



FEATURE

Highest honor

On June 29, Commander David Zezula was presented with a NOAA Corps Commendation Medal for outstanding leadership aboard the NOAA ship Fairweather and for his innovative use of laser scanners to improve operations during coastal surveys in the Arctic in 2015. ESRL Director Kevin Kelleher, on behalf of Rear Admiral David Score, Director of NOAA Corps, presented Zezula with the medal, the highest honorary award of the NOAA Corps.

SPOTLIGHT

Possible new threat to Earth's ozone layer

The Montreal Protocol has been hailed for controlling chlorine-based chemicals that created a vast hole in the ozone layer over Antarctica. But new research by GMD scientist Steve Montzka and colleagues suggests rising emissions of a chemical not controlled by the international treaty poses a potential risk to the Earth's protective ozone layer.

Two complementary PSD studies evaluate skill of sea surface temperature forecasts for coastal marine ecosystems

In a new study to be published in *Climate Dynamics*, CIRES and NOAA researchers in PSD evaluated the skill of monthly sea surface temperature (SST) anomaly predictions for large marine ecosystems in U.S. and Canadian coastal regions, using a suite of climate models from the North American Multimodel Ensemble--a newly available experimental seasonal forecasting system. In a complementary study in the same issue, some of those same researchers took a closer look at SST forecasts in the California Current System--a southward-moving current of cool water that extends along nearly all of the U.S. West Coast and is one of the world's most productive marine ecosystems.

NOAA's Greenhouse Gas Index up 40 percent since 1990

NOAA's Annual Greenhouse Gas Index, which tracks the warming influence of long-lived greenhouse gases, has increased by 40 percent from 1990 to 2016--with most of that attributable to rising carbon dioxide levels, according to NOAA climate scientists.

IN OUR COMMUNITY AND NEWS YOU CAN USE

- GSD's Science On a Sphere® team released new software for SOS Explorer™ (SOSx) that uses Oculus Rift virtual reality technology to immerse viewers in 3-D datasets that entertain as well as promote scientific literacy.
- Two ESRL scientists, Stan Benjamin ([GSD](#)) and Roger Pulwarty ([PSD](#)), were recently sworn in to the prestigious position of NOAA Senior Scientist for their respective divisions.
- CIRES/GSD's Betsy Weatherhead is presenting at the Conference on Regional Sea-Level Changes and Coastal Impacts, July 10-14 in New York City.
- PSD's Jian-Wen Bao will participate in the Workshop on the Future of Cumulus Parameterization to be held July 10-14 in Delft, The Netherlands and will present a talk entitled "Testing the super-parameterization of deep convection in the grey-zone."
- SWPC's Shawn Dahl will give a talk about space weather at the Boulder Public Library on July 15 at 2:00pm. City of Boulder Library and Arts requested the talk as part of their summer reading program themed "Build a Better World."

commsboulder@noaa.gov

Contacts:

Ann Reiser, Karin Vergoth, Layout & Co-editors
303-497-6634, 303-497-5125

Theo Stein, Media
303-497-6288

Sarah Venema, Public and Tours
303-497-6045

IN OUR COMMUNITY AND NEWS YOU CAN USE

- The National Geodetic Survey (NGS), an agency within NOAA, is conducting field research between Walsenburg and Durango until September to “ground truth” GRAV-D (Gravity for the Redefinition of the American Vertical Datum). GRAV-D is an airborne gravity campaign that will determine the geoid with high resolution over the entire United States as a foundation for precise elevation measurements. Colorado was chosen for this final test because of its high, rugged terrain.
- From July 25 to August 2, PSD will participate in the Woods Hole Oceanographic Institute Hawaii Ocean Timeseries Station (WHOTS) research cruise north of Oahu, HI aboard the NOAA ship Hi’ialakai.
- CSD will host the 2017 Atmospheric Tomography Mission (ATom) science team meeting in Boulder from July 25-27.
- In a new paper, PSD scientists analyze observations from the NOAA ship Ronald H. Brown and the G-IV Aircraft of a landfalling atmospheric river during the CalWater 2015 campaign.
- CIRES/GSD’s Betsy Weatherhead will be presenting an invited talk on Planning Environmental Observing Systems of the Future: the Role of Statistics at an international conference on climate and environment in Italy.
- NCEI has been working to provide archiving, discovery, display, and retrieval of global crowdsourced bathymetry data from mariners around the world.

AWARDS

- CSD’s Drew Rollins and Shuka Schwarz were awarded a CIRES Innovative Research Program grant to measure atomic chlorine, a trace species that has never been directly observed but is expected to play an important role in atmospheric chemistry.

TRENDING

This time-lapse video of a storm that formed just east of the NOAA Boulder campus on June 21 was last month’s top tweet.



BLDC: Boulder Labs Diversity Council
BOCC: Boulder Outreach and Coordinating Council
CCOG: Center for Coasts, Oceans, and Geophysics
CSD: Chemical Sciences Division
CWC: Center for Weather and Climate
EEO: Equal Employment Opportunity
ESRL: Earth System Research Laboratory
GMD: Global Monitoring Division
GSD: Global Systems Division
NCEI: National Centers for Environmental Information

NESDIS: National Environmental Satellite, Data, and Information Service
NIDIS: National Integrated Drought Information System
NOAA: National Oceanic and Atmospheric Administration
NOS: National Ocean Service
NWS: National Weather Service
OAR: Office of Oceanic and Atmospheric Research or NOAA Research
PSD: Physical Sciences Division
SWPC: Space Weather Prediction Center
WFO: Weather Forecast Office