Tracking and Stacking Photos in Photoshop

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The purpose of photo stacking is to improve image resolution and signal to noise ratio. During this process, photoshop will select the sharpest part of the image and add it to the group. Most of the unsharp parts of the image will be left out. There are many different methods of tracking and stacking photos. This is just one.

To image stars, tracking may or may not be necessary. If photos are taken for a duration of less than 5 minutes, tracking may not be necessary. See the chapter "Astrophotography Without Tracking." The sun and moon move very quickly. A single image would need to be taken because the sun would be out off the screen in a matter of seconds. If multiple images are taken of the sun and moon tracking would be required.

The best and easiest to use mount in this author's opinion for solar imaging would be the Sky-Watcher SolarQuest Alt-Azimuth Solar Mount. However, during the time of this writing, it was back ordered. The Sky-Watcher AZ-GTi Multi-Purpose Mount & Tripod was used. The AZ-GTi is actually more versatile because it can also be used to image the moon and stars.

In previous older chapters, external intervalometers were recommended. Most newer cameras have built in intervalometers.

Resources

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Sky-Watcher AZ-GTi Multi-Purpose Mount & Tripod
$475
Or
Sky-Watcher SolarQuest Alt-Azimuth Solar Mount
$530
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Example



10 images stacked and enlarged 200%

1 of f10 images enlarged 200%

The above object was a stationary object as seen through a 61 mm telescope with 15 mm eyepiece projection. This image may be considered a good image. The improvement here is subtle, but can be seen clearly. Some of the grain of the roof tiles on the top of the image was brought out clearly in the stacked image. Therefore stacking can even improve a good image.