

Comparison of the process of formation of the hydrological structure occurring between the andesite lava and basalt lava

*Kaisei MURAKAMI¹, Yuina MURAKAMI¹

1. Hyogo Prefectural Nishiwaki Senior High School, Earth Science Club

The structure of the hydrological structure can be seen also in the andesite in Kasai city and basalt in Toyooka City, Hyogo prefecture. We wondered that the same structure could be seen even though it was different rocks in different areas. Study on the cause of the formation of a hydrological structure was not found in the previous research. Therefore, thin sections were prepared, the structure was observed with a polarizing microscope, and the shape, arrangement and size of minerals, ratios of phenocrysts and stone groups were examined and compared. The structure of an andesitic lava flow is not euhedral because the plagioclase phenocrysts begin to crystallize after thin stripes are left behind by thick stripes. Basalt lava is arranged with plagioclase as walls partitioning the stripes after phenocrysts of euhedral plagioclase grew bigger and the temperature of thin stripes sharply decreased, so the proportion of phenocrysts is small.

Keywords: hydrological structure, andesite, basalt, phenocrysts of euhedral plagioclase

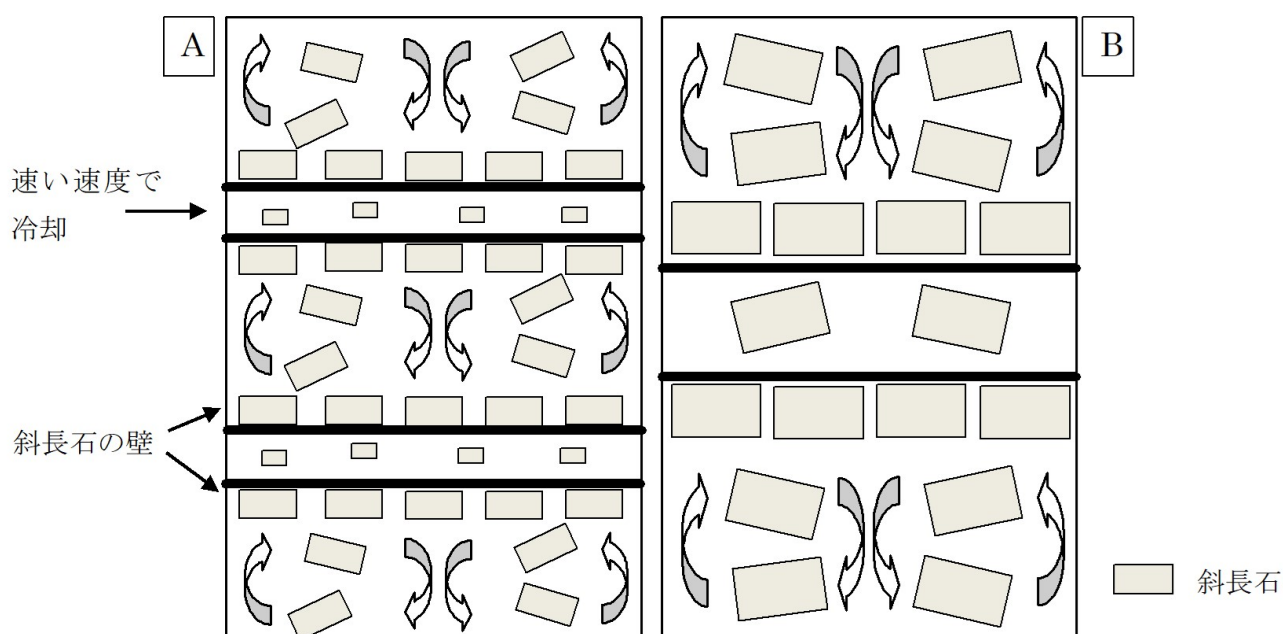


図 節理に生じた流理構造の比較

A : 安山岩溶岩

B : 玄武岩溶岩