The Astronomical Journal, 127:1811–1859, 2004 April


# A CATALOG OF COMPACT GROUPS OF GALAXIES IN THE SDSS COMMISSIONING DATA

Brian C. Lee,[1] Sahar S. Allam,[2,3] Douglas L. Tucker,[2] James Annis,[2] David E. Johnston,[2,4] Ryan Scranton,[4,5] Yamina Acebo,[2,6] Neta A. Bahcall,[7] Matthias Bartelmann,[8] Hans Böhringer,[9] Nancy Ellman,[10] Eva K. Grebel,[11] Leopoldo Infante,[7,12] Jon Loveday,[13] Timothy A. McKay,[6] Francisco Prada,[11] Donald P. Schneider,[14] Chris Stoughton,[2] Alexander S. Szalay,[15] Michael S. Vogeley,[16] Wolfgang Voges,[9] and Brian Yanny[2]
*Received 2003 April 18; accepted 2003 December 19*

## ABSTRACT

Compact groups (CGs) of galaxies—relatively poor groups of galaxies in which the typical separations between members is of the order of a galaxy diameter—offer an exceptional laboratory for the study of dense galactic environments with short (<1 Gyr) dynamical timescales. We present an objectively defined catalog of CGs in 153 deg$^2$ of the Sloan Digital Sky Survey (SDSS) Early Data Release. To identify CGs, we applied a modified version of Hickson's criteria of 1982 aimed at finding the highest-density CGs and thus reducing the number of chance alignments. Our catalog contains 175 CGs down to a limiting galaxy magnitude of $r^* = 21$. The resulting catalog has a median depth of $z_{\rm med} \approx 0.13$, substantially deeper than previous CG catalogs. Since the SDSS will eventually image up to one-quarter of the celestial sphere, we expect our final catalog, based on the completed SDSS, will contain on the order of 5000–10,000 CGs. This catalog will be useful for conducting studies of the general characteristics of CGs, their environments, and their component galaxies.

*Key words:* atlases — catalogs — surveys

## 1. INTRODUCTION

Perhaps more than half of all galaxies lie within groups containing three to 20 members (Tully 1987); yet, because of the difficulty of discerning them from the field, groups of galaxies are as a whole not as well studied as larger galaxy systems. Compact groups (CGs) of galaxies, however, defined by their small number of members (less than 10), their compactness (typical intragroup separations of a galaxy diameter or less), and their relative isolation (intragroup separations much less than group-field separations) are readily identifiable. Studies of CGs mainly concentrate on two issues: (1) What is the origin and relative importance of CGs in the universe? (2) Is there a relation between the global properties of these systems and the formation and evolution of their member galaxies? The possibility that these two issues are connected makes CGs particularly interesting (see the review by Hickson 1997).

The first example of a CG was found more than a hundred years ago by Stephan (1877). The best known catalog is that of the Hickson Compact Groups (HCGs; Hickson 1982, 1993), a sample comprising 100 groups selected from the red (E) prints of the Palomar Observatory Sky Survey (POSS). Other catalogs now available include an initial Digitized Palomar Observatory Sky Survey (DPOSS) CG catalog (Iovino et al. 2003), the Southern CG catalog (Iovino 2002; Prandoni et al. 1994), and those extracted from the three-dimensional UZC galaxy catalog (Focardi & Kelm 2002) and from the CfA2 (Barton et al. 1996) and Las Campanas (Allam & Tucker 2000) redshift surveys.

Because of their high densities (equivalent to those at the centers of rich clusters) and low velocity dispersions (roughly 200 km s$^{-1}$), CGs represent an environment where interactions, tidally triggered activity, and galaxy mergers are expected to be more prevalent than in most other environments. Studies of interacting galaxy pairs, both in the infrared and ultraviolet, suggest that interactions can trigger an inflow of gas to the galactic nucleus, resulting in either starburst or AGN activity. Although individual CGs are known to contain starbursts and AGNs (Menon 1995; Ribeiro et al. 1996), samples of CG galaxies as a whole do not appear to show rates of either activity enhanced beyond that of the field (Pildis et al. 1995; Allam et al. 1996; Allam 1998; Allam et al. 1999).

Some calculations have predicted extremely short dynamical lifetimes for CGs, $t_{\rm dyn} < 1$ Gyr, leading to speculation that many or most CGs may in fact be chance alignments

[1] Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, CA 94720-8160.
[2] Fermi National Accelerator Laboratory, P.O. Box 500, Batavia, IL 60510.
[3] Department of Astronomy, New Mexico State University, 1320 Frenger Mall, Las Cruces, NM 88003-8001.
[4] Department of Astronomy and Astrophysics, University of Chicago, 5640 South Ellis Avenue, Chicago, IL 60637.
[5] Department of Physics and Astronomy, University of Pittsburgh, 3941 O'Hara Street, Pittsburgh, PA 15260.
[6] Department of Physics, University of Michigan, 500 East University Avenue, Ann Arbor, MI 48109-1120.
[7] Princeton University Observatory, Peyton Hall, Princeton, NJ 08544.
[8] Max-Planck-Institut für Astrophysik, Postfach 1317, D-85741 Garching, Germany.
[9] Max-Planck-Institut für extraterrestrische Physik, Postfach 1312, D-85741 Garching, Germany.
[10] Department of Physics, Yale University, P.O. Box 208121, New Haven, CT 06520.
[11] Max-Planck-Institut für Astronomie, Königstuhl 17, D-69117 Heidelberg, Germany.
[12] Departamento de Astronomía y Astrofísica, Facultad de Física, Pontificia Universidad Católica de Chile, Casilla 306, Santiago 22, Chile.
[13] Astronomy Centre, University of Sussex, Falmer, Brighton BN1 9QJ, UK.
[14] Department of Astronomy and Astrophysics, 525 Davey Laboratory, Pennsylvania State University, University Park, PA 16802.
[15] Department of Physics and Astronomy, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218-2686.
[16] Department of Physics, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104.

instead of real structures (Mamon 1986). However, evidence of interactions and the discovery of diffuse intragroup X-ray gas within perhaps as many as 75% of the HCGs (Bahcall, Harris, & Rood 1984; Ponman & Bertram 1993; Ebeling, Voges, & Bohringer 1994; Saracco & Ciliegi 1995; Sulentic, Pietsch, & Arp 1995; Ponman, Bourner, & Ebeling 1996; Hickson 1997; Mulchaey 2000) attest to their physical reality.

*N*-body simulations have pointed out two possible classes of solution to the short dynamical time problem. The first is that there is ongoing formation of CGs, and the longevity of the group is due to secondary infall. In this case CGs must be continually forming in moderately dense environments like those of loose groups, and in fact many are seen to be embedded in such systems (Ramella, Geller, & Huchra 1989; Ramella et al. 1994; Barton et al. 1996; Diaferio, Geller, & Ramella 1994, 1995; de Carvalho et al. 1997; Coziol et al. 1998; Ribeiro et al. 1998; Tovmassian et al. 2001, 2002).

In the second class of solution the longevity of CGs is due to either their specific initial conditions or a massive halo encompassing the entire group (Athanassoula 2000). Athanassoula et al. (1997) have shown that CGs with an appropriate arrangement of luminous and dark matter can persist for $\sim$25 Gyr; that massive common dark matter halos around CGs might indeed exist is not inconsistent with the analysis of the dynamics of satellite galaxies within individual CGs (Perea et al. 2000).

Thus, CGs have sparked intense interest, both in their formation and evolutionary histories and in the interaction phenomena associated with these dense environments. Our difficulties in understanding the existence of CGs and their dynamics may be a consequence of the small samples studied so far. Further progress will require a larger, deeper, and more uniform samples of CGs with which to study their nature, evolution, and origin. The Sloan Digital Sky Survey (SDSS, York et al. 2000), which will eventually cover up to one-quarter of the sky with uniform photometry in five filters, makes for an obvious CG hunting ground.

We have thus embarked on a project to extract an objectively defined catalog of CGs from the SDSS (Lee, Tucker, & Allam 2001a; Lee, Tucker, & Brinkmann 2001b), starting with runs 752 and 756 of the SDSS Early Data Release (EDR, Stoughton et al. 2002). We present this initial catalog as follows. In § 2 we describe the region of the sky used for this preliminary search. In § 3 we describe our CG catalog construction techniques. In § 4 we present the catalog and an atlas of corresponding postage-stamp images for the individual groups. In § 5 we compare the properties of this catalog with those of previous CG catalogs. In § 6 we compare the properties of SDSS CG member galaxies with the properties of SDSS field galaxies. In § 7 we conclude and describe our future plans. Throughout the paper a flat $\Lambda$ cosmological model with $\Omega_M = 0.3$, $\Omega_\Lambda = 0.7$, and $H_0 = 100h$ km s$^{-1}$ Mpc$^{-1}$ is assumed.

## 2. THE DATA

The SDSS has as its goal to image up to 10,000 deg$^2$ ($\pi$ sr) of the northern Galactic cap in five different filters ($u$, $g$, $r$, $i$, $z$) and to perform follow-up spectroscopy of $10^6$ galaxies and $10^5$ quasars selected from the imaging survey. The survey will be complete (S:N $\sim$ 5:1) to limiting *ugriz* magnitudes of roughly 22.3, 23.3, 23.1, 22.3, and 20.8, respectively. An additional three stripes in the southern Galactic cap will be observed repeatedly for variability studies and will reach a co-added depth of $g \sim 25$.

While the SDSS was originally planned to be on the $u'g'r'i'z'$ system of Fukugita et al. (1996), the delivered filters do not perfectly conform to this system. The photometric calibration system for SDSS (called *ugriz*) had only been finalized as of the recent Data Release 1 (DR1, Abazajian et al. 2003), so the preliminary magnitudes as presented in this paper, which are based on a pre-DR1 calibration, will be denoted as $u$*, $g$*, $r$*, $i$*, and $z$* (for more details, see Stoughton et al. 2002). The system used in this paper should differ absolutely from the final (*ugriz*) SDSS photometric system by only a few percent. (See Fukugita et al. 1996, Gunn et al. 1998, York et al. 2000, Hogg et al. 2001, Lupton et al. 2001, Smith et al. 2002, Stoughton et al. 2002, Blanton et al. 2003a, and Pier et al. 2003 for further details about the photometric and spectroscopic surveys.)

The base galaxy catalog for the present study was generated from the spring equatorial scan subset of the SDSS EDR data (Stoughton et al. 2002). Instead of using the star-galaxy classifications from the standard SDSS imaging pipeline (PHOTO), however, we chose to use the more robust classifications measured by the code of Scranton et al. (2002). Galaxies were separated from stars using a Bayesian method that combines the automated classifications from the photometric pipelines with a correction for variations in seeing and assigns a probability for each object being a galaxy (Scranton et al. 2002). The accurate astrometry (Pier et al. 2003) combined with color and morphological information derived from the SDSS digital images (Lupton et al. 2001) allows for robust star-galaxy separation to a limiting magnitude of $\sim$22 (with 1."75 or better seeing). Very few objects have an uncertain star-galaxy probability (near 50%); thus, we have simply cut at 50%. This method suffers less at the faint end from stellar contamination than does the standard SDSS EDR star-galaxy separation. Our earliest CG catalogs using pre-EDR versions of the SDSS outputs had stellar contamination (a star identified as a galaxy) in as many as 25% of the selected CGs. Using the Scranton et al. (2002) catalog and cutting at a galaxy likelihood of 50%, our catalogs now have at worst 5% stellar contamination.

This star-galaxy separation breaks down for small, faint galaxies, and routines used for this initial study do not measure bright or large galaxies well. The combination limits the present study to galaxies within the $r$* magnitude range of 14.0–21.0 (which limits the brightest CG member to $r$* between 14.0 and 18.0; see § 3), excluding much of the HCG catalog but still providing some overlap.

The data presented here are from runs 752 and 756 (a $\sim$2.°5 wide stripe from $\alpha = 145°$ to $236°$ centered on $\delta = 0°$), which were observed on the nights of 1999 March 20 and 22. Galaxies from the entire $\sim$230 deg$^2$ region were used for checking the isolation criteria described in § 3; however, to obtain the least stellar contamination of the galaxy sample, only CGs observed in frames with seeing $\leq$1."6 were retained for the catalog, yielding an effective area on the sky for our base sample of 153 deg$^2$ (see Fig. 1).

Finally, we note that the Scranton et al. (2002) galaxy catalog was based on an earlier processing ("rerun") of the imaging data reductions than is presented in the final SDSS EDR. As a result, $u$*$g$*$r$*$i$*$z$* magnitudes may differ slightly from the values obtained by a direct query of the SDSS EDR database. Similarly, although each object's run, camera column, and field identification numbers will remain the same,

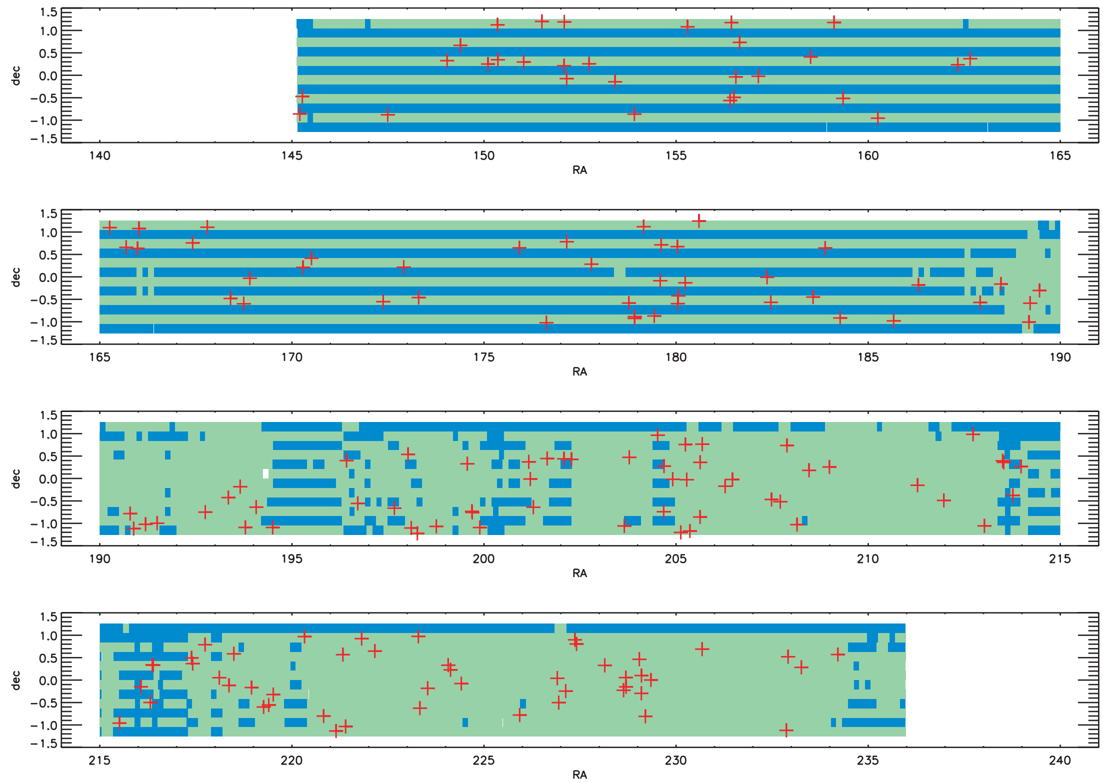


FIG. 1.—The 230 deg$^2$ area on the sky used for the present study, from the Scranton et al. (2002) catalog of runs 752 and 756. Green (*light*) blocks are individual fields for which the seeing is $\leq 1''.6$ (153 deg$^2$ total); blue (*dark*) blocks are fields for which the seeing is greater than $1''.6$. Galaxies in these fields were used to test isolation, but compact groups with member galaxies in these fields have been excluded from our catalog. Red crosses denote the locations of the 175 CGs extracted from this area.

the object identification number within the field will likely differ from the value provided by the SDSS EDR database.

## 3. CATALOG CONSTRUCTION

Hickson's (1982) criteria for extracting compact groups from the POSS red (E) prints include the following:

1. $N \geq 4$ (population),
2. $\theta_N \geq 3\theta_G$ (isolation), and
3. $\mu_G < 26.0$ mag arcsec$^{-2}$ (compactness),

where

1. $N$ is the total number of galaxies within 3 mag of the brightest group member,
2. $\mu_G$ is the total magnitude of these galaxies per square arcsecond averaged over the smallest circle containing their geometric centers (note that using a mean surface brightness yields, to first order, a distance-independent measure of compactness),
3. $\theta_G$ is the angular diameter of this smallest circle, and
4. $\theta_N$ is the angular diameter of the largest concentric circle that contains no other (external) galaxies within this magnitude range or brighter.

Searching the POSS prints, which cover 67% of the celestial sphere, by eye, Hickson found 100 CGs; the median redshift of this sample is $z_{\rm med} = 0.03$.

To select our SDSS CGs we use computer code embodying a slightly modified Hickson criteria to extract a CG catalog from this galaxy catalog:

1. $14.0 \leq r^* \leq 21.0$,
2. $10 \geq N \geq 4$,
3. $\theta_N > 3\theta_G$, and
4. $\mu_G < 24.0$ mag arcsec$^{-2}$ (in SDSS $r^*$ band),

where $r^*$ is the SDSS $r$-band *model* magnitude, which tends to be more robust than the SDSS $r$-band *Petrosian* magnitude for galaxies fainter than $r^* \sim 18$ (see Stoughton et al. 2002 for definitions of the various SDSS magnitudes).

Three changes were made from the Hickson criteria. The first merely added an upper limit of $N \leq 10$ to the number of members in a CG. This additional limit was added to constrain the run time of the group-finding algorithm, which is basically an $n^2$ process. Since the most populous group in our catalog contains only $N = 7$ members, this was (intentionally) not a very restrictive constraint. The second modification simply requires that $\theta_N$ is strictly greater than $3\theta_G$, instead of greater than or equal to; this change simplified the coding of the algorithm that identifies isolated groups and finds the smallest enclosing circle.

The third, the change from $\mu_G < 26.0$ to $\mu_G < 24.0$ mag arcsec$^{-2}$, resulted from tests suggested by A. Iovino (2000, private communication; see also Iovino 2001, 2002; Iovino et al. 2003) to reduce the rate of false CG detection. Following the approach described by Iovino 2002 and Iovino et al. 2003, we estimated the number of nonreal CGs produced through random alignments as a function of $\mu_G$ and compared it with the number of CGs found in the original SDSS catalog. Using a subset of our galaxy catalog, we generated a randomized galaxy catalog by assigning to each galaxy a right ascension and declination drawn at random from within the area of the subset; a value for the seeing at this random position was taken to be that for the nearest galaxy to this position in the real catalog. The compact group finding code was then run on this randomized galaxy catalog to generate a list of false CGs produced by projection effects, and this fake CG catalog was compared with the portion of our real CG catalog from the same region. Figure 2*a* shows the histogram of surface brightness for CGs in each catalog. The ratio of random to real CGs is ≈4% when restricting the search to CGs with $\mu_G < 24.0$, while the ratio increases to 55% within $24.0 < \mu_G \leq 25.0$ and 80% within $25.0 < \mu_G \leq 26.0$. From this plot it is clear that cutting at $\mu_G < 24$ leaves a much more clean (and compact) catalog. In Figure 2*b* we show a histogram of the difference in magnitude between the dimmest and brightest group member ($\Delta r^*$), where the maximum allowed by the Hickson criteria is 3. In contrast with Iovino et al. (2003), for our sample we found no strong trend in the contamination rate as a function $\Delta r^*$. There may be a small offset between the peaks, but a large gain in detection efficiency was unlikely to come from modifying this selection parameter in our algorithm. We therefore restricted the surface brightness limit to be $\mu_G < 24$ mag arcsec$^{-2}$ and left $\Delta r^*$ unchanged, to reduce the contamination rate of our sample to reasonable values.

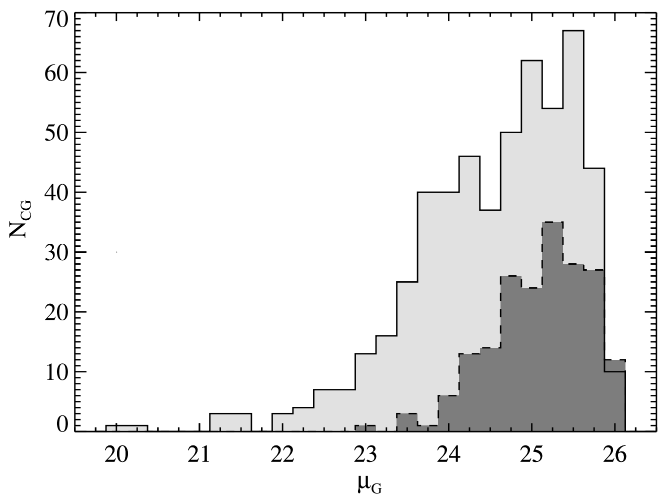


FIG. 2*a*

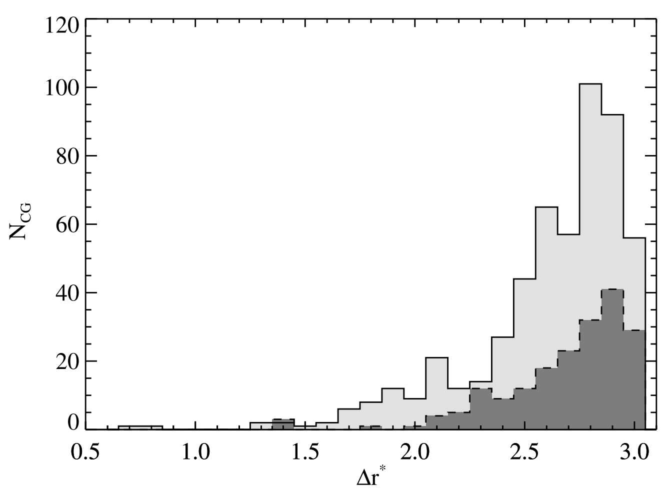


FIG. 2*b*

FIG. 2.—Number of compact groups found in the real (*light/solid line*) and randomized (*dark/dashed line*) galaxy catalogs. (*a*) Histogram of the surface brightness. (*b*) Histogram of the difference between the dimmest and the bright group members, $\Delta r^*$.

In addition, we examined the isolation criterion, which required that the next closest galaxy bright enough to be in the group or brighter be at least 3 group radii away. Allam & Tucker (2000) found that one-third of their compact groups are part of larger structures; and de Carvalho et al. (1997) and Ribeiro et al. (1998) found that a large fraction of HCGs are part of larger structures, and only a small number of groups can be defined as truly isolated. To overcome this problem, Iovino et al. (2003) adopt a flexible isolation criterion, such that no galaxy of magnitude brighter than the magnitude of the faintest CG member +0.5 mag is within the isolation radius. Our algorithm, which builds groups based on adding the closest galaxies that are in the correct magnitude range to be members, did not allow any flexibility in lowering the isolation criteria. However, we did note that the majority of the closest nonmember galaxies (that were eligible for membership) for our groups were within ±0.5 mag of the dimmest group member (73%) and were between 3 and 4 group radii of the center of the group (51%). (Numbers for the random catalog were similar, at 73% within ±0.5 mag and 40% nearby, thus relaxing isolation will add random alignments in nearly equal proportion to real groups.) Relaxing the isolation criteria for dim galaxies should be explored in our future efforts, as it seems likely the strict isolation criteria used excluded some compact groups.

Using our modified Hickson criteria, we found a total of 232 candidate CGs in 153 deg$^2$. To identify any potential weaknesses of our selection technique and improve future versions, each of these candidate CGs was inspected by eye, and much of the SDSS *r*-band imaging data (the corrected frames) for these candidate CGs was reanalyzed using GAIA (Draper 2000) and SExtractor (Bertin and Arnouts 1996) to double-check galaxy identification.

Of these 232 candidate CGs, 175 survived inspection to be included in the final CG catalog. Of the 57 that were discarded, 55 were found to be false detections due to poor deblending[17] of saturated bright stars or angularly large galaxies and/or poor magnitude determination of faint diffuse objects in the original SDSS image processing. Another two candidate groups were found to contain a QSO that was misclassified by PHOTO and SExtractor as a galaxy. These two groups are listed as "Tri" since they contain only three galaxies.

## 4. THE CATALOG

Our final catalog of SDSS CGs, extracted from 153 deg$^2$ of sky from runs 752 and 756 of the Scranton et al. (2002) galaxy catalogs in the SDSS EDR, contains a total of 744 galaxies in 175 CGs. Of the 744 CG member galaxies, 158 have spectroscopic redshifts (135 from the SDSS itself). Despite this low number, 131 (75%) of SDSS CGs contain at least one group member with a spectroscopic redshift. The properties of the CGs are described in Table 1; the properties of the CG member galaxies are described in Table 2.

### 4.1. *The Properties of the Compact Groups*

In Table 1 we list the general properties of all 175 SDSSCGs (plus two triplet systems): Column (1) lists a running identification number. Column (2): $\alpha_{\rm circ}$, the right ascension (J2000.0) of the center of the smallest circle containing all group members within 3 mag of the brightest

[17] See http://www.sdss.org/dr1/algorithms/deblend.html.

TABLE 1

THE SDSS COMPACT GROUP PROPERTIES

| CG (1) | $\alpha_{circ}$ (J2000.0) (2) | $\delta_{circ}$ (J2000.0) (3) | $\theta_G$ (arcsec) (4) | $\mu_G$ (mag arcsec$^{-2}$) (5) | $N$ (6) | $\Delta r$* (7) | $\theta_N/\theta_G$ (8) | $z_{photo}^{bgm}$ (9) | $z_{spectro}^{cg}$ (10) | $N_{spectro}^{cg}$ (11) | Comments[a] (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1............ | 09 40 48.72 | −00 51 36.63 | 38.9 | 23.93 | 4 | 2.948 | 3.64 | 0.1290 | . . . | 0 | |
| 2............ | 09 41 05.28 | −00 28 19.98 | 24.5 | 22.91 | 4 | 2.073 | 6.57 | 0.1459 | 0.1478 | 1 | M(bc) |
| 3............ | 09 49 58.08 | −00 52 57.18 | 28.7 | 22.56 | 4 | 2.814 | 8.33 | 0.1398 | 0.0916 | 1 | |
| 4............ | 09 56 09.36 | 00 19 35.67 | 18.1 | 22.08 | 4 | 2.529 | 15.46 | 0.0056 | 0.0353 | 2 | M(ab) |
| 5............ | 09 57 32.64 | 00 40 03.81 | 14.3 | 21.77 | 4 | 0.876 | 4.39 | 0.0372 | 0.0870 | 1 | M(abc) |
| 6............ | 10 00 24.96 | 00 15 00.61 | 20.2 | 22.94 | 5 | 2.987 | 3.49 | 0.2374 | 0.2195 | 1 | I(ac) |
| 7............ | 10 01 25.20 | 01 07 32.08 | 26.1 | 23.15 | 4 | 2.825 | 3.92 | 0.0792 | . . . | 0 | |
| 8............ | 10 01 26.88 | 00 20 43.57 | 26.2 | 23.44 | 5 | 2.295 | 4.23 | 0.2228 | 0.2316 | 1 | |
| 9............ | 10 04 07.44 | 00 18 01.97 | 36.7 | 23.37 | 4 | 2.982 | 4.72 | 0.1034 | 0.1398 | 1 | +1 |
| 10............ | 10 06 01.20 | 01 11 59.85 | 31.1 | 23.61 | 4 | 2.942 | 3.91 | 0.1461 | . . . | 0 | |
| 11............ | 10 08 20.16 | 00 12 54.03 | 19.5 | 22.27 | 4 | 2.839 | 8.02 | 0.1080 | 0.0935 | 1 | |
| 12............ | 10 08 21.60 | 01 11 13.66 | 27.7 | 23.59 | 4 | 2.248 | 3.21 | 0.2246 | . . . | 0 | M(ac) |
| 13............ | 10 08 36.96 | −00 04 27.48 | 20.4 | 22.99 | 4 | 2.826 | 5.58 | 0.1868 | 0.1844 | 1 | I(bd) |
| 14............ | 10 10 56.64 | 00 15 10.51 | 24.5 | 23.60 | 4 | 2.873 | 3.32 | 0.1908 | 0.1862 | 1 | |
| 15............ | 10 13 38.88 | −00 08 44.28 | 17.8 | 22.93 | 4 | 2.098 | 4.45 | 0.1345 | . . . | 0 | |
| 16............ | 10 15 39.60 | −00 51 55.23 | 23.9 | 23.85 | 5 | 2.528 | 3.34 | 0.1901 | 0.1778 | 1 | |
| 17............ | 10 21 11.52 | 01 05 00.34 | 36.9 | 23.59 | 6 | 2.621 | 4.74 | 0.1868 | . . . | 0 | I(ab) |
| 18............ | 10 25 37.68 | −00 33 42.08 | 23.6 | 23.24 | 5 | 2.998 | 5.88 | 0.1605 | 0.1693 | 1 | |
| 19............ | 10 25 45.36 | 01 10 37.74 | 27.1 | 23.35 | 4 | 2.917 | 3.33 | 0.1192 | . . . | 0 | I(ab) |
| 20............ | 10 26 01.68 | −00 29 28.72 | 26.4 | 23.74 | 5 | 2.355 | 3.38 | 0.1980 | 0.1715 | 1 | |
| 21............ | 10 26 13.44 | −00 02 16.90 | 33.6 | 23.51 | 4 | 2.075 | 3.02 | 0.0990 | 0.1041 | 2 | I(ac) |
| 22............ | 10 26 36.96 | 00 43 50.47 | 39.1 | 23.70 | 4 | 2.797 | 3.14 | 0.0951 | 0.1056 | 1 | +2 |
| 23............ | 10 28 34.08 | −00 01 12.64 | 20.9 | 23.62 | 4 | 2.921 | 6.12 | 0.2427 | . . . | 0 | |
| 24............ | 10 34 00.24 | 00 24 32.59 | 22.0 | 23.15 | 4 | 2.008 | 3.80 | 0.1672 | 0.1499 | 1 | +2 |
| 25............ | 10 36 26.88 | 01 10 36.08 | 20.6 | 23.37 | 4 | 2.505 | 4.83 | 0.0856 | . . . | 0 | |
| 26............ | 10 37 23.28 | −00 30 55.94 | 23.5 | 23.35 | 4 | 2.786 | 3.95 | 0.1288 | 0.1140 | 1 | |
| 27............ | 10 41 00.00 | −00 57 20.77 | 58.1 | 23.92 | 5 | 2.468 | 3.24 | 0.1021 | 0.0869 | 1 | +1 |
| 28............ | 10 49 19.92 | 00 14 10.81 | 30.4 | 23.22 | 4 | 0.806 | 3.22 | 0.1534 | 0.1254 | 1 | I(ab) I(cd) |
| 29............ | 10 50 36.24 | 00 22 04.72 | 28.3 | 23.72 | 6 | 2.920 | 3.23 | 0.1628 | 0.1496 | 1 | |
| 30............ | 11 01 02.16 | 01 05 52.47 | 32.7 | 23.60 | 4 | 2.524 | 4.80 | 0.1330 | 0.1849 | 1 | |
| 31............ | 11 02 44.40 | 00 39 28.36 | 30.3 | 22.75 | 4 | 2.126 | 3.36 | 0.0874 | 0.1099 | 2 | |
| 32............ | 11 03 55.92 | 00 38 05.88 | 35.3 | 23.58 | 4 | 2.083 | 6.84 | 0.0874 | 0.0964 | 1 | I(ac) |
| 33............ | 11 04 05.28 | 01 04 42.99 | 19.6 | 23.01 | 4 | 2.712 | 3.05 | 0.1798 | 0.1204 | 1 | I(ab) |
| 34............ | 11 09 39.84 | 00 45 34.68 | 25.6 | 23.90 | 6 | 2.970 | 3.45 | 0.3556 | 0.3319 | 1 | I(bd) |
| 35............ | 11 11 12.24 | 01 06 26.17 | 38.7 | 23.48 | 4 | 2.685 | 4.01 | 0.0849 | 0.0909 | 1 | |
| 36............ | 11 13 36.48 | −00 28 52.79 | 26.0 | 23.00 | 5 | 2.906 | 6.82 | 0.1454 | 0.1000 | 1 | |
| 37............ | 11 14 58.56 | −00 36 08.91 | 38.3 | 23.77 | 4 | 2.816 | 3.47 | 0.0850 | . . . | 0 | +1 |
| 38............ | 11 15 37.20 | −00 01 49.97 | 18.9 | 22.64 | 4 | 1.799 | 4.36 | 0.0773 | . . . | 0 | |
| 39............ | 11 21 08.16 | 00 12 39.30 | 43.5 | 23.57 | 4 | 2.779 | 3.75 | 0.0950 | . . . | 0 | |
| 40............ | 11 22 02.64 | 00 24 58.20 | 17.2 | 23.34 | 4 | 2.879 | 3.79 | 0.1730 | . . . | 0 | I(ad)? |
| 41............ | 11 29 30.72 | −00 33 12.02 | 20.0 | 23.67 | 4 | 2.479 | 4.21 | 0.1236 | 0.0754 | 1 | |
| 42............ | 11 31 38.40 | 00 12 54.97 | 38.2 | 22.91 | 6 | 2.412 | 3.50 | 0.1295 | 0.1324 | 2 | |
| 43............ | 11 33 11.52 | −00 27 25.36 | 56.7 | 23.86 | 5 | 2.079 | 7.45 | 0.1426 | 0.1050 | 1 | T(a) |
| 44............ | 11 43 40.80 | 00 38 56.74 | 21.1 | 24.00 | 4 | 2.511 | 3.10 | 0.2926 | . . . | 0 | |
| 45............ | 11 46 29.28 | −01 01 25.50 | 26.0 | 23.68 | 4 | 2.992 | 4.16 | 0.0890 | 0.0799 | 1 | |
| 46............ | 11 48 37.20 | 00 47 07.20 | 36.8 | 23.20 | 5 | 2.693 | 4.21 | 0.0942 | 0.1260 | 1 | I(ac) I(bd) |
| 47............ | 11 51 11.28 | 00 16 59.04 | 17.7 | 23.08 | 4 | 2.422 | 3.36 | 0.1695 | . . . | 0 | I(ab) |
| 48............ | 11 55 04.80 | −00 35 00.77 | 44.4 | 23.00 | 5 | 1.852 | 3.30 | 0.1335 | 0.1313 | 2 | +1 |
| 49............ | 11 55 40.56 | −00 55 27.05 | 22.5 | 22.73 | 4 | 2.073 | 5.96 | 0.1476 | 0.1067 | 1 | I(ab) |
| 50............ | 11 55 41.52 | −00 53 08.71 | 17.3 | 22.47 | 4 | 1.888 | 7.54 | 0.1142 | 0.2076 | 2 | I(bd) |
| 51............ | 11 56 36.96 | 01 07 15.52 | 46.9 | 23.77 | 4 | 2.934 | 4.95 | 0.0677 | 0.1573 | 1 | |
| 52............ | 11 57 44.16 | −00 52 24.64 | 37.6 | 23.46 | 4 | 2.944 | 3.49 | 0.0924 | 0.1318 | 1 | |
| 53............ | 11 58 20.40 | −00 05 14.10 | 36.3 | 23.67 | 4 | 2.007 | 3.59 | 0.1188 | 0.1058 | 1 | I(ab) |
| 54............ | 11 58 26.16 | 00 42 41.11 | 63.8 | 23.08 | 4 | 1.953 | 3.37 | 0.0566 | 0.0475 | 3 | M(cd) isolated? |
| 55............ | 12 00 09.12 | 00 40 25.66 | 34.8 | 23.09 | 4 | 2.865 | 4.27 | 0.0707 | 0.0854 | 1 | M(cd) |
| 56............ | 12 00 10.08 | −00 35 55.19 | 40.4 | 23.66 | 4 | 2.980 | 3.88 | 0.1516 | 0.1694 | 3 | |
| 57............ | 12 00 12.96 | −00 25 33.88 | 34.8 | 23.41 | 5 | 2.994 | 3.03 | 0.1032 | 0.0766 | 1 | M(cd) +1 |
| 58............ | 12 00 56.88 | −00 07 57.73 | 21.6 | 23.12 | 4 | 2.660 | 3.45 | 0.2017 | . . . | 0 | |
| 59............ | 12 02 22.56 | 01 14 44.91 | 24.4 | 23.61 | 5 | 2.706 | 3.21 | 0.2743 | . . . | 0 | I(ab) |
| 60............ | 12 09 28.32 | −00 00 27.76 | 16.6 | 23.06 | 4 | 2.688 | 3.70 | 0.2364 | . . . | 0 | |
| 61............ | 12 09 51.60 | −00 34 02.99 | 25.8 | 22.91 | 5 | 2.754 | 3.60 | 0.1929 | 0.1869 | 1 | I(bd) isolated? |
| 62............ | 12 14 15.60 | −00 26 59.34 | 10.2 | 21.73 | 4 | 2.252 | 4.85 | 0.2462 | 0.2452 | 2 | h(abd) |
| 63............ | 12 15 31.20 | 00 38 32.46 | 25.2 | 23.90 | 4 | 2.834 | 3.05 | 0.1389 | 0.0752 | 1 | I(ab) |

TABLE 1—*Continued*

| CG (1) | $\alpha_{circ}$ (J2000.0) (2) | $\delta_{circ}$ (J2000.0) (3) | $\theta_G$ (arcsec) (4) | $\mu_G$ (mag arcsec$^{-2}$) (5) | $N$ (6) | $\Delta r$* (7) | $\theta_N/\theta_G$ (8) | $z^{bgm}_{photo}$ (9) | $z^{cg}_{spectro}$ (10) | $N^{cg}_{spectro}$ (11) | Comments[a] (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 64........... | 12 17 04.80 | −00 54 53.76 | 28.2 | 23.93 | 4 | 2.700 | 3.65 | 0.1807 | 0.1977 | 1 | +1 |
| 65........... | 12 22 39.60 | −00 58 50.07 | 48.7 | 23.89 | 4 | 2.917 | 3.01 | 0.1816 | 0.1753 | 1 | M(ab) |
| 66........... | 12 25 13.92 | −00 10 50.93 | 21.5 | 23.44 | 4 | 2.812 | 4.13 | 0.2499 | 0.2873 | 1 | I(ab) |
| 67........... | 12 31 39.84 | −00 34 05.51 | 26.7 | 23.02 | 4 | 2.970 | 5.51 | 0.1752 | 0.2021 | 1 | M(bc) |
| 68........... | 12 33 49.44 | −00 09 32.34 | 34.0 | 23.14 | 5 | 2.943 | 4.65 | 0.0761 | 0.1354 | 1 | isolated? |
| 69........... | 12 36 44.16 | −01 00 23.00 | 21.4 | 23.57 | 4 | 2.182 | 3.72 | 0.2475 | . . . | 0 | I(abc) |
| 70........... | 12 36 51.36 | −00 35 08.64 | 33.3 | 23.61 | 4 | 2.745 | 4.16 | 0.0755 | 0.0088 | 1 | I(bc) |
| 71........... | 12 37 50.40 | −00 18 01.14 | 28.9 | 23.72 | 4 | 2.507 | 4.36 | 0.1693 | 0.1407 | 1 | |
| 72........... | 12 43 09.36 | −00 46 50.43 | 22.1 | 22.74 | 4 | 2.688 | 3.49 | 0.1154 | 0.1430 | 1 | isolated? |
| 73........... | 12 43 31.68 | −01 06 57.67 | 22.4 | 23.08 | 4 | 2.109 | 4.25 | 0.1558 | 0.1661 | 1 | |
| 74........... | 12 44 46.08 | −01 01 27.80 | 58.4 | 23.80 | 7 | 2.974 | 3.89 | 0.0997 | 0.1468 | 1 | M(ab) I(fg) |
| 75........... | 12 45 58.32 | −00 59 52.34 | 19.2 | 23.51 | 4 | 2.462 | 3.17 | 0.2029 | . . . | 0 | |
| 76........... | 12 50 58.32 | −00 44 52.60 | 22.8 | 23.31 | 5 | 1.886 | 3.47 | 0.2627 | 0.2566 | 1 | M(ab) |
| 77........... | 12 53 23.28 | −00 25 27.77 | 40.5 | 22.17 | 5 | 2.088 | 14.17 | 0.0858 | 0.0471 | 3 | M(cde) T(ab) |
| 78........... | 12 54 36.24 | −00 10 43.53 | 62.0 | 23.62 | 4 | 2.640 | 3.78 | 0.0543 | 0.0819 | 3 | I(bc) |
| 79........... | 12 55 08.64 | −01 05 22.41 | 29.1 | 23.47 | 5 | 2.708 | 4.29 | 0.2559 | 0.1229 | 1 | M(abc) |
| 80........... | 12 56 16.80 | −00 38 22.74 | 16.9 | 23.00 | 4 | 2.755 | 3.67 | 0.1395 | 0.1349 | 1 | |
| 81........... | 12 58 00.00 | −01 05 43.65 | 35.6 | 23.95 | 5 | 2.570 | 4.75 | 0.2080 | . . . | 0 | I(bc) |
| 82........... | 13 05 41.52 | 00 23 52.26 | 25.5 | 23.51 | 4 | 2.362 | 3.42 | 0.2467 | 0.2232 | 1 | I(ac) |
| 83........... | 13 06 51.12 | −00 33 27.53 | 33.3 | 23.86 | 4 | 2.864 | 4.73 | 0.1543 | 0.1283 | 1 | |
| 84........... | 13 10 39.84 | −00 39 55.92 | 81.5 | 23.73 | 5 | 2.915 | 3.05 | 0.0639 | 0.0805 | 3 | I(bc) |
| 85........... | 13 12 04.80 | 00 32 18.25 | 75.4 | 23.64 | 4 | 2.358 | 5.29 | 0.0842 | 0.1208 | 2 | isolated? |
| 86........... | 13 12 24.96 | −01 06 12.92 | 43.9 | 23.52 | 4 | 2.008 | 4.01 | 0.0867 | 0.1091 | 3 | +2 |
| 87........... | 13 13 02.40 | −01 13 27.69 | 52.2 | 23.77 | 4 | 2.847 | 4.09 | 0.1113 | . . . | 0 | I(ab) |
| 88........... | 13 15 02.40 | −01 04 05.84 | 9.9 | 21.16 | 4 | 1.841 | 5.03 | 0.2235 | 0.2148 | 1 | h? |
| 89........... | 13 18 15.36 | 00 19 37.88 | 23.5 | 22.18 | 4 | 2.373 | 6.87 | 0.0770 | 0.0816 | 1 | I(ab) |
| 90........... | 13 18 45.36 | −00 43 46.66 | 42.1 | 23.58 | 4 | 2.519 | 3.12 | 0.0625 | 0.0859 | 1 | M(ac) |
| 91........... | 13 18 47.04 | −00 45 31.37 | 20.6 | 22.92 | 4 | 2.787 | 4.57 | 0.1210 | 0.0870 | 1 | I(ab) |
| 92........... | 13 19 32.88 | −01 05 45.88 | 65.8 | 23.92 | 4 | 2.767 | 3.06 | 0.0702 | 0.0802 | 1 | I(cd) |
| 93........... | 13 24 39.12 | 00 22 03.84 | 32.7 | 23.18 | 4 | 2.990 | 3.41 | 0.0818 | 0.1080 | 1 | |
| 94........... | 13 24 49.44 | −00 00 42.95 | 31.9 | 23.30 | 4 | 2.848 | 4.80 | 0.1106 | 0.0816 | 1 | |
| 95........... | 13 25 08.40 | −00 38 30.71 | 26.0 | 23.32 | 4 | 2.680 | 3.04 | 0.1565 | 0.0849 | 1 | M(ac) |
| 96........... | 13 26 34.56 | 00 26 45.90 | 16.1 | 23.37 | 4 | 2.848 | 5.89 | 0.2618 | . . . | 0 | |
| 97........... | 13 28 19.68 | 00 26 15.27 | 18.7 | 23.07 | 4 | 2.862 | 3.17 | 0.2268 | . . . | 0 | |
| 98........... | 13 29 06.00 | 00 25 37.02 | 19.0 | 23.14 | 4 | 2.464 | 3.36 | 0.0871 | . . . | 0 | I(ab) |
| 99........... | 13 34 36.48 | −01 03 25.84 | 34.5 | 23.82 | 4 | 2.939 | 3.67 | 0.1019 | 0.0768 | 1 | |
| 100.......... | 13 35 06.24 | 00 28 21.20 | 61.8 | 23.81 | 4 | 2.541 | 5.62 | 0.0948 | 0.0869 | 1 | I(ab) |
| 101.......... | 13 38 04.56 | 00 57 55.94 | 26.1 | 23.68 | 4 | 2.632 | 3.57 | 0.1911 | 0.1430 | 1 | I(bd) |
| 102.......... | 13 38 42.48 | −00 44 33.88 | 25.4 | 23.34 | 4 | 2.697 | 3.70 | 0.3117 | 0.3462 | 1 | I(bc) |
| 103.......... | 13 38 44.88 | 00 16 33.84 | 29.6 | 23.99 | 4 | 2.705 | 3.78 | 0.1385 | 0.1290 | 1 | I(bd) |
| 104.......... | 13 39 38.88 | −00 01 02.18 | 22.2 | 23.94 | 4 | 2.703 | 3.36 | 0.2440 | . . . | 0 | |
| 105.......... | 13 40 28.80 | −01 12 07.05 | 40.5 | 23.78 | 4 | 2.570 | 3.80 | 0.1475 | . . . | 0 | I(ab) |
| 106.......... | 13 40 58.80 | 00 45 31.62 | 28.2 | 23.73 | 4 | 2.659 | 3.02 | 0.2520 | 0.1659 | 2 | M(ab) |
| 107.......... | 13 41 06.48 | −00 01 35.14 | 26.6 | 23.82 | 4 | 2.200 | 3.71 | 0.1349 | 0.1003 | 1 | T(b) |
| 108.......... | 13 41 27.36 | −01 10 21.36 | 80.1 | 23.94 | 4 | 2.601 | 3.23 | 0.0842 | 0.0888 | 1 | |
| 109.......... | 13 42 30.24 | −00 51 29.53 | 22.3 | 23.66 | 5 | 2.786 | 3.10 | 0.1970 | . . . | 0 | |
| 110.......... | 13 42 30.48 | 00 21 19.32 | 52.3 | 23.97 | 4 | 2.788 | 3.73 | 0.1297 | 0.2434 | 1 | |
| 111.......... | 13 42 43.92 | 00 45 41.76 | 58.8 | 23.89 | 4 | 2.999 | 3.54 | 0.0964 | 0.0732 | 1 | M(ad)+1 |
| 112.......... | 13 45 06.96 | −00 10 17.38 | 20.1 | 23.66 | 4 | 2.769 | 3.61 | 0.1567 | . . . | 0 | |
| 113.......... | 13 45 51.84 | −00 01 15.80 | 22.0 | 23.72 | 4 | 2.546 | 3.79 | 0.0871 | 0.0908 | 1 | |
| 114.......... | 13 49 55.92 | −00 28 08.35 | 24.4 | 23.82 | 4 | 2.737 | 3.04 | 0.2781 | 0.2602 | 1 | I(bd) |
| 115.......... | 13 50 50.88 | −00 31 01.96 | 27.3 | 23.02 | 4 | 2.536 | 5.57 | 0.1207 | 0.1504 | 1 | I(bcd) |
| 116.......... | 13 51 32.40 | 00 44 15.03 | 24.6 | 23.47 | 4 | 2.250 | 3.48 | 0.1285 | 0.0881 | 1 | |
| 117.......... | 13 52 35.04 | −01 01 43.96 | 21.6 | 23.04 | 4 | 2.303 | 3.44 | 0.1741 | 0.1412 | 1 | +1 |
| 118.......... | 13 53 50.64 | 00 10 51.64 | 22.2 | 23.63 | 4 | 2.958 | 3.32 | 0.2639 | . . . | 0 | I(ac) |
| 119.......... | 13 55 57.84 | 00 15 23.06 | 29.9 | 23.73 | 5 | 2.678 | 3.21 | 0.1198 | 0.1333 | 1 | M(ab) |
| 120.......... | 14 05 08.40 | −00 08 58.70 | 9.5 | 21.58 | 4 | 2.941 | 5.75 | 0.2661 | 0.2427 | 1 | h? |
| 121.......... | 14 07 52.32 | −00 29 17.61 | 21.5 | 23.20 | 4 | 2.408 | 3.93 | 0.2568 | . . . | 0 | |
| 122.......... | 14 10 54.96 | 00 59 06.15 | 18.1 | 23.06 | 4 | 2.741 | 4.28 | 0.1732 | 0.1803 | 1 | |
| 123.......... | 14 12 06.24 | −01 03 27.72 | 21.8 | 23.13 | 4 | 2.369 | 5.42 | 0.1536 | 0.1822 | 1 | I(ac) +1 |
| 124.......... | 14 13 59.76 | 00 23 43.65 | 24.4 | 23.42 | 4 | 2.385 | 3.23 | 0.1938 | 0.1892 | 1 | |
| 125.......... | 14 14 06.72 | 00 21 29.62 | 20.5 | 23.67 | 4 | 1.877 | 3.48 | 0.1208 | . . . | 0 | |
| 126.......... | 14 15 04.08 | −00 22 34.41 | 30.3 | 23.69 | 4 | 2.331 | 3.14 | 0.1342 | 0.1428 | 1 | |
| 127.......... | 14 15 54.24 | 00 16 04.30 | 28.8 | 23.96 | 4 | 2.942 | 3.39 | 0.1681 | 0.1260 | 1 | |

TABLE 1—*Continued*

| CG (1) | $\alpha_{\rm circ}$ (J2000.0) (2) | $\delta_{\rm circ}$ (J2000.0) (3) | $\theta_G$ (arcsec) (4) | $\mu_G$ (mag arcsec$^{-2}$) (5) | $N$ (6) | $\Delta r^*$ (7) | $\theta_N/\theta_G$ (8) | $z^{\rm bgm}_{\rm photo}$ (9) | $z^{\rm cg}_{\rm spectro}$ (10) | $N^{\rm cg}_{\rm spectro}$ (11) | Comments[a] (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 128.......... | 14 22 02.40 | −00 57 46.99 | 60.1 | 23.68 | 4 | 2.875 | 3.40 | 0.0890 | 0.1030 | 1 | I(abc) |
| 129.......... | 14 24 16.80 | −00 09 00.68 | 56.7 | 23.97 | 4 | 2.876 | 3.32 | 0.1351 | 0.1736 | 1 | |
| 130.......... | 14 25 15.84 | −00 29 46.50 | 24.8 | 23.74 | 4 | 2.767 | 3.50 | 0.1263 | 0.1080 | 1 | |
| 131.......... | 14 25 28.56 | 00 20 31.84 | 43.2 | 23.72 | 4 | 2.876 | 3.44 | 0.1194 | 0.1343 | 1 | M(ab) |
| 132.......... | 14 25 33.60 | 00 19 38.21 | 44.1 | 23.46 | 4 | 2.783 | 4.15 | 0.0727 | 0.0845 | 1 | |
| 133.......... | 14 29 33.12 | 00 29 50.85 | 41.2 | 23.90 | 4 | 2.425 | 3.36 | 0.1301 | 0.0554 | 1 | |
| 134.......... | 14 29 39.36 | 00 22 07.84 | 73.0 | 23.06 | 5 | 2.893 | 3.53 | 0.0256 | 0.0546 | 2 | |
| 135.......... | 14 30 57.84 | 00 47 24.14 | 16.6 | 22.85 | 4 | 1.935 | 6.64 | 0.1836 | . . . | 0 | I(bcd) |
| 136.......... | 14 32 26.40 | 00 03 09.68 | 37.6 | 23.12 | 5 | 2.264 | 4.76 | 0.0952 | 0.0929 | 1 | I(bd) |
| 137.......... | 14 33 27.84 | −00 07 03.48 | 21.2 | 22.63 | 4 | 2.564 | 4.43 | 0.1882 | 0.0344 | 1 | M(ab) +1 |
| 138.......... | 14 33 56.88 | 00 35 00.09 | 24.9 | 23.48 | 4 | 2.778 | 4.07 | 0.2167 | 0.2221 | 1 | I(ad) |
| 139.......... | 14 35 47.52 | −00 10 01.84 | 33.6 | 23.86 | 4 | 2.893 | 3.08 | 0.1046 | 0.0995 | 2 | |
| 140.......... | 14 37 03.36 | −00 35 52.82 | 20.0 | 23.45 | 4 | 1.410 | 3.15 | 0.2430 | 0.2137 | 1 | I(ab) |
| 141.......... | 14 37 34.56 | −00 33 21.44 | 38.9 | 23.39 | 4 | 2.957 | 3.19 | 0.1286 | 0.1799 | 1 | |
| 142.......... | 14 38 03.84 | −00 19 27.60 | 19.2 | 23.36 | 4 | 2.908 | 4.60 | 0.2441 | 0.2470 | 1 | |
| 143.......... | 14 41 18.96 | 00 58 15.76 | 23.1 | 23.54 | 4 | 2.530 | 4.77 | 0.2569 | . . . | 0 | |
| 144.......... | 14 43 17.76 | −00 48 07.05 | 18.5 | 22.97 | 4 | 2.910 | 4.70 | 0.1798 | 0.1466 | 1 | I(bdc) |
| 145.......... | 14 44 35.76 | −01 08 08.62 | 42.6 | 23.93 | 6 | 2.950 | 3.20 | 0.1480 | . . . | 0 | I(df) |
| 146.......... | 14 45 19.20 | 00 34 04.45 | 26.5 | 23.99 | 5 | 2.591 | 3.77 | 0.1960 | . . . | 0 | |
| 147.......... | 14 45 36.00 | −01 02 09.06 | 25.5 | 23.77 | 4 | 2.775 | 3.51 | 0.1285 | . . . | 0 | |
| 148.......... | 14 47 15.12 | 00 55 28.31 | 39.6 | 23.80 | 4 | 2.792 | 6.67 | 0.1186 | 0.1373 | 2 | |
| 149.......... | 14 48 37.44 | 00 38 54.18 | 43.7 | 23.94 | 4 | 2.658 | 5.19 | 0.1551 | 0.1405 | 1 | |
| 150.......... | 14 53 09.84 | 00 58 20.72 | 35.8 | 22.93 | 4 | 2.600 | 4.33 | 0.1285 | 0.1193 | 1 | |
| 151.......... | 14 53 19.68 | −00 37 31.99 | 23.2 | 23.93 | 4 | 2.918 | 3.56 | 0.1095 | 0.1857 | 1 | |
| 152.......... | 14 54 08.16 | −00 11 07.42 | 23.9 | 23.58 | 4 | 2.420 | 4.09 | 0.0679 | . . . | 0 | |
| 153.......... | 14 56 16.08 | 00 19 54.81 | 16.2 | 22.42 | 5 | 2.626 | 4.31 | 0.1494 | 0.1393 | 1 | M(ab) |
| 154.......... | 14 56 31.44 | 00 13 35.08 | 22.1 | 23.72 | 4 | 2.913 | 3.35 | 0.1850 | 0.1849 | 1 | I(ab) T(b) |
| 155.......... | 14 57 37.68 | −00 04 37.64 | 22.2 | 23.42 | 4 | 2.274 | 5.34 | 0.0205 | 0.0420 | 1 | +1 |
| 156.......... | 15 03 43.20 | −00 46 40.21 | 21.7 | 23.31 | 4 | 2.463 | 5.86 | 0.2273 | . . . | 0 | T(a) +1 |
| 157.......... | 15 07 37.68 | 00 02 27.85 | 11.9 | 22.07 | 4 | 2.383 | 3.05 | 0.2537 | 0.2314 | 1 | I(ab) |
| 158.......... | 15 07 47.28 | −00 30 04.53 | 18.2 | 23.15 | 4 | 2.322 | 6.69 | 0.1603 | 0.1525 | 1 | I(abc) +1 |
| 159.......... | 15 08 30.48 | −00 14 38.99 | 24.4 | 23.01 | 4 | 2.463 | 4.19 | 0.1193 | 0.0948 | 1 | I(ad) |
| 160.......... | 15 09 27.36 | 00 53 52.12 | 19.2 | 23.61 | 4 | 2.833 | 3.70 | 0.2623 | . . . | 0 | I(ab) |
| 161.......... | 15 09 37.92 | 00 48 04.62 | 75.2 | 23.94 | 4 | 1.909 | 3.26 | 0.0521 | 0.0834 | 2 | M(ac) |
| 162.......... | 15 12 34.08 | 00 19 34.17 | 35.7 | 23.90 | 5 | 2.905 | 3.85 | 0.1376 | 0.1174 | 1 | M(bc) +1 |
| 163.......... | 15 14 32.16 | −00 13 43.46 | 19.8 | 23.46 | 5 | 2.574 | 4.20 | 0.1106 | . . . | 0 | M(ab) |
| 164.......... | 15 14 45.60 | 00 03 13.86 | 26.5 | 23.71 | 4 | 2.737 | 5.09 | 0.1362 | 0.0716 | 1 | I(bd) |
| 165.......... | 15 14 47.52 | −00 09 08.40 | 29.6 | 23.94 | 4 | 2.551 | 3.02 | 0.0723 | 0.1001 | 1 | M(ac) +1 |
| 166.......... | 15 16 10.56 | 00 27 51.92 | 62.8 | 23.84 | 5 | 2.457 | 3.17 | 0.0647 | 0.1076 | 2 | |
| 167.......... | 15 16 22.56 | −00 17 32.89 | 85.9 | 23.97 | 4 | 2.785 | 4.76 | 0.0554 | 0.0863 | 2 | isolated? |
| 168.......... | 15 16 24.00 | 00 06 03.12 | 19.9 | 22.54 | 4 | 2.852 | 3.99 | 0.1379 | 0.1152 | 1 | |
| 169.......... | 15 16 48.48 | −00 48 32.42 | 25.3 | 23.43 | 4 | 1.933 | 4.25 | 0.1603 | 0.1191 | 1 | |
| 170.......... | 15 17 22.56 | 00 00 14.07 | 28.8 | 23.65 | 5 | 2.649 | 5.09 | 0.1511 | 0.1380 | 1 | T(d) |
| 171.......... | 15 22 42.96 | 00 41 19.98 | 32.3 | 23.81 | 4 | 2.159 | 3.93 | 0.0624 | 0.0761 | 1 | I(ab) isolated? |
| 172.......... | 15 31 29.04 | −01 07 27.87 | 46.1 | 23.93 | 5 | 2.623 | 4.73 | 0.0979 | . . . | 0 | h(abe) |
| 173.......... | 15 31 39.60 | 00 31 12.59 | 28.6 | 23.07 | 4 | 1.819 | 3.03 | 0.1101 | 0.0800 | 1 | |
| 174.......... | 15 33 00.48 | 00 16 59.07 | 72.7 | 23.70 | 4 | 2.978 | 8.30 | 0.0592 | . . . | 0 | +1 |
| 175.......... | 15 36 50.40 | 00 34 11.51 | 20.0 | 23.22 | 5 | 2.973 | 4.32 | 0.2269 | . . . | 0 | M(ad) |
| Tri1......... | 11 01 13.92 | +00 22 43.02 | 13.3 | 22.56 | 4 | 2.997 | 6.00 | . . . | . . . | . . . | QSO(a) |
| Tri2......... | 13 10 35.76 | −00 14 16.99 | 28.6 | 23.85 | 4 | 2.783 | 3.16 | . . . | . . . | . . . | QSO(b) |

Note.—Units of right ascension are hours, minutes, and seconds, and units of declination are degrees, arcminutes, and arcseconds.

[a] Symbols in the comments column are as follows: +1=a faint background galaxy is visible which could be a member of the group; +2=two faint background galaxies are visible that could be members of the group; isolated?=faint background galaxies are visible that could be members of the group; M(ab)=galaxies a and b appear to be merging; I(ab)=galaxies a and b appear to be interacting; T(a)=galaxy a shows a tidal tail; h(abc)=galaxies a, b, and c appear to be embedded within a common halo; QSO(a)=galaxy a is classified as a QSO in NED.

group member. Column (3): $\delta_{\rm circ}$, the declination (J2000.0) of the center of the smallest circle containing all group members within 3 mag of the brightest group member. Column (4): $\theta_G$, the angular diameter of this smallest circle (in arcseconds). Column (5): $\mu_G$, the total $r^*$ magnitude of the $N$ (col. [6]) group members averaged over the smallest circle containing their geometric centers. Column (6): $N$, the total number of galaxies in the group within 3 mag of the brightest group member. Column (7): $\Delta r^*$, the difference in the $r^*$ magnitude between the brightest group member and the faintest. Column (8): $\theta_N/\theta_G$, the ratio of $\theta_N$, the angular diameter of the largest concentric circle that contains no other (external) galaxies within 3 mag of the brightest group member, to $\theta_G$, the angular diameter of the smallest circle containing all group members

TABLE 2

The SDSS Compact Group Members

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 1: | | | | | | | | | | | | | | | | |
| 1a.......... | 09 40 49.77 | −00 51 47.07 | 16.707 | 0.007 | 0.108 | 2.219 | 0.093 | 1.134 | 0.010 | 0.498 | 0.008 | 0.349 | 0.008 | ... | ... | |
| 1b.......... | 09 40 49.80 | −00 51 26.92 | 18.123 | 0.012 | 0.108 | 2.047 | 0.231 | 1.129 | 0.022 | 0.480 | 0.015 | 0.344 | 0.024 | ... | ... | |
| 1c.......... | 09 40 47.40 | −00 51 39.69 | 18.487 | 0.024 | 0.107 | 1.187 | 0.138 | 0.633 | 0.034 | 0.328 | 0.032 | 0.107 | 0.073 | ... | ... | |
| 1d.......... | 09 40 48.99 | −00 51 41.70 | 19.655 | 0.029 | 0.108 | 0.847 | 0.133 | 0.537 | 0.043 | 0.393 | 0.041 | 0.162 | 0.091 | ... | ... | |
| CG 2: | | | | | | | | | | | | | | | | |
| 2a.......... | 09 41 04.64 | −00 28 13.50 | 16.895 | 0.008 | 0.158 | 2.072 | 0.103 | 1.155 | 0.010 | 0.461 | 0.008 | 0.382 | 0.010 | ... | ... | |
| 2b.......... | 09 41 06.09 | −00 28 24.50 | 17.818 | 0.012 | 0.158 | 1.488 | 0.104 | 1.009 | 0.016 | 0.545 | 0.013 | 0.403 | 0.018 | 0.1478 | ... | |
| 2c.......... | 09 41 05.90 | −00 28 28.81 | 18.309 | 0.020 | 0.157 | 1.006 | 0.106 | 0.650 | 0.026 | 0.459 | 0.025 | 0.058 | 0.055 | ... | ... | |
| 2d.......... | 09 41 05.39 | −00 28 16.93 | 18.968 | 0.017 | 0.158 | 1.835 | 0.287 | 1.096 | 0.027 | 0.470 | 0.020 | 0.327 | 0.035 | ... | ... | |
| CG 3: | | | | | | | | | | | | | | | | |
| 3a.......... | 09 49 58.96 | −00 52 49.22 | 16.255 | 0.012 | 0.178 | 0.915 | 0.042 | 0.785 | 0.016 | 0.250 | 0.014 | 0.440 | 0.021 | ... | ... | |
| 3b.......... | 09 49 58.48 | −00 52 59.32 | 16.520 | 0.008 | 0.178 | 2.066 | 0.051 | 0.984 | 0.009 | 0.444 | 0.008 | 0.352 | 0.007 | 0.0916 | 0.0916 | 2MASXi J0949584−0052599 |
| 3c.......... | 09 49 58.24 | −00 52 54.89 | 18.877 | 0.016 | 0.178 | 1.864 | 0.220 | 1.017 | 0.027 | 0.375 | 0.020 | 0.179 | 0.041 | ... | ... | |
| 3d.......... | 09 49 57.36 | −00 53 05.14 | 19.069 | 0.015 | 0.179 | 1.953 | 0.197 | 0.831 | 0.024 | 0.414 | 0.019 | 0.398 | 0.031 | ... | ... | |
| CG 4: | | | | | | | | | | | | | | | | |
| 4a.......... | 09 56 09.83 | 00 19 33.02 | 16.557 | 0.012 | 0.083 | 1.276 | 0.021 | 0.273 | 0.012 | 0.207 | 0.012 | 0.036 | 0.021 | 0.0354 | ... | |
| 4b.......... | 09 56 09.62 | 00 19 29.87 | 17.937 | 0.013 | 0.083 | 0.333 | 0.013 | −0.267 | 0.014 | 0.078 | 0.017 | 0.213 | 0.045 | ... | ... | |
| 4c.......... | 09 56 08.68 | 00 19 38.33 | 18.189 | 0.013 | 0.083 | 1.050 | 0.034 | 0.186 | 0.014 | 0.207 | 0.016 | 0.179 | 0.040 | ... | 0.0352 | 2dFGRSN351Z064 |
| 4d.......... | 09 56 08.80 | 00 19 33.51 | 19.086 | 0.021 | 0.083 | 1.074 | 0.097 | 0.506 | 0.026 | 0.360 | 0.026 | 0.218 | 0.066 | ... | ... | |
| CG 5: | | | | | | | | | | | | | | | | |
| 5a.......... | 09 57 32.96 | 00 40 05.41 | 17.393 | 0.011 | 0.098 | 0.942 | 0.021 | 0.274 | 0.011 | 0.323 | 0.012 | −0.483 | 0.033 | 0.0870 | ... | |
| 5b.......... | 09 57 32.85 | 00 40 04.25 | 17.452 | 0.011 | 0.098 | 1.362 | 0.054 | 0.851 | 0.014 | 0.657 | 0.012 | 0.499 | 0.011 | ... | ... | |
| 5c.......... | 09 57 32.32 | 00 39 58.29 | 18.234 | 0.010 | 0.097 | 2.008 | 0.095 | 0.971 | 0.013 | 0.419 | 0.012 | 0.349 | 0.013 | ... | ... | |
| 5d.......... | 09 57 32.93 | 00 40 09.34 | 18.269 | 0.017 | 0.099 | 0.743 | 0.047 | 0.285 | 0.020 | 0.226 | 0.024 | 0.011 | 0.058 | ... | ... | |
| CG 6: | | | | | | | | | | | | | | | | |
| 6a.......... | 10 00 25.22 | 00 14 57.67 | 17.835 | 0.011 | 0.074 | 2.338 | 0.232 | 1.389 | 0.017 | 0.533 | 0.012 | 0.446 | 0.017 | 0.2195 | ... | |
| 6b.......... | 10 00 24.84 | 00 15 10.64 | 17.866 | 0.014 | 0.075 | 1.950 | 0.225 | 1.268 | 0.022 | 0.530 | 0.016 | 0.434 | 0.027 | ... | ... | |
| 6c.......... | 10 00 25.36 | 00 14 53.01 | 18.747 | 0.015 | 0.074 | 1.491 | 0.184 | 1.423 | 0.027 | 0.506 | 0.018 | 0.422 | 0.029 | ... | ... | |
| 6d.......... | 10 00 24.27 | 00 15 02.94 | 18.750 | 0.017 | 0.074 | 2.410 | 0.446 | 1.221 | 0.029 | 0.523 | 0.021 | 0.468 | 0.035 | ... | ... | |
| 6e.......... | 10 00 24.81 | 00 15 02.81 | 20.822 | 0.043 | 0.074 | 2.564 | 0.814 | 1.082 | 0.076 | 0.627 | 0.053 | 0.563 | 0.087 | ... | ... | |
| CG 7: | | | | | | | | | | | | | | | | |
| 7a.......... | 10 01 24.49 | 01 07 23.66 | 16.737 | 0.007 | 0.056 | 1.961 | 0.059 | 0.879 | 0.008 | 0.421 | 0.008 | 0.418 | 0.008 | ... | ... | |
| 7b.......... | 10 01 24.35 | 01 07 31.56 | 18.509 | 0.012 | 0.056 | 1.659 | 0.110 | 0.844 | 0.015 | 0.404 | 0.014 | 0.444 | 0.022 | ... | ... | |
| 7c.......... | 10 01 25.82 | 01 07 40.52 | 18.576 | 0.018 | 0.056 | 1.583 | 0.201 | 0.894 | 0.027 | 0.266 | 0.024 | 0.239 | 0.050 | ... | ... | |
| 7d.......... | 10 01 25.44 | 01 07 32.10 | 19.562 | 0.026 | 0.056 | 1.702 | 0.362 | 0.840 | 0.041 | 0.414 | 0.036 | 0.302 | 0.077 | ... | ... | |
| CG 8: | | | | | | | | | | | | | | | | |
| 8a.......... | 10 01 26.92 | 00 20 39.08 | 17.539 | 0.011 | 0.074 | 2.398 | 0.233 | 1.433 | 0.016 | 0.564 | 0.011 | 0.396 | 0.015 | ... | ... | |
| 8b.......... | 10 01 27.34 | 00 20 54.56 | 17.626 | 0.011 | 0.074 | 2.545 | 0.311 | 1.402 | 0.018 | 0.569 | 0.013 | 0.326 | 0.020 | 0.2316 | ... | |
| 8c.......... | 10 01 26.63 | 00 20 55.17 | 19.420 | 0.024 | 0.074 | 1.599 | 0.326 | 1.171 | 0.042 | 0.581 | 0.029 | 0.280 | 0.063 | ... | ... | |
| 8d.......... | 10 01 26.36 | 00 20 39.56 | 19.791 | 0.029 | 0.075 | 1.621 | 0.439 | 1.210 | 0.055 | 0.576 | 0.036 | 0.294 | 0.079 | ... | ... | |
| 8e.......... | 10 01 26.39 | 00 20 32.57 | 19.834 | 0.029 | 0.075 | 2.204 | 0.703 | 1.213 | 0.054 | 0.665 | 0.035 | 0.359 | 0.067 | ... | ... | |
| CG 9: | | | | | | | | | | | | | | | | |
| 9a.......... | 10 04 07.74 | 00 17 46.52 | 16.308 | 0.009 | 0.085 | 1.994 | 0.048 | 0.949 | 0.010 | 0.485 | 0.009 | 0.397 | 0.008 | ... | ... | |
| 9b.......... | 10 04 08.60 | 00 17 56.55 | 17.357 | 0.010 | 0.085 | 2.143 | 0.125 | 1.149 | 0.013 | 0.515 | 0.011 | 0.411 | 0.014 | 0.1398 | ... | |
| 9c.......... | 10 04 07.27 | 00 17 43.80 | 18.523 | 0.015 | 0.085 | 1.549 | 0.113 | 0.732 | 0.019 | 0.366 | 0.019 | 0.266 | 0.041 | ... | ... | |
| 9d.......... | 10 04 06.54 | 00 18 14.45 | 19.290 | 0.020 | 0.085 | 1.994 | 0.597 | 1.644 | 0.048 | 0.628 | 0.024 | 0.336 | 0.047 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 10: | | | | | | | | | | | | | | | | |
| 10a........ | 10 06 02.12 | 01 12 04.22 | 16.871 | 0.008 | 0.086 | 1.781 | 0.075 | 1.070 | 0.010 | 0.517 | 0.009 | 0.396 | 0.010 | ... | ... | |
| 10b........ | 10 06 01.79 | 01 11 58.97 | 17.910 | 0.009 | 0.086 | 1.730 | 0.106 | 1.205 | 0.013 | 0.506 | 0.010 | 0.396 | 0.013 | ... | ... | |
| 10c........ | 10 06 01.21 | 01 11 48.95 | 19.641 | 0.026 | 0.086 | 1.133 | 0.283 | 1.123 | 0.047 | 0.484 | 0.035 | 0.386 | 0.067 | ... | ... | |
| 10d........ | 10 06 00.13 | 01 11 55.46 | 19.813 | 0.032 | 0.086 | 1.285 | 0.281 | 0.703 | 0.046 | 0.450 | 0.044 | 0.382 | 0.087 | ... | ... | |
| CG 11: | | | | | | | | | | | | | | | | |
| 11a........ | 10 08 19.97 | 00 12 44.59 | 16.378 | 0.008 | 0.079 | 2.046 | 0.045 | 1.020 | 0.009 | 0.468 | 0.008 | 0.388 | 0.007 | 0.0935 | ... | |
| 11b........ | 10 08 20.72 | 00 12 58.35 | 18.592 | 0.015 | 0.079 | 1.881 | 0.182 | 0.938 | 0.021 | 0.423 | 0.018 | 0.333 | 0.036 | ... | ... | |
| 11c........ | 10 08 19.49 | 00 12 54.47 | 18.788 | 0.017 | 0.079 | 1.832 | 0.211 | 0.922 | 0.025 | 0.378 | 0.021 | 0.345 | 0.046 | ... | ... | |
| 11d........ | 10 08 20.62 | 00 12 54.61 | 19.217 | 0.026 | 0.079 | 1.393 | 0.211 | 0.798 | 0.037 | 0.334 | 0.034 | 0.504 | 0.071 | ... | ... | |
| CG 12: | | | | | | | | | | | | | | | | |
| 12a........ | 10 08 21.77 | 01 11 26.90 | 17.126 | 0.012 | 0.102 | 1.942 | 0.244 | 1.406 | 0.021 | 0.510 | 0.014 | 0.307 | 0.024 | ... | ... | |
| 12b........ | 10 08 20.74 | 01 11 10.25 | 18.483 | 0.013 | 0.102 | 1.888 | 0.213 | 1.194 | 0.020 | 0.575 | 0.015 | 0.384 | 0.023 | ... | ... | |
| 12c........ | 10 08 21.75 | 01 11 24.29 | 19.162 | 0.027 | 0.102 | 2.136 | 0.622 | 1.021 | 0.046 | 0.775 | 0.033 | 0.504 | 0.049 | ... | ... | |
| 12d........ | 10 08 21.23 | 01 11 00.41 | 19.374 | 0.018 | 0.102 | 2.713 | 0.777 | 1.364 | 0.034 | 0.588 | 0.022 | 0.378 | 0.038 | ... | ... | |
| CG 13: | | | | | | | | | | | | | | | | |
| 13a........ | 10 08 36.40 | −00 04 24.23 | 17.039 | 0.010 | 0.079 | 2.055 | 0.094 | 1.239 | 0.012 | 0.523 | 0.010 | 0.397 | 0.010 | 0.1844 | ... | |
| 13b........ | 10 08 37.33 | −00 04 36.72 | 19.009 | 0.019 | 0.079 | 2.671 | 0.648 | 1.237 | 0.034 | 0.575 | 0.022 | 0.387 | 0.037 | ... | ... | |
| 13c........ | 10 08 37.07 | −00 04 17.30 | 19.316 | 0.025 | 0.079 | 1.929 | 0.435 | 1.077 | 0.044 | 0.554 | 0.031 | 0.326 | 0.059 | ... | ... | |
| 13d........ | 10 08 37.51 | −00 04 33.93 | 19.865 | 0.027 | 0.079 | 1.445 | 0.307 | 1.093 | 0.048 | 0.499 | 0.034 | 0.381 | 0.064 | ... | ... | |
| CG 14: | | | | | | | | | | | | | | | | |
| 14a........ | 10 10 56.62 | 00 15 22.76 | 17.148 | 0.010 | 0.084 | 1.962 | 0.114 | 1.271 | 0.013 | 0.502 | 0.011 | 0.384 | 0.014 | 0.1862 | ... | |
| 14b........ | 10 10 56.20 | 00 15 12.60 | 19.715 | 0.038 | 0.083 | 5.545 | 0.579 | 1.567 | 0.096 | 0.739 | 0.046 | 0.469 | 0.085 | ... | ... | |
| 14c........ | 10 10 56.72 | 00 14 58.26 | 19.893 | 0.025 | 0.083 | 1.894 | 0.441 | 1.183 | 0.043 | 0.397 | 0.031 | 0.403 | 0.068 | ... | ... | |
| 14d........ | 10 10 56.32 | 00 15 03.84 | 20.021 | 0.031 | 0.083 | 2.091 | 0.821 | 1.424 | 0.066 | 0.500 | 0.039 | 0.407 | 0.084 | ... | ... | |
| CG 15: | | | | | | | | | | | | | | | | |
| 15a........ | 10 13 39.11 | −00 08 36.04 | 17.657 | 0.010 | 0.095 | 1.902 | 0.067 | 0.900 | 0.011 | 0.380 | 0.011 | 0.343 | 0.013 | ... | ... | |
| 15b........ | 10 13 38.34 | −00 08 47.50 | 18.177 | 0.011 | 0.095 | 1.917 | 0.102 | 0.964 | 0.014 | 0.461 | 0.012 | 0.378 | 0.016 | ... | ... | |
| 15c........ | 10 13 39.48 | −00 08 44.58 | 19.660 | 0.033 | 0.094 | 1.900 | 0.432 | 0.783 | 0.049 | 0.428 | 0.043 | 0.220 | 0.100 | ... | ... | |
| 15d........ | 10 13 38.93 | −00 08 42.97 | 19.755 | 0.041 | 0.095 | 2.587 | 1.952 | 1.849 | 0.133 | 0.898 | 0.047 | 0.573 | 0.063 | ... | ... | |
| CG 16: | | | | | | | | | | | | | | | | |
| 16a........ | 10 15 38.96 | −00 52 01.09 | 17.791 | 0.011 | 0.126 | 2.167 | 0.159 | 1.172 | 0.016 | 0.497 | 0.012 | 0.365 | 0.015 | ... | 0.1778 | 2dFGRSN 289Z111 |
| 16b........ | 10 15 39.69 | −00 51 51.88 | 19.064 | 0.020 | 0.126 | 1.472 | 0.180 | 0.824 | 0.032 | 0.394 | 0.026 | 0.265 | 0.053 | ... | ... | |
| 16c........ | 10 15 40.44 | −00 51 54.89 | 19.819 | 0.036 | 0.127 | 0.652 | 0.206 | 1.024 | 0.070 | 0.403 | 0.049 | 0.469 | 0.087 | ... | ... | |
| 16d........ | 10 15 39.97 | −00 51 44.38 | 20.021 | 0.028 | 0.126 | 1.489 | 0.367 | 1.118 | 0.058 | 0.447 | 0.037 | 0.417 | 0.066 | ... | ... | |
| 16e........ | 10 15 38.85 | −00 51 56.95 | 20.319 | 0.046 | 0.126 | 2.661 | 1.184 | 0.849 | 0.083 | 0.468 | 0.063 | 0.118 | 0.147 | ... | ... | |
| CG 17: | | | | | | | | | | | | | | | | |
| 17a........ | 10 21 11.62 | 01 04 49.51 | 17.180 | 0.011 | 0.145 | 1.701 | 0.136 | 1.089 | 0.016 | 0.456 | 0.014 | 0.328 | 0.023 | ... | ... | |
| 17b........ | 10 21 11.33 | 01 04 52.45 | 17.263 | 0.009 | 0.145 | 2.195 | 0.178 | 1.343 | 0.013 | 0.525 | 0.010 | 0.480 | 0.012 | ... | ... | |
| 17c........ | 10 21 10.76 | 01 04 46.19 | 17.714 | 0.013 | 0.144 | 1.704 | 0.189 | 1.174 | 0.020 | 0.477 | 0.016 | 0.506 | 0.024 | ... | ... | |
| 17d........ | 10 21 10.40 | 01 05 06.73 | 19.145 | 0.021 | 0.146 | 2.155 | 0.550 | 1.229 | 0.037 | 0.460 | 0.027 | 0.429 | 0.049 | ... | ... | |
| 17e........ | 10 21 11.95 | 01 05 08.04 | 19.367 | 0.020 | 0.147 | 2.962 | 1.008 | 1.268 | 0.036 | 0.543 | 0.025 | 0.413 | 0.044 | ... | ... | |
| 17f........ | 10 21 12.71 | 01 05 06.70 | 19.801 | 0.061 | 0.147 | 1.720 | 0.934 | 0.899 | 0.099 | 0.360 | 0.089 | 0.173 | 0.228 | ... | ... | |
| CG 18: | | | | | | | | | | | | | | | | |
| 18a........ | 10 25 37.41 | −00 33 52.66 | 17.245 | 0.010 | 0.185 | 2.159 | 0.124 | 1.208 | 0.012 | 0.534 | 0.010 | 0.433 | 0.010 | 0.1693 | 0.1693 | 2MASXi J1025374−003353 |
| 18b........ | 10 25 37.87 | −00 33 44.26 | 18.010 | 0.012 | 0.186 | 2.483 | 0.266 | 1.237 | 0.016 | 0.527 | 0.013 | 0.375 | 0.016 | ... | ... | |
| 18c........ | 10 25 38.10 | −00 33 31.49 | 19.716 | 0.023 | 0.188 | 1.489 | 0.288 | 1.144 | 0.038 | 0.532 | 0.028 | 0.348 | 0.047 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18d........ | 10 25 38.11 | −00 33 48.01 | 19.858 | 0.037 | 0.186 | 0.625 | 0.895 | 2.610 | 0.229 | 0.875 | 0.044 | 0.581 | 0.053 | . . . | . . . | |
| 18e........ | 10 25 37.48 | −00 33 32.96 | 20.242 | 0.052 | 0.187 | 1.528 | 0.545 | 0.795 | 0.078 | 0.350 | 0.073 | 0.537 | 0.127 | . . . | . . . | |
| CG 19: | | | | | | | | | | | | | | | | |
| 19a........ | 10 25 45.66 | 01 10 27.21 | 17.217 | 0.010 | 0.154 | 1.453 | 0.057 | 0.804 | 0.012 | 0.448 | 0.011 | 0.382 | 0.014 | . . . | . . . | |
| 19b........ | 10 25 44.63 | 01 10 28.51 | 17.437 | 0.010 | 0.155 | 1.608 | 0.068 | 0.787 | 0.011 | 0.380 | 0.011 | 0.356 | 0.017 | . . . | . . . | |
| 19c........ | 10 25 45.95 | 01 10 46.99 | 19.268 | 0.018 | 0.153 | 1.504 | 0.194 | 0.888 | 0.027 | 0.377 | 0.024 | 0.335 | 0.049 | . . . | . . . | |
| 19d........ | 10 25 44.91 | 01 10 41.53 | 20.133 | 0.046 | 0.154 | 0.657 | 0.171 | 0.446 | 0.059 | 0.269 | 0.068 | 0.410 | 0.145 | . . . | . . . | |
| CG 20: | | | | | | | | | | | | | | | | |
| 20a........ | 10 26 01.52 | −00 29 31.05 | 17.723 | 0.011 | 0.212 | 2.261 | 0.204 | 1.266 | 0.016 | 0.520 | 0.012 | 0.459 | 0.014 | 0.1715 | . . . | |
| 20b........ | 10 26 01.33 | −00 29 38.96 | 18.233 | 0.018 | 0.212 | 1.503 | 0.206 | 1.130 | 0.028 | 0.520 | 0.022 | 0.466 | 0.032 | . . . | . . . | |
| 20c........ | 10 26 00.79 | −00 29 31.32 | 19.209 | 0.026 | 0.212 | 2.885 | 1.111 | 1.111 | 0.043 | 0.522 | 0.032 | 0.441 | 0.053 | . . . | . . . | |
| 20d........ | 10 26 00.92 | −00 29 20.40 | 19.794 | 0.035 | 0.213 | 0.584 | 0.192 | 1.027 | 0.059 | 0.481 | 0.046 | 0.543 | 0.073 | . . . | . . . | |
| 20e........ | 10 26 02.29 | −00 29 37.03 | 20.077 | 0.052 | 0.211 | 1.421 | 1.208 | 1.778 | 0.157 | 0.935 | 0.060 | 0.508 | 0.078 | . . . | . . . | |
| CG 2: | | | | | | | | | | | | | | | | |
| 21a........ | 10 26 13.85 | −00 02 04.47 | 16.924 | 0.012 | 0.156 | 2.254 | 0.134 | 0.965 | 0.014 | 0.449 | 0.013 | 0.420 | 0.016 | 0.1034 | 0.1034 | 2MASXi J1026137−000201 |
| 21b........ | 10 26 13.36 | −00 02 10.72 | 17.364 | 0.009 | 0.157 | 1.937 | 0.043 | 0.933 | 0.010 | 0.434 | 0.009 | 0.360 | 0.007 | . . . | . . . | |
| 21c........ | 10 26 13.82 | −00 02 00.89 | 18.474 | 0.012 | 0.157 | 1.659 | 0.080 | 0.984 | 0.015 | 0.475 | 0.013 | 0.322 | 0.016 | 0.1048 | . . . | |
| 21d........ | 10 26 13.15 | −00 02 32.91 | 19.000 | 0.021 | 0.156 | 1.169 | 0.105 | 0.573 | 0.027 | 0.400 | 0.027 | 0.333 | 0.054 | . . . | . . . | |
| CG 22: | | | | | | | | | | | | | | | | |
| 22a........ | 10 26 36.45 | 00 44 08.19 | 16.372 | 0.008 | 0.144 | 2.056 | 0.037 | 1.009 | 0.008 | 0.502 | 0.008 | 0.376 | 0.005 | 0.1056 | . . . | |
| 22b........ | 10 26 37.44 | 00 43 32.08 | 18.078 | 0.010 | 0.145 | 1.867 | 0.077 | 0.972 | 0.012 | 0.460 | 0.011 | 0.397 | 0.012 | . . . | . . . | |
| 22c........ | 10 26 38.25 | 00 43 56.11 | 18.638 | 0.012 | 0.145 | 2.304 | 0.266 | 1.256 | 0.019 | 0.542 | 0.014 | 0.361 | 0.021 | . . . | . . . | |
| 22d........ | 10 26 38.10 | 00 43 43.06 | 19.169 | 0.029 | 0.145 | 1.150 | 0.154 | 0.696 | 0.038 | 0.321 | 0.040 | 0.236 | 0.080 | . . . | . . . | |
| CG 23: | | | | | | | | | | | | | | | | |
| 23a........ | 10 28 33.74 | −00 01 21.63 | 17.672 | 0.013 | 0.189 | 1.372 | 0.097 | 1.196 | 0.018 | 0.508 | 0.014 | 0.463 | 0.018 | . . . | . . . | |
| 23b........ | 10 28 34.35 | −00 01 09.32 | 19.072 | 0.033 | 0.188 | 1.069 | 0.330 | 1.282 | 0.064 | 0.496 | 0.042 | 0.340 | 0.085 | . . . | . . . | |
| 23c........ | 10 28 33.76 | −00 01 13.26 | 20.376 | 0.041 | 0.188 | 1.331 | 0.538 | 1.306 | 0.081 | 0.565 | 0.051 | 0.395 | 0.092 | . . . | . . . | |
| 23d........ | 10 28 34.45 | −00 01 03.64 | 20.592 | 0.043 | 0.188 | 1.001 | 0.286 | 0.846 | 0.065 | 0.241 | 0.062 | 0.758 | 0.101 | . . . | . . . | |
| CG 24: | | | | | | | | | | | | | | | | |
| 24a........ | 10 34 00.40 | 00 24 39.26 | 17.233 | 0.010 | 0.188 | 2.039 | 0.094 | 1.149 | 0.012 | 0.560 | 0.011 | 0.367 | 0.012 | 0.1499 | . . . | |
| 24b........ | 10 33 59.92 | 00 24 42.20 | 18.809 | 0.015 | 0.188 | 2.171 | 0.261 | 1.205 | 0.021 | 0.511 | 0.017 | 0.392 | 0.028 | . . . | . . . | |
| 24c........ | 10 34 00.63 | 00 24 22.97 | 18.825 | 0.031 | 0.189 | 0.897 | 0.314 | 1.464 | 0.066 | 0.630 | 0.039 | 0.433 | 0.076 | . . . | . . . | |
| 24d........ | 10 34 00.17 | 00 24 33.95 | 19.241 | 0.022 | 0.188 | 1.456 | 0.336 | 1.445 | 0.043 | 0.761 | 0.026 | 0.528 | 0.040 | . . . | . . . | |
| CG 25: | | | | | | | | | | | | | | | | |
| 25a........ | 10 36 26.28 | 01 10 40.47 | 17.555 | 0.009 | 0.127 | 1.639 | 0.046 | 0.652 | 0.010 | 0.377 | 0.010 | 0.350 | 0.013 | . . . | . . . | |
| 25b........ | 10 36 27.52 | 01 10 31.69 | 18.901 | 0.012 | 0.127 | 2.672 | 0.334 | 1.279 | 0.017 | 0.745 | 0.013 | 0.426 | 0.015 | . . . | . . . | |
| 25c........ | 10 36 27.15 | 01 10 31.60 | 19.387 | 0.024 | 0.127 | 3.288 | 1.302 | 1.081 | 0.040 | 0.539 | 0.031 | 0.054 | 0.075 | . . . | . . . | |
| 25d........ | 10 36 27.35 | 01 10 31.51 | 20.059 | 0.054 | 0.127 | −0.136 | 0.164 | 1.020 | 0.094 | −4.214 | 1.930 | 4.541 | 1.941 | . . . | . . . | |
| CG 26: | | | | | | | | | | | | | | | | |
| 26a........ | 10 37 22.77 | −00 30 48.46 | 17.048 | 0.011 | 0.192 | 1.349 | 0.043 | 0.764 | 0.013 | 0.509 | 0.012 | 0.370 | 0.012 | 0.1140 | . . . | |
| 26b........ | 10 37 23.85 | −00 30 54.92 | 19.402 | 0.046 | 0.191 | 0.933 | 0.236 | 0.608 | 0.062 | 0.368 | 0.063 | 0.344 | 0.127 | . . . | . . . | |
| 26c........ | 10 37 22.89 | −00 31 02.72 | 19.441 | 0.027 | 0.192 | 1.005 | 0.124 | 0.504 | 0.033 | 0.327 | 0.035 | 0.192 | 0.079 | . . . | . . . | |
| 26d........ | 10 37 23.98 | −00 31 03.41 | 19.834 | 0.032 | 0.191 | 0.906 | 0.117 | 0.249 | 0.039 | 0.319 | 0.045 | 0.233 | 0.102 | . . . | . . . | |
| CG 27: | | | | | | | | | | | | | | | | |
| 27a........ | 10 41 01.81 | −00 57 08.74 | 16.285 | 0.008 | 0.144 | 1.981 | 0.035 | 1.000 | 0.008 | 0.452 | 0.008 | 0.349 | 0.005 | 0.0869 | 0.0869 | 2MASX J10405936+0057318 |
| 27b........ | 10 40 59.13 | −00 57 28.15 | 16.590 | 0.008 | 0.144 | 1.965 | 0.035 | 0.924 | 0.008 | 0.414 | 0.008 | 0.332 | 0.006 | . . . | . . . | |
| 27c........ | 10 40 59.70 | −00 57 40.01 | 17.576 | 0.011 | 0.145 | 1.550 | 0.060 | 0.862 | 0.014 | 0.421 | 0.012 | 0.344 | 0.015 | . . . | . . . | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27d........ | 10 40 59.71 | −00 57 32.76 | 18.215 | 0.011 | 0.144 | 1.945 | 0.092 | 0.818 | 0.014 | 0.396 | 0.013 | 0.278 | 0.018 | . . . | . . . | |
| 27e........ | 10 40 58.28 | −00 57 32.80 | 18.754 | 0.023 | 0.144 | 1.594 | 0.214 | 0.725 | 0.035 | 0.291 | 0.032 | 0.209 | 0.073 | . . . | . . . | |
| CG 28: | | | | | | | | | | | | | | | | |
| 28a........ | 10 49 19.43 | 00 14 06.16 | 17.209 | 0.008 | 0.112 | 2.072 | 0.067 | 1.130 | 0.009 | 0.450 | 0.008 | 0.424 | 0.009 | 0.1254 | . . . | |
| 28b........ | 10 49 19.03 | 00 14 01.92 | 17.335 | 0.015 | 0.112 | 1.116 | 0.099 | 1.054 | 0.021 | 0.364 | 0.019 | 0.368 | 0.040 | . . . | . . . | |
| 28c........ | 10 49 20.13 | 00 14 17.62 | 18.001 | 0.011 | 0.112 | 1.656 | 0.090 | 0.990 | 0.014 | 0.410 | 0.012 | 0.409 | 0.021 | . . . | . . . | |
| 28d........ | 10 49 20.68 | 00 14 19.70 | 18.015 | 0.009 | 0.112 | 1.092 | 0.032 | 0.748 | 0.011 | 0.404 | 0.011 | 0.337 | 0.017 | . . . | . . . | |
| CG 29: | | | | | | | | | | | | | | | | |
| 29a........ | 10 50 36.80 | 00 22 16.41 | 17.263 | 0.009 | 0.121 | 1.956 | 0.081 | 1.105 | 0.011 | 0.482 | 0.010 | 0.370 | 0.012 | 0.1496 | . . . | |
| 29b........ | 10 50 36.05 | 00 21 56.74 | 18.679 | 0.015 | 0.121 | 2.267 | 0.294 | 1.031 | 0.022 | 0.535 | 0.018 | 0.426 | 0.033 | . . . | . . . | |
| 29c........ | 10 50 36.31 | 00 22 12.57 | 19.445 | 0.028 | 0.121 | 1.497 | 0.268 | 0.865 | 0.039 | 0.515 | 0.035 | 0.600 | 0.062 | . . . | . . . | |
| 29d........ | 10 50 36.59 | 00 21 51.39 | 19.786 | 0.027 | 0.121 | 1.337 | 0.230 | 0.910 | 0.038 | 0.473 | 0.034 | 0.453 | 0.070 | . . . | . . . | |
| 29e........ | 10 50 37.12 | 00 22 08.42 | 20.099 | 0.037 | 0.121 | 0.766 | 0.301 | 1.329 | 0.072 | 0.454 | 0.049 | 0.454 | 0.108 | . . . | . . . | |
| 29f ........ | 10 50 35.49 | 00 22 12.67 | 20.184 | 0.058 | 0.120 | 2.023 | 1.791 | 1.799 | 0.161 | 1.201 | 0.063 | 0.589 | 0.077 | . . . | . . . | |
| CG 30: | | | | | | | | | | | | | | | | |
| 30a........ | 11 01 01.80 | 01 05 47.36 | 16.696 | 0.008 | 0.079 | 2.366 | 0.146 | 1.188 | 0.010 | 0.501 | 0.009 | 0.394 | 0.010 | 0.1849 | . . . | |
| 30b........ | 11 01 01.51 | 01 05 59.90 | 18.251 | 0.013 | 0.079 | 1.582 | 0.174 | 1.200 | 0.019 | 0.496 | 0.015 | 0.418 | 0.025 | . . . | . . . | |
| 30c........ | 11 01 03.15 | 01 06 01.17 | 19.026 | 0.019 | 0.078 | 1.250 | 0.131 | 0.618 | 0.024 | 0.361 | 0.026 | 0.233 | 0.057 | . . . | . . . | |
| 30d........ | 11 01 01.31 | 01 05 43.80 | 19.220 | 0.018 | 0.079 | 1.903 | 0.407 | 1.300 | 0.031 | 0.502 | 0.023 | 0.235 | 0.048 | . . . | . . . | |
| CG 31: | | | | | | | | | | | | | | | | |
| 31a........ | 11 02 45.15 | 00 39 38.66 | 16.233 | 0.007 | 0.092 | 2.085 | 0.040 | 0.991 | 0.008 | 0.439 | 0.008 | 0.364 | 0.006 | 0.0964 | . . . | |
| 31b........ | 11 02 45.11 | 00 39 22.73 | 17.213 | 0.011 | 0.092 | 1.501 | 0.057 | 0.763 | 0.013 | 0.414 | 0.013 | 0.192 | 0.020 | . . . | 0.1233 | 2dFGRSN367Z014 |
| 31c........ | 11 02 44.32 | 00 39 23.86 | 17.808 | 0.012 | 0.092 | 1.185 | 0.036 | 0.494 | 0.013 | 0.331 | 0.014 | 0.152 | 0.025 | . . . | . . . | |
| 31d........ | 11 02 43.67 | 00 39 18.05 | 18.360 | 0.012 | 0.092 | 1.740 | 0.098 | 0.967 | 0.015 | 0.377 | 0.014 | 0.313 | 0.021 | . . . | . . . | |
| CG 32: | | | | | | | | | | | | | | | | |
| 32a........ | 11 03 55.55 | 00 37 54.97 | 16.649 | 0.015 | 0.106 | 1.074 | 0.042 | 0.537 | 0.016 | 0.239 | 0.018 | 0.167 | 0.032 | 0.0964 | . . . | |
| 32b........ | 11 03 57.17 | 00 38 05.11 | 17.786 | 0.011 | 0.106 | 1.283 | 0.038 | 0.606 | 0.012 | 0.332 | 0.012 | 0.206 | 0.020 | . . . | . . . | |
| 32c........ | 11 03 54.90 | 00 37 59.71 | 18.703 | 0.018 | 0.106 | 1.366 | 0.131 | 0.892 | 0.025 | 0.427 | 0.024 | 0.273 | 0.043 | . . . | . . . | |
| 32d........ | 11 03 56.01 | 00 38 23.51 | 18.732 | 0.021 | 0.107 | 1.204 | 0.094 | 0.595 | 0.025 | 0.368 | 0.027 | 0.139 | 0.054 | . . . | . . . | |
| CG 33: | | | | | | | | | | | | | | | | |
| 33a........ | 11 04 04.74 | 01 04 37.20 | 17.375 | 0.008 | 0.145 | 1.125 | 0.030 | 0.859 | 0.009 | 0.591 | 0.008 | 0.366 | 0.009 | 0.1204 | . . . | |
| 33b........ | 11 04 04.76 | 01 04 49.26 | 18.115 | 0.015 | 0.146 | 1.852 | 0.211 | 1.000 | 0.021 | 0.567 | 0.018 | 0.494 | 0.027 | . . . | . . . | |
| 33c........ | 11 04 05.69 | 01 04 39.72 | 19.952 | 0.026 | 0.146 | 1.704 | 0.391 | 1.028 | 0.041 | 0.418 | 0.036 | 0.317 | 0.075 | . . . | . . . | |
| 33d........ | 11 04 05.91 | 01 04 44.92 | 20.087 | 0.041 | 0.147 | 0.857 | 0.272 | 0.887 | 0.063 | 0.408 | 0.058 | 0.073 | 0.156 | . . . | . . . | |
| CG 34: | | | | | | | | | | | | | | | | |
| 34a........ | 11 09 40.39 | 00 45 24.08 | 17.950 | 0.015 | 0.114 | 4.919 | 2.853 | 1.712 | 0.030 | 0.671 | 0.017 | 0.366 | 0.023 | . . . | . . . | |
| 34b........ | 11 09 40.00 | 00 45 36.55 | 18.500 | 0.014 | 0.114 | 3.386 | 1.044 | 1.761 | 0.028 | 0.648 | 0.016 | 0.345 | 0.021 | 0.3319 | . . . | |
| 34c........ | 11 09 40.74 | 00 45 37.70 | 19.717 | 0.032 | 0.114 | 1.122 | 0.418 | 1.584 | 0.074 | 0.660 | 0.041 | 0.273 | 0.072 | . . . | . . . | |
| 34d........ | 11 09 39.85 | 00 45 34.66 | 19.758 | 0.034 | 0.114 | 2.536 | 1.305 | 1.609 | 0.079 | 0.580 | 0.044 | 0.451 | 0.072 | . . . | . . . | |
| 34e........ | 11 09 39.21 | 00 45 42.02 | 20.543 | 0.044 | 0.114 | 2.236 | 1.011 | 1.526 | 0.098 | 0.672 | 0.055 | 0.443 | 0.086 | . . . | . . . | |
| 34f ........ | 11 09 40.47 | 00 45 31.17 | 20.920 | 0.049 | 0.114 | 1.635 | 0.779 | 1.526 | 0.113 | 0.565 | 0.066 | 0.564 | 0.101 | . . . | . . . | |
| CG 35: | | | | | | | | | | | | | | | | |
| 35a........ | 11 11 10.97 | 01 06 17.22 | 16.244 | 0.007 | 0.097 | 1.907 | 0.033 | 0.932 | 0.007 | 0.422 | 0.007 | 0.387 | 0.005 | 0.0909 | . . . | |
| 35b........ | 11 11 11.75 | 01 06 24.75 | 17.616 | 0.010 | 0.097 | 1.826 | 0.103 | 0.857 | 0.013 | 0.372 | 0.012 | 0.320 | 0.020 | . . . | . . . | |
| 35c........ | 11 11 13.26 | 01 06 35.08 | 18.380 | 0.010 | 0.098 | 1.546 | 0.085 | 0.690 | 0.013 | 0.369 | 0.013 | 0.295 | 0.025 | . . . | . . . | |
| 35d........ | 11 11 11.97 | 01 06 35.42 | 18.928 | 0.023 | 0.097 | 1.525 | 0.253 | 0.942 | 0.033 | 0.520 | 0.028 | 0.326 | 0.051 | . . . | . . . | |

TABLE 2—*Continued*

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 36: | | | | | | | | | | | | | | | | |
| 36a........ | 11 13 36.54 | −00 28 49.86 | 16.659 | 0.010 | 0.102 | 1.857 | 0.079 | 1.027 | 0.012 | 0.485 | 0.011 | 0.415 | 0.011 | 0.1000 | 0.1000 | NEDGROUP |
| 36b........ | 11 13 36.53 | −00 29 00.92 | 18.213 | 0.010 | 0.102 | 2.477 | 0.198 | 1.327 | 0.013 | 0.677 | 0.011 | 0.384 | 0.009 | ... | ... | |
| 36c........ | 11 13 35.85 | −00 28 44.11 | 18.857 | 0.021 | 0.102 | 0.976 | 0.073 | 0.363 | 0.024 | 0.264 | 0.028 | 0.071 | 0.068 | ... | ... | |
| 36d........ | 11 13 36.45 | −00 28 39.81 | 19.081 | 0.019 | 0.102 | 3.033 | 1.157 | 1.481 | 0.037 | 0.568 | 0.023 | 0.379 | 0.036 | ... | ... | |
| 36e........ | 11 13 37.07 | −00 29 02.51 | 19.565 | 0.021 | 0.102 | 1.494 | 0.314 | 1.306 | 0.037 | 0.479 | 0.025 | 0.299 | 0.045 | ... | ... | |
| CG 37: | | | | | | | | | | | | | | | | |
| 37a........ | 11 14 59.21 | −00 35 53.15 | 16.493 | 0.010 | 0.153 | 1.375 | 0.028 | 0.662 | 0.011 | 0.447 | 0.011 | 0.305 | 0.010 | ... | ... | |
| 37b........ | 11 14 58.80 | −00 36 27.48 | 18.017 | 0.012 | 0.153 | 2.483 | 0.402 | 1.545 | 0.021 | 0.617 | 0.014 | 0.416 | 0.017 | ... | ... | |
| 37c........ | 11 14 59.64 | −00 36 13.86 | 19.093 | 0.015 | 0.154 | 0.700 | 0.045 | 0.421 | 0.018 | 0.307 | 0.020 | 0.145 | 0.045 | ... | ... | |
| 37d........ | 11 14 58.12 | −00 35 50.51 | 19.309 | 0.019 | 0.151 | 1.694 | 0.354 | 1.409 | 0.036 | 0.633 | 0.022 | 0.450 | 0.034 | ... | ... | |
| CG 38: | | | | | | | | | | | | | | | | |
| 38a........ | 11 15 37.85 | −00 01 54.60 | 17.548 | 0.009 | 0.160 | 0.875 | 0.014 | 0.403 | 0.009 | 0.322 | 0.010 | 0.131 | 0.014 | ... | ... | |
| 38b........ | 11 15 36.76 | −00 01 45.34 | 17.610 | 0.009 | 0.161 | 1.963 | 0.054 | 0.929 | 0.010 | 0.412 | 0.009 | 0.328 | 0.009 | ... | ... | |
| 38c........ | 11 15 37.73 | −00 01 46.08 | 18.396 | 0.016 | 0.161 | 1.118 | 0.071 | 0.619 | 0.020 | 0.424 | 0.019 | 0.162 | 0.041 | ... | ... | |
| 38d........ | 11 15 37.39 | −00 01 55.52 | 19.347 | 0.020 | 0.160 | 2.067 | 0.308 | 0.894 | 0.029 | 0.375 | 0.025 | 0.348 | 0.050 | ... | ... | |
| CG 39: | | | | | | | | | | | | | | | | |
| 39a........ | 11 21 09.61 | 00 12 42.81 | 15.972 | 0.008 | 0.095 | 2.008 | 0.038 | 1.030 | 0.008 | 0.444 | 0.008 | 0.388 | 0.006 | ... | ... | |
| 39b........ | 11 21 07.97 | 00 12 42.51 | 17.760 | 0.011 | 0.096 | 1.954 | 0.106 | 0.948 | 0.013 | 0.411 | 0.012 | 0.336 | 0.020 | ... | ... | |
| 39c........ | 11 21 06.74 | 00 12 35.80 | 18.528 | 0.014 | 0.096 | 1.631 | 0.128 | 0.970 | 0.018 | 0.409 | 0.017 | 0.387 | 0.031 | ... | ... | |
| 39d........ | 11 21 09.14 | 00 12 36.86 | 18.751 | 0.017 | 0.095 | 1.273 | 0.157 | 1.248 | 0.026 | 0.374 | 0.021 | 0.551 | 0.036 | ... | ... | |
| CG 40: | | | | | | | | | | | | | | | | |
| 40a........ | 11 22 02.20 | 00 24 55.44 | 17.792 | 0.013 | 0.077 | 1.019 | 0.044 | 0.724 | 0.015 | 0.477 | 0.014 | 0.261 | 0.026 | ... | ... | |
| 40b........ | 11 22 03.08 | 00 25 05.10 | 19.562 | 0.024 | 0.077 | 1.433 | 0.271 | 1.192 | 0.038 | 0.602 | 0.028 | 0.321 | 0.057 | ... | ... | |
| 40c........ | 11 22 03.04 | 00 24 57.01 | 19.995 | 0.032 | 0.077 | 0.744 | 0.137 | 0.694 | 0.042 | 0.184 | 0.046 | 0.329 | 0.124 | ... | ... | |
| 40d........ | 11 22 02.39 | 00 24 51.31 | 20.671 | 0.048 | 0.077 | 0.574 | 0.249 | 1.031 | 0.077 | 0.555 | 0.061 | 0.718 | 0.098 | ... | ... | |
| CG 41: | | | | | | | | | | | | | | | | |
| 41a........ | 11 29 30.10 | −00 33 13.88 | 17.751 | 0.011 | 0.080 | 1.418 | 0.065 | 0.648 | 0.013 | 0.405 | 0.013 | 0.304 | 0.022 | 0.0754 | ... | |
| 41b........ | 11 29 30.55 | −00 33 02.99 | 20.051 | 0.037 | 0.079 | 2.462 | 1.463 | 1.725 | 0.100 | 0.576 | 0.047 | 0.406 | 0.080 | ... | ... | |
| 41c........ | 11 29 31.12 | −00 33 07.56 | 20.060 | 0.041 | 0.079 | 1.178 | 0.755 | 1.747 | 0.117 | 0.620 | 0.052 | 0.440 | 0.087 | ... | ... | |
| 41d........ | 11 29 31.41 | −00 33 10.16 | 20.229 | 0.041 | 0.079 | 1.752 | 0.797 | 1.327 | 0.083 | 0.598 | 0.052 | 0.492 | 0.083 | ... | ... | |
| CG 42: | | | | | | | | | | | | | | | | |
| 42a........ | 11 31 39.63 | 00 12 54.16 | 16.180 | 0.011 | 0.069 | 1.613 | 0.045 | 0.927 | 0.012 | 0.403 | 0.011 | 0.357 | 0.012 | 0.1324 | ... | |
| 42b........ | 11 31 38.25 | 00 12 53.33 | 16.918 | 0.010 | 0.069 | 1.307 | 0.037 | 0.972 | 0.012 | 0.529 | 0.011 | 0.344 | 0.011 | ... | ... | |
| 42c........ | 11 31 38.80 | 00 13 08.41 | 16.949 | 0.011 | 0.069 | 2.077 | 0.112 | 1.115 | 0.013 | 0.582 | 0.012 | 0.475 | 0.013 | 0.1324 | ... | |
| 42d........ | 11 31 38.13 | 00 13 01.77 | 18.552 | 0.016 | 0.069 | 2.315 | 0.484 | 1.565 | 0.030 | 0.555 | 0.018 | 0.429 | 0.030 | ... | ... | |
| 42e........ | 11 31 37.28 | 00 12 48.98 | 18.580 | 0.017 | 0.069 | 1.411 | 0.140 | 1.004 | 0.023 | 0.455 | 0.020 | 0.310 | 0.039 | ... | ... | |
| 42f ........ | 11 31 37.08 | 00 12 55.77 | 18.592 | 0.017 | 0.069 | 1.584 | 0.202 | 1.261 | 0.026 | 0.598 | 0.019 | 0.471 | 0.030 | ... | ... | |
| CG 43: | | | | | | | | | | | | | | | | |
| 43a........ | 11 33 11.86 | −00 27 52.84 | 15.918 | 0.010 | 0.067 | 1.316 | 0.041 | 0.862 | 0.011 | 0.431 | 0.011 | 0.351 | 0.012 | 0.1050 | 0.1050 | MASX J11331190−0027528 |
| 43b........ | 11 33 12.48 | −00 27 19.82 | 17.732 | 0.010 | 0.067 | 1.922 | 0.099 | 0.965 | 0.012 | 0.435 | 0.011 | 0.404 | 0.013 | ... | ... | |
| 43c........ | 11 33 10.93 | −00 26 57.89 | 17.787 | 0.010 | 0.067 | 1.963 | 0.098 | 1.048 | 0.012 | 0.459 | 0.011 | 0.352 | 0.012 | ... | ... | |
| 43d........ | 11 33 12.46 | −00 27 06.84 | 17.849 | 0.011 | 0.067 | 1.981 | 0.124 | 1.030 | 0.013 | 0.466 | 0.012 | 0.389 | 0.015 | ... | ... | |
| 43e........ | 11 33 09.85 | −00 27 32.23 | 17.997 | 0.010 | 0.067 | 2.317 | 0.341 | 1.480 | 0.019 | 0.548 | 0.012 | 0.416 | 0.018 | ... | ... | |
| CG 44: | | | | | | | | | | | | | | | | |
| 44a........ | 11 43 41.31 | 00 38 50.88 | 17.966 | 0.018 | 0.076 | 1.476 | 0.235 | 1.389 | 0.031 | 0.439 | 0.022 | 0.416 | 0.034 | ... | ... | |
| 44b........ | 11 43 40.54 | 00 39 06.94 | 20.081 | 0.035 | 0.076 | 1.052 | 0.221 | 0.828 | 0.049 | 0.281 | 0.050 | 0.329 | 0.095 | ... | ... | |
| 44c........ | 11 43 40.28 | 00 38 59.99 | 20.315 | 0.037 | 0.076 | 2.985 | 1.138 | 1.323 | 0.069 | 0.507 | 0.048 | 0.440 | 0.075 | ... | ... | |
| 44d........ | 11 43 40.72 | 00 38 46.17 | 20.477 | 0.036 | 0.076 | 3.366 | 0.854 | 1.397 | 0.072 | 0.522 | 0.048 | 0.266 | 0.085 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 45: | | | | | | | | | | | | | | | | |
| 45a........ | 11 46 30.02 | −01 01 21.60 | 17.436 | 0.010 | 0.055 | 1.082 | 0.026 | 0.486 | 0.011 | 0.310 | 0.011 | 0.190 | 0.017 | 0.0799 | ... | |
| 45b........ | 11 46 28.65 | −01 01 15.89 | 18.165 | 0.011 | 0.054 | 1.639 | 0.100 | 0.907 | 0.016 | 0.517 | 0.013 | 0.348 | 0.020 | ... | ... | |
| 45c........ | 11 46 29.46 | −01 01 24.41 | 19.730 | 0.030 | 0.055 | 1.130 | 0.143 | 0.510 | 0.041 | 0.224 | 0.043 | 0.114 | 0.103 | ... | ... | |
| 45d........ | 11 46 28.36 | −01 01 29.38 | 20.427 | 0.056 | 0.055 | 0.772 | 0.196 | 0.459 | 0.076 | 0.119 | 0.086 | −0.071 | 0.263 | ... | ... | |
| CG 46: | | | | | | | | | | | | | | | | |
| 46a........ | 11 48 36.47 | 00 46 52.74 | 16.094 | 0.008 | 0.069 | 2.087 | 0.042 | 1.058 | 0.009 | 0.456 | 0.008 | 0.401 | 0.005 | 0.1260 | ... | |
| 46b........ | 11 48 37.01 | 00 47 18.70 | 17.724 | 0.010 | 0.069 | 1.776 | 0.077 | 1.051 | 0.012 | 0.441 | 0.011 | 0.378 | 0.012 | ... | ... | |
| 46c........ | 11 48 37.19 | 00 46 52.69 | 18.464 | 0.012 | 0.069 | 2.034 | 0.124 | 1.098 | 0.015 | 0.402 | 0.013 | 0.344 | 0.016 | ... | ... | |
| 46d........ | 11 48 36.28 | 00 47 18.93 | 18.553 | 0.015 | 0.069 | 1.532 | 0.099 | 0.806 | 0.018 | 0.473 | 0.017 | 0.351 | 0.024 | ... | ... | |
| 46e........ | 11 48 38.21 | 00 46 56.29 | 18.787 | 0.020 | 0.069 | 1.734 | 0.243 | 0.960 | 0.030 | 0.406 | 0.027 | 0.340 | 0.046 | ... | ... | |
| CG 47: | | | | | | | | | | | | | | | | |
| 47a........ | 11 51 11.03 | 00 17 01.23 | 17.901 | 0.024 | 0.066 | 1.217 | 0.127 | 0.734 | 0.030 | 0.300 | 0.030 | −0.001 | 0.086 | ... | ... | |
| 47b........ | 11 51 10.74 | 00 17 04.47 | 18.107 | 0.012 | 0.066 | 2.144 | 0.144 | 1.106 | 0.015 | 0.518 | 0.012 | 0.371 | 0.017 | ... | ... | |
| 47c........ | 11 51 10.81 | 00 16 52.46 | 20.096 | 0.039 | 0.066 | 1.039 | 0.247 | 0.821 | 0.057 | 0.307 | 0.053 | 0.432 | 0.121 | ... | ... | |
| 47d........ | 11 51 11.64 | 00 17 04.89 | 20.323 | 0.039 | 0.066 | 0.830 | 0.138 | 0.367 | 0.048 | 0.289 | 0.053 | 0.213 | 0.146 | ... | ... | |
| CG 48: | | | | | | | | | | | | | | | | |
| 48a........ | 11 55 03.58 | −00 34 50.64 | 16.283 | 0.011 | 0.073 | 1.495 | 0.056 | 0.855 | 0.012 | 0.419 | 0.011 | 0.354 | 0.013 | ... | ... | |
| 48b........ | 11 55 04.81 | −00 35 22.95 | 16.344 | 0.009 | 0.072 | 1.536 | 0.046 | 0.872 | 0.010 | 0.406 | 0.010 | 0.335 | 0.010 | ... | ... | |
| 48c........ | 11 55 05.75 | −00 34 56.23 | 16.624 | 0.013 | 0.073 | 1.170 | 0.053 | 0.681 | 0.015 | 0.282 | 0.015 | 0.217 | 0.024 | 0.1353 | ... | |
| 48d........ | 11 55 05.05 | −00 35 07.61 | 17.460 | 0.011 | 0.073 | 1.142 | 0.043 | 0.708 | 0.013 | 0.401 | 0.013 | 0.343 | 0.016 | 0.1274 | ... | |
| 48e........ | 11 55 06.34 | −00 34 56.04 | 18.135 | 0.016 | 0.073 | 1.376 | 0.129 | 0.841 | 0.022 | 0.439 | 0.020 | 0.265 | 0.034 | ... | ... | |
| CG 49: | | | | | | | | | | | | | | | | |
| 49a........ | 11 55 40.76 | −00 55 30.74 | 17.006 | 0.008 | 0.063 | 1.866 | 0.065 | 1.110 | 0.010 | 0.381 | 0.009 | 0.107 | 0.011 | 0.1067 | 0.1067 | 2MASX J11554077−0055309 |
| 49b........ | 11 55 41.23 | −00 55 29.37 | 17.803 | 0.010 | 0.063 | 0.990 | 0.051 | 1.190 | 0.015 | 0.419 | 0.011 | 0.217 | 0.015 | ... | ... | |
| 49c........ | 11 55 39.76 | −00 55 24.74 | 17.954 | 0.011 | 0.063 | 1.434 | 0.066 | 0.762 | 0.015 | 0.388 | 0.013 | 0.265 | 0.019 | ... | ... | |
| 49d........ | 11 55 40.36 | −00 55 32.40 | 19.079 | 0.018 | 0.063 | 0.323 | 0.139 | 1.793 | 0.055 | 0.250 | 0.025 | −0.122 | 0.066 | ... | ... | |
| CG 50: | | | | | | | | | | | | | | | | |
| 50a........ | 11 55 41.09 | −00 53 02.31 | 17.358 | 0.009 | 0.064 | 1.850 | 0.059 | 0.851 | 0.010 | 0.350 | 0.010 | 0.353 | 0.010 | 0.0761 | ... | |
| 50b........ | 11 55 41.80 | −00 53 11.95 | 17.759 | 0.009 | 0.064 | 2.085 | 0.090 | 0.959 | 0.011 | 0.449 | 0.010 | 0.378 | 0.010 | ... | ... | |
| 50c........ | 11 55 41.29 | −00 53 08.74 | 18.840 | 0.016 | 0.064 | 1.410 | 0.272 | 1.729 | 0.042 | 0.528 | 0.019 | 0.414 | 0.026 | 0.3390 | ... | |
| 50d | 11 55 41.87 | −00 53 15.12 | 19.246 | 0.025 | 0.064 | 1.468 | 0.184 | 0.613 | 0.036 | 0.169 | 0.037 | 0.001 | 0.094 | ... | ... | |
| CG 51: | | | | | | | | | | | | | | | | |
| 51a | 11 56 37.38 | 01 07 00.84 | 16.280 | 0.011 | 0.044 | 1.040 | 0.038 | 0.430 | 0.013 | 0.178 | 0.014 | 0.158 | 0.028 | ... | ... | |
| 51b | 11 56 38.62 | 01 07 16.70 | 17.241 | 0.008 | 0.044 | 0.824 | 0.019 | 0.373 | 0.009 | 0.290 | 0.010 | 0.157 | 0.016 | 0.1573 | ... | |
| 51c | 11 56 35.52 | 01 07 20.09 | 17.719 | 0.008 | 0.044 | 1.996 | 0.085 | 0.966 | 0.010 | 0.381 | 0.009 | 0.395 | 0.011 | ... | ... | |
| 51d | 11 56 37.43 | 01 06 52.77 | 19.214 | 0.022 | 0.044 | 1.310 | 0.168 | 0.679 | 0.030 | 0.311 | 0.030 | 0.356 | 0.059 | ... | ... | |
| CG 52: | | | | | | | | | | | | | | | | |
| 52a | 11 57 43.41 | −00 52 16.60 | 16.128 | 0.010 | 0.069 | 1.131 | 0.024 | 0.676 | 0.011 | 0.179 | 0.011 | 0.129 | 0.015 | ... | 0.1318 | 2MASX J11574348−0052178 |
| 52b | 11 57 43.05 | −00 52 31.39 | 18.314 | 0.013 | 0.069 | 1.981 | 0.176 | 0.976 | 0.020 | 0.404 | 0.016 | 0.308 | 0.025 | ... | ... | |
| 52c | 11 57 44.16 | −00 52 43.44 | 18.601 | 0.013 | 0.069 | 1.115 | 0.057 | 0.680 | 0.017 | 0.362 | 0.015 | 0.252 | 0.026 | ... | ... | |
| 52d | 11 57 44.95 | −00 52 09.32 | 19.072 | 0.021 | 0.069 | 1.013 | 0.095 | 0.533 | 0.029 | 0.371 | 0.028 | 0.158 | 0.057 | ... | ... | |
| CG 53: | | | | | | | | | | | | | | | | |
| 53a | 11 58 20.85 | −00 05 05.07 | 16.766 | 0.009 | 0.092 | 2.118 | 0.066 | 1.072 | 0.010 | 0.431 | 0.009 | 0.420 | 0.007 | 0.1058 | 0.1058 | 2MASX J11582083−0005047 |
| 53b | 11 58 21.42 | −00 05 04.53 | 17.625 | 0.010 | 0.092 | 1.702 | 0.068 | 1.042 | 0.012 | 0.440 | 0.011 | 0.431 | 0.011 | ... | ... | |
| 53c | 11 58 19.18 | −00 05 13.86 | 18.645 | 0.018 | 0.093 | 1.663 | 0.306 | 1.486 | 0.035 | 0.499 | 0.021 | 0.421 | 0.033 | ... | ... | |
| 53d | 11 58 21.52 | −00 05 20.78 | 18.773 | 0.012 | 0.093 | 1.032 | 0.045 | 0.499 | 0.014 | 0.353 | 0.014 | 0.129 | 0.029 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 54: | | | | | | | | | | | | | | | | |
| 54a | 11 58 27.70 | 00 43 04.45 | 14.843 | 0.007 | 0.062 | 2.093 | 0.016 | 1.014 | 0.007 | 0.486 | 0.007 | 0.411 | 0.002 | . . . | 0.0474 | UGC06959NED03 |
| 54b | 11 58 26.12 | 00 42 47.14 | 16.216 | 0.007 | 0.061 | 2.046 | 0.023 | 0.885 | 0.008 | 0.407 | 0.008 | 0.309 | 0.003 | 0.0784 | 0.0786 | UGC 06959 NED02 |
| 54c | 11 58 25.30 | 00 42 24.61 | 16.759 | 0.008 | 0.061 | 2.055 | 0.026 | 0.864 | 0.008 | 0.430 | 0.008 | 0.394 | 0.003 | . . . | 0.0475 | UGC 06959 NED01 |
| 54d | 11 58 24.80 | 00 42 17.79 | 16.796 | 0.026 | 0.061 | 2.006 | 0.250 | 0.688 | 0.033 | 0.596 | 0.030 | 0.584 | 0.033 | . . . | . . . | |
| CG 55: | | | | | | | | | | | | | | | | |
| 55a | 12 00 08.06 | 00 40 25.81 | 15.931 | 0.007 | 0.066 | 2.151 | 0.031 | 0.967 | 0.008 | 0.439 | 0.008 | 0.339 | 0.004 | 0.0854 | . . . | |
| 55b | 12 00 10.35 | 00 40 21.92 | 18.276 | 0.011 | 0.066 | 1.775 | 0.100 | 1.090 | 0.014 | 0.437 | 0.013 | 0.319 | 0.015 | . . . | . . . | |
| 55c | 12 00 08.34 | 00 40 36.00 | 18.290 | 0.010 | 0.066 | 2.441 | 0.130 | 1.244 | 0.012 | 0.400 | 0.011 | 0.372 | 0.009 | . . . | . . . | |
| 55d | 12 00 08.38 | 00 40 37.71 | 18.796 | 0.013 | 0.066 | 1.567 | 0.097 | 1.137 | 0.018 | 0.426 | 0.015 | 0.203 | 0.020 | . . . | . . . | |
| CG 56: | | | | | | | | | | | | | | | | |
| 56a | 12 00 09.90 | −00 35 49.93 | 16.416 | 0.008 | 0.075 | 1.924 | 0.066 | 1.204 | 0.010 | 0.491 | 0.009 | 0.399 | 0.006 | 0.1694 | 0.1694 | 2MASX J12000991−0035499 |
| 56b | 12 00 10.57 | −00 35 36.77 | 17.222 | 0.009 | 0.075 | 1.798 | 0.079 | 1.197 | 0.011 | 0.529 | 0.010 | 0.436 | 0.008 | 0.1695 | 0.1695 | 2MASX J12001057−0035369 |
| 56c | 12 00 08.79 | −00 36 03.46 | 19.128 | 0.017 | 0.075 | 2.275 | 0.412 | 1.177 | 0.027 | 0.447 | 0.020 | 0.368 | 0.031 | . . . | 0.1485 | |
| 56d | 12 00 11.35 | −00 35 58.46 | 19.396 | 0.021 | 0.074 | 2.792 | 0.823 | 1.103 | 0.036 | 0.439 | 0.027 | 0.416 | 0.044 | . . . | . . . | |
| CG 57: | | | | | | | | | | | | | | | | |
| 57a | 12 00 13.54 | −00 25 18.55 | 16.582 | 0.008 | 0.080 | 1.940 | 0.041 | 0.946 | 0.008 | 0.422 | 0.008 | 0.375 | 0.005 | 0.0766 | 0.0766 | 2MASX J12001350−0025189 |
| 57b | 12 00 13.95 | −00 25 27.06 | 17.457 | 0.010 | 0.080 | 1.035 | 0.024 | 0.471 | 0.010 | 0.334 | 0.010 | 0.161 | 0.014 | . . . | . . . | |
| 57c | 12 00 14.01 | −00 25 29.36 | 18.470 | 0.011 | 0.080 | 2.382 | 0.218 | 1.192 | 0.016 | 0.557 | 0.012 | 0.365 | 0.012 | . . . | . . . | |
| 57d | 12 00 12.44 | −00 25 49.22 | 19.341 | 0.018 | 0.080 | 2.343 | 0.576 | 1.320 | 0.033 | 0.436 | 0.022 | 0.339 | 0.035 | . . . | . . . | |
| 57e | 12 00 12.40 | −00 25 36.41 | 19.576 | 0.023 | 0.080 | 2.302 | 0.776 | 1.361 | 0.045 | 0.480 | 0.028 | 0.453 | 0.043 | . . . | . . . | |
| CG 58: | | | | | | | | | | | | | | | | |
| 58a | 12 00 56.89 | −00 07 58.92 | 17.095 | 0.012 | 0.059 | 1.521 | 0.098 | 1.077 | 0.017 | 0.451 | 0.014 | 0.391 | 0.019 | . . . | . . . | |
| 58b | 12 00 57.65 | −00 07 53.74 | 18.643 | 0.017 | 0.059 | 1.981 | 0.273 | 1.123 | 0.026 | 0.480 | 0.020 | 0.280 | 0.035 | . . . | . . . | |
| 58c | 12 00 57.56 | −00 08 00.54 | 19.616 | 0.023 | 0.059 | 2.196 | 0.557 | 1.282 | 0.042 | 0.584 | 0.027 | 0.386 | 0.043 | . . . | . . . | |
| 58d | 12 00 56.31 | −00 08 01.72 | 19.755 | 0.028 | 0.059 | 0.444 | 0.080 | 0.531 | 0.036 | 0.020 | 0.042 | 0.256 | 0.105 | . . . | . . . | |
| CG 59: | | | | | | | | | | | | | | | | |
| 59a | 12 02 23.46 | 01 14 43.24 | 17.868 | 0.012 | 0.057 | 1.780 | 0.237 | 1.410 | 0.022 | 0.557 | 0.014 | 0.326 | 0.022 | . . . | . . . | |
| 59b | 12 02 23.06 | 01 14 42.55 | 18.246 | 0.016 | 0.057 | 2.306 | 0.557 | 1.432 | 0.032 | 0.465 | 0.020 | 0.554 | 0.030 | . . . | . . . | |
| 59c | 12 02 22.48 | 01 14 56.31 | 18.709 | 0.018 | 0.057 | 1.146 | 0.165 | 1.076 | 0.029 | 0.417 | 0.023 | 0.435 | 0.039 | . . . | . . . | |
| 59d | 12 02 22.04 | 01 14 52.91 | 20.293 | 0.041 | 0.057 | 1.962 | 0.928 | 1.200 | 0.079 | 0.551 | 0.053 | 0.579 | 0.084 | . . . | . . . | |
| 59e | 12 02 23.15 | 01 14 35.28 | 20.574 | 0.058 | 0.057 | 0.807 | 0.353 | 0.743 | 0.088 | 0.068 | 0.098 | 0.812 | 0.164 | . . . | . . . | |
| CG 60: | | | | | | | | | | | | | | | | |
| 60a | 12 09 28.31 | −00 00 32.08 | 17.523 | 0.011 | 0.062 | 1.713 | 0.110 | 1.306 | 0.015 | 0.481 | 0.012 | 0.357 | 0.014 | . . . | . . . | |
| 60b | 12 09 27.70 | −00 00 30.05 | 19.720 | 0.032 | 0.062 | 1.316 | 0.348 | 1.148 | 0.057 | 0.407 | 0.042 | 0.429 | 0.075 | . . . | . . . | |
| 60c | 12 09 27.87 | −00 00 26.56 | 19.913 | 0.027 | 0.062 | 2.752 | 1.041 | 1.639 | 0.063 | 0.712 | 0.031 | 0.415 | 0.044 | . . . | . . . | |
| 60d | 12 09 28.77 | −00 00 25.48 | 20.211 | 0.030 | 0.062 | 2.534 | 0.937 | 1.751 | 0.077 | 0.580 | 0.035 | 0.356 | 0.058 | . . . | . . . | |
| CG 61: | | | | | | | | | | | | | | | | |
| 61a | 12 09 52.42 | −00 33 58.28 | 16.817 | 0.009 | 0.056 | 2.056 | 0.081 | 1.299 | 0.010 | 0.516 | 0.009 | 0.391 | 0.006 | . . . | . . . | |
| 61b | 12 09 50.88 | −00 34 00.97 | 17.421 | 0.010 | 0.056 | 1.938 | 0.120 | 1.232 | 0.013 | 0.504 | 0.011 | 0.360 | 0.011 | 0.1869 | . . . | |
| 61c | 12 09 51.27 | −00 34 14.78 | 18.858 | 0.018 | 0.056 | 1.591 | 0.248 | 1.190 | 0.030 | 0.447 | 0.022 | 0.340 | 0.035 | . . . | . . . | |
| 61d | 12 09 50.96 | −00 33 54.76 | 19.286 | 0.023 | 0.056 | 1.281 | 0.190 | 0.903 | 0.034 | 0.429 | 0.029 | 0.355 | 0.047 | . . . | . . . | |
| 61e | 12 09 51.66 | −00 34 03.86 | 19.571 | 0.138 | 0.056 | 0.531 | 1.310 | 1.736 | 0.367 | 0.043 | 0.212 | −0.018 | 0.606 | . . . | . . . | |
| CG 62: | | | | | | | | | | | | | | | | |
| 62a | 12 14 15.32 | −00 26 57.87 | 17.367 | 0.011 | 0.056 | 2.274 | 0.269 | 1.502 | 0.018 | 0.565 | 0.012 | 0.284 | 0.015 | 0.2452 | 0.2452 | 2MASX J12141532−0026584 |
| 62b | 12 14 15.48 | −00 26 56.69 | 19.271 | 0.017 | 0.056 | 2.224 | 0.450 | 1.541 | 0.032 | 0.577 | 0.019 | 0.329 | 0.024 | . . . | 0.2452 | 2MASX J12141532−0026584 |
| 62c | 12 14 15.94 | −00 26 57.50 | 19.352 | 0.023 | 0.056 | 2.224 | 0.676 | 1.381 | 0.044 | 0.378 | 0.029 | 0.640 | 0.039 | . . . | . . . | |
| 62d | 12 14 15.31 | −00 27 01.17 | 19.619 | 0.027 | 0.056 | 1.325 | 0.376 | 1.374 | 0.056 | 0.356 | 0.035 | 0.575 | 0.053 | . . . | . . . | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 63: | | | | | | | | | | | | | | | | |
| 63a | 12 15 31.40 | 00 38 32.89 | 17.883 | 0.011 | 0.063 | 1.869 | 0.085 | 0.887 | 0.013 | 0.399 | 0.012 | 0.062 | 0.018 | ... | ... | |
| 63b | 12 15 31.16 | 00 38 30.78 | 18.730 | 0.017 | 0.063 | 1.008 | 0.062 | 0.528 | 0.021 | 0.258 | 0.022 | 0.077 | 0.045 | ... | ... | |
| 63c | 12 15 30.47 | 00 38 40.20 | 18.784 | 0.033 | 0.063 | 0.808 | 0.025 | 0.202 | 0.033 | 0.352 | 0.034 | −0.075 | 0.030 | 0.0752 | ... | |
| 63d | 12 15 31.80 | 00 38 24.72 | 20.716 | 0.053 | 0.063 | 1.080 | 0.355 | 0.816 | 0.081 | 0.124 | 0.085 | 0.408 | 0.162 | ... | ... | |
| CG 64: | | | | | | | | | | | | | | | | |
| 64a | 12 17 04.76 | −00 55 07.83 | 17.330 | 0.009 | 0.066 | 2.343 | 0.154 | 1.315 | 0.014 | 0.516 | 0.010 | 0.335 | 0.010 | 0.1977 | ... | |
| 64b | 12 17 05.20 | −00 54 52.42 | 19.032 | 0.016 | 0.067 | 1.900 | 0.265 | 1.266 | 0.030 | 0.529 | 0.018 | 0.329 | 0.026 | ... | ... | |
| 64c | 12 17 04.89 | −00 54 39.69 | 19.424 | 0.020 | 0.067 | 2.404 | 0.556 | 1.246 | 0.040 | 0.538 | 0.024 | 0.410 | 0.034 | ... | ... | |
| 64d | 12 17 04.39 | −00 54 47.73 | 20.030 | 0.031 | 0.066 | 0.767 | 0.114 | 0.472 | 0.043 | 0.306 | 0.042 | 0.261 | 0.084 | ... | ... | |
| CG 65: | | | | | | | | | | | | | | | | |
| 65a | 12 22 39.15 | −00 58 48.41 | 16.401 | 0.010 | 0.065 | 1.554 | 0.073 | 1.172 | 0.014 | 0.362 | 0.011 | −0.265 | 0.022 | ... | ... | |
| 65b | 12 22 39.33 | −00 58 51.13 | 16.730 | 0.009 | 0.065 | 2.238 | 0.148 | 1.300 | 0.014 | 0.574 | 0.010 | 0.495 | 0.009 | ... | 0.1753 | 2MASX J12223930−0058503 |
| 65c | 12 22 41.23 | −00 58 58.78 | 19.280 | 0.020 | 0.064 | 1.886 | 0.325 | 1.171 | 0.038 | 0.485 | 0.024 | 0.334 | 0.039 | ... | ... | |
| 65d | 12 22 38.20 | −00 58 41.36 | 19.318 | 0.020 | 0.065 | 1.556 | 0.276 | 1.246 | 0.042 | 0.497 | 0.024 | 0.261 | 0.043 | ... | ... | |
| CG 66: | | | | | | | | | | | | | | | | |
| 66a | 12 25 13.71 | −00 10 49.95 | 17.503 | 0.011 | 0.075 | 2.795 | 0.396 | 1.578 | 0.018 | 0.606 | 0.012 | 0.455 | 0.012 | 0.2873 | ... | |
| 66b | 12 25 13.31 | −00 10 52.61 | 18.648 | 0.021 | 0.075 | 1.630 | 0.406 | 1.605 | 0.047 | 0.528 | 0.025 | 0.370 | 0.041 | ... | ... | |
| 66c | 12 25 14.70 | −00 10 54.54 | 19.835 | 0.025 | 0.075 | 1.090 | 0.357 | 1.657 | 0.063 | 0.590 | 0.030 | 0.381 | 0.049 | ... | ... | |
| 66d | 12 25 14.34 | −00 10 41.29 | 20.315 | 0.182 | 0.075 | −0.109 | 0.609 | 1.142 | 0.329 | 0.086 | 0.277 | 0.413 | 0.610 | ... | ... | |
| CG 67: | | | | | | | | | | | | | | | | |
| 67a | 12 31 39.53 | −00 34 14.04 | 16.411 | 0.010 | 0.057 | 2.068 | 0.114 | 1.257 | 0.012 | 0.460 | 0.010 | 0.385 | 0.010 | 0.2021 | ... | |
| 67b | 12 31 39.46 | −00 33 54.39 | 18.604 | 0.017 | 0.056 | 1.882 | 0.283 | 1.164 | 0.027 | 0.393 | 0.020 | 0.422 | 0.032 | ... | ... | |
| 67c | 12 31 39.63 | −00 33 52.93 | 19.205 | 0.017 | 0.056 | 1.072 | 0.116 | 1.031 | 0.025 | 0.456 | 0.020 | 0.294 | 0.031 | ... | ... | |
| 67d | 12 31 40.22 | −00 34 18.09 | 19.381 | 0.023 | 0.057 | 1.319 | 0.223 | 0.997 | 0.036 | 0.546 | 0.028 | 0.192 | 0.051 | ... | ... | |
| CG 68: | | | | | | | | | | | | | | | | |
| 68a | 12 33 48.93 | −00 09 37.11 | 16.230 | 0.009 | 0.066 | 2.174 | 0.060 | 1.043 | 0.010 | 0.484 | 0.009 | 0.438 | 0.006 | ... | ... | |
| 68b | 12 33 48.22 | −00 09 29.09 | 17.654 | 0.010 | 0.066 | 1.916 | 0.066 | 1.017 | 0.011 | 0.436 | 0.010 | 0.468 | 0.009 | 0.1354 | ... | |
| 68c | 12 33 49.98 | −00 09 24.62 | 18.365 | 0.012 | 0.066 | 2.236 | 0.161 | 1.045 | 0.016 | 0.438 | 0.013 | 0.428 | 0.016 | ... | ... | |
| 68d | 12 33 49.88 | −00 09 17.50 | 18.894 | 0.018 | 0.066 | 1.724 | 0.202 | 0.944 | 0.027 | 0.392 | 0.022 | 0.371 | 0.040 | ... | ... | |
| 68e | 12 33 49.29 | −00 09 49.31 | 19.173 | 0.015 | 0.066 | 1.826 | 0.170 | 1.050 | 0.022 | 0.419 | 0.017 | 0.554 | 0.023 | ... | ... | |
| CG 69: | | | | | | | | | | | | | | | | |
| 69a | 12 36 44.20 | −01 00 27.50 | 17.978 | 0.016 | 0.066 | 1.229 | 0.134 | 1.052 | 0.028 | 0.444 | 0.020 | 0.405 | 0.031 | ... | ... | |
| 69b | 12 36 44.17 | −01 00 21.03 | 18.734 | 0.014 | 0.066 | 2.008 | 0.263 | 1.248 | 0.025 | 0.502 | 0.017 | 0.367 | 0.024 | ... | ... | |
| 69c | 12 36 44.80 | −01 00 26.22 | 18.809 | 0.018 | 0.066 | 0.969 | 0.089 | 0.724 | 0.026 | 0.400 | 0.023 | 0.217 | 0.043 | ... | ... | |
| 69d | 12 36 43.43 | −01 00 19.81 | 20.160 | 0.074 | 0.066 | 1.083 | 0.664 | 0.944 | 0.147 | −0.066 | 0.138 | 0.478 | 0.290 | ... | ... | |
| CG 70: | | | | | | | | | | | | | | | | |
| 70a | 12 36 51.87 | −00 35 15.68 | 16.601 | 0.075 | 0.064 | 0.896 | 0.060 | 0.654 | 0.076 | −0.078 | 0.077 | −0.298 | 0.075 | 0.0088 | ... | |
| 70b | 12 36 51.00 | −00 34 55.19 | 18.733 | 0.015 | 0.064 | 2.108 | 0.374 | 1.410 | 0.025 | 0.477 | 0.017 | 0.378 | 0.025 | ... | ... | |
| 70c | 12 36 50.68 | −00 34 55.45 | 18.735 | 0.016 | 0.064 | 2.467 | 0.596 | 1.464 | 0.029 | 0.538 | 0.018 | 0.366 | 0.026 | ... | ... | |
| 70d | 12 36 52.03 | −00 35 21.82 | 19.346 | 0.023 | 0.064 | 0.571 | 0.037 | −0.342 | 0.024 | −0.890 | 0.066 | −0.030 | 0.237 | ... | ... | |
| CG 71: | | | | | | | | | | | | | | | | |
| 71a | 12 37 50.44 | −00 18 15.48 | 17.167 | 0.008 | 0.068 | 1.780 | 0.080 | 1.051 | 0.011 | 0.428 | 0.009 | 0.423 | 0.012 | 0.1407 | ... | |
| 71b | 12 37 50.18 | −00 17 46.80 | 18.347 | 0.013 | 0.068 | 1.554 | 0.116 | 0.859 | 0.018 | 0.428 | 0.016 | 0.318 | 0.028 | ... | ... | |
| 71c | 12 37 50.14 | −00 17 54.70 | 19.337 | 0.021 | 0.068 | 1.448 | 0.220 | 0.953 | 0.033 | 0.396 | 0.027 | 0.376 | 0.053 | ... | ... | |
| 71d | 12 37 49.54 | −00 17 56.18 | 19.674 | 0.028 | 0.068 | 1.905 | 0.462 | 0.953 | 0.045 | 0.414 | 0.037 | 0.388 | 0.072 | ... | ... | |
| CG 72: | | | | | | | | | | | | | | | | |
| 72a | 12 43 09.48 | −00 47 01.40 | 16.715 | 0.008 | 0.066 | 2.124 | 0.095 | 1.069 | 0.010 | 0.429 | 0.008 | 0.444 | 0.009 | 0.1430 | ... | |
| 72b | 12 43 09.39 | −00 46 39.36 | 18.138 | 0.010 | 0.066 | 2.450 | 0.200 | 1.012 | 0.013 | 0.449 | 0.011 | 0.374 | 0.014 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72c | 12 43 08.65 | −00 46 49.33 | 18.831 | 0.014 | 0.066 | 2.003 | 0.247 | 1.022 | 0.021 | 0.418 | 0.016 | 0.423 | 0.025 | ... | ... | |
| 72d | 12 43 09.33 | −00 46 50.96 | 19.403 | 0.020 | 0.066 | 1.580 | 0.323 | 1.151 | 0.037 | 0.432 | 0.025 | 0.438 | 0.042 | ... | ... | |
| CG 73: | | | | | | | | | | | | | | | | |
| 73a | 12 43 32.33 | −01 07 00.35 | 17.118 | 0.007 | 0.096 | 2.030 | 0.085 | 1.151 | 0.010 | 0.442 | 0.008 | 0.370 | 0.009 | 0.1661 | ... | |
| 73b | 12 43 31.59 | −01 07 04.77 | 18.332 | 0.012 | 0.096 | 2.840 | 0.498 | 1.292 | 0.023 | 0.509 | 0.014 | 0.289 | 0.022 | ... | ... | |
| 73c | 12 43 31.05 | −01 06 59.54 | 19.159 | 0.019 | 0.096 | 1.767 | 0.298 | 1.029 | 0.036 | 0.442 | 0.025 | 0.276 | 0.048 | ... | ... | |
| 73d | 12 43 30.88 | −01 06 55.00 | 19.227 | 0.017 | 0.096 | 2.424 | 0.451 | 1.078 | 0.030 | 0.422 | 0.021 | 0.174 | 0.042 | ... | ... | |
| CG 74: | | | | | | | | | | | | | | | | |
| 74a | 12 44 46.21 | −01 01 09.40 | 15.984 | 0.008 | 0.091 | 2.063 | 0.070 | 1.079 | 0.010 | 0.412 | 0.008 | 0.340 | 0.008 | 0.1468 | ... | |
| 74b | 12 44 45.96 | −01 01 13.30 | 17.134 | 0.009 | 0.091 | 2.301 | 0.139 | 1.233 | 0.012 | 0.464 | 0.009 | 0.366 | 0.010 | ... | ... | |
| 74c | 12 44 45.73 | −01 01 29.57 | 17.745 | 0.010 | 0.091 | 1.978 | 0.107 | 1.006 | 0.013 | 0.422 | 0.011 | 0.386 | 0.013 | ... | ... | |
| 74d | 12 44 47.93 | −01 01 27.74 | 17.878 | 0.012 | 0.091 | 2.044 | 0.194 | 1.128 | 0.019 | 0.460 | 0.014 | 0.394 | 0.019 | ... | ... | |
| 74e | 12 44 44.51 | −01 01 46.80 | 18.266 | 0.011 | 0.091 | 2.032 | 0.154 | 1.068 | 0.016 | 0.459 | 0.012 | 0.461 | 0.015 | ... | ... | |
| 74f | 12 44 45.02 | −01 01 08.11 | 18.507 | 0.012 | 0.091 | 1.837 | 0.146 | 1.057 | 0.018 | 0.476 | 0.014 | 0.495 | 0.016 | ... | ... | |
| 74g | 12 44 45.10 | −01 01 01.80 | 18.958 | 0.017 | 0.091 | 1.507 | 0.177 | 0.997 | 0.027 | 0.369 | 0.021 | 0.653 | 0.028 | ... | ... | |
| CG 75: | | | | | | | | | | | | | | | | |
| 75a | 12 45 57.83 | −00 59 46.94 | 17.839 | 0.011 | 0.070 | 2.117 | 0.164 | 1.167 | 0.016 | 0.467 | 0.012 | 0.362 | 0.015 | ... | ... | |
| 75b | 12 45 58.25 | −00 59 57.16 | 19.039 | 0.015 | 0.070 | 2.015 | 0.267 | 1.121 | 0.026 | 0.401 | 0.019 | 0.377 | 0.030 | ... | ... | |
| 75c | 12 45 58.89 | −00 59 57.74 | 20.132 | 0.150 | 0.070 | −0.167 | 0.435 | 1.007 | 0.274 | −0.103 | 0.257 | −4.664 | 1.149 | ... | ... | |
| 75d | 12 45 57.77 | −00 59 55.63 | 20.301 | 0.046 | 0.070 | 0.208 | 0.137 | 0.666 | 0.071 | 0.215 | 0.069 | 0.221 | 0.151 | ... | ... | |
| CG 76: | | | | | | | | | | | | | | | | |
| 76a | 12 50 58.83 | −00 44 58.91 | 17.414 | 0.010 | 0.068 | 2.599 | 0.449 | 1.609 | 0.018 | 0.565 | 0.011 | 0.343 | 0.014 | 0.2566 | ... | |
| 76b | 12 50 58.63 | −00 44 58.07 | 19.067 | 0.032 | 0.068 | 1.349 | 0.431 | 1.151 | 0.057 | 0.491 | 0.040 | 0.516 | 0.062 | ... | ... | |
| 76c | 12 50 57.81 | −00 45 01.13 | 19.105 | 0.029 | 0.068 | 2.109 | 0.623 | 1.004 | 0.045 | 0.522 | 0.035 | 0.518 | 0.049 | ... | ... | |
| 76d | 12 50 58.38 | −00 44 53.48 | 19.226 | 0.018 | 0.068 | 4.471 | 1.406 | 1.450 | 0.035 | 0.531 | 0.021 | 0.390 | 0.031 | ... | ... | |
| 76e | 12 50 58.82 | −00 44 44.08 | 19.300 | 0.021 | 0.068 | 2.516 | 0.946 | 1.390 | 0.042 | 0.492 | 0.026 | 0.325 | 0.044 | ... | ... | |
| CG 77: | | | | | | | | | | | | | | | | |
| 77a | 12 53 22.35 | −00 25 42.73 | 15.315 | 0.008 | 0.070 | 1.496 | 0.020 | 0.775 | 0.008 | 0.372 | 0.008 | 0.345 | 0.005 | ... | 0.0471 | CGCG 015-030 NED: |
| 77b | 12 53 23.51 | −00 25 22.56 | 15.750 | 0.024 | 0.070 | 1.388 | 0.054 | 0.787 | 0.025 | −0.099 | 0.025 | 0.083 | 0.028 | ... | ... | |
| 77c | 12 53 23.85 | −00 25 23.49 | 16.814 | 0.013 | 0.070 | 2.069 | 0.082 | 0.506 | 0.014 | 0.678 | 0.013 | 0.411 | 0.011 | 0.0478 | 0.0478 | CGCG 015-030 NED: |
| 77d | 12 53 23.57 | −00 25 30.26 | 16.817 | 0.019 | 0.070 | 0.982 | 0.064 | 0.952 | 0.022 | −0.425 | 0.025 | −0.253 | 0.072 | 0.0471 | ... | |
| 77e | 12 53 24.16 | −00 25 12.80 | 17.403 | 0.025 | 0.070 | 0.862 | 0.069 | 0.657 | 0.029 | −0.584 | 0.039 | −1.199 | 0.308 | ... | ... | |
| CG 78: | | | | | | | | | | | | | | | | |
| 78a | 12 54 37.84 | −00 11 04.46 | 15.256 | 0.006 | 0.074 | 1.957 | 0.022 | 0.900 | 0.007 | 0.417 | 0.007 | 0.368 | 0.004 | 0.0826 | 0.0826 | 2MASX J12543782−0011048 |
| 78b | 12 54 35.06 | −00 10 55.59 | 17.091 | 0.007 | 0.075 | 1.884 | 0.046 | 0.933 | 0.008 | 0.435 | 0.008 | 0.374 | 0.007 | ... | 0.0819 | 2MASX J12543503−0010558 |
| 78c | 12 54 35.55 | −00 10 58.61 | 17.827 | 0.011 | 0.075 | 1.643 | 0.098 | 0.896 | 0.016 | 0.376 | 0.013 | 0.254 | 0.024 | 0.0818 | ... | |
| 78d | 12 54 34.79 | −00 10 22.60 | 17.896 | 0.011 | 0.075 | 1.701 | 0.103 | 0.853 | 0.015 | 0.360 | 0.013 | 0.318 | 0.023 | ... | ... | |
| CG 79: | | | | | | | | | | | | | | | | |
| 79a | 12 55 09.54 | −01 05 27.99 | 17.543 | 0.009 | 0.053 | 1.463 | 0.093 | 1.522 | 0.016 | 0.193 | 0.010 | 0.462 | 0.013 | 0.1229 | ... | |
| 79b | 12 55 09.20 | −01 05 30.48 | 17.724 | 0.011 | 0.053 | −2.367 | 0.359 | 4.651 | 0.352 | 0.311 | 0.013 | 0.415 | 0.018 | ... | ... | |
| 79c | 12 55 09.42 | −01 05 29.72 | 17.894 | 0.010 | 0.053 | 2.540 | 0.132 | 0.550 | 0.012 | 0.571 | 0.011 | 0.045 | 0.016 | ... | ... | |
| 79d | 12 55 09.33 | −01 05 12.19 | 19.385 | 0.025 | 0.053 | 1.177 | 0.146 | 0.596 | 0.035 | 0.407 | 0.032 | 0.349 | 0.054 | ... | ... | |
| 79e | 12 55 07.83 | −01 05 30.36 | 20.251 | 0.057 | 0.053 | −0.105 | 0.197 | 1.039 | 0.114 | 0.293 | 0.082 | 0.177 | 0.178 | ... | ... | |
| CG 80: | | | | | | | | | | | | | | | | |
| 80a | 12 56 17.15 | −00 38 22.34 | 17.418 | 0.009 | 0.055 | 1.723 | 0.072 | 0.892 | 0.011 | 0.385 | 0.010 | 0.326 | 0.012 | 0.1349 | ... | |
| 80b | 12 56 16.52 | −00 38 23.96 | 19.447 | 0.024 | 0.055 | 2.206 | 1.089 | 1.718 | 0.066 | 0.645 | 0.029 | 0.353 | 0.044 | ... | ... | |
| 80c | 12 56 16.35 | −00 38 17.87 | 20.145 | 0.044 | 0.055 | 1.186 | 0.483 | 1.075 | 0.078 | 0.552 | 0.055 | 0.414 | 0.091 | ... | ... | |
| 80d | 12 56 17.27 | −00 38 27.61 | 20.173 | 0.039 | 0.055 | 3.398 | 1.075 | 2.179 | 0.165 | 0.668 | 0.047 | 0.611 | 0.060 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 81: | | | | | | | | | | | | | | | | |
| 81a | 12 57 59.93 | −01 05 25.87 | 17.091 | 0.011 | 0.061 | 2.023 | 0.166 | 1.249 | 0.018 | 0.462 | 0.012 | 0.362 | 0.016 | ... | ... | |
| 81b | 12 58 00.07 | −01 05 35.18 | 17.970 | 0.013 | 0.061 | 2.007 | 0.259 | 1.280 | 0.027 | 0.546 | 0.016 | 0.379 | 0.022 | ... | ... | |
| 81c | 12 58 00.27 | −01 05 38.65 | 19.322 | 0.021 | 0.061 | 1.893 | 0.506 | 1.472 | 0.056 | 0.592 | 0.025 | 0.328 | 0.040 | ... | ... | |
| 81d | 12 58 00.45 | −01 05 59.65 | 19.348 | 0.028 | 0.061 | 1.151 | 0.201 | 0.799 | 0.048 | 0.341 | 0.038 | 0.123 | 0.086 | ... | ... | |
| 81e | 12 57 58.75 | −01 05 43.90 | 19.661 | 0.026 | 0.061 | 1.434 | 0.277 | 0.951 | 0.049 | 0.374 | 0.034 | 0.394 | 0.061 | ... | ... | |
| CG 82: | | | | | | | | | | | | | | | | |
| 82a | 13 05 41.28 | 00 23 53.46 | 17.247 | 0.011 | 0.056 | 2.284 | 0.260 | 1.410 | 0.017 | 0.609 | 0.012 | 0.352 | 0.017 | 0.2232 | ... | |
| 82b | 13 05 41.98 | 00 23 40.69 | 18.738 | 0.022 | 0.056 | 1.836 | 0.474 | 1.371 | 0.042 | 0.546 | 0.026 | 0.289 | 0.056 | ... | ... | |
| 82c | 13 05 40.89 | 00 23 58.66 | 18.802 | 0.016 | 0.056 | 1.417 | 0.139 | 0.853 | 0.022 | 0.514 | 0.019 | 0.172 | 0.042 | ... | ... | |
| 82d | 13 05 41.71 | 00 24 04.95 | 19.609 | 0.029 | 0.056 | 1.496 | 0.347 | 0.913 | 0.046 | 0.420 | 0.039 | 0.193 | 0.101 | ... | ... | |
| CG 83: | | | | | | | | | | | | | | | | |
| 83a | 13 06 51.81 | −00 33 14.30 | 16.938 | 0.007 | 0.052 | 1.874 | 0.066 | 1.060 | 0.009 | 0.472 | 0.008 | 0.357 | 0.008 | 0.1283 | 0.1279 | 2MASX J13065177−0033141 |
| 83b | 13 06 50.98 | −00 33 39.49 | 18.159 | 0.015 | 0.052 | 1.677 | 0.206 | 1.032 | 0.023 | 0.532 | 0.018 | 0.350 | 0.029 | ... | ... | |
| 83c | 13 06 50.45 | −00 33 40.76 | 19.524 | 0.042 | 0.052 | 1.899 | 0.778 | 0.925 | 0.069 | 0.536 | 0.055 | 0.446 | 0.091 | ... | ... | |
| 83d | 13 06 50.32 | −00 33 35.88 | 19.802 | 0.032 | 0.052 | 1.497 | 0.434 | 0.981 | 0.054 | 0.391 | 0.044 | 0.228 | 0.093 | ... | ... | |
| CG 84: | | | | | | | | | | | | | | | | |
| 84a | 13 10 38.19 | −00 39 24.43 | 15.172 | 0.007 | 0.066 | 2.077 | 0.030 | 0.987 | 0.007 | 0.414 | 0.007 | 0.381 | 0.003 | 0.0864 | 0.0864 | 2MASX J13103821−0039242 |
| 84b | 13 10 42.28 | −00 39 52.36 | 16.237 | 0.010 | 0.067 | 1.211 | 0.025 | 0.521 | 0.011 | 0.391 | 0.011 | 0.235 | 0.011 | 0.0762 | ... | |
| 84c | 13 10 42.62 | −00 40 00.17 | 16.579 | 0.008 | 0.067 | 1.857 | 0.051 | 1.036 | 0.009 | 0.455 | 0.008 | 0.383 | 0.006 | 0.0805 | ... | |
| 84d | 13 10 41.73 | −00 40 10.19 | 16.692 | 0.007 | 0.067 | 2.038 | 0.044 | 0.983 | 0.008 | 0.443 | 0.007 | 0.383 | 0.004 | ... | ... | |
| 84e | 13 10 37.20 | −00 39 55.54 | 18.087 | 0.011 | 0.066 | 1.897 | 0.130 | 0.893 | 0.014 | 0.358 | 0.012 | 0.308 | 0.019 | ... | ... | |
| CG 85: | | | | | | | | | | | | | | | | |
| 85a | 13 12 05.54 | 00 32 19.40 | 15.300 | 0.007 | 0.085 | 0.996 | 0.021 | 0.598 | 0.008 | 0.144 | 0.008 | 0.128 | 0.016 | ... | ... | |
| 85b | 13 12 07.14 | 00 32 01.09 | 15.684 | 0.011 | 0.086 | 1.069 | 0.029 | 0.682 | 0.012 | 0.211 | 0.012 | 0.184 | 0.017 | 0.1214 | ... | |
| 85c | 13 12 03.50 | 00 32 49.55 | 16.873 | 0.008 | 0.085 | 1.780 | 0.049 | 0.944 | 0.009 | 0.413 | 0.009 | 0.352 | 0.008 | 0.1203 | ... | |
| 85d | 13 12 05.07 | 00 31 40.65 | 17.657 | 0.020 | 0.085 | 1.040 | 0.128 | 0.877 | 0.030 | 0.334 | 0.027 | 0.253 | 0.054 | ... | ... | |
| CG 86: | | | | | | | | | | | | | | | | |
| 86a | 13 12 25.88 | −01 06 13.07 | 16.508 | 0.007 | 0.092 | 1.973 | 0.042 | 0.904 | 0.008 | 0.400 | 0.007 | 0.347 | 0.006 | ... | 0.1087 | APMUKS(BJ) B130952.04−00 NED02 |
| 86b | 13 12 26.40 | −01 06 20.04 | 16.943 | 0.008 | 0.093 | 1.838 | 0.063 | 0.946 | 0.010 | 0.421 | 0.009 | 0.447 | 0.009 | ... | 0.1095 | PMUKS(BJ) B130952.04−00 NED01 |
| 86c | 13 12 23.62 | −01 06 18.03 | 17.147 | 0.008 | 0.093 | 2.052 | 0.068 | 0.964 | 0.009 | 0.418 | 0.008 | 0.390 | 0.008 | 0.1091 | ... | |
| 86d | 13 12 23.63 | −01 06 05.78 | 18.516 | 0.018 | 0.092 | 1.021 | 0.082 | 0.534 | 0.025 | 0.291 | 0.024 | 0.163 | 0.051 | ... | ... | |
| CG 87: | | | | | | | | | | | | | | | | |
| 87a | 13 13 04.19 | −01 13 31.40 | 16.066 | 0.009 | 0.069 | 1.388 | 0.044 | 0.794 | 0.011 | 0.352 | 0.010 | 0.088 | 0.016 | ... | ... | |
| 87b | 13 13 03.95 | −01 13 22.15 | 16.803 | 0.007 | 0.069 | 1.997 | 0.062 | 1.031 | 0.009 | 0.452 | 0.008 | 0.423 | 0.007 | ... | ... | |
| 87c | 13 13 00.75 | −01 13 24.01 | 17.859 | 0.010 | 0.072 | 1.932 | 0.148 | 1.095 | 0.016 | 0.478 | 0.012 | 0.406 | 0.017 | ... | ... | |
| 87d | 13 13 03.60 | −01 13 37.78 | 18.913 | 0.015 | 0.069 | 1.505 | 0.137 | 0.775 | 0.023 | 0.461 | 0.019 | 0.290 | 0.033 | ... | ... | |
| CG 88: | | | | | | | | | | | | | | | | |
| 88a | 13 15 01.99 | −01 04 06.89 | 17.202 | 0.008 | 0.081 | 2.031 | 0.117 | 1.441 | 0.012 | 0.480 | 0.009 | 0.295 | 0.009 | ... | ... | |
| 88b | 13 15 02.57 | −01 04 04.10 | 17.688 | 0.010 | 0.081 | 1.633 | 0.206 | 1.900 | 0.025 | 0.490 | 0.011 | 0.293 | 0.015 | 0.2148 | ... | |
| 88c | 13 15 02.25 | −01 04 10.78 | 19.017 | 0.027 | 0.081 | 0.767 | 0.207 | 1.210 | 0.058 | 0.299 | 0.039 | 0.549 | 0.062 | ... | ... | |
| 88d | 13 15 02.30 | −01 04 00.91 | 19.043 | 0.016 | 0.081 | 0.786 | 0.352 | 2.479 | 0.086 | 0.327 | 0.021 | 0.235 | 0.039 | ... | ... | |
| CG 89: | | | | | | | | | | | | | | | | |
| 89a | 13 18 16.20 | 00 19 39.78 | 16.237 | 0.006 | 0.082 | 1.984 | 0.033 | 0.928 | 0.006 | 0.405 | 0.006 | 0.328 | 0.006 | 0.0816 | ... | |
| 89b | 13 18 15.82 | 00 19 35.94 | 17.103 | 0.013 | 0.082 | 0.958 | 0.049 | 0.521 | 0.016 | 0.260 | 0.016 | 0.110 | 0.045 | ... | ... | |
| 89c | 13 18 14.65 | 00 19 35.99 | 17.664 | 0.009 | 0.083 | 1.169 | 0.035 | 0.501 | 0.011 | 0.284 | 0.011 | 0.206 | 0.024 | ... | ... | |
| 89d | 13 18 15.15 | 00 19 28.17 | 18.610 | 0.014 | 0.083 | 1.621 | 0.151 | 0.824 | 0.020 | 0.317 | 0.018 | 0.345 | 0.042 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 90: | | | | | | | | | | | | | | | | |
| 90a | 13 18 44.74 | −00 44 01.60 | 16.029 | 0.008 | 0.076 | 2.051 | 0.045 | 0.929 | 0.008 | 0.446 | 0.008 | 0.421 | 0.005 | 0.0859 | ... | |
| 90b | 13 18 44.07 | −00 43 55.98 | 18.335 | 0.011 | 0.076 | 1.743 | 0.101 | 0.904 | 0.013 | 0.404 | 0.012 | 0.545 | 0.013 | ... | ... | |
| 90c | 13 18 45.06 | −00 44 07.36 | 18.386 | 0.021 | 0.077 | 0.836 | 0.144 | 1.017 | 0.034 | 0.403 | 0.027 | 0.301 | 0.052 | ... | ... | |
| 90d | 13 18 45.55 | −00 43 25.95 | 18.548 | 0.013 | 0.075 | 1.410 | 0.122 | 0.832 | 0.017 | 0.401 | 0.015 | 0.386 | 0.027 | ... | ... | |
| CG 91: | | | | | | | | | | | | | | | | |
| 91a | 13 18 46.54 | −00 45 27.13 | 17.233 | 0.008 | 0.079 | 2.093 | 0.073 | 0.949 | 0.009 | 0.448 | 0.009 | 0.441 | 0.007 | 0.0870 | ... | |
| 91b | 13 18 46.47 | −00 45 35.43 | 17.854 | 0.011 | 0.079 | 1.666 | 0.102 | 0.906 | 0.013 | 0.393 | 0.012 | 0.414 | 0.016 | ... | ... | |
| 91c | 13 18 47.73 | −00 45 27.31 | 19.566 | 0.023 | 0.079 | 1.696 | 0.337 | 0.877 | 0.034 | 0.406 | 0.029 | 0.423 | 0.053 | ... | ... | |
| 91d | 13 18 47.29 | −00 45 24.93 | 20.020 | 0.048 | 0.079 | 0.991 | 0.977 | 1.826 | 0.151 | 0.587 | 0.061 | 0.523 | 0.100 | ... | ... | |
| CG 92: | | | | | | | | | | | | | | | | |
| 92a | 13 19 34.20 | −01 05 20.06 | 15.692 | 0.006 | 0.072 | 1.931 | 0.024 | 0.921 | 0.007 | 0.472 | 0.007 | 0.324 | 0.003 | ... | ... | |
| 92b | 13 19 34.04 | −01 05 51.25 | 16.400 | 0.009 | 0.073 | 1.768 | 0.072 | 0.887 | 0.012 | 0.383 | 0.011 | 0.273 | 0.014 | 0.0802 | ... | |
| 92c | 13 19 31.48 | −01 06 11.74 | 17.797 | 0.010 | 0.073 | 1.516 | 0.069 | 0.843 | 0.013 | 0.442 | 0.012 | 0.279 | 0.016 | ... | ... | |
| 92d | 13 19 31.98 | −01 06 05.29 | 18.459 | 0.012 | 0.073 | 0.980 | 0.056 | 0.752 | 0.016 | 0.425 | 0.014 | 0.216 | 0.023 | ... | ... | |
| CG 93: | | | | | | | | | | | | | | | | |
| 93a | 13 24 39.79 | 00 22 15.96 | 16.152 | 0.006 | 0.066 | 2.104 | 0.047 | 1.019 | 0.007 | 0.447 | 0.007 | 0.380 | 0.006 | 0.1080 | ... | |
| 93b | 13 24 38.83 | 00 22 12.68 | 18.266 | 0.015 | 0.066 | 1.120 | 0.078 | 0.634 | 0.018 | 0.486 | 0.018 | 0.379 | 0.036 | ... | ... | |
| 93c | 13 24 38.32 | 00 21 51.72 | 18.794 | 0.012 | 0.065 | 2.036 | 0.193 | 1.029 | 0.016 | 0.463 | 0.014 | 0.407 | 0.025 | ... | ... | |
| 93d | 13 24 38.72 | 00 22 03.13 | 19.142 | 0.017 | 0.066 | 1.574 | 0.200 | 0.946 | 0.024 | 0.354 | 0.021 | 0.452 | 0.047 | ... | ... | |
| CG 94: | | | | | | | | | | | | | | | | |
| 94a | 13 24 49.00 | −00 00 35.68 | 16.556 | 0.006 | 0.065 | 2.033 | 0.045 | 1.011 | 0.007 | 0.495 | 0.007 | 0.411 | 0.006 | 0.0816 | ... | |
| 94b | 13 24 48.74 | −00 00 54.77 | 17.450 | 0.009 | 0.065 | 1.880 | 0.084 | 0.908 | 0.011 | 0.381 | 0.010 | 0.326 | 0.016 | ... | ... | |
| 94c | 13 24 50.01 | −00 00 53.71 | 19.153 | 0.016 | 0.065 | 2.062 | 0.263 | 0.875 | 0.022 | 0.370 | 0.020 | 0.297 | 0.043 | ... | ... | |
| 94d | 13 24 50.17 | −00 00 31.12 | 19.404 | 0.020 | 0.065 | 1.783 | 0.259 | 0.866 | 0.029 | 0.360 | 0.026 | 0.317 | 0.057 | ... | ... | |
| CG 95: | | | | | | | | | | | | | | | | |
| 95a | 13 25 07.78 | −00 38 23.69 | 16.967 | 0.009 | 0.084 | 1.898 | 0.080 | 1.081 | 0.010 | 0.536 | 0.009 | 0.433 | 0.008 | 0.0849 | ... | |
| 95b | 13 25 09.33 | −00 38 26.99 | 18.346 | 0.011 | 0.084 | 1.740 | 0.101 | 0.870 | 0.014 | 0.427 | 0.013 | 0.338 | 0.016 | ... | ... | |
| 95c | 13 25 08.60 | −00 38 19.90 | 19.010 | 0.144 | 0.084 | −0.618 | 0.339 | 1.210 | 0.244 | 0.297 | 0.189 | −0.045 | 0.492 | ... | ... | |
| 95d | 13 25 08.89 | −00 38 42.30 | 19.647 | 0.027 | 0.084 | 1.096 | 0.138 | 0.433 | 0.033 | 0.314 | 0.036 | 0.088 | 0.085 | ... | ... | |
| CG 96: | | | | | | | | | | | | | | | | |
| 96a | 13 26 34.98 | 00 26 44.27 | 17.856 | 0.011 | 0.071 | 1.852 | 0.169 | 1.400 | 0.017 | 0.522 | 0.012 | 0.331 | 0.016 | ... | ... | |
| 96b | 13 26 34.55 | 00 26 37.96 | 20.203 | 0.036 | 0.071 | 1.631 | 0.635 | 1.303 | 0.075 | 0.536 | 0.047 | 0.416 | 0.076 | ... | ... | |
| 96c | 13 26 34.02 | 00 26 50.54 | 20.485 | 0.056 | 0.071 | 1.030 | 0.355 | 0.737 | 0.083 | 0.253 | 0.084 | 0.322 | 0.170 | ... | ... | |
| 96d | 13 26 34.17 | 00 26 46.83 | 20.704 | 0.081 | 0.071 | 4.305 | 0.959 | 1.150 | 0.162 | 0.633 | 0.106 | 0.244 | 0.199 | ... | ... | |
| CG 97: | | | | | | | | | | | | | | | | |
| 97a | 13 28 20.16 | 00 26 18.66 | 17.285 | 0.011 | 0.077 | 2.531 | 0.280 | 1.462 | 0.016 | 0.592 | 0.012 | 0.407 | 0.012 | ... | ... | |
| 97b | 13 28 19.00 | 00 26 11.87 | 19.328 | 0.017 | 0.077 | 2.615 | 0.627 | 1.410 | 0.030 | 0.666 | 0.020 | 0.343 | 0.025 | ... | ... | |
| 97c | 13 28 19.69 | 00 26 17.54 | 19.578 | 0.027 | 0.077 | 2.234 | 0.794 | 1.297 | 0.052 | 0.508 | 0.036 | 0.496 | 0.053 | ... | ... | |
| 97d | 13 28 19.28 | 00 26 09.73 | 20.147 | 0.031 | 0.077 | 2.038 | 0.776 | 1.322 | 0.062 | 0.628 | 0.040 | 0.267 | 0.066 | ... | ... | |
| CG 98: | | | | | | | | | | | | | | | | |
| 98a | 13 29 06.66 | 00 25 36.30 | 17.860 | 0.010 | 0.077 | 0.998 | 0.028 | 0.424 | 0.011 | 0.288 | 0.012 | 0.128 | 0.020 | ... | ... | |
| 98b | 13 29 06.38 | 00 25 29.16 | 17.985 | 0.011 | 0.077 | 2.083 | 0.199 | 1.374 | 0.016 | 0.477 | 0.012 | 0.366 | 0.015 | ... | ... | |
| 98c | 13 29 06.30 | 00 25 40.53 | 19.672 | 0.033 | 0.077 | 0.856 | 0.321 | 1.361 | 0.069 | 0.651 | 0.042 | 0.449 | 0.059 | ... | ... | |
| 98d | 13 29 05.40 | 00 25 37.74 | 20.324 | 0.039 | 0.077 | 1.802 | 0.502 | 0.757 | 0.057 | 0.428 | 0.054 | 0.193 | 0.107 | ... | ... | |
| CG 99: | | | | | | | | | | | | | | | | |
| 99a | 13 34 36.92 | −01 03 41.08 | 16.928 | 0.007 | 0.087 | 1.374 | 0.022 | 0.692 | 0.008 | 0.406 | 0.008 | 0.285 | 0.006 | ... | 0.0768 | 2dFGRSN267Z146 |
| 99b | 13 34 35.84 | −01 03 10.61 | 17.680 | 0.012 | 0.087 | 1.058 | 0.049 | 0.688 | 0.015 | 0.346 | 0.014 | 0.218 | 0.023 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99c | 13 34 37.23 | −01 03 27.12 | 19.791 | 0.068 | 0.087 | 3.261 | 3.127 | 2.003 | 0.256 | 0.466 | 0.085 | 0.263 | 0.158 | ... | ... | |
| 99d | 13 34 36.61 | −01 03 23.53 | 19.867 | 0.031 | 0.087 | 1.108 | 0.163 | 0.351 | 0.041 | 0.265 | 0.044 | 0.042 | 0.115 | ... | ... | |
| CG 100: | | | | | | | | | | | | | | | | |
| 100a | 13 35 07.92 | 00 28 18.30 | 15.533 | 0.010 | 0.068 | 1.253 | 0.038 | 0.673 | 0.011 | 0.319 | 0.011 | 0.136 | 0.017 | ... | 0.0869 | 2dFGRSN334Z162 |
| 100b | 13 35 08.02 | 00 28 38.40 | 17.015 | 0.008 | 0.068 | 1.145 | 0.022 | 0.571 | 0.009 | 0.489 | 0.009 | 0.200 | 0.009 | ... | ... | |
| 100c | 13 35 05.78 | 00 28 25.48 | 17.927 | 0.010 | 0.069 | 1.831 | 0.097 | 0.807 | 0.012 | 0.453 | 0.012 | 0.264 | 0.016 | ... | ... | |
| 100d | 13 35 04.60 | 00 28 04.00 | 18.074 | 0.012 | 0.069 | 1.579 | 0.125 | 0.791 | 0.017 | 0.472 | 0.016 | 0.189 | 0.028 | ... | ... | |
| CG 101: | | | | | | | | | | | | | | | | |
| 101a | 13 38 05.29 | 00 57 47.09 | 17.406 | 0.010 | 0.067 | 1.620 | 0.092 | 1.077 | 0.013 | 0.450 | 0.011 | 0.327 | 0.015 | ... | 0.1430 | 2dFGRS N402Z076 |
| 101b | 13 38 04.47 | 00 58 01.07 | 18.310 | 0.033 | 0.067 | 0.952 | 0.214 | 1.008 | 0.048 | 0.194 | 0.045 | 0.389 | 0.082 | ... | ... | |
| 101c | 13 38 03.81 | 00 57 59.40 | 19.594 | 0.024 | 0.067 | 2.268 | 1.063 | 1.826 | 0.066 | 0.565 | 0.030 | 0.398 | 0.050 | ... | ... | |
| 101d | 13 38 04.19 | 00 58 07.01 | 20.038 | 0.040 | 0.067 | 1.244 | 0.340 | 0.799 | 0.059 | 0.366 | 0.056 | 0.422 | 0.103 | ... | ... | |
| CG 102: | | | | | | | | | | | | | | | | |
| 102a | 13 38 42.68 | −00 44 22.02 | 17.055 | 0.011 | 0.089 | 2.165 | 0.333 | 1.803 | 0.022 | 0.570 | 0.012 | 0.409 | 0.013 | 0.3462 | ... | |
| 102b | 13 38 41.85 | −00 44 35.82 | 18.537 | 0.018 | 0.089 | 1.925 | 0.798 | 2.142 | 0.060 | 0.670 | 0.021 | 0.050 | 0.036 | ... | ... | |
| 102c | 13 38 41.55 | −00 44 36.52 | 18.776 | 0.018 | 0.089 | 1.680 | 0.765 | 2.364 | 0.072 | 0.562 | 0.021 | 0.007 | 0.041 | ... | ... | |
| 102d | 13 38 42.12 | −00 44 45.93 | 19.752 | 0.028 | 0.088 | 1.445 | 0.674 | 1.807 | 0.080 | 0.618 | 0.034 | 0.421 | 0.049 | ... | ... | |
| CG 103: | | | | | | | | | | | | | | | | |
| 103a | 13 38 44.08 | 00 16 33.82 | 17.712 | 0.009 | 0.080 | 1.280 | 0.046 | 0.767 | 0.011 | 0.372 | 0.010 | 0.332 | 0.019 | ... | 0.1290 | 2dFGRSN335Z192 |
| 103b | 13 38 44.81 | 00 16 21.54 | 17.796 | 0.025 | 0.080 | 1.688 | 0.216 | 0.632 | 0.031 | 0.123 | 0.034 | 0.190 | 0.096 | ... | ... | |
| 103c | 13 38 44.56 | 00 16 48.09 | 20.109 | 0.256 | 0.080 | 0.188 | 0.877 | 1.200 | 0.379 | 0.435 | 0.301 | 0.867 | 0.383 | ... | ... | |
| 103d | 13 38 45.09 | 00 16 19.58 | 20.416 | 0.041 | 0.080 | 1.154 | 0.225 | 0.479 | 0.052 | 0.400 | 0.054 | 0.420 | 0.115 | ... | ... | |
| CG 104: | | | | | | | | | | | | | | | | |
| 104a | 13 39 39.20 | −00 01 02.01 | 17.989 | 0.010 | 0.073 | 2.095 | 0.201 | 1.362 | 0.016 | 0.480 | 0.012 | 0.304 | 0.018 | ... | ... | |
| 104b | 13 39 38.81 | −00 01 13.28 | 18.961 | 0.031 | 0.073 | 2.888 | 1.502 | 1.231 | 0.056 | 0.621 | 0.038 | 0.335 | 0.067 | ... | ... | |
| 104c | 13 39 38.69 | −00 01 03.44 | 20.183 | 0.037 | 0.073 | 2.397 | 1.103 | 1.288 | 0.072 | 0.435 | 0.048 | 0.138 | 0.116 | ... | ... | |
| 104d | 13 39 38.88 | −00 00 51.07 | 20.691 | 0.059 | 0.073 | 0.811 | 0.376 | 0.921 | 0.094 | 0.341 | 0.082 | 0.324 | 0.183 | ... | ... | |
| CG 105: | | | | | | | | | | | | | | | | |
| 105a | 13 40 29.51 | −01 12 13.56 | 17.098 | 0.009 | 0.073 | 1.802 | 0.042 | 1.026 | 0.010 | 0.437 | 0.009 | 0.339 | 0.006 | ... | ... | |
| 105b | 13 40 30.07 | −01 12 17.48 | 17.273 | 0.010 | 0.073 | 0.908 | 0.017 | 0.507 | 0.010 | 0.402 | 0.010 | 0.162 | 0.011 | ... | ... | |
| 105c | 13 40 28.27 | −01 11 54.68 | 17.370 | 0.010 | 0.073 | 1.961 | 0.073 | 1.017 | 0.011 | 0.430 | 0.010 | 0.345 | 0.009 | ... | ... | |
| 105d | 13 40 27.75 | −01 11 56.59 | 19.667 | 0.040 | 0.072 | 0.591 | 0.316 | 1.345 | 0.100 | 0.637 | 0.050 | 0.451 | 0.076 | ... | ... | |
| CG 106: | | | | | | | | | | | | | | | | |
| 106a | 13 40 58.27 | 00 45 28.10 | 17.454 | 0.009 | 0.079 | 1.673 | 0.121 | 1.407 | 0.014 | 0.532 | 0.011 | 0.348 | 0.013 | 0.2417 | ... | |
| 106b | 13 40 58.13 | 00 45 31.34 | 18.020 | 0.014 | 0.079 | 1.864 | 0.266 | 1.341 | 0.025 | 0.448 | 0.018 | 0.237 | 0.031 | ... | 0.0902 | 2dFGRSN336Z062 |
| 106c | 13 40 59.05 | 00 45 44.80 | 18.990 | 0.016 | 0.079 | 0.900 | 0.064 | 0.523 | 0.019 | 0.289 | 0.021 | 0.224 | 0.042 | ... | ... | |
| 106d | 13 40 58.39 | 00 45 18.45 | 20.113 | 0.028 | 0.079 | 1.244 | 0.368 | 1.373 | 0.055 | 0.666 | 0.034 | 0.332 | 0.054 | ... | ... | |
| CG 107: | | | | | | | | | | | | | | | | |
| 107a | 13 41 06.68 | −00 01 39.22 | 17.635 | 0.008 | 0.080 | 1.955 | 0.066 | 0.915 | 0.009 | 0.405 | 0.009 | 0.341 | 0.010 | 0.1003 | ... | |
| 107b | 13 41 06.15 | −00 01 47.93 | 18.459 | 0.013 | 0.080 | 1.759 | 0.269 | 1.488 | 0.025 | 0.580 | 0.015 | 0.405 | 0.023 | ... | ... | |
| 107c | 13 41 06.29 | −00 01 31.52 | 19.071 | 0.023 | 0.080 | 1.458 | 0.200 | 0.713 | 0.031 | 0.386 | 0.030 | 0.252 | 0.063 | ... | ... | |
| 107d | 13 41 06.64 | −00 01 22.35 | 19.835 | 0.040 | 0.080 | 0.710 | 0.245 | 1.017 | 0.066 | 0.390 | 0.054 | 0.271 | 0.118 | ... | ... | |
| CG 108: | | | | | | | | | | | | | | | | |
| 108a | 13 41 25.48 | −01 10 29.66 | 15.334 | 0.008 | 0.075 | 1.720 | 0.028 | 0.859 | 0.009 | 0.442 | 0.009 | 0.289 | 0.005 | ... | ... | |
| 108b | 13 41 27.13 | −01 09 56.12 | 15.930 | 0.008 | 0.075 | 1.975 | 0.024 | 0.908 | 0.008 | 0.456 | 0.008 | 0.332 | 0.003 | 0.0888 | ... | |
| 108c | 13 41 28.09 | −01 10 59.94 | 17.428 | 0.011 | 0.075 | 1.594 | 0.079 | 1.036 | 0.014 | 0.531 | 0.011 | 0.323 | 0.013 | ... | ... | |
| 108d | 13 41 26.65 | −01 09 42.75 | 17.934 | 0.012 | 0.075 | 1.910 | 0.154 | 1.107 | 0.018 | 0.562 | 0.013 | 0.370 | 0.016 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 109: | | | | | | | | | | | | | | | | |
| 109a | 13 42 29.65 | −00 51 29.30 | 17.724 | 0.010 | 0.078 | 2.236 | 0.193 | 1.212 | 0.018 | 0.540 | 0.012 | 0.312 | 0.016 | ... | ... | |
| 109b | 13 42 30.71 | −00 51 25.50 | 19.267 | 0.020 | 0.078 | 1.127 | 0.151 | 1.003 | 0.034 | 0.288 | 0.027 | 0.403 | 0.049 | ... | ... | |
| 109c | 13 42 30.81 | −00 51 35.18 | 19.578 | 0.023 | 0.079 | 3.268 | 1.043 | 1.020 | 0.041 | 0.523 | 0.029 | 0.279 | 0.052 | ... | ... | |
| 109d | 13 42 30.05 | −00 51 40.51 | 19.809 | 0.026 | 0.078 | 3.909 | 1.024 | 1.591 | 0.071 | 0.581 | 0.032 | 0.338 | 0.054 | ... | ... | |
| 109e | 13 42 30.16 | −00 51 18.40 | 20.509 | 0.046 | 0.078 | 0.937 | 0.341 | 0.986 | 0.089 | 0.435 | 0.064 | 0.100 | 0.149 | ... | ... | |
| CG 110: | | | | | | | | | | | | | | | | |
| 110a | 13 42 29.88 | 00 21 38.19 | 16.200 | 0.012 | 0.082 | 1.352 | 0.072 | 0.856 | 0.015 | 0.331 | 0.014 | 0.413 | 0.025 | ... | ... | |
| 110b | 13 42 31.11 | 00 21 43.91 | 16.956 | 0.009 | 0.082 | 2.155 | 0.182 | 1.484 | 0.013 | 0.521 | 0.010 | 0.354 | 0.015 | 0.2434 | 0.2434 | 2dFGRSN336Z227 |
| 110c | 13 42 29.92 | 00 20 54.72 | 18.599 | 0.017 | 0.081 | 1.635 | 0.281 | 1.308 | 0.030 | 0.513 | 0.021 | 0.373 | 0.042 | ... | ... | |
| 110d | 13 42 30.95 | 00 21 24.65 | 18.988 | 0.016 | 0.082 | 1.667 | 0.265 | 1.318 | 0.027 | 0.465 | 0.019 | 0.341 | 0.041 | ... | ... | |
| CG 111: | | | | | | | | | | | | | | | | |
| 111a | 13 42 43.36 | 00 45 56.41 | 15.528 | 0.012 | 0.082 | 1.410 | 0.065 | 0.829 | 0.015 | 0.154 | 0.015 | 0.125 | 0.027 | 0.0732 | 0.0733 | 2dFGRSN335Z003 |
| 111b | 13 42 45.27 | 00 45 21.27 | 18.187 | 0.012 | 0.083 | 1.809 | 0.144 | 1.061 | 0.017 | 0.448 | 0.014 | 0.337 | 0.021 | ... | ... | |
| 111c | 13 42 42.47 | 00 46 02.24 | 18.304 | 0.014 | 0.082 | 1.389 | 0.094 | 0.720 | 0.018 | 0.393 | 0.018 | 0.259 | 0.032 | ... | ... | |
| 111d | 13 42 43.25 | 00 45 52.36 | 18.526 | 0.021 | 0.082 | 2.298 | 0.619 | 1.343 | 0.041 | 0.741 | 0.025 | 0.192 | 0.040 | ... | ... | |
| CG 112: | | | | | | | | | | | | | | | | |
| 112a | 13 45 06.50 | −00 10 14.63 | 17.956 | 0.011 | 0.069 | 1.641 | 0.086 | 0.877 | 0.014 | 0.395 | 0.013 | 0.341 | 0.019 | ... | ... | |
| 112b | 13 45 06.57 | −00 10 25.39 | 18.845 | 0.019 | 0.069 | 5.013 | 1.575 | 1.694 | 0.047 | 0.600 | 0.023 | 0.437 | 0.036 | ... | ... | |
| 112c | 13 45 07.10 | −00 10 11.62 | 20.193 | 0.035 | 0.069 | 0.831 | 0.510 | 1.814 | 0.109 | 0.571 | 0.045 | 0.513 | 0.075 | ... | ... | |
| 112d | 13 45 07.38 | −00 10 09.38 | 20.726 | 0.063 | 0.069 | 0.692 | 0.443 | 1.110 | 0.118 | 0.359 | 0.089 | 0.521 | 0.168 | ... | ... | |
| CG 113: | | | | | | | | | | | | | | | | |
| 113a | 13 45 52.34 | −00 01 16.42 | 17.597 | 0.009 | 0.074 | 0.992 | 0.019 | 0.424 | 0.009 | 0.339 | 0.010 | 0.111 | 0.015 | 0.0908 | ... | |
| 113b | 13 45 51.36 | −00 01 22.94 | 19.615 | 0.024 | 0.074 | 2.225 | 0.705 | 1.319 | 0.045 | 0.467 | 0.030 | 0.270 | 0.063 | ... | ... | |
| 113c | 13 45 52.47 | −00 01 08.65 | 20.072 | 0.031 | 0.074 | 1.071 | 0.280 | 1.042 | 0.052 | 0.404 | 0.041 | 0.497 | 0.076 | ... | ... | |
| 113d | 13 45 51.89 | −00 01 21.60 | 20.143 | 0.042 | 0.074 | 0.570 | 0.190 | 0.790 | 0.061 | 0.168 | 0.062 | 0.631 | 0.118 | ... | ... | |
| CG 114: | | | | | | | | | | | | | | | | |
| 114a | 13 49 56.20 | −00 27 56.57 | 17.642 | 0.010 | 0.082 | 2.089 | 0.269 | 1.582 | 0.018 | 0.559 | 0.011 | 0.403 | 0.014 | 0.2602 | ... | |
| 114b | 13 49 56.14 | −00 28 19.89 | 18.748 | 0.019 | 0.082 | 2.342 | 0.696 | 1.419 | 0.036 | 0.516 | 0.023 | 0.126 | 0.046 | ... | ... | |
| 114c | 13 49 55.77 | −00 28 20.12 | 19.789 | 0.030 | 0.082 | 1.089 | 0.193 | 0.628 | 0.040 | 0.257 | 0.042 | 0.004 | 0.114 | ... | ... | |
| 114d | 13 49 56.29 | −00 28 19.16 | 20.379 | 0.050 | 0.082 | 0.600 | 0.541 | 1.635 | 0.128 | 0.767 | 0.060 | 0.410 | 0.088 | ... | ... | |
| CG 115: | | | | | | | | | | | | | | | | |
| 115a | 13 50 51.64 | −00 31 05.89 | 16.787 | 0.007 | 0.097 | 1.651 | 0.040 | 0.876 | 0.008 | 0.450 | 0.008 | 0.371 | 0.007 | ... | ... | |
| 115b | 13 50 49.89 | −00 30 58.02 | 17.467 | 0.011 | 0.097 | 1.458 | 0.079 | 0.983 | 0.013 | 0.468 | 0.013 | 0.375 | 0.015 | 0.1504 | ... | |
| 115c | 13 50 50.26 | −00 31 02.61 | 18.264 | 0.045 | 0.097 | 1.218 | 0.204 | 0.331 | 0.052 | −0.230 | 0.076 | 1.396 | 0.089 | ... | ... | |
| 115d | 13 50 50.46 | −00 31 01.68 | 19.323 | 0.024 | 0.097 | 2.303 | 0.900 | 1.374 | 0.048 | 0.488 | 0.031 | −0.183 | 0.086 | ... | ... | |
| CG 116: | | | | | | | | | | | | | | | | |
| 116a | 13 51 33.13 | 00 44 18.26 | 17.795 | 0.013 | 0.088 | 1.335 | 0.068 | 0.652 | 0.015 | 0.405 | 0.016 | 0.252 | 0.025 | ... | ... | |
| 116b | 13 51 31.55 | 00 44 11.80 | 17.921 | 0.008 | 0.088 | 2.463 | 0.201 | 1.588 | 0.012 | 0.514 | 0.009 | 0.395 | 0.009 | ... | 0.0881 | 2dFGRSN405Z061 |
| 116c | 13 51 32.46 | 00 44 11.82 | 18.466 | 0.014 | 0.088 | 0.938 | 0.043 | 0.257 | 0.016 | 0.178 | 0.020 | 0.133 | 0.044 | ... | ... | |
| 116d | 13 51 31.87 | 00 44 19.28 | 20.045 | 0.025 | 0.088 | 1.016 | 0.101 | 0.258 | 0.029 | 0.247 | 0.038 | 0.046 | 0.094 | ... | ... | |
| CG 117: | | | | | | | | | | | | | | | | |
| 117a | 13 52 35.53 | −01 01 42.59 | 17.356 | 0.008 | 0.127 | 1.462 | 0.058 | 1.014 | 0.011 | 0.424 | 0.010 | 0.309 | 0.013 | 0.1412 | ... | |
| 117b | 13 52 35.42 | −01 01 34.71 | 17.947 | 0.010 | 0.126 | 1.740 | 0.101 | 1.125 | 0.014 | 0.416 | 0.011 | 0.137 | 0.018 | ... | ... | |
| 117c | 13 52 35.74 | −01 01 47.00 | 18.850 | 0.014 | 0.127 | 1.513 | 0.121 | 0.900 | 0.020 | 0.356 | 0.018 | 0.240 | 0.032 | ... | ... | |
| 117d | 13 52 34.65 | −01 01 52.95 | 19.659 | 0.029 | 0.127 | 1.740 | 0.705 | 1.591 | 0.076 | 0.471 | 0.038 | 0.307 | 0.069 | ... | ... | |
| CG 118: | | | | | | | | | | | | | | | | |
| 118a | 13 53 50.83 | 00 11 01.85 | 17.708 | 0.012 | 0.111 | 2.043 | 0.220 | 1.436 | 0.018 | 0.554 | 0.013 | 0.370 | 0.019 | ... | ... | |
| 118b | 13 53 50.25 | 00 10 41.44 | 18.799 | 0.019 | 0.111 | 0.992 | 0.086 | 0.653 | 0.024 | 0.448 | 0.023 | 0.222 | 0.052 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 118c | 13 53 50.11 | 00 10 46.44 | 19.326 | 0.023 | 0.111 | 1.724 | 0.408 | 1.268 | 0.041 | 0.493 | 0.028 | 0.206 | 0.067 | ... | ... | |
| 118d | 13 53 51.21 | 00 10 54.16 | 20.665 | 0.052 | 0.111 | 0.376 | 0.194 | 0.645 | 0.074 | 0.017 | 0.085 | 0.445 | 0.227 | ... | ... | |
| CG 119: | | | | | | | | | | | | | | | | |
| 119a | 13 55 57.84 | 00 15 26.30 | 17.359 | 0.015 | 0.108 | 1.388 | 0.075 | 0.645 | 0.018 | 0.388 | 0.018 | 0.138 | 0.036 | ... | ... | |
| 119b | 13 55 58.09 | 00 15 30.64 | 17.858 | 0.012 | 0.108 | 1.451 | 0.094 | 1.083 | 0.015 | 0.459 | 0.013 | 0.337 | 0.023 | 0.1333 | ... | |
| 119c | 13 55 57.36 | 00 15 10.46 | 19.398 | 0.019 | 0.108 | 1.186 | 0.128 | 0.771 | 0.025 | 0.389 | 0.024 | 0.223 | 0.061 | ... | ... | |
| 119d | 13 55 58.88 | 00 15 25.41 | 19.739 | 0.030 | 0.108 | 1.013 | 0.157 | 0.543 | 0.039 | 0.372 | 0.041 | 0.105 | 0.123 | ... | ... | |
| 119e | 13 55 57.26 | 00 15 34.54 | 20.037 | 0.027 | 0.108 | 0.944 | 0.150 | 0.695 | 0.037 | 0.385 | 0.036 | 0.301 | 0.087 | ... | ... | |
| CG 120: | | | | | | | | | | | | | | | | |
| 120a | 14 05 08.08 | −00 09 02.15 | 17.176 | 0.011 | 0.119 | 1.943 | 0.232 | 1.610 | 0.020 | 0.510 | 0.013 | 0.396 | 0.018 | 0.2427 | 0.2427 | 2MASX J14050810−0009015 |
| 120b | 14 05 08.59 | −00 08 56.83 | 19.784 | 0.026 | 0.119 | 1.336 | 0.671 | 2.139 | 0.095 | 0.482 | 0.032 | 0.212 | 0.069 | ... | ... | |
| 120c | 14 05 08.38 | −00 08 58.91 | 20.025 | 0.039 | 0.119 | 1.715 | 0.667 | 1.212 | 0.073 | 0.823 | 0.045 | −0.113 | 0.109 | ... | ... | |
| 120d | 14 05 08.20 | −00 08 54.21 | 20.117 | 0.041 | 0.118 | 1.887 | 0.635 | 0.878 | 0.064 | 0.672 | 0.051 | 0.250 | 0.101 | ... | ... | |
| CG 121: | | | | | | | | | | | | | | | | |
| 121a | 14 07 52.93 | −00 29 19.07 | 17.610 | 0.011 | 0.107 | 2.033 | 0.247 | 1.504 | 0.018 | 0.474 | 0.012 | 0.404 | 0.016 | ... | ... | |
| 121b | 14 07 52.47 | −00 29 25.84 | 17.989 | 0.015 | 0.108 | 2.497 | 0.587 | 1.434 | 0.027 | 0.533 | 0.017 | 0.422 | 0.026 | ... | ... | |
| 121c | 14 07 51.80 | −00 29 24.08 | 18.889 | 0.016 | 0.108 | 2.358 | 0.632 | 1.483 | 0.032 | 0.502 | 0.020 | 0.390 | 0.032 | ... | ... | |
| 121d | 14 07 51.51 | −00 29 16.15 | 20.018 | 0.042 | 0.108 | 0.398 | 0.328 | 1.408 | 0.093 | 0.353 | 0.060 | 0.374 | 0.118 | ... | ... | |
| CG 122: | | | | | | | | | | | | | | | | |
| 122a | 14 10 54.95 | 00 59 08.92 | 17.536 | 0.009 | 0.091 | 2.138 | 0.182 | 1.182 | 0.013 | 0.492 | 0.010 | 0.368 | 0.015 | 0.1803 | ... | |
| 122b | 14 10 54.77 | 00 58 57.22 | 18.476 | 0.017 | 0.091 | 1.707 | 0.355 | 1.351 | 0.033 | 0.601 | 0.020 | 0.548 | 0.028 | ... | ... | |
| 122c | 14 10 54.41 | 00 59 06.29 | 20.240 | 0.041 | 0.091 | 1.005 | 0.321 | 0.768 | 0.063 | 0.371 | 0.058 | 0.213 | 0.135 | ... | ... | |
| 122d | 14 10 54.96 | 00 59 15.08 | 20.277 | 0.036 | 0.091 | 0.424 | 0.133 | 0.554 | 0.050 | 0.336 | 0.051 | −0.138 | 0.159 | ... | ... | |
| CG 123: | | | | | | | | | | | | | | | | |
| 123a | 14 12 05.86 | −01 03 21.74 | 17.138 | 0.011 | 0.158 | 2.453 | 0.307 | 1.228 | 0.021 | 0.447 | 0.013 | 0.381 | 0.019 | 0.1822 | ... | |
| 123b | 14 12 06.90 | −01 03 26.11 | 18.884 | 0.019 | 0.159 | 1.060 | 0.129 | 0.831 | 0.033 | 0.440 | 0.024 | 0.108 | 0.052 | ... | ... | |
| 123c | 14 12 05.50 | −01 03 23.89 | 19.026 | 0.049 | 0.158 | 0.808 | 0.300 | 0.857 | 0.093 | 0.349 | 0.068 | −0.422 | 0.252 | ... | ... | |
| 123d | 14 12 05.78 | −01 03 36.80 | 19.506 | 0.019 | 0.159 | 2.292 | 0.581 | 1.285 | 0.046 | 0.439 | 0.023 | 0.466 | 0.036 | ... | ... | |
| CG 124: | | | | | | | | | | | | | | | | |
| 124a | 14 14 00.24 | 00 23 35.34 | 17.167 | 0.009 | 0.112 | 2.245 | 0.169 | 1.285 | 0.012 | 0.573 | 0.010 | 0.362 | 0.014 | 0.1892 | ... | |
| 124b | 14 13 58.89 | 00 23 39.08 | 18.956 | 0.031 | 0.112 | 1.226 | 0.221 | 0.702 | 0.041 | 0.396 | 0.042 | −0.141 | 0.148 | ... | ... | |
| 124c | 14 13 59.49 | 00 23 53.53 | 19.030 | 0.017 | 0.111 | 2.197 | 0.396 | 1.212 | 0.026 | 0.426 | 0.021 | 0.317 | 0.044 | ... | ... | |
| 124d | 14 14 00.17 | 00 23 52.94 | 19.552 | 0.020 | 0.111 | 1.067 | 0.110 | 0.694 | 0.025 | 0.401 | 0.026 | 0.043 | 0.070 | ... | ... | |
| CG 125: | | | | | | | | | | | | | | | | |
| 125a | 14 14 06.22 | 00 21 36.96 | 17.929 | 0.010 | 0.112 | 1.021 | 0.037 | 0.541 | 0.012 | 0.354 | 0.012 | 0.165 | 0.027 | ... | ... | |
| 125b | 14 14 07.18 | 00 21 22.29 | 19.316 | 0.017 | 0.112 | 1.584 | 0.301 | 1.454 | 0.032 | 0.545 | 0.021 | 0.317 | 0.041 | ... | ... | |
| 125c | 14 14 06.32 | 00 21 24.36 | 19.647 | 0.023 | 0.112 | 2.660 | 1.079 | 1.603 | 0.051 | 0.665 | 0.028 | 0.373 | 0.050 | ... | ... | |
| 125d | 14 14 06.52 | 00 21 36.05 | 19.806 | 0.027 | 0.112 | 3.238 | 1.371 | 1.690 | 0.069 | 0.674 | 0.034 | 0.399 | 0.059 | ... | ... | |
| CG 126: | | | | | | | | | | | | | | | | |
| 126a | 14 15 03.15 | −00 22 42.89 | 17.233 | 0.008 | 0.117 | 2.120 | 0.115 | 1.044 | 0.010 | 0.432 | 0.009 | 0.401 | 0.011 | 0.1428 | ... | |
| 126b | 14 15 03.62 | −00 22 31.57 | 18.080 | 0.011 | 0.117 | 2.048 | 0.195 | 1.068 | 0.016 | 0.424 | 0.012 | 0.389 | 0.020 | ... | ... | |
| 126c | 14 15 04.44 | −00 22 20.89 | 18.522 | 0.018 | 0.117 | 1.806 | 0.287 | 0.871 | 0.029 | 0.400 | 0.024 | 0.358 | 0.047 | ... | ... | |
| 126d | 14 15 04.90 | −00 22 40.98 | 19.564 | 0.027 | 0.116 | 1.998 | 0.520 | 0.862 | 0.044 | 0.289 | 0.038 | 0.442 | 0.076 | ... | ... | |
| CG 127: | | | | | | | | | | | | | | | | |
| 127a | 14 15 55.07 | 00 16 06.24 | 17.399 | 0.008 | 0.109 | 1.796 | 0.074 | 1.108 | 0.010 | 0.406 | 0.009 | 0.378 | 0.013 | 0.1260 | ... | |
| 127b | 14 15 54.09 | 00 15 50.18 | 18.374 | 0.010 | 0.109 | 2.134 | 0.162 | 1.088 | 0.014 | 0.444 | 0.012 | 0.421 | 0.019 | ... | ... | |
| 127c | 14 15 53.32 | 00 16 04.37 | 20.228 | 0.042 | 0.110 | 1.763 | 0.640 | 0.944 | 0.067 | 0.367 | 0.058 | 0.262 | 0.155 | ... | ... | |
| 127d | 14 15 55.04 | 00 16 13.06 | 20.341 | 0.042 | 0.109 | 1.741 | 0.544 | 0.797 | 0.061 | 0.549 | 0.053 | 0.439 | 0.111 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 128: | | | | | | | | | | | | | | | | |
| 128a | 14 22 03.76 | −00 57 25.65 | 15.924 | 0.007 | 0.129 | 1.874 | 0.041 | 0.996 | 0.008 | 0.448 | 0.007 | 0.342 | 0.006 | 0.1030 | ... | |
| 128b | 14 22 02.50 | −00 57 17.01 | 16.378 | 0.008 | 0.129 | 1.727 | 0.055 | 1.010 | 0.010 | 0.438 | 0.008 | 0.358 | 0.009 | ... | ... | |
| 128c | 14 22 02.64 | −00 57 57.00 | 16.655 | 0.008 | 0.128 | 1.581 | 0.037 | 0.840 | 0.009 | 0.498 | 0.009 | 0.319 | 0.008 | ... | ... | |
| 128d | 14 22 01.97 | −00 58 16.51 | 18.799 | 0.017 | 0.128 | 1.774 | 0.227 | 0.981 | 0.028 | 0.275 | 0.023 | 0.244 | 0.051 | ... | ... | |
| CG 129: | | | | | | | | | | | | | | | | |
| 129a | 14 24 16.53 | −00 08 57.80 | 15.825 | 0.009 | 0.102 | 1.030 | 0.037 | 0.833 | 0.011 | 0.174 | 0.011 | 0.197 | 0.023 | 0.1736 | 0.1732 | 2dFGRSN344Z15 |
| 129b | 14 24 18.75 | −00 08 58.27 | 17.324 | 0.008 | 0.101 | 2.000 | 0.081 | 1.093 | 0.010 | 0.445 | 0.009 | 0.375 | 0.010 | ... | ... | |
| 129c | 14 24 18.18 | −00 08 45.06 | 18.584 | 0.021 | 0.101 | 2.108 | 0.728 | 1.658 | 0.051 | 0.669 | 0.025 | 0.382 | 0.041 | ... | ... | |
| 129d | 14 24 14.98 | −00 09 03.08 | 18.701 | 0.019 | 0.102 | 1.056 | 0.094 | 0.618 | 0.025 | 0.287 | 0.026 | 0.051 | 0.068 | ... | ... | |
| CG 130: | | | | | | | | | | | | | | | | |
| 130a | 14 25 15.67 | −00 29 58.32 | 17.292 | 0.008 | 0.133 | 1.665 | 0.051 | 0.919 | 0.009 | 0.452 | 0.008 | 0.379 | 0.009 | 0.1080 | ... | |
| 130b | 14 25 16.18 | −00 29 34.67 | 19.674 | 0.023 | 0.132 | 2.040 | 0.484 | 1.056 | 0.037 | 0.478 | 0.030 | 0.325 | 0.055 | ... | ... | |
| 130c | 14 25 15.53 | −00 29 49.67 | 19.946 | 0.029 | 0.132 | 0.558 | 0.139 | 0.887 | 0.043 | 0.352 | 0.039 | 0.338 | 0.076 | ... | ... | |
| 130d | 14 25 15.41 | −00 29 45.93 | 20.059 | 0.026 | 0.132 | 0.521 | 0.113 | 0.784 | 0.037 | 0.238 | 0.038 | 0.623 | 0.062 | ... | ... | |
| CG 131: | | | | | | | | | | | | | | | | |
| 131a | 14 25 27.65 | 00 20 16.10 | 16.267 | 0.006 | 0.088 | 2.022 | 0.051 | 1.127 | 0.007 | 0.437 | 0.007 | 0.397 | 0.007 | 0.1343 | ... | |
| 131b | 14 25 27.45 | 00 20 19.89 | 17.479 | 0.008 | 0.088 | 1.972 | 0.088 | 1.041 | 0.010 | 0.355 | 0.009 | −0.018 | 0.022 | ... | ... | |
| 131c | 14 25 29.62 | 00 20 47.59 | 18.488 | 0.011 | 0.088 | 2.077 | 0.162 | 1.043 | 0.015 | 0.455 | 0.013 | 0.348 | 0.024 | ... | ... | |
| 131d | 14 25 28.16 | 00 20 34.37 | 19.143 | 0.452 | 0.088 | 1.735 | 2.239 | 1.051 | 0.490 | −0.140 | 0.499 | 0.437 | 0.747 | ... | ... | |
| CG 132: | | | | | | | | | | | | | | | | |
| 132a | 14 25 34.36 | 00 19 56.93 | 15.817 | 0.006 | 0.089 | 1.968 | 0.034 | 0.943 | 0.007 | 0.395 | 0.006 | 0.365 | 0.006 | 0.0845 | 0.0843 | 2dFGRSN344Z098 |
| 132b | 14 25 33.09 | 00 19 58.98 | 18.000 | 0.009 | 0.089 | 1.883 | 0.096 | 0.930 | 0.012 | 0.402 | 0.011 | 0.309 | 0.020 | ... | ... | |
| 132c | 14 25 33.14 | 00 19 17.20 | 18.116 | 0.010 | 0.089 | 2.106 | 0.175 | 1.065 | 0.014 | 0.404 | 0.012 | 0.387 | 0.025 | ... | ... | |
| 132d | 14 25 33.48 | 00 19 51.44 | 18.600 | 0.013 | 0.089 | 1.715 | 0.135 | 0.828 | 0.017 | 0.439 | 0.016 | 0.340 | 0.034 | ... | ... | |
| CG 133: | | | | | | | | | | | | | | | | |
| 133a | 14 29 32.63 | 00 29 37.72 | 16.660 | 0.009 | 0.102 | 1.722 | 0.067 | 0.932 | 0.010 | 0.561 | 0.009 | 0.451 | 0.008 | 0.0554 | ... | |
| 133b | 14 29 33.95 | 00 29 33.88 | 17.559 | 0.019 | 0.102 | 0.801 | 0.072 | 0.449 | 0.023 | 0.204 | 0.027 | 0.185 | 0.058 | ... | ... | |
| 133c | 14 29 34.06 | 00 29 44.19 | 18.785 | 0.014 | 0.102 | 1.854 | 0.219 | 0.922 | 0.020 | 0.441 | 0.018 | 0.394 | 0.027 | ... | ... | |
| 133d | 14 29 32.40 | 00 30 07.83 | 19.085 | 0.038 | 0.102 | 0.747 | 0.151 | 0.416 | 0.047 | 0.230 | 0.056 | 0.182 | 0.122 | ... | ... | |
| CG 134: | | | | | | | | | | | | | | | | |
| 134a | 14 29 40.63 | 00 21 59.04 | 14.360 | 0.005 | 0.105 | 2.131 | 0.010 | 0.899 | 0.005 | 0.440 | 0.005 | 0.376 | 0.002 | 0.0556 | ... | |
| 134b | 14 29 39.14 | 00 22 39.90 | 16.378 | 0.006 | 0.105 | 1.947 | 0.027 | 0.868 | 0.006 | 0.440 | 0.006 | 0.340 | 0.005 | ... | ... | |
| 134c | 14 29 39.54 | 00 22 03.56 | 17.020 | 0.010 | 0.105 | 1.677 | 0.080 | 0.875 | 0.013 | 0.349 | 0.012 | 0.196 | 0.025 | ... | ... | |
| 134d | 14 29 41.83 | 00 22 08.51 | 17.253 | 0.008 | 0.105 | 1.830 | 0.060 | 0.827 | 0.009 | 0.432 | 0.009 | 0.324 | 0.014 | 0.0537 | ... | |
| 134e | 14 29 36.96 | 00 22 07.17 | 17.253 | 0.009 | 0.105 | 2.031 | 0.120 | 0.849 | 0.012 | 0.366 | 0.011 | 0.363 | 0.023 | ... | ... | |
| CG 135: | | | | | | | | | | | | | | | | |
| 135a | 14 30 57.38 | 00 47 17.77 | 17.623 | 0.009 | 0.104 | 1.487 | 0.063 | 0.968 | 0.011 | 0.496 | 0.010 | 0.314 | 0.014 | ... | ... | |
| 135b | 14 30 58.09 | 00 47 30.52 | 18.561 | 0.012 | 0.104 | 1.845 | 0.181 | 1.202 | 0.018 | 0.445 | 0.015 | 0.331 | 0.024 | ... | ... | |
| 135c | 14 30 57.84 | 00 47 31.23 | 19.497 | 0.032 | 0.104 | 1.086 | 0.502 | 1.696 | 0.085 | 0.744 | 0.039 | 0.194 | 0.073 | ... | ... | |
| 135d | 14 30 58.18 | 00 47 26.13 | 19.558 | 0.025 | 0.104 | 0.893 | 0.115 | 0.636 | 0.032 | 0.573 | 0.032 | 0.278 | 0.056 | ... | ... | |
| CG 136: | | | | | | | | | | | | | | | | |
| 136a | 14 32 25.98 | 00 03 27.21 | 16.323 | 0.006 | 0.113 | 2.108 | 0.042 | 1.023 | 0.007 | 0.444 | 0.006 | 0.358 | 0.005 | 0.0929 | 0.0930 | 2dFGRSN346Z007 |
| 136b | 14 32 26.40 | 00 02 51.23 | 17.037 | 0.007 | 0.114 | 1.671 | 0.068 | 1.267 | 0.009 | 0.436 | 0.008 | 0.346 | 0.011 | ... | ... | |
| 136c | 14 32 27.68 | 00 03 11.16 | 17.767 | 0.009 | 0.114 | 2.298 | 0.108 | 1.067 | 0.010 | 0.388 | 0.009 | 0.300 | 0.012 | ... | ... | |
| 136d | 14 32 26.86 | 00 02 52.00 | 17.963 | 0.011 | 0.114 | 1.775 | 0.130 | 1.032 | 0.015 | 0.475 | 0.013 | 0.022 | 0.029 | ... | ... | |
| 136e | 14 32 25.81 | 00 03 14.77 | 18.588 | 0.015 | 0.113 | 1.210 | 0.077 | 0.497 | 0.018 | 0.284 | 0.019 | 0.111 | 0.054 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 137: | | | | | | | | | | | | | | | | |
| 137a | 14 33 27.16 | −00 07 08.17 | 16.696 | 0.014 | 0.108 | 1.132 | 0.053 | 1.195 | 0.016 | 0.122 | 0.015 | −0.273 | 0.035 | . . . | 0.0344 | APMUKS(BJ) B143053.50+000603.0 |
| 137b | 14 33 27.19 | −00 07 09.26 | 17.952 | 0.046 | 0.108 | 1.270 | 0.044 | −1.243 | 0.047 | 0.799 | 0.052 | 0.851 | 0.049 | . . . | . . . | |
| 137c | 14 33 27.91 | −00 06 53.03 | 19.234 | 0.063 | 0.107 | 0.669 | 0.120 | −0.166 | 0.069 | 0.202 | 0.096 | 0.072 | 0.275 | . . . | . . . | |
| 137d | 14 33 27.87 | −00 07 14.01 | 19.260 | 0.045 | 0.108 | −0.086 | 0.643 | 2.666 | 0.286 | 0.098 | 0.075 | 1.367 | 0.088 | . . . | . . . | |
| CG 138: | | | | | | | | | | | | | | | | |
| 138a | 14 33 57.20 | 00 35 10.74 | 17.008 | 0.009 | 0.103 | 2.116 | 0.136 | 1.427 | 0.012 | 0.555 | 0.010 | 0.410 | 0.008 | 0.2221 | . . . | |
| 138b | 14 33 56.34 | 00 34 49.44 | 19.642 | 0.022 | 0.102 | 1.890 | 0.537 | 1.376 | 0.043 | 0.489 | 0.029 | 0.286 | 0.049 | . . . | . . . | |
| 138c | 14 33 57.25 | 00 34 59.08 | 19.700 | 0.024 | 0.102 | 1.547 | 0.401 | 1.332 | 0.043 | 0.531 | 0.030 | 0.425 | 0.044 | . . . | . . . | |
| 138d | 14 33 56.87 | 00 35 09.48 | 19.786 | 0.025 | 0.103 | 1.279 | 0.315 | 1.312 | 0.045 | 0.643 | 0.030 | −1.514 | 0.226 | . . . | . . . | |
| CG 139: | | | | | | | | | | | | | | | | |
| 139a | 14 35 47.68 | −00 10 06.25 | 17.356 | 0.014 | 0.114 | 1.290 | 0.059 | 0.676 | 0.016 | 0.274 | 0.016 | 0.288 | 0.030 | . . . | 0.1066 | 2dFGRSN347Z210 |
| 139b | 14 35 48.03 | −00 09 55.91 | 17.442 | 0.008 | 0.114 | 1.965 | 0.062 | 0.983 | 0.009 | 0.462 | 0.008 | 0.421 | 0.009 | 0.0925 | 0.0930 | 2dFGRSN346Z169 |
| 139c | 14 35 47.25 | −00 09 45.56 | 18.989 | 0.016 | 0.114 | 2.157 | 0.397 | 1.373 | 0.031 | 0.537 | 0.019 | 0.399 | 0.034 | . . . | . . . | |
| 139d | 14 35 47.79 | −00 10 18.11 | 20.248 | 0.036 | 0.114 | 1.575 | 0.485 | 1.122 | 0.066 | 0.691 | 0.043 | 0.385 | 0.080 | . . . | . . . | |
| CG 140: | | | | | | | | | | | | | | | | |
| 140a | 14 37 03.25 | −00 36 02.64 | 17.930 | 0.011 | 0.103 | 2.025 | 0.212 | 1.319 | 0.017 | 0.572 | 0.012 | 0.337 | 0.017 | . . . | 0.2137 | 2dFGRSN280Z122 |
| 140b | 14 37 03.03 | −00 35 59.83 | 19.003 | 0.018 | 0.103 | 1.271 | 0.174 | 0.967 | 0.028 | 0.402 | 0.024 | 0.282 | 0.047 | . . . | . . . | |
| 140c | 14 37 03.67 | −00 35 51.02 | 19.232 | 0.019 | 0.103 | 1.630 | 0.275 | 1.042 | 0.029 | 0.581 | 0.022 | 0.303 | 0.040 | . . . | . . . | |
| 140d | 14 37 03.49 | −00 35 42.99 | 19.340 | 0.020 | 0.103 | 2.071 | 0.554 | 1.280 | 0.037 | 0.562 | 0.025 | 0.347 | 0.044 | . . . | . . . | |
| CG 141: | | | | | | | | | | | | | | | | |
| 141a | 14 37 35.62 | −00 33 24.20 | 16.099 | 0.008 | 0.098 | 2.180 | 0.094 | 1.231 | 0.009 | 0.556 | 0.008 | 0.405 | 0.006 | 0.1799 | 0.1797 | 2MASX J14373563−0033239 |
| 141b | 14 37 34.42 | −00 33 02.09 | 17.467 | 0.012 | 0.098 | 2.808 | 0.551 | 1.137 | 0.020 | 0.511 | 0.015 | 0.327 | 0.026 | . . . | . . . | |
| 141c | 14 37 34.68 | −00 33 40.80 | 18.637 | 0.013 | 0.098 | 1.958 | 0.259 | 1.197 | 0.019 | 0.525 | 0.015 | 0.375 | 0.022 | . . . | . . . | |
| 141d | 14 37 33.91 | −00 33 24.66 | 19.056 | 0.015 | 0.098 | 2.010 | 0.348 | 1.179 | 0.024 | 0.531 | 0.018 | 0.393 | 0.028 | . . . | . . . | |
| CG 142: | | | | | | | | | | | | | | | | |
| 142a | 14 38 03.69 | −00 19 18.65 | 17.505 | 0.011 | 0.107 | 2.167 | 0.197 | 1.439 | 0.016 | 0.556 | 0.012 | 0.395 | 0.013 | 0.2470 | . . . | |
| 142b | 14 38 03.32 | −00 19 30.73 | 19.612 | 0.020 | 0.106 | 2.560 | 0.711 | 1.409 | 0.037 | 0.520 | 0.023 | 0.411 | 0.036 | . . . | . . . | |
| 142c | 14 38 04.29 | −00 19 29.88 | 19.883 | 0.029 | 0.107 | 1.014 | 0.168 | 0.724 | 0.040 | 0.207 | 0.040 | 0.232 | 0.097 | . . . | . . . | |
| 142d | 14 38 04.26 | −00 19 35.75 | 20.413 | 0.041 | 0.107 | 1.119 | 0.430 | 1.191 | 0.077 | 0.365 | 0.055 | 0.225 | 0.129 | . . . | . . . | |
| CG 143: | | | | | | | | | | | | | | | | |
| 143a | 14 41 19.04 | 00 58 12.77 | 17.866 | 0.010 | 0.122 | 2.035 | 0.236 | 1.465 | 0.017 | 0.515 | 0.012 | 0.424 | 0.015 | . . . | . . . | |
| 143b | 14 41 18.45 | 00 58 08.59 | 18.123 | 0.011 | 0.123 | 2.378 | 0.308 | 1.398 | 0.017 | 0.489 | 0.012 | 0.381 | 0.017 | . . . | . . . | |
| 143c | 14 41 19.81 | 00 58 13.46 | 18.918 | 0.020 | 0.122 | 1.745 | 0.395 | 1.312 | 0.036 | 0.496 | 0.024 | 0.309 | 0.043 | . . . | . . . | |
| 143d | 14 41 18.82 | 00 58 26.75 | 20.396 | 0.066 | 0.122 | 0.714 | 0.498 | 1.106 | 0.118 | 0.417 | 0.090 | 0.412 | 0.166 | . . . | . . . | |
| CG 144: | | | | | | | | | | | | | | | | |
| 144a | 14 43 18.35 | −00 48 03.12 | 17.470 | 0.011 | 0.110 | 1.594 | 0.083 | 0.990 | 0.013 | 0.478 | 0.012 | 0.357 | 0.012 | 0.1466 | 0.1464 | 2dFGRSN282Z141 |
| 144b | 14 43 17.37 | −00 48 12.92 | 18.125 | 0.013 | 0.110 | 2.245 | 0.223 | 1.018 | 0.017 | 0.419 | 0.014 | 0.323 | 0.019 | . . . | . . . | |
| 144c | 14 43 17.18 | −00 48 06.11 | 20.237 | 0.039 | 0.110 | 2.400 | 1.221 | 1.256 | 0.073 | 0.702 | 0.046 | 0.503 | 0.062 | . . . | . . . | |
| 144d | 14 43 17.23 | −00 48 10.98 | 20.379 | 0.038 | 0.110 | 0.837 | 0.199 | 0.593 | 0.053 | 0.431 | 0.050 | −0.208 | 0.140 | . . . | . . . | |
| CG 145: | | | | | | | | | | | | | | | | |
| 145a | 14 44 35.86 | −01 08 18.14 | 16.948 | 0.009 | 0.123 | 2.108 | 0.089 | 1.119 | 0.012 | 0.515 | 0.010 | 0.380 | 0.008 | . . . | . . . | |
| 145b | 14 44 34.96 | −01 07 51.32 | 17.537 | 0.019 | 0.123 | 1.395 | 0.155 | 1.078 | 0.032 | 0.499 | 0.023 | 0.443 | 0.033 | . . . | . . . | |
| 145c | 14 44 36.55 | −01 07 50.70 | 18.107 | 0.011 | 0.123 | 2.026 | 0.134 | 1.086 | 0.016 | 0.498 | 0.012 | 0.356 | 0.014 | . . . | . . . | |
| 145d | 14 44 36.25 | −01 08 25.98 | 18.834 | 0.064 | 0.123 | 0.645 | 0.357 | 0.997 | 0.123 | 1.040 | 0.072 | 0.404 | 0.084 | . . . | . . . | |
| 145e | 14 44 35.89 | −01 07 58.77 | 19.208 | 0.019 | 0.123 | 1.660 | 0.247 | 1.043 | 0.035 | 0.489 | 0.024 | 0.383 | 0.037 | . . . | . . . | |
| 145f | 14 44 36.38 | −01 08 27.98 | 19.898 | 0.026 | 0.123 | 3.486 | 1.160 | 0.969 | 0.048 | 0.518 | 0.033 | 0.097 | 0.068 | . . . | . . . | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 146: | | | | | | | | | | | | | | | | |
| 146a | 14 45 18.27 | 00 33 59.15 | 17.722 | 0.012 | 0.143 | 1.464 | 0.093 | 0.997 | 0.016 | 0.460 | 0.014 | 0.353 | 0.018 | ... | ... | |
| 146b | 14 45 19.49 | 00 34 16.20 | 19.157 | 0.013 | 0.143 | 1.747 | 0.132 | 0.845 | 0.017 | 0.239 | 0.017 | 0.209 | 0.032 | ... | ... | |
| 146c | 14 45 18.83 | 00 34 08.04 | 19.178 | 0.021 | 0.143 | 1.344 | 0.172 | 0.856 | 0.030 | 0.434 | 0.027 | 0.379 | 0.043 | ... | ... | |
| 146d | 14 45 19.22 | 00 33 51.34 | 20.298 | 0.045 | 0.142 | 2.361 | 0.949 | 0.863 | 0.070 | 0.442 | 0.060 | 0.437 | 0.099 | ... | ... | |
| 146e | 14 45 19.32 | 00 34 03.99 | 20.313 | 0.036 | 0.143 | 2.741 | 1.179 | 1.521 | 0.086 | 0.548 | 0.046 | 0.376 | 0.075 | ... | ... | |
| CG 147: | | | | | | | | | | | | | | | | |
| 147a | 14 45 35.36 | −01 02 01.79 | 17.417 | 0.009 | 0.121 | 2.254 | 0.136 | 1.065 | 0.013 | 0.462 | 0.010 | 0.300 | 0.014 | ... | ... | |
| 147b | 14 45 36.76 | −01 02 16.34 | 18.820 | 0.023 | 0.121 | 1.613 | 0.269 | 0.977 | 0.039 | 0.478 | 0.030 | 0.405 | 0.050 | ... | ... | |
| 147c | 14 45 35.74 | −01 01 59.68 | 19.788 | 0.031 | 0.121 | 1.550 | 0.435 | 1.201 | 0.063 | 0.256 | 0.045 | 0.275 | 0.100 | ... | ... | |
| 147d | 14 45 36.61 | −01 02 05.37 | 20.192 | 0.152 | 0.121 | 0.387 | 0.656 | 0.952 | 0.272 | 0.432 | 0.206 | −0.014 | 0.529 | ... | ... | |
| CG 148: | | | | | | | | | | | | | | | | |
| 148a | 14 47 16.50 | 00 55 24.15 | 16.743 | 0.008 | 0.142 | 2.127 | 0.102 | 1.072 | 0.010 | 0.486 | 0.009 | 0.425 | 0.009 | ... | 0.1373 | 2dFGRSN349Z047 |
| 148b | 14 47 15.70 | 00 55 34.97 | 17.448 | 0.009 | 0.142 | 1.729 | 0.081 | 1.061 | 0.011 | 0.526 | 0.009 | 0.430 | 0.010 | 0.1373 | ... | |
| 148c | 14 47 13.93 | 00 55 23.10 | 18.213 | 0.012 | 0.142 | 2.264 | 0.241 | 1.070 | 0.016 | 0.476 | 0.013 | 0.412 | 0.019 | ... | ... | |
| 148d | 14 47 15.20 | 00 55 48.11 | 19.535 | 0.200 | 0.142 | 1.994 | 2.325 | 0.450 | 0.247 | 0.236 | 0.278 | −2.512 | 6.258 | ... | ... | |
| CG 149: | | | | | | | | | | | | | | | | |
| 149a | 14 48 38.55 | 00 38 45.38 | 16.262 | 0.009 | 0.112 | 1.491 | 0.060 | 1.010 | 0.011 | 0.427 | 0.010 | 0.294 | 0.013 | 0.1405 | ... | |
| 149b | 14 48 35.87 | 00 38 54.66 | 18.846 | 0.014 | 0.112 | 1.205 | 0.187 | 1.589 | 0.030 | 0.589 | 0.017 | 0.347 | 0.026 | ... | ... | |
| 149c | 14 48 37.24 | 00 38 50.56 | 18.875 | 0.013 | 0.112 | 1.806 | 0.185 | 1.169 | 0.020 | 0.451 | 0.016 | 0.290 | 0.026 | ... | ... | |
| 149d | 14 48 38.78 | 00 38 53.71 | 18.920 | 0.015 | 0.112 | 1.873 | 0.200 | 1.034 | 0.021 | 0.399 | 0.018 | 0.346 | 0.030 | ... | ... | |
| CG 150: | | | | | | | | | | | | | | | | |
| 150a | 14 53 11.13 | 00 58 23.39 | 16.498 | 0.012 | 0.145 | 1.377 | 0.075 | 0.847 | 0.015 | 0.327 | 0.014 | 0.304 | 0.021 | ... | ... | |
| 150b | 14 53 09.04 | 00 58 29.63 | 16.625 | 0.011 | 0.144 | 1.074 | 0.044 | 0.435 | 0.013 | 0.170 | 0.014 | 0.175 | 0.031 | 0.1193 | ... | |
| 150c | 14 53 09.85 | 00 58 38.57 | 16.878 | 0.010 | 0.144 | 1.423 | 0.056 | 0.920 | 0.012 | 0.509 | 0.011 | 0.357 | 0.012 | ... | ... | |
| 150d | 14 53 09.29 | 00 58 05.77 | 19.098 | 0.023 | 0.144 | 1.106 | 0.125 | 0.538 | 0.030 | −0.012 | 0.037 | 0.409 | 0.080 | ... | ... | |
| CG 151: | | | | | | | | | | | | | | | | |
| 151a | 14 53 19.49 | −00 37 42.91 | 17.763 | 0.009 | 0.149 | 0.540 | 0.016 | 0.379 | 0.010 | 0.308 | 0.010 | 0.010 | 0.019 | 0.1857 | ... | |
| 151b | 14 53 19.00 | −00 37 29.74 | 19.348 | 0.022 | 0.149 | 1.249 | 0.250 | 1.210 | 0.039 | 0.446 | 0.028 | 0.434 | 0.047 | ... | ... | |
| 151c | 14 53 19.89 | −00 37 25.92 | 19.855 | 0.026 | 0.150 | 2.064 | 0.595 | 1.159 | 0.047 | 0.557 | 0.033 | 0.269 | 0.060 | ... | ... | |
| 151d | 14 53 20.20 | −00 37 22.50 | 20.681 | 0.052 | 0.150 | 2.067 | 1.108 | 1.160 | 0.099 | 0.354 | 0.074 | 0.575 | 0.125 | ... | ... | |
| CG 152: | | | | | | | | | | | | | | | | |
| 152a | 14 54 08.05 | −00 10 57.09 | 17.333 | 0.016 | 0.143 | 1.352 | 0.074 | 0.454 | 0.019 | 0.269 | 0.020 | 0.078 | 0.052 | ... | ... | |
| 152b | 14 54 08.87 | −00 11 02.58 | 19.059 | 0.015 | 0.143 | 2.594 | 0.542 | 1.405 | 0.028 | 0.556 | 0.018 | 0.466 | 0.028 | ... | ... | |
| 152c | 14 54 08.38 | −00 11 03.70 | 19.693 | 0.027 | 0.143 | 1.481 | 0.228 | 0.717 | 0.038 | 0.456 | 0.035 | 0.199 | 0.083 | ... | ... | |
| 152d | 14 54 07.41 | −00 11 12.25 | 19.753 | 0.025 | 0.144 | 1.172 | 0.173 | 0.798 | 0.036 | 0.457 | 0.032 | 0.093 | 0.084 | ... | ... | |
| CG 153: | | | | | | | | | | | | | | | | |
| 153a | 14 56 16.53 | 00 19 55.11 | 17.280 | 0.008 | 0.121 | 2.042 | 0.083 | 1.111 | 0.010 | 0.465 | 0.009 | 0.362 | 0.010 | 0.1393 | ... | |
| 153b | 14 56 16.36 | 00 19 55.86 | 18.047 | 0.012 | 0.121 | 2.426 | 0.308 | 1.265 | 0.017 | 0.466 | 0.014 | 0.325 | 0.025 | ... | ... | |
| 153c | 14 56 15.97 | 00 19 46.72 | 19.472 | 0.017 | 0.121 | 2.263 | 0.399 | 1.159 | 0.025 | 0.383 | 0.021 | 0.346 | 0.040 | ... | ... | |
| 153d | 14 56 15.61 | 00 19 50.36 | 19.752 | 0.027 | 0.121 | 1.155 | 0.139 | 0.365 | 0.032 | 0.243 | 0.038 | 0.021 | 0.125 | ... | ... | |
| 153e | 14 56 16.06 | 00 20 02.90 | 19.906 | 0.025 | 0.121 | 1.956 | 0.482 | 1.019 | 0.038 | 0.323 | 0.035 | 0.596 | 0.065 | ... | ... | |
| CG 154: | | | | | | | | | | | | | | | | |
| 154a | 14 56 30.81 | 00 13 34.93 | 17.621 | 0.010 | 0.128 | 1.952 | 0.146 | 1.215 | 0.014 | 0.503 | 0.012 | 0.406 | 0.017 | 0.1849 | ... | |
| 154b | 14 56 30.99 | 00 13 42.36 | 19.217 | 0.016 | 0.129 | 1.521 | 0.196 | 1.143 | 0.024 | 0.571 | 0.019 | 0.510 | 0.029 | ... | ... | |
| 154c | 14 56 32.16 | 00 13 29.37 | 20.250 | 0.038 | 0.129 | 1.212 | 0.284 | 0.652 | 0.051 | 0.344 | 0.053 | 0.035 | 0.173 | ... | ... | |
| 154d | 14 56 32.28 | 00 13 35.04 | 20.534 | 0.069 | 0.129 | 0.882 | 0.410 | 0.706 | 0.097 | 0.129 | 0.110 | −0.300 | 0.538 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 155: | | | | | | | | | | | | | | | | |
| 155a | 14 57 38.10 | −00 04 37.89 | 17.684 | 0.017 | 0.154 | 1.162 | 0.043 | 0.266 | 0.018 | 0.172 | 0.021 | 0.001 | 0.050 | 0.0420 | ... | |
| 155b | 14 57 37.84 | −00 04 48.69 | 18.482 | 0.014 | 0.154 | 1.653 | 0.132 | 1.012 | 0.019 | 0.512 | 0.016 | 0.389 | 0.025 | ... | ... | |
| 155c | 14 57 37.35 | −00 04 38.80 | 18.791 | 0.014 | 0.154 | 2.562 | 0.443 | 1.413 | 0.024 | 1.028 | 0.015 | 0.573 | 0.014 | ... | ... | |
| 155d | 14 57 37.70 | −00 04 26.60 | 19.958 | 0.042 | 0.153 | 1.032 | 0.237 | 0.769 | 0.059 | 0.398 | 0.057 | 0.201 | 0.130 | ... | ... | |
| CG 156: | | | | | | | | | | | | | | | | |
| 156a | 15 03 42.69 | −00 46 47.01 | 17.439 | 0.010 | 0.154 | 1.222 | 0.093 | 1.107 | 0.015 | 0.505 | 0.012 | 0.415 | 0.017 | ... | ... | |
| 156b | 15 03 43.35 | −00 46 36.62 | 18.555 | 0.015 | 0.154 | 1.706 | 0.245 | 1.403 | 0.024 | 0.514 | 0.017 | 0.381 | 0.021 | ... | ... | |
| 156c | 15 03 43.45 | −00 46 50.61 | 19.216 | 0.016 | 0.154 | 3.517 | 1.287 | 1.494 | 0.030 | 0.526 | 0.018 | 0.423 | 0.026 | ... | ... | |
| 156d | 15 03 43.15 | −00 46 29.49 | 19.902 | 0.032 | 0.154 | 1.968 | 0.783 | 1.208 | 0.058 | 0.466 | 0.040 | 0.405 | 0.068 | ... | ... | |
| CG 157: | | | | | | | | | | | | | | | | |
| 157a | 15 07 37.54 | 00 02 24.29 | 17.441 | 0.012 | 0.147 | 2.019 | 0.193 | 1.543 | 0.017 | 0.542 | 0.013 | 0.356 | 0.017 | 0.2314 | ... | |
| 157b | 15 07 37.59 | 00 02 27.94 | 18.727 | 0.020 | 0.147 | 1.896 | 0.398 | 1.387 | 0.035 | 0.656 | 0.023 | 0.033 | 0.053 | ... | ... | |
| 157c | 15 07 37.85 | 00 02 22.00 | 19.530 | 0.022 | 0.147 | 1.872 | 0.516 | 1.617 | 0.045 | 0.469 | 0.026 | 0.315 | 0.053 | ... | ... | |
| 157d | 15 07 37.71 | 00 02 33.69 | 19.824 | 0.025 | 0.148 | 2.198 | 0.670 | 1.435 | 0.048 | 0.567 | 0.030 | 0.276 | 0.061 | ... | ... | |
| CG 158: | | | | | | | | | | | | | | | | |
| 158a | 15 07 46.98 | −00 30 04.30 | 17.675 | 0.010 | 0.167 | 2.252 | 0.158 | 1.127 | 0.012 | 0.509 | 0.011 | 0.330 | 0.013 | 0.1525 | ... | |
| 158b | 15 07 47.00 | −00 30 08.36 | 18.821 | 0.015 | 0.167 | 1.831 | 0.221 | 1.114 | 0.022 | 0.455 | 0.018 | 0.330 | 0.028 | ... | ... | |
| 158c | 15 07 46.73 | −00 30 07.68 | 19.367 | 0.023 | 0.167 | 1.814 | 0.581 | 1.475 | 0.050 | 0.511 | 0.030 | 0.147 | 0.061 | ... | ... | |
| 158d | 15 07 47.87 | −00 30 01.37 | 19.997 | 0.030 | 0.168 | 2.072 | 0.622 | 0.926 | 0.046 | 0.423 | 0.040 | 0.256 | 0.083 | ... | ... | |
| CG 159: | | | | | | | | | | | | | | | | |
| 159a | 15 08 30.67 | −00 14 49.33 | 16.724 | 0.009 | 0.156 | 1.921 | 0.046 | 1.005 | 0.010 | 0.497 | 0.010 | 0.410 | 0.006 | 0.0948 | ... | |
| 159b | 15 08 29.86 | −00 14 48.37 | 18.565 | 0.022 | 0.157 | 1.683 | 0.217 | 0.825 | 0.029 | 0.521 | 0.026 | 0.363 | 0.043 | ... | ... | |
| 159c | 15 08 30.90 | −00 14 29.61 | 18.887 | 0.019 | 0.156 | 1.300 | 0.231 | 1.368 | 0.035 | 0.651 | 0.022 | 0.496 | 0.031 | ... | ... | |
| 159d | 15 08 30.51 | −00 14 43.65 | 19.187 | 0.036 | 0.156 | 0.701 | 0.098 | 0.291 | 0.043 | 0.418 | 0.046 | −0.073 | 0.124 | ... | ... | |
| CG 160: | | | | | | | | | | | | | | | | |
| 160a | 15 09 28.03 | 00 53 54.90 | 17.972 | 0.011 | 0.149 | 2.518 | 0.358 | 1.544 | 0.017 | 0.553 | 0.012 | 0.308 | 0.016 | ... | ... | |
| 160b | 15 09 27.89 | 00 53 49.54 | 18.953 | 0.016 | 0.149 | 2.656 | 0.677 | 1.483 | 0.028 | 0.532 | 0.019 | 0.334 | 0.030 | ... | ... | |
| 160c | 15 09 26.81 | 00 53 49.34 | 20.209 | 0.044 | 0.149 | 0.729 | 0.461 | 1.526 | 0.098 | 0.586 | 0.056 | 0.347 | 0.101 | ... | ... | |
| 160d | 15 09 27.11 | 00 53 57.44 | 20.805 | 0.045 | 0.149 | 1.023 | 0.541 | 1.485 | 0.095 | 0.528 | 0.058 | 0.475 | 0.098 | ... | ... | |
| CG 161: | | | | | | | | | | | | | | | | |
| 161a | 15 09 37.81 | 00 48 25.34 | 15.373 | 0.006 | 0.149 | 1.983 | 0.016 | 0.905 | 0.006 | 0.478 | 0.006 | 0.331 | 0.002 | ... | ... | |
| 161b | 15 09 39.71 | 00 47 39.45 | 16.889 | 0.007 | 0.149 | 2.010 | 0.036 | 0.947 | 0.008 | 0.475 | 0.007 | 0.338 | 0.005 | 0.0725 | ... | |
| 161c | 15 09 38.35 | 00 48 24.19 | 16.935 | 0.007 | 0.149 | 1.980 | 0.039 | 0.907 | 0.008 | 0.470 | 0.008 | 0.291 | 0.007 | ... | ... | |
| 161d | 15 09 35.98 | 00 48 29.79 | 17.282 | 0.011 | 0.150 | 1.101 | 0.028 | 0.420 | 0.011 | 0.330 | 0.012 | 0.122 | 0.021 | 0.0943 | ... | |
| CG 162: | | | | | | | | | | | | | | | | |
| 162a | 15 12 34.36 | 00 19 36.51 | 17.240 | 0.009 | 0.133 | 1.945 | 0.086 | 0.998 | 0.010 | 0.453 | 0.010 | 0.389 | 0.014 | ... | ... | |
| 162b | 15 12 35.03 | 00 19 41.76 | 17.461 | 0.009 | 0.133 | 2.012 | 0.085 | 0.963 | 0.010 | 0.484 | 0.010 | 0.312 | 0.014 | 0.1174 | ... | |
| 162c | 15 12 35.22 | 00 19 39.82 | 18.931 | 0.017 | 0.133 | 1.978 | 0.237 | 0.807 | 0.023 | 0.444 | 0.022 | 0.134 | 0.056 | ... | ... | |
| 162d | 15 12 33.01 | 00 19 41.60 | 20.104 | 0.048 | 0.133 | 0.692 | 0.285 | 0.951 | 0.075 | 0.407 | 0.066 | 0.087 | 0.208 | ... | ... | |
| 162e | 15 12 33.24 | 00 19 21.65 | 20.145 | 0.034 | 0.133 | 1.048 | 0.289 | 1.010 | 0.054 | 0.552 | 0.043 | 0.404 | 0.093 | ... | ... | |
| CG 163: | | | | | | | | | | | | | | | | |
| 163a | 15 14 31.91 | −00 13 34.46 | 17.831 | 0.021 | 0.142 | 1.143 | 0.067 | 0.381 | 0.024 | 0.353 | 0.025 | 0.187 | 0.046 | ... | ... | |
| 163b | 15 14 31.80 | −00 13 37.43 | 19.304 | 0.051 | 0.142 | 2.602 | 3.261 | 2.023 | 0.192 | 0.596 | 0.063 | 0.422 | 0.110 | ... | ... | |
| 163c | 15 14 32.32 | −00 13 33.79 | 19.565 | 0.028 | 0.142 | 0.853 | 0.196 | 1.188 | 0.050 | 0.467 | 0.035 | 0.463 | 0.058 | ... | ... | |
| 163d | 15 14 31.77 | −00 13 43.52 | 19.790 | 0.023 | 0.142 | 1.921 | 0.442 | 1.362 | 0.043 | 0.395 | 0.028 | 0.191 | 0.057 | ... | ... | |
| 163e | 15 14 32.42 | −00 13 52.70 | 20.405 | 0.036 | 0.142 | 0.828 | 0.182 | 0.730 | 0.053 | 0.153 | 0.052 | 0.326 | 0.121 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | α (J2000.0) (2) | δ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 164: | | | | | | | | | | | | | | | | |
| 164a | 15 14 46.28 | 00 03 22.34 | 17.158 | 0.013 | 0.142 | 1.608 | 0.066 | 0.879 | 0.015 | 0.577 | 0.014 | 0.364 | 0.015 | 0.0716 | ... | |
| 164b | 15 14 45.20 | 00 03 04.64 | 19.438 | 0.028 | 0.142 | 1.566 | 0.479 | 1.344 | 0.056 | 0.723 | 0.033 | 0.434 | 0.057 | ... | ... | |
| 164c | 15 14 44.91 | 00 03 22.01 | 19.443 | 0.028 | 0.142 | 0.465 | 0.109 | 0.819 | 0.040 | 0.390 | 0.036 | 0.162 | 0.098 | ... | ... | |
| 164d | 15 14 45.37 | 00 03 01.08 | 19.895 | 0.037 | 0.142 | 1.260 | 0.338 | 0.950 | 0.057 | 0.495 | 0.046 | 0.458 | 0.094 | ... | ... | |
| CG 165: | | | | | | | | | | | | | | | | |
| 165a | 15 14 47.32 | −00 09 01.89 | 17.138 | 0.010 | 0.146 | 1.494 | 0.040 | 0.589 | 0.011 | 0.403 | 0.011 | 0.227 | 0.016 | 0.1001 | ... | |
| 165b | 15 14 48.43 | −00 09 11.78 | 19.545 | 0.021 | 0.146 | 2.248 | 0.638 | 1.451 | 0.043 | 0.645 | 0.025 | 0.399 | 0.042 | ... | ... | |
| 165c | 15 14 47.21 | −00 08 58.10 | 19.561 | 0.039 | 0.146 | 0.058 | 0.101 | 0.653 | 0.058 | 0.413 | 0.054 | −0.321 | 0.199 | ... | ... | |
| 165d | 15 14 46.50 | −00 09 05.02 | 19.689 | 0.027 | 0.145 | 1.061 | 0.219 | 1.036 | 0.044 | 0.420 | 0.036 | 0.381 | 0.073 | ... | ... | |
| CG 166: | | | | | | | | | | | | | | | | |
| 166a | 15 16 10.16 | 00 27 41.02 | 15.854 | 0.008 | 0.141 | 2.161 | 0.032 | 1.019 | 0.008 | 0.450 | 0.008 | 0.380 | 0.003 | ... | ... | |
| 166b | 15 16 09.06 | 00 28 15.05 | 16.727 | 0.009 | 0.141 | 2.340 | 0.084 | 1.127 | 0.010 | 0.519 | 0.009 | 0.433 | 0.006 | 0.1091 | ... | |
| 166c | 15 16 11.89 | 00 27 28.79 | 17.123 | 0.011 | 0.141 | 2.042 | 0.094 | 1.016 | 0.013 | 0.464 | 0.012 | 0.372 | 0.011 | 0.1061 | ... | |
| 166d | 15 16 09.28 | 00 27 46.66 | 18.202 | 0.013 | 0.141 | 2.058 | 0.157 | 0.942 | 0.017 | 0.444 | 0.015 | 0.234 | 0.023 | ... | ... | |
| 166e | 15 16 12.10 | 00 27 43.58 | 18.311 | 0.012 | 0.140 | 2.110 | 0.130 | 0.972 | 0.014 | 0.451 | 0.013 | 0.332 | 0.016 | ... | ... | |
| CG 167: | | | | | | | | | | | | | | | | |
| 167a | 15 16 23.10 | −00 18 05.10 | 15.196 | 0.009 | 0.158 | 2.006 | 0.021 | 0.926 | 0.009 | 0.486 | 0.009 | 0.385 | 0.003 | 0.0509 | ... | |
| 167b | 15 16 23.33 | −00 16 51.78 | 16.124 | 0.011 | 0.158 | 1.666 | 0.055 | 0.991 | 0.012 | 0.452 | 0.012 | 0.302 | 0.011 | 0.1217 | ... | |
| 167c | 15 16 22.92 | −00 17 27.76 | 16.531 | 0.018 | 0.158 | 1.384 | 0.117 | 1.055 | 0.023 | 0.265 | 0.021 | 0.355 | 0.033 | ... | ... | |
| 167d | 15 16 21.67 | −00 18 14.00 | 17.981 | 0.016 | 0.158 | 1.830 | 0.148 | 0.754 | 0.020 | 0.360 | 0.019 | 0.297 | 0.034 | ... | ... | |
| CG 168: | | | | | | | | | | | | | | | | |
| 168a | 15 16 23.48 | 00 06 09.12 | 16.782 | 0.010 | 0.153 | 1.942 | 0.067 | 1.046 | 0.011 | 0.485 | 0.011 | 0.421 | 0.009 | 0.1152 | ... | |
| 168b | 15 16 23.60 | 00 05 58.29 | 17.773 | 0.013 | 0.153 | 2.174 | 0.160 | 0.982 | 0.015 | 0.487 | 0.014 | 0.401 | 0.020 | ... | ... | |
| 168c | 15 16 24.15 | 00 06 12.39 | 19.543 | 0.025 | 0.153 | 1.175 | 0.213 | 0.972 | 0.038 | 0.432 | 0.032 | 0.334 | 0.073 | ... | ... | |
| 168d | 15 16 24.54 | 00 05 57.13 | 19.634 | 0.029 | 0.154 | 1.381 | 0.418 | 1.334 | 0.055 | 0.601 | 0.036 | 0.344 | 0.074 | ... | ... | |
| CG 169: | | | | | | | | | | | | | | | | |
| 169a | 15 16 48.17 | −00 48 30.42 | 17.391 | 0.011 | 0.186 | 1.933 | 0.113 | 1.078 | 0.013 | 0.508 | 0.012 | 0.468 | 0.011 | 0.1191 | ... | |
| 169b | 15 16 49.37 | −00 48 37.04 | 18.042 | 0.015 | 0.186 | 1.341 | 0.082 | 0.760 | 0.017 | 0.434 | 0.016 | 0.310 | 0.023 | ... | ... | |
| 169c | 15 16 47.95 | −00 48 40.80 | 19.069 | 0.017 | 0.186 | 1.664 | 0.216 | 1.072 | 0.024 | 0.455 | 0.020 | 0.408 | 0.029 | ... | ... | |
| 169d | 15 16 48.03 | −00 48 22.76 | 19.324 | 0.023 | 0.186 | 1.341 | 0.191 | 0.760 | 0.030 | 0.417 | 0.028 | 0.487 | 0.044 | ... | ... | |
| CG 170: | | | | | | | | | | | | | | | | |
| 170a | 15 17 22.36 | 00 00 00.52 | 17.476 | 0.011 | 0.166 | 1.832 | 0.077 | 0.998 | 0.012 | 0.440 | 0.011 | 0.364 | 0.013 | 0.1380 | ... | |
| 170b | 15 17 23.34 | 00 00 05.45 | 18.159 | 0.016 | 0.166 | 1.313 | 0.100 | 0.770 | 0.019 | 0.508 | 0.018 | 0.254 | 0.035 | ... | ... | |
| 170c | 15 17 23.49 | 00 00 12.10 | 18.571 | 0.021 | 0.166 | 0.898 | 0.113 | 0.809 | 0.028 | 0.323 | 0.027 | 0.264 | 0.067 | ... | ... | |
| 170d | 15 17 21.88 | 00 00 24.10 | 19.147 | 0.023 | 0.165 | 0.735 | 0.086 | 0.556 | 0.028 | 0.193 | 0.031 | −0.040 | 0.111 | ... | ... | |
| 170e | 15 17 21.61 | 00 00 13.78 | 20.125 | 0.044 | 0.165 | 1.499 | 0.491 | 0.797 | 0.064 | 0.214 | 0.063 | 0.708 | 0.128 | ... | ... | |
| CG 171: | | | | | | | | | | | | | | | | |
| 171a | 15 22 42.19 | 00 41 30.15 | 17.348 | 0.009 | 0.157 | 2.165 | 0.084 | 0.766 | 0.010 | 0.359 | 0.010 | 0.235 | 0.014 | 0.0761 | ... | |
| 171b | 15 22 42.36 | 00 41 33.22 | 17.697 | 0.009 | 0.157 | 1.062 | 0.023 | 0.394 | 0.010 | 0.420 | 0.010 | 0.110 | 0.016 | ... | ... | |
| 171c | 15 22 42.70 | 00 41 06.04 | 18.776 | 0.018 | 0.157 | 0.447 | 0.071 | 0.872 | 0.026 | 0.486 | 0.023 | 0.416 | 0.040 | ... | ... | |
| 171d | 15 22 43.60 | 00 41 06.74 | 19.507 | 0.023 | 0.157 | 4.299 | 1.228 | 1.527 | 0.051 | 0.559 | 0.029 | 0.364 | 0.050 | ... | ... | |
| CG 172: | | | | | | | | | | | | | | | | |
| 172a | 15 31 28.88 | −01 07 09.93 | 16.368 | 0.009 | 0.440 | 2.623 | 0.167 | 1.309 | 0.012 | 0.511 | 0.010 | 0.382 | 0.008 | ... | ... | |
| 172b | 15 31 28.43 | −01 07 10.82 | 18.093 | 0.011 | 0.440 | 2.070 | 0.186 | 1.329 | 0.019 | 0.526 | 0.013 | 0.313 | 0.016 | ... | ... | |
| 172c | 15 31 30.46 | −01 07 26.30 | 18.186 | 0.010 | 0.437 | 1.870 | 0.165 | 1.237 | 0.019 | 0.441 | 0.012 | 0.398 | 0.018 | ... | ... | |
| 172d | 15 31 27.63 | −01 07 40.34 | 18.890 | 0.016 | 0.439 | 2.059 | 0.259 | 1.136 | 0.026 | 0.506 | 0.018 | 0.384 | 0.026 | ... | ... | |
| 172e | 15 31 28.76 | −01 07 04.94 | 18.991 | 0.023 | 0.440 | 0.558 | 0.291 | 2.109 | 0.096 | 0.525 | 0.029 | 0.399 | 0.045 | ... | ... | |

TABLE 2—*Continued*

| Name (1) | $\alpha$ (J2000.0) (2) | $\delta$ (J2000.0) (3) | $r^*$ (4) | $\sigma_{r^*}$ (5) | $A(r^*)$ (6) | $u^*-g^*$ (7) | $\sigma_{u^*-g^*}$ (8) | $g^*-r^*$ (9) | $\sigma_{g^*-r^*}$ (10) | $r^*-i^*$ (11) | $\sigma_{r^*-i^*}$ (12) | $i^*-z^*$ (13) | $\sigma_{i^*-z^*}$ (14) | $z_{sp}$ (15) | $z_{NED}$ (16) | Notes (17) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG 173: | | | | | | | | | | | | | | | | |
| 173a | 15 31 39.62 | 00 31 20.14 | 17.075 | 0.009 | 0.176 | 1.813 | 0.057 | 0.892 | 0.010 | 0.439 | 0.010 | 0.332 | 0.009 | 0.0800 | ... | |
| 173b | 15 31 38.72 | 00 31 15.55 | 17.183 | 0.009 | 0.177 | 2.073 | 0.076 | 0.957 | 0.010 | 0.462 | 0.010 | 0.345 | 0.009 | ... | ... | |
| 173c | 15 31 40.22 | 00 31 01.10 | 17.855 | 0.013 | 0.176 | 1.414 | 0.069 | 0.770 | 0.015 | 0.493 | 0.015 | 0.345 | 0.017 | ... | ... | |
| 173d | 15 31 40.19 | 00 31 24.43 | 18.894 | 0.044 | 0.175 | 0.691 | 0.434 | 1.520 | 0.106 | 0.718 | 0.054 | 0.412 | 0.081 | ... | ... | |
| CG 174: | | | | | | | | | | | | | | | | |
| 174a | 15 33 03.01 | 00 17 01.31 | 15.109 | 0.006 | 0.189 | 1.988 | 0.020 | 0.962 | 0.006 | 0.497 | 0.006 | 0.377 | 0.003 | ... | ... | |
| 174b | 15 33 01.59 | 00 17 01.77 | 16.262 | 0.007 | 0.188 | 2.044 | 0.032 | 0.969 | 0.007 | 0.462 | 0.007 | 0.379 | 0.005 | ... | ... | |
| 174c | 15 33 00.92 | 00 17 02.81 | 17.521 | 0.008 | 0.188 | 1.665 | 0.044 | 0.831 | 0.009 | 0.380 | 0.009 | 0.363 | 0.011 | ... | ... | |
| 174d | 15 32 58.17 | 00 16 56.81 | 18.087 | 0.010 | 0.186 | 1.274 | 0.053 | 0.697 | 0.012 | 0.477 | 0.012 | 0.227 | 0.023 | ... | ... | |
| CG 175: | | | | | | | | | | | | | | | | |
| 175a | 15 36 50.89 | 00 34 04.09 | 17.808 | 0.011 | 0.220 | 1.862 | 0.152 | 1.313 | 0.016 | 0.567 | 0.012 | 0.372 | 0.014 | ... | ... | |
| 175b | 15 36 50.12 | 00 34 20.30 | 18.558 | 0.013 | 0.220 | 1.946 | 0.222 | 1.332 | 0.021 | 0.492 | 0.015 | 0.440 | 0.020 | ... | ... | |
| 175c | 15 36 49.77 | 00 34 12.57 | 18.682 | 0.015 | 0.219 | 2.102 | 0.304 | 1.234 | 0.024 | 0.469 | 0.018 | 0.335 | 0.029 | ... | ... | |
| 175d | 15 36 50.70 | 00 34 05.24 | 19.856 | 0.036 | 0.220 | 1.527 | 0.506 | 1.190 | 0.067 | 0.612 | 0.045 | 0.083 | 0.094 | ... | ... | |
| 175e | 15 36 50.25 | 00 34 16.37 | 20.782 | 0.051 | 0.220 | 1.033 | 0.333 | 0.759 | 0.076 | 0.353 | 0.072 | −0.650 | 0.329 | ... | ... | |
| CG Tri1: | | | | | | | | | | | | | | | | |
| Tri1a | 11 01 14.24 | +00 22 48.88 | 17.638 | 0.013 | 0.079 | 0.542 | 0.024 | 0.441 | 0.014 | 0.356 | 0.015 | 0.136 | 0.033 | 0.214802 | 0.2148 | SDSSQSOJ110114.24+002248.9 |
| Tri1b | 11 01 14.18 | +00 22 38.65 | 19.063 | 0.017 | 0.079 | 1.049 | 0.074 | 0.580 | 0.019 | 0.357 | 0.021 | 0.189 | 0.051 | ... | ... | |
| Tri1c | 11 01 13.59 | +00 22 42.15 | 19.585 | 0.021 | 0.079 | 1.406 | 0.202 | 0.951 | 0.029 | 0.621 | 0.025 | 0.344 | 0.049 | ... | ... | |
| Tri1d | 11 01 14.47 | +00 22 43.86 | 20.634 | 0.052 | 0.079 | 0.562 | 0.170 | 0.390 | 0.064 | 0.354 | 0.074 | −0.257 | 0.322 | ... | ... | |
| CG Tri2: | | | | | | | | | | | | | | | | |
| Tri2a | 13 10 35.46 | −00 14 03.19 | 17.118 | 0.010 | 0.069 | 1.987 | 0.077 | 0.982 | 0.012 | 0.515 | 0.010 | 0.429 | 0.009 | ... | ... | |
| Tri2b | 13 10 36.45 | −00 14 25.87 | 19.245 | 0.015 | 0.069 | 0.205 | 0.025 | 0.320 | 0.017 | 0.082 | 0.019 | 0.454 | 0.034 | ... | 0.29 | 2QZ J131036.4−001426 |
| Tri2c | 13 10 36.23 | −00 14 05.83 | 19.873 | 0.053 | 0.070 | 1.461 | 0.283 | 0.458 | 0.063 | 0.257 | 0.067 | 0.302 | 0.134 | ... | ... | |
| Tri2d | 13 10 35.90 | −00 14 30.94 | 19.901 | 0.028 | 0.069 | 3.180 | 1.326 | 1.349 | 0.060 | 0.567 | 0.034 | 0.437 | 0.057 | ... | ... | |

within this magnitude range (col. [4]). Column (9): $z^{\rm bgm}_{\rm photo}$, the photometric redshift of the brightest group member as determined by the method described in § 4.4. Column (10): $z^{\rm cg}_{\rm spectro}$, the spectroscopic redshift for the group based on the median of the spectroscopic redshifts of its member galaxies (see Table 2). If available, a group member's SDSS spectroscopic redshift was used; otherwise, if available, its spectroscopic redshift from the NASA Extragalactic Database (NED), was used. Column (12): $N^{\rm cg}_{\rm spectro}$, the number of group member spectroscopic redshifts used in determining $z^{\rm cg}_{\rm spectro}$. Column (12) contains comments denoted as follows: "+1"=a faint background galaxy is visible that could be a member of the group; "+2"=two faint background galaxies are visible that could be members of the group; "isolated?"=faint background galaxies are visible that could be members of the group; "M(ab)"= galaxies a and b appear to be merging; "I(ab)"=galaxies a and b appear to be interacting; "T(a)"=galaxy a shows a tidal tail; "h(abc)"=galaxies a, b, and c appear to be embedded within a common halo; "QSO(a)"=galaxy a is classified as a QSO in NED.

### 4.2. *The Properties of Group Members*

In Table 2 we list the general properties of the individual member galaxies in each of the 175 SDSSCGs (and the two triplet systems). Column (1) gives the name of the group member, composed of the CG identification number (from col. [1] of Table 1) and an identification letter for galaxy (where "a" is the brightest group member, "b" the second brightest, etc.). Column (2): $\alpha$, the right ascension (J2000.0) of the galaxy. Column (3): $\delta$, the declination (J2000.0) of the galaxy. Column (4): the SDSS *r*-band model magnitude $r^*$ (non-dereddened). Column (5): the estimated rms error in the SDSS *r*-band model magnitude $\sigma_{r^*}$. Column (6): the reddening in $r^*$, $A(r^*) = 2.751E(B-V)$, as estimated from the Schlegel, Finkbeiner, & Davis (1998) reddening maps. Column (7): $u^*-g^*$, where $u^*$ and $g^*$ are, respectively, the (non-dereddened) SDSS *u*- and *g*-band model magnitudes. Column (8): $\sigma_{u^*-g^*}$, the rms error in $u^*-g^*$, estimated by adding the rms errors in $u^*$ and $g^*$ in quadrature. Column (9): $g^*-r^*$, where $g^*$ and $r^*$ are, respectively, the (non-dereddened) SDSS *g*- and *r*-band model magnitudes. Column (10): $\sigma_{g^*-r^*}$, the rms error in $g^*-r^*$, estimated by adding the rms errors in $g^*$ and $r^*$ in quadrature. Column (11): $r^*-i^*$, where $r^*$ and $i^*$ are, respectively, the (non-dereddened) SDSS *r*- and *i*-band model magnitudes. Column (12): $\sigma_{r^*-i^*}$, the rms error in $r^*-i^*$, estimated by adding the rms errors in $r^*$ and $i^*$ in quadrature. Column (13): $i^*-z^*$, where $i^*$ and $z^*$ are, respectively, the (non-dereddened) SDSS *i*- and *z*-band model magnitudes. Column (14): $\sigma_{i^*-z^*}$, the rms error in $i^*-z^*$, estimated by adding the rms errors in $i^*$ and $z^*$ in quadrature. Column (15): $z_{\rm sp}$, the spectroscopic redshift for the galaxy as measured by the SDSS, if available. Of the 744 CG members, 135 have SDSS spectroscopic redshifts. Column (16): $z_{\rm NED}$, the spectroscopic redshift for the galaxy from the NED, if available. Of the 744 CG members, 49 have spectroscopic redshifts from the NED. Of these 49, 23 have no corresponding spectroscopic redshift from the SDSS. Column (17): the source name of the NED-derived spectroscopic redshift (col. [16]).

### 4.3. *The Atlas*

For each of the SDSSCGs (and the two triplets) we have prepared an atlas image (see Fig. 3). These atlas images have the following properties:

1. The size of each image is 3 times the group radius;
2. The images were obtained from the *r*-band SDSS corrected frames;
3. Each image is labeled by the name of the group, which has the format "SDSS0 CG*NN*," where "SDSS0" refers to the fact that this catalog is based on SDSS commissioning data (Data Release 0), and where *NN* refers to the running identification number of the group;
4. Each group member is identified by a times cross and labeled by its identification letter (a, b, c, d, etc.);
5. The center of the group is marked by a square box; and
6. A circle of diameter $\theta_G$ (as defined in § 3) is also drawn.

### 4.4. *The Redshift Distribution*

As noted at the beginning of this section, only 158 of the 744 CG member galaxies have spectroscopic redshifts either from the SDSS or from the literature (see Fig. 4). Our magnitude cut for CG galaxies is $r^*_{\rm model} \leq 21.0$ (§ 3), whereas the magnitude limit for the main galaxy sample of the SDSS spectroscopic program is $r^*_{\rm petro} \leq 17.7$ (Table 29 of Stoughton et al. 2002). Further complicating matters is an SDSS single-plate target proximity limit of 55″ to avoid fiber collisions (Blanton et al. 2003a), which in general would allow only a single galaxy from a compact group to be targeted on a spectroscopic plate. Therefore, it is not surprising that so few of our CG galaxies have spectroscopically determined redshifts. Nonetheless, these 158 galaxies are spread fairly uniformly over the SDSS CG sample; so a full 75% of our CGs (131 out of 175) contain at least one group member with a spectroscopically determined redshift.

We were, however, able to obtain a photometric redshift for every SDSS CG (see Table 1). We did this by taking the photometric redshift of the brightest group member as the photometric redshift of the CG as a whole. These brightest group member photometric redshifts were determined by a variation on the polynomial method of Connolly et al. (1995). Instead of using polynomials, however, Padé approximants (Gershenfeld 1999) were used. Padé approximants, which have seen applications in statistical mechanics, critical phenomena, and circuit design (Baker & Graves-Morris 1996), are basically ratios of polynomials. As a training sample, ≈500 main-sample galaxies (Strauss et al. 2002) and ≈500 luminous red galaxies (LRGs) (Eisenstein et al. 2001) were taken from the SDSS spectroscopic sample; the low-redshift training set sample was supplemented with an additional ≈500 galaxies from a special spectroscopic plate that attempts to sample fully from the bright end of the luminosity function at $z < 0.15$ (Lin et al. 2004). Details on this method can be found elsewhere (Annis et al. 2004).

In calculating the photometric redshifts of the CGs, we ignored the non–first-ranked group members since using them tended to result in systematic errors of $\Delta z = 0.1$ or more. This is likely due to the fact that 85% of the non–first-ranked galaxies in our sample are fainter than $r^* = 17.7$, where the training set for our photometric redshift relation is dominated by LRGs, a type of galaxy that probably does not describe these fainter CG galaxies very well as a whole. In contrast, only 16% of brightest group members are fainter than $r^* = 17.7$—and none fainter than $r^* = 18$; furthermore, since LRGs have luminosities and spectral energy distributions similar to brightest cluster members, the LRG training set is probably better suited to our brightest group members than to the fainter group members.

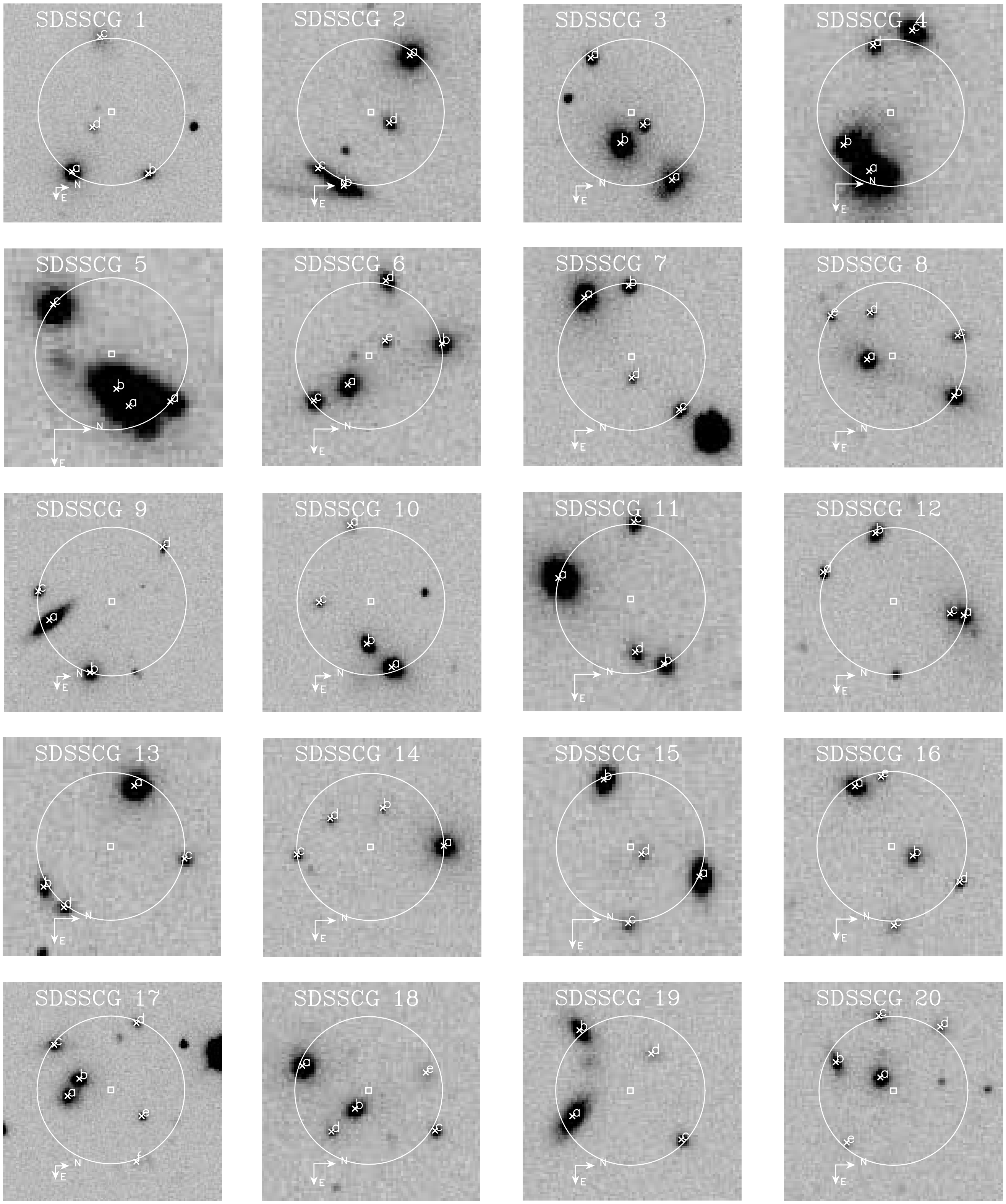


FIG. 3.—Atlas of SDSS compact groups. Color atlas images are also available at http://home.fnal.gov/~sallam/LeeCG.

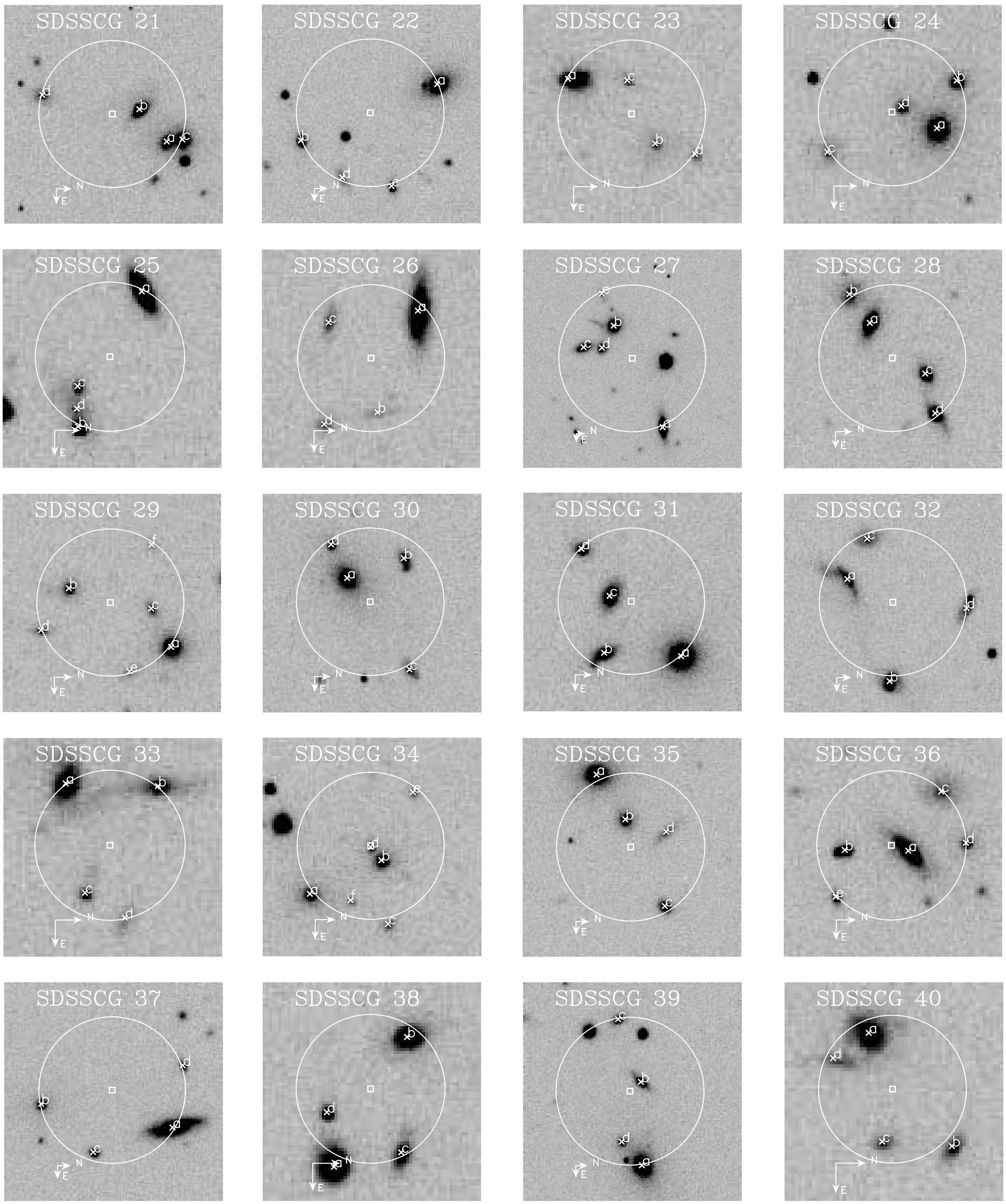


FIG. 3.—*Continued*

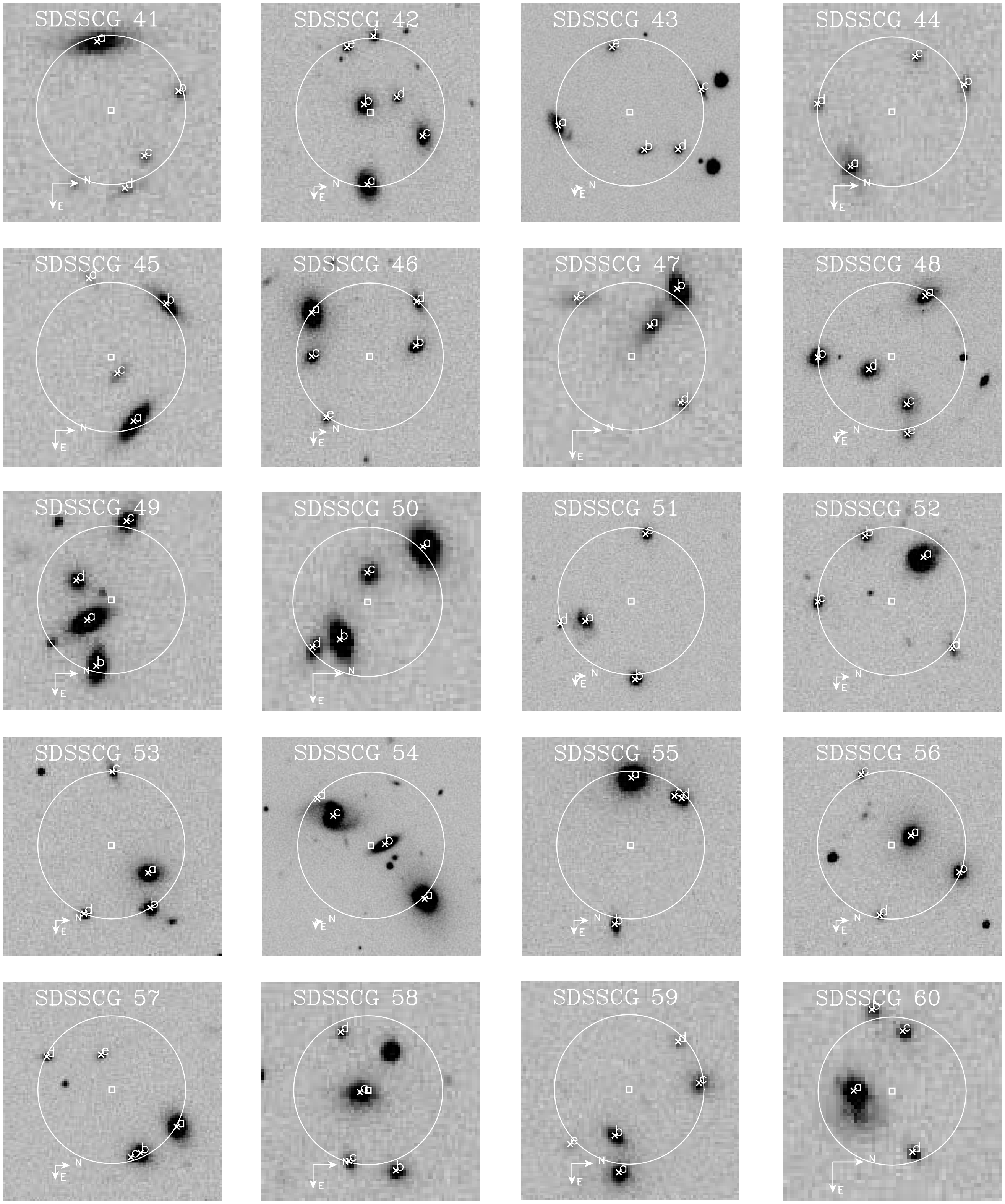


Fig. 3.—*Continued*

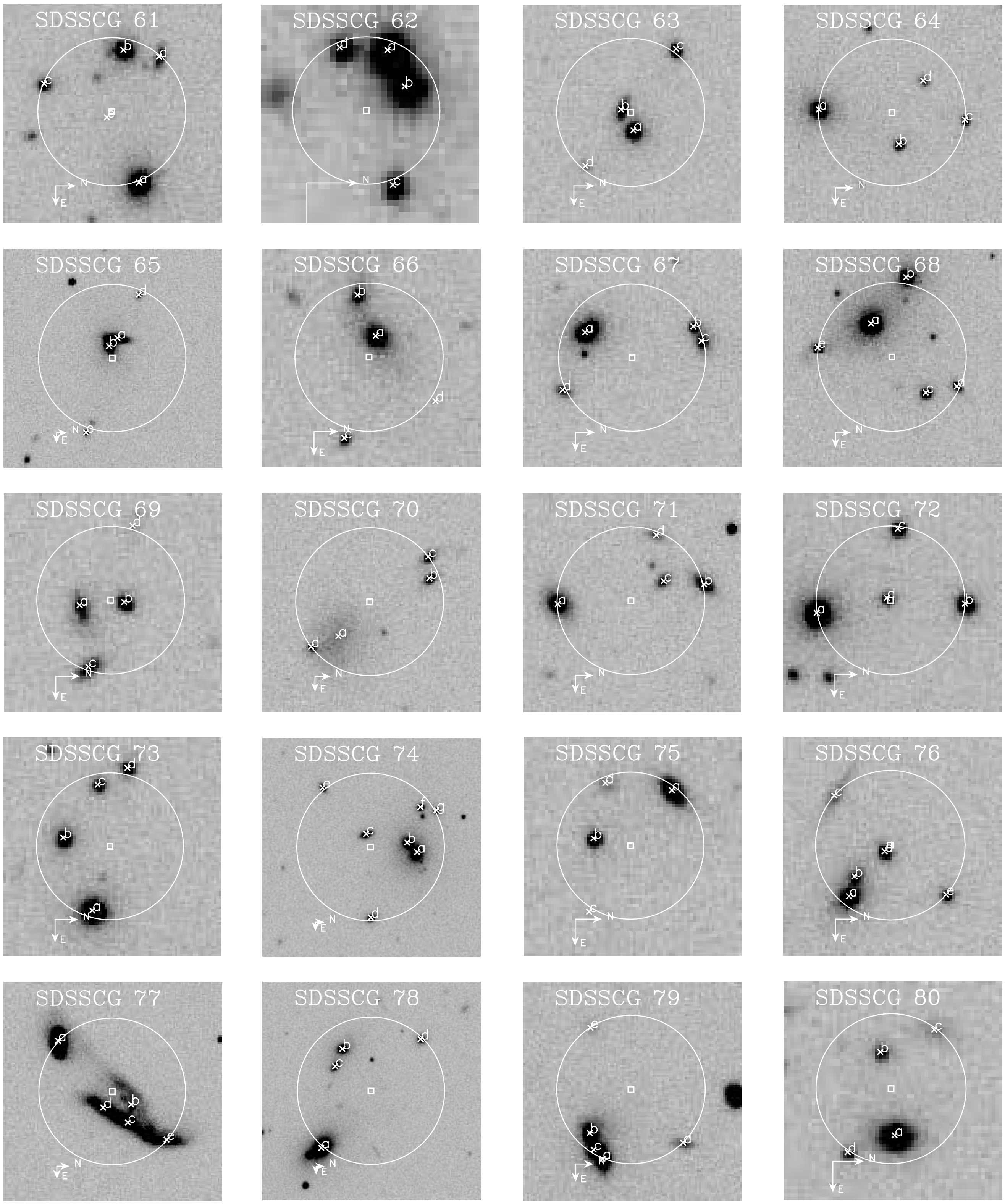


Fig. 3.—*Continued*

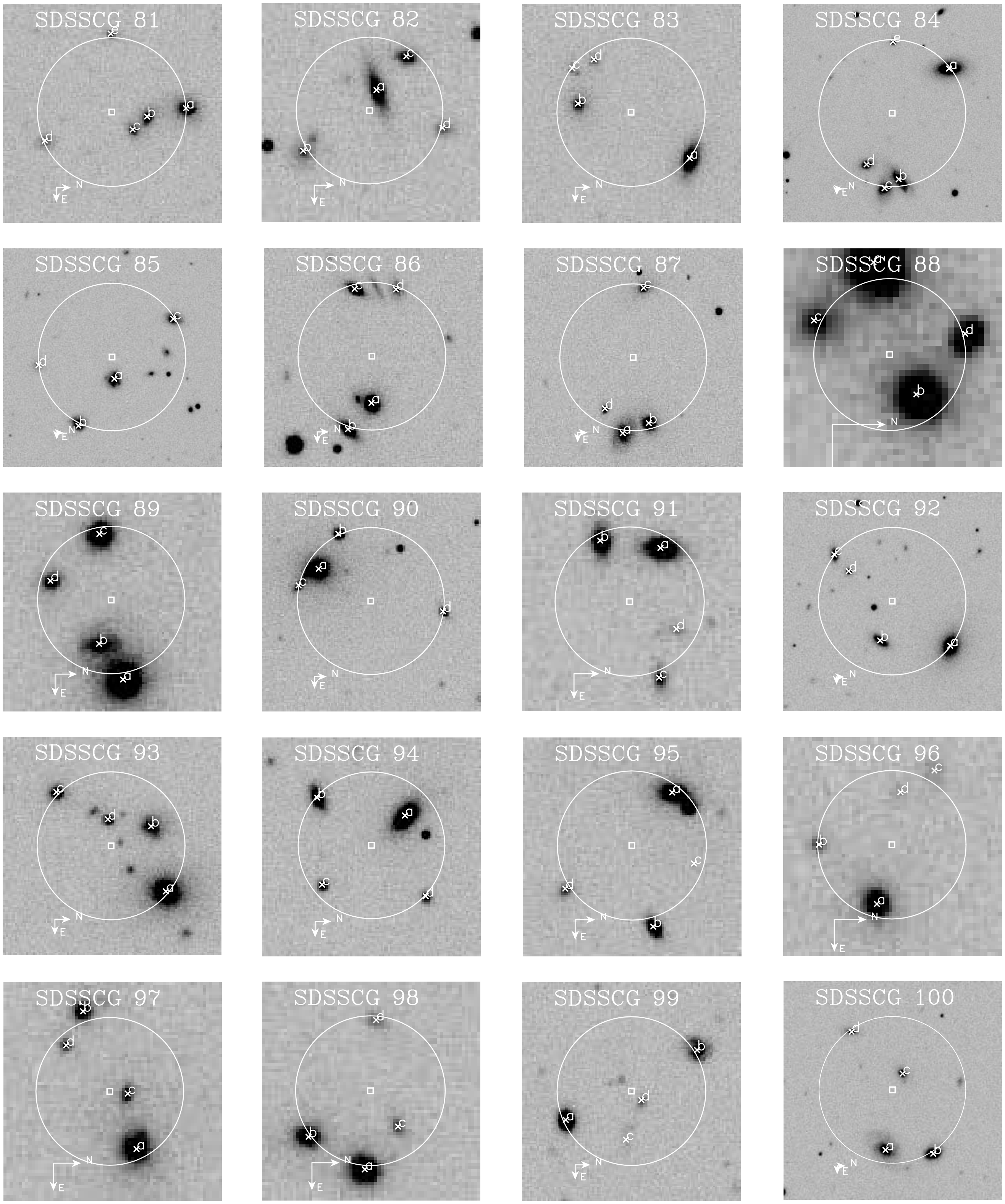


FIG. 3.—*Continued*

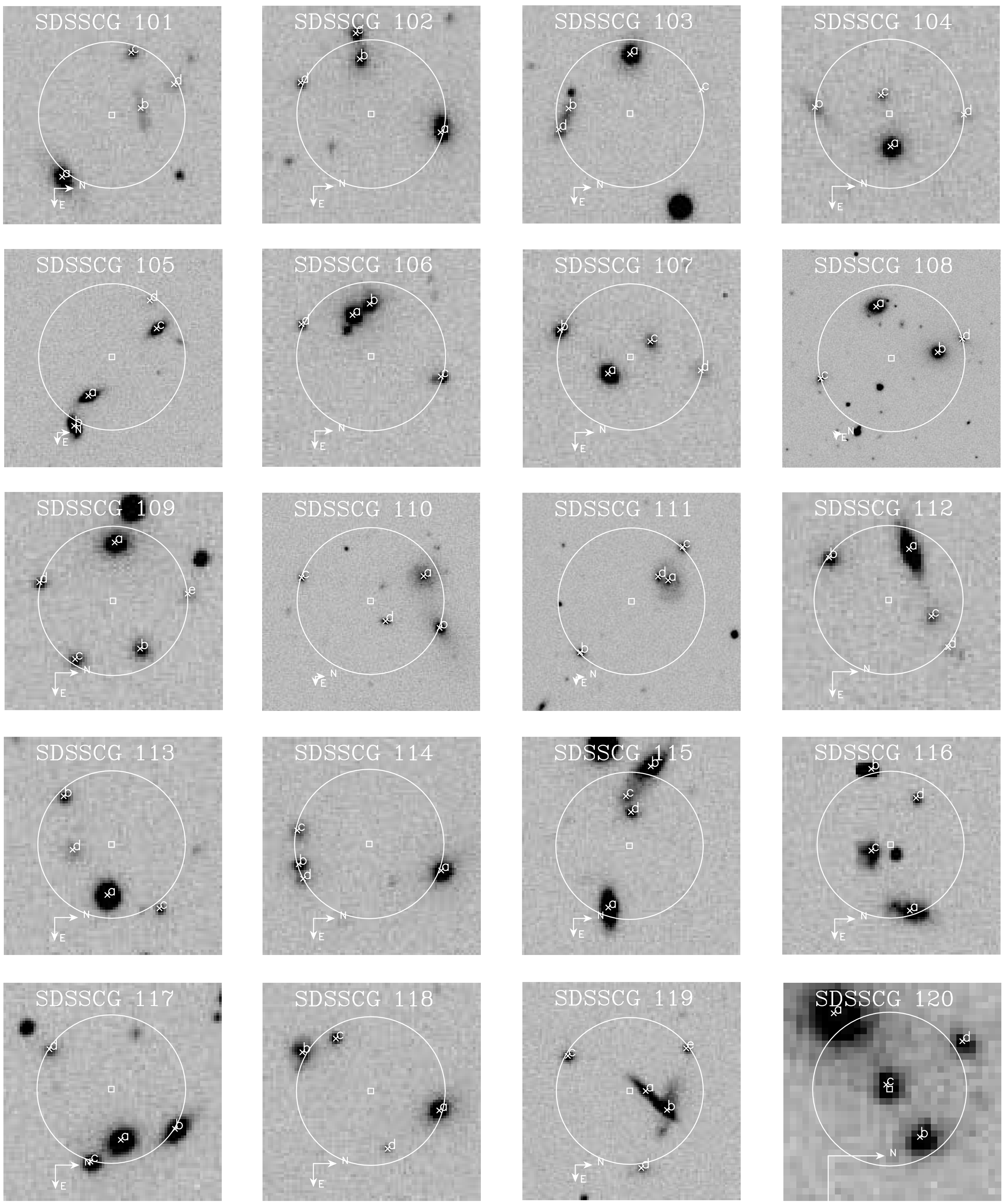


Fig. 3.—*Continued*

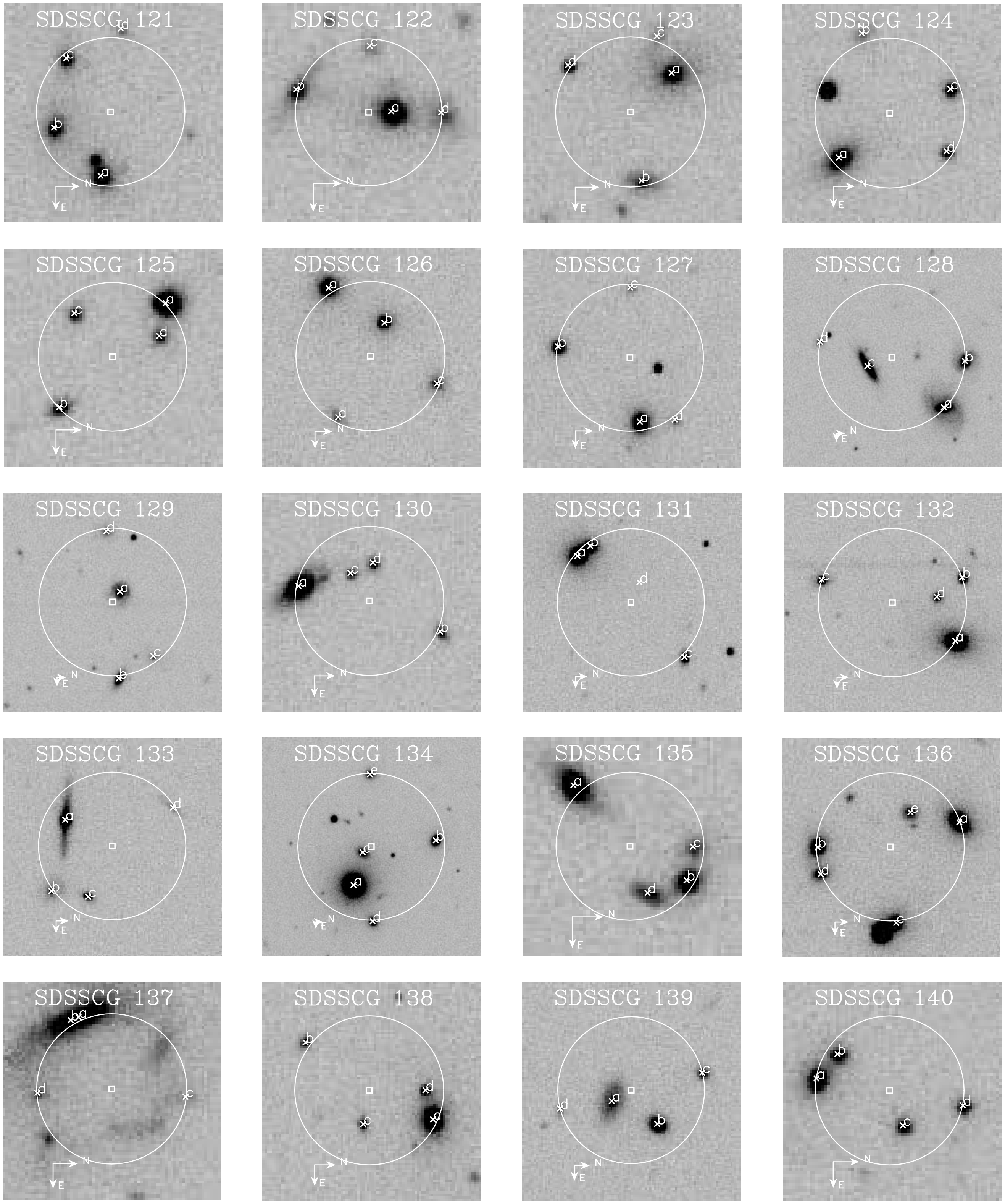


FIG. 3.—*Continued*

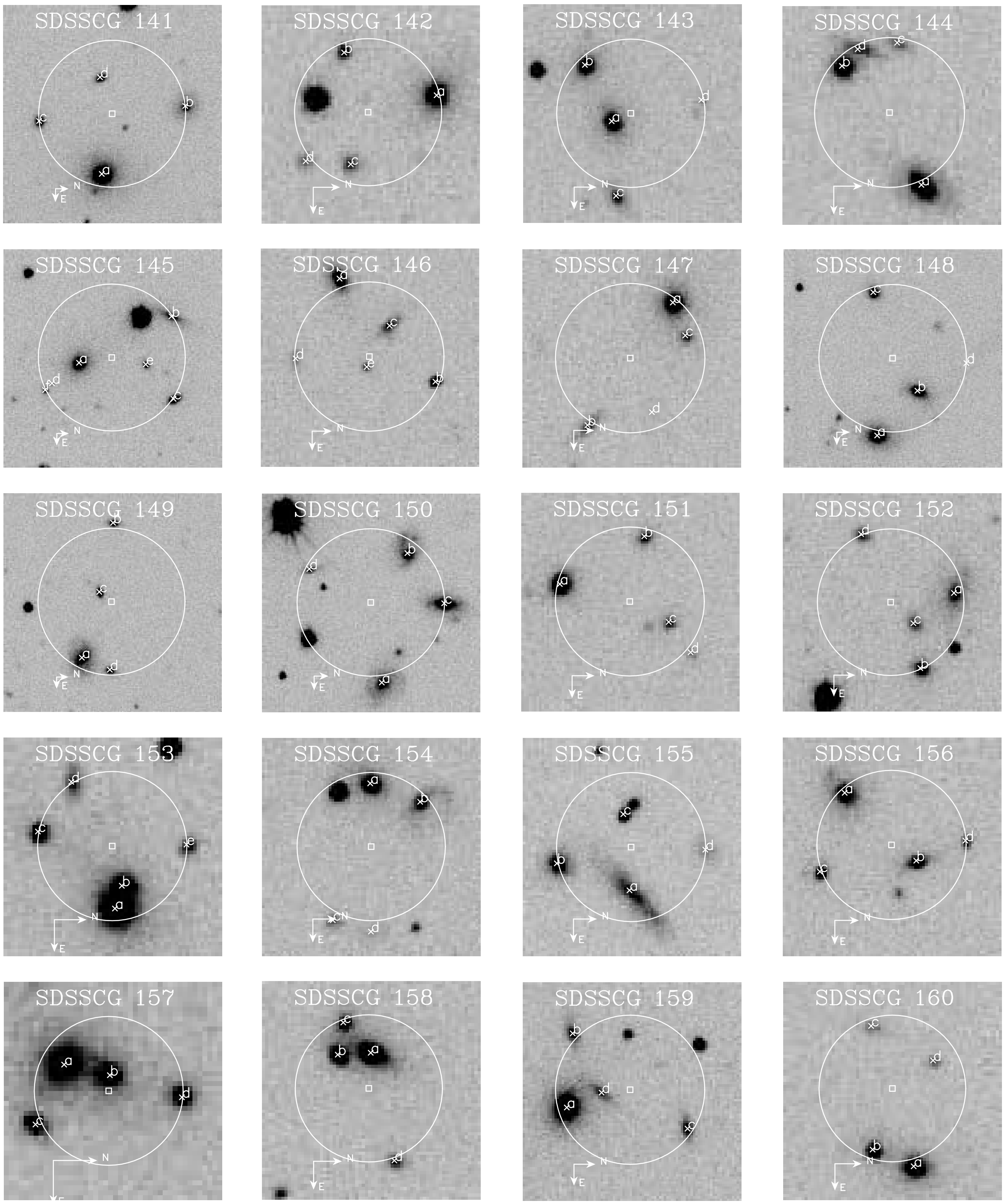


Fig. 3.—*Continued*

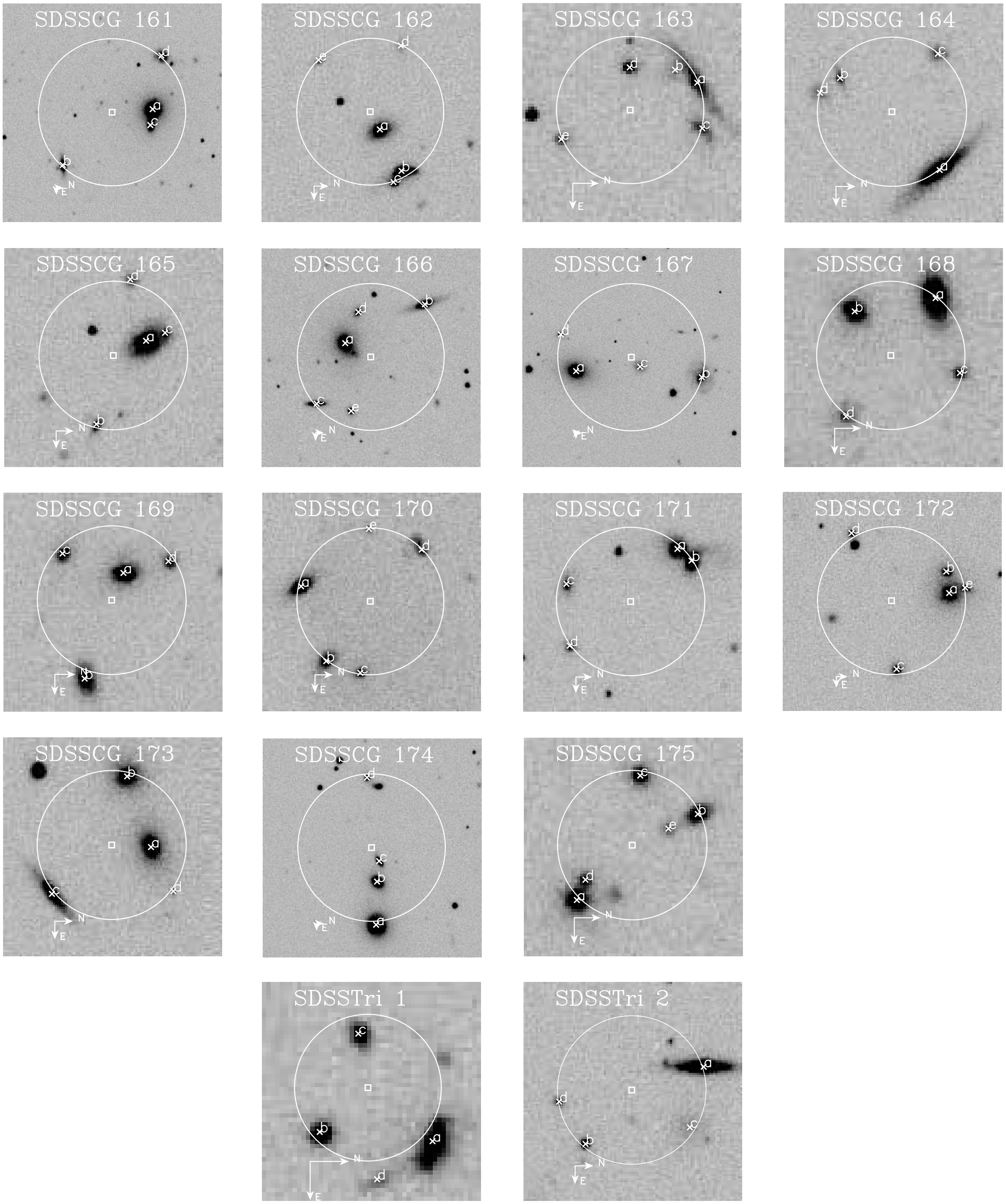


Fig. 3.—*Continued*

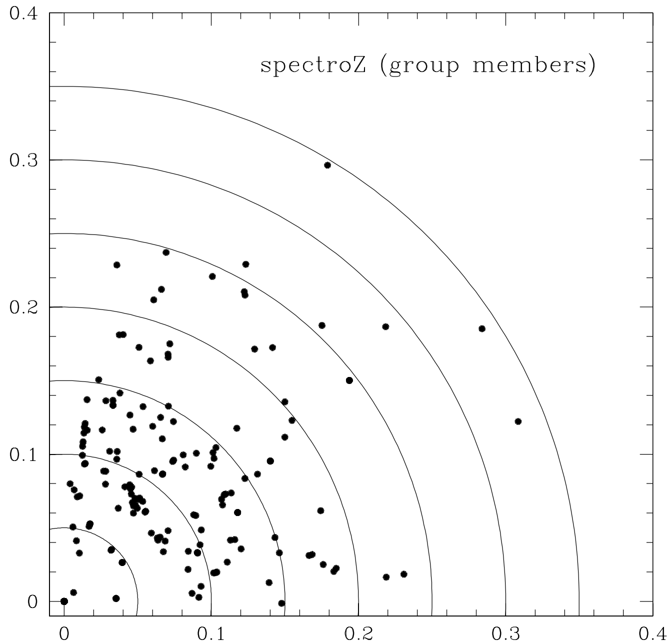


FIG. 4.—Space distribution of individual 158 CG galaxies with spectroscopic redshift (redshift/right ascensionwedge plot).

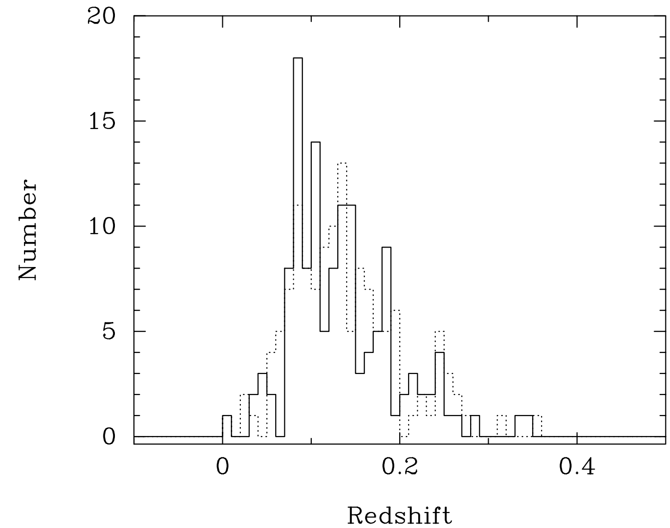


FIG. 6.—Distribution of redshifts for those 131 SDSS CGs with a spectroscopically determined redshift. The solid line is the histogram of spectroscopic redshifts, $z^{\rm cg}_{\rm spectro}$, for this sample of 131 SDSS CGs and has a mean of $0.135 \pm 0.005$ and a median of 0.126. The dotted line is the histogram of photometric redshifts, $z^{\rm bgm}_{\rm photo}$, for this sample of 131 SDSS CGs and has a mean of $0.138 \pm 0.005$ and a median of 0.130.

How well does a brightest group member photometric redshift, $z^{\rm bgm}_{\rm photo}$, track the group's spectroscopic redshift, $z^{\rm cg}_{\rm spectro}$? In Figure 5*a* we plot these two parameters against each other for those 131 SDSS CGs that contain at least one member with a spectroscopic redshift. The relationship is quite good. The rms of the residual of the unweighted least-squares fit of brightest group member photometric redshift to the group spectroscopic redshift is $\sigma_z = 0.037$ (Fig. 5*b*), which means that the typical 1 $\sigma$ rms error in the photometric redshift of an individual group is about 0.037. Further, if we plot the histograms of $z^{\rm bgm}_{\rm photo}$ and $z^{\rm cg}_{\rm spectro}$, we find that overall the two distributions look quite similar (Fig. 6).

Based on the 131 SDSS CGs with spectroscopic redshifts, we can estimate that the median redshift of the full sample of 175 SDSS CGs to be $\langle z_{\rm spectro} \rangle_{\rm med} = 0.126$. This estimate, however, may be biased: 25% of the SDSS CGS in the full sample of have no spectroscopic redshifts, and this subset may be systematically more (or less) distant than the rest of the SDSS CGs. In Figure 7 we plot the distribution of photometric redshifts for the 131 SDSS CGs with spectroscopic redshifts and the distribution of photometric redshifts for the 44 SDSS CGs without spectroscopic redshifts. Indeed, the set of 44 SDSS CGs without spectroscopic redshifts appears to be, on average, more distant than the set of 131 galaxies with

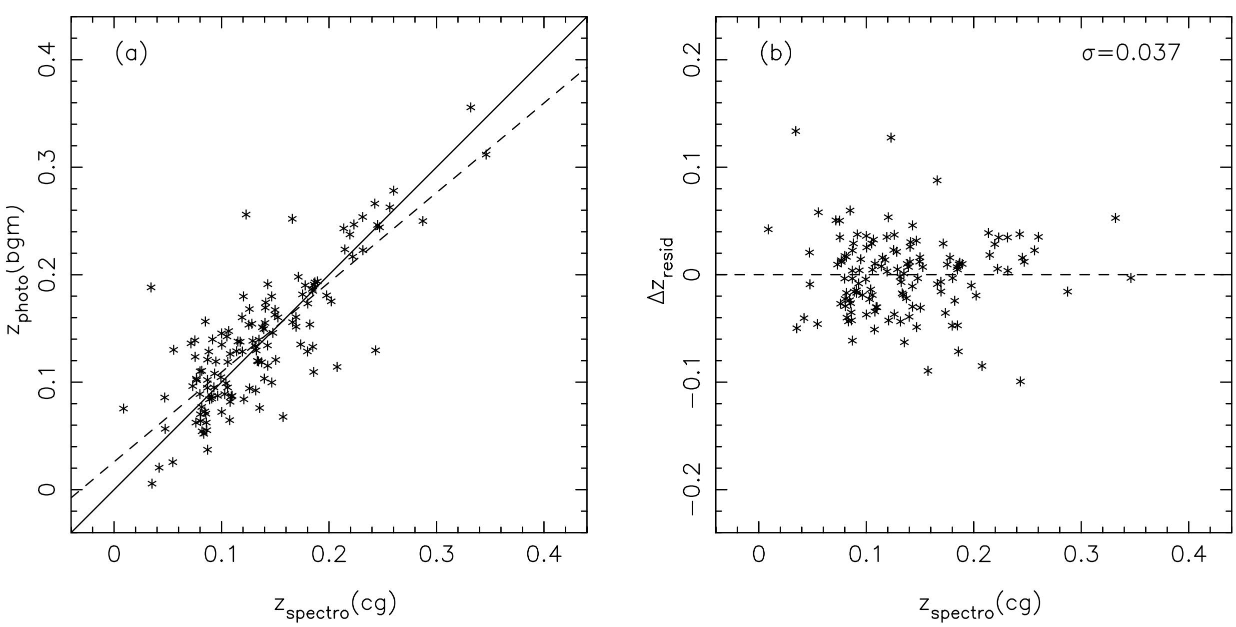


FIG. 5.—(*a*) Photometric redshift of the brightest group member, $z^{\rm bgm}_{\rm photo}$, vs. the spectroscopic redshift of the group, $z^{\rm cg}_{\rm spectro}$, for the set of 131 SDSS CGs that contain at least one group member with a spectroscopically determined redshift. The solid line depicts the relation $z^{\rm bgm}_{\rm photo} = z^{\rm cg}_{\rm spectro}$; the dashed line indicates the unweighted least-squares fit, $z^{\rm bgm}_{\rm photo} = 0.026 + 0.834 \times z^{\rm cg}_{\rm spectro}$. (*b*) Residuals of the least-squares fit in (*a*).

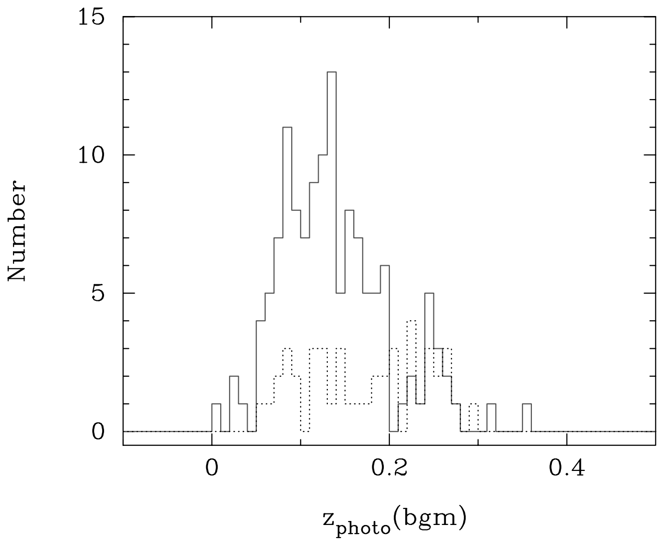


FIG. 7.—*Solid line*: Histogram of photometric redshifts for the sample of 131 SDSS CGs that have spectroscopically determined redshifts; it is the same as the dotted line plotted in Fig. 6. *Dotted line*: Histogram of photometric redshifts for the 44 SDSS CGs that do not have a spectroscopically determined redshifts; this distribution has a mean of $0.174 \pm 0.010$ and a median of 0.178. The full sample of 175 SDSS CGs has a mean photometric redshift of $0.147 \pm 0.005$ and a median photometric redshift of 0.136.

spectroscopic redshifts. Even so, it is a smaller set, and if we combine both sets of CGs, we find the median photometric redshift for the full sample of 175 SDSS CGs to be $\langle z_{\rm photo}\rangle_{\rm med} = 0.136$. This value is only marginally larger than our estimate for $\langle z_{\rm spectro}\rangle_{\rm med}$. Therefore, unless otherwise noted, we will use the spectroscopic redshifts throughout the remainder of the paper.

### 4.5. *The Local Environment*

Following Palumbo et al.'s (1995) and Iovino's (2002) studies of the local environments surrounding HCGs and SCGs, we have undertaken a similar study of the local environments surrounding SDSS CGs.

For each SDSS CG we searched a circular region 5 times the group's radius $\theta_G$ in the SDSS EDR database for galaxies in the interval $r^*_{\rm bgm} < r^* < r^*_{\rm fgm} + 1$, where $r^*_{\rm bgm}$ and $r^*_{\rm fgm}$ are the SDSS $r$-band model magnitudes of the brightest and the faintest group members, respectively, for that particular group, as listed in Table 2. The surface density of the SDSS CG ($\rho^{\rm SDSSCG}$) was obtained by dividing the number of these galaxies within 1 group radius by $0.25\pi\theta_G^2$. The surface density of galaxies in that SDSS CG's local environment $\rho^{\rm env}$ was calculated by dividing the number of these galaxies in an annulus 3–10 times the group's radius by the area of this annulus.

The distribution of the ratio $\rho^{\rm SDSSCG}/\rho^{\rm env}$ is shown in Figure 8. Note that the surface densities of SDSS CGs are factors of 5–3000 greater than those of their local environments (on average, they are about a factor of 40 greater), similar to what Palumbo et al. (1995) found for HCGs and what Iovino (2002) found for SCGs.

To test how the local environment of SDSS CGs compares with that of the field, we considered the local environments of galaxies from the SDSS isolated galaxy catalog Allam et al. (2004). For each SDSS CG, we selected isolated galaxies of comparable brightness to the brightest group member ($r^*_{\rm bgm} - 0.5 < r^* < r^*_{\rm bgm} + 0.5$) and observed under comparable

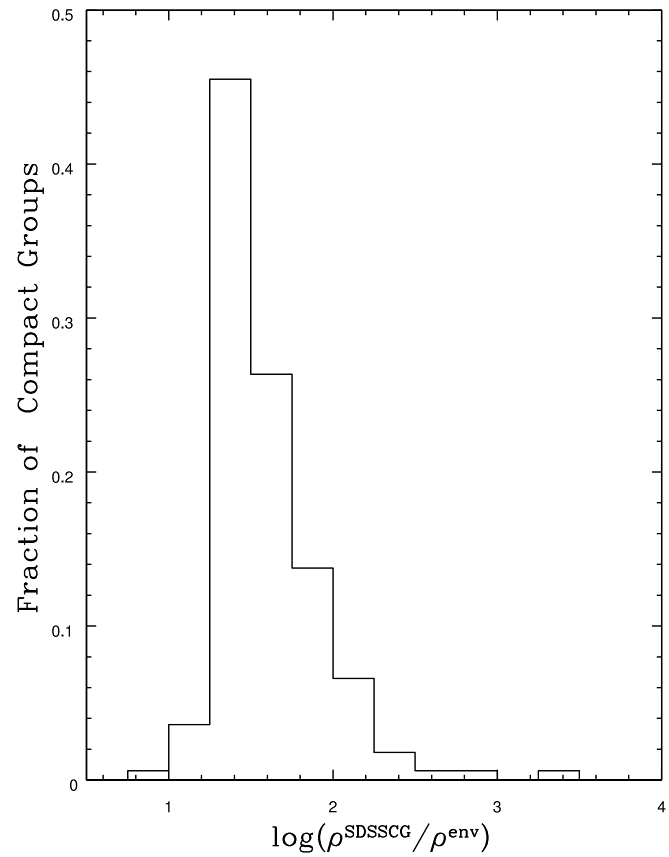


FIG. 8.—Distribution of the surface density ratio $\log(\rho^{\rm SDSSCG}/\rho^{\rm env})$ for SDSS CGs.

seeing conditions. We then calculated the surface density of galaxies surrounding of each of these isolated galaxies in an annulus 3–10 times the group's radius, just as we did to calculate $\rho^{\rm env}$ for the SDSS CG in question. We then calculated the mean value of the field $\rho^{\rm env}$ and its scatter $\sigma_{\rho_{\rm field}}$. Figure 9 shows the histogram of the quantity $(\rho^{\rm env}_{\rm SDSSCG} - \rho^{\rm env}_{\rm field})/\sigma_{\rho_{\rm field}}$. We find that the environments of SDSSCGs are, on average, similar to the environments of field galaxies, although there is considerable scatter. This result is comparable to those found by Palumbo et al. (1995) for HCGs and by Iovino (2002) for SCGs.

## 5. COMPARISON WITH OTHER CGs

It is instructive to compare the properties of SDSSCGs with those of CGs from other catalogs. In Table 3 we summarize the properties of the current SDSSCG catalog and those of six other CG catalogs—the initial DPOSS Compact Group (PCG) catalog by Iovino et al. (2003), the Southern Compact Group (SCG) catalog by Iovino (2002), the UZC Compact Group (UZC-CG) catalog by Focardi & Kelm (2002), the Las Campanas Compact Group (LCCG) catalog by Allam & Tucker (2000), the Redshift Survey Compact Group (RSCG) catalog by Barton et al. (1996), and the Hickson Compact Group (HCG) catalog by Hickson (1982, 1993).

Of these seven CG catalogs, four are based on galaxy sky positions and photometry alone (the SDSSCG, PCG, SCG, and HCG catalogs), and three also make use of galaxy redshift information (the UZC-CG, LCCG, and RSCG catalogs).

Looking at this table and its companion figures (Figs. 10, 11, and 12), it is apparent that SDSSCGs are quite similar to

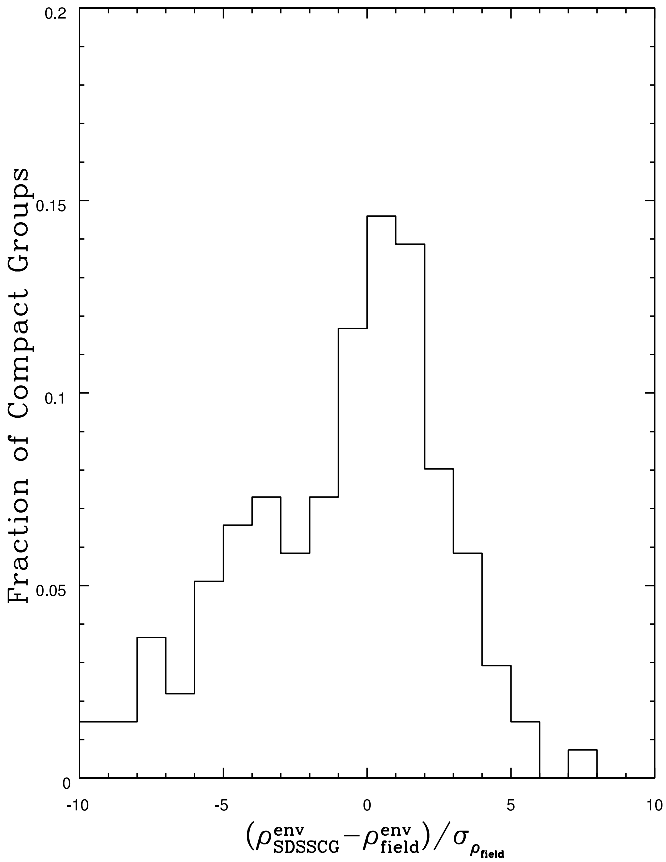


FIG. 9.—Distribution of the local SDSS CGs environments relative to that of the field galaxies.

most other CG catalogs in terms of their typical group membership ($N$) and linear group diameter ($D \times \theta_G$; Fig. 12). With the possible exception of the PCG catalog, however, the SDSSCG catalog is on average much deeper than any of the other CG catalogs. (Although we do not have redshift information for the SCG catalog, the mean and median angular diameters of its groups, coupled with a galaxy magnitude limit of $b_j = 15.0$, indicate that it has a depth comparable to that of the RSCG catalog.) With such a mean depth, the SDSSCG catalog is a first step toward the study of the evolutionary properties of CGs. Furthermore, at these depths the probability of finding CGs acting as strong lenses becomes noticeably higher (Hickson 1997); perhaps a CG from a future SDSSCG catalog will be the first to be discovered with giant arcs.

It is also curious to see that, although we used a compactness criterion to detect SDSSCGs that was substantially tighter than the original Hickson (1982) value, the mean surface brightnesses ($\mu_G$) in $r$* for SDSSCGs and HCGs are nearly identical. Recall that the HCG catalog was extracted from the first Palomar Sky Survey (POSS-I) via a search by eye. Hickson (1982) expected, and Prandoni et al. (1994) confirmed, that the HCG catalog was incomplete approaching the limits of the Hickson criteria. Here we appear to be seeing an independent confirmation of the HCG catalog's incompleteness for "less compact" CGs, as clearly seen in Figure 13.

Finally, although a detailed calculation of the space density of CGs is beyond the scope of this paper, we can perform a rough, "back-of-the-envelope" estimate by assuming that a given CG sample is complete out to its median redshift and calculating

$$n_{cg} = \frac{0.5N}{(A/41253 \ \deg^2)(4/3)\pi D_c^3}, \tag{1}$$

where $n_{cg}$ is the estimated CG space density, $N$ is the total number of CG's in the sample, $A$ is the sky area covered by the sample in square degrees, and $D_c$ is the comoving distance at the median redshift of the survey. We use a Euclidean measure of the volume since we will assume a zero-curvature universe in which $\Omega_M = 0.3$ and $\Omega_\Lambda = 0.7$ (see, e.g., Hogg 2000).

In particular, we wish to compare the space density of SDSS CGs with that of the PCG catalog, which is presently the only other deep ($z \gtrsim 0.1$), wide-area survey for CGs, and with that of the HCG catalog, which remains the benchmark for all CG catalogs.

For the SDSS CGs, we take $N = 175$, $A = 253$ deg$^2$, and $z_{med} = 0.126$ ($D_c = 368\ h^{-1}$ Mpc), yielding an estimated space density of $1.1 \times 10^{-4}\ h^3$ Mpc$^{-3}$. Using the above equation, we can also estimate the space density of the PCG catalog. For the PCGs, we take $N = 84$, $A = 2000$ deg$^2$, and $z_{med} = 0.1$ ($D_c = 280\ h^{-1}$ Mpc), yielding an estimated space density of $9.4 \times 10^{-6}\ h^3$ Mpc$^{-3}$. Clearly, the space density of SDSS CGs is about a factor of 10 greater than that for PCGs. The PCG catalog, however, has a much tighter mean group surface brightness constraint. If we consider just the 14 SDSS CGs that satisfy the PCG surface brightness criterion, we find a space density for "PCG-like" SDSS CGs of $9.0 \times 10^{-6}\ h^3$ Mpc$^{-3}$—almost identical to the value obtained for the original PCG sample. This is a good consistency check between these two modern CG catalogs.

Comparing the space density of CGs with that of HCGs is a bit harder. Since the HCG catalog is known to be incomplete, we cannot merely use equation (1). Using simulations, Mendes de Oliveira & Hickson (1991) estimated that the space density for HCGs is $3.9 \times 10^{-5}\ h^3$ Mpc$^{-3}$, or about one-third the space density of SDSS CGs. Worse yet, SDSS CGs have a more stringent surface brightness criterion. We find that 63% (58 out of 92) of HCGs meet the SDSS CG surface brightness constraint. Thus, the space density of SDSS CG-like HCGs should be about $2.5 \times 10^{-5}\ h^3$ Mpc$^{-3}$, or only about one-fifth to one-fourth the space density of SDSS CGs.

Four possibilities come readily to mind to explain this discrepancy. (1) The HCG catalog may still be substantially incomplete even for surface brightnesses of $\mu_G(r^*) < 24.0$. If so, a more complete sample of HCG-like groups would have a higher space density. (2) Mendes de Oliveira & Hickson's (1991) estimate of the space density of HCGs is itself uncertain and is very sensitive to the assumptions regarding the completeness of the HCG sample (Hernquist, Katz, & Weinberg 1995). Therefore, the discrepancy may not be very statistically significant. (3) Cosmic variance may play an effect. Out to their median redshifts the HCG and the SDSS CG volumes are both roughly equivalent to boxes only 100 $h^{-1}$ Mpc on a side. (4) Although much care was taken to avoid contamination by chance projections (§ 3), the SDSS CG catalog itself probably contains some small fraction of spurious groups, thus artificially increasing our estimated space density of SDSS CGs. We suspect that some combination of these four possibilities will eventually explain the present discrepancy.

## 6. MORPHOLOGY-ENVIRONMENT EFFECTS IN SDSS CGs

To search for environmental effects on the morphologies of CG galaxies, we have used the subsample of 158 SDSSCG

TABLE 3

Comparison between SDSS Compact Group Properties and other CGs

| Catalog | No. of CGs | $N$ |  | $\mu_G$ (mag arcsec$^{-2}$) |  | $z$ |  | $\theta_G$ (deg) |  | $D \times \theta_G$ ($h^{-1}$ kpc) |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Mean | Median | Mean | Median | Mean | Median | Mean | Median | Mean | Median |
| SDSSCG | 175 | $4.25 \pm 0.04$ | 4.00 | $23.39 \pm 0.04$ | 23.51 | $0.135 \pm 0.005$[a] | 0.126[a] | $0.0088 \pm 0.0003$ | 0.0073 | $58 \pm 2$[a] | 55[a] |
| PCG | 84 | $4.15 \pm 0.04$ | 4.00 | $23.25 \pm 0.05$[b] | 23.32[b] | ... | ≈0.1[c] | $0.0114 \pm 0.0003$ | 0.0113 | ... | ... |
| SCG | 121 | $4.29 \pm 0.05$ | 4.00 | $25.50 \pm 0.08$[d] | 25.68[d] | ... | ... | $0.15 \pm 0.01$ | 0.125 | ... | ... |
| UZC CG | 291 | $3.39 \pm 0.05$ | 3.00 | ... | ... | $0.0173 \pm 0.0004$ | 0.0171 | ... | ... | $147 \pm 3$ | 152 |
| LCCG | 76 | $3.33 \pm 0.08$ | 3.00 | ... | ... | $0.079 \pm 0.003$ | 0.075 | $0.016 \pm 0.001$ | 0.013 | $53 \pm 2$ | 52 |
| RSCG | 89 | $3.65 \pm 0.14$ | 3.00 | ... | ... | $0.014 \pm 0.001$ | 0.014 | $0.18 \pm 0.02$ | 0.08 | $60 \pm 3$ | 55 |
| HCG | 92[e] | $4.55 \pm 0.09$ | 4.00 | $23.4 \pm 0.1$[f] | 23.4[f] | $0.034 \pm 0.002$ | 0.030 | $0.061 \pm 0.005$ | 0.048 | $84 \pm 5$ | 70 |

[a] Based on the 131 SDSS CGs (75%) that have a spectroscopic redshift determination.
[b] Converted from Thuan-Gunn $r_{TG}$ to SDSS $r^*$ magnitudes assuming $r^* - r_{TG} \approx 0.1$ for an elliptical galaxy; see Thuan & Gunn 1976, Smith et al. 2002, and Fukugita et al. 1995.
[c] Determined photometrically, based on the magnitude distribution of the brightest group members; see Iovino et al. 2003.
[d] Converted from $b_j$ to $r^*$ magnitudes assuming $b_j - r^* \approx 1.0$ for an elliptical galaxy; see Blanton et al. 2001 and Iovino 2002.
[e] Here, we consider only the HCGs from the Hickson 1993 "cleaned" sample.
[f] Converted from $E$ to $r^*$ magnitudes assuming $r^* - E \approx 0.3$ for an elliptical galaxy; see Blanton et al. 2001 and Iovino 2002.

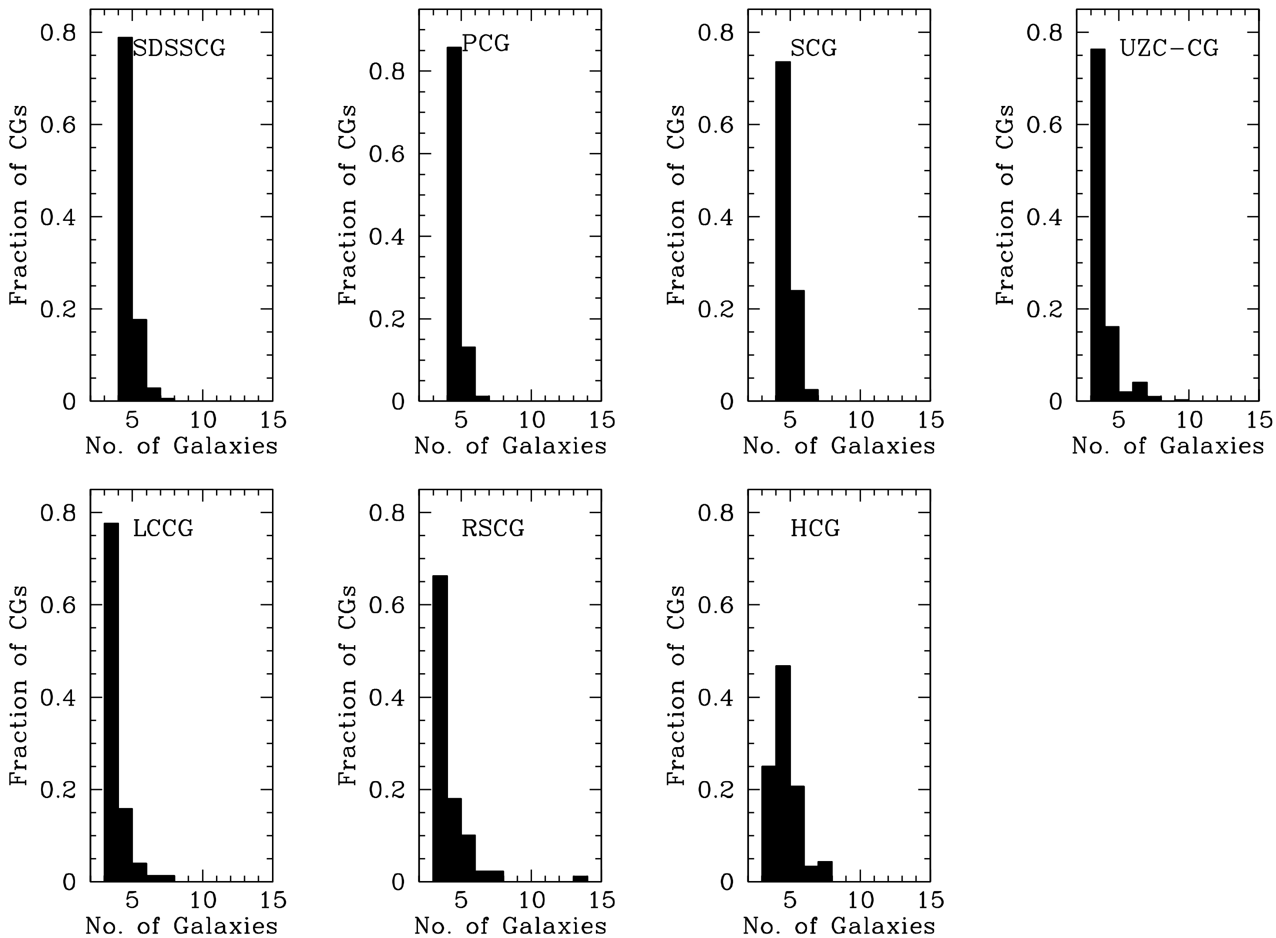


FIG. 10.—Distribution of group memberships, $N$, for the SDSSCG, PCG, SCG, UZC-CG, LCCG, RSCG, and HCG catalogs

galaxies that have known spectroscopic redshifts. To compare this sample fairly, we have constructed a field sample by selecting for each of these 158 SDSSCG galaxies the 10 galaxies with the nearest redshifts to it from the SDSS EDR (Eisenstein et al. 2001; Strauss et al. 2002). Since these 10 galaxies will tend to be randomly spread in right ascension and declination over the SDSS EDR survey area, they will reasonably sample the field, with little contamination from clusters. (Recall that only about 10% of galaxies lie within rich clusters). We have thus collected a field sample of 1580 galaxies, which has a redshift distribution essentially identical to that of the original 158 SDSSCG galaxies. That we met this goal is attested to by the fact that the means and medians of the two redshift distributions are identical (Table 4). Furthermore, a one-dimensional Kolmogorov-Smirnov (KS) test (Press et al. 1992) indicates that these two redshift distributions are drawn from the same parent distribution with an extremely high probability (Table 5).

A galaxy's color is a function of current star formation rate, and as such its color can be used as a rough indication of morphological type. Red galaxies tend to be ellipticals and S0's; blue galaxies tend to be spirals and irregulars. The SDSS data set contains not one but five filters' worth of photometry, which can define a set of four nonredundant colors: $u^*-g^*$, $g^*-r^*$, $r^*-i^*$, and $i^*-z^*$. We will use this plethora of color information to compare our two samples.

For our comparisons, we construct color-color and color-magnitude diagrams for these two samples. To do this, though, we must first correct the galaxy magnitudes and colors for interstellar absorption and for cosmological effects. To correct for interstellar absorption, the following reddening corrections (Stoughton et al. 2002) were subtracted from the galaxy magnitudes:

$$\begin{aligned} A(u^*) &= 5.155\,E(B-V), \\ A(g^*) &= 3.793\,E(B-V), \\ A(r^*) &= 2.751\,E(B-V), \\ A(i^*) &= 2.086\,E(B-V), \\ A(z^*) &= 1.479\,E(B-V), \end{aligned} \quad (2)$$

where the values for $E(B-V)$ were obtained from the Schlegel, Finkbeiner, & Davis (1998) reddening maps. (Note that we correct only for interstellar absorption due to the Milky Way Galaxy and do not attempt to correct for internal interstellar absorption associated with the individual galaxies themselves.)

We also apply a $k$-correction to convert the dereddened colors and magnitudes to their rest-frame (i.e., redshift $z = 0$) equivalents. Our $k$-corrections were estimated using the publicly available KCORRECT (v1.10) package of Blanton et al. (2003b). This code fits a galaxy's (redshifted) broadband magnitudes to a suite of template galaxy spectral energy

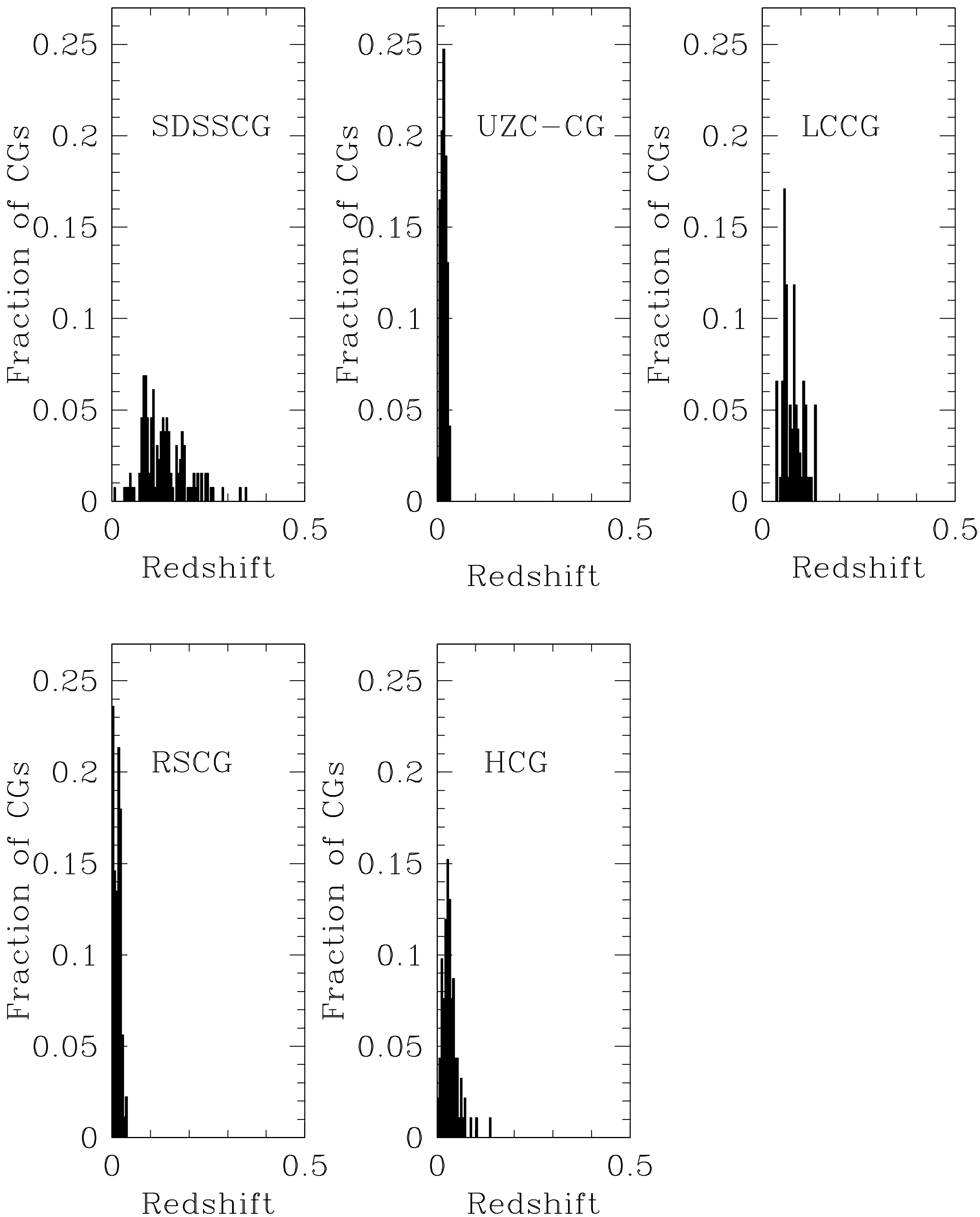


FIG. 11.—Distribution of group redshifts, *z*, for the SDSSCG, UZC-CG, LCCG, RSCG, and HCG catalogs. Note that the SDSSCG values make use of only those 131 CGs with known spectroscopic redshifts.

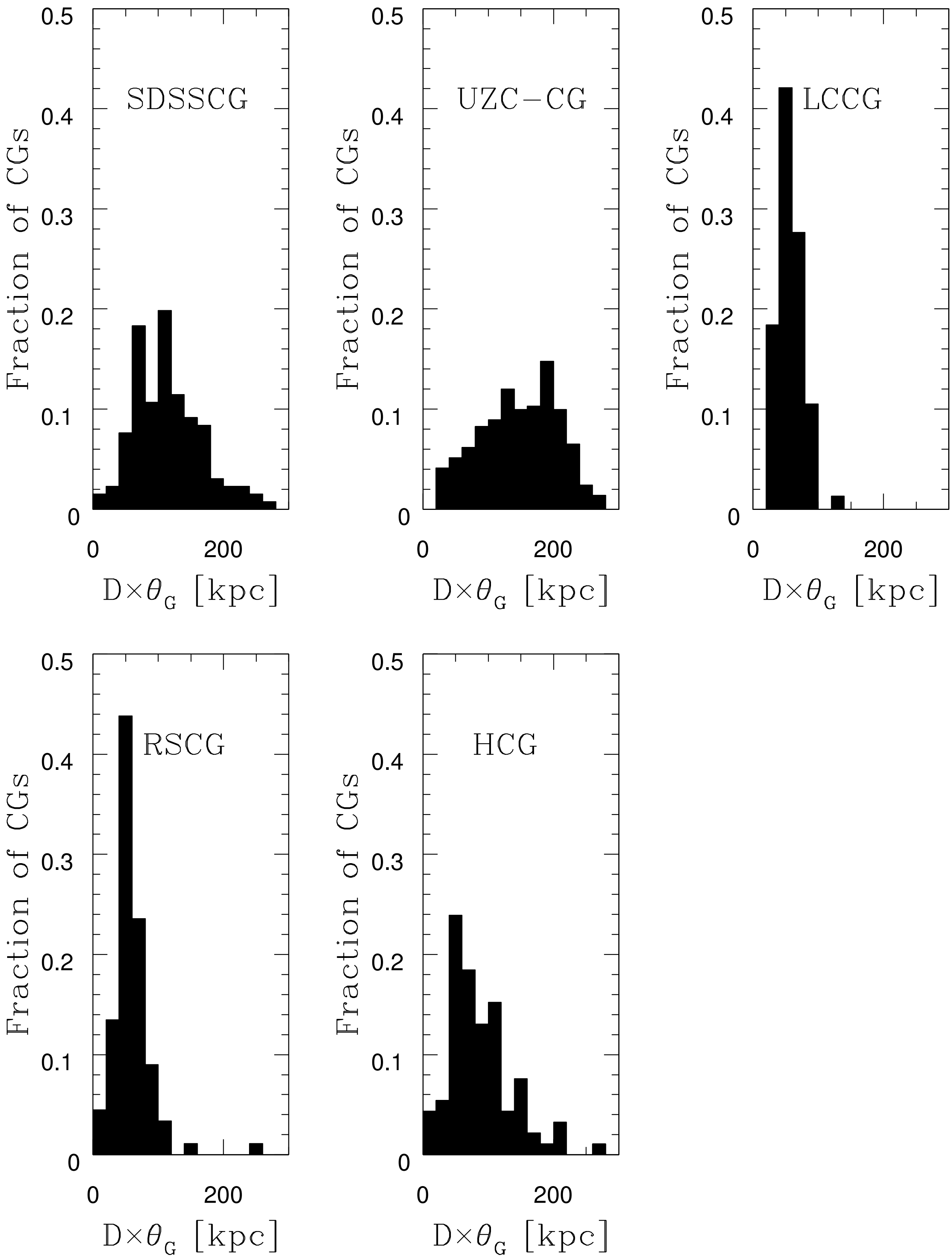


FIG. 12.—Distribution of linear group diameters, $D \times \theta_G$ ($H_0$ = 100 km s$^{-1}$ Mpc$^{-1}$), for the SDSSCG, UZC-CG, LCCG, RSCG, and HCG catalogs. Note that the SDSSCG values make use of only those 131 CGs with known spectroscopic redshifts.

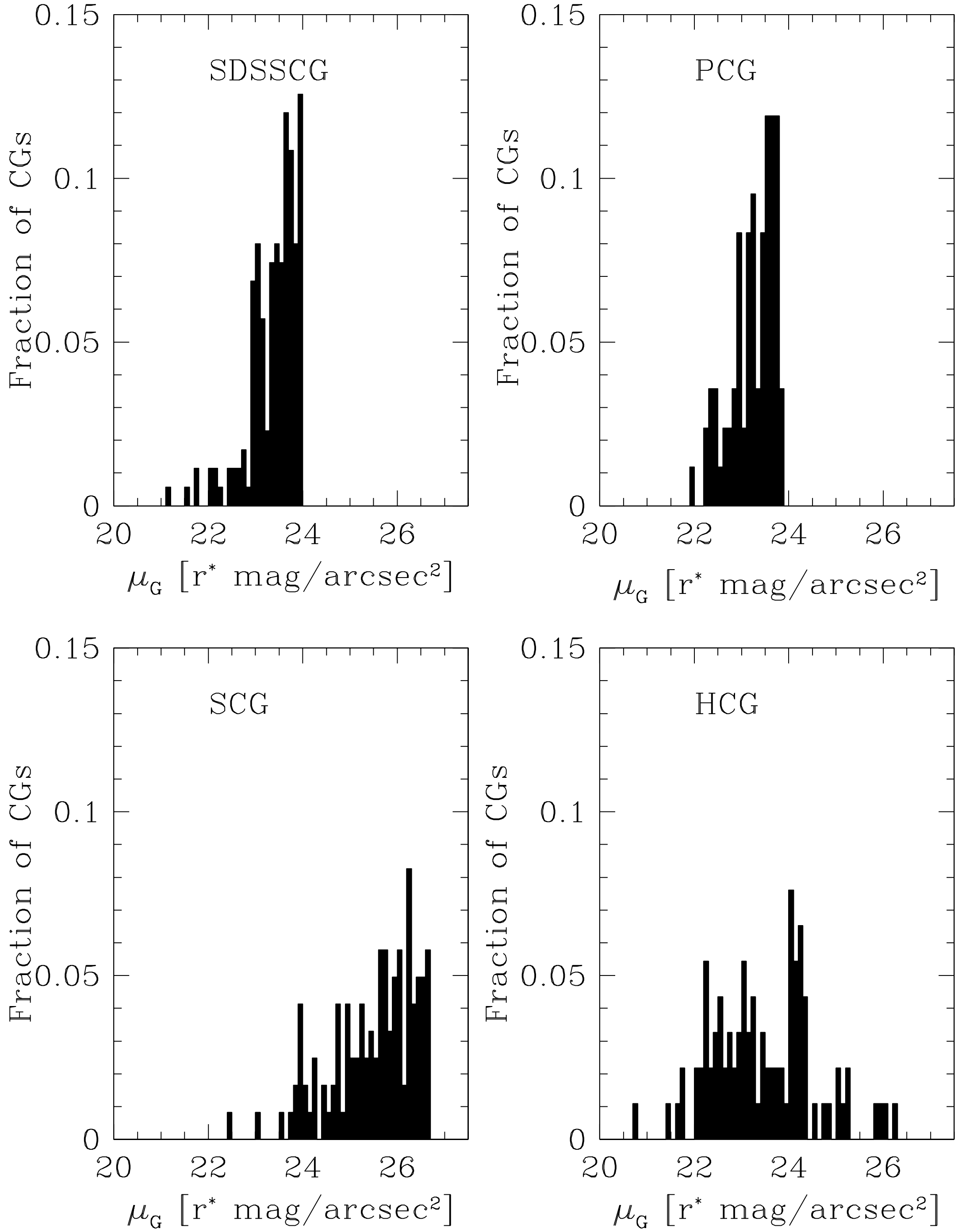


FIG. 13.—Distribution of group surface brightness, $\mu_G$ mag arcsec$^{-2}$, in the SDSS $r$* band for the SDSSCG, PCG, SCG, and HCG catalogs

TABLE 4

MEAN AND MEDIAN PROPERTIES FOR THE SDSSCG GALAXY AND SDSS FIELD GALAXY SAMPLES

| | SDSSCG SAMPLE | | SDSS FIELD SAMPLE | |
|---|---|---|---|---|
| TEST | Mean | Median | Mean | Median |
| $z_{sp}$ | $0.130 \pm 0.005$ | 0.120 | $0.130 \pm 0.002$ | 0.120 |
| $M_{r*}-5\log(h)$ | $-21.166 \pm 0.096$ | $-21.264$ | $-21.292 \pm 0.028$ | $-21.293$ |
| $M_{u*}-M_{g*}$ | $1.550 \pm 0.025$ | 1.659 | $1.485 \pm 0.007$ | 1.575 |
| $M_{g*}-M_{r*}$ | $0.710 \pm 0.012$ | 0.756 | $0.683 \pm 0.003$ | 0.730 |
| $M_{r*}-M_{i*}$ | $0.364 \pm 0.008$ | 0.393 | $0.351 \pm 0.003$ | 0.378 |
| $M_{i*}-M_{z*}$ | $0.233 \pm 0.016$ | 0.272 | $0.240 \pm 0.006$ | 0.268 |

TABLE 5
RESULTS FROM THE ONE-DIMENSIONAL KOLMOGOROV-SMIRNOV TESTS

| Test | KS Statistic | Probability |
|---|---|---|
| $z_{sp}$ | 0.01203 | 1.00000 |
| $M_{r*}-5\log(h)$ | 0.06139 | 0.65114 |
| $M_{u*}-M_{g*}$ | 0.19557 | 0.00003 |
| $M_{g*}-M_{r*}$ | 0.16519 | 0.00079 |
| $M_{r*}-M_{i*}$ | 0.13418 | 0.01135 |
| $M_{i*}-M_{z*}$ | 0.05380 | 0.80009 |

distributions to reconstruct the galaxy's broadband magnitudes at another redshift (e.g., at a redshift of $z = 0$).

Finally, to calculate absolute $r^*$ magnitudes, we must assume a cosmological model. We take the current standard—a flat model with $\Omega_M = 0.3$, $\Omega_\Lambda = 0.7$, and $H_0 = 100h$ km s$^{-1}$ Mpc$^{-1}$—using the analytical relation by Pen (1999) to calculate luminosity distance $d_L$.

Figure 14 plots the dereddened and $k$-corrected $M_{g*}-M_{r*}$ color against spectroscopic redshift for our two samples. The E/S0 ridge line—the locus of elliptical and S0 galaxies at $M_{g*}-M_{r*} \approx 0.8$—is nearly flat for the redshift range plotted, indicating that the $k$-corrections did a good job. The slight positive slope of the ridge line between $z = 0$ and $z = 0.3$ may be the result of a slight color evolution in early-type galaxies over this redshift range.

Figures 15 and 16 display the color-magnitude and the color-color diagrams for the two samples, respectively. Visually, it is hard to distinguish much difference between the SDSSCG and field galaxy samples in these plots, with the possible exception that the SDSSCG galaxies appear on average slightly redder than the field galaxies in $M_{u*}-M_{g*}$ and in $M_{g*}-M_{r*}$.

If, however, we look at the statistics of the absolute magnitude and rest-frame color distributions, differences between the two samples become more apparent. If we look at the means and medians of these distributions for the two samples (Table 4), it is clear that the SDSSCGs are on average redder than the field galaxies in $M_{u*}-M_{g*}$ and in $M_{g*}-M_{r*}$ at about the 2 $\sigma$ level. Furthermore, there is some evidence—at about the 1 $\sigma$ level—that SDSSCGs are on average less luminous than field galaxies (in the $r^*$ band).

We have also run two sets of KS tests (Press et al. 1992) for these two samples: (1) a set of one-dimensional KS

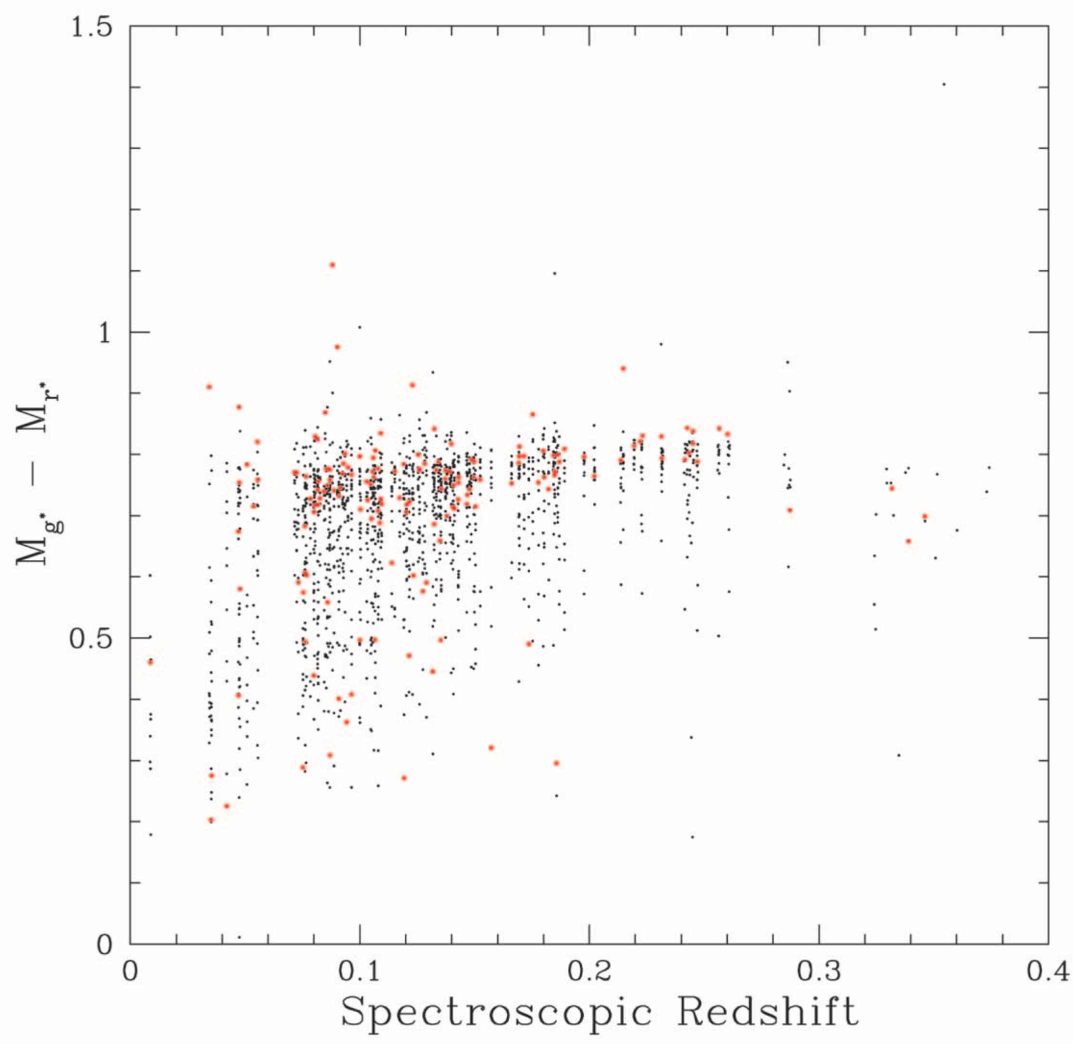


FIG. 14.—Rest-frame $M_{g*}-M_{r*}$ color vs. spectroscopic redshift. *Black dots*: Field-galaxy sample. *Red dots*: SDSSCG galaxy sample. (Note: the SDSSCG galaxy sample only contains those 158 SDSSCG galaxies with known spectroscopic redshifts.)

tests on the distributions of $z$, $M_{r*}$, $M_{u*}-M_{g*}$, $M_{g*}-M_{r*}$, $M_{r*}-M_{i*}$, and $M_{i*}-M_{z*}$ (Table 5); and (2) a set of two-dimensional KS tests on the plots shown in Figures 14–16 (Table 6).

These two sets of KS tests provide strong evidence that the rest-frame colors of CG galaxies do indeed differ from those of field galaxies—at least for $M_{u*}-M_{g*}$, $M_{g*}-M_{r*}$, and even $M_{r*}-M_{i*}$. The distribution of $M_{i*}-M_{z*}$ rest-frame colors, however, does not appear to differ significantly between the two galaxy samples. This is not surprising. The intrinsic rest-frame $M_{i*}-M_{z*}$ color of an elliptical is only about 0.25 mag redder than that of an irregular; in comparison, the $M_{u*}-M_{g*}$ color of an elliptical is about 1.3 mag redder than that of an irregular (Fukugita et al. 1995). Thus, the $M_{i*}-M_{z*}$ colors are not a very sensitive measure of galaxy morphology.

From the evidence of their $M_{u*}-M_{g*}$, $M_{g*}-M_{r*}$, and $M_{r*}-M_{i*}$ rest-frame colors, we conclude that SDSSCGs contain a relatively higher fraction of elliptical galaxies than does the field.

Why does the relative fraction of elliptical galaxies in SDSS CGs appear to be larger than in the field? A likely culprit is the cumulative effect of interactions and mergers over the course of a typical CG lifetime. *N*-body simulations like those pioneered by Toomre (1977) indicate that the end-product of merging spirals can be an elliptical galaxy.

There is evidence for interactions and/or mergers in SDSS CGs. While culling the original set of 232 candidate

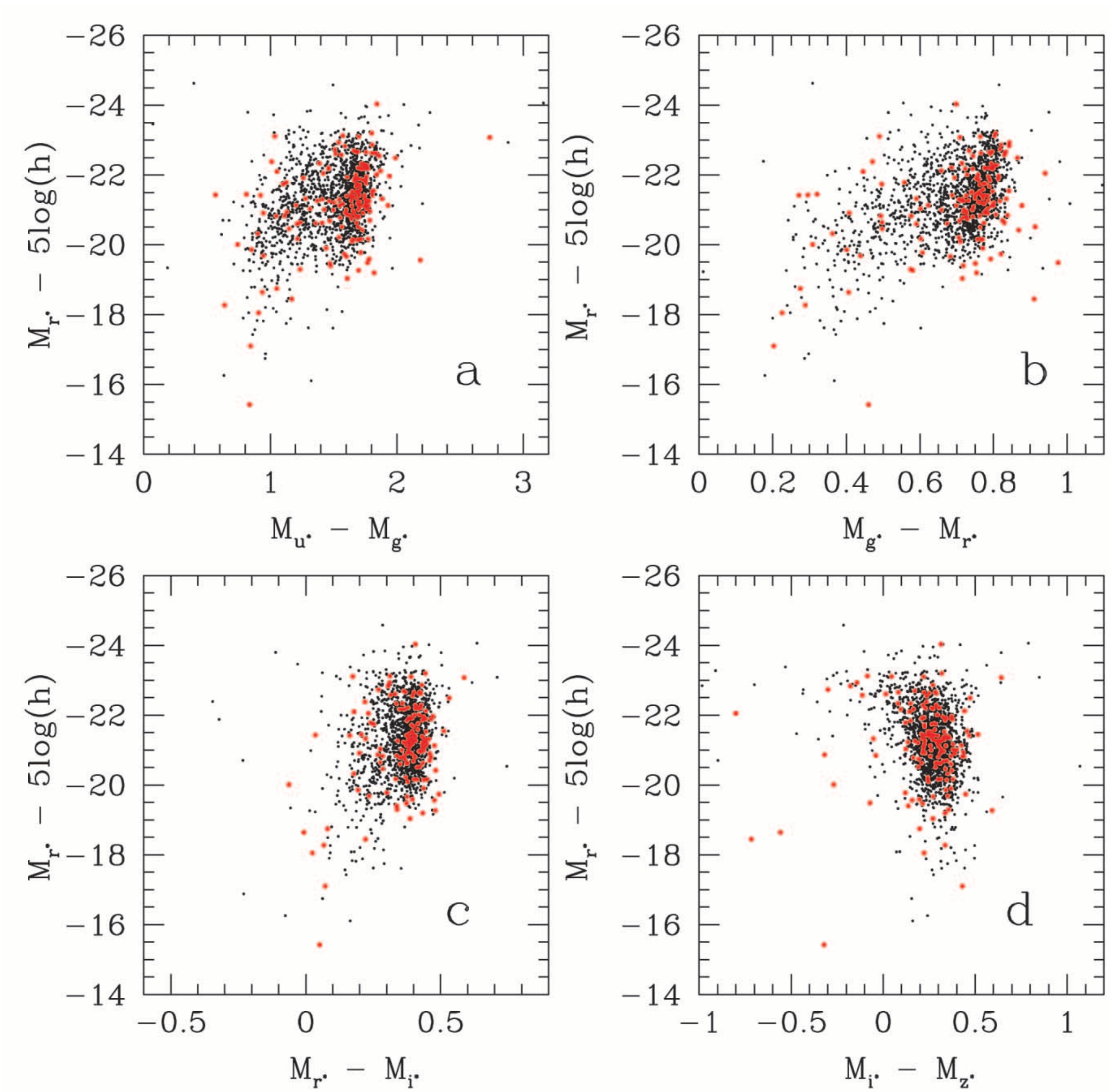


FIG. 15.—The $r$*-band absolute magnitude $M(r^*)-5\log(h)$ vs. rest-frame color. *Black dots*: Field-galaxy sample. *Red dots*: SDSSCG galaxy sample. (Note: the SDSSCG galaxy sample only contains those 158 SDSSCG galaxies with known spectroscopic redshifts.)

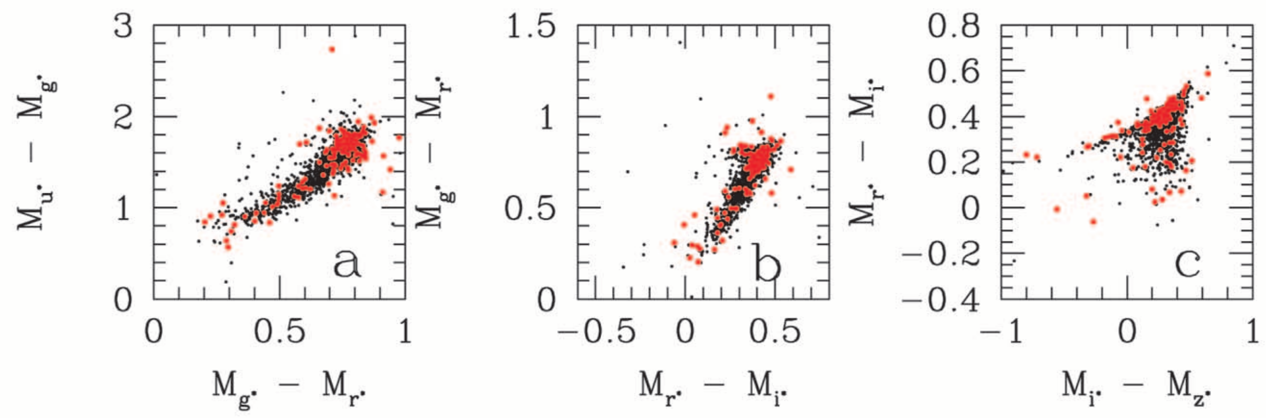


FIG. 16.—Rest-frame color vs. rest-frame color. *Black dots:* Field-galaxy sample. *Red dots*: SDSSCG galaxy sample. (Note: the SDSSCG galaxy sample only contains those 158 SDSSCG galaxies with known spectroscopic redshifts.)

SDSS CGs to the final set of 175 (§ 3), the member galaxies were visually inspected for tidal tails, bridges, and obvious other signs of interaction activity. Those SDSS CGs showing evidence of interactions and/or mergers are indicated in the ''Comments'' column (col. [12]) of Table 1. Evidence of some sort of interaction or tidal tail is seen in 55 SDSS CGs (31% of the final catalog of 175 SDSS CGs); full-blown merger events appear to be occurring in 26 SDSS CGs (14%). A luminous halo enveloping all or part of the group—perhaps the remnant of a completely disrupted galaxy—appears in four of the SDSS CGs (2%).

Zepf (1993) estimated that roughly 7% of the galaxies in HCGs are in the process of merging. His conclusion was based on roughly consistent frequencies of (1) optical signatures of merging, (2) warm far-infrared colors, and (3) sinusoidal rotation curves. Our initial results, described above, indicate comparable or even greater levels of merger activity in the SDSS CG sample.

## 7. CONCLUSIONS

We have presented a new catalog of CGs, one extracted via an objective algorithm from 153 deg$^2$ of runs 752 and 756 in the SDSS EDR (Stoughton et al. 2002). The algorithm, using a modified form of Hickson's (1982) original criteria, detected 175 CGs down to a limiting galaxy magnitude of $r^* = 21$. We have estimated that the median redshift of this current version of the SDSS CG catalog is $z_{\rm med} \approx 0.13$, substantially deeper than previous CG catalogs. This catalog will be useful for conducting studies of the general characteristics of CGs, their environments, and their component galaxies.

Our initial results show that SDSS CGs are on average about a factor of 40 denser than their local surroundings; that their general physical properties are similar to those of other, less deep CG catalogs; that the fraction of early-type galaxies is higher in SDSS CGs than in the field; and that there is strong visual evidence of interactions and mergers in a significant fraction of SDSS CGs.

Our future goals are threefold: further analyses of the properties of the current version of the SDSS CG catalog with its 175 CGs, the enlargement of the sample of SDSS CGs as more SDSS data become available, and improvement of CG selection techniques. Clearly, the next step is to apply our algorithm to the current SDSS Data Release. At a detection rate of slightly better than one CG per square degree, we expect that the final SDSS CG catalog, based on the a completed SDSS covering up to one-quarter of the sky, will contain on the order of 5000–10,000 CGs.

TABLE 6
RESULTS FROM THE TWO-DIMENSIONAL KOLMOGOROV-SMIRNOV TESTS

| Test | KS Statistic | Probability |
|---|---|---|
| $z_{\rm sp}$ vs. $M_{g*}-M_{r*}$ | 0.05316 | 0.90385 |
| $M_{u*}-M_{g*}$ vs. $M_{r*}-5\log(h)$ | 0.19937 | 0.00054 |
| $M_{g*}-M_{r*}$ vs. $M_{r*}-5\log(h)$ | 0.17627 | 0.00296 |
| $M_{r*}-M_{i*}$ vs. $M_{r*}-5\log(h)$ | 0.14778 | 0.02209 |
| $M_{i*}-M_{z*}$ vs. $M_{r*}-5\log(h)$ | 0.07911 | 0.54591 |
| $M_{g*}-M_{r*}$ vs. $M_{u*}-M_{g*}$ | 0.23006 | 0.00002 |
| $M_{r*}-M_{i*}$ vs. $M_{g*}-M_{r*}$ | 0.18354 | 0.00109 |
| $M_{i*}-M_{z*}$ vs. $M_{r*}-M_{i*}$ | 0.15791 | 0.00971 |

We thank the anonymous referee for the many useful comments on this text. Funding for the creation and distribution of the SDSS Archive has been provided by the Alfred P. Sloan Foundation, the Participating Institutions, the National Aeronautics and Space Administration, the National Science Foundation, the Department of Energy, the Japanese Monbukagakusho, and the Max Planck Society. The SDSS Web site is http://www.sdss.org. The SDSS is managed by the Astrophysical Research Consortium for the Participating Institutions. The Participating Institutions are the University of Chicago, Fermilab, the Institute for Advanced Study, the Japan Participation Group, Johns Hopkins University, Los Alamos National Laboratory, the Max Planck Institute for Astronomy, the Max Planck Institute for Astrophysics, New Mexico State University, the University of Pittsburgh, Princeton University, the US Naval Observatory, and the University of Washington. This research has made use of the NASA/IPAC Extragalactic Database, which is operated by the Jet Propulsion Laboratory, at the California Institute of Technology, under contract with NASA.

## REFERENCES


Abazajian, K., et al. 2003, AJ, 126, 2081
Allam, S. 1998, Ph.D. thesis, Univ. Potsdam
Allam, S., Assendorp, R., Longo, G., Braun, M., & Richter, G. 1996, A&AS, 117, 39
Allam, S., Tucker D. 2000, Astron. Nachr., 321, 101
Allam, S., Tucker, D., Lin, H., & Hashimoto, Y. 1999, ApJ, 522, L89
Allam, S., et al. 2004, in preparation
Annis, J., et al. 2004, in preparation
Athanassoula, E. 2000, in IAU Colloq. 174, Small Galaxy Groups, ed. M. J. Valtonen & C. Flynn (ASP Conf. Ser. 209) (San Francisco: ASP), 245
Athanassoula, E., Makino, J., & Bosma, A. 1997, MNRAS, 286, 825
Bahcall, N. A., Harris, D. E., & Rood H. J. 1984, ApJ, 284, L29
Baker, G. A., & Graves-Morris, P. 1996, Padé Approximants (2nd ed.; Cambridge: Cambridge Univ. Press)
Barton, E., Geller, M. J., Ramella, M., Marzke, R. O., & da Costa, L. N. 1996, AJ, 112, 871
Bertin, E., & Arnouts, S. 1996, A&AS, 117, 393
Blanton, M. R., et al. 2001, AJ, 121, 2358
Blanton, M. R., Lupton, R. H., Maley, F. M., Young, N., Zehavi, I., & Loveday, J. 2003a, AJ, 125, 2276
Blanton, M. R., et al. 2003b, AJ, 125, 2348
Connolly, A. J., Csabai, I., Szalay, A. S., Koo, D. C., Kron, R. G., & Munn, J. A. 1995, AJ, 110, 2655
Coziol, R., de Carvalho, R. R., Capelato, H. V., & Ribeiro, A. L. B. 1998, ApJ, 506, 545
de Carvalho, R. R., Ribeiro, A., Capelato, H., & Zepf, S. E. 1997, ApJS, 110, 1
Diaferio, A., Geller, M. J., & Ramella, M. 1994, AJ, 107, 868
———. 1995, AJ, 109, 2293
Draper, P. W. 2000, in ASP Conf. Ser. 216, Astronomical Data Analysis Software and Systems IX, ed. N. Manset, C. Veillet, & D. Crabtree (San Francisco: ASP), 615
Ebeling, H., Voges, W., & Böhringer, H. 1994, ApJ, 436, 44
Eisenstein, D. J., et al. 2001, AJ, 122, 2267
Focardi, P., & Kelm, B. 2002, A&A, 391, 35
Fukugita, M., Ichikawa, T., Gunn, J. E., Doi, M., Shimasaku, K., & Schneider, D. P. 1996, AJ, 111, 1748
Fukugita, M., Shimasaku, K., & Ichikawa, T. 1995, PASP, 107, 945
Gershenfeld, N. 1999, The Nature of Mathematical Modeling (Cambridge: Cambridge Univ. Press)
Gunn, J. E., et al. 1998, AJ, 116, 3040
Hernquist, L., Katz, N., & Weinberg, D. H. 1995, ApJ, 442, 57
Hickson, P. 1982, ApJ, 255, 382
———. 1993, Astrophys. Lett., 29, 1
———. 1997, ARA&A, 35, 357
Hogg, D. W. 2000, preprint (astro-ph/9905116)
Hogg, D. W., Schlegel, D. J., Finkbeiner, D. P., & Gunn, J. E. 2001, AJ, 122, 2129
Iovino, A. 2001, in ASP Conf Ser 232, The New Era of Wide Field Astronomy, ed. R. Clowes, A. Adamson, & G. Bromage (San Francisco: ASP), 164
———. 2002, AJ, 124, 2471
Iovino, A., de Carvalho, R. R., Gal, R. R., Odewahn, S. C., Lopes, P. A. A., Mahabal, A., & Djorgovski, S. G. 2003, AJ, 125, 1660
Lee, B. C., Tucker, D. L., & Allam, S. S. 2001a, BAAS, 199, No. 100.19
Lee, B. C., Tucker, D. L., & Brinkmann, J. 2001b, ASP Conf. Ser. 232, The New Era of Wide Field Astronomy, ed. M. de Groot & C. Strecken (San Francisco: ASP), 170
Lin, H., et al. 2004, in preparation
Lupton, R., Gunn, J. E., Ivezić, Z., Knapp, G. R., Kent, S., & Yasuda, N. 2001, in ASP Conf. Ser. 238, Astronomical Data Analysis Software and Systems X, ed. F. R. Harnden, Jr., F. A. Primini, & H. E. Payne (San Francisco: ASP), 269
Mamon, G. 1986, ApJ, 307, 426
Mendes de Oliveira, C., & Hickson, P. 1991, ApJ, 380, 30
Menon, T. K. 1995, AJ, 110, 2605
Mulchaey, J. S. 2000, ARA&A, 38, 289
Palumbo, G. G. C., Saracco, P., Hickson, P., & Mendes de Oliveira, C. 1995, AJ, 109, 1476
Pen, U.-L. 1999, ApJS, 120, 49
Perea, J., et al. 2000, IAU Colloq. 174, Small Galaxy Groups, ed. M. J. Valtonen & C. Flynn (ASP Conf. Ser. 209) (San Francisco: ASP), 377
Pier, J. R., Munn, J. A., Hindsley, R. B., Hennessy, G. S., Kent, S. M., Lupton, R. H., & Ivezic, Z. 2003, AJ, 125, 1559
Ponman, T. J., & Bertram, D. 1993, Nature, 363, 51
Ponman, T. J., Bourner, P. D. J., & Ebeling, H. 1996, in Röntgenstrahlung from the Universe: An International Conference on X-Ray Astronomy and Astrophysics (Garching: MPI Extraterr. Phys.), 357
Pildis, R. A., Bregman, J. N., & Evrard, A. E. 1995, ApJ, 443, 514
Prandoni, I., Iovino, A., & MacGillivray, H. T. 1994, AJ, 107, 1235
Press, W. H., Teukolsky, S. A., Vetterling, W. T., & Flannery, B. P. 1992, Numerical Recipes in FORTRAN: The Art of Scientific Computing (2nd ed.; Cambridge: Cambridge Univ. Press)
Ramella, M., Diaferio, A., Geller, M. J., & Huchra, J. P. 1994, AJ, 107, 1623
Ramella, M., Geller, M. J., & Huchra, J. P. 1989, ApJ, 344, 57
Ribeiro, A., de Carvalho, R. R., Capelato, H., & Zepf, S. E. 1998, ApJ, 497, 72
Ribeiro, A. L. B., de Carvalho, R. R., Coziol, R., Capelato, H. V., & Zepf, S. E. 1996, ApJ, 463, L5
Saracco, P., & Ciliegi, P. 1995, A&A, 301, 348
Schlegel, D., Finkbeiner, D., & Davis, M. 1998, ApJ, 500, 525
Scranton, R., et al. 2002, ApJ, 579, 48
Smith, J. A., et al. 2002, AJ, 123, 2121
Stephan, M. 1877, MNRAS, 37, 334
Stoughton, C., et al. 2002, AJ, 123, 485
Strauss, M. A., et al. 2002, AJ, 124, 1810
Sulentic, J. W., Pietsch, W., & Arp, H. 1995, A&A, 298, 420
Thuan, T. X., & Gunn, J. E. 1976, PASP, 88, 543
Toomre, A. 1977, in Evolution of Galaxies and Stellar Populations, ed. B. M. Tinsley & R. B. Larson, (New Haven: Yale Univ. Obs.), 401
Tovmassian, H. M., Yam, O., & Tiersch, H. 2001, Rev. Mexicana Astron. Astrofis., 37, 173
———. 2002, ApJ, 567, L33
Tully, B. 1987, ApJ, 321, 280
York, D. G., et al. 2000, AJ, 120, 1579
Zepf, S. E. 1993, ApJ, 407, 448