

Weather

How to Measure a Tornado

■ The original **Fujita Scale** (or F Scale) was developed by Dr. Theodore Fujita to classify tornadoes based on wind damage. All tornadoes, and other severe local windstorms, were assigned a number according to the most intense damage caused by the storm. An enhanced F scale (EF) was implemented in the United States on February 1, 2007. The new EF scale uses three-second gust estimates based on a more detailed system for assessing damage, taking into account different building materials.



F SCALE		EF SCALE (U.S.)	
F0 • 40–72 mph (64–116 km/h)	light damage	EF0 • 65–85 mph (105–137 km/h)	
F1 • 73–112 mph (117–180 km/h)	moderate damage	EF1 • 86–110 mph (138–178 km/h)	
F2 • 113–157 mph (181–253 km/h)	considerable damage	EF2 • 111–135 mph (179–218 km/h)	
F3 • 158–207 mph (254–332 km/h)	severe damage	EF3 • 136–165 mph (219–266 km/h)	
F4 • 208–260 mph (333–419 km/h)	devastating damage	EF4 • 166–200 mph (267–322 km/h)	
F5 • 261–318 mph (420–512 km/h)	incredible damage	EF5 • over 200 mph (over 322 km/h)	

Wind/Barometer Table

Barometer (Reduced to Sea Level)	Wind Direction	Character of Weather Indicated
30.00 to 30.20, and steady	westerly	Fair, with slight changes in temperature, for one to two days.
30.00 to 30.20, and rising rapidly	westerly	Fair, followed within two days by warmer and rain.
30.00 to 30.20, and falling rapidly	south to east	Warmer, and rain within 24 hours.
30.20 or above, and falling rapidly	south to east	Warmer, and rain within 36 hours.
30.20 or above, and falling rapidly	west to north	Cold and clear, quickly followed by warmer and rain.
30.20 or above, and steady	variable	No early change.
30.00 or below, and falling slowly	south to east	Rain within 18 hours that will continue a day or two.
30.00 or below, and falling rapidly	southeast to northeast	Rain, with high wind, followed within two days by clearing, colder.
30.00 or below, and rising	south to west	Clearing and colder within 12 hours.
29.80 or below, and falling rapidly	south to east	Severe storm of wind and rain imminent. In winter, snow or cold wave within 24 hours.
29.80 or below, and falling rapidly	east to north	Severe northeast gales and heavy rain or snow, followed in winter by cold wave.
29.80 or below, and rising rapidly	going to west	Clearing and colder.

Note: A barometer should be adjusted to show equivalent sea-level pressure for the altitude at which it is to be used. A change of 100 feet in elevation will cause a decrease of $\frac{1}{10}$ inch in the reading.