



1
00:00:00,267 --> 00:00:03,350
(music)

2
00:00:28,240 --> 00:00:29,280
- We all live here.

3
00:00:29,280 --> 00:00:30,960
We want to know what's happening

4
00:00:30,960 --> 00:00:34,250
and why it's happening the way that it is.

5
00:00:34,250 --> 00:00:37,763
Space offers us a birds
eye view of our planet.

6
00:00:50,280 --> 00:00:51,500
- The satellites that we have today

7
00:00:51,500 --> 00:00:52,950
are so much more advanced.

8
00:00:52,950 --> 00:00:56,320
It's like living in science
fiction when you think about it.

9
00:00:56,320 --> 00:00:58,840
Today, we can do everything
from that big picture view

10
00:00:58,840 --> 00:01:01,710
to zooming down in a small location.

11
00:01:01,710 --> 00:01:04,290
- Well, the earth is a system.

12
00:01:04,290 --> 00:01:05,530
Everything is connected.

13

00:01:05,530 --> 00:01:08,260

The atmosphere, the oceans, the air,

14

00:01:08,260 --> 00:01:10,770

all of that has to work together.

15

00:01:10,770 --> 00:01:13,120

So there is always a balance, you know,

16

00:01:13,120 --> 00:01:15,317

that exists around earth,

17

00:01:15,317 --> 00:01:17,843

and we can measure it, we can see it.

18

00:01:24,810 --> 00:01:26,440

- Sometimes we think of the polar regions

19

00:01:26,440 --> 00:01:28,610

as these remote places

disconnected from us

20

00:01:28,610 --> 00:01:30,760

and nothing could be

further from the truth.

21

00:01:30,760 --> 00:01:33,110

Changes in the sea ice cover change how

22

00:01:33,110 --> 00:01:35,520

our atmosphere works, changes our weather

23

00:01:35,520 --> 00:01:38,710

all over the planet, especially

here in North America.

24

00:01:38,710 --> 00:01:41,630

And changes in the land ice,
the glaciers of the Arctic,

25

00:01:41,630 --> 00:01:43,400

and of Greenland, and of Antarctica,

26

00:01:43,400 --> 00:01:45,350

they change our local sea levels.

27

00:01:45,350 --> 00:01:47,420

And one of the best ways to study those,

28

00:01:47,420 --> 00:01:49,415

is by satellite, because
you're trying to cover

29

00:01:49,415 --> 00:01:51,453

continental scale areas.

30

00:01:59,860 --> 00:02:02,250

- If an impending storm is coming in

31

00:02:02,250 --> 00:02:04,620

we know that, usually days in advance.

32

00:02:04,620 --> 00:02:07,590

And so these early warning
systems and observations

33

00:02:07,590 --> 00:02:09,690

all come from NASA
technologies that have been

34

00:02:09,690 --> 00:02:10,943

launched to space.

35

00:02:16,300 --> 00:02:19,800

- We can from space see
how the earth is changing.

36

00:02:19,800 --> 00:02:22,220

We have views from
Nevada and how Las Vegas

37

00:02:22,220 --> 00:02:25,150

has impacted the area
around through the years

38

00:02:25,150 --> 00:02:28,040

and how the sprawl has
taken over the desert.

39

00:02:28,040 --> 00:02:31,970

So it is just an amazing way
to see a rapid progression

40

00:02:31,970 --> 00:02:34,560

of those images and how
the landscape changes

41

00:02:34,560 --> 00:02:35,866

because of human action.

42

00:02:35,866 --> 00:02:39,320

(bouncy techno music)

43

00:02:39,320 --> 00:02:41,180

- Here it is. This little blue marble

44

00:02:41,180 --> 00:02:42,840

that's really a spaceship.

45

00:02:42,840 --> 00:02:44,400

And all of us are on it.

46

00:02:44,400 --> 00:02:46,100

And everybody you've ever known,

47

00:02:46,100 --> 00:02:48,540

everybody you care about is
down on that little planet

48

00:02:48,540 --> 00:02:50,690

and then you extrapolate that and go,

49

00:02:50,690 --> 00:02:53,230

wow, every human existence
that has ever happened

50

00:02:53,230 --> 00:02:54,960

in all of time is down
on this little thing

51

00:02:54,960 --> 00:02:56,760

that I went around in 90 minutes.

52

00:02:56,760 --> 00:02:59,150

And also, the earth seems very finite.

53

00:02:59,150 --> 00:03:01,280

And that more people that see our planet

54

00:03:01,280 --> 00:03:02,920

from that vantage point,

55

00:03:02,920 --> 00:03:04,440

the better we'll be to each other

56

00:03:04,440 --> 00:03:05,980

and maybe to our home planet.

57

00:03:05,980 --> 00:03:09,030

- Earth is the only planet
that we know that hosts life,

58

00:03:09,030 --> 00:03:11,150

therefore we absolutely must protect it

59
00:03:11,150 --> 00:03:14,080
and NASA is the agency that can understand

60
00:03:14,080 --> 00:03:16,220
what's causing the changes to the earth

61
00:03:16,220 --> 00:03:18,100
in a way that can inform policymakers

62
00:03:18,100 --> 00:03:20,060
so they can make good decisions.

63
00:03:20,060 --> 00:03:22,675
- First and foremost, we have
to understand the planet that