

# Gulf of Mexico Harmful Algal Bloom Bulletin

26 November 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: November 23, 2007

## Conditions Report

**SW Florida:** There is currently no harmful algal bloom at the coast in southwest Florida. No impacts are expected today through Thursday, November 29.

**NE Florida:** A harmful algal bloom has been identified from St. Johns County to central Brevard County. Today: patchy low impacts are possible in Volusia County, patchy very low impacts are possible in central Brevard County, and no impacts are expected in St. Johns, Flagler and northern Brevard Counties. Tuesday through Thursday: patchy very low impacts are possible in St. Johns and northern Brevard Counties, patchy high impacts are possible in Volusia County, and patchy low impacts are possible in central Brevard County. No impacts are expected elsewhere along northeast Florida through Thursday, November 29.

## Analysis

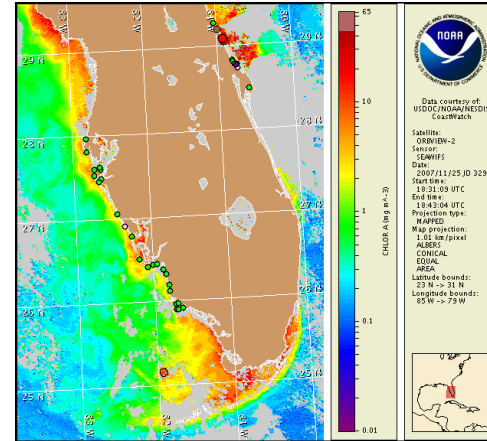
**SW Florida:** No *Karenia brevis* has been identified onshore Southwest Florida over the past week, with the exception of background concentrations found in northern Charlotte County on 11/20 (FWRI). A small patch of elevated chlorophyll (up to 9 µg/L) is presently visible south of Sanibel Island, southern Lee County, at 26°24'28"N 82°5'59"W. Southeasterly winds today could potentially bring this feature onshore. A region of elevated chlorophyll being tracked offshore Monroe County is currently located at 25°8'40"N 81°56'50"W and has continued to weaken over the past week (~4 µg/L at present). An additional region of high chlorophyll (>10 µg/L) is visible in recent imagery at 25°8'40"N 81°56'50"W, northwest of the Lower Keys. Conditions through Wednesday favor westward transport of these offshore features. Sampling is recommended. These features will continue to be monitored.

**NE Florida:** A harmful algal bloom persists between St. Johns and central Brevard Counties. In the past week FWRI confirmed low to high concentrations of *Karenia brevis* onshore Volusia County and very low to background concentrations onshore northern St. Johns and northern Brevard Counties. Satellite imagery (11/25) indicates several high chlorophyll patches (>10 µg/L) located 2-15 miles offshore central Volusia and northern Brevard Counties between 29°9'43"N and 28°46'56"N latitude. A region of high chlorophyll (>10 µg/L) is also visible ~22 miles offshore northern Volusia County at 29°22'46"N 80°45'56"W. Continued sampling is highly recommended. Respiratory irritation was reported at Cocoa Beach, central Brevard County, on 11/25. Imagery is currently

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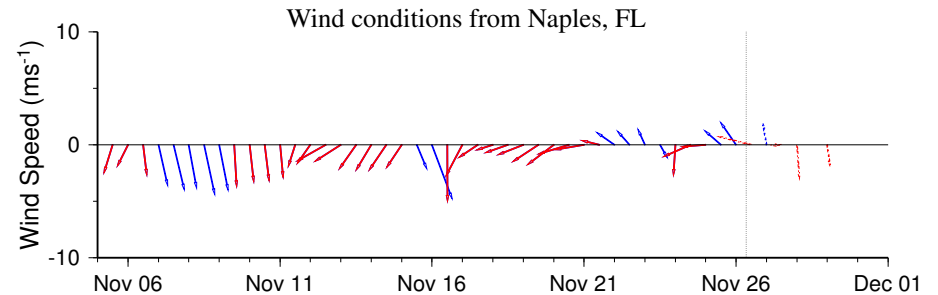
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

obscured in this region. Onshore winds Tuesday and Wednesday may increase the potential for impacts at the coast. Conditions Tuesday afternoon through Thursday may transport suspected offshore *K. brevis* features closer to shore in southern Volusia County. ~Fisher, Fenstermacher



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 19 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

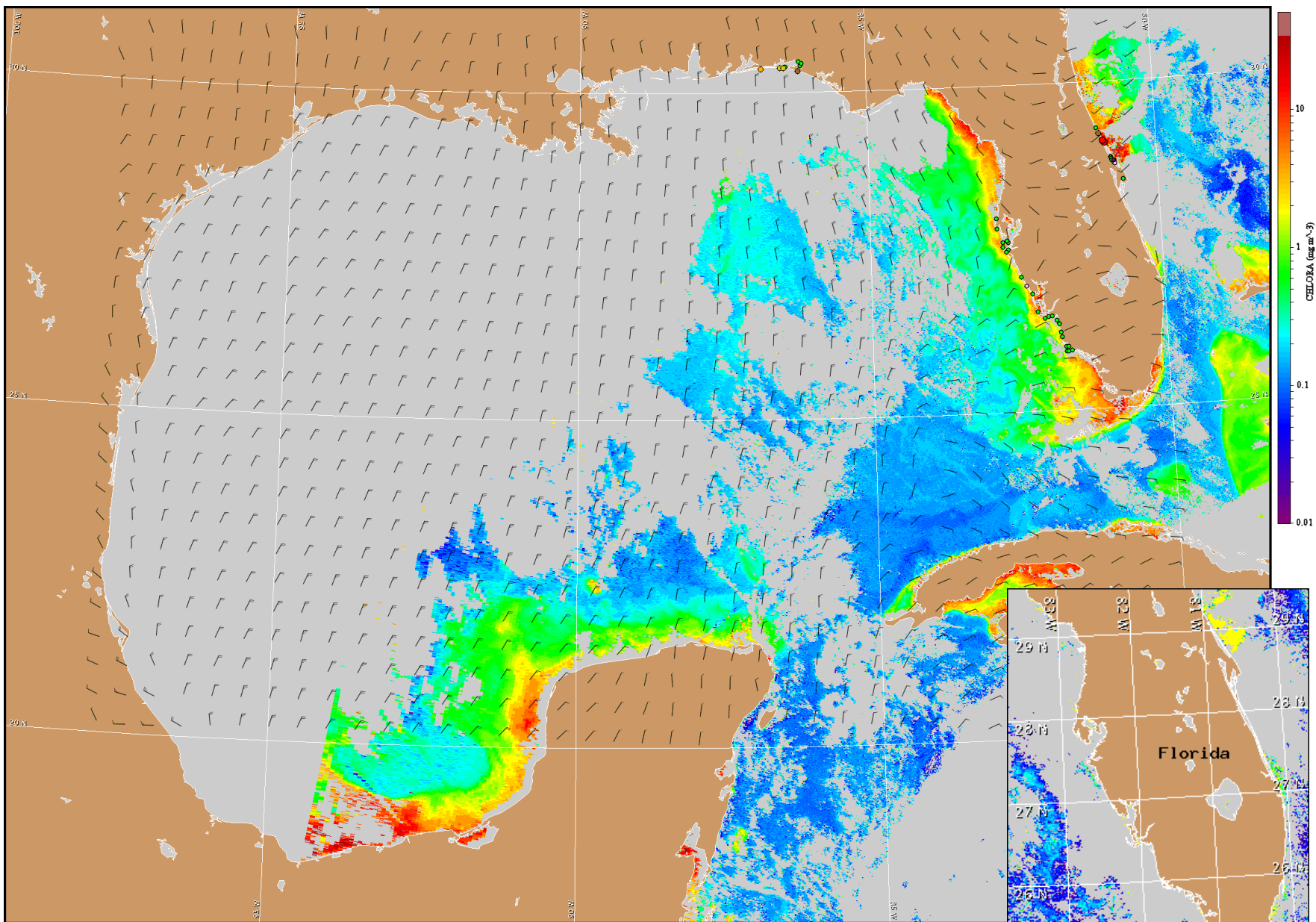
[http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)



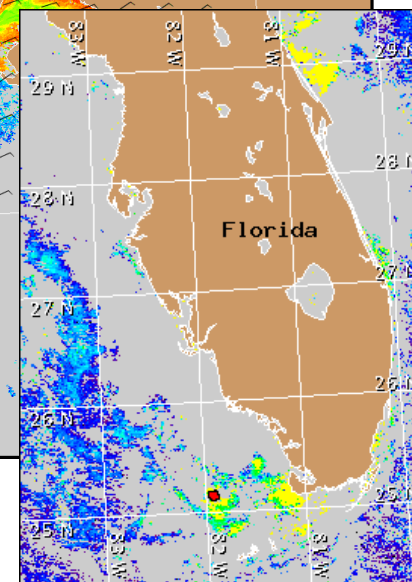
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

**SW Florida:** Southeasterlies today (15kts, 8m/s) and tonight. Variable winds Tuesday becoming northeasterly (10-15kts, 5-8m/s). Easterly winds Wednesday (10-15kts). Northeasterlies expected Thursday.

**NE Florida:** Southerlies today and tonight (15kts, 8 m/s). West winds becoming northerly Tuesday (5-10kts, 3-5m/s). Northeast winds Tuesday night through Wednesday (10-15kts, 5-8m/s). Easterlies Wednesday night becoming southeasterly (5-10kts, 3-5m/s). Northeasterlies expected Thursday.



Satellite chlorophyll image and forecast winds for November 27, 2007 12Z with Cell concentration sampling data from November 19 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: [http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)



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

Wind conditions from St Augustine, FL

