Equation (1) in the published version of this Letter contained an expression for the freeze-out timescale of CO and N$_2$ onto 0.1 μm dust grains. The $\sqrt{T_g}$ term in this equation inadvertently ended up in the numerator instead of the denominator. This also affected the numerical prefactor. The correct equation is

$$\tau_{fr} = 1 \times 10^4 \text{ yr} \sqrt{\frac{10 \text{ K} \times 10^6 \text{ cm}^{-3}}{T_g \ n(H_2)}}. \quad (1)$$

In other words, the freeze-out timescale is $10^4$ yr at an H$_2$ density of $10^6$ cm$^{-3}$ and a gas temperature of 10 K, and it decreases with the square root of the gas temperature.

In Figure 2, the freeze-out timescale labeled for each panel should be reduced by a factor of 10: it becomes $10^5$ yr for panels (a) and (d), $10^4$ yr for panels (b) and (e), and $10^3$ yr for panels (c) and (f). The timescale was implemented correctly in the chemical code used to compute the abundances for the Letter, so the results and conclusions are otherwise unaffected.