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Aerial extent, composition, bio-optics and biogeochemistry of a massive under-ice algal bloom in the Arctic

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Running head: Carbon fixation and composition of an under-ice algal bloom

Abstract

It has been long thought that coccolithophores are a minor component of the phytoplankton assemblage in Arctic waters, with diatoms typically being more dominant. Little is known about how the phytoplankton communities will change, however, as the Arctic warms. We participated in the 2011 ICESCAPE (Impacts of Climate on EcoSystems and Chemistry of the Arctic Pacific Environment) cruise to the western Arctic, performing a combination of

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