

$\log (L/L_{\odot})$

$\log T_{\text{eff}}$

$10 R_{\odot}$

$100 R_{\odot}$

H burning around core
(1.4×10^5 yrs)

Thickening of H shell
around core
(1.2×10^6 yrs)

Core contraction
(2.2×10^6 yrs)

H burning; main seq. evolution
(6.5×10^7 yrs)

Burning of thick
He shell

Unstable outer region

He burning
in core
(10^6 yrs)

Core contraction;
convective envelope expansion
(8×10^5 yrs)

Core contraction;
He layer burning

He burning
ends; core
contracts

He burning
begins

Red giant
phase
(2×10^6 yrs)

1

3

4

2

5

10

13

12

11

14

15

7

8

6