

# Gaseous Tracking Detectors at the Sakurajima Muography Observatory

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Muography is a novel imaging technology to reveal density structure of hill-sized objects. The cosmic muons predictably lose their energy and penetrate hundreds of meters into the ground, thus their differential local flux correlates with the crossed density-length.

The Sakurajima Muography Observatory in Kagoshima, Japan, is the largest muography experiment targeting an active volcano.

A set of multilayered gaseous detectors are used to reconstruct the muon tracks, thus by measuring the flux, imaging of the inner part of the volcano becomes possible.

The presentation will focus on the technical challenges of such a particle tracking system, the designed multi-wire proportional chambers, and the recent results from the measurements.

## Funding information

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