SNOPAC 07 February Attendees: **SNOPAC** AFB JNousek LSL **JLockman AHarris SOFIA Project** EZavalla **KES** Hal Yorke **TRolleig BReach** MGreenhouse -- SUG E Becklin NASA HQ **KSheth** Hashima Hasan Additional attendees whose names I did not catch... Notes SOFIA Flight System Tour 1 -- Project Report (09:15--10:15 am) + Update on Project Operations (Eddie Z) - 10 min + SOC Update (Cycle 5 status) (Hal Yorke) - 10 min + HAWC+ Update (and avail in Cycle 5, Cycle 6) (Hal Yorke) -10 min + Description/Status of Level 1 Science Metrics (eg 80% of Science Planned Program) (Kimberly) - 30 min

EZavalla -- Program Ops UPDATE since October 2016

• Cy4 competition & Cy5 commencing

- L1 requirement met in Cy4 (see Oct 2016 SNOPAC materials for review of L-1 requirements definition)
- Cy 5 block schedule (see EZ presentation)
- In DC for 2018 Winter AAS

HalY -- SMO Update

- HansZ -- 31 Dec stepped down as DepSMO Director
- Cycle-5 Progress, Start of Cy5 program tonight (07 February)
- Evaluating impact of "Large Impact" proposals
 - Hours not nights allocated --this places constraints on science efficiency
 - Evaluating supplementary call concept to fill unused time
 - Q&A: efficient use of flight <u>not</u> a metric considered in impact proposal evaluation
- Continued HAWC+ thermal issues (hold time, sensitivity). Reduced performance impacts science throughput, but high-priority science possible in Cy5. Not thought to jeopardize Cy5 HAWC+ allocations, but efficiency impact
- Cy6 Call April 2017; July proposal deadline, selections announced Oct.
- Q: Role for Combined US/German TAC process, A: Not presently envisioned

KES -- SOFIA Science Metrics

- Presentation on potential SOFIA Science Metrics with upcoming Senior Review in mind:
 - Observatory Efficiency (e.g. observing hours delivered)
 - Science Demand (e.g. oversubscription, community growth)
 - Science Productivity (e.g. papers per observing hour)
- KES Challenges SNOPAC: recommend right set of metrics for SR consideration
- Sense metrics presented too close to NASA L-1 requirements. Compliance with L-1 requirements important for HQ and SR, but such compliance probably not exciting to SR panel. Required but not compelling...
- Science/\$ metric (not primary metric, but an important one) important to present and frame positively for SOFIA, but SR package must also highlight coming attractions to capture committee's attention.
- Data suggest ~ 8% community growth year over year (hopeful if true)
- Data delivery latency chart judged to show excellent project responsivity (delivering increasing science value for fixed or decreasing dollars -- important SR message).
- Q: why are some data assessed as unpublishable? Are there lessons to learn from such data that can mitigate such data being taken in future?
- Suggestion: archive research never likely to be a SOFIA strength, de-emphasize for SR
- Suggestion: SR proposal should be science-forward-looking: SOFIA must demonstrate a history of delivering compelling science, but proposal message should focus on future science potential.

2 -- HO Update (10:15--10:30 am)

+ HQ Feedback & Senior Review Planning (KartikS)

KartikS -- NASA HQ Update

- General discussion of SR cycle and SOFIA's place in it
- News: per National Academy recommendation, congress +considering+ extending SR review cycle to 3 years! Not yet done deal, but indeed possible!
- German partners concerned about SR process and implications for SOFIA
- Q: May German partners have role in SR, A: No
- SR proposal call late summer/early fall 2017 (pending review cycle decision above)
- NextGen SOFIA instrument proposal call through ROSES mechanism late 2017
- Suggestions of SOFIA "technology infusion" (AB worry about unfunded mandate)

3 -- Far Infrared Next Generation Instrument Community Workshop (10:50--11:20 am) (Kimberly)

- + March 23, 2017, Caltech, Pasadena with a tour of SOFIA, morning of March 24, 2017
 + SOFIA, Balloons, Origins Space Telescope, FIR Probes, tech
- + Show Agenda and Leading Questions
- + Discussion: What other questions could we be asking to capture science needs?

KES -- Instrument Workshop

- SOFIA Instrument Workshop planned for Thurs 23 March -- Caltech
- Workshop to prioritize input/thinking for next instrument solicitation (see above)
- Q: Is it plausible to propose US-German partnership for next instrument, A: maybe...

4 -- Discussion: Restructuring Fellowship Program - (Hal Yorke) (11:20--11:35 am)

HalY -- Restructuring Fellowship Program

- Review proposals from Oct2016 meeting: Visiting scientist program, graduate student program
- No clear program element focussing on postdocs
- Q: NASA named fellowship shakeup in 2017 & 2018 -- opportunity for SOFIA?
- KartikS & LSL volunteered that SOFIA is already "included" in fellowship program: http://www.stsci.edu/institute/smo/fellowships/hubble:

"The Hubble Postdoctoral Fellowship Program supports outstanding postdoctoral scientists whose research is broadly related to NASA Cosmic Origins scientific goals as addressed by any of the missions in that program: the Herschel Space Observatory, Hubble Space Telescope (HST), James Webb Space Telescope (JWST), Stratospheric Observatory for Infrared Astronomy (SOFIA), and the Spitzer Space Telescope." The lack of any SOFIA selections in this program suggests that awareness of this opportunity should be raised in the SOFIA user community, and awareness of SOFIA should be raised among the Hubble Fellowship program administrators.

5 -- SUG Report (adjusted agenda)

MattG -- SUG report

- [SNOPAC +very+ happy to finally hear from SUG]
- Review of SUG and it's role respective to other SOFIA advisory groups (SOFIA receives a "rich" set of advice and perspectives)
- Perceived concern: the extent to which SUG input is received (or heard) beyond USRA

6 -- SNOPAC Activity Discussion (Andy B)

AFB -- SNOPAC activity/membership discussion

- Welcome to new SNOPAC member Lisa Storrie-Lombardi
- SNOPAC membership succession planning: original members coming to end of "nominal" terms, but charter envisioned flexibility -- some members advocated stability leading up to SR over term concerns. That seems sensible, but would that view be correct/same if SR is delayed until 2019?
- Open to additional member invitation -- unclear on process (i.e. do we adopt process foreseen in unsigned SNOPAC charter, or do we "dynamically" coordinate with project as we did for LSL?)
- Greatly appreciate KES' & project's engagement with SNOPAC
- Identified a nominal series of regular (quarterly) meetings
- Tabled discussion of chair succession for now

7 -- Executive Session

[Redacted]

8 -- SOFIA International Summit Plans (11:50a-12:15 pm) (Kimberly)

- + March 2-3 face to face at DLR/Bonn with telecon option
- + Show Draft Agenda Discussion: Solicit for comments (will finalize mid-Feb)
- + Goal: Foster stronger scientific engagement with German partner community
- + Membership: SNOPAC & SUG chairs, German Science rep, 6 representatives (drawn from SNOPAC & SUG + more broadly US)

KES -- Discussion of SIS agenda topics

- "SOFIA Today" -- branding/repackaging reflecting project progress & status
- Inspector General's report [I didn't follow this point...]
- Specifics on what resonated well...
- SIS: 10 US representatives

- Discussion suggestion: add one SOFIA instrument PI and one SUG member
- Suggestion: high-level discussions between NASA and DLR to discuss upcoming SR -probably better done as private sidebar rather than direct meeting topic

9 -- Discussion Challenge: Expanding the SOFIA Customer Base (01:30--02:15pm)

- + Engage more effectively with the grad-student/pre-tenure scientists
 - + SNOPAC to provide a report of findings, actionable suggestions by the May telecon
 - + Examples like:
 - + Invite to give talks at SOFIA science center (pay travel)
 - + Give them money to go to AAS/meetings
 - + Offer spots to fly on SOFIA
 - + Invite them to come to work on the project (with a task)
 - + Grad student symposium (is there an example we can model?)
- + Synergy between SOFIA and other observatories in address outstanding science questions
- Seeking SNOPAC ideas for building community (e.g.):
 - Seminar road show (MG): need updated, dynamic, evangelical message, but would be very effective at re-introducing SOFIA to community if done correctly (e.g. like Markus K-P road show when he became Gemini director...)
 - AAS topical sessions during summer meetings
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10 -- SNOPAC Feedback & Wrap-up

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- AFB summary from ExecSession
 - Endorsement of/reciprocal observer status with SUG we look forward to working closely with the SUG and inviting designated SUG representation (default Chair) to SNOPAC meetings/discussions
 - Praise/support for KES stepping into PS role Kimberly in her role as Project Scientist is fostering communication between SNOPAC and other project elements
 - Perception of outstanding progress over last two years sense of SNOPAC is that project is on a very positive trajectory of producing excellent science, meeting NASA HQ expectations and requirements, and being responsible and responsive stewards of public resources. We look forward to sharing our perception with our community colleagues.
 - Support for growing community while not wishing to criticize the past, we agree and endorse the concept of expanding the SOFIA user community, and accept the challenge of coming back fir the ~ May meeting with a short list of recommendations toward this goal
- TRolleig comment: "SOFIA Today" the result of a broad team effort SNOPAC agrees and endorses this comment as reflecting the excellent work of the SOFIA team.

11 -- Objectives for May SNOPAC (KES)

- SR Science Theme Storyboard Review/SNOPAC feedback
 Science Community Outreach/Cultivation feedback

Meeting end