THE RADAR POST

NWS GOODLAND'S NEWSLETTER SINCE 2017

Volume 4, Issue 4 Spring 2022

Message from the MIC

Spring is upon us and we are expecting another active weather season across the Tri-State Region. This year, with the drought conditions, we can continue to see an increase in fire and dust potential.

The NWS office is Goodland, Kansas wants everyone to be aware of the TORUS (Targeted Observations by Radar and UAS of Supercells) Project that may be in our area from May 15, 2022 until June 18, 2022.

Multiple research teams will follow severe thunderstorms to study how factors like wind speed, temperature, humidity and pressure may reveal the small-scale structures in a supercell storm and how it contributes to tornado formation. Roughly a dozen radar, ballooning, uncrewed aerial vehicle, and ground-based observations teams will travel into the storm. Along with a team in the NOAA P-3 Hurricane Hunter flying just outside the storm, they will provide a data-driven, multi-dimensional view of each storm system. (*https://www.nssl.noaa.gov/projects/torus/)*

This year we will have researchers potentially following storms in the Tri-State Region. This project and subsequent data could be beneficial to local forecasters and may assist them in the warning process.

Finally, your NWS Goodland Office Team continues to find ways to improve communication and forecasts. If you have any ideas on how we can help improve our area, please let us know.

-Ed Holicky, Meteorologist-In-Charge

INSIDE THIS ISSUE

Intense Winds and Dust Storm Impact the Great Plains on December 15th, 2021

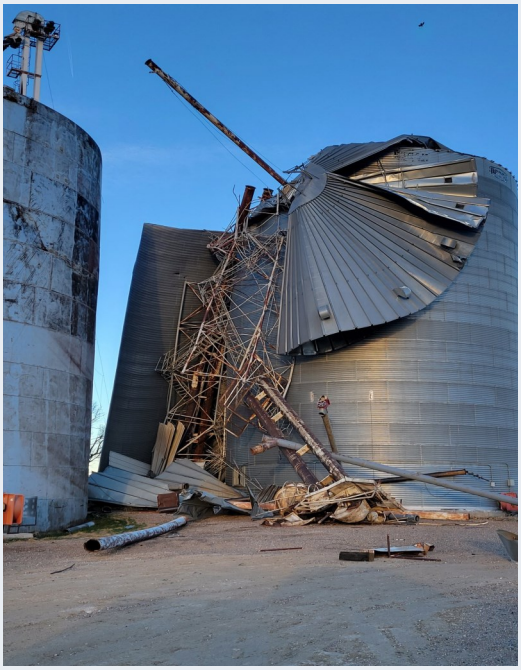
By: Kalitta Kauffman

On December 15th, 2021, a strong low pressure system moved across the Great Plains bringing high winds, a dust storm, and severe weather to the region. In the Tri-State area, high winds were measured gusting up to 90 mph with estimated gusts up to 120 mph based on the degree of damage these winds caused. The strongest winds, both measured and estimated, occurred in Norton County. Damage to power poles, trees, roofs, and outbuildings were common across the area. Some of the most notable damage included:

- The partial collapse of a rear wall to a building two-stories tall
- The total destruction of a barn that was blown onto a road
- Damage to the top of a metal grain elevator
- Blown over pivot irrigation systems

December 15th, 2021 Dust Storm near Tribune, KS
Image: Gabby Valenzuela

Besides widespread wind damage, the combination of high winds and dry conditions created a favorable environment for a wall of dust to develop. The dust storm moved across the entire Tri-State area with the passage of a cold front over several hours causing a complete loss of visibility at times and unhealthy to hazardous air quality conditions. The initial dust storm and dust that continued across the area afterward prompted the closure of Interstate 70 from Salina, Kansas to the Colorado border and all Kansas state highways in the western half of the state. Numerous accidents occurred across the area due to the high winds and reduced visibility.



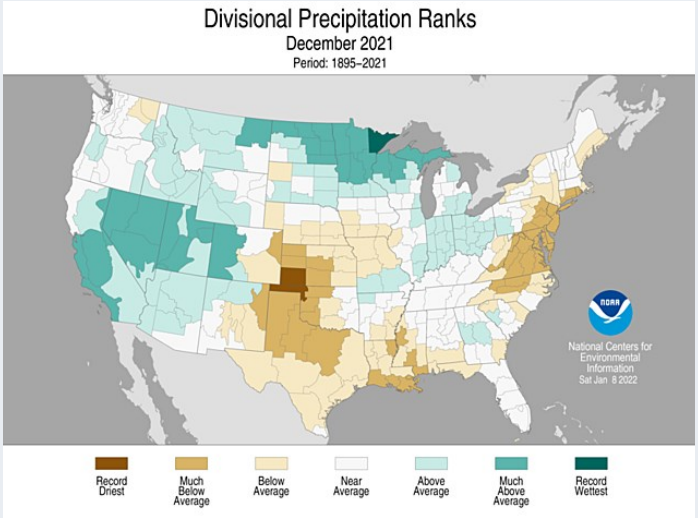
Damaged grain bin near Tribune, KS
Image: Gabby Valenzuela

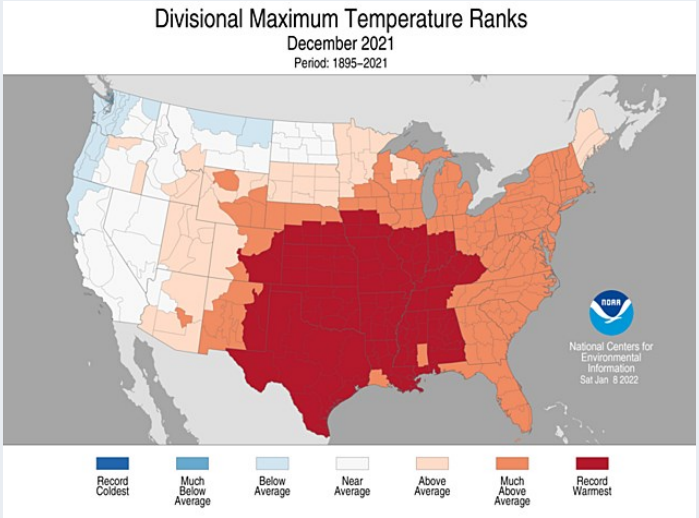
Another hazard brought on by the high winds were wildfires sparked mostly by downed power lines and one fire sparked by static electricity interacting with pasture fencing. Across the Tri-State area there were 6 wildfires that burned an estimated 17,800 acres across Wichita, Graham, Sheridan, Gove, and Logan counties in Kansas and Cheyenne County in Colorado. Unfortunately these fires did burn multiple homes, vehicles, power poles, along with acres of fields and grasslands. There was also one death due to injuries sustained from a fire in Wichita County, Kansas. The National Weather Service office in Goodland would like to thank everyone who sent in reports both during and after the event.

A Brief Overview of The Winter Season

By: Kyle Knight

For the Tri-State area (and much of the south-central United States), the winter season started out warm and dry. High temperatures were generally in the 50's and 60's across the area including 70's in the beginning of the month. For rain and snow, very little fell with most of the area seeing total liquid precipitation around 0.02 to 0.10 inches and only an inch or two of snow in some portions of the area. This is reflected in the charts below where most of the area had some of the driest Decembers on record. For the city of Goodland, it was only the second time in history that no snow fell from September to December. These dry conditions helped contribute to the December 15th dust/high wind storm.





**Month of December ranks for precipitation and high temperatures from 1893-2022.*

January brought an immediate change as snow fell across most of the area on New Year's Day and then again a few days later on January 5th. The snowfall on January 1st stopped the city of Goodland from reaching its record latest snowfall (Jan 15 in 1950-1951). High temperatures were a bit cooler with a mix of 50's/60's and 20's/30's. High temperatures only reached the single digits across most of the area on January 6th. However, the biggest story of January was the snowfall that occured on the 25th as an area roughly from Sharon Springs, KS to Burlington, CO saw around 20 to 28 inches of snow with the rest of the area seeing around 2 to 6 inches. The reason the snow was so high in that area is an intense band of snow developed and then stayed roughly in that area for most of the day while producing snowfall rates around 1 to 3 inches per hour. The snow that fell then lasted for a few weeks after the event and helped keep temperatures cooler in that area compared to the surrounding areas where all the snow melted faster.

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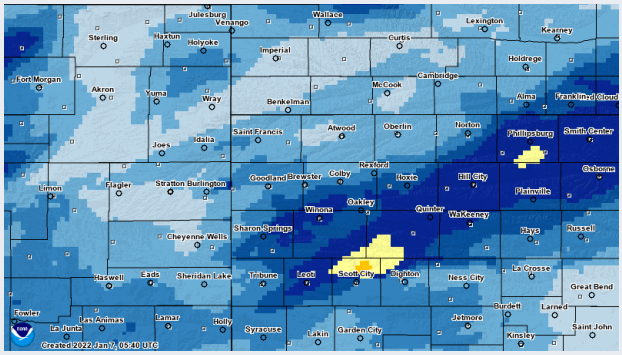
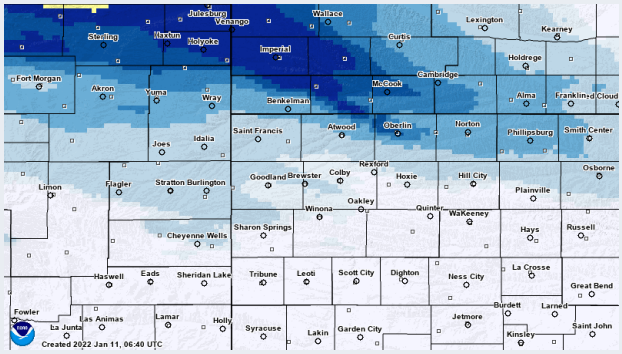
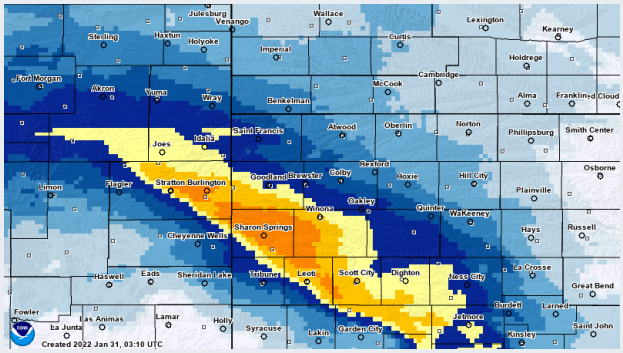
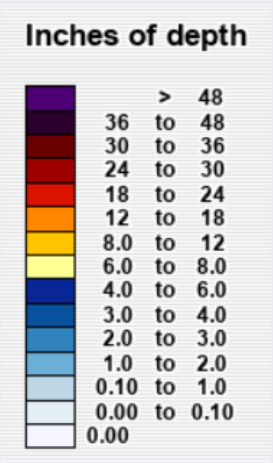


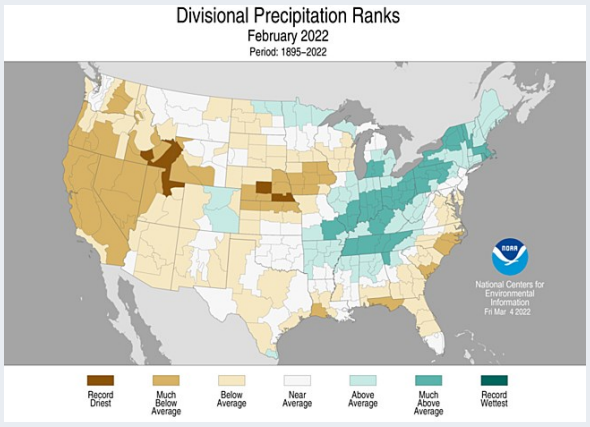


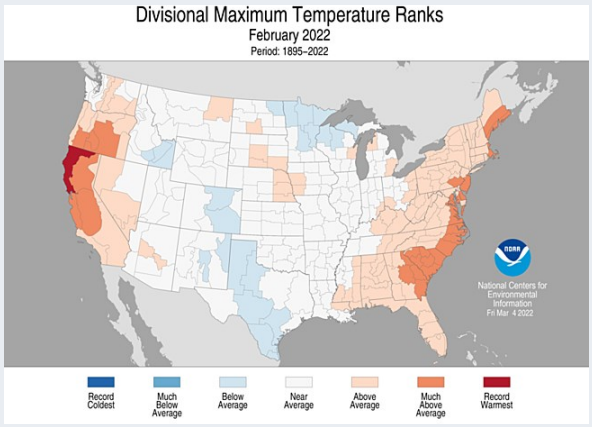




Estimated Snowfall totals for Jan 1st (Top Left), Jan 5th (Top Right) and Jan 25th (Bottom Middle)

February continued the same trend in temperatures with a mix of 50's/60's and 20/30's for highs. However, there were more instances of high in the teens and lows in the negative, especially near the end of the month. The week of the 21st through the 25th saw daytime temperatures generally remain in the teens and 20's while morning wind chills were at least -10 or as low as -30 on the 22nd. The city of Goodland also had a morning low of -10 on the 23rd. In spite of that week of cold, averaging the temperatures across the month led to near average temperatures. When it came to snow, it was a relatively dry month for most of Northwest Kansas and Southwestern Nebraska. The exception was a snow storm that produced 1-3 inches of snow near the KS/CO border at the beginning of the month.





Month of February ranks for precipitation and high temperatures from 1893-2022.

A Farewell to Jessica and Amanda

By: Tyler Trigg

Over the past few months the NWS Goodland office has said goodbye to a few forecasters (Amanda and Jessica). To show appreciation for all of the hard work they have done over the years we asked them a few departing questions as they begin their new life adventures.

Q: What do your future endeavors include?

Jessica: " I plan to be the best mom I can be for my son (and any future children), teaching him important morals, life skills, and about the weather of course".

Amanda: " I will be taking a forecaster position at the National Weather Service in Hastings, Nebraska. I grew up in eastern Nebraska, so after several years away from my family, I am looking forward to getting to be a little closer to home and spending some more time with them".

Q: What will you miss most about the Goodland office?

Jessica: " I will miss getting to "work severe weather events. There is kind of a rush that you can only get from watching storms blow up on radar and working to keep communities safe".

Amanda: "I will miss the camaraderie and the friendships will be what I miss most about working here. I've made some really good friends in the time I've been here".

Q: What was the most memorable experience/weather experience you had here?

Jessica: "In Goodland, my most memorable experience was meeting my husband and starting my family. When I came to town, I only expected to be here for a short time before moving on, but there were other plans for me! My most memorable weather experience was the supercell that traveled along I-70 on September 15, 2016 eventually hitting Goodland. The storm had over 70 mph winds and baseball hail which unfortunately resulted in lots of damage. I remember working that night knowing what fate was coming for my car parked outside at the office. I quickly re-grouped through to get the job done and take storm reports to make sure updates were going out."

Amanda: "The one event that really stands out to me though was January 15, 2021. This was the day of the Benkelman Fire and the dust storms that impacted Eastern Colorado and portions of Northwest Kansas. I think the reason this day stuck out to me was because it was my first time issuing dust storm warnings. I've had the opportunity to research dust storms on the Central High Plains for the past three years and to see our research being verified by that event".

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Q: What message or advice would you give the person taking your place?

Jessica: "I would tell him/her to find something he/she is passionate about, then do it to the best of your ability. Beyond the regular duties there are many areas to help out. Finding your niche will allow you to thrive at this job and enjoy it even more".

Amanda: "It is ok to ask questions, Meteorology is a complex field with many different concentrations so you're not going to know everything. Don't be afraid to ask questions and learn from those who are experts in particular areas. Get to know people for who they are. Most of the forecasters work rotating shifts, so you're going to be spending a lot of time together".

The office will be taking a huge loss losing both Amanda and Jessica as their contributions to both our social media program as ,Jessica mentioned that was one of her greatest accomplishments was being able to use her creativity skills to have the office set for many years to come, and our better understanding of Dust Storms, that Amanda has been focused on, have been significant from teaching us the newest tools available and creating new graphics. Congratulations Jessica and Amanda you both will be missed.

Jessica

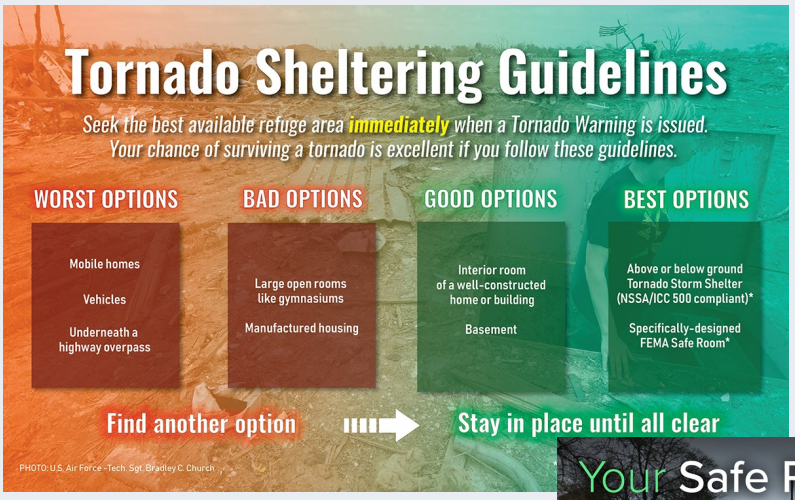
Amanda

Spring Weather Safety

With the upcoming severe weather season, now is a good time to review some safety tips and ways to prepare should severe weather come your way.

First, it is always good to have an emergency kit prepared and ready for a disaster.

When severe weather strikes, make sure you know where to shelter.



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Know what to do with each severe hazard.

Know where to go to get weather updates.

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Finally, make a Severe Weather Plan. Plan where you and your family will meet up and how you will contact each other should a disaster strike.

With all of this information, we hope you are ready for severe weather season.

We here at NWS Goodland will be there to help you before, during, and after the storm.

Weather Radio Programming

By: Jesse Lundquist

Despite the cold weather we have had recently, we are quickly approaching severe weather season. Along with having a sheltering plan for severe weather, having a way to stay alert to any warnings or watches that are issued is equally important. The best way to be aware of any watches or warnings issued from our forecast office is through a NOAA Weather Radio. You can find weather radios at many of the local hardware, farm, or grocery stores in the area.

Perhaps the greatest benefit of a weather radio is being able to program it only alert for a specific county. This was once a cumbersome process with the older weather radio models. However the new models over the past few years are much easier to program for a specific county or counties. Since the white Midland weather radios (pictured) are the most commonly found weather radio, it will be used as an example of how to program a weather radio for a specific county.

1. Push the “menu” button.
2. Use the arrows to go down to “Set Location”, then push the “select” button.
3. If you want to receive alerts for more than one county, select “Multiple”. Otherwise use the up and down arrows to select “Single”. (The weather radio is set to “Any” by default.)
4. Once you select “Multiple” or “Single” you will then need to push “Select” for each of the following options:
    - 4a. “USA”
    - 4b. The state you want alerts for.
    - 4c. The county you want alerts for.
    - 4d. Continue the process until all counties in which alerts are needed for are entered.
        [If “Single” is selected this only needs to be done once. For multiple counties you will need to go through this process for each county you want alerts for.]
5. When finished entering the counties push “menu” twice to exit the “Set Location” menu. (Each time “menu” is pressed the weather radio menu will go back one menu listing, eventually returning to the home screen that has the time.)

A similar process is done to specify what type of warnings or “events” you would like to be alerted for using the “Edit Events” option. If your weather radio has an option to set the “Alert Type”, setting it to “Voice” is recommended. Voice alerts allow the weather radio to automatically turn on so you can hear the warning being read each time a new warning is issued, without having to push the “weather” button on the weather radio. Once the warning text has been read, the weather radio audio will turn off. If you have any questions about your weather radio, please contact our office by phone or through social media.

Kids Korner: Fun With Water

By: Kalitta Kauffman

Ever wondered how rainbows occur after it rains or how the water cycle works? In this issue, we will provide two experiments that allow you to have fun with water.

Catch a Rainbow

Supplies: Bowl of water, Handheld mirror, Flashlight, Sheet of white paper, 2-3 people

1. Have one person hold the mirror in the bowl of water so it is partially underwater while another person points the flashlight at the part of the mirror underwater.
2. A third person should hold the piece of paper next to the person holding the flashlight to catch the light reflected off the mirror. If you do not have a third person, another option would be to tape the paper to the wall, fridge, etc.
3. If needed, adjust the mirror accordingly to see the rainbow's colors appear on the paper.
4. To change the rainbow, try changing the amount of water in the bowl.

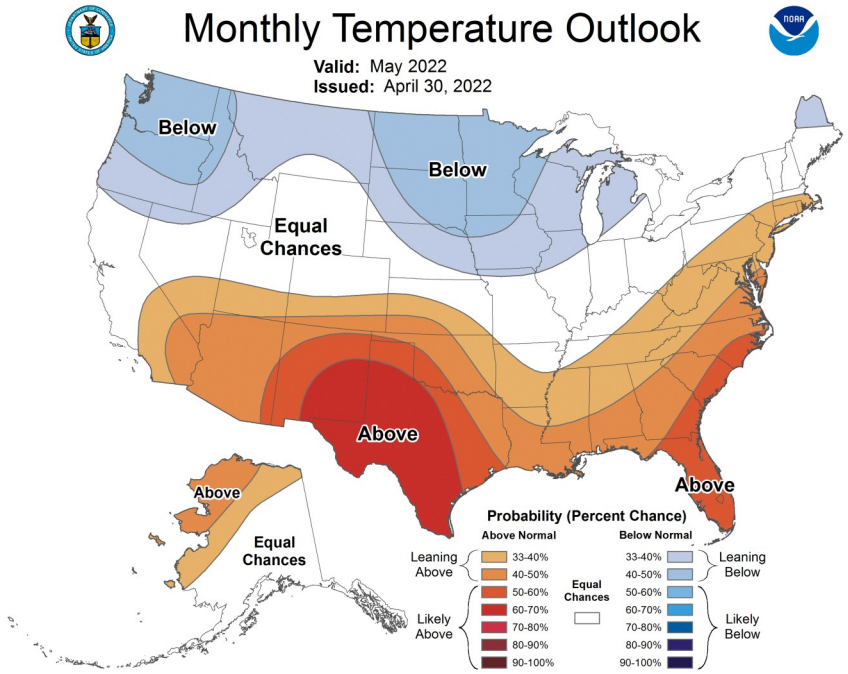
Create your own miniature water cycle

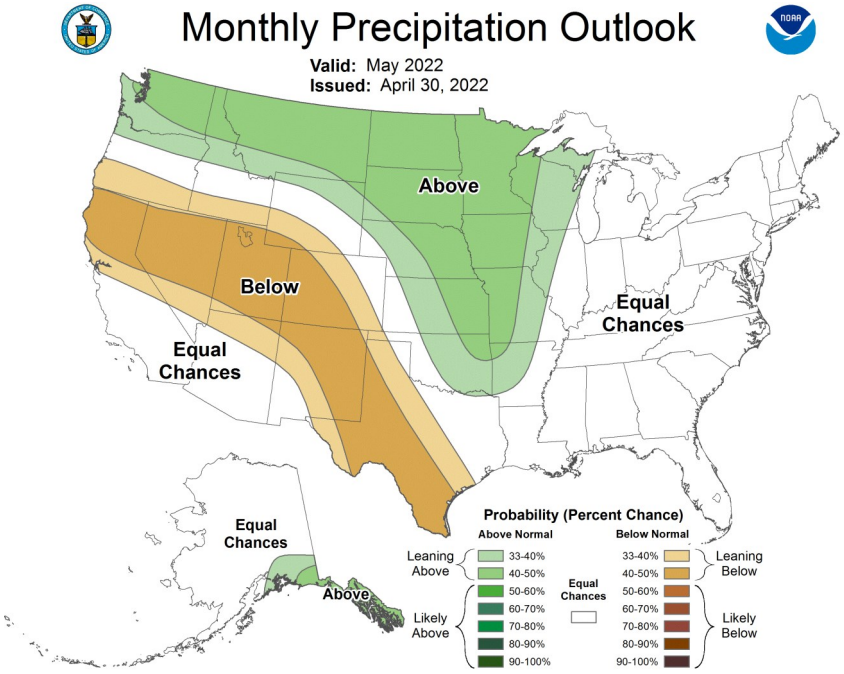
Supplies: Zipper sandwich bag Marker, Water Tape, Blue food coloring

1. Draw a sun and a cloud in the top half of the bag
2. Pour 1/4 cup of water into the sandwich bag and add a few drops of food coloring.
3. Seal the bag and tape it preferably on a sunny, ideally south-facing, window.
4. Watch the bag over a few days to see how the water cycle works:

As the water warms in the sunlight, it will evaporate into vapor. As the vapor cools, it will begin changing into liquid (condensation) just like a cloud. When the water condenses enough, the air will not be able to hold it and the water will fall down along the side of the bag in the form of precipitation.

Climate Corner





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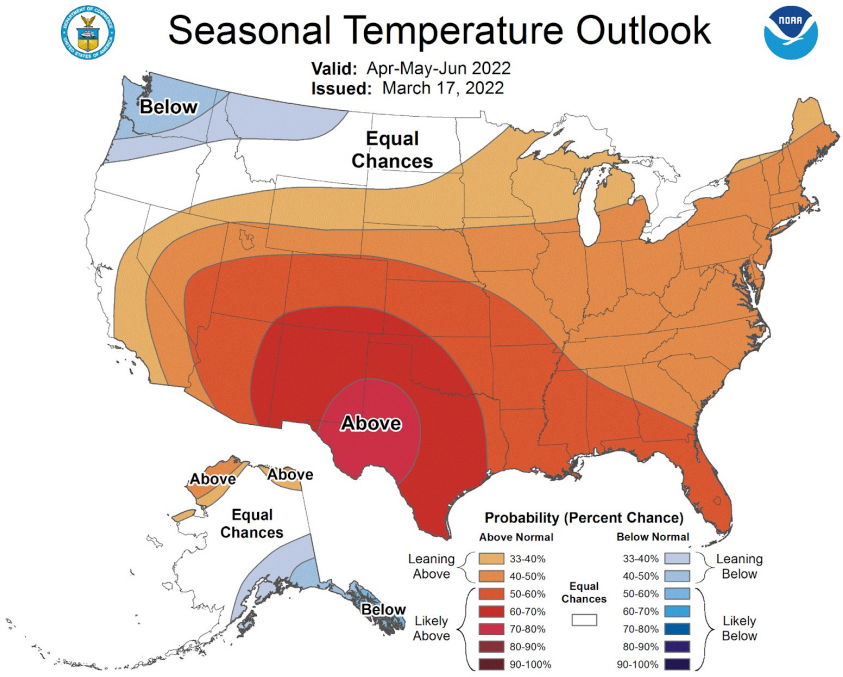
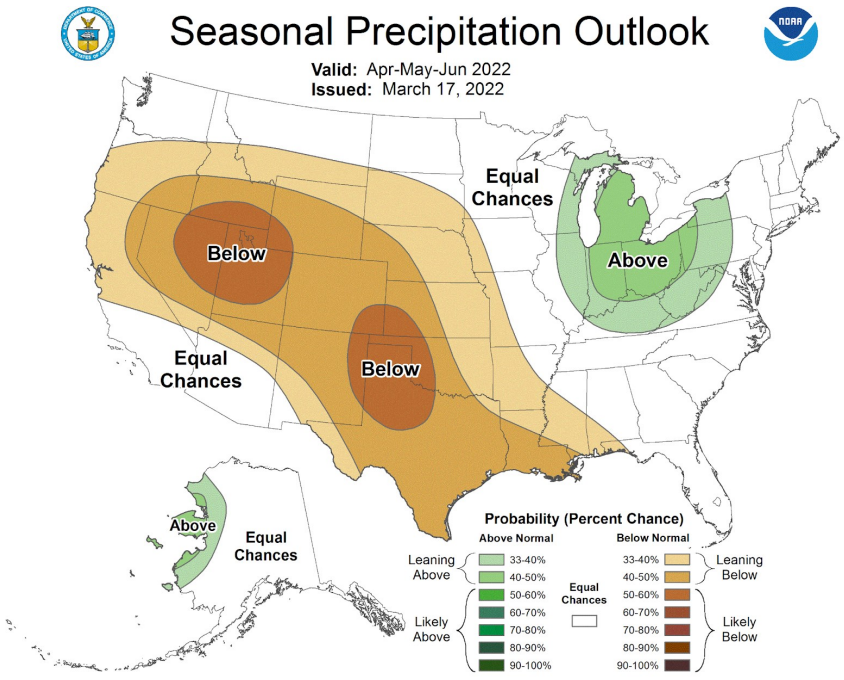
One Month Summary

The outlook calls for near to above average temperatures and near to above average precipitation for the month of May. The area averages around two and a half to three and a half inches of precipitation and highs in the mid to upper 70's.

Climate Corner





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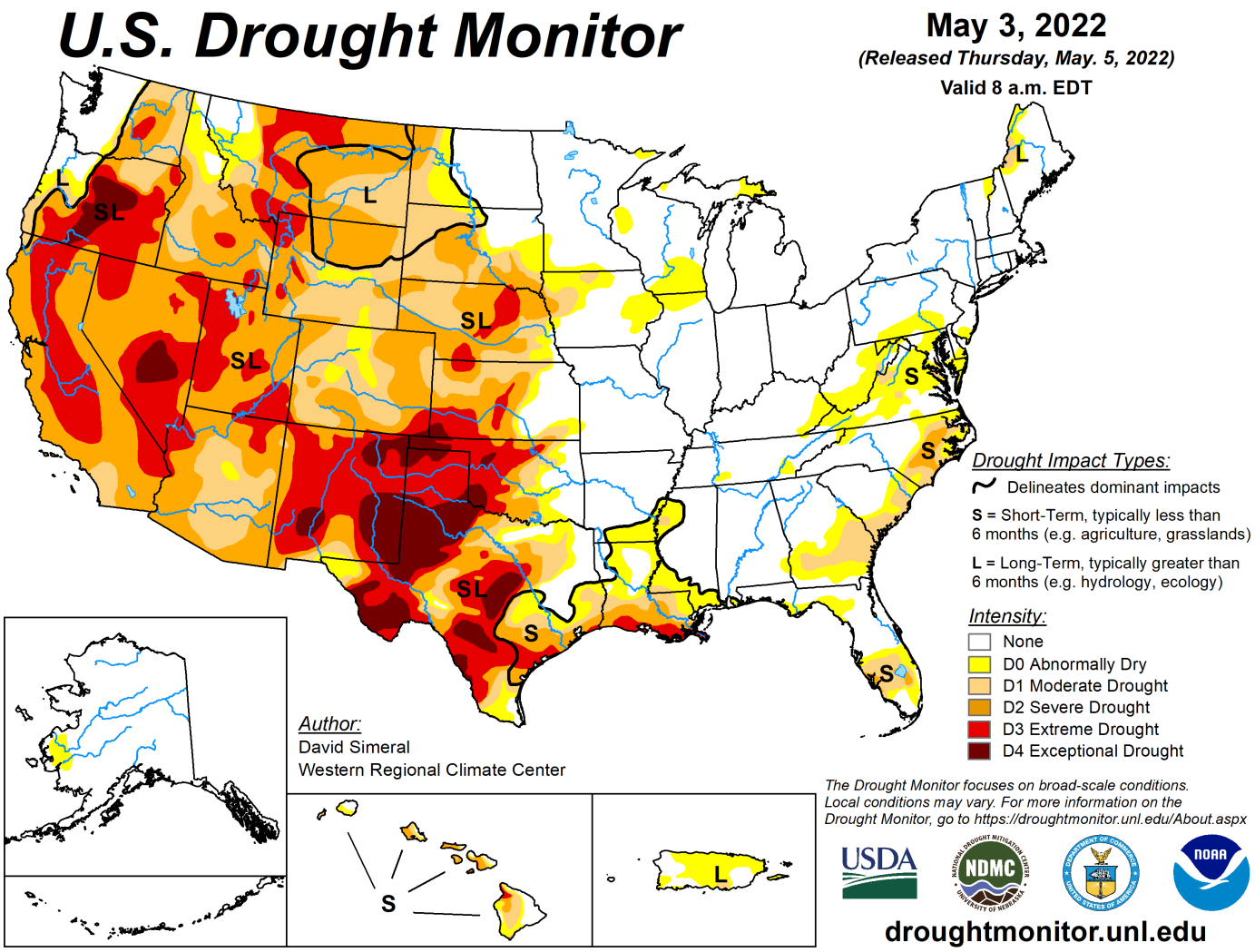
Three Month Summary

The three-month outlook calls for above normal temperatures and below normal precipitation across the area.



City	Year to Date* Precipitation (in.)	Normal Year to Date* (in.)	Departure from Normal (in.)
Goodland	3.34	3.89	-0.55
Burlington	4.68	3.37	+1.31
McCook	3.27	3.92	-0.65
Hill City	2.91	4.48	-1.57

Data as of May 8, 2022

WRN Ambassador News

Message from the WCM

Our annual severe weather season is upon us, and many of us will be impacted. Are you ready?

Before severe weather strikes, take some time to review your safety plans. Ask yourself these questions: what will I do without power for up to a week? Does my family have enough supplies? Where is my tornado shelter, both at home and work? Do I have a place to go if there is not suitable shelter? How will my family communicate before, during, and after a weather event? Have we practiced our severe weather plan lately? How will my family stay safe at the lake, on camping trips, traveling to school events, or whatever else is going on in our lives?

Answers to these questions could save your life, and the lives of your family, friends, and community members! The National Weather Service, along with FEMA and other emergency response and emergency management agencies, recommend that you have a disaster plan and an emergency kit. Your disaster plan should address safety, sheltering, communication, and recovery. Your emergency kit needs to contain all the supplies you will need in a disaster scenario, including medical supplies, food and water, and anything else you might need.

In a normal year, the Tri-State Region averages 23 tornadoes, over 100 reports of severe winds, and around 250 reports of severe hail, or greater than the size of a quarter. The majority of the tornadoes will remain over open fields in our rural landscape, but they can and do strike our towns and cities, as well as our farmsteads. In fact, just last year, the town of Selden, Kansas was hit hard by a tornado on May 24th, 2021. Widespread damage was observed across the town as a result of the EF-1 tornado, which produced winds as high as 110 mph. In addition, straight-line winds can do just as much damage as a tornado, and sometimes, more damage than a tornado. A microburst struck Burlington, Colorado on September 1st, 2021 causing damage consistent with winds up to 115 mph, or as strong as an EF-2 tornado. Overall, the point I want you to consider is to take all storms seriously and to be prepared as over the next 6-7 months, severe weather can strike at any time and the disaster could be of a great magnitude.

Ryan Husted, Warning Coordination Meteorologist

Interested in Joining Weather-Ready Nation?

For information on how to become a Weather-Ready Nation Ambassador, please contact the Warning Coordination Meteorologist, Ryan Husted (Ryan.Husted@noaa.gov) or NWS Goodland meteorologists (nws.goodland@noaa.gov or 785-899-7119). To learn more about this national initiative, visit the Weather-Ready Nation website (www.weather.gov/wrn), or the NWS Goodland WRN website (https://www.weather.gov/gld/WRN_Ambassadors).

WRN Ambassador News

Storm Spotters: Our Eyes in the Field

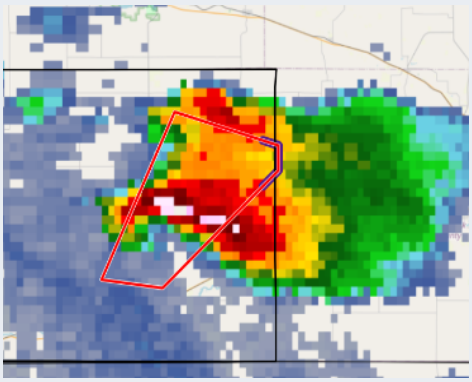
By Jesse Lundquist

Severe weather season is here. This is the time of year we heavily rely on our storm spotters because spotters are our eyes in the field; they help us see what our radar cannot. Spotters also put the radar data into context for us, helping us better understand what the storm is doing.

Because storm spotters are so important to us, we have conducted several virtual storm spotter training sessions this year. These sessions served as a reminder of the role of the spotter during severe weather, and how important weather reports from spotters are to our severe weather operations. We are not asking spotters to be storm chasers; but instead to report what they see wherever they are located. As we have said in prior years, don't expect someone else to report severe weather to us. If you see a weather phenomena that looks severe or close to it, please let us know. We would much rather be inundated with phone calls than not receive any.

In case you were not able to attend a virtual spotter training session this year, here are some of the highlights that are important to remember while out spotting:

Watch vs. Warning: A watch is issued when conditions are favorable for severe weather to occur. A warning is issued when severe weather is either eminent or already occurring.



Examples of what a watch (left) and a warning (right) look like.

Please report hail referencing known, standard sizes so we know how large the hail is. Also, report the largest hailstone you see. The larger the hailstone, the stronger the storm is.

When taking shelter from a tornado, go to the lowest level of the building and put as many walls between you and the outside as possible.

Wall clouds are attached to the base of the updraft. The updraft is at the back of the storm. If a

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WRN Ambassador News

Storm Spotters cont.

tornado will form, it will be from this cloud.

Examples of wall clouds. Images courtesy of NSSL (left) and NWS Cheyenne (right)

Shelf clouds are at the front part of the storm. Rain and increased wind may occur behind the shelf cloud.

A funnel cloud does not contact the ground. As soon as it does, it is now a tornado. Watch for a circulation below a funnel cloud. If there is one, a tornado has now formed.

A shelf cloud moving over Goodland, KS.
Image courtesy of Amanda Wekesser

Funnel Cloud.
Image courtesy of Daniell Railey

Tornado
Image courtesy of Christopher Warner

If there are flood waters over a road, turn around don't drown. The depth and speed of the water are unknown, plus you don't know what the condition of the road is underneath the water.

WRN Ambassador News

Where Will You Go?

By Jesse Lundquist

When hazardous severe weather is moving towards your location, where will you go for shelter? Do you have a plan of where to take shelter no matter where you are located? Don't assume severe weather will only occur when you are at home. Think about where you would take shelter if you are on the road, at a friend's house, or watching a baseball game.

If you have access to a building when severe weather is approaching, the best place to be is the lowest floor or basement if available. The higher you are above ground, the more likely hail or debris from damaging winds will cause you injury.

If on the road in a hail storm, stop on the side of the road. **Don't stop under an overpass.** This will likely lead to an accident or delay emergency vehicles that need to get through to storm victims or other emergencies. Most hail storms don't last more than 15 or 20 minutes. After that you can move on. If the hail is big enough to shatter windows, protect your eyes and head. Don't leave the vehicle during a hail storm. Leaving the vehicle for even a few seconds is enough time for the hail to cause injury. If a tornado is approaching, drive away from it at a 90^{o} angle. For example, if the tornado is headed northeast, drive southeast away from it. Don't outrun, out maneuver the tornado! If there is no time to evade the tornado, get into a ditch and protect your head to lower the chance of being hit by debris.

Parking under an overpass is not advised during severe weather.
Image courtesy of Freddy McKinney

Damage to a mobile home from the Selden, KS tornado on May 24th, 2021

If in a mobile home, go to a storm shelter. An EF-2 tornado will completely destroy a mobile home. Therefore, do not take shelter in them. If outside when severe weather approaches, take shelter in the nearest sturdy building or community storm shelter. If no building is available, sheltering in a ditch and protecting your head is the last "ditch" resort.

While out enjoying the spring weather, don't forget to remain aware of where you need go to take shelter from severe weather, should the need arise. You need to be prepared to act when a severe thunderstorm warning is issued for your location. Having a plan ahead of time for where to take shelter will help you stay safe when thunder roars!

WRN Ambassador News

What else can the National Weather Service do for you?

By Ryan Husted

The National Weather Service is a name brand that so many of you across the High Plains recognize. The NWS issues a 7-day forecast, all watches, warnings, and advisories, river forecasts, aviation forecasts, distributes and maintains climate information, provides programing for the NOAA Weather Radios, provides weather observations via radar, satellite, and automated surface observation systems (ASOS), and provides outreach to the local communities in the form of Spring Spotter Talks. The NWS also provides a large presence on our national website, our local website and through social media feeds, through Facebook and Twitter. But is that all the National Weather Service does? No. Here are a few services the National Weather Service provides that you may not know about!

Storm Data

After weather events, NWS Goodland collects reports from our emergency managers, local dispatch centers, storm spotters, the general public, and many others. Once we collect that data, it is quality controlled and archived for later use. What might this information be used for? The data can be used for research intended to improve forecasts and warnings. The data is often distributed to local, state, and federal governments to better inform community planning/ improvement grants and disaster declarations. The data can be used in court proceedings or insurance claims (likely need the "official" data, once it has been quality controlled). Finally, the general public can use the data for whatever educational and safety purposes that may not have been previously discussed.

Hail	(KS-C109) LOGAN	Add	0.75 in	05/24/21 16:15 CST	05/24/21 16:15 CST	View/Edit
	A supercell thunderstorm produced up to penny sized hail and heavy rain along US-83.					
Hail	(KS-C039) DECATUR	Add	0.88 in	05/24/21 16:55 CST	05/24/21 16:55 CST	View/Edit
	A supercell thunderstorm produced dime to nickel sized hail.					
Hail	(KS-C039) DECATUR	Add	1.75 in	05/24/21 17:05 CST	05/24/21 17:05 CST	View/Edit
	N/A					
Tornado	(KS-C179) SHERIDAN	Add	EF1, L: 5.87 mi, W: 850 yd	05/24/21 17:06 CST	05/24/21 17:36 CST	View/Edit
	A large, multi-vortex tornado moved across northwestern Sheridan County, Kansas, impacting the town of Selden. The tornado started west of town initially and moved slowly to the east, eventually crossing Highway 83. As the tornado crossed the highway, it started to impact structures on the west side of Selden, and eventually moving across the town. In town, damage was widespread and quiet concentrated. At one point, the tornado reached a width of one half mile wide. Damage consisted of thousands of broken tree limbs, hundreds of uprooted and snapped trees, shingles off and pieces of roofing removed from residences and buildings, many farm outbuildings either missing roofing material, walls damaged, and/or the building completely collapsed and removed from its foundation, windows broken out of houses, buildings, and vehicles, snapped power poles, overturned irrigation pivots, overturned semis and rail cars, and several grain silos blown over. The tornado then proceeded to the east, exiting town and heading towards the Highway 83 and Highway 383 split. There were a few more irrigation pivots overturned, as well as power poles snapped. The tornado appeared to dissipate as it neared the Highway 83 and Highway 383 split due to a lack of any visible damage at that intersection. The challenge with this survey was there were multiple vortices causing damage. Therefore, there were a few areas of more concentrated high-end EF-1 damage with broad/widespread EF-0 to EF-1 damage. There was one minor injury with this event. The town tornado sirens were not functioning as a result of a power outage. Therefore, fire fighters jumped into their vehicles to drive through town to warn people of the coming tornado. Powerlines fell upon one of the trucks, striking a fire fighter in the back of the neck. Injury was treated on scene.					
Thunderstorm Wind	(KS-C063) GOVE	Add	MG 52.0 kt	05/24/21 20:09 CST	05/24/21 20:09 CST	View/Edit
	Mesonet station KKSGRAIN4 measured a 60 mph wind gust associated with a band of heavy rain moving across Gove County.					
Thunderstorm Wind	(KS-C065) GRAHAM	Add	MG 51.0 kt	05/24/21 21:53 CST	05/24/21 21:53 CST	View/Edit
	Wind gusts occurred behind the thunderstorm activity.					

Sample of StormData from May 24, 2021 for Northwest Kansas.

Image courtesy of the National Weather Service

Decision Support Services

The National Weather Service is moving towards a work model in which we work more closely with our key local, state, and federal government partners. This does not mean that you will

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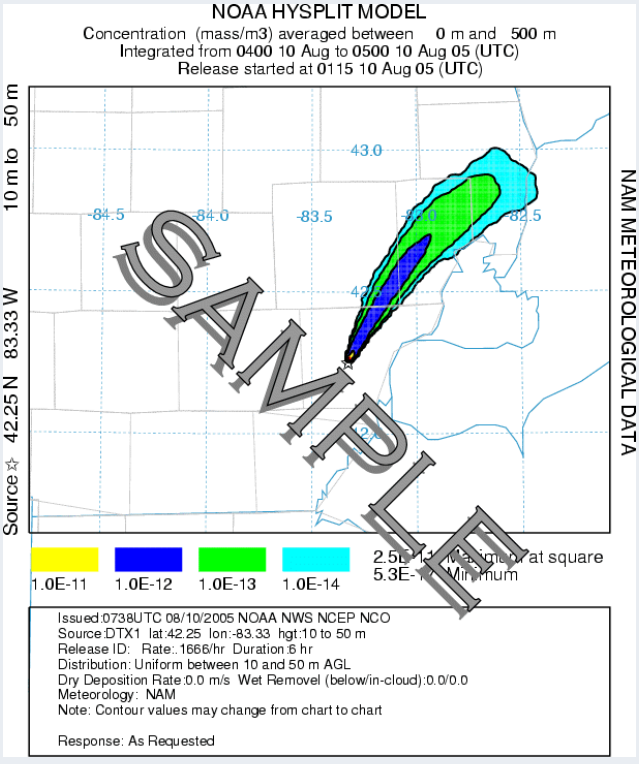
WRN Ambassador News

National Weather Service cont.

Black Hawk Helicopter operating near St. Francis, KS in November 2019.
Image courtesy of Jesse Lundquist

see any changes to your current service. What this does mean is that the National Weather Service will support your local communities, under the premise of safety, to ensure great decisions are made to keep everyone safe. Meteorologists can be deployed to both planned (ex. a fair, festival, sporting events, drills/exercises, or other large events where a high volume of people will be vulnerable to weather) or unplanned (a wildfire response, disaster recovery efforts). We come fully equipped and embed with the government officials operating, providing weather updates immediately upon request. The minutes saved by meteorologists serving as part of a response can be the difference between all those working that event getting to shelter or not.



Sample plume forecast showing where a toxic plume might go.
Image courtesy of NWS Detroit

Plume Forecasting

A train has derailed near a town. Several rail tanker cars were damaged, causing a chemical spill and toxic fumes to escape. This is a volatile chemical known to explode and to be poisonous when inhaled by humans. All residents downwind of the plume need to evacuate immediately or face being hospitalized or killed from the toxic plume. But, where is the plume going? With information provided by first responders, the National Weather Service can provide a model/forecast of where this plume of toxic fumes will move. The program is called Hysplit, and it can be run in a matter of minutes. There are other customizable features to the forecast too, such as is this a continuous release or an explosive release, the amount of chemical and type of chemical released, the weather observations in the area of the incident, and a variety of other inputs that can improve the forecast for that particular location. Armed with

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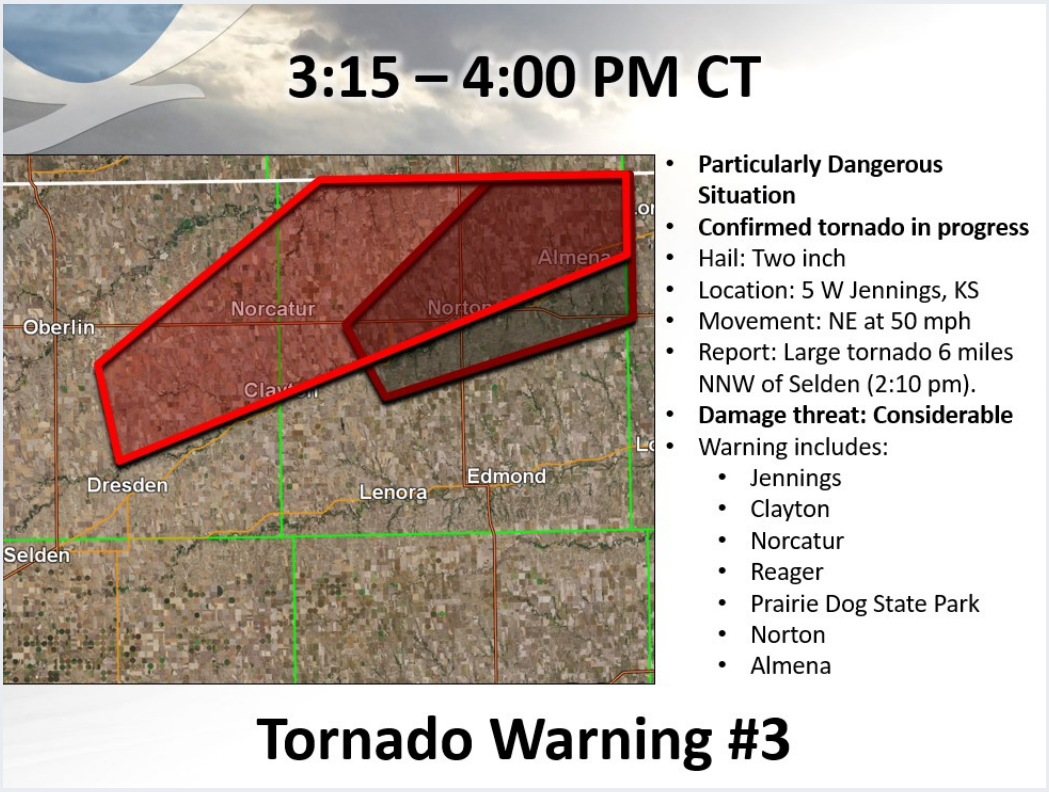
WRN Ambassador News

National Weather Service cont.

the latest plume forecast from the National Weather Service, local emergency management and first responders will be able to pinpoint locations that need to be evacuated immediately.

Participate or Lead Drills/Exercises

Another capability of the National Weather Service is to apply our weather expertise into drills and exercises held in the community! We are able to build resources to help you simulate a real event, making the drill seem much more like a real-life scenario. This could be done for tornado drills at area schools, table-top or full-scale exercises within the community, or planning and/or after action review conversations on how to handle weather-related disasters. The National Weather Service is happy to assist you in any way that may lead to a beneficial improvement in safety procedures.



Simulated warning for a table top exercise in Norton, KS.
Image courtesy of NWS Goodland

Useful Links

· Storm Prediction Center
- www.spc.noaa.gov
· Weather Prediction Center
- www.wpc.ncep.noaa.gov
· Climate Prediction Center
- www.cpc.ncep.noaa.gov
· Climate Data
- www.ncei.noaa.gov
· CoCoRaHS
- www.cocorahs.com
· Weather Models
- www.ncep.noaa.gov
· Space Weather
- www.swpc.noaa.gov

SciJinks
-scijinks.gov/

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