

0022-01

Room:303

Time:May 23 08:30-08:45

Topographic models on the Mt. Kannabe in San-in Kaigan Geopark and their effect - Creation of Communicating Geology-

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Outline of geology and land use

Mt. Kannabe is a quaternary(1 to 2 Ma) scoria cone. Area around Mt. Kannabe is overlaid with scoria and is utilized as the farmland of cabbage. On the other hand, basaltic lava erupted from Mt. Kannabe is distributed along the valley floor. Many waterfalls, pot holes and other eroded structures are observed on the basaltic lava. Rainwater on the Mt. Kannabe becomes underground stream, spring out from edge of the area covered the scoria and flow on the basaltic lava, because permeability of lava is lower than scoria. Japanese horseradish and farmed trout using spring water filtrated by the scoria are special products in the area.

Production of topographic models

We give the learning programs using the topographical relief with geological map for understanding the geological structure and relationship between geology and land use in the San-in Kaigan Geopark. Furthermore, we made a miniature model of Mt. Kannabe for experiment on the penetration of meteoric water into the scoria cone.

Topographical reliefs with geological map were made as a part of life long learning programs in the Museum of Nature and Human Activities Hyogo. The topographic reliefs are made by collaboration among all participants of the program. Besides making the topographic reliefs, they discuss on the geology, geography, rocks etc. They bring the finished topographic relief to the field trip. This process help to deep their understanding of relation between geology and land use.

Miniature of the Mt. Kannabe was exhibit in the "San-in Kaigan Geopark festival". Participants put water on the miniature and they know that scoria easily permeate the rain water and filtrated water is clear.

Communicating Geology

The effect of the producing of the topographic models is not only understanding of geology but deepening the communication among the participants. Communication between members are deepened through working on the topographic models, and the communication more deepen understanding of geology. Furthermore, the understanding of geology should create high level communication. We call "communicating geology" to the geological science creating such positive spiral. Creating the communicating geology should be one of the objects on geological study in the geopark.

Keywords: geopark, life long learning, geological map, communicating geology, topographical relief, San-in Kaigan