

THE SNAKE PLAIN WEATHERVANE

National Weather Service Pocatello, ID

Proudly Serving East Idaho and The Central Mountains

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Volume 3, Issue 1

The State Of Weather Forecasts Today By Dawn Harmon Lead Forecaster

Using sophisticated software, NWS meteorologists produce forecasts to meet many different needs. The forecast staff generates a gridded database of forecast values, and keeps this database up-to-date throughout the day. These values are used to create pictures of expected weather across time and space for every 2.5 km area in Eastern Idaho. We work with surrounding weather service offices to create a seamless forecast for inclusion into the National Digital Forecast Database.

There are many ways that you can take advantage of this technology. By visiting <a href="www.weather.gov/"www.weather.gov/"www.weather.gov/"www.weather.gov/"www.weather.gov/"www.weather.gov/"www.weather.gov/ pocatello and clicking on any point on the map, you can see your forecast customized for that specific location, directly from the gridded database. Click on a nearby spot, and see how the forecast may change with elevation!

You can also scroll down below the map and click on the graphical forecast links. These links will take you to either Local (Eastern Idaho only), Regional (Idaho, see the picture above), or the entire continental U.S. Then, just point your mouse at the information in the table, and the picture will update. As you can see by the image above, a picture can be worth a thousand words!

Warrings & Graphical National Radar Water Air Quality Salelite Climate Graphical Forecasts - Idaho e List | Page Help | Metric Units | Key (-12Hrs +12Hrs) Tonight Macritin Temperature Probability of 12 hr. penhability Precip ipm lipm 2am 5am 8pm | 11pm | 2am | 5am ipm Jipm Zam Sam Temperature Opm 11pm 2am 5am Develont Wind Speed & 8pm 11pm 2am 5am pm 11pm 2am Sam Wind Gust dpm | 11pm | 2am | 5am Amount of Precip QPF QPF Snow Amount Snow Amount Snow Wave Height Wave Height dpm 11pm 2am 5am 8pm 11pm 2am 5am telative Humidity Next Image Table MouseOver Effect On M. Temperature(F) Ending Fri Jul 18 2008 (Fri Jul 18 2008 122) National Digital Forecast Database Graphic created-Jul 17 8:50PM EDT

Summer 2008



Hydro Corner By Sherrie Hebert Service Hydrologist

A summary of the snow season might sound like this: "There's going to be flooding this spring," to "Looks like winter's over," to "We've got water in those rivers," as the snow came and went and came again this year.

Had the snow not stopped falling between February and March, we may have had another '97 on our hands, with respect to flooding. Those in Madison County did

experience some flooding, however, along the Henry's Fork at Rexburg as the river crested at 10.4 feet on May 23, nearly one foot above flood stage of 9.5 feet.

Now that the snow has melted, flash flooding is the summer threat facing Eastern Idaho and your input is crucial in helping the NWS carry out its mission to saving lives and property. Flash flooding is a rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek, beginning within six hours of intense rainfall or a dam or levee failure.

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Practice Like You Play By Vern Preston Warning Coordination Meteorologist

A highway accident involving hospital-grade nuclear materials in a Tribal Nation, earthquakes, weapons of mass destruction found at a school, lost snowmobilers in the back-county, water rescues on the Snake River, pandemic flu, aircraft accidents, dam failures, and railroad yard accidents - what do they all have in common? The need for real-time weather information. Forecasters use these local table top and functional training opportunities to assist our first responders and emergency managers with spot weather forecasts. We have found that attending these events improves the staff's understanding of our customers' needs. The exercises also help participants to better understand how different weather situations can affect their response and recovery efforts. In some cases, the Warning Coordination Meteorologist or Incident Meteorologist (IMET) are directly involved in the exercises. In other cases, the entire operations staff gets involved, just like it was the real thing. Either way, great lines of communication develop. In addition to the staff's assistance in providing simulated weather for exercise scenarios, they also provide real-time weather forecasts for safety purposes while the training is taking place. Have you used your IMET today? Remember, they're not just for fires, but for "all hazards."



WFO Pocatello IMET Jack Messick provides a weather briefing to safety personnel prior to a Union Pacific railroad yard hazardous materials accident functional exercise in Pocatello, Idaho

The Great Outdoors By Rick Dittmann Meteorologist In Charge

Idaho offers so much to do. Anything we do outdoors is that much more enjoyable because of the beauty of our state. Summer time has us spending time in the mountains, at the lakes, along the streams and even in our desert. As such, there are some natural weather hazards we need to consider.

Summer thunderstorms bring much needed

rain and often a pleasant cool down to our hot afternoons. They can also bring strong, erratic and occasionally damaging wind gusts in the form of micro-bursts. The beneficial rains can turn excessive and cause flash floods. Hail, while usually small in Idaho, can grow to golf ball size and cause terrible damage to property and crops. Every thunderstorm produces lightning which is a killer and causes many of our summer wildfires. The strongest thunderstorms can occasionally generate tornadoes in the Gem State.

We cannot control these elements, but we can do a few things to better prepare for them. Before venturing to the great outdoors, get ahead of the weather by checking out the forecast for your area. A quick visit to weather.gov/Pocatello will enable you to get an idea of how cool the nights will be, how warm the days will be, if it will be windy and if thunderstorms are expected. Knowing these things will allow you to better prepare your clothing and your shelter. It might even help save your life.



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Super-resolution Radar Data By Dean Hazen Science and Operation Officer

Recently the national network of NWS Doppler radars was upgraded to enhance their storm detection capability. Specifically, the computer software which processes the raw radar data was modified to remove data smoothing and to leverage overlapping data to increase resolution.

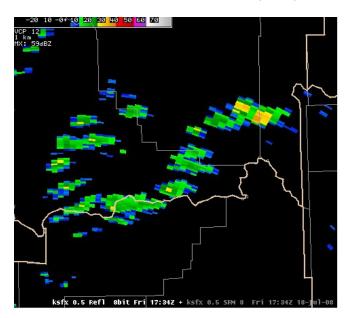
The NWS Doppler radar that covers SE Idaho was recently upgraded and forecasters at the Pocatello WFO can now display and analyze the higher resolution datasets.

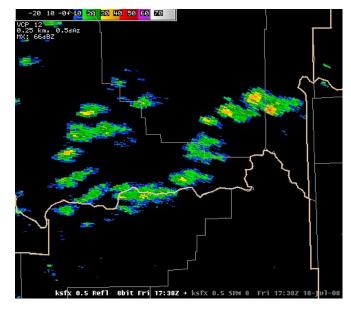
A comparison of the normal and super resolution data shows the effect of the enhanced resolution at a range of approximately 100 to 120 nautical miles from the radar site.

The "normal" resolution for data at this distance from the radar is approximately 1km (~.54mi); however, the new processing soft-

ware allows "super" resolution data to be provided at approximately I/4km (~.13mi) resolution. The effect is that the data appears a bit noisier; however, this also allows the forecaster to see more detail within the storm.

The difference is pretty amazing and will help forecasters get a better picture of thunderstorm evolution. Ultimately, this should result in better detection of severe thunderstorms capable of producing strong surface winds, large hail and tornadoes.





Left Image: Normal Resolution; Right Image: Super Resolution

Local Employee Wins Award By Dan Valle Lead Forecaster

Dave Phelps, Cooperative Program Manager for our local weather service office, won the 2007 National Weather Service Isaac Cline Award for the Western Region. Only nine employees across the Western Region receive this award each year.

In 2007, our office had 100% visitation at every cooperative observation site. Dave cultivates good relationships with every observer and is proactive and responsive to emergencies at the sites as they arise.

Dave is humbled by the award. He recognizes that this is a team effort and gives a lot of credit to fellow employee, Paul Angel, who helps Dave with the administrative part of the job.





Weather Observers Honored By Gary Wicklund Observation Program Leader

NOAA dedicates itself to enhancing economic security and national safety via prediction and research of weather and climate-related events. NOAA also provides environmental stewardship of our nation's coastal and marine resources. Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA works with its federal partners and

more than 60 countries, to develop a global monitoring network to predict and protect the planet it observes.

Over 70 volunteer weather observers across southeastern Idaho and northern Utah provide valuable weather reports to the National Weather Service (NWS), a division of NOAA. These reports help NWS more accurately predict the climate of the region. Cooperative observers are among an elite group of people contributing their time to accurately collect

weather information for NWS climate forecasts as part of the Cooperative Observer Weather Program (COOP) of nearly 12,000 volunteers. Often, many of these observing COOP locations pass on the responsibility within their family, making this a tradition often lasting for over a century.

The table below shows recent observers who have been recognized with length of service awards.

OBSERVER	LENGTH OF SERVICE
Dr, and Mrs, Lloyd Haderlie (American Falls)	10 years
Mr. Lynn Harmon (Shoshone)	10 years
Mr. Dale Meyer (Iona)	10 years
Mr. Leland Miller (Fort Hall)	15 years
Mr. Mike Childs (Shoshone)	20 years
Mr. Tom Kellom (Dubois)	35 years
Mr. Mike Praegitzer (Shoshone)	50 years

Winds of Change in the NWS By Dan Valle Lead Forecaster

Pocatello forecasters Mike Cantin and Brian Waranauskas recently received promotions as senior forecasters. Both promotions required a transfer. Mike is now working at the NWS forecast office in Tampa, FL while Brian is located at the NWS forecast office in Great Falls, MT. In addition, former intern Mike Reidy needed to leave the weather service so that he could be closer to family in Seattle, WA.

Tom Renwick is one of Pocatello's new fore-casters. Tom was born in Bromham, England. He moved to the U.S. on January 10, 1979 and became a U.S. citizen in June of 1993. Tom is a 1993 graduate of Penn State University. He joined the Air Force in June of 1995 as a division weather officer. His first assignment was in Fort Drum, NY where he briefed helicopter pilots on what weather they could encounter while performing training missions. In 1997, he was transferred to Osan AFB in South Korea. He provided daily weather briefings to the Air Forces commander, a three star general. After Korea, Tom completed his master's degree

from the Air Force Institute of Technology while working at Wright-Patterson AFB in Dayton, OH. In 2000, Tom moved to the Air Force Combat Climatology Center (AFCCC) in Asheville, NC. While at AFCCC, Tom was in charge of two teams. The first team provided climatological data which aided in the positioning of new technology. This team also provided weather information for war games that were conducted by the military. The second team handled special requests for weather information from the FBI, CIA, NOAA and even the President. For example, on September 11th, 2001, the secret service needed weather information so that they could make a decision on when President Bush could safely return to Washington D.C. From 2002 through 2005, Tom served as the flight commander for Pope AFB in Fayetteville, NC. Tom was the personal weather briefer to the base's wing commander. He assisted in the decision to evacuate the base for eight hurricanes. During this time, Tom was deployed to Qatar. He provided weather information for the missions during the peak of the wars in Iraq and Afghanistan. From 2005 to 2007. Tom was reassigned to Ramstein, Germany. While in Ger-

many, Tom worked for a four star general and was in charge of the overall budget for all weather teams throughout Europe. This was one of Tom's hardest jobs because every decision impacted all U.S. interests in Europe. Tom left the Air Force in 2007 and joined the NWS Pocatello family late last year. He and his wife, Christine, have been married for 6 years and have two girls, Julia and Paige.

Travis Wyatt is Pocatello's latest intern. Travis has a degree in Mathematics from the University of Arkansas and a degree in Meteorology from Texas A&M. Travis entered the Air Force in 2001 and worked in the weather hub in Tucson for two years. Then, Travis worked at Columbus AFB in Columbus, MS. The base is a training center for pilots and Travis's role was to give the weather briefings which impacted 300 flights per day. During his time in Columbus, Hurricane Katrina struck and Travis had an important role providing weather forecasts for the rescue operations. Travis provided similar support during Hurricane Ivan while he briefly worked in Panama City, FL. Travis has worked for the Boy Scouts for several years and is still active. During one summer, Travis

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War Stories By Tom Renwick Forecaster

After being commissioned as a Second Lieutenant (2Lt) in the US Air Force, my first assignment was to Ft. Drum, NY with the 10th Mountain Division. Every Army post has Air Force weather personnel assigned to provide all meteorological support. This stems from the National Security Act of 1947 that transformed the US Army Air Forces into the US Air Force. One provision of that act was the USAF would provide all weather services to the US Armed Forces.

As a 2Lt, I was in charge of providing weather support (forecasts, briefings, weather effects to Army operations, etc.) to several Army battalions. One of the battalions was ordered to participate in an exercise at the Joint Readiness Training Center in Ft Polk, LA in late May. The exercise simulates war from deploying from the post (getting equipment from NY to LA to include helicopters, tanks, Humvees, food, water, etc, a MASSIVE undertaking), operating in the field (going to war), to re-deployment (getting all the stuff back to NY). I was the Staff Weather Officer during the exercise, directly responsible to the Battalion Commander. We had to live 'in the field' for 3 weeks and perform duties exactly as we would in real war-time. This includes digging ditches, setting up checkpoints, setting up and living in tents, wearing full body armor, carrying weapons, etc.

One of my duties was to provide briefings to the Battalion Commander. The briefs occurred four times a day and included what weather was expected and how it would affect the troops (precip, temps, T-storms, fog, etc). Of course, being in the field means that the equipment we use is very limited. I was lucky during this exercise because ONLY two pieces of equipment broke on the way down to Ft Polk, leaving me with Visible Satellite and nothing else.

While preparing for my first forecast of the exercise, we had stratiform clouds with no sign of convective activity. Rainshowers were occurring around the area and looked to be the main concern for the next 24 hours. My brief-

ing to the commander went quite well, I thought. As I was finishing up he asked, "What are the chances of thunderstorms?" My reply, "No chance, sir. We have cloud cover and decent stability that will persist through the day and no sign of anything to kick off any thunderstorms". Almost immediately after saying that, everyone in the tent heard a loud crack of thunder. My heart sunk as I knew what the next question would be. "Was that....?","Yes sir, it sure was". Luckily, the commander had a sense of humor and commented on how he loved when Air Force guys were wrong...for some reason it made him feel better. Everyone in the tent got a kick

out of the comment. I felt somewhat ashamed but chalked it up as a learning experience. Without working equipment or data, it's almost impossible to make a 100% accurate forecast. Heck, it was probably the same conditions that I would experience if we really DID go to war.

Upon return to my unit, I told everyone what had happened and they all laughed and told me about the times something similar had happened to them. Then I heard the weather mantra in the Air Force...maybe the NWS too..."People may not remember when you're right...but they'll ALWAYS remember when you're wrong."



Forecaster Tom Renwick

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As a NWS Weather Spotter, you can help us save lives from flash flooding. Any time you witness a flash flood, please contact the Pocatello Weather Forecast Office immediately with your report. As always, include your spotter number and/or name, location, time of event and a description of what the water is doing, such as flowing over roads, flowing over banks, etc.

Thank you for your continued dedication and have a wonderful and safe summer!

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ran the summer camp in Salmon, ID and has lived in Jackson, WY. In his spare time, he enjoys photography, hiking, backpacking, kayaking and basketball.

Brand new to the office is forecaster, Kerry Hanko. Kerry arrived here from the NWS office in Juneau, AK where she worked as a forecaster. Kerry has experience with GIS which will be a valuable asset as the weather service advances its technology. Previous work experience also includes her time at Weatherbank, Inc. Kerry is married and has one child. We will include more about Kerry in our next newsletter.

The NWS Pocatello Staff

Meteorologist-In-Charge: Rick Dittmann Administrative Support Assistant: Karrie Schmidt Science And Operations Officer: Dean Hazen Warning Coordination Meteorologist: Vern Preston

Electronic Systems Analyst: Rick Stork Observation Program Leader: Gary Wicklund Information Technology Officer: Matt Williamson Lead Forecasters: Dawn Harmon, Jeff Hedges, Mike Huston, Bob

Survick and Dan Valle

General Forecasters: Kerry Hanko, Greg Kaiser, John Keyes, Jack Messick, and Tom Renwick

Meteorological Intern: Travis Wyatt

Hydrometeorological Technicians: Paul Angel, Dave Phelps

Service Hydrologist: Sherrie Hebert

Electronic Technicians: Richard Denning & Bryan Tilly