

National Aeronautics and Space Administration



# Goddard View

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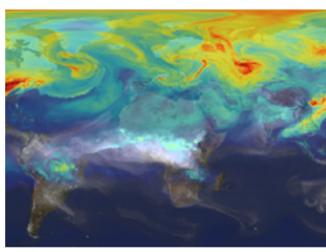
# GoddardView

## TRENDING



**Found It! NASA Reconnects With Missing Spacecraft**  
After two years of silence, the NASA Deep Space Network has re-established contact with STEREO-B. Alongside the nearly identical STEREO-A spacecraft, STEREO-B produces stereoscopic images of the sun.

**NASA Visualization Featured in Opening Ceremony of Olympics**  
A video from the Goddard-based Scientific Visualization Studio that details the global movement of carbon dioxide was featured in a segment of the opening ceremony of the Summer Olympics in Rio de Janeiro.



**Stuff-A-Truck Challenge Helps Families in Need**  
On Aug. 16, as part of the Feds Feed Families campaign, Goddard's directorates engaged in a friendly competition to fill a truck with nonperishable food items, all of which were donated to local food banks and pantries.

**HUBZone Event Connects Small Businesses With NASA**  
Goddard hosted more than 400 attendees on Aug. 9 for HUBZone Industry Day, a gathering designed to teach small businesses about working with NASA by connecting them with Goddard's technical personnel.



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**On the cover:** An aerial view of Rio de Janeiro – host of the 2016 Summer Olympic Games – as seen from the Landsat 8 Earth-observing satellite.

Photo credit: Landsat 8/NASA Earth Observatory

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**GoddardView Info**

Goddard View is an official publication of [NASA's Goddard Space Flight Center](#) in Greenbelt, Maryland. Goddard View showcases people and achievements in the Goddard community that support the center's mission to explore, discover and understand our dynamic universe. [Goddard View](#) is published by the Goddard Office of Communications.

You may submit story ideas to the editor at [darrell.d.delarosa@nasa.gov](mailto:darrell.d.delarosa@nasa.gov). All contributions are subject to editing and will be published as space allows.

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By **Sophia D. Ryan**

Comedian Robert Mac stood on stage with the sun beating down on him as he looked out at the crowd of NASA employees, their families and friends. His lab coat – a prop used for his science shows – had a small NASA meatball sticker on it to honor his first performance at NASA's Goddard Space Flight Center. He then brought his mouth close to the microphone and said, "My chemistry teacher says alcohol is a solution." The audience of more than 100 people let out hearty laughs.

On Aug. 3, with Mac and others on stage, the center hosted its first comedy show in front of the Goddard Visitor Center Rocket Garden. This show was particularly special because of its scientific theme: "Comedy Show with a Scientific Twist." The comedians joked about their experiences with science and shared stories about failed high school science experiments.

"I had a great time," said Stephanie Clark, a Goddard project support specialist who attended the show. "It was wonderful to relax and have a good laugh after a long day."

This show's lineup included Kasha Patel as the host, Mac and molecular biologist Adam Ruben. Patel works as an Earth science writer at Goddard and moonlights as a stand-up comedienne. She produces and hosts science comedy nights in Washington, D.C., that feature stories, songs and jokes.

"There aren't a lot of science comedians or regularly occurring science-themed comedy shows in the United States, so it was special to put on a show at NASA where the audience would appreciate the humor," said Patel, who helped produce the show.

Ruben, a molecular biologist by day, has been performing stand-up comedy for more than a decade after getting his start in Baltimore. He talked about how in the beginning his science jokes didn't quite get the warm reception he had hoped for, as many people weren't interested in his puns or nerdy material. Now, he performs his science jokes to interested crowds across the United States. He also hosts the Science Channel's "Outrageous Acts of Science," a program featuring homemade experiments and stunts.

"Comedy night was a different kind of event for the visitor center – kind of outside-of-the-box," said Deanna Trask, a Goddard public affairs specialist who assisted in the organization of the event. "I was happy to see so many Goddard employees and their families enjoying the event."

Those in attendance were encouraged to picnic while they listened to each comedian. Evidence Locker, a rock band whose members work at Goddard, performed at the opening and closing of the show.

"The visitor center is always looking for ways to engage the Goddard community and their families more, and this event was a great start," said Kristin Metropoulos, program manager at the visitor center. "We have lots of ideas for other fun events in the near future, so stay tuned." ■

Above: Comedians Robert Mac (left) and Kasha Patel deliver jokes during a science comedy show at the Goddard Visitor Center.

Photo credits: NASA/Goddard/Sophia D. Ryan

# SCIENCE IS NO LAUGHING MATTER – OR IS IT?

# INNOVATATHON: CAPTURING GODDARD'S CREATIVITY AROUND THE CLOCK

By Ashley Morrow

Employees at NASA's Goddard Space Flight Center have been providing cutting-edge solutions to the agency's challenges for nearly 60 years. In 2016, the center launched a somewhat unique event to embrace and advance that creative spirit even further.

Held in the Goddard Information and Collaboration Center from Aug. 8 to 9, Innovatathon – a portmanteau of the words “innovation” and “marathon” – was an around-the-clock, 24-hour event structured around the format of “code-a-thons” that take place in the private sector.

Code-a-thons, as their name suggests, engage programmers and developers in a collaborative experience to devise new products and streamline internal processes using computer code.

“We wanted to take that concept and combine it with the center’s push to encourage employees to carve out time for creative thinking,” said Steve Sirotzky, assistant branch head of the Goddard Telecommunication Networks and Technology Branch and chairman of the event. “That’s how Innovatathon was born.”

One might imagine that a code-a-thon-like event at Goddard would only engage engineers and scientists. But the Innovatathon team had a different idea: opening the contest to all employees on center.

“This event was created to leverage Goddard’s creativity not only for improving our understanding of science, but also to improve the back-end processes that might get overlooked here on base,” Sirotzky added. “To do so, we wanted to include the science and engineering community, but also the accounting, human resources, legal and secretarial staff. Regardless of their discipline, each person has the ability to initiate improvement and should feel comfortable doing so.”

Six teams participated in the first edition of the annual event. Their ideas ranged from the very technical, such as creating a central repository of symbols used when building circuit boards, to the more general, like developing an education and outreach program tailored specifically to Girl Scouts.

Other ideas included developing a wiki – a website that allows its users to create and edit its content – for interns to network

and exchange research information, creating a searchable knowledge map system so that different teams wouldn't spend valuable time repeating tests another team has already performed, and creating a “hometown” school presentation program that would allow employees to reuse others' presentations in their own hometowns.

The organizing committee implemented the 24-hour window to give employees adequate time to break away from their daily responsibilities, email and other distractions in order to commit to developing their ideas. Some participants, such as summer interns Natalie DeNigris and Scott Lopez, stayed late into the night to take advantage of the long duration.



“I definitely feel that the Innovatathon helped progress our idea,” said DeNigris, who developed the prototype for the intern wiki alongside Lopez. “Scott and I had been separately considering what the intern experience was lacking, but having 24 hours to solve our problem allowed us to work together and focus our attention to determine a feasible solution.”

Their idea won two of six awards – one for novel application of existing technology and another for innovation – presented at the end of the event. The project has already garnered attention from the center’s head of intern communications.

“These kinds of events provide employees the opportunity to have their ideas heard, and they can steer management toward solutions that they would not have otherwise considered,” Sirotzky said. “It’s a win for all involved.” ■

*\* Innovatathon was organized by Steve Sirotzky with the help of Alinda Mashiku, Lia Sacks, Alvin Yew, Jon Verville, Neerav Shah and Maria Lecha from the Goddard Applied Engineering and Technology Directorate, as well as Denna Lambert from the Goddard Management Operations Directorate.*

Center: Summer interns Natalie DeNigris (top) and Scott Lopez work on their idea for an intern wiki site during Innovatathon, a 24-hour collaboration session held in the Goddard Information and Collaboration Center from Aug. 8 to 9.

Photo credit: NASA/Goddard/Bill Hrybyk

# POSTER SESSION CAPS THE GODDARD INTERN EXPERIENCE



After more than two months working alongside the bright minds of NASA, nearly 400 of the center’s summer interns presented posters illustrating what they learned from their projects and how the agency has helped shape their future plans.

Entries were evaluated on such criteria as project originality, design layout and clarity of explanation. Judges recognized the creators of 12 posters for their outstanding work, presenting them with the awards “Swoosh,” “Orbit” and “Star” – all aptly named after the components of the NASA meatball logo. The winners, spread among four different categories, and their poster titles were as follows:

## Science

- Austin Kim and Lucas Tax – “The Double Dipper: Gamma Cassiopeia”
- Robert Spencer – “Comparing Remote-Sensing and in-situ Observation of Aerosols and Clouds”
- Evan Frangipane, Michael Greklek-McKeon and Anna Voelker – “Solar Flares: Building a New Forecasting Procedure and Establishing a Notification Threshold”

## Functional Services

- Ryan Hughes – “Up Close and Personal: Virtual Reality as an Educational Resource”
- Naema Ahmed – “NASA Journalism in Supercomputing: Communicating Computational Capabilities”
- Leugim Deynes and Laura Wunderlick – “Business Analysis Support for Flight Projects Directorate: Tools, Databases and Proposals”

## Computer Science and Information Technology

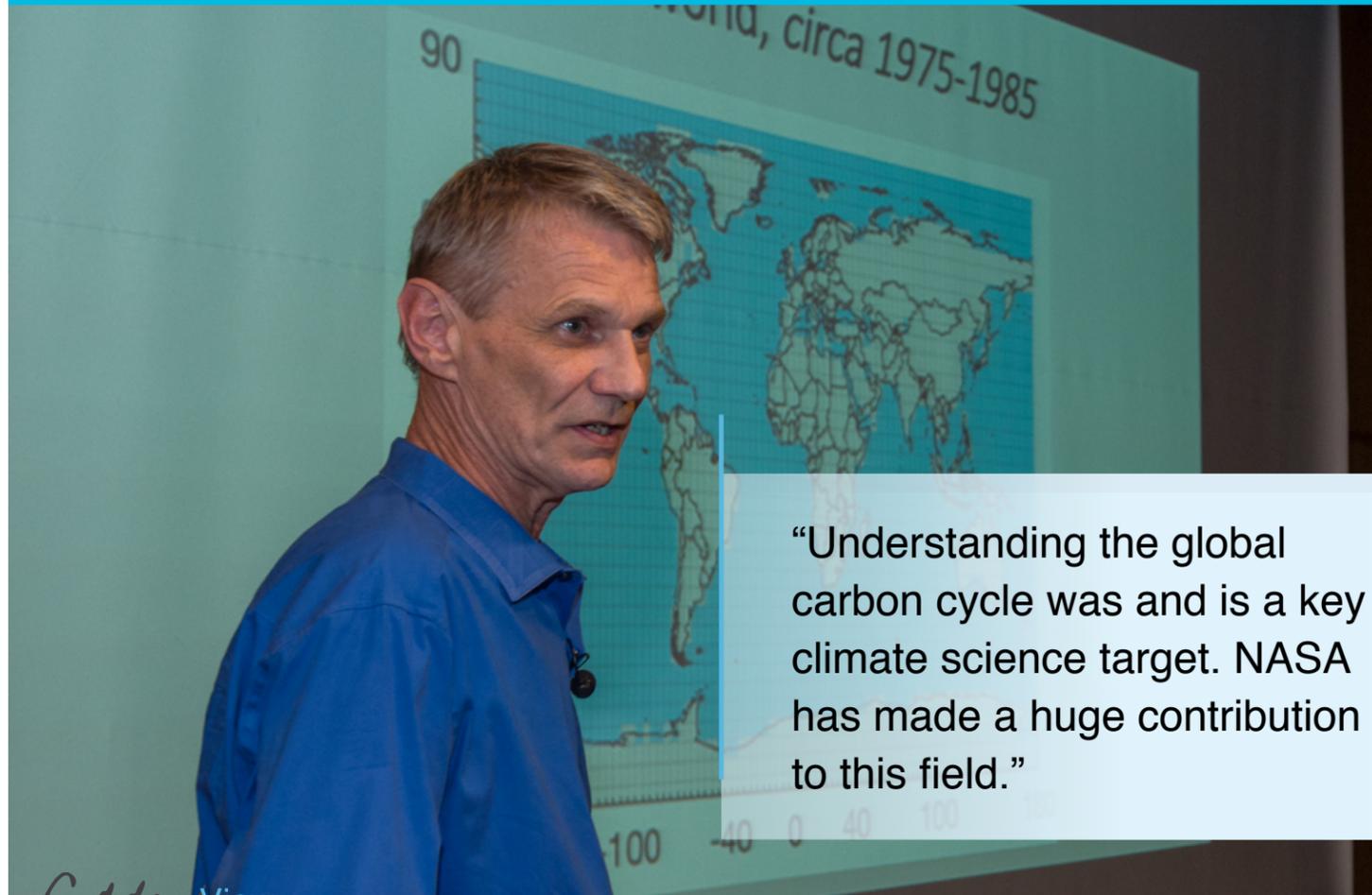
- Julianna Long and Sreya Vengara – “Development of a Google Glass App to Improve Robot Safety”
- Carlos Martinez Tirado – “High Resolution Web World Wind Forecast”
- Zachary Lamb – “Space Network Customer Data Mining”

## Engineering

- Joseph Breeden – “Reaction Ring for CubeSat Attitude Control”
- David Berlin – “Rapid ATP Bioburden Test for Planetary Protection”
- Patrick Menninger – “TWANG TDRSS Waveform and Noise Generator” ■



Photo credits: NASA/Goddard/Debora McCallum



“Understanding the global carbon cycle was and is a key climate science target. NASA has made a huge contribution to this field.”

## FORMER ASTRONAUT PIERS SELLERS RECOGNIZED FOR HIS WORK BACK DOWN ON EARTH

By Patricia Flores

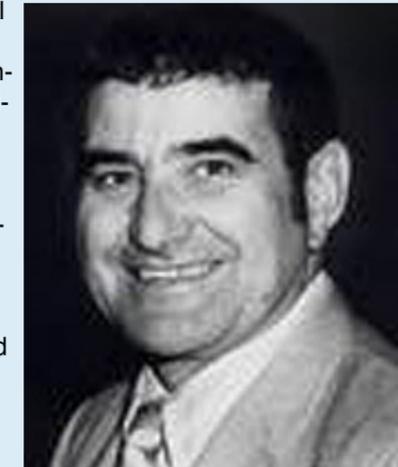
For almost three and a half decades, Goddard Earth scientist and former NASA astronaut Piers Sellers has dedicated much of his career to climate research. From serving as a staff scientist and publishing more than 70 papers to leading Goddard’s work in Earth science, all his devoted efforts recently culminated in the presentation of Goddard’s highest honor in the field – the William Nordberg Memorial Award for Earth Science.

In addition to sharing scientific data and information, Sellers included photographs from his various field campaigns over the years and pointed out which of his colleagues from the pictures were present in the audience. The lecture was informative, yet lighthearted, as Sellers joked with those in attendance, ranging from interns to retired scientists. One of those individuals was the now-retired John Barker, former Landsat associate project scientist and an early colleague of Sellers.

Presented annually since 1994, the award is named after William Nordberg, a NASA Earth scientist from 1959 to 1976 and pioneer in using remote sensing to conduct ground research. It is given to a Goddard scientist who exhibits the characteristics of Nordberg’s career, such as “broad scientific perspective, enthusiastic programmatic and technical leadership on the national and international level, wide recognition by peers, and substantial research accomplishments in understanding Earth System processes.”

“Piers’ unique ability to be direct and straightforward puts him in a stellar position to comment on the world of Earth science. He is very strong, allowing him to be successful,” Barker said.

The Goddard Awards Office handled the logistics of the Nordberg Award, while a committee of former winners selected Sellers as this year’s recipient. The Goddard Scientific Colloquium Committee organized and hosted the Nordberg Lecture.



“Piers has been an outstanding spokesperson for the NASA Earth science program, and that broad range of experience and accomplishment made him a rather logical choice for the award,” said David Thompson, Goddard astrophysicist and chair of the colloquium committee. “If you have not already met him, you will find him very personable, outgoing, articulate and thoughtful.”

Claire Parkinson, senior scientist for the Aqua mission and the 2015 recipient, considers it among her greatest accolades. “The Nordberg Award is the highest Earth science award given at Goddard, so it was extremely meaningful that my colleagues and I received recognition for our work,” she said.

For Sellers, winning the Nordberg Award doesn’t just validate his own successes, but also the incredible progress NASA has made in climate research over the decades. A well-known figure at Goddard and across the nation, he never hesitates to thank those who helped him along the way.

For his part, Sellers has been an innovator in Earth science during his career at NASA. Originally from the United Kingdom, Sellers moved to the United States in 1982 to conduct climate research at Goddard. His work focused on climate problems worldwide, and he led field campaigns in the United States, Canada, Africa and Brazil. Sellers left Goddard in 1996 to join the NASA astronaut corps, flying to the International Space Station aboard space shuttle Atlantis in 2002 and 2010 as well as aboard space shuttle Discovery in 2006. He returned to Goddard in 2011 to assume his current position of deputy director of sciences and exploration. He also serves as the acting director of the Goddard Earth Sciences Division, leading its groundbreaking research in atmospheric composition, climate patterns, carbon cycle processes and other areas.

“Understanding the global carbon cycle was and is a key climate science target. NASA has made a huge contribution to this field, bringing it from sketchy box diagrams on chalkboards in the 1980s to full-up global models today,” he said. “All the people here did a marvelous job, and I’m very proud to be associated with them.” ■

Center: William Nordberg, NASA Earth scientist from 1959 to 1976, for whom Goddard’s highest Earth science honor is named. Photo credit: NASA/Goddard

Opposite: Piers Sellers (right) accepts the Nordberg Award from Colleen Hartman, Goddard director of sciences and exploration (top). Sellers delivers the Nordberg Lecture, entitled “NASA and the Land Biosphere” (bottom). Photo credits: NASA/Goddard/Bill Hrybyk

On Aug. 17, in front of a standing-room-only crowd at the Goett Auditorium in Building 3, Sellers delivered the accompanying Nordberg Lecture after receiving the award. Entitled “NASA and the Land Biosphere,” his presentation detailed the progress that has been made in the development of scientific modeling that now allows researchers to reap the benefits of satellite data, biospheric models and climate models to study how Earth’s life cycles are altered by climate change.



Taylor Green

Code 569, Engineer,  
Electrical Systems

Why Goddard?: I've been involved with the NASA community since I was in college, and I love the diversity of the work here.

Hobbies/interests: family, beach, sports, vinyl records, hobby electronics



Shardae Williams

Code 160, Student Trainee, Education

Why Goddard?: NASA is making the universe more accessible. I want to be a part of it.

Hobbies/interests: laughing with colleagues, stargazing, writing short bios



Carl Hamilton

Code 228, Student Trainee, Architecture

Why Goddard?: To welcome new challenges, open up doors and fulfill a dream.

Hobbies/interests: San Francisco 49ers football, sustainable design, South American culture, exercising, family



Michelle Leimbach

Code 803, Facility Systems Safety Engineer

Why Goddard?: I love everything about working for NASA. It's an amazing experience.

Hobbies/interests: family, running, weaving



Syeda Kazmi

Code 566, Student Trainee, Engineering

Why Goddard?: NASA promotes a great culture and gives great opportunities to STEM majors.

Hobbies/interests: cooking, movies



Chip Choquette

Code 803, Flight Systems Safety Engineer

Why Goddard?: To contribute to our nation's space exploration, aerospace research and Earth science programs.

Hobbies/interests: volunteer firefighting, spaceflight, obstacle course races, traveling

## EMPLOYEE SPOTLIGHT

*Goddard is pleased to welcome these new employees to the NASA community.*



Steven Taylor

Code 221, Wallops Realty Specialist

Why Goddard?: An opportunity to bring my unique background and experience to NASA.

Hobbies/interests: trap, skeet, fishing, hunting, woodworking, real estate



## GODDARD SCIENTIST WINS PRESTIGIOUS EARLY CAREER AWARD

By [Kelly Ramos](#) and [Sophia D. Ryan](#)

**G**oddard magnetospheric scientist Colin Komar was recently awarded the American Geophysical Union Basu United States Early Career Award for Research Excellence in Sun-Earth Systems Science. The AGU Space Physics and Aeronomy Section announced the award, recognizing Komar's outstanding research in the sun-Earth connection.

Komar studies how solar flares and the solar wind interact with Earth's magnetic field, or magnetosphere. The solar wind is the sun's constant outflow of ionized gas – plasma – driven by magnetic conditions on the sun. Solar wind can interact with Earth's magnetic field in ways that can cause auroras or, in extreme cases, power grid strain.

Among his colleagues, Komar is well known for his expertise in heliophysics. "I have known Colin since he was a graduate student, and I have always been impressed with his ability to come up with clever solutions," said Alex Glocer, Komar's supervisor. "He impresses everyone he works with."

With a doctorate from West Virginia University, Komar researches the process of how plasma enters the region of near-Earth space through a process called magnetic reconnection – the source of many energetic events throughout the universe, from solar flares and coronal mass ejections on the sun to space weather events near Earth that create the auroras. Magnetic field lines normally cannot cross. Under special conditions, however, field lines can connect and then reconfigure into a new alignment. This process provides huge amounts of energy as the magnetic fields rebound explosively into new positions, sending particles and plasma off into space. Magnetic reconnection is a sort of magnetic explosion, during which magnetic fields snap into new configurations – sometimes creating magnetic highways that allow particles and plasma into near-Earth space.

"I took my two fascinations of space and physics and put them together in a very interesting way so that I could learn something new while also paralleling what I already had done," Komar said.

His love for science began at an early age with the support of his family and friends. "When I was in second grade, I told my teacher that I wanted to be a scientist," he added.

As an undergraduate student, Komar first became captivated by physics after a conversation with an engineer who worked at Apple. From that moment on, his appreciation for science took off after his first physics course at Illinois Wesleyan University.

"I was able to find what I was truly passionate about, and I couldn't be happier with myself," Komar said. "Every day presents a new problem to solve, and that's something I'm excited about."

The Basu United States Early Career Award for Research Excellence in Sun-Earth Systems Science is presented annually to one scientist at the start of their career – someone who represents full commitment, hard work and outstanding research in sun-Earth systems science.

Komar will give a speech about his award-winning research during the AGU Fall Meeting in San Francisco on Dec. 13, 2016. He will be recognized for how his research and knowledge of plasma physical processes benefit society by providing information that educates the public. ■

Above: Goddard magnetospheric scientist Colin Komar, recipient of the American Geophysical Union Basu United States Early Career Award for Research Excellence in Sun-Earth Systems Science.

Photo credit: NASA/Goddard/Kelly Ramos



## FLYING A ROLLER COASTER FOR SCIENCE

By [Samson Reiny](#)

Feeling breakfast move toward my chest is the uneasy cue that NASA's DC-8 flying laboratory is dropping altitude. We drop all right, from 35,000 feet to just 500 feet above the open ocean — the water so close that the airplane's wing starts to look like a diving board. Suddenly, the plane climbs hard, zooming toward the clouds. Standing, my feet are glued to the floor, the rest of my body wanting to follow. I'm dizzy, but I eventually adjust as we ascend to higher elevation.

That is, until we dive again. Seven more times, to be exact.

"I've never had such a nice flight," said Donald Blake, smirking. An atmospheric scientist at the University of California, Irvine, he has flown on the DC-8 countless times over the years. "One of my students threw up 19 times during a really bad flight over Central California. I told him, 'You're never flying on this thing again.' Well, I barely managed not to throw up myself."

In retrospect, motion sickness is a small price to pay to accomplish the Atmospheric Tomography (ATom) mission's ambitious objective: to survey the atmosphere around the world at a range of altitudes. The 23 instruments on board will be used to measure more than 200 gases and airborne particles in the most remote regions on Earth in order to help advance a number of scientific investigations.

On July 29, I joined 30 researchers on their first science flight: a nine-hour trek from NASA's Armstrong Flight Research Center in Edwards, California, to the equator in the Pacific Ocean and back. Next up would be a 23-day whirlwind trip, with far-flung stopovers in American Samoa in the Pacific; Ascension Island in the middle of the Atlan-

tic; and Kangerlussuaq, Greenland, in the Arctic Circle; among others.

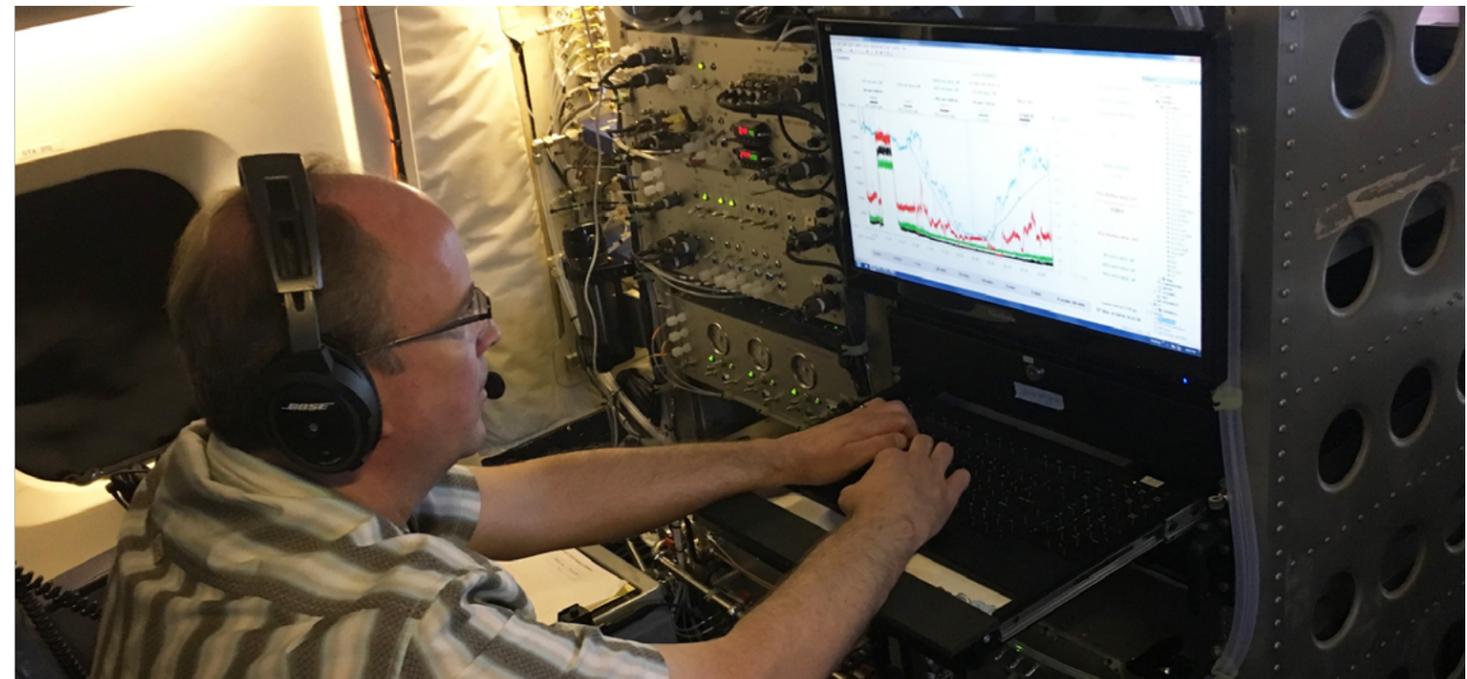
What is clear about being on a science flight is that instruments are the first-class passengers. These costly machines are checked incessantly — the thermostat set to their liking and their bodies secured for the vicissitudes of flight. From the onset, they cause a ruckus, some more than others.

At one point, a distressed passenger snatches my front row seat while I'm away. She points first to her ears then to the back of the plane. I hear a high-pitched warble that becomes more of a shrill the closer I move towards it.

"I should have told her the instrument behind me gets particularly loud," said a regretful Roisin Commane, an Irish-born Harvard University scientist who's assisting with the Quantum Cascade Laser, which uses light absorption to measure levels of carbon dioxide, methane, carbon monoxide and nitrous oxide.

Commane's instrument pretty much runs on its own, making her one of the lucky ones. Others are married to theirs. University of New Hampshire scientist Jack Dibb is always on his feet changing out filters for his Soluble Acidic Gases and Aerosols instrument as it passes through a string of altitudes and latitudes. The filters will be brought back to a lab and analyzed for pollutants such as nitric acid and for aerosols that are signatures of biomass burning, which includes wildfires.

For his part, Blake usually has his hands full fussing with the valves of his Whole Air Sampling machine, capturing air samples in cans to be sent to his and others' labs for



analysis of a hundred different gases and particles. Today, fellow UC Irvine researcher Barbara Barletta is helping out. The duo eventually fills 166 cans.

Some instruments even require their own maneuvers. The Meteorological Measurement System records in-situ pressure, wind and temperature data. To establish a reference point for the wind measurements, the DC-8 pilots conduct a few maneuvers, namely the "pitch" (quick up-and-down movements), the "yaw" (moving side to side like a crab) and the "box" (a succession of tight turns that result in a box pattern when seen from above). Even in the cockpit, the safest spot for a sensitive stomach, these maneuvers make me squirm.

Through it all, many researchers are hunched over computers, transfixed by the incoming data displayed through colorful graphs and charts. Over the intercom, they share results — talking in science jargon — and communicate with the navigator, mission director and assistant mission director.

As we move closer to the equator, I hear Tom Ryerson — who leads a research group in the National Oceanic and Atmospheric Administration Chemical Sciences Division — exclaim over the intercom, "This is the lowest NOy [total reactive nitrogen] measurement I've ever seen — 70 ppt [parts per trillion]."

NOy is the sum of all nitrogen oxides, derived from pollutants emitted from power plants, cars and trucks, and forest fires. His Nitrogen Oxides and Ozone instrument is delivering the measurement in real time. Levels of NOy are usually lower near the Southern Hemisphere, far away from their sources, but not this low, according to Ryerson.

"This was really low—about 10 times lower than in the Northern Hemispheric air we just sampled on our way south," he said.

NOy measurements taken during the rest of the mission will be useful for testing global models that simulate sources of NOy on the continents and how they're mixed around between the Northern and Southern hemispheres.

"The key thing about ATom is that we're making these measurements in very undermeasured parts of the world where the global models have very few measurements to compare against," Ryerson said. "We'll measure some things in some parts of the world that really haven't been observed before."

Moments later, he informs me that a few of the instruments picked up dust particles the team thinks came from Africa. Their sizes are much larger than expected and may reveal something new about how far dust can travel after being picked up by windstorms in the world's deserts.

"Not bad at all for a first flight," Ryerson added. "It feels like the start of a concert. The instruments are warming up, right before the symphony starts. There's lots of anticipation of great stuff to come." ■

Above, left: A view from the DC-8 aircraft as it oscillates between 500 and 35,000 feet above sea level during the Atmospheric Tomography mission. Photo credit: NASA/Goddard/Samson Reiny

Above, right: Tom Ryerson of the National Oceanic and Atmospheric Administration watches data stream in from his Nitrogen Oxides and Ozone instrument. Photo credit: NASA/Goddard/Samson Reiny

# TERESITA GUEVARA SMITH: CHAMORRO 'OLYMPIAN' OF THE PACIFIC ISLANDS

By [Elizabeth M. Jarrell](#)

## What do you do and what is most interesting about your role here at Goddard? How do you help support Goddard's mission?

I have been a diversity and inclusion (D&I) specialist for almost three years. The Goddard D&I Program Office (D&IPO) provides resources, training, tools, expertise and other support to enable the Goddard community to foster and grow diversity, inclusion and equity within the workforce. We oversee three of the nine advisory committees on center. I help manage the New and Developing Professionals Advisory Committee and the Veterans Advisory Committee, offering guidance, oversight and strategic planning to assist members in advocating for their constituencies. I also support related educational and outreach activities.

As the communications lead for D&IPO, I oversee all the communications from our office to the Goddard community and manage our multiple websites. I also lead our D&I Directorate Road Show, which teaches employees how D&I is critical to their management and mission success.

## What does D&I mean to you?

D&I to me means that together we can achieve the impossible. D&I fosters innovation, the same innovation that will take us to Mars and beyond.

## What are your passions outside of work?

I am very passionate about my family and our culture. I am a Chamorro with roots in Guam, a U.S. territory located in the Pacific Ocean within the Mariana Islands. Guam is my mother's birthplace.

## What does being Chamorro mean to you?

Being Chamorro is the essence of who I am; it is my identity. Being Chamorro to me means family, respect and honoring rich traditions. The Chamorro people have great pride rooted in their past. We are a resilient people; we are survivors. Although I grew up thousands of miles away from the island and could not visit often, my mother passed down our people's teachings and traditions. She raised me to know respect and honor, and to be proud of being a Chamorro no matter where I live.

And it means enjoying family and friends at fiestas to cook and eat red rice, keleguin mannok (coconut and chicken), empanadas, finadeni (a type of dipping sauce) and ribs.

## Why is the 12th Festival of Pacific Arts (FestPac) the 'Olympics' of the Pacific Islands?

The Conference of the South Pacific Commission holds this festival every four years, inviting representatives from 27 different Pacific Islands in the disciplines of traditional arts, literary arts, performing arts and visual arts. This festival is the "Olympics" of the Pacific Islands. Instead of competing for medals, we share and embrace cultures.

## How did you become a FestPac delegate?

Since July 2015, I have been practicing traditional dance and song several days a week via video conference with a Chamorro dance group based in Long Beach, California. I have also been learning the Chamorro language through songs and chants and researching our history.

In October 2015, I auditioned before representatives of the Guam Council – who were in Washington, D.C. – to be a performing arts delegate. In May 2016, I was honored to be one of the 500 delegates, and one of only 115 diaspora delegates selected outside of Guam.

## What did you learn from being in the festival?

I learned more about my Chamorro culture by experiencing it in person and not through a book. One of our greatest challenges is passing our language, customs and traditions to the youth. I have learned from this experience that I want to be a part of the effort in eliminating this challenge.

## What is one word that best describes yourself?

"Minesñgon," a Chamorro word meaning perseverance and to keep working hard to reach your goals even when it gets difficult. ■

Center: Teresita Guevara Smith in Guam.

Photo courtesy: NASA/Goddard/Teresita Guevara Smith

