

NOTES FROM THE PRELIMINARY INTIMATE WORKSHOP, DUNEDIN, NEW ZEALAND, 4 DECEMBER 2003.

Convener: Jamie Shulmeister

1. Summary report by Jamie Shulmeister

Dear all,

Please find attached some notes for the first meeting of the NZ bits of the Australasian INTIMATE group at the Geol Soc NZ conference on the 4th of December. The meeting was quite successful especially given its organisational nature. About 50 people turned up for the talks and about 40 took part in the group discussion afterwards. [attendance list will follow].

The four introductory talks were excellent setting the scene for the project. Matt McGlone's talk provided the preliminary framework to develop an event stratigraphy from. Maureen Marra reviewed the types of data we need and some of the fishhooks in the data sets. Phil Shane provided a very useful overview on the key marker tephras in New Zealand and how well, or badly, they are constrained. [Phil was his normal provocative self and got the audience into debating form by challenging the whole basis of isotope stratigraphy, as an aside]. Finally Barbara Manighetti revealed an impressive marine core covering the critical period, which if not necessarily going to act as the stratotype for our region, will certainly be a key reference record.

The afternoon discussions went well. I have attached some notes taken by Craig Woodward [Thanks Craig] which I have amplified in a few spots. The critical points are;

1. There is widespread interest and enthusiasm for the project and a recognition that a good mechanism for bringing people from different fields together is needed.
2. A detailed event stratigraphy supported by a good conceptual understanding of the climate forcings of the stratigraphy were what the participants thought was the key output to be achieved.
3. The community (especially in New Zealand) is small and having sub-groups working on topics like the marine records was seen as unhelpful. We want all meetings to be integrative whole community efforts.
4. Following on from 3. The participants preferred a time slice approach as a way of staying integrative across all disciplines.
5. There are heaps of data out there and we can establish a 'straw man' stratigraphy simply from integration of the existing data. This can then act as a focus for research whether to refine or redefine the event stratigraphy.
6. Chronology is REALLY important.

The participants felt that we should try to get work under way as soon as possible and we will look to establish an INTIMATE workshop this July so that initial results can be carried to Tasmania in December.

Finances will be an issue with a desire to help publicise a large grey literature and our general preference for stand-alone workshops rather than tag-ons to other meetings.

Cheers

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2. Minutes taken by Craig Woodward & Jamie Shulmeister

Points of Discussion:

I. Naming of the group:

- Discussion of a name for the Australasian section of the INTIMATE project will be conducted by email in the future.

II. Organisation:

- Organisation should mirror that of the Northern Hemisphere INTIMATE project, i.e.:

- Project coordinator
- Project secretary
- Specialist coordinators.
- Link to Northern INTIMATE

No real need for regional coordinators, especially if an informal agreement is reached that if the secretary is from NZ, the coordinator would be from Australia (or vice-versa).

- What is a logical format for subdivision?

Obviously a key issue is radiocarbon calibration/chronology. As this is such an important issue Christine Prior suggested there should be a special working group responsible for chronology.

Those present at the meeting were reluctant to subdivide participants into specialist areas (marine records, palynology, etc.) as it was believed that one of the key aims of the INTIMATE project is to integrate data from different disciplines; separation into units may act as a barrier to information flow.

Endorsement: There will be a minimal amount of funding available. It was strongly suggested that a good use would be to support publication of a grey literature and making datasets etc available to all.

- Nature and Timing of meetings:

Should we “piggy-back” other conferences or have stand-alone workshops?

- Unanimous opinion that workshops should be stand-alone.
- This has financial implications.
- Target University term break, e.g. July 2004 meeting. This was envisioned as an opportunity to get the NZ part of the community into gear before the first joint meeting in Tasmania in December.

III. Objectives

- **Step 1:** Evaluate existing records.
- **Step 2:** Identify gaps in the records.
Need to have a standard protocol for evaluating existing records.

- Target:

****Should it be data to be fed into a climate model?***

McGlone suggested that the goal should be a local conceptual model, in effect a ‘gross’ event stratigraphy for Australasia.

****What time period should we cover?***

27- 6 ka was suggested by McGlone. Plant biomass stabilizes at this point.

- Time slice approach to avoid separating into sub-cliques.
- Time slices = time periods for which events stayed the same.

Suggested time slices for initial analyses (calibrated years):

25 - 18 ka	[LGM]
17 – 14 ka	[Initial warming]
15 – 13 ka	[ACR]
13 – 11.5 ka	[Younger Dryas]
11.5 – 6 ka	[Early Holocene]

Suggested that the initial target should be a **workshop** where workers meet and bring along proxy data. The goal of this workshop should be to develop a **preliminary event stratigraphy**.

- Identify problem areas from an initial workshop.
- Proposed that we need to involve climatologists to verify the feasibility of climate models.

III Outcomes:

- Discrete products:

- **Journal articles** from conferences e.g. event stratigraphy *after* verification of chronology.
- **Protocols**
- **Databases:** There is a lot of unpublished data that need to be integrated.

Bibliographic reference: Shulmeister, J., Woodward, C. 2003: Notes from the preliminary INTIMATE workshop, Dunedin, New Zealand, 4 December 2003. www.paleoclimate.org.nz.