

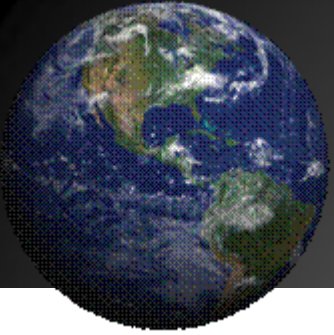
National Weather Service

Voluntary Observing Ship (VOS) Program



Ron Williams

Port Meteorological Officer (PMO)

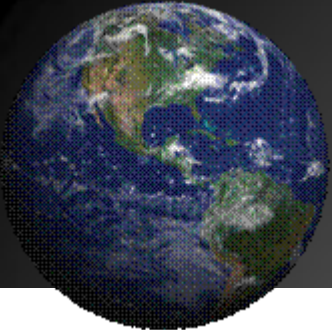


VOS Program



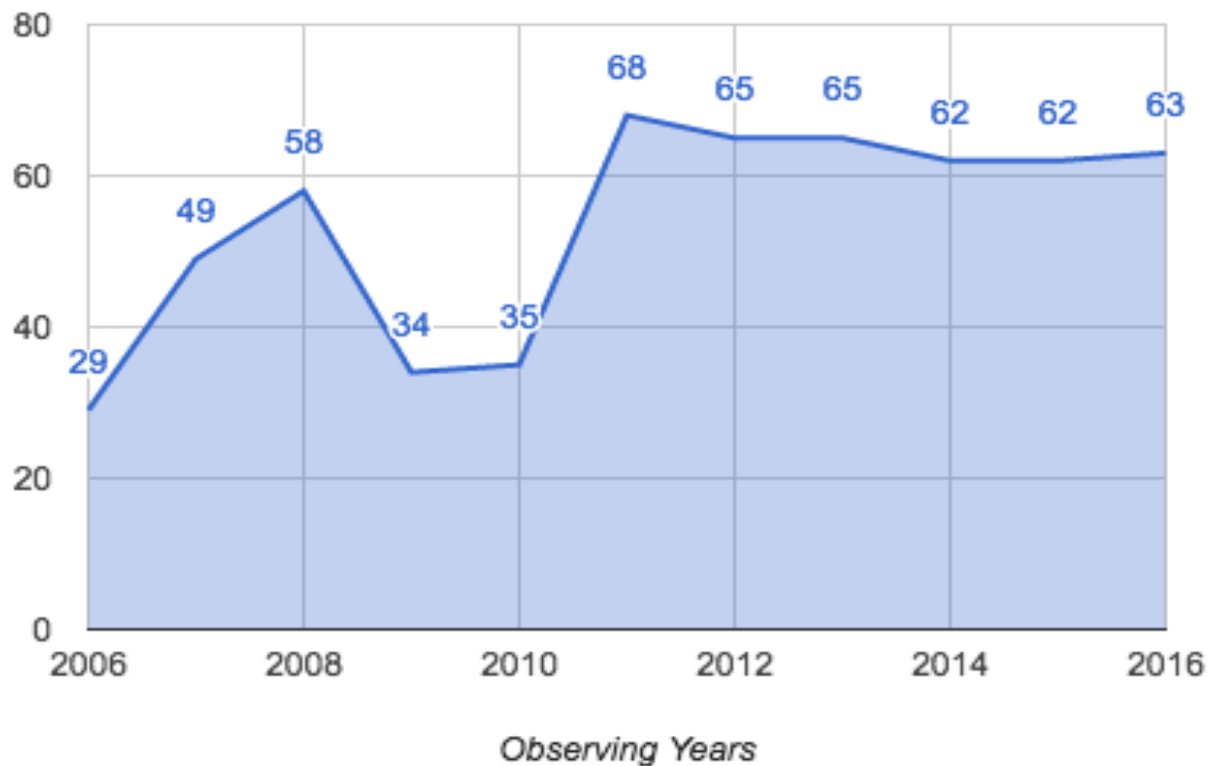
Successful program over the past few years with getting real-time weather data from vessels to utilize for the issuance of accurate weather forecasts.

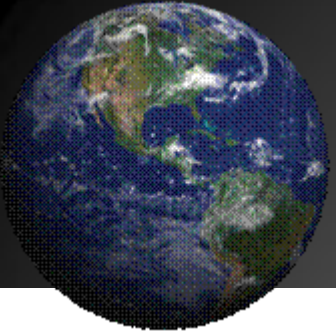




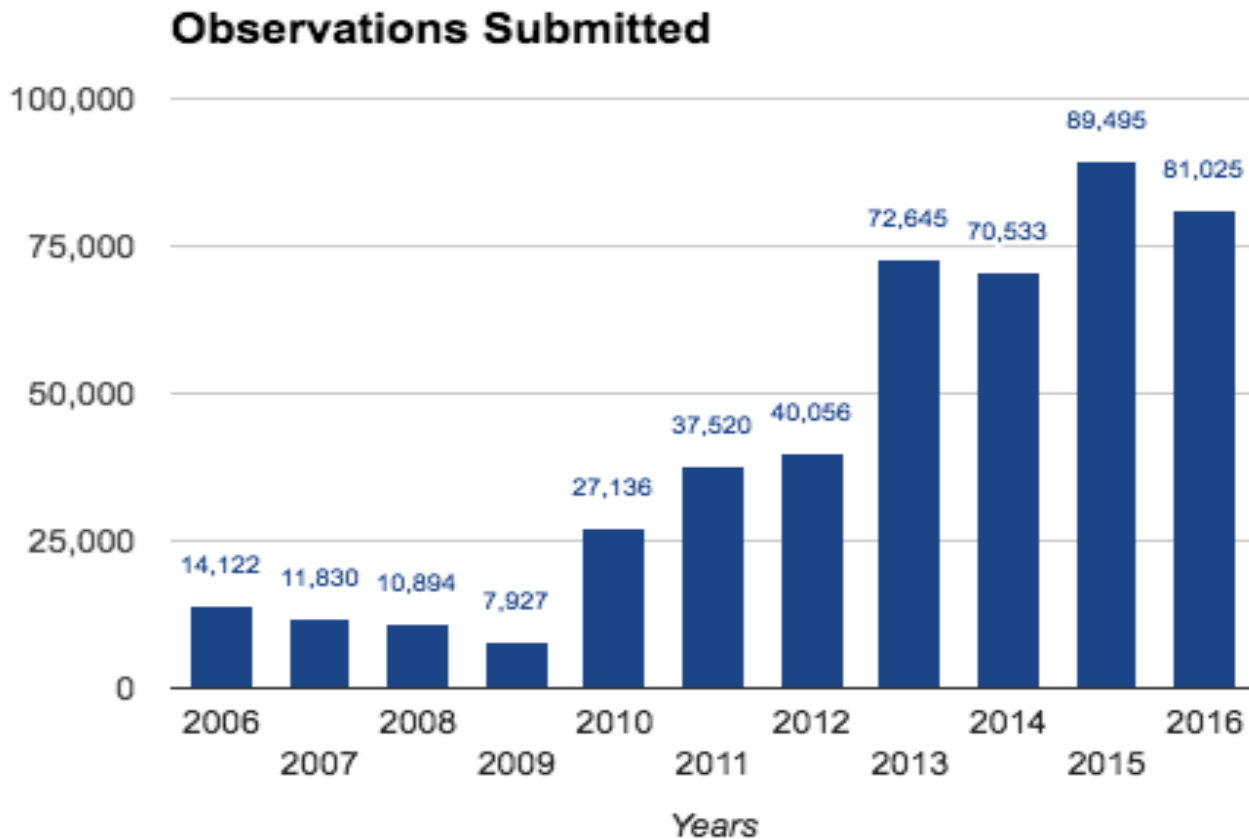
Great Lakes VOS Reporting Ships

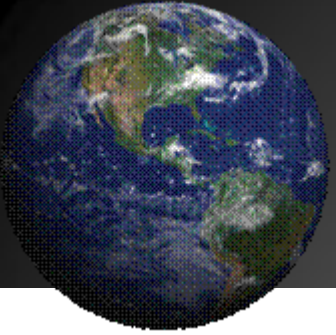
Great Lakes Observing Ships





Great Lakes Submitted Observations





Importance of Ship Obs

SHIP OBSERVATIONS ARE AN IMPORTANT INGREDIENT FOR NUMERICAL FORECAST MODELS

They provide:

Ground Truth

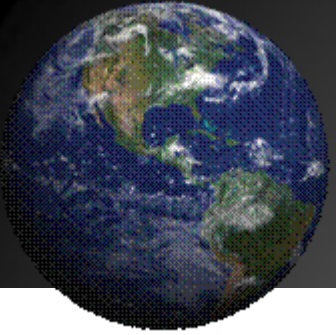
Verify Satellite data (adjustments are made based on ship observations)

Verify Buoy data / Winds and Waves

Verify Model data output

We go to great lengths to **UTILIZE** every reported element.





Marine Weather Forecasting



How does the forecaster use the observation?

- Looks for observations that tell the Meteorologist his current forecast is accurate / inaccurate.
- Looks for observations containing information about the location of fronts, dense fog or other hazards important to the Marine community.



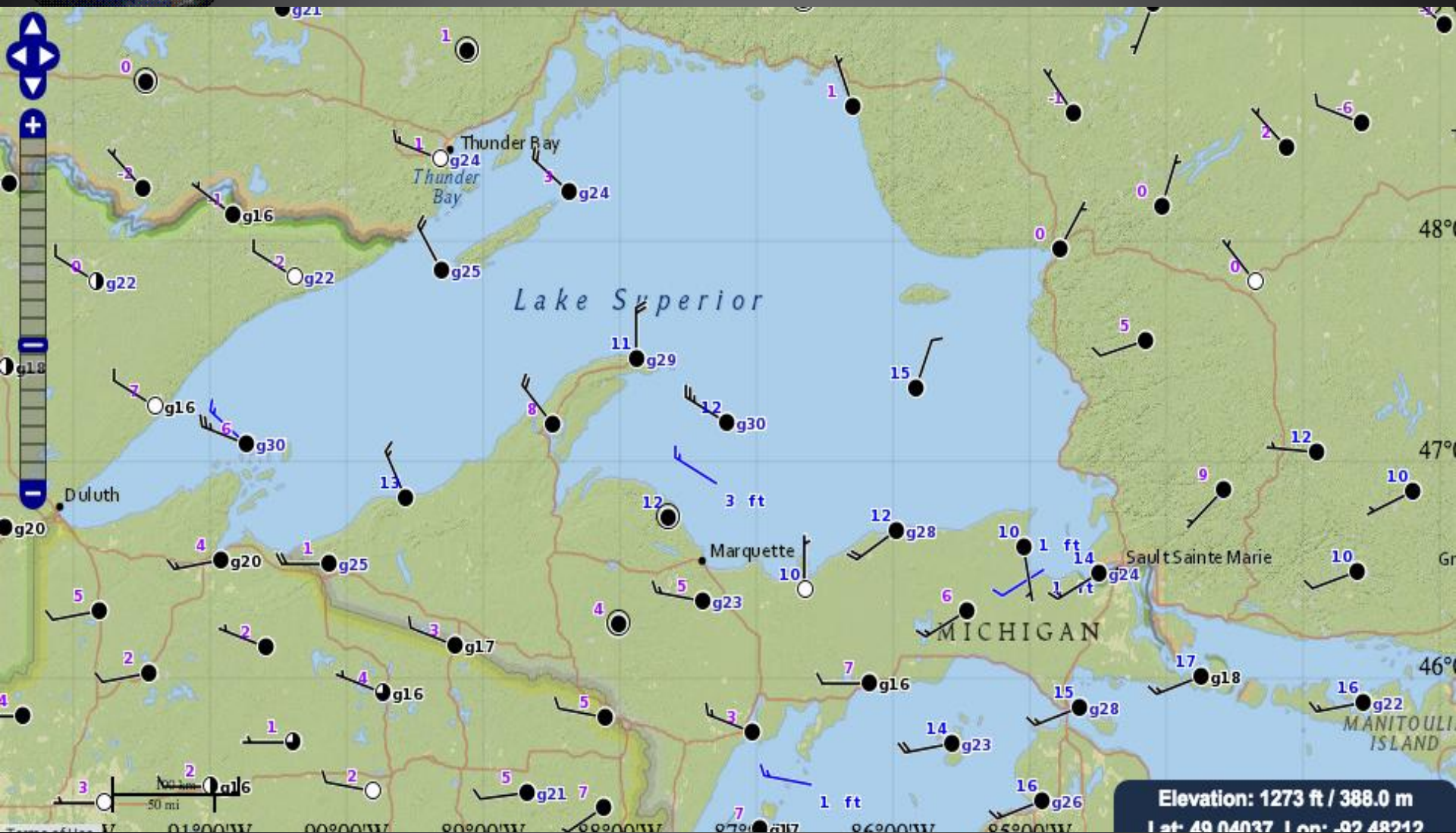
How the Mariner can help?

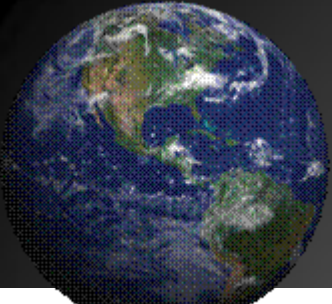
- Take and transmit weather observations





Open Water Data Gaps





Weather Reporting Webpage

www.weather.gov/dmawds



NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



Ship Observation Entry Form

Welcome to the Voluntary Observing Ship data entry page. Thank you for taking the time to submit your observation. The data you enter here plays a major important role in producing accurate weather and wave forecasts. Your observation is included in the computer models that create weather and wind forecasts. The more initial data in the model, the better the forecast; especially over the data sparse open waters of the Great Lakes.

If you need to make a correction to your observation, click on the back button after you transmitted your observation and make the final correction and retransmit your observation.

Your ship's radio callsign (which is also your login ID here) must be registered with DMAWDS in order to send an observation.

Note: Any element in red denotes mandatory observed entry.

What is the radio call sign (ID) of your ship? (NOTE: USE LETTERS AND NUMBERS ONLY. NO SPACES.)

What is your DMAWDS password?

Day of the month in UTC: 08

Actual Time of Observation to the Nearest Whole Hour in UTC: 20

What is the latitude in tenths of a degree (example: 42.8)?

What is the longitude in tenths of a degree (example: 82.1)?

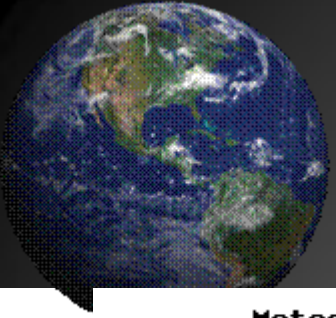
Enter the wind speed to the nearest knot (example: 12)?

Enter the wind direction in degrees (example: 90, 270):

Enter the wave height in feet (example: 6, 12)?



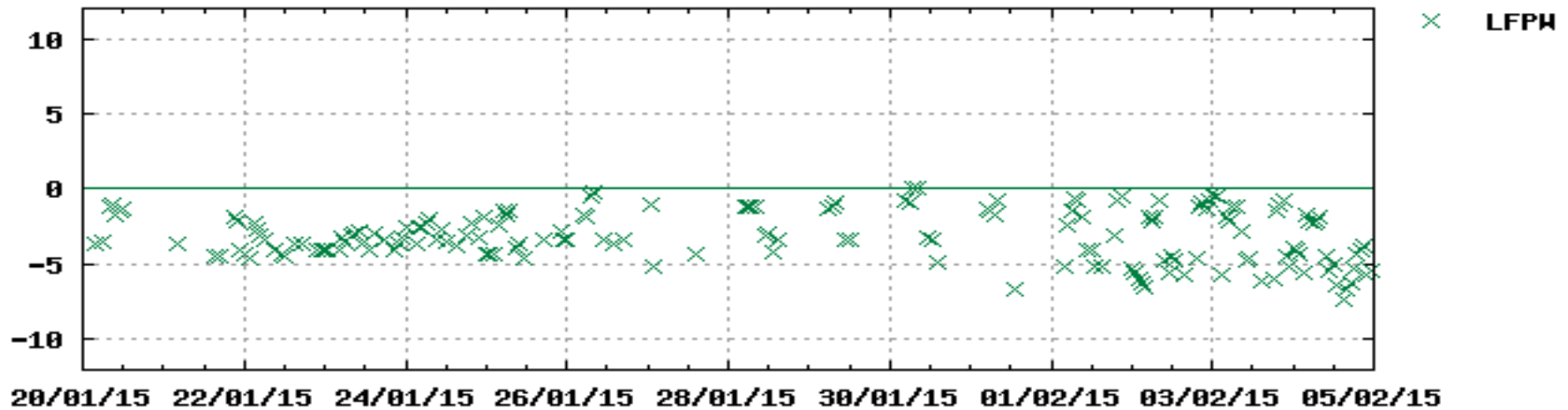
National Weather Service



Observation Quality Control

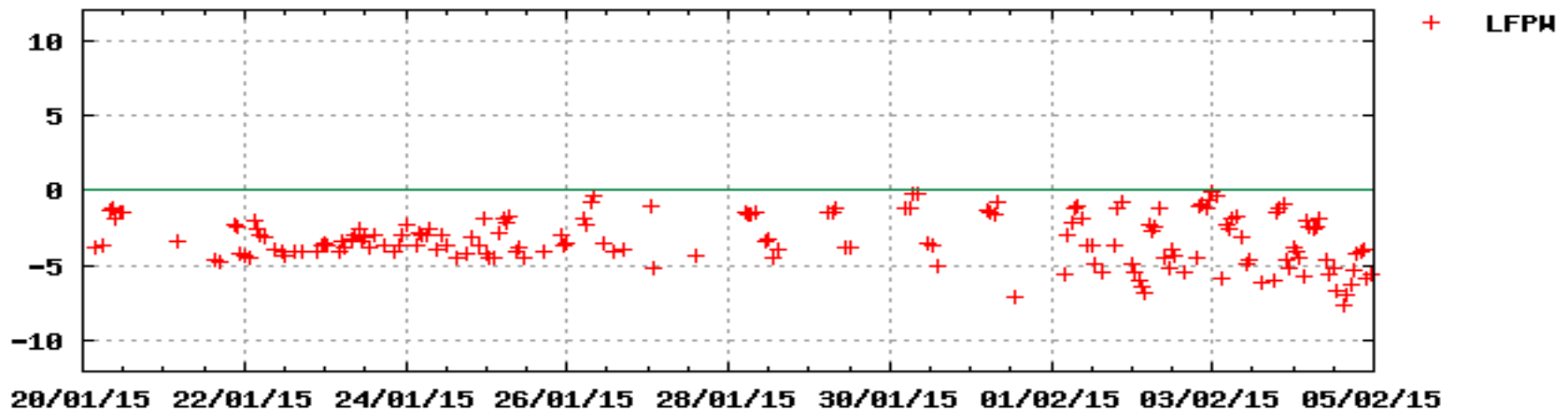
Meteo-France

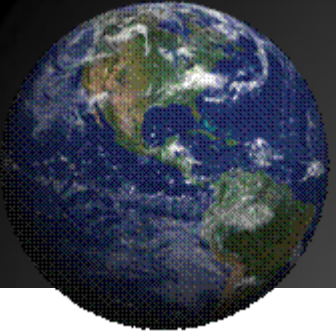
Station WMO PHE0 - Air Pressure differences in hPa



ECMWF

Station WMO PHE0 - Air Pressure differences in hPa

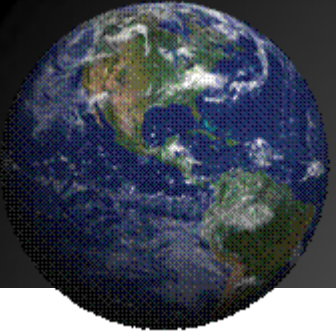




Weather Equipment

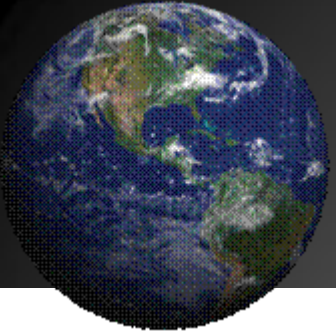
- Digital and aneroid barometers available for broken or ship issued original equip.
- NWS F420 wind units are dated, but accurate devices to serve as back-up.
- Nimbus/MMTS temperature standard still operational. If not working, contact me.





How do I become active in VOS?

- Contact PMO Ron Williams
- Will assess your weather equipment for accuracy
- Assign login/password for online entry
- PMO will adjust barometer and visit ship to train observers
- 20 observations per month to stay active in VOS



PMO CONTACT INFORMATION

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Questions?

