



Fig. 14.— Evolution from MESA star of 0.9, 1.2, 1.5, and 2 M_{\odot} stars with $Z = 0.02$ up to the end of the TP-AGB. The top panel shows their evolution in the H-R diagram, where the solid red point is the ZAMS. The bottom panel shows the evolution in the $T_c - \rho_c$ plane, exhibiting the He core flash and later evolution of the C/O core during the thermal pulses. The dashed blue (heavy grey) line shows a constant electron degeneracy of $\epsilon_F/k_B T = 20(4)$. The dashed red line is for a constant pressure of $\log P = 20.25$; relevant to the He core flash.