Decision (Weather) Support Services Page: weather.gov/aly/alyDSS 🔕

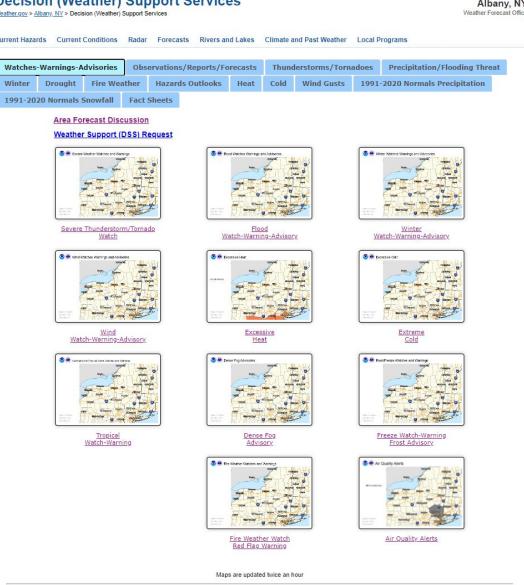








Created by Ingrid Amberger Retired Meteorologist - National Weather Service

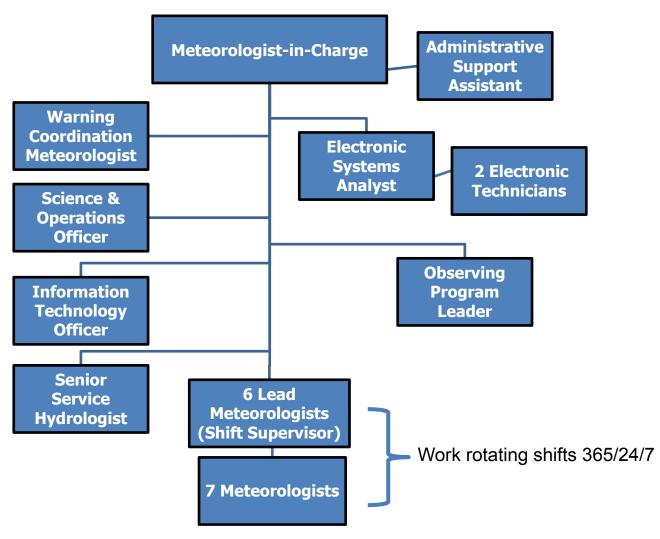




National Weather Service Forecast Office







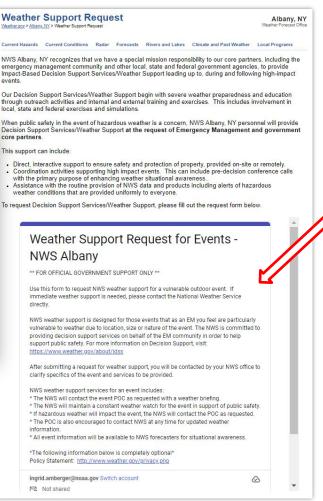
"Watches-Warnings-Advisories" Tab



Can see the areal coverage of watches, warnings and advisories that are in effect



Under each graphic tile there is a link to a fact sheet with the local criteria or to a National Weather Service web page for that hazard.



As emergency management or a government core partner, you can request weather support for an event by filling out this form. Requests should to be submitted at least 1 to 2 weeks prior to the event.

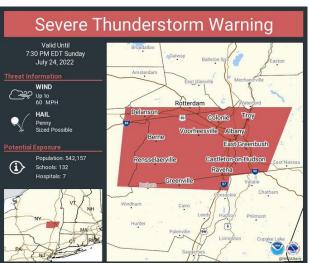


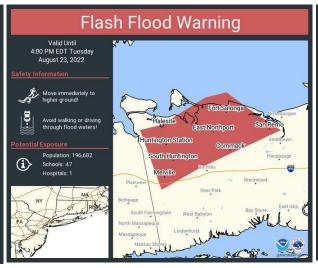


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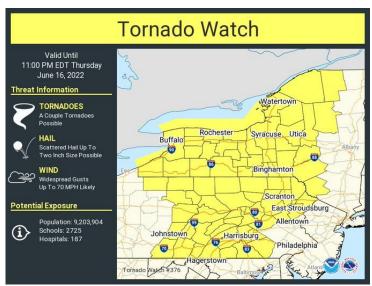


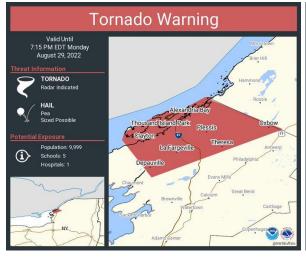














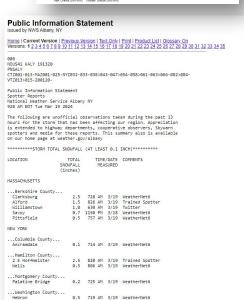


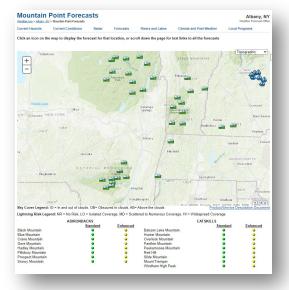
"Observations/Reports/Forecasts" Tab

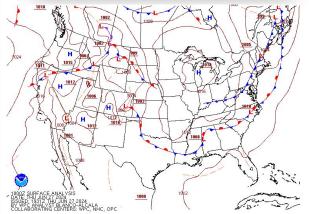


Access to current data such as radar, satellite, lightning data, weather maps, reports from on-going events and past events, snowpack information, recreational forecasts, and river and stream observations and forecasts.







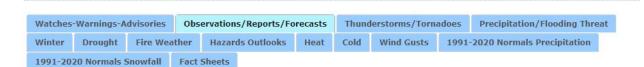


Decision (Weather) Support Services

Weather.gov > Albany, NY > Decision (Weather) Support Services

Current Hazards Current Conditions

Albany, NY Weather Forecast Office



Forecasts Rivers and Lakes Climate and Past Weather Local Programs

Weather Support Matrices







Northeast Radar Loop

National Radar Loop

National Water Prediction

Surface Map & Forecast Maps

Other Radar: Northeast

GOES Image Viewer: GOES-East Northeast Sector Satellite-derived Lightning: Day Time & Night Time

Reports: Public Information Statement --- Local Storm Reports --- mPING Spotter Reports Past Precipitation Analysis & Locally created Precipitation & Snowfall Maps

Northeast Regional Climate Center: State & Regional Analyses of Precipitation and Snowfall Snowpack Information: Snow Depth --- Snow Water Equivalent --- Estimated Snow Melt Past 24 hours

Mountain Top Forecasts (Search and Rescue): Eastern NY and adjacent Western New England

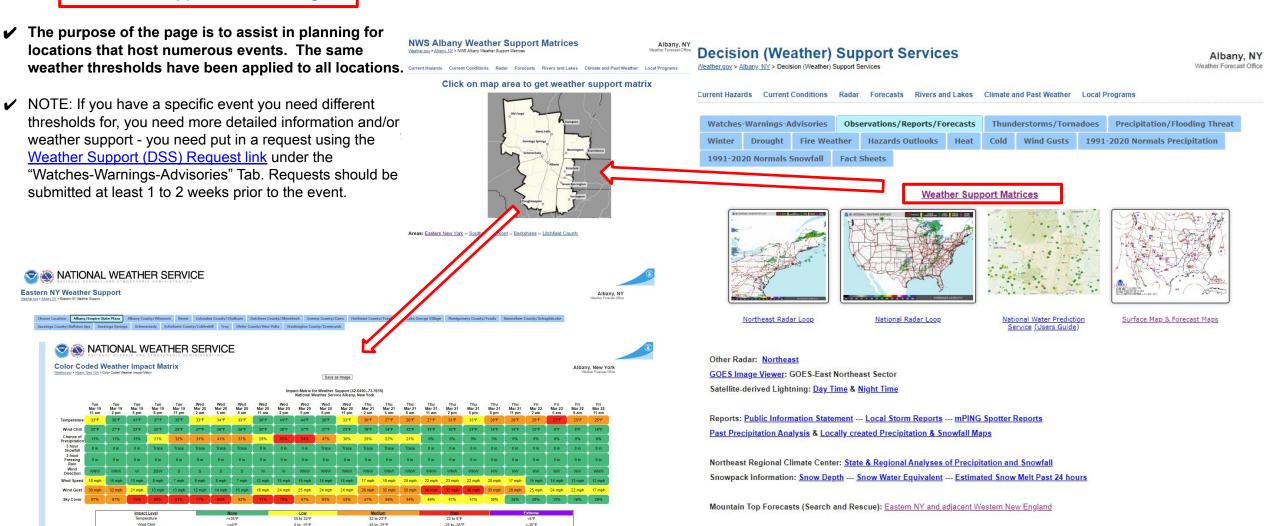
"Observations/Reports/Forecasts" Tab

35 to 45 mph

35 to 45 mph



Weather Support Matrices Page



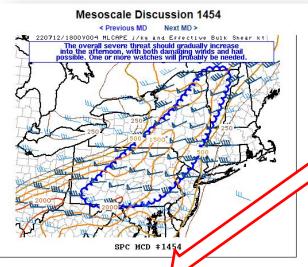




Wind Gus

"Thunderstorms/Tornadoes" Tab





Mesoscale Discussion 1454 NWS Storm Prediction Center Norman OK 1040 AM CDT Tue Jul 12 2022

Areas affected...Portions of northern NY/VT into PA and far northern

Concerning...Severe potential...Watch possible

Valid 121540Z - 121745Z

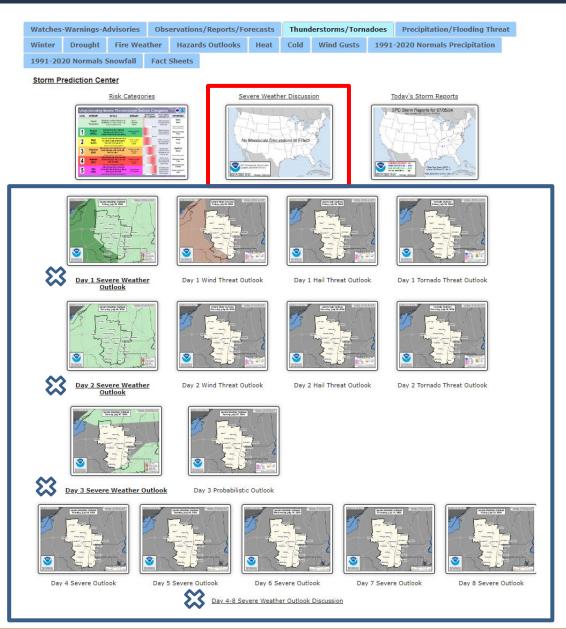
Probability of Watch Issuance...60 percent

SUMMARY...The overall severe threat should gradually increase into the afternoon, with both damaging winds and hail possible. One or more Severe Thunderstorm Watches will probably be needed.

DISCUSSION...An upper trough evident on water vapor satellite imagery over the Great Lakes and Ontario/Quebec will continue eastward across the Northeast and Mid-Atlantic today. Rather strong mid-level flow of 45-55+ kt will accompany the upper trough, and aid in strong effective bulk shear and updraft organization. Partly to mostly sunny conditions are ongoing across much of NY/VT into PA. Continued diurnal heating will likely result in surface temperatures increasing into well into the 80s and lower 90s later this afternoon. MLCAPE around 1000-2000 J/kg should develop ahead of a poorly defined cold front. Weak convergence along/ahead of this boundary and ascent associated with the upper trough will aid robust thunderstorm development over the next couple of hours. Deep-layer shear of 45-50+ kt will support some potential for supercells with both a hail and damaging wind threat. Still, most guidance suggests that a line of convection should eventually consolidate with eastward extent into eastern NY/PA later this afternoon. If this evolution occurs, then damaging winds should become the primary severe hazard. One or more Severe Thunderstorm Watches will probably be needed from parts of northern NY/VT into PA and vicinity to address this gradually increasing severe threat.

Severe Weather (Mesoscale) Discussions targets areas of expected and/or on-going severe weather

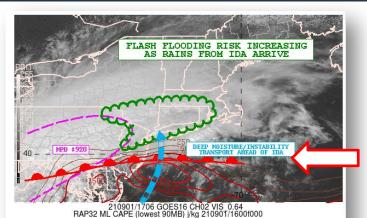
Shows the threat for severe thunderstorms including the specific threats for wind, hail and tornadoes and the severe outlook discussions can be accessed 💢



"Precipitation/Flooding Threat" Tab



Albany, NY WEATHER FORECAST OFFICE



Mesoscale Precipitation Discussion 0923 NWS Weather Prediction Center College Park MD 113 PM EDT Wed Sep 01 2021

Areas affected...Portions of the Northern Mid-Atlantic...Southeast NY and Southern New England

Concerning...Heavy rainfall...Flash flooding likely

Valid 011712Z - 011930Z

SUMMARY...Heavy rainfall overspreading areas of far northeast PA, southeast NY, northern NJ and southern New England will increasing in intensity over the next few hours, with areas of flash flooding becoming increasingly likely with time.

DISCUSSION...The latest satellite and radar imagery indicates an expansive area of steady moderate to heavy rain along with some embedded stronger convective elements impacting areas of far northeast PA, northern NJ, southeast NY and southern New England. All of this activity is associated with what is now Post-T.C. Ida.

Very strong frontogenetical forcing and moisture transport is lifting up across these areas, and with time there will be a notable increase in the pooling of diurnally aided instability along a warm front over the central Mid-Atlantic region that will be advancing northeast toward southern New England going through the afternoon hours. This will be aided largely by a strengthening south-southwest low-level jet ahead of Ida's extratropical low

Over the next few hours, there will an increase in the rainfall intensity and coverage, and the expectation is that there will be more numerous pockets of locally concentrated convection with very heavy rainfall rates.

Expect some hourly rainfall rates to begin to approach 2 inches/hour locally, and given the locally heavy rain that has occurred over the last few hours, some areas of flash flooding will be gradually likely heading toward the mid to late-afternoon

- **Precipitation Forecast** maps are updated every time NWS Albany updates their forecast.
- **Excessive Rainfall Outlook** shows the probability that the forecasted rainfall will exceed flash flood guidance. If exceeded flooding would be expected to occur.
- **Heavy Rainfall Discussions** targets areas of expected and/or on-going flash flooding.
- River Forecasts routinely updated each day late morning and as needed when flooding is expected and/or occurring.
- **Significant River Flood Outlook** This is not intended to depict all areas of minor flooding or small-scale events such as localized flooding and/or flash flooding.



Watches-Warnings-Advisories Observations/Reports/Forecasts Thunderstorms/Tornadoes Precipitation/Flooding Threat





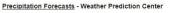


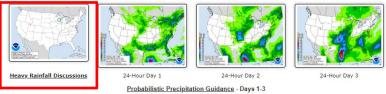




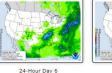


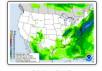
Understanding Excessive Rainfall Outlooks















Expected Snowfall - Official Forecast

This snowfall amount is determined by NWS forecasters to be the most likely outcome based on evaluation of data from computer models, satellite, radar, and other observations.

✓ High End Snowfall Amount

Depicts a reasonable upper-end or maximum snowfall amount for the time period shown on the graphic. This higher amount is an unlikely scenario, with only a 1 in 10 chance that more snow will fall, and a 9 in 10 chance that less snow will fall. This number can help serve as an upper-end or reasonable maximum scenario for planning purposes.

✓ Low End Snowfall Amount

Depicts a reasonable lower-end or minimum snowfall amount for the time period shown on the graphic. This lower amount is an unlikely scenario with a 9 in 10 chance that more snow will fall, and only a 1 in 10 chance that less snow will fall. This number can help serve as a lower-end or reasonable minimum scenario for planning purposes.

- NOTE: The greater the difference between the "High End" and "Low End" amounts, the greater uncertainty there is in the snowfall forecast.
- ✓ Day 1, Day 2 and Day 3 snowfall extremes by county [

Go to our Winter Weather Forecasts page to get more probabilistic snowfall products: weather.gov/aly/winter

Decision (Weather) Support Services

Albany, NY

Weather.gov > Albany, NY > Decision (Weather) Support Service

Watches-Warnings-Advisories Observations/Reports/Forecasts Thunderstorms/Tornadoes Precipitation/Flooding Threat

Winter Drought Fire Weather Hazards Outlooks Heat Cold Wind Gusts 1991-2020 Normals Precipitation

1991-2020 Normals Snowfall Fact Sheets

Snowfall Forecast & Probabilistic Graphics / Ice Accumulation Forecast



Official Forecast



High End Snowfall Amount 1 in 10 chance of higher snowfall



Low End Snowfall Amount 9 in 10 chance of higher snowfall



Official Forecast

Radial Ice vs. Flat Ice

Winter Weather Forecast Discussion - WPC

Winter Storm Severity Index - WSSI

Probabilistic Winter Storm Severity Index - PWSSI

Probabilistic Winter Precipitation Guidance: Days 1-3

Experimental Winter Storm Outlook: Days 1-4

Days 4-7 Winter Weather Outlook

Day 1, Day 2 & Day 3 Snow Extremes by County



"Drought" Tab



U.S. Drought Monitor

- Released every Thursday
- Shows the parts of the United States that are in drought
- Uses five classifications: abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3) and exceptional (D4).
- The Monthly and seasonal outlooks are issued monthly

Northeast Drought Early Warning System (DEWS) Dashboard

- A drought early warning system (DEWS) utilizes new and existing networks of federal, tribal, state, local, and academic partners to make climate and drought science accessible and useful for decision makers and stakeholders.
- **DEWS: A Regional Approach**

Drought and its impacts vary from region to region. Developing and implementing regional DEWS allows for responsiveness to particular geographic and hydrologic circumstances, as well as value-added information needs specific to stakeholders in the respective areas.

The Importance of Drought Early Warning Systems (DEWS)

Allows for early drought detection

Allows for proactive (mitigation) and reactive (emergency) responses

"Triggers" actions within a drought plan

Provides information for decision support

Decision (Weather) Support Services

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Albany, NY Weather Forecast Office

Radar Forecasts Rivers and Lakes Climate and Past Weather Watches-Warnings-Advisories Observations/Reports/Forecasts Thunderstorms/Tornadoes Precipitation/Flooding Threat Drought Fire Weather **Hazards Outlooks** Wind Gusts 1991-2020 Normals Precipitation 1991-2020 Normals Snowfall Fact Sheets

National Integrated Drought Information System (NIDIS) - Drought.gov: NY --- CT --- MA --- VT

Current Conditions - Outlooks & Forecasts - Historical Conditions - Drought Resources





U.S. Drought Monitor



Monthly Drought Outlook





Seasonal Drought Outlook

What is the U.S. Drought Monitor?

What is Drought?



"Fire Weather" Tab



Albany, NY WEATHER FORECAST OFFICE

- Spot Forecasts are issued by NWS forecast offices in support of wildfire management, and natural resource management. These forecasts aid the land management and fire control agencies in protecting life and property during wildland fires, hazardous fuels reduction, and rehabilitation and restoration of natural resources. Spot forecasts are also issued for hazardous materials incidents and other threats to public safety.
- Fire Weather Watches and Red Flag Warnings are issued by NWS forecast offices. These are issued when the combination of dry fuels and weather conditions support extreme fire danger and/or fire behavior. These conditions alert land management agencies to the potential for widespread new ignitions or control problems with existing fires, both of which could pose a threat to life and property.
- **Fire Weather Outlooks** are issued by the Storm Prediction Center. The outlooks are intended to delineate areas where pre-existing fuel conditions, combined with forecast weather conditions during the next 7 days, will result in a significant threat for the ignition and/or spread of wildfires. It's designed for use in the NWS, as well as other federal, state, and local government agencies.
- Minimum Relative Humidity (Min RH) Forecasts and Maximum Wind Gust (Max Gust) Forecasts Days 1-7 are updated every time NWS Albany updates their forecast.

Watches-Warnings-Advisories Observations/Reports/Forecasts Thunderstorms/Tornadoes Precipitation/Flooding Threat Drought Fire Weather Hazards Outlooks Heat Cold Wind Gusts 1991-2020 Normals Precipitation 1991-2020 Normals Snowfall Fact Sheets

National Weather Service Spot Forecast Request Page



For more detailed information visit: **NWS Albany** Fire Weather Page



















Min RH Forecast - Day 4





SPC Fire Weather Outlook - Day



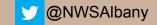
Min RH Forecast - Day 5



Max Gust Forecast - Day 5



SPC Fire Weather Outlook - Day



"Fire Weather" Tab





- National 7-Day Significant Potential The goal of this guidance is to help the regional and national resource manager make effective and efficient use of available resources. "Significant Fire Potential" is defined as "the likelihood that a wildland fire event will require mobilization of additional resources from outside the area in which the fire situation originates". It is crucial to understand that although weather is a major contributor to Significant Fire Potential, this product is not a weather forecast. It is a forecast of Significant Fire Potential only, which is a function of fuel conditions, weather, and resource availability. It assesses the daily probability for occurrence of a new large fire and/or the daily potential for significant new growth on existing fires.
- National Significant Wildland Fire Potential Outlooks are issued by Predictive Services National Interagency Fire Center. The significant wildland fire potential forecasts represent the cumulative forecasts of the ten Geographic Area Predictive Services units and the National Predictive Services unit. The outlook identifies areas by month for the next four months with above, below, and near normal significant fire potential. The main objectives of these outlooks are to improve information available to fire management decision makers. These assessments are designed to inform decision makers for proactive wildland fire management, thus better protecting lives and property, reducing firefighting costs and improving firefighting efficiency. They are updated on the first of each month or first work day of each month.













Max Gust Forecast - Day 6

SPC Fire Weather Outlook - Day 6

Min RH Forecast - Day 7

Max Gust Forecast - Day 7

SPC Fire Weather Outlook - Day 7

Understanding the Storm Prediction Center Fire Weather Outlooks

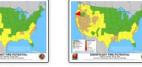
National 7-Day Significant Fire Potentia















These products are updated each weekday, usually by mid-afternoon Mountain time.

Explanation of the 7-Day Significant Fire Potential

National Significant Wildlife Fire Potential Outlooks













"Hazards Outlooks" Tab



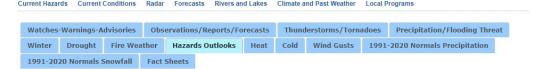
3-7 Day and 8-14 Day Hazards Outlooks

- The hazard areas are based off of products issued from the Weather Prediction Center (WPC), the Storm Prediction Center (SPC), the Climate Prediction Center (CPC), along with medium range numerical model guidance.
- The graphic and discussion are issued once per day and are available by 3:30pm EST/4:30pm EDT Monday through Friday only so please note that the information over the weekend may be out of date.
- The intended audience for this product includes emergency managers, weather forecasters, planners and managers in the public and private sectors, as well as the general public.

Temperature and Precipitation Outlooks

- Issued by the Climate Prediction Center
- 6-10 Day and 8-14 Days outlooks are issued daily between 3-4 pm
- Week 3-4 Outlooks are issued on Fridays between 3-4 pm
- Monthly Outlooks are issued mid-month and are updated at the end of the month.

Decision (Weather) Support Services



Experimental Graphical Hazardous Weather Outlook























Temperature and Precipitation Outlooks: Calculating Category Probabilities



Highs, Heat Index and WBGT graphics are updated every time NWS Albany updates their forecast

- **Heat Index** is measure of human discomfort due to combined heat and humidity.
- It measures the increased physiological heat stress and discomfort associated with higher than comfortable humidities.
- It does not consider the effects of air movement (wind speed) or exposure to sunshine on the degree of discomfort or stress.

Wet Bulb Globe Temperature (WBGT) is a measure of the heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle and cloud cover (solar radiation).

Comparing WBGT and Heat Index

	WBGT	HEAT INDEX
Measured in the sun	•	•
Measured in the shade	•	•
Uses temperature	•	•
Uses relative humidity	•	•
Uses wind	•	•
Uses cloud cover	•	•
Uses sun angle	•	•

NWS HeatRisk serves as another NWS tool that can be used to protect lives and property from the potential risks of excessive heat, being especially useful for those who are more easily affected by heat or those who provide support to those communities of heat-vulnerable individuals.



NWS HeatRisk - Understanding NWS HeatRis Heat Index --- Wet Bulb Globe Temperature





























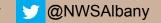














Lows and Wind Chill graphics are updated every time NWS Albany updates their forecast

- The wind chill is the effect of the wind on people and animals.
- The wind chill temperature is based on the rate of heat loss from exposed skin caused by wind and cold and is to give you an approximation of how cold the air feels on your body.
- As the wind increases, it removes heat from the body, driving down skin temperature and eventually the internal body temperature. Therefore, the wind makes it FEEL much colder.





"Wind Gusts" Tab



Decision (Weather) Support Services

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Albany, NY Weather Forecast Office

Climate and Past Weather Current Conditions Rivers and Lakes Forecasts

Watches-Warnings-Advisories Observations/Reports/Forecasts Thunderstorms/Tornadoes Precipitation/Flooding Threat Drought Fire Weather Hazards Outlooks Wind Gusts 1991-2020 Normals Precipitation Cold Winter Heat 1991-2020 Normals Snowfall **Fact Sheets**

These graphics are updated every time NWS Albany updates their forecast

They show the maximum forecast wind gust for the time period









Today

Tonight

Tomorrow

Tomorrow Night











Day 3

Day 4

Day 5

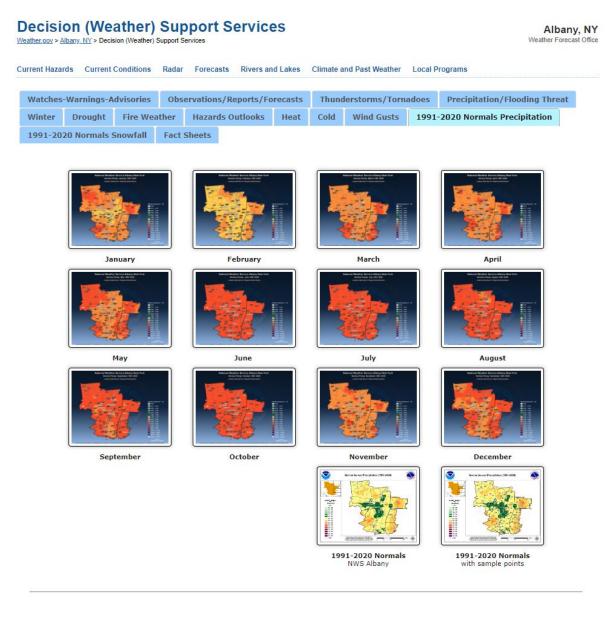
Day 6

Day 7



"1991-2020 Normals Precipitation" Tab





These maps show the 1991-2020 **Normal Precipitation across NWS Albany's area of responsibility**

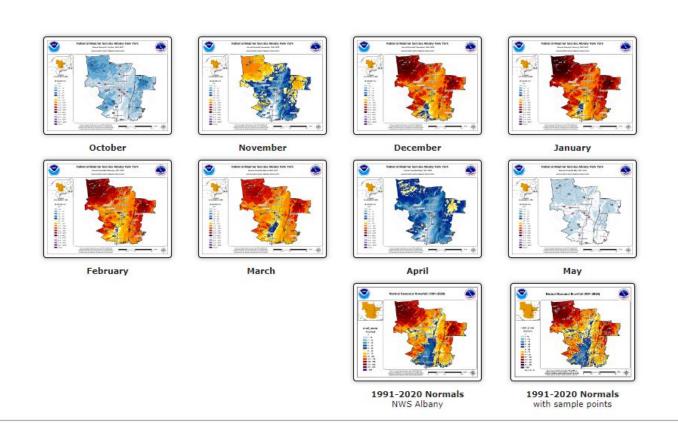


"1991-2020 Normals Snowfall" Tab





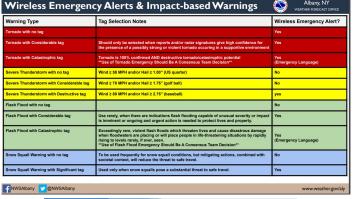
These maps show the 1991-2020 Normal Snowfall across **NWS Albany's area of responsibility**







This tab provides links to fact sheets which include local criteria and to descriptions/explanations of NWS outlooks and products as well as to NWS social media infographics











Wireless Emergency Alerts & Impact-Based Warnings

