

Reading SeBa output : SeBa.data

For every binary SeBa produces several lines of output data. Every line represents a moment in the evolution of the binary when something interesting happened, for example one of the star transitions from the main-sequence to the hertzsprung gap, or mass transfer starts or stops. The meaning of the columns is defined below. The first column represents a unique identifier for each binary.

columns (starting at column 1):

column 1 binary identity number

column 2 binary type

column 3 mass transfer type

column 4 time

column 5 separation in Solar radii

column 6 eccentricity

column 7 & 13 stellar identity number (either 0 or 1)

column 8 & 14 star type

column 9 & 15 stellar mass in Solar mass

column 10 & 16 stellar radius in Solar radii

column 11 & 17 log of effective temperature

column 12 & 18 core mass in Solar mass

options for binary type

2 detached

3 semi detached + stable mass transfer

4 contact

5 CE (gamma)

6 double\_spiral\_in

7 merged

8 disrupted

9 CE (alpha)

options for mass transfer type

1 on nuclear time scale

2 on angular momentum loss timescale (either gravitational waves & magnetic braking)

3 on thermal time scale

4 CE due to dynamics

5 CE due to Darwin Riemann instability

options for stellar type

1 planet

2 brown dwarf

3 main sequence

5 hertzsprung gap

6 sub\_giant

7 core helium burning star

8 agb

10 helium star

11 helium giant

- 12 carbon-oxygen white dwarf
- 13 helium white dwarf
- 14 oxygen-neon white dwarf
- 18 neutron star
- 19 black hole
- 20 disintegrated