

# THEMIS/ARTEMIS

## Education and Public Outreach Team Recent Results

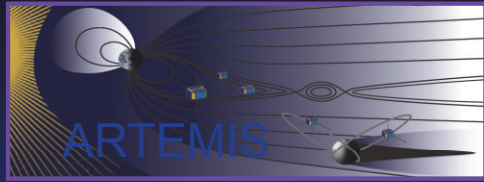
Dr. Laura Peticolas

[laura@ssl.berkeley.edu](mailto:laura@ssl.berkeley.edu)

and

Nancy Ali

[nancy.ali@ssl.berkeley.edu](mailto:nancy.ali@ssl.berkeley.edu)



## Heliophysics Educator Ambassador

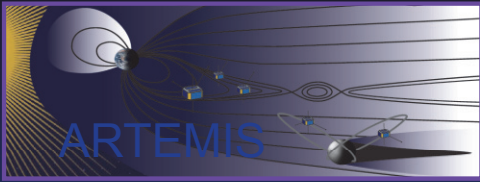


The THEMIS Education Program collaborated with several other NASA missions to present a 5-day Heliophysics Educator Ambassador workshop in Chicago, IL on July 18-22, 2011.

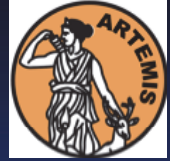
Twenty-two middle-school teachers representing 13 states participated in this 3<sup>rd</sup> annual workshop.



THEMIS and ARTEMIS were highlighted on the 2<sup>nd</sup> day of the workshop to coincide with the press release for the **orbital insertion of the second ARTEMIS satellite** around the Moon. Teachers participated in hands-on classroom activities developed by THEMIS and were given a detailed presentation on the THEMIS and ARTEMIS missions.



## Other E/PO Highlights



- ARTEMIS Postcard – distributed at teacher workshops and outreach events, including the International Observe the Moon Night
- GEONS Teacher James Bean & Laura Peticolas presented an invited session at AGU 2011, “Magnetometer Data in the Classroom as a part of the NASA THEMIS Satellite Mission”

- ROSES supplemental collaborative proposal submitted based on parent awards from Dr. C.-P. Wang, Dr. J. Bortnik, Dr. P. Pritchett

- Website revision to include ARTEMIS;  
<http://cse.ssl.berkeley.edu/artemis>

**THEMIS** ARTEMIS

TIME HISTORY OF EVENTS AND MACROSCALE INTERACTIONS DURING SUBSTORMS

MISSION SCIENCE NEWS AND EVENTS **EDUCATION & OUTREACH** MULTIMEDIA GALLERY ABOUT US

Overview Classroom Lessons EPO Program **Education & Outreach Overview**

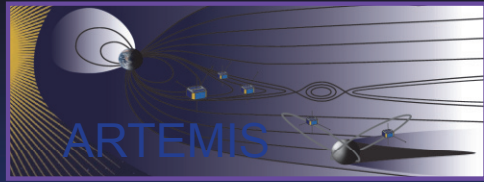
The THEMIS/ARTEMIS team, recognizing our country's need for improved mathematics, science, and technology education, has developed a comprehensive education and outreach program. Lead by UC Berkeley's Space Sciences Laboratory, we partner with science centers, K-12 educators, professional science organizations, and mission scientists to implement a comprehensive education and public outreach program.

Successes to date include:

1. The *HelioPhysics Educator Ambassador* project, in which teacher leaders participate in one week of professional development, and in turn, provide professional development for their teacher colleagues. A collaboration of 8 NASA missions, this project is in its third year and has reached over 700 teachers.
2. *High quality science and math educational materials* which have been reviewed by NASA scientists and pilot tested by teachers
3. The *Geomagnetic Event Observation Network by Students (GEONS)* project. Magnetometers are placed and provide real-time data from 10 schools across the country, with teachers receiving long-term professional development in reading and interpreting the data. Students learn Earth's magnetic field and its changes related to auroral substorm activity.
4. *Probing the Mysterious Aurora*, a ViewSpace show for museums and science centers across the country.
5. Launch of a new Lawrence Hall of Science (LHS) *Great Explorations in Math and Science (GEMS) like Learning Nevada*.
6. Providing professional development to teachers, with a focus on Tribal Colleges and the Society for Advancement of Chicanos and Native Americans in Science (SACNAS) in order to reach minority and underserved groups.
7. Launch and update of the THEMIS/ARTEMIS Education and Public Outreach website

We plan to meet these goals using five main projects:

1. The Geomagnetic Event Observation Network by Students (GEONS) in which 10 magnetometers are placed in 10 schools across the



## Upcoming Plans



- Continue to support HEA program through stipends for teachers and participation in reunion workshop in July 2012
- Distance Learning workshops for teachers @ magnetometer schools through monthly online tag-ups.
- Ongoing updates to THEMIS-ARTEMIS website providing content geared towards teachers
- Draw GEONS and DREAM students and teachers into Peticolas “Surfin’ the Solar Wind” project
- Distribute ARTEMIS postcard through E/PO networks
- Participate in outreach events such as Cal Day and UCLA Open House