



High-resolution analysis of calving behaviours at Svalbard glaciers

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Glacier calving is a key component of glacier dynamics and provides a significant contribution of ice mass to the oceans, about which major uncertainty exists. Predictions of future sea level rise are currently hindered by our limited understanding of controls on calving. Different calving styles are evident across the world. Catastrophic infrequent events are associated with large glacial systems such as those found in Greenland. Calving at smaller glaciers, such as those found in Svalbard, tends to consist of small, frequent ice falls and crumble events. Here, we examine calving styles at two tidewater glaciers in Svalbard using high-resolution time-lapse photography to demonstrate how calving behaviour can be used to examine the prevailing controls on glacier calving.