

Cs-137 gamma peak detection in snow layers on Calderone Glacier

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Abstract

The Calderone Glacier, located in the Gran Sasso d'Italia mountain group (Abruzzo, Italy), is the most southern glacier in Europe. The reduced dimension and the general conditions of the glacier make it a powerful environmental indicator in evaluating global change processes including the radio-chemical pollution induced by human activity. Two high altitude samples of snow, collected during spring 1999, and summer 1995, have been analysed using a high purity Germanium solid state gamma ray detector. The analysis of these samples revealed the presence of the radioactive isotope Cs-137. The possible origin of this contamination and differences between different samples are analysed. The physical features of the snow, where the spring 1999 samples were gathered, are also presented.

Notes to readers

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