



**The CALIPSO Project** – The CALIPSO project (Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations) studies the impact of clouds and aerosols on the Earth's radiation budget and climate.

**Data Products** – Data products (parameters) include: Emissivity, Cloud Properties, Infrared Radiance, Integrated Attenuated Backscatter, Lidar Depolarization Ratio, Column Reflectance, Aerosol Optical Thickness, Backscatter Coefficients, Depolarization Ratio Profile, Extinction Coefficients, Cloud Midlayer Temperature, Cloud Top Height, Column Reflectance, Cloud Base Height, Vertical Feature Mask, Aerosol Particle Properties, Cloud Type, and Cloud Particle Phase.

Data from the CALIPSO project can be obtained from the CALIPSO section of the ASDC website:  
[https://eosweb.larc.nasa.gov/project/calipso/calipso\\_table](https://eosweb.larc.nasa.gov/project/calipso/calipso_table).

**Documentation** – We recommend reading the Data User's Guide, which is an excellent overview of the CALIPSO project's data: [https://www-calipso.larc.nasa.gov/resources/calipso\\_users\\_guide/](https://www-calipso.larc.nasa.gov/resources/calipso_users_guide/). Other recommended documents are the: [Algorithm Theoretical Basis Documents \(ATBD\)](https://www-calipso.larc.nasa.gov/resources/project_documentation.php) ([https://www-calipso.larc.nasa.gov/resources/project\\_documentation.php](https://www-calipso.larc.nasa.gov/resources/project_documentation.php)) and the [Data Product Overview](https://www-calipso.larc.nasa.gov/products/) (<https://www-calipso.larc.nasa.gov/products/>).

**Dataset Organization** – The datasets are stored as hdf files and are organized by processing level and sensor: with Level 1 being full resolution, time and geo-referenced instrument data, Level 2 being the derived geophysical variables, and Level 3 being the variables mapped on a uniform space-time grid.

**Data Ordering Tools** – There are three ways to order CALIPSO data: ([https://eosweb.larc.nasa.gov/HBDOCS/langley\\_web\\_tool.html](https://eosweb.larc.nasa.gov/HBDOCS/langley_web_tool.html)), the [Reverb Search Tool](http://reverb.echo.nasa.gov/reverb) (<http://reverb.echo.nasa.gov/reverb>), and for Level 1 and 2 Lidar data only, the [CALIPSO Search and Subset Tool](https://www-calipso.larc.nasa.gov/search/login.php) (<https://www-calipso.larc.nasa.gov/search/login.php>). Register as a New User, if you have not already registered.

**Data Read and Display Tools** – Here is the location for Data Read IDL software routines [https://eosweb.larc.nasa.gov/tools/?tools\\_accordion\\_tabs=1](https://eosweb.larc.nasa.gov/tools/?tools_accordion_tabs=1). There are some Matlab and IDL examples in the User's Guide: [https://www-calipso.larc.nasa.gov/resources/calipso\\_users\\_guide/tools/index.php](https://www-calipso.larc.nasa.gov/resources/calipso_users_guide/tools/index.php), and on the HDF Group's website: <http://hdfeos.org/zoo/>.

**HDFView** is a free, easy-to-use visual tool from the non-profit HDF Group for browsing and editing HDF4 and HDF5 files: <http://hdfeos.org/software/tool.php#HDFVIEW>.

**My NASA Data** is an easy-to-use interface that displays selected CALIPSO datasets, with several options to output the data. Go to the website and use the Live Access Server – Advanced:  
<http://mynasadata.larc.nasa.gov/las/getUI.do>.

We hope this information is useful for you. If you have any questions, please contact us at [support-asdc@earthdata.nasa.gov](mailto:support-asdc@earthdata.nasa.gov).

NASA Langley ASDC User Support

*Preserving, managing, and sharing atmospheric data for the common good*

