

Ministry of Earth Sciences, Govt. of India, Hyderabad-500090



International Training Centre for Operational Oceanography (ITCOocean) -A Category-2-Centre of UNESCO

IOPredict-2024- An International Oceanography Workshop

Day-1	9 th December 2024 (Monday)				
0800-0900	Registration				
0900-0915 hrs	Opening Session				
0915-1000 hrs	Lead Talk	S. S. C. Shenoi	The Importance of Ocean Forecasts and Services: Safeguarding Lives, Ecosystems, and Marine Operations		
1000-1300 hrs (25 min talk	Invited talks	Arya Paul	Improving circulation in north Indian Ocean through data assimilation		
+ 5 min Q&A)		Sreenivas P	The Ocean observations - methods of data assimilation and its importance		
and Tea break		Biswamoy Paul	Ensemble Forecast Sensitivity to Observations: A modified Observing System Experiment for a stratified ocean		
(30 min.)		Jayaram Valluru	Role of Hybrid Machine Learning Algorithms for Ocean State Prediction		
		Balaji B	Improving ENSO Forecast Accuracy: Multi-year Predictions with Bayesian Convolutional Neural Networks		
1300-1400 hrs			Lunch Break		
1430-1530 hrs (25 min talk	Invited talks	Nikesh Narayanan	Adding Surface wave coupling in a global coupled modeling system		
+ 5 min Q&A)		Semanth M.	Improving Ocean wave forecast in the Indian Ocean through Data Assimilation		
Tea Break (30 min)		PLN Murty	Towards the improved storm surge and inundation computations along the Indian coasts		
1600-1720 hrs (17 min talk + 3		Meenakshi Sreejith	The past, present and future of Indian Ocean wave climate using CMIP6 GCM winds		
min Q&A)	talks	Abhijith Raj	Winds and waves over the Oceans-revisiting windstress over the Bay		
		Gideon Ovwuwonye	Sea surface conditions in the Bermuda Sea.		
		Mithun Sudhakar	Assessment of wave energy potential in the Indian EEZ		
Day-2	10 th Decembe	er 2024 (Tuesday)			
0915-1000 hrs	Lead talk	Rashmi Sharma	Major advances in the space-based observations for oceanographic research		
1000-1300 hrs	Invited talks	Tata Sudhakar	Observations Using Moored buoys		
(25 min talk		Praveen Kumar	Air Sea Fluxes over the oceans		
5 min Q&A) and		Girish Kumar	Motivations and Insights from the INCOIS Processes Specific Observation Campaign in the Arabian Sea		
Tea Break (30 min)		Amol Prakash	West India Coastal Current: Observations and Theoretical Studies		
		Siva Srinivas	Enhancing Observations Data: A Machine-Learning Approach to Fill Gaps in the Moored Buoy Data		













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1300-1400 hrs			Lunch Break		
1430-1530 hrs (25 min talk +	Invited talks	Kevin Martins	Ocean waves contribution to nearshore circulation: observations and predictions, with a focus on extreme water levels		
5 min Q&A) +		Sanil Kumar	Wind waves in the Indian Shelf Seas: Influencing factors and temporal variations		
Tea Break (30 min)		Remya P. G.	Drivers of Wave-Induced Coastal Flooding in the Indian Ocean		
1600-1730 hrs	Visit to INCC	Visit to INCOIS Facilities			
Day -3	10 th December 2024 (Tuesday)				
0915-1000 hrs	Lead talk	Vinayachandran P. N.	High resolution (~ 1 km) simulations of the Bay of Bengal Circulation		
1000-1200 hrs (25 min talk	Invited Talks	Abhisek Chatterjee	Impact of model resolution on the Indian Ocean simulation: an operational ocean perspective.		
+ 5 min Q&A)		Jithin Abhraham	Tide-induced internal gravity waves in the Bay of Bengal Observation and Numerical Modelling		
Tea Break (30 min)		Soumya Mukhopadhyay	Prolonged La Niña events and the associated heat distribution in the tropical Indian Ocean		
1200-1300 hrs (17 min talk	Contributed talks	Saraswathi Sabu	Pathway of ASHW intrusion into Bay of Bengal and its internnual variability		
+		Midhila Varan	Mesoscale eddies in the Eastern Arabian Sea		
3 min Q&A)		Athulya K.	Diurnal Variability in Air-Sea Interactions Induced by the Land Breeze in the Bay of Bengal During Summer		
1300-1400 hrs			Lunch Break		
1400-1700 hrs	Invited Talks	Sudheer Joseph	Integrated Ocean Energy in the Indian EEZ		
(25 min talk +		Sandhya K G	Development of Small Vessel Advisory Services for the Indian Coast		
5 min Q&A) + Tea Break (30 min)		Harikumar R.	Studies and services on oceanographic and marine met features and processes in the Indian Ocean for Industry- demanded ocean consultancy projects/services: a boost to blue economy		
		Shubham Krishna	Cascading and Multi-Stressor Effects in Coastal Ecosystems		
		Nur Hidayah Abdulla	Leveraging the Blue Economy for Sustainable Growth and Ocean Health in Malaysia: The Role of Higher Education		
Day-4	12th December	12 th December (Thursday)			
0915-1000 hrs	Lead Talk	V. V. S. S. Sarma	Status of biogeochemical models for Indian Ocean: A way forward		
1000-1300 hrs (25 min talk +	Invited Talks	Vinu Valsala	Predicting the climate variability of small pelagic Fishery of Indian West coast using Dynamic Modelling of Fishery Population		
5 min Q&A)		Sandip	Biogeochemical dynamics and fluxes in the estuaries of		













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+		Mukhopadhyay	the Sundarbans
Tea Break		Aneesh Lotliker	Remote Sensing of HABs with an emphasis on Noctiluca
(30 min)		AnuGopinath	TBD
		Kunal Chakraborty	Indian Ocean Acidification: Development of societally relevant predictions and projections
1300-1400 hrs	Lunch Break	<u> </u>	
1400-1700 hrs	Contrbuted talks	Apurva Joshi	Development of a ML-based Surface Total Alkalinity Data Product for the North Indian Ocean
(17 min talk + 3 min Q&A) + Tea Break (30 min)		Prasanna Kanti Ghoshal	Use of an advanced machine learning algorithm to improve a bio-physical model-simulated surface pCO2: A Hybrid Approach
		Sankirna Joge	Dimethyl Sulfide (DMS) predictions using the machine learning model
		Jhinook Mitra	Is the natural fish population of the Indian Sundarbans stressed? : A comparative account of five species in relation to environmental variables
		Oluwadunsin Samuel	geochemical concentration of the heavy metals in Ayetoro, Coastal Area of Ondo State, Nigeria.
		Rupam Kalita	TBD
		Sridevi Bobbili	Towards Improving Model Simulations: A New Climatology of the Nitracline Depth in the Bay of Bengal
Day-5	13 December	r (Friday)	
0915-1000 hrs	Lead Talk	Gnanaseelan C.	Gnanaseelan (Lead) (MC) 13 th How predictable is Indian Ocean up to a decade in advance
1000-1130hrs	Invited talks	Nidheesh A G	Global-to-local sea-level change: A climate perspective
(25 min talk + 5 min Q&A) + Tea Break (30 min)		Bajish C. C.	Understanding the Unprecedented Shift in Weddell Sea Maximum Sea Ice Extent in 2023
1130-1310 hrs (17 min talk	Contributed talks	Clea Welch	Subsurface manifestation of MHWs in the South West Indian Ocean
+ 3 min Q&A)		Manikandan Marimuthu	Quantitative Assessment of Long-term Shoreline Dynamics Using CoastSat Python Toolkit
		Athul C. K	A Machine Learning Framework for predicting daily- averaged sea level anomaly and surface currents with a lead time of 7 days
		Arya Rajan	Machine Learning integrated Ensemble Kalman Filter Data Assimilation Algorithm for real-time Sea Surface Temperature Prediction
		Tullala Gaziani	Evaluation of the trends in temperature in the tropical Indian Ocean













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1310-1400 hrs	Lunch Break				
1400-1615 hrs	Special session on WMO RSMC				
1400-1445 hrs	Lead Talk	WMO	TBD		
1445-1615 hrs	Invited talks	INCOIS	TBD		
(25 min talk		IMD	TBD		
+ E min ()%- ()					
5 min Q&A) +					
Tea Break					
(30 min)					
1615-1700 hrs	Valedictory Session				

^{*} The pre-conference tutorial will be held during 4-6 December 2024.









