

The aerosol pollution in Apatity and its influence on tensity of electric field

V.I. Demin¹, N.A. Melnik², E.V. Vashenyuk¹, A.A. Rayskich², M.I. Beloglazov¹

¹*Polar Geophysical Institute, Fersman str.14, 184209, Apatity, Russia;*

²*Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials, Fersman str. 14, 184200, Apatity, Russia*

Using measurements during 2001-2003, there is examined seasonal variation of air aerosols pollution in Apatity city. The mean concentration during winter months is 0.003 mkg/m³, during summer – 0.025 mkg/m³.

The choosen samples technogenic long-living radio-activity isotopes (Cs-134, Na-24, Ba-140) are not detected. The natural radionuclide are found in negligible quantities.

The mean summery activity of the air aerosols is 0.05 mkBk/liter. There is found cosmogenic } radionuclide Be-7 with concentration from 0.05 to 1.68 mkBk/m³ (the mean value is 0.60 mkBk/m³).

There is a positive correlation between concentration aerosols and the tensity of electric field: the tensity increases, when aerosol concentration is larger. This effect is caused by reconnection of light ions to aerosol particles.

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