# **Supplementary Materials**

## Averaged Spectra

The average line profiles for the <sup>12</sup>CO, <sup>13</sup>CO, from our survey, together with <sup>12</sup>CO from the Columbia CO Survey (Dame, Hartmann, and Thaddeus 2001) averaged over each two square degrees,  $1^{\circ} \times 2^{\circ}$  ( $l \times b$ ), are displayed in Figures 12-32.

## Integrated Intensity Maps

Figures 33 to 184 are the integrated intensity maps (moment  $0^{th}$ ) of  $T_{MB}$  from our survey. Each moment map covers a region 10 degrees by 2 degrees, and is integrated over a 10 km/s velocity range.

## **RMS Noise Maps**

Figures 185 to 189 show the 1  $\sigma$  noise maps of <sup>12</sup>CO, <sup>13</sup>CO and C<sup>18</sup>O data. The maps have been produced by integrating 2000 emission free channels.

## System Temperature

Maps of the system temperature for each isotopologue line are shown in Figures 190–194. Striping in these images occurs because the data is scanned in the l and b directions arising from sky variations during the scan.



**Figure 12.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 250-255^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 13.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 255 - 260^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50 \text{ km s}^{-1}$ . The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 14.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 260 - 265^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 15.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 265 - 270^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 16.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 270 - 275^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001))



**Figure 17.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 275 - 280^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 18.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 280 - 285^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 19.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 285 - 290^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001))



**Figure 20.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 290 - 295^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 21.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 295 - 300^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 22.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 300 - 305^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 23.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 305 - 310^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 24.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 310 - 315^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50 \text{ km s}^{-1}$ . The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 25.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 315 - 320^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 26.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 320 - 325^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 27.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 325 - 330^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 28.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 330 - 335^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 29.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 335 - 340^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 30.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 340 - 345^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50 \text{ km s}^{-1}$ . The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 31.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 345 - 350^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50 \text{ km s}^{-1}$ . The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



**Figure 32.** Average spectra for each  $1^{\circ} \times 2^{\circ}$  along the Galactic Plane between  $l = 350 - 355^{\circ}$ , labelled by their lower longitude limit, from  $-150 < V_{LSR} < +50$  km s<sup>-1</sup>. The dark solid lines are the Mopra <sup>12</sup>CO data, while the lower black lines are the <sup>13</sup>CO emission offset by -0.2K. The dashed lines are the equivalent average <sup>12</sup>CO spectra from the Columbia CO Survey (Dame et al., 2001)



Figure 33. Moment 0 image for *l*=250-260° calculated over the velocity interval v=80 to 90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 34.** Moment 0 image for *l*=250-260° calculated over the velocity interval v=70 to 80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 35. Moment 0 image for *l*=250-260° calculated over the velocity interval v=60 to 70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 36.** Moment 0 image for *I*=250-260° calculated over the velocity interval v=50 to 60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 37.** Moment 0 image for *l*=250-260° calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 38.** Moment 0 image for *l*=250-260° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 39.** Moment 0 image for *I*=250-260° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 40.** Moment 0 image for *l*=250-260° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 41.** Moment 0 image for *I*=250-260° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 42.** Moment 0 image for *l*=260-270° calculated over the velocity interval v=70 to 80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 43. Moment 0 image for *l*=260-270° calculated over the velocity interval v=60 to 70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 44.** Moment 0 image for *I*=260-270° calculated over the velocity interval v=50 to 60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 45.** Moment 0 image for *l*=260-270° calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 46.** Moment 0 image for *l*=260-270° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 47. Moment 0 image for *l*=260-270° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 48.** Moment 0 image for *l*=260-270° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 49. Moment 0 image for *l*=260-270° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 50.** Moment 0 image for *l*=260-270° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 51. Moment 0 image for *I*=270-280° calculated over the velocity interval v=50 to 60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 52.** Moment 0 image for *I*=270-280° calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 53.** Moment 0 image for *l*=270-280° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 54.** Moment 0 image for *l*=270-280° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 55.** Moment 0 image for *I*=270-280° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 56.** Moment 0 image for *l*=270-280° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 57.** Moment 0 image for  $l=270-280^{\circ}$  calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 58.** Moment 0 image for *l*=270-280° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 59.** Moment 0 image for *I*=280-290° calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 60.** Moment 0 image for *I*=280-290° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.


**Figure 61.** Moment 0 image for *l*=280-290° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 62.** Moment 0 image for *l*=280-290° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 63. Moment 0 image for *l*=280-290° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 64.** Moment 0 image for *l*=280-290° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 65.** Moment 0 image for  $l=280-290^{\circ}$  calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 66.** Moment 0 image for  $l=280-290^{\circ}$  calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 67.** Moment 0 image for  $l=280-290^{\circ}$  calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 68.** Moment 0 image for *I*=290-300° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 69.** Moment 0 image for  $l=290-300^{\circ}$  calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 70.** Moment 0 image for *l*=290-300° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 71. Moment 0 image for *l*=290-300° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 72.** Moment 0 image for *l*=290-300° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 73.** Moment 0 image for l=290-300° calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 74.** Moment 0 image for l=290-300° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 75.** Moment 0 image for  $l=290-300^{\circ}$  calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 76.** Moment 0 image for  $l=290-300^{\circ}$  calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 77.** Moment 0 image for *l*=300-310° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 78.** Moment 0 image for *l*=300-310° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 79.** Moment 0 image for *I*=300-310° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 80. Moment 0 image for *l*=300-310° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 81.** Moment 0 image for *l*=300-310° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 82.** Moment 0 image for l=300-310° calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 83.** Moment 0 image for l=300-310° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 84.** Moment 0 image for l=300-310° calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 85.** Moment 0 image for l=300-310° calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 86.** Moment 0 image for l=300-310° calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 87.** Moment 0 image for  $l=300-310^{\circ}$  calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 88.** Moment 0 image for *I*=310-320° calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 89.** Moment 0 image for *l*=310-320° calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 90.** Moment 0 image for *l*=310-320° calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 91.** Moment 0 image for *I*=310-320° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 92.** Moment 0 image for *l*=310-320° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 93.** Moment 0 image for *l*=310-320° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 94.** Moment 0 image for l=310-320° calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 95.** Moment 0 image for l=310-320° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 96.** Moment 0 image for l=310-320° calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 97.** Moment 0 image for l=310-320° calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 98.** Moment 0 image for l=310-320° calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 99.** Moment 0 image for  $l=310-320^{\circ}$  calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 100.** Moment 0 image for  $l=310-320^{\circ}$  calculated over the velocity interval v=-80 to -70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 101.** Moment 0 image for  $I=320-330^{\circ}$  calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 102.** Moment 0 image for  $I=320-330^{\circ}$  calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 103. Moment 0 image for  $I=320-330^{\circ}$  calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 104.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 105.** Moment 0 image for /=320-330° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 106.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 107.** Moment 0 image for *l*=320-330° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 108.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 109. Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 110.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 111.** Moment 0 image for *l*=320-330° calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 112.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-80 to -70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 113.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-90 to -80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 114.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-100 to -90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 115. Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-110 to -100 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 116.** Moment 0 image for  $l=320-330^{\circ}$  calculated over the velocity interval v=-120 to -110 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 117.** Moment 0 image for /=330-340° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 118.** Moment 0 image for /=330-340° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 119.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 120.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 121.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 122.** Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 123.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 124.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 125.** Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-80 to -70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 126.** Moment 0 image for *l*=330-340° calculated over the velocity interval v=-90 to -80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 127. Moment 0 image for *l*=330-340° calculated over the velocity interval v=-100 to -90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 128.** Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-110 to -100 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 129. Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-120 to -110 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 130.** Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-130 to -120 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 131.** Moment 0 image for  $l=330-340^{\circ}$  calculated over the velocity interval v=-140 to -130 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 132.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.


**Figure 133.** Moment 0 image for l=340-350° calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 134.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 135.** Moment 0 image for *I*=340-350° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 136.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 137.** Moment 0 image for *l*=340-350° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 138.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 139.** Moment 0 image for *l*=340-350° calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 140.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 141.** Moment 0 image for *l*=340-350° calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 142.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-80 to -70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 143.** Moment 0 image for *l*=340-350° calculated over the velocity interval v=-90 to -80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 144.** Moment 0 image for *l*=340-350° calculated over the velocity interval v=-100 to -90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 145. Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-110 to -100 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 146.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-120 to -110 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 147.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-130 to -120 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 148.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-140 to -130 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 149. Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-150 to -140 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 150.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-160 to -150 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 151.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-170 to -160 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 152.** Moment 0 image for *I*=340-350° calculated over the velocity interval v=-180 to -170 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 153.** Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-190 to -180 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 154. Moment 0 image for  $l=340-350^{\circ}$  calculated over the velocity interval v=-200 to -190 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 155.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=90 to 100 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 156.** Moment 0 image for  $I=350-355^{\circ}$  calculated over the velocity interval v=80 to 90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 157.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=70 to 80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 158.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=60 to 70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 159.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=50 to 60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 160. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=40 to 50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 161.** Moment 0 image for  $I=350-355^{\circ}$  calculated over the velocity interval v=30 to 40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 162.** Moment 0 image for  $I=350-355^{\circ}$  calculated over the velocity interval v=20 to 30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 163. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=10 to 20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 164.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=0 to 10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 165.** Moment 0 image for /=350-355° calculated over the velocity interval v=-10 to 0 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 166.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-20 to -10 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 167.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-30 to -20 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 168. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-40 to -30 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 169.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-50 to -40 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 170.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-60 to -50 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 171.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-70 to -60 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 172.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-80 to -70 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 173. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-90 to -80 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 174.** Moment 0 image for *l*=350-355° calculated over the velocity interval v=-100 to -90 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 175. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-110 to -100 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 176.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=-120 to -110 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 177.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=-130 to -120 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 178.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-140 to -130 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 179.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=-150 to -140 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 180.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=-160 to -150 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 181.** Moment 0 image for *I*=350-355° calculated over the velocity interval v=-170 to -160 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 182.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-180 to -170 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



Figure 183. Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-190 to -180 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 184.** Moment 0 image for  $l=350-355^{\circ}$  calculated over the velocity interval v=-200 to -190 km s<sup>-1</sup> using the main beam intensity, T<sub>MB</sub>. The grayscale <sup>12</sup>CO runs from 0 to 40 K.km/s, while the <sup>13</sup>CO from 0 to 8 K.km/s.



**Figure 185.** 1  $\sigma$  noise images for the <sup>12</sup>CO data covering 100 square degrees from  $l = 250-300^{\circ}$  and  $b = \pm 1^{\circ}$  in units of T<sub>MB</sub> (K). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions.



**Figure 186.** As in Figure 185, these are the 1  $\sigma$  noise images for the <sup>13</sup>CO and C<sup>18</sup>O data covering the same 100 square degrees.



**Figure 187.** 1  $\sigma$  noise images for the <sup>12</sup>CO data covering 100 square degrees from  $l = 300-350^{\circ}$  and  $b = \pm 1^{\circ}$  in units of  $T_{MB}$  (K). The striping pattern is inherent to the data set, resulting from scanning in the *l* and *b* directions in variable observing conditions.



**Figure 188.** As in Figure 187, these are the 1  $\sigma$  noise images for the <sup>13</sup>CO and C<sup>18</sup>O data covering the same 100 square degrees.



**Figure 189.** 1  $\sigma$  noise images for the <sup>12</sup>CO (top panel), <sup>13</sup>CO, and C<sup>18</sup>O (bottom panel) data covering 10 square degrees from  $l = 350-355^{\circ}$  and  $b = \pm 1^{\circ}$  in units of T<sub>MB</sub> (K). The striping pattern is inherent to the data set, resulting from scanning in the *l* and *b* directions in variable observing conditions.



**Figure 190.**  $T_{sys}$  images for the <sup>12</sup>CO data covering the 100 square degrees from  $l = 250-300^{\circ}$  in units of  $T_A^*$  (K) (as indicated by the scale bars). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions. The blank regions are accidentally deleted data.



**Figure 191.**  $T_{sys}$  images for the <sup>13</sup>CO and C<sup>18</sup>O data covering the 100 square degrees from  $l = 250-300^{\circ}$  in units of  $T_A^*$  (K) (as indicated by the scale bars). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions. The blank regions are accidentally deleted data.



**Figure 192.**  $T_{sys}$  images for the <sup>12</sup>CO data covering the 100 square degrees from  $l = 300-350^{\circ}$  in units of  $T_A^*$  (K) (as indicated by the scale bars). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions. The blank regions are accidentally deleted data.



**Figure 193.**  $T_{sys}$  images for the <sup>13</sup>CO and C<sup>18</sup>O data covering the 100 square degrees from  $l = 300-350^{\circ}$  in units of  $T_A^*$  (K) (as indicated by the scale bars). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions. The blank regions are accidentally deleted data.



**Figure 194.**  $T_{sys}$  images for the  ${}^{12}$ CO (top panel),  ${}^{13}$ CO and  $C^{18}$ O (bottom panel) data covering the 10 square degrees from  $l = 350-355^{\circ}$  in units of  $T_A^*$  (K) (as indicated by the scale bars). The striping pattern is inherent to the data set, resulting from scanning in the l and b directions in variable observing conditions.