GPM
全球降水観測計画

1
00:00:00,000 --> 00:00:03,990
[rain drops]

2
00:00:04,010 --> 00:00:08,040
[natural sound]

3
00:00:08,060 --> 00:00:12,230
[wind, rain]

4
00:00:20,420 --> 00:00:16,370
[water flowing]

5
00:00:20,440 --> 00:00:24,440
Dalia: Freshwater is extremely important on Earth. Only three

6
00:00:24,460 --> 00:00:28,480
percent of our water is actually in the form of freshwater.

7
00:00:28,500 --> 00:00:32,540
And only a fraction of that is actually usable

8
00:00:32,560 --> 00:00:36,580
freshwater on the surface.
Gail: If we don't know what

9
00:00:36,600 --> 00:00:40,620
kind of freshwater availability we have, then we may

10
00:00:40,640 --> 00:00:44,730
have issues in terms of droughts, we might have landslides,

11
00:00:44,750 --> 00:00:48,730
floods and things like that, and we need to be able to track those

12
00:00:48,750 --> 00:00:52,780
long term.
Dalia: Understanding how freshwater moves

13
00:00:52,800 --> 00:00:56,850
through the system is extremely important, both at the local scale, looking at how much water

14
00:00:56,870 --> 00:01:00,970
we have in our reservoir, to the larger scale, looking at how precipitation

15
00:01:00,990 --> 00:01:05,000
moves from ice pack, to the ocean, and then is

16
00:01:05,020 --> 00:01:09,040
evaporated from there. Sensors

17
00:01:09,060 --> 00:01:13,130
on the ground can look at a point source, so we understand how much rain is

18
00:01:13,150 --> 00:01:17,190
falling at a specific location, but there aren't very many

19
00:01:17,210 --> 00:01:21,210
gauges around the world that can provide that information for us.

20
00:01:21,230 --> 00:01:25,240
Arthur: If we were to take all the existing rain gauges in the

21
00:01:25,260 --> 00:01:29,280
world, they would fit into an area about the size of two

22
00:01:29,300 --> 00:01:33,320
basketball courts.
[rocket launching]