

2009N Spectral Albedo Data

Location: Every 5 m along the 2009 North Site transect line, ~200m long
UTM Zone 4 North
From 7920510.74 N 588422.82 E (“0 m end”)
To 7920471.23 N 588226.83 E (“200 m end”)

Collection: Spectral albedos (from 350-2500 nm) were measured every 5 m along the transect line, according to a tape measure laid out along the transect daily. The instrument used was an Analytic Spectral Devices FS3. Two spectrums were collected at each location, the first with the instrument oriented upward looking, and the second with the instrument oriented downward looking. Dividing the downward looking (upwelling) reading, by the upward looking (downwelling) reading produces the spectral albedos given. A diffuse cosine collector was used to acquire the data, mounted on a 1.5 m long arm and positioned ~1 m above the snow surface to minimize shadowing. All albedos are collected to the south of the E-W transect line, where foot traffic is not permitted.



Analytic Spectral Devices FS3
Photo: Chris Petrich

Data Format: Data files are excel workbooks. Filename indicates date. The data is presented in a table with wavelength down the vertical axis and distance along the line on the horizontal axis. Each column is a complete spectrum at an individual location. Average file provides spatially averaged spectral albedo for each date, and summary file provides a compilation of all the spectral data in a number of worksheets.