



面向“一带一路”自然资源 卫星遥感监测高级研修班

Seminar and International Workshop on
Satellite Remote Sensing Monitoring of
Natural Resources for the Belt and Road

2025年1月16日-17日



会议手册

CONFERENCE HANDBOOK

主办单位：河 海 大 学

协办单位：自然资源部国土卫星遥感应用中心

Organizer: Hohai University

Co-organizer: Land Satellite Remote Sensing Application Center,
Ministry of Natural Resources of P.R.China

目 录

- 一、 会议通知（中文）
- 二、 日程安排（中文）
- 三、 Conference Program
- 四、 Seminar Agenda





关于举办面向“一带一路”自然资源卫星遥感监测高级研修班的通知（中文版）

为深入推进共建“一带一路”可持续发展，由河海大学主办、自然资源部国土卫星遥感应用中心协办的面向“一带一路”自然资源卫星遥感监测高级研修班定于2025年1月16-17日在南京河海大学江宁校区举办。会议将以“非洲自然资源遥感精细监测与应用”为主题，面向中国卫星遥感科学发展前沿，围绕水资源、耕地、生物多样性保护等遥感监测应用和自然资源云服务等议题，开展国产卫星遥感数据的国际化应用研讨和示范培训，为我国自然资源卫星遥感监测高质量发展提供支撑、引领方向。

现将有关事项通知如下：

一、组织机构

主办单位：河海大学

协办单位：自然资源部国土卫星遥感应用中心

二、日程安排

2025年1月16日：技术研讨

2025年1月17日：高级研修班

三、时间和地点

时间：2025年1月16日-17日（15日报到）

地点：河海大学江宁校区笃学楼208会议室（线下）

Zoom会议室（线上）

四、议程安排

| 技术研讨（2025-01-16，主持人：唐新明） | | |
|--------------------------|---|------------------------------|
| 时间 | 内容 | 演讲人 |
| 13:00-15:00 | 培训班报到 | |
| 15:00-15:10 | 自然资源部国土卫星遥感应用中心致开幕辞 | 唐新明 |
| 15:10-15:20 | 河海大学领导致欢迎辞 | 领导 |
| 15:20-15:45 | 主旨报告：中国自然资源陆地卫星技术与应用 | 唐新明 (自然资源部国土卫星遥感应用中心) |
| 15:45-16:10 | 主旨报告：埃及卫星及遥感应用 | Belal Elleithy (埃及航天局) |
| 16:10-16:30 | 技术报告：基于季节性降雨循环的生态系统服务异质性和权衡：以肯尼亚塔纳河流域为例 | 严雪 (中国科学院武汉植物园) |
| 16:30-16:50 | 技术报告：高分系列卫星多光谱影像大气校正方法及应用 | 翟亮 (中国测绘科学研究院) |
| 16:50-17:15 | 技术报告：迈向可持续城市发展：分析肯尼亚城市增长的建筑高度和密度 | David Siriba (内罗毕大学) |
| 17:15-17:35 | 技术报告：21世纪非洲农田的时空动态研究 | 彭代亮 (中国科学院空天信息创新研究院) |
| 17:35-18:00 | 技术报告：卢旺达遥感应用 | Mutimucyeye Grâce 卢旺达理工学院 |
| 18:00 | 总结 | 唐新明 |

| 技术培训（2025-01-17，主持人：瓦格纳） | | |
|--------------------------|----------------------------------|----------------------------------|
| 时间 | 内容 | 演讲人 |
| 15:00-15:10 | 培训班开幕式 | 瓦格纳 (河海大学) |
| 15:10-16:00 | 培训：利用卫星遥感技术开展陆地水文研究 | Christopher Ndehedehe (内罗毕大学) |
| 16:00-16:50 | 培训：ENVI 和 ArcGIS Pro 的产品以及相关应用介绍 | 赵震宇 (易智瑞信息技术有限公司) |
| 16:50-17:00 | 休息 | |
| 17:00-18:00 | 培训：利用 GRACE 卫星开展地下水资源评价的实践培训 | Vagner Ferreira (河海大学) |
| 18:00 | 总结 | 院领导 |

五、参会对象

国内外卫星遥感领域的专家学者，埃及、肯尼亚、卢旺达相关人员，“一带一路”国际学生等。

六、参会方式

采取线上线下形式。

本次会议不收取会议注册费。

河海大学

2025年1月11日

面向“一带一路”自然资源卫星遥感监测高级研修班

会议时间：2025年1月16-17日，北京时间

会议地点：河海大学江宁校区笃学楼208会议室

Zoom会议：会议号：940 1503 2299，密码：4figlu

主持人：唐新明（自然资源部国土卫星遥感应用中心） 瓦格纳（河海大学）

| 技术研讨（2025-01-16，主持人：唐新明） | | |
|--------------------------|---|---------------------------|
| 时间 | 内容 | 演讲人 |
| 13:00-15:00 | 培训班报到 | |
| 15:00-15:10 | 自然资源部国土卫星遥感应用中心致开幕辞 | 唐新明 (自然资源部国土卫星遥感应用中心) |
| 15:10-15:20 | 河海大学领导致欢迎辞 | 领导 |
| 15:20-15:45 | 主旨报告：中国自然资源陆地卫星技术与应用 | 唐新明 (自然资源部国土卫星遥感应用中心) |
| 15:45-16:10 | 主旨报告：埃及卫星及遥感应用 | Belal Elleithy (埃及航天局) |
| 16:10-16:30 | 技术报告：基于季节性降雨循环的生态系统服务异质性和权衡：以肯尼亚塔纳河流域为例 | 严雪 (中国科学院武汉植物园) |
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| 16:50-17:15 | 技术报告：迈向可持续城市发展：分析肯尼亚城市增长的建筑高度和密度 | David Siriba (内罗毕大学) |
| 17:15-17:35 | 技术报告：21世纪非洲农田的时空动态研究 | 彭代亮 (中国科学院空天信息创新研究院) |

技术研讨（2025-01-16，主持人：唐新明）

| 时间 | 内容 | 演讲人 |
|-------------|--------------|------------------------------|
| 17:35-18:00 | 技术报告：卢旺达遥感应用 | Mutumucyeye Grâce 卢旺达理工学院 |
| 18:00 | 总结 | 唐新明 (自然资源部国土卫星遥感应用中心) |

技术培训（2025-01-17，主持人：瓦格纳）

| 时间 | 内容 | 演讲人 |
|-------------|----------------------------------|----------------------------------|
| 15:00-15:10 | 培训班开幕式 | 瓦格纳 (河海大学) |
| 15:10-16:00 | 培训：利用卫星遥感技术开展陆地水文研究 | Christopher Ndehedehe (内罗毕大学) |
| 16:00-16:50 | 培训：ENVI 和 ArcGIS Pro 的产品以及相关应用介绍 | 赵震宇 (易智瑞信息技术有限公司) |
| 16:50-17:00 | 休息 | |
| 17:00-18:00 | 培训：利用 GRACE 卫星开展地下水资源评价的实践培训 | 瓦格纳 (河海大学) |
| 18:00 | 总结 | 院领导 |

非洲国家参会专家

| 姓名 | 机构名称 | 职务 |
|--------------------------------|--------------------|-------|
| Dr. Belal Eleithy | 埃及航天局地球观测数据部 | 经理 |
| Mr. Ahmed Mohamed Gouda Elshal | 埃及航天局地球观测数据部 | 副经理 |
| Dr. David Nyangau Siriba | 肯尼亚内罗毕大学地理空间与空间技术系 | 系主任 |
| Dr. Sammy Mulei Musyoka | 肯尼亚内罗毕大学地理空间与空间技术系 | 讲师 |
| Dr. Collins Mwungu Mwange | 肯尼亚内罗毕大学地理空间与空间技术系 | 讲师 |
| Mr. Sammy Mwangi Matara | 肯尼亚内罗毕大学地理空间与空间技术系 | 访问学者 |
| Mutimucyeye Marie Grâce | 卢旺达理工学院恩戈马学院 | 讲师 |
| Nzabonintuma Theogene | 卢旺达理工学院恩戈马学院 | 讲师 |
| Dr. Fidèle Karamage | 卢旺达航天局 | 遥感分析师 |
| Mr. Innocent Ndikubwimana | 卢旺达理工学院 | 讲师 |

中方合作参会专家

| 姓名 | 机构名称 | 职务 |
|-----|-----------------|--------|
| 唐新明 | 自然资源部国土卫星遥感应用中心 | 研究员 |
| 刘瑾 | 河海大学地球科学与工程学院 | 院长、教授 |
| 肖儒雅 | 河海大学地球科学与工程学院 | 副院长、教授 |
| 瓦格纳 | 河海大学地球科学与工程学院 | 教授 |
| 葛莹 | 河海大学地球科学与工程学院 | 教授 |
| 冯莉 | 河海大学地理与遥感学院 | 教授 |
| 李勇 | 河海大学地球科学与工程学院 | 副教授 |
| 徐佳 | 河海大学地球科学与工程学院 | 副教授 |
| 井森 | 河海大学地球科学与工程学院 | 副教授 |
| 刘向阳 | 河海大学数学学院 | 副教授 |
| 周绍光 | 河海大学地球科学与工程学院 | 副教授 |
| 王鸿燕 | 自然资源部国土卫星遥感应用中心 | 正高级工程师 |
| 刘克 | 自然资源部国土卫星遥感应用中心 | 正高级工程师 |
| 严雪 | 中国科学院武汉植物园 | 主任、研究员 |
| 翟亮 | 中国测绘科学研究院 | 研究员 |
| 毛曦 | 中国测绘科学研究院 | 研究员 |
| 桑会勇 | 中国测绘科学研究院 | 副研究员 |
| 侯伟 | 中国测绘科学研究院 | 副研究员 |
| 彭代亮 | 中国科学院空天信息创新研究院 | 研究员 |
| 吕雨龙 | 中国科学院空天信息创新研究院 | 博士生 |
| 赵震宇 | 易智瑞信息技术有限公司 | 工程师 |



Notice on Seminar and International Workshop on Satellite Remote Sensing Monitoring of Natural Resources for the Belt and Road Countries

To promote sustainable development for Belt and Road countries, the Advanced Training Program on Satellite Remote Sensing Monitoring of Natural Resources will be hosted by Hohai University and co-organized by Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P. R. China. The training program is scheduled to take place on January 16–17, 2025, at the Jiangning Campus of Hohai University in Nanjing.

The event will focus on the theme of "Precise Monitoring and Application of African Natural Resources via Remote Sensing" and align with the forefront of China's satellite remote sensing scientific development. Discussions will center on topics such as remote sensing applications for water resources, farmland, biodiversity conservation, and natural resource cloud services. The program will feature international workshops and demonstration training sessions on the application of domestic satellite remote sensing data, aiming to support and guide the high-quality development of natural resource satellite remote sensing monitoring in China.

The following details are provided for your reference:

I. Organization

- Organizer: Hohai University (HHU)
- Co-organizer: Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P. R. China (LASAC)

II. Schedule

- January 16, 2025: Technical Workshop (online and offline)
- January 17, 2025: Advanced Training Program (online)

III. Time and Venue

- Time: January 16–17, 2025 (Check-in on January 15)
- Onsite: Room 208, Duxue Building, Jiangning Campus, Hohai University
- Online: Zoom Meeting Room

IV. Agenda

| Technical Seminar Sponsor Groups: National Key R&D Program of China (Project No. 2023YFE0207900) Primary Organizer: TANG Xinming (LASAC), LIU Jin (HHU) Primary Chair(s): TANG Xinming (LASAC) Date: 1/16/2025 Time: 3:00 PM – 6:00 PM (Beijing Time) | | |
|---|--|-----------------------|
| Time | Contents | Speaker |
| 15:00-15:10 | Opening Speech by the Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P. R. China | TANG Xinming (LASAC) |
| 15:10-15:20 | Welcome Speech by Hohai University | President (HHU) |
| 15:20-15:45 | Keynote: China's Natural Resources Land Satellite Technology and Applications | TANG Xinming (LASAC) |
| 15:45-16:10 | Keynote: EgSA satellite utilization in remote sensing application | Belal Elleithy (EgSA) |
| 16:10-16:30 | Technical Report: Exploring ecosystem service heterogeneity and trade-off based on inter-seasonal | YAN Xue (WBG CAS) |

| | | |
|-------------|--|--|
| | rainfall cycle: A case study in the Tana River Basin, Kenya | |
| 16:30-16:50 | Technical Report: Atmospheric correction method and application of GF series satellite multispectral images | ZHAI Liang (CASM) |
| 16:50-17:15 | Technical Report: Towards Sustainable Urban Development: Analyzing Building Height and Density for Urban Growth in Kenya | David Siriba (UoN) |
| 17:15-17:35 | Technical Report: Spatiotemporal dynamics of African cropland over the 21st century | PENG Dailiang (AIRCAS) |
| 17:35-18:00 | Technical Report: Applications of satellite remote sensing in Rwanda | Mutimucyeye Gráce (Rwanda Polytechnic) |
| 18:00 | Wrapping up | TANG Xinming (LASAC) |

Technical Training

Sponsor Groups: National Key R&D Program of China (Project No. 2023YFE0207900)

Primary Organizer: TANG Xinming (LASAC), LIU Jin (HHU)

Primary Chair(s): Vagner Ferreira (HHU)

Date: 1/17/2025 Time: 3:00 PM – 6:00 PM (Beijing Time)

| Time | Contents | Speaker |
|-------------|---|---|
| 15:00-15:10 | Opening Ceremony of the Training Course | Vagner Ferreira (HHU) |
| 15:10-16:00 | Training: Satellite Remote Sensing of Terrestrial Hydrology | Christopher Ndehedehe (UoN) |
| 16:00-16:50 | Training: Introduction and application of ENVI and ARCGIS Pro | ZHAO Zhenyu (GeoScene Information Technology Co., Ltd.) |
| 16:50-17:00 | Break | |
| 17:00-18:00 | Training: Groundwater Resource Assessment with GRACE: A Hands-On Training | Vagner Ferreira (HHU) |

Technical Training**Sponsor Groups: National Key R&D Program of China (Project No. 2023YFE0207900)****Primary Organizer: TANG Xinming (LASAC), LIU Jin (HHU)****Primary Chair(s): Vagner Ferreira (HHU)****Date: 1/17/2025 Time: 3:00 PM – 6:00 PM (Beijing Time)**

| Time | Contents | Speaker |
|-------------|-----------------|---------------------------|
| 18:00 | Wrapping up | Dean of the College (HHU) |

V. Participants

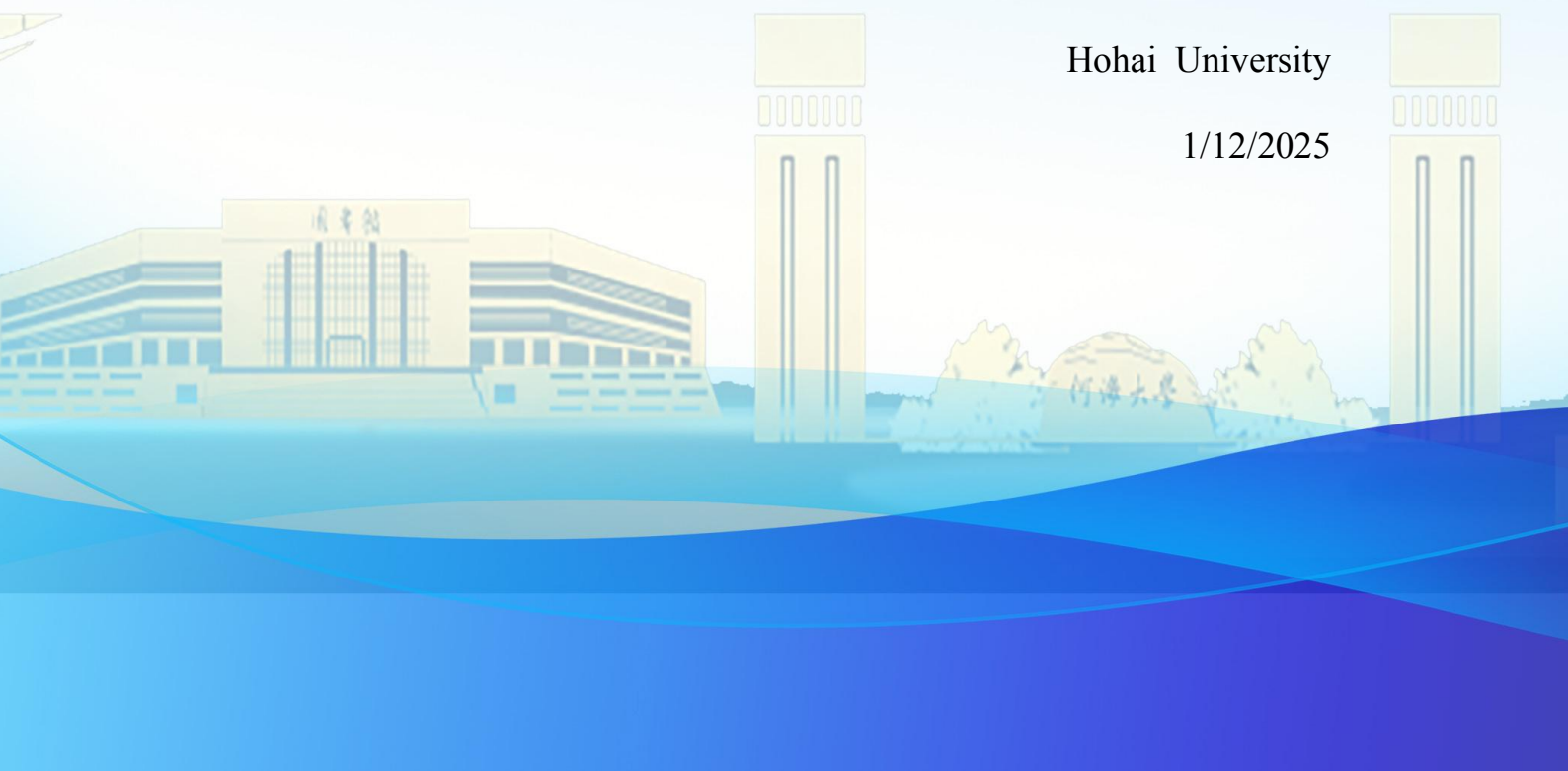
- Experts and scholars in the field of satellite remote sensing from China and abroad, relevant personnel from Egypt, Kenya, and Rwanda, as well as international students from the Belt and Road Initiative countries.

VI. Participation Method

- The conference will be held in both online and offline formats.
- There is no registration fee for this conference.

Hohai University

1/12/2025





Seminar and International Workshop on Satellite Remote Sensing Monitoring of Natural Resources for the Belt and Road Countries

Time: January 16-17, 2025 (Beijing time)

Venue: Meeting Room 208, Duxue Building, Hohai University, Jiangning Campus

Zoom Details: Conference No: 940 1503 2299, Password: 4fig1u

Organizer: Hohai University (HHU)

Co-organizer: Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P.R. China (LASAC)

Chairperson: TANG Xinming (LASAC), LIU Jin (HHU)

Host: TANG Xinming (LASAC), Vagner Ferreira (HHU)

Technical Seminar

Sponsor Groups: National Key R&D Program of China (Project No. 2023YFE0207900)

Primary Organizer: TANG Xinming (LASAC), LIU Jin (HHU)

Primary Chair: TANG Xinming (LASAC)

Date: 1/16/2025 Time: 3:00 PM – 6:00 PM (Beijing Time)

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| 18:00 | Wrapping up | TANG Xinming (LASAC) |

| Technical Training Sponsor Groups: National Key R&D Program of China (Project No. 2023YFE0207900) Primary Organizer: TANG Xinming (LASAC), LIU Jin (HHU) Primary Chair: Vagner Ferreira (HHU) Date: 1/17/2025 Time: 3:00 PM – 6:00 PM (Beijing Time) | | |
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| 17:00-18:00 | Training: Groundwater Resource Assessment with GRACE: A Hands-On Training | Vagner Ferreira (HHU) |
| 18:00 | Wrapping up | Dean of the College (HHU) |

List of Representatives from African Partners

| Name | Organization | Job Title |
|--------------------------------|--|--|
| Dr. Belal Eleithy | Egyptian Space Agency | Earth Observation Data General Manager |
| Mr. Ahmed Mohamed Gouda Elshal | Egyptian Space Agency | Senior Engineer |
| Dr. David Nyangau Siriba | Department of Geospatial and Space Technology, University of Nairobi | Chair, Department of Geospatial & Space Technology |
| Dr. Sammy Mulei Musyoka | Department of Geospatial and Space Technology, University of Nairobi | Senior Lecturer |
| Dr. Collins Mwungu Mwangi | Department of Geospatial and Space Technology, University of Nairobi | Lecturer |
| Mr. Sammy Mwangi Matara | Department of Geospatial and Space Technology, University of Nairobi | Academic Tutorial Fellow |
| Mutimucyeye Marie Grâce | Rwanda Polytechnic, Ngoma College | Assistant lecturer |
| Nzabonintuma Theogene | Rwanda Polytechnic, Ngoma College | Senior instructor |
| Dr. Fidèle Karamage | Rwanda Space Agency | Remote sensing Analyst |
| Mr. Innocent Ndikubwimana | Rwanda Polytechnic, Huye College | Assistant Lecturer |

List of Representatives from Chinese Partners

| Name | Organization | Job Title |
|-----------------|--|---------------------|
| TANG Xinming | Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P.R.China | Researcher |
| LIU Jin | School of Earth Sciences and Engineering, Hohai University | Dean、 Professor |
| XIAO Ruya | School of Earth Sciences and Engineering, Hohai University | Vice Dean Professor |
| Vagner Ferreira | School of Earth Sciences and Engineering, Hohai University | Professor |
| GE Ying | School of Earth Sciences and Engineering, Hohai University | Professor |
| FENG Li | College of Geography and Remote Sensing, Hohai University | Professor |
| LI Yong | School of Earth Sciences and Engineering, Hohai University | Associate Professor |
| XU Jia | School of Earth Sciences and Engineering, Hohai University | Associate Professor |
| JIN Miao | School of Earth Sciences and Engineering, Hohai University | Associate Professor |
| LIU Xiangyang | School of Mathematics, Hohai University | Associate Professor |
| ZHOU Shaoguang | School of Earth Sciences and Engineering, Hohai University | Associate Professor |
| WANG Hongyan | Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P.R.China | Senior Engineer |
| LIU Ke | Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P.R.China | Senior Engineer |

| | | |
|---------------|---|----------------------|
| YAN Xue | Wuhan Botanical Garden, Chinese Academy of Sciences. | Researcher |
| ZHAI Liang | Chinese Academy of Surveying and Mapping | Researcher |
| MAO Xi | Chinese Academy of Surveying and Mapping | Researcher |
| SANG Huiyong | Chinese Academy of Surveying and Mapping | Associate Researcher |
| HOU Wei | Chinese Academy of Surveying and Mapping | Associate Researcher |
| PENG Dailiang | Aerospace Information Research Institute, Chinese Academy of Sciences | Researcher |
| LV Yulong | Aerospace Information Research Institute, Chinese Academy of Sciences | PhD student |
| ZHAO Zhenyu | GeoScene Information Technology Co. ,Ltd. | Engineer |





主办单位：河海大学

协办单位：自然资源部国土卫星遥感应用中心

Organizer: Hohai University (HHU)

Co-organizer: Land Satellite Remote Sensing Application Center, Ministry of Natural Resources of P.R.China (LASAC)

项目支撑：国家重点研发计划项目（2023YFE0207900）

Project Support: National Key R&D Program of China (Project No. 2023YFE0207900)

地址：河海大学江宁校区笃学楼 江苏省南京市江宁区佛城西路8号

邮编：211100

Address: Duxue Building, Jiangning Campus, Hohai University

No. 8, Focheng West Road, Jiangning District, Nanjing, Jiangsu Province, China

Postcode: 211100