



Future Instrument Opportunities

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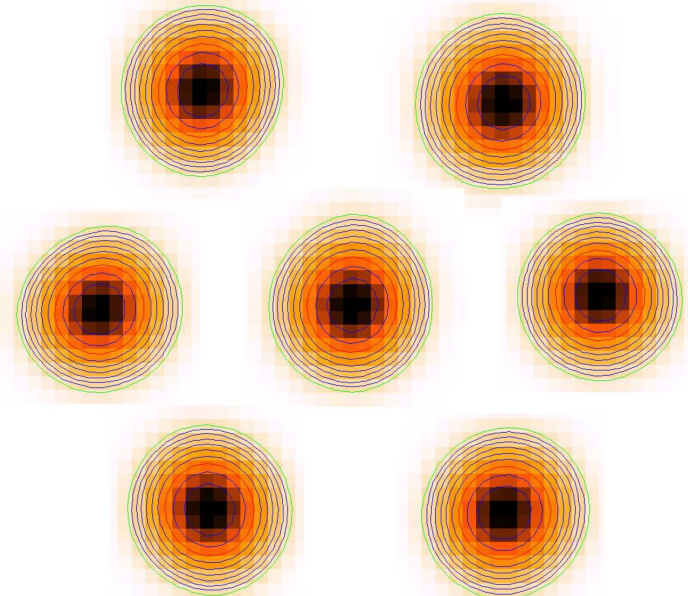
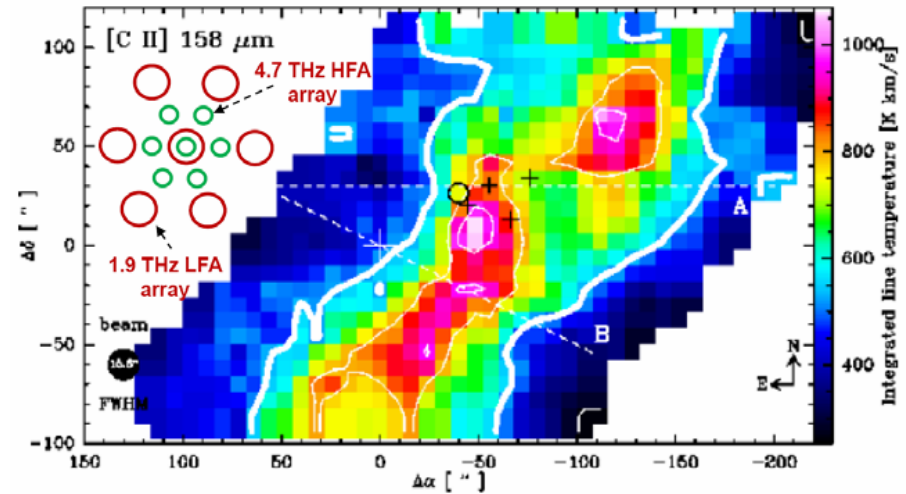
New Instruments on SOFIA



- As a facility that comes home every night, SOFIA has many opportunities to incorporate new technologies in instrumentation
- The Far-Infrared and sub-millimeter is one of the last areas of astronomy to benefit from advances in large sensor arrays



- upGREAT an enhancement of the GREAT heterodyne instrument developed by Rolf Güsten and collaborators.
- Compact heterodyne arrays
 - 7 pixels x 2 polarizations @ 1.9 to 2.5 THz
 - 7 pixels @ 4.7 THz [O I]
- Will map more than an order of magnitude faster than the previous instrument
- First light May 2015 and ***flying tonight !***





3rd Generation SI Call



- On 4/6/15, NASA issued a Community Announcement
 - <https://prod.nais.nasa.gov/cgi-bin/eps/synopsis.cgi?acqid=164733>
 - Intention to spend \$17M for one new SI during FY16-19
- Notional Schedule
 - Early June 2015 – Amendment to ROSES-2015 NASA Research Announcement as Program Element D.11
 - mid-July 2015 – Step 1 Proposals due
 - Late August 2015 – Step 2 Proposals due
 - 2018 time frame – Commissioning of instrument
- Changes since last time
 - ROSES Research Announcement rather than Announcement of Opportunity
 - Faster development time scale



<http://www.sofia.usra.edu>

