

Weathering the Storm

Using data to bolster the traditional weather story

Reporting on the weather is a fact of life in any newsroom, but not one typically paid much attention outside of major disasters. But weather stories don't have to suck. The National Weather Service puts out more data in more formats than perhaps any government agency outside of the Census. So please, hug a data set. Save a weather story today. It won't cost you a dime.

Know your gatekeepers

State climatologists will be able to tell you anything and everything that has happened in that state, from record temperatures to historical averages. They can be invaluable sources of data and many are more than willing to hand out whatever they have. Only 3 states currently don't have a state climate office (Georgia, Tennessee and Rhode Island). You can find contact info for yours here:

- <http://www.stateclimate.org/>

In most cases, your local or regional National Weather Service office can help you with local historical, current or forecast data and they provide it in a variety of constantly updating formats. Don't know your local office? Here's a list by state:

- <http://www.nws.noaa.gov/organization.php>

Here's a list of regional media contacts if you're really stuck and/or need an IT person:

- http://www.nws.noaa.gov/pa/nws_contacts.php

Stuck on a term?

The National Weather Service offers a full glossary to help you decipher the scientific jargon most meteorologists and climatologists are prone to. Find it here:

- <http://weather.gov/glossary/>

Plan ahead

The National Weather Service may be stupendous about putting out data in virtually every format you could desire, but they're terrible at organizing it. Poke around and figure out what data you need for various situations on a sunny day, so you're not scrambling for historical tornado data when the roof blows off your building.

Context, context, context

The simplest and best thing data can do to a weather story is provide context. Field reporting is great for color, but doesn't always give you the big picture during a weather event. Data can reinforce any weather story.

Helpful Links

Agency/Site	Link	Good For
CoCoRaHS Network	http://www.cocorahs.org/	Rain/snowfall totals, hail reports, historical rain and snow data
USGS/NOAA Streamgauges	http://water.weather.gov/ahps/	Real-time and historical river and tidal gauge data
NOAA Environmental Visualization Laboratory	http://www.nnvl.noaa.gov/	Satellite photos, animations, visualizations of current and recent weather phenomena
National Weather Service GIS Data Portal	http://www.nws.noaa.gov/gis/	One-stop shop for all your weather KML, Shape file and GIS needs
U.S. Drought Portal	http://www.drought.gov/	Current drought conditions, forecasts and historical data state-by-state for the United States. Also includes downloadable data, graphics and embeddable elements
Listing of Local NWS offices	http://www.nws.noaa.gov/organization.php	Local historical records, forecasts, storm reports, forecast discussions, watches, warnings and advisories. Almost everything you need to localize weather data.
National Hurricane Center	http://www.nhc.noaa.gov/	Current forecasts, seasonal outlooks, historical data including past hurricane tracks, real-time tropical hurricane data, including accurate KML files of current storms
NWS Storm Prediction Center	http://www.spc.noaa.gov/	Everything you need to cover a large scale severe weather event. Storm reports on wind, hail and tornadoes available in CSV and KML formats. Plenty of great forecast maps, data as well.
NWS Fire Weather Page	http://www.erh.noaa.gov/er/aly/FireWx/FirePage.htm	Fire weather forecasts, precipitation/lightning probability data, maps

Global Snow Lab	http://climate.rutgers.edu/snowcover/	Worldwide snowpack and snowfall data, anomalies. Both current and historical.
NWS Marine Weather Forecasts	http://www.nws.noaa.gov/om/marine/home.htm	Real-time, historical data covering marine weather, forecasts both in the U.S. and on Atlantic/Pacific Oceans
USGS Earthquake Hazards Program	http://earthquake.usgs.gov/	Real-time earthquake data, historical records, constantly updated XML and KML files
Weather Spark	http://weatherspark.com	Comprehensive dashboard of weather data for any city
U.S. Drought Monitor	http://droughtmonitor.unl.edu/	Weekly updates/maps on drought conditions around the country.
Storm Prediction Center Historical Data	http://www.spc.noaa.gov/wcm/	Lots of data/GIS files on past severe weather across the U.S.
Tornado History Project	http://www.tornadohistoryproject.com/	Searchable sortable historical tornado data and maps
Iowa Environmental Mesonet Local Storm Report App	http://mesonet.agron.iastate.edu/lsr/	Searchable historic severe weather report and warning data, maps
Wundermap	http://wunderground.com/wundermap	Great for analyzing current conditions, model forecasts. Nice UI. Weather Underground is good in general for local data as well, though they are a private, for-profit company.
Space Weather	http://spaceweather.com/	Both NOAA and NASA release a lot of data and multimedia on the sun's interaction with the Earth, but SpaceWeather.com is a good place to find the best stuff. Lots of good stuff on here -- think Northern Lights or geomagnetic storms
American Meteor Society	http://www.amsmeteors.org/	Are people talking about seeing a fireball streak across the sky? These guys will let you know. Have nice mapping products and great crowdsourced data.