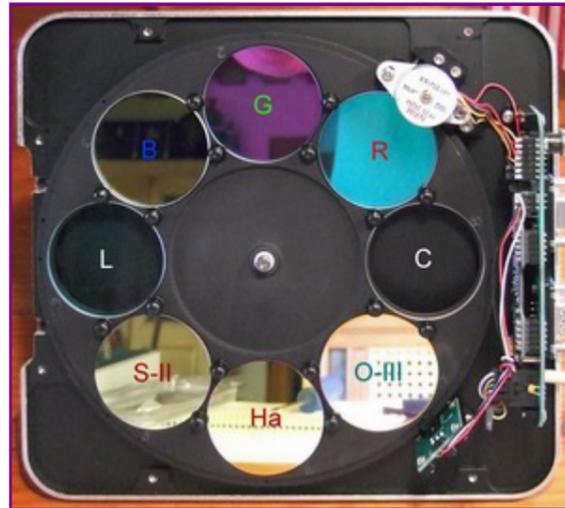


Preview Baader CLRGB CCD Filters

by Johannes Schedler / May 2008

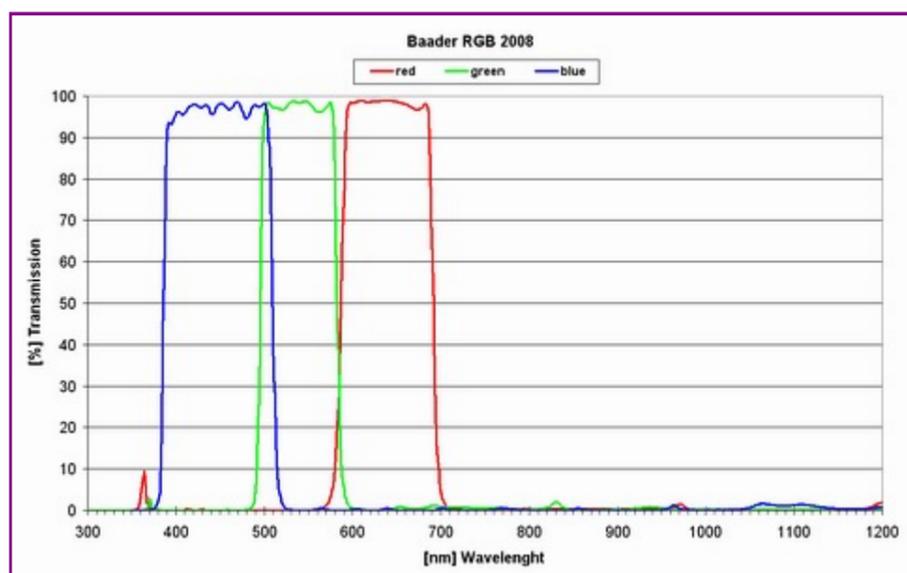
In April 2008 some days before leaving for my astroimaging trip to Namibia I received the new CLRGB filter set from Baader, all in 50.6 mm round design for my STL camera.

To the right you see the filters inserted into the big 9-pos STL filter wheel in line with the Baader narrowband filters. All filters are made of 3mm glass and parfocal



Here you see the transmission curve from the RGB set (origin Baader).

They are showing steep rise on both ends, the blue and green filters both utilize the O-III wavelength to full extend.



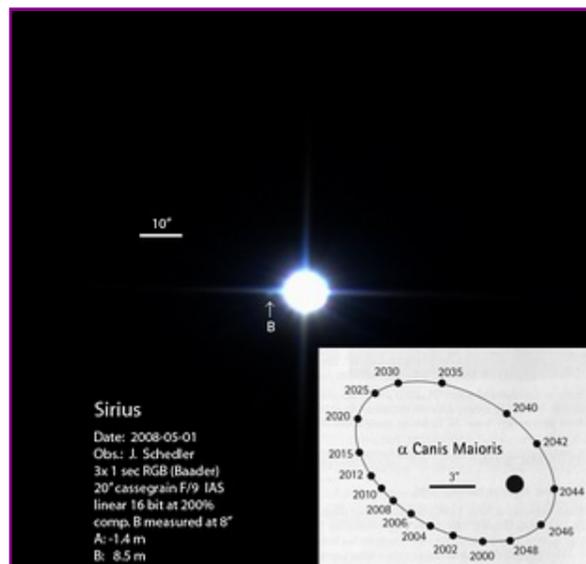
Other than with my previous filters the new set allows an 1:1:1 frame weighting for RGB combine what makes collecting of RGB frames easy with equal exposure time. To the right you see the result of a straight RGB combine at 1:1:1 on the well know target M20 using my STL-11000 camera.

This object is a tough one when trying to separate the 5 central bright multiple stars. Follow the link to see the result of combining just 10 min raw frames without using shorter exposures.

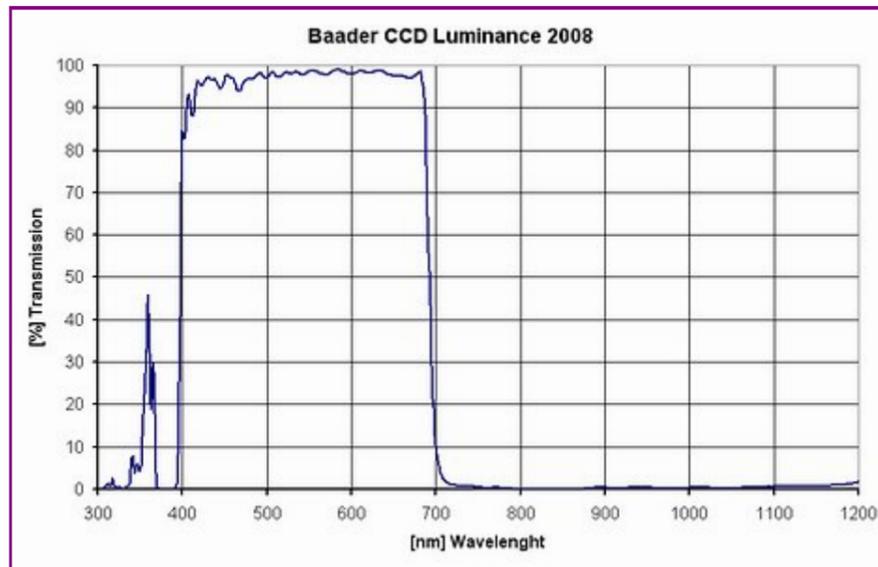


Here you see a straight 1 sec RGB exposure on Sirius with the 20" cassegrain at IAS/Hakos in corrected secondary focus, weighted 1:1:1, rescaled to 200% size and displayed in linear mode.

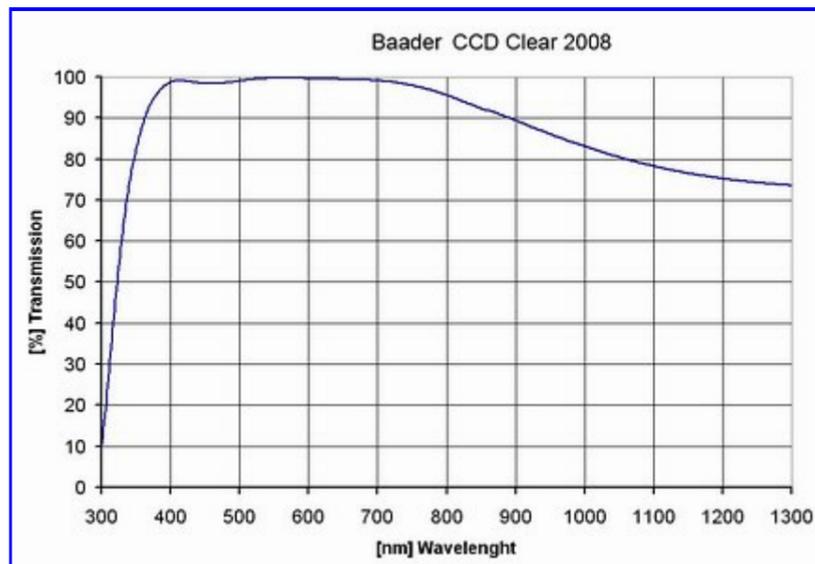
Without intention this test shot revealed the faint Sirius B companion, 10 magnitudes dimmer than Sirius A. It is partly hidden by the spike, the distance A-B measured at 8" as well as the position angle correspond with the chart from the literature.



Here you see the transmission curve from the L filter (origin Baader).



Here you see the transmission curve from the Clear filter (origin Baader).



The L and C filter are free from any reflections on bright stars see the image to the right displaying a 1 sec exposure of Sirius with the 20" at f/9 in 25/50% size log stretched



Conclusion:

I am more than satisfied with the performance of the new Baader filter set. The absence of any reflections from bright stars makes clean-up procedures obsolete for many objects displaying foreground stars. The simple 1:1:1 RGB weighting together with a distinct color separation supplies deep star colors and fine details in galaxies and nebulas.

Produced by: www.panther-observatory.com