A&A 537, C3 (2012)
DOI: 10.1051/0004-6361/201116447e
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Astronomy & Astrophysics

The *Herschel* M 33 extended survey (HerM33es): PACS spectroscopy of the star forming region BCLMP 302★ *(Corrigendum)*

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A&A 532, A152 (2011), DOI: 10.1051/0004-6361/201116447

Key words. local group – HII regions – galaxies: individual: M 33 – photon-dominated region (PDR) – galaxies: ISM – errata, addenda

1. [CII]/CO(1–0) intensity ratio

We made an error in the calculation of [C II]/CO(1–0) intensity ratios presented in our recent publication (Mookerjea et al. 2011). We assumed a CO(2–1)/CO(1–0) intensity ratio of 0.8 on the K km s^{-1} scale (Gratier et al. 2010), but calculated the CO(1–0) intensities on the erg s^{-1} cm^{-2} sr^{-1} scale incorrectly. The resulting [C II]/CO(1–0) ratios are too low by a factor 8.0. This affects Fig. 12 and one sentence of the last paragraph of the Discussion. The values used for the Hα peak position presented in Sect. 6, are correct as they were derived directly from observed CO(1–0) spectra. The corrected figure and text are given below.

In BCLMP 302/M 33, we find that the [C II]/CO(1–0) ratio varies between 10^3 and 7×10^4 (Fig. 12), with the H II region A shown by red markers having values in the range 6×10^3 to 3×10^4. The spiral arm region B (green markers) exhibits values in the range 1×10^3 to 4×10^3, while region C (cyan markers), where CO has hardly been detected, shows higher values, between 6×10^3 and 7×10^4.

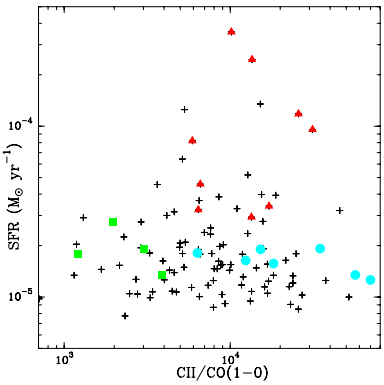

Fig. 12. Star formation rate (SFR) versus the [C II]/CO(1–0) intensity ratio. Markers are the same as in Fig. 7.

Figures 7 and 12 show values on a 12″ grid, and not on a 6″ grid as mentioned in the caption of Fig. 7 of the published paper.

References

Gratier, P., Braine, J., Rodriguez-Fernandez, N. J., et al. 2010, A&A, 522, A3
Mookerjea, B., Kramer, C., Buchbender, C., et al. 2011, A&A, 532, A152

★ *Herschel* is an ESA space observatory with science instruments provided by European-led Principal Investigator consortia and with important participation from NASA.