



## Winter Weather Awareness Week

October 18-24 is Winter Weather Awareness Week in Idaho and Oregon. Although the current forecast outlook for the winter months (Nov, Dec, and Jan) is showing a better chance for above normal temperatures and below normal precipitation, due to El Niño, we should still prepare for the weather winter can bring. Be safe this winter! Check out: <http://www.nws.noaa.gov/om/winter/> for safety tips on dealing with snow, ice, cold, strong winds, and wind chill. Please see pages 4 and 5 of the newsletter for a refresher on what needs to be reported during the winter.



## Energy Awareness Month

October is Energy Awareness Month as declared by the President. This year's theme is "A Sustainable Energy Future; Putting All the Pieces Together", and it encourages everyone to see how they fit into the big picture. Think about the little things you can do to make a difference. For more information see this webpage put together by the Department of Energy:

[http://www1.eere.energy.gov/femp/services/energy\\_aware.html](http://www1.eere.energy.gov/femp/services/energy_aware.html)

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**Before Winter and Extreme Cold:  
FEMA's preparedness guide:**

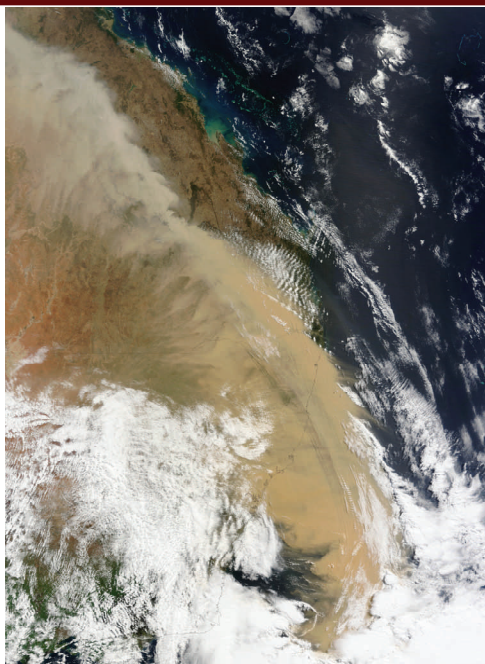
[http://www.fema.gov/hazard/winter/wi\\_before.shtm](http://www.fema.gov/hazard/winter/wi_before.shtm)

# Australian Dust Storms

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Australia was plagued by a series of dust storms in late September causing numerous problems. Flights were canceled or delayed, visibility reductions caused traffic problems, and health was a serious concern. Particulate concentration reached 15,000 micrograms per cubic meter, with normal concentrations only 10-20 micrograms per cubic meter. This storm was the worst the area had seen in nearly 70 years. Strong winds blew the dust from the dry inland regions of Australia to the populated coastal areas. More information can be found here:

<http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=40274>



**Left:** A view from space: The dust storm over the Queensland/New South Wales area. For more pictures of the dust storms:

<http://earthobservatory.nasa.gov/NaturalHazards/event.php?id=40275>

# Major Flooding in the Southeast US

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Eight days of nearly continuous rainfall the third week of September brought widespread areas of 6-12 inches of rainfall across portions of Alabama, Tennessee, and Georgia with localized areas seeing as high as 15-20 inches. To put this into perspective, the city of Boise averages 12 inches of rain per YEAR. The rain caused significant flooding with at least 9 dead and approximately \$250 million in damage.

Please remember to always **Turn Around, Don't Drown**. This simple rule saved many lives in the Southeast and can also save lives here in Oregon and Idaho when a river flood or flash flood situation arises.

## Rainfall totals:

[http://www.srh.noaa.gov/ffc/html/rain\\_totals090922.txt](http://www.srh.noaa.gov/ffc/html/rain_totals090922.txt)

## Some Related Articles:

[http://www.boston.com/bigpicture/2009/09/flooding\\_in\\_the\\_southeast.html](http://www.boston.com/bigpicture/2009/09/flooding_in_the_southeast.html)

[http://www.huffingtonpost.com/2009/09/21/atlanta-flooding-2-killed\\_n\\_293790.html](http://www.huffingtonpost.com/2009/09/21/atlanta-flooding-2-killed_n_293790.html)

<http://www.cnn.com/2009/TECH/science/09/22/atlanta.weather.science/index.html>

<http://news.aol.com/article/southeast-flooding-kills-9-in-georgia/678625>

[http://www.boston.com/bigpicture/2009/09/flooding\\_in\\_the\\_southeast.html](http://www.boston.com/bigpicture/2009/09/flooding_in_the_southeast.html)

## Some Changes

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I will be moving out of state to another National Weather Service office the first week of November and will no longer be running the SkyWarn Spotter Program or writing the newsletters for this office after that time. Not to worry, the program will remain intact and you will continue to receive newsletters, but it is currently unknown who will be responsible. After November 3, please direct all questions to [Paul.Flatt@noaa.gov](mailto:Paul.Flatt@noaa.gov) until another replacement is named.

It has been a pleasure working with all of you and thank you for your continual help and support in reporting ground truth!

Dawn Fishler

# Earthquakes and Tsunamis

There have been five major earthquakes the last few days of Sept into the first week of October in the Pacific Region known as the Ring of Fire, two of which generated tsunamis warnings. The first one, as you can see from the picture below, did generate a tsunami with increased wave activity measured all the way to the West Coast of the United States. This one sadly devastated the Samoa Island Region with many towns completely obliterated. The second one the following week was weaker with no significant damage reported. Between the quakes and the tsunami nearly 1500 people have lost their lives with the number expected to climb. Some interesting articles about all the recent activity:

## **Tsunami: Genesis of a Deadly Wave:**

[http://www.foxnews.com/story/0,2933,557740,00.html?loomia\\_ow=t0:s0:a16:g2:r1:c0.102099:b28030972:z10](http://www.foxnews.com/story/0,2933,557740,00.html?loomia_ow=t0:s0:a16:g2:r1:c0.102099:b28030972:z10)

## **How Earthquakes and Tsunamis Can Happen:**

<http://www.foxnews.com/story/0,2933,557462,00.html>

## **The USGS Recent Quake Page:**

<http://earthquake.usgs.gov/eqcenter/recenteqsww/>

## **Why The Ring of Fire is So Angry:**

<http://www.sciencealert.com.au/features/20090910-19967.html>

## **Other News Stories about the events:**

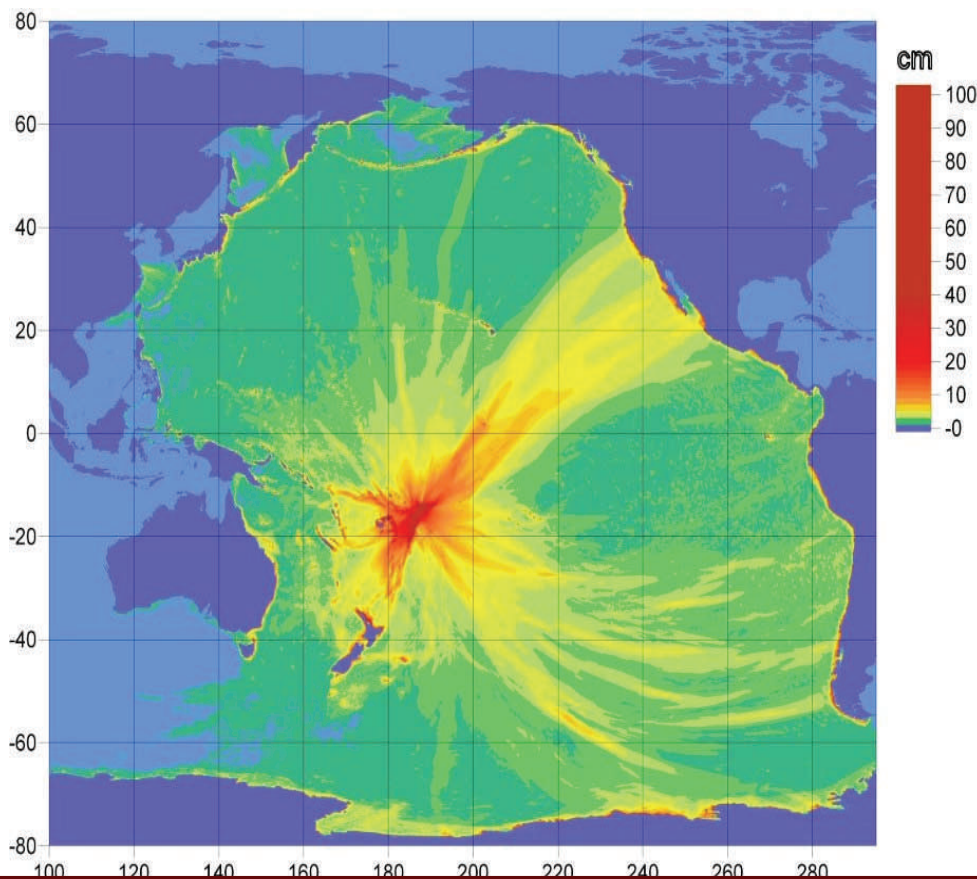
<http://www.cnn.com/2009/WORLD/asiapcf/09/30/samoa.earthquake/index.html>

<http://www.cbsnews.com/stories/2009/10/03/world/main5360678.shtml?tag=cbsContent;cbsCarousel>

<http://www.cnn.com/2009/WORLD/asiapcf/09/02/indonesia.earthquake/index.html>

<http://www.voanews.com/english/2009-10-08-voa9.cfm>

<http://www.foxnews.com/story/0,2933,562002,00.html>



**Left: The Tsunami propagation map. This tsunami was generated by a 8.0 magnitude earthquake that struck the Samoa Island Region.**

For Tsunami information:

<http://wcatwc.arh.noaa.gov/>

The West Coast and Alaska  
Tsunami Warning Center

# A Cold and Wet Start to October

After the second warmest September on record (6.4 degrees on average above normal and only 0.3 degrees shy of the record), October has gotten off to a cold start. The average temperature for the first 13 days of October is 10.7 degrees below normal. The first weekend of the month brought a storm with significant snowfall above 6000 feet and a dusting of snow as low as 3500 feet. Some snow totals from this storm can be found below. Storm total rainfall in the lower elevations was also impressive with widespread areas of half an inch to an inch of rain. This significant pattern change was a shock to many. A milder air mass has moved into the area recently with a progressive pattern leading to temperatures near normal. The warmer weather has brought the average temperature for the first 19 days of October to 5.5 degrees below normal. The progressive pattern continues in the upcoming week with periodic chances of rain and temperatures on both sides of normal.

Amount of Snow (inches)	Snotel Site	County	Elevation (ft msl)
6	Snow Mountain	Harney	6220
17	Big Creek	Valley	6600
17	Deadwood Summit	Valley	7000
6	South Mountain	Owyhee	6340
9	Bogus Basin	Boise	6100
14	Wilson Creek	Twin Falls	7120
27	Trinity Mountain	Elmore	7780
21	Atlanta Summit	Elmore	7500
19	Jackson Peak	Boise	7070
18	Mores Creek Summit	Boise	6100

## *Skywarn Spotter Reporting Criteria:*

*Call us when you observe:*

- \* *Tornado: All tornadoes*
- \* *Funnel Clouds: All funnel clouds, watch for rotation*
- \* *Hail: 1/2" in diameter and larger*
- \* *Near continuous Lightning*
- \* *Winds: All winds greater than 35 mph*
- \* *Heavy Rain: Falling at a rate of 1" per hour or greater (1/2" in 30 minutes), or more than 1" per day in the winter*
- \* *Freezing Rain: Any measurable freezing rain*
- \* *Heavy Snow: 1" per hour or greater, or storm total 4" or more, or snow causing road closures*
- \* *Flooding: Any water flowing where it doesn't normally or rivers flowing above their banks*
- \* *Low visibility: Visibility less than 1/4 mile for any reason*
- \* *Weather Related Damage, Death, or Injury: If weather causes damage, death or injury, please let us know*



# Measuring Snowfall Accurately

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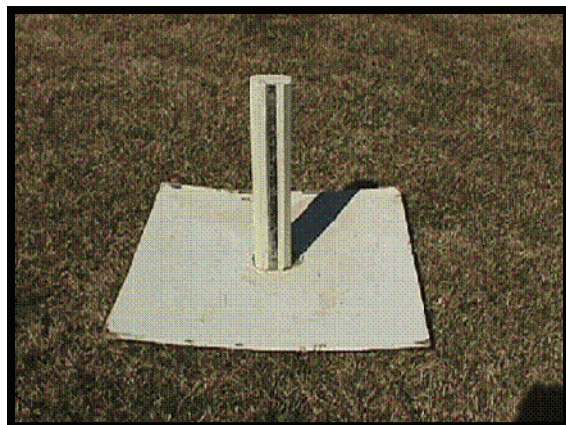
## What you're providing:

Snowfall information during and after a storm.

## What you'll need:

1. A snow-board ( a 2x2 ft plywood board or a plastic cutting board) with a ruler extending up from the center

-If this is not possible, try to measure snowfall in the most flat, and most representative area possible. Be sure to move snow away from your measurement location to see whether the snow is resting on top of grass, so the depth of the grass is not included in our measurement. Avoid pavement or concrete, and high traffic areas.



2. If using a snow-board, place the board in a flat area at least 10 feet away from tall objects.

3. Measure several spots on the board (to the closest 1/10th of an inch), then take an average of these measurements.

4. Once the measurement is taken, clean off your snow-board and place on top of the snow remaining on the ground.

## Some issues that you might face...

1. **Wind** accompanies the storm and blows your snow-board, or measurement area, bare, while piling snow in other locations.

-If this occurs, try to find an area that seems representative of the snowfall. This will probably be in a location that is not terribly drifted. Also, take several measurements, then average the results. Try the best you can as in this scenario getting a very accurate result is quite difficult.

## If you don't have a snowboard...

1. Measure snow in a relatively flat area

2. Measure in several different spots

3. Average your snowfall total





# Typhoons and Hurricanes

A third typhoon is set to hit the Philippines in less than a month. The death toll from the past two storms is more than 850 people, with hundreds of thousands still in storm shelters after the last typhoon. There is still feet of standing water in many locations after the Typhoon Ketsana drenched the capital city, Manila, with the heaviest rain seen in 40 years. Typhoon Lupit is packing winds near 110 mph and is expected to strengthen slightly before making landfall Thursday.

<http://www.cnn.com/2009/WORLD/weather/10/19/philippines.storms/index.html#cnnSTCText>

After being the strongest Eastern Pacific Hurricane in over a decade, with winds of 180 mph, Hurricane Rick has recently been downgraded to a tropical storm with sustained winds down to 65 mph as it touches the tip of Baja California and moves into central Mexico.

[http://news.yahoo.com/s/ap/20091018/ap\\_on\\_re\\_la\\_am\\_ca/tropical\\_weather](http://news.yahoo.com/s/ap/20091018/ap_on_re_la_am_ca/tropical_weather)

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*Working Together to Save Lives*



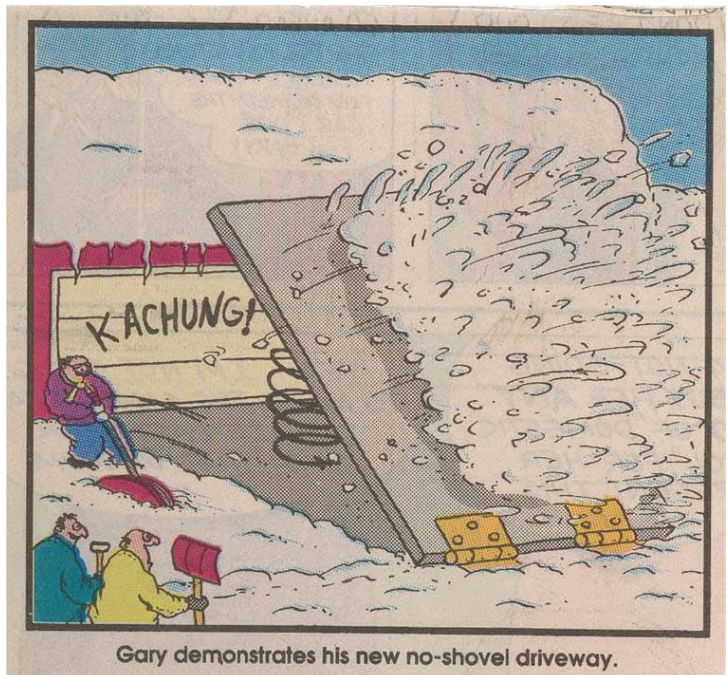
## iNWS Alerts

The National Weather Service is in the process of setting up a system to send cell phone SMS text alerts to users when any watch, warning, or advisory is issued. How this work will depend on how your town/city/county is organized. The text will have the headline of the product issued with a hyperlink to the actual warning and an image of where the warning is. This is currently just a prototype but over the next two years, steps will be taken to make this part of NWS operational services, available to anyone who signs up to receive these alerts. Look for future messages and updates about this service.

**Weather.gov/boise**

## Weather Humor Corner

A driveway I'm sure many of us wish we could have in the winter!



Gary demonstrates his new no-shovel driveway.