

# SOFIA Platform Available For Ride-Along Research

Readiness level:  
 TRL 1-3: Concept  
 TRL 4-6: Prototype  
 TRL 7-9: Demonstrated

NASA Ames Instrumentation Workshop

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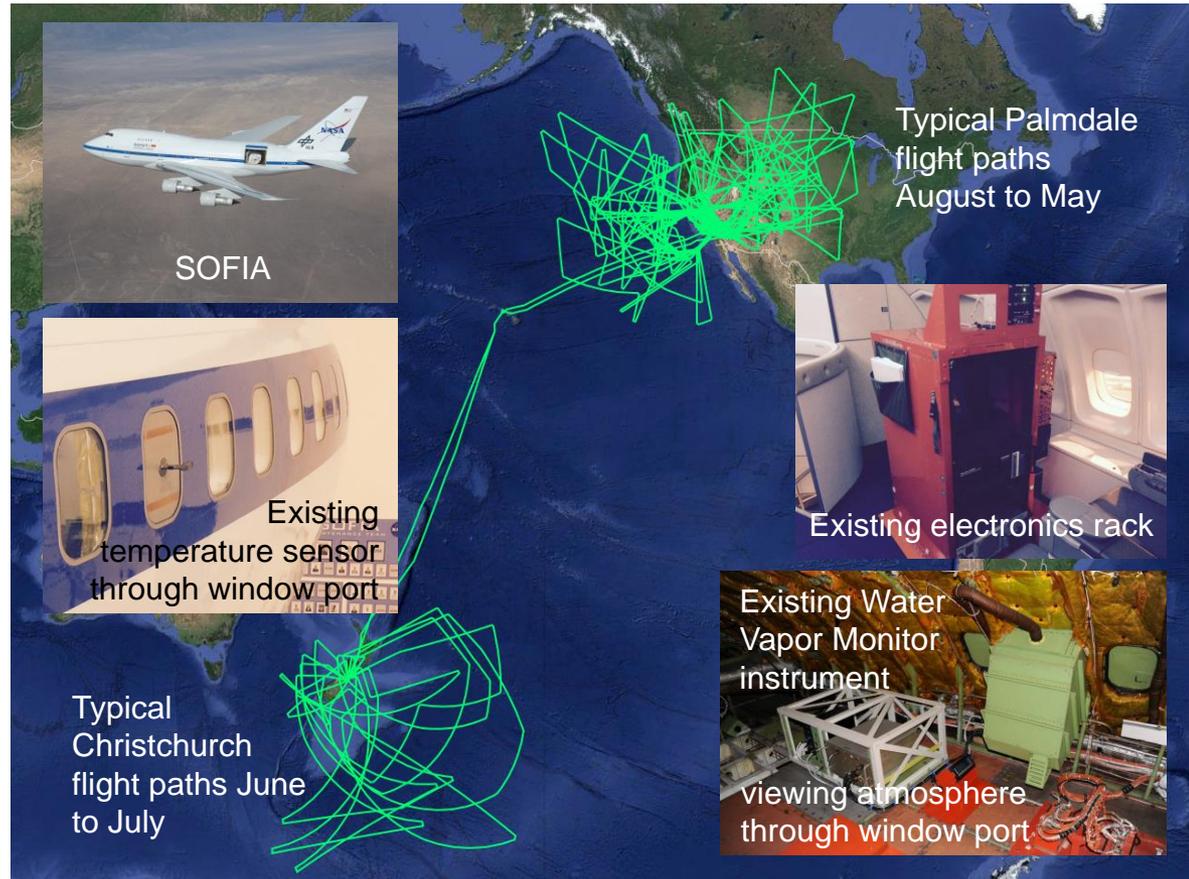
Technology / Application

*Stratospheric Observatory For Infrared Astronomy Platform available for*

*Ride-Along Research*

SOFIA is a 747SP with a 2.7m astronomical infrared telescope that can accommodate research instruments that do not interfere with astronomical observations

- Flies over 100 ten hour night flights each year
- Operates out of Palmdale California and Christchurch New Zealand (June/July)
- Flight altitudes between 39,000 ft. and 45,000 ft.
- Flight times, days, paths, and altitudes are fixed by observatory operations and typically not adjustable
- Window ports can be replaced with custom instrumentation
- Instrument operators can be flown
- Instrument accommodations are negotiable
- Air sampling and both side and nadir viewing directions possible



SOFIA

Existing temperature sensor through window port

Typical Palmdale flight paths August to May

Existing electronics rack

Existing Water Vapor Monitor instrument viewing atmosphere through window port

Typical Christchurch flight paths June to July

Funding / Timeline

- SOFIA is fully operational and funded.
- Non-SOFIA flight participants must fund all costs associated with integration, air-worthiness, unique operations, etc.
- Non-SOFIA flight participants and equipment can not interfere with SOFIA operations.

POC

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