



Proposal, Time Allocation, and Publication Metrics

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Outline

- Overview of proposal/TAC process
- Proposal statistics
- Publications



Proposals

- Two observing semesters per year (May 16 – Nov. 15, and Nov. 16- May 15).
- Deadlines: March for the summer semester and September for the winter semester.
- Proposal submission through SMA Observer Center (SMAOC).
- SMAOC provides up-to-date information on all projects and is the interface between users and the observatory.

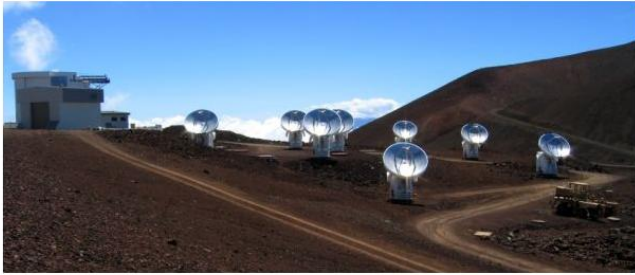
SMA Observer Center



IA Observer Center - Mozilla Firefox
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http://sma1.sma.hawaii.edu/smaoc.html

SMA Observer Center

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[The Submillimeter Array \(SMA\)](#) is an 8-element radio interferometer located atop [Mauna Kea in Hawaii](#). Operating at frequencies from 180 GHz to 900 GHz, the 6m dishes may be arranged into configurations with baselines as long as 500m, producing a synthesized beam of sub-arcsecond width. Each element can observe with two receivers simultaneously, with 2 GHz bandwidth each. The digital correlator backend allows flexible allocation of thousands of spectral channels to each receiver. The Submillimeter Array is a joint venture of the [Smithsonian Astrophysical Observatory](#) and the [Academia Sinica Institute of Astronomy and Astrophysics](#).

Public Links

User Link

Staff Links

Special Access Link(s)

Courtesy: Glen Petitpas
SMA Advisory Committee



Time Allocation

- Observing time shares among three partners: SAO 72.5%, IAA 15%, UH 12.5%
- Since September 2008, **IAA and SAO proposals are reviewed and ranked by a single committee.**
- Proposals reviewed by members of TAC (9-13 members) consisting of scientists from SMA, CfA, and outside community.
- UH runs a separate TAC on UH time share

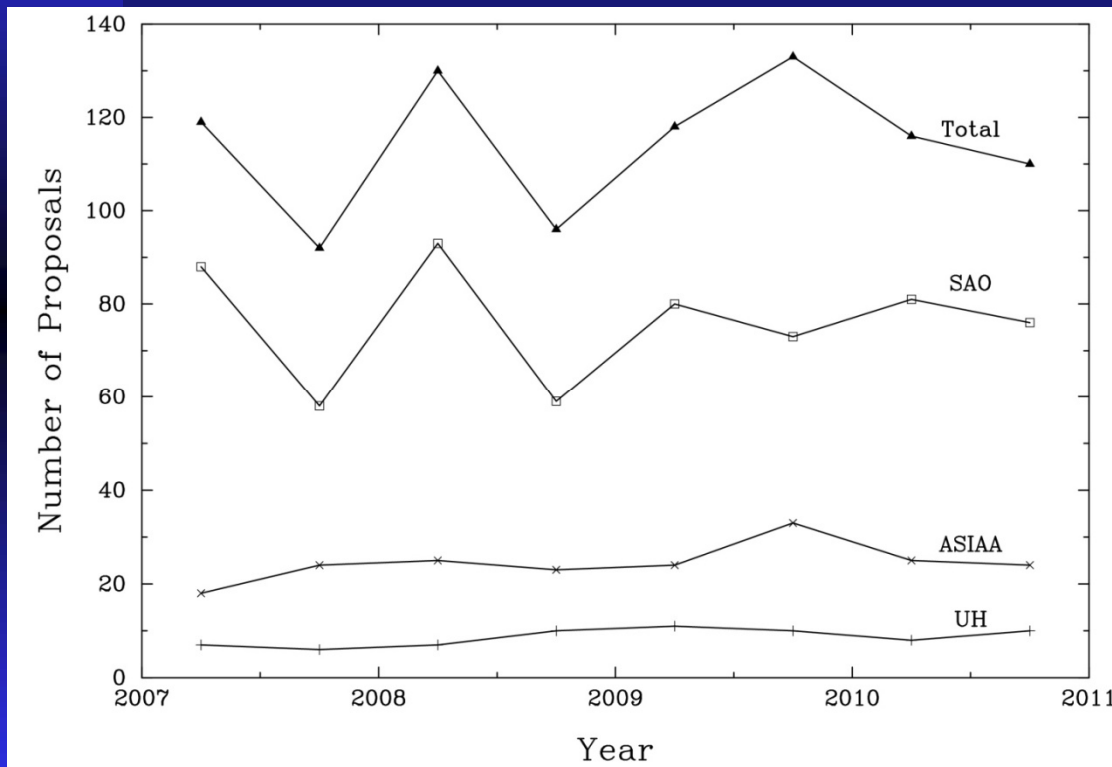


Time Allocation

- Each proposal reviewed by minimum of 4-6 TAC members; (“Legacy proposals” reviewed by all members).
- Proposals ranked, discussed and reevaluated at face-to-face meeting at CfA (next one on Oct. 15).
- TAC Chair uses rankings to determine rough configuration schedule to best accommodate highest ranked proposals (including partners).
- Proposals are rated by the TAC as
 - ◆ A: highest rating, executed on a best effort basis
 - ◆ B: middle rating, to be executed as time permits
 - ◆ C: lowest rating, will not be executed



No. of Proposals 2007-2010



of proposals: **904** (113 per semester)

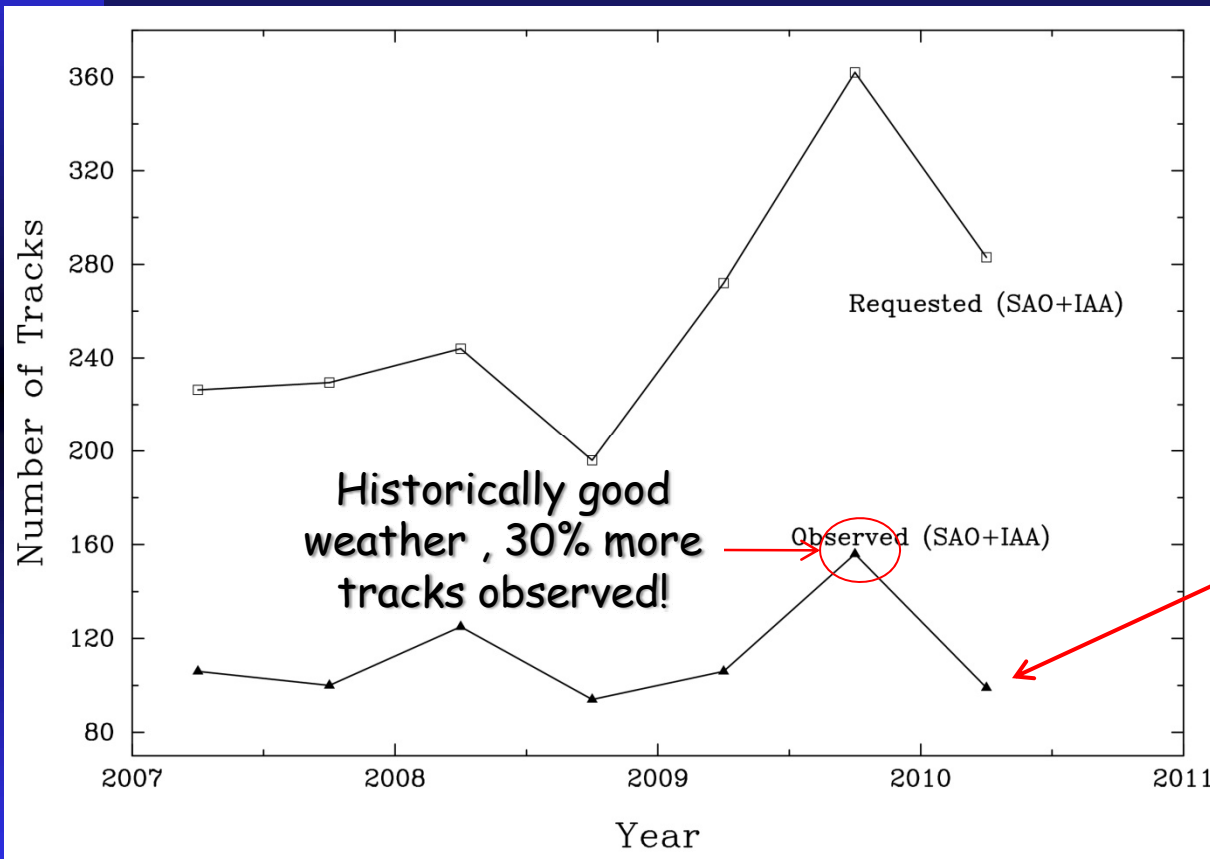
No. of unique PIs: **184**

SAO per semester: **58 - 93**

IAA per semester: **18-33**

UH: Only approved projects (10 per semester) enter in the system

No. of tracks requested/observed from 2007-2010 (SAO+IAA only)



Requested: 1992
Observed: 798
Oversubscription: 2.5

Historically good weather, 30% more tracks observed!

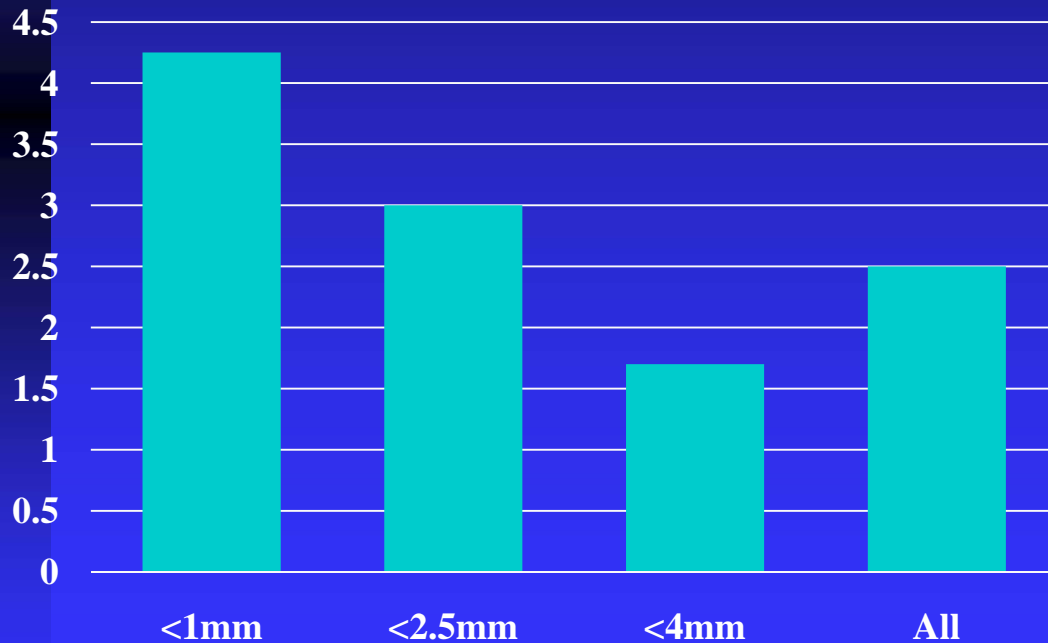
Current observing semester
Data through Sept. 25



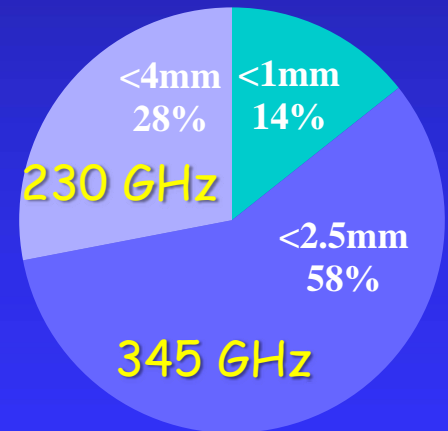
Time Oversubscription

- Majority of time request come at 345 GHz, where SMA is unique

Oversubscription by Weather



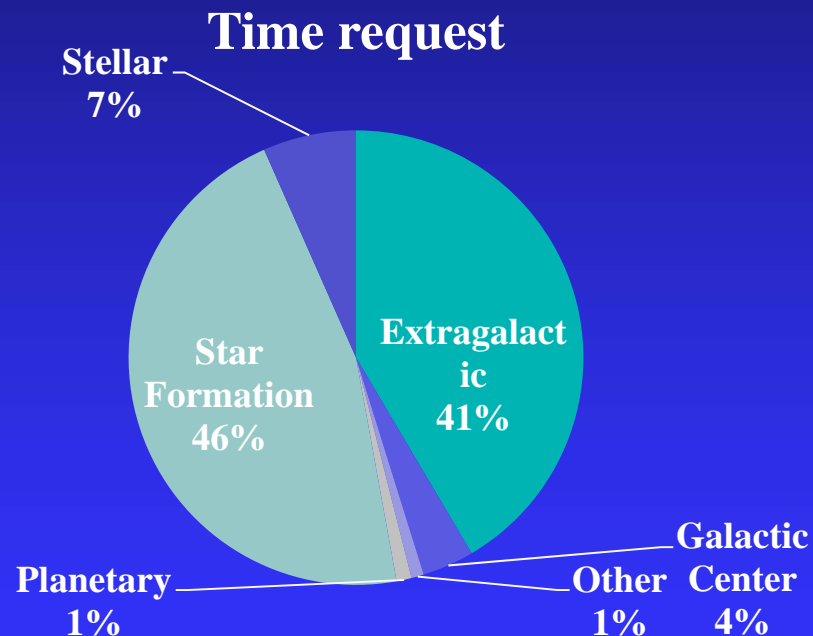
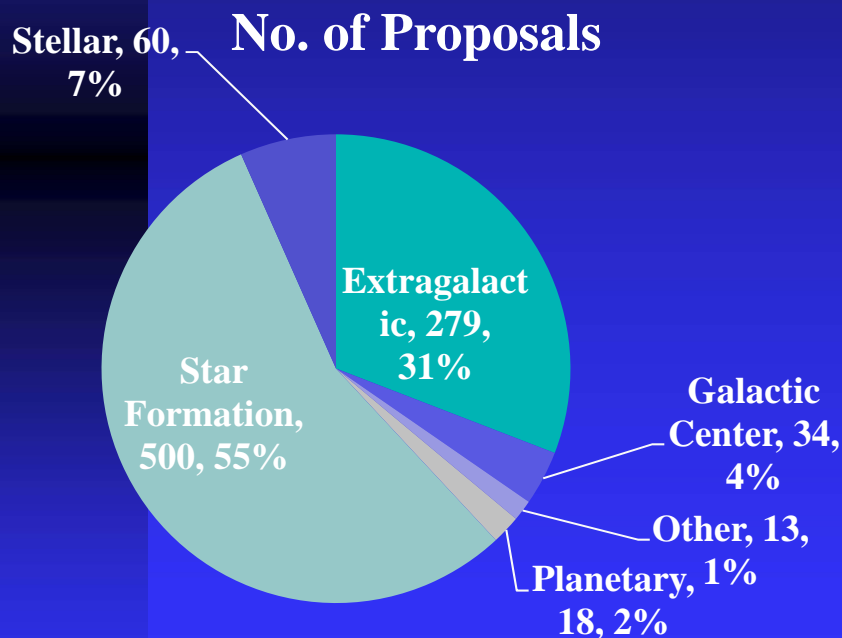
Time request by weather



Proposals in science categories



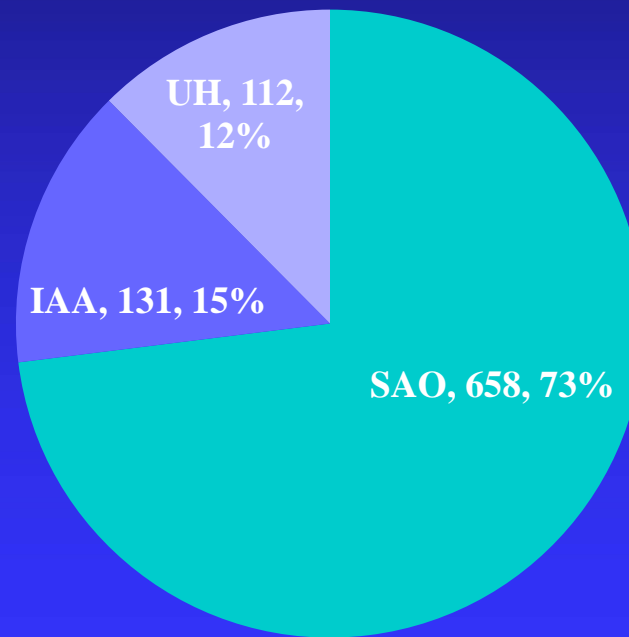
- Star formation and extragalactic science are the main drivers
- Extragalactic proposals request more tracks per proposal





Time shares among partners

Chart Title





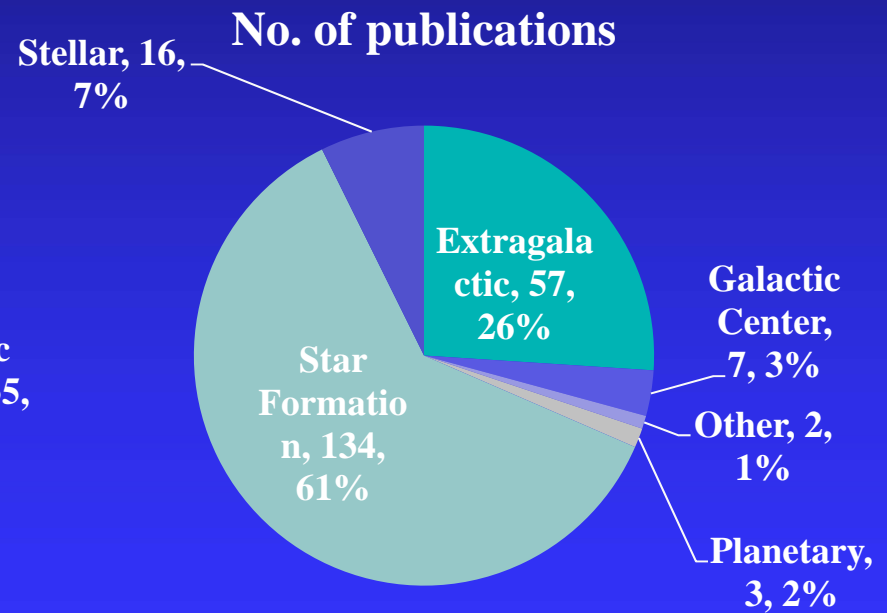
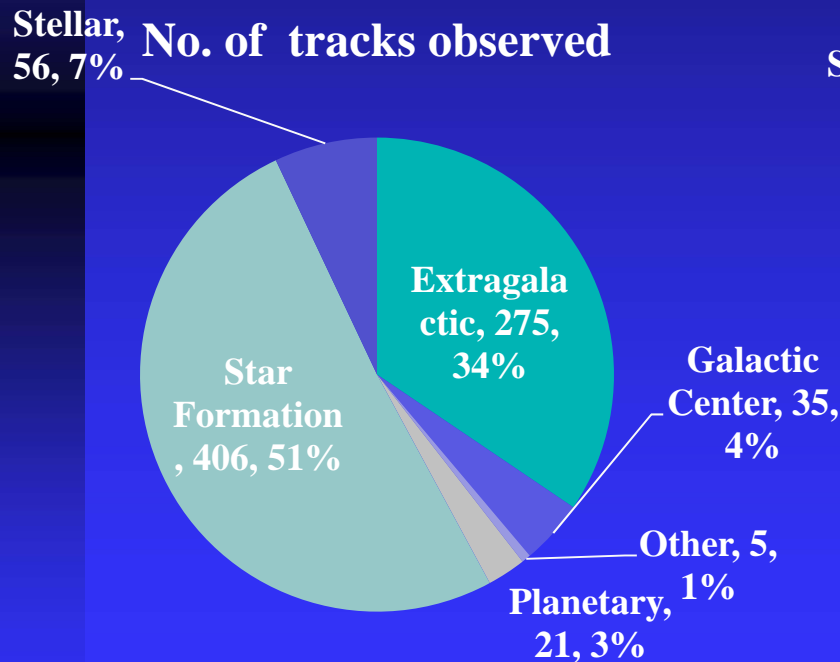
Refereed publications



Total of **220** refereed publications during 2007-Sept. 2010
55 pubs/year

Observing time and publications

- Extragalactic projects tend to require more observing time as compared to star formation projects





Student Training:

- **21 Ph.D. thesis with significant amount of SMA data** (not including those at partner institutions ASIAA and IfA):
 - ◆ Filipe Alves (visiting student/U. Barcelona, 2010), Joanna Brown (Caltech 2008), Simon Bruderer (ETH Zurich, expected 2010), Gemma Busquet (visiting student/U. Barcelona, expected 2010), Cassandra Fallscheer (Visiting student/Heidelberg 2010), Ramiro Franco-Hernandez (predoc/UNAM, 2009), Hao-Yu Liu (predoc/ASIAA, expected 2012), Roberto Galvan-Madrid (predoc/UNAM, expected 2011), Meredith Hughes (Harvard, 2010), Daniel Marrone (Harvard, 2006), Aina Palau (visiting student/U. Barcelona, 2007), Olja Panic (Leiden, 2009), Keping Qiu (SAO predoc/Nanjing University, 2010), Sheng-Li Qin (predoc/Beijing University, 2008), Javier Rodon (Visiting student/Heidelberg 2009), Peter Sollins (Harvard, 2005), Joshua Younger (Harvard, 2009), Vivien U (predoc/IfA, expected 2011), Junzhi Wang (predoc/Beijing University, 2006), Ke Wang (predoc/Beijing University, expected 2011), Lei Zhu (predoc/Beijing University, expected 2011)



Summary:

- SMA is a highly sought instrument among the mm/submm community.
- Science output from the SMA continues to increase, and remains very competitive as compared to other similar facilities.
- The main science output of the SMA is galactic star formation (61% publications) and extra galactic science (26% publications).