

## December 2009 CCD Image Processing Workshop Agenda

### Thursday December 10<sup>th</sup>

9:00am-12:00pm	Transportation available from Tucson Airport
1:00pm	Steward Observatory Mirror Lab Tour
2:15pm	Leave for Safeway
2:45pm	Arrive at Safeway
3:15pm	Depart for Mount Lemmon SkyCenter
4:30pm	Tour and check-into rooms at Mt. Lemmon SkyCenter
4:45pm	Introductions and Dinner
5:20pm	Sunset
6:30pm-midnight	Computer Check and use of 24-inch Telescope if clear

### Friday December 11<sup>th</sup>

8:30am – 9:00am	Breakfast
9:00am - 11:00am	Demonstration of Best Workflow (basically, the Adam Block method)
11:00am- noon	Example data with exercises in calibration, registration, normalization, data rejection, photometry (G2V flux measurement), and astrometry (plate scale, asteroids).
Noon- 1:00pm	Lunch
1:00pm-5:00pm	Continuing with fundamental processing steps from above and/or Asides for special considerations (deblooming, upsampling etc) Produce LRGB images for next day's session.
5:00pm	Dinner
5:20pm	Sunset
6:00pm	Demonstration of single-shot color images. Sample data included.
7:30pm- 1:00am	Use of 24-inch telescope if clear. Continuing workshop activities simultaneously at Learning Center (telescope can be controlled remotely).

### Saturday December 12<sup>th</sup>

8:30am-9:00am	Breakfast
9:00am- noon	LRGB Production and Workflow. Includes special blending techniques in Photoshop (High Pass Filtering, user-defined layer masks, inverted object masks and many others). Also includes demonstrations for the correction of common image problems and artifacts.
1:00pm-3:00pm	Discussion and Creation of an H-alpha blended image. (or sample set with participant choosing the software method)
3:00pm-5:00pm	Best practices for Data Rejection. Included normal Standard Deviation examples as well as combining images through two

different systems. CCDStack's missing value applications are also shown.

5:00pm

Dinner

5:20pm

Sunset

6:30pm -1:00am

Individual practice and observing on the 24-inch (if clear).

### **Sunday December 13<sup>th</sup>**

8:30am-9:00am

Breakfast

9:00am-noon

Bringing it together: Object Oriented Processing and Contrast Management (or wrap up topics)

Noon

Lunch and depart mountain (depends on guest itineraries)