Meteorological observations during 2002-2004 in Lunana region, Bhutan Himalayas

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Abstract

Meteorological observations were carried out in the Lunana region, Bhutan Himalayas, from September 2002 to October 2004. An automatic weather station (Lugge AWS) was installed at 4524 m a.s.l. on the end moraine of Lugge Glacier. In addition, air temperatures, ground temperatures and relative humidity were observed simultaneously around the AWS from late September to early October in 2003 and 2004 to investigate spatial variation of these components. Characteristics of seasonal and diurnal variations of meteorological elements are shown using the data observed by the AWS. Relatively large spatial variability of surface temperature is shown by the data observed at different sites compared to that of air temperature and relative humidity.