Mars 2020 Entry, Descent, and Landing Instrumentation 2 (MEDLI2) Sensor Suite

Helen Hwang,¹ Henry Wright,² Chris Kuhl,² Mark Schoenenberger,² Todd White,¹ Chris Karlgaard,³ Milad Mahzari,¹ Tomo Oishi,⁴ Steve Pennington,⁵ Nick Trombeta,² and Jose Santos⁶

AFTERBODY THERMAL MEASUREMENTS
• Radiative heating
• Near-surface temperature
• Direct heat fluxes

FOREBODY THERMAL MEASUREMENTS
• Near-surface and in-depth temperature
• Wider coverage across heatshield to capture transition front

FOREBODY PRESSURE MEASUREMENTS
• Supersonic pressures
• Aerodynamic performance vs winds

AFTERBODY PRESSURE

FOREBODY PRESSURE MEASUREMENTS
• Supersonic pressures
• Aerodynamic performance vs winds

SENSOR SUPPORT ELECTRONICS
• New oversampling method for pressure measurements

Contact: helen.hwang@nasa.gov

Inverse Analysis Results for PTF-150 Run 1 (Panel 2)
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Learn about the new sensors that will be flown on the Mars 2020 aeroshell (supersonic pressure transducers, direct heat flux gauges and radiometer), new techniques (oversampling), and plans for post-flight analysis.