



VEXAG Meeting # Wrap-Up

31 August 2011
Chantilly, Virginia

Updating the Goals and Objectives Document



Suggestions from Atmospheric group

- Re-write the introduction narrative
- Outstanding Questions about Venus
(those mentioned by the Decadal Survey and those not raised by the decadal survey)
- Drop the current description of the missions, include mission concepts that suggest near, intermediate and long term concepts based on difficulty/cost

Focus Groups



- Competed Missions & research and analysis focus group. Lead:
- Crosscutting Technology and Maturation Focus Group. Lead:
- Young Scientists Focus Group
- International Venus Working Group
- Revise Goals and Objectives Document

Competed Missions & SR&T Focus Group



- Suggestions VEXAG would like to offer for changes in NF and Discovery
 - Scope for the grand-fathered Venus Mission
 - Increasing the pool of knowledgeable Venus experts by limiting the science team members via two step selection of team members?
- Technology for Venus Exploration
- ROSES
 - Venus Fundamental Research?
 - Comparative Terrestrial Planetology
 - Sub-orbital missions

Future VEXAG Workshops and Meetings



- Comparative Climatology of Terrestrial Planets (25 June -28 June, 2012, Boulder, Colorado)
- 10th VEXAG – 29 June 2012 (Boulder)
- Venus Exploration Sites Workshop (17-18 March 2012 in Houston, before LPSC?)
- Balloon Platform for Planetary Observations (NASA/GRC, Cleveland, late January, 2012) ?

GOI Update Focus Group



1) Solicit input on revising the Goals/Objectives/Investigations including adding example measurement type via this meeting, the PEN, VEXAG website, and meetings at AGU, DPS, and LPSC.

VEXAG executive committee will collect input, lead by Buck Sharpton.

Initial draft by AGU.

2) The same process will be used to develop the top science questions. The emphasis is on high level questions that can be understood by non-Venusians.

VEXAG executive committee will collect input, Sue and Sanjay will collect input. Volunteers welcome! Initial draft available for comment now!

3) A narrative introduction to the science questions will be developed.

David Grinspoon will draft the intro by DPS.

Volunteers welcome! Writers will be drafted for additional sections!

4) Sushil Atreya has volunteered to provide a road map for Venus exploration.

Initial draft available by DPS

Proposed Top Science Questions



How and when did Venus and Earth diverge?

- How has the history of water and other volatiles shaped the evolution of Venus and what are the implications for Earth-like planets?
- Did Venus ever have Earth-like oceans, tectonics, a dynamo and a biosphere?
- In the absence of plate tectonics, how does Venus lose its heat, produce tectonic deformation, volcanism, and outgassing? How and when did Venus resurface?
- What processes drive past and present circulation and climate evolution? What are their commonalities with other solar system atmospheres?

Current Goals



- Origin and Evolution
- Venus as a Terrestrial Planet
- Climate change and the Future of Earth