A Potential Approach for DISCOVER EPO

Oct. 7, 2010

Lin Chambers, NASA LaRC
## Menu of EPO Activities

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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
Students collaborate with scientists

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

Hands-on science

International Program in 111 countries

Over 20 million environmental measurements reported

The GLOBE Program

http://www.globe.gov
GLOBE Presence at Deployment Sites

- Baltimore, MD
- Houston, TX
- Sacramento, 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 CALIPSSO 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.
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.