

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

Date/Time/Location: 26 June 6:00 PM Exploration Studio 106

**ATTENDING**

<b>Bullock</b>	Doubek	Harter	Knutson	<b>Lindsay</b>	<b>McGouldrick</b>
Rabellino	Romero	<b>Royer</b>	<b>Tarr</b>		

Guests: None

The meeting opened at 6:00 PM at Exploration Studio 106 in the Morgridge Wing. Those **attending** are listed above.

**OLD BUSINESS**

**New Venus Winds researcher recruitment from current DMNS volunteers** Art  
Art reported that advertisement for new volunteer positions will be made in the next few weeks.

**Wind velocity computations for 12 July 2004 images** Mark  
The purpose of this exercise is to determine one class of measurement errors inherent in the first step in registration, the alignment of nine successive images distributed by Mark of a series on 12 July 2004.

Mark displayed two images (recorded three and one-quarter hours apart) registered by Art in the past week as an example. Discussion included the use of a mask or a ring of the same diameter to center the image. The principal advantage of the mask is that it eliminates most extraneous parts of the image in one step while the advantage of the ring permits greater precision in determining the edge of the dark-side limb, which is often subtle. We also attempted to identify cloud (or gap) features on both images. In some cases, a particular feature changes shape which poses problems in picking a target.

The assignment continues until we have enough observations for statistical purposes. Try to register those two images for discussion at the next meeting.

**Venus Exploration Targets Workshop** Kevin  
Kevin presented a review of a recent workshop that he attended focused on the objectives of a spacecraft mission to Venus. The workshop was divided into mission subgroups: Surface; above the atmosphere; and within the atmosphere. The surface subgroup emphasized landing on a particular type of terrain, such as plains or highlands. The second subgroup represented missions that would employ a vehicle, such as a balloon or glider, that would observe atmospheric phenomena, such as hazes and sub-clouds. The third subgroup emphasized an orbiter that would contain instrumentation capable of observing Venus at multiple wavelengths.

URL for the poster session in which Kevin is a co-author:  
<http://www.hou.usra.edu/meetings/venus2014/pdf/sess201.pdf>

**Venus Winds wiki improvements** Mark  
*Postponed until we enlist more researchers*

**Mathematics of the rectangular coordinates transformation** Mark, Art  
*Postponed*

**Investigate some images on JPL web sites** Mark  
*Postponed*

**FITS headers** Mark  
*Postponed*

### **NEW BUSINESS**

The next meeting on July 10 will be in **Exploration Studio 106**.

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator