Answers: Light, moderate, and heavy fog
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Q: I have seen heavy fog defined as having a visibility of less than 0.3 miles. But have never see what defines a moderate or light fog. Is there some standard? *Lowell, Glen Allen, Va.*

A: This sounds like a pretty simple question, but isn't. First, here's the definition of "fog" from the American Meteorological Society's (AMS) *Glossary of Weather and Climate***: "A visible aggregate of minute water droplets suspended in the atmosphere near the earth's surface; a cloud in contact with the earth's surface. Fog is responsible for reducing visibility to less than 1 kilometer (5/8 mile)." Aviation weather observations and forecasts, intended for pilots, use "fog" when it reduces visibility to 5/8 statute miles or less. "Mist" is reported and foerecast for "foggy conditions" with visibility greater than 5/8 miles.**

Like you, I've seen NWS offices use the terms "heavy fog," "moderate fog," or "light fog," but I couldn't find these terms in the NWS online Glossary or the AMS Glossary.

I asked Chris Vaccaro, the NWS public relations chief. He sent me the following from Paul Stokols, who's with the NWS Public Weather Services Branch:

"The only official definition of fog intensity that I am aware of is in our directive for non precipitation products (10-515) which defines a "Dense Fog Advisory" as a product issued for "Widespread or localized fog reducing visibilities to 1/4 mile or less." The Weather element allows forecasters to differentiate between F+ (heavy or Dense fog) , F (Fog or Moderate Fog), and F- (Light Fog) and the computer worded forecasts pick up on these distinctions. However, there is no national standard for these definitions."

He notes that most NWS forecast offices would use the code for heavy fog when the visibility is less than 1/4 mile, just "fog" when the visibility is between 1/4 mile to 1 mile and light fog for visibility of 1 miles or more. "These tend to be set by forecasters based on local climatology for frequency of occurrence."