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Kr-85 Monitoring In North-West Region of Russia

85Kr monitoring in USSR-Russia was ceased in 1993, 85Kr concentration activity was 0.9 -0.92 Bq/m3.
The monitoring of Xe and 85Kr radionuclides was renewed since August 2006, and was arranged at the sampling station in Cherepovets city, located in 220 km northward from the Kalinin NPP. Kr-Xe gas mixture was filled in balloon with charcoal and transported to Radium Institute. For the period of monitoring in Cherepovets city concentration activity of 85Kr, varied from 1.3 to 1.8 Bq/m3 and amounted to 1.55 ±0.12 Bq/m3 in average. For the period since 85Kr monitoring cessation in Russia its atmospheric activity has grown approximately 1.5 times, and at present the results obtained for the North-West region of Russia correspond to the data for Europe and Japan. Mean 85Kr concentration activity in atmospheric air in St.-Petersburg made up 2.11 ±0.66 Bq/m3, which is 37% higher than that in Cherepovets. Air masses with increased 85Kr content are mainly transferred from the west and the south-west, i.e. from NPPs location regions. Air masses with lowered 85Kr concentration moved from the North (Greenland Sea, Northern and Norwegian Seas), where there are no NPPs located, which could discharge accumulated 85Kr.
Data of 85Kr monitoring in 2012-2013 are presented.

Primary author: DUBASOV, Yuri (Khlopin Radium Institute)

Presenter: DUBASOV, Yuri (Khlopin Radium Institute)

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