

Exploring the stellar properties of M dwarfs with high-resolution spectroscopy from the optical to the near-infrared (Corrigendum)

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References to the figures in the text are not correct. The corrected figure references along with the respective texts of the original paper are as follows:

– Caption of Fig. 5: References to right and left panels are inverted. The corrected figure caption is:

Left panel: comparison of T_{eff} versus spectral type relation as a function of metallicity from this study with [Passegger et al. \(2018; open triangle\)](#) and with [Rajpurohit et al. \(2013; open circle\)](#). *Right panel:* comparison of T_{eff} determined from this study with [Passegger et al. \(2018; open triangle\)](#) and with [Gaidos & Mann \(2014; filled square\)](#) as function of metallicity.

– Corrected text (page 5, right column): In order to explore the effect of stellar properties of M dwarfs, we have compared our results with the behavior of T_{eff} , as a function of spectral type with [Rajpurohit et al. \(2013\)](#) as shown in Fig. 5 (left panel).

– Corrected text (page 5, right column): In order to explore further, we compared T_{eff} determination with [Gaidos & Mann \(2014; hereafter G14\)](#) along with [Passegger et al. \(2018\)](#), for the common stars in our sample as shown in Fig 5 (right panel).

– Corrected text (page 6, left column): [Passegger et al. \(2018\)](#) compare the observed spectra with the synthetic spectra computed using the PHOENIX-ACES models, which are based on the PHOENIX version by [Husser et al. \(2013\)](#), and the equation of state by [Barman et al. \(2001\)](#), as shown in Fig 5 (right panel).

– Corrected text (page 6, right column): Figure 6 (left panel) shows the comparison of $\log g$ with [Passegger et al. \(2018\)](#) indicating difference of around 0.2 to 0.6 dex with our values.

– Corrected text (page 7, left column): Figure 6 (right panel) shows the comparison of the $[M/H]$ derived in this study with [Passegger et al. \(2018\)](#) and G14, indicating difference of around 0.2 to 0.4 dex with our values.

References

- Barman, T. S., Hauschildt, P. H., & Allard, F. 2001, *ApJ*, 556, 885
Gaidos, E., & Mann, A. W. 2014, *ApJ*, 791, 54
Husser, T.-O., Wende-von Berg, S., Dreizler, S., et al. 2013, *A&A*, 553, A6
Passegger, V. M., Reiners, A., Jeffers, S. V., et al. 2018, *A&A*, 615, A6
Rajpurohit, A. S., Reylé, C., Allard, F., et al. 2013, *A&A*, 556, A15