

International association for Gondwana Research Annual Convention and 9th International Symposium on Gondwana to Asia

November 18th to 21st, 2012 Adelaide, South Australia

First Circular

<u>Venue</u>

Mawson Building School of Earth and Environmental Sciences The University of Adelaide, North Terrace

Pre-conference field trip

17 - 18th November, 2012, Adelaide Hills, Flinders Ranges

Post-conference field trip

21 - 24th November, 2012 Eyre Peninsula, Gawler Craton

Organizing committee

Assoc. Prof. Alan Collins Prof. John Foden Prof. Martin Hand Dr. Rosalind King Ms. Diana Plavsa Mr. Ben McGee Mr. Andrew Barker Mr. Rowan Hansberry









ANNOUNCEMENT AND INVITATION

We have the pleasure of inviting you to visit The University of Adelaide this November to attend the 9th International Symposium on 'Gondwana to Asia' and the Annual Convention of the International Association for Gondwana Research (IAGR)—the first time this meeting has come to Australia. Adelaide lies on the edge of Cambrian Gondwana, with fantastic outcrops of the Neoproterozoic-Cambrian Gondwana passive margin sequence occurring in the suburbs of the city, in the nearby wine-growing districts and in the Adelaide Hills. To the west lies the Archaean-Proterozoic Gawler craton with excellent coastal exposures that correlate with similar rocks in Antarctica. To make the most of the local geology, the venue and the glorious Adelaide Spring, we have a program set up that includes two great fieldtrips with two days of conference and a morning workshop on the plate-reconstruction software – G-Plates, run by Prof. Dietmar Müller (University of Sydney). It should be a conference to remember. We do look forward to seeing you in November.

Conference Sessions

- Gondwana Resources
- Gondwana Amalgamation
- Gondwana Break-up and the Amalgamation of Asia
- Continental construction in Central Asia, IGCP Project 592 (2012 2015)

Conference outline

17 - 18th Nov, 2012 – Pre-conference field trip 18th Nov, 2012 – Delegates arrive in Adelaide. Welcome reception and ice-breaker party in the evening, Sprigg Room, Mawson Building 19 - 20th Nov, 2012 – Conference seminars and poster presentations

21st Nov, 2012 – 9am - 1pm GPlates workshop with Prof. Dietmar Müller - See attached flyer To register for the workshop please email: diana.playsa@adelaide.edu.au

21 - 24th Nov, 2012 - Post-conference field trip

Important dates

Abstract submission
31st August, 2012
Abstract acceptance notification

September, 2012 Field trip payment

31st August, 2012

Abstract format

Abstracts must follow the strict format guidelines of Gondwana Research http://www.elsevier.com/locate/gr **Submission style:** Electronic via email to

diana.plavsa@adelaide.edu.au

File format: MS Office (.doc or .docx file)

Font: 12pt Times New Roman

Maximum Length: up to three printed pages with a maximum of one figure and one table

Presentation style

Language: English

Style: Oral (20min including discussion), Poster

Accommodation

The University campus is located in the heart of the city and there are a large number of budget to 5-star hotels available within 5 to 10 min walk from the campus.

Climate

November in Adelaide is late spring and the climate is very pleasant with sunny and dry weather ranging in temperatures between low 20's to low 30's centigrade.

<u>Fees</u>

Registration

Free

Pre-conference field trip

Student delegates: \$300 AUD Professional delegates: \$350 AUD

Post-conference field trip

All delegates: \$650 AUD

Field trip payments **MUST** be made by 31st August, 2012. The fee includes accommodation, food and transportation. Field trip payments must be made via credit card. Please fill out the form attached to the circular with your credit card details and send to:

alan.collins@adelaide.edu.au

Field trip information

Pre-conference field trip

Field trip leader: Prof. John Foden Field trip title:

Cambrian arc initiation on the Gondwana margin

During the course of this field trip we will be looking at syn- to post-tectonic granite intrusions into the early Cambrian metasedimentary sequences as well as foreland thrust and fold belt deformation resulting in the formation of Delamerian Nappe structures.

Field trip location: Adelaide Hills, southern Flinders Ranges

Field tip duration: 2 days

Transportation: Minibuses

Post-conference field trip

Field trip leader: Prof. Martin Hand Field trip title:

Transpression and lower crustal extrusion: A transect across the Palaeoproterozoic Kalinjala Shear System in the eastern Gawler Craton

Please see the attached flyer for more information about the geology and the logisitics of the trip.

Field trip location: Port Lincoln, Eyre Peninsula, southern Gawler Craton Field trip duration: 4 days, 3 nights Transportation: Flying to and from Port Lincoln, 4WD to and from outcrops

To register for the conference please fill out the form at:

http://www.ees.adelaide.edu.au/research/gg/gondwana registration/









Field Trip Registration and Payment Form

Please tick the appropriate box: Pre - conference field trip - Adelaide Hills / Post - conference field trip - Eyre Peninsula (Southern Gawer Craton): Flinders Ranges: Student delegates: \$300 AUD All delegates: \$650 AUD Professional delegates: \$350 AUD <u>Title:</u> <u>Surname:</u> First Name: Affiliation: Student (please circle): YES / NO Email address: **Credit Card Details** Credit Card Type: VISA / MasterCard / American Express Name on card: Credit card number: Expiry date: Registration Fee: \$

Please note the tax receipts will be issued to you upon your arrival to the conference.

Email this registration form to: alan.collins@adelaide.edu.au







Post Conference Field trip

Transpression and lower crustal extrusion: A transect across the Palaeoproterozoic Kalinjala Shear System in the eastern Gawler Craton

The Kalinjala Shear system in the eastern Gawler Craton in southern Australia formed during Palaeoproterozoic ©. 1.7Ga) transpressional deformation. In the core of the shear system lower crustal granulites are exposed in a narrow vertical "channel" that is flanked by less deeply exhumed rocks. The differential exhumation across the shear system records extrusional exhumation during transpression.

The aim of the field trip is to examine the structural and metamorphic architecture of this system by undertaking a transect across the belt that moves from the mid-upper crust to the lower crust in the core system. We will see spectacular high-strain lower crustal granulites, coarse-grained metasedimentary rocks and deformed granitic units that have been intruded by abundant mafic dykes that can be used to assess the strain variation across the belt. The outcrops we will visit are located along the spectacular coast of South Australia that boarders the southern ocean. With a combination of golden beaches, jutting headlands and beautiful outcrops, the region is a wonderful expose of Australian Proterozoic geology and modern landscape.

Logistics

We will fly from Adelaide to Port Lincoln on southern Eyre Peninsula on the afternoon of November 21st and spend the next 3 days looking at outcrops that covers an approximately 40km transect across the shear system. We will travel by 4WD and return to Port Lincoln each evening, staying in cabins. The trip will conclude on the afternoon of November 24th by return flight to Adelaide.

The weather in November is likely sunny, with temperatures around 25 degrees. However since we will be on the southern ocean, weather fronts associated with wet and windy conditions are not uncommon. Outcrops will require some walking (less than 2 km), but study footwear is required.

The total cost is \$650. This includes airfares, accommodation, transport, breakfast and lunch and entry permits to Port Lincoln National Park. Numbers are limited to 20.



Gondwana to Asia 2012 Short Course Wednesday Nov 21st, 9am-1pm

What can GPlates do?

Gplates is open-source desktop software running on Windows, Linux and MacOS X. It enables the interactive manipulation of plate-tectonic reconstructions and the visualization of geodata through geological time. Users can build regional or global plate models, import their own data and digitise features. Raster files images in a variety of formats can be loaded, assigned to tectonic plates, age-coded and reconstructed through geological time. The software also allows the exporting of image sequences for animations or for publication-quality figure generation as vector graphics files. Plates and plate boundaries through time can be visualised over mantle tomography image stacks. GPlates is also designed to enable the linking of plate tectonic models with mantle convection models. The software allows the construction of time-dependent plate boundary topologies as well as exporting plate polygons and velocity time-sequences. Mantle convection model output images can be imported and animated with plate tectonic reconstructions overlain. In conjunction with the open-source "orange" software an introduction to spatio-temporal data mining will also be covered. The course will cover most basic functions available in Gplates.

Course content

Introduction to GPlates: Main window

Data file types

Loading and saving

Exercise on loading/saving data and changing colours

Controlling the view

Exercise on controlling the view and saving data

Interacting with features

Exercise on interacting with features

Reconstructions: Relative and absolute plate motions and how they are derived

Exercise on changing reconstructions/deriving new rotation poles

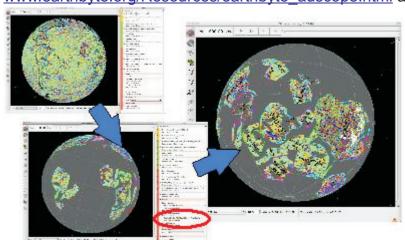
Exercise on reconstructions with paleomagnetic data

Exercise on plate velocities

Exercise on working with raster data

Requirements:

Please register your interest in the course in advance. You will need to bring a laptop computer with all these items installed to participate in the course. In preparation download and install the GPlates software from www.gplates.org as well as the user manual, the tutorial documents and files from www.earthbyte.org/Resources/earthbyte_auscope.html and bring your laptop.



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