

# HMI and AIA E/PO Report

For period February – March 2006

*By Deborah Scherrer*

## **1. Science Fellow Service Learning Program at Stanford** (*Partnership with Stanford's Haas Center for Public Service, the Stanford Solar*)

The Science Fellow mentors have completed their program for the Winter quarter. According to Program Director Kelly Beck, “The nine Mentor Coordinators were amazing!!!. All met weekly with Kelly, adequately trained their Volunteer mentorees, and visited the Boys and Girls Clubs. All are interested in returning next quarter. Kelly noted that her best volunteers and best mentors were all graduate students, who are better able to schedule and control their time than the undergrads. One Mentor student was so excited about the program that they did extra work and programs with the B&GC.

On the other side, the Volunteers had the usual pressures from classes and overextended schedules and were not always able to make their Haas commitment. The volunteers seemed more willing to participate once they had met the kids at the B&GC, so Kelly has decided to move the training up 2 weeks. The Mentor Coordinators are compensated, but the Volunteers receive neither money nor credit. Thus they have very little incentive to meet their Haas commitments. We are looking into other forms of compensation and encouragement for them.

Dr. Cherilynn Morrow presented an E/PO workshop for us on March 20. Faculty interested in E/PO programs were the prime targets. 36 people registered -- about half were outreach staff and 14 were faculty, mostly assistant professors. Their fields covered a broad spectrum. Costs for the workshop were shared by the Science in Service Program and the Center for Teaching and Learning.

For the workshop, Kelly put together a panel of local educators for a discussion in the workshop. These include Melissa McAlexander, Director of Community Partnerships and Tech Challenge, The Tech Museum; Cory Clark, Director of Education at RAFT (Resource Area for Teachers, [www.raft.net](http://www.raft.net)); and Lisa Benetar, Science Resource Coordinator at Escondido Elementary School.

The evaluations from the workshop are coming in and most are very positive even though the participants themselves represented very diverse backgrounds and experiences. Most people found the educator's panel, mentioned above, as most interesting and useful.

2. **Space Weather Monitors Program** (*jointly funded by NSF/CISM and NASA/SOHO/MDI*)

We have shipped 31 SID monitors, including 6 foreign in preparation for the IHY program. Because Stanford is unwilling to accept foreign boxes for shipment, we have had to experiment with other options, all of which were less than satisfactory and considerably time-consuming. We have settled on DHL, although the costs for shipping through DHL are high (over \$50 per unit). This will impact our costs for the IHY distribution.

We are receiving requests for SID monitors at the rate of 2-3 per week, many of them foreign. We also have several outstanding requests for AWESOME monitors, which we cannot fulfill because of lack of funding. We have scrounged funds to produce 1 AWESOME monitor for Aaron Price at the AAVSO. They are interested in working with us to distribute foreign monitors, train educators in their use, and even help with technical support. Delivery of the AAVSO monitor is scheduled for mid-April.

We have submitted a NASA ROSS proposal to fund development of a teacher training workshop and classroom materials jointly with Chabot Space and Science Center in Oakland, CA and Master Teachers. The plan is to work with an NCAR teacher workshop on Space Weather and adapt it to include use of the Space Weather Monitors. We have chosen a Master Teacher for both high school and community college, each of whom will take the lead in developing and testing classroom materials for their grade levels. Tim Slater of the U of Arizona has agreed to assist us with formal evaluation.

Because the funding request timeframe is lengthy, we have also arranged to “prefund” the program with other Stanford project funds so that the workshop can get jump-started. Initial meetings have taken place. We hope to have a suite of materials developed and ready by the summer and tested by our Master Teachers in classrooms this fall. If all goes well, the teacher workshop will be returned to NCAR where it will be converted to an online/DVD format, suitable for distribution around the world in our IHY project.

We are almost complete with our SID data pipeline. The necessary functionality is in place and being tested. Sites are now able to ftp-in their data to our well-firewalled SID ftp machine. We expect the data pipeline system to be completely in place early in April. We have also improved the data retrieval software considerably.

We are training Sean Liu, a high school student working with us on the project, on being a SID data expert. Hopefully Sean can help users with their data transfer problems and also serve as a resource in helping them understand and interpret their data.

### **3. IHY Project**

At the request of Cristina Soares, Education Program Director for the IHY, we prepared packages of solar posters and eclipse viewing glasses for delivery to eclipse sites in Nigeria, Georgia (former Soviet Union), Brazil, Ghana, Egypt, and Turkey. Special acknowledgment and thanks to Hao Thai of the Stanford Solar Center and Zoe Frank of Lockheed for their considerable efforts in providing these resources!

Funding for the IHY distribution of space weather monitors is still a major issue. We have worked through several rounds of budget proposals and Todd Hoeksema has drafted a Letter of Introduction to potential funding foundations (still under review). Because of the high load of staff necessary for maintaining the AWESOME project, the current projections require about \$3 million, of which approximately \$800,000 is for purchase of the monitors themselves.