

Watch how curiosity will land on Mars

April 6 2011, By Nancy Atkinson

Entry, descent and landing is **the** big moment for any Mars lander mission, and the big honkin' Mars Science Lab and its sky-crane landing system will truly be unique. This brand new video from the Jet Propulsion Lab shows how MSL, a.k.a Curiosoity will land on the Red Planet in August of 2012. Doug Ellison, part of the team who worked on this computer generated video told Universe Today that the scenes from Mars shown here were created from real elevation data from the HiRISE camera on the Mars Reconnaissance Orbiter, and the outcrop of rock that Curiosity visits is based on Burns Cliff, visited by Opportunity in 2004.

When they started working on the video, the real [rover](#) wasn't as close to completion as it is now. "The oddity is that we had to finish our virtual rover ahead of the real rover!" Ellison said. "The rover and other major components were derived from simplified CAD drawings, combined with lots of photographs of the actual hardware under construction."

I asked Ellison how he and his colleagues create the scenes of events that haven't happened yet.

"We were not starting from scratch, as we collaborated with the same team responsible for the [earlier MSL animation](#) you may have seen, (created about two years ago)" Ellison said. "People from different elements of the project helped steer us on how their elements of the project work. We then worked through a review process with those teams to make sure we get both how it looks, and how it works, as accurate as we can, whilst still being engaging."

“The EDL team especially were a thrill to work with,” Ellison continued, “urging us to reflect the dynamic, violent nature of landing on another planet. They commented that once it’s on that Atlas V and on its way to [Mars](#), they never get to see it at work. This animation is the thing they can show to friends and family to say ‘This is what I do’.”

Ellison said his team is working on a longer and more complete movie that should be finished with the next few months.

But for now, enjoy this thrill-ride along with Curiosity!

More information: For more information about MSL’s landing, here’s a link to a detailed [PDF](#) all about EDL

Source: [Universe Today](#)

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