



# 2026

## 地球深部探测与亚洲四维地形国际研讨会

2026年11月6-12日，中国北京  
(一号通知书)



中国地质科学院  
Chinese Academy of Geological Sciences



中国地质大学  
CHINA UNIVERSITY OF GEOSCIENCES  
北京·BEIJING



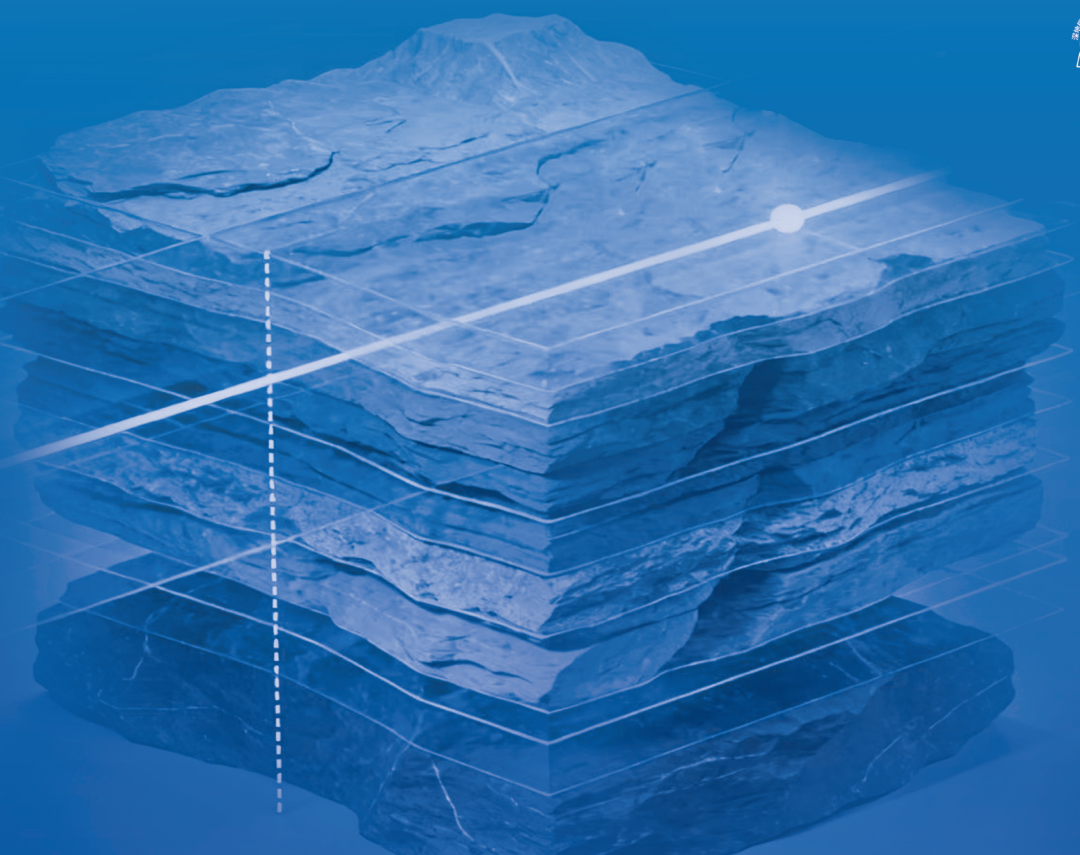
成都理工大学  
CHENGDU UNIVERSITY OF TECHNOLOGY



南方科技大学  
SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY



深地探测与矿产勘查  
全国重点实验室  
State Key Laboratory of Deep and  
Mineral Exploration





## 研讨会简介

揭开地球内部奥秘及其与地表的动态关联是当代地学面临的重大挑战。地球深部探测与亚洲四维地形国际研讨会2026聚焦地学研究前沿，将地球深部透视及亚洲等地区的深部—地表耦合作用这两大研究内容有机结合。

地球深部探测研究旨在通过多学科交叉方式，解密大陆及其边缘的结构、动力、演化问题。构造活动使地球形成了陆地、大洋及各类自然资源，触发地震和地质灾害，持续不断地塑造着地貌，而这些又对气候、环境和现代社会产生着深远影响。因此，探究地球内部对推动行星科学发展、解决全球挑战意义重大。

作为全球面积最大、人口最多的大洲，亚洲是独一无二的天然实验室。从古老的克拉通大陆、广袤的沉积盆地，到活动造山带、断裂系统、俯冲带、深海海沟，亚洲大陆保留了完整的构造演化过程、深地慢动力学过程、板块碰撞和剧烈的深地—地表动力学耦合作用。推动以上地质过程的研究，需要将深部地球科学与浅层地球科学有机结合。

作为我国深地探测领域的旗舰项目，中国深地探测研究专项（SinoProbe）引领全球深地探测事业发展。该项目开展中国岩石圈组成、结构、演化多学科交叉研究。项目启动阶段—SinoProbe I（2008–2016）聚焦重大科学问题，并为后续研究打下坚实基础，其接续阶段—SinoProbe II于2024年启动并已进入全面实施阶段。通过对中国及邻区开展大规模地球物理探测，项目聚焦深地结构及物质特性研究，部署数千公里地震反射断面、高密度宽频地震和大地电磁阵列，实施超深科学钻探，建设实时观测系统。





亚洲四维地形国际研究计划（TopoAsia）与深地探测研究相辅相成，该项目是国际岩石圈计划（ILP）正式支持下的国际地学旗舰计划。TopoAsia于2025年10月21日在上海正式启动，它的启动对地球系统科学研究具有划时代意义。计划以建立开放、协作的平台为核心使命，推动亚洲地区深地—地表交互作用研究，对理解构造动力学、自然资源形成、环境变化、可持续发展意义重大。整合地质学、地球化学、地球物理学、地球动力学建模，TopoAsia从地质历时角度揭示深地过程如何塑造地表地貌，同时揭示地表过程，如侵蚀作用、沉积作用、气候变化等，如何记录并反作用深部动力学过程。

深地探测与地表演化研究有着深刻的协同关系。SinoProbe项目的深部地震及大地电磁成像揭示的岩石圈框架为理解亚洲地表隆升、盆地沉降、地貌演化指明了边界条件。反之，地表过程的地貌和地质记录也为深部构造和动力提供了关键的时间、速率、机制约束条件。两者协同，使地球系统研究成为了内部联动的有机整体。

地球深部探测与亚洲四维地形国际研讨会2026旨在搭建一个地球深部科学和地球系统研究的国际合作平台。此次研讨会将：挖掘亚洲地球动力学和地貌演化前沿问题；加强深地探测研究与地表过程研究两大领域的协同发展；推动亚洲关键地质区域综合调查；加强多学科交叉研究，融合地球物理、地质学、地球化学、地球动力学建模等多学科研究手段，加深对地球结构、地球动力学、矿产资源、地表演化过程的理解。

此次研讨会与亚太经合组织第三十三次领导人非正式会议（APEC China 2026）同期召开，与APEC“开放、创新、合作”的主旨相契合。研讨会的召开将进一步加强亚太区域科学、技术、环境可持续发展合作。我们热情邀请全球学者专家参与这一具有里程碑意义的地学盛会，携手为深化人类对地球内部动力学及亚洲地貌相互作用的研究做出贡献。





## 组织单位及合作机构

### 组织单位:

- 中国地质科学院
- 中国地质大学（北京）
- 成都理工大学
- 南方科技大学

### 协办单位:

- 国际地质科学联合会 (IUGS)
- 国际大地测量和地球物理学联合会 (IUGG)
- 国际大陆科学钻探计划 (ICDP)
- 亚洲大洋洲地球科学学会 (AOGS)
- 国际岩石圈计划 (ILP)
- 世界地质图委员会 (CGMW)
- 美国地球物理学联合会 (AGU) 地震学分会

### 支持单位:

- 德国亥姆霍兹地学研究中心
- 西班牙科学研究理事会
- 巴黎地球物理研究所
- 非洲地质学会
- 巴西地质调查局
- 巴西巴西利亚大学
- 蒙古国地质调查局
- 蒙古国立大学

## 科学计划

### 科学主题:

- 深地幔及塑造亚洲地形的岩石圈动力学过程
- 深部地球物质探测、资源系统及其应用



- 在构造活动丰富的亚洲发生的地震、地质灾害活动及地质极端事件：机制、监测及减灾
- 大陆科学钻探：挑战与机遇
- 深地探测技术
- 造山演化和盆地形成：地貌变化的记录
- 亚洲地貌演化中的地表过程、气候和环境的相互作用
- 亚洲四维地貌重建的多学科融合
- 地貌演化在亚洲资源能源管理中的意义

注：欢迎就以上科学主题提出分会场申请。分会场申请发送至：顾琰菲 ([cagsdic@163.com](mailto:cagsdic@163.com))和张来明 ([meeting@topoasia.org](mailto:meeting@topoasia.org))。截止日期：2026年6月15日。

### 战略论坛及圆桌会议：

- SinoProbe II：“下一个重大地球科学之旅”论坛
- 粤港澳大湾区—中国南海沿岸国家海洋科学及可持续自然资源管理论坛
- 中国—印度洋地区构造及海洋地质学国际研讨会
- 亚太地区合作机制及数据共享平台圆桌会议
- 国际科学钻探圆桌会议：未来方向及合作设想

### 委员会会议及工作组会议：

- 启动中亚地质考察及五国编图项目（第二阶段）
- 天然实验室及关键科学问题
- TopoAsia委员会会议：
  - ▶ 协调委员会（CC）会议
  - ▶ 科学委员会（SC）会议
  - ▶ 执行委员会（EC）会议

### 其它活动

- 展板报告
- 技术考察



## 会后考察

北京郊区或周边地区（待定）。

## 初步日程

- 11月6日：注册报到
- 11月7日：开幕式和大会报告
- 11月8日：分会场、战略论坛、圆桌会议
- 11月9日：分会场和闭幕式
- 11月10日：不参加野外考察人员离开
- 11月10-11日：野外考察
- 11月12日：野外考察人员离开

## 重要日期及时间节点

- 2026年6月15日：分会场征集截止
- 2026年6月30日：发布研讨会二号通知书
- 2026年7月15日：摘要在线提交/在线注册系统开放
- 2026年10月1日：
  - ▶ 在线注册系统关闭
  - ▶ 摘要在线提交系统关闭
  - ▶ 会后考察在线报名关闭

## 会议报名

报名费具体数额将发布在研讨会二号通知中。学生报名享受优惠价格。

## 摘要提交

欢迎参会人员提交口头报告或展板报告摘要。摘要含题目、作者、单位、分会场等信息。摘要在线提交系统将于2026年7月15日开通。

## 官方语言

研讨会官方语言为英语。



## 联系方式

顾琰菲，邮箱：[cagsdic@163.com](mailto:cagsdic@163.com)

张来明，邮箱：[meeting@topoasia.org](mailto:meeting@topoasia.org)



# 2026

## International Symposium on Deep Earth Exploration and TopoAsia

November 6-12, 2026 in Beijing, China



中國地質科學院  
Chinese Academy of Geological Sciences



中國地質大學  
CHINA UNIVERSITY OF GEOSCIENCES  
北京 · BEIJING



成都理工大學  
CHENGDU UNIVERSITY OF TECHNOLOGY



南方科技大學  
SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY



深地探測與礦產勘查  
全國重點實驗室  
State Key Laboratory of Deep and  
Mineral Exploration

### 1st Circular



## ABOUT THE SYMPOSIUM

Unraveling the Earth's interior and its dynamic interactions with the surface represents one of the grand challenges in contemporary geoscience. *The 2026 International Symposium on Deep Earth Exploration and TopoAsia* unites two complementary scientific communities to address this frontier—integrating deep Earth probing with the study of deep-surface coupling processes across the Asian continent and beyond.

Deep Earth exploration is a multidisciplinary endeavor aimed at deciphering the structure, dynamics, and evolution of continents and their margins. Tectonic interactions not only shape Earth's continents, oceans, and natural resources, but also trigger seismic and geological hazards, while continuously modulating surface topography—all of which exert profound impacts on climate, environment, and modern society. Consequently, probing the Earth's interior is essential for advancing fundamental planetary knowledge and addressing global challenges.

Asia, the world's largest and most populous continent, serves as an unparalleled natural laboratory for such research. From ancient cratons and broad sedimentary basins to active orogenic belts, rift systems, subduction zones, and deep-sea trenches, Asia preserves a comprehensive record of long-term tectonic evolution, deep mantle dynamics, plate interactions, and strong dynamic couplings between interior and surface systems. Understanding these processes demands integrated approaches that bridge deep and shallow Earth science.





[SinoProbe](#), China's flagship national deep Earth exploration initiative, is at the forefront of this global endeavor. The program fosters a multidisciplinary understanding of the composition, structure, and evolution of the continental lithosphere beneath China. The inaugural phase, SinoProbe-I (2008–2016), identified pivotal scientific questions and established a robust foundation. Its successor, SinoProbe-II (2024–2030), launched in 2024, is now in full operational mode. Through extensive geophysical surveys across China and adjacent regions, the program investigates deep Earth structures and material properties via thousands of kilometers of seismic reflection profiles, high-density broadband seismic and magnetotelluric arrays, as well as super-deep scientific drilling and real-time in-situ monitoring campaigns.

Complementing these deep exploration efforts, [TopoAsia](#) is a flagship international geoscience initiative officially endorsed by the International Lithosphere Program (ILP). Launched in Shanghai on October 21, 2025, TopoAsia marks a new phase in integrated Earth system science. Its core mission is to establish an open, collaborative platform for investigating deep Earth–surface interactions across Asia—a frontier critical to understanding tectonic dynamics, natural resource formation, environmental change, and sustainable development. By integrating geology, geochemistry, geophysics, and geodynamic modeling, TopoAsia explores how deep Earth processes shape surface topography over geologic time, and how surface processes—including erosion, sedimentation, and climatic feedbacks—in turn record and modulate deep dynamics.





The synergies between deep exploration and topographic evolution studies are profound. The lithospheric framework revealed by SinoProbe's deep seismic and magnetotelluric imaging provides essential boundary conditions for understanding surface uplift, basin subsidence, and landscape evolution across Asia. Conversely, the topographic and geological records of surface processes offer critical constraints on the timing, rates, and mechanisms of deep-seated tectonic and mantle dynamics. Together, these approaches enable a holistic understanding of Earth as a single, interconnected system.

The joint *2026 International Symposium on Deep Earth Exploration and TopoAsia* will serve as a pivotal global platform for advancing international collaboration in deep Earth sciences and integrated Earth system research. This joint symposium aims to: explore frontier topics in Asian continental geodynamics and topographic evolution; strengthen partnerships between the deep Earth exploration and surface processes research communities; promote integrated investigations in key geological regions across Asia; foster multidisciplinary approaches integrating geophysics, geology, geochemistry, and geodynamic modeling, and ultimately advance our understanding of Earth's structure, dynamics, mineral resources, and surface evolutionary processes.

The symposium will be held in conjunction with the APEC China 2026, closely aligning with APEC's priorities of Openness, Innovation, and Cooperation. It will further reinforce regional scientific, technological, and environmental sustainability collaboration across the Asia-Pacific. We warmly invite scholars and experts from around the world to participate in this milestone academic event, contributing to a deeper global understanding of Earth's interior dynamics and their profound expressions across the Asian landscape.





## **ORGANIZERS & PARTNERS**

### **ORGANIZERS:**

- Chinese Academy of Geological Sciences
- China University of Geosciences (Beijing)
- Chengdu University of Technology
- Southern University of Science and Technology

### **SPONSORS:**

- International Union of Geological Sciences (IUGS)
- International Union of Geodesy and Geophysics (IUGG)
- Asia Oceania Geosciences Society (AOGS)
- International Lithosphere Program (ILP)

### **INSTITUTIONAL SUPPORTERS:**

- State Key Laboratory of Deep and Mineral Exploration
- State Key Laboratory of Continental Evolution and Early Life of China
- State Key Laboratory of Critical Earth Material Cycling and Mineral Deposits of China
- State Key Laboratory of Critical Mineral Research and Exploration of China
- State Key Laboratory of Deep Earth Exploration and Imaging of China
- State Key Laboratory of Deep Earth Processes and Resources of China
- State Key Laboratory of Earthquake Dynamics and Forecasting of China
- State Key Laboratory of Geological Processes and Mineral Resources of China
- State Key Laboratory of Lithospheric and Environmental Coevolution of China
- Geological Society of China
- Chinese Geophysical Society
- Institut de Physique du Globe de Paris
- Geological Survey of Brazil
- University of Brasilia
- National Geological Survey of Mongolia



## SCIENTIFIC PROGRAM

### SCIENTIFIC THEMES:

- Deep Mantle and Lithosphere Dynamics shaping Asian Topography
- Deep Earth Material Probing, Mineral Systems, and Their Applications
- Earthquakes, Geohazards and Future Geological Extremes in a Dynamic Asia: Mechanisms, Monitoring, and Mitigation
- Continental Scientific Drilling: Challenges and Opportunities
- Technologies for Deep Earth Exploration
- Orogenic Evolution and Basin Formation: Archives of Topographic Change
- Surface Processes, Climate and Environmental Interaction in Asian Topographic Evolution
- Multidisciplinary Integration for Asian 4D Topographic Reconstruction
- Controls on Asia's Mineral and Energy Resources in Topographic Evolution

**Note:** We warmly invite proposals for sessions aligned with the above scientific themes. All proposals should be sent via email to both Ms. Yanfei Gu ([cagsdic@163.com](mailto:cagsdic@163.com)) and Prof. Laiming ZHANG ([meeting@topoasia.org](mailto:meeting@topoasia.org)). Deadline for session proposals is May 15, 2026.

### STRATEGIC FORUMS AND ROUNDTABLE DISCUSSIONS:

- SinoProbe II: The Next Great Geoscience Voyage Forum
- Guangdong-Hong Kong-Macao Greater Bay Area - Countries around the South China Sea Marine Science and Sustainable Natural Resource Management Forum
- China-Indian Ocean Region International Forum on Tectonics and Marine Geology
- Roundtable on Establishing International Cooperation Mechanisms and Data Sharing Platforms in Asia-Pacific
- Roundtable on International Scientific Drilling: Future Directions and Collaborations



## COMMITTEE MEETINGS AND WORKING WORKSHOPS:

- Launch of the Central Asia Expedition and Five-Country Mapping Project (Phase II)
- Working Workshop on Natural Laboratories and the Key Scientific Questions
- TopoAsia Committee Meetings:
  - ▶ Coordinating Committee (CC) Meeting
  - ▶ Scientific Committee (SC) Meeting
  - ▶ Executive Committee (EC) Meeting

## ADDITIONAL EVENTS

- POSTER SESSIONS
- TECHNICAL SITE VISITS

## FIELD TRIP

Suburban and adjacent areas of Beijing (To Be Confirmed)

## TENTATIVE ITINERARY

- Nov. 6: Registration and welcome reception
- Nov. 7: Opening Ceremony and Plenary Session
- Nov. 8: Parallel Sessions, Forums and Roundtables
- Nov. 9: Parallel Sessions and closing ceremony
- Nov. 10: Departure of non-field trip participants
- Nov. 10-11: Organized Field Trip
- Nov. 12: Departure of field trip participants

## KEY DATES AND DEADLINES

- May 15, 2026 – Release of Second Circular / Deadline for Sessions Proposals
- July 15, 2026 – Abstract Submission System Opens
- October 1, 2026 – Deadline for:
  - ▶ Online Registration
  - ▶ Abstract Submission
  - ▶ Field Trip Sign-up



## **REGISTRATION**

A registration fee will be charged for the symposium, with the specific amount to be announced in the 2nd Circular. Discounted rates will be available for student participants.

## **ABSTRACT SUBMISSION**

Abstract for oral or poster presentations are welcome. The abstract will include title, author(s), affiliation(s), and preferred session. Online abstract submission will be accessible on July 15, 2026.

## **OFFICIAL LANGUAGE**

The official language of the Symposium is English.

## **VISA EXEMPTION**

China applies visa exemption policy (Unilateral Visa Exemption or Visa Exemption Agreement) to citizens of 75 countries. For more details, including the list of countries enjoying this policy, please consult:

[https://www.gov.cn/yaowen/liebiao/202508/content\\_7035244.htm](https://www.gov.cn/yaowen/liebiao/202508/content_7035244.htm)

## **CONTACT INFORMATION**

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Prof. Laiming ZHANG, Email: [meeting@topoasia.org](mailto:meeting@topoasia.org)