Untangling the effects of climate change on ice shelf melting in the Amundsen Sea, Antarctica

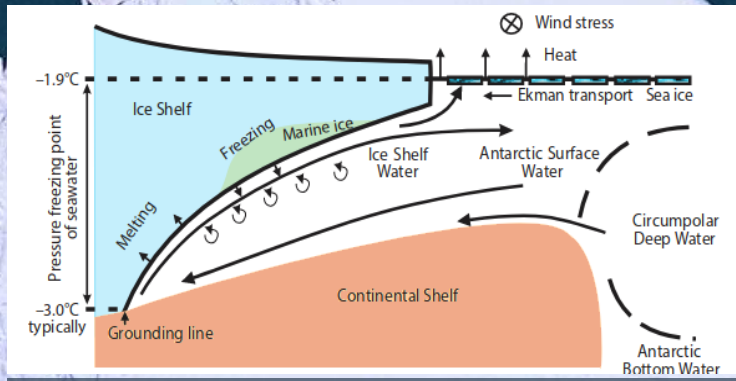
Katherine Turner

Project Supervised By:
Kaitlin Naughten
Paul Holland
Alberto Naveira Garabato

The Amundsen Sea ice shelves have the highest thinning rates in Antarctica.

Collapse of these ice shelves would lead to substantial sea level rise

Basal melt is influenced by:
- ice shelf geometry
- atmospheric forcing (e.g. wind)
- thermal forcing (ocean temperature)
- buoyancy forcing (sea-ice formation)



Jenkins et al. (2016)

Project goal

Create a model to untangle the various factors and their respective dominance for future ice sheet projections.

University of Southampton

British Antarctic Survey
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