



1  
00:00:04,550 --> 00:00:02,950  
here's an interesting question

2  
00:00:06,230 --> 00:00:04,560  
on one of the previous trips into space

3  
00:00:07,510 --> 00:00:06,240  
some astronauts said the radiation was

4  
00:00:09,910 --> 00:00:07,520  
dense enough

5  
00:00:11,990 --> 00:00:09,920  
to see with their eyes closed

6  
00:00:14,470 --> 00:00:12,000  
is orbit far enough out to see the

7  
00:00:16,790 --> 00:00:14,480  
radiation while you're sleeping or are

8  
00:00:19,349 --> 00:00:16,800  
you still too far in the earth's

9  
00:00:21,750 --> 00:00:19,359  
protective magnetic field

10  
00:00:23,670 --> 00:00:21,760  
well i think what this uh writers is

11  
00:00:26,470 --> 00:00:23,680  
referring to is

12  
00:00:28,230 --> 00:00:26,480  
the reports that astronauts sometimes

13  
00:00:30,870 --> 00:00:28,240

see flashes

14

00:00:32,389 --> 00:00:30,880

in their eyes with their eyes closed and

15

00:00:34,470 --> 00:00:32,399

naturally we have our eyes closed when

16

00:00:37,910 --> 00:00:34,480

we're sleeping here at night and that is

17

00:00:39,510 --> 00:00:37,920

true actually i frequently

18

00:00:40,950 --> 00:00:39,520

when i'm going to sleep at night with my

19

00:00:42,310 --> 00:00:40,960

eyes closed in the crew quarters and

20

00:00:44,709 --> 00:00:42,320

it's dark

21

00:00:49,029 --> 00:00:44,719

i will see flashes of light in different

22

00:00:49,990 --> 00:00:49,039

uh places in my field of of vision if

23

00:00:52,389 --> 00:00:50,000

you will

24

00:00:54,630 --> 00:00:52,399

um and we think it's uh it's uh

25

00:00:56,709 --> 00:00:54,640

radiation particles that are traveling

26

00:00:59,750 --> 00:00:56,719

at very high speed that uh

27

00:01:02,869 --> 00:00:59,760

that impact uh the uh

28

00:01:05,670 --> 00:01:02,879

the optic nerve in a way to at least

29

00:01:06,630 --> 00:01:05,680

give you the sensation of seeing a flash

30

00:01:09,990 --> 00:01:06,640

of light

31

00:01:11,670 --> 00:01:10,000

would see

32

00:01:13,990 --> 00:01:11,680

in the normal environment around us but

33

00:01:15,030 --> 00:01:14,000

it appears as a flash of light it's very

34

00:01:16,630 --> 00:01:15,040

subtle

35

00:01:18,710 --> 00:01:16,640

it's very quick

36

00:01:20,789 --> 00:01:18,720

but it happens regularly up here in this

37

00:01:22,789 --> 00:01:20,799

environment

38

00:01:24,870 --> 00:01:22,799

here's a question related to being in

39

00:01:26,789 --> 00:01:24,880

the space station a long time if you're

40

00:01:29,270 --> 00:01:26,799

in space for a long time is it tough

41

00:01:31,510 --> 00:01:29,280

always being enclosed inside the same

42

00:01:33,270 --> 00:01:31,520

surroundings well i have to say it is

43

00:01:36,630 --> 00:01:33,280

tough being here for a long time six

44

00:01:38,789 --> 00:01:36,640

months is a long time anywhere i know

45

00:01:40,710 --> 00:01:38,799

the space station is very big

46

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

there are five of us currently on board

47

00:01:45,030 --> 00:01:43,360

there were six of us on board earlier

48

00:01:47,190 --> 00:01:45,040

that's plenty of room in the space

49

00:01:49,270 --> 00:01:47,200

station for six of us to spread out

50

00:01:51,670 --> 00:01:49,280

we stay very busy up here and that helps

51  
00:01:52,789 --> 00:01:51,680  
whenever you're isolated anywhere being

52  
00:01:55,350 --> 00:01:52,799  
busy

53  
00:01:58,550 --> 00:01:55,360  
doing productive things

54  
00:02:01,510 --> 00:01:58,560  
is will always enhance your ability to

55  
00:02:03,670 --> 00:02:01,520  
to go for the long haul

56  
00:02:06,149 --> 00:02:03,680  
and that's certainly true here uh the

57  
00:02:08,389 --> 00:02:06,159  
other aspect of of course of

58  
00:02:10,229 --> 00:02:08,399  
being up here for a long time that's

59  
00:02:11,750 --> 00:02:10,239  
difficult is being separated from

60  
00:02:13,990 --> 00:02:11,760  
friends and family

61  
00:02:17,430 --> 00:02:14,000  
particularly our close family our our

62  
00:02:19,270 --> 00:02:17,440  
spouses our children uh et cetera

63  
00:02:20,710 --> 00:02:19,280

that's very tough it's very tough on the

64

00:02:23,990 --> 00:02:20,720

families at home

65

00:02:25,830 --> 00:02:24,000

which makes it tough on us thankfully we

66

00:02:27,589 --> 00:02:25,840

are in regular contact with our families

67

00:02:29,430 --> 00:02:27,599

we have the ability to call on a

68

00:02:31,430 --> 00:02:29,440

telephone from here

69

00:02:33,030 --> 00:02:31,440

and i typically talk to my family every

70

00:02:35,589 --> 00:02:33,040

day

71

00:02:36,949 --> 00:02:35,599

we also once a week or so have a video

72

00:02:40,390 --> 00:02:36,959

telecom

73

00:02:42,869 --> 00:02:40,400

teleconference with them so that helps

74

00:02:45,589 --> 00:02:42,879

and we've got some other support means

75

00:02:47,430 --> 00:02:45,599

to uh to help

76

00:02:48,949 --> 00:02:47,440

get both us

77

00:02:50,470 --> 00:02:48,959

on board the space station as well as

78

00:02:53,270 --> 00:02:50,480

the families on the ground

79

00:02:55,190 --> 00:02:53,280

through the experience so great question

80

00:02:56,790 --> 00:02:55,200

something we we do have to to worry