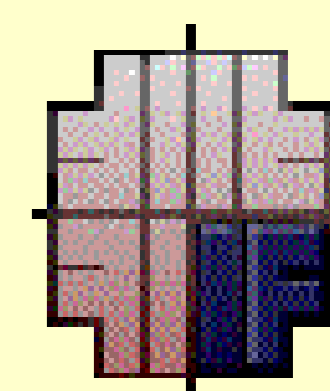


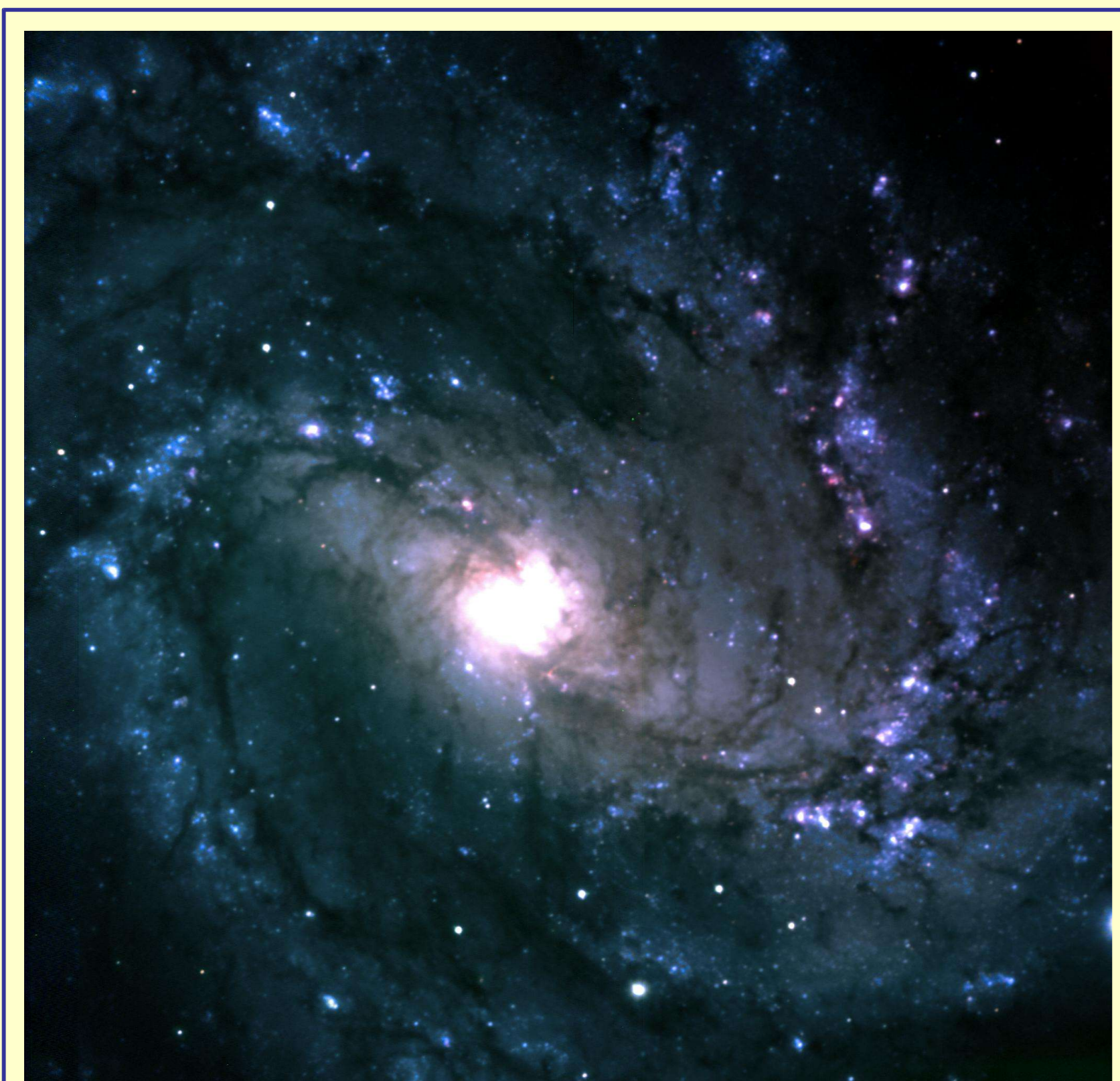
Status of the Soar Optical Imager through galaxy images



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We present 3-color composite images of galaxies obtained with the SOAR Optical Imager (SOI) at the 4.1-m Southern Astrophysical Research telescope during the commissioning period of this instrument. The SOI uses a mosaic of two E2V 2k x 4k CCDs to cover a 5.3x5.3 arcmin field, with a central gap of 7.8 arcsec. In the 2x2 binned mode used in these observations, the scale is 0.154 arcsec/pix. The images were obtained by the combination of multiple exposures in the B, V, and R filters, to enhance the different structures in the galaxies and in an attempt to show the objects in their natural colors. The typical seeing was 1 arcsec.

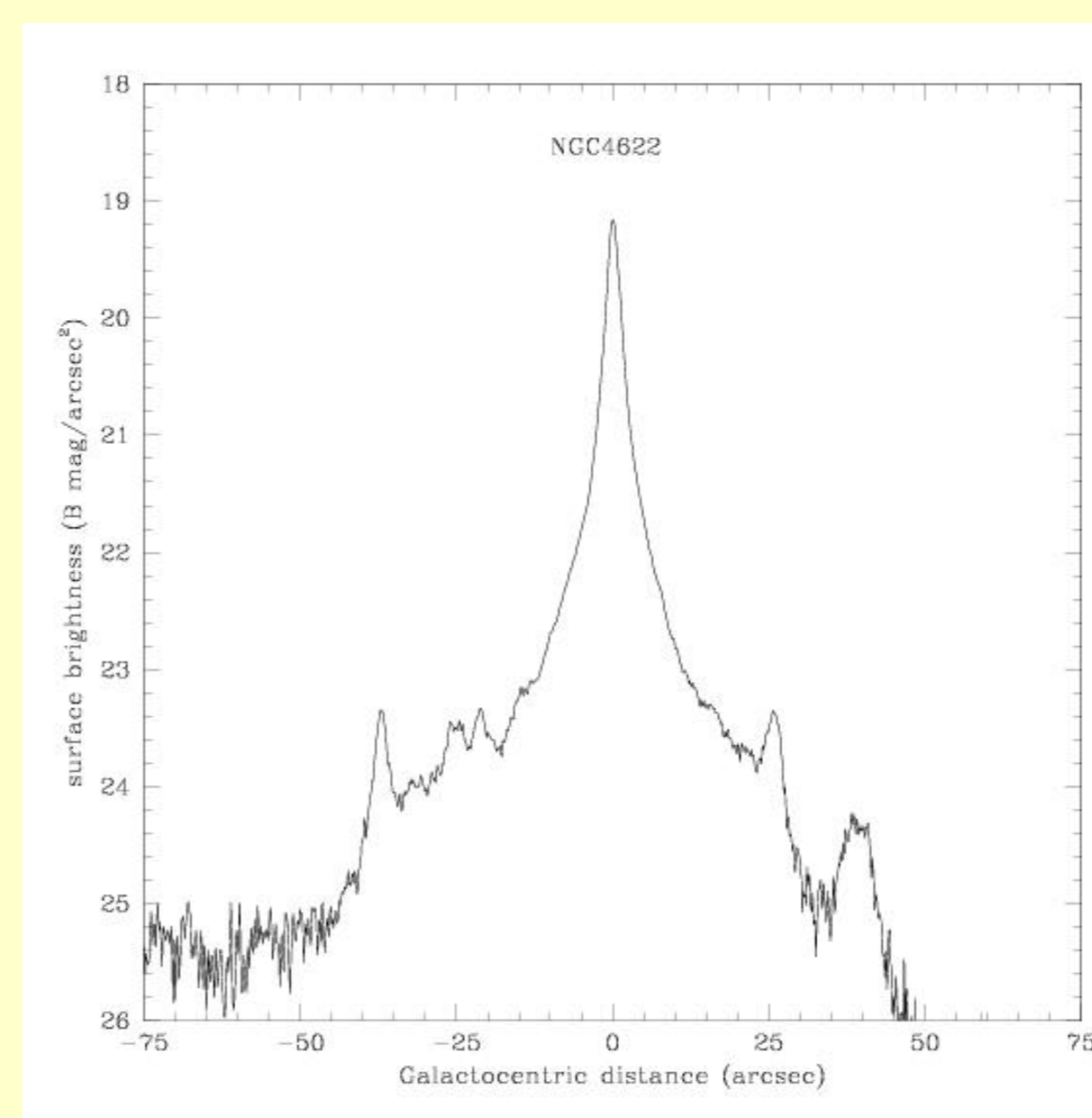
Feb05.



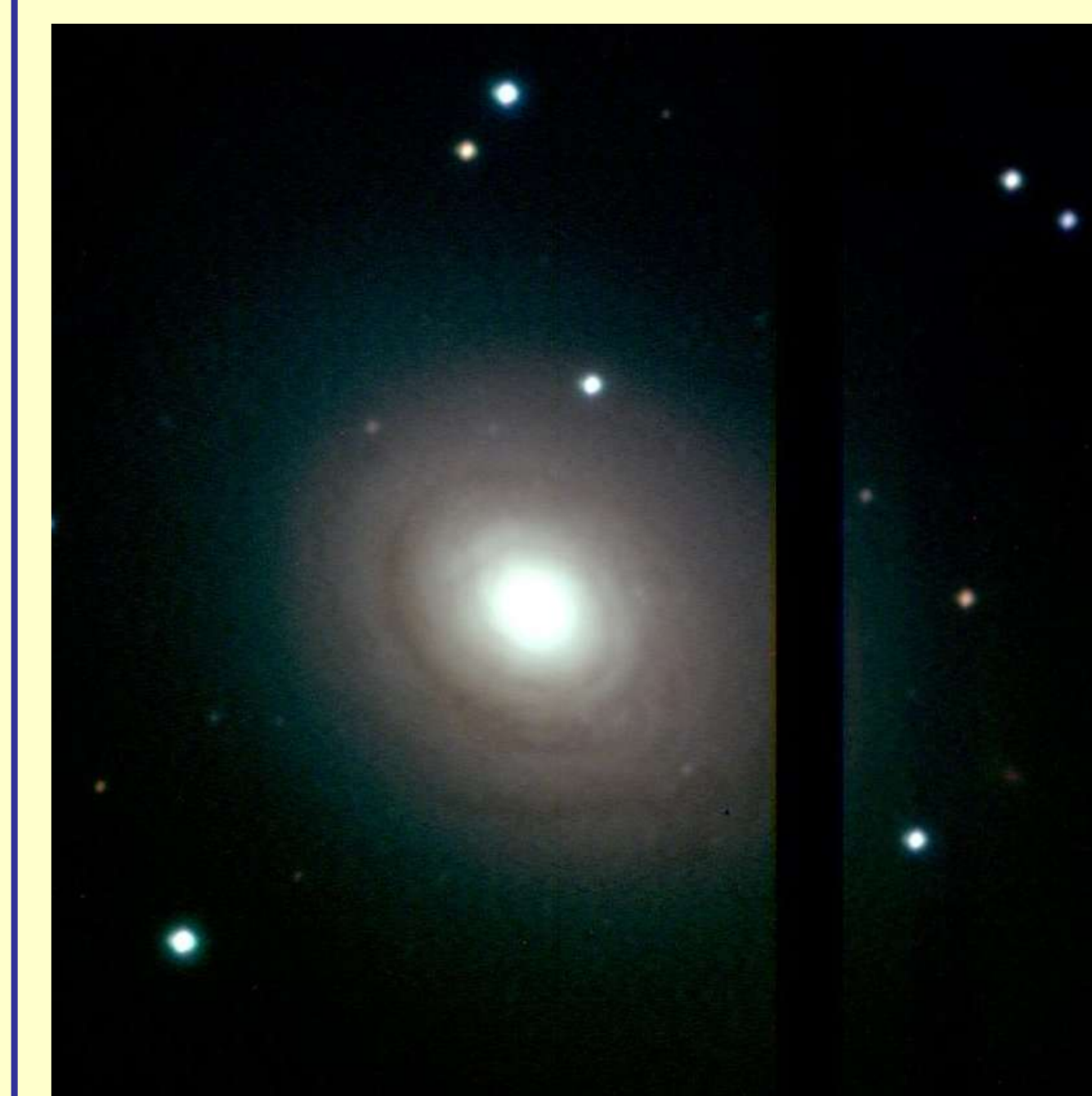
M83, the Southern Pinwheel galaxy.
FoV 5x5 arcmin. Seeing = 0.7 arcsec.



NGC 3981. FoV=1.9x1.9 arcmin.

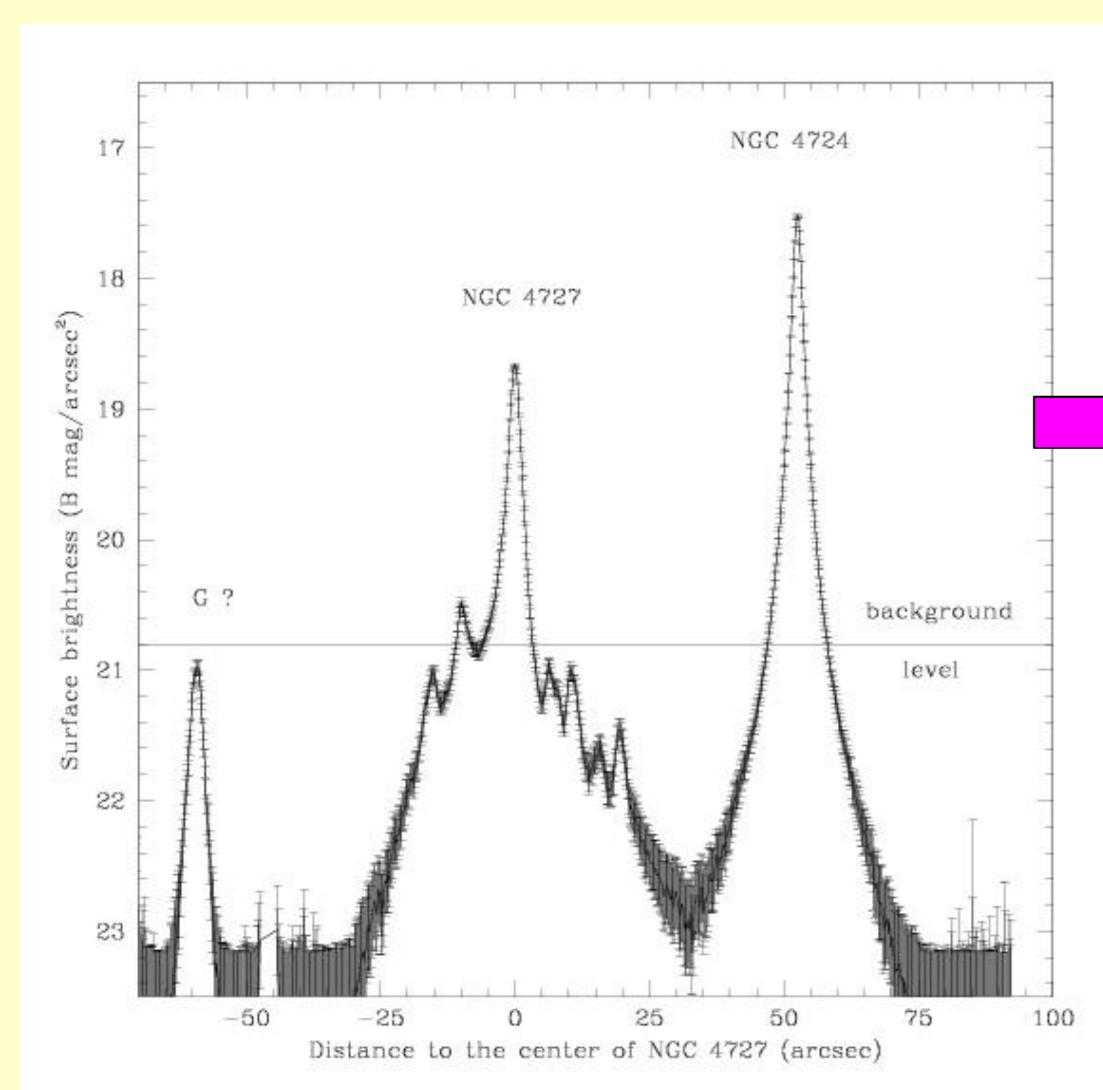


B surface brightness profile.
Asymetry at fainter levels is due to scattered light.

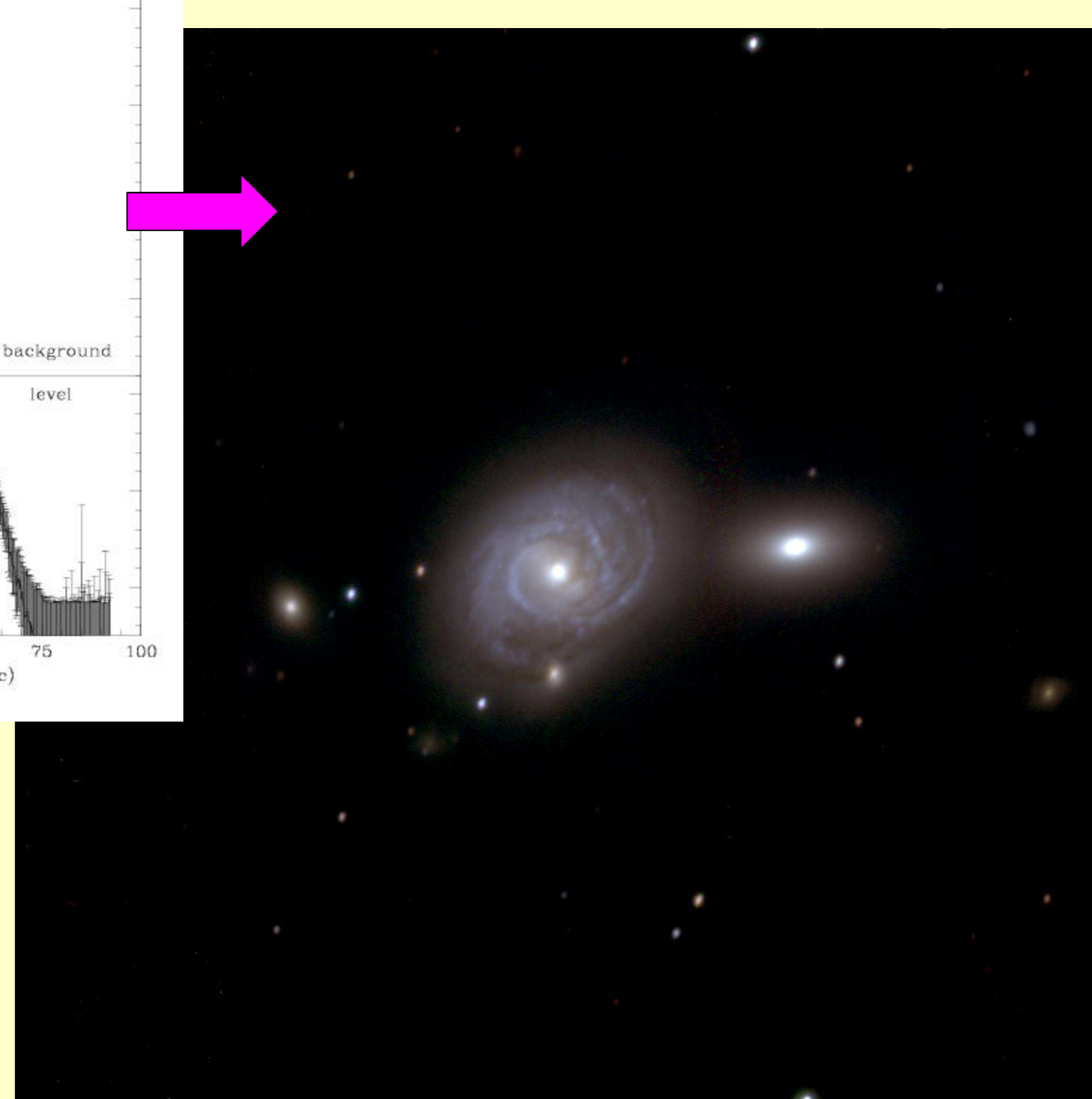


NGC 2855. FoV= 2x2 arcmin. The 7.8 arcsec gap is very noticeable because no dithering was made between the exposures

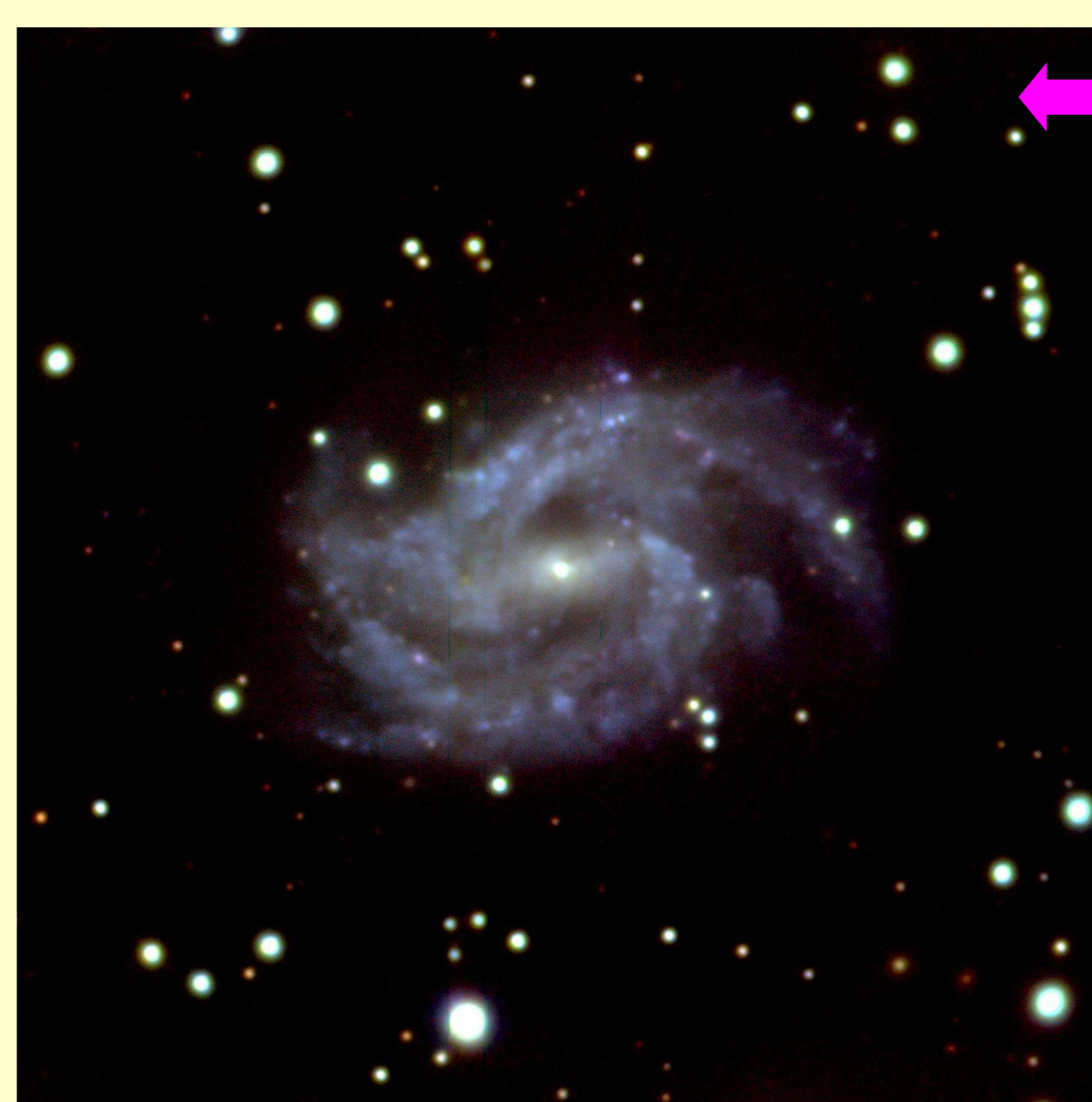
Apr05. Background was still very high (around $\mu_b=21$ mag/arcsec²) and non uniform, causing large uncertainties in the brightness levels and short range of magnitudes.



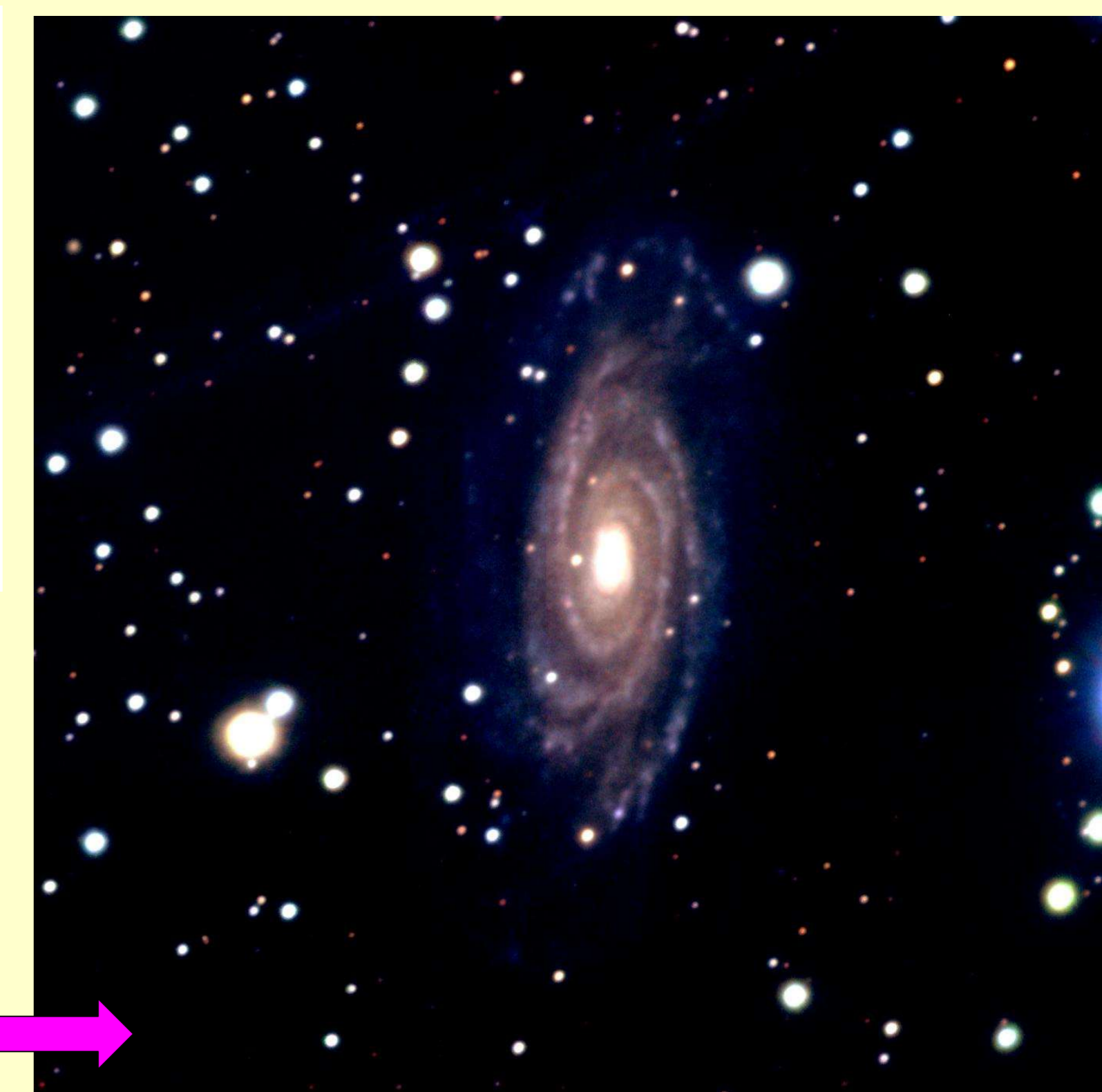
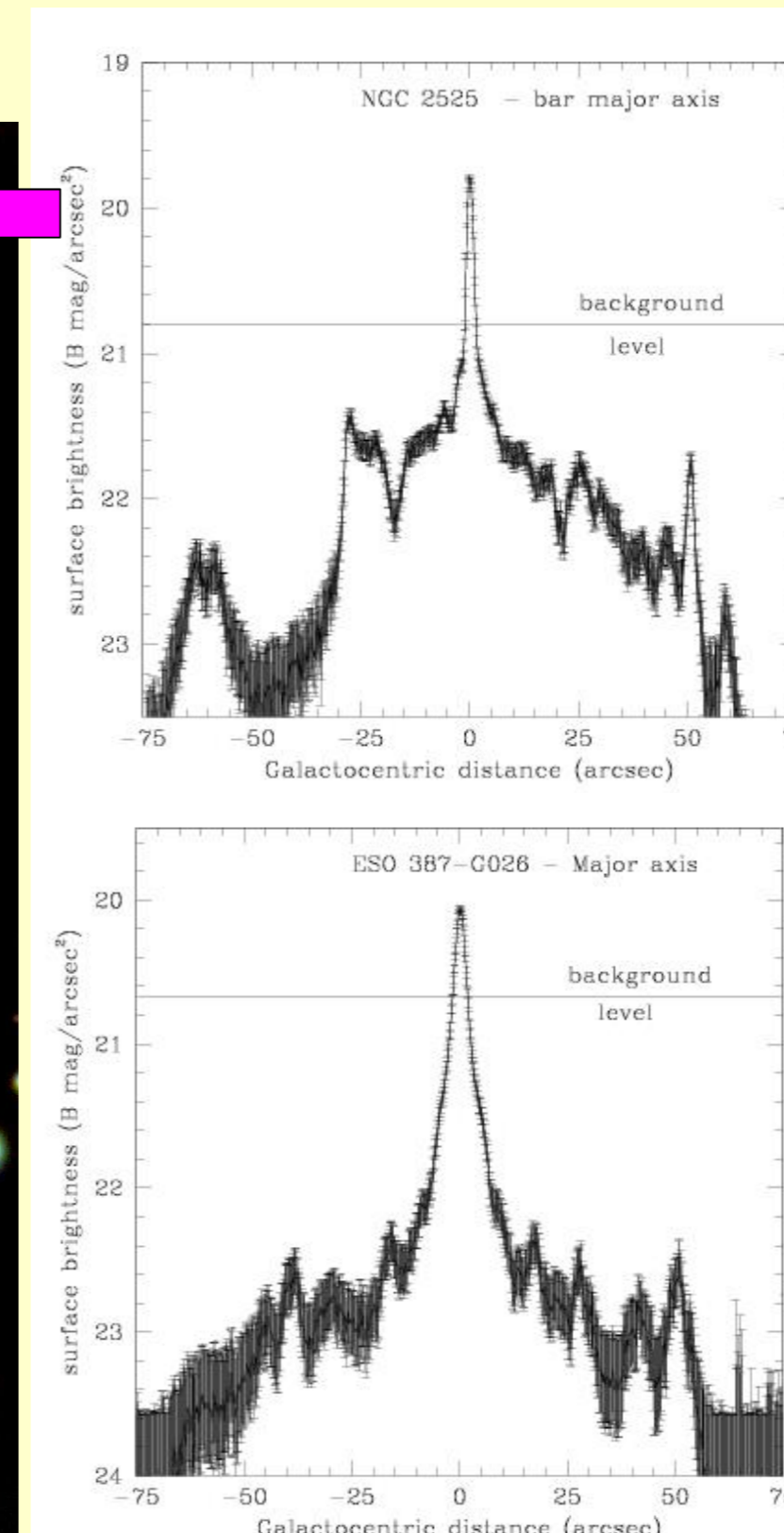
In all the profiles, the error bars accounts for uncertainties due to sky subtraction.



NGC 4727-24. FoV 4x4 arcmin.

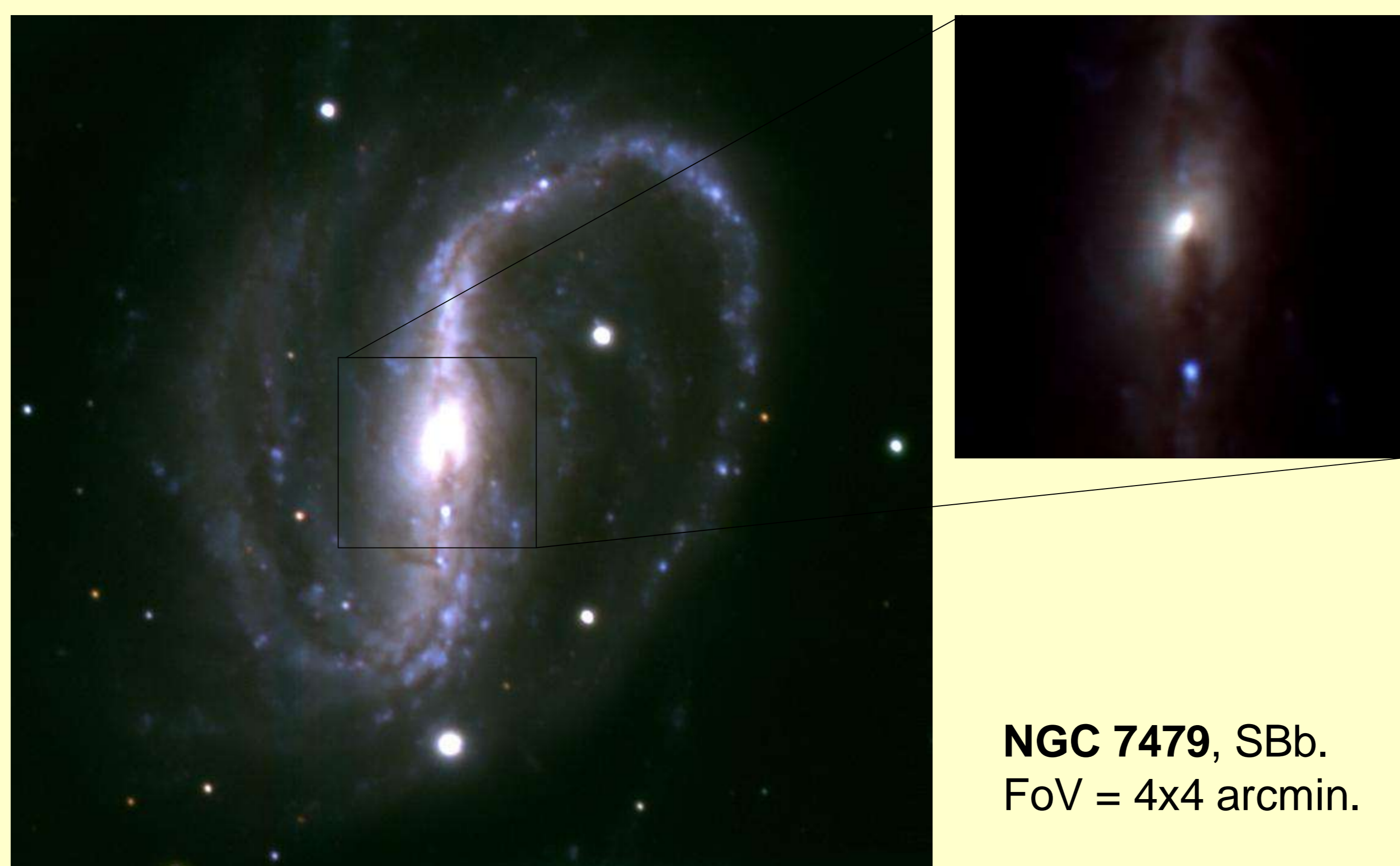


NGC 2525. FoV 4x4 arcmin.

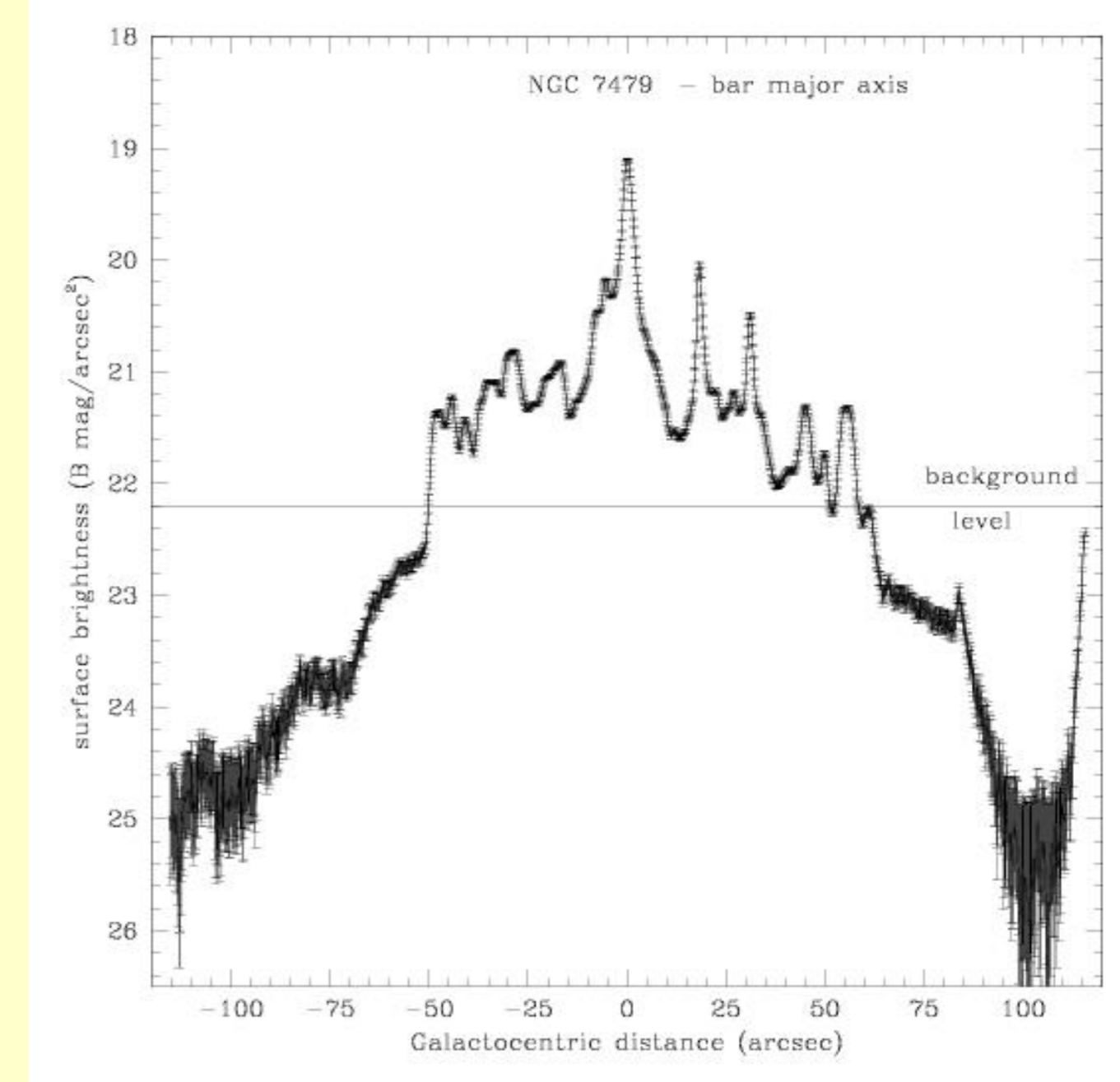


ESO387-26. FoV 3.5x3.5 arcmin.

Jul05. The M3 and SOI baffles are on and mirrors washed. Background is finally at the expected value.



NGC 7479, SBb.
FoV = 4x4 arcmin.



B brightness profile, resulting from combination of 5 exposures 5 min each. The background is flat, with 22.2 mag/arcsec²