

AI & HMI E/PO Report
Deborah Scherrer

For period 1-31 October 2005

1. **Science Fellow Service Learning Program** (*Partnership with Stanford's Haas Center for Public Service, the Stanford Solar Center, and Montana State University*)

With input from the student presenters, the Montana Team (Winter, Des Jardins, and Dave McKenzie) revised the SPOT presentation "Mars 3D!," enhancing the flow of the story line and adding several 3D pictures. Seven presenters gave their practice/checkout presentations, before being deemed ready to go to schools. There were 2 meetings of the entire SPOT team for training and practice. During October, there were 10 SPOT presentations, in 6 locations, to 260 students and 18 teachers.

Haas has received 10 applications for our 6 Science Fellow Mentor slots. 2 students are returning from last year's program. All are excellent choices and Kelly Beck is looking for a way to support and integrate all ten of them.

Dr. Matt Evans, a professor in the Carnegie Institute Department of Plant Biology, has asked if he could write something similar to our HMI Haas Science program into a grant proposal for his E/PO component. This is great news as we have our first faculty buy-in!

2. **Space Weather Monitor (SID & AWESOME) Project** (*jointly funded by NSF's CISM program and NASA's MDI instrument on SOHO*)

A final, difficult software problem has finally been solved and the SID monitors are nearing distribution.

We have installed an AWESOME system update at our monitor at the Wilcox Solar Observatory and are finishing up the automatic delivery of data to our computer systems on campus. And, with staff scientist help from the group, we have written a converter program to translate the AWESOME data files from their normal Matlab-based format to a simple ascii format easily readable by most systems and similar to the SID data files. This should significantly ease student's use and understanding of the data.

We have set up a Master Teacher program with 4 key Bay-Area educators who have been using the SID system in their classrooms. We will work directly with these key educators both to assess the use of multiple monitors monitoring different transmission sites and to expand upon our curriculum for integrating the monitors into a classroom.

3. SPA – AGU Slideset

Deborah Scherrer has been working with the Space Physics and Aeronomy (SPA) Education Committee of the AGU to produce an extensive PowerPoint presentation about the Sun and its affects on planet Earth. This “slideset” includes outstanding imagery and videos, most developed by NASA, chosen to explain SPA science to a general public audience. The slideset was originally produced by Paul Mortfield, with enhancements by Deborah and the committee. The slideset is virtually complete now and will be distributed through the AGU and to anyone interested. We hope to use it to provide training to our Haas Fellows as well as make it available to educators interested in bringing solar science into their classrooms.

4. Solar Planetarium Program (*joint project with LWS and the Lawrence Hall of Science*)

The Lawrence Hall of Science has completed their summer test-run of the jointly produced solar planetarium program for small, interactive planetaria. Now LHS is putting together test kits and distributing them to 25 sites interesting in beta-testing the show. We will be receiving a kit as well and hope to use it with the Science Fellows and the Boys and Girls Clubs.