

Permafrost Environments

3A - Antarctic Periglacial Environment

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The session is proposed within the SCAR Expert Group ANTPAS and it is focused on the climate change effects on geomorphologic and biologic processes of the periglacial and cryotic environment of the ice-free areas of Antarctica and SubAntarctic Islands. As highlighted by several recent studies, the recent climate change, as well as the significant climate change of the past, induce important and sometimes sudden changes in landform evolution, soil formation and vegetation development. The monitoring of the abiotic and biotic changes and the understanding of their mutual relationships and the relations with climate change and their feedbacks are the main issue to address in this session. All types of techniques to achieve these are welcome (geophysical investigations, thermal monitoring, vegetation and soil monitoring as well as remote sensing to monitor surface changes). Weathering changes on rock substrates and coastal evolution are also welcome.

Keywords: Antarctica, Periglacial, Environment, Climatic Change

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