PARTICLE SIZE DISTRIBUTION OF THE ANTARCTIC SOILS ACCORDING TO DATA OF SEDIMENTOMETRY AND LAZER DIFRACTIMETRY METHODS

Mukhametova N.V., Abakumov E.V., Ryumin A.G.

Saint-Petersburg State University,
29, 16th Line of Vasilyevski Island, Saint-Petersburg, 199178, Russia
E-mail: E.abakumov@bio.spbu.ru

Results of particle size distribution analyzes are received with using two methods: sedimentometry (traditional) and lazer difractometry are compared for several soils of Antarctic. Significant differences between the two methods are found for the amount of fine sand and silt fractions. It is established that the measurement of fine soil fractions by lazer difractometry method provides lower values for these fractions in comparison with the sedimentometry method. It can be result of accumulation of fine organic matter which gets in the fine soil fractions when sedimentation method is used.
Keywords: *soils of Antarctic, particle size distribution, methods comparison, methods of sedimentometry, method of lazer difractometry*