



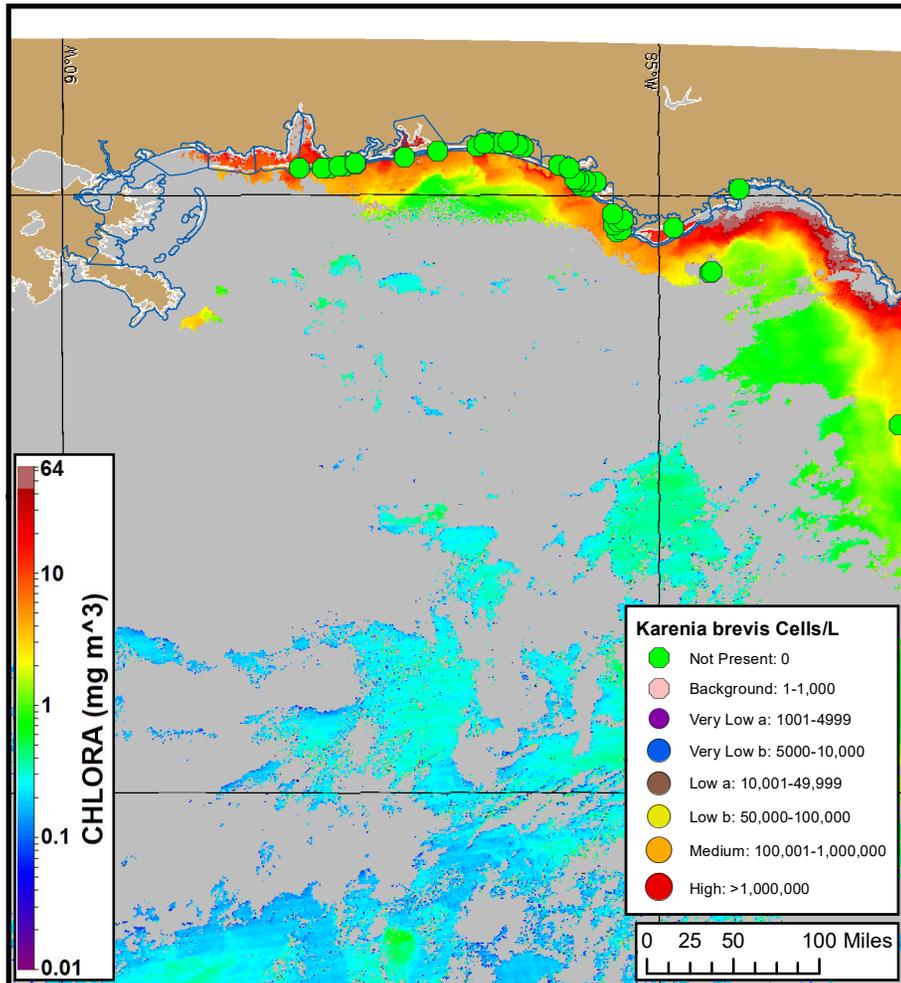
Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Northwest Florida to Louisiana

Monday, December 17, 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.

Recently Reported Impacts (Listed by County):

Respiratory irritation: None
Dead fish: None

Analysis

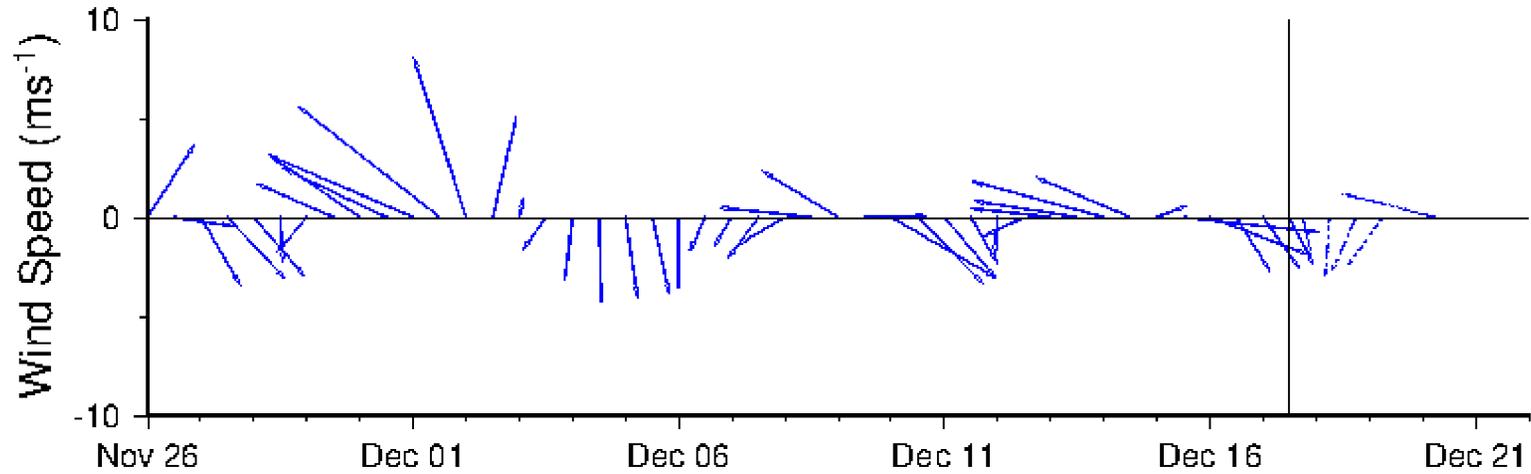
Imagery:

In recent ensemble imagery (MODIS Aqua, 12/16), patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* are visible along- and offshore Baldwin County in Alabama, and northwest Florida.

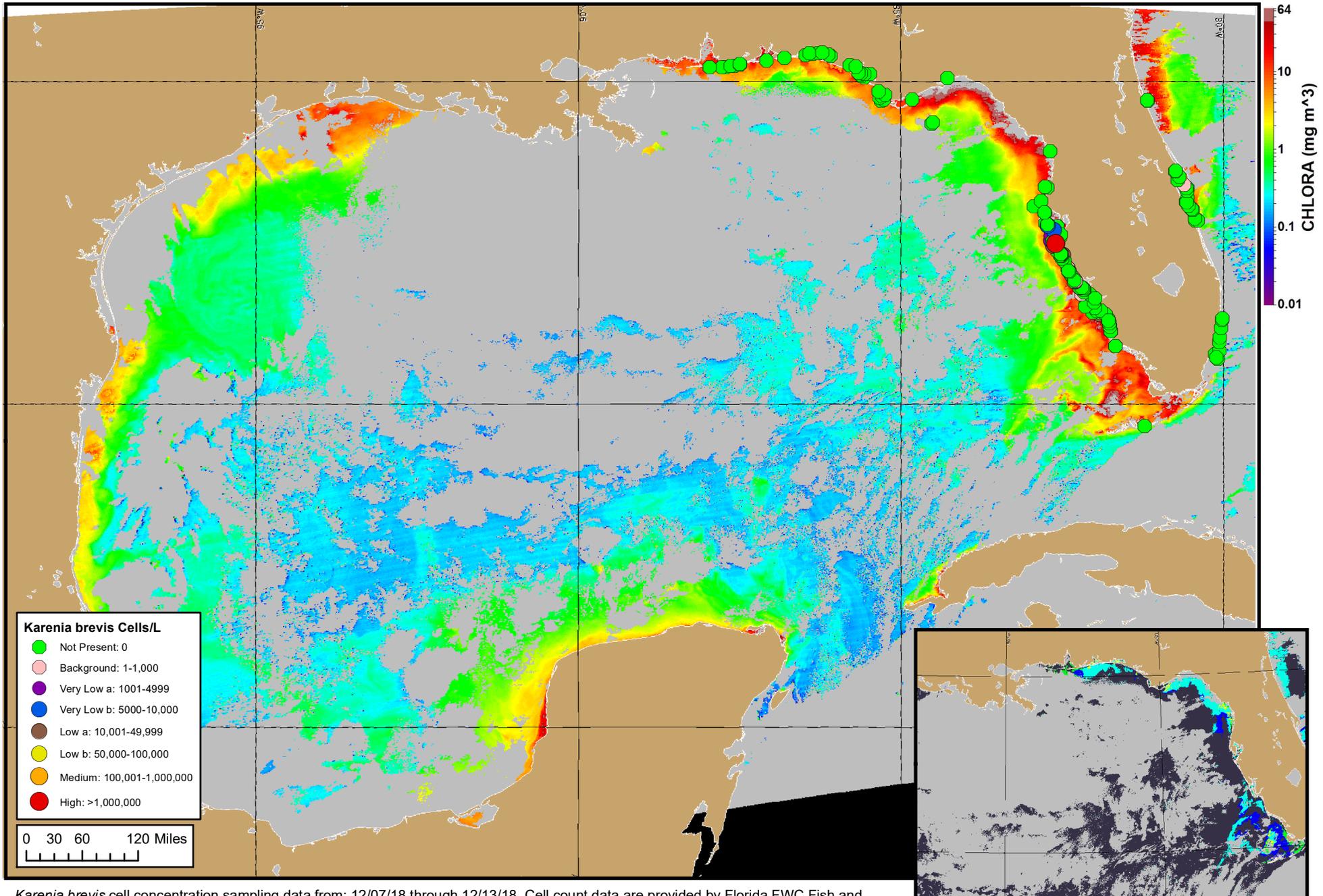
Yang, Ludema

Karenia brevis cell concentration sampling data from: 12/08/18 through 12/12/18. 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 (12/16/18) 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: 12/07/18 through 12/13/18. 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 (12/16/18).

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