STRUCTURE PARAMETERS OF GALACTIC GLOBULAR CLUSTERS

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ABSTRACT. Observed and derived structure parameters are tabulated for 154 galactic globular clusters, 7 dwarf spheroidal satellites of the Galaxy, and 6 globular clusters in the Fornax dwarf spheroidal. Observational parameters listed include equatorial coordinates, apparent level of the horizontal branch, reddening, subgiant branch color at the horizontal branch level, limiting and core angular radii, integrated magnitudes, and central surface brightnesses. Derived parameters include galactic coordinates, heliocentric and galactocentric distance, metallicity, limiting and core radii, central relaxation time scale, central mass density, central velocity dispersion, and central escape velocity.

1. INTRODUCTION

Nearly a decade has passed since the first comprehensive application of King's (1966) dynamical models of star clusters to the system of galactic globular clusters (Peterson and King 1975; Peterson 1976). The interim has seen a tremendous growth in the body of observational material available, particularly in integrated and surface photometry of individual clusters, and also in detailed color-magnitude studies of the more difficult clusters. At the same time, despite growing recognition of their shortcomings, the King models retain much of their attractiveness as tools in probing the dynamical structure of individual clusters by virtue of their great simplicity and ease of application. This paper incorporates this greatly increased body of observational data in a reanalysis of the galactic globular cluster system in terms of those models.

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*1984-85 JILA Visiting Fellow.

J. Goodman and P. Hut (eds.), Dynamics of Star Clusters, 541–577.

https://doi.org/10.1017/S0074180900147771 Published online by Cambridge University Press

For the sake of completeness, a number of recently-discovered objects are included here as possible to certain globular clusters. These include: AM 1 = E 1 = ESO 201-SC 10 (Holmberg *et al.* 1975; Lauberts 1976; Cannon, Hawarden, and Tritton 1978; Madore and Arp 1979), Eridanus = ESO 551-SC 01 (Cesarsky *et al.* 1977; Lauberts *et al.* 1981b), Reticulum = Sé 40/3 = ESO 118-G 31 (Sérsic 1974; Holmberg *et al.* 1975), AM 2 = ESO 368-SC 07 (Holmberg *et al.* 1978b; Madore and Arp 1979), E 3 = ESO 037-SC 01 (Lauberts 1976; Holmberg *et al.* 1978a; Cannon, Hawarden and Tritton 1978), ESO 093-SC?08 (Holmberg *et al.* 1977), AM 4 (Madore and Arp 1982), BH 176 = ESO 224-SC 08 (van den Bergh and Hagen 1975; Holmberg *et al.* 1977; Cannon, Hawarden and Tritton 1978), ESO 452-SC 11 (Lauberts *et al.* 1981a), TJ 5 (Terzan and Ju 1980), TJ 16 (Terzan, Bernard, and Ju 1978b; Terzan and Bernard 1978; Terzan and Ju 1980), TJ 15 (Terzan and Ju 1980), TJ 17 (Terzan, Bernard, and Ju 1978a; Terzan and Bernard 1978; Terzan and Ju 1980), Grindlay 1 (Grindlay and Hertz 1981), Liller 1 (Liller 1976a,b), TJ 23 (Terzan and Ju 1980), UKS 1 (Malkan, Kleinmann and Apt 1980), and Kodaira 1 (Kodaira 1983). UKS 2 = ESO 166-SC 12 = BH 66? (van den Bergh and Hagen 1975; Holmberg *et al.* 1977; Malkan 1981) was discussed by Malkan (1981) as a globular cluster, and is included here, although in the opinion of Holmberg *et al.* (1977) and this author, it appears to be an open cluster. In addition to these objects, several previously known objects have been added to the list: Ruprecht 106 = ESO 218-SC 10 (Ruprecht 1959; Holmberg *et al.* 1977), Terzan 3 = ESO 390-SC 06 (Terzan 1968; Holmberg *et al.* 1978b; Cannon, Hawarden, and Tritton 1978), Terzan 8 = ESO 398-SC 21 (Terzan 1968; Cannon, Hawarden, and Tritton 1978; Lauberts *et al.* 1981a), and Terzan 10 = ESO 521-SC 16 (Terzan 1968; Lauberts *et al.* 1981a). In this author's opinion, only the last of these four objects remains in doubt as a true globular cluster.

The Reticulum cluster noted above, NGC 1466, and NGC 1841 are sometimes discussed as members of the Large Magellanic Cloud (LMC) complex. Although they share a very similar apparent distance modulus with the LMC, they have been included here among the galactic globular clusters, NGC 1466 because of the large velocity difference from the LMC found by Cowley and Hartwick (1981) (although Freeman, Illingworth and Oemler [1983] find a much smaller difference), and Reticulum and NGC 1841 because, at angular distances of more than 10° from the center of the LMC, they can scarcely now be bound to the LMC, even though they may well share a common origin with it.

In the following section, the methods are discussed by which the observational data were obtained which form the basis of this study. These data are catalogued in Table I. The basic assumptions employed in deriving the individual cluster structure parameters are discussed in the subsequent section, and these parameters are listed in Table II.

2. OBSERVATIONAL DATA

Table I is organized in three parts: Ia, the galactic globular clusters, Ib the dwarf spheroidal satellites of the Galaxy, and Ic the globular clusters in the Fornax dwarf spheroidal. The observational methods employed are explained below in the context of the galactic globular clusters, but the other two parts of this table differ only slightly, if at all, and those differences will be noted at the end of this section.

The following discussion includes as well some estimates of the typical errors in each of the measured quantities. Where a numerical value is quoted for this error or uncertainty, it is meant to indicate the standard deviation of results obtained by that technique, but only when the source material is of good quality. A colon (:) or double colon (::) indicates source material of poor or very poor quality, or poor or very poor suitability for the technique employed, and the corresponding uncertainties in the quoted results are likely to be substantially worse. It must be emphasized, however, that this notation has been used here in a relative fashion, within the context of the technique involved. Poor results obtained by a reliable method may still be better than good results obtained with a poor one.

References in the table refer to the numbered bibliography immediately following it. Where more than one method, or more than one reference, have been employed, these are enumerated in the notes to each part of the table. These notes are identified by cluster designation (from column 1), with the relevant column numbers indicated in boldface type. Where multiple methods are used, the sets of reference numbers corresponding to different methods are set off by semicolons.

Table Ia is arranged as follows:

Cluster Designation. The observed structure parameters of the galactic globular clusters are listed in order of right ascension. Each cluster is identified in column (1) by its designation in IAU coordinate format. Where an object has not yet received an official designation, one has been assigned here using the same convention. The common name or names in contemporaneous use for each cluster are listed in columns (2) and (3).

Coordinates. The right ascension and declination for equinox 1950, rounded off to the nearest 1^s or $0\overset{\circ}{.}1$, are listed in columns (4) and (5), respectively. These have been compiled from numerous sources, dating from 1850 up through the recent measurements by Shawl and White (1984), and carry a median net uncertainty of $2\overset{''}{.}45$ in the positions of the cluster centers. Individual uncertainties are in general closely comparable to ε_v, the expected root-mean-square difference in position between the cluster visual photocenter and its dynamical center. This difference is given by the expression

$$\varepsilon^2 = \frac{\langle b^2\rangle}{\langle b\rangle} \frac{\int r^3\ \sigma(r)dr}{\left[\int r\ \sigma(r)dr\right]^2} \quad , \qquad (1)$$

https://doi.org/10.1017/S0074180900147771 Published online by Cambridge University Press

where b is the apparent brightness of an individual star, r the angular distance from dynamical cluster center, and σ(r) the surface brightness. For V-band observations, a good approximation is

$$\varepsilon_V = 24''\!.2 \; c^{-1.43} \; 10^{0.5\,c \,+\, 0.2(\sigma_c - V_{HB})} \quad , \tag{2}$$

where

$$c \equiv \log(\theta_t/\theta_c) \quad , \tag{3}$$

(see columns 15 and 18), σ_c is the central surface brightness (V magnitudes per square arcminute: see column 22), and V_{HB} the apparent level of the horizontal branch (column 6).

Attention should be called to significant discrepancies, exceeding 0°1, discovered in published positions of several objects: NGC 1841, AM 4, Ton 2, Ter 10, and NGC 6749. These have been resolved here, and the standard errors in the positions of these clusters listed in Table I are 16" or smaller.

Horizontal Branch. Columns (6), (7), and (8) contain the apparent level of the cluster horizontal branch, the method of its determination, and the reference from which this determination was drawn, respectively. The horizontal branch is commonly used as the standard candle in establishing the globular cluster distance scale, and this convention is followed here. Its level is fixed at the blue edge of the RR Lyrae gap wherever possible, as in the earlier compilations by Harris (1976, 1980).
The methods listed in column (6) identify the observational feature from which this estimate derives. These are, in order of preference (together with their estimated errors for first-rank data):

- CM - color-magnitude diagram ($\pm 0^m\!.05$)
- RR - mean magnitudes of RR Lyrae variable ($\pm 0^m\!.1$)
- BG - magnitudes of the brightest giants ($\pm 0^m\!.3$)
- IR - combination of the index of richness (Kukarkin 1974), integrated apparent magnitude of the cluster, and estimated foreground reddening ($\pm 0^m\!.6$)
- A - measured foreground reddening plus assumed reddening law ($\pm 1^m\!.4$).

The quantitative calibrations of the first four of these methods are described in detail by Harris (1976, 1980). The fifth assumes the modified cosecant law specified below to infer the cluster distance modulus, and is useful only for very highly reddened clusters at extremely low galactic latitude.

Reddening. Color excesses, methods for their determination, and corresponding references may be found in columns (9), (10), and (11), respectively. A wide variety of methods have been employed, here, and considerable judgment was exercised in preferring the results of some methods over others. The first-echelon measures rely on the facts that the intrinsic colors of blue horizontal branch stars are nearly independent of metallicity, and that their downward tail in the color-magnitude diagram is essentially a bolometric effect. These measures are:

HB - two-color diagram of blue horizontal branch stars
NB - narrow-band photometry and spectroscopy of horizontal branch stars fit to model atmospheres
B - color-magnitude diagram of blue horizontal branch stars fit to a fiducial curve.

With accurate photometry, the resulting estimates of E(B-V) are probably accurate to $\pm 0\overset{m}{.}02$ or better.

The second-echelon measures rely on intrinsic colors of RR Lyrae stars. These are:

rr - Sturch's method, using RR Lyrae colors at minimum
RR - mean RR Lyrae colors

Third-echelon measures employ comparisons with intrinsic flux distributions of individual red giant stars:

Ψ - slope of the red continuum of individual giants
ΔU - correlation of ultraviolet excesses of giant stars with the color of the subgiant sequence at the level of the horizontal branch.

These and the second-echelon measures are probably not greatly inferior to the first-echelon measures.

Fourth-echelon measures consist of asymptotic reddenings of foreground field stars:

UB - Johnson UBV photometry of field stars
uy - Strömgren uvby photometry of field stars
XY - Vilnius UPXYZVS photometry of field stars.

Because these estimates are essentially statistical in nature, they are normally significantly more uncertain than higher-echelon measures. If the field encompassed in the study is sufficiently small, however, an accuracy of $\pm 0.15\ E_{B-V}$ can be achieved in most cases, giving quite satisfactory results for high-latitude clusters.

Fifth-echelon measures employ the blue and red edges of the RR Lyrae instability strip:

GB - blue edge of the RR Lyrae gap
GR - red edge of the RR Lyrae gap.

These are also statistical in nature, depending heavily on having a dense distribution of stars in this part of the Hertzsprung-Russell diagram. Superior methods of estimating reddenings are available for the majority of clusters to which this method is most suited; among the clusters for which it is used here, an accuracy of $\pm 0\overset{m}{.}04$ is probably the best that can be expected. It should be noted that there is increasing empirical evidence (see, for example, Sandage, Katem, and Sandage 1981; Sandage 1981; Bingham et al. 1984) that the edges of the instability strip are not constant in color, as this method assumes.

The sixth-echelon measures are those which depend on comparisons of integrated photometry of the cluster in question with the intrinsic colors of clusters of similar spectral type and known reddening. They are:

CS - integrated optical or near-ultraviolet colors
IR - integrated infrared colors.
MI - correlation of metallicity index (Cowley, Hartwick, and Sargent 1978) with integrated color.

Because the calibration of these methods depends upon cluster reddenings derived by the above methods, they have been adopted only in the absence of a determination by one of the above methods. Nevertheless, at their best, the reddening estimates obtain from integrated color-spectral type relations appear comparable in accuracy with the second- and third-echelon measures discussed above.

Calibrations of integrated colors exist in a number of different photometric systems; it is the weighted mean of these independent determinations which is quoted in Table I. For the sake of consistency, a single calibration has been used for each photometric system. These are listed below, in decreasing order of accuracy, as determined by comparison with clusters whose reddenings were derived by one of the above methods:

ANS (λλ 1550,1800,2200,2500,3300): van Albada, de Boer, and Dickens (1981) ($\pm0^{m}.030$, n = 17)
Strömgren-Crawford (uvbyβ): Johnson and McNamara (1969) ($\pm0^{m}.036$, n = 12)
Zinn-Gunn (uvgr,39B,39N): Zinn (1980); Zinn and West (1984) ($\pm0^{m}.039$, n = 44)
Washington (CMT_1T_2): Harris and Canterna (1978) ($\pm0^{m}.040$, n = 34)
Johnson (UBV): Racine (1973); Harris (1976); Harris and Racine (1979) ($\pm0^{m}.046$, n = 48)
Kron-Mayall (PVI): Lohmann (1963) ($\pm0^{m}.048$, n = 31)
Stebbins-Whitford (UVBGRI): Kron and Guetter (1976) ($\pm0^{m}.052$, n = 39)
Vilnius (UPXYZVS): Zdanavičius (1983) ($\pm0^{m}.055$, n = 24)
DDO (35,38,41,42,45,48): Bica and Pastoriza (1983) ($\pm0^{m}.065$, n = 46).

Infrared photometric values are of rather lower precision ($\pm0^{m}.11$; Malkan 1981).

The third method of this group (MI) was calibrated using nine clusters with well-determined colors among those listed by Cowley, Hartwick and Sargent (1978). They give

$$(B-V)_0 = 0.479 + 0.0933 \cdot MI \ (\pm0^{m}.072) \quad . \qquad (4)$$

There are a number of clusters for which individual reddening studies are still lacking. For those lying at galactic latitude, $|b| \geq 10°$, use was made of the high-latitude extinction map of Burstein and Heiles (1982):

HI - neutral hydrogen column density plus galaxy counts.

Comparison with 43 clusters of known reddening indicates that these values are reasonably good ($\pm 0\overset{m}{.}060$). For clusters of lower galactic latitude, it was necessary to resort to a cosecant-like law:

CX - modified cosecant law.

The assumed form of this extinction law is intended to reflect the apparent absence of reddening at the galactic poles, and the finite scale height (assumed to be 150 pc) of obscuring matter in the galactic plane:

$$E_{B-V} = \frac{0.06}{\sin|b|}\left[1 - \exp(-R_o \sin|b|/0.15)\right] - 0.06 \qquad (5)$$

where R_o is the distance to the cluster in kpc. Where the exponential term in this expression is non-negligible, it is necessary to solve self-consistently for both reddening and distance. The accuracy of these estimates is only ± 0.4 E(B-V).

It should be noted here that the values of reddening listed in Table I portray individual clusters as suffering uniform extinction. However, an examination of most of the clusters included in this table on deep-sky survey plates reveals that many clusters with E(B-V) $\gtrsim$ 0.2 show evidence of nonuniform extinction, and this is almost invariably the case among highly reddened (E(B-V) $\gtrsim$ 0.5) clusters. This variable extinction could conceivably introduce systematic errors in the mean reddening estimates of highly obscured clusters as derived from their integrated colors.

Subgiant Branch Color. Columns (12), (13) and (14) of Table I contain, respectively, the observed color of the cluster subgiant branch at its horizontal branch level, the method by which this color was determined, and the reference to the source material for that determination. Whenever possible, the subgiant branch color was estimated directly from the cluster color-magnitude diagram:

CM - color-magnitude diagram.

Comparison of the values measured here with the un-dereddened values of Sandage (1982), for 34 clusters with common color-magnitude diagrams, indicates an internal error of only $\pm 0\overset{m}{.}016$. Uncertainties in the dereddened colors, $(B-V)_{0,g}$, are therefore dominated by uncertainties in the reddening correction and systematic errors in the photometry.

In the absence of a suitable color-magnitude diagram, several indirect methods were employed. These correlate the intrinsic color of the subgiant branch at the horizontal branch level with other properties of the cluster. In order of decreasing accuracy, they are:

ΔP - period difference of RR Lyrae variables at constant amplitude and effective temperature (see Sandage, Katem, and Sandage 1981)

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ΔS - cluster metallicity determined by the difference in spectral types, as derived from metallic lines and from hydrogen lines, observed in individual RR Lyrae stars (see Butler 1975)

UB - integrated UBV colors of the cluster

Q - line-blanketing index derived from integrated narrow-band photometry of the cluster (see Zinn 1980)

BV - integrated BV colors of the cluster

The correlations actually used, and their respective uncertainties, are:

$$(B-V)_{0,g} = 0.839 + 1.81\ (\Delta \log P)_s \qquad (\pm 0\overset{m}{.}041,\ n = 24) \qquad (6)$$

$$(B-V)_{0,g} = 1.038 + 0.172\ [Fe/H]_{\Delta S} \qquad (\pm 0\overset{m}{.}057,\ n = 26) \qquad (7)$$

$$(B-V)_{0,g} = 0.372 + 0.563\ (B-V)_0 + 0.513\ (U-B)_0 \qquad (\pm 0\overset{m}{.}059,\ n = 65) \qquad (8)$$

$$(B-V)_{0,g} = 0.719 + 0.874\ Q_{39} \qquad (\pm 0\overset{m}{.}060,\ n = 55) \qquad (9)$$

$$(B-V)_{0,g} = 0.133 + 0.992\ (B-V)_0 \qquad (\pm 0\overset{m}{.}065,\ n = 67)\ . \qquad (10)$$

To each of these values must be added the cluster reddening, E(B-V). In dereddening the observed integrated UBV colors of a cluster to apply equation (8), the ratio E(U-B)/E(B-V) has been calculated following Racine (1973).

Limiting and Core Radii. Columns (15), (16), and (17) contain the logarithm of the value (in arcminutes), method of its determination, and reference for the limiting radius of each cluster, with columns (18), (19), and (20) containing the corresponding quantities with respect to the core radius. Because the form of the surface brightness profile of the core of a strongly condensed cluster is only very weakly dependent on the degree of central concentration of the cluster, and likewise for the form of the surface brightness profile near its limiting radius, I have regarded these two quantites as independently determinable, and not attempt a reanalysis of all available data. Both determinations share many of the same methods, which are:

SC - star counts

SP - surface photometry

AP - concentric aperture photometry

D - correlation of apparent angular diameter with limiting radius (see, Kukarkin and Kireeva 1979)

e - eye estimate of the core radius.

At low surface densities, the ability to see stars several magnitudes fainter than those which contribute the bulk of the cluster light generally bestows superior statistical properties upon the star count method, in comparison with surface photometry or aperture photometry. It is therefore the method of choice for determining limiting radii. Unfortunately, the derived limiting radii are very sensitive to the adopted background star densities. Even in the best cases, they involve extrapolations of a factor of two or more in radius beyond the last measurable point, and the accuracies of the resulting radii appear to be no better than ±0.10 in log θ_t. In comparison, it is indeed very surprising to find that a crude apparent angular diameter/ limiting radius correlation (method D) gives results which are not terribly inferior (±0.17 in log θ_t, as deduced from the dispersion in cluster mean luminosity densities at fixed galactocentric distance -- see Innanen, Harris and Webbink [1983]).

In the cores of clusters, star counts provide an accurate description of the surface density distribution only in a very few, extremely open clusters. For the remainder, surface photometry is the method of choice, since it both provides more detailed information and is less sensitive to centering errors than either concentric aperture photometry or star counts. Provided that the cluster brightness profile is normal (see the remarks below), core radii derived from surface photometry appear to be accurate to ±0.049 in log θ_c, those from star counts to ±0.12 in log θ_c, and those from aperture photometry to ±0.14 in log θ_c. Peterson and King (1975) determine an uncertainty of ±0.16 for eye estimates of log θ_c, but this method requires photographic images of the cluster cores which are unsaturated.

It should be noted that the surface brightness distributions in the cores of some clusters are poorly represented by King models. Of particular interest are those which show central brightness excesses, the most famous of which is NGC 7078 (Newell and O'Neill 1978; Aurière and Cordoni 1981). Recent surface photometry studies by Djorgovski and King (1984), Kron, Hewitt, and Wasserman (1984), and Djorgovski and Penner (1985) have identified a number of other examples of this phenomenon, including NGC 4147, 6266, 6293, 6342, 6624, 6642, 6681, and 7099. The values of log θ_c (and of σ_c) listed in Table I for these clusters are, in effect, best fit values, but the deficiencies of the cluster model should be recognized here.

Integrated Magnitude and Central Surface Brightness. Columns (21), (22), (23), and (24) of Table I contain, respectively, the integrated V magnitude of the cluster, its central surface brightness (in V magnitudes per square arcminute), the method of their determination, and the source of the data or estimate for these values. The methods employed were:

- AP - concentric aperture photometry
- Σ - summation over the cluster color-magnitude diagram with corrections for faint stars and for stars lying outside the region studied
- R - fit of the upper end of the cluster luminosity function to a fiducial luminosity function
- IR - index of richness (see Kukarkin 1971, 1974).

Where the central surface brightness is enclosed in parentheses, it has been calculated from the integrated magnitude, using the King model appropriate to that cluster.

All available concentric aperture photometry of each cluster was collected and fit to a King model with core and limiting radii given by the values in columns (18) and (15), respectively. A complex weighting scheme was used which, in effect, weights most heavily those observations of greatest precision which involve the smallest extrapolation to find the integrated magnitude or central surface brightness, as the case may be. The median uncertainty in the derived integrated magnitude is $\pm0^{m}.024$, and that in the central surface brightness is $\pm0^{m}.035$, but these nominal errors do not include uncertainties in the limiting and core radii themselves.

For a number of highly obscured clusters, only infrared photometry is available. In these cases, the V magnitudes have been calculated by correcting the observed K magnitudes for the intrinsic $(V-K)_0$ color of the cluster (following Aaronson et al. 1978) appropriate to its deduced metallicity, and for reddening, with $E(V-R) \approx 2.82 \cdot E(B-V)$. The deduced integrated magnitudes in these cases are naturally of much lower precision than for other clusters with direct observations in the V band.

The remaining methods for estimating integrated magnitudes are of relatively low accuracy. Summation over color-magnitude diagrams gives values uncertain by an estimated $\pm0^{m}.6$. Fitting of the luminosity function of bright stars is of similar accuracy. This procedure, as applied here, amounted merely to estimating the number of cluster stars within two magnitudes of the brightest member (where possible), and scaling the integrated intrinsic luminosity of the comparison cluster accordingly. For this purpose, the fiducial luminosity function adopted here is that of M3, as compiled by Sandage (1954, 1957), corrected for the value of apparent distance modulus listed in Table Ia. Lastly, the calibration of Kukarkin's index of richness (IR) employed here is that due to Harris (1980). Among the highly obscured clusters for which this estimate has been adopted, the uncertainty in integrated magnitude is of order $\pm0^{m}.8$.

Cluster designations from column (1) are repeated in column (25) as a reference aid.

Table Ib differs slightly in format from Table Ia. Ellipticities of the dwarf spheroidals have been included in column (17). Because of their very low degree of central concentration, these objects are not amenable to independent determinations of core and limiting radii [columns (16) and (15), respectively], so a single method (column 18) and source (column 19) have been used for both of these quantities, as well as for their ellipticities. At the same time, they are poor subjects for concentric aperture photometry because of their very low surface brightnesses, and, not surprisingly, very little data of this sort exists. Surface photometry (SP) and other methods have therefore been widely used to measure integrated magnitudes (column 20) and central surface brightnesses (column 23), for which separate methods and references are given here (columns 21 and 24, and 22 and 25, respectively).

Table Ic parallels Table Ia exactly, and requires no further explanation.

3. DERIVED PARAMETERS

Table II is arranged in three parts, paralleling Table I, and contains positional and structural data derived from the observational data of Table I.

There now exists compelling evidence (Sandage 1982; Frenk and White 1982) that the horizontal branch level, V_{HB}, is not constant from cluster to cluster, but depends upon cluster metallicity. This phenomenon was anticipated from the early theoretical pulsation studies of Christy (1966), but the magnitude of the effect is not yet well established empirically, nor are its theoretical ramifications concerning differences in cluster ages and/or helium abundances well understood. Therefore, in fixing the cluster distance scale, a very conservative approach has been taken here, setting $M_V(HB) = +0.6$ (Harris 1976; Stothers 1983) without regard to metallicity, and adopting a ratio of total to selective absorption $R = A_V/E(B-V) = 3.2$. The distance from the Sun to the galactic center is assumed to be 8.8 kpc (Harris 1976).

The basis for calculating the internal structure parameters of individual globular clusters is the single-parameter family of King (1966) models. A mean mass-luminosity ratio $M/L_V = 1.6\ M_\odot/L_V(\odot)$ (Illingworth 1976) has been adopted throughout. It should be noted that a χ^2-test applied to Illingworth's results clearly indicates the presence of significant cluster-to-cluster differences in M/L_V, but they do not appear correlated in any obvious way with differences in cluster metallicity, core concentration, or galactocentric position. For purposes of estimating central relaxation time scales, a mean stellar mass (for those stars dominating the cluster light) of 0.65 $M_\odot$ was assumed. Finally, we note that a King model is completely specified by any three of the four quantities: (i) limiting radius, (ii) core radius, (iii) integrated magnitude, and (iv) central surface brightness. Where all four of these quantities are available independently, the limiting radius has been discarded in favor of the other three parameters, as it appears most susceptible of observational errors.

The columns of Tables IIa and IIb contain the following data:

- (1) - Cluster designation in IAU coordinate format (as in column 1 of Tables Ia and Ib)
- (2)-(3) - Cluster name (as in Tables Ia and Ib)
- (4) - Galactic longitude (in degrees)
- (5) - Galactic latitude (in degrees)
- (6) - Heliocentric distance (in kpc)
- (7)-(9) - Galactocentric coordinates (in kpc). The (X,Y,Z)-axes of this coordinate system are parallel to the directions $(\ell,b) = (0°,0°)$, $(90°,0°)$, and $(0°,90°)$, respectively
- (10) - Galactocentric distance (in kpc)

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(11) - Logarithm of the metallicity, in solar units, derived from $(B-V)_{0,g}$ (see below)
(12) - Integrated absolute magnitude of the cluster
(13) - Core radius (in pc)
(14) - Limiting radius (in pc)
(15) - Core concentration parameter, $c \equiv \log(r_t/r_c)$, as derived implicitly from the apparent core radius, central surface brightness, and integrated magnitude, for those clusters having multiple aperture photometry
(16) - Logarithm of the central relaxation time scale (in yr)
(17) - Logarithm of the central mass density (in $M_\odot$ pc^{-3})
(18) - Central velocity dispersion (in km s^{-1})
(19) - Central escape velocity (in km s^{-1})
(20) - Cluster designation (as in column 1)

With the exception of the metallicities (column 11), formulae and explanations for all of the structural parameters listed here may be found in the papers of King (1966) and Peterson and King (1975). It should be noted that the central velocity dispersion listed in column (18) is the true dispersion, which exceeds the projected dispersion by 4 percent or less for clusters with $c > 1.0$. The central escape velocity in column (19) is that calculated by treating the cluster as an isolated potential. This exceeds the escape velocity from cluster center to the potential corresponding to the cluster limiting radius by 8 percent or less for clusters with $c > 1.0$. The parameters listed in columns (18) and (19) are the same as those tabulated previously by Peterson and King (1975) and Peterson (1976).

The cluster metallicities calculated in column (11) were derived from the following correlation between dereddened subgiant colors and the high-dispersion spectroscopic metallicities on Cohen's scale, as tabulated by Zinn and West (1984):

$$[m/H] = -4.94 + 4.23\,(B-V)_{0,g} \qquad (\pm 0.28,\ n = 16) \quad . \qquad (11)$$

This correlation does not differ significantly from that obtained from a larger, but more heterogeneous, data base by Zinn and West themselves. While clearly present, it is of modest accuracy, and although values derived from this correlation are listed for the dwarf spheroidal satellites of the Galaxy in Table IIb, it is well known (see, for example, Stetson 1980, 1984; Carney 1984) that metallicities derived for these objects from line-blanketing indicators are systematically much lower than those derived here.

Table IIc, referring to the globular clusters in Fornax, differs from Tables IIa and IIb only in that columns (6)-(10) refer to the following positional parameters:

(6) - Angular distance of the cluster from the center of the Fornax dwarf spheroidal (in arcminutes)
(7) - Position angle (eastward from North) of the cluster (in degrees)

(8)-(9) - Cartesian coordinates of the cluster in the plane of the sky (in pc). The +X-axis points eastward along the major axis of Fornax, the +Y-axis northward along its minor axis.

(10) - Projected linear distance (in pc) of the cluster from the center of Fornax.

The position angle of the semi-major axis of Fornax has been taken as $\theta = 49°$ (Hodge and Smith 1974).

Although no formal error estimates have been made here for the derived cluster parameters, they are obviously no better than the data and assumptions upon which they are based. Except for the galactic coordinates (ℓ,b), the values quoted here are unlikely to be accurate to more than two decimal places, even in the very best of cases. The reader should, of course, consult the entries in Table I and their accompanying discussion in judging the reliability of the derived parameters of Table II.

ACKNOWLEDGMENTS

It is a pleasure to acknowledge the many individuals who contributed in some way to this effort. My gratitude goes to the following individuals who provided data prior to publication: M. Aaronson, G. Alcaino, B. J. Anthony-Twarog, R. D. Cannon, B. W. Carney, K. M. Cudworth, G. S. Da Costa, J. C. Forte, R. Gratton, D. A. Hanes, H. C. Harris, W. E. Harris, D. A. Hunter, G. E. Kron, M. H. Liller, M. Mendez, C. J. Peterson, C. A. Pilachowski, A. Sandage, P. Seitzer, S. J. Shawl, H. A. Smith, V. Trimble, R. E. White, and R. Zinn. I am especially indebted to Bill Harris for calling my attention to a number of studies not yet published, and to Gwendy Romey for preparing this camera-ready typescript. This work was supported in part by National Science Foundation grants AST78-12309, AST80-18859, and AST83-17916 to the University of Illinois, and by a Visiting Fellowship from the Joint Institute for Laboratory Astrophysics, University of Colorado and National Bureau of Standards.

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TABLE Ia. OBSERVED PARAMETERS OF GALACTIC GLOBULAR CLUSTERS

Number	Name		α_{1950}	δ_{1950}	V_{HB}			E_{B-V}		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0021-723	NGC 104	47 Tuc	00 21 53	-72 21.5	14.06	CM	136	0.04	UB	136
0050-268	NGC 288		00 50 19	-26 51.0	15.30	CM	160	0.04	HB	33
0100-711	NGC 362		01 01 32	-71 07.1	15.43	CM	91	0.04	UB	91
0310-554	NGC 1261		03 10 53	-55 24.1	16.63	CM	8	0.00	CS	*
0325+794	Pal 1		03 25 59	+79 24.3	16.76	CM	51	0.15	HI	29
0344-718	NGC 1466	SL 1	03 44 49	-71 49.7	18.8	CM	164	0.07	UB	165
0354-498	AM 1	E 1	03 53 35	-49 45.6	20.93	CM	1	0.00	HI	29
0422-213	Eri		04 22 35	-21 18.1	20.24	CM	50	0.00	HI	29
0435-590	Ret	Sé 40/3	04 35 21	-58 57.8	19.17	CM	60	0.018	UB	60
0443+313	Pal 2		04 42 54	+31 17.5	20.9	*	37	1.45:	MI	*
0444-840	NGC 1841		04 52 45	-84 04.8	18.88	RR	123	0.07	UB	165
0512-400	NGC 1851		05 12 28	-40 06.1	16.05	CM	197	0.018	uy	197
0522-245	NGC 1904	M 79	05 22 08	-24 34.2	16.20	CM	198	0.01	GB	198
0647-359	NGC 2298		06 47 13	-35 56.9	16.20	CM	3	0.15	CS	*
0734+390	NGC 2419		07 34 46	+38 59.7	20.50	CM	176	0.03	GB	176
0737-337	AM 2		07 36 53	-33 43.7	21.1:	BG	146	0.53	CX	215
0911-646	NGC 2808		09 11 04	-64 39.4	16.20	CM	88	0.22	UB	88
0921-770	E 3		09 21 31	-77 04.2	16.15:	CM	*	0.30	UB	107
0923-545	UKS 2		09 23 43	-54 30.1	17.75	BG	215	0.74	IR	148
1003+003	Pal 3	Sex C	10 02 58	+00 18.9	20.48	CM	*	0.05	UB	38
1015-461	NGC 3201		10 15 34	-46 09.7	14.75	CM	137	0.21	UB	137
1117-649	ESO 093-SC?08		11 17 34	-64 56.8	22.0::	BG	215	0.79	CX	215
1126+292	Pal 4	UMa	11 26 37	+29 15.3	20.45	CM	28	0.00	HI	29
1207+188	NGC 4147		12 07 33	+18 49.2	16.85	CM	186	0.02	Ψ	190
1223-724	NGC 4372		12 22 51	-72 22.8	15.50	CM	102	0.45	UB	102
1235-509	Rup 106		12 35 53	-50 52.6	18.5	BG	215	0.24	HI	29
1236-264	NGC 4590	M 68	12 36 49	-26 28.2	15.60	CM	85	0.03	GB	85
1256-706	NGC 4833		12 56 12	-70 36.3	15.45	CM	152	0.32	GB	152
1310+184	NGC 5024	M 53	13 10 28	+18 26.0	16.94	CM	48	0.00	Ψ	190
1313+179	NGC 5053		13 13 59	+17 57.7	16.63	CM	184	0.01	*	*
1323-472	NGC 5139	ω Cen	13 23 46	-47 13.0	14.52	CM	35	0.11	*	*
1339+286	NGC 5272	M 3	13 39 53	+28 37.8	15.68	CM	183	0.00	HB	178
1343-511	NGC 5286		13 43 16	-51 07.5	16.20	CM	97	0.21	CS	*
1353-269	AM 4		13 53 31	-26 55.6	18.2:	CM	118	0.06	HI	29
1403+287	NGC 5466		14 03 12	+28 46.1	16.60	CM	26	0.00	Ψ	190
1427-057	NGC 5634		14 26 59	-05 45.3	17.75	CM	174	0.05	CS	*
1436-263	NGC 5694		14 36 42	-26 19.4	18.4:	CM	93	0.10	CS	*
1452-820	IC 4499		14 52 10	-82 00.8	17.65	CM	42	0.24	CS	86
1500-328	NGC 5824		15 00 54	-32 52.4	18.00	CM	85	0.14	CS	*
1513+000	Pal 5	Ser	15 13 32	+00 03.9	17.35	CM	181	0.03	*	*
1514-208	NGC 5897		15 14 32	-20 49.6	16.25	CM	182	0.09	CS	*
1516+022	NGC 5904	M 5	15 16 01	+02 15.8	15.11	CM	17	0.03	rr	151
1524-505	NGC 5927		15 24 24	-50 30.0	16.70	CM	154	0.43	UB	154
1531-504	NGC 5946		15 31 49	-50 29.6	17.2	*	*	0.56	CS	*
1535-499	BH 176		15 35 28	-49 52.9	22.6::	BG	215	0.73	CX	215
1542-376	NGC 5986		15 42 47	-37 37.4	16.50	CM	97	0.25	CS	*
1608+150	Pal 14	AvdB	16 08 47	+15 05.2	20.08	CM	*	0.03	HI	29
1614-228	NGC 6093	M 80	16 14 03	-22 51.2	15.82	CM	95	0.22	uy	45
1620-720	NGC 6101		16 20 10	-72 05.2	16.76	CM	141	0.04	CS	*
1620-264	NGC 6121	M 4	16 20 31	-26 24.4	13.35	CM	135	0.36	*	31
1624-259	NGC 6144		16 24 10	-25 54.7	16.46:	CM	9	0.30	CS	*
1624-387	NGC 6139		16 24 17	-38 44.3	17.5	*	90	0.74	CS	*
1625-352	Ter 3		16 25 24	-35 14.2	18.8	BG	34	0.32	CX	215
1629-129	NGC 6171	M 107	16 29 43	-12 56.7	15.63	CM	64	0.33	rr	151
1636-283	ESO 452-SC 11		16 36 18	-28 18.0	16.66	CM	216	0.31	HI	29

TABLE Ia. OBSERVED PARAMETERS OF GALACTIC GLOBULAR CLUSTERS

$(B-V)_g$			$\log \theta_t$			$\log \theta_c$			V_t	σ_c			Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
1.03	CM	136	1.65	SC	49	-0.41	SP	81	3.83	5.55	AP	*	0021-723
0.88	CM	160	1.19	SC	167	0.22	SP	167	8.11	11.02	AP	*	0050-268
0.88	CM	91	1.01	SC	117	-0.69	*	117	6.46	6.07	AP	*	0100-711
0.89	CM	8	0.90	SC	167	-0.40	AP	167	8.28	8.70	AP	*	0310-554
1.08:	CM	51	0.70:	SC	167	-0.80:	SC	167	13.62	(12.36)	IR	132	0325+794
0.73	CM	164	0.81	D	215	-0.61	e	215	10.66:	10.23	AP	212	0344-718
0.77	CM	1	0.38	SC	161	-0.55	SC	161	15.84	14.97:	AP	1	0354-498
0.88	CM	50	0.54:	SC	217	-0.60	SC	162	14.70:	13.92	AP	217	0422-213
0.71:	CM	60	1.00:	SC	169	0.00	SC	169	12.7	(14.70)	Σ	169	0435-590
2.22	UB	*	0.50	SC	89	-1.10	SC	37	13.04	10.48:	AP	43	0443+313
0.87	BV	*	0.90	SC	123	-0.18	AP	168	10.90:	12.13	AP	*	0444-840
0.89	CM	197	0.91:	SC	117	-1.18	SP	65	7.15	5.23	AP	*	0512-400
0.83	CM	198	1.03	SC	167	-0.76	SP	130	7.81	7.38	AP	*	0522-245
0.83	CM	3	0.90:	*	133	-0.36	AP	167	9.20	9.71	AP	*	0647-359
0.73	CM	176	1.03	SC	167	-0.38	SP	130	10.32	10.99	AP	*	0734+390
			0.77	D	146	0.19	e	215	14.0	(16.03)	R	146	0737-337
1.04	CM	88	1.15	SC	117	-0.60	*	117	6.13	6.28	AP	*	0911-646
1.24:	CM	*	1.02:	SC	211	0.27	SC	211	11.35	(14.21)	R	211	0921-770
1.82:	Q	148	0.55	D	215	-0.11	e	215	13.0	(13.75)	R	215	0923-545
0.82	CM	191	0.63	SC	167	-0.33	SC	78	13.92:	14.20	AP	168	1003+003
1.00	CM	137	1.56	SC	167	0.04	*	167	6.68	9.69	AP	*	1015-461
			0.64::	D	215	-1.21:	e	215	14.5:	(11.75)	R	215	1117-649
0.86	CM	28	0.49	SC	167	-0.27	SC	167	14.20	(14.39)	Σ	96	1126+292
0.79	CM	186	0.86	SC	167	-0.89	SP	130	10.22	8.99	AP	*	1207+188
1.20	CM	102	1.5:	D	138	0.42:	AP	168	7.29:	11.54	AP	*	1223-724
			1.06	D	215	-0.02	e	215	10.9	(12.93)	R	215	1235-509
0.76	CM	85	1.47:	SC	167	-0.21	SP	130	7.74	9.62	AP	*	1236-264
1.02	CM	152	1.30	*	138	0.06	AP	167	7.03	9.54	AP	*	1256-706
0.72	CM	48	1.34	SC	167	-0.39	SP	130	7.48	8.51	AP	*	1310+184
0.70	CM	184	1.14	SC	167	0.39	SC	167	9.94	13.45	AP	*	1313+179
0.90	CM	35	1.64	SC	49	0.42	*	49	3.52:	7.85	AP	*	1323-472
0.86	CM	183	1.59	SC	167	-0.38	SP	130	5.92	7.40	AP	*	1339+286
1.00	CM	97	1.08	SC	166	-0.67	AP	166	7.18	7.05	AP	*	1343-511
0.70:	CM	118	0.60	D	215	-0.41	e	215	15.9	(15.86)	Σ	118	1353-269
0.73	CM	26	1.32:	SC	167	0.20	SC	20	8.95	12.08	AP	*	1403+287
0.80	*	*	0.88	D	133	-0.63	SP	130	9.38	8.90	AP	*	1427-057
0.82	*	*	1.18	*	96	-1.30	SP	130	9.17:	7.31	AP	*	1436-263
0.99:	CM	70	1.20	SC	166	0.10	SC	166	9.42:	12.02	AP	*	1452-820
0.84	CM	85	1.30:	SC	167	-1.26	SP	65	7.84:	6.15	AP	*	1500-328
0.86	CM	181	1.26:	SC	181	0.46	SC	167	11.75	(15.67)	Σ	96	1513+000
0.91	CM	182	1.06	SC	167	0.11	SP	130	8.64	11.48	AP	*	1514-208
0.82	CM	17	1.46	SC	167	-0.36	SP	130	5.69	7.15	AP	*	1516+022
1.44	CM	154	1.14	*	133	-0.32	AP	167	8.02	9.11	AP	*	1524-505
1.41	*	*	1.0:	D	133	-0.78	AP	168	9.48	8.77	AP	*	1531-504
			0.79::	D	215	-0.35:	e	215	14.0:	(14.47)	R	215	1535-499
1.01	CM	97	1.10	SC	166	-0.32	SC	166	7.48	8.52	AP	*	1542-376
0.88	CM	*	0.67	SC	99	-0.12	SC	99	14.68	(15.68)	Σ	52	1608+150
0.88	CM	95	0.97	SC	117	-0.98	SP	65	7.33	6.12	AP	*	1614-228
0.81	*	*	1.2:	D	133	-0.10	AP	168	9.16:	11.05	AP	*	1620-720
1.27	CM	135	1.64	SC	167	0.09	SP	130	5.76	9.00	AP	*	1620-264
1.04	CM	9	1.07	*	133	0.09	SP	130	9.01	11.61	AP	*	1624-259
1.53	*	*	1.10	SC	166	-0.65	AP	166	8.91	8.52	AP	*	1624-387
			0.88	D	*	-0.08	e	215	12.0	(13.53)	R	215	1625-352
1.29	CM	64	1.36	SC	166	-0.14	SP	130	8.10	9.91	AP	*	1629-129
1.24:	CM	216	0.54	D	215	-0.41	e	215	12.0	(11.86)	Σ	216	1636-283

TABLE Ia. (cont'd.)

Number	Name		α_{1950}	δ_{1950}	V_{HB}			E_{B-V}		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1639+365	NGC 6205	M 13	16 39 54	+36 33.2	14.95	CM	179	0.03	HB	178
1644-018	NGC 6218	M 12	16 44 38	-01 51.6	14.90	CM	172	0.21	uy	45
1645+476	NGC 6229		16 45 34	+47 36.9	18.10	CM	190	0.00	Ψ	190
1650-220	NGC 6235		16 50 25	-22 05.7	16.70	CM	139	0.38	GB	139
1654-040	NGC 6254	M 10	16 54 31	-04 01.4	14.65	CM	97	0.25	Ψ	190
1656-370	NGC 6256	Ter 12	16 56 10	-37 02.8	18.2:	CM	13	0.88:	GR	13
1657-004	Pal 15		16 57 28	-00 28.1	20.2:	CM	99	0.12	HI	29
1658-300	NGC 6266	M 62	16 58 02	-30 02.5	15.95	CM	*	0.45	*	6
1659-262	NGC 6273	M 19	16 59 32	-26 11.8	16.95:	CM	97	0.38	CS	*
1701-246	NGC 6284		17 01 25	-24 41.8	16.55	*	90	0.28	CS	*
1702-226	NGC 6287		17 02 09	-22 38.4	16.52	*	90	0.51	CS	*
1707-265	NGC 6293		17 07 04	-26 31.2	16.14	*	90	0.35	CS	*
1708-271	TJ 5		17 08 08	-27 08.0				≥0.65:	UB	157
1711-294	NGC 6304		17 11 22	-29 24.4	16.15	CM	106	0.52	CS	*
1713-280	NGC 6316		17 13 28	-28 05.1	17.8	*	90	0.52	CS	*
1714-237	NGC 6325		17 14 57	-23 42.8	17.3:	CM	85	0.86	CS	*
1715-277	TJ 16	TBJ 2	17 15 21	-27 43.4				≥0.65:	UB	157
1715-262	TJ 15		17 15 25	-26 14.8				≥0.65:	UB	157
1715-278	TJ 17	TBJ 1	17 15 33	-27 47.1				≥0.65:	UB	157
1715+432	NGC 6341	M 92	17 15 35	+43 11.4	15.10	CM	179	0.02	HB	178
1716-184	NGC 6333	M 9	17 16 16	-18 27.9	16.09	*	90	0.35	CS	*
1718-195	NGC 6342		17 18 13	-19 32.3	17.4	*	90	0.46	CS	*
1720-177	NGC 6356		17 20 40	-17 46.1	17.67	CM	187	0.30	CS	*
1720-263	NGC 6355		17 20 52	-26 18.5	17.2	*	90	0.73	CS	*
1721-484	NGC 6352		17 21 40	-48 22.6	15.15	CM	101	0.14	*	104
1724-307	Ter 2	HP 3	17 24 20	-30 45.6	19.8:	BG	79	1.31	IR	148
1725-050	NGC 6366		17 25 04	-05 02.1	15.70	CM	171	0.65	CS	86
1726-670	NGC 6362		17 26 45	-67 00.6	15.30	CM	2	0.08	*	69
1727-315	Ter 4	HP 4	17 27 24	-31 33.5	21.6::	BG	215	1.55	IR	148
1727-299	HP 1		17 27 53	-29 56.9	20.0:	BG	200	1.41	CX	215
1728-338	Gri 1		17 28 40	-33 47.9	26.2::	BG	80	3.2:	IR	80
1730-333	Lil 1		17 30 07	-33 21.3	24.4	A	215	2.91	IR	148
1731-390	NGC 6380	Ton 1	17 30 59	-39 01.9	18.0	BG	*	1.38	IR	148
1732-304	Ter 1	HP 2	17 32 34	-30 27.0	20.6:	BG	215	1.52	IR	148
1732-447	NGC 6388		17 32 38	-44 42.3	17.24	CM	10	0.31	CS	*
1733-390	Ton 2	Pis 26	17 32 43	-38 31.2	18.2	BG	34	0.91	CX	215
1735-032	NGC 6402	M 14	17 34 59	-03 13.2	17.50	CM	126	0.58	CS	*
1735-238	NGC 6401		17 35 34	-23 53.0	17.3	BG	90	0.76	CS	*
1736-536	NGC 6397		17 36 38	-53 38.9	12.90	CM	33	0.18	HB	33
1740-262	Pal 6		17 40 36	-26 12.1	19.1	BG	90	1.45	IR	148
1741-328	TJ 23		17 41 54	-32 45.1				1.73	CX	215
1742+031	NGC 6426		17 42 25	+03 11.4	18.0	IR	90	0.37	CS	*
1745-247	Ter 5		17 45 00	-24 45.8	21.7	BG	*	2.14	IR	148
1746-203	NGC 6440		17 45 54	-20 20.7	18.4:	CM	150	1.11	CS	*
1746-370	NGC 6441		17 46 49	-37 02.3	17.10	CM	105	0.36	uy	104
1748-346	NGC 6453		17 47 32	-34 35.2	17.7	*	90	0.61	CS	*
1747-312	Ter 6	HP 5	17 47 32	-31 15.7	20.8::	BG	132	1.46	CX	215
1751-241	UKS 1		17 51 24	-24 08.2	25.5	A	215	3.07	IR	148
1755-442	NGC 6496		17 55 24	-44 15.8	14.9	*	90	0.10	CS	*
1758-268	Ter 9		17 58 31	-26 50.4	20.3:	BG	215	1.71	IR	148
1759-089	NGC 6517		17 59 06	-08 57.6	18.0:	CM	85	1.09	CS	*
1800-260	Ter 10		17 59 51	-26 04.1	21.9::	BG	215	1.71	CX	215
1800-300	NGC 6522		18 00 23	-30 02.2	16.25	CM	18	0.49	UB	*
1801-003	NGC 6535		18 01 17	-00 18.0	15.85	CM	*	0.33	GB	140
1801-300	NGC 6528		18 01 37	-30 03.6	16.75	CM	213	0.62	CS	*

TABLE Ia. (cont'd.)

$(B-V)_g$			$\log \theta_t$			$\log \theta_c$			V_t	σ_c			Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
0.82	CM	179	1.43	SC	167	-0.08	SP	130	5.68	7.94	AP	*	1639+365
0.93	CM	172	1.26	SC	167	0.07	SP	130	6.77	9.44	AP	*	1644-018
0.84	*	*	0.75:	SC	167	-0.76	SP	130	9.36	8.31	AP	*	1645+476
1.17	CM	139	0.9:	D	133	-0.58	SP	66	9.99	9.87	AP	*	1650-220
1.06	CM	97	1.38	SC	167	-0.15	SP	130	6.55	8.78	AP	*	1654-040
1.68	CM	13	0.83	D	215	-0.42	e	215	11.29:	11.78:	AP	23	1656-370
0.99:	CM	99	0.73	SC	99	0.13	SC	99	14.2	(15.98)	Σ	99	1657-004
1.32:	CM	6	1.02	SC	117	-0.61	*	117	6.68	6.63	AP	*	1658-300
0.98:	CM	97	1.24	SC	166	-0.30	SP	130	6.73	7.95	AP	*	1659-262
1.13	*	*	1.00	*	133	-0.79	SP	130	8.85	8.07	AP	*	1701-246
1.27	*	*	0.98	*	133	-0.48	SP	130	9.31	9.69	AP	*	1702-226
1.08	*	*	1.17	*	133	-0.78	SP	130	8.15	7.75	AP	*	1707-265
			-0.22::	D	215	-1.11:	e	215					1708-271
1.56	CM	106	1.10	*	133	-0.58	SP	130	8.36	8.59	AP	*	1711-294
1.54	*	*	1.16	*	133	-0.76	SP	130	8.75	8.51	AP	*	1713-280
1.55:	CM	85	1.00:	*	133	-0.61	SP	130	10.56	10.30	AP	*	1714-237
			-0.29::	D	215	-1.34	e	205	16.3::	11.7::	AP	205	1715-277
			-0.22::	D	215	-1.01:	e	215					1715-262
1.80	BV	*	-0.05::	D	215	-1.27	e	205	16.58:	12.56::	AP	203	1715-278
0.74	CM	27	1.22	SC	167	-0.51	SP	130	6.39	6.81	AP	*	1715+432
1.10	*	*	1.19	SC	166	-0.38	SP	130	7.61	8.33	AP	*	1716-184
1.45	*	*	0.94	*	133	-0.88	SP	130	9.84	9.03	AP	*	1718-195
1.19:	CM	187	1.06	*	133	-0.53	SP	130	8.18	8.29	AP	*	1720-177
1.58	*	*	0.88:	*	133	-0.72	SP	130	9.68	9.56	AP	*	1720-263
1.29	CM	101	1.08	*	133	-0.17	AP	168	8.13	9.93	AP	*	1721-484
2.35:	Q	148	0.49	D	133	-0.97	SP	81	14.29:	12.12:	AP	149	1724-307
1.65	CM	171	1.3:	D	133	0.34	SC	167	8.88:	12.47	AP	*	1725-050
1.08	CM	2	1.22	SC	167	0.20	SC	167	7.52	10.20	AP	*	1726-670
2.65:	Q	148	0.22:	D	133	≤-1.00	e	215	16.0:	(≤13.34)	R	215	1727-315
2.18:	BV	67	0.67	D	133	-0.68	e	133	12.49	(11.62)	IR	132	1727-299
			0.94::	D	215	-0.27:	e	215	17.66:	18.64:	SP	80	1728-338
4.01:	Q	148	0.52	D	215	-1.23	SP	81	15.84:	13.42:	AP	*	1730-333
2.24	*	*	0.75	D	133	-0.46	AP	168	11.12:	11.14	AP	168	1731-390
2.71:	Q	148	0.59	D	133	-1.01	e	215	15.9	(13.74)	R	215	1732-304
1.33	CM	10	0.92	SC	117	-0.83	*	117	6.73	5.71	AP	*	1732-447
			0.71	D	133	-0.14	e	215	12.24	(13.27)	IR	132	1733-390
1.23:	CM	126	1.00	SC	167	-0.10	SP	130	7.57	9.52	AP	*	1735-032
1.69	*	*	1.12	SP	130	-0.63	SP	130	9.45:	9.76	AP	*	1735-238
0.87	CM	33	1.585	SC	49	-0.11	AP	49	5.75	8.14	AP	*	1736-536
2.67:	*	*	0.87	D	133	-0.17	e	133	11.55:	12.77	AP	168	1740-262
			0.04::	D	215	-0.75:	e	215					1741-328
1.08	*	*	0.87	*	133	-0.45	SP	130	11.13	11.76	AP	*	1742+031
3.14:	*	*	0.61	D	133	-1.32:	e	133	13.85:	10.70:	AP	175	1745-247
2.15	*	*	1.08	*	133	-0.94	SP	65	9.05	8.13	AP	*	1746-203
1.51	CM	105	0.88:	SC	117	-0.86	SP	81	7.19	6.26	AP	*	1746-370
1.42	*	*	0.7:	D	133	-0.79	SP	130	9.78	8.74	AP	*	1748-346
			0.18:	D	133	-1.08	e	215	13.85:	(10.85)	IR	132	1747-312
3.95:	Q	148	0.77	D	147	-0.66	AP	149	17.29:	16.63:	AP	149	1751-241
1.10	*	*	1.0:	D	133	0.25	AP	168	8.48:	11.18	AP	*	1755-442
2.77:	Q	148	0.43:	D	133	-0.91:	e	215	16.0:	(13.96)	R	215	1758-268
1.91	*	*	1.02:	*	133	-0.99	SP	130	10.30	9.09	AP	*	1759-089
			0.18:	D	202	-0.94:	e	215	14.9:	(12.39)	R	215	1800-260
1.29	CM	18	1.00	SP	130	-0.75	SP	130	8.35	7.63	AP	*	1800-300
1.13	CM	*	1.0:	*	133	-0.70	AP	168	10.48	10.27	AP	*	1801-003
1.56:	CM	213	0.67	SP	130	-0.89	SP	130	9.51	8.30	AP	*	1801-300

TABLE Ia. (cont'd.)

Number	Name		α_{1950}	δ_{1950}	V_{HB}			E_{B-V}		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1802-075	NGC 6539		18 02 07	-07 35.4	16.6	IR	90	1.10	CS	*
1804-250	NGC 6544		18 04 15	-25 00.3	15.0:	CM	12	0.73	CS	*
1804-437	NGC 6541		18 04 25	-43 43.4	15.20	CM	7	0.12	CS	*
1806-259	NGC 6553		18 06 11	-25 55.1	16.95	CM	100	0.80	CS	*
1807-317	NGC 6558		18 07 03	-31 46.4	16.7	*	90	0.43	CS	*
1808-072	IC 1276	Pal 7	18 08 03	-07 13.2	18.5	*	90	0.92	CS	86
1809-227	Ter 11		18 09 14	-22 45.3	22.5::	BG	215	1.57	CX	215
1810-318	NGC 6569		18 10 23	-31 50.5	17.1	*	90	0.55	CS	*
1812-121	Kod 1		18 12 19	-12 04.2				3.8:	IR	125
1814-522	NGC 6584		18 14 38	-52 14.1	16.8	*	90	0.10	CS	*
1820-303	NGC 6624		18 20 28	-30 23.3	16.05	CM	144	0.29	CS	*
1821-249	NGC 6626		18 21 28	-24 53.8	15.60	CM	11	0.37	GB	11
1827-255	NGC 6638		18 27 51	-25 32.0	15.92	CM	14	0.37	CS	*
1828-323	NGC 6637	M 69	18 28 07	-32 23.1	16.20	CM	87	0.17	CS	*
1828-235	NGC 6642		18 28 52	-23 30.8	15.5	*	90	0.37	CS	*
1832-330	NGC 6652		18 32 29	-33 01.9	16.7	BG	90	0.10	CS	*
1833-239	NGC 6656		18 33 21	-23 56.9	14.20	CM	5	0.35	uy	104
1838-198	Pal 8		18 38 32	-19 52.5	18.9	*	37	0.33	CS	*
1840-323	NGC 6681	M 70	18 39 57	-32 20.5	15.60	CM	*	0.05	CS	*
1850-087	NGC 6712		18 50 20	-08 46.2	16.11	CM	185	0.48	*	185
1851-305	NGC 6715	M 54	18 51 51	-30 32.6	17.71	CM	85	0.14	CS	*
1852-227	NGC 6717	Pal 9	18 52 05	-22 46.0	15.7	CM	76	0.20	CS	*
1856-367	NGC 6723		18 56 11	-36 41.9	15.48	CM	153	0.02	UB	153
1902+017	NGC 6749		19 02 43	+01 49.5	19.2	*	37	0.96:	CS	96
1906-600	NGC 6752		19 06 28	-60 03.9	13.80	CM	36	0.05	HB	*
1908+009	NGC 6760		19 08 39	+00 56.8	16.5	*	90	0.88	CS	*
1914-347	Ter 7		19 14 25	-34 44.8	18.6	BG	34	0.06	HI	29
1914+300	NGC 6779		19 14 39	+30 05.5	16.20	CM	21	0.20	Ψ	190
1916+184	Pal 10		19 15 49	+18 28.9	19.4	BG	37	1.15	CX	215
1925-304	Arp 2		19 25 34	-30 27.7	18.21	CM	192	0.11	HI	29
1936-310	NGC 6809	M 55	19 36 50	-31 04.6	14.40	CM	138	0.08	UB	138
1938-341	Ter 8		19 38 29	-34 07.1	19.4	BG	34	0.12	HI	29
1942-081	Pal 11		19 42 32	-08 07.7	17.38	CM	47	0.34	UB	38
1951+186	NGC 6838	M 71	19 51 32	+18 38.7	14.42	CM	46	0.19	XY	119
2003-220	NGC 6864	M 75	20 03 08	-22 03.9	17.45	CM	85	0.16	CS	*
2031+072	NGC 6934		20 31 45	+07 14.0	16.82	CM	94	0.11	Ψ	190
2050-127	NGC 6981	M 72	20 50 43	-12 43.6	16.85	CM	62	0.03	*	*
2059+160	NGC 7006		20 59 09	+15 59.4	18.72	CM	188	0.05	Ψ	190
2127+119	NGC 7078	M 15	21 27 33	+11 56.8	15.86	CM	179	0.10	*	*
2130-010	NGC 7089	M 2	21 30 53	-01 02.8	16.05	CM	85	0.02	Ψ	190
2137-234	NGC 7099	M 30	21 37 32	-23 24.4	15.09	CM	63	0.06	UB	63
2143-214	Pal 12	Cap	21 43 50	-21 29.0	17.10	CM	92	0.02	HI	29
2304+124	Pal 13	Peg	23 04 14	+12 30.2	17.70	CM	41	0.05	CS	86
2305-159	NGC 7492		23 05 49	-15 52.9	17.00	CM	22	0.00	CS	86

https://doi.org/10.1017/S0074180900147771 Published online by Cambridge University Press

TABLE Ia. (cont'd.)

$(B-V)_g$			$\log\ \theta_t$			$\log\ \theta_c$			V_t	σ_c			Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
2.02	*	*	1.12:	*	133	-0.28	SP	130	9.77	11.16	AP	*	1802-975
1.39:	CM	12	1.07:	*	133	-0.33	SP	130	8.07	9.07	AP	*	1804-250
0.81	CM	7	1.50:	SC	167	-0.55	SP	218	6.08	6.86	AP	*	1804-437
1.87:	CM	100	1.02:	*	133	-0.17	SP	130	8.06	9.27	AP	*	1806-259
1.24	*	*	0.8:	D	133	-0.81	AP	168	9.82	8.79	AP	*	1807-317
1.89:	UB	175	1.1:	D	133	0.10	*	167	10.34:	12.83	AP	175	1808-072
			0.30:	D	133	-0.71:	e	215	16.4:	(14.86)	R	215	1809-227
1.48	*	*	0.85:	*	133	-0.46	SP	130	8.71	9.09	AP	*	1810-318
									20.1::		AP	125	1812-121
0.90	*	*	0.94	*	133	-0.40	AP	167	8.63	9.14	AP	*	1814-522
1.26	CM	144	1.06	*	133	-1.06	SP	81	7.99	6.63	AP	*	1820-303
1.11	CM	11	1.18	*	133	-0.42	*	167	6.83	7.29	AP	*	1821-249
1.32	CM	14	0.77	*	166	-0.63	SP	130	9.05	8.34	AP	*	1827-255
1.12	CM	87	1.02:	*	133	-0.48	SP	130	7.56	7.93	AP	*	1828-323
1.23	*	*	0.9:	D	133	-1.13:	SP	66	9.36	7.66	AP	*	1828-235
1.05	*	*	0.89	*	133	-0.82	SP	130	8.76	7.70	AP	*	1832-330
1.09	CM	5	1.52	SC	167	0.08	SP	130	5.07	8.35	AP	*	1833-239
1.38	*	*	0.35	SC	37	-0.40	SC	37	11.15	10.78	AP	*	1838-198
1.00:	CM	85	1.04	*	133	-1.03	SP	65	7.95	6.85	AP	*	1840-323
1.35	CM	185	1.04:	*	133	-0.17	SP	130	8.17	9.57	AP	*	1850-087
0.87:	CM	85	0.87	SC	117	-0.98	SP	130	7.57	6.00	AP	*	1851-305
0.85:	CM	76	0.9:	D	133	-1.24	SP	66	9.18	7.29	AP	*	1852-227
0.93	CM	153	1.10	SC	167	-0.08	SP	130	7.17	8.85	AP	*	1856-367
2.04	UB	*	0.43	SC	37	-0.32	SC	37	12.44	12.32	AP	*	1902+017
0.83	CM	36	1.49	SC	49	-0.30	*	49	5.48	6.85	AP	*	1906-600
1.85	*	*	1.08	*	133	-0.36	SP	130	9.08	10.03	AP	*	1908+009
			0.54	D	133	-0.44	e	215	12.0	(11.76)	R	215	1914-347
0.82	CM	21	1.08	*	133	-0.36	SP	130	8.26	9.33	AP	*	1914+300
			0.75	SC	37	-0.49	SC	37	13.22	(13.14)	IR	132	1916+184
0.84	CM	192	0.75	D	133	0.30	SC	166	12.3	(14.46)	R	215	1925-304
0.88	CM	138	1.27	SC	167	0.24	SC	167	6.36	9.97	AP	*	1936-310
			0.94	D	*	-0.11	e	215	12.4	(13.93)	R	215	1938-341
1.29	CM	47	0.87	SC	167	0.12	SC	167	9.80::	11.92	AP	168	1942-081
1.25	CM	46	1.14	*	133	-0.08	SP	130	8.00	9.80	AP	*	1951+186
0.93	CM	85	0.78	SC	117	-1.02	SP	130	8.53	6.68	AP	*	2003-220
0.97	CM	94	0.95	SC	167	-0.69	SP	130	8.72	8.31	AP	*	2031+072
0.83	CM	62	0.94	SC	167	-0.44	SP	130	9.32	9.91	AP	*	2050-127
0.81	CM	188	0.80	SC	167	-0.75	SP	130	10.46	9.44	AP	*	2059+160
0.78	CM	27	1.32	SC	167	-1.04	SP	81	6.02	5.90	AP	*	2127+119
0.76	CM	85	1.21	SC	167	-0.47	SP	130	6.36	7.18	AP	*	2130-010
0.71	CM	63	1.20	SC	167	-1.13	SP	65	7.32	6.33	AP	*	2137-234
0.92	CM	92	1.03	SC	166	-0.32	SC	166	11.71	12.85	AP	*	2143-214
0.99:	CM	41	0.58	SC	163	-0.42	SC	163	13.80:	13.52:	AP	175	2304+124
0.74	CM	22	0.88	SC	167	-0.09	SP	130	11.43	13.08	AP	*	2305-159

FOOTNOTES TO TABLE Ia

0021-723 **(24)**: 24,49,72,82,117,127,128,168,207
0050-268 **(24)**: 24,82,120,168
0100-711 **(19)**: SP,AP **(24)**: 24,82,117,128,168,207
0310-554 **(11)**: 24,84,86,221 **(24)**: 24,82,128,168,212
0443+313 **(7)**: BG,IR **(11)**: 43,44,89 **(14)**: 43,89
0444-840 **(14)**: 71,77,168,210 **(24)**: 77,168,210
0512-400 **(24)**: 24,82,117,128,168,209,212
0522-245 **(24)**: 24,82,128,168,177
0647-359 **(11)**: 24,86,129,206,221 **(16)**: AP,D **(24)**: 24,82,98,128,168
0734+390 **(24)**: 53,98,131,177
0911-646 **(19)**: SP,AP **(24)**: 24,40,98,117,128,168,207
0921-770 **(8)**: 107,211 **(14)**: 107,211
1003+003 **(8)**: 78,191
1015-461 **(19)**: SC,AP **(24)**: 24,128,168,207
1207+188 **(24)**: 24,131,168,175,177,219
1223-724 **(24)**: 24,168,175
1236-264 **(24)**: 23,24,43,131,168,207,220
1256-706 **(16)**: AP,D **(24)**: 24,82,128,168,207
1310+184 **(24)**: 24,122,131,168,177,207,220
1313+179 **(10)**: Ψ;UB **(11)**: 190;184 **(24)**: 43,131,175,177
1323-472 **(10)**: NB;rr **(11)**: 158;30,199 **(19)**: SP,AP **(24)**: 24,49,72,82,83,128,168,207
1339+286 **(24)**: 24,122,131,177,207,219,220
1343-511 **(11)**: 24,84,129,173,221 **(24)**: 24,82,98,128,168,207
1403+287 **(24)**: 43,131,175
1427-057 **(11)**: 24,84,86,129,145,221 **(13)**: ΔP;ΔS;UB;Q **(14)**: 180;193;24,82,83,98,131,168,212,219;221 **(24)**: 24,82,98,131,168,212,219
1436-363 **(11)**: 24,86,129,145,221 **(13)**: UB;Q **(14)**: 24,82,83,98,131,168,212;223 **(16)**: AP,D **(24)**: 24,82,98,131,168,212
1452-820 **(24)**: 168,175
1500-328 **(11)**: 24,86,129,145,220,221 **(24)**: 24,82,98,131,168,220
1513+000 **(10)**: ΔU;Ψ **(11)**: 181;190
1514-208 **(11)**: 24,84,145,220 **(24)**: 24,82,131,168,219,220
1516+022 **(24)**: 24,40,82,120,122,131,168,177,207,219,220
1524-505 **(16)**: AP,D **(24)**: 24,82,128,168,207
1542-376 **(11)**: 24,86,129,145,221 **(24)**: 24,82,131,168,207
1608+150 **(8)**: 52,99 **(14)**: 52,99
1614-228 **(24)**: 24,82,83,117,131,168,207,220
1620-720 **(11)**: 24,86,223 **(13)**: UB;Q **(14)**: 24,82,168,175;223 **(24)**: 24,82,168,175
1620-264 **(10)**: HB,rr,RR **(24)**: 24,82,131,168,207,220
1624-259 **(11)**: 24,86,145,223 **(16)**: AP,D **(24)**: 24,82,131,168,175
1624-387 **(7)**: BG,IR **(11)**: 24,86,129,221 **(13)**: UB;Q **(14)**: 24,82,83,98,128,168;221 **(24)**: 24,82,98,128,168
1625-352 **(17)**: 34,201
1629-129 **(24)**: 24,82,131,168,177,219,220
1639+365 **(24)**: 24,120,122,131,219,220
1644-018 **(24)**: 24,82,120,122,131,168,207,219,220
1645+476 **(13)**: ΔP;UB;Q **(14)**: 180;24,98,131,177,219;221 **(24)**: 24,131,177,219
1650-220 **(24)**: 24,82,168,175
1654-040 **(24)**: 24,120,122,131,168,207,219,220
1658-300 **(8)**: 6,85 **(10)**: GB,GR **(19)**: SP,AP,SC **(24)**: 24,82,117,131,168,207,220
1659-262 **(11)**: 24,84,86,129,145,220,221 **(24)**: 24,82,120,131,168,207,220
1701-246 **(7)**: RR,BG,IR **(11)**: 24,86,129,145,221 **(13)**: ΔS,UB;Q **(14)**: 193;24,67,82,83,98,131,168;221 **(16)**: AP,D **(24)**: 24,82,131,168
1702-226 **(7)**: RR,BG,IR **(11)**: 24,86,145,221 **(13)**: UB;Q **(14)**: 24,82,83,98,131,168;221 **(16)**: AP,D **(24)**: 24,82,98,131,168
1707-265 **(7)**: RR,BG,IR **(11)**: 24,86,129,145,220,221 **(13)**: UB;Q **(14)**: 24,82,83,120,131,168,207;223 **(16)**: AP,D **(24)**: 24,82,120,131,168,207,220
1711-294 **(11)**: 24,84,129,145,173,220,221 **(16)**: AP,D **(24)**: 16,23,24,82,120,131,168,207,220
1713-280 **(7)**: BG,IR **(11)**: 24,86,145,221 **(13)**: UB;Q **(14)**: 24,67,82,120,168,175;223 **(16)**: AP,D **(24)**: 24,131,168,175
1714-237 **(11)**: 24,86,145,221 **(16)**: AP,D **(24)**: 24,131,168,175
1715-278 **(14)**: 203,204
1715+432 **(24)**: 24,120,122,131,177,219,220

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FOOTNOTES TO TABLE Ia (cont'd.)

1716-184	(7): RR,BG,IR (11): 24,86,129,145,220,221 (13): ΔP;UB;Q (14): 180;24,82,83,131,168,177,207;221 (24): 24,82,131,168,177,207,220
1718-195	(7): BG,IR (11) 24,86,145,221 (13): UB;Q (14): 24,82,98,131,168,175;223 (16): AP,D (24): 24,82,131,168,175
1720-177	(11): 24,84,96,121,129,145,220,221 (16): AP,D (24): 16,24,82,131,168,177,207,220
1720-263	(7): BG,IR (11): 24,86,145,221 (13): UB;Q (14): 24,82,83,131,168,175,223 (16): AP,D (24): 24,82,131,168,175
1721-484	(10): uy,UB (16): AP,D (24): 24,82,128,168,175,207
1725-050	(24): 168,175,219
1726-670	(10): GB,GR (24): 24,82,128,168,207
1730-333	(24): 124,149
1731-390	(8): 4,34 (13): BV;Q (14): 168;148
1732-447	(11): 24,86,206,221 (19): SP,AP (24): 24,82,98,117,128,168,207
1735-032	(11): 24,84,86,121,129,145,220,221 (24): 24,82,120,131,168,207,219,220
1735-238	(11): 86,145,223 (13): UB;Q (14): 23,82,168,175;223 (24): 23,82,131,168,175
1736-536	(24): 24,49,82,128,168,207
1740-262	(13): BV;Q (14): 168;148
1742+031	(11): 86,145,221 (13): ΔP;UB;Q (14): 180;43,98,131,168,219;221 (16): AP,D (24): 43,131,168,219
1745-247	(8): 175,194 (13): BV;Q (14): 175;148
1746-203	(11): 24,96,129,145,221 (13): UB;Q (14): 24,67,82,83,98,131,168,175,209;223 (24): 24,82,98,131,168,175,209
1746-370	(24): 24,82,117,128,168,207,209
1748-346	(7): RR,BG,IR (11): 24,96,145,223 (13): UB;Q (14): 24,168,175;223 (24): 24,131,168,175
1755-442	(7): BG,IR (11): 24,86,223 (13): BV;Q (14): 24,168,175;223 (24): 24,168,175
1759-089	(11): 24,86,145,223 (13): UB;Q (14): 24,67,98,120,131,175,219;223 (16): AP,D (24): 24,120,131,168,175,219
1800-300	(11): 18,208 (24): 24,82,120,131,168,207,220
1801-003	(8): 15,140 (14): 15,140 (16): AP,D (24): 24,120,168,177,219
1801-300	(11): 24,84,96,129,145,221 (24): 24,82,131,168,175
1802-075	(11): 86,145,223 (13): UB;Q (14): 131,168,175,177,219;223 (16): AP,D (24): 131,168,177,219
1804-250	(11): 24,86,129,145,220,221 (16): AP,D (24): 24,82,131,168,175,220
1804-437	(11): 24,84,86,206,221 (24): 24,82,128,168,207
1806-259	(11): 24,84,86,129,145,220,221 (16): AP,D (24): 24,82,120,131,168,175,220
1807-317	(7): RR,BG (11): 24,86,221 (13): UB;Q (14): 24,82,83,120,131,168,175;223 (16): AP,D (24): 24,82,120,131,168,175
1814-522	(7): BG,IR (11): 24,84,86,221 (13): UB;Q (14): 24,82,83,128,168,207;221 (16): AP,D (24): 24,82,128,168,207
1820-303	(11): 24,86,129,145,206,220,221 (16): AP,D (24): 19,24,32,82,103,120,131,168,207,209,220
1821-249	(16): AP,D (19): AP,e (24): 24,82,120,131,168,207,220
1827-255	(11): 24,84,86,129,145,221 (16): SC,AP (24): 23,24,82,120,131,168,175
1828-323	(11): 24,84,86,129,145,206,220,221 (16): AP,D (24): 24,82,131,168,207,220
1828-235	(7): RR,BG (11): 24,86,129,220,223 (13): UB;Q (14): 24,82,83,168,175;223 (24): 24,82,168,175,220
1832-330	(11): 24,84,86,129,145,220,221 (13): UB;Q (14): 24,82,83,131,168,207;223 (16): AP,D (24): 24,82,131,168,207,220
1833-239	(24): 24,82,120,131,168,207,220
1838-198	(7): BG,IR (10): 86,223 (13): UB;Q (14): 168,175; 223 (24): 168,175
1840-323	(8): 85,143 (11): 24,129,145,173,206,220,221 (16): AP,D (24): 24,82,131,168,207,220
1850-087	(10): B,UB,GB,GR (16): AP,D (24): 24,82,131,168,177,207,209,219,220
1851-305	(11): 24,86,129,145,206,220,221 (24): 24,82,117,131,168,207,220
1852-227	(11): 86,223 (24): 76,82,168,175
1856-367	(24): 24,74,82,131,168,207
1902+017	(7): BG,IR (14): 168,175,219 (24): 168,175,219
1906-600	(11): 39,159 (19): SP,AP (24): 24,49,74,82,128,168,207
1908+009	(7): RR,BG,IR (11): 24,84,86,145,221 (13): UB;Q (14): 24,67,82,83,98,131,168,177,219;223 (16): AP,D (24): 24,82,131,168,177,219
1914+300	(16): AP,D (24): 24,131,177,220

FOOTNOTES TO TABLE Ia (cont'd.)

1936-310 **(24)**: 24,82,120,131,168,207,220
1938-341 **(17)**: 34,201
1951+186 **(16)**: AP,D **(24)**: 24,131,168,207,219,220
2003-220 **(11)**: 24,86,129,145,206,220,221 **(24)**: 24,82,117,131,168,207,220
2031+072 **(24)**: 24,43,82,131,168,177,219
2050-127 **(10)**: Ψ;UB **(11)**: 190;62 **(24)**: 24,43,82,131,168,177,219
2059+160 **(24)**: 24,43,120,131,168,177,219
2127+119 **(10)**: HB;rr **(11)**: 27;25 **(24)**: 24,120,122,131,168,207,219,220
2130-010 **(24)**: 24,82,120,122,131,168,207,219,220
2137-234 **(24)**: 24,82,120,131,168,207,220
2143-214 **(24)**: 168,175
2305-159 **(24)**: 120,168,175

TABLE Ib. OBSERVED PARAMETERS OF GALACTIC DWARF SPHEROIDALS

Number	Name		α_{1950}	δ_{1950}	V_{HB}			E_{B-V}		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0057-340	Scl		00 57 44	-34 00.4	20.13	CM	134	0.02	*	*
0237-347	For		02 37 50	-34 44.4	21.4:	CM	214	0.00	HI	29
0640-509	Car		06 40 24	-50 55.0	20.52	CM	155	0.03	HI	29
1005+126	Leo I	DDO 74	10 05 46	+12 33.2	22.3	BG	115	0.02	HI	29
1110+224	Leo II	DDO 93	11 10 50	+22 26.1	22.45:	CM	59	0.01	HI	29
1508+674	UMi	DDO 199	15 08 12	+67 23.0	20.00	CM	189	0.06	*	189
1719+580	Dra	DDO 208	17 19 13	+57 57.5	20.07	CM	195	0.03	uy	196

FOOTNOTES TO TABLE Ib

0057-340 **(10)**: uy,UB **(20)**: 170;68
1110+224 **(22)**: 56,113 **(25)**: 56,113
1508+674 **(10)**: UB,GB

TABLE Ic. OBSERVED PARAMETERS OF THE FORNAX GLOBULAR CLUSTERS

Number	Name		α_{1950}	δ_{1950}	V_{HB}			E_{B-V}		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0235-344	For 1		02 34 57	-34 24.0	21.4:	CM	214	0.00	HI	29
0236-350	For 2		02 36 40	-35 01.5	21.4:	CM	214	0.00	HI	29
0237-345	For 3	NGC 1049	02 37 44	-34 28.3	21.4:	CM	214	0.00	HI	29
0238-348	For 4		02 38 05	-34 45.2	21.4:	CM	214	0.00	HI	29
0240-343	For 5		02 40 17	-34 18.9	21.4:	CM	214	0.00	HI	29
0238-346	For 6		02 38 06	-34 38.8	21.4:	CM	214	0.00	HI	29

FOOTNOTES TO TABLE Ic

0235-344 **(14)**: 110,112 **(24)**: 110,112
0236-350 **(14)**: 55,57,110,112 **(24)**: 55,57,77,110,112,222
0237-345 **(14)**: 55,57,73,77,110,112,131 **(17)**: 77,112,131
(24): 55,57,77,110,112,222
0238-348 **(14)**: 55,57,73,77,110,112 **(17)**: 55,77,112 **(24)**: 55,57,77,110,112,222
0240-343 **(14)**: 55,57,110,112 **(17)**: 55,112 **(24)**: 55,57,77,110,112,222

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TABLE Ib. OBSERVED PARAMETERS OF GALACTIC DWARF SPHEROIDALS

$(B-V)_g$			$\log \theta_t$	$\log \theta_c$	ε			V_t			σ_c			Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
0.79	CM	134	1.76	1.01	0.35	SC	75	8.13	SP	111	14.55	SP	111	0057-340
0.83:	CM	214	1.76	1.10	0.35	SC	75	8.41	SP	54	14.42	SP	114	0237-347
0.78	CM	155	1.67	0.98	0.31	SC	75	10.74	Σ	58	17.13	Σ	155	0640-509
			1.11	0.64	0.31	SC	75	10.46	SP	116	(13.98)			1005+126
0.84:	CM	59	1.00	0.36	0.01	SC	75	12.18:	AP	*	15.18	AP	*	1110+224
0.75	CM	189	1.67	1.12	0.55	SC	75	10.69	R	108	(16.41)			1508+674
0.80	CM	195	1.54	0.97	0.29	SC	75	10.78	R	109	(16.31)			1719+580

TABLE Ic. OBSERVED PARAMETERS OF THE FORNAX GLOBULAR CLUSTERS

$(B-V)_g$			$\log \theta_t$			$\log \theta_c$			V_t	σ_c			Number
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
0.65	UB	*	0.18	D	215	-0.62	e	215	15.57	13.89	AP	*	0235-344
0.75	UB	*	0.28	AP	55	-0.84	SP	55	13.50	11.42:	AP	*	0236-350
0.73	UB	*	0.20	AP	*	-1.63:	e	77	12.61	7.72:	AP	*	0237-345
0.83	UB	*	0.04	AP	*	-1.79:	e	77	13.57	7.87:	AP	*	0238-348
0.74	UB	*	0.10	AP	*	-1.16	e	77	13.42	10.01:	AP	*	0240-343
0.7::	CM	214	-0.24:	D	215	-1.15:	e	215	14.34	10.43:	AP	112	0238-346

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TABLE IIa. DERIVED PARAMETERS OF GALACTIC GLOBULAR CLUSTERS

Number	Name		ℓ	b	R_o	X	Y	Z	R_{GC}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0021-723	NGC 104	47 Tuc	305.895	-44.889	4.6	-6.9	-2.7	-3.3	8.1
0050-268	NGC 288		151.147	-89.377	8.2	-8.9	0.0	-8.2	12.1
0100-711	NGC 362		301.533	-46.247	8.7	-5.6	-5.1	-6.3	9.9
0310-554	NGC 1261		270.539	-52.127	16.1	-8.7	-9.9	-12.7	18.3
0325+794	Pal 1		130.067	+19.023	13.7	-17.1	9.9	4.5	20.3
0344-718	NGC 1466	SL 1	286.700	-39.537	39.4	-0.1	-29.1	-25.1	38.4
0354-498	AM 1	E 1	258.360	-48.472	116.4	-24.4	-75.6	-87.2	117.9
0422-213	Eri		218.108	-41.331	84.7	-58.9	-39.3	-56.0	90.2
0435-590	Ret	Sé 40/3	268.664	-40.269	50.4	-9.7	-38.5	-32.6	51.3
0443+313	Pal 2		170.532	-09.070	13.6	-22.0	2.2	-2.1	22.2
0444-840	NGC 1841		297.016	-30.147	40.9	7.2	-31.5	-20.5	38.3
0512-400	NGC 1851		244.512	-35.036	12.0	-13.0	-8.9	-6.9	17.2
0522-245	NGC 1904	M 79	227.231	-29.350	13.0	-16.5	-8.3	-6.4	19.5
0647-359	NGC 2298		245.629	-16.007	10.6	-13.0	-9.3	-2.9	16.2
0734+390	NGC 2419		180.370	+25.242	91.4	-91.4	-0.5	39.0	99.4
0737-337	AM 2		248.126	-05.876	57.7	-30.2	-53.2	-5.9	61.5
0911-646	NGC 2808		282.193	-11.252	9.5	-6.8	-9.1	-1.9	11.6
0921-770	E 3		292.269	-19.018	8.3	-5.8	-7.2	-2.7	9.7
0923-545	UKS 2		276.003	-03.008	9.0	-7.9	-9.0	-0.5	11.9
1003+003	Pal 3	Sex C	240.142	+41.866	87.9	-41.4	-56.8	58.7	91.5
1015-461	NGC 3201		277.229	+08.641	5.0	-8.2	-4.9	0.7	9.5
1117-649	ESO 093-SC?08		293.508	-04.041	59.5	14.9	-54.4	-4.2	56.6
1126+292	Pal 4	UMa	202.293	+71.801	93.3	-35.8	-11.1	88.7	96.2
1207+188	NGC 4147		252.848	+77.189	17.3	-9.9	-3.7	16.8	19.9
1223-724	NGC 4372		300.995	-09.881	4.9	-6.3	-4.2	-0.8	7.6
1235-509	Rup 106		300.888	+11.670	26.7	4.6	-22.4	5.4	23.5
1236-264	NGC 4590	M 68	299.625	+36.051	9.6	-5.0	-6.7	5.6	10.1
1256-706	NGC 4833		303.604	-08.014	5.8	-5.6	-4.8	-0.8	7.4
1310+184	NGC 5024	M 53	332.965	+79.764	18.5	-5.9	-1.5	18.2	19.2
1313+179	NGC 5053		335.675	+78.946	15.8	-6.0	-1.3	15.5	16.7
1323-472	NGC 5139	ω Cen	309.100	+14.971	5.2	-5.6	-3.9	1.3	7.0
1339+286	NGC 5272		042.218	+78.707	10.4	-7.3	1.4	10.2	12.6
1343-511	NGC 5286		311.614	+10.568	9.7	-2.5	-7.1	1.8	7.7
1353-269	AM 4		320.280	+33.506	30.3	10.6	-16.2	16.7	25.6
1403+287	NGC 5466		042.137	+73.593	15.8	-5.5	3.0	15.2	16.4
1427-057	NGC 5634		342.210	+49.260	25.0	6.7	-5.0	18.9	20.7
1436-263	NGC 5694		331.056	+30.360	31.3	14.9	-13.1	15.8	25.4
1452-820	IC 4499		307.354	-20.473	18.0	1.5	-13.4	-6.3	14.9
1500-328	NGC 5824		332.555	+22.071	24.6	11.4	-10.5	9.2	18.0
1513+000	Pal 5	Ser	000.847	+45.853	21.4	6.1	0.2	15.4	16.5
1514-208	NGC 5897		342.948	+30.294	11.8	1.0	-3.0	6.0	6.7
1516+022	NGC 5904	M 5	003.860	+46.797	7.6	-3.6	0.4	5.6	6.6
1524-505	NGC 5927		326.605	+04.859	8.8	-1.5	-4.8	0.7	5.1
1531-504	NGC 5946		327.582	+04.192	9.2	-1.1	-4.9	0.7	5.1
1535-499	BH 176		328.417	+04.344	85.7	64.0	-44.7	6.5	78.3
1542-376	NGC 5986		337.028	+13.273	10.5	0.6	-4.0	2.4	4.7
1608+150	Pal 14	AvdB	028.755	+42.177	75.3	40.1	26.8	50.6	69.9
1614-228	NGC 6093	M 80	352.674	+19.462	8.0	-1.3	-1.0	2.7	3.1
1620-720	NGC 6101		317.751	-15.828	16.1	2.7	-10.4	-4.4	11.6
1620-264	NGC 6121	M 4	350.975	+15.974	2.1	-6.8	-0.3	0.6	6.8
1624-259	NGC 6144		351.929	+15.702	9.5	0.3	-1.3	2.6	2.9
1624-387	NGC 6139		342.365	+06.939	8.1	-1.2	-2.4	1.0	2.9
1625-352	Ter 3		345.083	+09.190	27.2	17.2	-6.9	4.4	19.0
1629-129	NGC 6171	M 107	003.371	+23.012	6.2	-3.1	0.3	2.4	3.9
1636-283	ESO 452-SC 11		351.912	+12.097	10.3	1.2	-1.4	2.2	2.8

TABLE IIa. DERIVED PARAMETERS OF GALACTIC GLOBULAR CLUSTERS

[m/H]	M_V	r_c	r_t	c_{der}	log T_r	log ρ_o	σ_o	v_{esc}	Number
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
-0.75	-9.63	0.52	60.3	2.08	7.870	5.024	13.15	56.8	0021-723
-1.39	-6.59	3.96	37.0	0.89	9.037	2.017	2.84	10.0	0050-268
-1.39	-8.37	0.52	25.9	1.71	7.774	4.829	10.29	41.8	0100-711
-1.17	-7.75	1.86	37.1	1.28	8.618	3.186	5.46	20.7	0310-554
-1.01	-2.54	0.63	19.9		7.097	2.373	0.74	2.9	0325+794
-2.15	-7.54	2.81	73.9		8.818	2.477	3.69	14.3	0344-718
-1.68	-4.49	9.54	81.2	0.93	9.270	-0.001	0.68	2.4	0354-498
-1.22	-4.94	6.19	85.5	1.14	8.997	0.584	0.90	3.3	0422-213
-2.01	-5.87	14.66	146.6		9.740	-0.064	0.98	3.5	0435-590
-1.68	-7.26	0.31	12.5	1.63	7.290	5.090	8.39	33.7	0443+313
-1.56	-7.38	7.85	94.4	1.08	9.548	1.292	2.54	9.3	0444-840
-1.25	-8.30	0.23	28.3	2.16	7.086	5.480	9.77	42.9	0512-400
-1.47	-7.79	0.66	40.5	1.89	7.786	4.160	6.06	25.3	0522-245
-2.06	-6.40	1.34	24.4	1.20	8.209	3.120	3.62	13.6	0647-359
-1.98	-9.58	11.08	284.8	1.38	10.053	1.528	4.86	18.8	0734+390
	-6.50	25.97	98.7		10.401	-0.087	1.38	4.6	0737-337
-1.47	-9.47	0.70	39.2	1.76	8.132	4.845	14.13	57.9	0911-646
-0.96	-4.20	4.48	25.2		8.803	1.049	0.99	3.4	0921-770
-0.37	-4.15	2.04	9.3		8.326	2.167	1.55	5.2	0923-545
-1.68	-5.96	11.96	109.1	0.96	9.634	0.269	1.17	4.2	1003+003
-1.60	-7.47	1.58	52.4	1.55	8.400	3.118	4.36	17.3	1015-461
	-6.90	1.07	75.5		7.974	3.198	3.26	13.5	1117-649
-1.30	-5.65	14.58	83.9		9.790	0.081	1.06	3.7	1126+292
-1.68	-6.03	0.65	36.4	1.80	7.529	3.536	2.91	12.0	1207+188
-1.77	-7.61	3.76	45.3	1.09	9.103	2.332	4.05	14.9	1223-724
	-7.00	7.42	89.2		9.451	1.216	2.20	8.1	1235-509
-1.85	-7.26	1.72	82.1	1.63	8.400	2.878	3.60	14.4	1236-264
-1.98	-7.82	1.95	33.8	1.13	8.696	3.249	6.05	22.4	1256-706
-1.89	-8.86	2.20	118.0	1.66	8.809	3.175	6.50	26.2	1310+184
-2.02	-6.09	11.31	63.6	0.77	9.690	0.577	1.47	5.1	1313+179
-1.60	-10.40	3.96	65.7	1.15	9.583	3.347	13.79	51.2	1323-472
-1.30	-9.16	1.26	117.4	1.89	8.428	3.856	8.19	34.3	1339+286
-1.60	-8.42	0.60	33.8	1.80	7.854	4.587	9.07	37.4	1343-511
-2.23	-1.70	3.43	35.1		8.196	0.152	0.30	1.1	1353-269
-1.85	-7.05	7.31	96.3	1.08	9.448	1.253	2.27	8.3	1403+287
-1.77	-7.77	1.71	55.2	1.45	8.520	3.200	5.14	20.1	1427-057
-1.89	-8.63	0.46	138.0	2.40	7.479	4.453	5.95	27.5	1436-263
-1.77	-7.63	6.61	83.2	1.06	9.482	1.630	3.15	11.5	1452-820
-1.98	-9.56	0.39	142.6	2.39	7.532	5.034	9.98	46.0	1500-328
-1.43	-5.00	17.97	113.4		9.808	-0.495	0.69	2.4	1513+000
-1.47	-7.01	4.43	39.5	1.19	9.087	1.818	2.67	10.0	1514-208
-1.60	-8.82	0.97	64.1	1.83	8.223	4.109	8.44	34.9	1516+022
-0.67	-8.08	1.23	35.4	1.46	8.352	3.745	6.93	27.1	1524-505
-1.34	-7.12	0.44	26.6	1.79	7.452	4.482	5.90	24.3	1531-504
	-8.00	11.13	153.6		9.860	1.044	2.74	10.1	1535-499
-1.72	-8.42	1.46	38.3	1.43	8.529	3.676	7.61	29.6	1542-376
-1.34	-4.80	16.62	102.5		9.730	-0.463	0.66	2.3	1608+150
-2.15	-7.89	0.24	21.7	2.04	7.105	5.360	8.99	38.6	1614-228
-1.68	-7.00	3.72	74.2	1.26	8.953	1.997	2.77	10.5	1620-720
-1.09	-6.99	0.75	26.5	1.53	7.839	3.912	5.14	20.3	1620-264
-1.81	-6.85	3.42	32.6	1.09	8.918	2.154	3.00	11.0	1624-259
-1.60	-7.99	0.52	29.5	1.58	7.756	4.742	9.40	37.5	1624-387
	-6.20	6.59	60.1		9.283	1.142	1.75	6.3	1625-352
-0.88	-6.93	1.31	41.5	1.34	8.244	3.272	4.28	16.4	1629-129
-1.01	-4.06	1.17	10.4		7.833	2.549	1.57	5.6	1636-283

TABLE IIa. (cont'd.)

Number	Name		ℓ	b	R_o	X	Y	Z	R_{GC}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1639+365	NGC 6205	M 13	059.006	+40.914	7.1	-6.0	4.6	4.6	8.9
1644-018	NGC 6218	M 12	015.715	+26.313	5.3	-4.2	1.3	2.4	5.0
1645+476	NGC 6229		073.638	+40.306	31.6	-2.0	23.1	20.5	30.9
1650-220	NGC 6235		358.918	+13.520	9.5	0.4	-0.2	2.2	2.3
1654-040	NGC 6254	M 10	015.138	+23.074	4.5	-4.8	1.1	1.8	5.3
1656-370	NGC 6256	Ter 12	347.791	+03.307	9.1	0.0	-1.9	0.5	2.0
1657-004	Pal 15		018.873	+24.293	69.7	51.3	20.5	28.7	62.3
1658-300	NGC 6266	M 62	353.575	+07.317	6.1	-2.8	-0.7	0.8	3.0
1659-262	NGC 6273	M 19	356.869	+09.381	10.6	1.7	-0.6	1.7	2.5
1701-246	NGC 6284		358.347	+09.939	10.3	1.3	-0.3	1.8	2.2
1702-226	NGC 6287		000.132	+11.023	7.2	-1.7	0.0	1.4	2.2
1707-265	NGC 6293		357.620	+07.834	7.7	-1.2	-0.3	1.0	1.6
1708-271	TJ 5		357.261	+07.283					
1711-294	NGC 6304		355.825	+05.374	6.0	-2.9	-0.4	0.6	2.9
1713-280	NGC 6316		357.175	+05.765	12.8	3.9	-0.6	1.3	4.2
1714-237	NGC 6325		000.973	+08.003	6.2	-2.7	0.1	0.9	2.8
1715-277	TJ 16	TBJ 2	357.713	+05.636					
1715-262	TJ 15		358.939	+06.468					
1715-278	TJ 17	TBJ 1	357.688	+05.564					
1715+432	NGC 6341	M 92	068.339	+34.858	7.7	-6.5	5.9	4.4	9.8
1716-184	NGC 6333	M 9	005.544	+10.705	7.5	-1.5	0.7	1.4	2.2
1718-195	NGC 6342		004.899	+09.725	11.6	2.6	1.0	2.0	3.4
1720-177	NGC 6356		006.723	+10.220	16.7	7.5	1.9	3.0	8.3
1720-263	NGC 6355		359.585	+05.428	7.1	-1.7	-0.1	0.7	1.8
1721-484	NGC 6352		341.421	-07.164	6.6	-2.6	-2.1	-0.8	3.4
1724-307	Ter 2	HP 3	356.320	+02.298	10.0	1.2	-0.6	0.4	1.4
1725-050	NGC 6366		018.411	+16.041	4.0	-5.1	1.2	1.1	5.4
1726-670	NGC 6362		325.555	-17.569	7.7	-2.7	-4.2	-2.3	5.5
1727-315	Ter 4	HP 4	356.024	+01.308	16.1	7.3	-1.1	0.4	7.4
1727-299	HP 1		357.423	+02.113	9.5	0.7	-0.4	0.4	0.9
1728-338	Gri 1		354.304	-00.151	11.8	2.9	-1.2	0.0	3.2
1730-333	Lil 1		354.841	-00.161	7.9	-0.9	-0.7	0.0	1.2
1731-390	NGC 6380	Ton 1	350.182	-03.414	4.0	-4.9	-0.7	-0.2	5.0
1732-304	Ter 1	HP 2	357.558	+00.992	10.6	1.8	-0.5	0.2	1.9
1732-447	NGC 6388		345.557	-06.738	13.5	4.2	-3.3	-1.6	5.6
1733-390	Ton 2	Pis 26	350.797	-03.419	8.7	-0.3	-1.4	-0.5	1.5
1735-032	NGC 6402	M 14	021.322	+14.803	10.2	0.4	3.6	2.6	4.5
1735-238	NGC 6401		003.451	+03.978	7.1	-1.7	0.4	0.5	1.8
1736-536	NGC 6397		338.165	-11.959	2.2	-6.8	-0.8	-0.5	6.9
1740-262	Pal 6		002.092	+01.779	5.9	-2.9	0.2	0.2	2.9
1741-328	TJ 23		356.676	-01.916					
1742+031	NGC 6426		028.088	+16.233	17.5	6.0	7.9	4.9	11.1
1745-247	Ter 5		003.838	+01.687	7.1	-1.7	0.5	0.2	1.8
1746-203	NGC 6440		007.729	+03.800	7.1	-1.8	0.9	0.5	2.1
1746-370	NGC 6441		353.532	-05.006	11.7	2.8	-1.3	-1.0	3.3
1748-346	NGC 6453		355.717	-03.873	10.7	1.9	-0.8	-0.7	2.1
1747-312	Ter 6	HP 5	358.572	-02.163	12.8	3.9	-0.3	-0.5	4.0
1751-241	UKS 1		005.125	+00.764	10.4	1.5	0.9	0.1	1.8
1755-442	NGC 6496		348.026	-10.012	6.3	-2.8	-1.3	-1.1	3.2
1758-268	Ter 9		003.603	-01.988	7.0	-1.8	0.4	-0.2	1.9
1759-089	NGC 6517		019.225	+06.762	6.1	-3.1	2.0	0.7	3.8
1800-260	Ter 10		004.421	-01.864	14.6	5.8	1.1	-0.5	5.9
1800-300	NGC 6522		001.026	-03.929	6.6	-2.3	0.1	-0.4	2.3
1801-003	NGC 6535		027.176	+10.435	6.9	-2.8	3.1	1.2	4.3
1801-300	NGC 6528		001.138	-04.175	6.8	-2.0	0.1	-0.5	2.1

TABLE IIa. (cont'd.)

[m/H] (11)	M_V (12)	r_c (13)	r_t (14)	c_{der} (15)	log T_r (16)	log ρ_o (17)	σ_o (18)	v_{esc} (19)	Number (20)
-1.60	-8.67	1.72	55.5	1.44	8.672	3.556	7.79	30.4	1639+365
-1.89	-7.53	1.82	28.1	1.21	8.584	3.173	5.22	19.6	1644-018
-1.39	-8.14	1.60	51.7	1.51	8.524	3.398	6.07	23.9	1645+476
-1.60	-6.11	0.73	21.9	1.53	7.685	3.603	3.49	13.8	1650-220
-1.51	-7.50	0.92	31.2	1.66	8.023	3.765	5.37	21.6	1654-040
-1.56	-6.31	1.00	17.8	1.39	7.957	3.343	3.55	13.8	1656-370
-1.26	-5.40	27.35	108.9		10.245	-0.625	0.79	2.6	1657-004
-1.26	-8.67	0.43	18.4	1.67	7.716	5.209	13.29	53.7	1658-300
-2.40	-9.62	1.55	53.8	1.49	8.752	4.042	12.36	48.5	1659-262
-1.34	-7.10	0.48	29.8	1.77	7.511	4.364	5.64	23.1	1701-246
-1.72	-6.61	0.69	20.0	1.53	7.733	3.860	4.49	17.8	1702-226
-1.85	-7.39	0.37	32.9	1.95	7.328	4.695	6.33	26.7	1707-265
									1708-271
-0.54	-7.19	0.46	21.9	1.75	7.496	4.488	6.15	25.2	1711-294
-0.62	-8.45	0.65	53.8	1.98	7.850	4.365	7.58	32.2	1713-280
-2.02	-6.14	0.44	17.9	1.53	7.362	4.262	4.53	17.9	1714-237
									1715-277
									1715-262
≤-0.07									1715-278
-1.89	-8.11	0.69	37.2	1.65	7.938	4.381	8.22	33.1	1715+432
-1.77	-7.88	0.91	33.7	1.42	8.136	4.087	7.59	29.5	1716-184
-0.75	-6.96	0.45	29.5	2.00	7.370	4.242	4.53	19.3	1718-195
-1.17	-8.89	1.43	55.7	1.51	8.573	3.838	9.02	35.6	1720-177
-1.34	-6.92	0.39	15.7	1.94	7.302	4.429	4.98	21.0	1720-263
-0.07	-6.42	1.30	23.1	1.44	8.134	3.021	3.19	12.4	1721-484
-0.54	-4.91	0.31	9.0		6.973	4.261	3.20	12.5	1724-307
-0.71	-6.22	2.56	23.3	0.94	8.678	2.402	2.89	10.3	1725-050
-0.71	-7.18	3.57	37.4	0.83	9.089	2.454	4.13	14.4	1726-670
-0.29	-5.00	≤0.47	7.8		≤7.306	≥3.915	≥3.18	≥11.9	1727-315
-1.68	-6.91	0.58	12.9		7.703	4.329	6.35	24.4	1727-299
	-7.94	1.84	29.9	1.21	8.659	3.313	6.23	23.4	1728-338
-0.29	-7.96	0.14	7.6	2.06	6.726	6.139	12.23	52.6	1730-333
-1.30	-6.28	0.40	6.5	1.21	7.398	4.649	6.27	23.5	1731-390
+0.10	-4.10	0.30	12.0		6.804	3.891	2.04	8.1	1732-304
-0.62	-9.91	0.58	32.6	1.75	8.089	5.268	19.13	78.2	1732-447
	-5.36	1.83	12.9		8.354	2.577	2.45	8.6	1733-390
-2.19	-9.33	2.36	29.7	1.30	9.025	3.496	9.91	37.8	1735-032
-1.01	-7.25	0.49	27.4	1.93	7.492	4.297	5.27	22.2	1735-238
-2.02	-6.55	0.50	24.7	1.63	7.484	4.198	4.79	19.2	1736-536
+0.22	-6.95	1.16	12.8		8.246	3.635	5.56	20.3	1740-262
									1741-328
-1.94	-6.27	1.81	37.8	1.59	8.288	2.435	2.27	9.1	1742+031
-0.71	-7.25	0.10	8.4		6.454	6.380	11.76	49.4	1745-247
-0.54	-8.75	0.24	24.7	2.08	7.206	5.708	13.01	56.2	1746-203
-0.07	-9.31	0.47	25.9	1.89	7.814	5.200	14.41	60.2	1746-370
-1.51	-7.32	0.51	15.6	1.61	7.616	4.504	6.88	27.6	1748-346
	-6.35	0.31	5.6		7.229	4.977	7.11	26.9	1747-312
-1.22	-7.61	0.66	17.7		7.881	4.387	7.79	30.3	1751-241
-0.71	-5.82	3.23	18.2	0.72	8.854	2.156	2.52	8.6	1755-442
-0.45	-3.70	0.25	5.5		6.682	4.137	2.21	8.5	1758-268
-1.47	-7.10	0.18	18.5	2.06	6.778	5.416	7.10	30.6	1759-089
	-6.40	0.49	6.4		7.573	4.490	6.33	23.4	1800-260
-1.56	-7.30	0.34	19.1	1.69	7.333	4.965	7.88	31.9	1800-300
-1.56	-4.77	0.40	20.1	1.84	7.022	3.629	2.01	8.3	1801-003
-0.96	-6.64	0.26	9.3	1.81	7.012	4.984	6.08	25.1	1801-300

TABLE IIa. (cont'd.)

Number	Name		ℓ	b	R_o	X	Y	Z	R_{GC}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1802-075	NGC 6539		020.795	+06.775	3.1	-5.9	1.1	0.4	6.0
1804-250	NGC 6544		005.837	-02.201	2.6	-6.2	0.3	-0.1	6.2
1804-437	NGC 6541		349.286	-11.189	7.0	-2.1	-1.3	-1.4	2.8
1806-259	NGC 6553		005.253	-03.029	5.7	-3.1	0.5	-0.3	3.2
1807-317	NGC 6558		000.200	-06.024	8.8	0.0	0.0	-0.9	0.9
1808-072	IC 1276	Pal 7	021.832	+05.666	9.8	0.3	3.6	1.0	3.8
1809-227	Ter 11		008.357	-02.100	23.7	14.7	3.4	-0.9	15.1
1810-318	NGC 6569		000.481	-06.681	8.9	0.0	0.1	-1.0	1.0
1812-121	Kod 1		018.072	+02.415					
1814-522	NGC 6584		342.144	-16.413	15.0	4.9	-4.4	-4.2	7.8
1820-303	NGC 6624		002.788	-07.913	8.0	-0.9	0.4	-1.1	1.5
1821-249	NGC 6626		007.799	-05.580	5.8	-3.1	0.8	-0.6	3.2
1827-255	NGC 6638		007.897	-07.153	6.7	-2.2	0.9	-0.8	2.5
1828-323	NGC 6637	M 69	001.722	-10.269	10.3	1.3	0.3	-1.8	2.3
1828-235	NGC 6642		009.814	-06.439	5.5	-3.4	0.9	-0.6	3.6
1832-330	NGC 6652		001.535	-11.377	14.3	5.2	0.4	-2.8	6.0
1833-239	NGC 6656		009.890	-07.552	3.1	-5.7	0.5	-0.4	5.8
1838-198	Pal 8		014.103	-06.797	28.1	18.3	6.8	-3.3	19.8
1840-323	NGC 6681	M 70	002.853	-12.510	9.3	0.3	0.5	-2.0	2.1
1850-087	NGC 6712		025.353	-04.318	6.2	-3.2	2.7	-0.5	4.2
1851-305	NGC 6715	M 54	005.607	-14.088	21.5	12.0	2.0	-5.2	13.2
1852-227	NGC 6717	Pal 9	012.876	-10.901	7.8	-1.3	1.7	-1.5	2.6
1856-367	NGC 6723		000.072	-17.298	9.2	0.0	0.0	-2.7	2.7
1902+017	NGC 6749		036.201	-02.204	12.8	1.5	7.5	-0.5	7.7
1906-600	NGC 6752		336.495	-25.628	4.1	-5.4	-1.5	-1.8	5.9
1908+009	NGC 6760		036.108	-03.924	4.1	-5.5	2.4	-0.3	6.0
1914-347	Ter 7		003.387	-20.063	36.4	25.4	2.0	-12.5	28.4
1914+300	NGC 6779		062.659	+08.336	9.8	-4.3	8.6	1.4	9.8
1916+184	Pal 10		052.437	+02.726	10.6	-2.4	8.4	0.5	8.7
1925-304	Arp 2		008.543	-20.787	28.3	17.4	3.9	-10.0	20.4
1936-310	NGC 6809	M 55	008.798	-23.272	5.1	-4.2	0.7	-2.0	4.7
1938-341	Ter 8		005.758	-24.558	48.2	34.8	4.4	-20.0	40.4
1942-081	Pal 11		031.806	-15.577	13.8	2.5	7.0	-3.7	8.3
1951+186	NGC 6838	M 71	056.742	-04.562	4.4	-6.4	3.7	-0.3	7.4
2003-220	NGC 6864	M 75	020.304	-25.748	18.5	6.8	5.8	-8.0	12.0
2031+072	NGC 6934		052.105	-18.894	14.9	-0.1	11.1	-4.8	12.1
2050-127	NGC 6981	M 72	035.163	-32.683	17.0	2.9	8.2	-9.2	12.7
2059+160	NGC 7006		063.769	-19.407	39.1	7.5	33.1	-13.0	36.3
2127+119	NGC 7078	M 15	065.013	-27.313	9.7	-5.1	7.8	-4.5	10.4
2130-010	NGC 7089	M 2	053.371	-35.770	11.9	-3.0	7.8	-7.0	10.9
2137-234	NGC 7099	M 30	027.179	-46.835	7.2	-4.4	2.3	-5.3	7.2
2143-214	Pal 12	Cap	030.510	-47.680	19.4	2.4	6.6	-14.3	16.0
2304+124	Pal 13	Peg	087.104	-42.699	24.4	-7.9	17.9	-16.6	25.7
2305-159	NGC 7492		053.392	-63.479	19.1	-3.7	6.8	-17.0	18.7

TABLE IIa. (cont'd.)

[m/H] (11)	M_V (12)	r_c (13)	r_t (14)	c_{der} (15)	log T_r (16)	log ρ_o (17)	σ_o (18)	v_{esc} (19)	Number (20)
-1.05	-6.23	0.48	12.0	1.53	7.430	4.189	4.52	17.9	1802-075
-2.15	-6.33	0.35	8.8	1.44	7.269	4.688	5.89	22.9	1804-250
-2.02	-8.52	0.57	64.1	1.97	7.786	4.567	8.45	35.8	1804-437
-0.41	-8.29	1.13	17.4	1.04	8.445	4.218	10.52	38.3	1806-259
-1.51	-6.28	0.40	16.2	1.68	7.279	4.356	4.57	18.5	1807-317
-0.84	-7.56	3.59	35.9		9.094	2.449	4.34	15.7	1808-072
	-5.50	1.35	13.8		8.124	2.892	2.72	9.8	1809-227
-1.01	-7.79	0.89	18.3	1.46	8.102	4.043	7.13	27.9	1810-318
									1812-121
-1.56	-7.57	1.74	38.0	1.34	8.528	3.164	5.00	19.2	1814-522
-0.84	-7.46	0.20	26.8	2.15	6.880	5.323	7.19	31.5	1820-303
-1.81	-8.17	0.64	25.5	1.37	7.967	4.681	10.60	40.9	1821-249
-0.92	-6.27	0.46	11.5	1.29	7.466	4.411	5.52	21.0	1827-255
-0.92	-8.04	0.99	31.3	1.52	8.192	3.976	7.31	28.9	1828-323
-1.30	-5.54	0.12	12.8	2.15	6.247	5.244	3.86	16.9	1828-235
-0.92	-7.34	0.63	32.3	1.70	7.742	4.168	5.86	23.7	1832-330
-1.81	-8.53	1.10	30.2	1.59	8.319	3.991	8.27	33.0	1833-239
-0.50	-7.15	3.25	18.3	0.80	9.035	2.587	4.34	15.1	1838-198
-0.92	-7.05	0.25	29.6	2.19	6.941	4.833	5.08	22.4	1840-323
-1.26	-7.34	1.23	19.9	1.16	8.310	3.641	6.00	22.3	1850-087
-1.85	-9.54	0.65	46.4	1.86	8.073	4.880	13.85	57.6	1851-305
-2.19	-5.92	0.13	18.0	2.28	6.308	5.134	3.72	16.8	1852-227
-1.09	-7.71	2.22	33.6	1.05	8.789	3.091	5.69	20.7	1856-367
-0.37	-6.16	1.78	10.0	0.73	8.511	3.058	3.94	13.5	1902+017
-1.64	-7.72	0.59	36.5	1.59	7.789	4.475	7.79	31.1	1906-600
-0.84	-6.82	0.53	14.5	1.51	7.590	4.319	5.77	22.7	1908+009
	-6.00	3.85	36.8		8.895	1.746	2.06	7.4	1914-347
-2.32	-7.34	1.25	34.3	1.59	8.214	3.351	4.50	18.0	1914+300
	-5.58	0.99	17.3		7.877	3.157	2.81	10.6	1916+184
-1.85	-5.31	16.42	46.3		10.004	0.269	1.13	3.7	1925-304
-1.56	-7.44	2.59	27.7	1.27	8.784	2.637	4.03	15.3	1936-310
	-6.40	10.89	122.2		9.614	0.497	1.41	5.1	1938-341
-0.92	-6.98	5.27	29.7	0.75	9.344	1.947	3.29	11.3	1942-081
-0.45	-5.82	1.06	17.6	1.13	7.986	3.242	3.27	12.1	1951+186
-1.68	-8.32	0.51	32.5	1.82	7.731	4.739	9.24	38.2	2003-220
-1.30	-7.50	0.89	38.7	1.70	7.989	3.790	5.32	21.6	2031+072
-1.56	-6.93	1.80	43.1	1.53	8.401	2.744	3.22	12.7	2050-127
-1.72	-7.66	2.02	71.7	1.49	8.604	2.908	4.37	17.2	2059+160
-2.06	-9.24	0.26	59.1	2.54	7.133	5.263	8.55	40.9	2127+119
-1.81	-9.09	1.18	56.4	1.77	8.408	4.001	9.04	37.1	2130-010
-2.19	-7.17	0.16	33.4	2.40	6.554	5.260	5.15	23.8	2137-234
-1.13	-4.79	2.70	60.4	1.50	8.350	1.380	1.00	4.0	2143-214
-0.96	-3.30	2.70	27.0	0.90	8.285	1.196	0.75	2.7	2304+124
-1.81	-4.97	4.51	42.0	1.06	8.815	1.065	1.12	4.1	2305-159

https://doi.org/10.1017/S0074180900147771 Published online by Cambridge University Press

TABLE IIb. DERIVED PARAMETERS OF GALACTIC DWARF SPHEROIDALS

Number	Name		ℓ	b	R_o	X	Y	Z	R_{GC}
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0057-340	Scl		287.685	-83.133	78.	-6.	-9.	-78.	78.
0237-347	For		237.294	-65.654	145.	-41.	-50.	-132.	147.
0640-509	Car		260.113	-22.223	92.	-23.	-84.	-35.	94.
1005+126	Leo I	DDO 74	225.980	+49.109	212.	-105.	-100.	161.	217.
1110+224	Leo II	DDO 93	220.143	+67.236	231.	-77.	-58.	213.	234.
1508+674	UMi	DDO 199	104.969	+44.843	69.	-22.	48.	49.	72.
1719+580	Dra	DDO 208	086.363	+34.746	75.	-5.	61.	43.	75.

TABLE IIc. DERIVED PARAMETERS OF THE FORNAX GLOBULAR CLUSTERS

Number	Name		ℓ	b	ρ	θ	X	Y	R_F
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0235-344	For 1		236.724	-66.298	41.1	299.5	-343.	1694.	1729.
0236-350	For 2		238.082	-65.838	22.4	220.1	-941.	-15.	941.
0237-345	For 3	NGC 1049	236.660	-65.721	16.2	355.3	475.	486.	679.
0238-348	For 4		237.303	-65.609	3.2	104.7	59.	-119.	133.
0240-343	For 5		236.089	-65.226	39.5	50.0	1641.	-260.	1662.
0238-346	For 6		237.021	-65.629	6.4	29.3	264.	55.	270.

https://doi.org/10.1017/S0074180900147771 Published online by Cambridge University Press

TABLE IIb. DERIVED PARAMETERS OF GALACTIC DWARF SPHEROIDALS

[m/H]	M_V	r_c	r_t	c_{der}	log T_r	log ρ_o	σ_o	v_{esc}	Number
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
-1.68	-11.40	232.	1309.	0.91	12.346	-1.098	3.74	13.3	0057-340
-1.43	-12.39	529.	2420.	0.55	13.248	-1.323	5.28	17.4	0237-347
-1.77	-9.18	256.	1255.	0.94	12.039	-2.176	1.24	4.4	0640-509
	-11.24	270.	796.		12.690	-0.801	4.62	15.1	1005+126
-1.43	-9.67	154.	672.	0.63	12.055	-1.203	2.34	7.8	1110+224
-2.02	-8.71	266.	945.		12.044	-1.665	1.49	4.9	1508+674
-1.68	-8.69	203.	756.		11.999	-1.656	1.48	4.9	1719+580

TABLE IIc. DERIVED PARAMETERS OF THE FORNAX GLOBULAR CLUSTERS

[m/H]	M_V	r_c	r_t	c_{der}	log T_r	log ρ_o	σ_o	v_{esc}	Number
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
-2.19	-5.23	10.09	63.6	0.71	9.508	0.454	1.10	3.7	0235-344
-1.77	-7.30	6.08	80.1	1.08	9.370	1.598	2.80	10.3	0236-350
-1.85	-8.19	0.99	66.6	1.83	8.132	3.836	6.26	25.9	0237-345
-1.43	-7.23	0.68	46.1	1.82	7.742	3.936	4.86	20.1	0238-348
-1.81	-7.38	2.91	52.9	1.26	8.854	2.469	3.73	14.1	0240-343
-1.98	-6.46	2.98	24.2		8.824	2.324	3.05	10.8	0238-346