



1
00:00:00,627 --> 00:00:02,627
(Gentle background music)

2
00:00:02,627 --> 00:00:05,839
SOFIA is a telescope inside of an airplane.

3
00:00:06,214 --> 00:00:10,051
SOFIA is the Stratospheric Observatory for Infrared Astronomy.

4
00:00:10,051 --> 00:00:13,930
It's a 17 ton telescope in the back of a 747.

5
00:00:13,930 --> 00:00:17,434
Heavily, heavily modified. Some fantastic engineering.

6
00:00:17,892 --> 00:00:21,813
The reason we want to fly in a 747 at high altitude is

7
00:00:21,813 --> 00:00:24,649
to get the data that we can't get on the ground at all.

8
00:00:25,150 --> 00:00:28,361
SOFIA is a joint NASA/DLR mission.

9
00:00:28,361 --> 00:00:31,614
DLR is our German partners, the German Space Agency,

10
00:00:31,614 --> 00:00:33,324
and their contribution is the telescope.

11
00:00:33,825 --> 00:00:37,036
The goal is to learn more about the universe

12
00:00:37,036 --> 00:00:41,291
by looking back as far as we can to find our origins,

13
00:00:41,291 --> 00:00:42,792

to find how stars are formed.

14

00:00:43,001 --> 00:00:44,878

To understand our cosmic origins,

15

00:00:44,878 --> 00:00:47,922

NASA Astrophysics has three fundamental questions.

16

00:00:47,922 --> 00:00:49,549

How does the universe work?

17

00:00:49,549 --> 00:00:51,676

How did we get here? And are we alone?

18

00:00:51,676 --> 00:00:54,304

And different astrophysics missions will study