
Oral | Symbol H (Human Geosciences) | H-CG Complex & General

[H-CG36_29PM2]Nuclear Energy and Geoscience

Convener:*Koji Umeda(Tono Geoscience Center,Japan Atomic Energy Agency), Hidekazu Yoshida(Nagoya University Museum), Chair:Hidekazu Yoshida(Nagoya University Museum)

Tue. Apr 29, 2014 4:15 PM - 5:45 PM 411 (4F)

Handling of geological hazard assessments represent a major environmental concern in the modern society due to constructing nuclear facilities and their radioactive wastes, and also related to the management of contaminated biosphere after nuclear disasters. The session rational is to provide a forum to deal with various aspects of seismic and volcanic hazards at nuclear facilities, radioactive waste disposal in subsurface storage facilities and dynamic behavior of radionuclides emitted from disabled nuclear plants. It covers the aspects of geology, geophysics, geochemistry and other related geosciences.

5:30 PM - 5:45 PM

[HCG36-P04_PG]Occurrence of faults and water conducting features at 350m gallery of the Horonobe URL project

3-min talk in an oral session

*Akira HAYANO¹, Toshiyuki MATSUOKA¹, Eiichi ISHII¹ (1.Japan Atomic Energy Agency)

Keywords:Hydrogeological model, Fault, Water-conducting feature

In the Horonobe Underground Research Laboratory Project, methodology development for the investigation of geological structure in sedimentary rocks has been carried out through construction of underground facility. As part of the methodology development, hydrogeological models have been constructed and the geological structure associated with water-conducting features (WCFs) has been conceptualized on the basis of the surface-based investigations including geophysical survey, outcrop observation and borehole investigation. The horizontal gallery named '350m gallery' and having approximately 740m long in total has been excavated at a depth of 350m below the surface by January 2014. This study presents the predictive distribution of geological structures contributing to WCFs in 350m gallery based on the surface-based investigations and the characteristics of geological structures observed in 350m gallery.