Category

CR Cryosphere

Session Number

CR-6

Session Title

Glaciers and Ice Sheets: from the Mountains to the Poles

Session Description

Understanding glacial processes is key to assessing the sensitivity of glaciers and ice sheets to changing climate. One basis for our understanding of these processes is the regional to global assessment to provide a comprehensive characterization of land ice. Glacier and ice sheet changes are monitored on different spatio-temporal scales, from seasonal mass balance studies at selected glaciers, over multi-decadal repeat inventories over entire mountain ranges to geophysical measurements over entire ice sheets. Mathematical and numerical models form the other important basis to our understanding of glacial processes. Combining observations and models allows us to forecast the future evolution of glaciers and ice caps.

Bringing together studies from polar and mountain regions, this session includes presentations on both in-situ and remotely-sensed observations, as well as on numerical modeling of glaciers and ice sheets.

Keywords: glaciers, ice sheets, in-situ, remote sensing, numerical modeling

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