Konrad Guhl (IOTA/ES)

Planned Observation of the occulation of Betelgeuze by (319) Leona

Goal: high speed photometry in defined wavelenght

Split the light in two colours

How to split?





20/80

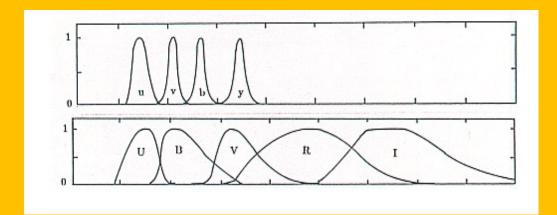
Goal: high speed photometry in defined wavelenght

Split the light in two colours

How to measure?

→ 2 x QHY 174 camera + computer, SW sharpcap

defined wavelenth

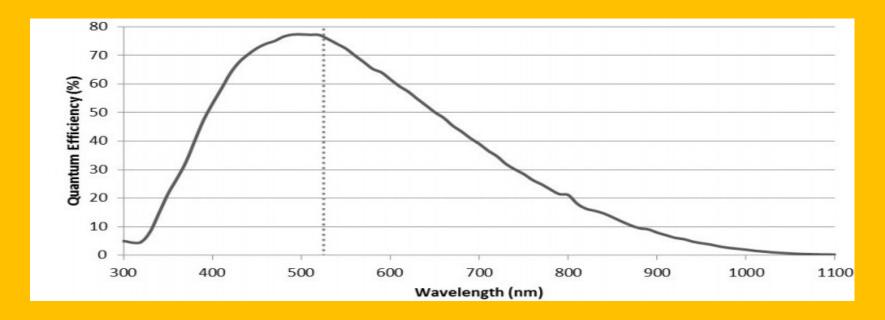


Strömgren, 1966

Johnson and Morgan 1953

select U(u) and Y(y), 365nm and 550nm

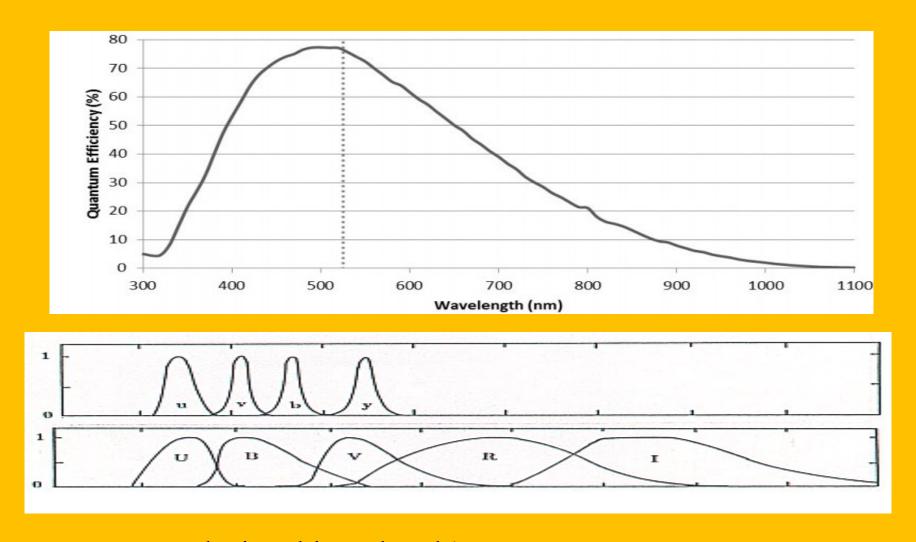
Sony IMX 174 (QHY174) in the colour ranges



 $U \rightarrow 365 \text{ nm}$

 $y \rightarrow 550 \text{ nm}$

80% for U-Kamera, 20% for y-Kamera



not so much signal in U-band!

Tests QHY 174 on 12" telescope

 $U \rightarrow 365 \text{ nm}$



250 ms, binning 2 Gain max (437)

 $y \rightarrow 550 \text{ nm}$



200 ms, binning 2 Gain max (437) We see in U-Band the signal is poor....

we will use the light collector M2



Guhl ESOP 2023 planned observation

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...thank you!