Room: 101A

Glaciological and meteorological observations in Suntar-Khayata Range, Eastern Siberia, in 2004-2007

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In the period of IGY (International Geophysical Years: 1956/57), Russian Academy has made glaciological researches extensively in Suntar-Khayata Range in Eastern Siberia, in which about 180 glaciers were numbered. Especially No. 31 Glacier was precisely studied, where a meteorological station was constructed and lots of glaciological data were acquired through whole three years. After the IGY, almost no observation was done in this area except getting aerial-photo and satellite images.

After 50 years, meteorological observations were donre in this area as an activity of IPY (International Polar Year) in 2004-2005. Meteorological instruments were installed at the same place of the former station at the terminus of Glacier No. 31 in Suntar-Khayata Range and at several points in Oimiyakon area.

Meteorological instruments (temperature, wind speed, wind direction, solar radiation) were installed at No. 31 Glacier in Suntar Khayata and Oimiyakon area in 2004 and the data were collected in 2005. The minimum temperature in a year was -59 C at Oimiyakon (about 680 m a.s.l.), which is called 'Pole of Cold', and -45 C at Glacier No. 31 (about 2050 m a.s.l.) (Fig.4), which suggests there was strong temperature-inversion in this area in the period of Siberia high pressure in winter.

In 2006, thermometers were set along Kolima Street from Magadan to Oimiyakon and data were set, and its data were collected in 2007. The minimum temperature in a year was -59.7 C at Oimiyakon, whereas it was -23.2 C at seashore in Magadan.