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## The stable atmospheric boundary layer at the Greenland Summit Environmental Observatory: bulk structure and temporal variability as inferred from radiosoundings

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Knowledge of the structure of the stable boundary layer is of paramount importance for understanding the energy exchange at the interface between the atmosphere and the Greenland ice sheet. Within the overall activities carried out at the Summit Greenland Environmental Observatory Greenland Summit Environmental Observatory (72°35'N, 38°30'W, 3203 m.a.s.l.), a total of 650 radiosondes were launched between June 2001 and August 2002 by members of the Swiss Federal Institute of Technology. This large set of radiosoundings offers a unique opportunity to study the bulk structure and temporal variability of the stable boundary layer, and to examine how these are affected by the conditions in the surface layer and the free atmosphere. Apart from providing an overview, the present contribution aims at looking in detail at some selected case studies.