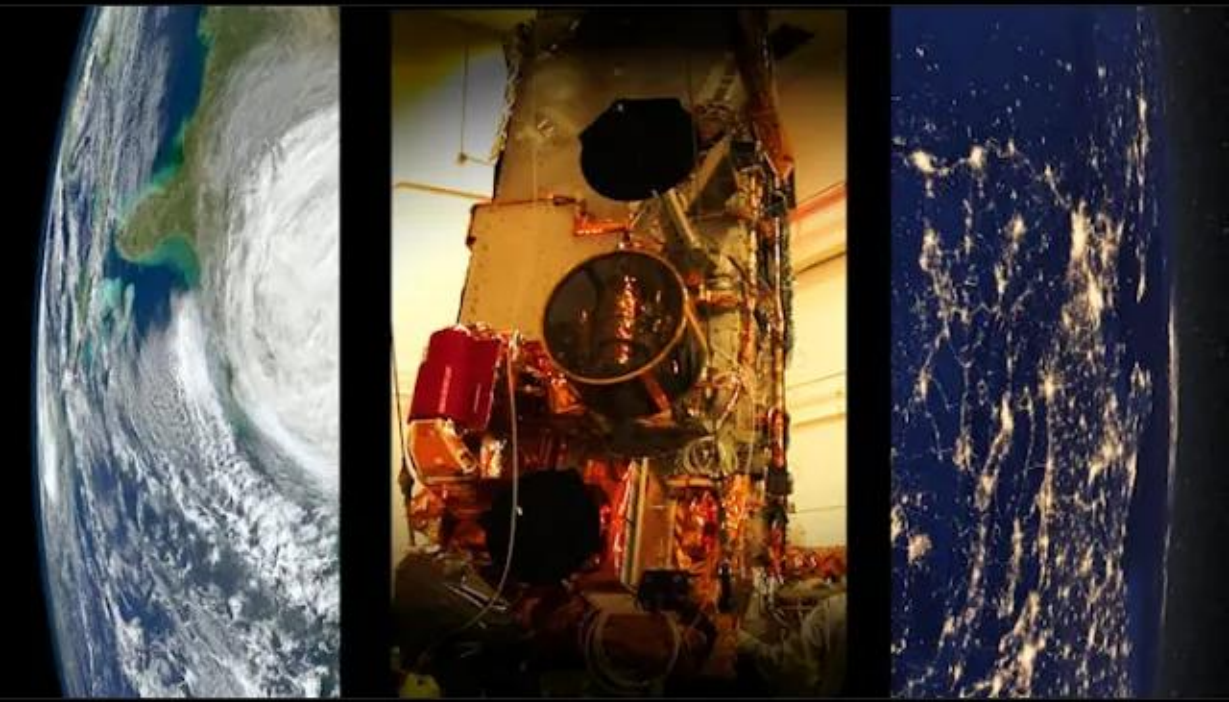

1
00:00:00,000 --> 00:00:04,000
[pulsing music]

2
00:00:12,000 --> 00:00:16,000
Narrator: Ten years ago, a remarkable suite of instruments

3
00:00:16,000 --> 00:00:20,000
aboard the first of a series of polar-orbiting

4
00:00:20,000 --> 00:00:24,000
known as the Joint Polar Satellite System.

5
00:00:24,000 --> 00:00:28,000
This is the story of the satellite that led the way.

6
00:00:28,000 --> 00:00:32,000
It has measured storms, fires,

7
00:00:40,000 --> 00:00:36,000
v

8
00:00:40,000 --> 00:00:44,000
critical long-term measurements of our planet.

9
00:00:44,000 --> 00:00:48,000
Announcer: 4, 3, 2 main engine start, one zero and liftoff

10
00:00:48,000 --> 00:00:52,000
Narrator: On Oct. 28, 2011, the Suomi-NPP satellite

11
00:00:52,000 --> 00:00:56,000
lifted off on a Delta II rocket from Vandenburg, California.

12
00:00:56,000 --> 00:01:00,000
Named after Verner Suomi,

13
00:01:00,000 --> 00:01:04,000

who invented the first spin-scan camera to observe weather from space,

14
00:01:04,000 --> 00:01:08,000
the satellite marked the beginning of another new era

15
00:01:08,000 --> 00:01:12,000
the Join Polar Satellite System, a mission to provde

16
00:01:12,000 --> 00:01:16,000
valuable weather and environmental data into the 2030s.\h

17
00:01:16,000 --> 00:01:20,000
And during the last decade, Suomi-NPP

18
00:01:20,000 --> 00:01:24,000
has become well known for its Blue Marble images and

19
00:01:24,000 --> 00:01:28,000
also its Day Night Band, which show us power outages

20
00:01:28,000 --> 00:01:32,000
after storms and human activities at night,

21
00:01:32,000 --> 00:01:36,000
such as highways, sea travel, and natural gas flares.

22
00:01:36,000 --> 00:01:40,000
Continuing observations begun by satellites

23
00:01:40,000 --> 00:01:44,000
like NASA’s Terra, Aqua, and Aura,

24
00:01:44,000 --> 00:01:48,000
it allows for a number of products that help people on the ground:\h

25
00:01:48,000 --> 00:01:52,000
Its data allow us to: Map wildfires, track the movement

26
00:01:52,000 --> 00:01:56,000
of wildfire smoke and then measure the air quality

27
00:01:56,000 --> 00:02:00,000
as that smoke moves through an area.

28
00:02:00,000 --> 00:02:04,000
Measure the insides of hurricanes and reveal the structure and intensity of a storm

29
00:02:04,000 --> 00:02:08,000
and the ocean surface temperature that fuels it,

30
00:02:08,000 --> 00:02:12,000
Track the health of major crops worldwide by showing how they’re impacted

31
00:02:12,000 --> 00:02:16,000
by weather and temperature,

32
00:02:16,000 --> 00:02:20,000
And measure emissions from volcanoes that help determine air quality and visibility for pilots.

33
00:02:20,000 --> 00:02:24,000
Over the last 10 years, NPP data has increased our understanding

34
00:02:24,000 --> 00:02:28,000
of major events, like the life cycle of Hurricane Sandy,

35
00:02:28,000 --> 00:02:32,000
the carbon released by Australian bush fires,

36
00:02:32,000 --> 00:02:36,000
Saharan dust storms across the Atlantic,

37
00:02:36,000 --> 00:02:40,000
and emissions decreases from global pandemic.

38
00:02:40,000 --> 00:02:44,000

The Joint Polar Satellite System’s next satellite

39
00:02:44,000 --> 00:02:48,000
launched six years later in 2017

40
00:02:48,000 --> 00:02:52,000
and its sister satellites will launch over the next decade,