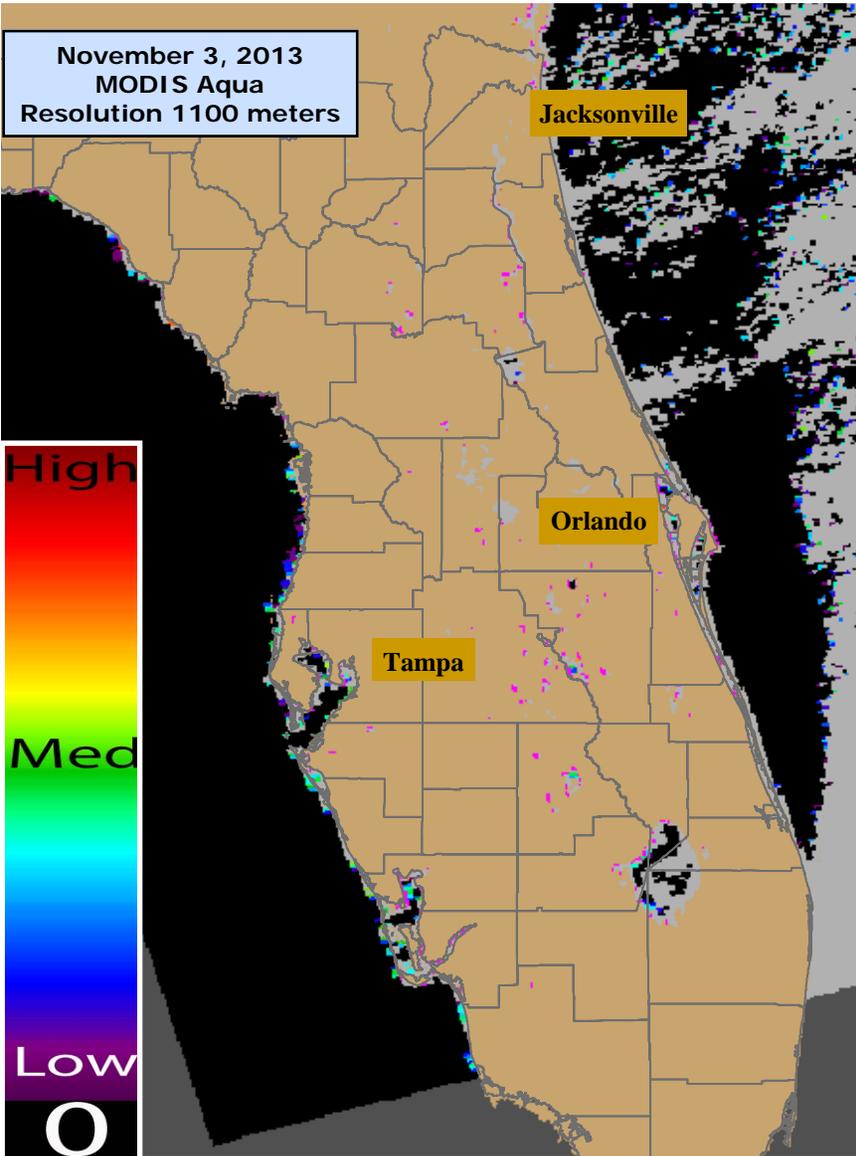


To report an illness related to a marine toxin or algal bloom contact the Florida Poison Information Center at 1-800-222-1222.
 Images/data obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric Administration (NOAA), NOAA National Climatic Data Centers and National Weather Centers. Support to produce this report from NOAA/NASA Contract NNH08ZDA001N.



MODIS Images display a chlorophyll-a index generated with a Moderate Resolution Imaging Spectroradiometer provided by the National Aeronautics and Space Administration (NASA)

- Very low likelihood of a bloom
- May indicate clouds or missing data
- Low estimated chlorophyll-a concentrations
- Medium estimated chlorophyll-a concentrations
- Higher estimated chlorophyll-a concentrations

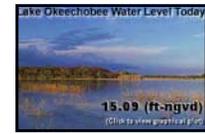
Inland CyanoHAB Conditions Report

- Large water features in Florida were unremarkable on the 1100 meter resolution MODIS Aqua image.

Negron wants state takeover of Lake O discharges



November 5, 2013



The chairman of a Senate panel studying the Indian River Lagoon and South Florida waters wants to strip the federal government of the power to decide when to pump polluted waters out of Lake Okeechobee. Sen. Joe Negron, the Stuart Republican chairing the Select Committee on Indian River Lagoon and Lake Okeechobee Basin, blasted the U.S. Army Corps of Engineers Tuesday over its decisions to pump waters out of the lake. And he wants Congress to remove that decision-making from the Corps and give it to the state Department of Environmental Protection. "I'd like to vote for or against people who can raise my taxes and decide whether or not to flood my community," Negron said. The committee was created in response to a "perfect storm" of pollution and Mother Nature ... Two massive plankton blooms that began in 2011 – largely the fault of nutrient runoff from fertilized lands -- in the lagoon has killed off dolphins, manatees, pelicans and sea grasses. See: <http://www.orlandosentinel.com/news/blogs/political-pulse/os-negron-wants-state-takeover-of-lake-o-discharges-20131105,0,4592078.post>

Marine Update: SW Florida Coast and IRL

Red Tide Update - FWRI/FWC 11/1/13: Karenia brevis ... was measured in water samples collected this week ranging from background to medium concentrations at several locations in and alongshore of southern Sarasota County south to northern Lee County...



Patchy blooms of various organisms including Aureoumbra lagunensis and Takayama species continue in the Indian River Lagoon system (Indian River Lagoon, Mosquito Lagoon, Banana River). These blooms have resulted in discolored water and fish kills in some locations.

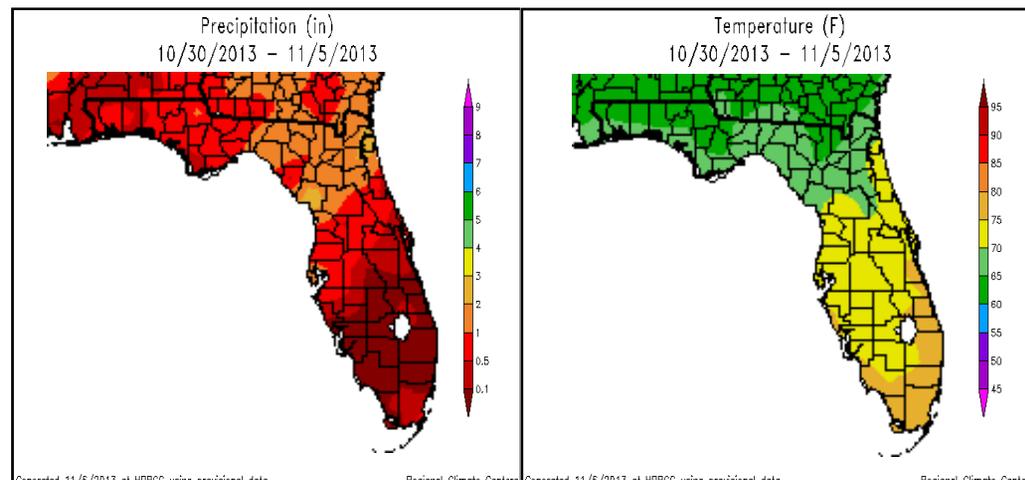
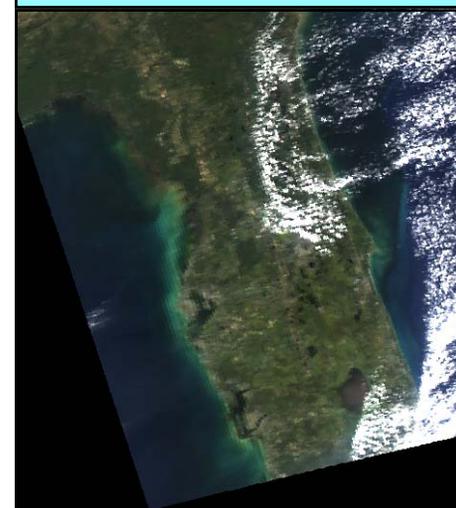
Interpreting Moderate Resolution Imaging Spectroradiometer Data

- The Moderate Resolution Imaging Spectroradiometer (MODIS) is deployed by NASA onboard the Terra (EOS AM) and Aqua (EOS PM) satellite. It passes over the earth, collecting new imagery every 1-2 days.
- This imagery is used as a surveillance tool. Data collected by the MODIS sensor are used to generate a chlorophyll-a index which is used to forecast harmful algal blooms. The results are not specific to any one HABs species and should be followed-up with onsite field observations. Data is only suggestive of a potential HAB event.
- MODIS uses a spectral band which is much coarser than MERIS, therefore only select larger water bodies in FL are visible using this technology.
- MODIS is better at depicting low to medium chlorophyll-a concentrations so once a potential bloom is depicted, a switch in algorithms may be used to improve the visibility. MODIS has a few spectral bands which have higher resolution that are more comparable to MERIS although these bands do not cover all of FL.
- Several environmental factors may affect how results can be interpreted. For example, areas with abundant aquatic vegetation may present with a high Chl-a index resulting in a false positive bloom reading.
- The sensor identifies biomass near the surface (in the upper few feet of water). As a result, it may underestimate the total biomass for blooms that are mixed or dispersed through the water column.
- While patches of red or warm colors may indicate higher chlorophyll-a concentrations, these data have not been verified in most cases using ground-truth methods.

Weather Conditions: Precipitation and Temperature - 10/30/13 to 11/05/13

- Weather conditions can impact the duration and location of blooms and the satellite imagery shown in this report may no longer be relevant.
- Images represent the last image taken with a realization that blooms may have moved, dissipated or intensified.
- Cloud coverage can obscure imagery and create patches or gray areas on map and obscure bloom detection.

November 3, 2013
MODIS Aqua True Color Images



To review HABs satellite reports in the Gulf of Mexico and marine waters visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive at: <http://tidesandcurrents.noaa.gov/hab/>



For Individual Weather Station Data-Visit:
<http://www.sercc.com/perspectives>

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