



1
00:00:07,749 --> 00:00:04,470
we have through the exploration over the

2
00:00:10,070 --> 00:00:07,759
last 50 years of the solar system we

3
00:00:11,509 --> 00:00:10,080
have come to understand the planets that

4
00:00:13,990 --> 00:00:11,519
surround us and we have come to

5
00:00:16,070 --> 00:00:14,000
understand much of the things about our

6
00:00:18,310 --> 00:00:16,080
solar system but we're missing a

7
00:00:20,790 --> 00:00:18,320
fundamental part we don't know what the

8
00:00:23,429 --> 00:00:20,800
boundaries of our solar system are that

9
00:00:26,150 --> 00:00:23,439
surround our entire solar system and

10
00:00:37,430 --> 00:00:26,160
separate us from the galactic

11
00:00:40,470 --> 00:00:39,670
those boundaries protect

12
00:00:42,869 --> 00:00:40,480
us

13
00:00:45,830 --> 00:00:42,879

and explorers

14

00:00:48,549 --> 00:00:45,840

leaving earth and going into space from

15

00:01:02,229 --> 00:00:48,559

the harsh galactic radiation

16

00:01:06,550 --> 00:01:04,229

i am dave mcomas the principal

17

00:01:10,070 --> 00:01:06,560

investigator for ibex the interstellar

18

00:01:15,350 --> 00:01:12,789

ibex the interstellar boundary explorer

19

00:01:18,070 --> 00:01:15,360

is a new nasa mission to discover the

20

00:01:25,510 --> 00:01:18,080

interaction between our solar system and

21

00:01:30,149 --> 00:01:27,670

as principal investigator for the ibex

22

00:01:32,069 --> 00:01:30,159

mission i'm responsible for everything

23

00:01:42,630 --> 00:01:32,079

from the conception of the mission all

24

00:01:47,190 --> 00:01:45,510

the solar wind flowing out from the sun

25

00:01:49,109 --> 00:01:47,200

inflates this bubble that we call the

26

00:01:50,230 --> 00:01:49,119

heliosphere if it weren't for that

27

00:01:52,789 --> 00:01:50,240

bubble

28

00:01:54,310 --> 00:01:52,799

very dangerous galactic cosmic rays

29

00:01:56,230 --> 00:01:54,320

would be coming into the inner solar

30

00:02:03,270 --> 00:01:56,240

system and could in fact affect life on

31

00:02:08,869 --> 00:02:06,550

ibex's job is to study those boundaries

32

00:02:10,949 --> 00:02:08,879

and understand how they really work and

33

00:02:12,949 --> 00:02:10,959

tell us how this very important region