



Observing and Monitoring the Subglacial Hydrological Environment in a Changing Climate

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Message from the Guest Editors

Dear Colleagues,

Subglacial water is generated by basal sliding of ice and melting caused by geothermal heat flux. These subglacial sources are often supplemented seasonally by surface-derived meltwater that reaches the bed via crevasses and moulins. Increased surface melting of Earth's ice masses, as mean global temperature has risen over recent years, has led to an expansion and enhancement of water flux through the subglacial environment with important implications for the dynamic behaviour of ice masses, and thus their contribution to global sea level, as well as sediment and nutrient fluxes to fjords and coastal oceans.

Although the subglacial hydrological environment is very difficult to observe directly, new observations and models of bed topography and substrate properties, high temporal and spatial resolution satellite-derived ice velocity data, and new biogeochemical monitoring methods, have opened up novel research avenues. This Special Issue of *Water* calls for innovative research papers that will advance our knowledge and understanding of the subglacial hydrological environment and its broader influence under a changing climate.





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Message from the Editor-in-Chief

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