

## POSTER PRESENTATION

### RELATING FRAGILARIOPSIS KERGUELENSIS FRAGMENTS TO ORIGINAL VALVE DIMENSIONS

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Morphological variability in marine diatoms recovered from sediment cores has become a valuable proxy for changes to temperature, sea-ice and nutrient conditions in the past. Of particular utility in the Southern Ocean is *Fragilariopsis kerguelensis*. Typically, a full valve is required for morphological measurements. However, especially during glacial periods, the majority of *Fragilariopsis kerguelensis* valves found sediment cores are fragmented reducing the usable sample size. As *F. kerguelensis* is the dominant species of diatom in the Southern Ocean and extensively used as a proxy record, including fragments as usable specimens would be helpful to many studies. As such, it is important to be able to reliably relate the geometry of fragments to the valves original length normalized width, which is related to various oceanographic conditions. This study compares various valve measurements to the width:length ratio in an attempt to identify a viable proxy from fragmentary valves.