



Final PROGRAM



Day 1 Monday 22/09		Day 2 Tuesday 23/09 Pan-CLIVAR		Day 3 Wednesday 24/09 <i>Symposium</i>		Day 4 Thursday 25/09 <i>Symposium</i> & Pan-CLIVAR		Day 5 Friday 26/09 Pan-CLIVAR	
		8:30-9:30	<i>Plenary</i> • Welcome Remarks • Introduction to CLIVAR and Pan-CLIVAR Meeting • Plenary talk	8:30-10:30	<i>Opening</i> • Speeches • Presentations • 2 Keynote talks	8:30-10:30	<i>Symposium</i> Session 10: Climate Variability and Change Session 11: Ocean Processes and Extremes 2 Session 12: Societal Impact 2	8:30-10:30	<i>Plenary and Closing Remarks</i> • 2 plenary talks • Discussions • Presentations and closing remarks
		9:30-10:30	SSG Session and Panel Meetings						
		10:30-11:00	Coffee Break						
		11:00-12:30	SSG Session and Panel Meetings						
				10:30-11:00	Coffee Break	10:30-11:00	Coffee Break	10:30-11:00	Coffee Break
				11:00-12:30	<i>Symposium</i> Session 1: Atmospheric Processes and Climate Dynamics 1 Session 2: Ocean-Climate Observations and Modelling 1 Session 3: Biogeochemical Processes and Climate Interactions	11:00-12:25	<i>Symposium</i> Breakout 1: Climate, atmospheric processes, societal impacts Breakout 2: Ocean processes, modelling, observations, biogeochemistry Breakout 3: Indo-Pacific Ocean, Climate, and Linkage	11:00-12:30	• Side Event 2: <i>Inclusive Innovation for Ocean and Climate Observations</i> • SSG Meeting • Panel Meetings
						12:30-13:00	<i>Plenary</i>		
		12:30-13:30	Lunch	12:30-13:30	Lunch	13:00-14:00	Lunch	12:30-14:00	Lunch
13:30-15:00	Closed SSG Meeting	13:30-15:00	SSG Session and Panel Meetings	13:30-15:00	<i>Symposium</i> Session 4: Atmospheric Processes and Climate Dynamics 2 Session 5: Ocean-Climate Observations and Modelling 2 Session 6: Artificial Intelligence: Role in Climate-Ocean Research and Prediction	14:00-15:30	• MHW Open Session • ECR Session • Side Event 1: <i>Enhancing International Ocean-Climate Research Collaboration in a Changing Climate</i> • Panel Meetings	13:30-15:00	• SSG Meeting • Panel Meetings
15:00-15:30	Coffee Break	15:00-15:30	Coffee Break	15:00-15:30	Coffee Break	15:30-16:00	Coffee Break	15:30	End of Event
15:30-17:30	Closed SSG Meeting	15:30-17:00	SSG Session and Panel Meetings	15:30-16:30	<i>Symposium</i> Poster viewing	16:00-17:30	• TBI Open Session • ECR Session (cont'd) • Side Event 1 (cont'd) • Panel Meetings		
		17:00-18:00	<i>Plenary</i> 2 Plenary talks Discussions	16:30-18:00	<i>Symposium</i> Session 7: Cascading and Compound Event Session 8: Ocean Processes and Extremes 1 Session 9: Societal Impact 1				
				18:30	Symposium Dinner	18:30	Pan-CLIVAR Dinner		

Day 1 Mon 22/09		Day 2 Tue 23/09							Day 3 Wed 24/09				
		Pan-CLIVAR							Symposium				
Room->	RM1		RMA	RM1	RM2	RM3	RM4	RM5		RMA	RMB	RMC	
		8:30-9:30	Plenary						8:30-9:30	Opening			
		9:30-10:30	SSG		PRP		IORP		9:30-10:30	Keynotes			
		10:30-11:00	Coffee Break							10:30-11:00	Coffee Break		
		11:00-12:30	SSG	TBI	PRP	MHW	IORP	GSOP	11:00-12:30	Session 1	Session 2	Session 3	
		12:30-13:30	Lunch							12:30-13:30	Lunch		
13:30-15:00	SSG	13:30-15:00	SSG	TBI	OMDP	SORP	ARP	CDP	13:30-15:00	Session 4	Session 5	Session 6	
15:00-15:30	Coffee Break	15:00-15:30	Coffee Break							15:00-15:30	Coffee Break		
15:30-17:30	SSG	15:30-17:00	SSG	TBI-PRP-CDP (TROPICS)	OMDP	SORP	ARP	MP	15:30-16:30	Poster viewing			
		17:00-18:00	Plenary						16:30-18:00	Session 7	Session 8	Session 9	
	Free time		Free time							18:30	Symposium Dinner		

Day 4 Thu 25/09	Symposium & Pan-CLIVAR						Day 5 Fri 26/09	Pan-CLIVAR		
Room->	RMA	RMB	RMC	RM1	RM2	RM3-5		RMA	RM1	RM2-5
8:30-9:30	Session 10	Session 11	Session 12				8:30-9:30	Plenary		
9:30-10:30	Session 10	Session 11	Session 12				9:30-10:30	Plenary		
10:30-11:00	Coffee Break						10:30-11:00	Coffee Break		
11:00-12:25	Breakout 1	Breakout 2	Breakout 3				11:00-12:30	Side Event 2	SSG	
12:30-13:00	Plenary						12:30-14:00	Lunch		
13:00-14:00	Lunch						13:30-15:00	SSG		
14:00-15:30	MHW Open Session	ECR Session	Side Event 1	SORP						
15:30-16:00	Coffee Break						15:30	End of Event		
16:00-17:30	TBI Open Session	ECR Session	Side Event 1	SORP-NORP-OMDP						
18:30	Pan-CLIVAR Dinner									

Room Legend

RMA: Ballroom

RMB: Bali

RMC: Sedap Malam

RM1: Sawu

RM2: Nias

RM3: Sahadewa

RM4: Nakula

RM5: Boardroom

BINTANG BALI RESORT



Note: Bali Room, Nias Room, Sawu Room are located under Ballroom

- | | | | | |
|----------------------|---------------------------|---------------------------|----------------------------------|--|
| 1. Security | 9. Boardroom | 17. Sedap Malam | 25. The Wharf Restaurant | A. Deluxe Room |
| 2. Bell Captain Desk | 10. Restrooms | 18. Taman Sari (ground) | 26. The Reef Bar | A1. Family Room |
| 3. Alor Room | 11. Shopping Arcade | 19. La Brasserie (ground) | 27. Pool Theatre | B. Suites/Residences |
| 4. Reception Desk | 12. Photography Service | 20. Panda Kids Club | 28. Jacuzzi | C. Bintang Bali Suite / Suites |
| 5. Main Lobby | 13. Tour & Travel Counter | 21. Pool Towel Counter | 29. Children's Playground | |
| 6. Grand Lobby Bar | 14. Office | 22. Tennis Court | 30. Temple | Fire Assembly Point |
| 7. Exhibition Center | 15. Health Club | 23. Theta Spa by The Sea | 31. Romantic Zone | Tsunami Evacuation Point (3 rd Floor) |
| 8. Ballroom | 16. Clinic | 24. Temple | 32. Sunset Garden | |
| | | | 33. Sahadewa Room (ground floor) | 34. Nakula Room (ground floor) |

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Meeting Agenda: Panels, Research Foci, Cross-panels	28

Day 1: Monday, 22 September 2025 | Pan-CLIVAR Meeting

13:30 – 15:00	SSG Closed Session	
15:00 – 15:30	Coffee Break	
15:30 – 17:30	SSG Closed Session	
	Free time	

Day 2: Tuesday, 23 September 2025 | Pan-CLIVAR Meeting

07:30 – 08:30	Badges and materials collection (from Monday 22 September 16:00-18:00)	
08:30 – 09:30	Plenary	
08:30	Welcome remarks	Dr. Agus Santoso International CLIVAR Project Office, Director
08:35	Introduction to CLIVAR and Pan-CLIVAR Meeting	Dr. Gokhan Danabasoglu National Center for Atmospheric Research, USA CLIVAR SSG, Co-Chair
08:50	Welcome remarks from WCRP	Prof. Cristiana Stan George Mason University, USA WCRP Joint Scientific Committee, Co-Chair
08:55	Welcome remarks from ICPO host institution: Ocean University of China	Prof. Houjie Wang Ocean Univ. of China, Vice President
09:00	Welcome remarks from ICPO co-host institution: Laoshan Laboratory	Dr. Yanheng Xiao Executive Director of the Leading Group for Foreign Affairs, Laoshan Laboratory
09:05	Plenary 1: Connecting the WCRP Academy and the CLIVAR Community	Dr. Chris Lennard University of Cape Town, South Africa Prof. Melissa Hart University of Tasmania, Australia WCRP Academy, SSG Co-Chairs
09:30 – 17:00	Parallel Meetings	
09:30	SSG IORP PRP	
10:30	Coffee Break	
11:00	SSG MHW RF GSOP TBI RF IORP PRP	
12:30	Lunch	
13:30	SSG SORP OMDP TBI RF ARP CDP	
15:00	Coffee Break	
15:30	SSG SORP OMDP MP ARP TBI-PRP-CDP (TROPICS)	
17:00 – 18:00	Plenary	

17:00	Plenary 2: CORDEX Southeast Asia Climate Projections and Their Relevance to Society	Prof. Fredolin Tangang Universiti Brunei Darussalam, Brunei
17:20	Plenary 3: Towards reliable SST predictions in the Tropical Pacific Cold Tongue	Dr. Anna-Lena Deppenmeier University of Liverpool, UK
17:40	(10 min. Pre-Recorded) Understanding regional pCO ₂ model biases and uncertainties in the Biogeochemical Southern Ocean State Estimate (B-SOSE)	Dr. Angela Kuhn Scripps Institution of Oceanography, USA
18:00	Free time	

Day 3: Wednesday, 24 September 2025 | Symposium

07:30 – 08:30	Badges and materials collection	
08:30 – 09:30	Opening	<i>Symposium opening host:</i> Dr Intan Suci Nurhati National Research and Innovation Agency (BRIN), Indonesia
08:30	Welcome Remarks	Prof. Anak Agung Suryawan Bali Governor Representative
08:35	Opening Remarks from WCRP	Dr. Hindumathi Palanisamy World Meteorological Organization, WCRP Scientific Officer, Pan-CLIVAR 2025 event organising committee
08:40	CLIVAR: Overview and Perspectives	Prof. Francois Engelbrecht University of the Witwatersrand, South Africa CLIVAR SSG, Co-Chair
08:50	BRIN: Overview and Perspectives	Prof. Ocky Karna Radjasa Chairman of Research Organization for Earth Sciences and Maritime, National Research and Innovation Agency (BRIN), Indonesia Pan-CLIVAR 2025, local organiser
09:05	Remarks from Bandung Institute of Technology (ITB)	Dr. Muh Farid Head of Center for Coastal and Marine Development, Bandung Institute of Technology, Indonesia Pan-CLIVAR 2025, local organiser
09:15	Laoshan Laboratory and International Science Cooperation	Ms. Ning Wang Head of Cooperation and Planning Department, Laoshan Laboratory, China
09:30-18:00	CLIVAR Symposium	

09:30	Introduction to CLIVAR Symposium	Prof. Mat Collins University of Exeter, UK CLIVAR SSG, member
09:40	Keynote 1: El Niño 2023/24 and the Skill of Drought Warning Issued by BMKG	Dr. Supari Head of Climate Variability Analysis Division, Badan Meteorologi, Klimatologi, dan Geofisika (BMKG), Indonesia
10:05	Keynote 2: Coordinated regional ocean climate projections: why, where are we and where are we going? A CLIVAR-CORDEX task force	Dr. Angelique Melet Head of Ocean Climate Team, Mercator Ocean International, Toulouse, France
10:30	Coffee Break	
	Parallel Sessions	
11:00	Session 1: Atmospheric Processes and Climate Dynamics 1 Session 2: Ocean-Climate Observations and Modelling 1 Session 3: Biogeochemical Processes and Climate Interactions	
12:30	Lunch	
13:30	Session 4: Atmospheric Processes and Climate Dynamics 2 Session 5: Ocean-Climate Observations and Modelling 2 Session 6: Artificial Intelligence: Role in Climate-Ocean Research and Prediction	
15:00	Coffee Break	
15:30	Poster viewing	
16:30	Session 7: Cascading and Compound Event Session 8: Ocean Processes and Extremes 1 Session 9: Societal Impact 1	
18:30	Symposium Dinner	

Day 4: Thursday, 25 September 2025 | Symposium & Pan-CLIVAR Meeting

08:30 – 10:30	Symposium Parallel Sessions	
08:30	Session 10: Climate Variability and Change Session 11: Ocean Processes and Extremes 2 Session 12: Societal Impact 2	
10:30	Coffee Break	
11:00	Breakout 1: Climate, atmospheric processes, societal impacts Breakout 2: Ocean processes, modelling, observations, biogeochemistry Breakout 3: Indo-Pacific Ocean, Climate, and Linkage (a PRP-IORP-TBI RF joint-session)	
12:30	Plenary, Symposium Closing	Prof. Mat Collins University of Exeter, UK CLIVAR SSG, member

13:00	Lunch	
14:00-17:30	Pan-CLIVAR Parallel Sessions	
14:00	MHW Open Session ECR Session Side Event 1: <i>Enhancing International Ocean-Climate Research Collaboration in a Changing Climate</i> SORP	
15:30	Coffee Break	
16:00	TBI Open Session ECR Session Side Event 1 SORP-NORP-OMDP	
18:30	Pan-CLIVAR Dinner	

Day 5: Friday, 26 September 2025 | Pan-CLIVAR Meeting

08:30 – 10:30	Closing Plenary: Towards the Next CLIVAR Science and Implementation Plan	
08:30	Plenary 4: The impact of storms on Southern Ocean energy and carbon cycling	Prof. Nicole Lovenduski University of Colorado Boulder, USA
08:50	Plenary 5: Digital Twins of the Ocean for Sustainable and Climate-Responsive Marine Management	Dr. Joanna Staneva Helmholtz Zentrum Hereon, Germany
09:10	Discussions • Summary of Pan-CLIVAR Meeting • New initiatives from panel/RF meetings • New science frontiers to include in the next science plan (cont'd at 13:30)	
10:00	CLIVAR 30 th Anniversary Presentations and Closing Remarks	
10:30	Coffee Break	
11:00-15:30	Parallel Sessions & Additional Meetings	
11:00	SOG Side Event 2: <i>Inclusive Innovation for Ocean and Climate Observations</i>	<i>SOG: Closed Meeting</i>
12:30	Lunch	
13:30	SOG	<i>SOG: Members and Partners Welcome</i> Scientific issues to be addressed and scope for cross-project/institution collaborations
15:30	End of Event	

CLIVAR SSG Session Tuesday 23 September

To provide a forum for partners engagement, the CLIVAR scientific steering group (SSG) session invites partner organisation representatives to present on Tuesday 23rd September 2025 from 9:30 to 17:00. Each allocation is 15-min. (10-min. presentation + 5 minutes for Q&A). Presentations should include a brief introduction of the organisation/project, with just a couple of highlights, and present discussion points surrounding ongoing and future synergy with CLIVAR.

9:30-10:30

Climate and Ocean: Variability, Predictability and Change (WCRP CLIVAR)	Gokhan Danabasoglu, Francois Engelbrecht
Climate and Cryosphere (WCRP CLiC)	Keith Alverson (Online)
Scientific Committee on Oceanic Research (SCOR)	Emily Twigg (Online)
My Climate Risk (MyClimateRisk WCRP Lighthouse Activity)	Regina Rodrigues

11:00-12:30

Partnership for Observation of the Global Ocean (POGO)	Hui Zhou
Northwestern Pacific Ocean Circulation and Climate Experiment (NPOCE)	Fei Chai, Hui Zhou
Surface Ocean - Lower Atmosphere Study (SOLAS)	Li Li
Digital Twins of the Ocean (DITTO)	Joanna Staneva
Ocean Observations Physics and Climate Panel (OOPC)	Weidong Yu (Online)
Past Global Changes (PAGES)	Aixue Hu

13:30-15:00

North Pacific Marine Science Organization (PICES)	Antonietta Capotondi
Earth System Modelling and Observations (WCRP ESMO)	Harun Rashid (Online)
Global Energy and Water Exchanges (WCRP GEWEX)	Jason Evans
Regional Information for Society (WCRP RIFS)	Naomi Goldenson
Coordinated Regional Climate Downscaling Experiment (WCRP CORDEX)	Angelique Melet, Jason Evans
Explaining and Predicting Earth System Change (EPESC WCRP Lighthouse Activity)	Shoshiro Minobe

15:30-17:00

Atmospheric Processes And their Role in Climate (WCRP APARC)	Olaf Morgenstern (Online)
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Integrated Marine Biosphere Research ([IMBeR](#))

US Climate Variability and Predictability Program ([US CLIVAR](#))

Ocean University of China ([OUC](#))

International Science Council ([ISC](#))

Discussions

A'an Johan Wahyudi

Ruby Leung

Xiaopei Lin

Jia Gensuo

CLIVAR Symposium: Bridging Science and Society in Southeast Asia and Beyond

All Oral Presentations: 10 minutes + 4 min. Q&A

Pre-recorded presentations: 10 minutes, no Q&A

Lightning presentations: 2 minutes

Atmospheric Processes and Climate Dynamics

Wednesday, 24 September

11:00-12:30 Session 1 Atmospheric Processes and Climate Dynamics 1

Location: Ballroom

Conveners: *Mohan Kumar Das, Thea Turkington, Masa Kageyama*

Hot season gets hotter due to rainfall delay over tropical land in a warming climate	Song Fengfei
Evaluation of NEX-GDDP-CMIP6 Model Performance in Simulating Precipitation Variability over Indonesia	Prasetya Ratih
Quantitative Analysis of Monsoon Pattern Shifts in Pakistan's Climatic Zones: Impacts of Environmental Change and Projections Under RCP Scenarios (ONLINE)	Arshad Adnan
Climatic Control on the Variability of Atmospheric Constituents in the Anthropogenically-dominated Monsoon Trough Region of India	Ramaraju Hk
The Modulation of the Diurnal Variations by the Intraseasonal Oscillations of the Indian Summer Monsoon	Vasubandhu Misra
Day-to-Day Variability and Seasonal Patterns of Global Dust Aerosol Optical Depth from IASI Satellite Observations (ONLINE)	Anoruo Chukwuma

13:30-15:00 Session 4 Atmospheric Processes and Climate Dynamics 2

Location: Ballroom

Conveners: *Jason Evans, Masa Kageyama, Tao Geng*

Emergence of positive IOD-like warming pattern driven by greenhouse gases and anthropogenic aerosols during the recent four decades	Dong Lu
Regional radiative feedbacks as drivers of Pacific SST gradients in a hierarchy of models	Burls Natalie
Contrasting Impacts of Northern and Southern Extratropical Forcings on Tropical Pacific SSTs: Insights from 1979–2024 and Implications for Future Projections	Hwang Yen-Ting
Unveiling the role of South Tropical Atlantic in winter Atlantic Niño inducing La Niña	Wang Xin
Predictable Equatorial Atlantic variability from atmospheric convection-ocean coupling (ONLINE)	Nnamchi Hyacinth
<i>Lightning Talks</i>	<i>POSTER presenters</i>

Posters

Introducing TBIMIP: The Tropical Basin Interaction Model Intercomparison Project	Richter Ingo
Land surface feedback and rainfall bias in the dynamical models with different physical parametrizations	Gautam Pratibha
Modulation of Diurnal Rainfall Cycle by BSISO during Boreal Summer over western part of Indonesia and Southeast Asia	Permana Donaldi
The influence of intraseasonal oscillations on rainfall variability over Central Africa: case of the 25–70 days variability	Wamba Tchinda Claudin
Modelling the extreme rainfall and land use land cover change induced flood hazard vulnerability in the north-eastern region of Bangladesh	Islam Md. Anowarul
Long-term rainfall variability along the west coast of India and its teleconnections	Manjunatha Busnur

Ocean-Climate Observations and Modelling

Wednesday, 24 September

11:00-12:30 **Session 2 Ocean-Climate Observations and Modelling 1**

Location: Bali Room

Conveners: Rima Rachmayani, Mauricio Mata, Chunxue Yang

Enhancing Spatial Analysis of Sea Level Rise in the Bali-Lombok Sea Using Marine AWS, Tide Gauge, Satellite Altimetry, and Numerical Model Integration	Putu Hadi Wiguna Pande
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Advancing Ocean Modeling in the Bay of Bengal: Validating FIO-COM and Assessing Nonbreaking Surface Wave-Induced Mixing Effects	Mowsumi Tahir Jannat
Sea Surface Salinity Variability of Central Indian Ocean – Western Indonesia Waters 1993-2019	Bernawis Lamona
Observed Freshwater Dynamics in the Banda Sea	Iskandar Iskhaq
Transport and Variation of the Indonesian Throughflow at Halmahera Sea through Jailolo and Gebe Straits	Wang Zheng
Indonesian Throughflow salinity and SST variability since the 1750s	Zinke Jens

13:30-15:00 **Session 5 Ocean-Climate Observations and Modelling 2**

Location: Bali Room

Conveners: *Wahyu Pandoe, Paul Spence, Chunxue Yang*

An absence of moorings in the western Tropical Pacific: what are the main consequences and risks to climate research and prediction?	Cravatte Sophie
China's Activities in Ocean Observations in the Northwest Pacific	Chen Zhaohui, Xiaopei Lin
Mapping sparse ocean observations: What can we learn from synthetic observing systems in models?	Nissen Cara
Ocean reanalysis inter-comparison over the global Ocean	Rahaman Hasibur
The Marine Environment Reanalyses Evaluation Project MER-EP, towards an improved knowledge of the global ocean environment of the past decades, to support ocean applications and ocean prediction	Bourdallé-Badie Romain, Chunxue Yang

Lightning Talks

POSTER presenters

Posters

Regional water mass transformation due to global climate change	Stanev Emil
Diffusive and Adiabatic Meridional Overturning Circulations in the Cooling Abyss of the Indo-Pacific Ocean	Han Lei
Study of the Depth of Thermocline (DOT) Based on Planktonic Foraminifera Abundance During the Younger Dryas Period in the Makassar Strait	Rachmayani Rima
A Fully Coupled High-Resolution Ocean-Atmosphere Model around the Lombok Strait	Kartadikaria Aditya R.
A new ocean regional projection dataset with 10 km resolution for the North Pacific d4PDFv2-Ocean and its application to coastal downscale modeling around Japan	Urakawa Shogo
Ocean modelling for climate research: the role of the CLIVAR OMDP	Iovino Dorotea

Seasonal and Interannual Variability of Freshwater Flux in the Labrador Coastal Current: Insight from OSNAP Mooring Data (ONLINE)

Hossain Md Shahadat

Biogeochemical Processes and Climate Interactions

Wednesday, 24 September

11:00-12:30 **Session 3 Biogeochemical Processes and Climate Interactions**

Location: Sedap Malam Room

Conveners: *Fei Chai, Nicole Lovenduski, Lijing Cheng*

Hindcast-based BGC+ Index Simulation for Acidification and Eutrophication Monitoring

Wahyudi A'an Johan

Assessing the current state of Indian Ocean acidification, its driving mechanisms, and projected near-future changes

Apurva P Joshi

Variability of Net Primary Productivity in the Northwest Atlantic from a Multi-Datasets Perspective

Suhita Ni Putu Asri Ratna

Tracking climate impacts on Kuroshio marine fish communities using environmental DNA

Yang Jiwei

Blue carbon is an overlooked carbon sink under climatic change

Bobrik Anna

Lightning Talks

POSTER presenters

Posters

Significant Intraseasonal Variability of Surface Chlorophyll-a in the Western Pacific Western Boundary Current System

Zhou Hui

A Strategic Approach to Marine Protected Areas Based on Larval Connectivity in the Lombok Strait

Kartadikaria Aditya R.

Climate Variability as a Driver of Coastal Ecosystem Stressors in the Coral Triangle: A Case Study from the Derawan Islands, Indonesia

Faruq Khadami

Assessing Carbon Sink Dynamics in India: Projections from Climate Models (ONLINE)

Gupta Smrati

Artificial Intelligence: Role in Climate-Ocean Research and Prediction

Wednesday, 24 September

13:30-15:00 **Session 6 Artificial Intelligence: Role in Climate-Ocean Research and Prediction**

Location: Sedap Malam Room

Conveners: Mat Collins, Joanna Staneva, Komang Dharmawan

AI deep learning for climate forecasts	Luo Jing-Jia
Atlantic and Benguela Niño predictable months in advance, After All!	Keenlyside Noel
A data-driven approach to mesoscale ocean forecasting	Oke Peter
Hybrid Approach: Combining Physical and CNN-Based Cloud Fraction Parametrizations for Enhanced NWP Performance	Rath Subhrajit
Key role of the MJO on humid heatwaves in the tropics and in southeast Asia: an opportunity for AI-based forecasting	Izumo Takeshi
Towards Explainable El Niño Predictions and Understanding Climate Model Biases (ONLINE)	Zhao Sen
<i>Lightning Talks</i>	<i>Poster presenters</i>

Posters

Machine learning-based long-term spatial reconstruction of surface total alkalinity for the northern Indian Ocean.	Apurva P. Joshi
Hybrid Model Based on MCS Numerical Scheme and ANN Artificial Intelligence for Simulation and Risk Evaluation of Coastal Erosion in South Bali	Dharmawan Komang
Ocean Prediction Model for SSH and SST in the Western Indian Ocean using Deep Learning Technique	Maggero Balla
Role of Artificial Intelligence and Remote Sensing (AIRS) to study the Air-Sea CO ₂ exchange and Aquatic toxicology to develop physicochemical and Spectroscopic methods, to Control Water Aquatic Pollution (ONLINE)	Goswami Virendra

Cascading and Compound Event

inc. Climate Variability and Change

Wednesday, 24 September

16:30-18:00 **Session 7 Cascading and Compound Event**

inc. Climate Variability and Change

Location: Ballroom

Conveners: *Albertus Sulaiman, Rahman As-Syakur, Bolan Gan*

Global and Regional Drivers for Exceptional Climate Extremes in 2023-2024: Beyond the New Normal	Minobe Shoshiro
Accelerating increases in heat waves durations under global warming	Martinez-Villalobos Cristian
Magnified urban heat island intensity during heatwaves in East Asia	Jia Gensuo
Enhanced Future Risk of Soil Moisture Drought despite Wetter Conditions in South Asia	Aadhar Saran
Southeast Asia's highest CMIP6-based convection permitting climate change projections to date	Moise Aurel

Lightning talks

Poster presenters

Posters

Unique Patterns of the Indian Ocean Dipole events since 2019	Makarim Salvienty
Assessing the impact of Western Central Pacific SST anomalies on rainfall over Indonesia	As-syakur Abd. Rahman
Monitoring ENSO under a warming climate: Southeast Asia Perspective	Turkington Thea
Evapotranspiration in a Changing Climate: A Multi-Parameter Analysis of Recent Trends and Seasonal Variations (ONLINE)	Hasanapuram Sushmitha
Spatial-Temporal Characteristics of Glacier Cover Over Mountains of Eastern Africa Region	Mbithi Daniel
Spatial and temporal variability of extreme rainfall events and their precursor features over Peninsular Malaysia (ONLINE)	Chenoli Sheeba

Climate Variability and Change

Thursday, 25 September

08:30-10:30 Session 10 Climate Variability and Change

Location: Ballroom

Conveners: *Salvienty Makarim, Soon-Il An, Bolan Gan*

Evaluating Three Decades of NMME Hindcasts to Assess Model Performance in Predicting ENSO Onset (ONLINE)	Ehsan Muhammad Azhar
Role of Salinity Barrier Layers on Atlantic Niño Events	Liu Hailong

Understanding 21st-Century ENSO Complexities: The Interplay of Tropical and Subtropical ENSO Dynamics	Yu Jin-Yi
Strengthening of the equatorial Pacific upper-ocean circulation over the past three decades	Tuchen Franz Philip
Tug of war between atmosphere and ocean in controlling ITCZ	Hu Aixue
Impacts of Climate Change on the Tropical Pacific and El Niño Southern Oscillation	Collins Matthew
Nonlinear ENSO response to formation of a permanent El Niño-like state under persistent greenhouse warming	Geng Tao
Emulating GCM Experiments with reduced-complexity models: Insights into tropical interbasin interactions	Shoichiro Kido

Ocean Processes and Extremes

Wednesday, 24 September

16:30-18:00 Session 8 Ocean Processes and Extremes 1

Location: Bali Room

Conveners: Emil Stanev, Roxy Koll, Ivonne Radjawane

Quasi-convergence Conditions during Normal, El Niño, and La Niña Years for the Maritime Continent	Kartadikaria Aditya R.
Dramatic effect of Indonesia Throughflow variability to cyclone events in the Banda Sea	Pratama Khafid Rizki
ENSO-controlled coastal upwelling off north New Guinea regulates interannual deep-water renewal in Kao Bay, Halmahera Island of Western Equatorial Pacific	Salamena Gerry
Intraseasonal Sea Level Variability in the Java Sea and Its Ocean-Atmosphere Driving Mechanisms	Sinaga Azka Afta Tarissa
ENSO-driven variability of water masses in the Tasman Sea	Rykova Tatiana

Lightning Talks

Poster Presenters

Posters

The dynamical mechanisms controlling the equilibrium state transition within the Mindanao-New Guinea Confluence (ONLINE)	Li Yuxuan
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Characteristics of Non-Linear Solitary Waves in the Nusa Penisa Sill, Lombok Strait and the Influence of the Indonesian Throughflow	Musyaffa Ahdan
Salinity characteristics during Marine Heatwaves in Bay of Bengal	Singh Shikha

Thursday, 25 September

08:30-10:30 Session 11 Ocean Processes and Extremes 2

Location: Bali Room

Conveners: *Ivonne Radjawane, Roxy Koll, Lei Han*

Toward a mechanistic characterisation of marine heatwaves	Holbrook Neil
Surface and Subsurface Dynamics of Northeast Pacific Marine Heatwaves	Capotondi Antonietta
Identification of Extreme Sea Levels and Concurrent Marine Heatwaves- Extreme Sea Levels in SETIO Waters 1993-2022	Boedihardjo Denise
Variability of Marine Heatwaves in the Tropical Indian Ocean with special emphasis on El-Niño decay phase	Pothula Srujitha
Positive Indian Ocean Dipole Intensifies Marine Heatwaves along the West African Coast	Zhang Lei
Caribbean Sea Marine Heatwaves tied to Indian Ocean Marine Heatwaves	Li Jianping
Drivers of the extreme North Atlantic marine heatwave during 2023	England Matthew
Subsurface Marine Heatwaves in the Tropical Western Pacific Ocean: Extreme Events, Drivers and the Role of Subsurface Eddies (ONLINE)	Hu Shijian

Societal Impact

Wednesday, 24 September

16:30-18:00 Session 9 Societal Impact 1

Location: Sedap Malam Room

Conveners: *Muh Farid, HK Ramaraju, Hindumathi Palanisamy*

Impact of ENSO and the IOD on global economy	Cai Wenju
Impacts of the 2020–2023 Triple-Dip La Niña on Rainfall in Southeast Asia	Samanta Dhrubajyoti

Impacts of Marine Heatwaves on the Bay of Bengal's Coastal Ecosystems and Communities: Drivers, Adaptation Strategies, and Enhancing Resilience	Das Mohan Kumar
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Impact of warming Indian Ocean on different facets of life in India	Krishnapillai Shadananan Nair
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Projection of Climate Change Impact on Oldeman Climate Classification in Indonesia (ONLINE)	Wiratmo Joko
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Lightning Talks

Poster presenters

Posters

Climate Change induced Sea Level Rise and Coastal flooding Vulnerability in Chennai region, TamilNadu	Sudharson G
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Gaps and Challenges in Addressing the Societal Impact of Climate Variability and Climate Change in the Indian Coastal Metropolitan City due to Interactions with Complex Ocean and Atmospheric Processes: An Example of Bridging Science and Society in Southeast Asia and Beyond (ONLINE)	Mandal Shailendra
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Tidal Reconstruction of Three Cruise Ships Harboursing Simultaneously in Benoa Harbour in Respect to Modern Navigation File S-100	Surya Dharma Candrasa, Kartadikaria Aditya R.
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Seawater Ingress Monitoring at River mouths due to tidal dynamics	Muthiah Krishnaveni
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Climate Variability and Predictability of the Mediterranean: research progress and climate change impacts in the MENA region	Badiaa Chelli
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Water security through science -based cooperation and Echo-hydrology for sustainability	Elemide Oyebola Adebola
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Science to Society: An Educational Model for Climate Resilience in Bangladesh and its Potential for Regional Application	Deb Biplob, Hermanto
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Thursday, 25 September

08:30-10:30 **Session 12 Societal Impact 2**

Location: Sedap Malam Room

Conveners: Nelly Florida Riama, Juliet Hermes, Muh Farid

Spatial Distribution and Prediction of Extreme Rainfall Over Indonesia for supporting Key Pillar of Indonesia Early Warning for All	Ripaldi Adi
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An Application of WRF-ARW/WRF Hydro Model Coupled in Flood Simulation in South Tapanuli Region (Case Study 12 - 15 March 2025) (ONLINE)	Siregar Plato
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Assessing the Socioeconomic Footprint of Tornado Events in Indonesia: A 14-Year Spatio-Temporal Impact Analysis (2010–2024)	Kiki Kiki
Bridging Science and Society through CLIVAR Initiative: Tropical Cyclones as a Catalyst for Coastal Fisheries and Mangrove Resilience in the Goni and Haiyan Corridors (Catanduanes and Aklan) in the Philippines	Masagca Jimmy
Empowering Communities in Tamilnadu: Human Dimensions and Foresight of Oceanic and Climatic Shifts	Sangeetha R
Comparative Analysis of Drought Classification Using SPI and SPEI Across Arid and Semi-Arid Climatic Zones of India (1981–2020) (ONLINE)	Bharghavi Kandula
Could solar radiation management (SRM) ameliorate or exacerbate the impacts of climate change in Africa?	Lennard Chris
Advancing Ocean20: Strengthening Science to Society initiatives through partnerships (PRE-RECORDED)	Morris Tamaryn

Breakout Sessions, Thursday, 25 September

11:00-12:25

Breakout Session 1: Climate, atmospheric processes, societal impacts

Location: Ballroom

Panellists: Juliet Hermes, Hindumathi Palanisamy, Masa Kageyama, Bolan Gan

Remote Triggering of a North Pacific Marine Heatwave by the 2022 Indian Summer Monsoon	Wang Chunzai
Impacts of the unprecedented global marine heatwaves in 2023 and 2024	Smith Katie
Linking Large-Scale Climate Drivers to Hydroclimate Variability over South Asia	Satyaban Bishoyi Ratna
Impacts of regional aerosol forcing uncertainty on the simulated historical global warming (ONLINE)	Rashid Harun

Discussions

Breakout Session 2: Ocean processes, modelling, observations, biogeochemistry, AI

Location: Bali Room

Panellists: Roxy Koll, Shoshiro Minobe, Mauricio Mata, A'an Wahyudi

Advancing Ocean Observations for Climate Action: The Synergy of CLIVAR, GOOS, and GCOS	Yu Weidong
Robust Yet Diverse Southern Ocean Teleconnection from Antarctic Meltwater: Insights from SOFIA	Purich Ariaan
Development of ECCO downscaled regional simulations of the Antarctic coastal seas (ONLINE)	Nakayama Yoshihiro
Physical processes and biological productivity in the upwelling regions of the tropical Atlantic	Brandt Peter

Discussions

Breakout Session 3: Indo-Pacific Ocean, Climate, and Linkage

Location: Sedap Malam Room

Panellists: Janet Sprintall, Ingo Richter, Andrea Taschetto, Sophie Cravatte

Indonesian Throughflow Monitoring Program: Past, Present, and Future	Susanto Raden Dwi
Drivers of Indo-Pacific upper ocean heat and freshwater variability: A synthesis of coral proxies and ocean models	Murty Sujata

Tropical basin interactions in changing climates since the Last Glacial Maximum

Okumura Yuko

Interactions between Pacific and Indian Ocean interannual variability

Stuecker Malte

Discussions

Early Career Researchers Session

Thursday, 25 September, 14:00

Location: Bali Room

The Early Career Researchers (ECR) session will include a first slot dedicated to mentoring and discussions about opportunities and challenges for ECRs, and a second slot for brainstorming cutting-edge research questions with the aim of developing a research proposal led by ECRs and mentored by senior scientists. This session is the first step in designing a proposal for the establishment of a CLIVAR ECR panel.

Agenda

Chairs: Shikha Singh (IORP Co-chair) and Philip Tuchen (ARP)

14:00-15:30 - Open to all career stages

- Welcome
- Roundtable introduction
- Introduction to the ECR Session, CLIVAR, and ECRs in CLIVAR
- Mentoring talks:
 - Dr. Chris Lennard - University of Cape Town (WCRP Academy)
 - Dr. Masa Kageyama - LSCE (CLIVAR Scientific Steering Group)
 - Prof. Francois Engelbrecht - University of the Witwatersrand (CLIVAR Scientific Steering Group)
- Interactive discussions (sharing experiences and challenges)

16:00-17:30 - For ECRs, mentoring from senior scientists is welcome

- Brainstorming on current and future challenges in ocean and climate science
- Design and draft the research proposal and the proposal for a CLIVAR ECR panel

All interested participants - both ECRs and senior scientists are invited to register their interest in attending via the following link by September 19, 2025.

<https://forms.gle/m1MQ4ws65rmJCPwU9>

This session is a pivotal opportunity to foster mentorship, build networks, and catalyze innovative research led by the next generation of scientists.

Side Events

Thursday, 25 September, 14:00

Enhancing International Ocean-Climate Research Collaboration in a Changing Climate

Location: Sedap Malam Room

Date and time: Thursday, 25 September, 14:00-17:30

Register your interest to participate by 22 August

2025: <https://forms.gle/z2DPAQVu1J4dG9uaA> and complete this optionally anonymous **survey** **before 25 September:** <https://forms.gle/BMFpDxtDoHMnkdjb6> to facilitate the discussion and contribute to the review. *If you are not able to access these forms, you may download them [here](#) and [here](#), fill them out, and email to icpo@clivar.org.*

Background

We have seen in these recent times how the impacts of climate variability and change have been unfolding before our eyes, with occurrences of extreme events around the world impacting on the environment, society, and economy. All of these are happening in the backdrop of ongoing and rising geopolitical tensions and the prospect of global disruptions (e.g., pandemic). Predicting and anticipating these extreme occurrences to inform the society and manage risks requires active ocean-climate research and sustained advances in observations and modeling on global and regional scales that provide critical infrastructure to research. Such efforts require synergistic international collaboration and coordination in research, observations, and modeling, unconstrained by borders and geopolitics.

Several large-scale organisations, programs, and activities exist today that coordinate, promote, and drive ocean-climate research. However, there is a lack of systematic review on the scientific scope, regional coverage, funding opportunities, and existing synergy among programs. Such a review will help identify research gaps that may benefit from an enhanced collaboration among existing programs, the constraints for multi-lateral cooperation, and the potential need for new initiatives and adjustments amid the evolving challenges associated with a changing climate and global disruptions.

This side event **aims** to:

- 1) outline current and anticipated scientific and institutional challenges in ocean-climate research that could benefit from an enhanced international collaboration;
- 2) outline and review existing associated coordination activities and programs around the world; and
- 3) identify opportunities for new collaboration initiatives to enhance ocean-climate research.

The **outcomes** of this side event include:

- 1) a compiled list of collaborative organisations and activities, with the scientific scope, capabilities, regional coverage, and available opportunities (e.g., funding, training);
- 2) a review or perspective paper on the need for enhanced international coordination and collaboration to tackle challenges in a changing climate; and
- 3) potential new synergy among the participants.

Program

Facilitators: Agus Santoso, Xiaopei Lin, Fei Chai, Juliet Hermes

14:00-15:30

- Introduction
 - OceanObs'29
 - Global Ocean Summit and Global Ocean Research Union
- Sea Level Rise and WCRP, *Presenter*: Hindumathi Palanisamy
- Coordinated efforts for detecting and understanding ocean oxygen change and links to heat and carbon, *Presenter*: Lijing Cheng
- Enhancing international collaboration with the palaeoclimate community, *Presenter*: Jens Zinke
- Discussions

16:00-17:30

- Strengthening International Collaboration through Ocean Observations: Lessons from Indonesia and the Data Buoy Cooperation Panel, *Presenter*: Nelly Florida Riama
- Strengthening Ocean-Climate Research in the Bay of Bengal: Regional Collaboration for a Changing Climate, *Presenter*: Mohan Kumar Das
- 2nd Cooperative Study of the Kuroshio and its Adjacent Regions (CSK-2), *Presenter*: Xiaopei Lin
- Discussions

Statement on the alignment with WCRP CLIVAR's mission and [science plan](#)

The overarching objectives of WCRP are to understand the climate system and its variability, determine its predictability and projectability, and connect climate science to policy and decision

making. CLIVAR's mission is to understand the dynamics, the interaction, and the predictability of the climate system with emphasis on ocean-atmosphere interactions.

The aims of this side event are essentially targeted towards nurturing and advancing climate science through enhancing international collaboration and partnerships. The science covered includes ocean and climate and ocean-atmosphere observations, modelling, prediction and projection, as well as new frontiers that may be considered for the next CLIVAR science plan such as biogeochemistry, AI, and societal impacts. Having this event following the CLIVAR Symposium will also frame the discussion in terms of bridging science and society. As such, the side event is in line with WCRP and CLIVAR's missions and science plan.

Friday, 26 September, 11:00

Interactive Session: "Inclusive Innovation for Ocean and Climate Observations"

Location: Ballroom

Please fill out this [registration link](#) to attend

This 90-minute side event which is co-sponsored by Rip Curl Asia will bring together scientists, innovators, surfers, fishers, and policymakers to explore and demonstrate accessible, ocean observing technologies. The session will showcase practical tools that enable inclusive participation in ocean monitoring, particularly in coastal and under-resourced regions. These technologies aim to democratize ocean observing, generate fit-for-purpose data for climate prediction, and foster regional and local resilience through inclusive participation.

The interactive session will be anchored around initiatives that expand the reach of ocean and climate monitoring by harnessing the knowledge, platforms, and commitment of local people:

Interactive Session: Inclusive Innovation for Ocean and Climate Observations
26 September | 11:00–13:00 (followed by "Science in Motion" demonstration)

Request participants to change into swimming costumes during the tea break and put clothing over the top to attend the session.

Moderator - Juliet Hermes

Welcome and Introductions (10 mins)

The session opens with BMKG leadership and DBCP Chair **Nelly Florida Riama**, welcoming participants and setting the stage for why accessible, inclusive technologies matter for ocean and climate observations, grounding the discussion in the Indonesian context.

Scene-Setting Presentations and Discussion (40 mins)

- **Patrick Gorringe** will frame the global need for accessible, scalable technologies, drawing examples from FVON, scuba-based monitoring, CoastMap, and ocean colour initiatives.

- **Faruq Khadami** will present a low-cost observation system for aquatic environments that uses AI-powered camera vision to detect floating debris, distinguishing plastics from other waste and classifying debris by size. This approach has strong potential for application in rivers, estuaries, and coastal waters, where pollution monitoring is most urgent. (3 minute video)
- **Lizzie Murray** will explain why surfers are a vital part of this story – how surfboard sensors close key coastal data gaps and how the surfing community is uniquely positioned to champion ocean stewardship.
- **Rip Curl / Professional Surfer** will zoom into the issues at Kuta Beach, sharing lived experience of environmental pressures and the potential role of sport in driving solutions.
- **Local Indonesian voice** (youth or community representative) will add personal perspective, sharing how ocean changes are felt daily and how local participation in monitoring offers empowerment and impact.

Each intervention will be short, followed by guided discussion to draw links across science, community, and policy.

There will also be time for further discussion and for participants to explore additional innovative technologies on display. **Lamona Bernawis** will showcase a Midi Secchi disc with the Forel-Ule Scale, a simple but powerful tool for tracking water clarity and colour that can be used in citizen science programmes. Together, these demonstrations highlight how both cutting-edge and accessible, low-tech approaches can contribute to a more inclusive global ocean observing system.

Closing Activity: “Science in Motion” (30-60 mins, running into lunch)

Led by Lizzie Murray, Tipi, and Rip Curl partners, participants are invited to join an immersive demonstration on the beach. Surfers, youth, and scientists will paddle or swim out with surfboard sensors, showing how accessible technologies can generate real-time data while strengthening community stewardship. The panel will remain available for informal discussion on the beach, creating a relaxed space for deeper exchanges as the session transitions into lunch.

Value Proposition for WCRP Steering Committee

This side event directly supports WCRP’s mission by:

1. Filling Observational Gaps in Coastal Regions

- The surfboard sensors and FVON provide *in situ*, *high-frequency* sea surface temperature and ocean condition data in nearshore zones—some of the most under-observed yet climate-vulnerable regions.
- These data complement satellite and model outputs, improving boundary condition accuracy and regional downscaling potential for WCRP’s modelling efforts.

2. Supporting WCRP’s Regional Climate Frameworks

- The Indonesian and African context supports the WCRP Regional Climate Activity, particularly its engagement in Southeast Asia and Africa.

- Highlight opportunities for integrating community-generated data into WCRP climate models and research
- Support regional capacity development aligned with WCRP's strategic framework

3. Demonstrating Scalable, Low-Cost Climate Observation Solutions

- These initiatives showcase alternative observing strategies that can be scaled across other tropical regions and SIDS, aligning with WCRP's interest in *sustainable, cost-effective, and adaptable climate infrastructure*.

4. Building Capacity and Equity in the Climate Research Ecosystem

- Community involvement (fishers, surfers, local youth) demonstrates inclusive observing and science democratization, echoing WCRP's focus on capacity development and diverse participation in climate science.
- Involvement of BRIN, BMKG, and local NGOs creates a model for co-designed, cross-sectoral implementation.

5. Linking Climate Research to Societal Benefit

- The discussion will explore how real-time data can support local decision-making (e.g., fishing, coastal management, early warning) and be fed into global climate models, thereby closing the loop between data generation, research, and application.
- Attracts media to the work being done not just in terms of innovative, accessible technology but also CLIVAR
- Stimulate dialogue on sustainability, equity, and open data principles in a changing climate

Panels, Research Foci, Cross-panel Meeting Agendas

[ARP] Atlantic Region Panel

DAY 2 - Tuesday 23, 2025

13:30 - 15:00

13:30 Welcome and aims - *Regina Rodrigues*

13:40 Introductions for new members - *All*

14:00 Feedback from CLIVAR SSG - *Regina Rodrigues*

14:15 Report on foci: AMOC + discussion - *Laura Jackson, Olga Sato, Aixue Hu, Ben Moat, Feili Li*

14:30 Report on foci: Ocean Climate Risk incl. Marine heatwaves - *Regina Rodrigues, Tannecia Stephenson*

14:45 Report on foci: Tropical Atlantic + discussion [[PIRATA](#)]- *Hyacinth Nnamchi, Philip Tuchen*

15:30 - 17:00

15:30 Invited talks (15 min each)

- *Peter Brandt*
- *Emil Stanev*

16:00 Individual presentations by ARP members (5 min each) - *All*

16:30 Plans for 2026 - *Regina Rodrigues*

- Terms of reference for ARP foci; plans for more regular meetings
- Plans to continue TBI focus? Coordination with other panels?
- Upwelling systems focus?
- Coordinated sessions
- Papers
- Atlantic blog: volunteers
- Projects to consider for endorsement

16:50 Upcoming membership changes - *All*

16:55 Close + next meeting - *Regina Rodrigues*

[IORP] Indian Ocean Region Panel

DAY 2 - Tuesday 23, 2025

09:30 - 9:40

Introduction to IORP, welcome guests and members

Shikha Singh, Janet Sprintall (Online)

09:40 - 10:30

5 minute talks + 2 min Q&A = 7 min each - *Shika Singh, Janet Sprintall (Online)*

- Emergence of IOD-like warming pattern in observations (includes Q&A) - *Lu Dong*
- *Ivonne Radjawane*
- *Gerry Salamena*
- *Zheng Wang*

Discussion on ITF TT

11:00 - 12:00

5 minute talks + 2 min Q&A = 7 min each *Intan Nurhati, Marie Alexandrine Sicre (Online)*

- *Marie-Alexandrine Sicre (Online)*
- *Intan Nurhati*
- *Sujata Murty*
- *Jens Zinke*

Setting up an IO Paleo Task Team (TT)

Discuss Terms of reference (ToR)

12:00 - 12:20

Progress in set up of ToR etc for Coastal TT - *Tammy Morris (Online), Pattabhi (Online), Bernardino, Eric Raes*

12:20 - 12:30 IORP Business, membership, new TTs - *Shikha Singh*

[PRP] Pacific Region Panel

DAY 2 - Tuesday 23, 2025

9:30 - 10:30

9:30 General introduction, round table

9:35 - 10:05 Discussion on the threats on the Observing System and possible actions

- Threats on the TPOS (3-5') - *Sophie Cravatte*
- How GOOS/OOPC could help (3-5') - *Weidong Yu (Online)*
- Argo deployments, contributions, possible opportunities (3-5') - *Peter Oke*
- Discussion: what can we do as a CLIVAR panel? - *All*

10:10 - 10:30 Collaboration with Pacific countries, in particular Pacific islands

- Cooperation with PISCES (3-5') - *Antonietta Capotondi*
- PCOOS and the SPC: Role and possible actions with CLIVAR (3-5') - *Jerome Aucan*
- Discussion on the reinforcement of the collaboration with Pacific countries, in particular Pacific Islands - *All*

11:00 - 12:30

11:00 SSG feedbacks on the CLIVAR PRP activities: discussion on how best to reply to recommendations

11:30 Update on WGs and ENSO webinars

12:00 Update on the workshop next year to be organized the week before the JpGU-AGU Joint Meeting, 20-22 May 2026, in Tokyo, Japan

15:30 - 17:00 TBI/PRP/CDP: TROPICS WG session

The cross-panel session will include introductions from the TROPICS, TBI and PATAAC groups followed by Q&A and a brainstorming exercise to identify key knowledge gaps and research priorities that we should address in those areas, with further discussions to explore pathways forward. This session will be in person only.

[SORP] CLIVAR/CliC/SCAR Southern Ocean Region Panel

DAY 2 - Tuesday 23, 2025

13:30 - 15:00

Opening and self-introduction

- Presentation of SORP including finances by co-chairs (~ 10 min)
- SORP member self introductions (2 slides max, 5 min incl. Q&A each, ~ 45 min), both on site and remote participants.
- Mapping out participation in other panels, expertise, coordination, activities

Operation of SORP

- Monthly telecons
- In person meetings (around conferences, business meetings)
- Communication within SORP
- Membership : Recruitment for this year
- New co-chair for beginning 2027

15:30 - 17:00

SORP Activities Part 1

- SOFIA - *Ariaan Purich*
- PROS4SORP Webinars
- Review cross-shelf heat paper - *Channing Prend*
- Polar heat workshop - *Carolina Dufour*

DAY 4 - Thursday 25, 2025

14:00 - 15:30

SORP Activities Part 2

- Antarctica InSync - *Alexander Haumann*
- Discussion on proposed new SORP activities related to InSync and IPY

[SORP/OMDP/NORP] Cross-panel meeting

DAY 4 Thursday 25, 2025

16:00 - 17:30

Round of introductions (5 min)

Name, affiliation, panel

Part 1 - Regional modelling (30 min)

- Presentation of CLIVAR-CORDEX - *Angélique Melet* (5 min)
- Discussion on regional modelling in polar regions, including both regional models and global models with regional refinement and focus on the poles: what exists already? What is missing? (30 min)

Part 2 - Ocean Model Intercomparison Project (OMIP) (30 min)

- Presentation of OMIP - *Gokhan Danabasoglu* (5 min)
- Discussion on what OMIP could focus on in polar regions (important questions to address, analyses, etc) and whether new observations will be available for model evaluation through Antarctica InSync (30 min)

Part 3 - Joint activities between NORP, SORP and OMDP (25 min)

- Advertisement of the Polar heat workshop in Glasgow (Feb. 28 - Mar. 1st, 2026)
- Joint modelling efforts in polar regions: discussion on what to prioritize in ocean modelling (e.g. resolution), OSSEs to guide the planning of the next IPY
- Organisation of joint activities: summer school, workshop, review or white papers

[OMDP] Ocean Model Development Panel

DAY 2 Tuesday 23, 2025

13:30 - 17:00

OMDP overview (15 min) - *Manita Chouksey*

Invited guest talk 1 (15 min): Energetically consistent climate modelling - *Carsten Eden*

Invited guest talk 2 (15 min): Indian Ocean simulation in a suite of global and a regional model - *Hasibur Rahman*

Regional downscaling topic discussion (15 min)

Updates on Ocean Model Intercomparison Project (OMIP) Working Group (15 min)

OMDP participation in the Polar Heat Workshop 2026

Update on OMDP webinars

Talk by GSOP co-chair (15 min): Engagement with GSOP - *Peter Oke*

Discussions

*including coffee break 15:00-15:30

[MP] CLIVAR/GEWEX Monsoons Panel

DAY 2 Tuesday 23, 2025

15:30 - 17:00

Opening remarks - *Thea Turkington*

Updates from Working Groups (WG)

Updates from the International Monsoons Project Office

Discussion on pressing monsoon research (questions to be sent separately)

Discussions on involvement in GPEX and its Working Groups activities

Discussions on the proposed MP's new Observational-cum-Modelling project planned to be submitted to CLIVAR/GEWEX/WCRP for approval/funding

Open Discussion on the ongoing MP & WG activities - *All*

[CDP] Climate Dynamics Panel

DAY 2 Tuesday 23, 2025

13:30 - 15:00

CDP 2026 Annual workshop (updates, if any)

CDP research foci and intersection with other CLIVAR panels and WCRP lighthouse activities

- Confronting high-resolution Earth-system models with observations: Complement and expand on WCRP Digital Earths km-scale Hackathon by exploring whether similar activities can be developed focusing on mesoscale-resolving high-resolution coupled climate simulations e.g. EERIE and MESACLIP datasets.
- APARC-CLIVAR joint discussion and potential for the 2027 joint CPD annual workshop: discuss the potential for a co-organized workshop between CDP and APARC on a topic of common interest.

Open Discussion

[GSOP] Global Synthesis and Observations Panel

DAY 2 Tuesday 23, 2025

11:00 - 12:30

11:00 Welcome and Introduction to GSOP - *Peter Oke*

11:05 Tidal mixing signatures observed from high-resolution sea surface temperature data - *Raden Dwi Susanto*

11:15 An Ensemble-based Coupled Reanalysis of the Climate from 1860 to the Present (CoRea1860+) - *Yiguo Wang*

11:25 The CNR-ISMAR historical ocean reanalyses - *Chunxue Yang*

11:35 Biogeochemical modelling of the Southern Ocean - *Angela Kuhn*

11:45 Comparison of reanalyses and satellite-based sea surface salinity products in the North Atlantic - *Aida Alvera*

11:55 SynObs Flagship Activities - *Yosuke Fujii*

12:05 Metrics for Observing System Experiments: demonstrating Argo impacts on regional analyses - *Peter Oke*

12:10 Discussion – plans, scope, next steps

12:25 Closing Remarks - *Aida Alvera*

[TBI] Tropical Basin Interaction Research Focus

DAY 2 Tuesday 23, 2025

11:00 - 12:30 TBIMIP Session

Presentations:

- a. “Tropical Basin Interactions in CESM2 Pacemaker Experiments” - *Chunzai Wang*
- b. “Examining ENSO skill degradation in the SINTEX-F2 pacemaker hindcast experiments” - *Ingo Richter*

Current data sharing

Toward publishing TBIMIP output on the ESGF

Papers to be prepared by the TBIMIP group

13:30 - 15:00 RF TBI Session

Updates from the 4 Working Groups

Prepare outline for TBI review paper and assign writing tasks

Discuss the legacy of RF TBI

Schedule TBI webinar series

[TBI] Tropical Basin Interaction Research Focus

DAY 4 Thursday 25, 2025

16:00 - 17:30 TBI Open Session

Future perspectives for TBI research (*Wenju Cai* and *Jin-Yi Yu*, ~10 min each)

Brief highlights from the RF TBI activities, organized along the four RF TBI Working Groups.

- TBIMIP - *Ingo Richter*
- Interbasin LIM - *Shoichiro Kido*
- Toward a pantropical observation system - *Ingo Richter on behalf of Greg Foltz*
- Paleo reanalysis or similar - *Noel Keenlyside / Yuko Okumura*

Discussion on the RF TBI legacy

[MHWs] Marine Heatwaves in the Global Ocean Research Focus

DAY 2 Tuesday 23, 2025

11:00 - 12:30 RF Meeting

Short presentations from all the members (5 min each)

Discussion on future activities

DAY 4 Thursday 25, 2025

14:00 - 15:30 Open Session

- Summary of marine heatwaves presentations at CLIVAR Symposium - *Antonietta Capotondi*
- Drivers of marine heatwaves in different regions – *Neil Holbrook*
- Biogeochemical extremes and their interactions with physical extremes – *Nikki Lovenduski*
- Marine heatwaves at the coasts – *Katie Smith*
- Discussions

[TROPICS] TBI-PRP-CDP Cross Panel Meeting

DAY 2 Tuesday 23, 2025

15:30 - 17:00

Introduction: goals, session structure, introduction of speakers (5 min) - *Malte Stuecker*

Three presentations (15 min each, including 3 min Q&A)

- TROPICS Working Group - *Mat Collins*
- PATAC Working Group - *Andrea Taschetto*
- TBI Research Focus - *Ingo Richter*

Breakout exercise (20 min)

- Aims (5 mins) - *Malte Stuecker, Ingo Richter, and Andrea Taschetto* (5min)
- Discussion (15 min) - Brainstorm gaps in each area

Closing (5 min) - *Malte Stuecker*