

# Scientific Productivity

William T. Reach

SOFIA Users Group #13

16 Nov 2018

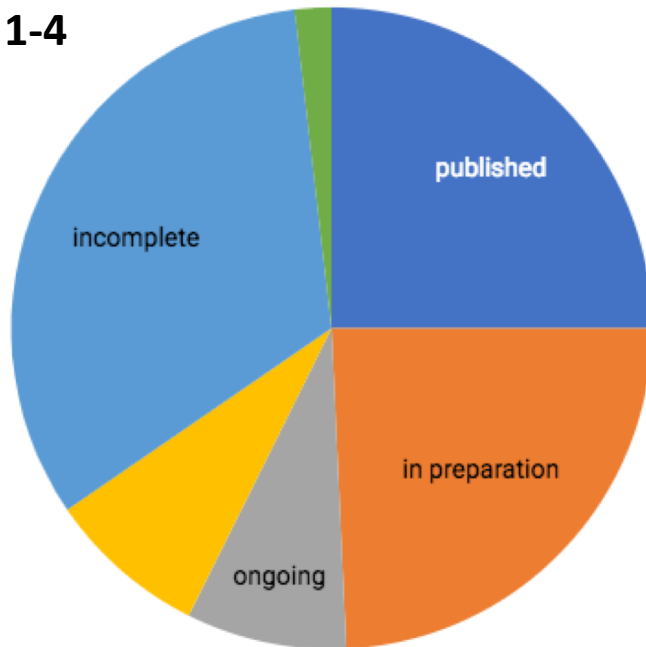
# Status of Guest Observer Projects

Each project dispositioned into one of these categories:

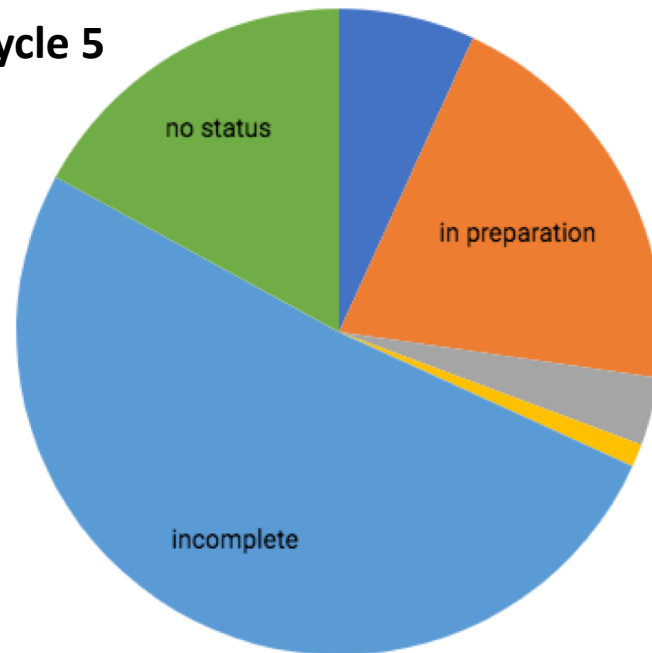
- **Published**: refereed journal article using data
- **Ongoing**: will be combined with upcoming observations
- **In preparation**: GO working on draft/plans to write
- **Incomplete**: less than half of proposed observations complete, or GO indicates cannot publish subset
- **Unpublishable**: GO or SMO believe scientific results will never be obtainable with the acquired data

# Status of Guest Observer Projects

Cycles 1-4



Cycle 5

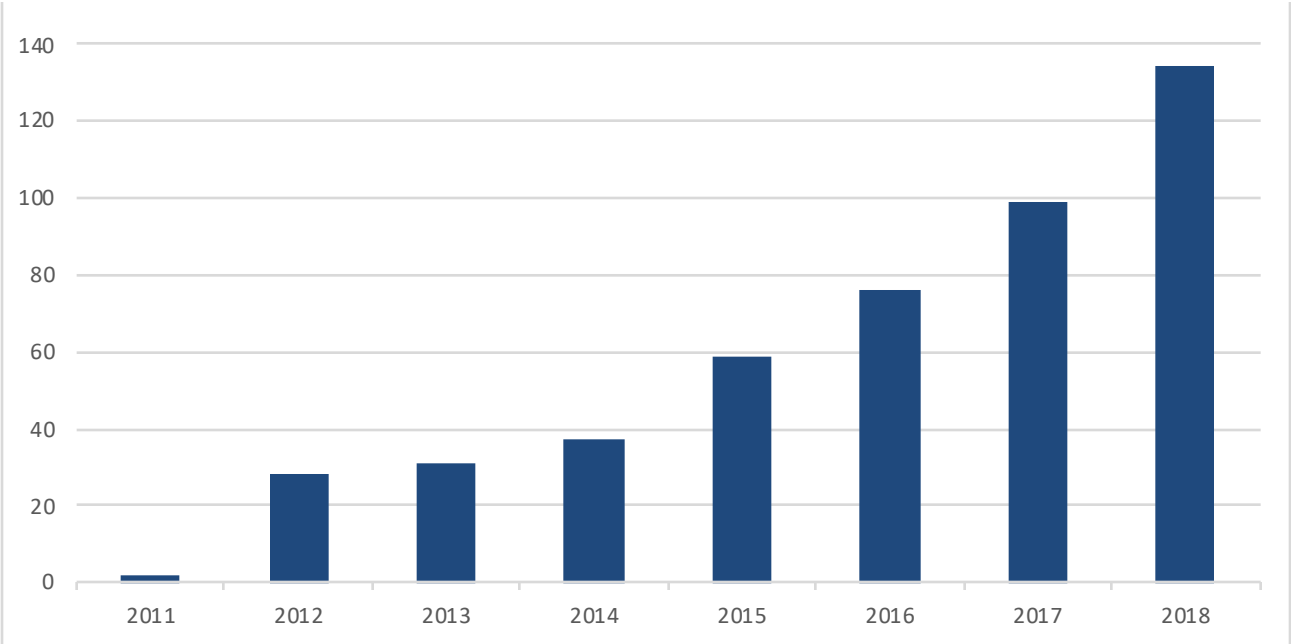


# Cycle 5 Incompleteness

- Cycle 5 plagued by incomplete programs
  - Aircraft issues, in particular engine issues, caused many lost flights
  - Loss of GREAT flights in NZ was worst problem
  - Instrument scientists and flight planners tried to either **complete** (observed >80% awarded time) or **not spend time** (observed <20% awarded time) on GO programs
- Cycle 6, mitigation:
  - Accept Priority 1+2 programs up to 75% of available time

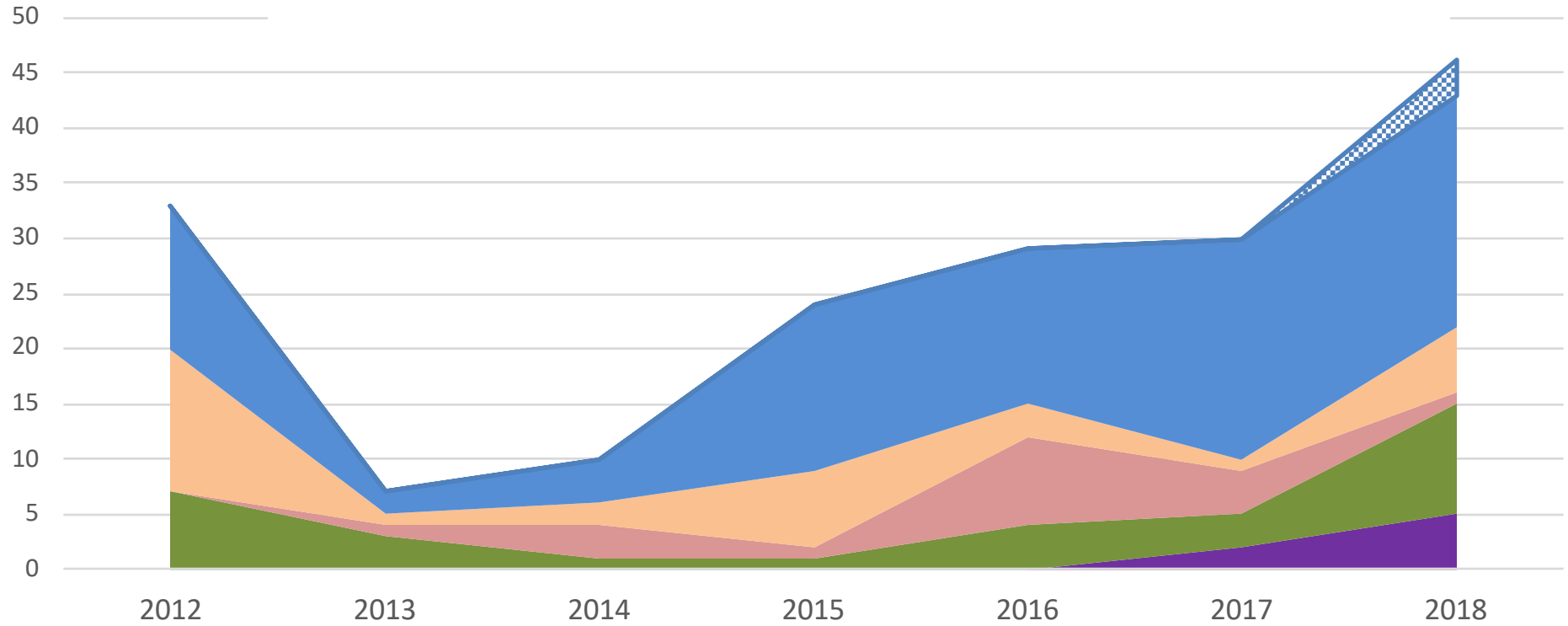
Observed/ Awarded	Number
<20%	27
20-40%	14
40-60%	11
60-80%	9
>80%	28

# Cumulative Refereed Scientific Publications



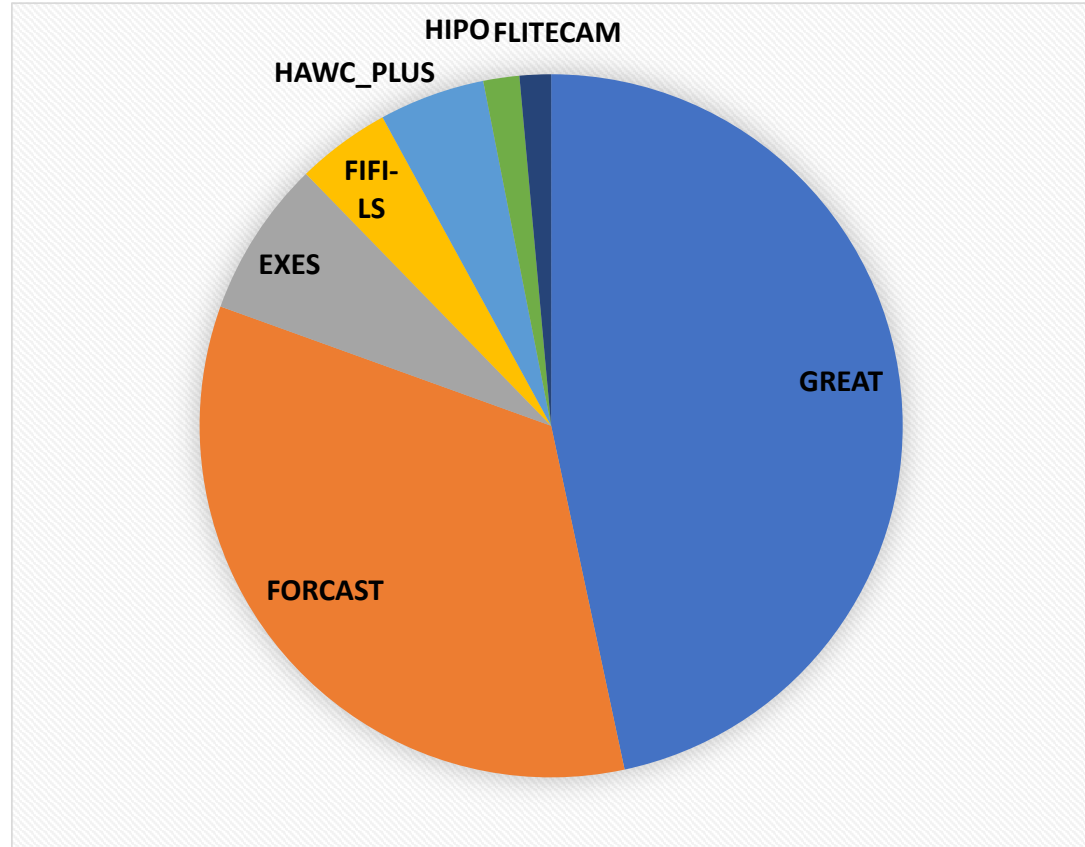
# All Refereed Publications per year

Archive, Theory   instrument   thesis   GTO   GO   extrap18



# Refereed scientific Papers per instrument

Instrument	#Papers	Hrs/paper
GREAT	65	12±2
FORCAST	47	14±2
EXES	10	20±7
FIFI-LS	6	75±40
HAWC+	7	40±20
HIPO	2	9±6
FLITECAM	2	34±24



### 3. Proposed addition of Archival Research Program

---

- SOFIA is considering adding a funded Archival Research Program
  - Hubble, Chandra have many Cycles of funded archival research
  - Specifically-SOFIA research would no longer be eligible for the NASA Astrophysics Data Analysis Program
- Synchronize Archival Call with annual Guest Observer & Legacy Calls
- Total funds being considered \$500k/yr
  - 10% compared to total funding for Observers of \$5M/year
- Goal is to encourage studies encompassing multiple projects
  - Classes of target
  - Multi-instrument, comprehensive studies of regions
  - Encouraging publication of “orphaned” data