Expanding the SOFIA users community

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Proposal pressure from European observer community consistently seems light

• Proposal pressure seen from DLR and the rest of Europe has stagnated:
  • No growth in DLR component over past 3 cycles
  • European component outside of DLR community:
    • Makes up ~ 60% of “other” category shown in figure
    • No growth over past 3 cycles
    • Overall engagement is very low

• What is impeding the rest of ESA’s Herschel community from using SOFIA?

• Why is the growth of the DLR component not keeping pace with that of the US community?

• Actions to improve ESA community engagement:
  • Focused professional outreach led by DLR/DSI SOFIA team
  • DLR/DSI programmatic advocacy within Europe to make data reduction funding available to SOFIA projects that are relevant to ESA mission objectives: Hershel, JWST, etc
  • Your ideas here …
Focused professional outreach is needed to grow overall utilization and specific science applications

- **Exoplanet transits and imagery**
  - SOFIA should be more competitive than many ground-based facilities due to increased atmospheric stability and reduced scintillation noise
  - Effective use of SOFIA is not being realized
  - To enable transit spectroscopy, we must be willing to award long (>4 hr) flight legs

- **Recommend** that a small short-lived team of young external investigators be formed to plan/execute/publish a test case transit observation using DDT to characterize SOFIA capability
  - Team should begin by analyzing for root cause, [prior efforts](#) (e.g., GJ 1214b) that are said to have achieved 10X lower precision photometry than ground-based observations:
  - We are unlikely to receive exoplanet instrument proposals absent characterization of SOFIA’s photometric precision and relief on operational constraints that are inconsistent with exoplanet observing requirements

- **Planetary Science**
  - Focused professional outreach to the DPS and equivalent international communities

- **All areas:**
  - Revive Project effort to systematically cover key university departments and topical meetings in the US and abroad with talks on SOFIA
  - Initiate systematic proactive effort to insert SOFIA content into keynote talks at major meetings
Synergize SOFIA unique capability with other concurrent flight & ground-based assets

• Develop programmatic agreements with other observatories that enable one to include a SOFIA component in an observing proposal to the other asset
  • Examples: Inclusion of high resolution FIR spectroscopy or polarimetry in a JWST or ALMA proposal

• The above effort would:
  • Increase science impact of SOFIA and that of the other facility
  • Increase the overall visibility of SOFIA
  • Would likely require temporal coordination of CfPs among the facilities involved