

Venus Atmosphere: From Surface to Thermosphere – How does it work?

Sushil Atreya¹ and Sanjay S. Limaye², Co-Chairs

(¹University of Michigan, Ann Arbor, Michigan, USA ²University of Wisconsin, Madison, Wisconsin, USA)

Summary

The NASA convened Venus Exploration and Analysis Group (VEXAG) is sponsoring an international workshop, “**Venus Atmosphere: From Surface to Thermosphere: How does it work?**” which will be followed by the 8th VEXAG meeting from 30 August – 2 September 2010 in Madison, Wisconsin. Venus is the most Earth-like of the terrestrial planets. The study of Venus has already offered numerous insights into Earth processes from plate tectonics to ozone hole formation. Papers on current science questions covering the full range of Venus science are solicited. Focus areas include the Venus atmosphere, interactions between the atmosphere, surface, and interior, and comparisons between Earth and Venus. The workshop will provide an opportunity to discuss recent results from the Venus Express orbiter, consider the results anticipated from the Venus Climate Orbiter launched by Japan in May 2010, and set the stage for future observations needed to answer outstanding science questions. Workshop format will include several invited oral presentations and contributed poster presentations.

Introduction

The Venus Exploration Analysis Group (VEXAG) was established by NASA in July 2005 to identify scientific priorities and strategies for Venus exploration. VEXAG currently is composed of a chair and five focus groups, who actively solicit input from the scientific community. VEXAG will report its findings and provide input to NASA, but will not make recommendations. Past VEXAG reports are available at the VEXAG URL (www.lpi.usra.edu/vexag). One of the important documents produced by VEXAG is the “Pathways for Venus Exploration”, available at: www.lpi.usra.edu/vexag/reports/pathways1009.pdf.

Surface, Atmosphere and Global Environment (SAGE) is a mission to Venus currently in the Concept Study Report phase for NASA’s 3rd New Frontiers Mission. A call for mission proposals to NASA’s Discovery Program has been issued and it is anticipated that many Venus mission proposals will be submitted to this competed program.

At present, ESA’s Venus Express mission continues to collect observations from the Venus

Express Orbiter from an eccentric, 24-hour polar orbit. On the 21st of May, Japan successfully launched Akatsuki, a “weather satellite for Venus” which will arrive in early December and enter into a near equatorial orbit. At present the National Academy’s Second Decadal Survey for Planetary Science is also underway with a report anticipated in Spring 2011.

We welcome the international scientific community with an interest in Venus, terrestrial planets and comparative Planetology to attend the workshop. Information about the workshop is posted on the web at: <http://venus.wisc.edu/workshop>.

Extended Abstracts Format Guidelines

Extended abstracts should be submitted as PDF files via the VEXAG link (www.lpi.usra.edu/vexag) by July 15. All abstracts should begin with a short summary and should be limited to four pages in length (but we do encourage four pages, not less!)

Page Layout: Please use US Letter size (8.5”x11”) with 1” margins (top, bottom, left and right). Page should be divided into two 3.15” columns with a 0.2” margin in between. All paragraphs should begin flush left and justified at right margin.

Font and Type: Please use 10-point Helvetica or Arial font in single space for all content text and headings. Section headings should be bold. There should be cleared single space between paragraphs and headings.

Title and Authors: This section should be centered. The title should be 14-point bold and followed by authors’ names and affiliations, both 10-point normal. Numbers must be used to indicate the author’s affiliation (placed in brackets, followed by city and country).

The extended abstracts will be reproduced as a printed booklet (in black and white) and posted on the workshop website in PDF format. Any graphics in color are acceptable in the PDF versions.

References

Please use the Icarus style for references (<http://icarus.cornell.edu/information/authors.html#1.5>).