

The planets, tough objects to do well

- Planets are small and require high magnification to show detail
- The high magnification accentuates the turbulence (twinkling/flickering)
- Prolonged exposure is not the way forward
- One trick is to take lots of short exposure images, minimizing the fuzziness due to twinkling, and add them. VIDEOS!

Exposure time is not an issue – most planets are bright.
But high magnification means blurring from atmospheric
turbulence even with a short exposure.
Below – the best you'll get with a standard single exposure, maybe 1/5s





Remove the plastic webcam lens (often a 'C thread') and buy/make adaptor, or tape to telescope eyepiece hole)


Link to videos

Plenty of freeware to sort and stack video images. The best is;

Home Download Preview V6 Links About

RegiStax⁶

Free image processing software



REGISTAX 6 RELEASED

Email : registax@gmail.com

RegiStax Articles

Cor Berrevoets:

- Trapping noise
- Dealing with AVI-files

Bob Pilz:

- Lunar AVI's

Eric Roel:

- Solar Prominences

Sylvain Weiller:

- Solar H-Alpha zones

Ken Hough:

- RegiStax under Linux

Downloads

MAY 6 RegiStax 6 update available

The 1st update of RegiStax 6 is available for download from the [downloadpage](#). This update only replaces the executable file of RegiStax and needs to be installed in the same directory where RegiStax 6 has been installed, you should NOT uninstall.

[Download Release 6.1.0.8 \(1.6 Mb\)](#)

Find below the most important changes of this update, if you have issues that are not solved with this update please report them.

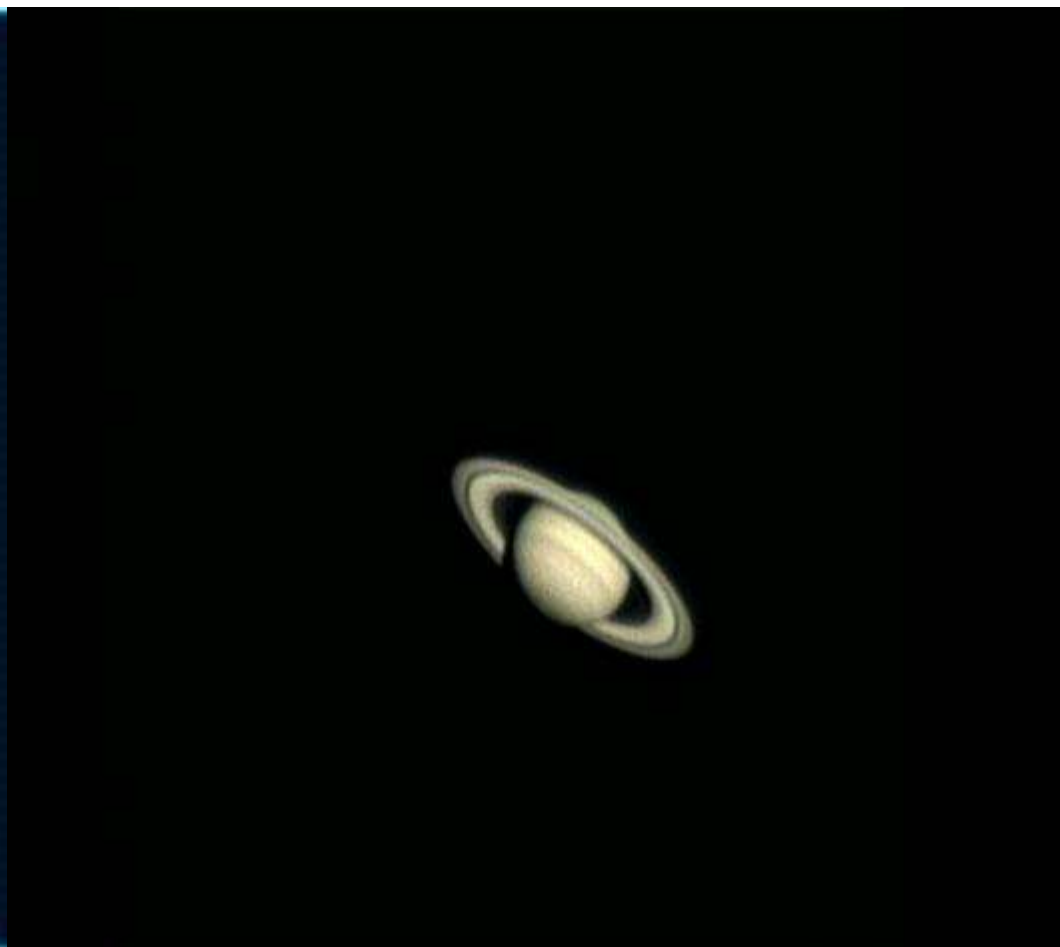
General improvements:

- large AVI's (that needed the extended mode from RegiStax 5) now also use multicore to read frames.
- when using larger wavelet-filters (problem also existed in R5) spurious edges could appear on the image (horizontal striping), this is now solved.
- when saving a wavelet-scheme the new "linked wavelet-setting" is also saved.

Solves the following issues reported:



Jupiter and two of its moons



saturn

Some of mine
Better than you'd see visually in a good telescope



Saturn about to go behind the moon (over-exposed)



A sunspot

More of mine

High Mag view of a lunar crater. Before.....

The screenshot displays a software interface with a menu bar at the top containing 'Select', 'MRU', 'Flat/Dark/Reference', 'Tools', 'Settings', 'Cancel', 'Pause', and 'About'. Below the menu bar is a toolbar with 'Align', 'Stack', and 'Wavelet' buttons. The status bar shows 'File Version: 6.0.7.113', '30-03-2011 08:49', and 'Memory Used/Free/Total: 65/1553/2048Mb'. The main window is divided into a left sidebar and a right image area. The sidebar has three tabs: 'Set Alignpoints' (selected), 'Align', and 'Limit'. The 'Set Alignpoints' tab contains the following settings:

- Set Alignpoint parameters**
 - Minimum distance between: 20
 - Min distance from edge: 15
 - Intensity_selection
 - Default
 - 3x3 area
 - Lowest pixelvalue
 - Lo: 28
 - Hi: 228
- weakest Threshold strongest
- Number of Alignpoints: 0
- Keep Alignpoints inside ScanFrame
- Alignment setup** Show Alignment
 -
 - Alignmentbox size: 25
 - Max Alignpoint movement: 5
 - Align by Centre of gravity
 - Lum Threshold: 0
 - Estimate Rotation
- Limit Setup**
 - Lowest Quality (%)

The right image area shows a high-magnification grayscale view of a lunar crater, which is the central focus of the software's processing.

After stacking 50 images.....(some sharpening too)

Wavelets Reset Wavelets

Automatic
 Hold Wavelet Setting


Waveletscheme
 Dyadic (2ⁿ) Linear

Initial Layer Step Increment

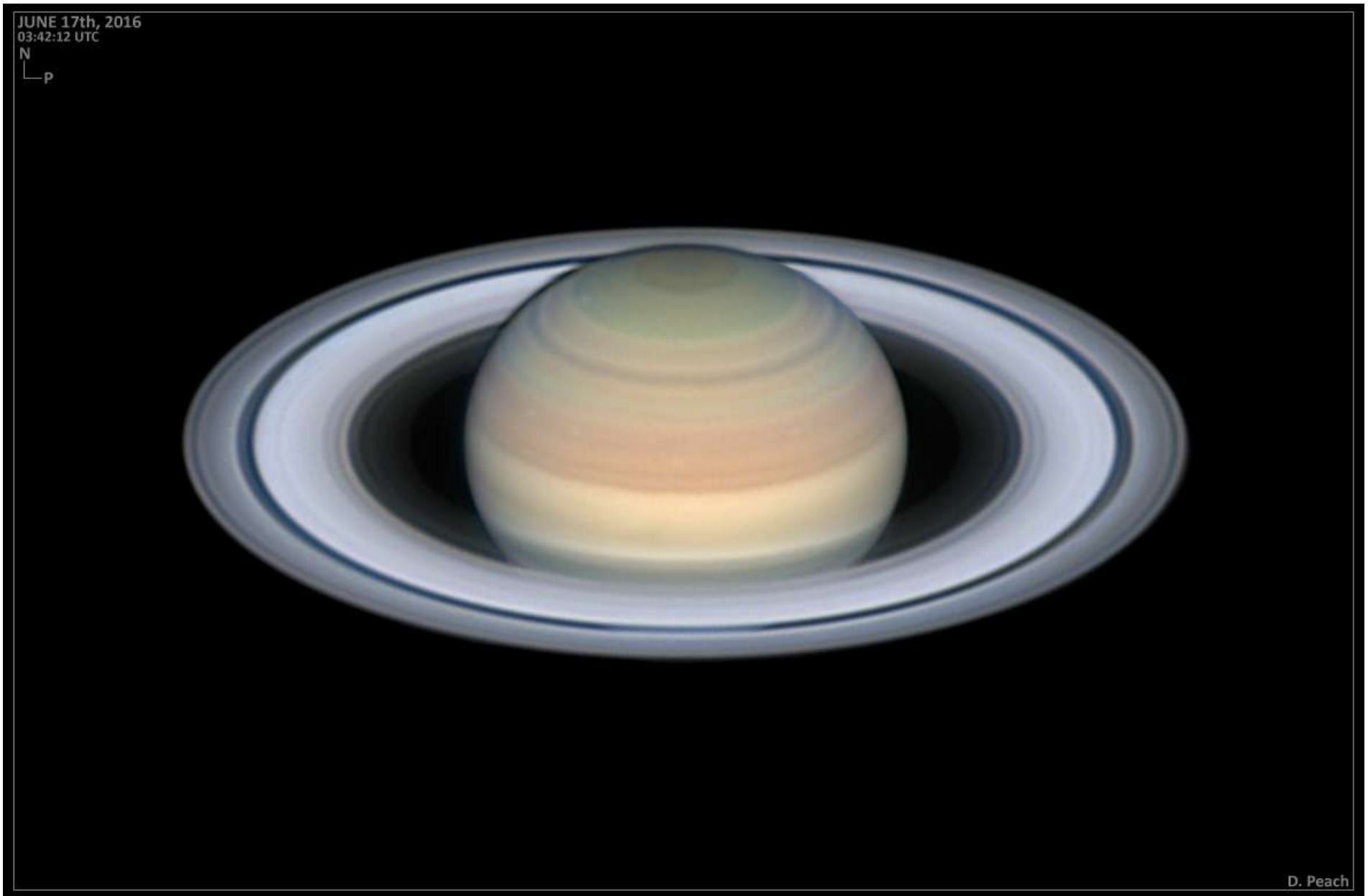
Wavelet filter
 Default Gaussian

Use Linked Wavelet Layers

Layer	Denoise	Sharpen	Preview
<input checked="" type="checkbox"/> 1	<input type="text" value="0,15"/>	<input type="text" value="0,1200"/>	72,4
<input checked="" type="checkbox"/> 2	<input type="text" value="0,00"/>	<input type="text" value="0,100"/>	75,4
<input checked="" type="checkbox"/> 3	<input type="text" value="0,00"/>	<input type="text" value="0,100"/>	82,8
<input checked="" type="checkbox"/> 4	<input type="text" value="0,00"/>	<input type="text" value="0,100"/>	1.0
<input checked="" type="checkbox"/> 5	<input type="text" value="0,00"/>	<input type="text" value="0,100"/>	1.0
<input checked="" type="checkbox"/> 6	<input type="text" value="0,00"/>	<input type="text" value="0,100"/>	1.0

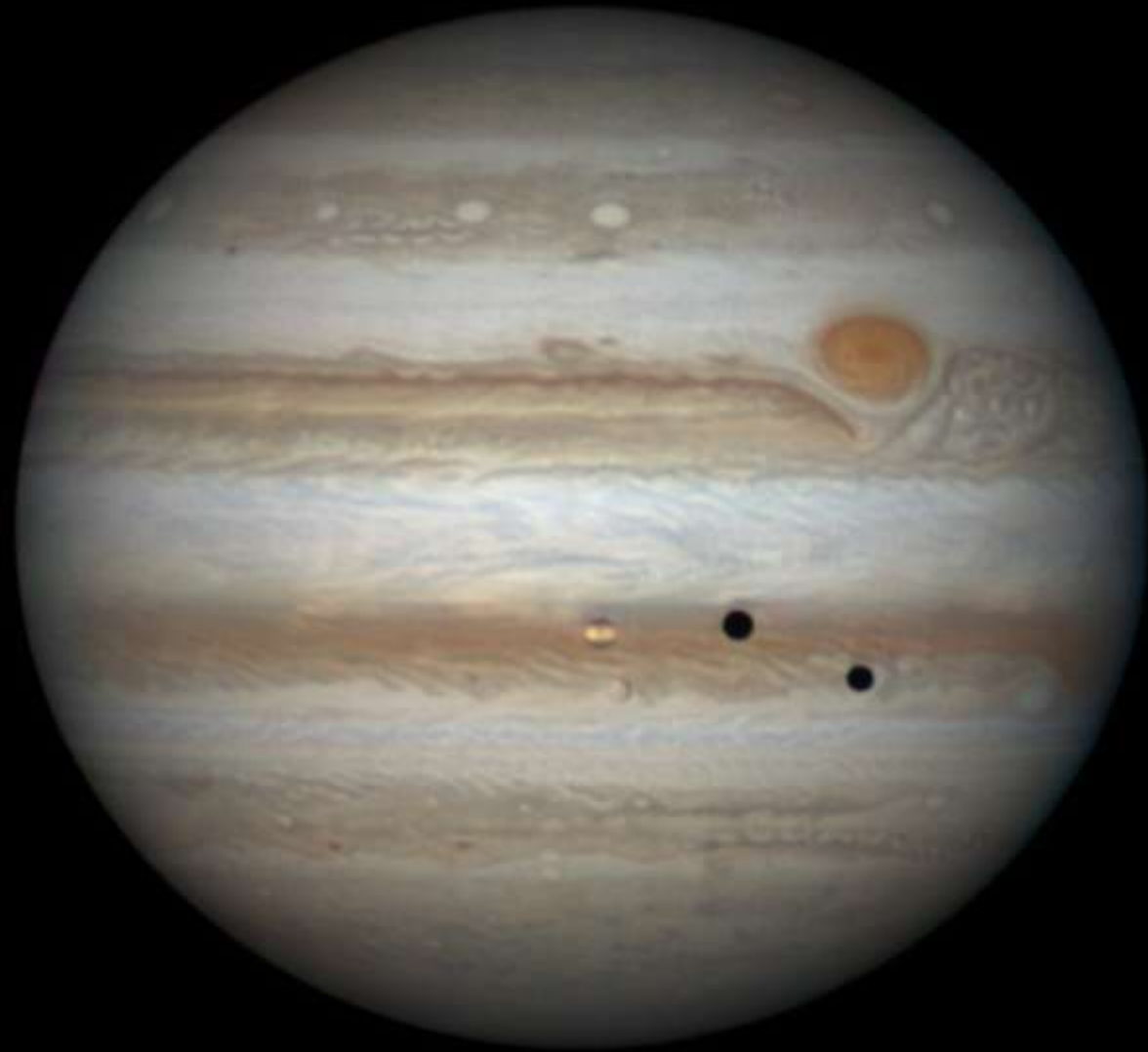


For a masterclass in this technique check out the UK amateur Damian Peach;
<http://www.damianpeach.com/>



MARCH 21st, 2016
05:00:30 UTC

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A true amateur master....

He started with the simpler webcam kit, but now uses higher end video camera – but new DSLRs often have video options!