

Rates of Argon-37 in Natural Soils

Thursday, 22 June 2023 10:43 (1 minute)

Knowledge about the natural background of xenon isotopes and Ar-37 in the top few meters of the soil column is crucial for the assessment of measurement of those isotopes in the course of an on-site inspection. There are many factors that control the Ar-37 concentration in soil air. Production and gas transport mechanisms have previously been investigated but less attention was put on the depth dependency of Ar-37 emanation. Irradiation experiments on natural soil samples have revealed changes of this important parameter by almost an order of magnitude over a depth range of 5 meters.

E-mail

roland.purtschert@climate.unibe.ch

Promotional text

The contribution presents results from neutron irradiation experiments that are crucial for on-site inspection.

Oral preference format

Primary author: PURTSCHERT, Roland (University of Bern)

Co-author: Dr MUSY, Stéphanie (University of Bern)

Presenter: PURTSCHERT, Roland (University of Bern)

Session Classification: Lightning talks: P1.1, P3.3

Track Classification: Theme 3. Monitoring and On-Site Inspection Technologies and Techniques: T3.3
On-Site Inspection Techniques