Exploring Our Solar System

with Dr. Amy Simon

1
00:00:10,870 --> 00:00:06,700
[Music]

2
00:00:13,190 --> 00:00:10,880
i would say as a child i was always

3
00:00:15,589 --> 00:00:13,200
interested in all things kind of science

4
00:00:16,290 --> 00:00:15,599
related i liked rocks i like dinosaurs i

5
00:00:17,990 --> 00:00:16,300
like planets

6
00:00:20,230 --> 00:00:18,000
[Music]

7
00:00:22,150 --> 00:00:20,240
but my pivotal moments i think i had two

8
00:00:24,310 --> 00:00:22,160
of them and the first was the space

9
00:00:25,670 --> 00:00:24,320
shuttle program and sally ride and the

10
00:00:27,830 --> 00:00:25,680
fact that you know she was the first

11
00:00:30,230 --> 00:00:27,840
american woman in space and i really

12
00:00:34,229 --> 00:00:30,240
wanted to do that

13
00:00:35,750 --> 00:00:34,239

but the second was the voyager flybys

14
00:00:37,510 --> 00:00:35,760
and while i don't really have memories

15
00:00:45,590 --> 00:00:37,520
of the jupiter flyby i distinctly

16
00:00:49,910 --> 00:00:47,910
and getting these images of these alien

17
00:00:51,510 --> 00:00:49,920
worlds these funny moons that you know

18
00:00:53,189 --> 00:00:51,520
all different colors all sorts of things

19
00:00:54,950 --> 00:00:53,199
going on there that we didn't understand

20
00:00:57,029 --> 00:00:54,960
and really that cemented for me i wanted

21
00:00:58,389 --> 00:00:57,039
to study space science there was no

22
00:00:58,750 --> 00:00:58,399
other question that's what i was going

23
00:01:10,830 --> 00:00:58,760
to

24
00:01:16,789 --> 00:01:14,870
do so as a planetary scientist i study

25
00:01:19,030 --> 00:01:16,799
the planets in our solar system

26
00:01:20,789 --> 00:01:19,040
primarily the outer planets and i'm

27
00:01:23,030 --> 00:01:20,799
interested in their atmospheres and how

28
00:01:25,350 --> 00:01:23,040
they work and what they can teach us as

29
00:01:32,550 --> 00:01:25,360
a laboratory for atmospheres all over

30
00:01:36,149 --> 00:01:34,310
my background is

31
00:01:38,469 --> 00:01:36,159
a little interesting

32
00:01:40,310 --> 00:01:38,479
i actually originally wanted to study

33
00:01:42,069 --> 00:01:40,320
mars geology

34
00:01:44,950 --> 00:01:42,079
but when i started my graduate school

35
00:01:47,590 --> 00:01:44,960
career i had an opportunity to work on

36
00:01:49,190 --> 00:01:47,600
jupiter data particularly with hubble

37
00:01:51,429 --> 00:01:49,200
calibrating some of the early images

38
00:01:53,749 --> 00:01:51,439

before hubble had its corrective optics

39
00:01:56,069 --> 00:01:53,759
right before the shoemaker levy 9 common

40
00:01:57,670 --> 00:01:56,079
impacts into jupiter

41
00:01:59,429 --> 00:01:57,680
and then we had this great encounter

42
00:02:01,270 --> 00:01:59,439
where we had all these commentary pieces

43
00:02:03,429 --> 00:02:01,280
hitting in but it was a new camera on

44
00:02:05,830 --> 00:02:03,439
hubble after the corrective optics so

45
00:02:08,229 --> 00:02:05,840
you know wow all these great new images

46
00:02:09,669 --> 00:02:08,239
and i kind of got sold into this is

47
00:02:12,390 --> 00:02:09,679
really what i want to do to study the

48
00:02:14,070 --> 00:02:12,400
atmospheres of planets

49
00:02:16,150 --> 00:02:14,080
hubble space telescope's been looking at

50
00:02:17,910 --> 00:02:16,160
jupiter for the past 25 years and this

51
00:02:20,229 --> 00:02:17,920
particular image taken just a few days

52
00:02:21,990 --> 00:02:20,239
ago we can see the dynamic cloud bands

53
00:02:24,150 --> 00:02:22,000
all the swirling clouds and colors on

54
00:02:26,390 --> 00:02:24,160
jupiter of course and the great red spot

55
00:02:27,830 --> 00:02:26,400
but we also see wave features and

56
00:02:29,110 --> 00:02:27,840
smaller storms in the atmosphere so

57
00:02:31,190 --> 00:02:29,120
we're learning a lot about jupiter's

58
00:02:34,690 --> 00:02:31,200
weather basically by doing these hubble

59
00:02:34,700 --> 00:02:59,110
[Music]

60
00:03:02,149 --> 00:03:00,550
i would say i'm not really good at

61
00:03:04,229 --> 00:03:02,159
looking towards the future of

62
00:03:06,470 --> 00:03:04,239
envisioning exactly where i'll be in 10

63
00:03:08,309 --> 00:03:06,480

years but you know i want to see more

64
00:03:10,309 --> 00:03:08,319
missions to the outer solar system i

65
00:03:12,390 --> 00:03:10,319
think we have a lot left to do out there

66
00:03:14,550 --> 00:03:12,400
and i am looking forward to the day when

67
00:03:16,390 --> 00:03:14,560
we are ready to launch a mission to

68
00:03:19,030 --> 00:03:16,400
neptune or even another mission to

69
00:03:21,450 --> 00:03:19,040
saturn and i certainly hope to be part