$M = 1.4 M_{\odot}$  X = 0.70 Z = 0.03  $\gamma = 1.67$ 3 ×10<sup>30</sup> 4 ×10<sup>4</sup> (b) mass density (a) mass 3  $\rho \, [\text{kg/m}^3]$ 2 M [kg] 0 0 0.2 0.6 0.2 0.6 0.4 8.0 0 0.4 0.8 0  $r/R_s$  [-]  $r/R_s$  [-] 8 ×10 15 15 ×10<sup>6</sup> (c) pressure (d) temperature 6 10 P [Pa]  $\vdash$ 5 2 0 0 0.2 0 0.4 0.6 8.0 0 0.2 0.4 0.6 0.8  $r/R_s$  [-]  $r/R_s$  [-] 10 × 10 26 (e) luminosity (f) opacity 9.5  $\log \kappa \, [\mathrm{m^2/kg}]$ ∑ 9 → 8.5 8 7.5 <u></u>0 -2 0.2 0.4 0.6 8.0 0 0.2 0.4 0.6 0.8 1  $r/R_s$  [-]  $r/R_s$  [-]