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

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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 H$_\alpha$ 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 $7 \times 10^4$ (Fig. 12), with the H$_\alpha$ region A shown by red markers having values in the range $6 \times 10^3$ to $3 \times 10^4$. The spiral arm region B (green markers) exhibits values in the range $1 \times 10^3$ to $4 \times 10^3$, while region C (cyan markers), where CO has hardly been detected, shows higher values, between $6 \times 10^3$ and $7 \times 10^4$.

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

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.

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Mookerjea, B., Kramer, C., Buchbender, C., et al. 2011, A&A, 532, A152