

## After more than 20 days on Mars, Perseverance delivered its first pictures from Supercam instrument.

**Buc, March 17<sup>th</sup>, 2021** – SuperCam was developed jointly by the Los Alamos National Laboratory (LANL) in New Mexico and a consortium of French research laboratories under the auspices of the Centre National d’Etudes Spatiales (CNES).

A key objective for Perseverance’s mission on Mars is astrobiology, including the search for signs of ancient microbial life. The rover will characterize the planet’s geology and past climate, pave the way for human exploration of the Red Planet, and be the first mission to collect and cache Martian rock and regolith (broken rock and dust).

The images below were taken from the Supercam’s Remote Micro-imager (RMI) and especially from 3D PLUS CMOS camera. Stitched together from five images, this mosaic (Figure 1) shows the calibration target for the SuperCam instrument aboard NASA’s Perseverance rover on Mars. This calibration target includes visual elements for adjusting the focus of the RMI, and various samples for the calibration of the instrument’s four spectrometers. The RMI can observe dust grains as small as 100 microns on SuperCam’s calibration targets on the back of the rover. Supercam instrument shows a close-up view of the rock target (Figure 2) named “Máaz and the corresponding spectrum analysis of the rock.

Figure 1

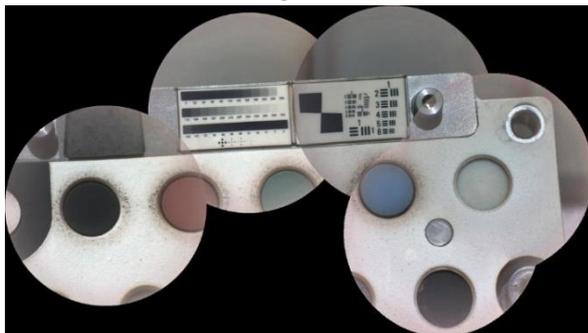
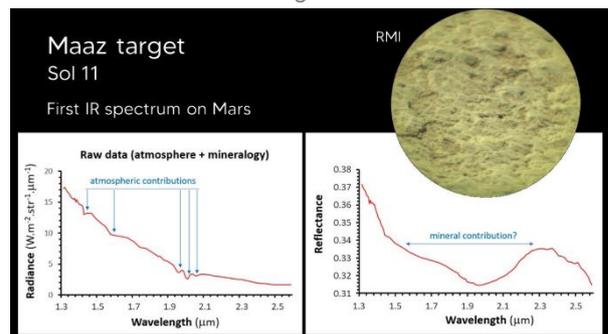


Figure 2



Credits: NASA/JPL-Caltech/LANL/CNES/CNRS

Combining two images, the mosaic on the right shows a close-up view of the rock target (Figure 3) named Yeehgo from the SuperCam instrument on NASA’s Perseverance rover on Mars.

On March 9, the mission released three SuperCam audio files. Obtained only about 18 hours after landing, when the mast remained stowed on the rover deck, the first file captures the faint sounds of Martian wind. 3D PLUS is proud to be part of this successful mission, which will address high-priority science goals for Mars exploration.

Figure 3



Credits: NASA/JPL-Caltech/LANL/CNES/CNRS/ASU/MSSS

### About 3D PLUS:

3D PLUS is a French Medium enterprise, world leader in the design and manufacturing of high-performance and high reliability components miniaturized with its unique 3D vertical interconnect technology. With more than 175,000 modules into space early 2021 and a production of more than 30,000 space qualified modules per year in its facility nearby Paris, 3D PLUS provides all stakeholders of the global space industry for over 20 years for telecommunications applications, Earth observation, navigation, launchers and human spaceflight, science missions, small satellites and constellations.