GRIP Archive Data Set Status

Michael Goodman

GRIP Science Team Meeting

7 June 2011

Team Members

GRIP IT (Info Tech)

- Helen Conover – Project Mgr
- Marilyn Drewry – Dbase Mgr
- Will Ellett –Sys Admin
- Danny Hardin – Web Mgr
- Lamar Hawkins – Operations
- Matt He – System Developer
- Ajinkya Kulkarni – Sys Devel
- *Steve Jones – retired*
- Mary Nair – Dbase Developer

Real Time Mission Monitor

- Rich Blakeslee – Co-PI
- Michele Garrett – Sys Admin
- John Hall - RTMM Developer
- Jared Harper – Dbase Develop
- Matt He – RTMM-Waypoint Planning Tool
- Paul Meyer – Project Mgr
- Kathryn Regner – Sys Engr
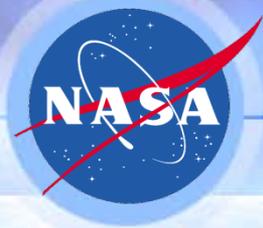- Tammy Smith – Web Develop

GRIP Data System

- **Objectives**: design, implement, and operate a suite of information technologies for GRIP, utilizing web map-based and virtual globe applications on a common data management framework for remote presence, data visualization, access, and dissemination of GRIP-specific tropical cyclone information and relevant project information throughout the lifecycle of the GRIP field experiment.

    - *Active Data Stewardship* for GRIP at the Global Hydrology Resource Center and JPL providing for science data collection, archival, dissemination and user assistance.

    - *Collaboration Portal* for mission planning and coordination

    - *Remote Presence* to enable interactive coordination across multiple sites (GRIP-Ft. Lauderdale, GRIP-DFRC, PREDICT, IFEX, PI institutions)

    - *Decision Support* for aircraft and experiment asset situational awareness via the Real Time Mission Monitor, the Waypoint Planning Tool and the GRIP-specific near real time satellite data.
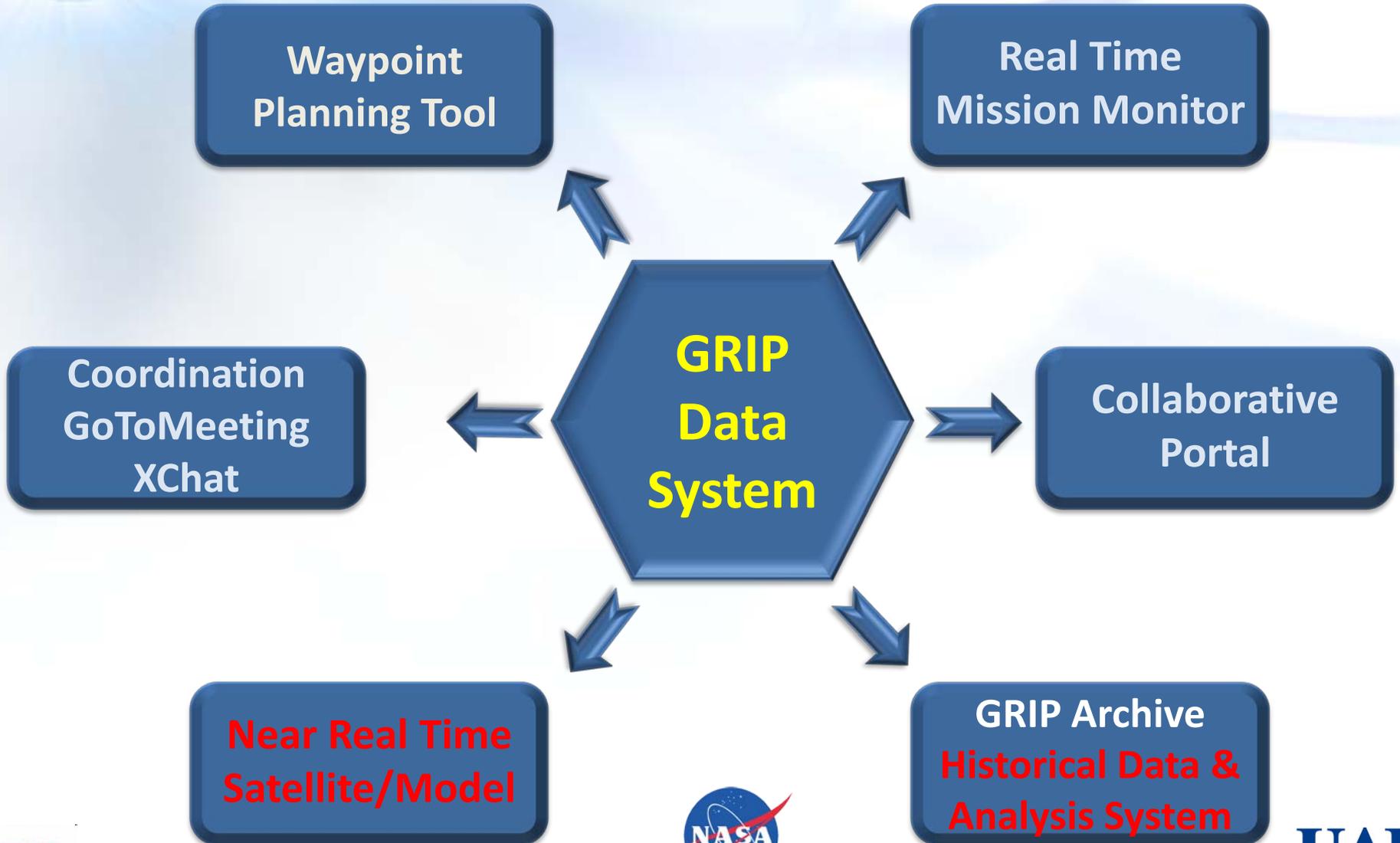
Post-Experiment Activities

- Update field experiment database (working closely with science investigators) to ingest, document and quality controlled data sets
- Serve as a full service data center for GRIP: providing ingest, archive, documentation, on-line access and custom delivery of GRIP field-campaign data (airborne and *in-situ*).
- Generate web movies that encapsulate and replay the flights of the RTMM visualizations
- Build the historical satellite hurricane database and analysis system to include the tropical cyclones observed during GRIP.

# GRIP Data Systems Components

Waypoint Planning Tool

Real Time Mission Monitor

Coordination GoToMeeting XChat

GRIP Data System

Collaborative Portal

Near Real Time Satellite/Model

GRIP Archive Historical Data & Analysis System

GHRC Procedures to Publish a Dataset

1. Receive data from PI. Review filename, format and aggregation changes as required (e.g., preferred date format: yyyymmdd)
2. Archive data and create long listing of filenames
3. Stage data to public GRIP FTP site (i.e., publicly available but URL is not advertised)
4. Submit the dataset filenames and metadata into the GHRC catalog and reconcile with GCMD
5. Write dataset guide - this includes the PI documentation which is copied to GHRC server (avoids broken links in future)
6. Upon completion of #1-5, dataset is now ready to publish to the world. This means that the dataset will be found in the following search engines once metadata submission is made:
   - GHRC search engine HyDRO: http://ghrc.nsstc.nasa.gov/hydro/
   - Reverb: http://www.echo.nasa.gov/reverb/about_reverb.htm
   - Listed in the Global Change Master Directory (GCMD): http://gcmd.nasa.gov/
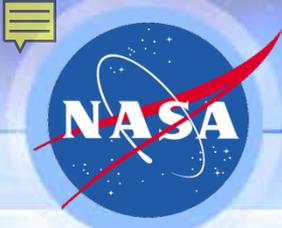
GRIP Dataset/Instrument Fact Sheet

Following information will facilitate the inclusion of datasets into the GRIP Field Catalog and Archive

1. Dataset/Instrument (i.e., full name and acronym)
2. Principal Investigator w/ Institution
3. Co-Investigator(s) w/ Institution
4. Instrument Type (e.g., radiometer, Doppler radar, lidar, radiosonde)
5. Platform during GRIP (e.g., DC-8, Global Hawk, WB-57, satellite, surface)
6. Brief description of Instrument and Function
7. Temporal Resolution (if applicable)
8. Spatial Resolution (if applicable)
9. Direct Parameters measured (e.g., radiances, atmospheric state variables, aerosol scattering, particle size distribution)
10. Derived Products (e.g., temperature, water vapor, aerosol backscatter coeff)
11. Number of datasets and format to be archived and/or for distribution
12. List each product that will have quick-look and/or browse
13. Approximate data volume per day or per flight mission (as appropriate)
14. Website for additional information/documentation
15. Refereed publication reference or other reference
16. Miscellaneous information or comment

Submission Requirements and Status

Dataset	PI Survey Initial information	Data / Browse Received	Final PI Readme / Document	Related Information / URLS	References	Read software or Tools info	Staged on FTP Server	Publicly available in Search Engines
APR-2	2/18/2010	5/18/2011	5/26/2011	✓	✓		5/23/2011	6/2/2011
Dropsonde DC-8	In Progress	6/4/2011	6/4/2011	✓	✓		6/6/2011	6/7/2011
CAPS/PIP/CDP	2/19/2010	5/27/2011	5/27/2011	✓			6/6/2011	6/7/2011
DAWN	3/17/2010				✓			
GHIS	n/a	During Mission						
GOES	n/a	During mission					2/9/2011	4/7/2011
GOES-Overshoot Top	n/a	During mission					2/11/2011	4/7/2011
HAMSR	2/26/2010	5/6/2011	5/13/2011		✓		5/12/2011	6/2/2011
HIRAD	3/09/2010			✓	✓			
HIWRAP	3/10/2010			✓				
LARGE	2/21/2010			✓			6/6/2011	

Submission Requirements and Status

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LASE	3/09/2011	5/23/2011	5/26/2011	✓	✓	Read software	5/23/11	6/2/11
LIP	6/07/10	This week			✓			
MMS	3/09/10	4/1/11		✓	✓		4/1/11	5/10/11
Meteosat 2nd Gen	n/a						3/15/11	
NAV-DC8	n/a	During mission					12/14/10	3/15/11
NAV-GH	n/a	During mission					2/2/11	3/15/11
NAV-WB57	n/a	During mission					2/17/11	4/20/11
Radiosonde	In Progress	10/20/10	3/20/11				12/20/11	4/7/11
Reports	n/a	3/1/11					3/1/11	4/7/11