

OZ-INTIMATE WORKSHOP

13th July, 2010

AQUA, North Stradbroke Is.

Present: Jessica Reeves, Kat Fitzsimmons, Tim Barrows, Steven Phipps, Stephen Lewis, Lynda Petherick, Ian Goodwin, Patrick Moss, Peter Almond and other AQUA attendees

Apologies: Tim Cohen, Jamie Shulmeister, Patrick De Deckker, Helen McGregor, Michael Griffiths, Mat Fischer

The gathering of Quaternarists from both sides of the Tasman seemed too good an opportunity to miss for the OZ-INTIMATE group to hold a workshop. The intention of the workshop was to present to the broader community the outcomes of the December workshop, in the form of a poster presentation, to invite further contributions and to focus on what reasonable outcomes we can hope to present at INQUA in 12 months time.

Jessica Reeves presented an overview of the INTIMATE project and the progress so far of the OZ-INTIMATE chapter. Peter Almond also presented the progress of NZ-INTIMATE in the form of their minimum dataset event stratigraphy and gave some sage advice on how the Australian group may proceed. The discussion then revolved around the poster presentation, focussing on the 4 major regions.

There was a strong feeling that more records were needed initially, before a minimum dataset for Australia can be agreed upon. We should go back to the regional groups for a more concerted effort to look for the significant periods of change (excursions and transitions), and how each of the proxies are responding to the changes within each region. This may be done initially in a block fashion (hot-cold, wet-dry). These would form a series of synthesis papers – to be compiled in December 2010.

Several researchers suggested further records that could/should be included, including their own unpublished or recent work. Examples include ODP 820 core (Patrick Moss), which includes a 40 ka record of pollen, charcoal, $\delta^{18}\text{O}$ SST and magnetic susceptibility, the diatom record of Blue Lake (John Tibby), the Southern Ocean stack record (Tim Barrows) and the Huon Pine records. The idea of including archaeological records (perhaps as a response) was also floated. Esmée Webb and Lynley Wallis will look into the feasibility of this. Peter Almond recommended the use of the Antarctic EDML record both to link with NZ and the North Atlantic groups.

It was also felt that the Australian records should probably stretch back at least to 35 ka, initially to include the full decline into the LGM and the possible bimodal character of cooling/drying we are now seeing in several records.

In an attempt to look across the records at times of change, the period 14-12 ka came up as significant. In preparation for INQUA, Steven Phipps has agreed to generate a GCM for the period 15-10 ka, to address the potential drivers during this time. This will be a major advance for the Aus-INTIMATE group, applicable to both the Australian and New Zealand CES's.

A cautionary note regarding chronology was added, as sound chronology is essential to accurately correlate records. There will be guidelines added to the website for reference. Note also that the poster and supplementary notes will be made available on the INTIMATE page of the AQUA website for all to access. A note will be sent via AQUA-list directing people to the poster and calling for contributions in preparation for the December workshop

The poster compilation was a good first attempt to look at records from across our disparate continent; however more detailed work needs to be done in order to constrain the key events – and responses. This should be achieved for the next December AINSE workshop.