



Sol 30
16:35:31 LMT
2022-100 02:40:38 UTC
Sep 05 18:40:38 PST



Earth Time 24:00:00

1
00:00:01,910 --> 00:00:09,080

I'm David Oh, lead flight director for the Mars Curiosity rover and this is your Curiosity

2
00:00:09,080 --> 00:00:10,200

rover report.

3
00:00:10,200 --> 00:00:13,980

Over the past seven days, we've been doing checkouts of the arm instruments including

4
00:00:13,980 --> 00:00:17,680

the MAHLI imager, which is a very versatile instrument that can focus on things that are

5
00:00:17,680 --> 00:00:20,130

close-by and very far away.

6
00:00:20,130 --> 00:00:24,190

The imager has generated some spectacular shots of the underbelly of the rover and its

7
00:00:24,190 --> 00:00:29,449

wheels, of a 1909 Lincoln penny that we mounted on the rover for calibration purposes so we

8
00:00:29,449 --> 00:00:32,230

can check that the camera is operating properly.

9
00:00:32,230 --> 00:00:36,250

And its also been used to generate a nice self-portrait of the Mastcam on the rover,

10
00:00:36,250 --> 00:00:39,610

a portrait that's taken by the arm looking back, the same way you would take a picture

11
00:00:39,610 --> 00:00:41,530

of yourself using a cell phone.

12
00:00:41,530 --> 00:00:46,829
We've also been testing the APXS instrument,
an instrument for doing contact mineralogy

13
00:00:46,829 --> 00:00:47,829
science.

14
00:00:47,829 --> 00:00:52,520
It generates spectra that allow us to identify
the minerals that are present in a rock.

15
00:00:52,520 --> 00:00:56,309
When the checkout of the arm is complete,
we'll be continuing our drive to the scientific

16
00:00:56,309 --> 00:01:00,079
target, Glenelg, but we'll be stopping along
the way to take some video of the Martian

17
00:01:00,079 --> 00:01:03,040
moons, Phobos and Deimos, passing overhead.

18
00:01:03,040 --> 00:01:06,080
We control the rover from Earth, but we have
to operate it on Mars time.

19
00:01:06,080 --> 00:01:09,300
A Martian day is 39 minutes longer than an
Earth day.

20
00:01:09,300 --> 00:01:13,840
So every day, the whole operations team comes
in 40 minutes later, every single day, to

21
00:01:13,840 --> 00:01:15,120
send commands to the rover.

22
00:01:15,120 --> 00:01:20,300

In the month after landing, my whole family joined me on Mars time and we got to jump

23

00:01:20,300 --> 00:01:24,050

a time zone a day for 30 days going all the way around the clock.

24

00:01:24,050 --> 00:01:30,000

As we did that, we got to explore Mars here at JPL and to explore Los Angeles at night,

25

00:01:30,000 --> 00:01:33,000

and it was a great adventure for the whole family.

26

00:01:33,000 --> 00:01:35,170

This has been your Curiosity rover report.