Lunar Imaging

CAA
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www.astronomylog.co.uk

Lunar Imaging

Why Image the Moon?

- Bright object
- Easy to find
- Lots of features to image
- Only need a modest telescope
- Easiest to image – confidence builder

Top 10 Lunar Imaging Tips

1. Don’t image a full moon, image the moon through the phases. There is lots of detail along the terminator line
2. Image the moon when high in the sky
3. Capture video with software that came with webcam or try FireCapture or SharpCap (www.sharpcap.co.uk)
4. Try a Green or OIII filter to aid with Lunar ‘seeing’ + (UV/IR filters)
5. Set your mount to the Lunar Tracking Rate

Top 10 Lunar Imaging Tips

6. The moon is bright, so lower the gain and exposure times
7. Take video at the highest frame rates you can (fps)
8. Take 500-1000 frames
9. Save your video as an uncompressed AVI or SER file.
10. Process video in AutoStakkert and Registax (or just Registax 5 or 6) – both are FREE

Processing Lunar Video

Registax 6

- Select video
- Set alignpoints
- Align
- Limit the frames
- Stack the best frames
- Use wavelets to sharpen

Move to image editing program to tweak brightness, contrast, sharpening etc.

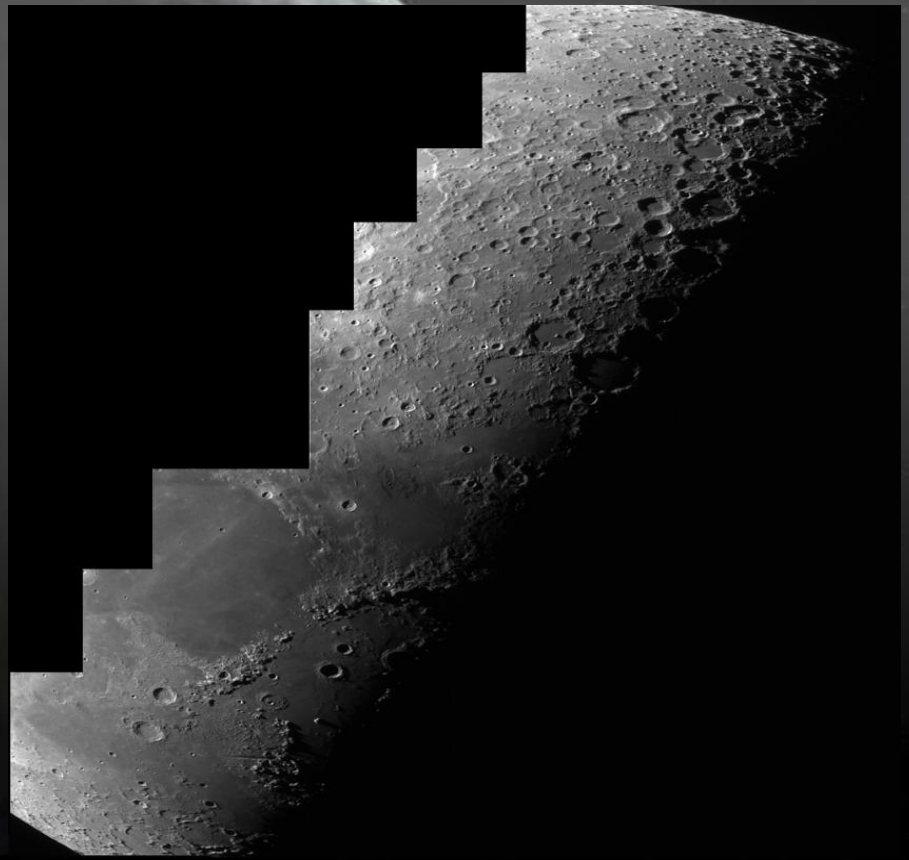
Autostakkert

- ‘Open’ video
- Set stabilisation point
- Analyse
- Set alignment points
- Stack

Move to Registax for wavelet processing and then image editing program.

Demo Time
Play the lunar video!

Lunar Mosaic



Lunar Mosaic

Most webcams have a small chip, so a small field of view

To get the whole moon you may need to make a mosaic by taking several videos.

1. Keep settings the same throughout all videos
2. Make sure you overlap your videos
3. Process in Autostakkert and Registax – use same settings, including Wavelets
4. You don’t have to manually align the image frames.
    - Use Photomerge in Photoshop and Photoshop Elements (8+)
    - Microsoft ICE program (Free)

Lunar Mosaic Demo

The End
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