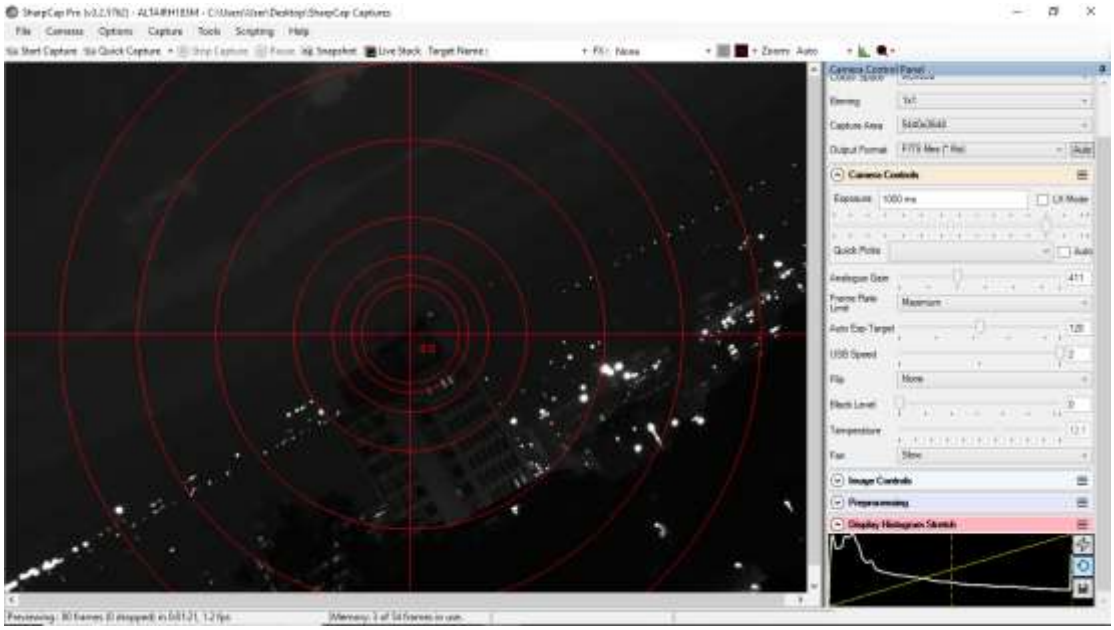
The initial finderscope/telescope alignment can be practised during day light. Then slew to another object using the finder and check the eyepiece or image view. Choose an object about a mile away if possible.

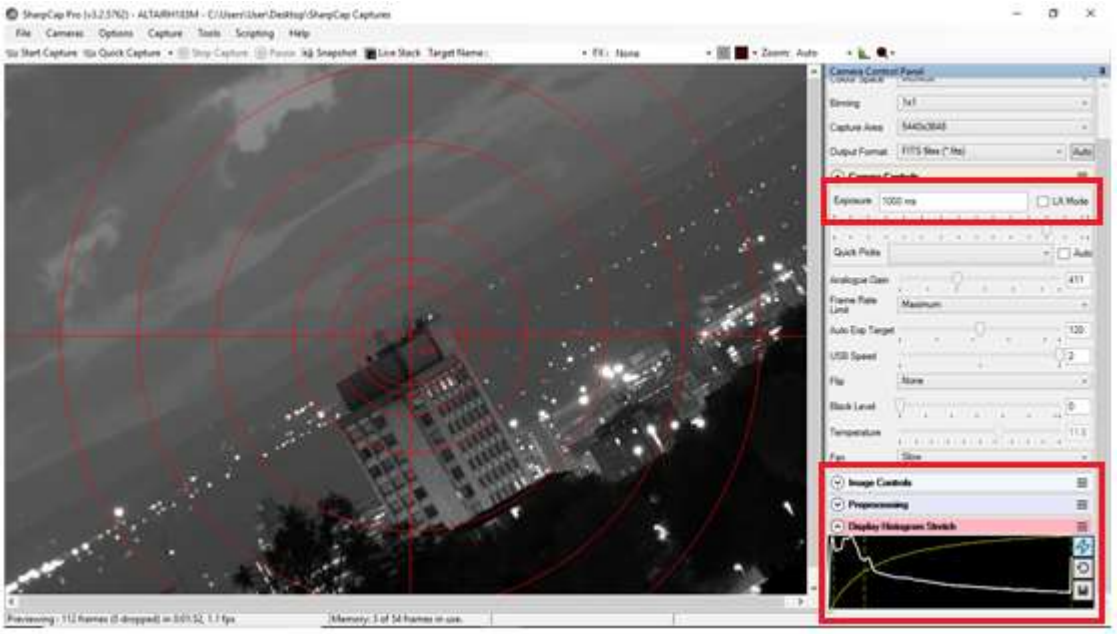
View over town – just gone dark, camera fitted to telescope.



Apply Display Histogram Stretch – exposure only 1s but looks like day. Turn on the reticule.

Make sure finderscope/red dot finder has the same view. This is important as the finder will be used to find alignment stars.

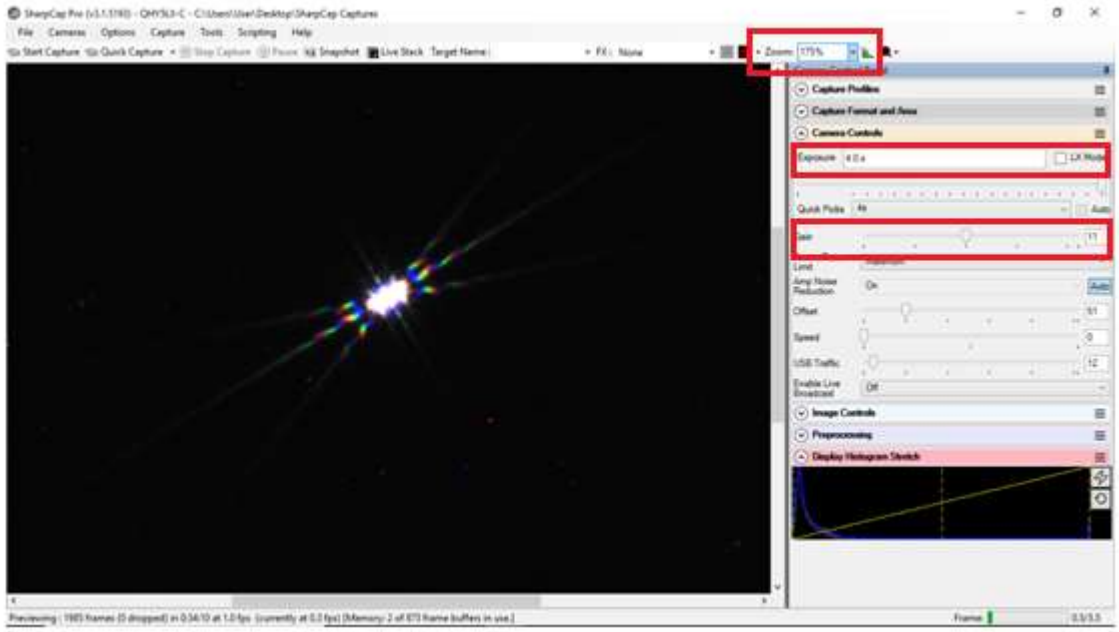
Achieve ‘eyeball quality’ focus. This will be ‘good enough’ for the alignment process.



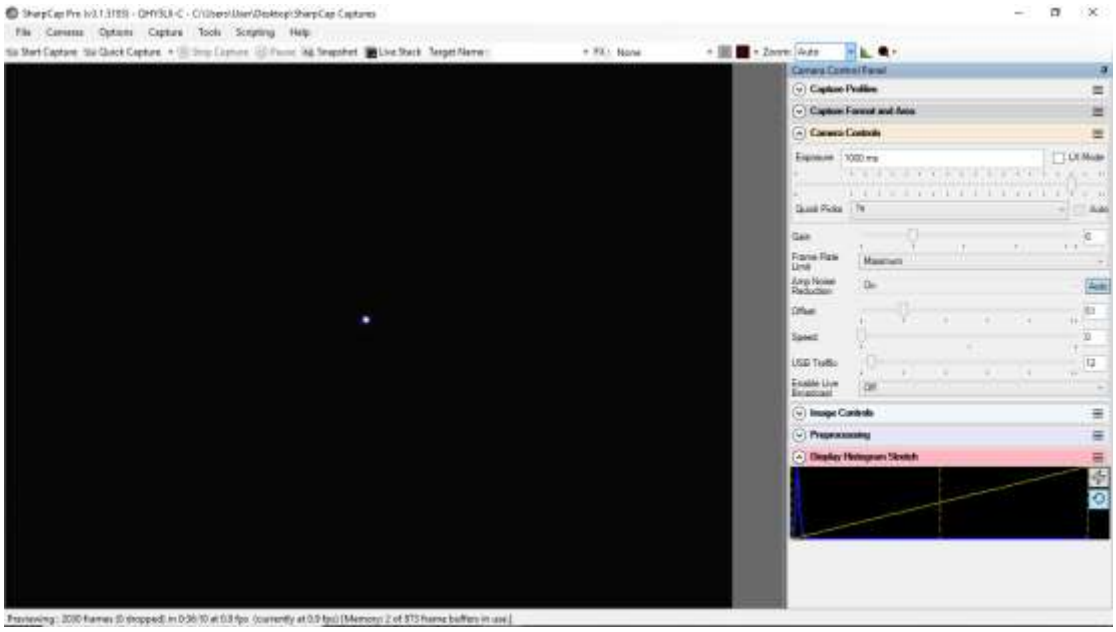
Carry out the alignment process for your particular mount.

Slew to a star near to the object of interest. For example, to image M27, I would choose Altair.

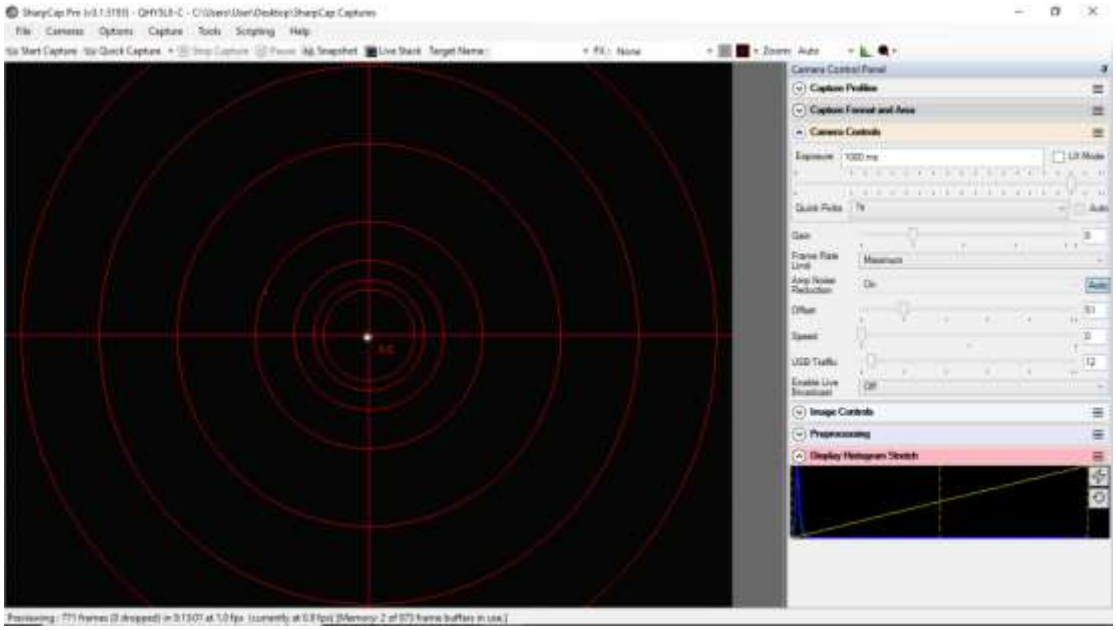
Place Bahtinov Mask over scope. Keep exposure low, increase gain if necessary, this helps with responsive focusing.



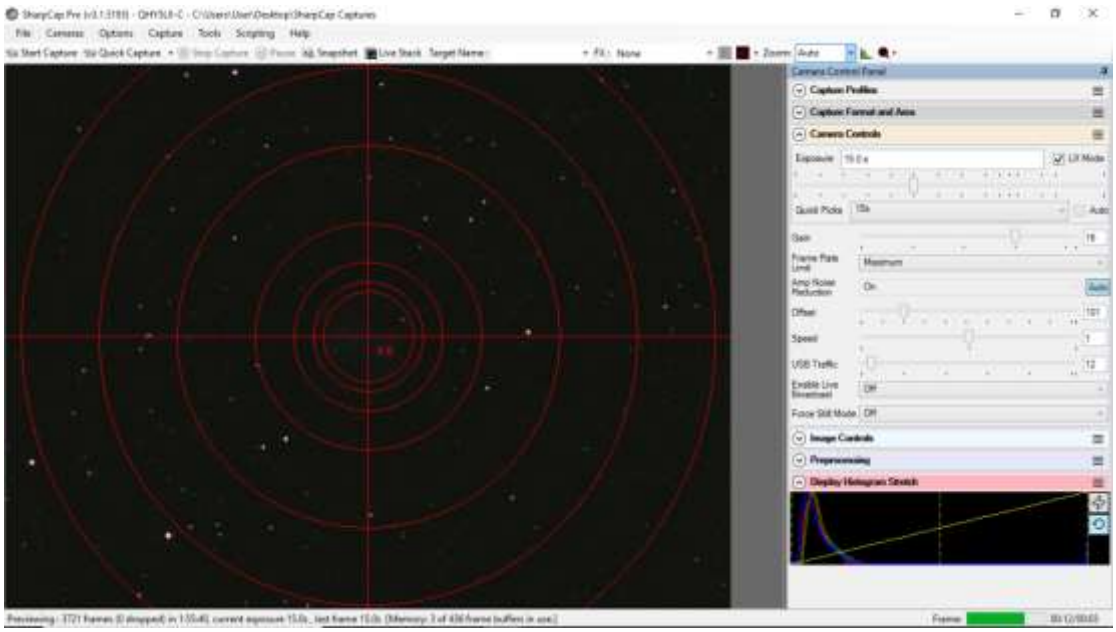
The focused star



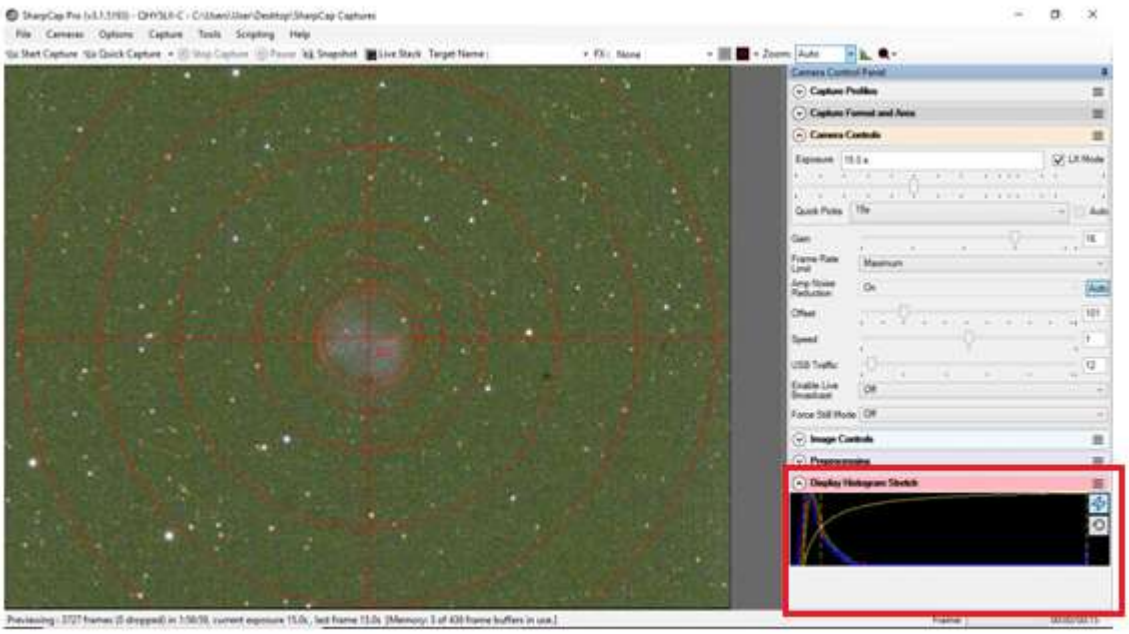
Turn on the reticule.



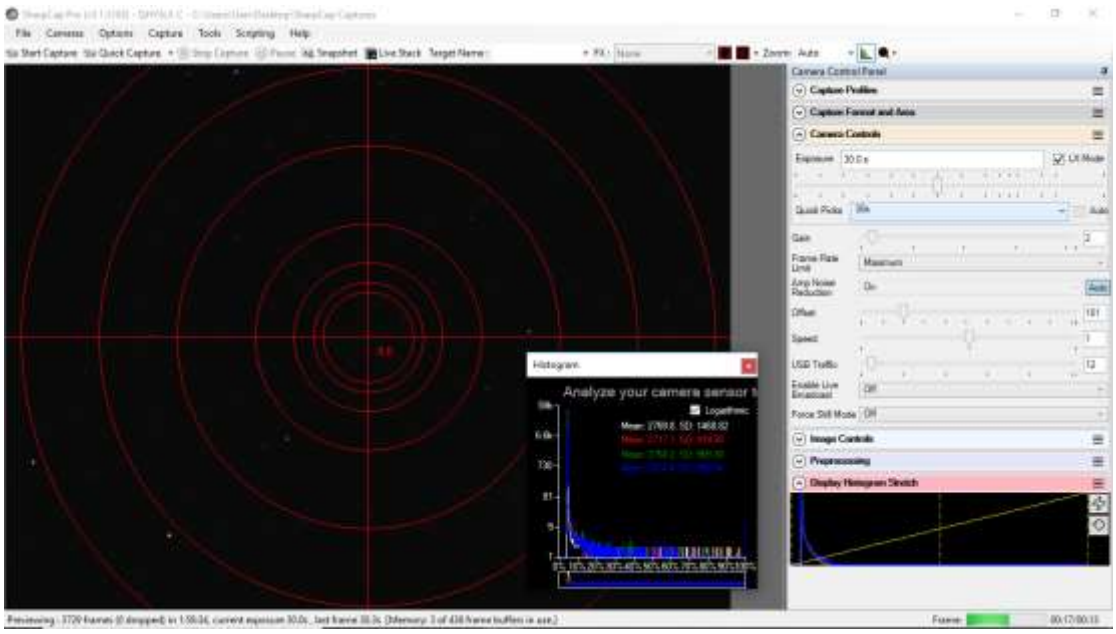
Slew to the object of interest but remember it won't be visible.



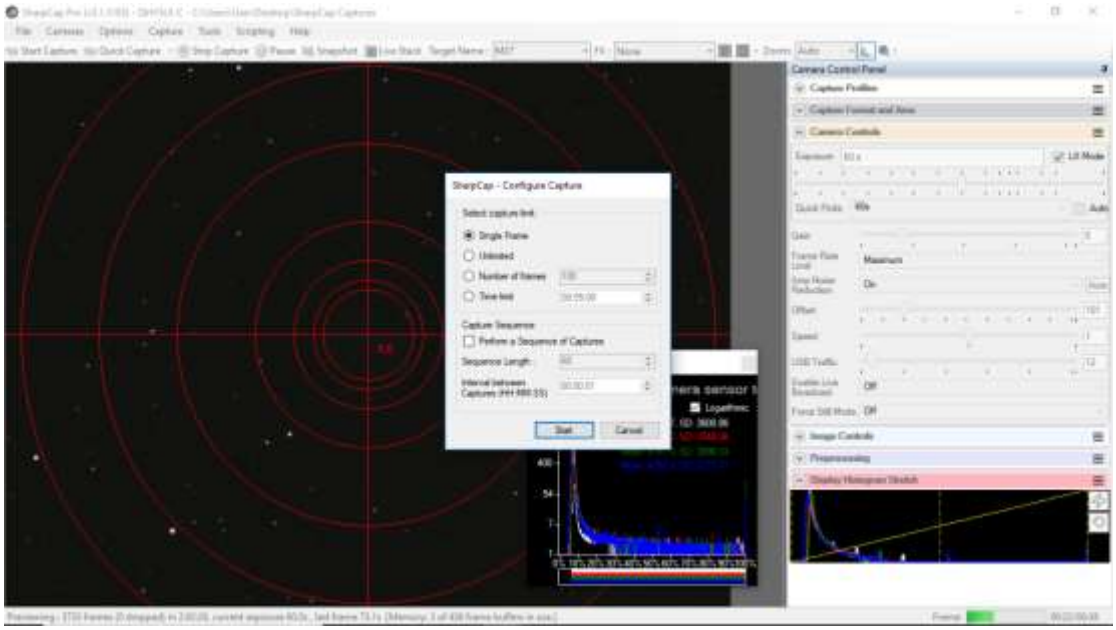
Apply Display Histogram Stretch. If object not centre, then drop exposure until only 1 or 2 stars visible. Use handset buttons to move mount until star in 'right place' for object to be central.



Turn on the histogram and detach it from its dock – the full histogram has too much information for beginners. The shape shown is classic histogram for a deep sky object – see SharpCap documentation. Histogram has a small gap at Left-Hand-Side. The histogram can touch the Right-Hand-Side but it must be very low down the axis. Adjust exposure, gain, offset/brightness/black level until satisfied.



At this point either start an imaging run, or switch to Live Stack and carry on from there.



Don’t be obsessed with the screen view being correct, issues like colour balance can be addressed in post processing.