

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

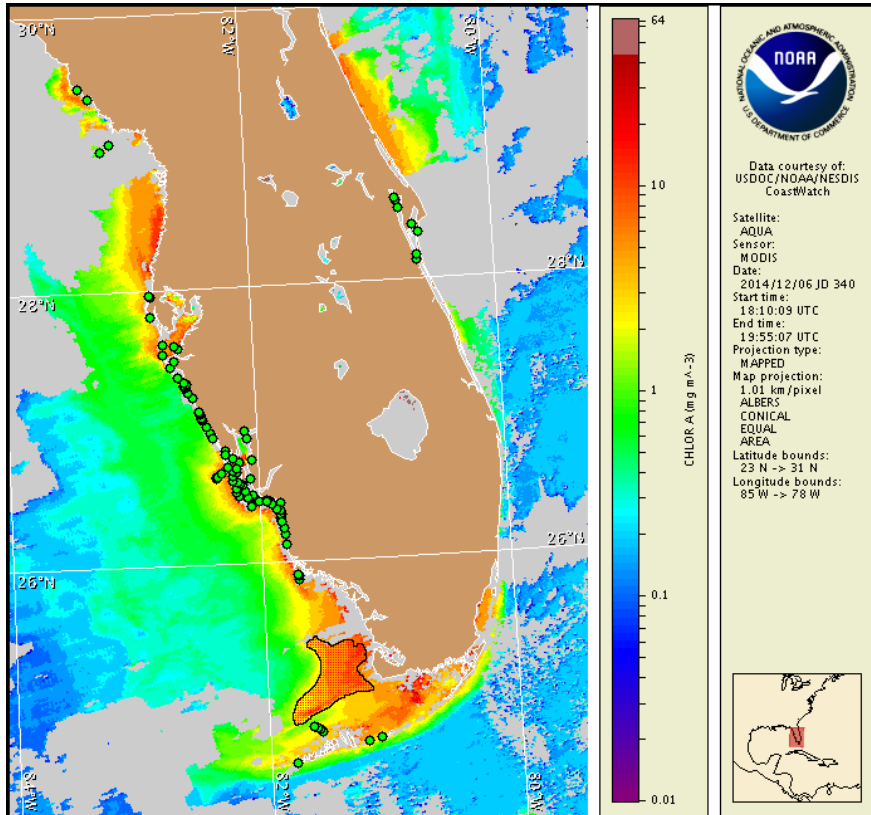
Monday, 08 December 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 4, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 28 to December 4: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (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:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of southwest Florida, and is not present in the Florida Keys. No respiratory irritation is expected alongshore southwest Florida Monday, December 8 through Thursday, December 11.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

Analysis

Not present to background concentrations of *Karenia brevis* are present along- and off-shore portions of southwest Florida from Pinellas to Monroe counties (FWRI, SCHD, MML, CCPCPD; 11/30-12/4). All samples collected last week from alongshore Sarasota, Charlotte, Lee, and northern Collier counties indicated that *K. brevis* is not present (FWRI, SCHD, CCPCPD; 12/1-12/4). All recent samples collected from alongshore the Marco Island region of Collier County also indicated that *K. brevis* concentrations are dissipating in the area, with 'not present' samples from South Marco Beach and just south of Marco Island collected on 12/1 and 12/3, respectively (FWRI). No reports have been received for Monroe County, where the most recent samples identified 'low b' to 'medium' *K. brevis* concentrations 3-9 miles offshore Pavilion Key (MML; 11/25). No reports of respiratory irritation or fish kills have been received over the last several days (FWRI, MML; 12/4-12/8).

Recent MODIS Aqua imagery (12/6, shown left) is obscured by clouds alongshore much of southwest Florida, limiting analysis. Elevated chlorophyll (2 to 10 $\mu\text{g/L}$) is visible along- and offshore Pinellas and southern Charlotte to Monroe counties, with patches of high to very high chlorophyll (11 to >20 $\mu\text{g/L}$) visible offshore central Collier and Monroe counties.

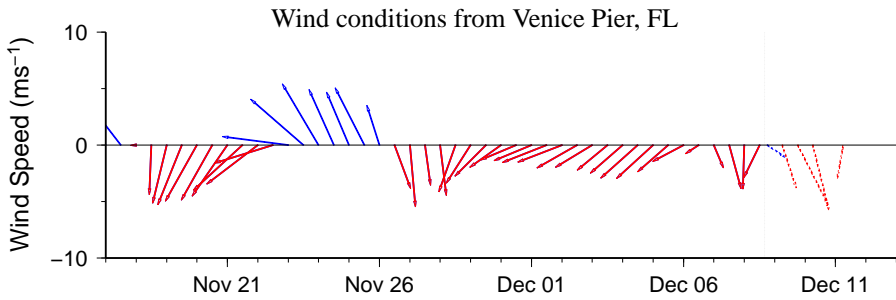
Observed winds over the past few days as well as forecast winds over the next several days may continue to promote southerly transport of surface *K. brevis* concentrations. Additionally, conditions are not favorable for bloom intensification at the coast over the next several days.

Derner, Yang

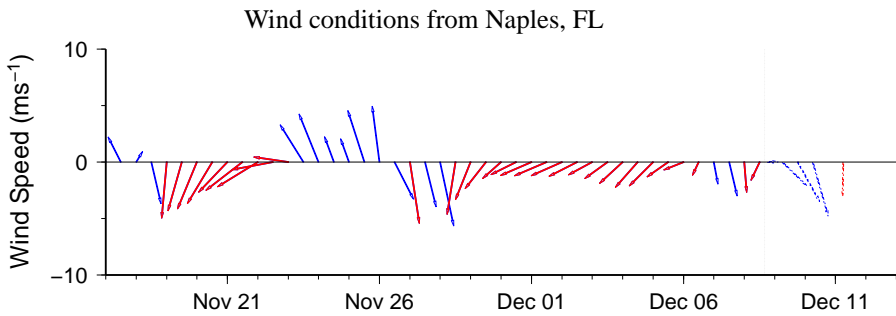
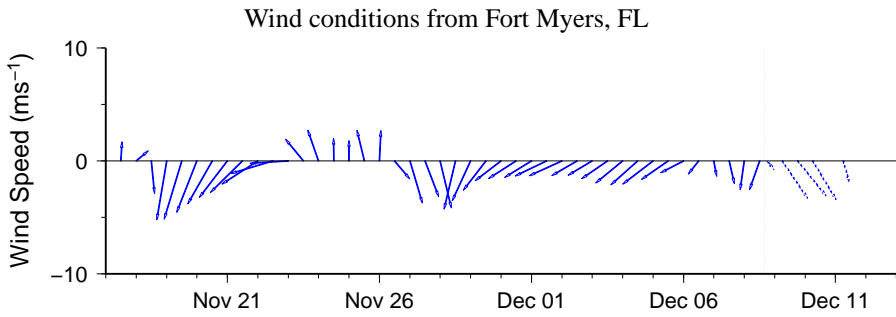
Wind Analysis

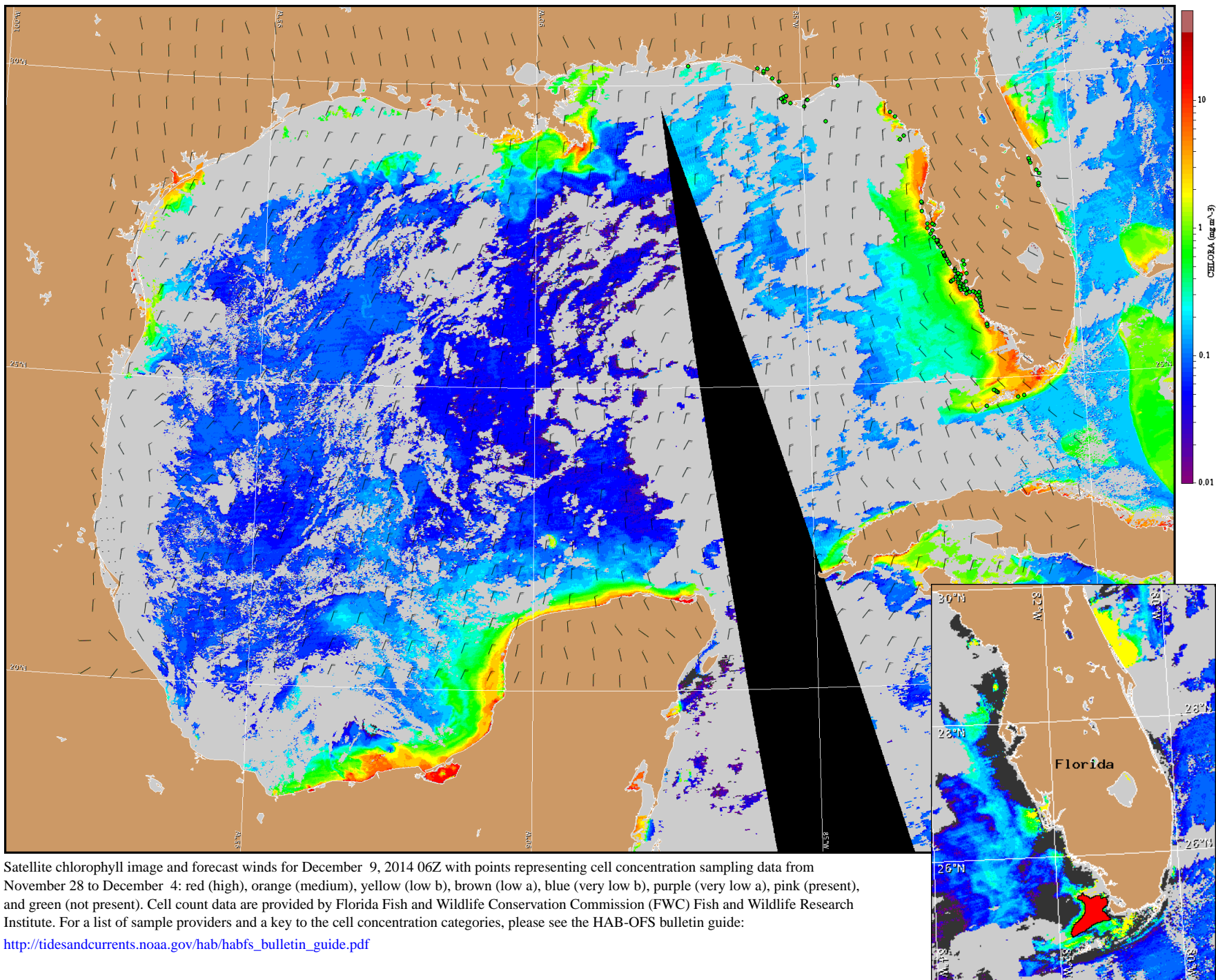
Bonita Beach to Englewood (Fort Myers): Northeast winds (5-10kn, 3-5m/s) today becoming northwest (15kn, 8m/s) this afternoon. North winds (10-20kn, 5-10m/s) tonight though Tuesday, becoming northwest (20kn, 10m/s) Tuesday night. North winds (10-15kn, 5-8m/s) Wednesday through Thursday. Northeast winds (10kn, 5m/s) Wednesday night.

Chokoloskee to Bonita Beach (Naples): North northwest winds (5-10kn) today becoming north (10-15kn) tonight through Wednesday. North northeast winds (5-10kn) Wednesday night through Thursday.



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).





Satellite chlorophyll image and forecast winds for December 9, 2014 06Z with points representing cell concentration sampling data from November 28 to December 4: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (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:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).