

# Tornado

**STEM Sims**

## Lesson 2: Temperature and Tornadoes

Tornadoes most often occur in the spring. Meteorologists study various weather conditions associated with the presence of tornadic activity. What do you think is the relationship between temperature and tornadoes?

### Doing the Science

1. Start the Tornado Simulation by clicking on the “Sim” tab.
2. Make sure the Temperature Difference is set on “0°C.” Leave the Pressure on “1,000 millibars” and the Funnel Width on “Narrow” for this entire lesson.
3. Click the “Run Simulation” button.
4. Note and record in Table 1 the Wind Speed and Damage Rating.
5. Click the “Reset Simulation” button. Change the Temperature Difference to “10°C” and rerun the experiment repeating steps 3 – 4.
6. Continue collecting data for temperature differences of 20, 30, 40 and 50°C. Make sure to keep Pressure and Funnel Width constant.

**Table 1.**

Temperature Difference (°C)	Wind Speed (mph)	Damage Rating
0		
10		
20		
30		
40		
50		

### Do You Understand?

1. How are temperature difference and the wind speed associated with a tornado related?
  
2. How does temperature difference impact the damage caused by a tornado?
  
3. Why do you think that most tornadoes happen during the spring months?