



Smithsonian  
*National Air and Space Museum*

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Dr. Michael Meyer, Mars Exploration Program Lead Scientist  
Planetary Science Division, Science Mission Directorate  
NASA Headquarters  
300 E Street SW  
Washington, DC 20546

Dear Michael:

The purpose of this letter is to summarize the outcome and findings of the recently concluded effort by the Mars Landing Site Steering Committee to identify a new candidate landing site for the MSL spacecraft. The intent was to review new data collected by MRO and other spacecraft since the second workshop to ensure that new discoveries were considered in the process of identifying candidate landing sites.

Four new sites were submitted for consideration following a call to the Mars Landing Site Steering Committee, MRO PSG, and MSL PSG. These sites included: South Meridiani Planum (3.3S, 354.4E), Chloride west of Miyamoto Crater (3.1S, 351.6E), Gale Crater (4.5S, 137.4E), and Nili Fossae Carbonate (21.9N, 78.9E).

Following a two-week period to review the new sites, a telecon was held to discuss them and to decide which would be added to the existing list of candidate sites. The 25 participants represented the Steering Committee, MSL PSG, NASA Headquarters, and individuals who had proposed the sites. Following summary presentations of each site, any associated safety concerns, and a discussion of the schedule and status of the site selection process, the group began discussing the relative merits of the new candidate sites.

There was unanimous agreement that all four of the new sites were potentially equally or more compelling as the existing set of sites under consideration. Moreover, the new South Meridiani site was deemed to be as safe, but more scientifically compelling than the existing North Meridiani site. Hence, there was near unanimous agreement that the new South Meridiani site should be swapped for the existing North Meridiani site.

There was considerable discussion of the other three sites as well, the Gale Crater and Nili Carbonate sites in particular. Concern related to the limited diversity of geologic targets at the Concern that the Chloride site might offer only a limited diversity of geologic targets was the main reason the site was not the favorite. Many participants expressed concern that dropping either the Gale Crater or Nili Carbonate Site without

additional information (e.g., from HiRISE and CRISM) about their potential setting and accessibility presented a science risk to landing site selection. Most participants felt that both sites should remain under consideration at least until the third landing site workshop in September (new data from MRO is in the queue and will be reviewed by the Committee in the coming few weeks to assess any new discoveries). Nevertheless, the MSL Project and NASA Headquarters specified the need to arrive at consensus on a single new site (in addition to the South Meridiani site) and the group favored the Gale Crater site by a two-to-one margin. The margin in favor of Gale Crater was consistent for votes made by all meeting participants and votes by only the Mars Landing Site Steering Committee members. Supporting materials related to these new sites are posted at: <http://marsoweb.nas.nasa.gov/landingsites/> and <http://webgis.wr.usgs.gov/msl>).

We appreciate the opportunity for the science community to contribute to the MSL landing site selection process. We hope that NASA will continue to support analysis of potential future landing sites in order to achieve the most comprehensive evaluation of their relative merits.

We stand ready to provide additional input to the process as requested.

Sincerely,



John Grant



Matt Golombek

Co-Chairs, MSL Landing Site Steering Committee  
On behalf of the MSL Landing Site Steering Committee