

ON MARS



CURIOSITY

MARS SCIENCE LABORATORY

1
00:00:00,000 --> 00:00:04,000
MUSIC

2
00:00:04,000 --> 00:00:08,000
Hi my name is Matt Heverly.
I'm a rover driver and this is your Curiosity Rover Report.

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00:00:08,000 --> 00:00:12,000
The rover recently drove over a sand dune we called 'Dingo Gap.'

4
00:00:12,000 --> 00:00:16,000
This is in order to get to an area on the other side known as 'Moonlight Valley.'

5
00:00:16,000 --> 00:00:20,000
This area has much gentler terrain with fewer sharp rocks.

6
00:00:20,000 --> 00:00:24,000
The rate of wear of the wheels has increased over the last few hundred meters.

7
00:00:24,000 --> 00:00:27,000
We think that's because we're in a different type of terrain where the rocks

8
00:00:27,000 --> 00:00:31,000
are really especially sharp and well cemented into the ground.

9
00:00:31,000 --> 00:00:35,000
We're here at JPL in the Mars yard and we're using the scarecrow rover,

10
00:00:35,000 --> 00:00:39,000
and this rover weighs on Earth what Curiosity weighs on Mars.

11
00:00:39,000 --> 00:00:42,000
We're driving the rover on its wheels over some man-made obstacles

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00:00:42,000 --> 00:00:45,000
that resemble some of the sharpest rocks that we might see on Mars.

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00:00:45,000 --> 00:00:48,000

And the wheels are made out of aluminum (knock knock).

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00:00:48,000 --> 00:00:51,000

And we're using these wheels and this rover and these obstacles to understand

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00:00:51,000 --> 00:00:56,000

really what's going on and how these rocks can cause damage to the wheels.

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00:00:56,000 --> 00:01:00,000

We're also looking at different strategies to try and minimize this and avoid some of these rocks.

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00:01:00,000 --> 00:01:03,000

Now that the rover is in the Moonlight Valley we're able to increase

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00:01:03,000 --> 00:01:07,000

its drive distance each sol because of the terrain it's a little more favorable

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00:01:07,000 --> 00:01:08,000

for the wheels.

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00:01:08,000 --> 00:01:12,000

(Crowd noise) In fact, the rover just crossed its 5K mark.