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...start round table discussion ESOP XXXI...

Exposition tests with the new 535 nm filter

During ESOP XXVI in 2007 we made a workshop and decide to use standardized equipment for Beads observation. Every observer has to use:

- Optic - 100/1000 Maksutov

- standardized filter – made by the original green filter for 100/1000 + ND 4 layer

- video camera without automatic exposition

- exposition adaption by rotating crossed polarizer

IOTA/ES handle the order for optics and filter production and 2008 August 1 we place 3 observers on each limb in Sibiria for the best observed solar eclipse ever.

The standardized equipment idea was communicated published amongs others in the „Beads atlas".

100/1000 + watec piggypack on my telescope

Old equipments:

- 100/1000 + IOTA/ES filter
- Watec 120N γ → off, gain = 0
- no polarizer → sun in saturation and no sunspots visible

So do we **need crossed polarizer** to adapt the exposition.

During ESOP XXX we have got the contribution from A. Raponi. To unify our pictures with the Picard experiment we decide to install a small bandfilter 535 nm (now called „Raponi-filter").
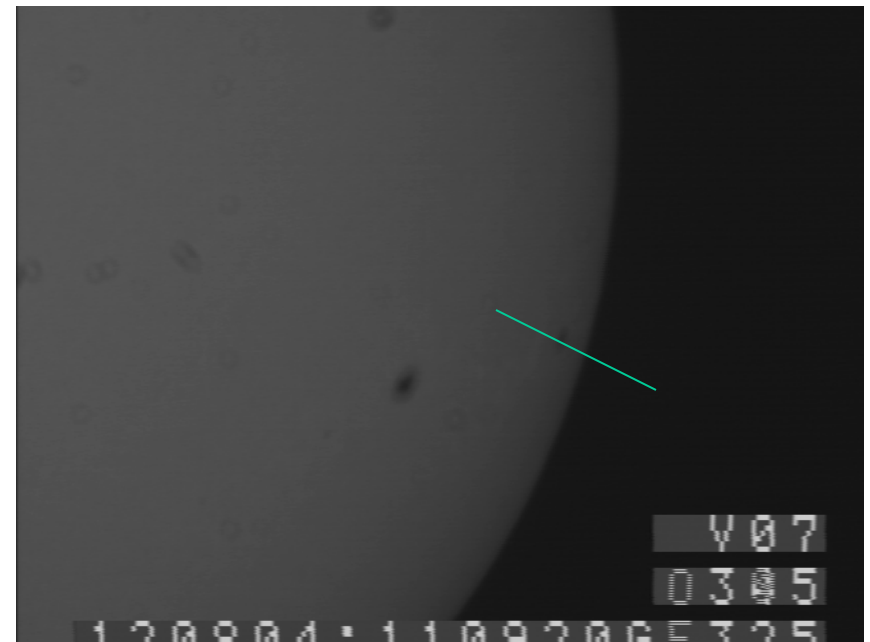
Result: not enoungh light with the old set up.

- 100/1000 + IOTA/ES filter + 535 nm
- Watec 120N γ → off, gain = 0
- polarizer parallel
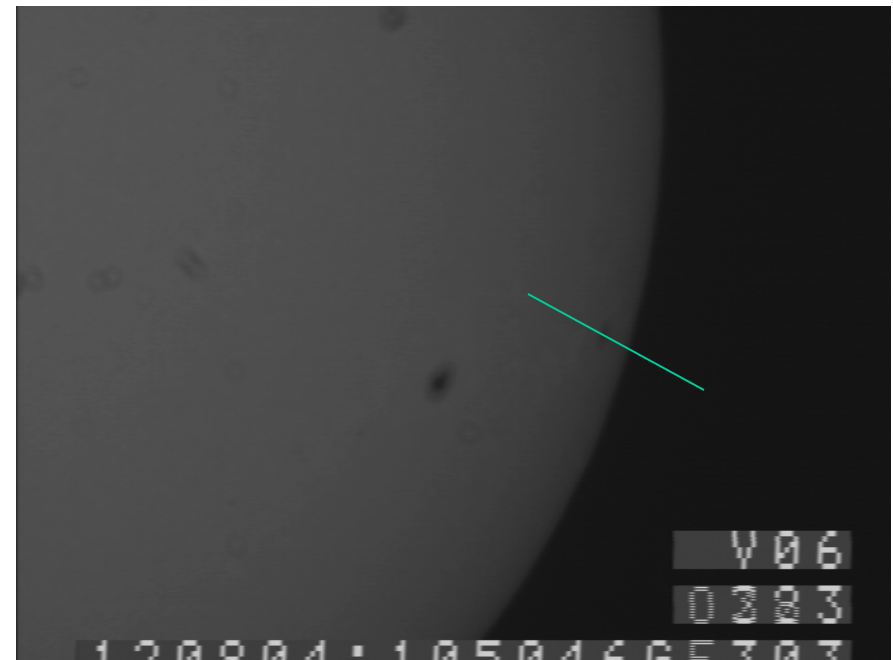
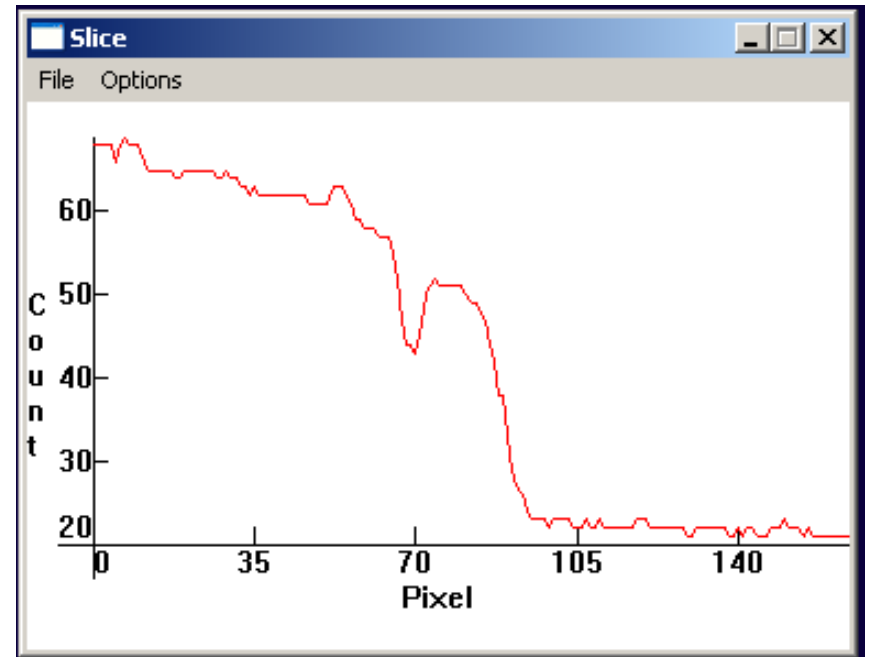Brightness vs. Radius along the line.
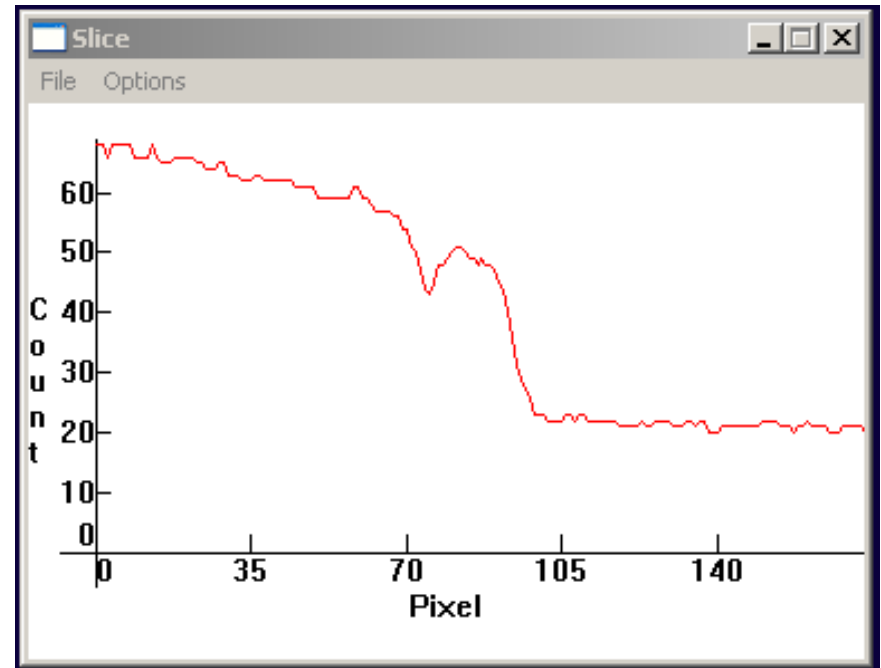
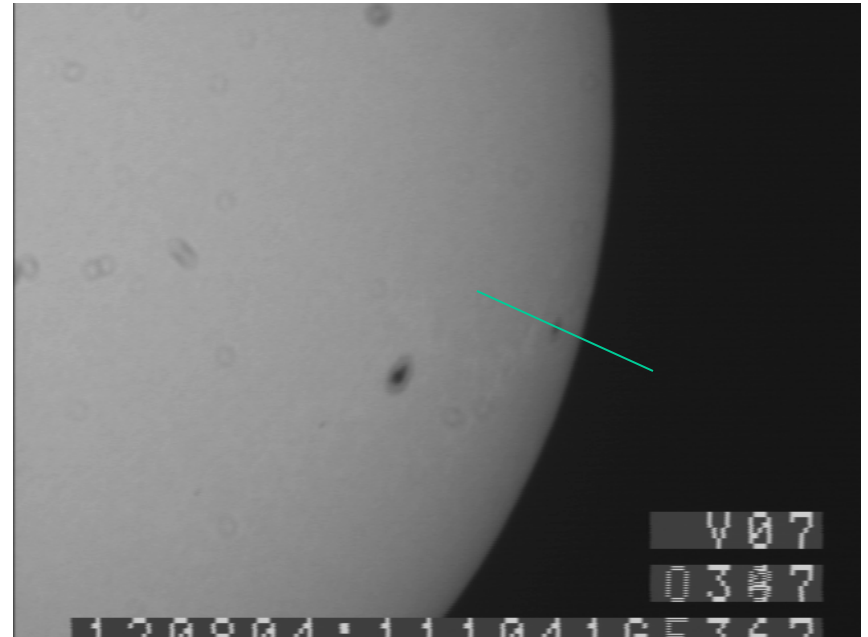- 100/1000 + IOTA/ES filter + 535 nm
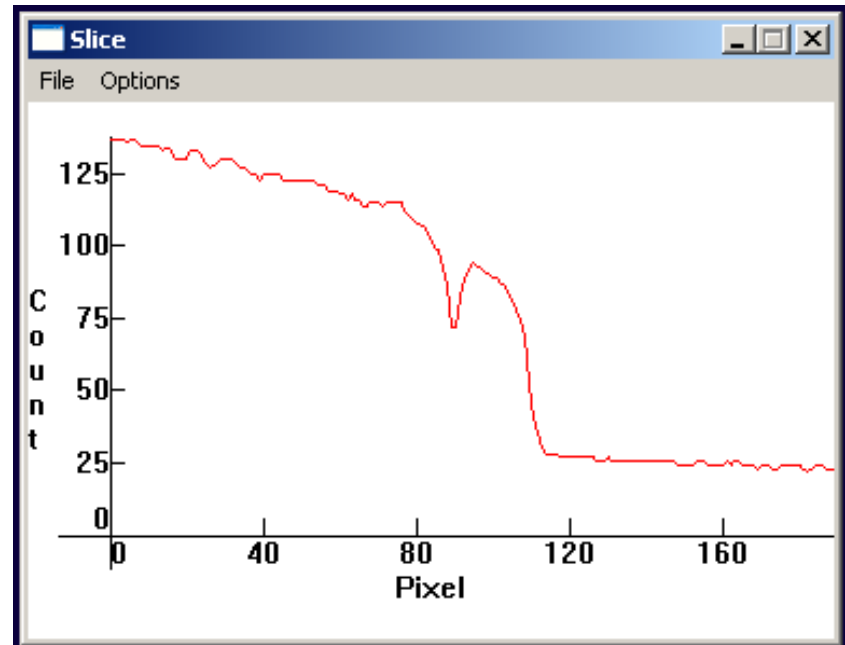- Watec 120N γ → off, gain = 0.2
- polarizer parallel

Brightness vs. Radius along the line.

- 100/1000 + IOTA/ES filter + 535 nm
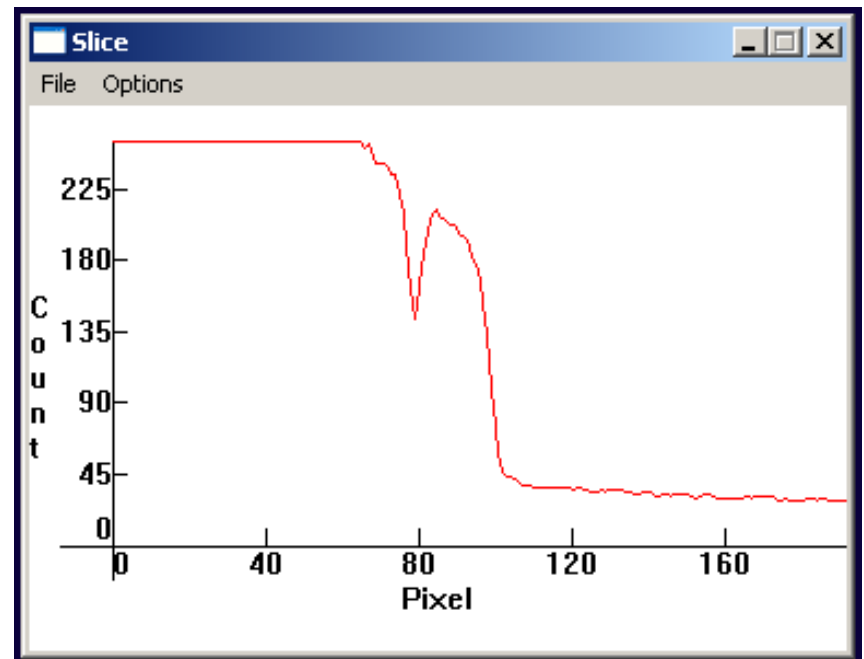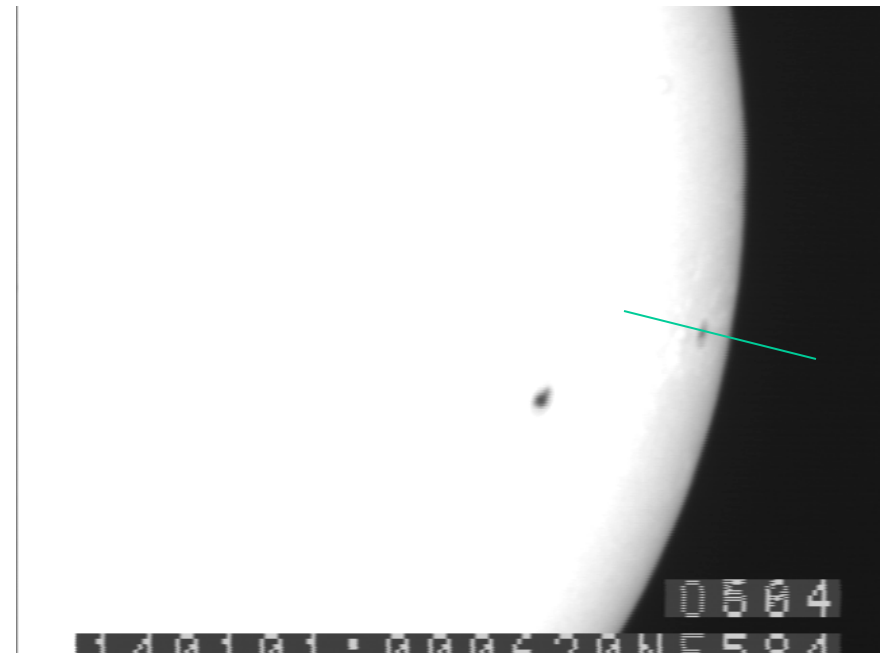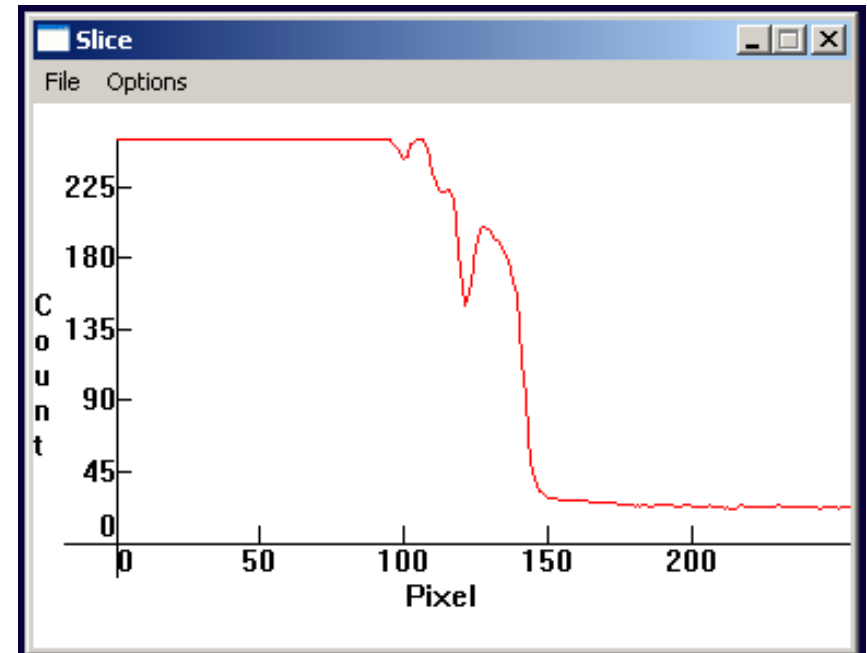- Watec 120N γ → off, gain = 0.3
- polarizer parallel

Brightness vs. Radius along the line.

- 100/1000 + IOTA/ES filter + 535 nm
- Watec 120N γ → off, gain = 0.4
- polarizer parallel

V 0 6
D 0 6 8

Brightness vs. Radius along the line.

- 100/1000 + IOTA/ES filter + 535 nm
- Watec 120N γ → off, gain = 0
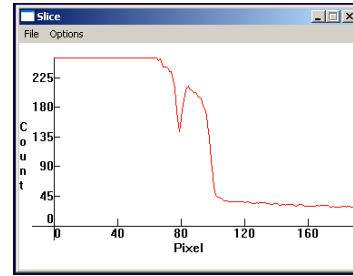- no polarizer

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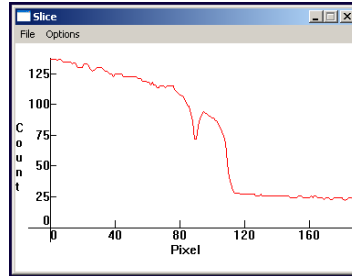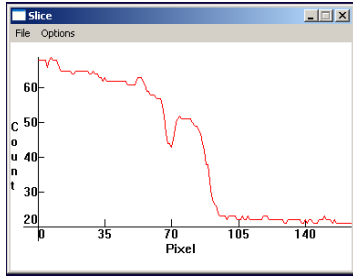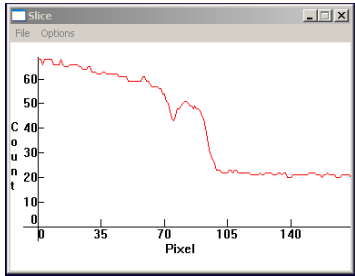Brightness vs. Radius along the line.

polarizer, gain=0	polarizer, gain=0.2	polarizer, gain=0.3	polarizer, gain=0.4	no polarizer, gain= 0
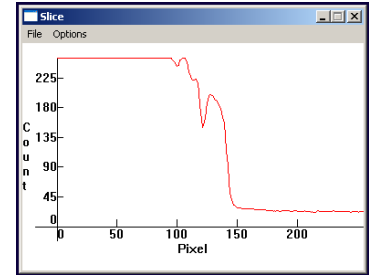
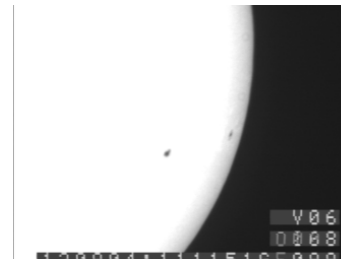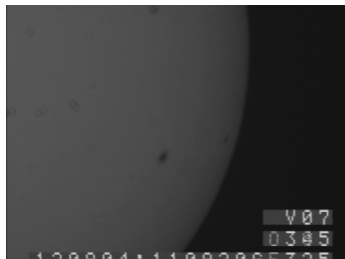| max 70; min 20	max 70; min 20	max 130; min 25	max 255; min 45	max 255: min 30
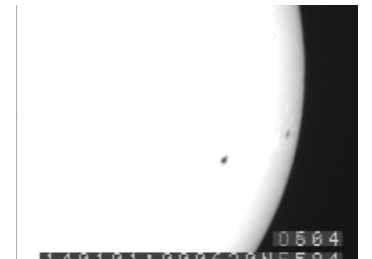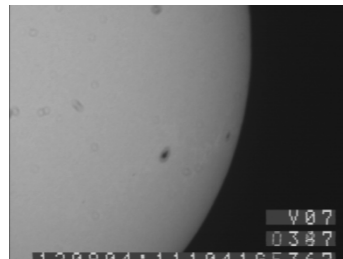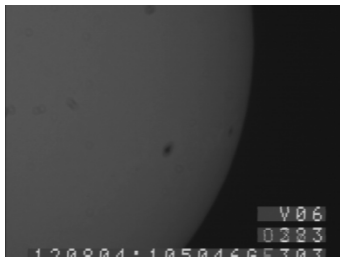
Center of solar disk shall be in saturation →
remove polarizer or turn on gain.