

Accessing NASA HDF-EOS atmospheric chemistry data via OPeNDAP

The NASA Aura mission researches the composition, chemistry and dynamics of the Earth's atmosphere as well as study the ozone, air quality and climate. OPeNDAP is widely used within Earth Science community and it provides an easy way to access Data remotely. The Aura data is in HDF-EOS5 format and was released in February, 2007. It will tremendously improve the efficiency to do scientific research if scientists can have easy access towards NASA Aura atmospheric Chemistry data. NASA ROSE ACCESS program recently supports a project to implement an HDF5-OPeNDAP handler so that HDF5 data can be accessed via OPeNDAP. With the end of the first year of this project, we can successfully demonstrate the usage of HDF5-OPeNDAP data handler to access OMI, HIRDLES, MLS and TES level 2G and Level 3G HDF-EOS5 Grid data via IDV, GrADS, ncBrowse, ODC, Ferret, NCL and MatLab OPeNDAP clients. This will tremendously reduce the learning curve for those scientists/researchers who are familiar with existing OPeNDAP clients. It may also make educators have an easy access of the newly released ozone and air quality data.

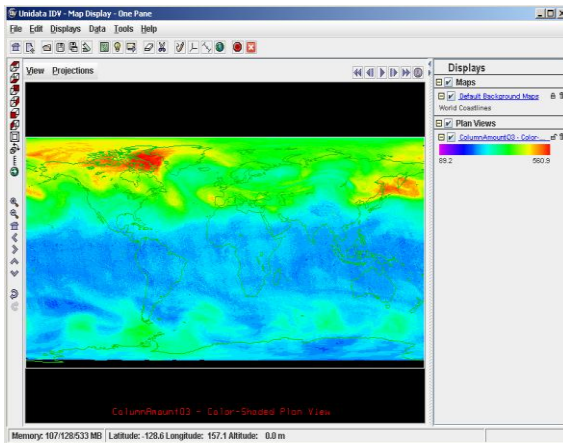


Fig.1. Displaying NASA EOS Aura Grid Map of ozone through the IDV OPeNDAP client. The unit is DU.

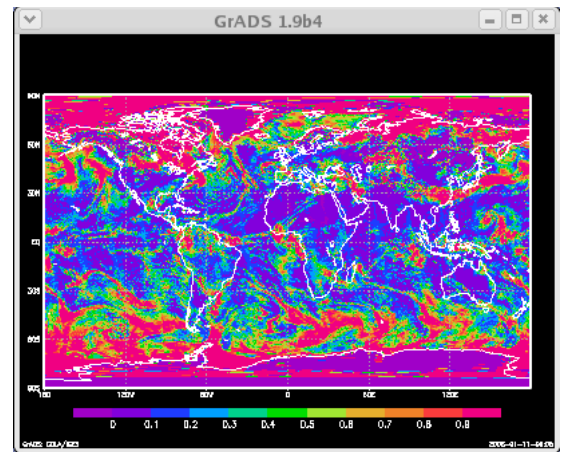


Fig.2. Displaying NASA EOS Aura Grid Map of cloud fraction through the GrADS OPeNDAP client.

***For information on how to obtain HDF5-DAP handler and other information, check the URL:
<http://hdfdap.hdfgroup.uiuc.edu:8080>***