The paper by Ginot et al. provides an excellent case study for the impact of volcanic product deposition on ice core records (isotopes and soluble ions) using cores collected prior to and following the Tungurahua eruption. Impacts include surface melting with some percolation leading to preferential elution and relocalization of certain ionic species and no impacts on stable isotopes.

While some might question the preservation of stable isotopes and N compounds following a volcanic induced percolation event, comparison of the two cores adequately justifies this conclusion. Notably seasonal signals are preserved and ice layer occurrence is limited to the volcanic event era.
This case study offers yet another example of the value in recovering mountain glacier ice core records and the potential for well preserved environmental signals in these records.

Interactive comment on The Cryosphere Discuss., 4, 1343, 2010.