

Research Project

Radon ICOS-CH

Third-party funded project

Project title Radon ICOS-CH

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Organisation / Research unit

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Department

Project Website <https://radon.unibas.ch>

Project start 17.08.2016

Probable end 16.08.2025

Status Active

Project inserted in the frame of the ICOS-CH infrastructure (Integrated Carbon Observation System- the Swiss contribution to a European Research Infrastructure)

Cooperation: ANSTO Atmospheric Mixingä (Australian Nuclear Science and Technology Organisation)

Radon-222äis naturally emitted from land surfaces. The only sink of this noble gas in the atmosphere is radioactive decay. Its half-life of 3.8 days provides for large concentration differences between the planetary boundary layer and free tropospheric air, making itäa **good tracer for recent land contact of air masses**äs sampled at the high altitude observatory Jungfraujoch. Through this project we provide daily updated radon-222 concentrations for Jungfraujoch (3454 m a.s.l.) and for Bern (575 m a.s.l.), located 60 km to the NW of Jungfraujoch. Earlier results of the project include the characterisation (mapping) of radon-222 flux in Europe, the USA and Russia.

Financed by

Public Administration

Add publication

Published results

4636479, Conen, Franz; Bokowiecki, Nicolas; Gysel, Martin; Steinbacher, Martin; Fischer, Andrea; Reimann, Stefan, Low number concentration of ice nucleating particles in an aged smoke plume, 0035-9009, Quarterly journal of the Royal Meteorological Society, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4508658, Creamean, Jessie M.; Mignani, Claudia; Bukowiecki, Nicolas; Conen, Franz, Using freezing spectra characteristics to identify ice-nucleating particle populations during the winter in the Alps, 1680-7316, Atmospheric chemistry and physics, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4636482, Brunner, Cyril; Brem, Benjamin T.; Collaud Coen, Martine; Conen, Franz; Hervo, Maxime; Henne, Stephan; Steinbacher, Martin; Gysel-Beer, Martin; Kanji, Zamin A., The contribution of Saharan dust to the ice-nucleating particle concentrations at the High Altitude Station Jungfraujoch (3580 m a.s.l.),

Switzerland, 1680-7316, Atmospheric chemistry and physics, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

Add documents

Specify cooperation partners