

Science and landing-site candidates of the MELOS 1 EDL demonstrator

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MELOS (Mars Exploration with a Lander-Orbiter Synergy) is a Japanese Mars-exploration mission proposed by the Japan Aerospace Exploration Agency. Through a few years of discussions of its both scientific and engineering aspects, the outline of the mission becomes clearer. Most importantly, MELOS now stands for a concept of a series of missions; the MELOS 1 will focus on an accurate orbital insertion with an entry-decent-landing (EDL) demonstrator for future Mars missions, which will be followed by a full-scaled MELOS 2 or later missions.

MELOS1 emphasizes its engineering aspects, however, the EDL and the orbiter carries a fair amount of science payload to perform geologic and atmospheric investigations to expand our knowledge of the red planet. In this talk, we will report an update on the EDL of the MELOS 1 mission, especially about its size/orbital parameters as well as its scientific goal and potential landing sites.

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