**Table 3.** Clumps found in MBM 32 using the $^{12}$CO(1–0) MRS data, with $T_{\rm R}^{*}\geq$0.8K, and $\delta v'$>1.0km s$^{-1}$.

| $\Delta\alpha$ ′ | $\Delta\delta$ ′ | $V_{\rm lsr}$ km s$^{-1}$ | $T_{\rm peak}$ K | $\delta$v km s$^{-1}$ | size pc | Mass $M_\odot$ | n cm$^{-3}$ | $M_{vir}$ $M_\odot$ | Rem.[1] |
|---|---|---|---|---|---|---|---|---|---|
| $V_{\rm lsr}$>2 km s$^{-1}$ | | | | | | | | | |
| 5.7 | 2.7 | 3.89 | 4.11 | 1.25 | 0.48 | 2.00 | 228 | 157 | + |
| 55.7 | 28.0 | 3.78 | 3.36 | 1.41 | 0.42 | 1.46 | 235 | 177 | + |
| 6.8 | 22.3 | 3.33 | 3.59 | 1.36 | 0.40 | 1.38 | 254 | 158 | + |
| 21.6 | 9.3 | 3.18 | 3.15 | 1.26 | 0.43 | 1.28 | 194 | 145 | + |
| 39.7 | 36.1 | 3.65 | 3.88 | 0.80 | 0.26 | 0.35 | 255 | 35 | + |
| 40.3 | 13.5 | 2.94 | 2.59 | 0.74 | 0.41 | 0.55 | 98 | 48 | + |
| -0.1 | 3.7 | 4.00 | 4.66 | 1.01 | 0.09 | 0.06 | 1141 | 18 | – |
| 49.0 | 35.4 | 2.89 | 2.68 | 0.66 | 0.19 | 0.10 | 200 | 17 | – |
| 67.8 | 23.9 | 3.70 | 3.06 | 0.55 | 0.18 | 0.10 | 193 | 12 | – |
| 27.4 | 4.6 | 2.63 | 1.94 | 0.94 | 0.19 | 0.11 | 205 | 34 | – |
| 16.3 | 23.2 | 4.05 | 2.30 | 0.66 | 0.27 | 0.19 | 119 | 24 | – |
| 4.1 | -7.0 | 3.90 | 2.54 | 0.76 | 0.17 | 0.10 | 234 | 21 | – |
| 15.9 | -15.4 | 4.20 | 2.15 | 1.18 | 0.14 | 0.08 | 386 | 40 | – |
| 48.5 | 16.9 | 3.50 | 1.60 | 1.13 | 0.23 | 0.16 | 161 | 62 | – |
| 59.2 | 31.5 | 4.61 | 2.11 | 0.62 | 0.19 | 0.09 | 143 | 16 | – |
| -0.2 | 28.3 | 2.63 | 2.78 | 0.51 | 0.20 | 0.10 | 150 | 11 | + |
| 78.5 | 23.0 | 4.51 | 1.99 | 1.65 | 0.11 | 0.08 | 596 | 65 | – |
| 23.9 | -20.7 | 4.59 | 2.01 | 0.88 | 0.15 | 0.06 | 250 | 24 | – |
| 16.8 | 4.6 | 3.49 | 1.46 | 1.26 | 0.19 | 0.11 | 201 | 65 | – |
| 76.0 | 20.1 | 2.13 | 1.59 | 1.05 | 0.15 | 0.06 | 234 | 34 | – |
| 40.4 | 27.3 | 3.07 | 4.20 | 0.42 | 0.10 | 0.02 | 371 | 4 | – |
| 84.4 | 39.6 | 4.15 | 1.91 | 0.68 | 0.16 | 0.06 | 168 | 15 | – |
| 28.0 | 8.1 | 4.27 | 2.18 | 0.47 | 0.21 | 0.08 | 101 | 9 | – |
| 55.6 | 36.0 | 3.70 | 1.53 | 1.36 | 0.14 | 0.06 | 319 | 54 | – |
| -8.0 | 19.9 | 3.88 | 1.38 | 0.76 | 0.23 | 0.10 | 104 | 27 | – |
| Mass in these clumps: 8.73 $M_\odot$ (51.8% of 16.84 $M_\odot$) | | | | | | | | | |
| 0<$V_{\rm lsr}$<2 km s$^{-1}$ | | | | | | | | | |
| 9.6 | 18.9 | 1.96 | 2.19 | 1.01 | 0.17 | 0.11 | 265 | 37 | + |
| Mass in this clump: 0.11 $M_\odot$ (23.9% of 0.46 $M_\odot$) | | | | | | | | | |
| $V_{\rm lsr}$<0 km s$^{-1}$ | | | | | | | | | |
| -17.0 | 15.5 | -2.34 | 2.86 | 1.61 | 0.18 | 0.25 | 548 | 96 | + |
| -36.3 | 0.0 | -0.37 | 2.56 | 1.05 | 0.22 | 0.21 | 260 | 50 | + |
| -20.8 | -22.3 | -2.44 | 2.46 | 1.19 | 0.18 | 0.16 | 348 | 53 | + |
| -16.3 | -1.1 | -2.24 | 1.98 | 1.83 | 0.18 | 0.19 | 429 | 124 | + |
| -28.1 | -16.0 | -2.50 | 2.53 | 1.02 | 0.19 | 0.16 | 283 | 42 | + |
| -4.7 | 14.0 | -1.32 | 2.16 | 1.21 | 0.19 | 0.15 | 296 | 58 | + |
| -53.0 | -15.7 | -0.01 | 1.63 | 1.63 | 0.22 | 0.23 | 248 | 126 | + |
| -29.2 | 8.7 | -0.47 | 1.54 | 1.73 | 0.19 | 0.16 | 294 | 119 | – |
| -12.5 | 13.0 | -1.37 | 2.36 | 1.51 | 0.10 | 0.06 | 751 | 47 | – |
| -40.2 | 0.8 | -0.41 | 1.26 | 1.75 | 0.16 | 0.10 | 283 | 105 | – |
| -7.0 | 7.7 | -1.45 | 1.88 | 1.35 | 0.11 | 0.05 | 480 | 42 | – |
| -33.1 | 15.7 | -2.17 | 1.29 | 1.55 | 0.17 | 0.09 | 254 | 84 | – |
| Mass in these clumps: 1.83 $M_\odot$ (43.8% of 4.18 $M_\odot$) | | | | | | | | | |

[1] A + indicates clumps that are clearly visible in the original channel maps (without other clumps being subtracted).

**Table 4.** Clumps found in MBM 32 using the $^{12}$CO(1–0) HRS data, with $T_{\rm R}^{*}\geq 1.4$K, and $\delta v' > 0.4$km s$^{-1}$.

| $\Delta\alpha$ ′ | $\Delta\delta$ ′ | V$_{\rm lsr}$ km s$^{-1}$ | $T_{\rm peak}$ K | $\delta$v km s$^{-1}$ | size pc | Mass M$_\odot$ | n cm$^{-3}$ | M$_{vir}$ M$_\odot$ | Rem. |
|---|---|---|---|---|---|---|---|---|---|
| V$_{\rm lsr}$>2 km s$^{-1}$ | | | | | | | | | |
| 6.0 | 2.2 | 4.05 | 5.27 | 0.84 | 0.32 | 0.76 | 292 | 47 | + |
| 5.1 | 16.8 | 3.76 | 4.94 | 0.75 | 0.25 | 0.38 | 313 | 29 | + |
| 18.0 | 9.6 | 3.43 | 4.17 | 0.78 | 0.35 | 0.67 | 194 | 44 | + |
| 2.0 | 30.1 | 2.81 | 4.02 | 0.68 | 0.38 | 0.67 | 153 | 37 | + |
| 9.5 | -2.1 | 3.27 | 3.97 | 0.58 | 0.28 | 0.31 | 174 | 20 | + |
| 24.1 | 4.3 | 2.89 | 3.41 | 0.61 | 0.26 | 0.25 | 165 | 21 | + |
| -0.1 | 4.2 | 4.16 | 9.35 | 0.91 | 0.07 | 0.08 | 2377 | 13 | − |
| 10.0 | 24.4 | 3.76 | 3.26 | 0.70 | 0.24 | 0.22 | 201 | 25 | − |
| 10.2 | 16.0 | 2.88 | 3.84 | 0.53 | 0.17 | 0.11 | 244 | 10 | − |
| 18.0 | 5.9 | 4.08 | 5.73 | 0.46 | 0.10 | 0.05 | 544 | 4 | + |
| 20.2 | 20.0 | 3.92 | 3.35 | 0.55 | 0.15 | 0.07 | 251 | 10 | + |
| 18.0 | 15.8 | 2.80 | 3.27 | 0.41 | 0.17 | 0.06 | 171 | 6 | − |
| 23.9 | 2.0 | 3.52 | 6.28 | 0.40 | 0.08 | 0.03 | 652 | 3 | − |
| 4.0 | -7.9 | 3.44 | 2.82 | 0.59 | 0.19 | 0.10 | 187 | 14 | + |
| 36.1 | 10.0 | 2.88 | 2.37 | 0.80 | 0.28 | 0.25 | 142 | 37 | − |
| 0.2 | 27.8 | 3.36 | 4.34 | 0.41 | 0.11 | 0.03 | 355 | 4 | − |
| 10.1 | 27.9 | 4.00 | 6.15 | 0.42 | 0.08 | 0.03 | 691 | 3 | − |
| 4.0 | -4.1 | 4.24 | 4.08 | 0.51 | 0.10 | 0.04 | 437 | 5 | + |
| 10.0 | 12.0 | 4.00 | 4.08 | 0.68 | 0.10 | 0.05 | 598 | 10 | − |
| 8.1 | 28.0 | 3.12 | 5.07 | 0.54 | 0.08 | 0.03 | 725 | 5 | − |
| 14.0 | 22.0 | 3.44 | 4.84 | 0.47 | 0.07 | 0.02 | 633 | 3 | + |
| 14.1 | 2.0 | 3.84 | 3.20 | 0.41 | 0.11 | 0.03 | 262 | 4 | − |
| 23.9 | 11.9 | 2.64 | 3.29 | 0.52 | 0.10 | 0.03 | 354 | 6 | − |
| 0.0 | 6.1 | 3.92 | 3.14 | 0.57 | 0.11 | 0.04 | 336 | 8 | − |
| 0.1 | 16.0 | 3.84 | 3.40 | 0.56 | 0.10 | 0.03 | 408 | 6 | − |
| Mass in these clumps: 4.33 M$_\odot$ (45.9% of 9.43 M$_\odot$) | | | | | | | | | |
| 0<V$_{\rm lsr}$<2 km s$^{-1}$ | | | | | | | | | |
| -12.0 | 14.1 | 1.28 | 7.52 | 0.57 | 0.06 | 0.03 | 1494 | 4 | + |
| Mass in this clump: 0.027 M$_\odot$ (6.6% of 0.40 M$_\odot$) | | | | | | | | | |
| V$_{\rm lsr}$<0 km s$^{-1}$ | | | | | | | | | |
| -7.7 | 12.1 | -0.72 | 12.43 | 1.20 | 0.05 | 0.07 | 6095 | 16 | + |
| -16.1 | 16.0 | -2.16 | 2.34 | 1.08 | 0.21 | 0.19 | 252 | 52 | + |
| -16.1 | -0.1 | -1.60 | 5.38 | 0.93 | 0.08 | 0.06 | 1289 | 15 | + |
| -6.1 | 13.9 | -1.68 | 3.45 | 0.82 | 0.12 | 0.07 | 490 | 17 | − |
| 4.0 | -4.0 | -2.64 | 3.71 | 0.93 | 0.09 | 0.05 | 766 | 17 | + |
| Mass in these clumps: 0.44 M$_\odot$ (29.4% of 1.49 M$_\odot$) | | | | | | | | | |

**Table 5.** Clumps found in MBM 32 from $^{12}$CO(2–1) MRS data, with $T_{\rm R}^{*}$>0.6K, and $\delta$v′>0.6km s$^{-1}$.

| $\Delta\alpha$ | $\Delta\delta$ | V$_{\rm lsr}$ | $T_{\rm peak}$ | $\delta$v | size | Mass | n | M$_{vir}$ | Rem. |
|---|---|---|---|---|---|---|---|---|---|
| ′ | ′ | km s$^{-1}$ | K | km s$^{-1}$ | pc | M$_\odot$ | cm$^{-3}$ | M$_\odot$ | |
| V$_{\rm lsr}$>2 km s$^{-1}$ | | | | | | | | | |
| 6.0 | -1.6 | 3.72 | 2.63 | 1.19 | 0.38 | 1.53 | 346 | 112 | + |
| 2.9 | 18.2 | 3.60 | 2.62 | 0.96 | 0.22 | 0.41 | 482 | 42 | + |
| 4.3 | 27.7 | 3.11 | 2.28 | 1.07 | 0.27 | 0.60 | 381 | 65 | + |
| 20.0 | 7.9 | 3.23 | 1.94 | 1.29 | 0.46 | 1.81 | 229 | 162 | + |
| 0.1 | 5.8 | 4.19 | 2.18 | 0.96 | 0.13 | 0.11 | 692 | 25 | + |
| 7.9 | 14.0 | 3.93 | 1.66 | 1.21 | 0.18 | 0.23 | 462 | 56 | − |
| 8.1 | 19.9 | 2.92 | 1.57 | 1.34 | 0.12 | 0.11 | 710 | 47 | + |
| 17.9 | 19.9 | 3.76 | 1.54 | 0.54 | 0.23 | 0.15 | 153 | 14 | − |
| 8.0 | 5.8 | 4.60 | 1.68 | 0.85 | 0.13 | 0.08 | 476 | 19 | − |
| 8.0 | -1.9 | 2.92 | 1.65 | 0.57 | 0.14 | 0.07 | 276 | 10 | + |
| 10.0 | 24.1 | 4.20 | 2.40 | 0.59 | 0.06 | 0.02 | 918 | 5 | + |
| 29.9 | 6.0 | 2.56 | 1.36 | 0.69 | 0.16 | 0.09 | 237 | 16 | + |
| 0.1 | -6.0 | 3.56 | 1.44 | 0.65 | 0.14 | 0.06 | 277 | 13 | − |
| 25.8 | 2.0 | 3.57 | 1.30 | 0.86 | 0.11 | 0.05 | 410 | 18 | − |
| 11.9 | 25.9 | 3.36 | 1.33 | 1.04 | 0.08 | 0.03 | 686 | 19 | − |
| 15.9 | 25.9 | 4.20 | 1.42 | 0.41 | 0.14 | 0.04 | 181 | 5 | − |
| 1.9 | 18.0 | 4.40 | 1.62 | 0.89 | 0.07 | 0.02 | 893 | 11 | + |
| 13.9 | 5.9 | 3.99 | 1.26 | 0.92 | 0.10 | 0.04 | 505 | 17 | − |
| 14.0 | -12.0 | 4.40 | 1.85 | 0.73 | 0.07 | 0.02 | 806 | 8 | + |
| 10.0 | 14.0 | 2.93 | 1.19 | 0.83 | 0.11 | 0.04 | 375 | 16 | + |
| 33.9 | 13.9 | 2.53 | 1.21 | 0.71 | 0.12 | 0.04 | 309 | 12 | − |
| 5.9 | 14.0 | 3.15 | 1.58 | 0.60 | 0.08 | 0.02 | 498 | 6 | − |
| 21.9 | 24.0 | 4.00 | 1.12 | 0.62 | 0.11 | 0.03 | 262 | 9 | + |
| 7.9 | 1.9 | 4.62 | 1.13 | 0.54 | 0.13 | 0.03 | 200 | 8 | − |
| 11.9 | 18.0 | 3.99 | 1.55 | 1.10 | 0.06 | 0.02 | 1202 | 15 | − |
| 3.9 | 14.0 | 4.20 | 1.24 | 0.83 | 0.08 | 0.02 | 522 | 12 | − |
| 33.9 | 10.0 | 3.35 | 1.09 | 0.52 | 0.14 | 0.04 | 166 | 8 | − |
| 27.9 | 8.0 | 4.40 | 1.77 | 0.55 | 0.06 | 0.01 | 656 | 4 | − |
| 17.9 | 18.0 | 3.15 | 2.60 | 0.48 | 0.04 | 0.01 | 1272 | 2 | + |
| -2.0 | 3.9 | 3.78 | 1.29 | 0.55 | 0.08 | 0.01 | 396 | 5 | − |
| 1.9 | 4.0 | 3.77 | 1.09 | 0.46 | 0.11 | 0.02 | 182 | 5 | + |
| 11.9 | 29.9 | 3.15 | 1.54 | 0.60 | 0.06 | 0.01 | 649 | 5 | − |
| 29.8 | 2.0 | 3.15 | 1.83 | 0.46 | 0.06 | 0.01 | 617 | 2 | − |
| 13.9 | 4.0 | 2.94 | 0.88 | 0.81 | 0.12 | 0.03 | 260 | 16 | − |
| -4.1 | -2.0 | 3.37 | 1.03 | 0.66 | 0.09 | 0.02 | 300 | 9 | − |
| 4.0 | 22.0 | 3.99 | 1.37 | 0.46 | 0.08 | 0.01 | 337 | 3 | − |
| 11.9 | 14.0 | 2.31 | 0.87 | 0.66 | 0.14 | 0.04 | 178 | 12 | − |
| 9.9 | -4.0 | 4.41 | 1.00 | 0.74 | 0.09 | 0.02 | 330 | 11 | − |
| Mass in these clumps: 5.92 M$_\odot$ (48.8% of 12.14 M$_\odot$) | | | | | | | | | |
| 0<V$_{\rm lsr}$<2 km s$^{-1}$ | | | | | | | | | |
| -13.9 | 13.9 | 1.26 | 2.25 | 0.89 | 0.07 | 0.04 | 1138 | 12 | + |
| 2.0 | -14.0 | 0.01 | 2.02 | 0.33 | 0.09 | 0.02 | 329 | 2 | − |
| Mass in these clumps: 0.055 M$_\odot$ (22.0% of 0.25 M$_\odot$) | | | | | | | | | |
| V$_{\rm lsr}$<0 km s$^{-1}$ | | | | | | | | | |
| -20.0 | 16.2 | -1.72 | 1.32 | 0.98 | 0.21 | 0.19 | 261 | 42 | + |
| -16.0 | 18.0 | -2.51 | 1.66 | 0.44 | 0.15 | 0.06 | 204 | 6 | + |
| -16.2 | -2.0 | -1.88 | 1.34 | 1.25 | 0.12 | 0.08 | 581 | 40 | + |
| -8.0 | 14.0 | -1.45 | 1.07 | 1.28 | 0.18 | 0.15 | 323 | 61 | + |
| 4.0 | -2.0 | -2.73 | 1.52 | 0.95 | 0.08 | 0.03 | 722 | 16 | + |
| -14.0 | 18.0 | -1.26 | 1.19 | 0.95 | 0.10 | 0.04 | 458 | 20 | + |
| -18.0 | 0.0 | -1.89 | 1.37 | 0.97 | 0.07 | 0.02 | 799 | 14 | − |
| -6.0 | 17.9 | -2.10 | 1.76 | 0.77 | 0.06 | 0.01 | 1001 | 7 | − |
| 1.9 | -14.0 | -1.89 | 1.18 | 0.40 | 0.11 | 0.02 | 178 | 4 | − |
| -4.0 | 24.0 | -2.09 | 1.05 | 0.64 | 0.09 | 0.02 | 303 | 8 | − |
| -20.1 | -6.1 | -2.31 | 0.85 | 1.11 | 0.11 | 0.04 | 366 | 28 | − |
| -12.0 | 11.9 | -2.94 | 0.92 | 0.90 | 0.10 | 0.03 | 346 | 17 | − |
| 1.9 | -6.0 | -2.10 | 1.19 | 1.21 | 0.07 | 0.02 | 920 | 20 | − |
| Mass in these clumps: 0.72 M$_\odot$ (30.4% of 2.36 M$_\odot$) | | | | | | | | | |

**Table 6.** Clumps found in MBM 32 from $^{13}$CO(1–0) HRS data, with $T_{\rm R}^{*}$>0.4K, and $\delta$v$'$>0.3km s$^{-1}$.

| $\Delta\alpha$ $'$ | $\Delta\delta$ $'$ | $V_{lsr}$ km s$^{-1}$ | $T_{peak}$ K | $\delta$v km s$^{-1}$ | size pc | Mass $M_\odot$ | n cm$^{-3}$ | $M_{vir}$ $M_\odot$ | Rem. |
|---|---|---|---|---|---|---|---|---|---|
| $V_{lsr}$>2 km s$^{-1}$ | | | | | | | | | |
| 2.6 | 16.3 | 3.79 | 2.84 | 0.41 | 0.12 | 0.22 | 1563 | 4 | + |
| 6.2 | 21.6 | 3.60 | 3.74 | 0.61 | 0.09 | 0.24 | 4098 | 7 | + |
| 2.6 | 5.1 | 4.05 | 1.86 | 0.58 | 0.16 | 0.37 | 1081 | 11 | + |
| 9.7 | -1.6 | 3.10 | 2.89 | 0.40 | 0.09 | 0.14 | 1970 | 3 | + |
| 8.8 | 12.2 | 3.61 | 1.45 | 0.66 | 0.18 | 0.39 | 882 | 16 | + |
| 0.7 | 27.8 | 3.16 | 1.90 | 0.48 | 0.13 | 0.19 | 1180 | 6 | + |
| 5.6 | -2.0 | 3.78 | 1.76 | 0.62 | 0.14 | 0.26 | 1297 | 11 | + |
| 23.6 | 2.5 | 3.35 | 1.96 | 0.60 | 0.11 | 0.18 | 1758 | 8 | + |
| 10.2 | 20.0 | 3.35 | 1.13 | 0.43 | 0.20 | 0.26 | 392 | 8 | + |
| 16.0 | 7.8 | 3.61 | 1.31 | 0.80 | 0.15 | 0.29 | 1176 | 20 | + |
| 0.0 | 2.0 | 4.13 | 1.02 | 0.51 | 0.14 | 0.14 | 578 | 8 | − |
| 6.0 | 5.8 | 4.38 | 1.29 | 0.31 | 0.12 | 0.07 | 546 | 2 | − |
| 0.1 | 28.1 | 2.84 | 0.80 | 0.31 | 0.26 | 0.23 | 154 | 5 | + |
| 16.1 | 20.0 | 3.61 | 1.26 | 0.48 | 0.10 | 0.07 | 1027 | 5 | − |
| 22.0 | 4.1 | 3.10 | 0.64 | 0.38 | 0.27 | 0.23 | 145 | 8 | − |
| 4.0 | 14.0 | 3.78 | 0.95 | 0.31 | 0.14 | 0.07 | 353 | 3 | + |
| -6.0 | 14.0 | 4.21 | 1.84 | 0.42 | 0.07 | 0.05 | 1723 | 3 | + |
| 5.9 | 0.0 | 3.27 | 1.14 | 0.39 | 0.09 | 0.05 | 802 | 3 | − |
| 24.0 | 16.0 | 3.53 | 0.62 | 0.45 | 0.17 | 0.10 | 273 | 7 | − |
| 4.0 | -8.1 | 3.44 | 0.68 | 0.66 | 0.14 | 0.12 | 521 | 13 | − |
| 14.0 | 4.0 | 3.18 | 4.44 | 0.62 | 0.04 | 0.05 | 12258 | 3 | − |
| 8.0 | 24.0 | 3.87 | 1.94 | 0.43 | 0.06 | 0.04 | 2247 | 2 | − |
| Mass in these clumps: 3.78 $M_\odot$ (48.6% of 7.77 $M_\odot$) | | | | | | | | | |