



Joint Conference of the
13th International Conference on Tropical Marine Environmental Changes (MEC) &
6th CLIVAR Climate Dynamics Panel (CDP) Annual Workshop on
“Abrupt changes and tipping points”
Apr. 13-16, 2026 | Guangzhou, China

First Announcement

Background

The *State Key Laboratory of Tropical Oceanography* has a long tradition of organizing the **International Conference on Tropical Marine Environmental Changes (MEC)** every two years since 2001. This well-established series provides a global platform for discussing the latest progress in ocean and climate sciences, while also extending to interdisciplinary studies that connect with marine biogeochemistry, ecosystems, geology, and atmospheric sciences.

The **CLIVAR Climate Dynamics Panel (CDP) Annual Workshop** shares a similar mission, aiming to bring together scientists to advance understanding of ocean–atmosphere interactions and climate dynamics, including their variability, predictability, and role in global climate change.

In 2026, these two events will be held jointly under the theme **“Abrupt Change and Tipping Points”**, hosted by the South China Sea Institute of Oceanology. The joint conference aims to foster interdisciplinary dialogue on how nonlinear processes and feedbacks can drive rapid and potentially irreversible shifts in the Earth system. The joint meeting will provide an opportunity for scientists worldwide to share their insights into the mechanisms, early warnings, and impacts of abrupt changes in the ocean, atmosphere, and Earth's climate system, and their connections to marine ecosystems, biogeochemistry, paleoclimate, and other marine processes.

Tentative Session Topics

The joint conference will feature six scientific sessions designed collaboratively by the CLIVAR CDP and the MEC. These sessions cover a broad range of themes, including climate dynamics, ocean processes, biogeochemical and ecological responses, and marine geological perspectives, reflecting the interdisciplinary nature of abrupt changes and tipping points in the Earth system.

- Ocean–Atmosphere Interactions and Climate Variability
- Climate Tipping Elements and Earth System Feedbacks

- Predictability, Early Warnings, and Climate Risk Assessment
- Physical Ocean Processes: Abrupt Changes and Marine Tipping Points
- Marine Geology and Paleoclimate Records of Abrupt Events
- Ecosystem and Biogeochemical Tipping Points in a Changing Ocean

Registration and Logistics

A registration fee will be charged, covering attendance on all four days, morning and afternoon tea breaks and lunches, and a workshop dinner.

Domestic participant: 2,000 RMB

Domestic student: 1,000 RMB

International participant: 300 USD

International student: 150 USD

Detailed information about abstract submission, registration, and accommodation will be announced soon.

Confirmed Invited Speakers

Aixue Hu (National Center for Atmospheric Research)

Jing-Jia Luo (Nanjing University of Information and Technology)

Kathy Gunn (University of Southampton)

Shoshiro Minobe (Hokkaido University)

Yushi Morioka (Japan Agency for Marine-Earth Science and Technology)

Conference Organizing Committee

Lei Zhang (South China Sea Institute of Oceanology)

Yan Du (South China Sea Institute of Oceanology)

Jianwei Chi (South China Sea Institute of Oceanology)

Matthew England (University of New South Wales)

Satyaban Bishoyi Ratna (India Meteorological Department)

Michael Byrne (Univ. St Andrews)

For further information, please contact the local host, Lei Zhang (zhanglei@scsio.ac.cn).

Website: <http://ic.sklto.scsio.ac.cn/>

<https://clivar.org/events/joint-conferenceabrupt-changes-and-tipping-points-6th-clivar-cdp-workshop-mec2026>

State Key Laboratory of Tropical Oceanography

South China Sea Institute of Oceanology

Chinese Academy of Sciences

2025-11-18