

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

Date/Time/Location 3 September 2015, 6:00 PM Exploration Studio 102 or 106

**AGENDA ITEMS CARRIED FORWARD**

**Wind velocities for analysis of July 4-13, 2004 data** Mark, Art

This task was to center each image and to send those ten images to Mark who then converts each image, using a cylindrical map projection, into a rectangular image. A 370px mask was provided to do the centering step. Several analysts had completed the centering task and sent those images to Mark. Unfortunately an error in the conversion to rectangular coordinates was discovered and corrected. Analysts should redo the centering exercise and send their images to Mark for conversion to the rectangular format.

Art discovered a problem in using a circular mask/circle to center the image before rotation. It happens that a mask/circle diameter of 370px technically works only at one time, in this case July 5 at 1800 UT. In the July 4-13 series, the Venus diameter changes about 0.6 arc-sec every day.

**Wind velocities for 10 nights in July 2004** Mark

After Mark has distributed projected rectangular images for the nights of July 4-13, 2004, we will determine velocities for each pair. There are advantages of using rectangular images, rather than raw images, to determine wind speed.

**Removing spectrometer slit** Mark, Michael L. and Kevin

Mark described how to use Photoshop to eliminate the spectrometer slit; this was originally discovered by Marta. Michael figured out how to do this in Gimp. Instructions for Photoshop and Gimp have been sent by e-mail. Discussion will focus on those analysts who have done this experiment with their results.

**Identifying cloud features that repeat six days later** Mark

We examined images from July 4–13, 2004 and discovered that features seen on July 4 can be seen on July 10; other features on July 5 can be seen on July 11. This six-day interval is evidently the rotation period of the atmosphere at this altitude. Those who have tried identifying persistent features should discuss their experience.

**NEW AGENDA ITEMS SINCE LAST MEETING**

**Venus greenhouse effect** Mark

Mark will explain how Venus' greenhouse effect works and what impact it may have on the winds that we observe.