Theme: Geography and Sustainable Development: Challenges and Opportunities

26-29 October, 2023 | Beijing, China & online

The International Year of Basic Sciences for Sustainable Development launched by UNESCO highly recognized the importance of basic sciences for attaining sustainable development. As a transdisciplinary discipline studying the coupled human and nature systems and their interactions, geography has natural advantages to promote the sustainable development by providing the underpinning theories, methodologies, models and data. Geographers have made important contributions to exploring the nexus between the natural and social sciences, and delivered knowledge and experiences that are needed to support transformation towards sustainable development. The International Workshop on Geography and Sustainability 2023 aims to identify the challenges and explore the opportunities associated with geography and sustainable development. All are welcomed to participate the conference to address sustainable development from a geography perspective and contribute to the sustainable development of the world.

We look forward to you joining us in Beijing and online in October 2023!

http://geosus2023.scievent.com/

CONTENTS

Committees	
Keynote Speakers	
Conference Program Overview	
Opening and Closing Ceremony & Keynote Speech	Sessions
Thematic Sessions Schedule	
Thematic Sessions Presentations	26
Conference Venue	76

Conference Program Overview

October 26	Registration
	Time: 14:00-19:00 CNCC Main Lobby A (C1 Access)
	Editorial Board Meeting of Geography and Sustainability and Panel DiscussionTime: 16:00-18:00Meeting Room 213AB
	Dinner Time: 18:00-20:00 Meeting Room 402AB
	RegistrationTime: 8:00-19:00CNCC Main Lobby A (C1 Access)
	Opening Ceremony and Keynote Speech Session ITime: 8:30-11:40Function Hall A
October 27	Lunch Time: 12:00-13:00 Function Hall B
	In-person Poster SessionTime: 13:00-13:30Poster Zone
	Thematic Session 01 Carbon emissions, sequestrations and carbon neutrality 02 Climate-smart conservation 03 Coupled Human-cultivated land utilization systems 06 Earth observation and big earth data for sustainability 07 Ecological security, risk, and sustainability in urbanization 10 Unimate pattern acture and evolve bility
	 10 Human-nature coupling system and sustainability 13 Land use/land Cover change and sustainable development 14 Nature-based Solutions for disaster risk reduction 16 Rural geography in achieving sustainable development 18 Sustainable development goals: assessments, interactions, and advancing pathways 20 Sustainable water resources management in agriculture under drought scenario 23 Understanding hazards and risks for sustainable development
	Time: 13:30-15:30 Meeting Room: 206AB, 209AB, 210AB, 212AB, 213AB, 215
	Refreshment BreakTime: 15:30-15:50Function Hall B

15

October 27	Thematic Session01 Carbon emissions, sequestrations and carbon neutrality03 Coupled Human-cultivated land utilization systems06 Earth observation and big earth data for sustainability07 Ecological security, risk, and sustainability in urbanization09 Geography education and sustainable development10 Human-nature coupling system and sustainability11 Land Degradation as a Local and Global Challenge12 Landscape dynamics and extreme events in the Himalaya: experiences and case studies13 Land use/land Cover change and sustainable development16 Rural geography in achieving sustainable development20 Sustainable water resources management in agriculture under drought scenario23 Understanding hazards and risks for sustainable developmentTime: 15:50-17:50
	Reception Dinner
	Time: 18:00-20:00
October 28	Registration Time: 18:00-20:00
	 Thematic Session 04 Dryland climate change and water cycle 05 Dryland sustainability 06 Earth observation and big earth data for sustainability 08 Ecosystem service flow and payment for ecosystem service 15 Nature-based Solutions for synergy of social-ecological-economic development 17 Smart cities and sustainability in comparative perspective 19 Sustainable transformation of agricultural land system 21 Third pole environment and sustainability 22 Transitional geospace and human-nature coupling for sustainability 25 Urban sustainability: coupling social-ecological systems to overcome climate and biodiversity crises
	Time: 8:00-9:40 Meeting Room: 206AB, 209AB, 210AB, 212AB, 213AB, 215
	Refreshment BreakTime: 9:40-10:00Function Hall B

	Thematic Session
	04 Dryland climate change and water cycle
	05 Dryland sustainability
	06 Earth observation and big earth data for sustainability
	08 Ecosystem service flow and payment for ecosystem service
	15 Nature-based Solutions for synergy of social-ecological-economic development
	17 Smart cities and sustainability in comparative perspective
	19 Sustainable transformation of agricultural land system
	21 Third pole environment and sustainability
October 28	22 Transitional geospace and human-nature coupling for sustainability
0000001 20	24 Urban green spaces and sustainability
	25 Urban sustainability: coupling social-ecological systems to overcome climate and biodi-
	versity crises
	Time: 10:00-11:30 Meeting Room: 206AB, 209AB, 210AB, 212AB, 213AB, 215
	Lunch
	Time: 12:00-13:00 Function Hall B
	Keynote Speaker Session II and Closing Ceremony
	Time: 13:30-17:00 Function Hall A
October 29	Field Trips

Opening and Closing Ceremony & Keynote Speech Sessions Opening Ceremony & Keynote Speech Session I October 27 8:30-11:40 Function Hall A ZOOM ID: 977 1706 2617

Moderator: Xiaobin Dong (Beijing Normal University, China)	
8:30-9:00	Opening Ceremony Welcome addresses
Moderator: Holly Barcus (Macalester College, USA)	
9:00-9:25	Title: <i>Social-Ecological Systems and Sustainability</i> Speaker: Bojie Fu (Beijing Normal University; Research Centre for Eco-Environmental Sci- ences, Chinese Academy of Sciences, China)
9:25-9:50	Title: <i>Changing Coastal Environments of China in the Anthropocene</i> Speaker: Michael Edwards Meadows (University of Cape Town, South Africa; Nanjing Uni- versity, China)

9:50-10:15	Title: <i>Sustainability Geography: An Emerging Interdisciplinary Frontier</i> Speaker: Jianguo Liu (Michigan State University, USA)
10:15-10:35	Refreshment Break (Function Hall B)
Moderator: Junguo Liu (North China University of Water Resources and Electric Power, China)	
10:35-11:00	Title: Watershed Science: Coupling Hydrological Science and Decision Making for Sustain- able Water Resources Management Speaker: Chansheng He (Western Michigan University, USA)
11:00-11:25	Title: <i>Considering the Role of Community Engagement in Rural Sustainability Narratives</i> Speaker: Holly Barcus (Macalester College, USA)
11:25-11:40	Title: <i>IYBSSD: Highlighting the Value of Basic Sciences and Launching the International Decade of Sciences</i> Speaker: Zhijun Yi (Bureau of International Cooperation, Chinese Academy of Sciences, China)

Keynote Speech Session II and Closing CeremonyOctober 28 13:30-17:00Function Hall AZOOM ID: 977 1706 2617

Moderator: Yongping Wei (University of Queensland, Australia)	
13:30-13:55	Title: Urbanising Asia and Africa: Challenges and Opportunities for Geographers Speaker: Yaping Wang (University of Glasgow, UK)
13:55-14:20	Title: Integrated Disaster Risk Reduction and Enhancing Sustainability Speaker: Peijun Shi (Beijing Normal University, China)
14:20-14:45	Title: Addressing Planetary Crisis and Accelerating Sustainable Development through Nature-based Solutions Speaker: Charles Karangwa (IUCN Nature based Solutions (NbS) Management Hub)
14:45-15:05	Refreshment Break (Function Hall B)
Moderator: Ya Ping Wang (University of Glasgow, UK)	
15:05-15:30	TTitle: <i>Probabilities for Achieving Sustainable Development Goals and Future Scenarios for</i> <i>China</i> Speaker: Yonglong Lu (Xiamen University, China)

16:20-17:00

International Workshop on Geography and Sustainability

15:30-15:55	Title: Fertile Islands as Hotspots of Biogeochemical Activity in Global Drylands Speaker: David Eldridge (University of New South Wales, Australia)
15:55-16:20	Title: Research on Human-Earth System Detection Based on Multisource Data Speaker: Yansui Liu (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences)
Moderator: Yan Li (Beijing Normal University, China)	
10.00 17.00	Closing Ceremony

Announcements for Best Speakers/Posters/GeoSus Editors/Reviewers/Articles

Thematic Sessions Schedule

October 27 13:30-15:30	01 Carbon emissions, sequestrations and carbon neutralityConveners: Yangjian Zhang (Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China); Jonathan Adams (Professor, Nanjing University, China)Meeting Room 206AZOOM ID: 93384031646
	02 Climate-smart conservation(13:30-14:30)Conveners: Walter Musakwa (Professor, University of Johannesburg, South Africa); RegisMusavengane (Research Fellow, University of Johannesburg, South Africa)Meeting Room 215ZOOM ID: 96004590768
	03 Coupled Human-cultivated land utilization systemsConveners: Xiangbin Kong (Professor, China Agricultural University, China); Minghong Tan(Professor, Institute of Geographic Sciences and Natural Resources Research, ChineseAcademy of Sciences, China); Xinli Ke (Professor, Huazhong Agricultural University, China)Meeting Room 206BZOOM ID: 95994667541
	06 Earth observation and big earth data for sustainabilityConvener: Bingfang Wu (Professor, Aerospace Information Research Institute, ChineseAcademy of Sciences, China)Meeting Room 209AZOOM ID: 93262245051
	 07 Ecological security, risk, and sustainability in urbanization Conveners: Jian Peng (Professor, Peking University, China); Yanxu Liu (Associate Professor, Beijing Normal University, China) Meeting Room 209B ZOOM ID: 99866676427

	10 Human-nature coupling system and sustainability Conveners: Shuai Wang (Professor, Beijing Normal University, China); Örjan Bodin (Profes-
	sor, Stockholm Resilience Centre at Stockholm University, Sweden); Haibin Chen (Professor, Northwest A&F University, China) Meeting Room 210A ZOOM ID: 98556883236
October 27 13:30-15:30	13 Land use/land Cover change and sustainable developmentConveners: Monica Dumitrascu (Institute of Geography, Romanian Academy. Romania;Chair of IGU-LUCC Commission); Jinwei Dong (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences)Meeting Room 210BZOOM ID: 95286168927
	14 Nature-based Solutions for disaster risk reduction (14:30-15:30)Conveners: Carla Ferreira (Researcher, Coimbra Polytechnic Institute, Portugal); Zahra Ka- lantari (Professor, KTH Royal Institute of Technology, Sweden); Haozi Pan (Professor, Shang- hai Jiaotong University, China); Karen Sudmeier-Rieux (Researcher, TH Kéln, University of Cologne, Germany); Milica Kasanin-Grubin (Researcher, University of Belgrade, Republic of Serbia)Meeting Room 215ZOOM ID: 98749876332
	16 Rural geography in achieving sustainable developmentConveners: Hualou Long (Professor, Steering Committee Member of IGUCommission on the Sustainability of Rural Systems; Institute of Geographic Sciences andNatural Resources Research, Chinese Academy of Sciences, China); Yingnan Zhang (Doctor,Zhejiang University, China)Meeting Room 212AZOOM ID: 91721863987
	18 Sustainable development goals: assessments, interactions, and advancing pathwaysConveners: Xutong Wu (Doctor, Beijing Normal University, China); Gabriela Morosanu (Institute of Geography, Romanian Academy, Romania)Meeting Room 212BZOOM ID: 94369744913
	20 Sustainable water resources management in agriculture under drought scenarioConveners: Paolo Tarolli (Full Professor, University of Padova, Italy); Eugenio Straffelini (Research Assistant University of Padova, Italy)Meeting Room 213AZOOM ID: 91322936291
	23 Understanding hazards and risks for sustainable developmentConvener: Takashi Oguchi (Professor, The University of Tokyo, Japan)Meeting Room 213BZOOM ID: 96676372237
15:30-15:50	Refreshment Break (Function Hall B)

October 27 15:50-17:50	01 Carbon emissions, sequestrations and carbon neutralityConveners: Yangjian Zhang (Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China); Jonathan Adams (Professor, Nanjing University, China)Meeting Room 206AZOOM ID: 93384031646
	03 Coupled Human-cultivated land utilization systemsConveners: Xiangbin Kong (Professor, China Agricultural University, China); Minghong Tan(Professor, Institute of Geographic Sciences and Natural Resources Research, ChineseAcademy of Sciences, China); Xinli Ke (Professor, Huazhong Agricultural University, China)Meeting Room 206BZOOM ID: 95994667541
	06 Earth observation and big earth data for sustainability Convener: Bingfang Wu (Professor, Aerospace Information Research Institute, Chinese Academy of Sciences, China) Meeting Room 209A ZOOM ID: 93262245051
	07 Ecological security, risk, and sustainability in urbanizationConveners: Jian Peng (Professor, Peking University, China); Yanxu Liu (Associate Professor,Beijing Normal University, China)Meeting Room 209BZOOM ID: 99866676427
	09 Geography education and sustainable development (16:50-18:00)Conveners: Paulo Pereira (Professor, Mykolas Romeris University, Lithuania); Wenwu Zhao(Professor, Beijing Normal University, China)Meeting Room 215ZOOM ID: 92865200427
	10 Human-nature coupling system and sustainabilityConveners: Shuai Wang (Professor, Beijing Normal University, China); Örjan Bodin (Professor, Stockholm Resilience Centre at Stockholm University, Sweden); Haibin Chen (Professor, Northwest A&F University, China)Meeting Room 210AZOOM ID: 98556883236
	11 Land Degradation as a Local and Global Challenge (15:50-16:50)Convener: Matija Zorn (Head of the Institute, Research Centre of the Slovenian Academy ofSciences and Arts, Anton Melik Geographical Institute, The Republic of Slovenia)Meeting Room 215ZOOM ID: 97469480292
	12 Landscape dynamics and extreme events in the Himalaya: experiences and case studiesConveners: Pankaj Kumar (Associate Professor University of Delhi, India); Manish Kumar(Assistant Professor Central University of Haryana, India); Shipra Singh (Assistant ProfessorMiranda House, India)XOOM ID: 91238955836

	13 Land use/land Cover change and sustainable developmentConveners: Monica Dumitrascu (Institute of Geography, Romanian Academy. Romania;Chair of IGU-LUCC Commission); Jinwei Dong (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences)Meeting Room 210BZOOM ID: 95286168927
	16 Rural geography in achieving sustainable development
	Conveners: Hualou Long (Professor, Steering Committee Member of IGU
	Commission on the Sustainability of Rural Systems; Institute of Geographic Sciences and
October 27	Natural Resources Research, Chinese Academy of Sciences, China); Yingnan Zhang (Doctor,
15:50-17:50	Zhejiang University, China)
10.00-17.00	Meeting Room 212A ZOOM ID: 91721863987
	20 Sustainable water resources management in agriculture under drought scenario
	Conveners: Paolo Tarolli (Full Professor, University of Padova, Italy); Eugenio Straffelini (Re-
	search Assistant University of Padova, Italy)
	Meeting Room 213A ZOOM ID: 91322936291
	23 Understanding hazards and risks for sustainable development
	Convener: Takashi Oguchi (Professor, The University of Tokyo, Japan)
	Meeting Room 213B ZOOM ID: 96676372237

	04 Dryland climate change and water cycleConveners: Jianping Huang (Professor, Lanzhou University, China); Haipeng Yu (Professor, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China)Meeting Room 206AZOOM ID: 98504382476		
October 28 8:00-9:40	05 Dryland sustainability Conveners: Nan Lu (Professor, Research Center for Eco-Environmental Sciences Chinese Academy of Sciences, China); David Eldridge (Adjunct Professor, UNSW, Australia); Changli- ang Shao (Professor, Chinese Academy of Agricultural Sciences, China); Jingyi Ding (Assis- tant Professor, Beijing Normal University, China) Meeting Room 206B ZOOM ID: 96829224290		
	06 Earth observation and big earth data for sustainability Convener: Bingfang Wu (Professor, Aerospace Information Research Institute, Chinese Academy of Sciences, China) Meeting Room 209A ZOOM ID: 98241180925		

	08 Ecosystem service flow and payment for ecosystem serviceConveners: Jing Li (Professor, Shaanxi Normal University, China); Xianfeng Liu (AssociatedProfessor, Shaanxi Normal University, China)Meeting Room 209BZOOM ID: 93402252972
	Interview Intervie
October 28	 <i>17 Smart cities and sustainability in comparative perspective</i> Conveners: Gary Sigley (Professor, Faculty of Geographical Science, Beijing Normal University, China); Mengmeng Zhang (Assistant Professor, Faculty of Geographical Science, Beijing Normal University, China); Marcus Foth (Professor, Faculty of Creative Industries, Education, and Social Justice, Queensland University of Technology, Australia) Meeting Room 210B ZOOM ID: 92104841923
8:00-9:40	19 Sustainable transformation of agricultural land systemConveners: Xiangzheng Deng (Professor, Institute of Geographic Sciences and NaturalResources Research, CAS, China); Hua Qin (Associate Professor, Division of Applied So-cial Sciences, University of Missouri-Columbia, USA); John Gibson (Professor, University ofWaikato, New Zealand)ZOOM ID: 94669865268
	21 Third pole environment and sustainabilityConveners: Jian Sun (Professor, Institute of Tibetan Plateau Research Chinese Academy of Science, China); Hua Shang (Doctor, Rutgers University, USA); Xiaoyong Bai (Institute Of Geochemistry, Chinese Academy of Sciences, China)Meeting room 215ZOOM ID: 94110763931
	22 Transitional geospace and human-nature coupling for sustainabilityConveners: Wei Deng (Professor, Sichuan Normal University, China); Lianqi Zhu (Professor,Henan University, China); Junhong Bai (Professor, Beijing Normal University, China); JintongLiu (Professor, IGDB, CAS, China); Yuluan Zhao (Professor, Guizhou Normal University, China);na); Shaoyao Zhang (Associate Professor, Sichuan Normal University, China)Meeting Room 212BZOOM ID: 98373036947

	24 Urban green spaces and sustainabilityConveners: Long Li (Associate Professor, China University of Mining and Technology, China); Xinyang Yu (Lecturer, Shandong Agricultural University, China); Changlong Li (Lecturer, Guangzhou College of Commerce, China)Meeting Room 213AZOOM ID: 94800586125					
	25 Urban sustainability: coupling social-ecological systems to overcome climate and biodi- versity crisesConveners: Michael Meadows (Professor, Nanjing University, China); Fanhua Kong (Professor, Nanjing University, China); Ariane Middel (Associated professor Arizona state University, USA)Meeting Room 213BZOOM ID: 92321187894					
9:40-10:00	Refreshment Break (Function Hall B)					
	04 Dryland climate change and water cycleConveners: Jianping Huang (Professor, Lanzhou University, China); Haipeng Yu (Professor, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China)Meeting Room 206AZOOM ID: 98504382476					
	05 Dryland sustainabilityConveners: Nan Lu (Professor, Research Center for Eco-Environmental Sciences ChineseAcademy of Sciences, China); David Eldridge (Adjunct Professor, UNSW, Australia); Changli-ang Shao (Professor, Chinese Academy of Agricultural Sciences, China); Jingyi Ding (Assistant Professor, Beijing Normal University, China)Meeting Room 206BZOOM ID: 96829224290					
October 28 10:00-11:30	06 Earth observation and big earth data for sustainability Convener: Bingfang Wu (Professor, Aerospace Information Research Institute, Chinese Academy of Sciences, China) Meeting Room 209A ZOOM ID: 98241180925					
	08 Ecosystem service flow and payment for ecosystem serviceConveners: Jing Li (Professor, Shaanxi Normal University, China); Xianfeng Liu (AssociatedProfessor, Shaanxi Normal University, China)Meeting Room 209BZOOM ID: 93402252972					
	15 Nature-based Solutions for synergy of social-ecological-economic developmentConveners: Ming Luo (Director, Key Laboratory of Land Consolidation and Rehabilitation,Ministry of Natural Resources, China); Jun Wang (Director, Land Consolidation and Rehabilitation Center, MNR; Land Science and Technology Innovation Center, MNR, China); YanZhang (Country Coordinator, IUCN China Office, China); Emmanuelle COHEN-SHACHAM(Lead, Nature-based Solutions Thematic Group, CEM, IUCN, USA); Zhaowu Yu (Professor,Fudan University, China)Meeting Room 210AZOOM ID: 92857943948					



17 Smart cities and sustainability in comparative perspective

Conveners: Gary Sigley (Professor, Faculty of Geographical Science, Beijing Normal University, China); Mengmeng Zhang (Assistant Professor, Faculty of Geographical Science, Beijing Normal University, China); Marcus Foth (Professor, Faculty of Creative Industries, Education, and Social Justice, Queensland University of Technology, Australia)

Meeting Room 210B ZOOM ID: 92104841923

19 Sustainable transformation of agricultural land system

Conveners: Xiangzheng Deng (Professor, Institute of Geographic Sciences and Natural Resources Research, CAS, China); Hua Qin (Associate Professor, Division of Applied Social Sciences, University of Missouri-Columbia, USA); John Gibson (Professor, University of Waikato, New Zealand)

Meeting Room 212A ZOOM ID: 94669865268

21 Third pole environment and sustainability

Conveners: Jian Sun (Professor, Institute of Tibetan Plateau Research Chinese Academy of Science, China); Hua Shang (Doctor, Rutgers University, USA); Xiaoyong Bai (Institute Of Geochemistry, Chinese Academy of Sciences, China)

Meeting room 215 ZOOM ID: 94110763931

October 28 10:00-11:30

22 Transitional geospace and human-nature coupling for sustainability

Conveners: Wei Deng (Professor, Sichuan Normal University, China); Lianqi Zhu (Professor, Henan University, China); Junhong Bai (Professor, Beijing Normal University, China); Jintong Liu (Professor, IGDB, CAS, China); Yuluan Zhao (Professor, Guizhou Normal University, China); Shaoyao Zhang (Associate Professor, Sichuan Normal University, China)

Meeting Room 212B

ZOOM ID: 98373036947

24 Urban green spaces and sustainability

Conveners: Long Li (Associate Professor, China University of Mining and Technology, China); Xinyang Yu (Lecturer, Shandong Agricultural University, China); Changlong Li (Lecturer, Guangzhou College of Commerce, China)

Meeting Room 213A ZOOM ID: 94800586125

25 Urban sustainability: coupling social-ecological systems to overcome climate and biodiversity crises

Conveners: Michael Meadows (Professor, Nanjing University, China); Fanhua Kong (Professor, Nanjing University, China); Ariane Middel (Associated professor Arizona state University, USA)

Meeting Room 213B ZOOM ID: 92321187894

25

Thematic Sessions Presentations

01 Carbon emissions, sequestrations and carbon neutrality (Oct 27 13:30-17:10)

Conveners: Yangjian Zhang (Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China); Jonathan Adams (Professor, Nanjing University, China)

Meeting Room 206A Zoom: 93384031646

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:50	Confirming Remote Sensing Reliability to Mitigate Error Propagation	Guofan Shao	Purdue University	Oral Pre- sentation (in-person)
13:50- 14:10	The Impact of Land Use Changes on Carbon Flux in the World's 100 Largest Cities	Yong- ping Wei	The University of Queensland	Oral Pre- sentation (in-person)
14:10- 14:30	From Soils to Streams: Connecting Ter- restrial Carbon Transformation, Chemi- cal Weathering, and Solute Export	Hang Wen	Tianjin University	Oral Pre- sentation (in-person)
14:30- 14:50	Responses of carbon storage to land use pattern in karst area: A case study of Nanbei Panjiang River Basin	Dan Luo	Guizhou Normal University	Oral Pre- sentation (in-person)
14:50- 15:10	Quantifying Greenhouse Gas Emissions and Nitrogen Losses of Rice-Paddy in Tai Lake Region of China	Yufan Gao	Duke Kunshan University	Oral Pre- sentation (in-person)
15:10- 15:30	The Great Climate Mitigation Potential of Cropland Ecosystem Management in China	Huan Zheng	Beijing Normal University	Oral Pre- sentation (in-person)
15:30- 15:50	Refreshment Break(Function Hall B)			'
15:50- 16:10	38% carbon emissions can be reduced in China's planting industry system by closing intensity gap	Qiao Li	Northwest A&F University	Oral Presen- tation (virtual)
16:10- 16:30	Blue Carbon Target Space and Legal Limitations in South Korea	Chan Woong Kim	Korea Maritime Institute	Oral Presen- tation (virtual)

16:30- 16:50	CH4 emission of the wetlands on the Tibetan Plateau	Yangjian Zhang	Institute of Geographic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral Pre- sentation (in-person)
16:50- 17:10	Complex Cooccurrence Networks and Microbial Community Dynamics in Pad- dy Field	Jon- athan Adams	Nanjing University	Oral Pre- sentation (in-person)
P01-1	Challenges and opportunities for esti- mating GPP using entirely satellite data across Chinese terrestrial ecosystems	Chunyan Cao	Lanzhou university	Poster
P01-2	Impact of Chinese cropland displace- ment on carbon budget and its optimi- zation	Siyu Sheng	Central China Normal Uni- versity	Poster
P01-3	Performance assessment of land car- bon storage in China based on dynam- ic global vegetation models	Weiyi Xu	China University of Mining and Technology	Poster
P01-5	Public-Private Partnerships and House- hold Carbon Emissions: Evidence from Prefecture-Level Cities in China	Tianzuo Wen	The University of Hong Kong	Poster
P01-6	Cluster planting of crops can help reduce agricultural carbon emissions	Haowei Wu	Institute of Geograph- ic Sciences and Natural Resources Research, CAS/ University of Chinese Acad- emy of Sciences	Poster
P01-7	Impacts of Urbanization on Carbon Emissions: A perspective from city level using EKC and PVAR Models	Xiuli Cao	China University of Mining and Technology	Poster
P01-8	Multi-scenario simulation to evaluate the effects of urbanization on habitats and connectivity in Nanning, China.	Shihui Chang	Guangxi University	Poster
P01- 10	Spatial and Temporal Characteristics and Influencing Factors of County Land Use Carbon Emissions in China	Chong Liu	China University of Geosci- ences, Wuhan	Poster
P01- 11	Networking for carbon intensity and its driving factors in urban agglomerations: A social network approach	Beiqing Zhu	Macau University of Sci- ence and Technology/ Guangzhou Xinhua College	Poster

International Workshop on

Geography and Sustainability

P01- 12	Potential Carbon Sequestration and Economic Value Assessment of the Relict Plant Ginkgo biloba L. Based on the Maximum Entropy Model	Xiaoting Zhang	Beijing Normal University	Poster
P01- 13	China can achieve agricultural carbon neutrality nearly 20 years earlier detected by integrating new assessing framework and multi-scenario deep learning models	Chao- qing Chai	Northwest Agriculture and Forestry University	Poster

02 Climate-smart conservation (Oct 27 13:30-14:30)

Conveners: Walter Musakwa (Professor, University of Johannesburg, South Africa); Regis Musavengane (Research Fellow, University of Johannesburg, South Africa)

Meeting Room 215 Zoom: 96004590768

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:40	Assessing the impact of climate change on the Agricultural system of Parvati Valley, Kul- lu District, Himachal Pradesh.	Udbhaw Sandylya	University of Delhi	Oral presentation (virtual)
13:40- 13:50	Application of Remote sensing & GIS in Cryosphere studies With Special Reference to Sikkim Himalaya & its Ranikhola Water- shed at Prognostic Climate Change Sce- nario	SUDIP DEY	ASUTOSH COL- LEGE, UNIVERSITY OF CALCUTTA	Oral presentation (virtual)
13:50- 14:00	Optimization of conservation pattern for adaption to sea level rise and rapid urban- ization in the Guangdong-Hong Kong-Ma- cao Greater Bay Area	Xinyi Dong	South China Uni- versity of Technolo- gy	Oral presentation (virtual)
14:00- 14:10	The linkages between sub-Saharan pro- tected areas and local tourism communities in combating climate change	Michael	North-West Univer- sity	Oral presentation (virtual)
14:10- 14:20	Combining Artificial Intelligence and citizen science for better conservation outcomes in the Gonarezhou National Park	Walter Musak- wa	University of Johan- nesburg	Oral presentation (in person)



14:20- 14:30	Increasing Human-Wildlife Conflict (HWC) due to Climate Change: Implications and Mitigation Strategies	Nyasha Norah Mavhu	Geography and built environment, Mount Pleasant, Harare, Zimbabwe	Oral presentation (virtual)
-----------------	--------------------------------------------------------------------------------------------------------------	--------------------------	----------------------------------------------------------------------------	--------------------------------

03 Coupled Human-cultivated land utilization systems (Oct 27 13:30-17:50)

Conveners: Xiangbin Kong (Professor, China Agricultural University, China); Minghong Tan (Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China); Xinli Ke (Professor, Huazhong Agricultural University, China)

Meeting Room 206B Zoom: 95994667541

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	The Development Trends, Framework Con- struction, and Case Studies of Coupled Hu- man-Cultivated Land Utilization Systems	Xiangbin Kong	China Agricultural University	Oral Pre- sentation (in-person)
13:45- 14:00	Spatio-temporal evolution patterns of ecologi- cal land based on a "scale-morphology-value" perspective	Zheng- feng Zhang	Renmin University of China	Oral Pre- sentation (in-person)
14:00- 14:15	Coupling human-farmland utilization by territo- rializing the responsibility of food security: the lenses of food localization	Taiyang Zhong	Nanjing University	Oral Pre- sentation (in-person)
14:15- 14:30	Theoretical mechanism and empirical test of cultivated land renting-in affecting sustainable intensification: Analysis on the mediating effect of management scale and fragmentation level	Xiao Lv	Northeastern Univer- sity	Oral Pre- sentation (in-person)
14:30- 14:45	The study on the green transition of cultivated land use and driving mechanism in Guangdong Province	Dafang Wu	Guangzhou Universi- ty	Oral Pre- sentation (in-person)
14:45- 15:00	Social-economic-ecological predicament on sloping cropland in China	Yahui Wang	Southwest University	Oral Pre- sentation (in-person)
15:00- 15:15	Evaluation of drought resilience in crop sys- tems and its regional differences	Caiqian Bai	Central China Normal University	Oral Pre- sentation (in-person)

15:15- 15:30	Dynamic assessment of the water-ener- gy-cropland nexus in China from 2007 to 2017	Ziwen Liu	Beijing Normal Uni- versity	Oral Pre- sentation (in-person)
15:30- 15:50	Refreshment Break (Function Hall B)			
15:50- 16:05	Changes in the spatial distribution of China's population and the impacts on cropland use	Ming- hong Tan	Institute of Geo- graphic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral Pre- sentation (in-person)
16:05- 16:20	Vulnerability to biological disasters: A novel field of cultivated land use transition research	Xiaoqing Song	China University of Geosciences	Oral Pre- sentation (in-person)
16:20- 16:35	Balancing Crop Security and Sustainable Crop- land Use: Policy Lessons from the Watershed Ecosystem Service Payments in Xin'an River, China	Tan Li	Anhui agricultural university	Oral Pre- sentation (in-person)
16:35- 16:50	Is there still any relations among smallholders who adopt farmland trusteeship service? – Evidence from a social network analysis of a cross-village farmers' professional cooperative in China	Guanyi Yin	Shandong Normal University	Oral Pre- sentation (in-person)
16:50- 17:05	Influence and countermeasures of cropland requisition-compensation balance system on non-grain production in mountainous areas in China: A case study of Fujian Province	Zhen Xie	Fujian Agricultural and Forestry Univer- sity	Oral Pre- sentation (in-person)
17:05- 17:20	Spillover effect offset saving water of winter wheat-fallow policy	Ming Lei	China Agricultural University	Oral Pre- sentation (in-person)
17:20- 17:35	The characteristics of arable land use mor- phology and mechanism at Village level—case study of Xiaozhai Village, Hanzhong, Shaanxi	Yanfen He	Northwest University	Oral Presen- tation (Virtu- al)
17:35- 17:50	Studying the Relationship between Farmland "Non-agriculturalization" and Agricultural Habitat Quality during Urbanization: A Case Study of Hunan Province	Qing Li	Hunan University of Finance and Eco- nomics	Oral Pre- sentation (in-person)

P03-1	Characteristic evolution and trend prediction of cultivated land landscape fragmentation in China in recent 30 years	Jing Liu	China University of Mining and Technol- ogy	Poster
P03-2	The Coupling Characteristics and Influencing Factors of the "Homestead-cultivated Land" System in the Three Gorges Reservoir Area from a Farmer Perspective	Lulu Zhou	Southwest University	Poster
P03-4	How does the relationship between ecosystem services and biodiversity vary across scales under the influence of landscape heterogene- ity?	Yufei Zhang	Shenyang Agricultur- al University	Poster
P03-6	Trend and spatial pattern of stable cropland productivity in China based on satellite obser- vations (2001– 2020)	Bo Han	Nanjing University	Poster
P03-7	Evolution of Land Use Pattern and Spatial Competition Characteristics in the Agricultural and Pastoral Interlaced Zone of Northern China	Kaige Wang	China Agricultural University	Poster
P03-8	Prioritization of post-mining land restoration from a cost-benefit perspective:A case study of "Northern Sand Belt", China	Zhichao Dong	Shenyang Agricultur- al University	Poster
P03- 10	Effects of farmland landscape pattern on spa- tial distribution of soil organic carbon in Lower Liaohe Plain of Northeast China	Xiaoc- hen Liu	Shenyang Agricultur- al University	Poster

04 Dryland climate change and water cycle (Oct 28 8:00-11:30)

Conveners: Jianping Huang (Professor, Lanzhou University, China); Haipeng Yu (Professor, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China)

Meeting Room 206A Zoom: 98504382476

Time Slot	Title	Speaker	Institution	Presenta- tion Type
8:00- 8:20	Impact of climate change on the water cycle in the Great Lakes region of Central Asia (invited)	Xi Chen	Xinjiang institute of ecology and geography, Chinese Academy of Sciences	Oral pre- sentation (virtual)

8:20- 8:40	Multiscale drought variations over Asia (invited)	Ren- guang Wu	Zhejiang University	Oral pre- sentation (in person)
8:40- 9:00	Amplifying subtropical hydrological tran- sition over China in early summer tied to weakened mid-latitude synoptic distur- bances (invited)	Wen Zhou	Fudan University	Oral pre- sentation (in person)
9:00- 9:15	Aerosols Influence on Precipitating and Non-Precipitating Clouds during Summer and Winter	Khan Alam	University of Peshawar, Pakistan	Oral pre- sentation (virtual)
9:15- 9:30	Super Drought: Concept, Monitoring Index and Web Services	Lin Wang	Institute of Atmospheric Physics, Chinese Acade- my of Sciences	Oral pre- sentation (in person)
9:30- 9:45	Revisiting biophysical impacts of greening on precipitation over the Loess Plateau of China using WRF with water vapor tracers	Jun Ge	Nanjing University	Oral pre- sentation (in person)
9:45- 10:00	Refreshment Break (Function Hall B)	1	<u></u>	1
10:00- 10:20	Arctic sea ice and climate prediction (invit- ed)	Ke Fan	Sun Yat-sen University	Oral pre- sentation (in person)
10:20- 10:40	Climate Change and Disaster Footprint Analysis (invited)	Dabo Guan	Tsinghua University	Oral pre- sentation (in person)
10:40- 11:00	Land-atmosphere feedbacks and dryland water cycle (invited)	Sha Zhou	Beijing Normal University	Oral pre- sentation (in person)
11:00- 11:15	Oxygen footprint for dryland expansion	Dongli- ang Han	Lanzhou University	Oral pre- sentation (in person)
11:15- 11:30	Vegetation restoration potential in the dry- lands of China under water constraint	Huiqing Lin	Beijing Normal University	Oral pre- sentation (in person)
P04-1	Human activities impact the propagation from meteorological to hydrological drought in the Yellow River Basin, China	Qi Zhang	Beijing Normal University	Poster

P04-2	Assessment and attribution of global surface water stress From the Past to the Future	Ming Peng	Lanzhou University	Poster
P04-3	The Response of Water Cycle to Global Warming over Drylands in East Asia	Yu Ren	Lanzhou University	Poster
P04-4	Reverse desertification in Yellow River Ba- sin from Satellite observation	Guolong Zhang	Lanzhou University	Poster
P04-5	The Precipitation-Recycling Process En- hanced Extreme Precipitation in Xinjiang, China	Jinxia Zhang	Lanzhou University	Poster
P04-6	Accelerated reversals of vegetation green- ness in China's dryland	Li Fu	Lanzhou university	Poster
P04-7	Variation characteristics of drought during the whole growth period of spring maize in the Songnen Plain	Fuguo Zhang	Heilongjiang Bayi Agricul- tural University	Poster

05 Dryland sustainability (Oct 28 8:00-11:25)

Conveners: Nan Lu (Professor, Research Center for Eco-Environmental Sciences Chinese Academy of Sciences, China); David Eldridge (Adjunct Professor, UNSW, Australia); Changliang Shao (Professor, Chinese Academy of Agricultural Sciences, China); Jingyi Ding (Assistant Professor, Beijing Normal University, China) Meeting Room 206B Zoom: 96829224290

Time Slot	Title	Speaker	Institution	Presentation Type
8:00- 8:20	Differentiating anthropogenic modification from climate-driven change in Kazakhstan	Ranjeet John	University of South Dakota	Oral presen- tation (virtual)
8:20- 8:40	Understanding the cause-effect relationship between heat waves and wildfires within a Eurasia longitudinal gradient	Raffaele Lafortezza	University of Bari/ Beijing Forestry University	Oral pre- sentation (in person)
8:40- 9:00	Ecological restoration of temperate steppes in Northern China and their contribution to carbon neutrality	Shiqiang Wan	Hebei University	Oral pre- sentation (in person)

		1	T	I
9:00- 9:15	Carbon sequestration potential of Inner Mon- golia grasslands	Shiping Chen	Institute of Botany, Chinese Academy of Sciences	Oral pre- sentation (in person)
9:15- 9:30	Shrub fertile island effect and its response to grazing	Yuchun Yan	Institute of Agricul- tural Resources and Regional Planning, CAAS	Oral pre- sentation (in person)
9:30- 9:45	Life cycle assessment on carbon footprint in northern China agro-pastoral areas	Changliang Shao	Institute of Agricul- tural Resources and Regional Planning, Chinese Academy of Agri- cultural Sciences	Oral pre- sentation (in person)
9:45- 10:00	Refreshment Break (Function Hall B)			
10:00- 10:15	Woody plant removal cannot reverse the impact of woody encroachment across the globe	Jingyi Ding	Beijing Normal University	Oral pre- sentation (in person)
10:15- 10:30	Spatiotemporal differentiation and driving factors of coupling coordination degree of economic-ecological-social benefits from de- sertification control in the Mu Us Sandy Land	Yue Wang	Nanjing Universi- ty of Information Science & Tech- nology	Oral pre- sentation (in person)
10:30- 10:45	Grazing modulated climate-driven ecological thresholds in China's drylands	Changjia Li	Beijing Normal University	Oral pre- sentation (in person)
10:45- 10:55	The Regional Impact of Ecological Restoration in the Arid Steppe on Dust Reduction over the Metropolitan Area in Northeastern China	Chaowei Zhou	Research Center for Eco-environ- mental Sciences, Chinese Academy of Sciences	Oral pre- sentation (in person)
10:55- 11:05	Improved mapping and understanding of dryland vegetation-habitat complexes from spectral endmember space using multi-sea- sonal fraction and harmonic characteristics	Xin Lin	China Agricultural University	Oral pre- sentation (in person)
11:05- 11:15	Differentiated growth of the most widely plant- ed conifer in response to extreme droughts across semi-arid regions in Northern China	Jitang Li	Peking University	Oral pre- sentation (in person)

11:15- 11:25	Belowground soil and vegetation components change across the aridity threshold in grass- lands	Zhuobing Ren	Beijing Normal University/	Oral pre- sentation (in person)
P05-1	The turning point of vegetation greenness and driving factors in Mongolian Plateau	Xinyu Zheng	Research Center of Eco-environ- mental Sciences	Poster
P05-2	Mapping groundwater-dependent ecosys- tems for sustainable dryland ecosystem services provision	Xuanlong Ma	Lanzhou Universi- ty	Poster
P05-3	Sustainability of Vegetation Restoration in Typ- ical Sandy Areas of Eastern China	Fanrui Bu	Beijing Normal University	Poster
P05-4	Relative importance of the effects of climatic factors and human activities on the improve- ment of ecosystem quality in Inner Mongolia during 2005–2020	Mengyuan Li	beijing normal university	Poster
P05-5	Linking regional sustainable development goals with ecosystem services to identify ecological security patterns	Xin Lyu	Beijing Normal University	Poster

06 Earth observation and big earth data for sustainability (1st half session) (Oct 27 13:30-17:10)

Convener: Bingfang Wu (Professor, Aerospace Information Research Institute, Chinese Academy of Sciences, China)

Meeting Room 209A Zoom: 93262245051

Time Slot	Title	Speaker	Institution	Presentation Type
	Towards Intelligent Analysis of Remote			
13:30-	Sensing Big Data for Geological Environ-	Lizhe	China University of	Oral Presenta-
13:50	ment: An Overview of Challenges, Recent	Wang	Geosciences	tion (in-person)
	Progress, and Emerging Opportunities			

13:50- 14:10	Satellite observed Asian dryland greening: drivers and implications to sustainable de- velopment	Xuanlong Ma	Lanzhou University	Oral Presenta- tion (in-person)
14:10- 14:30	Monitoring and Analysis of Economic and Social Sustainable Development Goals (SDGs) from Rmote Sensing Data	Yanjun Wang	Hunan University of Science and Tech- nology	Oral Presenta- tion (in-person)
14:30- 14:50	Vegetation mapping with multi-source data in a global biodiversity hotspot region	Mingjian Xiahou	Peking University	Oral Presenta- tion (in-person)
14:50- 15:10	Mapping global maximum irrigation extent at 30m resolution using the irrigation perfor- mances under drought stress	Fuyou Tian	Aeospace Informa- tion Research Insti- tute, Chinese Acad- emy of Sciences	Oral Presenta- tion (in-person)
15:10- 15:30	Supporting agriculture policy reform to- wards sustainable practices and food security thanks to most advanced satellite observation	Pierre Dedouny	UCLouvain-Geomat- ics (Belgium)	Oral Presenta- tion (virtual)
15:30- 15:50	Refreshment Break (Function Hall B)	1		
15:50- 16:10	The performance of Vega platform and Rus- sian Meteor-M constellation for agriculture satellite monitoring	Dmitry Plotnikov	Space Research Institute of Russian Academy of Scienc- es	Oral Presenta- tion (virtual)
16:10- 16:30	Detailed mapping of individual building height reveals enlarged gap of urban-rural residential spaces in the contiguous US	Yangzi Che	Sun Yat-sen Univer- sity	Oral Presenta- tion (in-person)
16:30- 16:50	Monitoring the modes and phases of global human activity development over 30 years: evidence from county-level nighttime light	Shijie Li	Beijing Normal Uni- versity	Oral Presenta- tion (in-person)
16:50- 17:10	Urban Local Spatial Morphology Cognition Based on High-Resolution Remote Sensing Imagery of 80 Cities Around the World	Jie Chen	Central South Uni- versity	Oral Presenta- tion (in-person)
P06-1	Estimation of the Surface Latent Heat and Sensible Heat Fluxes on different underly- ing surfaces based on FluxNet observation sites and remote sensing data in the Tibet- an Plateau	Fang Zhao	Henan university	Poster



06 Earth observation and big earth data for sustainability (2nd half session) (Oct 28 8:00-11:30)

Convener: Bingfang Wu (Professor, Aerospace Information Research Institute, Chinese Academy of Sciences, China)

Meeting Room 209A Zoom: 98241180925

Time Slot	Title	Speaker	Institution	Presentation- Type
8:00- 8:20	Cloud services with big data provide a solution for monitoring and tracking sustainable development goals	Bingfang Wu	Aeospace Information Research Institute, Chinese Academy of Sciences	Oral Presenta- tion (in-person)
8:20- 8:40	An Operational Assessment Framework for Near Real-time Cropland Dynamics: Toward Sustainable Cropland Use in Mid-Spine Belt of Beautiful China	Le Yu	Tsinghua University	Oral Presenta- tion (in-person)
8:40- 9:00	Sustainability of the surface water resources as derived from the historical river flows: an example of Nebraska, United States	Vijendra K Boken	University of Nebras- ka-Kearney	Oral Presenta- tion (virtual)
9:00- 9:20	Multi-scale observations and simula- tion of carbon-water fluxes in grazing ecosystems and climate-smart live- stock-farming management	Fei Li	Institute of Grassland Research of CAAS	Oral Presenta- tion (in-person)
9:20- 9:40	Cropland mapping, arable land re- source assessment and spatial climate change vulnerability assessment in Zim- babwe using high resolution remotely sensed datasets	Emmanuel Mashon- jowa	University of Zimbabwe	Oral Presenta- tion (in-person)
9:40- 10:00	Refreshment Break (Function Hall B)			
10:00- 10:20-	High resolution Crop Mapping Based on Satellite Data	Ruoque Shen	Sun Yat-sen University	Oral Presenta- tion (in-person)
10:20- 10:40	Assessing the utility of an enhanced fuel age input for improving fuel load estimation using satellite data	Lulu He	University of Adelaide	Oral Presenta- tion (in-person)

International Workshop on

Geography and Sustainability

10:40- 11:00	Irrigation water for cropland increased by 18% from 2003 to 2015 in China's arid and semi-arid regions	Hongwei Zeng	Aerospace Informa- tion Research Institute Chinese Academy of Sciences	Oral Presenta- tion (in-person)
11:00- 11:15	Coupling Google Earth Engine with Remote Sensing for Accurate Coastline Extraction	Manali Santra	Central University of Jharkhand	Oral Presenta- tion (virtual)
11:15- 11:30	Build individual carbon datasets based on blockchain and federated learning using multiple data such as POI, signal- ing, environment, etc	Xuanxuan Chen	Nanjing University	Oral Presenta- tion (virtual)

07 Ecological security, risk, and sustainability in urbanization (Oct 27 13:30-17:40)

Conveners: Jian Peng (Professor, Peking University, China); Yanxu Liu (Associate Professor, Beijing Normal University, China)

Meeting Room: 209B Zoom: 99866676427

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Satellite evidence for global urbanization effect on land surface warming	Decheng Zhou	Nanjing University of Information Science and Technology	Oral presenta- tion (in person)
13:45- 14:00	Urban water scarcity in China	Zhifeng Liu	Beijing Normal Uni- versity	Oral presenta- tion (in person)
14:00- 14:15	Ecological security evaluation of ice- snow tourism destinations: An example of Chongli in China	Chengcai Tang	Beijing International Studies University	Oral presenta- tion (in person)
14:15- 14:30	Spatial variation of reactive nitrogen emissions from China's croplands code- termined by regional urbanization and its feedback to global climate change	Peng Xu	Southern University of Science and Tech- nology (SUSTech)	Oral presenta- tion (in person)
14:30- 14:45	Impact of urban expansion and lake shrink- age on summer climate and human thermal comfort in a land-water mosaic area	Qian Cao	China University of Geosciences	Oral presenta- tion (in person)

14:45- 15:00	Spatiotemporal changes in ecological net- work resilience in the Shandong Peninsula urban agglomeration	Longyang Huang	Chongqing University	Oral presenta- tion (in person)
15:00- 15:15	Nature-based solutions as a useful so- cial-ecological response to climate and biodiversity challenges in Africa cities	Pippin Anderson	University of Cape Town	Oral presenta- tion (virtual)
15:15- 15:30	Risk of Ground Water Depletion in Jaipur District, India: A timeseries prediction of ground water for 2028 using Artificial Neu- ral Network	Monidip Mondal	Jawaharlal Nehru University	Oral presenta- tion (virtual)
15:30- 15:50	Refreshment Break (Function Hall B)			
15:50- 16:00	Socio-Cultural Implications of Urban Ecological Restoration: A Case Study of Maozhou River, Shenzhen	Yuehan Dou	Xi'an Jiaotong-Liver- pool University	Oral presenta- tion (in person)
16:00- 16:10	Research on the dominant factors and the driving threshold of ecosystem service bundles based on "glass box" machine learning model: A case study of Fujian Province	Ziyi Zhang	East China University of Technology	Oral presenta- tion (in person)
16:10- 16:20	Mega-event as accelerator for urban sustainable transformation: Beijing's 2008 Summer Olympics and 2022 Winter Olympics	Ying Xiong	Renmin University of China	Oral presenta- tion (in person)
16:20- 16:30	A quantitative framework to evaluate urban ecological resilience: broadening under- standing through multi-attribute perspectives	Yongyang Wang	Guangdong Univer- sity of Technology	Oral presenta- tion (in person)
16:30- 16:40	Ecosystem health in China under rapid urban construction land expansion: evo- lution trends, driving effects and its spatial inequalities	Guoen Wei	Nanchang University	Oral presenta- tion (in person)
16:40- 16:50	Spatial conservation prioritization based on human and ecological needs in Beijing	Jiping Wen	Beijing University of Civil Engineering and Architecture	Oral presenta- tion (in person)
16:50- 17:00	Exploring the impact of ecosystem health on tea production and well-being in Fujian Province	Dongyan Pang	Qufu Normal Universi- ty/Chinese Academy of Agricultural Sciences	Oral presenta- tion (in person)

17:00- 17:10	Evaluation of the surface water pollution risk from mineral resource exploitation—— a case study of Liaoning province	Huang Dong	Liaoning Normal University	Oral presenta- tion (in person)
17:10- 17:20	Seasonal variations in ecosystem service supply and demand based on the SWAT model: a case study in the Guanting Res- ervoir Basin, China	Yihan Zhou	Beijing Normal Uni- versity	Oral presenta- tion (in person)
17:20- 17:30	Based on Supply and Demand Perspec- tive and GAP Analysis of Funiu Mountains Nature Reserve Ecological security pattern construction	Wenping Deng	Henan University	Oral presenta- tion (in person)
17:30- 17:40	Effects of landscape patterns and their changes on ecosystem health under different topographic gradients: A case study of the Miaoling Mountains in south- ern China	Min Li	Guizhou Normal University	Oral presenta- tion (in person)
P07-1	Impacts of urbanization on ecosystem services and ecological security patterns	Haoyu Wu	shenyang agriculture university	Poster
P07-3	Nature-based Solutions for the construc- tion and evaluation of resource-exhausted cities: A case study of Heshan, Guangxi, South China	Zheng- peng Luo	China University of Geosciences, Wu- han	Poster
P07-4	Evolutionary and zoning of territory space ecosystem function stability on the south- ern hilly areas: From the "structure-func- tion" perspective	Ouyang Xiao	Hunan University of Finance and Eco- nomics	Poster
P07-5	Analyze Temporal and Spatial dynamics of Ecosystem Services and Trade-Offs/Syn- ergies during Urbanization in the Loess Plateau	Jiamin Liu	Shaanxi Normal Uni- versity	Poster
P07-6	Sources and ecological risk assessment associated with spatial-temporal variation characteristics of heavy metals in water- body from Taihu Lake, China	Chao Ji	Yunnan university of finance and econom- ics	Poster
P07-7	Evolution and Relationship between the Expansion of Construction Land and Land Space Conflicts in Jiangsu Province	Xizhao Liu	China University of Mining and Technol- ogy	Poster

P07-8	Construction of ecological security pattern of Yimengshan UNESCO Global Geopark based on InVEST model and circuit theory	Junxiong Mo	Qufu Normal Univer- sity	Poster
P07-9	Relationship between urban industrial land use size and sulfur dioxide emissions: evidence from 294 cities in China	Min Yang	Yunnan Normal Uni- versity	Poster
P07- 10	Incorporating bioclimatic zones into in- forming ecological networks for better biodiversity conservation	Jiaquan Duan	Shanghai normal uni- versity	Poster
P07- 11	Prioritized Spatial Distribution of Na- ture-Based Solutions for Flood Regulation: A Case Study of Xiamen	Ziyuan Luo	Tianjin University/ University College Dublin	Poster
P07- 12	Impacts of Vegetation Dynamics on Re- gional Ecosystem Health in the Three Gorges Reservoir Area, China	Chunbo Huang	China University of Geosciences	Oral presentation (in person)

08 Ecosystem service flow and payment for ecosystem service (Oct 28 8:00-11:25)

Conveners: Jing Li (Professor, Shaanxi Normal University, China); Xianfeng Liu (Associated Professor, Shaanxi Normal University, China)

Meeting Room 209B Zoom: 93402252972

Time Slot	Title	Speak- er	Institution	Presentation Type
8:00- 8:15	Benefit flow is essential for quantifying soil conservation functions	Yihe Lv	Research Center for Eco-en- vironmental Sciences, Chi- nese Academy of Sciences	Oral presentation (in person)
8:15- 8:30	Ecosystem service flow: Theory, meth- ods, and empirical studies	Jing Li	Shaanxi Normal University	Oral presentation (in person)
8:30- 8:45	Virtual flows of ecosystem services embedded in traded goods across metacoupled systems	Qingxu Huang	Beijing Normal University	Oral presentation (in person)

8:45- 9:00	Multi-level ecological compensation poli- cy design based on ecosystem service flow: a case study of carbon seques- tration service in the core area of the Qinghai-Tibet Plateau	Chun- sheng Wu	Institute of Geographic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral presentation (in person)
9:00- 9:15	Carbon sequestration service flow in the Guanzhong-Tianshui economic region of China: How it flows, what drives it, and where could be optimized?	Ting Li	Foshan University	Oral presentation (in person)
9:15- 9:30	Research on optimal management of Qinling-Daba Mountain area based on multi-scale ecosystem service supply and demand	Yuyu Yang	Henan Normal University	Oral presentation (in person)
9:30- 9:45	Compound droughts slow down the greening of the Earth	Gaop- eng Sun	Chinese Academy of Sci- ences	Oral presentation (in person)
9:45- 10:00	Refreshment Break (Function Hall B)			(
10:00- 10:15	Supply-demand relationship and spatial flow of urban cultural ecosystem services	Hui Dang	Research Center for Eco-En- vironmental Sciences, Chi- nese Academy of Sciences	Oral presentation (in person)
10:15- 10:25	Do carbon sequestration and food security in urban and rural landscapes differ in patterns, relationships, and responses?	Ya Zhang	Shaanxi Normal University	Oral presentation (in person)
10:25- 10:35	Grassland Ecosystem Service Value in Tibetan Plateau has not recovered	Fayong Liu	Institute of Geographical Sciences and Natural Re- sources Research Chinese, Academy of Sciences	Oral presentation (in person)
10:35- 10:45	Asymmetrical precipitation sensitivity to temperature across global dry and wet regions	Juan Liang	Shaanxi Normal University	Oral presentation (in person)
10:45- 10:55	Analysis of the Contribution of Eco- system Services and Identification of Ecosystem Regulation Tradeoffs/Col- laborative Relationships in Guangdong Province from 1980 to 2020 at the Township Scale	Xuanx- uan Chen	Nanjing University	Oral presentation (virtual)



10:55- 11:05	Linking Wetland Ecosystem Services to the Landscape Fragmentation Analysis in Rarh Region, West Bengal, India	Rumki Khatun	Kazi Nazrul University	Oral presentation (virtual)
11:05- 11:15	Research on the simulation of water provision service flow and its compen- sation mechanism: A case study of the Wuding River watershed.	Yida Wang	Beijing Normal University	Oral presentation (virtual)
11:15- 11:25	Spatiotemporal differentiation and driving factors of ecosystem services transfor- mation in the Yellow River Basin	Nan Li	Qufu Normal University	Oral presentation (virtual)
P08-1	The Accounting of Ecological Product Value in Chengdu from the Perspective of Environmental Health Benefits	Tianyi Sun	Renmin University of China	Poster
P08-3	Spatial zoning to enhance ecosystem service co-benefits for dustainable land- use management in the Yangtze River Economic Belt, China	Deng- shuai Chen	Liaocheng University	Poster

09 Geography education and sustainable development (Oct 27 16:50-18:10)

Conveners: Paulo Pereira (Professor, Mykolas Romeris Univeristy, Lithuania); Wenwu Zhao (Professor, Beijing Normal University, China)

Meeting Room 215 Zoom: 92865200427

Time Slot	Title	Speaker	Institution	Presentation Type
16:50- 17:00	Does geography matter? Mapping the spatial variations of educational development and the factors affecting it in the Bardhaman District of West Bengal, India	Tamali Halder	University of Hyderabad	Oral presentation (virtual)
17:00- 17:10	Being proactive about anthropogenic environ- mental changes: Augmenting students' decision making with Artificial Intelligence (AI) technology	Xi Xiang		Oral presentation (in person)

International Workshop on

Geography and Sustainability

	"Water"as a key anchor for developing Educa-			
17:10- 17:20	tion for Sustainable Development in geography education	Jiaqi Li	Northeast Nor- mal University	Oral presentation (virtual)
17:20- 17:30	Addressing sustainable development goal "affordable and clean energy": access to clean cooking fuel in India	Sonali Panda	Ravenshaw University	Oral presentation (virtual)
17:30- 17:40	Climate change perception and sustainable	Gaetano Sabato	University of Palermo	Oral presentation
17.40	development: the case of University students	Sabalo	FaleIIIIO	(virtual)
17:40- 17:50	On Developing a Multistage Hybrid Model for Spatial Inquiry of the Rural Public Health Ser- vices: Tested in the Indian District of Purulia	Tanmoy Sarkar/ Mukunda Mishra	Gazole Ma- havidyalaya	Oral presentation (virtual)
17:50- 18:00	Effects of Temperature Exposures on Early Childhood Cognitive Development and Home Environment	Wenjie Wu	Wuhan univer- sity	Oral presentation (in person)
18:00- 18:10	The impact of the armed conflict in Afghanistan on environment	Zhijie Zhang	Chinese acad- emy of Environ- mental Planning	Oral presentation (in person)

10 Human-nature coupling system and sustainability (Oct 27 13:30-17:50)

Conveners: Shuai Wang (Professor, Beijing Normal University, China); Örjan Bodin (Professor, StockholmResilience Centre at Stockholm University, Sweden); Haibin Chen (Professor, Northwest A&F University, China)Meeting Room 210AZoom: 98556883236

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Hydropedology: A critical zone approach to Geography in the Anthropocene and sustainable development	Xiaoyan Li	Beijing Normal University	Oral presenta- tion (in person)
13:45- 14:00	Coupled Human-nature system for sus- tainable food-energy-water nexus	Yue Qin	Peking university	Oral presenta- tion (in person)
14:00- 14:15	Calculation of Social-Ecological Fit Based on Modified Moran's I: the case of China's White Dolphin Reserves	Mingbao Chen	Macau University of Sci- ence and Technology	Oral presenta- tion (in person)

44 Inter Geog

14:15- 14:30	Similarity analysis of world's river basins vis-à-vis socio-ecological resilience to ten major water related risks	Olli Varis	Aalto University	Oral presenta- tion (in person)
14:30- 14:45	Coupled crop-livestock farming system has potential to reduce methane emis- sion: Evidence from Inner Mongolia	Lexin Li	China Agrcultural Univer- sity	Oral presenta- tion (in person)
14:45- 15:00	Halving nitrogen waste for global sus- tainable development goals	Peiying He	Zhejiang University	Oral presenta- tion (in person)
15:00- 15:15	A Refined Quantitative Approach to Assess the Heterogeneity of Human Activity Interference in Protected Areas and Their Adjacent Areas	Miao Sui	Southwest University	Oral presenta- tion (in person)
15:15- 15:30	Evolution of ecosystem service respons- es to increases in human pressure: Comparative analysis of urban agglom- erations and peripheral areas	Cheng- hao Liu	Nanchang University	Oral presenta- tion (in person)
15:30- 15:50	Refreshment Break (Function Hall B)	1		1
15:50- 16:05	Evaluation of China's Marine Sustainable Development Based on SDG14 and PSR and synergy-trade-off relationship study	Ting Guo	College of the Environ- ment and Ecology/Coast- al and Ocean Manage- ment Institute	Oral presenta- tion (in person)
16:05- 16:20	Formation Mechanism of Herders' Information Exchange Network and Its Influence on Stocking Rate	Dayuan Xing	Northwest A&F University	Oral presenta- tion (in person)
16:20- 16:35	Land-atmosphere coupling exacerbates the moisture-associated heterogenous impacts of compound extreme events on maize yield in China	Zitong Li	Beijing Normal University	Oral presenta- tion (in person)
16:35- 16:50	Long-term human expansion and policy impact in coastal zone	Jinfeng Liao	Institute of Geographic Sciences and Natural Re- sources Research, CAS	Oral presenta- tion (in person)
16:50- 17:05	A social–ecological approach for identi- fying and mapping ecosystem services trade-offs and conservation priorities in peri-urban areas	Zheyi Xia	China Agricultural Univer- sity	Oral presenta- tion (in person)

17:05- 17:20	Analysis on the drivers of the formation of herdsman's collaborative network in rangeland resources governance—— from the perspective of ecological fit	Liang Chen	Northwest Agriculture and Forestry University	Oral presenta- tion (in person)
17:20- 17:35	Incorporation of local knowledge in the conservation of ecosystem services and promoting sustainable human well-be- ing within the Vhavenda people of the Limpopo Province, South Africa.	Lerato Malap- ane	University of Johannes- burg	Oral presenta- tion (in person)
17:35- 17:50	Identifying key indicators to assess the disparities of sustainable urban develop- ment in China	Ao Leng	Shaanxi Normal University	Oral presenta- tion (in person)
P10-1	Comparing Residents' Willingness to Protect the North China Leopard in Rural and Urban Areas: A Case Study in Heshun County, Shanxi Province	Qingting Liao	Beijing Normal University	Poster
P10-2	Analysis on the spatiotemporal correla- tion between human activity intensity and vegetation cover in the Loess Plateau	Wenwen Chai	Changʻan University	Poster
P10-4	Projection of runoff changes in the Yellow River Basin under future climate change scenarios	Gui Xu	Beijing Normal University	Poster
P10-5	Natural or anthropogenic? Identifying factors affecting net primary productivity from the perspective of production-liv- ing-ecological space's evolution	Xinyue Dong	Beijing Forestry University	Poster
P10-6	The interprovincial moisture recycling in China and its tele-connected effects on socio-economy	Shan Sang	Beijing Normal University	Poster
P10-7	The role of wildlife damage compensa- tion on local residents'attitude changes: A case study of Sichuan Wolong Na- tional Nature Reserve	Hong- min Li	Capital Normal University,	Poster
P10-8	Quantify the spatial varying drivers of vegetation cover dynamics and its fore- cast in the region with coupled human and natural systems: a case study of the TGR area, China	Xinquan Su	Huazhong Agricultural University	Poster

The spatiotemporal effects of industrial transformation and upgrading on sup- ply-demand relationship of ecosystem services: a case study of the Yangtze River Economic Belt	Tongn- ing Li	Nanchang University	Poster
Hysteresis effect of lake ecosystem regime shift in response to polluters' behavior: Evidence from four Chinese lake basins	Saiya Li	Institute of Geographic Sciences and Resourc- es, Chinese Academy of Sciences	Poster
Coupling coordination degree spa- tio-temporal pattern and obstacle fac- tors of habitat quality and urbanization in the Yellow River basin	Jinye Zhang	QuFu Normal Universtiy	Poster
Adaptive evolution and dynamic mech- anism of resort development in Chinese coastal cities	Caixia Gao	Beijing International Stud- ies University	Poster
Integrating ecosystem organization, quality and services indicators in the ecological security assessment	Butian Tang	Shaanxi normal university	Poster
Tourism-oriented Urbanization Process and its Driving Factors —Take Nanping City, Fujian Province as an example	Tianxin Zhang	Tianjin University of Fi- nance and Economics	Poster
Identifying match or mismatch of eco- system services supply and demand in biodiversity hotspot area from local perspective: case study in inWolong Nature Reserve	Jianying Xu	Capital Normal University	Poster
A framework for integrating sustainability and resilience in desirable landscape patterns under climate change	Yao He	Institute of Geographic Sciences and Natural Re- sources Research, Chi- nese Academy of Scienc- es/University of Chinese Academy of Sciences	Poster
Strong heterogeneity of bioclimatic variables dominates China's vegetation community complexity	Yanlong Guan	College of Resources and Environment,Fujian Agriculture and Forestry University	Poster
	 transformation and upgrading on sup- ply-demand relationship of ecosystem services: a case study of the Yangtze River Economic Belt Hysteresis effect of lake ecosystem regime shift in response to polluters' behavior: Evidence from four Chinese lake basins Coupling coordination degree spa- tio-temporal pattern and obstacle fac- tors of habitat quality and urbanization in the Yellow River basin Adaptive evolution and dynamic mech- anism of resort development in Chinese coastal cities Integrating ecosystem organization, quality and services indicators in the ecological security assessment Tourism-oriented Urbanization Process and its Driving Factors — Take Nanping City, Fujian Province as an example Identifying match or mismatch of eco- system services supply and demand in biodiversity hotspot area from local perspective: case study in inWolong Nature Reserve A framework for integrating sustainability and resilience in desirable landscape patterns under climate change Strong heterogeneity of bioclimatic variables dominates China's vegetation 	transformation and upgrading on supply-demand relationship of ecosystem services: a case study of the Yangtze River Economic BeltTongn- ing LiHysteresis effect of lake ecosystem regime shift in response to polluters' behavior: Evidence from four Chinese lake basinsSaiya LiCoupling coordination degree spa- tio-temporal pattern and obstacle fac- tors of habitat quality and urbanization in the Yellow River basinJinye ZhangAdaptive evolution and dynamic mech- anism of resort development in Chineses coastal citiesButian Tang GaoIntegrating ecosystem organization, quality and services indicators in the ecological security assessmentTianxin ZhangIdentifying match or mismatch of eco- system services supply and demand in biodiversity hotspot area from local perspective: case study in inWolong Nature ReserveYao HeStrong heterogeneity of bioclimatic variables dominates China's vegetationYanlong Guan	InstructionInstructionInstructionInstructionInstructionply-demand relationship of ecosystem regime shift in response to polluters' behavior: Evidence from four Chinese lake basinsSaiya LiInstitute of Geographic Sciences and Resourc- es, Chinese Academy of SciencesCoupling coordination degree spa- tio-temporal pattern and obstacle fac- ons of habitat quality and urbanization in the Yellow River basinJinye ZhangOuFu Normal UniversityAdaptive evolution and dynamic mech- anism of resort development in Chinese coastal citiesCaixia GaoBeijing International Stud- ies UniversityIntegrating ecosystem organization, quality and services indicators in the ecological security assessmentTianxin ZhangTianjin University of Fi- nance and EconomicsIdentifying match or mismatch of eco- system services supply and demand in biodiversity hotspot area from local perspective: case study in inWolongJianying XuInstitute of Geographic Sciences and Natural Re- sources Research, Chi- rese Academy of SciencesAf framework for integrating sustainability and resilience in desirable landscape patterns under climate changeYanlong Guiny of Sciences and Environment, Fujian yanlong Sciences and Natural Re- sources Research, Chi- rese Academy of Sciences and resilience in desirable landscape patterns under climate changeCollege of Resources and Environment, Fujian Agriculture and ForestryStrong heterogeneity of bloclimatic variables dominates China's vegetationYanlong GuanCollege of Resources and Environment, Fujian

47

11 Land Degradation as a Local and Global Challenge (Oct 27 15:50-16:50)

Convener: Matija Zorn (Head of the Institute, Research Centre of the Slovenian Academy of Sciences and Arts, Anton Melik Geographical Institute, The Republic of Slovenia)

Meeting Room 215 Zoom: 97469480292

Time Slot	Title	Speaker	Institution	Presentation Type
15:50- 16:00	Sensitivity evaluation of land degrada- tion in northwest China	Lei Zhang	Chang'an University	Oral presenta- tion (virtual)
16:00- 16:10	Land degradation in the world's raini- est region: Meghalaya Plateau, North- east India, in the context of achieving sustainable development goals	Pawel Prokop	Institute of Geography and Spatial Organiza- tion, Polish Academy of Sciences	Oral presenta- tion (virtual)
16:10- 16:20	Spatial analysis of areas sensitive to land degradation using the MEDALUS model (Polish Western Carpathians)	Anna Bu- cala-Hra- bia	Institute of Geography and Spatial Organiza- tion,Polish Academy of Sciences	Oral presenta- tion (virtual)
16:20- 16:30	Provenance of Desertification Sands in the Central Ningxia Arid Zone, north- western China, revealed by the Heavy Mineral Assemblages	Xiaobo Liu	Chang'an University	Oral presenta- tion (in person)
16:30- 16:40	The effect of cover and management factor (C-factor) on soil erosion values in the RUSLE model, case study from Polish Carpathians	Małgorzata Kijows- ka-Stru- gała	Institute of Geography and Spatial Organiza- tion, Polish Academy of Sciences	Oral presenta- tion (virtual)
16:40- 16:50	Geospatial analysis of soil degradation by erosion in the Anambra River Basin (Nigeria, West Africa) using RUSLE and ancillary data	Frank Okenmuo	Chukwuemeka Odumeg- wu Ojukwu University	Oral presenta- tion (virtual)

12 Landscape dynamics and extreme events in the Himalaya: experiences and case studies (Oct 27 15:50-18:00)

Conveners: Pankaj Kumar (Associate Professor, University of Delhi, India); Manish Kumar (Assistant Professor, Central University of Haryana, India); Shipra Singh (Assistant Professor, Miranda House, India)

Meeting Room 212B Zoom: 91238955836

Time Slot	Title	Speaker	Institution	Presentation Type
15:50- 16:00	Glacier retreat and lake outburst floods in the north-western Himalayan region from 2000 to 2022	Abhishek Banerjee	Northwest Institute of Eco-Environment and Resources Chinese Academy of Sciences	Oral presenta- tion (in person)
16:00- 16:10	Monitoring Snow Cover and Climate change impact in Himachal Himalaya	Pankaj Kumar	Department of Geogra- phy, University of Delhi	Oral presenta- tion (in person)
16:10- 16:20	Evaluation of GLOF susceptibility in watersheds based on system failure: the case of Chongdup watershed in Nyalam, Tibet.	Qian Wei	China university of geo- science	Oral presenta- tion (in person)
16:20- 16:30	Forest fire susceptibility assessment in the Western Himalayas using Geospa- tial	Manish Kumar	Central University of Haryana	Oral presenta- tion (in person)
16:30- 16:40	Trend analysis of Precipitation and Temperature in Lahaul and Spiti dis- trict, Himachal Pradesh, India	Md Arif Husain	University of Delhi	Oral presenta- tion (virtual)
16:40- 16:50	Assessment of Climate Variability and Perception of Livelihood Vulnerability in Lahaul and Spiti, Himachal Pradesh, India	Ashwani	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)
16:50- 17:00	Assessment of Climate Variability and Perception of Livelihood Vulnerability in Lahaul and Spiti, Himachal Pradesh, India	Ashwani	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)
17:00- 17:10	Analyzing long term (1901 to 2021) precipitation variability and trends using the Modified Mann-Kendall test over the Himachal Pradesh state, India	Rajesh Sarda	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)

17:10- 17:20	The Disaster-Resistant Sustainable Architecture in the Himalayas: A Case Study of Kashmir and Himachal Pradesh	Megha Karn	University of Delhi	Oral presenta- tion (virtual)
17:20- 17:30	The land use and land cover (LULC) changes in Varanasi city over the years 1990, 2000, 2010, and 2021 comparing the predicted LULC for 2031	Anish Kumar Rai	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)
17:30- 17:40	Analysis of Long-Term IMD Grided Precipitation Data Using an Innovative Approach: A Case Study of Nubra Valley, Ladakh.	Ambrish	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)
17:40- 17:50	Altitudinal Appraisal of land use land cover and surface temperature change in the Satluj Basin, India	Surajmal Junawa	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)
17:50- 18:00	Effect of Climate Change on Evapo- transpiration (ET): A case study, Him- achal Pradesh, India.	Ankur Yadav	Department of Geogra- phy, University of Delhi	Oral presenta- tion (virtual)

13 Land use/land Cover change and sustainable development (Oct 13:30-17:20)

Conveners: Monica Dumitrascu (Institute of Geography, Romanian Academy. Romania; Chair of IGU-LUCC Commission); Jinwei Dong (Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences)

Meeting Room 210B Zoom: 95286168927

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Spatial and Temporal Dynamics and Driving Forces of Land Use Changes in New Sub-Administrative Districts of Meg- acities: A Case Study of Laoshan District, Qingdao City, China	Hongjiang Zhang	The University of Hong Kong	Oral presenta- tion (virtual)

13:45- 14:00	Ecological restoration exacerbates the agriculture-induced water crisis in North	Yan Zhou	Henan University	Oral presenta- tion (in person)
14:00- 14:15	China Region Spatially explicit reconstruction of crop- land cover for Europe from AD1800-2000	Jun Li	Beijing Normal Uni- versity	Oral presenta- tion (in person)
14:15- 14:30	Urbanization Development and Urban Ex- pansion Features of Large-Scale Rapidly Urbanizing Regions in Western China: A Case Study of Chengdu-Chongqing Metropolitan Area	Hongjiang Zhang	The University of Hong Kong	Oral presenta- tion (virtual)
14:30- 14:45	North China Leopard Habitat change in the Loess Plateau Region between 2000 and 2020	Qingting Liao	Beijing Normal Uni- versity	Oral presenta- tion (in person)
14:45- 15:00	Taking healthy dietary patterns would mitigate China's cropland pressure	Yijuan Zhan	China Agricultural University	Oral presenta- tion (in person)
15:00- 15:15	High-resolution mapping of surface water for the Third Pole of the world and analy- sis of climatic drivers	Zhen Xiao	University of Chinese Academy of Sciences	Oral presenta- tion (in person)
15:15- 15:30	Mapping of the impact of vegetation changes on PM2.5 purification services in the Fenwei Plain,China	Yu Liu	Shaanxi Normal Uni- versity	Oral presenta- tion (in person)
15:30- 15:50	Refreshment Break (Function Hall B)	I	I	
15:50- 16:05	Identification of land-use conflicts: a novel framework combining scientific expertise and local people's views	Aibo Sun	China University of Mining and Technolo- gy	Oral presenta- tion (in person)
16:05- 16:20	Spatial Evolution, Driving Mechanism, and Patch Prediction of Grain-Producing Cultivated Land in China	Zhiyuan Zhu	Northwest A&F Uni- versity	Oral presenta- tion (virtual)
16:20- 16:35	Evaluating the Impact of Future Land Use/Land Cover Changes on Ecosystem Services Value in Punjab, Pakistan	Abdus Samie	University of Agricul- ture, Pakistan	Oral presenta- tion (virtual)

International Workshop on

Geography and Sustainability

16:35- 16:50	Fragmentation of rural settlements in China and its influencing factors, 2000— 2020	Binqao Duan	China University of Geosciences, Wuhan	Oral presenta- tion (virtual)
16:50- 17:05	Spatio-temporal drought monitoring and detection of the areas most vulnerable to drought risk in Morroco region, based on remote sensing data	Brahim Meskour	Ibn Zohr University	Oral presenta- tion (virtual)
17:05- 17:20	The impact of changes in industrial land use morphology on industrial wastewater discharge	Jiajing Yao	Northwest A&F Uni- versity	Oral presenta- tion (virtual)
P13-1	Assessing future urban landscape pattern and flood risk from the perspective of climate change and urbanization: Taking Xiamen as a case study	Ziyuan Luo	Tianjin University	Poster

14 Nature-based Solutions for disaster risk reduction (Oct 27 14:30-15:30)

Conveners: Carla Ferreira (Researcher, Coimbra Polytechnic Institute, Portugal); Zahra Kalantari (Professor, KTH Royal Institute of Technology, Sweden); Haozi Pan (Professor, Shanghai Jiaotong University, China); Karen Sudmeier-Rieux (Researcher, TH Kéln, University of Cologne, Germany); Milica Kasanin-Grubin (Researcher, University of Belgrade, Republic of Serbia)

Meeting Room 215 Zoom: 98749876332

Time Slot	Title	Speaker	Institution	Presentation Type
14:30- 14:42	Nature-based solutions for flood risk mitigation in urban areas	Carla Ferreira	Polytechnic Institute of Coimbra	Oral Presentation (virtual)
14:42- 14:54	Land Use Strategies for Mitigating Flood Disaster Risks: A Preliminary Analysis of Henan, China	Jun Chen	China University of Mining and Technology	Oral Presentation (in-person)
14:54- 15:06	Exploring Hydrological Dynamics and Infrastructure Vulnerabilities: A Case Study of the Gilort River, Romania	Drăgan Theodo- ra	University of Bucharest, Faculty of Geography	Oral Presentation (virtual)



15:06- 15:18	Extraction methods of traffic affected area of "July 20" Zhengzhou rainstorm disaster based on Social media data	Qiuling Wang	Institute of Disaster Prevention	Oral Presentation (virtual)
15:18- 15:30	A adaptive approach to promote resil- ience in fire-prone landscapes	Jie Xi	Beijing University of Civil Engineering and Archi- tecture	Oral Presentation (in-person)

15 Nature-based Solutions for synergy of social-ecological-economic development (Oct 28 8:00-9:45)

Conveners: Ming Luo (Director, Key Laboratory of Land Consolidation and Rehabilitation, Ministry of Natural Resources, China); Jun Wang (Director, Land Consolidation and Rehabilitation Center, MNR; Land Science and Technology Innovation Center, MNR, China); Yan Zhang (Country Coordinator, IUCN China Office, China); Emmanuelle COHEN-SHACHAM (Lead, Nature-based Solutions Thematic Group, CEM, IUCN, USA); Zhaowu Yu (Professor, Fudan University, China)

Meeting Room 210A Zoom: 92857943948

Time Slot	Title	Speaker	Institution	Presenta- tion Type
8:00- 8:15	Nature-based Solutions – from definition to implementation	Emman- uelle Cohen	IUCN CEM	Oral pre- sentation (virtual)
8:15- 8:30	China's Practice of Nature-based Solu- tions	Jun Wang, Chong- yao Yang	Key Laboratory of Land Consolidation and Rehabil- itation, Land Consolidation and Rehabilitation Center, Ministry of Natural Re- sources	Oral pre- sentation (in person)
8:30- 8:45	Nature-based solutions for urban heat mit- igation: From threshold, network to mech- anism	Zhaowu Yu	Fudan University	Oral pre- sentation (in person)
8:45- 9:00	How do nature-based solutions (NbS) improve ecosystem services in China: a meta analysis	Kaiji Xu	China University of Geosci- ences (Beijing)	Oral pre- sentation (in person)

International Workshop on

Geography and Sustainability

9:00- 9:15	Nature-based Solutions approaches and practices	Yuting Liu	IUCN	Oral pre- sentation (in person)
9:15- 9:30	Implementing nature-based solutions in urban areas: International research prog- ress and its applicability in China	Dan Zhang	Xi'an Jiaotong University	Oral pre- sentation (in person)
9:30- 9:45	Assessing the effectiveness of Three- north shelter forest project based on the difference in difference model	Wenling Ren	Henan University	Oral pre- sentation (in person)
P15-1	Reflections on the High-Quality Develop- ment of the Guangdong-Hong Kong-Ma- cao Greater Bay Area Based on the Fourth Regional Plan of New York Metro- politan Area under the Three-Factor Model of Economy, Environment and Society	Liang Zhao	Shenzhen University	Poster
P15-2	Study on the Coupling and Coordination between the Level of Economic Develop- ment and the Quality of Life of Residents in the Yangtze River Basin	Minli Huang	Hunan Normal University	Poster

16 Rural geography in achieving sustainable development (Oct 27 13:30-17:50)

Conveners: Hualou Long (Professor, Steering Committee Member of IGU Commission on the Sustainability of Rural Systems; Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China); Yingnan Zhang (Doctor, Zhejiang University, China)

Meeting Room 212A Zoom: 91721863987

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Driven by the policy or bent by the market? Cracking the code of plastic-mulched farmland expansion in China	Yingnan Zhang	Zhejiang Universi- ty	Oral Presenta- tion (in-person)
13:45- 14:00	Planting Structure Adjustment and Layout Opti- mization of Feed Grain and Food Grain in China Based on Productive Potentials	Tingting Li	Chinese Acad- emy of Social Sciences.CASS	Oral Presenta- tion (in-person)

14:00- 14:15	Spatial-Temporal Patterns and Driving Factors of Green Transformation for Cultivated Land Use of Major Grain-Producing Areas in Northeast China	Jia Gao	School of Hu- manities and Law, Northeast- ern University	Oral Presenta- tion (in-person)
14:15- 14:30	Rural Livelihood Sustainability in India – Issues and Challenges Ahead.	Shahab Fazal	Aligarh Muslim University	Oral Presenta- tion (in-person)
14:30- 14:45	Urban-rural spatial structure in inland county ar- eas from the perspective of residents' daily trav- el behavior: A case study of Nankang, Jiangxi Province	Wenqian Ke	Fujian Normal University	Oral Presenta- tion (in-person)
14:45- 15:00	The Pathways and Strategies for Achieving Sustainable Development of Rural Ecology in China from the Perspective of Marxist Ecologi- cal Views	Ziyu Liu	Qingdao Institute of Technology	Oral Presenta- tion (in-person)
15:00- 15:15	Study on the effect and mechanism of ecosys- tem services on local residents' well-being in Wolong National Nature Reserve	Meiyu Xie	Capital Normal University	Oral Presenta- tion (in-person)
15:15- 15:30	The sustainability of growing grain crops on leased farmland in China: The impact of agricul- tural subsidies on the profitability of grain-farm- ing land	Qi Yuan	China Agricultural University	Oral Presenta- tion (in-person)
15:30- 15:50	Refreshment Break (Function Hall B)			
15:50- 16:05	Ecological function transitions of land use in Beibu Gulf Economic Zone from the perspec- tive of "production-living-ecological" functions	Guipeng Zhou	Institute of Geo- graphic Scienc- es and Natural Resources Re- search/University of Chinese Acad- emy of Sciences	Oral Presenta- tion (in-person)
16:05- 16:20	Understanding rural gentrification in China: Ex- amining the evolving concept and comparative insights	Sijie Li	Chinese Acade- my of Sciences/ University of Chi- nese Academy of Sciences	Oral Presenta- tion (in-person)

16:20- 16:35	More land, less cultivation: a current challenge or future trend for smallholder farmers in South Africa?	Felicity Aphiwe Mkhongi	University of Jo- hannesburg	Oral Presenta- tion (in-person)
16:35- 16:50	Study on the evolution trend, regional differenc- es and Driving factors of high-quality develop- ment efficiency in China's agriculture and rural areas under resource and environmental con- straints	Ruifan Xu	Northwest A&F University	Oral Presenta- tion (virtual)
16:50- 17:05	Mechanisms and strategies of land consoli- dation in promoting rural communities —— A case comparison of two villages in eastern China	Yanfeng Jiang	Guangxi Universi- ty	Oral Presenta- tion (virtual)
17:05- 17:20	The mechanism and improvement path of rural perceived resilience from the perspective of farmers: A case study of Qufu City, Shandong Province	Yanan Wang	Northeastern University	Oral Presenta- tion (virtual)
17:20- 17:35	Optimizing Rural Settlement Space Patterns through Webometrics Approach	Xinyue Gu	the Hong Kong Polytechnic Uni- versity	Oral Presenta- tion (virtual)
17:35- 17:50	Biodiversity-ecosystem functioning and bio- mass allocation in meadow steppe and alpine meadow of Qinghai-Tibet Plateau	Lokman Hossain	Hong Kong Bap- tist University	Oral Presenta- tion (virtual)
P16-1	Research on the Evolution Characteristics and Mechanism of Rural Living Space in the Reser- voir Area during the Post Three Gorges Project Period—A Case Study of Santuo Village in Chongqing	Yan Yan	Southwest Uni- versity	Poster
P16-2	Influencing factors of Rural Settlement Expan- sion under the process of rapid urbanization in City of annulus Hangzhou Bay Group: Geospa- tial modelling using multiscale geographically weighted regression (MGWR)	Zijuan Zhao	CAAS/Chinese Academy of Agri- cultural Sciences	Poster

17 Smart cities and sustainability in comparative perspective (Oct 28 8:00-11:10)

Conveners: Gary Sigley (Professor, Faculty of Geographical Science, Beijing Normal University, China); Mengmeng Zhang (Assistant Professor, Faculty of Geographical Science, Beijing Normal University, China); Marcus Foth (Professor, Faculty of Creative Industries, Education, and Social Justice, Queensland University of Technology, Australia)

Meeting Room 210B Zoom: 92104841923

Time Slot	Title	Speaker	Institution	Presentation Type
	Group 1: Sustainability			
8:00- 8:10	Storytelling, smart cities, and sustainability: Fostering public engagement in urban sus- tainability through situated digital storytelling.	Sarah Barns	Queensland Uni- versity of Technolo- gy	Oral presenta- tion (virtual)
8:10- 8:20	More-than-Human Futures: Connected Ur- banism and Cohabitation in the Smart City.	Marcus Foth	Queensland Uni- versity of Technolo- gy	Oral presenta- tion (virtual)
8:20- 8:30	Governing Smart Cities for Multispecies Jus- tice.	Hira Sheikh	Queensland Uni- versity of Technolo- gy	Oral presenta- tion (virtual)
8:30- 8:40	Smart Cities and Sustainability: A Compara- tive Study of Technological Innovation, Envi- ronmental Impact, and Urban Resilience.	Ashle- sha Pas- si	University of Delhi	Oral presenta- tion (virtual)
8:40- 8:50	A community household waste recycling and classification system under the study of zero-waste management.	Yuqing Luo	Chinese Academy of Science	Oral presenta- tion (virtual)
	Group 2: Regional Case Studies			
8:50- 9:05	Alternative Imaginaries: smart city bricolage in small(er) places.	Warwick Powell	Queensland Uni- versity of Technolo- gy	Oral presenta- tion (in person)
9:05- 9:15	Neoliberalism, Beautification project and Ur- ban Injustice in religious city of Varanasi India.	Kundan Kumar	Jawaharlal Nehru University	Oral presenta- tion (virtual)

9:15- 9:25	Study on resilience of key node cities in Chi- na under the impact of epidemic.	Huilong Wang	Ningxia University	Oral presenta- tion (virtual)
9:25- 9:40	ICT's Impact on Citizen Participation in Urban Flood Response: Evidence from a Large- Scale Survey in Zhengzhou, China.	Huax- iongJi- ang	Beijing Normal University	Oral presenta- tion (in person)
9:40- 10:00	Refreshment Break (Function Hall B)			
	Group 3: Urban Science			
10:00- 10:15	Smart Wings or Not: A Comparative Analy- sis of Digital Twin City Projects in Mainland China.	Qiying Zhao	Hong Kong Uni- versity of Science and Technology, Guangzhou	Oral presenta- tion (in person)
10:15- 10:30	The influence of built environment on ex- treme commuting in the mega-city: an analy- sis of Beijing based on big data and machine learning model.	Meng- meng Zhang	Beijing Normal University	Oral presenta- tion (in person)
10:30- 10:45	How do built environment characteristics in- fluence bus use patterns across neighbour- hood types in Beijing? A machine-learning analysis.	Tao Sui	Beijing Normal University	Oral presenta- tion (in person)
10:45- 10:55	Integrating Big Data Analytics and Machine Learning for Sustainable Development Solu- tions.	ldriss Mou- men	Ibn Tofail University	Oral presenta- tion (virtual)
10:55- 11:10	ICTs and economic performance nexus: Meta-analysis evidence from country-specific data.	Wang Di	Southwest Univer- sity	Oral presenta- tion (in person)

18 Sustainable development goals: assessments, interactions, and advancing pathways (Oct 27 13:30-15:30)

Conveners: Xutong Wu (Doctor, Beijing Normal University, China); Gabriela Morosanu (Institute of Geography, Romanian Academy, Romania)

Meeting Room 212B Zoom: 94369744913

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:42	Unraveling human drivers behind complex interrelationships among sustainable de- velopment goals: A demonstration in the Wolong Nature Reserve	Hongbo Yang	Research Center for Eco-environmental Sciences, CAS	Oral presenta- tion (in person)
13:42- 13:54	Deploying Renewables towards Sustain- able Development Goals	Mengyao Han	Chinese Academy of Sciences	Oral presenta- tion (in person)
13:54- 14:06	Key axes of global progress towards the Sustainable Development Goals	Caichun Yin	Beijing Normal Uni- versity	Oral presenta- tion (in person)
14:06- 14:18	Seven Years of Embracing the Sustainable Development Goals: Perspectives from University of South Africa's Academic Staff	Godwell Nhamo	University of South Africa	Oral presenta- tion (in person)
14:18- 14:30	In line with SDG 6?: Comparative per- spective over two ecological restoration projects in Romania. Comana Wetland and Gilort River	Gabriela Adina Morosanu	Institute of Geogra- phy of the Romanian Academy	Oral presenta- tion (virtual)
14:30- 14:42	Drivers of rising agriculture water scarcity in China	Xinxian Qi	Nanjing University	Oral presenta- tion (Virtual)
14:42- 14:54	Mapping the renewable energy potential of Romania: a premise to achieve SDG 7 regarding affordable and clean energy	Costache Mih- nea-Ștefan	University of Bucha- rest	Oral presenta- tion (virtual)
14:54- 15:06	From MDGs to SDGs: Coverage for RM- NCH and Nutrition in India	Amit Ba- nerjee	The University of Burdwan	Oral presenta- tion (virtual)

15:06- 15:18	Understanding Multidimensional Poverty Dynamics in India: A District-Level Analysis of Spatial Patterns and Determinant Fac- tors using NFHS Database	Bapan Biswas	Jawaharlal Nehru University	Oral presenta- tion (virtual)
15:18- 15:30	Fair Trade and Sustainability: Can Fair Trade Solve Poverty? – Centering on cof- fee farmers in Vietnam (Dak Lak)	Kim Ye Won	Seoul National Uni- versity	Oral presenta- tion (virtual)
P18-1	The Impact of Urbanization on the Delivery of Public Service–Related SDGs in China	Zhongxu Zhao	Institute of Geo- graphic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Poster
P18-2	Impact path analysis of ecosystem ser- vices and sustainable development goals in the Guangdong-Hong Kong-Macao Greater Bay Area based on SEM	Linglong Zhu	Guangzhou Universi- ty	Poster
P18-3	An integrated approach to assess spatial and temporal changes in the contribution of the ecosystem to Sustainable Develop- ment Goals	Zhiyuan Ma	Research Institute of Forestry	Poster
P18-4	Spatial and temporal variation character- istics of urban ecological resilience in the middle reaches of Yangtze River urban agglomeration and improvement paths	Shangwei Li	China University of Geosciences (Wu- han) , China	Poster
P18-5	Study on the influence of life course events on migrants' settlement intention	Sihan Li	Northeast Normal University	Poster
P18-6	The forest coverage quality increased in the Yellow River Basin during 2000-2020	Zhiwen Yuan	Chinese Academy of Forestry/National Forestry and Grass- land Administration	Poster
P18-7	Analysis of the influence mechanism of the built environment on the passenger flow of urban rail transit at different time periods	Lei Pang	Tianjin University	Poster

19 Sustainable transformation of agricultural land system (Oct 28 8:00-11:30)

Conveners: Xiangzheng Deng (Professor, Institute of Geographic Sciences and Natural Resources Research, CAS, China); Hua Qin (Associate Professor, Division of Applied Social Sciences, University of Missouri-Columbia, USA); John Gibson (Professor, University of Waikato, New Zealand)

Meeting Room 212A Zoom: 94669865268

Time Slot	Title	Speaker	Institution	Presentation Type
8:00- 8:15	Agricultural land use system man- agement: research progress and perspectives	Xiangzheng Deng	Institute of Geographic Sciences and Natural Re- sources Research, CAS	Oral Presenta- tion (in-person)
8:15- 8:30	Agricultural land use system man- agement to tackle climate change	Yuping Bai	China University of Geo- sciences, Beijing	Oral Presenta- tion (in-person)
8:30- 8:45	Carbon sink, carbon emissions and carbon neutrality from agriculture, case study in Shandong, China	Fang Yin	Shandong Academy of Agricultural Sciences	Oral Presenta- tion (in-person)
8:45- 9:00	Spatial–Temporal Evolution and Driving Factors of the Low–Carbon Transition of Farmland Use in Coast- al Areas of Guangdong Province	Ying Wang	China University of Geo- sciences	Oral Presenta- tion (in-person)
9:00- 9:15	The Carbon Neutrality Achievement in Southeast Ecological Area of China: from the Perspective of Land Ecological Transformation Manage- ment	Sijian Jiang	Minjiang University	Oral Presenta- tion (in-person)
9:15- 9:25	Balancing food system greenhouse gas emissions reduction and food security in China	Hao Zhao	Zhejiang University/Inter- national Institute for Ap- plied Systems Analysis	Oral Presenta- tion (in-person)
9:25- 9:35	Transformation of agricultural land to mango-based multistory agrofor- estry system for sustainable crop production, land sue and economic return	Md Abiar Rahman	Bangabandhu Sheikh Mujibur Rahman Agricul- tural University	Oral Presenta- tion (in-person)
9:35- 9:45	Carbon loss flows implied in global palm oil trade	Xiyu Li	Tsinghua university	Oral Presenta- tion (in-person)

9:45- 10:00	Refreshment Break (Function Hall B	3)		
10:00- 10:10	The simulation and spatio-temporal changes of suitable agricultural land for grain crops in China in the con- text of climate change	Zhanhang Zhou	Huazhong Agricultural University/Huazhong Agri- cultural University	Oral Presenta- tion (in-person)
10:10- 10:20	How Grain for Green project im- pacts the food supply and soil con- servation under the climate changes and socio-economic development: a case study in the TGR area	Xiao Chen	Huazhong Agricultural University	Oral Presenta- tion (in-person)
10:20- 10:30	Low-Carbon Agriculture Transforma- tion: A Double-Case Study Based on Sanlian Farm and King Farm in Xingtang, Hebei Province	Tianyi Sun	Renmin University of Chi- na	Oral Presenta- tion (in-person)
10:30- 10:40	The supply and demand of soy- beans and optimization strategies in China	Yifei Wang	Institute of Geographic Sciences and Natural Re- sources Research, CAS/ University of Chinese Academy of Sciences	Oral Presenta- tion (virtual)
10:40- 10:50	Spatial differences of farmland low-carbon use efficiency in the Yangtze Delta and its interactive spillover effects with New-type urbanization	Mengqing Du	Huazhong Agricultural University	Oral Presenta- tion (virtual)
10:50- 11:00	Ocurrence and Human Risk Assess- ment of Pesticides in the Eastern Avo- cado Region of Michoacán, México.	Ana Merlo Reyes	Université Grenoble Alpes	Oral Presenta- tion (virtual)
11:00- 11:10	Does low carbon agricultural technol- ogy adoption improve farmers' agri- cultural production performance?	Liangyu Shi	Huazhong Agriculture University	Oral Presenta- tion (virtual)
11:10- 11:20	Do land tenure rights matter in sustainable agriculture technology adoption intensity? The empirical evidence from small farmers in Afghanistan	Sayed Alim Samim	Institute of Geographical and Natural Resources of CAS	Oral Presenta- tion (virtual)

11:20- 11:30	Vermicompost enhances soil nu- trient contents in drought-prone region and reduces soil salinity in salinity-affected region: A 6-year study in Bangladesh	Md Lokman Hossain	Hong Kong Baptist Uni- versity	Oral Presenta- tion (virtual)
P19-1	The development of biofertilizers for sustainable agriculture over four decades (1980–2022)	Baolei Jia	Chung-Ang University	Poster
P19-2	Study on Sustainable Development of Agricultural and Animal Husband- ry Intertwined Areas in the Mongo- lian Plateau in the Context of Rapid Urbanization	Jun Ma	Beijing Forestry University	Poster

20 Sustainable water resources management in agriculture under drought scenario (Oct 27 13:30-17:38)

Conveners: Paolo Tarolli (Full Professor, University of Padova, Italy); Eugenio Straffelini (Research Assistant University of Padova, Italy)

Meeting Room 213A Zoom: 91322936291

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Drought impact on food security: sus- tainable adaptation strategies under climate change scenarios	Paolo Tarolli	University of Padova	Oral presenta- tion (virtual)
13:45- 13:57	High–resolution mapping of monthly irrigation water withdrawal in China	Chengc- heng Hou	Beijing Normal Univer- sity	Oral presenta- tion (in person)
13:57- 14:09	Decoupling of irrigation biophysical and crop yield effects in China's drylands	Shuangsh- uang Zi	Beijing Normal Univer- sity	Oral presenta- tion (in person)
14:09- 14:21	Optimization strategy of agricultural wa- ter system in Wensu County, Xinjiang Province,China	Haolin Li	Peking University	Oral presenta- tion (in person)

14:21- 14:33	Water sustainability evaluation and pre- diction in China under the framework of SDGs	Song Song	Guangzhou University	Oral presenta- tion (in person)
14:33- 14:45	Evolution of China's Agricultural Crop Water Footprint and Its Implications for Sustain- able Water Resource Management	Song Song	Guangzhou University	Oral presenta- tion (in person)
14:45- 14:57	Agronomic and physiological respons- es of drought tolerant maize hybrids in north-east Italy	Gaetano Roberto Pesce	University of Padova	Oral presenta- tion (virtual)
14:57- 15:09	Blue-green water resource availability dynamics in the upper Awash basin, central Ethiopia: implications for agri- cultural water scarcity assessment	Birtukan Abebe Hirpa	Addis Ababa Univer- sity, Africa Center of Excellence for Water Management/Harama- ya University	Oral presenta- tion (virtual)
15:09- 15:21	Modelling macro-catchment water har- vesting: the Jordanian Marab for food security in the Middle East	Giulio Cas- telli	University of Florence/ University of Geneva	Oral presenta- tion (virtual)
15:30- 15:50	Refreshment Break (Function Hall B)	1		I
15:50- 16:02	Drought impact on soil salinization and weed proliferation in costal agriculture	Nebojša Nikolić	University of Padova	Oral presenta- tion (virtual)
16:02- 16:14	Coping with Drought Risk in Agriculture through Sustainable Water Resource Management	Bhawana Manda	University of Delhi	Oral presenta- tion (virtual)
16:14- 16:26	Climate change challenges in vine- yards of North East Italy	Vincenzo Baldan	University of Padova	Oral presenta- tion (virtual)
16:26- 16:38	Regional assessment of pond spatial distribution in grasslands resilience to drought	Lin Chen	Nanjing Forestry Uni- versity/Northwest A&F University	Oral presenta- tion (virtual)
16:38- 16:50	Enhancing the sustainability of steep slope agriculture through water re- source management to mitigate grow- ing drought effects	Wendi Wang	University of Padova	Oral presenta- tion (virtual)
16:50- 17:02	The impact of climate change on the Mediterranean diet in Italy	Sara Mecca	University of Padova	Oral presenta- tion (virtual)

17:02- 17:14	Drought assessment and identifica- tion of its effect on the growth stages of sugarcane crop by using Drought indices	Blessy V A	Indian council of Agri- culture Research	Oral presenta- tion (virtual)
17:14- 17:26	The assessment of long-term near-sur- face temperature and precipitation trends within Canadian viticulture utiliz- ing Google Earth Engine	Massimiliano Nicola Lippa	University of Padova	Oral presenta- tion (virtual)
17:26- 17:38	Evaluating crop-specific responses to salinity and drought stress from remote sensing	Wen Wen	Leiden University	Oral presenta- tion (virtual)
P20-1	Assessing the Potential of Red So- lar-Induced Chlorophyll Fluorescence for Drought Monitoring in Different Growth Stages of Winter Wheat	Litao Zhou	Beijing Normal Univer- sity	Poster

21 Third pole environment and sustainability (Oct 28 8:00-10:45)

Conveners: Jian Sun (Professor, Institute of Tibetan Plateau Research Chinese Academy of Science, China); Hua Shang (Doctor, Rutgers University, USA); Xiaoyong Bai (Institute Of Geochemistry, Chinese Academy of Sciences, China)

Meeting room 215 Zoom: 94110763931

Time Slot	Title	Speaker	Institution	Presenta- tion Type
8:00- 8:15	Evaluation, trade-offs and driving factors of ecosystem services on the Qinghai-Tibet Plateau	Erfu Dai	Institute of Geographic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral pre- sentation (in person)
8:15- 8:30	Ecosystem changes and adaptive management in the Qinghai–Tibetan Plateau grasslands	Kai Xue	University of Chinese Acad- emy of Sciences	Oral pre- sentation (in person)
8:30- 8:45	Multi-scale responses of ecosystem service supply and demand to human activities on the Qinghai-Tibet Plateau	Shiliang Liu	Beijing Normal University	Oral pre- sentation (in person)

International Workshop on	
Geography and Sustainability	

8:45- 9:00	Qinghai-Tibetan Plateau Greening and HumanWell-Being Improving	Yanqiang Wei	Northwest Institute of Eco-Environment and Re- sources, CAS	Oral pre- sentation (in person)
9:00- 9:15	Spatial and temporal evolution char- acteristics and driving factors of soil conservation services on the Qing- hai-Tibet Plateau	Rongrong Lu	Institute of Geographic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral pre- sentation (in person)
9:15- 9:30	Inconsistency between grassland greening and productivity increase on the Tibetan Plateau during 2000 – 2020	Lizhi Jia	Institute of Geographic Sciences and Natural Re- sources Research, Chinese Academy of Sciences	Oral pre- sentation (in person)
9:40- 10:00	Refreshment Break (Function Hall B)			
10:00- 10:15	Global warming creates the tipping points of livestock cold and heat stress exposure on the Qinghai-Tibet- an Plateau	Ning Zhan	Beijing Normal University	Oral pre- sentation (in person)
10:15- 10:30	Ecosystem multifunctionality implies to Sustainable Development Goals progress	Mengqi Zhang	Institute of Tibetan Plateau Research, Chinese Acade- my of Sciences	Oral pre- sentation (in person)
10:30- 10:45	Dynamics and controls of ecosystem multiserviceability across the Qing- zang Plateau	Ruowei Li	Inner Mongolia Agricultural University	Oral pre- sentation (in person)
P21-1	Assessment of multiple factors and interactions affecting grassland degra- dation on the Tibetan Plateau	Shanshan Wang	Qufu Normal University	Poster
P21-2	Nonlinear Impacts of Thermokarst Lakes on Surrounding Vegetation Greenness in the Qinghai-Tibet Pla- teau: Insights from Stable Isotope and Satellite Observation Analysis	Yuanhong Deng	Beijing Normal University	Poster
P21-3	Effectiveness of protected areas edg- es on vegetation greenness, cover and productivity on the Tibetan Pla- teau, China	Ting Hua	Beijing Normal University	Poster

22 Transitional geospace and human-nature coupling for sustainability (Oct 28 8:00-11:30)

Conveners: Wei Deng (Professor, Sichuan Normal University, China); Lianqi Zhu (Professor, Henan University, China); Junhong Bai (Professor, Beijing Normal University, China); Jintong Liu (Professor, IGDB, CAS, China); Yuluan Zhao (Professor, Guizhou Normal University, China); Shaoyao Zhang (Associate Professor, Sichuan Normal University, China)

Meeting Room 212B Zoom: 98373036947

Time Slot	Title	Speaker	Institution	Presentation Type
8:00- 8:15	Seasonal response of Suaeda salsa to hydrological connectivity in intertidal salt marshes through changing trait net- works	Junhong Bai	Beijing Normal Universi- ty	Oral presenta- tion (in person)
8:15- 8:30	Identification and Analysis of Transitional Zone Patterns along Urban-Rural-Nat- ural Landscape Gradients: An applica- tion to China's Southwest Mountains	Shaoyao Zhang	Sichuan Normal Univer- sity	Oral presenta- tion (in person)
8:30- 8:45	Effects of Fencing Project on Wind Erosion Reduction in Alpine Grassland, Southern Tibetan Plateau	Donghong Xiong	Chinese Academy of Sciences	Oral presenta- tion (in person)
8:45- 9:00	Resilience Measurement and Spatial Function Transformation ofIntegrated Regional System in Northwest Hunan	Lihua Fu	Hunan University of Arts and Science	Oral presenta- tion (in person)
9:00- 9:15	How to identify transitional geospace in mountainous areas? An approach using a transitional index from the perspective of coupled human and natural systems	Hao Zhang	Sichuan normal univer- sity	Oral presenta- tion (in person)
9:15- 9:30	Evolution and effects of the social-eco- logical system in mountainous Karst re- gions: A case study of Guangxi, China	Ni Gong	Guizhou Normal Univer- sity	Oral presenta- tion (in person)

9:30- 9:45	The impact of extreme climate on vege- tation dynamics in the Qinling-Daba Mountains	Chaonan Chen	Henan University	Oral presenta- tion (in person)
9:45- 10:00	Refreshment Break (Function Hall B)			
10:00- 10:15	Spatiotemporal Distribution Variation of Extreme Temperatures under Moun- tain Elevation Effect and its Response Characteristics to Regional Warming in Qinling-Daba Mountains, China	Yanhong Li	Henan university	Oral presenta- tion (in person)
10:15- 10:30	Deciphering the recent human impact on sediment yield dynamics using lake deposits from a debris flow-prone catchment in the Daliang Mountain region, Southwest China	Han Wu	Neijiang Normal Univer- sity	Oral presenta- tion (in person)
10:30- 10:45	Spatiotemporal responses of ecosys- tem service values to land use/cover changes in the Baiyangdian region, China	Lixiang Wen	Beijing Normal Universi- ty	Oral presenta- tion (in person)
10:45- 11:00	Interdecadal variation of drought and influential factors in the north-south transitional zone of China	Qingdong Dong	Henan University	Oral presenta- tion (in person)
11:00- 11:10	Improved trade-off model of land use functions: Differentiated objective set- ting by territory spatial planning	Zhanyun Wang	Institute of Mountain Hazards and Environ- ment, CAS	Oral presenta- tion (in person)
11:10- 11:20	Construction of ecological security pat- tern based on Circuit Theory in moun- tainous transitional geospace: a case study of Taihang Mountain area	Ruicong Zhang	CAS/University of Chinese Academy of Sciences	Oral presenta- tion (in person)
11:20- 11:30	Future soil carbon storages under different human-nature coupling sce- narios in a mountain to plain transitional geospace	Jing Huang	State Key Laboratory of Pollution Control and Resource Reuse, School of the Environ- ment, Nanjing University	Oral presenta- tion (in person)

P22-1	An analysis of the association between population change and agricultural pro- ductivity in southwestern mountainous areas	Qianli Zhou	Sichuan Normal Univer- sity	Poster
P22-2	How Does Mountain Definition Affect Transitional Geospace? The Efficiency of Morphological Description on Border Relations Between Ecotones in Moun- tainous Areas	Neslihan Dal	Istanbul University	Poster
P22-3	Spatio-temporal evolution and hotspot zoning of ecological vulnerability in the Beibu Gulf Economic Zone, Southern China	Yuchu Xie	Nanning Normal Univer- sity	Poster
P22-4	Characteristics and Sustainable Devel- opment of Transitional Geospaces in Mountainous Areas	Wei Deng	Sichuan Normal Univer- sity	Poster
P22-5	Supply and demand of ecosystem services for sustainable development in the transitional geospace of the Taihang Mountains	Fei Qi	Center for Agricultural Resources Research, Institute of Genetics and Developmental Biology, Chinese Acad- emy of Sciences	Poster
P22-7	Identification of the Dominant Factors and Altitudinal Variation in Water Use Ef- ficiency in the Qinling-Daba Mountains	Tixia Zhao	Henan University	Poster
P22-8	Spatial Characteristics and Difference Analysis of Soil Quality on the Northern Slope of FuNiu Mountain	Junhua Zhang	henan university	Poster
P22-9	Long-term response of runoff and sed- iment load to spatiotemporally varied rainfall in the Lhasa River basin, Tibetan Plateau	Dongmei Zhao	Chinese Academy of Sciences	Poster
P22- 10	Spatiotemporal Dynamics and Drivers of Wind Erosion during 1990–2020 in the Yarlung Zangbo River Basin, Southern Tibetan Plateau	Xiaomin Qin	Institute of Mountain Hazards and Environ- ment,CAS	Poster

69

23 Understanding hazards and risks for sustainable development (Oct 27 13:30-17:25)

Convener: Takashi Oguchi (Professor, The University of Tokyo, Japan)Meeting Room 213BZoom: 96676372237

Time Slot	Title	Speaker	Institution	Presentation Type
13:30- 13:45	Longer-traveling and slower-moving large contiguous heatwaves under global warming	Sijia Wu	Sun Yat-sen Uni- versity	Oral presenta- tion (in person)
13:45- 14:00	Identifying Spatial and Temporal Patterns of Heat Risk: A Heat Risk Framework Based on Heat Storage Capacity	Mengqiu Cui	Lanzhou Jiaotong University	Oral presenta- tion (in person)
14:00- 14:15	Global contiguous extreme precipitation un- der climate change	Xiaoyu Wang	Sun Yat-Sen Uni- versity	Oral presenta- tion (in person)
14:15- 14:30	Increasing Synchronization of Global Extreme Heat and Precipitation Events	Yu Tang	Sun Yat-Sen Uni- versity	Oral presenta- tion (in person)
14:30- 14:45	Extreme rainfall reduces one-twelfth of Chi- na's rice yield over the last two decades	Jin Fu	Peking University	Oral presenta- tion (in person)
14:45- 15:00	Resilience patterns of human mobility in re- sponse to extreme urban floods	Junqing Tang	Peking University	Oral presenta- tion (in person)
15:00- 15:15	Understanding and evaluating the urban flood risk for vehicles in the case of Changsha city	Jing Ran	Hunan University	Oral presenta- tion (in person)
15:15- 15:30	Understanding the evolving international collaborative governance for transboundary air pollution in Northeast Asia: An institutional collective action perspective	Jian- zheng Liu	Xiamen University	Oral presenta- tion (in person)
15:30- 15:50	Refreshment Break (Function Hall B)			
15:50- 16:00	Spatio-temporal Dynamics of Compound Drought and Heatwave Events in the Yili River Basin under Climate Change	Jianhang Zhang	Beijing Normal Uni- versity	Oral presenta- tion (virtual)
16:00- 16:10	Spatial-temporal Characteristics of Natural Disasters and Residents' Perceptions in the Yili River Basin Under Climate Change	Jianhang Zhang	Beijing Normal Uni- versity	Oral presenta- tion (virtual)

16:10- 16:25	An Integrated Socio-ecological Approach to Climate-induce Vulnerability Mapping and (Re) thinking of Sustainability: A Case Study of Indian Coastal Society	Kousik Das MALA- KAR	Central University of Haryana	Oral presenta- tion (virtual)
16:25- 16:40	Urban Flooding in India: A Case of Delhi Inun- dation, 2023	Kavita Arora	University of Delhi	Oral presenta- tion (virtual)
16:40- 16:55	Multi-hazard risk assessment in the coastal plains of Tamil Nadu, India- An integrated micro-level approach	Leo George	Central University of Tamil Nadu	Oral presenta- tion (virtual)
16:55- 17:10	Remote sensing and geomorphological ap- proaches to understanding vegetation recov- ery after land disturbances	Takashi Oguchi	University of Tokyo	Oral presenta- tion (virtual)
17:10- 17:25	Deep learning forecast of rainfall-induced shallow landslides in Italy	Ales- sandro Mondini	CNR	Oral presenta- tion (virtual)
P23-1	Compare the characteristics of different drought indices in Northeast China	Xinyi Han	Qinghai Normal University	Poster
P23-2	Assessing Climate Risks and Vulnerabilities in Urban Communities: A Case Study of the Pearl River Delta	Anqi Zhu	Renmin University of China	Poster
P23-3	The effects of relief on the extent of mass movement-dominated headwater catchments	Hui Chen	Seoul National University	Poster

24 Urban green spaces and sustainability (Oct 28 8:00-11:30)

Conveners: Long Li (Associate Professor, China University of Mining and Technology, China); Xinyang Yu (Lecturer, Shandong Agricultural University, China); Changlong Li (Lecturer, Guangzhou College of Commerce, China)

Meeting Room 213A Zoom: 94800586125

Time Slot	Title	Speaker	Institution	Presentation Type
8:00-	Identification and comparative analysis of vege-	Xiaoyu	Beijing Normal	Oral presenta-
8:15	tation greening trends in built-up areas in China	Duan	University	tion (in person)

8:15- 8:30	More inequality? The residential spatial differen- tiation in urban renewal resettlement communi- ties in Xi'an, China	Kui Liu	Xi'an Jiaotong University	Oral presenta- tion (virtual)
8:30- 8:40	How accessible are the public open spaces in Kathmandu Metropolitan, Nepal? A mixed method analysis	Krishna Prasad Timalsina	Tribhuvan Uni- versity, Nepal	Oral presenta- tion (virtual)
8:40- 8:50	Landscape perception and preference based on photography: A study of the governmental publicity of Thailand	Sang Kun	Xiamen Univer- sity Malaysia, Malaysia	Oral presenta- tion (virtual)
8:50- 9:05	Understanding the influence of land use and vegetation cover on the urban thermal environ- ment: A case study of Xuzhou, China	Xiaobo Zhang	China University of Mining and Technology	Oral presenta- tion (in person)
9:05- 9:20	Change in urban greenness and beneficiary population in large cities in the world	Liqun Sun	Shenzhen Insi- titue of Advanced Technology	Oral presenta- tion (in person)
9:20- 9:30	An inquiry on the urban green spaces and sus- tainability in my environment (A case study of Sector N, Aliganj, Lucknow, UttarPradesh, India)	Devanshi Singh	National P.G. College	Oral presenta- tion (virtual)
9:30- 9:40	Diverging perceptions by urban residents on cultural ecosystem services provided by urban green	Haibei Yi	Central South University of For- estry and Tech- nology	Oral presenta- tion (virtual)
9:40- 10:00	Refreshment Break (Function Hall B)	1	·	1
10:00- 10:15	The relationship between green spaces and citizens' perceptions in Europe: quality of life and role of per capita GDP	Giannico Vincenzo	University of Bari Aldo Moro, Italy	Oral presenta- tion (in person)
10:15- 10:30	Understanding the unrelenting expansion of the urban heat island over the last century	Yaxue Ren	University of Bari Aldo Moro, Italy	Oral presenta- tion (in person)
10:30- 10:45	Effective screening and texture segmentation of green vegetation cover based on UAV images	Tong Zhao	Beijing Normal University	Oral presenta- tion (in person)
10:45- 11:00	The Ecological Landscape Characteristics and Optimization Path of Sponge City Park in Karst Landform Area: A Case Study of Moon Lake Park in Guiyang City	Min Luo	Guizhou University	Oral presenta- tion (in person)

11:00- 11:15	The role of technological innovation and urban spatial structure on haze pollution in the middle reaches of the Yangtze River urban agglomera- tion in China	Kaiwen Liu	China University of Geosciences (Wuhan)	Oral presenta- tion (virtual)
11:15- 11:30	The influence of collaborative agglomeration of manufacturing and producer services on haze pollution - Based on empirical analysis of urban agglomeration in the middle reaches of the Yangtze River	Yuncong Tian	China University of Geosciences (Wuhan)	Poster
P24-2	Fine-resolution mapping for satellite-based monitoring of greenhouse gas emissions in China	Xiaoqian Zhang	Satellite Applica- tion Center for Ecology and Envi- ronment, MEE	Poster
P24-3	Remote sensing monitoring of dynamic chang- es in carbon storage in Guangzhou over the past 20 years	Chan- glong Li	Guangzhou College of Com- merce	Poster

25 Urban sustainability: coupling social-ecological systems to overcome climate and biodiversity

crises (Oct 28 8:00-11:35)

Conveners: Michael Meadows (Professor, Nanjing University, China); Fanhua Kong (Professor, Nanjing University, China); Ariane Middel (Associated professor Arizona state University, USA)

Meeting Room 213B Zoom: 92321187894

Time Slot	Title	Speaker	Institution	Presentation Type
8:00- 8:15	Nature-based and engineered solutions to overcome urban overheating – Les- sons learned from a living laboratory in the Desert Southwest US	Ariane Middel	Arizona State Univer- sity	Oral presenta- tion (virtual)
8:15- 8:30	Greening the Streets: A Real-Scale Long-Term Experiment in a Mediterra- nean Street Canyon	Noa Zuck- erman	Bar Ilan University	Oral presenta- tion (virtual)

8:30- 8:45	Trade, war, and urbanization: invasion pathways of common ragweed in East China cities	Jun Yang	Tsinghua University	Oral presenta- tion (in person)
8:45- 8:55	Simulation analysis of Chinese new-type urbanization policy in mineral resource abundant regions based on the CGE model	Lijun Zeng	Shandong University of Science and Tech- nology	Oral presenta- tion (in person)
8:55- 9:05	Assessing Socio-Ecological Fit of Inter- national Environment Agreements and Trade-Embodied Carbon Flow Networks	Zhibin Xu	Macau University of Science and Technol- ogy	Oral presenta- tion (in person)
9:05- 9:15	Delineating the facilitation mechanisms of the digital economy on air pollution mitigation in China: a consideration from driving effect, spillover effect and inter- mediary pathway	Yiting Yang	Nanchang University	Oral presenta- tion (in person)
9:15- 9:25	Human-perceived temperature changes under extreme temperature events in relation to local climate zones: a study on the North China Plain	Xiang Li	Sun Yat-sen Universi- ty	Oral presenta- tion (in person)
9:25- 9:35	Does more efficient transportation improve habitat quality? Evidence from China	Haonan Bai	ChongQing University	Oral presenta- tion (virtual)
9:35- 9:50	Urban Resilience: A Social-Ecologi- cal-Technological Systems Perspective	Ayyoob Sharifi	Hiroshima University	Oral presenta- tion (virtual)
9:50- 10:00	Refreshment Break (Function Hall B)	<u>, </u>		
10:00- 10:15	Transient social-ecological dynamics reveal signals of decoupling in a highly disturbed Anthropocene landscape	Ke Zhang	Chinese Academy of Science	Oral presenta- tion (in person)
10:15- 10:25	Urban expansion weakens the contribu- tion of local land cover to urban warming	Weiqi Zhou	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	Oral presenta- tion (in person)



10:25- 10:35	Urban land expanded closer to pro- tected areas in China: A three decade investigation over 2500 protected areas	Mingzhe Liu	Beijing Normal Uni- versty	Oral presenta- tion (in person)
10:35- 10:45	Along the river with water buffaloes: Landscape allows for coexistence in Hong Kong	Jingwen Zhou	The University of Hong Kong	Oral presenta- tion (virtual)
10:45- 10:55	Analysis of the spatial distribution char- acteristics and influencing factors of the ancient capital of Shanxi On the enlightenment of its spatial distribution to the tourism development of the ancient capital	Xiaotian Zhang	Hengyang normal university	Oral presenta- tion (virtual)
10:55- 11:10	What's in hybridity and what is it good for?	Erik An- dersson	University of Helsinki/ Stockholm University/ North-West University	Oral presenta- tion (virtual)
11:10- 11:25	Nature-based solutions as a useful so- cial-ecological response to climate and biodiversity challenges in Africa cities	Pippin Anderson	University of Cape Town	Oral presenta- tion (virtual)
11:25- 11:35	Rethinking Urban Spaces in the Face of Urban Heat Islands:	Abir Mess- aoudi	Gouvernance, am- biances et dévelop- pement des villes – GADEV	Oral presenta- tion (virtual)
11:35- 11:45	Methods and challenges in developing ecological networks for the urban biodi- versity conservation	Fanhua Kong	Nanjing University, China	Oral presenta- tion (in person)