

International Joint Workshop on Slow-to-Fast Earthquakes 2023

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In commemoration of the 100th anniversary of the Great Kanto Earthquake in 1923, the International Joint Workshop on Slow-to-Fast Earthquakes this year was held at the University of Tokyo, and the field trip was to observe the uplifting of the events in 1923 and 1703 around Boso Peninsula. This meeting was very impressive, where people from different backgrounds talked about the same topic, slow earthquakes.

This is my first time participating in this meeting. It is always thrilling to attend academic meetings for the first time. However, this meeting had a family feel, which made me comfortable being a part of it. I had a presentation on the first day. I could see that all the committees had prepared everything well so that I could present my topic smoothly. I learned many things from other presentations, found new terms, new approaches, the development of the science of slow earthquakes, and so on. One of my favorite sessions was group discussion. I joined a group that I think is relevant to me: "International Joint Research with Developing Countries." In this group, we shared the problems that we thought had become obstacles to conducting international joint research with developing countries and addressed some solutions. This session is beneficial in broadening our point of view on the research world in general and slow earthquakes, to be precise. On Friday, I had the opportunity to visit the Earthquakes Research Institute (ERI) and obtain an explanation of the construction of this earthquake-resilient building, the OBS, and a seismograph museum in the basement of the building.

After the three main days, the next day, we went on a field trip to the southern area of the Boso Peninsula in Chiba. The purpose is to observe the terraces uplifted in large events in this area. We had three stops: Kenbutsu Coast, Shirahama Coast, and Chikura Coast. On the Kenbutsu coast, we could see the terraces from the 1923 and 1703 events. Meanwhile, in Shirahama, there is only the uplifting from the latest event. From these locations, we could find coral fossils attached to the rocks, which show quite different characteristics. These fossils help scientists estimate the time when the event happened by calculating radiocarbon decay. In Kenbutsu, we found oyster fossils, and in Shirahama, we found blue-coral worm fossils. Different from the two stops, in the last stop, we could also find traces of prehistoric events that were located quite far from the coast.

To sum up, this meeting provided very useful and practical knowledge. I hope the science of slow-to-fast earthquakes and this meeting continue to make innovations for science and the community.



Figure 1. The venue of International Joint Workshop on Slow-to-Fast Earthquakes 2023 in Ito International Research Center



Figure 2. Omori Long Period Seismograph exhibited in Seismograph Museum of ERI



Terrace from 1703
earthquake

Terrace from 1923
earthquake

Figure 3. Terraces from 1923 and 1703 events in Kenbutsu Coast



Figure 4. Terrace from 1923 Great Kanto Earthquake in Shirahama Coast



Figure 5. The location where trace of large event in 2,000 yBP, found ~300m from the coast.



Figure 6. The location where trace of large event in 3,200 yBP, found ~700 m from the coast.