

## Earth School: Field Seminar for Parents and Children; 1. Melange around the Tokuyama Dam

# Masao Kametaka[1]; Shoji Nishimoto[2]; Hisao Nakamura[2]; Hidekazu Yoshida[3]; Yusuke Katsurada[3]; Kazuhiro Tsukada[1]; Katsuhiko Mouri[2]; Mamoru Adachi[4]

[1] Nagoya Univ. Museum; [2] Nagoya City Science Museum; [3] NUM; [4] Nagoya University, University Museum

Earth School, a field seminar for parents and children, is operated by the Nagoya University Museum and Nagoya City Science Museum. This work is supported by Japan Science and Technology Agency (JST). It is noteworthy example of cooperation between a university and a local museum. Earth School has been carried out 9 times in 2006: 8 times for general people, and once for curators of science museums. Each event except for event with lodging is composed of two days: One day is for learning/experiment in laboratory and the other is for fieldwork. Here we will describe the outline of the 3rd Earth School; Let's study rocks of the Tokuyama Dam, and discuss problem to be solved.

Tokuyama Dam, which is one of the largest rock-fill dam in Japan, have been constructed at the upper stream area of the Ibigawa River, in Ibigawa Town, Gifu Prefecture. Usually we could not enter construction sites. Therefore we collaborated with the Water Walk, which is an event promoted by the Yomiuri Shimbun. Thus we were able to operate a field seminar in the area where was scheduled to submerge. The 3rd Earth School (Tokuyama Dam) was carried out just before test filling of the Tokuyama Dam, in Aug. 19 and 20, 2006. The aim of this event is to promote participants' understanding about accretionary complex, and to memorize the scenery of Tokuyama Dam before water filling.

The number of applicants of the 3rd Earth School (Tokuyama Dam) was 35 people (17 families). However, some families canceled, and the number of real participants was 25 people (13 families). The ratio of male applicants of this event is characteristically higher than that of the other events.

On the first day (Aug. 19), a short talk about plate tectonics and accretionary complex, and an experiment of fault formation were programmed. The story started with basic knowledge of rocks and strata, and finally it extended to faults and melange in accretionary complex. The experiment of fault formation was done by using cocoa powder, flour and slide case. This experiment is useful for understanding the thrust formation of accretionary complex.

The second day (Aug. 20) set for a field trip to the Tokuyama dam from Nagoya. Jurassic accretionary complex of the Mino terrane is widespread around the Tokuyama Dam. The viewpoints of the trip are 1) sandstone, greenstone and fault between them at quarry, 2) rock materials which consist of melange at the dam site.

Result of questionnaire survey after the event were generally favorable. This event called participants' attention to the nature successfully, because they checked the items of [Realize the nature is interesting] (19 people) and [Triggered the interests in nature] (18 people). Some participants pointed out that the contents of the first day is a little difficult for children. On the other hand, some kindly said it is necessary for second day's investigation. Truly it is difficult to teach about accretionary complex to the students of primary school, who do not learn about fundamental earth sciences. However, field seminar featuring accretionary complex is available for junior high school students and adults. In such a cases, it is essential to listen a talk or do an experiment about accretionary complex before fieldwork. The concept of plate tectonics is more familiar to the people than the concept of accretionary complex. Hence effort to popularizing the concept of accretionary complex is required.