Download of air radioactivity data

Concentration data of aerosol-bound radioactivity in outdoor air at 6 stations operated by the Environmental Radioactivity Section (URA) of the Federal Office of Public Health (FOPH) is available for download at data.geo.admin.ch. The filters of the high-volume aerosol samplers are changed weekly and then analyzed using gamma spectrometry (HPGe).

The measured values of the last four months are provided as a semicolon-separated CSV-file named CHHV_DATA.csv. The file contains the latest available data, however, note that due to sample shipping and long measurement times there is a delay of several days. By defalut the file contains the concentrations of the isotopes Be-7, Co-60, I-131, Cs-134, and Cs-137. Other isotopes might be added occasionally.

A description of the file is given in the table below.

Field name	Example	Comment
Originator	www.bag.admin.ch/ura-hvs-de	reference to the laboratory publishing the data
Organization	BAG/OFSP/SFOPH	Name of the organisation publishing the data
Sending_date	02-17-2021 08:26Z	date and time when data file was created (UTC)
Country	Switzerland	Country of measurement site
Location	CERN	Name of the location of the measurement site
Latitude	46.24	Latitude in of measurement site °N
Longitude	6.08	Longitude of measurement site in °E
Altitude_m_asl	421	Altitude of measurement site in meters
Fraction	Aerosol	Fraction sampled (aerosol or gaz phase)
Start_date	09.11.2020	Date at the beginning of sampling (UTC)
Start_hour	10:17	Time at the beginning of sampling (UTC)
End_date	16.11.2020	Date at the end of sampling (UTC)
End_hour	07:55	Time at the end of sampling (UTC)
time_standard	UTC	time standard used
Volume_m3	87968	Volume of air sampled
STP_corrected_volume	No	Is the reported volumes of air corrected to standard temperature and pressure?

Ref_temp		Reference temperature used for the above correction
Start_timestamp	11-09-2020 10:17Z	Date and time at the beginning of sampling (UTC)
End_timestamp	11-16-2020 07:55Z	Date and time at the end of sampling (UTC)
Nuclide	Be-7	name of the nuclide reported
Activity_concentration	3291	measured activity concentration of the nuclide in units specified in field 'Unit'
Absolute_uncertainty	330	uncertainty (type see field 'Standard_Deviation_type') of the activity concentration in units specified in field 'Unit'
Unit	µBq/m3	Unit of activity concentration and uncertainty reported
Relative_uncertainty_%		relative uncertainty in percent
Limit_value	3.094	detection limit (or other limit as specified in field 'Limit_type')
Limit_unit	µBq/m3	unit of the limit
Limit_type	Detection Limit (DL)	type of the limit given in field 'Limit_value'
Standard_Deviation_type	2 sigma (k=2)	type of uncertainty given in field 'Absolute_uncertainty' and 'Relative_uncertainty_%'
Coincidence_Correction	Yes	Are true coincidence corrections performed for Gammaspectrometry analyses?
Parent_Daughter_Correction		Information on any particular corrections for parent-daughter isotope equilibrium
Measurement_Standard		
Reference_date_type	collection interval	'collection interval' assumes constant concentration during the sampling interval. Decay during sampling for short-lived isotopes is corrected.
Explicit_ref_date		Reference date to which the radioactive decay has been corrected. No date is given with option 'collection interval' in field 'Reference_date_type'
Comment		any other comment