Polar aerosols complex research results and perspectives

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Big interest in polar aerosols stipulates by not only subject factor, such as deficiency of knowledge in this sphere and realization difficulties of any aerosol measuring. It is also stipulated by objective reasons, such as increased value of polar aerosols in climate forming, well-knowledged technogenic and natural atmosphere pollution measurements, and also transformation processes of initial aerosol product in atmosphere.

Great importance have valuation of different countries contributions in arctic atmospheric pollution. The greatest valuable results about origin, composition and structures of polar tropospheric aerosols have obtained by American and Canadian scientists with help of the aircraft experiments in the 70-80 years. Researches of the polar stratospheric aerosols was isolated.

Great number of data was accumulated on chemical and elemental composition of aerosols and precipitation. In the future should be direct at study of the polar aerosol physico-chemical processes, morphological structures and heterogeneous chemical reactions specifically with ozone.