

Glacier calving behavior has been tied to changes in the ice mélange.

Amundson et al, 2010; Howat et al. 2010; Walter et al. 2012

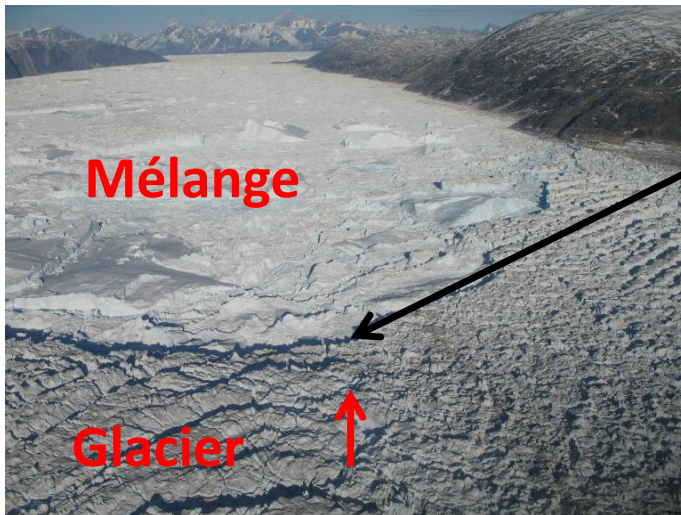
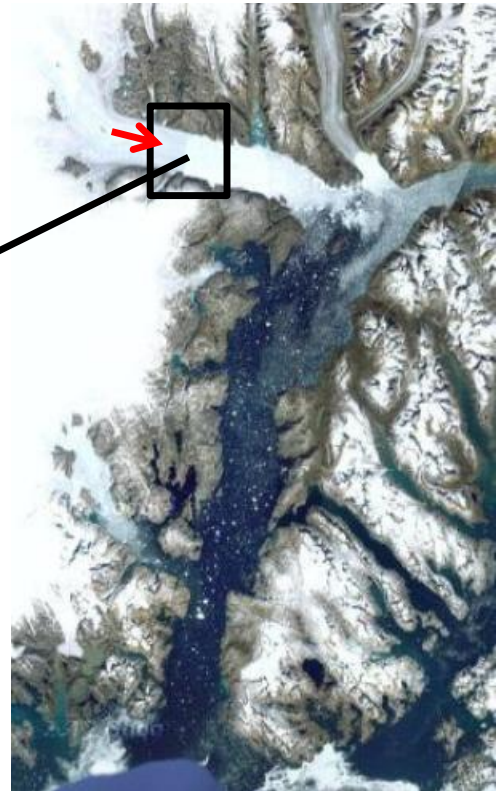


Photo:
M. Nettles



Question: What is the impact of down-fjord winds on the ice mélange?

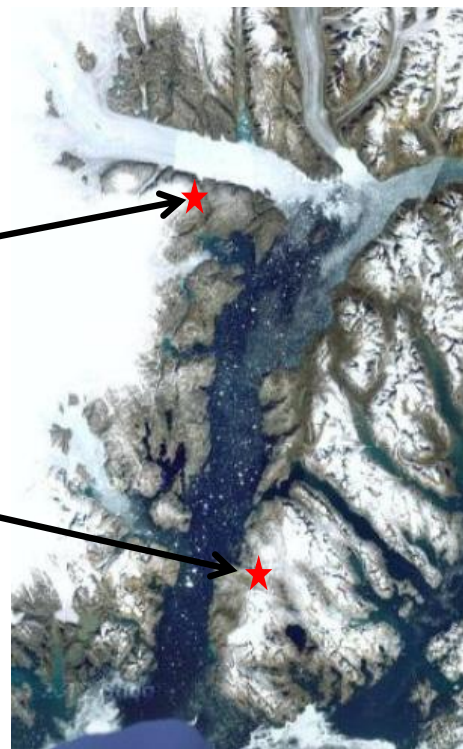
Oltmanns, Straneo, Hamilton, Mernild, Buccino

Method: Construct Helheim ice mélange index using a time-lapse camera and compare the time series with wind data from weather station at Sermilik Fjord.

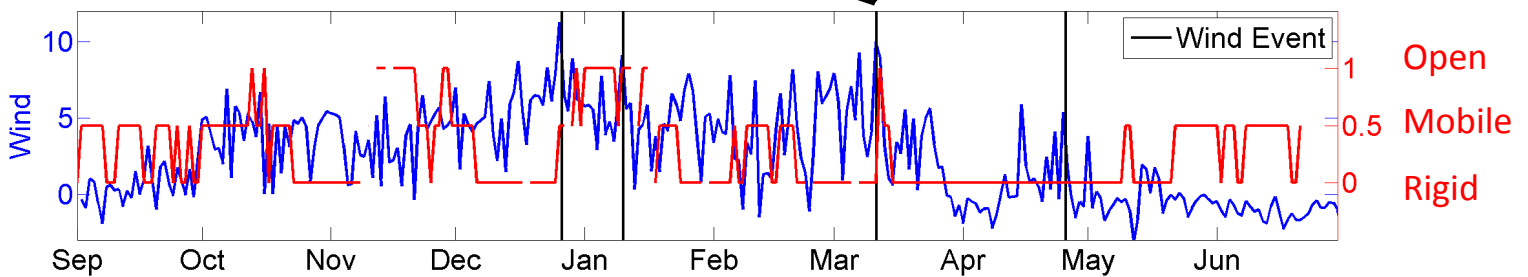
Camera

Station

G. Hamilton



Result: Strong winds are often associated with the disintegration of the ice mélange.



Oltmanns, Straneo, Hamilton, Mernild, Buccino