



Katabatic winds at the edge of Hofsjökull glacier, Iceland

H. Ágústsson (1) and H. Ólafsson (2,3)

(1) University of Iceland and Institute for Meteorological Research, Iceland, (2) University of Iceland and the Icelandic Meteorological Office, Reykjavik, Iceland, (3) Bergen School of Meteorology, Geophysical Institute, University of Bergen, Norway

Hofsjökull is a close to circular glacier in the central part of Iceland. The diameter of Hofsjökull is close to 30 km and it rises about 1000 m above its surroundings. During the summer of 2007, observations were made of katabatic flows at the northern edge of Hofsjökull (FLOHOF - FLow Over and around HOFsjökull). The observations reveal that katabatic winds are quite persistent at the edge of the glacier. However, they extend only a short distance away from the glacier, and at a distance of 7 km from the edge, the katabatic winds are almost non-existent. There is a strong diurnal cycle in the katabatic winds, with a maximum in strength and frequency in the afternoon and a minimum in the early morning. The onset of the katabatic winds is associated with a drop in temperature.