

IMPACTS 1st Science Team Meeting

Wallops Flight Facility

15-17 April 2019

AGENDA

Monday, 15 April, Morning:

8:30 Overview of IMPACTS Science and Management (Session Chair – Vidal Salazar)

- 8:30 Opening remarks & introduction – Lynn McMurdie
- 8:40 Remarks from Headquarters – Gail Skofronick-Jackson (for Tsengdar Lee)
- 8:50 Overview of IMPACTS – Lynn. McMurdie
 - Overview of science team
 - Phenomenon
 - Science objectives
 - Science background
 - Overview of observational strategy
 - Climatology/Meteorology of our region

9:10 ESPO Support (Aircraft, ground and ops center) – Vidal Salazar

9:30 Introduction of Science PIs (Session Chair – Steve Guimond)

- 09:30 Brian Colle
- 09:40 Sandra Yuter
- 09:50 Bob Rauber
- 10:00 Fuqing Zhang
- 10:10 Greg McFarquhar
- 10:20 Andy Heymsfield
- Discussion (if time permits)

10:30 Coffee Break

11:00 Instrumentation and Platforms – ER-2 (Session Chair – Greg McFarquhar)

- 11:00 ER-2 Aircraft update - Brian Hobbs
- ER-2 instruments (status, issues, calibration, data products, real time data)*
- 11:15 HIWRAP, CRS, EXRAD – Matt McLinden and Lihua Li
- 11:35 AMPR – Tim Lang
- 11:45 CosMIR – Rachael Kroodsma
- 11:55 CPL – John Yorks
- 12:05 Discussion on ER-2 topics

12:15 Lunch

Monday, 15 April, Afternoon:

01:15 Instrumentation and Platforms Cont. – P-3 (Session Chair – Andy Heymsfield)

01:15 P-3 Aircraft update - Mike Cropper
P-3 Instruments (status, issues, calibration, data products, real time data)
01:30 Microphysics Probes – Mike Poellot
01:40 TAMMS/dropsondes – Lee Thornhill
01:50 WISPER – David Noone
02:00 PHIPS - Martin Schnaiter
02:10 NSRC Capabilities - Melissa Yang
02:20 Discussion on P-3 topics

02:30 Instrumentation Cont. – Ground Network (Session Chair – Sandra Yuter)

Ground network (status, issues, calibration, data products, real time data)
02:30 SBU Radars – Pavlos Kollias
02:40 Mobile rawinsondes – Brian Colle and Bob Rauber
02:50 NOAA rawinsondes - Jeff Waldstreicher
03:00 Discussion on additional ground networks (D3R, NY ground obs)

03:15 Coffee Break

03:45 Risks and Mitigations (Session Chair – Scott Braun)

03:45 Risks to IMPACTS flights/science (weather, instrument issues, fly-decisions)
04:00 Science Describes/Cost Management

04:15 Partners and Parallel Projects (Session Chair – Gerry Heymsfield)

04:15 Overview of NOAA Winter Storm Reconnaissance – David Novak
04:25 East Coast Operations of Winter Storm Recon. – Peter Black
04:35 Overview of Proposed LOBSTAS Project - Karen Kosiba
04:40 Discussion about NOAA/NSF collaboration and other potential partnerships

04:45 General Discussion about Day 1

Tuesday, 16 April, Morning:

08:30 Field Operations

Mix of presentations and open discussion – coffee/session breaks at natural break in discussion

08:30 Observational Strategy (Discussion Leader – Sandra Yuter)

- Science priorities - Lynn McMurdie
 - Flight tracks to maximize science
 - Constraints and Tradeoffs
- 09:15 Flight Operations (Discussion Leader – Gerry Heymsfield)
 - Flight tracks from aircraft perspective
 - Real time data needs for flight adjustments
 - Coordinating aircraft to maximize science objectives
 - Dropsondes and FAA airspace discussion
- 10:15 Ground Operations (Discussion Leader – Bob Rauber)
 - Mobile sounding decisions
 - Coordination with NOAA and soundings - Jeff Waldstreicher
- 11:00 Operations Center (Discussion Leader – John Yorks)
 - NRT model and data availability for forecasting - Stacy Brodzik
 - Daily briefings and student forecasters
 - MTS flight ops tools - Aaron Duley
 - Jan Nystrom and flight coordination
- 11:45 Weather Forecasting/Numerical Modeling (Discussion Leader – Lynn McMurdie)
 - NOAA - Vijay Tallapragada
 - Fuqing Zhang
 - Brian Colle

12:30 Lunch

Tuesday, 16 April, Afternoon:

01:30 Tour of Wallops Facilities (hangar, ops center, etc.)

02:00 Dry Run (Facilitated by Lynn McMurdie and Brian Colle)

Mix of presentations and open discussion – coffee/session breaks at natural break in discussion

- Example storms
- How would we sample these storms?
- What if storms are too warm?
- Storms over Midwest vs. NE corridor
- Storms over New England vs mid-Atlantic

Wednesday, 17 April, Morning:

08:30 High-Level Data Products and Retrievals (Session Chair – Scott Braun)

- 08:30 Radar/Radiometer Products: General Methodology – Mircea Grecu
- 08:40 Radar/Radiometer Products: Examples from OLYMPEX – Joe Munchak
- 08:50 Combined Radar/Lidar Products – Gerry Heymsfield

09:00 Discussion on Data Products/Retrievals

09:15 Data Flow and Management (Session Chair – John Yorks)

09:15 In-Field Data Management – Stacy Brodzik

09:30 Long-Term Data Distribution and Archiving – Deborah Smith

09:50 Data Management Discussion (website, documentation, etc.)

10:00 Coffee Break

10:30 Final Discussions and Action Items