

DENVER MUSEUM OF NATURE AND SCIENCE
VENUS WINDS PROJECT
MINUTES OF MEETING

Date/Time/Location: 6 November 2014 6:00 PM Exploration Studio 106

ATTENDING

| | | | | | | |
|--------------------|-----------------|---------|---------------|----------------|----------------|----------------|
| Boudreau | Bullock | Crowl | Diba | Doubek | Farrell | Gehring |
| Harter | Heil | Knutson | Krider | Lindsay | Logan | |
| McGouldrick | Parziale | Romero | Royer | Stewart | Tarr | Viera |
| Zimmerle | | | | | | |

Guests: Sandy Krider

The meeting opened at 6:00 PM at Exploration Studio 106 in the Morgridge Wing. Those **attending** are listed above.

OLD BUSINESS

Your results and experience All researchers

Earlier Mark released nine images from the 20040712 dataset. Researchers were to choose the same nine tracking points on each image and record their coordinates on a spreadsheet. If possible, velocity components $U(x)$ and $V(y)$ should be computed. Results from Rachel, Nick Zimmerle and Nick Heil were displayed. All three noted that $U(x)$ was prominently lower for tracking points near the Equator. As a result of this discussion, several experiments were proposed to determine the magnitude of measurement errors due to the type of feature measured.

New velocity measurement exercise: 14 Dec 2010 Mark

New data from the **14 Dec 2010** image dataset are not yet available because the Venus Winds wiki has been blocked by IT personnel at SwRI due to alleged hacking by outsiders. As a result of this discussion, Mark has prepared two DropBox folders that contain 1,589 images in Fits format and JPEG format, respectively. Please see his e-mail for further details.

Venus general circulation Mark

Mark discussed the general picture of Venus winds. East-West winds are dominant while North-South winds show the tops of Hadley cells that transport heat from the Equator to the poles.

Individual sub-group tasks

Two sub-groups have been formed:

Sub-group *Slit Removal* (Proposer: Dylan)

Dylan described his tentative plan to remove the slit artifact from the images. Mark discussed his own experiments in doing the same task. If automated, the slit removal feature would measurably improve the quality of the images for analysis.

Sub-group *Improved Online Tools* (Proposer: Ricardo)

Ricardo and an associate have been improving the coordinate recording tool that Ricardo demonstrated at the last meeting (October 23). The tool is available for testing at <http://venuswindsproject.org/>. Report your experience and any problems to Ricardo.

Ricardo also suggested an improved method of rapidly examining a series of images for a specific dataset. Discussion followed regarding temporary data storage while the wiki is being restored. This has been accomplished with the release of the two DropBox folders.

NEW BUSINESS

The next meeting place on November 20 will be announced at a later date because a Museum-wide social function for current and future donors will occupy many, if not all, meeting spaces.

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator