Residence time of submarine springs in volcanic island

*Kazuyoshi Asai[1], Kazumi Asai[1], Katsuro Mogi[2]

1. Geo Science Laboratory, 2. Department of Systems Innovation Engineering, University of Tokyo

Submarine spring is an important part of the hydrological cycle, and of coastal chemical budgets. Residence time of submarine spring provides valuable information about the sources and flow paths of submarine springs. In this study, residence time of submarine springs located on Rishiri island and Hachijo island were determined using transient tracers (3H, CFCs, SF6). Based on the results, we discuss the factor that is controlling age of submarine spring in volcanic island.

Keywords: submarine spring, residence time, age dating tracer, Rishiri island, Hichijo island

