SkyWarn
Reporting Severe Weather

How to Make Reports...

✔ Contact your local NWS office at...

✔ Amateur/Ham Radio
✔ Call 911 and ask them to relay your report to the nearest NWS Office
✔ Use NWS' On-Line Tools and Web Pages (i.e., eSpotter) to relay reports

Guidelines of Severe / Hazardous Weather Reports:

- **WHAT?** (Tornado, funnel cloud, wall cloud, damaging thunderstorm wind, hail, flash flooding, damaging non-thunderstorm wind, snow, ice pellets/sleet, freezing rain, freezing drizzle, icing)
- **WHERE?** (County and distance from nearest city/town center, exact location - cross streets and highways, exact address, latitude and longitude)
- **WHEN?** (Exact time and duration of event, not time of report)
- **DETAILS?** (Extent of damage or degree of event, largest hail size observed and whether size was measured or estimated, amount of snowfall/ice accumulations)
- **WHO IS MAKING REPORT?** (Report your name, your affiliation - storm spotter, law enforcement, EMS, fire department, emergency management, media - and contact phone #)

Note: Unless you witnessed the tornado, do not try to determine whether it is tornado or thunderstorm wind damage, just refer to the damage as thunderstorm wind damage. Official NWS or NWS assigned survey crews will make the determination and will assign the EF damage level if it is determined to be a tornado. This is not your responsibility as a storm spotter.

Date	Time	County/State	City/Town	Exact Location	Event	Details
Examples... Apr 14	1010pm	Smith, MS	6 SE Anywhere	1278 Smith Lane (2 miles west of intersection of U. S. Highway 34 and Smith Lane)	Thunderstorm Wind Damage	Two trees uprooted; some roof shingles blown off; fence partially blown down
Apr 14	1015pm	Lee, MS	3E Anywhere	Along US Highway 78	Hail	1" hail (measured); started at 1015pm / ended 1017pm

Estimating the Intensity of Rainfall Based Upon the Rate of Fall...

Light - Scattered drops that do not completely wet an exposed object, regardless of duration (up to .10"/hour, maximum of .10" in six minute period)

Moderate - .11" to .30" per hour; more than .01" to as much as .03" in six minute period

Heavy - More than .30" per hour; more than .03" in six minute period

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Reporting Hail Sizes

Always remember that hail diameter should be reported to the NWS in inch size diameter (middle column below)

Hail Sizes (Common Objects Diameter)	Hail Sizes (Inch Diameter)	Freefall Velocity
... Non-Severe Reports ...		
Pea Size	1/4 inch (0.25 inch) or smaller	25 mph
Pinto Bean Size	3/8 inch (0.40 inch)	30 mph
Regular Marble Size	1/2 inch (0.50 inch)	35 mph
Dime Size	5/8 inch (0.60 inch)	40 mph
... Severe Reports ...		
Penny Size	3/4 inch (0.75 inch)	43 mph
Nickle Size	7/8 inch (0.88 inch)	47 mph
Quarter Size	1 inch (1.00 inch)	50 mph
Half Dollar Size	1 1/4 inch (1.25 inch)	56 mph
Ping Pong Ball Size	1 1/2 inch (1.50 inch)	61 mph
Golfball Size	1 3/4 inch (1.75 inch)	66 mph
Hen Egg Size	2 inches (2.00 inches)	72 mph
Racket Ball Size	2 1/4 inches (2.25 inches)	76 mph
Tennis Ball Size	2 1/2 inches (2.50 inches)	80 mph
Baseball Size	2 3/4 inches (2.75 inches)	85 mph
Tea Cup Size	3 inches (3.00 inches)	89 mph
	3 1/4 inches (3.25 inches)	94 mph
	3 1/2 inches (3.50 inches)	98 mph
	3 3/4 inches (3.75 inches)	102 mph
Grapefruit Size	4 inches (4.00 inches)	106 mph
	4 1/4 inches (4.25 inches)	112 mph
Softball Size	4 1/2 inches (4.50 inches)	117 mph
DVD / CD Sizes	4 3/4 inches (4.75 inches)	122 mph
	5 inches (5.00 inches)	125 mph

Observing Lightning

Types:
LTGIC - Incloud Lightning
LTGCC - Cloud to Cloud Lightning
LTGCA - Cloud to Air Lightning
LTGCG - Cloud to Ground Lightning (most dangerous)
LTGCW - Cloud to Water Lightning
... and combinations ...
LTGCCCG - Cloud to Cloud and Cloud to Ground Lightning

Frequency:
OCNL (Occasional) - Less than 1 lightning flash per minute
FQT (Frequent) - About 1 to 6 lightning flashes per minute
CONS (Continuous) - More than 6 lightning flashes per minute

Typical lightning observations:
FQT LTGICCCCG Distant West
OCNL LTGIC Overhead

Estimating the Intensity of Rainfall Based on Ground Observations...

Light - Scattered drops that do not completely wet an exposed surface, regardless of duration; individual drops are easily seen; slight spray may be observed over pavement; puddles form slowly if at all; sound on roofs range from slow light pattering to gentle swishing; steady small streams may form in gutters and down spouts

Moderate - Individual drops are not clearly identifiable; spray is observed just above pavement and other hard surfaces; puddles form rapidly; gutters and down spouts 1/4 to 1/2 full; sound on roof ranges from swishing to gentle roar

Heavy - Rain seemingly falls in sheets; individual drops are unidentifiable; heavy spray, to a height of several inches, is observed over hard surfaces; gutters and down spouts run more than 1/2 full; visibility is greatly reduced; sound on roof resembles roll of drums or distant roar

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Beaufort Wind Scale

How to use...
(1) Observe wind conditions and closely match to those listed in the "specification" column
(2) Move to the left on the chart until you reach the "MPH" or "KNOTS" - this is the estimated speed

MPH	Knots	Description	Specification
< 1	< 1	Calm	Calm; smoke rises vertically
1-3	1-3	Light Air	Wind direction shown by smoke drift; direction not shown by wind vanes
4-7	4-6	Light Breeze	Wind felt on face; leaves rustle; wind vanes moved
8-12	7-10	Gentle Breeze	Leaves and small twigs in constant motion; wind will extend light flag
13-18	11-16	Moderate	Raises dust, loose paper; small branches moved
19-24	17-21	Fresh	Small trees (in leaf) begin to sway; crested wavelets form on inland water
25-31	22-27	Strong	Large branches in motion; whistling heard in overhead power/ telephone wires; umbrellas used with difficulty
32-38	28-33	Near Gale	Whole trees in motion; inconvenience felt walking against the wind
39-46	34-40	Gale	Breaks twigs off of trees; impedes walking progress
47-54	41-47	Strong Gale	Slight structural damage occurs
55-63	48-55	Storm	Trees broken/uprooted; more substantial damage begins
64-72	56-63	Violent Storm	Widespread damage
73-82	64-71	Hurricane Strength	Widespread damage