



1
00:00:00,030 --> 00:00:04,050
music throughout

2
00:00:04,070 --> 00:00:08,090
Liz MacDonald: People were out observing the aurora, and they started noticing something that was overhead

3
00:00:08,110 --> 00:00:12,090
as well, when they were seeing aurora far to the northern regions.

4
00:00:12,110 --> 00:00:16,110
It was unlike most aurora. Talked to the scientists,

5
00:00:16,130 --> 00:00:20,120
we didn't know what it was. And together,

6
00:00:20,140 --> 00:00:24,200
they said we will keep taking observations, and we will call it Steve

7
00:00:24,220 --> 00:00:28,210
in the meantime. Steve is mostly a very narrow purple arc

8
00:00:28,230 --> 00:00:32,260
and sometimes it has these little green features

9
00:00:32,280 --> 00:00:36,310
that go along with it as well that are kind of like waving fingers

10
00:00:36,330 --> 00:00:40,370
or a picket fence. That means that there's plasma physics

11
00:00:40,390 --> 00:00:44,390
happening up there to cause that light and to make these

12
00:00:44,410 --> 00:00:48,400
little discrete features that we don't understand yet.

13
00:00:48,420 --> 00:00:52,410

We now have some satellite observations from the ESA satellite

14

00:00:52,430 --> 00:00:56,450

called SWARM that show that Steve

15

00:00:56,470 --> 00:01:00,480

optically is associated with a very strong flow

16

00:01:00,500 --> 00:01:04,490

in the particles in the ionosphere, the upper level of our atmosphere.

17

00:01:04,510 --> 00:01:08,580

Steve is important for a number of reasons. It's really

18

00:01:08,600 --> 00:01:12,580

exciting that people armed with cameras

19

00:01:12,600 --> 00:01:16,600

all over the globe can capture something that we didn't fully understand

20

00:01:16,620 --> 00:01:20,640

and shed new light on that.

21

00:01:20,660 --> 00:01:24,690

It's also really exciting that this happens further to the south where there are more people.

22

00:01:24,710 --> 00:01:28,690

So, it might be a kind of aurora that more people can see than the usual kind.

23

00:01:28,710 --> 00:01:32,710

We are now able to look up at the sky and see

24

00:01:32,730 --> 00:01:36,710

things about the aurora and this sub-auroral region

25

00:01:36,730 --> 00:01:40,710

that we never understood before.

26

00:01:40,730 --> 00:01:44,720

We can correlate that with our traditional observations and lead to greater

27

00:01:44,740 --> 00:01:48,730

understanding.

28

00:01:48,750 --> 00:01:52,780

Thank you to the citizen scientists around the world who help us explore as one.

29

00:01:52,800 --> 00:01:56,780

Join the search for STEVE at www.aurorasaurus.org

30

00:02:04,790 --> 00:02:00,790

tone