

SCD Implementation Workshop

January 5-7, 2011, Austin, TX



On behalf of the conveners, we thank you for participating in the Subduction Cycles and Deformation (SCD) Implementation Workshop! The overarching purpose of this workshop is to formulate an integrated and feasible implementation strategy for the SCD component of the GeoPRISMS science plan.

The future of GeoPRISMS depends on developing a community model for science and implementation priorities from this meeting. The purpose here is not to rewrite the Draft Science Plan, nor is it to revisit the rationale behind each question, but to refine the plan and prioritize the objectives. In advance of the workshop, please take time to review the SCD chapter (http://www.nsf-margins.org/Planning_and_review/FinalDoc/4.pdf) and implementation strategies chapter (http://www.nsf-margins.org/Planning_and_review/FinalDoc/6.pdf) of the GeoPRISMS Draft Science Plan. It is also important to review the SCD White Papers that were submitted in advance of the workshop (<http://www.geoprisms.org/meetings/scd2011/49.html>), as these will form part of the basis for discussions during the workshop.

Below are some instructions and description of the workshop program. The latest version of the meeting agenda is also attached, along with other documents discussed below. Please note, all documents can be found on the meeting web site (<http://www.geoprisms.org/meetings/scd2011>).

Evaluation Matrices:

This workshop will require making difficult choices about which science questions to pursue most vigorously, what types of study sites are most suitable to address these questions, and what overall distribution of primary sites and thematic studies will best advance SCD science. To assist you in objectively making these decisions, we have put together some evaluation matrices (attached) that break down the science questions and logistical issues that must be considered. Each matrix is designed to aid the goals of one of the first two breakout sessions at the workshop. We recommend that you consider these matrices in advance of the workshop for the major science questions that most interest you. (A follow-up e-mail will provide participant break-out assignments to focus your efforts.)

In order to fill out the matrices, choose one of the seven science questions listed at the top of each form, and consider the sub-questions associated with that key question (see attached list of SCD key questions and sub-questions; refer to the Draft Science Plan for more detail). For each sub-question, work your way across the matrix and consider how each is best prioritized, addressed scientifically, and implemented through focused SCD efforts. Bring these forms with you to the workshop to facilitate the break-out and plenary discussions.

Note, you will have the opportunity to finalize the forms at the workshop, during the break-out discussions. We plan to collect the completed forms after the break-outs to guide subsequent discussions.

Workshop Program and Objectives:

On Day 1 of the meeting we will focus on refining and prioritizing the science questions. Meeting attendees will be assigned to two break-out groups organized by the seven "key topics" for SCD (see attached list of questions). Prior to the first break-out, invited speakers will make

presentations on these topics to help set the stage for the break-out discussions. We note that identifying example sites is appropriate in these first break-outs, but it is critical to avoid the trap of casting the science questions around specific study sites at this stage of discussions. After the break-out, there will be a few short invited talks and very short poster "advertisements" by students and post-docs (limit of 2 PPT slides; to give them more "voice" at the meeting. Sorry, there is not enough time for all poster presenters to do this), followed by a plenary session with summaries of the break-out session discussions and open discussion.

On Day 2 of the workshop, we will hear from invited speakers presenting ideas on how the SCD program may interface with other programs and infrastructure. Next, in the first break-out session of the day, we will focus on (1) discussing the need for primary sites versus more "cross-cutting" thematic approaches to address the science questions within the context of the key topics, (2) identifying and prioritizing potential primary sites, and (3) defining the desired balance between primary sites research versus other "thematic" efforts. Here we begin to make the hard choices. Following a few invited talks, there will be a plenary session aimed at prioritizing primary sites and finding threads of common interest that cut across proposed sites. The second break-out session of the day will be aimed at developing well-rounded implementation plans that address components of each of the themes identified on Day 1 as being high-priority, taking either a primary site approach or a thematic approach. In the plenary session that follows, the goal is to narrow the options even further, setting the stage for reaching consensus on Day 3.

Day 3 of the meeting is devoted to coming to consensus on the implementation strategy for the SCD component of the GeoPRISMS science plan. We will meet in plenary to discuss the straw-person implementation strategies developed by the Day 2 break-out groups and refined in the plenary sessions. We expect there will be one or more votes on these strategies to help sharpen the focus of our discussion. By noon of Day 3 we will come to a consensus on the way forward for the SCD program.

Posters

Finally, please note that there will be topical posters on display throughout the workshop, and scheduled poster sessions both evenings, lubricated by a cash bar (January 5 and 6). We encourage you to visit the posters and talk with the presenters to learn more about ongoing GeoPRISMS research, as well as potential primary sites and implementation strategies.

Conveners

Clifford Thurber (University of Wisconsin-Madison) – Co-Chair
Michael Underwood (University of Missouri-Columbia) – Co-Chair
Harm van Avendonk (University of Texas, Austin)
Susan Bilek (New Mexico Tech)
Heather DeShon (University of Memphis)
Michael Gurnis (CalTech)
Katherine Kelley (University of Rhode Island)
Demian Saffer (Penn State University)