

Description of parameters that included in each evolutionary track table:

1. MODE: model number;
2. MASS: current total mass in M_{\odot} , M_{tot} ;
3. AGE: age in year;
4. Dtime: time-step in year;
5. LOG_L: logarithm of surface luminosity, $\log(L/L_{\odot})$;
6. LOG_TE: logarithm of effective temperature in K, $\log T_{\text{eff}}$;
7. RSTAR: current radius in cgs unit;
8. CONV: mass of the homogeneous core (includes overshoot) in total mass unit, M/M_{tot} ;
9. QSCHW: mass of the unstable core (does not include overshoot) in total mass unit, M/M_{tot} ;
10. QDISC: mass where the hydrogen abundance is about equal to the surface one ($|X - X_{\text{sup}}| < 10^{-3}$) in total mass unit, M/M_{tot} ;
11. QH_HE: mass where hydrogen abundance $X = (X_c + X_{\text{sup}})/2$ in total mass unit, M/M_{tot} ;
12. QHEL: mass where hydrogen exhausted in total mass unit, M/M_{tot} ;
13. Q_HE_CO: mass where helium abundance $Y = (Y_c + Y_{\text{sup}})/2$ in total mass unit, M/M_{tot} ;
14. QCAROX: mass where helium exhausted in total mass unit, M/M_{tot} ;
15. LOG_Tc: logarithm of central temperature in K, $\log T_c$;
16. LOG_RHc: logarithm of central density in cgs unit, $\log \rho_c$;
17. LOG_Pc: logarithm of central pressure in cgs unit, $\log P_c$;
18. PSI_C: degeneracy parameter;
19. G1_AVG: average Γ_1 on the star;
20. G1_AVG_CO: average Γ_1 on the CO core;
21. XCEN: central hydrogen (^1H) fraction in mass;
22. XHE3C: central ^3He fraction in mass;
23. YCEN: central helium (^4He) fraction in mass;
24. XC_CEN: central carbon (^{12}C) fraction in mass;
25. XN_CEN: central nitrogen (^{14}N) fraction in mass;
26. XO_CEN: central oxygen (^{16}O) fraction in mass;
27. XNE_CEN: central neon ($^{20}\text{Ne} + ^{22}\text{Ne}$) fraction in mass;
28. XMG_CEN: central magnesium ($^{24}\text{Mg} + ^{25}\text{Mg} + ^{26}\text{Mg}$) fraction in mass;
29. XSI28_CEN: central silicon (^{28}Si) fraction in mass;
30. XS32_CEN: central sulfur (^{32}S) fraction in mass;
31. XAR36_CEN: central argon (^{36}Ar) fraction in mass;
32. XCA40_CEN: central calcium (^{40}Ca) fraction in mass;
33. XTI44_CEN: central titanium (^{44}Ti) fraction in mass;
34. DM: current mass lost in M_{\odot} ;
35. RATE: rate of mass loss in M_{\odot}/yr ;
36. M: number of mesh points of the current model;
37. MO1 : last saved model, used to restart;
38. OUTALF: mixing length parameter;
39. Xsup: surface hydrogen fraction in mass;
40. Ysup: surface helium fraction in mass;
41. XCsup: surface carbon fraction in mass;
42. XC13sup: surface ^{13}C fraction in mass;
43. XNsup: surface nitrogen fraction in mass;
44. XOsup: surface oxygen fraction in mass;
45. XO18sup: surface ^{18}O fraction in mass;
46. XNEsup: surface neon fraction in mass;

47. XMGsup: surface magnesium fraction in mass;
48. MU: mean molecular weight;
49. POLRAD_ENV: polar radius at the surface in cgs unit;
50. EQRAD_ENV: equator radius at the surface in cgs unit;
51. OMG_ENV: current rotation rate at the surface, ω ;
52. ANG_VEL_ENV: angular rotation velocity at the surface in rad/s unit, Ω ;
53. TANVEL_ENV: tangential linear velocity at the surface in cgs unit, v ;
54. TOT_INERTIA: total rotational inertia in cgs unit;
55. TOT_ANGMOM: total angular momentum in cgs unit;
56. TOT_MOM_LOST: total angular momentum lost;
57. VAR_MOMANG: relative variation of total angular momentum lost;
58. R_CONV: logarithm of radius of the homogeneous core in cgs unit;
59. R_SCHW: logarithm of radius of the unstable core in cgs unit;
60. R_DISC: logarithm of radius where $X_c < X_{\text{sup}}$ in cgs unit;
61. R_H_HE: logarithm of radius where $X = (X_c + X_{\text{sup}})/2$ in cgs unit;
62. RHEL: logarithm of radius where where $X_c = 0$;
63. R_HE_CO: logarithm of radius where $Y = (Y_c + Y_{\text{sup}})/2$ in cgs unit ;
64. R_CAROX: logarithm of radius where central-He exhausted;
65. TMAX : logarithm of the highest temperature inside the star in K unit;
66. RHTMAX: logarithm of the density where $T = TMAX$ in cgs unit;
67. QTMAX: mass where $T = TMAX$ in total mass unit, M/M_{tot} ;
68. LNUC : luminosity provided by nuclear reactions in total luminosity unit, L/L_{tot} ;
69. LX : luminosity provided by hydrogen burning reactions in total luminosity unit, L/L_{tot} ;
70. QH1: mass at the bottom of hydrogen-burning zone in total mass unit, M/M_{tot} ;
71. QH2 : mass at the top of hydrogen-burning zone in total mass unit, M/M_{tot} ;
72. LY : fraction of luminosity provided by helium burning reactions in total luminosity unit, L/L_{tot} ;
73. QHE1: mass at the bottom of helium-burning zone in total mass unit, M/M_{tot} ;
74. QHE2: mass at the top of helium-burning zone in total mass unit, M/M_{tot} ;
75. LC : luminosity provided by carbon burning reactions in total luminosity unit, L/L_{tot} ;
76. QC1: mass at the bottom of carbon-burning zone in total mass unit, M/M_{tot} ;
77. QC2 : mass at the top of carbon-burning zone in total mass unit, M/M_{tot} ;
78. LNEUTR: luminosity lost by neutrinos in total luminosity unit, L/L_{tot} ;
79. L_GRAV: luminosity provided by gravity in total luminosity unit, L/L_{tot} ;
80. L_ACC: luminosity provided by accretion in total luminosity, L/L_{tot} ;
81. LYYY: luminosity provided by triple α -reactions in total luminosity unit, L/L_{tot} ;
82. LYC : luminosity provided by α -capture on carbon in total luminosity unit, L/L_{tot} ;
83. LYO : luminosity provided by α -capture on oxygen in total luminosity unit, L/L_{tot} ;
84. N_C : not used;
85. AL_X_TOT: not used ;
86. EGENV_H: logarithm of gravitational energy of the hydrogen-rich envelope in cgs unit;
87. EGENV_HE: logarithm of gravitational energy of the helium-rich envelope in cgs unit;
88. ENTAL_H: logarithm of enthalpy of hydrogen-rich envelope in cgs unit;
89. ENTAL_HE: logarithm of enthalpy of helium-rich envelope in cgs unit;
90. E_INT_H : logarithm of internal energy of hydrogen-rich envelope in cgs unit;
91. E_INT_HE : logarithm of internal energy of helium-rich envelope in cgs unit;
92. ES_TOT : total entropy of the star in cgs unit;
93. Q_CNV : mass of the convective envelope in total mass unit, M/M_{tot} ;
94. DPTH_CNV : logarithm of the depth of convective envelope in cgs unit;
95. TCVN_YR: eddie turnover timescale in year;
96. PHS : phase;

- 97. CI1 : upper border of the first convective zone in total mass unit, M/M_{tot} ;
- 98. CF1: bottom of the first convective zone in total mass unit, M/M_{tot} ;
- 99. - 104.: same definition as CI1 and CF1 but for the N th convective zone;
- 105. T20L10 : logarithm of atmosphere temperature of the gas at $\tau = 20$ in K;
- 106. RH20L10: logarithm of atmosphere density of the gas at $\tau = 20$ in cgs unit;
- 107. P20L10 : logarithm of atmosphere pressure of the gas at $\tau = 20$ in cgs unit;
- 108. TE20L10 : logarithm of atmosphere effective temperature of the gas at $\tau = 20$ in K;
- 109. R20L10 : logarithm of atmosphere radius of the gas at $\tau = 20$ in cgs unit;
- 110. - 114.: same as columns 105 to 109 but for $\tau = 2/3$
- 115. FIT_M : fitting point in mass fraction, M/M_{tot} ;
- 116. COMP_TIME: elapsed time in second unit.

We note that at column 96, the phase refers to the evolutionary stage of a star which is: 0=PMS, 1=MS, 3=SGB, 4=RGB, 5=AGB.