



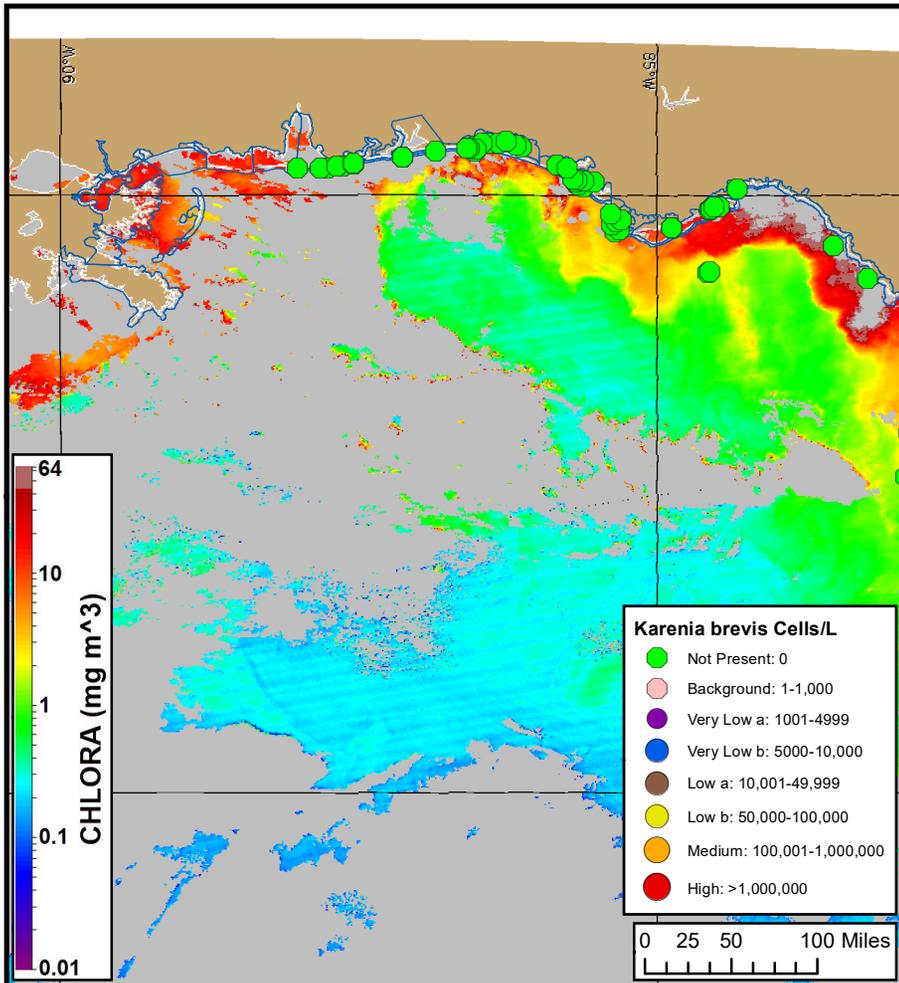
Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Northwest Florida to Louisiana

Thursday, December 20, 2018
NOAA National Ocean Service
NOAA Satellite and Information Service
NOAA National Weather Service



Instructions for viewing this geospatial pdf are available at: <https://go.usa.gov/xn9g2>.



Conditions Report

No respiratory irritation associated with *Karenia brevis* (commonly known as red tide) is expected in this region.

****Note: As of today, December 20, northwest Florida to Louisiana bulletins (Taylor County, FL to Louisiana) will no longer be issued. The region will continue to be monitored and twice weekly bulletins will resume as conditions warrant.****

Recently Reported Impacts (Listed by County):

Respiratory irritation:None
Dead fish:None

Analysis

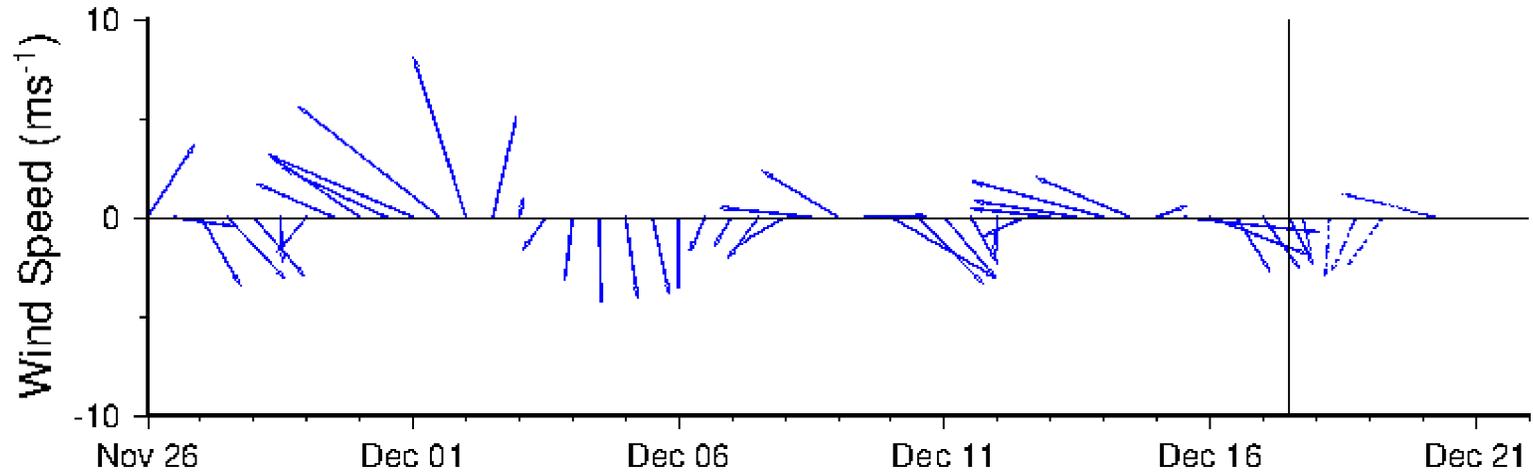
Imagery:

Recent ensemble imagery (MODIS Aqua, 12/18), is partially obscured by clouds, limiting analysis. Patches of elevated to very high chlorophyll (2 to >20 µg/L) with some of the optical characteristics of *K. brevis* are visible along- and offshore Baldwin County in Alabama, and northwest Florida.

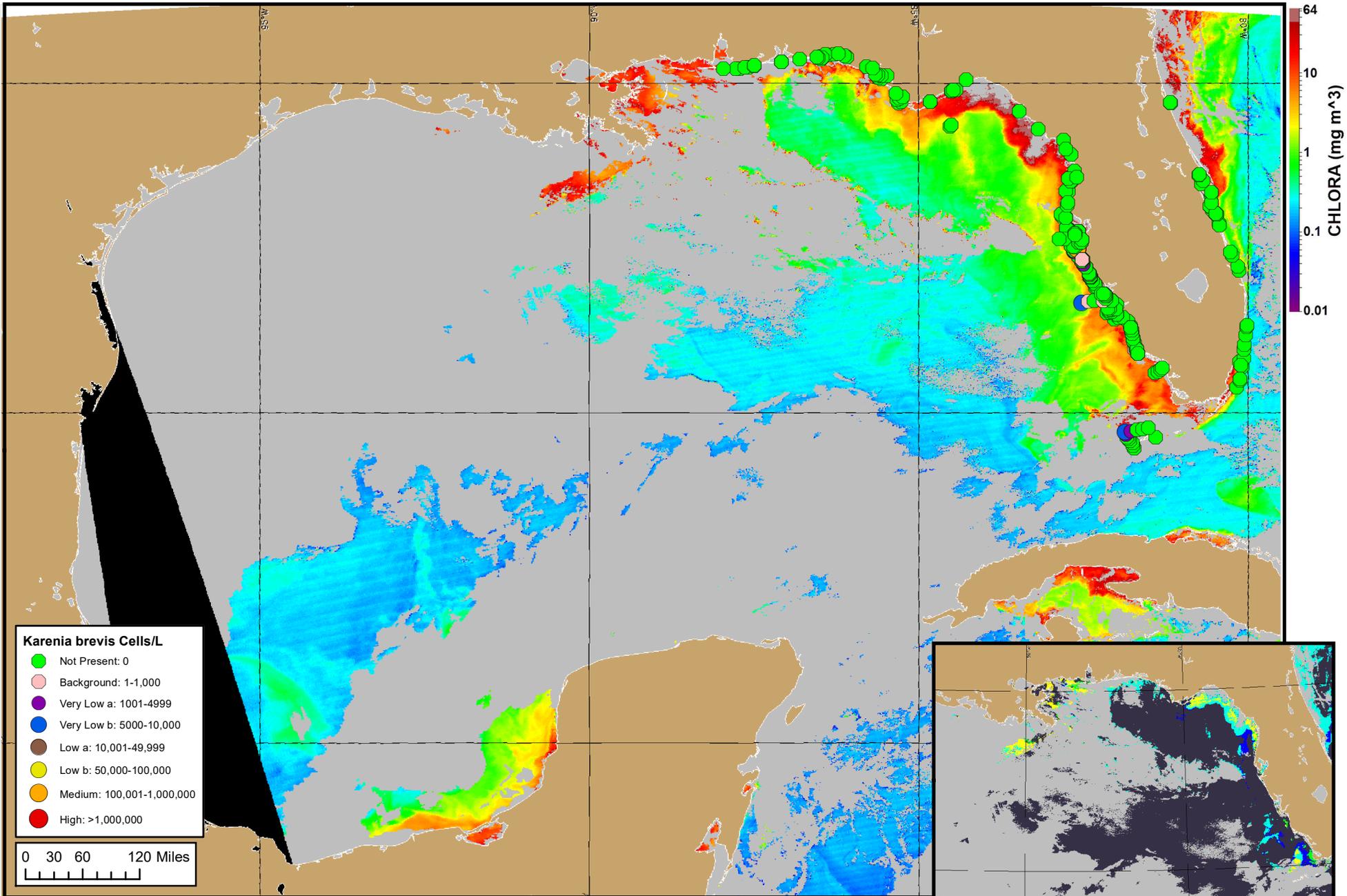
Yang, Ludema

Karenia brevis cell concentration sampling data from: 12/10/18 through 12/18/18. Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf. Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute: <http://myfwc.com/REDTIDESTATUS>.

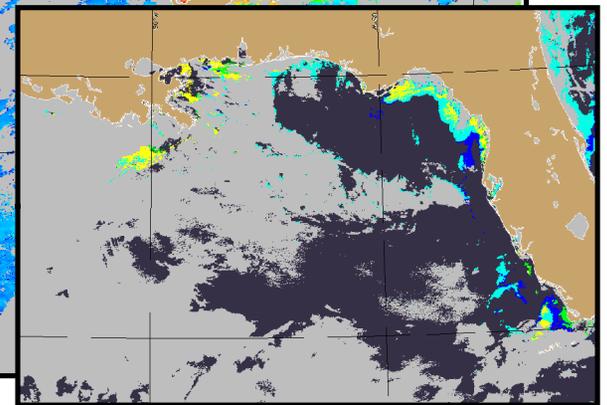
MODIS Aqua satellite chlorophyll image (12/18/18) with possible *K. brevis* HAB areas shown by red polygon(s).

Wind conditions from Panama City Beach, FL

Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS). A text summary of the marine forecast by region is available from NWS at <https://go.usa.gov/xnx4X>.



Karenia brevis cell concentration sampling data from: 12/10/18 through 12/19/18. Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf. Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute: <http://myfwc.com/REDTIDESTATUS>. MODIS Aqua satellite chlorophyll image (12/18/18).



Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).