- S3-15 Atsushi SHIMIZU\*, Ichiro MATSUI, Tomoaki NISHIZAWA and Nobuo SUGIMOTO: A LIDAR

- NETWORK FOR CLOUD AND AEROSOL OBSERVATIONS IN ASIA
- S3-16 Masao MIKAMI\*: TOWARDS THE UNDERSTANDING OF ASIAN DUST: ITS PHYSICS, MODELING, AND ROLES IN THE ATMOSPHERE AND CLIMATE SYSTEM.
- S3-17 Liu YANG and Kenji KAI\*: TEMPORAL AND SPATIAL DISTRIBUTIONS AND OCCURRENCE CAUSES OF DUST EVENTS IN GOBI DESERT DURING 1999-2007
- S3-18 Yudai UENO, Kenji KAI\* and Hongfei ZHOU: CHARACTERISCICS OF THE DUST OVER THE TAKLIMAKAN DESERT IN SPRING AND ESTIMATION OF THE TOTAL AMOUNT OF THE DUST

Break

#### 9 Nov. 10:30-11:45 Chair: TBD

- S3-19 Daizhou ZHANG\*, Hiroko OGATA, Maromu YAMADA, Yutaka TOBO, Atsushi MATSUKI, et al.:
  ASIAN DUST PARTICLES ARRIVING AT JAPAN: CHANGES AND SUBSEQUENT EFFECTS DURING
  THE TRANSPORT
- S3-20 Taichu Y. TANAKA\*, Tomonori SAKAMI, Seiji YUKIMOTO and Makoto DEUSHI: DEVELOPMENT OF AN AEROSOL MODULE IN AN EARTH SYSTEM MODEL FOR GLOBAL WARMING PREDICTION
- S3-21 Keiya YUMIMOTO\*, Itsushi UNO, Atsushi SHIMIZU and Nobuo SUGIMOTO: DUST TRANSPORT MODEL WITH 4D-VAR DATA ASSIMILATION METHOD: INVERSE MODELING USING GROUND-BASED LIDAR AND SATELLITE OBSERVATIONS
- S3-22 Thomas T. SEKIYAMA\*, Taichu Y. TANAKA, Atsushi SHIMIZU and Takemasa MIYOSHI: DATA ASSIMILATION OF CALIPSO AEROSOL OBSERVATIONS USING AN ENSEMBLE KALMAN FILTER
- S3-23 Xin LI\*: EXPERIENCE OF EMISSION CONTROL FROM THE BEIJING GREEN OLYMPIC GAMES

## 9 Nov. 14:00-15:45 Chair: Rokjin PARK

- S3-24 Kazuyuki KITA\*, Seiichiro YONEMURA, Haruo TSURUTA, Pakpong POCHANART, Akkaneewut CHABANGBORN, et al.: OZONE, CO, AND AEROSOLS OBSERVED IN A RURAL AREA IN THAILAND: INCREASING INFLUENCES OF TRANSPORT FROM CHINA
- S3-25 **Jie LI\*, Pakpong POCHANART, Zifa WANG, Yu LIU, Kazuyo YAMAJI, et al.**: IMPACT OF CHEMICAL PRODUCTION AND TRANSPORT ON SUMMERTIME DIURNAL OZONE BEHAVIOR AT A MOUNTAINOUS SITE IN CENTRAL EASTERN CHINA
- S3-26 Xiaole PAN\*, Zifa WANG, Xiquan WANG and Huabin DONG: OBSERVATION STUDY ON OZONE DRY DEPOSITION OVER GRASS LAND IN SUBURBAN AREA OF BEIJING
- S3-27 Xiao TANG\*, Zifa WANG, Jiang ZHU, Qizhong WU and Jie LI: MONTE CARLO SENSITIVITY ANALYSIS OF THE RELATIONSHIP BETWEEN  $O_3$  AND ITS PRECURSOR EMISSIONS DURING HIGH SUMMER OZONE IN BEIJING
- S3-28 Tatsuya NAGASHIMA\*, Toshimasa OHARA, Kengo SUDO and Hajime AKIMOTO: SOURCE ATTRIBUTION OF SURFACE OZONE OVER EAST ASIA WITH TRACER TAGGING METHOD
- S3-29 Masayuki TAKIGAWA\*, Masaaki TAKAHASHI, Hajime AKIMOTO and Kazuyuki KOBAYASHI:
  FUTURE PROJECTION OF SURFACE OZONE AND ITS IMPACT ON CROP YIELD LOSS OVER EAST
  ASIAN IN 2020

**Break** 

#### 9 Nov. 16:15-17:45 Chair: Hajime FUKUSHIMA

- S3-30 Akira WADA\*, Shohei MURAYAMA, Hidekazu MATSUEDA, Yousuke SAWA, Hiroaki KONDO, et al.: OBSERVATION OF RADON-222 IN THE WESTERN NORTH PACIFIC WITH A NEW RADON MEASURING SYSTEM
- S3-31 **Yumi KIM\*, Sang-Woo KIM and Soon-Chang YOON**: INTERCOMPARISON OF CIRRUS OPTICAL DEPTHS RETRIEVED FROM SPACE-BORNE CALIOP AND GROUND-BASED LIDAR IN SEOUL
- S3-32 Sang-Woo KIM\*, In-Jin CHOI and Soon-Chang YOON: LONG TERM OBSERVATION OF AEROSOL OPTICAL PROPERTIES AND THEIR RADIATIVE FORCING AT GOSAN, KOREA

- S3-33 Tadahiro HAYASAKA\*, Kazuaki KAWAMOTO, Kazuma AOKI and Guangyu SHI: AEROSOL RADIATIVE PROPERTIES AND SHORTWAVE RADIATION BUDGET OVER EAST ASIA
- S3-34 Hajime FUKUSHIMA\*, Kazunori OGATA and Liping LI: INCREASING TRENDS IN ANGSTROM EXPONENT OVER EAST-ASIAN WATERS OBSERVED IN SEAWIFS AND AQUA/MODIS
- S3-35 **Toshihiko TAKEMURA\***: HINDCAST SIMULATION OF AEROSOL GLOBAL DISTRIBUTION AND RADIATIVE FORCING WITH AEROSOL CLIMATE MODEL

## S-4 Future Climate Projection and Impact

Session Conveners: Akio KITOH, Xiuqun YANG, and Won-Tae KWON

# 8 Nov. 13:00-15:00 Chair: Akio KITOH (Location: Conference Room 101)

- S4-01 **Michio KAWAMIYA\***: CHALLENGES FOR LONG-TERM GLOBAL WARMING PROJECTION USING AN EARTH SYSTEM MODEL
- S4-02 Masahide KIMOTO\*, Masayoshi ISHII, Takashi MOCHIZUKI, Yoshimitsu CHIKAMOTO, Masahiro WATANABE, et al.: CLIMATE2030: A JAPANESE PROJECT FOR DECADAL CLIMATE PREDICTION
- S4-03 **Akio KITOH\*, Kenji KAMIGUCHI, Osamu ARAKAWA and Shoji KUSUNOKI**: PROJECTION OF PRECIPITATION EXTREMES IN THE ASIAN MONSOON REGION
- S4-04 **Yoon-Kyoung LEE\*, Jong-Ghap JHUN and Byung-Kwon MOON**: ENSO CHANGES DUE TO GLOBAL WARMING: FOCUS ON THE OCEAN CHANGE
- S4-05 **Satoru YOKOI\* and Yukari N. TAKAYABU**: MULTI-MODEL BASED PROJECTION OF TROPICAL CYCLONE GENESIS FREQUENCY OVER THE WESTERN NORTH PACIFIC BASIN USING CMIP3 ARCHIVE
- S4-06 Junichi TSUTSUI\*: POTENTIAL INTENSIFICATION OF TROPICAL CYCLONES APPROACHING JAPAN DERIVED FROM MULTI-MODEL CLIMATE EXPERIMENTS
- S4-07 Jun YOSHIMURA\*: GLOBAL WARMING PROJECTION WITH A SUPER-HIGH-RESOLUTION AGCM -- TROPICAL CYCLONES AND PRECIPITATION --
- S4-08 **Johnny C. L. CHAN\***: GLOBAL WARMING AND TROPICAL CYCLONE ACTIVITY IN THE WESTERN NORTH PACIFIC

**Break** 

## 8 Nov. 15:30-17:30 Chair: Shoji KUSUNOKI

- S4-09 **Toshiki IWASAKI\*, Yasushi MOCHIZUKI and Chihiro KODAMA**: GLOBAL WARMING EFFECTS ON WAVE ENERGY GENERATION IN THE NORTHERN HEMISPHERIC WINTER
- S4-10 Kazuaki NISHII\*, Takafumi MIYASAKA, Yu KOSAKA and Hisashi NAKAMURA: REPRODUCIBILITY AND FUTURE PROJECTION OF THE MIDWINTER STORM-TRACK ACTIVITY OVER THE FAR EAST IN THE CMIP3 CLIMATE MODELS IN RELATION TO HARU-ICHIBAN
- S4-11 **Yuanhai FU\* and Riyu LU**: CHANGE OF EAST ASIAN SUMMER RAINFALL INTERANNUAL VARIABILITY IN THE TWENTY-FIRST CENTURY
- S4-12 **Jinho SHIN\*, Hyo-Shin LEE, Min-Ji KIM and Won-Tae KWON**: AN UNCERTAINTY ASSESSMENT OF ANNUAL VARIABILITY OF PRECIPITATION SIMULATED BY IPCC AOGCMS IN EAST ASIA
- S4-13 Hiroaki KAWASE\*, Takao YOSHIKANE, Masayuki HARA, Fujio KIMURA, Ailikun BORJIGINTE, et al.: ASSESSMENT OF FUTURE CHANGES IN THE BAIU RAINBAND USING THE PSEUDO-GLOBAL WARMNING DOWNSCALING METHOD
- S4-14 **Shoji KUSUNOKI\*, Ryo MIZUTA and Mio MATSUEDA**: CHANGE IN THE EAST ASIA SUMMER MONSOON PROJECTED BY AN ATMOSPHERIC GLOBAL MODEL WITH 20-KM GRID

- S4-15 Yasuo SATO, Md. Mizanur RAHMAN, Nazlee FERDOUSI, Erwin Eka Syahputra MAKMUR, Analiza Solmoro SOLIS, Akio KITOH\*, et al.: PRESENT CLIMATE VERIFICATION AND FUTURE CLIMATE PROJECTIONS OVER SOUTHEAST ASIA BY AN MRI 20KM-MESH AGCM
- S4-16 **Eiki SHINDO\***: FUTURE CHANGES OF THE MIDLATITUDE ACTIVITIES USING THE DYNAMIC STATE INDEX
- S4-16 Zhihong JIANG\*, Weilin CHEN, Laurent LI and Pascal YIOU: SIMULATION OF REGIONAL CLIMATE-CHANGE UNDER IPCC A2 SCENARIO IN SOUTHEAST CHINA (Canceled)

# S-5 Typhoon and Meso-scale Phenomenon

Session Conveners: Tetsuo NAKAZAWA, Xiaotu LEI, and Jong-Jin BAI

# 8 Nov. 13:00-14:50 Chair: Takuya KOMORI (Location: Conference Room 405)

- S5-01 Tetsuo NAKAZAWA\*, Patrick HARR, Jim MOORE, Martin WEISSMANN, Sharan MAJUMDAR, et al.: THORPEX PACIFIC ASIAN REGIONAL CAMPAIGN FOR TYPHOON TARGETING IN 2008 OVER THE WESTERN NORTH PACIFIC (Keynote: 20min.)
- S5-02 Kotaro BESSHO\*, Tetsuo NAKAZAWA and Martin WEISSMANN: DROPSONDE OPERATION OF FALCON IN T-PARC AND THE ANALYSES OF SURROUNDING ENVIRONMENT OF TYPHOONS
- S5-03 Takuya KOMORI\*, Ryota SAKAI, Hitoshi YONEHARA, Kiyotomi SATO, Takashi KADOWAKI, et al.: JMA SINGULAR VECTOR GUIDANCE FOR T-PARC 2008
- S5-04 Hyun Mee KIM\*, Byoung-Joo JUNG and Sung Min KIM: ADAPTIVE OBSERVATION GUIDANCE AND OBSERVATION SYSTEM EXPERIMENTS FOR TROPICAL CYCLONES DURING T-PARC 2008
- S5-05 **Koji YAMASHITA\*, Yoichiro OHTA and Tetsuo NAKAZAWA**: AN OBSERVING SYSTEM EXPERIMENT OF SPECIAL OBSERVATIONS OF T-PARC FOR SINLAKU AND JANGMI USING THE OPERATIONAL NWP SYSTEM AT JMA
- S5-06 Hiroyuki YAMADA\*, Wataru YANASE, Ryuichi SHIROOKA, Kunio YONEYAMA, Masaki SATOH, et al.: OBSERVATION AND SIMULATION OF THE GENESIS OF TYPHOON FENGSHEN (2008) IN THE TROPICAL WESTERN PACIFIC
- S5-07 Mayumi K. YOSHIOKA\*, Kazuhisa TSUBOKI and Atsushi SAKAKIBARA: DEVELOPMENT OF A TYPHOON GENESIS IN THE EARLY STEAGE SIMULATED IN HYDROSTATIC- AND NON-HYDROSTATIC ATMOSPHERIC MODELS

Break

#### 8 Nov. 15:20-16:50 Chair: Tetsuo NAKAZAWA

- S5-08 Ming YING and Eun-Jeong CHA\*: COMPARISON OF THREE WESTERN NORTH PACIFIC TROPICAL CYCLONE BEST TRACK DATASETS IN SEASONAL CONTEXT
- S5-09 Ming YING\*: CLIMATOLOGY OF MULTI-TROPICAL CYCLONE ACTIVITIES IN THE WESTERN NORTH PACIFIC
- S5-10 **Hisayuki KUBOTA\* and Johnny CHAN**: INTERDECADAL VARIABILITY OF TROPICAL CYCLONE LANDFALL IN THE PHILIPPINES FROM 1902 TO 2005
- S5-11 **Shunsuke HOSHINO\* and Tetsuo NAKAZAWA**: INTERCOMPARISON OF DVORAK PARAMETERS IN THE TROPICAL CYCLONE DATASETS OVER THE WESTERN NORTH PACIFIC
- S5-12 Yohei YAMADA\*, Kazuyoshi OOUCHI, Masaki SATOH, Hirofumi TOMITA and Wataru YANASE:
  PROJECTION OF CHANGES IN TROPICAL CYCLONE ACTIVITY AND ITS CLOUD HEIGHT DUE TO A
  GREENHOUSE WARMING: A GLOBAL-CLOUD-SYSTEM-RESOLVING APPROACH
- S5-13 **Jinhua YU\*, Yuqing WANG and Kevin HAMILTON**: RESPONSE OF TROPICAL CYCLONE POTENTIAL INTENSITY TO A GLOBAL WARMING SCENARIO IN THE IPCC AR4 CGCMS

### 9 Nov. 8:30-10:00 Chair: TBD

(Location: Conference Room 201B)

- S5-14 Hironori FUDEYASU, Yuqing WANG, Masaki SATOH\*, Tomoe NASUNO, Hiroaki MIURA, et al.:

  MULTISCALE INTERACTIONS ON THE LIFECYCLE OF TROPICAL CYCLONE SIMULATED BY GLOBAL
  CLOUD-SYSTEM-RESOLVING MODEL
- S5-15 Masato SUGI\*, Sachie KANADA and Kengo MIYAMOTO: SIMULATIONS OF TROPICAL CYCOGENESIS USING MODELS WITH DIFFERENT RESOLUTIONS
- S5-16 Yogesh KUMKAR, Purnendranath SEN, Ok-Yeon KIM and Jai-Ho OH\*: AN EXPERIMENT WITH THE HIGH RESOLUTION GLOBAL ICOSAHEDRAL GRID POINT MODEL FOR THE PREDICTION OF TROPICAL CYCLONES OVER THE NORTH INDIAN OCEAN
- S5-17 Wataru YANASE\*, Hiroshi TANIGUCHI and Masaki SATOH: LARGE-SCALE ENVIRONMENTAL FIELD ASSOCIATED WITH TROPICAL CYCLOGENESES OVER THE BAY OF BENGAL
- S5-18 **Sho ARAKANE\***, **Masaki SATOH and Wataru YANASE**: NUMERICAL STUDY ON THE RAPID DEVELOPMENT OF THE DEEP CONVECTION TO THE NORTH OF TYPHOON BEBINCA
- S5-19 **Tomohito HIOKI\* and Kazuhisa TSUBOKI**: MECHANISIMS OF WARM CORE FORMATION AND PRESSURE FALL OF A DEVELOPING TYPHOON SIMULATED BY THE CLOUD-RESOLVING MODEL

Break

#### 9 Nov. 10:30-11:45 Chair: Il Ju MOON

- S5-20 Mitsuru UENO\* and Masaru KUNII: POSSIBLE CONTROL OF NEAR-SURFACE WIND DISTRIBUTIONS IN TYPHOONS BY ENVIRONMENTAL VERTICAL WIND SHEAR
- S5-21 II Ju MOON\*, Sung Hun KIM, Min Young KIM and Young Yun JUNG: ON OCEAN EVIRONMENTAL FACTORS AFFECTING TYPHOON INTENSITY: RESULTS FROM THE COUPLED TYPHOON-OCEAN MODEL
- S5-22 **Tohru KURODA\*, Kazuo SAITO, Masaru KUNII, Nadao KOHNO and Hiromu SEKO**: NUMERICAL SIMULATION OF MYANMAR CYCLONE NARGIS AND ITS ASSOCIATED STORM SURGE
- S5-23 **Kosuke ITO\*, Yoichi ISHIKAWA and Toshiyuki AWAJI**: ESTIMATES OF THE AIR-SEA EXCHANGE COEFFICIENTS FOR HIGH WIND REGIME IN A TROPICAL CYCLONE USING AN ADJOINT METHOD
- S5-24 **Weibiao LI\*, Shumin CHEN, Youyu LU and Dongxiao WANG**: LATENT HEAT FLUX VARIATIONS DURING TROPICAL CYCLONES IN THE SOUTH CHINA SEA

#### 9 Nov. 14:00-15:30 Chair: Taro SHINODA

- S5-25 Nasreen AKTER\* and Kazuhisa TSUBOKI: HIGH RESOLUTION NUMERICAL SIMULATION OF CONVECTIVE CELLS IN THE RAINBAND OF CYCLONE SIDR
- S5-26 **Tetsuya SANO\* and Kazuhisa TSUBOKI**: STRUCTURE OF THE SPIRAL RAINBAND ASSOCIATED WITH DEVELOPING TYPHOON OBSERVED BY DOPPLER RADAR
- S5-27 HaiGuang ZHOU\*: STRUCTURE OF TYPHOON KROSA RAINBAND WITH DUAL-DOPPLER RADAR
- S5-28 Ryuji YOSHIDA\*, Yuichiro OKU, Tetsuya TAKEMI and Hirohiko ISHIKAWA: SATELLITE AND MODELING ANALYSIS OF ELLIPTICAL EYE OF DEVASTATING CYCLONE NARGIS
- S5-29 **Toshihisa ITANO\* and Muneyuki HOSOYA**: SPECTRAL ANALYSES OF THE PENTAGONAL EYE OF TYPHOON SINLAKU
- S5-30 Fujiyuki NAKANO\*, Takeshi MORIMOTO, Tomoo USHIO and Zen KAWASAKI: SPATIAL AND TEMPORAL CHARACTERISTICS OF LIGHTNING IN TYPHOON

**Break** 

#### 9 Nov. 16:00-17:00 Chair: Naoko KITABATAKE

S5-31 **Ji-Young HAN\* and Jong-Jin BAIK**: CONVECTIVELY FORCED MESOSCALE FLOWS IN A SHEAR FLOW WITH A CRITICAL LEVEL

- S5-32 Naoko KITABATAKE\* and Fumiaki FUJIBE: RELATIONSHIP BETWEEN SURFACE WIND FIELDS AND THREE-DIMENSIONAL STRUCTURES OF TROPICAL CYCLONES LANDFALLING IN THE JAPAN MAIN ISLANDS
- S5-33 Jing XI\*, Mingjuan LI, Shehong LI, Nini TU, Yu JING, et al.: LARGE ENVIRONMENTS AND MESOSCALE SYSTEMS ATTENDING CHINA MCC GENESIS AND DEVELOPMENT
- S5-34 Taro SHINODA\*, Masaya KATO, Yukari SHUSSE, Mitsuharu NOMURA, Mariko OUE, et al.:
  STRUCTURE OF A PRECIPITATION SYSTEM DEVELOPED AROUND AICHI PREFECTURE, JAPAN ON AUGUST 28-29, 2008

## S-6 Satellite Remote Sensing

Session Conveners: Riko OKI, Peng ZHANG, and Myoung-Seok SUH

# 9 Nov. 10:00-12:00 Chair: Masato SHIOTANI (Location: Conference Room 202B)

- S6-01 Kei SHIOMI\*, Shuji KAWAKAMI, Tomoko KINA, Makiko MUKAI, Daisuke SAKAIZAWA, et al.: INITIAL CHECK-OUT RESULTS OF TANSO CALIBRATION
- S6-02 Akihiko KUZE\*, Hiroshi SUTO, Masakatsu NAKAJIMA and Takashi HAMAZAKI: FIRST HIGH SPECTRAL RESOLUTION OBSERVATION FROM SPACE WITH TANSO-FTS ON GOSAT
- S6-03 Yukio YOSHIDA\*, Yoshifumi OTA, Nawo EGUCHI, Tomoaki TANAKA, Nobuhiro KIKUCHI, et al.:
  RETRIEVAL OF CARBON DIOXIDE AND METHANE FROM SHORT-WAVELENGTH INFRARED
  SPECTRA OBTAINED FROM GREENHOUSE GASES OBSERVING SATELLITE (GOSAT)
- S6-04 Nawo EGUCHI\*, Lesley OTT, Ryu SAITO, Zhengxin ZHU, Tatsuya YOKOTA, et al.: COMPARISON ANALYSIS OF CO<sub>2</sub> SIMULATION BETWEEN NIES TRANSPORT MODEL AND GEOS-5 FOR GOSAT CO<sub>2</sub> RETRIEVAL
- S6-05 Masato SHIOTANI\*, Masahiro TAKAYANAGI and JEM/SMILES MISSION TEAM: CURRENT STATUS OF SUPERCONDUCTING SUBMILLIMETER-WAVE LIMB-EMISSION SOUNDER (SMILES)
- S6-06 Chikako TAKAHASHI\*, Chihiro MITSUDA, Makoto SUZUKI, Yoshitaka IWATA, Hiroo HAYASHI, Koji IMAI, et al.: CAPABILITY STUDY FOR ATMOSPHERIC MINOR SPECIES WITH JEM/SMILES
- S6-07 Yasuko KASAI\*, Philippe BARON, Jana MENDROK, Satoshi OCHIAI, Takeshi MANABE, et al.:
  OBSERVATION CAPABILITIES OF SUPERCONDUCTIVE SUBMILLIMETER-WAVE LIMB-EMISSION
  SOUNDER (SMILES) ONBOARD INTERNATIONAL SPACE STATION (ISS)
- S6-08 Chihiro MITSUDA\*, Chikako TAKAHASHI, Makoto SUZUKI, Hiroo HAYASHI, Takuki SANO, et al.: DEVELOPMENT OF JEM/SMILES LEVEL 2 DATA PROCESSING SYSTEM

#### 9 Nov. 14:00-15:45 Chair: TBD

- S6-09 **Yaoming MA\***: REGIONALIZATION OF LAND SURFACE HEAT FLUXES OVER HETEROGENEOUS LANDSCAPE OF THE TIBETAN PLATEAU BY USING THE SATELLITE AND IN-SITU DATA
- S6-10 **Jeon Ho KANG\*, Myoung Seok SUH and Ki Ok HONG**: DEVELOPMENT OF LAND SURFACE TEMPERATURE RETRIEVAL ALGORITHM FROM GEOSTATIONARY SATELLITE DATA
- S6-11 **Hyo-Sik EOM\* and Myoung-Seok SUH**: CHARACTERISTICS OF BRIGHTNESS TEMPERATURE FROM MTSAT-1R ON LIGHTNING EVENTS OVER SOUTH KOREA
- S6-12 Byung-Ju SOHN\*, Seung-Hee HAM and Ping YANG: VISIBLE CHANNEL CALIBRATION BASED ON DEEP CONVECTIVE CLOUD TARGETS OVERSHOOTING THE TTL
- S6-13 **Atsushi HAMADA\* and Noriyuki NISHI**: CLOUD-TOP HEIGHT ESTIMATION BY GEOSTATIONARY SATELLITE SPLIT-WINDOW MEASUREMENTS USING CLOUDSAT MEASUREMENTS
- S6-14 **Nobuhiro TAKAHASHI\* and Riko OKI**: CLOUD AND PRECIPITATION OBSERVATION MISSION IN JAPAN: CURRENT AND FUTURE
- S6-15 **Toshiyoshi KIMURA\* and Nobuhiro TAKAHASHI**: MISSION AND DEVELOPMENT OF CLOUD PROFILING RADAR ON EARTHCARE SATELLITE

**Break** 

#### 9 Nov. 16:00-18:15 Chair: Myoung-Seok SUH

- S6-16 Yuichi OHNO\*, Kenji SATO, Hiroaki HORIE, Nobuhiro TAKAHASHI and Hiroshi KUMAGAI:

  SATELLITE-BORNE CLOUD RADAR CALIBRATION USING AIRBORNE CLOUD RADAR AND GROUD
  MEASUREMENTS
- S6-17 Hajime OKAMOTO\*, Kaori SATO, Yuichiro HAGIHARA and Ryo YOSHIDA: GLOBAL ANALYSIS OF CLOUD PROPERTIES FROM CLOUDSAT AND CALIPSO
- S6-18 **Prasamsa SINGH and Kenji NAKAMURA\***: DIURNAL VARIATION IN SUMMER PRECIPITATION OVER THE CENTRAL TIBETAN PLATEAU
- S6-19 Yukari N. TAKAYABU\*, Shoichi SHIGE, Wei-Kuo TAO and Nagio HIROTA: SHALLOW AND DEEP LATENT HEATING MODES OVER TROPICAL OCEANS OBSERVED WITH TRMM PR SPECTRAL LATENT HEATING DATA
- S6-20 **Shuji SHIMIZU\*, Toshio IGUCHI, Riko OKI, Tetsuya TAGAWA and Masafumi HIROSE**:
  EVALUATION OF THE EFFECTS OF THE ORBIT BOOST OF THE TRMM SATELLITE ON PR RAIN ESTIMATES
- S6-21 **Eun Kyoung SEO\***: DIFFERENCES BETWEEN PRECIPITATION RADAR AND MICROWAVE IMAGER RETRIEVED RAIN RATES
- S6-22 **Takuji KUBOTA\*, Misako KACHI, Riko OKI, Tomoo USHIO, Shoichi SHIGE, et al.**: NEAR-REAL-TIME GLOBAL RAINFALL MAP USING MULTI-SATELLITE DATA BY JAXA AND ITS VALIDATION
- S6-23 Shoichi SHIGE\*, Tomoya YAMAMOTO, Takeaki TSUKIYAMA, Satoshi KIDA, Hiroki ASHIWAKE, et al.: THE GSMAP PRECIPITATION RETRIEVAL ALGORITHM FOR MICROWAVE SOUNDERS:

  OVER-OCEAN ALGORITHM
- S6-24 **Shinta SETO\*, Toshio IGUCHI and Taikan OKI**: DEVELOPMENT OF A RETRIEVAL ALGORITHM FOR THE GPM DUAL-FREQUENCY PRECIPITAION RADAR (DPR)

## S-7 Boundary Layer Meteorology

Session Conveners: Hiroaki KONDO, Shuhua LIU, and Yign NOH

9 Nov. 14:00-16:00 Chair: Hiroaki KONDO (Location: Conference Room 201A)

- S7-01 **Yaoming MA\***: ANALYSIS OF THE LAND SURFACE HETEROGENEITY AND ITS IMPACT ON ATMOSPHERIC VARIABLES AND THE AERODYNAMIC AND THERMODYNAMIC ROUGHNESS LENGTHS
- S7-02 Mingyuan DU\*, Seiichiro YONEMURA, Yingnian LI, Song GU, Liang ZHAO, et al.: LOCAL CIRCULATION AND ITS POSSIBLE RELATIONSHIP TO LOCAL CLIMATE AND SO THAT TO  $CO_2$  FLUX OBSERVATION OVER COMPLEX TERRAIN ON TIBETAN PLATEAU
- S7-03 **Hiroshi OHNO\* and Tetsuya TAKEMI**: THE MERGER OF MULTIPLE VOTICES IN DUST DEVIL GENERATION
- S7-04 Tetsuya TAKEMI\*, Hanako INOUE, Kenichi KUSUNOKI, Wataru KATO, Keiji ARAKI, et al.: MICROSCALE VORTICES IN CONVECTIVE BANDS OVER WARM OCEAN IN WINTER
- S7-05 **Atsushi MORI\* and Hiroshi NIINO**: SELF-SIMILARITY OF HORIZONTAL CONVECTIONS CAUSED BY THERMAL FORCING AT THE BOTTOM
- S7-06 **Yi-Xiong LU\*, Jianping TANG and Yuan WANG**: APPLICATION OF DYNAMICAL DOWNSCALING IN WIND RESOURCE ASSESSMENT OVER EAST CHINA
- S7-07 **Hyun Jong KO and Yign NOH\***: LARGE EDDY SIMULATION OF PARTICLE SETTLING IN THE ATMOSPHERIC BOUNDARY LAYER

S7-08 Hiroaki KONDO\*, Shohei MURAYAMA, Yoisuke SAWA, Hidekazu MATSUEDA, Kentaro ISHIJIMA, et al.: OBSERVATION OF 222RN CONCENTRATION AT THE MRI TOWER AND ANALYSIS OF ITS VARIATION

## S-8 General Session and Other Topics

Session Conveners: Hiroshi L. TANAKA, Chunyi WANG, Jhoon KIM

# 9 Nov. 8:30-10:15 Chair: Jhoon KIM (Location: Conference Room 201A)

- S8-01 **Lei WANG\***: ANALYSES OF THE WATER AND ENERGY CYCLES IN THE UPPER TONE RIVER BASIN WITH THE AIDS OF A DISTRIBUTED BIOSPHERE HYDROLOGICAL MODEL (WEB-DHM) AND MODIS LAND SURFACE TEMPERATURE
- S8-02 **Bu-Yong LEE\* and Hyun-Chul KIM**: THE CHARACTERISTICS OF SNOW OBSERVATION BY NEW WEIGHT MEASUREMENT ROUNDED PLATE
- S8-03 Yongfu XU\* and Yangchun LI: ESTIMATE OF THE UPTAKE AND STORAGE OF ANTHROPOGENIC  ${\rm CO_2}$  IN THE PACIFIC OCEAN
- S8-04 **Kunihiko KODERA\***: CHANGE IN THE ENSO TELECONNECTION CHARACTERISTICS IN THE BOREAL WINTER
- S8-05 Hui LU\*, Toshio KOIKE, Kun YANG, Xiangde XU, Xin LI, Hiroyuki TSUTSUI, et al.: SIMULATING SURFACE ENERGY FLUX AND SOIL MOISTURE AT THE WENJIANG PBL SITE USING THE LAND DATA ASSIMILATION SYSTEM OF THE UNIVERSITY OF TOKYO
- S8-06 Takafumi MIYASAKA\* and Hisashi NAKAMURA: STRUCTURE AND MECHANISMS OF THE SOUTHERN HEMISPHERE SUMMERTIME SUBTROPICAL ANTICYCLONES

Break

### 9 Nov. 10:30-12:15 Chair: Chunyi WANG

- S8-07 **Yafei WANG\***: AN EXTRATROPICAL AIR-SEA INTERACTION OVER THE NORTH PACIFIC IN ASSOCIATION WITH A PRECEDING EL NIÑO EPISODE IN EARLY SUMMER
- S8-08 Hiroshi L. TANAKA\*, Hi-Ryong BYUN, Daisuke NOHARA and Noriko MURA: NUMERICAL SIMULATION OF WIND HOLE CIRCULATION AT ICE VALEY IN KOREA USING A SIMPLE 2D MODEL
- S8-09 **Yizhuo SHA\*, Xigui FU, Xiaolei HE and Lekun ZHU**: A PROPOSAL OF STANDARD CALIBRATION LABORATORY FOR RICS
- S8-10 **Shigeru CHUBACHI\***: SEASONAL START OF THE ANTARCTIC OZONE HOLE DERIVED BY THE OBSERVATIONS WITH DOBSON SPECTROPHOTOMETERS
- S8-11 Jingbei PENG\*, Qingyun ZHANG and Lieting CHEN: STUDY ON THE RELATIONSHIPS AMONG SO-NO-AAO-NPO
- S8-12 Yousay HAYASHI\*, Fumichika UNO, Soojin HWANG, Jinil YUN and Haedong KIM: SPATIAL DISTRIBUTION OF SOLAR RADIATION FLUX ACCOUNTING TOPOGRAPHICAL SHADE AND REFLECTION FRACTION BY SEA SURFACE: A CASE OF CHEJU-DO, KOREA

#### **Poster Session**

#### S-1 Numerical Weather Prediction

- P-01 Xiaowen TANG\* and Yuan WANG: VERIFICATION OF T213 ENSEMBLE FORECASTING BASED ON TIGGE DATASET
- P-02 Jong Im PARK and Hyun Mee KIM\*: ENSEMBLE KALMAN FILTER APPLIED ON TYPHOON WUKONG (2006)PREDICTION
- P-03 Morio INABA\* and Kunihiko KODERA: FORECAST STUDY OF THE CAUSE OF THE COLD DECEMBER 2005 IN JAPAN
- P-04 **Mio MATSUEDA\***: COMPARISON OF MEDIUM-RANGE ENSEMBLE FORECAST SKILL USING THE TIGGE DATABASE
- P-05 **Kazuhiro MORI\* and Hiroshi TANAKA**: WEEKLY FORECAST EXPERIMENTS OF NICAM; USING THE GLOBAL GAUSSIAN ANALYSIS DATA FOR VERTICAL LEVELS OF ETA OF THE JMA
- P-06 Kondo KEIICHI\* and Hiroshi L. TANAKA: APPLYING A LOCAL ENSEMBLE TRANSFORM KALMAN FILTER TO THE NONHYDROSTATIC ICOSAHEDRAL ATMOSPHERIC MODEL (NICAM)
- P-07 Masaru KUNII\*, Kazuo SAITO, Masahiro HARA and Hiromu SEKO: INTERCOMPARISON OF ENSEMBLE PREDICTION SYSTEMS IN THE WWRP B08RDP PROJECT
- P-08 Eun-Chul CHANG\*, Kyo-Sun LIM, Yoo-Bin YHANG, Jung-Eun KIM, Song-You HONG, et al.: AN EVALUATION OF HIGH-IMPACT WEATHERS OVER KOREA SIMULATED BY THE TWO NON-HYDROSTATIC REGIONAL MODELS
- P-09 **Hiroyuki KUSAKA\*, Keiko NAWATA, Fujio KIMURA, Yukako MIYA and Yuko AKIMOTO**:

  QUESTIONING THE RELIABILITY OF SENSITIVITY EXPERIMENTS IN DETERMINING URBAN EFFECTS ON PRECIPITATION PATTERNS
- P-10 Manami OHYA\* and Hiroyuki KUSAKA: SENSITIVITY OF THE WRF MICROPHYSICS TO THE SNOWFALL SIMULATION IN THE COASTAL AREA OF JAPAN SEA

#### S-2 Monsoon

- P-11 Kyung-Sook YUN, Kyong-Hwan SEO and Kyung-Ja HA\*: INTERDECADAL SHIFT IN THE ASSOCIATION BETWEEN ENSO AND NORTHWARD PROPAGATING INTRASEASONAL OSCILLATION IN THE EASM
- P-12 **Ji-Sun LEE\*, Ki-Seon CHOI, Do-Woo KIM, Su-Bin OH and Hi-Ryong BYUN**: THE SHIFT IN THE EARLY 1980S OF SPRING PRECIPITATION IN KOREA
- P-13 **Minoru TANAKA\***: 20-TH CENTURY WINTER TEMPERATURES NEAR JAPAN: ITS RELATIONSHIP TO THE DECADAL OSCILLATION OF THE ALEUTIAN LOW AND SIBERIAN HIGH
- P-14 Sun-Seon LEE, P. N. VINAYACHANDRAN, Kyung-Ja HA\* and Jong-Ghap JHUN: SHIFT OF PEAK IN SUMMER MONSOON RAINFALL OVER KOREA AND ITS ASSOCIATION WITH ENSO

#### S-3 Atmospheric Aerosol, Gases, and Radiation

- P-15 **Kojiro SHIMADA\*, Akirori TAKAMI, Shungo KATO, Yoshizumi KAJII and Shiro HATAKEYAMA**:

  VARIATION OF CARBONACEOUS AEROSOLS IN POLLUTED AIR MASS TRANSPORTED FROM EAST
  ASIA
- P-16 Min-Hyeok CHOI\* and Byung-Gon KIM: WEEKLY PERIODICITIES OF METEOROLOGICAL VARIABLES AND THEIR POSSIBLE RELATION TO AEROSOLS IN KOREA
- P-17 Nobuo SUGIMOTO\*, Ichiro MATSUI, Atsushi SHIMIZU, Tomoaki NISHIZAWA, Yukari HARA, et al.: LIDAR NETWORK FOR OBSERVING TROPOSPHERIC AEROSOLS IN EAST ASIA
- P-18 Akinori TAKAMI\*: ATMOSPHERIC AEROSOL CHARACTERIZATION IN EAST ASIA
- P-19 Kazuo OSADA\*, T. OHARA, I. UNO, M. KIDO and Hajime IIDA: INCREASING TREND ON VOLUME CONCENTRATION OF LOWER TROPOSOHERIC SUBMICRON AEROSOL PARTICLES AT MOUNT TATEYAMA. JAPAN
- P-20 Hiroshi TAKAHASHI\*, Yasuhito IGARASHI, Hiroshi KOBAYASHI and Hiroaki NAOE: DIURNAL CHANGE OF WIND AND AEROSOL CONCENTRATION AT MT. FUJI, JAPAN

- P-21 **Koichi WATANABE\* and Hideharu HONOKI**: CHEMICAL COMPOSITION OF FOG WATER AT MT. TATEYAMA
- P-22 Sayako UEDA\*, Osada KAZUO and Okada KIKUO: MIXING STATE OF CLOUD INTERSTITIAL PARTICLES AT MT. TATEYAMA, JAPAN: RELATIONSHIP WITH METEOROLOGICAL CONDITIONS
- P-23 Masahide ISHIZUKA\*, Masao MIKAMI, Yutaka YAMADA, John LEYS and FanJiang ZENG: THRESHOLD FRICTION VELOCITY FOR SAND PARTICLES AT A GOBI DESERT AND A FALLOW FEILD
- P-24 Yumiko HONDA\*, Sachiko HAYASHIDA, Makoto KUJI and Wataru TAKEUCHI: SPATIAL AND TEMPORAL VARIATIONS IN TRACE GASES AND AEROSOLS FROM BIOMASS BURNING IN SOUTHEAST ASIA AS MEASURED FROM SPACE
- P-25 **Satomi ETO\*, Yuko ARIYAMA, Katsuyuki NOGUCHI, Sachiko HAYASHIDA and Wataru TAKEUCHI**:
  ANALYSIS OF METHANE CONCENTRATIONS OBSERVED BY SCIAMACHY CORRESPOND TO RICE
  PADDY EMISSIONS IN ASIA
- P-26 **Heon-Sook KIM\*, Shamil MAKSYUTOV, Tazu SAEKI and Gen INOUE**: METHANE INVERSE MODELING USING NIES TRANSPORT MODEL: OPTIMIZATION OF THE SEASONAL FLUX BASED ON OBSERVATION DATA AND A PIROR FLUX
- P-27 **Seung-Hee EUN\* and Byung-Gon KIM**: IS-OROGRAPHIC-INDUCED PRECIPITATION RELATED TO AEROSOLS IN KOREA
- P-28 Jaehwa LEE\*, Jhoon KIM, Chul Han SONG and Brent HOLBEN: CHARACTERISTICS OF AEROSOL TYPE INFERRED FROM AERONET SUNPHOTOMETER MEASUREMENTS
- P-29 You-Joon KIM\*, Byung-Gon KIM and Chang-Hoi HO: SEASONAL AND SPATIAL COMPARISONS BETWEEN CLOUD AND AEROSOL OPTICAL PROPERTIES DERIVED FROM SATELLITE REMOTE SENSING IN NORTHEAST ASIA
- P-30 Jinsang JUNG\*, Mylene G. CAYETANO, Tsatsral BATMUNKH, Dam Duy AN, Kwang Yul LEE, et al.: SEASONAL VARIATIONS OF OPTICAL PROPERTIES AND HYGROSCOPICITY OF ATMOSPHERIC AEROSOL IN SEOUL, KOREA
- P-31 Tomoki NAKAYAMA\*, Yutaka MATSUMI, Akihiro YAMAZAKI, Akihiro UCHIYAMA, Sato KEI, et al.: MEASUREMENT OF OPTICAL PROPERTIES OF SECONDARY ORGANIC AEROSOLS
- P-32 **Rei KUDO\***, **Akihiro UCHIYAMA**, **Akihiro YAMAZAKI and Eriko KOBAYASHI**: THE RECENT TRENDS OF AEROSOL OPTICAL PROPERTIES AND SURFACE RADIATIVE FORCING AT TSUKUBA, JAPAN
- P-33 Yueqin MO\*, Yun YANG, Wenhua LV, Lei DING and Dong WANG: THE COMPARISON FOR MEASUREMENTS OF DIFFUSE SKY RADIATION
- P-34 Maeng-Ki KIM\* and Woo-Seop LEE: A SENSITIVITY STUDY OF AEROSOL DIRECT RADIATIVE FORCING ON LARGE-SCALE CIRCULATION AND RAINFALL TREND IN ASIA DURING BOREAL SPRING
- P-35 Jeongsoon LEE\*, Jin Bok LEE, Dong Min MOON, GawngSub KIM, TaeYoung GOO, et al.: STANRD GAS MISTURES OF KRISS SCALE FOR ATMOSPHERIC GREEN HOUSE GAS MONITORING

#### S-4 Future Climate Projection and Impact

- P-36 **Da-Hee CHOI\*, Won-Tae KWON, Hee-Jeong BAEK and Yu-Mi CHA**: CHANGES IN PRECIPITATION INTENSITY OVER THE EAST ASIA IN RESPONSE TO GLOBAL WARMING
- P-37 **Mio MATSUEDA\*, Ryo MIZUTA and Shoji KUSUNOKI**: FUTURE CHANGE AND ITS UNCERTAINTY IN NORTHERN HEMISPHERE WINTERTIME ATMOSPHERIC BLOCKING
- P-38 Moved to S4-16 (Eiki SHINDO\*: FUTURE CHANGES OF THE MIDLATITUDE ACTIVITIES USING THE DYNAMIC STATE INDEX.)
- P-39 **Hiroyuki MURAKAMI\* and Bin WANG**: FUTURE CHANGE OF NORTH ATLANTIC TROPICAL CYCLONE TRACKS: PROJECTION BY A 20-KM-MESH GLOBAL CLIMATE MODEL
- P-40 Motoki NISHIMORI\* and Toshichika IIZUMI: A STATISTICAL DOWNSCALING FOR REGIONAL-SCALE SOLAR RADIATION CHANGE OVER JAPAN BY USING GLOBAL REANALYSIS METEOROLOGICAL DATASETS
- P-41 Masaomi NAKAMURA\*, Masuo NAKANO, Sachie KANADA, Shugo HAYASHI, Teruyuki KATO, et al.: PROJECTION OF THE CHANGES IN THE FUTURE EXTREMES OVER JAPAN USING A CLOUD RESOLVING MODEL (JMA-NHM)

P-42 Toshichika IIZUMI\*, Motoki NISHIMORI and Masayuki YOKOZAWA: DIAGNOSIS OF CLIMATE-MODEL BIAS IN SUMMER TEMPERATURE AND WARM SEASON INSOLATION FOR SIMULATING REGIONAL PADDY RICE YIELD IN JAPAN

### S-5 Typhoon and Meso-scale Phenomenon

- P-43 **Sun-Hee KIM\* and H. Joe KWON**: SENSITIVITY EXPERIMENTS ON FDDA OPTIONS IN WRF-BASED TYPHOON MODEL
- P-44 **Ki-Seon CHOI\***, **Do-Woo KIM**, **Su-Bin OH**, **Ji-Sun LEE and Hi-Ryong BYUN**: SEASONAL PREDICTION OF THE WNP TROPICAL CYCONE GENESIS FREQUENCY USING TELECONNECTION PATTERNS
- P-45 Lina BAI\* and Yuan WANG: THE CONTROLLING FACTORS OF TROPICAL CYCLONE INTENSITY CHANGE IN DIFFERENT INTENSITY PHASE
- P-46 **Sung Min KIM\* and Hyun Mee KIM**: THE EFFECT OF ENVIRONMENTAL BAROCLINICITY ON STRUCTURE AND EVOLUTION OF SINGULAR VECTORS OF TROPICAL CYCLONES
- P-47 Yuan WANG\* and Jin-Jie SONG: THE WIND-PRESSURE RELATIONS OF TROPICAL CYCLONES IN THE WESTERN NORTH PACIFIC AND ITS RELATED CLIMATIC CHARACTERISTICS
- P-48 **Min-Young KIM\* and II-Ju MOON**: EFFECTS OF TYPHOON RECURVATURE ON THE SEA SERFACE COOLING BY TYPHOONS
- P-49 Sung-hun KIM\*, II-ju MOON, Min-Young KIM and Jung YOUNG-YOON: EFFECTS OF THE CHANGJIANG DILUTED WATER ON TYPHOON INTENSITY
- P-50 **Akiyoshi WADA\*, Nadao KOHNO, Norihisa USUI and Yoshimi KAWAI**: PRELIMINARY NUMERICAL EXPERIMENTS FOR TYPHOON HAI-TANG IN 2005 BY TYPHOON-WAVE-OCEAN COUPLED MODEL
- P-51 **Akihiko MURATA\***: A MECHANISM FOR HEAVY PRECIPITATION ASSOCIATED WITH TYPHOON MEARI (2004)
- P-52 **Won-Su KIM\*, Tae-Young LEE and U-Ju SHIN**: FORMATION AND EVOLUTION OF HEAVY RAIN CELLS IN CONVECTION BANDS WHICH ARE RELATED TO TOPOGRAPHY
- P-53 Mayu OKAZAKI\*, Shusaku SUGIMOTO and Kimio HANAWA: LONG-TERM BEHAVIORS OF BOMB: NUMBER AND INTENSITY

#### S-6 Satellite Remote Sensing

- P-54 **Mijin KIM, Jhoon KIM\* and Jong Min YOON**: APPLICATION OF MID-IR CHANNEL TO RETRIEVAL OF AEROSOL OPTICAL DEPTH FROM GEOSTATIONARY SATELLITE
- P-55 **Nobuyuki KIKUCHI\*, Akiko HIGURASHI, Tatsuya YOKOTA, Satoru FUKUDA and Teruyuki NAKAJIMA**: TENTATIVE PROPERTIES OF AEROSOLS DERIEVED FROM GOSAT TANSO-CAI DATA
  AND PLANS FOR VALIDATION
- P-56 **Tomoaki NISHIZAWA\*, Nobuo SUGIMOTO, Ichiro MATSUI, Atsushi SHIMIZU, Boyan TATAROV, et al.**: DEVELOPMENT OF AEROSOL CLASSIFICATION AND RETRIEVAL ALGORITHM USING 1A+1B+1Γ DATA OF ATLID/EARTHCARE
- P-57 Jungbin MOK, Jhoon KIM and Jaehwa LEE\*: CO-BC RELATIONS FROM SATELLITE REMOTE SENSING
- P-58 Tomoo USHIO\*, Kazumasa AONASHI, Kakuji KUBOTA, Shoichi SHIGE, Misako KACHI, Riko OKI, et al.: GLOBAL SATELLITE MAPPING OF PRECIPITATION USING MOVING VECTOR AND KALMAN FILTER (GSMAP\_MVK)

#### S-7 Boundary Layer Meteorology

- P-59 **Ryosaku IKEDA\* and Hiroyuki KUSAKA**: PROPOSING THE SIMPLIFICATION OF THE MULTI-LAYER URBAN CANOPY MODEL
- P-60 Yuko AKIMOTO\* and Hiroyuki KUSAKA: SENSITIVITY OF WRF MODEL TO INPUT-DATASETS AND SURFACE PARAMETERS FOR HEAT ISLAND
- P-61 Hiroyuki KUSAKA\*, Fei CHEN, Mukul TEWARI, Jimy DUDHIA, Yukako MIYA, et al.: PERFORMANCE OF THE WRF MODEL AS A HIGH RESOLUTION URBAN CLIMATE MODEL
- P-62 Kyoo-seock LEE\* and Wencheng JIN: BUILDING WIND CHARACTERISTICS AT SKYSCRAPER AREA

- P-63 **Hirofumi SUGAWARA\*, Ken-Ichi NARITA and Min Sik KIM**: WIND PATH EFFECT OF RIVER IN URBAN HEAT ISLAND
- P-64 **Jie SONG, Zhihong JIANG and Hongyun MA\***: EFFECT OF URBAN LAND COVER AND POLLUTION IN A HEAT WAVE EVENT IN NANJING, CHINA
- P-65 **Yukiko HISADA, Shinpei TODAKA\* and Nobuhiro MATSUNAGA**: A SIMULATION OF LOCALIZED HEAVY RAINFALLS IN FUKUOKA CITY
- P-66 Masahiro SAWADA\*, Sha WEIMING, Yamazaki TAKESHI, Iwasaki TOSHIKI, Iwai HIRONORI, et al.:

  NUMERICAL STUDY ON TRANSIENT FLOW ASSOCIATED WITH DOWNSLOPE WIND IN THE LEE OF
  ZAO MOUNTAIN
- P-67 Junshi ITO\*, Hirosho NIINO, Mikio NAKANISHI and Ryo TANAKA: A NUMERICAL EXPERIMENT ON DUST DEVILS IN A DIURNALLY-EVOLVING CONVECTIVE MIXED LAYER
- P-68 **Yoshihito SETO\* and Hideo TAKAHASHI**: ADJUSTMENT TECHNIQUE OF OBSERVED WIND BY ROUGHNESS PARAMETER AND LOGARITHMIC LAW: DIVERGENCE FIELD OVER THE KANTO PLAIN
- P-69 **Akihikro HORI, Kazuo KURIHARA\* and Kosuke HASHIMOTO**: WIND TUNNEL EXPERIMENT FOR DIFFUSION OF VOLCANIC GAS ERUPTED FROM MIYAKE ISLAND

#### S-8 General Session and Other Topics

- P-70 Jung CHOI\* and Soon-II AN: CHANGES IN THE RELATIONSHIP BETWEEN THE ANNUAL CYCLE AMPLITUDE AND ENSO IN A CGCM SIMULATION
- P-71 Juejing HAN\* and Yuan WANG: A COMPARISON OF CHINA AMDAR REPORTS AND SOUNDING DATA
- P-72 **Sun-Hee SHIN\*, Kyung-Ja HA, Masahide KIMOTO and Akio KITOH**: IMPACT OF DIFFERENT DIFFUSION SCHEMES ON SIMULATED RAINFALL: LAND-OCEAN CONTRAST
- P-73 Kenji KAMIGUCHI\*, Osamu ARAKAWA, Akiyo YATAGAI, Haruko KAWAMOTO and Masato NODZU: PRECIPITATION CHARACTERISTICS OF APHRO\_PR, HIGH-RESOLUTION DAILY PRECIPITATION DATA
- P-74 **Su-Bin OH\*, Do-Woo KIM, Ji-Sun LEE, Ki-Seon CHOI and Hi-Ryong BYUN**: INTRODUCTION OF EAST ASIAN DROUGHT MONITORING SYSTEM
- P-75 **Kensuke KATO\*, Yuko SHIMO and Hiroshi L. TANAKA**: NUMERICAL SIMULATION OF BLOCKING USING NICAM INSTALLED AT CCS, UNIVERISTY OF TSUKUBA
- P-76 **Shinji TAKAHASHI\* and Hiroshi TANAKA**: DYNAMICS AND STATISTICS OF ARCTIC CYCLONES COMPARED WITH TROPICAL AND EXTRA-TROPICAL CYCLONES
- P-77 **Fuyuki FUJIWARA\* and Hiroshi L. TANAKA**: INTERACTION BETWEEN THE BAROCLINICALLY UNSTABLE WAVE AND THE SUBTROPICAL AND POLAR-FRONTAL JETS
- P-78 Shingo KATO\* and Hiroshi L. TANAKA: PREDICTABILITY OF THE ARCTIC OSCILLATION INDEX USING A BAROTROPIC GENERAL CIRCULATION MODEL
- P-79 Masahiro OHASHI\* and Hiroshi L. TANAKA: DATA ANALYSIS OF ARCTIC OSCILLATION SIMULATED BY GLOBAL WARMING PREDICTION MODELS
- P-80 **Koji TERASAKI\* and Hiroshi TANAKA**: THE DIFFERENCES IN ENERGY SPECTRUM OF NICAM BY DIFFERENT HORIZONTAL RESOLUTIONS
- P-81 **Yuko SHIMO\*, Takuro AIZAWA and Hiroshi TANAKA**: NUMERICAL SIMULATION OF TROPICAL CYCLONES USING NICAM INSTALLED AT CCS, UNIVERSITY OF TSUKUBA
- P-82 **Hiraku FUKAZAWA and Yoshitaka FUKUOKA\***: THE STANDARD DIVISION OF THE HEATSTROKE PREVENTION INDICATOR