High Plains Wind

(Weather Information News Data)

November 20, 2013
Volume 7 Issue 3

Inside This Issue

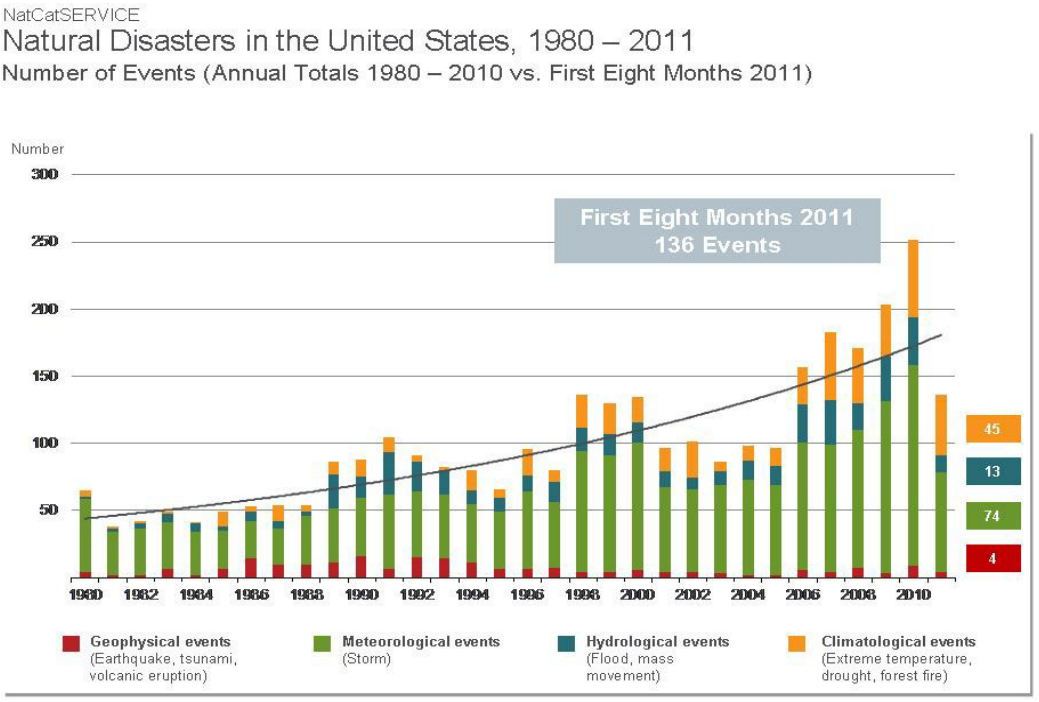
Photo Courtesy of
Ron Rehfeld, Arapahoe, CO

A Message from the Meteorologist-in-Charge

Weather Ready Nation

By Scott A. Mentzer

High impact weather events take a large toll on the United States. The floods in Colorado during the week of September 9, 2013, and the November 17, 2013, tornado outbreak in the Midwest are two recent examples. In addition to fatalities, injuries, and life-changing experiences, these high-impact events produce large losses to the economy of the United States. The events are also increasing (see graph below).



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Several years ago the National Weather Service implemented a plan called the Weather-Ready Nation initiative. This initiative helps communities and citizens build resilience in the face of increasing vulnerability to extreme weather and water events. A Weather-Ready Nation has officials at all levels of governments, the private sector, nonprofit organizations, academia, the full weather enterprise, and the general public participating in ways that encourage people to take protective action in advance of severe weather.

To help build a Weather Ready Nation, the NWS has several goals over the next 10 years:

- Improve Weather Decision Services
- Improve Water Forecasting Services
- Enhance Climate Services and adapt to climate-related risks
- Improve sector-relevant information to support of economic productivity
- Enable environmental forecast services supporting healthy communities and ecosystems
- Sustain a highly skilled, professional workforce equipped with training, tools, and infrastructure to meet the mission

The NWS office in Goodland is part of the Weather-Ready Nation initiative. The office routinely conducts conference calls with Emergency Managers and key decision makers about upcoming weather events. It is utilizing the increasing accuracy of models to help forecast rainfall and snowfall amounts. The office monitors global weather phenomena, like El Niño and La Niña, to correlate local climatic impacts. Staff members are required to take an abundance of training to keep informed about the latest technology and forecasting techniques. All of these steps are taken to improve weather services to the citizens of the Tri-State area.

For more information see the website below:

http://www.nws.noaa.gov/com/weatherreadynation/#.UovdOhCMmbM

NWS Staff participate in Outreach Efforts

By Mike Kochasic

Recently, National Weather Service staff members have had opportunities to participate in various outreach events across the Tri-State area. In August, the National Weather Service partnered with the Yuma County Conservation District to participate in a youth weather day camp at Beecher Island, Colorado. The audience was comprised of kids between 2nd and 8th grades. Staff presented different short lectures on cloud types and names, making a simple weather forecast, weather instruments, thunderstorms, flooding, and tornadoes. Instructors led experiments in which kids were able to make a tornado in a bottle, clouds in a jar, and flooding of a model river. Other activities involved playing weather games with the kids, such as weather jeopardy, that included interesting weather facts. Staff members also assisted the kids with creating their own weather maps.

Employee Randy Bowers demonstrates types of National Weather Service equipment used in the forecasting process to kids attending the Beecher Island Weather Camp.

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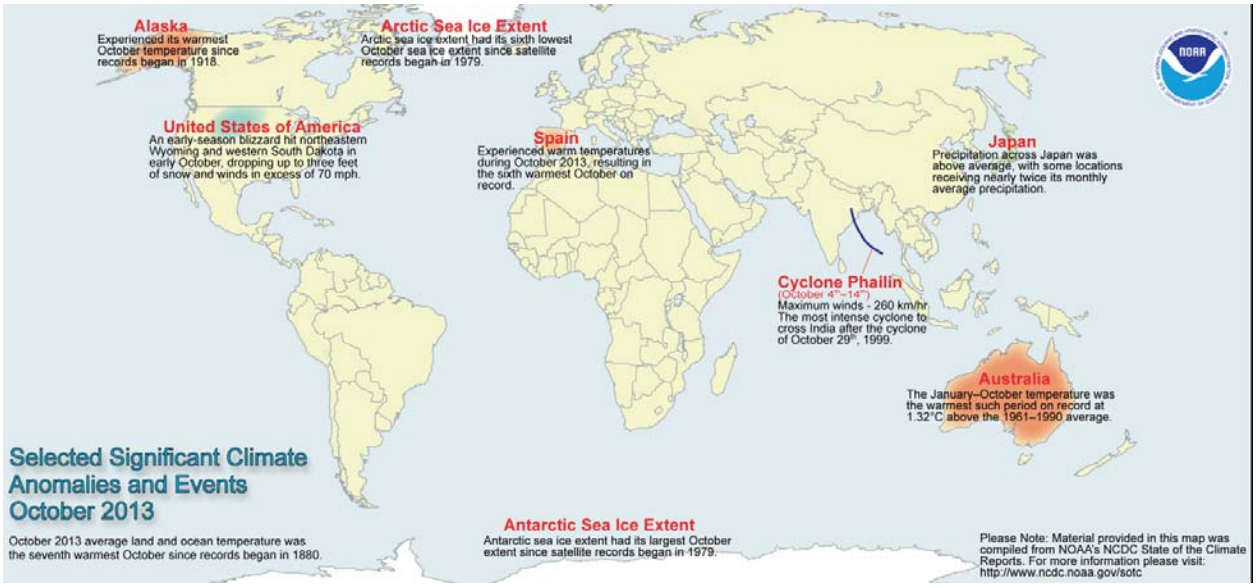
Every year, the National Weather Service has organized an official week dedicated to giving back to the communities we service. This week is known to employees as the Week of Service. This year in early October, Goodland employees participated in the Week of Service by volunteering time at the Northwest Kansas Animal Shelter in Goodland. After interacting with the cats and dogs, staff members spent several hours cleaning around the animal pens, weeding, and moving exterior dog houses.

NWS Goodland volunteers pose for a picture with cats at the Northwest Kansas Animal Shelter.



Click on the picture above or the link below for more information on weather events around the world courtesy of NOAA

http://www.ncdc.noaa.gov/sotc/service/global/extremes/201310.gif

CoCoRaHS Corner

By David Thede

If you are interested in participating in the CoCoRaHS program and can reliably report precipitation data whether it's daily or just on days when precipitation fell, we would be interested in having you join us.

I'd also like to remind you about some quick videos on how to correctly measure snowfall and snow water equivalent.

http://www.youtube.com/watch?v=x1PBc8jPh5o

http://www.youtube.com/watch?v=tfb3Os4Loa4

Interested volunteers should contact the Northwest Kansas/East Central Colorado and Southwest Nebraska CoCoRaHS Coordinator, David Thede of the National Weather Service in Goodland. He can be reached at (785) 899-7119 or at david.thede@noaa.gov.

To learn more visit the website below:

http://www.cocorahs.org/

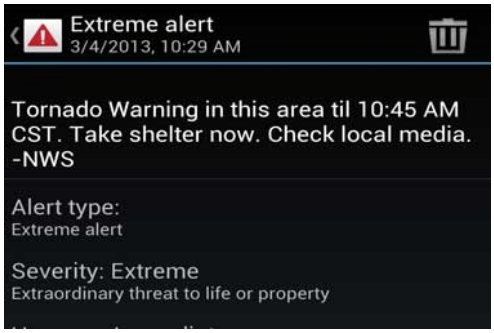
Wireless Emergency Alerts: Free weather alerts delivered to your phone

By Joe Moore

Imagine this: You're at a local baseball game in a neighboring town when your phone makes an odd tone. You heard on the news in the morning that there was a potential for thunderstorms, and you see some dark clouds in the distance. You look at your phone to see a message from the National Weather Service: a Tornado Warning has been issued for your location! You didn't sign up for the alerts, and you aren't even in your hometown. How did this happen? The new Wireless Emergency Alert system!

The Wireless Emergency Alerts (WEA) system was launched in June of 2012 as the result of work by numerous federal agencies and telecommunications companies to bring localized alerts direct to your phone. While you may subscribe to text-message alerts through your county or use an app to let you know when an alert is issued, WEA serves as yet another method to ensure you're alerted in dangerous conditions. These alerts are free, and most phones sold in the last year or two are compatible with this new service. You have some control over which alerts you receive, depending on your phone and service provider – see you phone's manual or contact your service provider for details.

Here's how it works:



1) Your local National Weather Service Office issues an alert because of an urgent threat to life and property. Currently, WEA alerts include:
    a. Tornado Warning
    b. Flash Flood Warning
    c. Dust Storm Warning
    d. Tsunami, Hurricane, and Typhoon Warnings – but we typically do not issue these alerts for the High Plains!
2) Once the alert is issued, cell phone towers broadcast a special alert within the area of hazardous weather. For instance, in the case of a tornado warning, only the towers which are within the tornado warning polygon or serve the warning area (not the entire county) will broadcast the alert.
3) Phones with WEA enabled that are communicating with a tower in the alert will sound a special alarm tone and display a short message containing information about the alert. (See screenshots)

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The WEA system is designed to notify you quickly. The messages are fairly brief, so you may also want to check our website, weather radio, local media, or other sources of reliable weather information for details. In most cases this is encouraged, but if you receive a tornado warning you should take action immediately.

Look for the logo above when shopping for your next cell phone to receive WEA messages.

These alerts are not perfect, and due to limitations of cell phone technology you may receive alerts which are not for your specific location. You may also receive duplicate alerts if you lose cell phone service then regain it, such as while traveling. Messages sent to your phone are not controlled by the forecaster who issued the alert, but future improvements to the system might allow forecasters to have more control over the alerts.

If you have questions about WEA, please contact your cell phone service provider. You can find more information about weather alerts sent through WEA at:

http://www.nws.noaa.gov/com/weatherreadynation/wea.html

Check out the new Owlie Skywarn page for kids of all ages on Facebook!

https://www.facebook.com/Owlie.Skywarn.NWS

Frost-Free Days
First and Last Freezes of the Season

By Amanda Wertz

Whether you are a farmer or gardener, it is important to know when you should cover your plants or bring them inside to keep them from getting damaged by freezing temperatures. It is also important to know when you can start planting them outdoors, and how long the growing season will last. In order for the National Weather Service to uphold the main priority of protecting life and in this case, property, there are certain products issued to let you know when to care for plant life. First, here are some definitions:

Frost-free days: The number of days starting from the last day of the cool season (usually late spring) when hard frosts and freezes will no longer occur, indicating it is safe to start planting, to the first day of the cool season (usually early fall) when a hard frost or freeze occurs, indicating that precautions should be taken so that plants are not damaged or killed by being outdoors. This number lets you know how many days the growing season will last.

First Freeze: The first day of the cool season (usually early fall) when a hard frost or freeze is likely to take place, damaging or killing plant life. This is when you would want to cover your plants or take other precautions to keep plants alive.

Last Freeze: The last day of the cool season (usually late spring) when a hard frost or freeze can no longer be expected, ensuring it is safe to start planting outdoors. This is when you could start planting, since it is unlikely that a hard frost or freeze would occur after this date.

The National Weather Service has information on when the average first and last freeze days occur, as well as the total number of frost-free days using data collected from various state climatologists and the High Plains Regional Climate Center. A table and maps of average freeze information is available at http://www.crh.noaa.gov/gld/?n=/climate/averagefreeze.php Here are some maps to visualize this information within the county forecast area:

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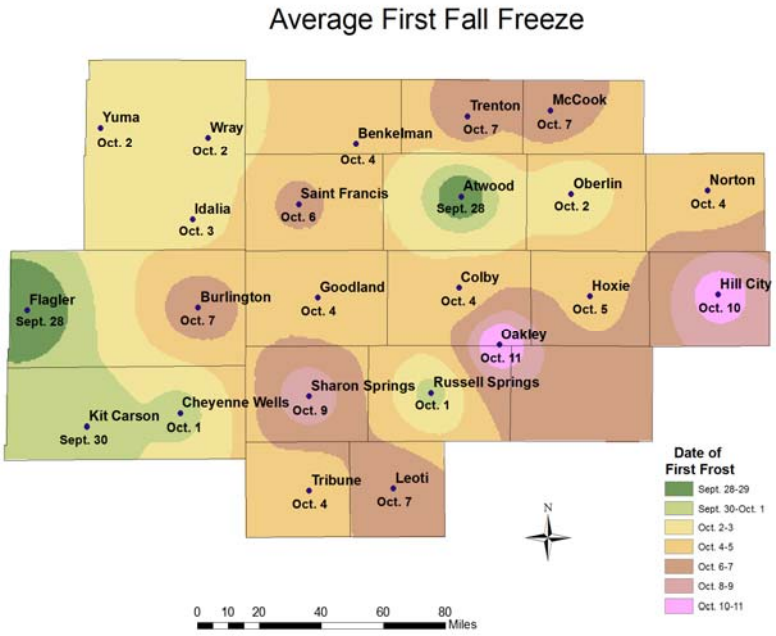

Figure 1. This map shows the average date of the first freeze for each city. It is often in the early fall when the first hard frost or freeze occurs. The earliest, on average, starts on September 28th, with the latest, on average, around October 11th.

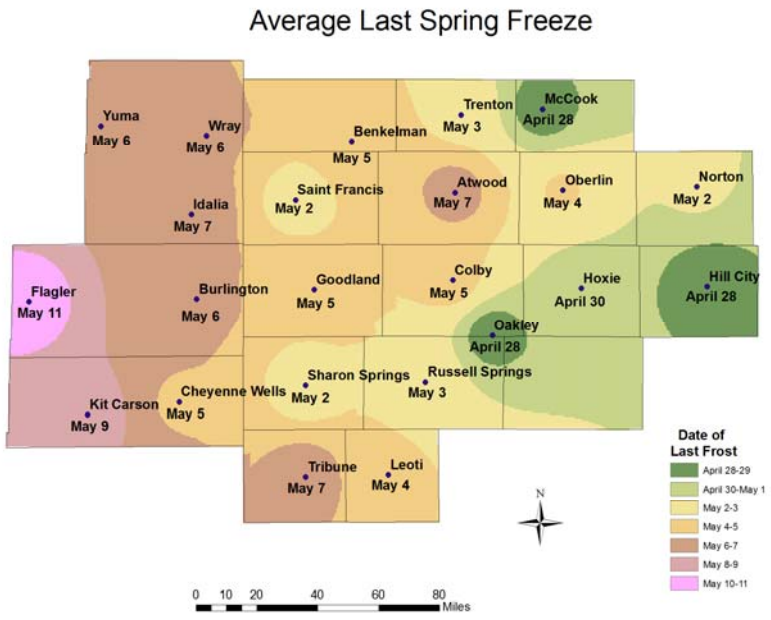

Figure 2. This map shows the average date of the last hard frost or freeze for each city. It is often in the late Spring when the last hard frost or freeze occurs. The latest, on average, is May 11th, with the earliest, on average, around April 28th.

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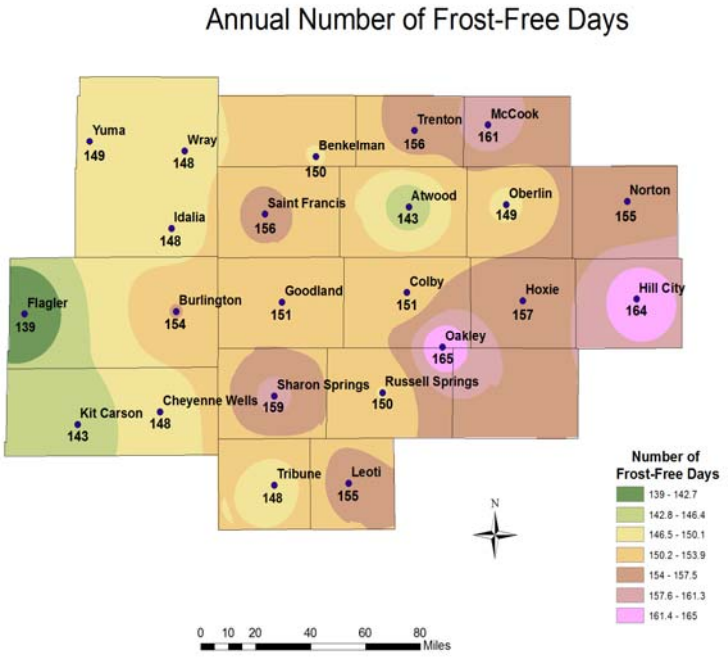

Figure 3. This map shows the number of frost-free days for each city, on average, during the warm season.

Frost Advisories and Freeze Warnings

Using this frost and freeze information, the National Weather Service also issues certain products with specific criteria that are issued to alert you of when a hard frost or freeze is likely around the beginning and at the end of the growing season. These products are the Frost Advisory and Freeze Warning:

Frost Advisory: This is issued when the surface air temperature is 29℉ to 36℉ with light winds. The combination of temperature and low wind speed can increase what is known as radiative cooling, which can lead to the formation of frost, sometimes in isolated areas. This product is used near the beginning and end of the growing season.

Freeze Warning: This is issued when the surface air temperature is less than or equal to 28℉ over most of the local area for at least one hour. Conditions to issue a freeze warning are more dependent on cold air being advected, or transported, into an area, usually behind a cold front. This product is also used near the beginning and end of the growing season.

The National Weather Service issues frost advisories and freeze warnings on a county basis. Frost advisories and freeze warnings were not issued during the spring of 2013 due to late winter precipitation followed by a quick warming of temperatures. Frost advisories and freeze warnings were issued for the fall of 2013. On the next page are some maps displaying when frost advisories and freeze warnings were issued for the county warning area.

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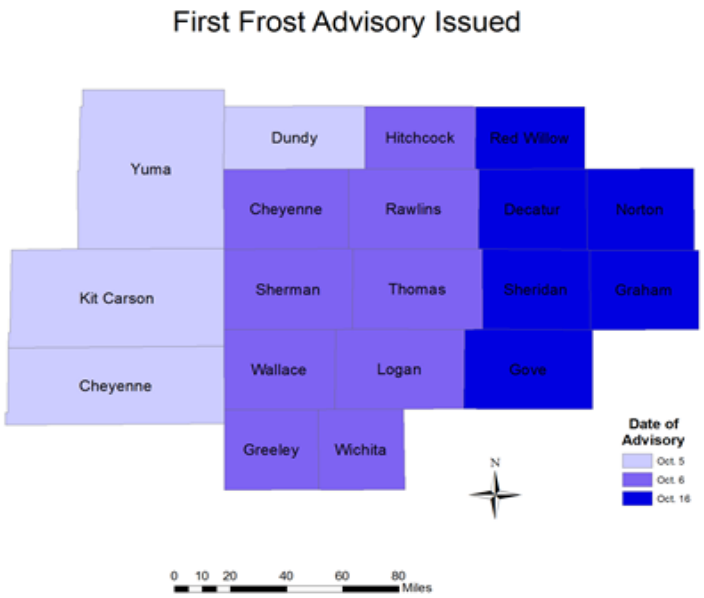

Figure 4. All frost advisories during the fall of 2013 were issued in October. The first advisories were issued on Oct. 5th indicated by the very light blue. The next advisories were issued on Oct. 6th indicated by the darker blue, and the last advisories were issued on Oct. 16th indicated by the darkest blue.

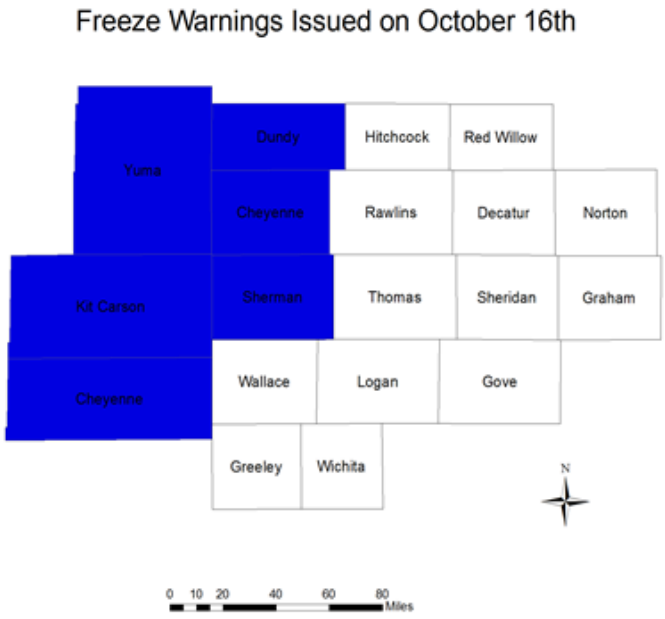

Figure 5. The first freeze warnings were issued on October 16th. The freeze warnings are indicated by the dark blue counties. No other freeze warnings were issued for the remaining counties during the fall of 2013.

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Frost advisories and freeze warnings are posted on the National Weather Service website at www.weather.gov/gld. Frost advisories and freeze warnings are no longer being issued for the remainder of the cool season, but may be issued again during the spring of 2014, towards the end of the cool season. So, until then, keep your plants safe and be ready to start the growing season come spring time!

Coming Soon – 2013 Special Event for Ham Radio Operators!

Check out this website for more information:

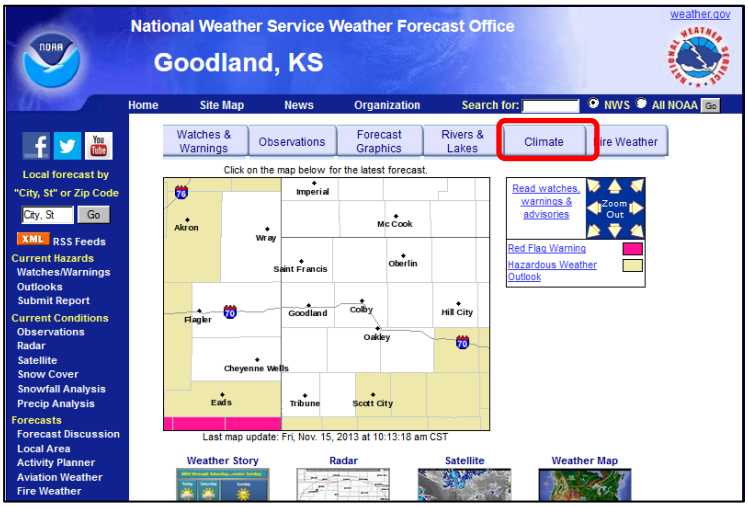
http://www.wrh.noaa.gov/mtr/hamradio/

Accessing Local Weather Data Online

by Dave Floyd

Quite often, someone will call our office and inquire about how much rain fell overnight or perhaps how much fell two months ago. Or maybe a caller is wondering how many 100 degree days occurred last July. While we're always happy to answer questions and chat for a while, much of the information requested is readily available on our web page for anyone to access. The main problem is that most people don't know where it's located! So in this article, I'll show you how to navigate around our web site to retrieve some of this basic information. In the end, if you still have questions, don't hesitate to give us a call.

To begin, visit our main web page at **weather.gov/goodland.** Once there, click on the **Climate** tab.



In the Climate section shown below, a new set of tabs appears across the top. Right now we'll concentrate on just a couple of those. By default, the **Observed Weather** tab on the far left is highlighted. The information found under this tab relates to our four automated weather stations located in Burlington, CO, Goodland, KS, Hill City, KS and McCook, NE. On this page, work left to right: 1) Select the **Product**; 2) Choose the **Location**; 3) Pick the **Timeframe**; and 4) **Go** get the data.

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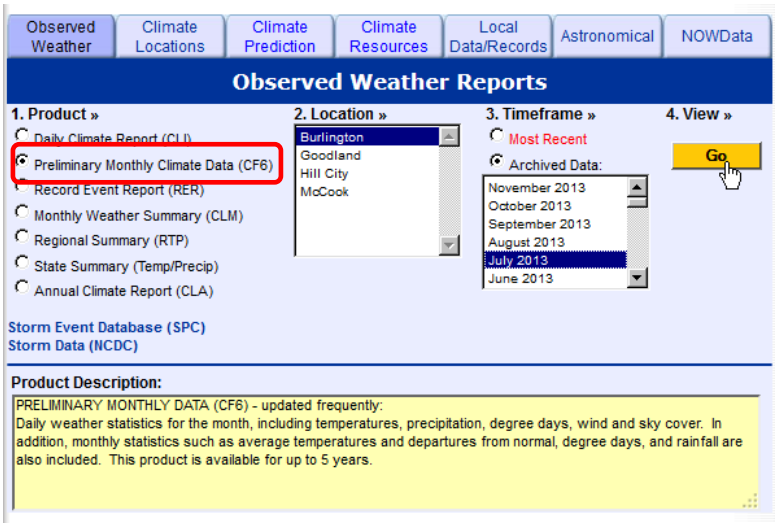
To answer the question: "How many days hit 100 degrees last July in Burlington, Colorado" we'll utilize a **Product** called **Preliminary Monthly Climate Data**. Under **Location** select Burlington; under **Timeframe** click Archived Data and scroll down to July 2013, then hit **Go**. You can select data going back five years right here on line!



The product appears in a separate window and is shown below. To interpret the data there is a help link at the top of the new window (not shown here), but much of the info is pretty clear. Days of the month (DY) are down the left column, followed by MAX temperature, MIN temperature, etc. So it looks like the only two days last July when the temperature reached 100 degrees were on the 9th and 12th of the month.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: BURLINGTON CO
MONTH: JULY
YEAR: 2013
LATITUDE: 39 18 N
LONGITUDE: 102 17 W

TEMPERATURE IN F:							:PCPN:	SNOW:	WIND			:SUNSHINE:		SKY	:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	12Z DPTH	AVG SPD	MX 2MIN SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	79	54	67	-6	0	2	0.01	M	M	7.5	15	80	M	M	5		20	90
2	83	52	68	-5	0	3	T	M	M	8.5	15	170	M	M	4	8	21	160
3	87	57	72	-1	0	7	0.00	M	M	14.1	21	150	M	M	2		28	150
4	94	58	76	3	0	11	0.01	M	M	11.7	22	160	M	M	0	3	29	160
5	99	63	81	7	0	16	0.02	M	M	10.3	33	310	M	M	0		43	300
6	98	60	79	5	0	14	0.00	M	M	7.5	28	230	M	M	1		35	240
7	99	64	82	8	0	17	0.15	M	M	8.7	30	160	M	M	2	13	38	210
8	98	62	80	6	0	15	T	M	M	9.2	32	170	M	M	1	1	41	250
9	101	63	82	8	0	17	0.00	M	M	9.4	22	20	M	M	0		28	30
10	94	64	79	5	0	14	0.01	M	M	12.5	32	170	M	M	0	3	38	170
11	92	58	75	1	0	10	0.00	M	M	15.3	28	170	M	M	0		41	170
12	102	68	85	10	0	20	0.00	M	M	15.1	28	150	M	M	0		32	150
13	99	60	80	5	0	15	T	M	M	7.0	23	290	M	M	1	3	28	290
14	86	64	75	0	0	10	0.36	M	M	10.0	22	20	M	M	5	13	29	10
15	81	57	69	-6	0	4	0.00	M	M	10.5	22	160	M	M	3	1	26	160
16	80	58	69	-6	0	4	0.00	M	M	15.6	26	160	M	M	5	1	33	140
17	86	62	74	-1	0	9	0.00	M	M	20.9	31	180	M	M	5		37	180
18	92	62	77	2	0	12	0.00	M	M	17.3	30	180	M	M	0		39	190
19	93	62	78	3	0	13	0.06	M	M	13.0	35	10	M	M	4	13	44	360
20	87	58	73	-2	0	8	0.04	M	M	7.9	31	320	M	M	2	3	41	320
21	89	61	75	0	0	10	0.00	M	M	11.5	21	150	M	M	3	1	26	150
22	98	64	81	6	0	16	0.00	M	M	9.1	20	150	M	M	1	12	24	130
23	88	55	72	-3	0	7	0.00	M	M	11.4	23	30	M	M	1		33	50
24	87	61	74	-1	0	9	0.07	M	M	12.2	28	260	M	M	5	1	36	250
25	84	58	71	-4	0	6	T	M	M	9.3	24	350	M	M	3	12	31	360
26	84	56	70	-5	0	5	0.00	M	M	7.3	20	170	M	M	1	1	29	240
27	81	57	69	-6	0	4	0.12	M	M	14.5	33	70	M	M	3	13	39	70
28	63	56	60	-15	5	0	0.05	M	M	8.9	20	130	M	M	10	12	25	140
29	82	60	71	-4	0	6	T	M	M	6.3	17	350	M	M	6	12	22	360
30	91	61	76	1	0	11	0.00	M	M	6.5	17	140	M	M	3	12	21	100
31	94	62	78	3	0	13	0.04	M	M	9.8	29	130	M	M	2	123	38	130
SM	2771	1857			5	308	0.94	M	M	338.8			M		78			
AV	89.4	59.9								10.9	FASTST		M	M	3		MAX(MPH)	
									MISC ---->	# 35	10						# 44	360

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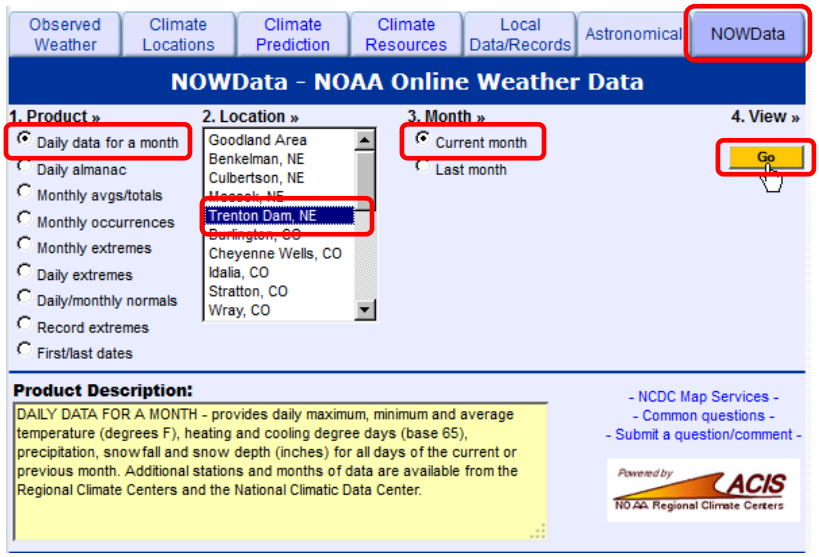
How about this question: "Have we dropped into the teens at night this month in Trenton, Nebraska?" For this one, let's jump over the NOWData tab on the far right. This tab gives information from over 20 of our cooperative observer stations. First, select the **Product** called **Daily Data for a Month**. Next, select the **Location**...Trenton Dam, NE. Leave the **Month** default as Current Month, then click **Go**.



A new screen appears with a listing of daily temperature and precipitation data for Trenton Dam, Nebraska, the nearest observing site to Trenton. It appears that overnight lows dropped into the teens only twice, on the 12th and 13th of the month.

NOWData - NOAA Online Weather Data

TRENTON DAM (258628)
Observed Daily Data
Month: Nov 2013

Day	MaxT	MinT	AvgT	HDD	CDD	Pcpn	Snow	Snwg
1	64	34	49.0	16	0	0.00		
2	61	28	44.5	20	0	0.00		
3	63	29	46.0	19	0	0.00		
4	64	32	48.0	17	0	0.00		
5	53	30	41.5	23	0	0.18		
6	38	21	29.5	35	0	0.28		
7	53	23	38.0	27	0	0.00		
8	59	27	43.0	22	0	0.00		
9	73	33	53.0	12	0	0.00		
10	63	28	45.5	19	0	0.00		
11	60	33	46.5	18	0	0.00		
12	36	17	26.5	38	0	0.00		
13	51	18	34.5	30	0	0.00		
14	71	27	49.0	16	0	0.00		
15	62	31	46.5	18	0	0.00		
16	M	M	M	M	M	M		
17	M	M	M	M	M	M		
18	M	M	M	M	M	M		
19	M	M	M	M	M	M		
20	M	M	M	M	M	M		
21	M	M	M	M	M	M		
22	M	M	M	M	M	M		
23	M	M	M	M	M	M		
24	M	M	M	M	M	M		
25	M	M	M	M	M	M		
26	M	M	M	M	M	M		
27	M	M	M	M	M	M		
28	M	M	M	M	M	M		
29	M	M	M	M	M	M		
30	M	M	M	M	M	M		
Smry	58.1	27.4	42.7	330	0	0.46		

Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data

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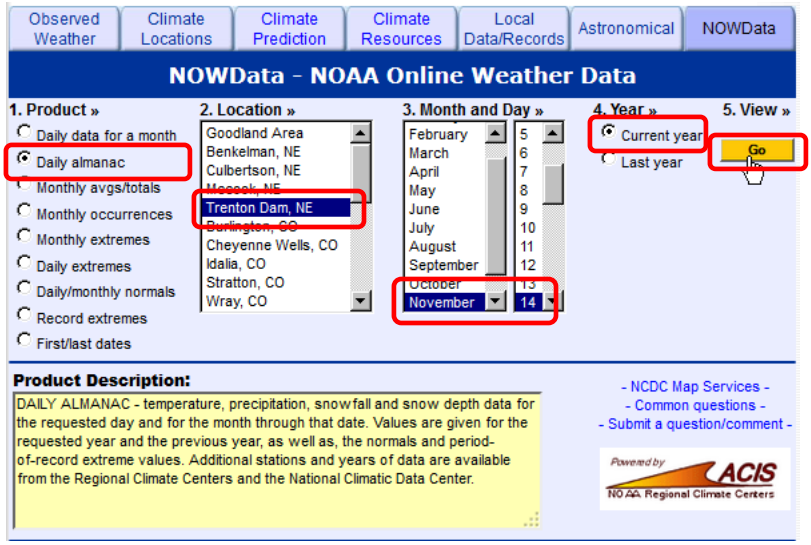
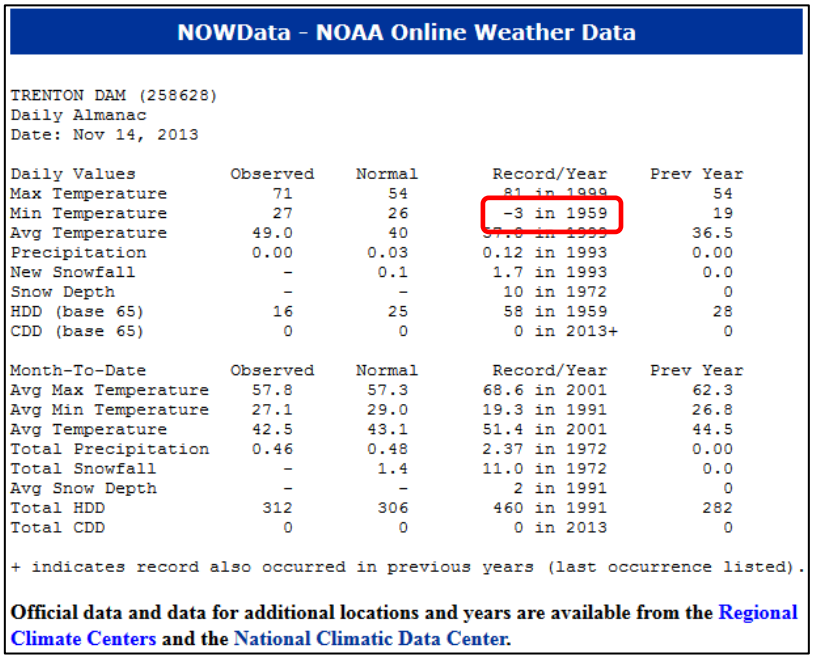
Here's a related question we might receive: "What is the record low temperature for November 14th for Trenton?" To answer this question, we stay under the NOWData tab but select a product called **Daily Almanac.** Keep the location as Trenton Dam, select the month and day, keep the default Current Year and click Go.



A new window appears with Observed data, Normals and Records for both the date selected and Month-To-Date values. So it looks like the Record Low temperature for this date is -3 degrees occurring in 1959.



NOWData - NOAA Online Weather Data

TRENTON DAM (258628)
Daily Almanac
Date: Nov 14, 2013

Daily Values	Observed	Normal	Record/Year	Prev Year
Max Temperature	71	54	81 in 1999	54
Min Temperature	27	26	-3 in 1959	19
Avg Temperature	49.0	40	57.8 in 1999	36.5
Precipitation	0.00	0.03	0.12 in 1993	0.00
New Snowfall	-	0.1	1.7 in 1993	0.0
Snow Depth	-	-	10 in 1972	0
HDD (base 65)	16	25	58 in 1959	28
CDD (base 65)	0	0	0 in 2013+	0

Month-To-Date	Observed	Normal	Record/Year	Prev Year
Avg Max Temperature	57.8	57.3	68.6 in 2001	62.3
Avg Min Temperature	27.1	29.0	19.3 in 1991	26.8
Avg Temperature	42.5	43.1	51.4 in 2001	44.5
Total Precipitation	0.46	0.48	2.37 in 1972	0.00
Total Snowfall	-	1.4	11.0 in 1972	0.0
Avg Snow Depth	-	-	2 in 1991	0
Total HDD	312	306	460 in 1991	282
Total CDD	0	0	0 in 2013	0

+ indicates record also occurred in previous years (last occurrence listed).

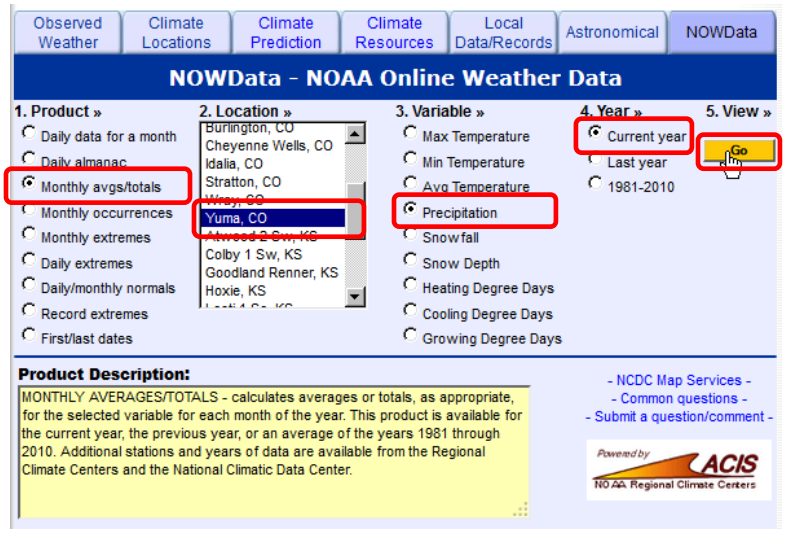
Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data Center.

continued on page 17

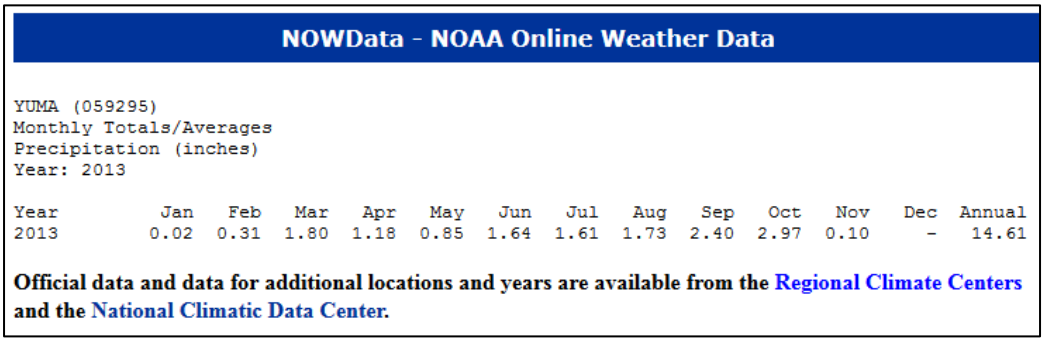
continued from page 16

Another question frequently asked is "What are the monthly precipitation totals this year for Yuma, Colorado?" Once again, we remain in the NOWData tab since this is a cooperative observer station. The product we're looking for now is called **Monthly Avgs/Totals**.

The screen below shows our selections.



The new window shows the monthly precipitation totals. Note from the screen shot above that data can be selected from this year, last year, or the 30-year normal for 1981-2010.



NOWData - NOAA Online Weather Data

YUMA (059295)
Monthly Totals/Averages
Precipitation (inches)
Year: 2013

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2013	0.02	0.31	1.80	1.18	0.85	1.64	1.61	1.73	2.40	2.97	0.10	-	14.61

Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data Center.

There is a wealth of other information available on our web site. Explore a bit on your own and see what you find. If you have any questions, drop me an email and I'll try to help out: david.l.floyd@noaa.gov.

Cooperative Observer News

Don't forget to take the funnel out of your rain gauge and Fischer Porter equipment to get ready to measure snow.
If you need help check out this website:

http://www.nws.noaa.gov/om/coop/reference/Snow_Measurement_Guidelines.pdf

If you have any questions, give us a call at 800-272-7811. We will be glad to assist you!

Pictured above is the staff at the Kansas State Southwest Region Extension Center in Tribune, Kansas receiving a 100 year Institutional Award from Scott Mentzer, Meteorologist in Charge. Staff pictured include (left to right) Jeff Slattery, Randy Mai, Scott, and Dewayne Bond.

NWS Goodland Via Facebook and Twitter

http://www.facebook.com/US.NationalWeatherService.Goodland.gov

https://twitter.com/NWSGoodland

One more way to find us - load our page
using your phone's camera and a QR code reader.
Scan the code above and take the latest weather bulletins with you when you are on the go!

Top Five Floods in Nebraska

Bob French attempting rescue of stranded Power Plant Employees May 31, 1935

Our office recently received a report compiled by David Pearson, Senior Service Hydrologist in Omaha, on the top five floods in Nebraska. The data is quite interesting, and might surprise you! The flood in fifth place was the Medicine Creek/Republican River Flood of 1947. The fourth place went to the Missouri River flood of 1881. Third place was the 1950 floods in southeast and south central Nebraska. Second place went to the flood season of 1993, especially in the area around and in Omaha. First place went to the 1935 Flood of the Republican River in southwest Nebraska. Our website has lots of information about this particular devastating flood. If you would like to learn more about it, or any of the other floods in the top ten check out the report and the information about the 1935 flood on our website!

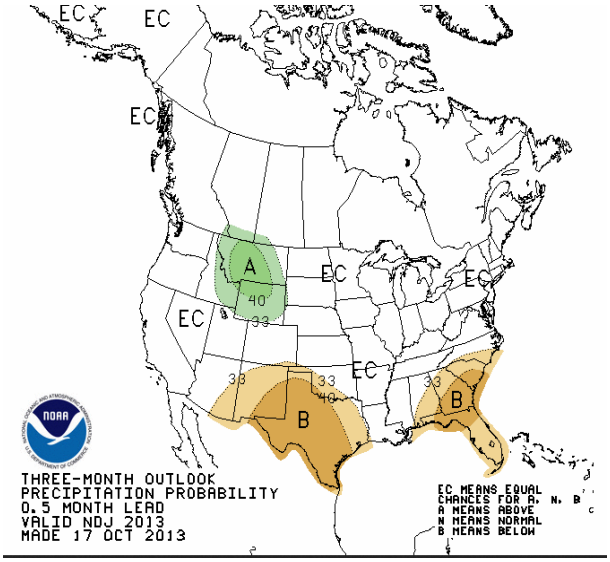
http://www.weather.gov/gld/?n=1935flood

Photo above taken near Cambridge, Nebraska after the flood

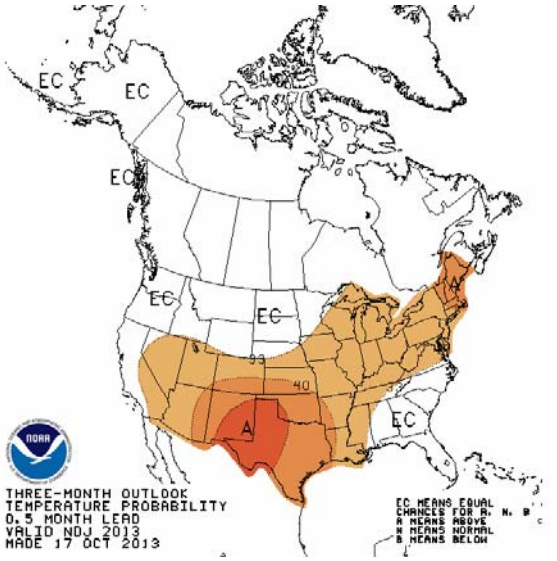
Climate Corner

Current Weather Information for Our Area

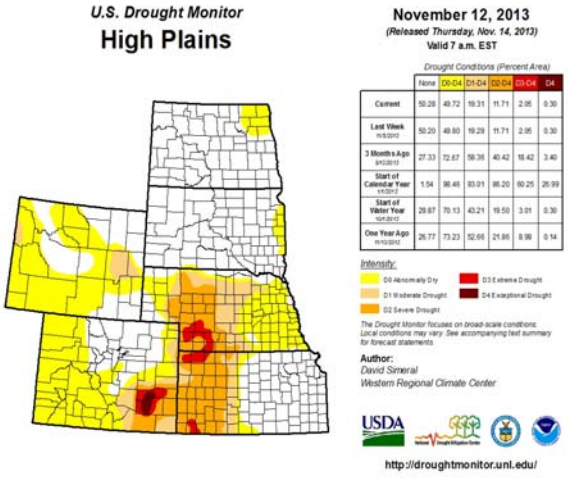
Latest Extended Outlooks



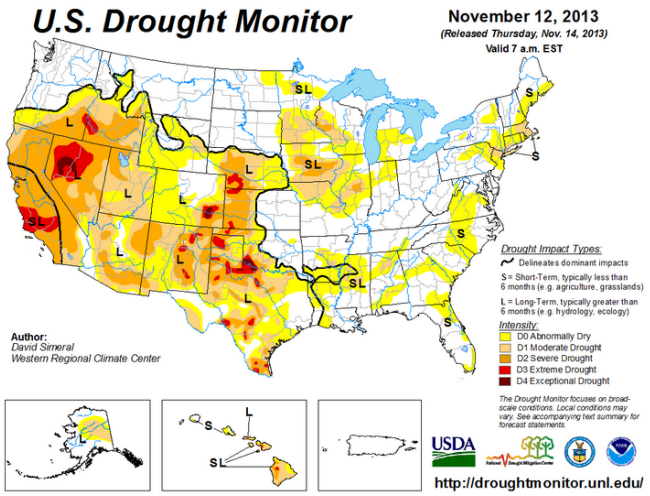
Precipitation Outlook (Nov& Dec 2013 Jan 2014)



Temperature Outlook (Nov& Dec 2013 Jan 2014)



Current Drought Monitor



Drought Outlook

Need more information? Check out the U.S. Drought Monitor website: http://droughtmonitor.unl.edu/

Site	Year-to-Date Precipitation	Departure from Normal
Burlington	16.71	-.19
Goodland	16.68	-2.31
Hill City	17.56	-4.41
McCook	12.61	-8.98

National Weather Service
920 Armory Road
Goodland, KS 67735

Phone:
785-899-7119

Fax:
785-899-3501

E-mail:
w-gld.webmaster@noaa.gov

Please don't forget, if you have pictures or video to share of any severe weather events that take place this year, please contact ***david.l.floyd@noaa.gov***

With your permission, your pictures and video will provide information and training materials for future storm spotters and meteorologists!

The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community. It is accomplished by providing warnings and forecasts of hazardous weather, including thunderstorms, flooding, hurricanes, tornadoes, winter weather, tsunamis, and climate events. The NWS is the sole United States OFFICIAL voice for issuing warnings during life-threatening weather situations.