

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

Date/Time/Location: 10 May 2016 6:00 PM Exploration Studio 106

**ATTENDING**

<b>Art</b>	Ashley	Christian	<b>Connor</b>	Cristy	<b>Dave</b>	Drew
Dylan	Elizabeth	<b>Emilie</b>	John	<b>Kevin</b>	<b>Mark</b>	Marta
Michael D.	<b>Michael L.</b>	Rachel	Terran	<b>Yvonne</b>		

Guests:

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

**OLD BUSINESS**

**Assignment Results – All**

We started the meeting with group members showing their results. Everyone now has an assignment and thumb drive to copy results to. Art showed us the 16 images from Dec 14, 2010 that he is going to work on using Photoshop. Michael showed the results of several steps: the selection of 16 images from the Sep 29, 2015 dataset, removal of the spectrometer slits, removal of the diagonal ‘crack’ in these images, and then centering each one. He did this processing using GIMP. Connor selected the 16 images that he will be working from the Dec 17, 2010 dataset, and removed the spectrometer slit. Connor also used GIMP.

There was some discussion on using Marta’s centering tool and masks – the large multi-layer Photoshop image that we use as a template. While the raw data are 16 bit gray images, the circles stand out better if they are red, i.e. an RGB image. Converting the raw image to RGB makes it 24 bit (although still gray), which can then be layered with the red circle RGB image. This may result in a tiny loss of gray dynamic range, but not much. It would be worthwhile to make some visual comparisons.

All of the above results are on the data server, in their respective folders. Go to ‘Centered Images’ or ‘Slit Removed’ folders.

**Science on a Sphere – Michael and Connor**

Michael and Connor displayed several Magellan image datasets of Venus on Science on a Sphere, and the Venus geologic map. This allowed us to identify terrain types; specifically mountainous regions that may induce mountain wave clouds downwind.

**Akatsuki Update – Kevin**

Another meeting in Japan between the NASA *Akatsuki* Participating Scientists and the Japanese science team will be held May 30-31. Kevin will begin his in-residence post at that time, returning sometime in the fall.

## **NEW BUSINESS**

### **Removing bad pixels – Mark**

Most astronomical images have defects – scratches, dust, or cosmic rays that passed through the detector chip during the exposure. Mark went over the general scheme of how this is done in preparation for trying out a software tool on our images next time.

The next meeting will be on 24 May 2016 at 6 PM in Exploration Studio 102.

Submitted by Arthur C. Tarr, Venus Winds Project Coordinator