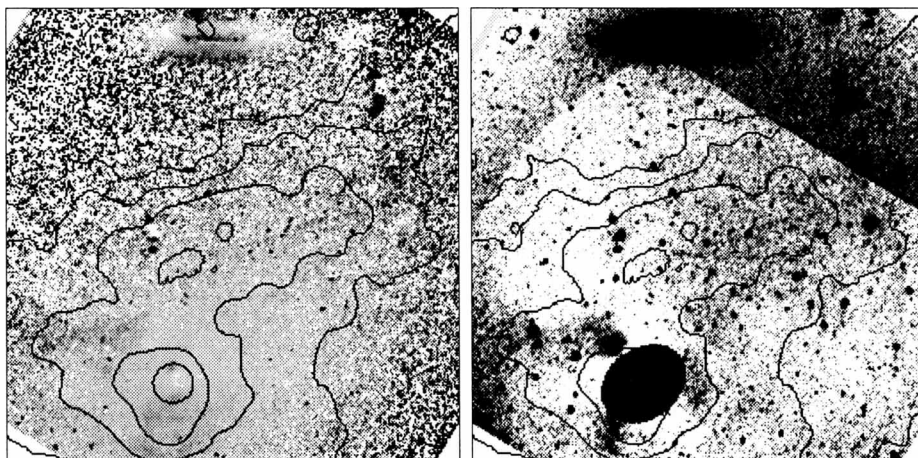


EMISSION LINE REGIONS IN M86

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We present broad- and narrow-band (B, R, $H\alpha$ + $[NII]$ and $H\alpha$ continuum) observations of M86 obtained with a focal reducer at the Calar Alto 1.23m telescope, to look for any signs of material cooling out from the hot X-ray emitting ISM. The above figures show a quotient image ($13' \times 13'$, north up) ($H\alpha$ cont. - $H\alpha$) to the left, and a $H\alpha$ image (right) from which the light of the stellar spheroid of M86 has been subtracted. Both are overlaid with ROSAT PSPC X-ray contours.

We found three regions of excess emission (dark in the figures): (A): $H\alpha$ emission with complex morphology near and south of the center of M86, possibly related to cooling flow activity. (B): A broad fanshaped feature extending to the NE and E, visible as excess in the galaxy-subtracted images of all bands, although most prominent in the $H\alpha$ band. The head of this feature is coincident with a small companion galaxy, so it is probably due to interaction. (C): A very narrow filament extending along the X-ray plume to the northwest. This filament may be due to cooling gas in the denser regions of the X-ray plume or to shock heating of yet unknown origin.