

IGCP 732 2023 meeting and workshop: The Anthropocene

Topic: Impacts and Sustainability of Earth System Development

Xi'an, China

14th-19th November, 2023

Catalog

CONFERENCE BACKGROUND	3
ORGANIZATION.....	3
AGENDA	4
CONFERENCE PROGRAM	5
FIELD INVESTIGATION.....	9
OTHERS	10

Conference background

The Anthropocene establishes a powerful concept associated with unprecedented global change. Recognizing and managing this novel situation sustainably requires a planetary network and accompanying knowledge framework. Here we propose to engage new ideas and networks in developing the Anthropocene concept by cooperating globally with scientists, especially those in developing and less developed countries. The core aims are to unite and assess global evidence of the Anthropocene and to establish the Anthropocene as a fertile framework for future geosciences

The topic of the IGCP 732 2023 meeting and workshop is Impacts and Sustainability of Earth System Development, exchanging the research progress of various countries on the Anthropocene, and improving international influence and development in the field of Anthropocene research.

Organization

Host

Institute of Earth Environment, Chinese Academy of Sciences
State Key Laboratory of Loess Science

Co-host

IEECAS Group of Youth Innovation Promotion Association CAS
Anthropocene Research Branch, Geological Society of China
Xi'an Institute for Innovative Earth Environment Research
Shaanxi Association for Science and Technology

Academic advisory board

Zhisheng An, Weijian Zhou, Yongming Han, Xiaolin Hou, Liangcheng Tan

Organization Board

Chairman: Luyuan Zhang

Organization board member: Ning Chen, Peng Cheng, Xue Zhao, Dongna Yan, Jing Zhang

Time

14th - 19th November, 2023

Location

Qujiang Huibinyuan Hotel, Xi'an, China
No. 388, Yanta South Road, Yanta District, Xi'an City

Agenda

Date	Day/week	Time	Report content	Location
14 th Nov. 2023	Tuesday	All day	Registration	Hotel lobby
15 th Nov. 2023	Wednesday	9:00-9:20	Opening ceremony IGCP project introduction	Huibin room
		9:20-10:20	IGCP project introduction	
		10:20-11:00	Group photo Coffee break	Hotel lobby entrance/ conference room
		11:00-12:00	Academic exchange	Huibin room
		12:00-13:30	Lunch	
		13:30-17:10	Academic exchange	Huibin room
		18:00-20:00	Dinner	
16 th Nov. 2023/11/16	Thursday	9:00-12:00	Academic exchange	Huibin room
		12:00-13:30	Lunch	
		13:30-17:30	Academic exchange	Huibin room
		18:00-20:00	Dinner	
17 th Nov. 2023	Friday	9:00-11:30	Lab tour	Institute of Earth Environment, Chinese Academy of Sciences
		12:00-13:30	Lunch	
		13:30-17:00	Academic exchange	Huibin room
		18:00-20:00	Dinner	
18 th Nov. 2023	Saturday	8:00-12:00	Travel to Luochuan by bus	Luochuan Loess National Geopark, Shaanxi Province
		12:00-13:30	Lunch	
		13:30-18:00	Field investigation at Luochuan Loess National Geopark, National observation and research station of earth critical zone on the loess plateau	
		18:00-20:00	Dinner	
19 th Nov. 2023	Sunday	9:00-10:00	Luochuan Loess Museum	
		10:00-14:00	Travel back from Luochuan to Xi'an	

- Dinner on 15th Nov: Huijian Hall on the 2nd floor.
- Lunch and dinner on other days: Four Seasons Hall on the 1st floor.

Conference program

Date	Week	Time	Item/Title	Lecturer	Affiliation	Chair			
14 th Nov. 2023	Tuesday	All day	Registration						
15 th Nov. 2023	Wednesday	9:00-9:05	Opening Ceremony: Welcome speech				Luyuan Zhang		
		9:05-9:10	Welcome speech	Speech by a leader of IEECAS	Institute of Earth Environment, Chinese Academy of Sciences				
		9:10-9:15		Zhisheng An, Academician of CAS, AWG member	Institute of Earth Environment, Chinese Academy of Sciences				
		9:15-9:20		Weijian Zhou, Academician of CAS	Institute of Earth Environment, Chinese Academy of Sciences				
		9:20-9:30	Introduction to IGCP 732	Michael Wagneich	University of Vienna				
		9:30-09:50	Progress of the anthropocene study in China	Luyuan Zhang	Institute of Earth Environment, Chinese Academy of Sciences	Michael Wagneich			
		9:50-10:20	Anthropocene studies in Austria	Michael Wagneich	University of Vienna	Luyuan Zhang			
		10:20-11:00	Group Photo, coffee break						
		11:00-12:00	Invited Talk 1			Xiaolin Hou	Institute of Earth Environment, Chinese Academy of Sciences	Michael Wagneich	
			Human nuclear activity and anthropocene - mark, tracing and impact						
		12:00-13:30	Lunch						
		13:30-14:10	Invited Talk 2			Yongming Han	Institute of Earth Environment, Chinese Academy of Sciences	Xiaolin Hou	
			Features of the Sihailongwan Maar Lake meet all criteria of the Anthropocene GSSP						
			14:10-14:40	Anthropocene signatures in sediments on the west coast of Korea, Yellow Sea	Eun Young Lee				University of Vienna
			14:40-15:10	Newly formed barriers in Nakdong River Delta, Busan, SE Korea: morphologic response to natural vs. anthropogenic stress?	Tae Soo Chang				Chonnam National University, Faculty of Earth and Environmental Sciences
		15:10-15:40	Coffee Break						
		15:40-16:40	Invited Talk 3			Tae Soo			

			The formal stratigraphic Anthropocene epoch	Simon Turner	University College London, AWG	Chang
		16:40-17:10	The fingerprint of a metropolis: Extracting the anthropogenic impact of Vienna from Danube flood plain archives	Diana Hatzenbühler	University of Vienna	
		18:00-20:00	Dinner			
16 th Nov. 2023	Thursday	9:00-9:30	Introduction of Chinese Academy of Sciences	Li Li	Institute of Earth Environment, Chinese Academy of Sciences	Mehwish Bibi
		9:30-10:00	Progress of Study on the measurement method using 3 MV Xi'an-AMS	Yunchong Fu	Institute of Earth Environment, Chinese Academy of Sciences	
		10:00-10:30	The Anthropocene Event as a Holistic Framework for Management of the Earth System	Emlyn Koster	Director Emeritus, Royal Tyrrell Museum, Canada	
		10:30-11:00	Coffee Break			
		11:00-11:30	Geochemical signals for anthropogenic flux and climate change: Evidence from lake sediments in the Potwar Plateau, Pakistan	Mehwish Bibi	University of Vienna	Eun Young Lee
		11:30-12:00	Understanding of cascading hazards for risk-informed decision making in the Asian highland	Basanta Raj Adhikari	Tribhuvan University	
		12:00-13:30	Lunch			
		13:30-14:00	Comparisons of lab results of anthropogenic formation and “natural” soil: granulometry, sand fractioning and pedological chemical analyses	Érika Cristina Nesta Silva	Universidade Estadual de Campinas	Xue Zhao
		14:00-14:30	Human activity has increasingly affected recent carbon accumulation in Zhanjiang mangrove wetland, South China	Kunshan Bao	South China Normal University	
		14:30-15:00	Chinese peatland records	Barbara	Adam Mickiewicz	

			crucial markers of Anthropocene	Fiałkiewicz-Kozieł	University			
		15:00-15:30	Geochemical record of the Anthropocene in a sediment core from Lake Korzhynkol (East Kazakhstan)	Michał Woszczyk	Adam Mickiewicz University			
		15:30-16:00	Coffee Break					
		16:00-17:00	Invited Talk 4			University of Leicester	Basanta Raj Adhikari	
			Palaeontological signatures of the Anthropocene diverge from past patterns of biotic change	Mark Williams				
		17:00-17:30	Baringo Geopark	Lydia Olaka	Technical University of Kenya			
		18:00-20:00	Dinner					
17 th Nov. 2023	Friday	9:00-11:30	Lab tour at the Institute of Earth Environment, Chinese Academy of Science			Yang Li		
		12:00-13:30	Lunch					
		13:30-14:00	Later Anthropocene Phase: geochemical signal of mariculture activities in a sediment core from Cape Bolinao, Philippines	Caroline Marie Jaraula	University of the Philippines	Veronika Koukal		
		14:00-14:30	Foraminifera-Based Assessment of Anthropogenic Impacts on a Bay Ecosystem: A Case Study in Pagbilao Bay, Quezon Province, Philippines	Gerard Vann Vincent T. Gomez	University of the Philippines			
		14:30-15:00	Anthropogenic Sources of Sedimentary Organic Matter in Modern Mahakam Delta, Indonesia Based on Molecular Markers	Jamaluddin	University of Vienna			
		15:00-15:30	Anthropogenic impact on alluvial sediment: A case study of Manggar River Balikpapan, Indonesia by Novaldi Makitulung	Novaldi Makitulung, presented by Jamaluddin	Sekolah Tinggi Teknologi Migas Balikpapan			
				15:30-16:00	Coffee Break			
				16:00-16:30	The timing of	Chris Carl Toyado	University of the	Michael

			Anthropocene phases in the Philippines are shared across Southeast Asian records		Philippines	Wagreich and Luyuan Zhang	
		16:30-17:00	Discussion and Closing Ceremony				
		18:00-20:00	Dinner				
18 th Nov. 2023	Saturday	8:00-12:00	Travel to Luochuan			Jing Zhang	
		12:00-13:30	Lunch				
		13:30-18:00	Field investigation at Luochuan Loess National Geopark, Shaanxi Province				Xianghui Kong
		18:00-20:00	Dinner				
19 th Nov.	Sunday	9:00-10:00	Luochuan Loess Museum			Xiangyu Guo	
		10:00-14:00	Return back to Xi'an				

Field investigation

Visiting the Luochuan Loess National Geopark, Shaanxi Province, the Luochuan Integrated Field Observation Station of Loess Critical Zone, and the Luochuan Loess Museum

The Luochuan Loess National Geopark is an environmental conservation project in China that responds to the UNESCO Global Geoparks Program with the aim of promoting sustainable development for human society. Constructing the geopark serves the purpose of benefiting society by protecting the environment. Luochuan Loess National Geopark is characterized by the classic loess profile and loess geomorphy. It also preserves vertebrate fossils, and abundant information on the paleoclimate, paleoenvironment, paleontology and other important geological events since the Quaternary.

The Integrated Field Observation Station of Loess Critical Zone is located in Heimugou Basin, with a total area of 8.2 km², of which the key observation area of a small watershed is ~1.1 km², and the office area of 5886 m².

Date: 18th-19th November, 2023

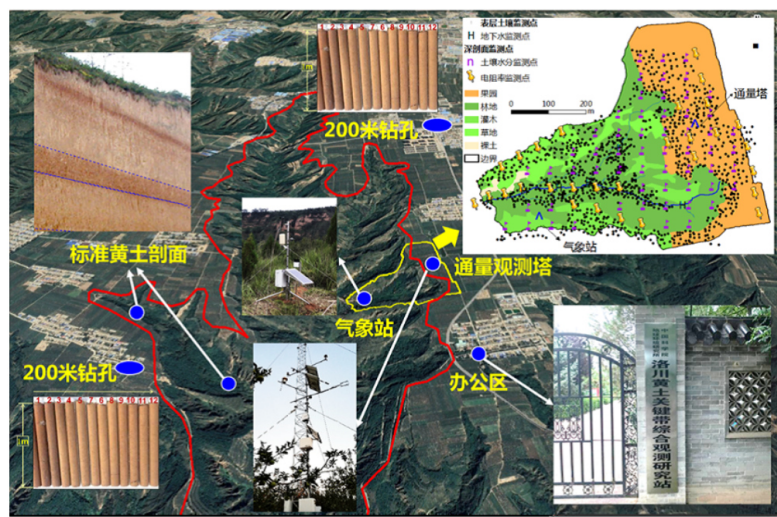


Fig. 1 Luochuan Integrated Field Observation Station of Loess Critical Zone



Fig. 2 Luochuan Loess Museum

Others

Online Meeting (Zoom conference system)

Theme: IGCP 732 Annual Meeting 2023

15th-17th Nov. 2023 09:00-18:00 UTC/GMT +8 (Beijing)

Zoom ID: 672 1043 9073

Code: 458027

<https://univienne.zoom.us/j/67210439073?pwd=c1RtL2lGQjlyUFFYQWo2cHNNTU5RUT09>

Traffic guidance

Location of Xi'an Qujiang Huibinyuan Hotel



Route 1: Xianyang Airport → Xi'an Qujiang Huibinyuan Hotel

Subway: Take Line 14 to Xi'an Bei Railway Station, and transfer to Line 4 to Qujiang Chixi Subway, then take a taxi to the hotel

Taxi: 53 kilometers ~150 RMB

Route 2: Xi'an Bei Railway Station → Xi'an Qujiang Huibinyuan Hotel

Subway: Take Line 4 from Xi'an Bei Railway Station to Qujiang Chixi Subway Station, and then take a taxi to the hotel

Taxi: 30 kilometers ~50 RMB

Weather

13 th Nov.	Monday	Cloudy	2-11 °C
14 th Nov.	Tuesday	Sunny	0-13 °C
15 th Nov.	Wednesday	Cloudy	6-14 °C
16 th Nov.	Thursday	Sunny	2-15 °C
17 th Nov.	Friday	Sunny	0-14 °C

Tips: there will be a large temperature difference between day and night, please take care to defend cold.

Contact

Conference Director: Luyuan Zhang (+86 13186017212; zhangly@ieecas.cn)

Registration: Jing Zhang (+86 18202977158); Lu Tang (+86 18700408676)

Transportation: Tong Zhang (+86 18612690983); Huan Jiang (+86 13772099223)

Accommodation: Jing Zhang (+86 18202977158)

Venue: Yanyun Wang (17809290019); Xuke Liu (+86 15828235524)

Field investigation: Jing Zhang (+86 18202977158); Mengmeng Bian (+86 18677378243)