

LIMS Reprocessed Data Version 6 Revised Level 2

About LIMS:

The objective of the Limb Infrared Monitor of the Stratosphere (LIMS) experiment was to map the vertical profiles of temperature and the concentration of ozone, water vapor, nitrogen dioxide, and nitric acid in the lower to middle stratosphere range, with extension to the stratopause for water vapor and into the lower mesosphere for temperature and ozone. This experiment was a follow-on to the Limb Radiance Inversion Radiometer (LRIR) flown on Nimbus 6.

Year_Month (Directory):

These year/month directories contain subdirectories organized by day containing the data files named LIMS_2_yyyymmdd_V6.ASCII.gz, and three screening files: cloud_flags_data_LIMS_2_yyyymmdd.txt, cloud_flags_data_psc_LIMS_2_yyyymmdd.txt, and finally removed_scans_LIMS_2_yyyymmdd.txt. You should download all files for a given day. These data are also available on CD-R media (go to <http://daac.gsfc.nasa.gov/data/dataset/LIMS>).

Documentation (Directory):

Dr_E_Reimsberg_Comments:

This file is in PDF and text format and contains comments on data quality which apply to the plots on the LIMS web site:

LIMS HOME PAGE ->>

<http://lims.gats-inc.com>

VERSION_06 DATA ->>

http://lims.gats-inc.com/data/Version_06

Users_Guide:

This file is in PDF and text format and discusses the improvements for all LIMS parameters, due to updates in spectroscopy since 1980, improvement in our knowledge of the spacecraft attitude and other aspects of the LIMS forward model. An example of the data is included.

Data_Files:

LIMS_2_YYYYMMDD_V6.ASCII.gz:

YYYY is the year
MM is the month
DD is the day

These files contain the revised Level 2 profiles in text format. See LIMS web site <http://lims.gats-inc.com> to identify days the Instrument was turned off. The data files are screened for obvious cirrus and polar stratospheric cloud signature effects, as seen in the retrieved ozone profiles. See "Users_Guide.pdf" for detailed information on screening criteria.

Data_Screening Files:

There are three data screening text files for each day:

- removed_scans_LIMS_2_YYYYMMDD.txt,
- cloud_flags_data_psc_LIMS_2_YYYYMMDD.txt and
- cloud_flags_data_LIMS_2_YYYYMMDD.txt.

The cloud detection algorithm is discussed in Users_Guide.pdf.

LIMS_Readers (Directory):

Contains routines written in "C", FORTRAN and IDL to read the LIMS data. Instructions on how to compile and execute each routine are explained in each file.

Viewing Each File Format:

Viewing the LIMS data files:

All files are zipped using gzip. To view these files perform step 1 or step 2 depending on your operating system.

1. LINUX or UNIX:
 - a. Copy the desired file to your local directory.
 - b. To unzip the file, type:
`gunzip LIMS_2_YYYYMMDD_V6.ASCII.gz`
(replace YYYYMMDD with the actual year, month and day)
 - c. The data file should now be labeled
`LIMS_2_YYYYMMDD_V6.ASCII`
(the gz extension is removed)
 - d. The data file is unzipped and can be viewed with any text editor. Unzipped each LIMS data file is 80 to 120 MEGS.
2. Windows or Macintosh:
 - a. Copy the desired file to your local computer.
 - b. To unzip the file, click on the data file and extract
3. Using the installed unzip program.
 - a. The data file should now be labeled
`LIMS_2_YYYYMMDD_V6.ASCII`
(the gz extension is removed)
 - b. The data file is unzipped and can be viewed with any text editor. Unzipped each LIMS data file is 80 to 120 MEGS.

Viewing PDF files:

The PDF files can be viewed using Ghost View or the Adobe Acrobat Reader.

1. LINUX or UNIX:
 - a. Copy the desired file to your local directory.
 - b. type -> `gv Users_Guide.pdf` or
 - c. type -> `acroread Users_Guide.pdf`
1. Windows or Macintosh:
 - a. Copy the desired file to your local computer.
 - b. Click on the PDF icon to start the Acrobat Reader.