HS3 Science & Deployment Preparation Meeting
May 7-9, 2013
NASA Research Park, Moffett Field, CA

Tuesday May 7

7:00-8:00 Badging (for foreign nationals)

8:00-8:05 Introduction / Greeting — Braun

8:05-8:20 Opening statements — Kakar

8:20-8:40 Mission Overview — Braun
- *Goals of this Science Team meeting*
- *Mission Status and Accomplishments*

8:40-10:00 Overview from each instrument team
(15 min each + 5 for questions). Presentations should include: status of data processing, discussion of instrument status, and any open issues.

Environmental

CPL	Hlavka
AVAPS dropsondes	Wick/Hock
S-HIS	Revercomb
TWiLiTE	Gentry

10:00-10:30 BREAK

10:30-12:10 Overview from each instrument team (*15 min each + 5 for questions*)

Overstorm

HIWRAP	Heymsfield
HIRAD	Cecil
HAMSR	Lambrigtsen
GPS Winds	Garrison
Gamma Ray Detector; ADELE	Smith

12:10-1:30 LUNCH

1:30 – 3:00 POSTER SESSION

(1) A Multi-spectral Analysis of Tropical Cyclone Cloud Tops from Combined Satellite and High-Altitude Aircraft Remote Sensing. C. Velden and S. Monette (UWisc.-CIMSS), P. Black (NRL-MRY), A. Heidinger (NOAA/NESDIS), E. Zipser (Utah), and G. Heymsfield (NASA/GSFC)

(2) Wind Retrieval Algorithms for Downward Pointing, Conically Scanning Airborne

Doppler Radar. S. Guimond, L. Tian and G. Heymsfield

(3) Dust impact and forecast evaluation during HS3 Ed. Nowottnick

(4) Extended-range (5-30 day) forecasts of tropical cyclones with the ECMWF ensemble during the HS3 field experiment. R. Elsberry, H. Tsai, M. S. Jordan, and F. Vitart

(5) S-HIS Dual Regression Analysis Relative to AVAPS and CPL Measurements. D. DeSlover, et al

(6) S-HIS Real-time Processing and Data Transport. D. Hoese, R. Garcia, et al

(7) S-HIS Radiometric Calibration and Performance. J. Taylor, et al

(8) Composite Analyses of Tropical Convective Systems Prior to Tropical Cyclogenesis. Charles N. Helms, Jason P. Dunion, and Lance F. Bosart

(9) Secondary eyewall formation as a progressive boundary layer response. Sergio F. Abarca, Michael T. Montgomery and Michael M. Bell.

(10) Balanced and unbalanced aspects of secondary eyewall formation. Sergio F. Abarca and Michael T. Montgomery

(11) Organization of Tropical Cyclone Kinematics by Environmental Shear. J. DeHart, R. Houze and R. Rogers.

(12) A Multiscale Analysis of Hurricane Earl's Period of Rapid Intensification During GRIP: Relationships Among Convective Bursts, Lightning and the Warm Core. J. Thomas (UMBC), J. Halverson (UMBC), G. Heymsfield(GSFC), B. Pasken (SLU)

(13) Necessary and Sufficient Conditions for Tropical Cyclogenesis: Evidence from Recent Field Programs. J. Zawislak and E. Zipser

(14) Rapid Intensification of Hurricane Earl (2010): Vorticity and Mass-Flux budgets". G. Susca-Lopata (University of Utah) E. Zipser (University of Utah), C. Lopez-Carillo (New Mexico Inst. of Mines and Technology), D. Raymond (New Mexico Inst. of Mines and Technology), R. Rogers (NOAA HRD)

(15) VAD analysis of wind field at nadir from HIWRAP observations during GRIP. Lin Tian, G. Heymsfield, S. Guimond, L. Li

(16) The JPL Tropical Cyclone Information System – a tool for hurricane research and model evaluation: The 11-year global database and the GRIP/HS3 interactive portals. S. Hristova-Veleva, Z. Haddad, B. Knosp, B. Lambrigtsen, P. P. Li, N. Niamsuwan, W. L. Poulsen, T.-P. Shen, S. Tanelli, F. J. Turk, Q. A. Vu

(17) Identifying Opportunities for Enhanced HS3 Collection Synergies. D. Poppe

(18) The Kinematic Boundaries of Hurricane Nadine B. Rutherford, T. Dunkerton, and M. Montgomery.

(19) New insights into the Dynamics and Predictability of Tropical Cyclogenesis. L. Lussier III and M. Montgomery

(20) Tropical Cyclone Outflow Layer Structure. J. Molinari, P. Duran, D. Vollaro, and K. Corbosiero.

3:00 – 3:30 BREAK

3:30 – 4:45 Lessons Learned from 2012 *(15 min each)*

Science	Newman
Aircraft	Fratello
Pilots	Hall
WFF	Walsh
Project Management	Vasques

4:45 – 5:00 Lessons Learned Discussion Newman

5:00 – 5:30 Open Discussion/ Action items Newman
5:30 End of Session for Day 1

Wednesday May 8

8:00 - 10:00 HS3 Science Team Member Presentations (*15 min each + 5 for questions*)
Braun
Montgomery
Zipser/Zawislak
Thorncroft
Halverson
Rogers

10:00 – 10:30 BREAK

10:30 - 11:50 HS3 Science Team Member Presentations (*15 min each + 5 for questions*)
Sippel
Hence
Wick
Black

11:50 – 12:10 SEAC4RS update Pfister

12:10-1:30 LUNCH

1:30 – 2:30 Aircraft Status, Integration& Schedule Fratello

- *Status (progress with pods, new instruments)*
- *Operational constraints (flight duration issues, turn-around time, hazard avoidance, other issues particularly for AV-1)*
- *2013 and 2014 schedule*
- Changes to rules for aircraft scheduling, operations
- Fatigue management
- Changes to the COA

2:30-3:00 Ku availability/Bandwidth discussion Sullivan

3:00 – 3:30 BREAK

3:30–5:00 Discussion/review of science operations Braun/Newman

- Forecasting
- Flight Planning
- Flight modules
- Mission scientist's roles and responsibilities
- PMOF operations

5:00 – 5:30 Open Discussion/ Action items Newman
5:30 End of Session for Day 2

<u>Thursday May 9</u>

8:00 – 10:00 HS3 Deployment Details
8:00 – 8:30 Field Operations for 2013 Deployment Vasques

8:30 – 9:00 MTS Duley

- Capabilities
- Real-time data
- New for 2013

9:00 – 9:30 Data Catalog Emory

9:30 - 9:45 Mission Scientist and Forecaster scheduling Braun/Halverson

9:45 – 10:00 Final wrap up/ Next Meeting/Telecons Braun/Vasques

10:00 – 10:30 BREAK

10:30 – 11:30 HSRP Oral Presentations (*15 min each + 5 for questions*)
Krishnamurti
A. Juracic (for D. Raymond)
D.-L. Zhang

11:30 - 1:00 LUNCH

1:00 – 2:40 HSRP Oral Presentations (*15 min each + 5 for questions*)
Houze
F. Zhang
Cecil
Corbosiero
Doyle

2:40 – 3:10 BREAK

3:10 – 3:50 HSRP Oral Presentations (*15 min each + 5 for questions*)
Dunion
Fovell

3:50 – 4:20 Discussion
4:20 End of Session / Meeting