

Guiding Principles:

(Still Unchanged Since Start of Site Selection Process)
(It's Good that this Sounds Like a Broken Record)

- Landing site selection is critical to all aspects of mission and program success
- Final site recommendation, selection, and approval is the job of the Project, Athena Science Team, and NASA HQ, respectively.
- *The broad expertise of the science community is crucial to the identification of optimal sites.*
- Process is open to all and has no predetermined outcome

Avenues for Community Involvement:

- NASA-Appointed Steering Comm.
- Add. Members and HQ Ex-Officios
 - Blend Experience and Mission Involvement
 - Provides for Feed-back on Process
 - Access to Ongoing Mission Data
- Mars Characterization Investigators
 - Insight into Landing Site Safety
- Science Community Input
- All Activities Documented on Web
 - <http://marsoweb.nas.nasa.gov/landingsites/>
 - <http://webgis.wr.usgs.gov/>

Site Selection Process to Date:

- 9/00 Prelim. Engin. Constraints
- 9/00 185 Potential Sites Identified
- 1/01 1st Landing Site Workshop
 - 7 ROTO/17 Nadir (Multiple Ellipses)
- 3/01 Update Thermal/Albedo
 - Eliminates Elysium Site/Nadir Sites
- 6/01 Ganges and Candor Eliminated
 - Based on Safety Concerns
- 8/01 Consider TCM-5/DeltaDOR
 - 9 New Ellipses Including Elysium
- 9/01 Official Ellipses Grow a Bit
 - Eliminates three of the 8/01 Ellipses
- 10/01 2nd Landing Site Workshop
 - 4 Primary Sites, 2 Backups
 - Project Begins Detailed Evaluations
- 1/02 Athabasca to Backup/Isidis to Primary
- *3/02 Expanded Targeting/Odyssey Discoveries*
- *3/02 3rd Landing Site Workshop*
 - *Community Evaluation of Site Criteria*

Site Selection Process: (Future Events)

(Dates are Tentative)

- 3/02 Project/Science Team Review
 - Based on Science and Safety
- 3/02-??? Odyssey Data/Discoveries
 - New Views of Existing Sites
 - Accommodate New Discoveries
 - Discussed in Subsequent Presentation
- 4/02 Site Certification
 - Project Peer Review of Process (4/16-4/17)
 - NASA HQ Review of Process
- 2/03 4th Landing Site Workshop
 - Define Ellipses in Target Regions
 - Start Process of Site Selection for '07
- 4/03 Site Certification
 - Project and NASA HQ

Workshop Format:

Day 1

- Introduction and Overview Talks
 - Constraints, EDL, Winds, History
- Site Science Potential Presentations
 - New Odyssey Data
 - Primary Sites

Day 2

- Site Science Potential (Cont'd)
 - Primary Sites, Back-up Sites
 - Discussion
- Safety Considerations
 - Radar and Slopes

Day 3

- Safety Considerations (Cont'd)
 - Radar and Slopes (Cont'd)
 - Thermal/Albedo/Rocks
- Discussion and Community Input

3rd Workshop Outcomes:

- Discuss Primary/Back-up Sites
 - Project Presentations
 - Science Presentations
- Safety Presentations
- Evaluate Each Site
 - Science Criteria
 - Safety Criteria
 - Public Relations Criteria
- Based on Community Consensus
 - Input to Project and Science Team

Workshop Deliverables:

<i>MER Landing Site Ranking Criteria</i>						
<i>Major Questions/Criteria:</i>	<i>Landing Sites:</i>					
<i>Science Criteria</i>	<i>Hematite</i>	<i>Gusev</i>	<i>Isidis</i>	<i>Melas</i>	<i>Eos</i>	<i>Athabasca</i>
<i>Evidence for Water Activity</i>						
<i>Address Climate/Geologic History</i>						
<i>Preserve Biotic/Prebiotic Materials</i>						
<i>Definitive Testing of Hypothesis(es)</i>						
<i>Differing Locations/Settings</i>						
<i>Site Diversity (for MER's)</i>						
<i>Site Diversity (from VL and MPF)</i>						
<i>Materials for Athena Analyses</i>						
<i>Rock Abundance (pro and con)</i>						
<i>Trafficability</i>						
<i>Amount of Dust Obscuration</i>						
<i>Mission Lifetime</i>						
<i>Relief (View of Surroundings)</i>						
<i>Has Good Earth Analog</i>						
<i>Safety Criteria</i>						
<i>1 km Slope</i>						
<i>100 m Slope</i>						
<i>10 m Slope</i>						
<i>Relief (Craters, Hills)</i>						
<i>Rock Abundance/Trafficability</i>						
<i>Potentially Hazardous Rocks</i>						
<i>Horizontal Winds</i>						
<i>Temperature at Site</i>						
<i>Mission Lifetime</i>						
<i>Dust</i>						
<i>Load Bearing Surface</i>						
<i>Elevation</i>						
<i>Radar Reflectivity</i>						
<i>Public Engagement</i>						
<i>Aesthetics (Views/Relief)</i>						
<i>Differs from VL or MPF Sites</i>						
<i>Life (Past or Present)</i>						
<i>Explainable to Public</i>						