DENVER MUSEUM OF NATURE AND SCIENCE
VENUS WINDS PROJECT
MEETING AGENDA

Date/Time/Location 23 April 2015, 6:00 PM ADM 1 (basement level)

AGENDA ITEMS CARRIED FORWARD

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. However, also see below regarding Marta's efforts on this issue.

Sub-group *Improved Online Tools* (Proposer: Ricardo)
Ricardo and an associate have been improving the coordinate recording tool that Ricardo demonstrated at an earlier meeting (November 6). The tool is available for testing at **http://venuswindsproject.org/**.

Sub-group *Automated Co-Registration* (Proposer: Dave)
Dave has been researching available applications employing auto-correlation algorithms that would be employed in automated co-registration of images. He is planning to continue this research.

Progress in using Gimp as a substitute for Adobe Photoshop All
Recently we proposed that analysts who do not have access to Adobe Photoshop use open-source application Gimp. This is an opportunity for those who have experimented with Gimp to tell of their experience. We are interested in feedback from those who have no experience with either application. Several analysts have reported success in using Gimp for this purpose and will be asked to demonstrate their work at a future meeting.

NEW AGENDA ITEMS SINCE LAST MEETING

Wind velocity computations for 12 July 2004 images Mark
Mark has distributed a new Excel workbook containing a series of nine images from the 12 July 2004 series and instructions on how to track nine selected features on the first image through the remaining eight images. Wind speed profiles are calculated automatically on a separate spreadsheet. As a group we will track several of the points in the 12 July 2004 spreadsheet for all nine images, and work through the spreadsheet to show how the velocities for these points are determined.

Slit removal using Adobe Photoshop Marta, Mark
Marta demonstrated a method of removing the dark vertical slit in Venus images using Adobe Photoshop. The slit is four pixels wide and captures data for spectral analysis. The method smoothes over the four pixels by interpolation.

Availability of ALL Venus images Marta
On the Research/Datasets tab of the project web page, Marta has a link, in yellow, to all the Venus images. This is a password protected site. The username and password have been discussed at a previous meeting; temporary username is **mark** and default password is **venus**.

Published overview of atmospheres of the terrestrial planets Mark
Mark distributed *Atmospheres of the Terrestrial Planets* by James Pollack, Chapter 8 in the volume *The New Solar System* to all analysts. The chapter is an excellent overview of Mercury, Venus, Earth and Mars. Available on the web page.