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Chemical probes of turbulence in the diffuse medium: the TDR model (*Corrigendum*)

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Key words. astrochemistry – turbulence – ISM: molecules – ISM: kinematics and dynamics – ISM: structure – errata, addenda

We have noticed two typos in our original paper. In Sect. 3.1, Eq. (2), which gives the expression of the effective temperature of an ion-neutral reaction, should read (Pineau des Forêts et al. 1986)

$$T_{\text{eff}} = \frac{m_1 T_2 + m_2 T_1}{m_1 + m_2} + \frac{1}{3k} \frac{m_1 m_2}{m_1 + m_2} u_{\text{D}}^2. \quad (2)$$

In Sect. 5.2, the destruction timescale of the CH⁺ by reaction with H₂ should read $\sim 1 \text{ yr } f_{\text{H}_2}^{-1} (50 \text{ cm}^{-3}/n_{\text{H}})$. These correct

expressions are those that have been used in all the calculations performed in our original paper. These typos have therefore no bearing on the paper results/conclusions.

References

Pineau des Forêts, G., Flower, D. R., Hartquist, T. W., & Dalgarno, A. 1986, *MNRAS*, **220**, 801