



CUSTARD

Carbon Uptake & Seasonal Traits of Antarctic Remineralisation Depth

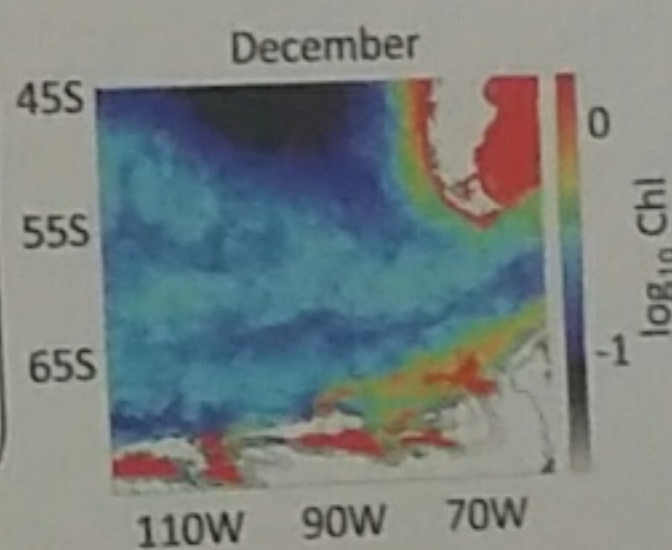
WorkPackage 3

What is the seasonality in remineralisation depth?

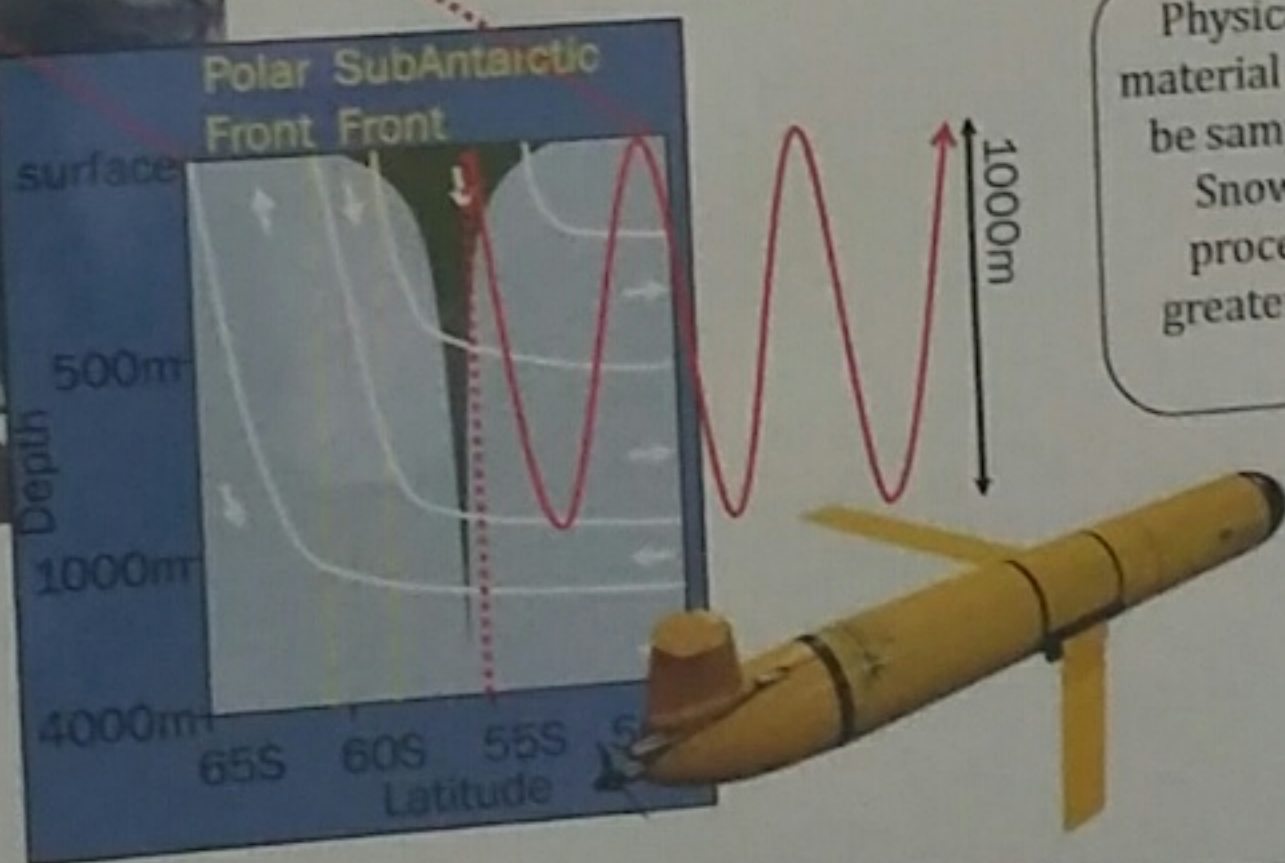
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Tracking remineralisation depth throughout the year is very challenging. To achieve this we will use an exciting new glider-based approach pioneered by the ERC GOCART project (PI Henson)



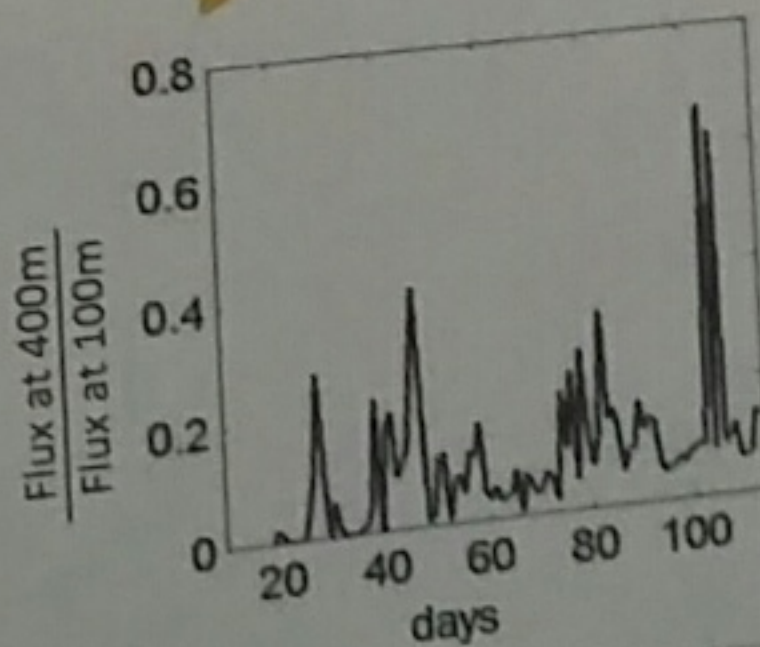
Satellite data for Chl throughout the year will be used to estimate primary production and export flux (Henson et al., 2011)



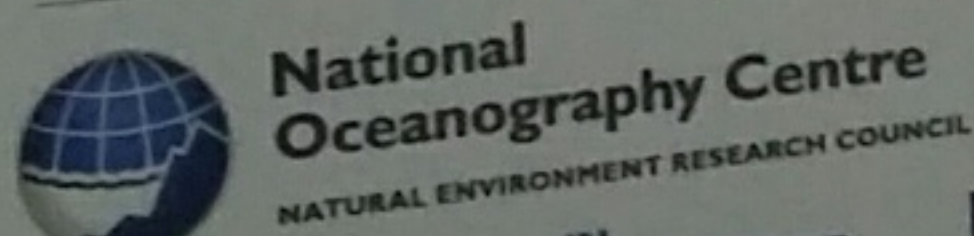
Physical samples of sinking material at different depths will be sampled using the Marine SnowCatcher during the process cruise to provide greater detail on the sinking flux.



- Aims:**
- 1) Deliver direct observations of POC flux and remineralisation from MSCs in a biogeochemically significant region of the Southern Ocean;
 - 2) Provide detailed data on the composition, sinking speed and morphology of sinking particles during the critical seasonal transition phase;
 - 3) Provide a unique year-long, daily time series of NCP, export flux and remineralisation depth;



These preliminary data show how Backscatter data from a sensor on the glider can be used to estimate the attenuation of sinking flux with depth.



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