Chair's Report
6th and Final Meeting of the
Big Data Task Force

November 1, 2 & 3, 2017

Jet Propulsion Laboratory

BDTF Membership

Name	Dept./Center	Organization
Charles Holmes - Chair	Retired	Formerly NASA HQ
Reta Beebe	Dept of Astronomy	NMSU
Eric Feigelson (1)	Center for Astrostatistics	Penn State U.
Neal Hurlburt	Solar and Astrophysics Lab.	Lockheed Martin
James Kinter	Center for Ocean-Land-Atmosphere Studies	GMU
Chris Mentzel (2)	Program Director Data-Driven Discovery	Gordon & Betty Moore Foundation
Clayton Tino (3)	Software Architect	Virtustream / EMC
Raymond Walker	Institute for Geophysics and Planetary Physics	UCLA
Jerry Smith – Exec. Sec.	SMD	HQ NASA

5th BDTF Report to the Science Committee

- The Science Committee met at LARC on July 24th and 25, 2016.
  - I remotely made the TF's report on the 24th.
- Submitted the BDTF's four recommendations:
  1. NASA Participation in DOE's Exascale Computer Program
  2. Joining the National Data Superhighway
  3. Joint Program with NSF's Big Data Innovation Regional Hubs and Spokes
  4. SMD Data Science Applications Program
- The Science Committee tabled any action on these recommendations until the some of the Science Advisory Committees have a chance to look at them.

Goals of this meeting

1. Review many of JPL's data science activities.
2. Finish the white papers from the Focus Topics.
3. Update from IPAC & finish the TF's Assessment of the Data Centers.
4. Review and pass or defer two recommendations
5. Bring up, review and pass recommendations arising from the white papers.

BDTF Focus Topics

1. *Data discovery*
2. *Improved data/science analysis methodologies*
3. *Modeling workflows*
4. *Server-side analytics*

Draft Recommendations and Assessment

1. The Formation of a Data Science and Computing Division

2. DS&C Advisory Positions

3. Recommendations arising from the focus topics

4. Top-level Assessment of the SMD data programs

The Next Meeting of the Science Committee

- November 28th and 29th at NASA HQ.
- I will present the TF's final report:
  - Continued discussion of previous recommendations
  - White papers
  - New recommendations

- Jerry Smith passed out a timeline for the NAC's deliberations of the TF's recommendations next year.

- I think there could be a possibility that we could be called back into session (e.g. a ½-day telemeeting) to clarify, etc. our some of our products.

SPACE STUDIES BOARD
Fall Meeting – 175th Meeting – November 1-3, 2017

OPEN SESSION
Focus Session on Big Data

Time	Topic	Speaker
1:15 pm	Intro to the Theme	Sarah Gibson, SSB Member
1:20 pm	Big Data and NASA Space Sciences (15 minute presentation & 5 minute discussion)	Daniel Crichton, JPL
1:40 pm	Big Data and NOAA Science (15 minute presentation & 5 minute discussion)	Ed Kearns, NOAA
2:00 pm	Big Data Analytics and Visualization to Monitor Sea-Level Rise (15 minute presentation & 5 minute discussion)	Thomas Huang, JPL,
2:20 pm	Using Machine Learning in Astronomy (15 minute presentation & 5 minute discussion)	George Djorgovski, Caltech
2:40 pm	Maching Learning and Solar Physics (15 minute presentation & 5 minute discussion)	Monica Bobra, Stanford
3:00 pm	Commentary on CSSP Session on Data & Analytics In Solar and Space Physics (10 minute presentation & 5 minute discussion)	CSSP Co-Chair
3:15 pm	Panel Discussion with the Board Members • Potential for new discoveries • How can our science agencies and communities prepare • Is the a role for an SSB activity / study?	All
3:55 pm	Summary of the Discussion	Fiona Harrison, SSB Chair

11/1/20

AGENDA

First discussion of study reports
Nov 1, 16:00 – 17:00

- About 15 mins for each topic.
  - Introduce with a summary of the report.
  - Discuss updates since the June tele-meeting.
  - Outline possible recommendations.

QUESTIONS?