LETTER FROM THE DIRECTOR

Computational Infrastructure for Geodynamics begins operations at UC Davis

I am pleased to announce that CIG began operations at UC Davis under a new cooperative agreement from NSF on July 1st, 2010. The core administrative and server team is in place, and we have begun recruiting software engineers. If you know of candidates for these positions (or you would like to apply for one of the positions), please let us know! The job descriptions are posted below.

CIG has had a full summer of workshops and release of new versions of codes. We also have a full schedule ahead. The Science Steering Committee is reviewing the development priorities for the upcoming year, and we welcome comments and suggestions from you, the CIG community. We will hold an upcoming election for vacancies on the Executive Committee and Science Steering Committee. In December, we will hold our Annual Business Meeting. We have made subcontracts to University of Chicago (for continued development of PyLith), and to Texas A&M (for continued development of deal.ii and the magma suite). Walter Landry at Caltech continues his work on GALE and other projects.

If you would like to contact me, or any member of the EC or SSC, you can view our contact information here:

Contact Information.

CIG is a community driven organization – we are nothing without your participation.

Louise Kellogg, Director, CIG.

Staffing News

Bill Broadley is a network/cluster manager at University of California, Davis, and has been managing the transition to Davis, and reestablishing the SVN and buildbots. Walter Landry of Caltech is also working on the transition, as well as continuing to develop GALE and give tutorial sessions. Braden Pellett is the website developer and mailing list manager for CIG at Davis. He has been assisting CIG in revamping the design and ease of the geodynamics.org website. Ariel Shoresh once again is the administrator of the CIG project, and is the main point of contact for all things administrative, from subawards to workshops.

Position Openings at CIG

We currently are looking for our Lead Software Engineer. This person will be responsible for providing high-level technical direction for CIG, as well as management/oversight of CIG software engineers. They will assist in strategic technology planning along with the Science Steering Committee of CIG, and the Director. They will also be working closely with community geophysicists to identify and implement improved algorithms by discussing research needs and then writing new code based on their feedback. The lead software engineer will also participate in software training sessions in new codes for both scientists and graduates/post-docs, with varied levels of programming familiarity.

Full details and requirements can be found at the following UCD Human Resources. Search by requisition number: 03003045

UCD Human Resources

If you, or someone you know, might be interested in the position, please apply!

UC Davis is an equal opportunity employer.

Upcoming Gale Tutorial at the Geological Society of America Meeting

Training Session for the Gale Computational Software in Tectonics and Geophysics, to be held Saturday, Oct 30, 2010, Colorado Convention Center, Denver, CO (before the 2010 GSA Annual Meeting). In this training session, CIG will focus on training new users in the use of the tectonics modeling software Gale, a 2D/3D parallel code that solves problems in orogenesis, rifting, and subduction with a variety of boundary conditions, including free surfaces and coupling to surface erosion models. Get more details at 2010 GSA Annual Meeting here:

GSA Annual Meeting

HOLD THE DATE: CIG Business Meeting at AGU

We will be holding our Annual Business Meeting on Monday, December 13th, at the Parc 55, during the AGU Fall Meeting in San Francisco. We'll be discussing the now complete transition and getting community input on future goals and priorities for CIG over the next year. We hope to see you there! We will send out more information the closer we get to the date.

GLADE Workshop

Geodynamicists convened July 26-29, 2010 at the Scripps Institution of Oceanography in La Jolla, California for the Geodynamics of the Lithosphere and Deep Earth (GLADE) meeting. GLADE was co-sponsored by CIG and NSF with 90 participants from all over the world and from complementary disciplines, including computational geodynamics, tectonics, marine geophysics, and seismology. The 3-day science program stimulated discussion with extended poster sessions, punctuated by 6 keynote lectures each day. More than half the participants were graduate students (33), postdocs, or other early career scientists (20). The technical program on the fourth day consisted of hands-on tutorials for next-generation geodynamics software including GALE and SNAC as well as a CIG session on emerging numerical methodologies.

A townhall discussion was led by members of the Science Steering Committee, Wolfgang Bangerth and Magali Billen to gather input from the community regarding present and future software development priorities. A summary of the discussion at the GLADE townhall is available at the following link; comments are welcome.

GLADE Townhall

Overall, there was a great chemistry amongst GLADE participants who left the meeting with a new (or renewed) sense of community and

CDM Workshop

The Crustal Deformation Modeling workshop was held June 14-18, 2010, in Golden, Colorado on the campus of the Colorado School of Mines, with 68 participants. The first two days were spent on tutorials for the various code packages, with Monday serving beginning users, and intermediate/advanced tutorials being held on Tuesday. The last three days consisted of talks about the recent earthquakes in Haiti, Chile and Baja California, as well as presentations on numerical and modeling methods.

These presentations can be found at this link, and are downloadable as PDF files. (No animations).

CDM Presentations

If you attended the CDM workshop, and you haven't yet responded to the post-workshop survey, please do so, as we need feedback on the status/location of next year's workshop.

Gale 1.5.0 Release and Installation on Teragrid

Gale 1.5.0 was released on July 27, 2010. GALE is an implicit finite element code for the long-term tectonics community. This release features check-pointing, deformed lower boundaries, multi-grid, and a robust yielding rheology.

You can download binaries or the source code from:

GALE Package

Gale 1.5.0 is also available on TACC's Lonestar. For instructions on how to use Gale on Lonestar and information about CIG's TACC allocation, see

TACC Information

Deal.ii Release

Version 6.3.1 was released on July 18, 2010. This release addresses a number of problems in release 6.3.0 related to compatibility with certain compilers, operating systems, and versions of external libraries. A list of changes between versions 6.3.0 and 6.3.1 can be found at

deal.ii