FY2025 Special Program for Regional Contributions: "Understanding Earth Through the Median Tectonic Line: Earth Science via Faults, Rocks, and Dating"

Masayo Minami
Office for the Promotion of Transdisciplinary Network

On August 26 and 27, 2025, a summer hands-on learning program was held for 25 upper elementary school students (11 fourth graders, 11 fifth graders, and 3 sixth graders). The program included outdoor observation activities in Oshika, Nagano Prefecture.

On the first day, student participants visited the Oshika Museum of Japan Median Tectonic, located almost directly above the Median Tectonic Line −a major fault running vertically through the Japanese archipelago from Kanto to Kyushu− as well as the Onishiyama Landslide Site along the nearby Koshibu River. At these sites, they conducted field observations of faults, rock formations, and landslides. The students also enjoyed freely collecting various rocks of their choice, such as mylonite (a fault rock) and granite from the Ina Mountains (the inner belt of central Japan), and green schist, peridotite, and sandstone from the Akaishi Mountains (the outer belt of central Japan). The Koshibu River is known for its numerous landslide-prone terrains and extremely high sediment inflow. The students also toured the Koshibu Dam, completed in 1969 as a flood control measure −the first arch concrete dam in the Tenryu River system.

On the second day, the students attended a lecture on rocks and minerals and observed the microstructure of rock thin sections using polarizing microscopes, learning to recognize the distinct textures characteristic of each rock type. They also took part in indoor lab work using education kits to understand sediment-related disasters and the countermeasures against debris flows. Finally, divided into three groups, the students created posters summarizing their two days of learning and presented their findings in a poster session, which was also attended by their parents and guardians.

This program was listed in the Ministry of Education, Culture, Sports, Science and Technology's [Tokai/Hokuriku] August Science and Technology Events Calendar. It was implemented with support from the Nagoya University Regional Contribution Special Support Project (President's Discretionary Funds) for FY2025.

Supervising Staff:

Masayo Minami and Takenori Kato
(Institute for Space–Earth Environmental Research, Nagoya University)
Kazuo Kawamoto (Oshika Museum of the Japan Median Tectonic Line)
Shoji Nishimoto (Aichi University)

① Observation of the Koshibu Dam ② Student participants learning rock-sampling methods from Curator Kazuo Kawamoto ③ Observation of the Onishiyama Landslide Site ④ Group photo in front of the Oshika Museum of Japan Median Tectonic Line ⑤ Indoor lab work using educational kits on debris-flow countermeasures ⑥ Poster presentations in front of parents and guardians