Mixing ratios at 100x solar metallicity, 0.5 C/O ratio  $10^{-9}$  $10^{-7}$ Pressure (bar) 10<sup>-5</sup> H20 CO2 CH4 NH3 10<sup>1</sup> -10-11 10 -3 10 -9 10 -7 10 -5 10 -1 Mixing ratios