

# White House budget to ground SOFIA

Obama budget request slashes funds for NASA's airborne observatory.

Alexandra Witze

04 March 2014



NASA Photo/Tom Tschida

The Stratospheric Observatory for Infrared Astronomy would be grounded under a budget request from the White House.

US President Barack Obama has proposed grounding the world's largest airborne observatory, just 11 days after it reached full operational capability.

Under a proposed budget for the 2015 fiscal year, released today, NASA would drastically slash its funding for the Stratospheric Observatory for Infrared Astronomy (SOFIA) from US\$84 million to \$12 million. Unless partners step in to make up the difference, the cuts would ground the aeroplane, a modified Boeing 747 that carries a 2.5-metre telescope.

NASA pays 80% of SOFIA's costs. The rest is covered by Germany, under an agreement with the German Aerospace Center (DLR). Since the mid-1990s, the partnership has spent \$1.25 billion on the project, earning it a reputation as an [astronomical white elephant](#).

SOFIA began making science observations in 2010, and [reached its full complement of instruments](#) less than two weeks ago. It flies above most of the atmosphere to gather infrared observations that would otherwise be obscured by water vapour. "It's just starting to produce science in a big way," says Erick Young, SOFIA's science mission operations director. "It would be a very bad time to make any reductions."

## Chequered past

SOFIA has a long history of delays and budget overruns. In 2006, NASA tried to cancel the project, but an outcry from Congress and from Germany forced the agency to restore it. Few anticipated the latest proposed cut. "It's an enormous surprise," says Dan Lester, an astronomer at the University of Texas at Austin who has served on SOFIA evaluation panels.

The White House budget summary suggests that SOFIA is being cut "to fund higher priority science missions", and hints that those priorities might include extending the Cassini mission to Saturn.

The next hurdle for SOFIA was expected to be a 'senior review' in 2016, in which independent astronomers would evaluate it against other operational NASA missions to gauge whether it is worth continuing. The memorandum of understanding between the DLR and NASA also expires in two years. It allows either party to end the project. NASA administrator Charles Bolden called his counterpart in Germany last week to notify him of the potential cut. SOFIA "has done very well, but we had to make a choice", Bolden said in a media conference on 4 March.

With operating costs of about \$80 million a year, the observatory consumes more operating costs than any NASA astrophysics mission except the Hubble Space Telescope, mainly owing to the costs of jet fuel and of keeping pilots, crew and other staff on hand. Many astronomers have complained about its high cost per hour of scientific observation. And this year, it was already scheduled for a 5.5-month maintenance check, a federally mandated time-out that eliminates science operations for much of the rest of 2014.

Following Obama's budget request, Congress will determine final budget numbers for all federal agencies. SOFIA's flight operations and science team are both based in California, and congressional representatives in the state may soon start getting calls. "I guess we're going to have to start a lobbying effort," says Robert Gehrz, an astronomer at the University of Minnesota in Minneapolis.

*Nature* | doi:10.1038/nature.2014.14821