Erratum: A very dark stellar system lost in Virgo: kinematics and metallicity of SECCO 1 with MUSE

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This paper **'A very dark stellar system lost in Virgo: kinematics and metallicity of SECCO 1 with MUSE'** was published in MNRAS, 465, 2189 (2017). While performing a follow-up study of SECCO1, we discovered an unfortunate error in our calculation of the star formation rate (SFR) reported in the original paper. The error turns into an overestimation by a factor of 100 of the SFR. The correct SFR of SECCO1 as inferred from the MUSE data is $0.7 \times 10^{-3} \, M_{\odot} \, yr^{-1}$, a value that is typical for star-forming dwarfs of similar luminosity.

As a consequence, the following conclusion, reported in Section 6 of the paper 'The extreme SFR, given the total luminosity, may be suggestive of a star formation episode induced by some kind of interaction.' is not valid anymore since the correct SFR reconciles SECCO1 to the class of dwarf galaxies of similar luminosity.

The last sentence in the abstract is now changed as follows:

The star formation rate derived from the Hα is $0.7 \times 10^{-3} \, M_{\odot} \, yr^{-1}$, quite typical of star-forming dwarfs of comparable luminosity.

The last paragraph of Section 5 of the original paper should read as follows:

On the other hand, integrating the extinction-corrected Hα luminosity over all the 38 H II regions and adopting the calibration by Kennicutt (1998), we obtain a total SFR of $0.7 \times 10^{-3} \, M_{\odot} \, yr^{-1}$, quite typical of star-forming dwarfs of comparable luminosity ($\simeq 1.0 \times 10^{-3} \, M_{\odot} \, yr^{-1}$; James et al. 2015, see, e.g. their fig. 6).

Moreover, we spotted a typo in the abstract of the original paper. The mean abundance $<12 + \log(O/H)> = 8.44$ is in fact $<12 + \log(O/H)> = 8.38$, as inferred from the metallicity values of 8.37 and 8.39 of the Main and Secondary Body (respectively) reported in Table 2 of the manuscript. This typo has no consequence on any of our conclusions.

REFERENCES

James B. L., Koposov S., Stark D. P., Belokurov V., Pettini M., Olszewski E. W., 2015, MNRAS, 448, 2687

Kennicutt R. C., Jr, 1998, ARA&A, 36, 186

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