

Workshop on Oceanic and Atmospheric Simulation 2026

20 Fri - 21 Sat, Nov. 2026; Nagoya University, Higashiyama Campus

Program 2nd draft (10/16)

Day 1 (Friday, 11/20) Lecture Hall (Environmental Science Bldg.)

Session 1: Weather & Climate Dynamics (Chair: Tomoe Nasuno (tentative))

10:05-10:30 Takeshi Enomoto (invited), Kyoto University

Accurate and efficient spherical transform methods for high-resolution atmospheric dynamical cores

10:30-11:00 Thomas Rackow (invited), ECMWF

Global Kilometre-Scale Coupled Earth System Simulations: New Opportunities for Ocean-Atmosphere Interaction Research

11:00-11:20 Ayako Yamamoto, Rikkyo University

Impact of future Northern Hemisphere atmospheric wave events on surface temperature

11:20-11:40 Yoko Yamagami, JAMSTEC

Investigating midlatitude North Pacific marine heatwaves using an eddy-permitting coupled model

11:40-13:10 lunch/poster

Session 2: Multi-scale Ocean Dynamics 1 (Chair: Tomomichi Ogata (tentative))

13:10-13:35 Yukio Masumoto (invited), The University of Tokyo

The background history behind OFES

13:35-14:00 Hideharu Sasaki (invited), JAMSTEC

A series of OFES Eddying Ocean Simulations

14:00-14:20 Shuya Wang, AIMEC, Tohoku University

Submesoscale topographic wake behind the Hirase Seamount in the Tokara Strait: energy cascade and instability

14:20-14:40 Xinyu Guo, Ehime University

Interannual Variability of Surface Nutrients in the North Pacific and Its Controlling Mechanisms

14:40-15:00 Bunmei Taguchi, University of Toyama

Marine surface air temperature suppression and its response to climate change

15:00-15:30 coffee break

Session 3: Air-sea Interaction 1 (Chair: Shiori Sugimoto (tentative))

15:30-16:00 Iam-Fei Pun (invited), National Central University, Taiwan

Suppression of marine heatwave activity by tropical cyclone-induced upper ocean cooling

16:00-16:20 Rintaro Nakano, The University of Tokyo

Spatiotemporal variability of deep-cycle turbulence in the equatorial Pacific associated with ENSO

16:20-16:40 Risa Furusawa, The University of Tokyo

Role of Preceding Wind Forcing and Oceanic Wave Propagation in the Different Evolution of Canonical El Niño and El Niño Modoki

16:40-17:45 coffee break/poster

17:45 close

18:00 WOAS2026 Banquet (Restaurant Hana-noki)

Day 2 (Saturday, 11/21) Sakata-Hirata Hall (Science South Bldg.)

Session 4: Air-sea Interaction 2 (Chair: Ayako Yamamoto (tentative))

9:00-9:30 Malte F. Stuecker (invited), University of Hawaii at Manoa

Global climate mode resonance due to rapidly intensifying El Niño-Southern Oscillation

9:30-9:50 RAKESH TEJA KONDURU, EORC, JAXA

Unravelling the Heavy Precipitation Prediction over Yakushima & its neighborhoods through Precipitation Data Assimilation and Ocean-Atmosphere Interactions over the Takara Strait Kuroshio region

9:50-10:10 Arunkumar R, Central University of Rajasthan, India & Kagawa University, Japan

Sensitivity Analysis of Microphysics Parameterizations for High-Resolution Rainfall Simulation using the WRF-Urban Model

10:10-10:30 Tomoki Tozuka, The University of Tokyo

Generation Mechanisms of Coastal El Niño: Role of the Coastal Bjerknes Feedback Revealed by Regional Ocean Model Experiments

10:30-10:50 Masami Nonaka, JAMSTEC

Does the subsurface ocean affect sea surface temperature anomalies in summer over the North Pacific?

10:50-11:10 Kento Usui, The University of Tokyo

Roles of mesoscale air-sea interactions in the Kuroshio Extension revealed by an ocean model

11:10-13:10 group photo/lunch/poster

Session 5: Air-sea Variability & its Application (Chair: Akira Yamazaki (tentative))

13:10-13:40 VO LUONG Hong Phuoc (invited), Viet Nam National University, Ho Chi Minh city

From Hydrodynamics to Coastal Resilience: Understanding Mangrove–Coast Interactions in Southern Vietnam

13:40-14:00 Yuchun Lin, National Taiwan Ocean University

The Influence of Environments on the Intensity Change of Typhoon Soudelor

14:00-14:20 Ning Li, University of Hawaii at Manoa

Short term and extended range wave forecasting for Hawaii

14:20-14:40 Shiori Sugimoto, JAMSTEC

Influence of SST and Topography on Extreme Precipitation during Typhoon Hagibis (2019)

14:40-15:00 Yoo-Jun Kim, AORI, The University of Tokyo

The Role of Time- and Spatially Varying Wind in Coastal Circulation Based on High-Resolution Oceanic and Atmospheric Simulations

15:00-15:25 coffee break

Session 6: Multi-scale Ocean Dynamics 2 (Chair: Shoichiro Kido (tentative))

15:25-15:45 Motoki Nagura, JAMSTEC

Triad resonance between vertically propagating equatorial waves in an idealized OGCM

15:45-16:05 Yusuke Terada, JAMSTEC

Vertical phase propagation of the Equatorial Deep Jets

16:05-16:25 Takeshi Anami, The University of Tokyo

A Decadal Regime Shift in the Hemispheric Asymmetry of the Subtropical Cells Associated with Tropical Pacific Decadal Variability

16:25-16:45 Nan Yuan, WPI—AIMEC (Tohoku Uni.)

Barotropic water exchange between the ice cavity and the open ocean in an inviscid and frictionless fluid

16:45-17:05 Muh. Nur Hidayat, National Research and Innovation Agency (BRIN)

Multi-Constituent Tidal Modulation of Sea Level and Circulation in the Northern Bay of Bengal: A Year-Long ROMS Experiment

17:05-17:25 Borui Wu, Nagoya University

A Hadley Ascending Cloudless Zone in the Southeastern Tropical Pacific Shapes ENSO Wave Dynamics

17:30 close

19:00 Indo-Pacific WS icebreaker (TBD, Sakae-area)

(Poster presentations)

1 Xinru Li, Advanced Institute for Marine Ecosystem Change

Exploring Global Upper Ocean Marine Heatwaves in Coupled GFDL

2 Taek-Bum Jeong, Pusan National University

Assessing Tropical Inter-basin Connections Through SST Restoring Experiments

3 Peien Xu, The University of Tokyo

Phase-Dependent Mixed-Layer Heat Budget of Tropical Instability Waves in the Eastern Equatorial Pacific

4 Nobumasa Komori, Keio University

An intercomparison of eddy-resolving ocean reanalyses in the western North Pacific

5 Yoshikazu Sasai, JAMSTEC

Decadal variability of simulated phytoplankton and nitrate distributions over the North Pacific Ocean

6 Shuhei Matsugishi, Atmosphere and Ocean Research Institute, The University of Tokyo

Development of a Model for High-Resolution Climate Simulation Combining MIROC and NICAM

7 Akira Yamazaki, JAMSTEC

Importance of representing stormtrack activity on simulating Northern Hemisphere blocking

8 Hiromichi Sato, Atmosphere and Ocean Research Institute, The University of Tokyo
Growth and Decay Patterns of Mesoscale Eddies

9 Chuyuan Zhuang, Kyushu University
Weakened Seasonality of Mixed Layer Temperature along the East China Sea Kuroshio

10 Gaku Nishihira, RIAM, Kyushu University
Variability of the Tsushima Warm Current transport by the Pacific Decadal Oscillation and subpolar winds

11 Terushi Tada, The University of Aizu
Why did the 2015 El Niño impacts not materialize? Disentangling ENSO, IOD, and decadal variability

12 Hill Kento, Hokkaido University
Influence of wind forcing on Gulf Stream path variability and its nonstationary relationship with the North Atlantic Oscillation

13 Shinnosuke Yoshida, Hokkaido University
Frictional versus Buoyancy Control on the Energetics of the Antarctic Circumpolar Current

14 Aparna Raut, Japan Meteorological Corporation
A Multimodal Meta-Learning Framework to Predict Streamflow Drought Onset from Large-Scale Atmospheric Triggers and Catchment Characteristics

15 Hidenori Aiki, Nagoya University
Strong downward wave energy transfer over Shenyang in winter

Indo-Pacific Workshop 2026

22 Sun, Nov. 2026; Nagoya University, Higashiyama Campus
Sakata-Hirata Hall (Science South Bldg.)

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Chair: Takanori Horii (tentative)

9:20-9:45 HyungBo KIM, Seoul National University

State change of the Indonesian Throughflow Water–Subtropical Water front in the southwestern Indian Ocean

9:45-10:10 Somang Song, Seoul National University

Observed Variability of Intermediate Water Masses in the South Indian Ocean from Observations of 2004-2025

10:10-10:35 Hanani Adiwira, WPI-AIMEC, Tohoku University

Subsurface ocean conditions during marine heatwave events in Southwest Sumatra

10:35-11:00 Muhammad Azzam Hanif Prasetyo, Tohoku University

The Possible Contribution of Marine Heatwaves on the Declining Healthy Coral Reef Cover in Nusa Dua, Bali

11:00-11:20 coffee break

Chair: Hidenori Aiki (tentative)

11:20-11:45 Takuro Matsuta, Hokkaido University

Drag-Controlled Regime Transitions in the Eddy Saturation Mechanism of the Antarctic Circumpolar Current

11:45-12:10 Seiya Kitajima, Hokkaido University

Energy Budget of the Antarctic Circumpolar Current and Its Dependence on Model Resolution

12:10-12:35 Ryohei Masuda, Hokkaido University

Energy Conversion in the Antarctic Circumpolar Current Using a High-Resolution Ocean Model

12:35-14:00 lunch

Chair: Yukio Masumoto (tentative)

14:00-14:25 Saji N Hameed (invited), The University of Aizu

Multidecadal changes and their influence on recent strong El Ninos

14:25-14:50 Suyun Noh, KIOST

TBD (Indian Ocean Climate Variability)

14:50-15:15 Kaiwen Ye, Nagoya University

Vertical wave energy flux in the troposphere over the North Atlantic storm track

15:15-15:40 Taek-Bum Jeong, Pusan National University

Assessing Tropical Inter-basin Connections Through SST Restoring Experiments

15:40 close