



1
00:00:00,010 --> 00:00:04,010

[plane sounds]

My name is Rachael Kroodsma, I'm with

2
00:00:04,030 --> 00:00:08,040

the NASA Goddard Space Flight Center and I am instrument scientist for

3
00:00:08,060 --> 00:00:12,060

CoSMIR. CoSMIR has very similar

4
00:00:12,080 --> 00:00:16,170

frequencies to what GMI, the microwave radiometer

5
00:00:16,190 --> 00:00:20,180

on GPM has. And so by flying CoSMIR on

6
00:00:20,200 --> 00:00:24,290

the DC-8 and especially doing underflights with GPM

7
00:00:24,310 --> 00:00:28,470

passes over us, we'll be able to relate

8
00:00:28,490 --> 00:00:32,640

the measurements we see from CoSMIR with GMI, and

9
00:00:32,660 --> 00:00:36,820

by that way we can validate the measurements. What a radiometer

10
00:00:36,840 --> 00:00:40,890

does is that it measures the radiation that's naturally emitted from

11
00:00:40,910 --> 00:00:44,910

the Earth. In this case we're measuring the rain and snow, so

12
00:00:44,930 --> 00:00:48,990

there's radiation that's naturally emitted from the rain and the snow in the microwave

13

00:00:49,010 --> 00:00:53,020

spectrum, and so this is a microwave radiometer and it's measuring that

14

00:00:53,040 --> 00:00:57,050

radiation. My expertise is with microwave radiometer calibration.

15

00:00:57,070 --> 00:01:01,090

And so I do a lot of data analysis,

16

00:01:01,110 --> 00:01:05,120

checking out calibration of microwave radiometers.

17

00:01:05,140 --> 00:01:09,150

[laughs] I just think it's pretty cool to be

18

00:01:09,170 --> 00:01:13,200

part of the instruments and to be out in the field and just see

19

00:01:13,220 --> 00:01:17,240

how everything works and how it all comes

20

00:01:17,260 --> 00:01:21,270

together and be a part of that.

[music]