

A Potential Approach for DISCOVER EPO

Oct. 7, 2010

Lin Chambers, NASA LaRC

A-TRAIN SYMPOSIUM



Menu of EPO Activities

| | K-12 | Undergraduate / Graduate | Teachers | Public |
|---------------------------------------|---|--|--|--|
| In-person (at symposium) | Local student visits to poster session | Student travel support | 1-day teacher workshops (Tues-Thurs) | Lobby exhibit with Dynamic Planet |
| Direct engagement (outside symposium) | GLOBE Student-Scientist Observation Campaign (Oct. 18-Nov. 5) | Science Café with A-Train scientist "host" | Scientist visits to local classrooms (20-30) | Science Café with A-Train scientist "host" |
| Distance | NASA EDGE | NASA EDGE | NASA EDGE | NASA EDGE |
| Print | A-Train brochure, poster and graphic | | | |
| PR | Local, regional and national | | | |

Teacher Workshops



- Goal:** Increase understanding of remote sensing and how to access and use NASA Earth Science Data for education
- Hold concurrent 1-day workshop for local/regional teachers (approx 30 each day);. Repeat 3 or 4 days; 6 hr duration
 - Support for substitutes provided by the LSU/SU Regional Collaborative for Excellence in Science and Mathematics Teaching
 - Include talks from A-Train Symposium scientists and presentations by EPO specialists
 - Held on the 1st floor of the Sheraton Hotel (A-Train Symposium to be held on 3rd and 5th floor)
 - Invite 5 scientists from symposium to join teachers each day for lunch.
 - **A-Train POC:** *Matt Rogers, Colorado State University (CloudSat)*
 - **Local POCs:** *Jean May-Brett (Math/Science Partnership Program Director with Louisiana Dept of Education); Gayle Glusman*

Student Visits to A-Train Symposium

- Goal:** Allow aspiring middle and high school scientists to experience a professional science conference
- Arrange for a group of local students to attend afternoon poster session – *one group tentatively confirmed; others possible.*
 - A-Train Scientist Mentors to escort students
 - Explain context of the A-Train Symposium and relevant science
 - Use meeting to illustrate how science is communicated
 - Poster submission by local students/teachers participating in a NASA sponsored GLOBE observational activity
 - Outgrowth from teacher workshop held in June in New Orleans using Sun photometers and MODIS/CALIPSO obs. (C. Trepte)
 - **A-Train POC:** *Preston Lewis, NASA Langley*
 - **Local POC:** *Gayle Glusman*

A-Train Scientists Visit Local Schools

- Arrange for visits by 20-30 A-Train scientists to local New Orleans area schools (elementary, middle and high schools) on Friday morning, October 29th; *Informal request already received from local school district for this activity*
- Teaching media and handouts to be provided for visiting scientists if needed
- List of volunteer scientists to be identified by October 1st and provided to local POCs; *26 volunteers to date*
- *Local POCs: Jean May-Brett (LA Dept of Education) and Gayle Glusman (local educator consultant)*
- *A-Train POC: Lin Chambers at LaRC*



Student Scientist Observation Campaign

- GLOBE-related event with students in US, France, Netherlands and around the world (Oct. 18 – Nov. 5, 2010)
- A-Train-related student observations to be reported by GLOBE schools and S'COOL participants
- Social media type website will enable *2-way interaction* between scientists, teachers, and students during the campaign (Smog Blog model) *Open source tool currently in testing*
- **Topical discussion areas** (hurricanes, sea ice, aerosols, etc...)
- Evaluation to be coordinated with GLOBE internal evaluator (Dr. Williams)
- Lessons learned to feed into GLOBE Student Climate Research Campaign
- *A-Train POC: Lin Chambers, NASA Langley (CERES)*
- *CNES POC: Danielle DeStaerke (CALIPSO)*
- *GLOBE POCs: Teresa Kennedy (GLOBE) and Regional Directors*

The GLOBE Program



Students
collaborate
with scientists



Hands-on science



<http://www.globe.gov>



Atmosphere/Climate,
Hydrology, Soil,
Land Cover/Biology,
Phenology and
4 NEW NSF Earth
System Science
Projects



Over 20 million
environmental
measurements
reported

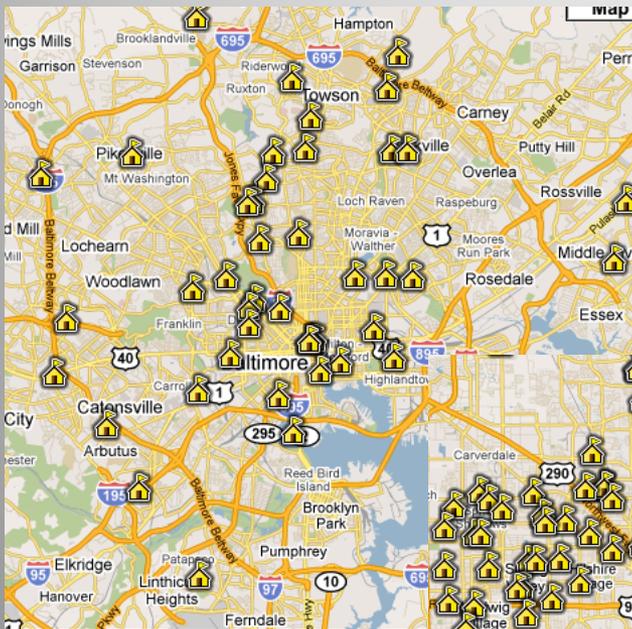


International
Program
in 111 countries

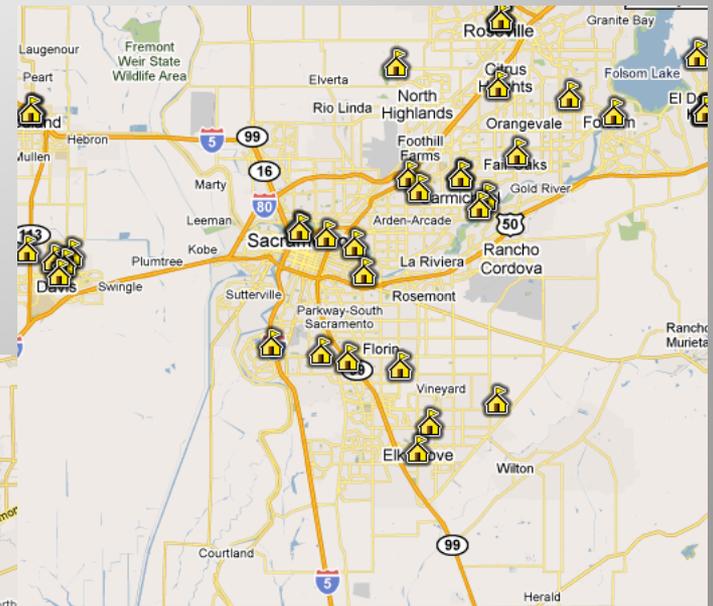


GLOBE Presence at Deployment Sites

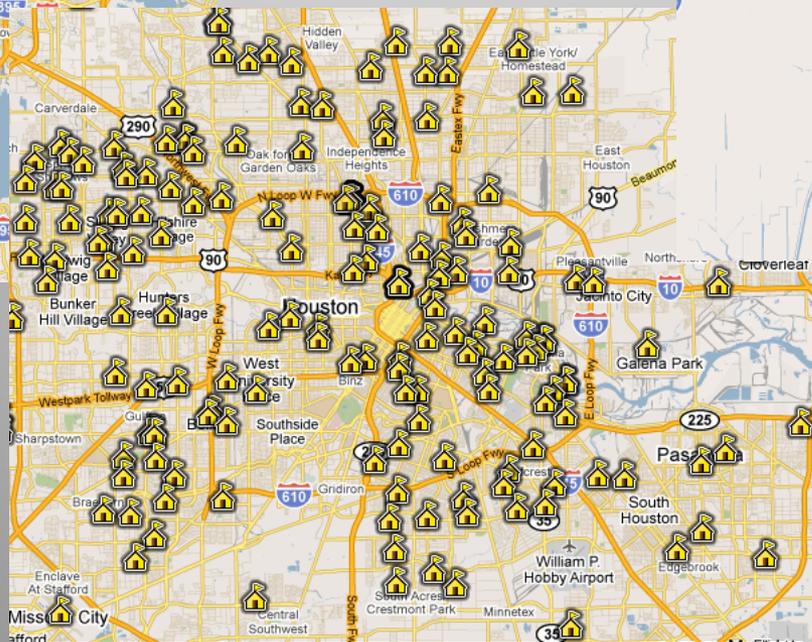
Baltimore, MD



Sacramento, TX



Houston, TX



Travel Support for Undergraduate/Graduate Students

- ***Travel support:*** up to \$500/student for maximum of 15 students – *Have 23 applications so far*
- Reimbursement will follow normal federal guidelines and will be administered by SSAI (contract support services)
- Applications and criteria are available on the [A-Train Symposium website](#)
- Notification of support to be sent out September 30th
- Funding supported through CALIPSO EPO activity
- ***A-Train POC: Chip Trepte at LaRC, Diane Zeimet (SSAI)***

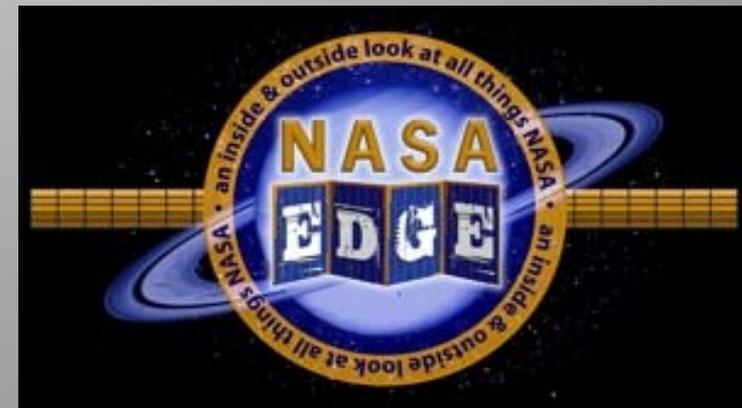
Exhibits, Displays, and Poster/Brochure

- Digital Earth (4 ft diameter) display in Sheraton Hotel Lobby (in front of registration desk)
- Possible exhibit display on 3rd floor of A-Train (need to verify availability of space)
- A-Train Poster under development
- A-Train General Audience Brochure under development
- New A-Train or NASA Earth Science Visualization Project under development for A-Train Symposium (contact GSFC visualization lab)
- **POC: Katie Lorentz at LaRC with support from GSFC**



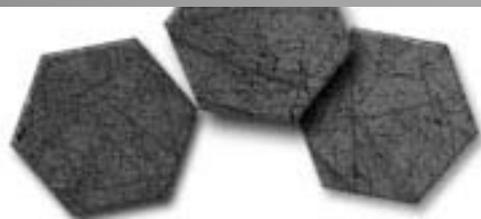
NASA Edge

- NASA Edge team is approved to support the A-Train Symposium
- Produce live 1 hour webcast from event
- Produce prepackaged interviews (interviews to be arranged)
- Acquire HD b-roll of event for use in live webcast
- Promote Symposium through social media tools (Facebook, Twitter)
- After Symposium produce 'Best of' video podcast and distribute through NASA Edge website/iTunes
- ***NASA POC: Amber Richards (LaRC)***
and NASA EDGE team



Science Cafe

- A small, informal public event discussing a topic of wide interest
- Proposed for one or more evenings during Symposium
- Might be held in hotel lobby bar area or nearby café
- Scientist “host” to be identified
- Moderated by NASA LaRC – experience running a café series since April 2008
- NASA POC: Katie Lorentz (LaRC) with support from Jennifer Collings.



the
**Science
Café**

Lively, interactive discussions on
all kinds of science topics

Challenges – DISCOVER specific

- Summer-time campaigns – schools not in session
 - Good for teacher workshops
 - Need alternate paths for student involvement
- Funding and partnerships?
- Guidance from HQ?
- Process for development and approval of plan?

After the Symposium

- Involving the local GLOBE trainer and partners, as well as the GLOBE Program Office
- Expect to have one or more GLOBE trainings in NOLA as a follow-up to the A-Train Symposium
- Ongoing engagement of NOLA teachers with NASA will largely occur through the auspices of the GLOBE Program.

