$M = 0.6 M_{\odot}$  X = 0.70 Z = 0.03  $\gamma = 1.67$ 12 × 10<sup>29</sup> (a) mass (b) mass density <u>×1</u>0<sup>4</sup> 10 10 8 ho [kg/m $^3$ ] M [kg] 8 6 2 0 0.2 0.6 0.2 0.4 8.0 0.4 0.6 0.8 0 0  $r/R_s$  [-]  $r/R_s$  [-] 2 ×10 16 (c) pressure  $\times 10^6$ (d) temperature 10 1.5 8 6 4 0.5 2 0 0 0.2 0.4 0.6 8.0 0 0.2 0.4 0.6 0.8 0  $r/R_s$  [-]  $r/R_s$  [-] 10 × 10 25 (e) luminosity (f) opacity 2 8  $\log~\kappa~\rm [m^2/kg]$ 6 2 0 -1 0.2 0.4 0.6 8.0 0 0.2 0.4 0.6 0.8 1 0  $r/R_s$  [-]  $r/R_s$  [-]