

# Creating Star Trails using multiple stacked images

On a recent club outing, some members participated in taking multiple time exposures in order to create a star trail by combining the stack of multiple images. The method on the next page uses Photoshop to stack the images together and create a composite image using the brightest parts from the stacked images.

For earlier versions of Photoshop which may not have the File...Scripts... Statistics function (as per step 2), users will need to use the method described in step 3.

Those of you who do not have Photoshop, the following link provides a link to download a free application for Windows users:

<http://www.startrails.de/html/software.html>

For Mac users who don't have Photoshop try:

<http://www.markus-enzweiler.de/StarStaX/StarStaX.html#download>

Note: instead of combining a lot of high resolution images which which may grind your computer to a halt, first export the images from Aperture, Lightroom( or whatever image processing software you use) to a lower resolution JPEG file - say 1024 x 768 pixels.

The process will then run a lot faster and you will see if you are happy with the final results, before deciding to work with higher resolution files.

For Aperture users, select all of the images you wish to convert (click on the first image the shift click on the last image to select the entire sequence), then from the menu, select File...Export...Versions.... then select Export presets JPEG - Fit within 1024 x 1024

If you are a Lightroom user, select all of the images in the sequence (click on the first image then shift click on the last image to select the entire sequence), the from the menu select File....Export then enter 1024 x 768 in the Image Sizing section with a resolution of 72ppi, and choose somewhere to save the images from the Export Location section of the Export dialog.

Have fun!

Peter Squires

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1. Capture

Capture settings for this image:  
24mm ISO 50 f/2.8 - 30s x 46 shots  
(ie 23 mins of images)

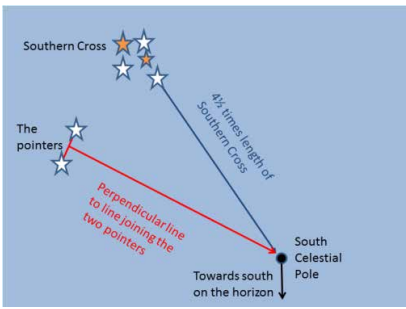
Max aperture - makes stars brighter

Tripod & Cable Release

Anchor shot with suitable object  
(ie buildings, trees, rocks etc)

Tips:

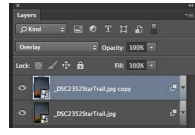
Consider position of Southern Celestial Pole  
when composing shot



5. Final Image

4. Duplicate Layer

Overlay blend mode  
(or image adjust to suit)



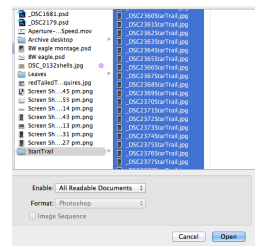
3. Resulting Image



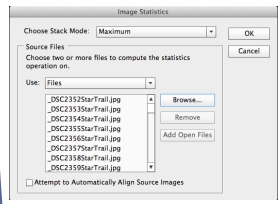
Tutorial  
Creating Star Trails using  
Photo Stacking  
P.Squires October 2014

File...Scripts...Statistics

Choose Stack Mode "Maximum"



Browse...select files...Open ...OK



2. Method 1 - quickest  
(if statistics option available)

3. Method 2  
(if statistics option not available)

Place each image on new layer  
- can be done using  
File...Automate...Photomerge

Change every layer blend mode to lighten

Note: Creating the star trial by stacking & combining images worked well for this image because it was a full moon & the building was already illuminated. The photo was taken on Cockatoo Island in the middle of Sydney Harbour and due to all the stray light the stars were not that bright and nowhere near as many as I have seen in Tassie! In darker areas with clear skies and many bright stars, during a new moon (no moon) single images with long exposures 30mins or more can be used. We revolve 360 deg in 24 hrs, so in 1hr we revolve 15 deg. The more stars visible, the quicker the star trails join up. A good resource: <http://www.lightstalking.com/how-to-photograph-star-trails>