





# SOFIA Cycle 2 results and Cycle 3 Proposal Solicitation

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# **Cycle 2 Selection Statistics**







### **Proposal statistics – Cy 2**

### **Submitted Proposals**

- Total number of unique proposals received:
  - NASA/USRA queue: 89
  - DLR/DSI queue: 22
- Total requested time:
  - NASA/USRA queue: 544.5h (OSR: 3.1)
  - DLR/DSI queue: 67.1h (OSR: 1.4)
- Accepted Proposals both queues
- Total Number of accepted proposal:
  - Must Do: 51
  - Do if Time: 29
- Total Allocated time:
  - "Must Do" only: 205h

US grants allocated: \$518k







### **SOFIA Cy 2 US-queue statistics**

Proposal (by number of **PIs** – many **PIs** have multiple proposals)

- Non–US PIs: 9
  - France (5), Netherlands (3), Chile (2), UK (2), Spain (2), Ireland (1), India (1), Greece (1), Taiwan (1)
- Total Number of PIs: 80
  - SOFIA Staff proposals (as PI)\*: 6
- Total number of PIs & Co-Is: 353
- New Pls (neither Pl or co-l in Cy 1): 19
- Selections (number of programs ):
- 44 by US PIs (not USRA)
- 6 by SOFIA staff\*
- 11 by non–US PIs







Solar System, incl. Exoplanets

Star Formation

Evolved stars and

Circumstellar

material

Extragalactic Astronomy

ISM

**Proposals by subject** (Categorization pre- and post- selection not identical)











Proposals by Instrument - US queue



#### **Selections by Instrument – both queues**









### **Distribution of awards (in hours)**

- Must Do programs, both queues
  - Does not include Do if Time or SURVEY programs
- Two accepted programs  $\geq$  10h









## Cy 2 status

- Cy 2 selections went out November 5
- Phase II preparations and long range planning are under way
  - Phase II inputs (final) are due December 13
    - Particularly for the first Flight Series (FORCAST) this is challenging
    - Several FORCAST GIs have been requested and strongly encouraged to submit AORs (for RA 1h to 17h) by November 15.
  - Because the available science campaigns are limited, longrange planning is tractable (SMO Director made first cut as part of selections)
- Instrument cadence and durations are not yet 100% set
  - FLITECAM commissioning must be inserted in spring
  - A "carry-over" series might be inserted
  - The observing schedule is, therefore, not yet finalized







# **Cycle 3 CfP Preparation**

"Notional"\*

\* (à la Paul Hertz)







### **Caveats (and formalities)**

- This presentation to the SUG is FYI (formally)
- We're still discussing the details of the Cy 3 CfP
- Detailed coordination with DSI still pending
- We will post this to the web for "public comments"







## Cycle 3 "Boundary Conditions"

- Cycle 3 will be open to world astronomical community
- Period offered: March 2015 February 2015
- Intermixed with HAWC instrument commissioning
- Southern Hemisphere deployment(s) planned
- Approximately 513 hours of time will be offered
  - 425h in the US call
  - 87h in the German call
  - Reflects some repayment from German allocation
- Approximately \$1.3M available for GI grants
- Director's Discretionary Time available







### **Schedule Considerations**

- A shift in the cycle boundary (to Feb/March) is likely due to:
  - Mitigation of Cy 1 observing losses carry over to 2014 which extends Cy 2 into 2015
  - Allows "Orion" proposals to be considered "once per year"
  - Moves the Cycle start (flight preps) away from holidays
- For the US community/SMO, retaining the deadline in late June is advantageous because:
  - AAS Summer meeting good opportunity to interact with proposers after they have started actively working on proposals
  - Allows TAC meeting before fall semester starts (late August)
  - SMO needs 6+10 weeks from proposal selection to stars of Cycle for phase II generation and flight planning







### **Items under discussion**

- Should there be a category of "Guaranteed Observations"?
  - 5-10% of highest ranked programs that WILL be carried over to subsequent cycles
    - Actively considered for Cy 3
- Multiple Southern Deployments per cycle?
  - A southern deployment costs ~3 flights (for ferrying etc.)
    - Trade multiple deployments against research hours
  - Could allow coordinated science campaigns (different instruments) of Southern targets
    - Actively considered for Cy 3
- Large Proposal category
  - Could allow community to more seriously consider significant, coherent, programs
  - We haven't yet had a full year's observing
  - Many of the SOFIA G1/G2 instruments have not been commissioned (hence community interest is unclear)
    - Not considered for Cy 3; May be considered in later cycles







### Instruments & Capabilities intended for Cy 3

- EXES: All modes
- FIFI-LS: All modes
  - PSI-FSI transition nominally occurs mid-cycle
- FLITECAM: Imaging and grism all modes
- FORCAST: Imaging and grism all modes
- GREAT: (TBD)
  - L1, L2: All frequencies
  - M: OH, 2.51 THz, line only
  - H:?
    - Up-GREAT ?
- HAWC+: Limited availability after commissioning completed
- HIPO: All modes
- FDC/FPI+: TBD







### US queue:

- Call for Proposals Released
- Update "opportunity" planned for
- Proposal deadline
- Technical Review
- US Peer Review

- **2014 dates**
- May 2 June 2 June 30 early August Mid August

- Directors' Review
- Announce Selections
- Phase 2
- Cycle starts (nominally)

late September ~October 1 October March 1, 2015







## **Cycle 3 Staffing Assignment**

- Instrument/Support Scientists:
  - EXES
    - Adwin Boogert (Support Scientist; starts Sept '13)
    - Bill Vacca (Deputy Support Scientist)
  - FIFI-LS
    - Randolf Klein (Instrument Scientist)
    - Maureen Savage (Deputy Instrument Scientist)
  - FLITECAM
    - Maureen Savage (Instrument Scientist)
    - Ryan Hamilton (Post-doc, Assistant Instrument Scientist)
  - FORCAST
    - Jim De Buizer (Instrument Scientist)
    - Andrew Helton (Deputy Instrument Scientist)
  - GREAT
    - Göran Sandell (Support Scientist)
  - HAWC+
    - John Vaillancourt (Instrument Scientist)
  - HIPO
    - Jeff van Cleve (Support Scientist)
- User Support Scientists:
  - Ravi Sankrit (lead), Andrew Helton