

## SOFIA



**SOFIA, the Stratospheric Observatory for Infrared Astronomy**, is a partnership of NASA and DLR. It features a modified Boeing 747SP aircraft carrying a telescope with an effective diameter of 2.5 meters.

The aircraft is based at NASA's Armstrong Flight Research Center in Palmdale, California. The Science Mission Operations center is at NASA Ames, Mountain View, California. In a flight altitude of 12 - 14 km, the observatory is above most of the terrestrial water vapor layer and allows observations throughout the complete IR/FIR wavelength range.

SOFIA had its first light in 2010 and is now in fully operational mode with regular deployments to the Southern hemisphere (New Zealand). It has a [suite of instruments](#) [1] covering various science areas. The German community participates with two science instruments, the FIR heterodyne Spectrometer [upGREAT](#) [2] ([MPIfR](#) [3], Bonn; Universität zu Köln; [DLR Institut für Optische Sensorsysteme](#) [4]), operated as a Principal Investigator Instrument, and the far-infrared imaging spectrometer [FIFI-LS](#) [5] (University of Stuttgart), recently established as a SOFIA Facility Instrument.

Webpages with further information:

Deutsches SOFIA Institut: <http://www.dsi.uni-stuttgart.de/index.html> [6]

SOFIA Science Center: <https://www.sofia.usra.edu> [7]; [List of SOFIA publications](#) [8] maintained at the SOFIA Science Center

NASA SOFIA: [http://www.nasa.gov/mission\\_pages/SOFIA/](http://www.nasa.gov/mission_pages/SOFIA/) [9]

**Source URL:** <http://www.astro.uni-koeln.de/node/959>

### Links:

[1] <https://www.sofia.usra.edu/science/instruments>

[2] <http://www.astro.uni-koeln.de/node/893>

[3] <http://www.mpifr-bonn.mpg.de/>

[4] [http://www.dlr.de/os/desktopdefault.aspx/tabid-3452/5341\\_read-7830/](http://www.dlr.de/os/desktopdefault.aspx/tabid-3452/5341_read-7830/)

[5] <http://www.irs.uni-stuttgart.de/forschung/fifi-ls/>

[6] <http://www.dsi.uni-stuttgart.de/index.html>

[7] <https://www.sofia.usra.edu>

[8] <https://www.sofia.usra.edu/science/publications/sofia-publications>

[9] [http://www.nasa.gov/mission\\_pages/SOFIA/](http://www.nasa.gov/mission_pages/SOFIA/)

