Figure from Spiral Structure Based Limits on the Disk Mass of the Low Surface Brightness Galaxies UGC 6614 and F568-6
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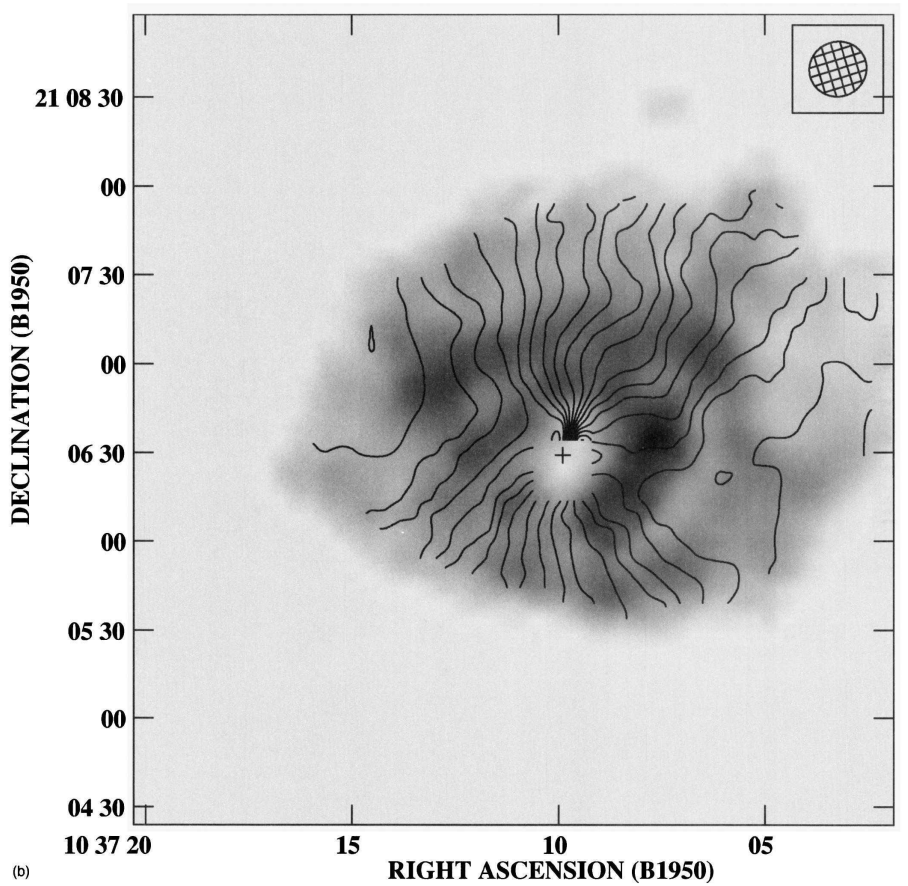


FIG. 2. (continued)

spiral arms are far brighter than the underlying disk which is only marginally detected. Although peaks in the H I and *R* band surface brightness are correlated (see Figs. 1 and 2) they do not correspond to maximum densities or surface brightnesses in the azimuthal cuts except at large radii in UGC 6614 (see Figs. 3 and 4). Better correlation might be observed with higher angular resolution H I observations.

Since the amplitudes shown in Figs. 3 and 4 depend on the assumed galaxy orientations we recomputed them for moderate variations in the inclination angles. For a 5° lower inclination of 30° in UGC 6614, the change in amplitudes

TABLE 1. Observation parameters and derived properties.[a]

| | F568-6 | UGC 6614 |
|---|---|---|
| Total absolute *R* band magnitude | −23.6±0.1 | −22.3±0.1 |
| Distance assumed (Mpc) | 184 | 85 |
| Total H I line flux (Jy km/s) | 4.4±0.3 | 15.0±0.8 |
| Total H I mass ($10^{10}$ $\mathcal{M}_\odot$) | 3.6±0.4 | 2.5±0.2 |
| FWHM of synthesized beam (''×'') | 19.5×18.4 | 21.4×19.8 |