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One year after landing - An update on the Mars 2020 Perseverance rover's mission to Jezero crater, Mars

Prof. Joel Hurowitz

The Mars 2020 Perseverance rover landed in Jezero crater on Mars on February 18, 2021. Since that time, the Mars 2020 rover science team has conducted field reconnaissance and analysis of two major geological units on the floor of Jezero crater and collected 7 samples (1 atmospheric sample and 6 rock samples) that will eventually be returned to Earth for further, in-depth analysis. Her companion, the Ingenuity helicopter, conducted the first ever powered, controlled flight by an aircraft on another planet, and continues operating as a scout vehicle for the rover. This update will discuss Perseverance and Ingenuity's operations, the discoveries that have been made using the rover's scientific instrument payload, and what the precious samples collected by the rover might teach us about the geological and astrobiological history of the Red Planet.

Joel Hurowitz is a geochemist and planetary scientist working on the exploration of Mars and the study of modern and ancient Mars analog environments on Earth. He is the deputy principal investigator of one of seven instruments, called PIXL, which was selected for the science payload of the Mars 2020 rover mission. Dr. Hurowitz received his Ph.D. from Stony Brook University working under the supervision of Dr. Scott McLennan. He was a Caltech postdoctoral scholar at the Jet Propulsion Laboratory in 2006–2007 working with Dr. Albert Yen. From 2007 to 2013, Dr. Hurowitz was a research scientist at the NASA Jet Propulsion Laboratory. In 2013, he joined the faculty of the Department of Geosciences at Stony Brook University where he is an assistant professor.

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TBD Prof. Qingyun Li

March 25. 2022 TBD Prof. Scott McLennan

April 22. 2022

TBD Prof. Weisen Shen