Schedule

March 27, Thursday

9:30-9:40 *Opening Remark* : **Swandhin Behera (Application Laboratory, JAMSTEC)**

Chair (Hideharu Sasaki)

9:40-10:10 *Invited Talk* : **Yuanlong Li (Institute of Oceanology, Chinese Academy of Science)**
Emergence of the North Pacific heat storage pattern delayed by decadal wind-driven redistribution

Pacific Ocean

10:10-10:25 **Masami Nonaka (JAMSTEC)**
Extreme northward meander of the Kuroshio Extension in 2023 in an eddying OGCM

10:25-10:40 **Anzhou Cao (Zhejiang Univ.)**
Numerical simulation of internal tides modulated by multiscale ocean dynamics near the Luzon Strait

10:40-10:55 **Vera Stockmayer (Univ. of Hawaii)**
On the role of spiciness in Pacific Decadal Variability

10:55-11:25 Coffee Break

Chair (Tomomichi Ogata)

11:25-11:40 **Bo Qiu (Univ. of Hawaii)**
Bi-directional energy cascades in the Pacific Ocean from repeat ADCP measurements and high-resolution OGCM

11:40-11:55 **Shuya Wang (WPI-AIMEC, Tohoku Univ.)**
Understanding energy cascade in the Northwest Pacific using a submesoscale-permitting OGCM

11:55-12:10 **Taichi Ogata (Hokkaido Univ.)**
Performance evaluation of statistical downscaling of storm surge along the coast of Japan: Using observation and ultra-high resolution ocean model data

12:10-12:25 **Kento Usui (Univ. of Tokyo)**
Importance of geostrophic shear on eddy-induced Ekman pumping in the Kuroshio Extension region

12:25-14:00 Lunch

Chair (Shuya Wang)

Ocean Ecosystem

14:00-14:15 **Tomoki Tozuka (Univ. of Tokyo)**
How important is the negative feedback associated with phytoplankton to ENSO?

14:15-14:30 **Takeshi Doi (JAMSTEC)**
Seasonal predictability of mass coral bleaching events between the Pacific Ocean and the East China Sea with a large-ensemble climate model

14:30-14:45 **Eun-Byeol Cho (IBS center for Climate Physics)**
Intensifying ocean temperature extremes threaten protected ecosystem

Ocean Dynamics

14:45-15:00 **Yusuke Terada (Univ. of Tokyo)**
Generation of the equatorial deep jets in the Pacific Ocean

15:00-15:15 **Borui Wu (Nagoya Univ.)**
Deep reaching wave energy-flux in the off-equatorial central and western regions of the Pacific Ocean during the El Niño and La Niña events

15:15-15:45 Photo session & coffee Break

Chair (Yusuke Terada)

15:45-16:00 **Motoki Nagura (JAMSTEC)**
Mixed Rossby gravity waves at middepths of the equatorial Indian Ocean

16:00-16:15 **Hideharu Sasaki (JAMSTEC)**
A diagnostic method to evaluate the spatiotemporal variations of mixed layer instability in the world ocean using Argo float observation

16:15-16:30 **Nan Yuan (WPI-AIMEC, Tohoku Univ.)**
The hydraulics of local separation applied to middle layer upwelling at the exit of Shelikof Strait, northwest Gulf of Alaska

16:30-16:45 **Peien Xu (Univ. of Tokyo)**
On long-lived cyclonic eddies off western Australia: from statistics to energy analysis

16:45-17:00 **Yoo-Jun Kim (AORI, Univ. of Tokyo)**
The impact of small-scale winds on realistic river water spread and estuarine circulation

17:00-18:00 ***Poster Session***

18:30-20:30 Reception

March 28, Friday

Chair (Ayako Yamamoto)

9:30-10:00 *Invited Talk* : **Rhys Parfitt (Florida State Univ.)**
New perspectives on ocean-atmosphere interaction: moving forwards in time, not backwards

Air-Sea Interaction

10:00-10:15 **Bunmei Taguchi (Toyama Univ.)**
Surface air temperature adjustment over the warm ocean

10:15-10:30 **Joowan Kim (Kongju National Univ.)**
Atmospheric pathway of marine heatwaves over the Northwestern Pacific

10:30-10:45 **Yu-Xiang Qiao (Tohoku Univ.)**
Role of Kuroshio warming in intensifying the mei-yu-baiu rainband: A quantitative study

10:45-11:00 **Kazuaki Nishii (Mie Univ.)**
Large-scale atmospheric response to anomalies in the sea surface temperatures and sea ice in the 2021-22 winter

11:00-11:30 Coffee Break

Chair (Yu-Xiang Qiao)

11:30-11:45 **Ingo Richter (JAMSTEC)**
Which way Atlantic Niño? – How CMIP6 projections envision future variability in the equatorial Atlantic

11:45-12:00 **Ayako Yamamoto (J. F. Oberlin University)**
The impact of ocean-atmosphere interactions on future waviness trends

Atmospheric Processes

12:00-12:15 **Mayuki Sano (Tohoku Univ.)**
3D light diffusion simulation of artificial radiance from the ground

12:15-12:30 **Kaiwen Ye (Nagoya Univ.)**
Downward flux of wave energy in the lower troposphere over the Pacific Ocean

12:30-12:45 **Yuya Baba (JAMSTEC)**
Seasonal prediction of atmospheric rivers in western North Pacific using a seasonal prediction system

12:45-13:00 **Yong-Yub Kim (IBS, Center for Climate Physics)**
Robust estimates of earth system predictability of the 1st kind using the CESM2 multiyear prediction system (CESM2-MP)

13:00-14:30 Photo Session & Lunch

14:30-15:30 ***Poster Session***

Chair (Patrick Martineau)
Model Development, Data Assimilation, and Predictability
15:30-15:45 **Masuo Nakano (JAMSTEC)**
Tropical cyclone seasonal forecasting by NICOCO

15:45-16:00 **Saori Nakashita (DPRI, Kyoto Univ.)**
Applicability of ensemble singular vectors to a mesoscale convective system over the East China Sea

16:00-16:15 **Tomomichi Ogata (JAMSTEC)**
Variability in the Western North Pacific summer monsoon in 140-year-long AGCM hindcast experiments: SST impact on the cyclonic anomaly around 1890s−1930s

16:15-16:30 **Akira Yamazaki (JAMSTEC)**
A climatology of atmospheric observation impacts estimated by EFSO

16:30-16:45 **Takeshi Enomoto (DPRI, Kyoto Univ.)**
Numerical optimization and variational data assimilation using automatic differentiation

16:45-17:00 Closing Remarks

17:00 Adjourn

Poster Session

P01: TsaiLing Chuang (National Cheng Kung Univ.)
A numerical investigation of horizontal divergence, relative vorticity, and potential vorticity under Kuroshio topography

P02: Haruto Fujishima (Tokyo Univ. of Marine Science and Technology)
Generating analysis-ready BGC-Argo datasets and preliminary analysis

P03: Minori Fukushima (DPRI, Kyoto Univ.)
Ensemble adjoint sensitivity analysis for the cold wave over Japan in January 2023

P04: Ryo Furue (JAMSTEC)
Coastal trapped wave modes revisited

P06: Yilong Lyu (Institute of Oceanology, Chinese Academy of Sciences)
Evolution and physical mechanisms of Indian Ocean heat distribution in the post-hiatus period

P07: Patrick Martineau (JAMSTEC)
Projected amplification of moisture fluxes towards Antarctica by synoptic eddies

P08: Satoru Okajima (Univ. of Tsukuba)
Quantifying the importance of synoptic-scale atmospheric disturbances for time-mean air-sea fluxes

P09: Yoshikazu Sasai (JAMSTEC)
Decadal variations of simulated phytoplankton and nitrate distribution over the North Pacific

P10: Hideharu Sasaki (JAMSTEC)
A trial of OFES2 hindcast simulation forced by JRA-3Q

P11: Yoko Yamagami (JAMSTEC)
Potential impact of North Atlantic SST variability on the recent SST warming in the Kuroshio Extension

P12: Hidetaka Hirata (Rissho Univ.)
Effects of a marine heatwave associated with the Kuroshio Extension large meander on extreme precipitation in September 2023