



# **Outreach in a Changing Budget Climate: More or Less, Doing More with Less**

**Annie Richardson**

**Jet Propulsion Laboratory, California Institute of Technology  
OSTST**

**9 October 2013**

**Boulder, Colorado**



# Overview



- **2013: What was cold, what was hot; What was in, what was not?**
- **2 new missions: Jason-3 and SWOT**
- **What's the Future for EPO?**



# Girl Scouts Earth Science Patch Events



- Nearly 200 girls have participated in 3 events
- Girls rotate through 4 activity stations (2 are ocean related)
- The El Niño Skit is always a favorite





# Jason and other JPL Missions at Ventura County STEM Expo

Sponsored by CSU  
Channel Islands

800 Middle School  
Students

First time for JPL Earth  
Science Participation





# Classroom Visits



**Animo Leadership Academy, Inglewood**



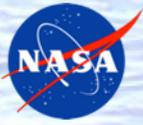
**Madera Elementary School, Simi Valley**



# Engineering Workshop for Women and Minority Engineering Students



- Hosted jointly by GRACE FO and Jason at JPL
- Focus on engineering & technology (not science)
- USC and UC Riverside participated
- 33 undergraduate students
- 12 JPL engineers (including 2 from Jason)
- 1<sup>st</sup> part of workshop was a panel discussion with 6 engineers
- 2<sup>nd</sup> part of workshop, engineers were grouped by discipline
- In a “Speed Dating” format, 2-4 engineers per discipline rotated through 5 tables of students
- Students free to ask any questions they wanted
- Event so successful, we’ll be planning a second one!



# Engineering Workshop for Women and Minority Engineering Students





# Engineering Workshop for Women and Minority Engineering Students



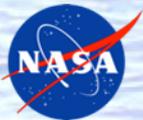


# “Stability and Change in Earth Systems”



## Multi-Mission Earth Science Summer Educator Institute

- 15-19 July 2013 at JPL
- 35 Teachers (4-6<sup>th</sup> grade) from 5 Counties in So Cal
- 3 Big Questions:
  - “How Does Water Move in the Earth System?”
  - “Where is Water Stored in the Earth System?”
  - “How do Heat, CO<sub>2</sub>, and Salt Move between and Impact Earth’s Major Reservoirs?”
- 7 Satellite and 1 Airborne Mission are Highlighted
  - Jason-1 and OSTM/Jason-2
  - Aquarius
  - GRACE and GRACE FO
  - OCO-2 (Orbiting Carbon Observatory-2)
  - SMAP (Soil Moisture Active Passive)
  - AirMOSS (Airborne Microwave Observatory of Subcanopy and Subsurface)



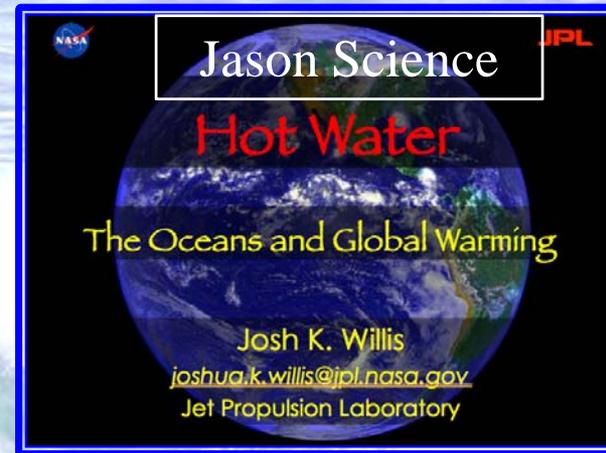
# “Stability and Change in Earth Systems”



## Multi-Mission Earth Science Summer Educator Institute at JPL

A Workshop Goal

**EXPLAIN:**  
**Ocean Circulation**



The Jason Board Game



The El Niño Skit



# “Stability and Change in Earth Systems” Multi-Mission Earth Science Summer Educator Institute





# “Stability and Change in Earth Systems”



## Multi-Mission Earth Science Summer Educator Institute



# Lab-wide Celebration of Jason-2 Fifth Anniversary



*Seasat - June 26, 1978*

*"Where it all Began"*

*Celebrating a 35-year Legacy of  
Spaceborne Earth Remote Sensing*

*OSTM/Jason-2 - June 20, 2008*

*"An Heir to the Legacy"*

*Congratulations on your 5<sup>th</sup> Anniversary!*





# U.S. Participation Argonautica 2013 7<sup>th</sup> Continent Expedition



2012 Expedition postponed at first by derelict fishing gear, once begun, the French expedition to sail to the “Great Pacific Garbage Patch” had to terminate prematurely. Captain Deixonne rescheduled the voyage for May 2013.

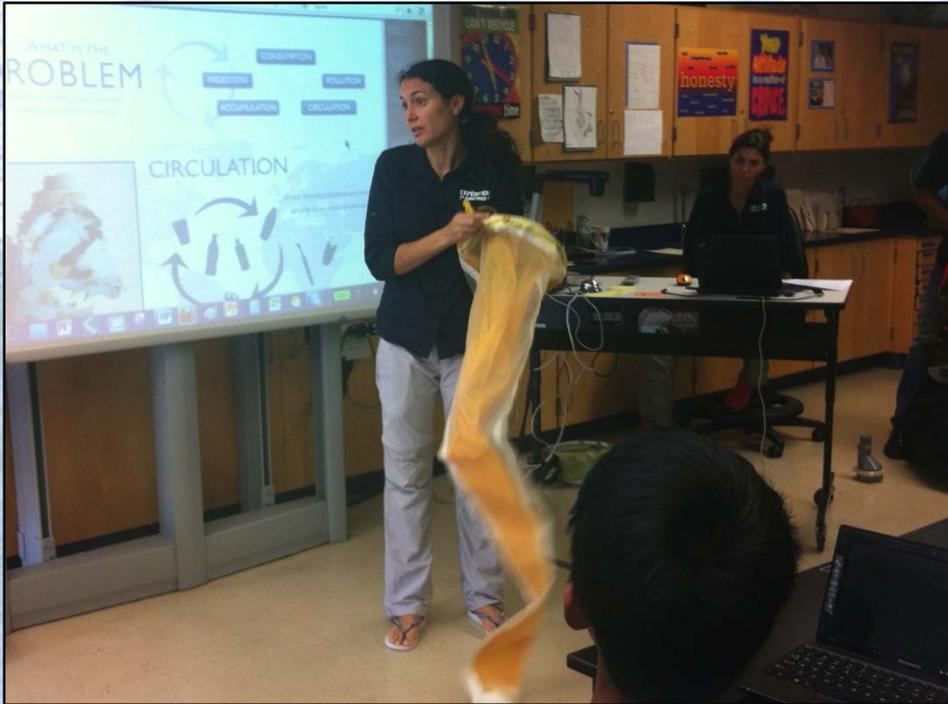


# 7<sup>th</sup> Continent Expedition 2013



## Expedition Team and Outreach Lead Visit

Wangenheim Middle School, San Diego, Calif. 17 May





# 7<sup>th</sup> Continent Expedition 2013

## Expedition Team and Outreach Lead Visit

### Wangenheim Middle School, San Diego, Calif. 17 May





# 7<sup>th</sup> Continent Expedition 2013

## Jornal du Bord/Log Book



### EXPÉDITION 7ÈME CONTINENT

# LE BLOG

#### 04/06/13 – 06/06/13: JOURNAL DE BORD

Mardi 04 juin 2013 Cela fait maintenant deux jours que nous naviguons sur un océan qui porte bien son nom " Le Pacifique " : il a revêtu un bleu profond à...

[Lire la suite](#)

#### 04/06/13 – 06/06/13: LOGBOOK

Tuesday 4th June, 2013 For the past two days we have been sailing on an ocean that warrants its name – Pacific. Its dark blue depths are vertiginous. On deck, the crew...

[Lire la suite](#)

#### 03/06/13: JOURNAL DE BORD

Vendredi 31 Mai et samedi 1 juin 2013 Nous sommes sur le chemin de retour, nous traversons une mer agitée. L'équipage va bien mais la navigation reste inconfortable... Nous allons donc faire...

[Lire la suite](#)



#### LES BOBIS, COMMENT ÇA MARCHE ? (FR-EN)

Alexandra ter Halle, Emile Perez Laboratoire des

#### 03/06/13: LOGBOOK

Friday 31th May and Saturday 1st June We're on our way back, the sea is very rough. The crew is fine but sailing is difficult... We're going to sit tight until Monday...

[Lire la suite](#)



#### 30/05/13: JOURNAL DE BORD

[Suivre](#)



# Budget Sequestration: Woe is Us

## NASA Memo: Suspend All Education and Public Outreach (Update)

Posted by [Marc Boucher](#) - Source: SpaceRef Posted March 22, 2013 8:05 PM 8 Comments



NASA JPL education promo image.

©NASA JPL

**spaceREF** SpaceRef

[+](#) Follow [+1](#)

+ 1,480

[Follow @SpaceRef](#) 14.9K followers

**mars today**

learn more...

[spaceref.com/mars](http://spaceref.com/mars)

ADVERTISE ON SPACEREF

Start your free website trial

[Find out more](#)

*“Effective immediately, all education and public outreach activities should be suspended, pending further review. In terms of scope, this includes all public engagement and outreach events, programs, activities, and products developed and implemented by Headquarters, Mission Directorates, and Centers across the Agency, including all education and public outreach efforts conducted by programs and projects.”*



# Victims of Budget Crisis

 **Jet Propulsion Laboratory**  
California Institute of Technology

JPL HOME EARTH  
BRING THE UNIV

News Missions Images Video & Audio Education

**PUBLIC EVENTS**  
TOURS | LECTURE SERIES | SPEAKERS BUREAU | OPEN HOUSE | TEAM COM

**JPL Open House Suspended**



Due to budget restrictions, plans for a JPL Open House in 2013 have been suspended. If budget considerations improve, JPL hopes to host an Open House at a future date, perhaps as early as June of 2014.

## JPL Climate Day 2013



## No JPL Participation!





*“Bringing Scientists, Students, and Communities together to Promote  
Global Climate Literacy”*

**SAVE THE DATE!**

April 11, 2014

Pasadena Convention Center



**Hosted by JPL Earth Public Engagement Team**

**Sponsored by JPL Earth Science Missions Office, NASA Climate Day, and  
South Coast Air Quality Management District**



# Earth Missions Public Engagement Campaign



- 2014 has been dubbed “The Year of Earth”
- There are 7 NASA Earth science launches scheduled between January 2014 and June 2015
- NASA and Center (JPL, et al) Offices of Communication, are involved in planning a broad campaign to publicize these upcoming Earth mission launches.
- “Our planet is changing; We’re on it.”
- Focus on science and applications; What’s the benefit to you
- Jason-3 is included with special note that it continues the 20+ year record of ocean surface topography measurements.



## EPO in the Future



- Across-the-board budget reductions affect all of us
- No matter the budget, we are still mandated to share the NASA story
- Outreach activities and events are becoming larger, more thematic, and less mission specific. Several missions benefit from a single event.
- Internal team work across missions, and external partnerships even more important
- We can do it: OST outreach team brings experience, creativity, and a history of playing well with others
- We expect to continue to be a part of improving the public's knowledge of satellite oceanography, global sea level rise, ocean circulation, and the ocean's role in climate



# Thank You for Listening!



Thanks also to our partners:

CNES, NOAA, and EUMETSAT