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

B. Mookerjee¹, C. Kramer², C. Buchbender², M. Boquien³, S. Verley⁴, M. Relaño⁴, G. Quintana-Lacaci², S. Aalto⁵, J. Braine⁶, D. Calzetti³, F. Combes⁷, S. Garcia-Burillo⁸, P. Gratier⁶, C. Henkel⁹, F. Israel¹⁰, S. Lord¹¹, T. Nikola¹², M. Röllig¹³, G. Stacey¹², F. S. Tabatabaei⁹, F. van der Tak¹⁴, and P. van der Werf^{10,15}

¹ Tata Institute of Fundamental Research, Homi Bhabha Road, Mumbai 400005, India
 e-mail: bhaswati@tifr.res.in

² Instituto Radioastronomía Milimétrica, Av. Divina Pastora 7, Nucleo Central, 18012 Granada, Spain

³ University of Massachusetts, Department of Astronomy, LGRT-B 619E, Amherst, MA 01003, USA

⁴ Universidad de Granada, 18012 Granada, Spain

⁵ Department of Radio and Space Science, Onsala Observatory, Chalmers University of Technology, 43992 Onsala, Sweden

⁶ Laboratoire d'Astrophysique de Bordeaux, Université Bordeaux 1, Observatoire de Bordeaux, OASU, UMR 5804, CNRS/INSU, BP 89, 33270 Floirac, France

⁷ Observatoire de Paris, LERMA, CNRS, 61 Av. de l'Observatoire, 75014 Paris, France

⁸ Observatorio Astronómico Nacional (OAN) – Observatorio de Madrid, Alfonso XII 3, 28014 Madrid, Spain

⁹ Max Planck Institut für Radioastronomie, Auf dem Hügel 69, 53121 Bonn, Germany

¹⁰ Leiden Observatory, Leiden University, PO Box 9513, 2300 RA Leiden, The Netherlands

¹¹ IPAC, MS 100-22 California Institute of Technology, Pasadena, CA 91125, USA

¹² Department of Astronomy, Cornell University, Ithaca, NY 14853, USA

¹³ KOSMA, I. Physikalisches Institut, Universität zu Köln, Zùlpicher Strasse 77, 50937 Köln, Germany

¹⁴ SRON Netherlands Institute for Space Research, Landleven 12, 9747 AD Groningen, The Netherlands

¹⁵ SUPA, Institute for Astronomy, University of Edinburgh, Royal Observatory, Blackford Hill, Edinburgh EH9 3HJ, UK

A&A 532, A152 (2011), DOI: [10.1051/0004-6361/201116447](https://doi.org/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 [CII]/CO(1–0) intensity ratios presented in our recent publication (Mookerjee 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 [CII]/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 α 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 [CII]/CO(1–0) ratio varies between 10³ and 7 × 10⁴ (Fig. 12), with the HII region A shown by red markers having values in the range 6 × 10³ to 3 × 10⁴. The spiral arm region B (green markers) exhibits values in the range 1 × 10³ to 4 × 10³, while region C (cyan markers), where CO has hardly been detected, shows higher values, between 6 × 10³ and 7 × 10⁴.

Fig. 12. Star formation rate (SFR) versus the [CII]/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

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

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