

Andrew Thornett's Processing Workflow for Astrophotography Photographs in Pixinsight & Photoshop 22/1/2025

1. Run PixInsight.
2. Stack in PixInsight using Weighted Batch Pre-Processing (WBPP), using Lights, Darks and Flats. Biases are not necessary.
3. If using Mono then next step is to run process LRGBCombination to combine the channels into a single RGB image.
4. Crop image to remove stacking artifacts at edges.
5. Run process Dynamic Background Extraction (DBE). Once the process dialogue box is opened in PixInsight, then need to click on the image to select samples (avoid the object in the image), and, within "Target Image Corrections", change drop down box to "subtract", then run the process.
6. BackgroundNeutralization process: Select reference image, the image that is being processed. Do not need a region of interest. Run
7. Create New Preview of the brightest object in image.
8. ColourCalibration process
White Reference – in reference image select the preview above.
Background Reference – In reference image select image you wish to process.
9. Save image as 16 bit TIFF.
10. Optional:
 - Topaz GigapixelAI to increase resolution of image.
 - Topaz DenoiseAI or other equivalent software.
 - Topaz SharpenAI or equivalent software.
11. Run Photoshop and open 16 bit TIFF above.
12. Whilst within Photoshop, at key intervals, save the processed image as new copy so can go back to this if further processing not helpful: Do this by following – select all – copy merged – paste.
13. Use curves to bring out detail and levels to remove empty areas of black end of spectrum in iterative process ensuring brightest portions of image do not saturate.
14. Increase brightness & saturation – again don't overdo this – do this iteratively until you are happy that you have achieved best you can at this stage.
15. Ideally, you are able now to see some blue and some red in image – do not worry if colours not as you would like them yet!
16. Now use combinations of following to achieve the desired final image:
 - Astroflat Pro plug in.
 - Image – Adjustments – Replace Colour.
 - Hue adjustment.
 - Levels.
 - Curves.