Contribution ID: **21** Type: **not specified**

Does it have to be deep, or can we learn anything from shallow ice cores?

Thursday, 28 April 2011 10:50 (20 minutes)

The deep ice cores from Antarctica have revealed an unparalleled view of the changes in, and linkages between, the climate and the atmosphere over several climate cycles. Further, comparison of the Antarctic cores with the deep ice cores from Greenland has shown the inter-hemispheric exchange of energy, probably via the Meridional Overturning Circulation, has lead to a difference in phasing of climate in the north to that of the south.

These deep ice cores have justifiably become the 'gold standard' for studying long-term climate change. So is there any value to be obtained from drilling shallow ice cores (which I define here as including cores ranging from around 100 to 1000 m deep)? With a few chosen examples, I will examine how Antarctic shallow ice cores can help fill in the regional picture of climate change, and also whether they have adequately captured the most recent 'anthropogenic' warming trends.

Primary author: Dr MULVANEY, Robert (British Antarctic Survey)

Presenter: Dr MULVANEY, Robert (British Antarctic Survey)

Session Classification: Ice Cores (Part 2) chaired by Jeff Severinghaus

Track Classification: Ice Cores