

Mars Desert Research Station

February 15 – March 16, 2003



Insert Name of Presenter, Organization

Mars Analog Research

Sites which offer characteristics similar to or analogous to environments on Mars



Utah desert near MDRS



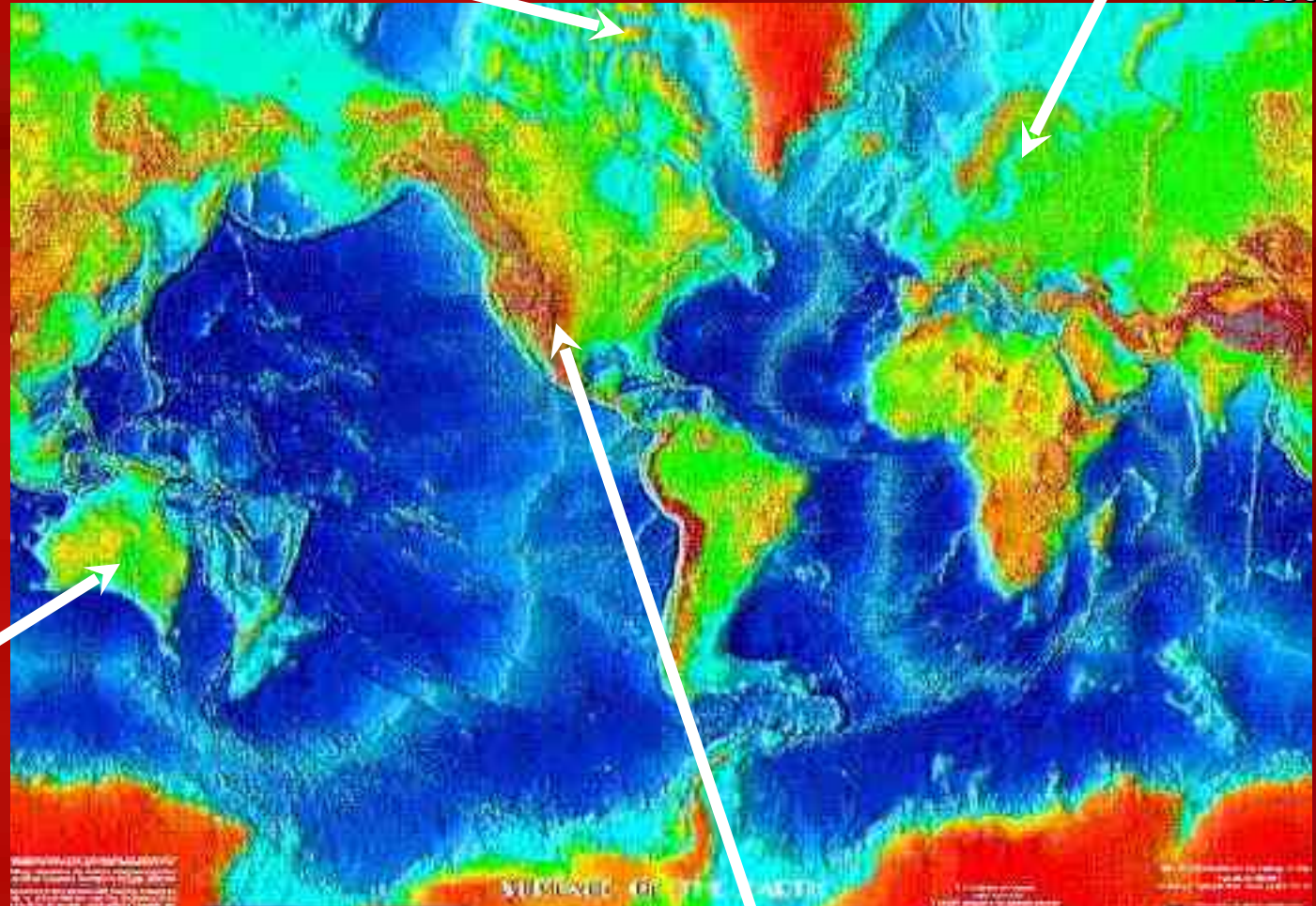
“ Presidential pan” from the Imager for Mars Pathfinder (IMP) in Ares Valles



Global Network

Devon Island
F-MARS 2000

Iceland
Euro-MARS
2003



Australia
MARS-OZ
2004

Southern Utah
MDRS 2002



MDRS

Southern Utah Constructed in 2001 Second Field Season in 2003



Rationale Behind the Expedition

Field Base



Analog Research



Publicity



Expedition One



Structure of the Expedition



Phase 1 & 2 – Series of EVA experiments

Phase 3 – Scientific experiments inside and outside the MDRS

Phase 4 – Integrated the lessons learned and best strategies from Phases 1-3



Why Send Humans to Mars?



Investigate the question –
are we alone in the
Universe?

Understand the geological
record of Mars

Inspirational

Technological spinoffs

Crew Members



Selected via competitive process

Worldwide call for volunteers

Variety of disciplines

Different cultural backgrounds



Mars Society of Canada



Expedition Organizer

Background

Goals

Projects



<http://marssociety.senecac.on.ca>



Expedition One



Mars Society Australia



Expedition Partner

Background

Goals

Technical Projects



<http://www.marssociety.org.au>

Michigan Mars Rover Project



Expedition Partner

Goals

Projects

Basic Facts



<http://www.umrover.org>

My Role on Expedition One



Insert some text on what you did on Expedition One and extracts from your bio

Insert picture of yourself from Expedition One – I can send you a suitable one from the photos taken.

Living in the MDRS



Communal meals ...

Early wakeup calls ...



Working in the MDRS



Upstairs Laptop Area

Downstairs in the Lab



Suiting Up

Setting dataloggers



Donning the suits

**MARSSkin &
MDRS suits**

In the Airlock



EVAs During Expedition One



Scouting



Sampling

Spacesuit Comparison Studies



Comparative Rover Studies



**Thorough data
collection in
the field**



**Analysis of
Rover
functionality**



**Compares the
Everest & the Ares
Rovers & a typical
SUV**

Biological Research



What is the capability of microbial life to thrive in this area?

Geological Studies



What is the best method for documenting samples?

What can studies of soil and dust tell us about Mars?

Human Factors Research



Social psychological measures

Evaluation of neuro-cognitive measures

Workload and work analysis

Engineering & Technological Studies



Spacesuit and Rover functionality tests



Testing instruments, hardware, software



The Next Step – Expedition Two

July 2004

Build on lessons learned

Month long mission

Use Arkaroola as a starting point

Cover Mars analog sites in the South Australian Outback



Media Exposure

TV, print, radio, Internet



For Further Information ...

Press Kit:

<http://marssociety.senecac.on.ca/ExpeditionOne/preskit100203.pdf>

Websites:

<http://marssociety.senecac.on.ca/ExpeditionOne/>

<http://www.marssociety.org/mdrs>