



# MET Stations and Web Cams

The Real-Time Meteorological Observation Network consists of shore-based meteorological stations in Wisconsin, Michigan, Illinois, Indiana, and Ohio. Stations in Alpena, MI, Muskegon, MI, Chicago, IL, Milwaukee, WI, and Toledo, OH also include web cameras. All meteorological observation stations measure and record wind speed, wind gust, wind direction, air temperature, and wind chill. In addition, instruments in Muskegon measure dew point, relative humidity, atmospheric pressure, and light level. This data as well as camera images are updated at 5-30 minute intervals and displayed on GLERL's web site. The meteorological observations are used in GLERL's Great Lakes Coastal Forecasting System to improve nowcasts and forecasts of wind, waves, water levels, and circulation.

## Real-Time Meteorological Observation Stations



### Web Cam Stations:    Met Data Stations:

- ◆ Muskegon, MI
  - ◆ Alpena, MI
  - ◆ Chicago, IL
  - ◆ Toledo, OH
  - ◆ Milwaukee, WI
- ◆ Alpena, MI
  - ◆ Muskegon, MI
  - ◆ South Haven, MI
  - ◆ Michigan City, IN
  - ◆ Chicago, IL
  - ◆ Milwaukee, WI
  - ◆ Toledo, OH

The Met Stations provide vital weather data that scientists incorporate within complex computer models used to produce nowcasts and forecasts of waves and circulation available on the Great Lakes Coastal Forecasting System (<http://superior.eng.ohio-state.edu/>). Observations from these stations are also provided to the National Weather Service (NWS) marine forecast offices at Milwaukee, Chicago, and Grand Rapids in real-time. Fishers, boaters, surfers, and other recreational users have found the real-time conditions and WebCam images particularly useful in making plans for when and where to venture out on the waters.



WebCam photograph of the Chicago skyline from the Chicago Met Station.



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## Real-Time Meteorological Data

Conditions at 7:00 am EST on 02/17/2005 (DOY 048 12:00 GMT)  
(Updated at 05,20,35,50 minutes past the hour)

|                     |                                  |
|---------------------|----------------------------------|
| Wind Speed:         | 21.21 kts (10.91 m/s)            |
| Max Wind Speed:     | 24.46 kts (12.58 m/s)            |
| Wind Direction:     | 305° (NW)                        |
| Air Temperature:    | 21.6 °F (-5.8 °C)                |
| Wind Chill:         | 5.0 °F (-15.0 °C)                |
| Dew Point:          | 14.0 °F (-10.0 °C)               |
| Relative Humidity:  | 72.5 %                           |
| Station Pressure:   | 29.41 in Hg. (996.00 mb)         |
| Sea Level Pressure: | 30.12 in Hg. (1019.87 mb)        |
| PAR:                | 0.00 uEinst/cm <sup>2</sup> /sec |

Example of available real-time meteorological data. Current conditions and four WebCam views at the Muskegon Met Station website on Feb. 17, 2005.

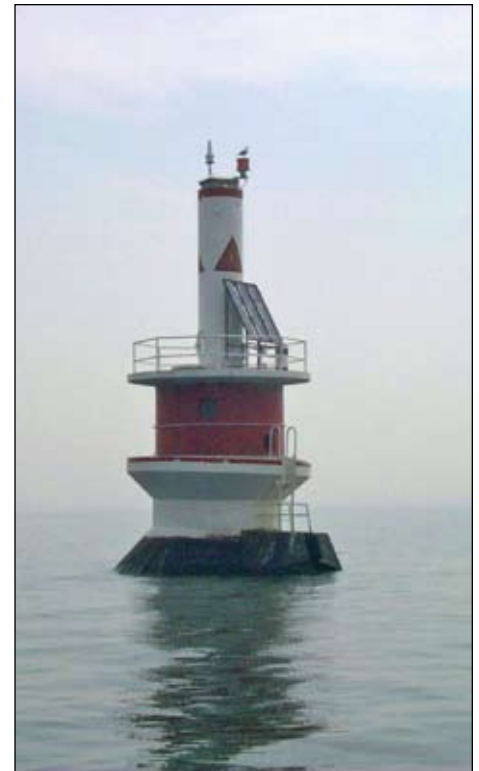


[www.glerl.noaa.gov/webcams](http://www.glerl.noaa.gov/webcams)

[www.glerl.noaa.gov/metdata](http://www.glerl.noaa.gov/metdata)

### Sponsors/Contributors/Collaborators:

- ◆ NOAA/GLERL
- ◆ National Weather Service
- ◆ USCG Group Milwaukee
- ◆ USCG Aids to Navigation Team Kenosha
- ◆ USCG Group Grand Haven
- ◆ USCG Station Michigan City
- ◆ Thunder Bay National Marine Sanctuary and Underwater Preserve
- ◆ City of Chicago
- ◆ City of Milwaukee
- ◆ City of Kenosha
- ◆ U.S. Army Corps of Engineers Waterways Experiment Station



Toledo Meteorological station located at the end of the Toledo shipping channel in the middle of the western basin of Lake Erie.

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