



# Experimental Gulf of Mexico Harmful Algal Bloom Bulletin

20 November 2003

National Ocean Service/NCCOS and CSC

NESDIS/CoastWatch and NDBC

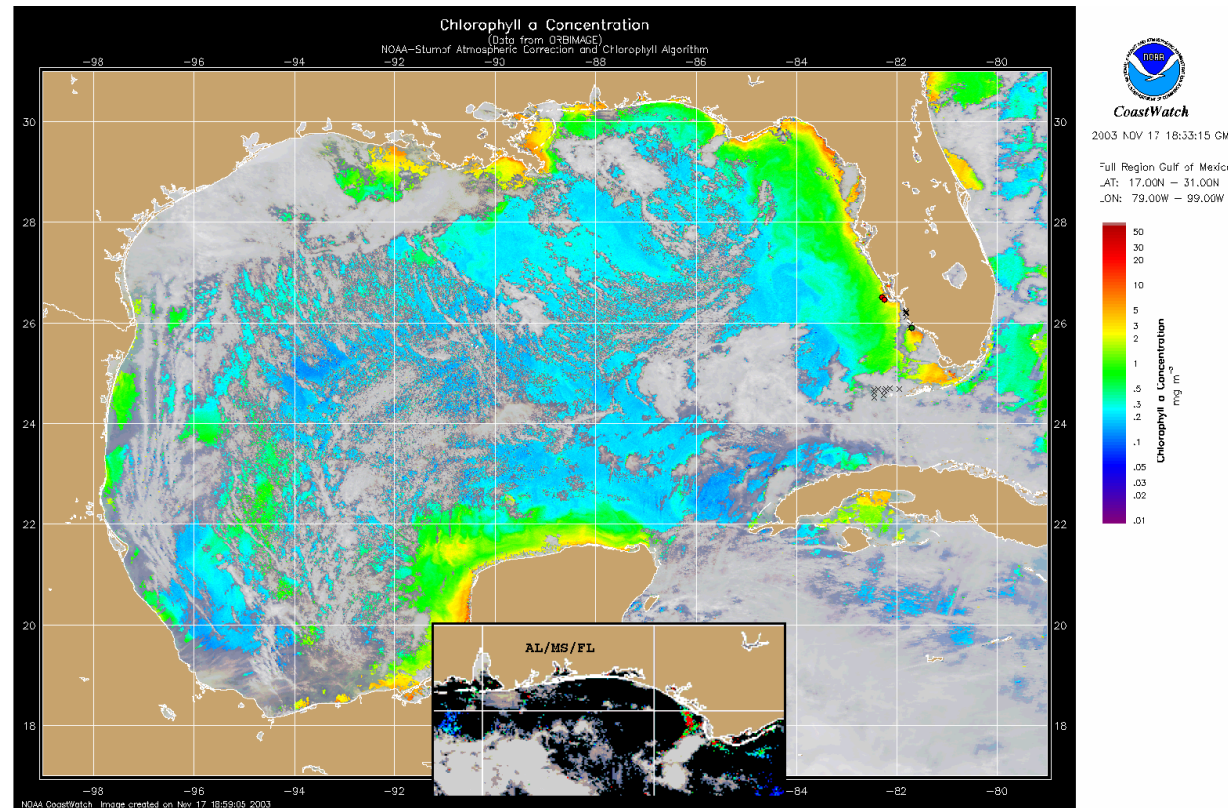
Last bulletin: November 10, 2003

## Analysis

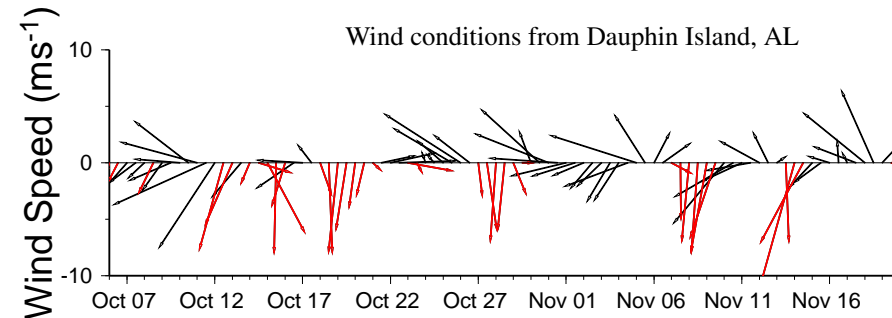
Northwest Florida: *Karenia brevis* is being reported in the St. Joe Bay and St. George Island areas of northwest Florida. Recent imagery has been cloudy, but this image from Nov. 17 indicates a relatively small extent.

Southwest Florida - Reports do not presently indicate any areas of concern.

Culver



Chlorophyll concentration (above) and possible HAB areas shown in red (inset). Cell concentration sampling data from November 6, 2003 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on NOAA buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast.

Winds in the northern Gulf are forecast to be from the north but decreasing over the next few days.

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