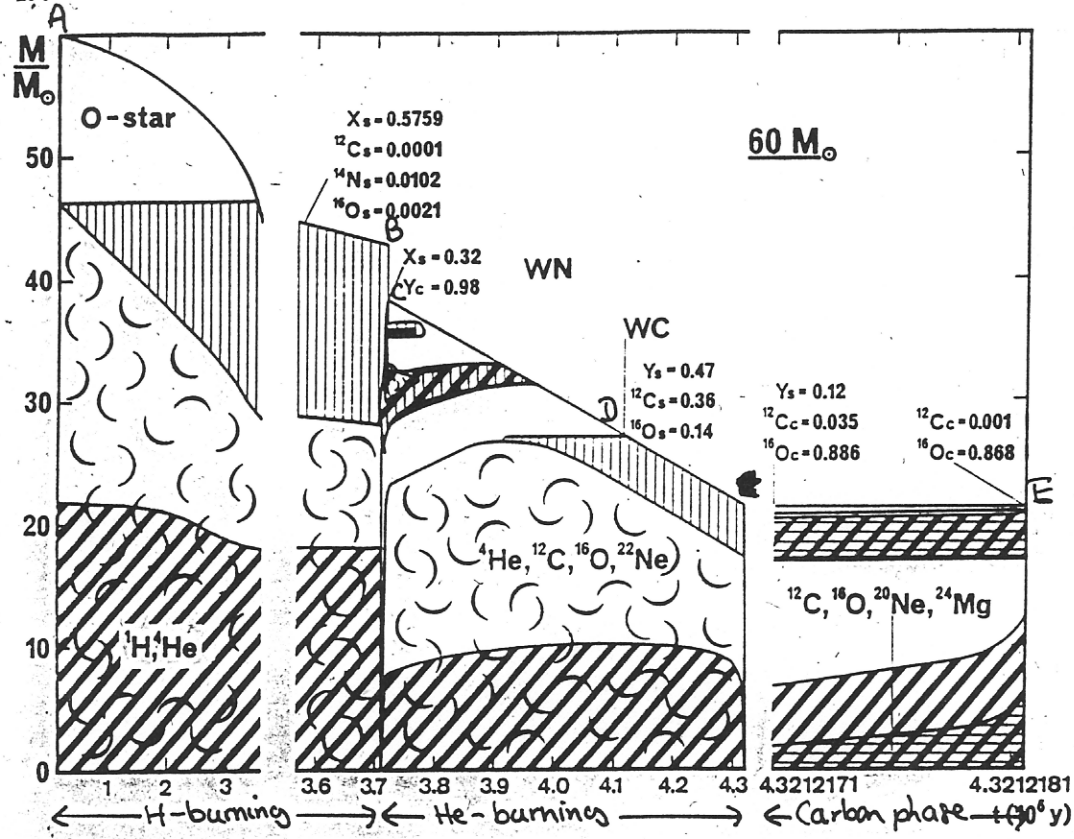

Fig. 3. Evolution of the internal structure of stars of 60 $M_\odot$ up to central C-exhaustion. Cloudy regions represent convective zones, heavy diagonals indicate regions where the nuclear energy rates are larger than 10^3 erg g^{-1} s^{-1}. The vertically hatched regions are zones of variable hydrogen and helium contents and the horizontally hatched zones represent areas of variable ^{12}C, ^{16}O, and ^{20}Ne contents. The evolution of the surface of the star is indicated, as well as the observable status of the star: O-star, Wolf-Rayet star of type WN, then WC: X_s, Y_s mean surface contents in hydrogen and helium; Y_c means the central content of helium, ^{12}Cs, ^{14}Ns, ^{16}Os are the surface abundances of ^{12}C, ^{14}N, and ^{16}O respectively, ^{12}Cc and ^{16}Oc mean central contents of ^{12}C and ^{16}O

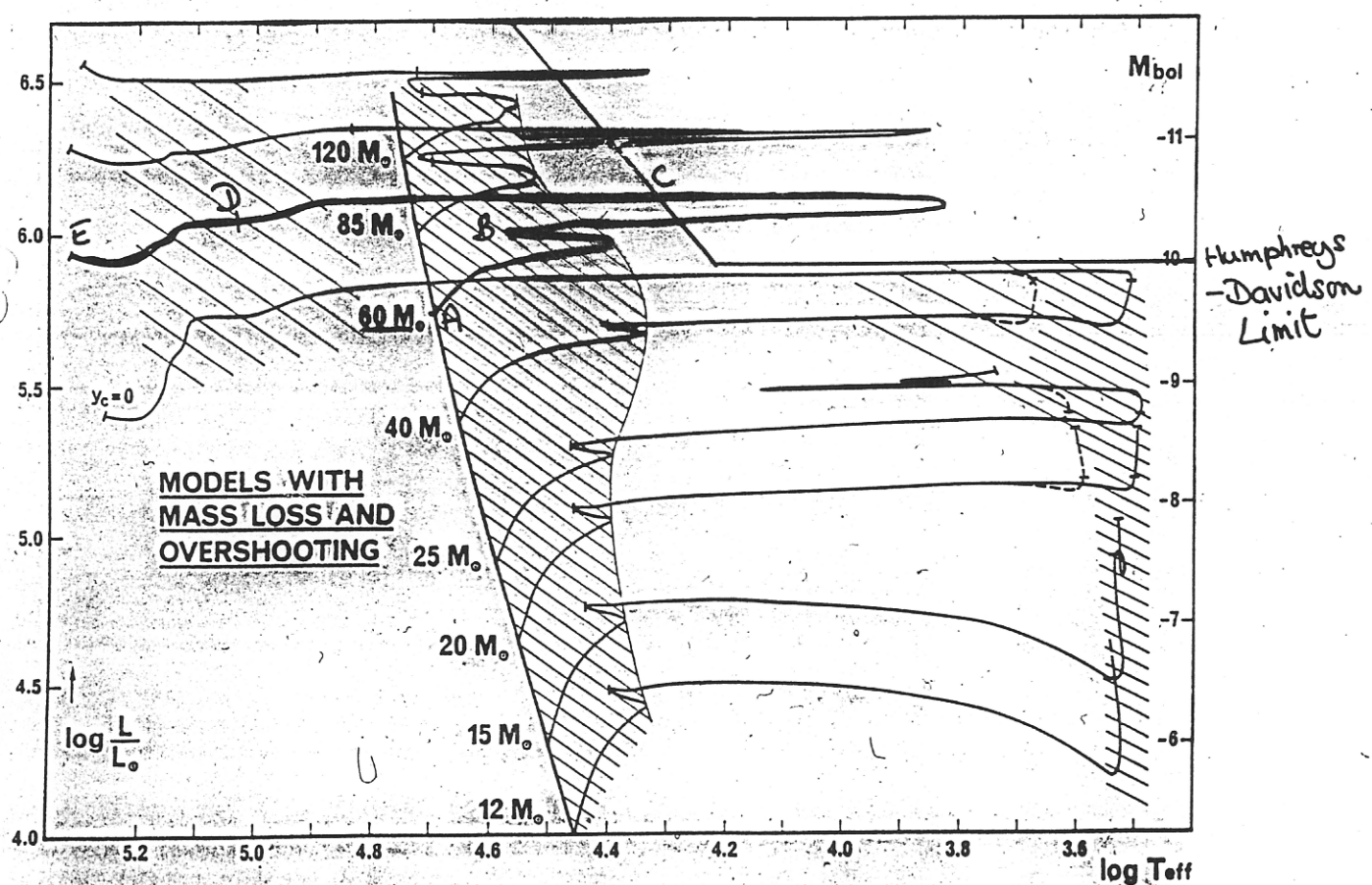

Fig. 9. Evolutionary tracks of massive stars with initial composition $X = 0.70$ and $Z = 0.02$ evolved with mass loss by stellar winds and overshooting. Hatched areas indicate the main sequence band and the He-burning phase. For red supergiants, the broken lines indicate the tracks computed with $\alpha_e = 1/H_e = 0.3$ while the continuous lines refer to the usual mixing length theory with $\alpha_p = 1/H_p = 1.5$. The first slash along the evolutionary tracks indicates the central exhaustion of H, the second the beginning of the He-burning phase and the last the central exhaustion of He