

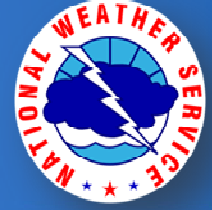
Weather-Ready Nation

David J. Nicosia

Warning Coordination Meteorologist
NOAA-National Weather Service
Binghamton, NY



Building a Weather-Ready Nation



Extreme Weather



on is the by
mar, water
weat, ds ever

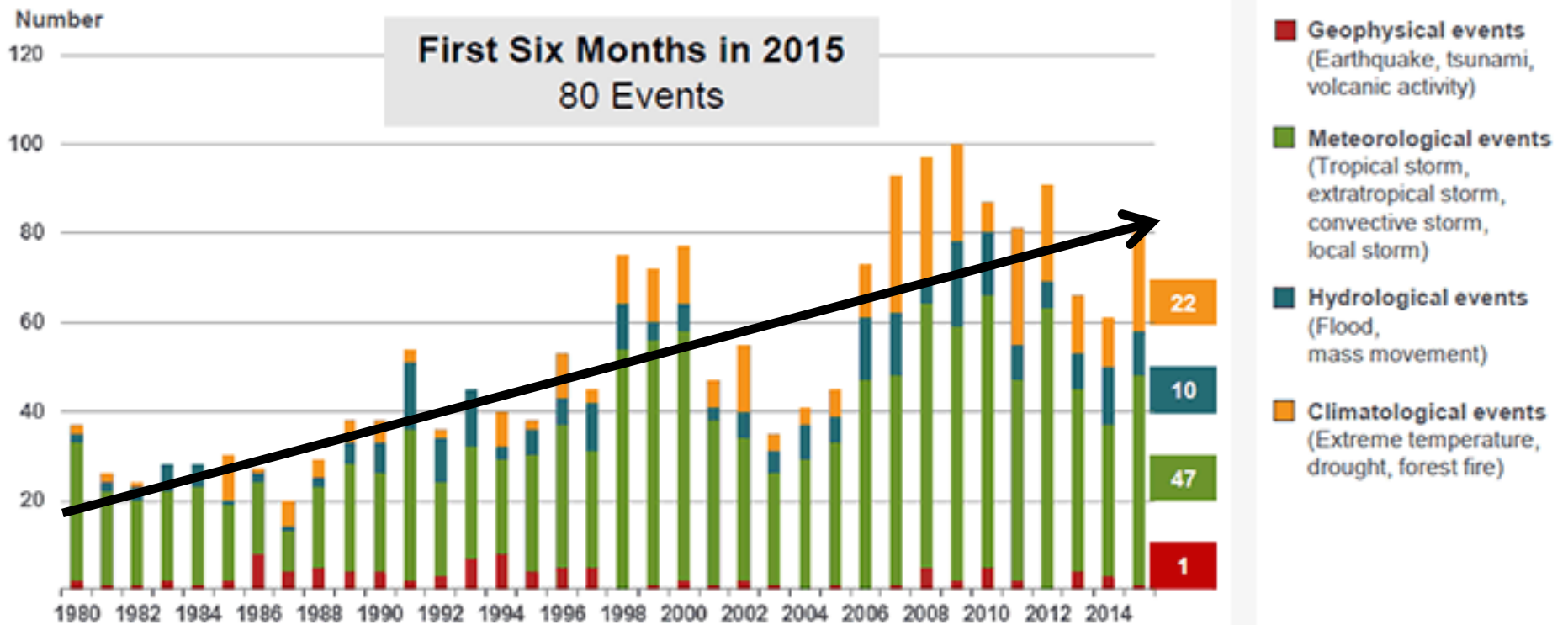


Building a Weather-Ready Nation



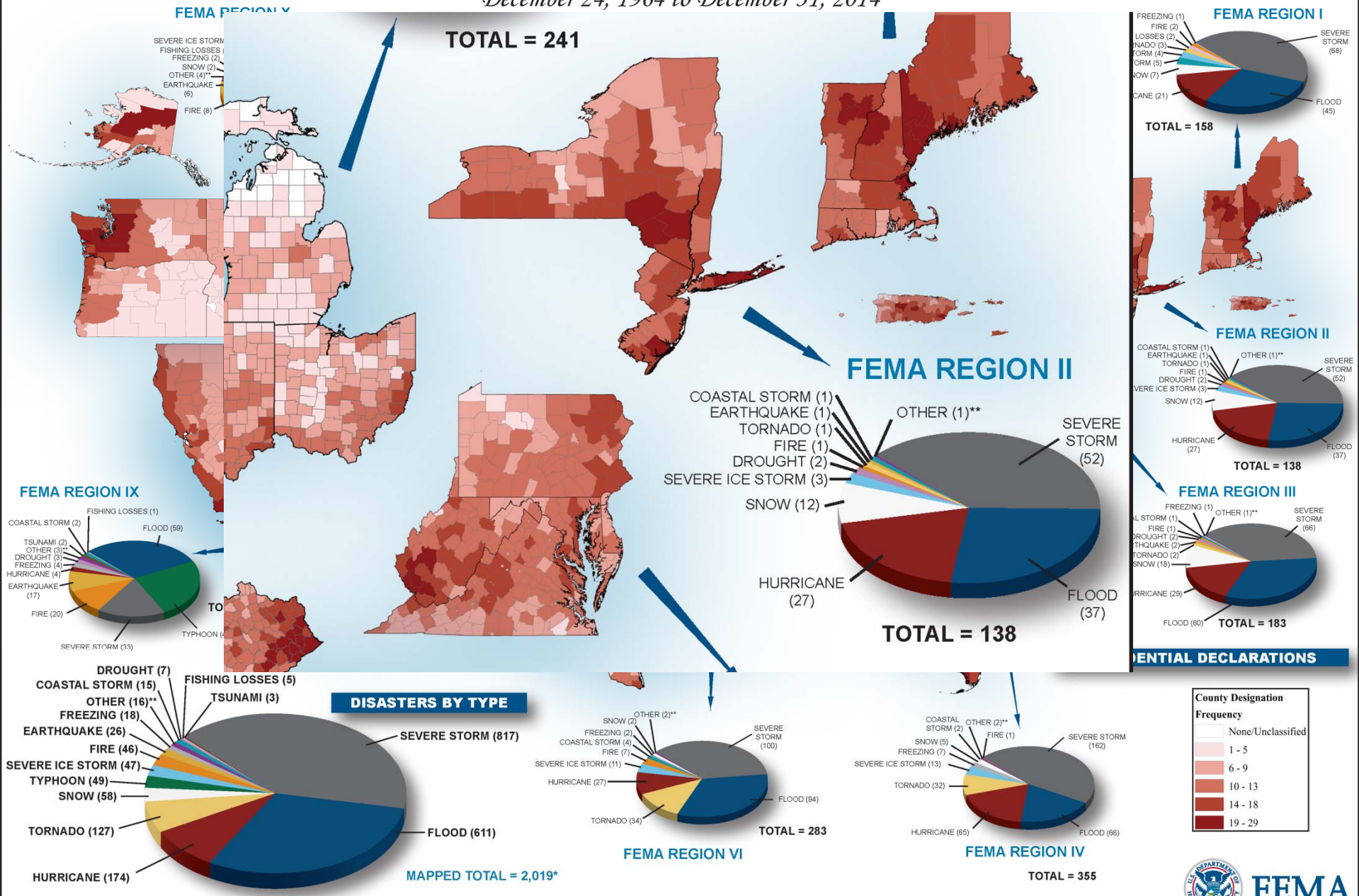
U.S. Natural Disaster Trends

Increased Vulnerability to Extreme Events



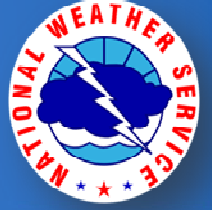
PRESIDENTIAL DISASTER DECLARATIONS

December 24, 1964 to December 31, 2014

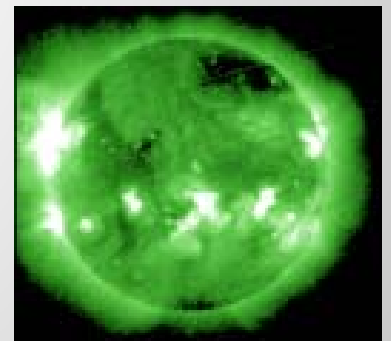
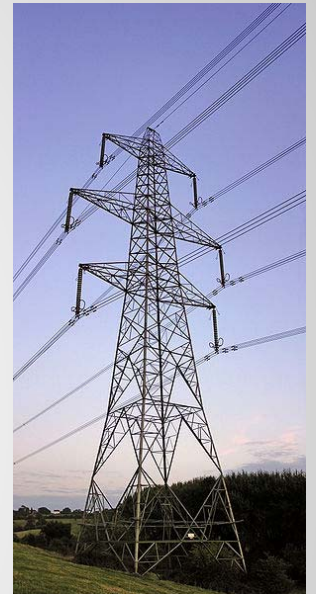




Increasing Vulnerability

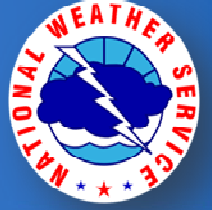


Becoming a **Weather-Ready Nation** is about building community resilience in the face of increasing vulnerability to extreme weather.






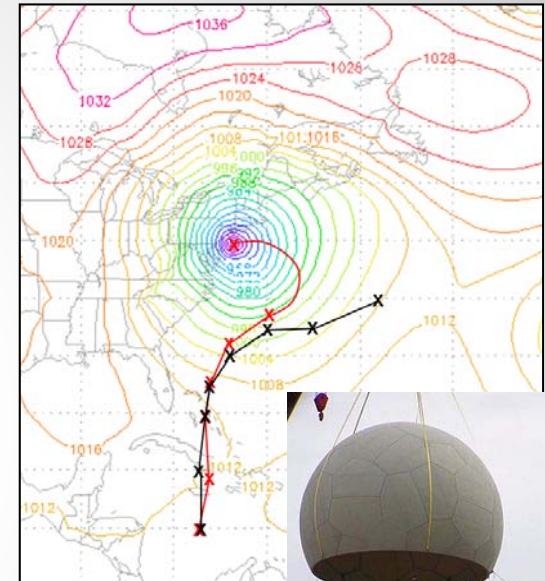


Your National Weather Service



To achieve far-reaching national preparedness for climate, water, and weather events, NWS is:





-  Developing new decision support services (DSS).
-  Improving technology to track and forecast storms
-  Expanding dissemination efforts



Building a Weather-Ready Nation



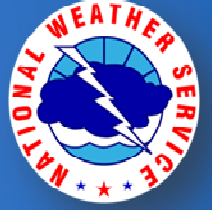
Building a Weather-Ready Nation:

-  Integrate social and physical sciences
-  Delivery of warnings - focus on the “last mile”
-  Assess and update warning dissemination strategy
-  Improve outreach and education





Decision Support Services(DSS)



The NWS is focused on providing **Impact-based Decision Support Services(IDSS)** to core partners



Outcome: Communities are better prepared and more resilient





Keys to Successful Decision Support

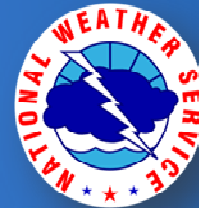


- Having a full understanding of **societal impacts**
- Making information **relevant** to decision makers
- Working with community leaders, other agencies, and America's Weather Enterprise as **force multipliers**

Strategic Outcome: A Weather-Ready Nation

- Ready
- Responsive
- Resilient

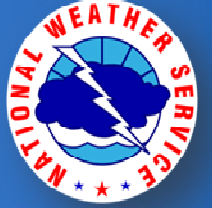




It's All About Partnerships



Building a Weather-Ready Nation



National Weather Service Decision Support to New York State

Scott Whittier

Warning Coordination Meteorologist
NOAA-National Weather Service
Burlington, VT



Building a Weather-Ready Nation



Decision Support Services



The NWS is focused on providing **Impact-based Decision Support Services** to core partners

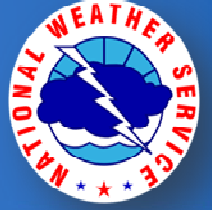


Outcome: Communities are better prepared and more resilient

How does the NWS accomplish this?



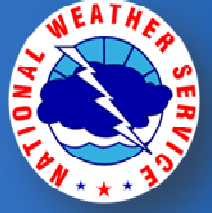
Decision Support Services



- **Listening, engaging with our partners**
- **Adopting/Integrating ICS**
- **Various ways of providing DSS services**
 - Event driven support
 - Planning/training support



NWS Decision Support Services Event Driven Support



- **“Heads up” Situational Awareness e-mails**
 - Leading up to an event
 - Planning purposes
 - Issuance criteria varies across the state due to partner/customer needs
 - Provides more detail than standard forecasts



Heads Up/Situational Awareness e-mails

All Offices



Hello Emergency Managers and Partners,

A winter storm system will continue to produce freezing rain this morning, with heavy rain this afternoon. Gusty winds will continue across mainly the higher terrain today. Below is a summary of the winter weather headlines for the following areas:

Winter Storm Warning: western Adirondacks until 4 pm today.

Winter Weather Advisory: eastern Catskills, greater Capital Region, Taconics, Mid Hudson Valley, Berkshires, and Litchfield County in northwest Connecticut, until 10 am today

Winter Weather Advisory: Mohawk Valley, Lake George/Saratoga region, southeast Adirondacks, and southern Vermont, until 1 pm today

Precipitation is expected to change to rain for most of the area this morning into the early afternoon.

Poor drainage flooding and ponding of water on roadways will be possible due to heavy precipitation amounts combined with excess runoff over frozen ground, mainly this afternoon.

Please see the attached updated briefing slides for further details, including timing, precipitation types, amounts, and impacts for the ongoing winter storm.

If you have any questions, please feel free to contact us via:

1. Email: alb_stormreport@noaa.gov
2. NWChat at <https://nwschat.weather.gov/live/>
3. Social Media: Facebook and Twitter
4. Telephone: (518) 435-9575

Sincerely,

NWS Albany Staff

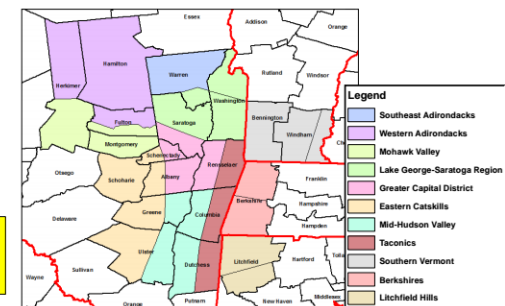
Attachment(s)



6-8 Slide package

Winter Weather Briefing NWS Albany, NY

Tuesday, February 16, 2016 – 525 am



This briefing applies to the NWS Albany forecast area only!

www.weather.gov/albany

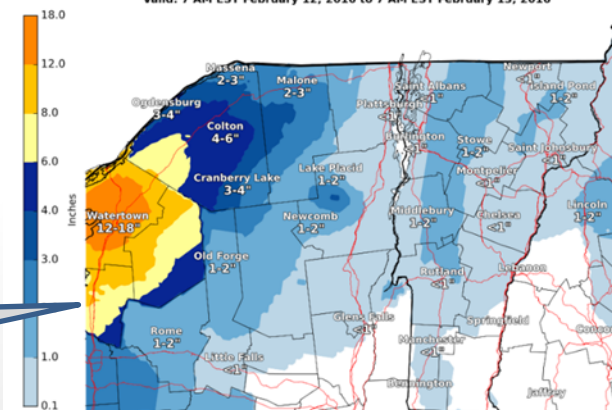
[NWSAlbany](https://www.facebook.com/NWSAlbany)

[@NWSAlbany](https://twitter.com/NWSAlbany)

[YouTube NWSAlbany](https://www.youtube.com/user/NWSAlbany)

North Country Storm Total Snow

Valid: 7 AM EST February 12, 2016 to 7 AM EST February 13, 2016

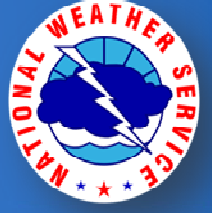


National Weather Service
Burlington, VT
02/12/2016 05:28 AM EST

Follow Us: [f](https://www.facebook.com/NWSBurlington) [t](https://twitter.com/NWSBurlington) [y](https://www.youtube.com/user/NWSBurlington)
weather.gov/Burlington



NWS Decision Support Services Event Driven Support

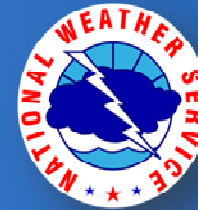


- **Event-driven Conference Calls/Briefings**
 - Conference Calls
 - Guests - *"Subject matter expert"*
 - Hosts – NWS initiated calls
 - Bigger, Greater Impact events



Special Event Conference Call Brief

All Offices



Higher End Events
Greater / Major Impacts



NWS Burlington Brief Upcoming Winter Storm



Prepared by
Scott Whittier
National Weather Service—Burlington, VT
802-658-0207/802-658-0150

PRESENTATION CREATED:
December 9, 2014 – 1130 am

National Weather Service – Burlington, VT



www.weather.gov/btv



US National Weather Service Burlington, VT

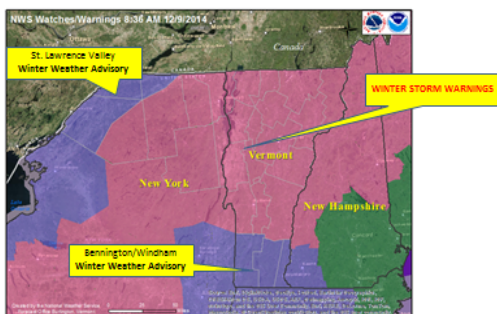


@NWSBurlington

More Specifics
More Impact Oriented



Watches, Warnings, Advisories Midday Tuesday through Wednesday

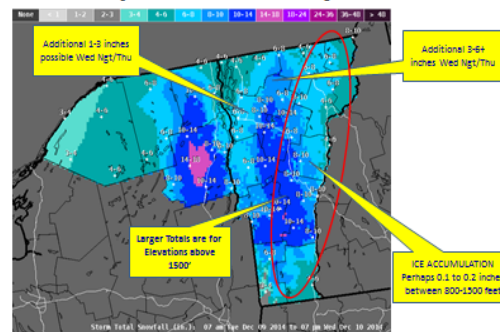


MAY NEED TO EXTEND THROUGH WEDNESDAY NIGHT FOR
PORTIONS OF NORTHERN VERMONT AND NORTHERN NEW YORK

2



Snowfall Forecast thru 7 pm Wednesday



NWS / National Weather Service Burlington, VT
<http://www.weather.gov/btv/stormtotasnow>

3



Potential Impacts



- **Hazardous Travel**
 - Tuesday afternoon evening commute through early (pre-dawn) Wednesday morning
 - Snowfall rates 1-2 inches per hour at times
 - Wednesday morning commute
 - No direct weather issues, perhaps spotty Freezing drizzle
 - Wednesday Evening (Phase #2)
 - Accumulating Snow Falling...esp N NY, Northern Half VT
- **Power Outages**
 - **Greatest Threat in VT / Champlain Valley NY**
 - Snow/Water Ratios 10:1 or less rather than 15:1
 - Mixed Snow/Rain/Sleet will add weight
 - Gusty winds to 20-30 mph in spots

www.weather.gov/btv | @NWSBurlington
www.facebook.com/US.NationalWeatherService.Burlington.gov

4



NWS Decision Support Services

Situational Awareness/Planning Role



- **Weekly Briefs and/or Conference Calls (BUF, BTV)**
 - Increase “Big Picture” Situational Awareness
 - Keep partnerships, line of communications open
 - “Reaching out”...trust is being built before NEXT event



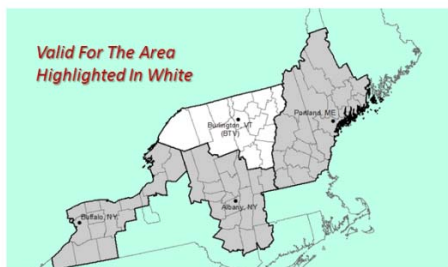
Weekly Briefing - WED

Burlington, Buffalo



NWS Burlington Weekly Brief

Valid: Feb 3 - 10, 2016



Valid For The Area
Highlighted In White

Scott Whittier, Warning Coordination Meteorologist
National Weather Service – Burlington, VT
802-658-0207/802-658-0150

PRESENTATION CREATED:
2/16/2016 10:31 AM

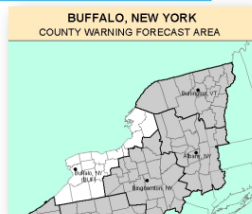
National Weather Service – Burlington, VT

Weekly Weather Briefing
National Weather Service – Buffalo NY

Week of February 10 – 16

Applies to NWS Buffalo
Area of Responsibility Only

Please note:
The information contained in this
briefing is time sensitive



National Weather Service - Buffalo NY – www.weather.gov/buf

<http://www.facebook.com/US.NationalWeatherService.Buffalo.gov> on FACEBOOK

@NWSBuffalo on TWITTER



- **Situational Awareness / Planning**
 - Weekly Duty Officers brief
- **Focus: Potential High Impact events**
- **Short/Brief (8-10 slides)**
- **10-15 minute phone call**
 - Keeping lines of communication open

- **Situational Awareness / Planning**
- **Detailed weekly forecast and synopsis**
- **Climate section**
- **10-15+ slides**
- **No phone call**



NWS Decision Support Services



- **“Heads up” Situational Awareness e-mails**
 - Leading up to an event
 - Planning purposes
 - Issuance criteria varies across the state due to partner/customer needs
 - Provides more detail than standard forecasts
- **Event-driven Conference Calls/Briefings**
 - Conference Calls (Guests-“*Subject matter expert*” or Hosts)
 - Bigger, Greater Impact events
- **Weekly Briefs and/or Conference Calls (BUF, BTV,BGM?)**
 - Increase “Big Picture” Situational Awareness
 - Keep partnerships, line of communications open
 - “Reaching out” ...trust is being built before NEXT event
- **Daily Conference Calls to NYC FAA and NYC EM (NYC)**



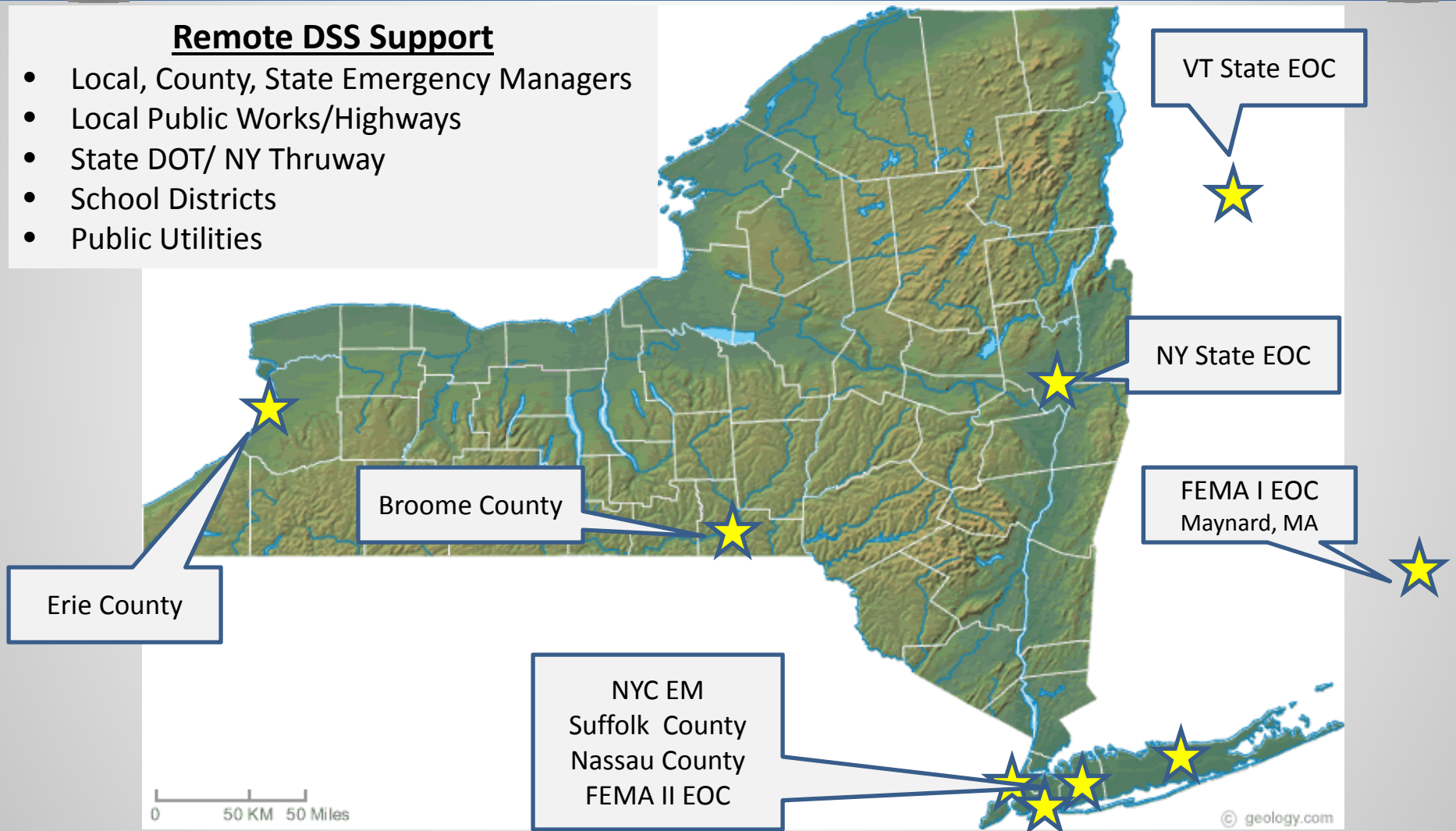
NWS Decision Support Services

Weather Emergency Deployments (On-site)



Remote DSS Support

- Local, County, State Emergency Managers
- Local Public Works/Highways
- State DOT/ NY Thruway
- School Districts
- Public Utilities





NWS Decision Support Services



- **Large Scale Public Gatherings with Government (Local, County, State, Federal) Command Centers**
 - County, State Fairs
 - Watkins Glen – NASCAR with Schuyler County EM
 - Multiple events in NYC area (Superbowl XLVIII, Papal Visit, etc.)
 - Ask your local office for more details
- **Routine/Non-routine on-site DSS**
 - Gives NWS personnel opportunity to train for future big events
 - Allows decision makers to “pick the brain” of NWS
 - Allows NWS personnel “insight in decision making process and to interject if feel message is “unclear”



NWS Decision Support Services Planning/Logistics Role



- **Table-top and Full Scale Exercises**
 - VT Full Scale Exercise (Inland Flooding-Tropical Storm) – September 2010
 - Worked with NHC, NERFC, FEMA I, VT Nat'l Guard, VT DEMHS
 - VT Nat Guard ICE-X Joint Staff Exercise(2012)/VT Vigilant Guard(2016)
 - NY Hydro Dam EAP/TTX
 - NY State Department of Health – Weather Exercises
 - NY Various County Exercises
- **Post Storm Summaries to Support PDA requests**
- **Participate in After Action Reports**
 - Irene (2011) , Lee (2011), Sandy (2012), Buffalo LES (2014), Blizzard (2016)



Impact-Based Decision Support Services (IDSS) Technology

Steve DiRienzo

Warning Coordination Meteorologist
NOAA-National Weather Service
Albany, NY



Building a Weather-Ready Nation



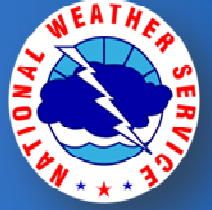
Overview



- Some of the tools the National Weather Service brings to the party:
 - 1) NWS Chat
 - 2) NYS Responds (DLAN)
 - 3) NWS Damage Assessment Toolkit (DAT)
 - 4) HYSPLIT
 - 5) NWS Mobile Workstation (Thin Client)



1) NWS Chat



- NWSChat: Instant Messaging program for sharing critical weather information.
- Weather information is exchanged in real-time with the media and emergency response community.
- NWS partners can use NWSChat as a way to seek *clarification* of the NWS communication stream.
- Emergency manager only chat rooms available.



NWS Chat



https://nwschat.weather.gov/live/

NWSChat Live

Actions Available

Buddies

- NWSChat Admin Team
- Joe Palko (Admin Team Mem)
- Daryl Herzmann
- nwsbot
- nwsdmx-brad.small
- Shane Searcy (Admin Team M)

Map Panel

Map Valid: 12:20 PM Tools Opacity

Layers Control

- ESRI Topo
- Satellite
- GOES Water Vapor
- GOES West Visible
- GOES East Visible
- GOES Visible Composite
- GOES IR
- Precip/RADAR
- NMQ Q2 3 Day Precip
- NMQ Q2 2 Day Precip
- NMQ Q2 1 Day Precip
- NMQ Q2 1 Hour Precip
- NEXRAD Base Reflectivity
- NMQ Hybrid Scan Reflectivity
- No Overlay
- Chatroom Products
- Local Storm Reports
- Storm Based Warnings
- HPC Precipitation Forecasts

Help All Chats alyemchat alychat bgmchat bufchat btvchat okxchat boxchat

Clear Room Log Print Log View As HTML Hide NWSBot Mute Sounds A A

Message

(12:10 PM) nwsbot: Local Storm Report by NWS BOX: Scituate [Plymouth Co, MA] amateur radio [reports NON-TSTM WND DMG](#) at 09:19 AM EST -- wires down on over rock road.

(12:10 PM) nwsbot: Local Storm Report by NWS BOX: Marshfield [Plymouth Co, MA] amateur radio [reports COASTAL FLOOD](#) at 09:39 AM EST -- moderate coastal flooding on the southern side of the esplanade

(12:10 PM) nwsbot: Local Storm Report by NWS BOX: 2 ESE Nantucket [Nantucket Co, MA] asos [reports NON-TSTM WND GST of M58 MPH](#) at 11:07 AM EST --

(12:10 PM) nwsbot: Local Storm Report by NWS BOX: Nantucket - Quidnet [Nantucket Co, MA] ham radio [reports NON-TSTM WND GST of M64 MPH](#) at 11:27 AM EST -- ham radio

(12:10 PM) nwsbot: BOX issues [Summary Local Storm Report](#), 3 out of 10 reports were previously sent and not repeated here., view [text summary](#)

52 people in room

- academia-chris.eagan
- academia-john.p.golino
- dod-justin.w.mayes
- em-bruce.a.lockwood
- em-joshua.p.manfredo
- em-rene.fieliding
- em-robert.a.verdone
- em-robert.spurr
- fema-ryan.b.jones
- ham-adam.karsin
- ham-james.r.palmer
- Justin.Arnott (NWS GYX)
- law-michael.perkins
- media-andrea.l.butera
- media-bob.cox



NWS Chat



Export Shape Files of Snowfall Reports

https://nwschat.weather.gov/lst/#BOX/201602081126/201602081719/0101

Event Time Slider
Start: 8 Feb 2016 6:26 AM
End: 8 Feb 2016 12:19 PM
Load

Local Storm Report Information
Print Data Grid Export to Excel Save Shapefile Expand All

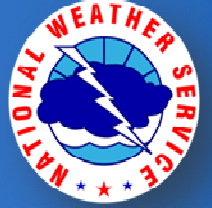
Office	Report Time	County	Location	ST	Event Type	Mag.
BOX	2016-02-08 6:26...	Norfolk	Millis	MA	NON-TSTM WN...	0
BOX	2016-02-08 6:30...	Plymouth	Middleboro	MA	NON-TSTM WN...	0
BOX	2016-02-08 6:50...	Barnstable	1 NW East Falm...	MA	SNOW	1
BOX	2016-02-08 7:00...	Barnstable	2 SSE Yarmouth	MA	SNOW	1.4
BOX	2016-02-08 7:00...	Barnstable	3 E Falmouth	MA	SNOW	1
BOX	2016-02-08 7:00...	Barnstable	3 NNW Falmouth	MA	SNOW	1.3
BOX	2016-02-08 7:00...	Barnstable	2 WSW Falmouth	MA	SNOW	1.6
BOX	2016-02-08 7:23...	Washington	Richmond	RI	NON-TSTM WN...	0
BOX	2016-02-08 7:30...	Barnstable	1 SSW Waquoit	MA	SNOW	2
BOX	2016-02-08 7:30...	Barnstable	1 NNW Falmouth	MA	SNOW	3
BOX	2016-02-08 8:30...	Dukes	3 N West Tisbury	MA	SNOW	2
BOX	2016-02-08 8:43...	Barnstable	Osterville	MA	SNOW	3
BOX	2016-02-08 8:46...	Barnstable	Marstons Mills	MA	SNOW	2
BOX	2016-02-08 8:48...	Barnstable	Centerville	MA	SNOW	3.5
BOX	2016-02-08 8:49...	Barnstable	Mashpee	MA	SNOW	3
BOX	2016-02-08 9:12...	Barnstable	2 WSW Mashpee	MA	SNOW	2.6
BOX	2016-02-08 9:14...	Plymouth	Plymouth	MA	NON-TSTM WN...	0
BOX	2016-02-08 9:16...	Dukes	Edgartown	MA	COASTAL FLOOD	0
BOX	2016-02-08 9:16...	Plymouth	Scituate	MA	COASTAL FLOOD	0
BOX	2016-02-08 9:19...	Plymouth	Scituate	MA	NON-TSTM WN...	0
BOX	2016-02-08 9:30...	Barnstable	Sandwich	MA	SNOW	2.5
BOX	2016-02-08 9:39...	Plymouth	Marshfield	MA	COASTAL FLOOD	0
BOX	2016-02-08 9:43...	Plymouth	Marshfield	MA	COASTAL FLOOD	0
BOX	2016-02-08 9:45...	Plymouth	West Wareham	MA	SNOW	2.1

Map
Real Time Mode Radar Valid: 2016-02-08 6:00 AM

Base Layer
ESRI Topo
Overlays
Radar Reflectivity
Local Storm Reports
Storm Based Warnings
Counties



2) NYS Responds (DLAN)



Responds

NYSOEM
Status Board

Daily Operations

Sun Feb 21, 2016 :: 16:03:14

Options

Incident Messages

NYS Helplines

02/17/2016 08:22 - Danielle Daly

NYS Helplines

NYS Flood Helpline: 1-888-769-7243

Red Cross Shelter Helpline: 1-315-705-5293

PSC Utility Helpline: 1-800-342-3377

855-697-7263

1-800-339-1759

ogram: 1-877-568-9045



Responds

Welcome To NYSOEM

Please review the following settings before continuing

Incident: -- Please Select an Incident --

Role: NWS Albany

First Name: Steve

Last Name: DiRienzo

Email: stephen.dirienzo@noaa.gov

Phone: 518-301-2045

Ext:

User Agreement: ☒ I have read and understand the [User Agreement](#)

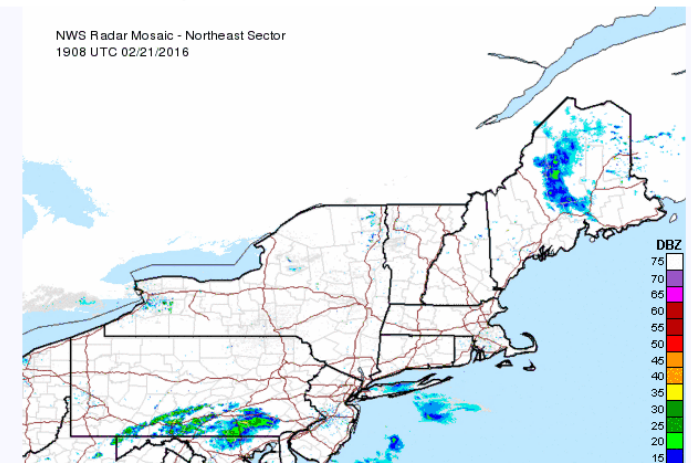
Continue

Slide Show

Regional Radar

02/17/2016 08:22 - Danielle Daly

NWS Radar Mosaic - Northeast Sector
1908 UTC 02/21/2016



Source: Slide Show

Press Briefings





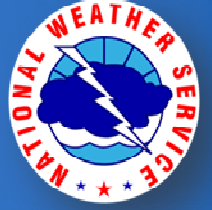
NYS Responds (DLAN)



- The National Weather Service (NWS) offices in New York have accounts.
- If we can't come to an EOC, we can upload briefings, or other weather information via NYS Responds.



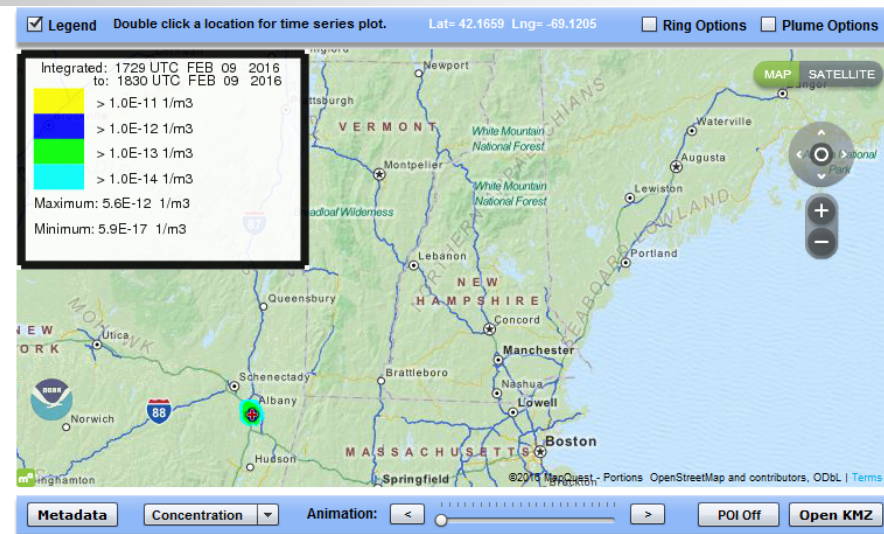
3) HYSPLIT Plume Dispersion Modeling (HAZMAT/Fire)



- The accidental or intentional release of chemical, biological or nuclear agents can have significant health, safety, national security, economic, and ecological implications.
- HYSPLIT is used to track and forecast the release of radioactive material, volcanic ash, wildfire smoke, and pollutants from various emission sources.
- NWS HYSPLIT graphics can be generated in as little as 15 minutes.



HYSPLIT Plume Dispersion Modeling (HAZMAT/Fire)

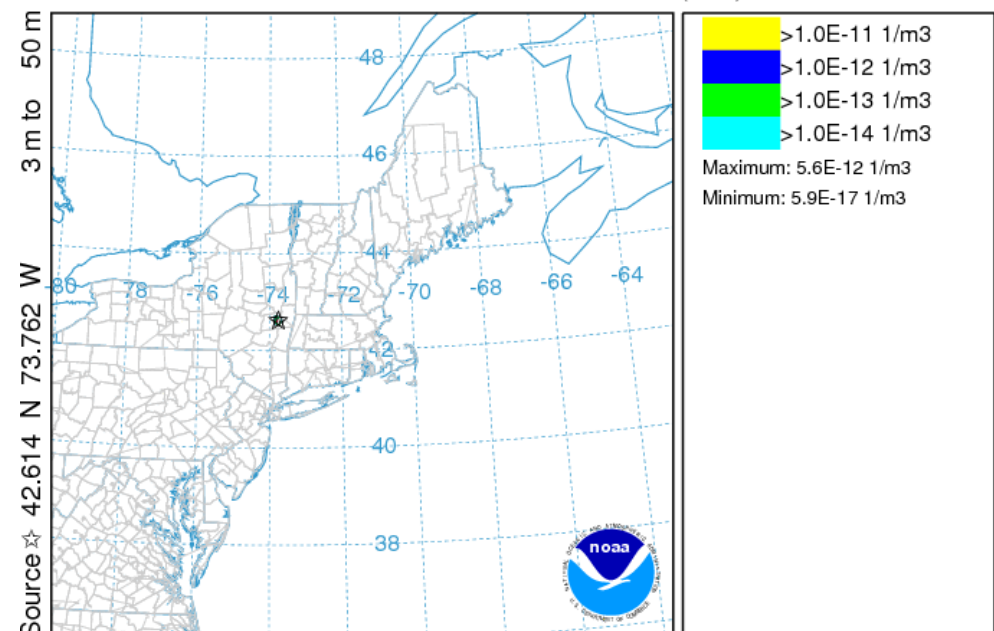


MORE RESULTS	Click on text link or dropdown menu to view images in a new window.				
	GIF Plots	Animated GIF Plots	PDF Plots	Google Earth	Flash Maps
Concentration Grid 1	--	.gif	Java	.pdf	.kmz
Particle Positions	--	.gif	Java	.pdf	-
Time of Arrival	.gif	-	-	.pdf	.kmz

- [Create customer link to these products.](#)
- [Zipped file of all graphics and diagnostics \(for redistribution\)](#)

NOAA HYSPLIT MODEL

Dilution Factor (1/m3) averaged between 0 m and 100 m
Integrated from 1729 09 Feb to 1830 09 Feb 16 (UTC)
Unit Release started at 1729 09 Feb 16 (UTC)

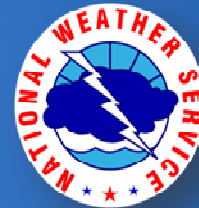


NAMS METEOROLOGICAL DATA

Job ID: 24591 Job Start: Tue Feb 9 17:30:27 UTC 2016
Release: lat.: 42.613900 lon.: -73.762500 Hgt: 3 to 50 m
Pollutant: - Unspecified
Release Quantity: 1 mass Start: 16 02 09 17 29 Duration: 4 hrs, 0 min
Pollutant Averaging/Integration Period: 1 hrs and 0 min
Dry Deposition rate: 0 cm/s Wet Removal: None #Part: -10000
Meteorology: 1200Z 9 Feb 2016 - NAMHUS
Produced by user: stephen.dirienzo



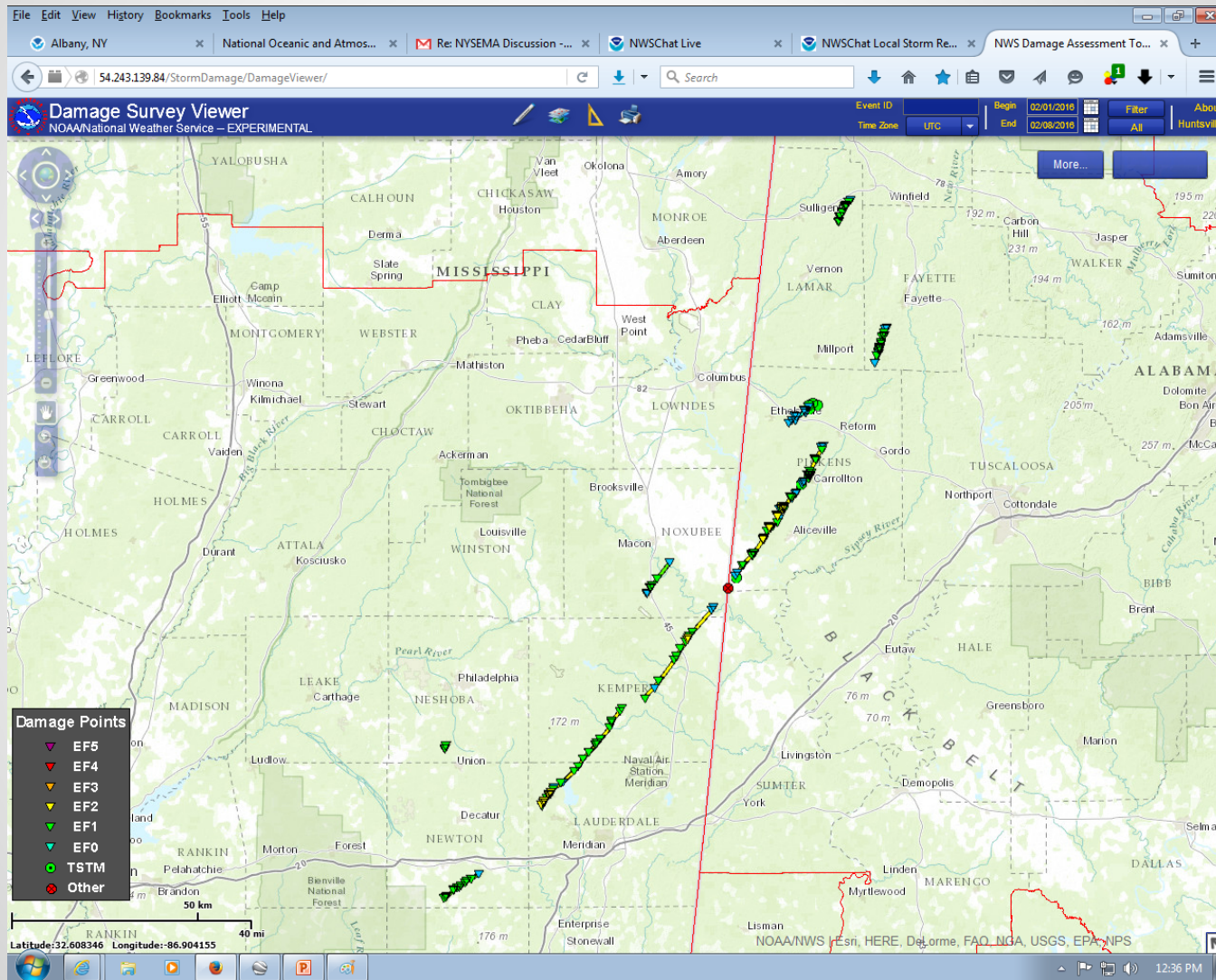
4) NWS Damage Assessment Toolkit (DAT)



- The National Weather Service is tasked with conducting post storm damage assessments following significant severe weather or flooding events.
- The Toolkit is a GIS-based framework for collecting, storing, and retrieving damage survey data.
- Data from individual locations are collected using software run on laptops or other mobile devices and transmitted to a central geospatial database.

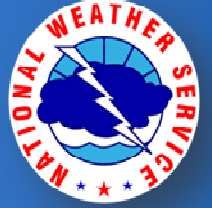


NWS Damage Assessment Toolkit (DAT)





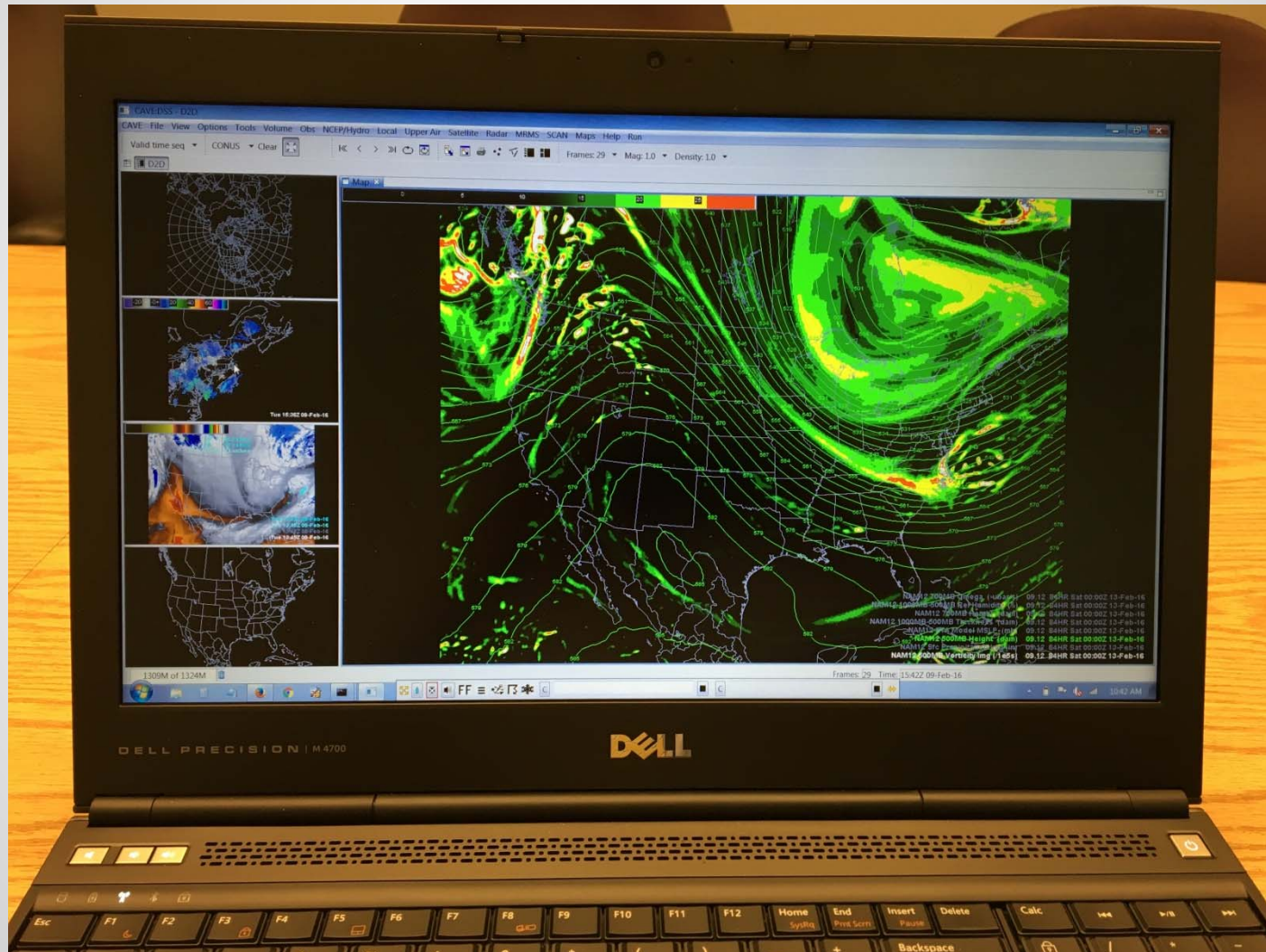
5) NWS Mobile Workstation



- Designed for National Weather Service remote access of the latest observed weather data and forecast model data.
- Used by Incident Meteorologists (IMETs) in the field during hazardous incidents such as wild land fires (Sullivan County – May 2015) to provide critical decision making support to emergency management officials.
- Works with LAN, WIFI or Cell connection.



NWS Mobile Workstation

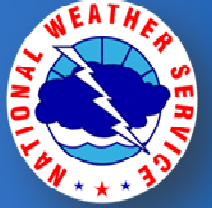




Summary



- The NWS has a variety of tools to provide information to the emergency management community.
- Goals:
 - Enhance environmental intelligence/situational awareness.
 - Aid in informed decision making when weather is a factor.



National Weather Service and NOAA Websites

Judith Levan

Warning Coordination Meteorologist
NOAA-National Weather Service
Buffalo, NY





Building a Weather-Ready Nation



www.weather.gov



**NATIONAL WEATHER SERVICE**
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HOME FORECAST PAST WEATHER SAFETY INFORMATION EDUCATION NEWS SEARCH ABOUT

Local forecast by
"City, ST" or ZIP code

[Location Help](#)

Heavy snow in the northeast as precipitation changes to rain in the Mid-Atlantic

A strong storm will continue to bring heavy snow to the northeast and New England as precipitation changes to heavy rain in the Mid-Atlantic. Numerous winter weather advisories and winter storm warnings are in effect for the northeast; with flood watches in the Mid-Atlantic and portions of the Ohio Valley. Rain and snow are also moving into the west.

[Read More...](#)

**Customize
Your
Weather.gov**

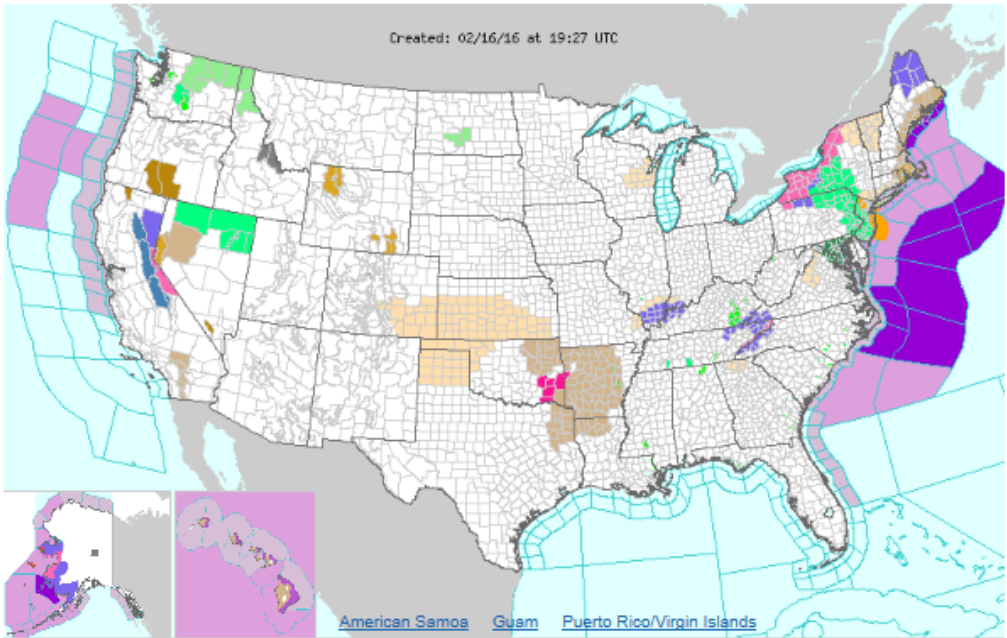
Enter Your City, ST or
ZIP Code

☐ Remember Me

[Privacy Policy](#)

ACTIVE ALERTS FORECAST MAPS RADAR RIVERS, LAKES, RAINFALL AIR QUALITY SATELLITE PAST WEATHER

Created: 02/16/16 at 19:27 UTC

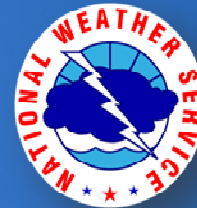


[American Samoa](#) [Guam](#) [Puerto Rico/Virgin Islands](#)

Click on the map above for detailed alerts or [Public Alerts in XML/CAP v1.1 and ATOM Formats](#)



Office Websites





Some standardization



NWS Forecast Office New York, NY

[Weather.gov](#) > New York, NY

New York, NY
Weather Forecast Office

[Current Hazards](#) [Current Conditions](#) [Radar](#) [Forecasts](#) [Rivers and Lakes](#) [Climate and Past Weather](#) [Local Programs](#)

Click on the map below to zoom in.



[Radar](#)



[Current Weather](#)



[Rivers & Lakes](#)



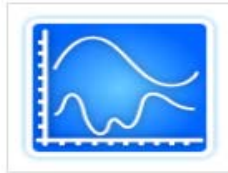
[Satellite](#)



[Weather Information
Display](#)



[Forecast Maps](#)



[Hour by Hour Forecast](#)



www.weather.gov/erh/gis



gis_state

[Weather.gov](#) > [Eastern Region Headquarters](#) > gis_state

Eastern Region Headquarters

Regional Headquarters

[Local Forecast Offices A-K](#)

[Local Forecast Offices L-Z](#)

[River Forecast Centers](#)

[Center Weather Service Units](#)

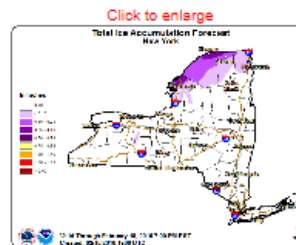
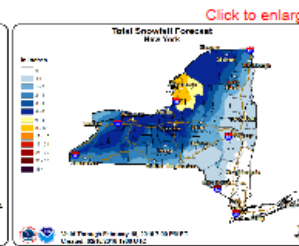
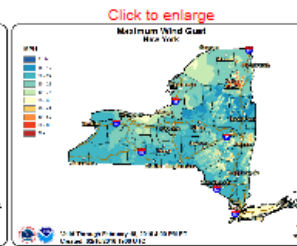
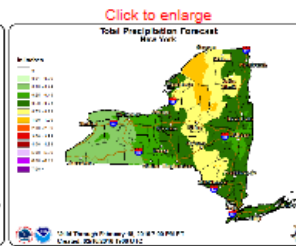
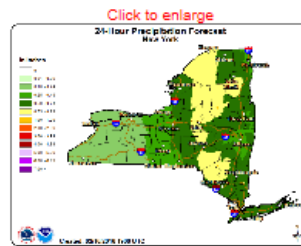
[Regional HQ](#)

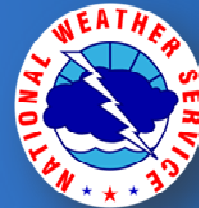
NY NDFD GIS Graphics

All images are stored at: <http://www.weather.gov/images/erh/gis/...>

Right-click on each image to view, save or copy.

[Click here for FAQ](#)





Activity Planner

Weather Activity Planner

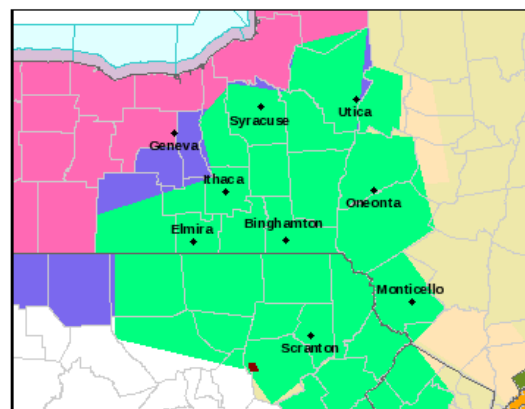
Welcome to the **Weather Activity Planner**. Please enter the range of weather parameters required for your activity. Then, either click the approximate location on the map below, or enter the specific latitude and longitude and hit submit. This will query the forecast grids to find when your weather requirements will be met at the nearest grid point over the next 7 days. Public **comments and suggestions** are encouraged.

This application generates products from a digital forecast data base. It is intended to allow a user to define and produce a forecast for general planning purposes only. As any weather or hydrologic event evolves, updated forecasts and warnings are issued by the NWS. Customers are urged to obtain the latest official forecast information prior to engaging in any weather sensitive activity, and to monitor forecasts for updates during such activities.

The **Weather Activity Planner** is NOT meant to replace a spot forecast request. **Weather Activity Planner** surface winds are a gridded representation of projected, local surface winds at a 5km or 2.5km resolution. The surface winds returned do NOT account for fuel type, sheltering or slope aspect. Users can select either surface wind speeds or 20 foot winds (if the 20 foot wind grid is available). If precise wind forecasts are needed, please submit a spot forecast request to your servicing Weather Forecast Office.

[\[English Units - Click to Change\]](#)

Element	Min	Max	Element	Min	Max
Temperature (°F) <input type="text"/>	<input type="text"/>	to <input type="text"/>	Surface Wind Direction <input type="text"/>	<input type="text"/>	to <input type="text"/>
Relative Humidity <input type="text"/>	<input type="text"/>	to <input type="text"/>	Sky Cover <input type="text"/>	<input type="text"/>	to <input type="text"/>
Surface Wind Speed (mph) <input type="text"/>	<input type="text"/>	to <input type="text"/>	Precipitation Potential <input type="text"/>	<input type="text"/>	to <input type="text"/>



Last Updated: Tue, Feb. 16 2016 2:53 PM

- Read watches, warnings & advisories **Zoom Out**
- Severe Thunderstorm Warning
 - Flash Flood Warning
 - Special Marine Warning
 - Winter Storm Warning
 - Winter Weather Advisory
 - Flood Advisory
 - Small Craft Advisory
 - Flood Watch
 - Coastal Flood Statement
 - Special Weather Statement
 - Hazardous Weather Outlook

Latitude/Longitude Entry
decimal degrees (i.e. 42.134) or
deg min sec (i.e. 42 23 34)

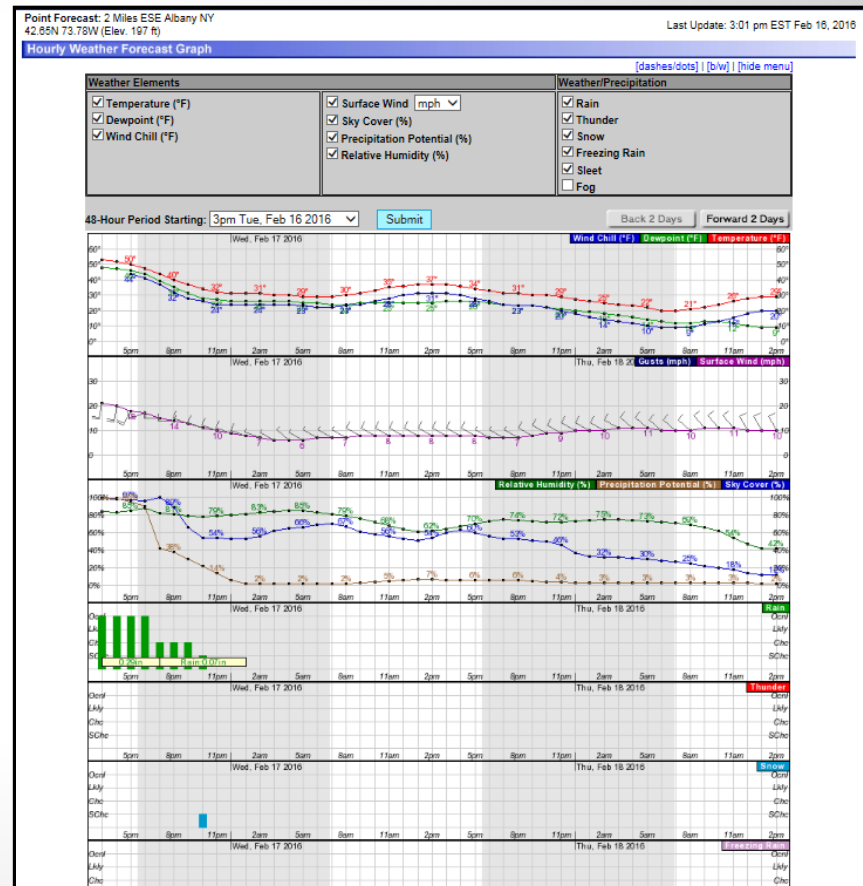
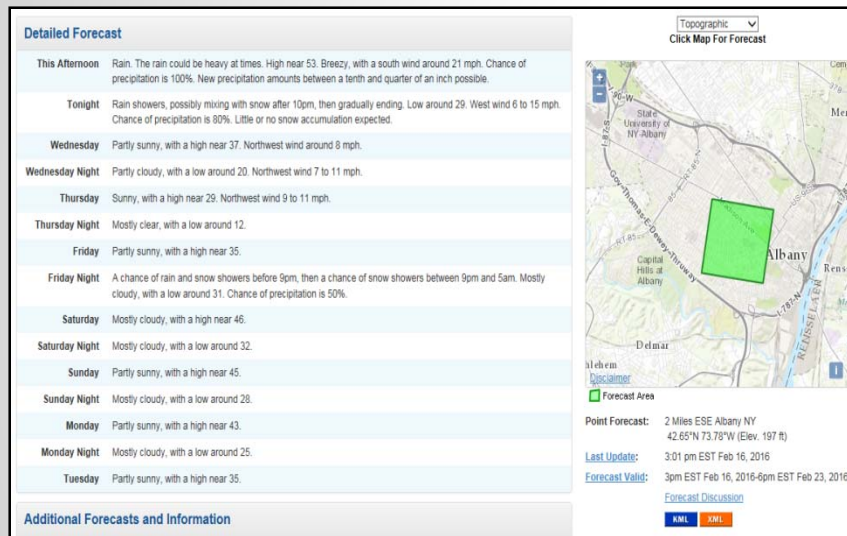
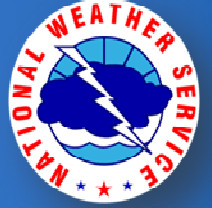
Latitude:

Longitude:

Use "-" (negative sign) in longitude
for locations in Western
Hemisphere

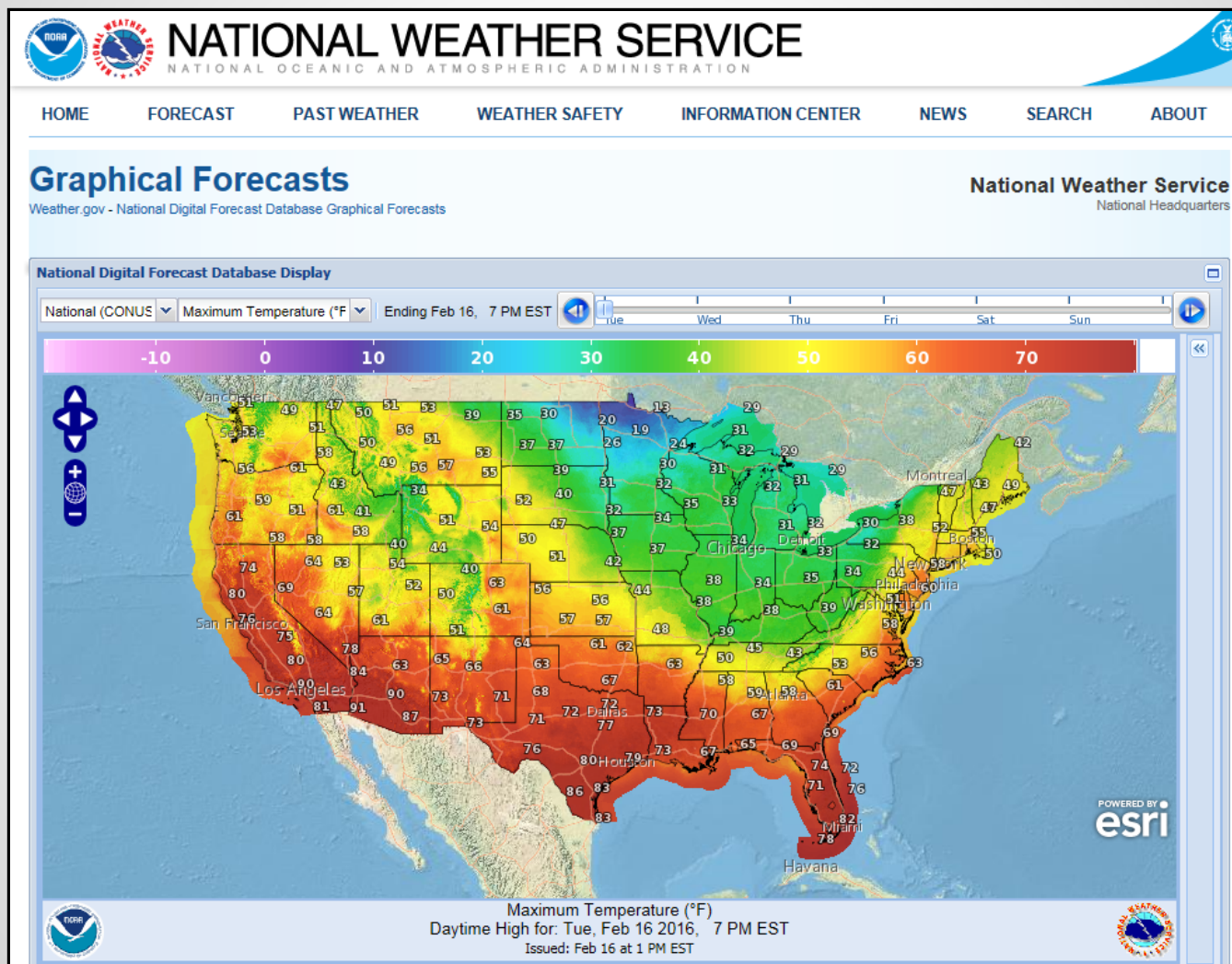


“Point and Click” Hourly Weather Graph



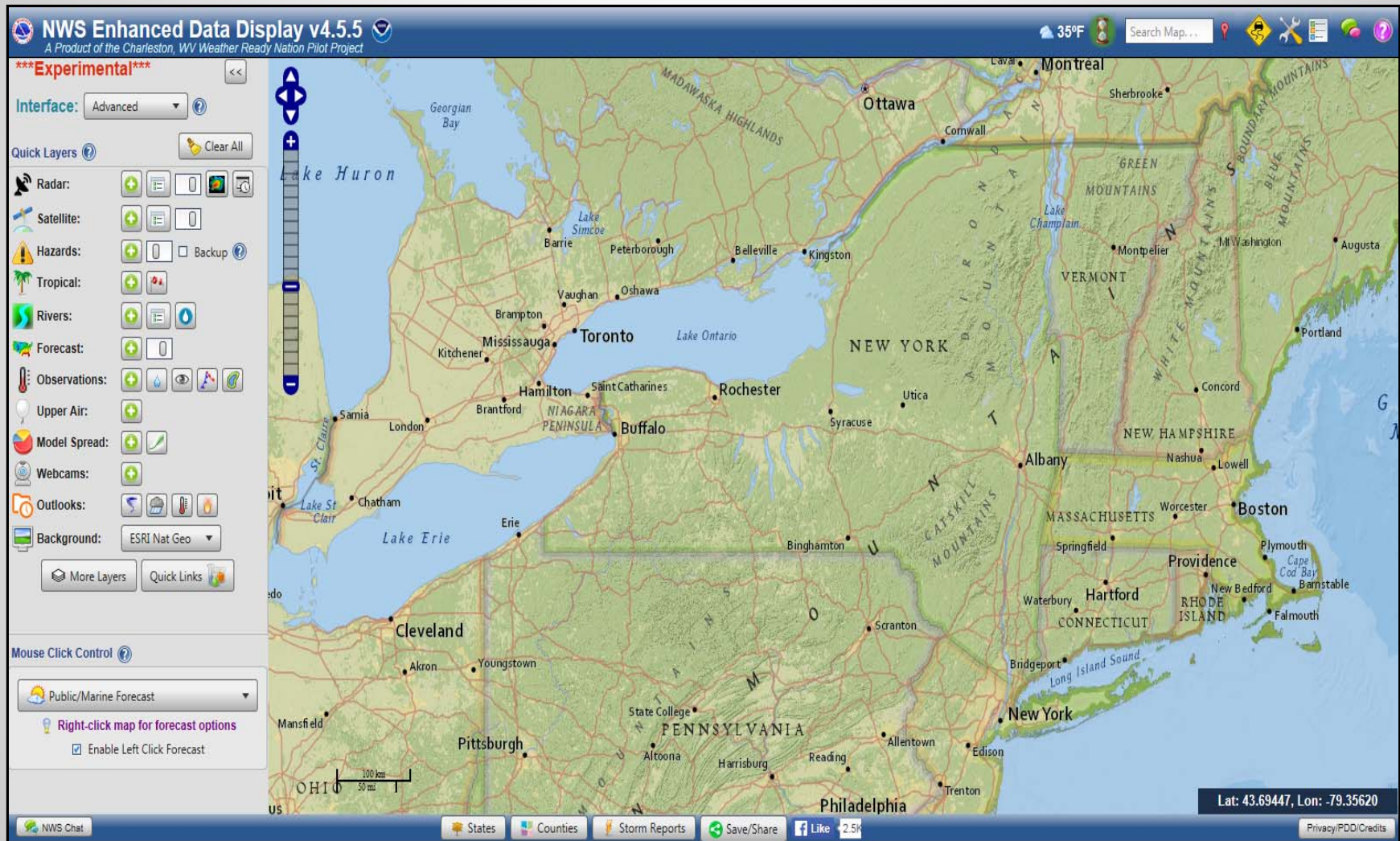


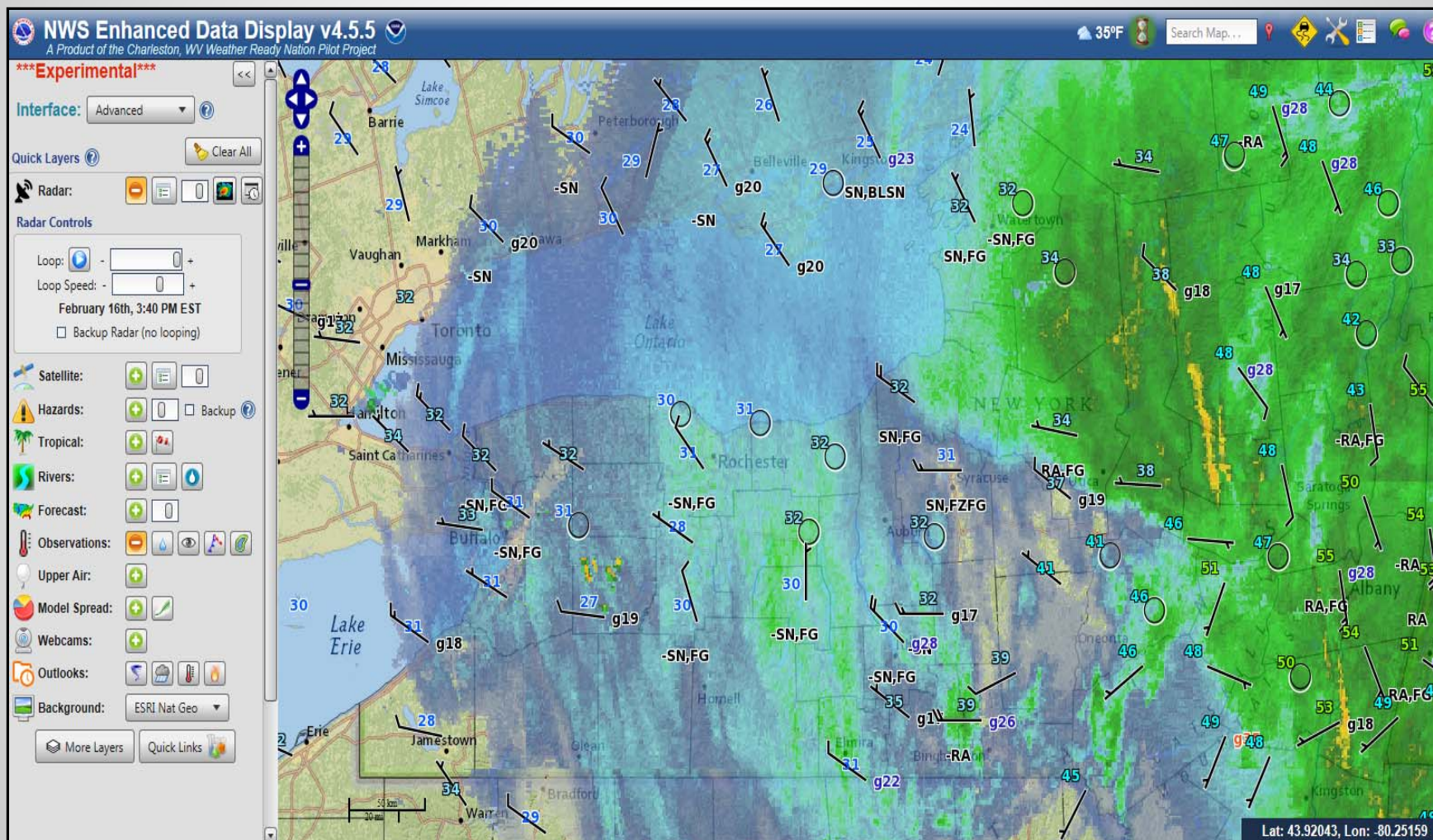
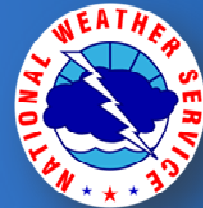
digital.weather.gov





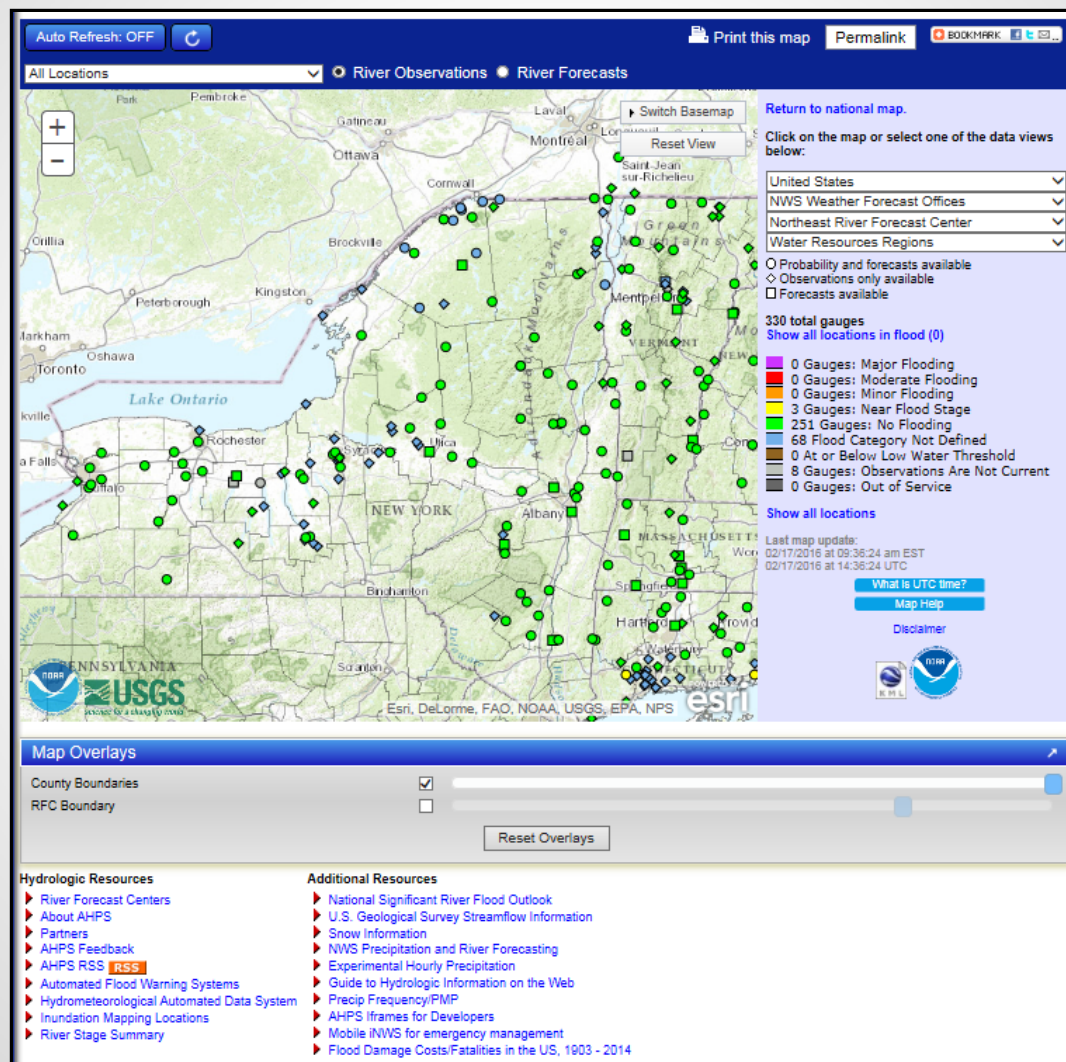
preview.weather.gov/edd







water.weather.gov





www.nws.noaa.gov/gis

National Weather Service GIS Data Portal

Many of the National Weather Service data sets are available in formats that are able to be imported directly into Geographic Information Systems (GIS). Data formats include downloadable shapefiles, web services, KML files and geo referenced images.

As more data is made available in these formats, links to the data will be added to these pages. Click one of the GIS format links below in to start exploring the NWS GIS data currently available! [Questions?](#)

[Web Services](#)

This page contains links to data that are distributed via web server technology in the Open Geospatial Consortium (OGC). In addition, some of the NWS data is available as geo-referenced image files such as geo-gifs.

[KML](#)

Keyhole Markup Language (KML) is used by a variety of GIS and mapping applications and the specifications are freely available to the public and available to the user community without charge or restriction. KML is an XML-based language for managing the display of three-dimensional geospatial data in the programs Google Earth, Google Maps, Google Mobile, ArcGIS Explorer, WorldWind and other GIS viewers. The word Keyhole is an earlier name for the software that became Google Earth; the software was produced in turn by Keyhole, Inc, which was acquired by Google in 2004. ([more about KML](#))

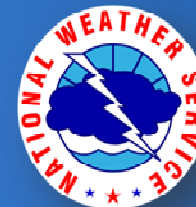
[Shapefile](#)

Shapefiles are a geospatial vector data format for geographic information systems software. Shapefiles spatially describe points, lines and polygons. A "Shapefile" commonly refers to a collection of files with ".shp", ".shx", ".dbf", and other extensions on a common prefix name (i.e., "lakes.shp"). SHP files can be viewed in GIS viewers as well as more sophisticated GIS applications. ([more about Shapefiles](#))

National Weather Service Base maps are available in Shapefiles. The [AWIPS map database](#) catalog contains background map data in Shapefile format that are used by the National Weather Service (NWS) for use by the user community. These data consist of a variety of official NWS forecast zones and county designations used by NWS. In addition other data that might be of interest and that are used by the (NWS) Advanced Weather Information Processing System (AWIPS) are available through [the catalog](#).

[NWS Alerts as CAP](#)

NWS provides access to watches, warnings, advisories, and other similar products in the Common Alerting Protocol (CAP) and Atom Syndication Format (ATOM)..



The following links will either provide kml/kmz files, will link you to a page with these type of files, or displays info in a GIS viewer.

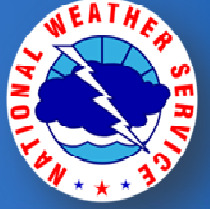
Current Weather	Forecasts	Past Weather
Watches & Warnings Current Weather Warnings Severe Weather Watches and warnings (includes SPC outlooks) Flash Flooding - Basins and Streams	Your Local Weather Forecast MOS Guidance GFS Meteograms GOES Sounding Skew-T River Gage Forecasts Tropical Cyclone forecast models	Doppler Radar NWS Radar archive data Normals, Means, Extremes NCDC Climate Atlas of the United States NCDC GIS Portal Severe Weather Storm Reports: Tornado, Wind and Hail 1950-2006 Database: Tornado, Large Hail, and Damaging Wind Reports Tornadoes: 1950-2006 track and icons
Doppler Radar Real Time Radar CONUS radar from NSSL Radar Locations	WPC Products: Quantitative Precipitation Forecasts (QPFs) 5-Day Significant River Flood Outlook Winter Weather Forecasts Alaska Analyses and Forecasts CONUS Surface Analyses	Rain/Snowfall CoCoRaHS Observations NOHRSC Snow Data
Surface Observations Metar Obs RAWS Obs APRSWXNET Obs MesoWest Obs Other Surface Obs From NSSL 10-minute Surface Observations Hourly Observations	SPC Convective Outlooks: Day 1 Convective Outlook Day 2 Convective Outlook Day 3 Convective Outlook Day 4 to 8 Convective Outlook	Hurricanes Past Atlantic Storm Tracks Past East/Central Pacific Storm Tracks
Satellite Satellites	SPC Fire Weather Outlooks: Day 1 Fire Weather Outlook Day 2 Fire Weather Outlook Day 3 Fire Weather Outlook Day 4 Fire Weather Outlook Day 5 Fire Weather Outlook Day 6 Fire Weather Outlook Day 7 Fire Weather Outlook Day 8 Fire Weather Outlook	
Remote Gages River Gages: Observed Snow Gages: w/ labels w/o labels	CPC Outlooks: CPC Day 3-7 Precipitation Outlook CPC Day 3-7 Temperature Outlook CPC Day 3-7 Soils Outlook CPC Day 8-14 Precipitation Outlook CPC Day 8-14 Temperature Outlook CPC Day 8-14 Soils Outlook	
Great Lakes Wave Height Ice Water Temperature	Fire Weather Current Spot Forecast Sites Fire Weather Categorized Observations MODIS fires IMET Locations	Additional Info Coastal Estuarine Bathymetry nowCOAST web mapping portal Upper Air thanks reports

National Weather Service Data in Shapefile Format

Shapefiles are an open published de-facto industry and government standard GIS format viewable by many, commercial and Open Source GIS Desktop and sever applications. See a list of [free Shapefile viewers](#) below. [Questions?](#)

The following links will either provide shapefiles, will link you to a page with these type of files, or displays info in a GIS viewer.

Current Weather	Forecasts	Past Weather
Watches & Warnings <ul style="list-style-type: none">• Current Weather Warnings• Weather Hazards Assessments River And Flooding Data <ul style="list-style-type: none">• Observed and Forecast AHPS River Gauges Other Current Data <ul style="list-style-type: none">• Alaska Ice and Sea Surface Temperature	Flood/Flash Flood <ul style="list-style-type: none">• Flash Flood Guidance• Significant River Flood Outlook• Gridded Flash Flood Precipitation <ul style="list-style-type: none">• Forecasts• Frequency Estimates Extended <ul style="list-style-type: none">• U.S Temperature and Precipitation Seasonal Outlooks Hurricanes <ul style="list-style-type: none">• Forecast Tracks, Storm Surges and more Outlooks <ul style="list-style-type: none">• SPC Outlooks	<ul style="list-style-type: none">• 1950-2006 Database of Tornado, Large Hail, and Damaging Wind Reports Rain/Snowfall <ul style="list-style-type: none">• Hourly Precipitation Analysis Hurricanes <ul style="list-style-type: none">• Historic Hurricane Tracks
	Fire Weather <ul style="list-style-type: none">• MODIS Fires• Western Region Digital Forecasts	Additional Info <ul style="list-style-type: none">• Heat Index• Global Sea Surface Temperature Drought Monitoring <ul style="list-style-type: none">• Soil Moisture• Evaporation• Precipitation• Runoff• Temperature



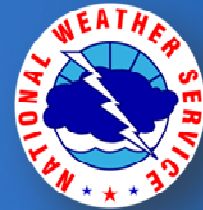
Regional and National NWS Efforts to Support Local Offices in High Profile and High Impact Events

John Koch

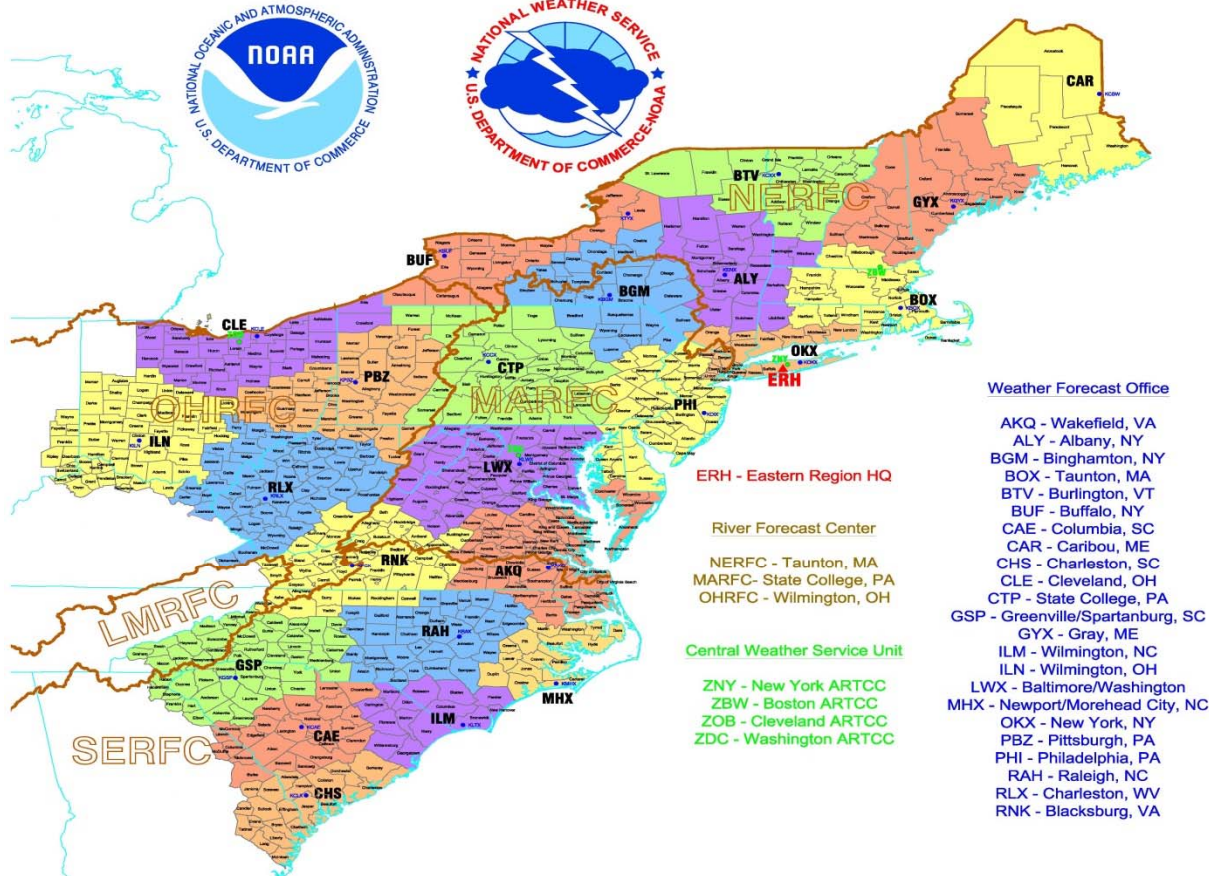
Meteorological Service Division, Deputy Chief
NOAA-National Weather Service
Eastern Region Headquarters – Bohemia, NY



Building a Weather-Ready Nation



NATIONAL WEATHER SERVICE EASTERN REGION

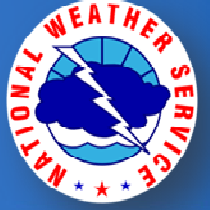


Highlights

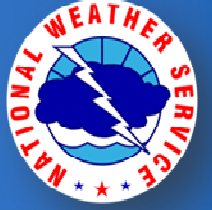
- 16 states
- Population of approximately 100 million
- 16 of the top 50 media markets



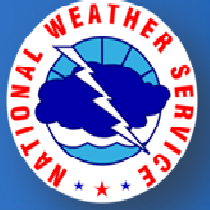
- Examples of high profile and high impact events
 - Hurricane Sandy
 - Record breaking Blizzards
 - Democratic and Republican National Conventions
 - Presidential Inaugurations
 - Papal visit
 - Holiday celebrations in major cities
 - Super Bowl XLVIII



- Administrative/Operational
 - Pre-position support staff to supplement local offices
 - Planning and coordination calls with National centers
 - Activate Eastern Region Regional Operations Center
 - Provide on-site support
 - Provide briefings to FEMA Regions I, II and III



- Training (national)
 - Professional Development Series
 - ICS coursework
 - communication
 - Decision Support Services (DSS) Bootcamp (KC)
 - Effective Hurricane Messaging Course (NHC)



- Training (regional)
 - DSS Roadshow (new in 2016)
 - Communication
 - Media training
 - On-site and remote support
 - Tailored to local office needs



NWS Contact Information



CWA COVERAGE PROVIDED
BY WFO BURLINGTON

NWS Buffalo

judith.levan@noaa.gov
1-716-565-0204 x223
www.weather.gov/buf

NWS Burlington

scott.whittier@noaa.gov
1-802-862-8711 x223
www.weather.gov/btv

NWS Albany

stephen.dirienzo@noaa.gov
1-518-435-9571 x 223
www.weather.gov/aly

Buffalo

Binghamton

Albany

NWS Binghamton

david.nicosia@noaa.gov
1-607-770-9531 x223
www.weather.gov/bgm

NWS New York

gary.conte@noaa.gov
1-631-924-0593 x 223
www.weather.gov/okx

New York City