

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

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

**ATTENDING**

<b>Bullock</b>	Harter	<b>Knutson</b>	McGoudrick	Romero
<b>Doubek</b>	Hink	<b>Lindsay</b>	Rabellino	<b>Tarr</b>

Josh joined us via telephone hookup set up by Michael Doubek. Welcome back, Josh, and thanks, Michael, for this demonstration!

**OLD BUSINESS**

**Results of assignments to determine wind speed examples**

8 Jul 2004	Bryan	
9 Jul 2004	Michael D.	
10 Jul 2004	Art	Completed
11 Jul 2004	Sarah	
11 Jul 2004	Marta	Completed
12 Jul 2004	Carlos	
13 Jul 2004	Mark	Completed
13 Jul 2004	Sarah	

*Mark and Art showed results of their respective assignments.*

*Mark converted his images into cylindrical coordinates and then, by using Photoshop, picked distinct features of clouds at five widely spaced latitudes. He used the earliest and latest usable images for the beginning and end points. The images were exceptionally good. The graphic files of the zonal (latitude) and meridional (longitude) components and Excel spreadsheet showing the velocity calculation are attached here:*

**zonal.pdf    meridional.pdf    Jul13\_2004\_velocity.xlsx**

*Art chose eight fairly evenly-spaced and registered images and tracked 14 cloud features using Photoshop. The quality of the seeing was marginal and so most of the points were unusable because of difficulties in precisely locating most of the features. No velocities were computed. Typical example is: **0150.c.pdf** Marta and Art will switch their days for comparison of technique.*

**Venus Winds wiki improvements** Mark  
*Postponed until we have greater attendance.*

**Instructions for transferring JPL Horizons ephemerides to Excel Spreadsheet**  
*Postponed until we have greater attendance.*

Mark

**Position descriptions for new recruits**

*Mark and Art are working on additions to the Venus Winds Researcher position description that will specify the desirability for the applicant having significant computer processing and programming skills and experience that would be appropriate to the position.*

**Alternate meeting spaces discussion**

*The alternate meeting spaces (studios) proposed for Venus Winds Project are located in the Expedition Health area (2<sup>nd</sup> floor) and in the new Morgridge wing (1<sup>st</sup> floor). These spaces are intended for larger groups than ours and are appointed with modern furniture and large display capability.*

**Tutorials**

*There is a strong case for producing more tutorial videos (similar to the ones produced by Carlos several years ago and by Michael Doubek last fall). This was especially evident when we were presenting our methods and results at this meeting.*

**NEW BUSINESS**

**Physical properties of Venus's atmosphere**

*Mark made a short presentation describing the atmosphere of Venus as inferred by various terrestrial and spacecraft observations. We discussed the need for a summary article or tutorial video that would illustrate these physical properties of the atmosphere for new Researchers.*

**Meeting schedules**

*We discussed the merits of meeting on the second and fourth Thursdays of each month to avoid the scheduling conflict with Science Lounge on third Thursdays. This position is now established and will be implemented as soon as possible. The next meetings will be on 3/27, 4/10 and 4/24.*

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator