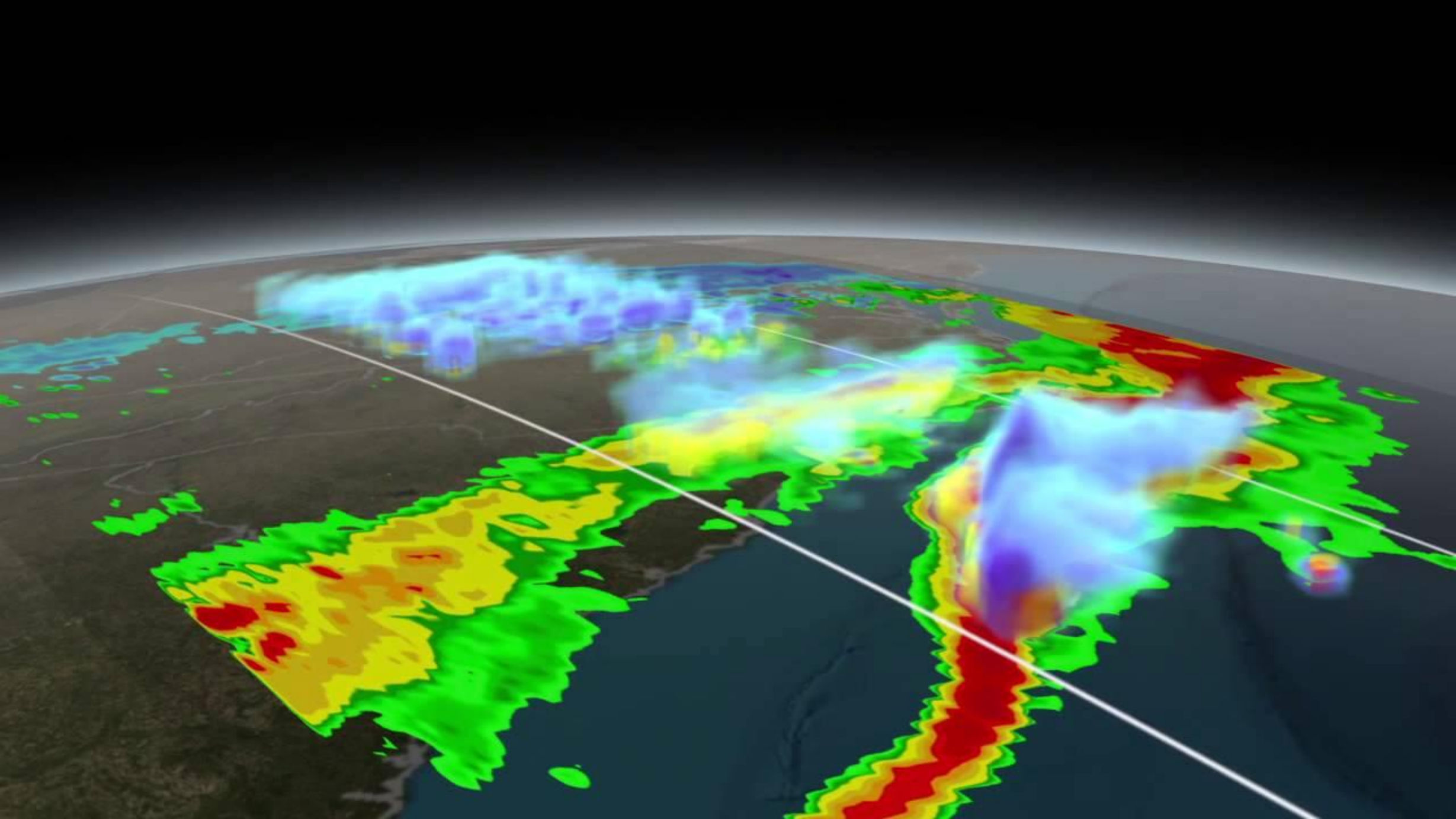

1
00:00:00,010 --> 00:00:04,020
On March 17, 2014, the GPM, or Global Precipitation

2
00:00:04,040 --> 00:00:08,070
Measurement mission's Core Observatory, flew over a

3
00:00:08,090 --> 00:00:12,110
rare late-season East Coast snow storm. This was also one of the

4
00:00:12,130 --> 00:00:16,130
first major snow storms observed by GPM shortly after

5
00:00:16,150 --> 00:00:20,140
it was launched on February 27, 2014. Shades of

6
00:00:20,160 --> 00:00:24,150
green to red are liquid precipitation. Cyan to purple are frozen

7
00:00:24,170 --> 00:00:28,180
precipitation. GPM is the first NASA satellite designed to

8
00:00:28,200 --> 00:00:32,230
measure the full range of light rain, heavy rain, and falling snow.

9
00:00:32,250 --> 00:00:36,240
Off the coasts of the Carolinas, the tops of the clouds are icy,

10
00:00:36,260 --> 00:00:40,270
reaching about 10 kilometers up into the atmosphere. Down at the surface

11
00:00:40,290 --> 00:00:44,310
heavy rains fall in the Atlantic Ocean. Farther north

12
00:00:44,330 --> 00:00:48,330
over West Virginia, Virginia and Maryland, the post-frontal part

13
00:00:48,350 --> 00:00:52,350

of the storm has much lower cloud tops, and they are

14
00:00:52,370 --> 00:00:56,390
composed of snow, which falls at the surface. GPM's broader

15
00:00:56,410 --> 00:01:00,410
spectrum of precipitation data gives scientists a better estimate of

16
00:01:00,430 --> 00:01:04,430
water content and a new perspective on winter storms,

17
00:01:04,450 --> 00:01:08,440
particularly in the middle and high latitudes.

18
00:01:08,460 --> 00:01:12,470
In addition to its own data gathering, the GPM Core Observatory

19
00:01:12,490 --> 00:01:16,490
is the reference standard for the GPM Constellation, a network

20
00:01:16,510 --> 00:01:20,520
of international partner satellites that detect falling rain and

21
00:01:20,540 --> 00:01:24,540
snow all over the globe every few hours. Here

22
00:01:24,560 --> 00:01:28,580
the partner satellites crisscross the globe and observe the March 17

23
00:01:28,600 --> 00:01:32,620
snow storm.