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GEOG 529
Assignment 1

Database

This database is a library of freely accessible atmospheric and climate data from Columbia University's International Research Institute for Climate and Society (IRI). This database serves as a general clearinghouse for a wide variety of atmospheric and oceanic observations, land and surface vegetation data stats from a large range of governmental and other agencies.

<http://iridl.ldeo.columbia.edu/>

Specifically for my proposed class project I plan to get data from the following site:

<http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GSFC/.TOMS/>

This site provides data from NASA's Goddard Space Flight Center. Specifically provided are erythemal UVB and the aerosol index from the Total Ozone Mapping Spectrometer (TOMS). Unlike other sources for this data, the IRI provides daily and monthly averages in a very simple to download and compressed file format. Furthermore these daily and monthly averages can be restricted by latitude and longitude range as well as date range in order to get more tailored data without need for a ton of data mining for the researcher. Depending on the date range of a selected request this data comes from onboard NASA's Earth Probe spacecraft, the Nimbus-7 spacecraft, or from the Ozone Monitoring Instrument (OMI). TOMS collected data from several NASA satellites from 1979 to 2005. OMI data runs from October 1, 2004 until the present day and uses the same algorithm as TOMS in order to calculate erythemal UVB.