

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

Date/Time/Location 9 Apr 2015, 6:00 PM ADM 1

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.

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/>. 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.

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.

Assignment: Co-Register Images All Researchers

Your assignment was to center each of your 9 images from Dec 14, 2010 in a 512 x 512 image. Then bring these 9 processed images with you or email to Art before the meeting. The next meeting will be Thursday Feb 26 at 6:00 pm.

Image Co-Registration: Mark

Mark will go through the process of centering each of 9 images from Dec 14, 2010, using Photoshop and GIMP. With the tutorials on the new web page and this demonstration, you should have enough information to start trying this yourself.

Wind Velocity Measurements: Mark

Mark discussed an instructive new way to choose points for wind velocity determination. The analysts present proposed a number of possibilities in the July 12, 2004 images. This consensus-derived method should yield points that are easier to follow. The new points will be the basis for a new exercise determining velocities with pre-defined points. Art will send the images with points plotted and a new spreadsheet. Several of the points discussed at the meeting will be included in that set.

NEW AGENDA ITEMS SINCE LAST MEETING

Wind velocity computations for 12 July 2004 images Mark

Mark will introduce and discuss nine new images from 12 July 2004. He will provide a new spreadsheet for the velocity computations.

Published article of Venus Winds results Mark, Art

This discussion will focus on the scope of an article (to be published in a scientific journal) detailing the methods and results of Venus Winds Project research into the zonal winds at 50 km altitude. Certain goals have been established and these will be discussed in detail.

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 hearing from those who have no experience with either application.