

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

Date/Time/Location: 22 January 2015 6:00 PM South of Boettcher Plaza; Volunteer Breakroom

ATTENDING

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

Guests: **Sandy Krider**

The meeting opened at 6:00 PM at south of the Boettcher Plaza and Morgridge Wing. Those **attending** are listed above.

Telescope Night Mark

A crescent Moon was setting in the west in the early evening of January 22, 2015 with Mars also visible in the west. The conditions were cold and Mark set up his 8” Schmidt-Cassegrain telescope for viewing some planets (Mars, Uranus, Neptune) and galaxies such as M31, the Andromeda Galaxy. Others are welcome to bring their own instruments. Although the meeting place was on the second floor of the Museum (in EH201), those present met in the Volunteer Breakroom.

OLD BUSINESS

Your results and experience All researchers

The assignment was to select 9 sharp images from the Dec 14, 2010 dataset, approximately equally spaced in time. We have seven results of this assignment so far. The goal is to start reviewing these selected images next meeting.

Summary of velocity data from July 12, 2004 images Mark

Spreadsheets with wind velocities have been filled out by eight researchers so far. Summaries of these results will be posted on Google Docs soon, with a discussion postponed until the next meeting.

Wind velocity measurements using pre-defined points All researchers

Since last meeting, Mark sent an Excel workbook containing three spreadsheets: 1. **(Input)** This spreadsheet is similar to a previous exercise in which nine target points were to be tracked on nine evenly-spaced images from the July 12, 2004 series; 2. **(Calculations)** Display of nine graphs each of E-W distance (km) vs. Time (sec) and nine graphs N-S distance (km) vs. Time (sec) and 3. **(Results)** East to West Wind Speed (m/s) vs. Latitude and South to North Wind Speed (m/s) vs. Latitude graphs

One workbook was completed by Art. Serious anomalies were seen in most of the graphs that could not be readily explained. Mark will set up the exercise again using new target points. Look for an email from him with a new spreadsheet and annotated image.

Individual sub-group task reports

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

Dylan and Mark discussed potential algorithms to automate slit removal from the images. Dylan will build upon existing program code.

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

Postponed until next meeting.

Sub-group *Plotting Rotation Curves* (Proposer: Christy)

Postponed until next meeting.

Sub-group *Automated Co-Registration* (Proposer: Dave)

Postponed until next meeting.

Upcoming Assignment: Co-Register Images All researchers

Mark discussed the new assignment, which is to take each of your 9 images from Dec 14, 2010 and move Venus so that it is in the center of the 512x512 image. Please bring these new, shifted images with you to our next meeting on January 29, 2015.

NEW BUSINESS

Marta Lindsay has created a fabulous new web site for the project, hosted on the DMNS server. This will largely replace the now-defunct wiki. Actually, she made two: Please check them out and tell her and Art which one you prefer. Go to <http://spaceodyssey.dmns.org/> and you will see VWP 1 and VWP II on the right hand side of the top menu bar. Click on these to see the two different web site designs.

The next meeting on January 29 will be online only at 6:00 PM. We plan to use the electronic meeting space provided by Michael Doubek. Just point your browser to: <https://bluejeans.com/597553819/#> and join the meeting! If you don't have a computer, please dial into the conference line: (866) 588-1857
Access code: 4015711. If either of these change before the meeting, we'll give you an update.

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator