

AIA, HMI, EVE E/PO Report

For period February 2007

By Deborah Scherrer

1. AIA – SAO

Work to integrate the space weather component into a second Challenger mission continues and they plan to have it ready for use in the 2007-2008 school year. The Challenger headquarters (in Washington D.C.) is interested in having the space weather component integrated into every mission, and therefore would be a part of every child's experience when going to a Challenger Center! There are 50 or so Challenger Centers nationwide, hosting now something like a half million students each year.

2. EVE Space Weather Program

To help them better understand the role of magnetism in the Earth / heliophysical system, Stefan Eriksson from LASP spoke to the students with the EVE MESA Pilot Project at Skyline High School in the St. Vrain School District. The students will be going on a field trip in March to the Fiske Planetarium.

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

Our Chief Engineer, Ray Mitchell, is busy developing the prototype for a less complex, less expensive, and more reliable SID monitor. Target date for the completed prototype is 15 March. A member of the team at QuickFilter, the company that designed the chip we are using, is also helping with the frequency loader. Progress is slow because our engineer works only part-time, and the engineer at QuickFilter has other, higher priorities.

As of the end of February we had shipped 86 monitors. We have only 5 SID monitors remaining from the initial batch, and more than that many requests.

We finally received word on the NASA IHY proposal we submitted. We received a favorable review and are "very likely to be at least partially funded in FY2007." According to Barbara Thompson, "The Secretariat took a fairly large budget hit this year because we wanted it to go to the proposals. There were (I think) 9 proposals funded, which is pretty good. However, the cutoff line was really really high - getting a Very Good/Excellent didn't necessarily mean funding, so those are some ugly odds." We are awaiting details about how much funding we'll receive to determine how to pare down our program. We are also looking into other possibilities for funding, including talking with Stanford alumni.

4. IHY Project (HMI)

IHY Opening Ceremonies were held in conjunction with the United Nations Science and Technology Subcommittee (STSC) session in Vienna on 19 February 2007, followed by a 1-day conference on IHY planning held at the Austrian Academy of

Science. The opening included an IHY poster exhibit set up in the UN rotunda, to which we submitted a poster on the Space Weather Monitors, and a presentation by Joe Davila to the UN Committee on the Peaceful Uses of Outer Space. Deborah Scherrer represented the project (and the US IHY Education Advisory Committee) at the ceremonies and conference.



See http://ihy2007.org/newsroom/kickoff_images.shtml and <http://sun.stanford.edu/~deborah/Vienna/> for more photographs and information.

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

The coordinators have significantly matured this quarter – becoming more knowledgeable, facile, and thinking at higher levels. It appears to take at least 1 quarter to achieve this level of training, which verifies our initial assumptions that significant training would be valuable and be required. The Boys & Girls Clubhouse mentors/coordinators are developing their own activities based on an "energy" theme. The other group chose to use an After-School curriculum and are doing well.

Funding has been arranged to secure the Haas Science Fellow Program through SDO launch. After that, the program will hopefully rely on an endowment funded by Stanford alumni.

6. **Other Activities** (*HMI*)

- California State University East Bay (CSUEB) Science Day is scheduled for Saturday, 21 April 2007. As in the previous 2 years, they have requested our participation. Solar scientist John Beck has agreed to give presentations and demonstrations relating to the Sun. John will highlight the SunSpotters and h-alpha telescope. He will also supplement his presentations with jugs, harmonicas, and bells to demonstrate sound waves.
- GATE Student Workshop – School children enrolled in the GATES program in Calaveras County, Avery Middle School, will be visiting Stanford on Friday, 20 April 2007. Approximately 35-38 students, 10-12 parents, and one teacher are expected. John Beck has been asked to give a demonstration and talk. He will probably demonstrate the h-alpha telescope and the SunSpotters, as well as the hands-on activities he is preparing for CSUEB Science Day.