

C. CHAMP ISO-CO COLUMN DENSITY MOMENTS

We provide here a standard set of moment maps for the mass surface density Σ ($\propto N_{12\text{CO}}$ by Eq. 7) in each Region. Each map in a given Region is overlaid by the same set of contours in Σ , spaced by 10%–20% of the peak for that Region (see scale bar for values). From top to bottom on the left hand side are the integrated Σ , the Σ -weighted mean V_{LSR} , and velocity dispersion σ_V . On the right hand side we show the Σ and velocity error maps. The ellipses are the same as in Appendix A.

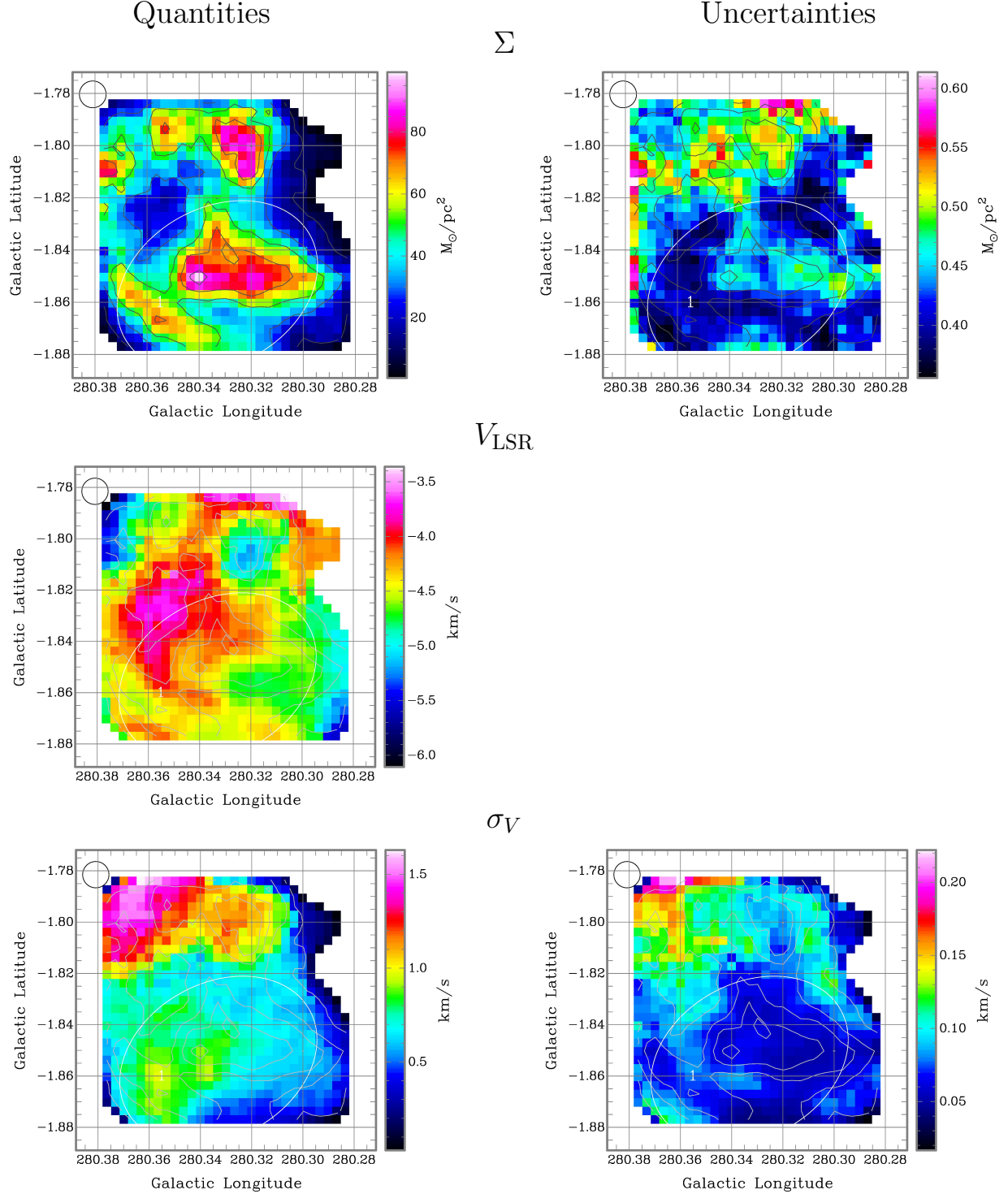


Figure C1. BYF 1. At an assumed distance of 3.2kpc, the scale is $0^{\circ}1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

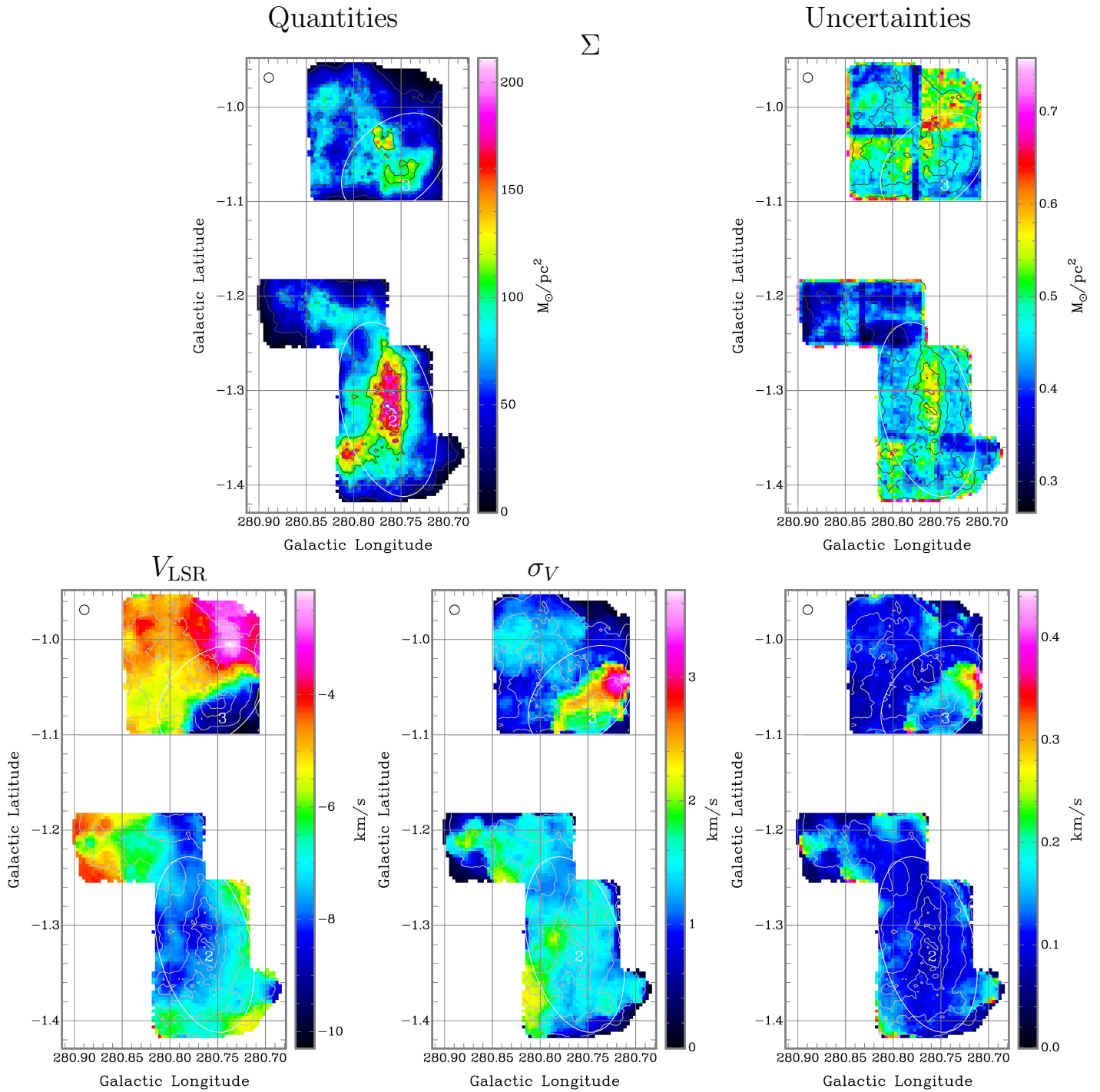


Figure C2. BYF 2 & 3 (Region 1a). At an assumed distance of 3.2 kpc, the scale is $0''.1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

Quantities

Uncertainties

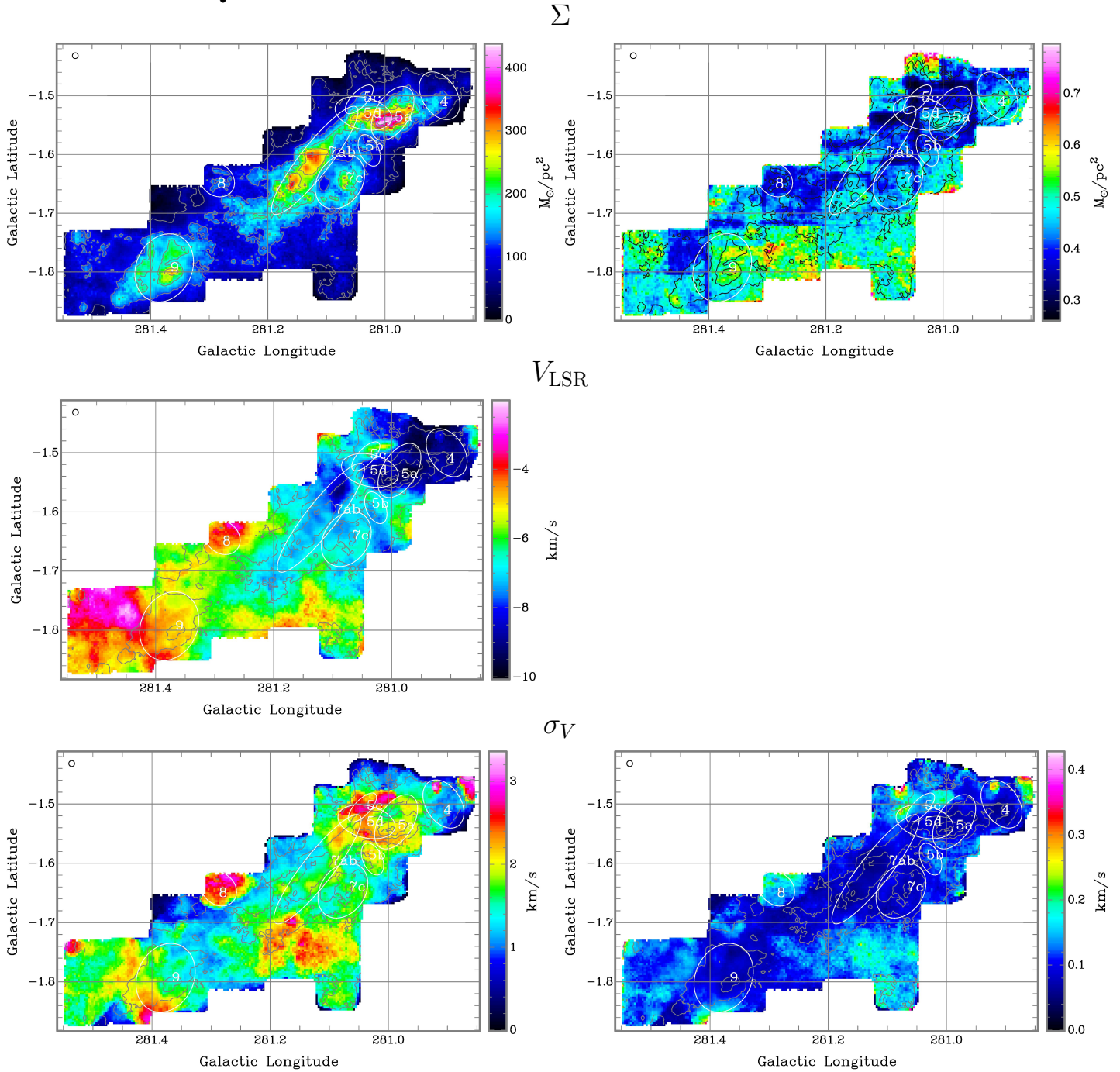


Figure C3. BYF 4–9 (Region 1b). At an assumed distance of 3.2 kpc, the scale is $0''.1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

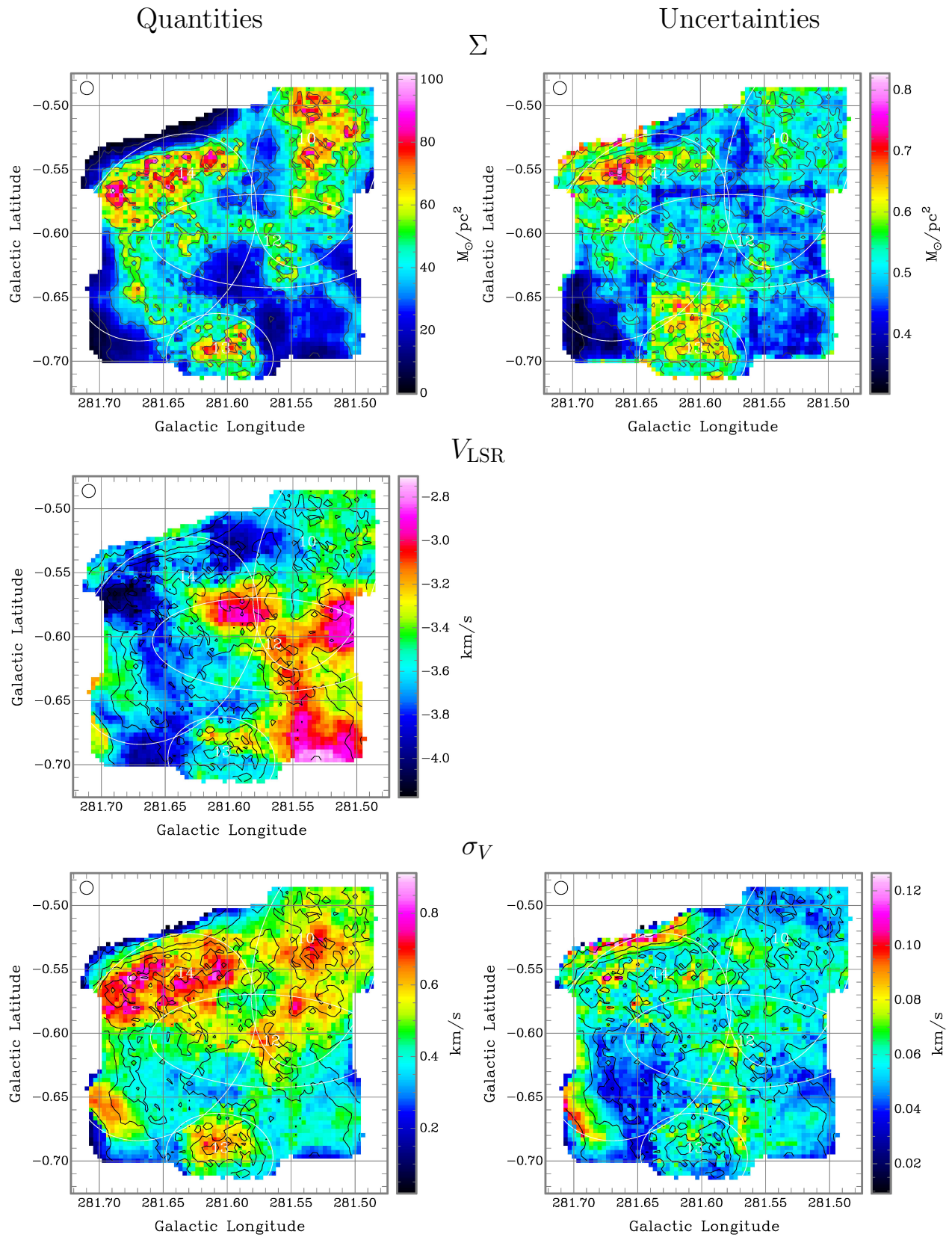


Figure C5. BYF 10, 13, 14 (Region 2a-North). At an assumed distance of 3.2 kpc, the scale is $0^{\circ}1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

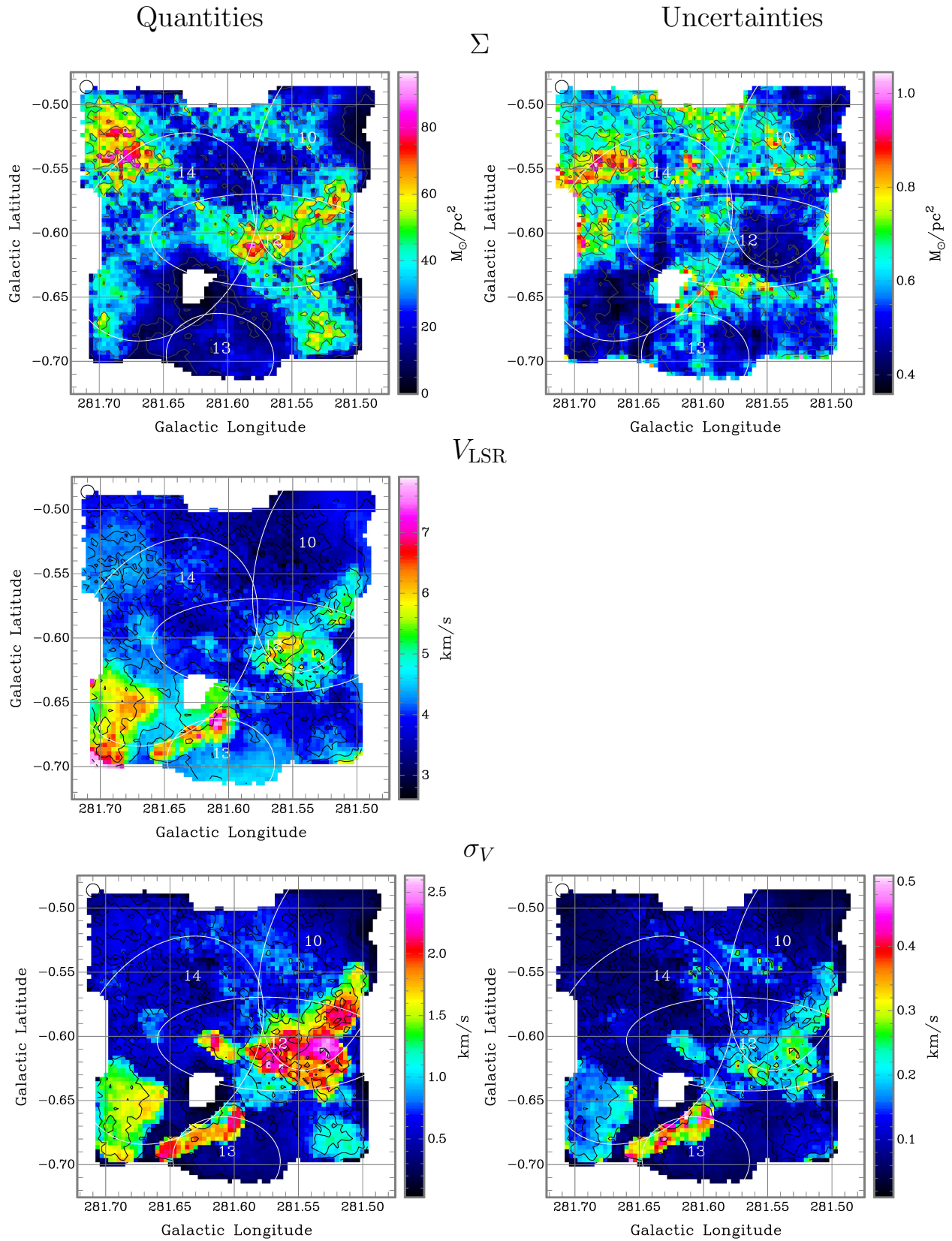


Figure C6. BYF 12 (Region 2a-North). At an assumed distance of 3.2 kpc, the scale is $0^{\circ}1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

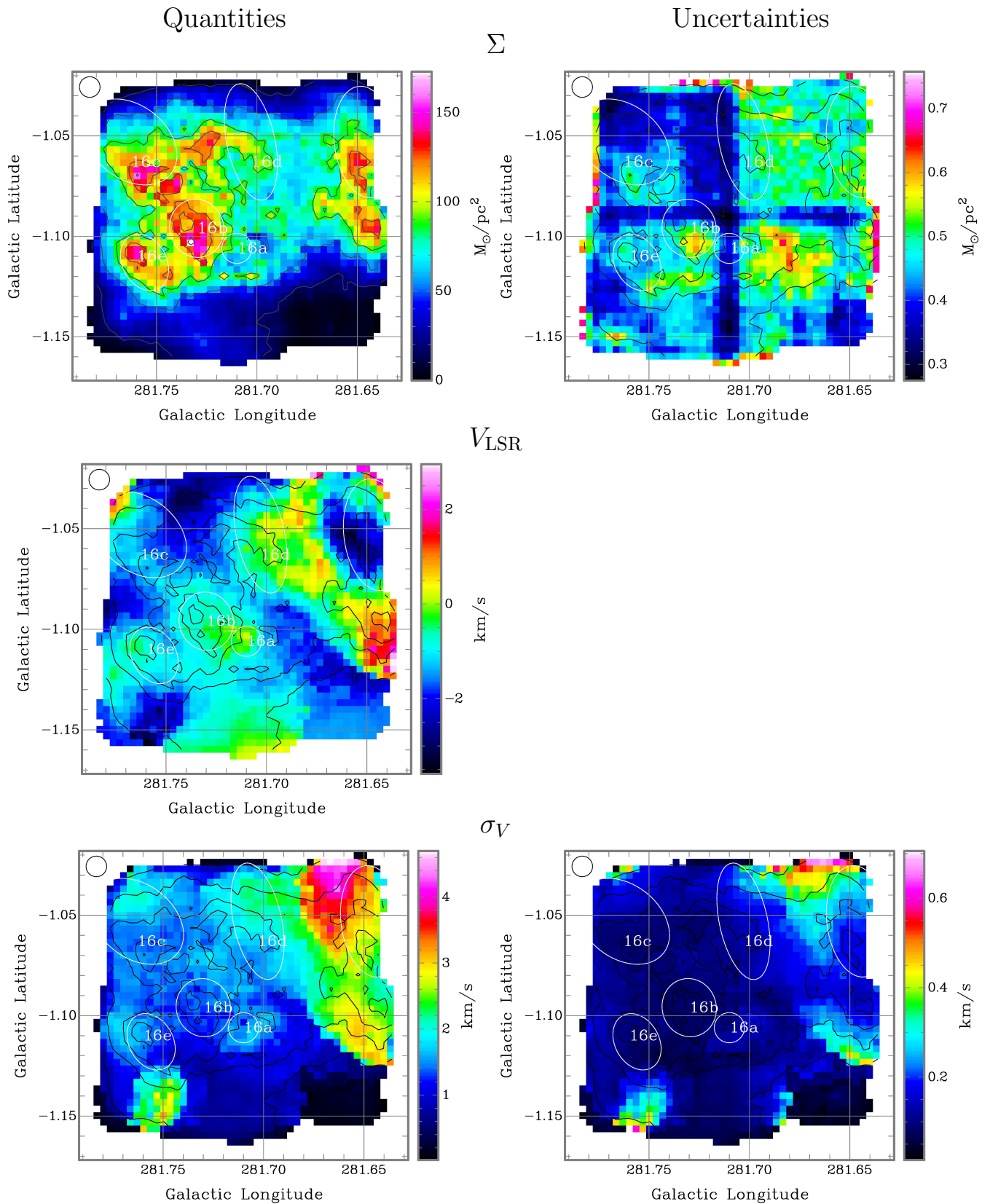


Figure C7. BYF 16 (Region 2a-South). At an assumed distance of 3.2 kpc, the scale is $0^{\circ}1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

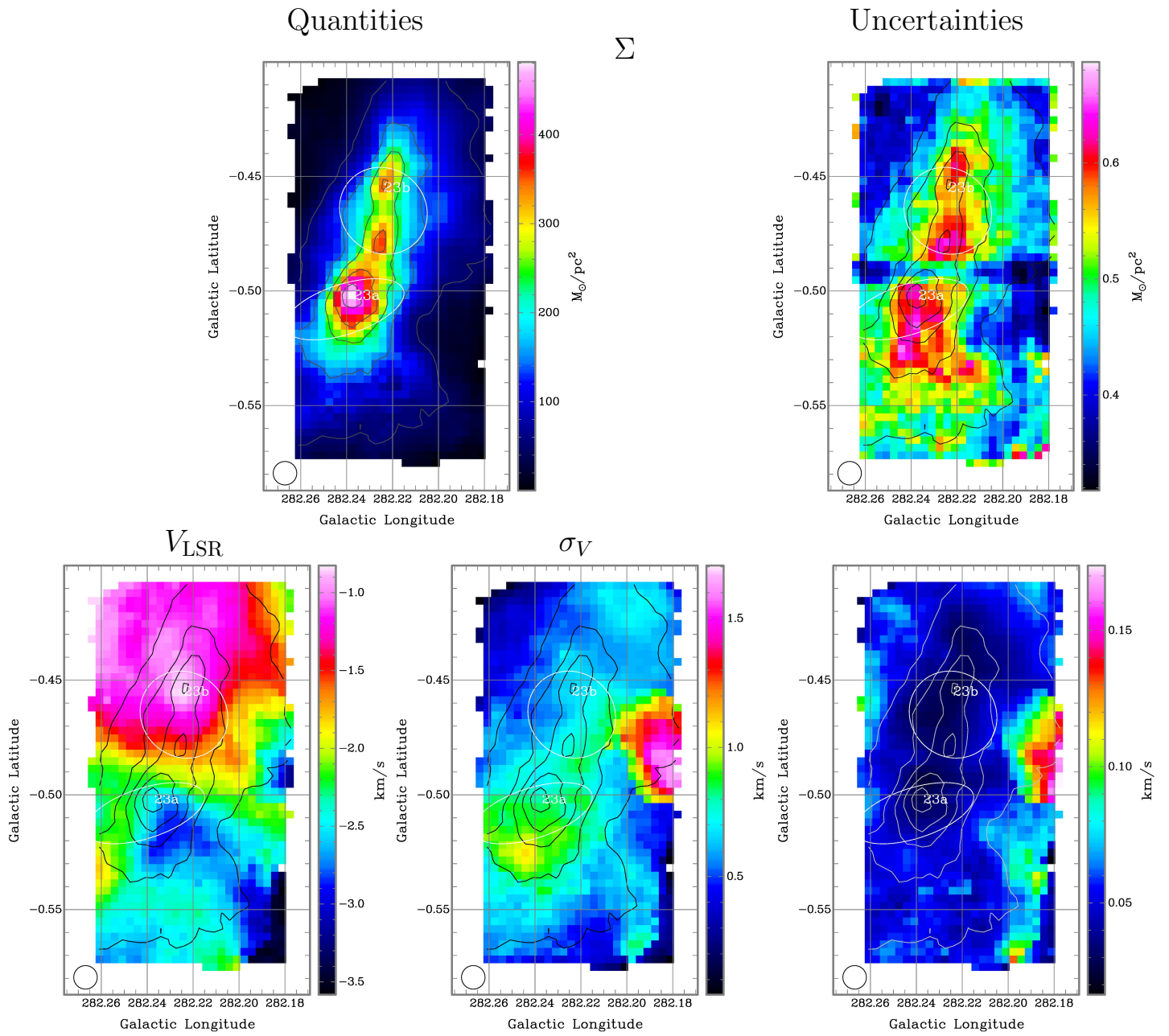


Figure C9. BYF 23 (Region 2c-North). At an assumed distance of 3.2 kpc, the scale is $0''.1 = 5.6$ pc. The Mopra HPBW is shown in the BL corner.

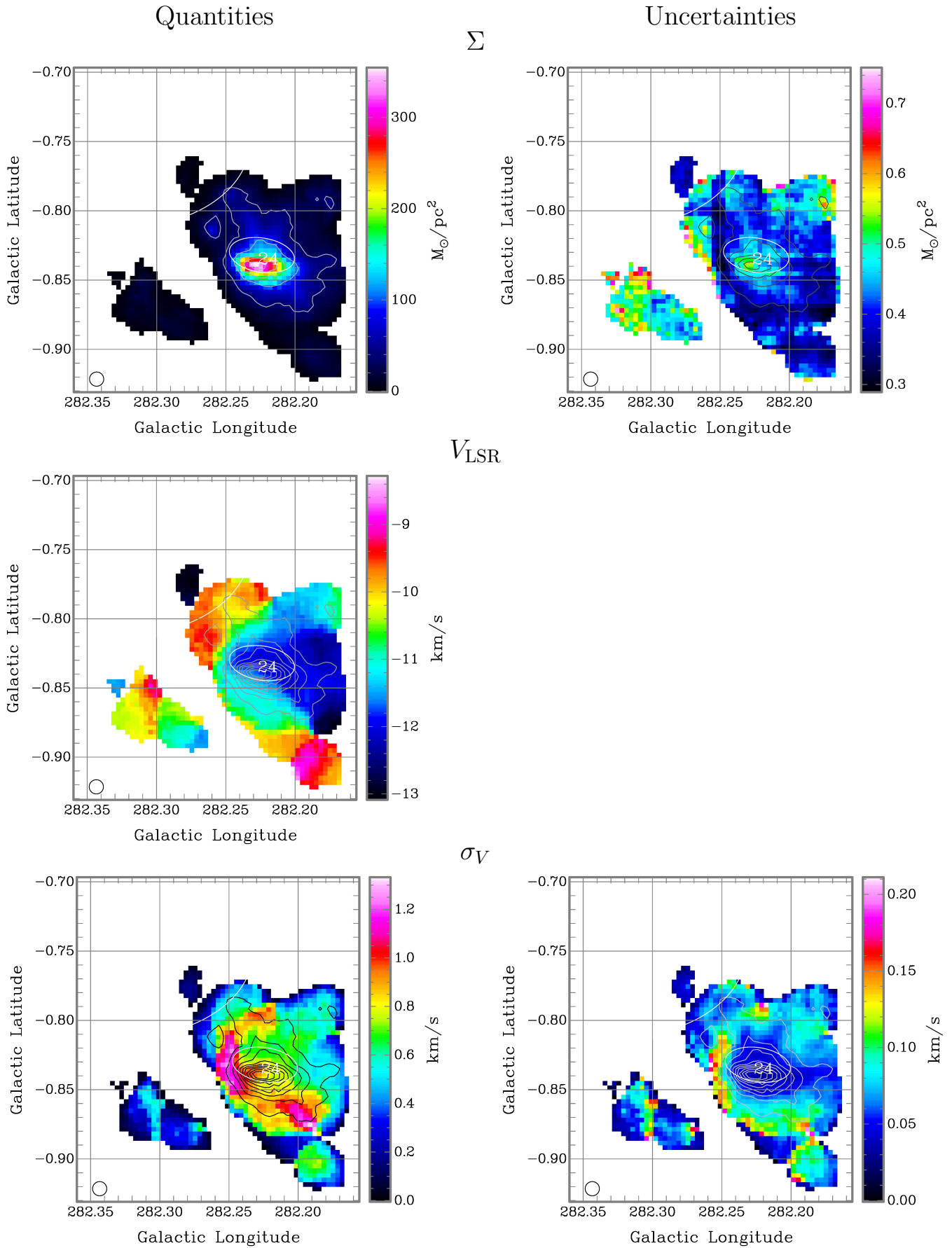


Figure C10. BYF 24 (Region 2c-South). At an assumed distance of 3.2 kpc, the scale is $0^{\circ}.1 = 5.6$ pc. The Mopra HPBW is shown in the BL corner.

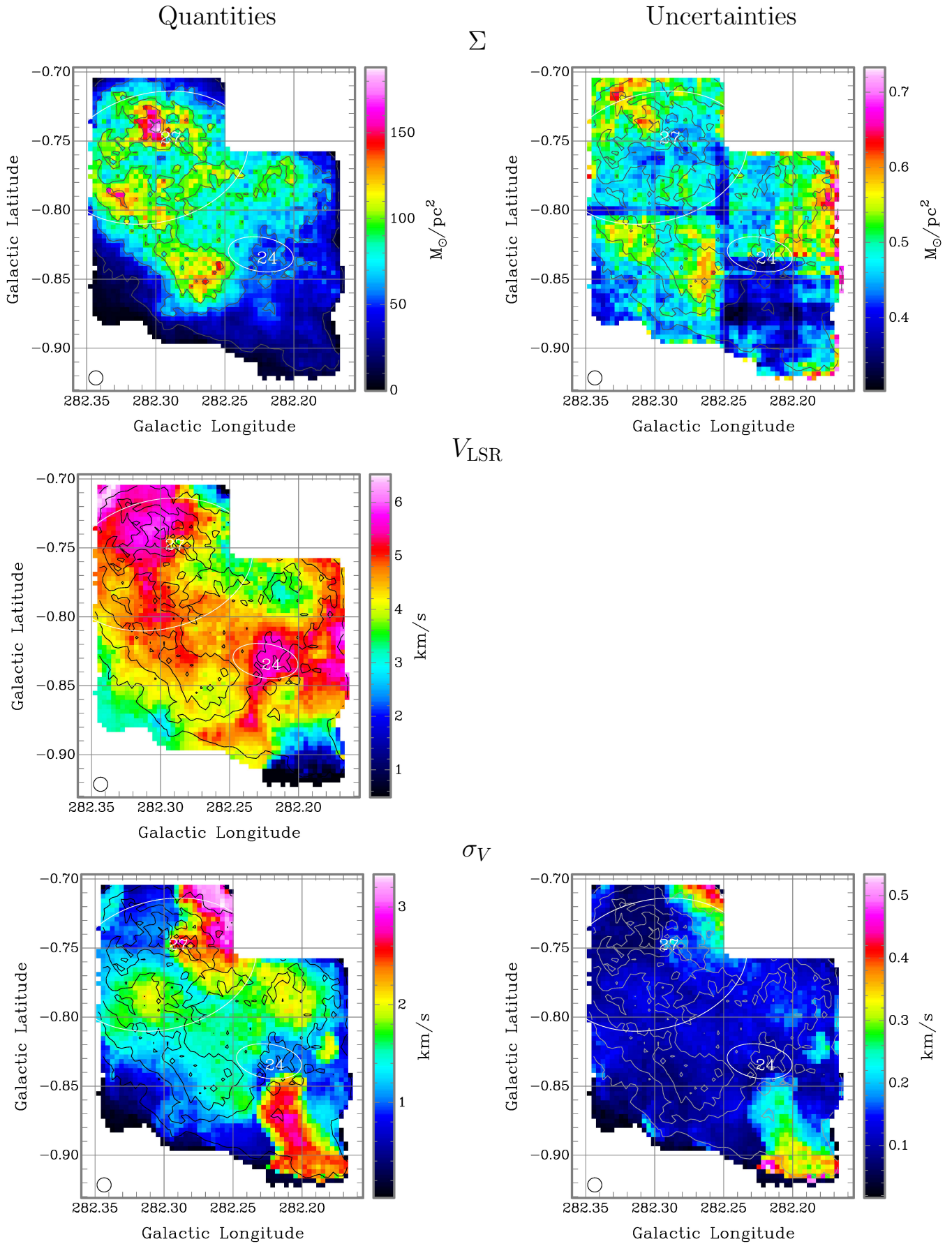
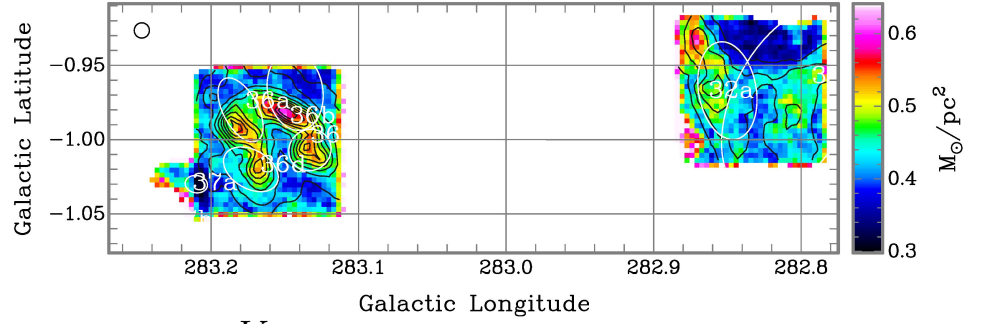
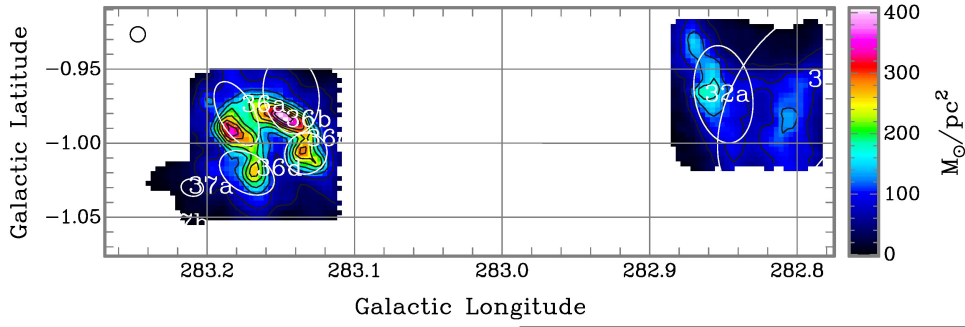


Figure C11. BYF 27 (Region 2c-South). At an assumed distance of 3.2 kpc, the scale is $0^{\circ}.1 = 5.6$ pc. The Mopra HPBW is shown in the BL corner.

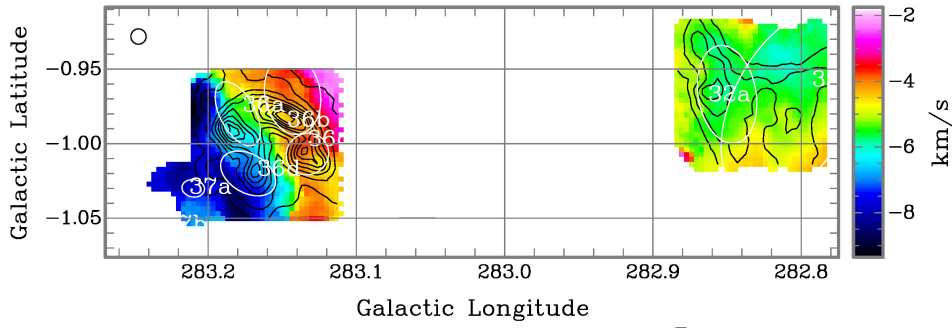
Quantities

Uncertainties

Σ



V_{LSR}



σ_V

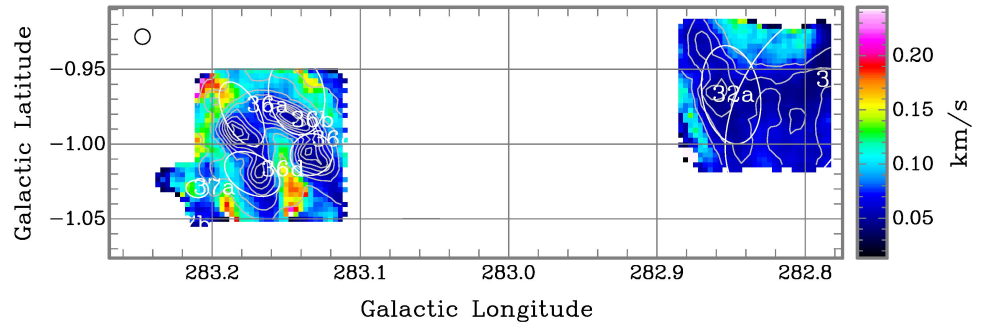
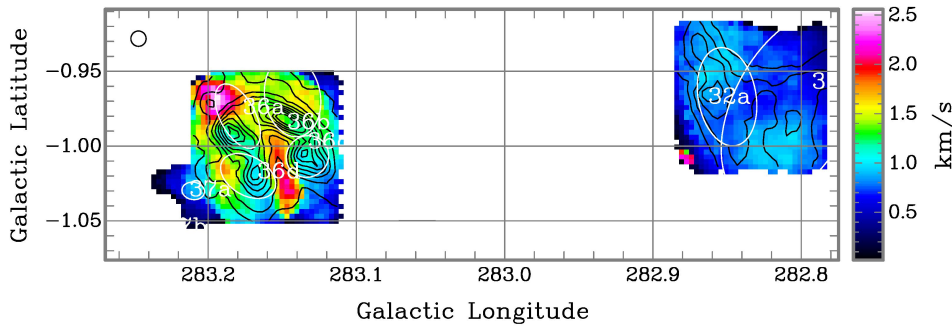


Figure C12. BYF 32 & 36 (Region 5). At an assumed distance of 3.2 kpc, the scale is $0''.1 = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

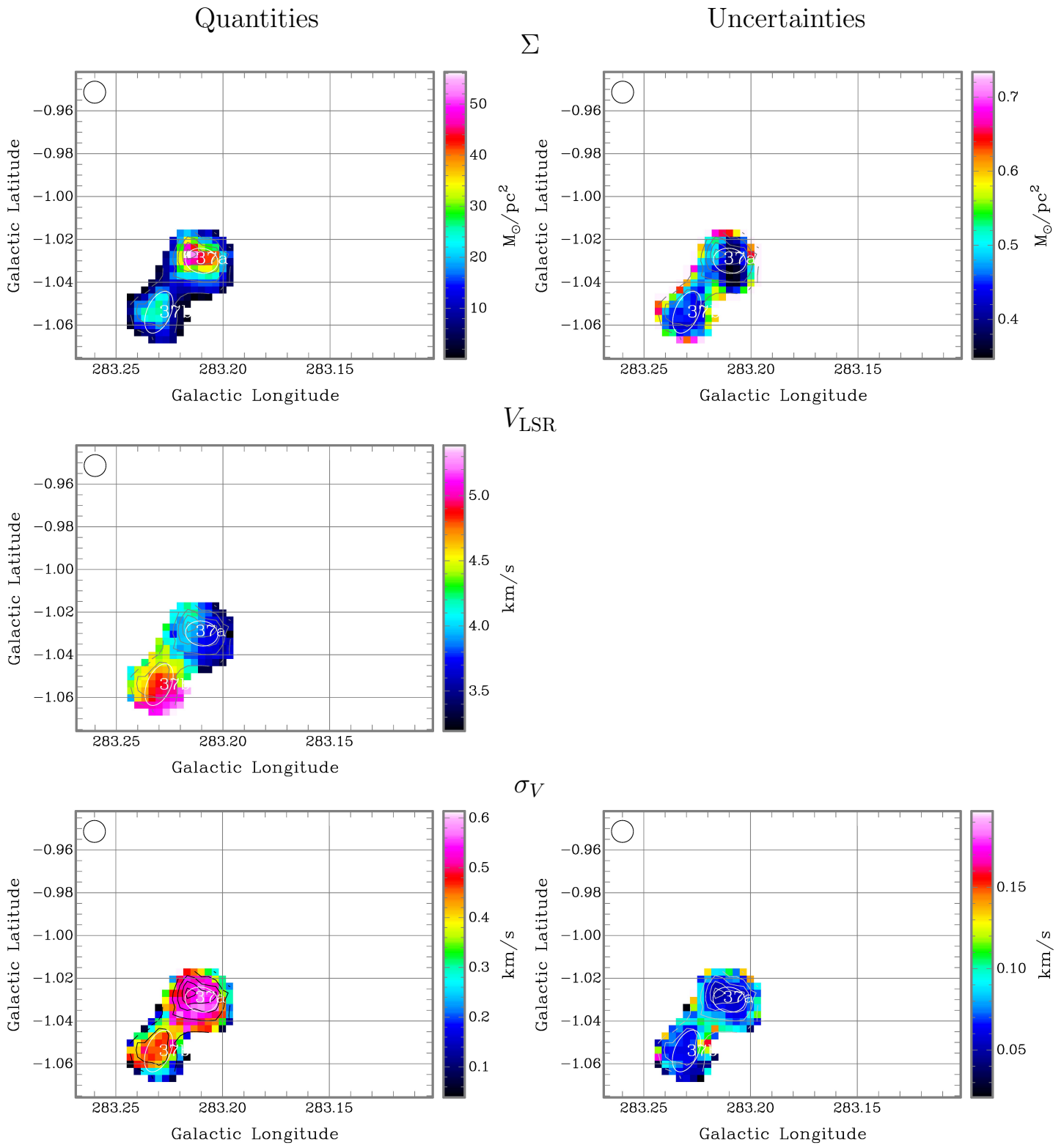


Figure C13. BYF 37 (Region 5-East). At an assumed distance of 3.2 kpc, the scale is $0.1'' = 5.6$ pc. The Mopra HPBW is shown in the TL corner.

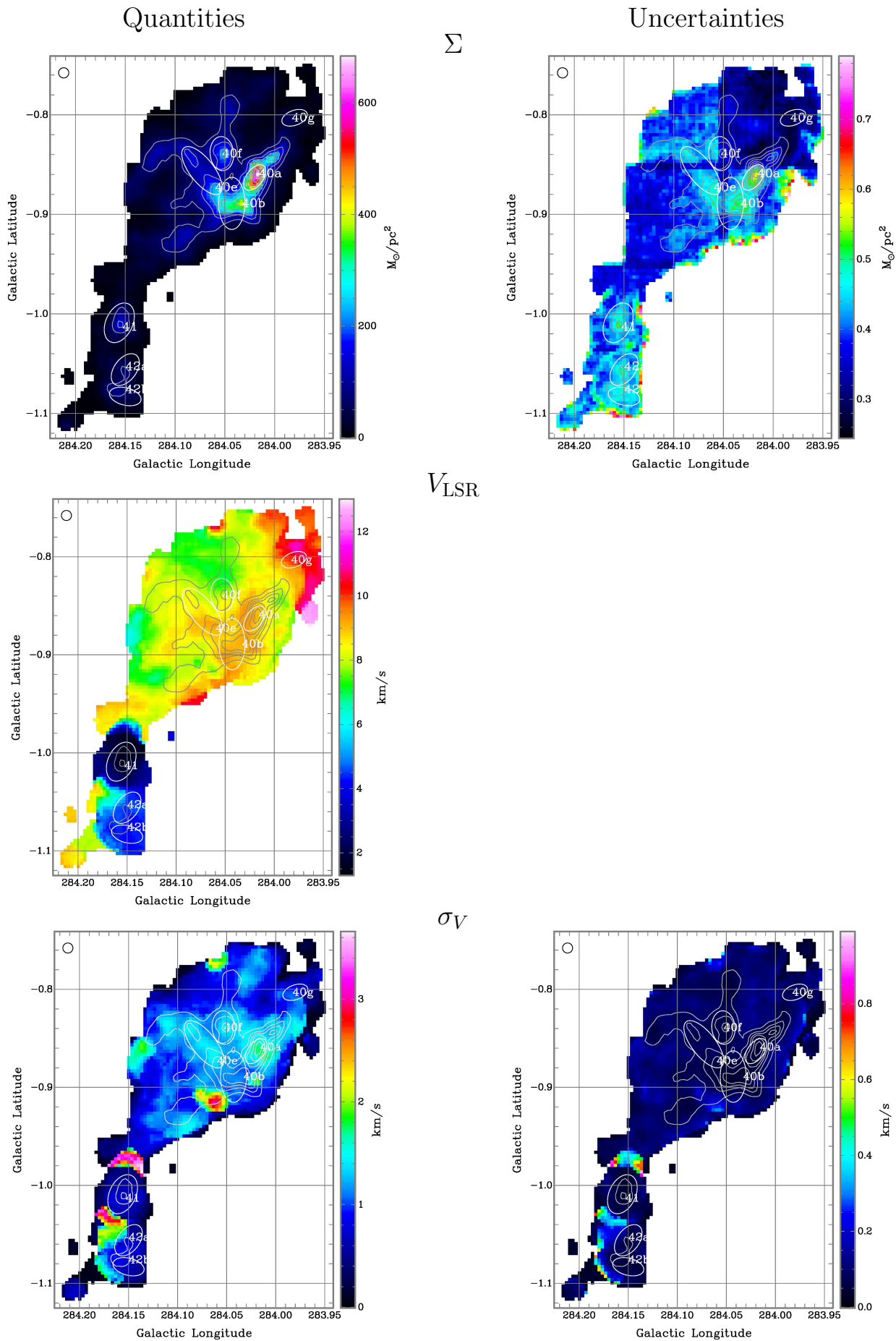


Figure C15. BYF 40–42 (Region 6). At an assumed distance of 6.6 kpc, the scale is $0^{\circ}.1 = 11.5$ pc. The Mopra HPBW is shown in the TL corner.

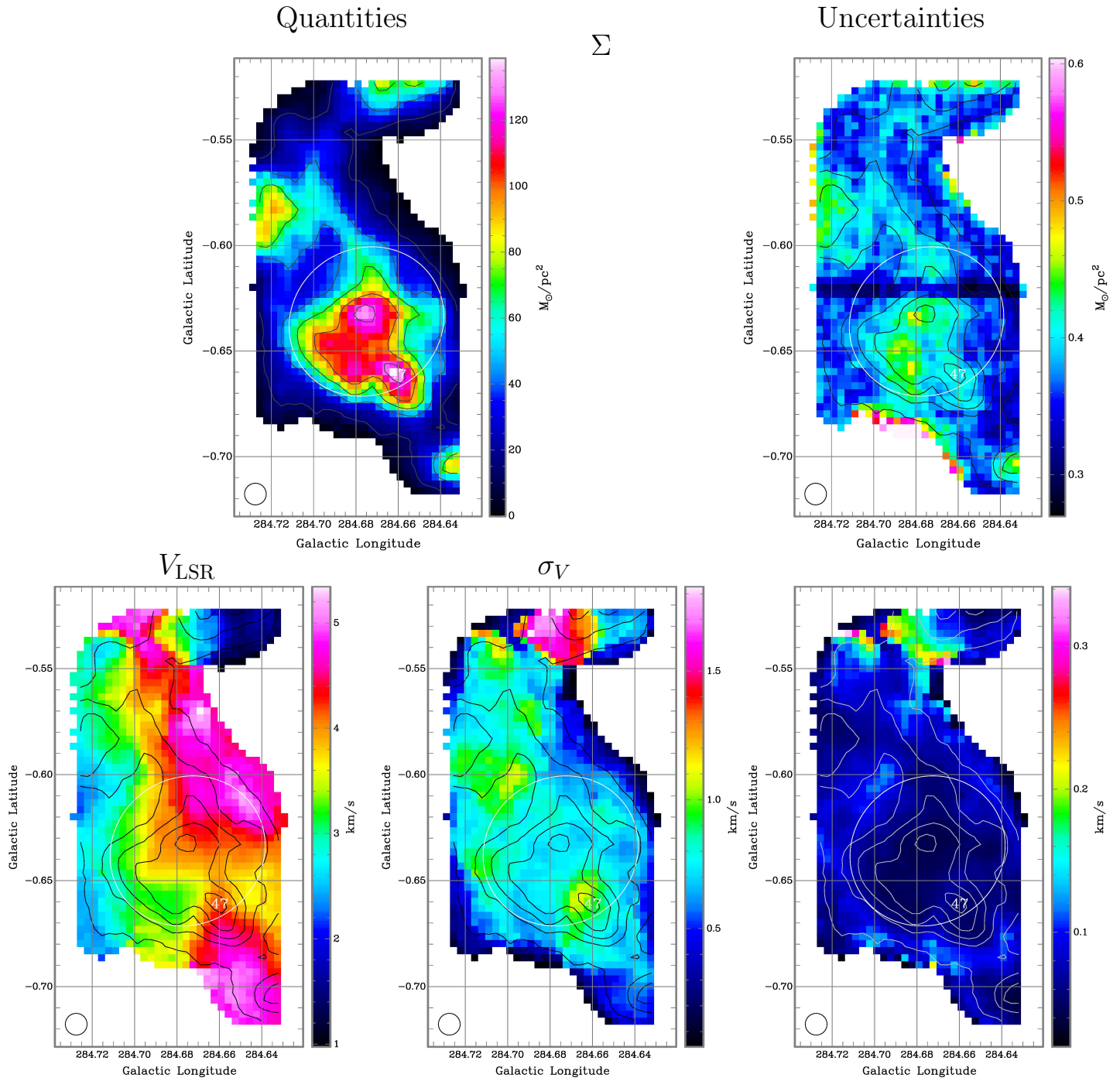


Figure C16. BYF 47 (Region 7). At an assumed distance of 5.3 kpc, the scale is $0^{\circ}1 = 9.3$ pc. The Mopra HPBW is shown in the BL corner.

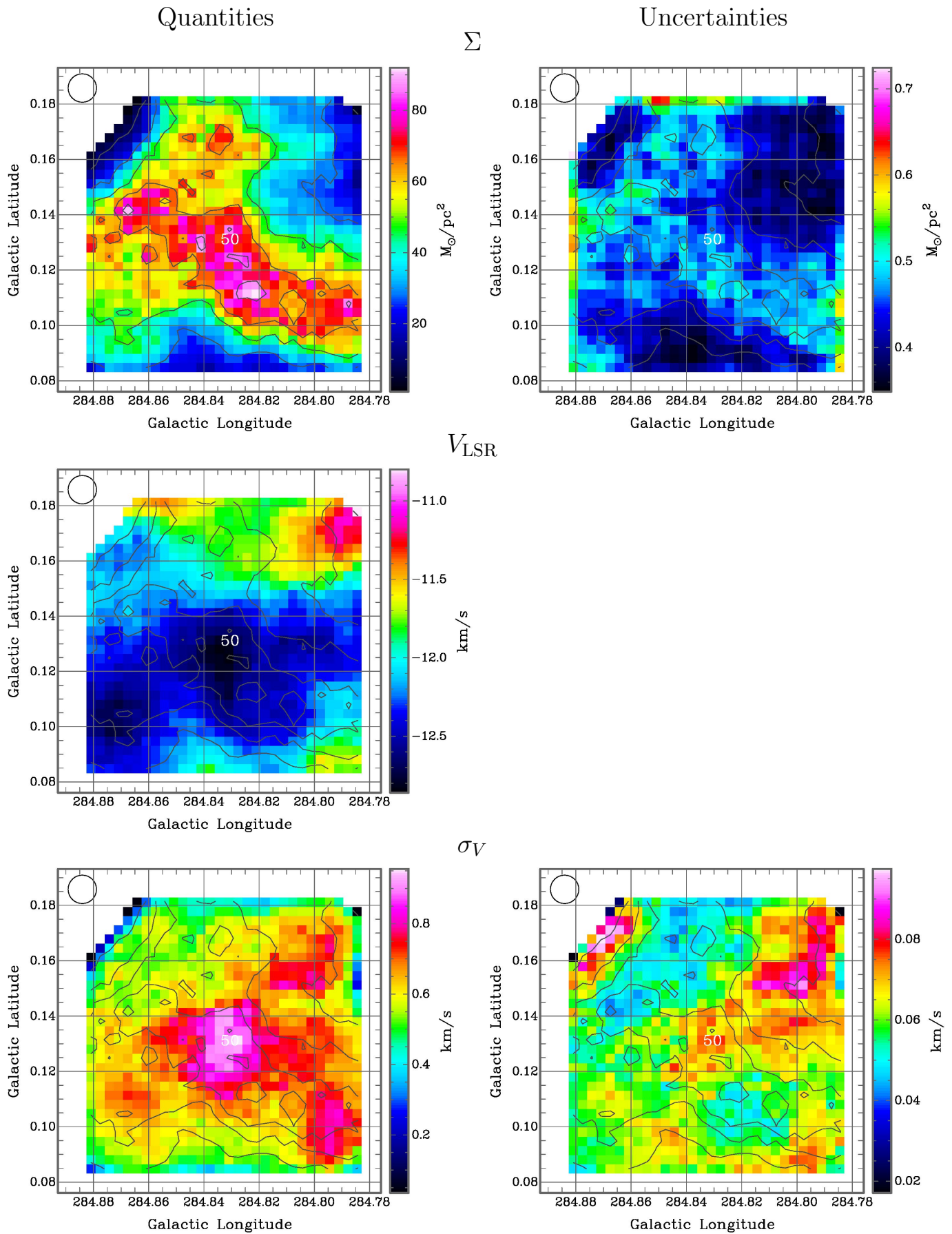


Figure C17. BYF 50 (Region 8-West). At an assumed distance of 5.3 kpc, the scale is $0.1'' = 9.3$ pc. The Mopra HPBW is shown in the TL corner.

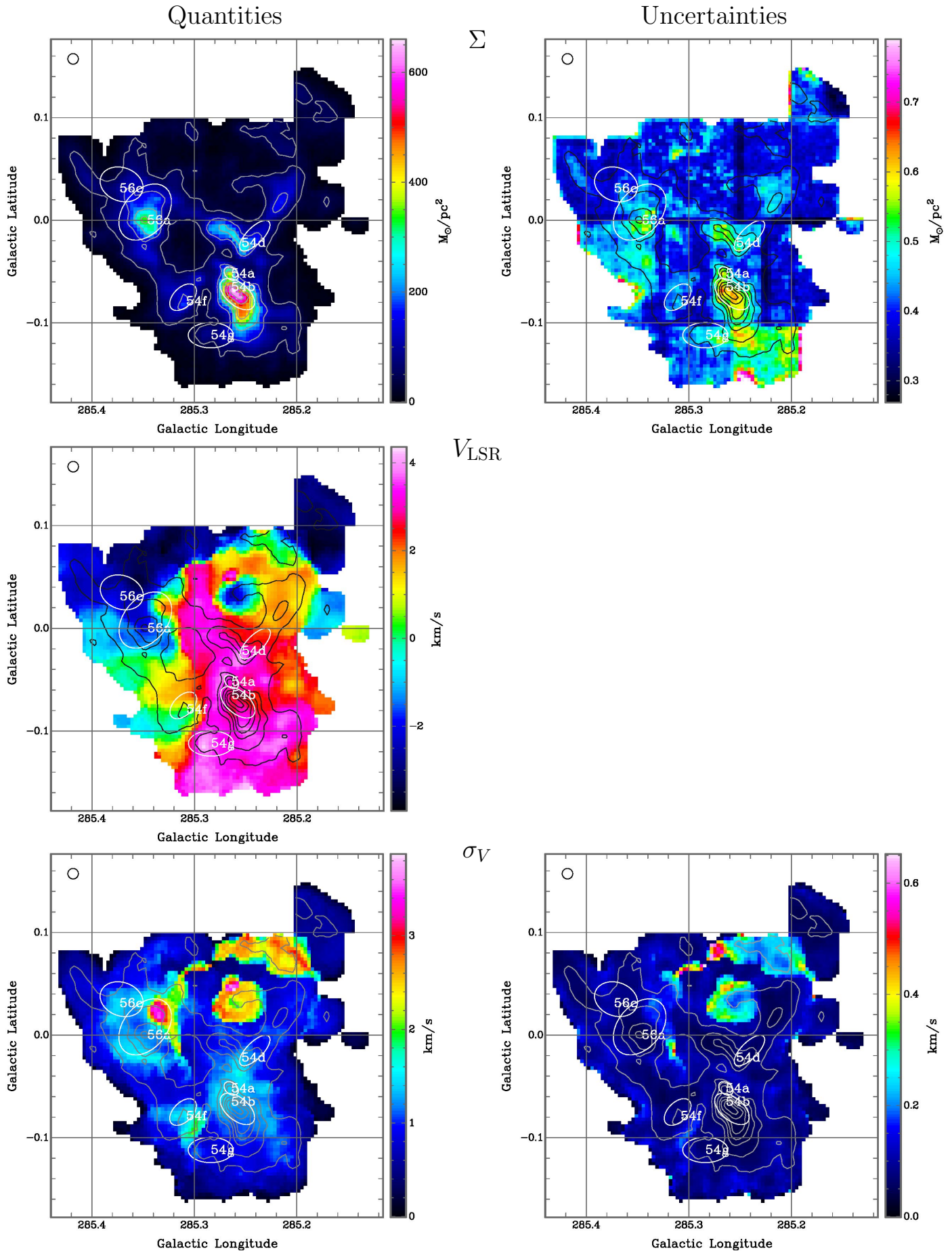


Figure C18. BYF 51–56 (Region 8-East). At an assumed distance of 5.3 kpc, the scale is $0^{\circ}1 = 9.3$ pc. The Mopra HPBW is shown in the TL corner.

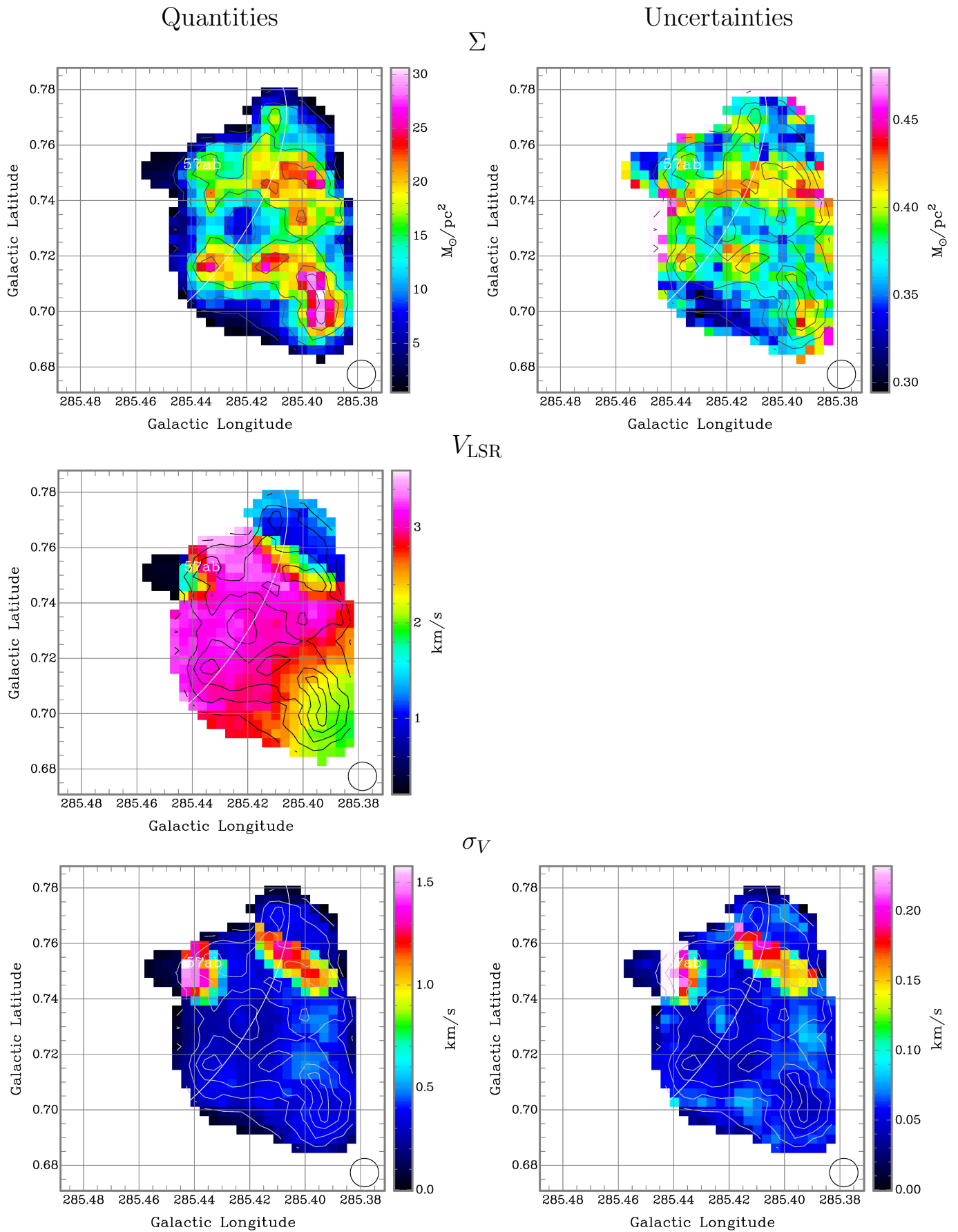


Figure C19. BYF 57-West. At an assumed distance of 5.3 kpc, the scale is $0^{\circ}1 = 9.3$ pc. The Mopra HPBW is shown in the BR corner.

Quantities

Uncertainties

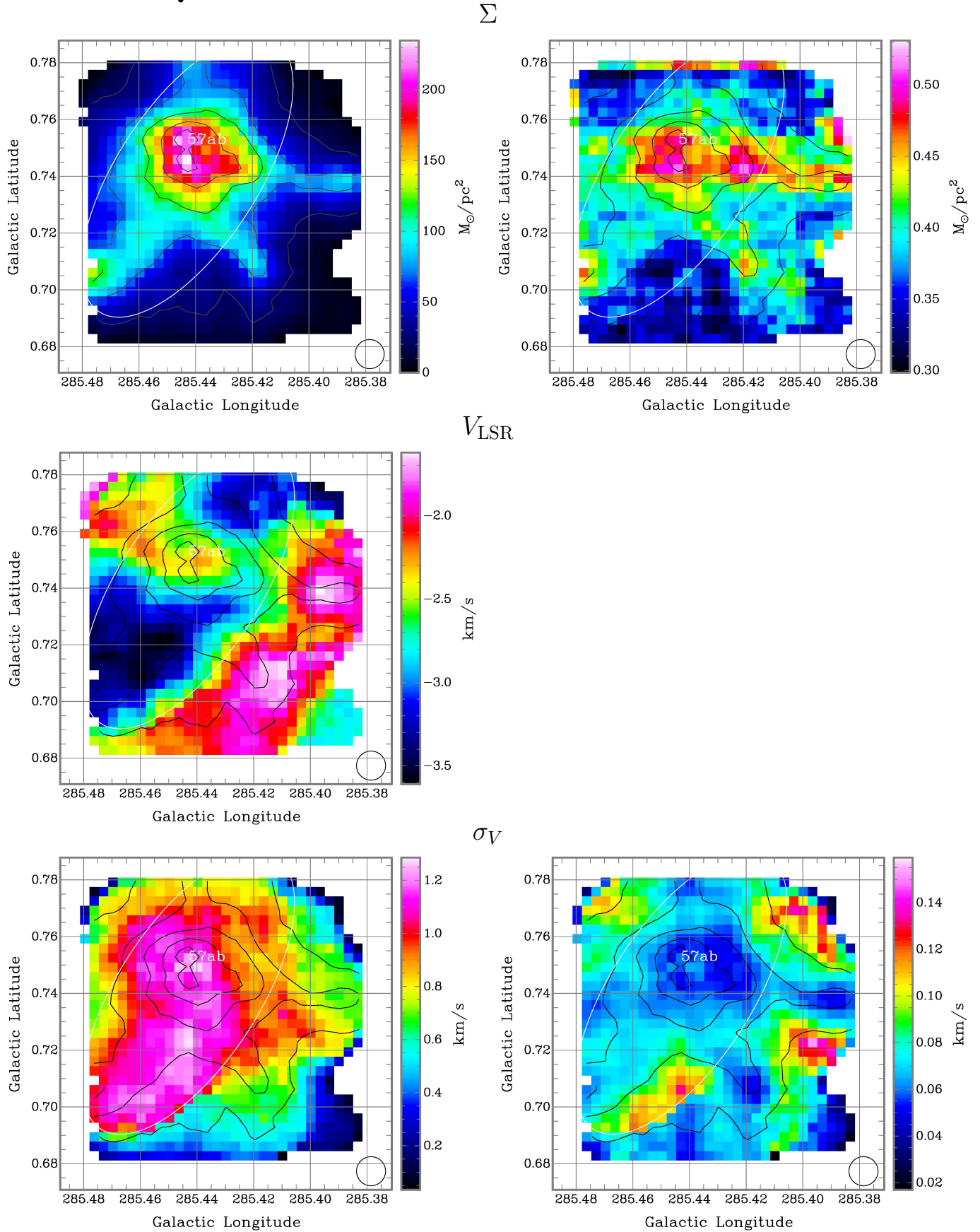


Figure C20. BYF 57-East. At an assumed distance of 5.3 kpc, the scale is $0''.1 = 9.3 \text{ pc}$. The Mopra HPBW is shown in the BR corner.

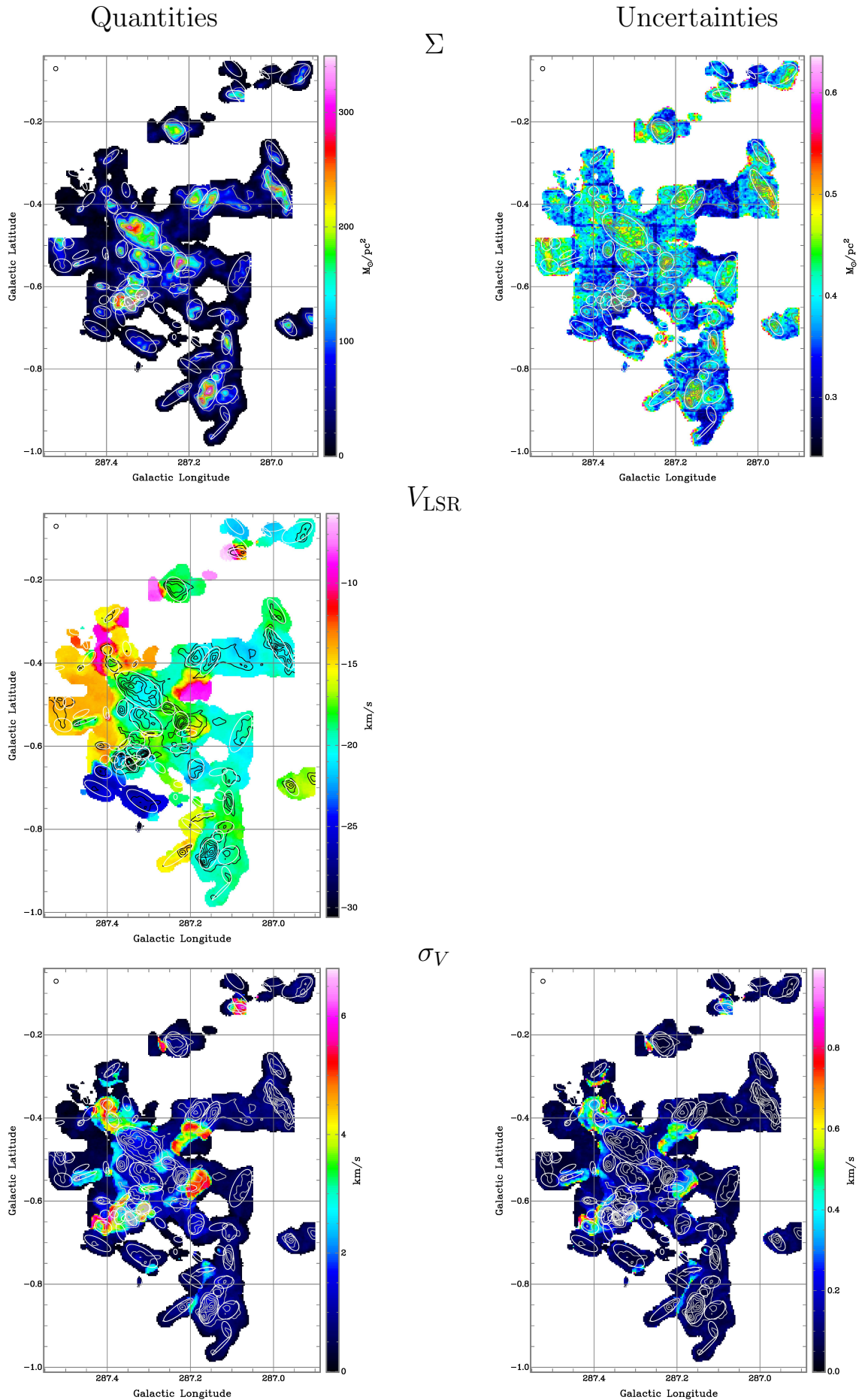


Figure C22. BYF 83–104 (Region 10). At an assumed distance of 2.5 kpc, the scale is $0^{\circ}1 = 4.4$ pc. The Mopra HPBW is shown in the TL corner.

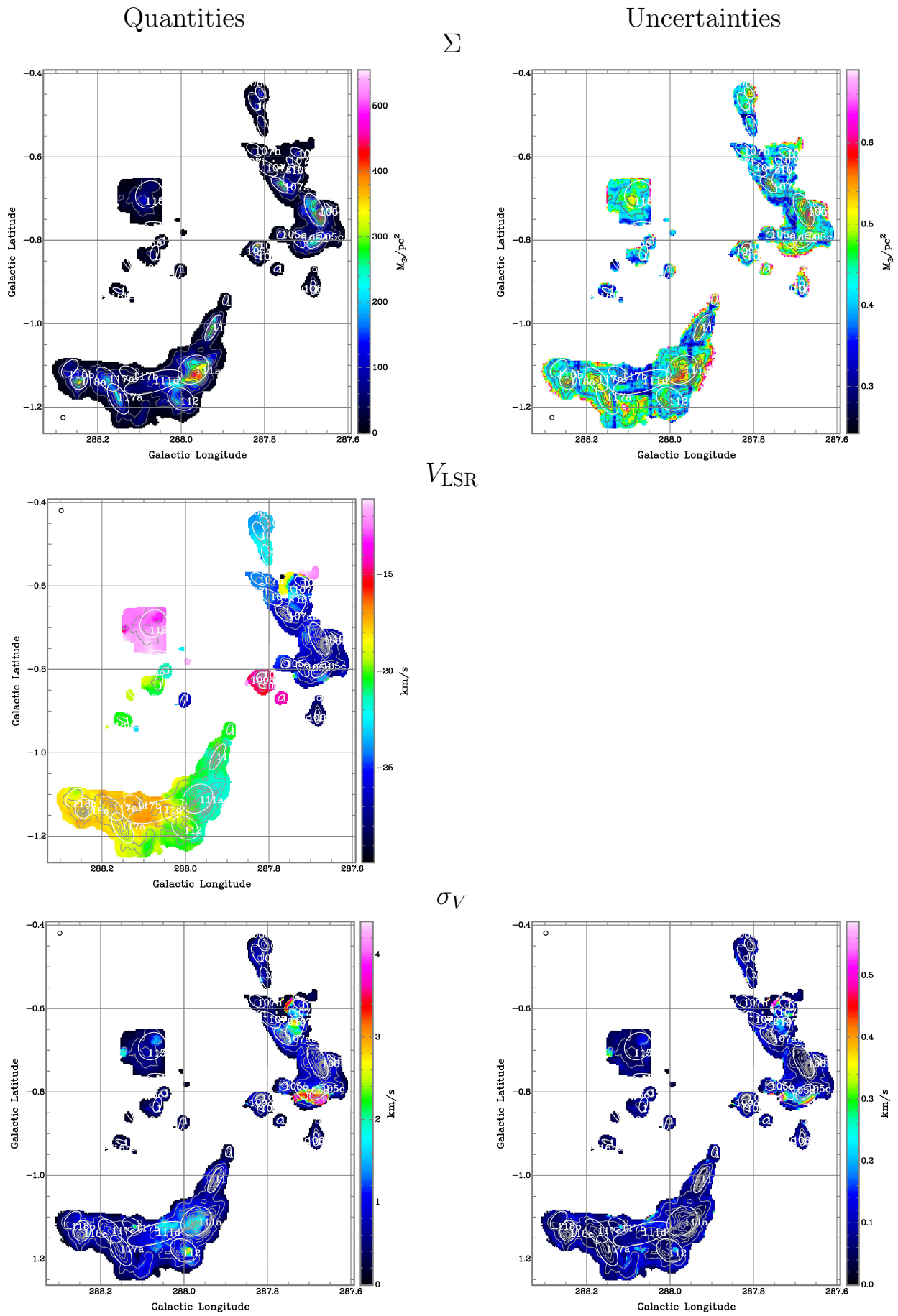


Figure C23. BYF 105–118 (Region 11). At an assumed distance of 2.5 kpc, the scale is $0.1'' = 4.4$ pc. The Mopra HPBW is shown in the TL corner.

Quantities

Uncertainties

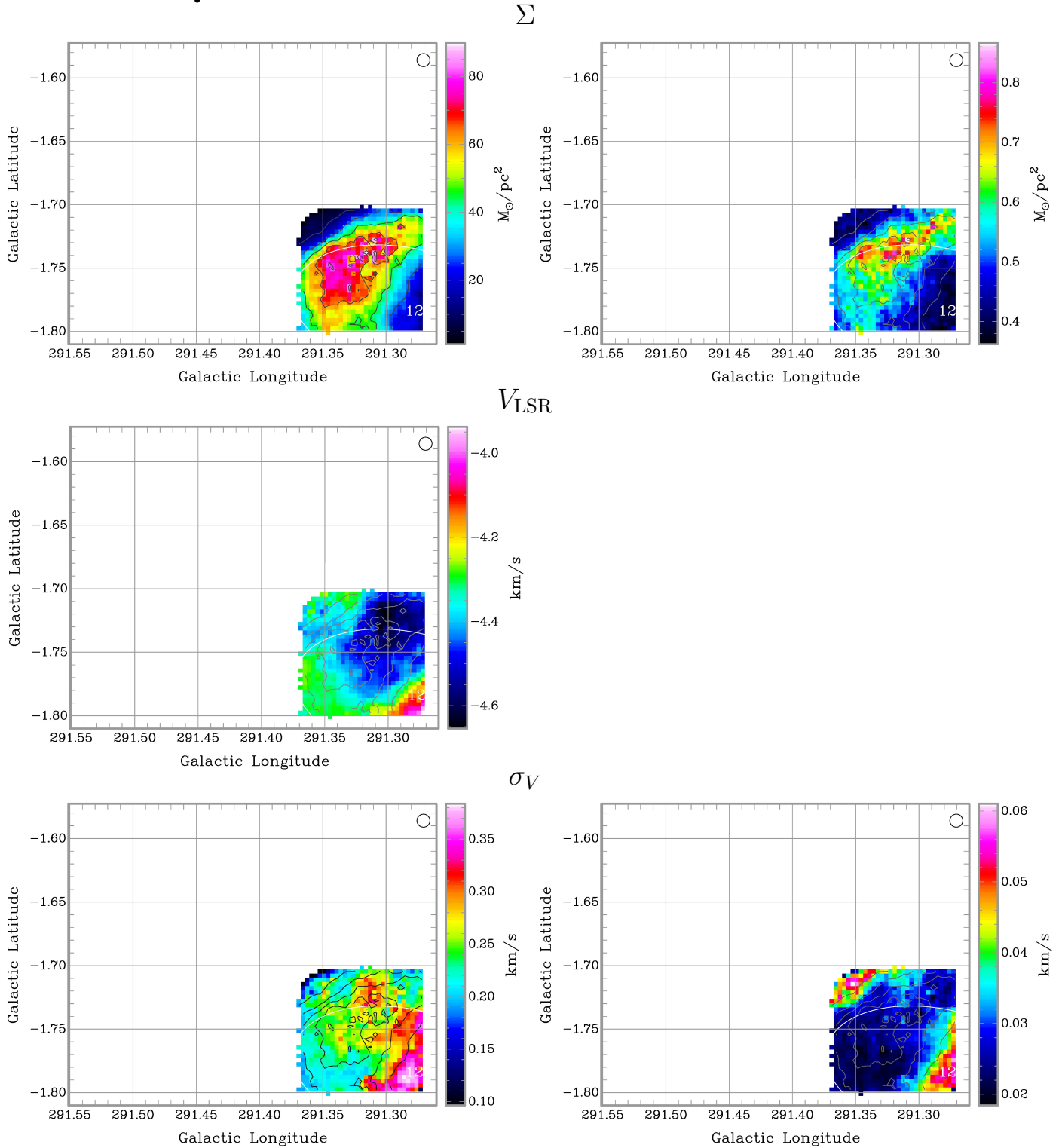


Figure C25. BYF 127 (Region 12-West). At an assumed distance of 1.1 kpc, the scale is $0^{\circ}1 = 1.9$ pc. The Mopra HPBW is shown in the TR corner.

Quantities

Uncertainties

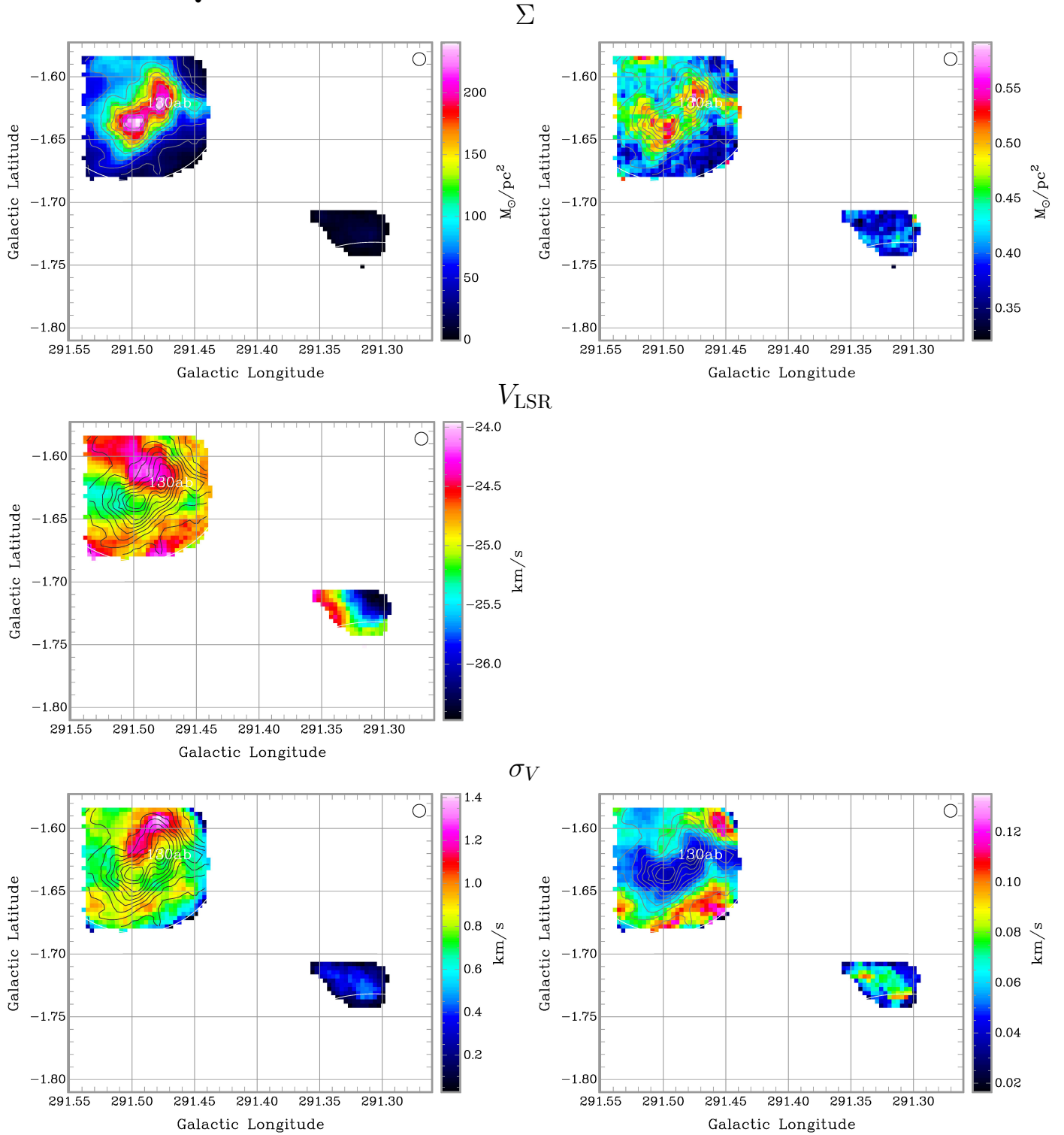


Figure C26. BYF 130 (Region 12-East). At an assumed distance of 2.4 kpc, the scale is $0^{\circ}1 = 4.2$ pc. The Mopra HPBW is shown in the TR corner.

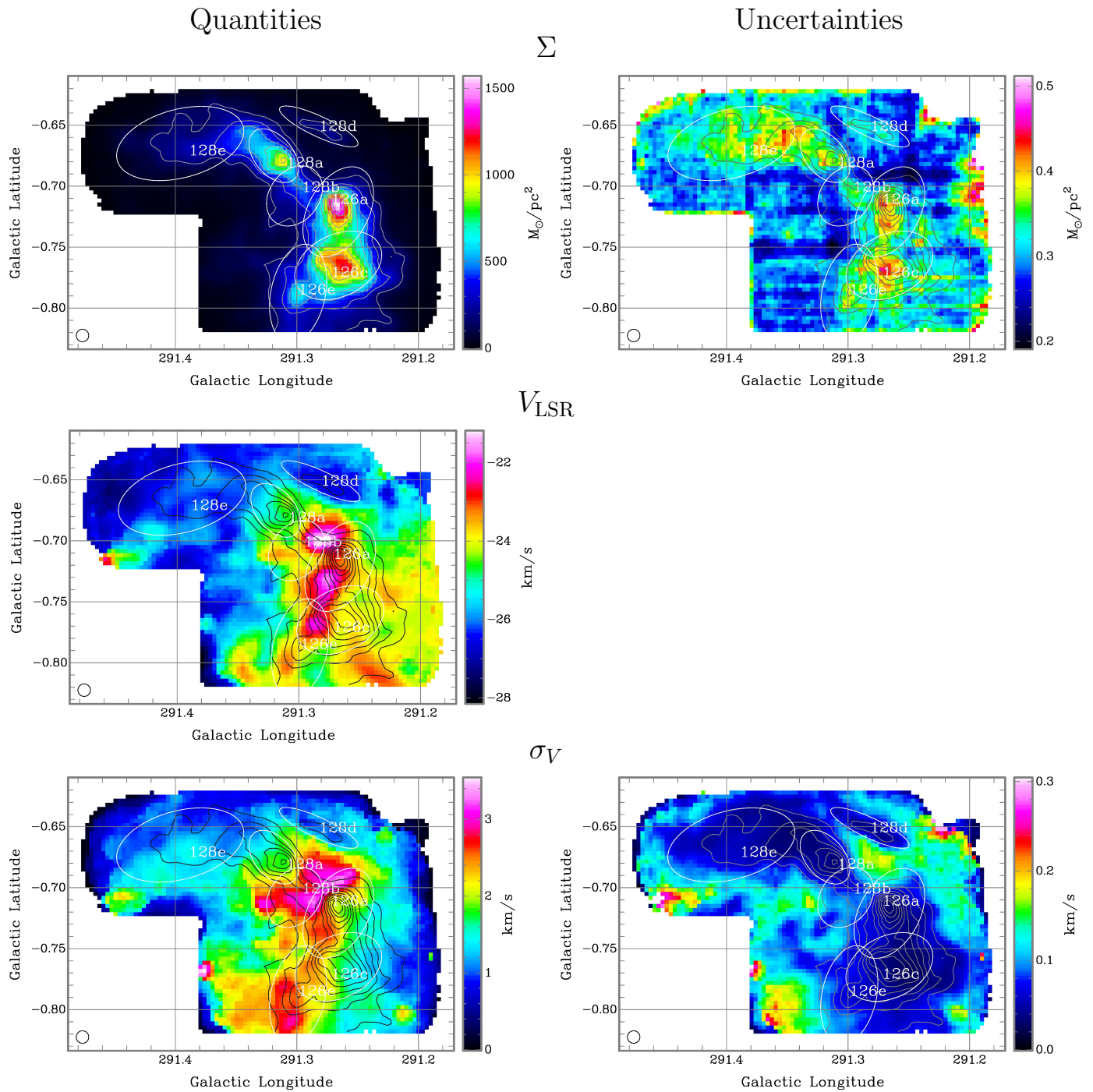


Figure C27. BYF 126 & 128 (Region 13a). At an assumed distance of 2.4 kpc, the scale is $0''.1 = 4.2$ pc. The Mopra HPBW is shown in the BL corner.

Quantities

Uncertainties

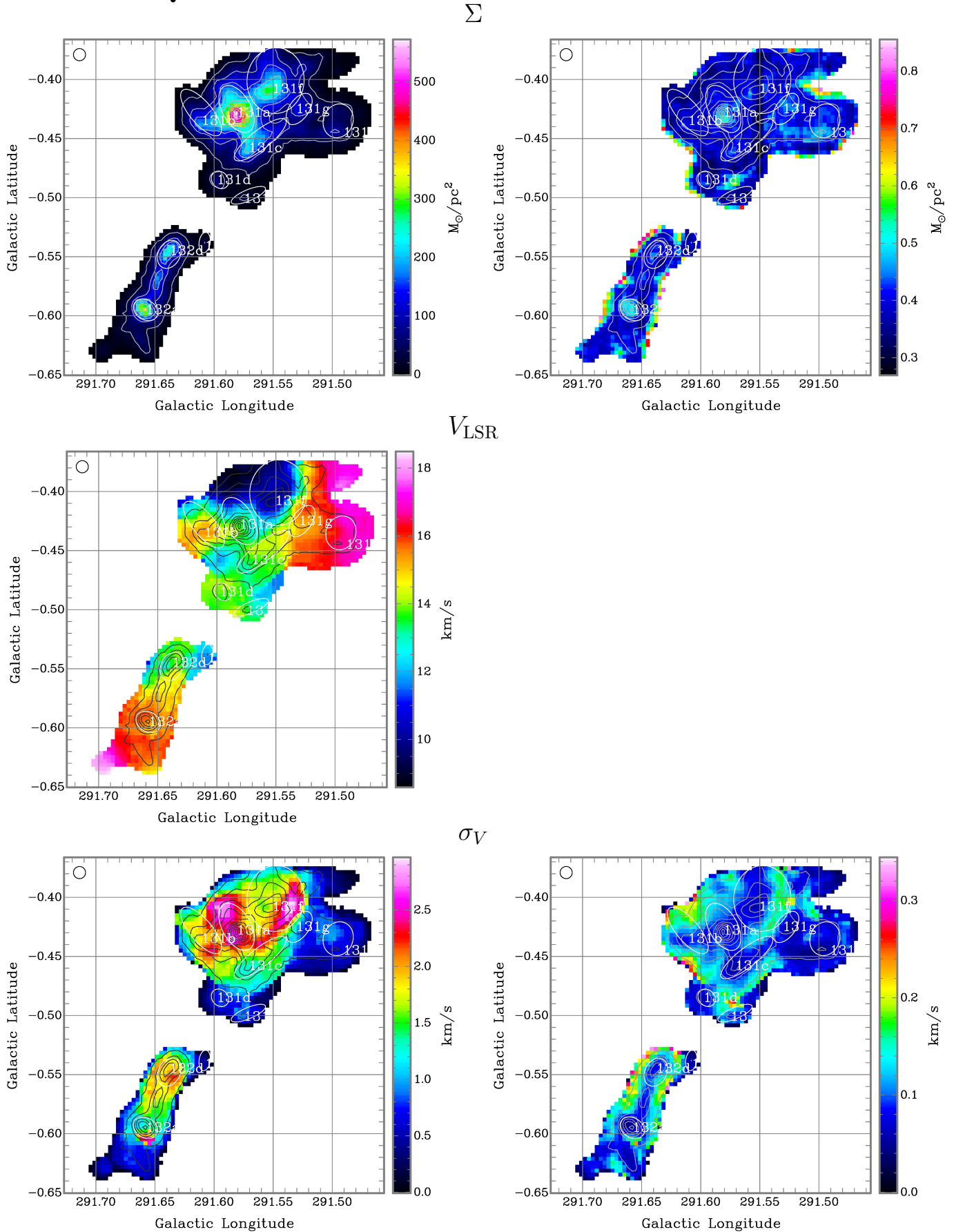


Figure C29. BYF 131 & 132 (Region 13c). At an assumed distance of 6.0 kpc, the scale is $0^{\circ}.1 = 10.5$ pc. The Mopra HPBW is shown in the TL corner.

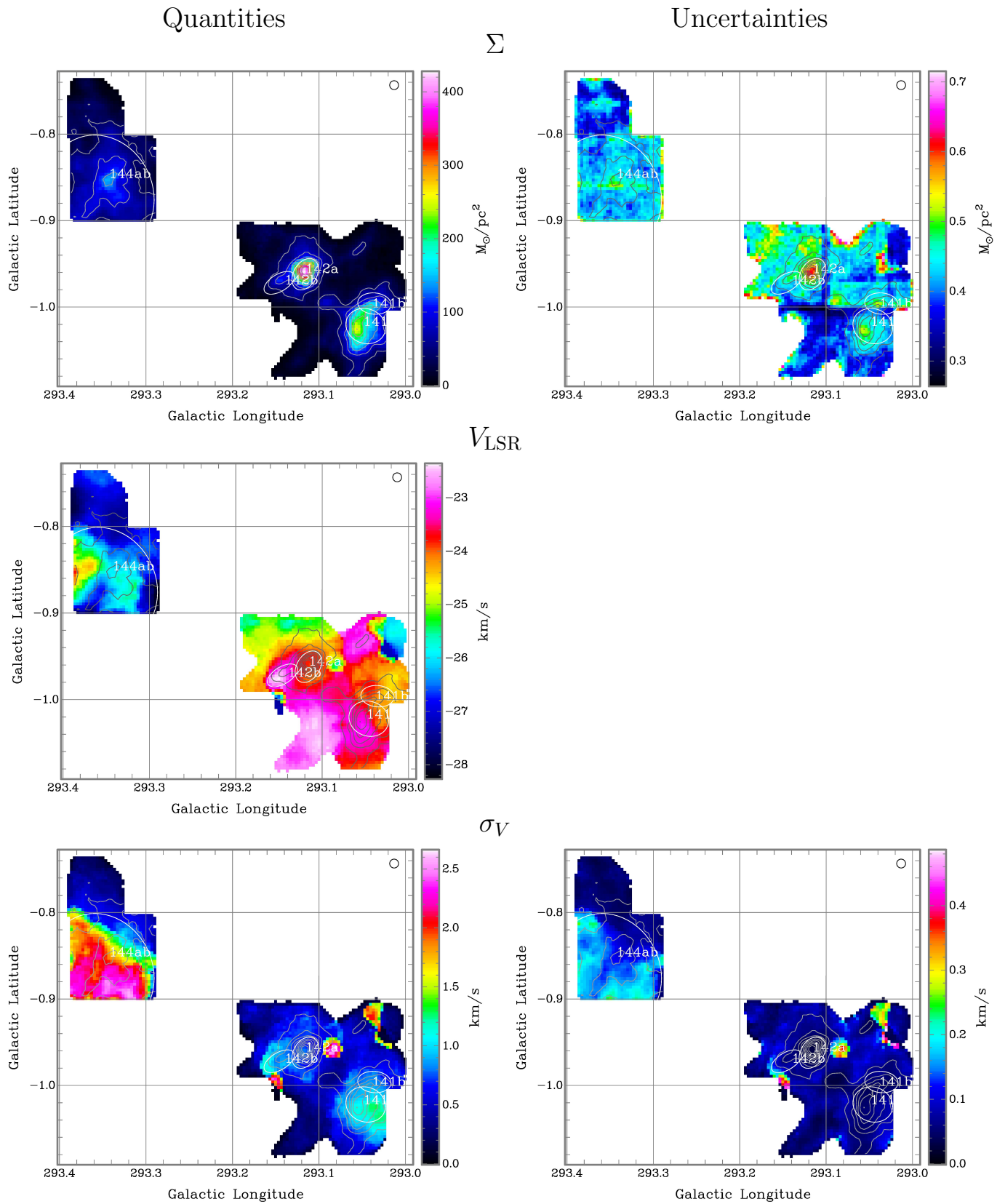


Figure C31. BYF 141–144 (Region 16). At an assumed distance of 2.4 kpc, the scale is $0^{\circ}1 = 4.2$ pc. The Mopra HPBW is shown in the TR corner.

Quantities

Uncertainties

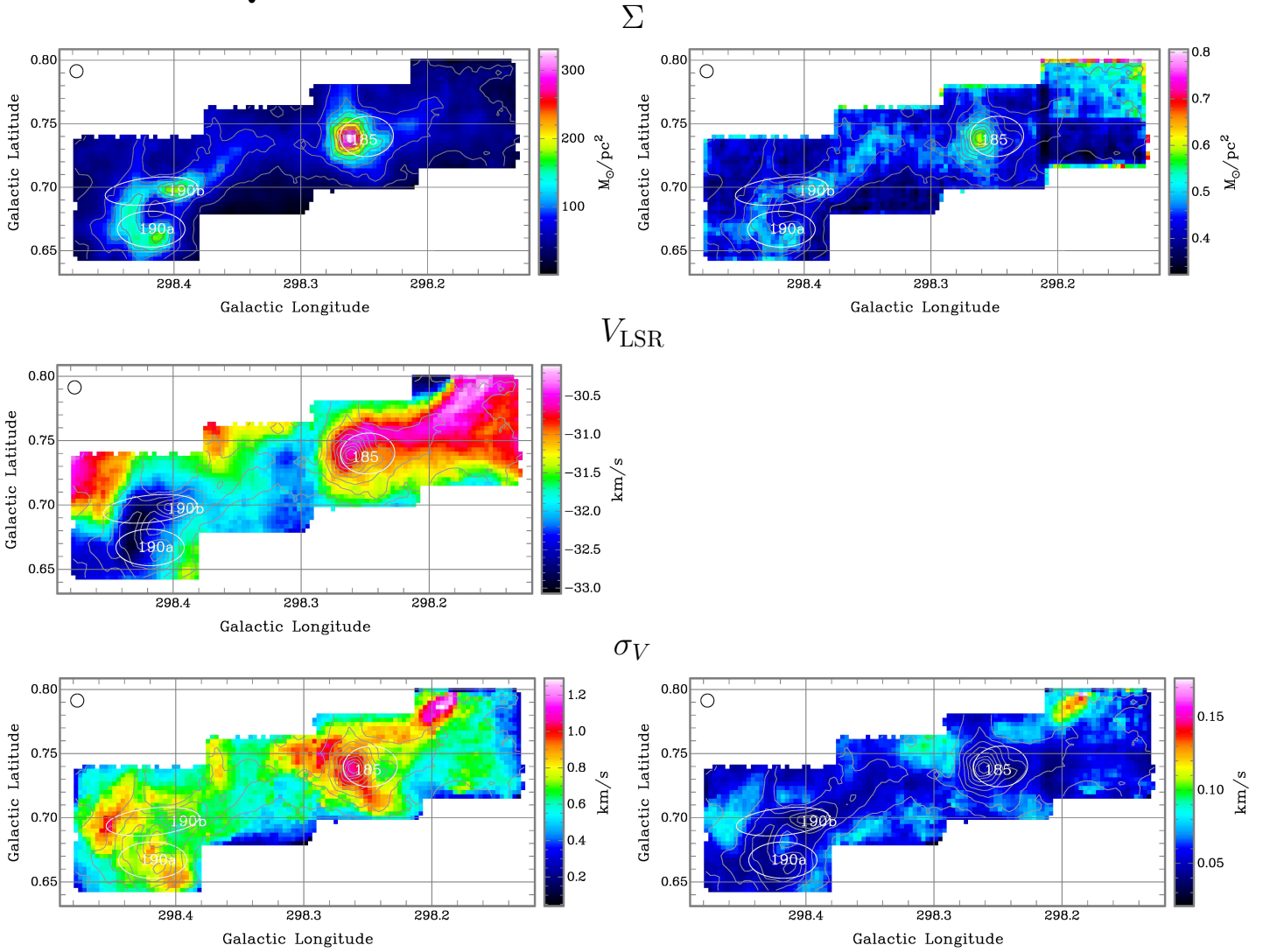


Figure C34. BYF 183–190 (Region 23). At an assumed distance of 4.7 kpc, the scale is $0^{\circ}1 = 8.2$ pc. The Mopra HPBW is shown in the TL corner.

Quantities

Uncertainties

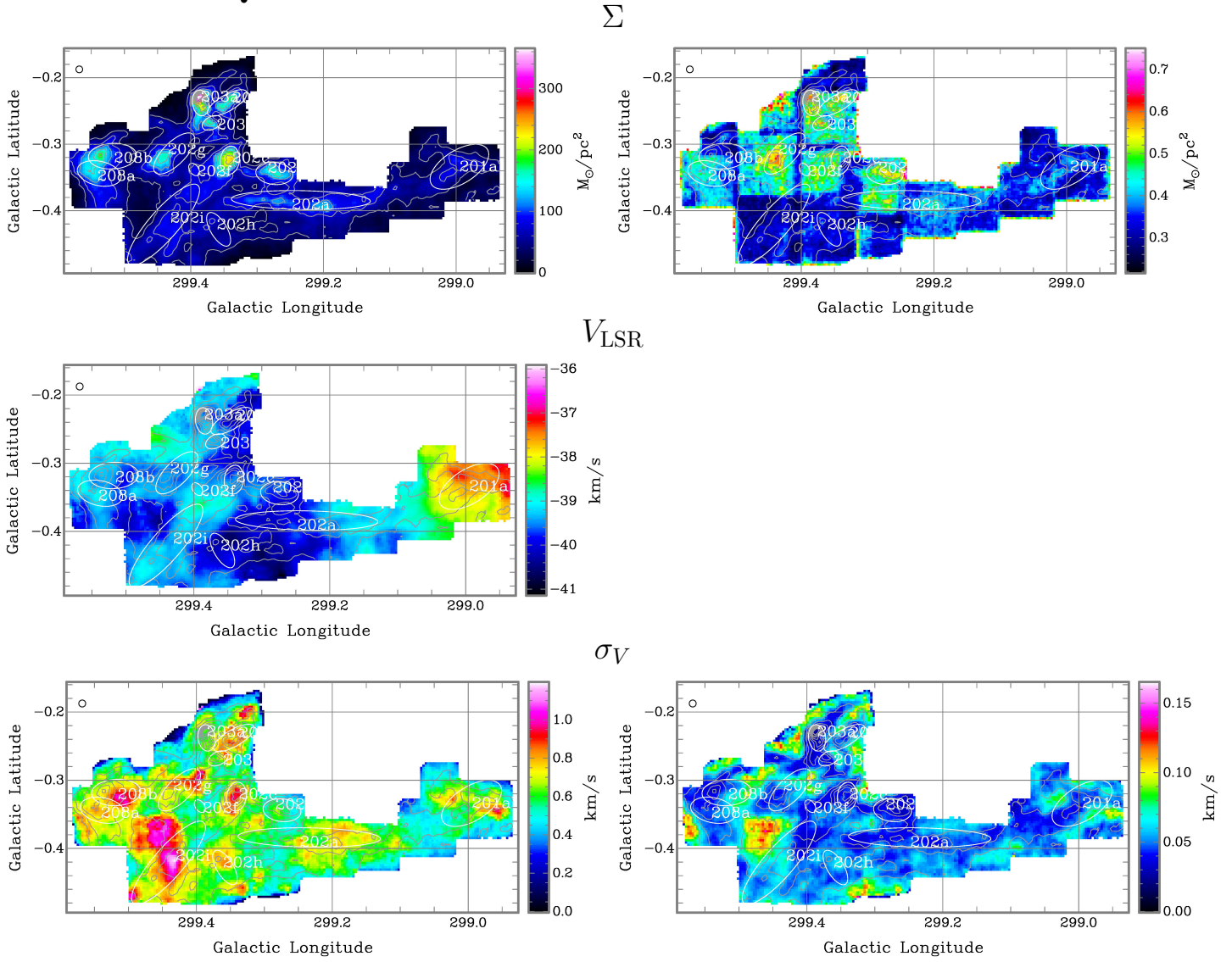


Figure C36. BYF 201–208 (Region 26b). At an assumed distance of 4.7 kpc, the scale is $0.1^\circ = 8.2$ pc. The Mopra HPBW is shown in the TL corner.