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## STELLAR EVOLUTION FROM THE ZERO-AGE MAIN SEQUENCE

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### ABSTRACT

A set of 247 evolutionary sequences extending from the zero-age main sequence (ZAMS) to the base of the red-giant branch has been computed for the following values of the helium abundance  $Y$  and the heavy-element abundance  $Z$ :  $Y = 0.10, 0.20, 0.30$ , and  $0.40$  and  $Z = 0.00001, 0.0001, 0.0004, 0.001, 0.004, 0.01, 0.04$ , and  $0.10$ . For  $Z < 0.10$  the sequence masses  $M$  ranged from  $0.55$  to  $4.40 M_{\odot}$ , while for  $Z = 0.10$  the upper mass limit was increased to  $6.90 M_{\odot}$ . These mass intervals were chosen so that the luminosity  $L$  at the ZAMS phase fell within the approximate range  $-1 \leq \log L(\text{ZAMS})/L_{\odot} \leq 2.5$ . Typically, 10 sequences with roughly equally spaced values of  $\log M$  were constructed for each composition. However, a finer spacing in mass was used over the mass interval in which a blueward fluctuation (or gap) develops in the track at the end of the main-sequence phase. In a few sequences with large  $M$  and low  $Z$ , central helium burning began before the tracks reached the red-giant branch. These sequences were terminated at the onset of helium burning. Extensive tabulations of the numerical results are provided. With these results a number of observable features of the evolutionary tracks can be calibrated in terms of the composition and mass. Such features include the relative position of the main sequence, the luminosity at which a blueward fluctuation in the track first occurs, the track morphology, and the evolutionary time scales.

*Subject headings:* stars: evolution — stars: interiors — stars: late-type

### I. INTRODUCTION

Evolutionary sequences for stars evolving from the zero-age main sequence (ZAMS) to the red-giant branch have a number of astrophysical applications. Such sequences are needed when one is studying the properties of star clusters (e.g., Iben 1967; Demarque and McClure 1977), the chemical evolution of galaxies (Audouze and Tinsley 1976), and the integrated properties of stellar systems (Tinsley 1972; Searle, Sargent, and Bagnuolo 1973). For these reasons there have been numerous theoretical investigations of the main-sequence and immediate post-main-sequence evolutionary phases (see review papers by Iben 1967, 1974, and references therein). In recent years stellar models with near solar abundances have been computed by Kinahan and Härm (1975), Demarque and Gisler (1975), Hejlesen (1977), and Patenaude (1977), while Wagner (1974) has examined the evolution of very metal-poor stars.

The objective of the present paper is to provide a consistent set of evolutionary sequences extending from the ZAMS to the red-giant branch for a wider

range of compositions and masses than has so far been available. Since the structure of main-sequence stellar models has been exhaustively discussed by other researchers (e.g., Iben and Rood 1970), we will confine the present paper largely to a presentation of the numerical results. Evolutionary sequences have been obtained for the following ranges in the helium abundance  $Y$ , the heavy-element abundance  $Z$ , and the mass  $M$ :

$$0.10 \leq Y \leq 0.40, \quad 0.00001 \leq Z \leq 0.10,$$

$$0.55 M_{\odot} \leq M \leq 6.90 M_{\odot}. \quad (1)$$

The one extreme,  $Z = 0.00001$ , is an appropriate lower bound for the extremely metal-deficient stars observed in dwarf spheroidal galaxies such as Draco (Hartwick and McClure 1974; Hirshfeld 1978), while the other extreme,  $Z = 0.10$ , seems a reasonable upper bound for stars in the nuclei of giant elliptical galaxies (McClure 1969; Spinrad *et al.* 1971).

Table 1 lists the masses of the sequences computed for each composition. We have used the following

basic set of mass values:  $M = 0.55, 0.70, 0.90, 1.10, 1.40, 1.75, 2.20, 2.80, 3.50, 4.40, 5.50$ , and  $6.90 M_{\odot}$ . These masses were selected to be roughly equally spaced in  $\log M$ . This was done so that the evolutionary tracks would be nearly uniformly spaced in the H-R diagram. The minimum and maximum masses of the sequences for each composition were chosen so that the luminosity  $L$  at the ZAMS phase fell within the approximate range  $-1 \leq \log L(\text{ZAMS})/L_{\odot} \leq 2.5$ . Consequently, the smallest one or two masses in the basic set were sometimes omitted, and the maximum mass was limited to 3.50 or 4.40  $M_{\odot}$  except for  $Z = 0.10$ . One or two additional sequences with masses intermediate to those in the basic set were also constructed for each composition over the mass range in which a blueward fluctuation develops in the track at the time of central hydrogen exhaustion (see § III).

Each of the 247 sequences given in Table 1 was started from a homogeneous ZAMS model. We have not followed the pre-main-sequence contraction phase. All of the sequences were evolved to the base of the red-giant branch except for a few sequences with large  $M$  and low  $Z$ . In these latter sequences central helium burning began during the evolution across the Hertzsprung gap before the tracks reached the red-giant branch. A similar result has been reported by Wagner (1974). These sequences were terminated at the onset of helium burning. The remaining sequences were continued until the location of the base of the red-giant branch was reasonably well determined. The masses underlined in Table 1 identify the sequences

which have been extended to the tip of the red-giant branch by Sweigart and Gross (1978). The present sequences together with their extensions by Sweigart and Gross (1978) form the basis for the isochrones and luminosity functions of Ciardullo and Demarque (1977) and the luminosity functions of Sweigart (1978, 1979). An overall review of both these main-sequence and red-giant calculations has been given by Sweigart (1978).

## II. CONSTRUCTION OF THE STELLAR MODELS

### a) Input Physics

The models have been constructed with the stellar evolution program developed by Sweigart (1972, 1973) from the Princeton program (Schwarzschild and Härm 1965). The version of this program used in the present study was identical to the one described by Sweigart and Gross (1974) except for a modification to include the approach of the ON cycle to equilibrium. This modification was made because the ON approach to equilibrium can influence the main-sequence evolution through its effect on the efficiency of the CNO cycle (Simoda and Iben 1970). Our treatment of the ON approach to equilibrium was taken from Sweigart and Gross (1978). In contrast, the CN cycle has been assumed to operate in equilibrium. This assumption is reasonable since little hydrogen burning by the CNO cycle is needed to establish CN equilibrium. However, a substantially greater amount of hydrogen must be burned before the ON cycle can come into full

TABLE 1  
MASSES OF THE SEQUENCES COMPUTED FOR EACH COMPOSITION

$Y$	$Z$	$M^*$
0.10	0.00001	<u>0.70, 0.90, 1.10, 1.40, 1.75, 1.95, 2.20, 2.50, 2.80, 3.50, 4.40</u>
0.20	0.00001	<u>0.70, 0.90, 1.10, 1.40, 1.75, 1.95, 2.20, 2.50, 2.80, 3.50</u>
0.30	0.00001	<u>0.55, 0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 1.95, 2.20, 2.80, 3.50</u>
0.40	0.00001	<u>0.55, 0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.10	0.0001	<u>0.70, 0.90, 1.10, 1.40, 1.75, 1.95, 2.20, 2.50, 2.80, 3.50, 4.40</u>
0.20	0.0001	<u>0.70, 0.90, 1.10, 1.40, 1.75, 1.95, 2.20, 2.80, 3.50</u>
0.30	0.0001	<u>0.55, 0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.40	0.0001	<u>0.55, 0.70, 0.90, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50</u>
0.20	0.0004	<u>0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.30	0.0004	<u>0.55, 0.70, 0.90, 1.10, 1.25, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.10	0.001	<u>0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 1.95, 2.20, 2.80, 3.50, 4.40</u>
0.20	0.001	<u>0.70, 0.90, 1.10, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.30	0.001	<u>0.55, 0.70, 0.90, 1.10, 1.25, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50</u>
0.40	0.001	<u>0.55, 0.70, 0.90, 1.00, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50</u>
0.20	0.004	<u>0.70, 0.90, 1.10, 1.25, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50, 4.40</u>
0.30	0.004	<u>0.70, 0.90, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50</u>
0.10	0.01	<u>0.90, 1.10, 1.25, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50, 4.40</u>
0.20	0.01	<u>0.70, 0.90, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50, 4.40</u>
0.30	0.01	<u>0.70, 0.90, 1.00, 1.10, 1.40, 1.75, 2.20, 2.80, 3.50</u>
0.40	0.01	<u>0.55, 0.70, 0.80, 0.90, 1.00, 1.10, 1.40, 1.75, 2.20, 2.80, 3.50</u>
0.20	0.04	<u>0.90, 1.10, 1.25, 1.40, 1.55, 1.75, 2.20, 2.80, 3.50, 4.40</u>
0.30	0.04	<u>0.70, 0.90, 1.00, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50, 4.40</u>
0.20	0.10	<u>0.90, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50, 4.40, 5.50, 6.90</u>
0.30	0.10	<u>0.70, 0.90, 1.00, 1.10, 1.25, 1.40, 1.75, 2.20, 2.80, 3.50, 4.40, 5.50</u>

\* The masses of the sequences continued to the tip of the red-giant branch by Sweigart and Gross (1978) have been underlined.

equilibrium, especially for the larger  $Z$  values. It has been assumed that no  $^{17}\text{O}$  is present at the ZAMS phase and that the ZAMS abundances of C, N, and O as fractions of  $Z$  have the values quoted in Table 1 of Cox and Stewart (1970b), i.e., ( $\text{C}/\text{Z}$ ,  $\text{N}/\text{Z}$ ,  $\text{O}/\text{Z}$ ) = (0.1408, 0.0463, 0.4198).

The radiative opacity for each  $Z$  value has been obtained from the references listed in Table 2. These opacities assume that the CNO abundance scales according to  $Z$ . We have not investigated the effects of varying the CNO abundance independently of the rest of the heavy elements. Rood (1978) has recently demonstrated that such CNO variations can significantly affect the main-sequence evolution.

Envelope convection has been treated according to the mixing-length formalism of Böhm-Vitense (1958) and Paczyński (1969). In all of the present sequences the mixing length  $l$  was taken to be 1 pressure-scale height  $H_p$ . The effects which changes in  $l$  can have on the tracks are illustrated in Figure 4 of Sweigart (1978) for sequences with  $(M, Y, Z) = (0.90, 0.20, 0.001)$ .

### b) Numerical Constraints

The time steps between models were controlled by several criteria. During the main-sequence phase the maximum change in the central hydrogen abundance between models was limited to 0.03. This limit was substantially reduced shortly before central hydrogen exhaustion in order to define the turnoff point and the blueward fluctuation in the track more carefully. The changes in  $\log T_{\text{eff}}$  between models were not permitted to exceed 0.010 and 0.015 in the lower- and higher-mass sequences, respectively. These limits on the  $\log T_{\text{eff}}$  changes were useful in setting the time step during the crossing of the Hertzsprung gap. The maximum permitted change in  $\log L$  between models was 0.03. The hydrogen abundance at the center of the hydrogen shell did not change by more than 10% of its envelope value between models, and hence it was not necessary to shift the hydrogen shell during the red-giant-branch phase by some special procedure such as the one discussed by Härm and Schwarzschild (1966). These criteria together with several additional constraints on the time steps yielded sequences consisting typically of about 140 models.

TABLE 2  
REFERENCES FOR THE RADIATIVE OPACITY

$Z$	Reference
0.00001	Cox and Tabor (1976)
0.0001	Cox and Stewart (1970b)
0.0004	Cox and Stewart (1970b)
0.001	Cox and Stewart (1970b)
0.004	Cox and Stewart (1969)
0.01	Cox and Stewart (1970a)
0.04	Cox and Stewart (1969)
0.10	Cox and Tabor (1976)

The changes between Henyey mesh points were limited to 0.05 in  $\log P$ ,  $\log r$ , and  $\log M_r$ , and 0.01 in the hydrogen abundance. Energy generation between points was not allowed to produce more than 2% of the total hydrogen-burning luminosity. In the neighborhood of the convective-core edge the density of points was increased by a factor of 3 over the normal spacing. In general, the number of points in a model ranged from roughly 225 on the main sequence to 350 at the base of the red-giant branch.

### III. RESULTS FOR THE EVOLUTIONARY SEQUENCES

Figures 1 illustrate the evolutionary tracks for each composition in the theoretical H-R diagram. The extensions of some of these tracks to the tip of the red-giant branch can be found in Figures 1 of Sweigart and Gross (1978). The blueward fluctuation at the end of the main-sequence phase is evident in the higher-mass tracks. Central hydrogen exhaustion in the higher-mass sequences takes place throughout a relatively large region of the core because of the presence of core convection during the preceding main-sequence evolution. As a result, the transition to hydrogen-shell burning occurs abruptly, leading to a sudden contraction of the star and hence to a blueward fluctuation. Observationally, this fluctuation would produce a gap in a cluster H-R diagram. At lower masses the core is not convective during the main-sequence phase; consequently, there is a more gradual transition to hydrogen-shell burning.

Data on the evolutionary characteristics of each sequence are presented in Table 3, which is organized overall in order of increasing  $Z$ . All of the masses in Table 3 are in solar units. Column (1) for each sequence gives the time  $t$  elapsed since the ZAMS phase in units of  $10^6$  yr. Columns (2), (3), and (4) give, respectively, the logarithms of the effective temperature  $T_{\text{eff}}$ , the luminosity  $L$  in solar units, and the surface gravity  $g$  in cgs units. Column (5) has been used to tabulate either the central hydrogen abundance  $X_c$  or the mass  $M_{\text{SH}}$  interior to the center of the hydrogen shell, defined as the point where the hydrogen abundance is one-half of its envelope value. The value of  $X_c$  is given when there is an asterisk in column (5). Otherwise, column (5) gives  $M_{\text{SH}}$ . Similarly, column (6) has been used to tabulate either  $M_{\text{CC}}$ , the mass within the convective core (when there is an asterisk), or  $M_{\text{CE}}$ , the mass interior to the base of the convective envelope. This double usage of columns (5) and (6) makes Table 3 more concise without sacrificing much information. For example, the quantities  $X_c$  and  $M_{\text{SH}}$  are not both of interest at the same time. Moreover, main-sequence models with a convective core do not usually have a convective envelope. In the few cases in which both a convective core and a convective envelope exist,  $M_{\text{CC}}$  has been tabulated. The entries for  $M_{\text{CC}}$  found near the end of some of the higher-mass sequences refer to the convective core associated with the onset of central helium burning.

The data in Table 3 have been tabulated at increments of 0.1 in  $X_c$  during the main-sequence phase.

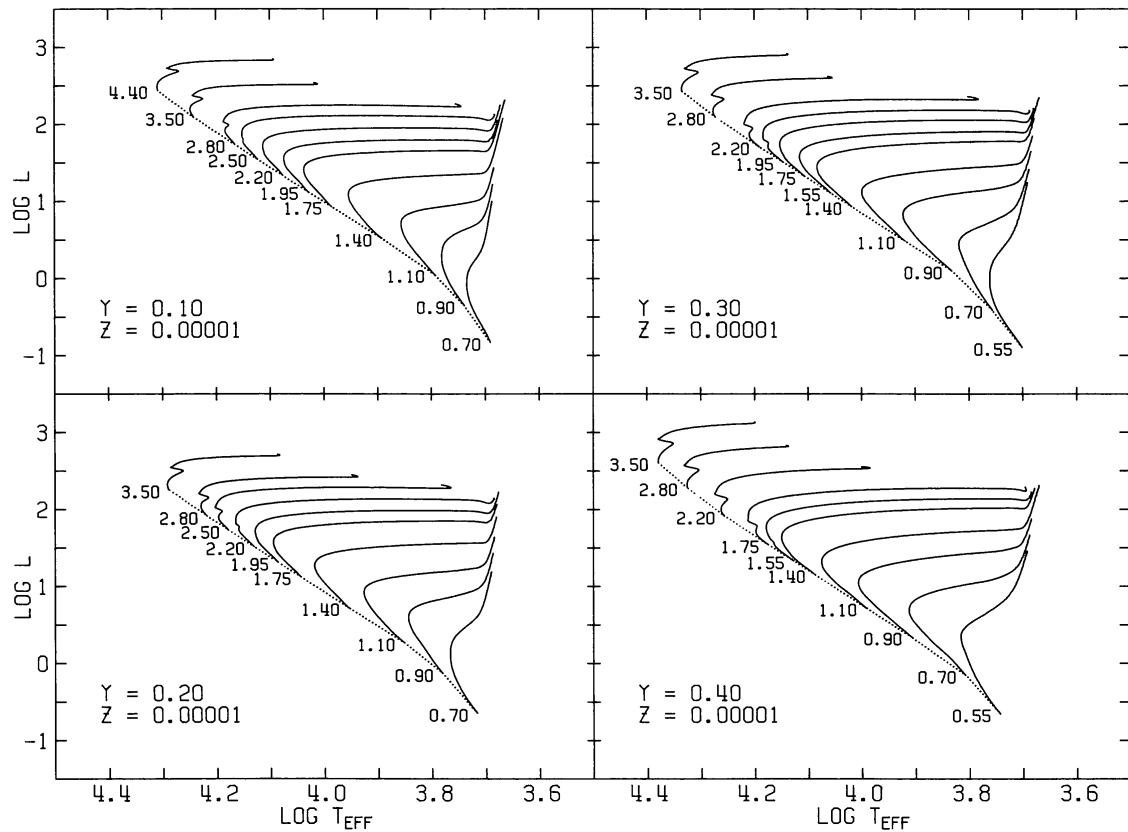


FIG. 1a

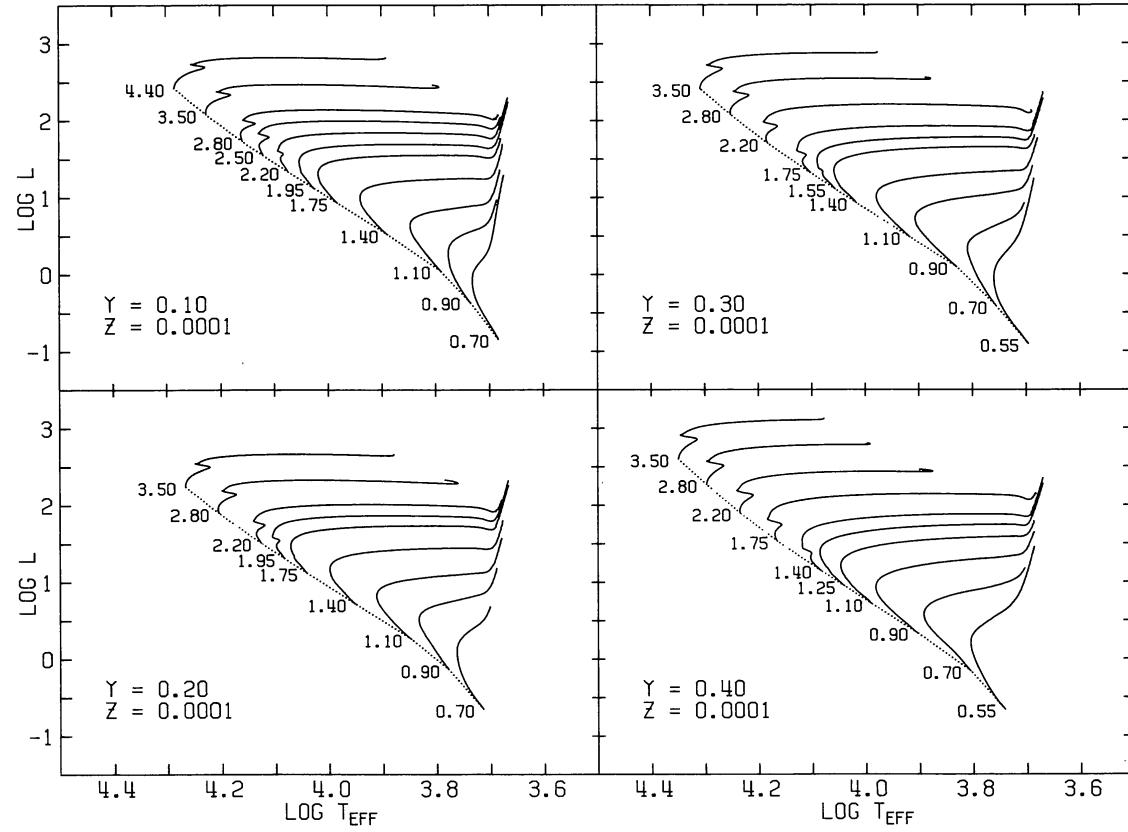


FIG. 1b

FIG. 1.—Evolutionary tracks starting from the zero-age main sequence for  $0.10 \leq Y \leq 0.40$ ,  $0.00001 \leq Z \leq 0.10$ , and  $0.55 M_{\odot} \leq M \leq 6.90 M_{\odot}$ . Each track is labeled by its mass  $M$  in solar units. The location of the ZAMS is indicated by the dotted line.

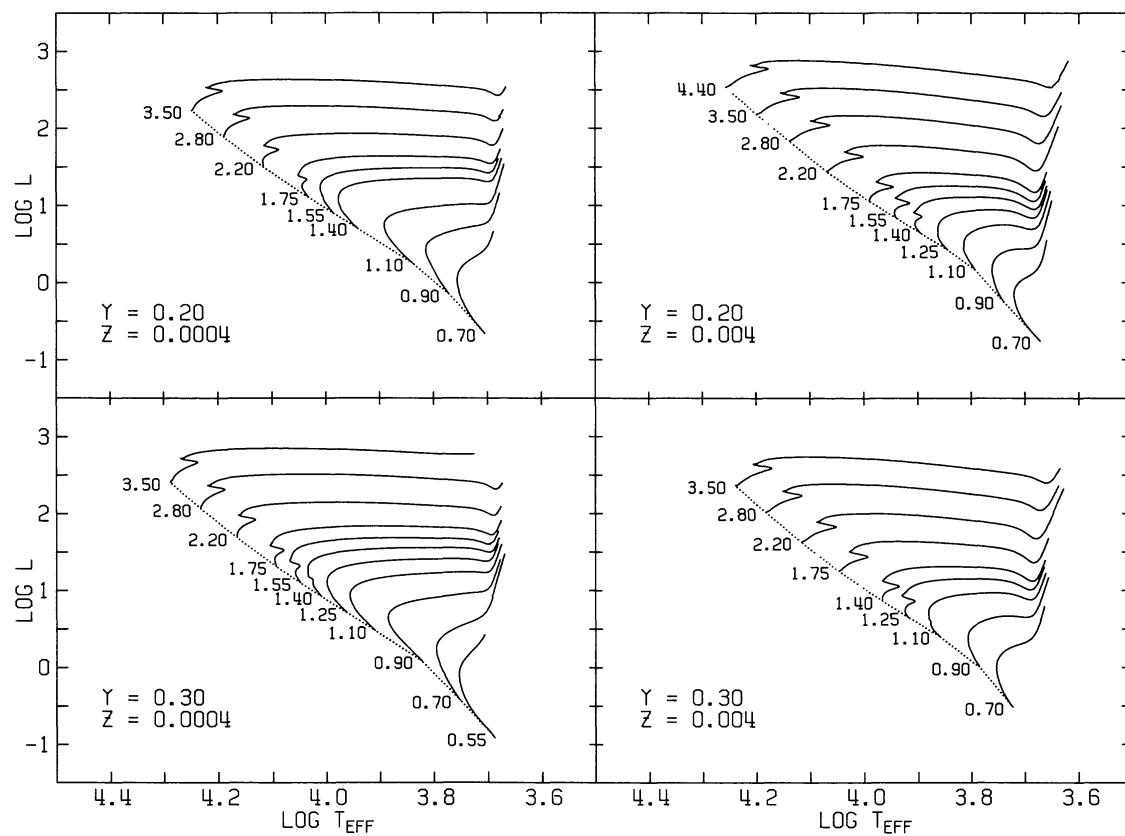


FIG. 1c

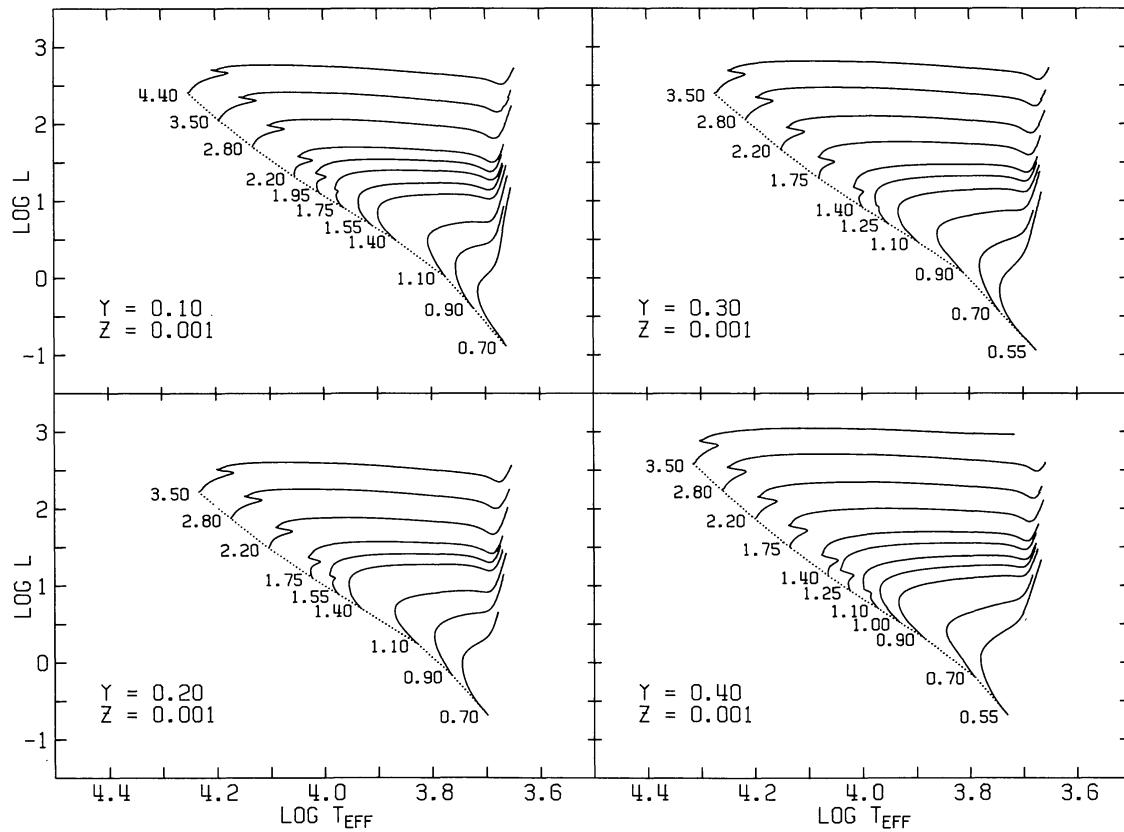


FIG. 1d

FIG. 1—Continued

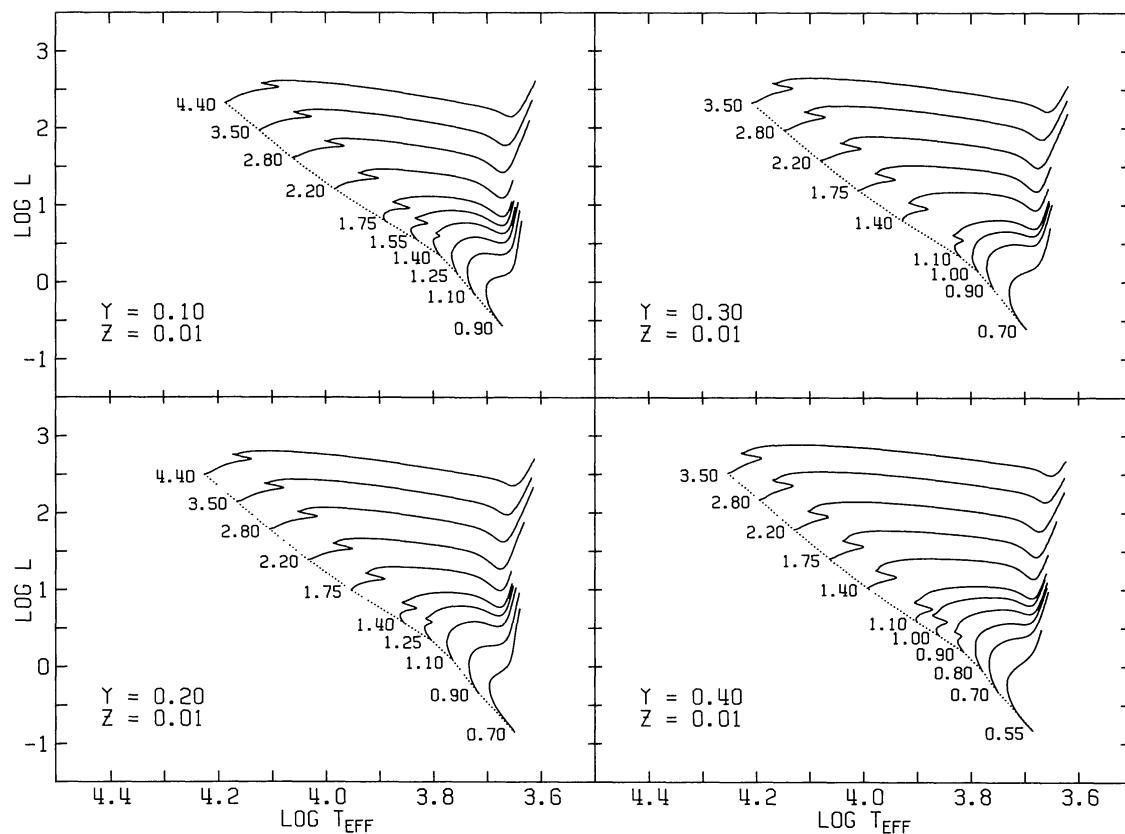


FIG. 1e

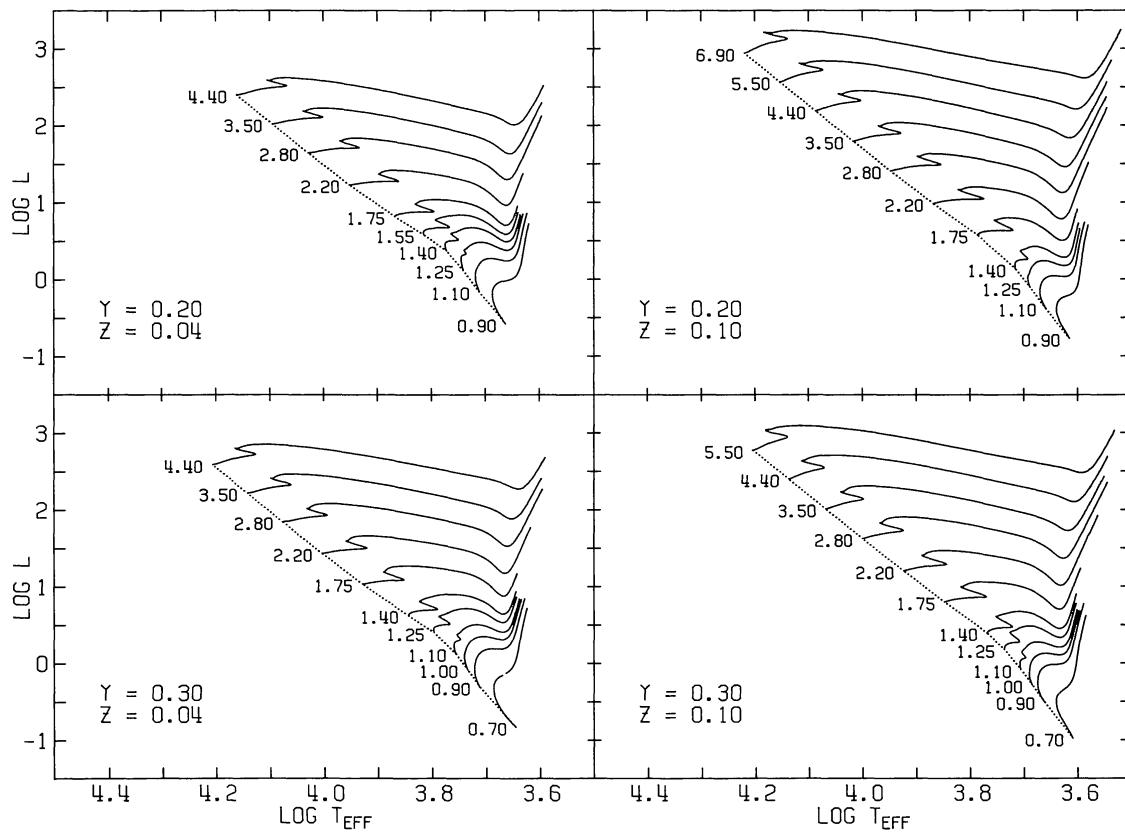


FIG. 1f

FIG. 1—Continued

TABLE 3  
EVOLUTION FROM THE ZERO-AGE MAIN SEQUENCE

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
$M = 0.70 \quad Y = 0.10 \quad Z = 0.00001$																	
0.0000	3.6903	-0.8342	4.825	0.9000*	0.0013*	10744.9059	3.7026	1.0600	3.176	0.2471	0.9657						
4764.6574	3.6919	-0.8086	4.806	0.8000*	0.6178	10782.4465	3.6968	1.1300	3.083	0.2487	0.8489						
9471.8364	3.6939	-0.7802	4.785	0.7000*	0.6328	10815.6757	3.6928	1.2000	2.997	0.2516	0.7523						
14194.6812	3.6963	-0.7476	4.762	0.6000*	0.6440	10846.4981	3.6896	1.2700	2.914	0.2570	0.6811						
18954.9161	3.6991	-0.7097	4.736	0.5000*	0.6526	10874.5299	3.6870	1.3400	2.834	0.2650	0.6169						
23786.3106	3.7027	-0.6648	4.705	0.4000*	0.6629	10899.2675	3.6842	1.4100	2.752	0.2745	0.5713						
28738.5378	3.7072	-0.6104	4.668	0.3000*	0.6709	10906.9118	3.6839	1.4346	2.727	0.2779	0.5574						
33902.8229	3.7128	-0.5416	4.622	0.2000*	0.6776	$M = 1.40 \quad Y = 0.10 \quad Z = 0.00001$											
39516.1563	3.7200	-0.4469	4.556	0.1000*	0.6845	0.0000	3.8924	0.5178	4.582	0.9000*	0.0474*						
43315.5162	3.7257	-0.3618	4.494	0.0500*	0.6880	559.8580	3.8989	0.5560	4.570	0.8000*	0.0138*						
47570.4247	3.7322	-0.2246	4.383	0.0200*	0.6925	1011.6489	3.9042	0.5892	4.558	0.7000*	0.0004*						
49924.7961	3.7346	-0.1097	4.277	0.0100*	0.6940	1398.4025	3.9088	0.6201	4.546	0.6000*	---						
50504.2504	3.7347T	-0.0736	4.242	0.0078*	0.6939	1761.6058	3.9132	0.6515	4.532	0.5000*	---						
51633.4773	3.7337	0.0100	4.154	0.0028*	0.6933	2114.7001	3.9176	0.6851	4.516	0.4000*	---						
52532.0477	3.7307	0.0961	4.056	0.0000*	0.6914	2487.1675	3.9227	0.7254	4.496	0.3000*	---						
53152.3119	3.7247	0.1800	3.948	0.1677	0.6844	2933.3975	3.9299	0.7826	4.467	0.2000*	---						
53590.0962	3.7155	0.2700	3.821	0.1749	0.6601	3557.7148	3.9419	0.8875	4.410	0.1000*	---						
53878.1441	3.7077	0.3600	3.700	0.1804	0.6210	3965.5178	3.9504	0.9816	4.350	0.0500*	---						
54101.8258	3.7026	0.4500	3.590	0.1863	0.5779	4164.4059	3.9538	1.0361	4.309	0.0200*	---						
54301.4704	3.6992	0.5400	3.486	0.1942	0.5400	4217.8859	3.9545	1.0520	4.296	0.0100*	---						
54483.9703	3.6966	0.6300	3.386	0.2043	0.5102	4317.6295	3.9551T	1.0858	4.265	0.0011*	---						
54644.0247	3.6945	0.7200	3.287	0.2157	0.4867	4446.2708	3.9531	1.1387	4.204	0.0000*	---						
54779.9974	3.6920	0.8100	3.187	0.2276	0.4643	4574.0147	3.9400	1.2100	4.080	0.2735	---						
54892.2452	3.6896	0.9000	3.088	0.2394	0.4501	4639.3191	3.9100	1.2643	3.906	0.2840	---						
54984.2750	3.6874	0.9900	2.989	0.2510	0.4365	4662.1786	3.8800	1.2912	3.759	0.2870	---						
54993.2773	3.6873	0.9998	2.979	0.2523	0.4330	4674.9438	3.8500	1.3092	3.621	0.2884	---						
$M = 0.90 \quad Y = 0.10 \quad Z = 0.00001$																	
0.0000	3.7386	-0.3554	4.648	0.9000*	0.0085*	4683.8066	3.8200	1.3225	3.488	0.2892	---						
2184.5732	3.7424	-0.3203	4.628	0.8000*	0.8965	4690.7812	3.7900	1.3329	3.357	0.2897	---						
4185.9544	3.7461	-0.2852	4.608	0.7000*	0.8974	4696.9988	3.7600	1.3414	3.229	0.2901	---						
6153.4836	3.7500	-0.2469	4.585	0.6000*	0.8981	4705.6611	3.7300	1.3504	3.100	0.2905	1.3990						
8092.3995	3.7540	-0.2051	4.560	0.5000*	0.8987	4725.9154	3.7000	1.3787	2.952	0.2910	1.2448						
10003.2142	3.7582	-0.1586	4.530	0.4000*	0.8992	4740.5169	3.6924	1.4500	2.850	0.2912	1.0322						
11887.6157	3.7627	-0.1067	4.496	0.3000*	0.8996	4765.9488	3.6844	1.5300	2.752	0.2914	0.8647						
13778.6279	3.7673	-0.0462	4.454	0.2000*	0.8998	4777.4041	3.6813	1.6100	2.658	0.2922	0.7394						
15995.4998	3.7731	0.0415	4.390	0.1000*	---	4788.0591	3.6783	1.6900	2.565	0.2959	0.6488						
17814.2294	3.7781	0.1388	4.312	0.0500*	---	4797.7545	3.6753	1.7700	2.474	0.3050	0.5758						
19663.0726	3.7813	0.2848	4.179	0.0200*	---	4806.2444	3.6725	1.8500	2.382	0.3161	0.5260						
19918.9679	3.7813T	0.3114	4.152	0.0166*	---	4813.7452	3.6693	1.9300	2.290	0.3280	0.4906						
20373.5619	3.7804	0.3648	4.095	0.0100*	---	4819.2697	3.6667	2.0100	2.198	0.3402	0.4698						
20916.9399	3.7772	0.4400	4.008	0.0004*	---	$M = 1.75 \quad Y = 0.10 \quad Z = 0.00001$											
21147.1589	3.7734	0.4801	3.952	0.0000*	---	4906.3844	4.0369	1.4448	4.330	0.0000*	---						
21500.6121	3.7597	0.5600	3.817	0.2005	0.8999	0.0000	3.9864	0.9289	4.644	0.9000*	0.0799*						
21731.7444	3.7354	0.6400	3.640	0.2089	0.8973	295.5266	3.9916	0.9663	4.628	0.8000*	0.0488*						
21879.2726	3.7124	0.7200	3.468	0.2136	0.8468	538.2104	3.9961	0.9996	4.612	0.7000*	0.0278*						
21972.9078	3.7030	0.8000	3.350	0.2170	0.7586	735.1088	3.9998	1.0296	4.597	0.6000*	0.0052*						
22050.5583	3.6981	0.8800	3.251	0.2218	0.6892	899.3179	4.0033	1.0578	4.583	0.5000*	---						
22121.5323	3.6947	0.9600	3.158	0.2293	0.6296	1067.8443	4.0076	1.0905	4.567	0.4000*	---						
22186.4735	3.6918	1.0400	3.066	0.2389	0.5747	1259.1524	4.0133	1.1334	4.547	0.3000*	---						
22243.1721	3.6892	1.1200	2.975	0.2496	0.5391	1486.8556	4.0211	1.1941	4.517	0.2000*	---						
22291.1423	3.6865	1.2000	2.884	0.2607	0.5070	1754.9356	4.0314	1.2843	4.469	0.1000*	---						
22300.6142	3.6859	1.2175	2.865	0.2632	0.4999	1868.6531	4.0350	1.3280	4.440	0.0500*	---						
$M = 1.10 \quad Y = 0.10 \quad Z = 0.00001$																	
0.0000	3.7944	0.0508	4.553	0.9000*	0.0268*	1948.9516	4.0369	1.4127	4.366	0.0002*	---						
1177.5709	3.7992	0.0885	4.534	0.8000*	0.0020*	2228.7127	4.0000	1.5732	4.054	0.3236	---						
2155.6541	3.8035	0.1227	4.517	0.7000*	---	2244.4939	3.9700	1.6020	3.905	0.3279	---						
3095.5463	3.8079	0.1587	4.498	0.6000*	---	2252.2964	3.9400	1.6199	3.767	0.3296	---						
4003.0655	3.8127	0.1969	4.479	0.5000*	---	2257.3371	3.9100	1.6325	3.635	0.3304	---						
4874.8363	3.8177	0.2375	4.459	0.4000*	---	2261.0787	3.8800	1.6417	3.506	0.3309	---						
5724.5535	3.8231	0.2815	4.436	0.3000*	---	2264.0680	3.8500	1.6484	3.379	0.3312	---						
6627.4669	3.8295	0.3358	4.408	0.2000*	---	2266.5290	3.8200	1.6529	3.254	0.3314	---						
7845.4489	3.8400	0.4285	4.357	0.1000*	---	2268.5853	3.7900	1.6557	3.132	0.3315	---						
8849.9203	3.8496	0.5349	4.289	0.0500*	---	2270.3874	3.7600	1.6569	3.010	0.3316	---						
9652.3695	3.8559	0.6554	4.194	0.0200*	---	2272.6677	3.7300	1.6557	2.892	0.3316	1.7498						
9860.6225	3.8568	0.6932	4.160	0.0100*	---	2277.5988	3.7010	1.6439	2.787	0.3317	1.6647						
9937.3055	3.8568T	0.7086	4.144	0.0050*	---	2284.4945	3.6892	1.7100	2.674	0.3317	1.2749						
10197.9405	3.8541	0.7700	4.072	0.0000*	---	2289.8540	3.6847	1.7800	2.586	0.3318	1.0569						
10262.4306	3.8522	0.7879	4.047	0.0000*	---	2294.9362	3.6814	1.8500	2.503	0.3318	0.8924						
10447.4705	3.8383	0.8500	3.929	0.2298	---	2299.8264	3.6786	1.9200	2.422	0.3318	0.7481						
10558.4111	3.8100	0.9020	3.764	0.2380	---	2304.5498	3.6759	1.9900	2.341	0.3319	0.6308						
10607.1025	3.7800	0.9329	3.613	0.2413	---	2309.1054	3.6732	2.0600	2.260	0.3337	0.5714						
10646.2742	3.7500	0.9624	3.463	0.2435	1.0999	2313.4736	3.6706	2.1300	2.180	0.3419	0.5241						
10694.1562	3.7200	0.996	3.306	0.2455	1.0852	2317.5532	3.6678	2.2000	2.098	0.3527	0.4944						

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>						
2321.2364	3.6649	2.2700	2.017	0.3646	0.4791	1109.1196	3.6718	2.2441	2.170	0.3668	0.1333*						
2323.4225	3.6629	2.3148	1.964	0.3726	0.4764	<i>M</i> = 2.50 <i>Y</i> = 0.10 <i>Z</i> = 0.00001											
<i>M</i> = 1.95 <i>Y</i> = 0.10 <i>Z</i> = 0.00001																	
0.0000	4.0297	1.1210	4.672	0.9000*	0.0977*	0.0000	4.1246	1.5460	4.734	0.9000*	0.1932*						
219.7218	4.0344	1.1579	4.654	0.8000*	0.0774*	114.1628	4.1283	1.5836	4.712	0.8000*	0.1665*						
399.3494	4.0384	1.1912	4.637	0.7000*	0.0462*	202.1771	4.1324	1.6184	4.694	0.7000*	0.0652*						
542.4128	4.0421	1.2215	4.621	0.6000*	0.0070*	265.7968	4.1366	1.6486	4.680	0.6000*	0.0026*						
659.0407	4.0458	1.2501	4.608	0.5000*	----	319.4438	4.1407	1.6775	4.668	0.5000*	----						
781.7591	4.0504	1.2842	4.592	0.4000*	----	372.7933	4.1449	1.7087	4.653	0.4000*	----						
919.1089	4.0564	1.3282	4.572	0.3000*	----	423.2295	4.1485	1.7401	4.636	0.3000*	----						
1073.5443	4.0640	1.3864	4.544	0.2000*	----	469.7866	4.1506	1.7690	4.616	0.2000*	0.0080*						
1225.1739	4.0711	1.4522	4.506	0.1000*	----	522.0953	4.1504R	1.8007	4.583	0.1236*	0.0256*						
1281.3582	4.0726	1.4776	4.487	0.0500*	----	529.8034	4.1505	1.8061	4.578	0.1000*	0.0218*						
1315.2530	4.0734	1.4940	4.474	0.0200*	----	545.2530	4.1515	1.8197	4.569	0.0500*	0.0063*						
1335.1033	4.0739	1.5048	4.465	0.0100*	----	555.8717	4.1524	1.8302	4.562	0.0200*	----						
1407.6644	4.0750	1.5500	4.424	0.0003*	----	564.2586	4.1527	1.8377	4.555	0.0100*	----						
1428.7235	4.0750T	1.5651	4.409	0.0001*	----	584.2121	4.1530B	1.8558	4.538	0.0018*	----						
1457.2681	4.0743	1.5874	4.384	0.0000*	----	617.0034	4.1530	1.8900	4.504	0.0001*	----						
1504.1885	4.0703	1.6300	4.326	0.3100	----	636.6827	4.1523	1.9137	4.478	0.0000*	----						
1546.6276	4.0586	1.6800	4.229	0.3300	----	662.9346	4.1498	1.9500	4.431	0.3194	----						
1574.8474	4.0300	1.7279	4.066	0.3423	----	686.7429	4.1432	1.9900	4.365	0.3448	----						
1584.6308	4.0000	1.7517	3.923	0.3458	----	705.1104	4.1294	2.0300	4.270	0.3645	----						
1589.8435	3.9700	1.7670	3.787	0.3473	----	716.8245	4.1000	2.0663	4.116	0.3760	----						
1593.4839	3.9400	1.7778	3.657	0.3480	----	721.0318	4.0700	2.0842	3.978	0.3791	----						
1596.2242	3.9100	1.7856	3.529	0.3484	----	723.4422	4.0400	2.0954	3.847	0.3805	----						
1598.3882	3.8800	1.7909	3.403	0.3487	----	725.1524	4.0100	2.1029	3.719	0.3811	----						
1600.1388	3.8500	1.7941	3.280	0.3489	----	726.4688	3.9800	2.1079	3.594	0.3816	----						
1601.6056	3.8200	1.7957	3.159	0.3490	----	727.5399	3.9500	2.1109	3.471	0.3818	----						
1602.8553	3.7900	1.7960	3.038	0.3490	----	728.4341	3.9200	2.1123	3.350	0.3820	----						
1603.9571	3.7600	1.7949	2.919	0.3491	----	729.2032	3.8900	2.1122	3.230	0.3821	----						
1605.2687	3.7300	1.7910	2.803	0.3491	1.9498	729.8707	3.8600	2.1109	3.111	0.3822	----						
1608.2832	3.7000	1.7702	2.704	0.3492	1.8686	730.4512	3.8300	2.1085	2.994	0.3823	----						
1608.2969	3.6999	1.7701	2.704	0.3492	1.8678	730.9618	3.8000	2.1051	2.877	0.3823	----						
1612.5059	3.6881	1.8200	2.607	0.3492	1.4579	731.4120	3.7700	2.1006	2.762	0.3823	----						
1615.4976	3.6846	1.8700	2.543	0.3492	1.2522	731.8346	3.7400	2.0946	2.648	0.3824	----						
1618.4651	3.6816	1.9200	2.481	0.3492	1.0905	732.5136	3.7100	2.0777	2.545	0.3824	2.4962						
1621.3767	3.6795	1.9700	2.422	0.3492	0.9422	733.2965	3.6943	2.0515	2.508	0.3824	2.3817						
1624.1740	3.6776	2.0200	2.365	0.3492	0.8200	734.7344	3.6846	2.0900	2.430	0.3824	0.0006*						
1625.7057	3.6764	2.0480	2.332	0.3492	0.7752	735.9741	3.6828	2.1249	2.389	0.3824	0.2038*						
<i>M</i> = 2.20 <i>Y</i> = 0.10 <i>Z</i> = 0.00001																	
0.0000	4.0766	1.3301	4.703	0.9000*	0.1389*	0.0000	4.1656	1.7327	4.761	0.9000*	0.2633*						
158.0155	4.0806	1.3665	4.683	0.8000*	0.1125*	85.0480	4.1694	1.7717	4.737	0.8000*	0.2144*						
285.7848	4.0845	1.4002	4.664	0.7000*	0.0647*	148.3514	4.1738	1.8072	4.719	0.7000*	0.096*						
382.6491	4.0884	1.4307	4.650	0.6000*	0.0020*	196.5661	4.1780	1.8389	4.704	0.6000*	0.0485*						
463.4391	4.0925	1.4600	4.637	0.5000*	----	238.1011	4.1814	1.8683	4.689	0.5000*	0.0394*						
548.9835	4.0974	1.4951	4.621	0.4000*	----	277.8080	4.1837	1.8971	4.669	0.4000*	0.0569*						
639.5584	4.1031	1.5369	4.602	0.3000*	----	322.1697	4.1840	1.9288	4.639	0.3000*	0.0974*						
729.0631	4.1085	1.5828	4.578	0.2000*	----	374.4599	4.1798	1.9660	4.585	0.2000*	0.1226*						
800.5365	4.1114	1.6204	4.552	0.1000*	----	400.1751	4.1765	1.9866	4.551	0.1000*	0.1091*						
829.8401	4.1119	1.6362	4.538	0.0500*	----	403.5691	4.1763R	1.9898	4.547	0.0855*	0.1055*						
853.4953	4.1125	1.6505	4.526	0.0200*	----	411.2941	4.1777	1.9999	4.542	0.0500*	0.0879*						
868.0408	4.1130	1.6601	4.518	0.0100*	----	417.4057	4.1827	2.0152	4.547	0.0200*	0.0528*						
933.2589	4.1142	1.7100	4.474	0.0002*	----	419.4592	4.1859	2.0255	4.550	0.0100*	0.0200*						
945.1904	4.1142T	1.7205	4.463	0.0001*	----	420.8163	4.1874B	2.0325	4.549	0.0044*	----						
970.0827	4.1136	1.7442	4.437	0.0000*	----	438.7630	4.1856	2.0600	4.514	0.0000*	----						
1011.1480	4.1098	1.7900	4.376	0.3198	----	448.9014	4.1842	2.0748	4.493	0.0000*	----						
1045.7285	4.0990	1.8400	4.283	0.3438	----	464.1643	4.1815	2.1000	4.458	0.3184	----						
1069.5503	4.0700	1.8902	4.117	0.3593	----	479.4318	4.1767	2.1300	4.408	0.3434	----						
1076.9628	4.0400	1.9132	3.974	0.3632	----	491.6919	4.1683	2.1600	4.345	0.3637	----						
1080.7716	4.0100	1.9273	3.839	0.3647	----	501.1607	4.1514	2.1900	4.247	0.3790	----						
1083.3970	3.9800	1.9371	3.710	0.3655	----	505.8022	4.1300	2.2095	4.142	0.3857	----						
1085.3580	3.9500	1.9437	3.583	0.3659	----	508.8276	4.1000	2.2251	4.006	0.3891	----						
1086.9156	3.9200	1.9482	3.459	0.3662	----	510.5855	4.0700	2.2345	3.877	0.3905	----						
1088.1917	3.8900	1.9507	3.336	0.3664	----	511.8624	4.0400	2.2405	3.751	0.3912	----						
1089.2595	3.8600	1.9517	3.215	0.3665	----	512.8654	4.0100	2.2444	3.627	0.3917	----						
1090.1785	3.8300	1.9514	3.095	0.3666	----	513.6997	3.9800	2.2464	3.505	0.3919	----						
1090.9736	3.8000	1.9499	2.977	0.3666	----	514.4103	3.9500	2.2470	3.384	0.3921	----						
1091.6712	3.7700	1.9472	2.859	0.3666	----	515.0256	3.9200	2.2461	3.265	0.3923	----						
1092.3456	3.7400	1.9429	2.744	0.3667	----	515.5681	3.8900	2.2441	3.147	0.3924	----						
1093.5891	3.7100	1.9264	2.640	0.3667	2.1899	516.0413	3.8600	2.2410	3.030	0.3924	----						
1095.0344	3.6939	1.9110	2.591	0.3667	2.0330	516.4606	3.8300	2.2369	2.914	0.3925	----						
1097.4168	3.6854	1.9600	2.508	0.3667	1.6142	516.8293	3.8000	2.2326	2.799	0.3926	0.0004*						
1099.5077	3.6819	2.0100	2.444	0.3667	1.3569	517.1656	3.7700	2.2273	2.684	0.3927	0.0114*						
1101.5431	3.6795	2.0600	2.385	0.3667	1.1891	517.3480	3.7532	2.2247	2.620	0.3927	0.0338*						
1103.5698	3.6772	2.1100	2.326	0.3667	0.9988	517.5434	3.7482	2.2500	2.574	0.3927	0.1569*						
1105.5709	3.6754	2.1600	2.268	0.3667	0.8536	517.5746	3.7552	2.2664	2.586	0.3928	0.1723*						
1107.5373	3.6731	2.2100	2.209	0.3667	0.0009*												

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>
<i>M</i> = 3.50 <i>Y</i> = 0.10 <i>Z</i> = 0.00001											
0.0000	4.2412	2.0872	4.806	0.9000*	0.4252*	0.0000	3.7790	-0.1364	4.591	0.8000*	0.0151*
48.7661	4.2447	2.1285	4.778	0.8000*	0.4025*	1399.8847	3.7837	-0.0968	4.570	0.7000*	0.8999
87.2806	4.2475	2.1654	4.753	0.7000*	0.3333*	2623.9171	3.7880	-0.0587	4.549	0.6000*	---
119.5914	4.2485	2.1984	4.724	0.6000*	0.3063*	3816.9679	3.7923	-0.0177	4.525	0.5000*	---
147.6969	4.2472	2.2281	4.689	0.5000*	0.3168*	4976.6534	3.7969	0.0267	4.499	0.4000*	---
175.5720	4.2437	2.2591	4.644	0.4000*	0.2840*	6107.5692	3.8017	0.0756	4.470	0.3000*	---
196.6382	4.2382	2.2834	4.598	0.3000*	0.2674*	7271.4945	3.8073	0.1339	4.434	0.2000*	---
214.0526	4.2315	2.3047	4.550	0.2000*	0.2420*	8783.8728	3.8171	0.2307	4.376	0.1000*	---
228.3936	4.2254	2.3242	4.506	0.1000*	0.2100*	10038.9392	3.8284	0.3428	4.309	0.0500*	---
232.6191	4.2248R	2.3314	4.496	0.0664*	0.1914*	11154.2621	3.8397	0.4926	4.205	0.0200*	---
234.4992	4.2259	2.3358	4.496	0.0500*	0.1829*	11474.8323	3.8423	0.5491	4.159	0.0100*	---
237.8644	4.2314	2.3473	4.507	0.0200*	0.1504*	11718.0198	3.8434T	0.5989	4.113	0.0012*	---
238.9235	4.2369	2.3564	4.520	0.0100*	0.1175*	11984.5034	3.8403	0.6683	4.031	0.0000*	---
239.8705	4.2442B	2.3742	4.531	0.0014*	0.0013*	12187.6027	3.8276	0.7400	3.909	0.2111	---
243.2433	4.2404	2.3941	4.496	0.0000*	---	12314.4139	3.8000	0.8046	3.734	0.2196	---
250.9956	4.2351	2.4200	4.449	0.3672	---	12376.9381	3.7700	0.8496	3.569	0.2237	---
258.7294	4.2246	2.4500	4.377	0.4173	---	12434.9721	3.7400	0.9021	3.396	0.2271	0.8991
264.4611	4.1986	2.4800	4.243	0.4268	---	12509.1515	3.7121	0.9800	3.207	0.2310	0.8491
266.5323	4.1700	2.4939	4.114	0.4269	---	12560.0202	3.7023	1.0600	3.088	0.2347	0.7560
267.7458	4.1400	2.5023	3.986	0.4287	---	12601.5584	3.6975	1.1400	2.988	0.2403	0.6797
268.5983	4.1100	2.5071	3.861	0.4302	---	12638.6014	3.6935	1.2200	2.893	0.2486	0.6234
269.2563	4.0800	2.5098	3.739	0.4309	---	12670.8515	3.6905	1.3000	2.801	0.2588	0.5698
269.7994	4.0500	2.5108	3.618	0.4313	---	12698.0182	3.6872	1.3800	2.707	0.2697	0.5342
270.1134	4.0302	2.5104	3.539	0.4316	0.0015*	12711.9076	3.6858	1.4262	2.656	0.2760	0.5121
270.5314	4.0183	2.5374	3.464	0.4318	0.1402*						
<i>M</i> = 4.40 <i>Y</i> = 0.10 <i>Z</i> = 0.00001											
0.0000	4.3086	2.4329	4.829	0.9000*	0.7286*	0.0000	3.8504	0.2621	4.565	0.8000*	0.0301*
31.1216	4.3099	2.4764	4.791	0.8000*	0.7738*	748.1288	3.8574	0.3027	4.552	0.7000*	0.0049*
56.9810	4.3094	2.5156	4.750	0.7000*	0.6913*	1351.6949	3.8633	0.3384	4.541	0.6000*	---
78.7239	4.3069	2.5514	4.704	0.6000*	0.6218*	1903.3796	3.8689	0.3741	4.527	0.5000*	---
96.9910	4.3024	2.5837	4.653	0.5000*	0.5750*	2432.1779	3.8745	0.4118	4.512	0.4000*	---
112.4170	4.2961	2.6132	4.599	0.4000*	0.5100*	2963.9690	3.8806	0.4546	4.493	0.3000*	---
125.2238	4.2882	2.6396	4.541	0.3000*	0.4481*	3570.7886	3.8885	0.5122	4.468	0.2000*	---
135.6526	4.2790	2.6631	4.481	0.2000*	0.3846*	4427.5601	3.9025	0.6189	4.417	0.1000*	---
144.0220	4.2706	2.6843	4.426	0.1000*	0.3255*	5075.9925	3.9151	0.7327	4.354	0.0500*	---
147.1287	4.2693R	2.6939	4.411	0.0566*	0.2923*	5482.2350	3.9232	0.8281	4.290	0.0200*	---
147.5575	4.2700	2.6958	4.412	0.0500*	0.2856*	5572.0836	3.9247	0.8519	4.273	0.0100*	---
149.4601	4.2756	2.7062	4.424	0.0200*	0.2450*	5777.6212	3.9266T	0.9185	4.214	0.0002*	---
150.0514	4.2814	2.7139	4.440	0.0100*	0.2080*	5861.2361	3.9257	0.9520	4.176	0.0000*	---
150.5844	4.2920B	2.7325	4.463	0.0010*	0.268*	5995.8793	3.9172	1.0200	4.075	0.2396	---
151.0903	4.2857	2.7466	4.424	0.0000*	---	6089.7557	3.8907	1.0900	3.898	0.2515	---
153.2328	4.2772	2.7700	4.366	0.5852	---	6116.1312	3.8700	1.1183	3.787	0.2546	---
156.0037	4.2538	2.8000	4.243	0.5852	---	6138.3938	3.8400	1.1473	3.638	0.2570	---
156.9051	4.2300	2.8128	4.135	0.5852	---	6153.2049	3.8100	1.1693	3.496	0.2584	---
157.4988	4.2000	2.8214	4.006	0.5852	---	6164.5048	3.7800	1.1870	3.359	0.2594	---
157.8898	4.1700	2.8261	3.882	0.5859	---	6176.4360	3.7500	1.2059	3.220	0.2603	1.0999
158.1764	4.1400	2.8286	3.759	0.5864	---	6196.4112	3.7200	1.2338	3.072	0.2616	1.0895
158.3352	4.1195	2.8290	3.677	0.5865	---	6227.5221	3.7004	1.3000	2.927	0.2633	0.9394
158.5873	4.0938	2.8507	3.552	0.5867	0.1331*	6246.9150	3.6948	1.3700	2.835	0.2650	0.8240
<i>M</i> = 0.70 <i>Y</i> = 0.20 <i>Z</i> = 0.00001											
0.0000	3.7150	-0.6504	4.740	0.8000*	0.0006*	0.0000	3.9544	0.7178	4.630	0.8000*	0.0631*
3152.1384	3.7188	-0.6150	4.720	0.7000*	0.6818	369.8811	3.9606	0.7585	4.615	0.7000*	0.0350*
6254.0885	3.7230	-0.5765	4.698	0.6000*	0.6863	669.3602	3.9657	0.7946	4.599	0.6000*	0.0159*
9337.3835	3.7275	-0.5332	4.673	0.5000*	0.6886	909.8663	3.9702	0.8272	4.584	0.5000*	---
12419.1501	3.7326	-0.4840	4.644	0.4000*	0.6918	1128.6111	3.9749	0.8608	4.569	0.4000*	---
15521.1389	3.7382	-0.4264	4.608	0.3000*	0.6941	1372.1397	3.9810	0.9040	4.550	0.3000*	---
18674.4073	3.7444	-0.3571	4.564	0.2000*	0.6961	1668.9393	3.9899	0.9673	4.523	0.2000*	---
22157.7252	3.7518	-0.2607	4.497	0.1000*	0.6980	2053.7696	4.0040	1.0737	4.473	0.1000*	---
24772.1024	3.7579	-0.1632	4.424	0.0500*	0.6990	2256.2185	4.0118	1.1438	4.434	0.0500*	---
27643.6918	3.7645	-0.0019	4.289	0.0200*	0.6997	2345.7781	4.0147	1.1773	4.412	0.0200*	---
28998.4246	3.7657	0.1162	4.176	0.0100*	0.6998	2379.3976	4.0158	1.1915	4.402	0.0100*	---
29088.0931	3.7657T	0.1253	4.167	0.0093*	0.6998	2496.1329	4.0184	1.2500	4.354	0.0002*	---
29812.4587	3.7645	0.2100	4.077	0.0019*	0.6998	2537.5897	4.0185T	1.2749	4.330	0.0000*	---
30363.6807	3.7604	0.2955	3.976	0.0000*	0.6998	2556.3959	4.0182	1.2872	4.316	0.0000*	---
30754.9630	3.7521	0.3800	3.858	0.1785	0.6994	2625.5908	4.0140	1.3400	4.246	0.2704	---
31035.5125	3.7374	0.4700	3.709	0.1870	0.6963	2683.3309	3.9993	1.4000	4.128	0.2859	---
31223.1248	3.7218	0.5600	3.556	0.1932	0.6767	2716.2703	3.9700	1.4512	3.959	0.2943	---
31359.8340	3.7110	0.6500	3.423	0.1988	0.6343	2729.6360	3.9400	1.4806	3.810	0.2972	---
31471.6293	3.7051	0.7400	3.310	0.2057	0.5852	2737.7673	3.9100	1.5016	3.669	0.2987	---
31570.1681	3.7008	0.8300	3.203	0.2148	0.5454	2743.6143	3.8800	1.5177	3.533	0.2996	---
31656.9178	3.6975	0.9200	3.099	0.2255	0.5147	2748.0789	3.8500	1.5301	3.400	0.3002	---
31730.7276	3.6945	1.0100	2.997	0.2369	0.4888	2751.6919	3.8200	1.5397	3.271	0.3005	---
31792.5140	3.6915	1.1000	2.896	0.2486	0.4714						
31841.9393	3.6885	1.1864	2.797	0.2598	0.4498						

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
2754.7107	3.7900	1.5471	3.143	0.3008	----	944.3866	3.6955	1.9459	2.510	0.3502	1.8136
2757.3880	3.7600	1.5528	3.018	0.3011	----	946.5430	3.6873	1.9900	2.433	0.3503	1.4614
2761.2074	3.7300	1.5581	2.892	0.3013	1.3995	948.4421	3.6837	2.0400	2.369	0.3504	1.2333
2765.0037	3.7132	1.5580	2.825	0.3015	1.3863	950.2728	3.6808	2.0900	2.308	0.3505	1.0638
2775.9337	3.6936	1.6100	2.695	0.3019	1.1066	952.0654	3.6785	2.1400	2.248	0.3507	0.9387
2782.2945	3.6892	1.6700	2.617	0.3021	0.9548	953.8015	3.6762	2.1900	2.189	0.3515	0.0023*
2788.2036	3.6863	1.7300	2.545	0.3024	0.8364	955.1769	3.6753	2.2183	2.157	0.3549	0.1339*
2793.8248	3.6833	1.7900	2.473	0.3031	0.7377	<i>M</i> = 2.20 <i>Y</i> = 0.20 <i>Z</i> = 0.00001					
2799.1363	3.6808	1.8500	2.404	0.3054	0.6600	0.0000	4.1308	1.5100	4.740	0.8000*	0.1901*
2802.9977	3.6793	1.8959	2.352	0.3095	0.6088	102.8372	4.1364	1.5520	4.721	0.7000*	0.1095*
<i>M</i> = 1.75 <i>Y</i> = 0.20 <i>Z</i> = 0.00001						176.3947	4.1419	1.5885	4.706	0.6000*	0.0124*
0.0000	4.0443	1.1180	4.687	0.8000*	0.1165*	232.9967	4.1470	1.6210	4.694	0.5000*	----
198.4911	4.0494	1.1585	4.667	0.7000*	0.0773*	286.9701	4.1521	1.6550	4.680	0.4000*	----
352.4836	4.0543	1.1949	4.650	0.6000*	0.0274*	337.6874	4.1566	1.6891	4.664	0.3000*	----
469.8190	4.0591	1.2276	4.636	0.5000*	----	395.6083	4.1598	1.7278	4.638	0.2000*	0.0232*
583.6563	4.0646	1.2643	4.621	0.4000*	----	456.0854	4.1593R	1.7679	4.596	0.1134*	0.0455*
709.4172	4.0717	1.3111	4.603	0.3000*	----	460.5120	4.1594	1.7715	4.593	0.1000*	0.0434*
847.1078	4.0804	1.3711	4.578	0.2000*	----	476.5246	4.1609	1.7875	4.583	0.0500*	0.0262*
975.2114	4.0880	1.4341	4.545	0.1000*	----	485.7638	4.1637	1.8025	4.579	0.0200*	0.0021*
1023.0199	4.0899	1.4582	4.529	0.0500*	----	490.7138	4.1644	1.8091	4.575	0.0100*	----
1054.5892	4.0911	1.4759	4.516	0.0200*	----	519.2516	4.1649	1.8400	4.546	0.0005*	----
1072.6258	4.0918	1.4869	4.508	0.0100*	----	529.9664	4.1650B	1.8528	4.534	0.0001*	----
1133.9046	4.0941	1.5300	4.474	0.0004*	----	554.1987	4.1647	1.8854	4.500	0.0000*	----
1184.4411	4.0949T	1.5732	4.434	0.0000*	----	575.8498	4.1632	1.9200	4.460	0.2928	----
1190.7852	4.0948	1.5793	4.427	0.0000*	----	596.7150	4.1588	1.9600	4.402	0.3170	----
1229.1951	4.0930	1.6200	4.379	0.2865	----	613.1665	4.1500	2.0000	4.327	0.3368	----
1266.5362	4.0862	1.6700	4.302	0.3064	----	625.3346	4.1323	2.0400	4.216	0.3515	----
1293.9161	4.0704	1.7200	4.189	0.3210	----	633.4571	4.0938	2.0800	4.022	0.3602	----
1306.7979	4.0500	1.7531	4.074	0.3275	----	636.4159	4.0600	2.0992	3.868	0.3626	----
1315.1799	4.0200	1.7821	3.925	0.3312	----	638.6286	4.0200	2.1140	3.693	0.3639	----
1319.7774	3.9900	1.8014	3.786	0.3328	----	640.1983	3.9800	2.1235	3.523	0.3647	----
1322.9547	3.9600	1.8156	3.652	0.3337	----	641.4088	3.9400	2.1290	3.358	0.3651	----
1325.3726	3.9300	1.8262	3.521	0.3343	----	642.3856	3.9000	2.1317	3.195	0.3653	----
1327.2913	3.9000	1.8341	3.393	0.3347	----	643.1899	3.8600	2.1318	3.035	0.3655	----
1328.8551	3.8700	1.8396	3.268	0.3349	----	643.8604	3.8200	2.1298	2.877	0.3656	----
1330.1601	3.8400	1.8433	3.144	0.3351	----	644.4232	3.7800	2.1259	2.721	0.3657	----
1331.2651	3.8100	1.8455	3.022	0.3352	----	644.9217	3.7400	2.1195	2.567	0.3658	----
1332.2255	3.7800	1.8463	2.901	0.3353	----	645.9964	3.7000	2.0841	2.443	0.3659	2.1525
1333.1035	3.7500	1.8456	2.782	0.3354	----	646.2879	3.6944	2.0752	2.429	0.3660	2.0779
1334.5027	3.7200	1.8400	2.667	0.3355	1.7482	647.5835	3.6859	2.1100	2.360	0.3661	0.0003*
1337.1622	3.6965	1.8241	2.589	0.3356	1.6114	648.7404	3.6844	2.1448	2.320	0.3662	0.1932*
1340.2116	3.6886	1.8700	2.512	0.3357	1.3144	<i>M</i> = 2.50 <i>Y</i> = 0.20 <i>Z</i> = 0.00001					
1342.8328	3.6856	1.9200	2.450	0.3357	1.1464	0.0000	4.1773	1.7220	4.769	0.8000*	0.2312*
1345.4042	3.6825	1.9700	2.387	0.3358	0.9913	70.3556	4.1833	1.7648	4.751	0.7000*	0.1319*
1347.8956	3.6804	2.0200	2.329	0.3359	0.8929	122.7132	4.1889	1.8021	4.736	0.6000*	0.0647*
1350.0203	3.6783	2.0636	2.277	0.3361	0.7979	166.3812	4.1934	1.8361	4.720	0.5000*	0.0538*
<i>M</i> = 1.95 <i>Y</i> = 0.20 <i>Z</i> = 0.00001						207.0937	4.1964	1.8687	4.699	0.4000*	0.0724*
0.0000	4.0858	1.3054	4.712	0.8000*	0.1495*	255.3631	4.1970	1.9071	4.663	0.3000*	0.1012*
145.3108	4.0909	1.3462	4.692	0.7000*	0.0977*	299.6128	4.1936	1.9432	4.614	0.2000*	0.1283*
255.2398	4.0961	1.3831	4.676	0.6000*	0.0150*	326.6312	4.1904	1.9679	4.576	0.1000*	0.1141*
337.3984	4.1011	1.4158	4.663	0.5000*	----	329.2621	4.1902R	1.9706	4.572	0.0890*	0.1109*
420.3240	4.1070	1.4533	4.649	0.4000*	----	337.7724	4.1918	1.9827	4.567	0.0500*	0.0952*
507.0610	4.1137	1.4979	4.631	0.3000*	----	343.9734	4.1972	1.9991	4.572	0.0200*	0.0597*
590.6922	4.1200	1.5452	4.609	0.2000*	----	345.9665	4.2010	2.0107	4.576	0.0100*	0.0273*
656.5837	4.1234	1.5831	4.585	0.1000*	----	347.7749	4.2032B	2.0219	4.573	0.0031*	----
684.6011	4.1244	1.5999	4.572	0.0500*	----	362.9018	4.2017	2.0500	4.539	0.0001*	----
707.1335	4.1253	1.6149	4.561	0.0200*	----	372.4549	4.2006	2.0666	4.518	0.0000*	----
721.4116	4.1259	1.6255	4.553	0.0100*	----	384.5642	4.1988	2.0900	4.487	0.2931	----
774.4933	4.1283	1.6700	4.517	0.0004*	----	397.7538	4.1955	2.1200	4.444	0.3178	----
821.5453	4.1290	1.7189	4.471	0.0000*	----	408.5699	4.1901	2.1500	4.392	0.3385	----
823.8210	4.1290T	1.7215	4.469	0.2679	----	417.1911	4.1806	2.1800	4.325	0.3554	----
861.0690	4.1267	1.7700	4.411	0.2954	----	423.7646	4.1635	2.2100	4.226	0.3683	----
890.9290	4.1195	1.8200	4.332	0.3183	----	427.5070	4.1400	2.2332	4.109	0.3749	----
912.5119	4.1028	1.8700	4.216	0.3350	----	429.8901	4.1100	2.2514	3.971	0.3783	----
922.5902	4.0800	1.9035	4.091	0.3423	----	431.3779	4.0800	2.2635	3.839	0.3800	----
928.3643	4.0500	1.9294	3.945	0.3459	----	432.4824	4.0500	2.2719	3.710	0.3809	----
931.5938	4.0200	1.9466	3.808	0.3475	----	433.3552	4.0200	2.2778	3.584	0.3816	----
933.8766	3.9900	1.9592	3.675	0.3484	----	434.0789	3.9900	2.2815	3.461	0.3820	----
935.6129	3.9600	1.9683	3.546	0.3490	----	434.6982	3.9600	2.2836	3.339	0.3822	----
936.9929	3.9300	1.9749	3.419	0.3493	----	435.2376	3.9300	2.2842	3.218	0.3824	----
938.1349	3.9000	1.9794	3.295	0.3496	----	435.7080	3.9000	2.2835	3.099	0.3826	----
939.0987	3.8700	1.9821	3.172	0.3497	----	436.1227	3.8700	2.2816	2.981	0.3827	----
939.9261	3.8400	1.9834	3.051	0.3499	----	436.4838	3.8400	2.2787	2.863	0.3829	----
940.6378	3.8100	1.9834	2.931	0.3499	----	436.8057	3.8100	2.2753	2.747	0.3831	0.0020*
941.2641	3.7800	1.9822	2.812	0.3500	----	437.0986	3.7800	2.2712	2.631	0.3832	0.0204*
941.8316	3.7500	1.9797	2.695	0.3501	----	437.1659	3.7730	2.2707	2.604	0.3832	0.0301*
942.6757	3.7200	1.9717	2.583	0.3501	1.9491	437.3643	3.7707	2.3000	2.565	0.3834	0.1568*

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
437.3991	3.7816	2.3159	2.593	0.3835	0.1730*	41646.3469	3.7054	0.8400	3.106	0.2139	0.4653
	$M = 2.80$	$Y = 0.20$	$Z = 0.00001$			41730.9547	3.7013	0.9400	2.990	0.2256	0.4480
						41799.9311	3.6978	1.0400	2.876	0.2376	0.4346
						41855.6997	3.6945	1.1400	2.763	0.2495	0.4255
0.0000	4.2172	1.9056	4.795	0.8000*	0.2647*	41900.7892	3.6908	1.2400	2.648	0.2613	0.4158
53.1801	4.2230	1.9495	4.774	0.7000*	0.2179*	41901.3608	3.6907	1.2414	2.646	0.2614	0.4158
95.2474	4.2273	1.9878	4.753	0.6000*	0.1771*						
131.3232	4.2296	2.0220	4.728	0.5000*	0.1833*						
166.7421	4.2293	2.0565	4.692	0.4000*	0.1840*						
205.7539	4.2256	2.0966	4.637	0.3000*	0.2197*						
229.9091	4.2202	2.1227	4.590	0.2000*	0.1967*	1942.3074	3.7611	-0.3729	4.647	0.6000*	0.6985
249.4554	4.2150	2.1464	4.545	0.1000*	0.1735*	3766.9881	3.7657	-0.3292	4.622	0.5000*	0.6991
255.4731	4.2147R	2.1555	4.535	0.0644*	0.1591*	5569.6242	3.7707	-0.2804	4.593	0.4000*	0.6994
257.7119	4.2159	2.1604	4.535	0.0500*	0.1498*	7354.5996	3.7760	-0.2252	4.559	0.3000*	0.6997
262.2166	4.2215	2.1742	4.543	0.0200*	0.1216*	9159.3638	3.7820	-0.1598	4.517	0.2000*	0.6999
263.6520	4.2269	2.1848	4.554	0.0100*	0.0919*	11298.8374	3.7903	-0.0619	4.452	0.1000*	---
264.7977	4.2333B	2.2030	4.562	0.0024*	0.0120*	13088.0171	3.7990	0.0537	4.372	0.0500*	---
271.8545	4.2301	2.2325	4.519	0.0000*	---	14862.5947	3.8107	0.2328	4.239	0.0200*	---
281.5624	4.2265	2.2600	4.477	0.3140	---	15507.5560	3.8159	0.3300	4.163	0.0100*	---
290.8592	4.2208	2.2900	4.425	0.3428	---	15939.0922	3.8193	0.4100	4.097	0.0009*	---
298.4742	4.2112	2.3200	4.356	0.3669	---	16052.8245	3.8196T	0.4357	4.072	0.0002*	---
304.1270	4.1935	2.3500	4.255	0.3837	---	16236.1597	3.8185	0.4831	4.020	0.0000*	---
307.0133	4.1700	2.3714	4.140	0.3914	---	16493.7267	3.8088	0.5700	3.895	0.1887	---
308.8335	4.1400	2.3876	4.004	0.3954	---	16671.1203	3.7842	0.6600	3.706	0.1984	---
309.9913	4.1100	2.3982	3.873	0.3973	---	16764.2946	3.7600	0.7314	3.538	0.2038	0.6999
310.8593	4.0800	2.4054	3.746	0.3985	---	16852.7040	3.7332	0.8200	3.342	0.2093	0.6963
311.5579	4.0500	2.4102	3.621	0.3992	---	16927.4666	3.7161	0.9100	3.184	0.2150	0.6647
312.1455	4.0200	2.4131	3.498	0.3998	---	16987.3353	3.7076	1.0000	3.060	0.2221	0.6182
312.6511	3.9900	2.4143	3.377	0.4002	---	17037.5553	3.7019	1.0900	2.947	0.2315	0.5713
313.0369	3.9644	2.4143	3.275	0.4006	0.0007*	17080.2422	3.6978	1.1800	2.840	0.2426	0.5369
313.5492	3.9439	2.4400	3.167	0.4013	0.1401*	17115.7547	3.6940	1.2700	2.735	0.2543	0.5026
313.5769	3.9486	2.4463	3.180	0.4013	0.1483*	17145.4648	3.6903	1.3600	2.631	0.2658	0.4829
						17161.1866	3.6881	1.4150	2.567	0.2728	0.4705
	$M = 3.50$	$Y = 0.20$	$Z = 0.00001$								
0.0000	4.2883	2.2521	4.829	0.8000*	0.4627*						
35.1281	4.2911	2.2986	4.794	0.7000*	0.5205*	0.0000	3.8319	0.0958	4.571	0.7000*	0.0213*
64.0904	4.2913	2.3392	4.754	0.6000*	0.4766*	864.4204	3.8391	0.1393	4.555	0.6000*	0.0033*
88.5493	4.2890	2.3760	4.708	0.5000*	0.4383*	1571.8962	3.8456	0.1785	4.542	0.5000*	---
109.2244	4.2845	2.4094	4.657	0.4000*	0.4099*	2232.9342	3.8522	0.2191	4.528	0.4000*	---
126.6374	4.2780	2.4397	4.601	0.3000*	0.3684*	2888.5005	3.8592	0.2645	4.511	0.3000*	---
140.6862	4.2701	2.4664	4.543	0.2000*	0.3196*	3613.9252	3.8682	0.3240	4.488	0.2000*	---
151.9643	4.2629	2.4906	4.489	0.1000*	0.2629*	4627.3036	3.8844	0.4329	4.443	0.1000*	---
153.8296	4.2621R	2.4951	4.482	0.0808*	0.2553*	5436.2577	3.9012	0.5584	4.385	0.0500*	---
156.6575	4.2625	2.5033	4.475	0.0500*	0.2375*	6004.3722	3.9151	0.6846	4.314	0.0200*	---
159.2072	4.2688	2.5155	4.488	0.0200*	0.2027*	6137.5287	3.9184	0.7192	4.293	0.0100*	---
160.0097	4.2749	2.5242	4.504	0.0100*	0.1698*	6357.9333	3.9229	0.7900	4.240	0.0003*	---
160.6718	4.2851B	2.5441	4.525	0.0017*	0.0477*	6462.7224	3.9236T	0.8322	4.201	0.0000*	---
161.7183	4.2804	2.5650	4.485	0.0000*	---	6478.0738	3.9235	0.8391	4.193	0.0000*	---
165.1098	4.2748	2.5900	4.438	0.4290	---	6611.9104	3.9185	0.9100	4.103	0.2191	---
168.9435	4.2639	2.6200	4.364	0.4491	---	6714.5535	3.8987	0.9900	3.944	0.2310	---
171.6980	4.2387	2.6500	4.233	0.4760	---	6760.4420	3.8700	1.0447	3.774	0.2364	---
172.8522	4.2100	2.6667	4.102	0.4835	---	6784.4867	3.8400	1.0822	3.616	0.2390	---
173.5549	4.1800	2.6771	3.971	0.4864	---	6801.0145	3.8100	1.1115	3.467	0.2407	---
174.0533	4.1500	2.6835	3.845	0.4877	---	6813.6531	3.7800	1.1358	3.323	0.2420	---
174.4359	4.1200	2.6870	3.721	0.4884	---	6827.9410	3.7500	1.1646	3.174	0.2434	0.9000
174.6330	4.1020	2.6881	3.648	0.4887	0.0010*	6853.9204	3.7200	1.2153	3.003	0.2460	0.8876
174.9375	4.0864	2.7103	3.564	0.4891	0.1301*	6884.3964	3.7040	1.2900	2.864	0.2500	0.7941
	$M = 0.55$	$Y = 0.30$	$Z = 0.00001$			6906.7395	3.6978	1.3700	2.760	0.2559	0.7088
0.0000	3.7010	-0.8984	4.827	0.7000*	0.5008	6925.6264	3.6934	1.4500	2.662	0.2645	0.6352
4393.1867	3.7043	-0.8634	4.805	0.6000*	0.5103	6941.6597	3.6898	1.5300	2.568	0.2747	0.5868
8821.9563	3.7082	-0.8232	4.781	0.5000*	0.5191	6960.8823	3.6842	1.6478	2.428	0.2902	0.5238
13318.3649	3.7130	-0.7751	4.752	0.4000*	0.5262						
17932.1818	3.7191	-0.7165	4.718	0.3000*	0.5326						
22750.2460	3.7269	-0.6416	4.674	0.2000*	0.5374	0.0000	3.9194	0.4834	4.620	0.7000*	0.0456*
28015.7301	3.7369	-0.5366	4.609	0.1000*	0.5424	477.8054	3.9267	0.5276	4.605	0.6000*	0.0235*
31655.8280	3.7451	-0.4371	4.542	0.0500*	0.5454	862.7119	3.9327	0.5672	4.589	0.5000*	0.0060*
35721.2823	3.7554	-0.2680	4.414	0.0200*	0.5482	1172.8622	3.9382	0.6036	4.575	0.4000*	---
37884.3866	3.7605	-0.1208	4.288	0.0100*	0.5491	1492.8910	3.9449	0.6470	4.558	0.3000*	---
38836.2220	3.7617	-0.0300	4.201	0.0057*	0.5493	1881.4251	3.9547	0.7102	4.534	0.2000*	---
39343.3286	3.7619T	0.0271	4.145	0.0026*	0.5495	2419.0253	3.9721	0.8260	4.488	0.1000*	---
39994.9810	3.7604	0.1200	4.046	0.0000*	0.5495	2764.7358	3.9858	0.9279	4.441	0.0500*	---
40130.9065	3.7596	0.1437	4.019	0.0000*	0.5495	2931.8399	3.9924	0.9854	4.410	0.0200*	---
40577.4101	3.7538	0.2400	3.900	0.1626	0.5491	2977.7343	3.9942	1.0028	4.400	0.0100*	---
40896.1215	3.7439	0.3400	3.760	0.1712	0.5475	3121.8371	3.9992	1.0700	4.352	0.0002*	---
41118.4255	3.7326	0.4400	3.615	0.1784	0.5413	3191.3140	4.0003	1.1107	4.316	0.0000*	---
41287.4645	3.7224	0.5400	3.474	0.1854	0.5264	3207.3822	4.0003T	1.1213	4.306	0.2281	---
41426.6073	3.7148	0.6400	3.344	0.1934	0.5044	3294.8866	3.9960	1.1900	4.220	0.2459	---
41545.2340	3.7097	0.7400	3.223	0.2029	0.4838	3356.0503	3.9799	1.2600	4.085	0.2589	---

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
3389.5171	3.9500	1.3192	3.906	0.2658	----	1107.3239	3.7400	1.9043	2.630	0.3220	----	
3404.1847	3.9200	1.3554	3.750	0.2686	----	1109.0006	3.7100	1.8956	2.519	0.3224	1.5358	
3413.6719	3.8900	1.3825	3.603	0.2702	----	1110.3064	3.6989	1.8881	2.482	0.3226	1.4546	
3420.6956	3.8600	1.4042	3.461	0.2713	----	1113.9552	3.6886	1.9500	2.379	0.3234	1.1133	
3426.1668	3.8300	1.4216	3.324	0.2721	----	1117.0420	3.6839	2.0200	2.290	0.3251	0.9281	
3430.6539	3.8000	1.4359	3.190	0.2727	----	1119.8641	3.6801	2.0900	2.205	0.3303	0.8116	
3434.5142	3.7700	1.4478	3.058	0.2732	----	1122.4988	3.6770	2.1600	2.123	0.3380	0.7037	
3439.4643	3.7400	1.4621	2.924	0.2739	1.0999	1124.9876	3.6744	2.2300	2.042	0.3470	0.6378	
3450.1630	3.7100	1.4854	2.780	0.2752	1.0668	1127.3053	3.6715	2.3000	1.961	0.3571	0.5908	
3462.8265	3.6972	1.5500	2.665	0.2770	0.8926	1128.8257	3.6691	2.3431	1.908	0.3648	0.1188*	
3471.8257	3.6920	1.6200	2.574	0.2795	0.7809							
3479.8883	3.6884	1.6900	2.489	0.2845	0.6983					<i>M</i> = 1.75	<i>Y</i> = 0.30	
3487.3138	3.6849	1.7600	2.405	0.2920	0.6314					<i>Z</i> = 0.00001		
3493.8938	3.6819	1.8300	2.323	0.3010	0.5803	0.0000	4.1053	1.3169	4.732	0.7000*	0.1308*	
3495.2887	3.6814	1.8461	2.305	0.3031	0.5728	118.6655	4.1123	1.3622	4.715	0.6000*	0.0432*	
						201.8057	4.1188	1.4004	4.702	0.5000*	----	
							277.6697	4.1257	1.4405	4.690	0.4000*	----
							354.7381	4.1334	1.4864	4.675	0.3000*	----
0.0000	4.0188	0.9258	4.680	0.7000*	0.0915*	425.7341	4.1401	1.5320	4.656	0.2000*	----	
237.9845	4.0252	0.9705	4.661	0.6000*	0.0532*	480.0987	4.1434	1.5667	4.634	0.1000*	----	
417.8176	4.0312	1.0103	4.645	0.5000*	0.0046*	504.5055	4.1446	1.5833	4.622	0.0500*	----	
561.9079	4.0372	1.0480	4.631	0.4000*	----	525.6893	4.1459	1.5997	4.611	0.0200*	----	
720.6647	4.0453	1.0967	4.615	0.3000*	----	539.1771	4.1469	1.6111	4.604	0.0100*	----	
903.9427	4.0562	1.1638	4.592	0.2000*	----	589.6127	4.1505	1.6600	4.569	0.0004*	----	
1101.8300	4.0695	1.2522	4.556	0.1000*	----	631.1008	4.1527	1.7100	4.528	0.0000*	----	
1180.7479	4.0740	1.2902	4.536	0.0500*	----	634.8677	4.1529	1.7151	4.524	0.0000*	----	
1222.7413	4.0762	1.3121	4.523	0.0200*	----	658.1295	4.1531T	1.7495	4.490	0.2576	----	
1245.2816	4.0775	1.3254	4.515	0.0100*	----	681.2071	4.1515	1.7900	4.443	0.2782	----	
1324.4128	4.0817	1.3800	4.477	0.0003*	----	703.8101	4.1459	1.8400	4.371	0.2996	----	
1381.6231	4.0838	1.4294	4.436	0.0000*	----	720.4675	4.1334	1.8900	4.271	0.3163	----	
1400.6832	4.0839T	1.4486	4.417	0.2493	----	731.7876	4.1077	1.9400	4.118	0.3275	----	
1444.1832	4.0817	1.5000	4.357	0.2678	----	737.8524	4.0700	1.9797	3.928	0.3330	----	
1481.9456	4.0726	1.5600	4.261	0.2846	----	741.0967	4.0300	2.0061	3.741	0.3353	----	
1507.6982	4.0510	1.6200	4.115	0.2961	----	743.2585	3.9900	2.0242	3.563	0.3367	----	
1517.5372	4.0300	1.6532	3.997	0.3003	----	744.8591	3.9500	2.0369	3.390	0.3375	----	
1524.9336	4.0000	1.6851	3.845	0.3031	----	746.1111	3.9100	2.0455	3.222	0.3380	----	
1529.5388	3.9700	1.7085	3.702	0.3047	----	747.1240	3.8700	2.0509	3.056	0.3384	----	
1532.9511	3.9400	1.7268	3.564	0.3057	----	747.9573	3.8300	2.0536	2.894	0.3388	----	
1535.6056	3.9100	1.7411	3.429	0.3064	----	748.6495	3.7900	2.0542	2.733	0.3390	----	
1537.7360	3.8800	1.7523	3.298	0.3069	----	749.2475	3.7500	2.0524	2.575	0.3393	----	
1539.4847	3.8500	1.7610	3.169	0.3072	----	750.3058	3.7100	2.0395	2.428	0.3397	1.7426	
1540.9604	3.8200	1.7676	3.043	0.3075	----	751.3541	3.6957	2.0221	2.388	0.3401	1.6220	
1542.2110	3.7900	1.7724	2.918	0.3078	----	753.3666	3.6872	2.0700	2.306	0.3410	1.2784	
1543.3190	3.7600	1.7758	2.795	0.3080	----	754.9624	3.6838	2.1200	2.243	0.3429	1.0974	
1544.8078	3.7300	1.7781	2.672	0.3082	1.3997	756.4804	3.6808	2.1700	2.180	0.3466	0.0023*	
1547.5438	3.7058	1.7726	2.581	0.3086	1.3673	757.7232	3.6796	2.2003	2.145	0.3511	0.1581*	
1553.2431	3.6916	1.8300	2.467	0.3095	1.0529							
1556.8060	3.6868	1.8900	2.388	0.3104	0.9142					<i>M</i> = 1.95	<i>Y</i> = 0.30	
1560.1748	3.6837	1.9500	2.315	0.3128	0.8042					<i>Z</i> = 0.00001		
1563.3294	3.6814	2.0100	2.246	0.3178	0.7287	0.0000	4.1461	1.5012	4.758	0.7000*	0.1582*	
1566.3317	3.6785	2.0700	2.174	0.3246	0.6614	84.8382	4.1538	1.5478	4.742	0.6000*	0.0388*	
1566.6272	3.6782	2.0759	2.167	0.3253	0.6560	145.4118	4.1605	1.5864	4.730	0.5000*	0.0041*	
						197.0403	4.1665	1.6227	4.718	0.4000*	0.0007*	
						246.7024	4.1717	1.6594	4.702	0.3000*	0.0090*	
						323.0972	4.1753	1.7151	4.660	0.2000*	0.0556*	
0.0000	4.0587	1.1059	4.704	0.7000*	0.1161*	371.5244	4.1742R	1.7520	4.619	0.1074*	0.0689*	
173.6672	4.0652	1.1507	4.685	0.6000*	0.0562*	373.9428	4.1743	1.7543	4.617	0.1000*	0.0674*	
301.0404	4.0714	1.1900	4.670	0.5000*	----	389.7477	4.1761	1.7720	4.607	0.0500*	0.0530*	
408.9437	4.0780	1.2293	4.657	0.4000*	----	398.6850	4.1809	1.7914	4.606	0.0200*	0.0196*	
526.7691	4.0865	1.2792	4.641	0.3000*	----	401.7841	4.1831	1.8016	4.605	0.0100*	0.0001*	
652.5790	4.0966	1.3415	4.619	0.2000*	----	428.4021	4.1841	1.8400	4.571	0.0002*	----	
764.6834	4.1050	1.4028	4.592	0.1000*	----	431.6793	4.1842B	1.8447	4.566	0.0001*	----	
807.2777	4.1073	1.4268	4.577	0.0500*	----	451.8630	4.1842	1.8764	4.535	0.0000*	----	
836.2500	4.1088	1.4447	4.565	0.0200*	----	469.6482	4.1836	1.9100	4.499	0.2674	----	
854.1350	4.1100	1.4571	4.557	0.0100*	----	487.0305	4.1810	1.9500	4.448	0.2910	----	
930.2843	4.1146	1.5200	4.513	0.0002*	----	500.9675	4.1753	1.9900	4.386	0.3111	----	
970.4843	4.1162	1.5618	4.478	0.0000*	----	511.7058	4.1648	2.0300	4.304	0.3275	----	
992.7556	4.1163T	1.5888	4.451	0.2560	----	519.4859	4.1454	2.0700	4.186	0.3395	----	
1033.8371	4.1129	1.6500	4.376	0.2805	----	524.8414	4.1099	2.1100	4.004	0.3471	----	
1066.6447	4.0990	1.7200	4.251	0.3012	----	527.6453	4.0700	2.1370	3.817	0.3504	----	
1084.2789	4.0700	1.7797	4.075	0.3122	----	529.4385	4.0300	2.1550	3.639	0.3522	----	
1091.1113	4.0400	1.8140	3.921	0.3161	----	530.7515	3.9900	2.1673	3.467	0.3533	----	
1094.9846	4.0100	1.8378	3.777	0.3180	----	531.7839	3.9500	2.1755	3.299	0.3540	----	
1097.7217	3.9800	1.8558	3.639	0.3191	----	532.6220	3.9100	2.1805	3.134	0.3545	----	
1099.8305	3.9500	1.8698	3.505	0.3200	----	533.3143	3.8700	2.1828	2.972	0.3550	----	
1101.5097	3.9200	1.8807	3.374	0.3205	----	533.8894	3.8300	2.1828	2.811	0.3554	----	
1102.8766	3.8900	1.8889	3.246	0.3209	----	534.3717	3.7900	2.1808	2.654	0.3558	----	
1104.0240	3.8600	1.8951	3.119	0.3212	----	534.7817	3.7500	2.1767	2.498	0.3561	----	
1105.0054	3.8300	1.8996	2.995	0.3214	----	535.4235	3.7100	2.1608	2.353	0.3567	1.9448	
1105.8434	3.8000	1.9025	2.872	0.3217	----	536.1096	3.6941	2.1337	2.317	0.3573	1.8231	
1106.5817	3.7700	1.9041	2.751	0.3218	----	537.3636	3.6864	2.1700	2.250	0.3590	0.0535*	

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
537.5126	3.6872	2.1838	2.239	0.3596	0.1831*	107.0219	4.3234	2.7500	4.472	0.5238	—						
$M = 2.20 \quad Y = 0.30 \quad Z = 0.00001$																	
0.0000	4.1911	1.7036	4.787	0.7000*	0.1509*	112.8791	4.2600	2.8572	4.111	0.5545	—						
58.7283	4.1985	1.7489	4.772	0.6000*	0.0887*	113.3524	4.2300	2.8726	3.976	0.5591	—						
106.2414	4.2045	1.7890	4.756	0.5000*	0.0728*	113.6762	4.2000	2.8828	3.846	0.5613	—						
150.0438	4.2086	1.8272	4.734	0.4000*	0.0907*	113.9197	4.1700	2.8897	3.719	0.5623	—						
196.7420	4.2098	1.8684	4.698	0.3000*	0.1319*	114.1291	4.1400	2.8968	3.592	0.5631	0.0544*						
242.9776	4.2070	1.9112	4.644	0.2000*	0.1452*	114.2148	4.1393	2.9137	3.572	0.5634	0.1474*						
271.4392	4.2037	1.9409	4.601	0.1000*	0.1269*	$M = 0.55 \quad Y = 0.40 \quad Z = 0.00001$											
277.5340	4.2036R	1.9485	4.593	0.0745*	0.1219*	0.0000	3.7412	-0.6577	4.747	0.6000*	0.0021*						
283.0875	4.2050	1.9575	4.589	0.0500*	0.1085*	2599.6570	3.7467	-0.6121	4.723	0.5000*	0.5444						
291.4401	4.2158	1.9873	4.602	0.0100*	0.0473*	5153.2162	3.7526	-0.5616	4.697	0.4000*	0.5459						
292.9183	4.2196B	2.0030	4.602	0.0032*	—	7730.2389	3.7591	-0.5024	4.664	0.3000*	0.5475						
307.8415	4.2181	2.0400	4.559	0.0000*	—	10363.9930	3.7664	-0.4307	4.621	0.2000*	0.5487						
311.8492	4.2176	2.0485	4.549	0.0000*	—	13356.9202	3.7760	-0.3265	4.555	0.1000*	0.5495						
325.4098	4.2158	2.0800	4.510	0.2766	—	15702.8015	3.7853	-0.2124	4.478	0.0500*	0.5499						
339.3374	4.2122	2.1200	4.455	0.3068	—	18223.9894	3.7991	-0.0156	4.337	0.0200*	—						
349.9913	4.2050	2.1600	4.387	0.3309	—	19313.9052	3.8067	0.1234	4.228	0.0100*	—						
357.7902	4.1914	2.2000	4.292	0.3495	—	19892.4732	3.8120	0.2200	4.153	0.0023*	—						
363.1313	4.1647	2.2400	4.146	0.3620	—	20333.1085	3.8154	0.3200	4.066	0.0000*	—						
365.3316	4.1400	2.2624	4.024	0.3667	—	20385.3942	3.8154T	0.3345	4.052	0.0000*	—						
366.9411	4.1100	2.2813	3.885	0.3697	—	20665.2625	3.8113	0.4300	3.940	0.1716	—						
368.0690	4.0800	2.2949	3.752	0.3715	—	20863.6188	3.7962	0.5300	3.780	0.1812	—						
368.9476	4.0500	2.3048	3.622	0.3728	—	20993.6908	3.7726	0.6300	3.585	0.1884	—						
369.6666	4.0200	2.3123	3.494	0.3737	—	21087.7813	3.7504	0.7300	3.396	0.1947	0.5496						
370.2683	3.9900	2.3174	3.369	0.3744	—	21164.7949	3.7326	0.8300	3.225	0.2013	0.5454						
370.7893	3.9600	2.3209	3.246	0.3750	—	21231.1648	3.7207	0.9300	3.078	0.2095	0.5304						
371.2439	3.9300	2.3228	3.124	0.3757	—	21287.3750	3.7122	1.0300	2.943	0.2199	0.5091						
371.6398	3.9000	2.3233	3.003	0.3763	—	21334.2872	3.7063	1.1300	2.820	0.2318	0.4864						
371.9871	3.8700	2.3226	2.884	0.3768	—	21372.6901	3.7013	1.2300	2.700	0.2441	0.4676						
372.2917	3.8400	2.3209	2.766	0.3774	0.0001*	21403.8610	3.6969	1.3300	2.582	0.2563	0.4519						
372.5664	3.8100	2.3186	2.648	0.3779	0.0098*	21429.1287	3.6923	1.4300	2.464	0.2682	0.4394						
372.7177	3.7927	2.3175	2.580	0.3782	0.0267*	21435.6089	3.6916	1.4596	2.431	0.2717	0.4372						
372.9296	3.7945	2.3500	2.555	0.3788	0.1566*	$M = 0.70 \quad Y = 0.40 \quad Z = 0.00001$											
372.9495	3.8021	2.3579	2.577	0.3789	0.1605*	0.0000	3.8062	-0.1580	4.612	0.6000*	0.0134*						
$M = 2.80 \quad Y = 0.30 \quad Z = 0.00001$																	
0.0000	4.2729	2.0889	4.834	0.7000*	0.2947*	1155.7143	3.8121	-0.1101	4.588	0.5000*	0.0006*						
38.4739	4.2768	2.1373	4.801	0.6000*	0.3674*	2128.5849	3.8175	-0.0654	4.565	0.4000*	—						
70.3961	4.2774	2.1796	4.761	0.5000*	0.3535*	3082.0000	3.8236	-0.0158	4.540	0.3000*	—						
100.1663	4.2752	2.2224	4.710	0.4000*	0.3216*	4088.1864	3.8317	0.0457	4.511	0.2000*	—						
124.2005	4.2703	2.2599	4.653	0.3000*	0.2995*	5438.5412	3.8485	0.1540	4.469	0.1000*	—						
142.4218	4.2637	2.2908	4.596	0.2000*	0.2661*	6571.1580	3.8691	0.2862	4.420	0.0500*	—						
157.2287	4.2574	2.3195	4.542	0.1000*	0.2288*	7520.4752	3.8927	0.4584	4.342	0.0200*	—						
162.3378	4.2569R	2.3315	4.528	0.0594*	0.2070*	7767.8904	3.9000	0.5172	4.312	0.0100*	—						
163.4073	4.2580	2.3350	4.528	0.0500*	0.2017*	8051.9400	3.9084	0.6000	4.263	0.0003*	—						
166.7532	4.2641	2.3487	4.539	0.0200*	0.1739*	8204.2689	3.9118	0.6583	4.218	0.0000*	—						
167.8074	4.2703	2.3585	4.554	0.0100*	0.1437*	8298.6735	3.9124T	0.7026	4.176	0.1896	—						
168.7553	4.2807B	2.3840	4.570	0.0011*	0.0067*	8439.2313	3.9063	0.7900	4.064	0.2023	—						
170.7353	4.2764	2.4108	4.526	0.0000*	—	8532.1545	3.8851	0.8800	3.890	0.2115	—						
175.6512	4.2723	2.4400	4.481	0.3858	—	8572.6917	3.8600	0.9378	3.732	0.2158	—						
180.2268	4.2661	2.4700	4.426	0.3866	—	8600.2749	3.8300	0.9871	3.562	0.2187	—						
183.7887	4.2549	2.5000	4.351	0.3883	—	8619.5894	3.8000	1.0262	3.403	0.2209	—						
186.3417	4.2343	2.5300	4.239	0.4076	—	8636.1993	3.7700	1.0628	3.247	0.2228	—						
187.6891	4.2100	2.5507	4.121	0.4163	—	8661.5254	3.7400	1.1239	3.065	0.2262	0.6993						
188.6823	4.1800	2.5675	3.984	0.4218	—	8696.2901	3.7175	1.2100	2.889	0.2327	0.6803						
189.3667	4.1500	2.5787	3.853	0.4249	—	8725.8933	3.7063	1.3000	2.755	0.2427	0.6294						
189.9043	4.1200	2.5864	3.725	0.4269	—	8749.3036	3.6999	1.3900	2.639	0.2543	0.5795						
190.3669	4.0900	2.5922	3.599	0.4285	—	8768.1445	3.6951	1.4800	2.530	0.2661	0.5407						
190.7679	4.0600	2.5969	3.475	0.4299	0.0235*	8783.5807	3.6907	1.5700	2.422	0.2775	0.5104						
190.9859	4.0629	2.6188	3.464	0.4309	0.1386*	8796.3310	3.6868	1.6600	2.317	0.2887	0.4879						
190.9859	4.0629	2.6188	3.464	0.4309	0.1386*	8796.9297	3.6868	1.6647	2.312	0.2892	0.4879						
$M = 3.50 \quad Y = 0.30 \quad Z = 0.00001$																	
0.0000	4.3348	2.4234	4.844	0.7000*	0.6143*	0.0000	3.9071	0.3379	4.629	0.6000*	0.0396*						
26.3928	4.3353	2.4753	4.794	0.6000*	0.6580*	538.7424	3.9154	0.3870	4.613	0.5000*	0.0197*						
47.8354	4.3329	2.5209	4.739	0.5000*	0.5891*	958.1528	3.9225	0.4307	4.598	0.4000*	0.0005*						
65.3426	4.3282	2.5624	4.679	0.4000*	0.5289*	1319.0654	3.9300	0.4748	4.584	0.3000*	—						
79.5548	4.3214	2.5999	4.614	0.3000*	0.4598*	1750.9720	3.9409	0.5385	4.564	0.2000*	—						
90.8692	4.3132	2.6331	4.548	0.2000*	0.3913*	2363.5236	3.9613	0.6587	4.525	0.1000*	—						
99.6745	4.3055	2.6630	4.487	0.1000*	0.3284*	2790.9623	3.9802	0.7776	4.482	0.0500*	—						
101.3588	4.3044R	2.6694	4.477	0.0782*	0.3096*	3014.1862	3.9912	0.8537	4.449	0.0200*	—						
103.3368	4.3049	2.6781	4.470	0.0500*	0.2908*	3070.8926	3.9941	0.8753	4.439	0.0100*	—						
105.2883	4.3112	2.6909	4.482	0.0200*	0.2523*	3229.6874	4.0020	0.9500	4.397	0.0002*	—						
105.8928	4.3176	2.6992	4.499	0.0100*	0.2219*	3310.9283	4.0054	0.9993	4.361	0.0000*	—						
106.3971	4.3297B	2.7214	4.526	0.0016*	0.0756*	3371.0001	4.0065T	1.0438	4.321	0.2154	—						
106.5285	4.3280	2.7274	4.513	0.0000*	—												

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
3449.0772	4.0023	1.1200	4.228	0.2303	-----	819.1559	3.7300	2.0160	2.434	0.3193	1.3999
3502.8852	3.9858	1.2000	4.082	0.2412	-----	820.9038	3.7015	2.0061	2.330	0.3218	1.3450
3530.0207	3.9600	1.2619	3.917	0.2468	-----	823.7433	3.6890	2.0600	2.226	0.3273	1.0467
3545.3542	3.9300	1.3091	3.749	0.2499	-----	825.7320	3.6848	2.1200	2.150	0.3331	0.9071
3555.3558	3.9000	1.3451	3.593	0.2519	-----	827.5512	3.6819	2.1800	2.078	0.3398	0.8060
3562.7792	3.8700	1.3741	3.444	0.2534	-----	829.2696	3.6790	2.2400	2.006	0.3473	0.0030*
3568.6314	3.8400	1.3981	3.300	0.2545	-----	830.3205	3.6776	2.2674	1.973	0.3526	0.1333*
3573.4351	3.8100	1.4182	3.160	0.2556	-----	$M = 1.55 \quad Y = 0.40 \quad Z = 0.00001$					
3577.5096	3.7800	1.4353	3.023	0.2565	-----	407.3685	4.1697	1.6024	4.651	0.0200*	0.0006*
3581.8946	3.7500	1.4536	2.885	0.2575	0.9000	415.4930	4.1707	1.6119	4.646	0.0100*	-----
3591.7641	3.7200	1.4927	2.726	0.2602	0.8911	0.0000	4.1270	1.3248	4.758	0.6000*	0.0961*
3606.6645	3.7002	1.5700	2.570	0.2673	0.7716	93.6300	4.1365	1.3745	4.746	0.5000*	0.0050*
3616.3400	3.6941	1.6500	2.465	0.2755	0.6806	163.3177	4.1446	1.4172	4.736	0.4000*	-----
3624.4471	3.6898	1.7300	2.368	0.2851	0.6203	230.4341	4.1529	1.4628	4.723	0.3000*	-----
3631.4028	3.6863	1.8100	2.274	0.2953	0.5716	289.5880	4.1595	1.5051	4.708	0.2000*	0.0028*
3636.5257	3.6832	1.8767	2.195	0.3040	0.5444	374.2822	4.1644	1.5654	4.667	0.1000*	0.0280*
$M = 1.10 \quad Y = 0.40 \quad Z = 0.00001$						395.3691	4.1671	1.5865	4.656	0.0500*	0.0124*
0.0000	3.9914	0.7134	4.678	0.6000*	0.0715*	407.3685	4.1697	1.6024	4.651	0.0200*	0.0006*
294.4058	3.9992	0.7634	4.659	0.5000*	0.0331*	455.9260	4.1745	1.6600	4.613	0.0003*	-----
508.6293	4.0065	0.8070	4.645	0.4000*	-----	489.0832	4.1775	1.7100	4.575	0.0000*	-----
707.4739	4.0151	0.8554	4.631	0.3000*	-----	491.3065	4.1777	1.7138	4.572	0.0000*	-----
945.6298	4.0277	0.9258	4.611	0.2000*	-----	515.6414	4.1788	1.7600	4.530	0.2400	-----
1237.3192	4.0473	1.0379	4.577	0.1000*	-----	522.1020	4.1788T	1.7741	4.516	0.2470	-----
1370.5844	4.0567	1.0987	4.554	0.0500*	-----	540.3968	4.1771	1.8200	4.463	0.2679	-----
1435.0003	4.0609	1.1301	4.539	0.0200*	-----	555.8976	4.1716	1.8700	4.391	0.2872	-----
1463.0214	4.0628	1.1452	4.532	0.0100*	-----	567.3757	4.1605	1.9200	4.296	0.3028	-----
1574.2041	4.0707	1.2200	4.489	0.0001*	-----	575.4086	4.1398	1.9700	4.164	0.3142	-----
1624.8385	4.0737	1.2637	4.457	0.0000*	-----	580.9170	4.1044	2.0200	3.972	0.3219	-----
1681.8308	4.0751T	1.3258	4.400	0.2359	-----	583.6574	4.0700	2.0519	3.803	0.3256	-----
1730.9866	4.0703	1.4000	4.307	0.2535	-----	585.7137	4.0300	2.0782	3.616	0.3282	-----
1765.4400	4.0528	1.4800	4.157	0.2667	-----	587.2113	3.9900	2.0973	3.437	0.3300	-----
1780.4821	4.0300	1.5331	4.013	0.2727	-----	588.3714	3.9500	2.1113	3.263	0.3314	-----
1789.9991	4.0000	1.5786	3.847	0.2763	-----	590.0770	3.8700	2.1286	2.926	0.3339	-----
1795.7367	3.9700	1.6117	3.694	0.2784	-----	590.7177	3.8300	2.1331	2.762	0.3350	-----
1799.8222	3.9400	1.6379	3.548	0.2799	-----	591.2555	3.7900	2.1354	2.599	0.3360	-----
1802.9773	3.9100	1.6592	3.407	0.2810	-----	591.7179	3.7500	2.1356	2.439	0.3369	-----
1805.5145	3.8800	1.6765	3.269	0.2819	-----	592.5875	3.7100	2.1270	2.288	0.3387	1.5421
1807.6141	3.8500	1.6907	3.135	0.2827	-----	593.4461	3.6962	2.1140	2.245	0.3406	1.4430
1809.3855	3.8200	1.7024	3.003	0.2834	-----	595.1299	3.6872	2.1600	2.163	0.3452	1.1446
1810.8888	3.7900	1.7119	2.874	0.2841	-----	596.4792	3.6840	2.2100	2.101	0.3505	0.0141*
1812.2271	3.7600	1.7198	2.746	0.2847	-----	596.9044	3.6840	2.2189	2.092	0.3524	0.1712*
1814.2870	3.7300	1.7304	2.615	0.2856	1.0994	$M = 1.75 \quad Y = 0.40 \quad Z = 0.00001$					
1820.7084	3.7000	1.7627	2.463	0.2894	0.9857	302.8255	4.1975	1.7951	4.622	0.0500*	0.0950*
1826.1800	3.6918	1.8400	2.353	0.2957	0.8176	311.1744	4.2035	1.8148	4.627	0.0200*	0.0695*
1830.6762	3.6867	1.9200	2.253	0.3041	0.7159	0.0000	4.1743	1.5342	4.790	0.6000*	0.0740*
1834.6862	3.6829	2.0000	2.157	0.3135	0.6398	64.3330	4.1834	1.5826	4.778	0.5000*	0.0397*
1838.3287	3.6794	2.0800	2.063	0.3238	0.5868	117.6371	4.1908	1.6261	4.764	0.4000*	0.0367*
1841.6219	3.6759	2.1600	1.969	0.3348	0.5480	172.7539	4.1964	1.6722	4.741	0.3000*	0.0707*
1844.6109	3.6721	2.2400	1.874	0.3464	0.5258	235.6756	4.1979	1.7254	4.693	0.2000*	0.1072*
1846.9868	3.6692	2.3102	1.792	0.3570	0.5079	287.6421	4.1955	1.7747	4.634	0.1000*	0.1102*
$M = 1.40 \quad Y = 0.40 \quad Z = 0.00001$						289.4088	4.1954R	1.7766	4.632	0.0946*	0.1094*
0.0000	4.0873	1.1465	4.733	0.6000*	0.0905*	312.8255	4.1975	1.7951	4.622	0.0500*	0.0950*
132.4789	4.0962	1.1965	4.719	0.5000*	0.0100*	313.8274	4.2087	1.8295	4.633	0.0100*	0.0430*
229.2805	4.1043	1.2402	4.708	0.4000*	-----	316.4914	4.2128B	1.8518	4.627	0.0021*	-----
328.6142	4.1142	1.2922	4.695	0.3000*	-----	333.5602	4.2124	1.8900	4.587	0.0000*	-----
428.4361	4.1249	1.3519	4.678	0.2000*	-----	355.2233	4.2117	1.9400	4.534	0.2507	-----
510.0052	4.1322	1.4030	4.656	0.1000*	-----	368.7056	4.2100	1.9800	4.487	0.2751	-----
542.8484	4.1344	1.4243	4.644	0.0500*	-----	379.1711	4.2057	2.0200	4.430	0.2951	-----
568.7118	4.1366	1.4433	4.633	0.0200*	-----	387.2853	4.1978	2.0600	4.359	0.3120	-----
584.2872	4.1380	1.4561	4.626	0.0100*	-----	393.3674	4.1845	2.1000	4.265	0.3254	-----
641.1717	4.1434	1.5100	4.594	0.0004*	-----	397.7673	4.1625	2.1400	4.137	0.3353	-----
690.5901	4.1479	1.5700	4.552	0.0000*	-----	400.9899	4.1279	2.1800	3.959	0.3422	-----
691.0884	4.1479	1.5707	4.551	0.0000*	-----	402.9287	4.0900	2.2087	3.779	0.3462	-----
728.8041	4.1496	1.6300	4.499	0.2410	-----	404.3293	4.0500	2.2303	3.597	0.3489	-----
735.6276	4.1496T	1.6426	4.486	0.2462	-----	405.3784	4.0100	2.2458	3.422	0.3509	-----
761.7992	4.1468	1.7000	4.418	0.2670	-----	406.2142	3.9700	2.2568	3.251	0.3527	-----
781.7542	4.1379	1.7600	4.322	0.2845	-----	406.9004	3.9300	2.2644	3.083	0.3543	-----
795.3765	4.1118	1.8200	4.185	0.2973	-----	407.4696	3.8900	2.2691	2.918	0.3558	-----
804.2162	4.0826	1.8800	3.981	0.3056	-----	407.9456	3.8500	2.2716	2.756	0.3572	-----
807.9934	4.0500	1.9145	3.816	0.3091	-----	408.3429	3.8100	2.2717	2.596	0.3584	-----
810.9253	4.0100	1.9449	3.626	0.3116	-----	408.6785	3.7700	2.2703	2.437	0.3595	-----
813.0039	3.9700	1.9670	3.443	0.3133	-----	408.9925	3.7300	2.2660	2.281	0.3606	1.7500
814.5862	3.9300	1.9835	3.267	0.3146	-----	409.8343	3.6959	2.2336	2.177	0.3637	0.0239*
815.8331	3.8900	1.9957	3.095	0.3158	-----	410.0653	3.6939	2.2700	2.133	0.3648	0.1566*
816.8491	3.8500	2.0046	2.926	0.3168	-----	410.0947	3.6953	2.2910	2.118	0.3650	0.1726*
817.6891	3.8100	2.0106	2.760	0.3177	-----						
818.3954	3.7700	2.0143	2.596	0.3184	-----						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$					
$M = 2.20 \quad Y = 0.40 \quad Z = 0.00001$																
0.0000	4.2560	1.9092	4.842	0.6000*	0.1816*	0.0000	3.6836	-0.8452	4.809	0.8999*	0.0012*					
43.3489	4.2610	1.9606	4.810	0.5000*	0.2568*	4848.5671	3.6857	-0.8183	4.791	0.8000*	0.6287					
82.5657	4.2625	2.0096	4.767	0.4000*	0.2568*	9638.4292	3.6881	-0.7890	4.771	0.7000*	0.6367					
113.5337	4.2602	2.0512	4.716	0.3000*	0.2417*	14425.9229	3.6908	-0.7556	4.748	0.6000*	0.6474					
139.1035	4.2556	2.0887	4.660	0.2000*	0.2207*	19265.6478	3.6940	-0.7169	4.722	0.5000*	0.6555					
159.5838	4.2508	2.1228	4.607	0.1000*	0.1882*	24160.9909	3.6980	-0.6712	4.693	0.4000*	0.6652					
164.2497	4.2504R	2.1320	4.596	0.0733*	0.1778*	29175.3649	3.7030	-0.6163	4.658	0.3000*	0.6728					
168.0087	4.2518	2.1410	4.593	0.0500*	0.1686*	34403.4602	3.7091	-0.5472	4.613	0.2000*	0.6784					
172.6154	4.2581	2.1570	4.602	0.0200*	0.1435*	40086.3604	3.7169	-0.4524	4.549	0.1000*	0.6842					
174.0561	4.2645	2.1684	4.616	0.0100*	0.1141*	43923.0068	3.7228	-0.3677	4.488	0.0500*	0.6878					
175.2727	4.2748B	2.1974	4.629	0.0016*	0.0120*	48200.3782	3.7294	-0.2324	4.379	0.0200*	0.6912					
179.4594	4.2719	2.2336	4.581	0.0000*	---	50353.4658	3.7317	-0.1329	4.289	0.0100*	0.6923					
187.2601	4.2693	2.2700	4.534	0.2855	---	51464.3364	3.7321T	-0.0697	4.227	0.0020*	0.6925					
194.7429	4.2647	2.3100	4.475	0.3240	---	52427.5986	3.7306	0.0012	4.151	0.0000*	0.6918					
200.6593	4.2564	2.3500	4.402	0.3512	---	53371.6388	3.7241	0.1000	4.026	0.1591	0.6845					
204.9321	4.2417	2.3900	4.303	0.3706	---	53938.2532	3.7126	0.2000	3.880	0.1661	0.6561					
207.8301	4.2161	2.4300	4.161	0.3836	---	54273.5601	3.7029	0.3000	3.741	0.1705	0.6007					
209.2273	4.1900	2.4559	4.031	0.3897	---	54526.4575	3.6974	0.4000	3.619	0.1752	0.5450					
210.2368	4.1600	2.4770	3.890	0.3939	---	54755.0670	3.6938	0.5000	3.505	0.1826	0.4956					
210.9559	4.1300	2.4924	3.754	0.3968	---	54963.2649	3.6910	0.6000	3.394	0.1929	0.4641					
211.5277	4.1000	2.5040	3.623	0.3990	---	55138.8422	3.6889	0.7000	3.285	0.2047	0.4378					
212.0034	4.0700	2.5128	3.494	0.4010	---	55279.1912	3.6864	0.8000	3.175	0.2166	0.4143					
212.4068	4.0400	2.5192	3.367	0.4028	---	55390.7590	3.6840	0.9000	3.065	0.2281	0.3915					
212.7573	4.0100	2.5240	3.243	0.4045	0.0007*	55479.7871	3.6815	1.0000	2.956	0.2394	0.3788					
213.1935	3.9999	2.5518	3.175	0.4072	0.1462*	55551.3557	3.6788	1.1000	2.845	0.2504	0.3694					
	$M = 2.80 \quad Y = 0.40 \quad Z = 0.00001$															
0.0000	4.3254	2.2766	4.857	0.6000*	0.4638*	55651.4240	3.6729	1.2903	2.631	0.2710	0.3593					
28.6952	4.3259	2.3319	4.803	0.5000*	0.5048*	$M = 0.90 \quad Y = 0.10 \quad Z = 0.0001$										
52.0530	4.3234	2.3812	4.744	0.4000*	0.4515*	0.0000	3.7364	-0.3593	4.644	0.8999*	0.0085*					
70.7696	4.3182	2.4253	4.679	0.3000*	0.3983*	2197.4492	3.7402	-0.3243	4.624	0.8000*	0.8961					
85.5063	4.3113	2.4646	4.612	0.2000*	0.3417*	4214.3331	3.7439	-0.2893	4.603	0.7000*	0.8971					
96.9319	4.3046	2.5000	4.550	0.1000*	0.2844*	6197.4425	3.7476	-0.2511	4.580	0.6000*	0.8978					
99.6240	4.3039R	2.5096	4.537	0.0721*	0.2667*	8151.8487	3.7515	-0.2093	4.554	0.5000*	0.8986					
101.5833	4.3049	2.5177	4.533	0.0500*	0.2535*	10078.8628	3.7556	-0.1630	4.524	0.4000*	0.8990					
104.0992	4.3110	2.5318	4.544	0.0200*	0.2220*	11979.9393	3.7597	-0.1112	4.489	0.3000*	0.8995					
104.8691	4.3177	2.5410	4.561	0.0100*	0.1947*	13888.2962	3.7642	-0.0509	4.446	0.2000*	0.8997					
105.5226	4.3312B	2.5685	4.588	0.0014*	0.0535*	16122.3843	3.7696	0.0366	4.381	0.1000*	0.9000					
105.6969	4.3294	2.5794	4.570	0.0000*	---	17943.8378	3.7740	0.1325	4.302	0.0500*	---					
106.2038	4.3266	2.6000	4.538	0.4314	---	19567.2351	3.7766	0.2520	4.193	0.0200*	---					
108.4919	4.3224	2.6300	4.491	0.4435	---	19789.3409	3.7767T	0.2715	4.174	0.0156*	---					
110.8175	4.3169	2.6600	4.439	0.4555	---	20007.0298	3.7766	0.2918	4.153	0.0100*	---					
112.6747	4.3074	2.6900	4.371	0.4657	---	20629.8549	3.7745	0.3600	4.076	0.0001*	---					
114.0513	4.2914	2.7200	4.277	0.4802	---	20852.1401	3.7725	0.3899	4.039	0.0000*	---					
115.0798	4.2654	2.7500	4.143	0.4836	---	21221.0675	3.7647	0.4500	3.947	0.1821	0.9000					
115.6379	4.2400	2.7695	4.022	0.4893	---	21528.9143	3.7481	0.5200	3.811	0.1911	0.8995					
116.0857	4.2100	2.7857	3.886	0.4932	---	21737.3600	3.7210	0.5900	3.633	0.1962	0.8817					
116.4247	4.1800	2.7974	3.754	0.4956	---	21862.2756	3.7045	0.6600	3.497	0.1985	0.7905					
116.7035	4.1500	2.8059	3.626	0.4973	0.0032*	21944.4212	3.6976	0.7300	3.399	0.2000	0.7014					
116.9150	4.1406	2.8262	3.568	0.4984	0.1289*	22016.1997	3.6939	0.8000	3.314	0.2023	0.6389					
	$M = 3.50 \quad Y = 0.40 \quad Z = 0.00001$															
0.0000	4.3798	2.6042	4.843	0.6000*	0.7651*	22083.9441	3.6910	0.8700	3.232	0.2064	0.5761					
19.2238	4.3788	2.6629	4.781	0.5000*	0.7564*	22147.5158	3.6880	0.9400	3.150	0.2128	0.5257					
34.3446	4.3748	2.7145	4.713	0.4000*	0.6585*	22170.0150	3.6870	0.9662	3.120	0.2156	0.5142					
	$M = 1.10 \quad Y = 0.10 \quad Z = 0.0001$															
46.2405	4.3685	2.7611	4.641	0.3000*	0.5707*	0.0000	3.7914	0.0471	4.544	0.8999*	0.0268*					
55.4190	4.3605	2.8025	4.568	0.2000*	0.4824*	1184.2584	3.7960	0.0849	4.525	0.8000*	0.0020*					
62.5088	4.3528	2.8398	4.500	0.1000*	0.4018*	2168.9758	3.8001	0.1191	4.507	0.7000*	---					
63.6678	4.3518R	2.8466	4.489	0.0809*	0.3902*	3115.3696	3.8044	0.1551	4.488	0.6000*	---					
65.4165	4.3521	2.8580	4.479	0.0500*	0.3646*	4029.4872	3.8089	0.1932	4.468	0.5000*	---					
66.9645	4.3587	2.8723	4.491	0.0200*	0.3144*	4907.7709	3.8137	0.2337	4.447	0.4000*	---					
67.4351	4.3654	2.8808	4.509	0.0100*	0.2796*	5763.6810	3.8190	0.2777	4.424	0.3000*	---					
67.8602	4.3802B	2.9105	4.539	0.0007*	0.0425*	6671.7868	3.8250	0.3317	4.394	0.2000*	---					
67.9107	4.3779	2.9154	4.525	0.0000*	---	7884.7485	3.8346	0.4228	4.341	0.1000*	---					
68.1086	4.3728	2.9400	4.480	0.6000	---	8801.8961	3.8426	0.5154	4.281	0.0500*	---					
68.9203	4.3659	2.9700	4.422	0.6296	---	9347.9321	3.8465	0.5832	4.228	0.0200*	---					
69.9537	4.3564	3.0000	4.354	0.6301	---	9482.5168	3.8471	0.6018	4.212	0.0100*	---					
70.7554	4.3406	3.0300	4.261	0.6326	---	9685.9098	3.8474T	0.6337	4.182	0.0015*	---					
71.3333	4.3136	3.0600	4.123	0.6414	---	9994.9432	3.8449	0.6922	4.113	0.0000*	---					
71.6081	4.2900	3.0772	4.011	0.6414	---	10264.6954	3.8327	0.7600	3.997	0.2064	---					
71.8472	4.2600	3.0931	3.875	0.6414	---	10409.4747	3.8100	0.8105	3.855	0.2149	---					
72.0208	4.2300	3.1043	3.744	0.6414	---	10485.0645	3.7800	0.8458	3.700	0.2189	---					
72.1722	4.2000	3.1168	3.612	0.6414	0.0787*	10537.0398	3.7500	0.8745	3.551	0.2212	1.0998					
72.2200	4.1998	3.1287	3.599	0.6414	0.1480*	10589.8119	3.7200	0.8998	3.406	0.2229	1.0856					
	$M = 3.50 \quad Y = 0.40 \quad Z = 0.00001$															
	$M = 1.10 \quad Y = 0.10 \quad Z = 0.0001$															
	$M = 0.90 \quad Y = 0.10 \quad Z = 0.0001$															
	$M = 0.70 \quad Y = 0.10 \quad Z = 0.0001$															
	$M = 0.50 \quad Y = 0.10 \quad Z =$															

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
10762.3520	3.6862	1.1700	3.000	0.2279	0.6063	552.0219	4.0380	1.2197	4.607	0.6000*	0.0284*
10792.6552	3.6837	1.2400	2.920	0.2337	0.5432	671.3140	4.0414	1.2482	4.592	0.5000*	0.0022*
10819.5242	3.6811	1.3100	2.840	0.2418	0.4979	773.8969	4.0446	1.2755	4.577	0.4000*	—
10835.1282	3.6798	1.3576	2.787	0.2477	0.4677	876.1446	4.0478	1.3050	4.560	0.3000*	—
						971.5218	4.0502	1.3337	4.542	0.2000*	—
	$M = 1.40$	$Y = 0.10$	$Z = 0.0001$			1051.7207	4.0512	1.3583	4.521	0.1000*	—
						1091.6742	4.0515	1.3713	4.509	0.0500*	—
0.0000	3.8888	0.5150	4.571	0.8999*	0.0477*	1127.8604	4.0520	1.3845	4.498	0.0200*	—
562.5959	3.8953	0.5532	4.558	0.8000*	0.0142*	1151.9194	4.0524	1.3939	4.490	0.0100*	—
1016.9414	3.9005	0.5864	4.546	0.7000*	0.0004*	1274.3596	4.0540	1.4500	4.440	0.0001*	—
1405.6838	3.9050	0.6172	4.533	0.6000*	—	1310.7301	4.0540T	1.4698	4.421	0.0000*	—
1770.3687	3.9093	0.6485	4.519	0.5000*	—	1328.7389	4.0538	1.4803	4.409	0.0000*	—
2123.8134	3.9135	0.6819	4.503	0.4000*	—	1416.9601	4.0496	1.5400	4.333	0.2408	—
2493.6878	3.9184	0.7214	4.483	0.3000*	—	1481.9750	4.0364	1.6000	4.220	0.2669	—
2927.7489	3.9249	0.7760	4.454	0.2000*	—	1514.3858	4.0100	1.6435	4.071	0.2799	—
3476.8639	3.9340	0.8621	4.405	0.1000*	—	1526.4748	3.9800	1.6656	3.929	0.2840	—
3748.6342	3.9380	0.9120	4.370	0.0500*	—	1532.7329	3.9500	1.6780	3.796	0.2856	—
3881.8487	3.9393	0.9385	4.349	0.0200*	—	1537.0761	3.9200	1.6857	3.669	0.2865	—
3936.5222	3.9398	0.9506	4.339	0.0100*	—	1540.3831	3.8900	1.6900	3.544	0.2871	—
4147.7941	3.9407T	1.0054	4.288	0.0001*	—	1543.0477	3.8600	1.6917	3.423	0.2874	—
4250.3788	3.9396	1.0377	4.251	0.0000*	—	1545.2843	3.8300	1.6913	3.303	0.2877	—
4387.2754	3.9338	1.0900	4.176	0.2269	—	1547.2120	3.8000	1.6892	3.185	0.2878	—
4503.0205	3.9153	1.1500	4.042	0.2422	—	1548.9183	3.7700	1.6854	3.069	0.2879	—
4551.9957	3.8900	1.1857	3.905	0.2482	—	1550.7638	3.7400	1.6785	2.956	0.2881	—
4577.3370	3.8600	1.2090	3.761	0.2509	—	1554.4215	3.7100	1.6508	2.863	0.2882	1.9247
4592.5574	3.8300	1.2240	3.626	0.2522	—	1557.1539	3.7014	1.6379	2.842	0.2883	1.7979
4603.1058	3.8000	1.2341	3.496	0.2530	—	1563.8572	3.6884	1.6900	2.738	0.2885	1.3997
4611.4243	3.7700	1.2407	3.370	0.2534	—	1569.1781	3.6846	1.7500	2.663	0.2888	1.1523
4620.8317	3.7400	1.2449	3.246	0.2538	1.3998	1574.2652	3.6815	1.8100	2.590	0.2900	0.9532
4635.2721	3.7117	1.2386	3.139	0.2542	1.3737	1579.1925	3.6788	1.8700	2.519	0.2944	0.7791
4659.9867	3.6929	1.2900	3.012	0.2545	1.0766	1583.9446	3.6766	1.9300	2.451	0.3006	0.6532
4674.4950	3.6887	1.3500	2.935	0.2546	0.9240	1588.3405	3.6744	1.9900	2.382	0.3078	0.5558
4688.0878	3.6851	1.4100	2.861	0.2548	0.7926	1592.3211	3.6719	2.0500	2.312	0.3156	0.5029
4700.7922	3.6825	1.4700	2.790	0.2553	0.6788	1595.9626	3.6692	2.1100	2.241	0.3238	0.4738
4712.6819	3.6806	1.5300	2.723	0.2574	0.6098	1599.3035	3.6670	2.1700	2.172	0.3324	0.4493
4723.7822	3.6781	1.5900	2.653	0.2630	0.5556	1602.3714	3.6645	2.2300	2.102	0.3412	0.4374
4733.9562	3.6756	1.6500	2.583	0.2701	0.5010	1602.6822	3.6641	2.2364	2.094	0.3421	0.4374
4739.5658	3.6747	1.6875	2.542	0.2749	0.4708						
	$M = 1.75$	$Y = 0.10$	$Z = 0.0001$				$M = 2.20$	$Y = 0.10$	$Z = 0.0001$		
0.0000	3.9829	0.9267	4.632	0.8999*	0.0756*	0.0000	4.0735	1.3281	4.693	0.8999*	0.1344*
295.4572	3.9882	0.9638	4.617	0.8000*	0.0508*	161.3748	4.0769	1.3642	4.670	0.8000*	0.1350*
540.4653	3.9925	0.9971	4.600	0.7000*	0.0308*	294.1930	4.0801	1.3981	4.649	0.7000*	0.1053*
740.4266	3.9961	1.0272	4.584	0.6000*	0.0104*	401.0848	4.0833	1.4298	4.630	0.6000*	0.0649*
904.4901	3.9994	1.0549	4.570	0.5000*	—	487.7651	4.0863	1.4588	4.613	0.5000*	0.0421*
1062.9098	4.0030	1.0850	4.554	0.4000*	—	562.5183	4.0882	1.4853	4.594	0.4000*	0.0406*
1234.6723	4.0075	1.1218	4.536	0.3000*	—	637.1041	4.0885	1.5118	4.569	0.3000*	0.0507*
1417.3510	4.0123	1.1659	4.511	0.2000*	—	710.1185	4.0866	1.5373	4.536	0.2000*	0.0773*
1583.4051	4.0158	1.2091	4.481	0.1000*	—	778.6230	4.0830R	1.5628	4.496	0.1036*	0.0697*
1652.9400	4.0166	1.2280	4.466	0.0500*	—	780.2332	4.0830	1.5636	4.495	0.1000*	0.0691*
1704.8547	4.0172	1.2435	4.453	0.0200*	—	802.3216	4.0844	1.5768	4.487	0.0500*	0.0560*
1735.3963	4.0177	1.2536	4.445	0.0100*	—	814.9010	4.0892	1.5921	4.491	0.0200*	0.0303*
1860.0206	4.0189	1.3000	4.403	0.0002*	—	819.2947	4.0924	1.6028	4.494	0.0100*	0.0065*
1907.2791	4.0189T	1.3206	4.382	0.0000*	—	824.7769	4.0933B	1.6100	4.490	0.0038*	—
1945.0666	4.0185	1.3385	4.363	0.0000*	—	897.4153	4.0906	1.6583	4.431	0.0000*	—
2021.6125	4.0158	1.3800	4.311	0.2331	—	957.3190	4.0857	1.7100	4.360	0.2459	—
2095.0615	4.0074	1.4300	4.227	0.2531	—	1007.0393	4.0698	1.7700	4.236	0.2774	—
2148.3736	3.9865	1.4800	4.093	0.2677	—	1028.0432	4.0400	1.8081	4.079	0.2905	—
2170.1432	3.9600	1.5084	3.959	0.2731	—	1035.2438	4.0100	1.8251	3.942	0.2941	—
2181.4572	3.9300	1.5263	3.821	0.2755	—	1039.2976	3.9800	1.8345	3.812	0.2957	—
2188.4740	3.9000	1.5372	3.690	0.2766	—	1042.2301	3.9500	1.8398	3.687	0.2966	—
2193.5573	3.8700	1.5441	3.563	0.2773	—	1044.5438	3.9200	1.8423	3.564	0.2972	—
2197.4988	3.8400	1.5479	3.439	0.2776	—	1046.4703	3.8900	1.8426	3.444	0.2975	—
2200.6986	3.8100	1.5493	3.318	0.2779	—	1048.1213	3.8600	1.8410	3.326	0.2978	—
2203.4157	3.7800	1.5486	3.199	0.2781	—	1049.5562	3.8300	1.8377	3.209	0.2980	—
2206.0338	3.7500	1.5458	3.082	0.2782	—	1050.8241	3.8000	1.8329	3.094	0.2981	—
2210.3327	3.7200	1.5329	2.974	0.2784	1.7462	1051.9546	3.7700	1.8266	2.980	0.2982	—
2215.8706	3.7000	1.5113	2.916	0.2786	1.6439	1053.0907	3.7400	1.8178	2.869	0.2984	—
2225.0097	3.6886	1.5600	2.822	0.2787	1.2963	1057.8305	3.6929	1.7648	2.734	0.2988	1.9800
2231.2129	3.6854	1.6100	2.759	0.2788	1.0969	1062.2651	3.6864	1.8200	2.652	0.2996	1.5335
2237.1774	3.6823	1.6600	2.697	0.2789	0.9639	1066.3017	3.6827	1.8800	2.578	0.3022	1.2418
2242.8411	3.6804	1.7100	2.639	0.2793	0.8361	1070.2279	3.6798	1.9400	2.506	0.3070	1.0062
2248.2675	3.6782	1.7600	2.580	0.2810	0.7114	1074.0832	3.6771	2.0000	2.435	0.3130	0.8024
2248.9652	3.6777	1.7668	2.571	0.2815	0.6953	1077.6770	3.6745	2.0600	2.365	0.3200	0.6614
	$M = 1.95$	$Y = 0.10$	$Z = 0.0001$			1080.9787	3.6724	2.1200	2.296	0.3276	0.5725
0.0000	4.0265	1.1192	4.661	0.8999*	0.1059*	1084.0667	3.6700	2.1800	2.227	0.3357	0.5021
221.7137	4.0309	1.1557	4.642	0.8000*	0.0834*	1086.9084	3.6674	2.2400	2.156	0.3441	0.4715
404.6289	4.0346	1.1891	4.624	0.7000*	0.0579*	1089.4222	3.6648	2.2973	2.089	0.3525	0.4563

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
$M = 2.50 \quad Y = 0.10 \quad Z = 0.0001$											
0.0000	4.1205	1.5429	4.721	0.8999*	0.2057*	176.0530	4.2170	2.2266	4.570	0.5000*	0.4467*
121.9353	4.1230	1.5811	4.693	0.8000*	0.2278*	202.9040	4.2101	2.2556	4.513	0.4000*	0.3998*
218.8961	4.1256	1.6164	4.668	0.7000*	0.1920*	243.3722	4.1915	2.3047	4.390	0.2000*	0.3035*
297.3080	4.1276	1.6489	4.644	0.6000*	0.1575*	258.2002	4.1819	2.3257	4.330	0.1000*	0.2581*
362.4191	4.1281	1.6776	4.617	0.5000*	0.1432*	262.7022	4.1800R	2.3333	4.315	0.0647*	0.2373*
421.7673	4.1265	1.7043	4.584	0.4000*	0.1443*	264.4162	4.1807	2.3371	4.314	0.0500*	0.2282*
471.7029	4.1228	1.7271	4.546	0.3000*	0.1432*	267.7812	4.1858	2.3470	4.325	0.0200*	0.2006*
534.3907	4.1155	1.7580	4.486	0.2000*	0.1541*	268.8135	4.1921	2.3543	4.343	0.0100*	0.1789*
569.7799	4.1095	1.7772	4.443	0.1000*	0.1329*	269.7050	4.2068B	2.3768	4.379	0.0012*	0.0535*
573.3353	4.1090R	1.7794	4.439	0.0888*	0.1299*	271.6513	4.1972	2.4000	4.317	0.4534	— — —
584.7394	4.1099	1.7889	4.433	0.0500*	0.1201*	276.9659	4.1828	2.4300	4.230	0.4538	— — —
593.1128	4.1156	1.8017	4.443	0.0200*	0.0980*	279.7987	4.1600	2.4498	4.119	0.4562	— — —
595.7605	4.1212	1.8116	4.456	0.0100*	0.0779*	281.2539	4.1300	2.4614	3.987	0.4616	— — —
598.2723	4.1296B	1.8330	4.468	0.0013*	— — —	282.0952	4.1000	2.4669	3.861	0.4632	— — —
609.5802	4.1266	1.8538	4.435	0.0000*	— — —	282.6725	4.0700	2.4689	3.740	0.4638	— — —
638.3577	4.1207	1.8900	4.375	0.2510	— — —	283.1097	4.0400	2.4688	3.620	0.4640	— — —
665.0579	4.1082	1.9300	4.285	0.2813	— — —	283.4619	4.0100	2.4669	3.501	0.4642	— — —
681.7449	4.0800	1.9657	4.137	0.2987	— — —	283.7470	3.9800	2.4633	3.385	0.4642	— — —
687.3104	4.0500	1.9810	4.001	0.3036	— — —	283.9871	3.9500	2.4583	3.270	0.4642	— — —
690.4200	4.0200	1.9890	3.873	0.3056	— — —	284.1926	3.9200	2.4523	3.156	0.4643	— — —
692.7025	3.9900	1.9933	3.749	0.3068	— — —	284.3693	3.8900	2.4447	3.044	0.4643	— — —
694.5352	3.9600	1.9949	3.627	0.3076	— — —	284.5212	3.8600	2.4367	2.932	0.4643	0.0008*
696.0882	3.9300	1.9945	3.508	0.3082	— — —	284.6536	3.8300	2.4278	2.821	0.4643	0.0152*
697.4466	3.9000	1.9922	3.390	0.3086	— — —	284.7637	3.8034	2.4224	2.720	0.4643	0.0580*
698.6537	3.8700	1.9883	3.274	0.3091	— — —	284.8998	3.7960	2.4500	2.663	0.4643	0.1337*
699.7297	3.8400	1.9830	3.159	0.3095	— — —	284.9488	3.8044	2.4616	2.684	0.4643	0.1455*
700.6885	3.8100	1.9764	3.046	0.3099	— — —	$M = 4.40 \quad Y = 0.10 \quad Z = 0.0001$					
701.5439	3.7800	1.9684	2.934	0.3104	— — —	702.3378	3.7500	1.9586	2.824	0.3109	— — —
703.4312	3.7200	1.9391	2.723	0.3117	2.4987	0.0000	4.2860	2.4204	4.751	0.8999*	0.9514*
704.8978	3.6999	1.9000	2.682	0.3130	2.4225	36.6061	4.2844	2.4670	4.698	0.8000*	0.9354*
705.5114	3.6945	1.8910	2.669	0.3135	2.3247	66.0381	4.2813	2.5083	4.645	0.7000*	0.8189*
708.3191	3.6866	1.9300	2.599	0.3166	1.8540	90.0786	4.2766	2.5458	4.588	0.6000*	0.7442*
710.5855	3.6832	1.9700	2.545	0.3196	1.6057	110.0313	4.2701	2.5803	4.528	0.5000*	0.6551*
712.7255	3.6811	2.0100	2.497	0.3230	1.3846	126.3752	4.2620	2.6114	4.464	0.4000*	0.5787*
714.2442	3.6792	2.0386	2.460	0.3259	1.2563	139.7410	4.2522	2.6393	4.397	0.3000*	0.5051*
$M = 2.80 \quad Y = 0.10 \quad Z = 0.0001$											
0.0000	4.1595	1.7273	4.742	0.8999*	0.3009*	159.2869	4.2301	2.6866	4.262	0.1000*	0.3589*
93.1600	4.1610	1.7667	4.709	0.8000*	0.3345*	161.5121	4.2281R	2.6932	4.247	0.0701*	0.3408*
168.0020	4.1624	1.8032	4.678	0.7000*	0.2979*	162.9202	4.2282	2.6982	4.242	0.0500*	0.3184*
229.5218	4.1625	1.8363	4.645	0.6000*	0.2676*	164.8789	4.2326	2.7075	4.251	0.0200*	0.2852*
281.5699	4.1605	1.8660	4.608	0.5000*	0.2502*	165.4768	4.2390	2.7141	4.270	0.0100*	0.2535*
327.1427	4.1564	1.8933	4.564	0.4000*	0.2311*	165.9719	4.2540B	2.7352	4.309	0.0013*	0.1124*
365.2042	4.1502	1.9172	4.515	0.3000*	0.2183*	166.7550	4.2409	2.7600	4.231	0.6525	— — —
396.4890	4.1427	1.9379	4.465	0.2000*	0.1927*	168.9488	4.2191	2.7900	4.114	0.6525	— — —
422.0672	4.1356	1.9566	4.417	0.1000*	0.1712*	169.9212	4.1900	2.8061	3.982	0.6525	— — —
430.1539	4.1346R	1.9640	4.406	0.0643*	0.1586*	170.4303	4.1600	2.8144	3.853	0.6525	— — —
433.1528	4.1356	1.9679	4.406	0.0500*	0.1512*	170.7479	4.1300	2.8181	3.730	0.6525	— — —
439.2072	4.1411	1.9789	4.417	0.0200*	0.1289*	170.9706	4.1000	2.8191	3.609	0.6525	— — —
441.0946	4.1471	1.9877	4.432	0.0100*	0.1086*	171.1393	4.0700	2.8181	3.490	0.6525	— — —
442.7952	4.1584B	2.0099	4.455	0.0013*	0.0134*	171.2733	4.0400	2.8158	3.372	0.6525	— — —
447.2267	4.1544	2.0278	4.421	0.0000*	— — —	171.3818	4.0100	2.8122	3.256	0.6525	— — —
458.8188	4.1501	2.0500	4.382	0.3077	— — —	171.4733	3.9800	2.8072	3.141	0.6525	— — —
473.0093	4.1407	2.0800	4.314	0.3107	— — —	171.5514	3.9500	2.8020	3.026	0.6525	0.0031*
484.0638	4.1179	2.1100	4.193	0.3165	— — —	171.6206	3.9200	2.7976	2.910	0.6525	0.0392*
489.6659	4.0800	2.1294	4.022	0.3267	— — —	171.6339	3.9141	2.7973	2.887	0.6525	0.0582*
492.3811	4.0400	2.1376	3.854	0.3301	— — —	171.7216	3.8917	2.8171	2.777	0.6525	0.1457*
494.2435	4.0000	2.1402	3.691	0.3318	— — —	$M = 0.70 \quad Y = 0.20 \quad Z = 0.0001$					
495.6673	3.9600	2.1382	3.533	0.3328	— — —	496.8531	3.9200	2.1336	3.378	0.3336	— — —
497.9017	3.8800	2.1267	3.225	0.3343	— — —	498.7951	3.8400	2.1173	3.074	0.3349	— — —
499.5499	3.8000	2.1057	2.926	0.3355	— — —	500.1859	3.7600	2.0919	2.780	0.3362	— — —
500.8835	3.7200	2.0685	2.643	0.3370	2.7993	501.4079	3.7037	2.0400	2.606	0.3376	2.7769
502.0256	3.6917	2.0117	2.587	0.3384	2.6061	502.9701	3.6860	2.0400	2.536	0.3400	0.0005*
502.9701	3.6860	2.0400	2.536	0.3400	0.6115*	504.0389	3.6826	2.0700	2.492	0.3420	0.0220*
504.4698	3.6843	2.0716	2.497	0.3430	0.5462*	504.4698	3.6843	2.0716	2.497	0.2118*	2.7622T
$M = 3.50 \quad Y = 0.10 \quad Z = 0.0001$											
0.0000	4.2264	2.0760	4.758	0.8999*	0.5350*	29872.4338	3.7607	0.1700	4.102	0.0000*	0.6997
57.9620	4.2266	2.1196	4.715	0.8000*	0.6115*	29956.2475	3.7602	0.1806	4.090	0.0000*	0.6997
104.9047	4.2252	2.1587	4.670	0.7000*	0.5462*	30422.8163	3.7556	0.2500	4.002	0.1616	0.6996
143.6062	4.2220	2.1942	4.622	0.6000*	0.4975*	30767.3070	3.7466	0.3200	3.896	0.1691	0.6988
						31008.3633	3.7338	0.3900	3.775	0.1746	0.6938
						31181.4617	3.7198	0.4600	3.649	0.1785	0.6736

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>
31307.7850	3.7099	0.5300	3.539	0.1814	0.6294	2630.4185	3.9604	1.3500	4.022	0.2480	---
31409.0540	3.7042	0.6000	3.446	0.1846	0.5851	2647.1961	3.9400	1.3748	3.916	0.2514	---
31499.5055	3.7000	0.6700	3.359	0.1888	0.5427	2660.6989	3.9100	1.3987	3.772	0.2538	---
31514.4661	3.6995	0.6821	3.345	0.1896	0.5366	2669.3493	3.8800	1.4151	3.635	0.2551	---
						2675.5448	3.8500	1.4264	3.504	0.2559	---
	<i>M</i> = 0.90	<i>Y</i> = 0.20	<i>Z</i> = 0.0001			2680.3462	3.8200	1.4342	3.376	0.2564	---
						2684.2547	3.7900	1.4392	3.251	0.2568	---
0.0000	3.7769	-0.1401	4.586	0.7999*	0.0151*	2687.7563	3.7600	1.4420	3.128	0.2571	---
1408.4053	3.7810	-0.1005	4.563	0.7000*	0.8999	2692.8455	3.7300	1.4413	3.009	0.2575	1.3993
2641.2764	3.7851	-0.0626	4.541	0.6000*	---	2700.8452	3.7062	1.4267	2.929	0.2580	1.3418
3843.2821	3.7893	-0.0215	4.517	0.5000*	---	2714.1097	3.6918	1.4800	2.818	0.2587	1.0536
5011.9794	3.7937	0.0229	4.491	0.4000*	---	2722.8727	3.6876	1.5400	2.741	0.2594	0.8886
6151.8782	3.7983	0.0717	4.460	0.3000*	---	2730.9773	3.6844	1.6000	2.668	0.2613	0.7594
7324.1660	3.8036	0.1299	4.423	0.2000*	---	2738.5383	3.6818	1.6600	2.598	0.2658	0.6721
8841.5786	3.8126	0.2260	4.363	0.1000*	---	2745.5453	3.6795	1.7200	2.528	0.2720	0.5896
10049.7567	3.8226	0.3310	4.298	0.0500*	---	2751.8781	3.6769	1.7800	2.458	0.2791	0.5405
10878.0810	3.8299	0.4267	4.231	0.0200*	---	2753.5024	3.6764	1.7968	2.439	0.2811	0.5215
11082.1355	3.8315	0.4537	4.211	0.0100*	---						
11510.4417	3.8330T	0.5230	4.148	0.0001*	---					<i>M</i> = 1.75	<i>Y</i> = 0.20
11683.6562	3.8318	0.5578	4.108	0.0000*	---					<i>Z</i> = 0.0001	
11935.8024	3.8248	0.6200	4.018	0.1862	---						
12139.6373	3.8040	0.6900	3.865	0.1966	---	0.0000	4.0413	1.1158	4.677	0.7999*	0.1198*
12231.2024	3.7800	0.7345	3.724	0.2012	---	201.8477	4.0460	1.1562	4.655	0.7000*	0.0901*
12310.2508	3.7500	0.7844	3.554	0.2048	0.8997	360.7565	4.0505	1.1928	4.636	0.6000*	0.0515*
12384.3299	3.7200	0.8356	3.383	0.2075	0.8791	486.7014	4.0548	1.2268	4.620	0.5000*	0.0162*
12445.7643	3.7043	0.9000	3.256	0.2093	0.7781	588.8787	4.0588	1.2580	4.605	0.4000*	0.0030*
12489.6220	3.6979	0.9700	3.160	0.2110	0.6870	678.7424	4.0622	1.2874	4.589	0.3000*	0.0018*
12528.3615	3.6940	1.0400	3.074	0.2139	0.6159	768.2516	4.0647	1.3176	4.569	0.2000*	0.0082*
12564.1448	3.6907	1.1100	2.991	0.2193	0.5560	857.0669	4.0656	1.3482	4.542	0.1000*	0.0089*
12594.1935	3.6876	1.1750	2.914	0.2262	0.5180	888.8530	4.0667	1.3623	4.532	0.0500*	0.0012*
						913.5317	4.0677	1.3740	4.524	0.0200*	---
						932.5010	4.0683	1.3830	4.517	0.0100*	---
	<i>M</i> = 1.10	<i>Y</i> = 0.20	<i>Z</i> = 0.0001			1038.1380	4.0706	1.4400	4.470	0.0001*	---
						1085.6026	4.0710	1.4713	4.440	0.0000*	---
0.0000	3.8469	0.2589	4.554	0.7999*	0.0301*	1101.5420	4.0710T	1.4828	4.429	0.1967	---
751.9779	3.8538	0.2994	4.541	0.7000*	0.0049*	1170.0709	4.0681	1.5400	4.360	0.2261	---
1359.3889	3.8597	0.3351	4.529	0.6000*	---	1223.4012	4.0582	1.6000	4.260	0.2510	---
1914.6427	3.8652	0.3709	4.516	0.5000*	---	1258.9038	4.0305	1.6600	4.089	0.2685	---
2446.7067	3.8706	0.4084	4.500	0.4000*	---	1267.6084	4.0100	1.6813	3.986	0.2725	---
2980.8220	3.8766	0.4510	4.481	0.3000*	---	1274.5899	3.9800	1.7013	3.846	0.2753	---
3585.7473	3.8842	0.5079	4.455	0.2000*	---	1278.9599	3.9500	1.7142	3.713	0.2768	---
4406.1706	3.8967	0.6071	4.405	0.1000*	---	1282.2227	3.9200	1.7228	3.585	0.2777	---
4919.4478	3.9051	0.6870	4.359	0.0500*	---	1284.8142	3.8900	1.7282	3.459	0.2783	---
5166.9473	3.9086	0.7309	4.329	0.0200*	---	1286.9618	3.8600	1.7312	3.336	0.2788	---
5246.2231	3.9097	0.7464	4.318	0.0100*	---	1288.7759	3.8300	1.7320	3.215	0.2791	---
5514.7549	3.9120	0.8100	4.264	0.0002*	---	1290.3412	3.8000	1.7309	3.096	0.2794	---
5560.1640	3.9120T	0.8227	4.251	0.0000*	---	1291.7288	3.7700	1.7283	2.979	0.2797	---
5647.6787	3.9114	0.8491	4.222	0.0000*	---	1293.2127	3.7400	1.7227	2.865	0.2800	---
5813.6388	3.9059	0.9100	4.139	0.2057	---	1296.2948	3.7100	1.6966	2.771	0.2804	1.7293
5949.2235	3.8867	0.9800	3.992	0.2190	---	1298.8540	3.6975	1.6794	2.738	0.2809	1.5938
6007.8557	3.8600	1.0243	3.841	0.2246	---	1304.2856	3.6888	1.7300	2.652	0.2823	1.2489
6038.4047	3.8300	1.0539	3.692	0.2273	---	1308.7973	3.6862	1.7900	2.582	0.2855	1.0374
6057.5005	3.8000	1.0745	3.551	0.2287	---	1313.0666	3.6830	1.8500	2.510	0.2905	0.8719
6072.1018	3.7700	1.0907	3.415	0.2297	---	1317.1672	3.6800	1.9100	2.437	0.2964	0.7361
6089.1111	3.7400	1.1078	3.278	0.2307	1.0995	1320.9570	3.6777	1.9700	2.368	0.3031	0.6399
6117.3234	3.7100	1.1261	3.140	0.2318	1.0430	1324.4645	3.6754	2.0300	2.299	0.3104	0.5634
6146.2104	3.6975	1.1900	3.026	0.2327	0.8610	1327.7111	3.6729	2.0900	2.229	0.3180	0.5160
6167.6855	3.6911	1.2600	2.930	0.2337	0.7399	1330.7084	3.6702	2.1500	2.158	0.3260	0.4831
6186.9779	3.6878	1.3300	2.847	0.2361	0.6420	1333.4747	3.6678	2.2100	2.088	0.3342	0.4585
6204.6972	3.6848	1.4000	2.765	0.2418	0.5791	1335.3960	3.6655	2.2551	2.034	0.3406	0.4508
6220.3879	3.6821	1.4700	2.684	0.2496	0.5244						
6233.8169	3.6797	1.5400	2.605	0.2582	0.4776						
6238.7423	3.6784	1.5682	2.571	0.2617	0.4697	0.0000	4.0826	1.3030	4.702	0.7999*	0.1485*
	<i>M</i> = 1.40	<i>Y</i> = 0.20	<i>Z</i> = 0.0001			149.9154	4.0867	1.3434	4.678	0.7000*	0.1280*
0.0000	3.9511	0.7154	4.619	0.7999*	0.0600*	268.6102	4.0910	1.3810	4.657	0.6000*	0.0844*
370.1328	3.9572	0.7557	4.604	0.7000*	0.0350*	362.9483	4.0949	1.4154	4.639	0.5000*	0.0570*
671.2787	3.9622	0.7917	4.588	0.6000*	0.0166*	442.7152	4.0975	1.4463	4.618	0.4000*	0.0514*
914.4956	3.9665	0.8243	4.572	0.5000*	---	518.5141	4.0982	1.4760	4.591	0.3000*	0.0696*
1128.6192	3.9709	0.8567	4.557	0.4000*	---	606.9567	4.0956	1.5108	4.546	0.2000*	0.0846*
1362.0324	3.9764	0.8971	4.539	0.3000*	---	660.5273	4.0927	1.5342	4.511	0.1000*	0.0774*
1630.3476	3.9836	0.9515	4.513	0.2000*	---	671.3599	4.0926R	1.5399	4.505	0.0769*	0.0747*
1913.0987	3.9912	1.0180	4.477	0.1000*	---	683.4295	4.0938	1.5485	4.501	0.0500*	0.0662*
2029.8178	3.9935	1.0475	4.457	0.0500*	---	696.2459	4.0994	1.5655	4.506	0.0200*	0.0414*
2101.3629	3.9948	1.0671	4.443	0.0200*	---	700.5546	4.1035	1.5776	4.511	0.0100*	0.0169*
2141.8932	3.9956	1.0795	4.433	0.0100*	---	705.0336	4.1055B	1.5888	4.508	0.0032*	---
2285.1380	3.9980	1.1300	4.393	0.0003*	---	766.1333	4.1034	1.6374	4.451	0.0000*	---
2384.3932	3.9986T	1.1729	4.352	0.0000*	---	818.4332	4.1000	1.6900	4.384	0.2295	---
2392.3947	3.9985	1.1767	4.348	0.0000*	---	861.3261	4.0888	1.7500	4.280	0.2598	---
2490.5178	3.9959	1.2300	4.284	0.2180	---	887.0288	4.0600	1.8051	4.109	0.2790	---
2573.4914	3.9860	1.2900	4.184	0.2357	---	894.9571	4.0300	1.8303	3.964	0.2844	---
						899.1293	4.0000	1.8450	3.829	0.2868	---

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
902.0464	3.9700	1.8546	3.700	0.2883	- - - -	312.4653	4.0400	2.3261	3.665	0.3780	- - - -
904.3142	3.9400	1.8606	3.574	0.2892	- - - -	313.2355	4.0000	2.3263	3.505	0.3780	- - - -
906.1543	3.9100	1.8639	3.450	0.2899	- - - -	313.8538	3.9600	2.3233	3.348	0.3780	- - - -
907.7199	3.8800	1.8650	3.329	0.2904	- - - -	314.3623	3.9200	2.3176	3.194	0.3780	- - - -
909.0713	3.8500	1.8641	3.210	0.2908	- - - -	314.7987	3.8800	2.3099	3.042	0.3780	- - - -
910.2463	3.8200	1.8616	3.093	0.2913	- - - -	315.1619	3.8400	2.2993	2.892	0.3780	- - - -
911.2858	3.7900	1.8576	2.977	0.2917	- - - -	315.4698	3.8000	2.2878	2.744	0.3782	0.0073*
912.2237	3.7600	1.8520	2.862	0.2920	- - - -	315.7074	3.7661	2.2786	2.617	0.3785	0.0477*
913.4253	3.7300	1.8405	2.754	0.2925	1.9497	315.8423	3.7629	2.3000	2.583	0.3787	0.1213*
916.2133	3.7000	1.7938	2.680	0.2938	1.8404	315.9219	3.7833	2.3276	2.637	0.3788	0.1614*
916.3373	3.6989	1.7920	2.678	0.2938	1.8295						
921.2467	3.6879	1.8500	2.576	0.2977	1.3296	$M = 3.50$	$Y = 0.20$	$Z = 0.0001$			
924.7605	3.6841	1.9100	2.501	0.3024	1.1138						
928.1400	3.6807	1.9700	2.427	0.3080	0.9097	0.0000	4.2666	2.2382	4.757	0.7999*	0.6735*
931.2939	3.6781	2.0300	2.357	0.3143	0.7587	40.7991	4.2658	2.2858	4.706	0.7000*	0.6728*
934.2634	3.6759	2.0900	2.288	0.3213	0.6456	74.1495	4.2629	2.3284	4.651	0.6000*	0.6111*
937.0298	3.6733	2.1500	2.218	0.3287	0.5679	101.8380	4.2579	2.3679	4.592	0.5000*	0.5493*
939.6265	3.6705	2.2100	2.146	0.3365	0.5205	124.5036	4.2511	2.4038	4.529	0.4000*	0.4847*
942.0294	3.6681	2.2700	2.077	0.3447	0.4837	142.8683	4.2423	2.4358	4.462	0.3000*	0.4233*
943.7281	3.6660	2.3156	2.023	0.3510	0.4712	157.6137	4.2321	2.4644	4.392	0.2000*	0.3667*
	$M = 2.20$	$Y = 0.20$	$Z = 0.0001$			173.4136	4.2202R	2.5006	4.309	0.0588*	0.2728*
						174.1951	4.2209	2.5033	4.309	0.0500*	0.2674*
0.0000	4.1268	1.5063	4.727	0.7999*	0.1898*	176.8047	4.2263	2.5141	4.319	0.0200*	0.2391*
110.5838	4.1303	1.5481	4.700	0.7000*	0.1990*	177.6143	4.2328	2.5215	4.338	0.0100*	0.2126*
198.8138	4.1337	1.5865	4.675	0.6000*	0.1589*	178.3206	4.2486B	2.5459	4.377	0.0009*	0.0600*
270.4550	4.1354	1.6204	4.648	0.5000*	0.1413*	178.5017	4.2437	2.5488	4.354	0.0000*	- - - -
333.5252	4.1348	1.6515	4.614	0.4000*	0.1431*	179.0842	4.2389	2.5700	4.314	0.5141	- - - -
403.1267	4.1312	1.6876	4.564	0.3000*	0.1504*	181.9664	4.2275	2.6000	4.239	0.5248	- - - -
448.5095	4.1256	1.7121	4.517	0.2000*	0.1490*	184.3474	4.2023	2.6300	4.108	0.5248	- - - -
486.4017	4.1200	1.7349	4.472	0.1000*	0.1295*	185.1427	4.1800	2.6430	4.005	0.5248	- - - -
490.0728	4.1196R	1.7374	4.468	0.0891*	0.1282*	185.7735	4.1500	2.6535	3.875	0.5248	- - - -
502.3811	4.1206	1.7485	4.461	0.0500*	0.1146*	186.1905	4.1200	2.6592	3.749	0.5248	- - - -
511.1398	4.1265	1.7623	4.471	0.0200*	0.0948*	186.4945	4.0900	2.6621	3.626	0.5248	- - - -
513.9335	4.1323	1.7730	4.483	0.0100*	0.0741*	186.7296	4.0600	2.6626	3.506	0.5248	- - - -
516.5879	4.1407B	1.7970	4.493	0.0013*	- - -	186.9202	4.0300	2.6616	3.387	0.5248	- - - -
530.1955	4.1379	1.8230	4.455	0.0000*	- - -	187.0776	4.0000	2.6590	3.269	0.5248	- - - -
557.0045	4.1336	1.8600	4.401	0.2355	- - -	187.2099	3.9700	2.6547	3.154	0.5248	- - - -
580.9171	4.1257	1.9000	4.329	0.2648	- - -	187.3220	3.9400	2.6492	3.039	0.5248	0.0003*
598.4864	4.1097	1.9400	4.225	0.2855	- - -	187.4188	3.9100	2.6434	2.925	0.5248	0.0194*
608.2633	4.0800	1.9725	4.074	0.2965	- - -	187.4752	3.8917	2.6414	2.854	0.5248	0.0541*
612.3623	4.0500	1.9895	3.937	0.3005	- - -	187.5797	3.8785	2.6629	2.779	0.5248	0.1354*
614.9116	4.0200	1.9997	3.807	0.3026	- - -						
616.8214	3.9900	2.0060	3.681	0.3039	- - -	$M = 0.55$	$Y = 0.30$	$Z = 0.0001$			
618.3688	3.9600	2.0093	3.557	0.3049	- - -						
619.6869	3.9300	2.0105	3.436	0.3057	- - -	0.0000	3.6955	-0.9059	4.813	0.6999*	0.5077
620.8308	3.9000	2.0097	3.317	0.3064	- - -	4448.6214	3.6993	-0.8700	4.792	0.6000*	0.5157
621.8350	3.8700	2.0072	3.200	0.3072	- - -	8929.6441	3.7038	-0.8289	4.769	0.5000*	0.5210
622.7241	3.8400	2.0032	3.083	0.3079	- - -	13473.0654	3.7092	-0.7801	4.742	0.4000*	0.5277
623.5082	3.8100	1.9977	2.969	0.3086	- - -	18130.4636	3.7159	-0.7210	4.709	0.3000*	0.5324
624.2032	3.7800	1.9909	2.856	0.3093	- - -	22992.3514	3.7243	-0.6457	4.668	0.2000*	0.5371
624.8350	3.7500	1.9822	2.744	0.3100	- - -	28305.5971	3.7350	-0.5407	4.605	0.1000*	0.5416
625.7196	3.7200	1.9641	2.643	0.3110	2.1989	31972.4155	3.7433	-0.4416	4.539	0.0500*	0.5449
626.7097	3.7027	1.9300	2.607	0.3123	2.1562	36046.1420	3.7536	-0.2746	4.414	0.0200*	0.5478
627.6607	3.6957	1.9130	2.597	0.3135	1.9892	37928.1963	3.7580	-0.1556	4.312	0.0100*	0.5487
629.9261	3.6855	1.9500	2.519	0.3166	1.5872	39097.5225	3.7598	-0.0600	4.224	0.0008*	0.5490
631.7868	3.6823	1.9900	2.466	0.3195	1.3867	39413.5840	3.7599T	-0.0274	4.192	0.0001*	0.5491
633.5563	3.6799	2.0300	2.416	0.3230	1.2209	39737.6086	3.7594	0.0105	4.152	0.0000*	0.5491
635.2789	3.6777	2.0698	2.368	0.3268	1.0532	40397.0044	3.7554	0.1100	4.036	0.1484	0.5489
	$M = 2.80$	$Y = 0.20$	$Z = 0.0001$			40837.0643	3.7465	0.2100	3.901	0.1567	0.5475
						41126.8571	3.7343	0.3100	3.752	0.1630	0.5412
						41333.8153	3.7224	0.4100	3.604	0.1684	0.5221
0.0000	4.2051	1.8952	4.757	0.7999*	0.3788*	41502.5338	3.7138	0.5100	3.470	0.1746	0.4949
64.5710	4.2066	1.9404	4.718	0.7000*	0.4248*	41638.8250	3.7078	0.6100	3.346	0.1822	0.4624
117.5281	4.2060	1.9810	4.674	0.6000*	0.3870*	41754.6868	3.7033	0.7100	3.228	0.1915	0.4386
161.3865	4.2031	2.0176	4.626	0.5000*	0.3523*	41851.8872	3.6997	0.8100	3.114	0.2019	0.4166
198.0228	4.1980	2.0506	4.573	0.4000*	0.3166*	41932.0446	3.6960	0.9100	2.999	0.2126	0.3977
228.1769	4.1909	2.0800	4.515	0.3000*	0.2862*	41996.9791	3.6926	1.0100	2.885	0.2231	0.3837
253.0020	4.1821	2.1064	4.454	0.2000*	0.2486*	42049.2280	3.6893	1.1100	2.772	0.2335	0.3726
272.8290	4.1739	2.1302	4.397	0.1000*	0.2099*	42091.3593	3.6858	1.2100	2.658	0.2437	0.3648
280.3671	4.1726R	2.1413	4.381	0.0549*	0.1897*	42101.9457	3.6846	1.2389	2.624	0.2466	0.3631
281.1133	4.1732	2.1429	4.381	0.0500*	0.1874*						
285.5917	4.1791	2.1545	4.393	0.0200*	0.1676*	$M = 0.70$	$Y = 0.30$	$Z = 0.0001$			
287.0120	4.1855	2.1628	4.411	0.0100*	0.1454*						
288.2853	4.1996B	2.1881	4.442	0.0009*	0.0169*	0.0000	3.7551	-0.4184	4.668	0.6999*	0.0060*
289.7625	4.1944	2.2073	4.402	0.0000*	- - -	1953.1656	3.7597	-0.3764	4.645	0.6000*	0.6982
295.2496	4.1898	2.2300	4.361	0.3523	- - -	3790.3206	3.7643	-0.3328	4.620	0.5000*	0.6989
302.0750	4.1799	2.2600	4.291	0.3618	- - -	5605.9229	3.7692	-0.2840	4.590	0.4000*	0.6992
307.1710	4.1568	2.2900	4.169	0.3713	- - -	7404.1693	3.7744	-0.2290	4.556	0.3000*	0.6996
309.9221	4.1200	2.3108	4.001	0.3776	- - -	922.5792	3.7801	-0.1636	4.513	0.2000*	0.6998
311.4413	4.0800	2.3215	3.830	0.3780	- - -	11375.6737	3.7881	-0.0659	4.448	0.1000*	- - -

TABLE 3—Continued

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X</i> <sub>C(*)</sub> <i>M</i> <sub>SH</sub>	<i>M</i> <sub>CC(*)</sub> <i>M</i> <sub>CE</sub>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X</i> <sub>C(*)</sub> <i>M</i> <sub>SH</sub>	<i>M</i> <sub>CC(*)</sub> <i>M</i> <sub>CE</sub>
309.3756	4.1155	1.4365	4.653	0.4000*	0.0822*	180.6405	4.2169	2.3277	4.371	0.0500*	0.2308*
391.2441	4.1160	1.4737	4.618	0.3000*	0.0896*	184.0346	4.2228	2.3401	4.383	0.0200*	0.2033*
471.2747	4.1130	1.5115	4.568	0.2000*	0.1047*	185.0766	4.2295	2.3481	4.401	0.0100*	0.1826*
523.3985	4.1095	1.5390	4.526	0.1000*	0.0967*	186.0187	4.2458B	2.3763	4.438	0.0008*	0.0338*
528.1120	4.1093R	1.5418	4.523	0.0902*	0.0949*	186.2597	4.2416	2.3848	4.413	0.0000*	- - -
545.6938	4.1110	1.5556	4.516	0.0500*	0.0835*	187.6332	4.2373	2.4100	4.371	0.4035	- - -
557.9432	4.1168	1.5726	4.522	0.0200*	0.0627*	191.3070	4.2304	2.4400	4.313	0.4141	- - -
561.8736	4.1222	1.5856	4.530	0.0100*	0.0417*	194.3413	4.2175	2.4700	4.232	0.4258	- - -
565.9564	4.1272B	1.6076	4.529	0.0019*	- - -	196.5080	4.1916	2.5000	4.098	0.4389	- - -
603.9170	4.1254	1.6498	4.479	0.0000*	- - -	197.3564	4.1700	2.5146	3.997	0.4389	- - -
644.8181	4.1228	1.7000	4.419	0.2157	- - -	198.1047	4.1400	2.5280	3.863	0.4389	- - -
680.1459	4.1154	1.7600	4.329	0.2463	- - -	198.6289	4.1100	2.5364	3.735	0.4389	- - -
703.4006	4.0958	1.8200	4.190	0.2684	- - -	199.0299	4.0800	2.5415	3.610	0.4389	- - -
712.6820	4.0700	1.8565	4.051	0.2775	- - -	199.3469	4.0500	2.5438	3.488	0.4389	- - -
717.6671	4.0400	1.8817	3.906	0.2822	- - -	199.6060	4.0200	2.5442	3.367	0.4389	- - -
720.7000	4.0100	1.8982	3.769	0.2847	- - -	199.8263	3.9900	2.5429	3.249	0.4389	- - -
722.9291	3.9800	1.9097	3.638	0.2865	- - -	200.0159	3.9600	2.5401	3.131	0.4389	- - -
724.7086	3.9500	1.9176	3.510	0.2878	- - -	200.1787	3.9300	2.5356	3.016	0.4389	0.0001*
726.1888	3.9200	1.9227	3.385	0.2890	- - -	200.3237	3.9000	2.5310	2.900	0.4389	0.0181*
727.4456	3.8900	1.9254	3.262	0.2900	- - -	200.3857	3.8869	2.5297	2.849	0.4389	0.0403*
728.5347	3.8600	1.9263	3.141	0.2909	- - -	200.5512	3.8870	2.5577	2.822	0.4389	0.1430*
729.4877	3.8300	1.9254	3.022	0.2918	- - -						
730.3177	3.8000	1.9228	2.904	0.2927	- - -						
731.0551	3.7700	1.9189	2.788	0.2935	- - -						
731.7953	3.7400	1.9126	2.675	0.2943	1.7500	0.0000	4.3074	2.4095	4.749	0.6999*	0.7557*
733.3992	3.7100	1.8841	2.583	0.2963	1.7335	29.6582	4.3058	2.4636	4.688	0.6000*	0.7534*
734.7887	3.6967	1.8590	2.555	0.2980	1.6023	53.4526	4.3016	2.5118	4.623	0.5000*	0.6612*
738.2105	3.6870	1.9100	2.466	0.3027	1.2293	72.4184	4.2953	2.5554	4.554	0.4000*	0.5750*
741.0066	3.6855	1.9700	2.399	0.3079	1.0133	87.4531	4.2870	2.5947	4.482	0.3000*	0.5068*
743.6437	3.6821	2.0300	2.326	0.3138	0.8684	99.2778	4.2770	2.6295	4.407	0.2000*	0.4320*
746.1300	3.6791	2.0900	2.254	0.3201	0.7389	108.6174	4.2672	2.6611	4.336	0.1000*	0.3605*
748.4603	3.6769	2.1500	2.185	0.3269	0.6495	111.6233	4.2652R	2.6729	4.316	0.0617*	0.3303*
750.6509	3.6742	2.2100	2.114	0.3341	0.5815	112.4544	4.2660	2.6769	4.315	0.0500*	0.3212*
752.6973	3.6714	2.2700	2.043	0.3417	0.5333	114.5165	4.2713	2.6889	4.325	0.0200*	0.2865*
754.5970	3.6687	2.3300	1.972	0.3496	0.5017	115.1461	4.2779	2.6962	4.344	0.0100*	0.2598*
755.5488	3.6674	2.3619	1.935	0.3539	0.4876	115.6820	4.2950B	2.7220	4.386	0.0010*	0.0951*
	<i>M</i> = 2.20					116.0442	4.2855	2.7500	4.321	0.5686	- - -
						117.3864	4.2761	2.7800	4.253	0.5686	- - -
0.0000	4.1814	1.6942	4.758	0.6999*	0.2390*	118.8539	4.2598	2.8100	4.158	0.5686	- - -
74.7507	4.1843	1.7417	4.722	0.6000*	0.2837*	119.8093	4.2300	2.8374	4.011	0.5703	- - -
136.1561	4.1847	1.7839	4.682	0.5000*	0.2592*	120.2652	4.2000	2.8531	3.875	0.5755	- - -
187.0454	4.1823	1.8217	4.634	0.4000*	0.2405*	120.5593	4.1700	2.8630	3.745	0.5774	- - -
229.5553	4.1774	1.8559	4.580	0.3000*	0.2232*	120.7707	4.1400	2.8691	3.619	0.5782	- - -
264.4409	4.1706	1.8861	4.523	0.2000*	0.1974*	120.9331	4.1100	2.8728	3.496	0.5787	- - -
292.4482	4.1639	1.9137	4.469	0.1000*	0.1702*	121.0630	4.0800	2.8744	3.374	0.5790	- - -
297.9801	4.1631R	1.9200	4.459	0.0774*	0.1632*	121.1705	4.0500	2.8742	3.254	0.5790	- - -
304.1988	4.1637	1.9283	4.453	0.0500*	0.1551*	121.2607	4.0200	2.8726	3.136	0.5791	0.0015*
310.6240	4.1700	1.9421	4.465	0.0200*	0.1334*	121.3322	3.9933	2.8717	3.030	0.5792	0.0366*
312.6243	4.1765	1.9517	4.481	0.0100*	0.1130*	121.4229	3.9762	2.8900	2.943	0.5792	0.1452*
314.4917	4.1896B	1.9822	4.503	0.0007*	- - -						
317.5871	4.1863	2.0051	4.467	0.0000*	- - -						
330.1065	4.1821	2.0400	4.415	0.2713	- - -						
342.8652	4.1741	2.0800	4.343	0.2911	- - -	0.0000	3.7397	-0.6606	4.744	0.5999*	0.0021*
352.3843	4.1589	2.1200	4.242	0.3150	- - -	2611.6347	3.7453	-0.6150	4.721	0.5000*	0.5441
358.5509	4.1256	2.1600	4.069	0.3196	- - -	5180.2851	3.7513	-0.5646	4.695	0.4000*	0.5459
361.1447	4.0900	2.1814	3.905	0.3235	- - -	7772.8602	3.7576	-0.5056	4.661	0.3000*	0.5472
362.9663	4.0500	2.1956	3.731	0.3272	- - -	10424.1881	3.7648	-0.4340	4.618	0.2000*	0.5486
364.3139	4.0100	2.2035	3.563	0.3298	- - -	13435.5617	3.7739	-0.3301	4.551	0.1000*	0.5494
365.3744	3.9700	2.2064	3.400	0.3320	- - -	15790.4427	3.7828	-0.2166	4.473	0.0500*	0.5498
366.2506	3.9300	2.2058	3.241	0.3340	- - -	18184.6505	3.7949	-0.0368	4.341	0.0200*	- - -
367.0153	3.8900	2.2027	3.084	0.3358	- - -	18910.3345	3.7991	0.0391	4.282	0.0100*	- - -
367.6617	3.8500	2.1968	2.930	0.3375	- - -	19609.1107	3.8031	0.1300	4.207	0.0004*	- - -
368.2043	3.8100	2.1887	2.778	0.3390	- - -	20000.2391	3.8044	0.1987	4.144	0.0000*	- - -
368.6541	3.7700	2.1783	2.628	0.3403	- - -	20056.8414	3.8045T	0.2103	4.132	0.1428	- - -
369.0799	3.7300	2.1628	2.484	0.3416	2.1999	20451.5695	3.8004	0.3100	4.016	0.1547	- - -
369.5683	3.7068	2.1300	2.424	0.3430	2.1840	20710.6219	3.7874	0.4100	3.864	0.1638	- - -
370.0733	3.6950	2.0926	2.414	0.3444	0.0001*	20877.5563	3.7672	0.5100	3.684	0.1704	0.5499
371.1232	3.6901	2.1300	2.357	0.3473	0.1813*	20995.0681	3.7453	0.6100	3.496	0.1756	0.5486
371.1400	3.6905	2.1329	2.356	0.3473	0.1815*	21091.2480	3.7278	0.7100	3.326	0.1811	0.5367
	<i>M</i> = 2.80					21167.8990	3.7167	0.8100	3.182	0.1881	0.5068
						21229.4457	3.7092	0.9100	3.052	0.1972	0.4722
						21280.2298	3.7038	1.0100	2.930	0.2075	0.4452
0.0000	4.2513	2.0727	4.764	0.6999*	0.4768*	21322.2749	3.6993	1.1100	2.812	0.2181	0.4217
46.4869	4.2512	2.1244	4.712	0.6000*	0.5156*	21356.7778	3.6949	1.2100	2.694	0.2287	0.4028
84.2304	4.2483	2.1704	4.654	0.5000*	0.4617*	21384.8676	3.6907	1.3100	2.577	0.2391	0.3874
114.6172	4.2431	2.2118	4.592	0.4000*	0.4075*	21407.7357	3.6867	1.4100	2.461	0.2494	0.3775
139.1960	4.2357	2.2491	4.525	0.3000*	0.3636*	21417.0113	3.6849	1.4571	2.407	0.2542	0.3740
158.8736	4.2266	2.2826	4.455	0.2000*	0.3112*						
174.2996	4.2179	2.3125	4.390	0.1000*	0.2580*						
180.2109	4.2164R	2.3263	4.371	0.0537*	0.2340*						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
$M = 0.70 \quad Y = 0.40 \quad Z = 0.0001$																	
0.0000	3.8043	-0.1607	4.607	0.5999*	0.0134*	1769.3788	3.7900	1.5769	3.009	0.2455	---						
1161.0752	3.8103	-0.1130	4.583	0.5000*	0.0006*	1771.3507	3.7600	1.5830	2.883	0.2465	---						
2139.7406	3.8154	-0.0683	4.559	0.4000*	---	1778.7289	3.7129	1.5881	2.689	0.2509	1.0742						
3098.7183	3.8213	-0.0187	4.533	0.3000*	---	1787.9858	3.6956	1.6400	2.568	0.2582	0.8575						
4110.0533	3.8289	0.0426	4.502	0.2000*	---	1793.4215	3.6905	1.7000	2.488	0.2641	0.7471						
5460.1294	3.8444	0.1499	4.457	0.1000*	---	1798.0722	3.6865	1.7600	2.412	0.2705	0.6647						
6525.3368	3.8627	0.2697	4.410	0.0500*	---	1799.9669	3.6855	1.7869	2.381	0.2734	0.6437						
7201.7716	3.8766	0.3711	4.365	0.0200*	---	$M = 1.25 \quad Y = 0.40 \quad Z = 0.0001$											
7374.2924	3.8802	0.4005	4.350	0.0100*	---	0.0000	4.0397	0.9430	4.697	0.5999*	0.0915*						
7706.0032	3.8872	0.4700	4.308	0.0004*	---	198.9636	4.0472	0.9926	4.677	0.5000*	0.0442*						
7933.4949	3.8911	0.5316	4.262	0.0000*	---	347.9731	4.0545	1.0371	4.662	0.4000*	0.0108*						
8060.0505	3.8920T	0.5738	4.224	0.1627	---	467.8188	4.0609	1.0779	4.647	0.3000*	0.0031*						
8218.3739	3.8895	0.6400	4.148	0.1731	---	575.1939	4.0662	1.1167	4.629	0.2000*	0.0060*						
8339.7477	3.8799	0.7100	4.039	0.1817	---	689.2743	4.0699	1.1590	4.602	0.1000*	0.0102*						
8424.4459	3.8597	0.7800	3.888	0.1881	---	729.8806	4.0721	1.1784	4.591	0.0500*	0.0026*						
8477.4541	3.8300	0.8408	3.709	0.1922	---	757.8867	4.0741	1.1933	4.584	0.0200*	---						
8507.6966	3.8000	0.8838	3.546	0.1946	---	778.3508	4.0752	1.2042	4.578	0.0100*	---						
8533.1526	3.7700	0.9250	3.384	0.1967	---	886.3274	4.0810	1.2700	4.535	0.0001*	---						
8566.4200	3.7400	0.9847	3.205	0.1997	0.6983	939.9151	4.0837	1.3111	4.505	0.0000*	---						
8602.0787	3.7185	1.0500	3.054	0.2037	0.6688	1011.6779	4.0858	1.3800	4.444	0.1836	---						
8630.9442	3.7086	1.1200	2.944	0.2090	0.6099	1023.9594	4.0858T	1.3941	4.430	0.1889	---						
8649.2640	3.7036	1.1753	2.869	0.2142	0.5693	1071.6013	4.0825	1.4600	4.351	0.2112	---						
$M = 0.90 \quad Y = 0.40 \quad Z = 0.0001$																	
0.0000	3.9042	0.3355	4.620	0.5999*	0.0379*	1106.9650	4.0709	1.5300	4.235	0.2302	---						
539.2814	3.9123	0.3844	4.603	0.5000*	0.0197*	1129.6428	4.0435	1.6000	4.055	0.2440	---						
961.3324	3.9193	0.4279	4.588	0.4000*	0.0005*	1137.3653	4.0200	1.6344	3.927	0.2488	---						
1320.8542	3.9265	0.4715	4.573	0.3000*	---	1143.1411	3.9900	1.6653	3.776	0.2525	---						
1743.0620	3.9367	0.5328	4.553	0.2000*	---	1147.0036	3.9600	1.6877	3.633	0.2550	---						
2293.9217	3.9534	0.6346	4.517	0.1000*	---	1149.9501	3.9300	1.7047	3.496	0.2569	---						
2583.9727	3.9628	0.6991	4.490	0.0500*	---	1152.3124	3.9000	1.7178	3.363	0.2585	---						
2728.5656	3.9672	0.7342	4.473	0.0200*	---	1154.2622	3.8700	1.7277	3.233	0.2598	---						
2790.8830	3.9693	0.7514	4.464	0.0100*	---	1155.9001	3.8400	1.7350	3.106	0.2611	---						
2996.8065	3.9762	0.8200	4.423	0.0002*	---	1157.3072	3.8100	1.7402	2.981	0.2623	---						
3129.9696	3.9801	0.8770	4.382	0.0000*	---	1158.5437	3.7800	1.7435	2.858	0.2634	---						
3231.1230	3.9814T	0.9316	4.333	0.1782	---	1159.7498	3.7500	1.7452	2.736	0.2645	---						
3327.5845	3.9785	1.0000	4.253	0.1922	---	1162.2620	3.7200	1.7408	2.620	0.2670	1.2439						
3397.2939	3.9678	1.0700	4.140	0.2032	---	1164.2571	3.7077	1.7305	2.582	0.2690	1.2053						
3444.2824	3.9446	1.1400	3.977	0.2111	---	1171.5954	3.6924	1.8000	2.451	0.2780	0.8866						
3465.5023	3.9200	1.1842	3.834	0.2148	---	1175.7162	3.6879	1.8700	2.363	0.2852	0.7603						
3480.5536	3.8900	1.2224	3.676	0.2175	---	1179.3677	3.6841	1.9400	2.278	0.2926	0.6595						
3490.6999	3.8600	1.2509	3.528	0.2193	---	1182.6671	3.6810	2.0100	2.195	0.3004	0.6003						
3498.2704	3.8300	1.2732	3.385	0.2207	---	1185.6631	3.6783	2.0800	2.114	0.3086	0.5460						
3504.2189	3.8000	1.2911	3.247	0.2218	---	1188.3821	3.6749	2.1500	2.031	0.3171	0.5086						
3509.2877	3.7700	1.3060	3.113	0.2229	---	1190.8495	3.6717	2.2200	1.948	0.3260	0.4797						
3516.6296	3.7400	1.3261	2.972	0.2245	0.8996	1192.7354	3.6689	2.2789	1.878	0.3337	0.4648						
3533.2280	3.7100	1.3617	2.817	0.2290	0.8409	$M = 1.40 \quad Y = 0.40 \quad Z = 0.0001$											
3547.7066	3.6988	1.4300	2.704	0.2355	0.7155	0.0000	4.0842	1.1440	4.723	0.5999*	0.0951*						
3558.3098	3.6944	1.5000	2.616	0.2425	0.6386	140.3987	4.0914	1.1930	4.703	0.5000*	0.0685*						
3567.2771	3.6897	1.5700	2.527	0.2502	0.5703	251.3353	4.0979	1.2377	4.684	0.4000*	0.0465*						
3575.0886	3.6858	1.6400	2.442	0.2581	0.5265	346.0838	4.1021	1.2782	4.661	0.3000*	0.0531*						
3576.0943	3.6850	1.6496	2.429	0.2592	0.5265	446.5178	4.1033	1.3219	4.622	0.2000*	0.0663*						
$M = 1.10 \quad Y = 0.40 \quad Z = 0.0001$																	
0.0000	3.9885	0.7115	4.668	0.5999*	0.0674*	538.1430	4.1015	1.3656	4.571	0.1000*	0.0746*						
294.1336	3.9961	0.7607	4.649	0.5000*	0.0363*	542.0403	4.1015R	1.3677	4.569	0.0939*	0.0739*						
513.1944	4.0031	0.8044	4.634	0.4000*	0.0015*	567.5241	4.1037	1.3856	4.560	0.0500*	0.0636*						
697.1295	4.0104	0.8478	4.620	0.3000*	---	583.7352	4.1096	1.4055	4.563	0.0200*	0.0447*						
897.0075	4.0194	0.9023	4.601	0.2000*	---	589.0265	4.1148	1.4207	4.569	0.0100*	0.0233*						
1088.8524	4.0276	0.9600	4.576	0.1000*	---	646.4786	4.1187	1.4900	4.515	0.0000*	---						
1171.0637	4.0306	0.9862	4.562	0.0500*	---	655.1897	4.1187	1.4990	4.506	0.0000*	---						
1229.3497	4.0328	1.0067	4.550	0.0200*	---	685.2326	4.1190B	1.5342	4.472	0.1839	---						
1264.6178	4.0344	1.0207	4.543	0.0100*	---	727.5799	4.1168	1.6000	4.397	0.2130	---						
1393.3199	4.0405	1.0800	4.508	0.0003*	---	758.6776	4.1070	1.6700	4.288	0.2377	---						
1494.2122	4.0448	1.1394	4.465	0.0000*	---	778.4666	4.0820	1.7400	4.118	0.2558	---						
1562.8390	4.0467	1.1900	4.422	0.1780	---	784.8981	4.0600	1.7737	3.997	0.2619	---						
1595.7227	4.0468T	1.2188	4.394	0.1868	---	789.7796	4.0300	1.8051	3.845	0.2666	---						
1644.4143	4.0447	1.2700	4.335	0.2008	---	795.2463	3.9700	1.8438	3.567	0.2718	---						
1687.5502	4.0373	1.3300	4.245	0.2145	---	798.6538	3.9100	1.8654	3.305	0.2753	---						
1718.0922	4.0210	1.3900	4.120	0.2252	---	801.0709	3.8500	1.8763	3.054	0.2781	---						
1734.2742	4.0000	1.4347	3.991	0.2312	---	802.0402	3.8200	1.8789	2.931	0.2793	---						
1745.8902	3.9700	1.4766	3.829	0.2356	---	802.8880	3.7900	1.8798	2.811	0.2805	---						
1752.8180	3.9400	1.5059	3.680	0.2383	---	803.6494	3.7600	1.8793	2.691	0.2816	---						
1757.8051	3.9100	1.5281	3.538	0.2402	---	804.6618	3.7300	1.8753	2.575	0.2831	1.3997						
1761.6292	3.8800	1.5453	3.400	0.2418	---	807.3599	3.7009	1.8453	2.489	0.2871	1.3143						
1764.6940	3.8500	1.5587	3.267	0.2432	---	811.9239	3.6904	1.9100	2.382	0.2950	0.9777						
1767.2213	3.8200	1.5690	3.137	0.2444	---	815.0639	3.6863	1.9800	2.296	0.3018	0.8136						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
817.8885	3.6830	2.0500	2.212	0.3092	0.7169	78.4112	4.2844	2.4180	4.551	0.3000*	0.4474*	
820.4853	3.6796	2.1200	2.129	0.3169	0.6270	94.1253	4.2757	2.4598	4.475	0.2000*	0.3775*	
822.8661	3.6761	2.1900	2.045	0.3251	0.5675	106.2200	4.2670	2.4973	4.402	0.1000*	0.3144*	
825.0356	3.6731	2.2600	1.963	0.3337	0.5243	110.7614	4.2655R	2.5139	4.380	0.0545*	0.2830*	
827.0110	3.6700	2.3300	1.880	0.3426	0.4960	111.1550	4.2660	2.5157	4.380	0.0500*	0.2799*	
827.5847	3.6690	2.3517	1.855	0.3455	0.4888	113.7537	4.2721	2.5295	4.390	0.0200*	0.2503*	
						114.5535	4.2790	2.5376	4.410	0.0100*	0.2265*	
				$M = 1.75$	$Y = 0.40$	$Z = 0.0001$	115.1695	4.2945	2.5600	4.450	0.0019*	0.1308*
							115.2548	4.2975B	2.5691	4.452	0.0008*	0.0600*
0.0000	4.1651	1.5243	4.764	0.5999*	0.1508*	115.3332	4.2951	2.5741	4.438	0.0000*	---	
83.7745	4.1694	1.5754	4.730	0.5000*	0.1954*	115.6417	4.2899	2.6000	4.391	0.4679	---	
151.7837	4.1704	1.6198	4.689	0.4000*	0.1970*	117.1638	4.2841	2.6300	4.338	0.4711	---	
215.5129	4.1680	1.6653	4.634	0.3000*	0.1794*	118.9635	4.2759	2.6600	4.275	0.4835	---	
262.3051	4.1629	1.7017	4.577	0.2000*	0.1662*	120.3531	4.2617	2.6900	4.188	0.4866	---	
300.2582	4.1575	1.7353	4.522	0.1000*	0.1494*	121.3612	4.2373	2.7200	4.061	0.5002	---	
305.6433	4.1570R	1.7406	4.515	0.0843*	0.1443*	121.9323	4.2100	2.7412	3.930	0.5056	---	
316.3634	4.1579	1.7535	4.505	0.0500*	0.1348*	122.3301	4.1800	2.7566	3.795	0.5081	---	
325.0488	4.1645	1.7699	4.516	0.0200*	0.1130*	122.6167	4.1500	2.7671	3.664	0.5087	---	
327.7023	4.1711	1.7810	4.531	0.0100*	0.0954*	122.8390	4.1200	2.7742	3.537	0.5087	---	
330.1383	4.1843B	1.8161	4.548	0.0009*	0.0017*	123.0194	4.0900	2.7789	3.413	0.5087	---	
335.8457	4.1817	1.8461	4.508	0.0000*	---	123.1689	4.0600	2.7813	3.290	0.5087	---	
350.0686	4.1795	1.8800	4.465	0.2127	---	123.2953	4.0300	2.7818	3.170	0.5087	0.0003*	
365.0363	4.1758	1.9200	4.411	0.2432	---	123.3448	4.0170	2.7817	3.118	0.5087	0.0084*	
377.1005	4.1691	1.9600	4.344	0.2649	---	123.5220	3.9957	2.8023	3.012	0.5087	0.1405*	
386.1609	4.1576	2.0000	4.258	0.2817	---							
392.4567	4.1372	2.0400	4.136	0.2937	---							
396.9571	4.1013	2.0800	3.952	0.3024	---							
399.0579	4.0700	2.1018	3.806	0.3064	---	0.0000	4.3501	2.5933	4.735	0.5999*	0.8479*	
400.9008	4.0300	2.1203	3.627	0.3098	---	20.9033	4.3474	2.6541	4.664	0.5000*	0.8089*	
402.2808	3.9900	2.1322	3.455	0.3126	---	37.0378	4.3422	2.7074	4.590	0.4000*	0.6969*	
403.3883	3.9500	2.1392	3.288	0.3149	---	49.3783	4.3348	2.7549	4.513	0.3000*	0.6005*	
404.3025	3.9100	2.1425	3.125	0.3171	---	58.9542	4.3257	2.7975	4.433	0.2000*	0.5142*	
405.0667	3.8700	2.1427	2.965	0.3191	---	66.3373	4.3164	2.8358	4.358	0.1000*	0.4241*	
405.7070	3.8300	2.1402	2.807	0.3209	---	68.6690	4.3146R	2.8498	4.337	0.0618*	0.4009*	
406.2417	3.7900	2.1352	2.652	0.3225	---	69.3366	4.3155	2.8546	4.336	0.0500*	0.3861*	
406.6964	3.7500	2.1280	2.499	0.3239	---	70.9624	4.3210	2.8680	4.344	0.0200*	0.3435*	
407.5075	3.7100	2.0982	2.369	0.3262	1.7379	71.4519	4.3278	2.8756	4.364	0.0100*	0.3121*	
408.2250	3.6975	2.0655	2.352	0.3282	1.5947	71.8685	4.3461B	2.9035	4.409	0.0010*	0.1324*	
409.6033	3.6874	2.1000	2.277	0.3320	1.2781	71.9675	4.3409	2.9192	4.373	0.0000*	---	
410.7239	3.6836	2.1400	2.222	0.3355	1.1126	72.0957	4.3364	2.9400	4.334	0.6297	---	
411.1334	3.6824	2.1552	2.202	0.3369	1.0642	72.7344	4.3282	2.9700	4.271	0.6297	---	
				$M = 2.20$	$Y = 0.40$	$Z = 0.0001$	73.5983	4.3161	3.0000	4.193	0.6297	---
							74.2509	4.2957	3.0300	4.081	0.6480	---
							74.6308	4.2700	3.0533	3.955	0.6575	---
0.0000	4.2350	1.8912	4.775	0.5999*	0.3376*	74.8845	4.2400	3.0711	3.817	0.6612	---	
51.8965	4.2350	1.9448	4.722	0.5000*	0.3750*	75.0574	4.2100	3.0832	3.685	0.6626	---	
94.6044	4.2322	1.9932	4.662	0.4000*	0.3380*	75.1853	4.1800	3.0917	3.557	0.6628	---	
128.6738	4.2268	2.0366	4.597	0.3000*	0.2988*	75.2865	4.1500	3.0973	3.431	0.6628	---	
155.9595	4.2193	2.0758	4.528	0.2000*	0.2626*	75.3698	4.1200	3.1008	3.308	0.6628	---	
177.1936	4.2119	2.1110	4.463	0.1000*	0.2178*	75.4426	4.0900	3.1042	3.184	0.6628	0.0445*	
181.6155	4.2108R	2.1195	4.450	0.0754*	0.2102*	75.5070	4.0774	3.1201	3.118	0.6628	0.1448*	
185.9152	4.2114	2.1289	4.443	0.0500*	0.1951*							
190.5538	4.2176	2.1430	4.454	0.0200*	0.1755*							
191.9976	4.2245	2.1519	4.473	0.0100*	0.1563*							
193.1762	4.2407	2.1800	4.510	0.0015*	0.0609*	0.0000	3.7046	-0.6668	4.715	0.7996*	0.6816	
193.3221	4.2414B	2.1874	4.505	0.0005*	0.0042*	3228.7606	3.7090	-0.6313	4.697	0.7000*	0.6825	
193.4717	4.2398	2.1932	4.493	0.0000*	---	6436.4762	3.7138	-0.5925	4.677	0.6000*	0.6857	
194.9367	4.2363	2.2200	4.452	0.3133	---	9623.6907	3.7191	-0.5493	4.655	0.5000*	0.6880	
199.5965	4.2329	2.2500	4.408	0.3332	---	12810.1054	3.7247	-0.5001	4.628	0.4000*	0.6897	
203.8845	4.2277	2.2800	4.358	0.3413	---	16020.4234	3.7307	-0.4426	4.595	0.3000*	0.6918	
207.3545	4.2186	2.3100	4.291	0.3551	---	19288.5680	3.7370	-0.3737	4.551	0.2000*	0.6941	
210.0085	4.2036	2.3400	4.201	0.3606	---	22888.8050	3.7443	-0.2783	4.485	0.1000*	0.6964	
212.0291	4.1791	2.3700	4.073	0.3661	---	25555.6332	3.7498	-0.1836	4.412	0.0500*	0.6978	
213.3127	4.1500	2.3927	3.934	0.3704	---	28258.1269	3.7547	-0.0455	4.294	0.0200*	0.6987	
214.1779	4.1200	2.4083	3.798	0.3739	---	28963.4340	3.7557	-0.0008	4.253	0.0100*	0.6990	
214.8436	4.0900	2.4193	3.667	0.3763	---	29541.1996	3.7558T	0.0417	4.211	0.0012*	0.6990	
215.3818	4.0600	2.4266	3.540	0.3780	---	30260.8380	3.7543	0.1078	4.139	0.0000*	0.6990	
215.8350	4.0300	2.4312	3.415	0.3780	---	30784.9973	3.7504	0.1700	4.061	0.1517	0.6987	
216.2306	4.0000	2.4338	3.293	0.3793	---	31223.1963	3.7420	0.2400	3.957	0.1595	0.6970	
216.5794	3.9700	2.4346	3.172	0.3810	---	31532.7496	3.7283	0.3100	3.833	0.1651	0.6889	
216.8932	3.9400	2.4339	3.053	0.3826	---	31751.2108	3.7128	0.3800	3.700	0.1689	0.6551	
217.1668	3.9100	2.4316	2.935	0.3843	0.0016*	31902.9808	3.7022	0.4500	3.588	0.1715	0.6008	
217.4014	3.8830	2.4296	2.829	0.3856	0.0268*	32021.0102	3.6959	0.5200	3.493	0.1742	0.5441	
217.5942	3.8830	2.4500	2.809	0.3867	0.1305*	32124.6663	3.6918	0.5900	3.407	0.1778	0.5045	
217.6589	3.8993	2.4600	2.864	0.3871	0.1486*	32219.3233	3.6886	0.6600	3.324	0.1828	0.4660	
				$M = 2.80$	$Y = 0.40$	$Z = 0.0001$	32222.4813	3.6885	0.6624	3.321	0.1830	0.4647
0.0000	4.2977	2.2615	4.761	0.5999*	0.6003*							
32.6789	4.2958	2.3200	4.694	0.5000*	0.5783*							
58.1575	4.2912	2.3712	4.625	0.4000*	0.5127*							

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub><sup>(*)</sup></i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub><sup>(*)</sup></i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub><sup>(*)</sup></i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub><sup>(*)</sup></i> <i>M<sub>CE</sub></i>						
<i>M</i> = 0.90 <i>Y</i> = 0.20 <i>Z</i> = 0.0004																	
0.0000	3.7711	-0.1510	4.574	0.7996*	0.0134*	2637.6427	3.8700	1.3349	3.676	0.2275	- - -						
1418.0203	3.7754	-0.1118	4.552	0.7000*	0.8998	2645.9732	3.8400	1.3443	3.546	0.2287	- - -						
2682.0731	3.7792	-0.0738	4.529	0.6000*	0.8999	2657.3069	3.7800	1.3510	3.299	0.2301	- - -						
3914.9482	3.7832	-0.0327	4.504	0.5000*	- - -	2662.3955	3.7500	1.3491	3.181	0.2307	- - -						
5114.1201	3.7872	0.0119	4.475	0.4000*	- - -	2670.6163	3.7200	1.3326	3.078	0.2315	1.3940						
6283.2568	3.7913	0.0607	4.443	0.3000*	- - -	2681.2043	3.6990	1.3038	3.023	0.2324	1.2814						
7481.7630	3.7958	0.1187	4.403	0.2000*	- - -	2696.4213	3.6877	1.3500	2.931	0.2339	1.0002						
9013.2013	3.8029	0.2129	4.337	0.1000*	- - -	2706.5506	3.6838	1.4000	2.866	0.2360	0.8581						
10119.5274	3.8094	0.3027	4.274	0.0500*	- - -	2715.8952	3.6808	1.4500	2.803	0.2394	0.7553						
10737.4702	3.8128	0.3626	4.227	0.0200*	- - -	2724.6473	3.6782	1.5000	2.743	0.2437	0.6671						
10904.8909	3.8136	0.3806	4.212	0.0100*	- - -	2732.3377	3.6762	1.5500	2.685	0.2487	0.6060						
11300.0366	3.8146T	0.4308	4.166	0.0005*	- - -	2739.3842	3.6738	1.6000	2.626	0.2540	0.5457						
11635.8860	3.8132	0.4831	4.108	0.0000*	- - -	2740.0255	3.6737	1.6050	2.620	0.2545	0.5352						
11969.5519	3.8053	0.5500	4.010	0.1714	- - -	<i>M</i> = 1.55 <i>Y</i> = 0.20 <i>Z</i> = 0.0004											
12220.7730	3.7856	0.6200	3.861	0.1822	- - -	12358.8865	3.7600	0.6742	3.704	0.8980	0.9000	0.0000	3.9850	0.8936	4.621	0.7996*	0.0831*
12459.4555	3.7300	0.7197	3.539	0.1916	0.8950	12570.5965	3.7000	0.7811	3.357	0.1944	0.7727	282.9740	3.9903	0.9334	4.602	0.7000*	0.0618*
12628.6691	3.6924	0.8500	3.258	0.1959	0.6626	12677.3319	3.6876	0.9200	3.169	0.1982	0.5858	514.9298	3.9942	0.9692	4.582	0.6000*	0.0434*
12721.0983	3.6842	0.9900	3.085	0.2025	0.5285	12759.7069	3.6813	1.0600	3.004	0.2090	0.4745	860.2219	4.0011	1.0331	4.546	0.5000*	0.0252*
12791.5504	3.6786	1.1300	2.923	0.2166	0.4420	12803.2038	3.6776	1.1590	2.890	0.2198	0.4253	995.3626	4.0037	1.0621	4.527	0.3000*	0.0092*
<i>M</i> = 1.10 <i>Y</i> = 0.20 <i>Z</i> = 0.0004																	
0.0000	3.8382	0.2497	4.529	0.7996*	0.0268*	1306.5055	4.0078	1.1390	4.467	0.0200*	- - -						
752.3419	3.8447	0.2895	4.515	0.7000*	0.0037*	1336.6624	4.0083	1.1485	4.460	0.0100*	- - -						
1367.2717	3.8503	0.3249	4.502	0.6000*	- - -	1458.3656	4.0100	1.1900	4.425	0.0003*	- - -						
1936.9944	3.8557	0.3608	4.488	0.5000*	- - -	1569.5861	4.0105	1.2360	4.381	0.0000*	- - -						
2481.9832	3.8609	0.3985	4.471	0.4000*	- - -	1576.5025	4.0105T	1.2392	4.377	0.1560	- - -						
3025.6758	3.8664	0.4407	4.451	0.3000*	- - -	1657.8049	4.0092	1.2800	4.332	0.1758	- - -						
3627.2007	3.8733	0.4955	4.423	0.2000*	- - -	1738.9496	4.0045	1.3300	4.263	0.1970	- - -						
4367.2275	3.8828	0.5787	4.378	0.1000*	- - -	1801.4046	3.9936	1.3800	4.169	0.2148	- - -						
4753.0435	3.8873	0.6294	4.345	0.0500*	- - -	1846.4891	3.9681	1.4300	4.017	0.2283	- - -						
4951.3250	3.8890	0.6579	4.324	0.0200*	- - -	1880.1017	3.8800	1.4801	3.615	0.2373	- - -						
5038.2782	3.8898	0.6718	4.313	0.0100*	- - -	1885.0759	3.8500	1.4849	3.490	0.2383	- - -						
5392.0892	3.8917	0.7400	4.252	0.0001*	- - -	1889.0424	3.8200	1.4862	3.368	0.2390	- - -						
5409.3817	3.8917T	0.7439	4.249	0.0001*	- - -	1892.3424	3.7900	1.4848	3.250	0.2396	- - -						
5514.3801	3.8912	0.7690	4.221	0.0000*	- - -	1895.3725	3.7600	1.4807	3.134	0.2401	- - -						
5727.2939	3.8864	0.8300	4.141	0.1813	- - -	1899.7462	3.7300	1.4667	3.028	0.2407	1.5489						
5905.0380	3.8695	0.9000	4.004	0.1962	- - -	1908.9970	3.7000	1.4192	2.955	0.2421	1.4203						
5995.5262	3.8400	0.9510	3.835	0.2038	- - -	1911.1491	3.6952	1.4180	2.937	0.2425	1.3595						
6034.0189	3.8100	0.9784	3.687	0.2068	- - -	1919.9609	3.6881	1.4600	2.867	0.2446	1.1106						
6058.5035	3.7800	0.9965	3.549	0.2085	- - -	1927.6465	3.6844	1.5100	2.802	0.2476	0.9488						
6081.4803	3.7500	1.0116	3.414	0.2099	1.0999	1934.8563	3.6811	1.5600	2.739	0.2514	0.8219						
6109.1762	3.7200	1.0161	3.290	0.2112	1.0886	1940.3629	3.6792	1.6024	2.689	0.2553	0.7148						
6128.2460	3.7058	1.0140	3.235	0.2119	1.0335	<i>M</i> = 1.75 <i>Y</i> = 0.20 <i>Z</i> = 0.0004											
6170.9518	3.6904	1.0800	3.107	0.2133	0.8054	936.1977	4.0352R	1.3311	4.438	0.1000*	0.0788*						
6198.3512	3.6857	1.1500	3.018	0.2149	0.6862	957.6149	4.0365	1.3452	4.428	0.0500*	0.0686*						
6222.7231	3.6820	1.2200	2.934	0.2186	0.5954	975.2394	4.0424	1.3614	4.436	0.0200*	0.0503*						
6244.5120	3.6790	1.2900	2.852	0.2249	0.5236	1026.6606	4.0374	1.1487	4.628	0.7000*	0.1133*						
6262.7325	3.6760	1.3600	2.770	0.2325	0.4781	376.5645	4.0404	1.1850	4.604	0.6000*	0.0908*						
6278.3472	3.6734	1.4300	2.689	0.2403	0.4334	514.1859	4.0430	1.2186	4.581	0.5000*	0.0748*						
6292.0251	3.6701	1.5000	2.606	0.2482	0.4089	629.6125	4.0443	1.2487	4.556	0.4000*	0.0697*						
6298.0330	3.6693	1.5344	2.568	0.2520	0.3971	735.6590	4.0436	1.2770	4.525	0.3000*	0.0758*						
<i>M</i> = 1.40 <i>Y</i> = 0.20 <i>Z</i> = 0.0004																	
0.0000	3.9429	0.7079	4.594	0.7996*	0.0600*	925.7960	4.0355	1.3311	4.438	0.1000*	0.0788*						
373.5847	3.9489	0.7479	4.578	0.7000*	0.0341*	981.0667	4.0475	1.3739	4.444	0.0100*	0.0311*						
678.6672	3.9536	0.7836	4.561	0.6000*	0.0195*	986.3475	4.0518B	1.3908	4.444	0.0026*	- - -						
930.0711	3.9576	0.8162	4.545	0.5000*	0.0049*	1053.9999	4.0490	1.4301	4.393	0.0000*	- - -						
1137.3404	3.9612	0.8464	4.529	0.4000*	- - -	1116.5231	4.0457	1.4700	4.340	0.1860	- - -						
1342.3425	3.9651	0.8798	4.511	0.3000*	- - -	1165.5005	4.0403	1.5100	4.279	0.2069	- - -						
1554.8062	3.9692	0.9180	4.489	0.2000*	- - -	1203.2637	4.0300	1.5500	4.197	0.2242	- - -						
1752.1764	3.9721	0.9560	4.463	0.1000*	- - -	1231.4659	4.0079	1.5900	4.069	0.2376	- - -						
1845.1281	3.9731	0.9749	4.448	0.0500*	- - -	1244.4327	3.9800	1.6140	3.933	0.2436	- - -						
1918.2886	3.9740	0.9915	4.435	0.0200*	- - -	1251.5268	3.9500	1.6278	3.800	0.2465	- - -						
1964.0907	3.9746	1.0028	4.426	0.0100*	- - -	1256.3486	3.9200	1.6355	3.672	0.2482	- - -						
2132.6312	3.9766	1.0500	4.387	0.0004*	- - -	1260.0302	3.8900	1.6389	3.548	0.2494	- - -						
2272.7753	3.9771	1.0982	4.341	0.0000*	- - -	1262.9921	3.8600	1.6392	3.428	0.2503	- - -						
2282.2743	3.9771T	1.1019	4.337	0.1614	- - -	1265.5007	3.8300	1.6368	3.311	0.2510	- - -						
2394.6302	3.9750	1.1500	4.281	0.1809	- - -	1267.6699	3.8000	1.6322	3.195	0.2517	- - -						
2487.6937	3.9691	1.2000	4.207	0.1982	- - -	1269.5950	3.7700	1.6253	3.082	0.2523	- - -						
2558.7074	3.9556	1.2500	4.103	0.2122	- - -	1271.6978	3.7400	1.6137	2.974	0.2530	1.7500						
2604.5892	3.9300	1.2939	3.957	0.2215	- - -	1275.1377	3.7127	1.5800	2.898	0.2542	1.7399						
2625.7567	3.9000	1.3197	3.811	0.2255	- - -	1280.9964	3.6928	1.5414	2.857	0.2564	1.5002						

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1286.9275	3.6850	1.5800	2.787	0.2594	1.2348					<i>M</i> = 0.20	<i>Z</i> = 0.0004
1291.5662	3.6815	1.6200	2.733	0.2624	1.0776	0.0000	4.2484	2.2275	4.694	0.7996*	0.7557*
1295.7226	3.6794	1.6600	2.685	0.2658	0.9402	42.6486	4.2444	2.2738	4.632	0.7000*	0.7115*
1299.6805	3.6770	1.7000	2.635	0.2695	0.8241	78.0733	4.2403	2.3169	4.573	0.6000*	0.6263*
1301.9759	3.6759	1.7245	2.606	0.2719	0.7958	106.6465	4.2343	2.3560	4.510	0.5000*	0.5660*
						129.9088	4.2264	2.3914	4.443	0.4000*	0.5020*
						148.7942	4.2167	2.4231	4.372	0.3000*	0.4259*
						<i>M</i> = 2.20	<i>Y</i> = 0.20	<i>Z</i> = 0.0004			
0.0000	4.1164	1.4968	4.695	0.7996*	0.2130*	163.8680	4.2054	2.4511	4.299	0.2000*	0.3645*
118.5628	4.1169	1.5375	4.657	0.7000*	0.2628*	175.8926	4.1944	2.4761	4.230	0.1000*	0.3077*
216.2670	4.1170	1.5754	4.619	0.6000*	0.2427*	179.5867	4.1919R	2.4851	4.211	0.0640*	0.2864*
296.8535	4.1153	1.6096	4.578	0.5000*	0.2344*	180.9098	4.1925	2.4892	4.209	0.0500*	0.2775*
366.2587	4.1112	1.6412	4.530	0.4000*	0.2102*	183.6454	4.1974	2.4998	4.218	0.0200*	0.2473*
423.1335	4.1049	1.6687	4.478	0.3000*	0.1939*	184.4780	4.2041	2.5069	4.238	0.0100*	0.2229*
470.3165	4.0968	1.6929	4.421	0.2000*	0.1730*	185.1759	4.2220B	2.5321	4.284	0.0011*	0.0987*
508.6308	4.0889	1.7148	4.368	0.1000*	0.1483*	185.3465	4.2177	2.5345	4.265	0.0000*	---
519.6255	4.0876R	1.7225	4.355	0.0666*	0.1407*	186.9184	4.2063	2.5700	4.183	0.5074	---
524.7584	4.0885	1.7274	4.354	0.0500*	0.1350*	190.4265	4.1754	2.6100	4.020	0.5294	---
533.6898	4.0941	1.7392	4.364	0.0200*	0.1199*	191.4937	4.1400	2.6260	3.862	0.5334	---
536.4909	4.1006	1.7483	4.381	0.0100*	0.1047*	192.1219	4.1000	2.6330	3.695	0.5334	---
538.9280	4.1156B	1.7762	4.413	0.0012*	0.0239*	192.5016	4.0600	2.6333	3.535	0.5334	---
543.7534	4.1115	1.7971	4.376	0.0000*	---	192.7703	4.0200	2.6296	3.379	0.5334	---
563.8264	4.1062	1.8300	4.322	0.2415	---	192.9721	3.9800	2.6225	3.226	0.5334	---
584.9392	4.0934	1.8700	4.230	0.2579	---	193.1278	3.9400	2.6122	3.076	0.5334	---
596.9620	4.0700	1.9005	4.106	0.2746	---	193.2507	3.9000	2.5995	2.929	0.5334	---
602.7631	4.0400	1.9178	3.969	0.2809	---	193.3488	3.8600	2.5845	2.784	0.5334	---
606.0972	4.0100	1.9264	3.840	0.2818	---	193.4277	3.8200	2.5672	2.641	0.5334	---
608.5341	3.9800	1.9304	3.716	0.2818	---	193.4909	3.7800	2.5473	2.501	0.5334	---
610.4734	3.9500	1.9310	3.596	0.2822	---	193.5422	3.7400	2.5247	2.364	0.5334	---
612.1116	3.9200	1.9289	3.478	0.2835	---	193.5939	3.7045	2.4900	2.257	0.5334	0.0006*
613.5425	3.8900	1.9246	3.362	0.2848	---	193.6351	3.6905	2.4500	2.240	0.5334	0.0060*
614.8248	3.8600	1.9183	3.248	0.2860	---	193.6784	3.6803	2.4250	2.225	0.5334	0.0190*
615.9625	3.8300	1.9099	3.137	0.2872	---	193.7183	3.6721	2.4600	2.157	0.5334	0.0388*
616.9460	3.8000	1.8994	3.027	0.2883	---	193.7470	3.6687	2.5000	2.103	0.5334	0.0664*
617.8118	3.7700	1.8871	2.920	0.2893	---	193.8517	3.6665	2.5322	2.062	0.5334	0.1352*
618.6890	3.7400	1.8713	2.815	0.2904	---					<i>M</i> = 0.55	<i>Y</i> = 0.30
619.8990	3.7148	1.8400	2.746	0.2918	2.1959					<i>Z</i> = 0.0004	
620.9688	3.7000	1.8000	2.727	0.2930	2.1586						
622.6479	3.6892	1.7777	2.706	0.2944	1.9056	0.0000	3.6859	-0.9207	4.789	0.6996*	0.5130
625.0813	3.6826	1.8100	2.647	0.2972	1.6076	4558.0468	3.6902	-0.8837	4.769	0.6000*	0.5200
627.4691	3.6789	1.8500	2.592	0.3002	1.3907	9157.0420	3.6952	-0.8416	4.747	0.5000*	0.5246
629.7399	3.6763	1.8900	2.542	0.3034	1.2166	13814.5296	3.7015	-0.7921	4.723	0.4000*	0.5288
631.9603	3.6744	1.9300	2.494	0.3068	1.0511	18586.0191	3.7091	-0.7323	4.693	0.3000*	0.5331
634.1554	3.6721	1.9700	2.445	0.3104	0.8813	23566.8613	3.7182	-0.6567	4.654	0.2000*	0.5366
635.3861	3.6710	1.9929	2.418	0.3126	0.8044	29008.7065	3.7295	-0.5518	4.594	0.1000*	0.5404
						32741.3527	3.7381	-0.4537	4.531	0.0500*	0.5436
						36827.1577	3.7478	-0.2929	4.409	0.0200*	0.5464
						38417.8214	3.7513	-0.2034	4.333	0.0100*	0.5474
0.0000	4.1895	1.8833	4.706	0.7996*	0.4768*	39364.2481	3.7528	-0.1400	4.276	0.0007*	0.5478
69.7062	4.1874	1.9278	4.653	0.7000*	0.4810*	39729.5591	3.7531T	-0.1102	4.247	0.0001*	0.5479
126.9931	4.1845	1.9687	4.601	0.6000*	0.4336*	40121.9227	3.7528	-0.0741	4.210	0.0000*	0.5479
173.7166	4.1797	2.0058	4.544	0.5000*	0.3927*	40697.4610	3.7510	-0.0100	4.139	0.1361	0.5478
212.2977	4.1729	2.0393	4.484	0.4000*	0.3467*	41174.2416	3.7469	0.0600	4.052	0.1429	0.5470
243.7396	4.1642	2.0692	4.419	0.3000*	0.3069*	41525.1689	3.7400	0.1300	3.955	0.1483	0.5447
269.2866	4.1538	2.0957	4.351	0.2000*	0.2653*	41783.9656	3.7310	0.2000	3.849	0.1526	0.5383
289.8806	4.1437	2.1196	4.286	0.1000*	0.2226*	41982.6950	3.7213	0.2700	3.740	0.1563	0.5244
296.4363	4.1416R	2.1287	4.269	0.0623*	0.2071*	42142.0223	3.7129	0.3400	3.636	0.1596	0.5015
298.4001	4.1424	2.1323	4.269	0.0500*	0.1987*	42275.0673	3.7066	0.4100	3.541	0.1632	0.4749
303.0071	4.1477	2.1432	4.279	0.0200*	0.1785*	42299.9796	3.7056	0.4241	3.523	0.1639	0.4703
304.4286	4.1544	2.1510	4.298	0.0100*	0.1603*						
305.6598	4.1720B	2.1777	4.342	0.0011*	0.0535*					<i>M</i> = 0.70	<i>Y</i> = 0.30
305.9657	4.1683	2.1806	4.324	0.0000*	---					<i>Z</i> = 0.0004	
311.3326	4.1589	2.2200	4.247	0.3709	---	0.0000	3.7503	-0.4282	4.659	0.6996*	0.0048*
318.8079	4.1355	2.2600	4.113	0.3898	---	1971.4077	3.7548	-0.3869	4.636	0.6000*	0.6976
321.7209	4.1000	2.2808	3.951	0.3906	---	3851.3540	3.7592	-0.3433	4.610	0.5000*	0.6984
323.1827	4.0600	2.2893	3.782	0.3906	---	5710.0940	3.7639	-0.2946	4.580	0.4000*	0.6989
324.1034	4.0200	2.2904	3.621	0.3906	---	7551.7702	3.7687	-0.2394	4.544	0.3000*	0.6994
324.7562	3.9800	2.2866	3.465	0.3906	---	9412.8242	3.7740	-0.1740	4.500	0.2000*	0.6997
325.2605	3.9400	2.2790	3.312	0.3906	---	11604.3975	3.7810	-0.0771	4.431	0.1000*	0.6999
325.6577	3.9000	2.2679	3.164	0.3906	---	13380.0343	3.7880	0.0321	4.349	0.0500*	---
325.9753	3.8600	2.2540	3.017	0.3906	---	14631.3817	3.7929	0.1350	4.266	0.0200*	---
326.2332	3.8200	2.2375	2.874	0.3906	---	14931.9858	3.7939	0.1631	4.242	0.0100*	---
326.4418	3.7800	2.2183	2.733	0.3906	---	15692.7264	3.7951T	0.2547	4.155	0.0000*	---
326.6150	3.7400	2.1952	2.596	0.3906	---	15863.3463	3.7946	0.2807	4.127	0.0000*	---
326.7855	3.7099	2.1600	2.511	0.3906	2.7972	16370.1513	3.7870	0.3800	3.997	0.1571	---
326.9142	3.6965	2.1200	2.498	0.3906	2.7644	16691.2184	3.7674	0.4800	3.819	0.1678	0.6999
327.0200	3.6885	2.0922	2.493	0.3906	2.6549	16873.1212	3.7400	0.5681	3.621	0.1740	0.6978
327.2522	3.6772	2.1300	2.410	0.3906	2.1523	17025.6815	3.7100	0.6651	3.404	0.1790	0.6412
327.4389	3.6756	2.1700	2.364	0.3906	1.8763	17118.3479	3.6989	0.7600	3.265	0.1833	0.5595
327.7885	3.6726	2.2100	2.312	0.3906	0.0032*	17194.5002	3.6922	0.8600	3.138	0.1902	0.4889
328.4028	3.6733	2.2051	2.320	0.3906	0.1481*	17255.6541	3.6888	0.9600	3.024	0.2001	0.4455

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
17304.4304	3.6847	1.0600	2.908	0.2105	0.4075	1449.3522	3.9918	0.9664	4.482	0.0200*	---	
17344.2979	3.6809	1.1600	2.793	0.2209	0.3851	1491.2078	3.9928	0.9784	4.474	0.0100*	---	
17377.0134	3.6769	1.2600	2.677	0.2311	0.3640	1622.6375	3.9957	1.0200	4.444	0.0007*	---	
17403.8166	3.6729	1.3600	2.561	0.2413	0.3540	1753.5000	3.9981	1.0700	4.403	0.0000*	---	
17425.8607	3.6689	1.4600	2.445	0.2514	0.3452	1783.1720	3.9984	1.0828	4.392	0.0000*	---	
17428.5538	3.6684	1.4737	2.429	0.2528	0.3451	1865.8737	3.9987T	1.1227	4.353	0.1581	---	
						1947.2457	3.9969	1.1700	4.299	0.1749	---	
				$M = 0.90$	$Y = 0.30$	$Z = 0.0004$	2015.6173	3.9915	1.2200	4.227	0.1902	---
							2067.9820	3.9801	1.2700	4.132	0.2031	---
0.0000	3.8217	0.0839	4.541	0.6996*	0.0190*	2106.1767	3.9570	1.3200	3.989	0.2132	---	
871.4492	3.8278	0.1269	4.523	0.6000*	0.0022*	2124.4969	3.9300	1.3519	3.849	0.2180	---	
1594.2836	3.8337	0.1659	4.507	0.5000*	---	2135.7276	3.9000	1.3743	3.707	0.2209	---	
2275.1444	3.8398	0.2067	4.491	0.4000*	---	2143.4201	3.8700	1.3893	3.572	0.2227	---	
2947.9212	3.8461	0.2519	4.471	0.3000*	---	2149.1216	3.8400	1.3992	3.442	0.2241	---	
3682.4394	3.8544	0.3102	4.446	0.2000*	---	2153.6559	3.8100	1.4053	3.316	0.2251	---	
4626.0763	3.8672	0.4051	4.402	0.1000*	---	2157.4477	3.7800	1.4083	3.193	0.2260	---	
5173.7897	3.8752	0.4733	4.366	0.0500*	---	2161.5337	3.7500	1.4084	3.073	0.2270	1.2499	
5453.3396	3.8787	0.5121	4.341	0.0200*	---	2168.7358	3.7200	1.3932	2.968	0.2287	1.2406	
5556.2430	3.8800	0.5280	4.331	0.0100*	---	2177.2092	3.7027	1.3740	2.918	0.2309	1.1234	
5890.5144	3.8838	0.5900	4.284	0.0003*	---	2188.8207	3.6911	1.4200	2.826	0.2350	0.9016	
6099.0161	3.8848	0.6384	4.239	0.0000*	---	2196.8874	3.6873	1.4700	2.760	0.2388	0.7919	
6146.6081	3.8848T	0.6509	4.227	0.1538	---	2203.9285	3.6841	1.5200	2.698	0.2434	0.6962	
6368.0432	3.8807	0.7200	4.142	0.1689	---	2210.1822	3.6816	1.5700	2.638	0.2483	0.6280	
6529.6358	3.8676	0.7900	4.019	0.1809	---	2213.7375	3.6803	1.6006	2.602	0.2513	0.5864	
6632.6782	3.8400	0.8544	3.844	0.1888	---							
6678.5259	3.8100	0.8928	3.686	0.1923	---							
6707.6688	3.7800	0.9205	3.538	0.1944	---							
6736.5529	3.7500	0.9482	3.390	0.1964	0.8997	0.0000	4.0087	0.9177	4.648	0.6996*	0.0951*	
6771.4885	3.7200	0.9708	3.248	0.1986	0.8847	244.8062	4.0137	0.9612	4.624	0.6000*	0.0722*	
6826.8156	3.6961	1.0400	3.083	0.2024	0.7150	440.7023	4.0182	1.0008	4.603	0.5000*	0.0499*	
6855.1799	3.6907	1.1100	2.991	0.2062	0.6206	598.9033	4.0222	1.0375	4.582	0.4000*	0.0362*	
6879.6515	3.6865	1.1800	2.905	0.2121	0.5476	732.7506	4.0248	1.0707	4.559	0.3000*	0.0343*	
6899.9752	3.6830	1.2500	2.821	0.2193	0.5031	866.1018	4.0252	1.1042	4.527	0.2000*	0.0411*	
6917.4003	3.6795	1.3200	2.737	0.2267	0.4585	957.8221	4.0244R	1.1291	4.499	0.1092*	0.0406*	
6932.5230	3.6768	1.3900	2.656	0.2342	0.4293	966.1273	4.0245	1.1318	4.497	0.1000*	0.0396*	
6933.3270	3.6766	1.3940	2.651	0.2346	0.4293	1010.0761	4.0262	1.1487	4.487	0.0500*	0.0297*	
						1034.6351	4.0313	1.1681	4.487	0.0200*	0.0085*	
				$M = 1.10$	$Y = 0.30$	$Z = 0.0004$	1044.3784	4.0333	1.1776	4.486	0.0100*	---
							1138.9177	4.0344	1.2200	4.448	0.0002*	---
0.0000	3.9082	0.4736	4.585	0.6996*	0.0425*	1200.5369	4.0348B	1.2515	4.418	0.0000*	---	
479.4141	3.9151	0.5169	4.569	0.6000*	0.0220*	1212.1690	4.0348	1.2582	4.411	0.0000*	---	
870.0416	3.9208	0.5560	4.553	0.5000*	0.0066*	1277.2156	4.0343	1.3000	4.368	0.1652	---	
1184.2927	3.9258	0.5916	4.537	0.4000*	---	1340.4983	4.0312	1.3500	4.305	0.1857	---	
1489.5272	3.9313	0.6309	4.520	0.3000*	---	1389.6113	4.0235	1.4000	4.225	0.2033	---	
1826.7672	3.9381	0.6811	4.497	0.2000*	---	1426.0227	4.0075	1.4500	4.110	0.2177	---	
2183.5794	3.9453	0.7420	4.465	0.1000*	---	1447.9083	3.9800	1.4921	3.958	0.2267	---	
2344.3847	3.9480	0.7716	4.446	0.0500*	---	1458.4464	3.9500	1.5176	3.813	0.2310	---	
2450.2046	3.9497	0.7931	4.431	0.0200*	---	1464.8584	3.9200	1.5337	3.677	0.2335	---	
2510.2278	3.9508	0.8066	4.422	0.0100*	---	1469.5623	3.8900	1.5441	3.546	0.2352	---	
2716.0090	3.9542	0.8600	4.383	0.0004*	---	1473.2554	3.8600	1.5505	3.420	0.2365	---	
2884.0866	3.9561	0.9147	4.335	0.0000*	---	1476.2582	3.8300	1.5535	3.297	0.2376	---	
2946.1494	3.9562T	0.9385	4.312	0.1576	---	1478.8011	3.8000	1.5539	3.177	0.2385	---	
3060.7929	3.9543	0.9900	4.253	0.1727	---	1481.0283	3.7700	1.5519	3.059	0.2394	---	
3163.5914	3.9467	1.0500	4.163	0.1874	---	1483.6487	3.7400	1.5455	2.945	0.2404	1.3999	
3238.0696	3.9293	1.1100	4.033	0.1989	---	1488.6752	3.7100	1.5133	2.857	0.2425	1.3797	
3281.1222	3.9000	1.1590	3.867	0.2057	---	1493.4516	3.6966	1.4920	2.825	0.2446	1.2470	
3301.4149	3.8700	1.1881	3.718	0.2089	---	1501.7776	3.6872	1.5400	2.739	0.2490	0.9856	
3314.3934	3.8400	1.2077	3.578	0.2108	---	1507.5114	3.6833	1.5900	2.674	0.2533	0.8547	
3323.6970	3.8100	1.2212	3.444	0.2121	---	1512.5836	3.6806	1.6400	2.613	0.2578	0.7379	
3331.0542	3.7800	1.2305	3.315	0.2131	---	1516.1518	3.6782	1.6776	2.566	0.2615	0.6754	
3338.8928	3.7500	1.2375	3.188	0.2142	1.0999							
3351.3539	3.7200	1.2345	3.071	0.2158	1.0917							
3361.0660	3.7050	1.2252	3.020	0.2171	1.0353							
3382.7345	3.6917	1.2800	2.912	0.2211	0.8115	0.0000	4.0484	1.0980	4.670	0.6996*	0.1234*	
3396.3633	3.6866	1.3400	2.832	0.2254	0.6997	185.2139	4.0521	1.1406	4.642	0.6000*	0.1104*	
3408.1186	3.6833	1.4000	2.759	0.2308	0.6247	334.7769	4.0556	1.1803	4.617	0.5000*	0.0916*	
3418.2699	3.6804	1.4600	2.687	0.2369	0.5606	458.2394	4.0576	1.2164	4.589	0.4000*	0.0828*	
3427.2959	3.6775	1.5200	2.616	0.2432	0.5073	565.6211	4.0572	1.2490	4.554	0.3000*	0.0870*	
3435.4105	3.6747	1.5800	2.544	0.2496	0.4707	672.6619	4.0536	1.2829	4.506	0.2000*	0.0946*	
3437.7024	3.6738	1.5982	2.523	0.2515	0.4649	748.9938	4.0496	1.3099	4.463	0.1000*	0.0837*	
				$M = 1.25$	$Y = 0.30$	$Z = 0.0004$	761.9920	4.0492R	1.3153	4.456	0.0805*	0.0816*
							781.2022	4.0503	1.3254	4.450	0.0500*	0.0753*
							798.9178	4.0567	1.3428	4.459	0.0200*	0.0574*
0.0000	3.9624	0.7118	4.619	0.6996*	0.0657*	804.6319	4.0624	1.3558	4.469	0.0100*	0.0394*	
333.5097	3.9685	0.7555	4.600	0.6000*	0.0436*	809.6880	4.0686B	1.3782	4.471	0.0022*	---	
603.0736	3.9735	0.7950	4.580	0.5000*	0.0234*	849.8653	4.0670	1.4100	4.433	0.0000*	---	
817.1617	3.9783	0.8311	4.563	0.4000*	0.0057*	863.6551	4.0666	1.4194	4.422	0.0000*	---	
994.9954	3.9827	0.8651	4.547	0.3000*	0.0001*	904.3276	4.0649	1.4500	4.384	0.1692	---	
1157.8072	3.9865	0.8990	4.528	0.2000*	---	947.6522	4.0619	1.4900	4.332	0.1901	---	
1307.5738	3.9893	0.9315	4.507	0.1000*	---	981.6145	4.0562	1.5300	4.269	0.2076	---	
1383.2449	3.9905	0.9492	4.494	0.0500*	---	1007.9561	4.0457	1.5700	4.188	0.2222	---	

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1027.6173	4.0254	1.6100	4.066	0.2338	- - - -	372.3863	3.8700	2.1259	3.081	0.3261	- - - -
1037.8902	4.0000	1.6375	3.937	0.2399	- - - -	372.9503	3.8300	2.1136	2.933	0.3272	- - - -
1044.3877	3.9700	1.6572	3.797	0.2436	- - - -	373.4097	3.7900	2.0982	2.788	0.3282	- - - -
1048.6998	3.9400	1.6695	3.665	0.2459	- - - -	373.7916	3.7500	2.0796	2.647	0.3289	- - - -
1051.9818	3.9100	1.6770	3.538	0.2476	- - - -	374.2799	3.7125	2.0400	2.537	0.3299	2.1958
1054.6249	3.8800	1.6808	3.414	0.2490	- - - -	374.5856	3.6994	2.0000	2.524	0.3305	2.1600
1056.8230	3.8500	1.6817	3.293	0.2502	- - - -	375.0355	3.6863	1.9731	2.499	0.3313	1.9223
1058.7088	3.8200	1.6802	3.174	0.2512	- - - -	375.7496	3.6810	2.0100	2.441	0.3325	1.6001
1060.3499	3.7900	1.6764	3.058	0.2522	- - - -	376.6549	3.6773	2.0500	2.386	0.3342	1.3630
1061.8596	3.7600	1.6704	2.944	0.2531	- - - -	377.5481	3.6746	2.0876	2.338	0.3362	1.2178
1064.0050	3.7300	1.6552	2.839	0.2545	1.5493						
1066.6938	3.7090	1.6200	2.791	0.2563	1.5263						
1070.2990	3.6950	1.5962	2.758	0.2588	1.3540						
1074.7023	3.6895	1.6300	2.703	0.2620	1.1399	0.0000	4.2322	2.0614	4.699	0.6996*	0.5350*
1078.3836	3.6858	1.6700	2.648	0.2654	0.9845	48.6204	4.2297	2.1119	4.638	0.6000*	0.5421*
1081.7057	3.6827	1.7100	2.596	0.2689	0.8810	88.1290	4.2253	2.1577	4.575	0.5000*	0.4897*
1084.7996	3.6804	1.7500	2.546	0.2726	0.7805	120.1793	4.2188	2.1996	4.507	0.4000*	0.4241*
1085.9926	3.6800	1.7662	2.528	0.2741	0.7537	145.6709	4.2103	2.2370	4.436	0.3000*	0.3795*
						166.0942	4.1998	2.2705	4.360	0.2000*	0.3222*
						182.0847	4.1896	2.3004	4.289	0.1000*	0.2662*
						187.3334	4.1874R	2.3119	4.269	0.0607*	0.2426*
<i>M</i> = 1.75 <i>Y</i> = 0.30 <i>Z</i> = 0.0004											
0.0000	4.0932	1.3066	4.693	0.6996*	0.1692*	188.6217	4.1882	2.3155	4.269	0.0500*	0.2363*
137.9223	4.0951	1.3500	4.658	0.6000*	0.1756*	192.1227	4.1936	2.3275	4.278	0.0200*	0.2145*
249.6646	4.0965	1.3900	4.623	0.5000*	0.1599*	193.2048	4.2005	2.3353	4.298	0.0100*	0.1956*
342.5330	4.0955	1.4261	4.583	0.4000*	0.1520*	194.1443	4.2196B	2.3639	4.346	0.0010*	0.0674*
420.0712	4.0918	1.4580	4.536	0.3000*	0.1524*	194.3764	4.2145	2.3723	4.317	0.0000*	- - - -
487.3637	4.0857	1.4877	4.483	0.2000*	0.1356*	196.7007	4.2065	2.4100	4.247	0.4194	- - - -
540.4754	4.0796	1.5137	4.432	0.1000*	0.1207*	200.8841	4.1902	2.4500	4.142	0.4312	- - - -
559.6998	4.0790R	1.5255	4.418	0.0585*	0.1136*	203.0845	4.1600	2.4805	3.991	0.4428	- - - -
563.3775	4.0800	1.5289	4.418	0.0500*	0.1095*	204.2215	4.1200	2.4988	3.813	0.4428	- - - -
575.9514	4.0862	1.5436	4.428	0.0200*	0.0931*	204.8745	4.0800	2.5068	3.645	0.4428	- - - -
579.8664	4.0926	1.5545	4.443	0.0100*	0.0782*	205.3141	4.0400	2.5085	3.483	0.4428	- - - -
583.4967	4.1049B	1.5856	4.461	0.0011*	0.0021*	205.6378	4.0000	2.5058	3.326	0.4428	- - - -
597.4621	4.1018	1.6137	4.421	0.0000*	- - - -	205.8898	3.9600	2.4997	3.172	0.4428	- - - -
628.9294	4.0983	1.6500	4.371	0.1907	- - - -	206.0905	3.9200	2.4904	3.021	0.4428	- - - -
657.8984	4.0927	1.6900	4.308	0.2159	- - - -	206.2525	3.8800	2.4786	2.873	0.4428	- - - -
680.0991	4.0827	1.7300	4.228	0.2351	- - - -	206.3828	3.8400	2.4645	2.727	0.4428	- - - -
696.2147	4.0623	1.7700	4.107	0.2493	- - - -	206.4882	3.8000	2.4478	2.584	0.4428	- - - -
703.3920	4.0400	1.7939	3.993	0.2557	- - - -	206.5728	3.7600	2.4282	2.443	0.4428	- - - -
708.4769	4.0100	1.8129	3.854	0.2600	- - - -	206.6490	3.7200	2.4023	2.309	0.4428	2.7999
711.7416	3.9800	1.8242	3.723	0.2626	- - - -	206.7098	3.7024	2.3700	2.271	0.4428	0.0002*
714.2209	3.9500	1.8309	3.596	0.2645	- - - -	206.7678	3.6912	2.3300	2.266	0.4428	0.0038*
716.2170	3.9200	1.8338	3.474	0.2661	- - - -	206.8081	3.6849	2.3135	2.258	0.4428	0.0095*
717.9040	3.8900	1.8338	3.353	0.2674	- - - -	206.8807	3.6765	2.3500	2.187	0.4428	0.0273*
719.3604	3.8600	1.8315	3.236	0.2687	- - - -	206.9608	3.6728	2.3900	2.133	0.4428	0.0828*
720.6209	3.8300	1.8270	3.120	0.2698	- - - -	207.0799	3.6736	2.3866	2.139	0.4428	0.1440*
721.7311	3.8000	1.8206	3.007	0.2709	- - - -						
722.7198	3.7700	1.8124	2.895	0.2720	- - - -						
723.7362	3.7400	1.8002	2.787	0.2730	- - - -						
725.2746	3.7155	1.7700	2.719	0.2747	1.7438	0.0000	4.2888	2.4010	4.682	0.6996*	0.8479*
726.7832	3.6993	1.7300	2.695	0.2763	1.6735	30.2281	4.2837	2.4529	4.610	0.6000*	0.7634*
727.3332	3.6951	1.7185	2.689	0.2768	1.6225	54.6818	4.2786	2.5004	4.542	0.5000*	0.6744*
731.2310	3.6858	1.7500	2.620	0.2808	1.2719	74.1378	4.2714	2.5436	4.470	0.4000*	0.5962*
733.8642	3.6817	1.7900	2.564	0.2841	1.1124	89.6870	4.2623	2.5826	4.395	0.3000*	0.5110*
736.2674	3.6792	1.8300	2.514	0.2874	0.9812	101.9251	4.2514	2.6174	4.317	0.2000*	0.4370*
738.5891	3.6769	1.8700	2.465	0.2909	0.8601	111.4725	4.2406	2.6482	4.242	0.1000*	0.3629*
740.6786	3.6749	1.9076	2.419	0.2943	0.7643	114.5747	4.2382R	2.6600	4.221	0.0614*	0.3407*
						115.4229	4.2388	2.6639	4.220	0.0500*	0.3280*
						117.5606	4.2439	2.6757	4.228	0.0200*	0.2907*
						118.2031	4.2507	2.6830	4.248	0.0100*	0.2675*
<i>M</i> = 2.20 <i>Y</i> = 0.30 <i>Z</i> = 0.0004											
0.0000	4.1662	1.6820	4.710	0.6996*	0.3009*	118.7560	4.2698B	2.7099	4.298	0.0010*	0.1179*
82.5477	4.1657	1.7298	4.660	0.6000*	0.3436*	118.8867	4.2641	2.7182	4.267	0.0000*	- - - -
149.7395	4.1631	1.7727	4.606	0.5000*	0.3124*	119.1305	4.2585	2.7400	4.223	0.5641	- - - -
204.2659	4.1583	1.8112	4.549	0.4000*	0.2807*	120.4775	4.2476	2.7700	4.149	0.5908	- - - -
249.2893	4.1512	1.8463	4.485	0.3000*	0.2488*	121.8788	4.2271	2.8000	4.037	0.5908	- - - -
285.2906	4.1422	1.8772	4.418	0.2000*	0.2194*	122.7337	4.1900	2.8252	3.863	0.5908	- - - -
314.2190	4.1334	1.9053	4.355	0.1000*	0.1871*	123.1699	4.1500	2.8384	3.690	0.5908	- - - -
324.5405	4.1317R	1.9175	4.336	0.0576*	0.1730*	123.4316	4.1100	2.8435	3.525	0.5908	- - - -
326.2403	4.1325	1.9202	4.336	0.0500*	0.1694*	123.6147	4.0700	2.8440	3.364	0.5908	- - - -
332.7876	4.1384	1.9331	4.347	0.0200*	0.1499*	123.7510	4.0300	2.8408	3.208	0.5908	- - - -
334.8007	4.1453	1.9418	4.366	0.0100*	0.1334*	123.8559	3.9900	2.8346	3.054	0.5908	- - - -
336.5677	4.1634B	1.9731	4.407	0.0009*	0.0338*	123.9393	3.9500	2.8258	2.903	0.5908	- - - -
337.6751	4.1582	1.9934	4.366	0.0000*	- - - -	124.0067	3.9100	2.8149	2.753	0.5908	- - - -
347.3793	4.1523	2.0300	4.306	0.2939	- - - -	124.0608	3.8700	2.8022	2.606	0.5908	0.0029*
357.1955	4.1396	2.0700	4.215	0.3052	- - - -	124.1049	3.8300	2.7883	2.460	0.5908	0.0214*
364.0386	4.1073	2.1100	4.046	0.3203	- - - -	124.1423	3.7900	2.7751	2.313	0.5908	0.0616*
366.8632	4.0700	2.1299	3.877	0.3211	- - - -	124.1809	3.7500	2.7692	2.159	0.5908	0.1190*
368.6379	4.0300	2.1398	3.707	0.3239	- - - -	124.1814	3.7495	2.7692	2.157	0.5908	0.1199*
369.9048	3.9900	2.1428	3.544	0.3254	- - - -	124.2178	3.7248	2.7721	2.055	0.5908	0.1516*
370.8909	3.9500	2.1408	3.386	0.3258	- - - -						
371.7044	3.9100	2.1350	3.232	0.3258	- - - -						

TABLE 3—Continued

$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
$M = 0.70 \quad Y = 0.10 \quad Z = 0.001$																	
0.0000	3.6620	-0.8875	4.765	0.8990*	0.6352	11009.1194	3.7045	0.7177	3.526	0.1956	1.0448						
5172.3892	3.6645	-0.8599	4.747	0.8000*	0.6408	11120.3143	3.6830	0.7800	3.378	0.1969	0.7832						
10372.2001	3.6672	-0.8294	4.728	0.7000*	0.6473	11233.8936	3.6741	0.9200	3.202	0.1987	0.5557						
15571.0750	3.6704	-0.7950	4.706	0.6000*	0.6546	11280.8214	3.6714	0.9900	3.121	0.2017	0.4845						
20800.2993	3.6742	-0.7556	4.682	0.5000*	0.6596	11322.1076	3.6688	1.0600	3.041	0.2075	0.4374						
26098.0916	3.6788	-0.7095	4.654	0.4000*	0.6655	11355.7834	3.6663	1.1300	2.961	0.2148	0.4040						
31528.0458	3.6844	-0.6543	4.621	0.3000*	0.6708	11408.4978	3.6610	1.2700	2.800	0.2298	0.3523						
37199.8163	3.6915	-0.5850	4.580	0.2000*	0.6744	11425.3132	3.6588	1.3249	2.736	0.2357	0.3429						
43371.0298	3.7002	-0.4905	4.521	0.1000*	0.6778	$M = 1.40 \quad Y = 0.10 \quad Z = 0.001$											
47446.9296	3.7064	-0.4091	4.464	0.0500*	0.6801	53755.6449	3.8669	0.4903	4.508	0.8990*	0.0379*						
51866.9327	3.7126	-0.2867	4.366	0.0200*	0.6826	54718.9121	3.8726	0.5268	4.494	0.8000*	0.0083*						
58825.7998	3.7142	-0.1764	4.265	0.0005*	0.6818	55430.3109	3.8773	0.5591	4.481	0.7000*	---						
59086.5121	3.6714	-0.1404	4.227	0.0000*	0.6810	56820.5080	3.8815	0.5900	4.466	0.6000*	---						
59304.0780	3.6691	0.5500	3.356	0.1833	0.3578	57729.9101	3.8853	0.6213	4.450	0.5000*	---						
59472.8087	3.6671	0.6500	3.248	0.1939	0.3364	58209.5294	3.8889	0.6534	4.433	0.4000*	---						
59607.8585	3.6645	0.7500	3.138	0.2042	0.3239	58539.4625	3.8923	0.6882	4.412	0.3000*	---						
59715.9365	3.6621	0.8500	3.028	0.2143	0.3112	58825.7998	3.8959	0.7283	4.386	0.2000*	---						
59802.6214	3.6593	0.9500	2.917	0.2240	0.3061	59086.5121	3.8984	0.7719	4.352	0.1000*	---						
59928.4019	3.6561	1.0500	2.804	0.2336	0.3034	59304.0780	3.8989	0.7930	4.333	0.0500*	---						
59937.5850	3.6524	1.1683	2.671	0.2449	0.3050	59472.8087	3.8992	0.8101	4.317	0.0200*	---						
$M = 0.90 \quad Y = 0.10 \quad Z = 0.001$																	
0.0000	3.7230	-0.3920	4.623	0.8990*	0.0048*	59607.8585	3.8993	0.8210	4.307	0.0100*	---						
2265.4538	3.7268	-0.3587	4.604	0.8000*	0.8919	59715.9365	3.8997	0.8481	4.281	0.0013*	---						
4435.7054	3.7303	-0.3240	4.584	0.7000*	0.8935	6075.7773	3.7300	1.0728	3.378	0.2124	1.3985						
6571.3633	3.7340	-0.2861	4.561	0.6000*	0.8947	6170.8846	3.7000	1.0282	3.302	0.2133	1.3222						
8678.7185	3.7377	-0.2446	4.534	0.5000*	0.8956	6173.6375	3.6910	1.0199	3.275	0.2136	1.2201						
10759.9834	3.7415	-0.1985	4.503	0.4000*	0.8966	6177.0572	3.6762	1.1300	3.105	0.2148	0.7845						
12817.7212	3.7452	-0.1468	4.466	0.3000*	0.8977	61817.4443	3.6702	1.2500	2.961	0.2201	0.5714						
14881.2611	3.7489	-0.0867	4.421	0.2000*	0.8984	61836.2790	3.6678	1.3100	2.892	0.2257	0.4940						
17258.8516	3.7528	-0.0016	4.352	0.1000*	0.8991	61852.1271	3.6655	1.3700	2.822	0.2320	0.4562						
19106.6235	3.7554	0.0855	4.275	0.0500*	0.8994	61866.1079	3.6631	1.4300	2.753	0.2385	0.4097						
20326.1257	3.7561	0.1557	4.207	0.0200*	0.8996	61871.0009	3.6622	1.4529	2.726	0.2410	0.4029						
20466.0768	3.7561T	0.1640	4.199	0.0156*	0.8996	$M = 1.55 \quad Y = 0.10 \quad Z = 0.001$											
20584.5301	3.7560	0.1717	4.191	0.0100*	0.8996	61875.7773	3.7300	1.0728	3.378	0.2124	1.3985						
21465.8002	3.7536	0.2400	4.113	0.0000*	0.8996	61876.2790	3.7300	1.0728	3.378	0.2124	1.3985						
21617.6388	3.7528	0.2539	4.096	0.0000*	0.8995	61877.0572	3.7300	1.0728	3.378	0.2124	1.3985						
22236.2795	3.7451	0.3200	3.999	0.1634	0.8990	61878.4443	3.7300	1.0728	3.378	0.2124	1.3985						
22729.5414	3.7259	0.3900	3.852	0.1735	0.8924	61879.7734	3.7300	1.0728	3.378	0.2124	1.3985						
23002.5879	3.7000	0.4370	3.702	0.1778	0.8262	61880.6367	3.7300	1.0728	3.378	0.2124	1.3985						
23164.6747	3.6858	0.5000	3.582	0.1794	0.6961	61881.8138	3.7300	1.0728	3.378	0.2124	1.3985						
23277.5436	3.6800	0.5700	3.489	0.1806	0.5999	61882.5588	3.7300	1.0728	3.378	0.2124	1.3985						
23375.3394	3.6762	0.6400	3.404	0.1822	0.5230	61883.9498	3.7300	1.0728	3.378	0.2124	1.3985						
23465.3592	3.6733	0.7100	3.322	0.1851	0.4726	61884.9645	3.7300	1.0728	3.378	0.2124	1.3985						
23546.8638	3.6709	0.7800	3.242	0.1900	0.4236	61885.9268	3.7300	1.0728	3.378	0.2124	1.3985						
23616.7186	3.6687	0.8500	3.163	0.1968	0.3907	61886.2332	3.7300	1.0728	3.378	0.2124	1.3985						
23672.5485	3.6664	0.9200	3.084	0.2042	0.3694	61887.1079	3.7300	1.0728	3.378	0.2124	1.3985						
23673.5098	3.6663	0.9213	3.082	0.2044	0.3694	61888.7734	3.7300	1.0728	3.378	0.2124	1.3985						
$M = 1.10 \quad Y = 0.10 \quad Z = 0.001$																	
0.0000	3.7756	0.0169	4.511	0.8990*	0.0190*	61889.4443	3.9113	0.6828	4.537	0.8990*	0.0477*						
1198.9782	3.7793	0.0528	4.490	0.8000*	0.0003*	61890.3464	3.9117	0.7192	4.522	0.8000*	0.0207*						
2249.2015	3.7825	0.0869	4.469	0.7000*	---	61891.7994	3.9121	0.7516	4.507	0.7000*	0.0074*						
3266.9857	3.7858	0.1232	4.446	0.6000*	---	61892.6367	3.9125	0.7811	4.492	0.6000*	0.0032*						
4251.3391	3.7892	0.1616	4.421	0.5000*	---	61893.0165	3.9130	0.8400	4.476	0.5000*	0.0002*						
5197.4527	3.7925	0.2023	4.393	0.4000*	---	61894.1739	3.9135	0.8100	4.460	0.4000*	---						
6115.9607	3.7959	0.2464	4.363	0.3000*	---	61895.8199	3.9140	0.9603	4.357	0.0100*	---						
7074.9016	3.7997	0.2993	4.325	0.2000*	---	61896.0666	3.9145	1.0400	4.275	0.0000*	---						
8268.3258	3.8049	0.3805	4.265	0.1000*	---	61897.3095	3.9150	1.1920	3.263	0.2194	1.5440						
8919.2719	3.8071	0.4328	4.221	0.0500*	---	61898.9933	3.9155	1.1500	3.228	0.2200	1.4671						
9249.1733	3.8076	0.4613	4.195	0.0200*	---	61899.6629	3.9160	1.1399	3.198	0.2204	1.3083						
9384.7567	3.8076	0.4742	4.182	0.0100*	---	61900.7734	3.9165	1.1800	3.121	0.2210	1.0597						
9439.6486	3.8077T	0.4798	4.177	0.0071*	---	61901.4846	3.9170	1.2300	3.056	0.2218	0.8922						
9954.7512	3.8058	0.5400	4.109	0.0001*	---	61902.4443	3.9175	1.2649	3.000	0.2238	0.7569						
10092.2861	3.8042	0.5589	4.084	0.0000*	---	61903.6308	3.9180	1.3300	2.935	0.2274	0.6593						
10467.6723	3.7940	0.6200	3.982	0.1748	---	61904.6031	3.9185	1.3700	2.876	0.2320	0.5780						
10787.6865	3.7649	0.6900	3.795	0.1885	---	61905.9151	3.9188	1.4300	2.818	0.2371	0.5088						
10901.1340	3.7400	0.7172	3.668	0.1928	1.0991	61906.9831	3.9193	1.4654	2.784	0.2402	0.4838						
10991.3363	3.7100	0.7196	3.546	0.1953	1.0669	61907.2642	3.9197	1.4594	2.784	0.2402	0.4838						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
$M = 1.75 \quad Y = 0.10 \quad Z = 0.001$											
0.0000	3.9630	0.9065	4.573	0.8990*	0.0674*	0.0000	4.0544	1.3096	4.635	0.8990*	0.1692*
301.0552	3.9678	0.9426	4.556	0.8000*	0.0524*	182.2001	4.0545	1.3448	4.600	0.8000*	0.2269*
558.4890	3.9712	0.9750	4.537	0.7000*	0.0517*	346.2557	4.0541	1.3809	4.562	0.7000*	0.2118*
780.2976	3.9735	1.0050	4.517	0.6000*	0.0439*	471.9752	4.0527	1.4117	4.526	0.6000*	0.1926*
965.6375	3.9752	1.0324	4.496	0.5000*	0.0373*	576.3260	4.0498	1.4392	4.487	0.5000*	0.1795*
1123.3429	3.9763	1.0575	4.475	0.4000*	0.0322*	664.2924	4.0451	1.4637	4.444	0.4000*	0.1698*
1260.6642	3.9762	1.0802	4.452	0.3000*	0.0319*	738.9272	4.0384	1.4848	4.396	0.3000*	0.1574*
1390.2600	3.9747	1.1016	4.425	0.2000*	0.0341*	801.7735	4.0299	1.5030	4.343	0.2000*	0.1419*
1490.5393	3.9731R	1.1198	4.400	0.1030*	0.0301*	853.5018	4.0217	1.5194	4.294	0.1000*	0.1260*
1493.3582	3.9731	1.1205	4.399	0.1000*	0.0297*	871.8287	4.0203R	1.5272	4.281	0.0599*	0.1154*
1539.2685	3.9749	1.1340	4.393	0.0500*	0.0181*	875.9666	4.0213	1.5301	4.282	0.0500*	0.1128*
1566.5893	3.9784	1.1484	4.392	0.0200*	----	888.2947	4.0271	1.5420	4.293	0.0200*	0.0989*
1582.0993	3.9789B	1.1536	4.389	0.0101*	----	892.2016	4.0336	1.5517	4.310	0.0100*	0.0842*
1582.6197	3.9789	1.1537	4.389	0.0100*	----	895.7251	4.0480B	1.5792	4.340	0.0011*	0.0107*
1717.6529	3.9777	1.1900	4.348	0.0002*	----	906.9145	4.0435	1.5967	4.304	0.0000*	----
1820.0036	3.9762	1.2222	4.310	0.0000*	----	946.8483	4.0363	1.6300	4.242	0.2111	----
1919.5738	3.9731	1.2600	4.260	0.1686	----	987.0920	4.0179	1.6700	4.128	0.2382	----
2007.5148	3.9669	1.3000	4.195	0.1884	----	1003.7286	3.9900	1.6897	3.997	0.2406	----
2079.0459	3.9546	1.3400	4.106	0.2056	----	1011.2812	3.9600	1.6962	3.870	0.2426	----
2128.6424	3.9300	1.3746	3.973	0.2178	----	1016.1770	3.9300	1.6967	3.750	0.2453	----
2150.2680	3.9000	1.3907	3.837	0.2227	----	1019.8868	3.9000	1.6929	3.634	0.2471	----
2161.6878	3.8700	1.3965	3.711	0.2250	----	1022.9449	3.8700	1.6859	3.521	0.2485	----
2169.5018	3.8400	1.3967	3.591	0.2262	----	1025.5982	3.8400	1.6761	3.411	0.2497	----
2175.4194	3.8100	1.3928	3.475	0.2271	----	1027.8690	3.8100	1.6634	3.303	0.2507	----
2180.2590	3.7800	1.3854	3.362	0.2276	----	1029.8932	3.7800	1.6482	3.198	0.2517	----
2184.9467	3.7500	1.3730	3.254	0.2281	----	1031.9273	3.7500	1.6298	3.097	0.2526	----
2191.7477	3.7200	1.3406	3.167	0.2287	1.7471	1034.9749	3.7190	1.5900	3.013	0.2541	2.1978
2195.8933	3.7067	1.3100	3.144	0.2290	1.7260	1037.1543	3.7043	1.5500	2.994	0.2552	2.1759
2203.9846	3.6916	1.2700	3.124	0.2296	1.5597	1039.7503	3.6928	1.5100	2.988	0.2565	2.0688
2204.9427	3.6905	1.2679	3.121	0.2297	1.5329	1042.9186	3.6847	1.5007	2.965	0.2580	1.8613
2218.3495	3.6802	1.3000	3.048	0.2309	1.2276	1049.7832	3.6773	1.5400	2.896	0.2615	1.4889
2228.2875	3.6763	1.3400	2.993	0.2325	1.0526	1055.0054	3.6738	1.5800	2.842	0.2647	1.3006
2237.3432	3.6739	1.3800	2.943	0.2349	0.9267	1059.9229	3.6711	1.6200	2.791	0.2681	1.0845
2245.9911	3.6716	1.4200	2.894	0.2380	0.8152	1064.6158	3.6693	1.6600	2.744	0.2716	0.9475
2253.9857	3.6699	1.4600	2.847	0.2416	0.7148	1069.1739	3.6672	1.7000	2.695	0.2753	0.8307
2257.9143	3.6689	1.4810	2.822	0.2437	0.6702	1072.0404	3.6661	1.7258	2.665	0.2778	0.7287
$M = 1.95 \quad Y = 0.10 \quad Z = 0.001$											
0.0000	4.0077	1.1007	4.604	0.8990*	0.1055*	0.0000	4.1328	1.7028	4.660	0.8990*	0.3788*
234.7642	4.0107	1.1363	4.581	0.8000*	0.1215*	105.7806	4.1295	1.7417	4.608	0.8000*	0.4398*
448.0872	4.0124	1.1708	4.553	0.7000*	0.1177*	192.1658	4.1260	1.7777	4.558	0.7000*	0.3994*
618.4041	4.0130	1.2011	4.525	0.6000*	0.1122*	263.0689	4.1217	1.8108	4.508	0.6000*	0.3645*
759.8381	4.0127	1.2285	4.497	0.5000*	0.1013*	321.6869	4.1157	1.8405	4.454	0.5000*	0.3242*
878.7918	4.0110	1.2525	4.466	0.4000*	0.0971*	370.2711	4.1079	1.8668	4.396	0.4000*	0.2936*
988.5857	4.0071	1.2750	4.428	0.3000*	0.0977*	410.6967	4.0982	1.8900	4.334	0.3000*	0.2632*
1077.4867	4.0016	1.2934	4.387	0.2000*	0.0939*	444.4218	4.0869	1.9103	4.269	0.2000*	0.2274*
1152.0596	3.9961	1.3103	4.348	0.1000*	0.0865*	471.8756	4.0758	1.9285	4.206	0.1000*	0.1929*
1170.9592	3.9955R	1.3158	4.341	0.0717*	0.0811*	483.4179	4.0733R	1.9385	4.186	0.0502*	0.1737*
1184.4764	3.9966	1.3216	4.339	0.0500*	0.0755*	483.4495	4.0733	1.9385	4.186	0.0500*	0.1736*
1202.4382	4.0021	1.3350	4.348	0.0200*	0.0602*	489.7087	4.0793	1.9495	4.199	0.0200*	0.1561*
1208.2495	4.0079	1.3464	4.360	0.0100*	0.0440*	491.6725	4.0862	1.9577	4.218	0.0100*	0.1400*
1213.7307	4.0147B	1.3662	4.367	0.0020*	----	493.4391	4.1053B	1.9872	4.265	0.0007*	0.0268*
1275.3699	4.0107	1.3954	4.322	0.0000*	----	493.6440	4.1029	1.9837	4.259	0.0000*	----
1348.8676	4.0056	1.4300	4.267	0.1783	----	506.7225	4.0849	2.0300	4.141	0.3381	----
1414.3533	3.9969	1.4700	4.192	0.2020	----	515.6736	4.0500	2.0550	3.976	0.3381	----
1465.4987	3.9758	1.5100	4.068	0.2212	----	518.7695	4.0100	2.0591	3.812	0.3416	----
1486.1675	3.9500	1.5288	3.946	0.2287	----	520.5189	3.9700	2.0541	3.657	0.3427	----
1497.0296	3.9200	1.5368	3.818	0.2322	----	521.6995	3.9300	2.0433	3.508	0.3431	----
1503.8280	3.8900	1.5380	3.696	0.2340	----	522.5642	3.8900	2.0276	3.364	0.3433	----
1508.8995	3.8600	1.5347	3.580	0.2351	----	523.2327	3.8500	2.0079	3.224	0.3434	----
1512.9533	3.8300	1.5282	3.466	0.2359	----	523.7627	3.8100	1.9845	3.087	0.3434	----
1516.3880	3.8000	1.5187	3.356	0.2365	----	524.1894	3.7700	1.9573	2.954	0.3435	----
1519.4498	3.7700	1.5062	3.248	0.2371	----	524.5757	3.7300	1.9216	2.830	0.3435	----
1522.9250	3.7400	1.4856	3.149	0.2377	1.9499	524.8829	3.7080	1.8800	2.783	0.3435	2.7953
1526.9081	3.7173	1.4500	3.094	0.2384	1.9449	525.1787	3.6932	1.8300	2.774	0.3435	2.7423
1530.3581	3.7035	1.4100	3.078	0.2390	1.9029	525.3915	3.6848	1.8088	2.762	0.3435	2.6048
1534.5947	3.6919	1.3775	3.064	0.2398	1.7628	525.9271	3.6732	1.8500	2.674	0.3435	2.1170
1546.0738	3.6813	1.4100	2.990	0.2427	1.3715	526.4995	3.6691	1.9000	2.608	0.3435	1.7537
1553.8358	3.6772	1.4500	2.933	0.2454	1.1724	527.2979	3.6652	1.9500	2.542	0.3435	1.4481
1560.7911	3.6749	1.4900	2.884	0.2486	1.0176	528.2121	3.6625	2.0000	2.482	0.3435	1.1273
1567.2691	3.6725	1.5300	2.834	0.2522	0.8782	529.2571	3.6597	2.0500	2.420	0.3435	0.8665
1573.3441	3.6707	1.5700	2.787	0.2561	0.7588	530.3829	3.6572	2.1000	2.360	0.3435	0.6992
1577.2183	3.6697	1.5967	2.756	0.2587	0.6947	531.4481	3.6547	2.1500	2.300	0.3435	0.5664
						532.6157	3.6521	2.2000	2.240	0.3435	0.5056
						533.4525	3.6504	2.2322	2.201	0.3435	0.4788

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
$M = 3.50 \quad Y = 0.10 \quad Z = 0.001$											
0.0000	4.1952	2.0530	4.656	0.8990*	0.6735*	9990.6780	3.7114	-0.5689	4.644	0.5000*	0.6851
63.2815	4.1895	2.0939	4.593	0.8000*	0.6568*	13308.7625	3.7169	-0.5200	4.617	0.4000*	0.6871
114.7356	4.1849	2.1318	4.536	0.7000*	0.5935*	23821.1972	3.7290	-0.3944	4.584	0.3000*	0.6893
156.9208	4.1793	2.1667	4.479	0.6000*	0.5368*	26553.2453	3.7407	-0.2089	4.401	0.0500*	0.6956
192.0321	4.1720	2.1984	4.418	0.5000*	0.4733*	29229.3318	3.7444	-0.0838	4.291	0.0200*	0.6973
220.8058	4.1630	2.2268	4.353	0.4000*	0.4274*	29849.9990	3.7451	-0.0506	4.260	0.0100*	0.6974
244.7534	4.1521	2.2521	4.285	0.3000*	0.3729*	30091.9778	3.7451T	-0.0361	4.246	0.0035*	0.6974
264.3882	4.1396	2.2742	4.213	0.2000*	0.3168*	31000.2547	3.7440	0.0300	4.175	0.0000*	0.6974
280.0185	4.1274	2.2936	4.144	0.1000*	0.2630*	31082.8398	3.7438	0.0368	4.168	0.0000*	0.6975
286.6375	4.1243	2.3040	4.122	0.0500*	0.2358*	31748.6050	3.7401	0.1000	4.090	0.1443	0.6967
286.6504	4.1243R	2.3040	4.122	0.0499*	0.2357*	32299.9374	3.7316	0.1700	3.986	0.1527	0.6932
290.1611	4.1300	2.3143	4.134	0.0200*	0.2138*	32693.6912	3.7168	0.2400	3.857	0.1586	0.6776
291.2654	4.1367	2.3218	4.153	0.0100*	0.1954*	32960.3257	3.7005	0.3100	3.722	0.1623	0.6220
292.2577	4.1562B	2.3498	4.203	0.0006*	0.0425*	33132.0599	3.6911	0.3800	3.614	0.1646	0.5587
292.3691	4.1531	2.3450	4.196	0.0000*	- - -	33266.0027	3.6854	0.4500	3.521	0.1671	0.5040
297.4346	4.1299	2.3900	4.058	0.4747	- - -	33383.1919	3.6818	0.5200	3.437	0.1704	0.4533
300.7473	4.0900	2.4100	3.878	0.4747	- - -	33490.8056	3.6788	0.5900	3.354	0.1751	0.4217
301.9220	4.0500	2.4123	3.716	0.4747	- - -	33576.2852	3.6767	0.6515	3.285	0.1804	0.3960
302.5801	4.0100	2.4063	3.562	0.4747	- - -						
303.0184	3.9700	2.3954	3.413	0.4747	- - -						
303.3359	3.9300	2.3802	3.268	0.4747	- - -						
303.5761	3.8900	2.3614	3.127	0.4747	- - -	0.0000	3.7636	-0.1692	4.562	0.7990*	0.0107*
303.7630	3.8500	2.3395	2.989	0.4747	- - -	1437.4056	3.7673	-0.1311	4.539	0.7000*	0.8995
303.9108	3.8100	2.3150	2.853	0.4747	- - -	2755.7280	3.7708	-0.0930	4.515	0.6000*	0.8997
304.0292	3.7700	2.2876	2.721	0.4747	- - -	4042.1554	3.7744	-0.0518	4.488	0.5000*	0.8998
304.1296	3.7300	2.2559	2.592	0.4747	- - -	5294.0993	3.7781	-0.0072	4.458	0.4000*	0.9000
304.2305	3.6995	2.2100	2.516	0.4747	3.4947	6514.1395	3.7816	0.0419	4.423	0.3000*	- - -
304.3278	3.6824	2.1600	2.498	0.4747	3.3907	7758.6201	3.7854	0.0996	4.381	0.2000*	- - -
304.3605	3.6776	2.1496	2.489	0.4747	3.3109	9317.9929	3.7907	0.1907	4.311	0.1000*	- - -
304.4579	3.6681	2.1900	2.411	0.4747	2.7903	10338.2626	3.7942	0.2663	4.249	0.0500*	- - -
304.5358	3.6623	2.2400	2.337	0.4747	2.4013	10835.4094	3.7952	0.3072	4.212	0.0200*	- - -
304.6446	3.6583	2.2900	2.272	0.4747	2.0799	10988.2065	3.7954	0.3212	4.199	0.0100*	- - -
304.8262	3.6573	2.3400	2.217	0.4747	1.7119	11193.3467	3.7955T	0.3418	4.179	0.0031*	- - -
305.0866	3.6543	2.3900	2.155	0.4747	0.0008*	11756.7212	3.7937	0.4100	4.103	0.0000*	- - -
305.5558	3.6533	2.4107	2.131	0.4747	0.1374*	11829.8711	3.7932	0.4204	4.091	0.0000*	- - -
$M = 4.40 \quad Y = 0.10 \quad Z = 0.001$											
0.0000	4.2517	2.4006	4.634	0.8990*	0.9514*	12860.0688	3.7100	0.6433	3.535	0.1822	0.8591
37.9699	4.2458	2.4434	4.567	0.8000*	0.9447*	12978.5818	3.6893	0.7100	3.386	0.1845	0.6821
69.2184	4.2406	2.4832	4.507	0.7000*	0.8416*	13044.2756	3.6832	0.7800	3.291	0.1862	0.5874
94.7681	4.2344	2.5197	4.446	0.6000*	0.7390*	13100.7910	3.6791	0.8500	3.205	0.1889	0.5099
115.6140	4.2266	2.5526	4.382	0.5000*	0.6581*	13151.0303	3.6758	0.9200	3.122	0.1938	0.4666
132.7905	4.2171	2.5824	4.314	0.4000*	0.5869*	13192.8545	3.6730	0.9900	3.041	0.2005	0.4278
146.9504	4.2057	2.6091	4.242	0.3000*	0.5069*	13227.3591	3.6703	1.0600	2.960	0.2077	0.3960
158.4582	4.1928	2.6326	4.167	0.2000*	0.4253*	13257.0749	3.6676	1.1300	2.879	0.2150	0.3675
167.5985	4.1802	2.6533	4.095	0.1000*	0.3631*	13260.3541	3.6671	1.1383	2.869	0.2158	0.3675
171.1742	4.1768R	2.6631	4.072	0.0545*	0.3250*	12247.2354	3.7851	0.4900	3.989	0.1609	- - -
171.4909	4.1772	2.6643	4.072	0.0500*	0.3214*	12552.3314	3.7673	0.5600	3.848	0.1722	- - -
173.5689	4.1822	2.6741	4.082	0.0200*	0.2922*	12738.7994	3.7400	0.6159	3.683	0.1788	0.8986
174.2158	4.1888	2.6811	4.102	0.0100*	0.2677*	0.0000	3.8257	0.2339	4.494	0.7990*	0.0239*
174.7882	4.2078B	2.7072	4.152	0.0007*	0.0848*	758.3891	3.8318	0.2729	4.480	0.7000*	0.0022*
174.8506	4.2046	2.7023	4.144	0.0000*	- - -	1391.3975	3.8369	0.3082	4.465	0.6000*	- - -
177.2012	4.1714	2.7500	3.964	0.6368	- - -	1983.7440	3.8420	0.3442	4.449	0.5000*	- - -
178.2327	4.1400	2.7630	3.825	0.6368	- - -	2548.9898	3.8469	0.3819	4.431	0.4000*	- - -
178.8379	4.1000	2.7668	3.661	0.6368	- - -	3107.7850	3.8520	0.4237	4.410	0.3000*	- - -
179.1641	4.0600	2.7625	3.505	0.6368	- - -	3704.9778	3.8578	0.4752	4.382	0.2000*	- - -
179.3769	4.0200	2.7532	3.355	0.6368	- - -	4360.2741	3.8643	0.5419	4.341	0.1000*	- - -
179.5280	3.9800	2.7403	3.207	0.6368	- - -	4665.9876	3.8664	0.5764	4.315	0.0500*	- - -
179.6418	3.9400	2.7246	3.063	0.6368	- - -	4851.5829	3.8675	0.5991	4.297	0.0200*	- - -
179.7304	3.9000	2.7062	2.921	0.6368	- - -	4949.4136	3.8679	0.6123	4.285	0.0100*	- - -
179.8000	3.8600	2.6857	2.782	0.6368	- - -	5322.9613	3.8691T	0.6719	4.230	0.0002*	- - -
179.8552	3.8200	2.6631	2.645	0.6368	- - -	5518.1335	3.8682	0.7103	4.188	0.0000*	- - -
179.8997	3.7800	2.6386	2.509	0.6368	- - -	5766.0110	3.8626	0.7700	4.106	0.1652	- - -
179.9359	3.7400	2.6122	2.375	0.6368	- - -	5955.0694	3.8483	0.8300	3.989	0.1791	- - -
179.9734	3.7000	2.5754	2.252	0.6368	4.3993	6075.1466	3.8200	0.8806	3.825	0.1882	- - -
180.0076	3.6803	2.5300	2.219	0.6368	4.3569	6127.3407	3.7900	0.9069	3.679	0.1919	- - -
180.0326	3.6706	2.5100	2.200	0.6368	4.1821	6162.9610	3.7600	0.9237	3.542	0.1942	- - -
180.0686	3.6591	2.5600	2.104	0.6368	3.4626	6197.8408	3.7300	0.9291	3.417	0.1962	1.0974
180.0880	3.6540	2.6100	2.034	0.6368	0.0003*	6240.5630	3.7005	0.9088	3.319	0.1979	1.0150
180.1126	3.6505	2.6600	1.970	0.6368	0.0049*	6290.6285	3.6858	0.9600	3.209	0.1994	0.7844
180.1731	3.6471	2.7100	1.906	0.6368	0.0332*	6322.6935	3.6805	1.0200	3.128	0.2009	0.6679
180.2945	3.6465	2.7193	1.894	0.6368	0.1362*	6350.3725	3.6773	1.0800	3.055	0.2036	0.5820
$M = 0.70 \quad Y = 0.20 \quad Z = 0.001$											
0.0000	3.6966	-0.6855	4.701	0.7990*	0.6776	6396.6942	3.6716	1.2000	2.912	0.2142	0.4772
3336.8248	3.7012	-0.6505	4.685	0.7000*	0.6803	6430.5612	3.6666	1.3200	2.842	0.2204	0.4318
6673.6390	3.7061	-0.6120	4.666	0.6000*	0.6822	6444.7063	3.6643	1.3800	2.703	0.2329	0.3804
						6452.7940	3.6625	1.4176	2.658	0.2369	0.3709

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
$M = 1.40 \quad Y = 0.20 \quad Z = 0.001$																	
0.0000	3.9313	0.6953	4.560	0.7990*	0.0535*	961.3826	4.0082R	1.3073	4.353	0.0816*	0.0918*						
374.8372	3.9369	0.7345	4.544	0.7000*	0.0331*	981.5275	4.0089	1.3159	4.347	0.0500*	0.0849*						
687.1144	3.9412	0.7695	4.526	0.6000*	0.0223*	1005.1340	4.0216	1.3425	4.371	0.0100*	0.0538*						
949.7100	3.9446	0.8018	4.507	0.5000*	0.0150*	1048.8529	4.0275	1.3953	4.342	0.0000*	---						
1170.2971	3.9475	0.8317	4.489	0.4000*	0.0073*	1123.9582	4.0218	1.4400	4.274	0.1764	---						
1358.8747	3.9499	0.8596	4.470	0.3000*	0.0035*	1186.2513	4.0106	1.4900	4.180	0.2028	---						
1524.8893	3.9515	0.8857	4.451	0.2000*	0.0024*	1230.9682	3.9812	1.5400	4.012	0.2225	---						
1670.6044	3.9522	0.9097	4.430	0.1000*	0.0004*	1241.6774	3.9600	1.5548	3.913	0.2272	---						
1742.6389	3.9527	0.9230	4.418	0.0500*	---	1250.0082	3.9300	1.5652	3.782	0.2305	---						
1813.7260	3.9533	0.9373	4.406	0.0200*	---	1255.5759	3.9000	1.5689	3.658	0.2326	---						
1860.3398	3.9538	0.9473	4.398	0.0100*	---	1259.8087	3.8700	1.5681	3.539	0.2340	---						
2039.7691	3.9552	0.9900	4.361	0.0004*	---	1263.2083	3.8400	1.5640	3.423	0.2350	---						
2160.1146	3.9555T	1.0236	4.329	0.0000*	---	1266.0938	3.8100	1.5568	3.310	0.2359	---						
2215.5886	3.9553	1.0409	4.311	0.0000*	---	1268.6073	3.7800	1.5470	3.200	0.2367	---						
2353.3540	3.9531	1.0900	4.253	0.1566	---	1271.0747	3.7500	1.5329	3.094	0.2375	---						
2466.1926	3.9470	1.1400	4.179	0.1757	---	1274.9064	3.7200	1.4970	3.010	0.2388	1.7468						
2553.9163	3.9339	1.1900	4.076	0.1918	---	1278.2566	3.7026	1.4500	2.988	0.2400	1.7068						
2609.2817	3.9100	1.2310	3.939	0.2025	---	1284.2966	3.6869	1.4162	2.959	0.2421	1.4559						
2636.4776	3.8800	1.2550	3.795	0.2077	---	1292.7545	3.6800	1.4600	2.887	0.2456	1.1585						
2650.8345	3.8500	1.2668	3.664	0.2102	---	1299.8366	3.6759	1.5100	2.821	0.2495	0.9861						
2660.7476	3.8200	1.2724	3.538	0.2117	---	1306.3000	3.6728	1.5600	2.759	0.2538	0.8177						
2668.1924	3.7900	1.2733	3.417	0.2128	---	1312.3804	3.6701	1.6100	2.698	0.2583	0.7102						
2674.7491	3.7600	1.2698	3.301	0.2136	---	1315.4907	3.6689	1.6371	2.666	0.2609	0.6422						
2683.1817	3.7300	1.2549	3.196	0.2146	1.3992	$M = 2.20 \quad Y = 0.20 \quad Z = 0.001$											
2694.0175	3.7053	1.2100	3.142	0.2157	1.3614	0.0000	4.1039	1.4849	4.657	0.7990*	0.2681*						
2704.8477	3.6927	1.1890	3.112	0.2167	1.2063	130.2454	4.1015	1.5259	4.607	0.7000*	0.3018*						
2721.7802	3.6829	1.2300	3.032	0.2188	0.9684	234.8798	4.0989	1.5633	4.559	0.6000*	0.2755*						
2735.4963	3.6784	1.2800	2.964	0.2216	0.8267	320.0861	4.0950	1.5973	4.509	0.5000*	0.2541*						
2747.6395	3.6754	1.3300	2.902	0.2254	0.7031	390.3712	4.0891	1.6276	4.456	0.4000*	0.2247*						
2758.3912	3.6729	1.3800	2.842	0.2299	0.6329	448.4258	4.0811	1.6542	4.397	0.3000*	0.2072*						
2768.0359	3.6703	1.4300	2.782	0.2348	0.5598	536.0081	4.0615	1.6989	4.274	0.2000*	0.1811*						
2773.5363	3.6691	1.4609	2.746	0.2379	0.5194	545.6354	4.0598R	1.7052	4.261	0.0715*	0.1463*						
$M = 1.55 \quad Y = 0.20 \quad Z = 0.001$																	
0.0000	3.9741	0.8822	4.589	0.7990*	0.0830*	552.3745	4.0603	1.7110	4.257	0.0500*	0.1392*						
287.1490	3.9786	0.9211	4.568	0.7000*	0.0672*	561.3135	4.0657	1.7225	4.267	0.0200*	0.1268*						
529.8046	3.9817	0.9562	4.545	0.6000*	0.0614*	564.1183	4.0726	1.7314	4.286	0.0100*	0.1140*						
732.3713	3.9839	0.9886	4.522	0.5000*	0.0533*	566.7791	4.0906B	1.7633	4.326	0.0004*	---						
901.2565	3.9853	1.0182	4.498	0.4000*	0.0463*	567.0936	4.0888	1.7648	4.317	0.0000*	---						
1046.9845	3.9853	1.0448	4.471	0.3000*	0.0454*	586.1905	4.0797	1.8100	4.235	0.2541	---						
1181.9600	3.9832	1.0696	4.438	0.2000*	0.0494*	609.6939	4.0512	1.8600	4.071	0.2730	---						
1290.3951	3.9808	1.0915	4.406	0.1000*	0.0449*	614.6841	4.0300	1.8728	3.974	0.2756	---						
1299.3689	3.9807R	1.0936	4.404	0.0909*	0.0440*	618.4861	4.0000	1.8809	3.846	0.2793	---						
1336.8108	3.9826	1.1064	4.399	0.0500*	0.0350*	620.9655	3.9700	1.8825	3.724	0.2802	---						
1363.4814	3.9879	1.1241	4.402	0.0200*	0.0149*	622.8319	3.9400	1.8798	3.607	0.2802	---						
1373.1336	3.9907	1.1343	4.403	0.0100*	0.0018*	624.3434	3.9100	1.8740	3.493	0.2804	---						
1378.9433	3.9912B	1.1378	4.402	0.0066*	---	625.6326	3.8800	1.8656	3.381	0.2811	---						
1507.5241	3.9896	1.1800	4.353	0.0001*	---	626.7320	3.8500	1.8545	3.272	0.2817	---						
1561.7609	3.9887	1.2003	4.329	0.0000*	---	627.6781	3.8200	1.8412	3.165	0.2822	---						
1671.2875	3.9854	1.2500	4.266	0.1641	---	628.4991	3.7900	1.8256	3.061	0.2827	---						
1756.9266	3.9776	1.3000	4.185	0.1857	---	629.2294	3.7600	1.8075	2.959	0.2832	---						
1821.9872	3.9602	1.3500	4.066	0.2037	---	630.0365	3.7300	1.7799	2.867	0.2837	2.1998						
1849.4296	3.9400	1.3770	3.958	0.2116	---	631.0116	3.7072	1.7300	2.826	0.2842	2.1894						
1867.4944	3.9100	1.3969	3.818	0.2166	---	631.8414	3.6938	1.6800	2.822	0.2847	2.1068						
1877.6514	3.8800	1.4065	3.688	0.2192	---	632.6058	3.6855	1.6630	2.806	0.2851	1.9366						
1884.6607	3.8500	1.4100	3.565	0.2208	---	635.1818	3.6764	1.7100	2.722	0.2866	1.5020						
1890.0151	3.8200	1.4092	3.445	0.2219	---	637.6668	3.6727	1.7600	2.657	0.2885	1.2484						
1894.3793	3.7900	1.4050	3.330	0.2227	---	640.3508	3.6692	1.8100	2.593	0.2911	1.0019						
1898.3708	3.7600	1.3969	3.218	0.2234	---	643.2748	3.6665	1.8600	2.533	0.2948	0.8142						
1903.9284	3.7300	1.3746	3.120	0.2244	1.5489	646.3416	3.6640	1.9100	2.473	0.2995	0.6629						
1910.0364	3.7083	1.3300	3.078	0.2255	1.5205	648.9006	3.6615	1.9600	2.413	0.3036	0.5639						
1916.7954	3.6953	1.2962	3.060	0.2266	1.3788	651.4405	3.6591	2.0100	2.353	0.3082	0.4980						
1931.8621	3.6832	1.3400	2.968	0.2301	1.0471	651.6809	3.6589	2.0149	2.347	0.3086	0.4917						
1942.0607	3.6790	1.3900	2.901	0.2335	0.8891	$M = 2.80 \quad Y = 0.20 \quad Z = 0.001$											
1950.9684	3.6762	1.4400	2.839	0.2378	0.7563	0.0000	4.1741	1.8710	4.657	0.7990*	0.4768*						
1959.0416	3.6736	1.4900	2.779	0.2424	0.6487	71.4645	4.1696	1.9133	4.596	0.7000*	0.4936*						
1962.6423	3.6725	1.5138	2.751	0.2447	0.6237	130.9611	4.1652	1.9534	4.539	0.6000*	0.4430*						
$M = 1.75 \quad Y = 0.20 \quad Z = 0.001$																	
0.0000	4.0232	1.0986	4.622	0.7990*	0.1198*	179.2757	4.1593	1.9895	4.479	0.5000*	0.4014*						
218.8021	4.0254	1.1375	4.591	0.7000*	0.1437*	219.1243	4.1514	2.0224	4.415	0.4000*	0.3596*						
404.4153	4.0264	1.1738	4.559	0.6000*	0.1296*	251.8022	4.1416	2.0515	4.346	0.3000*	0.3100*						
553.6731	4.0265	1.2063	4.527	0.5000*	0.1176*	278.3069	4.1301	2.0772	4.274	0.2000*	0.2694*						
677.2768	4.0248	1.2350	4.491	0.4000*	0.1127*	299.6466	4.1186	2.1001	4.206	0.1000*	0.2285*						
783.0811	4.0209	1.2603	4.451	0.3000*	0.1089*	305.2235	4.1164R	2.1071	4.190	0.0697*	0.2123*						
871.8051	4.0151	1.2822	4.405	0.2000*	0.1082*	313.3414	4.1214	2.1231	4.194	0.0500*	0.2016*						
949.1380	4.0089	1.3034	4.360	0.1000*	0.0931*	314.8095	4.1285	2.1310	4.214	0.0100*	0.1659*						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
316.1806	4.1485B	2.1620	4.263	0.0004*	0.0054*	44346.0730	3.6825	0.6500	3.205	0.1815	0.3488
316.3380	4.1454	2.1618	4.251	0.0000*	- - -	44445.5958	3.6790	0.7500	3.091	0.1910	0.3319
323.2434	4.1299	2.2100	4.141	0.3837	- - -	44525.8254	3.6753	0.8500	2.976	0.2003	0.3202
329.7964	4.0900	2.2464	3.945	0.3852	- - -	44590.3777	3.6716	0.9500	2.861	0.2095	0.3133
331.6232	4.0500	2.2549	3.777	0.3852	- - -	44642.4143	3.6678	1.0500	2.746	0.2184	0.3078
332.6659	4.0100	2.2537	3.618	0.3852	- - -	44667.8764	3.6653	1.1080	2.678	0.2236	0.3053
333.3618	3.9700	2.2465	3.465	0.3852	- - -	$M = 0.70 \quad Y = 0.30 \quad Z = 0.001$					
333.8683	3.9300	2.2346	3.317	0.3852	- - -	0.0000	3.7438	-0.4464	4.651	0.6990*	0.0030*
334.2528	3.8900	2.2184	3.173	0.3852	- - -	2006.8334	3.7480	-0.4060	4.628	0.6000*	0.6959
334.5529	3.8500	2.1987	3.033	0.3852	- - -	3966.7032	3.7524	-0.3624	4.601	0.5000*	0.6969
334.7899	3.8100	2.1756	2.896	0.3852	- - -	5905.1072	3.7569	-0.3136	4.571	0.4000*	0.6979
334.9787	3.7700	2.1491	2.762	0.3852	- - -	7827.1065	3.7615	-0.2583	4.534	0.3000*	0.6987
335.1427	3.7300	2.1161	2.635	0.3852	- - -	9766.8515	3.7664	-0.1930	4.488	0.2000*	0.6992
335.2955	3.7041	2.0700	2.578	0.3852	2.7941	12030.2865	3.7724	-0.0969	4.416	0.1000*	0.6997
335.4233	3.6903	2.0200	2.573	0.3852	2.7446	13807.5664	3.7778	0.0060	4.335	0.0500*	0.6999
335.5030	3.6834	1.9997	2.565	0.3852	2.6331	14889.7445	3.7807	0.0848	4.268	0.0200*	0.6999
335.6997	3.6718	2.0400	2.479	0.3852	2.1559	15137.6793	3.7812	0.1043	4.250	0.0100*	0.7000
335.8907	3.6671	2.0900	2.410	0.3852	1.8311	15633.6350	3.7818T	0.1514	4.205	0.0007*	- - -
336.2233	3.6631	2.1400	2.344	0.3852	1.5466	16185.5411	3.7807	0.2165	4.136	0.0000*	- - -
336.6466	3.6600	2.1900	2.282	0.3852	1.2699	16602.9955	3.7768	0.2800	4.057	0.1432	- - -
337.1253	3.6566	2.2400	2.218	0.3852	0.0007*	16948.8114	3.7682	0.3500	3.952	0.1526	0.6999
337.2269	3.6559	2.2502	2.205	0.3852	0.0011*	17197.8285	3.7531	0.4200	3.822	0.1598	0.6994
	$M = 3.50 \quad Y = 0.20 \quad Z = 0.001$					17388.3310	3.7295	0.4900	3.657	0.1652	0.6913
0.0000	4.2330	2.2171	4.643	0.7990*	0.7557*	17541.9614	3.7052	0.5600	3.490	0.1694	0.6297
43.3589	4.2264	2.2611	4.573	0.7000*	0.7136*	17634.8205	3.6947	0.6300	3.378	0.1723	0.5509
79.6757	4.2213	2.3034	4.510	0.6000*	0.6309*	17705.2719	3.6891	0.7000	3.286	0.1756	0.4980
108.9581	4.2145	2.3416	4.445	0.5000*	0.5587*	17766.3570	3.6851	0.7700	3.200	0.1805	0.4525
132.6637	4.2060	2.3758	4.377	0.4000*	0.4939*	17818.2286	3.6815	0.8400	3.115	0.1871	0.4149
151.8433	4.1955	2.4062	4.304	0.3000*	0.4229*	17840.2106	3.6800	0.8742	3.075	0.1904	0.4067
167.2404	4.1835	2.4329	4.229	0.2000*	0.3655*	$M = 0.90 \quad Y = 0.30 \quad Z = 0.001$					
179.7907	4.1714	2.4572	4.157	0.1000*	0.3081*	17880.2930	3.8118	0.0685	4.517	0.6990*	0.0169*
183.1954	4.1689R	2.4649	4.139	0.0681*	0.2898*	1883.2347	3.8171	0.1107	4.496	0.6000*	0.0014*
184.9918	4.1691	2.4700	4.135	0.0500*	0.2782*	1628.1485	3.8219	0.1497	4.476	0.5000*	- - -
187.8297	4.1736	2.4805	4.142	0.0200*	0.2476*	2334.7474	3.8270	0.1906	4.456	0.4000*	- - -
188.6821	4.1806	2.4878	4.163	0.0100*	0.2272*	3029.9767	3.8327	0.2357	4.434	0.3000*	- - -
189.4759	4.2002B	2.5171	4.212	0.0003*	0.0060*	3777.4258	3.8398	0.2926	4.405	0.2000*	- - -
189.5629	4.1965	2.5166	4.198	0.0000*	- - -	4664.4597	3.8499	0.3757	4.363	0.1000*	- - -
191.9264	4.1792	2.5600	4.085	0.5161	- - -	5103.0949	3.8545	0.4232	4.333	0.0500*	- - -
194.8182	4.1400	2.5926	3.896	0.5161	- - -	5347.7692	3.8567	0.4519	4.313	0.0200*	- - -
195.7255	4.1000	2.6018	3.727	0.5161	- - -	5462.1782	3.8577	0.4670	4.302	0.0100*	- - -
196.2161	4.0600	2.6016	3.567	0.5161	- - -	5864.2274	3.8607	0.5300	4.251	0.0002*	- - -
196.5365	4.0200	2.5956	3.413	0.5161	- - -	6073.2930	3.8612T	0.5705	4.213	0.0000*	- - -
196.7646	3.9800	2.5854	3.263	0.5161	- - -	6101.2904	3.8611	0.5765	4.206	0.0000*	- - -
196.9369	3.9400	2.5716	3.117	0.5161	- - -	6360.4364	3.8580	0.6400	4.131	0.1510	- - -
197.0703	3.9000	2.5545	2.974	0.5161	- - -	6573.2839	3.8467	0.7100	4.015	0.1645	- - -
197.1750	3.8600	2.5344	2.834	0.5161	- - -	6723.7638	3.8185	0.7800	3.832	0.1747	- - -
197.2572	3.8200	2.5118	2.697	0.5161	- - -	6784.4560	3.7900	0.8172	3.681	0.1789	- - -
197.3226	3.7800	2.4868	2.562	0.5161	- - -	6831.0067	3.7600	0.8484	3.530	0.1820	0.8999
197.4348	3.7000	2.4140	2.314	0.5161	3.4981	6874.8655	3.7300	0.8686	3.390	0.1846	0.8948
197.4761	3.6845	2.3700	2.296	0.5161	3.4569	6935.8848	3.7000	0.8872	3.251	0.1879	0.7739
197.5119	3.6744	2.3410	2.285	0.5161	3.3191	6977.9820	3.6903	0.9500	3.150	0.1910	0.6446
197.5671	3.6652	2.3900	2.199	0.5161	2.7459	7011.9829	3.6855	1.0200	3.060	0.1955	0.5594
197.6021	3.6605	2.4400	2.130	0.5161	2.3470	7040.6841	3.6814	1.0900	2.974	0.2017	0.5009
197.6642	3.6563	2.4900	2.064	0.5161	2.0000	7064.1426	3.6780	1.1600	2.891	0.2087	0.4513
197.8058	3.6530	2.5400	2.000	0.5161	0.0146*	7084.2750	3.6746	1.2300	2.807	0.2157	0.4181
198.0274	3.6525	2.5466	1.992	0.5161	0.1366*	7101.7052	3.6718	1.3000	2.726	0.2227	0.3927
	$M = 0.55 \quad Y = 0.30 \quad Z = 0.001$					7117.0386	3.6685	1.3700	2.643	0.2297	0.3686
						7117.9596	3.6682	1.3744	2.637	0.2301	0.3686
0.0000	3.6764	-0.9404	4.771	0.6990*	0.5152	$M = 1.10 \quad Y = 0.30 \quad Z = 0.001$					
4722.0291	3.6808	-0.9035	4.752	0.6000*	0.5190	481.1425	3.9031	0.5029	4.535	0.6000*	0.0206*
9513.3455	3.6863	-0.8612	4.731	0.5000*	0.5238	880.7134	3.9085	0.5417	4.518	0.5000*	0.0072*
14362.7117	3.6928	-0.8115	4.707	0.4000*	0.5272	1204.5449	3.9130	0.5767	4.501	0.4000*	- - -
19330.6769	3.7008	-0.7516	4.680	0.3000*	0.5311	1492.7778	3.9173	0.6116	4.483	0.3000*	- - -
24520.5311	3.7104	-0.6760	4.642	0.2000*	0.5349	1785.4948	3.9219	0.6511	4.462	0.2000*	- - -
30192.1618	3.7219	-0.5712	4.583	0.1000*	0.5380	2070.8114	3.9256	0.6930	4.435	0.1000*	- - -
34046.2792	3.7305	-0.4748	4.521	0.0500*	0.5404	2208.6318	3.9270	0.7146	4.419	0.0500*	- - -
38163.8543	3.7396	-0.3232	4.406	0.0200*	0.5435	2319.0058	3.9283	0.7339	4.405	0.0200*	- - -
39653.7644	3.7425	-0.2489	4.343	0.0100*	0.5447	2385.8136	3.9291	0.7468	4.395	0.0100*	- - -
41118.2570	3.7439T	-0.1563	4.257	0.0000*	0.5455	2627.9903	3.9321	0.8000	4.354	0.0003*	- - -
41267.5577	3.7438	-0.1446	4.244	0.0000*	0.5456	2825.8959	3.9334	0.8544	4.305	0.0000*	- - -
42255.8205	3.7409	-0.0500	4.138	0.1331	0.5446	2883.2292	3.9334T	0.8727	4.287	0.1352	- - -
42942.2653	3.7323	0.0500	4.004	0.1417	0.5399	3037.1554	3.9310	0.9300	4.220	0.1532	- - -
43381.6682	3.7185	0.1500	3.849	0.1478	0.5227	3161.1354	3.9230	0.9900	4.128	0.1692	- - -
43677.9538	3.7054	0.2500	3.696	0.1524	0.4835	3252.6045	3.9048	1.0500	3.995	0.1823	- - -
43897.5878	3.6967	0.3500	3.561	0.1571	0.4378	$M = 0.55 \quad Y = 0.30 \quad Z = 0.001$					
44078.6866	3.6910	0.4500	3.439	0.1636	0.4012	7117.0386	3.6685	1.3700	2.643	0.2297	0.3686
44224.5990	3.6865	0.5500	3.321	0.1721	0.3735	7117.9596	3.6682	1.3744	2.637	0.2301	0.3686

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
3298.3948	3.8800	1.0901	3.856	0.1893	-----	1530.2774	3.6732	1.5600	2.663	0.2477	0.6236
3324.4791	3.8500	1.1173	3.708	0.1933	-----	1531.4504	3.6728	1.5702	2.651	0.2486	0.6100
3340.3400	3.8200	1.1338	3.572	0.1957	-----						
3351.7773	3.7900	1.1440	3.442	0.1973	-----						
3361.8043	3.7600	1.1498	3.316	0.1987	-----						
3375.4261	3.7300	1.1457	3.200	0.2005	1.0978	0.0000	4.0812	1.2943	4.658	0.6990*	0.1898*
3396.3611	3.7005	1.1124	3.115	0.2032	1.0068	150.6661	4.0799	1.3377	4.609	0.6000*	0.2139*
3426.1419	3.6854	1.1700	2.997	0.2082	0.7539	271.7651	4.0781	1.3772	4.563	0.5000*	0.1951*
3443.1230	3.6813	1.2300	2.921	0.2128	0.6461	370.0701	4.0746	1.4128	4.513	0.4000*	0.1779*
3457.3732	3.6776	1.2900	2.846	0.2183	0.5678	450.3969	4.0687	1.4440	4.458	0.3000*	0.1657*
3469.7036	3.6743	1.3500	2.773	0.2241	0.5149	517.0479	4.0607	1.4716	4.398	0.2000*	0.1484*
3480.6304	3.6717	1.4100	2.702	0.2299	0.4730	571.3094	4.0525	1.4971	4.340	0.1000*	0.1282*
3489.0425	3.6693	1.4609	2.642	0.2350	0.4429	588.3787	4.0512R	1.5070	4.325	0.0633*	0.1211*
						594.1172	4.0522	1.5116	4.325	0.0500*	0.1172*
						606.7063	4.0581	1.5252	4.334	0.0200*	0.1041*
						610.6302	4.0651	1.5354	4.352	0.0100*	0.0923*
0.0000	3.9514	0.7003	4.586	0.6990*	0.0656*	614.0918	4.0820B	1.5684	4.387	0.0011*	0.0213*
339.2899	3.9570	0.7432	4.566	0.6000*	0.0468*	621.7189	4.0778	1.5945	4.344	0.0000*	-----
619.4734	3.9613	0.7819	4.544	0.5000*	0.0357*	655.3868	4.0718	1.6400	4.275	0.2063	-----
849.8767	3.9647	0.8175	4.523	0.4000*	0.0265*	685.4981	4.0579	1.6900	4.169	0.2284	-----
1041.8505	3.9673	0.8502	4.500	0.3000*	0.0222*	703.0742	4.0300	1.7305	4.017	0.2379	-----
1210.5555	3.9684	0.8801	4.475	0.2000*	0.0227*	710.2304	4.0000	1.7502	3.877	0.2442	-----
1306.2964	3.9683R	0.8977	4.457	0.1348*	0.0218*	714.3806	3.9700	1.7600	3.747	0.2476	-----
1352.9142	3.9685	0.9073	4.448	0.1000*	0.0198*	717.3848	3.9400	1.7640	3.623	0.2499	-----
1416.0642	3.9706	0.9246	4.439	0.0500*	0.0100*	719.7981	3.9100	1.7639	3.503	0.2517	-----
1454.1298	3.9735	0.9403	4.435	0.0200*	-----	721.8084	3.8800	1.7606	3.387	0.2532	-----
1481.6864	3.9741	0.9484	4.429	0.0100*	-----	723.5272	3.8500	1.7546	3.273	0.2545	-----
1626.3107	3.9754	0.9900	4.393	0.0004*	-----	725.0209	3.8200	1.7461	3.161	0.2557	-----
1737.7819	3.9762B	1.0287	4.357	0.0000*	-----	726.3273	3.7900	1.7353	3.052	0.2568	-----
1766.7695	3.9762	1.0400	4.346	0.0000*	-----	727.5107	3.7600	1.7218	2.945	0.2578	-----
1879.7026	3.9752	1.0900	4.292	0.1462	-----	728.9709	3.7300	1.6982	2.849	0.2591	1.7497
1970.5949	3.9713	1.1400	4.226	0.1642	-----	730.8030	3.7081	1.6500	2.810	0.2606	1.7342
2042.0782	3.9625	1.1900	4.141	0.1798	-----	732.5567	3.6939	1.6000	2.803	0.2620	1.6377
2096.2546	3.9445	1.2400	4.019	0.1929	-----	733.6734	3.6896	1.5925	2.793	0.2629	1.5364
2124.8813	3.9200	1.2746	3.887	0.2002	-----	739.0669	3.6796	1.6400	2.706	0.2672	1.1691
2141.7041	3.8900	1.2981	3.743	0.2045	-----	742.9176	3.6758	1.6900	2.641	0.2709	0.9691
2152.0976	3.8600	1.3119	3.609	0.2071	-----	746.5562	3.6725	1.7400	2.577	0.2747	0.8120
2159.5319	3.8300	1.3196	3.482	0.2088	-----	750.0402	3.6696	1.7900	2.516	0.2789	0.7148
2165.3170	3.8000	1.3229	3.358	0.2102	-----	753.3401	3.6671	1.8393	2.456	0.2832	0.6236
2170.2510	3.7700	1.3225	3.239	0.2113	-----						
2176.5154	3.7400	1.3144	3.127	0.2127	1.2497						
2186.3785	3.7100	1.2741	3.047	0.2149	1.2208						
2194.8477	3.6969	1.2517	3.017	0.2169	1.0924	0.0000	4.1516	1.6690	4.664	0.6990*	0.3376*
2210.6699	3.6864	1.3000	2.927	0.2213	0.8572	87.1376	4.1477	1.7155	4.602	0.6000*	0.3649*
2220.7586	3.6824	1.3500	2.861	0.2253	0.7488	157.1093	4.1432	1.7574	4.542	0.5000*	0.3205*
2229.4467	3.6794	1.4000	2.799	0.2298	0.6476	213.7152	4.1370	1.7954	4.479	0.4000*	0.2928*
2237.2892	3.6766	1.4500	2.738	0.2344	0.5847	259.8968	4.1287	1.8295	4.412	0.3000*	0.2559*
2244.0169	3.6745	1.4969	2.682	0.2388	0.5436	296.8733	4.1184	1.8593	4.341	0.2000*	0.2250*
						326.5560	4.1083	1.8863	4.274	0.1000*	0.1881*
						335.9600	4.1062R	1.8966	4.255	0.0627*	0.1789*
						338.9406	4.1070	1.9009	4.254	0.0500*	0.1725*
0.0000	3.9982	0.9069	4.616	0.6990*	0.0951*	345.7379	4.1126	1.9136	4.263	0.0200*	0.1552*
251.6869	4.0019	0.9489	4.589	0.6000*	0.0881*	347.8237	4.1197	1.9223	4.283	0.0100*	0.1414*
460.5800	4.0044	0.9873	4.561	0.5000*	0.0791*	349.6065	4.1398B	1.9537	4.332	0.0011*	0.0535*
632.5417	4.0059	1.0224	4.532	0.4000*	0.0721*	350.0426	4.1363	1.9621	4.310	0.0000*	-----
777.9308	4.0053	1.0537	4.498	0.3000*	0.0735*	359.6006	4.1272	2.0100	4.226	0.2982	-----
903.7527	4.0022	1.0816	4.457	0.2000*	0.0813*	371.3267	4.1040	2.0600	4.083	0.3129	-----
1032.0642	3.9973	1.1130	4.407	0.1000*	0.0711*	375.7198	4.0700	2.0859	3.921	0.3162	-----
1037.3755	3.9971R	1.1144	4.404	0.0944*	0.0707*	377.9912	4.0300	2.0975	3.749	0.3176	-----
1076.5283	3.9984	1.1290	4.395	0.0500*	0.0641*	379.4173	3.9900	2.0994	3.587	0.3198	-----
1101.6151	4.0044	1.1461	4.402	0.0200*	0.0495*	380.4435	3.9500	2.0950	3.432	0.3210	-----
1109.6490	4.0102	1.1597	4.412	0.0100*	0.0340*	381.2424	3.9100	2.0857	3.281	0.3218	-----
1117.6474	4.0163B	1.1836	4.412	0.0020*	-----	381.8870	3.8700	2.0725	3.134	0.3224	-----
1205.4088	4.0134	1.2270	4.357	0.0000*	-----	382.4146	3.8300	2.0557	2.991	0.3229	-----
1283.3326	4.0105	1.2700	4.303	0.1554	-----	382.8410	3.7900	2.0351	2.852	0.3233	-----
1352.2196	4.0050	1.3200	4.230	0.1769	-----	383.1917	3.7500	2.0103	2.716	0.3236	-----
1403.6397	3.9931	1.3700	4.133	0.1947	-----	383.5593	3.7154	1.9700	2.618	0.3239	2.1987
1441.0434	3.9661	1.4200	3.975	0.2088	-----	383.8458	3.6997	1.9200	2.606	0.3241	2.1709
1454.8499	3.9400	1.4435	3.847	0.2141	-----	384.2340	3.6841	1.8752	2.588	0.3243	1.9593
1463.9221	3.9100	1.4592	3.711	0.2175	-----	384.8882	3.6755	1.9200	2.509	0.3246	1.5861
1470.0672	3.8800	1.4675	3.583	0.2197	-----	385.7252	3.6704	1.9700	2.438	0.3252	1.3160
1474.7528	3.8500	1.4712	3.459	0.2214	-----	386.6626	3.6673	2.0200	2.376	0.3263	1.1043
1478.5089	3.8200	1.4710	3.339	0.2227	-----	387.6830	3.6641	2.0700	2.313	0.3275	0.8940
1481.6501	3.7900	1.4678	3.223	0.2238	-----	388.6984	3.6612	2.1200	2.252	0.3300	0.7484
1484.5099	3.7600	1.4612	3.109	0.2248	-----	389.7886	3.6586	2.1698	2.191	0.3334	0.6403
1488.6036	3.7300	1.4423	3.008	0.2263	1.3991						
1493.3753	3.7075	1.4000	2.961	0.2281	1.3749						
1498.2853	3.6946	1.3659	2.943	0.2299	1.2581						
1510.3606	3.6830	1.4100	2.853	0.2347	0.9518	0.0000	4.2160	2.0495	4.646	0.6990*	0.5350*
1517.6985	3.6790	1.4600	2.787	0.2389	0.8095	49.7318	4.2112	2.0981	4.578	0.6000*	0.5407*
1524.2254	3.6759	1.5100	2.724	0.2432	0.7190	90.3711	4.2056	2.1428	4.511	0.5000*	0.4848*

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
123.1516	4.1983	2.1837	4.441	0.4000*	0.4274*	21625.1006	3.7514	0.3300	3.800	0.1497	0.5487
149.3786	4.1888	2.2202	4.366	0.3000*	0.3751*	21825.3054	3.7293	0.4300	3.612	0.1555	0.5378
170.1769	4.1776	2.2523	4.289	0.2000*	0.3207*	21976.8015	3.7099	0.5300	3.434	0.1608	0.4977
186.6600	4.1663	2.2811	4.216	0.1000*	0.2657*	22086.0187	3.6995	0.6300	3.293	0.1671	0.4452
191.4621	4.1640R	2.2909	4.197	0.0654*	0.2526*	22169.6104	3.6945	0.7300	3.172	0.1760	0.4078
193.4549	4.1645	2.2960	4.194	0.0500*	0.2399*	22235.9711	3.6890	0.8300	3.051	0.1853	0.3765
197.1290	4.1696	2.3079	4.202	0.0200*	0.2196*	22290.2042	3.6841	0.9300	2.931	0.1946	0.3532
198.2594	4.1767	2.3157	4.222	0.0100*	0.1981*	22334.2048	3.6797	1.0300	2.813	0.2038	0.3395
199.2005	4.1971B	2.3447	4.275	0.0011*	0.0950*	22369.9450	3.6753	1.1300	2.696	0.2128	0.3270
199.4242	4.1932	2.3528	4.251	0.0000*	---	22399.1038	3.6707	1.2300	2.578	0.2218	0.3201
202.7375	4.1805	2.4000	4.154	0.4258	---	22422.6753	3.6662	1.3289	2.461	0.2307	0.3151
207.1800	4.1500	2.4452	3.986	0.4269	---						
208.6873	4.1100	2.4652	3.806	0.4346	---						
209.4452	4.0700	2.4720	3.639	0.4372	---						
209.9277	4.0300	2.4714	3.480	0.4381	---	0.0000	3.7921	-0.1847	4.582	0.5990*	0.0120*
210.2700	3.9900	2.4656	3.326	0.4385	---	1187.2734	3.7968	-0.1379	4.554	0.5000*	0.0001*
210.5269	3.9500	2.4554	3.176	0.4386	---	2219.1906	3.8013	-0.0930	4.527	0.4000*	---
210.7263	3.9100	2.4417	3.030	0.4387	---	3233.1006	3.8059	-0.0432	4.496	0.3000*	---
210.8839	3.8700	2.4249	2.887	0.4388	---	4292.3164	3.8115	0.0179	4.458	0.2000*	---
211.0087	3.8300	2.4050	2.746	0.4388	---	5647.7603	3.8215	0.1184	4.397	0.1000*	---
211.1078	3.7900	2.3823	2.609	0.4388	---	6474.6776	3.8298	0.1960	4.353	0.0500*	---
211.1869	3.7500	2.3567	2.475	0.4388	---	6877.9092	3.8339	0.2381	4.327	0.0200*	---
211.2677	3.7100	2.3176	2.354	0.4388	2.7991	7023.3597	3.8355	0.2551	4.316	0.0100*	---
211.3319	3.6918	2.2700	2.329	0.4389	2.7747	7481.1783	3.8406	0.3200	4.272	0.0004*	---
211.4270	3.6746	2.2286	2.301	0.4389	2.4798	7799.2715	3.8433	0.3772	4.225	0.0000*	---
211.4846	3.6682	2.2700	2.234	0.4389	2.1482	7945.1793	3.8437T	0.4083	4.196	0.1297	---
211.5508	3.6656	2.3200	2.174	0.4389	1.8408	8184.9704	3.8416	0.4700	4.126	0.1405	---
211.7115	3.6617	2.3700	2.108	0.4389	1.5581	8389.9268	3.8331	0.5400	4.022	0.1506	---
211.9533	3.6580	2.4200	2.043	0.4389	0.0170*	8538.0661	3.8142	0.6100	3.876	0.1586	---
212.2313	3.6587	2.4103	2.056	0.4389	0.1420*	8626.0476	3.7900	0.6664	3.723	0.1637	---
						8702.3594	3.7600	0.7278	3.542	0.1683	0.6998
						8764.0510	3.7300	0.7773	3.372	0.1722	0.6925
						8835.3515	3.7052	0.8400	3.210	0.1780	0.6072
0.0000	4.2734	2.3913	4.630	0.6990*	0.8479*	8878.0793	3.6960	0.9100	3.104	0.1837	0.5350
31.0516	4.2657	2.4418	4.549	0.6000*	0.7575*	8910.7458	3.6909	0.9800	3.013	0.1900	0.4838
55.9619	4.2597	2.4884	4.479	0.5000*	0.6672*	8937.3900	3.6865	1.0500	2.925	0.1969	0.4413
75.5965	4.2519	2.5301	4.406	0.4000*	0.5937*	8959.9585	3.6828	1.1200	2.841	0.2036	0.4117
91.4747	4.2420	2.5684	4.328	0.3000*	0.5045*	8961.4983	3.6827	1.1252	2.835	0.2041	0.4101
103.9084	4.2305	2.6018	4.249	0.2000*	0.4330*						
113.7747	4.2188	2.6320	4.172	0.1000*	0.3567*						
116.4896	4.2164R	2.6417	4.152	0.0669*	0.3370*						
117.7785	4.2167	2.6472	4.148	0.0500*	0.3243*	0.0000	3.8851	0.3162	4.563	0.5990*	0.0379*
119.9633	4.2215	2.6589	4.155	0.0200*	0.2939*	550.2814	3.8926	0.3641	4.545	0.5000*	0.0185*
120.6277	4.2284	2.6661	4.176	0.0100*	0.2746*	988.4322	3.8990	0.4070	4.528	0.4000*	0.0023*
121.1868	4.2484B	2.6929	4.229	0.0012*	0.1416*	1342.3069	3.9048	0.4469	4.511	0.3000*	---
121.3168	4.2440	2.7014	4.203	0.0000*	---	1698.9090	3.9112	0.4927	4.491	0.2000*	---
122.1790	4.2318	2.7400	4.115	0.5686	---	2060.7082	3.9175	0.5446	4.464	0.1000*	---
124.2483	4.2063	2.7800	3.973	0.5844	---	2235.5695	3.9202	0.5718	4.448	0.0500*	---
125.2193	4.1600	2.8054	3.763	0.5934	---	2366.0731	3.9223	0.5943	4.433	0.0200*	---
125.6786	4.1100	2.8141	3.554	0.5934	---	2440.4473	3.9237	0.6084	4.425	0.0100*	---
125.9405	4.0600	2.8125	3.356	0.5934	---	2676.5797	3.9280	0.6600	4.391	0.0005*	---
126.1157	4.0100	2.8043	3.164	0.5934	---	2897.1132	3.9316	0.7200	4.345	0.0000*	---
126.2412	3.9600	2.7912	2.977	0.5934	---	2929.3515	3.9320	0.7301	4.336	0.0000*	---
126.3337	3.9100	2.7732	2.795	0.5934	---	3086.3792	3.9329T	0.7862	4.284	0.1336	---
126.4021	3.8600	2.7513	2.617	0.5934	---	3206.1322	3.9310	0.8400	4.222	0.1466	---
126.4536	3.8100	2.7258	2.443	0.5934	---	3309.9164	3.9244	0.9000	4.136	0.1592	---
126.4925	3.7600	2.6971	2.271	0.5934	---	3387.6155	3.9101	0.9600	4.019	0.1699	---
126.5243	3.7100	2.6611	2.107	0.5934	3.4998	3443.8042	3.8817	1.0200	3.845	0.1785	---
126.5428	3.6911	2.6300	2.063	0.5934	3.4928	3464.7233	3.8600	1.0480	3.731	0.1819	---
126.5626	3.6787	2.5900	2.053	0.5934	0.0022*	3482.9116	3.8300	1.0746	3.584	0.1850	---
126.5805	3.6703	2.5702	2.039	0.5934	0.0074*	3495.8331	3.8000	1.0934	3.445	0.1873	---
126.6031	3.6611	2.6100	1.963	0.5934	0.0177*	3506.4436	3.7700	1.1074	3.311	0.1893	---
126.6162	3.6566	2.6500	1.905	0.5934	0.0265*	3520.0303	3.7400	1.1195	3.179	0.1918	0.8993
126.6331	3.6535	2.6900	1.853	0.5934	0.0427*	3540.3117	3.7100	1.1131	3.065	0.1959	0.8603
126.7329	3.6514	2.7226	1.811	0.5934	0.1455*	3546.7828	3.7031	1.1127	3.038	0.1973	0.8238
						3571.9627	3.6908	1.1700	2.932	0.2038	0.6622
						3587.1391	3.6852	1.2300	2.849	0.2095	0.5854
						3599.5719	3.6816	1.2900	2.775	0.2152	0.5262
0.0000	3.7291	-0.6858	4.727	0.5990*	0.0008*	3610.4309	3.6781	1.3500	2.701	0.2209	0.4783
2709.3481	3.7347	-0.6414	4.705	0.5000*	0.5409	3620.1405	3.6746	1.4100	2.627	0.2266	0.4525
5426.0243	3.7408	-0.5912	4.679	0.4000*	0.5429	3628.7785	3.6719	1.4700	2.556	0.2323	0.4227
8171.7822	3.7474	-0.5322	4.646	0.3000*	0.5448	3628.8588	3.6719	1.4706	2.556	0.2324	0.4227
10983.2097	3.7543	-0.4607	4.603	0.2000*	0.5464						
14153.1289	3.7627	-0.3579	4.533	0.1000*	0.5481						
16576.9007	3.7699	-0.2489	4.453	0.0500*	0.5491						
18652.4744	3.7767	-0.1167	4.348	0.0200*	0.5497	0.0000	3.9308	0.5173	4.590	0.5990*	0.0517*
19051.9398	3.7779	-0.0884	4.325	0.0100*	0.5498	402.0948	3.9375	0.5651	4.569	0.5000*	0.0332*
20077.9409	3.7800	0.0100	4.235	0.0000*	0.5499	724.6311	3.9433	0.6083	4.549	0.4000*	0.0177*
20251.2073	3.7801T	0.0310	4.214	0.0000*	0.5499	983.6301	3.9482	0.6478	4.529	0.3000*	0.0097*
20906.1733	3.7770	0.1300	4.103	0.1323	0.5499	1201.8782	3.9521	0.6844	4.508	0.2000*	0.0079*
21341.8892	3.7679	0.2300	3.966	0.1423	0.5498	1391.9788	3.9547	0.7186	4.485	0.1000*	0.0054*

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1476.3641	3.9567	0.7373	4.474	0.0500*	0.0009*	1129.5580	3.9600	1.5075	3.814	0.2164	- - - -
1542.1193	3.9584	0.7532	4.465	0.0200*	- - -	1136.0500	3.9300	1.5266	3.675	0.2199	- - -
1588.9178	3.9594	0.7647	4.457	0.0100*	- - -	1140.6706	3.9000	1.5387	3.543	0.2225	- - -
1755.8041	3.9630	0.8100	4.426	0.0006*	- - -	1144.2550	3.8700	1.5458	3.415	0.2246	- - -
1908.3024	3.9660	0.8600	4.388	0.0000*	- - -	1147.1440	3.8400	1.5491	3.292	0.2262	- - -
1957.0787	3.9668	0.8783	4.373	0.0000*	- - -	1149.5558	3.8100	1.5491	3.172	0.2277	- - -
2055.5538	3.9678	0.9200	4.335	0.1275	- - -	1151.6364	3.7800	1.5465	3.055	0.2290	- - -
2100.8874	3.9678T	0.9419	4.314	0.1343	- - -	1153.8214	3.7500	1.5398	2.941	0.2303	1.2499
2187.0333	3.9661	0.9900	4.259	0.1483	- - -	1157.6416	3.7200	1.5116	2.850	0.2327	1.2435
2258.9975	3.9614	1.0400	4.190	0.1612	- - -	1162.4306	3.6999	1.4640	2.817	0.2357	1.1444
2315.3343	3.9517	1.0900	4.101	0.1726	- - -	1171.9824	3.6867	1.5100	2.718	0.2420	0.8529
2358.4477	3.9341	1.1400	3.981	0.1823	- - -	1177.1605	3.6824	1.5600	2.651	0.2462	0.7302
2384.8291	3.9100	1.1798	3.844	0.1887	- - -	1181.7822	3.6792	1.6100	2.588	0.2504	0.6506
2401.9974	3.8800	1.2107	3.694	0.1929	- - -	1186.0486	3.6761	1.6600	2.526	0.2548	0.5908
2413.0403	3.8500	1.2311	3.553	0.1958	- - -	1187.4324	3.6756	1.6772	2.506	0.2563	0.5661
2421.0504	3.8200	1.2450	3.419	0.1980	- - -						
2427.3123	3.7900	1.2540	3.290	0.1998	- - -						
2433.2659	3.7600	1.2598	3.164	0.2015	- - -						
2442.7000	3.7300	1.2570	3.047	0.2042	0.9971						
2457.2728	3.7034	1.2324	2.966	0.2086	0.9064		0.0000	4.0641	1.1249	4.662	0.5990*
2473.9101	3.6912	1.2800	2.869	0.2145	0.7273		168.4961	4.0641	1.1717	4.615	0.5000*
2483.5965	3.6866	1.3300	2.801	0.2192	0.6406		306.3694	4.0631	1.2151	4.568	0.4000*
2491.7972	3.6832	1.3800	2.737	0.2238	0.5795		415.3979	4.0596	1.2528	4.516	0.3000*
2499.1423	3.6800	1.4300	2.675	0.2285	0.5322		504.7695	4.0535	1.2864	4.458	0.2000*
2505.7775	3.6776	1.4800	2.615	0.2331	0.4934		578.4573	4.0469	1.3177	4.400	0.1000*
2507.8146	3.6767	1.4962	2.595	0.2346	0.4766		604.9751R	4.0461R	1.3318	4.383	0.0579*
							609.4959	4.0470	1.3353	4.383	0.0500*
							626.3991	4.0535	1.3516	4.393	0.0200*
							631.7248	4.0606	1.3632	4.409	0.0100*
							636.5490	4.0764B	1.4015	4.435	0.0010*
0.0000	3.9708	0.6950	4.614	0.5990*	0.0674*		653.4926	4.0729	1.4357	4.386	0.0000*
304.8929	3.9766	0.7420	4.590	0.5000*	0.0548*		693.0853	4.0695	1.4800	4.328	0.1692
554.2031	3.9810	0.7847	4.565	0.4000*	0.0451*		730.0351	4.0633	1.5300	4.254	0.1926
757.7005	3.9840	0.8236	4.538	0.3000*	0.0387*		757.2385	4.0511	1.5800	4.155	0.2114
933.3324	3.9847	0.8589	4.506	0.2000*	0.0407*		776.2712	4.0257	1.6300	4.003	0.2253
1090.7115	3.9837R	0.8928	4.468	0.1041*	0.0420*		784.0630	4.0000	1.6571	3.873	0.2314
1095.9288	3.9838	0.8942	4.467	0.1000*	0.0418*		789.2324	3.9700	1.6763	3.734	0.2354
1158.8265	3.9858	0.9136	4.455	0.0500*	0.0352*		792.7956	3.9400	1.6881	3.602	0.2382
1194.2725	3.9917	0.9348	4.458	0.0200*	0.0190*		795.5128	3.9100	1.6946	3.476	0.2403
1206.4616	3.9958	0.9495	4.459	0.0100*	0.0036*		797.7161	3.8800	1.6971	3.353	0.2421
1302.2138	3.9976	0.9900	4.426	0.0003*	- - -		799.5543	3.8500	1.6965	3.234	0.2437
1405.7159	3.9983	1.0343	4.385	0.0000*	- - -		801.1275	3.8200	1.6932	3.117	0.2450
1461.8356	3.9986B	1.0633	4.357	0.1295	- - -		802.4852	3.7900	1.6874	3.003	0.2462
1536.5978	3.9977	1.1100	4.306	0.1460	- - -		803.7190	3.7600	1.6791	2.891	0.2474
1600.8960	3.9940	1.1600	4.242	0.1619	- - -		805.3738	3.7300	1.6611	2.789	0.2489
1651.2609	3.9862	1.2100	4.161	0.1759	- - -		807.4472	3.7083	1.6200	2.744	0.2507
1689.7378	3.9714	1.2600	4.051	0.1878	- - -		811.0345	3.6899	1.5764	2.714	0.2537
1718.1317	3.9431	1.3100	3.888	0.1975	- - -		815.7313	3.6825	1.6200	2.641	0.2579
1729.2586	3.9200	1.3342	3.771	0.2015	- - -		819.4807	3.6786	1.6700	2.575	0.2617
1738.6882	3.8900	1.3557	3.630	0.2049	- - -		822.9208	3.6751	1.7200	2.511	0.2657
1745.3340	3.8600	1.3698	3.496	0.2074	- - -		826.1517	3.6721	1.7700	2.449	0.2698
1750.4219	3.8300	1.3787	3.367	0.2093	- - -		827.9023	3.6705	1.7986	2.414	0.2723
1754.5044	3.8000	1.3837	3.242	0.2109	- - -						
1758.0251	3.7700	1.3854	3.120	0.2123	- - -						
1762.5142	3.7400	1.3818	3.004	0.2142	1.0997						
1770.3260	3.7100	1.3505	2.915	0.2174	1.0745		0.0000	4.1347	1.4976	4.669	0.5990*
1776.6355	3.6981	1.3323	2.886	0.2200	0.9746		99.5227	4.1322	1.5485	4.608	0.5000*
1788.6620	3.6867	1.3800	2.792	0.2258	0.7728		177.6668	4.1276	1.5930	4.545	0.4000*
1795.9756	3.6825	1.4300	2.726	0.2303	0.6832		240.8454	4.1211	1.6335	4.478	0.3000*
1802.3290	3.6792	1.4800	2.663	0.2347	0.6021		291.3998	4.1123	1.6696	4.407	0.2000*
1808.1328	3.6757	1.5300	2.598	0.2393	0.5514		331.7145	4.1034	1.7026	4.338	0.1000*
1809.6706	3.6752	1.5444	2.582	0.2405	0.5428		346.2738	4.1017R	1.7170	4.317	0.0571*
							348.4150	4.1025	1.7200	4.317	0.0500*
							357.3091	4.1088	1.7346	4.328	0.0200*
							360.1106	4.1160	1.7442	4.347	0.0100*
0.0000	4.0225	0.9273	4.644	0.5990*	0.1033*		362.5979	4.1370B	1.7821	4.393	0.0008*
220.5996	4.0250	0.9731	4.608	0.5000*	0.1020*		363.6239	4.1323	1.8038	4.353	0.0000*
400.0006	4.0265	1.0151	4.572	0.4000*	0.0948*		377.3701	4.1271	1.8500	4.286	0.2412
546.3102	4.0258	1.0526	4.532	0.3000*	0.0914*		391.6373	4.1156	1.9000	4.190	0.2593
679.5982	4.0221	1.0892	4.480	0.2000*	0.0957*		401.5732	4.0872	1.9500	4.026	0.2716
788.9182	4.0171	1.1228	4.427	0.1000*	0.0848*		406.0631	4.0500	1.9794	3.848	0.2799
813.5668	4.0166R	1.1320	4.416	0.0724*	0.0805*		408.6347	4.0100	1.9944	3.673	0.2842
832.1321	4.0178	1.1409	4.411	0.0500*	0.0759*		410.4200	3.9700	2.0002	3.507	0.2870
855.7471	4.0240	1.1583	4.419	0.0200*	0.0644*		411.7884	3.9300	1.9996	3.348	0.2890
863.2185	4.0307	1.1715	4.432	0.0100*	0.0515*		412.8971	3.8900	1.9943	3.193	0.2907
869.7881	4.0418B	1.2052	4.443	0.0016*	0.0002*		413.8155	3.8500	1.9848	3.043	0.2921
917.0434	4.0394	1.2457	4.393	0.0000*	- - -		414.5796	3.8100	1.9718	2.896	0.2934
978.6433	4.0371	1.2900	4.339	0.1492	- - -		415.2213	3.7700	1.9553	2.752	0.2945
1032.7605	4.0334	1.3400	4.275	0.1705	- - -		415.8722	3.7300	1.9304	2.617	0.2956
1072.6453	4.0256	1.3900	4.194	0.1877	- - -		416.5252	3.7080	1.8900	2.570	0.2967
1102.2833	4.0101	1.4400	4.082	0.2019	- - -		417.1594	3.6943	1.8400	2.564	0.2977
1118.1655	3.9900	1.4758	3.965	0.2102	- - -		417.5878	3.6885	1.8258	2.556	0.2983
											1.5722

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
419.8655	3.6777	1.8700	2.468	0.3011	1.1915					$M = 3.50$	$Y = 0.40$
421.4980	3.6735	1.9200	2.402	0.3040	0.9945	0.0000	4.3142	2.5772	4.608	0.5990*	0.8479*
423.1093	3.6700	1.9700	2.337	0.3071	0.8600	21.5951	4.3074	2.6350	4.523	0.5000*	0.8061*
424.6924	3.6671	2.0200	2.276	0.3106	0.7489	38.1927	4.3005	2.6864	4.444	0.4000*	0.6991*
426.2587	3.6640	2.0700	2.213	0.3143	0.6453	51.1295	4.2918	2.7331	4.363	0.3000*	0.5977*
427.3372	3.6618	2.1050	2.170	0.3171	0.5866	61.1073	4.2812	2.7745	4.279	0.2000*	0.5161*
						68.8622	4.2703	2.8118	4.198	0.1000*	0.4268*
						71.1944	4.2679R	2.8248	4.175	0.0638*	0.4054*
						72.0192	4.2685	2.8303	4.172	0.0500*	0.3930*
0.0000	4.2001	1.8667	4.661	0.5990*	0.4250*	73.7438	4.2736	2.8437	4.179	0.0200*	0.3565*
58.6665	4.1944	1.9196	4.585	0.5000*	0.4045*	74.2669	4.2806	2.8513	4.199	0.0100*	0.3340*
104.4473	4.1883	1.9669	4.513	0.4000*	0.3627*	74.7069	4.3018B	2.8794	4.256	0.0011*	0.1730*
141.1528	4.1803	2.0101	4.438	0.3000*	0.3139*	74.8051	4.2963	2.8977	4.216	0.0000*	---
169.8194	4.1704	2.0482	4.360	0.2000*	0.2750*	75.5602	4.2803	2.9500	4.099	0.6441	---
192.6131	4.1604	2.0831	4.285	0.1000*	0.2310*	76.4063	4.2643	2.9800	4.006	0.6441	---
201.0025	4.1582R	2.0983	4.261	0.0556*	0.2125*	77.0268	4.2346	3.0100	3.857	0.6441	---
201.9647	4.1588	2.1006	4.261	0.0500*	0.2094*	77.3454	4.2000	3.0285	3.700	0.6441	---
206.9946	4.1648	2.1148	4.271	0.0200*	0.1889*	77.5629	4.1600	3.0395	3.529	0.6441	---
208.5345	4.1721	2.1236	4.291	0.0100*	0.1723*	77.7066	4.1200	3.0438	3.365	0.6441	---
209.8658	4.1947B	2.1595	4.346	0.0008*	0.0535*	77.8109	4.0800	3.0434	3.205	0.6441	---
210.0112	4.1922	2.1646	4.331	0.0000*	---	77.8901	4.0400	3.0395	3.049	0.6441	---
212.7535	4.1835	2.2100	4.251	0.3319	---	77.9522	4.0000	3.0328	2.896	0.6441	---
219.4533	4.1700	2.2600	4.147	0.3539	---	78.0022	3.9600	3.0231	2.745	0.6441	---
223.8548	4.1322	2.3100	3.946	0.3631	---	78.0421	3.9200	3.0117	2.597	0.6441	---
225.1725	4.1000	2.3288	3.798	0.3685	---	78.0745	3.8800	2.9986	2.450	0.6441	0.0070*
226.1546	4.0600	2.3405	3.626	0.3714	---	78.1010	3.8400	2.9842	2.304	0.6441	0.0290*
226.8175	4.0200	2.3439	3.463	0.3728	---	78.1236	3.8000	2.9717	2.157	0.6441	0.0708*
227.3086	3.9800	2.3416	3.305	0.3734	---	78.1460	3.7600	2.9637	2.005	0.6441	0.1194*
227.6879	3.9400	2.3346	3.152	0.3734	---	78.1739	3.7200	2.9591	1.849	0.6441	0.1516*
227.9921	3.9000	2.3239	3.003	0.3734	---	78.1773	3.7160	2.9587	1.834	0.6441	0.1514*
228.2365	3.8600	2.3098	2.857	0.3734	---						
228.4320	3.8200	2.2926	2.714	0.3734	---						
228.5886	3.7800	2.2727	2.574	0.3734	---						
228.7172	3.7400	2.2496	2.437	0.3734	---						
228.8850	3.7032	2.2000	2.340	0.3734	2.1934						
229.0012	3.6890	2.1500	2.333	0.3734	2.1321	0.0000	3.6721	-0.7580	4.676	0.7960*	0.6675
229.1061	3.6801	2.1297	2.317	0.3734	1.9644	3773.7862	3.6765	-0.7247	4.660	0.7000*	0.6693
229.2987	3.6720	2.1700	2.245	0.3734	1.6303	7671.9821	3.6815	-0.6868	4.642	0.6000*	0.6706
229.6303	3.6697	2.2200	2.186	0.3734	1.3498	11553.5726	3.6870	-0.6443	4.622	0.5000*	0.6730
230.0809	3.6660	2.2700	2.121	0.3742	0.0125*	15443.9089	3.6928	-0.5961	4.597	0.4000*	0.6744
230.5152	3.6676	2.2486	2.149	0.3763	0.1479*	19382.1593	3.6991	-0.5398	4.565	0.3000*	0.6766
						23423.4404	3.7057	-0.4716	4.524	0.2000*	0.6798
						27818.4916	3.7127	-0.3799	4.460	0.1000*	0.6826
						30876.9587	3.7172	-0.2968	4.395	0.0500*	0.6834
0.0000	4.2613	2.2411	4.636	0.5990*	0.6003*	33696.4969	3.7202	-0.1956	4.306	0.0200*	0.6846
33.7636	4.2547	2.2958	4.555	0.5000*	0.5893*	34427.0277	3.7207	-0.1666	4.279	0.0100*	0.6852
60.7230	4.2481	2.3457	4.478	0.4000*	0.5199*	34711.8931	3.7208T	-0.1548	4.267	0.0030*	0.6842
81.9474	4.2396	2.3912	4.399	0.3000*	0.4462*	35683.3848	3.7199	-0.1043	4.213	0.0000*	0.6840
98.4511	4.2291	2.4314	4.317	0.2000*	0.3821*	36719.5005	3.7162	-0.0400	4.134	0.1348	0.6796
111.2696	4.2185	2.4676	4.238	0.1000*	0.3170*	37569.9340	3.7066	0.0300	4.026	0.1439	0.6638
115.3483	4.2162R	2.4810	4.215	0.0616*	0.2978*	38144.2062	3.6900	0.1000	3.889	0.1497	0.6065
116.4784	4.2169	2.4856	4.214	0.0500*	0.2902*	38463.7045	3.6781	0.1700	3.772	0.1525	0.5373
119.3154	4.2223	2.4992	4.222	0.0200*	0.2630*	38678.0095	3.6718	0.2400	3.677	0.1544	0.4707
120.1796	4.2295	2.5073	4.242	0.0100*	0.2427*	38853.4015	3.6679	0.3100	3.591	0.1566	0.4219
120.9078	4.2514B	2.5382	4.299	0.0010*	0.1127*	39010.0935	3.6652	0.3800	3.510	0.1596	0.3860
121.0806	4.2459	2.5560	4.259	0.0000*	---	39153.2429	3.6630	0.4500	3.432	0.1638	0.3556
121.8596	4.2384	2.5900	4.195	0.4724	---	39281.4578	3.6610	0.5200	3.354	0.1693	0.3345
124.3042	4.2251	2.6300	4.102	0.4736	---	39334.5419	3.6600	0.5561	3.313	0.1726	0.3234
126.0385	4.1955	2.6700	3.943	0.4915	---						
126.7771	4.1600	2.6924	3.779	0.4915	---						
127.2363	4.1200	2.7048	3.607	0.4915	---						
127.5326	4.0800	2.7092	3.442	0.4915	---	0.0000	3.7410	-0.2415	4.544	0.7960*	0.0019*
127.7453	4.0400	2.7080	3.283	0.4915	---	1542.1135	3.7439	-0.2067	4.521	0.7000*	0.8961
127.9070	4.0000	2.7029	3.129	0.4915	---	3095.8766	3.7470	-0.1684	4.495	0.6000*	0.8970
128.0324	3.9600	2.6939	2.978	0.4915	---	4615.6103	3.7500	-0.1267	4.465	0.5000*	0.8976
128.1309	3.9200	2.6818	2.830	0.4915	---	6097.8695	3.7530	-0.0814	4.432	0.4000*	0.8983
128.2096	3.8800	2.6673	2.684	0.4915	---	7542.3314	3.7558	-0.0317	4.393	0.3000*	0.8988
128.2724	3.8400	2.6505	2.541	0.4915	---	8991.6919	3.7583	0.0256	4.346	0.2000*	0.8993
128.3233	3.8000	2.6314	2.400	0.4915	---	10706.1726	3.7610	0.1088	4.274	0.1000*	0.8995
128.3639	3.7600	2.6100	2.261	0.4915	---	11667.6839	3.7618T	0.1647	4.221	0.0538*	0.8997
128.3983	3.7200	2.5843	2.127	0.4915	2.7999	11722.3367	3.7618	0.1678	4.218	0.0500*	0.8997
128.4288	3.6955	2.5500	2.063	0.4915	2.7948	12129.1115	3.7614	0.1912	4.193	0.0200*	0.8997
128.4555	3.6844	2.5100	2.059	0.4915	0.0009*	12256.4026	3.7613	0.1994	4.184	0.0100*	0.8997
128.4874	3.6734	2.4827	2.042	0.4915	0.0065*	13016.6992	3.7593	0.2600	4.116	0.0001*	0.8997
128.5164	3.6660	2.5200	1.975	0.4915	0.0149*	13252.9252	3.7580	0.2818	4.089	0.0000*	0.8996
128.5419	3.6615	2.5600	1.918	0.4915	0.0279*	13881.1686	3.7503	0.3500	3.990	0.1448	0.8993
128.6749	3.6589	2.5903	1.877	0.4915	0.1352*	14402.9988	3.7307	0.4200	3.841	0.1588	0.8952
						14617.2793	3.7100	0.4394	3.739	0.1639	0.8689
						14869.6135	3.6800	0.4823	3.576	0.1678	0.6644
						14982.4800	3.6729	0.5500	3.480	0.1694	0.5545
						15074.8607	3.6687	0.6200	3.393	0.1713	0.4750

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
15156.9366	3.6654	0.6900	3.310	0.1744	0.4240	1660.0516	3.9026	0.8108	4.330	0.3000*	0.0544*	
15229.6418	3.6625	0.7600	3.228	0.1793	0.3835	1857.2154	3.8978	0.8313	4.290	0.2000*	0.0541*	
15285.1497	3.6599	0.8300	3.148	0.1858	0.3465	2017.5582	3.8930	0.8498	4.253	0.1000*	0.0496*	
15330.6529	3.6572	0.9000	3.067	0.1925	0.3260	2032.5098	3.8927R	0.8518	4.249	0.0899*	0.0488*	
15369.3595	3.6547	0.9700	2.987	0.1991	0.3074	2087.3865	3.8942	0.8638	4.243	0.0500*	0.0413*	
15402.4695	3.6521	1.0400	2.907	0.2056	0.2996	2126.3020	3.9003	0.8820	4.250	0.0200*	0.0278*	
15414.0770	3.6510	1.0663	2.876	0.2081	0.2941	2139.4373	3.9055	0.8965	4.256	0.0100*	0.0125*	
						2151.7193	3.9082B	0.9080	4.255	0.0037*	---	
				$M = 1.10$	$Y = 0.20$	$Z = 0.004$	2368.5118	3.9019	0.9521	4.186	0.0000*	---
							2545.5948	3.8953	1.0000	4.112	0.1374	---
0.0000	3.7934	0.1706	4.429	0.7960*	0.0107*	2690.1948	3.8821	1.0500	4.009	0.1583	---	
777.0484	3.7968	0.2058	4.407	0.7000*	---	2780.7800	3.8600	1.0875	3.883	0.1725	---	
1506.1691	3.8002	0.2416	4.385	0.6000*	---	2827.5123	3.8300	1.1062	3.744	0.1800	---	
2199.3046	3.8035	0.2786	4.361	0.5000*	---	2850.3988	3.8000	1.1102	3.620	0.1835	---	
2856.0920	3.8067	0.3168	4.336	0.4000*	---	2866.2792	3.7700	1.1062	3.504	0.1858	---	
3490.1690	3.8099	0.3577	4.308	0.3000*	---	2881.8727	3.7400	1.0884	3.402	0.1878	1.3997	
4120.0066	3.8130	0.4033	4.275	0.2000*	---	2898.0930	3.7128	1.0400	3.342	0.1895	1.3882	
4672.3607	3.8148	0.4460	4.239	0.1000*	---	2909.2415	3.6984	0.9900	3.334	0.1905	1.3302	
4825.9307	3.8148T	0.4580	4.227	0.0667*	---	2925.6299	3.6857	0.9518	3.321	0.1917	1.1649	
4904.4350	3.8147	0.4645	4.220	0.0500*	---	2966.4531	3.6735	1.0000	3.224	0.1955	0.8221	
5079.9205	3.8145	0.4800	4.204	0.0200*	---	2990.4190	3.6702	1.0500	3.161	0.1989	0.6858	
5184.9735	3.8145	0.4902	4.193	0.0100*	---	3010.4017	3.6670	1.1000	3.098	0.2033	0.5923	
5709.2071	3.8133	0.5500	4.129	0.0001*	---	3027.6966	3.6646	1.1500	3.039	0.2080	0.5008	
5928.3371	3.8114	0.5802	4.091	0.0000*	---	3043.2439	3.6621	1.2000	2.979	0.2126	0.4462	
6293.5377	3.8034	0.6400	3.999	0.1414	---	3057.3988	3.6600	1.2500	2.920	0.2173	0.4074	
6583.5208	3.7853	0.7000	3.867	0.1576	---	3057.7319	3.6599	1.2512	2.919	0.2174	0.4074	
6751.1325	3.7600	0.7392	3.727	0.1673	1.1000							
6851.1861	3.7300	0.7481	3.598	0.1727	1.0973							
6923.5911	3.7000	0.7076	3.518	0.1755	1.0319							
6964.5161	3.6872	0.6919	3.483	0.1767	0.9160	0.0000	3.9404	0.8349	4.501	0.7960*	0.0762*	
7050.6596	3.6746	0.7500	3.374	0.1787	0.6666	300.4360	3.9435	0.8705	4.478	0.7000*	0.0741*	
7103.6452	3.6704	0.8100	3.297	0.1807	0.5629	604.8946	3.9445	0.9071	4.445	0.6000*	0.0845*	
7151.0089	3.6668	0.8700	3.223	0.1839	0.4944	892.7029	3.9428	0.9439	4.402	0.5000*	0.0970*	
7191.9557	3.6641	0.9300	3.152	0.1887	0.4287	1096.4482	3.9385	0.9699	4.359	0.4000*	0.0991*	
7223.4777	3.6616	0.9900	3.082	0.1944	0.3884	1264.9568	3.9324	0.9920	4.312	0.3000*	0.0946*	
7250.3839	3.6592	1.0500	3.012	0.2002	0.3582	1405.0269	3.9245	1.0102	4.263	0.2000*	0.0878*	
7273.8561	3.6566	1.1100	2.942	0.2060	0.3415	1521.5533	3.9166	1.0267	4.214	0.1000*	0.0783*	
7294.4073	3.6540	1.1700	2.872	0.2116	0.3260	1560.4493	3.9155R	1.0348	4.202	0.0617*	0.0750*	
7299.6650	3.6535	1.1871	2.853	0.2132	0.3212	1571.7151	3.9166	1.0391	4.202	0.0500*	0.0722*	
				$M = 1.25$	$Y = 0.20$	$Z = 0.004$	1600.0636	3.9229	1.0549	4.211	0.0200*	0.0606*
							1608.9762	3.9299	1.0681	4.226	0.0100*	0.0503*
							1617.2181	3.9425B	1.0995	4.245	0.0013*	---
0.0000	3.8443	0.4249	4.433	0.7960*	0.0213*	1670.4642	3.9377	1.1221	4.203	0.0000*	---	
527.2461	3.8493	0.4607	4.418	0.7000*	0.0045*	1809.7480	3.9271	1.1700	4.113	0.1497	---	
982.6100	3.8536	0.4939	4.402	0.6000*	---	1919.7664	3.9082	1.2200	3.987	0.1743	---	
1387.1741	3.8572	0.5254	4.385	0.5000*	---	1970.9876	3.8800	1.2471	3.848	0.1863	---	
1755.9290	3.8601	0.5562	4.366	0.4000*	---	1992.8708	3.8500	1.2546	3.720	0.1913	---	
2081.1443	3.8622	0.5848	4.345	0.3000*	---	2005.7041	3.8200	1.2528	3.602	0.1940	---	
2361.0886	3.8631	0.6102	4.324	0.2000*	---	2014.7706	3.7900	1.2449	3.490	0.1958	---	
2410.6359	3.8632T	0.6147	4.319	0.1808*	---	2022.6803	3.7600	1.2302	3.384	0.1972	---	
2609.4454	3.8629	0.6332	4.300	0.1000*	---	2032.3037	3.7300	1.1944	3.300	0.1987	1.5488	
2745.6394	3.8627	0.6471	4.285	0.0500*	---	2039.2394	3.7128	1.1500	3.276	0.1997	1.5359	
2869.9654	3.8628	0.6611	4.271	0.0200*	---	2045.8325	3.7000	1.1000	3.275	0.2006	1.4802	
2948.9315	3.8628	0.6708	4.262	0.0100*	---	2057.4499	3.6866	1.0541	3.267	0.2020	1.2878	
3298.2128	3.8626	0.7200	4.212	0.0002*	---	2086.8941	3.6750	1.1000	3.174	0.2064	0.8986	
3534.9121	3.8611	0.7603	4.165	0.0000*	---	2103.9210	3.6712	1.1500	3.110	0.2104	0.7463	
3779.3854	3.8566	0.8100	4.097	0.1302	---	2118.9102	3.6683	1.2000	3.048	0.2147	0.6143	
3980.7325	3.8467	0.8600	4.008	0.1480	---	2132.4432	3.6661	1.2500	2.989	0.2191	0.5350	
4145.8129	3.8249	0.9100	3.871	0.1639	---	2144.9705	3.6635	1.3000	2.929	0.2236	0.4757	
4219.1529	3.8000	0.9340	3.747	0.1713	---	2150.4266	3.6625	1.3234	2.901	0.2257	0.4459	
4266.1759	3.7700	0.9449	3.616	0.1759	---							
4302.4897	3.7400	0.9379	3.503	0.1790	1.2492							
4336.4987	3.7096	0.8900	3.430	0.1813	1.2216							
4370.3297	3.6899	0.8400	3.401	0.1830	1.0566	0.0000	3.9909	1.0548	4.536	0.7960*	0.1344*	
4374.9844	3.6878	0.8369	3.396	0.1832	1.0282	234.0908	3.9894	1.0882	4.497	0.7000*	0.1634*	
4425.6553	3.6761	0.8800	3.306	0.1856	0.7548	455.6263	3.9862	1.1226	4.450	0.6000*	0.1638*	
4458.9111	3.6721	0.9300	3.240	0.1881	0.6416	628.4829	3.9816	1.1517	4.402	0.5000*	0.1576*	
4488.0910	3.6694	0.9800	3.179	0.1917	0.5560	773.2644	3.9753	1.1775	4.351	0.4000*	0.1457*	
4512.6881	3.6670	1.0300	3.119	0.1961	0.4876	893.2886	3.9672	1.1993	4.297	0.3000*	0.1346*	
4533.4879	3.6649	1.0800	3.061	0.2008	0.4449	992.0608	3.9571	1.2170	4.239	0.2000*	0.1185*	
4551.9308	3.6626	1.1300	3.001	0.2056	0.3996	1072.8446	3.9474	1.2329	4.184	0.1000*	0.1027*	
4568.4377	3.6606	1.1800	2.944	0.2104	0.3724	1103.2329	3.9456R	1.2416	4.168	0.0570*	0.0970*	
4577.0893	3.6591	1.2088	2.909	0.2131	0.3683	1107.8559	3.9464	1.2442	4.169	0.0500*	0.0953*	
				$M = 1.40$	$Y = 0.20$	$Z = 0.004$	1127.4093	3.9529	1.2588	4.180	0.0200*	0.0844*
							1133.5658	3.9603	1.2708	4.198	0.0100*	0.0740*
							1139.1360	3.9781B	1.3070	4.233	0.0009*	0.0067*
0.0000	3.8960	0.6440	4.471	0.7960*	0.0425*	1154.5610	3.9734	1.3240	4.197	0.0000*	---	
384.7096	3.9004	0.6800	4.452	0.7000*	0.0259*	1230.0429	3.9626	1.3700	4.108	0.1708	---	
722.7204	3.9038	0.7133	4.432	0.6000*	0.0246*	1287.3407	3.9400	1.4077	3.980	0.1968	---	
1042.2935	3.9057	0.7458	4.407	0.5000*	0.0343*	1314.6739	3.9100	1.4247	3.843	0.2025	---	
1373.4902	3.9056	0.7805	4.372	0.4000*	0.0438*	1326.2402	3.8800	1.4265	3.721	0.2059	---	

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1333.5591	3.8500	1.4207	3.607	0.2084	- - - -	359.7391	3.7600	2.0008	2.871	0.3642	- - - -
1339.0162	3.8200	1.4101	3.497	0.2101	- - - -	359.9630	3.7200	1.9473	2.764	0.3642	2.7998
1343.4362	3.7900	1.3953	3.392	0.2114	- - - -	360.1321	3.6993	1.8900	2.739	0.3642	2.7931
1347.3871	3.7600	1.3751	3.292	0.2125	- - - -	360.2900	3.6856	1.8300	2.744	0.3642	2.7377
1352.3138	3.7300	1.3363	3.211	0.2138	1.7494	360.4827	3.6730	1.8027	2.721	0.3642	2.5011
1356.3671	3.7124	1.2900	3.187	0.2147	1.7412	360.7374	3.6627	1.8600	2.622	0.3642	2.0387
1359.9331	3.7003	1.2400	3.188	0.2156	1.7092	361.0132	3.6573	1.9200	2.541	0.3642	1.7012
1364.3069	3.6896	1.1900	3.196	0.2165	1.5937	361.4283	3.6527	1.9800	2.462	0.3642	1.3112
1370.1250	3.6828	1.1728	3.186	0.2177	1.4234	361.9204	3.6485	2.0400	2.385	0.3642	1.0027
1387.5967	3.6727	1.2200	3.098	0.2220	1.0291	362.4684	3.6452	2.1000	2.312	0.3642	0.7780
1399.2939	3.6687	1.2700	3.032	0.2258	0.8735	363.0809	3.6412	2.1600	2.236	0.3642	0.6398
1410.0214	3.6660	1.3200	2.971	0.2297	0.7000	363.7506	3.6376	2.2200	2.162	0.3642	0.5468
1420.1075	3.6633	1.3700	2.910	0.2339	0.5834	364.4506	3.6340	2.2800	2.087	0.3642	0.5011
1429.5995	3.6609	1.4200	2.851	0.2381	0.4990	364.6242	3.6331	2.2950	2.069	0.3642	0.4879
1431.4625	3.6601	1.4300	2.838	0.2390	0.4873						
$M = 2.20 \quad Y = 0.20 \quad Z = 0.004$											
0.0000	4.0700	1.4423	4.565	0.7960*	0.3009*	0.0000	4.2000	2.1838	4.545	0.7960*	0.7557*
138.7646	4.0624	1.4770	4.499	0.7000*	0.3215*	44.6547	4.1890	2.2217	4.463	0.7000*	0.6891*
256.9144	4.0558	1.5113	4.439	0.6000*	0.2967*	82.8570	4.1813	2.2603	4.393	0.6000*	0.6080*
352.6216	4.0486	1.5423	4.379	0.5000*	0.2588*	113.5755	4.1730	2.2948	4.326	0.5000*	0.5263*
430.6314	4.0398	1.5693	4.317	0.4000*	0.2363*	138.4697	4.1631	2.3253	4.255	0.4000*	0.4727*
495.2018	4.0290	1.5924	4.250	0.3000*	0.2040*	159.0854	4.1512	2.3523	4.181	0.3000*	0.4094*
547.7520	4.0166	1.6114	4.182	0.2000*	0.1804*	175.9521	4.1375	2.3755	4.103	0.2000*	0.3477*
590.8847	4.0043	1.6282	4.116	0.1000*	0.1525*	189.3984	4.1239	2.3957	4.028	0.1000*	0.2898*
609.2378	4.0018	1.6388	4.095	0.0500*	0.1369*	195.7989	4.1206R	2.4089	4.002	0.0431*	0.2598*
610.6656	4.0017R	1.6398	4.094	0.0460*	0.1355*	198.1297	4.1258	2.4187	4.013	0.0200*	0.2385*
619.1509	4.0080	1.6519	4.107	0.0200*	0.1252*	199.0669	4.1332	2.4275	4.034	0.0100*	0.2250*
622.2665	4.0155	1.6625	4.126	0.0100*	0.1127*	199.9354	4.1558B	2.4624	4.089	0.0004*	0.0268*
625.1100	4.0370B	1.7002	4.175	0.0005*	0.0067*	200.0267	4.1516	2.4586	4.076	0.0000*	- - - -
625.4276	4.0344	1.6988	4.166	0.0000*	- - -	203.0428	4.1315	2.5000	3.954	0.4946	- - - -
650.7703	4.0178	1.7500	4.048	0.2583	- - -	205.7418	4.1000	2.5201	3.808	0.4946	- - - -
666.2970	3.9900	1.7752	3.912	0.2685	- - -	206.8199	4.0600	2.5217	3.647	0.4946	- - - -
671.6910	3.9600	1.7788	3.788	0.2699	- - -	207.3703	4.0200	2.5121	3.496	0.4946	- - - -
674.7138	3.9300	1.7738	3.673	0.2699	- - -	207.7180	3.9800	2.4957	3.353	0.4946	- - - -
676.8055	3.9000	1.7634	3.563	0.2705	- - -	207.9597	3.9400	2.4739	3.214	0.4946	- - - -
678.3718	3.8700	1.7487	3.458	0.2713	- - -	208.1378	3.9000	2.4474	3.081	0.4946	- - - -
679.6011	3.8400	1.7304	3.356	0.2717	- - -	208.2731	3.8600	2.4167	2.952	0.4946	- - - -
680.6100	3.8100	1.7091	3.258	0.2719	- - -	208.3783	3.8200	2.3826	2.826	0.4946	- - - -
681.4657	3.7800	1.6849	3.162	0.2721	- - -	208.4618	3.7800	2.3453	2.703	0.4946	- - - -
682.2359	3.7500	1.6553	3.071	0.2722	- - -	208.5298	3.7400	2.3049	2.583	0.4946	- - - -
683.1773	3.7200	1.6031	3.004	0.2724	2.1988	208.5880	3.7060	2.2600	2.492	0.4946	3.4996
683.8346	3.7047	1.5500	2.996	0.2725	2.1888	208.6393	3.6866	2.2100	2.465	0.4946	3.4883
684.4792	3.6926	1.4900	3.007	0.2725	2.1290	208.6957	3.6717	2.1600	2.455	0.4946	3.3859
685.2838	3.6813	1.4486	3.003	0.2726	1.9328	208.7348	3.6637	2.1555	2.428	0.4946	3.1639
687.3573	3.6696	1.5000	2.905	0.2726	1.3797	208.7852	3.6550	2.2000	2.348	0.4946	2.7591
689.3491	3.6648	1.5600	2.826	0.2727	1.1109	208.8261	3.6498	2.2500	2.278	0.4946	2.4142
691.6201	3.6606	1.6200	2.749	0.2728	0.8395	208.8759	3.6457	2.3000	2.211	0.4946	2.1553
694.1668	3.6572	1.6800	2.676	0.2731	0.6631	208.9624	3.6417	2.3500	2.145	0.4946	1.8585
696.9060	3.6542	1.7400	2.603	0.2742	0.5161	209.0993	3.6379	2.4000	2.080	0.4946	1.5426
699.9084	3.6504	1.8000	2.529	0.2766	0.4434	209.2544	3.6345	2.4500	2.016	0.4946	1.2517
703.2660	3.6473	1.8600	2.456	0.2809	0.4014	209.3184	3.6331	2.4699	1.991	0.4946	1.1313
706.4090	3.6443	1.9200	2.384	0.2856	0.3790						
710.0190	3.6406	1.9800	2.309	0.2924	0.3690						
712.2218	3.6384	2.0226	2.258	0.2967	0.3672						
$M = 2.80 \quad Y = 0.20 \quad Z = 0.004$											
0.0000	4.1388	1.8319	4.555	0.7960*	0.4768*	0.0000	4.2566	2.5328	4.522	0.7960*	1.0675*
75.3016	4.1305	1.8688	4.484	0.7000*	0.4983*	68.0300	4.2298	2.6491	4.298	0.5000*	0.7421*
140.0633	4.1229	1.9055	4.418	0.6000*	0.4458*	83.1491	4.2199	2.6820	4.225	0.4000*	0.6439*
192.5946	4.1149	1.9386	4.352	0.5000*	0.3817*	95.4046	4.2080	2.7110	4.149	0.3000*	0.5582*
234.6899	4.1051	1.9672	4.285	0.4000*	0.3387*	105.2099	4.1944	2.7358	4.070	0.2000*	0.4776*
269.2914	4.0936	1.9918	4.214	0.3000*	0.2985*	113.1831	4.1807	2.7582	3.992	0.1000*	0.3948*
298.0010	4.0802	2.0129	4.140	0.2000*	0.2555*	117.0837	4.1775R	2.7728	3.965	0.0400*	0.3532*
321.1430	4.0670	2.0311	4.068	0.1000*	0.2129*	118.3121	4.1820	2.7812	3.975	0.0200*	0.3266*
330.9442	4.0641	2.0421	4.046	0.0500*	0.1921*	118.8619	4.1892	2.7892	3.996	0.0100*	0.3121*
332.0559	4.0640R	2.0435	4.044	0.0442*	0.1886*	119.3800	4.2110B	2.8217	4.050	0.0003*	0.0338*
336.2253	4.0697	2.0542	4.056	0.0200*	0.1736*	119.4345	4.2059	2.8182	4.033	0.0000*	- - - -
337.8442	4.0772	2.0638	4.077	0.0100*	0.1600*	121.5570	4.1600	2.8743	3.793	0.6754	- - - -
339.3313	4.0997B	2.1002	4.130	0.0005*	0.0169*	122.2779	4.1100	2.8796	3.588	0.6754	- - - -
339.4984	4.0962	2.0971	4.119	0.0000*	- - -	122.5997	4.0600	2.8692	3.399	0.6754	- - - -
349.8790	4.0721	2.1500	3.970	0.3605	- - -	122.7825	4.0100	2.8495	3.218	0.6754	- - - -
354.4424	4.0400	2.1652	3.826	0.3642	- - -	122.9040	3.9600	2.8233	3.044	0.6754	- - - -
356.4482	4.0000	2.1630	3.668	0.3642	- - -	122.9901	3.9100	2.7916	2.876	0.6754	- - - -
357.5701	3.9600	2.1505	3.521	0.3642	- - -	123.0531	3.8600	2.7553	2.712	0.6754	- - - -
358.2980	3.9200	2.1309	3.381	0.3642	- - -	123.1001	3.8100	2.7162	2.552	0.6754	- - - -
358.8159	3.8800	2.1056	3.246	0.3642	- - -	123.1363	3.7600	2.6750	2.393	0.6754	- - - -
359.2034	3.8400	2.0753	3.116	0.3642	- - -	123.1654	3.7100	2.6311	2.237	0.6754	- - - -
359.5020	3.8000	2.0404	2.991	0.3642	- - -	123.1908	3.6761	2.5800	2.152	0.6754	4.3903

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>
123.2260	3.6515	2.5313	2.102	0.6754	4.0481	3413.8325	3.8601	0.8800	3.986	0.1480	- - -
123.2473	3.6423	2.5900	2.007	0.6754	3.4208	3526.0641	3.8352	0.9300	3.837	0.1614	- - -
123.2628	3.6355	2.6500	1.920	0.6754	2.9420	3573.0301	3.8100	0.9533	3.712	0.1673	- - -
123.2810	3.6329	2.7100	1.850	0.6754	2.4871	3604.4436	3.7800	0.9665	3.579	0.1712	- - -
123.3286	3.6279	2.7700	1.769	0.6754	1.9427	3630.7712	3.7500	0.9689	3.457	0.1745	1.0999
123.4158	3.6236	2.8300	1.692	0.6754	0.0051*	3657.5401	3.7200	0.9438	3.362	0.1774	1.0925
123.5888	3.6204	2.8697	1.640	0.6754	0.1466*	3677.0164	3.7015	0.9000	3.332	0.1792	1.0392
						3701.6422	3.6885	0.8788	3.301	0.1813	0.8965
	<i>M</i> = 0.70	<i>Y</i> = 0.30	<i>Z</i> = 0.004			3736.8057	3.6795	0.9200	3.224	0.1848	0.7062
						3763.3856	3.6752	0.9700	3.156	0.1884	0.5914
0.0000	3.7224	-0.5151	4.634	0.6960*	0.6874	3784.5622	3.6720	1.0200	3.094	0.1928	0.5289
2214.7906	3.7266	-0.4769	4.613	0.6000*	0.6885	3802.8053	3.6691	1.0700	3.032	0.1973	0.4760
4496.8362	3.7311	-0.4336	4.587	0.5000*	0.6903	3818.9950	3.6667	1.1200	2.973	0.2019	0.4282
6759.7001	3.7355	-0.3849	4.556	0.4000*	0.6923	3833.6160	3.6640	1.1700	2.912	0.2065	0.4015
9011.0215	3.7399	-0.3295	4.518	0.3000*	0.6935	3846.7088	3.6620	1.2200	2.854	0.2110	0.3712
11279.4435	3.7442	-0.2641	4.470	0.2000*	0.6950	3847.8868	3.6617	1.2244	2.848	0.2114	0.3712
13849.5370	3.7490	-0.1717	4.397	0.1000*	0.6970						
15719.3877	3.7522	-0.0827	4.321	0.0500*	0.6978						
16792.5796	3.7533	-0.0236	4.266	0.0200*	0.6983						
17002.3694	3.7534	-0.0119	4.255	0.0100*	0.6983	0.0000	3.9177	0.6526	4.500	0.6960*	0.0555*
17275.3628	3.7534T	0.0066	4.236	0.0023*	0.6984	349.3239	3.9218	0.6916	4.477	0.6000*	0.0470*
18105.3033	3.7521	0.0722	4.166	0.0000*	0.6985	667.4545	3.9239	0.7282	4.448	0.5000*	0.0580*
18784.3159	3.7480	0.1400	4.081	0.1299	0.6981	1000.9195	3.9237	0.7685	4.408	0.4000*	0.0643*
19319.5568	3.7391	0.2100	3.976	0.1405	0.6960	1235.7195	3.9203	0.7969	4.366	0.3000*	0.0728*
19740.5203	3.7204	0.2800	3.831	0.1490	0.6817	1499.7199	3.9131	0.8308	4.303	0.2000*	0.0710*
20056.8575	3.6935	0.3500	3.653	0.1547	0.5846	1657.8140	3.9064	0.8525	4.254	0.1000*	0.0655*
20207.6951	3.6831	0.4200	3.542	0.1574	0.5031	1692.6906	3.9056R	0.8587	4.245	0.0751*	0.0636*
20317.3543	3.6774	0.4900	3.449	0.1602	0.4448	1726.1114	3.9064	0.8672	4.240	0.0500*	0.0592*
20410.2711	3.6735	0.5600	3.363	0.1638	0.4003	1763.6855	3.9130	0.8854	4.248	0.0200*	0.0490*
20492.2911	3.6703	0.6300	3.280	0.1688	0.3674	1775.6767	3.9198	0.8999	4.260	0.0100*	0.0388*
20557.1721	3.6673	0.7000	3.199	0.1751	0.3449	1786.3623	3.9303B	0.9310	4.271	0.0018*	- - -
20611.4465	3.6645	0.7700	3.118	0.1816	0.3221	1878.6028	3.9254	0.9619	4.221	0.0000*	- - -
20627.7143	3.6636	0.7935	3.090	0.1837	0.3186	2027.9639	3.9184	1.0100	4.145	0.1315	- - -
						2142.6162	3.9082	1.0600	4.054	0.1514	- - -
	<i>M</i> = 0.90	<i>Y</i> = 0.30	<i>Z</i> = 0.004			2230.4734	3.8861	1.1100	3.916	0.1683	- - -
						2269.4368	3.8600	1.1354	3.786	0.1763	- - -
0.0000	3.7850	0.0062	4.472	0.6960*	0.0067*	2291.2658	3.8300	1.1475	3.654	0.1808	- - -
903.9026	3.7883	0.0446	4.447	0.6000*	- - -	2304.9743	3.8000	1.1505	3.531	0.1836	- - -
1766.1335	3.7916	0.0843	4.421	0.5000*	- - -	2315.8321	3.7700	1.1467	3.414	0.1857	- - -
2591.8579	3.7948	0.1263	4.392	0.4000*	- - -	2327.9307	3.7400	1.1287	3.312	0.1879	1.2495
3392.3705	3.7981	0.1717	4.359	0.3000*	- - -	2340.6935	3.7146	1.0800	3.260	0.1899	1.2318
4217.8098	3.8015	0.2257	4.319	0.2000*	- - -	2350.8387	3.6998	1.0300	3.250	0.1914	1.1614
5061.2921	3.8050	0.2894	4.269	0.1000*	- - -	2363.4197	3.6903	1.0082	3.234	0.1932	1.0256
5393.8367	3.8056	0.3155	4.246	0.0500*	- - -	2389.6494	3.6803	1.0500	3.152	0.1974	0.7734
5599.0390	3.8059	0.3330	4.229	0.0200*	- - -	2407.1603	3.6758	1.1000	3.084	0.2016	0.6485
5720.7325	3.8060	0.3446	4.218	0.0100*	- - -	2421.9567	3.6729	1.1500	3.023	0.2059	0.5728
6114.0828	3.8065T	0.3874	4.177	0.0005*	- - -	2435.3606	3.6698	1.2000	2.960	0.2103	0.4969
6516.8796	3.8054	0.4406	4.120	0.0000*	- - -	2447.4132	3.6676	1.2500	2.901	0.2146	0.4532
6878.4870	3.8009	0.5000	4.042	0.1278	- - -	2458.4737	3.6649	1.3000	2.841	0.2190	0.4135
7166.1695	3.7909	0.5600	3.942	0.1414	- - -	2458.8174	3.6649	1.3017	2.839	0.2192	0.4101
7392.6184	3.7719	0.6200	3.806	0.1529	- - -						
7516.7164	3.7500	0.6568	3.682	0.1594	0.8996						
7614.7765	3.7200	0.6665	3.552	0.1642	0.8865						
7694.3230	3.6953	0.6516	3.468	0.1673	0.7826	0.0000	3.9660	0.8626	4.532	0.6960*	0.0951*
7782.9153	3.6810	0.7100	3.353	0.1708	0.5967	271.2972	3.9665	0.9000	4.497	0.6000*	0.1098*
7834.2639	3.6763	0.7700	3.274	0.1740	0.5099	528.7875	3.9647	0.9373	4.452	0.5000*	0.1124*
7878.6455	3.6725	0.8300	3.199	0.1783	0.4574	763.3330	3.9605	0.9746	4.398	0.4000*	0.1122*
7914.0961	3.6694	0.8900	3.126	0.1837	0.4097	930.3651	3.9539	1.0018	4.344	0.3000*	0.1048*
7943.6579	3.6666	0.9500	3.055	0.1893	0.3829	1066.4511	3.9454	1.0247	4.287	0.2000*	0.0986*
7969.4116	3.6639	1.0100	2.984	0.1948	0.3563	1179.6848	3.9368	1.0458	4.232	0.1000*	0.0868*
7992.0255	3.6611	1.0700	2.913	0.2003	0.3399	1215.4889	3.9353R	1.0549	4.217	0.0633*	0.0829*
8011.9842	3.6582	1.1300	2.842	0.2058	0.3210	1227.6835	3.9364	1.0600	4.216	0.0500*	0.0803*
8022.7644	3.6564	1.1656	2.799	0.2090	0.3149	1254.5190	3.9426	1.0762	4.225	0.0200*	0.0710*
						1262.9772	3.9501	1.0893	4.241	0.0100*	0.0605*
	<i>M</i> = 1.10	<i>Y</i> = 0.30	<i>Z</i> = 0.004			1270.4480	3.9665B	1.1273	4.269	0.0012*	0.0060*
						1303.7340	3.9619	1.1532	4.225	0.0000*	- - -
0.0000	3.8608	0.4077	4.461	0.6960*	0.0268*	1396.6721	3.9540	1.2000	4.146	0.1459	- - -
493.9031	3.8661	0.4469	4.443	0.6000*	0.0138*	1477.1105	3.9390	1.2500	4.036	0.1698	- - -
924.2180	3.8707	0.4838	4.425	0.5000*	0.0063*	1530.9721	3.9100	1.2921	3.878	0.1859	- - -
1287.5210	3.8741	0.5173	4.405	0.4000*	0.0049*	1550.7763	3.8800	1.3074	3.743	0.1919	- - -
1615.8014	3.8763	0.5492	4.382	0.3000*	0.0073*	1561.8074	3.8500	1.3115	3.619	0.1952	- - -
1921.4815	3.8771	0.5796	4.354	0.2000*	0.0092*	1569.5461	3.8200	1.3091	3.501	0.1974	- - -
2102.7466	3.8768R	0.5986	4.334	0.1227*	0.0073*	1575.4525	3.7900	1.3017	3.389	0.1990	- - -
2150.9198	3.8770	0.6044	4.329	0.1000*	0.0057*	1580.6957	3.7600	1.2886	3.282	0.2004	- - -
2252.8891	3.8780	0.6192	4.318	0.0500*	0.0009*	1587.4651	3.7300	1.2569	3.194	0.2021	1.3991
2336.8037	3.8788	0.6320	4.309	0.0200*	- - -	1593.1260	3.7116	1.2100	3.167	0.2034	1.3864
2400.9451	3.8791	0.6415	4.301	0.0100*	- - -	1598.1374	3.6993	1.1600	3.167	0.2045	1.3362
2665.9756	3.8799B	0.6846	4.261	0.0004*	- - -	1610.3072	3.6842	1.1200	3.147	0.2070	1.1003
2910.6230	3.8796	0.7333	4.211	0.0000*	- - -	1628.0230	3.6761	1.1700	3.065	0.2113	0.8256
3104.0082	3.8774	0.7800	4.155	0.1165	- - -	1639.9607	3.6726	1.2200	3.001	0.2152	0.7061
3275.2815	3.8717	0.8300	4.082	0.1331	- - -	1650.7897	3.6692	1.2700	2.9		

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1660.7247	3.6665	1.3200	2.876	0.2233	0.5296						
1669.8890	3.6640	1.3700	2.816	0.2275	0.4653						
1674.1303	3.6629	1.3943	2.788	0.2296	0.4489						
	$M = 1.75$	$Y = 0.30$	$Z = 0.004$								
0.0000	4.0477	1.2515	4.567	0.6960*	0.2130*	0.0000	4.1828	2.0145	4.548	0.6960*	0.5350*
164.0770	4.0408	1.2886	4.502	0.6000*	0.2349*	52.3467	4.1729	2.0576	4.465	0.6000*	0.5283*
300.7381	4.0343	1.3242	4.440	0.5000*	0.2181*	95.3231	4.1644	2.0982	4.391	0.5000*	0.4680*
413.3859	4.0268	1.3571	4.378	0.4000*	0.1948*	129.5741	4.1552	2.1347	4.318	0.4000*	0.4027*
503.3846	4.0175	1.3850	4.312	0.3000*	0.1714*	196.7267	4.1185	2.2183	4.087	0.1000*	0.2530*
576.3298	4.0064	1.4086	4.244	0.2000*	0.1498*	201.5446	4.1158R	2.2263	4.068	0.0683*	0.2414*
635.1173	3.9954	1.4295	4.179	0.1000*	0.1278*	204.1514	4.1160	2.2321	4.064	0.0500*	0.2304*
651.5126	3.9933R	1.4369	4.164	0.0679*	0.1215*	208.2094	4.1210	2.2447	4.071	0.0200*	0.2091*
660.0512	3.9940	1.4426	4.161	0.0500*	0.1165*	209.4391	4.1287	2.2540	4.092	0.0100*	0.1964*
673.7690	3.9997	1.4566	4.169	0.0200*	0.1055*	210.5829	4.1514B	2.2926	4.144	0.0003*	0.0027*
678.0016	4.0074	1.4679	4.189	0.0100*	0.0978*	210.7064	4.1475	2.2943	4.127	0.0000*	---
681.6644	4.0283B	1.5055	4.235	0.0012*	0.0338*	214.8455	4.1328	2.3400	4.023	0.4026	---
685.9045	4.0233	1.5258	4.195	0.0000*	---	221.2511	4.0600	2.3849	3.687	0.4097	---
720.0952	4.0154	1.5700	4.119	0.2119	---	222.0383	4.0200	2.3810	3.530	0.4120	---
751.9824	3.9875	1.6200	3.957	0.2284	---	222.5338	3.9800	2.3692	3.382	0.4128	---
761.0804	3.9600	1.6346	3.833	0.2303	---	222.8792	3.9400	2.3514	3.240	0.4131	---
766.2007	3.9300	1.6380	3.709	0.2336	---	223.1368	3.9000	2.3289	3.103	0.4133	---
769.7088	3.9000	1.6346	3.593	0.2360	---	223.3349	3.8600	2.3020	2.969	0.4133	---
772.3828	3.8700	1.6262	3.481	0.2374	---	223.4893	3.8200	2.2712	2.840	0.4134	---
774.5684	3.8400	1.6140	3.373	0.2376	---	223.6111	3.7800	2.2366	2.715	0.4134	---
776.4091	3.8100	1.5986	3.269	0.2382	---	223.7100	3.7400	2.1979	2.594	0.4134	---
777.9858	3.7800	1.5797	3.168	0.2390	---	223.7991	3.7068	2.1500	2.509	0.4134	2.7992
779.4785	3.7500	1.5552	3.072	0.2399	---	223.8699	3.6902	2.1000	2.492	0.4134	2.7841
781.3895	3.7220	1.5100	3.005	0.2408	1.7487	223.9475	3.6772	2.0500	2.490	0.4134	2.6935
782.8669	3.7072	1.4600	2.996	0.2415	1.7356	223.9717	3.6736	2.0397	2.486	0.4134	2.6405
784.1550	3.6967	1.4100	3.004	0.2420	1.6944	224.0882	3.6615	2.0800	2.397	0.4135	2.1904
786.9132	3.6838	1.3600	3.003	0.2430	1.4690	224.1732	3.6555	2.1300	2.324	0.4135	1.9027
786.9978	3.6835	1.3594	3.002	0.2431	1.4611	224.3030	3.6510	2.1800	2.255	0.4135	1.6347
792.9749	3.6747	1.4000	2.926	0.2453	1.1073	224.5053	3.6472	2.2300	2.190	0.4135	1.4008
798.2372	3.6701	1.4500	2.858	0.2480	0.9144	224.7417	3.6433	2.2800	2.125	0.4135	1.2082
803.8644	3.6669	1.5000	2.795	0.2515	0.7632	224.9955	3.6397	2.3300	2.060	0.4135	0.9777
809.0925	3.6639	1.5500	2.733	0.2549	0.6421	225.1596	3.6377	2.3605	2.022	0.4135	0.8956
813.7428	3.6611	1.6000	2.672	0.2582	0.5418		$M = 3.50$	$Y = 0.30$	$Z = 0.004$		
818.2898	3.6583	1.6500	2.610	0.2618	0.4804						
820.7106	3.6568	1.6774	2.577	0.2639	0.4507	0.0000	4.2396	2.3610	4.526	0.6960*	0.7557*
	$M = 2.20$	$Y = 0.30$	$Z = 0.004$			31.4154	4.2296	2.4057	4.441	0.6000*	0.7080*
0.0000	4.1174	1.6296	4.567	0.6960*	0.3788*	56.8888	4.2212	2.4476	4.365	0.5000*	0.6419*
93.2729	4.1076	1.6692	4.488	0.6000*	0.3647*	77.7401	4.2119	2.4866	4.289	0.4000*	0.5584*
169.9578	4.0996	1.7074	4.418	0.5000*	0.3285*	94.3210	4.2007	2.5209	4.210	0.3000*	0.4849*
232.1753	4.0908	1.7422	4.348	0.4000*	0.2892*	107.5324	4.1878	2.5507	4.129	0.2000*	0.4118*
282.0096	4.0802	1.7722	4.275	0.3000*	0.2459*	118.0994	4.1748	2.5774	4.050	0.1000*	0.3415*
322.2136	4.0677	1.7978	4.200	0.2000*	0.2150*	121.0447	4.1719R	2.5862	4.030	0.0668*	0.3246*
354.6161	4.0554	1.8204	4.128	0.1000*	0.1833*	122.4422	4.1721	2.5916	4.025	0.0500*	0.3118*
364.4733	4.0527R	1.8289	4.109	0.0649*	0.1688*	124.8186	4.1769	2.6041	4.032	0.0200*	0.2834*
368.2652	4.0533	1.8337	4.106	0.0500*	0.1623*	125.5404	4.1844	2.6126	4.053	0.0100*	0.2653*
375.5861	4.0589	1.8471	4.115	0.0200*	0.1466*	126.2846	4.2015	2.6510	4.083	0.0000*	---
377.8226	4.0667	1.8574	4.136	0.0100*	0.1342*	128.1961	4.1818	2.7000	3.956	0.5366	---
379.7247	4.0890B	1.8935	4.189	0.0011*	0.0535*	129.9365	4.1500	2.7274	3.801	0.5563	---
380.1703	4.0852	1.8996	4.168	0.0000*	---	130.6260	4.1100	2.7359	3.632	0.5567	---
395.5059	4.0687	1.9600	4.042	0.2992	---	130.9982	4.0700	2.7332	3.475	0.5567	---
405.5527	4.0300	1.9952	3.852	0.3070	---	131.3214	4.0300	2.7234	3.325	0.5567	---
408.5587	3.9900	1.9999	3.687	0.3076	---	131.5099	3.9500	2.6881	3.040	0.5567	---
410.2411	3.9500	1.9929	3.534	0.3076	---	131.5993	3.9100	2.6644	2.904	0.5567	---
411.3634	3.9100	1.9781	3.389	0.3076	---	131.6689	3.8700	2.6374	2.771	0.5567	---
412.1804	3.8700	1.9573	3.249	0.3076	---	131.7236	3.8300	2.6078	2.641	0.5567	---
412.8053	3.8300	1.9314	3.115	0.3079	---	131.7675	3.7900	2.5760	2.512	0.5567	---
413.2945	3.7900	1.9007	2.986	0.3081	---	131.8031	3.7500	2.5425	2.386	0.5567	---
413.6902	3.7500	1.8640	2.863	0.3082	---	131.8344	3.7100	2.5044	2.264	0.5567	3.4999
414.1285	3.7127	1.8000	2.777	0.3083	2.1980	131.8623	3.6840	2.4600	2.204	0.5567	3.4927
414.4517	3.6953	1.7300	2.778	0.3084	2.1696	131.8916	3.6677	2.4100	2.189	0.5567	3.4067
414.8335	3.6806	1.6717	2.777	0.3084	1.9952	131.9043	3.6621	2.3965	2.180	0.5567	3.3164
415.7338	3.6667	1.7400	2.654	0.3084	1.4076	131.9396	3.6493	2.4400	2.086	0.5567	2.7808
416.7207	3.6605	1.8100	2.559	0.3085	1.1077	131.9599	3.6439	2.4900	2.014	0.5567	2.4061
417.8547	3.6557	1.8800	2.470	0.3086	0.8227	131.9857	3.6393	2.5400	1.946	0.5567	2.1076
419.0801	3.6515	1.9500	2.383	0.3090	0.6443	132.0330	3.6353	2.5871	1.882	0.5567	1.7864
420.4579	3.6472	2.0200	2.296	0.3105	0.5360		$M = 0.90$	$Y = 0.10$	$Z = 0.01$		
421.8817	3.6427	2.0900	2.208	0.3133	0.4665						
423.4786	3.6388	2.1600	2.122	0.3178	0.4280	0.0000	3.6714	-0.5742	4.598	0.8900*	0.8576
425.1911	3.6344	2.2300	2.034	0.3238	0.4121	2959.9265	3.6750	-0.5453	4.584	0.8000*	0.8598
426.8411	3.6300	2.3000	1.947	0.3309	0.3988	6198.4867	3.6787	-0.5119	4.565	0.7000*	0.8623
427.5458	3.6286	2.3233	1.918	0.3343	0.3972	9394.7796	3.6825	-0.4755	4.544	0.6000*	0.8641
						12563.9112	3.6865	-0.4354	4.520	0.5000*	0.8652

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub>(*)</i> <i>M<sub>CE</sub></i>
15719.9859	3.6905	-0.3907	4.491	0.4000*	0.8673	10157.9261	3.6414	1.0374	3.009	0.2038	0.2864
18881.0968	3.6943	-0.3401	4.456	0.3000*	0.8684						
22074.6685	3.6979	-0.2814	4.411	0.2000*	0.8706	<i>M</i> = 1.40 <i>Y</i> = 0.10 <i>Z</i> = 0.01					
25520.7368	3.7010	-0.2060	4.349	0.1000*	0.8728	0.0000	3.7872	0.3404	4.339	0.8900*	0.0019*
27880.3891	3.7022	-0.1422	4.290	0.0500*	0.8721	607.2615	3.7903	0.3701	4.322	0.8000*	---
28892.8383	3.7023T	-0.1110	4.259	0.0333*	0.8707	1241.0954	3.7932	0.4025	4.301	0.7000*	---
29650.3244	3.7020	-0.0866	4.233	0.0200*	0.8701	1837.8922	3.7958	0.4353	4.278	0.6000*	---
30075.6682	3.7017	-0.0729	4.218	0.0100*	0.8699	2391.8131	3.7982	0.4678	4.255	0.5000*	---
31348.6429	3.6995	-0.0247	4.161	0.0000*	0.8653	2899.3419	3.7999	0.4993	4.231	0.4000*	---
32821.9817	3.6905	0.0400	4.060	0.1477	0.8416	3349.6820	3.8007	0.5284	4.205	0.3000*	---
33979.9989	3.6615	0.1100	3.875	0.1578	0.6852	3744.6697	3.7997	0.5524	4.177	0.2000*	0.0054*
34311.0830	3.6521	0.1800	3.767	0.1594	0.5579	4500.5803	3.7894	0.5900	4.098	0.1000*	0.0280*
34534.1887	3.6481	0.2500	3.681	0.1603	0.4787	4541.6298	3.7888R	0.5924	4.093	0.0839*	0.0274*
34725.5363	3.6459	0.3200	3.602	0.1614	0.4196	4620.4859	3.7896	0.6023	4.087	0.0500*	0.0217*
34900.9179	3.6440	0.3900	3.525	0.1630	0.3664	4687.3872	3.7932	0.6204	4.083	0.0200*	0.0086*
35063.3300	3.6428	0.4600	3.450	0.1660	0.3321	4712.8254	3.7955	0.6311	4.081	0.0100*	---
35210.6548	3.6412	0.5300	3.373	0.1705	0.3084	4721.1760	3.7956B	0.6324	4.080	0.0080*	---
35327.9671	3.6396	0.6000	3.297	0.1764	0.2879	5205.2510	3.7864	0.6767	3.999	0.0000*	---
35412.3780	3.6382	0.6700	3.221	0.1829	0.2763	5552.7005	3.7761	0.7200	3.915	0.1382	---
35483.3504	3.6363	0.7400	3.144	0.1893	0.2669	5912.3107	3.7500	0.7655	3.765	0.1603	1.3999
35529.3384	3.6350	0.7920	3.087	0.1940	0.2631	6065.0505	3.7200	0.7532	3.657	0.1691	1.3953
	<i>M</i> = 1.10 <i>Y</i> = 0.10 <i>Z</i> = 0.01					6117.9832	3.7011	0.7100	3.625	0.1714	1.3655
	<i>M</i> = 1.10 <i>Y</i> = 0.10 <i>Z</i> = 0.01					6158.7769	3.6867	0.6600	3.617	0.1727	1.2792
0.0000	3.7234	-0.1617	4.481	0.8900*	1.0893	6221.2923	3.6721	0.6280	3.591	0.1739	1.0502
1439.2145	3.7257	-0.1320	4.460	0.8000*	1.0906	6317.0948	3.6615	0.6700	3.506	0.1753	0.8116
3003.5311	3.7281	-0.0977	4.436	0.7000*	1.0924	6384.9096	3.6578	0.7200	3.442	0.1765	0.6611
4530.9529	3.7303	-0.0610	4.408	0.6000*	1.0933	6444.6443	3.6551	0.7700	3.381	0.1786	0.5720
6019.9196	3.7325	-0.0215	4.377	0.5000*	1.0947	6498.7494	3.6529	0.8200	3.322	0.1818	0.5019
7463.5200	3.7344	0.0206	4.343	0.4000*	1.0956	6545.0944	3.6514	0.8700	3.266	0.1860	0.4336
8856.8698	3.7359	0.0656	4.304	0.3000*	1.0961	6580.8859	3.6494	0.9200	3.208	0.1909	0.3865
10229.8766	3.7368	0.1151	4.258	0.2000*	1.0968	6607.7900	3.6476	0.9653	3.156	0.1953	0.3497
11135.3955	3.7370T	0.1516	4.222	0.1377*	1.0969		<i>M</i> = 1.55 <i>Y</i> = 0.10 <i>Z</i> = 0.01				
11753.7814	3.7368	0.1790	4.194	0.1000*	1.0971						
12563.0503	3.7359	0.2152	4.154	0.0500*	1.0971	0.0000	3.8307	0.5465	4.351	0.8900*	0.0107*
12841.4716	3.7351	0.2263	4.140	0.0200*	1.0969	433.1153	3.8342	0.5755	4.336	0.8000*	0.0003*
12934.2787	3.7349	0.2301	4.135	0.0100*	1.0968	851.6361	3.8376	0.6050	4.320	0.7000*	---
13906.3314	3.7307	0.2863	4.062	0.0000*	1.0962	1230.7108	3.8401	0.6329	4.302	0.6000*	---
14718.4037	3.7224	0.3400	3.975	0.1478	1.0926	1597.1148	3.8418	0.6606	4.281	0.5000*	0.0050*
15414.0615	3.7000	0.3708	3.855	0.1632	1.0600	2158.6262	3.8405	0.7005	4.236	0.4000*	0.0348*
15728.4047	3.6738	0.3521	3.769	0.1679	0.9048	2653.3746	3.8327	0.7315	4.174	0.3000*	0.0541*
15975.2289	3.6578	0.4100	3.647	0.1695	0.6722	2998.9436	3.8210	0.7489	4.110	0.2000*	0.0644*
16103.8120	3.6534	0.4700	3.569	0.1702	0.5628	3192.5232	3.8118	0.7577	4.064	0.1000*	0.0590*
16213.4485	3.6509	0.5300	3.499	0.1709	0.4842	3258.9474	3.8103R	0.7641	4.052	0.0607*	0.0554*
16313.7915	3.6487	0.5900	3.431	0.1721	0.4194	3275.9988	3.8113	0.7683	4.052	0.0500*	0.0528*
16404.5971	3.6471	0.6500	3.364	0.1743	0.3851	3322.5543	3.8173	0.7861	4.058	0.0200*	0.0427*
16485.3435	3.6455	0.7100	3.298	0.1780	0.3477	3337.3571	3.8241	0.8020	4.069	0.0100*	0.0330*
16552.6994	3.6440	0.7700	3.232	0.1829	0.3167	3351.7134	3.8342B	0.8322	4.079	0.0015*	---
16601.4261	3.6421	0.8300	3.164	0.1884	0.2956	3494.4014	3.8263	0.8501	4.030	0.0000*	---
16642.9852	3.6403	0.8900	3.097	0.1940	0.2840	3843.7788	3.8042	0.9000	3.891	0.1444	---
16664.4734	3.6393	0.9259	3.057	0.1972	0.2813	3998.0696	3.7800	0.9242	3.770	0.1596	---
	<i>M</i> = 1.25 <i>Y</i> = 0.10 <i>Z</i> = 0.01					4084.7632	3.7500	0.9224	3.652	0.1678	1.5499
	<i>M</i> = 1.25 <i>Y</i> = 0.10 <i>Z</i> = 0.01					4136.5020	3.7200	0.8813	3.573	0.1720	1.5450
0.0000	3.7555	0.1064	4.397	0.8900*	1.2491	4157.2737	3.7057	0.8400	3.557	0.1733	1.5234
900.4439	3.7575	0.1361	4.375	0.8000*	1.2493	4177.8565	3.6928	0.7900	3.556	0.1742	1.4631
1868.6824	3.7597	0.1702	4.350	0.7000*	1.2496	4206.0616	3.6797	0.7400	3.554	0.1752	1.3098
2800.0382	3.7618	0.2059	4.322	0.6000*	1.2497	4223.8290	3.6744	0.7298	3.542	0.1757	1.2016
3686.7501	3.7636	0.2429	4.293	0.5000*	1.2498	4303.3887	3.6630	0.7700	3.457	0.1784	0.8628
4523.5939	3.7650	0.2807	4.261	0.4000*	1.2498	4359.0493	3.6594	0.8200	3.392	0.1815	0.6946
5313.8636	3.7660	0.3194	4.226	0.3000*	1.2499	4408.1263	3.6567	0.8700	3.331	0.1856	0.5880
6079.6242	3.7663	0.3604	4.186	0.2000*	1.2499	4445.6992	3.6547	0.9200	3.273	0.1906	0.5024
6118.4446	3.7663T	0.3626	4.184	0.1948*	1.2499	4476.3146	3.6529	0.9700	3.216	0.1955	0.4421
6706.2024	3.7652	0.3941	4.148	0.1000*	1.2499	4503.3982	3.6508	1.0200	3.158	0.2004	0.3943
6925.9401	3.7642	0.4048	4.133	0.0500*	1.2499	4520.5485	3.6498	1.0559	3.118	0.2039	0.3659
7094.9516	3.7634	0.4144	4.120	0.0200*	1.2499		<i>M</i> = 1.75 <i>Y</i> = 0.10 <i>Z</i> = 0.01				
7204.8272	3.7630	0.4215	4.112	0.0100*	1.2499						
7988.0273	3.7583	0.4800	4.035	0.0000*	1.2498	0.0000	3.8883	0.7840	4.397	0.8900*	0.0425*
8089.5173	3.7573	0.4886	4.022	0.0000*	1.2498	322.7577	3.8910	0.8141	4.377	0.8000*	0.0387*
8645.0953	3.7484	0.5400	3.935	0.1430	1.2496	653.3980	3.8926	0.8442	4.354	0.7000*	0.0564*
9229.4487	3.7200	0.5833	3.778	0.1652	1.2419	998.3921	3.8912	0.8740	4.318	0.6000*	0.0799*
9418.6336	3.6900	0.5320	3.709	0.1706	1.1524	1333.7076	3.8864	0.9017	4.271	0.5000*	0.0949*
9531.7035	3.6718	0.5067	3.662	0.1723	0.9491	1659.6001	3.8776	0.9285	4.209	0.4000*	0.1025*
9676.5133	3.6600	0.5600	3.561	0.1734	0.7164	1847.6931	3.8677	0.9403	4.158	0.3000*	0.0968*
9774.0542	3.6558	0.6200	3.484	0.1743	0.5950	2004.8772	3.8564	0.9486	4.104	0.2000*	0.0906*
9859.4514	3.6531	0.6800	3.414	0.1756	0.5028	2138.4985	3.8454	0.9560	4.053	0.1000*	0.0808*
9935.5350	3.6510	0.7400	3.345	0.1780	0.4332	2197.0346	3.8436	0.9645	4.037	0.0500*	0.0734*
10003.2928	3.6492	0.8000	3.278	0.1820	0.3790	2197.3622	3.8436R	0.9645	4.037	0.0497*	0.0734*
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TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
2247.9085	3.8754B	1.0366	4.092	0.0009*	----	633.5857	3.6728	1.4200	3.103	0.3138	2.4827
2290.7396	3.8701	1.0495	4.058	0.0000*	----	633.5983	3.6725	1.4193	3.102	0.3138	2.4755
2432.0441	3.8572	1.0800	3.976	0.1416	----	634.5630	3.6595	1.4800	2.989	0.3138	1.7756
2571.7738	3.8300	1.1085	3.839	0.1656	----	635.4317	3.6535	1.5500	2.896	0.3138	1.3624
2626.2319	3.8000	1.1109	3.716	0.1743	----	636.5173	3.6489	1.6200	2.807	0.3138	0.9721
2652.1442	3.7700	1.0985	3.609	0.1780	----	637.7065	3.6449	1.6900	2.721	0.3138	0.6662
2672.4153	3.7400	1.0701	3.517	0.1805	1.7499	639.0366	3.6409	1.7600	2.635	0.3138	0.5127
2683.6357	3.7240	1.0400	3.483	0.1817	1.7484	640.5342	3.6368	1.8300	2.549	0.3138	0.4404
2693.8327	3.7099	1.0000	3.467	0.1826	1.7392	642.2057	3.6326	1.9000	2.462	0.3138	0.4037
2702.0519	3.6999	0.9600	3.467	0.1832	1.7159	644.1359	3.6286	1.9700	2.376	0.3138	0.3754
2710.1191	3.6915	0.9200	3.473	0.1838	1.6666	646.5323	3.6247	2.0400	2.290	0.3138	0.3622
2720.4249	3.6834	0.8800	3.481	0.1844	1.5791	648.0278	3.6209	2.0960	2.219	0.3138	0.3549
2742.5628	3.6723	0.8471	3.469	0.1856	1.3238						
2786.7845	3.6635	0.8800	3.401	0.1888	0.9842						
2818.6000	3.6604	0.9200	3.349	0.1920	0.8250						
2844.7464	3.6578	0.9600	3.298	0.1958	0.7016	0.0000	4.1241	1.9633	4.461	0.8900*	0.6003*
2867.4462	3.6559	1.0000	3.251	0.1996	0.6028	66.1901	4.1161	1.9947	4.398	0.8000*	0.6187*
2888.2687	3.6543	1.0400	3.204	0.2035	0.5167	127.6886	4.1066	2.0254	4.329	0.7000*	0.5402*
2888.8929	3.6542	1.0412	3.203	0.2036	0.5137	177.6097	4.0971	2.0530	4.264	0.6000*	0.4853*
						219.1014	4.0866	2.0771	4.198	0.5000*	0.4281*
						253.6569	4.0745	2.0975	4.129	0.4000*	0.3684*
						282.2850	4.0607	2.1138	4.057	0.3000*	0.3214*
0.0000	3.9845	1.2025	4.462	0.8900*	0.1898*	305.9375	4.0453	2.1261	3.983	0.2000*	0.2719*
196.6932	3.9791	1.2264	4.417	0.8000*	0.2433*	325.3855	4.0300	2.1363	3.912	0.1000*	0.2288*
404.7623	3.9723	1.2538	4.362	0.7000*	0.2382*	333.7384	4.0268	2.1448	3.891	0.0500*	0.2079*
572.8803	3.9643	1.2771	4.307	0.6000*	0.2176*	335.7095	4.0264R	2.1471	3.887	0.0378*	0.2031*
712.2673	3.9553	1.2968	4.251	0.5000*	0.1994*	338.3091	4.0318	2.1567	3.899	0.0200*	0.1915*
828.8204	3.9447	1.3128	4.193	0.4000*	0.1802*	339.7118	4.0398	2.1682	3.919	0.0100*	0.1753*
927.3546	3.9324	1.3251	4.131	0.3000*	0.1616*	340.8034	4.0595B	2.2007	3.966	0.0017*	0.1081*
1010.1889	3.9185	1.3334	4.067	0.2000*	0.1396*	341.0583	4.0578	2.2039	3.956	0.0000*	---
1078.8241	3.9051	1.3402	4.007	0.1000*	0.1179*	350.1897	4.0200	2.2345	3.774	0.4178	---
1106.5277	3.9021R	1.3465	3.989	0.0529*	0.1071*	352.8700	3.9800	2.2240	3.624	0.4178	---
1108.0835	3.9025	1.3476	3.989	0.0500*	0.1064*	354.0701	3.9400	2.2004	3.488	0.4178	---
1123.7370	3.9092	1.3627	4.001	0.0200*	0.0977*	354.7691	3.9000	2.1684	3.360	0.4178	---
1128.7142	3.9172	1.3763	4.019	0.0100*	0.0893*	355.2367	3.8600	2.1301	3.238	0.4178	---
1133.2560	3.9394B	1.4201	4.064	0.0007*	0.0120*	355.5706	3.8200	2.0861	3.122	0.4178	---
1137.8740	3.9334	1.4245	4.036	0.0000*	----	355.8222	3.7800	2.0369	3.011	0.4178	---
1201.0507	3.9100	1.4615	3.905	0.2180	----	356.0232	3.7400	1.9818	2.906	0.4178	---
1220.4247	3.8800	1.4606	3.786	0.2211	----	356.1898	3.7077	1.9200	2.839	0.4178	3.4995
1229.1158	3.8500	1.4467	3.680	0.2246	----	356.3384	3.6878	1.8500	2.830	0.4178	3.4855
1234.5850	3.8200	1.4261	3.581	0.2261	----	356.5137	3.6715	1.7800	2.834	0.4178	3.3274
1238.6335	3.7900	1.4004	3.486	0.2267	----	356.6187	3.6635	1.7716	2.811	0.4178	3.1278
1241.9625	3.7600	1.3691	3.398	0.2267	----	356.8293	3.6522	1.8400	2.697	0.4178	2.4634
1245.5403	3.7299	1.3200	3.326	0.2267	2.1997	357.0031	3.6456	1.9100	2.601	0.4178	1.9885
1248.1817	3.7127	1.2700	3.307	0.2267	2.1957	357.2588	3.6402	1.9800	2.509	0.4178	1.5395
1250.2939	3.7010	1.2200	3.311	0.2267	2.1797	357.6207	3.6355	2.0500	2.420	0.4178	1.0794
1252.2511	3.6916	1.1700	3.323	0.2267	2.1366	358.0382	3.6308	2.1200	2.332	0.4178	0.7751
1254.6579	3.6827	1.1200	3.337	0.2267	2.0155	358.5022	3.6261	2.1900	2.243	0.4178	0.6195
1259.2201	3.6716	1.0872	3.326	0.2267	1.7182	359.0264	3.6220	2.2600	2.156	0.4178	0.5401
1268.4454	3.6629	1.1300	3.248	0.2267	1.2252	359.6074	3.6177	2.3300	2.069	0.4178	0.4843
1276.6124	3.6591	1.1800	3.183	0.2267	0.9457	359.8310	3.6157	2.3583	2.033	0.4178	0.4762
1286.3016	3.6561	1.2300	3.121	0.2268	0.7214						
1297.4777	3.6536	1.2800	3.061	0.2298	0.5573						
1311.2837	3.6517	1.3214	3.012	0.2346	0.4771						
						0.0000	4.1867	2.3251	4.449	0.8900*	0.8479*
						35.2944	4.1765	2.3535	4.380	0.8000*	0.9069*
						73.8073	4.1679	2.3900	4.309	0.7000*	0.7454*
						102.6067	4.1586	2.4197	4.242	0.6000*	0.6685*
						126.6674	4.1482	2.4463	4.174	0.5000*	0.5877*
						146.5653	4.1363	2.4690	4.104	0.4000*	0.5113*
						163.0894	4.1226	2.4880	4.030	0.3000*	0.4465*
						176.7104	4.1072	2.5032	3.953	0.2000*	0.3776*
						187.8013	4.0919	2.5161	3.879	0.1000*	0.3144*
						192.5437	4.0884	2.5252	3.856	0.0500*	0.2894*
						193.6944	4.0879R	2.5277	3.852	0.0374*	0.2836*
						195.1559	4.0930	2.5365	3.863	0.0200*	0.2680*
						195.9609	4.1007	2.5468	3.884	0.0100*	0.2442*
						196.5841	4.1199B	2.5762	3.931	0.0017*	0.1600*
						197.6730	4.1173	2.5796	3.917	0.0000*	---
						200.1282	4.0800	2.6087	3.739	0.5675	---
						201.4029	4.0400	2.6016	3.586	0.5675	---
						201.9662	4.0000	2.5815	3.446	0.5675	---
						202.2931	3.9600	2.5536	3.314	0.5675	---
						202.5108	3.9200	2.5197	3.188	0.5675	---
						202.6661	3.8800	2.4808	3.067	0.5675	---
						202.7820	3.8400	2.4378	2.950	0.5675	---
						202.8725	3.8000	2.3918	2.836	0.5675	---
						202.9453	3.7600	2.3433	2.724	0.5675	---
						203.0070	3.7200	2.2916	2.616	0.5675	---
						203.0572	3.6909	2.2400	2.551	0.5675	4.3987
						203.1093	3.6711	2.1800	2.532	0.5675	4.3607

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
203.1748	3.6540	2.1452	2.499	0.5675	4.0509	6010.1989	3.7726	0.3765	4.140	0.0100*	----
203.2290	3.6439	2.2000	2.403	0.5675	3.4606	6647.3337	3.7699	0.4300	4.075	0.0001*	----
203.2685	3.6368	2.2600	2.315	0.5675	2.9904	6881.2442	3.7680	0.4528	4.045	0.0000*	----
203.3093	3.6316	2.3200	2.234	0.5675	2.5939	7391.9386	3.7605	0.5100	3.958	0.1288	1.0999
203.3695	3.6269	2.3800	2.155	0.5675	2.1103	7856.1937	3.7428	0.5700	3.827	0.1485	1.0993
203.4713	3.6224	2.4400	2.078	0.5675	1.7136	8083.3770	3.7200	0.5839	3.722	0.1581	1.0924
203.6054	3.6182	2.5000	2.001	0.5675	1.2946	8233.9081	3.6900	0.5326	3.653	0.1629	0.9915
203.7536	3.6138	2.5600	1.923	0.5675	0.9736	8275.3216	3.6825	0.5204	3.635	0.1638	0.9209
203.8848	3.6105	2.6095	1.860	0.5675	0.8378	8445.3076	3.6655	0.5800	3.508	0.1667	0.6377
						8527.5627	3.6612	0.6400	3.431	0.1687	0.5473
	$M = 0.70$	$Y = 0.20$	$Z = 0.01$			8600.1354	3.6579	0.7000	3.357	0.1717	0.4636
						8664.4908	3.6553	0.7600	3.287	0.1760	0.4075
0.0000	3.6476	-0.8515	4.671	0.7900*	0.6489	8713.8991	3.6532	0.8200	3.218	0.1813	0.3649
4350.4212	3.6507	-0.8219	4.654	0.7000*	0.6504	8751.8742	3.6508	0.8800	3.149	0.1868	0.3412
9159.0818	3.6548	-0.7855	4.634	0.6000*	0.6526	8784.7906	3.6486	0.9400	3.080	0.1923	0.3135
13963.1685	3.6598	-0.7443	4.613	0.5000*	0.6547	8813.1389	3.6462	1.0000	3.011	0.1977	0.2976
18789.8882	3.6656	-0.6967	4.588	0.4000*	0.6569	8824.7738	3.6453	1.0268	2.980	0.2001	0.2903
23688.9639	3.6720	-0.6408	4.558	0.3000*	0.6606						
28747.4964	3.6791	-0.5726	4.518	0.2000*	0.6625						
34194.6764	3.6868	-0.4826	4.459	0.1000*	0.6642						
37792.6327	3.6915	-0.4062	4.402	0.0500*	0.6654	0.0000	3.8038	0.3430	4.354	0.7900*	0.0060*
40995.9820	3.6948	-0.3199	4.329	0.0200*	0.6638	534.4320	3.8070	0.3742	4.335	0.7000*	----
42003.1997	3.6955	-0.2889	4.300	0.0100*	0.6637	1070.8439	3.8102	0.4073	4.315	0.6000*	----
43014.1050	3.6956T	-0.2541	4.266	0.0006*	0.6607	1566.9746	3.8130	0.4399	4.293	0.5000*	----
43823.1469	3.6950	-0.2221	4.232	0.0000*	0.6581	2015.8294	3.8151	0.4712	4.271	0.4000*	----
45356.2675	3.6902	-0.1500	4.140	0.1328	0.6466	2398.4489	3.8162	0.4984	4.248	0.3000*	0.0007*
46534.8438	3.6753	-0.0700	4.001	0.1419	0.5960	3188.6675	3.8106	0.5482	4.175	0.2000*	0.0289*
47118.8090	3.6619	0.0100	3.867	0.1456	0.5029	3549.7669	3.8036	0.5684	4.127	0.1000*	0.0346*
47459.5047	3.6557	0.0900	3.762	0.1477	0.4336	3588.2521	3.8030R	0.5713	4.122	0.0845*	0.0334*
47727.3087	3.6524	0.1700	3.669	0.1497	0.3833	3667.4496	3.8036	0.5819	4.114	0.0500*	0.0287*
47962.7219	3.6502	0.2500	3.580	0.1527	0.3472	3733.2371	3.8089	0.6029	4.114	0.0200*	0.0153*
48177.1063	3.6485	0.3300	3.493	0.1570	0.3191	3755.4217	3.8128	0.6171	4.115	0.0100*	0.0041*
48368.7600	3.6469	0.4100	3.407	0.1628	0.2962	3770.2430	3.8141B	0.6239	4.114	0.0054*	----
48506.4471	3.6452	0.4900	3.320	0.1698	0.2798	4168.2173	3.8053	0.6670	4.035	0.0000*	----
48616.7110	3.6432	0.5700	3.232	0.1769	0.2681	4450.4250	3.7973	0.7100	3.960	0.1232	----
48709.7483	3.6412	0.6500	3.144	0.1839	0.2619	4729.0538	3.7795	0.7600	3.839	0.1430	----
48788.1761	3.6390	0.7300	3.055	0.1907	0.2566	4919.0668	3.7500	0.7889	3.692	0.1573	1.2498
48808.4751	3.6383	0.7529	3.030	0.1926	0.2551	5006.2500	3.7200	0.7644	3.597	0.1633	1.2416
	$M = 0.90$	$Y = 0.20$	$Z = 0.01$			5043.5792	3.7026	0.7200	3.572	0.1654	1.2015
						5084.3574	3.6868	0.6700	3.558	0.1670	1.0871
						5123.5413	3.6775	0.6576	3.534	0.1683	0.9345
0.0000	3.7160	-0.3412	4.544	0.7900*	0.8834	5198.5167	3.6681	0.7000	3.454	0.1708	0.7166
1772.1024	3.7188	-0.3090	4.523	0.7000*	0.8850	5254.4301	3.6639	0.7500	3.387	0.1737	0.6113
3704.8818	3.7219	-0.2708	4.497	0.6000*	0.8867	5303.8063	3.6612	0.8000	3.326	0.1773	0.5317
5601.5547	3.7248	-0.2291	4.467	0.5000*	0.8882	5344.4419	3.6589	0.8500	3.267	0.1818	0.4653
7458.9073	3.7276	-0.1835	4.432	0.4000*	0.8897	5376.1444	3.6569	0.9000	3.209	0.1865	0.4143
9275.2544	3.7300	-0.1334	4.392	0.3000*	0.8915	5403.1394	3.6549	0.9500	3.151	0.1912	0.3818
11075.8340	3.7322	-0.0763	4.344	0.2000*	0.8933	5427.1802	3.6528	1.0000	3.092	0.1959	0.3479
13086.6663	3.7338	-0.0003	4.274	0.1000*	0.8947	5447.5474	3.6511	1.0472	3.038	0.2002	0.3214
13757.2897	3.7340T	0.0293	4.245	0.0724*	0.8948						
14306.6064	3.7339	0.0545	4.220	0.0500*	0.8949						
14844.4079	3.7333	0.0776	4.194	0.0200*	0.8946						
14973.3291	3.7331	0.0835	4.187	0.0100*	0.8947	0.0000	3.8548	0.5698	4.380	0.7900*	0.0239*
16092.4072	3.7300	0.1505	4.108	0.0000*	0.8938	391.4191	3.8584	0.6015	4.363	0.7000*	0.0155*
17054.7779	3.7213	0.2200	4.004	0.1393	0.8889	765.8946	3.8612	0.6330	4.342	0.6000*	0.0163*
17766.2376	3.7000	0.2670	3.872	0.1527	0.8503	1162.5106	3.8623	0.6660	4.314	0.5000*	0.0339*
18212.6439	3.6700	0.3068	3.712	0.1584	0.6551	1603.3317	3.8593	0.7008	4.267	0.4000*	0.0552*
18382.1698	3.6622	0.3700	3.617	0.1599	0.5388	2003.1322	3.8513	0.7302	4.205	0.3000*	0.0672*
18520.6173	3.6577	0.4400	3.529	0.1614	0.4605	2234.8646	3.8418	0.7438	4.154	0.2000*	0.0664*
18640.4805	3.6546	0.5100	3.447	0.1637	0.4068	2422.2300	3.8328	0.7561	4.106	0.1000*	0.0623*
18748.1410	3.6523	0.5800	3.368	0.1672	0.3643	2453.5181	3.8317R	0.7589	4.098	0.0819*	0.0604*
18844.1135	3.6501	0.6500	3.289	0.1723	0.3293	2505.1462	3.8320	0.7673	4.091	0.0500*	0.0560*
18912.2481	3.6479	0.7200	3.210	0.1785	0.3078	2550.5603	3.8390	0.7868	4.100	0.0200*	0.0461*
18966.8361	3.6458	0.7900	3.132	0.1847	0.2931	2565.0871	3.8462	0.8031	4.112	0.0100*	0.0363*
19013.3860	3.6433	0.8600	3.052	0.1909	0.2773	2577.4859	3.8580B	0.8359	4.127	0.0020*	0.0011*
19053.4583	3.6408	0.9300	2.972	0.1971	0.2701	2690.7121	3.8509	0.8560	4.078	0.0000*	----
19065.8925	3.6397	0.9540	2.943	0.1991	0.2685	2938.5945	3.8369	0.9000	3.978	0.1281	----
	$M = 1.10$	$Y = 0.20$	$Z = 0.01$			3148.0589	3.8092	0.9500	3.817	0.1529	----
						3223.0618	3.7800	0.9630	3.687	0.1621	----
						3265.5110	3.7500	0.9556	3.575	0.1672	1.3999
0.0000	3.7636	0.0795	4.401	0.7900*	1.0996	3299.8915	3.7200	0.9138	3.497	0.1707	1.3955
839.8779	3.7661	0.1115	4.379	0.7000*	1.0997	3316.5043	3.7054	0.8700	3.482	0.1720	1.3740
1738.8495	3.7684	0.1483	4.351	0.6000*	1.0998	3332.6479	3.6935	0.8200	3.484	0.1731	1.3126
2595.9858	3.7706	0.1866	4.322	0.5000*	1.0999	3364.5746	3.6787	0.7700	3.475	0.1749	1.1069
3404.0769	3.7726	0.2258	4.290	0.4000*	1.0999	3371.8998	3.6766	0.7675	3.469	0.1752	1.0516
4170.3008	3.7741	0.2666	4.255	0.3000*	1.0999	3430.1069	3.6669	0.8100	3.388	0.1789	0.7829
4911.6804	3.7750	0.3100	4.216	0.2000*	----	3471.7762	3.6632	0.8600	3.323	0.1829	0.6320
5245.4786	3.7751T	0.3303	4.196	0.1508*	----	3504.3047	3.6602	0.9100	3.261	0.1876	0.5451
5515.4674	3.7744	0.3457	4.178	0.1000*	----	3531.6786	3.6578	0.9600	3.202	0.1923	0.4683
5734.9138	3.7735	0.3579	4.162	0.0500*	----	3555.6321	3.6558	1.0100	3.144	0.1969	0.4137
5900.8121	3.7730	0.3685	4.149	0.0200*	----	3577.2189	3.6535	1.0600	3.084	0.2015	

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
3585.6245	3.6524	1.0813	3.059	0.2035	0.3611	251.4132	4.0619	1.8924	4.187	0.4000*	0.3205*
	$M = 1.75 \quad Y = 0.20 \quad Z = 0.01$					290.1671	4.0488	1.9120	4.115	0.3000*	0.2763*
0.0000	3.9533	0.9912	4.449	0.7900*	0.1198*	321.8870	4.0342	1.9273	4.041	0.2000*	0.2345*
242.3157	3.9501	1.0187	4.409	0.7000*	0.1575*	360.9605	4.0167R	1.9523	3.946	0.0407*	0.1770*
491.8393	3.9443	1.0478	4.357	0.6000*	0.1598*	365.1140	4.0220	1.9631	3.957	0.0200*	0.1641*
693.9978	3.9366	1.0721	4.302	0.5000*	0.1530*	366.9890	4.0301	1.9749	3.977	0.0100*	0.1495*
859.0963	3.9274	1.0920	4.245	0.4000*	0.1433*	368.6897	4.0533B	2.0164	4.028	0.0004*	0.0019*
998.3848	3.9166	1.1080	4.186	0.3000*	0.1283*	368.8788	4.0499	2.0136	4.017	0.0000*	---
1113.2648	3.9041	1.1198	4.124	0.2000*	0.1153*	385.6534	4.0100	2.0660	3.805	0.3500	---
1208.5892	3.8923	1.1303	4.066	0.1000*	0.0973*	389.1706	3.9700	2.0599	3.652	0.3502	---
1243.2880	3.8900R	1.1374	4.050	0.0577*	0.0895*	390.7757	3.9300	2.0397	3.512	0.3502	---
1249.1060	3.8909	1.1403	4.051	0.0500*	0.0877*	391.7531	3.8900	2.0110	3.380	0.3502	---
1271.3208	3.8976	1.1566	4.061	0.0200*	0.0795*	392.4222	3.8500	1.9755	3.256	0.3502	---
1278.3570	3.9056	1.1709	4.079	0.0100*	0.0707*	392.9108	3.8100	1.9342	3.137	0.3502	---
1284.6849	3.9258B	1.2137	4.117	0.0009*	0.0067*	393.2853	3.7700	1.8872	3.024	0.3502	---
1301.1484	3.9210	1.2268	4.085	0.0000*	---	393.6027	3.7300	1.8294	2.922	0.3502	---
1385.7626	3.9093	1.2700	3.994	0.1648	---	393.8711	3.7032	1.7600	2.884	0.3502	2.7969
1446.7682	3.8800	1.2955	3.852	0.1800	---	394.0861	3.6883	1.6900	2.895	0.3502	2.7689
1469.5261	3.8500	1.2949	3.732	0.1873	---	394.4841	3.6686	1.6203	2.886	0.3502	2.4341
1482.4100	3.8200	1.2843	3.623	0.1900	---	394.8892	3.6577	1.6900	2.772	0.3502	1.8410
1491.6214	3.7900	1.2677	3.520	0.1914	---	395.2960	3.6512	1.7600	2.676	0.3502	1.4000
1499.1269	3.7600	1.2438	3.424	0.1930	---	395.8710	3.6461	1.8300	2.586	0.3502	1.0661
1507.5097	3.7300	1.1990	3.348	0.1947	1.7494	396.5307	3.6415	1.9000	2.498	0.3502	0.7717
1513.5562	3.7127	1.1500	3.328	0.1957	1.7432	397.2415	3.6370	1.9700	2.409	0.3502	0.6063
1518.5126	3.7012	1.1000	3.332	0.1965	1.7212	398.0354	3.6323	2.0400	2.321	0.3502	0.5006
1523.4316	3.6921	1.0500	3.346	0.1973	1.6601	398.9348	3.6279	2.1100	2.233	0.3502	0.4601
1531.3590	3.6824	1.0000	3.357	0.1983	1.5105	399.8925	3.6235	2.1800	2.146	0.3502	0.4285
1541.8160	3.6751	0.9851	3.343	0.1997	1.3052	400.8920	3.6189	2.2500	2.057	0.3502	0.4029
1568.4196	3.6669	1.0300	3.265	0.2040	0.9414	402.0397	3.6144	2.3200	1.969	0.3502	0.3950
1587.6173	3.6631	1.0800	3.200	0.2081	0.7492	402.2174	3.6140	2.3296	1.958	0.3502	0.3950
1604.8477	3.6602	1.1300	3.138	0.2121	0.6237						
1620.7298	3.6579	1.1800	3.079	0.2162	0.5314						
1635.6274	3.6549	1.2300	3.017	0.2205	0.4566						
1638.3061	3.6546	1.2398	3.006	0.2213	0.4333						
	$M = 2.20 \quad Y = 0.20 \quad Z = 0.01$					0.0000	4.1665	2.1380	4.456	0.7900*	0.6735*
0.0000	4.0340	1.3851	4.478	0.7900*	0.3009*	44.3577	4.1545	2.1686	4.378	0.7000*	0.6512*
139.2138	4.0234	1.4100	4.410	0.7000*	0.3013*	145.2982	4.1234	2.2587	4.163	0.4000*	0.4255*
266.9721	4.0141	1.4374	4.346	0.6000*	0.2824*	167.3426	4.1104	2.2804	4.090	0.3000*	0.3692*
374.9328	4.0045	1.4631	4.281	0.5000*	0.2513*	185.3458	4.0958	2.2979	4.014	0.2000*	0.3220*
464.2542	3.9935	1.4849	4.216	0.4000*	0.2204*	200.2010	4.0813	2.3132	3.940	0.1000*	0.2731*
537.4738	3.9810	1.5022	4.149	0.3000*	0.1917*	204.3775	4.0782R	2.3190	3.922	0.0682*	0.2525*
597.8010	3.9670	1.5151	4.080	0.2000*	0.1665*	206.5648	4.0783	2.3237	3.918	0.0500*	0.2423*
647.4864	3.9532	1.5260	4.014	0.1000*	0.1403*	210.0103	4.0833	2.3361	3.926	0.0200*	0.2254*
660.1481	3.9506R	1.5302	3.999	0.0709*	0.1305*	211.9715	4.0912	2.3469	3.946	0.0100*	0.2104*
668.5600	3.9507	1.5354	3.994	0.0500*	0.1260*	212.1744	4.1096	2.3824	3.984	0.0000*	---
680.1413	3.9564	1.5494	4.003	0.0200*	0.1144*	218.8549	4.0700	2.4311	3.777	0.4566	---
683.7012	3.9646	1.5624	4.023	0.0100*	0.1047*	220.5251	4.0300	2.4272	3.621	0.4566	---
686.6762	3.9869B	1.6037	4.071	0.0013*	0.0425*	221.2919	3.9900	2.4101	3.478	0.4566	---
687.4074	3.9845	1.6040	4.061	0.0000*	---	221.7522	3.9500	2.3847	3.344	0.4566	---
726.8326	3.9600	1.6580	3.909	0.2483	---	226.0618	3.9100	2.3529	3.215	0.4566	---
739.4786	3.9300	1.6647	3.782	0.2537	---	222.2843	3.8700	2.3158	3.093	0.4566	---
744.5030	3.9000	1.6558	3.671	0.2575	---	222.4517	3.8300	2.2738	2.975	0.4566	---
747.6020	3.8700	1.6396	3.567	0.2590	---	222.5816	3.7900	2.2277	2.861	0.4566	---
749.7851	3.8400	1.6181	3.469	0.2597	---	222.6858	3.7500	2.1776	2.751	0.4566	---
751.4376	3.8100	1.5924	3.374	0.2601	---	222.7769	3.7117	2.1200	2.655	0.4566	3.4999
752.7566	3.7800	1.5627	3.284	0.2602	---	222.8516	3.6889	2.0600	2.624	0.4566	3.4938
753.9136	3.7500	1.5267	3.200	0.2603	---	222.9230	3.6744	2.0000	2.626	0.4566	3.4433
755.2618	3.7200	1.4647	3.142	0.2604	2.1990	223.0094	3.6613	1.9729	2.601	0.4566	3.1752
756.2334	3.7030	1.4000	3.139	0.2604	2.1880	223.1014	3.6511	2.0300	2.503	0.4566	2.6692
757.1179	3.6907	1.3300	3.160	0.2605	2.1344	223.1747	3.6438	2.0900	2.413	0.4566	2.2957
758.6489	3.6761	1.2657	3.165	0.2605	1.8295	223.2653	3.6386	2.1500	2.333	0.4566	1.9384
761.8244	3.6635	1.3300	3.051	0.2605	1.2284	223.4147	3.6339	2.2100	2.254	0.4566	1.6081
764.6850	3.6581	1.4000	2.959	0.2605	0.8969	223.6167	3.6294	2.2700	2.176	0.4566	1.2215
767.8229	3.6537	1.4700	2.871	0.2605	0.6465	223.8404	3.6252	2.3300	2.099	0.4566	0.9069
771.3168	3.6499	1.5400	2.786	0.2605	0.4751	224.0835	3.6210	2.3900	2.023	0.4566	0.7434
775.3139	3.6461	1.6100	2.701	0.2605	0.4106	224.3459	3.6171	2.4500	1.947	0.4566	0.6440
780.1542	3.6421	1.6800	2.615	0.2605	0.3661	224.3719	3.6168	2.4558	1.940	0.4566	0.6362
785.3612	3.6379	1.7500	2.529	0.2650	0.3469						
789.8936	3.6339	1.8200	2.442	0.2707	0.3322						
795.2664	3.6305	1.8789	2.370	0.2787	0.3296						
	$M = 2.80 \quad Y = 0.20 \quad Z = 0.01$					0.0000	4.2260	2.4944	4.437	0.7900*	0.9514*
0.0000	4.1053	1.7812	4.471	0.7900*	0.4768*	25.7749	4.2141	2.5266	4.358	0.7000*	0.8706*
77.3585	4.0935	1.8098	4.396	0.7000*	0.4684*	49.4638	4.2046	2.5619	4.284	0.6000*	0.7827*
147.2142	4.0835	1.8406	4.325	0.6000*	0.4114*	68.8618	4.1951	2.5943	4.214	0.5000*	0.6830*
204.2741	4.0734	1.8684	4.256	0.5000*	0.3607*	84.8301	4.1840	2.6229	4.141	0.4000*	0.6052*
						97.8835	4.1713	2.6476	4.066	0.3000*	0.5138*
						108.4468	4.1569	2.6681	3.987	0.2000*	0.4352*

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub><sup>(*)</sup></i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub><sup>(*)</sup></i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub><sup>(*)</sup></i> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub><sup>(*)</sup></i> <i>M<sub>CE</sub></i>						
<i>M</i> = 1.00 <i>Y</i> = 0.30 <i>Z</i> = 0.01																	
117.0364	4.1426	2.6860	3.912	0.1000*	0.3715*	0.0000	3.7870	0.1374	4.395	0.6900*	0.0030*						
119.5845	4.1393R	2.6928	3.892	0.0661*	0.3434*	666.7686	3.7898	0.1715	4.372	0.6000*	- - -						
120.6918	4.1395	2.6972	3.889	0.0500*	0.3311*	1351.6548	3.7926	0.2090	4.346	0.5000*	- - -						
122.6717	4.1444	2.7092	3.896	0.0200*	0.3073*	1994.6145	3.7949	0.2471	4.317	0.4000*	- - -						
123.2869	4.1520	2.7189	3.917	0.0100*	0.2909*	2599.3318	3.7970	0.2863	4.286	0.3000*	- - -						
123.8077	4.1740B	2.7525	3.971	0.0011*	0.1455*	3148.4749	3.7983	0.3242	4.253	0.2000*	- - -						
123.9264	4.1680	2.7508	3.949	0.0000*	- - -	3309.7034	3.7983T	0.3352	4.242	0.1648*	- - -						
126.8134	4.1200	2.7991	3.709	0.6253	- - -	3550.9506	3.7977	0.3507	4.225	0.1000*	- - -						
127.5737	4.0700	2.7916	3.516	0.6253	- - -	3723.8739	3.7971	0.3623	4.211	0.0500*	- - -						
127.9161	4.0200	2.7684	3.339	0.6253	- - -	3877.7384	3.7968	0.3746	4.197	0.0200*	- - -						
128.1167	3.9700	2.7357	3.172	0.6253	- - -	3981.1354	3.7968	0.3838	4.188	0.0100*	- - -						
128.2480	3.9200	2.6951	3.013	0.6253	- - -	4441.4609	3.7959	0.4300	4.138	0.0002*	- - -						
128.3400	3.8700	2.6482	2.860	0.6253	- - -	4774.3794	3.7943	0.4697	4.092	0.0000*	- - -						
128.4073	3.8200	2.5968	2.711	0.6253	- - -	5064.4507	3.7912	0.5100	4.039	0.1042	- - -						
128.4585	3.7700	2.5424	2.565	0.6253	- - -	5369.8911	3.7846	0.5600	3.963	0.1199	- - -						
128.4992	3.7200	2.4860	2.422	0.6253	- - -	5627.4328	3.7725	0.6100	3.864	0.1342	- - -						
128.5309	3.6833	2.4300	2.331	0.6253	4.3980	5842.8788	3.7500	0.6540	3.730	0.1472	0.9996						
128.5614	3.6625	2.3700	2.308	0.6253	4.3382	5969.7457	3.7200	0.6519	3.612	0.1547	0.9886						
128.5763	3.6551	2.3514	2.297	0.6253	4.2345	6037.0804	3.6985	0.6100	3.568	0.1580	0.9198						
128.6194	3.6371	2.4100	2.166	0.6253	3.4305	6092.7240	3.6855	0.5947	3.532	0.1602	0.7831						
128.6384	3.6307	2.4700	2.080	0.6253	2.9845	6176.9335	3.6745	0.6400	3.442	0.1636	0.6228						
128.6594	3.6255	2.5300	2.000	0.6253	2.5122	6231.4697	3.6702	0.6900	3.375	0.1669	0.5352						
128.6951	3.6204	2.5900	1.919	0.6253	2.0904	6278.7479	3.6669	0.7400	3.312	0.1706	0.4789						
128.7651	3.6159	2.6500	1.841	0.6253	1.6666	6316.3815	3.6645	0.7900	3.252	0.1749	0.4290						
128.8412	3.6118	2.6991	1.776	0.6253	1.2974	6347.3146	3.6620	0.8400	3.192	0.1795	0.3929						
	<i>M</i> = 0.70 <i>Y</i> = 0.30 <i>Z</i> = 0.01					6374.2465	3.6598	0.8900	3.134	0.1840	0.3649						
0.0000	3.6973	-0.6081	4.627	0.6900*	0.6739	6397.9028	3.6578	0.9400	3.076	0.1884	0.3363						
2544.6328	3.7017	-0.5726	4.609	0.6000*	0.6760	6419.1923	3.6553	0.9900	3.016	0.1928	0.3171						
5345.1690	3.7066	-0.5293	4.585	0.5000*	0.6777	6433.3109	3.6541	1.0269	2.974	0.1960	0.3081						
8128.4006	3.7115	-0.4807	4.556	0.4000*	0.6805	<i>M</i> = 1.10 <i>Y</i> = 0.30 <i>Z</i> = 0.01											
10908.8193	3.7165	-0.4251	4.520	0.3000*	0.6822	6316.3815	3.6645	0.7900	3.252	0.1749	0.4290						
13712.5467	3.7213	-0.3596	4.474	0.2000*	0.6841	6347.3146	3.6620	0.8400	3.192	0.1795	0.3929						
16795.7455	3.7261	-0.2707	4.405	0.1000*	0.6867	6374.2465	3.6598	0.8900	3.134	0.1840	0.3649						
18886.1764	3.7287	-0.1938	4.338	0.0500*	0.6880	6433.3109	3.6541	1.0269	2.974	0.1960	0.3081						
20267.6164	3.7295	-0.1344	4.282	0.0200*	0.6888	<i>M</i> = 1.10 <i>Y</i> = 0.30 <i>Z</i> = 0.01											
20582.2240	3.7295	-0.1209	4.268	0.0100*	0.6889	6447.2320	3.6601	0.9400	3.126	0.1877	0.3953						
20813.2959	3.7295T	-0.1095	4.257	0.0033*	0.6889	6467.2320	3.6601	0.9400	3.126	0.1877	0.3953						
21796.3681	3.7283	-0.0520	4.195	0.0000*	0.6880	6477.4057	3.68278	0.4011	4.336	0.5000*	0.0018*						
22682.2219	3.7245	0.0100	4.117	0.1237	0.6860	6488.8796	3.6828	0.4328	4.314	0.4000*	0.0024*						
23479.4671	3.7145	0.0800	4.007	0.1353	0.6739	6508.1539	3.6825	0.5156	4.211	0.2000*	0.0380*						
24108.2461	3.6920	0.1500	3.847	0.1441	0.6077	6515.2970	3.6822	0.5762	4.139	0.0200*	0.0277*						
24418.4377	3.6763	0.2200	3.714	0.1478	0.5104	6527.4328	3.6824	0.5938	4.145	0.0100*	0.0165*						
24595.4096	3.6695	0.2900	3.617	0.1501	0.4442	6537.0744	3.6838B	0.6153	4.146	0.0028*	- - -						
24736.3711	3.6654	0.3600	3.531	0.1527	0.3995	6539.6356	3.6825	0.6504	4.079	0.0000*	- - -						
24859.2269	3.6623	0.4300	3.449	0.1562	0.3591	6567.2888	3.6816	0.5546	4.136	0.0500*	0.0381*						
24969.3479	3.6596	0.5000	3.368	0.1609	0.3356	6577.4044	3.6811	0.5546	4.136	0.0500*	0.0381*						
25056.5526	3.6572	0.5700	3.288	0.1666	0.3105	6587.0004	3.8035	0.7500	3.890	0.1319	- - -						
25124.6551	3.6548	0.6400	3.208	0.1726	0.2944	6597.4368	3.7800	0.7897	3.756	0.1455	- - -						
25178.2106	3.6526	0.7041	3.136	0.1781	0.2812	6607.9981	3.7500	0.8074	3.618	0.1546	1.0998						
	<i>M</i> = 0.90 <i>Y</i> = 0.30 <i>Z</i> = 0.01					6627.8894	3.7200	0.7829	3.523	0.1598	1.0920						
						6646.7580	3.6843	0.6904	3.472	0.1651	0.8757						
0.0000	3.7590	-0.0827	4.457	0.6900*	0.8986	6647.2320	3.6722	0.7400	3.374	0.1701	0.6373						
986.8259	3.7611	-0.0474	4.430	0.6000*	0.8990	6657.0744	3.6681	0.7900	3.308	0.1741	0.5482						
2045.8800	3.7637	-0.0063	4.400	0.5000*	0.8993	6667.9028	3.6652	0.8400	3.246	0.1787	0.4741						
3060.2864	3.7661	0.0370	4.366	0.4000*	0.8995	6677.4044	3.6625	0.8900	3.186	0.1832	0.4282						
4031.1859	3.7683	0.0830	4.329	0.3000*	0.8997	6687.8796	3.6601	0.9400	3.126	0.1877	0.3953						
4998.5215	3.7702	0.1350	4.285	0.2000*	0.8998	6697.4368	3.6575	0.9900	3.066	0.1922	0.3644						
5961.9343	3.7713	0.1934	4.230	0.1000*	0.8999	6707.9981	3.6552	1.0400	3.007	0.1966	0.3380						
6127.0362	3.77113T	0.2032	4.221	0.0788*	0.8999	6717.8408	3.6543	1.0604	2.982	0.1983	0.3332						
6302.1455	3.7709	0.2129	4.209	0.0500*	0.8999	<i>M</i> = 1.40 <i>Y</i> = 0.30 <i>Z</i> = 0.01											
6494.9008	3.7704	0.2251	4.195	0.0200*	0.8999	6727.8894	3.6483	0.6904	3.472	0.1651	0.8757						
6614.1363	3.7703	0.2338	4.186	0.0100*	0.8999	6737.4044	3.6461	0.7400	3.374	0.1701	0.6373						
7274.0849	3.7689	0.2900	4.124	0.0001*	0.8999	6747.2320	3.6433	0.7900	3.308	0.1741	0.5482						
7579.3640	3.7673	0.3207	4.087	0.0000*	0.8999	6757.4368	3.6401	0.8400	3.246	0.1787	0.4741						
8082.1942	3.7621	0.3800	4.007	0.1184	0.8998	6767.8796	3.6375	0.9900	3.066	0.1922	0.3644						
8497.7084	3.7517	0.4400	3.905	0.1336	0.8995	6777.4044	3.6347	0.9900	3.007	0.1966	0.3380						
8833.8789	3.7300	0.4904	3.768	0.1465	0.8955	6787.0744	3.6325	0.9900	3.007	0.1966	0.3380						
9032.8807	3.7000	0.4802	3.658	0.1534	0.8363	6797.4368	3.6293	0.9900	3.007	0.1966	0.3380						
9075.3374	3.6926	0.4732	3.636	0.1546	0.7938	6807.0744	3.6265	0.9900	3.007	0.1966	0.3380						
9251.6264	3.6734	0.5300	3.502	0.1591	0.5798	6817.8408	3.6237	0.9900	3.007	0.1966	0.3380						
9332.7533	3.6681	0.5900	3.421	0.1619	0.4982	6827.8894	3.6209	0.9900	3.007	0.1966	0.3380						
9400.4336	3.6647	0.6500	3.347	0.1657	0.4352	6837.4044	3.6181	0.9900	3.007	0.1966	0.3380						
9459.0905	3.6617	0.7100	3.275	0.1703	0.3911	6847.2320	3.6153	0.9900	3.007	0.1966	0.3380						
9503.6624	3.6588	0.7700	3.204	0.1756	0.3544	6857.0744	3.6125	0.9900	3.007	0.1966	0.3380						
9540.4910	3.656																

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
1740.7987	3.8200	1.1706	3.640	0.1770	- - -	454.5654	3.6527	1.6800	2.657	0.2909	0.7877
1754.0076	3.7900	1.1637	3.527	0.1799	- - -	455.9681	3.6480	1.7500	2.569	0.2910	0.5844
1764.3494	3.7600	1.1485	3.422	0.1821	- - -	457.5543	3.6436	1.8200	2.481	0.2910	0.4828
1775.9870	3.7300	1.1098	3.341	0.1843	1.3989	459.2594	3.6394	1.8900	2.394	0.2913	0.4317
1784.2970	3.7121	1.0600	3.319	0.1856	1.3879	461.1349	3.6347	1.9600	2.306	0.2932	0.3960
1790.7700	3.7003	1.0100	3.322	0.1866	1.3544	463.4101	3.6303	2.0300	2.218	0.2979	0.3773
1798.5155	3.6905	0.9600	3.332	0.1877	1.2668	465.6905	3.6258	2.1000	2.130	0.3039	0.3658
1810.7556	3.6819	0.9307	3.327	0.1892	1.1021	467.5927	3.6211	2.1700	2.041	0.3097	0.3603
1843.9088	3.6709	0.9800	3.234	0.1942	0.7620	467.9557	3.6202	2.1834	2.024	0.3109	0.3603
1862.7768	3.6671	1.0300	3.169	0.1982	0.6295						
1879.4689	3.6641	1.0800	3.107	0.2022	0.5454					$M = 2.80$	$Y = 0.30$
1894.7737	3.6612	1.1300	3.045	0.2063	0.4766					$Z = 0.01$	
1908.6793	3.6589	1.1800	2.986	0.2103	0.4246	0.0000	4.1497	1.9675	4.463	0.6900*	0.5475*
1917.9341	3.6568	1.2156	2.942	0.2133	0.3899	49.8328	4.1365	1.9984	4.379	0.6000*	0.4854*
						95.4028	4.1260	2.0327	4.303	0.5000*	0.4316*
	$M = 1.75$	$Y = 0.30$	$Z = 0.01$								
0.0000	4.0110	1.1928	4.479	0.6900*	0.2180*	132.4655	4.1151	2.0637	4.228	0.4000*	0.3737*
165.8085	4.0011	1.2199	4.412	0.6000*	0.2218*	162.4958	4.1029	2.0902	4.153	0.3000*	0.3256*
318.9224	3.9916	1.2494	4.344	0.5000*	0.2045*	186.5608	4.0890	2.1118	4.076	0.2000*	0.2727*
444.3024	3.9814	1.2757	4.277	0.4000*	0.1871*	206.1530	4.0754	2.1309	4.002	0.1000*	0.2322*
547.2533	3.9698	1.2977	4.209	0.3000*	0.1636*	213.5497	4.0721R	2.1409	3.979	0.0564*	0.2109*
631.3455	3.9565	1.3152	4.138	0.2000*	0.1421*	214.5178	4.0727	2.1433	3.979	0.0500*	0.2077*
700.3936	3.9436	1.3306	4.071	0.1000*	0.1203*	219.0008	4.0789	2.1579	3.989	0.0200*	0.1892*
722.2427	3.9410R	1.3379	4.053	0.0633*	0.1102*	220.3839	4.0869	2.1695	4.010	0.0100*	0.1746*
729.4199	3.9419	1.3425	4.052	0.0500*	0.1062*	221.5831	4.1110B	2.2117	4.064	0.0008*	0.0477*
745.0226	3.9482	1.3585	4.062	0.0200*	0.0972*	221.7124	4.1077	2.2091	4.053	0.0000*	- - -
749.8842	3.9565	1.3723	4.081	0.0100*	0.0886*	235.1927	4.0300	2.2845	3.667	0.3821	- - -
754.1043	3.9790B	1.4168	4.127	0.0011*	0.0239*	236.2779	3.9900	2.2734	3.518	0.3821	- - -
762.2792	3.9730	1.4358	4.084	0.0000*	- - -	236.9188	3.9500	2.2527	3.379	0.3821	- - -
804.7215	3.9625	1.4800	3.997	0.2004	- - -	237.3530	3.9100	2.2251	3.246	0.3821	- - -
832.0711	3.9400	1.5093	3.878	0.2114	- - -	237.6682	3.8700	2.1918	3.120	0.3821	- - -
844.1885	3.9100	1.5166	3.751	0.2165	- - -	237.9063	3.8300	2.1536	2.998	0.3821	- - -
850.2791	3.8800	1.5112	3.636	0.2200	- - -	238.0909	3.7900	2.1108	2.881	0.3821	- - -
854.4136	3.8500	1.4988	3.529	0.2221	- - -	238.2385	3.7500	2.0631	2.768	0.3821	- - -
857.5195	3.8200	1.4813	3.426	0.2235	- - -	238.3840	3.7100	1.9973	2.674	0.3821	2.7995
860.0531	3.7900	1.4595	3.328	0.2244	- - -	238.4956	3.6900	1.9300	2.661	0.3821	2.7867
862.2876	3.7600	1.4326	3.235	0.2250	- - -	238.6231	3.6744	1.8600	2.669	0.3821	2.6729
864.8801	3.7300	1.3873	3.160	0.2257	1.7496	238.6593	3.6708	1.8491	2.666	0.3821	2.6006
866.7931	3.7135	1.3400	3.142	0.2261	1.7454	238.8681	3.6556	1.9100	2.544	0.3821	2.0310
868.4122	3.7026	1.2900	3.148	0.2264	1.7287	239.0440	3.6483	1.9800	2.445	0.3821	1.6443
869.9676	3.6940	1.2400	3.163	0.2267	1.6844	239.3290	3.6426	2.0500	2.352	0.3821	1.3239
872.2955	3.6847	1.1900	3.176	0.2270	1.5488	239.6918	3.6372	2.1200	2.260	0.3821	0.9727
876.0718	3.6766	1.1753	3.158	0.2275	1.3203	240.0831	3.6326	2.1900	2.172	0.3821	0.7328
884.1508	3.6694	1.2200	3.085	0.2278	0.9883	240.5144	3.6275	2.2600	2.082	0.3821	0.6016
891.1684	3.6652	1.2700	3.018	0.2303	0.7965	240.9967	3.6224	2.3300	1.991	0.3821	0.5348
898.8197	3.6617	1.3200	2.954	0.2335	0.6642	241.2109	3.6207	2.3587	1.956	0.3821	0.5146
906.9758	3.6588	1.3700	2.893	0.2370	0.5645					$M = 3.50$	$Y = 0.30$
913.2501	3.6560	1.4200	2.831	0.2400	0.4870					$Z = 0.01$	
919.5890	3.6532	1.4700	2.770	0.2433	0.4168	0.0000	4.2092	2.3203	4.445	0.6900*	0.7557*
923.6235	3.6512	1.5028	2.729	0.2455	0.3979	30.2928	4.1962	2.3551	4.358	0.6000*	0.6748*
						57.2189	4.1859	2.3923	4.280	0.5000*	0.5832*
	$M = 2.20$	$Y = 0.30$	$Z = 0.01$								
0.0000	4.0814	1.5754	4.477	0.6900*	0.3617*	78.7058	4.1753	2.4254	4.204	0.4000*	0.5018*
89.8295	4.0689	1.6032	4.399	0.6000*	0.3354*	96.0772	4.1632	2.4541	4.127	0.3000*	0.4413*
173.3403	4.0585	1.6349	4.326	0.5000*	0.3032*	110.2156	4.1495	2.4787	4.048	0.2000*	0.3756*
241.7013	4.0476	1.6634	4.254	0.4000*	0.2656*	121.5965	4.1359	2.5003	3.972	0.1000*	0.3211*
297.7345	4.0353	1.6876	4.180	0.3000*	0.2343*	125.7632	4.1325R	2.5107	3.948	0.0580*	0.2948*
343.2824	4.0213	1.7072	4.105	0.2000*	0.1930*	126.4840	4.1331	2.5136	3.947	0.0500*	0.2893*
379.3325	4.0080	1.7238	4.035	0.1000*	0.1669*	129.1211	4.1388	2.5276	3.956	0.0200*	0.2639*
392.9945	4.0048R	1.7329	4.013	0.0569*	0.1521*	129.9308	4.1466	2.5381	3.977	0.0100*	0.2442*
394.9743	4.0055	1.7356	4.013	0.0500*	0.1491*	130.6277	4.1708B	2.5776	4.034	0.0008*	0.0951*
403.3784	4.0119	1.7511	4.023	0.0200*	0.1358*	130.7029	4.1671	2.5759	4.021	0.0000*	- - -
405.9731	4.0202	1.7637	4.044	0.0100*	0.1244*	136.4772	4.0700	2.6449	3.563	0.4980	- - -
408.2374	4.0440B	1.8082	4.095	0.0008*	0.0301*	136.8858	4.0300	2.6323	3.416	0.5001	- - -
409.1418	4.0372	1.8162	4.059	0.0000*	- - -	137.1435	3.9900	2.6121	3.276	0.5007	- - -
435.0256	4.0107	1.8800	3.890	0.2813	- - -	137.3223	3.9500	2.5862	3.142	0.5009	- - -
441.1440	3.9800	1.8899	3.757	0.2857	- - -	137.4536	3.9100	2.5550	3.013	0.5010	- - -
444.3205	3.9400	1.8816	3.605	0.2872	- - -	137.5530	3.8700	2.5195	2.889	0.5011	- - -
446.1640	3.9000	1.8620	3.465	0.2891	- - -	137.6303	3.8300	2.4806	2.768	0.5011	- - -
447.4045	3.8600	1.8344	3.332	0.2899	- - -	137.6919	3.7900	2.4388	2.650	0.5011	- - -
448.3066	3.8200	1.8003	3.206	0.2903	- - -	137.7419	3.7500	2.3947	2.534	0.5011	- - -
448.9985	3.7800	1.7604	3.086	0.2905	- - -	137.7860	3.7100	2.3455	2.423	0.5011	3.4999
449.5779	3.7400	1.7114	2.975	0.2906	- - -	137.8254	3.6833	2.2900	2.372	0.5012	3.4932
450.0665	3.7132	1.6500	2.929	0.2907	2.1981	137.8676	3.6660	2.2300	2.362	0.5012	3.4143
450.4762	3.6969	1.5800	2.934	0.2908	2.1808	137.8994	3.6562	2.2140	2.339	0.5012	3.2120
450.8780	3.6851	1.5100	2.957	0.2908	2.0945	137.9452	3.6442	2.2700	2.235	0.5012	2.6926
451.3099	3.6748	1.4795	2.946	0.2909	1.8846	137.9786	3.6381	2.3300	2.151	0.5012	2.3233
452.2914	3.6637	1.5400	2.841	0.2909	1.3613	138.0254	3.6322	2.3900	2.067	0.5012	1.9628
453.3498	3.6577	1.6100	2.748	0.2909	1.0321	138.1142	3.6274	2.4500	1.988	0.5012	1.6446

TABLE 3—Continued

$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}/M_{SH}$	$M_{CC}^{(*)}/M_{CE}$	$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}/M_{SH}$	$M_{CC}^{(*)}/M_{CE}$						
138.2408	3.6223	2.5100	1.908	0.5012	1.2920	7170.7246	3.6605	0.9700	2.959	0.1885	0.3103						
138.3346	3.6194	2.5506	1.855	0.5012	1.0864	7190.9475	3.6576	1.0295	2.888	0.1934	0.2991						
$M = 0.55 \quad Y = 0.40 \quad Z = 0.01$																	
0.0000	3.6837	-0.8331	4.693	0.5900*	0.5217	0.0000	3.8133	0.1924	4.399	0.5900*	0.0169*						
3369.7699	3.6895	-0.7930	4.675	0.5000*	0.5235	579.0381	3.8171	0.2319	4.375	0.5000*	0.0081*						
7128.6686	3.6964	-0.7429	4.653	0.4000*	0.5250	1117.9774	3.8208	0.2711	4.351	0.4000*	0.0023*						
10944.6100	3.7038	-0.6841	4.624	0.3000*	0.5271	1569.5028	3.8235	0.3064	4.326	0.3000*	0.0031*						
14883.2502	3.7119	-0.6118	4.584	0.2000*	0.5302	2107.1679	3.8241	0.3474	4.287	0.2000*	0.0166*						
19178.8367	3.7208	-0.5132	4.521	0.1000*	0.5328	2740.4877	3.8180	0.3929	4.218	0.1000*	0.0296*						
22135.0233	3.7268	-0.4226	4.455	0.0500*	0.5348	2836.9352	3.8172R	0.4018	4.206	0.0691*	0.0278*						
24491.4377	3.7310	-0.3289	4.378	0.0200*	0.5370	2891.1906	3.8185	0.4111	4.202	0.0500*	0.0248*						
25119.1214	3.7318	-0.3012	4.353	0.0100*	0.5374	2974.5662	3.8239	0.4336	4.200	0.0200*	0.0137*						
26261.6646	3.7325	-0.2400	4.295	0.0001*	0.5376	3001.2280	3.8287	0.4512	4.202	0.0100*	0.0023*						
26520.1185	3.7325T	-0.2239	4.279	0.0000*	0.5378	3026.2221	3.8301B	0.4597	4.199	0.0043*	---						
26667.3379	3.7323	-0.2143	4.268	0.0000*	0.5378	3327.3385	3.8264	0.5000	4.144	0.0000*	---						
27538.3209	3.7305	-0.1500	4.197	0.1128	0.5363	3449.6389	3.8252	0.5199	4.119	0.0000*	---						
28266.8146	3.7254	-0.0800	4.106	0.1216	0.5316	3651.4318	3.8225	0.5600	4.069	0.0984	---						
28812.5358	3.7164	-0.0100	4.000	0.1287	0.5205	3859.2163	3.8162	0.6100	3.993	0.1127	---						
29212.5150	3.7031	0.0600	3.877	0.1341	0.4908	4031.4740	3.8041	0.6600	3.895	0.1260	---						
29483.9908	3.6911	0.1300	3.759	0.1379	0.4465	4176.7859	3.7819	0.7100	3.756	0.1387	---						
29672.6136	3.6833	0.2000	3.658	0.1410	0.4060	4255.3512	3.7600	0.7375	3.641	0.1463	0.8999						
29820.8404	3.6780	0.2700	3.567	0.1443	0.3687	4323.8163	3.7300	0.7428	3.516	0.1528	0.8964						
29946.8460	3.6740	0.3400	3.481	0.1483	0.3435	4386.0768	3.7000	0.6925	3.446	0.1583	0.8218						
30057.8600	3.6707	0.4100	3.398	0.1530	0.3196	4401.9184	3.6939	0.6829	3.431	0.1596	0.7760						
30145.0121	3.6677	0.4800	3.315	0.1587	0.3054	4478.2781	3.6789	0.7300	3.324	0.1662	0.5662						
30146.9176	3.6676	0.4817	3.313	0.1588	0.3054	4513.7455	3.6748	0.7800	3.258	0.1706	0.4885						
$M = 0.70 \quad Y = 0.40 \quad Z = 0.01$																	
0.0000	3.7485	-0.3314	4.555	0.5900*	0.6943	4605.6499	3.6631	0.9800	3.011	0.1880	0.3560						
1348.7052	3.7515	-0.2919	4.527	0.5000*	0.6948	4622.4357	3.6603	1.0300	2.950	0.1921	0.3362						
2818.6093	3.7549	-0.2448	4.494	0.4000*	0.6962	4637.5339	3.6576	1.0800	2.889	0.1963	0.3194						
4256.3881	3.7580	-0.1927	4.454	0.3000*	0.6974	4641.2561	3.6572	1.0936	2.874	0.1974	0.3194						
5695.3807	3.7612	-0.1327	4.407	0.2000*	0.6982	$M = 1.00 \quad Y = 0.40 \quad Z = 0.01$											
7330.8400	3.7647	-0.0488	4.337	0.1000*	0.6989	4565.8188	3.6685	0.8800	3.133	0.1794	0.4065						
8214.5050	3.7659	0.0034	4.290	0.0500*	0.6992	4587.0119	3.6654	0.9300	3.070	0.1838	0.3759						
8582.4983	3.7658	0.0241	4.269	0.0200*	0.6992	4605.6499	3.6631	0.9800	3.011	0.1880	0.3560						
8705.1172	3.7658	0.0324	4.260	0.0100*	0.6992	4622.4357	3.6603	1.0300	2.950	0.1921	0.3362						
9104.3155	3.7661T	0.0644	4.229	0.0009*	0.6993	4642.7551	3.6603	1.0800	2.889	0.1963	0.3194						
9747.3177	3.7652	0.1235	4.167	0.0000*	0.6994	842.6467	3.8644	0.4794	4.362	0.4000*	0.0372*						
10327.7781	3.7618	0.1900	4.086	0.1098	0.6994	1281.2472	3.8619	0.5176	4.314	0.3000*	0.0530*						
10801.7314	3.7543	0.2600	3.987	0.1229	0.6989	1709.6506	3.8537	0.5544	4.245	0.2000*	0.0577*						
11179.0047	3.7392	0.3300	3.856	0.1343	0.6955	1965.3921	3.8450	0.5764	4.188	0.1000*	0.0550*						
11474.0527	3.7100	0.3782	3.691	0.1435	0.6544	2046.4138	3.8436R	0.5867	4.172	0.0634*	0.0525*						
11678.3140	3.6867	0.4400	3.536	0.1497	0.5131	2074.2004	3.8448	0.5930	4.170	0.0500*	0.0500*						
11779.0903	3.6792	0.5100	3.436	0.1539	0.4477	2134.3189	3.8513	0.6141	4.175	0.0200*	0.0406*						
11857.4448	3.6741	0.5800	3.346	0.1588	0.3980	2152.7504	3.8588	0.6317	4.188	0.0100*	0.0320*						
11919.5173	3.6703	0.6500	3.260	0.1645	0.3604	2169.3839	3.8717B	0.6723	4.199	0.0015*	---						
11968.0084	3.6669	0.7200	3.177	0.1705	0.3331	2297.0951	3.8655	0.7002	4.146	0.0000*	---						
12009.0191	3.6638	0.7900	3.095	0.1764	0.3111	2508.4667	3.8579	0.7500	4.066	0.1069	---						
12044.0971	3.6605	0.8600	3.011	0.1822	0.2984	2659.4355	3.8489	0.8000	3.980	0.1238	---						
12074.4058	3.6570	0.9300	2.927	0.1879	0.2864	2781.1011	3.8307	0.8500	3.857	0.1391	---						
12091.3104	3.6551	0.9743	2.876	0.1915	0.2811	2843.1556	3.8100	0.8787	3.746	0.1477	---						
$M = 0.80 \quad Y = 0.40 \quad Z = 0.01$																	
0.0000	3.7793	-0.0500	4.455	0.5900*	0.0042*	2999.0856	3.6923	0.7919	3.362	0.1691	0.8301						
817.9098	3.7821	-0.0116	4.427	0.5000*	0.7998	3052.2321	3.6793	0.8400	3.261	0.1756	0.5972						
1648.6540	3.7850	0.0306	4.397	0.4000*	0.7999	3077.4186	3.6753	0.8900	3.196	0.1800	0.5178						
2447.4905	3.7876	0.0755	4.362	0.3000*	0.7999	3098.5880	3.6720	0.9400	3.132	0.1844	0.4631						
3243.7194	3.7902	0.1266	4.322	0.2000*	0.7999	3117.0465	3.6692	0.9900	3.071	0.1886	0.4187						
3959.2145	3.7917	0.1760	4.278	0.1000*	---	3133.5629	3.6663	1.0400	3.010	0.1928	0.3845						
4213.9644	3.7915	0.1928	4.261	0.0500*	---	3148.3067	3.6639	1.0900	2.950	0.1969	0.3608						
4393.4712	3.7914	0.2063	4.247	0.0200*	---	3159.9693	3.6613	1.1333	2.896	0.2004	0.3411						
4508.9981	3.7916	0.2164	4.237	0.0100*	---	$M = 1.10 \quad Y = 0.40 \quad Z = 0.01$											
5058.8970	3.7918T	0.2717	4.183	0.0002*	---	2957.1493	3.7200	0.8682	3.396	0.1642	0.9885						
5419.1801	3.7910	0.3155	4.136	0.0000*	---	2978.6418	3.7034	0.8200	3.378	0.1668	0.9286						
5792.6336	3.7884	0.3700	4.071	0.1006	---	3000.0000	3.9017	0.5868	4.446	0.5900*	0.0600*						
6125.1882	3.7823	0.4300	3.986	0.1149	---	333.0316	3.9024	0.6225	4.413	0.5000*	0.0672*						
6391.2706	3.7713	0.4900	3.882	0.1277	0.7999	690.8589	3.8994	0.6594	4.364	0.4000*	0.0757*						
6618.4634	3.7489	0.5500	3.733	0.1397	0.7990	1009.5538	3.8923	0.6923	4.303	0.3000*	0.0805*						
6754.5243	3.7200	0.5661	3.601	0.1473	0.7811	1241.4743	3.8826	0.7154	4.241	0.2000*	0.0763*						
6838.9578	3.6985	0.5522	3.529	0.1517	0.7011	1433.3977	3.8730	0.7366	4.181	0.1000*	0.0706*						
6950.7759	3.6822	0.6100	3.406	0.1580	0.5307	1502.3256	3.8713R	0.7483	4.163	0.0592*	0.0649*						
7009.2105	3.6766	0.6700	3.324	0.1628	0.4614	1516.3018	3.8724	0.7529	4.162	0.0500*	0.0633*						
7054.3423	3.6729	0.7300	3.249	0.1679	0.4085	1560.9930	3.8794	0.7731	4.170	0.0200*	0.0550*						
7090.5099	3.6694	0.7900	3.175	0.1732	0.3731	1574.9018	3.8873	0.7897	4.185	0.0100*	0.0466*						
7120.9741	3.6665	0.8500	3.103	0.1784	0.3489	1587.3500	3.9054B	0.8375	4.210	0.0011*	0.0006*						
7147.5178	3.6636	0.9100	3.032	0.1835	0.3282	1649.4768	3.8998	0.8632	4.162	0.0000*	---						

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T<sub>eff</sub></i>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub>(*)</i> <i>M<sub>SH</sub></i>	<i>M<sub>CC(*)</sub></i> <i>M<sub>CE</sub></i>
1802.6674	3.8905	0.9100	4.078	0.1166	---	494.7158	3.6873	1.4500	2.927	0.2601	1.6396
1920.0586	3.8798	0.9600	3.985	0.1357	---	495.6352	3.6778	1.4231	2.915	0.2604	1.4237
2011.6982	3.8571	1.0100	3.844	0.1525	---	497.9575	3.6680	1.4800	2.819	0.2612	1.0369
2054.7808	3.8300	1.0351	3.711	0.1610	---	499.8729	3.6625	1.5400	2.737	0.2621	0.8183
2078.5844	3.8000	1.0451	3.581	0.1659	---	501.7945	3.6585	1.6000	2.661	0.2635	0.6636
2094.7320	3.7700	1.0447	3.461	0.1693	---	503.8965	3.6544	1.6600	2.585	0.2653	0.5539
2111.0837	3.7400	1.0285	3.357	0.1725	1.0995	506.1361	3.6506	1.7200	2.510	0.2680	0.4625
2126.4766	3.7144	0.9800	3.303	0.1753	1.0863	508.5976	3.6466	1.7800	2.434	0.2716	0.4182
2137.0195	3.7015	0.9300	3.302	0.1769	1.0393	511.4686	3.6429	1.8400	2.359	0.2763	0.3968
2158.9496	3.6860	0.8854	3.284	0.1800	0.8585	516.6255	3.6400	1.8905	2.297	0.2860	0.3898
2188.9340	3.6766	0.9300	3.202	0.1849	0.6385						
2208.0514	3.6727	0.9800	3.136	0.1890	0.5556						
2224.5305	3.6691	1.0300	3.072	0.1931	0.4895						
2239.1516	3.6663	1.0800	3.011	0.1970	0.4380	0.0000	4.1295	1.7784	4.466	0.5900*	0.3788*
2252.3829	3.6636	1.1300	2.950	0.2010	0.3988	57.3637	4.1176	1.8127	4.384	0.5000*	0.3949*
2264.3982	3.6610	1.1800	2.890	0.2050	0.3697	114.3252	4.1063	1.8526	4.299	0.4000*	0.3251*
2271.7385	3.6589	1.2130	2.848	0.2077	0.3525	156.8288	4.0941	1.8853	4.218	0.3000*	0.2775*
						190.6780	4.0807	1.9130	4.137	0.2000*	0.2371*
	<i>M</i> = 1.40	<i>Y</i> = 0.40	<i>Z</i> = 0.01			217.4790	4.0678	1.9374	4.061	0.1000*	0.1989*
						223.8305	4.0652R	1.9444	4.043	0.0731*	0.1898*
0.0000	3.9929	1.0209	4.481	0.5900*	0.1508*	228.8056	4.0656	1.9526	4.037	0.0500*	0.1812*
187.7743	3.9850	1.0530	4.417	0.5000*	0.1690*	234.9595	4.0712	1.9681	4.043	0.0200*	0.1659*
361.0051	3.9752	1.0844	4.347	0.4000*	0.1569*	236.8243	4.0795	1.9803	4.064	0.0100*	0.1530*
502.0855	3.9643	1.1122	4.276	0.3000*	0.1420*	238.3727	4.1040B	2.0229	4.120	0.0011*	0.0674*
618.3005	3.9520	1.1360	4.202	0.2000*	0.1244*	238.7294	4.1001	2.0339	4.093	0.0000*	---
711.4250	3.9402	1.1573	4.134	0.1000*	0.1046*	250.2802	4.0842	2.1000	3.964	0.3091	---
732.5309	3.9380R	1.1634	4.119	0.0743*	0.0977*	257.3309	4.0500	2.1373	3.789	0.3233	---
750.2113	3.9388	1.1720	4.114	0.0500*	0.0944*	259.6437	4.0100	2.1434	3.623	0.3290	---
771.2282	3.9448	1.1891	4.121	0.0200*	0.0854*	260.8391	3.9700	2.1355	3.471	0.3319	---
777.6510	3.9532	1.2036	4.140	0.0100*	0.0792*	261.6128	3.9300	2.1184	3.328	0.3332	---
783.1739	3.9764B	1.2509	4.185	0.0012*	0.0239*	262.1650	3.8900	2.0947	3.192	0.3339	---
795.3075	3.9720	1.2778	4.141	0.0000*	---	262.5812	3.8500	2.0654	3.061	0.3343	---
838.4120	3.9669	1.3200	4.078	0.1633	---	262.9014	3.8100	2.0315	2.935	0.3345	---
885.9156	3.9492	1.3700	3.957	0.1769	---	263.1563	3.7700	1.9927	2.814	0.3346	---
913.2483	3.9200	1.3993	3.811	0.1895	---	263.3751	3.7300	1.9460	2.701	0.3347	---
925.5698	3.8900	1.4082	3.682	0.1956	---	263.5884	3.7020	1.8800	2.655	0.3347	2.1958
933.0366	3.8600	1.4072	3.563	0.1991	---	263.7673	3.6866	1.8100	2.663	0.3348	2.1594
938.2429	3.8300	1.3997	3.451	0.2014	---	263.9789	3.6744	1.7590	2.665	0.3348	1.9814
942.2314	3.8000	1.3870	3.343	0.2031	---	264.4276	3.6596	1.8200	2.545	0.3348	1.4811
945.5145	3.7700	1.3698	3.241	0.2045	---	264.9234	3.6531	1.8900	2.449	0.3348	1.1632
949.0426	3.7400	1.3402	3.150	0.2058	1.3999	265.5191	3.6474	1.9600	2.356	0.3349	0.8968
952.1438	3.7209	1.3000	3.114	0.2069	1.3974	266.1498	3.6425	2.0300	2.267	0.3349	0.7074
954.9100	3.7071	1.2500	3.109	0.2078	1.3829	266.8566	3.6375	2.1000	2.177	0.3350	0.5850
957.3825	3.6977	1.2000	3.121	0.2086	1.3449	267.6517	3.6326	2.1700	2.087	0.3358	0.5112
961.1766	3.6884	1.1500	3.134	0.2096	1.2257	268.5039	3.6274	2.2400	1.996	0.3370	0.4639
965.3276	3.6825	1.1373	3.123	0.2107	1.0927	268.8916	3.6253	2.2751	1.953	0.3389	0.4532
976.4998	3.6740	1.1800	3.047	0.2139	0.8098						
984.8601	3.6701	1.2300	2.981	0.2169	0.6791						
992.5970	3.6664	1.2800	2.916	0.2201	0.5706						
999.8443	3.6635	1.3300	2.855	0.2234	0.4946	0.0000	4.1951	2.1656	4.446	0.5900*	0.5350*
1006.7961	3.6601	1.3800	2.791	0.2269	0.4437	32.2442	4.1833	2.2028	4.362	0.5000*	0.5532*
1013.2542	3.6575	1.4300	2.730	0.2305	0.4074	63.9516	4.1723	2.2459	4.275	0.4000*	0.4430*
1016.5746	3.6558	1.4567	2.697	0.2325	0.3870	87.1641	4.1604	2.2808	4.192	0.3000*	0.3879*
	<i>M</i> = 1.75	<i>Y</i> = 0.40	<i>Z</i> = 0.01			106.0072	4.1472	2.3116	4.109	0.2000*	0.3312*
						120.8236	4.1343	2.3389	4.030	0.1000*	0.2815*
						124.1799	4.1317R	2.3461	4.012	0.0748*	0.2634*
0.0000	4.0641	1.4011	4.483	0.5900*	0.2681*	127.0826	4.1319	2.3548	4.004	0.0500*	0.2514*
103.9927	4.0522	1.4331	4.403	0.5000*	0.2795*	130.4208	4.1372	2.3697	4.010	0.0200*	0.2347*
206.3659	4.0411	1.4704	4.321	0.4000*	0.2306*	131.4448	4.1452	2.3807	4.031	0.0100*	0.2177*
283.4032	4.0290	1.5006	4.243	0.3000*	0.2002*	132.2885	4.1695B	2.4196	4.090	0.0012*	0.1112*
344.9226	4.0156	1.5258	4.164	0.2000*	0.1712*	132.4808	4.1654	2.4326	4.060	0.0000*	---
393.8628	4.0029	1.5481	4.091	0.1000*	0.1446*	136.4232	4.1488	2.4900	3.937	0.4209	---
405.5457	4.0004R	1.5548	4.074	0.0727*	0.1391*	139.8103	4.1100	2.5287	3.743	0.4325	---
414.5530	4.0010	1.5630	4.068	0.0500*	0.1326*	140.7326	4.0700	2.5341	3.577	0.4392	---
425.8726	4.0068	1.5793	4.075	0.0200*	0.1202*	141.2268	4.0300	2.5268	3.425	0.4396	---
429.2902	4.0152	1.5926	4.095	0.0100*	0.1093*	141.5471	3.9900	2.5116	3.280	0.4396	---
432.1229	4.0394B	1.6376	4.147	0.0012*	0.0425*	141.7741	3.9500	2.4903	3.141	0.4396	---
434.9815	4.0334	1.6632	4.098	0.0000*	---	141.9442	3.9100	2.4641	3.007	0.4396	---
461.5675	4.0217	1.7200	3.994	0.2299	---	142.0755	3.8700	2.4435	2.878	0.4396	---
475.1886	4.0000	1.7543	3.873	0.2465	---	142.1782	3.8300	2.3989	2.753	0.4396	---
481.5623	3.9700	1.7688	3.739	0.2525	---	142.2596	3.7900	2.3612	2.630	0.4396	---
484.6947	3.9400	1.7695	3.618	0.2563	---	142.3254	3.7500	2.3204	2.511	0.4396	---
486.7867	3.9100	1.7628	3.504	0.2581	---	142.3849	3.7100	2.2721	2.399	0.4396	2.7999
488.3430	3.8800	1.7509	3.396	0.2582	---	142.4344	3.6869	2.2200	2.359	0.4396	2.7931
489.5610	3.8500	1.7349	3.292	0.2582	---	142.4877	3.6716	2.1600	2.358	0.4396	2.7336
490.5312	3.8200	1.7150	3.192	0.2582	---	142.5197	3.6637	2.1381	2.348	0.4396	2.6329
491.3354	3.7900	1.6919	3.095	0.2582	---	142.6066	3.6493	2.1900	2.239	0.4396	2.1113
492.0230	3.7600	1.6651	3.002	0.2586	---	142.6754	3.6433	2.2500	2.155	0.4396	1.7969
492.7521	3.7300	1.6255	2.922	0.2591	1.7499	142.8018	3.6376	2.3100	2.072	0.4396	1.4872
493.4651	3.7103	1.5700	2.899	0.2595	1.7452	142.9779	3.6323	2.3700	1.991	0.4396	1.2289
494.0631	3.6975	1.5100	2.908	0.2598	1.7215	143.1751	3.6276	2.4300	1.912	0.4396	1.0096

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
143.2776	3.6255	2.4594	1.874	0.4396	0.9103	13719.2815	3.6454	0.2900	3.717	0.1546	0.6246
	$M = 3.50 \quad Y = 0.40 \quad Z = 0.01$					13869.6710	3.6410	0.3500	3.640	0.1558	0.5234
0.0000	4.2531	2.5134	4.427	0.5900*	0.7557*	14034.3617	3.6324	0.5900	3.365	0.1678	0.3084
19.4756	4.2413	2.5531	4.340	0.5000*	0.6888*	14367.9606	3.6305	0.6500	3.298	0.1727	0.2926
37.1540	4.2305	2.5947	4.256	0.4000*	0.6180*	14418.9611	3.6284	0.7100	3.229	0.1778	0.2702
51.4446	4.2192	2.6331	4.172	0.3000*	0.5372*	14461.9310	3.6263	0.7700	3.161	0.1827	0.2594
62.7749	4.2063	2.6668	4.087	0.2000*	0.4499*	14498.2427	3.6240	0.8300	3.092	0.1875	0.2547
71.6123	4.1936	2.6967	4.006	0.1000*	0.3790*	14513.7458	3.6228	0.8574	3.059	0.1898	0.2518
74.0290	4.1908R	2.7063	3.985	0.0683*	0.3575*						
75.2926	4.1913	2.7132	3.981	0.0500*	0.3447*						
77.2828	4.1966	2.7278	3.987	0.0200*	0.3168*						
77.8879	4.2044	2.7381	4.008	0.0100*	0.3030*						
78.4038	4.2284B	2.7745	4.067	0.0011*	0.1570*	0.0000	3.7407	0.1167	4.327	0.7600*	1.2476
78.5183	4.2224	2.7889	4.029	0.0000*	- - -	569.9053	3.7419	0.1388	4.310	0.7000*	1.2479
79.4843	4.2094	2.8300	3.936	0.5626	- - -	1474.4615	3.7436	0.1753	4.280	0.6000*	1.2486
81.7095	4.1600	2.8789	3.689	0.5700	- - -	2313.0782	3.7448	0.2113	4.249	0.5000*	1.2489
82.1895	4.1100	2.8828	3.486	0.5700	- - -	3067.7870	3.7455	0.2450	4.218	0.4000*	1.2491
82.4322	4.0600	2.8712	3.297	0.5700	- - -	3730.6650	3.7454	0.2751	4.188	0.3000*	1.2492
82.5837	4.0100	2.8502	3.118	0.5700	- - -	4275.8660	3.7445	0.2985	4.161	0.2000*	0.0003*
82.6871	3.9600	2.8218	2.947	0.5700	- - -	5382.9621	3.7366	0.3254	4.102	0.1000*	0.0245*
82.7602	3.9100	2.7868	2.782	0.5700	- - -	5491.1035	3.7358R	0.3297	4.095	0.0707*	0.0236*
82.8139	3.8600	2.7469	2.621	0.5700	- - -	5565.1326	3.7360	0.3367	4.089	0.0500*	0.0202*
82.8540	3.8100	2.7035	2.465	0.5700	- - -	5667.5947	3.7380	0.3574	4.076	0.0200*	0.0092*
82.8846	3.7600	2.6577	2.311	0.5700	- - -	5701.8169	3.7394	0.3730	4.066	0.0100*	1.2489
82.9090	3.7100	2.6091	2.159	0.5700	3.5000	5717.7976	3.7396B	0.3754	4.064	0.0070*	1.2490
82.9275	3.6773	2.5600	2.078	0.5700	3.4957	6362.4774	3.7336	0.4098	4.006	0.0000*	1.2484
82.9440	3.6613	2.5100	2.064	0.5700	3.4363	6912.7646	3.7263	0.4500	3.936	0.1155	1.2470
82.9597	3.6498	2.4835	2.044	0.5700	3.2447	7637.4430	3.7000	0.4738	3.807	0.1442	1.2238
82.9784	3.6384	2.5300	1.952	0.5700	2.7575	7794.6655	3.6834	0.4300	3.785	0.1494	1.1532
82.9900	3.6319	2.5800	1.876	0.5700	2.3863	7942.9777	3.6642	0.3800	3.758	0.1527	0.9815
83.0025	3.6277	2.6300	1.809	0.5700	2.1202	7972.6917	3.6610	0.3769	3.748	0.1531	0.9393
83.0223	3.6231	2.6750	1.746	0.5700	1.8376	8152.1130	3.6484	0.4200	3.655	0.1557	0.7018
	$M = 0.90 \quad Y = 0.20 \quad Z = 0.04$					8257.8432	3.6445	0.4700	3.589	0.1577	0.5864
						8348.7609	3.6419	0.5200	3.529	0.1605	0.5097
						8431.4989	3.6400	0.5700	3.471	0.1639	0.4408
0.0000	3.6619	-0.5834	4.569	0.7600*	0.8413	8502.5101	3.6381	0.6200	3.414	0.1679	0.3856
2039.2980	3.6642	-0.5617	4.557	0.7000*	0.8441	8554.7453	3.6365	0.6700	3.357	0.1723	0.3454
5386.6754	3.6684	-0.5234	4.536	0.6000*	0.8466	8597.4727	3.6349	0.7200	3.301	0.1767	0.3143
8682.1223	3.6726	-0.4813	4.510	0.5000*	0.8483	8634.5173	3.6330	0.7700	3.243	0.1810	0.2967
11932.9099	3.6767	-0.4343	4.480	0.4000*	0.8505	8666.4651	3.6312	0.8200	3.186	0.1851	0.2810
15139.5138	3.6807	-0.3819	4.443	0.3000*	0.8549	8683.1233	3.6299	0.8485	3.152	0.1875	0.2759
18296.5211	3.6841	-0.3228	4.398	0.2000*	0.8551						
21518.5041	3.6867	-0.2532	4.339	0.1000*	0.8561						
23336.2502	3.6873	-0.2083	4.296	0.0500*	0.8551	8500.0000	3.7721	0.3640	4.255	0.7600*	- - -
23704.1049	3.6874T	-0.1989	4.287	0.0403*	0.8545	339.2753	3.7733	0.3829	4.241	0.7000*	- - -
24474.6726	3.6872	-0.1785	4.266	0.0200*	0.8533	858.7090	3.7747	0.4121	4.217	0.6000*	- - -
24907.0958	3.6869	-0.1664	4.253	0.0100*	0.8509	1313.9098	3.7753	0.4379	4.194	0.5000*	0.0008*
26963.5757	3.6838	-0.0991	4.173	0.0000*	0.8432	1935.5242	3.7740	0.4703	4.156	0.4000*	0.0169*
28867.5743	3.6704	-0.0300	4.050	0.1411	0.7963	2618.2423	3.7671	0.4946	4.104	0.3000*	0.0403*
29919.2098	3.6433	0.0400	3.872	0.1492	0.5902	3108.4254	3.7577	0.5030	4.058	0.2000*	0.0505*
30209.9997	3.6374	0.1100	3.778	0.1505	0.4867	3400.2295	3.7512	0.5060	4.029	0.1000*	0.0478*
30428.1202	3.6344	0.1800	3.696	0.1515	0.4184	3517.7832	3.7501R	0.5134	4.017	0.0545*	0.0450*
30617.6540	3.6323	0.2500	3.618	0.1528	0.3552	3528.7869	3.7504	0.5159	4.016	0.0500*	0.0439*
30790.1760	3.6306	0.3200	3.541	0.1549	0.3218	3601.1957	3.7541	0.5390	4.008	0.0200*	0.0335*
30948.3367	3.6288	0.3900	3.464	0.1584	0.2929	3623.7669	3.7584	0.5598	4.004	0.0100*	0.0229*
31090.8053	3.6270	0.4600	3.386	0.1631	0.2695	3646.1498	3.7643B	0.5932	3.994	0.0018*	- - -
31190.8983	3.6253	0.5300	3.310	0.1686	0.2553	3885.5507	3.7575	0.6070	3.953	0.0000*	- - -
31267.0808	3.6232	0.6000	3.231	0.1743	0.2461	4295.2193	3.7464	0.6400	3.876	0.1117	1.3999
31329.9520	3.6207	0.6700	3.151	0.1799	0.2427	4745.9491	3.7200	0.6693	3.741	0.1411	1.3977
31372.9545	3.6188	0.7251	3.089	0.1843	0.2378	4870.1888	3.6996	0.6300	3.699	0.1488	1.3789
	$M = 1.10 \quad Y = 0.20 \quad Z = 0.04$					4912.8483	3.6891	0.5900	3.697	0.1509	1.3465
						4946.3613	3.6805	0.5500	3.703	0.1523	1.2863
0.0000	3.7115	-0.1635	4.435	0.7600*	1.0801	4988.2482	3.6711	0.5100	3.705	0.1537	1.1827
959.2982	3.7126	-0.1410	4.417	0.7000*	1.0809	5065.2349	3.6592	0.4878	3.679	0.1557	1.0041
2514.9711	3.7146	-0.1024	4.386	0.6000*	1.0829	5166.6460	3.6511	0.5200	3.615	0.1586	0.8062
4011.5139	3.7163	-0.0615	4.353	0.5000*	1.0860	5242.8656	3.6473	0.5600	3.560	0.1616	0.6806
5430.1682	3.7178	-0.0189	4.316	0.4000*	1.0879	5308.7470	3.6450	0.6000	3.510	0.1648	0.5925
6752.0839	3.7187	0.0239	4.277	0.3000*	1.0896	5361.5611	3.6429	0.6400	3.462	0.1685	0.5118
7497.8561	3.7189T	0.0494	4.252	0.2397*	1.0903	5403.7959	3.6410	0.6800	3.414	0.1724	0.4554
7969.3940	3.7188	0.0660	4.235	0.2000*	1.0903	5440.4488	3.6393	0.7200	3.368	0.1761	0.4046
9091.5729	3.7180	0.1060	4.192	0.1000*	1.0908	5472.3821	3.6380	0.7600	3.322	0.1797	0.3648
9555.3573	3.7171	0.1213	4.173	0.0500*	1.0903	5500.7696	3.6362	0.8000	3.275	0.1832	0.3432
9824.5968	3.7164	0.1303	4.161	0.0200*	1.0898	5523.4664	3.6351	0.8359	3.235	0.1862	0.3208
9975.7929	3.7160	0.1363	4.154	0.0100*	1.0898						
11184.6761	3.7121	0.1931	4.081	0.0000*	1.0872						
12279.8839	3.7029	0.2500	3.987	0.1286	1.0773						
13149.4230	3.6800	0.2613	3.884	0.1479	1.0018						
13455.8048	3.6593	0.2382	3.825	0.1524	0.8468						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
$M = 1.55 \quad Y = 0.20 \quad Z = 0.04$											
0.0000	3.8140	0.5763	4.254	0.7600*	0.0268*	793.5583	3.8634	1.2720	3.908	0.1000*	0.1125*
256.8934	3.8148	0.5940	4.240	0.7000*	0.0299*	811.7344	3.8609R	1.2742	3.896	0.0716*	0.1069*
677.5993	3.8144	0.6212	4.211	0.6000*	0.0419*	841.9831	3.8676	1.2977	3.899	0.0200*	0.0909*
1099.4559	3.8102	0.6434	4.172	0.5000*	0.0620*	847.2272	3.8764	1.3164	3.916	0.0100*	0.0818*
1527.0883	3.8012	0.6598	4.120	0.4000*	0.0713*	851.5594	3.8985B	1.3701	3.951	0.0013*	0.0213*
1925.0337	3.7888	0.6706	4.059	0.3000*	0.0762*	863.7885	3.8939	1.3805	3.922	0.0000*	---
2166.6575	3.7778	0.6706	4.015	0.2000*	0.0721*	935.6172	3.8700	1.4173	3.789	0.2093	---
2377.4825	3.7682	0.6712	3.976	0.1000*	0.0652*	954.5630	3.8400	1.4056	3.681	0.2112	---
2448.7958	3.7665R	0.6755	3.965	0.0620*	0.0606*	962.5486	3.8100	1.3794	3.587	0.2149	---
2469.7390	3.7672	0.6804	3.963	0.0500*	0.0588*	967.7149	3.7800	1.3457	3.501	0.2167	---
2520.9592	3.7716	0.7014	3.960	0.0200*	0.0497*	971.6046	3.7500	1.3038	3.423	0.2176	---
2536.7401	3.7780	0.7220	3.965	0.0100*	0.0405*	974.9648	3.7239	1.2500	3.372	0.2182	2.1997
2547.5125	3.7899	0.7600	3.974	0.0028*	0.0150*	977.6942	3.7063	1.1900	3.362	0.2185	2.1964
2550.2602	3.7929B	0.7712	3.975	0.0013*	---	979.8999	3.6940	1.1300	3.373	0.2187	2.1821
2630.5389	3.7888	0.7852	3.945	0.0000*	---	981.9171	3.6843	1.0700	3.394	0.2188	2.1383
2949.6060	3.7696	0.8200	3.833	0.1234	---	984.2938	3.6749	1.0100	3.416	0.2189	2.0326
3189.0194	3.7400	0.8353	3.699	0.1472	1.5499	989.8316	3.6612	0.9608	3.411	0.2190	1.6102
3265.0720	3.7165	0.8000	3.641	0.1543	1.5463	999.5307	3.6508	1.0200	3.310	0.2191	1.0787
3291.8206	3.7038	0.7600	3.630	0.1565	1.5340	1007.2977	3.6462	1.0800	3.232	0.2193	0.7911
3310.4214	3.6943	0.7200	3.632	0.1578	1.5101	1016.3527	3.6426	1.1400	3.157	0.2199	0.5657
3327.0677	3.6865	0.6800	3.641	0.1587	1.4718	1027.4927	3.6392	1.2000	3.083	0.2216	0.4474
3344.6841	3.6790	0.6400	3.651	0.1596	1.4023	1039.1681	3.6361	1.2600	3.011	0.2255	0.3697
3372.1753	3.6698	0.6000	3.654	0.1607	1.2738	1054.3653	3.6327	1.3200	2.938	0.2316	0.3283
3420.0907	3.6606	0.5859	3.631	0.1626	1.0669	1064.6086	3.6294	1.3769	2.867	0.2358	0.3094
3498.9418	3.6525	0.6200	3.565	0.1663	0.8470	$M = 2.80 \quad Y = 0.20 \quad Z = 0.04$					
3553.9174	3.6487	0.6600	3.509	0.1702	0.7212						
3596.1058	3.6463	0.7000	3.460	0.1741	0.6183	0.0000	4.0294	1.6387	4.310	0.7600*	0.3788*
3632.4209	3.6443	0.7400	3.412	0.1779	0.5455	55.8599	4.0199	1.6466	4.265	0.7000*	0.3921*
3664.5574	3.6426	0.7800	3.365	0.1817	0.4724	143.1481	4.0066	1.6640	4.194	0.6000*	0.3368*
3693.0827	3.6411	0.8200	3.319	0.1852	0.4140	214.9075	3.9940	1.6791	4.128	0.5000*	0.2939*
3719.3642	3.6395	0.8600	3.272	0.1888	0.3677	275.7636	3.9806	1.6907	4.063	0.4000*	0.2624*
3724.6915	3.6392	0.8686	3.263	0.1896	0.3637	326.8569	3.9661	1.6980	3.998	0.3000*	0.2202*
$M = 1.75 \quad Y = 0.20 \quad Z = 0.04$											
0.0000	3.8681	0.8132	4.287	0.7600*	0.0951*	405.3536	3.9506	1.7011	3.933	0.2000*	0.1872*
191.7815	3.8660	0.8270	4.264	0.7000*	0.1043*	420.5060	3.9339	1.7112	3.856	0.1000*	0.1547*
515.0837	3.8592	0.8465	4.218	0.6000*	0.1136*	428.9483	3.9399	1.7277	3.863	0.0200*	0.1284*
802.6430	3.8493	0.8604	4.164	0.5000*	0.1253*	431.5546	3.9485	1.7450	3.881	0.0100*	0.1163*
1057.3233	3.8373	0.8700	4.107	0.4000*	0.1129*	433.6851	3.9707B	1.7954	3.919	0.0013*	0.0338*
1254.2892	3.8243	0.8733	4.051	0.3000*	0.1049*	438.4757	3.9644	1.8051	3.884	0.0000*	---
1425.1992	3.8103	0.8732	3.996	0.2000*	0.0934*	466.3279	3.9400	1.8356	3.756	0.2862	---
1570.0247	3.7975	0.8729	3.945	0.1000*	0.0814*	473.2599	3.9100	1.8229	3.649	0.2904	---
1603.2210	3.7955R	0.8748	3.935	0.0746*	0.0776*	476.0957	3.8800	1.7971	3.554	0.2904	---
1633.5151	3.7956	0.8807	3.929	0.0500*	0.0729*	477.8290	3.8500	1.7641	3.467	0.2904	---
1668.1504	3.8023	0.9013	3.935	0.0200*	0.0640*	479.0314	3.8200	1.7257	3.386	0.2904	---
1678.8507	3.8108	0.9212	3.949	0.0100*	0.0542*	479.9328	3.7900	1.6831	3.308	0.2904	---
1686.0798	3.8262	0.9600	3.972	0.0028*	0.0304*	480.6514	3.7600	1.6363	3.235	0.2904	---
1688.5484	3.8312B	0.9756	3.977	0.0007*	---	481.2877	3.7300	1.5813	3.170	0.2904	2.8000
1724.8027	3.8276	0.9879	3.950	0.0000*	---	481.9064	3.7048	1.5100	3.140	0.2904	2.7986
1857.6687	3.8171	1.0200	3.876	0.1328	---	482.4551	3.6875	1.4300	3.152	0.2904	2.7840
1982.3202	3.7900	1.0347	3.753	0.1533	---	482.9800	3.6744	1.3500	3.179	0.2904	2.7036
2042.2853	3.7600	1.0227	3.645	0.1629	---	483.7850	3.6600	1.2956	3.176	0.2904	2.3054
2071.0278	3.7336	0.9900	3.572	0.1670	1.7498	485.0497	3.6461	1.3700	3.046	0.2904	1.5450
2086.8872	3.7164	0.9500	3.543	0.1690	1.7482	486.0946	3.6397	1.4500	2.940	0.2904	1.0650
2097.2283	3.7049	0.9100	3.537	0.1701	1.7418	487.3085	3.6342	1.5300	2.838	0.2904	0.6872
2105.5626	3.6961	0.8700	3.542	0.1709	1.7275	490.3865	3.6241	1.6900	2.638	0.2904	0.4156
2113.2667	3.6887	0.8300	3.552	0.1715	1.7005	492.2049	3.6187	1.7700	2.536	0.2904	0.3752
2121.2718	3.6822	0.7900	3.566	0.1720	1.6560	494.3692	3.6134	1.8500	2.435	0.2904	0.3508
2131.1247	3.6757	0.7500	3.580	0.1726	1.5698	497.1609	3.6079	1.9300	2.333	0.2904	0.3393
2150.0505	3.6669	0.7100	3.585	0.1737	1.3917	499.6925	3.6025	2.0100	2.231	0.2933	0.3323
2166.9924	3.6617	0.7011	3.573	0.1747	1.2601	502.3029	3.5970	2.0900	2.129	0.2996	0.3296
2224.4360	3.6528	0.7400	3.498	0.1790	0.9274	503.6330	3.5944	2.1241	2.085	0.3032	0.3308
2259.0248	3.6489	0.7800	3.443	0.1828	0.7800	$M = 3.50 \quad Y = 0.20 \quad Z = 0.04$					
2288.3095	3.6467	0.8200	3.394	0.1863	0.6705						
2314.9442	3.6444	0.8600	3.345	0.1899	0.5575	180.5436	4.0338	2.0887	3.975	0.3000*	0.3007*
2339.2186	3.6426	0.9000	3.298	0.1933	0.4692	0.0000	4.0963	2.0140	4.299	0.7600*	0.5350*
2361.5508	3.6406	0.9400	3.250	0.1968	0.4148	31.2817	4.0866	2.0239	4.251	0.7000*	0.5536*
2366.3714	3.6401	0.9488	3.239	0.1976	0.3971	80.1769	4.0735	2.0451	4.177	0.6000*	0.4692*
$M = 2.20 \quad Y = 0.20 \quad Z = 0.04$											
0.0000	3.9527	1.2246	4.313	0.7600*	0.2390*	152.8418	4.0481	2.0781	4.043	0.4000*	0.3548*
107.6761	3.9449	1.2324	4.274	0.7000*	0.2462*	180.5436	4.0338	2.0887	3.975	0.3000*	0.3007*
272.3698	3.9326	1.2464	4.211	0.6000*	0.2224*	222.8480	4.0041	2.1001	3.845	0.1000*	0.2177*
411.4353	3.9204	1.2582	4.150	0.5000*	0.2044*	228.0297	4.0013R	2.1035	3.830	0.0700*	0.2031*
531.1808	3.9073	1.2668	4.089	0.4000*	0.1791*	231.2432	4.0016	2.1086	3.826	0.0500*	0.1945*
633.0172	3.8930	1.2714	4.027	0.3000*	0.1581*	235.8460	4.0073	2.1240	3.833	0.0200*	0.1816*
720.1567	3.8777	1.2721	3.965	0.2000*	0.1370*	238.4398	4.0384B	2.1879	3.894	0.0012*	0.1610*

TABLE 3—Continued

$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
239.9455	4.0307	2.1968	3.854	0.0000*	---	39299.9709	3.6342	0.3600	3.406	0.1563	0.2634	
253.1322	4.0000	2.2239	3.704	0.3809	---	39412.4512	3.6320	0.4400	3.318	0.1625	0.2518	
255.9683	3.9600	2.2017	3.567	0.3846	---	39502.5300	3.6295	0.5200	3.228	0.1686	0.2436	
257.1424	3.9200	2.1635	3.445	0.3846	---	39578.6543	3.6269	0.6000	3.137	0.1748	0.2375	
257.8372	3.8800	2.1159	3.332	0.3846	---	39642.6178	3.6238	0.6800	3.045	0.1808	0.2348	
258.3016	3.8400	2.0614	3.227	0.3846	---	39670.2800	3.6223	0.7194	2.999	0.1837	0.2336	
258.6402	3.8000	2.0011	3.127	0.3846	---							
258.9008	3.7600	1.9358	3.033	0.3846	---							
259.1200	3.7200	1.8622	2.946	0.3846	---							
259.2888	3.6932	1.7900	2.911	0.3846	3.4984		0.0000	3.7108	-0.3107	4.492	0.6600*	0.8782
259.4512	3.6756	1.7100	2.921	0.3846	3.4715	1095.2373	3.7127	-0.2858	4.475	0.6000*	0.8789	
259.6938	3.6567	1.6313	2.924	0.3846	3.2198	2878.0523	3.7153	-0.2427	4.443	0.5000*	0.8809	
260.0300	3.6392	1.7100	2.775	0.3846	2.2409	4597.0051	3.7177	-0.1966	4.406	0.4000*	0.8825	
260.2380	3.6316	1.7900	2.665	0.3846	1.7286	6230.4815	3.7194	-0.1482	4.364	0.3000*	0.8844	
260.5110	3.6257	1.8700	2.561	0.3846	1.2063	7774.2321	3.7205	-0.0978	4.318	0.2000*	0.8859	
260.8771	3.6198	1.9500	2.458	0.3846	0.7586	9151.2874	3.7206T	-0.0482	4.269	0.1086*	0.8880	
261.3078	3.6139	2.0300	2.354	0.3846	0.5821	9278.5537	3.7206	-0.0434	4.264	0.1000*	0.8879	
261.7868	3.6081	2.1100	2.251	0.3846	0.5063	9989.1999	3.7200	-0.0171	4.236	0.0500*	0.8879	
262.3066	3.6026	2.1900	2.149	0.3846	0.4517	10385.4412	3.7195	-0.0022	4.219	0.0200*	0.8875	
262.9144	3.5968	2.2700	2.046	0.3846	0.4276	10571.0028	3.7192	0.0055	4.210	0.0100*	0.8874	
263.1477	3.5947	2.2974	2.010	0.3846	0.4220	11651.0698	3.7170	0.0600	4.147	0.0000*	0.8869	
$M = 0.90 \quad Y = 0.30 \quad Z = 0.04$												
$M = 4.40 \quad Y = 0.20 \quad Z = 0.04$												
0.0000	4.1624	2.3910	4.286	0.7600*	0.7557*	14158.3325	3.6751	0.1840	3.855	0.1420	0.7567	
18.0202	4.1526	2.4034	4.235	0.7000*	0.7284*	14508.9927	3.6549	0.2400	3.718	0.1465	0.5592	
44.9670	4.1400	2.4275	4.160	0.6000*	0.6522*	14655.3207	3.6496	0.3000	3.637	0.1485	0.4749	
67.5020	4.1281	2.4499	4.090	0.5000*	0.5739*	14774.2231	3.6463	0.3600	3.564	0.1510	0.4107	
86.2072	4.1154	2.4686	4.021	0.4000*	0.4855*	14879.3980	3.6437	0.4200	3.493	0.1543	0.3636	
101.5835	4.1015	2.4827	3.951	0.3000*	0.4176*	14973.7402	3.6414	0.4800	3.424	0.1582	0.3344	
114.4702	4.0864	2.4931	3.880	0.2000*	0.3624*	15048.8700	3.6392	0.5400	3.356	0.1628	0.3111	
125.2191	4.0718	2.5017	3.813	0.1000*	0.3059*	15105.8229	3.6370	0.6000	3.287	0.1676	0.2893	
128.3247	4.0687R	2.5062	3.796	0.0674*	0.2834*	15153.6956	3.6348	0.6600	3.218	0.1724	0.2711	
129.8515	4.0690	2.5109	3.793	0.0500*	0.2778*	15195.1934	3.6321	0.7200	3.147	0.1771	0.2628	
132.4230	4.0746	2.5258	3.800	0.0200*	0.2531*	15231.4598	3.6296	0.7800	3.077	0.1818	0.2527	
133.2091	4.0829	2.5401	3.819	0.0100*	0.2350*	15261.8200	3.6271	0.8379	3.009	0.1863	0.2495	
133.8623	4.1055B	2.5852	3.865	0.0012*	0.0951*							
134.0129	4.1006	2.5807	3.849	0.0000*	---							
139.0383	4.0700	2.6174	3.690	0.5053	---							
140.5695	4.0300	2.6022	3.546	0.5053	---		0.0000	3.7336	-0.0825	4.401	0.6600*	0.9929
141.1419	3.9900	2.5701	3.418	0.5054	---	713.4491	3.7350	-0.0584	4.383	0.6000*	0.9942	
141.4752	3.9500	2.5287	3.299	0.5061	---	1853.0925	3.7370	-0.0174	4.350	0.5000*	0.9951	
141.6938	3.9100	2.4804	3.187	0.5063	---	2917.5237	3.7385	0.0239	4.314	0.4000*	0.9963	
141.8502	3.8700	2.4267	3.081	0.5064	---	3888.0303	3.7394	0.0639	4.278	0.3000*	0.9968	
141.9682	3.8300	2.3686	2.979	0.5064	---	4562.6159	3.7396T	0.0928	4.250	0.2243*	0.9971	
142.0606	3.7900	2.3075	2.880	0.5064	---	4767.0286	3.7395	0.1018	4.241	0.2000*	0.9969	
142.1359	3.7500	2.2445	2.783	0.5064	---	5506.1368	3.7386	0.1328	4.206	0.1000*	0.9971	
142.2007	3.7100	2.1783	2.689	0.5064	---	5787.3902	3.7378	0.1432	4.192	0.0500*	0.9970	
142.2570	3.6797	2.1100	2.637	0.5064	4.3971	5985.0438	3.7373	0.1519	4.182	0.0200*	0.9969	
142.3125	3.6599	2.0400	2.627	0.5064	4.3505	6109.5185	3.7371	0.1584	4.174	0.0100*	0.9969	
142.3680	3.6459	2.0053	2.606	0.5064	4.1093	6810.0841	3.7352	0.2000	4.125	0.0001*	0.9968	
142.4478	3.6296	2.0700	2.476	0.5064	3.3571	7195.9219	3.7336	0.2259	4.093	0.0000*	0.9963	
142.4915	3.6224	2.1400	2.378	0.5064	2.8941	7786.2575	3.7296	0.2700	4.033	0.0994	0.9955	
142.5381	3.6160	2.2100	2.282	0.5064	2.4204	8395.5205	3.7213	0.3200	3.949	0.1184	0.9922	
142.6027	3.6101	2.2800	2.188	0.5064	1.9432	8976.1062	3.7000	0.3467	3.838	0.1373	0.9626	
142.7055	3.6043	2.3500	2.095	0.5064	1.3330	9302.0321	3.6700	0.3072	3.757	0.1456	0.7782	
142.8408	3.5990	2.4200	2.004	0.5064	0.8706	9315.4874	3.6687	0.3071	3.752	0.1458	0.7662	
142.9941	3.5935	2.4900	1.912	0.5064	0.7196	9485.3762	3.6569	0.3500	3.662	0.1489	0.6068	
143.0685	3.5913	2.5216	1.871	0.5064	0.6780	9589.2734	3.6521	0.4000	3.593	0.1513	0.5145	
$M = 0.70 \quad Y = 0.30 \quad Z = 0.04$												
$M = 1.10 \quad Y = 0.30 \quad Z = 0.04$												
0.0000	3.6432	-0.8300	4.632	0.6600*	0.6401	9871.2199	3.6427	0.6000	3.355	0.1653	0.3340	
2806.1090	3.6465	-0.8057	4.621	0.6000*	0.6413	9913.4996	3.6408	0.6500	3.297	0.1695	0.3117	
7452.8606	3.6525	-0.7620	4.601	0.5000*	0.6431	9950.1264	3.6389	0.7000	3.240	0.1736	0.2978	
12084.5837	3.6588	-0.7125	4.577	0.4000*	0.6441	9982.8167	3.6367	0.7500	3.181	0.1776	0.2784	
16732.5189	3.6654	-0.6551	4.546	0.3000*	0.6487	10011.3620	3.6346	0.8000	3.123	0.1816	0.2708	
21443.2948	3.6722	-0.5867	4.505	0.2000*	0.6503	10029.3383	3.6332	0.8346	3.083	0.1843	0.2627	
26381.8306	3.6790	-0.4990	4.445	0.1000*	0.6532							
29303.6101	3.6826	-0.4357	4.395	0.0500*	0.6540							
31336.0307	3.6844	-0.3853	4.352	0.0200*	0.6523							
32027.3585	3.6849	-0.3666	4.336	0.0100*	0.6518		0.0000	3.7549	0.1264	4.319	0.6600*	1.0994
33307.9620	3.6852T	-0.3271	4.297	0.0009*	0.6505		465.3753	3.7559	0.1484	4.301	0.6000*	1.0996
34700.0373	3.6842	-0.2766	4.243	0.0000*	0.6457		1189.1782	3.7575	0.1837	4.272	0.5000*	1.0997
36423.1030	3.6780	-0.2000	4.141	0.1254	0.6267		1838.7439	3.7584	0.2165	4.243	0.4000*	1.0997
37661.9943	3.6601	-0.1200	3.990	0.1353	0.5454		2401.3678	3.7584	0.2451	4.214	0.3000*	1.0998
38183.9090	3.6486	-0.0400	3.864	0.1387	0.4521		3252.0488	3.7554	0.2814	4.166	0.2000*	0.0169*
38492.4169	3.6434	0.0400	3.763	0.1408	0.3906		4029.7023	3.7477	0.3015	4.115	0.1000*	0.0309*
38736.6522	3.6405	0.1200	3.671	0.1431	0.3453		4176.5344	3.7468R	0.3091	4.104	0.0607*	0.0287*
38949.0458	3.6382	0.2000	3.582	0.1463	0.3050		4214.1911	3.7472	0.3146	4.100	0.0500*	0.0265*
39138.9634	3.6362	0.2800	3.494	0.1507	0.2842		4316.8917	3.7498	0.3381	4.087	0.0200*	0.0162*

TABLE 3—Continued

<i>t</i> ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
4349.7888	3.7522	0.3579	4.077	0.0100*	0.0047*	2671.2824	3.6500	0.7900	3.341	0.1798	0.5151
4370.0681	3.7533B	0.3684	4.070	0.0047*	1.0998	2694.9977	3.6477	0.8300	3.291	0.1832	0.4520
4860.6479	3.7475	0.4011	4.015	0.0000*	1.0996	2716.7851	3.6456	0.8700	3.243	0.1865	0.4027
5368.4513	3.7400	0.4500	3.936	0.1041	1.0993	2736.2950	3.6439	0.9100	3.196	0.1897	0.3630
5874.5104	3.7227	0.5000	3.817	0.1284	1.0965	2746.3235	3.6427	0.9314	3.170	0.1915	0.3496
6126.3226	3.7000	0.4846	3.741	0.1408	1.0705	$M = 1.75 \quad Y = 0.30 \quad Z = 0.04$					
6219.5914	3.6851	0.4400	3.726	0.1445	0.9969	0.0000	3.9294	1.0312	4.314	0.6600*	0.1692*
6329.6252	3.6692	0.4045	3.698	0.1478	0.8507	125.4368	3.9220	1.0401	4.275	0.6000*	0.1838*
6484.6152	3.6562	0.4500	3.600	0.1524	0.6297	324.9793	3.9095	1.0557	4.210	0.5000*	0.1658*
6569.4351	3.6522	0.5000	3.534	0.1558	0.5376	489.9144	3.8966	1.0677	4.146	0.4000*	0.1528*
6642.1570	3.6492	0.5500	3.472	0.1596	0.4738	630.7404	3.8826	1.0760	4.082	0.3000*	0.1333*
6697.8177	3.6469	0.6000	3.413	0.1640	0.4225	749.3545	3.8678	1.0804	4.018	0.2000*	0.1165*
6742.6180	3.6449	0.6500	3.355	0.1683	0.3749	849.7550	3.8539	1.0843	3.959	0.1000*	0.0975*
6781.7485	3.6423	0.7000	3.295	0.1726	0.3378	880.6153	3.8513R	1.0889	3.944	0.0645*	0.0908*
6815.3023	3.6404	0.7500	3.237	0.1767	0.3122	892.2809	3.8523	1.0942	3.942	0.0500*	0.0877*
6845.0213	3.6381	0.8000	3.178	0.1808	0.2964	915.6694	3.8591	1.1143	3.949	0.0200*	0.0761*
6863.8062	3.6366	0.8349	3.137	0.1836	0.2866	922.6711	3.8679	1.1337	3.965	0.0100*	0.0687*
	$M = 1.25 \quad Y = 0.30 \quad Z = 0.04$					927.9863	3.8870	1.1800	3.995	0.0020*	0.0314*
0.0000	3.7957	0.3974	4.267	0.6600*	0.0169*	928.6159	3.8899B	1.1893	3.998	0.0012*	0.0095*
299.1002	3.7965	0.4168	4.250	0.6000*	0.0182*	948.6861	3.8858	1.2060	3.965	0.0000*	---
773.4225	3.7967	0.4466	4.221	0.5000*	0.0247*	1026.7377	3.8750	1.2500	3.877	0.1668	---
1279.0545	3.7936	0.4736	4.182	0.4000*	0.0414*	1077.6509	3.8500	1.2689	3.758	0.1798	---
1793.3822	3.7855	0.4933	4.130	0.3000*	0.0521*	1098.7185	3.8200	1.2600	3.647	0.1840	---
2197.1005	3.7755	0.5030	4.080	0.2000*	0.0573*	1109.4029	3.7900	1.2385	3.549	0.1853	---
2478.1377	3.7677	0.5083	4.044	0.1000*	0.0548*	1117.0343	3.7600	1.2086	3.459	0.1878	---
2551.6944	3.7664R	0.5125	4.034	0.0713*	0.0513*	1124.3306	3.7298	1.1600	3.387	0.1898	1.7498
2602.3422	3.7667	0.5197	4.028	0.0500*	0.0490*	1129.2735	3.7126	1.1100	3.368	0.1909	1.7475
2671.1378	3.7705	0.5414	4.022	0.0200*	0.0411*	1133.0401	3.7008	1.0600	3.371	0.1916	1.7380
2692.3766	3.7760	0.5626	4.023	0.0100*	0.0318*	1136.3942	3.6918	1.0100	3.384	0.1922	1.7147
2706.6629	3.7848	0.6000	4.020	0.0031*	0.0092*	1139.9029	3.6843	0.9600	3.404	0.1927	1.6630
2710.4992	3.7865B	0.6086	4.019	0.0016*	- - -	1144.8059	3.6768	0.9100	3.425	0.1933	1.5510
2854.9565	3.7810	0.6255	3.980	0.0000*	- - -	1157.0534	3.6654	0.8756	3.413	0.1946	1.2488
3182.6038	3.7692	0.6600	3.898	0.1038	- - -	1178.1415	3.6572	0.9200	3.336	0.1974	0.8840
3454.9648	3.7538	0.7000	3.796	0.1256	1.2499	1194.2182	3.6530	0.9700	3.269	0.2003	0.6983
3641.1044	3.7300	0.7109	3.690	0.1415	1.2487	1209.2928	3.6494	1.0200	3.205	0.2035	0.5804
3712.1691	3.7109	0.6800	3.645	0.1473	1.2396	1223.5184	3.6469	1.0700	3.145	0.2067	0.4874
3745.0098	3.6989	0.6400	3.637	0.1497	1.2147	1237.2272	3.6439	1.1200	3.083	0.2102	0.4061
3769.9867	3.6896	0.6000	3.640	0.1512	1.1747	1250.0070	3.6411	1.1700	3.022	0.2137	0.3635
3798.8191	3.6807	0.5600	3.644	0.1527	1.0910	1250.1736	3.6411	1.1707	3.021	0.2138	0.3611
3862.9599	3.6677	0.5308	3.621	0.1555	0.9043	$M = 2.20 \quad Y = 0.30 \quad Z = 0.04$					
3951.2601	3.6584	0.5700	3.545	0.1599	0.6938	466.5375	3.9213	1.5028	3.909	0.0500*	0.1193*
4003.0761	3.6548	0.6100	3.490	0.1635	0.6051	478.2911	3.9281	1.5219	3.917	0.0200*	0.1086*
4042.8166	3.6521	0.6500	3.440	0.1672	0.5281	0.0000	4.0041	1.4291	4.314	0.6600*	0.2681*
4076.9781	3.6502	0.6900	3.392	0.1708	0.4752	65.9727	3.9944	1.4368	4.268	0.6000*	0.2873*
4107.3819	3.6480	0.7300	3.343	0.1744	0.4223	173.5567	3.9805	1.4548	4.194	0.5000*	0.2490*
4134.1885	3.6464	0.7700	3.297	0.1778	0.3874	260.3846	3.9669	1.4694	4.125	0.4000*	0.2216*
4158.7856	3.6442	0.8100	3.248	0.1812	0.3640	333.5506	3.9525	1.4803	4.057	0.3000*	0.1914*
4180.7193	3.6427	0.8500	3.202	0.1845	0.3376	394.5370	3.9372	1.4870	3.989	0.2000*	0.1598*
4188.3218	3.6420	0.8642	3.185	0.1857	0.3234	444.9151	3.9232	1.4927	3.927	0.1000*	0.1341*
	$M = 1.40 \quad Y = 0.30 \quad Z = 0.04$					461.2203	3.9203R	1.4979	3.910	0.0631*	0.1235*
0.0000	3.8440	0.6222	4.284	0.6600*	0.0600*	481.9196	3.9369	1.5400	3.934	0.0100*	0.0964*
227.2001	3.8427	0.6389	4.262	0.6000*	0.0700*	484.9271	3.9593B	1.5931	3.971	0.0011*	0.0190*
596.7687	3.8373	0.6613	4.218	0.5000*	0.0829*	491.8898	3.9540	1.6076	3.935	0.0000*	---
958.9427	3.8273	0.6788	4.161	0.4000*	0.0891*	536.6035	3.9300	1.6590	3.788	0.2362	---
1245.9754	3.8153	0.6883	4.103	0.3000*	0.0839*	547.2329	3.9000	1.6556	3.671	0.2466	---
1474.7534	3.8022	0.6923	4.047	0.2000*	0.0774*	551.5085	3.8700	1.6361	3.571	0.2467	---
1670.5842	3.7907	0.6965	3.997	0.1000*	0.0683*	554.1737	3.8400	1.6089	3.478	0.2482	---
1729.7390	3.7886R	0.7013	3.984	0.0659*	0.0664*	556.0672	3.8100	1.5758	3.391	0.2493	---
1756.4214	3.7893	0.7073	3.980	0.0500*	0.0628*	557.5143	3.7800	1.5379	3.309	0.2499	---
1804.1904	3.7955	0.7285	3.984	0.0200*	0.0533*	558.7192	3.7500	1.4947	3.232	0.2503	---
1818.5169	3.8039	0.7493	3.997	0.0100*	0.0451*	559.9683	3.7200	1.4330	3.174	0.2505	2.1997
1826.9316	3.8153	0.7800	4.012	0.0039*	0.0284*	560.9300	3.7022	1.3700	3.165	0.2506	2.1958
1830.7347	3.8225B	0.8033	4.017	0.0013*	0.0012*	561.8121	3.6889	1.3000	3.182	0.2507	2.1745
1887.7949	3.8189	0.8202	3.986	0.0000*	- - -	562.6875	3.6783	1.2300	3.210	0.2508	2.1010
2114.8603	3.8030	0.8600	3.883	0.1180	- - -	564.0908	3.6662	1.1730	3.219	0.2508	1.8356
2289.9330	3.7800	0.8924	3.758	0.1402	- - -	567.5480	3.6520	1.2400	3.095	0.2509	1.1000
2382.1423	3.7500	0.8956	3.635	0.1524	- - -	570.0239	3.6463	1.3100	3.002	0.2509	0.8195
2428.4312	3.7223	0.8600	3.560	0.1582	1.3983	572.8105	3.6414	1.3800	2.912	0.2510	0.5968
2446.8681	3.7080	0.8200	3.542	0.1602	1.3912	575.9329	3.6368	1.4500	2.824	0.2512	0.4703
2459.4306	3.6981	0.7800	3.543	0.1614	1.3737	579.4527	3.6325	1.5200	2.737	0.2517	0.3878
2470.6923	3.6905	0.7400	3.552	0.1623	1.3404	583.1164	3.6281	1.5900	2.649	0.2545	0.3473
2482.6587	3.6837	0.7000	3.565	0.1631	1.2864	587.3156	3.6234	1.6600	2.560	0.2587	0.3302
2499.4021	3.6757	0.6600	3.573	0.1642	1.1751	592.6342	3.6187	1.7300	2.472	0.2649	0.3195
2523.3692	3.6683	0.6399	3.564	0.1656	1.0286	595.0853	3.6162	1.7678	2.424	0.2680	0.3160
2580.1730	3.6589	0.6700	3.496	0.1693	0.8017						
2615.6874	3.6552	0.7100	3.441	0.1729	0.6624						
2645.2897	3.6523	0.7500	3.390	0.1764	0.5924						

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
$M = 2.80 \quad Y = 0.30 \quad Z = 0.04$											
0.0000	4.0777	1.8395	4.303	0.6600*	0.4250*	66.9135	4.1444	2.6962	3.909	0.2000*	0.4374*
37.2274	4.0675	1.8503	4.251	0.6000*	0.4023*	75.0370	4.1303	2.7126	3.836	0.1000*	0.3745*
91.4479	4.0535	1.8707	4.175	0.5000*	0.3606*	78.5371	4.1274	2.7248	3.813	0.0578*	0.3431*
137.0216	4.0401	1.8893	4.103	0.4000*	0.3102*	80.4270	4.1336	2.7412	3.821	0.0200*	0.3110*
174.7897	4.0259	1.9038	4.031	0.3000*	0.2661*	81.0115	4.1417	2.7548	3.840	0.0100*	0.2916*
205.4877	4.0108	1.9138	3.961	0.2000*	0.2221*	81.5190	4.1660B	2.8021	3.890	0.0008*	0.0951*
230.6949	3.9970	1.9225	3.897	0.1000*	0.1843*	81.5722	4.1621	2.7985	3.878	0.0000*	---
239.9717	3.9941R	1.9296	3.878	0.0579*	0.1686*	84.8214	4.1200	2.8514	3.656	0.5839	---
241.5616	3.9949	1.9330	3.878	0.0500*	0.1655*	85.6371	4.0700	2.8371	3.471	0.5839	---
247.4677	4.0018	1.9514	3.887	0.0200*	0.1518*	85.9679	4.0200	2.8025	3.305	0.5839	---
249.3055	4.0104	1.9679	3.905	0.0100*	0.1371*	86.1507	3.9700	2.7556	3.152	0.5839	---
250.8837	4.0324B	2.0177	3.943	0.0008*	0.0134*	86.2704	3.9200	2.7001	3.008	0.5839	---
253.4964	4.0258	2.0318	3.903	0.0000*	---	86.3549	3.8700	2.6381	2.870	0.5839	---
274.4363	3.9900	2.0804	3.711	0.3253	---	86.4177	3.8200	2.5718	2.736	0.5839	---
277.6659	3.9500	2.0633	3.568	0.3337	---	86.4659	3.7700	2.5037	2.604	0.5839	---
279.1049	3.9100	2.0300	3.441	0.3359	---	86.5041	3.7200	2.4356	2.472	0.5839	---
279.9878	3.8700	1.9871	3.324	0.3366	---	86.5343	3.6786	2.3700	2.372	0.5839	4.3992
280.5952	3.8300	1.9367	3.215	0.3368	---	86.5635	3.6525	2.3000	2.338	0.5839	4.3535
281.0455	3.7900	1.8802	3.111	0.3369	---	86.5875	3.6387	2.2686	2.314	0.5839	4.1591
281.3969	3.7500	1.8181	3.013	0.3369	---	86.6205	3.6225	2.3300	2.188	0.5839	3.4134
281.7185	3.7107	1.7400	2.934	0.3369	2.7998	86.6597	3.6074	2.4700	1.987	0.5839	2.4565
281.9707	3.6887	1.6600	2.926	0.3369	2.7924	86.6898	3.6009	2.5400	1.891	0.5839	1.8806
282.2037	3.6742	1.5800	2.948	0.3369	2.7380	86.7454	3.5955	2.6100	1.800	0.5839	1.4696
282.5472	3.6585	1.5247	2.941	0.3369	2.4256	86.8278	3.5892	2.6800	1.705	0.5839	1.0600
283.0185	3.6445	1.6000	2.810	0.3369	1.7505	86.8325	3.5889	2.6838	1.700	0.5839	1.0372
283.4347	3.6373	1.6800	2.701	0.3369	1.3037	$M = 0.90 \quad Y = 0.20 \quad Z = 0.10$					
283.9642	3.6312	1.7600	2.596	0.3369	0.8832	33601.2344	3.6389	-0.4387	4.333	0.0500*	0.8314
284.5712	3.6252	1.8400	2.492	0.3369	0.6106	35335.0311	3.6395	-0.4116	4.308	0.0200*	0.8305
285.2415	3.6195	1.9200	2.390	0.3369	0.5047	36130.1092	3.6151	-0.7707	4.570	0.7000*	0.8137
285.9805	3.6137	2.0000	2.286	0.3369	0.4390	36182.4258	3.6178	-0.7365	4.546	0.6000*	0.8170
286.8130	3.6081	2.0800	2.184	0.3369	0.4110	37610.8544	3.6209	-0.6985	4.521	0.5000*	0.8169
287.7449	3.6018	2.1600	2.079	0.3369	0.3931	37633.2481	3.6246	-0.6547	4.492	0.4000*	0.8236
288.8059	3.5960	2.2400	1.976	0.3369	0.3810	37635.9186	3.6290	-0.6039	4.458	0.3000*	0.8274
289.2339	3.5938	2.2679	1.939	0.3369	0.3810	37635.9186	3.6335	-0.5450	4.417	0.2000*	0.8309
$M = 3.50 \quad Y = 0.30 \quad Z = 0.04$											
0.0000	4.1435	2.2118	4.291	0.6600*	0.6003*	0.0000	3.6151	-0.7707	4.570	0.7000*	0.8137
20.9551	4.1330	2.2244	4.236	0.6000*	0.5780*	37610.8544	3.6398T	-0.3701	4.268	0.0014*	0.8265
52.2258	4.1194	2.2494	4.157	0.5000*	0.4865*	39882.3285	3.6386	-0.3206	4.214	0.0000*	0.8182
77.4734	4.1066	2.2714	4.083	0.4000*	0.4239*	42567.6889	3.6309	-0.2500	4.112	0.1393	0.7820
98.4034	4.0928	2.2895	4.010	0.3000*	0.3630*	44217.0884	3.6072	-0.1700	3.937	0.1488	0.5896
115.5516	4.0780	2.3033	3.937	0.2000*	0.3084*	44557.8869	3.6007	-0.0900	3.831	0.1497	0.4669
129.7500	4.0641	2.3155	3.869	0.1000*	0.2586*	44792.5204	3.5979	-0.0100	3.740	0.1502	0.3759
134.7648	4.0610R	2.3230	3.849	0.0593*	0.2434*	44995.0623	3.5961	0.0700	3.653	0.1508	0.3262
135.8372	4.0618	2.3267	3.849	0.0500*	0.2377*	45176.4963	3.5947	0.1500	3.567	0.1519	0.2887
139.2093	4.0682	2.3440	3.857	0.0200*	0.2154*	45342.2663	3.5933	0.2300	3.482	0.1549	0.2609
140.2405	4.0767	2.3592	3.876	0.0100*	0.1985*	45492.1682	3.5917	0.3100	3.395	0.1597	0.2420
141.1225	4.1002B	2.4085	3.921	0.0009*	0.0477*	45616.8516	3.5898	0.3900	3.308	0.1652	0.2343
141.6284	4.0920	2.4188	3.878	0.0000*	---	45713.7118	3.5877	0.4700	3.219	0.1710	0.2248
150.2895	4.0600	2.4641	3.704	0.4283	---	45793.1516	3.5852	0.5500	3.130	0.1768	0.2215
152.0277	4.0200	2.4529	3.556	0.4340	---	45859.2614	3.5826	0.6300	3.039	0.1826	0.2207
152.7366	3.9800	2.4248	3.424	0.4340	---	45910.2114	3.5800	0.7015	2.957	0.1877	0.2200
153.1558	3.9400	2.3867	3.302	0.4340	---	$M = 1.10 \quad Y = 0.20 \quad Z = 0.10$					
153.4383	3.9000	2.3415	3.187	0.4340	---	36130.1092	3.6398	-0.3980	4.295	0.0100*	0.8298
153.6436	3.8600	2.2905	3.078	0.4340	---	36182.4258	3.6398T	-0.3701	4.268	0.0014*	0.8265
153.7999	3.8200	2.2350	2.973	0.4340	---	37633.2481	3.6679	-0.2607	4.358	0.4000*	1.0653
153.9231	3.7800	2.1757	2.873	0.4340	---	37635.9186	3.6698	-0.2192	4.324	0.3000*	1.0676
154.0234	3.7400	2.1133	2.775	0.4340	---	37635.9186	3.6706	-0.1519	4.260	0.1193*	1.0668
154.1053	3.7044	2.0500	2.696	0.4340	3.4999	37635.9186	3.6679	-0.2607	4.358	0.4000*	1.0653
154.1812	3.6795	1.9800	2.667	0.4340	3.4932	37635.9186	3.6698	-0.2192	4.324	0.3000*	1.0676
154.2581	3.6629	1.9100	2.670	0.4340	3.4309	37635.9186	3.6706	-0.1804	4.289	0.2000*	1.0675
154.3450	3.6491	1.8815	2.643	0.4340	3.1642	37635.9186	3.6707T	-0.1519	4.260	0.1193*	1.0668
154.4561	3.6348	1.9500	2.518	0.4340	2.5631	37635.9186	3.6706	-0.1453	4.253	0.1000*	1.0663
154.5305	3.6279	2.0200	2.420	0.4340	2.1256	37635.9186	3.6701	-0.1277	4.234	0.0500*	1.0660
154.6271	3.6216	2.0900	2.325	0.4340	1.7436	37635.9186	3.6697	-0.1137	4.218	0.0200*	1.0638
154.7731	3.6160	2.1600	2.232	0.4340	1.2772	37635.9186	3.6694	-0.1046	4.208	0.0100*	1.0641
154.9607	3.6104	2.2300	2.140	0.4340	0.8901	37635.9186	3.6671	-0.0500	4.144	0.0000*	1.0602
155.1749	3.6048	2.3000	2.047	0.4340	0.6705	37635.9186	3.6661	-0.0349	4.125	0.0000*	1.0575
155.4087	3.5993	2.3700	1.955	0.4340	0.5982	37635.9186	3.6594	0.0200	4.043	0.1311	1.0427
155.5271	3.5967	2.4044	1.911	0.4340	0.5586	37635.9186	3.6300	0.0380	3.908	0.1524	0.8972
$M = 4.40 \quad Y = 0.30 \quad Z = 0.04$											
0.0000	4.2078	2.5835	4.275	0.6600*	0.8479*	21390.7892	3.6030	0.2100	3.628	0.1553	0.4255
12.5762	4.1978	2.6002	4.219	0.6000*	0.7910*	21497.3862	3.6013	0.2700	3.561	0.1561	0.3732
30.4779	4.1848	2.6293	4.138	0.5000*	0.6720*	21596.2326	3.5998	0.3300	3.495	0.1579	0.3211
44.9323	4.1724	2.6553	4.062	0.4000*	0.5916*	21687.2543	3.5983	0.3900	3.429	0.1611	0.2916
57.0346	4.1590	2.6779	3.986	0.3000*	0.5084*	21771.8818	3.5967	0.4500	3.362	0.1651	0.2661

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub></i> <sup>(*)</sup> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub></i> <sup>(*)</sup> <i>M<sub>CE</sub></i>	<i>t</i> (10 <sup>6</sup> yr)	log <i>T</i> <sub>eff</sub>	log <i>L</i>	log <i>g</i>	<i>X<sub>C</sub></i> <sup>(*)</sup> <i>M<sub>SH</sub></i>	<i>M<sub>CC</sub></i> <sup>(*)</sup> <i>M<sub>CE</sub></i>
21843.2693	3.5949	0.5100	3.295	0.1694	0.2530	2996.5561	3.7552B	0.7686	3.880	0.0001*	---
21901.0929	3.5930	0.5700	3.228	0.1739	0.2399	3000.1237	3.7518	0.7679	3.867	0.0000*	---
21949.5344	3.5911	0.6300	3.160	0.1783	0.2351	3213.5339	3.7300	0.7985	3.749	0.1499	---
21991.9003	3.5889	0.6900	3.091	0.1827	0.2310	3357.5791	3.7000	0.7784	3.649	0.1675	1.7492
22024.0515	3.5869	0.7416	3.032	0.1865	0.2286	3397.5073	3.6801	0.7300	3.618	0.1709	1.7426
	<i>M</i> = 1.25 <i>Y</i> = 0.20 <i>Z</i> = 0.10					3414.6408	3.6671	0.6800	3.616	0.1721	1.7242
						3426.8295	3.6573	0.6300	3.627	0.1727	1.6820
						3437.7126	3.6483	0.5800	3.641	0.1731	1.6106
0.0000	3.6885	-0.1100	4.345	0.7000*	1.2351	3451.1341	3.6386	0.5300	3.652	0.1735	1.4747
1511.8346	3.6904	-0.0748	4.318	0.6000*	1.2368	3466.2885	3.6299	0.5052	3.642	0.1738	1.2718
2924.3196	3.6920	-0.0400	4.289	0.5000*	1.2392	3506.0209	3.6178	0.5500	3.549	0.1746	0.8743
4195.7809	3.6929	-0.0078	4.261	0.4000*	1.2402	3533.4208	3.6141	0.6000	3.484	0.1758	0.6953
5062.0708	3.6932T	0.0139	4.240	0.3227*	1.2407	3564.3050	3.6114	0.6500	3.423	0.1779	0.5607
5293.3166	3.6931	0.0196	4.234	0.3000*	1.2406	3597.4113	3.6093	0.7000	3.365	0.1812	0.4294
6212.4520	3.6926	0.0412	4.210	0.2000*	1.2405	3631.1964	3.6072	0.7500	3.306	0.1851	0.3635
6979.4032	3.6914	0.0577	4.189	0.1000*	1.2403	3664.0059	3.6052	0.8000	3.248	0.1893	0.3198
7347.4966	3.6906	0.0657	4.178	0.0500*	1.2398	3693.9471	3.6031	0.8500	3.190	0.1935	0.2916
7653.7729	3.6902	0.0739	4.168	0.0200*	1.2398	3721.2340	3.6009	0.9000	3.131	0.1977	0.2754
7858.4512	3.6899	0.0801	4.161	0.0100*	1.2393	3725.6389	3.6005	0.9089	3.120	0.1984	0.2695
9263.2143	3.6875	0.1300	4.101	0.0000*	1.2387		<i>M</i> = 2.20 <i>Y</i> = 0.20 <i>Z</i> = 0.10				
9571.5323	3.6866	0.1423	4.085	0.0000*	1.2385						
10662.2205	3.6819	0.1900	4.019	0.1094	1.2353						
11816.4089	3.6694	0.2400	3.919	0.1380	1.2193	0.0000	3.8692	0.9813	4.222	0.7000*	0.2473*
12502.0746	3.6400	0.2029	3.838	0.1540	1.0848	311.5183	3.8590	1.0019	4.161	0.6000*	0.2470*
12640.4854	3.6235	0.1766	3.799	0.1556	0.9111	584.7613	3.8466	1.0178	4.095	0.5000*	0.2342*
12771.2476	3.6125	0.2200	3.711	0.1563	0.6748	824.3986	3.8324	1.0298	4.026	0.4000*	0.2178*
12856.4492	3.6088	0.2700	3.647	0.1568	0.5587	1033.0266	3.8162	1.0371	3.954	0.3000*	0.1962*
12934.9804	3.6065	0.3200	3.587	0.1574	0.4770	1213.1589	3.7982	1.0393	3.880	0.2000*	0.1742*
13010.2550	3.6047	0.3700	3.530	0.1587	0.4144	1369.2903	3.7798	1.0387	3.807	0.1000*	0.1473*
13082.3300	3.6032	0.4200	3.474	0.1612	0.3629	1436.9515	3.7749	1.0451	3.781	0.0500*	0.1322*
13150.5205	3.6018	0.4700	3.418	0.1645	0.3260	1447.3474	3.7746R	1.0468	3.778	0.0421*	0.1292*
13211.5416	3.6003	0.5200	3.362	0.1681	0.2971	1473.6480	3.7801	1.0632	3.784	0.0200*	0.1191*
13261.5045	3.5987	0.5700	3.306	0.1720	0.2798	1484.5746	3.7890	1.0827	3.800	0.0100*	0.1095*
13304.9832	3.5970	0.6200	3.249	0.1759	0.2590	1493.1479	3.8179	1.1500	3.848	0.0013*	0.0609*
13332.9932	3.5959	0.6563	3.209	0.1786	0.2527	1494.0266	3.8229B	1.1679	3.850	0.0003*	0.0030*
	<i>M</i> = 1.40 <i>Y</i> = 0.20 <i>Z</i> = 0.10					1494.9513	3.8200	1.1623	3.844	0.0000*	---
						1575.7161	3.7900	1.1767	3.689	0.2245	---
						1598.0348	3.7600	1.1821	3.585	0.2282	---
0.0000	3.7161	0.1319	4.263	0.7000*	0.0120*	1607.2491	3.7300	1.1492	3.498	0.2293	---
1002.1414	3.7172	0.1641	4.235	0.6000*	0.0117*	1613.5084	3.7000	1.0945	3.432	0.2307	2.1997
1954.7531	3.7174	0.1939	4.206	0.5000*	0.0193*	1617.4220	3.6793	1.0300	3.414	0.2312	2.1960
2975.2359	3.7160	0.2229	4.171	0.4000*	0.0347*	1620.2507	3.6645	0.9600	3.425	0.2314	2.1777
4053.3447	3.7114	0.2461	4.130	0.3000*	0.0548*	1622.5630	3.6528	0.8900	3.448	0.2315	2.1213
5044.0021	3.7034	0.2564	4.088	0.2000*	0.0694*	1625.1692	3.6415	0.8200	3.473	0.2315	1.9697
5777.6427	3.6953	0.2573	4.055	0.1000*	0.0732*	1628.2721	3.6301	0.7839	3.463	0.2316	1.6643
6064.6678	3.6934	0.2643	4.040	0.0500*	0.0671*	1633.6562	3.6177	0.8500	3.347	0.2316	1.0046
6115.2890	3.6932R	0.2665	4.037	0.0409*	0.0657*	1636.9387	3.6128	0.9200	3.258	0.2316	0.6988
6222.8810	3.6950	0.2832	4.027	0.0200*	0.0585*	1640.2565	3.6089	0.9900	3.172	0.2316	0.4975
6270.6645	3.6983	0.3041	4.020	0.0100*	0.0470*	1643.7876	3.6052	1.0600	3.088	0.2316	0.3896
6301.4310	3.7052	0.3500	4.001	0.0027*	0.0222*	1647.6404	3.6015	1.1300	3.003	0.2316	0.3335
6307.2349	3.7070B	0.3671	3.991	0.0013*	0.0054*	1652.0370	3.5977	1.2000	2.918	0.2316	0.2969
6513.5263	3.7031	0.3836	3.959	0.0000*	1.3979	1657.1916	3.5939	1.2700	2.832	0.2316	0.2804
7635.2992	3.6800	0.4270	3.823	0.1430	1.3876	1663.1094	3.5898	1.3400	2.746	0.2319	0.2701
7928.1850	3.6562	0.3800	3.775	0.1542	1.3257	1670.8016	3.5857	1.4100	2.659	0.2345	0.2670
7994.5384	3.6434	0.3300	3.774	0.1559	1.2336	1682.3099	3.5817	1.4800	2.574	0.2419	0.2671
8084.1235	3.6247	0.2849	3.744	0.1572	0.9994	1689.5658	3.5795	1.5178	2.527	0.2467	0.2691
8177.5734	3.6143	0.3300	3.658	0.1580	0.7302		<i>M</i> = 2.80 <i>Y</i> = 0.20 <i>Z</i> = 0.10				
8245.5307	3.6108	0.3800	3.594	0.1589	0.5925						
8313.9605	3.6084	0.4300	3.534	0.1610	0.4943						
8381.1009	3.6066	0.4800	3.477	0.1642	0.4228	0.0000	3.9479	1.4025	4.221	0.7000*	0.3871*
8442.4217	3.6050	0.5300	3.420	0.1681	0.3604	156.6866	3.9354	1.4238	4.149	0.6000*	0.3681*
8494.3881	3.6033	0.5800	3.364	0.1723	0.3304	293.3971	3.9224	1.4431	4.078	0.5000*	0.3346*
8539.5829	3.6017	0.6300	3.307	0.1764	0.2980	410.9624	3.9084	1.4593	4.006	0.4000*	0.3009*
8579.3680	3.6000	0.6800	3.250	0.1804	0.2764	511.0035	3.8928	1.4708	3.932	0.3000*	0.2599*
8614.3704	3.5980	0.7300	3.192	0.1844	0.2613	595.5857	3.8755	1.4771	3.856	0.2000*	0.2261*
8616.2088	3.5979	0.7330	3.189	0.1846	0.2581	667.0927	3.8583	1.4810	3.784	0.1000*	0.1905*
	<i>M</i> = 1.75 <i>Y</i> = 0.20 <i>Z</i> = 0.10					697.8784	3.8542	1.4893	3.759	0.0500*	0.1730*
						704.5086	3.8541R	1.4923	3.756	0.0389*	0.1681*
						714.8003	3.8596	1.5066	3.763	0.0200*	0.1527*
0.0000	3.7864	0.5711	4.202	0.7000*	0.1240*	719.7381	3.8686	1.5248	3.781	0.0100*	0.1491*
585.3642	3.7821	0.5962	4.160	0.6000*	0.1314*	723.4133	3.8900	1.5695	3.822	0.0023*	0.1052*
1125.7851	3.7744	0.6155	4.109	0.5000*	0.1357*	724.3220	3.8991B	1.5963	3.832	0.0002*	---
1624.7770	3.7630	0.6282	4.051	0.4000*	0.1389*	724.7717	3.8957	1.5922	3.822	0.0000*	---
2034.3531	3.7501	0.6333	3.994	0.3000*	0.1335*	757.8931	3.8700	1.6313	3.680	0.3037	---
2400.2555	3.7365	0.6327	3.941	0.2000*	0.1282*	768.5841	3.8400	1.6210	3.570	0.3113	---
2725.7716	3.7238	0.6298	3.893	0.1000*	0.1132*	772.4824	3.8100	1.5941	3.477	0.3113	---
2845.8790	3.7204R	0.6323	3.877	0.0590*	0.1078*	774.6794	3.7800	1.5587	3.393	0.3113	---
2870.9794	3.7206	0.6358	3.874	0.0500*	0.1046*	776.1228					

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
779.8059	3.6498	1.2200	3.211	0.3113	2.7464	208.8432	3.5977	1.9100	2.509	0.5331	3.2849
780.7893	3.6326	1.1300	3.232	0.3113	2.4537	208.9038	3.5896	1.9900	2.396	0.5331	2.6489
780.9567	3.6300	1.1244	3.227	0.3113	2.3728	208.9647	3.5828	2.0700	2.289	0.5331	2.1116
782.3824	3.6136	1.2100	3.076	0.3113	1.4273	209.0435	3.5766	2.1500	2.184	0.5331	1.4778
783.2225	3.6068	1.3000	2.959	0.3113	0.9635	209.1572	3.5704	2.2300	2.079	0.5331	0.9607
784.1498	3.6009	1.3900	2.845	0.3113	0.6318	209.3000	3.5645	2.3100	1.976	0.5331	0.7449
785.1842	3.5952	1.4800	2.732	0.3113	0.4768	209.4582	3.5586	2.3900	1.872	0.5331	0.6470
786.3156	3.5895	1.5700	2.619	0.3113	0.4039	209.6252	3.5527	2.4700	1.768	0.5331	0.5966
787.4824	3.5837	1.6600	2.506	0.3113	0.3708	209.8153	3.5466	2.5500	1.664	0.5331	0.0237*
788.7207	3.5778	1.7500	2.393	0.3113	0.3516	209.9318	3.5461	2.5580	1.654	0.5331	0.1076*
790.0259	3.5719	1.8400	2.279	0.3113	0.3371						
791.4664	3.5657	1.9300	2.164	0.3113	0.3306	<i>M</i> = 5.50 <i>Y</i> = 0.20 <i>Z</i> = 0.10					
793.2064	3.5595	2.0200	2.050	0.3113	0.3272	0.0000	4.1549	2.5610	4.183	0.7000*	0.9170*
794.7660	3.5535	2.1100	1.935	0.3113	0.3266	25.4259	4.1430	2.5932	4.103	0.6000*	0.8888*
796.8703	3.5471	2.2000	1.820	0.3140	0.3289	46.5077	4.1320	2.6239	4.029	0.5000*	0.7899*
797.8723	3.5451	2.2286	1.783	0.3179	0.3304	63.6532	4.1204	2.6506	3.956	0.4000*	0.7016*
	<i>M</i> = 3.50 <i>Y</i> = 0.20 <i>Z</i> = 0.10			77.9159	4.1074	2.6733	3.881	0.3000*	0.6117*		
				89.8061	4.0929	2.6919	3.804	0.2000*	0.5340*		
0.0000	4.0180	1.7894	4.211	0.7000*	0.5257*	99.9459	4.0781	2.7086	3.729	0.1000*	0.4790*
83.7555	4.0051	1.8137	4.135	0.6000*	0.4992*	104.4688	4.0744	2.7208	3.702	0.0500*	0.4519*
155.5197	3.9926	1.8367	4.062	0.5000*	0.4455*	105.0812	4.0742R	2.7228	3.699	0.0431*	0.4473*
216.5979	3.9794	1.8567	3.989	0.4000*	0.3910*	107.0016	4.0796	2.7368	3.706	0.0200*	0.4290*
267.5398	3.9647	1.8720	3.915	0.3000*	0.3436*	107.7939	4.0878	2.7503	3.725	0.0100*	0.4054*
310.5862	3.9485	1.8827	3.840	0.2000*	0.2931*	108.5000	4.1182B	2.8098	3.788	0.0004*	0.0848*
346.4219	3.9324	1.8907	3.767	0.1000*	0.2424*	108.5684	4.1119	2.8020	3.770	0.0000*	- - -
356.2220	3.9291R	1.8950	3.750	0.0682*	0.2312*	110.5907	4.0700	2.8382	3.567	0.6878	- - -
361.5578	3.9292	1.9004	3.745	0.0500*	0.2218*	111.6341	4.0200	2.8183	3.386	0.7045	- - -
369.9249	3.9347	1.9174	3.750	0.0200*	0.2075*	111.9819	3.9700	2.7741	3.231	0.7057	- - -
372.5104	3.9435	1.9339	3.769	0.0100*	0.2002*	112.1711	3.9200	2.7153	3.089	0.7057	- - -
374.9082	3.9711B	1.9953	3.817	0.0002*	- - -	112.2919	3.8700	2.6465	2.958	0.7057	- - -
375.1441	3.9674	1.9923	3.806	0.0000*	- - -	112.3770	3.8200	2.5716	2.833	0.7057	- - -
393.8950	3.9300	2.0359	3.612	0.3975	- - -	112.4405	3.7700	2.4944	2.710	0.7057	- - -
397.4896	3.8900	2.0119	3.476	0.4062	- - -	112.4897	3.7200	2.4186	2.586	0.7057	- - -
398.9030	3.8500	1.9697	3.359	0.4078	- - -	112.5299	3.6700	2.3446	2.460	0.7057	- - -
399.7147	3.8100	1.9162	3.252	0.4083	- - -	112.5646	3.6299	2.2700	2.374	0.7057	5.4935
400.2541	3.7700	1.8540	3.154	0.4084	- - -	112.6049	3.6035	2.2091	2.330	0.7057	5.2736
400.6465	3.7300	1.7851	3.063	0.4084	- - -	112.6439	3.5851	2.2800	2.185	0.7057	4.3363
400.9707	3.6900	1.7051	2.983	0.4084	3.5000	112.6638	3.5762	2.3600	2.069	0.7057	3.6174
401.2322	3.6617	1.6200	2.955	0.4084	3.4967	112.6825	3.5690	2.4400	1.961	0.7057	2.8999
401.4716	3.6427	1.5300	2.969	0.4084	3.4566	112.7057	3.5620	2.5200	1.853	0.7057	2.2826
401.8131	3.6239	1.4585	2.965	0.4084	3.1099	112.7439	3.5556	2.6000	1.747	0.7057	1.5800
402.1877	3.6076	1.5400	2.819	0.4084	2.1844	112.8079	3.5496	2.6800	1.643	0.7057	1.1270
402.4161	3.5998	1.6300	2.698	0.4084	1.5294	112.8851	3.5435	2.7600	1.539	0.7057	0.8503
402.6706	3.5932	1.7200	2.581	0.4084	0.9673	112.9790	3.5374	2.8400	1.434	0.7057	0.0663*
402.9884	3.5870	1.8100	2.466	0.4084	0.6645	113.0404	3.5365	2.8480	1.423	0.7057	0.1440*
403.3658	3.5806	1.9000	2.351	0.4084	0.5513						
403.7852	3.5743	1.9900	2.235	0.4084	0.4942	<i>M</i> = 6.90 <i>Y</i> = 0.20 <i>Z</i> = 0.10					
404.2303	3.5680	2.0800	2.120	0.4084	0.4577	52.0091	4.1604	3.0902	3.775	0.2000*	0.7898*
404.6940	3.5615	2.1700	2.004	0.4084	0.4328	57.9203	4.1451	3.1122	3.691	0.1000*	0.7109*
405.2114	3.5551	2.2600	1.889	0.4084	0.4209	0.0000	4.2206	2.9360	4.170	0.7000*	1.2625*
405.7891	3.5485	2.3500	1.772	0.4084	0.0063*	14.6235	4.2092	2.9721	4.088	0.6000*	1.2136*
406.1495	3.5507	2.3219	1.809	0.4084	0.1432*	26.4807	4.1988	3.0058	4.012	0.5000*	1.1110*
	<i>M</i> = 4.40 <i>Y</i> = 0.20 <i>Z</i> = 0.10			36.5144	4.1878	3.0374	3.937	0.4000*	0.9919*		
				44.8866	4.1751	3.0654	3.858	0.3000*	0.9147*		
0.0000	4.0881	2.1831	4.197	0.7000*	0.6807*	60.5389	4.1407	3.1262	3.660	0.0500*	0.6657*
45.6620	4.0756	2.2118	4.118	0.6000*	0.6643*	60.8902	4.1404R	3.1284	3.656	0.0431*	0.6604*
83.6305	4.0640	2.2388	4.045	0.5000*	0.6025*	61.9957	4.1453	3.1416	3.663	0.0200*	0.6311*
115.7072	4.0516	2.2629	3.971	0.4000*	0.5287*	62.4485	4.1531	3.1536	3.682	0.0100*	0.6121*
141.9895	4.0377	2.2820	3.896	0.3000*	0.4551*	62.8593	4.1852B	3.2112	3.753	0.0004*	0.2130*
163.8365	4.0224	2.2967	3.821	0.2000*	0.3820*	62.8986	4.1772	3.2030	3.729	0.0000*	- - -
181.7388	4.0075	2.3086	3.749	0.1000*	0.3279*	63.3058	4.1300	3.2359	3.507	0.9687	- - -
189.5437	4.0041	2.3191	3.725	0.0500*	0.3159*	63.6309	4.0800	3.2187	3.324	0.9687	- - -
190.5930	4.0040R	2.3210	3.723	0.0431*	0.3159*	63.7731	4.0300	3.1808	3.162	0.9687	- - -
194.0431	4.0098	2.3359	3.731	0.0200*	0.3029*	63.8536	3.9800	3.1296	3.014	0.9687	- - -
195.4703	4.0182	2.3509	3.750	0.0100*	0.2853*	63.9060	3.9300	3.0691	2.874	0.9687	- - -
196.7425	4.0465B	2.4103	3.803	0.0004*	0.0268*	63.9432	3.8800	3.0032	2.740	0.9687	- - -
196.8683	4.0413	2.4039	3.789	0.0000*	- - -	63.9706	3.8300	2.9358	2.607	0.9687	- - -
203.9625	4.0100	2.4472	3.621	0.5331	- - -	63.9917	3.7800	2.8694	2.474	0.9687	- - -
206.4175	3.9700	2.4352	3.473	0.5331	- - -	64.0084	3.7300	2.8061	2.337	0.9687	- - -
207.2067	3.9300	2.4014	3.346	0.5331	- - -	64.0216	3.6800	2.7461	2.197	0.9687	6.9000
207.6333	3.8900	2.3557	3.232	0.5331	- - -	64.0332	3.6300	2.6847	2.058	0.9687	6.8995
207.9096	3.8500	2.3013	3.126	0.5331	- - -	64.0484	3.5870	2.6123	1.959	0.9687	6.6744
208.1062	3.8100	2.2404	3.027	0.5331	- - -	64.0604	3.5673	2.6900	1.802	0.9687	5.5288
208.2532	3.7700	2.1749	2.933	0.5331	- - -	64.0658	3.5580	2.7700	1.685	0.9687	4.5806
208.3696	3.7300	2.1064	2.841	0.5331	- - -	64.0705	3.5508	2.8500	1.576	0.9687	3.5408
208.4662	3.6900	2.0353	2.752	0.5331	- - -	64.0756	3.5440	2.9300	1.469	0.9687	2.5732
208.5514	3.6555	1.9600	2.690	0.5331	4.3990	64.0832	3.5376	3.0100	1.364	0.9687	1.8928
208.6346	3.6322	1.8800	2.677	0.5331	4.3656	64.1028	3.5313	3.0900	1.258	0.9687	1.4337
208.7356	3.6135	1.8332	2.649	0.5331	4.0579	64.1382	3.5252	3.1700	1.154	0.9687	1.2027

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$						
64.1819	3.5193	3.2431	1.057	0.9687	0.0898*	14369.2866	3.6114	0.3000	3.530	0.1527	0.3963						
$M = 0.70 \quad Y = 0.30 \quad Z = 0.10$																	
0.0000	3.6087	-0.9779	4.642	0.6000*	0.6116	14601.2862	3.6043	0.5000	3.302	0.1657	0.2770						
6595.6691	3.6114	-0.9413	4.616	0.5000*	0.6194	14643.1560	3.6025	0.5500	3.244	0.1693	0.2621						
13279.3123	3.6147	-0.8991	4.587	0.4000*	0.6230	14680.6613	3.6004	0.6000	3.186	0.1730	0.2498						
20133.5908	3.6191	-0.8472	4.553	0.3000*	0.6289	14713.4346	3.5985	0.6500	3.128	0.1766	0.2445						
27255.2885	3.6247	-0.7827	4.511	0.2000*	0.6305	14733.9315	3.5971	0.6836	3.089	0.1790	0.2394						
34734.7825	3.6317	-0.6983	4.455	0.1000*	0.6359	$M = 1.10 \quad Y = 0.30 \quad Z = 0.10$											
38809.6396	3.6354	-0.6429	4.414	0.0500*	0.6362	0.0000	3.7058	-0.0865	4.335	0.6000*	0.0067*						
41504.1919	3.6375	-0.6016	4.381	0.0200*	0.6348	1256.2269	3.7074	-0.0504	4.306	0.5000*	0.0046*						
42572.2946	3.6383	-0.5837	4.366	0.0100*	0.6348	2376.4200	3.7082	-0.0184	4.277	0.4000*	0.0065*						
46182.4179	3.6399	-0.5100	4.299	0.0001*	0.6329	3555.9608	3.7078	0.0138	4.243	0.3000*	0.0146*						
46596.5657	3.6399T	-0.5000	4.289	0.0000*	0.6323	4870.5364	3.7048	0.0436	4.201	0.2000*	0.0303*						
47018.3673	3.6398	-0.4895	4.278	0.0000*	0.6297	6111.3330	3.6987	0.0616	4.159	0.1000*	0.0428*						
49679.6276	3.6363	-0.4100	4.185	0.1240	0.6122	6500.7200	3.6973	0.0727	4.142	0.0500*	0.0382*						
51459.2531	3.6239	-0.3300	4.055	0.1342	0.5524	6519.9282	3.6973R	0.0735	4.141	0.0473*	0.0379*						
52159.7316	3.6124	-0.2500	3.929	0.1374	0.4520	6696.4434	3.6966	0.0963	4.128	0.0200*	0.0273*						
52495.5985	3.6073	-0.1700	3.829	0.1388	0.3782	6756.5188	3.7021	0.1180	4.116	0.0100*	0.0159*						
52743.8726	3.6045	-0.0900	3.737	0.1400	0.3400	6798.1194	3.7043B	0.1433	4.100	0.0033*	1.0960						
52956.5747	3.6025	-0.0100	3.650	0.1418	0.2945	7522.2589	3.7003	0.1775	4.049	0.0000*	1.0949						
53145.1185	3.6009	0.0700	3.563	0.1449	0.2672	8279.1240	3.6947	0.2200	3.984	0.1084	1.0932						
53312.8924	3.5992	0.1500	3.476	0.1494	0.2526	9032.9954	3.6822	0.2700	3.885	0.1321	1.0854						
53460.4426	3.5974	0.2300	3.389	0.1545	0.2389	9470.4201	3.6600	0.2621	3.804	0.1463	1.0319						
53579.4615	3.5953	0.3100	3.300	0.1600	0.2279	9601.8133	3.6429	0.2200	3.777	0.1495	0.9192						
53676.7408	3.5930	0.3900	3.211	0.1655	0.2244	9654.7887	3.6347	0.2082	3.756	0.1503	0.8397						
53759.7172	3.5904	0.4700	3.121	0.1711	0.2195	9774.5411	3.6214	0.2500	3.661	0.1518	0.6296						
53829.2341	3.5875	0.5500	3.029	0.1765	0.2187	9843.5729	3.6173	0.3000	3.595	0.1530	0.5224						
53881.6312	3.5848	0.6200	2.949	0.1813	0.2179	9906.0609	3.6144	0.3500	3.533	0.1548	0.4487						
$M = 0.90 \quad Y = 0.30 \quad Z = 0.10$																	
0.0000	3.6620	-0.5039	4.490	0.6000*	0.8619	10022.6650	3.6104	0.4500	3.417	0.1608	0.3587						
2751.7584	3.6655	-0.4629	4.463	0.5000*	0.8645	10072.9895	3.6085	0.5000	3.360	0.1646	0.3206						
5438.0383	3.6689	-0.4190	4.433	0.4000*	0.8666	10116.6135	3.6067	0.5500	3.302	0.1683	0.2937						
8015.7674	3.6718	-0.3727	4.398	0.3000*	0.8682	10155.3790	3.6049	0.6000	3.245	0.1721	0.2732						
10417.7310	3.6739	-0.3261	4.360	0.2000*	0.8703	10189.6153	3.6027	0.6500	3.186	0.1758	0.2627						
12625.2473	3.6750	-0.2809	4.319	0.1000*	0.8711	10215.3266	3.6010	0.6916	3.138	0.1789	0.2542						
13725.6713	3.6751	-0.2570	4.296	0.0500*	0.8708	$M = 1.25 \quad Y = 0.30 \quad Z = 0.10$											
14314.7339	3.6751T	-0.2433	4.282	0.0266*	0.8704	10000	3.7365	0.1754	4.252	0.6000*	0.0452*						
14539.6568	3.6750	-0.2377	4.276	0.0200*	0.8708	929.8276	3.7360	0.2081	4.217	0.5000*	0.0530*						
14973.3453	3.6750	-0.2264	4.265	0.0100*	0.8710	1805.9863	3.7335	0.2359	4.179	0.4000*	0.0622*						
17101.5325	3.6737	-0.1600	4.193	0.0000*	0.8678	2668.2737	3.7278	0.2573	4.135	0.3000*	0.0732*						
17655.8540	3.6727	-0.1397	4.169	0.0000*	0.8657	3425.2211	3.7196	0.2683	4.091	0.2000*	0.0802*						
19310.0390	3.6667	-0.0700	4.075	0.1214	0.8544	4052.2037	3.7108	0.2731	4.051	0.1000*	0.0770*						
20812.5876	3.6400	-0.0157	3.914	0.1426	0.7588	4297.6633	3.7083R	0.2795	4.035	0.0544*	0.0760*						
21220.9379	3.6180	0.0500	3.760	0.1461	0.5300	4320.6268	3.7085	0.2818	4.033	0.0500*	0.0747*						
21366.4032	3.6131	0.1200	3.671	0.1471	0.4342	4472.3971	3.7109	0.3041	4.021	0.0200*	0.0639*						
21488.2743	3.6101	0.1900	3.589	0.1487	0.3758	4517.5599	3.7147	0.3255	4.014	0.0100*	0.0537*						
21597.6688	3.6078	0.2600	3.510	0.1516	0.3303	4546.2132	3.7226	0.3700	4.002	0.0028*	0.0303*						
21696.8248	3.6057	0.3300	3.431	0.1557	0.2900	4554.0795	3.7266B	0.4007	3.987	0.0007*	1.2497						
21784.9302	3.6035	0.4000	3.353	0.1604	0.2680	4647.9810	3.7231	0.4159	3.958	0.0000*	1.2496						
21856.6846	3.6012	0.4700	3.273	0.1653	0.2538	5331.5572	3.7081	0.4600	3.854	0.1263	1.2488						
21917.1737	3.5988	0.5400	3.194	0.1703	0.2426	5774.1476	3.6800	0.4764	3.725	0.1504	1.2375						
21967.9477	3.5961	0.6100	3.113	0.1753	0.2368	5858.7841	3.6629	0.4300	3.703	0.1545	1.1966						
22011.5914	3.5932	0.6800	3.031	0.1802	0.2307	5899.2712	3.6504	0.3800	3.703	0.1560	1.1145						
22049.6576	3.5903	0.7500	2.950	0.1851	0.2275	5960.3873	3.6326	0.3342	3.677	0.1574	0.8959						
22060.1529	3.5892	0.7715	2.924	0.1866	0.2275	6027.1004	3.6221	0.3800	3.590	0.1587	0.6645						
$M = 1.00 \quad Y = 0.30 \quad Z = 0.10$																	
0.0000	3.6853	-0.2863	4.412	0.6000*	0.9800	6118.8175	3.6154	0.4800	3.463	0.1625	0.4664						
1792.2879	3.6877	-0.2479	4.383	0.5000*	0.9812	6163.7702	3.6131	0.5300	3.404	0.1657	0.3969						
3476.9725	3.6895	-0.2095	4.352	0.4000*	0.9821	6205.0073	3.6111	0.5800	3.346	0.1695	0.3485						
5000.3636	3.6906	-0.1735	4.320	0.3000*	0.9834	6242.5631	3.6091	0.6300	3.287	0.1733	0.3169						
6336.1387	3.6909	-0.1416	4.290	0.2000*	0.9846	6276.3830	3.6070	0.6800	3.229	0.1772	0.2915						
6433.5330	3.6909T	-0.1393	4.287	0.1923*	0.9849	6306.6603	3.6049	0.7300	3.171	0.1810	0.2734						
7520.8639	3.6905	-0.1135	4.260	0.1000*	0.9850	6333.5440	3.6026	0.7796	3.112	0.1848	0.2623						
8105.6331	3.6901	-0.0990	4.244	0.0500*	0.9851	$M = 1.40 \quad Y = 0.30 \quad Z = 0.10$											
8569.3765	3.6898	-0.0859	4.229	0.0200*	0.9852	0.0000	3.7690	0.3924	4.214	0.6000*	0.0981*						
8846.0698	3.6896	-0.0772	4.220	0.0100*	0.9852	691.2695	3.7653	0.4206	4.171	0.5000*	0.1035*						
10145.7532	3.6884	-0.0300	4.168	0.0002*	0.9858	1324.3744	3.7584	0.4423	4.122	0.4000*	0.1096*						
10909.3536	3.6870	0.0025	4.130	0.0000*	0.9849	1907.6382	3.7480	0.4564	4.066	0.3000*	0.1089*						
11892.0866	3.6835	0.0500	4.068	0.1039	0.9831	2388.4992	3.7364	0.4620	4.014	0.2000*	0.1067*						
12810.0592	3.6764	0.1000	3.990	0.1232	0.9753	2814.4288	3.7252	0.4649	3.966	0.1000*	0.0986*						
13793.2754	3.6500	0.1243	3.860	0.1446	0.8914	3007.5357	3.7218	0.4727	3.945	0.0500*	0.0916*						
13970.2213	3.6346	0.1090	3.814	0.1472	0.7820	3019.6427	3.7217R	0.4734	3.944	0.0468*	0.0909*						
14223.4863	3.6163	0.2000	3.649	0.1497	0.5049	3112.7161	3.7248	0.4943	3.935	0.0200*	0.0829*						

TABLE 3—Continued

<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	<i>t</i> (10 <sup>6</sup> yr)	$\log T_{eff}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	
3144.7401	3.7298	0.5153	3.935	0.0100*	0.0753*	899.5188	3.6184	1.0900	3.111	0.2662	1.0923	
3165.6847	3.7418	0.5600	3.938	0.0028*	0.0520*	900.9942	3.6123	1.1700	3.006	0.2662	0.7638	
3171.4972	3.7523B	0.6087	3.931	0.0005*	0.0054*	902.4771	3.6071	1.2500	2.905	0.2662	0.5624	
3173.4586	3.7513	0.6097	3.926	0.0000*	---	904.0847	3.6019	1.3300	2.804	0.2662	0.4328	
3500.4612	3.7310	0.6500	3.805	0.1339	---	905.8478	3.5968	1.4100	2.704	0.2662	0.3707	
3750.4294	3.7100	0.6741	3.696	0.1555	1.3995	907.8190	3.5916	1.4900	2.603	0.2662	0.3355	
3857.8895	3.6800	0.6342	3.616	0.1645	1.3899	910.0412	3.5864	1.5700	2.502	0.2662	0.3215	
3880.0862	3.6674	0.5900	3.610	0.1660	1.3667	912.2636	3.5812	1.6500	2.402	0.2667	0.3094	
3896.6414	3.6567	0.5400	3.617	0.1669	1.3201	915.0423	3.5758	1.7300	2.300	0.2693	0.3035	
3912.8094	3.6469	0.4900	3.628	0.1675	1.2188	918.4729	3.5703	1.8100	2.198	0.2743	0.3029	
3939.0264	3.6336	0.4519	3.613	0.1682	1.0075	922.0859	3.5645	1.8900	2.095	0.2805	0.3036	
3978.5440	3.6228	0.5000	3.522	0.1691	0.7101	923.0243	3.5625	1.9218	2.055	0.2823	0.3035	
4004.3157	3.6188	0.5500	3.456	0.1702	0.5888							
4030.8581	3.6160	0.6000	3.394	0.1720	0.4812							
4058.4897	3.6135	0.6500	3.334	0.1747	0.4074							
4086.3256	3.6112	0.7000	3.275	0.1780	0.3588	0.0000	4.0005	1.6178	4.216	0.6000*	0.4250*	
4113.6055	3.6091	0.7500	3.217	0.1817	0.3139	97.9110	3.9866	1.6434	4.134	0.5000*	0.3849*	
4139.1216	3.6067	0.8000	3.157	0.1854	0.2908	180.9134	3.9732	1.6677	4.057	0.4000*	0.3424*	
4162.6953	3.6044	0.8500	3.098	0.1892	0.2740	249.9436	3.9589	1.6881	3.979	0.3000*	0.3002*	
4182.4684	3.6021	0.8960	3.043	0.1927	0.2634	307.5009	3.9430	1.7039	3.900	0.2000*	0.2637*	
						355.5375	3.9277	1.7177	3.825	0.1000*	0.2184*	
				<i>M</i> = 1.75	<i>Y</i> = 0.30	<i>Z</i> = 0.10	371.4008	3.9241R	1.7254	3.802	0.0616*	0.1974*
						375.7024	3.9249	1.7303	3.801	0.0500*	0.1920*	
0.0000	3.8479	0.7954	4.224	0.6000*	0.1967*	386.4615	3.9314	1.7496	3.807	0.0200*	0.1835*	
370.8040	3.8378	0.8182	4.160	0.5000*	0.1899*	389.8464	3.9402	1.7667	3.826	0.0100*	0.1732*	
693.6897	3.8247	0.8352	4.091	0.4000*	0.1829*	392.7114	3.9686B	1.8275	3.878	0.0010*	0.0674*	
978.7417	3.8093	0.8476	4.017	0.3000*	0.1674*	393.3449	3.9639	1.8339	3.853	0.0000*	---	
1225.8123	3.7918	0.8551	3.939	0.2000*	0.1502*	421.0992	3.9300	1.9032	3.648	0.3384	---	
1435.7173	3.7742	0.8599	3.864	0.1000*	0.1301*	426.1233	3.8900	1.8911	3.500	0.3483	---	
1508.4777	3.7695R	0.8650	3.840	0.0608*	0.1240*	428.0333	3.8500	1.8582	3.373	0.3509	---	
1527.5298	3.7699	0.8695	3.838	0.0500*	0.1201*	429.1310	3.8100	1.8129	3.259	0.3519	---	
1578.2923	3.7754	0.8898	3.839	0.0200*	0.1080*	429.8559	3.7700	1.7582	3.153	0.3522	---	
1593.4413	3.7842	0.9099	3.854	0.0100*	0.0985*	430.3813	3.7300	1.6955	3.056	0.3523	---	
1603.9745	3.8064	0.9600	3.893	0.0022*	0.0701*	430.8220	3.6900	1.6192	2.972	0.3524	2.8000	
1606.6209	3.8176B	0.9966	3.901	0.0001*	---	431.1969	3.6621	1.5300	2.950	0.3524	2.7955	
1607.7835	3.8148	0.9968	3.890	0.0000*	---	431.5192	3.6448	1.4400	2.971	0.3524	2.7501	
1711.9819	3.7952	1.0500	3.758	0.1852	---	431.9561	3.6280	1.3666	2.977	0.3524	2.4721	
1758.4649	3.7700	1.0578	3.650	0.1925	---	432.5567	3.6111	1.4500	2.826	0.3525	1.6116	
1779.4006	3.7400	1.0416	3.546	0.1948	---	432.9489	3.6033	1.5400	2.705	0.3525	1.1259	
1791.4240	3.7100	1.0046	3.463	0.1967	1.7499	433.4058	3.5968	1.6300	2.589	0.3525	0.7623	
1799.1707	3.6864	0.9500	3.423	0.1967	1.7476	433.9333	3.5902	1.7200	2.472	0.3525	0.5660	
1804.2937	3.6713	0.8900	3.422	0.1970	1.7359	434.4954	3.5840	1.8100	2.357	0.3525	0.4709	
1808.2542	3.6599	0.8300	3.437	0.1976	1.7027	435.1036	3.5775	1.9000	2.242	0.3525	0.4345	
1812.2177	3.6503	0.7700	3.458	0.1980	1.6238	435.7843	3.5708	1.9900	2.125	0.3525	0.4091	
1818.7913	3.6382	0.7100	3.470	0.1985	1.3947	436.5303	3.5643	2.0800	2.009	0.3525	0.3935	
1821.9845	3.6338	0.7028	3.460	0.1987	1.2745	437.2441	3.5578	2.1700	1.892	0.3525	0.3844	
1834.4409	3.6226	0.7600	3.358	0.1995	0.8372	438.0254	3.5513	2.2600	1.777	0.3525	0.3799	
1842.2128	3.6180	0.8200	3.279	0.2002	0.6146	438.9656	3.5446	2.3500	1.660	0.3533	0.0178*	
1850.3399	3.6143	0.8800	3.205	0.2013	0.4745	439.1331	3.5444	2.3529	1.656	0.3542	0.0544*	
1859.2352	3.6111	0.9400	3.132	0.2028	0.3933							
1868.9954	3.6079	1.0000	3.059	0.2050	0.3291							
1879.7457	3.6045	1.0600	2.985	0.2079	0.3008							
1891.0939	3.6013	1.1200	2.913	0.2112	0.2829	0.0000	4.0693	2.0034	4.202	0.6000*	0.5447*	
1902.6263	3.5980	1.1800	2.839	0.2149	0.2713	53.5071	4.0561	2.0340	4.119	0.5000*	0.5104*	
1913.0951	3.5946	1.2356	2.770	0.2187	0.2639	96.9544	4.0435	2.0620	4.040	0.4000*	0.4456*	
				<i>M</i> = 2.20	<i>Y</i> = 0.30	<i>Z</i> = 0.10	132.8924	4.0301	2.0862	3.963	0.3000*	0.3942*
							162.6156	4.0155	2.1060	3.884	0.2000*	0.3383*
0.0000	3.9239	1.1973	4.225	0.6000*	0.2795*	195.0198	3.9982R	2.1327	3.788	0.0606*	0.2689*	
196.3651	3.9110	1.2207	4.150	0.5000*	0.2780*	197.1063	3.9990	2.1373	3.787	0.0500*	0.2652*	
364.2194	3.8970	1.2408	4.074	0.4000*	0.2523*	202.8931	4.0053	2.1558	3.794	0.0200*	0.2525*	
506.8962	3.8817	1.2570	3.997	0.3000*	0.2249*	204.7164	4.0139	2.1714	3.813	0.0100*	0.2357*	
628.1832	3.8646	1.2684	3.917	0.2000*	0.2007*	206.2573	4.0416B	2.2275	3.867	0.0009*	0.0848*	
730.6758	3.8477	1.2776	3.840	0.1000*	0.1673*	206.4132	4.0389	2.2288	3.855	0.0000*	---	
762.7629	3.8436R	1.2833	3.818	0.0637*	0.1575*	219.8737	4.0000	2.3050	3.623	0.4402	---	
774.0494	3.8440	1.2886	3.814	0.0500*	0.1522*	222.1382	3.9600	2.2965	3.472	0.4457	---	
797.8084	3.8499	1.3083	3.818	0.0200*	0.1380*	223.0153	3.9200	2.2678	3.341	0.4489	---	
804.9395	3.8589	1.3271	3.835	0.0100*	0.1291*	223.5131	3.8800	2.2269	3.221	0.4501	---	
809.9453	3.8800	1.3713	3.875	0.0024*	0.0936*	223.8443	3.8400	2.1770	3.111	0.4505	---	
811.3553	3.8896B	1.4031	3.882	0.0001*	---	224.0837	3.8000	2.1200	3.008	0.4506	---	
812.0326	3.8864	1.4047	3.868	0.0000*	---	224.2656	3.7600	2.0576	2.911	0.4507	---	
865.5885	3.8600	1.4651	3.702	0.2542	---	224.4106	3.7200	1.9912	2.817	0.4507	---	
879.2652	3.8300	1.4624	3.584	0.2621	---	224.5359	3.6800	1.9182	2.730	0.4508	3.5000	
884.6152	3.8000	1.4424	3.484	0.2625	---	224.6463	3.6508	1.8400	2.692	0.4508	3.4957	
887.6320	3.7700	1.4128	3.394	0.2642	---	224.7570	3.6317	1.7600	2.695	0.4509	3.4366	
889.7092	3.7400	1.3762	3.311	0.2651	---	224.8477	3.6203	1.7251	2.684	0.4509	3.2447	
891.3623	3.7100	1.3289	3.238	0.2656	---	225.0277	3.6017	1.8000	2.535	0.4509	2.4735	
893.0594	3.6799	1.2500	3.196	0.2659	2.1983	225.1230	3.5939	1.8800	2.424	0.4509	1.9543	
894.2436	3.6621	1.1700	3.205	0.2660	2.1816	225.2331	3.5871	1.9600	2.317	0.4510	1.4951	
895.2800	3.6492	1.0900	3.234	0.2661	2.1201	225.3812	3.5808	2.0400	2.211	0.4510	1.0199	
897.2233	3.6317	1.0133	3.240	0.2661	1.7181	225.5623	3.5745	2.1200	2.106	0.4510	0.7519	

TABLE 3—Continued

$t$ ( $10^6$ yr)	$\log T_{\text{eff}}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$	$t$ ( $10^6$ yr)	$\log T_{\text{eff}}$	$\log L$	$\log g$	$X_C^{(*)}$ $M_{SH}$	$M_{CC}^{(*)}$ $M_{CE}$
225.7673	3.5687	2.2000	2.003	0.4510	0.6311	118.1036	3.5467	2.6600	1.555	0.5922	0.0072*
225.9951	3.5626	2.2800	1.899	0.4510	0.5670	118.1595	3.5443	2.6946	1.510	0.5922	0.0439*
226.2416	3.5565	2.3600	1.795	0.4510	0.5310						
226.4799	3.5512	2.4303	1.703	0.4510	0.0393*						
$M = 5.50 \quad Y = 0.30 \quad Z = 0.10$											
0.0000	4.1388	2.3944	4.189	0.6000*	0.7316*	0.0000	4.2052	2.7685	4.177	0.6000*	1.0069*
28.8110	4.1262	2.4289	4.104	0.5000*	0.6828*	15.7541	4.1925	2.8039	4.091	0.5000*	0.9207*
52.0440	4.1144	2.4605	4.025	0.4000*	0.6008*	28.9826	4.1815	2.8393	4.011	0.4000*	0.8191*
71.0757	4.1019	2.4884	3.947	0.3000*	0.5161*	40.0322	4.1697	2.8721	3.931	0.3000*	0.7364*
86.5766	4.0883	2.5119	3.869	0.2000*	0.4625*	49.1786	4.1563	2.9014	3.849	0.2000*	0.6666*
99.7685	4.0747	2.5342	3.792	0.1000*	0.4049*	56.7742	4.1428	2.9285	3.767	0.1000*	0.5848*
104.3270	4.0715R	2.5447	3.769	0.0606*	0.3811*	60.0826	4.1399	2.9454	3.739	0.0500*	0.5555*
105.4582	4.0722	2.5493	3.767	0.0500*	0.3765*	61.9368	4.1453	2.9627	3.743	0.0200*	0.5272*
108.6119	4.0783	2.5672	3.774	0.0200*	0.3594*	62.5145	4.1534	2.9753	3.763	0.0100*	0.5019*
109.6054	4.0866	2.5813	3.793	0.0100*	0.3413*	63.0447	4.1810B	3.0349	3.814	0.0001*	---
110.4512	4.1145B	2.6334	3.852	0.0009*	0.1608*	63.1000	4.1736	3.0398	3.779	0.0000*	---
110.5385	4.1118	2.6382	3.837	0.0000*	---	64.1629	4.1300	3.0890	3.556	0.7846	---
115.2022	4.0700	2.7052	3.603	0.5741	---	64.6892	4.0800	3.0815	3.363	0.7846	---
116.4621	4.0200	2.6960	3.412	0.5886	---	64.8838	4.0300	3.0505	3.194	0.7858	---
116.8956	3.9700	2.6603	3.247	0.5913	---	64.9908	3.9800	3.0047	3.040	0.7865	---
117.1313	3.9200	2.6087	3.099	0.5919	---	65.0602	3.9300	2.9479	2.897	0.7867	---
117.2825	3.8700	2.5454	2.962	0.5920	---	65.1086	3.8800	2.8832	2.761	0.7867	---
117.3885	3.8200	2.4739	2.834	0.5921	---	65.1444	3.8300	2.8144	2.630	0.7867	---
117.4669	3.7700	2.3979	2.710	0.5921	---	65.1717	3.7800	2.7453	2.499	0.7867	---
117.5279	3.7200	2.3208	2.587	0.5921	---	65.1932	3.7300	2.6783	2.366	0.7867	---
117.5776	3.6700	2.2441	2.464	0.5921	4.4000	65.2103	3.6800	2.6146	2.230	0.7867	---
117.6187	3.6336	2.1700	2.392	0.5921	4.3933	65.2256	3.6300	2.5476	2.097	0.7867	5.4991
117.6725	3.6072	2.1005	2.356	0.5921	4.1850	65.2448	3.5935	2.4773	2.021	0.7867	5.3014
117.7264	3.5884	2.1800	2.201	0.5922	3.2935	65.2608	3.5736	2.5500	1.869	0.7867	4.3611
117.7536	3.5798	2.2600	2.087	0.5922	2.7372	65.2685	3.5647	2.6300	1.753	0.7867	3.6301
117.7835	3.5726	2.3400	1.978	0.5922	2.2369	65.2759	3.5571	2.7100	1.643	0.7867	2.8618
117.8296	3.5658	2.4200	1.871	0.5922	1.6708	65.2848	3.5506	2.7900	1.537	0.7867	2.1958
117.9060	3.5594	2.5000	1.765	0.5922	1.2438	65.3036	3.5439	2.8700	1.430	0.7867	1.5699
117.9995	3.5529	2.5800	1.659	0.5922	0.8748	65.3461	3.5374	2.9500	1.324	0.7867	1.1769
						65.4119	3.5312	3.0276	1.222	0.7867	0.1061*

In addition, data have also been included for  $X_c = 0.05$ , 0.02, and 0.01 and for the first model from each sequence with  $X_c = 0.0$  (the last entry with an asterisk in col. [5]). Occasionally, there appear to be two entries with  $X_c = 0.0$ . This occurs when  $X_c$  for the first of these entries is less than 0.00005 and has thus been rounded off to 0.0.

There are three special points marked by the letters T, R, and B in the  $\log T_{\text{eff}}$  column. In tracks without a blueward fluctuation the turnoff (i.e., bluest) point of the track has been indicated by the letter T. The letter R identifies the red edge of the blueward fluctuation when one exists, while the letter B identifies the bluest point of the track after point R. Except for nine sequences, point B corresponds to the blue edge of the blueward fluctuation. These nine exceptions are given by  $(M, Y, Z) = (2.50, 0.10, 0.00001)$ ,  $(2.20, 0.20, 0.00001)$ ,  $(1.95, 0.30, 0.00001)$ ,  $(1.55, 0.30, 0.0001)$ ,  $(1.40, 0.40, 0.0001)$ ,  $(1.40, 0.30, 0.0004)$ ,  $(1.25, 0.30, 0.001)$ ,  $(1.10, 0.40, 0.001)$ , and  $(1.10, 0.30, 0.004)$ . These sequences represent cases in which the blueward fluctuation is not fully developed or is only marginally present. The tracks for these sequences extend slightly to the blue after the blueward fluctuation before evolving redward toward the red-giant branch.

After the main-sequence phase the change in either  $\log T_{\text{eff}}$  or  $\log L$  has been used to control the spacing of the tabulated points. Some sequences, particularly

those with larger values of  $Z$ , have a local minimum in the luminosity at the base of the red-giant branch. Data for the model at this minimum have been tabulated in Table 3 whenever the track showed such a dip in the luminosity.

In the lower-mass sequences the location of the hydrogen shell, as given by  $M_{SH}$  in Table 3, coincides closely with the point of maximum hydrogen burning. At the higher masses, however, most of the hydrogen burning takes place inside  $M_{SH}$ . This is the reason why  $M_{SH}$  does not change in many of the higher-mass sequences.

Table 3 and Figures 1 provide for the hydrogen-burning phases a calibration of the main observable features of the H-R diagram in terms of the composition and mass. A number of features can be derived from the present computations and used for interpretive purposes:

1. The relative position of the main sequence can be determined as a function of the composition. One can use these results to obtain information concerning a system's chemical homogeneity from the intrinsic width of the main sequence.
2. The tracks in Figures 1 together with their extensions by Sweigart and Gross (1978) illustrate how the relative position of the red-giant branch depends on the composition. The absolute position of the red-giant branch is, of course, theoretically

uncertain since it depends on the adopted value of the mixing length. As for the main sequence, the intrinsic width of the red-giant branch contains additional information about a system's chemical homogeneity.

3. The theoretical luminosity function can be derived from the relative evolutionary time scales and compared with the observed number distributions of stars in the H-R diagrams of galactic and globular clusters.

4. The present sequences predict the intrinsic luminosity at which a blueward fluctuation first occurs at the end of the main-sequence phase. This predicted luminosity should be useful in understanding the H-R diagrams of galactic clusters.

5. A dip in the luminosity sometimes occurs at the base of the red-giant branch. This dip is most pronounced at the larger values of  $Z$ .

6. Figures 1 show that a metal-poor star evolves farther up along the main sequence before turning off toward the red-giant branch. This behavior is, of course, the reason for the well-known result that metal-poor systems are older than metal-rich systems with the same turnoff luminosity.

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7. For the most massive and most metal-poor models studied here, the onset of helium burning halts the evolution across the Hertzsprung gap so that the star remains blue during its phase of core-helium burning.

An attempt will be made to make the data on the characteristics of each model from the sequences listed in Table 1 available on magnetic tape. These data are substantially more detailed than the data given in Table 3. Researchers interested in obtaining a copy of this magnetic tape should contact A. Sweigart.

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