

**Crystal habit (tracht) of groundmass pyroxene crystals recorded magma ascent paths
during the 2011 Shinmoedake eruption**

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Online Resource 1: Overview of analytical procedures

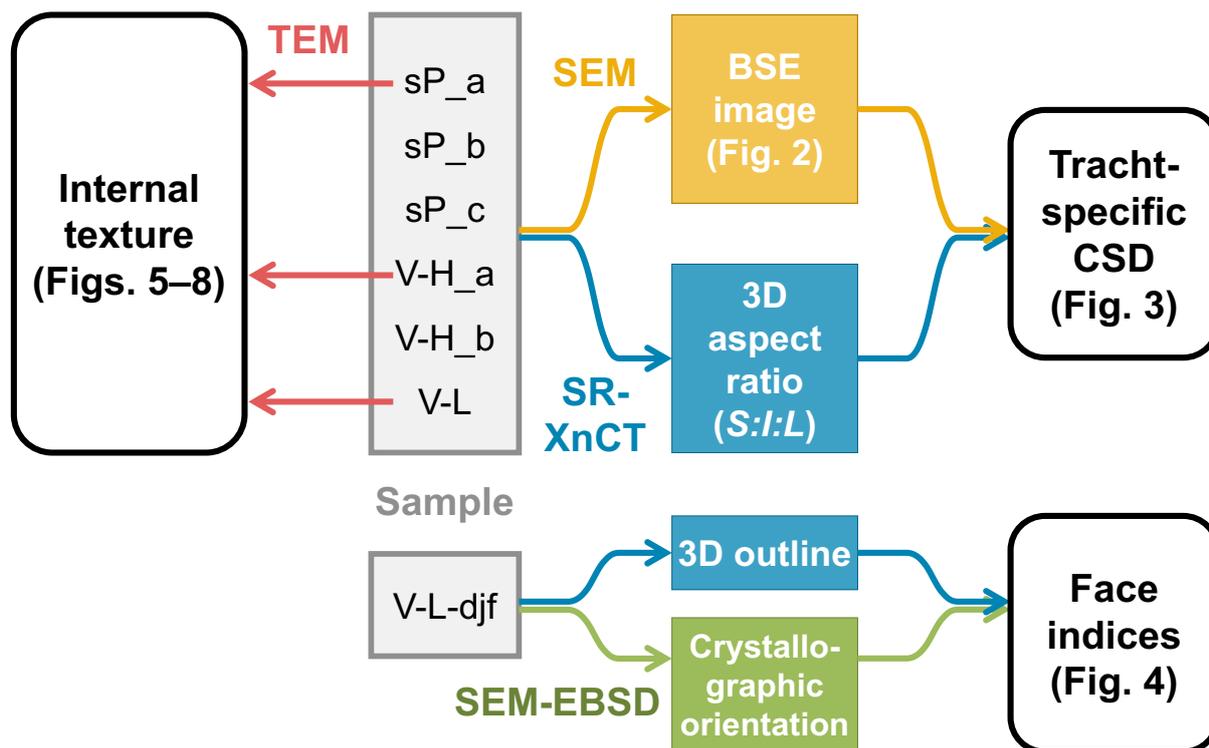


Figure S1. Overview of analytical procedures in this study. The glass compositions of all samples were measured by energy-dispersive X-ray spectroscopy in the SEM. Two samples in this study (sP_a and V-H_a) were previously analyzed by Okumura et al. (2022a), and we used their BSE images and 3D aspect ratios of groundmass pyroxenes. Abbreviations: SEM, scanning electron microscope; EBSD, electron backscatter diffraction; TEM, transmission electron microscope; SR-XnCT, synchrotron radiation X-ray computed nanotomography; BSE, backscattered electron; *S*, short axis; *I*, intermediate axis; *L*, long axis; and CSD, crystal size distribution.

Reference cited

Okumura, S.H., Mujin, M., Tsuchiyama, A., and Miyake, A. (2022a) 3D crystal size distributions of pyroxene nanolites from nano X-ray computed tomography: Improved correction of crystal size distributions from CSDCorrections for magma ascent dynamics in conduits. *American Mineralogist*, 107. <https://doi.org/10.2138/am-2022-8039>