

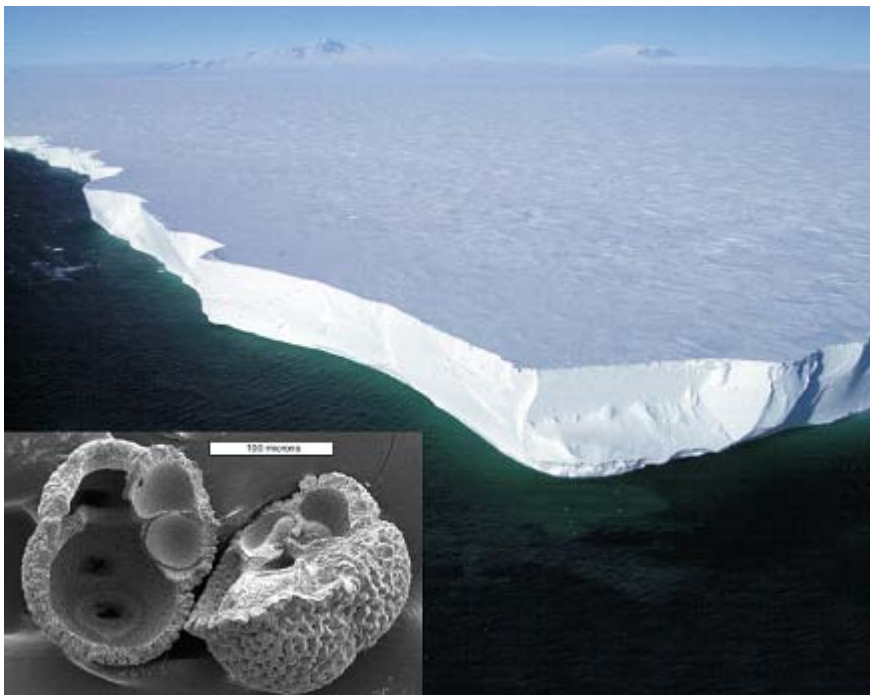
Snow and Ice Research Group – New Zealand

Monthly video seminar

Ocean temperature and the collapse of the Ross Ice Shelf

Dr. Gavin Dunbar, Victoria University, Wellington

Antarctica's large ice shelves play a key role in global climate and sea level, not least because they "buttress" the potentially unstable West Antarctic Ice Sheet (WAIS) which has 5 m of sea level equivalent in ice. Numerical modelling suggests sub-ice melting is a critical element in the stability of ice shelves and warming of the ocean by $\sim 5^{\circ}\text{C}$ is sufficient to initiate collapse of the Ross Ice Shelf (RIS) (Pollard, DeConto, Nature, 2009). Sediments recovered from drill cores in McMurdo Sound clearly show a collapse of the RIS occurred 1.07 million years ago. An open question is "what was the sea surface temperature (SST) associated with this event?". In this talk I will outline my attempts to quantify SST during this event using Mg/Ca paleothermometry based on the planktonic foraminifera *Neogloboquadrina pachyderma*.



Wednesday, 3rd August 2011, 1pm-1:50pm

All interested are welcome to attend.

Video meetings are held every month over the Access Grid. Video rooms are sited at most universities. The locations of the video conference rooms for each campus are:

Massey: Room 4.40, Social Sciences Tower.

Auckland: Room 429, School of Geography, Geology and Environmental Science.

Canterbury: Room 164, Level 1, Geography-Psychology Building.

Otago: Teaching Facilities South West corner, Information Services Building.

Victoria: Library RB106.