

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



SVC048-P01

Room:Convention Hall

Time:May 22 14:00-16:30

A study on a methodology of volcanic scenario analysis applying FEP analysis - A case study -

Makoto Murakami¹, Makoto Kawamura^{2*}, Hitoshi Makino³, Nobuo Geshi⁴, Teruki Oikawa⁴, Takuya Nishimura⁵, Koji Umeda³, Hisashi Sasaki⁶, Toshihiro Seo³, Takao Ohi⁷

¹Hokkaido Uni., ²MMTEC, ³JAEA, ⁴AIST, ⁵GSI, ⁶KKC, ⁷NUMO

The prediction technique of the volcanism is requested from the viewpoint of disaster prevention now. The prediction method using the volcanic scenario has been paid to attention. The purpose of this study is to develop the methodology of the volcanic scenario construction that the progress of the volcanic activity is predictable by progressively applying the FEP analysis methodology in the research of HLW geological disposal to the volcanic activity. A basic concept is as follows. We resolve the phenomena to compose the volcanic activity to the single-process referring to past volcanic eruptions. The single-process is arranged to the logical function theory. And, the development of volcanic scenarios is expressed as a chain of the functions. As a result, we developed adaptable volcano scenarios to the purpose. Moreover, it could be expected that the observations are made more effective by feeding back this methodology to the field survey.

Keywords: Volcanic Scenario, FEP: Feature, Event, Process, FEP Analysis, Single-process, Function, Matrix