

Characterization of individual aerosol particles from the eruption of Lonquimay volcano in Chile

Koltay, E.

Rajta, I.

Morales, J. R.

Borbély-Kiss, I.

Kiss, Á Z.

A set of aerosol samples collected during major volcanic activities around the Chilean site Lonquimay in the years 1988-1990 has been subjected to measurements in conventional and microPIXE modes in the Debrecen institute. The aim of the study was the completion of the earlier results with comparative PIXE data and microPIXE measurements for the characterization of individual particles. Results have been obtained on separate particles in terms of their elemental composition, on separate particle groups of different composition by statistical dissimilarity analysis. Si/Al and K/Si elemental ratios have been used for a comparison with published data from other volcanic locations.