Abstract:

3D observation of rock textures with AVS -An example of magma-mingled rock-

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3D visualization technique for rock textures using AVS has been proposed. The specimen for 3D observation, a composite dike that was collected from the Hida metamorphic belt, central Japan and that consists of melanocratic part (amphibolite) and leucocratic part (metatonalite), was cut off as ?x?x12 cm parallelopipedon. 2D images of polished section were taken as color pictures at every 0.5 mm thickness by hand-grinding with abrasive. 2D image data were converted to volume data under AVS. For 3D observations, we adopted the cross-section method and the volume-rendering method in AVS. The magma commingling textures of melanoocratic part and leucocratic part were obviously demonstrated in moving section images on monitor by the cross-section method . Their contact relations and 3D form of leucocratic part were well recognized in 3D images by volume-rendering method.