

# INTERNATIONAL SYMPOSIA ON RECENT PROGRESSES IN CLIMATE VARIABILITY STUDY:

## **NEW FACES OF CLIMATE VARIABILITY**

30-31 October 2013

Admission : **Free** (Pre-registration required)

<http://www.jamstec.go.jp/apl/e/topics/modoki2013/>

## **SCALE INTERACTIONS IN CLIMATE VARIABILITY**

1 November 2013

Admission : **Free**

<http://www.jamstec.go.jp/rigc/e/workshop/20131101/>

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### Miyoshi Memorial Hall

Yokohama Institute for Earth Sciences, JAMSTEC

3173-25 Showa-machi, Kanazawa-ku, Yokohama Kanagawa

Host : JAMSTEC (Japan Agency for Marine-Earth Science and Technology)

Contact : JAMSTEC APL Symposium Secretariat

TEL : +81-45-778-5671

FAX : +81-45-778-5497

E-mail : [apl-sympo@jamstec.go.jp](mailto:apl-sympo@jamstec.go.jp)



## NEW FACES OF CLIMATE VARIABILITY

30-31 October 2013

Day1: Oct 30

09:00-10:00 Registration

10:00-10:10 Announcements

### Welcome Address:

10:10-10:20 Yoshihisa Shirayama, JAMSTEC, Japan

### First Session: Past, Present and Future of Indo-Pacific Climate Variability

10:20-11:00 Toshio Yamagata, APL, JAMSTEC, Japan

"New faces of climate variations in the Indo-Pacific sector"

11:00-11:40 Antonio Navarra (Invited), CMCC, Italy

"Atmosphere-ocean interactions at strong couplings in a simple model of El Niño"

11:40-12:20 F.J. Doblas-Reyes (Invited) IC3, Spain

"Decadal climate prediction: predicting the near term for adaptation and climate services"

12:20-14:00 Lunch Break

### Second Session: ENSO Modoki

14:00-14:30 Swadhin Behera, APL/RIGC, JAMSTEC, Japan

"A new paradigm of climate variability in the tropical Pacific"

14:30-15:10 Surya Chandra Rao (Invited), IITM, India

"Tropical Climate Modes in high resolution coupled model"

15:10-15:50 Karumuri Ashok (Invited) IITM, India

"El Niño Modokis: Why they are a distinct class"

15:50-16:10 Coffee Break

### Third Session: Ningaloo Niño

16:10-16:50 Ming Feng (Invited), CSIRO, Australia

"Variability and dynamics of the Ningaloo Niño"

16:50-17:20 Takahito Kataoka, U. Tokyo, Japan

"On the Ningaloo Niño/Niña"

17:20-17:50 Takeshi Doi, APL/RIGC, JAMSTEC, Japan

"Predictability of the Ningaloo Niño/Niña"

18:15-20:00 Reception

Day2: Oct 31

### Fourth Session: Tropical and Subtropical Climate Variations

10:00-10:40 Ping Chang (Invited), Texas A&M Univ., USA

"The Impact of the El Niño-Southern Oscillation and Atlantic Meridional Mode on Atlantic Tropical Cyclone Activity"

10:40-11:20 Gabriel Vecchi (Invited), GFDL, USA

"Atmospheric Nonlinearity and the El Niño-Southern Oscillation"

11:20-11:50 Yushi Morioka, RIGC, JAMSTEC, Japan

"Role of tropical SST variability on the formation of subtropical dipoles"

11:50-12:20 Chaoxia Yuan, APL, JAMSTEC, Japan

"Predictability of the Subtropical Dipole Modes in a Coupled Ocean-Atmosphere Model"

12:20-13:30 Lunch Break

### Fifth Session: Progresses and Challenges in Climate Predictions

13:30-14:10 Arun Kumar (Invited), NCEP, USA

"Understanding changes in ENSO characteristics during last decade"

14:10-14:50 Sarah Ineson (Invited), Hadley Centre, UK

"GloSea5: the Met Office high resolution prediction system"

14:50-15:30 Sebastien Masson (Invited), LOCEAN, France

"The relationship between the mean and interannual variability of the Indian Summer Monsoon (ISM) onset date and Sea Surface Temperature (SST) remains controversial"

15:30-16:10 Jing-Jia Luo (Invited), BMRC, Australia

"Current status of intraseasonal-seasonal-to-interannual prediction of the Indo-Pacific climate"

16:10-16:30 Coffee Break

### Sixth Session: African Perspective

16:30-17:00 Genito Amos Maure (Invited), Dep. of Physics, Eduardo Mondlane University, Mozambique

"Modeled impact of biomass burning aerosol loading on Southern Africa precipitation"

17:00-17:30 Alberto Francisco Mavume (Invited), Dep. of Physics, Eduardo

Mondlane University, Mozambique

"Climatology of tropical cyclones in the South-West Indian Ocean"

17:30-18:00 Atanásio João Manhique (Invited), National Institute of Meteorology, Mozambique

"Atmospheric and Ocean patterns associated with the extreme rains and floods in southern Africa in January 2013"

18:00-18:10 Closing Remarks (Toshio Yamagata)

## SCALE INTERACTIONS IN CLIMATE VARIABILITY

1 November 2013

09:00-10:00 Registration

### First Session: Modes of Tropical Climate Variability:

#### Observations and Simulations

(Chair: Swadhin Behera)

10:00-10:30 Yukio Masumoto, JAMSTEC, Japan

"Interactions between intraseasonal variability and Indian Ocean Dipole in the tropical eastern Indian Ocean"

10:30-11:00 Wenju Cai (Invited), CSIRO, Australia

"The impact of greenhouse warming on the Indian Ocean Dipole"

11:00-11:20 Kentaro Ando, JAMSTEC, Japan

"Observed ocean and atmosphere processes associated with climate modes in the tropics"

11:20-11:40 Tomoki Tozuka, JAMSTEC, Japan

"Influence of the reflected Rossby waves on the western Arabian Sea upwelling region"

11:40-12:00 Ingo Richter, JAMSTEC, Japan

"On the relation among SST, deep convection and surface winds in the equatorial Atlantic"

12:00-12:20 Motoki Nagura, JAMSTEC, Japan

"Meridional heat advection due to mixed Rossby gravity waves in the equatorial Indian Ocean"

12:20-13:30 Lunch Break

### Second Session: Scale-Interactions and Teleconnections

(Chair: Masami Nonaka)

13:30-14:00 Niklas Schneider (Invited), U. Hawaii, USA

"The response of the atmospheric boundary layer to a weak sea surface temperature fronts"

14:00-14:20 Saji Hameed, U. Aizu, Japan

"The role of Indo-Pacific modes on the interannual modulation of typhoon activity in the western North Pacific"

14:20-14:40 Hidenori Aiki, JAMSTEC, Japan

"Momentum fluxes to ocean circulation as given by the dissipation rate of surface waves under tropical cyclone conditions"

14:40-15:00 Hyung-Jin Kim (Invited), APCC, Korea

"Advance and prospectus of APCC seasonal prediction system: Sharing climate information and technology"

15:00-15:20 Venkata Ratnam, JAMSTEC, Japan

"Effect of ENSO on southern Africa precipitation"

15:20-15:40 Coffee Break

### Third Session: Subtropical and Extra-tropical Climate Variations

(Chair: Yukio Masumoto)

15:40-16:10 Hisashi Nakamura (Invited), U. Tokyo, Japan

"Impacts of the North Pacific SST on the atmospheric boundary layer and free troposphere"

16:10-16:30 Masami Nonaka, JAMSTEC, Japan

"Uncertainty and predictability of interannual variability in the Kuroshio Extension"

16:30-16:50 Koutarou Takaya, JAMSTEC, Japan

"Intraseasonal differences of ENSO impacts on East Asian winter monsoon"

16:50-17:10 Toru Miyama, JAMSTEC, Japan

"Convective rainband persistent along the warm Kuroshio in the East China Sea : Case Studies"

17:10-17:30 Desmond Manatsa, Bindura University, Zimbabwe

"Link between Antarctic ozone depletion and summer warming over southern Africa"

17:30-17:50 Mototaka Nakamura, JAMSTEC, Japan

"Impacts of extratropical SST anomalies on regional and hemispheric climate"

17:50-18:00 Closing Remarks