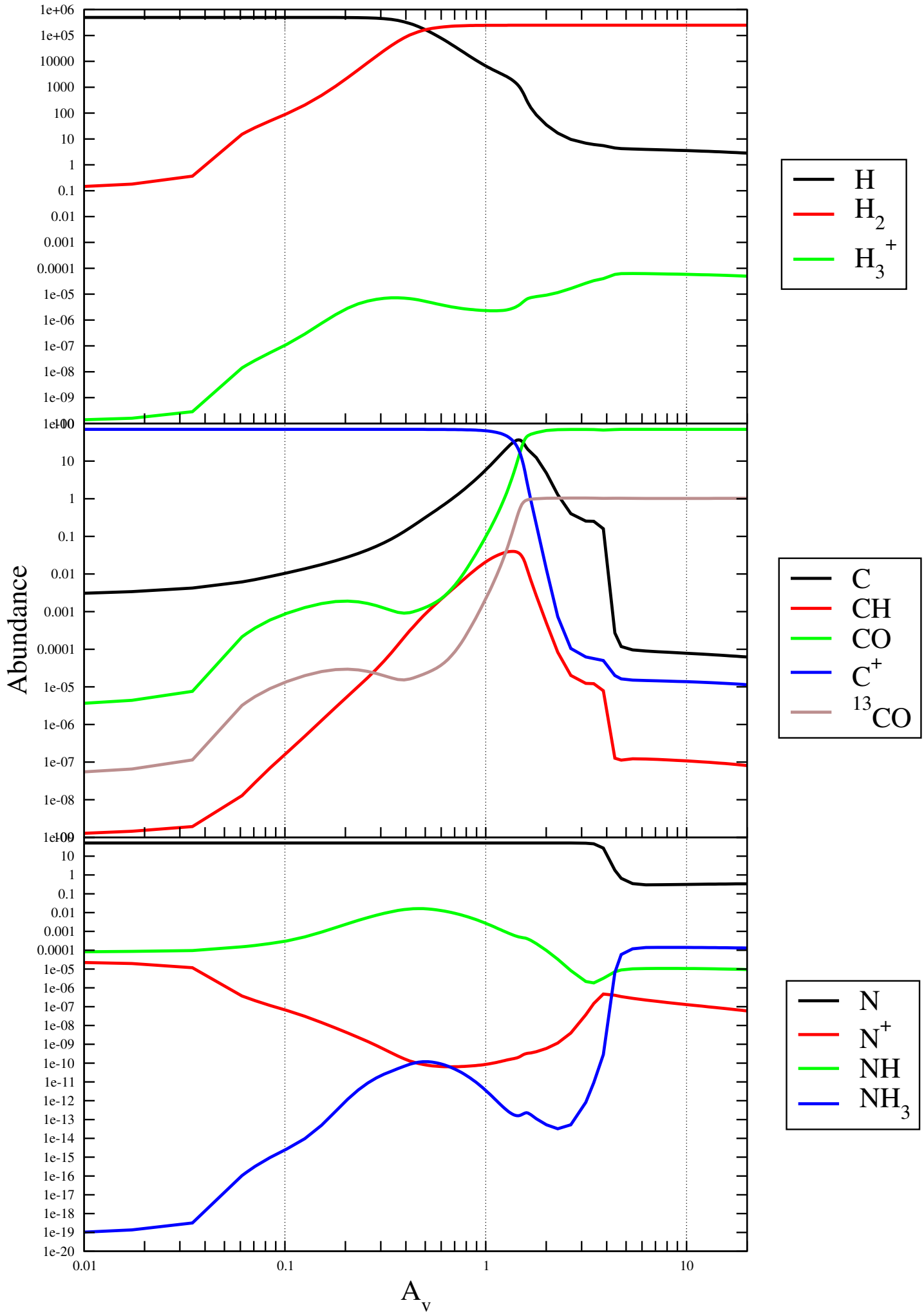$\chi=2\times10^4$, $n=5\times10^5$, $R_{tot}=3.08\times10^{17}$ cm