

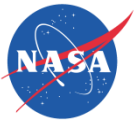


SOFIA Science Mission Operations and Cycle 1 & 2 Status

Erick Young

Science Mission Operations Director





Cycle 1 Call for Proposals

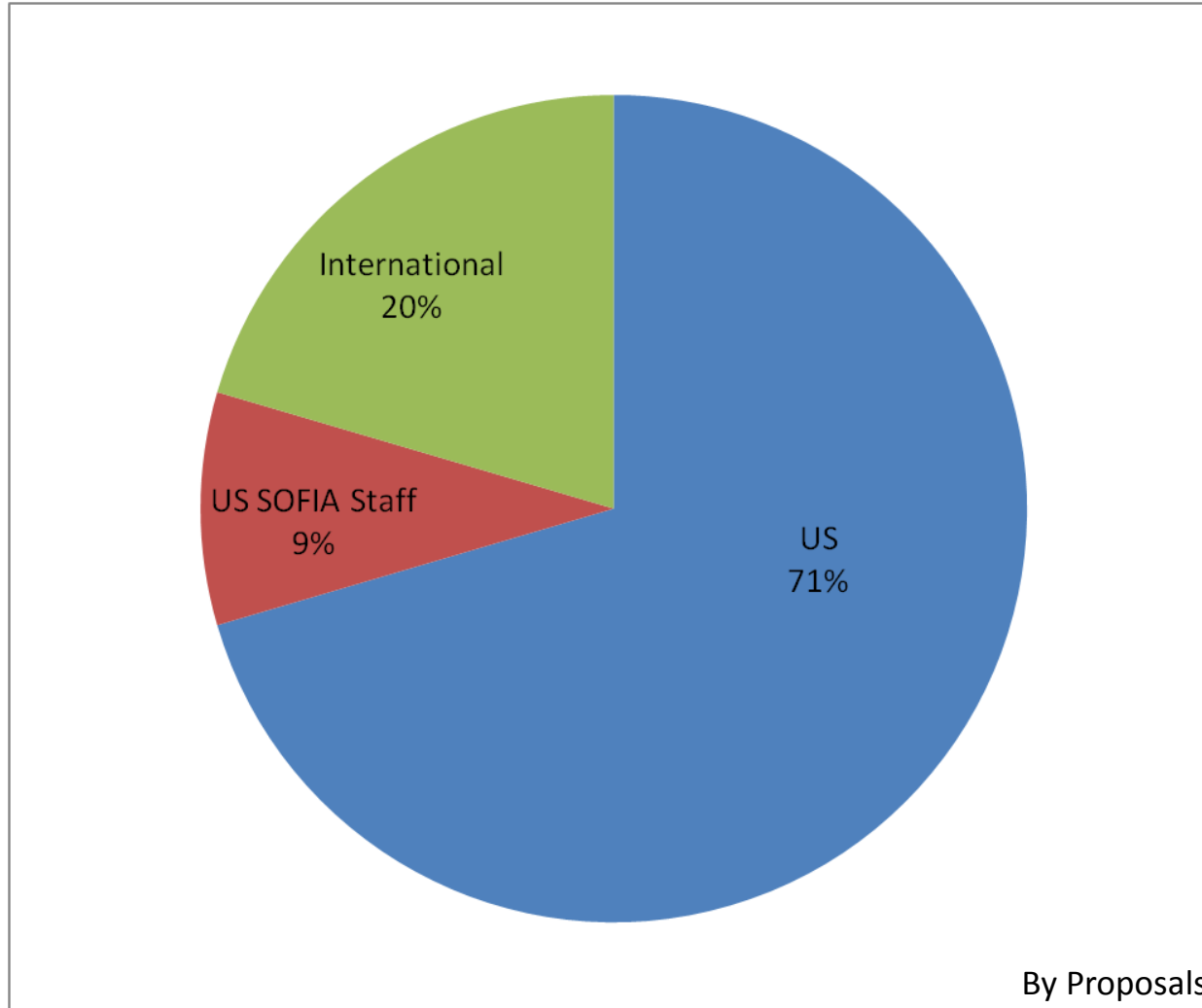


- TAC results were announced in August 2012
 - The announcement came after first system-level test of enhanced SOFIA systems
- To maintain the full year of visibility for the selected investigations, we are extending Cycle 1 to December 2013
- Future observing cycles to adopt the January to December window.





US Queue Distribution of Proposals





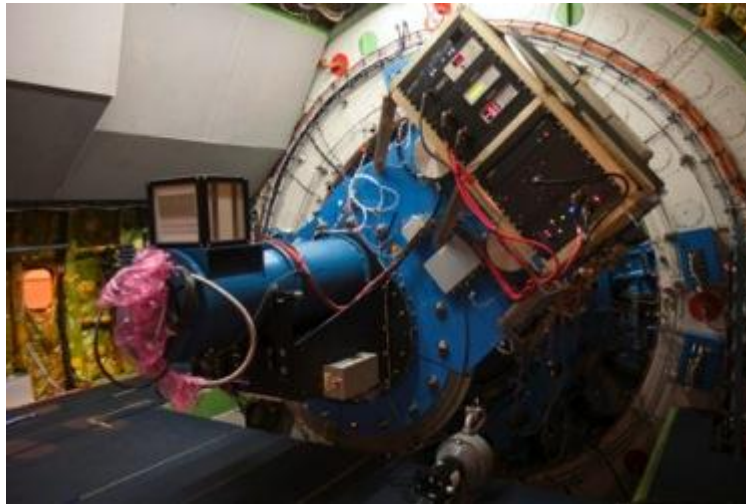
Four 1st Generation Instruments Available for Cycle 01



FORCAST
Mid-IR Camera



GREAT
Heterodyne spectrometer

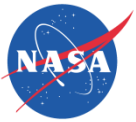


FLITECAM
Near IR Camera

HIPO
Occultation Photometer

FLIPO
(co-mounted on SOFIA)



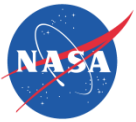


Cycle 1 Plans



- We plan to commission GREAT, FORCAST, FLITECAM, & HIPO in 2013
 - GREAT will feature the first availability of 2.5 THz band
 - New capabilities include grism spectroscopy for both FORCAST and FLITECAM
- Community science flights will begin in May 2013
 - FORCAST & FLITECAM availability
- SOFIA will deploy to New Zealand in July 2013 with GREAT for 9 flights
 - M-channel observations are included
- Additional FORCAST, FLITECAM, & GREAT flights in November-December 2013
- A total of ~300 hours for science
 - 200 hours has been awarded under US Call for Proposals
 - 40 hours for Germany
 - 60 hours for Instrument Team Guaranteed Time, Calibration Time, and Director's Time





Cycle 2

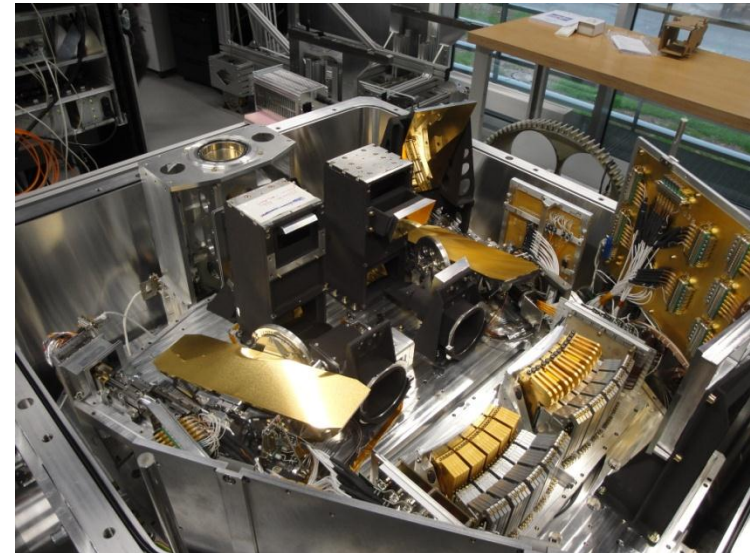


- Schedule
 - Cycle 2 will cover calendar year 2014
 - Call For Proposals anticipated release April 2013
 - Proposals due in June 2013
- Hours
 - SOFIA will support a higher flight rate (4 flights/week)
 - Expect ~400 science hours
- Instruments
 - Expect EXES and FIFI-LS to be commissioned during 2014
 - Some of these new capabilities will be available on a shared-risk basis



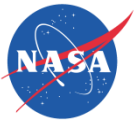


EXES
High Resolution Mid- IR
Spectrometer



FIFI LS
Integral Field Far-IR
Spectrometer



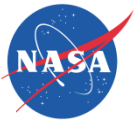


Instrument Capabilities



Instrument	Wavelengths	Spectral Resolution	Availability in Cycle 2
FORCAST	5 – 38 μm	4 - 1200	Commissioned
FLITECAM	1 – 5 μm	3 - 900	Commissioned
GREAT	60 – 240 μm	10^7	Commissioned
HIPO	0.3 – 1.1 μm	4	Commissioned
EXES	5 – 28 μm	85,000	Shared Risk
FIFI-LS	40 – 210 μm	1300 - 7500	Shared Risk



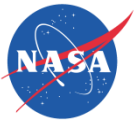


Proposal Submission



- We will continue a 2-phase proposal submission system for Cycle 2
 - Phase 1: SOFIA proposal tool
 - collects information including target location, observing mode, and requested observation duration
 - Proposers do not specify precise observing parameters
 - Phase 2: S-Spot
 - Collects observing parameters by filling out Astronomical Observing Template
 - AOR files are saved and used by Science and Mission Operations to make observing scripts





Opportunities for Involvement in SOFIA



- Observing Proposals
 - As a Guest Investigator
 - As a member of the TAC
- SOFIA Users' Group
 - Rotating committee of ~10 scientists to advise Science Center
- SOFIA Community Task Force
 - Biweekly “tele-talks”
- First SOFIA Science Conference
 - Targeting Mid-2014

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