3-rd ACES Working Group Meeting, June 2-6, 2003
Melbourne and Brisbane, Australia

Introduction

The ACES Working Group Meetings are held in between the major ACES Workshops and provide an opportunity for a smaller group to meet and work together on specific issues and problems. The 3-rd ACES WG meeting theme will be "The physics and dynamics of interacting fault systems and the plate-mantle system". The meeting will be broken into two parts, the first being more formal and focussed on computational science aspects, and the second being for focussed discussions on recent advances and future directions aimed at resolving the key scientific questions.

Theme

The physics and dynamics of interacting fault systems and the plate-mantle system.

Part I, Computational science focus, June 2-4, 2003, Melbourne, Australia

The first part of the ACES WG meeting will be held in Melbourne structured as a workshop within the 2003 International Conference on Computational Science held on June 2-4 (see http://www.science.uva.nl/events/ICCS2003/). This part of the ACES meeting will be focussed on the computational science aspects appropriate for ICCS ("New challenges are in the fields of modelling of complex systems, sophisticated algorithms, advanced scientific computing and associated (multi-disciplinary) Problem Solving Environments.", taken from the ICCS introduction). The reason for holding this part of the meeting within ICCS was to foster interactions and exchange of ideas with computational science groups outside the ACES community. Those wishing to present a paper at the ACES workshop within the ICCS meeting and have it published in the ICCS conference Proceedings should consult the instructions at the end of this message. ***THE JAN 21, 2003 PAPER DEADLINE IS TOTALLY INFLEXIBLE.*** The description of the ICCS ACES workshop provided to the ICCS conference organisers is attached at the end of this document.

Part II, The physics and dynamics of interacting fault systems and the plate mantle system, June 5-6, 2003, Brisbane, Australia

The second part of the ACES WG meeting will be held in Brisbane and aims to allow for interactions between a small group and focussed discussions on recent advances and future directions aimed at resolving the key scientific questions. The focus of this part is on the science and future directions in the domains of interacting fault and plate-mantle system dynamics and physics.

This part will have a more informal approach and will aim to foster lively discussion, idea exchange, and collaboration on the big scientific questions, and directions on how to progress towards their resolution via simulation. Further instructions on this part of the meeting will be sent in March 2003.

Local Organising Committee

Peter Mora, Hans Muhlhaus, Dion Weatherley, Steffen Abe

Questions and organisation

Dion Weatherley is the principle organiser for Part II of the WG meeting in Brisbane and can respond to questions on Part I.

E-mail: dion@quakes.uq.edu.au
Phone: +61 7 3365 4853

Registration

Please register by sending an email with your name, address, phone, fax details to Tracy Paroz paroz@quakes.uq.edu.au.

Web site

The ACES WG meeting information will be posted in the Events section of the ACES web site: http://www.aces.org.au/

ICCS (ACES) workshop papers deadlines and information

Deadlines

Because of ICCS deadlines, it will be ***IMPOSSIBLE*** to allow any flexibility in the deadlines listed below.

Monday Jan 21, 2003	Paper submission deadline
February 12, 2003	Authors of accepted papers will be notified including any required revisions
February 15, 2003	Presenters of accepted papers must be registered at the ICCS (Through the regular conference registration site)
March 1, 2003	Camera ready final accepted papers are required by ICCS

Paper submission

Papers relating to the physics and dynamics of interacting fault systems should be submitted to Dion Weatherley	dion@quakes.uq.edu.au
Papers on plate-mantle simulation should be submitted to Hans Muhlhaus	muhlhaus@access.edu.au

Paper length and format

The submitted paper must be camera-ready and formatted according to the rules of LNCS. See http://www.springer.de/comp/lncs/authors.html for formatting information. Papers should be of length between 6-10 pages.

Number of papers

As per ICCS guidelines, the ACES ICCS workshop will consist of around 10 formal peer reviewed paper presentations. The possible range in the number of paper presentations allowed by ICCS is 5-15.

Peer review and publication

Papers will be peer reviewed and the accepted papers will be published in Springer-Verlag in the Lecture Notes in Computer Science series. Selected papers from the ICCS meeting as a whole will also be published in a special issue of an appropriate journal.

Session Title: **Computational Earthquake Physics and Solid Earth System Simulation**

Description of Session:

Large-scale computations are playing a pivotal role in driving advancements in solid earth geophysics and earthquake science leading to national initiatives including the Australian Computational Earth Systems Simulator, Japan's Earth Simulator Project, and initiatives in USA such as at NASA and GEM (General Earthquake Model). Considerable progress in understanding earthquake physics has been achieved in recent years promoted by collaboration fostered by the APEC Cooperation for Earthquake Simulation (ACES) which links between these complementary national programs. As part of the 2003 ICCS Conference in Melbourne, Aust., ACES will host its third international working group meeting focusing upon micro-scale and macro-scale simulations of earthquake physics and crustal dynamics, and related geodynamical processes. Presentations by leading international researchers in the field will cover various aspects of these topics, providing a comprehensive overview of the state of the art of computational earthquake physics and solid earth system simulation. Subsequent to the ICCS Conference, a working group meeting will be held in Brisbane, Australia at which technical discussions will be encouraged with the aim of identifying keys areas for further advancements in solid earth system simulation.