

Erratum

Infra-red Molecular Line Emission from Grain Surfaces in Dense Clouds

L. J. Allamandola and C. A. Norman

Laboratory Astrophysics, Huygens Laboratorium, Wassenaarseweg 78, NL-2300 RA Leiden, The Netherlands

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The following version of Table 4 was submitted with the published article, but an earlier incorrect version was inadvertently printed. It should be noted that the infra-red flux in the last column was deduced from the mean interstellar ultra-violet radiation field and not from a local ultra-violet source. It is now ap-

parent that such a local source is necessary to explain the intensities of the features in at least some of the observed fluorescing regions. See article by L. J. Allamandola, J. M. Greenberg, and C. A. Norman in this issue.

Table 4. Infra-red line intensity estimates at the top of the atmosphere

Molecule	Rel. Velocity required to excite transition 10^4 cm s^{-1}	R^{coll} $\text{cm}^{-3} \text{ s}^{-1}$	$I^{\text{coll a}}$ W cm^{-2}	R^{ch} $\text{cm}^{-3} \text{ s}^{-1}$	I^{ch} W cm^{-2}	R^{ph} $\text{cm}^{-3} \text{ s}^{-1}$	I^{ph} W cm^{-2}
N ₂ O	6.0	10^{-17}	$1.8 \cdot 10^{-21}$	$3 \cdot 10^{-12}$	$1.3 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$1.3 \cdot 10^{-17}$
NO ₂	5.9	10^{-17}	$1.8 \cdot 10^{-21}$	$3 \cdot 10^{-12}$	$1.4 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$1.4 \cdot 10^{-17}$
CO ₂	6.0	10^{-13}	$1.8 \cdot 10^{-17}$	$3 \cdot 10^{-12}$	$1.5 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$1.5 \cdot 10^{-17}$
HCN	7.9	10^{-12}	$1.8 \cdot 10^{-16}$	$3 \cdot 10^{-12}$	$1.6 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$1.6 \cdot 10^{-17}$
H ₂ C ₂	8.5	10^{-13}	$1.8 \cdot 10^{-17}$	$3 \cdot 10^{-12}$	$1.6 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$1.6 \cdot 10^{-17}$
NH ₃	12	10^{-11}	$1.8 \cdot 10^{-15}$	$3 \cdot 10^{-12}$	$1.5 \cdot 10^{-18}$		$1.5 \cdot 10^{-17}$
	9.6				$2.6 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$2.6 \cdot 10^{-17}$
H ₂ CO	10	10^{-13}	$1.8 \cdot 10^{-17}$	$3 \cdot 10^{-12}$	$2.8 \cdot 10^{-18}$	$3 \cdot 10^{-11}$	$2.8 \cdot 10^{-17}$
CO	13	10^{-9}	$1.8 \cdot 10^{-13}$	$3 \cdot 10^{-12}$	$4.7 \cdot 10^{-17}$	$3 \cdot 10^{-11}$	$4.7 \cdot 10^{-17}$

^a All intensities are in watts per square centimeter at the top of the atmosphere