



### The PolarTREC Program

One of the main goals of PolarTREC - Teachers and Researchers Exploring and Collaborating, is to connect researchers and teachers to work together to create and sustain enthusiasm, knowledge, and support of polar research.



Adeena Teres at Thule Airbase.  
Photo by John Woods.



Picture of John Woods, Researcher.  
Photo by NASA

*“PolarTREC is a game changer for any project to maximize its education and outreach effort in an extremely effective and efficient manner.”* John Woods Researcher

## Expanding Horizons: Teachers and Scientists Collaborating

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<https://www.polartrec.com/expeditions/operation-icebridge-2017>

### Researchers Gain

- A team member with a science background
- An enthusiastic participant
- Access to social media outlets: journals, Facebook, YouTube videos
- A new perspective on the research project
- Reach the next generation of scientists
- Increase the knowledge of the teacher
- Access to a new audience who do not have a background in science
- Continued communication



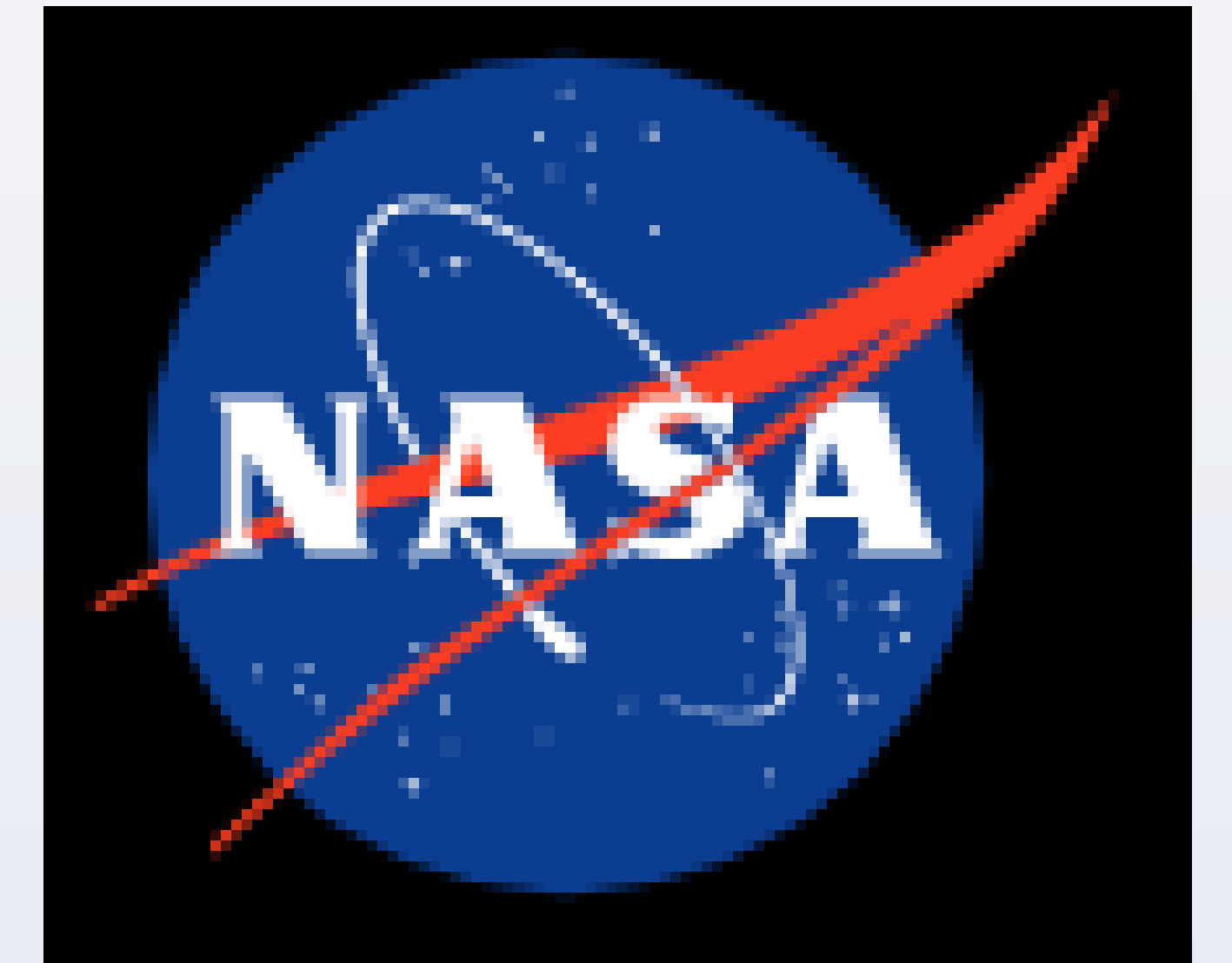
Exploring Russell Glacier with the IceBridge Crew.  
Photo by Adeena Teres

### Teachers Gain

- Practical hands on learning
- Ideas for new lesson plans
- Professional development
- Learning opportunity
- An understanding of the rigors of field science
- Gain more confidence
- Recognition of the intricacies and difficulties of field work

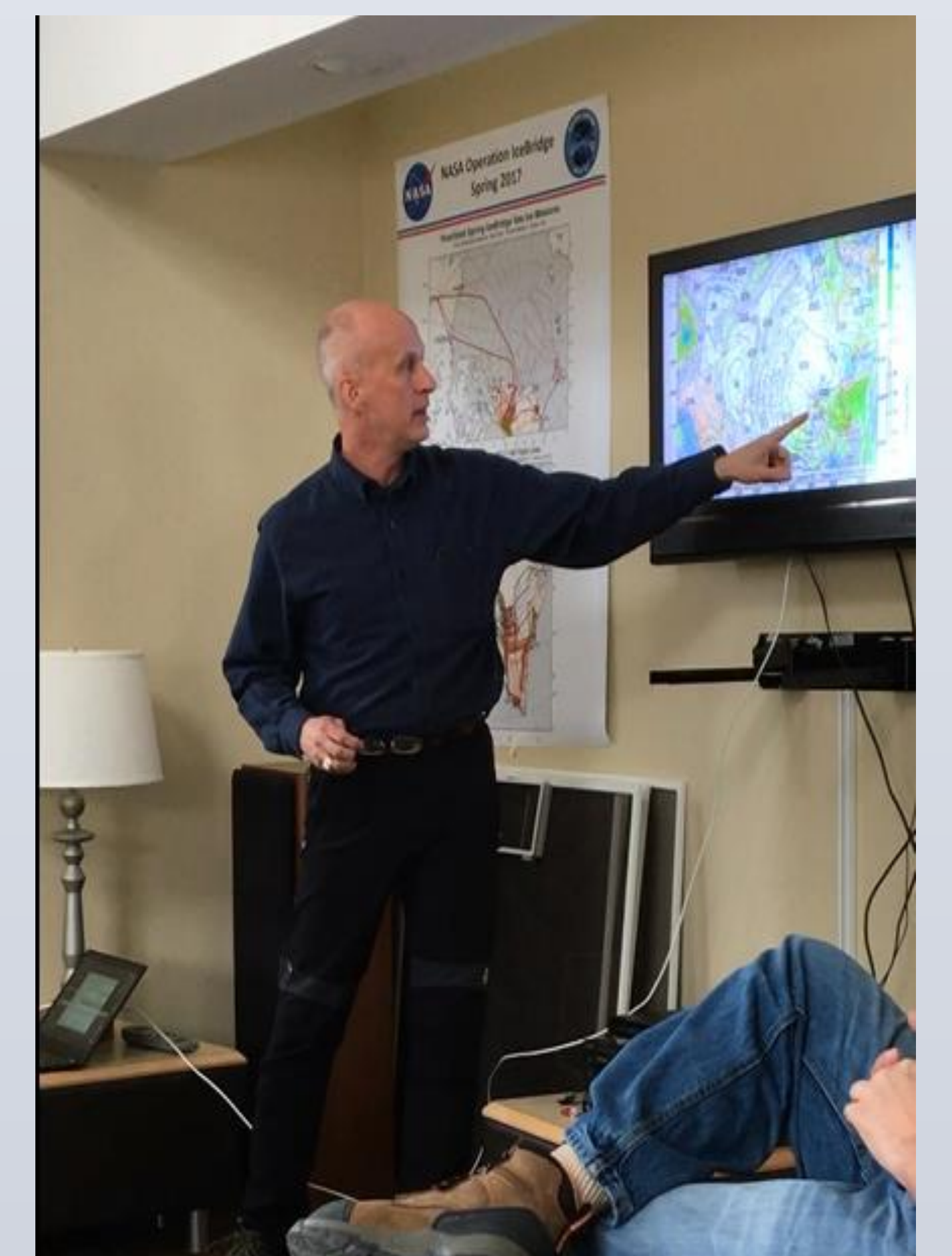
### What I Did While on the Expedition

- Learned from the crew
- Used the 360 camera to take pictures of our flight path and downloaded them allowing me to learn new technology
- Learned about raspberry pie and coding
- Conducted a video chat and messaging with school groups
- Wrote a journal about my experiences that was shared with the crew
- Conducted outreach within my school, community, and all across the country
- Gained confidence in my abilities to take on new challenges



### NASA's Operation IceBridge

Aerial study of the Arctic and Antarctic, from an aircraft, monitoring changes in the polar ice. It bridges the gap between ICESat satellite and the launch of the ICESat-2 .



John Sonntag leading the nightly meeting.  
Photo by Adeena Teres

### Still Communicating

- Continued contact with John woods working on lesson plans, presentations, and outreach
- Still learning from the research that Operation IceBridge is doing
- Still communicating with Operation IceBridge by using their system to chat with the plane
- Continuing to keep in touch with members of the crew

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