

Practical class "Water geochemistry" composed of fieldwork, analysis and lecture

JUN-ICHIRO ISHIBASHI^{1*} AND TOMOHARU MIYAMOTO¹

¹Dept. Earth Planet. Sci, Faculty of Science, Kyushu Univ.

*E-mail: ishibashi.junichiro.779@m.kyushu-u.ac.jp

A practical class "Water geochemistry" is composed of pre-training (6 hours), fieldwork to collect water samples and observe rocks (one day), analysis of the collected water samples (6 hours), classroom lecture on chemical equilibrium of water-rock interactions (12 hours), and report writing (students' own effort). Sampling stations are located along streams around a karst tableland called Hiraodai (Fig.1). The streams are selected from different geologic bodies (limestone region, granite body, metamorphic rocks), so that students easily recognize diversity of chemical compositions among the collected waters and ruminant factors controlling water chemistry (Fig. 2). Experiences through the class should be valuable for the third grade undergraduates as good training to switch their mind from passive lecture-based learning to active thesis studies.

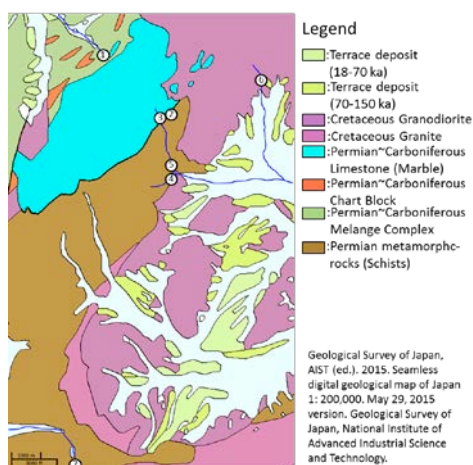


Fig. 1 Geological map of the fieldwork area

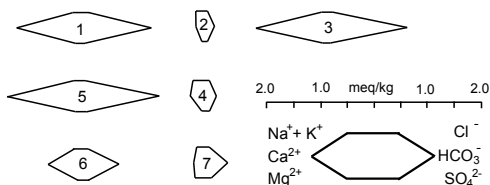


Fig. 2 Stiff diagrams of the stream waters