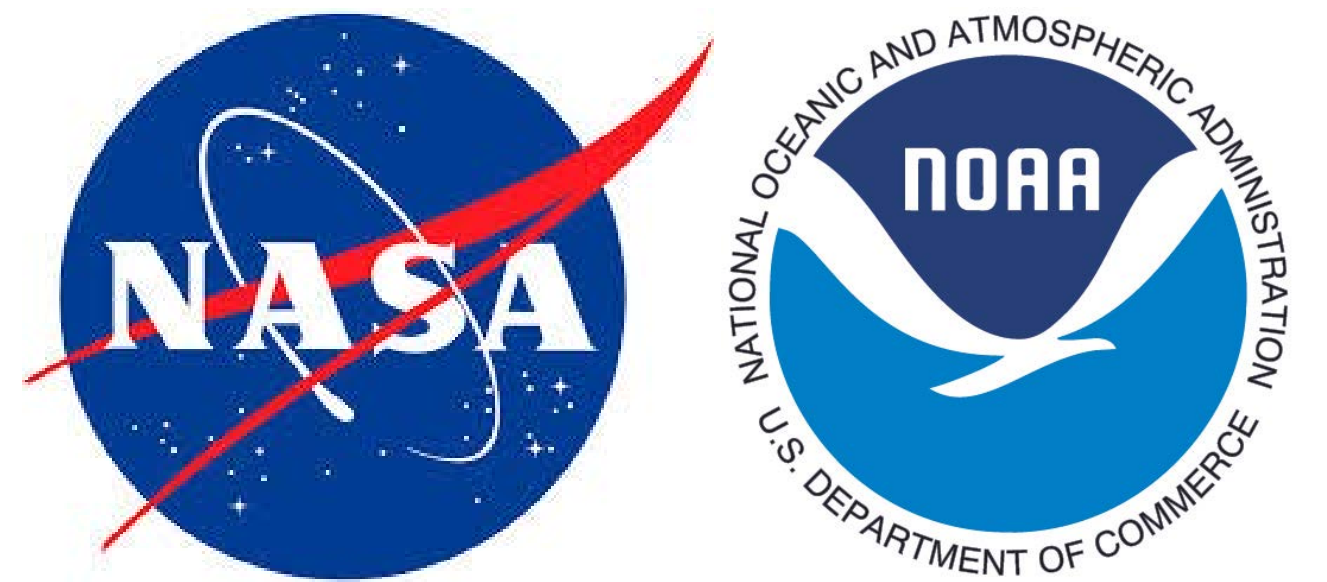


# ESIP Education Workshops

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The Cooperative Institute for Meteorological Satellite Studies (CIMSS) has been organizing workshops for G6-14 science teachers at ESIP summer meetings since 2009. ESIP, or the Federation of Earth Science Information Partners, is a unique consortium of scientific organizations that collect, interpret, and develop applications for remotely sensed data. ESIP members meet twice a year, and at different locations each summer, providing the perfect opportunity to reach new groups of regional educators. To date, over 200 science educators from over a dozen states have participated in ESIP Education Workshops. By inviting regional educators to a conference where ESIP members are already gathering, the carbon footprint of each teacher workshop is kept to a minimum. Workshop outcomes align with the ESIP Education Committee mission statement as well as NOAA, NASA and CIMSS Education goals. ESIP education workshops represent the perfect synergy of sponsoring agencies outreach missions and ESIP members efforts to design tools and curriculum that *make data matter*. In 2016 ESIP Education efforts are focusing on professional development opportunities using drones (Unmanned Aircraft Systems - UAS) for science fair projects!



2009 ESIP Teacher Workshop  
UCSB Bren School of Environmental Science



2010 ESIP Teacher Workshop  
University of Tennessee Knoxville



2011 ESIP Teacher Workshop  
Santa Fe New Mexico



2012 ESIP Teacher Workshop  
CIMSS - University of Wisconsin-Madison



2013 ESIP Teacher Workshop  
UNC - Chapel Hill



2015 ESIP Teacher Workshop  
Asilomar, Pacific Grove California



2013 ESIP Teacher Workshop Evaluation Results (n=14)						
Please rate the following aspects of your experience on a 5-point scale by checking the box that best describes your opinion.						
	1 = Not at all	2 = Very little	3 = Somewhat	4 = A fair amount	5 = A great deal	AVERAGES
<b>BENEFITS</b>						
To what extent did the experience:						
B1. Increase your awareness of available Earth Science/Climate data tools	0	0	0	1	13	4.93
B2. Increase your knowledge of Earth Science/Climate topics & related data tools	0	0	0	3	11	4.79
B3. Increase your understanding of potential applications of technologies to teach & study Earth Science & Climate topics in your classroom	0	0	0	2	12	4.86
B4. Increase the likelihood that you will use the new Earth Science & Climate data tools demonstrated at this workshop in your classroom	0	0	0	0	14	5.00
<b>CONTENT</b>						
To what extent was the content covered:						
C1. Easily understandable	0	0	0	3	11	4.79
C2. Relevant to your needs	0	0	0	2	12	4.86
C3. Suitable to your current knowledge	0	0	0	6	8	4.57
C4. In accordance with your expectations	0	0	0	3	11	4.79
<b>DELIVERY</b>						
To what extent was information:						
D1. Well organized	0	0	0	1	13	4.93
D2. Presented at the right pace	0	2	0	2	12	4.50
D3. Clearly explained	0	1	0	2	12	4.86
D4. Communicated clearly	0	0	0	2	12	4.86
To what extent did presenters:						
D5. Emphasize important points	0	0	0	1	13	4.93
D6. Allow for sharing of ideas and experiences	0	0	0	2	12	4.86
<b>OVERALL WORKSHOP RATING</b>						
Overall, how do you rate this teaching/learning experience?	1 = Poor	2 = Fair	3 = Good	4 = Very good	5 = Excellent	AVERAGES
	0	0	0	2	12	4.86
<b>Comments:</b>						
I feel much more knowledgeable about climate and ideas for improving my lesson plans.						
This was great! I am looking forward to using this in my classroom. I never would have taken the time to find all of this information for myself. Thank you!						
Next time you might want to ask teachers to bring any apps that they have enjoyed or had success with. > Great workshop! Thanks!						
I have seen a whole new world! Many thanks!						
Great workshop! Great agenda and diversity of speakers.						
Thank you!! Work will integrate within curriculum - Made easy						



### ESIP Education Workshop Evaluations

Thursday, July 16<sup>th</sup> - Asilomar, California

Using MY NASA DATA as a source for Earth System Science Data: Preston Lewis, NASA

- Excellent clear, useful
- Very Nice. I appreciated the Overview and the hands on walkthrough (even if meeting was useful).
- Nice presentation. Kinda complex navigation of site. I am curious about the...
- Great!
- I liked Preston's presentation style. The PP graphics were excellent.
- Excellent tools and presentation. I will use this.
- Glad to be reminded of this resource by such a nice guy.
- This will be a great resource for my third graders. Thank you!

Using Socioeconomic Data with the CHANGE Viewer: Robert Downs, CIMSS

- Very clear
- Good booklet. I would have loved a bit more time to try to answer a question...
- For cool site. I am not sure how to integrate it into my classroom. I will get...
- It was interesting because it dealt with socioeconomic data.
- Interesting tool. Wish I was logged into the conference site 1<sup>st</sup> so I could...
- Use tools to extract pop. # and data from layers
- potential resource for showing applied math.
- and very informative
- useful

Resources from NASA and NOAA: Dana Haine and Margaret Mooney

- Very useful
- Very good. Want to see the PowerPoint slides so can get back to sites
- Lesson provided the most useful resources
- Good
- So many cool sites. I will need time to look at them more closely.
- Good introduction of a broad menu
- Excellent - wonderful catalog of useful resources

Accessing satellite data via Apps, Web Map Servers, & the GOES-R Education Pro...

Mooney

- Learned something new
- Extremely useful and interesting
- Exciting time in satellite
- Very interested in GOES-R preview ground
- I learned a lot about satellites that I did not know
- Great

Using Data to Align with Next Generation Science Standards: Becky Reid, Olive Grove Charter

- Excellent - Clear
- Good Demo of a fabulous resource - Giovanni
- Great!
- She did an excellent job explaining her main points and tying them into NESS.
- Appreciate the teacher perspective!
- Nice to hear from a classroom teacher
- Very important
- useful

Using the U.S. Climate Resilience Toolkit to inspire authentic student-led projects: LuAnn Dahlman NOAA

- Excellent - Clear
- Read the stories could be helpful. I will probably have my students read and present them separately.
- Great!
- Fun presentation. I liked the idea of engaging students in creating climate resiliency.
- I liked the clicker!
- I love the examples
- Will be very useful for storytelling
- useful

Tectonic Motions of the Western United States: Shelley Olds, UNAVCO

- Move faster to get through more of UNAVCO's material
- Nice visuals. I liked the posters. Just to get out of computer land
- Fun
- This session was useful as we have rocks at Point Lobos State Natural Reserve that used to be in South Calif.
- Really cool tool. I will definitely use this.
- Nice to be hands-on
- Kids will love this
- Great presentation
- interesting

Virtual Planet Portal: Emily Law, NASA JPL

- Good Demo!
- Very neat tool. Not sure how I would use this as a teaching tool.
- Wow! I've got some ideas already
- Good
- This will be fun websites to learn and explore.
- Wow - what a great tool
- Exciting tools, exciting planets
- Great for 3<sup>rd</sup> grade
- Fascinating
- interesting

Overall Workshop Rating (n=10):

Poor: 0  
Fair: 0  
Good: 1  
Very Good: 6  
Excellent: 3

OVERALL WORKSHOP RATING

n=10