

DATA PROTOCOL FOR START08/PRE-HIPPO.

The purpose of this data protocol is to encourage timely analysis and publication of the data obtained during the START08/PRE-HIPPO (ST/PH) mission, to foster collaboration between investigators and to produce an integrated data archive to be used initially by the ST/PH investigators, and then released to the public domain. Public domain users of the data are encouraged to contact project investigators for consultation on appropriate use of measurements and model products as described in this data protocol.

Analysis of preliminary data during the mission is an important component for flight planning and evaluation of science objectives. Thus, the data protocol also includes provisions for creation of a preliminary (or in-field) data archive.

All START/PRE-HIPPO Science Team members and their collaborators agree to the following:

- All measurements and data products acquired or developed as part of the ST/PH mission by any member of the ST/PH Science Team should be submitted to the ST/PH Archive in one of the data formats described below
- All measurements and data products for the 'Quick Look' and Final Archives should be submitted to the ST/PH Data Archive following instructions available on the project management web page (http://start.tamu.edu/data_management.html). Alternately, direct data transfers by memory stick or similar devices can be arranged for the in-field data archive.
- Investigators are responsible for acquiring, processing, certifying and reducing the data from their instruments and providing required data products on schedule (described below).
- Neither measurements, nor data products emerging from analysis of the measurements, in the 'Quick Look' archive may be published or used in any presentation without the permission of the PI responsible for the measurements.
- Any ST/PH Science Team member preparing a paper for publication which uses measurements and/or data products submitted to the ST/PH Archive by another group is required to offer co-authorship on the paper to the PI responsible for the parameter(s). Early contact with possible collaborators in development of publication is encouraged to maximize scientific interaction and ensure proper use of PI data.

DATA FORMAT

Several data formats are acceptable for data submission to the ST/PH archive.

1) NetCDF format.

2) The GTE Data Archive Format (http://www-gte.larc.nasa.gov/pem/GTE_FMT98.htm) Section V and Table 1 & 2 of the NASA document are replaced with specifics for ST/PH

3) The NASA Ames Data Archive Format. The NASA Ames data format has been used by a number of investigators in ST/PH and can be used for data submission. See: <http://www.espo.nasa.gov/solve/archiv/archive.tutorial.html> or <http://badc.nerc.ac.uk/help/formats/NASA-Ames/> for details.

File naming for ST/PH should be done according to the following format:

Examples:

<u>Type</u>	<u>Name</u>	<u>Source</u>
RAF files	start08_rf01_gv_v01.nc	RAF
Selected RAF & GFS vars	start08_rf01_gfs_v01.nc	Bowman
Instrument files (example)	start08_rf01_vcsel_v01.txt	PI's
Merged RAF/GFS/instrument	start08_rf01_merge_v01.nc	Tilmes

The file name has five parts:

project name: **start08**

flight name & number: **tf01** or **rf01** (test flight or research flight, use two digits with leading zero if necessary)

product or instrument name: **gv, gfs, vcsel, etc.**

version number: **v01** (use two digits with leading zero if necessary)

suffix depends on file type

The suffix is separated by a period ".". Other parts are separated by underscores. Please do not use periods or underscores in the product or instrument name.

DATA SUBMISSION and HANDLING:

Instructions for uploading data to the operational data server can be found at http://start.tamu.edu/data_management.html

All data submitted to the 'Quick Look' and Final Archives will be available to the ST/PH Science Team under password control prior to release to the public.

The ST/PH Data Managers will create merged data sets and will include them in the Data Archive. The "standard" merged data product will be a 1-Hz merge, and that will be typically be available within 24 hours after PI data submission. Special merges based on other time bases will be provided after submission of the Preliminary Data. Schedule is to be determined.

SCHEDULE:

ST/PH data submission deadlines and schedule:

'Quick Look' data due	24 – 48 hrs after each flight
1 Hz 'Quick Look' Merge	24 -48 hours after PI data
Phase I: Preliminary data due	16 June 2008
Phase II: Preliminary data due	28 July 2008
Merges of 'Quick Look' Archive available	Updated as needed
Final data due	31 December 2008
Final Archive data available	31 December 2008
Merged data files available	15 January 2009
Model products available	when submitted
Data Workshop (I)	Winter, 2009 (TBD)
International Workshop on Chemistry and Dynamics of the Extratropical UTLS	Summer, 2009 (TBD)
Final Archive released to public	28 June 2009
Data Workshop (II)	If required
Manuscript and conference presentations	To be determined