



1  
00:00:07,430 --> 00:00:05,190  
i've been working

2  
00:00:10,870 --> 00:00:07,440  
remotely on the galapagos for the last

3  
00:00:12,629 --> 00:00:10,880  
25 years published a few papers

4  
00:00:13,990 --> 00:00:12,639  
had some wonderful collaborations with

5  
00:00:16,390 --> 00:00:14,000  
people

6  
00:00:18,550 --> 00:00:16,400  
but i've never been down there this year

7  
00:00:19,990 --> 00:00:18,560  
happens to coincide with the 200th

8  
00:00:21,029 --> 00:00:20,000  
anniversary of the birth of charles

9  
00:00:23,509 --> 00:00:21,039  
darwin

10  
00:00:25,910 --> 00:00:23,519  
it's also the 150th anniversary of the

11  
00:00:27,990 --> 00:00:25,920  
publication of the origin of species

12  
00:00:30,390 --> 00:00:28,000  
to celebrate that the charles darwin

13  
00:00:32,389 --> 00:00:30,400

foundation is holding an international

14

00:00:34,790 --> 00:00:32,399

symposium they've invited me to come

15

00:00:37,430 --> 00:00:34,800

down i'm going to present a paper on

16

00:00:39,750 --> 00:00:37,440

my perspective of the galapagos over the

17

00:00:41,270 --> 00:00:39,760

last 25 years as a satellite

18

00:00:44,310 --> 00:00:41,280

oceanographer

19

00:00:47,190 --> 00:00:44,320

i wrote a proposal to nasa to study the

20

00:00:49,590 --> 00:00:47,200

ocean ocean color in particular eastern

21

00:00:50,470 --> 00:00:49,600

pacific using this new satellite that

22

00:00:53,270 --> 00:00:50,480

they had

23

00:00:57,590 --> 00:00:53,280

and that's where my research started

24

00:00:59,750 --> 00:00:57,600

just at that time in the 8283 period

25

00:01:01,029 --> 00:00:59,760

this was the biggest el nino of the

26

00:01:03,430 --> 00:01:01,039

century

27

00:01:05,509 --> 00:01:03,440

and here i am sitting on a data set that

28

00:01:08,469 --> 00:01:05,519

captured for the first time

29

00:01:10,550 --> 00:01:08,479

the impact on a very large scale of el

30

00:01:12,310 --> 00:01:10,560

nino

31

00:01:16,469 --> 00:01:12,320

having that perspective in space and

32

00:01:18,390 --> 00:01:16,479

watching this event develop over time

33

00:01:19,670 --> 00:01:18,400

revealed things that we'd never seen

34

00:01:21,510 --> 00:01:19,680

before

35

00:01:23,510 --> 00:01:21,520

so they've invited me to come down so

36

00:01:25,510 --> 00:01:23,520

i'm really excited about it

37

00:01:26,469 --> 00:01:25,520

of all the places in the world there's

38

00:01:28,390 --> 00:01:26,479

probably

39

00:01:30,789 --> 00:01:28,400

no place

40

00:01:32,710 --> 00:01:30,799

like the galapagos for a number of

41

00:01:34,230 --> 00:01:32,720

different reasons the volcanic islands

42

00:01:35,830 --> 00:01:34,240

in the middle of the ocean

43

00:01:37,990 --> 00:01:35,840

they're about a thousand kilometers to

44

00:01:40,710 --> 00:01:38,000

the west of south america

45

00:01:43,350 --> 00:01:40,720

and they sit right on the equator

46

00:01:46,069 --> 00:01:43,360

and because of that unique position

47

00:01:48,950 --> 00:01:46,079

they are influenced by some very very

48

00:01:50,389 --> 00:01:48,960

unique oceanographic conditions because

49

00:01:52,630 --> 00:01:50,399

of their isolation

50

00:01:55,030 --> 00:01:52,640

it's been a place where evolution could

51  
00:01:56,870 --> 00:01:55,040  
run rampant and very quickly

52  
00:01:59,910 --> 00:01:56,880  
it's the only place in the world where

53  
00:02:00,789 --> 00:01:59,920  
you'll find tropical subtropical

54  
00:02:03,429 --> 00:02:00,799  
and

55  
00:02:05,429 --> 00:02:03,439  
you know almost antarctic species

56  
00:02:06,550 --> 00:02:05,439  
because of the unique environment it's

57  
00:02:08,630 --> 00:02:06,560  
the only place where you'll find

58  
00:02:10,630 --> 00:02:08,640  
penguins and coral reefs

59  
00:02:13,270 --> 00:02:10,640  
in the same location

60  
00:02:15,510 --> 00:02:13,280  
darwin spent five weeks in the galapagos

61  
00:02:16,790 --> 00:02:15,520  
most people admit that if it had not

62  
00:02:18,229 --> 00:02:16,800  
been for those five weeks in the

63  
00:02:19,670 --> 00:02:18,239

galapagos and the things that he had

64

00:02:21,670 --> 00:02:19,680

seen there

65

00:02:23,589 --> 00:02:21,680

that he probably would not have come up

66

00:02:27,750 --> 00:02:23,599

with the origin of species

67

00:02:34,229 --> 00:02:29,990

what he saw in the galapagos

68

00:02:40,790 --> 00:02:34,239

critically changed the way he viewed

69

00:02:40,800 --> 00:02:44,309

it's been a really strange

70

00:02:47,830 --> 00:02:45,670

realization that i'm actually going to

71

00:02:49,830 --> 00:02:47,840

finally get to go to the galapagos

72

00:02:51,750 --> 00:02:49,840

i feel like i know them but i know them

73

00:02:52,790 --> 00:02:51,760

from a distance so i don't know how i'm

74

00:02:55,509 --> 00:02:52,800

going to feel

75

00:02:57,670 --> 00:02:55,519

it's exciting it's a little scary

76

00:03:00,229 --> 00:02:57,680

because i think i know about the place

77

00:03:02,869 --> 00:03:00,239

but but maybe i really don't you know my

78

00:03:04,550 --> 00:03:02,879

perspective has been from 600 kilometers

79

00:03:05,990 --> 00:03:04,560

up in space

80

00:03:08,229 --> 00:03:06,000

but i'm going to get real up close and

81

00:03:10,630 --> 00:03:08,239

personal with lava fields and upwelling

82

00:03:13,190 --> 00:03:10,640

of the equatorial undercurrent and the

83

00:03:14,790 --> 00:03:13,200

winds and the waves and the tortoises

84

00:03:16,470 --> 00:03:14,800

and

85

00:03:22,390 --> 00:03:16,480

it's

86

00:03:23,670 --> 00:03:22,400

thought about for years and years and