Scientific Results from Early Science

Göran Sandell Senior Science Advisor, SOFIA-USRA

2011 was a good year for SOFIA!!

- 35 SOFIA flights
 - 6 Short Science flights (3 FORCAST & 3 GREAT)
 - Basic Science 1 provided 9+ FORCAST flights for the science community (mostly US)
 - Basic Science 2 another 7 flights with GREAT for both the US and German astronomy community
 - And flights for the instrument teams (GREAT consortium plus one FORCAST flight shared with the community)

Two special SOFIA issues

- FORCAST decided to write up all the Short Science results in a special ApJ Letter issue.
 - 8 papers in total including one on SOFIA (Young et al. 2012) and one on FORCAST (Herter et al. 2012)
 - Another FORCAST Short Science Paper has since then been accepted in ApJ (Hirsch et al. 2012), Calibration paper, Herter et al ready to be submitted
 - No papers yet on Basic Science 1 data!

Two special SOFIA issues

- GREAT decided to combine both Short Science 2 and Basic Science 2 in a special A&A issue. This resulted in:
 - 22 papers of which 4 were technical
 - Of the 6 US proposals that flew, 3 were published (one paper published later with some GREAT data)
 - Of the 8 successful German proposals 5 were published in the special issue
 - A total of 9 Basic Science 2 papers from 7 GREAT flights

What is happening with Basic Science 1 data?

- These are the 9+ community flights with FORCAST (not insiders although some are)
- Are the results being written up? How many papers can we expect?
 - We sent out a questionnaire to all 20 successful BS1 GIs
 - 15 replies
 - 6 will definitely publish
 - 2 maybe
 - 5 (source not detected or not enough signal-tonoise)
 - 2 no, not enough for a paper

Discussion

- Why so few papers from the 10 Basic Science flights?
- Some explanations (multiple choice)
 - No deadline
 - No pressure
 - More challenging programs that push or exceed the performance of the observatory (SS1 observed bright, easy targets)
 - other