

Field research operations and measurements from ILEWG EuroMoonMars campaigns

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Abstract

We have conducted a series of field research campaigns (ILEWG EuroMoonMars) in the extreme environment of the Utah desert relevant to habitability and astrobiology in Mars environments in order to help in the interpretation of Mars missions measurements from orbit (MEX, MRO) or from the surface (MER, MSL). We describe the field operations and the comparison between remote sensing and in-situ data.

Summary results

In the frame of ILEWG EuroMoonMars campaigns (2009 to 2013) we deployed at Mars Desert Research station, near Hanksville Utah, a suite of instruments and techniques [0, 1, 2, 3, 9] including sample collection, context imaging from remote to local and microscale, drilling, spectrometers and life sensors.

We concentrate here on the description of the field operations and in-situ measurements.

Laboratory sample analysis was also performed [4-12] using various measurement techniques to study the mineralogy, elemental composition, organic chemistry and microbiology.

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