



第二届极地海洋与全球变化国际学术研讨会
2nd INTERNATIONAL SYMPOSIUM ON POLAR OCEAN AND GLOBAL CHANGE

Theme:
Physical and Ecological Processes in the Southern Ocean under a Changing Climate

Brochure

Qingdao, China
May 2023



Symposium Information

会议信息



Guidelines for participation:
参会须知:



Please copy your oral presentation PPT to the meeting computer before your session start.

请口头报告人在本专题报告开始前，将PPT复制到会场讲台上的电脑中。



Restaurant: Zhonghua Hall (Buffet with meal ticket which you could get when you register)

用餐地点: 黄海饭店中华厅 (自助餐,凭报到时领取的餐券用餐)



iSPOGOC 2023 Website:

<https://coas.ouc.edu.cn/pogoc/2023/0522/c9802a432973/page.htm>



Contact for meeting:
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Meeting Room	Conference Center Back Hall 会议中心后区	The 2nd Floor Conference Room 二楼会议厅
9:00-12:00 May 25	Opening Ceremony and Keynote Lectures	
14:00-18:00 May 25	Session: Southern Ocean Heat Uptake and Its Climatic Impacts	Session: Sustainability Use of Antarctic Marine Living Resources and Antarctic Governance
9:00-17:00 May 26	Session: Antarctic Shelf-basin Exchanges and Ice-ocean Interactions	Session: Marine Biodiversity and Biogeochemical Cycles in the Southern Ocean

日程安排

AGENDA

9:00-18:00 (UTC+8) May 25, 2023

Opening Ceremony

Meeting Room: Conference Center Back Hall

Chair: Jiuxin Shi
史久新

9:00-9:30 Welcoming Address+POGOC Introduction+Group Photo

Keynote Lectures

Meeting Room: Conference Center Back Hall

9:30-10:00	Matthew England	Abyssal ocean overturning slowdown and warming driven by Antarctic meltwater
10:00-10:30	Wenju Cai 蔡文炬	Southern Ocean heat uptake and El Nino variability under greenhouse warming
10:30-10:45		Tea Break
10:45-11:15	Meng Zhou 周朦	Perspectives on the Ross Sea Ecosystem studies and monitoring
11:15-11:45	Akiho Shibata	Asian cooperation in strengthening the Antarctic governance: towards 2026 ATCM in Japan

Session: Southern Ocean Heat Uptake and Its Climatic Impacts

Meeting Room: Conference Center Back Hall

Chair: Yiyong Luo
罗义勇

14:00-14:20 16:00-16:20 (UTC+10)	Helen Phillips	Mechanisms of poleward heat transport in the Antarctic Circumpolar Current (Online)
14:20-14:40	Yan Du 杜岩	Evolution of the subantarctic mode water in the Southern Ocean
14:40-15:00	Lixiao Xu 许丽晓	Buoyancy and wind driven effects on recent changes of the Subantarctic Mode Water
15:00-15:20	Shiming Xu 徐世明	Observing Antarctic Marginal Ice Zones with Satellite Altimetry Synergy – A Case Study of the Indian Ocean Sector during July, 2017
15:20-15:40	Zhi Li 李志	Key role of Southern Ocean water masses in global heat uptake using Argo measurements
15:40-16:00	Yu Hong 洪宇	Origins and pathways of the Antarctic Intermediate Water
16:00-16:15		Tea Break

Chair: Fukai Liu
刘福凯

16:15-16:35	Xichen Li 李熙晨	Reversal of surface temperature trend pattern over Antarctic continent in 21st century
16:35-16:55	Kewei Lyu 吕柯伟	Roles of surface forcing in shaping the Southern Ocean rapid warming
16:55-17:15	Xiaoming Hu 胡晓明	Role of seasonal energy transfer mechanism in the Antarctic Warming and its inter-model spread in CMIP6
17:15-17:35 5:15-5:35 (UTC-4)	Liping Zhang 张丽萍	The relative role of the subsurface Southern Ocean in driving negative Antarctic sea ice extent anomalies in 2016-2021 (Online)
17:35-17:55 5:35-5:55 (UTC-4)	Jia-Rui Shi 石佳睿	Climate change in the Southern Ocean: the rising temperature and enhanced zonal velocity (Online)

Session: Sustainability Use of Antarctic Marine Living Resources and Antarctic Governance

Meeting Room: The Second Floor Conference Room

Chair: Yitong Chen
陈奕彤

14:00-14:20	Li Chen 陈力	Legal Implementation of Madrid Protocol in China (Online)
14:20-14:40	Xuefeng Li 李学峰	Antarctic blue carbon protection under the framework of Antarctic treaty system
14:40-15:00 15:40-16:00 (UTC+9)	Hyoung Chul Shin	Governance of Antarctic marine ecosystem conservation, a hot potato or a cool lodestar? (Online)
15:00-15:15		Tea Break

Chair: Yang Liu
刘阳

15:15-15:35	Yang Liu 刘阳	Integrating Mesopelagic Fish into the assessment of marine protected areas under climate change scenarios
15:35-15:55	Yutian Ding 丁雨田	The Area 48 Krill Fishery: The difficult pace of upgrading the management system

POSTER

Yutong Zheng 郑裕彤	The Southern Ocean rapid warming and related spiciness changes
Tingzhen Liu 刘婷甄	Interannual variability of eddy activity in the Southern Ocean associated with the ENSO
Hong Li 李宏	The observed enhancement of eddy from stress in the standing meanderings of the Antarctic Circumpolar Current
Xubin Ni 倪旭彬	The ocean response leaves behind a footprint in the Antarctic Intermediate Water heat content
Kaiyan Xiao 肖开妍	Bird feathers as non-invasive bio-indicators of metals and pesticides in the Southern Ocean
Yurong Mu 穆玉蓉	Climate-induced response of predators to the marine ecosystems in the Southern Ocean

AGENDA

9:00-17:00 (UTC+8) May 26, 2023

Session: Antarctic Shelf-basin Exchanges and Ice-ocean Interactions

Meeting Room: Conference Center Back Hall

Chair: **Zhaoru Zhang**
张召儒

9:00-9:20 11:00-11:20 (UTC+10)	Steve Rintoul	Vulnerability of East Antarctic Ice Shelves to ocean processes and change (Online)
9:20-9:40 21:20-21:40 (UTC-4)	Michael S. Dinniman	Sensitivity of the relationship between Antarctic ice shelves and iron supply to projected changes in the atmospheric forcing (Online)
9:40-10:00 21:40-22:00 (UTC-4)	Xiaozhou Ruan 阮晓舟	Ice-Shelf Meltwater Overturning in the Bellingshausen Sea (Online)
10:00-10:20 12:00-12:20 (UTC+10)	Kathryn L. Gunn	Recent reduced abyssal overturning and ventilation in the Australian Antarctic Basin (Online)
10:20-10:35		Tea Break
		Chair: Chengyan Liu 刘成彦
10:35-10:55 14:35-14:55 (UTC+12)	Inga J. Smith	Ice-ocean interactions sea-ice formation and break-out near ice shelves
10:55-11:15	Jiuxin Shi 史久新	Impacts of Grounding Icebergs on Sea Ice, Polynyas and Circulation in Prydz Bay, Antarctica
11:15-11:35	Jiechen Zhao 赵杰臣	The influence of snow cover on landfast sea ice thickness in Prydz Bay, East Antarctica
		Chair: Libao Gao 高立宝
14:00-14:20 15:00-15:20 (UTC+9)	Shigeru Aoki	Deep and shallow warm water intrusion on the continental shelf off East Antarctic coasts (Online)
14:20-14:40 16:20-16:40 (UTC+10)	Laura Herraiz Borreguero	Poleward shift of Circumpolar Deep Water threatens East Antarctic Ice Sheet (Online)
14:40-15:00	Chengyan Liu 刘成彦	Topography-mediated transport of warm deep water across the continental shelf slope, East Antarctica
15:00-15:20	Guijun Guo 郭桂军	Intrusion of warm modified circumpolar deep water and its impact on dense shelf water formation
15:20-15:35		Tea Break
		Chair: Jiuxin Shi 史久新
15:35-15:55	Zhaomin Wang 王召民	The salinity budget of the Ross Sea continental shelf, Antarctica (Online)
15:55-16:15	Zhaoru Zhang 张召儒	Effects of projected wind changes caused by the Amundsen Sea low on the high salinity shelf water formation in the Ross Sea
16:15-16:35	Lingqiao Cheng 程灵巧	Interannual Variability of Winter Water in the Indian Ocean Sector of the Southern Ocean and Its Causes
16:35-16:55 18:35-18:55 (UTC+10)	Guy Williams	The New Golden Era of Polar Research and Exploration with Autonomous Systems (Online)

Session: Marine Biodiversity and Biogeochemical Cycles in the Southern Ocean

Meeting Room: The Second Floor Conference Room

Chair: **Yantao Liang**
梁彦韬

9:00-9:20 18:00-18:20 (UTC-7)	Jeomshik Hwang	Dissolved Organic Carbon Cycling in the Antarctic Seas Based on Radiocarbon Analysis(Online)
9:20-9:40	Yingxu Wu 吴瀛旭	Strong transport of anthropogenic carbon from the Antarctic shelf to deep Southern Ocean triggers rapid acidification
9:40-10:00 21:40-22:00 (UTC-4)	David Pez Espino	The Diversity of the Global Virome(Online)
10:00-10:20	Imali Kaushalya Herath	Isotopic constraints on sources and cycling of Nitrate in Polar Sea Ice
10:20-10:35		Tea Break
		Chair: Xiaotong Xiao 肖晓彤
10:35-10:55	Guang Yang 杨光	Role of zooplankton in the Southern Ocean biogeochemical cycles
10:55-11:15	Liyang Zhan 詹力扬	A study on the role of sea ice in the N ₂ O cycle in the Prydz Bay, Antarctica
11:15-11:35	Jun Zhao 赵军	Does reactive iron contribute to the long-term preservation of marine organic carbon in the Antarctic sediment?
		Chair: Jun Zhao 赵军
14:00-14:20	Chunyang Li 李春阳	A novel ATP dependent dimethylsulfoniopropionate lyase identified in Antarctic bacteria
14:20-14:40	Yongli Zhang 张永莉	Iron limitation and uneven grazing pressure on phytoplankton co-lead the seasonal species succession in the Ross Ice Shelf Polynya
14:40-15:00	Meiaoxue Han 韩梅傲雪	The distribution characteristics and potential roles of viruses in the Antarctic ice-edge algal blooms
15:00-15:20	Chaofeng Wang 王超锋	Pelagic ciliate (Ciliophora) communities in the Southern Ocean: Bioindicator to water mass, habitat suitability classification and potential response to global warming
15:20-15:40	Fraser Kennedy	To be determined (Online)