2025 JKWOC/AWOC Program

[Day-1] Nov. 18 (Tuesday)

Opening Ceremony			
	13:10-13:20	**Welcoming Remarks (Director of External Relations at KIOST)**	Joo-Hyung Ryu
	13:20-13:40	**Opening Remarks (Deputy Director of National Ocean Satellite Center at KHOA)**	Heeyoon Park
Keynote Speech #1			
KN1	13:40-14:30	SCSDCT: a gap-filled chlorophyll-a reconstruction and its application	Wenfang Lu

Session 1: Ocean Color Missions			
Chair : Jongkuk Choi			
		Title	**First Author**
1	14:40-15:00	Toward longterm observation by GCOM -C	Hiroshi Murakami
2	15:00-15:20	Evaluation of near-blue UV remote sensing reflectance over the global ocean from SNPP VIIRS, PACE OCI, and GCOM-C SGLI	Lufei Zheng
3	15:20-15:40	National Ocean Satellite Center: GOCI Service Overview	Hyeongyu Lee
4	15:40-16:00	Current Calibraiton and Validation status of the GOCI-II Atmospheric Correction	Jae-Hyun Ahn

Poster Session #1			
PS1	16:00-17:00	**14 Poster Presentations**	

Session 2: Machine Learning and Algorithm Development			
Chair : Hiroshi Murakami			
		Title	**First Author**
5	17:00-17:20	Simultaneous retrieval of water quality indicators using GCOM-C satellite and Machine learning models	Yuuto Sasaki
6	17:20-17:40	Development of a GOCI-II Algorithm for Red-Tide Detection and Concentration Estimation Using Physics-Based Machine Learning	Jong Hyuk Lee
7	17:40-18:00	Local Tuning of Satellite Chlorophyll-a in Coastal Waters using Simple Statistical and Machine Learning Techniques	Joji Ishizaka
8	18:00-18:20	Machine Learning boosts robust ocean color retrieval in complex atmosphere and ocean systems: taking coastal Forel-Ule Index mapping as an example	Ruofei Liu

[Day-2] Nov. 19 (Wednesday)

Session 3: IOP/Calibration/Correction			
Chair : Zhongping Lee			
	Time	**Title**	**First Author**
9	9:00-9:20	Evaluation of Uncertainties in Particle Absorption Coefficient Measurements Based on the Filter-Pad Technique and Approaches for Their Reduction	Riku Goto
10	9:20-9:40	Development of an IOP Ensemble Algorithm (IEA) for Estimating IOP Based on Water Mass Classification in Coastal Areas with High Turbidity	Sotaro Aburadani
11	9:40-10:00	Iterative Approach to the Geostationary Ocean Color Imager-II (GOCI-II) Radiometric Calibration	Minsang Kim
12	10:00-10:20	Multi-Sensor Approach to Improve GOCI-II Gas Absorption Correction Using AMI and GEMS data	Kyeong-Sang Lee
13	10:20-10:40	Development of an IOP Ensemble Algorithm (IEA) for Estimating IOP Based on Water Mass Classification in Coastal Areas with High Turbidity	Sotaro Aburadani

Session 4: Ocean Biogeochemistry and Primary Production			
Chair : Jaehyun Ahn			
		Title	**First Author**
14	11:00-11:20	Analysis of the Nutrient Transport Process in the Southern Java Sea and Its Interplay with Oceanic Eddy Occurrences	Takahiro Osawa
15	11:20-11:40	Relationships between oceanic conditions and Common minke whale (Balaenoptera acutorostrata) distribution in spring observed along the eastern coast of Korea	Keiko Yamada
16	11:40-12:00	Relationship between Sargassum biomass and marine heatwaves	Jisun Shin
17	12:00-12:20	Long-term variation in primary production enhancement due to typhoons in the subtropical region of the western north Pacific	Mitsuhiro Toratani

Keynote Speech #2			
KN2	13:30-14:20	Long-term Water Quality Properties measured from Satellite Ocean Color sensors using Improved Algorithms in the Chesapeake Bay	Seunghyun Son

Session 5: Ocean Physics and Climate Variability			
Chair : Joji Ishizaka			
		Title	**First Author**
18	14:20-14:40	Analysis on Subsurface Coastal Upwelling Processes based on Vertical Profiles of Temperature and Salinity derived from Machine Learning	Yoon-Seo Jeong
19	14:40-15:00	Analysis on Three-Dimensional Multi-scale Ocean Fronts in the East Sea Using a Deep-Learning algorithm and the Empirical Mode Decomposition	Eunju Kim
20	15:00-15:20	Study on the Mechanisms of Extreme Sea Surface Temperature Events along the Korean Peninsula Coast	Hyun-Jin Yang
21	15:20-15:40	A Numerical Model Study of Coastal Submesoscale Dynamics Observed with Unmanned Aerial Vehicle	Sin-Young Kim

Poster Session #2			
PS2	15:40-16:40	**14 Poster Presentations**	

Session 6: Coastal Hazards			
Chair : Tingwei Cui			
		Title	**First Author**
22	16:40-17:00	Satellite-based assessment of marine blue carbon sinks in Taiwan and the northern South China Sea: validation against in situ observations	Chin-Chang Hung
23	17:00-17:20	Red-Tide Quantification Using an Airborne Multispectral Camera	Seungil Baek
24	17:20-17:40	Regionally Optimized Optical Water Type Classification for the Korean Seas Using Fuzzy C-Means Clustering	Jungho Im
25	17:40-18:00	Application of Ocean Color Remote Sensing Data for Coastal Infrastructure Assessment Considering Ecosystem Services and Human Well-being	Kohtaroh Kobayashi

[Day-3] Nov.20 (Thursday)

Session 7: Coastal and Estuarine Water Quality			
Chair : Genki Terauchi			
		Title	**First Author**
26	9:00-9:20	Evaluation of Ocean Color Data Assimilation Configurations for Improving Phytoplankton Reproducibility in Tokyo Bay, Japan	Hiroto Imazu
27	9:20-9:40	Vertical Distribution of Phytoplankton Signatures in the Temperate Coastal Waters of Sagami Bay	Koichi Yano
28	9:40-10:00	Controlled Sediment Retention for Flood Mitigation and Morphological Restoration in the Ma'an River	Happy Mareta
29	10:00-10:20	On the Challenges of Retrieving Phytoplankton Properties from Remote-Sensing Observations	J. Xavier Prochaska

Session 8: Marine Ecology and Remote Sensing Applications			
Chair : Forrest Wu			
		Title	**First Author**
30	10:40-11:00	Coastal benthic coverage mapping using UAV mounted hyperspectral sensors	Phillip Kim
31	11:00-11:20	A Deep Learning-Based Environmental Stress Index for Monitoring Coral Reefs in Indonesia	Ni Putu Praja Chintya
32	11:20-11:40	Monitoring Summer Eelgrass Die-offs in Nanao Bay Using a Compact Sonar Mounted on a Stand-up Paddle Surfboard	Genki Terauchi

Closing Session			
	11:40-12:00	Discussion on Next Workshop	Youngheon Jo
	12:00-12:10	Closing Remarks	Jongkuk Choi

Poster Session (Day1 and Day2)			
1	poster	How extreme weather events reshape biological carbon pump in tropical/subtropical western North Pacific	Yung-Yen Shih
2	poster	Comparison assessment of in situ and satellite-based methods for estimating marine carbon sinks in the seas around Taiwan	Zi-Xin Liao
3	poster	An Analysis on Water Types Classification in the Western Arctic Ocean in Summer	Kwang-Mo Kim
4	poster	Reducing Uncertainty in a Marine Biological Carbon Pump Model for the Northern South China Sea by Incorporating Satellite-Derived Parameters	Zong-Ru Cheng
5	poster	Comparative Analysis of Total Column Ozone from GK-2A/AMI and GK-2B/GEMS for Improving Atmospheric Correction of GOCI-II	Eunkyung Lee
6	poster	Estimation of High-Resolution Ocean Acidification Indices Using a Clustering-Regression Ensemble	Chae-Reum Kang
7	poster	Seasonal and Long-Term Variability in GOCI-II Level-3 Chlorophyll-a Concentration	Ji-Yeon Baek
8	poster	Improving GOCI-II IOP Retrieval with Hybrid Machine Learning Approaches	Eunna Jang
9	poster	The difference between in situ and satellite-based dissolved organic carbon in South China Sea	Sheng-Lun Chen
10	poster	Simultaneous Assimilation of HF Radar and Ocean Color Satellite Data to Improve a Transport Model for a Semi-Enclosed Bay	Kotaro Yamashita
11	poster	Phenological Characteristics of Phytoplankton Bloom in the South China Sea	Mohd Ikmal Shafiq Rosli
12	poster	Applicability Assessment of an Optical Satellite –Based Turbidity	Yo Matsumoto
13	poster	Machine Learning-Based pCO_2 Estimation in the East China Sea for Spatiotemporal Patterns from 2003 to 2023: Optical Water Classification	DoHyeon Kwon
14	poster	AI-Based Classification of Jellyfish and Quantifying their Size and Distribution in the East China Sea	Yoo-Min Kim
15	poster	Distinction of Seasonal Internal Solitary Waves in the Lombok Strait using GCOM-C/SGLI Data	Chonnaniyah