

Curiosity on Mars: Curiosity's Martian Holiday

Hi, I am Colette Lohr, tactical uplink lead on the Mars Science Laboratory mission, and this is your Curiosity Rover Report.

Recently, the rover drove by an outcrop called "Shaler," where we used Curiosity's Chemistry and Camera, or ChemCam instrument, and Mast Camera to look at the rock's composition and observe its layering.

Then from Shaler, we drove another 50 meters or so and we descended roughly half a meter into a location called Yellow Knife Bay, making science observations along the way.

The team is now searching in earnest for a suitable rock for our first drill activity after the Holidays. This has been an exciting time for the team, because we've started to do what we call, "discovery-driven planning," and this is when we, in a sense, hand over the rover keys to the science team.

In the early part of any mission, much of what the rover does is pre-scripted, as we kind of perform checkouts and do first-time activities.

But in recent sols, or Martian days, the science team has really had more freedom to send the rover where the science takes them.

These days, the team is busy preparing to preload the rover with 11 sols of activity over the course of 2 Earth days, and this is going to allow us to spend the holidays with our friends and families.

This capability will come in handy when we experience solar conjunction coming up in April. This is where the Sun positions itself between the Earth and Mars, and it's going to interrupt our ability to communicate with Curiosity for upwards of two weeks.

Curiosity is expected to drive another 30 meters to a location the team has informally dubbed as "Grandma's House." That's where she'll spend the holidays acquiring a 360-degree panorama from within Yellow Knife Bay. A small team will still be working during this period to monitor Curiosity's health.

On behalf of the Mars Science Laboratory Mission, we wish you all a very happy holiday and look forward to many new adventures with Curiosity in the New Year!