



XIV IAEG Congress 2023 Field Trip

Field Trip #3: The Three Gorges hydropower project and reservoir landslide disasters

26-27 September 2023 – 2 FULL DAYS WITH ACCOMMODATION

Departure on 26/9 at 8:36 – return to Chengdu on 27/9 at 22:11.

Organizers:

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Topic: The sites include the world's largest hydropower station and the largest construction project in China, and an active landslide, owing to which, an entire town has been relocated.

General Description:

The Three Gorges Hydropower Station is the world's largest hydropower station and the largest construction project in China. The accompanied issues, such as immigration, relocation, and environmental issues, have attracted widespread attention from the moment of its establishment. After the impoundment of the hydroelectric reservoir, the hydrological environment of the original bank slope has been greatly changed, leading to the revival of many large landslides. This scenic route focuses on the Three Gorges hydropower project and reservoir landslide disasters, passing through Badong County and Yichang City in Hubei Province. The activity will last for two days. The two key scenic spot in this route are: (1) Badong Field Comprehensive Experimental Station: established in the Huangtupo landslide with the largest volume in the Three Gorges Reservoir Area. A three-dimensional comprehensive observation is carried out for this landslide. It allows for close observation of the geological structure and deformation characteristics of the landslide. (2) Three Gorges Dam: You can come to the vicinity of the top of the Three Gorges Dam to view the whole scenic area. Understand the construction process and functions of the Three Gorges Dam by visiting different scenic spots.



Fig. 1 The map of the field trip itineraries

1. Shennong Stream

Shennong Stream is a left tributary of the Yangtze River, located in the Hubei Province of central China. Fed by tributaries some of which come from the Shennongjia Forestry District, the stream flows south, falling into the Yangtze. The Shennong Stream, with a length of 60 kilometers, flows through three gorges with different charming scenery. The three gorges are Mianzhu Gorge, Parrot Gorge and Longcangdong Gorge.



Fig. 2 Shennong Stream

2. Kou Zhun Park ' Millennium Badong One Night Back '

A large immersive live-action drama carrying multi-cultures such as intangible cultural heritage and folklore.

3. Badong Field Comprehensive Experimental Station

The Badong field comprehensive experimental station is built on the largest ancient landslide in the Three Gorges Reservoir Area - the Huangtupo landslide, and is also the first large-scale field comprehensive "underground laboratory" in the world that focuses on landslide disasters.

The experimental station is equipped with a four-dimensional observation system of sky, air, ground, and underground, collecting long-term observation data for researching the giant reservoir landslides. Each branch tunnel and experimental tunnel undertake different scientific research tasks. It provides scientific basis for solving the prevention and control problems of giant reservoir landslides in the Three Gorges Reservoir Area.

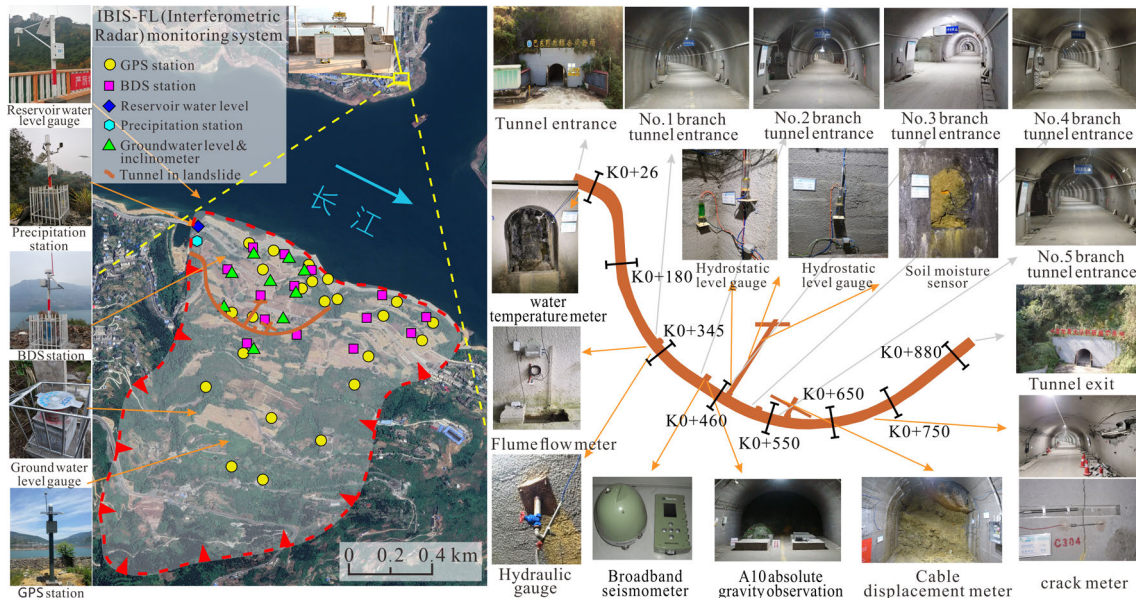


Fig. 4 Badong Field Comprehensive Experimental Station

4. Three Gorges Dam

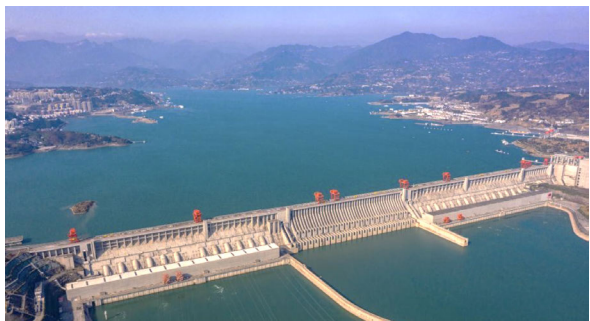


Fig. 5 Three Gorges Dam



Fig. 6 Three Gorges Locks

The Three Gorges Dam is located in the Three Gorges Dam Tourist Area of Sandouping Town, Yiling

District, Yichang City, Hubei Province. It is located in the Xilingxia section of the main stream of the Yangtze River, at the eastern end of the Three Gorges Reservoir, with a controlled drainage area of about 1 million square kilometers. It was founded in 1994 and integrates flood control, power generation, navigation, and water resource utilization. It is the main project of the Three Gorges Hydropower Station and the core landscape of the Three Gorges Dam Tourist Area, one of the largest water conservancy hub buildings in the world today.

Tentative programme:***1st Day Program-September 26, 2023***

- 8:36: departure from Chengdu by railway(G3423)
- 13:00: arrive at Badong Railway Station
- 13:40: arrive at the hotel and check in
- 14:30: go to the Badong Visitor Center
- 15:00: visit the Shennong Stream
- 17:30: dinner
- 18:30: Kou Zhun Park ' Millennium Badong One Night Back '

2nd Day Program-September 27, 2023

- 7:00: Badong Field Comprehensive Experimental Station
- 8:00: go to Three Gorges Dam
- 11:00: Lunch
- 12:00: visit the Three Gorges Dam
- 13:50: go to Yichangdong Railway Station
- 15:11: departure to Chengdu by railway (D2243, arrive at 22:11)