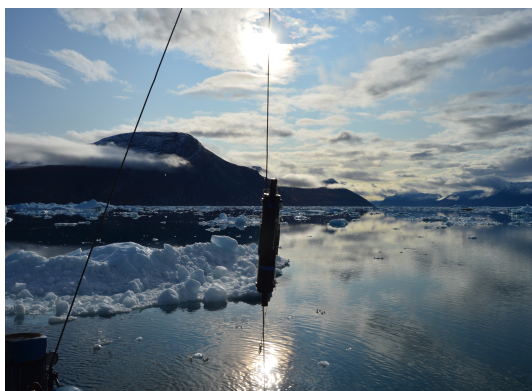


## Terrestrial



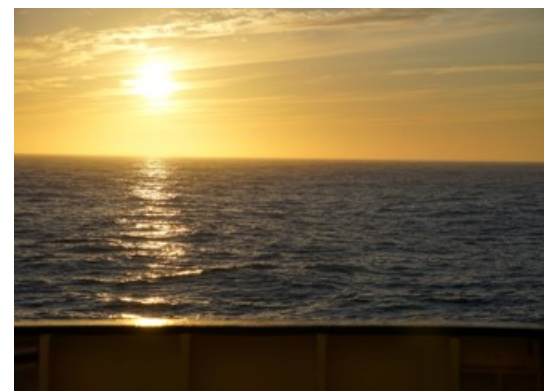
Leverett Glacier,  
Kiattuut Sermiat

## Fjords

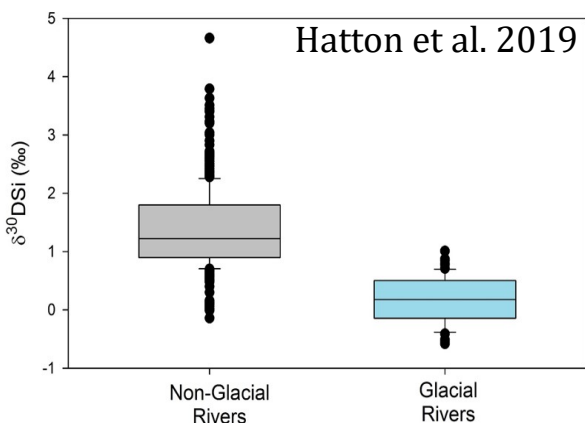


Godhabsfjord,  
Ameralik Fjord

## Open Ocean



DY081  
SW Greenland



Glacial DSi is isotopically distinct - could this help understand fjord processes?

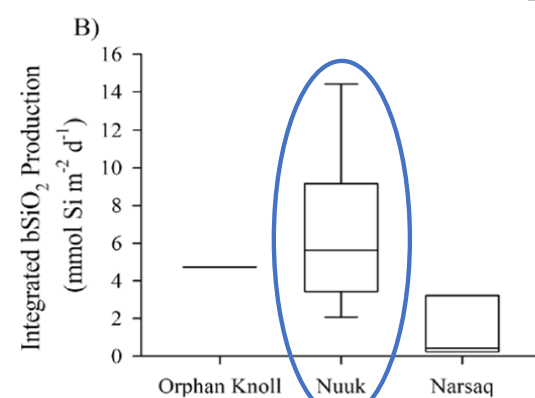
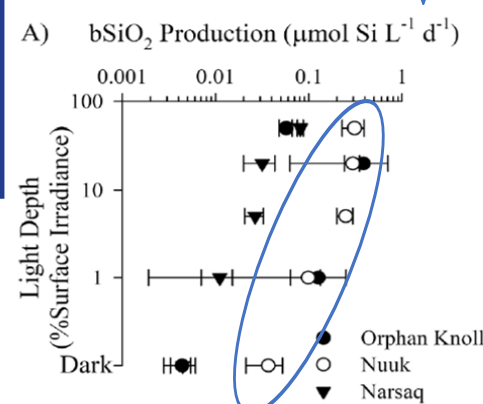
## Project ICY-LAB

### Impact of Glacial Meltwater within Fjords and Beyond: Using Si as a Case Study

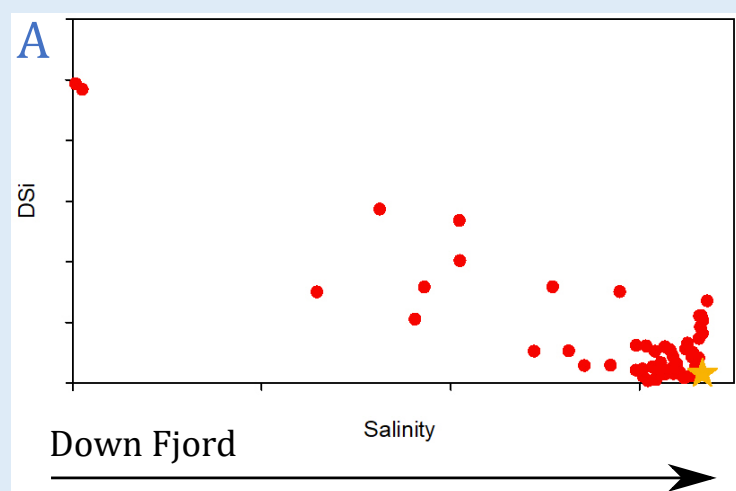
Hatton, J., Ng, H. C., Hendry, K., Beaton, A., Meire, L.



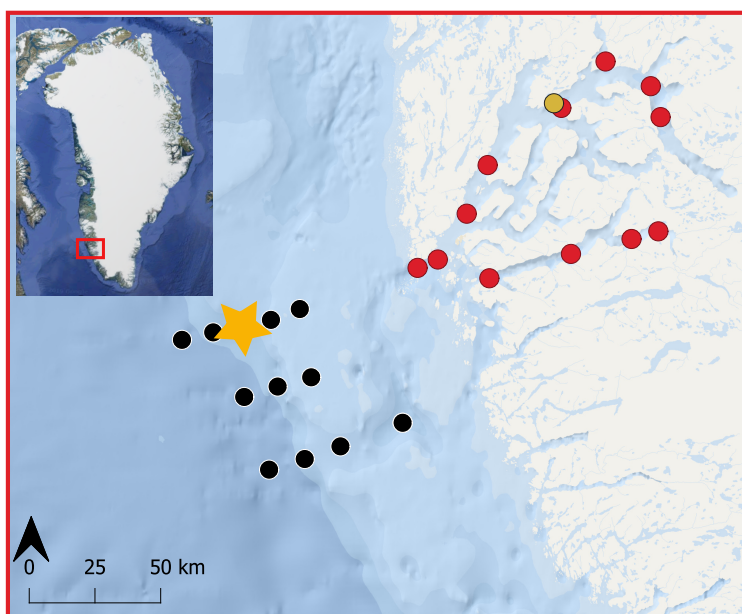
High Diatom activity on shelf  
Despite low surface DSi concentrations



Hendry et al. 2019

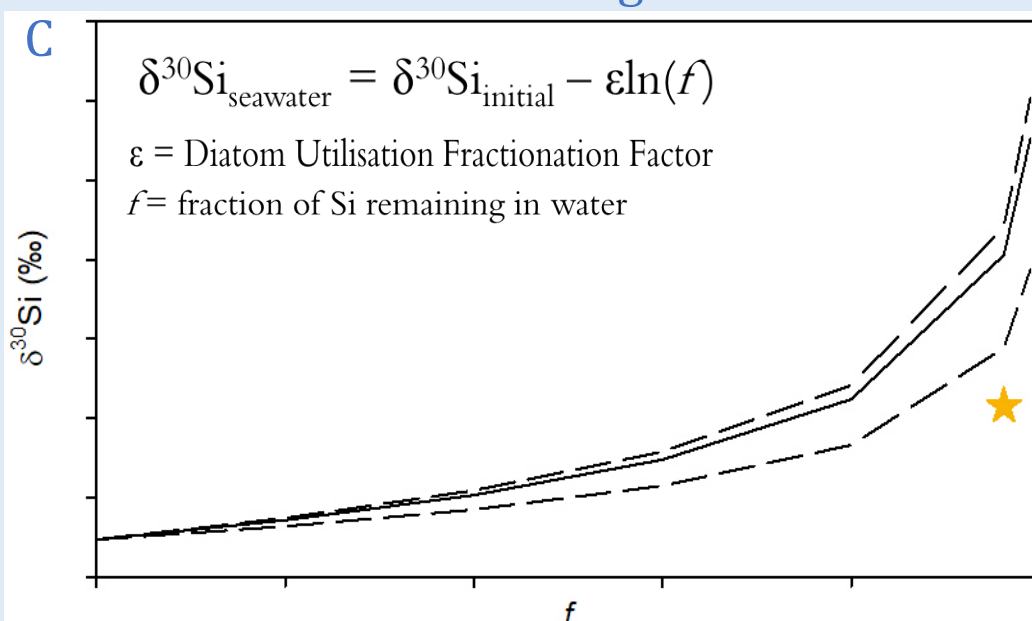
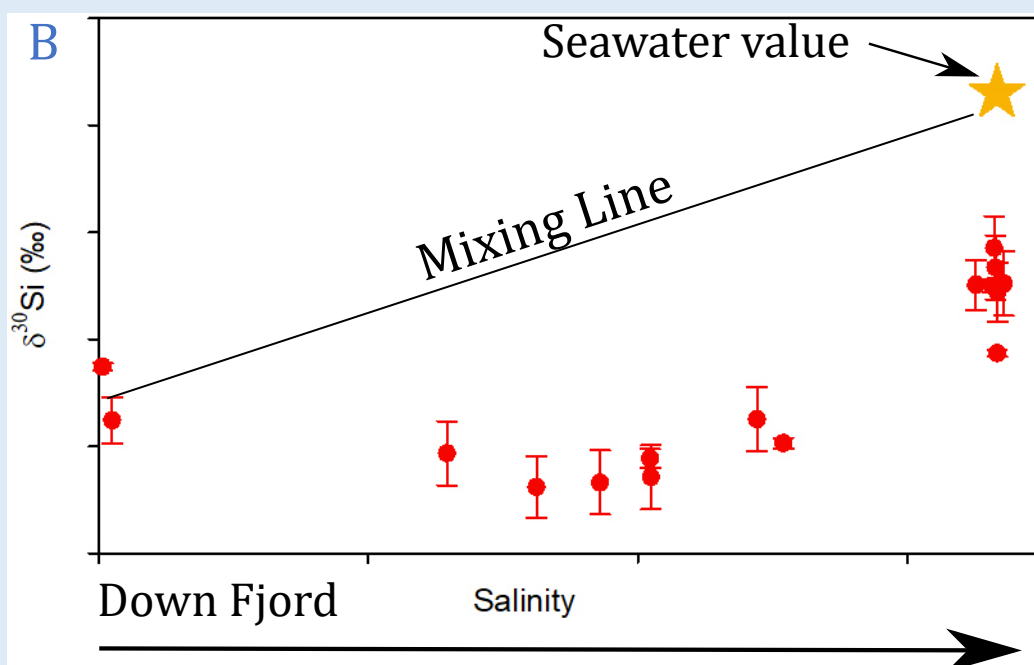


Low DSi concentrations exit the fjords - despite high Si in glacial inputs



Closed fractionation model cannot reproduce observed seawater  $\delta^{30}\text{Si}$

Source of isotopically light Si:  
Benthic upwelling?  
Dissolution of glacial sediments?



To fully understand the impact of glacial meltwaters to downstream ecosystems we need to consider dissolved and particulate export - the importance of sediments in these environments need to be investigated further