International Workshop and Summer School
Oceans in a Changing Climate and their Prediction

When: 8 – 18 July 2025
Where: CAOS, IISc, Bengaluru

Topics

- Ocean Science
- Modeling
- Prediction
- Machine Learning

Highlights

- Expert-led Keynote Sessions
- Invited Lectures
- Research Presentations
- Hands-On Technical Training

Applications Open

Present and prospective PhD Students, Postdocs, Early Career Scientists

To Apply

Send an email to: office.dccc@iisc.ac.in
Subject Line: Oceans Workshop 2025
Include the following information in a document as attachment:
Full Name
Profession (if student, mention course and year)
Institution/Organization
Contact Information (Email and Phone Number)
Short Statement (about 100 words) on how this workshop will benefit you
Apply Before: 13 April 2025

Co-convenors

P. N. Vinayachandran & Deepak Subramani

Supported By

Centre for Atmospheric and Oceanic Sciences & Divecha Centre for Climate Change, IISc Bengaluru
BRICS PARADIGM Project, Department of Science & Technology, Govt. of India

Confirmed Speakers and topics

Jennifer Veitch, SAEON , Cape Town : Regional Ocean Modelling with the Coastal and Regional Ocean Community

Laura Braby, SAEON , Cape Town : Model evaluation methods: South African Case study

Jennifer Veitch, Laura Braby and Giles Fearon, Hand on session : Running a downscaled operational forecast system in CROCO

Jennifer Veitch, Laura Braby and Giles Fearon, Hand on session : Particle tracking using OpenDrift

Fangli QIAO, First Institute of Oceanography, China: New generation models for ocean and climate prediction

Roman Sedakov, Shirshov Institute of Oceanology, Russian Academy of Science: "General circulation modelling with NEMO"

Mikhail Krinitiskiy, Moscow Institute of Physics and Technology, : Machine learning for discriminative and exploratory tasks in Earth Sciences

Mikhail Krinitiskiy, hands-on session on : Artificial neural networks for discriminative and exploratory tasks in Earth Sciences: building, efficient training and debugging

Mauro Cirano, Institute of Geosciences, Federal University of Rio de Janeiro, : The role of transients in the circulation along the Brazilian Continental Margin

Nathan Steiger, Institute of Earth Sciences, Hebrew University of Jerusalem : Oceanic influences on long-term hydroclimate.

Nathan Paldor, Institute of Earth Sciences, Hebrew University of Jerusalem: Non-harmonic (trapped) midlatiude wave theory,

Aviv Solodoch, Institute of Earth Sciences, The Hebrew University of Jerusalem: The Oceanic Overturning Circulation: from small scale mixing to climate impacts.

Changshui XIA: First Institute of Oceanography, Ministry of Natural Resources, China

Wave-tide-Circulation coupled model and its application in the operational ocean forecast -

Hezi Gildor, Institute of Earth Sciences,The Hebrew University of Jerusalem: Ocean chaotic mixing

Deepa N Subramani, Indian Institute of Science,: Machine learning applications in ocean observations, modelling, and forecasting.

P. N. Vinayachandran, Indian Institute of Science: Application of Ocean General Circulation models

To be upated …

For updates visit: https://caos.iisc.ac.in/index.html