

Program for the 5th MSL Landing Site Workshop
Held May 16-18 in Monrovia, CA.

Monday, May 16th (Start at 8:30 am)

Introduction 8:30 to 9:30 am

Welcome

John Grant, Matt Golombek, Michael Meyer (15 minutes)

Status of MSL

John Grotzinger and Michael Watkins (15 minutes)

Discussion of the outcome of the workshop and where we stand on sites today

John Grant and Matt Golombek (30 minutes)

Talks on Multiple Sites 9:30 to 11:30 [DesMarais, Tanaka]

Fluvial processes tiger team summary of the candidate MSL landing sites

Ross Irwin (20 Minutes)

Impact crater processes in the MSL landing sites

Horton Newsom, Jim Bell, Dawn Sumner (20 minutes)

Late alluvial fan formation in southern Margaritifer Terra

John Grant and Sharon Wilson (15 minutes)

Crater counts and stratigraphical constraints on the age of the MSL landing sites

Nicolas Mangold (15 minutes)

The search for fresh craters in the MSL landing ellipses

Peter Buhler, Kenzie Day, and John Grotzinger (5 minutes)

Small rayed craters in or near the MSL landing ellipses: insights into the recent erosional history and potential sampling locations at each site

Fred Calef (5 minutes)

Minimum area analysis of impact crater statistics: Lessons for the chronology assessment of the MSL landing sites

Nick Warner (5 minutes)

Mineralogical abundances of the phyllosilicate-bearing deposits of the four candidate MSL sites

Francois Poulet and J. Carter (15 minutes)

CRISM-derived mineral abundances at the MSL landing sites
Bethany Ehlmann, Selby Cull, Ray Arvidson, and Francois Poulet (15 Minutes)

Disequilibrium as a habitability sign: An integrate tool
Eugenio Simoncini, A. Delgado-Bonal, and F. J. Martin-Torres (5 minutes)

Effects of ionizing radiation on the chemical and isotopic composition of the geologic outcrops on Mars: Implications for MSL/SAM measurements
Alex Pavlov (5 minutes)

Potential to establish aqueous chemical processes and chemical stratigraphy of the MSL landing sites with aid of Fuzzy C Means analysis of multispectral imaging and use of FREZCHEM
Jeff Kargel, Roberto Furfaro, Giles Marion, and Alexis Rodriguez (5 minutes)

Discussion (30 minutes)

Lunch Day 1 12:10 to 1:30 pm

Mawrth Vallis Talks 1:30 to 4:40 pm [Mustard, Morris]

Overarching questions related to the formation of units at Mawrth Vallis
Jean-Pierre Bibring (10 minutes)

The early supracrustal rocks of Mars
Nicolas Tosca, Joel Hurowitz, Dawn Sumner, and Ralph Milliken (15 minutes)

Distribution of breccias types in the Mawrth landing ellipse
Dawn Sumner (10 minutes)

Ages of the clay-unit at Mawrth
Damien Loizeau (10 minutes)

Mineralogical diversity of the AL phyllosilicate bearing unit at Mawrth Vallis: Evidence for acid-rock interaction
Joe Michalski and Eldar Noe Dobrea (15 minutes)

THEMIS-modeled phyllosilicate abundances at the Mawrth Vallis landing site
Christina Viviano and Jeff Moersch (10 minutes)

Evidence for poorly-crystalline Aluminosilicates at Mawrth Vallis from TES models
Elizabeth Rampe (10 minutes)

Concentration and preservation of organics in clay-rich fluvio-lacustrine sediments: Lessons from the Painted Desert and its relevance to Mawrth Vallis, Mars.

Eldar Noe Dobrea, Andrew Aubrey, Fred Calef, and Caroline Freissinet (10 minutes)

Targets to address MSL goals and major Martian science objectives at Mawrth Vallis
Nicolas Mangold et al. (15 minutes)

Science objectives that can be addressed by experiments on MSL at Mawrth Vallis
Janice Bishop, Ray Arvidson, Damien Loizeau, and the Mawrth Vallis Team (15 minutes)

Operational and related science considerations for the evaluation of MSL landing sites
Steve Ruff (10 minutes)

Discussion (60 minutes)

End of Day One at 4:40pm

Tuesday, May 17th (Start at 8:30 am)

Gale Crater Talks 8:30 to 11:10 am [Ming, Christensen]

What Gale crater can tell us about the history and habitability of Mars
Ken Edgett (20 minutes)

Gale crater: A field site where MSL can test specific hypotheses about Martian climate and habitability
Jim Bell (15 minutes)

An aqueous origin for the entire Gale mound
Tim Parker (10 minutes)

A visit by Curiosity to Gale crater's stratigraphic record of sulfate and clay-mineral deposition
Dave Vaniman (15 minutes)

Mineralogy at Gale crater
Ralph Milliken (15 minutes)

Gale as a preferred site for snowmelt-limited induration of atmospherically transported sediment
Edwin Kite (10 minutes)

Science targets along a proposed Gale crater traverse
Ryan Anderson (15 minutes)

Stratal relationships in the Gale mound and implications for depositional environments
Dawn Sumner (15 minutes)

Discussion (45 minutes)

Planetary Protection 11:10 to 12:10 pm [Zurek]

The Planetary Protection Constraints on MSL Landing Sites
John Rummel (15 minutes)

Possible near-surface ice and implications for the candidate MSL landing sites
Jack Mustard, Mathieu Vincendon, Francois Forget, Mikhail Kreslavsky, Aymeric Spiga, Scott Murchie, and Jean-Pierre Bibring (10 minutes)

MSL project considerations on Planetary Protection
Ashwin Vasavada (20 minutes)

Discussion (15 minutes)

Lunch 12:10 to 1:15 pm

Eberswalde Crater Talks 1:15 to 3:20 pm [Sumner, Parker]

DEM analysis of the Eberswalde basin
Kevin Lewis (15 minutes)

Eberswalde testable hypothesis: Ice-covered lakes
Jim Rice (10 minutes)

Net assessment of the impact hypothesis for fluvial activity at Eberswalde and tests with MSL
Edwin Kite (10 minutes)

High-resolution strata architecture of the Eberswalde 'delta': MSL targets and outcrop analogues
Sanjeev Gupta (15 minutes)

A detailed look at science targets within the Eberswalde landing ellipse
Melissa Rice (15 minutes)

Mineralogy of select outcrops at Eberswalde Crater
Nancy McKeown and Melissa Rice (15 minutes)

Discussion (45 minutes)

Holden Crater Talks 3:20 to 5:00 pm [Edgett, Phillips]

Models for terrestrial lacustrine systems and implications for Mars
Kevin Bohacs and Alan Carroll (20 minutes)

Mineralogic diversity at Holden crater
James Wray (15 minutes)

Candidate targets for exploration by MSL in Holden crater
Ross Irwin (20 minutes)

Discussion (45 minutes)

End of Day 2 at 5:00 pm

Wednesday, May 18th (Start at 8:30 am)

Characterization Talks 8:30 to 11:35 [McEwen]

Update on Landing Site Characterization
Matt Golombek (30 minutes)

CRISM Products supporting MSL landing site selection
Frank Seelos (5 minutes)

Landing Safety at the MSL Sites
Devin Kipp (30 minutes)

Atmospheric simulations at the MSL sites
Al Chen (15 minutes)

Traversability at the candidate landing sites
Mike Watkins, Rick Welch, Paolo Bellutta (45 minutes)

Discussion (60 minutes)

Lunch 11:35 to 1:00 pm

Summary Discussion 1:00 to 4:00 pm

Revision and completion of the Quad Charts
Strengths, weaknesses, remaining unknowns (180 minutes)

End of Workshop at 4:00 pm