

M17

APAC Briefing: SOFIA

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FORCAST $19\mu\text{m}$, $37\mu\text{m}$; Herschel $70\mu\text{m}$; Spitzer $3\mu\text{m}$
USRA | NASA | SOFIA | Spitzer | Herschel



Lim, et al 2019, subm.
Image courtesy of:
De Buizer, Lim, Radomski

SOFIA 5-Year Flagship Mission Review (FMR)



*SMO: Science Mission Operations, according to NASA's Prime Contract to Universities Space Research Association

Program activities underway (1/3)

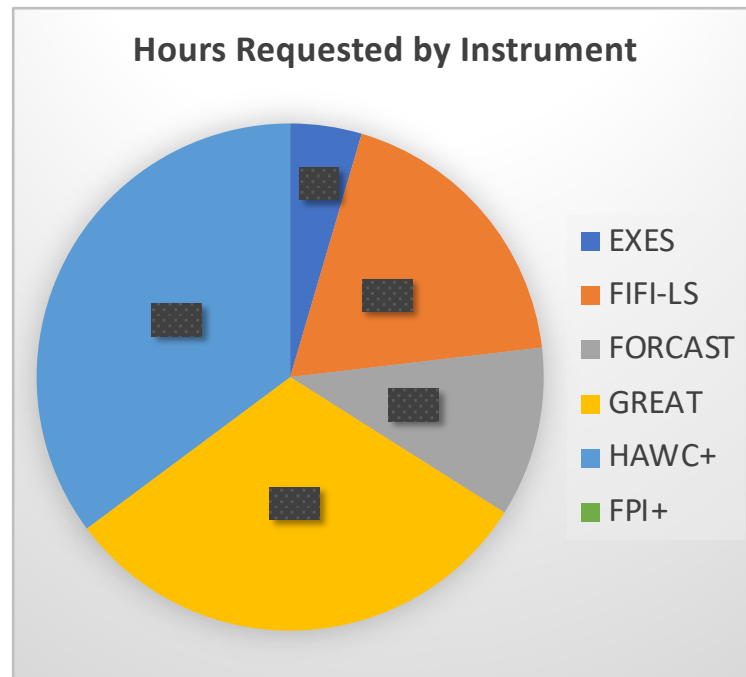
- The Project leadership (NASA and the SMO) conduct regular (generally weekly) strategic meetings preparing the plan to address and implement the FMR recommendations
- Identifying and eliminating or reducing “impediments to change” both within SMO (USRA) and external to SMO (NASA, DLR, DSI)
- Eliminate SMO activities not directly related to “enhancing science productivity”
- The SMO is undergoing a reorganization
 - Added new science role – Associate Director (AD) for Research: Jim Jackson
 - Reduce and consolidate other AD roles
 - New roles and responsibilities for staff to enhance efficiencies

Program activities underway (2 of 3)

- Recently conducted a test 5-flight week
 - Use results and modeling to refine optimization for high quality science
 - Draft report outlines advantages and disadvantages of more frequent shorter flights versus fewer longer flights (weekly 5 x 8 hours versus 4 x 10 hours)
- Cycle 8 Selections and Cycle 9 Call for Proposals
 - Reduce instrument modes and instruments offered
- New post doc and staff scientist positions: requisitions and ads created
- Developing new “automation” software to reduce mundane repetitive activities of staff
- Cross training staff (example TO slash IO, pipeline slash instrument scientists)
- Make SOFIA pipeline software publicly available
 - Pipeline software is being rewritten to Python

Program activities underway (3/3)

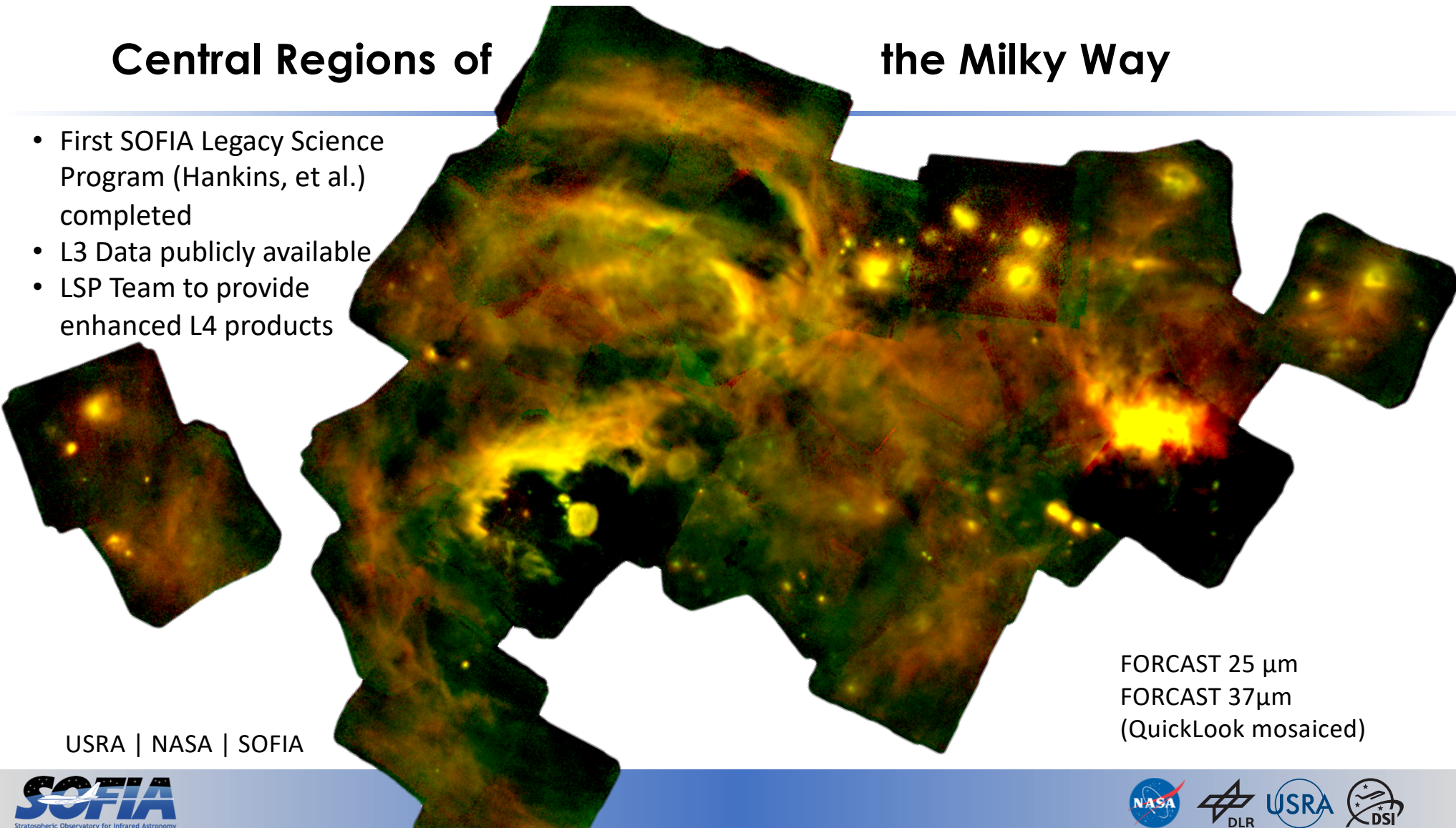
- Cycle 8 selections to reflect emphasis on “enhancing science productivity”
 - Panel Chairs of October 14-16 TAC meeting lauded vast improvement of quality of SOFIA proposals over the last few years
 - Increased proposal pressure (Cy7 oversubscription 4.7 increased to Cy8’s 5.9)
 - Selections to be announced in December depend on negotiations with NASA
 - Goal: Fewer but longer instrument campaigns; optimization of flight length & frequency; adjustment of observing time to accommodate better/worse observing conditions



Central Regions of

the Milky Way

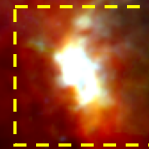
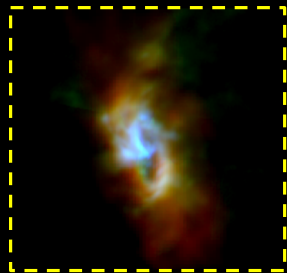
- First SOFIA Legacy Science Program (Hankins, et al.) completed
- L3 Data publicly available
- LSP Team to provide enhanced L4 products



FORCAST 25 μm
FORCAST 37 μm
(QuickLook mosaiced)

USRA | NASA | SOFIA

Preliminary work



The Galactic center: 25 μm (FORCAST), 37 μm (FORCAST), 70 μm (PACS)