Welcome to our New Graduate Students!

Kevin Craft graduated from the University of New Mexico with a B.S. in Mechanical Engineering. Kevin is working with Dr. John Horel.

Claire Schirle graduated from the University of Nebraska-Lincoln with a B.S. in Meteorology-Climatology and a B.S. in Mathematics. Claire is originally from the Bay Area of California. She is currently studying remote sensing and snow and works with Dr. Steve Cooper.

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Ross Petersen graduated from Reed College with a B.A. in Physics. He is originally from Steamboat Springs, Colorado and is an employee of Storm Peak Laboratory. Ross is working with Dr. Gannett Hallar while he earns his MS.

Tyler West is a Captain in the United States Air Force and has a B.S. in Meteorology and M.S. in Atmospheric Sciences from the University of Utah. He is working with Dr. Jim Steenburgh while he earns his Ph.D. through the AIFT program.

Peter Saunders is from Carroll County, Maryland and graduated from Florida State University with a B.S. and M.S. in Atmospheric Science. He is working with Dr. Zhaoxia Pu while he earns his Ph.D. through the Air Force Institute of Technology (AFIT) Program.

Zeqian Xia (Hazel) attended the Nanjing University of Information Science and Technology from 2012-2014 and Florida State University from 2014-2016 as part of a partnership between the two universities. She has B.S. degrees from both institutions. Hazel is from the Lu’an city of Anhui Province in the People’s Republic of China and is working with Dr. Jay Mace.

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Contribute Financially:
Financial donations allow our department to purchase new equipment, computers, and resources for our students. They also help fund our student-run Ute Weather Center and scholarships given to our undergraduates.

Donations may be made online here: https://umarket.utah.edu/uagive/index.php?gift_id=107. If you would like your donation to go to a specific departmental fund or endowment, please note this in the “Special Instructions” box. Thank you for your generosity and support.

If you would prefer to mail your donation to our office, please send a check payable to The Department of Atmospheric Sciences to:

University of Utah
Dept. of Atmospheric Sciences
135 S. 1460 E, Rm 819
Salt Lake City, UT 84112-0110
Phone: 801.581.6136
Fax: 801.585.3681
www.atmos.utah.edu

The Challenge and Rewards of Giving Back
by Department Chair, Dr. Kevin Perry
kevin.perry@utah.edu

It is that time of year when students approach faculty members to request reference letters for employment opportunities and graduate school applications. I’m always surprised at how hesitant some students are when making their request. After all, our service to students doesn’t stop just because the semester comes to a close. As faculty, we have an obligation to mentor students, provide career advice, and do what we can to help them obtain employment. We do this as part of our job, but it is also our duty to pay it forward because we have all benefited from others doing the same for us at some point in the past. As I reflect back on the people who had the biggest influence on my professional career, I know that there were some that would be quite surprised by the impact their seemingly insignificant actions had on me. My point being that it doesn’t necessarily take an extended, year-long commitment to make a real difference in someone’s life. It just takes a commitment to offer a sympathetic ear, a word of encouragement, a job tip, some timely advice, or a much-needed scholarship to a struggling student. The Department has many opportunities and needs when it comes to student mentoring and scholarships. Please let us know if you can help out in any way, big or small.

The University of Utah had the privilege of honoring Distinguished Alumnus Dell Vaughn McDonald with their Prestigious Award in October. Dell received a much needed upgrade during the fall semester. The room was repainted inside for details). His efforts have literally touched thousands of lives. I started thinking of what it means to give back in a broader sense when I learned that Distinguished Alumnus Dell Vaughn McDonald received the Jack Gallivan Legacy Award from the Utah Housing Coalition for his sustained positive impact on affordable housing and community development on behalf of the homeless in Salt Lake City (see article inside for details). His efforts have literally touched thousands of lives. I know that many of you, like me, want to make a positive difference in the world but struggle to find the time or don’t know where to begin. The challenge is to make the commitment of time, energy, or resources. The reward is the knowledge that you have helped make the world a better place for someone.

The Ute Weather Center Staff at the Open House

The Ute Weather Center, located on the 8th floor of the William Browning Building, received a much needed upgrade during the fall semester. The room was repainted and a window was added to the room to allow students to see through the hall to the outside.

The Department hosted an Open House in November, after the remodel was complete to introduce the new staff.

Pictured at left are Director Emeritus Karlie Rees, Chief Meteorologist Spencer Tangen, Assistant Director Zach Rieck, Director Kai Tawa, Chief Meteorologist Emeritus Cole Osborne, Forecaster Spencer Fielding, Intern Emma Calder, and Forecaster Lucas Bohne. Additional staff not pictured include Interns Matt Johnson, Samuel Smith, and Marcus Howell.

Ute Weather Center New Space and Changing of the Guard

Fall 2016

THE WASATCH

Academic Advisor Michelle Brooks represented the Department at the University of Utah’s Annual Major Expo in September. The event provides a chance for current U of U students as well as prospective students to learn more about majors and minors at the Atmospheric Sciences table watched a temperature inversion demo that was conducted by Michelle and juniors Kai Tawa and Spencer Fielding.
Introducing Dr. Gannet Hallar (Associate Professor)

By Dr. Kevin Perry, Department Chair

We are very pleased to announce that Dr. Gannet Hallar joined the Department of Atmospheric Sciences as an Associate Professor on July 1, 2016. She was hired under the auspices of the Transformative Scholarship Program, which provides faculty members across campus on interdisciplinary research topics related to Society, Water, and Climate (SWC) (http://www.utah.edu/faculty/swc/). The overarching theme of Hallar’s research is using high quality measurement of trace gases, aerosol physical and chemical properties, and cloud microphysics to understand connections between chemistry, the physical environment, and climate. She holds a B.A. degree in Physics from Truman State University and M.S. and Ph.D. degrees in Atmospheric and Oceanic Sciences from the University of Colorado at Boulder.

Dr. Hallar comes to us from the Division of Atmospheric Sciences at Desert Research Institute (DRI) where she held positions as a Research Professor and Director of Storm Peak Laboratory (SPL). SPL, which is located in Steamboat Springs, CO, is one of the few high-elevation mountain-top observatories in the world dedicated to atmospheric sciences research (https://www.dri.edu/stormpeak). Dr. Hallar has participated in 15 field experiments, has more than 45 peer-reviewed publications, and has received more than $3 million in external funding. She received the Peter W. Wagner Medal of Excellence for her career contributions in 2011 and the Regens’ Rising Star Award from the Nevada System of Higher Education Board of Regents in 2012. Needless to say, we are extremely excited that she joined our faculty and we very much look forward to working with her on new research projects.

Utah Ski Weather Forecasts the Greatest Snow on Earth

By Peter Veals, PhD Candidate and Utah Ski Weather President

Many on Atmospheric Sciences grad student in Utah has had to answer the question from our friends and family: “is it going to snow in the mountains this weekend?” A few of us who have spent time playing in the mountains have given some good informal forecasts like this for the most part we all realize one thing. It’s really hard to forecast mountain weather on the spot. Two of the keys to the success and skill of operational meteorologists, at organizations like the National Weather Service, are the continuity of the job and the ability to learn from senior forecasters. In other words, taking a look at the models once a month with little experience in the intricacies of the local mountain regions is difficult to make good forecasts for friends, family, or the public.

Utah Ski Weather started sometime around 2005 as a way to both formalize the forecasting we already did as grad students and to provide practice and experience for those with an interest in weather and meteorology. For those not interested in operations, it also provides a fun outlet for doing what we would already be doing in the office in January: talking about weather and skiing!

Our website has gone through many changes and updates in the years since, including a move to a “blog-style” written forecast, but we have largely maintained the same mission and core team.

We begin operations in late October or early November, and provide a forecast each evening throughout the ski season, usually shutting down in late April. The USW crew will keep an eye on the atmospheric westerlies, bringing their own unique perspective and style to the daily forecast. Depending on the skill of the forecaster, this can be a good or bad thing. In any event, it provides a lot of fun around the office when one of us nails the forecast (or busts terribly).

To see Utah Ski Weather’s forecasts, visit their website at: http://utahskiweather.com/
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Dr. Hallar is now a member of the Department of Atmospheric Sciences at the National Center for Atmospheric Research (NCAR). She has worked in the field of atmospheric chemistry for over 15 years and has made significant contributions to our understanding of the role of stratospheric and mesospheric aerosols in the global climate. She is currently working on developing new models to simulate the impact of aerosols on climate.

Donor Recognition

The students, staff, and faculty of the Department of Atmospheric Sciences gratefully acknowledge the support of the following donors. Large or small, your donations enhance the quality of our program and education of our students.

Friends and Alumni

2015-2016 Distinguished Alumni

Glenn D. Ahrens
Myron K. Ahrens
Abe C. Almeda
Quinon C. Almeda
Diana M. Benton
Tomas L. Beres
Christopher J. Brennan
Richard A. Brown
Bruce W. Budai
Graciela M. Budd
James Robert Campbell
Dominic C. Caradus
Paul A. Caradus
F. John Carradus
Lisa Carter
Barbara J. Cas
W. Robertson Case
e
Maja Celi
Janelle J. Dicks

Memorial Funds:

• NSF-CBET Graduate Fellowship Fund
• Atmospheric Sciences Faculty Research Support Fund

Relatives of Professor Shih-Kung Kao Visit the Department

By Dr. Kevin Perry, Department Chair

Professor Shih-Kung Kao was a professor in the Department of Atmospheric Sciences from 1960 until his passing in 1981. He served as Department Chair from 1972-1981. During his 20 years in the Department, he served as an associate professor on 66 M.S. theses and 5 Ph.D. dissertations. He was an active member of the University’s faculty, participating in interdisciplinary research topics related to society, water, and climate (SWC) (http://www.uthat.edu/faculty/swc). The overarching theme of Dr. Kao’s research was understanding the role of stratospheric and mesospheric aerosols in the global climate.

Dr. Kevin Perry met Ms. Shi Bing Gao during her visit to campus over the summer.

Distinguished Alumns Dell Vaughn McDonald Receives the Jack Gallivon Legacy Award

By Dr. Kevin Perry, Department Chair

It is always a pleasure for me to recognize extraordinary achievements by our alumni. Dell Vaughn McDonald (M.S. 1966) had a long and distinguished military career with the United States Air Force before retiring with the rank of Lieutenant General in 1986. The Department of Atmospheric Sciences formally recognized his achievements with our Distinguished Alumnus Award in 2009. With little fanfare and a lot of dedication, Vaughn volunteered to be the Director of the US Peace Corps for three years. He is a retired general and was awarded the highest civilian honor, the President’s Medal of Freedom. He is also a member of the National Academy of Engineering and the National Academy of Sciences. He received his Ph.D. from the University of Utah in 1966.

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PhD Candidate Quentin Coopman successfully defended his dissertation titled, “Evaluation of simulated tropical convective updraft hydrometeor properties and the impacts of aerosols on convective cloud properties.”

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In this Issue:
• Message from the Chair
• Ute Weather Center Update
• Introducing Dr. Gannett Hallar
• Utah Ski Weather Forecasts
• Relates of Dr. Shih-Kung Kao
• AMS Student Chapter Updates
• New Graduate Students

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