

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

Date/Time/Location: 8 May 2014 6:00 PM Admin 2

ATTENDING

Bullock	Doubek	Harter	Knutson	Lindsay	McGuldrick
Rabellino	Romero	Royer	Tarr		

Guests: **Dave Blumenstock**

The meeting opened at 6:50 PM. Those **attending** are listed above.

Emilie Royer was welcomed as our newest Venus Winds Project researcher!

OLD BUSINESS

Results of assignments to determine wind speed examples

7 Jul 2004 Marta

8 Jul 2004 Bryan

9 Jul 2004 Michael D. Images centered and transformed to cylindrical projection

10 Jul 2004 Marta

11 Jul 2004 Art Completed

12 Jul 2004 Carlos

13 Jul 2004 Mark Completed

Venus Winds wiki improvements Mark

Postponed.

Mathematics of the rectangular coordinates transformation Mark, Art

Postponed.

Sources of errors in velocity determination

The sources of errors in velocity determination were briefly discussed and will be a topic in the future.

Investigate some images on JPL web sites Mark

Postponed.

Crowd-sourcing

The discussion centered mainly on the feasibility of preparing an online demonstration of calculation of average velocity of a cloud feature on pairs of images. The demonstration might

be expanded to reselect the same feature multiple times. Variations in the picked coordinates from the several trials would be used to compute one estimate of picking errors.

If the demonstration is feasible, the experiment could be configured on a kiosk on which Space Odyssey visitors could learn the details of image registration as well the source of picking errors.

NEW BUSINESS

New Venus Winds researcher recruitment from current DMNS volunteers

Dave Blumenstock, Coordinator for Space Sciences Division at the Museum has proposed a mechanism by which new Venus Winds researchers could be recruited from volunteers who are already working at DMNS. He suggested that a description of the Venus Winds Project be prepared, including general goals and desirable specialty skills, to be distributed to all current DMNS volunteers, especially those who have a strong interest in planetary astronomy and/or atmospheric physics.

Art prepared a draft that was circulated earlier as an attachment to the Meeting Agenda. Those present commented on different elements of the draft attachment. The general opinion was that the format needed to be simplified so as to initially identify those volunteers whose interest was positive and then to determine if the specific skills of each matched those required for working with Venus Winds images. Examples of skill sets include computer programming, scripting and image processing, and image analysis. Art will prepare a set of prototype webpage designs that will be distributed and discussed at the next meeting. **If you are interested in diving into this application, please contact Mark or Art.**

First step in error analysis

Mark will distribute five rectangular (cylindrical projection) images from the December 2010 series. We will have everyone pick tracking points and calculate wind velocities. Then we will compare results to understand the variation due to individual technique. This will be the first step in an error analysis of the results.

The next meeting is May 22 will be in the usual space, Admin 2.

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator