Western Region Newsletter

APRIL 2012

National Weather Service

In This Issue:

Regional Director's Message

To Western Region Employees,

Spring has arrived and with it, change has also arrived, like the time change, the changing weather, and the Regional Office. We have been working on exciting changes to the regional office over the past several months, and, finally received approval to implement a new regional office structure, effective March 20, 2012. We didn't add or remove any positions, simply realigned with a different emphasis. A question you may be asking yourself is "why reorganize"? There are several reasons. The previous divisional structure was not optimal to support the new NWS Strategic Plan which has a strong emphasis on decision support services, and more cohesive operations in the Region. Previous divisions were viewed as "stove-piped" and communications across the divisions was not optimal. I wanted to provide a structure that would be more successful in building expertise and backup in program areas as we move into the future, focusing on our strategic direction as an agency. I am hoping that the new structure along with defined cross-divisional workgroups will address these areas and move us into the future.

So, what has changed? The most significant change was to align Divisions along functional areas. Program requirements will be handled by the new "Program Support Division". Development will be handled by the "Science and Technology Infusion Division". Regional Operations, Testing and Implementation will be the focus of the new "Operations and Decision Support Division". Sustainment will lie in the "Systems and Facilities Division". Our Administrative Management Division remains unchanged and takes care of resource management. The players may have moved to a different chair, with a different name plate, however, they all remain here to support all levels of the agency, especially the field offices. For details on the new organizational chart and functional areas of responsibility please click on the link below.

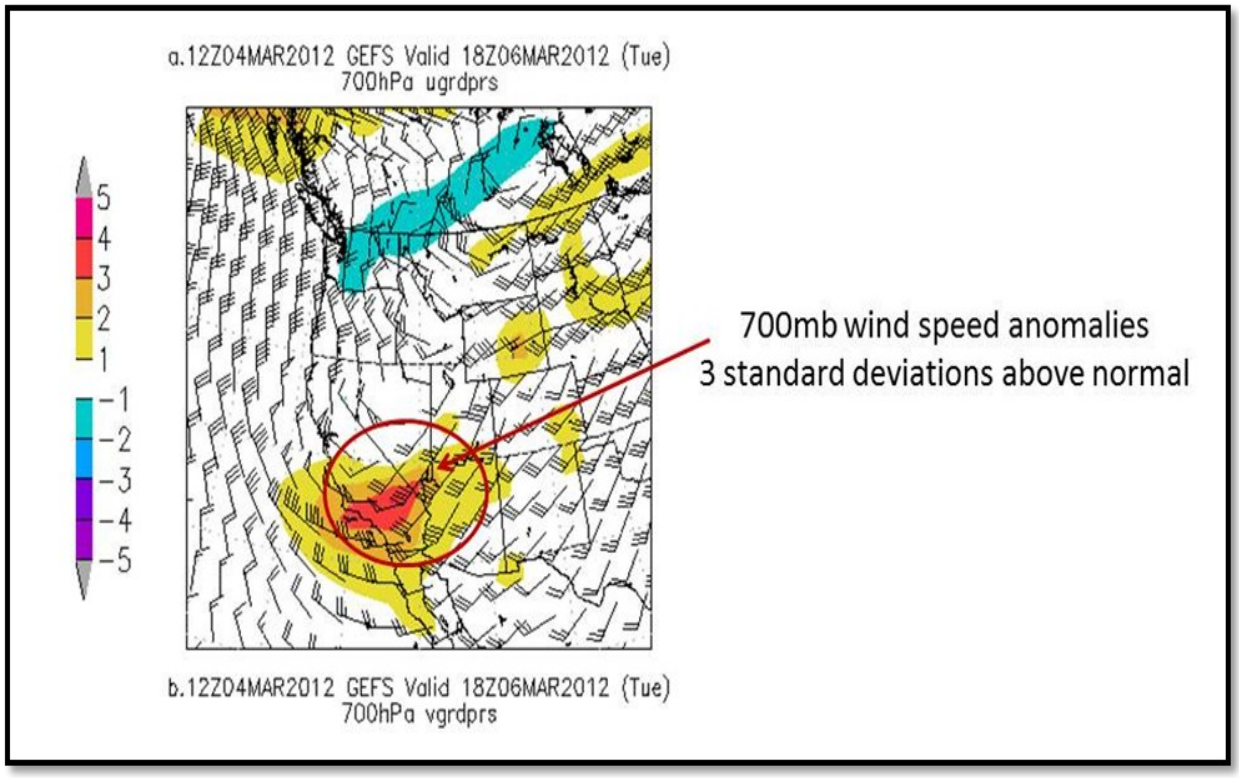
http://wr-s-sharepoint/WRH%20Position%20Flow%20Chart/WR%20Reorganization%20Org%20Chart%20and%20Personnel.pdf

Enjoy the Spring!

~Vickie

WFO Las Vegas, Nevada DSS for High Wind Event - March 6, 2012

Excellence in Decision Support Services has become standard at many NWS Offices, and several Western Region WFOs are leading the way in this cultural shift. WFO Las Vegas, Nevada serves the sparse population of open desert communities as well as a major metropolitan area of over 1.5 million people. The high wind event that impacted a great deal of Nevada on March 6th gave WFO Las Vegas a chance to shine, stepping up their DSS game and providing long lead times for State and local Emergency Managers, as well as McCarran International Airport (ranked 9th in the world for aircraft movement - 2010).



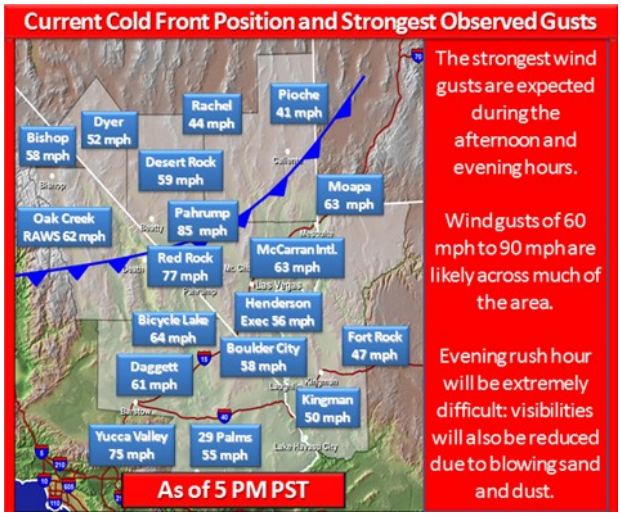
On Sunday, March 4th, WFO Las Vegas forecasters utilized the 'forecast confidence toolkit' GEFS Anomalies which highlighted the significance of the upcoming wind event in relationship to the 700mb standardized normal for winds (see image below).

Armed with an increasing confidence in a high impact event, WFO Las Vegas began issuing weather stories on March 4th to highlight the potential for strong, damaging winds. The WFO posted a web briefing video to Facebook and emailed daily informational briefings to their partners. An Airport Weather Warning was issued nearly 24 hours in advance of the onset of high winds and reduced visibilities in blowing dust. McCarran Airport had delays and diversions due to weather, and the advanced lead time gave airport personnel time to prepare for the upcoming event. The WFO made great use of the red banner at the top of their web page, highlighting expected winds of 60-90 mph. The red banner was updated several times as the event unfolded and was linked to the latest weather graphic.

WFO Las Vegas, Nevada DSS for High Wind Event - March 6, 2012 (Continued)

Local WFO Management supported several key staffing decisions made by the Lead Forecaster Monday in preparation for the active day ahead on Tuesday. Arrangements for extra staffing were finalized with staggered starting times, ensuring adequate coverage was available throughout the event. The SOO and the met intern staffed the DSS Communications desk and successfully utilized Hoot Suite for Tweets, updated Facebook routinely, and issued hourly nowcast Weather Graphics to highlight the current position of the cold front and location of the strongest winds and impacted areas. Feedback on the DSS efforts was positive and included the following quote from the City of Las Vegas EM, *"I shared the Weather Story graphics with my management…and they were impressed. Good Job!"* On Facebook, the WFO received more positive feedback including a post from the general public stating, *"Dislike the wind but like these updates - thanks!"*

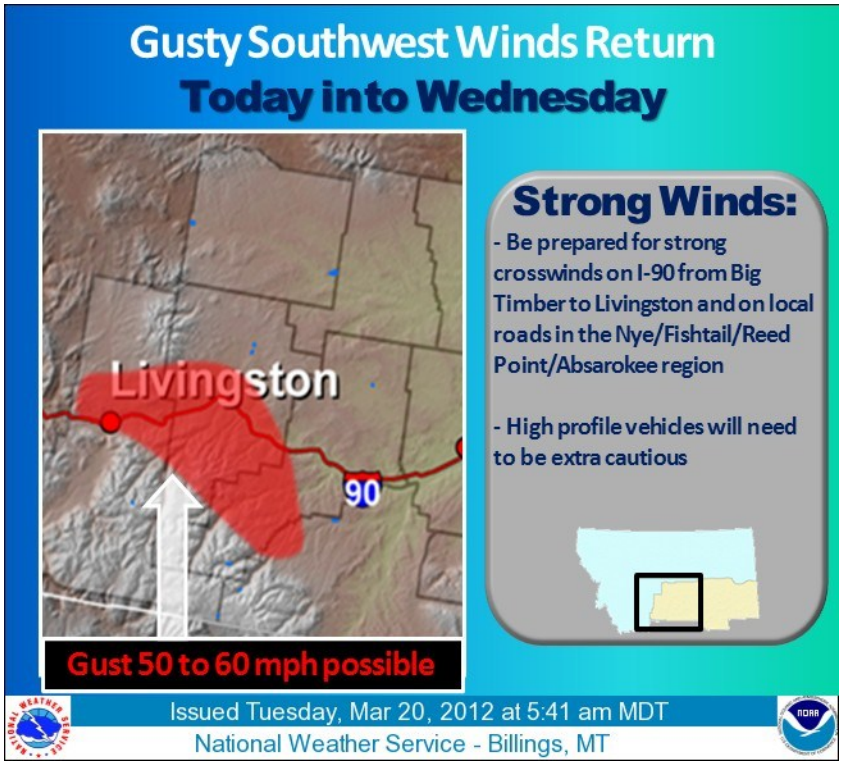
Across the CWA, winds were clocked at 55-80+ mph, with McCarran Airport peaking at 63 mph (7th highest wind gust ever recorded for March). Visibilities to below 1 mile in blowing dust and sand impacted many Las Vegas communities, airports, major highways and interstates. The information and services provided for this event were timely, accurate, and provided significant enhancements to legacy products. The media utilized the WFO DSS efforts in near or real time, getting the information out to the public as early as Sunday evening (48 hours before the event). Overall, WFO Las Vegas was innovative with their DSS messaging and had a positive impact on their community and the people they serve. On behalf of WR and our Regional Director Vickie Nadolski, thank you WFO Las Vegas for continuing to lead by example - well done.



Graphical weather images issued by WFO Las Vegas, Nevada on March 4th (left) and one of the nowcasts (right) during the high wind event of March 6th.

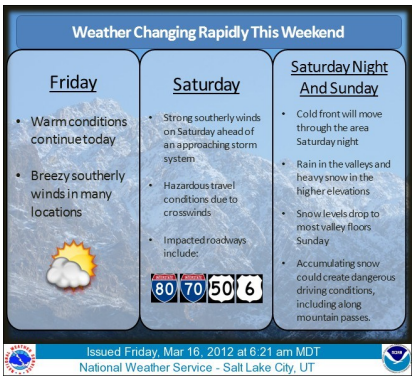
Weather Story of the Month

This month's winner comes from WFO Billings. The graphic was originally created for a wind event in the middle of March and then modified by Meteorologist Intern David Church for another wind event a week later. With the modification, they introduced the inset map in the lower right hand corner, to help show customers where the zoomed in map on the left is actually located. Sometimes when a zoomed map is displayed, our customers have a difficult time knowing where the area of concern is located. As with most items in a weather story, it is important not to overuse the inset map. Use it when it provides the most bang for the buck. The larger, regional map was created using ArcGIS. This particular graphic also ties in some of the other principles we have been highlighting the past few months. A simple graphic, with the most important impacts listed in easy to read fonts and colors, makes this the Weather Story of the Month. Great job WFO Billings!

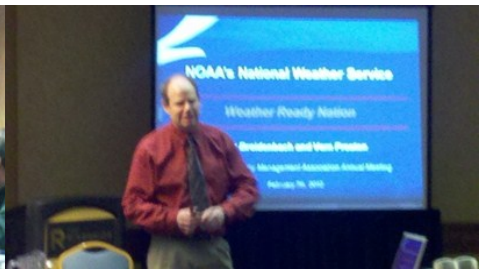


Weather Story Tip of the Month

Interstate and highway signs are something people recognize or are familiar with on the road. Including such features in a Weather Story can quickly help people identify routes they may be traveling on a particular day. WFO Missoula started this trend by including common highway pass signs in their area on weather stories. This was spearheaded by General Forecaster Corby Dickerson from WFO Missoula. Nanette Hosenfeld, WFO Salt Lake City, worked with Corby and took it a step further and gathered common Interstate and Highway symbols over Utah and made them easily accessible for the staff to use. Great job Nanette and Corby!



Idaho Emergency Management Association Conference



Vern Preston and Jay Breidenbach brief Idaho County Emergency Managers

The Idaho Emergency Managers Association (IEMA) holds an annual week-long meeting of the Idaho Association of Counties (IAC). Breakout meetings of various county elected officials start the week including county commissioners, sheriffs, clerks, treasurers, coroners etc. the latter half of the week are general sessions of the IAC.

The 2012 Idaho Emergency Management Association (IEMA) conference took place in Boise and was attended by County Emergency Coordinators from Idaho. The theme of this year's conference was "Engaging the Whole Community". County EM coordinators praised the NWS for our support throughout the year, especially during the active flood season in 2011 during their best practice session.

Jay Breidenbach (WCM Boise) and Vernon Preston (WCM Pocatello) presented at the conference and highlighted information on Idaho's involvement with our new vision of a "Weather Ready Nation" and projects and partnerships we are fostering from each office that services Idaho.

WFO Boise's Annual Discover Engineering Day

Bob Diaz, Jay Breidenbach, and Troy Lindquist participated in the 8th annual Discover Engineering Day at Boise State University which was attended by over 4000 people. They discussed the science of extreme weather in the context of a "Weather Jeopardy" game in six sessions throughout the day. Two Teams competed to be Weather Jeopardy Champions and various scientific weather demonstrations were conducted during the course of the games. In addition, weather safety information was provided in a fun and interactive way.

Troy Lindquist and Jay Breidenbach conducting weather experiment during the NWS weather jeopardy session at the Boise State University's Engineering Day.

CFC Campaign Celebration at WFO Boise

The CFC campaign was very successful and exceeded the office goals. Previously, the total dollar amount of $15600 (two years ago) was the all-time high; however, this year the goal was set at $16k and the Boise office gave $17k. In these tough economic times, this is quite an accomplishment. Additionally, the office overall participation for this year's campaign was 96%. The CFC campaign manager was Travis Mayer, for the third year in a row. Travis also served as a CFC loaned executive and supported 8 other agency campaigns within the National Interagency Fire Center.

Every year, the agencies compete (small, medium and large) to have the best overall campaign. The criteria focus on total dollars, total participation, and average pledge. In order to be named the best overall campaign; an agency must show improvement in all three areas and be recognized by the CFC board of directors as having the best campaign. This year's overall winner for the medium sized agencies was WFO Boise! This is the seventh time in the last ten years that the Boise office has held this distinction. The office held a CFC Campaign Celebration (see picture above).

Chinese Delegation Visits Oxnard

CMA officials visiting the WFO Los Angeles/Oxnard office pose for a group photo in the WFO's NOAA Global Monitoring Exhibit.

WFO Los Angeles/Oxnard recently hosted a distinguished delegation from the China Meteorological Administration (CMA). The group was represented by 13 of the 31 Chinese Provinces, and also included officials from the CMA General Office in Beijing. The group was primarily comprised of division chiefs and directors in charge of areas such as emergency disaster mitigation, climate, personnel, science and forecasting, policy, and international cooperation. Of note, 3 provincial bureau directors were in the group, along with 4 provincial deputy directors. The group was given a presentation on NWS operations, followed by a tour of the WFO's operations area, and a tour of the WFO's NOAA Global Monitoring Exhibit. Cecil Ma, forecaster at CWSU Palmdale and fluent in Chinese, assisted with the tour by providing interpretation and leading the tour of the exhibit. The group was very interested in knowing more about the dual-pol radar upgrade, NOAA Weather Radio, and the StormReady and Tsunami Ready programs. While in the U.S., the CMA delegation also visited NCEP. More information on the CMA can be found at: http://2011.cma.gov.cn/en/.

WFO Participates in Billings Clinic Science Expo

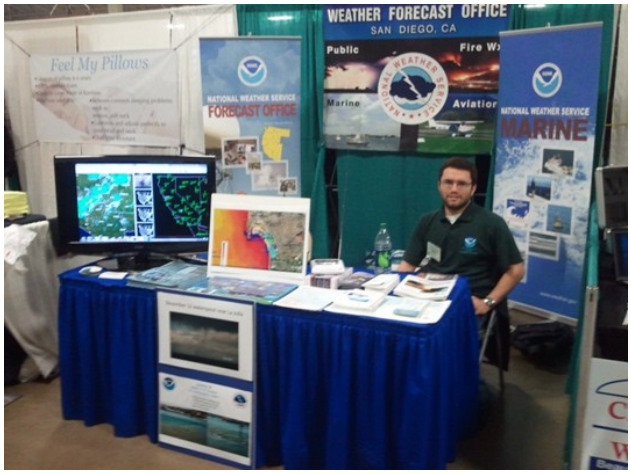
On March, 24, 2012, WFO Billings employees Joe Lester and Sean Campbell staffed an informative booth at the Billings Clinic Science Expo, part of a regional science fair for southeast Montana. The booth featured the popular Van de Graaff generator to demonstrate lightning and a tornado generator to explain how tornadoes form. Approximately 300 people, most of whom were school-aged children, stopped by the booth during the day to interact with the displays and learn about various aspects of weather safety. The evening prior, several Billings staff members; SOO - Marc Singer, Forecaster - Julie Arthur, and ET - David Smith) also volunteered to judge science projects as part of the event. In the picture below, Joe Lester explains how the Van de Graaff generator works, while two children watch the tornado generator.

Sierra Club Basic Wilderness Course

Sierra Club training group attending the Basic Wilderness Couse in La Jolla. About 170 students attended the training conducted by WFO San Diego. This was followed by medical training on altitude impacts. Photo by Alex Tardy

Alex Tardy gave an hour presentation to a packed room with 170 students of various ages as part of the Sierra Club Basic Wilderness Course. The course is a 10 week session held every year and the focus is mountain hazards and the anticipation of impact weather. The NWS presentation focused on mountain driven thunderstorms which occur several days a year during the monsoon season across the mountains in the San Diego CWA. There were also discussion and demonstration of elevation thunderstorms and the similar impact that may occur. There were special interest by attendees for the time lapse photography (provided by Stefanie Sullivan) and videos of significant wind and hail which occurred in 2011 and captured by local spotters.

Fred Hall Boat Show visits Del Mar Fairgrounds in San Diego County



Steve Harrison attends the NWS San Diego booth at the Fred Hall boat, fishing and travel show. Roger Pierce and Alex Tardy also staffed the booth. Photo by Alex Tardy

The large national Fred Hall boat, fishing and outdoor travel show visited San Diego County from March 22-25. NWS San Diego staffed a booth each day with a focus on marine weather support to fishermen and boaters. In recognition of Tsunami Awareness week (March 25-31) several types of brochures were distributed that focused on Tsunami impact, as well as the new CalEMA brochure for boater awareness and for Japanese tsunami marine debris information. To attract attention to the booth real-time weather radar and satellite, and videos were displayed on a TV display for those passing by. This worked well on the final day, Sunday, as precipitation approached the show. There was also a continuous NOAA weather radio broadcast and recent weather photos on display.

WFO San Diego Media Workshop

WFO San Diego held a full day media workshop on March 6 for TV, print and radio media. The workshop consisted of demonstrations of our products and services guide, a hands-on tour of our web page such as climate information and forecasts, a tour of office, a map briefing, lunch, dual-polarization introduction, media interviews and lunch. Miguel Miller and Alex Tardy conducted the workshop and it was the first since 2009. During the rest of the year we plan additional individual visits to continue.

Weather briefing in operations given to some of the media workshop attendees. Alex Tardy and Roger Pierce in the foreground. Photo by Jamie Moker

WFO Monterey Tsunami Awareness Campaign

Pictured left to right: Rick Wilson (CA Geological Survey), Sandra McKenzie (CalEMA), Kevin Miller (CalEMA), Laurie Lang (Santa Cruz Co.), Paul Horvat (Santa Cruz Co.), Tom Evans (WCM), and Kevin Baker (MIC)

WFO Monterey recognized two counties for TsunamiReady certification in March as part of the Tsunami Awareness campaign. Santa Cruz and Monterey Counties are the latest additions to the TsunamiReady certification program, and the community of Pebble Beach will be recognized by the end of the month. Tom Evans (WCM) worked closely with community, state, and emergency management officials to complete certification requirements, and increase public awareness to better respond to Tsunami hazards. Road signs were placed in these communities to warn residents and visitors of tsunami hazard zones and define evacuation routes. In addition, StormReady certification was achieved this month in the communities of Pacific Grove and Pebble Beach.

Montana Mutual Aid Meeting

These pictures were taken during the Spring 2012 Montana Mutual Aid meeting held in East Helena, MT on March 3rd. Ben Schott, Great Falls WCM, provided a presentation on a recent large grass fire near Browning, MT and a seasonal outlook for the fire season. In addition, Ben helped on the inclusion of Spot Weather Forecast information into their Field Operations Guide that has become a valuable component to assist emergency personnel across the state. Ben stressed how the four Montana NWS offices can help with decision support and planning before and during events and the importance of continued interaction with firefighters in Montana who constitute Montana Mutual Aid.

Duck Valley Indian Reservation Renews as StormReady Community

Pictured from left to right: Jeff Rood (WFO LKN Fire Program Focal Point), Brent Hunter (Fire Management Officer and Emergency Manager) and Michael Fitzsimmons (WFO LKN WCM)

Beginning in April of 2006, the Duck Valley Indian Reservation in Owyhee, Nevada was the first reservation to successfully fulfill the requirements of a StormReady Community. Since that time, Brent Hunter Tribal Fire Management Officer and Emergency Manager has been on a mission to continue enhancing the warning communication infrastructure for the reservation. This has been accomplished through the development of a mitigation plan for Wildhorse Dam, a Fire Management Plan, and a FEMA All Risk Mitigation Plan along with annual spotter training sessions for the tribal community. These events had resulted in the Duck Valley Indian Reservation being renewed as a StormReady Community in 2009.

Following the first StormReady renewal, Brent is working with other tribal members to form a CERT team within the reservation. In addition, the reservation has acquired their own radio station (102.7 FM) to alert the reservation of watch and warning information. As a result of these accomplishments the Duck Valley Indian Reservation has successfully been renewed a second time as a StormReady Community.

Elko County Science Fair

The 30th annual Elko County Science Fair was held from March 12th to 15th at the Elko Convention Center. The Elko Science Fair is a regional affiliate of the Intel International Science and Engineering Fair. This year's event had a record 535 science projects to be judged by individuals from Barrick, Newmont, the Bureau of Land Management (BLM), the National Weather Service and other community members. A total of 120 judges including five staff members from the Elko Forecast Office (Lawrence Whitworth, Pamela Szatanek, Donny Dumont, Ray Martin and Michael Fitzsimmons) volunteered their time to evaluate the grade school through high school science projects. The weather service employees were responsible for judging nearly one-third of the science projects displayed. With the completion of the judging Tuesday evening, there was a tie for this year's grand prize. Pictured left to right are Kirsten Perry for her project titled, "An Evaluation of Tannins and Their Metal Absorption Properties for Remediation of Wastewater" and Kayla Carpenter for her project titled, "Efficiency of Silicon Carbide Transistors". Kirsten received a $250 award from Barrick while Kayla received a $250 award from Newmont. Each student received various awards from other local entities.

NWS Reno Forecasters Special Guests at Nevada Children's Discovery Museum

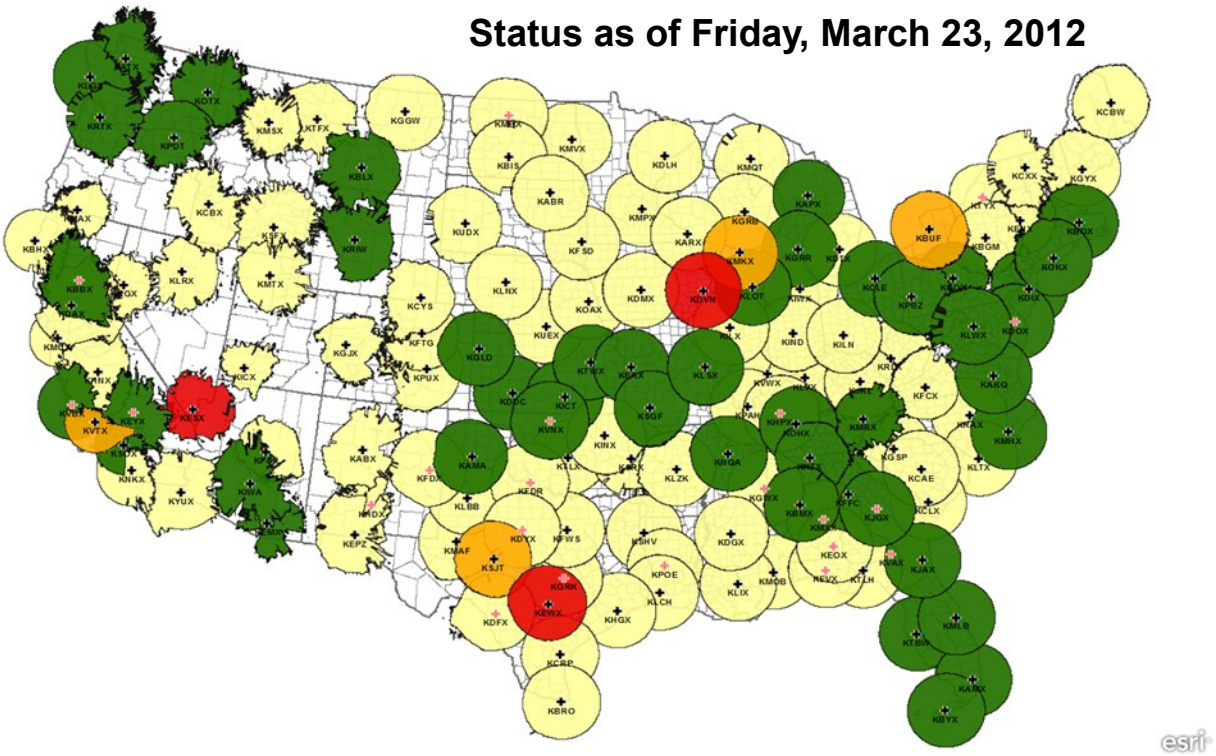
Senior Forecaster Alex Hoon and WCM Rhett Milne participated in the "Visiting Scientist" series at the Nevada Children's Discovery Museum in Reno on Saturday, February 25th. Every half hour a weather presentation was provided to kids and parents in a special activities room located in the middle of the museum. The interactive presentations focused on the ingredients of weather systems, as well as instruments and weather data used by meteorologists in making a forecast.. In addition, numerous hands-on weather experiments and instruments were used to complement the presentation. Throughout the day, over 200 parents and children attended the special weather sessions.

The Discovery Museum opened in the fall of 2011 with the mission of bringing a fun, family-based learning experience to the Reno Community. Forecasters from the Reno office have partnered with the museum and will participate in the "Visiting Scientist" program on a semi-annual basis.

Dual Pol Installation Status: The five dual pol installation teams are making excellent progress as they crisscross the United States. Las Vegas, Los Angeles and San Francisco are the next upgrades for Western Region. The next major milestone for the program will be the first upgrade of a dual channel radar at Yuma in April.

The dual pol installation schedule has been distributed to all WR offices and is available at: http://www.roc.noaa.gov/WSR88D/PublicDocs/DualPol/DPstatus.pdf.

General information about the dual pol program can be found at: Radar Operations Center (ROC) http://www.roc.noaa.gov/WSR88D/dualpol/ and Warning Decision Training Branch (WDTB) http://www.wdtb.noaa.gov/.



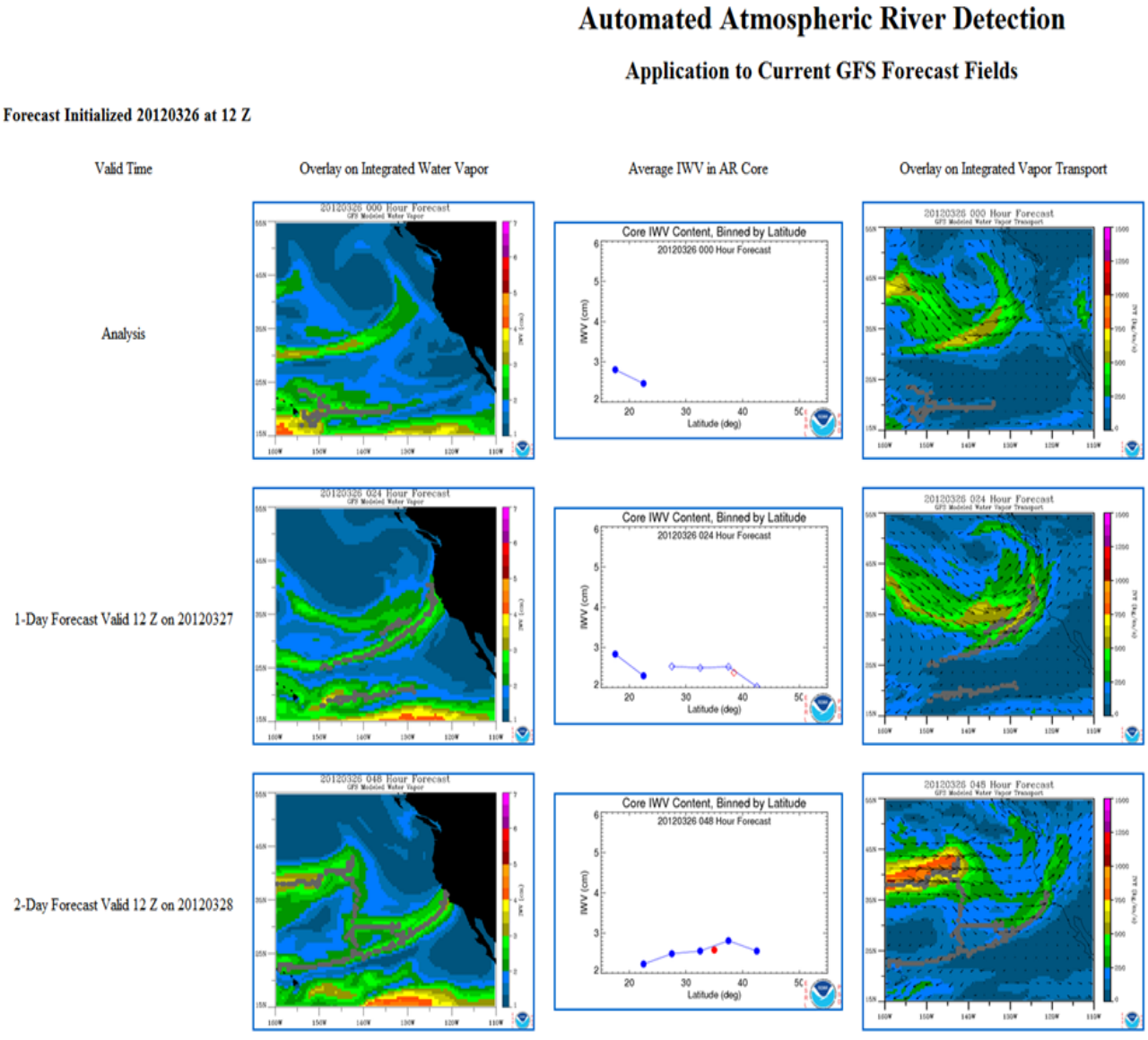
Installation Status	NWS	DOD	FAA
Completed	41	6	0
In Progress	3	0	0
Scheduled w/in 14 Days	4	0	0
Pending	74	20	12

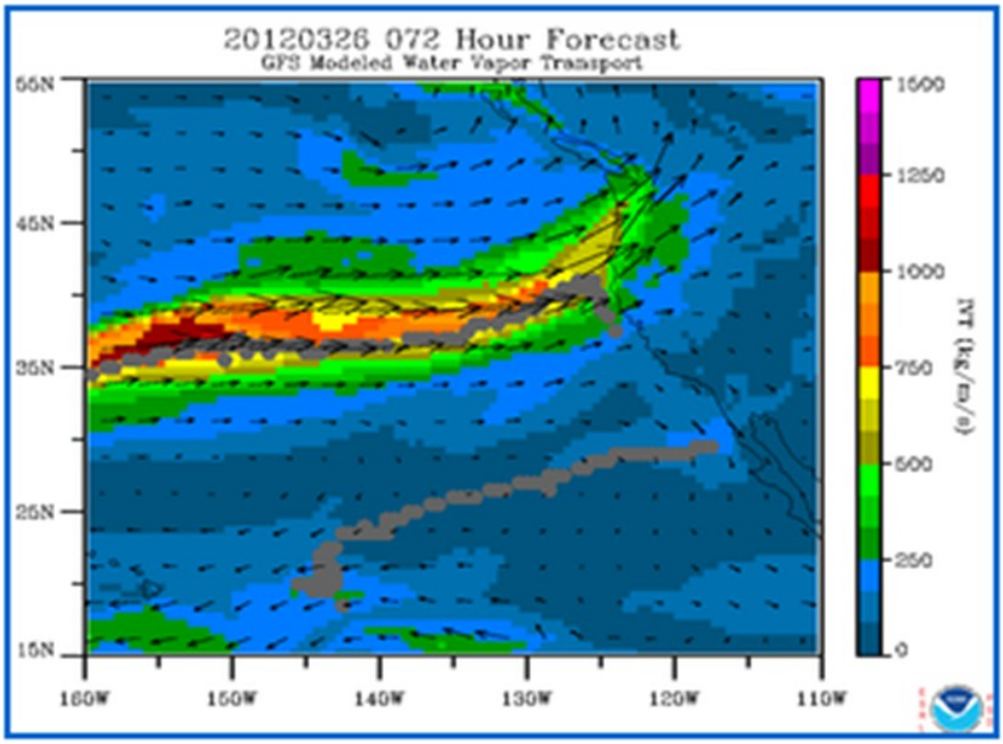
Radar coverage shown is at 10,000 ft AGL or below

AWIPS-2 Status:: AWIPS-2 has been installed on a second side by side system at the Houston, TX WFO and on the primary hardware at the Norman, OK WFO. In addition to the Omaha and Boulder, these are the 4 primary test sites for AWIPS-2. Boulder has been working through a number of GFE issues, including terrain and sending grids to the web. Fixes will be included in the next build.

New Atmospheric River tools from OAR PSD:

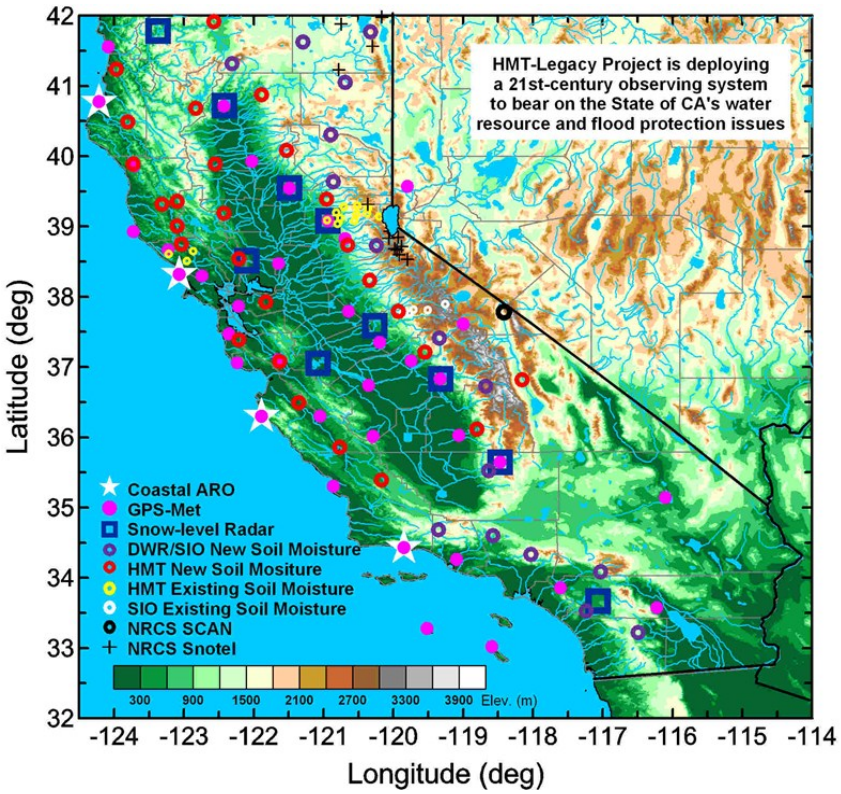
OAR Physical Science Division (PSD) has developed an experimental set of tools to identify atmospheric rivers (AR) and then combine these AR features with low level winds derived from the NCEP GFS to determine where the best cross-terrain flow will occur, and consequently, higher expected precipitation rates. The tool is call Atmospheric River Flux and can be found at:
http://www.esrl.noaa.gov/psd/psd2/coastal/satres/data/html/ar_detect_gfs.html



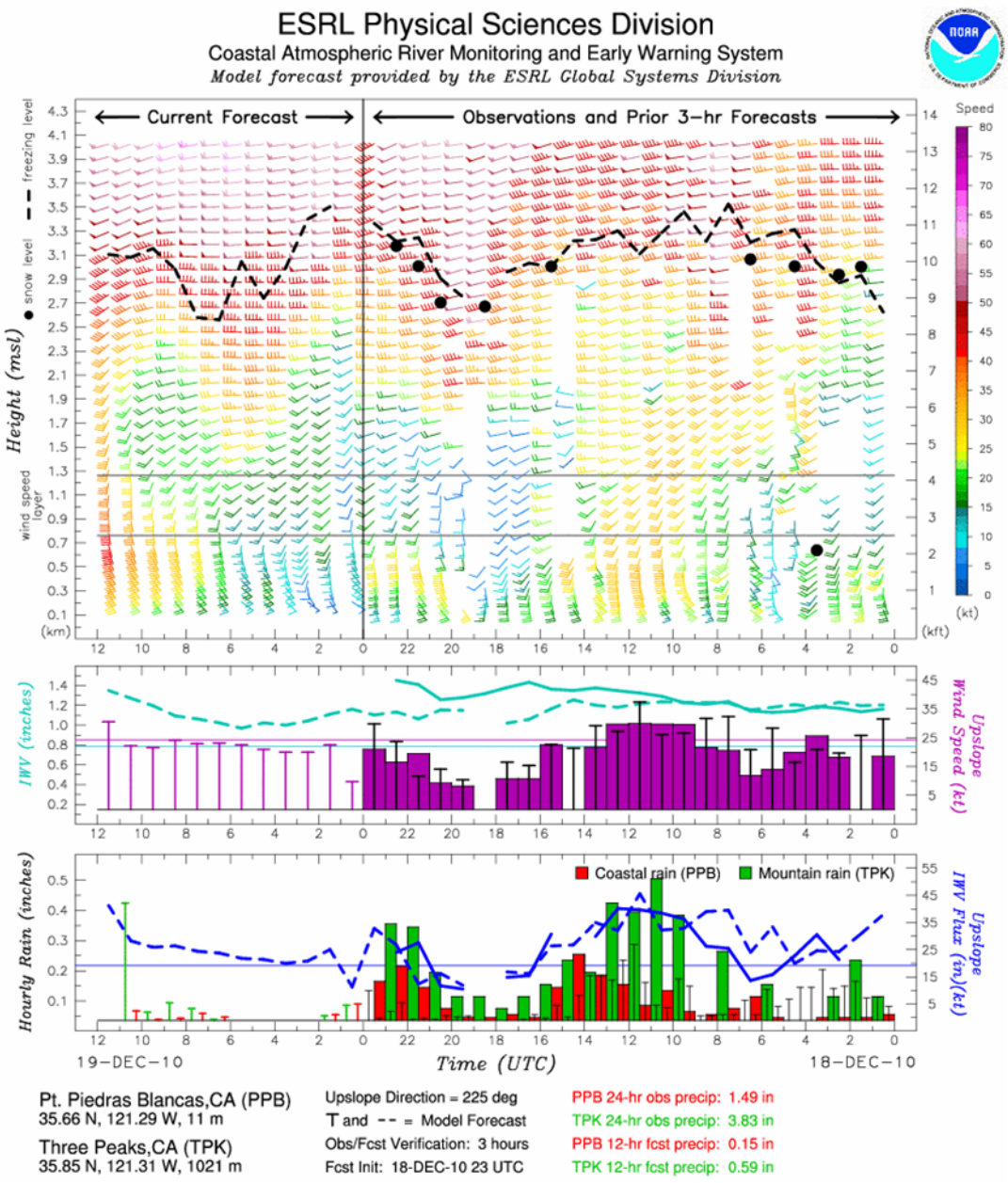


Example of AR Flux tool for a 72 hour forecast.

OAR PSD is in the process of deploying a number of new sensors in California through a grant from the state. All of the data can be found at - http://www.esrl.noaa.gov/psd/data/obs/



AR Observatory: A few sites have a number of sensors, which combined with the RUC, can be used to provide a more integrated view of the atmosphere. They are called AR Observatories and an example of the integrated model/data graphic is displayed below. All of the data can be found at: http://www.esrl.noaa.gov/psd/data/obs/ - click on the sites with "vapor flux".



In addition, some new auto updating sites for monitoring snow level can be found below:
http://www.esrl.noaa.gov/psd/data/obs/autoupdate/Cazadero.html
http://www.esrl.noaa.gov/psd/data/obs/autoupdate/SugarPine.html
http://www.esrl.noaa.gov/psd/data/obs/autoupdate/SantaRosa.html
http://www.esrl.noaa.gov/psd/data/obs/autoupdate/Westport.html

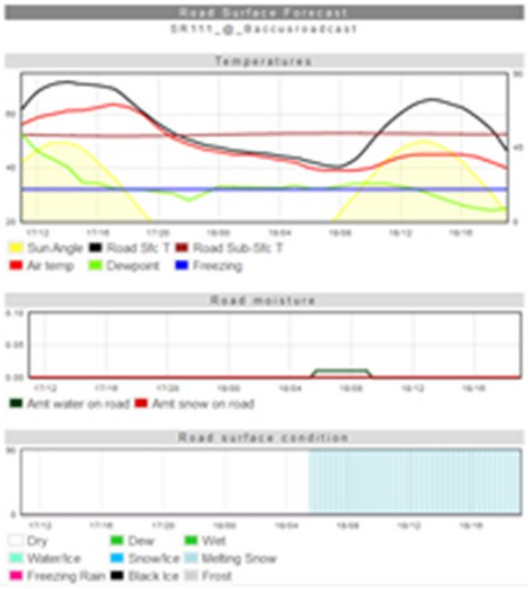
Road Model (Metro) Example: The Metro model can be used to objectively distinguish between events where falling snow will stick to the roadways and which events will not. The Metro model (a very complete land/surface model) uses the WFO gridded forecast combined with Clarius road observations to make predictions on if and when precipitation will freeze on road surfaces. The idea is that the forecasters can use this information to highlight impacts of winter storms.

The case below is typical for spring, where the high sun angles can offset a cooling air mass during day time and delay or offset the water freezing to the roads.

Metro sites for WR can be found at:
http://dev.wrh.noaa.gov/mso/GEarth/getMetro.php?sid=wr&daysOld=31&
(Note: This link will open up with Google Earth.)

Baccus – Salt Lake Valley (Lower Elevation)

- Precipitation is forecasted to begin around sunrise in the Salt Lake Valley
- Despite a cooler airmass edging in, solar radiation (fluxes on next slide) is expected to drive up road surface temperatures tomorrow
  - Though METRo seems to signal an "all-clear", caution might be good. More cloud cover and precipitation cold lead to much cooler air and road temperatures, especially as the event unfolds Sunday night



Length of Service Awards

Wooley, David	WFO Eureka, CA	Electronics Technician	25 Years
Ochs, Brian	WFO Hanford, CA	Meteorologist Intern	5 Years
Lhotak, John	CBRFC Salt Lake City, UT	Senior Hydrologist	10 Years
Sherwood, Michael	WFO Tucson, AZ	Observing Program Leader	30 Years
Silverly, Lyndall	WFO Glasgow, MT	Electronics Technician	25 Years
Strickland, Gary	WFO Oxnard, CA	Electronics Systems Analyst	30 Years
Spilde, Marc	WFO Medford, OR	Meteorologist, General Forecaster	5 Years
Zell, Gary	WFO Tucson, AZ	Meteorologist, General Forecaster	20 Years
Intermill, Joe	NWRFC Portland, OR	Service Coordination Hydrologist	25 Years
Walbrun, Carolina	WFO Monterey, CA	Meteorologist, General Forecaster	10 Years
Nguyen, Son	WRH/SOD Salt Lake City, UT	Regional Maintenance Specialist	25 Years
Lachacz, Joseph	WRH/SOD Salt Lake City, UT	Electronics and Facilities Branch Chief	25 Years

New Hires in Western Region for March

O'Malley, Mark	WFO Phoenix, AZ	Meteorologist, Senior Forecaster	Transferred from a Meteorologist position at WFO Kansas City, MO
Iniguez, Paul	WFO Hanford, CA	Science and Operations Officer (SOO)	Transferred from a Meteorologist position at WFO Phoenix, AZ
Bonk, Jonathan	WFO Portland, OR	Meteorologist, Journey Forecaster	Transferred from a Meteorologist position at WFO Pendleton, OR
Neuman, Colby	WFO Portland, OR	Meteorologist, Journey Forecaster	Transferred from a MET Intern position at WFO Spokane, WA

Personnel Departing Western Region in March

Knutsvig, Ryan	WFO Elko, NV	Science and Operations Officer (SOO)	Transferred to the MIC position at WFO North Platted, NE
Pereira, Michael	WFO Boise, ID	Electronic Systems Analyst (ESA)	Voluntary Optional Retirement
Evans, Thomas	WFO Monterey, CA	Warning Coordination Meteorologist	Transferred to WFO Honolulu, HI
LaBelle, Katherine	WFO Reno, NV	Meteorologist, General Forecaster	Transferred to OAA/PCO in Silver Spring, MD
Stacey, Mark	WFO Salt Lake City, UT	Electronics Technician	Transferred to an ET position at WFO Marquette, MI
Fries, Michael	WFO Spokane, WA	Meteorologist, General Forecaster	Transferred to WFO Pittsburg, PA
Sutula, Aaron	WRH/SSD Salt Lake City, UT	Meteorologist, IFPS	Resigned to take a Technical Lead position with Open Plans, Bus Times project in New York City, NY

Please send newsletter submissions to:
laura.smith@noaa.gov and aaron.sorensen@noaa.gov
by the **25th** of every month.