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# Dynamical evolution of clusters in the Magellanic Clouds

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## ABSTRACT

*Context.* Recent surveys of the clusters in the Large and Small Magellanic Clouds have provided us with a wealth of data on their age and structure, which can be combined to study their evolutionary history.

*Aims.* Our aim is to study the dynamical state and evolution of the clusters in these two dwarf galaxies.

*Methods.* We have collected structural parameters and ages for a sample of 710 clusters in the LMC and 198 in the SMC from the literature and successively computed their central surface brightness, their current and initial masses, their central and mean relaxation times, and their dissolution time. To obtain the current and initial masses of the clusters, we used synthetic stellar population models which take into account mass-dependent loss of stars during the evolution.

*Results.* The present-day and initial masses of the clusters remain constant on average in both galaxies until an age of 300Myr. Both progressively increase thereafter, because of evaporation of low-mass clusters. The analysis is therefore limited to clusters younger than 300Myr. The spread in core radius increases with dynamical age to a maximum, and then decreases until final dissolution. There are no dynamically young clusters in regions of low galactic stellar density, indicating that the clusters must form in dense regions of the two galaxies. The LMC and SMC clusters are (marginally) different in their dynamical properties in that the former have on average larger current and initial masses and smaller core, half-mass and tidal radii.

*Conclusions.* The present results rest on parameters that are very model-dependent. The ages were mostly determined from color-magnitude diagrams that assume a constant metallicity and do not take into account multiple stellar populations or unusual Helium abundances, and the masses were derived from models for the evolution of the mass function in star clusters. Other assumptions and/or methods will certainly yield different ages and masses, but not necessarily a different overall evolutionary picture.

**Key words.** Galaxies: star clusters: general - Galaxies: individual: LMC, SMC

## 1. Introduction

The dynamical evolution of star clusters is essentially governed by the effect of mass loss, as stars either lose mass or escape altogether from the cluster (Lamers et al. 2010). This leads to the progressive dissolution of the stellar system. It has been extensively studied over the years, and there is now fairly good agreement between N-body simulations and Fokker-Planck models in predicting the rate of escape of stars from clusters (Takahashi & Baumgardt 2012).

On the observational side, dissolution timescales have been evaluated for clusters in various nearby galaxies, the Magellanic Clouds, M33, M51, the Antennae and the Galaxy (Boutloukos & Lamers 2003, Lamers et al. 2005, de Grijs & Anders 2006, Kruijssen & Portegies Zwart 2009, Fall et al. 2009, Chandar et al. 2010). The usual approach is to study the mass of clusters as a function of their age or of their dissolution time. Another approach is to determine a bivariate distribution of masses and ages and compare it to the one predicted from simple models for the dissolution of star clusters (Fall et al. 2009, Chandar et al. 2010). The age and mass are computed by fitting evolutionary models to the spectral energy distribution, with the difficulty that one has to solve the age-metallicity and age-extinction degeneracies. Another potential problem with the models is that the effect of the preferential escape of low-mass stars on the mass-to-light ratio (M/L) is ignored, except in a few cases (Kruijssen

& Portegies Zwart 2009; Anders et al. 2009). The age can also be determined from color-magnitude diagrams, which are believed to give more accurate estimates. The dissolution time is either derived from theoretical arguments or empirically, from the age distribution of clusters.

The present study was motivated by the availability of structural data and ages for a large number of clusters in both the LMC and the SMC. We were in particular interested to uncover differences in the dynamical evolution of clusters in the two galaxies. If present, such differences could arise from different initial conditions in the formation of the LMC and SMC (in particular different dynamical conditions or gas content), and/or from the large mass ratio of the two galaxies, as one may expect clusters to disrupt faster in the stronger gravitational field of a more massive galaxy. The most recent mass estimates for the LMC and SMC are  $2.4 \cdot 10^{10} M_{\odot}$  (Mastropietro et al 2005), and  $3 \cdot 10^9 M_{\odot}$  (Connors et al. 2006), respectively, in good agreement with earlier determinations (e.g. van den Bergh 2000), in other words a mass contrast of almost a factor ten. Events of external origin may also produce different cluster evolutions in the two galaxies. However, the main such event is certainly a mutual gravitational interaction during an encounter between the two galaxies, which is likely to affect their cluster population in roughly the same way.

Our approach is different from that of previous studies of Magellanic Cloud clusters in several respects. We chose to

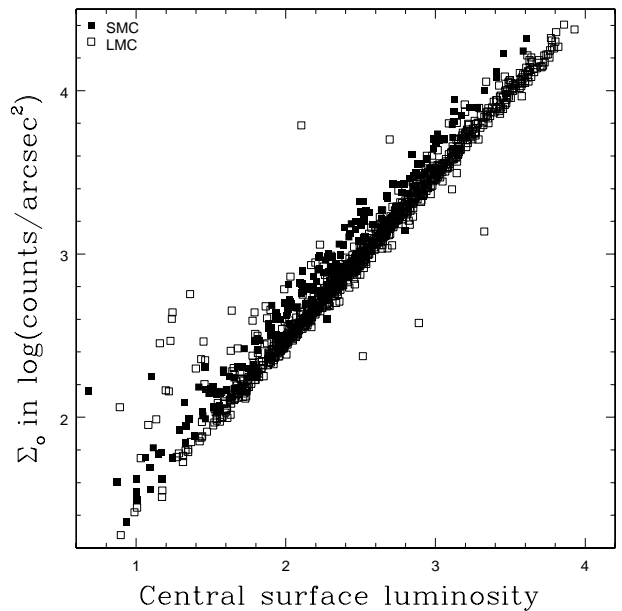
determine the masses of the clusters using models that take into account mass-dependent loss of stars during the evolution, which, as shown by numerical simulations (Baumgardt & Makino 2003), has an important effect on the dynamical evolution of clusters. These models allow us to determine the initial mass of each cluster, which has never been predicted for clusters in the Magellanic Clouds before. We adopted a specific reddening for each cluster and a metallicity that declines with increasing cluster age for older clusters. Finally, we used the dynamical age, defined as the physical age normalised by the dissolution time, as timescale for evolution.

## 2. Data

The structural parameters for 1066 clusters in the LMC have been obtained by Werchan & Zaritsky (2011), and those for 204 clusters in the SMC by Hill & Zaritsky (2006). The ages for 1193 clusters in the LMC and 324 in the SMC have been determined from color-magnitude diagrams by Glatt et al. (2010). We built our samples on the clusters with structural data, adding the age and reddening from Glatt et al. (2010) when available, and finding ages and reddenings for the other clusters through a search in the literature. We increased the ages given by Chiosi et al. (2006) by 0.2 (in log), as they are systematically younger by 0.2-0.3 than those given by Glatt et al. (2010). Age determinations from the remaining other sources (100 ages in the LMC and 40 in the SMC) were not corrected, because the difference in metallicity and/or distance modulus introduces an error of about 0.1-0.15 (Glatt et al. 2010), which is both small and uncertain. In particular, Glatt et al. (2010) found no systematic effect for the ages given by Pietrzynski & Udalski (2000), even though the latter adopted a distance modulus of 18.65 and a metallicity of 0.008 for the SMC.

We removed from our two samples the clusters for which no age was available. On the other hand, we did not remove the clusters with the highest  $\chi^2$ , after reading the paper by Andrae et al. (2010). This left us with 710 LMC clusters and 198 SMC clusters.

Our samples are presented in Tables 2 (LMC) and 3 (SMC). We adopted the structural parameters derived with the King model; in each table, the first column is the number given by Werchan & Zaritsky (2011) preceded by an "A" (for LMC clusters), or the number given by Hill & Zaritsky (2006) preceded by a "B" (for SMC clusters), the core radius  $r_c$  in pc is in col.2, the half-light radius  $r_h$  in pc is in col.3,  $r_{90}$  in pc is in col.4, the tidal radius  $r_t$  in pc is in col.5, the absolute magnitude  $M_v$  corrected for reddening is in col.6, the central surface brightness ( $\mu_{o,v}$ ) in mag/arcsec<sup>2</sup>, corrected for reddening is in col.7, the age in Gyr is in col.8, the reddening  $E(B-V)$  is in col.9 the mass in  $\log(M_\odot)$  is in col.10 the initial mass in  $\log(M_\odot)$  is in col.11 the logarithm of the number of stars in a one-kpc circle around the cluster is in col.12, the central relaxation time  $T_c$  in log(yr) is in col.13, the mean relaxation time  $T_h$  in log(yr) is in col.14, the dissolution time  $T_{dis}$  in log(yr) is in col.15, and the references for the age and the reddening are in col.16, separated by a comma. The absolute magnitudes were computed using the apparent magnitudes of Werchan & Zaritsky (2011) and Hill & Zaritsky (2006) for the LMC and SMC, respectively. The derivation of  $r_h$ ,  $r_t$ , the masses and initial masses is explained in Sect. 4, and that of the relaxation and dissolution times in Sect. 5. The distance modulus of the LMC is 18.5, and that of the SMC 18.9. These are the values adopted in the papers from which the data originate.



**Fig. 1.** Comparison between measured central surface brightness  $\Sigma_o$  in  $\log(\text{counts}/\text{arcsec}^2)$  and central surface luminosity  $\Sigma_{o,v}$  in  $\log(L_\odot/\text{pc}^2)$  computed by us from the structural parameters and using a King model. The open and filled squares represent LMC and SMC clusters, respectively.

## 3. Calibration of the magnitude scale

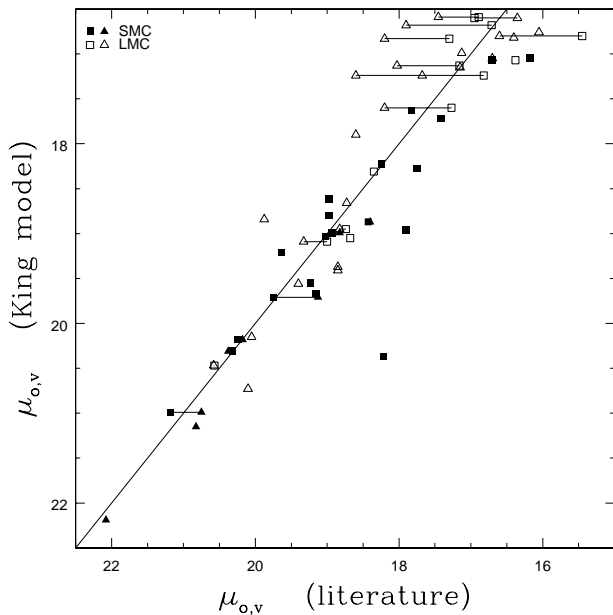
The central surface brightness ( $\Sigma_o$ ) is given in counts/arcsec<sup>2</sup> in the V band in the papers by Hill & Zaritsky (2006) and Werchan & Zaritsky (2011). However, these values cannot be converted to calibrated mag/arcsec<sup>2</sup> for several reasons (Zaritsky, personal communication). We thus derived the central surface brightness  $\mu_{o,v}$  in mag/arcsec<sup>2</sup> from the other structural parameters and the total magnitude, using the empirical formulae given by King (1962). We successively calculated the ratio of tidal to core radius  $r_t/r_c$  using his eqs. 18 and 21, the ratio  $N/f_o$  of total number of stars to central surface density using his eqs. 14 and 21, and the central surface luminosity  $\Sigma_{o,v} = L_v f_o / N$ , where  $\log(L_v) = 0.4(M_{\odot,v} - M_v)$  is the logarithm of the total V luminosity,  $M_v$  is the total absolute V magnitude and  $M_{\odot,v} = 4.83$ .

We finally calculated the central surface brightness  $\mu_{o,v}$ :

$$\mu_{ov} = M_{\odot,v} + 21.572 - 2.5 * \log(\Sigma_{o,v})$$

We compare the resulting  $\Sigma_{o,v}$  with the measured central surface luminosity  $\Sigma_o$  on logarithmic scales on Fig. 1. While the two estimates of central surface brightness are well correlated for most clusters, some SMC clusters show a small systematic shift, and some LMC clusters are definitely in disagreement.

The central surface brightness in the V band of a subset of clusters is available in the literature : 35 clusters in Mackey & Gilmore (2003a,2003b) and 35 in Carvalho et al. (2008), with 18 clusters in common. We compare on Fig. 2 the  $\mu_{o,v}$  listed in these two literature sources with the  $\mu_{o,v}$  derived above. The agreement between the three sets of data is fairly good, there is no significant zero-point shift or non-linearity. There is a larger scatter about the diagonal line at the brightest central surface brightnesses, and the horizontal lines that join independent estimates become longer, pointing to the difficulty of estimating high central surface brightnesses.



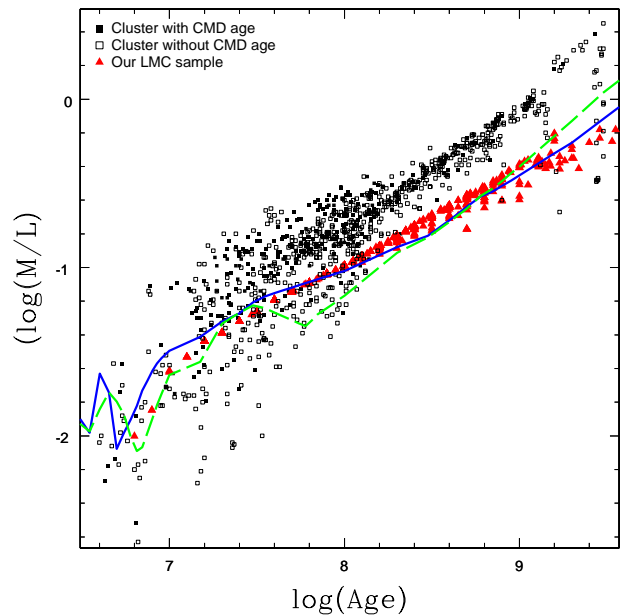
**Fig. 2.** Comparison between central surface brightnesses  $\mu_{o,v}$  (in mag/arcsec<sup>2</sup>) from the literature for a subset of clusters and those computed by us from the structural parameters and using a King model. The  $\mu_{o,v}$  from Carvalho et al. (2008) and from Mackey & Gilmore (2003a,2003b) are represented by squares and triangles respectively, open ones for LMC clusters and filled ones for SMC clusters. Data from different sources for the same cluster are linked by a horizontal line. The diagonal line is the 1:1 line.

#### 4. Determination of the mass and mass-to-light ratio of the clusters

Determining the mass of clusters is an important step in the study of their dynamical properties. For Galactic globular cluster one often assumes a constant  $M/L$ . For clusters in the Magellanic Clouds this is not feasible because the ranges in cluster ages and masses are very large.

All studies of the dissolution time of clusters rely on synthetic models for the evolution of stellar populations at a given metallicity to derive masses for the clusters. The metallicity is always set constant for all clusters, (generally  $Z = 0.008$  for the LMC, and  $Z = 0.004$  for the SMC). We determined the cluster masses using the only analytical and physical model that takes into account mass loss due to the preferential escape of low-mass stars during the evolution, that of Kruijssen (2009). There are four free parameters, the metallicity, the dissolution timescale parameter  $t_o$ , a parameter for the kick velocity for compact stellar remnants, and the King (1966) profile parameter  $W_o$ . All models assume a Kroupa initial mass function.

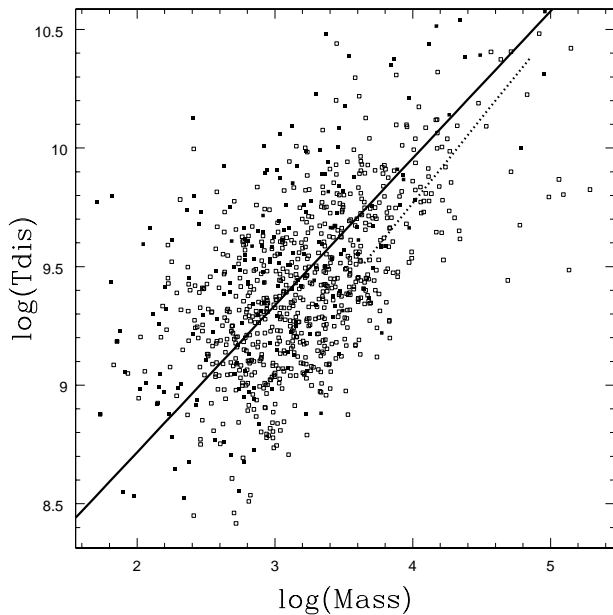
There has been many studies of the age-metallicity relation for clusters in the LMC (Hill et al. 2000, Leonardi & Rose 2003, Kerber et al. 2007, Piatti et al. 2009, Sharma et al. 2010) and SMC (Da Costa & Hatzidimitriou 1998, Piatti et al. 2007, Parisi et al. 2009). Using the data from the above references, we adopted a constant metallicity below 1.6 Gyr, namely  $Z = 0.008$  and  $0.004$  for the LMC and SMC respectively, and thereafter a metallicity decreasing as a function of logarithm of time with slopes of  $-1.615$  and  $-1.170$  for the LMC and SMC respectively. It was necessary to adopt a constant metallicity at younger ages to be coherent with the age determinations of Glatt et al. (2010) and most others, which rest on that assumption. While



**Fig. 3.** Comparison between the  $M/L_v$  of our sample of LMC clusters (filled red triangles) and those computed from the data of Popescu et al. (2012) as a function of age on logarithmic scales. The latter data are for 288 LMC clusters with ages from color-magnitude diagrams (filled black squares) and 632 LMC clusters without (open black squares). The solid blue line is the Maraston (2005) model for  $\text{Fe}/\text{H} = -1.35$  ( $Z = 0.00084$ ) and the long-dashed green line is the Maraston (2005) model for  $\text{Fe}/\text{H} = -0.33$  ( $Z = 0.0089$ ). The  $M/L_v$  from the models of Maraston (2005) agree roughly with ours, except for older ages, whereas those of Popescu et al. (2012) tend to be higher by 0.4 dex. The scatter in their data increases for younger clusters, whereas it increases slightly in our data for older clusters.

the adopted gradient at older ages might differ from recent determinations of the field and cluster metallicity gradients (e.g. Piatti & Geisler 2012), the scatter among metallicity measurements for individual clusters does not justify a more accurate modeling. For  $t_o$ , we adopted the value of 30Myr recommended by Kruijssen (2009) for the LMC and SMC. In principle we should have adopted a  $t_o$  for each cluster, as it depends on  $W_o$ . Furthermore choosing the same value for both galaxies might contribute to erasing the very differences in the dynamical evolution of the clusters that we are looking for, so this simplifying assumption should be kept in mind. We have found that the different available values for  $W_o$  and the kick velocity parameter produce very small differences in the resulting mass, of the order of one or two percent, and we thus adopted the same values for all clusters ( $W_o = 5$  and the recommended value of 1 for the kick-velocity parameter). The parameter  $W_o$  is directly related to  $r_t/r_c$ , which can be computed for our clusters. We find mean values  $W_o = 6.0$  for the LMC clusters and  $W_o = 5.1$  for the SMC clusters, thus in reasonable agreement with the constant value adopted for computing masses.

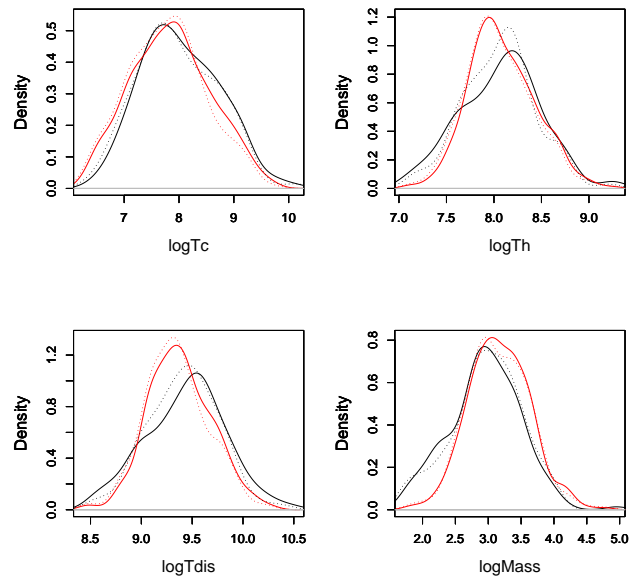
We obtained the mass and initial mass of the Magellanic Cloud clusters for a given absolute magnitude, age and metallicity by interpolating linearly between the available models of Kruijssen (2009). We also had to extrapolate to lower absolute magnitudes than available in a handful of cases. Linear interpolation and extrapolation give satisfactory results, provided they are done in logarithmic values (Kruijssen, private communication). The results are listed in Tables 2 and 3.



**Fig. 4.** Dissolution time as a function of mass, calibrated using empirical estimates. The solid diagonal line is the dissolution time from the equation given by Kruijssen (2009) with  $t_o = 30$  Myr, and the dotted line the dissolution time obtained by Baumgardt & Makino (2003) in simulations of the evolution of Galactic clusters, and adapted by us to the gravitational field of the LMC.

After this project was essentially finished, Popescu et al. (2012) published estimates of ages and masses from Monte-Carlo simulations for 920 clusters in the LMC. Their estimates were obtained assuming  $Z = 0.008$  for all clusters, but without preferential evaporation of low-mass stars. Their main innovation was to take into account stochastic fluctuations in the stellar mass function; this avoids often having to consider fractions of stars at its high end. Their Table 2 lists 288 clusters in common with Glatt et al. (2010), and their Table 3 lists another 632 clusters. Note that some cluster names appear several times in that latter table, with different age and mass estimates. The data from the two tables are thus considered separately.

We compare our determinations of  $M/L_v$  with those of the Maraston (2005) models and those derived from the data of Popescu et al. (2012) on Fig. 3. Our  $M/L_v$  agree roughly with the Maraston (2005) models, except at older ages where the effect of mass-dependent mass loss becomes important, and are lower than those of Popescu et al. (2012) by about 0.4 dex on average. The systematic difference between the two sets of  $M/L_v$  for LMC clusters cannot be due to the fact that Popescu et al. (2012) use a Kroupa initial mass function that extends to  $120 M_\odot$ , rather than  $70 M_\odot$ , because massive stars do provide more stellar remnants, but have lower  $M/L_v$ . Our  $M/L_v$  values show an increasing scatter for older clusters, because of the mass-dependent effect of evaporation. On the contrary, the  $M/L_v$  values of Popescu et al. (2012) show a large scatter for younger ages, maybe because stochastic fluctuations of the stellar mass function are more important then. Nevertheless, this comparison, together with the fact that a Salpeter initial mass function would increase  $M/L_v$  by a factor 1.6 on average, give an idea of the external uncertainties to be expected for cluster mass estimates in the LMC and SMC.



**Fig. 5.** Probability density functions for the central relaxation time  $\log(T_c)$  (top left), mean relaxation time  $\log(T_h)$  (top right), dissolution time  $\log T_{dis}$  (bottom left) and  $\log(Mass)$  (bottom right). Data are in red for the LMC clusters and in black for the SMC clusters, solid for ages less than 1 Gyr and dotted for ages less than 300 Myr. The LMC clusters are more massive and have a shorter central relaxation time.

## 5. Relaxation and dissolution times

In order to look for tidal effects on the dynamical evolution of the clusters in the SMC and LMC, one should use a timescale linked to this dynamical evolution.

The relaxation time is an estimate of the time required for successive encounters to change completely the velocity of an individual star. It can also be defined as the time needed for a cluster to return to dynamical quasi-equilibrium after a perturbation (essentially the escape of stars). It thus measures the rate of dynamical evolution of clusters. A cluster with a shorter relaxation time will dissolve more rapidly. Two measures of the relaxation time have been proposed (see Djorgovski 1993 and references therein).

The central relaxation time is :

$$T_c = \frac{8 \sqrt{2\pi} \rho_o^{1/2} r_c^{5/2}}{27 p^{1/2} G^{1/2} m^{1/2} \ln(\gamma N)}$$

where  $m = M_\odot/2$  is the mean mass of stars for a Kroupa initial mass function,  $N = M/m$  is the total number of stars,  $\rho_o$  is the central surface density in  $M_\odot/pc^2$ ,  $p$  is a structural constant for which Djorgovski (1993) provides an interpolation formula,  $G = 4.5010^{-15} pc^3 M_\odot^{-1} yr^{-2}$  is the gravitational constant, and  $\gamma$  is another constant, usually taken as 0.4, but numerical simulations have found that its value is 0.11 for single-mass clusters (Giersz & Spurzem 1994). We adopt the former value for the convenience of comparing our relaxation times with those from the literature. Adopting the latter value increases the relaxation times by about 0.08dex on average.

The total mass  $M$  was calculated in Sect. 4. The density  $\rho_o$  was obtained by multiplying the central surface luminosity  $\Sigma_{o,v}$  obtained in Sect. 3 by  $M/L_v$  obtained in Sect. 4.

The mean relaxation time within the inner half of the stellar system,  $T_h$ , is

$$T_h = \frac{0.138N^{1/2}r_h^{3/2}}{G^{1/2}m^{1/2}\ln(\gamma N)}$$

where  $r_h$  is the half-mass radius, computed from  $r_t$  using eqs. 18 and 21 of King (1962) and the other parameters are the same as in  $T_c$ .

The mean relaxation time  $T_h$  is a good measure of the internal relaxation process (Tanikawa & Fukushige 2005). However, it has been shown that the dissolution time  $T_{dis}$  of clusters is slower than  $T_h$  and that  $T_{dis}$  scales as  $T_h^{3/4}T_{cr}^{1/4}$  in a tidal field (Baumgardt 2001, Takahashi & Baumgardt 2012). In addition, Lamers et al. (2005) have shown that it depends on the local space density to the power -0.5.

The term  $T_{cr}$  is the crossing time, also called escape time, which can be estimated as the mean radius of the cluster  $r_h$  divided by the r.m.s. escape velocity of a star. The latter is four times the mean velocity dispersion in a non rotating cluster in dynamical equilibrium. The latter is in turn roughly equal to  $\sqrt{GM/2r_h}$ . Finally :

$$T_{cr} = \frac{r_h^{3/2}}{\sqrt{GM}}$$

and

$$T_{dis} = kT_h^{3/4}T_{cr}^{1/4}\rho^{-0.5}$$

where  $\rho$  is the galactic stellar surface density (in stars/kpc<sup>2</sup>) in a circle of surface one square kpc around each cluster, from the catalogues of stars in the LMC (Zaritsky et al. 2004) and the SMC (Zaritsky et al. 2002). The equation of Lamers et al. (2005) uses the space density averaged over the orbit. In order to correct to some extent for using the surface rather than the space density, and to compensate for the difference in thickness with the LMC (Subramanian & Subramanian 2009), we applied a factor  $(4.90/3.95)^{-0.50}$  to the dissolution time of the SMC. We cannot of course compute the density averaged over the orbit, but it is not unreasonable to consider that, statistically, the local density is a good measure of the average one. The constant  $k = 10^{4.4}$  has been estimated by comparison with the dissolution time  $T_{dis} = t_o M^{0.62}$  of Kruijssen (2009), with  $t_o = 30$  Myr, which is shown as a solid diagonal line on Fig. 4. The dotted line on that figure represents the results of numerical simulations by Baumgardt & Makino (2003), where their Table 3 gives  $T_{dis}$  as a function of initial mass for clusters in circular orbit around the Galaxy. We adopted the values at  $R_G = 2.833$  kpc, corrected for a galactic rotation of 69 km/s for the clusters of the Magellanic Clouds (Schommer et al. 1992). The agreement between the two empirical estimates is good, considering that the value of 69 km/s applies to the LMC clusters only, and that Baumgardt & Makino (2003) give the initial rather than the present-day mass.

Since  $T_{dis}$  depends on  $T_{cr}$  to the power 0.25, the exact dependence of  $T_{cr}$  on radius and velocity dispersion is not critical. We have checked that using the definition of  $T_{cr}$  given by King (1959), namely replacing  $r_h$  by  $r_t$  and the mean velocity dispersion by the central one, makes little difference to the resulting dissolution time.

We have computed the total masses, relaxation times and dissolution times of the clusters, and obtained the same parameters for the Galaxy (data from Harris 1996, 2010 edition) and NGC 5128, another giant galaxy (data from McLaughlin et al. 2008), for comparison. The total masses and  $T_{dis}$  of Galactic globular clusters were computed assuming  $M/L_v = 2$  and no space density dependence. The constant  $k$  for the dissolution

**Table 1.** Mean values of age, absolute magnitude, current and initial mass, relaxation times and dissolution time for clusters in the different galaxies. The rms dispersions are given in brackets.

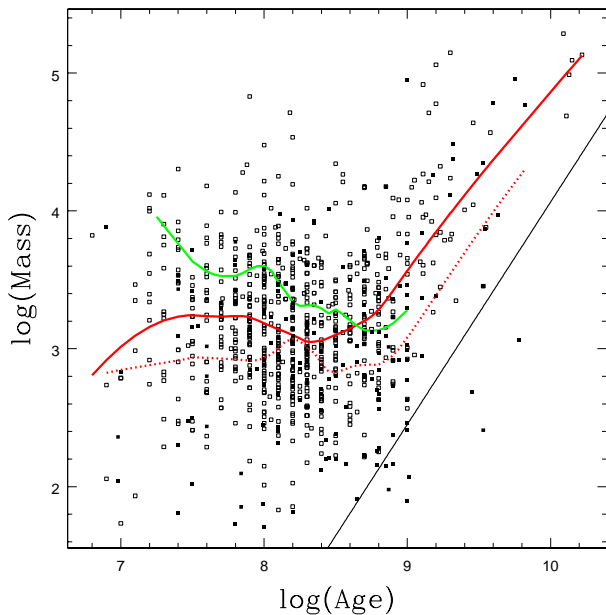
	SMC	LMC	Galaxy	NGC 5128
number	198	706	153	127
log(age)	8.38 (0.59)	8.21 (0.51)		
$M_{vo}$	-4.81 (1.45)	-5.41 (1.30)	-6.90 (1.70)	
log(Mass)	3.03 (0.62)	3.23 (0.53)	5.00	5.57 (0.54)
log(ln. M)	3.31 (0.59)	3.41 (0.53)		
log( $T_c$ )	8.12 (0.78)	7.89 (0.74)	8.00 (1.18)	8.31 (1.03)
log( $T_h$ )	8.14 (0.49)	8.12 (0.38)	8.86 (1.14)	9.41 (0.36)
log( $T_{dis}$ )	9.50 (0.45)	9.41 (0.33)	10.11 (0.89)	10.49 (0.33)

time in the Galaxy and NGC 5128 was calibrated using Table 3 of Baumgardt & Makino (2003).

Before discussing the results, we want to stress an important difference between our estimates of the relaxation and dissolution times and those determined by means of N-body or Fokker-Planck simulations. The latter are computed using the initial values of total mass and structural parameters, whereas we use the values at the present time. This remark mainly applies to the total mass, since the half-mass radius of a cluster is expected to stay roughly constant during the dynamical evolution. Furthermore, our estimates of the stellar surface density at the apparent location of each cluster is very approximate, because of possible projection effects. One could also argue that we should have used the equation of Kruijssen (2009) to compute  $T_{dis}$ , since this is how the initial mass is computed in his models. But we believe that taking into account the detailed dependence on radius and on Coulomb logarithm (the  $\ln(\gamma N)$  term) should reduce the noise in the resulting timescales.

We have made statistical tests to determine whether the masses and characteristic times of the clusters in the two galaxies are significantly different. The probability density functions for different subsamples are shown on Fig. 5, where the LMC clusters are in red and the SMC clusters in black, and the solid and dotted lines correspond to age limits of 1Gyr and 300Myr respectively. These limits, which are explained in Sect. 6, are those beyond which incompleteness and evaporation set in, respectively. The mean values of the parameters are given in Table 1, together with those for the clusters of the Galaxy and NGC 5128. Two-sample Kolmogorov-Smirnov tests were performed on the different subsamples. The distributions for  $\log(T_c)$  are similar, but the means are different. The distributions and means for  $\log(T_h)$  are the same. The distributions for  $\log(T_{dis})$  are different, but the means are the same. The distributions and means for  $\log(\text{Mass})$  are different. In summary, the only (marginally) significant difference between the clusters of the LMC and SMC is in their total masses and  $T_{dis}$ . The mean relaxation times in the Galaxy and NGC 5128 are larger than in the Magellanic Clouds, essentially because their clusters are more massive.

It might be surprising at first glance that  $T_c$  and  $T_h$  are larger than age for about half the clusters in both dwarf galaxies, which implies that roughly half of them have not yet reached dynamical equilibrium. We do not think that this is actually the case. There is evidence, perhaps marginal only, for on-going dynamical evolution of the SMC and LMC clusters, in the sense that older clusters tend to be rounder, as expected from dynamical arguments (Davoust & Prugniel 1990). Using the ellipticities provided by Hill & Zaritsky (2006), we find that SMC clusters tend to become rounder with dynamical age. Ellipticities for the LMC clusters are unfortunately not available in Werchan & Zaritsky (2011), but Frenk & Fall (1982) have found that, in a sample of



**Fig. 6.** Cluster mass as a function of age on logarithmic scales. The filled and open squares are the SMC and LMC clusters, respectively. The red solid (LMC), red dotted (SMC) and green solid (M33) lines are Loess smoothing curves. The average mass increases rapidly for older clusters in the Magellanic Clouds. The black diagonal line is the limit beyond which clusters evaporate.

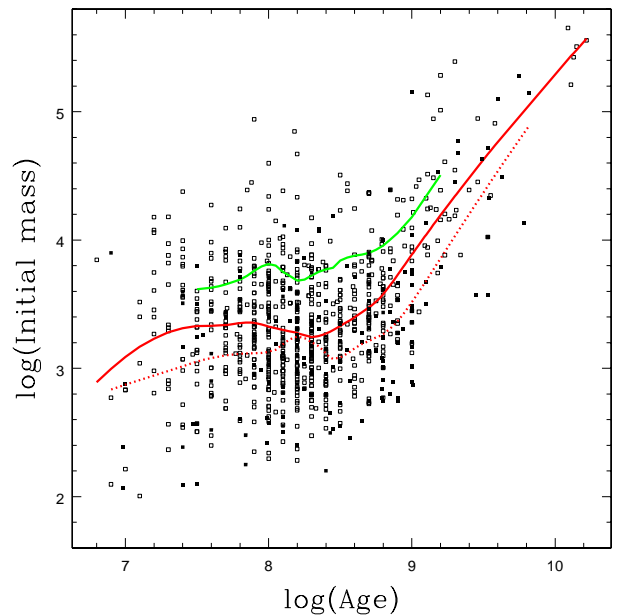
52 LMC clusters, the younger clusters are flatter than the older ones. Using the initial mass instead of the current mass and/or eliminating older clusters does not remove the paradox. The issue may be resolved by assuming that the dynamical evolution of the clusters has been accelerated because they are the result of fusions of smaller clusters. Numerical simulations by McMillan et al. (2007) have shown that the merged clusters retain the dynamical properties of the progenitors, which, being less massive, evolved faster.

Bica et al (2008) and Werchan & Zaritsky (2011) have shown that there is an excess of large clusters in the SMC with respect to the LMC. The latter authors interpreted this excess as resulting from a weaker tidal stress in the SMC, unless the sample suffers from an unknown selection effect that would favor large clusters. We find that there is an excess of faint clusters in the SMC; the same is true if one substitutes mass for absolute magnitude (see bottom right panel of Fig. 5). Werchan & Zaritsky (2011) note that the bar region in the LMC has a much higher stellar density than that of the SMC, which might reduce the detectability of faint clusters in that region of the galaxy.

## 6. Observed age dependence of cluster mass

Our compilation of ages and determination of masses for the clusters allow us to study the age dependence of mass, and to compare it to that for clusters in other galaxies.

The observed age dependence of cluster mass is shown on Fig. 6. Similar distributions of ages and masses have been found for the clusters of the LMC (de Grijs & Anders 2006, their Fig. 7, which uses different data from ours), for those of M51 (Bastian et al. 2005, their Fig. 10), and those of M83 (Fouesneau et al. 2012, their Figs. 13 and 16). All figures show the same trend, namely an absence of old low-mass clusters. This may be a selection effect due to evolutionary fading of clusters (Hunter et



**Fig. 7.** Cluster initial mass as a function of age at the same scale and using the same symbols as on Fig. 6. The average initial mass increases rapidly for older clusters in all three galaxies.

al. 2003). In our case, it is mainly due to evaporation of the clusters. This process occurs before evolutionary fading because the limit of detection in magnitude  $M_v = -2.00$  is faint. The evaporation limit, indicated by a diagonal line on Fig. 6, is given by  $T_{dis} = 30M^{0.62}$  (Kruijssen 2009). This is an average limit, as the more exact dissolution time (shown on Fig. 4) depends not only on the mass of a cluster, but also on its structure and on the local space density.

For the sake of clarity, we did not plot error bars on Fig. 6 and on the following ones. As mentioned in Sect. 2, the typical uncertainty on ages is 0.2 in log; for a small fraction of clusters (5% in the LMC and 10% in the SMC), it is larger than 0.5. The compilation of ages from different sources also increases the uncertainty. We want to emphasize at this point that determining accurate ages for clusters, as well as for galaxies, is a notoriously difficult task: one needs to know the metallicity and the Helium abundance, and the presence of multiple generations may complicate the task. Accurate ages can thus only be obtained with deep photometry and spectroscopy of individual stars, which is only available for a small fraction of the sample considered here.

The main source of error when deriving the mass from Kruijssen's (2009) models is due to the age uncertainty. Assuming that it is of order 0.2, it introduces a mass uncertainty of the order of 0.15 to 0.33 in log, depending on the initial mass, the age and the metallicity. This uncertainty is generally smaller at intermediate ages (around 0.1 Gyr) and for lower metallicities, and it increases with the initial mass, except at the youngest ages (where it remains constant). The metallicity is assumed to be constant until an age of 1.6 Gyr, and to decrease thereafter. This simplification introduces an additional mass uncertainty, which is negligible until about 1 Gyr, but which can reach 0.20 in log at 10 Gyr. There is also a possible systematic effect, due to the choice of initial mass function (see Sect. 4 and Fig. 3), which does not influence our main conclusions since it affects all masses in the same way.

One striking feature of Fig. 6, also evident in M83 (see Fig. 13 and 16 of Fouesneau et al. 2012), is that the most massive

clusters are also the oldest, as outlined by the red solid and dotted lines, which are Loess smoothing curves for the LMC and SMC clusters, respectively. This was already noticed by Hunter et al. (2003) for the LMC, although they found that mass increases with age over the whole age range, while we find that the mass is first constant or decreases slightly before increasing at older ages. They explain the mass increase at older ages as a size-of-sample effect: as age increases, larger numbers of clusters sample further into the high-mass end of the cluster mass distribution function, assuming that the latter is a power law. In the LMC, the slope of the mass-age relation is 1.28 for the current cluster mass and 1.38 for the initial mass. Since the slope expected for a constant cluster formation rate is between 0.7 and 1 in the LMC (Hunter et al. 2003), the higher slope means that the cluster formation rate was higher in the past in the LMC and SMC.

Hunter et al. (2003) also plot a histogram of the mass distribution of clusters to show that the excess of very old high-mass clusters cannot be explained by such a size-of-sample effect, and conclude that these old and massive clusters, which resemble Galactic globular clusters, must have a different formation history. While the presence of such clusters in the LMC has often been noted as peculiar (e.g. Piatti & Geisler 2012), we cannot confirm that they are statistically different from the others, as our sample probably suffers from incompleteness and larger uncertainties in mass at ages older than one Gyr.

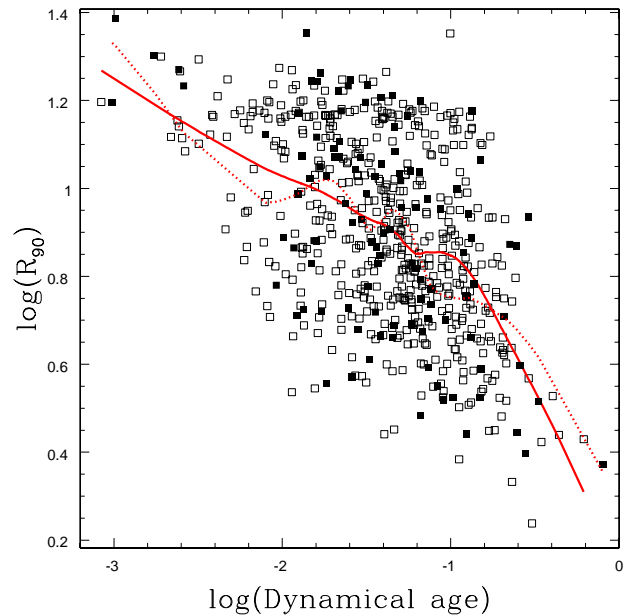
We have also plotted as a green solid line on Fig. 6 the Loess smoothing curve of a sample of M33 clusters (San Roman et al. 2009), for which we obtained initial and present-day masses using a Kruijssen (2009) model with  $Z = 0.004$  and  $t_o = 3$  Myr. Unfortunately, the ages of the M33 clusters were obtained from color-magnitude diagrams, which are not sensitive to ages greater than 1 Gyr, so the upward trend at older ages is less evident.

A similar trend appears when considering the initial mass, as shown on Fig. 7. The initial mass remains roughly constant until an age of about 300 Myr, and then increases rapidly with age, as shown by the Loess smoothing curves (red solid and dotted lines). This trend is also present among the young clusters of M33: their Loess smoothing curve is shown as a green solid line on Fig. 7. At the age of 300 Myr there is an inflection point in the mean absolute magnitude of the LMC clusters as a function of age, which is where evaporation begins to deplete the cluster populations in the range of masses considered here.

The age-mass and age-initial mass relations for the SMC clusters are shifted with respect to those for the LMC, indicating that the clusters formed in the SMC were systematically less massive than in the LMC.

The initial cluster mass function in the LMC and SMC might have changed over the past 300 Myr, even though we find that the average initial mass has remained approximately constant over that time, because of the phenomenon of infant mortality of clusters. There has been some debate over the importance of this phenomenon in the Magellanic Cloud clusters (see e.g. de Grijs & Goodwin 2009 and references therein). The latter authors find less than 10% mass-independent infant mortality before 10 Myr in the LMC. If we adopt their conclusion and assume that they are correct for the SMC as well, this cause of depletion, which affects all cluster masses equally, has no incidence on our estimates of the initial masses and their average value.

If we take into account the clusters of M33, there seems to be a trend of cluster mass increasing with parent galaxy mass, since the mass of M33 is  $5 \cdot 10^{10} M_{\odot}$  (Corbelli 2004). But the average



**Fig. 8.** Cluster radius containing 90% of the light as a function of dynamical age, on a logarithmic scale. Clusters shrink in size in the course of their dynamical evolution. The open and filled squares are the clusters younger than 300 Myr in the LMC and SMC, respectively, and the red solid and dotted lines are Loess smoothing curves for the clusters in the LMC and SMC, respectively.

higher mass of the clusters in M33 might instead be the result of a selection effect, as the galaxy is almost 900 kpc away.

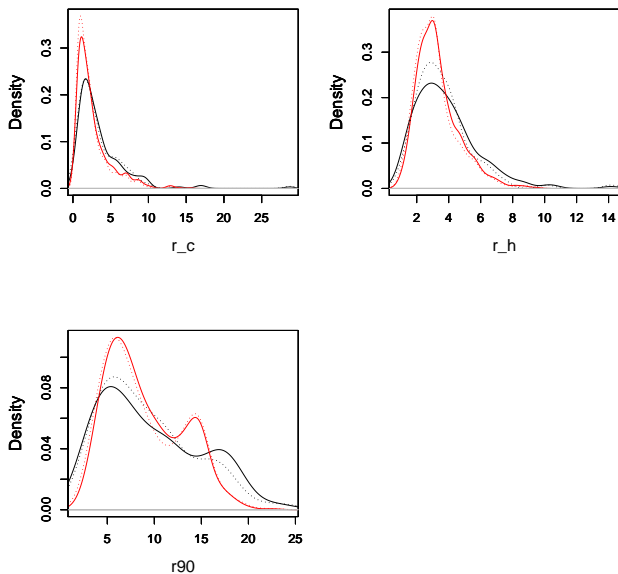
## 7. Tidal effects on the dynamical evolution of the clusters

We now move on to discuss the dynamical evolution of the clusters, and, for this purpose, use the dynamical rather than the physical age. We also limit the analysis to clusters younger than 300 Myr, which is the approximate age at which evaporation begins to deplete the population of clusters in both galaxies. An advantage of this limitation is that these younger clusters have on average the same initial mass, thus approximately the same initial radius. Another advantage is that it eliminates the problem of incompleteness, which sets in at about one Gyr.

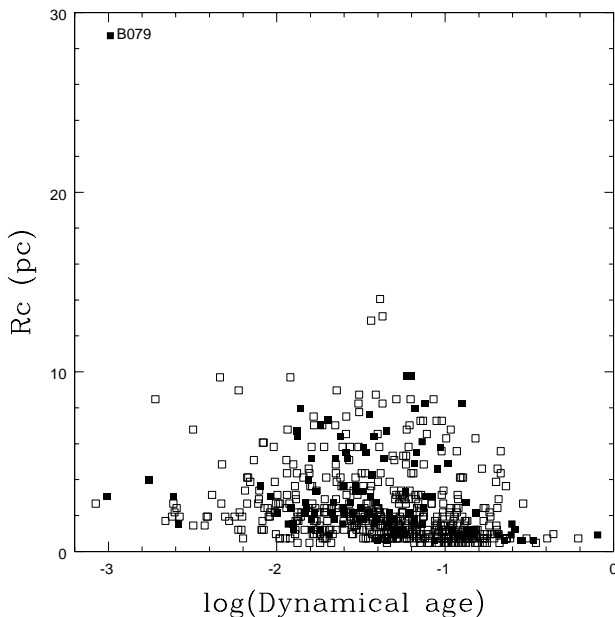
An evidence for external tidal effects is that the radius  $r_{90}$  of the clusters tends to decrease with dynamical age, as shown on Fig. 8. This is contrary to the canonical evolutionary scenario of globular clusters: their core shrinks and their outer regions expand. This trend depends of course on the initial mass function of the clusters: it will be blurred for example if clusters were more massive in the past, which is why we do not consider older clusters.

One effect of the tidal field is to reduce the tidal radius of the cluster, and this artefact has been used to study how the strength of the tidal field influences the dynamical evolution of simulated star clusters (Tanikawa & Fukushige 2005; Takahashi & Baumgardt 2012). One expects the tidal radius of SMC clusters to be larger on average than that of LMC clusters. We indeed find that the probability distribution functions of  $r_c$ ,  $r_h$ , and  $r_{90}$  of the SMC and LMC clusters, shown on Fig. 9, are different. There is an excess of SMC clusters at larger values of all three characteristic radii. We did not consider  $r_t$ , because it has been derived by us from the other structural parameters.



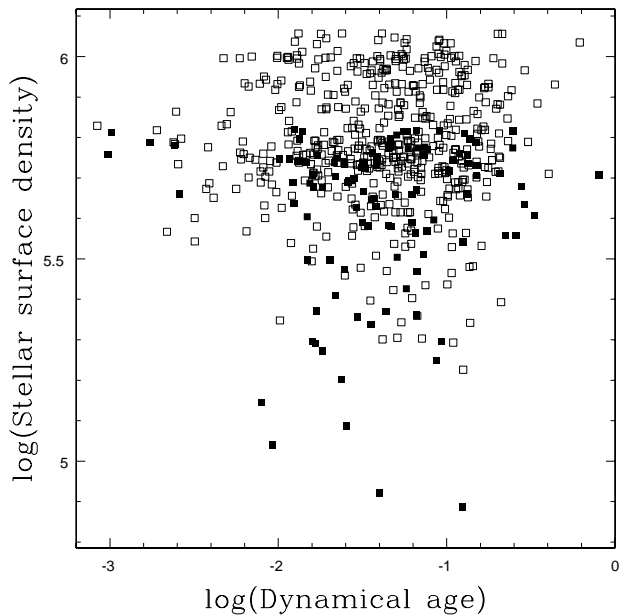


**Fig. 9.** Probability density functions for the core radius  $r_c$  (top left), half-light radius  $r_h$  (top right), and  $r_{90}$  (bottom left). The symbols are the same as in Fig. 5.



**Fig. 10.** Evolution of the cluster core radius with dynamical age. The spread in  $r_c$  increases progressively in time to a maximum and then decreases until final dissolution. The symbols are the same as on Fig. 8.

MacKey & Gilmore (2003a) have found that the spread in core radius in the LMC increases with age, bifurcating into two branches at several hundred Myr. With a much larger sample covering both dwarf galaxies, and plotted versus dynamical rather than physical age, we find that the spread increases in time to a maximum, and then decreases until final dissolution. The SMC cluster B079 (= K31-L46) is the sole exception to the trend, suggesting that its age has been underestimated. If there is no hidden selection effect in the data, this trend can be interpreted as core expansion until the onset of core collapse,



**Fig. 11.** Galactic stellar surface density, in  $\log(\text{star}/\text{kpc}^2)$ , as a function of cluster dynamical age. Clusters progressively migrate to low-density regions. The symbols are the same as on Fig. 8.

and then progressive shrinking of the core radius with dynamical evolution. While core collapse occurs late in the dynamical evolution of Galactic globular clusters, an early onset of core-collapse in the Magellanic Cloud clusters can be explained by the merger origin mentioned in Sect. 5. An alternative explanation is that the dynamical evolution is on the contrary very slow, and that the cluster cores tend to expand until dynamical equilibrium is reached, and then proceed to contract in agreement with numerical simulations.

We have also looked for a possible effect of the local tidal field on the dynamical evolution of the clusters. We have plotted the local galactic surface density  $\rho$  as a function of dynamical age of the clusters on Fig. 11, where the open and filled squares represent the LMC and SMC clusters, respectively. There are no dynamically young clusters in the regions of low stellar surface density. The trend is admittedly not very strong, in part because of projection effects : some low-density clusters are seen in front of the high-density region. In other words, the high stellar surface densities (say above 5.5 in log) should be considered as upper limits.

We interpret this result as follows: clusters form in regions of high stellar density, and, assuming peculiar velocities of the order of 10 to 50 km/s, can only reach low-density regions after 10 to 100 Myr. The trend is also present, although weaker in a diagram of stellar density vs physical age, where the regions of lowest stellar densities are populated after 100 Myr. This result has been predicted in models of cluster evolution by Kruijssen et al. (2011), who call it “cluster migration”.

## 8. Conclusion

We have taken advantage of the availability of ages and structural parameters for a large sample of star clusters in the SMC and LMC to investigate the dynamical properties of these clusters, and to look for possible differences between the clusters of the SMC and LMC, which would result from different initial conditions in the formation of the two galaxies and their clus-

ters, or from the large mass difference between the two dwarf galaxies.

To that end, we first determined the present-day and initial masses and relaxation and dissolution times of the sample clusters, taking great care to properly determine their central surface brightness.

The clusters in both galaxies form with an initial mass that remained constant over the past 300Myr. The trend for older clusters is masked because the low-mass clusters progressively evaporate, and possibly by incompleteness for clusters older than 1Gyr. We therefore limited our analysis to clusters younger than 300Myr.

Although this is not a new result, we have found that clusters must form in high-density regions, because there are no dynamically old clusters in the regions of low stellar density of the two galaxies.

The LMC clusters are (marginally) different from the SMC clusters in their dynamical properties, in that they have larger current and initial masses and shorter central relaxation times, as well as smaller dimensions (smaller  $r_c$ ,  $r_h$  and  $r_{90}$ ). We find that the average cluster mass increasing with parent galaxy mass also applies to M33. This deserves to be noted, even though it could well be the result of a selection effect.

We conclude by putting our findings into perspective in the light of presently available data and methods. The present results rest on parameters that are very model-dependent. The ages were mostly determined from color-magnitude diagrams that assume a constant metallicity and do not take into account multiple stellar populations or unusual Helium abundances, and the masses were derived from Kruijssen's (2009) models. Other assumptions (such as a Salpeter initial stellar mass function or a mass-dependent infant mortality) or methods (such as that of Popescu et al. 2012), with their own pros and cons, will certainly yield different ages and masses, but not necessarily a different overall evolutionary picture. This is the state of the art, and other studies of this kind are necessary to confort our results and to converge toward a unified picture of the dynamical evolution of clusters in the Magellanic Clouds.

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**Table 2.** Structural parameters, ages, masses and relaxation times for the LMC clusters

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0001	5.58	7.03	15.53	30.97	-4.83	22.27	9.23	0.075	3.449	3.882	4.846	8.669	8.721	10.441	4,2
A0002	2.67	3.17	6.84	13.30	-3.59	21.82	8.90	0.03	2.763	3.225	5.149	7.963	7.959	9.626	1,1
A0003	7.03	7.32	15.00	27.64	-5.56	21.75	8.70	0.05	3.582	3.802	5.249	8.928	8.798	10.297	1,1
A0005	3.39	3.13	6.15	10.83	-4.65	20.87	8.80	0.08	3.265	3.533	5.266	8.377	8.126	9.663	1,1
A0007	2.18	3.91	10.33	24.24	-4.61	20.94	8.70	0.10	3.181	3.445	5.352	7.861	8.242	9.748	1,1
A0009	1.70	3.89	11.87	31.21	-3.99	21.30	8.80	0.03	2.982	3.291	5.541	7.572	8.167	9.607	1,1
A0011	0.97	3.58	15.13	49.24	-4.71	19.81	8.30	0.10	3.001	3.188	5.563	7.124	8.120	9.546	1,1
A0013	13.09	5.33	9.00	13.12	-4.61	22.28	8.80	0.10	3.249	3.518	5.629	9.594	8.467	9.825	1,1
A0015	2.67	3.44	7.69	15.50	-5.83	19.71	8.94	0.075	3.834	4.083	5.646	8.326	8.402	9.665	34,2
A0017	0.97	2.31	7.23	19.37	-3.46	20.65	8.60	0.02	2.606	2.945	5.549	7.072	7.700	9.189	1,1
A0018	2.42	3.21	7.27	14.84	-5.36	20.01	9.20	0.02	3.826	4.157	5.713	8.250	8.353	9.584	14,1
A0020	4.12	2.59	4.63	7.27	-4.96	20.29	8.40	0.15	3.165	3.358	5.696	8.611	7.967	9.304	1,1
A0021	1.70	2.34	5.39	11.19	-6.16	18.49	7.90	0.18	3.359	3.481	5.603	7.835	7.972	9.327	1,1
A0022	0.73	3.13	14.71	50.91	-4.02	19.99	8.00	0.07	2.543	2.705	5.679	6.763	7.878	9.310	1,1
A0023	7.51	8.13	16.89	31.60	-5.56	21.95	8.85	0.05	3.659	3.907	5.760	8.988	8.895	10.127	15,1
A0026	5.09	4.32	8.28	14.16	-3.71	22.55	9.00	0.10	2.926	3.357	5.383	8.550	8.216	9.743	1,1
A0027	0.97	1.85	5.08	12.28	-4.55	19.31	8.60	0.08	3.112	3.350	5.766	7.295	7.731	9.040	15,15
A0029	3.88	3.86	7.77	14.06	-5.63	20.31	8.72	0.075	3.621	3.843	5.577	8.571	8.395	9.724	34,2
A0031	2.42	5.49	16.68	43.70	-7.24	18.80	8.30	0.11	4.020	4.173	5.794	8.191	8.777	9.938	1,1
A0032	0.48	1.13	3.50	9.32	-5.51	17.06	7.90	0.10	3.099	3.225	5.778	6.784	7.401	8.707	1,1
A0035	1.70	2.90	7.43	17.01	-5.99	18.95	9.20	0.06	4.095	4.388	5.255	8.057	8.390	9.809	4,21
A0036	0.48	3.35	22.50	93.74	-2.52	20.90	8.20	0.07	2.026	2.282	5.806	6.270	7.767	9.203	1,1
A0037	2.42	2.67	5.59	10.54	-6.94	18.14	7.90	0.11	3.672	3.790	5.811	8.249	8.174	9.379	1,1
A0039	3.39	3.60	7.43	13.80	-6.47	19.29	8.00	0.12	3.530	3.660	5.807	8.426	8.316	9.544	1,1
A0042	5.82	7.02	15.23	29.81	-3.67	23.46	8.30	0.15	2.579	2.794	5.734	8.404	8.416	9.815	1,1
A0043	3.15	2.85	5.56	9.71	-4.71	20.62	8.00	0.10	2.823	2.970	5.742	8.179	7.909	9.271	1,1
A0044	4.85	3.60	6.68	10.96	-3.56	22.36	8.20	0.15	2.458	2.673	5.798	8.411	7.943	9.327	1,1
A0047	8.24	3.35	5.65	8.23	-5.76	20.12	7.90	0.15	3.199	3.323	5.822	9.275	8.146	9.415	1,1
A0048	5.09	4.52	8.78	15.25	-5.21	21.13	8.70	0.10	3.435	3.670	5.806	8.716	8.428	9.671	1,1
A0049	8.97	5.02	8.81	13.50	-5.36	21.35	8.70	0.05	3.494	3.726	5.810	9.289	8.519	9.751	1,1
A0051	1.21	2.37	6.59	16.12	-5.62	18.75	8.30	0.20	3.370	3.538	5.575	7.526	7.984	9.352	1,1
A0052	6.30	4.64	8.58	14.04	-3.21	23.26	8.80	0.10	2.632	3.003	5.554	8.642	8.164	9.646	1,1
A0053	2.42	1.56	2.81	4.44	-3.81	20.33	8.00	0.10	2.460	2.624	5.819	8.016	7.399	8.772	1,1
A0054	0.73	0.96	2.15	4.36	-4.82	17.92	7.90	0.20	2.822	2.955	5.791	7.109	7.198	8.536	1,1
A0055	1.45	2.94	8.34	20.73	-7.35	17.46	7.95	0.08	3.858	3.980	5.832	7.818	8.308	9.474	1,1
A0058	0.73	0.82	1.73	3.29	-4.56	17.95	7.90	0.15	2.718	2.854	5.789	7.120	7.064	8.417	1,1
A0059	1.21	1.87	4.56	9.98	-6.05	18.02	7.90	0.08	3.315	3.438	5.814	7.566	7.810	9.066	1,1
A0061	6.54	2.86	4.86	7.15	-4.05	21.48	8.20	0.05	2.670	2.858	5.611	8.905	7.860	9.309	1,1
A0062	1.21	2.96	9.44	25.61	-4.51	20.11	8.80	0.10	3.177	3.481	5.671	7.406	8.058	9.406	1,1
A0064	3.39	6.38	17.34	41.63	-6.83	19.73	9.23	0.075	4.323	4.610	5.826	8.572	8.995	10.094	34,2
A0065	9.21	4.49	7.73	11.55	-5.46	21.04	8.95	0.15	3.680	3.953	5.822	9.436	8.516	9.714	14,1
A0067	9.45	8.43	16.41	28.55	-7.22	20.47	9.46	0.07	4.639	4.946	5.783	9.586	9.303	10.374	21,21
A0069	0.73	2.95	13.29	44.90	-4.83	19.14	8.87	0.075	3.367	3.653	5.614	7.057	8.126	9.474	34,2
A0071	3.39	4.80	11.19	23.51	-4.36	21.83	8.70	0.05	3.085	3.353	5.829	8.178	8.340	9.622	1,1
A0077	3.64	2.40	4.34	6.90	-3.86	21.21	8.45	0.05	2.722	2.985	5.847	8.358	7.765	9.089	1,1
A0078	7.76	3.42	5.83	8.59	-4.26	21.66	7.90	0.15	2.595	2.737	5.614	8.987	7.953	9.411	1,1
A0079	0.48	2.50	13.54	50.60	-2.17	21.07	8.10	0.12	1.831	2.429	5.602	6.255	7.525	9.086	1,1
A0080	3.15	4.23	9.62	19.74	-2.66	23.29	8.70	0.02	2.224	2.733	5.397	7.863	7.975	9.591	1,1
A0082	4.85	3.11	5.59	8.82	-4.67	20.97	8.20	0.15	2.923	3.095	5.577	8.625	8.002	9.433	1,1
A0083	2.42	5.57	17.08	45.05	-6.23	19.83	8.72	0.075	3.865	4.073	5.807	8.127	8.727	9.905	34,2
A0088	1.45	2.20	5.30	11.49	-5.46	18.98	8.00	0.15	3.126	3.263	5.615	7.620	7.846	9.229	1,1
A0089	1.94	3.77	10.43	25.42	-5.33	20.06	8.87	0.075	3.582	3.838	5.630	7.914	8.365	9.674	34,2
A0093	1.94	4.06	11.76	29.69	-6.57	18.91	8.20	0.12	3.687	3.835	5.772	7.935	8.453	9.676	1,1
A0094	5.82	2.84	4.89	7.31	-4.37	21.13	8.10	0.15	2.741	2.907	5.615	8.800	7.880	9.317	1,1
A0095	4.12	4.60	9.67	18.32	-5.23	21.03	9.09	0.075	3.631	3.957	5.397	8.576	8.513	9.931	34,2
A0097	1.70	3.54	10.19	25.64	-4.53	20.65	8.70	0.075	3.150	3.416	5.842	7.654	8.165	9.431	10,2
A0098	3.15	3.53	7.43	14.10	-5.63	20.05	8.72	0.075	3.621	3.843	5.866	8.397	8.337	9.522	34,2
A0099	1.94	4.66	14.68	39.49	-8.27	17.35	7.40	0.15	3.920	3.995	5.776	7.996	8.631	9.817	1,1
A0100	0.73	1.28	3.34	7.75	-5.11	18.03	8.10	0.10	3.040	3.192	5.715	7.105	7.464	8.809	1,1
A0101	1.94	2.90	6.93	14.92	-6.33	18.72	8.28	0.075	3.643	3.800	5.847	8.004	8.216	9.407	34,2
A0105	8.48	3.52	5.95	8.69	-4.66	21.33	8.40	0.05	3.037	3.243	5.710	9.225	8.121	9.469	1,1
A0108	0.73	1.77	5.62	15.19	-6.37	17.14	7.80	0.15	3.391	3.502	5.735	7.157	7.802	9.086	1,1
A0109	0.48	2.46	13.13	48.74	-3.46	19.77	8.40	0.05	2.547	2.792	5.654	6.465	7.721	9.165	1,1
A0110	0.97	2.52	8.39	23.42	-6.41	17.79	8.00	0.10	3.506	3.636	5.851	7.371	8.076	9.285	1,1
A0111	0.73	2.42	9.50	29.55	-2.75	21.06	8.70	0.05	2.374	2.763	5.529	6.749	7.658	9.188	1,1
A0115	0.97	1.68	4.35	10.04	-5.73	18.01	8.28	0.075	3.402	3.566	5.871	7.424	7.771	8.986	34,2

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_i$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0116	1.45	2.34	5.83	13.02	-3.67	20.85	8.30	0.15	2.579	2.794	5.564	7.417	7.700	9.185	1,1
A0118	4.36	4.81	10.07	18.99	-4.81	21.55	7.80	0.10	2.766	2.888	5.734	8.307	8.232	9.606	1,1
A0120	0.73	1.75	5.53	14.88	-3.93	19.57	8.20	0.075	2.623	2.813	5.902	6.891	7.527	8.836	10,2
A0121	2.67	4.10	9.94	21.67	-6.51	19.27	8.30	0.10	3.727	3.886	5.727	8.237	8.474	9.712	1,1
A0122	3.64	6.16	15.75	35.96	-8.68	17.90	8.20	0.09	4.534	4.671	5.887	8.730	9.056	10.092	8,8
A0124	0.97	1.44	3.45	7.42	-5.06	18.48	8.00	0.15	2.965	3.107	5.822	7.307	7.516	8.818	1,1
A0126	1.45	2.27	5.58	12.29	-7.22	17.27	8.00	0.20	3.831	3.957	5.885	7.872	8.130	9.274	1,1
A0130	0.73	2.03	7.06	20.32	-3.83	19.82	8.85	0.075	2.936	3.268	5.887	6.966	7.728	9.002	10,2
A0131	2.91	2.24	4.18	6.93	-4.59	20.28	8.40	0.06	3.009	3.217	5.881	8.251	7.817	9.083	1,1
A0135	1.70	3.27	8.97	21.74	-6.11	18.98	7.70	0.10	3.232	3.336	5.706	7.701	8.142	9.464	1,1
A0142	5.58	6.54	14.02	27.11	-6.84	20.15	9.58	0.11	4.568	4.909	5.354	9.125	9.108	10.406	32,32
A0145	1.21	2.39	6.67	16.38	-5.65	18.73	8.20	0.08	3.317	3.474	5.830	7.505	7.969	9.217	1,1
A0150	0.48	2.44	13.02	48.24	-3.03	20.19	9.00	0.075	2.568	3.120	5.914	6.474	7.725	9.036	10,2
A0151	1.94	2.52	5.66	11.45	-3.36	21.50	8.40	0.05	2.509	2.755	5.744	7.643	7.727	9.131	1,1
A0152	0.73	1.89	6.26	17.43	-4.23	19.35	8.30	0.075	2.811	3.005	5.917	6.937	7.638	8.915	10,2
A0155	5.82	8.12	18.79	39.22	-7.23	20.11	8.08	0.075	3.881	4.013	5.918	8.830	8.978	10.098	4,2
A0156	0.73	3.16	15.00	52.15	-3.56	20.46	8.80	0.02	2.752	3.132	5.562	6.829	7.954	9.416	1,1
A0157	7.27	3.10	5.26	7.71	-4.41	21.30	8.30	0.10	2.882	3.073	5.717	9.057	7.985	9.351	1,1
A0159	0.73	3.09	14.39	49.54	-4.53	19.47	8.30	0.075	2.929	3.119	5.878	6.894	7.999	9.278	10,2
A0160	0.48	2.39	12.55	46.12	-4.26	18.95	8.10	0.15	2.697	2.865	5.846	6.518	7.754	9.081	1,1
A0161	1.94	2.18	4.59	8.72	-4.43	20.20	8.60	0.075	3.065	3.305	5.919	7.877	7.819	9.059	10,2
A0164	1.70	2.48	5.87	12.51	-5.33	19.40	8.72	0.075	3.493	3.729	5.865	7.869	8.059	9.263	34,2
A0166	1.70	2.10	4.60	9.10	-5.83	18.66	8.35	0.075	3.482	3.654	5.925	7.913	7.946	9.122	34,2
A0167	0.73	3.16	15.00	52.15	-3.25	20.77	8.65	0.08	2.541	2.906	5.699	6.760	7.884	9.307	1,1
A0168	3.15	2.37	4.41	7.27	-6.32	18.68	8.10	0.20	3.525	3.666	5.863	8.498	8.042	9.243	1,1
A0170	0.97	2.92	10.73	32.00	-5.58	18.76	8.00	0.25	3.174	3.310	5.932	7.221	8.050	9.267	1,1
A0171	1.70	4.43	14.76	41.25	-6.69	18.73	7.30	0.03	3.221	3.290	5.863	7.631	8.338	9.583	1,1
A0172	2.67	3.70	8.53	17.75	-6.52	19.12	9.03	0.04	4.172	4.417	5.938	8.437	8.579	9.645	26,26
A0174	1.21	1.78	4.22	9.02	-4.83	19.17	8.10	0.075	2.928	3.084	5.899	7.442	7.638	8.907	10,2
A0177	3.39	4.10	8.89	17.41	-7.47	18.49	8.55	0.12	4.265	4.439	5.938	8.669	8.683	9.735	23,23
A0181	1.94	2.43	5.36	10.67	-3.73	21.07	8.70	0.075	2.798	3.119	5.939	7.750	7.798	9.065	10,2
A0183	1.70	3.42	9.66	23.93	-7.81	17.33	7.40	0.10	3.736	3.811	5.951	7.878	8.360	9.485	1,1
A0184	1.94	4.63	14.55	39.04	-4.81	20.81	8.10	0.10	2.920	3.076	5.948	7.628	8.260	9.505	1,1
A0185	3.88	1.77	3.03	4.48	-4.48	20.01	8.20	0.09	2.848	3.022	5.882	8.603	7.609	8.898	1,1
A0186	0.73	2.08	7.37	21.45	-5.96	17.71	7.80	0.05	3.227	3.340	5.870	7.065	7.848	9.089	1,1
A0187	0.97	2.21	6.75	17.73	-4.71	19.35	8.30	0.10	3.001	3.188	5.924	7.216	7.806	9.052	1,1
A0190	0.73	3.06	14.13	48.44	-3.21	20.79	8.60	0.10	2.518	2.852	5.886	6.757	7.855	9.187	1,1
A0191	5.09	3.75	6.93	11.34	-3.25	22.75	9.00	0.05	2.635	3.194	5.110	8.505	8.025	9.730	1,1
A0193	3.39	2.79	5.30	8.97	-5.83	19.49	8.70	0.075	3.689	3.905	5.943	8.575	8.209	9.345	10,2
A0194	1.45	3.53	11.23	30.41	-4.81	20.20	8.50	0.10	3.161	3.373	5.799	7.519	8.167	9.453	1,1
A0199	1.70	2.67	6.54	14.40	-4.73	20.10	8.50	0.075	3.129	3.343	5.953	7.716	7.973	9.186	10,2
A0202	0.97	2.04	5.94	15.04	-5.17	18.81	8.30	0.15	3.189	3.364	5.818	7.298	7.822	9.094	1,1
A0203	2.67	5.47	15.60	38.96	-5.93	20.21	7.47	0.075	3.024	3.109	5.926	7.907	8.404	9.646	34,2
A0206	1.45	3.14	9.29	23.83	-7.23	17.65	8.10	0.075	3.891	4.025	5.970	7.817	8.364	9.457	10,2
A0207	0.97	2.98	11.07	33.28	-7.21	17.15	10.15	0.10	5.093	5.507	5.797	7.966	8.811	9.804	30,30
A0211	2.18	4.00	10.70	25.38	-5.73	19.84	9.23	0.075	3.845	4.204	5.761	8.104	8.503	9.707	34,2
A0212	2.42	3.64	8.74	18.88	-6.01	19.53	8.40	0.10	3.589	3.763	5.849	8.126	8.344	9.543	1,1
A0214	1.45	2.94	8.33	20.70	-5.73	19.08	8.65	0.075	3.623	3.832	5.934	7.729	8.218	9.369	34,2
A0216	5.82	6.33	13.17	24.69	-6.21	20.76	8.90	0.10	3.958	4.194	5.647	8.934	8.846	10.090	22,22
A0219	5.82	5.73	11.50	20.73	-6.41	20.39	8.20	0.10	3.623	3.772	5.921	8.840	8.653	9.810	1,1
A0220	1.94	2.67	6.13	12.71	-5.53	19.41	8.05	0.075	3.183	3.324	5.987	7.857	7.992	9.181	10,2
A0222	1.45	4.07	14.21	41.04	-5.25	19.90	8.30	0.08	3.220	3.395	5.928	7.512	8.281	9.494	1,1
A0223	1.94	2.16	4.53	8.57	-4.49	20.13	8.10	0.03	2.788	2.953	5.819	7.783	7.717	9.046	1,1
A0224	2.67	2.00	3.70	6.08	-4.23	20.40	8.40	0.075	2.868	3.081	5.966	8.156	7.693	8.937	10,2
A0228	1.21	1.72	4.01	8.44	-4.63	19.33	8.60	0.075	3.143	3.380	5.930	7.526	7.692	8.914	10,2
A0230	0.48	1.92	8.59	28.90	-3.72	19.33	8.10	0.07	2.473	2.659	5.933	6.477	7.538	8.852	1,1
A0231	3.39	4.08	8.84	17.29	-5.43	20.52	8.20	0.075	3.229	3.389	6.001	8.277	8.286	9.461	10,2
A0232	0.48	2.49	13.44	50.15	-3.53	19.71	8.90	0.075	2.744	3.204	5.953	6.527	7.795	9.063	10,2
A0234	0.97	1.24	2.75	5.52	-4.03	19.29	8.25	0.075	2.689	2.888	5.931	7.257	7.321	8.607	34,2
A0235	13.09	5.29	8.94	13.02	-5.02	21.86	8.45	0.07	3.222	3.422	5.617	9.586	8.454	9.822	1,1
A0239	2.67	3.40	7.54	15.11	-6.06	19.46	7.20	0.02	2.919	2.981	5.933	7.994	8.057	9.310	1,1
A0240	4.36	4.85	10.17	19.23	-5.03	21.34	8.40	0.075	3.193	3.385	5.929	8.454	8.385	9.601	10,2
A0241	7.51	3.03	5.12	7.45	-5.91	19.76	7.70	0.10	3.152	3.257	5.930	9.200	8.066	9.287	1,1
A0242	0.73	1.50	4.29	10.73	-6.46	16.87	7.10	0.15	2.986	3.039	5.906	7.048	7.548	8.805	1,1
A0243	2.67	2.46	4.84	8.52	-5.23	19.77	8.48	0.075	3.323	3.519	5.947	8.243	7.992	9.180	34,2
A0245	0.73	3.16	14.93	51.85	-3.23	20.79	8.20	0.075	2.331	2.548	5.935	6.694	7.817	9.149	10,2
A0246	1.45	2.50	6.47	14.91	-4.33	20.28	8.70	0.075	3.073	3.342	5.952	7.568	7.912	9.134	10,2

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0248	0.73	2.43	9.52	29.62	-3.87	19.94	7.60	0.28	2.287	2.398	5.966	6.723	7.632	8.955	1,1
A0249	3.39	4.41	9.87	19.96	-5.83	20.24	8.79	0.075	3.736	3.967	5.847	8.442	8.525	9.702	34,2
A0252	0.73	3.09	14.39	49.54	-5.35	18.65	7.90	0.08	3.035	3.162	5.872	6.931	8.036	9.303	1,1
A0255	0.97	2.18	6.58	17.16	-4.23	19.82	8.50	0.075	2.917	3.155	5.999	7.189	7.767	8.987	10,2
A0256	4.36	6.84	16.81	37.05	-8.13	18.75	8.10	0.075	4.252	4.383	5.992	8.753	9.012	10.039	10,2
A0260	0.97	3.36	13.58	43.02	-4.73	19.73	8.75	0.075	3.272	3.526	6.004	7.232	8.176	9.343	10,2
A0261	1.70	2.37	5.48	11.43	-4.57	20.10	9.34	0.12	3.349	3.883	5.478	7.828	7.975	9.395	30,30
A0262	0.73	2.35	9.02	27.68	-3.86	19.92	8.20	0.15	2.595	2.786	5.866	6.826	7.708	9.040	1,1
A0263	0.73	2.93	13.17	44.40	-6.63	17.33	8.10	0.075	3.650	3.788	5.995	7.164	8.227	9.343	10,2
A0267	1.70	3.06	8.12	19.10	-4.83	20.18	8.00	0.075	2.874	3.017	5.965	7.591	7.975	9.218	10,2
A0268	2.91	3.65	8.04	16.00	-5.17	20.51	8.10	0.15	3.063	3.216	5.913	8.106	8.154	9.397	1,1
A0269	5.33	4.85	9.49	16.62	-5.55	20.93	9.26	0.08	3.787	4.162	5.721	8.871	8.606	9.839	7,7
A0271	0.97	2.62	8.93	25.36	-5.03	19.21	8.20	0.075	3.066	3.233	5.988	7.203	7.940	9.145	10,2
A0272	1.45	2.96	8.41	20.96	-6.43	18.38	8.05	0.075	3.543	3.678	6.006	7.699	8.192	9.318	10,2
A0274	0.97	2.00	5.72	14.32	-7.12	16.83	7.50	0.20	3.519	3.603	5.787	7.425	7.928	9.167	1,1
A0275	2.18	5.03	15.46	40.83	-8.23	17.61	7.80	0.075	4.135	4.242	5.997	8.163	8.765	9.808	10,2
A0277	1.94	4.14	12.14	30.93	-9.06	16.44	7.20	0.18	4.119	4.178	5.797	8.098	8.633	9.777	1,1
A0280	1.45	1.41	2.82	5.06	-5.06	18.71	8.10	0.05	3.020	3.173	5.772	7.717	7.519	8.839	1,1
A0281	1.94	2.54	5.70	11.56	-5.83	19.03	8.15	0.075	3.360	3.509	6.033	7.937	8.025	9.165	10,2
A0282	2.18	2.81	6.27	12.63	-4.31	20.79	8.50	0.10	2.949	3.185	5.626	7.869	7.944	9.346	1,1
A0283	3.88	4.03	8.25	15.19	-5.53	20.48	8.65	0.075	3.544	3.756	5.978	8.528	8.394	9.535	34,2
A0286	7.27	2.95	4.98	7.25	-5.83	19.78	8.15	0.075	3.360	3.509	5.996	9.252	8.123	9.281	10,2
A0287	6.79	2.89	4.90	7.18	-5.12	20.44	8.30	0.20	3.169	3.345	5.914	9.114	8.040	9.267	1,1
A0288	2.18	3.21	7.64	16.35	-6.75	18.54	8.15	0.08	3.728	3.871	6.034	8.116	8.316	9.401	19,19
A0289	0.97	3.31	13.21	41.56	-7.63	16.82	9.20	0.075	4.778	5.011	6.032	7.819	8.750	9.675	10,2
A0291	4.61	2.46	4.29	6.51	-3.46	21.72	8.40	0.05	2.547	2.792	5.810	8.542	7.723	9.089	1,1
A0293	2.91	5.54	15.15	36.57	-6.63	19.62	8.10	0.075	3.650	3.788	6.014	8.208	8.642	9.748	10,2
A0294	0.97	2.60	8.80	24.89	-5.72	18.51	7.80	0.20	3.130	3.245	5.966	7.227	7.957	9.164	1,1
A0296	5.82	3.26	5.71	8.75	-5.03	20.74	9.18	0.075	3.623	3.994	5.924	9.055	8.285	9.441	33,2
A0297	1.21	3.83	14.53	44.27	-4.73	20.14	8.30	0.075	3.009	3.195	6.025	7.296	8.167	9.361	10,2
A0298	5.09	2.54	4.39	6.59	-3.73	21.53	8.90	0.075	2.917	3.276	6.004	8.762	7.868	9.086	10,2
A0300	2.67	3.02	6.38	12.15	-6.13	19.21	8.35	0.075	3.604	3.771	5.976	8.279	8.229	9.361	10,2
A0301	0.48	1.60	6.32	19.71	-5.28	17.62	7.70	0.25	2.900	3.008	5.963	6.649	7.562	8.803	1,1
A0302	0.48	2.15	10.42	36.70	-5.28	17.85	7.85	0.25	2.978	3.101	5.914	6.630	7.779	9.034	1,1
A0303	0.97	1.42	3.35	7.14	-5.56	17.96	7.70	0.15	3.012	3.119	5.960	7.328	7.519	8.746	1,1
A0304	1.70	3.69	10.93	28.07	-5.03	20.20	8.85	0.075	3.433	3.709	5.988	7.747	8.296	9.448	10,2
A0306	0.48	2.47	13.23	49.19	-4.83	18.40	8.20	0.075	2.987	3.156	5.979	6.613	7.873	9.093	10,2
A0308	4.36	6.96	17.24	38.29	-7.03	19.87	8.70	0.075	4.176	4.369	6.056	8.719	8.993	9.999	10,2
A0310	4.36	5.93	13.57	28.00	-7.93	18.75	8.00	0.075	4.115	4.239	6.057	8.739	8.865	9.880	10,2
A0312	1.94	3.30	8.47	19.39	-6.43	18.80	8.13	0.075	3.586	3.729	5.934	7.947	8.280	9.436	34,2
A0313	2.91	3.05	6.27	11.59	-5.93	19.47	8.05	0.075	3.342	3.481	6.018	8.263	8.139	9.288	10,2
A0314	1.45	3.06	8.92	22.61	-6.13	18.72	8.35	0.075	3.604	3.771	6.014	7.714	8.238	9.352	10,2
A0315	1.45	3.93	13.40	38.09	-7.33	17.78	8.55	0.075	4.210	4.384	6.039	7.895	8.633	9.643	10,2
A0316	3.64	3.28	6.40	11.17	-6.68	18.95	8.00	0.25	3.614	3.743	5.686	8.561	8.286	9.562	1,1
A0321	3.39	5.63	14.24	32.22	-5.73	20.68	8.28	0.075	3.402	3.566	5.966	8.248	8.559	9.726	34,2
A0322	5.58	4.22	7.86	12.97	-6.01	20.24	9.11	0.10	3.954	4.242	5.938	9.032	8.581	9.680	30,30
A0325	3.88	3.09	5.83	9.77	-4.93	20.63	6.90	0.075	2.057	2.096	6.000	8.120	7.723	9.058	10,2
A0327	1.21	2.45	6.94	17.24	-5.03	19.38	7.80	0.075	2.854	2.974	5.993	7.335	7.822	9.054	10,2
A0328	7.03	8.36	18.01	35.03	-7.03	20.49	8.70	0.075	4.176	4.369	6.054	9.114	9.112	10.120	10,2
A0329	2.67	2.12	3.98	6.66	-4.83	19.90	7.84	0.075	2.792	2.918	5.885	8.110	7.705	9.000	34,2
A0330	1.45	3.16	9.36	24.06	-7.03	17.86	8.00	0.075	3.755	3.882	6.057	7.763	8.315	9.385	10,2
A0331	4.12	3.87	7.65	13.55	-6.23	19.74	7.80	0.075	3.334	3.447	6.057	8.524	8.290	9.422	10,2
A0333	2.18	5.27	16.68	45.01	-7.33	18.55	8.00	0.075	3.876	4.001	6.056	8.054	8.695	9.747	10,2
A0334	1.21	2.57	7.51	19.09	-3.86	20.61	8.30	0.05	2.653	2.865	5.696	7.255	7.786	9.194	1,1
A0335	5.33	3.12	5.51	8.52	-4.56	21.11	8.10	0.02	2.816	2.980	5.736	8.687	7.966	9.332	1,1
A0336	0.97	2.39	7.67	20.89	-5.13	19.02	8.00	0.075	2.993	3.134	6.042	7.195	7.854	9.043	10,2
A0338	5.33	2.90	5.07	7.73	-4.93	20.60	8.80	0.075	3.374	3.637	6.029	8.916	8.117	9.257	10,2
A0339	7.76	4.71	8.38	13.06	-4.09	22.47	8.80	0.03	3.019	3.327	5.653	8.986	8.306	9.685	1,1
A0343	4.85	6.53	14.86	30.52	-6.43	20.47	7.90	0.075	3.467	3.588	6.037	8.564	8.680	9.802	10,2
A0346	1.21	2.16	5.70	13.35	-7.21	17.05	10.22	0.1	5.133	5.556	6.036	8.243	8.619	9.486	8,8
A0347	0.48	2.48	13.33	49.65	-3.53	19.70	7.00	0.075	1.733	2.214	5.983	6.233	7.496	8.877	10,2
A0348	2.91	5.24	13.85	32.54	-7.03	19.15	8.50	0.075	4.056	4.231	5.953	8.377	8.760	9.836	34,2
A0349	1.45	2.56	6.68	15.54	-5.23	19.41	8.45	0.075	3.309	3.503	6.056	7.646	8.010	9.146	10,2
A0352	4.36	1.93	3.29	4.85	-5.53	19.15	8.30	0.075	3.335	3.503	6.056	8.866	7.838	8.970	10,2
A0354	2.42	5.42	16.36	42.62	-5.73	20.30	8.60	0.075	3.594	3.796	6.054	8.030	8.607	9.702	10,2
A0357	1.21	2.17	5.75	13.50	-5.63	18.64	9.31	0.075	3.833	4.232	5.980	7.720	8.102	9.199	13,2
A0358	0.73	3.16	15.00	52.15	-4.31	19.71	8.20	0.10	2.773	2.957	5.695	6.836	7.961	9.354	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0359	0.73	1.69	5.21	13.79	-4.67	18.79	8.10	0.15	2.864	3.022	5.887	6.980	7.584	8.868	1,1
A0360	1.45	3.90	13.25	37.55	-8.17	16.94	7.30	0.15	3.813	3.880	5.673	7.741	8.475	9.728	1,1
A0362	1.70	4.46	14.87	41.64	-5.73	19.70	8.30	0.075	3.414	3.581	6.043	7.700	8.411	9.538	10,2
A0363	2.18	3.13	7.36	15.57	-7.88	17.37	7.60	0.25	3.893	3.984	5.925	8.187	8.363	9.477	1,1
A0364	0.73	1.11	2.69	5.85	-4.23	18.73	8.30	0.075	2.811	3.005	6.035	7.061	7.293	8.510	10,2
A0365	0.73	3.06	14.13	48.44	-2.11	21.89	8.20	0.10	1.855	2.371	5.674	6.564	7.662	9.184	1,1
A0368	2.91	3.65	8.04	16.00	-7.02	18.66	10.13	0.07	4.988	5.424	6.028	8.851	8.899	9.794	6,6
A0369	0.48	2.32	11.91	43.25	-5.23	17.96	8.50	0.075	3.334	3.533	5.988	6.745	7.957	9.123	10,2
A0370	1.45	4.03	13.96	40.12	-6.33	18.81	8.20	0.075	3.589	3.740	6.047	7.650	8.411	9.510	10,2
A0371	2.42	5.07	14.67	37.03	-6.72	19.24	8.00	0.20	3.631	3.759	5.950	8.058	8.576	9.718	1,1
A0373	2.67	3.26	7.11	13.99	-6.63	18.83	9.05	0.075	4.223	4.470	6.033	8.493	8.517	9.528	10,2
A0374	1.21	1.49	3.26	6.44	-5.11	18.64	7.90	0.10	2.939	3.068	5.930	7.496	7.527	8.779	1,1
A0375	4.12	3.60	6.96	12.02	-3.33	22.52	8.33	0.075	2.423	2.687	5.954	8.236	7.931	9.242	10,2
A0376	1.70	2.47	5.84	12.42	-6.46	18.27	8.00	0.15	3.526	3.656	5.768	7.881	8.069	9.317	1,1
A0377	1.70	2.46	5.78	12.26	-5.55	19.17	7.50	0.08	2.890	2.979	5.913	7.654	7.836	9.103	1,1
A0381	0.97	2.26	6.98	18.51	-4.62	19.47	8.30	0.07	2.965	3.153	5.996	7.197	7.807	9.023	1,1
A0382	1.21	2.41	6.77	16.69	-6.44	17.95	10.11	0.11	4.689	5.210	6.043	8.035	8.508	9.442	23,23
A0385	0.73	3.15	14.86	51.55	-4.43	19.59	8.90	0.075	3.230	3.533	6.041	6.997	8.118	9.273	10,2
A0386	0.73	1.04	2.42	5.09	-4.35	18.51	7.50	0.08	2.410	2.506	5.910	6.950	7.116	8.450	1,1
A0388	1.21	1.80	4.31	9.27	-6.43	17.59	8.00	0.075	3.514	3.644	6.033	7.650	7.859	8.976	10,2
A0389	0.73	1.40	3.84	9.30	-5.56	17.69	7.80	0.18	3.066	3.182	5.767	7.092	7.531	8.846	1,1
A0390	2.18	1.94	3.77	6.55	-4.71	19.79	8.30	0.10	3.001	3.188	5.785	8.007	7.720	9.036	1,1
A0393	2.18	1.83	3.51	5.99	-7.11	17.29	7.20	0.10	3.339	3.399	5.916	8.149	7.806	9.007	1,1
A0394	3.88	2.25	3.97	6.13	-5.33	19.63	8.50	0.075	3.373	3.571	6.036	8.683	7.951	9.088	10,2
A0395	0.73	2.08	7.35	21.38	-5.43	18.24	8.20	0.075	3.229	3.389	5.989	7.066	7.848	9.029	10,2
A0396	2.42	2.50	5.10	9.36	-7.98	17.00	7.20	0.22	3.687	3.747	5.943	8.275	8.136	9.273	1,1
A0399	1.70	2.19	4.88	9.82	-7.60	16.95	7.30	0.13	3.585	3.653	5.929	7.939	8.012	9.171	1,1
A0400	3.15	3.47	7.25	13.66	-5.01	20.64	8.20	0.10	3.058	3.226	5.656	8.197	8.119	9.491	1,1
A0401	0.73	1.71	5.30	14.09	-6.81	16.67	7.90	0.10	3.619	3.738	5.703	7.248	7.864	9.130	1,1
A0406	3.15	4.66	11.11	23.83	-4.75	21.34	8.50	0.05	3.137	3.351	5.391	8.137	8.340	9.833	1,1
A0407	1.21	3.81	14.42	43.84	-6.43	18.43	7.71	0.075	3.365	3.469	6.045	7.427	8.292	9.425	31,2
A0408	0.48	2.42	12.79	47.20	-4.46	18.76	7.70	0.05	2.571	2.687	5.882	6.474	7.719	9.046	1,1
A0409	2.42	5.00	14.37	36.06	-6.73	19.21	8.30	0.075	3.815	3.972	6.041	8.132	8.638	9.706	10,2
A0410	0.97	3.49	14.45	46.49	-4.63	19.86	8.55	0.075	3.118	3.343	5.973	7.171	8.144	9.349	10,2
A0413	0.73	3.06	14.13	48.44	-6.96	17.04	7.70	0.15	3.572	3.674	5.870	7.127	8.225	9.415	1,1
A0414	1.45	2.28	5.59	12.32	-6.25	18.24	7.80	0.08	3.342	3.455	5.931	7.689	7.947	9.141	1,1
A0415	1.70	4.12	13.09	35.38	-8.76	16.59	7.20	0.18	3.999	4.058	5.567	7.938	8.583	9.861	1,1
A0416	1.45	3.82	12.79	35.90	-8.33	16.76	9.20	0.075	5.061	5.283	5.976	8.243	8.959	9.868	10,2
A0423	1.70	2.15	4.76	9.51	-5.80	18.73	7.78	0.00	3.154	3.266	5.975	7.785	7.842	9.041	22,22
A0424	2.18	2.42	5.07	9.58	-3.71	21.16	8.20	0.10	2.516	2.729	5.690	7.770	7.701	9.131	1,1
A0426	3.15	3.10	6.23	11.23	-4.71	20.76	8.40	0.10	3.066	3.262	5.844	8.235	8.049	9.326	1,1
A0428	1.94	3.00	7.32	16.03	-6.43	18.67	8.30	0.075	3.695	3.854	6.039	8.014	8.259	9.347	10,2
A0430	0.48	2.39	12.55	46.12	-4.02	19.19	8.30	0.20	2.715	2.926	5.790	6.524	7.760	9.113	1,1
A0431	2.42	1.84	3.44	5.69	-6.63	17.82	6.90	0.075	2.737	2.772	5.999	8.041	7.597	8.843	10,2
A0433	2.42	3.74	9.10	19.90	-4.53	21.05	8.90	0.075	3.268	3.569	5.973	8.000	8.243	9.427	10,2
A0434	2.42	3.37	7.79	16.24	-6.03	19.40	9.13	0.075	3.973	4.252	5.977	8.295	8.441	9.518	13,2
A0436	0.48	0.95	2.65	6.51	-4.41	17.97	8.00	0.23	2.704	2.855	5.884	6.686	7.153	8.461	1,1
A0437	5.58	5.95	12.28	22.83	-4.86	21.98	8.80	0.02	3.347	3.611	5.314	8.683	8.575	10.076	1,1
A0438	0.97	1.93	5.41	13.33	-6.78	17.13	7.20	0.22	3.207	3.268	5.755	7.319	7.790	9.091	1,1
A0441	0.48	1.45	5.35	15.99	-4.16	18.66	7.90	0.18	2.555	2.699	5.690	6.549	7.382	8.808	1,1
A0442	3.64	5.45	13.06	28.16	-5.23	21.19	8.20	0.075	3.149	3.311	5.988	8.232	8.446	9.639	10,2
A0443	0.48	1.54	5.91	18.12	-3.83	19.04	9.05	0.075	2.955	3.440	5.965	6.674	7.555	8.788	10,2
A0444	3.15	3.01	5.98	10.66	-6.22	19.20	8.38	0.07	3.658	3.828	5.918	8.463	8.247	9.400	3,3
A0446	0.97	3.43	14.04	44.85	-6.03	18.45	8.00	0.075	3.354	3.486	5.904	7.258	8.218	9.424	31,2
A0448	8.73	4.62	8.03	12.17	-5.73	20.81	9.00	0.075	3.832	4.095	6.034	9.424	8.592	9.661	10,2
A0449	0.73	2.99	13.62	46.29	-6.16	17.82	7.00	0.05	2.785	2.830	5.934	6.844	7.929	9.200	1,1
A0450	2.67	5.49	15.72	39.35	-9.73	16.42	6.80	0.30	3.822	3.846	5.829	8.199	8.701	9.875	1,1
A0452	1.70	3.46	9.83	24.48	-5.73	19.43	7.40	0.075	2.904	2.983	5.995	7.571	8.064	9.288	10,2
A0455	1.70	3.77	11.31	29.33	-8.63	16.62	7.88	0.075	4.336	4.449	6.031	8.090	8.657	9.651	10,2
A0456	1.45	3.50	11.05	29.78	-7.73	17.27	8.50	0.075	4.343	4.506	6.005	7.970	8.610	9.617	10,2
A0460	2.42	3.95	9.91	22.25	-5.23	20.42	8.60	0.075	3.391	3.606	5.974	8.030	8.324	9.489	10,2
A0461	0.73	2.85	12.53	41.74	-5.35	18.59	8.10	0.08	3.137	3.286	5.932	6.979	8.020	9.243	1,1
A0462	3.64	3.91	8.11	15.13	-6.56	19.37	8.10	0.15	3.622	3.760	5.872	8.504	8.405	9.586	1,1
A0463	4.36	3.93	7.68	13.41	-6.23	19.80	9.10	0.075	4.062	4.325	5.804	8.849	8.576	9.726	33,2
A0465	1.70	4.27	13.85	38.03	-4.36	21.02	8.30	0.18	2.862	3.054	5.849	7.513	8.186	9.489	1,1
A0466	0.97	1.71	4.48	10.43	-4.87	18.90	8.00	0.15	2.890	3.033	5.658	7.235	7.601	8.995	1,1
A0467	6.79	2.73	4.61	6.71	-7.18	18.27	7.40	0.38	3.484	3.560	5.841	9.256	8.118	9.336	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_i$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0468	1.21	2.92	9.23	24.88	-5.33	19.27	7.90	0.075	3.027	3.154	6.001	7.357	7.996	9.200	10,2
A0470	3.64	3.56	7.12	12.80	-6.81	18.96	7.80	0.10	3.567	3.677	5.713	8.515	8.321	9.590	1,1
A0473	2.91	3.16	6.57	12.31	-4.81	20.65	8.10	0.10	2.920	3.076	5.728	8.100	8.010	9.366	1,1
A0475	4.85	2.86	5.05	7.82	-6.26	19.22	7.60	0.15	3.245	3.340	5.965	8.773	8.060	9.250	1,1
A0479	8.73	4.61	8.02	12.15	-6.23	20.31	8.20	0.075	3.550	3.701	6.001	9.317	8.484	9.612	10,2
A0480	0.73	2.40	9.36	29.00	-5.51	18.29	7.80	0.10	3.046	3.163	5.581	6.975	7.876	9.287	1,1
A0481	2.67	5.67	16.53	41.98	-5.73	20.45	8.70	0.075	3.649	3.867	5.996	8.128	8.656	9.772	10,2
A0482	5.58	2.36	4.00	5.86	-4.63	20.49	8.40	0.075	3.025	3.232	5.983	8.939	7.857	9.070	10,2
A0483	2.18	4.67	13.68	34.88	-9.15	16.60	8.18	0.21	4.713	4.846	5.997	8.412	8.947	9.900	16,21
A0484	3.39	3.16	6.24	11.03	-5.61	19.93	8.20	0.10	3.301	3.458	5.615	8.386	8.146	9.504	1,1
A0485	1.45	1.69	3.60	6.94	-6.19	17.86	7.90	0.03	3.371	3.493	5.918	7.787	7.762	8.958	1,1
A0487	0.73	3.16	15.00	52.15	-6.76	17.26	7.50	0.15	3.375	3.460	5.815	7.049	8.174	9.420	1,1
A0489	0.73	3.13	14.71	50.91	-3.83	20.18	7.10	0.075	1.933	2.005	5.997	6.582	7.698	9.049	10,2
A0490	2.42	2.79	5.93	11.38	-4.42	20.73	8.70	0.07	3.108	3.375	5.561	8.028	7.994	9.407	1,1
A0491	2.18	2.80	6.24	12.55	-4.43	20.66	8.85	0.075	3.156	3.488	5.993	7.944	8.015	9.204	10,2
A0492	4.36	7.26	18.41	41.72	-2.96	24.00	8.40	0.05	2.313	2.606	5.746	8.041	8.354	9.783	1,1
A0493	2.67	3.51	7.89	16.03	-5.41	20.15	7.60	0.10	2.905	3.003	5.539	7.982	8.073	9.525	1,1
A0494	1.70	3.54	10.19	25.64	-5.33	19.85	8.59	0.075	3.424	3.637	5.957	7.753	8.265	9.433	34,2
A0498	4.61	6.36	14.65	30.43	-7.01	19.81	8.10	0.10	3.802	3.938	5.938	8.651	8.789	9.911	1,1
A0500	4.12	3.62	7.01	12.13	-5.03	20.83	9.00	0.075	3.541	3.837	5.980	8.622	8.323	9.463	10,2
A0503	0.48	1.25	4.13	11.51	-4.75	17.92	8.00	0.08	2.839	2.986	5.293	6.674	7.376	8.961	1,1
A0504	0.97	1.50	3.66	8.01	-6.53	17.07	7.95	0.075	3.530	3.655	6.002	7.500	7.746	8.876	10,2
A0505	0.73	1.45	4.08	10.06	-6.11	17.19	7.70	0.10	3.232	3.336	6.001	7.141	7.615	8.790	1,1
A0506	0.73	3.16	15.00	52.15	-4.36	19.66	8.00	0.05	2.684	2.835	5.913	6.807	7.931	9.227	1,1
A0507	1.21	2.19	5.80	13.66	-7.25	17.03	7.20	0.05	3.395	3.455	6.003	7.553	7.941	9.090	1,1
A0508	0.97	2.81	10.03	29.38	-5.00	19.30	8.00	0.16	2.942	3.083	5.635	7.147	7.941	9.340	1,1
A0509	0.48	2.39	12.55	46.12	-3.06	20.15	8.00	0.15	2.149	2.339	5.962	6.347	7.583	8.925	1,1
A0510	0.97	1.98	5.63	14.03	-4.07	19.87	7.60	0.15	2.367	2.476	5.887	7.030	7.523	8.875	1,1
A0511	1.45	2.52	6.52	15.06	-4.96	19.66	7.90	0.18	2.879	3.009	5.782	7.498	7.848	9.182	1,1
A0512	1.45	3.23	9.71	25.23	-4.13	20.78	8.25	0.075	2.728	2.925	6.001	7.389	7.960	9.205	10,2
A0513	1.21	3.76	14.09	42.59	-8.02	16.83	7.30	0.20	3.753	3.820	5.996	7.574	8.428	9.529	1,1
A0515	1.21	3.32	11.42	32.65	-6.43	18.30	7.90	0.075	3.467	3.588	5.984	7.490	8.239	9.388	10,2
A0516	1.94	4.63	14.55	39.04	-6.32	19.30	7.70	0.20	3.316	3.420	6.012	7.769	8.401	9.558	1,1
A0518	2.42	3.65	8.77	18.96	-5.65	19.89	8.50	0.08	3.500	3.694	5.294	8.093	8.313	9.802	1,1
A0519	2.42	5.18	15.21	38.80	-4.37	21.61	8.40	0.15	2.923	3.134	5.971	7.797	8.334	9.568	1,1
A0521	5.82	4.35	8.06	13.25	-4.31	22.01	8.20	0.10	2.773	2.957	5.633	8.632	8.168	9.591	1,1
A0523	4.12	6.34	15.43	33.71	-6.73	20.00	9.11	0.075	4.268	4.513	6.006	8.728	8.969	9.986	33,2
A0524	2.18	2.87	6.48	13.19	-6.96	18.17	7.90	0.15	3.680	3.798	5.959	8.129	8.225	9.355	1,1
A0526	1.45	4.33	15.77	46.82	-4.76	20.45	8.10	0.15	2.900	3.057	5.922	7.387	8.209	9.470	1,1
A0527	1.45	2.36	5.91	13.25	-6.53	18.01	7.60	0.075	3.353	3.447	5.996	7.682	7.975	9.134	10,2
A0528	1.21	3.97	15.42	47.70	-2.65	22.25	8.50	0.08	2.227	2.571	5.637	7.035	7.934	9.429	1,1
A0530	1.70	3.39	9.54	23.54	-6.53	18.60	8.43	0.075	3.818	3.991	5.967	7.912	8.386	9.491	34,2
A0532	7.03	3.01	5.11	7.49	-4.67	20.98	8.10	0.12	2.864	3.022	5.751	9.027	7.960	9.312	1,1
A0533	1.45	3.39	10.49	27.86	-6.63	18.33	8.10	0.075	3.650	3.788	6.003	7.709	8.321	9.433	10,2
A0535	2.42	2.46	5.00	9.13	-4.96	19.99	8.20	0.15	3.038	3.206	5.918	8.043	7.889	9.133	1,1
A0536	0.73	2.79	12.11	40.01	-6.76	17.17	7.30	0.15	3.249	3.318	5.875	7.021	8.047	9.282	1,1
A0537	1.94	4.75	15.16	41.15	-5.33	20.31	9.00	0.075	3.657	3.947	6.001	7.892	8.544	9.656	10,2
A0539	1.70	2.76	6.91	15.48	-5.93	18.95	8.20	0.075	3.430	3.583	6.007	7.816	8.106	9.249	10,2
A0540	3.88	6.79	17.68	41.00	-6.25	20.52	8.30	0.05	3.624	3.784	5.875	8.406	8.764	9.944	1,1
A0541	1.94	2.62	5.98	12.30	-6.31	18.60	7.80	0.10	3.366	3.479	5.930	7.930	8.048	9.239	1,1
A0542	1.21	2.40	6.71	16.50	-4.46	19.93	8.30	0.05	2.902	3.092	5.858	7.355	7.824	9.117	1,1
A0543	0.48	2.44	13.02	48.24	-4.86	18.36	7.30	0.05	2.489	2.563	5.870	6.448	7.699	9.043	1,1
A0544	6.30	2.81	4.79	7.06	-4.14	21.35	8.20	0.11	2.706	2.893	5.835	8.883	7.861	9.194	1,1
A0545	0.73	3.15	14.86	51.55	-5.45	18.57	7.90	0.08	3.075	3.201	5.969	6.941	8.062	9.276	1,1
A0546	2.18	3.64	9.22	20.90	-6.61	18.84	7.90	0.10	3.539	3.659	5.525	8.012	8.325	9.693	1,1
A0548	0.97	2.81	10.03	29.38	-4.23	20.07	8.70	0.075	3.035	3.305	5.983	7.179	7.974	9.186	10,2
A0549	2.67	5.15	14.17	34.40	-8.53	17.54	7.85	0.075	4.279	4.389	6.002	8.394	8.837	9.855	10,2
A0550	1.21	2.25	6.07	14.49	-3.83	20.48	8.59	0.075	2.803	3.074	5.954	7.337	7.749	9.008	34,2
A0551	3.64	4.58	10.13	20.20	-6.33	19.84	9.00	0.075	4.080	4.321	6.004	8.632	8.683	9.730	10,2
A0552	0.73	3.12	14.64	50.61	-4.51	19.50	7.50	0.10	2.474	2.569	5.813	6.741	7.854	9.228	1,1
A0553	0.97	2.78	9.86	28.75	-5.66	18.64	7.90	0.05	3.159	3.284	5.989	7.224	8.012	9.203	1,1
A0554	1.21	3.86	14.73	45.03	-6.67	18.20	7.80	0.15	3.511	3.621	5.998	7.478	8.354	9.489	1,1
A0555	2.42	4.15	10.67	24.50	-4.71	21.00	8.60	0.10	3.175	3.410	5.802	7.940	8.277	9.559	1,1
A0557	3.39	4.38	9.79	19.75	-6.43	19.63	8.94	0.075	4.081	4.310	5.851	8.577	8.654	9.777	34,2
A0558	2.18	3.42	8.38	18.45	-5.43	19.94	8.35	0.075	3.320	3.499	6.005	7.947	8.203	9.363	10,2
A0562	2.18	4.56	13.17	33.21	-6.93	18.80	7.99	0.075	3.710	3.836	5.874	8.020	8.537	9.704	34,2
A0563	1.21	2.55	7.41	18.76	-4.46	20.00	8.20	0.05	2.840	3.014	5.804	7.320	7.843	9.172	1,1



Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0564	3.39	3.35	6.72	12.12	-3.60	22.03	8.20	0.13	2.473	2.688	5.537	8.084	7.899	9.411	1,1
A0566	2.18	5.60	18.46	51.23	-7.63	18.32	7.20	0.075	3.547	3.607	5.864	7.915	8.610	9.807	31,2
A0570	4.85	7.34	17.70	38.36	-9.83	17.23	7.90	0.075	4.830	4.941	5.996	9.065	9.290	10.225	10,2
A0571	0.97	3.11	11.89	36.42	-4.56	19.84	8.10	0.15	2.816	2.980	5.972	7.084	7.964	9.212	1,1
A0573	2.42	5.07	14.67	37.03	-5.96	20.00	8.00	0.15	3.326	3.459	5.905	7.945	8.463	9.672	1,1
A0575	1.21	3.89	14.92	45.77	-5.88	19.00	7.90	0.25	3.247	3.371	5.871	7.379	8.262	9.499	1,1
A0576	2.91	3.67	8.13	16.23	-5.82	19.87	7.90	0.07	3.223	3.347	5.555	8.162	8.216	9.615	1,1
A0577	1.21	3.46	12.26	35.72	-5.03	19.74	8.30	0.075	3.133	3.310	5.999	7.360	8.145	9.335	10,2
A0579	2.42	3.31	7.58	15.67	-5.21	20.20	8.20	0.10	3.141	3.303	5.899	7.988	8.118	9.356	1,1
A0580	4.85	5.99	13.12	25.94	-6.83	19.94	8.85	0.075	4.178	4.391	5.735	8.862	8.896	10.063	27,2
A0581	0.73	2.25	8.36	25.16	-6.03	17.71	7.90	0.30	3.307	3.430	5.750	7.081	7.926	9.216	1,1
A0583	1.45	3.79	12.63	35.33	-8.40	16.68	7.30	0.13	3.905	3.972	5.543	7.782	8.492	9.796	1,1
A0584	0.97	3.16	12.21	37.65	-7.40	17.01	7.40	0.13	3.572	3.648	5.932	7.353	8.246	9.405	1,1
A0585	2.42	4.57	12.44	29.91	-6.00	19.84	8.00	0.13	3.342	3.475	5.580	7.975	8.402	9.771	1,1
A0586	3.64	3.52	7.02	12.57	-5.79	19.96	8.70	0.06	3.673	3.890	5.997	8.559	8.354	9.466	15,15
A0587	1.21	1.94	4.82	10.73	-6.06	18.06	7.70	0.15	3.212	3.316	5.854	7.519	7.796	9.047	1,1
A0590	1.70	4.06	12.75	34.21	-6.33	19.00	8.00	0.075	3.475	3.605	5.995	7.742	8.373	9.515	10,2
A0591	2.67	5.35	15.08	37.29	-6.75	19.37	8.20	0.05	3.758	3.906	5.976	8.181	8.660	9.770	1,1
A0592	0.48	1.46	5.36	16.02	-5.11	17.71	8.00	0.10	2.985	3.126	5.922	6.694	7.528	8.778	1,1
A0593	2.18	3.27	7.84	16.91	-5.75	19.56	8.40	0.08	3.483	3.662	5.997	8.019	8.235	9.375	15,15
A0594	2.42	3.49	8.21	17.40	-6.09	19.39	8.00	0.03	3.379	3.510	5.994	8.060	8.239	9.396	1,1
A0595	1.70	2.16	4.79	9.59	-5.56	18.97	8.20	0.05	3.281	3.439	5.967	7.831	7.891	9.075	1,1
A0597	1.45	2.82	7.82	19.07	-6.09	18.67	7.95	0.03	3.354	3.481	5.994	7.639	8.092	9.253	1,1
A0598	0.97	3.63	15.48	50.66	-7.87	16.66	7.80	0.15	3.991	4.098	5.993	7.489	8.497	9.562	1,1
A0599	2.18	4.83	14.45	37.43	-5.73	20.06	8.21	0.075	3.356	3.512	5.990	7.876	8.442	9.604	34,2
A0600	3.39	3.93	8.38	16.13	-5.23	20.66	9.00	0.075	3.619	3.910	5.993	8.433	8.405	9.527	10,2
A0602	2.67	4.85	12.90	30.45	-6.89	19.11	8.60	0.06	4.059	4.246	5.984	8.321	8.712	9.772	15,15
A0604	2.91	2.08	3.82	6.20	-4.01	20.72	8.00	0.10	2.539	2.701	5.918	8.121	7.610	8.924	1,1
A0605	6.79	3.14	5.37	7.96	-3.75	21.98	8.70	0.08	2.805	3.126	5.650	8.947	7.967	9.377	1,1
A0606	1.45	1.92	4.35	8.88	-5.06	19.19	8.50	0.15	3.259	3.468	5.835	7.706	7.807	9.061	1,1
A0608	5.09	3.75	6.93	11.34	-5.63	20.37	8.85	0.075	3.687	3.933	5.961	8.880	8.401	9.528	10,2
A0609	1.70	2.36	5.45	11.35	-4.26	20.40	8.20	0.15	2.753	2.938	5.845	7.620	7.763	9.083	1,1
A0610	5.58	2.35	3.99	5.84	-5.42	19.70	8.10	0.20	3.165	3.313	5.937	8.989	7.905	9.121	1,1
A0612	1.94	2.96	7.18	15.63	-6.51	18.57	8.00	0.10	3.546	3.676	5.886	7.962	8.195	9.381	1,1
A0613	8.24	6.75	12.82	21.67	-4.71	22.53	8.70	0.10	3.220	3.482	5.573	8.981	8.611	10.001	1,1
A0614	1.45	3.42	10.68	28.51	-6.91	18.06	7.90	0.10	3.660	3.778	5.984	7.711	8.332	9.452	1,1
A0615	4.36	3.69	7.07	12.08	-3.66	22.26	8.70	0.02	2.773	3.093	5.383	8.397	8.061	9.610	1,1
A0616	4.61	2.16	3.70	5.50	-4.67	20.24	8.30	0.15	2.985	3.172	5.827	8.752	7.785	9.082	1,1
A0619	2.18	4.23	11.68	28.43	-7.83	17.81	8.20	0.30	4.193	4.333	5.737	8.226	8.675	9.838	1,1
A0620	1.45	4.09	14.33	41.48	-3.05	22.10	8.50	0.05	2.368	2.715	5.587	7.224	7.997	9.498	1,1
A0621	0.97	3.18	12.36	38.23	-5.21	19.21	8.80	0.10	3.483	3.741	5.463	7.318	8.217	9.624	1,1
A0622	1.21	3.19	10.71	30.09	-5.26	19.44	7.80	0.15	2.946	3.064	5.864	7.309	8.026	9.310	1,1
A0624	2.67	2.92	6.09	11.44	-5.86	19.42	8.30	0.18	3.466	3.632	5.831	8.239	8.155	9.381	1,1
A0625	1.70	3.03	7.99	18.70	-5.22	19.78	8.10	0.20	3.083	3.235	5.691	7.666	8.041	9.392	1,1
A0627	0.73	2.55	10.37	32.97	-4.61	19.24	8.20	0.10	2.899	3.072	5.952	6.914	7.864	9.111	1,1
A0628	7.51	3.02	5.09	7.41	-6.41	19.25	7.50	0.10	3.235	3.321	5.971	9.232	8.092	9.281	1,1
A0629	1.21	2.20	5.87	13.87	-5.61	18.68	7.90	0.10	3.139	3.264	5.805	7.459	7.853	9.138	1,1
A0630	0.73	2.30	8.70	26.45	-4.62	19.14	8.05	0.20	2.815	2.970	5.799	6.903	7.767	9.102	1,1
A0631	0.73	2.48	9.86	30.95	-5.50	18.33	7.90	0.13	3.095	3.221	5.856	6.986	7.913	9.180	1,1
A0632	8.48	3.47	5.87	8.56	-5.19	20.77	9.11	0.06	3.606	3.941	5.971	9.440	8.321	9.455	14,14
A0637	3.88	4.60	9.90	19.23	-6.07	20.15	8.30	0.12	3.550	3.713	5.823	8.488	8.482	9.699	1,1
A0638	1.70	2.65	6.47	14.20	-5.41	19.41	7.60	0.10	2.905	3.003	5.963	7.639	7.890	9.130	1,1
A0639	0.97	2.87	10.38	30.69	-6.96	17.36	7.90	0.15	3.680	3.798	5.773	7.412	8.224	9.447	1,1
A0640	1.94	3.00	7.31	16.00	-6.61	18.49	8.00	0.10	3.586	3.715	5.557	7.973	8.218	9.562	1,1
A0641	4.12	1.88	3.22	4.76	-4.66	19.96	8.00	0.18	2.803	2.951	5.954	8.627	7.634	8.893	1,1
A0642	2.67	2.40	4.69	8.18	-6.97	17.99	7.50	0.12	3.459	3.544	5.758	8.301	8.026	9.289	1,1
A0643	1.94	1.77	3.48	6.11	-3.93	20.36	8.90	0.075	2.988	3.349	5.965	7.918	7.658	8.886	10,2
A0644	14.06	5.67	9.57	13.93	-6.11	20.92	8.40	0.10	3.629	3.802	5.960	9.785	8.649	9.786	1,1
A0645	0.73	1.77	5.63	15.22	-3.21	20.30	8.80	0.10	2.632	3.003	5.630	6.892	7.537	8.981	1,1
A0646	4.36	3.95	7.71	13.48	-5.87	20.16	8.00	0.15	3.290	3.424	5.957	8.557	8.287	9.475	1,1
A0647	0.48	2.47	13.23	49.19	-4.35	18.88	8.00	0.08	2.680	2.831	5.851	6.508	7.768	9.096	1,1
A0649	1.70	2.24	5.06	10.30	-7.38	17.21	7.70	0.25	3.741	3.841	5.889	7.990	8.087	9.242	1,1
A0653	7.27	3.08	5.23	7.66	-4.51	21.19	8.50	0.10	3.042	3.260	5.598	9.116	8.037	9.440	1,1
A0655	9.70	4.69	8.07	12.04	-5.62	20.97	7.20	0.04	2.743	2.806	5.829	9.138	8.208	9.537	8,8
A0656	6.06	3.80	6.80	10.68	-5.96	20.12	7.50	0.02	3.055	3.142	5.601	8.825	8.178	9.578	1,1
A0658	2.67	5.87	17.48	45.12	-4.37	21.85	8.30	0.15	2.866	3.058	5.723	7.836	8.395	9.760	1,1
A0659	1.45	1.99	4.57	9.47	-5.95	18.35	7.80	0.08	3.223	3.336	5.750	7.683	7.816	9.117	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0660	0.97	2.92	10.73	32.00	-5.81	18.53	7.90	0.10	3.219	3.343	5.578	7.237	8.066	9.454	1,1
A0661	0.97	3.61	15.34	50.09	-5.63	18.89	8.35	0.075	3.403	3.576	5.943	7.268	8.270	9.449	10,2
A0663	2.91	3.22	6.75	12.75	-4.51	20.98	8.40	0.10	2.978	3.187	5.359	8.114	8.043	9.575	1,1
A0664	0.73	3.11	14.56	50.27	-7.30	16.71	7.40	0.16	3.532	3.608	5.941	7.110	8.221	9.382	1,1
A0665	0.73	2.77	11.96	39.39	-4.83	19.09	8.10	0.30	2.928	3.084	5.853	6.910	7.928	9.220	1,1
A0666	7.03	3.15	5.38	7.94	-4.07	21.67	8.50	0.15	2.855	3.095	5.903	9.002	7.987	9.264	1,1
A0667	0.97	2.09	6.17	15.79	-7.08	16.92	8.10	0.25	3.830	3.966	5.787	7.533	8.076	9.269	1,1
A0668	6.79	8.79	19.65	39.66	-4.35	23.22	7.50	0.08	2.410	2.506	5.601	8.430	8.508	9.997	1,1
A0671	8.24	3.37	5.70	8.31	-5.16	20.74	8.00	0.05	3.005	3.146	5.837	9.202	8.083	9.372	1,1
A0672	1.94	3.56	9.54	22.64	-9.23	16.09	7.40	0.30	4.304	4.378	5.833	8.207	8.607	9.706	1,1
A0674	1.70	2.44	5.74	12.15	-6.45	18.26	7.80	0.08	3.423	3.534	5.622	7.847	8.023	9.359	1,1
A0676	2.18	3.49	8.66	19.26	-7.56	17.84	7.60	0.15	3.765	3.857	5.738	8.107	8.384	9.611	1,1
A0677	1.70	3.10	8.26	19.53	-4.16	20.87	8.80	0.05	3.046	3.353	5.833	7.647	8.042	9.327	1,1
A0678	3.15	5.07	12.61	28.11	-7.38	18.83	7.80	0.25	3.795	3.903	5.868	8.356	8.638	9.796	1,1
A0679	3.64	3.54	7.07	12.68	-5.03	20.73	8.78	0.075	3.403	3.659	5.783	8.456	8.257	9.516	34,2
A0680	3.88	4.61	9.92	19.28	-5.11	21.11	8.70	0.10	3.396	3.632	5.900	8.431	8.426	9.627	1,1
A0681	2.18	4.44	12.63	31.46	-6.22	19.48	8.10	0.20	3.486	3.626	5.824	7.942	8.435	9.662	1,1
A0683	3.15	3.27	6.68	12.29	-5.37	20.19	8.20	0.15	3.205	3.365	5.904	8.267	8.133	9.360	1,1
A0685	3.15	4.62	10.98	23.46	-5.68	20.40	8.40	0.25	3.455	3.635	5.880	8.254	8.451	9.653	1,1
A0689	0.97	3.13	12.05	37.03	-6.76	17.64	7.90	0.15	3.599	3.719	5.841	7.365	8.251	9.452	1,1
A0691	4.12	6.10	14.54	31.19	-6.32	20.36	8.10	0.20	3.525	3.666	5.694	8.452	8.657	9.942	1,1
A0692	0.48	2.19	10.74	38.09	-5.72	17.43	7.30	0.20	2.833	2.904	5.734	6.576	7.741	9.106	1,1
A0693	6.54	6.38	12.76	22.92	-5.81	21.23	8.30	0.10	3.446	3.612	5.823	8.852	8.657	9.889	1,1
A0694	0.97	1.75	4.62	10.86	-5.43	18.36	8.50	0.075	3.413	3.609	5.551	7.418	7.801	9.174	34,2
A0695	1.21	3.35	11.59	33.27	-2.91	21.83	8.50	0.10	2.318	2.664	5.670	7.095	7.852	9.318	1,1
A0696	3.39	5.85	15.10	34.78	-5.83	20.62	9.40	0.075	4.008	4.389	5.760	8.470	8.813	9.993	33,2
A0698	4.36	3.71	7.12	12.19	-5.63	20.30	8.35	0.075	3.403	3.576	5.798	8.619	8.288	9.539	34,2
A0700	4.12	4.23	8.62	15.79	-5.36	20.76	7.90	0.05	3.039	3.166	5.677	8.387	8.242	9.606	1,1
A0701	3.39	2.81	5.34	9.06	-4.67	20.66	8.35	0.12	3.011	3.207	5.623	8.324	7.965	9.360	1,1
A0706	1.94	3.28	8.38	19.12	-5.71	19.51	8.05	0.10	3.254	3.394	5.786	7.827	8.153	9.432	1,1
A0708	0.97	3.54	14.81	47.94	-5.03	19.48	9.11	0.075	3.546	3.884	5.846	7.323	8.310	9.516	33,2
A0709	8.48	9.48	19.94	37.80	-8.60	19.23	7.60	0.13	4.181	4.272	5.818	9.258	9.196	10.321	1,1
A0710	6.06	6.83	14.42	27.43	-5.85	21.26	7.90	0.08	3.235	3.359	5.632	8.678	8.624	9.983	1,1
A0711	3.64	4.04	8.46	15.98	-5.76	20.22	7.90	0.15	3.199	3.323	5.494	8.338	8.268	9.701	1,1
A0712	2.91	3.22	6.75	12.75	-5.31	20.18	8.30	0.10	3.244	3.418	5.530	8.209	8.138	9.546	1,1
A0714	12.85	5.58	9.49	13.94	-5.76	21.23	8.60	0.15	3.606	3.808	5.834	9.680	8.630	9.833	1,1
A0715	6.54	2.74	4.64	6.79	-5.48	19.97	7.90	0.22	3.087	3.213	5.743	9.068	7.976	9.301	1,1
A0719	0.73	3.03	13.93	47.59	-3.46	20.53	8.10	0.18	2.371	2.560	5.570	6.712	7.803	9.312	1,1
A0721	6.30	6.28	12.66	22.93	-6.03	20.97	9.01	0.075	3.955	4.215	5.619	9.013	8.839	10.098	34,2
A0723	1.45	3.37	10.39	27.52	-3.71	21.25	8.00	0.10	2.420	2.586	5.508	7.279	7.887	9.420	1,1
A0724	0.73	1.84	6.01	16.55	-5.56	17.99	7.90	0.15	3.119	3.245	5.702	7.051	7.730	9.070	1,1
A0725	5.58	5.66	11.48	20.93	-5.93	20.83	8.79	0.075	3.784	4.005	5.815	8.863	8.706	9.892	34,2
A0727	12.36	5.00	8.45	12.31	-4.86	21.90	8.80	0.05	3.347	3.611	5.567	9.593	8.462	9.837	1,1
A0728	7.03	5.75	10.92	18.45	-5.92	20.98	9.17	0.04	3.924	4.238	5.664	9.141	8.771	10.011	26,26
A0729	6.30	2.88	4.92	7.28	-3.85	21.69	8.40	0.08	2.696	2.938	5.809	8.868	7.874	9.220	1,1
A0730	2.67	3.17	6.83	13.28	-5.11	20.30	7.90	0.10	2.939	3.068	5.735	8.023	8.019	9.368	1,1
A0733	5.09	7.70	18.57	40.24	-5.41	21.76	8.00	0.10	3.105	3.243	5.813	8.430	8.656	9.943	1,1
A0734	1.45	2.87	8.02	19.71	-7.79	16.99	10.09	0.06	5.287	5.652	5.806	8.399	8.866	9.825	30,30
A0735	2.67	3.13	6.70	12.95	-4.31	21.08	8.10	0.10	2.717	2.884	5.615	7.952	7.935	9.375	1,1
A0736	4.36	2.90	5.25	8.36	-5.07	20.41	7.80	0.12	2.870	2.990	5.738	8.522	7.938	9.296	1,1
A0737	2.18	4.93	14.99	39.24	-4.05	21.77	8.70	0.05	2.914	3.238	5.780	7.712	8.299	9.629	1,1
A0738	3.15	3.40	7.07	13.22	-4.75	20.87	8.80	0.05	3.304	3.570	5.740	8.291	8.196	9.490	1,1
A0739	0.48	1.53	5.84	17.85	-5.43	17.43	7.77	0.075	3.001	3.115	5.710	6.692	7.567	8.920	34,2
A0742	1.21	1.67	3.86	8.03	-4.33	19.59	9.18	0.075	3.266	3.743	5.781	7.578	7.719	8.999	33,2
A0744	5.09	5.43	11.21	20.85	-6.73	19.91	9.15	0.075	4.213	4.485	5.738	8.954	8.845	10.005	33,2
A0745	1.70	2.20	4.92	9.93	-6.31	18.25	7.80	0.10	3.366	3.479	5.794	7.856	7.934	9.192	1,1
A0746	1.45	2.14	5.10	10.93	-4.75	19.66	8.50	0.05	3.137	3.351	5.633	7.630	7.833	9.206	1,1
A0748	1.21	2.88	9.02	24.16	-5.40	19.19	7.80	0.13	3.002	3.119	5.718	7.350	7.978	9.327	1,1
A0750	4.61	5.03	10.47	19.65	-5.25	21.21	8.70	0.05	3.451	3.685	5.678	8.590	8.503	9.808	1,1
A0751	9.94	4.05	6.84	9.97	-5.18	21.12	8.70	0.09	3.423	3.658	5.750	9.476	8.352	9.624	1,1
A0754	0.97	1.70	4.44	10.31	-5.77	17.99	7.90	0.12	3.203	3.327	5.666	7.348	7.707	9.053	1,1
A0755	3.64	4.90	11.17	22.95	-2.41	23.86	8.80	0.10	2.252	2.771	5.738	7.964	8.080	9.521	1,1
A0756	6.54	7.33	15.43	29.28	-5.11	22.16	8.80	0.10	3.444	3.704	5.380	8.805	8.746	10.201	1,1
A0757	2.42	2.27	4.49	7.95	-4.25	20.57	8.40	0.05	2.876	3.089	5.690	8.013	7.780	9.161	1,1
A0758	1.94	2.82	6.65	14.14	-7.77	17.24	7.40	0.12	3.720	3.795	5.778	8.042	8.227	9.441	1,1
A0759	1.45	3.05	8.85	22.39	-4.43	20.42	9.53	0.075	3.454	4.024	5.741	7.658	8.179	9.451	34,2
A0761	0.97	2.87	10.38	30.69	-4.73	19.59	8.90	0.075	3.345	3.642	5.766	7.287	8.099	9.374	10,2

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0762	2.18	3.06	7.10	14.86	-5.01	20.21	8.00	0.10	2.946	3.087	5.710	7.844	7.998	9.359	1,1
A0763	3.88	3.72	7.40	13.21	-4.75	21.13	8.70	0.08	3.235	3.497	5.739	8.440	8.228	9.533	1,1
A0764	1.21	2.09	5.40	12.44	-7.37	16.85	7.10	0.15	3.350	3.402	5.726	7.549	7.894	9.189	1,1
A0765	1.21	1.53	3.38	6.75	-6.21	17.58	7.80	0.10	3.326	3.439	5.738	7.626	7.682	8.974	1,1
A0766	7.51	4.09	7.14	10.88	-4.96	21.31	8.70	0.05	3.337	3.576	5.693	9.127	8.327	9.640	1,1
A0767	2.18	3.11	7.28	15.35	-4.66	20.58	7.40	0.05	2.476	2.560	5.757	7.683	7.852	9.254	1,1
A0769	3.88	5.95	14.42	31.43	-6.26	20.33	7.90	0.15	3.400	3.521	5.665	8.358	8.594	9.912	1,1
A0771	1.45	3.73	12.29	34.12	-6.21	18.85	8.10	0.10	3.482	3.623	5.634	7.626	8.320	9.642	1,1
A0772	7.27	3.03	5.13	7.50	-4.56	21.11	8.30	0.05	2.941	3.130	5.775	9.088	7.991	9.320	1,1
A0773	2.67	2.95	6.17	11.64	-3.73	21.57	8.70	0.075	2.798	3.119	5.680	7.997	7.923	9.320	10,2
A0774	1.45	2.80	7.73	18.79	-4.96	19.79	8.30	0.15	3.105	3.283	5.729	7.551	7.997	9.326	1,1
A0775	0.97	1.98	5.65	14.10	-6.28	17.66	7.85	0.25	3.378	3.495	5.740	7.375	7.870	9.154	1,1
A0776	2.91	5.47	14.85	35.63	-7.21	19.02	7.80	0.10	3.727	3.836	5.716	8.241	8.662	9.906	1,1
A0778	3.64	2.94	5.55	9.34	-4.13	21.31	8.80	0.075	3.034	3.342	5.659	8.388	8.002	9.376	10,2
A0779	1.21	4.02	15.77	49.06	-6.51	18.40	8.30	0.10	3.727	3.886	5.630	7.552	8.462	9.749	1,1
A0780	7.51	8.00	16.52	30.71	-7.93	19.56	9.15	0.075	4.712	4.944	5.686	9.406	9.298	10.407	33,2
A0781	15.51	6.45	10.92	15.96	-4.66	22.65	8.60	0.05	3.155	3.391	5.472	9.658	8.558	10.008	1,1
A0782	0.73	2.02	6.96	19.95	-5.06	18.58	7.60	0.15	2.765	2.865	5.790	6.910	7.664	9.010	1,1
A0783	0.97	2.02	5.81	14.62	-4.11	19.85	8.30	0.10	2.750	2.960	5.744	7.150	7.660	9.031	1,1
A0784	1.94	3.01	7.34	16.08	-5.95	19.15	8.20	0.08	3.438	3.591	5.791	7.918	8.164	9.414	1,1
A0785	1.94	1.87	3.74	6.70	-5.91	18.48	7.50	0.10	3.035	3.122	5.772	7.914	7.710	9.027	1,1
A0788	1.45	3.31	10.13	26.64	-3.83	21.11	8.65	0.075	2.823	3.119	5.651	7.415	8.008	9.416	10,2
A0789	8.97	5.74	10.29	16.23	-6.41	20.56	8.25	0.10	3.653	3.806	5.769	9.291	8.665	9.894	1,1
A0790	5.09	2.67	4.63	7.00	-4.56	20.79	7.90	0.05	2.718	2.854	5.752	8.673	7.831	9.202	1,1
A0791	1.70	1.90	3.98	7.54	-6.19	18.14	7.70	0.06	3.264	3.368	5.780	7.865	7.800	9.080	1,1
A0792	2.18	4.16	11.38	27.49	-3.75	21.87	8.20	0.05	2.531	2.744	5.751	7.625	8.059	9.457	1,1
A0794	2.18	2.50	5.30	10.15	-4.93	19.99	8.57	0.075	3.246	3.470	5.630	8.010	7.972	9.330	34,2
A0797	1.70	4.27	13.85	38.03	-5.61	19.77	7.90	0.10	3.139	3.264	5.743	7.610	8.284	9.600	1,1
A0798	4.12	5.06	11.07	21.84	-6.71	19.70	7.60	0.10	3.425	3.518	5.750	8.469	8.499	9.770	1,1
A0799	2.91	3.12	6.46	12.04	-4.73	20.71	8.13	0.075	2.904	3.066	5.747	8.099	7.997	9.345	34,2
A0800	1.45	2.56	6.70	15.60	-4.43	20.21	8.70	0.075	3.112	3.379	5.768	7.575	7.941	9.249	10,2
A0801	5.09	6.68	15.04	30.55	-5.21	21.75	7.70	0.10	2.872	2.981	5.745	8.391	8.482	9.836	1,1
A0802	1.45	2.06	4.80	10.10	-6.26	18.09	8.00	0.15	3.447	3.577	5.765	7.755	7.920	9.181	1,1
A0803	2.18	3.22	7.68	16.46	-6.17	19.12	7.90	0.15	3.363	3.485	5.678	7.979	8.182	9.499	1,1
A0804	1.21	2.40	6.72	16.53	-7.55	16.84	7.70	0.08	3.809	3.908	5.794	7.687	8.157	9.350	1,1
A0805	1.70	2.93	7.58	17.46	-3.96	21.00	8.30	0.05	2.692	2.903	5.770	7.539	7.885	9.251	1,1
A0806	2.42	4.70	13.01	31.70	-6.17	19.70	7.00	0.12	2.789	2.834	5.734	7.769	8.224	9.595	1,1
A0808	1.94	4.58	14.28	38.12	-8.81	16.80	7.20	0.10	4.019	4.078	5.788	8.037	8.659	9.823	1,1
A0809	1.94	4.75	15.16	41.15	-5.33	20.31	8.50	0.075	3.373	3.571	5.680	7.786	8.438	9.752	10,2
A0810	5.09	4.57	8.92	15.56	-4.61	21.75	8.00	0.10	2.784	2.932	5.747	8.481	8.205	9.570	1,1
A0811	0.73	1.70	5.27	13.99	-4.37	19.10	8.25	0.15	2.833	3.016	5.532	6.967	7.578	9.043	1,1
A0813	0.48	2.21	10.89	38.74	-2.71	20.44	8.00	0.10	2.011	2.295	5.771	6.320	7.490	8.945	1,1
A0814	0.48	2.44	13.02	48.24	-4.61	18.61	7.40	0.10	2.456	2.540	5.789	6.437	7.689	9.077	1,1
A0815	2.67	3.02	6.38	12.15	-6.71	18.63	7.50	0.10	3.355	3.440	5.626	8.186	8.136	9.480	1,1
A0816	2.67	4.56	11.71	26.84	-6.51	19.41	9.30	0.10	4.238	4.545	5.693	8.407	8.742	9.920	21,21
A0817	1.94	4.22	12.51	32.15	-7.60	17.92	7.70	0.00	3.829	3.928	5.742	7.981	8.532	9.748	1,1
A0818	1.45	2.69	7.23	17.23	-5.43	19.27	8.50	0.075	3.413	3.609	5.640	7.673	8.081	9.410	34,2
A0819	5.33	3.21	5.69	8.85	-5.01	20.71	8.20	0.10	3.058	3.226	5.639	8.760	8.068	9.449	1,1
A0821	3.15	3.25	6.62	12.14	-7.01	18.54	7.60	0.10	3.545	3.638	5.792	8.394	8.253	9.487	1,1
A0823	4.12	3.80	7.46	13.13	-4.93	21.01	8.80	0.075	3.374	3.637	5.787	8.544	8.292	9.553	34,2
A0824	1.70	1.85	3.84	7.19	-6.06	18.23	7.70	0.05	3.212	3.316	5.790	7.854	7.764	9.046	1,1
A0825	1.21	1.98	4.96	11.14	-6.41	17.74	8.00	0.10	3.506	3.636	5.715	7.621	7.916	9.194	1,1
A0826	2.18	2.94	6.69	13.75	-4.99	20.17	7.80	0.03	2.838	2.958	5.751	7.818	7.934	9.290	1,1
A0827	8.00	3.73	6.39	9.48	-3.67	22.43	8.60	0.12	2.746	3.022	5.702	9.031	8.059	9.452	1,1
A0828	2.91	3.37	7.20	13.86	-4.61	20.95	8.50	0.10	3.082	3.298	5.770	8.137	8.110	9.422	1,1
A0829	0.97	3.51	14.63	47.22	-5.61	18.89	7.70	0.10	3.032	3.139	5.758	7.139	8.118	9.443	1,1
A0831	8.48	3.57	6.05	8.85	-4.32	21.70	8.40	0.07	2.903	3.115	5.403	9.171	8.084	9.605	1,1
A0832	0.97	1.70	4.44	10.31	-7.11	16.65	7.90	0.10	3.740	3.857	5.775	7.547	7.906	9.119	1,1
A0833	10.18	4.43	7.54	11.08	-3.39	23.10	8.60	0.03	2.582	2.919	5.431	9.165	8.118	9.668	1,1
A0834	2.67	3.12	6.69	12.93	-4.23	21.16	8.04	0.075	2.653	2.812	5.793	7.931	7.913	9.273	34,2
A0835	0.48	1.84	7.99	26.42	-4.56	18.46	8.00	0.05	2.764	2.913	5.697	6.578	7.605	8.998	1,1
A0836	4.36	2.68	4.77	7.45	-4.87	20.46	7.60	0.15	2.689	2.790	5.654	8.493	7.824	9.249	1,1
A0837	0.73	3.16	15.00	52.15	-4.75	19.27	7.90	0.08	2.794	2.928	5.794	6.844	7.968	9.308	1,1
A0840	1.94	3.41	8.89	20.65	-8.11	17.16	7.40	0.10	3.856	3.931	5.759	8.042	8.403	9.606	1,1
A0842	1.45	2.84	7.89	19.30	-5.02	19.75	8.30	0.07	3.129	3.306	5.711	7.555	8.014	9.348	1,1
A0843	2.18	2.19	4.42	8.03	-5.56	19.14	7.90	0.15	3.119	3.245	5.753	8.009	7.840	9.155	1,1
A0844	0.48	2.51	13.63	51.02	-3.66	19.58	8.30	0.05	2.575	2.790	5.672	6.472	7.745	9.176	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0845	4.85	6.13	13.57	27.11	-6.53	20.27	8.90	0.075	4.094	4.317	5.678	8.823	8.878	10.086	10,2
A0846	5.82	6.57	13.88	26.43	-6.29	20.74	8.20	0.03	3.574	3.724	5.711	8.775	8.724	9.993	1,1
A0848	0.97	2.54	8.45	23.64	-6.56	17.65	7.50	0.02	3.295	3.380	5.775	7.291	8.000	9.279	1,1
A0849	1.21	1.85	4.49	9.78	-4.79	19.27	8.20	0.03	2.971	3.141	5.740	7.445	7.680	9.022	1,1
A0850	1.70	3.46	9.82	24.44	-4.66	20.49	8.60	0.05	3.155	3.391	5.682	7.661	8.152	9.497	1,1
A0851	2.18	4.59	13.34	33.77	-3.66	22.08	8.40	0.05	2.623	2.867	5.725	7.631	8.154	9.552	1,1
A0852	2.91	3.55	7.75	15.25	-4.79	20.85	8.50	0.03	3.153	3.366	5.777	8.146	8.169	9.467	1,1
A0853	0.97	2.84	10.21	30.05	-5.52	18.79	8.00	0.20	3.150	3.286	5.659	7.219	8.022	9.380	1,1
A0854	1.94	4.58	14.28	38.12	-5.63	19.98	8.50	0.075	3.492	3.686	5.671	7.836	8.458	9.760	34,2
A0855	0.73	1.73	5.40	14.43	-6.66	16.83	7.60	0.02	3.405	3.499	5.768	7.166	7.791	9.057	1,1
A0856	7.03	3.74	6.51	9.88	-5.75	20.33	7.70	0.08	3.088	3.194	5.792	9.005	8.179	9.479	1,1
A0857	0.73	3.11	14.56	50.27	-3.69	20.32	8.40	0.03	2.635	2.878	5.757	6.793	7.904	9.285	1,1
A0858	0.97	3.06	11.57	35.19	-5.29	19.09	7.50	0.03	2.787	2.877	5.792	7.078	7.944	9.286	1,1
A0859	5.82	5.56	11.06	19.72	-6.80	19.95	8.20	0.13	3.778	3.925	5.737	8.909	8.693	9.919	1,1
A0860	0.97	1.24	2.76	5.54	-5.56	17.77	7.30	0.05	2.769	2.840	5.793	7.282	7.350	8.694	1,1
A0862	0.97	3.60	15.27	49.80	-3.25	21.27	7.90	0.05	2.186	2.350	5.687	6.859	7.859	9.334	1,1
A0863	3.15	2.25	4.13	6.70	-6.16	18.74	7.60	0.02	3.205	3.300	5.766	8.401	7.890	9.186	1,1
A0864	4.12	3.78	7.41	13.01	-5.56	20.37	8.00	0.05	3.166	3.302	5.732	8.471	8.213	9.532	1,1
A0865	2.42	3.39	7.87	16.46	-5.15	20.29	7.70	0.08	2.848	2.957	5.714	7.879	8.032	9.404	1,1
A0866	1.21	2.54	7.36	18.60	-7.66	16.79	7.10	0.05	3.466	3.517	5.790	7.546	8.064	9.310	1,1
A0867	2.18	1.88	3.62	6.22	-5.69	18.75	7.50	0.03	2.947	3.035	5.790	8.000	7.681	9.002	1,1
A0869	2.67	2.57	5.11	9.13	-5.05	20.02	8.60	0.08	3.319	3.537	5.789	8.227	8.017	9.285	1,1
A0870	8.97	4.03	6.87	10.14	-7.16	19.11	7.40	0.05	3.476	3.552	5.763	9.383	8.369	9.626	1,1
A0872	7.03	2.95	4.99	7.30	-4.56	21.04	8.50	0.05	3.062	3.279	5.643	9.107	8.014	9.392	1,1
A0874	1.21	2.99	9.60	26.17	-3.56	21.07	8.50	0.02	2.619	2.905	5.767	7.212	7.873	9.251	1,1
A0875	6.79	2.88	4.89	7.16	-4.36	21.20	8.00	0.05	2.684	2.835	5.790	8.947	7.871	9.228	1,1
A0876	3.15	6.31	17.77	43.92	-4.87	21.61	8.30	0.15	3.067	3.249	5.780	8.034	8.512	9.821	1,1
A0877	1.94	4.01	11.50	28.84	-3.56	21.90	8.70	0.02	2.737	3.056	5.673	7.598	8.103	9.512	1,1
A0878	1.94	2.16	4.54	8.60	-4.85	19.77	7.60	0.08	2.681	2.782	5.778	7.747	7.682	9.046	1,1
A0879	0.97	1.98	5.62	14.00	-3.69	20.25	8.30	0.03	2.587	2.801	5.750	7.099	7.592	8.983	1,1
A0882	1.21	3.29	11.25	32.03	-2.63	22.09	8.70	0.075	2.214	2.723	5.779	7.068	7.809	9.234	10,2
A0883	2.18	3.96	10.51	24.79	-3.93	21.63	8.00	0.075	2.507	2.670	5.736	7.629	8.019	9.427	10,2
A0884	3.15	3.09	6.20	11.16	-5.95	19.52	7.40	0.08	2.992	3.070	5.783	8.209	8.021	9.339	1,1
A0885	8.48	3.53	5.98	8.74	-4.56	21.44	8.10	0.05	2.816	2.980	5.783	9.146	8.047	9.390	1,1
A0886	2.67	2.77	5.67	10.43	-4.96	20.24	8.20	0.05	3.038	3.206	5.779	8.100	7.966	9.280	1,1
A0887	5.82	4.04	7.38	11.89	-4.91	21.28	8.50	0.10	3.200	3.411	5.743	8.809	8.270	9.578	1,1
A0888	0.73	2.03	7.03	20.21	-4.56	19.09	8.10	0.05	2.816	2.980	5.654	6.925	7.686	9.093	1,1
A0889	1.21	2.22	5.92	14.03	-4.25	20.04	8.50	0.05	2.925	3.163	5.662	7.383	7.781	9.169	1,1
A0891	0.48	1.92	8.59	28.90	-4.31	18.74	8.10	0.10	2.717	2.884	5.771	6.557	7.617	8.979	1,1
A0892	0.48	2.51	13.63	51.02	-4.19	19.05	8.20	0.06	2.725	2.912	5.762	6.521	7.794	9.160	1,1
A0894	1.21	2.52	7.26	18.27	-3.81	20.63	8.50	0.10	2.716	2.998	5.726	7.282	7.793	9.178	1,1
A0897	3.15	2.19	4.00	6.45	-5.72	19.14	8.00	0.20	3.230	3.365	5.761	8.419	7.882	9.177	1,1
A0898	1.21	3.99	15.57	48.28	-4.48	20.42	8.20	0.09	2.848	3.022	5.768	7.235	8.138	9.483	1,1
A0900	1.21	2.24	6.04	14.40	-4.36	19.95	8.20	0.05	2.792	2.976	5.672	7.334	7.744	9.145	1,1
A0903	3.39	5.53	13.86	31.10	-7.01	19.37	8.70	0.10	4.168	4.361	5.513	8.547	8.840	10.119	1,1
A0905	1.70	3.73	11.13	28.73	-8.18	17.06	8.00	0.22	4.216	4.339	5.704	8.045	8.603	9.780	1,1
A0906	2.42	5.60	17.25	45.62	-6.46	19.61	7.80	0.15	3.427	3.538	5.716	7.960	8.565	9.854	1,1
A0907	1.70	2.31	5.30	10.94	-5.11	19.53	8.35	0.10	3.192	3.376	5.731	7.777	7.904	9.219	1,1
A0908	0.73	2.62	10.87	34.97	-5.67	18.21	7.80	0.15	3.110	3.226	5.753	6.982	7.956	9.272	1,1
A0910	1.21	2.90	9.14	24.57	-8.01	16.59	7.70	0.10	3.993	4.092	5.758	7.716	8.351	9.535	1,1
A0911	1.21	2.35	6.48	15.77	-6.95	17.41	7.60	0.08	3.521	3.614	5.767	7.584	8.033	9.282	1,1
A0912	0.48	2.37	12.30	44.99	-4.46	18.74	8.10	0.05	2.777	2.941	5.725	6.547	7.773	9.150	1,1
A0913	0.97	1.45	3.46	7.45	-5.35	18.20	7.80	0.08	2.982	3.100	5.782	7.311	7.523	8.842	1,1
A0914	3.64	4.97	11.41	23.60	-6.11	20.18	8.15	0.10	3.472	3.619	5.757	8.376	8.504	9.766	1,1
A0916	7.03	4.78	8.68	13.90	-6.36	20.20	8.00	0.05	3.486	3.617	5.782	9.045	8.484	9.730	1,1
A0917	2.67	5.07	13.83	33.33	-8.92	17.13	7.30	0.07	4.113	4.180	5.784	8.332	8.762	9.914	1,1
A0918	0.97	2.60	8.83	25.00	-4.96	19.27	8.10	0.05	2.980	3.134	5.742	7.174	7.905	9.245	1,1
A0919	1.70	2.12	4.66	9.25	-6.06	18.45	7.70	0.05	3.212	3.316	5.717	7.810	7.854	9.173	1,1
A0920	2.67	2.35	4.56	7.90	-4.46	20.46	8.75	0.05	3.142	3.426	5.725	8.193	7.897	9.222	1,1
A0922	1.94	2.67	6.13	12.71	-5.56	19.38	8.60	0.05	3.521	3.731	5.726	7.981	8.116	9.386	1,1
A0923	1.21	4.03	15.84	49.34	-4.36	20.55	7.30	0.05	2.289	2.366	5.760	7.052	7.963	9.389	1,1
A0924	12.85	5.23	8.84	12.88	-4.61	22.25	8.30	0.10	2.961	3.149	5.654	9.477	8.353	9.740	1,1
A0925	2.18	3.53	8.81	19.70	-7.95	17.46	7.40	0.08	3.792	3.867	5.746	8.116	8.402	9.621	1,1
A0927	1.21	1.67	3.86	8.03	-5.66	18.26	7.70	0.05	3.052	3.158	5.716	7.502	7.643	8.986	1,1
A0928	1.21	1.90	4.65	10.24	-4.41	19.68	8.60	0.10	3.057	3.297	5.711	7.469	7.725	9.070	1,1
A0929	0.73	1.80	5.76	15.68	-4.96	18.57	8.00	0.15	2.926	3.068	5.712	6.987	7.645	9.008	1,1
A0932	3.39	2.85	5.45	9.29	-6.52	18.84	7.60	0.07	3.349	3.443	5.781	8.440	8.096	9.364	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A0934	8.73	4.62	8.04	12.19	-5.16	21.38	8.60	0.02	3.363	3.579	5.784	9.247	8.416	9.680	1,1
A0935	1.94	4.88	15.86	43.59	-4.46	21.21	7.70	0.05	2.571	2.687	5.738	7.501	8.177	9.575	1,1
A0936	0.73	1.81	5.85	15.99	-5.96	17.58	8.20	0.05	3.442	3.595	5.736	7.170	7.836	9.113	1,1
A0937	1.21	1.78	4.23	9.05	-3.91	20.10	8.25	0.10	2.642	2.842	5.716	7.343	7.543	8.943	1,1
A0938	2.42	2.82	6.02	11.61	-7.06	18.11	7.80	0.15	3.667	3.776	5.737	8.230	8.207	9.450	1,1
A0939	2.67	3.70	8.55	17.80	-4.46	21.18	8.70	0.02	3.123	3.390	5.717	8.042	8.185	9.518	1,1
A0940	0.73	1.73	5.41	14.47	-6.36	17.13	7.70	0.05	3.332	3.435	5.739	7.140	7.765	9.056	1,1
A0941	2.67	4.90	13.10	31.06	-5.66	20.35	7.30	0.05	2.809	2.880	5.729	7.859	8.258	9.629	1,1
A0942	10.67	4.42	7.47	10.91	-4.41	22.07	8.60	0.10	3.057	3.297	5.718	9.384	8.276	9.618	1,1
A0943	1.94	1.88	3.75	6.72	-7.11	17.28	7.60	0.10	3.585	3.678	5.736	8.115	7.912	9.167	1,1
A0944	1.21	3.10	10.18	28.20	-6.06	18.60	8.30	0.05	3.546	3.709	5.768	7.533	8.223	9.469	1,1
A0946	5.09	7.06	16.29	33.91	-8.73	18.31	9.30	0.075	5.148	5.391	5.715	9.253	9.395	10.421	4,2
A0947	1.70	2.66	6.52	14.35	-6.36	18.47	8.10	0.02	3.541	3.682	5.724	7.867	8.123	9.390	1,1
A0949	2.42	3.32	7.64	15.84	-5.96	19.46	8.10	0.02	3.382	3.524	5.726	8.073	8.209	9.499	1,1
A0950	0.48	2.26	11.34	40.72	-3.75	19.42	8.70	0.05	2.805	3.126	5.770	6.562	7.752	9.102	1,1
A0951	1.94	4.06	11.76	29.69	-5.75	19.73	8.70	0.05	3.657	3.874	5.741	7.924	8.442	9.684	1,1
A0952	1.21	3.88	14.83	45.42	-3.16	21.72	8.40	0.02	2.385	2.680	5.719	7.087	7.968	9.401	1,1
A0956	5.09	2.88	5.06	7.77	-5.33	20.17	8.79	0.075	3.539	3.779	5.780	8.932	8.174	9.414	34,2
A0957	4.12	5.18	11.44	22.80	-5.61	20.83	8.72	0.10	3.613	3.836	5.621	8.533	8.584	9.892	1,1
A0958	2.42	5.58	17.14	45.25	-6.02	20.04	8.00	0.07	3.350	3.483	5.762	7.933	8.534	9.811	1,1
A0959	1.21	4.02	15.77	49.06	-4.61	20.30	7.70	0.10	2.631	2.745	5.721	7.160	8.070	9.469	1,1
A0960	1.21	2.60	7.64	19.52	-7.16	17.32	7.60	0.05	3.605	3.698	5.771	7.592	8.132	9.366	1,1
A0961	2.91	3.42	7.34	14.21	-7.46	18.12	7.70	0.05	3.773	3.873	5.767	8.388	8.374	9.586	1,1
A0963	3.88	2.74	5.02	8.12	-5.91	19.43	8.00	0.10	3.306	3.439	5.778	8.576	8.055	9.330	1,1
A0965	0.97	2.16	6.50	16.89	-6.91	17.13	8.10	0.10	3.762	3.899	5.709	7.499	8.071	9.313	1,1
A0966	1.21	3.03	9.82	26.94	-3.96	20.68	8.50	0.05	2.813	3.054	5.776	7.275	7.947	9.293	1,1
A0968	3.88	6.84	17.88	41.60	-5.96	20.82	8.60	0.05	3.686	3.885	5.719	8.427	8.792	10.041	1,1
A0969	1.45	2.59	6.82	15.97	-3.66	20.99	8.70	0.02	2.773	3.093	5.775	7.456	7.830	9.183	1,1
A0970	1.70	2.81	7.11	16.07	-7.66	17.24	7.60	0.05	3.805	3.897	5.742	7.953	8.259	9.479	1,1
A0973	6.06	8.15	18.55	38.09	-8.33	19.05	9.11	0.075	4.917	5.131	5.660	9.279	9.394	10.483	4,2
A0974	1.94	4.63	14.55	39.04	-6.81	18.81	7.30	0.10	3.269	3.338	5.687	7.752	8.384	9.710	1,1
A0975	5.33	5.86	12.25	23.07	-5.66	21.13	8.80	0.05	3.674	3.910	5.737	8.766	8.687	9.929	1,1
A0977	2.18	3.85	10.06	23.42	-5.76	19.76	8.20	0.02	3.362	3.517	5.732	7.933	8.296	9.587	1,1
A0978	0.73	1.35	3.65	8.70	-4.16	19.05	8.00	0.05	2.604	2.758	5.725	6.943	7.353	8.753	1,1
A0979	1.45	2.51	6.51	15.03	-4.81	19.81	8.30	0.10	3.040	3.226	5.753	7.554	7.903	9.229	1,1
A0980	0.73	3.11	14.56	50.27	-3.86	20.15	7.90	0.05	2.436	2.583	5.761	6.728	7.840	9.246	1,1
A0981	2.42	2.31	4.58	8.16	-3.66	21.18	8.40	0.05	2.623	2.867	5.753	7.924	7.705	9.090	1,1
A0982	7.03	5.10	9.40	15.32	-5.85	20.83	8.10	0.08	3.337	3.481	5.756	8.964	8.471	9.753	1,1
A0983	9.70	8.79	17.18	30.05	-6.22	21.55	8.30	0.07	3.612	3.772	5.656	9.196	8.927	10.219	1,1
A0984	1.21	4.01	15.71	48.83	-5.06	19.85	7.40	0.02	2.635	2.717	5.703	7.161	8.070	9.477	1,1
A0985	0.73	1.15	2.83	6.25	-5.95	17.05	7.40	0.08	2.992	3.070	5.700	7.116	7.377	8.736	1,1
A0986	1.45	3.17	9.39	24.16	-3.86	21.03	8.30	0.05	2.653	2.865	5.727	7.368	7.921	9.314	1,1
A0988	0.97	1.91	5.32	13.04	-6.67	17.23	8.00	0.15	3.610	3.739	5.722	7.470	7.932	9.191	1,1
A0989	0.48	2.13	10.26	36.00	-4.05	19.08	8.50	0.05	2.848	3.088	5.717	6.585	7.729	9.100	1,1
A0991	0.97	2.09	6.17	15.79	-5.05	18.95	8.50	0.08	3.255	3.464	5.555	7.318	7.861	9.255	1,1
A0992	2.42	2.50	5.11	9.39	-5.01	19.97	8.40	0.10	3.185	3.377	5.529	8.090	7.952	9.369	1,1
A0993	2.18	4.48	12.81	32.05	-6.75	18.96	7.70	0.05	3.488	3.590	5.684	7.941	8.442	9.738	1,1
A0994	0.97	3.51	14.63	47.22	-5.21	19.29	7.70	0.10	2.872	2.981	5.694	7.083	8.062	9.442	1,1
A0995	2.67	4.56	11.71	26.84	-7.62	18.30	8.05	0.07	4.020	4.149	5.348	8.322	8.656	10.040	1,1
A0996	0.97	1.73	4.56	10.68	-4.01	19.77	8.20	0.10	2.655	2.843	5.482	7.154	7.529	9.044	1,1
A0997	1.21	1.58	3.54	7.17	-5.22	18.61	7.80	0.07	2.930	3.048	5.751	7.477	7.562	8.904	1,1
A0998	0.48	2.27	11.49	41.38	-4.12	19.06	8.10	0.07	2.642	2.811	5.643	6.506	7.702	9.139	1,1
A0999	5.33	5.17	10.34	18.54	-5.86	20.73	9.46	0.02	4.045	4.452	5.258	8.948	8.748	10.174	21,21
A1000	7.27	3.26	5.56	8.21	-3.75	22.07	8.40	0.05	2.658	2.901	5.303	8.956	7.942	9.547	1,1
A1001	1.94	3.85	10.76	26.46	-4.15	21.26	8.40	0.08	2.836	3.051	5.343	7.641	8.109	9.669	1,1
A1002	7.51	3.46	5.91	8.75	-3.46	22.48	8.80	0.02	2.718	3.096	5.181	8.985	8.000	9.657	1,1
A1003	0.73	1.93	6.45	18.11	-4.13	19.47	8.35	0.075	2.796	3.003	5.342	6.928	7.645	9.211	34,2
A1004	9.21	3.80	6.43	9.39	-4.59	21.57	8.50	0.03	3.074	3.290	5.572	9.294	8.185	9.597	1,1
A1006	0.48	2.07	9.78	33.94	-2.82	20.29	8.30	0.07	2.174	2.475	5.226	6.374	7.495	9.202	1,1
A1007	5.33	4.18	7.85	13.09	-5.16	21.06	8.40	0.05	3.244	3.434	5.537	8.721	8.308	9.712	1,1
A1009	1.94	4.73	15.05	40.77	-6.72	18.92	7.50	0.07	3.359	3.444	5.673	7.781	8.430	9.750	1,1
A1010	1.45	4.15	14.68	42.77	-6.87	18.30	8.00	0.12	3.691	3.818	5.662	7.683	8.469	9.745	1,1
A1011	1.45	3.17	9.39	24.16	-5.06	19.83	8.10	0.05	3.020	3.173	5.397	7.493	8.046	9.553	1,1
A1012	1.94	2.81	6.64	14.11	-3.41	21.60	8.30	0.10	2.444	2.696	5.726	7.592	7.777	9.199	1,1
A1013	0.73	1.40	3.85	9.33	-4.86	18.39	8.10	0.05	2.940	3.096	5.480	7.048	7.488	8.965	1,1
A1014	5.33	3.11	5.49	8.48	-3.66	22.00	8.80	0.05	2.786	3.169	5.427	8.679	7.954	9.479	1,1
A1015	0.97	2.27	7.06	18.78	-6.15	17.94	8.20	0.08	3.518	3.670	5.305	7.397	8.012	9.493	1,1

Table 2. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_i$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
A1016	0.97	2.33	7.32	19.68	-5.96	18.16	8.10	0.05	3.382	3.524	5.423	7.341	7.976	9.417	1,1
A1017	0.73	3.00	13.73	46.75	-3.25	20.73	8.40	0.05	2.417	2.714	5.652	6.729	7.812	9.274	1,1
A1018	8.73	3.56	6.02	8.78	-5.31	20.71	8.10	0.10	3.121	3.270	5.478	9.282	8.159	9.611	1,1
A1019	1.21	2.92	9.21	24.82	-4.86	19.74	8.10	0.05	2.940	3.096	5.746	7.326	7.965	9.309	1,1
A1023	3.39	4.23	9.31	18.49	-5.96	20.05	7.50	0.05	3.055	3.142	5.689	8.203	8.248	9.604	1,1
A1024	1.45	2.87	8.02	19.71	-4.56	20.22	8.60	0.05	3.116	3.354	5.493	7.549	8.016	9.462	1,1
A1025	0.73	3.12	14.64	50.61	-3.55	20.46	8.30	0.08	2.516	2.749	5.643	6.754	7.867	9.321	1,1
A1026	0.48	2.41	12.68	46.70	-3.55	19.66	8.30	0.05	2.516	2.749	5.701	6.459	7.698	9.123	1,1
A1028	1.45	2.41	6.10	13.81	-4.41	20.15	8.30	0.10	2.882	3.073	5.563	7.511	7.821	9.264	1,1
A1029	5.82	5.90	11.97	21.82	-6.09	20.76	8.40	0.03	3.621	3.794	5.649	8.829	8.672	9.965	1,1
A1030	0.73	1.78	5.69	15.43	-5.09	18.43	8.10	0.03	3.032	3.185	5.743	7.026	7.677	9.009	1,1
A1031	0.48	1.91	8.51	28.57	-2.76	20.29	8.40	0.15	2.240	2.532	5.393	6.405	7.462	9.077	1,1
A1032	0.48	1.85	8.07	26.75	-3.96	19.06	8.10	0.05	2.577	2.750	5.437	6.516	7.547	9.096	1,1
A1033	0.97	2.98	11.07	33.28	-3.02	21.34	8.60	0.07	2.451	2.781	5.420	6.972	7.817	9.391	1,1
A1034	0.73	2.50	10.03	31.62	-4.36	19.48	8.50	0.05	2.968	3.204	5.721	6.940	7.875	9.227	1,1
A1035	0.73	3.13	14.71	50.91	-2.66	21.35	8.70	0.02	2.224	2.733	5.281	6.664	7.779	9.452	1,1
A1038	5.09	4.25	8.10	13.77	-5.01	21.22	8.50	0.10	3.240	3.449	5.693	8.667	8.316	9.643	1,1
A1042	5.58	2.39	4.06	5.96	-4.75	20.40	8.30	0.08	3.017	3.203	5.675	8.929	7.863	9.231	1,1
A1043	1.45	2.69	7.26	17.32	-4.87	19.83	8.10	0.12	2.944	3.099	5.301	7.504	7.915	9.481	1,1
A1044	2.42	3.02	6.66	13.24	-3.75	21.53	8.40	0.05	2.658	2.901	5.657	7.847	7.893	9.321	1,1
A1045	1.70	4.68	16.14	46.22	-4.85	20.62	8.60	0.08	3.229	3.462	5.729	7.624	8.376	9.687	1,1
A1048	4.12	6.20	14.91	32.23	-4.91	21.79	7.60	0.10	2.705	2.806	5.701	8.157	8.377	9.776	1,1
A1049	0.73	1.29	3.37	7.85	-4.41	18.74	8.40	0.10	2.939	3.149	5.710	7.067	7.432	8.794	1,1
A1050	3.15	5.95	16.20	38.96	-6.41	20.00	7.50	0.10	3.235	3.321	5.651	8.108	8.535	9.884	1,1
A1051	1.94	3.73	10.24	24.82	-5.53	19.85	9.30	0.075	3.794	4.189	5.205	7.996	8.438	9.927	27,2
A1052	1.70	2.85	7.23	16.42	-3.11	21.81	8.60	0.10	2.483	2.815	5.336	7.479	7.797	9.409	1,1
A1054	0.73	2.28	8.58	26.00	-4.61	19.15	8.40	0.10	3.017	3.224	5.727	6.973	7.832	9.174	1,1
A1055	3.39	5.72	14.60	33.28	-8.83	17.60	8.00	0.075	4.477	4.598	5.568	8.660	8.985	10.189	4,2
A1056	2.18	3.25	7.78	16.75	-3.22	22.08	8.30	0.07	2.373	2.624	5.435	7.639	7.849	9.426	1,1
A1057	1.70	2.56	6.17	13.35	-4.75	20.03	8.50	0.05	3.137	3.351	5.740	7.729	7.951	9.269	1,1
A1058	1.70	2.94	7.60	17.52	-3.96	21.00	9.00	0.05	3.008	3.448	5.440	7.647	7.994	9.481	1,1
A1059	1.94	2.08	4.31	8.04	-3.99	20.57	8.20	0.03	2.647	2.836	5.465	7.748	7.646	9.171	1,1
A1060	0.97	1.37	3.18	6.67	-4.05	19.42	7.80	0.08	2.461	2.592	5.689	7.153	7.312	8.750	1,1
A1062	5.33	5.48	11.16	20.45	-5.11	21.57	8.80	0.10	3.444	3.704	5.541	8.701	8.557	9.930	1,1
A1063	10.18	7.49	13.85	22.67	-5.32	22.19	9.55	0.07	3.880	4.347	5.394	9.405	8.926	10.308	21,21
A1065	0.73	3.14	14.79	51.25	-3.81	20.21	8.05	0.10	2.485	2.659	5.470	6.742	7.862	9.406	1,1
A1066	3.64	4.65	10.33	20.73	-6.25	19.94	8.30	0.08	3.624	3.784	5.459	8.452	8.517	9.905	1,1

**Notes.** References to ages and reddenings. 1 : Glatt et al. (2010), 2 : Schlegel et al (1998), 3 : Girardi et al. (1995), 4 : Geisler et al. (1997), 5 : Mighell et al. (1998), 6 : Suntzeff & Walker (1998), 7 : Santos et al. (1999), 8 : Dirsch et al. (2000), 9 : De Oliveira et al. (2000), 10 : Pietrzynski & Udalski (2000), 11 : Piatti et al. (2001), 12 : Ahumada et al. (2002), 13 : Beasley et al. (2002), 14 : Geisler et al. (2003), 15 : Piatti et al. (2003), 16 : Santos & Piatti (2004), 17 : Piatti et al. (2005), 18 : Piatti et al. (2005), 19 : Santos et al. (2006), 20 : Chiosi et al. (2006), 21 : Kerber et al. (2007), 24 : Piatti et al. (2008), 25 : Baume et al. (2008), 26 : Milone et al. (2009), 27 : Piatti et al. (2009), 28 : Mucciarelli et al. (2009), 29 : Dias et al. (2010), 30 : Sharma et al. (2010), 31 : Popescu & Hanson (2010), 32 : Cid Fernandes & González Delgado (2010), 33 : Piatti (2011), 34 : from broadband colors and empirical relation of Girardi et al. (1995).

**Table 3.** Structural parameters, ages, masses and relaxation times for the SMC clusters

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
B002	3.97	6.94	18.06	41.86	-6.06	20.75	9.30	0.02	4.119	4.449	5.056	8.613	8.969	10.437	24,17
B003	2.75	4.50	11.30	25.39	-4.49	21.44	9.20	0.03	3.383	3.787	5.140	8.110	8.406	9.942	24,17
B004	10.69	7.00	12.62	20.02	-5.16	22.24	9.54	0.02	3.867	4.326	5.073	9.477	8.876	10.374	29,17
B005	3.97	5.26	11.90	24.28	-4.11	22.33	8.87	0.037	3.013	3.363	5.251	8.274	8.375	9.909	34,2
B006	3.36	6.59	18.31	44.80	-1.99	24.60	8.00	0.03	1.708	2.573	5.370	7.668	8.126	9.771	1,1
B007	9.16	5.41	9.57	14.82	-4.33	22.53	8.70	0.01	3.036	3.311	5.372	9.113	8.401	9.872	1,1
B008	0.92	3.03	11.78	36.48	-4.31	19.99	9.53	0.037	3.452	4.021	5.082	7.273	8.173	9.728	34,2
B009	4.89	5.38	11.24	21.17	-4.03	22.58	9.10	0.01	2.946	3.498	5.253	8.443	8.366	9.908	1,1
B010	9.16	10.53	22.40	42.97	-6.89	21.15	8.85	0.03	4.172	4.390	5.472	9.296	9.261	10.514	1,1
B011	0.92	2.59	9.07	26.23	-4.86	19.30	8.00	0.05	2.881	3.024	5.504	7.096	7.868	9.294	1,1
B012	20.16	9.89	17.04	25.49	-5.79	22.42	9.10	0.03	3.841	4.137	5.559	10.006	9.092	10.350	1,1
B013	5.50	4.09	7.57	12.42	-6.01	20.18	8.20	0.10	3.435	3.589	5.582	8.832	8.363	9.670	1,1
B014	5.50	2.21	3.73	5.43	-2.31	22.68	9.01	0.037	2.066	2.872	5.566	8.646	7.507	9.011	34,2
B015	8.86	3.78	6.42	9.41	-3.96	22.19	9.78	0.05	3.067	4.131	5.353	9.249	8.179	9.655	25,25
B016	5.50	7.55	17.36	35.98	-4.95	22.25	9.00	0.08	3.464	3.770	5.565	8.639	8.774	10.086	1,1
B017	0.61	3.08	16.31	60.23	-2.51	21.23	7.84	0.037	1.853	2.479	5.583	6.421	7.667	9.188	34,2
B018	14.05	6.05	10.27	15.07	-4.85	22.31	8.50	0.08	3.129	3.346	5.596	9.569	8.507	9.852	1,1
B019	19.55	13.97	25.65	41.63	-4.89	23.98	8.90	0.03	3.369	3.672	5.532	9.649	9.139	10.482	20,20
B021	3.05	2.78	5.45	9.55	-3.79	21.48	7.90	0.03	2.403	2.551	5.570	8.019	7.757	9.216	20,20
B022	2.14	3.31	8.06	17.64	-5.25	20.06	8.70	0.05	3.414	3.654	5.577	7.973	8.217	9.531	1,1
B023	7.33	8.66	18.63	36.15	-4.49	23.11	8.75	0.06	3.120	3.410	5.580	8.746	8.738	10.092	1,1
B024	3.36	3.04	5.94	10.38	-3.92	21.55	8.80	0.04	2.843	3.239	5.603	8.228	7.959	9.341	1,1
B025	2.75	4.42	11.01	24.55	-6.09	19.82	8.10	0.06	3.418	3.561	5.693	8.127	8.408	9.663	1,1
B026	17.10	6.95	11.74	17.11	-4.52	22.95	8.90	0.04	3.228	3.536	5.548	9.760	8.633	9.988	1,1
B027	5.19	4.37	8.36	14.26	-4.85	21.44	7.95	0.08	2.851	2.990	5.694	8.539	8.198	9.533	1,1
B028	2.44	3.76	9.16	20.02	-5.92	19.67	8.55	0.04	3.597	3.795	5.551	8.128	8.369	9.668	1,1
B029	1.83	4.18	12.77	33.57	-5.61	19.84	7.90	0.10	3.134	3.259	5.703	7.674	8.268	9.559	1,1
B030	1.83	5.07	17.56	50.43	-3.75	21.89	8.75	0.05	2.780	3.136	5.693	7.513	8.271	9.617	1,1
B031	6.72	9.34	21.58	44.97	-6.64	21.01	9.32	0.11	4.378	4.678	5.675	9.119	9.264	10.383	24,18
B032	7.64	3.10	5.23	7.62	-5.37	20.35	7.70	0.12	2.919	3.025	5.646	9.126	7.997	9.347	20,1
B033	5.50	7.93	18.64	39.49	-3.82	23.45	9.00	0.07	2.919	3.359	5.550	8.429	8.609	10.007	1,1
B034	1.83	3.25	8.55	19.98	-5.69	19.46	9.00	0.03	3.770	4.042	5.611	7.969	8.340	9.584	12,12
B035	1.53	4.64	17.10	51.13	-5.37	19.97	8.60	0.12	3.404	3.622	5.745	7.599	8.434	9.665	20,20
B036	1.83	4.74	15.69	43.70	-6.61	18.96	8.25	0.10	3.703	3.858	5.726	7.860	8.559	9.756	1,1
B037	1.22	1.89	4.61	10.10	-3.72	20.38	8.80	0.07	2.775	3.165	5.738	7.379	7.626	8.950	20,9
B038	3.05	1.26	2.14	3.13	-1.76	22.01	8.80	0.05	1.898	3.019	5.713	8.202	7.098	8.549	20,20
B039	3.05	6.35	18.28	45.99	-2.81	23.64	9.53	0.037	2.410	3.573	5.478	7.785	8.296	9.800	34,2
B040	2.44	2.05	3.91	6.66	-6.32	18.32	8.00	0.20	3.466	3.596	5.776	8.270	7.923	9.130	1,1
B041	0.61	1.00	2.50	5.61	-4.51	18.15	8.00	0.10	2.739	2.889	5.680	6.902	7.197	8.555	1,1
B042	0.92	2.96	11.36	34.86	-4.35	19.93	8.65	0.08	3.018	3.278	5.738	7.120	8.002	9.292	1,1
B043	1.22	3.07	9.97	27.40	-4.23	20.44	8.30	0.14	2.762	2.973	5.743	7.260	7.938	9.261	1,1
B044	3.67	2.84	5.32	8.84	-7.02	18.37	7.80	0.20	3.647	3.756	5.736	8.631	8.205	9.405	1,1
B045	1.83	2.29	5.03	9.99	-2.51	22.16	8.57	0.037	2.162	2.458	5.676	7.511	7.556	8.993	34,2
B046	3.05	6.42	18.63	47.13	-4.96	21.50	6.78	0.05	2.044	2.069	5.781	7.675	8.196	9.595	20,20
B047	3.97	3.83	7.65	13.69	-5.61	20.33	8.60	0.10	3.499	3.714	5.727	8.550	8.345	9.570	1,1
B048	1.22	3.92	14.98	45.90	-2.75	22.14	8.45	0.08	2.210	2.530	5.735	7.041	7.921	9.322	1,1
B049	0.92	1.72	4.63	11.06	-4.35	19.37	8.85	0.08	3.096	3.436	5.498	7.260	7.674	9.073	1,1
B050	2.75	4.52	11.37	25.60	-6.98	18.96	8.35	0.09	3.911	4.073	5.752	8.308	8.608	9.760	1,1
B051	3.05	3.48	7.37	14.09	-5.87	19.77	8.00	0.15	3.285	3.419	5.762	8.245	8.202	9.442	1,1
B052	3.05	6.53	19.14	48.81	-2.82	23.66	9.00	0.07	2.462	3.012	5.674	7.795	8.331	9.730	1,1
B053	6.11	2.57	4.36	6.38	-5.16	20.15	8.50	0.05	3.251	3.464	5.805	9.080	7.994	9.217	20,20
B054	1.22	2.62	7.71	19.70	-5.01	19.49	8.35	0.10	3.118	3.307	5.755	7.418	7.959	9.226	1,1
B055	1.83	5.29	18.86	55.20	-5.45	20.23	8.70	0.08	3.492	3.729	5.647	7.759	8.552	9.819	1,1
B056	1.83	4.22	12.99	34.32	-6.29	19.17	8.50	0.06	3.711	3.899	5.745	7.885	8.488	9.673	20,20
B057	3.97	7.43	20.09	48.08	-5.75	21.15	6.78	0.08	2.360	2.383	5.788	7.966	8.383	9.739	20,1
B058	0.92	1.13	2.47	4.87	-1.91	21.24	8.87	0.037	1.978	2.895	5.618	7.017	7.046	8.534	34,2
B059	1.22	1.52	3.35	6.65	-5.67	18.12	8.05	0.15	3.229	3.369	5.788	7.600	7.644	8.879	1,1
B060	1.53	1.42	2.79	4.92	-4.26	19.54	8.10	0.18	2.682	2.851	5.817	7.654	7.407	8.704	1,1
B061	1.22	3.15	10.42	28.99	-6.22	18.47	8.10	0.20	3.470	3.612	5.806	7.508	8.207	9.397	1,1
B062	4.89	3.40	6.21	10.01	-3.75	22.06	8.30	0.05	2.575	2.792	5.362	8.481	7.942	9.482	1,1
B063	6.11	2.94	5.05	7.53	-5.67	19.91	8.20	0.15	3.297	3.457	5.758	9.033	8.097	9.337	1,1
B064	0.92	2.53	8.74	25.03	-4.48	19.66	8.00	0.09	2.727	2.877	5.810	7.048	7.801	9.095	20,20
B065	7.94	10.14	22.55	45.25	-5.25	22.64	8.00	0.05	3.036	3.176	5.816	8.745	8.811	10.059	20,20
B066	4.58	1.95	3.30	4.83	-5.19	19.51	7.70	0.06	2.846	2.955	5.818	8.746	7.669	8.943	20,20
B067	5.50	2.73	4.72	7.08	-6.62	18.80	8.20	0.20	3.680	3.829	5.774	9.091	8.193	9.368	1,1
B068	1.22	3.88	14.78	45.13	-6.61	18.28	7.60	0.10	3.362	3.455	5.820	7.428	8.302	9.502	1,1

Table 3. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
B069	7.33	8.57	18.36	35.47	-6.89	20.69	9.32	0.06	4.489	4.771	5.602	9.272	9.253	10.392	24,17
B070	0.92	2.03	6.06	15.67	-5.73	18.18	8.00	0.14	3.229	3.364	5.797	7.269	7.831	9.061	20,9
B071	1.22	3.85	14.58	44.36	-6.56	18.32	8.10	0.05	3.606	3.746	5.814	7.521	8.388	9.554	20,20
B072	1.53	2.11	4.87	10.12	-4.57	19.86	7.40	0.12	2.436	2.519	5.779	7.448	7.588	8.938	20,20
B073	5.19	7.47	17.55	37.15	-5.75	21.39	8.20	0.08	3.329	3.488	5.677	8.538	8.716	9.992	1,1
B074	3.36	2.62	4.92	8.19	-4.81	20.40	7.90	0.10	2.812	2.946	5.814	8.271	7.852	9.133	1,1
B075	1.53	1.51	3.04	5.49	-6.41	17.50	7.70	0.23	3.335	3.437	5.818	7.860	7.678	8.882	1,1
B076	1.83	4.49	14.37	39.06	-5.31	20.21	8.50	0.10	3.318	3.521	5.785	7.726	8.382	9.605	20,9
B077	1.53	4.64	17.10	51.13	-2.86	22.48	8.70	0.05	2.377	2.772	5.755	7.247	8.082	9.452	20,20
B078	3.97	1.61	2.72	3.96	-4.20	20.10	8.55	0.13	2.885	3.144	5.798	8.688	7.559	8.838	1,1
B079	28.71	14.15	24.39	36.52	-7.47	21.52	7.20	0.12	3.538	3.597	5.812	10.119	9.210	10.388	20,20
B080	2.14	4.66	13.78	35.40	-7.11	18.62	8.45	0.10	4.016	4.189	5.797	8.118	8.668	9.782	1,1
B081	6.72	2.72	4.59	6.68	-5.96	19.47	7.70	0.05	3.155	3.258	5.773	9.128	7.995	9.248	20,20
B083	3.67	1.56	2.64	3.87	-3.46	20.76	8.60	0.05	2.566	2.908	5.767	8.508	7.431	8.769	20,20
B084	6.41	3.08	5.29	7.89	-6.91	18.77	7.50	0.10	3.419	3.503	5.795	9.110	8.172	9.376	1,1
B085	2.44	2.52	5.13	9.41	-7.21	17.78	7.40	0.10	3.492	3.567	5.688	8.209	8.068	9.314	1,1
B086	1.83	3.02	7.60	17.14	-6.26	18.80	7.80	0.02	3.342	3.454	5.296	7.827	8.131	9.595	1,1
B087	1.22	3.61	13.07	38.65	-6.32	18.50	7.70	0.04	3.299	3.401	5.708	7.419	8.232	9.496	1,1
B088	5.50	2.21	3.73	5.43	-4.23	20.76	7.40	0.01	2.300	2.385	5.688	8.714	7.575	8.988	1,1
B089	2.75	6.22	18.86	49.34	-3.82	22.50	8.90	0.04	2.914	3.279	5.814	7.865	8.449	9.716	1,1
B090	3.36	2.76	5.24	8.86	-6.25	19.05	7.50	0.05	3.155	3.241	5.755	8.372	8.005	9.266	1,1
B091	3.97	3.82	7.61	13.60	-6.92	19.01	7.80	0.07	3.606	3.716	5.687	8.592	8.383	9.612	1,1
B092	3.05	1.98	3.56	5.63	-2.25	22.40	7.80	0.08	1.731	2.604	5.596	7.960	7.348	8.877	1,1
B093	0.92	2.25	7.16	19.41	-5.28	18.74	8.20	0.22	3.142	3.305	5.761	7.216	7.866	9.127	1,1
B094	1.83	1.55	2.98	5.10	-3.29	20.75	8.80	0.03	2.629	3.007	5.803	7.783	7.450	8.762	1,1
B095	1.53	4.64	17.10	51.13	-4.36	20.98	8.60	0.05	2.966	3.243	5.821	7.442	8.277	9.533	20,20
B096	3.97	3.77	7.49	13.33	-6.36	19.55	8.60	0.05	3.807	4.002	5.811	8.672	8.451	9.589	20,20
B097	0.92	2.34	7.64	21.09	-3.59	20.47	8.90	0.03	2.728	3.196	5.561	7.065	7.749	9.168	1,1
B098	3.05	5.76	15.66	37.64	-9.27	17.07	6.70	0.12	3.887	3.899	5.757	8.331	8.757	9.910	20,20
B099	3.36	6.85	19.48	48.54	-5.01	21.63	8.95	0.10	3.456	3.754	5.599	8.213	8.707	10.003	1,1
B100	0.92	1.22	2.76	5.63	-3.36	19.90	8.10	0.05	2.317	2.508	4.886	7.093	7.193	9.005	1,1
B101	1.53	2.04	4.62	9.45	-7.34	17.04	7.80	0.11	3.775	3.883	5.732	7.931	8.037	9.220	1,1
B102	20.77	12.81	22.84	35.72	-6.31	22.41	9.53	0.037	4.345	4.714	5.761	10.123	9.458	10.539	34,2
B103	3.36	4.75	11.07	23.25	-4.86	21.31	9.00	0.02	3.388	3.737	5.465	8.282	8.443	9.816	1,1
B104	8.86	10.24	21.83	41.97	-6.99	20.99	9.82	0.03	4.770	5.144	5.420	9.511	9.483	10.668	28,5
B105	0.61	1.37	4.12	10.73	-2.55	20.49	8.80	0.08	2.277	2.748	5.733	6.679	7.255	8.648	1,1
B106	2.44	2.29	4.52	8.00	-2.27	22.56	8.90	0.12	2.163	2.747	5.568	7.792	7.557	9.048	1,1
B107	6.41	2.65	4.48	6.54	-2.31	23.06	8.79	0.037	2.159	2.839	5.341	8.760	7.652	9.256	34,2
B108	3.05	1.29	2.18	3.19	-3.21	20.59	8.50	0.037	2.378	2.732	5.635	8.332	7.246	8.676	34,2
B109	1.22	1.51	3.32	6.58	-2.51	21.27	8.79	0.037	2.255	2.770	5.591	7.277	7.315	8.782	34,2
B110	4.89	3.69	6.87	11.33	-5.41	20.55	9.63	0.037	3.973	4.488	5.713	8.954	8.501	9.663	29,2
B111	2.44	3.92	9.73	21.67	-5.20	20.45	8.05	0.13	3.039	3.186	5.589	7.913	8.192	9.553	1,1
B112	8.25	3.49	5.91	8.65	-5.27	20.70	8.30	0.12	3.193	3.370	5.771	9.253	8.171	9.419	1,1
B113	8.55	3.44	5.80	8.44	-3.42	22.52	8.80	0.07	2.673	3.055	5.596	9.122	7.982	9.391	1,1
B114	9.47	4.00	6.78	9.93	-2.71	23.56	8.50	0.037	2.203	2.551	5.576	9.015	7.933	9.414	34,2
B115	2.14	5.23	16.67	45.21	-7.25	18.61	8.20	0.05	3.933	4.078	5.738	8.060	8.712	9.867	1,1
B116	6.72	6.06	11.84	20.68	-6.60	20.37	8.00	0.13	3.577	3.707	5.741	8.945	8.673	9.880	1,1
B117	0.61	2.12	8.59	27.25	-2.71	20.75	8.43	0.037	2.197	2.496	5.634	6.571	7.518	8.971	34,2
B118	5.19	6.71	15.01	30.29	-4.46	22.52	7.90	0.05	2.673	2.809	5.749	8.341	8.417	9.750	20,20
B119	3.97	2.98	5.54	9.12	-4.16	21.34	9.00	0.05	3.030	3.483	5.308	8.469	8.011	9.514	1,1
B120	3.36	5.23	12.78	28.05	-2.51	23.79	8.79	0.037	2.255	2.770	5.549	7.873	8.122	9.611	34,2
B121	1.22	3.72	13.73	41.13	-4.86	19.99	8.30	0.05	3.024	3.213	5.787	7.315	8.153	9.417	20,20
B122	5.80	2.41	4.08	5.96	-3.63	21.54	7.30	0.01	2.020	2.100	5.723	8.652	7.551	8.982	20,1
B123	1.83	2.57	5.98	12.53	-6.46	18.38	7.80	0.15	3.423	3.533	5.737	7.901	8.057	9.289	1,1
B124	2.44	1.23	2.12	3.18	-3.72	19.95	8.80	0.07	2.775	3.165	5.720	8.232	7.345	8.678	20,9
B125	9.47	8.83	17.42	30.78	-4.61	23.16	9.00	0.10	3.295	3.646	5.410	9.053	8.813	10.228	1,1
B126	1.83	4.81	16.10	45.16	-5.06	20.53	8.20	0.05	3.051	3.220	5.744	7.616	8.331	9.613	1,1
B127	0.92	2.29	7.38	20.18	-4.05	19.99	8.45	0.08	2.781	3.013	5.774	7.086	7.753	9.058	1,1
B128	9.77	4.00	6.77	9.87	-4.46	21.81	8.20	0.02	2.805	2.989	5.772	9.243	8.125	9.428	1,1
B129	1.83	4.05	12.12	31.39	-4.41	21.00	8.20	0.10	2.785	2.970	5.579	7.561	8.126	9.528	1,1
B130	0.92	3.00	11.58	35.71	-3.55	20.74	8.40	0.08	2.553	2.801	5.705	6.961	7.852	9.223	1,1
B131	2.44	2.59	5.35	9.94	-4.82	20.22	7.30	0.07	2.496	2.569	5.733	7.852	7.740	9.105	20,1
B132	1.53	2.76	7.32	17.23	-7.06	17.72	7.40	0.05	3.432	3.507	5.746	7.722	8.106	9.332	1,1
B133	1.83	1.91	3.92	7.23	-2.79	21.60	8.70	0.03	2.229	2.747	5.698	7.587	7.459	8.877	1,1
B134	5.19	3.22	5.75	9.01	-3.81	21.92	8.94	0.037	2.916	3.307	5.103	8.679	8.022	9.644	34,2
B135	25.96	11.56	19.70	29.05	-6.16	22.40	9.49	0.05	4.271	4.629	5.494	10.385	9.361	10.587	24,11
B136	8.86	8.78	17.68	31.96	-7.42	20.31	9.75	0.07	4.959	5.280	5.500	9.639	9.460	10.576	28,5



Table 3. continued

Name	$r_c$	$r_h$	$r_{90}$	$r_t$	$M_v$	$\mu_v$	Age	E(B-V)	M	Mi	den	$T_c$	$T_h$	$T_{dis}$	ref
B137	2.75	5.21	14.22	34.25	-4.51	21.61	8.70	0.10	3.106	3.378	5.775	7.972	8.402	9.661	1,1
B138	3.97	3.34	6.39	10.90	-4.45	21.25	8.80	0.08	3.122	3.434	5.712	8.461	8.118	9.406	1,1
B139	0.92	1.09	2.35	4.57	-3.11	19.99	8.43	0.037	2.339	2.652	5.708	7.132	7.127	8.525	34,2
B140	0.92	2.90	10.96	33.32	-2.41	21.86	7.99	0.037	1.877	2.420	5.426	6.767	7.633	9.230	34,2
B141	1.22	1.71	3.96	8.28	-4.26	19.69	8.40	0.02	2.851	3.068	5.559	7.435	7.585	8.988	1,1
B142	1.53	4.64	17.10	51.13	-3.76	21.58	8.75	0.02	2.784	3.140	5.715	7.380	8.214	9.549	1,1
B143	2.14	2.30	4.77	8.90	-5.75	19.03	7.60	0.08	3.018	3.114	5.698	7.937	7.838	9.148	1,1
B144	2.14	3.94	10.54	25.02	-5.21	20.33	7.60	0.10	2.802	2.901	5.737	7.710	8.113	9.434	1,1
B145	2.14	3.22	7.75	16.76	-7.65	17.63	7.50	0.08	3.715	3.798	5.748	8.092	8.313	9.496	1,1
B146	1.53	3.63	11.35	30.36	-3.16	21.94	9.45	0.05	2.687	3.572	5.237	7.395	8.021	9.608	24,18
B147	0.92	1.82	5.11	12.57	-4.75	19.04	8.30	0.08	2.981	3.171	5.711	7.205	7.674	8.982	1,1
B148	8.25	3.35	5.65	8.23	-2.55	23.33	8.40	0.05	2.119	2.201	5.542	8.922	7.792	9.302	1,1
B149	4.89	1.98	3.35	4.88	-4.52	20.23	8.00	0.04	2.743	2.893	5.718	8.776	7.647	8.985	1,1
B150	1.53	4.64	17.10	51.13	-6.45	18.89	7.00	0.08	2.835	2.878	5.661	7.397	8.232	9.586	1,1
B151	0.61	1.95	7.46	22.84	-3.96	19.43	8.40	0.02	2.709	2.955	5.557	6.746	7.625	9.049	1,1
B152	2.14	1.98	3.89	6.85	-3.65	20.87	8.10	0.08	2.430	2.618	5.731	7.793	7.543	8.918	1,1
B153	3.36	4.95	11.77	25.19	-7.02	19.21	8.35	0.04	3.927	4.088	5.628	8.473	8.674	9.885	1,1
B154	1.53	4.62	16.93	50.49	-4.06	21.27	8.50	0.02	2.805	3.050	5.599	7.389	8.218	9.607	1,1
B155	2.75	2.38	4.59	7.90	-4.96	20.00	8.10	0.05	2.964	3.120	5.661	8.155	7.841	9.178	20,20
B156	9.77	3.91	6.59	9.58	-5.25	20.97	8.35	0.05	3.214	3.399	5.660	9.399	8.252	9.554	1,1
B157	1.53	3.30	9.71	24.84	-6.19	18.80	7.54	0.03	3.168	3.256	5.638	7.584	8.125	9.444	1,1
B158	4.58	7.35	18.25	40.63	-2.96	24.05	8.80	0.05	2.407	2.893	5.012	8.113	8.391	10.128	20,20
B159	7.33	6.39	12.34	21.29	-4.75	22.35	8.20	0.08	2.928	3.101	5.497	8.778	8.472	9.895	1,1
B160	1.83	3.78	10.83	27.15	-5.16	20.17	8.20	0.02	3.094	3.258	5.658	7.684	8.188	9.507	1,1
B161	1.53	2.86	7.75	18.55	-3.51	21.32	8.57	0.037	2.578	2.903	5.540	7.413	7.831	9.281	34,2
B162	1.83	1.84	3.72	6.76	-2.26	22.07	8.85	0.02	2.148	2.800	5.536	7.575	7.410	8.919	1,1
B163	1.53	4.43	15.84	46.42	-4.88	20.41	8.20	0.09	2.980	3.151	5.671	7.457	8.252	9.581	20,20
B165	3.97	4.93	10.84	21.49	-4.15	22.19	9.00	0.08	3.026	3.480	5.606	8.299	8.338	9.693	1,1
B166	4.28	3.54	6.74	11.43	-4.96	20.88	8.00	0.05	2.921	3.063	5.650	8.444	8.085	9.432	1,1
B167	7.02	5.65	10.67	17.93	-6.21	20.65	8.10	0.10	3.466	3.608	5.676	8.974	8.585	9.841	1,1
B168	3.36	6.33	17.19	41.28	-5.46	21.08	8.40	0.15	3.339	3.524	5.666	8.190	8.612	9.892	1,1
B169	3.05	3.00	6.02	10.85	-3.01	22.39	7.40	0.037	1.811	2.091	5.040	7.826	7.639	9.436	34,2
B170	16.80	8.44	14.58	21.90	-5.26	22.60	8.85	0.15	3.511	3.771	5.543	9.752	8.863	10.179	1,1
B171	3.67	4.25	9.08	17.48	-7.20	18.87	9.60	0.00	4.786	5.098	5.621	8.943	8.917	10.000	28,12
B172	3.97	5.89	14.07	30.22	-6.89	19.71	9.18	0.03	4.264	4.530	5.508	8.712	8.919	10.140	24,17
B173	2.14	4.40	12.59	31.51	-4.16	21.51	8.65	0.02	2.905	3.207	5.617	7.719	8.221	9.588	1,1
B174	4.28	6.63	16.19	35.47	-8.59	18.23	9.00	0.03	4.952	5.157	5.663	9.028	9.274	10.310	28,24
B175	2.75	1.60	2.82	4.35	-3.86	20.36	8.70	0.02	2.809	3.137	5.490	8.257	7.528	8.972	1,1
B176	6.41	3.94	7.02	10.97	-4.96	21.20	8.10	0.05	2.964	3.120	5.630	8.839	8.170	9.521	1,1
B177	2.75	3.17	6.76	12.99	-4.61	20.82	7.47	0.037	2.478	2.568	5.604	7.898	7.866	9.298	34,2
B178	1.53	4.64	17.10	51.13	-5.51	19.83	8.15	0.10	3.212	3.366	5.474	7.529	8.364	9.758	1,1
B179	7.94	3.31	5.61	8.20	-4.57	21.29	8.30	0.12	2.910	3.102	5.468	9.134	8.038	9.478	1,1
B180	1.83	3.79	10.88	27.31	-4.19	21.15	8.30	0.06	2.746	2.958	5.564	7.561	8.069	9.484	1,1
B181	0.61	1.19	3.28	7.99	-4.49	18.39	8.25	0.06	2.851	3.036	5.607	6.896	7.348	8.727	1,1
B182	5.80	2.46	4.18	6.12	-1.91	23.31	8.65	0.10	1.911	2.593	5.570	8.611	7.536	9.057	1,1
B183	5.19	4.25	8.06	13.62	-4.27	21.97	8.30	0.12	2.777	2.988	5.369	8.524	8.154	9.662	1,1
B184	0.61	2.17	8.96	28.73	-4.61	18.87	8.25	0.10	2.898	3.081	5.249	6.792	7.760	9.311	1,1
B185	2.14	3.56	9.03	20.46	-5.06	20.35	8.30	0.05	3.109	3.289	5.589	7.843	8.155	9.507	1,1
B186	6.41	4.95	9.26	15.37	-5.18	21.41	8.30	0.09	3.157	3.336	5.203	8.816	8.386	9.924	1,1
B188	2.44	5.68	17.56	46.57	-3.11	22.98	7.84	0.037	2.096	2.250	5.497	7.521	8.130	9.665	34,2
B189	2.75	4.63	11.81	26.90	-5.25	20.72	8.10	0.08	3.080	3.233	5.409	7.993	8.316	9.761	1,1
B190	3.67	4.05	8.49	16.02	-5.49	20.50	8.20	0.06	3.226	3.387	5.356	8.354	8.281	9.732	1,1
B192	1.53	3.24	9.44	23.95	-3.96	21.01	8.25	0.05	2.632	2.835	5.512	7.403	7.930	9.386	1,1
B193	9.47	3.81	6.43	9.36	-4.05	22.12	9.00	0.05	2.994	3.443	5.391	9.296	8.158	9.625	1,1
B194	2.75	5.49	15.44	38.11	-4.88	21.30	8.90	0.09	3.365	3.668	5.496	8.054	8.530	9.890	1,1
B195	1.22	2.31	6.31	15.20	-3.51	20.84	8.79	0.037	2.703	3.080	4.876	7.305	7.734	9.498	34,2
B196	2.75	6.22	18.86	49.34	-3.39	22.93	9.00	0.03	2.632	3.205	5.284	7.770	8.354	9.925	1,1
B197	3.67	5.52	13.26	28.65	-7.46	18.99	8.11	0.02	3.975	4.111	5.144	8.544	8.763	10.210	29,17
B198	5.80	2.91	5.02	7.54	-3.86	21.69	8.40	0.05	2.671	2.917	5.296	8.762	7.872	9.431	1,1
B199	2.14	4.08	11.18	27.01	-5.81	19.77	8.00	0.10	3.261	3.396	5.292	7.864	8.299	9.777	1,1
B200	2.14	3.95	10.62	25.27	-4.62	20.92	8.20	0.07	2.876	3.051	5.338	7.735	8.141	9.651	1,1
B201	1.22	1.60	3.61	7.34	-6.21	17.65	7.40	0.037	3.093	3.169	5.271	7.537	7.629	9.141	34,2
B202	0.61	2.02	7.90	24.54	-6.17	17.25	8.15	0.15	3.477	3.624	4.921	7.012	7.919	9.551	1,1
B203	2.14	5.41	17.61	48.49	-2.09	23.80	8.20	0.03	1.816	2.404	5.087	7.344	8.023	9.797	1,1
B204	0.92	3.03	11.79	36.52	-3.81	20.49	7.99	0.037	2.450	2.614	4.772	6.926	7.827	9.678	34,2