CERES Education and Outreach Update

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S’COOL Team:
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MY NASA DATA Team:
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What is MY NASA DATA?

• Involve students in real science.
• Enable K-12 teachers and students, as well as citizen scientists, to explore the large volumes of data that NASA collects about the Earth from space.

• Students use scientific inquiry and math skills as they access and display microsets of the Earth System.

http://mynasadata.larc.nasa.gov
MY NASA DATA and CERES

• Project adopted by Aqua and Terra in latest Senior Review cycle

• Includes several CERES data parameters:
  – Albedo, Fluxes (EBAF & TRMM)
  – Surface Scene Type

• A baker’s dozen of lesson plans use CERES data
CERES Impact Measures

Lesson Accesses

Lesson featured in NES training

Accesses per month

Lesson ID

Accesses per month

Jan-10
Feb-10
Mar-10
A collection of material that is relevant to the project and classroom.

Updated on a weekly to bi-weekly basis with new information.

Features video segments, photo albums and many useful links to find new information.

Features tutorials for help with the web page and Live Access Server.

Contains many videos that pertain to various parameters and satellite instruments.

The MY NASA DATA main web site contains instructions on downloading these videos for use in the classroom.
What is S’COOL?

- Education and Public Outreach arm of CERES
- Backbone of Terra/Aqua formal education effort
- A simple way to involve K-12 students in authentic science
- A source of validation data for the CERES cloud retrievals

http://scool.larc.nasa.gov
S’COOL Project

- > 83,500 observations from 56 countries and all 50 states
- 47 % from outside the US (77% US participants)
- > 2,950 registered participants from 80 countries

Map as of April 2010
Impact Measures

• ~55 requests for S’COOL materials since Nov. 2010 (average rate)

**Countries “Top Five”**
- US: 53%
- Colombia: 17%
- Argentina: 6%
- France: 6%
- Taiwan: 3%

**States “Top Five”**
- PA: 22%
- VA: 9%
- PR: 6%
- CA: 5%
- NH: 5%

**States “Bottom Five”**
- North Dakota: 14
- DC: 12
- Virgin Islands: 9
- Guam: 6
- Northern Marianas: 0

Bottom five states: Delaware “graduated”
Impact Measures (cont’d)

Database of observations - as of Apr. 19, 2010

- > 48,300 satellite correspondences (789 match both)
  - For 58% of ground observations
- >2,980 registered participants
  - 37% submitted data
- 80 countries
  - data from 56 countries (70%)
New Person

- February 2010: New team member
  - Sarah Crecelius (part-time)
- Updating high school level lessons
- Working on data analysis
- Helping develop new energy budget poster
### S’COOL Presentations Since Oct. 2010

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSTA Regional, Ft. Lauderdale, FL</td>
<td>November 2009</td>
<td>Preston Lewis</td>
</tr>
<tr>
<td>Virginia Association of Science Teachers (VAST), Chantilly, VA</td>
<td>November 2009</td>
<td>Susan Moore</td>
</tr>
<tr>
<td>NSTA Regional, Phoenix, AZ</td>
<td>December 2009</td>
<td>Stacy Deveau (ambassador)</td>
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<tr>
<td>AGU, San Francisco, CA</td>
<td>December 2009</td>
<td>Susan Moore</td>
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<tr>
<td>Earth to Sky Workshop, Harpers Ferry, WV</td>
<td>February 2010</td>
<td>Preston Lewis</td>
</tr>
<tr>
<td>NSTA National, Philadelphia, PA</td>
<td>March 2010</td>
<td>Susan Moore</td>
</tr>
<tr>
<td>NASA Explorer Schools Virtual Campus webcast, Cleveland, OH</td>
<td>March 2010</td>
<td>Preston Lewis, Susan Moore</td>
</tr>
</tbody>
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Old Rover

Currently heading to San Diego

http://aroundtheamericas.org
New Rover! (Rower?)

http://rozsavage.com
• A collection of pictures from S’COOL participants around the globe.
• Geotagged photos allow teachers and students to feature their own school for others to see.
• Allows viewers to take a look at what is going on with other participating schools around the world.

• 4,540 unique channel views, since the page’s inception.
• Features material that is directly related to national and state standards.
• The S’COOL main web site contains instructions on downloading these videos for use in the classroom.
New Connections

• Improving connections to CALIPSO/CloudSat data products
• Working to identify schools near those ground tracks
New Data Source!

GLOBE Reports Matched to CERES

6000+ matches in 3 months
S’COOL Needs YOU!

• Make S’COOL Rover observations!
• Participants in every state and >75 countries
  – Offer to serve as a resource to a local teacher
  – Arrange a S’COOL visit when traveling
  – Provide S’COOL info to teachers you know
• Presentation materials available, with script suggestions
• Help with translation of materials
• Serve as resource for scientific content questions sent in by participants
• Analyze some data!