I've used these two animated wind map links in my classroom to tie the concepts of wind direction and intensity to fronts and other weather phenomena. The first (linked to the "Rachel Maddow Show" blogsite) shows wind patterns associated with the "Polar Vortex" phenomenon of the first two weeks of January, 2014:

http://www.msnbc.com/rachel-maddow-show/seeking-answers-the-blowing-wind

The second wind map is a real-time, current map of the winds over the continental US:

http://hint.fm/wind/

[The information below, copied from the website, describes the history of the project (with disclaimers) and shows links that can be executed from the website. Also of interest to my students is the "Gallery" section, in which students can study "remarkable" US weather events.]

An invisible, ancient source of energy surrounds us—energy that powered the first explorations of the world, and that may be a key to the future. This map shows you the delicate tracery of wind flowing over the US.

Wind map prints are available from Point.B Studio.

Read more about wind and about wind power.

The wind map is a personal art project, not associated with any company. We've done our best to make this as accurate as possible, but can't make any guarantees about the correctness of the data or our software. Please do not use the map or its data to fly a plane, sail a boat, or fight wildfires :-)

If the map is missing or seems slow, we recommend the latest Chromebrowser.

Surface wind data comes from the National Digital Forecast Database. These are near-term forecasts, revised once per hour. So what you're seeing is a living portrait. (See the NDFD site for precise details; our timestamp shows time of download.) And for those of you chasing top wind speed, note that maximum speed may occur over lakes or just offshore.

If you're looking for a weather map, or just want more detail on the weather today, see these more traditional maps of temperature and wind.

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