

Figure 1: Shoreline position in different observation years Image from Chand and Acharya (2010) Shoreline change and sea level rise along coast of Bhitarkanika wildlife sanctuary, Orissa: An analytical approach of remote sensing and statistical techniques, *International Journal of Geomatics and Geosciences*, 1(3): 436-455.

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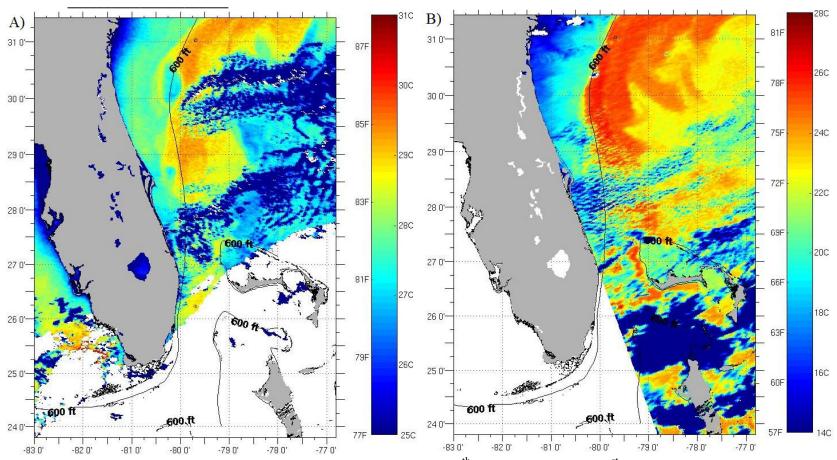


Figure 2: Sea surface temperature of the Florida Coast on A) October 4<sup>th</sup>, 2011 and January 31<sup>st</sup>, 2012. Images from the NOAA AVHRR and MODIS-Aqua Satellites and downloaded from the Rutgers Costal Ocean Observation Lab:

<a href="http://marine.rutgers.edu/mrs/sat\_data/?nothumbs=0">http://marine.rutgers.edu/mrs/sat\_data/?nothumbs=0</a>



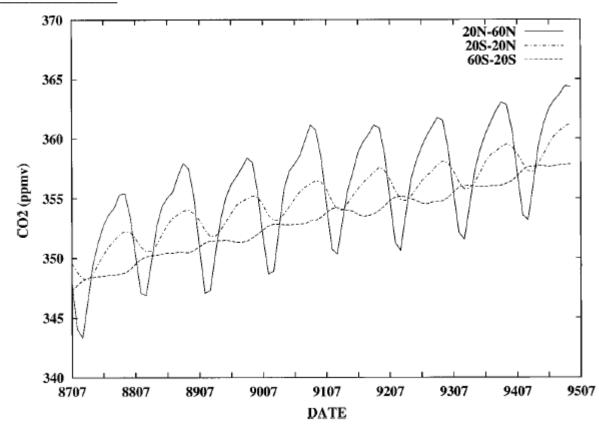


Figure 3: The CO<sub>2</sub> surface concentration seasonal variation for the latitude zones 60°-20°N, 20°N-20°S, 20°-60°S, which shoes a trend of an increase of 0.4% yr<sup>-1</sup>. Image take from Chedin, Serrar, Armante, Scott, & Hollingsworth (2002) Signatures of Annual and Seasonal Variations of CO<sub>2</sub> and Other Greenhouse Gases from Comparison between NOAA TOVS Observations and Radiation Model Simulations, *Journal of Climate*, 15:95-116.

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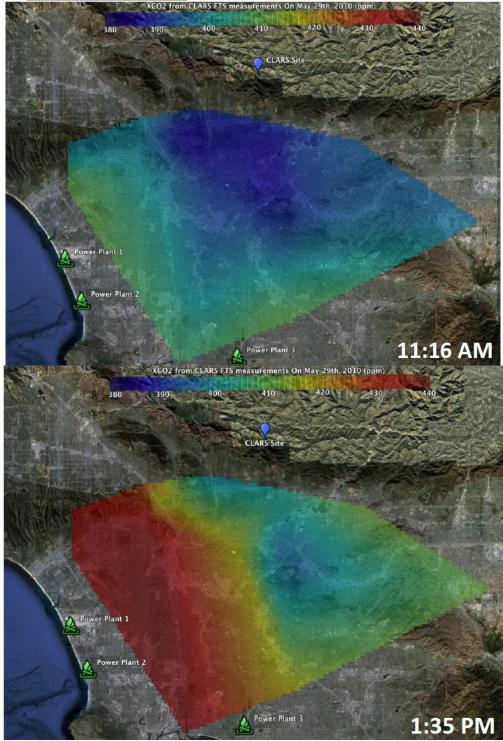


Figure 4: The CO<sub>2</sub> concentration in the LA basin on May 29<sup>th</sup> 2010 at 11:16 am and 1:35 pm. Images from presentation by Fu et al. Remote Sensing of Spatial Distributions of Greenhouse Gases in the Loas Angles Basin:

http://www.arb.ca.gov/research/calnex2010/da\_workshop\_may2011/Tuesday/arb\_2011\_dejian\_fu.pdf

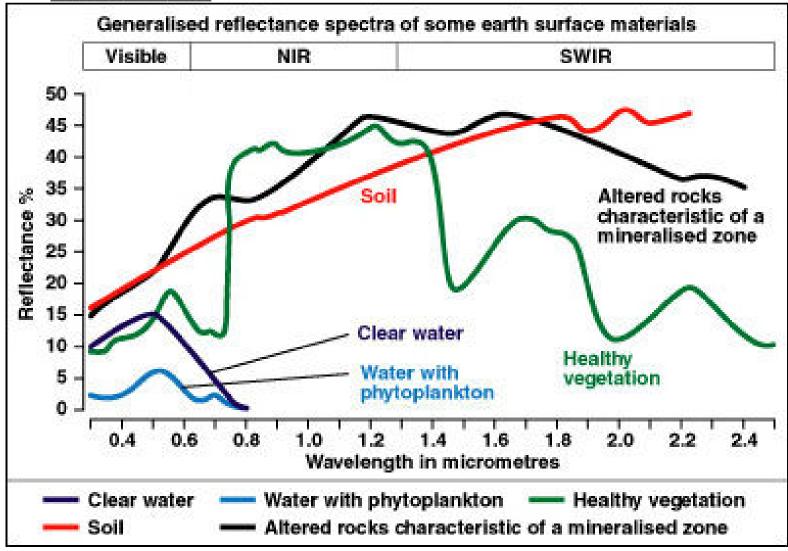


Figure 5: Generalized reflectance spectra of common earth surface materials. Image from the Remote Sensing Applications Consultants website: http://www.rsacl.co.uk/rs.html

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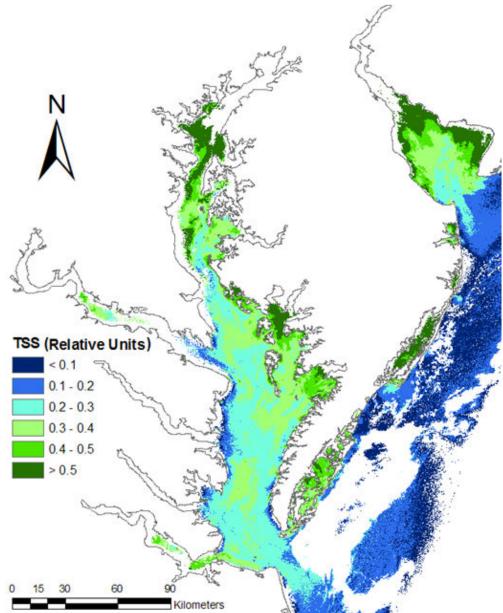


Figure 6: Total Suspended Solids (TSS) in the Chesapeake Bay on June 30<sup>th</sup> 2006

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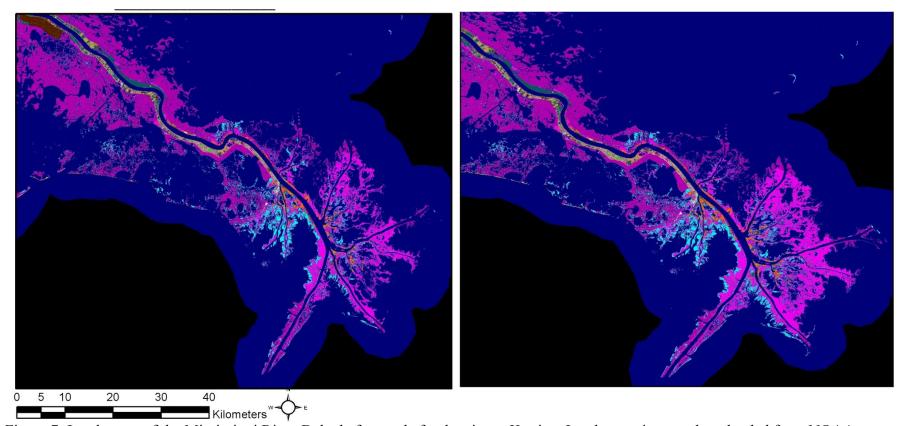


Figure 7: Land cover of the Mississippi River Delta before and after hurricane Katrina. Land cover images downloaded from NOAA Costal Services Center: http://www.csc.noaa.gov/crs/lca/katrina/