

## How Doppler radar assists meteorologists – Amanda Reynolds

Doppler radar helps meteorologists learn the secrets hidden inside storms. The key to being able to see a tornado with radar is by locating rotation within the storm. The Doppler radar sends out radiation and can sense whether the target is moving toward or away from the radar. This is done by utilizing the Doppler Effect, which is caused by a change in the frequency of a wave, such as a sound wave or an electromagnetic wave. This is why when a car goes by really fast the sound seems to change pitch. In a radar, it allows it to differentiate between winds blowing towards or away from the radar. These are shown by different colors and where they meet, there is likely a circular rotation, indicating a potential tornado.