A CATALOG OF RICH CLUSTERS OF GALAXIES

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ABSTRACT

This is an all-sky catalog of 4073 rich clusters of galaxies, each having at least 30 members within the magnitude range m_3 to $m_3 + 2$ (m_3 is the magnitude of the third brightest cluster member) and each with a nominal redshift less than 0.2. The southern data have been collected from a survey of UK 1.2 m Schmidt telescope IIIa-J plates and films and have been reduced to the systems defined by the northern data previously published by G. O. Abell. A revised northern catalog, including Bautz-Morgan types and redshifts where known, is also included.

Subject headings: galaxies: clustering — galaxies: redshifts — galaxies: structure

I. INTRODUCTION AND BACKGROUND

The catalog of rich galaxy clusters by Abell (1958) has been widely used as a source list for studies of the distribution of rich clusters (see, e.g., Abell 1958, 1961, 1975; Rood 1976; Peebles 1980; Thuan 1980; Bingelli 1982; Schmidt 1983; Bahcall and Soneira 1984; Batuski and Burns 1985; Ciardullo, Ford, and Harms 1985; Kalinkov and Kuneva 1986; Tully 1986, 1987; and references therein), cosmological and extragalactic distance scale studies (see, e.g., Sandage 1973; Sandage, Kristian, and Westphal 1976; Hoessel, Gunn, and Thuan 1980; Aaronson et al. 1986; de Vaucouleurs and Corwin 1985, 1986; Buta and Corwin 1986a, b; and references therein), studies of the properties of individual clusters (see, e.g., Noonan 1974; Chincarini and Rood 1976; Smyth 1979; and references therein), studies of the collective properties of clusters (see, e.g., Culhane 1978; Baier 1978; Lari and Perola 1978; Dressler 1978a, b, 1980; Mitchell et al. 1979; Owen et al. 1982; Johnson et al. 1983; Kowalski et al. 1984; Struble and Rood 1987a; and references therein), Galactic extinction studies (Holmberg 1974; de Vaucouleurs and Buta 1983), and other studies.

The original catalog, however, has several drawbacks that have somewhat limited its usefulness. These include (1) sky coverage limited to declinations north of -27° , the original southern limit of the Palomar Sky Survey (hereinafter PSS), (2) serious incompleteness beyond $z = v/c \approx 0.2$ (though many of its included clusters have considerably larger redshifts; see, e.g., Struble and Rood 1987b), (3) possible systematic errors in its magnitude scale (see, e.g., Corwin 1974), (4) cluster populations given only as "richness classes," and (5) listing

The first of these shortcomings is the most serious and has to some extent hampered the progress of extragalactic astronomy and cosmology in the southern sky. This led Abell to propose in 1975 that a "southern rich cluster survey" be carried out on the deep IIIa-J Southern Sky Survey plates being taken by the United Kingdom's 1.2 m Schmidt telescope at Siding Spring in Australia (hereinafter UKST). Consequently, Abell spent a sabbatical year at the Department of Astronomy, University of Edinburgh, and the Royal Observatory, Edinburgh, in order to begin the survey. There, he enlisted Corwin's help for the survey. Abell and Corwin completed about half of the survey before Abell's return to the University of California, Los Angeles, in 1977 and Corwin's return to the University of Texas in 1981. A status report on the survey to that point is given by Abell and Corwin (1983).

It was their intention to finish the survey as soon as possible on the high-quality film copies issued as the UKST IIIa-J portion of the Southern Sky Survey. This was prevented by Abell's untimely death in 1983 October and by Corwin's continuing commitment to the *Third Reference Catalogue of Bright Galaxies* (de Vaucouleurs *et al.*, in preparation). In 1984, G. Chincarini of the University of Oklahoma suggested to Corwin that Olowin might help in the completion of the survey. A joint proposal to the National Science Foundation was submitted and, upon its approval, Olowin finished the remaining portion of the survey on the UKST films.

This paper presents the results of that work, the southern portion of the "Abell catalog" of rich clusters. We also present here a revised and corrected version of the northern

only the richest clusters found by Abell (see, e.g., Einasto, Jôeveer, and Saar 1980).

¹Deceased 1983 October 7.

portion of the catalog. This revision was initially prepared in 1980 under Abell's direction by Katherine Sedwick and Albert Lee, then graduate students in the Department of Astronomy, University of California, Los Angeles. Corrections suggested by Corwin (1972, unpublished), Leir (1976), and Struble and Rood (1987a) have been incorporated in the northern catalog, as have Bautz-Morgan types and redshifts where known (Struble and Rood 1987b).

Throughout this paper, we use the terms "northern cluster," "northern survey," or "northern catalog" to refer to Abell's (1958) catalog of clusters found on the PSS 103a-E plates. The terms "southern cluster," "southern survey," or "southern catalog" refer to the clusters found by us on the UKST IIIa-J plates or copy films and listed here for the first time.

We have reduced the data for the southern clusters to the systems of the northern catalog by means of 275 northern clusters included in the 10° overlap zone $(-17^{\circ} \text{ to } -27^{\circ})$ between the PSS and the UKST. The result is a homogeneous all-sky catalog of rich galaxy clusters, nominally complete to z = 0.2 for clusters with populations of 30 or more galaxies in the magnitude range m_3 to $m_3 + 2.0$, where m_3 is the magnitude of the third brightest cluster member.

We hope that this will be the last such catalog prepared by visual scans of photographic plates, and we urge future investigators to compile cluster catalogs using high-speed microphotometric scanning machines and objective selection criteria. We are aware of two such projects under way using the COSMOS and APM machines in the United Kingdom, another, using the Minnesota APS machine, is being planned. In order to remove the possibility of systematic error from such catalogs, there must be at least three independent compilations of clusters.

II. DATA COLLECTION

a) Edinburgh (Abell and Corwin)

i) Selection of Plate Material

In Edinburgh, Abell and Corwin scanned original IIIa-J plates on a light table with a $3 \times$ wide-field magnifier. The plates were selected from rejected UKST plates stored at the Royal Observatory. Many of these plates were rejected from the UKST because of "cosmetic" flaws (i.e., faint streaks or splotches, unacceptably large numbers of satellite trails, broken glass backing, etc.), but nevertheless have images ($30-40~\mu m$ or less for the faintest stars) and limiting magnitudes ($B \approx 23$) typical of survey quality plates. In a few cases, however, the only available plate for a field had images of substandard quality. These were nevertheless scanned, but were noted as being of poor quality so that they could be later resurveyed on the issued film copies.

Corwin also scanned in Edinburgh a few film copies of fields for which only "accepted" survey plates had been taken (these plates are permanently stored at Siding Spring). These copies were made for the survey by the photo labs of the Royal Observatory, either in Edinburgh or at Siding Spring.

ii) Selection of Clusters

All clusters deemed rich enough to be included in the catalog were marked on the backs of the plates (or on

transparent overlay sheets for the films). Criteria for selection were those adopted for the northern survey (Abell 1958), and were continually checked and recalibrated by scanning fields in the overlap zone. Since the IIIa-J plates show considerably fainter galaxies than the 103a-D red plates taken for the Palomar Sky Survey, the possibility of selecting "rich" clusters that are no more than chance superpositions increases sharply toward the plate limit. Lucey (1983) and Struble and Rood (1987a) estimate that perhaps 25% of the northern Abell clusters are the result of such superpositions. Fesenko (1979a, b, c, and references therein) suggests that the percentage of such illusory clusters is even higher. Since one of the nearest clusters included in the present catalog (A3526, the well-known Centaurus Cluster) may be such a superposition (Lucey, Dickens, and Dawe 1980; Lucey, Currie, and Dickens 1986), we have no reason to doubt that there are many others in the list. The only sure way at present to detect such superpositions is through extensive redshift surveys (either by means of spectroscopy or multicolor imaging) of suspected cluster members.

We also caution that confusion with field stars at low Galactic latitude has limited the number of distant clusters that we have found near the plane of the Milky Way. A few relatively nearby low-latitude clusters are included in the catalog, but the confusion problem means that our list cannot be complete in areas where the star density is high on the plates.

Thus, since the present all-sky catalog is based on purely visual surveys of apparent areal densities of galaxies, it should not be taken as a definitive catalog of rich clusters, but rather as a finding list of apparent rich clusters which need further investigation.

Only two out of 135 northern clusters (in all richness classes) on the overlap zone plates scanned by Corwin (Abell did not scan any plates in the overlap zone) were missed completely, though another seven would not have been included in the southern survey had they not been listed in the northern catalog. The two clusters missed are A503 and A512, both poor clusters in rich star fields. The other seven clusters are all too poor or too close to the Galactic equator to be included in Abell's statistical sample. On the other hand, Corwin found 45 new clusters (and Abell found one cluster at $-26^{\circ}57'$, A3205, in a -30° zone field) with richness classes greater than 0 and redshifts less than the nominal cutoff at z = 0.2. This is a significantly larger number than would be expected if the selection criteria of the two surveys were the same. This, in turn, appears to confirm a suggestion by Huchra (1987, private communication) that the northern catalog is deficient in clusters in its southern-most zones. Olowin, Chincarini, and Corwin (1987) have indeed found significant selection effects in the cluster catalogs. However, Batuski and Bahcall (1988, private communication), taking appropriate measures to define statistically complete, high-Galactic latitude samples, find that the two-point correlation functions for the northern and southern catalogs are virtually identical.

iii) Positions

Celestial coordinates were estimated using overlay grids photocopied onto transparent plastic sheets produced at ESO by Lauberts. Since it was not possible to exactly reproduce the 67".14 mm⁻¹ scale of the plates in the x-axis with the computer-driven plotter used to draw the overlays (Lauberts, private communication), there will be small errors in determining celestial coordinates with these overlays. Comparison of galaxy positions so determined with precise positions from the ESO/Uppsala catalog (Lauberts 1982) shows that these systematic errors rarely exceed 3' (Corwin, de Vaucouleurs, and de Vaucouleurs 1985). Since the cluster centers were chosen visually, we expect their positions to have slightly larger errors than those for objects with well-defined centers. A comparison of the positions of 288 clusters found in two or more fields yielded standard deviations in right ascension \pm 3'.2 and \pm 2'.4 in declination.

Rectangular coordinates for the clusters were measured independently of the celestial coordinates. The rectangular coordinates of the left (east) and bottom (south) crosses at the edges of the plates were also measured so that the cluster coordinates could be referred to them. Because the plates that Abell and Corwin searched are not those used for the issued film copies, these rectangular coordinates are generally not the same as those measured on the films. They are usually close enough, however, to allow unambiguous identification of the clusters on the issued films.

iv) Cluster Classifications

Clusters were classified in the Abell (1965) and Bautz and Morgan (1970) systems. We have not attempted to make Rood and Sastry (1971) classifications; we hope this will be done later by other investigators. We have extended the Abell system (which originally consisted of only two classifications, regular [R] and irregular [I]) to include two intermediate types, RI and IR. Clusters classified RI are characterized by either (a) less overall symmetry of distribution of galaxies within the cluster than regular clusters, but with early-type galaxies still dominating the cluster or (b) strong overall distribution symmetry, but with considerable morphological diversity among the member galaxies. The IR clusters show little symmetry of distribution with early-type galaxies dominating or moderate symmetry with mixed morphology among the member galaxies. Type examples for each class include the Coma Cluster (A1656) as R, the Virgo and Centaurus (A3526) Clusters as RI, the Perseus Cluster (A426) and A1367 as IR, and the Hercules Cluster (A2151) as I.

The Bautz-Morgan system was used in its original form where the magnitude difference between the first and second brightest galaxies in the cluster is the major classification criterion. Uncertainty symbols (a colon or a question mark) have been added to the cluster types where foreground or background contamination confused the appearance of the cluster, where the cluster appeared at the edge of a plate, or where it was so distant as to make classification difficult.

v) Magnitudes and Distances

Estimates of the total V magnitudes of the first, third, and tenth brightest cluster members were made using a step scale of elliptical and lenticular galaxy images. Construction and calibration of the step scale is discussed below in § IV. Use of the step scales was found to be very sensitive to the appearance of the galaxy images. When the appearance of the galaxy image matched that of the images on the step scale, repeated

estimates for the same galaxy seen on the same plate or film are consistent to within ± 0.1 mag. However, spiral galaxies, edgewise galaxies of all types, low-surface-brightness galaxies, and galaxies with extended coronae did not match the images on the step scale, so we had more difficulty estimating their magnitudes. We marked these cases as uncertain and noted the reason for the uncertainty (see Table 7).

Internal mean errors in the magnitudes so estimated by Corwin were found by comparison of the data for the 288 clusters that he found on two or more plates. For the firstranked cluster members, the standard deviation, $\sigma(\overline{m} - m_i)$, is ± 0.32 mag; for the third-ranked members, the standard deviation is ± 0.27 mag; and for the tenth-ranked members, ± 0.28 mag. Much of the scatter comes from the different background densities of the original plates (background densities for fully exposed sky-limited plates ranged from less than 0.5 to more than 1.5). Some of the scatter comes from the selection of the first, third, and tenth brightest galaxies from among the galaxies within the counting radius. Obvious foreground galaxies were always excluded, but foreground objects are often not easily distinguishable from real cluster members. Since Abell found only one cluster in two adjacent fields, we are unable to derive internal errors for his magnitude data. However, Olowin has 42 clusters in common with Abell (Corwin has only three), so we shall be able to derive "external" errors for Abell's southern data (see § VI).

Cluster distances, needed to determine counting radii, were estimated solely from the magnitude of the tenth brightest galaxy. This procedure was adopted to provide consistency with Abell's northern survey and also as a matter of expediency. Based on the work of Leir and van den Bergh (1977), we expect that some combination of all the magnitude estimates for a given cluster will provide a better distance estimate for that cluster. Leir and van den Bergh also used an estimate of the cluster diameter in their distance determination formulation. (We found that the "edges" of the clusters as seen on the UKST plates were too ill-defined to allow consistent diameter estimates to be made. Analysis of ring counts in each cluster could perhaps provide a consistent set of cluster radii on some system [see, e.g., de Vaucouleurs 1948; Noonan 1974; Bahcall 1975; Olowin 1986; and references therein], but would have been beyond the scope of the present survey.) A magnituderedshift relation for our estimates is given below in § VIIc.

vi) Counts

The distance estimated from the magnitude of the tenth brightest cluster member was used to assign a "counting radius" to the cluster. These are the same as the so-called Abell radii used in the northern survey, and the reader is referred to Abell's original discussion for more detail. As in the northern catalog, counts were made in the magnitude interval m_3 to $m_3 + 2$. The counts were made through a transparent film overlay with the counting radii and radial lines dividing the counting areas into octants photographically copied on it.

The internal standard deviation in Corwin's counts is ± 23.4 (after correction for background contamination, and after correction to the system of Abell's northern survey; see §§ III and VIa). As with the magnitudes, we are unable to make an estimate of the internal error in Abell's southern counts, but we will derive an "external" error estimate below in § VIa.

b) Oklahoma (Olowin)

i) Selection of Films

In general, Olowin worked from the issued survey films, though he also searched a few film copies of fields not yet issued. (These copies were made for us by the photo labs of the Royal Observatory, Edinburgh, from survey quality plates.) He attached the films to a Houston Instruments backlit digitizer and also searched for clusters by eye using a $7 \times$ magnifier.

ii) Selection of Clusters

Olowin used the same criteria for cluster selection as did Abell and Corwin; see § IIa(ii).

In the overlap zone, Olowin found 90 new clusters with richness classes of 1 or larger and nominal redshifts less than 0.2, 11 of which are in common with Corwin's list. Again, this is a significantly larger number than would be expected if the selection criteria had been identical to those used by Abell for the northern survey. As mentioned in § IIa(ii) above, Huchra has suggested that there is a dependence on declination in the areal density of clusters in the northern survey. We cannot rule out a similar dependence in the southern survey; because of the high altitude of the overlap zone at Siding Spring $(77^{\circ}-87^{\circ})$, we may have included relatively too many clusters in this zone.

iii) Positions

Once the clusters had been located on the films, the rectangular coordinates of the estimated cluster center were measured with the digitizer. The machine was set to automatically average eight consecutive readings, with the output fed directly to a VAX minicomputer. In addition to the cluster centers, the crosses at the north, west, and east edges of the plates and 20-25 SAO stars were also measured. All measurements were referred to the plate centers as defined by the edge crosses, and a whole plate solution (including radially dependent terms) was made (König 1962; Luyten and La Bonte 1972; and references therein). Though the digitizer has a resolution of 0.025 mm (1".7 at the 67.14 mm arcsec⁻¹ scale of the UKST), the standard deviations in the calculated positions for the standard stars were 16".1 in right ascension, and 19".5 in declination. The large errors are attributed to slight shifting of the films during digitizing since they were not removed from their protective plastic bags. The error in declination is significantly larger than that in right ascension, apparently because of slight internal bias of unknown origin in the digitizer.

iv) Cluster Classifications

Olowin classified the clusters in the same ways as Abell and Corwin (§ IIa[iv]).

v) Magnitudes and Distances

Olowin also used the same step scale that Corwin used for most of his portion of the survey, though some of the fainter images were replaced, and their magnitudes recalibrated, toward the end of the survey. Distance estimates were also made using the same criteria as used by Abell and Corwin.

From 538 multiply observed clusters, internal standard deviations in Olowin's magnitude estimates are ± 0.37 for first-ranked cluster members, and ± 0.25 for both third- and tenth-ranked members. These are similar to the standard deviations for Corwin's magnitude estimates (see § IIIa[v]).

vi) Counts

Again, Olowin followed the same procedures that Abell and Corwin used (§ IIa[vi]). However, the standard deviation (± 17.9) in his counts (again corrected for background and to Abell's northern system) was significantly smaller than that for Corwin's counts.

III. BACKGROUND CORRECTION

Background corrections were made assuming a "universal" luminosity function for "field" galaxies. Since the time of the northern survey, considerable evidence has accumulated that the luminosity function of faint galaxies is the same in all directions in the sky (see, e.g., Brown 1974; 1979; Rainey 1977; Peterson et al. 1979; Karachentsev 1980; Kron 1980; Shanks et al. 1984; Tyson 1984; and references therein). Therefore, we have adopted a "universal" luminosity function from Rainey (1977) and have used it to correct our counts for background contamination.

Rainey's V counts have been corrected for the difference in effective wavelength between V magnitudes and IIIa-J magnitudes, and for the differential k-correction between the two passbands. The counts have also been extrapolated slightly so that we can make background corrections for the most distant clusters that we found. The extrapolation was done using the theoretical k-correction for spiral galaxies in a $q_0 = 0.5$, $\Lambda = 0$ expanding universe model. The theoretical prediction for spirals fits Rainey's data at the faint end better than does the theoretical prediction for ellipticals, perhaps due to moderate evolutionary effects. Thus, for those clusters with $m_3 + 2$ fainter than 21.0, our background correction will be dependent on the model we assumed rather than on Rainey's data. These clusters are too distant to be included in the main catalog, but are included in a supplementary table (Table 6) with many poorer clusters that we also found.

Rather than assume some specific form of the apparent luminosity function, we have simply used linear approximations over different magnitude intervals for computational purposes:

$$\log N(\leq m_v) = 0.596(m_v - 17.0) + 1.335, m_v \leq 17.8;$$

$$\log N(\leq m_v) = 0.529(m_v - 18.5) + 2.182, 17.9 \leq m_v \leq 19.0;$$

$$\log N(\leq m_v) = 0.457(m_v - 19.5) + 2.670, 19.1 \leq m_v \leq 19.8;$$

$$\log N(\leq m_v) = 0.344(m_v - 20.3) + 2.983, 19.9 \leq m_v \leq 20.7;$$

$$\log N(\leq m_v) = 0.250(m_v - 21.5) + 3.327, m_v \geq 20.8;$$
(1)

where $N(\leq m_n)$ is the number of galaxies per square degree

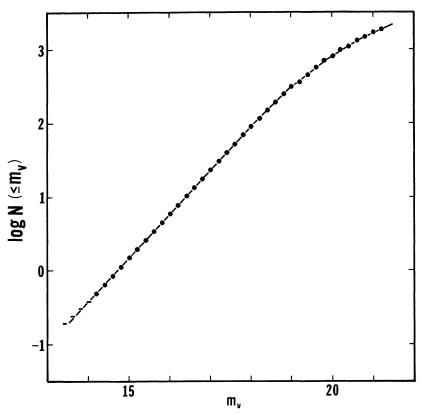


FIG. 1.—Luminosity function for field galaxies. The dots are the calculated points from Rainey (1977), corrected for the difference in effective wavelength between V and IIIa-J magnitudes and for the differential k-correction between the two passbands. The dashes represent uncertain data. The lines are the linear representations over specific magnitude ranges that we used for computing the background correction.

TABLE 1
Areas within Counting Diameters

					I	DIAMETER	(mm)				
	9	14	18	22	30	36	45	60	90	120	180
Diameter (arcmin) Area (arcmin ²)			20.1 317	24.6 475	33.6 887	40.3 1276	50.4 1995	67.1 3536	101 8012	134 14100	201 31730

brighter than magnitude m_v . The actual data used, along with these linear fits, are shown in Figure 1.

The number of "field" galaxies within the counting area (defined by the "Abell" radii) is then just

$$C_f = [N(\le m_3 + 2)] \left(\frac{A}{3600} \right),$$
 (2)

where $N(\leq m_3+2)=N(\leq m_v)$ is from equations (1) above and A is in square arcminutes from Table 1. The corrected counts are then

$$C_r(c) = C_r - C_f, (3)$$

where C_r are the raw counts.

IV. CONSTRUCTION AND CALIBRATION OF THE STEP SCALES

Step scales of galaxy images ("flyspankers") were constructed from cosmetically defective film copies of IIIa-J plates. Elliptical or early lenticular galaxy images of moderate ellipticity were chosen, mounted side by side and arbitrarily numbered with lower numbers representing brighter images. (A similar step scale is shown by Dressler 1980.) Abell used a different step scale than did Corwin, but both calibrated the step scales against the same galaxies as explained below. Corwin's step scale (the first constructed by Abell) proved unsatisfactory in its middle range as several galaxies did not match the appearance of typical cluster objects, so Corwin constructed a third step scale from a film copy of the Virgo Cluster plate used for calibration (see below). This step scale was used for most of the survey by both Corwin and Olowin.

Abell also constructed step scales of spiral and edgewise galaxies, but these were found to be of little use for the following reasons: (1) It is difficult to distinguish morphological types for galaxies fainter than about V=17 on the UKST plates. This made construction of the faint end of the spiral step scale difficult. (2) Virtually no accurate photometry for faint spiral galaxies existed in the southern hemisphere at the time of the step scale's construction (1976). This meant that accurate calibration of the faint end of the step scale would be impossible. (3) While many clusters have first- or thirdranked members that are spirals or spindles (edgewise galaxies), very few clusters have enough such objects dominating at the level of the tenth-ranked galaxy to make the use of a spiral or edgewise step scale necessary. Without introducing large errors in the finally adopted distances (our only use for the magnitude estimates of the tenth-ranked objects), we could usually choose elliptical or lenticular galaxies as the tenth brightest member.

Abell and Corwin calibrated the arbitrary steps of their step scales against magnitude using an original IIIa-J plate (J2137) of the central part of the Virgo Cluster. Accurate total V magnitudes derived from photoelectric photometry were taken from de Vaucouleurs and Head (1978) for most galaxies in the field brighter than V=13, and for many fainter objects

as well. Similar total V magnitudes for other galaxies in the field were derived by Corwin using observations from Sandage (1972) for galaxies in A1553, and by Corwin (1980, and unpublished McDonald observations) for several other galaxies in the Virgo Cluster as well as behind it. A few additional calibrating galaxies were chosen from the Indus Supercluster fields and from A2670, all photoelectrically measured by Corwin (1980).

The faint end of the step scale was calibrated using magnitudes of globular clusters and stars around M87 (Hanes 1975). Since all of the globular clusters are completely stellar in appearance, and since they are seen against the faint outskirts of M87, use of their magnitudes and the magnitudes of stars to calibrate galaxy images will introduce systematic errors in the calibration. In addition, the colors of the Galactic foreground stars and the M87 globulars are on average bluer than the colors of most of the faint cluster galaxies.

Therefore, we checked the calibration of the faint end of our step scale against magnitudes for very faint stars and galaxies observed electrographically by Hawkins (1981). While Hawkins compares his B magnitudes with ours, he does not show the V magnitude comparison which interests us here. This comparison, shown in Figure 2, suggests that our calibration has no large errors except for the known effect of color.

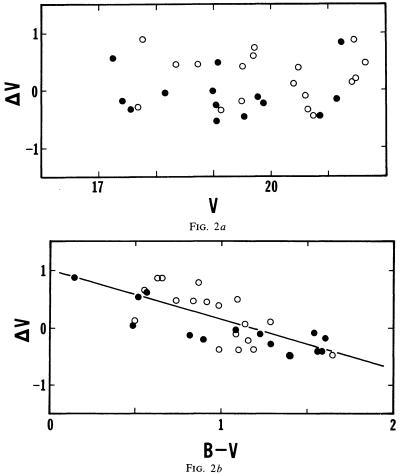


FIG. 2.—(a) Comparison of Hawkins's (1981) electrographic V magnitudes with step scale V magnitude estimates. (b) Correlation of Hawkins's (1981) B-V electrographic colors with V magnitude differences (electrographic minus step scale). The solid points are data for stars; the open points are for galaxies.

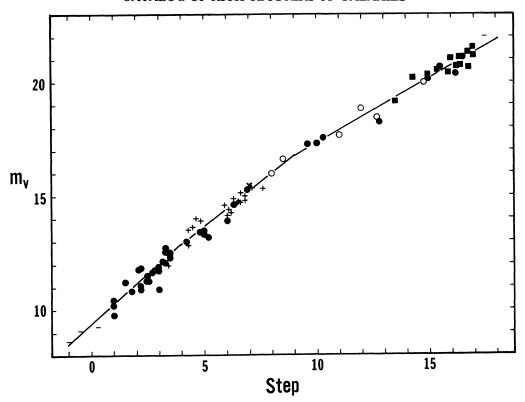


FIG. 3.—Step scale calibration example. The lines show the adopted calibration for Corwin's step scale. Filled circles are data for Virgo Cluster galaxies, plus signs are data for Indus Supercluster galaxies, the cross is for a galaxy in Abell 2670, open circles are for field stars around M87, filled squares are for globulars around M87, and short dashes are uncertain data.

The impartial line shown in Figure 2b,

$$V_{\rm EG} - V_{\rm S} = \begin{array}{l} +0.064 - 0.875 \left[(B - V)_{\rm EG} - 1.0 \right], \ \sigma = \pm 0.260 \\ \pm 0.047 \pm 0.107 \end{array}$$
(4)

applies to all 32 objects in common between the two samples (the "EG" subscripts refer to Hawkins's electrographic data, and the "S" subscript to our step scale data). However, for the eight galaxies with B-V>1.0, the mean residual is -0.114 ± 0.114 (s.d. $=\pm0.323$). Since we expect that most of our cluster galaxies will have B-V color indices larger than 1.0, we have made no corrections to our V magnitude estimates. Nevertheless, we caution users of the southern catalog that our magnitude estimates are probably more uncertain at m>18 than for brighter objects because of our reliance on stars and globular clusters for the calibration at these faint magnitudes.

Olowin recalibrated the step scale against a film copy of the same IIIa-J Virgo Cluster plate that Abell and Corwin used. His calibration differed only slightly in zero point (see § V) and was adopted as the final magnitude system for the southern survey as his data constitute nearly 60% of the survey data.

As an example of our calibration curves, the final adopted calibration for Corwin's second step scale is shown in Figure 3.

V. COMPARISON OF THE EDINBURGH AND OKLAHOMA SURVEYS

After all the fields were scanned, the cluster data were collected and reduced to a common magnitude system by comparing Olowin's Oklahoma data with Corwin's Edinburgh data. The counts were directly reduced to the system of the northern survey as discussed below in § VI.

A preliminary comparison of the magnitude estimates for the tenth-ranked members in the 45 northern Abell clusters in common between Corwin's and Olowin's lists showed only a marginally significant zero-point difference of 0.13 ± 0.08 (mean error), in the sense that Corwin's estimates are systematically brighter than Olowin's. Therefore, all Corwin's estimates were corrected by +0.1. We attribute this small difference to the fact that the sky background was always denser on the original plates scanned by Corwin than on the films scanned by Olowin.

A test of the magnitude residuals for all 201 clusters in common after this correction (see Fig. 4) showed that Olowin's estimates for the first-ranked galaxies were 0.19 ± 0.04 mag brighter than the means, while Corwin's estimates were 0.12 ± 0.03 fainter. While these are significant differences, the fact that the third- and tenth-ranked estimates did *not* show any significant differences ($\langle \Delta m_3[O] \rangle = 0.00\pm0.03$, $\langle \Delta m_{10}[O] \rangle = -0.03\pm0.02$, $\langle \Delta m_3[C] \rangle = 0.00\pm0.02$, and $\langle \Delta m_{10}[C] \rangle = +0.03\pm0.02$) has persuaded us to make no further correction to the magnitudes for the first-ranked galaxies. The large magnitude difference for the first-ranked members is possibly

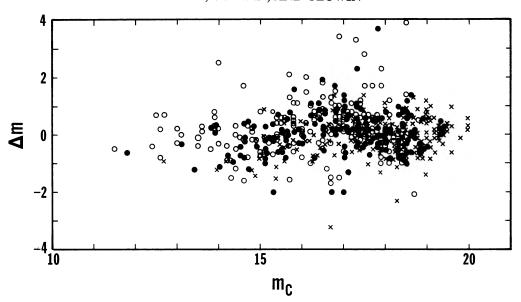


FIG. 4.—Comparison between Corwin's and Olowin's magnitudes for 201 clusters in common. The open circles are data for the first-ranked cluster members, the filled circles are for the third-ranked members, and the crosses are for the tenth-ranked members. Δm is m_c minus m_0 .

due to foreground contamination: that is, Olowin and Corwin apparently often selected different galaxies as first-ranked cluster "members," one or the other of which may be a foreground galaxy.

The standard deviations in the residuals from the means for the third- and tenth-ranked objects are also smaller than those for the first-ranked galaxies. For Olowin's data, the standard deviations are ± 0.60 (first), ± 0.36 (third), and ± 0.30 (tenth); for Corwin's data, the standard deviations are $\pm 0.46, \pm 0.35,$ and ± 0.34 , respectively. (Considering the differences in the sample sizes, these numbers are reasonably consistent with the internal standard deviations found in § II.) Thus, we must caution users of the catalog that the magnitudes of the first-ranked galaxies are probably not suitable for use as distance indicators. We have, of course, not used them in this way.

We have also compared Abell's southern data for the 45 clusters he has in common with Olowin and Corwin. For the counts, a triangular comparison of the residuals yields $\sigma(\text{Abell}) = \pm 12.1$, $\sigma(\text{Corwin}) = \pm 20.0$, and $\sigma(\text{Olowin}) = \pm 13.9$. These are not in agreement with counts for the northern samples (§ VIa) because of the small numbers of clusters in common in the south (Abell and Olowin have 42 clusters in common, while Abell and Corwin have just three clusters in common). They are also obviously very uncertain, again because of the small numbers of clusters in common to the different lists. We found no dependence on magnitude in Abell's southern counts, nor did we find a dependence in the residuals on the counts themselves.

We did, however, find a magnitude-dependent correction in Abell's southern magnitude estimates when compared with Olowin's and Corwin's estimates. Figure 5 shows an apparent discontinuity at $m_A(\text{south}) = 15.0$. We have corrected Abell's data to Olowin's scale using simple zero point shifts:

$$m_{\text{OC}} = m_{\text{A}} + 0.7, \qquad \text{s.d.} = \pm 0.5, \qquad m_{\text{A}} < 15.0,$$

$$m_{\text{OC}} = m_{\text{A}} - 0.5, \qquad \text{s.d.} = \pm 0.55, \qquad m_{\text{A}} > 15.0. \quad (5)$$

We do not know the source of the discontinuity in the magnitude scales.

VI. COMPARISON OF THE NORTHERN AND SOUTHERN SURVEYS

In order that the present survey be as homogeneous as possible with the northern survey (Abell 1958), we treated the northern Abell clusters in the overlap zone as newly discovered clusters, estimating magnitudes and counts in the same manner as for the "new" southern clusters. Here, we compare counts and magnitudes with Abell's northern data in order to derive formulae that will reduce the new data to the systems of the northern catalog.

a) Counts

Figure 6 shows the residuals between Corwin's counts and Abell's northern counts as a function of the magnitude (m_3) of the third brightest cluster member for 166 clusters in common. Three more or less distinct zones are set off in the figure, which also shows the adopted relations between the two sets of counts:

$$\begin{split} C_{\rm C}({\rm fc}) &= C_{\rm C}({\rm c}) - 30, \qquad m_3 \le 13.5; \\ C_{\rm C}({\rm fc}) &= C_{\rm C}({\rm c}) - 2 + 17.7 (m_3 - 16.5), \\ &\pm 3 \pm 3.4 \end{split}$$

$$13.5 \le m_3 \le 17.4, \qquad {\rm s.d.} = \pm 27; \\ C_{\rm C}({\rm fc}) &= C_{\rm C}({\rm c}) - 5, \qquad m_3 \ge 17.5, \qquad {\rm s.d.} = \pm 30; \quad (6) \end{split}$$

where $C_{\rm C}(c)$ are the background corrected counts from equation (3), and $C_{\rm C}({\rm fc})$ are the fully corrected counts in Abell's northern system.

Figure 7 shows a similar plot for 158 Abell clusters counted by Olowin. The four residuals shown as dashes have been

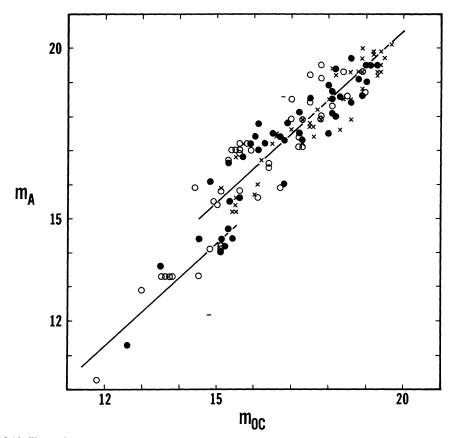


FIG. 5.—Comparison of Abell's southern magnitudes with Olowin's and Corwin's. The lines show the adopted corrections; the other symbols are the same as those in Fig. 4. The short dashes represent rejected data.

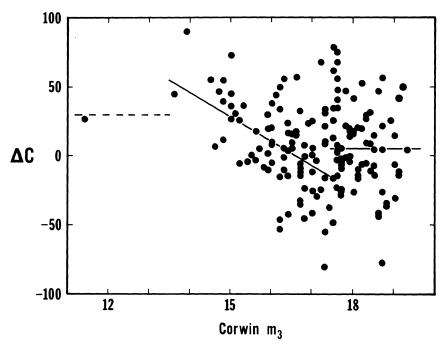


Fig. 6.—Corwin's corrected counts minus Abell's corrected northern counts versus m_3 . The lines show the adopted corrections; the filled circles represent the data.

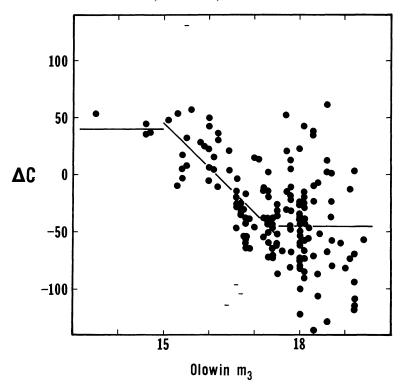


Fig. 7.—Olowin's corrected counts minus Abell's corrected northern counts versus m₃. The symbols are the same as in Fig. 6, except for the short dashes which represent rejected data.

rejected from the comparison. The adopted relations are

$$C_{\rm O}({\rm fc}) = C_{\rm O}({\rm c}) - 40, \qquad m_3 \le 15.0, \qquad {\rm s.d.} = \pm 8;$$

$$C_{\rm O}({\rm fc}) = C_{\rm O}({\rm c}) + 13 + 38.8 (m_3 - 16.5),$$

 $\pm 3 \pm 3.9$

$$15.0 \le m_3 \le 17.5$$
, s.d. $= \pm 23$;

$$C_{\rm O}({\rm fc}) = C_{\rm O}({\rm c}) + 45, \qquad m_3 > 17.5, \qquad {\rm s.d.} = \pm 43. \quad (7)$$

The differing zero points for the bright and faint clusters, and the strong slopes for the clusters of intermediate brightness, are most likely due to the different magnitude systems used for the two surveys ($\S VIb$).

We derived final errors in the counts in the following manner. The standard deviation in the counts (after correcting Corwin's counts via eq. [6]) within the Corwin-Abell (north) sample is ± 28.1 . For the Olowin-Abell (north) sample (Olowin's counts corrected via eq. [7]), the standard deviation in the counts is ± 33.6 . For the 42 clusters in the overlap zone in common between Corwin and Olowin, the standard deviation in the fully corrected counts is ± 41.1 . Therefore, a triangular comparison of these fully corrected counts gives $\sigma(\text{Abell north}) = \pm 10.7$, $\sigma(\text{Corwin}) = \pm 26.0$, and $\sigma(\text{Olowin})$ $=\pm 31.8$. However, a better indication of the true errors in the corrected counts is probably given by comparison of the total sample (including the 42 northern clusters) of 201 clusters in common between Corwin and Olowin. When this sample is used, the triangular comparison yields $\sigma(Abell)$ north) = ± 25.7 , $\sigma(Corwin) = \pm 11.3$, and $\sigma(Olowin) = \pm 21.6$.

These external errors are in agreement with the previously derived internal errors (§ IIb[vi]) only for Olowin's counts. There are obviously too few clusters in Abell's southern sample to derive a meaningful standard deviation for his data, and the implication of an external error in Corwin's counts of less than half the internal error is also not realistic. Therefore, we have finally adopted a mean of the southern and northern comparisons, assuming that the standard deviations in Abell's northern and southern counts are the same. The triangular comparison then gives $\sigma(Abell north and south) = \pm 19$, $\sigma(Corwin) = \pm 17$, and $\sigma(Olowin) = \pm 18$. These are obviously uncertain, but suggest that the errors in the counts of the three observers are about the same. Therefore, we adopt a final standard deviation of ± 18 for our southern counts and subject to confirmation—Abell's northern counts as well.

Since the mean number of galaxies in a rich cluster in the southern list is 60 (compared with 64 for the northern list), the standard deviation derived in the previous paragraph corresponds to uncertainties of 30% in the south and 28% in the north. These are significantly larger than the 17% internal uncertainty found by Abell for the northern survey. Considering the comparison here of an "external" with an "internal" uncertainty, and considering also the differences in plate material, counting techniques, magnitude scales, number of observers, etc., a somewhat larger error for the southern counts would not be unexpected.

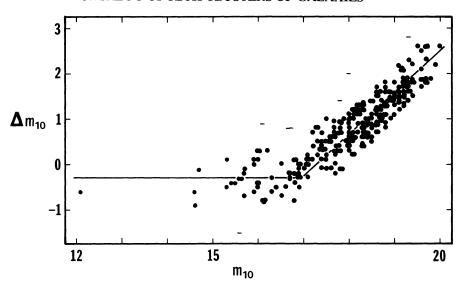


FIG. 8.—Corwin-Olowin southern m_{10} minus Abell northern m_{10} versus Corwin-Olowin southern m_{10} . The short dashes represent uncertain data. The solid lines are the adopted relations.

The size of the difference is larger than we expected, however. We suggest (without proof) that our use of a "universal" luminosity function to compute the background corrections has led to much of the difference. Abell (1958) used counts near each cluster to find background corrections for the northern clusters. These "local" corrections are probably much more appropriate for the counts than are corrections from an all-sky luminosity function, given the uneven nature of the distribution of the galaxies (see, e.g., Shane and Wirtanen 1967; and de Vaucouleurs 1971).

Another indication of the inappropriateness of the use of the "universal" background correction is seen in the negative corrected counts for many of the poorer clusters that we found (see Table 5). Since these groups and clusters were selected as density enhancements above the *local* background, we expect that local background counts would show them to have a positive number of member objects, in accord with our visual impressions.

Odewahn (1987, private communication) has suggested that the faint, diffuse background light seen in many of the clusters (see § VIII) may have led to uncertainties in the magnitude estimates and therefore in the counts. This may have had a "second-order" effect on the magnitudes and counts, but we have no ready way of testing for it with the present data.

b) Magnitudes

As explained in § IV, the magnitudes estimated in the southern survey are total V magnitudes, rather than red magnitudes as estimated by Abell for the northern clusters. Also, the southern magnitudes were estimated on IIIa-J plates and film copies, so there will be a second color term in any comparison made between the two systems. The differential k-correction between the two passbands will add yet another color term to the relationship. However, because the k-term ensures that the colors of elliptical and lenticular galaxies are correlated with redshift (thus with distance and magnitude

itself), any color terms will be absorbed into the magnitude scale terms in the following comparison.

We have, however, removed the Galactic latitude correction from the northern magnitudes and have made the small correction to bring Corwin's magnitude estimates into Olowin's system (§ V).

Figure 8, the comparison of the m_{10} values, clearly shows the increased sensitivity of the IIIa-J emulsion to redshift. For clusters with $m_{10} \ge 17.0$,

$$m_{10}(N) = m_{10}(S) - 1.12 - 0.91 [m_{10}(S) - 18.5],$$

 $\pm 0.15 \pm 0.03 [m_{10}(S) - 18.5],$
s.d. = ± 0.28 . (8)

Since the slope is so close to 1.0, the northern magnitude estimates apparently have almost no correlation with distance for $m_{10}(N) > 17$. The low redshift resolution of the northern survey explains why many of the clusters are being found to have redshifts beyond the nominal cutoff at z = 0.2 (see Struble and Rood 1987b).

For the clusters with m_{10} brighter than 17.0,

$$m_{10}(N) = m_{10}(S) + 0.30, \quad \text{s.d.} = \pm 0.31.$$
 (9)

After the corrections of equations (8) and (9) were made, the revised magnitude residuals were once again checked. A residual zero point of -0.24 mag ($m_{10}[S]$ too bright) was found and corrected. We also searched for but found no systematic effects in these final residuals dependent on magnitude, richness, or Galactic latitude.

Finally, the corrected southern magnitudes were further corrected for Galactic extinction using Abell's (1958) formula

$$m_{10}(c) = m_{10} - 0.136(|\csc b| - 1).$$
 (10)

The southern magnitudes so reduced are listed in the catalog

for comparison with the northern catalog only. As explained above, the southern magnitudes are preferred for redshift estimates.

VII. RICHNESS AND DISTANCE CLASSES AND A MAGNITUDE-REDSHIFT RELATION

a) Richness Classes

We have adopted Abell's (1958) richness classes for the southern clusters. (For convenience, Abell's table of count versus richness class is copied here as Table 2A.) We note that Abell's original goal was to produce a "statistical" sample of rich clusters with more than 50 member galaxies in the magnitude interval m_3 to $m_3 + 2$. We stress that while we may have achieved this statistical goal (this assertion needs to be tested with a machine-selected sample of rich clusters), we nevertheless strongly urge that the counts given here, even for the northern clusters, not be used in studies of individual clusters. Detailed luminosity functions corrected for the local background will have to be used to derive accurate counts.

b) Distance Classes

Even though the magnitudes for the northern clusters have almost no correlation with distance for $m_{10}(N) > 17.0$, we have still used the southern magnitudes converted to the northern scale for distance class determination. We do this for

consistency with the northern survey. Table 2B repeats Abell's (1958) table of distance class versus magnitude.

c) Magnitude-Redshift Relations and Cluster Redshifts

From a consideration of a mean cluster luminosity function (Abell 1976, and references therein), the k-correction, and the differences between the IIIa-J bandpass and the standard B

TABLE 2A
CLUSTER POPULATIONS AND RICHNESS CLASSES

Population	Class	Population	Class
30–49 50–79 80–129		130–199 200–299 300 or more	

TABLE 2B MAGNITUDES AND DISTANCE CLASSES

<i>m</i> ₁₀ (c)	Class	<i>m</i> ₁₀ (c)	Class
<13.3	0	15.7–16.4	4
	1	16.5–17.2	5
	2	17.3–18.0	6
	3	>18.0	7

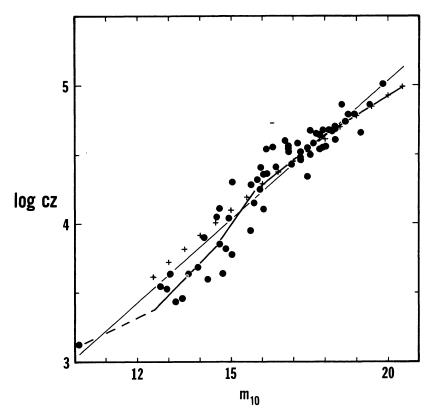


FIG. 9.—Magnitude-redshift relations. The dots are data for the Abell clusters in the overlap zone or for nearby southern clusters, with known redshifts. The thin line is a linear magnitude-redshift relation with a slope of 5. The solid and dashed lines are the empirical relationships over different magnitude ranges. The plus signs represent a magnitude-redshift relation calculated from northern hemisphere data corrected to the magnitude system of the southern survey.

and V bandpasses, Abell derived the magnitude-redshift relation shown in Figure 9. Figure 9 also shows a linear magnitude-redshift relation fit to Abell's at $m_{10} \approx 17.0-17.5$. Finally, Figure 9 displays data for the northern clusters measured on IIIa-J plates/films in the overlap zone and our adopted magnitude-redshift relation.

As a check of this adopted relation, we have also plotted the data for the nearer southern clusters with known redshifts. There is a significant departure in the same sense as is seen for the bright galaxies in the southern hemisphere (see, e.g., de Vaucouleurs 1958; de Vaucouleurs and Peters 1985; Dressler et al. 1987; and references therein): the redshifts are lower than the adopted magnitude-redshift relation would predict. The effect is clearly significant, and is larger than any allowable uncertainty in our magnitude calibration at the bright end.

Therefore, before searching for cluster redshifts for the southern clusters, we derived an empirical magnitude-redshift relation from the data shown in the figure. Again, we prefer not to fit a single arbitrary function to the data, but use instead straight line segments over limited magnitude ranges (the data for A2359, shown as a dash in Fig. 9, were omitted):

log
$$cz = 0.108 [m_{10}(S) - 11.5] + 3.26, m_{10}(S) \le 12.5,$$

$$\log cz = 0.23 \left[m_{10}(S) - 13.5 \right] + 3.595,$$

$$12.5 < m_{10}(S) \le 14.5$$
,

$$\log cz = 0.324 [m_{10}(S) - 15.25] + 4.07,$$

$$14.5 < m_{10}(S) \le 15.75$$
,

$$\log cz = 0.18[m_{10}(S) - 17.0] + 4.46,$$

$$15.75 < m_{10}(S) \le 18.0$$
,

log
$$cz = 0.14[m_{10}(S) - 19.5] + 4.85, m_{10}(S) > 18.0.$$
(11)

These empirical relationships are shown in Figure 9.

The range about these linear relationships is roughly ± 0.3 in log cz. Therefore, in our searches for redshifts, we adopted the following restrictions: if a redshift for a galaxy within one Abell radius of the center of the cluster is more than ± 0.6 in log cz away from the nominal redshift predicted by equations (11), we assume the galaxy to be either a foreground or a background object. Those objects with redshifts in the range ± 0.3 to ± 0.6 in log cz from the nominal redshift are considered as possible cluster members; if there are no other redshifts for galaxies in the area of the cluster, then these redshifts are enclosed in parentheses in Tables 4–6 to call attention to their uncertainty. We suspect that most of these redshifts will, upon further examination, turn out to apply to foreground or background objects.

VIII. THE ABELL CATALOG OF RICH GALAXY CLUSTERS

Tables 3 and 4 give data for 4073 clusters of galaxies meeting our criteria for "rich clusters within z = 0.2," that is,

the so-called Abell clusters. The adjective "rich" has the same meaning as in Abell (1958) and in the above discussion: at least 30 cluster members in the magnitude range m_3 to $m_3 + 2$. With the mean error of ± 18 in the counts of cluster members, our catalog should be "complete" for clusters with 50 or more members in that magnitude range.

Table 3 is the revised northern "Abell catalog" in essentially the same form that it has been distributed in by Abell and his colleagues at UCLA since 1980. However, the coordinates are now for the equinoxes 1950 and 2000, the precession and cluster diameters have been omitted, the redshifts have been updated from Struble and Rood (1987a), and Bautz-Morgan types have been added from Leir and van den Bergh (1976) (or from other sources given below if not listed by Leir and van den Bergh). The northern catalog has also had all known errors corrected (Struble and Rood 1987a; Leir 1976 as reported by Struble and Rood 1987a; and Corwin 1972, unpublished).

The columns are as follows:

Column (1).—Abell number, 1 to 2712, numbered in order of right ascension for 1855.0, the original equinox of the northern catalog.

Columns (2) and (3).—Right ascension and declination for the equinox 1950.0.

Columns (4) and (5).—Right ascension and declination for the equinox 2000.0.

Columns (6) and (7).—Galactic longitude and latitude calculated from the 1950.0 equatorial coordinates.

Columns (8) and (9).—Rectangular coordinates (in millimeters, computed with respect to the southeast corners) on the Palomar Sky Survey prints from Sastry and Rood (1971), who give additional information, also, the PSS field number and alternate rectangular coordinates if the cluster appears in more than one field.

Column (10).—Cluster classification in the Bautz-Morgan system (Bautz and Morgan 1970). For the northern Abell catalog, these types are primarily from Leir and van den Bergh (1977). Other sources for the northern catalog are Bautz and Morgan (1970), Bautz (1972), Corwin (1974), Sandage, Kristian, and Westphal (1976), Kristian, Sandage, and Westphal (1978), and White (1978).

Column (11).—Background-corrected count of cluster members in the magnitude range m_3 to $m_3 + 2$.

Column (12).—Cluster redshift from Struble and Rood (1987b).

Columns (13), (14), and (15).—Richness and distance classes and m_{10} , the red magnitude of the tenth brightest cluster member, all from Abell (1958).

Finally, we refer users of the northern catalog to Struble and Rood (1987a), who give valuable and extensive notes for the northern clusters.

The information for the clusters found during the southern survey is given in Tables 4–6. The columns on the left-hand side of the page are as follows:

Column (1).—Abell number, 2713 to 4076, for the southern rich clusters (Table 4), numbered in order of 1950 right ascension. (When the notes to these tables were being prepared, three duplicate entries were found in Table 4: A3208 = A3207, A3833 = A3832, and A3897 = A2462.) Table 5 lists

the supplementary southern clusters not rich enough or too distant for inclusion in the main catalog. These are numbered from S1 to S1174, also in order of right ascension. Table 6 includes data for northern clusters found on IIIa-J UKST plates and films in the 10° overlap zone (-17° to -27°).

Columns (2) and (3).—Right ascension and declination for equinox 1950.0 of the apparent cluster center. When the cluster was found in more than one field, a mean position is listed. As explained in §§ IIa(iii) and IIb(iii) above, Abell and Corwin used overlays positioned with respect to SAO stars to estimate the position, while Olowin calculated positions from his measured rectangular coordinates. Thus, Olowin's positions were given double weight when means were taken.

Columns (4) and (5).—Right ascension and declination of the apparent cluster center precessed to the equinox of 2000.0.

Columns (6) and (7).—Galactic longitude and latitude calculated from the 1950.0 equatorial coordinates.

Column (8).—Southern Sky Survey Field Number in which the cluster is located. For clusters found in two or more fields, the field given is the one in which the cluster is closest to the plate center.

Column (9).—Rectangular coordinates in millimeters of the apparent cluster center, referred to the center of the Southern Sky Survey Field given in the previous column. The field centers are defined by the crosses near the edges of the plates. The positive x-direction is to the east (left) and the positive y-direction is to the north (top). These are in the same sense as the rectangular coordinates given by Lauberts (1982) in the ESO/Uppsala Catalog, and are listed to facilitate location of the cluster on the 5°×5° ESO 1.0 m Schmidt portion of the Southern Sky Survey. Abell and Corwin measured rectangular coordinates from the left and bottom edges of the plates, so the x_{cen} and y_{cen} from their data are calculated assuming that the plate center is 164 mm from the left and bottom crosses on the plates (they also measured the crosses). Olowin referred his rectangular coordinates directly to the plate center as defined by the crosses, so no transformation is necessary for his data.

Column (10).—Rectangular coordinates of the apparent cluster center, referred to the southeast (lower left) edge of the Southern Sky Survey Field given in column (8). The field edges are defined by the crosses near, but not at, the edges of the plates; thus, it is possible for these coordinates to be negative. Olowin's data were transformed assuming that the plate center is 164 mm from the crosses.

The columns on the right-hand side are:

Column (1).—Abell number, repeated.

Column (2).—Cluster classification in Abell's (1965) system: I, irregular; R, regular; IR and RI, intermediate. A colon indicates a mean type, with differences between estimates of two steps, or an uncertain type estimate; a question mark indicates a mean type, with differences between estimates of three steps, or a questionable type estimate.

Column (3).—Classification in the Bautz-Morgan system (Bautz and Morgan 1970) from the UKST. A colon indicates a mean type, with differences between estimates of two steps, or an uncertain type estimate; a question mark indicates a mean type, with differences between estimates of three or more steps, or a questionable type estimate.

Column (4).—Number of cluster members between m_3 and $m_3 + 2$, corrected for background contamination using the "universal" luminosity function from Rainey (1977). The southern counts are corrected to the system of the northern catalog (see § VIa).

Column (5).—Weighted mean total apparent V magnitude estimate for the first-ranked cluster member. No Galactic extinction correction has been applied. A colon indicates a mean magnitude, with a standard deviation of more than ± 0.5 mag, or an uncertain magnitude estimate. A question mark indicates a mean magnitude, with a standard deviation of more than ± 1.0 mag, or a questionable magnitude estimate. An asterisk indicates that the magnitude estimate is for a known or probable foreground object.

Column (6).—Weighted mean total V magnitude estimate for the third-ranked cluster member, again uncorrected for Galactic extinction. Uncertainty symbols as for m_1 .

Column (7).—Weighted mean total V magnitude estimate for the tenth-ranked cluster member, again uncorrected for Galactic extinction. Uncertainty symbols as for m_1 .

Column (8).—Number of fields in which the cluster was found, and the observer's initial (A, Abell; C, Corwin; O, Olowin).

Column (9).—Sources of previous data listings for the clusters: B, Braid and MacGillivray (1978); D, Duus and Newell (1977), d, Dressler (1980); K, Klemola (1969); O, Olowin (1987); Q, Quintana and White (1980 and private communication); R, Rose (1976); S, Sersic (1974); and s, Snow (1970). Even though all questionable cases of cross identification were checked on the Southern Sky Survey, there remain a few uncertain cases. These are given in Table 7. Duus and Newell (1977) give references to all lists of southern groups and clusters published previous to their compilation, including several shorter lists not referred to here.

Column (10).—Cluster redshift from the list by Struble and Rood (1987b, for the northern Abell clusters in Table 6), from Huchra's 1986 collection of published redshifts (Huchra, private communication), and from Fairall (1985), Corwin (1981; see also Corwin and Emerson 1982), Couch and Newell (1984 and private communication), Noonan (1981), and Spinrad (private communication). The redshift is in parentheses if it is between 0.3 dex and 0.6 dex from the expected redshift for the cluster's m_{10} (see § VIIc). Cluster redshifts from Huchra's list and from Fairall (1985) were determined by selecting all galaxies with known redshifts within one Abell radius of the cluster center, rejecting discordant redshifts, and averaging the remainder.

Column (11).—Richness class as defined by Abell (1958).

Column (12).—Distance class from m_{10} (col. [13], right-hand side). See § VIIb for details.

Column (13).—Magnitude for the tenth-ranked cluster member in Abell's (1958) system (from eqs. [8] and [9], corrected for Galactic extinction following Abell's formula, eq. [11]).

Most of the southern clusters have notes. These are given in Table 7 for the clusters listed in Tables 4-6. Notes for Olowin's clusters are given in upper case type, while Abell's and Corwin's notes are given in lower case type. Olowin's notes often refer to quadrants relative to the cluster or plate centers. These quadrants are numbered from 1 to 4 in a

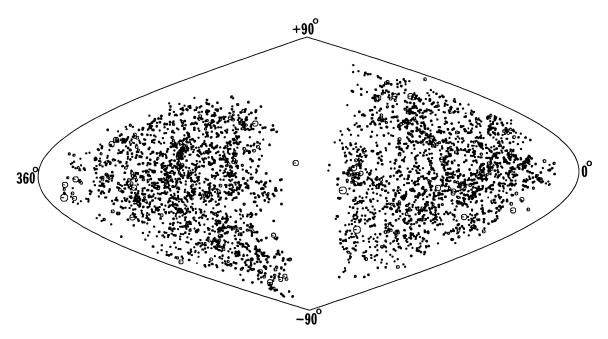


FIG. 10.—All-sky distribution of the 4073 Abell clusters in supergalactic coordinates. The symbol size has been scaled by distance class: the nearest (distance class 0) clusters are represented by large open circles, while distance class 7 clusters are shown as small dots.

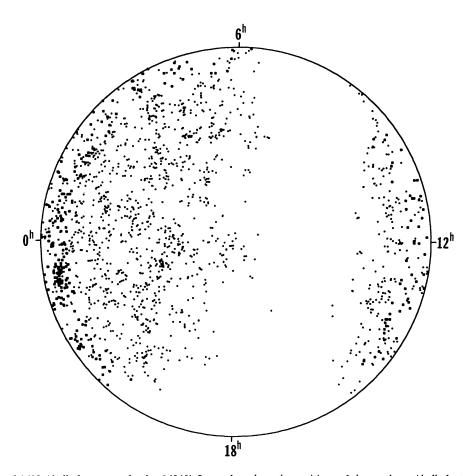


FIG. 11.—Distribution of 1638 Abell clusters south of $-16^{\circ}45'$. Large dots show the positions of the northern Abell clusters between $-16^{\circ}45'$ and -27° ; small dots show the positions of the 1360 southern Abell clusters, including the "new" clusters in the overlap zone. The projection is centered on the south celestial pole.

counterclockwise direction, with quadrant 1 to the northwest of the cluster or plate center.

We also note that many of the clusters in the catalog have a very faint background light, typically diffused throughout the central area of the cluster. This background glow has been previously noted by Zwicky (1952, 1957) and has been measured in the Coma Cluster (A1656) (e.g., de Vaucouleurs and de Vaucouleurs 1970; Gunn and Melnick 1975) and in other clusters (e.g., Baum 1973). The high-contrast, fine-grain UKST IIIa-J plates detect this background light readily. As noted above (§ VIa), this background light may have had a small effect on our magnitude estimates and counts.

The distribution of the 4073 Abell clusters is shown in Figure 10, with those south of $-16^{\circ}45'$ shown in Figure 11. The distribution will be studied in detail by Chincarini *et al.* (in preparation).

Figure 12 is an all-sky integrated "luminosity function" for the rich clusters, with Figure 13 showing only the northern data, and Figure 14 the southern. Figure 14a uses our V magnitude estimates, while Figure 14b uses these estimates converted to Abell's northern system (using eqs. [8] and [9]). Figure 14b suggests that equations (8) and (9) over-correct our magnitudes at the limit of the survey.

IX. DISTRIBUTION OF THE CATALOG DATA

Magnetic tape copies of the main data tables (Table 3-6) listed here are available from the NASA Astronomical Data Center in Greenbelt, Maryland, and from the Stellar Data

Center in Strasbourg, France. The tapes may be obtained by completing a copy of the request form published in the latest issues of the Astronomical Data Center Bulletin and the Bulletin d'Information du Centre de Données Stellaires (or by sending a letter with tape specifications—density, internal coding [ASCII or EBCDIC], and maximum allowable block size [physical record length]), and including with the request a 2400 foot (732 m) blank (preferably new) magnetic tape to Dr. Wayne H. Warren, Jr., Astronomical Data Center, Code 633, NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA, or to Centre de Données Stellaires, Observatoire de Strasbourg, 11, rue de l'Université, 67000 Strasbourg, France. Floppy disk copies in IBM-PC format are available from either the second or third authors. Printed copies (reprints) of this article are available from the Astronomy Department, University of California, Los Angeles, or from the second or third authors.

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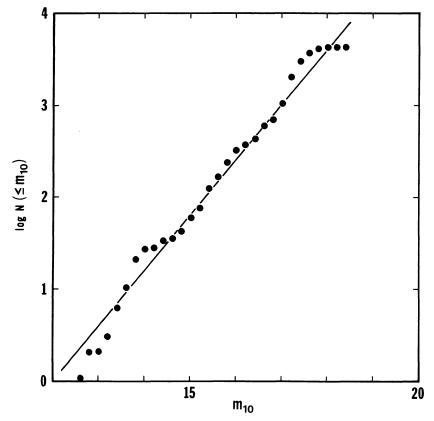


Fig. 12.—All-sky Abell cluster luminosity function. The line has the canonical slope of 0.6 and is fit by eye to the data between $m_{10} = 14.5$ and $m_{10} = 17.0$.

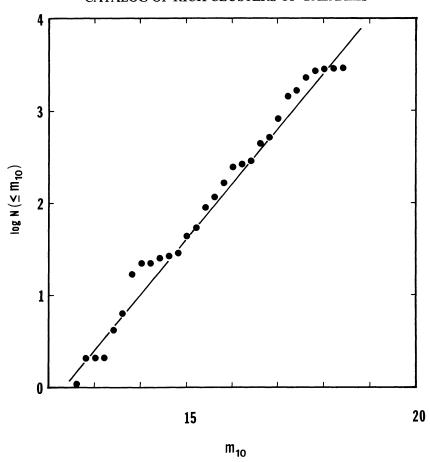


Fig. 13.—Northern Abell cluster luminosity function. The line of slope 0.6 is again fit by eye to the data between $m_{10} = 14.5$ and $m_{10} = 17.0$.

Engineering Research Council (SERC), McDonald Observatory, and the University of California, Los Angeles, is also gratefully acknowledged.

A project of this size could not have succeeded without the help and encouragement of many people. In particular, we are pleased to thank Professors Vincent C. Reddish and Malcolm S. Longair, successive directors of the Royal Observatory, Edinburgh, for their hospitality during Abell's and Corwin's stays in Scotland, the staff of the United Kingdom Schmidt Telescope Unit for help in the plate library, and for taking several plates specifically for this program, the excellent photographers at Siding Spring and Edinburgh who provided the film copies that enabled us to finish the survey, the Time Allocation Committees of the SERC and McDonald Observatory for generous allocations of telescope time for calibration photometry, the on-site staffs of the South African Astronomical Observatory and McDonald Observatory for valuable help during observing, Professor Guido Chincarini, who not only kept after all three of us until we got the work done, but who also contributed his expertise in innumerable ways throughout the later stages of the project, Phyllis Abell, Professor Ferdinand Coroniti, Forrest Barger, Phyllis Williams, and Katherine Sedwick for assistance and support during a trip to UCLA by H. C. in 1983 December, Katherine

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Finally, it has become the sad duty of two of us (H. C. and R. O.) to dedicate this catalog to the memories of George Ogden Abell (1927–1983) and Antoinette de Vaucouleurs (1921–1987), two great catalogers whose work has helped immeasurably to advance extragalactic research in the twentieth century.

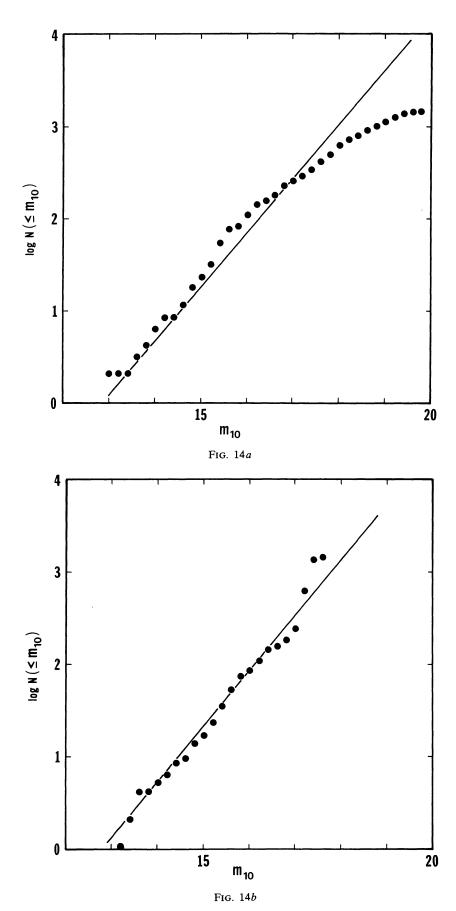


Fig. 14.—Southern Abell cluster luminosity functions. (a) V magnitudes. (b) R magnitudes in Abell's northern system. The lines of slope 0.6 are fit by eye to the data between $m_{10} = 13.5$ and $m_{10} = 17.0$.

TABLE 3
REVISED NORTHERN "ABELL CATALOG"

	D m	0 0 17.4 0 6 18.0 0 0 17.2 0 0 17.7 0 0 17.2	0 6 18.0 0 6 17.6 0 5 17.2 0 6 17.5 0 6 17.9		0 0 17.8 0 6 17.5 0 6 18.0 0 5 17.1 0 6 17.5	0 3 15.5 0 0 16.3 0 6 18.0 0 0 15.9 0 3 15.5	0 3 15.0 1 5 16.5 0 6 17.9 1 5 17.1 0 5 17.1	17 17 17 17	0 4 15.9 0 5 16.6 1 6 17.6 0 5 16.6 0 5 17.2	0 6 17.6 0 0 17.9 0 0 16.9 0 0 17.2 1 5 17.2	0
	z R	00000		00000		0.0724 (0.0416 0.0719 0.0927	0.1030	0.0610	0.1115	0.1344
	D	37 76 33 49	50 98 51 70 I: 94	н	47 86 I 52 I:106 I: 50	0 4 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	I 42 I: 65 73	46 125 36 76 59	31 58 37 93	55 46 47 44 I: 52	61 80 I:185 40
	T_{B-M}	H		0 III 0 III 3 II-II 9 III-	5 9 II 0 II-III 0 II-III 4 II-III	0 III 1 5 III 7	3 II-III 6 I: 9 II-III 0 III	9 III: 1 III: 5 II: 2 I	4 8 III 6 IIII 8 IIII 8 III	3 II 5 6 11-III	1 I-II 9 III 6 II-III 8
	x y	180 155 165 120 155 47 171 278 139 149	139 34 137 296 136 90 163 146 157 133	01010010	101 175 103 199 99 300 95 150	124 110 166 331 82 315 89 227 69 307	61 173 91 106 89 279 57 140 73 99	80 39 78 201 43 241 44 315 36 272	44 254 18 248 44 26 16 268	15 203 322 275 317 105 307 6	62 323 4 179 288 266 279 149 280 318
	9	34.33 74.37 59.93 35.96	70.22 71.32 59.21 32.45	84.55 13.10 43.82	67.77 43.48 53.56 44.41	33.19 17.09 53.31 84.40 41.53	55.98 33.29 36.07 44.65	40.53 37.41 48.76 41.41	84.29 72.55 87.80 72.19 60.63	73.39 42.18 81.15 65.15	23.36 85.84 42.37 80.46 65.36
	1	69.61-8 104.88-7 109.25-6 118.06-3	109.96-7 109.33-7 110.69-6 118.59-3	78.30-8 117.83-4 120.35-1 118.05-4	113.17-6 118.25-4 116.93-5 118.35-4	119.39-7 120.59-7 117.51-7 91.67-1	117.76-5 120.11-3 119.93-3 119.33-4 76.92-8	119.77-4 120.07-3 119.25-4 119.96-4	101.56-84 116.01-77 61.98-87 116.23-72	115.86-73 120.51-42 110.92-81 119.26-65	121.89- 105.02- 121.36- 116.25- 120.43-
	RA(2000)Dec	6-2339 8-1211 6-0733 7+2644 0+0619	8-0747 9-0854 0-0645 5+3016 0+3001	8-2311 3+2023 9+4941 5+1854 9+1904	6-0510 0+1915 0+0908 6+1820 3-0725	8+2935 5+4543 3+0925 9-2218 8+2115	8+0646 6+2931 6+2644 6+1808 4-2440	0+2216 4+2524 4+1402 8+2124 6-0920	5-2147 0-0947 9-2602 1-0925 4+0210	2-1037 7+2039 7-1827 3-0219 9-0051	4+3930 9-2309 4+2029 8-1738 3-0230
	RA(20	0031.6 0031.8 0032.6 0033.7	0033.8 0034.0 0034.6	4.0.0.0.0	0036.6 0037.0 0037.0 0037.6	0037.8 0038.9 0038.9	0039.8 0040.6 0040.6	0041.0 0041.4 0041.8 0041.8	0042.0 0043.0 0043.0	0043.7 0043.7 0043.7	0046.4 0045.9 0046.4
.0G,,	(1950)Dec	1-2356 3-1228 1-0750 1+2628	3-0804 4-0911 5-0702 8+3000 3+2945	3-2328 7+2007 1+4925 9+1838 3+1848	1-0527 4+1859 4+0852 0+1804 8-0742	1+2919 8+4527 7+0909 4-2235 2+2059	2+0630 9+2915 9+2628 0+1752 9-2457	4+2200 7+2508 8+1346 2+2108 1-0937	0-2204 5-1004 4-2619 6-0942 8+0154	7-1054 1+2023 2-1844 7-0236	7+3914 4-2326 8+2013 3-1755 7-0247
CATALO	RA(19	0029. 0029. 0030. 0031.	0031. 0031. 0031.	0032. 0032. 0033. 0034.	0034. 0034. 0035. 0035.	0035. 0035. 0035. 0036.	0037. 0037. 0037. 0038.	0038. 0038. 0039.	0040. 0040. 0040.	0040. 0041. 0041. 0042.	0043. 0043. 0043. 0044.
"ABELL	Abell	0051 0052 0053 0054 0055	0056 0057 0058 0059 0060	0061 0062 0063 0064 0065	0066 0067 0068 0069 0070	0071 0072 0073 0074 0075	0076 0077 0078 0079 0080	0081 0082 0083 0084 0085	0086 0087 0088 0089 0090	0091 0092 0093 0094 0095	0096 0097 0098 0099 0100
ORTHERN	a l	17.1 17.3 17.0 17.8	17.5 17.1 17.2 18.0	17.2 17.2 16.6 15.2	17.0 17.6 17.1 17.8	16.2 17.5 17.0 17.5	17.4 16.5 17.6 17.5	17.7 18.0 17.9 18.0	17.6 18.0 17.6 18.0	17.6 17.1 15.9 17.0	7.7.6
CEVISED N	R D	49 1 5 0 6 0 5 1 0	73 1 5 0 5 0 5 0 5	0 0 5 0 5 0 0 5 0	8 2 5 0 6 0 6 1 50	8 2 2 8 0 2 0 3 H 6 6 5 5 6	00000	0000 0000 2000 2000	99999	7 3 3 4 0 1 0 6 0 6	1 6 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
K.	8	1 0.12 2 5 5 6	6 5 0.107 5 8	9 2 5 0.064 5 0.121	6 0.083 11 2	6 0.094 1 0.143 5 0.005 7 0.133	000VN	0 0.159 1 8 8	40004	0.275 0.108 0.111	0.150
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	y T_B	51 III 42 II 347 II: 173 III	115 II-I 261 II-I 174 III 317 II-I 131 III	214 III: 44 III 49 II: 141 III: 27 II-II	71 II 81 I- 02 II 08 II	60 I: 44 I 83 95 III 22 III	179 312 246 III 270 120 III	58 II-II 186 II-II 50 III 02 I-II	88 III 10 II 35 II: 63 III	30 II- 56 I 09 III 33 II	84 II-II 28 II 60 III 61 II 32 II:
	x	171 159 148 147	134 124 110 107	102 2 94 92 63 1	48 1 46 2 44 3 19 1 2 8	18 311 302 308 284 1	305 1 265 3 256 2 264 2 232 1	252 230 2 225 3 236 3 232 2	220 216 2 212 2 211 1 210	208 2 217 1 206 1 197 1 191 1	186 8 192 13 176 10 171 10
	9	-45.08 -77.63 -57.22 -54.60	-44.09 -29.71 -71.58 -52.20	-76.05 -68.49 -78.46 -81.22 -81.83	-55.10 -53.12 -64.31 -67.67	-33.75 -82.98 -62.81 -39.10	-25.69 -81.16 -54.18 -24.06 -73.98	-39.90 -71.07 -80.56 -70.81	-74.62 -72.50 -48.57 -73.35	-54.60 -83.78 -44.96 -50.49	.74.91 -84.44 -50.03 -73.61
	~	107.97. 67.91. 103.24. 104.71. 113.09.	109.30- 113.28- 90.97- 107.09- 97.75-	80.99 96.38 72.27 52.57 38.67	107.78- 108.66- 102.80- 101.17- 63.20-	114.77. 42.89. 106.53. 114.37.	11.6.71 78.09 111.79 117.70 100.55	115.62 103.999 85.46 104.47	100.53-74 103.39-77 114.47-48 102.80-77	113.22- 65.76- 115.34- 114.53- 103.04-	102.70-7. 64.11-8 115.24-5 105.31-7. 79.00-8
	RA(2000)Dec	6+1630 4-1938 3+0401 4+0646 3+3305	5+1741 7+3224 2-1111 4+0927 9-0559	7-1626 4-0736 6-1930 2-2353	8+0644 0+0847 1-0247 9-0611 6-2237	5+2837 7-2542 8-0053 5+2317 1-0009	3+3650 8-2042 2+0807 0+3833 7-1211	+2237 -0906 -1930 -0848 -2140	6-1247 9-1031 4+1355 3-1123 6+1623	8+0750 6-2338 9+1734 6+1201 8-1217	-1252 -2409 +1232 -1125 -2213
	RA(20	0007. 0008. 0009. 0009.	0010. 0011. 0012. 0012.	0012. 0013. 0013. 0015.	0016.8 0017.0 0017.1 0018.9	0020.7 0020.7 0021.8 0022.8	0023.3 0024.8 0025.2 0027.0	0027.1 0026.9 0027.1 0027.2	0027.6 0027.9 0028.4 0028.3	0028.8 0028.6 0028.9 0029.6	0030.2 0030.6 0031.2 0031.4
	RA(1950)Dec	0+1614 9-1955 7+0345 8+0630 7+3249	9+1725 1+3208 6-1128 8+0911 3-0616	2-1643 8-0753 1-1947 7-2410 7-2618	2+0628 4+0831 5-0304 3-0628 1-2254	9+2821 2-2559 2-0110 9+2301 5-0026	7+3634 3-2059 6+0751 3+3817 2-1228	5+2221 4-0923 6-1947 7-0905 9-2157	1-1304 4-1048 8+1339 8-1140 0+1607	2+0734 1-2355 3+1718 0+1145 3-1234	7-1309 1-2426 6+1216 9-1142 9-2230
		0005. 0005. 0006. 0006.	0007. 0009. 0009. 0009. 0010.	0010. 0010. 0011. 0012.	0014.2 0014.4 0014.5 0016.3	0017.9 0018.2 0019.2 0019.9	0020.7 0022.3 0022.6 0024.3	0024.5 0024.4 0024.6 0024.7 0024.7	0025.1 0025.4 0025.8 0025.8	0026.2 0026.1 0026.3 0027.0	0027.7 0028.1 0028.6 0028.9 0028.9
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	82	0.0526	0.0645		0.1156	0.0706	0.0547 0.135		0.1029 0.1230 0.0335 0.0015	0.0482 0.0178 0.0422	
	0	72 46 108 66 51	65 61 61 51 34	41 68 88 60 37	76 78 89 63 37	42 75 74 36 84	: 56 68 77 31 33	39 74 78 74	56 111 : 57 : 50 33	89 90 37 32	77 65 110 46 57
	x y T_{B-M}	304 270 II: 300 240 303 92 II: 284 116 II 24 92 II-III	40 319 277 3 II 274 74 264 287 III 260 322 III	57 210 243 288 III 309 174 III 238 253 III 296 276	231 225 III: 300 160 III 230 146 II-III 89 86 218 192	210 40 I 205 307 II: 314 297 307 126 173 287 III:	168 18 II-III 222 298 III 146 245 III 146 213 III 139 295 I	138 150 II-III 134 84 198 251 133 190 II-III 192 274 III	126 218 II 128 67 III 125 92 II-III 115 222 III 112 248	114 290 III 108 52 I: 99 278 II 89 52 II 82 197 II	156 92 III 74 127 III: 69 216 III 69 144 65 306 III:
	9 1	142.90-77.61 129.71-48.65 131.38-57.34 129.52-44.96 185.41-85.17	127.80-29.23 143.70-76.47 129.91-45.71 145.63-77.06 130.52-47.04	128.07-25.22 134.18-59.49 129.61-37.84 137.10-65.99 128.76-30.00	150.38-77.89 129.88-38.07 135.67-62.04 128.00-21.51 132.19-49.33	131.73-46.18 135.39-59.01 128.73-23.57 129.38-26.70 133.01-47.44	143.59-69.87 171.34-81.07 132.58-42.22 132.71-42.82 137.81-58.98	139.16-61.61 144.22-68.51 177.57-81.33 134.60-49.12 175.88-80.96	148.20-71.74 166.65-79.35 151.54-73.88 139.32-60.20 148.23-71.13	133.21-41.30 138.27-57.41 136.94-53.26 142.07-63.10 134.40-42.91	133.53-38.93 166.81-77.86 162.41-76.50 166.19-77.55 135.86-46.74
	RA(2000)Dec	0108.9-1525 0109.8+1358 0109.7+0513 0111.0+1739 0110.3-2449	0111.8+3326 0111.1-1424 0111.8+1652 0112.0-1506 0112.9+1530	0114.8+3724 0114.2+0252 0114.6+2443 0114.3-0345	0114.6-1616 0115.4+2428 0115.2+0014 0116.5+4106 0116.1+1305	0116.8+1615 0117.0+0314 0118.8+3859 0119.8+3548 0119.6+1452	0119.6-0808 0120.0-2101 0121.8+2004 0121.8+1928 0121.9+0300	0122.0+0017 0122.2-0655 0121.9-2154 0122.7+1302 0122.4-2128	0122.7-1025 0122.5-1913 0122.8-1246 0123.7+0138 0123.7-0951	0124.4+2054 0124.3+0428 0125.1+0841 0125.6-0130	0127.2+2312 0126.7-1806 0127.0-1626 0127.1-1747 0128.0+1512
ia .	RA(1950)Dec	0106.4-1541 0107.2+1343 0107.1+0458 0108.3+1724 0107.9-2505	0109.0+3311 0108.6-1440 0109.1+1637 0109.5-1522 0110.2+1515	0112.0+3709 0111.6+0237 0111.9+2428 0111.8-0401	0112.1-1632 0112.7+2413 0112.6-001 0113.6+4051 0113.5+1250	0114.1+1600 0114.4+0259 0115.9+3844 0117.0+3533 0116.9+1437	0117.1-0824 0117.6-2117 0119.1+1949 0119.1+1913 0119.3+0245	0119.4+0002 0119.7-0711 0119.5-2210 0120.0+1247 0120.0-2144	0120.2-1041 0120.1-1929 0120.3-1302 0121.1+0123 0121.2-1007	0121.7+2039 0121.7+0413 0122.5+0826 0123.0-0146 0124.2+1855	0124.5+2257 0124.3-1822 0124.6-1642 0124.7-1803 0125.3+1457
Onlinue	Abell	0151 0152 0153 0154	0156 0157 0158 0159 0160	0161 0162 0163 0164 0165	0166 0167 0168 0169 0170	0171 0172 0173 0174 0175	0176 0177 0178 0179 0180	0181 0182 0183 0183 0185	0186 0187 0188 0189 0190	0191 0192 0193 0194 0195	0196 0197 0198 0199
IABLE 3—	C z R D m	90 0.0632 0 5 17.2 39 0.0632 0 3 15.4 80 0 5 17.2 50 0.0822 1 4 15.9 59 0.082 1 4 15.9	37 0 0 17.2 59 0 5 17.1 72 0 5 17.2 746 0 0 17.2	140 0 5 17.2 50 0 5 17.2 43 0.0566 0 4 15.9 174 0.1971 3 6 17.3	48 0.0665 0 4 15.7 40 0.0535 0 4 16.0 77 0 5 16.5 69 0.0440 1 3 15.0 52 0 5 17.2	67 0.1048 1 4 16.0 64 0 5 17.1 72 0 5 17.2 94 2 0 17.5 66 0.188 1 5 17.2	51 0 5 16.6 58 0 6 17.7 41 0 0 17.0 103 0 5 17.2 66 0 5 17.2	51 0 5 17.2 39 0 0 17.7 47 0.0604 0 4 15.9 43 0.0699 0 4 16.0 100 0 6 17.7	99 0.1569 2 6 17.5 102 0 6 17.5 146 3 0 17.5 120 2 0 17.5 182 0.152 3 6 17.5	140 0.230 3 6 17.7 95 0 6 18.0 59 0 6 17.5 63 0 6 17.5 82 0 6 17.6	70 0 6 17.6 32 0.0438 0 3 15.0 52 0 5 17.2 98 0.0596 1 5 16.6
	x y T_{B-M}	278 82 II: 263 205 II-III 253 139 III 293 161 II-III: 249 199 II-III	236 148 234 64 III 229 102 III 262 37 III: 208 138	205 184 III 196 88 III 196 205 III 228 261 218 257 III	167 167 162 237 200 8 III: 159 64 II-III 147 217 III:	143 77 III 180 15 I: 131 3 II: 260 154 113 254 III	113 13 1-II: 149 166 II-III: 103 80 97 241 II 90 124 II-III	81 304 III 133 294 115 255 68 317 108 213 III:	119 190 I 115 226 II-III 201 192 158 153 93 139 II:	80 105 III 28 183 III: 88 253 II-III 68 305 II	325 172 I 323 249 III 318 68 III 162 219 308 196 I-II
	9 1	120.75-63.77 121.49-61.49 121.43-68.71 122.46-38.35 121.70-67.59	122.00-74.55 120.95-82.11 122.65-69.42 123.25-40.65 123.55-56.75	123.87-67.88 124.19-63.66 124.31-67.48 128.36-84.53 124.21-36.54	125.31-62.21 126.77-72.87 176.44-88.80 125.76-64.11 130.19-79.21	127.33-69.83 180.90-88.42 130.54-77.17 124.51-20.48 126.12-48.55	131.93-76.94 151.07-85.86 131.90-75.68 130.88-72.69 128.50-62.91	134.93-77.40 126.12-35.78 149.10-84.09 129.88-65.25 154.06-84.72	126.57-37.71 126.63-37.04 125.64-19.70 126.07-26.40 166.69-85.67	175.32-85.93 130.72-61.70 127.20-36.51 152.25-82.87 132.04-65.05	137.08-73.68 131.44-60.43 139.26-75.53 126.38-19.15
	RA(2000)Dec	0047.6-0054 0048.7+0122 0049.2-0550 0049.8+2431 0049.5-0443	0050.4-1140 0050.3-1914 0051.0-0632 0052.5+2213 0052.8+0607	0052.8-0500 0053.7-0047 0053.5-0436 0053.7-2140 0056.0+2619	0055.9+0038 0056.0-1001 0055.7-2624 0056.4-0115	0057.5-0700 0057.4-2616 0058.4-1423 0059.4+4222	0059.8-1412 0059.9-2327 0100.5-1257 0101.0-0957	0102.2-1446 0103.0+2701 0102.6-2147 0103.0-0231	0104.1+2504 0104.5+2544 0105.3+4306 0105.4+3623	0105.6-2435 0106.2+0057 0106.7+2614 0106.3-2051	0107.5-1114 0108.2+0209 0108.0-1310 0109.4+4335
	RA(1950)Dec	0045.0-0111 0046.1+0106 0046.7-0607 0047.1+2415	0047.9-1157 0047.8-1931 0048.5-0649 0049.8+2157 0050.2+0551	0050.3-0517 0751.1-0104 0651.0-0453 0051.2-2157	0053.3+0022 0053.5-1018 0053.3-2641 0053.8-0132 0054.6-1641	0055.0-0717 0055.0-2633 0055.9-1440 0056.6:4206	0057.3-1429 0057.5-2344 0058.0-1314 0058.5-1014	0059.7-1503 0100.3+2645 0100.2-2204 0100.5-0248 0100.8-2251	0101.4+2448 0101.8+2528 0102.5+4250 0102.6+3607 0102.1-2414	0103.2-2452 0103.6+0041 0104.0+2558 0103.9-2108	0105.0-1131 0105.6+0154 0105.5-1327 0106.5+4320
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BLE	b x y T_{B-M} C z R D	0128.1+1631 135.51-45.45 65 55 43 00 17. 0127.9+0716 138.64-54.48 61 202 II-III 111 06 17. 0128.3+0152 141.41-59.67 54 234 II-III: 71 05 17. 0128.6-0647 148.09-67.83 49 90 III 55 0.1557 16 17. 0129.0+0612 139.56-55.45 45 145 III: 77 0 6 17.	0128.5-2535 204.52-81.57 117 53 39 0 0 17. 0129.1-0229 144.66-63.76 41 0 41 0 0 0 17. 0131.6+0032 143.79-60.70 332 164 41 41 0 16. 00 17. 0132.0-1334 155.88-73.47 318 49 II-III:158 0.206 3 6 17. 0132.3-2558 208.05-80.80 72 32 34 0 0 17.	0132.8-0400 147.89-64.86 312 240 II: 83 0 5 17. 0134.3+0429 142.69-56.73 298 51 44 0 0 177. 0135.4+2037 136.64-41.08 279 276 III 50 0 6 17. 0135.4-2326 195.00-79.41 32 167 III: 66 0 6 17.	0136.7-0624 152.42-66.66 260 112 II-III 70 0.1158 1 5 17. 0136.6-0802 154.29-68.12 260 24 II: 64 0.1126 1 5 17. 0136.6-0802 154.59-68.12 260 24 II: 64 0.1126 1 5 17. 0136.6-0909 141.56-52.05 258 301 III 62 0 6 17. 0137.3+0756 142.14-53.21 258 236 II 69 0 6 17.	0138.1+1808 138.26-43.34 245 142 III 71 0 6 17. 0138.2-1258 162.47-72.22 246 81 III-III155 0.211 3 6 17. 0138.0-1246 162.42-71.99 240 92 III 152 0.207 3 6 17. 0138.3-0-056 153.93-66.95 239 83 III 75 0.1617 15 17. 0138.3+1853 138.26-42.57 234 182 II-III 51 0.0692 1 4 15.	0139.0-1014 158.76-69.74 227 228 II 75 0.1282 1 6 17. 0139.8-8-181 138.78-421.9 223 145 II 79 0 6 17. 0139.2-1002 158.58-69.54 224 238 33 0.0289 0 6 17. 0139.4-0337 151.03-63.85 224 261 III 77 05 16.0319.8-121 160.85-70.61 220 168 III 104 0 6 17.	0140.6+2431 136.97-37.01 312 164 48 0 0 17. 0140.1-1021 159.60-69.69 212 221 III: 71 0.1874 1 6 17. 0140.3-0149 149.85-62.12 231 33 6 III-III 58 0 5 17. 0141.0+1855 138.90-42.41 209 184 II-III: 76 0.1731 16 17. 0140.2-1724 174.68-75.13 208 165 III: 74 0 1731 16 17.	0140.5-1150 162.29-70.87 207 142 II-III: 58 0.1874 1 5 17. 0141.0+0016 148.44-60.13 206 149 34 0 0 16. 0146. 0140.9-2302 195.64-78.10 283 191 III 63 0 6 17. 0141.4-1146 162.72-70.69 196 146 III 80 0 6 17. 0141.9+0737 144.12-53.16 197 219 II-III 43 0.0618 0 3 15.	0141.6-1614 172.41-74.07 190 229 III 68 0 6 17. 0141.9-1418 168.03-72.60 187 10 I-II 52 0 6 18. 0142.5-1013 160.80-69.26 181 129 47 0.0117 0 5 16. 0144.2+1829 140.05-42.63 168 161 III 61 0 6 17. 0144.1+0623 145.68-54.15 168 153 140 0.0790 0 4 16.	0144.7+0548 146.27-54.64 159 122 II-III 56 0.0700 1 4 16. 0145.2+1738 140.69-43.38 154 116 III 57 0 5 16. 0144.8-0215 152.42-62.04 153 13 II-III: 79 0 6 17. 0146.7+2002 140.23-40.96 136 245 III 63 0 6 17. 0147.0+1940 140.46-41.29 132 226 III 53 0 6 17.
BLE	$RA(2000)Dec$ l b x y T_{B-M} C z R D	0128.1+1631 135.51-45.45 65 55 43 00 17. 0127.9+0716 138.64-54.48 61 202 II-III 111 06 17. 0128.3+0152 141.41-59.67 54 234 II-III: 71 05 17. 0128.6-0647 148.09-67.83 49 90 III 55 0.1557 16 17. 0129.0+0612 139.56-55.45 45 145 III: 77 0 6 17.	551 0128.5-2535 204.52-81.57 117 53 39 0 0 17. 45 0129.1-0229 144.66-63.76 41 0 41 0 0 017. 0131.6131.3 159.88-73.47 318 49 II-III:158 0.206 3 6 17. 514 0132.3-2558 208.05-80.80 72 32 34	416 0132.8-0400 147.89-64.86 312 240 II: 83 0 5 17. 414 0134.3-0429 142.69-56.73 298 51 44 0 0 17. 922 0135.4+2037 136.64-41.08 779 276 III 50 0 6 17. 521 0134.3-2605 299.21-80.36 47 25 I 71 0 6 17. 342 0135.4-2326 195.00-79.41 32 167 III: 66 0 6 17.	0136.7-0624 152.42-66.66 260 112 II-III 70 0.1158 1 5 17. 0136.6-0802 154.29-68.12 260 24 II: 64 0.1126 1 5 17. 0136.6-0802 154.59-68.12 260 24 II: 64 0.1126 1 5 17. 0136.6-0909 141.56-52.05 258 301 III 62 0 6 17. 0137.3+0756 142.14-53.21 258 236 II 69 0 6 17.	0138.1+1808 138.26-43.34 245 142 III 71 0 6 17. 0138.2-1258 162.47-72.22 246 81 III-III155 0.211 3 6 17. 0138.0-1246 162.42-71.99 240 92 III 152 0.207 3 6 17. 0138.3-0-056 153.93-66.95 239 83 III 75 0.1617 15 17. 0138.3+1853 138.26-42.57 234 182 II-III 51 0.0692 1 4 15.	030 0139.0-1014 158.76-69.74 227 228 II 75 0.1282 1 6 17. 756 0139.8+181 138.78-43.19 223 145 II 79 0 6 17. 018 0139.2-1002 158.58-69.54 224 238 33 0.028 0 6 17. 353 0139.4-037 151.03-63.85 224 261 III 77 0 6 17. 130.028 0 6 17.	0140.6+2431 136.97-37.01 312 164 48 0 0 17. 0140.1-1021 159.60-69.69 212 221 III: 71 0.1874 1 6 17. 0140.3-0149 149.85-62.12 231 33 6 III-III 58 0 5 17. 0141.0+1855 138.90-42.41 209 184 II-III: 76 0.1731 16 17. 0140.2-1724 174.68-75.13 208 165 III: 74 0 1731 16 17.	1206 0140.5-1150 162.29-70.87 207 142 II-III: 58 0.1874 1 5 17. 001 0141.0+0016 148.44-60.13 206 149 2318 0140.9-2302 195.61-78.10 283 191 III 63 0 617. 1202 0141.4-1146 162.72-70.69 196 146 III 80 0 6 17. 0722 0141.9+0737 144.12-53.16 197 219 II-III 43 0.0618 0 3 15.	630 0141.6-1614 172.41-74.07 190 229 III 68 0 6 17. 844 0141.9-1418 168.03-72.60 187 10 I-II 52 0 6 18. 129 0142.5-1013 160.80-69.26 181 129 47 0.0117 0 16. 184 0144.2-1829 140.05-42.63 168 161 III 61 0 6 17. 508 0144.1+0623 145.68-54.15 168 153 16 0.0790 0 4 16.	0144.7+0548 146.27-54.64 159 122 II-III 56 0.0700 1 4 16. 0145.2+1738 140.69-43.38 154 116 III 57 0 5 16. 0144.8-0215 152.42-62.04 153 13 II-III: 79 0 6 17. 0146.7+2002 140.23-40.96 136 245 III 63 0 6 17. 0147.0+1940 140.46-41.29 132 226 III 53 0 6 17.
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	9	27.18 35.24 20.58 34.00	35.21 27.34 27.34 28.79 33.86	35.56 24.58 33.70 22.76 34.67	34.47 35.42 33.93 35.85	33.11 33.69 28.14 29.78 35.34	35.15 35.04 36.69 35.43	36.81 37.23 34.99 33.99	32.53 37.20 30.45 30.12	37.57 34.78 24.42 36.13	31.48 37.25 37.96 35.86
	1	07.93 61.77 22.54 82.55 72.68	71.28 08.19 08.54 04.64	165.31 215.92 187.51 219.87	83.38 75.66 87.63 61.38	92.76 90.38 09.54 06.27 83.43	84.94 86.64 68.29 85.50	76.88 66.86 92.31 41.29	135.67 179.05 209.79 210.71 195.30	179.22 197.89 225.03 191.57	.09.89 .86.40 .79.90 .96.92 .85.75
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	RA(2000)Dec	2.3+1 5.7+5 1.8+0 5.3+4	3.3+1 3.8+1 4.1+1 5.3+3	7.3+5 4.8+0 6.5+3 0.8+6	7.2+3 8.1+4 7.7+3 0.2+5 2.6+6	8.5+3 8.9+3 8.3+1 0.2+1	1.6+3 2.3+3 4.3+5 4.1+3 5.3+3	6.2+4 8.0+5 6.6+3 3.4+7 7.6+4	7.9+7 9.0+4 7.5+1 7.5+1 9.2+2	1.1+4 0.9+2 9.7+0 1.2+3	1.6+1 2.9+3 3.4+4 4.6+2 6.0+3
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1 1	b x y T_{B-M} C z R D	3419 186.19 26.97 305 108 57 1 0 17 2921 191.48 25.49 215 160 III 32 0 4 15 3345 186.96 27.29 278 76 II: 54 0 5 16 6121 155.52 31.64 280 274 38 0 0 17 2723 193.76 25.49 180 55 39 0 0 16	3556 184.64 28.11 262 194 60 1 0 17 3919 180.91 28.99 300 56 49 0 0 16 6345 152.69 31.91 168 76 II-III: 57 0 5 17 6331 122.96 31.93 167 63 II-III 63 0 5 17 2706 194.30 26.03 145 41 46 0 0 16	604 184.71 28.91 220 201 56 1 0 17. 448 186.12 28.61 220 131 IIII 50 0 5 16. 508 174.52 30.99 208 43 III 71 0 6 17. 757 203.88 23.20 265 195 III 444 0 5 17. 143 189.61 28.14 107 288 59 1 0 17.	4648 172.64 31.52 192 132 II 65 0 5 17. 7718 136.79 30.92 132 160 II-III: 84 0 6 17. 6733 148.16 32.59 17 II-III: 76 0 6 17. 621 23.23 149.16 23.5 77 52 10 16. 454 173.98 31.62 179 72 III 83 0 6 17.	7001 145.24 32.16 174 91 III 97 0 6 17. 4801 171.30 32.19 164 197 II-III 57 0 6 17. 0056 222.50 16.00 195 144 1 57 0.0871 15 16. 7651 137.25 31.23 119 137 III 74 0 6 17. 8222 130.98 30.02 126 113 III 107 0 5 16.	4912 169.96 32.83 136 261 II-III: 53 0 5 17. 344 186.70 30.23 128 128 III 54 0 6 17. 351 31 86.18 30.51 121 155 II-III: 43 0 4 15. 6625 149.39 33.01 101 221 III 78 0.138 1 5 17. 4019 180.40 31.74 159 107 III 35 0 5 16.	8 185.40 30.90 109 195 38 0 0 0 1 4 152.57 19.62 147 140 62 1 0 0 1 4 152.57 33.79 0 78 III: 91 90.0267 0 5 1 3 206.15 24.94 135 129 III 35 0.51 0 5 1	4 141.91 32.39 137 239 43 0 0 16. 2 171.01 33.48 96 218 40 0 0 17. 5 209.67 24.07 106.87 48 0 0 17. 4 147.56 33.27 81 302 III 135 0.291 3 6 17. 2 192.82 30.61 240 190 III 53 0 6 17.	37 200.33 27.85 270 125 35 0 0 17 22 122.57 31.05 225 195 III 91 0 6 17 29 166.03 34.40 216 119 30 0 0 17 35 230.01 15.25 34 111 III: 42 0.0704 0 4 16 34 161.14 34.78 191 337 III 50 0 6 17	06 172.65 34.58 29 153 III 48 0.1303 0 5 16. 32 216.32 23.19 322 283 74 10 17. 32 189.92 32.33 180 335 III: 56 0 6 17. 52 170.53 35.03 313 251 II 40 0 6 17. 34 205.36 28.14 297 231 31 0 0 17.
1 1	ec RA(2000)Dec l b x y T_{B-M} C z R D	3427 0753.4+3419 186.19 26.97 305 108 57 1 0 17 2929 0753.3+2921 191.48 25.49 215 160 III 32 0 4 15 3353 0755.8+3345 186.96 27.29 278 76 II: 54 0 5 16 6130 0759.2+6121 155.52 31.64 280 274 38 0 0 17 2732 0756.3+2723 193.76 25.49 180 55 39 0 0 16	3605 0757.1+3556 184.64 28.11 262 194 60 1 0 17 3228 0757.5+3919 180.91 28.99 300 56 49 0 0 16 6554 0802.2+6345 152.96 31.91 168 76 II-III: 57 0 5 17 6340 0802.3+6331 152.96 31.93 167 63 II-III: 63 0 5 17 2715 0759.3+2706 194.30 26.03 145 41 46 0 0 16	613 0801.0+3604 184.71 28.91 220 201 56 1 0 17. 6457 0801.0+348 186.12 28.61 220 133 IIII 50 0 5 16. 617 0802.5+4508 174.52 30.99 208 131 III 71 0 6 17. 806 0801.1+1757 203.88 23.20 265 195 III 44 0 5 17. 152 0802.8+3143 189.61 28.14 107 288 59 1 0 17.	7 0804.3+4648 172.64 31.52 192 132 II 65 0 5 17. 8 0814.2+7718 136.79 30.92 132 160 II-III: 84 0 6 17. 9 0809.0+6733 148.16 32.29 136 279 II-III: 76 0 6 17. 10 0802.6-0212 223.28 14.73 235 77 52 1 0 16. 10 0805.7+4541 173.98 31.62 179 72 III 83 0 6 17.	110 0811.3+7001 145.24 32.16 174 91 III 97 06 17.10 10 0807.4+4801 171.30 32.19 164 197 III 57 06 17.7 48 0805.6-0056 222.50 16.00 195 144 57 0.0871 15 16.10 10 0817.8+7651 31.25 31.23 119 137 111 74 06 17.30 32 0828.2+8222 130.98 30.02 126 113 111 107 05 16.	1921 0810.7+4912 169.96 32.83 136 261 II-III: 53 0 5 17. 452 0809.3+343 186.70 30.23 128 128 III 54 0 6 17. 552 0810.1+3513 186.78 30.51 121 155 IIII: 43 0 6 17. 5635 0815.0+6625 149.39 33.01 101 221 III 78 0.138 15 17. 5636 0815.0+6629 180.40 31.74 159 107 III 35 0.138 15 17.	607 0811.2+3558 185.40 30.90 109 195 38 0 0 1 1 50 0 1 1 1 1 1 1 1 1 1 1 1 1 1	254 0820.7+7244 141.91 32.39 137 239 43 00 16. 832 0815.0+4822 171.01 33.48 96 218 40 00 17. 335 0813.1+1325 209.67 24.07 180 274 48 00 17. 804 0819.9+6754 147.56 33.27 81 302 III 135 0.291 3 6 17. 952 0817.4+2942 192.82 30.61 240 190 III 53 0.6 17.	2247 0814.7+2237 200.33 27.85 270 125 35 0 0 17 3012 0819.1+31002 192.57 31.05 225 195 III 91 0 6 17 5529 0819.6+5229 166.10 34.40 216 119 30 0 17 0726 0817.4-0735 230.01 15.25 34 111 III: 42 0.0704 0 4 16 5644 0822.5+5634 161.14 34.78 191 337 III 50 0 6 17	4716 0822.1+4706 172.65 34.58 29 153 III 48 0.1303 0 5 16. 0742 0820.4+0732 216.32 23.19 322 283 74 10 17. 3342 0822.2+2232 189.92 32.33 180 335 III: 56 0 6 17. 4902 0824.2+4852 170.53 35.03 313 251 II 40 0 6 17. 1844 0822.5+1834 205.36 28.14 297 231 31 0 0 17.
1 1	ec RA(2000)Dec l b x y T_{B-M} C z R D	50.2+3427 0753.4+3419 186.19 26.97 305 108 57 1 0 17 50.2+2929 0753.3+2921 191.48 25.49 215 160 III 32 0 4 15 52.6+3353 0755.8+3345 186.96 27.29 278 76 II: 54 0 5 16 54.9+6130 0759.2+6121 155.52 31.64 280 274 38 0 0 17 53.2+2732 0756.3+2723 193.76 25.49 180 55 39 0 0 16	53.8+3605 0757.1+3556 184.64 28.11 262 194 60 1 0 17 54.1+328 0757.5+3919 180.91 28.99 300 56 49 0 0 16 57.8+6340 0802.2+6345 152.96 31.91 168 76 II-III: 57 0 5 17 57.8+6340 0802.3+6331 152.96 31.93 167 63 II-III: 63 0 5 17 56.2+2715 0759.3+2706 194.30 26.03 145 41 46 0 0 16	57.7+3613 0801.0+3604 184.71 28.91 220 201 56 1 0 17. 57.8+3457 0801.0+3448 186.12 28.61 220 133 II—III 50 0 5 16. 59.0+4517 0802.5+4508 174.52 30.99 208 43 III 71 0 6 17. 58.2+1806 0801.1+1757 20.388 23.20 265 195 III 44 0 5 17. 59.6+3152 0802.8+3143 189.61 28.14 107 288 59 1 0 17.	90.7+4657 0804.3+4648 172.64 31.52 192 132 II 65 0 5 17. 97.4+572 0814.2+7718 136.79 30.92 132 160 II-III: 84 0 6 17. 94.1+5742 0809.0+6733 1481 32.29 136 279 II-III: 76 0 17. 00.1-0204 0802.6-6212 223.28 14.73 235 77 52 10 16. 12.2+4550 0805.7+4541 173.98 31.62 179 72 II 83 0 6 17.	.1+7010 0811.3+7001 145.24 32.16 174 91 III 97 0 6 17. 8+4810 0807.4+4801 171.30 32.19 164 197 II-III 57 0 6 17. 1-0048 0805.6-065 222.50 16.00 195 144 57 0.0871 15 16. 2+7701 0817.8+7651 137.25 31.33 199 137 III 74 0 6 17. 8+8232 0828.2+8222 130.98 30.02 126 113 III 107 0 5 16.	0.0+4921 0810.7+4912 169.96 32.83 136 261 II-III: 53 0 5 17. 1.43452 08005.3+3443 186.70 30.23 128 128 III 54 0 6 17. 994552 0810.1+5513 186.18 30.51 121 155 II-III: 43 0 41 15. 1.46635 0815.0+6625 149.39 33.01 101 221 III: 78 0.138 1 5 17. 744028 0811.1+4019 180.40 31.74 159 107 III 35 0 5 16.	04-3607 0811.2+3558 185.40 30.90 109 195 38 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 1 0	5.2+7254 0820.7+7244 141.91 32.39 137 239 43 00 16. 1.4+84832 0815.0+4822 171.01 33.48 96 218 40 00 177. 0.3+1335 0813.1+1325 209.67 24.07 106.274 48 00 177. 5.1+6804 0819.9+6754 147.56 33.27 81 302 III 135 0.291 3 6 17. 4.3+2952 0817.4+2942 192.82 30.61 240 190 III 53 0 6 17.	1.7+2247 0814.7+2237 200.33 27.85 270 125 35 0 0 17 6.0+3012 0819.1+302 192.57 31.05 225 195 III 91 0 6 17 5.8+5239 0819.6+5229 166.10 34.40 216 119 30 0 17 5.0-0726 0811.4-0735 230.01 15.25 34 111 III: 42 0.0704 0 4 16 8.6+5644 0822.5+5634 161.14 34.78 191 337 III 50 0 6 17	3.6+4716 0822.1+4706 172.65 34.58 29 153 III 48 0.1303 0 5 16.7.7+0742 0820.4+0732 216.32 23.19 322 283 74 1 0 17.7+0742 0822.2+3232 189.92 32.33 180 335 III: 56 0 6 17.7+074902 0824.2+4852 170.53 35.03 313 251 II 40 0 6 17.7+07444 0822.5+1834 205.36 28.14 297 231 31 0 0 17.7+07416
1 1	RA(2000)Dec l b x y T_{B-M} C z R D	2+3427 0753.4+3419 186.19 26.97 305 108 57 1 0 17 2+2929 0753.3+2921 191.48 25.49 215 160 III 32 0 4 15 6+3353 0755.8+3345 186.96 27.29 278 76 II: 54 0 5 16 9+6130 0759.2+6121 155.52 31.64 280 274 38 0 0 17 2+2732 0756.3+2723 193.76 25.49 180 55 39 0 0 16	8+3605 0757.1+3556 184.64 28.11 262 194 60 1 0 17 1+3928 0757.5+3919 180.91 28.99 300 56 49 0 0 16 7+6354 0802.2+6345 152.69 31.91 168 76 II-III: 57 0 5 17 8+6340 0802.3+6331 122.96 31.93 167 63 II-III: 63 0 5 17 2+2715 0759.3+2706 194.30 26.03 145 41 46 0 0 16	.7+3613 0801.0+3604 184.71 28.91 220 201 56 1 0 17. 8+3457 0801.0+3448 186.12 28.61 220 133 II—III 50 0 5 16. 044517 0802.5+4508 174.52 30.99 2.88 43 III 71 0 6 17. 044806 0801.1+1757 203.88 23.20 265 195 III 44 0 5 17. 0441806 0802.8+3143 189.61 28.14 107 288 15 59 1 0 17.	7.74657 0804.34648 172.64 31.52 192 132 II 65 0 5 17. 447728 0814.2+7718 136.79 30.92 132 160 II-III: 84 0 6 17. 1.46742 0809.0+6733 148.16 32.29 136 279 II-III: 76 0 6 17. 1.0-0204 0802.6-0212 22.32 14.73 235 77 52 1 0 16. 1.46550 0805.7+4541 173.98 31.62 179 72 III 83 0 6 17.	1+7010 0811.3+7001 145.24 32.16 174 91 III 97 0 6 17. 84810 0807.4+801 171.30 32.19 164 197 II-III 57 0 6 17. 1-0048 0805.6-0056 222.50 16.00 195 144 57 0.0871 15 16. 2+7701 0817.8+7651 137.25 31.23 119 137 III 74 0 6 17. 8+8232 0828.2+8222 130.98 30.02 126 113 III 107 0 5 16.	1921 0810.7+4912 169.96 32.83 136 261 II-III: 53 0 5 17. 452 0809.3+343 186.70 30.23 128 128 III 54 0 6 17. 552 0810.1+3513 186.78 30.51 121 155 IIII: 43 0 6 17. 5635 0815.0+6625 149.39 33.01 101 221 III 78 0.138 15 17. 5636 0815.0+6629 180.40 31.74 159 107 III 35 0.138 15 17.	0+3607 0811.2+3558 185.40 30.90 109 195 38 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	.2+7254 0820.7+7244 141.91 32.39 137 239 43 0 0 16. 44832 1815.0+882 171.01 33.48 96 218 40 0 0 177. 13.18 0813.1+1325 20.67 24.07 106 274 48 0 0 177. 146804 0819.9+6754 147.56 33.27 81 302 III 135 0.291 3 6 17. 3+2952 0817.4+2942 192.82 30.61 240 190 III 53 0.291 3 6 17.	.7+2247 0814.7+2237 200.33 27.85 270 125 35 0 0 17 91 0819.1+302 192.57 31.05 225 195 III 91 0 6 17 .8+5239 0819.6+5229 166.10 34.40 216 119 30 0 17 .0-0726 0817.4+0735 230.01 15.25 34 111 III: 42 0.0704 04 16 .6+5644 0822.5+5634 161.14 34.78 191 337 III 50 0 6 17	6+4716 0822.1+4706 172.65 34.58 29 153 III 48 0.1303 0 5 16. 7+0742 0820.4+0732 216.32 23.19 322 283 74 1 0 17. 1.+3242 0822.2+3232 189.92 32.33 180 335 III: 56 0 6 17. 6+4902 0824.2+4852 170.53 35.03 313 251 II 40 0 6 17. 6+1844 0822.5+1834 205.36 28.14 297 231 31 0 0 17.

	В	17.8 17.8 17.3 15.2	17.5 15.6 17.9 17.5	17.0 16.2 16.5 17.4	17.1 17.1 17.7 16.5	17.7 17.7 17.5 16.9	17.9 17.5 17.8 13.8	17.6	16.9 17.0 17.5	17.5	17.4 16.5 17.7 17.7
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	D	35 37 39 39 0	55 32 31 63	98000	74 79 38 38	65 55 108 48 61	51 210 54 32 39	97 107 56 64 39	45 106 63 47 75	60 64 55 151	56 54 38 99
	T_{B-M}	111 1-11:		II-III II-III III:	1111	!!! !!!-!!! !!:	!!!! !!!! !-!!:		::: :::	111-111 111-111 111 111	111-111 111-111 111
	y	190 176 158 10 258	232 191 236 201 235	282 330 100 95	275 136 283 63 63	273 243 86 182 201	4 185 3 221 8 82 2 89 8 192	6 230 0 104 7 280 7 265 7 185	0 37 5 337 1 224 4 268 3 119	0 230 1 255 1 332 8 350 8 324	9 234 9 190 2 56 7 144 6 305
	н	248 70 313 308 184	184 181 141 138 286	281 169 270 27 163	254 236 180 244 49	49 305 43 226 216	21 17 18 27 27	3000	13 13 14 14	31,71,11,11	26 8 25 25 17
	q	0 31.16 9 42.66 3 26.30 6 24.76 2 42.95	8 42.99 2 43.13 1 43.39 0 43.45 5 27.52	1 24.57 0 35.71 1 38.28 3 39.97 4 36.03	5 28.45 0 31.81 7 33.40 5 33.03	3 41.03 2 43.99 2 43.39 4 34.42 8 34.74	9 31.50 4 34.14 5 27.36 7 44.41 5 25.07	0 44.05 0 43.95 0 41.53 4 43.33	6 36.01 9 36.21 7 37.25 5 41.85	3 39.04 3 45.67 3 44.83 4 37.68	8 42.37 0 42.04 13 32.96 5 43.22 2 46.43
	1	128.9 188.4 236.7 239.2 170.0	170.6 171.7 178.8 179.7 235.7	240.4 138.4 213.5 150.5	235.4 129.8 132.8 227.7 154.7	153.7 187.0 166.1 225.6 225.3	231.7 133.9 239.5 191.0	195.7 165.6 153.4 161.5	137.4 137.8 140.1 153.5 244.7	218.9 178.3 167.7 223.4 217.0	154.18 213.10 130.93 156.11
	A(2000)Dec	2+8325 4+3526 6-0653 8-0938 5+4857	4+4828 8+4742 6+4232 8+4153 6-0528	7-1035 1+7417 5+1559 2+6349 7+7349	1-0443 2+8224 8+7923 3+0318 1+6025	6+6110 5+3637 0+5142 6+0531 3+0552	3-0023 3+7813 0-0818 8+3346 5-1215	4+3026 0+5158 2+6114 5+5458 2+5928	8+7447 6+7423 1+7217 3+6101 1-1337	3+1225 0+4248 6+5018 8+0839 0+1410	0+6023 6+1739 6+8057 3+5844 5+3747
	RA(20	0928.3 0910.4 0908.6 0908.8	0912.0 0912.0 0912.0 0912.0	0910. 0919. 0912. 0917.	0913. 0930. 0925. 0914.	0918. 0916. 0918. 0915.	0916. 0928. 0918. 0919.	0920. 0922. 0923. 0922.	0928. 0928. 0928. 0925.	0922. 0925. 0925. 0923.	0928. 0936. 0939. 0928.
	(1950)Dec	5+8338 3+3539 1-0641 4-0926 1+4910	0+4841 4+4755 3+4245 6+4206 1-0516	3-1023 9+7430 7+1612 1+6402 6+7402	6-0431 4+8238 4+7936 7+0331 2+6038	7+6123 4+3650 5+5155 0+0544 7+0605	7-0011 4+7827 5-0806 8+3359 1-1203	4+3039 5+5211 3+6127 9+5511 4+5941	7+7501 5+7437 3+7231 5+6114 7-1325	6+1238 8+4301 2+5031 1+0852 3+1423	2+6037 8+1753 9+8111 6+5858 4+3801
	RA(195	0919.5 0907.3 0906.1 0906.4	0909.4 0909.4 0909.3 0909.6	0908.3 0913.9 0909.7 0913.1	0910.6 0922.4 0919.4 0911.7	0914.7 0913.4 0914.5 0913.0	0913.7 0922.4 0915.5 0916.8	0917.4 0918.5 0919.3 0918.9	0923.7 0923.5 0923.3 0921.5	0919.6 0921.8 0922.2 0921.1	0924.2 0923.8 0932.9 0926.6
-Continued	Abell	0751 0752 0753 0754 0755	0756 0757 0758 0759 0760	0761 0762 0763 0764	0766 0767 0768 0769 0770	0771 0772 0773 0774 0775	0776 0777 0778 0779 0780	0781 0782 0783 0784 0785	0786 0787 0788 0789 0790	0791 0792 0793 0794 0795	0796 0797 0798 0799 0800
ABLE 3—	E	17.7 17.1 17.8 17.5 17.5	17.5 17.5 17.9 17.9	17.3 17.7 16.8 16.8	17.1 16.7 17.1 17.6 17.6	17.7 16.9 17.1 16.7	16.7 16.7 17.5 17.1	17.6 17.7 17.7 17.7 17.5	17.5 16.9 17.5 17.5	17.8 17.7 17.5 16.6	17.7 17.5 17.4 17.7 17.1
T	z R D	00100	90900	0000	00000	0000	0000	2030 1 6 1159 1 6 0 6	0000	0 6 0 6 0 6 729 0 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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	T_{B-M}	III-III: II-III	II II	111: 111: 111: 11-111:	III I-II	111-111 111 111-111		II-III: I: I	111 111-111 111-111	::::::::::::::::::::::::::::::::::::::	
8	y	321 I 256 I 157 282 203 I	135 I 313 288 I 244 236	219 I 291 I 216 I 204 I 173 I	231 166 275 211 I	274 245 I 95 I 342 I	265 I 68 I 95 111 I 62 I	52 I 292 I 111 I	109 I 312 211 I 166 I 223 I	275 I 222 I 113 I 134 I	74 I 267 I 89 I 260 155 I
	н	314 190 299 246 185	178 239 300 247 268	240 129 217 318 241	32 280 228 237 185	171 74 301 201 162	63 277 149 159 189	145 142 181 114	166 209 218 256 209	1115 100 29 28 28	112 98 211 319 314
	q	38.42 35.61 27.78 32.38 37.03	36.88 32.18 38.62 32.03	26.35 36.89 34.68 40.10	40.28 31.08 32.73 33.25	38.80 39.24 31.79 40.55	39.52 40.77 32.51 39.71 40.74	25.77 29.41 40.25 35.74 39.24	41.06 32.65 33.54 41.78	42.04 40.32 34.66 37.38	42.14 40.17 34.84 33.59 35.52
	1	84.31 20.42 21.93 33.68	96.03 33.03 85.11 14.55	27.24 00.05 08.78 79.59	71.01 29.74 33.59 34.90	54.45 94.07 31.16 84.02 52.76	93.66 82.92 18.44 58.20 67.16	32.05 25.50 61.56 11.84 53.68	5.96 2.69 2.52 9.12	85.89 55.24 19.28 12.13 25.14	66.63 54.16 36.91 23.10
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	RA(2000)Dec	4444	3+28 9+79 0+37 2+12 2+36	5.4+0018 2.1+2537 2.6+1812 1.8+4154	5.0+4827 2.5+8251 5.8+7913 5.7+7800 5.1+1537	4 4 4 4 4	£ + 4 + 4	3+0 3+5 6+1 1+6	3.2+5212 3.5+7954 2.4+7801 1.5+4714 5.6+4218	5+3 2+6 7+1 3+1 8+0	4 4 4 4 4
	RA(0847 0847 0846 0846 0859	0848 0900 0849 0850	0850 0852 0852 0854 0854	0856 0912 0906 0905 0855	0859 0857 0911 0858 0901	0858 0859 0857 0901 0900	0857 0901 0900 0904	0903 0913 0904 0905	0906 0910 0906 0907	0909 0910 0916 0908 0909
	A(1950)Dec	4+3819 0+2510 5+0519 4+7930 6+3011	3+2855 8+8005 8+3743 4+1256 0+3645	8+0030 1+2549 8+1824 5+4206 6+3535	5+4839 8+8304 1+7925 4+7812 3+1549	5+6129 3+3057 1+8140 1+3846 1+6248	3+3119 9+3937 9+1010 3+5827 8+5132	9-0329 3+0322 6+5549 8+1628 4+6157	6+5224 7+8007 2+7814 1+4726 3+4231	3+3730 3+6030 0+1029 5+1652 2+0459	1+5145 0+6120 9+7559 0+0711 4+1114
	RA(19	0844. 0844. 0852.	0845.0 0853.0 0845.0 0847.4	0847.8 0849.8 0851.0	0852.6 0903.8 0900.1 0859.4	0855. 0854. 0904. 0855.	0855.0 0855.0 0854.0 0857.0	0854.0 0855.0 0857.0 0900.4	0859. 0906. 0906. 0901.	0903. 0906. 0904. 0904.	0906. 0910. 0910. 0906.
	Abell	0701 0702 0703 0704 0705	0706 0707 0708 0709 0710	0711 0712 0713 0714 0715	0716 0717 0718 0719 0720	0721 0722 0723 0724 0725	0726 0727 0728 0729 0730	0731 0732 0733 0734 0735	0736 0737 0738 0739 0740	0741 0742 0743 0744 0745	0746 0747 0748 0749 0750
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	B Q	0 18.4 6 17.8 0 17.5 6 17.7 0 17.4	0 17.1 0 16.9 0 16.9 5 16.6 5 17.1	0 17.4 6 17.7 0 17.7 6 17.4 5 16.6	0 17.5 0 17.5 6 17.6 0 17.4 6 17.7	5 17.1 6 17.6 6 17.4 6 17.7 0 17.4	6 17.6 6 17.7 5 16.8 5 17.2 6 17.4	0 17.7 5 17.1 5 16.8 0 17.1 6 17.7	6 17.5 0 17.6 6 17.7 6 17.6 0 17.2	6 17.6 0 17.1 6 17.8 0 17.8 6 18.0	0 17.0 0 17.6 6 18.0 5 17.2
	z R	402 1 0 2069 1	0 0881 0	00000	0 0 153 3	182 3	00000	1408 0	00000	360 1	00000
	0	71 0. 50 42 59 0. 55	42 44 0. 51 59	43 68 40 57	45 44 186 0. 48 62	52 70 133 0. 63	59 61 63	444 488 63 63	69 66 31 31	61 42 50 47 53 0.	44 44 54 34
	T_{B-M}	7 9 III 5 III 3	7 8 1 1 1 1 1 1 1 1 1 1	1 II-III: 6 III 1 III	1 7 8 II-III: 5 III	9 II-III: 5 III 4 III 6 III	73 II: 75 III 98 II-III: 51 III 08 II-III:	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 III 9 III 1 III:	8 II-III 9	11 12 13 11 11 11
	r h	213 15 154 17 194 7 195 4	132 34 118 27 175 20 174 4 170 32	170 21 163 7 160 17 34 17 98 29	133 11 149 23 142 6 135 33 133 8	130 19 93 17 303 18 114 10 302 16	61 17 79 7 91 19 52 15 86 30	287 20 71 33 70 18 67 14 97 34	88 23 12 78 15 328 14 42 27	314 12 36 23 182 21 180 22 91 29	297 161 291 116 82 280 33 283 317 245
	q	4 48.52 4 44.66 4 41.80 4 31.33	1 45.90 9 22.42 2 40.58 4 42.11 0 38.59	4 37.43 1 42.63 3 29.61 7 39.28 2 49.53	3 45.59 3 38.03 2 32.49 0 39.27 4 43.14	8 42.36 3 35.87 0 39.41 5 45.96 3 39.69	4 50.20 1 37.10 4 41.86 2 50.31 2 36.14	7 39.37 1 43.45 3 42.05 4 41.68 1 44.38	3 46.46 6 51.21 3 36.26 9 49.64 0 36.37	2 51.01 6 39.76 3 51.86 4 51.90 6 49.89	0 51.66 7 51.41 3 50.11 9 48.06 3 49.03
	-	171.67 198.2 217.9 225.83	158.01 255.69 229.62 226.24 233.80	235.94 225.51 247.93 140.17	155.73 235.73 244.72 234.00 225.84	146.0 133.8 139.9 155.6	198.8 135.6 230.8 199.5	139.27 228.21 231.43 232.34 149.71	155.5 181.3 133.9 208.9 242.6	200.4 237.2 188.3 188.0 167.0	180.2 200.8 167.3 158.6 215.4
	KA(2000)Dec	0942.8+4700 0942.0+2925 0942.2+1523 0942.1+0856	0945.4+5633 0942.1-2236 0943.4+0553 0943.7+0851 0943.6+0206	0943.6+0003 0944.5+0934 0943.9-1236 0950.0+7111 0946.7+4329	0948.0+5808 0945.2+0032 0945.5-0838 0946.2+0221 0946.8+0936	0951.2+6546 0955.5+7715 0952.7+7117 0950.6+5801	0949.9+2916 0955.9+7522 0949.7+0545 0950.7+2851 0949.7-0410	0956.0+7142 0951.3+0814 0951.3+0529 0951.5+0443	0954.3+5753 0953.7+4020 0959.8+7656 0953.5+2246	0954.3+2824 0953.6+0033 0955.7+3558 0955.9+3609	0956.5+4100 0956.3+2811 0957.7+4915 0958.3+5516
1	KA(1950)Dec	0939.6+4714 0939.1+2939 0939.5+1537 0939.4+0910 0939.0-0903	0941.9+5647 0939.8-2223 0940.8+0607 0941.0+0905 0941.0+0220	0941.0+0017 0941.8+0948 0941.5-1223 0945.6+7126 0943.5+4343	0944.4+5822 0942.6+0046 0943.0-0825 0943.6+0235	0947.3+6601 0950.3+7730 0948.4+7132 0947.1+5816	0947.0+2931 0951.1+7537 0947.1+0600 0947.8+2906	0951.7+7157 0948.6+0829 0948.7+0544 0948.9+0458	0950.8+5808 0950.6+4035 0954.8+7711 0950.7+2301 0950.5-0436	0951.4+2839 0951.0+0048 0952.7+3613 0952.9+3624	0953.444115 0953.442826 0954.544930 0954.945531 0953.841850
-Continue	Abell	0851 0852 0853 0854 0855	0856 0857 0858 0859 0860	0861 0862 0863 0864 0865	0866 0867 0868 0869 0870	0871 0872 0873 0874 0875	0876 0877 0878 0879 0880	0881 0882 0883 0884 0885	0886 0887 0888 0889 0899	0891 0892 0893 0894 0895	0896 0897 0898 0899 0900
IAB	z KU m	1918 2 6 17.7 0 6 17.3 0 0 17.5 0 6 17.4	0 0 17.5 0 6 17.9 0 0 17.4 0 0 16.9	0 6 17.4 0 0 17.8 1 0 17.5 0 5 17.1	1 0 17.4 0 5 17.1 0 0 16.5 0759 0 5 16.5 0 6 17.5	0 0 17.7 1 0 17.5 1 0 17.3 0 6 17.5 1 0 18.2	0 0 17.7 0 6 17.5 0 0 17.7 0 0 17.1	0 0 17.5 0 0 17.1 0 0 16.7 0 4 16.3 0 6 17.7	0 6 17.3 0 6 17.5 0507 0 3 15.3 0 0 17.9	0 0 16.5 0 0 16.7 0 6 17.5 0 6 17.6 0 6 17.4	0 5 17.0 0 6 17.5 0 0 16.9 0 0 17.2 0 6 17.5
	. c	81 0.1 59 49 64 37	42 54 38 31	71 39 61 62 62	68 50 47 36 0.0	448 50 50 57	32 55 41 57	44 49 43 51	52 52 40 0.0 33	447 30 559 92	6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
E :	x y $^{IB-M}$	73 345 II-III 225 266 III 50 215 234 348 II-III: 47 107	231 319 41 183 III 34 299 142 172 19 91	139 185 II-III 133 310 22 69 137 99 II-III 267 160 II:	15 131 324 176 III 96 317 324 84 III 300 51 III	296 279 294 132 224 104 230 207 III 198 179	194 183 289 49 III 280 220 195 325 280 291 II	281 44 275 96 272 149 187 246 III 256 256 II-III	125 234 II 255 345 II-III 254 262 III 127 312 123 249	234 306 229 52 158 347 III 218 157 III: 168 124 II	158 130 II: 212 340 II-III 1 104 44 155 69 208 240 III
1 1		209.54 43.33 145.79 40.18 220.20 40.44 151.18 42.08 229.20 36.59	159.59 44.35 239.70 30.67 225.46 38.62 134.49 35.14 235.91 33.54	134.23 35.04 185.39 47.24 247.15 25.87 135.85 35.94 198.25 46.38	246.25 26.72 214.14 43.17 137.87 37.03 223.54 40.01 237.20 33.72	238.94 32.72 246.76 27.20 256.64 18.71 205.72 45.90 147.35 41.42	162.69 45.81 237.37 33.86 221.02 41.87 151.30 42.90 226.49 39.68	237.56 33.94 216.52 43.45 222.71 41.41 145.77 40.99 220.47 42.56	133.09 34.76 225.64 40.61 239.79 33.14 131.65 33.92 132.80 34.64	239.28 33.93 253.70 22.96 158.23 45.44 236.33 36.14 148.20 42.40	208.23 46.81 232.86 38.12 136.53 36.99 209.84 46.55 221.35 43.25
D A (20000) A G	nA(2000)Dec	0928.0+2033 0933.4+6702 0929.2+1207 0932.8+6233 0929.0+0406	0932.2+5601 0929.0-0626 0930.2+0741 0939.0+7717	0939.9+7731 0932.6+3753 0930.5-1433 0939.2+7555 0932.3+2903	0931.0-1323 0932.2+1721 0938.9+7358 0932.3+0939 0933.8-0255	0934.0-0441 0933.7-1325 0933.2-2551 0935.3+2354 0938.8+6525	0937.3+5330 0934.6-0257 0935.6+1211 0938.9+6208 0935.5+0730	0935.2-0302 0936.0+1551 0936.2+1051 0940.7+6640	0946.5+7826 0937.5+0831 0937.1-0500 0948.6+7953	0938.6-0411 0938.2-2055 0941.9+5634 0940.1-0056	0941.1+2229 0940.4+027 0947.6+7452 0941.4+2121 0941.1+1234
B A (1050) Dog	14A(1900)Dec	0925.2+2047 0929.2+6716 0926.5+1221 0928.9+6247 0926.4+0420	0928.6+5615 0926.5-0613 0927.5+0755 0933.5+7731	0934.4+7745 0929.5+3807 0928.1-1420 0934.0+7609	0928.6-1310 0929.4+1735 0934.0+7412 0929.6+0953	0931.5-0428 0931.3-1312 0931.0-2538 0932.4+2408	0933.8+5344 0932.1-0244 0932.9+1225 0935.1+6222	0932.7-0249 0933.2+1605 0933.5+1105 0936.6+6654 0934.7+1305	0940.9+7840 0934.8+0845 0934.6-0447 0942.5+8007 0941.9+7856	0936.1-0358 0935.9-2042 0938.4+5648 0937.5-0043	0938.3+2243 0937.8+0241 0942.7+7506 0938.6+2135
A bell	Tancii	0801 0802 0803 0804 0805	0806 0807 0808 0809 0810	0811 0812 0813 0814 0815	0816 0817 0818 0819 0820	0821 0822 0823 0824 0824	0826 0827 0828 0829 0830	0831 0832 0833 0834 0835	0836 0837 0838 0839 0840	0841 0842 0843 0844 0844	0846 0847 0848 0849 0850

	Abell RA(1950)Dec	0901 0953.7-0945 0902 0954.0-0956 0903 0955.0+1955 0904 0956.6+6015	0906 0957.8+653 0907 0955.9-104, 0908 0956.8+223 0909 1000.6+750 0910 0959.1+672	0911 0958.0-1500 0912 0958.6+0000 0913 0959.8+204. 0914 1004.3+712 0915 1002.6+511	0916 1001.5-1900 0917 1004.2+6240 0918 1006.1+7350 0919 1002.4-0027	0921 1002.9+074 0922 1006.3+711 0923 1003.7+260 0924 1004.1+355 0925 1004.0+272	0926 1004.0+215 0927 1005.0+503 0928 1004.2+114 0929 1004.9+3811 0930 1004.4-052	0931 1004.4-131 0932 1005.3+1956 0933 1005.1+004 0934 1005.9+173	0936 1006.4+294 0937 1006.2+141 0938 1006.7+183 0939 1006.3-110 0940 1006.7-162	0941 1007.1+035 0942 1008.7+193 0943 1009.3+335 0944 1008.6-014 0945 1011.8+692	0946 1009.7+240 0947 1011.6+631 0948 1012.9+723 0949 1009.8+064 0950 1011.5+500
	RA(2000)Dec	2 0956.2-0956 6 0956.5-1010 2 0957.8+1937 9 1000.1+6004 4 1000.4+5659	7 1001.6+6522 9 0958.4-1103 9 0959.6+2224 4 1005.2+7449 4 1003.0+6709	9 1000.4-1523 8 1001.2-0006 3 1002.6+2028 9 1008.4+7114 0 1005.8+5055	8 1003.9-1922 5 1007.8+6230 9 1010.5+7344 7 1005.0-0041 1 1007.3+5516	0 1005.5+0725 6 1010.4+7101 9 1006.5+2554 4 1007.0+3539 2 1006.8+2707	6 1006.8+2141 4 1008.2+5019 5 1006.9+1130 5 1007.9+3800 3 1006.9-0537	0 1006.8-1324 0 1008.1+1935 6 1007.7+0031 0 1008.6+1715 4 1010.6+5559	8 1009.3+2933 3 1008.9+1358 9 1009.4+1824 4 1008.8-1118 3 1009.1-1637	6 1009.7+0341 2 1011.4+1917 2 1012.2+3337 7 1011.1-0201 0 1015.7+6905	6 1012.5+2351 9 1015.2+6304 3 1017.0+7218 0 1012.4+0625 4 1014.7+4949
	q 1	247.95 33.63 248.21 33.53 214.09 49.65 152.23 46.12 156.19 47.59	145.75 43.48 249.37 33.27 210.14 50.89 135.66 37.91 143.64 42.57	253.44 30.60 239.45 40.89 213.40 50.99 138.95 40.44 164.19 50.79	257.28 28.28 148.56 45.64 136.38 38.90 240.84 41.28 157.87 49.22	231.76 46.07 139.04 40.70 205.22 53.25 188.78 54.17 203.24 53.55	212.01 52.29 164.87 51.36 226.79 48.39 184.76 54.18 246.18 38.49	253.11 33.10 215.41 51.92 240.11 42.56 219.00 51.22 156.57 49.31	199.27 54.41 223.77 49.95 217.39 51.82 251.73 34.92 256.20 31.14	237.01 44.86 216.31 52.57 192.28 55.26 243.52 41.64 140.60 42.30	209.10 54.13 147.21 46.01 137.33 40.23 234.33 46.96 165.00 52.50
	x y T_{B-M}	318 0 313 308 300 300 55 219 III 41 54	71 181 288 262 252 128 I-II: 43 50 III: 71 277 II-III	258 30 256 205 239 345 III 237 174 III 269 50 III	210 138 283 351 III 222 308 III 205 173 II: 249 282 II-III	199 288 III 229 162 II-III 167 314 II: 58 195 III 165 58 III	164 88 II: 281 340 III 184 186 II-III: 54 321 177 231 III:	175 136 170 297 III: 169 239 III 163 172 III 223 320	138 188 157 318 II-III 152 234 III 150 248 144 285	143 88 II 127 281 307 87 III 121 101 III 208 58	94 205 287 61 III 199 230 108 235 III 227 312 II-III
TABLE	C z RD m	52 1 0 17.7 43 0 0 17.7 44 0 0 17.2 51 0 6 17.4 38 0 0 17.8	44 0 0 17.4 54 1 0 17.5 55 0 7 18.4 90 0 6 17.7 222 0.2055 4 6 17.5	42 0 0 17.5 36 0.0888 0 4 15.9 65 0.1675 1 6 18.0 114 0 6 17.7 54 0 5 17.2	41 0 0 17.3 66 0 6 17.4 69 0 5 17.1 60 0 5 17.1 56 0 5 17.1	41 0 5 16.7 : 85 0 6 17.9 50 0.1162 1 5 17.2 75 0.0989 1 5 17.2 53 0 6 17.7	56 0 6 17.8 66 0 6 17.4 57 0 5 17.2 45 0 0 17.6 50 5 16.5	40 0 17.4 50 0 6 17.5 44 0 4 15.9 61 0 5 17.0 49 0 17.2	41 0 0 17.2 : 65 0 5 17.2 30 0 5 16.6 31 0 0 17.7 48 0 0 17.5	56 0 5 17.1 32 0 0 17.0 82 0 5 17.2 50 0 5 17.1 45 0.0917 0 5 17.2	44 0 0 17.6 77 0 5 16.8 32 0 0 17.1 31 0 5 16.8 : 55 0 6 17.6
3—Continued	Abell	0951 0952 0953 0954 0955	0956 0957 0958 0959 0960	0961 0962 0963 0964	0966 0967 0968 0969	0971 0972 0973 0974	0976 0977 0978 0979	0981 0982 0983 0984 0985	0986 0988 0989 0999	0991 0993 0994 0994	0996 0997 0998 1000
	RA(1950)Dec	1011.0+3458 1011.0+2001 1010.7-1542 1011.1+0007	1012.344725 1011.4-0040 1013.244115 1014.1+5948 1015.1+6628	1013.6+3352 1015.3+6343 1014.2+3916 1013.8+2503 1015.5+5008	1013.9-2508 1015.4+4341 1017.4+6831 1015.7+3037 1015.1-1027	1016.8+4113 1017.0+3948 1016.8+0819 1017.0+1418 1019.1+6453	1017.0-1340 1018.0+3329 1018.0-0616 1017.9-0738 1019.3+5022	1020.7+6822 1019.0+3453 1020.1+6004 1018.7+1227 1019.8+5218	1018.9+1423 1019.1+0639 1019.8+3234 1019.4+0927 1020.4+4925	1019.7+1908 1019.8+2045 1019.4-0442 1020.1+1935 1020.7+3732	1020.2+1524 1021.0+3746 1022.6+6813 1020.7+1306 1021.8+5026
	RA(2000)Dec	1013.9+3443 1013.7+1946 1013.1-1556 1013.7-0007 1012.9-2426	1015.4+4710 1014.0-0054 1016.2+4100 1017.5+5932 1018.8+6612	1016.5+3337 1018.8+6327 1017.2+3900 1016.6+2448 1018.6+4952	1016.2-2522 1018.4+4325 1021.2+6815 1018.5+3021 1017.6-1042	1019.8+4057 1020.0+3932 1019.4+0803 1019.7+1402 1022.7+6437	1019.4-1355 1020.9+3313 1020.5-0631 1020.4-0753 1022.4+5006	1024.4+6806 1021.9+3437 1023.5+5948 1021.4+1211 1023.0+5202	1021.6+1407 1021.7+0623 1022.7+3218 1022.0+0911 1023.5+4909	1022.4+1852 1022.5+2029 1021.9-0457 1022.8+1919 1023.6+3716	1022.9+1508 1023.9+3730 1026.3+6757 1023.4+1250
	l b	190.33 55.60 215.86 53.24 256.49 32.29 242.08 43.33 262.78 25.81	169.04 53.57 242.97 42.89 179.22 55.34 151.21 48.26 143.35 44.38	192.28 56.16 146.39 46.11 182.62 55.86 207.87 55.25 164.48 53.07	264.08 25.54 174.89 55.19 140.99 43.22 198.16 56.49 253.11 36.87	179.04 56.01 181.52 56.31 233.68 49.32 225.49 52.34 144.71 45.71	256.23 34.82 192.96 57.07 250.01 40.36 251.25 39.38 163.71 53.53	140.86 43.55 190.37 57.24 150.24 48.73 228.47 51.84 160.76 52.75	225.71 52.78 236.28 48.86 194.66 57.45 232.74 50.47 165.05 54.08	218.47 54.87 215.81 55.43 248.84 41.70 217.79 55.11 185.43 57.36	224.42 53.51 184.98 57.39 140.85 43.78 227.92 52.58
	x y T_{B-M}	287 147 III: 98 308 II-III 94 0 89 204 60 182	222 170 III 85 161 I-II: 97 160 III 227 191 III: 255 228 II-III	259 87 II-III 263 81 85 54 I-II 44 257 II 192 315 III	21 131 III: 79 291 237 337 III 30 234 II-III 34 281 III	61 159 II 57 83 II-III 15 324 II 17 323 II-III 238 142 III:	324 109 211 65 III 316 185 II 316 112 160 327 II-III	221 328 II-III 199 140 III: 187 204 III 308 225 126 109 III	304 329 III 303 236 III 280 339 300 64 149 276 III	291 262 III 288 349 III 297 269 III 286 286 I: 181 282 III	287 62 III 177 295 III: 212 320 II 281 260 II-III:
	C Z	52 0.14 54 55 49 75	52 55 0.04 60 55 :117	: 88 48 134 0.20 50	67 47 119 : 56	33 6 8 6 8 9 3 6 8 6 8	58 52 55 0.05 39 0.05	:126 77 87 30 61	66 61 32 32 58	51 0.08 52 36 0.05 52 56	52 70 123 : 33 0.03
	R D m	27 1 6 17, 0 5 16, 1 0 17, 0 0 16,	0 5 17.2 4 1 4 15.9 0 6 18.0 0 5 17.2	0 5 17 0 0 17 6 3 5 17 0 5 17	0 6 17. 0 0 17. 0 6 17. 0 6 17. 0 5 16.	0 5 16. 0 5 17. 0 6 17. 0 6 17. 0 5 16.	1 0 17. 0 5 17. 27 1 3 15. 5 0 3 15. 0 6 17.	0 6 17. 0 6 17. 0 6 17. 0 0 17. 0 5 17.	0 6 17. 0 5 17. 0 0 18. 0 0 17. 0 6 17.	80 1 5 17. 0 6 17. 33 0 3 14. 0 6 17.	0 6 17. 0 5 17. 0 6 17. 18 0 3 15.

	в	17.5 17.8 17.2 17.2	17.0 17.2 17.2 17.2	17.7 17.2 17.2 17.2	16.6 16.6 17.0 15.1	17.2 17.2 17.2 17.3	17.2 17.5 17.0 17.1	17.2 17.6 17.6 17.4 16.6	17.5 17.8 17.0 17.7 17.7	17.7 17.6 17.8 18.0 18.0	17.8 16.0 16.9 17.0
	R D	00000	0 0 5 0 0 0 5 0 0 0 1	00000	3 0000 032	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000	88 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	N		0.011		0.063	0.13		0.158		0.226	0.04
	0	54 72 72 85 85	51 58 46 57 50	99 I: 62 67 54 48	68 50 71 45 122	44 1 82 77 60	1 50 1 888 1: 55 41 42	1 83 46 35 31	51 44 42 39 99	38 76 51 83 93	1 60 1 38 32 53
	T_{B-M}	:::::::				111-111 111 111		111-111 1111 1111			
	y	122 110 255 278	205 237 130 215 18	280 101 250 282 51	170 120 105 73 73	273 79 251 144 13	5 121 3 136 1 249 0 140 5 273	2 193 0 343 3 201 5 156 3 338	7 294 8 318 3 134 0 250 1 196	268 287 58 84 67	7 112 0 295 1 3 8 160 3 122
	н	6 23 6 122 1 119 3 183 9 34	177 100 100 1 23 1 93	138 83 83 74 60	6 66 2 150 3 147 2 58 7 197	8 132 6 44 7 276 6 275 8 23	5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 252 0 30 5 33 1 303	8 307 8 2903 8 2903	0 290 7 293 1 287 5 295 5 279	3 287 3 287 3 208 1 283
	q	57.3 60.1 58.7 60.0	59.09 55.30 60.54 43.64 26.51	45.29 57.26 58.40 49.02 52.32	51.6 60.0 60.1 42.1 37.0	59.4 52.2 61.1 58.1	51.9 58.4 49.4 49.8	61.8 62.1 51.0 44.0	36.6 59.7 34.1 60.0	36.4 50.4 55.5 58.8	62.9 46.9 46.9 62.7 61.8
	1	168.20 203.21 197.79 174.47	175.90 231.36 190.43 253.51 269.64	140.23 226.15 221.39 246.43 151.74	241.93 178.58 179.11 256.58 130.61	172.97 150.74 185.57 166.61 258.20	149.56 166.63 248.39 256.38 247.99	187.62 194.40 147.63 256.42 219.48	264.06 171.00 266.18 222.74 265.62	264.73 248.33 238.59 204.90 229.05	203.77 196.30 254.35 188.64 216.14
	Dec	612 803 045 237	148 224 422 558 731	+6712 +1552 +1839 +0116 +5653	0510 1014 3957 836 7808	4305 5724 3638 4638 0943	5810 4630 0038 0722 0105	3534 3222 5939 0704 2016	1629 4354 1928 1838	1659 0121 0904 2731 1513	2803 3128 0355 3458 2214
	A(2000)Dec	037.0+4 036.4+2 036.7+3 037.3+4	037.9+4 037.2+1 037.8+3 037.2-0	040.8+6 038.7+1 038.8+1 038.8+0	039.4+0 040.6+4 040.8+3 039.9-0	042.6+6 043.4+6 042.4+6 043.3+6	045.1+9 044.6+4 043.6+0 043.4-0	044.8+ 044.7+ 046.2+ 044.6- 045.3+	044.7- 046.2+ 044.7- 046.4+ 045.7-	046.0-1 046.4+(046.9+(047.5+2	048.1+7.0048.5+0047.9-0048.9+
	2	86466	40889	0.000	20214		0 0 4 7 1	00000	40644	47076	W4040 44444
	(1950)Dec	0+462 6+281 9+310 4+425 5+372	0+420 5+124 0+343 7-054 5-271	3+672 0+160 1+185 2+013 8+570	.8+052 .7+403 .9+401 .4-082	7+432 3+574 6+365 3+465 0-092	9+582 7+464 0+005 9-070 4+012	0+355 9+323 0+595 1-064 6+203	2-161 3+441 3-191 7+185	5-164 8+013 3+092 8+274 8+152	4+281 7+314 4-034 1+351 2+223
7	RA(18	1034 1033 1033 1034	1035. 1034. 1035. 1034.	1037. 1036. 1036. 1036. 1037.	1036 1037 1037 1037 1042	1039 1040 1039 1040	1041 1041 1041 1040 1040	1042 1041 1043 1042	1042 1043 1043 1043	1043 1043 1044 1044	1045 1045 1045 1046
ontinue	Abell	1051 1052 1053 1054 1055	1056 1057 1058 1059 1060	1061 1062 1063 1064 1065	1066 1067 1068 1069 1070	1071 1072 1073 1074 1075	1076 1077 1078 1079 1080	1081 1082 1083 1084 1085	1086 1087 1088 1089 1090	1091 1092 1093 1094 1095	1096 1097 1098 1099 1100
НУ - (ı i	22667	L2LL2	51788	40000	90106	81078	0 L 0 D 4	52078	10090	22222
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IABL	B-M C Z RD	70 0 6 1 50 0 6 1 37 0.0520 0 5 1 I 76 0 5 1	11 79 0 6 17. 72 0 6 17. 40 0 0 17. 76 0 6 17. 59 0 5 17.	228 46 0 0 17. 281 11 88 0 0 17. 201 111 88 0 6 17. 184 111 61 0 6 17.	159 37 0.0321 0 3 15. 167 17 47 0 0 17. 250 111 50 0.297 1 6 17. 250 111 58 0.0650 1 4 16.	: 55 0 5 16. 40 0 17. 31 0 0 17. 69 0 5 17. 87 0 5 16.	I 74 0 5 17. 67 0 5 17. I 64 0 5 17. II 81 0 5 17. 46 0 0 17.	40 17. 31 0 4 15. 15. 165 111. 96 0 5 17. 120 111. 94 0.0799 2 3 15.	40 0017. 40 0017. II 63 0617. 32 0017. 46 0017.	I 50 0 5 17. I 51 0 5 17. -III 71 0 6 17. -III 71 0 5 17.	III 108 0 6 17. II 60 0 5 17. 30 0 0 17. III 108 0 6 17. III 95 0 5 17.
IABL	$y T_{B-M}$ C z R D	.78 280 181 III 70 0 6 1 .03 137 314 III 50 0 6 1 .87 135 203 37 0.0520 0 5 1 .56 103 57 I-II 76 0 5 1 .67 206 334 III 81 0 6 1	.50 206 270 II-III 79 0 6 1792 260 249 III: 72 0 6 1755 250 248 III 76 0 0 1759 299 59 III 59 0 5 17.	.75 254 228 46 0 0 17. .16 241 283 38 0 0 17. .52 244 201 III 88 0 6 17. .68 200 184 III 84 0 5 17. .46 135 136 III 61 0 6 17.	.45 233 159 37 0.0321 0 3 15. .59 195 167 47 0 17. .54 212 190 II 50 0.297 1 6 17. .54 215 257 III 50 0.050 1 4 16.	.31 126 303 III: 55 0 5 16. .04 216 90 40 0 0 17. .50 215 19. 69 0 0 17. .62 215 94 II: 69 0 5 17. .62 187 46 III 87 0 5 16.	.12 257 113 II 74 0 5 17. .14 63 184 I 67 0 5 17. .96 250 169 II 64 0 5 17. .36 231 182 III 81 0 5 17. .11 190 268 46 0 0 17.	.59 249 40 45 0 0 1716 188 108 III 31 0 4 1519 3 165 III 96 0 5 1747 179 253 III 62 0 6 1746 237 120 II-III: 94 0.0799 2 3 15.	.45 172 314 40 0 0 17. .82 112 43 40 0 0 17. .57 151 334 I-II 63 0 6 17. .23 45 82 46 0 0 17.	.77 150 59 III 50 0 5 1736 139 204 III 51 0 5 1750 138 122 III 60 0 5 1794 137 196 II-III 71 0 6 1705 139 252 II-III 71 0 5 17.	53 155 320 III 108 0 6 17. 29 128 129 II 60 0 5 17. 07 196 319 30 0 0 17. 76 150 308 III 108 0 6 17. 89 20 47 III 95 0 5 17.
IABL	b x y T_{B-M} C z R D	71 40.78 280 181 III 70 0 6 1 .79 54.03 137 314 III 50 0 6 1 .03 54.87 135 203 37 0.0520 0 5 1 .91 53.56 103 57 I-II 76 0 5 1 .48 43.67 206 334 III 81 0 6 1	.66 44.50 206 270 II-III 79 0 6 17. 51 58 04 160 49 III: 72 0 6 17. 81 41.65 257 224 III 76 0 6 17. 01 57.59 299 59 III 59 0 5 17.	.17 52.75 254 228 46 0 0 17. .63 58.16 241 283 38 0 0 17. .98 41.52 244 201 III 88 0 6 17. .20 45.68 200 184 III 84 0 5 17. .40 58.46 135 136 III 61 0 6 17.	.32 52.45 233 159 37 0.0321 0 3 15. .43 45.98 195 167 47 0 0 177. .46 55.59 22 129 II 50 0.297 1 6 17. .56 58.64 212 257 III 50 0.050 1 4 16.	.45 58.31 126 303 III: 55 0 5 16. .41 52.04 216 90 40 0 0 17. .98 48.62 215 174 II: 69 0 5 17. .77 47.62 187 46 III 87 0 5 16.	.85 58.12 257 113 II 74 0 5 1783 53.14 63 184 I 67 0 5 1788 57.96 251 0169 II 64 0 5 1788 37.36 231 182 III 81 0 5 1724 59.11 190 268 40 0 0 17.	.29 58.59 249 40 45 0 0 1715 49.16 188 108 III 31 0 4 1527 59.19 93 165 III 96 0 5 1748 58.46 237 120 II-III: 94 0.0799 2 3 15.	.56 59.45 172 314 40 0 0 1720 43.82 112 43 40 0 0 1787 48.57 151 279 32 0 6 1788 43.75 152 279 32 0 0 1778 57.23 45 82 46 0 0 17.	.09 40.77 150 59 III 50 0 5 1763 54.36 139 204 III 51 0 5 1768 56.50 138 122 III 60 0 5 1790 60.05 139 252 II-III 71 0 5 17.	.82 44.53 155 320 III 108 0 6 1774 50.29 128 129 II 60 0 5 1725 58.07 196 319 30 0 0 1792 44.76 150 308 III 108 0 6 1762 57.89 20 47 III 95 0 5 17.
IABL	x y T_{B-M} C z R D	250.71 40.78 280 181 III 70 0 6 1 163.79 54.03 137 314 III 50 0 6 1 167.03 54.87 135 203 37 0.0520 0 5 1 161.91 53.56 103 57 I-II 76 0 5 1 140.48 43.67 206 334 III 81 0 6 1	141.66 44.50 206 270 II-III 79 0 6 17. 193.51 58.04 160 49 III: 72 0 6 17. 250.34 41.65 257 224 III 76 0 6 17. 182.01 57.59 299 59 III 59 0 5 17.	229.17 52.75 254 228 46 0 0 17. 196.63 58.16 241 283 38 0 0 17. 250.98 41.52 244 201 III 88 0 6 17. 143.20 45.68 200 184 III 84 0 5 17. 190.40 58.46 135 136 III 61 0 6 17.	231.32 52.45 233 159 37 0.0321 0 3 15. 143.43 45.98 195 167 47 0 0 17. 221.46 55.59 221 190 II 50 0.297 1 6 17. 197.56 58.64 215 257 III 50 0.0650 1 4 16. 232.28 52.32 222 129 II-III: 68 0.0650 1 4 16.	184.45 58.31 126 303 III: 55 0 5 16. 233.41 52.04 216 90 40 0 0 17. 251.98 41.50 215 172 31 0 0 17. 240.98 48.62 215 94 II: 69 0 5 17. 145.77 47.62 187 46 III 87 0 5 16.	179.85 58.12 257 113 II 74 0 5 17. 157.83 53.14 63 184 I 67 0 5 17. 177.88 57.96 250 169 II 64 0 5 17. 131.82 37.36 231 182 III 81 0 5 17. 197.24 59.11 190 268 46 0 0 17.	182.29 58.59 249 40 45 0 0 17. 241.15 49.16 188 108 III 31 0 4 15. 189.27 59.19 93 165 III 96 0 5 17. 220.09 56.77 179 253 III 62 0 6 17. 179.44 58.46 237 120 II-III: 94 0.0799 2 3 15.	195.56 59.45 172 314 40 0 0 17. 139.20 43.82 112 43 243.87 48.57 151 34 I-II 63 0 6 17. 251.28 43.75 152 279 32 0 0 17. 169.78 57.23 45 82 46 0 0 17.	255.09 40.77 150 59 III 50 0 5 17. 231.63 54.36 139 204 III 51 0 5 17. 240.68 56.50 138 122 III 60 0 5 17. 240.04 50.94 137 196 III 71 0 6 17. 197.90 60.05 139 252 IIII 71 0 5 17.	139.82 44.53 155 320 III 108 0 6 17. 241.74 50.29 128 129 II 60 0 5 17. 172.25 58.07 196 319 30 0 0 17. 139.92 44.76 150 308 III 108 0 6 17. 170.62 57.89 20 47 III 95 0 5 17.
IABL	l b x y T_{B-M} C z R D	-0636 250.71 40.78 280 181 III 70 0 6 1 +4951 163.79 54.03 137 314 III 50 0 6 1 +4747 167.03 54.87 135 203 37 0.0520 0 5 1 +5103 161.91 53.56 103 57 I-II 76 0 5 1 +6813 140.48 43.67 206 334 III 81 0 6 1	4-6702 141.66 44.50 206 270 II-III 79 06 17. 4-2255 193.51 58.04 160 49 III: 72 06 17. 0-521 249.98 41.92 250 248 40 0 17. -0547 250.34 41.65 257 224 III 76 0 17. +3903 182.01 57.59 299 59 III 59 0 5 17.	+1215 229.17 52.75 254 228 46 00 17. +1316 196.63 58.16 241 283 38 00 17. -0613 250.98 41.52 244 201 III 88 0 6 17. +5526 143.20 45.68 200 184 III 84 0 5 17. +3432 190.40 58.46 135 136 III 61 0 6 17.	1058 231.32 52.45 233 159 37 0.0321 0 3 15. 15507 143.43 45.98 195 167 47 0 0 17. 1513 221.46 55.59 221 190 11 50 0.297 1 6 17. 1048 232.28 52.32 222 129 II-III: 68 0.0650 1 4 16.	19339 184.45 58.31 126 303 III: 55 05 16. 10940 233.41 52.04 216 90 40 00 017. 1045 251.98 441.50 216 172 31 00 17. 10345 240.98 486.62 215 94 III 69 05 17. 1045 145.77 47.62 187 46 III 87 05 16.	+4004 179.85 58.12 257 113 II 74 0 5 17 +5523 157.83 53.14 63 184 I 67 0 5 17 +4707 177.88 57.96 55 169 II 64 0 5 17 +7719 131.82 37.36 231 182 II 81 0 5 17 +3059 197.24 59.11 190 268 46 0 0 17	182.29 58.59 249 40 45 0 0 17. 4400 241.15 49.16 18 108 11 31 0 4 15. 1504 189.27 59.19 91 165 11 96 0 5 17. 1842 250.09 56.77 179 253 11 62 0 6 17. 4012 179.44 58.46 237 120 II-III: 94 0.0799 2 3 15.	3151 195.56 59.45 172 314 40 0 0 17. 8646 139.20 43.82 112 43 40 0 0 17. 9214 243.87 48.57 151 334 I-II 63 0 6 17. 9447 243.87 151 279 32 0 0 17. 4528 169.78 57.23 45 82 46 0 0 17.	8853 255.09 40.77 150 59 III 50 0 5 17. 1147 231.63 54.36 139 204 III 51 0 5 17. 1616 224.68 56.50 138 122 III 60 0 5 17. 5539 24.08 50.09 137 196 IIII 71 0 6 17. 3041 197.90 60.05 139 252 II-III 71 0 5 17.	6757 139.82 44.53 155 320 III 108 0 6 17. 0424 241.74 50.29 128 129 II 60 0 5 17. 4156 172.25 58.07 196 319 30 0 0 17. 6744 139.92 44.76 150 308 III 108 0 6 17. 4448 170.62 57.89 20 47 III 95 0 5 17.
IABL	b x y T_{B-M} C z R D	0636 250.71 40.78 280 181 III 70 0 6 1 4951 163.79 54.03 137 314 III 50 0 6 1 4747 167.03 54.87 135 203 37 0.0520 0 5 1 5103 161.91 53.56 103 57 I-II 76 0 5 1 6813 140.48 43.67 206 334 III 81 0 6 1	5702 141.66 44.50 206 270 II-III 79 0 6 17. 2355 193.51 58.04 160 49 III: 72 0 6 17. 249.88 41.92 560 248 40.00 0 0 17. 26037 41.65 257 224 III 76 0 6 17. 3903 182.01 57.59 299 59 III 59 0 5 17.	1215 229.17 52.75 254 228 46 0 0 17. 3116 196.63 58.16 241 283 38 0 0 17. 0613 250.98 41.52 244 201 III 88 0 6 17. 6526 143.20 184 III 84 0 6 17. 3432 190.40 58.46 135 136 III 61 0 6 17.	058 231.32 52.45 233 159 37 0.0321 0 15. 507 143.43 45.98 195 167 47 0 0 17. 73 221.46 119 111 50 0.297 1 1 17. 048 197.56 58.64 215 257 111 50 0 17. 024 232.28 52.32 222 129 III-III: 68 0.0650 1 16.	3739 184.45 58.31 126 303 III: 55 0 5 16. 0940 233.41 52.04 216 90 40 0 0 17. 0945 251.98 41.50 116 172 31 0 0 17. 0345 240.98 48.62 215 94 II: 69 0 5 17. 6250 145.77 47.62 187 46 III 87 0 5 16.	4004 179.85 58.12 257 113 II 74 0 5 17. 5523 157.83 53.14 63 184 I 67 0 5 17. 177.0 177.88 57.96 250 169 II 64 0 5 17. 7719 131.82 37.36 231 182 III 81 0 5 17. 3059 197.24 59.11 190 268 46 0 0 17.	182.29 58.59 249 40 45 0 0 17. 241.15 49.16 188 108 III 31 0 4 15. 189.27 59.19 93 165 III 96 0 5 17. 220.09 56.77 179 253 III 62 0 6 17. 179.44 58.46 237 120 II-III: 94 0.0799 2 3 15.	195.56 59.45 172 314 40 0 0 17. 139.20 43.82 112 43 243.87 48.57 151 34 I-II 63 0 6 17. 251.28 43.75 152 279 32 0 0 17. 169.78 57.23 45 82 46 0 0 17.	853 255.09 40.77 150 59 III 50 0 5 17. 147 231.63 54.36 139 204 III 51 0 5 17. 616 2240.68 56.50 138 122 III 60 0 5 17. 639 240.04 50.94 137 196 II-III 71 0 6 17. 641 197.90 60.05 139 252 II-III 71 0 5 17.	757 139.82 44.53 155 320 III 108 0 6 17. 424 241.74 50.29 128 129 II 60 0 5 17. 356 172.25 58.07 196 319 30 0 0 17. 744 139.92 44.76 150 308 III 108 0 6 17. 448 170.62 57.89 20 47 III 95 0 5 17.
IABL	$RA(2000)Dec$ l b x y T_{B-M} C z R D	0621 1023.2-0636 250.71 40.78 280 181 III 70 0 6 1 5007 1025.1+4951 163.79 54.03 137 314 III 50 0 6 1 4803 1025.1+4747 167.03 54.87 135 203 37 0.0520 0 5 1 5119 1025.5+5103 161.91 53.56 103 57 I-II 76 0 5 1 6829 1027.5+6813 140.48 43.67 206 334 III 81 0 6 1	6718 1027.6+6702 141.66 44.50 206 270 II-III 79 0 6 17. 3311 1025.5+3255 193.51 58.04 160 49 III: 72 0 6 17. 0506 1024.9-0521 249.88 41.92 260 248 440 0 0 17. 0512 1024.9-0547 250.34 41.65 257 224 III 76 0 6 17. 3919 1026.2+3903 182.01 57.59 299 59 III 59 0 5 17.	132 1025.5+1215 229.17 52.75 254 228 46 0 0 17. 558 1026.1+3116 196.63 58.16 241 283 38 0 0 17. 558 1025.9-06456 143.20 45.68 1.52 244 201 111 88 0 6 17. 542 1029.0-6556 143.20 45.68 200 184 111 84 0 5 17. 448 1027.8+3432 190.40 58.46 135 136 III 61 0 6 17.	114 1027.0+1058 231.32 52.45 233 159 37 0.0321 0 3 15. 523 1030.1+6507 143.43 45.98 195 167 1 47 0 0 177. 47 1027.9+1304 221.65 55.59 221 190 11 50 0.297 1 6 17. 104 1028.4+3048 232.58 64 215 257 III 50 0.050 1 4 16. 040 1027.8+1024 232.28 52.32 222 129 II-III: 68 0.0650 1 4 16.	55 1028.7+3739 184.45 58.31 126 303 III: 55 0 5 16. 56 1028.3+0940 233.41 52.04 216 90 40 0 0 17. 31 01028.0-0645 251.98 411.50 216 172 31 0 0 17. 50 1028.3+0345 240.98 48.62 215 94 II: 69 0 5 17. 50 1031.6+6250 145.77 47.62 187 46 III 87 0 5 16.	4020 1030.1+4004 179.85 58.12 257 113 II 74 0 5 17. 5339 1030.9+5323 157.83 53.14 63 184 I 67 0 5 17. 4123 1030.6+4107 177.88 57.96 250 169 II 64 0 5 17. 7735 1035.4+719 131.82 37.36 231 182 III 81 0 5 17. 5115 1030.6+3059 197.24 59.11 190 268 46 0 0 17.	3859 1031.1+3843 182.29 58.59 249 40 45 0 0 17. 0416 1030.3+0400 241.15 49.16 188 108 III 31 0 4 15. 1550 1031.6+354 189.27 59.19 93 165 III 96 0 5 17. 1858 1031.3+1842 220.09 56.77 179 253 III 62 0 6 17. 4028 1032.1+4012 179.44 58.46 237 120 II-III: 94 0.0799 2 3 15.	207 1032.1+3151 195.56 59.45 172 314 40 0 0 17. 902 1035.7+6846 139.20 43.82 112 43 40 0 0 17. 230 1033.0+0214 243.74 84.57 151 334 I-II 63 0 6 17. 432 1032.8-0474 251.28 43.75 152 279 32 0 0 17. 544 1034.4+4528 169.78 57.23 45 82 46 0 0 17.	838 1032.9-0853 255.09 40.77 150 59 III 50 0 5 17. 203 1034.1+1147 231.63 54.36 139 204 III 51 0 5 17. 632 1034.4+1651 224.68 86.50 138 122 III 60 0 5 17. 655 1034.2+0539 26.04 137 196 III-III 71 0 6 17. 657 1035.0+3041 197.90 60.05 139 252 II-III 71 0 5 17.	813 1037.6+6757 139.82 44.53 155 320 III 108 0 6 17. 440 1034.8+0424 241.74 50.29 128 129 II 60 0 5 17. 412 1036.1+4356 172.25 58.07 196 319 30 0 0 17. 800 1038.6+6744 139.92 44.76 150 308 III 108 0 6 17. 504 1036.9+4448 170.62 57.89 20 47 III 95 0 5 17.
IABL	$RA(2000)Dec$ l b x y T_{B-M} C z R D	0.7-0621 1023.2-0636 250.71 40.78 280 181 III 70 0 6 1 2.0+5007 1025.1+4951 163.79 54.03 137 314 III 50 0 6 1 2.0+4803 1025.1+4747 167.03 54.87 135 203 37 0.0520 0 5 1 2.4+5119 1025.5+5103 161.91 53.56 103 57 I-II 76 0 5 1 3.8+6829 1027.5+6813 140.48 43.67 206 334 III 81 0 6 1	4.0+6718 1027.6+6702 141.66 44.50 206 270 II-III 79 0 6 17. 2.2-0506 1024.7-0542 129.81 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.92 60 248 41.65 27.24 III 76 0 6 17. 3.3+3919 1026.2+3903 182.01 57.59 299 59 III 59 0 5 17.	2.8+1231 1025.5+1215 229.17 52.75 254 228 46 0 0 17. 3.3+3132 1026.1+3116 196.63 58.16 241 283 38 0 0 17. 3.4-0558 1025.9-0613 250.98 41.52 244 201 III 88 0 6 17. 5.5+5542 1029.0+6526 143.20 45.68 200 184 III 84 0 5 17. 4.9+3448 1027.8+3432 190.40 58.46 135 136 III 61 0 6 17.	4.4+1114 1027.0+1058 231.32 52.45 233 159 37 0.0321 0 3 15. 6.6+6523 1030.1+6507 143.43 45.98 195 167 47 0 0 17. 5.2+1749 1027.9+1733 221.66 55.59 221 190 11 50 0.297 1 6 17. 5.6+3104 1028.4+3048 197.56 58.64 215 257 111 50 6 17. 5.2+1040 1027.8+1024 232.28 52.32 129 II-III: 68 0.0650 1 4 16.	5.8+3755 1028.7+3739 184.45 58.31 126 303 III: 55 0 5 16. 5.7+0956 1028.3+0940 233.41 52.04 216 90 40 0 0 17. 5.5-0630 1028.0-0645 251.98 41.50 216 172 31 0 0 17. 5.7+0401 1028.3+0345 240.98 48.62 215 94 II: 69 0 5 17. 8.2+6306 1031.6+6250 145.77 47.62 187 46 III 87 0 5 16.	7.2+4020 1030.1+4004 179.85 58.12 257 113 II 74 0 5 17. 7.8+5339 1030.9+5323 157.83 53.14 63 184 I 67 0 5 17. 7.7+123 1030.6+4107 177.88 57.96 520 169 II 64 0 5 17. 1.0+7735 1035.4+7719 137.36 231 182 III 81 0 5 17. 7.8+3115 1030.6+3059 197.24 59.11 190 268 46 0 0 17.	8.2+3859 1031.1+3843 182.29 58.59 249 40 45 0 0 17. 7.7+0416 1030.3+0400 241.15 49.16 188 108 III 31 0 4 15. 8.7+3520 1031.6+3504 189.25 59.19 93 165 III 96 0 5 17. 9.2+4028 1032.1+4012 179.44 58.46 237 120 II-III: 94 0.0799 2 3 15.	9.3+3207 1032.1+3151 195.56 59.45 172 314 40 0 0 17. 2.1+6902 1035.7+6846 139.20 43.82 112 43 40 0 0 17. 0.4+0230 1033.0+0214 243.87 48.57 151 334 I-II 63 0 6 17. 0.3-0432 1032.8-0424 435.28 43.75 152 279 32 0 0 17. 1.4+4544 1034.4+4528 169.78 57.23 45 82 46 0 0 17.	30.4-0838 1032.9-0853 255.09 40.77 150 59 III 50 0 5 17. 31.5+1203 1034.1+1147 231.63 54.36 139 204 III 51 0 5 17. 31.7+1632 1034.4+1616 224.68 56.50 138 122 III 60 0 5 17. 31.6+0555 1034.2+0539 240.04 50.94 137 196 II-III 71 0 6 17. 32.2+3057 1035.0+3041 197.90 60.05 139 252 II-III 71 0 5 17.	4.0+6813 1037,6+6757 139.82 44.53 155 320 III 108 0 6 17. 2.2+0440 1034.8+0424 241.74 50.29 128 129 II 60 0 5 17. 3.1+4412 1036.1+4356 172.25 58.07 196 319 30 0 0 17. 5.1+6800 1038.6+6744 139.92 44.76 150 308 III 108 0 6 17. 3.9+4504 1036.9+4448 170.62 57.89 20 47 III 95 0 5 17.
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	l b	185.06 65.64 237.74 60.94 253.42 53.53 157.67 59.50 186.82 65.84	161.57 60.94 236.00 61.64 218.51 65.33 238.17 61.24 270.86 37.21	272.84 34.50 251.05 55.84 272.63 35.05 253.39 54.50 274.51 32.28	135.90 45.72 158.51 60.50 232.54 63.42 167.18 63.28 245.95 58.84	252.66 55.32 263.07 47.55 171.70 64.58 168.22 63.81 191.37 67.16	248.39 58.19 220.55 66.20 187.73 67.03 215.13 66.91 140.60 50.59	272.47 37.00 194.91 67.56 240.48 61.87 155.69 59.97 203.05 67.75	130.78 40.21 175.56 65.85 221.29 66.57 255.94 54.57 172.75 65.34	256.38 54.31 144.06 53.62 169.29 64.68 197.64 68.04 262.25 49.91	150.30 57.71 182.68 67.11 198.52 68.18 224.96 66.34 260.80 51.42
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)Dec	1729 0847 4229 7104 7528	1618 3519 25525 0515 0203	4819 1037 0947 1708 4120	3634 2651 2351 3408 5403	9-0935 6+2347 3-0702 7+1953 0+3640	3301 1254 2028 6713 3440	3322 3959 6045 3502 1433	2221 6646 0558 6045 3335	5601 3549 3903 5414 0731	0509 7613 4448 3358
	RA(2000)D	24.7+1 24.4-0 25.2+4 26.9+7	25.4-1 26.1+3 26.2+0 26.2+0	27.5+4 27.0+1 26.8-0 27.2+1	128.1+ 127.9+ 128.4+ 129.1+	28.9- 29.6+ 29.3- 29.7+ 30.0+	30.1+ 30.2+ 31.2+	30.5+ 30.7+ 31.2+ 30.9+	30.8+ 31.8+ 30.8+ 31.6+	32.1+ 31.8+ 31.9+ 32.3+ 31.6-	31.7- 33.7+ 32.5+ 32.4+ 32.0-
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	RA(1950)Dec	122.1- 121.9- 122.5- 123.8- 124.4-	122.9 123.4-123.6-123.6-123.8	24.8 24.4 24.3 24.6	25.4 25.3 25.8 26.4	26.8	27.4+ 27.4+ 27.6+ 28.3+ 27.8+	27.8 28.0 28.4 28.2 27.9	88888	29.1 29.2 29.5 29.5	29.24 29.84 29.74 29.51
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	7	238.8 159.8 173.8 230.7 255.1	263.4 135.9 253.0 240.2 232.8	269.0 145.2 201.5 264.5	263.7 277.5 151.9 234.0	139.5 158.5 160.6 181.4	188.7 156.8 186.9 159.9	154.0 232.4 275.3 223.9 228.5	260.6 165.8 260.0 141.2	207.6 234.8 232.3 160.7	224.] 227.8 265.9 134.8
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	RA(2000)Dec	3.0+1; 4.0+4; 3.5+1; 3.4+0;	3.5-05; 5.7+674 4.1+04; 4.5+129	4.8-17 7.2+5 6.5+2 6.9-0 9.5+0	7.7-0 7.6-2 8.8+5 8.4+1 8.9+3	9.00.01	÷ ÷ ÷ ÷ ÷ ÷	2.3+4 2.1+1 1.8-1 2.4+2 2.9+1	8.4.0.4.E	3.4+2 3.2+1 3.7+1 4.2+4	3.8 4.0 7.7 7.4 4.9
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	x y T_{B-M}	236 140 I-II 190 31 266 275 II-III 189 118 III 122 213 III	185 134 II-III: 227 287 181 336 II: 223 307 177 165 III	26 133 I-II 170 297 112 311 169 121 III 231 266 III	68 298 II-III 159 316 II-IIII: 62 73 II-III 101 237 314 293 II-III	146 85 III 145 192 I-II: 145 87 III 306 314 III 136 96	134 157 III 58 314 III 205 191 III 124 322 196 293 III	286 77 II-III 88 191 II: 46 254 III 190 140 III 111 194 III	106 111 I-II: 31 94 III 178 131 III 93 141 III 92 231 II-III	88 200 I 77 184 269 166 40 241 II-III: 72 83	311 268 132 85 71 127 III 69 49 III 308 281
	9 1	139.15 56.37 282.11 38.58 216.69 74.31 255.77 66.46 162.06 69.62	255.43 66.72 136.83 53.96 259.07 65.07 136.47 53.65 254.71 67.25	153.30 66.58 260.50 64.61 157.89 68.53 270.78 56.82 194.50 74.88	132.47 48.46 234.81 73.03 145.99 62.79 160.36 69.61 148.40 64.38	246.71 70.80 254.96 68.01 272.04 56.47 147.62 64.13 276.52 51.24	271.25 57.73 140.67 59.12 223.30 74.96 261.48 65.51 216.19 75.57	128.22 41.25 129.95 44.82 141.44 60.17 227.10 74.91 256.18 68.46	272.85 57.20 144.44 62.81 228.02 75.06 272.80 57.81 255.65 69.23	280.17 47.83 272.63 58.66 149.88 66.83 157.91 70.41 278.42 51.49	140.43 60.18 183.07 75.53 277.96 52.25 274.91 56.46 140.15 59.97
	RA(2000)Dec	1142.5+5832 1141.9-2127 1142.1+2502 1142.2+1009 1142.7+4154	1142.5+1026 1143.0+6117 1142.8+0813 1143.5+6139 1143.1+1101	1143.8+4621 1143.6+0729 1143.9+4344 1143.7-0145	1145.0+6725 1144.5+1950 1145.0+5115 1144.8+4221 1145.2+4920	1145.5+1532 1145.5+1131 1145.5-0223 1146.0+4944 1146.1-0814	1146.3-0104 1147.0+5544 1146.8+2330 1147.1+0757	1148.5+7513 1148.4+7126 1148.2+5437 1148.0+2233 1148.1+1133	1148.4-0156 1148.8+5137 1149.0+2223 1149.4-0122 1149.6+1215	1149.8-1217 1150.6-0034 1150.8+4700 1151.1+4223 1150.9-0828	1151.2+5451 1151.2+331 1151.0-0739 1151.2-0305 1151.4+5506
3	RA(1950)Dec	1139.8+5849 1139.4-2111 1139.5+2519 1139.6+1026 1140.1+4211	1139.9+1043 1140.3+6134 1140.2+0830 1140.8+6156 1140.5+1118	1141.1+4638 1141.0+0746 1141.3+4401 1141.1-0129 1141.8+3111	1142.2+6742 1141.9+2007 1142.3+5132 1142.2+4238 1142.5+4937	1142.9+1549 1142.9+1148 1142.9-0207 1143.3+5001 1143.5-0758	1143.7-0048 1144.3+5601 1144.2+2347 1144.5+0814 1144.9+2541	1145.7+7530 1145.6+7143 1145.5+5454 1145.4+2250 1145.5+1150	1145.8-0140 1146.2+5154 1146.4+2240 1146.8-0106 1147.0+1232	1147.2-1201 1148.0-0018 1148.2+4717 1148.5+4240 1148.3-0812	1148.6+5508 1148.6+3348 1148.4-0723 1148.6-0249 1148.8+5523
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	b x y T_{B-M} C z R D	1133.9+7503 129.46 41.07 40 70 36 0 0 16. 1133.4+6624 134.68 48.90 125 240 II: 85 0 5 16. 1132.8+3647 177.88 70.78 34 262 III 62 0 6 18. 1132.8+3527 181.67 71.29 31 190 II-III 80 0.2131 2 6 17. 1133.0+3446 183.64 71.56 28 154 36 0 0 17.	1133.2+4636 156.13 65.16 124 143 34 0 0 17. 1132.8+1431 243.52 67.77 310 32 II 71 0 5 16. 1132.9-0358 268.55 53.57 313 2 II-III 37 0.0481 0 4 15. 1133.0-1150 274.37 46.63 307 224 III 80 5 17. 1133.8+3950 169.71 69.49 212 102 II-III 78 0 6 17.	1133.2-2402 280.89 35.46 37 207 58 1 0 17. 1134.2+5003 150.54 62.73 118 328 III 53 0 6 17. 1134.2+1704 238.34 69.52 291 168 III 64 0.0341 0 1 13. 1134.8+4902 151.84 63.57 112 274 III 44 0.0341 0 1 13. 1136.1+7155 130.94 44.02 141 214 35 0 0 16.	1135.6+3723 175.49 71.01 300 294 47 0 0 17. 1135.1-133 276.07 45.33 279 134 I-II: 82 0 5 16. 1136.4+5457 143.94 59.01 1372 269 II 56 0.0566 1 3 15. 1136.3+4004 168.40 69.76 187 114 III 104 0 6 17. 1135.8-0548 271.12 52.33 272 227 40 40	1136.644804 152.79 64.49 95 222 45 00 17. 1137.0+6313 136.42 51.91 97 70 45 0.0104 0 5 17. 1136.2-0801 272.90 50.41 266 108 II 50 0 5 17. 1137.1+5705 141.60 57.26 278 44 III 58 0 5 17. 1136.7+0711 257.87 63.32 262 281 II-III 63 0 5 17.	1137.1+4010 167.91 69.83 179 119 III 80 0 6 17. 1137.0+2631 210.78 73.40 322 33 II; 54 0 6 17. 1137.6+3722 174.97 71.37 279 292 III 53 0 5 17. 1138.6+7107 131.14 44.83 129 171 I-II 59 0 5 16. 1138.4+4931 150.13 63.57 82 300 38 0 0 17.	1138.8+6335 135.86 51.68 88 90 II-III 93 0 6 17. 1138.0-0920 274.42 49.42 242 37 46 0 0 16. 1139.3+4952 149.39 63.39 75 319 49 0 0 17. 1138.9-0418 271.04 54.00 232 307 39 0.0555 0 4 15. 1140.1+6808 132.68 47.62 95 334 II-III 51 0 5 17.	1139.4+3224 189.92 73.53 286 348 III 46 0 4 16. 1139.4+1009 254.50 65.99 226 119 III 50 0.0826 1 5 17. 1140.4+1814 237.74 71.39 211 230 0 0 16. 1141.6+7304 129.81 43.11 122 276 47 0 0 17. 1140.9+4452 156.81 67.33 49 52 45 0 0 17.	1140.6+1023 254.65 66.37 210 131 III 56 0 6 17. 1140.7+1004 255.22 66.15 209 114 III 53 0.1061 1 17. 1141.3+6039 137.63 54.43 240 254 32 0.0318 0 5 17. 1140.8-1043 275.25 48.45 205 285 II-III 51 0 5 16. 1141.2+1041 254.41 66.69 202 147 III: 71 0.1095 1 5 17.	61.85 62.81 202 201 II-III 59 0.0970 1 5 16. 83.55 34.70 261 129 65 1 0 17. 77.36 46.99 200 197 III 99 0 5 17. 42.20 59.10 94 291 II-III 66 0 5 16. 18.25 74.14 266 250 37 0 0 17.
	l b x y T_{B-M} C z R D	133.9+7503 129.46 41.07 40 70 36 0 0 16. 133.4+6624 134.68 48.90 125 240 II: 85 0 5 16. 132.8+3647 177.88 70.78 34 262 III 62 0 6 18. 132.8+3527 181.67 71.29 31 190 II-III 80 0.2131 2 6 17. 133.0+3446 183.64 71.56 28 154 36 0 0 17.	133.2+4636 156.13 65.16 124 143 34 0 0 17. 132.8+1431 243.52 67.77 310 32 II 71 0 5 16. 132.9-0358 268.55 53.57 313 2 II-III 37 0.0481 0 4 15. 133.9-1350 274.77 46.63 307 224 III 80 5 17. 133.8+3950 169.71 69.49 212 102 II-III 78 0 6 17.	33.2-2402 280.89 35.46 37 207 58 10 17. 44.2+503 150.54 62.73 118 328 III 53 0 6 17. 34.2+1704 238.34 65.57 112 274 III 64 0.0341 0 1 13. 36.1+7155 130.94 44.02 141 214 35 0 0 16.	135.6+3723 175.49 71.01 300 294 47 0 0 17. 135.1-1331 276.07 45.33 279 134 I-II: 82 0 5 16. 136.4+5457 143.94 59.01 137 269 II 56 0.0566 1 3 15. 136.3+4004 168.40 69.76 187 114 III 104 0 6 17. 135.8-0548 271.12 52.33 272 227 40	136.6+4804 152.79 64.49 95 222 45 00 17. 137.0+6313 136.42 51.91 97 70 45 0.0104 0 5 17. 136.2-0801 272.90 50.41 266 108 III 50 0 5 17. 137.1+5705 141.60 57.26 278 64 III 58 0 5 17. 136.7+0711 257.87 63.32 262 281 II-III 63 0 5 17.	137.1+4010 167.91 69.83 179 119 III 80 0 6 17. 137.0+2631 210.78 73.40 322 33 II; 54 0 6 17. 137.6+3722 174.97 7137 279 292 III 59 0 5 17. 138.6+7107 131.14 44.83 129 171 -II 59 0 5 16. 138.4+4931 150.13 63.57 82 300	138.8+6335 135.86 51.68 88 90 II-III 93 0 6 17. 138.0-0920 274.42 49.42 242 37 46 0 0 16. 139.3+4952 149.39 63.39 75 319 49 0 0 17. 138.9-0418 271.04 54.00 232 307 39 0.0555 0 4 15. 140.1+6808 132.68 47.62 95 334 II-III 51 0 5 17.	139.4+3224 189.92 73.53 286 348 III 46 0 4 16. 130.4+1009 254.50 65.99 226 119 III 50 0.0826 1 5 17. 140.4+1814 237.74 71.39 211 230 0 0 16. 141.6+7304 129.81 43.11 122 276 47 0 0 17. 140.9+4452 156.81 67.33 49 52 45 0 0 17.	140.6+1023 254.65 66.37 210 131 III 56 0 6 17. 140.7+1004 255.22 66.15 209 114 III 53 0.1061 15 17. 141.3+6039 137.63 54.43 240 254 32 0.0318 0 5 17. 140.8-1043 276.25 48.45 205 285 IIIIII 51 0.1095 15 17.	141.2+0541 261.85 62.81 202 201 II-III 59 0.0970 1 5 16. 141.0-2530 283.55 34.70 261 129 65 1 0 17. 141.2-1221 277.36 46.99 200 197 III 99 0 5 17. 142.1+5521 142.20 59.10 94 291 II-III 66 0 5 16. 141.8+2435 218.25 74.14 266 250 17.

	D	6 17.3 4 15.7 0 17.8 5 17.2	5 17.0 0 17.2 0 17.3 5 17.0 6 18.0	5 16.6 5 17.2 5 17.2 6 18.0	5 17.2 0 17.4 4 16.0 5 17.4	0 17.8 6 17.8 6 17.8 6 17.8	6 17.6 6 18.0 6 17.8 9 17.0	5 17.6 5 17.3 1 6 17.6	0 0 17.3 0 6 17.8 0 6 17.8 0 6 17.8	0 17. 5 17. 6 17.	1 4 16.0 2 6 17.8 0 6 17.0 0 5 16.0
	z R	0.0631 0	00000	00000	0.0844 1	0 0 0 0 0	00000	00000	00000	0 0 0 0.1429 2	0.0941 1 0.1669 2 0
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	T_{B-M}	8 III 9	3 III 3 7 7 III 9 III	45 II-III 59 III 07 III 43 III	45 II 56 79 I: 57 III 04 III	43 61 II: 50 III 54 III	70 III 14 II 47 III 79 63 III	03 III 39 III: 79 26 II:	48 17 I-II 26 III 83 II: 51 III	19 ZII 19 ZII 19 ZII 14 ZIII: 76 ZII	84 III 38 II-II: 06 II: 44 III
	x	225 28 219 9° 223 28 218 50 308 11	220 12 214 13 216 26 215 3 210 17	199 24 206 5 208 10 298 4 290 33	301 14 287 25 203 7 195 15 287 20	187 14 260 26 257 25 165 5	253 27 208 11 238 24 139 27 224 26	127 10 125 23 219 13 267 23	212 2/ 212 2/ 106 2/ 205 8	99 31 197 11 95 21 198 21 194 17	317 18 186 : 184 30 83 ,
	9	6 39.98 2 63.80 8 56.19 4 64.46 4 79.42	8 64.45 3 63.20 3 55.84 0 62.91 6 62.43	9 71.90 2 73.76 4 64.27 4 79.61 4 78.74	6 78.54 0 44.09 7 64.21 1 54.02 8 45.06	5 63.23 4 79.75 4 79.85 2 74.17 5 79.88	2 79.81 5 52.42 8 80.41 0 44.91 0 80.36	6 75.32 9 55.86 1 78.11 8 44.70 3 57.53	4 80.67 1 80.85 13 49.93 12 81.35 6 77.66	2 68.71 2 79.15 13 67.04 4 80.81 8 81.37	11 57.19 17 81.67 13 80.72 19 74.90 16 42.49
	1	288.2 139.8: 281.1 140.4	274.48 139.03 281.63 276.30 138.16	258.6 275.2 212.5 183.8	233.5 127.7 139.4 283.4 127.8	137.8 189.3 190.3 261.0 226.1	188.2 130.5 189.5 288.9 187.8	260.9 284.7 167.1 127.2 284.1	188.94 192.41 288.03 208.32 254.46	275.8 170.1 277.9 231.1 196.5	131.9 214.0 181.5 266.0 126.3
	RA(2000)Dec	1203.3-2130 1203.6+5144 1203.7-0438 1203.8+5101 1203.9+2759	1203.9+0414 1204.1+5225 1204.2-0503 1204.3+0230 1204.5+5317	1204.6+4231 1204.8+1503 1204.8+0356 1204.9+2643 1205.0+3207	1205.0+2237 1205.4+7236 1205.6+5125 1205.8-0706 1206.9+7138	1207.4+5236 1207.6+3048 1207.8+3036 1208.0+1457 1208.1+2424	1208.2+3058 1208.9+6404 1210.5+3033 1210.1-1649 1210.7+3051	1210.8+1552 1211.0-0-34 1210.9+3517 1211.1+7205 1211.5-0352	1211.8+3034 1212.5-1148 1212.5+2729 1212.5+1837	1213.0+0753 1213.0+3410 1213.3+0602 1213.2+2356 1213.4+2914	1213.4+5916 1214.1+2639 1214.2+3139 1214.2+1445 1213.8+7423
	RA(1950)Dec	1200.7-2114 1201.1+5201 1201.1-0422 1201.3+5118 1201.3+2816	1201.3+0431 1201.6+5242 1201.6-0447 1201.7+0247 1202.0+5334	1202.1+4248 1202.2+1520 1202.2+0413 1202.3+2700 1202.4+3224	1202.4+2254 1202.9+7253 1203.1+5142 1203.2-0650 1204.4+7155	1204.9+5253 1205.1+3105 1205.3+3053 1205.4+1514 1205.6+2441	1205.7+3115 1206.4+6421 1208.0+3050 1207.5-1633 1208.2+3108	1208.3+1609 1208.4+0518 1208.4+3534 1208.7+7222 1208.9-0336	1209.3+3051 1209.3+3016 1209.9-1132 1210.0+2746 1210.0+1854	1210.4+0810 1210.5+3427 1210.7+0619 1210.7+2413 1210.9+2931	1210.9+5933 1211.6+2656 1211.7+3156 1211.7+1502 1211.5+7440
Continued	Abell	1451 1452 1453 1454	1456 1457 1458 1459	1461 1462 1463 1464	1466 1467 1468 1469 1470	1471 1472 1473 1474 1475	1476 1477 1478 1479 1480	1481 1482 1483 1484 1485	1486 1487 1488 1489 1490	1491 1492 1493 1494 1495	1496 1497 1498 1499
TABLE 3-	z RD m	0.1648 3 5 17.0 0 0 17.2 0 6 17.6 0 0 16.6	0 5 17.2 0 5 17.0 0 5 16.9 0 5 17.2	0.0839 2 4 15.9 0.1427 3 5 17.1 0 5 17.2 0 5 17.0	0 6 17.6 0 6 17.6 0 0 17.4 0 5 17.0	0 5 17.2 0 0 17.8 0 5 16.5 0 5 16.6	0 5 17.2 0 5 17.0 0 6 17.8 0 0 17.6 0.2105 2 6 17.6	0 5 17.2 0 0 17.7 0 5 17.1 0 0 17.2 0 5 17.0	0.0646 1 3 15.4 0.1339 3 5 17.2 0 6 17.5 0 0 17.2 0 0 17.6	0 5 17.2 0 5 17.0 0 6 17.8 0 5 17.0 0 6 17.6	0.1028 2 5 17.0 0 6 17.4 0 5 16.6 0 5 17.2 2 0 17.6
	٥	153 34 50 39 50	56 72 72 38	69 196 (53	52 50 48 I 73	65 48 63 63	. 50 33 96	65 63 44 42 42	69 154 58 30 49	56 77 63 106 81	85 73 72 107
	x y T_{B-M}	124 286 III 166 240 139 131 III 53 65 136 72 II-III	281 323 II: 37 122 II 39 78 II-III 236 276 III 103 310	14 187 III: 70 302 III 100 184 I 18 127 III: 142 103 III	324 153 III 78 143 III: 318 181 322 203 II-II: 87 330 III	263 326 III 309 161 62 93 II-III 304 166 III 68 346 III	293 163 III 70 256 II-III 291 104 III 47 206 189 313 III	57 228 II: 249 332 49 319 III 268 153 265 148 III	237 339 III 265 75 I-II: 42 202 III 177 349 20 242	27 197 II-III 254 68 III 25 170 III 31 220 III 248 207 III	99 113 II-III 18 209 III 232 172 II-III 316 143 III
	l b	170.21 73.90 135.65 55.23 204.01 76.86 275.19 56.84 208.86 76.90	131.11 48.31 274.87 57.94 251.25 72.19 145.89 65.42 168.10 73.94	274.63 59.22 128.32 43.07 226.36 76.79 249.97 73.10 136.79 57.74	261.64 69.06 177.33 75.98 285.06 42.29 274.85 59.58 214.68 77.70	130.57 48.34 279.95 53.40 180.39 76.66 270.40 64.45 213.47 78.09	283.43 47.85 192.68 77.86 264.50 68.67 171.97 75.91 143.22 65.24	194.93 78.21 130.15 48.29 216.21 78.35 281.25 53.52 264.33 69.63	136.90 59.47 273.62 63.27 197.05 78.55 142.05 64.75 288.10 38.03	171.75 76.31 255.91 73.29 229.85 77.99 195.18 78.70 277.29 60.21	135.29 57.90 226.74 78.38 282.13 54.07 202.45 79.21 288.76 38.22
	RA(2000)Dec	1152.1+3716 1152.5+6025 1152.3+2823 1152.4-0248 1152.5+2717	1153.3+6753 1153.6-0144 1153.8+1523 1154.1+4904 1154.0+3743	1155.3-0031 1155.8+7328 1155.4+2322 1155.5+1617 1155.8+5752	1155.9+1046 1156.1+3436 1156.0-1838 1156.3-0014 1156.6+2605	1157.0+6758 1157.2-0701 1157.4+3339 1157.6+0502 1158.2+2623	1158.3-1259 1158.4+3042 1158.4+0951 1159.1+3545 1159.5+4947	1159.5+3010 1159.7+6806 1159.7+2552 1200.3-0710	1200.5+5615 1200.5+0320 1200.7+2941 1200.8+5027 1200.7-2322	1200.9+3534 1201.1+1512 1201.5+2305 1201.7+3001 1201.8-0009	1201.9+5801 1202.1+2349 1203.0-0649 1203.1+2834 1203.1-2318
	RA(1950)Dec	1149.5+3733 1149.9+6042 1149.7+2840 1149.8-0232	1150.6+6810 1151.0-0128 1151.2+1540 1151.5+4921	1152.7-0015 1153.1+7345 1152.8+2339 1152.9+1634 1153.2+5809	1153.3+1103 1153.5+3453 1153.4-1822 1153.7+0002 1154.0+2622	1154.4+6815 1154.6-0645 1154.8+3356 1155.0+0519 1155.6+2640	1155.7-1243 1155.8+3059 1155.8+1008 1156.5+3602 1156.9+5004	1156.9+3027 1157.1+6823 1157.1+2609 1157.7-0654 1157.8+1058	1157.9+5632 1157.9+0337 1158.1+2958 1158.2+5044 1158.1-2306	1158.3+3551 1158.5+1529 1158.9+2322 1159.1+3018 1159.2+0007	1159.3+5818 1159.5+2406 1200.4-0633 1200.5+2851 1200.5-2302
	Abell	1401 1402 1403 1404	1406 1407 1408 1409 1410	1411 1412 1413 1414 1415	1416 1417 1418 1419 1420	1421 1422 1423 1424 1425	1426 1427 1428 1429 1430	1431 1432 1433 1434 1435	1436 1437 1438 1439 1440	1441 1442 1443 1444 1445	1446 1447 1448 1449 1450

	В	5 17. 5 16. 6 17. 6 17. 5 17.	0 17. 6 18. 5 17. 5 17. 0 18.	0 17. 6 17. 6 17. 5 16. 6 17.	5 16. 0 17. 6 17. 5 17. 6 17.	6 17. 6 17. 0 17. 5 16. 0 17.	6 18. 6 17. 0 17. 6 17.	5 17. 6 17. 6 17. 5 16. 5 16.	0 18. 0 17. 0 17. 5 16. 5 16.	6 17. 0 18. 0 17. 6 17. 6 17.	0 17. 6 17. 0 18. 0 17. 0 17.
	R	37 1 52 2 0	4 2 0 0 0 1 2	04000	8 00000	m 0 0 0 0	00000	00000	0 0 18 0	00000	00000
	12	0.08	0.10	0.19	0.07	0.20			0.07		0.30
	C	50 75 100 I. 62 58	31 89 36 50 123	31 I: 77 50 33 85	91 35 56 40 1: 78	190 I 63 43 48 47	158 73 44 40 I 81	50 80 72 51 I 31	34 39 48 I: 38	121 49 32 I: 57 71	48 46 35 37
	T_{B-M}			::::::::::::::::::::::::::::::::::::::	11-11	111-111	III III-III		111-11	11-11	н
	y	255 203 141 108	1 52 132 280 66	75 173 222 315 183	135 43 187 142 314	182 72 58 285 46	73 201 274 215 215	43 115 4 185 296	107 85 281 250 279	320 206 73 83	312 230 169 47 254
	ы	316 191 178 176	151 65 139 78 135	177 200 270 125 190	57 232 258 108 108	175 104 104 101 218	41 86 161 47 130	59 231 57 55 47	42 172 37 40 149	116 161 183 160 160 30	31 144 157 19 26
	q	79.41 73.80 72.75 77.87	40.67 54.15 49.08 49.92 77.39	47.69 75.51 62.88 64.41 75.39	52.66 86.55 63.56 78.90 81.91	33.76 48.03 47.78 52.00 86.83	53.86 62.40 73.84 51.23 39.18	65.45 64.93 46.83 44.23	72.64 87.68 57.99 81.17 43.96	67.14 86.63 83.49 87.91 46.40	82.33 44.88 87.20 65.59
	1	7.42 3.65 5.63 5.93	7.40 6.62 6.46 5.71 3.45	5.33 8.99 3.37 5.08	5.87 8.51 8.17 3.78 6.94	23.59 97.61 97.64 97.13	5.73 5.60 1.73 5.16 3.91	5.90 7.30 9.43 9.43	94.40 02.07 98.30 87.57 24.08	27.09 60.14 40.55 02.39 99.87	86.78 24.06 67.42 97.69
		2 4 4 7 6 4 4 2 8 4 2 2 8 2 2 2 2 8	00 29 50 12 34 29 06 12	10001	24 4 2 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2 2	48888	11 12 13 13 13 12 12 12 12 12 12 12 12 12 12 12 12 12	44 29 05 12 57 29 34 29 29 29	нииии	44488	24426
	RA(2000)Dec	7+3639 8+1144 8+1034 0+1557 0-1323	3-22 6+62 0-13 1+67	1+6921 2+4110 1+5403 0+0150 2+4121	0+642; 1+264, 8+532, 3+163; 4+194	7+8320 7-1441 7-1456 9-1042 3+2648	8+6311 9-0016 1+4303 9+6550 0+7755	8+02 4+52 5-15 8-18 3-16	1+0956 2+2732 6-0447 6+1835 1+7308	4+4954 0+2947 0+3318 2+2729 6-1625	4+1944 1+7213 5+2906 8+0248 0-1716
	RA(20	1229. 1229. 1230. 1231. 1232.	1233. 1232. 1234. 1233.	1233. 1234. 1234. 1235.	1235. 1236. 1235. 1236. 1236.	1232. 1236. 1236. 1236. 1237.	1236. 1237. 1238. 1237. 1237.	1239. 1239. 1240. 1240.	1241. 1241. 1241. 1241. 1240.	1241. 1242. 1242. 1242. 1242.	1242. 1241. 1242. 1242. 1243.
	Dec	3656 1201 1051 1614 1307	-2144 +6307 -1318 +6723 +1527	6938 4127 5420 0207 4138	6439 2701 5341 1652 2005	8337 1425 1440 1026 2705	6328 0000 4320 6607 7812	0301 5222 1541 1818 1613	1013 2749 0431 1852 7325	5011 3004 3335 2746 1609	2001 7230 2923 0305 1700
	A(1950)Dec	27.2+ 27.3+ 28.3+ 28.5+	30.7-7 30.3+0 31.4-7 30.9+0	31.0+ 31.8+ 31.8+ 32.4+ 32.8+	33.64	31.5+8 34.1-1 34.1-1 34.3-1	34.6+63 35.3-0 35.7+43 35.7+6	37.2+03 37.1+52 37.9-15 38.2-18	38.6+ 39.0- 39.1+	39.1+ 39.6+ 39.6+ 40.0-	39.9+ 39.1+ 40.0+ 40.2+
pənı	R	12212	12212	1221	1221	5 4 3 12 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2	1221	5 4 3 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1221	1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	12212
-Continued	Abell	1551 1552 1553 1553 1554	1556 1557 1558 1559 1560	1561 1562 1563 1564 1564	1566 1567 1568 1569 1570	157 157 157 157	1576 1577 1578 1579 1580	15888	1586 1587 1588 1589 1590	15999	1596 1597 1598 1599 1600
LE 3-	В	5.22.2	8.0 7.2 8.0	4.8.1.9.	6.6 6.6 7.0 6.8	6.8 77.8 8.0 8.0	8.08.7	7.8 7.3 8.0 7.0	6.9 7.6 7.2 7.8	7.22	7.27
TABL	R D	00000	0 0 0 0 0 0 4 10 0 0	0 0 17 0 6 17 0 0 17 3 6 17 0 6 17	0000	92000	0 5 16 0 0 17 0 6 17 0 0 18 0 6 17	2000	0000	4 8 0 8 9	90908
	z]	1836	0592	1995		1369 259		2319		0586	1611
	0	57 52 41 98 0.	68 39 0. 53 80	41 70 38 32 0.	50 44 45 45	65 61 36 03 0. 86 0.	62 34 75 51	68 61 19 0. 30	652 86 86	58 0. 73 40 62 0.	86 66 39 67 0.
	М-	HH ##	1111		::::- ::::- ::::-	I I -III 1	н	III:		III	1 II II I
	TB	11 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 4 8 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 6 4 8 H	4 4 6 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 III 29 60 III 84 II			9 II I	
	x y	78 6 72 29 72 29 67 25	66 31 98 22 60 19 61 19 57 6	54 14 26 7 40 26 39 3	19 17 15 26 48 8 24 5 28 14	27 12 04 28 06 22 99 31 98 15	91 3 83 2 53 1 74 3	58 4 64 26 39 29 51 2	164 170 26 111 234 51 103 34 228 122	223 4 235 29 27 23 96 8 233 18	98 145 322 45 201 293 314 162 223 202
	9	39 1 57 68 97 1	.59 2 .38 2 .68 1	.87 .64 .07 2 .98 1	. 24 . 85 . 88 . 3	45 11 11 32 47 2 86 2	96 96 98 98 98 97 97 97 97 97 97 97 97 97 97 97 97 97	04 2 116 2 00 2 32 2 75 2	91 71 90 33	20 20 20 20 20 20	33 74 73
	1	97 53. 71 53. 83 78. 06 81. 78 78.	89 80 02 56 90 77 16 78 50 82	75 42 55 70 47 44 37 79 42 82	03 66 10 56 98 53 76 82 11 48	23 48. 29 67. 71 67. 54 69.	42 74. 33 73. 86 57. 44 64.	04 59. 28 81. 01 63. 67 55.	87 39. 97 36. 79 59. 90 54. 68 66.	59 70. 98 67. 50 83. 06 69.	11 84. 13 80. 14 84.
	1	287.3 253.8 208.0	179.8 131.0 260.9 162.1 210.5	291.7 141.5 126.4 251.3	282.0 288.1 128.9 212.7 291.1	291.2 136.2 282.7 281.5 281.5	274.4 277.3 129.8 128.9	130.0 257.2 288.0 128.6 293.7	124.8 295.9 129.7 127.9 287.6	284.5 132.9 179.5 127.4 134.0	127.0 215.8 268.0 191.5
)Dec	6313 0813 1926 2731	3146 5958 1729 3537 2711	1914 4513 7249 2039 2758	0514 0500 6330 2655 1315	1341 4911 0608 0750 0108	1344 1213 5854 6113 0205	5742 2047 0054 6130	7707 2549 5653 6233	0850 4926 3022 6325 4724	6436 2645 1925 2856 4742
	RA(2000)Dec	214.1+6 215.2-0 215.2+1 215.3+2	5.8 6.1 6.3 6.3 7	216.8- 216.9+ 217.0+ 217.9+ 218.7+	219.0+ 219.2- 219.0+ 219.3+ 219.6-	219.6- 219.9+ 221.3+ 221.7+	222.8+ 222.8+ 222.9+ 223.3+ 222.9+	24.1+ 24.4+ 24.6+ 24.1+ 25.4-	24.9+ 26.6- 26.3+ 26.3+ 27.2+	27.4+0 27.6+4 27.8+3 27.7+6 28.2+4	28.0+6. 28.6+2. 29.0+13. 29.0+21.
		0 6 8 8 8	3 121 5 121 6 121 8 121	ппппп	ааааа	ппппп	ппппп	122	34 12 12 12 12 12 12 12 12 12 12 12 12 12	3 12 9 12 1 12 1 12	12212
	RA(1950)Dec	7+633 6-075 7+194 8+274 1+185	3+3203 4+6015 6+1746 8+3554 0+2728	2-1858 4+4530 7+7306 4+2056 2+2815	4+0531 6-0444 6+6347 8+2712 0-1259	0-1325 4+4928 7+0625 2+0807 5-0052	6+1401 3+1230 5+5911 9+6130 3+0222	7+5759 9+2104 0+0111 7+6147 8-1523	8+772 0-253 9+571 0+625 6+043	9+090 2+494 3+303 4+634 8+474	7+645 1+270 5+194 5+291 8+475
	RA(18	1211. 1212. 1212. 1212. 1213.	1213. 1213. 1213. 1213. 1214.	1214. 1214. 1214. 1215. 1216.	1216. 1216. 1216. 1216. 1216.	1217. 1217. 1218. 1219. 1219.	1219. 1220. 1220. 1220.	1221. 1221. 1222. 1221.	1222. 1224. 1223. 1224.	1224. 1225. 1225. 1225.	1225. 1226. 1226. 1226.
	Abell	1501 1502 1503 1504	1506 1507 1508 1509 1510	1511 1512 1513 1514 1515	1516 1517 1518 1519 1520	1521 1522 1523 1524 1525	1526 1527 1528 1529 1530	1531 1532 1533 1534 1535	1536 1537 1538 1539 1540	541 542 543 545	546 547 548 549 550
	7 1					34				ппппп	ааааа

	R D m	1 4 16.0 0 6 17.4 0 6 17.7 0 5 16.9 0 6 18.0	2 1 13.5 0 6 17.5 0 5 17.2 0 0 17.5 0 6 17.8	2 6 17.6 0 5 17.2 0 5 17.0 2 0 17.3 0 6 17.7	0 5 16.8 2 6 17.6 0 5 16.6 0 6 17.8	0 6 17.4 0 5 17.2 0 0 16.9 3 5 17.2 1 5 17.2	0 0 17.5 2 6 17.7 0 6 17.4 2 6 17.5 0 0 17.0	0 5 17.1 0 6 17.5 0 5 17.1 0 5 17.2	0 6 18.0 0 0 17.5 0 0 17.6 4 6 17.6 0 5 17.2	1 3 15.4 0 0 17.2 0 0 17.2 0 5 17.2 0 6 17.8	0 0 17.7 2 6 17.5 0 6 17.6 0 6 17.4 0 5 17.2
-	z	0.0825	0.0232	0.1671	0.1648	0.1055	0.1832	760.0	0.181	0.0722	0.1829
	٥	70 64 67 31	106 55 50 44 70	97 59 56 112 130	98 35 4 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8	: 71 53 37 165 50	45 112 78 115 47	: 79 75 64 68 44	60 33 49 228 56	64 42 50 63	84 96 96 98 98
	y T _{B-M}	312 I-II 135 III 181 II-III 217 I 183 II-III	08 II 02 II-III 29 II-III 92	67 III: 40 II 78 II: 97	77 III 13 III: 85 II 75 II-III 42 III	81 II-III 86 II: 88 96 II-III 38 II-III	04 64 II-III 38 III 12 III 98	18 II-III 38 II 18 III 31 III:	02 II 31 85 33 II-III 90 II-III	66 II 56 42 09 III 05 III	99 22 III 60 II: -2 III 48 III:
	8	120 3: 118 1: 115 1: 260 2: 212 1:	256 1(112 3(95 3 89 3	232 1 77 3 74 . 209 19	39 . 213 3: 63 28 57 2:	188 24 239 4 23 1 181 2 233 1:	203 2 184 2 251 3: 176 3:	44 2 187 11 39 2 304 11	126 1 228 1 279 2 277 1 270 2	123 268 147 209 309	136 29 131 13 244 10 233 .
	9 1	306.75 58.63 306.03 49.34 310.27 74.10 92.20 86.63 121.79 51.73	58.09 87.96 317.94 82.22 307.71 59.35 309.26 66.43 118.99 66.72	74.06 86.99 311.39 71.00 308.65 60.23 306.51 38.57 23.96 87.34	118.77 65.14 94.86 84.65 323.52 81.64 323.71 81.43 327.11 82.59	307.18 40.11 99.71 82.95 118.05 65.49 121.16 49.59 102.03 82.01	116.56 69.18 83.87 85.08 120.21 54.81 88.67 84.29 109.87 76.94	121.44 45.22 115.05 70.34 121.31 45.22 317.84 72.77 97.95 81.52	343.80 83.15 118.32 58.56 312.35 57.82 313.39 61.10 334.39 81.02	105.19 77.23 313.90 61.50 114.02 68.30 91.88 81.87 118.69 55.29	114.07 67.21 1111.82 70.41 312.88 55.42 310.10 40.50 51.51 84.63
	RA(2000)Dec	1259.4-0411 1259.7-1329 1259.6+1120 1259.4+3000 1258.3+6522	1259.8+2758 1260.0+1935 1301.2-0326 1301.5+0340 1301.2+5019	1301.8+2904 1302.5+0818 1302.8-0231 1303.7-2413 1303.2+2640	1302.8+5153 1303.3+3148 1303.9+1915 1304.3+1904 1304.3+2019	1305.5-2239 1304.8+3333 1304.5+5130 1303.5+6729 1305.2+3432	1304.9+4746 1305.9+3053 1305.0+6214 1306.6+3147 1306.7+3947	1305.0+7151 1306.8+4632 1306.2+7151 1309.2+1025 1308.8+3445	1310.7+2152 1309.8+5824 1311.5-0440 1311.6-0121 1311.2+1923	1311.4+3912 1312.3-0055 1311.3+4829 1311.6+3400 1311.8+6140	1312.6+4933 1312.9+4615 1314.1-0700 1314.9-2202 1314.7+2843
	RA(1950)Dec	1256.8-0355 1257.1-1313 1257.1+1137 1257.0+3017 1256.3+6539	1257.4+2815 1257.5+1952 1258.6-0310 1259.0+0357 1259.0+5036	1259.4+2921 1260.0+0835 1300.2-0215 1301.0-2357 1300.8+2657	1300.6+5210 1300.9+3205 1301.4+1932 1301.8+1921 1301.9+2036	1302.8-2223 1302.4+3350 1302.3+5147 1301.7+6746 1302.9+3449	1302.7+4803 1303.5+3110 1303.0+6231 1304.2+3204 1304.4+4004	1303.4+7208 1304.6+4649 1304.6+7208 1306.7+1041 1306.5+3501	1308.3+2208 1307.8+5840 1308.9-0425 1309.0-0106 1308.8+1939	1309.1+3928 1309.7-0040 1309.1+4845 1309.3+3416	1310.444949 1310.744631 1311.5-0645 1312.2-2147 1312.3+2859
	Abell	1651 1652 1653 1653	1656 1657 1658 1659 1660	1661 1662 1663 1664	1666 1667 1668 1669 1670	1671 1672 1673 1674 1675	1676 1677 1678 1679 1680	1681 1682 1683 1684	1686 1687 1688 1689 1690	1691 1692 1693 1694 1695	1696 1697 1698 1699 1700
	RD m	0 5 17.2 0 6 17.8 0 5 17.2 1 0 17.6 0 5 17.0	0 5 17.0 0 5 16.7 0 0 17.2 891 1 5 16.8 0 5 17.2	0 6 17.8 0 0 17.6 0 6 17.6 29 0 6 17.5 0 6 18.0	52 0 4 16.0 0 6 17.6 0 6 17.5 0 6 17.8 0 5 17.2	0 5 16.5 855 2 6 18.0 0 6 17.5 0 6 17.8	0 0 17.8 0 0 18.0 0 6 17.4 0 6 17.5 649 1 5 16.7	508 0 3 15.4 962 2 5 17.2 1 0 17.6 0 6 17.6 0 5 17.2	0 6 17.8 0 5 17.0 0 4 16.0 0 0 17.5 0 6 17.8	0 6 17.6 0 6 17.3 981 1 6 17.7 449 1 4 15.7 0 6 17.8	0 0 16.9 0 6 17.8 1 0 16.9 0 0 17.2 845 2 5 17.0
	z R D	0 0 5 17. 2 0 6 17. 2 1 0 17. 5 0 5 17.	2 0 5 17. 3 0 5 16. 6 0.0891 1 5 16. 5 0 5 17.	5 0 6 17. 7 0 0 17. 1 0.229 0 6 17. 8 0 6 18.	9 0.0833 0 4 16. 9 0.152 0 6 17. 0 0 6 17. 5 0 6 17. 2 0 5 17.	1 0.2855 2 6 18.5 0 6 17.0 0 6 17.5 0 0 17.5 0 0 17.5 0 0 17.5 0 0 17.5 0 0 17.5 0 0 17.5 0 0 17.5 0 0 17.5	0 0 17. 0 0 18. 0 6 17. 0 6 17. 49 1 5 16.	08 0 3 15. 62 2 5 17. 1 0 17. 0 6 17. 0 5 17.	0 6 17. 0 5 17. 0 4 16. 0 0 17. 0 6 17.	9 0 6 17. 0 0.1981 1 6 17. 8 0.0449 1 4 15. 4 0 6 17.	0 0 16. 0 6 17. 1 0 16. 0 0 17. 45 2 5 17.
	R D	0 5 17. 0 6 17. 0 5 17. 1 0 17. 0 5 17.	0 5 17. 0 5 16. 0 0 17. 0 0 18 1 5 16.	0 6 17. 0 0 17. 0 6 17. 0 6 17. 0 6 18.	0.0833 0 4 16. 0.152 0 6 17. 0 6 17. 0 6 17. 0 5 17.	0 5 16. 0.2855 2 6 18. 0 6 17. 0 6 17. 0 0 17.	5 0 0 17. 7 0 0 18. 7 0 6 17. 3 0 6 17. 4 0.0649 1 5 16.	4 0.0508 0 3 15. 0 0.1962 2 5 17. 5 1 0 17. 6 0 6 17. 3 0 5 17.	6 17. 5 17. 4 16. 0 17. 6 17.	0 6 17. 0.1981 1 6 17. 0.0449 1 4 15. 0 6 17.	0 0 16. 3 0 6 17. 8 1 0 16. 5 0 0 17. 4 0.0845 2 5 17.
	y T_{B-M} C z R D	27 55 II 70 0 5 17. 44 72 I: 59 0 6 17. 23 24 III 62 0 5 17. 31 258 63 1 0 17. 18 58 III 55 0 5 17.	15 216 III 51 0 5 17. 06 121 III 82 0 5 16. 09 348 II-III: 56 0.0891 15 16. 02 219 II-III 65 0 0 5 17.	72 266 II-III 65 0 6 17. 76 68 33 0 0 17. 24 194 II-III: 77 0 6 17. 16 94 III 51 0.229 0 6 17. 59 267 II-III: 58 0 6 18.	64 273 II-III 39 0.0833 0 4 16. 83 176 III 139 0.152 0 6 17. 76 138 II: 55 0 6 17. 48 129 III 42 0 5 17.	5 42 III 51 0 5 16. 6 318 III 96 0.2855 2 6 18. 9 206 III 65 0 6 17. 1 66 45 0 0 17.	64 289 45 0 0 17. 27 288 37 0 0 18. 25 144 II-III 57 0 6 17. 20 140 II-III 54 0.0649 1 5 16.	08 31 I 34 0.0508 0 3 15. 32 155 II-III: 80 0.1962 2 5 17. 12 80 75 1 0 17. 92 179 III: 66 0 6 17. 88 58 III 53 0 5 17.	6 47 III 103 0 6 17. 9 47 III 60 0 5 17. 8 269 III 33 0 4 16. 6 117 49 0 17. 0 33 III 61 0 6 17.	3 134 II-III 79 0 6 17. 0 237 III 64 0 6 17. 2 250 III 68 0.0449 1 4 15. 0 61 II: 64 0 6 17.	39 338 30 0 0 16. 43 328 II 53 0 6 17. 65 68 68 1 0 16. 28 96 35 0 0 17. 28 119 I-II 114 0.0845 2 5 17.
	b x y T_{B-M} C z R D	96.69 71.75 327 55 II 70 05 17. 07.20 88.22 144 72 I: 59 06 17. 00.27 47.28 323 24 III 62 05 17. 00.70 39.73 131 258 63 1 0 17. 00.62 41.91 318 58 III 55 0 5 17.	00.29 50.85 315 216 III 51 0 5 17. 23.62 40.97 106 121 III 82 0 5 16. 33.92 88.68 109 37 11. 40.74 86.95 102 219 II-III 65 0.0891 15 16.	96.10 81.73 272 266 II-III 65 0 6 17. 01.06 60.05 276 68 33 0 0 17. 28.52 81.52 124 194 II-III: 77 0 6 17. 23.60 47.44 116 94 III 51 0.229 0 6 17. 24.60 68.24 59 267 II-III: 58 0 6 18.	24.10 62.08 164 273 II-III 39 0.0833 0 4 16. 23.87 57.93 83 176 III 139 0.152 0 6 17. 40.082 73.72 254 136 III 55 0 6 17. 42.21 88.53 76 138 III 55 0 6 17. 62.07 61.28 248 129 III 42 0 5 17.	23.48 54.45 275 42 III 51 0 5 16. 23.71 67.30 46 318 III 96 0.2855 2 6 18. 23.77 69.40 39 206 III 65 0 6 17. 02.77 71.51 238 37 III 60 0 6 17. 02.79 42.08 231 66 45 0 0 17.	25.62 85.80 64 289 45 0 0 17. 02.60 76.20 27 28 37 0 0 18. 26.39 88.51 51 51 06 11. 37 0 6 17. 03.14 67.43 220 140 II-III 54 0.0649 1 5 16.	3.44 47.43 208 31 I 34 0.0508 0 3 15. 1.28 88.28 32 155 II-III: 80 0.1962 2 5 17. 3.65 36.48 12 80 75 10 17. 4.08 56.18 192 179 III: 66 0 6 17. 4.14 53.93 188 58 III 53 0 5 17.	22.54 54.31 246 47 III 103 0 6 17. 21.95 66.31 110 47 III 60 0 5 17. 08.33 81.83 178 269 III 33 0 4 16. 05.95 73.01 176 117 49 0 0 17. 22.34 54.56 240 33 III 61 0 6 17.	86.86 88.36 303 134 II-III 79 0 6 17. 06.30 69.24 160 237 III 64 0 6 17. 04.92 45.50 152 250 II 68 0.0449 1 6 17. 05.07 47.98 150 61 II: 64 0 6 17.	2.06 54.96 39 338 30 0 0 16. 4.35 82.83 143 328 II 53 0 6 17. 5.03 36.22 265 68 68 10 16. 8.85 72.55 128 96 35 0 0 17. 6.73 61.06 128 119 I-II 114 0.0845 2 5 17.
	ec l b x y T_{B-M} C z R D	243.5+0858 296.69 71.75 327 55 II 70 0 5 17. 243.5+2717 207.20 88.22 144 72 I: 59 0 6 17. 243.9-1533 300.27 47.28 323 24 III 62 0 5 17. 243.9-2306 300.70 39.73 131 258 63 1 0 17. 244.0-2055 300.62 41.91 318 58 III 55 0 5 17.	244.6-1159 300.29 50.85 315 216 III 51 0 5 17. 245.6+3323 133.92 83.61 143 77 88 0 0 17. 246.5+526.5 244.88 88.68 109 348 II-III: 56 0.0891 1 5 16. 247.1+3001 140.74 86.95 102 219 II-III 65 0.5 17.	247.3+1854 296.10 81.73 272 266 II-III 65 0 6 17. 247.7-0248 301.06 60.05 276 68 33 0 0 17. 247.4+3533 128.52 81.52 124 194 II-III: 77 0 6 17. 246.3+6940 123.60 47.44 116 94 III 51 0.229 0 6 17. 247.7+4852 124.60 68.24 59 267 II-III: 58 0 6 18.	247.6+5502 124.10 62.08 164 273 II-III 39 0.0833 0 4 16. 247.6+5911 123.87 57.93 83 176 III 139 0.152 0 6 177 249.0+1051 300.82 73.72 254 156 III 50 0 6 177 249.2+2.830 142.21 88.53 76 138 III 55 0 6 177 249.8-0135 302.07 61.28 248 129 III 42 0 5 17.	248.7+6240 123.48 54.45 275 42 III 51 0 5 16. 249.6+4949 123.71 67.30 46 318 III 96 0.2855 2 6 18. 249.7+4743 123.77 69.40 39 206 III 65 0 6 17. 250.3+0838 302.77 71.51 238 37 III 60 0 6 17. 251.0-2047 302.79 42.08 231 66 45	250.5+3119 125.62 85.80 64 289 45 00 17. 251.1+1319 302.60 76.20 227 288 37 00 18. 251.0+2836 126.39 88.51 55 144 IIIII 57 0 6 17. 251.6+0355 303.07 66.80 221 106 III: 53 0 6 17. 251.7+0433 303.14 67.43 220 140 IIIII 54 0.0649 1 5 16.	252.8-1526 303.44 47.43 208 31 I 34 0.0508 0 3 15. 253.0+2848 111.28 88.28 32 155 II-III: 80 0.1962 2 5 17. 254.0-2623 303.65 36.48 12 80 75 1 0 17. 254.0-0641 304.08 56.18 192 179 III: 66 0 6 17. 254.3-0856 304.14 53.93 188 58 III 53 0 5 17.	253.5+6248 122.54 54.31 246 47 III 103 0 6 17. 253.9+5048 121.95 66.31 110 47 III 60 0 5 17. 254.7+1859 308.33 811.83 175 117 49 0 0 17. 255.0+1009 305.55 73.01 176 117 49 0 0 17. 255.5+103 122.34 54.56 240 33 III 61 0 6 17.	255.8+2826 86.86 88.36 303 134 II-III 79 0 6 17. 255.9+464 120.19 73.02 275.29+4404 120.19 73.02 2757 229 111 64 0.617. 2557.2-1721 304.92 45.50 152 250 11 68 0.0449 14 15. 257.3-1452 305.07 47.98 150 61 II: 64 0 6 17.	255.8+6209 122.06 54.96 39 338 30 0 0 16. 255.5+2005 314.35 82.83 143 328 II 53 0 6 17. 259.0-2637 305.03 36.22 265 68 68 10 16. 258.6+0945 308.85 72.55 128 96 35 0 0 17. 258.8-0145 306.73 61.06 128 119 I-II 114 0.0845 2 5 17.

R D m	0 0 17.6 0 0 17.2 0 6 17.3 0 5 17.0	0 0 17.6 1 0 17.0 0 3 6 18.0 1 3 6 17.6		0 6 17.5 01 1 4 15.7 0 0 17.2 0 5 17.2 0 6 17.6	1 0 16.8 0 5 17.0 76 1 3 15.6 91 2 6 17.6 96 2 4 15.7	0 0 17.2 0 6 17.6 0 5 16.6 0 0 17.6	62 0 3 15.4 0 6 17.8 66 0 4 16.3 36 2 5 17.2	0 6 17.6 0 6 17.8 0 6 17.7 0 0 17.8	1 0 17.0 0 6 17.8 1 0 1 16.4 1 0 17.0	4 00000 00000 00000
z	7110	1 0 8 0.280 2 0.168 8 0.171	4 2 2 4 0 .18	4 5 5 3 3	8 6 0.07 1 0.16 2 0.06	15930	1 0.07 7 0.07 4 0.21	0 88 11 4 15	7 44 7 7 0.084 5	0.00
x y T_{B-M} C	15 227 3 328 329 4 328 152 III 6 325 230 II-III 5 317 105 III: 6	92 335 164 247 54 252 349 III 199 285 335 III 133 284 333 III 16	64 92 III 11 139 166 III 55 182 158 III 15 58 214 4 257 130 II 10	122 347 III 55 238 177 II 61 238 108 41 95 95 III 55 134 176 III 55	61 84 61111 6118 812 107 111 812 107 111 863 341 1 9	312 112 173 193 1-II 7 166 258 III 4 160 193 4 154 46 III 7	35 207 III 4 150 304 II-III 7 307 302 III 4 141 200 II 7 106 329 I-II 9	138 52 III 6 93 257 III 5 299 203 III 7 70 89 4 290 217 III: 7	295 127 6 293 258 II-III 5 287 336 III 7 287 30 I 11	7 217 II 2 267 II-III 4 85 3 185 II 7 110 II:
9 1	320.75 55.75 63.63 80.25 327.97 65.74 318.51 49.98 344.92 75.44	115.16 54.33 315.34 38.58 107.16 65.34 359.94 78.08	112.31 58.62 13.37 79.23 92.61 73.48 113.16 56.39 337.76 70.17	64.01 78.76 112.48 57.00 319.99 47.35 39.12 79.38 90.84 72.68	316.89 35.22 322.42 49.86 331.10 62.31 87.45 73.50 31.93 78.71	110.60 57.89 117.63 45.02 323.16 49.66 100.05 67.15 332.91 62.62	49.20 78.04 348.53 71.66 108.23 60.02 336.45 65.04 80.90 74.31	95.30 69.13 76.35 74.96 106.17 61.58 84.18 73.09 106.11 61.27	318.94 35.63 52.99 77.11 59.02 76.63 318.99 34.70	4.93 48. 6.94 76. 8.64 57. 0.42 75.
m RA(2000)Dec	1331.3-0544 1330.9+3145 1331.6+0450 1332.0-1139 1331.7+1557	1330.5+6212 1333.5-2316 1332.5+5030 1334.0+2014 1334.1+2012	1332.8+5738 1335.6+2305 1335.3+4057 1334.7+5954 1336.9+1025	1337.1+3227 1336.0+5912 1338.7-1357 1339.2+2745 1340.1+4116	1342.2-2616 1342.1-1105 1342.1+0214 1341.2+4000 1341.9+2621	1341.0+5801 1339.4+7136 1344.2-1108 1343.2+4736 1344.6+0252	1344.5+2950 1344.9+1341 1343.4+5535 1345.6+0544 1344.7+3808	1345.5+4459 1345.9+3648 1345.2+5345 1346.2+3939 1346.3+5402	1348.9-2526 1348.0+3050 1348.3+3217 1350.2-2619 1349.0+2635	.3-115 .5+250 .1+573 .4+352
RA(1950)Dec	1328.7-0529 1328.6+3201 1329.1+0506 1329.4-1124 1329.3+1613	1328.7+6228 1330.8-2301 1330.5+5046 1331.6+2030	1330.9+5754 1333.2+2321 1333.1+4113 1332.9+6010 1334.4+1041	1334.8+3243 1334.2+5928 1336.0-1342 1336.9+2801 1337.9+4132	1339.4-2601 1339.4-1050 1339.6+0230 1339.0+4016 1339.6+2637	1339.2+5817 1338.2+7152 1341.5-1053 1341.2+4752 1342.1+0308	1342.2+3006 1342.5+1357 1341.5+5551 1343.1+0600 1342.5+3824	1343.4+4514 1343.7+3703 1343.3+5401 1344.0+3954 1344.4+5417	1346.1-2512 1345.7+3105 1346.1+3232 1347.4-2605 1346.7+2650	1347.6-1140 1347.2+2515 1346.3+5750 1347.2+3541 1347.4+2819
Abell	1751 1752 1753 1754 1754	1756 1757 1758 1759 1759	1761 1762 1763 1764 1764	1766 1767 1768 1769 170	1771 1772 1773 1774 1774	1776 1777 1778 1778 1779	1781 1782 1783 1784 1784	1786 1787 1788 1789 1790	1791 1792 1793 1794 1795	1796 1797 1798 1799 1800
R D m	0 0 17.0 0 6 17.8 0 6 18.0 0 6 17.8 0 6 17.7	0 5 17.2 0 6 17.6 0 6 17.8 0 0 16.4	0 0 17.2 0 6 18.0 0 5 17.2 0 6 18.0 0 5 17.0	0 6 17.8 0 5 17.2 0 6 17.8 0 0 18.0 0 6 17.6	0 6 17.8 0 6 17.7 0 5 17.0 0 6 17.5 0 6 17.7	0 5 17.2 0 0 17.4 0 0 17.6 0 5 17.2 0 6 17.6	0 5 17.2 0 6 17.5 0 6 18.0 0 0 17.3 0 6 17.8	0 2 14.8 0 6 17.3 2 5 16.6 0 6 17.6 0 6 17.6	0 5 17.1 0 0 17.5 0 6 17.8 0 5 17.2 2 0 18.4	0 0 17.2 0 6 18.0 0 6 17.4 1 4 16.0 0 4 15.9
z	2 0 2 4 0.22 9 0.296	2 1 0.196 3	63215	ი.ი4.ფი	6 0.328 7 7 3	.	00048	1 0.035 0 5 0.1146 1		0.059
x y T_{B-M} C	199 269 4. 115 62 III 55 246 99 II 12. 121 141 II 13. 273 267 III 55	75 184 III 99 186 120 II-III: 6 94 136 III 77 185 29 45 63 305	178 160 87 124 III 55 162 112 II-III 55 62 81 III 66 65 310 II-III: 50	59 104 III 66 29 188 III 66 98 263 III 99 58 237 48 135 58 II-III 46	132 289 III 36 263 116 III 86 51 281 III 47 299 162 II-III: 56 120 278 I-II 65	118 166 II: 56 279 258 45 113 176 46 111 26 III 76 288 79 III 59	137 117 II 92 106 94 I-II 67 64 324 III 90 172 279 40 82 236 III 59	244 40 III: 70 316 301 III: 70 119 87 I: 85 247 185 III 51 274 197 III-III: 56	238 188 II-III 73 67 300 62 87 II: 69 116 179 I-II 53 149 205	289 186 39 145 141 III 59 35 238 III 56 267 302 II: 55 18 107 II-III: 40
q 1	118.16 55.92 110.07 71.43 114.33 64.91 118.91 52.36 120.66 44.16	104.79 74.85 116.81 58.62 110.05 70.00 311.35 40.96 106.76 72.65	325.88 72.62 85.55 80.81 115.89 58.68 79.86 81.08 94.59 77.73	81.64 80.72 101.96 74.47 118.65 50.06 90.43 78.78 321.18 64.87	346.95 79.52 119.43 46.83 92.16 78.03 04.34 81.83 314.03 45.38	340.79 77.56 312.69 39.21 330.04 72.43 318.64 58.52 356.92 80.74	115.05 58.47 313.55 41.95 322.85 63.73 113.28 61.31 333.47 73.17	312.58 35.10 108.97 66.64 114.19 58.95 51.77 82.00 99.10 73.83	119.26 45.42 336.40 74.07 324.64 64.95 114.81 57.27 111.60 62.52	82.25 78.63 110.66 63.64 350.32 77.59 87.94 76.79 322.65 59.51
RA(2000)Dec	1313.5+6100 1314.5+4507 1315.0+5149 1314.4+6435 1313.7+7252	1316.3+4123 1315.7+5813 1316.9+4629 1318.7-2127 1317.8+4338	1318.7+1058 1318.4+3416 1319.2+5804 1320.6+3327 1320.8+3744	1320.9+3354 1320.8+4126 1319.5+6650 1321.3+3623 1322.0+0305	1322.2+1923 1319.7+7006 1322.1+3712 1322.6+2300 1323.9-1647	1323.2+1705 1324.2-2302 1323.7+1116 1324.0-0321 1323.6+2127	1322.7+5810 1325.0-2013 1326.1+0212 1323.9+5512 1326.1+1223	1326.9-2706 1325.4+4933 1325.1+5736 1326.2+2926 1326.1+4139	1324.1+7128 1327.3+1334 1327.5+0336 1325.9+5918 1326.8+5349	1327.8+3527 1327.2+5237 1329.8+1824 1329.5+3737 1330.9-0150
- 1	9 5 2 2 9	00004	22027	10 42 42 06 23 21	22 22 22 28 28 32	21 32 06 43	38888	545 52 52 53 53	52 52 34 05	443 453 35 35
Abell RA(1950)Dec	1311.6+611 1312.3+452 1312.9+520 1312.6+645 1312.3+730	1314.1+413 1313.7+582 1314.7+464 1316.0-211; 1315.6+435	1316.2+111 1316.1+343 1317.2+582 1318.3+334 1318.5+380	1318.6+34. 1318.6+41. 1317.8+67(1319.0+36.	1319.8+19 1318.2+70 1319.8+37 1320.2+23 1321.2-16	1320.8+17 1321.5-22 1321.2+11 1321.4-03 1321.2+21	1320.8+58 1322.3-19 1323.6+02 1321.9+55 1323.6+12	1324.1-26 1323.3+49 1323.2+57 1323.9+29 1323.9+41	1322.7+71 1324.8+13 1325.0+03 1324.0+59	1325.5+35. 1325.2+52! 1327.4+18. 1327.3+37! 1328.3-013

1	z R D m	0 5 17.2 0 5 16.6 1 0 17.3 0 6 17.5 0 6 17.5	0 5 17.2 1 0 17.6 0 0 17.6 0 988 0 6 17.8 0 5 17.2	0 5 17.2 0 5 17.2 0 5 17.2 0 5 17.0 0 0 17.8	0 5 17.2 0 6 17.5 0 6 17.5 0 5 17.2 0 5 17.2	0 0 17.1 0508 0 5 17.2 0776 0 4 16.3 0 6 17.4	0 5 17.1 1241 1 6 17.8 254 1 6 17.5 0 6 17.8 1413 1 5 17.2	0 5 17.0 0 5 17.2 0 0 17.1 0220 0 6 17.8 0 5 17.0	0 5 17.2 0 0 17.2 0 0 17.5 1860 2 6 17.3 0570 0 3 15.5	0 5 17.0 0 5 16.5 0 6 17.5 0 5 17.0 225 0 6 17.7	0 0 17.2 0 0 17.0 0 5 17.0 0 5 16.0 0 5 17.2
	C	125 77 56 68 55	76 79 44 45 0.	58 51 77 40	3 4 4 1 1 4 3 3 9 4 4 1 3 8 9 1 4 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	32 39 0. 41 0. 50	53 71 0. 56 0. 56	58 166 46 45 0.	73 36 40 112 0. 37 0.	76 79 69 60 107 0.	45 30 33 72
	x y T_{B-M}	90 223 II-III 210 91 III 202 115 105 270 II-III 268 163 II:	82 272 III 58 163 167 300 143 217 165 317 II:	67 96 II-III: 160 241 II-III 65 66 III 158 182 II 137 141	138 250 III 51 275 II 44 86 III 46 184 III: 124 246 III	112 129 119 317 321 112 II 318 198 II-III 101 320 III:	97 99 III 107 201 II 306 169 III 87 85 II-III 313 125 III	79 256 III 76 192 III 288 243 101 287 97 302 II-III	287 57 III 50 189 42 312 260 249 III 35 328 I-II:	252 105 III 117 254 III 286 340 III 58 287 III 304 175 III	39 309 313 59 221 272 III: 293 193 III 312 212 III
	9 1	115.78 44.05 02.61 69.69 325.84 39.78 51.22 73.62 91.89 65.37	30.28 73.14 324.34 34.88 336.27 53.53 107.11 54.71 00.21 67.89	39.66 73.14 347.91 62.52 37.77 73.09 346.53 61.63 105.71 55.91	348.85 62.38 50.91 72.60 39.04 72.71 45.22 72.72 349.16 62.17	331.28 44.87 107.94 52.86 40.88 72.21 46.12 72.18 02.29 67.00	331.27 44.24 105.85 54.65 44.35 71.97 109.02 51.34 23.12 70.87	350.80 61.77 342.41 56.03 326.91 35.67 106.99 53.19 83.18 66.57	37.75 71.49 11.43 68.19 03.66 66.02 48.91 71.03 354.04 62.17	40.66 70.93 118.19 37.66 115.71 41.63 81.53 66.18 113.76 44.39	68.61 68.81 337.20 48.05 32.34 69.93 13.16 67.22 63.55 69.00
	RA(2000)Dec	1359.3+7207 1404.0+1545 1405.6-1946 1404.3+3104 1405.0+4704	1406.1+2506 1408.4-2446 1407.9-0419 1405.2+6005	1407.5+2748 1408.1+0632 1407.6+2715 1408.3+0526 1405.9+5839	1409.8+0642 1409.1+3108 1409.4+2736 1409.3+2926 1410.8+0638	1412.4-1330 1409.0+6156 1411.7+2808 1411.7+2944 1412.5+1401	1413.5-1404 1410.4+5946 1412.8+2912 1410.5+6335 1413.2+2233	1414.2+0651 1414.7-0019 1415.6-2314 1411.9+6122 1413.8+4340	1414.7+2708 1416.5+1735 1417.1+1352 1416.7+3043 1417.6+0811	1417.5+2802 1409.9+7843 1413.0+7420 1417.7+4322 1414.4+7114	1418.7+3747 1421.0-0846 1420.6+2509 1421.4+1741 1421.1+3601
1	RA(1950)Dec	1358.5+7222 1401.6+1600 1402.8-1932 1402.1+3119	1403.8+2521 1405.6-2432 1405.3-0405 1403.6+6020 1405.2+1412	1405.2+2803 1405.6+0647 1405.3+2730 1405.8+0541	1407.3+0657 1406.9+3123 1407.1+2751 1407.1+2941 1408.3+0653	1409.7-1316 1407.6+6211 1409.5+2823 1409.5+2959 1410.1+1416	1410.8-1350 1408.9+6001 1410.6+2927 1409.1+6350 1410.9+2238	1411.7+0705 1412.1-0006 1412.8-2301 1410.4+6137 1411.8+4354	1412.5+2722 1414.1+1749 1414.7+1406 1414.5+3057 1415.1+0825	1415.3+2816 1410.4+7858 1412.6+7434 1415.7+4336 1413.7+7128	1416.6+3801 1418.3-0833 1418.3+2523 1419.0+1755 1419.0+3615
Continued	Abell	1851 1852 1853 1853 1854	1856 1857 1858 1859 1860	1861 1862 1863 1864 1865	1866 1867 1868 1869 1870	1871 1872 1873 1874 1875	1876 1877 1878 1879 1880	1881 1882 1883 1884 1885	1886 1887 1888 1889 1890	1891 1892 1893 1894 1895	1896 1897 1898 1899 1900
TABLE 3-	z R D m	0 6 17.8 1 0 17.0 0 6 17.5 0 6 17.6 0 6 17.8	0 6 18.0 0 6 18.0 0 0 17.2 0.0788 1 4 15.8 0 5 17.2	0 6 17.5 0 0 17.0 0 4 16.0 0 5 17.2 0 6 17.8	1 0 17.6 0 5 17.2 0 5 17.2 0 5 17.2 0 6 17.6	0 6 17.5 2 0 17.6 0 6 17.5 0 5 17.2	0 6 17.5 0.0668 1 5 16.6 0 5 16.6 0 6 17.8 0 6 17.5	0.0733 1 3 15.4 0 5 17.2 0 5 17.0 0 5 17.2 0 0 17.6	.0363 0 4 15.7 .0376 1 4 15.7 0 6 18.0 0 6 17.4 .0104 0 5 17.2	0 6 17.5 0 5 17.2 0 0 17.8 0 0 17.2	2 0 17.6 0 6 17.6 0 6 17.7 0 5 16.6
	R D	69 0 6 17. 61 1 0 17. 79 0 6 17. 56 0 6 17. 65 0 6 17.	0 6 18. 0 6 18. 0 0 17. 788 1 4 15. 0 5 17.	6 17. 0 17. 4 16. 5 17. 6 17.	76 1 0 17. 50 0 5 17. 34 0 5 17. 65 0 5 17.	71 0 6 17. 119 2 0 17. 52 0 6 17. 54 0 0 5 17. 49 0 0 6 18.	102 0 6 17. 68 0.0668 1 5 16. 59 0 5 16. 58 0 6 17. 56 0 6 17.	733 1 3 1 0 5 1 0 0 5 1 0 0 0 1 1 0 0 1 1 1 1 1	41 0.0363 0 4 15 50 0.0376 1 4 15 130 0 6 18 63 0 0.0104 0 5 17	6 17. 5 17. 0 17. 0 17. 0 17.	0 17. 6 17. 6 17. 5 16. 6 17.
	z R D	0 6 17. 1 0 17. 0 6 17. 0 6 17. 0 6 17.	3 0 6 18. 8 0 6 18. 4 0 0 17. 8 0.0788 1 4 15. 5 0 5 17.	1 0 6 17. 2 0 0 17. 1 0 0 17. 1 0 5 17. 4 0 6 17.	6 1 0 17. 0 0 5 17. 4 0 5 17. 5 0 5 17. 8 0 6 17.	2 0 17. 2 0 17. 2 0 6 17. 4 0 5 17. 9 0.0618 0 4 15.	0.0668 1 5 16. 0 5 16. 0 5 16. 0 6 17. 0 6 17.	0.0733 1 3 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1	0.0363 0 4 15 0.0376 1 4 15 0 6 18 0.0104 0 5 17	5 0 6 17. 9 0 5 17. 0 0 0 17. 5 0 0 17. 9 0 0 17.	2 0 17. 6 0 6 17. 0 0 6 17. 2 0 5 16. 7 0 6 17.
	$y T_{B-M}$ C z R D	53 60 117 111 69 0 6 17. 41 151 111 111 79 0 6 17. 92 280 111 65 0 6 17. 56 73 111 65 0 6 17.	12.86 75.27 270 68 II 53 0 6 18. 326.84 50.28 56 11 I-II 58 0 6 18. 344.77 67.20 55 74 44 0 0 17. 335.54 63.54 39 168 II: 78 0.0788 14 15. 71.85 74.14 318 228 III 65 0 5 17.	162 III 61 0 6 17. 305 41 0 0 17. 188 II: 32 0 4 16. 48 II 71 0 5 17. 108 III 74 0 6 17.	80 76 10 17. 136 III 50 0 5 17. 46 III 34 0 5 17. 147 III 68 0 6 17.	256 III 71 0 6 17. 51 III-III: 52 0 6 17. 52 III 54 0 6 17. 32 III 49 0.0618 0 4 15.	0 243 III 102 0 6 17. 8 89 II: 68 0.0668 1 5 16. 0 231 II-III: 59 0 6 17. 8 335 III 56 0 6 17.	64 104 III 67 0.0733 1 3 1 64 187 III 54 0 5 1 65 1 8 1 1 1 72 0 5 1 6 1 1 1 7 2 0 5 1 6 4 3 1 1 1 5 4 8 0 0 0 1	231 II: 41 0.0363 0 4 15 255 I-II 50 0.0376 1 4 15 162 II-III 130 0 6 18 272 I 0 6 17 243 35 0.0104 0 5 17	175 III 55 0 6 17. 220 III 79 0 5 17. 327 40 0 0 17. 132 35 0 0 17. 44 39 0 0 17.	132 113 2 0 17. 144 III 66 0 6 17. 330 III: 50 0 6 17. 58 II: 57 0 6 17.
	b x y T_{B-M} C z R D	1350.6+0519 338.44 64.03 75 177 III 69 0 6 17. 1351.4-2642 319.18 34.26 263 60 61 III. 1346.4-4504 100.56 245.60 141 151 IIIII: 79 0 6 17. 1349.2+5722 108.21 58.08 256 73 III 65 0 6 17.	1350.9+2118 12.86 75.27 270 68 II 53 0 6 18. 1352.4-0944 326.84 50.28 56 11 I-II 58 0 6 18. 1352.3+05094 344.77 67.20 55 74 4 44 0 0 17. 1353.3+0509 33+054 63.54 39 168 II: 78 0.0788 1 4 15. 1352.6+3615 71.85 74.14 318 228 III 65 0 5 17.	1349.8+7101 116.25 45.34 128 162 III 61 0 6 17. 1353.1+3742 76.01 73.28 311 305 41 0 0 17. 1353.5+3331 69.17 74.35 311 188 II: 32 0 4 16. 1354.1+1464 356.13 70.97 28 48 II 71 0 5 17. 1354.4+0401 338.74 62.43 23 108 III 74 0 6 17.	1355.7-2621 320.42 34.32 212 80 76 10 17. 1354.3+834 42.52 76.05 222 136 III 50 05 17. 1354.4+2653 35.65 75.98 222 46 III 50 05 17. 1355.2+2441 25.56 75.38 214 232 III 65 05 17. 1356.3+1046 349.04 67.64 315 147 III 68 0 6 17.	51.37 75.41 201 256 III 71 0 6 17. 21.51 35.06 178 132 119 2 0 17. 90.95 67.94 32 51 III—III: 52 0 6 17. 35.61 75.25 182 42 III 54 0 5 17. 13.43 73.50 181 32 III 49 0.0618 0 4 15.	1357.8+3035 50.27 75.07 180 243 III 102 0 6 17. 1358.2+2142 16.93 73.87 178 89 II: 68 0.0668 1 5 16. 1358.4+1823 06.89 72.29 280 231 IIIII: 59 0 5 16. 1358.2+3817 75.72 72.11 256 335 III 58 0 6 17. 1357.8+4724 94.69 65.92 28 185 III 56 0 6 17.	1359.2+2759 40.14 74.98 164 104 III 67 0.0733 1 3 1 3 1 3 1 3 1 3 2 2 2 2 2 2 2 2 2	1401.7-1136 328.98 47.68 252 231 II: 41 0.0363 0 4 15 1401.8-1109 322.28 48.08 251 255 I-II 50 0.0376 1 4 15 1400.3-44103 81.88 70.14 230 162 II-III 130 0 6 18 1402.5-0450 333.85 53.71 239 272 I 63 0 6 17 1401.5+3034 49.76 74.29 137 243 35 0.0104 0 5 17	23.35 73.62 132 175 III 55 0 6 17. 06.84 71.21 232 200 III 79 0 5 17. 58.41 68.95 232 327 40 0 0 17. 31.07 49.80 230 44 39 0 0 17.	2.87 34.69 115 132 113 2 0 17. 1.61 73.27 121 144 III 66 0 6 17. 666 42.21 103 330 III: 50 0 6 17. 1.69 69.56 215 73 III 32 0 5 16. 9.84 65.18 216 58 II: 57 0 6 17.
	ec l b x y T_{B-M} C z R D	350.6+0519 338.44 64.03 75 177 III 69 0 6 17. 351.4-2642 319.18 34.26 263 60 61 10 17. 346.6+4614 100.06 65.25 109 280 III 56 0 6 17. 349.2+5722 108.21 58.08 256 73 III 65	350.9+2118 12.86 75.27 270 68 II 53 0 6 18. 35.4-0944 326.84 50.28 56 11 I-II 58 0 6 18. 352.2+0924 344.77 67.20 55 74 44 0 0 17. 353.3+0509 339.54 65.54 39 168 II: 78 0.0788 14 15. 352.6+3615 71.85 74.14 318 228 III 65 0 5 17.	349.8+7101 116.25 45.34 128 162 III 61 0 6 17. 353.1+7742 76.01 73.28 311 305 41 0 0 17. 355.5+5531 69.17 74.35 311 188 II: 32 0 4 16. 354.1+1454 356.13 70.97 28 48 II 71 0 5 17. 354.4+0401 338.74 62.43 23 108 III 74 0 6 17.	355.7-2621 320.42 34.32 212 80 76 1 0 17. 354.3+2834 42.52 76.05 222 136 III 50 0 5 17. 354.3+2834 55.56 75.98 222 46 III 54 0 5 17. 355.2+2421 55.56 75.38 214 232 III 65 0 5 17. 355.3+1046 349.04 67.64 315 147 III 68 0 6 17.	56.0+3048 51.37 75.41 201 256 III 71 0 6 17. 56.5-252 32.51 35.06 178 132 119 2 0 17. 56.7+44455 90.95 67.94 32 SIII-III: 52 0 617. 56.7+4465 33.61 75.25 182 42 III 54 0.0618 0 4 15. 58.0+2039 13.43 73.50 181 32 III 49 0.0618 0 4 15.	57.8+3035 50.27 75.07 180 243 III 102 0 6 17. 56.2+2142 16.93 73.87 178 89 II: 68 0.0668 1 5 16. 58.4+1823 06.89 72.29 280 2311 IIII 59 0 5 16. 58.2+3817 75.72 72.11 256 335 III 56 0 6 17. 57.8+4724 94.69 65.92 28 185 III 56 0 6 17.	359.2+2759 40.14 74.98 164 104 III 67 0.0733 1 3 1 359.2+2932 46.11 74.90 164 187 III 54 0 5 1 400.2+40437 34.05 62.15 266 138 III 72 0 5 1 358.7+4932 97.45 64.13 137 297 III 52 0 5 1 401.0+0251 340.37 60.57 256 43 48	401.7-1136 328.98 47.68 252 231 II: 41 0.0363 0 4 15 401.8-1109 322.28 48.08 251 255 I-II 50 0.0376 1 4 15 400.3-44103 81.88 70.14 230 162 II-III 130 0 6 18 402.5-0450 333.85 53.71 239 272 I 63 0 617 401.5+3034 49.76 74.29 137 243	401.9+2318 23.35 73.62 132 175 III 55 0 6 17. 402.2+1747 06.84 71.21 232 200 III 79 0 5 17. 402.5+1030 351.60 66.39 231 327 40 0 0 17. 402.7+1030 351.60 66.39 231 132 35 0 0 17. 403.3-0906 331.07 49.80 230 44 39 0 0 17.	03.7-2522 322.87 34.69 115 132 113 2 0 17. 02.7+2243 21.61 73.27 121 144 III 66 0 6 17. 58.1+7407 116.86 42.21 103 330 III: 50 0 6 17. 03.6+51525 01.69 69.56 215 73 III 32 0 5 16. 03.8+0907 349.84 65.18 216 58 II: 57 0 6 17.

	C z RD m	60 0 6 17.7 107 0.248 2 6 18.0 44 0 5 16.6 120 0.181 2 6 17.6 47 0 0 17.8	07 0 6 17.6 66 0.241 3 6 17.8 88 0.2284 2 6 17.8 69 0 6 17.4 53 0.1876 1 5 16.6	37 0.232 3 6 17.8 35 0 0 17.2 96 0 6 17.7 44 0 0 16.9 43 0 0 17.6	04 0 6 18.0 69 0 6 17.8 68 0 6 17.8 51 0 6 17.7 79 0 5 17.2	42 38 0.0189 0 5 17.2 26 0 6 17.6 56 0 6 17.5 57 0 5 17.1	53 0.1169 1 5 16.9 98 2 0 17.0 51 0 5 16.8 08 0.1687 2 5 17.2 50 0.1152 1 5 17.2	38 0 0 17.0 49 0 5 16.6 51 0.0441 1 3 15.4 93 0.1231 2 5 17.2 52 0 5 17.2	67 0.1182 1 5 16.9 43 0 17.6 41 0.0160 0 5 17.2 57 0 5 17.2 40 0.1269 3 5 17.2	60 0.0586 1 3 15.4 42 0 0 17.8 53 0 6 17.5 70 0 6 17.7 56 1 0 18.4	36 0.0499 0 5 17.0 44 0 1032 1 4 15.7 57 0 5 16.6
	x y T_{B-M}	211 172 II 279 134 III 1 29 278 III 1 267 128 I: 1 328 284	254 296 III 1 1 252 272 III 1 251 259 III 309 191 III 301 279 III 301 279 III III	236 271 III: 1 139 273 233 286 III 291 56 50 234	170 147 III 1 274 87 III 210 306 III 189 83 III 266 279 III	260 35 198 203 195 69 III 1 291 42 III 167 50 III:	174 43 III 156 170 226 345 II: 162 275 II-III 1 160 134 II-III	150 175 160 245 I-II: 197 139 III: 146 96 II 197 202 III	139 94 III 140 333 135 34 183 189 II-III: 130 103 III 1	175 240 I: 131 58 165 304 III 164 214 III	89 198 156 317 151 286 51 227 II-III 48 236 III
	9 1	119.79 33.26 42.94 65.78 10.24 60.73 42.69 65.55 347.89 48.27	50.24 65.37 49.16 65.35 48.60 65.33 18.88 62.43 22.27 62.95	49.09 65.05 94.90 55.43 49.76 64.98 344.88 44.50 61.25 64.20	99.18 52.73 06.03 57.66 50.61 64.53 104.31 49.17 11.86 59.57	14.40 60.23 32.61 63.50 40.43 64.10 113.70 40.24 109.01 44.74	26.61 62.23 335.11 30.73 14.71 59.55 49.20 63.66 30.29 62.47	335.45 30.69 47.96 63.63 18.95 60.12 41.76 63.25 02.27 54.11	28.97 61.90 51.59 63.22 26.74 61.48 02.27 53.75 42.12 62.96	22.77 60.50 77.67 59.73 357.96 50.91 350.06 45.31 96.88 52.50	336.63 30.59 25.73 60.71 357.83 50.49 91.89 54.78 92.01 54.63
	RA(2000)Dec	1423.9+8317 1441.1+2838 1441.9+1317 1442.1+2831	1442.9+3139 1443.1+3112 1443.2+3058 1443.9+1742 1444.5+1920	1444.5+3111 1442.9+5512 1444.8+3128 1446.8-0846 1445.2+3627	1444.1+5853 1447.2+0946 1446.8+3151 1443.9+6341 1447.7+1321	1448.0+1447 1448.3+2356 1448.3+2726 1443.2+7449 1446.3+6909	1450.4+2057 1452.2-2429 1450.8+1435 1451.0+3116 1451.5+2239	1453.4-2422 1451.2+3043 1452.7+1644 1452.4+2756 1453.3+0555	1453.2+2154 1452.9+3221 1453.5+2046 1454.4+0541 1453.8+2804	1454.5+1837 1453.6+4511 1455.9+0150 1456.2-0550 1452.8+5802	1457.4-2355 1455.9+2003 1456.9+0129 1454.1+5418 1454.6+5427
pan	RA(1950)Dec	1427.1+8331 1438.9+2851 1439.5+1330 1439.9+2844 1441.4-0419	1440.8+3152 1441.0+3125 1441.1+3111 1441.6+1755 1442.2+1933	1442.4+3124 1441.4+5525 1442.7+3141 1444.1-0834 1443.2+3640	1442.8+5906 1444.8+0959 1444.7+3204 1442.8+6354 1445.3+1334	1445.6+1500 1446.1+2409 1446.1+2739 1443.3+7502 1445.7+6922	1448.1+2110 1449.3-2417 1448.4+1448 1448.9+3129 1449.3+2252	1450.5-2410 1449.1+3056 1450.4+1657 1450.2+2809 1450.8+0608	1450.9+2207 1450.8+3234 1451.2+2059 1451.9+0554 1451.6+2817	1452.2+1850 1451.8+4524 1453.4+0203 1453.6-0538 1451.5+5815	1454.5-2343 1453.6+2016 1454.4+0142 1452.6+5431 1453.1+5440
—Continued	Abell	1951 1952 1953 1954 1955	1956 1957 1958 1959 1960	1961 1962 1963 1964 1965	1966 1967 1968 1969 1970	1971 1972 1973 1974 1975	1976 1977 1978 1979 1980	1981 1982 1983 1984 1985	1986 1987 1988 1989 1990	1991 1992 1993 1994 1995	1996 1997 1998 1999 2000
TABLE 3	R D m	0 5 16.6 0 5 17.2 0 5 17.0 0 5 17.0 0 6 18.0	0 5 16.6 0 5 17.2 0 5 17.1 0 5 16.8 0 6 17.8	913 2 5 17.2 0 5 17.0 533 1 4 16.0 712 2 5 17.2 0 6 17.6	0 6 17.8 0 6 18.0 415 3 6 17.5 0 0 17.6 310 2 5 17.0	352 1 5 17.2 0 6 17.6 0 5 17.2 2 0 17.0 0 5 17.2	0 5 16.6 40 1 4 16.0 0 6 17.6 91 2 6 17.3 13 1 5 17.0	0 5 17.2 0 0 17.2 0 6 17.3 95 3 6 17.4 1 0 17.5	186 1 5 17.0 182 2 5 17.2 0 5 17.2 183 1 5 16.6 196 3 5 17.0	0 6 17.5 3 6 17.5 0 6 17.6 0 5 17.2 1 0 17.6	0 6 17.6 0 6 17.5 0 0 17.2 0 5 17.2
	2	0.070		0.00	0.17	0.13	0.074 0.219 0.131	0.21	0.13 0.08 0.13	0.224	
	x y T_{B-M} C z	21 122 III: 46 22 280 III: 107 90 68 II-III 53 13 241 II-III: 83 0.07 64 128 III 94	262 179 III 46 112 303 III 53 1180 340 III 59 178 259 III 79 175 275 II-III: 48	90 47 II-III 80 0.1 56 34 III: 65 23 138 III 53 0.0 56 307 II: 105 0.1 45 325 III 55	15 92 II-III: 50 06 317 III 94 03 60 I-II 142 0.1 92 176 35 57 305 II-III:103 0.1	.1	0. 2.1.	~		8 235 III 56 4 83 III 138 0.22. 7 221 III 86 5 231 III 76 0 292 51	149 112 III 69 148 70 II-III: 50 274 243 48 54 216 III 68 47 266 II: 69
	$y T_{B-M}$ C	122 III: 46 280 II: 107 68 II-III 53 241 II-III: 83 0.07 128 III 94	179 III 4 303 III 5 340 II: 5 259 III 7 275 II-III: 4	6 34 III: 65 0.0 3 138 III: 53 0.0 6 307 II: 105 0.1 5 325 III 55	92 II-III: 50 317 III 94 60 I-II 142 0.1 176 35 305 II-III:103 0.1	4 161 II 63 0.1 2 348 III 56 1 296 III 53 3 290 95 42 II: 92	244 III 112 299 I-II: 50 0.0 130 II: 69 0.2 184 II-III: 95 0.2 296 II 60 0.1	330 III 62 166 109 II-III: 93 180 II 142 0.2 137	04 252 III: 69 0.1 38 116 III: 99 0.1 88 192 III: 53 17 255 II-III 59 0.0 96 269 III 130 0.1	235 III 56 83 III 138 0.22. 221 III 86 231 III 76 292 51	12 III 6 70 II-III: 5 43
	b x y T_{B-M} C	4.16 67.28 321 122 III: 46 6.10 68.44 302 280 II: 107 8.86 69.71 190 68 II-III 53 9.66 62.30 113 241 II-III: 83 0.07 1.17 66.15 264 128 III 94	3.26 66.60 262 179 III 6 1.40 61.49 112 303 III 5 6.28 69.37 180 340 II: 5 2.11 69.11 178 259 III 7 2.93 69.09 175 275 II-III: 4	24 67.30 290 47 II-III 80 0.1 29 69.03 156 34 IIII 65 14 65.58 223 138 III 53 0.0 66.745 256 307 III 55 0.0 42 68.76 145 325 III 55	40.00 47.62 215 92 II-III: 50 20.31 66.81 206 317 III 94 66.42 50.86 303 60 I-II 142 0.1 54.44 58.07 192 176 98.45 56.56 257 305 II-III:103 0.1	28.03 67.53 114 161 II 63 0.1 22.08 66.58 182 348 III 56 31.43 46.52 181 296 III 53 31.43 34.90 93 290 99.50 55.63 285 42 II: 92	32.16 67.61 99 244 III 112 34.84 67.68 93 299 I-II: 50 0.0 54.15 57.02 160 130 II: 69 45.08 67.81 83 184 II-III: 95 0.2 50.54 67.55 77 296 II 60 0.1	79.88 63.54 206 330 III 62 84.95 61.91 20 166 45 11.53 44.77 245 109 II-III: 93 44.86 67.48 66 180 II 12 0.2 34.33 37.11 124 137 73	95.91 56.57 204 252 III: 69 0.1 00.04 54.04 238 116 III 99 0.1 00.31 52.54 88 192 III: 53 0.0 00.31 56.23 196 269 III 130 0.1 00.1	47.53 66.57 318 235 III 56 55.12 55.28 74 83 III 138 0.22. 46.86 66.55 317 221 III 86 37.32 66.51 315 231 III 76 33.61 34.04 310 292 51	0.54 64.43 149 112 III 8.81 64.68 148 70 II-III: 5 6.32 60.28 274 243 4 8.88 63.45 54 216 III 6 9.49 60.90 47 266 II: 6
	A(2000)Dec l b x y T_{B-M} C	421.0+4019 74.16 67.28 321 122 III: 46 421.8+3717 66.70 68.44 302 280 II: 107 422.8+2721 38.86 69.71 190 68 II-III 53 422.1+4833 89.66 62.30 113 241 II-III: 83 0.07 423.7+1628 11.17 66.15 264 128 III 94	423.8+1725 13.26 66.60 262 179 III 4 422.3+942 91.40 61.49 112 303 III 5 52.5.9+2625 36.28 69.27 180 340 II: 5 424.1+4455 32.11 69.11 178 259 III 7 424.4+2512 32.93 69.09 175 275 II-III: 4	424.4+3857 70.24 67.30 290 47 II-III 80 0.1 425.6+2644 37.29 69.03 156 34 III: 65 426.9+1640 12.54 65.88 223 138 III 53 0.0 65.6.19349 67.20 67.45 256 307 II: 55 0.0 426.6+3210 52.42 68.76 145 325 III 55	428.4-0809 340.00 47.62 215 92 II-III: 50 428.0+2001 20.31 66.81 206 317 III 94 425.2+609 106.42 50.86 303 60 I-II 142 0.1 425.7+6053 354.44 58.07 192 176 427.3+5546 98.45 56.56 257 305 II-III:103 0.1	429.3+2305 28.03 67.53 114 161 II 63 0.1 430.0+2035 22.08 66.58 182 348 III 56 430.0+137 1984 66.22 181 296 III 53 431.5-222 331.43 34.90 93 290 428.4+5651 99.50 55.63 285 42 II: 92	430.6+2438 32.16 67.61 99 244 III 112 431.0+5539 34.84 67.68 93 299 I—II: 50 0.0 432.2+0431 354.15 57.02 160 130 II: 69 432.9+231 45.08 67.81 83 184 II—III: 95 0.2 432.6+3136 50.54 67.55 77 296 II 60 0.1	432.0+4415 79.88 63.54 206 330 III 62 432.2+4705 84.95 61.91 20 166 45 429.1+707 111.53 44.77 245 109 II-III: 93 433.3+42926 44.86 67.48 66 180 II 12 0.2 435.9-1919 334.33 37.11 124 137 73	434.5+5448 95.91 56.57 204 252 III: 69 0.1 434.4+8815 100.04 54.04 238 116 III 99 0.1 437.8-0015 350.31 52.54 88 192 IIII: 59 0.0 66.16 17 255 III-III 59 0.0 435.5+5508 96.15 56.23 196 269 III 130 0.1	437.5+3030 47.53 66.57 318 235 III 56 438.6+0340 355.12 55.28 74 83 III 138 0.22 437.7+3014 46.86 66.55 317 221 III 86 437.8+3025 47.32 66.51 315 231 III 76 440.2-2216 333.61 34.04 310 292 51	437.9+4013 70.54 64.43 149 112 III 6 438.1+3926 68.81 64.68 148 70 II-III: 5 437.7+4836 86.32 60.28 274 243 440.0+1808 18.88 63.45 54 216 III 6 440.5+1304 09.49 60.90 47 266 II: 6

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	T_{B-M}	!!!-!! !!!!!!!!!!!!!!!!!	11-11 111	ëdë E				888			i iiii
	8	149 1 164 1 164 1 215 1	1110 1 273 205 1 140 1	238 315 345 236 81	255 252 187 198 161	256 1 214 1 119 1 314	316] 311] 146] 186]	254 66 241 163 273	183 32 32 85	105 1 262 1 257 1 89 1	273] 71 69] 289]
	8	208 209 209 201 184 282	135 158 158 123 141	1112 1111 125 187 93	111 89 33 80 231	224 80 59 1 261 287	258 189 43 31 348	33 24 24 316 3 167 3	282 284 215 282 154	286 270 122 264 175	1111 170 268 166 99
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	9	40444	57. 37. 41. 57.	57. 49. 54. 56.	45. 56. 56.	56. 56. 39.	54 346. 55.	35. 45. 55.	540. 540. 54.	54. 54. 54. 53.	54 53 53 53
	-	9.40 9.52 9.66 83	3.69 1.84 8.99 4.79 0.86	8.16 2.81 9.82 9.82	03.92 48.67 08.36 46.85 56.56	9.73 7.12 9.95 0.54	2.01 7.82 1.80 5.20	3.66 8.08 8.08 2.55 96	08.74 07.95 62.74 43.95	7.11 9.48 13.38	9.97 3.78 5.42 0.65
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)Dec	-0056 +0700 -0040 +5446 +0612	+2816 -1039 +7150 +2850 -1209	3+3039 3+3209 0+0838 0+4838	+0102 +3054 +7129 +2953 +3514	7+3700 9+1812 7+2824 7+6345	1+4407 1+6202 9-1300 1+2852 6+4143	5-1059 7+032 4+304 1+351 6+072	1+7222 7+7135 0+3851 7+2800 7+6133	+1014 +3108 +3702 -0201 +4031	4+372(4+393) 1+693(6+4344
	RA(2000)Dec	516.8 516.8 517.3 514.6	519.2+ 521.0- 513.8+ 520.3+	521.3 521.3 521.0 522.7	523.9+ 523.2+ 517.8+ 524.0+ 524.3+	524.7 525.9 525.7 522.7	526.1: 524.1: 529.9: 528.1:	3390.	524.1 524.7 531.0 532.7	34.3+ 36.3+ 36.6-	35.
	R/	нанан	ааааа	ааааа	нанан	нанан	ннннн	1221	нанан	155	152
)Dec	0046 0711 0030 5458 0623	2827 1029 7202 2901	3050 3216 0849 4849 2754	0113 3105 7140 3004 3525	3711 1823 2835 6356 7411	+4418 +6213 -1250 +2903 +4154	8-1049 2+0337 4+3055 2+3528 2+0732	+7233 +7146 +3902 +2811 +6144	9+1024 3+3119 4+3712 0-0152 0+4041	5+3730 6+3945 9+6941 9+4354 5+3748
	RA(1950)Dec	14.2- 14.3+ 14.7- 13.2+ 16.3+	17.1+ 18.3- 13.8+ 18.2+	19.2+ 20.6+ 19.4+ 20.6+	21.4+ 21.2+ 17.8+ 21.9+ 22.3+	522.8+3 523.6+1 523.6+2 521.9+6 520.1+7	524.44 523.24 527.1- 526.04	28.24 28.24 28.24 28.24 29.24	w @ 67 60 80	321.9 342.4 33.0	33.94
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Continued	Abell	2051 2052 2053 2053 2054 2055	2056 2057 2058 2059 2060	2061 2062 2063 2064 2065	2066 2067 2068 2069 2070	2071 2072 2073 2074 2075	2076 2077 2078 2079 2080	2081 2082 2083 2084 2085	2086 2087 2088 2089 2090	2091 2092 2093 2094 2095	2096 2097 2098 2099 2100
$\frac{3-C_{\ell}}{2}$											
BLE	日	17.2 17.2 17.0 16.0	17.2 16.9 17.5 17.2	17.2 16.6 18.0 17.5	17.6 16.6 16.6 16.3	17.0 15.6 17.2 18.0	16.7 17.7 15.7 16.0 16.9	17.1 17.9 15.7 16.9 17.1	16.0 17.5 17.2 17.2	17.2 17.2 17.2 17.6	16.9 17.9 16.0 17.0
TA	R D	0402 60864	011201	01010	00000	00011	00440 00440	0 0 4 2 2	40004	0000	00101
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		0000	0.1	0.1	0.0	00.			0.0		0.09
	C	57 68 34 105	58 93 78	50 53 91 50	63 73 53 47	52 50 50 50 50	51 82 82 82	76 : 76 40 ::105	38 46 52	39 72 51 53	55 75 75 50
	T_{B-M}	::: :::-::: ::::::::::::::::::::::::::				::::::::::::::::::::::::::::::::::::::	I: I-II -II	!!!-!!! !!!-!!!	II-III		
	y J	40 III 83 III 56 III	95 H 12 H 60 H 66 H	26 H 26 H 136 H	63 E 63 E 71 E 57 E	22 H	86 II 45 II 85 II 91 I	245 194 II 223 II 72 II 198 II	06 II 20 II 54 85 80 II	527 III	44 10 10 10 10 10 10 10 10 10 10 10 10 10
	x	1 2 4 5 1 2 2 1 2 2 4 7 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 1 2	110 2 202 3 54 1 51 178	80 3 80 1 73 2 76 3	71 1 24 1 63 1 20 57 3	330 1 310 1 30 24 1 118 1	318 1 152 2 305 2 286 1 282 1	278 2 217 1 279 2 78 272 1	655 625 625 625 625 626 626 626 626 626	69 69 10 10 10 10 10 10 10 10 10 10 10 10 10	53 1 208 2 228 1 187 2 214 2
			.76 1 .21 2 .70 .16	63 05 24 13 2	23362	90 3 67 3 74 04	115 3 38 1 87 3 78 2		70382		20003
	q	61.27 44.98 59.88 61.43	59.7 61.2 60.7 34.7	50.50	55.32 60.16 57.63 60.83	59.9 60.6 49.7 57.0	58.3 51.8 50.5 46.3	38.73 37.20 50.81 59.53 42.48	56.5 55.2 52.5 51.1	43.76 59.02 55.64 54.69	58.9 48.8 58.6 45.9
	1	31.18 07.65 25.04 35.79 41.80	5.59 3.21 2.31 8.90	4.32 0.36 8.96 3.46	2.04 2.68 0.11 0.72 7.62	32.50 43.31 01.72 79.27 55.56	8.86 1.46 8.46 6.51	9.28 4.79 7.39 3.61	24.69 09.97 20.20 12.23 09.06	6.79 2.20 8.89 7.64	6.12 4.89 5.81 0.19
		- 7	112362	8 4 9 4 9	H 8 8 4 0		35 0 35	349. 114. 07. 53.	-	106 59 22 18 18	56 114 05 50 50
)Дес	-2244 -6821 -1927 -2456 -2749	1940 3800 2308 2122 8108	1+4945 1+1631 1+6030 1-1601 1+5559	+1112 +2310 +4716 +2711 +0755	+2301 +2825 +0251 +4707	6-0016 3+4245 6+0731 0+0545	-1111 +7748 +0621 +3331	+1803 +7212 +1513 +0947 +0725	+6852 +3632 +1625 +1418 -0245	7+3450 3+7807 3+0422 7+3146 4+0005
	RA(2000)Dec	57.0+ 53.0+ 58.7+ 58.6+	59.6+18 58.9+38 00.0+23 00.3+21	59.8+ 01.8+ 58.8+ 603.6-	02.7+ 02.5+ 01.2+ 03.0+	w 4 10 10 10 10 u m 10 10 10	08.6- 07.3+ 09.6+ 111.0+	511.9- 500.7+ 511.5+ 510.2+	511.54 505.24 512.24 512.64	507.04 511.44 512.74 512.84	512.7+ 503.3+ 515.3+ 514.7+
	RA	44444	15001	1250	150	150 150 150 150	155	151	151	151 151 151 151	151
)Dec	2257 6834 1939 2508 2801	1952 3812 2320 2134 8121	4957 1643 6042 1550 5611	1124 2322 4728 2723 0807	2313 2837 0303 4719 3439	0-0005 5+4257 1+0743 5+0557 7+0006	-1100 +7800 +0633 +3343	+1815 +7224 +1525 +0959 +0737	5+6904 4+3644 4+1637 5+1430 6-0234	7+3502 6+7819 8+0434 7+3158 8+0017
	A(1950)Dec	6.6+28 6.6+28 6.6+28	4.0.9 9.8 9.8 9.8 9.8	58.2+ 59.5+ 57.6+ 00.8-	2.34	501.3+ 502.2+ 503.3+ 503.8+	506.0- 505.5+ 507.1+ 508.5+	509.2- 501.8+ 509.0+ 508.2+ 509.5-	• 44 40 40 44	506.5+ 509.4+ 510.4+ 510.5+	510.7+ 504.6+ 512.8+ 512.7+ 513.8+
	RA	145 145 145 145	1455	145 145 150 150	150 145 150 150	150 150 150 150	150 150 150 150	150 150 150 150	1509 1509 1509 1510	150 150 151 151 151	ппппп
	Abell	2001 2002 2003 2004 2005	2006 2007 2008 2009 2010	2011 2012 2013 2014 2015	2016 2017 2018 2019 2020	2021 2022 2023 2024 2024	2026 2027 2028 2029 2030	2031 2032 2033 2034 2035	2036 2037 2038 2039 2040	2041 2042 2043 2044 2045	2046 2047 2048 2049 2050
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	C z RD m	87 0.0371 2 1 13.8 60 0.0374 1 1 13.8 33 0.06 16.9 51 0 6 17.5	00 0 6 17.5 76 0 6 17.7 45 0.1349 0 5 16.8 34 0 0 15.9 52 0 6 17.9	94 0 6 17.5 37 0.0320 0 1 13.7 119 0.0698 2 6 17.5 36 0 0 17.5 34 0.0286 0 6 17.4	51 0 5 17.1 43 0 0 17.6 66 0 5 16.5 45 0 4 15.9 38 0 4 15.9	62 0.1387 15 17.1 51 10 17.1 59 0 5 17.1 61 0.0978 1 4 16.2	127 0 5 17.1 44 0.0769 0 6 17.5 51 0.0928 1 5 17.1 52 0.1360 1 5 17.1 60 0 5 17.1	51 0 6 17.7 43 0 0 17.4 56 0.1365 1 5 17.1 31 0.0550 0 4 15.9 51 0 6 17.4	49 0.0825 0 5 17.1 42 0 0 17.1 70 0 5 17.1 51 0 6 17.7	62 0.1868 1 5 17.1 53 0 5 17.1 43 0 0 16.9 76 0 6 17.4	46 0.1332 0 5 16.9 73 0.0308 1 1 13.9 85 0.0798 2 6 17.7 88 0.0309 2 1 13.9 48
	x y T_{B-M}	189 181 III 172 307 32 156 II-III 182 248 III	135 261 III 72 190 III: 139 249 108 140 129 191 III	112 173 II-III 117 170 II-III 68 187 172 216 99 338	33 306 III 287 324 315 204 III 312 256 III 65 151 III:	91 181 III 54 218 II-III 315 347 134 253 II: 26 191 II	77 170 II-III: 17 289 325 228 II 315 216 III 263 175 III	273 171 III: 271 321 302 232 II 249 310 II: 59 126 III	274 114 278 153 174 71 60 225 III 256 283 III	249 291 252 227 II-III: 247 71 III 68 45 203 220 III	246 164 II-III 239 132 III 236 289 III: 236 58 I
	q 1	31.60 44.52 29.92 44.02 27.11 42.77 98.25 41.72 41.66 46.24	107.37 37.66 75.13 46.87 68.04 47.41 31.35 42.84 48.93 46.32	105.34 38.27 48.41 46.04 06.76 30.52 91.98 42.88 44.50 45.12	86.12 44.17 61.27 46.46 83.64 44.57 76.65 45.56 39.97 43.67	105.22 37.86 66.99 45.90 22.89 37.53 92.48 41.97 49.35 44.41	104.82 37.77 43.73 43.42 42.31 43.03 66.97 45.26 74.37 44.80	111.33 34.72 29.63 39.29 67.38 45.01 77.85 44.26 103.73 37.94	47.74 43.16 65.30 44.54 54.83 43.96 105.67 36.92 68.69 44.15	44.39 41.99 67.27 44.07 39.18 40.76 87.01 42.14 75.39 43.62	65.63 43.96 64.82 43.80 68.86 43.77 62.90 43.70 47.53 42.14
	RA(2000)Dec	1605.2+1744 1605.4+1626 1606.8+1405 1602.5+6505 1607.3+2500	1600.6+7311 1607.5+4751 1608.2+4300 1611.6+1658 1611.5+2956	1605.4+7131 1612.5+2932 1615.6-0607 1610.4+6024 1614.2+2640	1612.2+5558 1614.3+3825 1613.1+5409 1614.1+4907 1616.8+2310	1610.5+7139 1616.7+4223 1620.3+0853 1616.2+6104 1620.4+2954	1613.5+7125 1621.0+2544 1621.5+2438 1620.2+4224 1620.2+4739	1610.6+7729 1623.1+1425 1621.5+4242 1621.0+5011 1616.8+7035	1625.0+2832 1624.3+4115 1625.2+3344 1618.9+7225 1626.0+4341	1627.7+2552 1626.6+4240 1628.2+2146 1625.0+5710 1626.6+4832	1627.4+4129 1628.2+4054 1628.1+4349 1628.6+3931 1629.4+2810
pa	RA(1950)Dec	1603.0+1753 1603.1+1635 1604.5+1413 1602.0+6514 1605.2+2508	1601.3+7320 1606.0+4759 1606.6+4308 1609.3+1706 1609.5+3004	1605.8+7139 1610.5+2940 1612.9-0600 1609.6+6032 1612.1+2648	1611.1+5606 1612.5+3833 1611.9+5417 1612.7+4915 1614.7+2318	1610.9+7147 1615.1+4231 1617.9+0901 1615.5+6112 1618.4+3002	1613.9+7133 1618.9+2552 1619.4+2446 1618.6+4232 1618.7+4747	1612.5+7737 1620.8+1432 1619.9+4250 1619.7+5019 1617.1+7043	1623.0+2839 1622.6+4122 1623.3+3351 1619.5+7233 1624.4+4348	1625.6+2559 1625.0+4247 1626.0+2153 1624.0+5717 1625.2+4839	1625.7+4136 1626.5+4101 1626.5+4356 1626.9+3938 1627.4+2817
-Continued	Abell	2151 2152 2153 2153 2154	2156 2157 2158 2159 2160	2161 2162 2163 2164 2164	2166 2167 2168 2169 2170	2171 2172 2173 2173 2174	2176 2177 2178 2179 2180	2181 2182 2183 2183 2184 2185	2186 2187 2188 2189 2190	2191 2192 2193 2193 2194 2195	2196 2197 2198 2199 2200
TABLE 3-	z R D m	0 0 17.2 0 6 17.7 0 0 17.1 0 6 17.4 0 5 17.2	0.0421 14 15.7 0.0919 04 15.7 0.0978 1 5 17.0	0.229 3 6 17.8 0 0 17.8 0 0 17.1 0 0 17.8 0 6 17.8	0 6 17.8 0 6 17.8 0 0 17.1 0 0 17.2 0 6 17.8	0 6 17.4 0 5 16.6 0 0 17.5 0.0654 1 3 15.6 0.2465 4 6 17.6	0 6 17.6 0 0 17.9 0 5 16.5 0 6 17.8 0 6 17.8	0 6 17.5 0 0 16.9 0 6 17.8 0 6 17.5	0 6 17.6 0 0 17.1 0 0 17.5 0 6 17.4	0.0899 2 4 16.0 0.0899 2 0.16.6 0.016.6 0.017.5	0.0356 1 13.8 0.0442 0 3 15.4 0 0 16.1 0 6 17.7
	x y T_{B-M} C	235 214 35 259 104 III 69 220 111 46 218 21 III 89 245 313 III: 56	68 76 III: 69 204 80 I 204 193 III 45 206 200 444 196 237 I-II 54	62 116 II-III 148 61 217 47 193 128 47 119 255 37 244 96 II-III 84	101 245 II-III 58 102 295 III 50 98 190 41 145 66 36 322 119 III 56	230 81 II-III 104 312 207 II-III: 68 128 81 46 307 203 I 50 154 216 II-III 230	118 305 III 34 106 111 34 99 33 I-II 39 98 308 II-III 52 274 228 III 52	268 201 II: 69 208 102 254 213 III 50 203 145 III 88 200 335 40	176 42 III 78 283 308 40 181 76 40 84 168 II: 70 170 232 31	169 167 II 74 286 48 II 89 166 271 37 167 118 III 109 141 50 48	73 220 III 77 227 83 III 52 231 273 41 109 191 42 146 165 II-III 79
	9	.31 .26 .98 .74	54 17 62 21	41 32 45 10	97768	ñ040∞					
	1	20.48 48 105.99 41 03.93 39 02.84 39 109.91 38	53.73 53. 34.40 51. 28.62 50. 13.07 44.	54.96 53.4 58.12 53.3 11.67 43.6 69.20 52.4	68.78 52.16 70.26 51.97 67.13 52.27 18.08 45.49 55.12 52.53	105.12 41.05 57.80 52.40 359.60 34.74 57.69 52.30	41.54 50.99 111.56 36.95 04.84 37.66 32.79 49.05 58.49 51.71	57.68 51.58 105.26 40.49 58.02 51.31 106.03 39.94 79.89 48.52	80.66 48.31 95.27 44.13 54.10 49.87 99.22 42.41 76.87 48.47	56.74 49.71 44.22 48.70 59.73 49.67 105.00 39.70 53.41 49.07	100.13 41.69 28.81 44.49 42.00 47.23 83.96 46.26 105.64 38.88
	m RA(2000) Dec l	4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	73 53. 40 51. 62 50. 07 44. 78 53.	54.96 53. 58.12 53. 11.67 43. 69.20 52. 05.62 41.	78 52. 26 51. 13 52. 08 45.	1539.1+6947 105.12 41.0 1544.5+15607 57.80 52.4 1547.1-0810 359.60 34.7 1545.0+3603 57.69 52.3 1541.0+6618 101.21 42.9	54 50. 56 36. 34 37. 79 49.	57.68 51. 05.26 40. 58.02 51. 06.03 39.	0.66 48. 5.27 44. 4.10 49. 9.22 42. 6.87 48.	56.74 49. 44.22 48. 59.73 49. 05.00 39.	0.13 41.6 8.81 44.4 2.00 47.2 3.96 46.2 5.64 38.8
		538.1+1217 20.48 4 532.4+7009 105.99 4 539.9-0209 03.93 3 540.1-0317 02.84 3 531.0+7404 109.91 3	539.0+3340 53.73 53. 539.8+2146 34.40 51. 540.1+1753 28.62 50. 540.7+0601 13.07 44. 539.7+3042 48.78 53.	539.6+3424 54.96 53. 539.9+3617 58.12 53. 541.6+0440 11.67 43. 540.4+4301 69.20 52. 535.9+7003 105.62 41.	542.2+4249 68.78 52. 542.3+4345 70.26 51. 542.5+4148 67.13 52. 545.0+0930 18.08 45. 543.9+3429 55.12 52.	539.1+6947 105.12 41.0 544.5+3607 57.80 52.4 547.1-0810 359.60 34.7 545.0+3603 57.69 52.3 541.0+6618 101.21 42.9	546.7+2558 41.54 50. 537.7+7615 111.56 36. 548.9-0303 04.84 37. 548.4+2002 32.79 49. 547.9+3633 58.49 51.	548.6+3603 57.68 51. 543.5+7012 105.26 40. 549.9+3616 58.02 51. 544.6+7100 106.03 39. 553.0+5034 79.89 48.	553.3+5107 80.66 48. 552.7+6202 95.27 44. 556.6+3345 54.10 49. 553.4+6523 99.22 42. 556.6+4839 76.87 48.	557.8+3527 56.74 49. 558.3+2713 44.22 48. 558.0+3723 59.73 49. 552.6+7031 105.00 39. 600.3+3315 53.41 49.	556.1+6620 100.13 41.6 602.3+1553 28.81 44.4 603.3+2527 42.00 46.7.2 601.6+5352 83.96 46.7.2 557.4+7123 105.64 38.8

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Abell	1 RA(1950)Dec	RA(2000)Dec	9 1	x y T_{B-M}	C z RD m	Abell	RA(1950)Dec	RA(2000)Dec	q 1	x y T _{B-M}	0	z R D	E
2201 2202 2203 2204 2205	1625.9+5534 1627.9+4856 1623.7+7328 1630.3+0541 1630.2+1259	1627.0+5527 1629.3+4849 1622.9+7321 1632.8+0534 1632.5+1252	84.67 42.30 75.70 43.14 106.50 36.22 21.10 33.24 29.02 36.58	204 269 I-II: 179 235 50 276 III 151 168 II 148 238 III	95 0 5 17.1 41 0 0 17.1 83 0 5 17.1 133 0.1523 3 5 17.1 49 0 5 16.5	2251 2252 2253 2254 2254	1710.5+2452 1712.6+4927 1713.4+3843 1715.5+1946 1712.2+6409	1712.6+2448 1713.9+4923 1715.1+3839 1717.7+1942 1712.5+6405	46.60 31.95 75.96 35.83 62.89 34.64 41.46 29.15 93.98 34.95	19 230 II 84 260 II-III 234 325 III 180 274 219 81 II-III:	60 63 45 124 102	0 6 0.1147 1 6 0 5 0.0800 2 3	17. 17. 16. 15.
2206 2207 2208 2209 2210	1629.4+4326 1627.4+6532 1628.7+5837 1625.3+7341 1632.3+0535	1631.0+4319 1627.7+6525 1629.6+5830 1624.4+7334 1634.8+0528	68.15 43.26 97.19 39.19 88.51 41.19 106.67 36.02 21.28 32.76	208 262 III 179 160 II: 39 118 I-II: 298 281 124 163	55 0 6 17.7 75 0 6 17.6 65 0 5 17.1 40 0 17.9 50 0.0465 1 5 17.1	2256 2257 2258 2259 2259	1706.6+7847 1716.1+3238 1717.0+3146 1718.2+2742 1714.3+7211	1703.7+7843 1718.0+3234 1718.9+3142 1720.2+2739 1713.5+7207	111.10 31.74 55.85 32.89 54.90 32.49 50.37 31.15 103.45 33.18	123 227 II-III 257 321 248 274 237 56 109 194 III	: 61 57 82 82	0.0601 2 3 0.0054 1 5 1 0 1 0 0 5	15. 17. 17.
2211 2212 2213 2214 2214	1632.4+4102 1632.1+4922 1634.9+4123 1636.0+3800 1636.7+4809	1634.1+4055 1633.5+4915 1636.5+4116 1637.8+3754 1638.1+4803	64.87 42.69 76.18 42.41 65.36 42.23 60.83 41.83 74.46 41.76	180 133 II-III: 143 259 II-III: 154 151 III 39 295 101 194 II-III	54 0.1355 1 6 17.4 50 0 5 16.9 75 0.1597 1 6 17.7 38 0 0 17.6 68 0 5 17.1	2261 2262 2263 2264 2264	1720.6+3212 1721.2+2348 1721.2+2659 1721.8+2914 1713.7+7729	1722.5+3209 1723.3+2345 1723.2+2656 1723.7+2911 1711.4+7725	55.62 31.86 46.33 29.30 49.81 30.30 52.35 30.83 109.52 31.80	206 296 205 168 II-III 205 339 II 194 137 97 160	128 102 46 41 47	2 0 0 6 0.1051 0 5 0 0	17, 17, 17, 17, 17, 17, 17, 17, 17, 17,
2216 2217 2218 2219 2219	1634.5+6746 1638.7+2800 1635.7+6619 1638.9+4647 1638.5+5351	1634.5+6739 1640.7+2754 1635.9+6612 1640.4+4641 1639.6+5345	99.53 37.73 47.91 39.65 97.75 38.12 72.60 41.47 81.96 40.84	142 280 III 89 78 III 134 203 II: 78 122 III	78 0 6 17.4 73 0 5 17.1 214 0.171 4 6 17.7 159 0 6 17.4 42 0.0106 0 6 17.5	2266 2267 2268 2269 2270	1722.8+3209 1722.4+6104 1725.8+5523 1726.5+4912 1726.3+5513	1724.7+3206 1723.0+6101 1726.8+5520 1727.8+4909 1727.3+5510	55.70 31.40 90.10 34.14 83.23 33.91 75.80 33.55 83.03	181 294 III 269 237 37 259 II-III 259 243 32 250	83 61 44 49	0.1671 2 6 1 0 0 6 0.0377 0 6	7777
1222222	1639.5+4321 1639.5+4253 1640.5+2731 1641.1+1326 1638.7+5551	1641.1+4315 1641.1+4247 1642.5+2725 1643.4+1320 1639.7+5545	68.02 41.42 67.40 41.41 47.43 39.15 30.87 34.35 84.55 40.48	110 258 III 109 233 III 67 53 III 320 261 III 108 285 II-III	73 0 6 17.7 69 0 6 17.7 36 0 5 16.5 138 0.1504 3 6 17.4 : 50 0 6 17.5	2271 2272 2273 2274 2274	1719.9+7804 1731.3+4038 1732.2+4225 1726.3+7728 1734.9+5313	1717.3+7800 1732.9+4035 1733.8+4223 1723.9+7725 1736.0+5311	110.06 31.32 65.85 31.58 67.95 31.73 109.28 31.15 80.69 32.51	84 193 I 190 104 III: 179 200 61 164 III 260 135 II-III	35 (53 33 110 18	0.0568 0 4 0 5 0 0 0 5 0 5	15,17
2226 2227 2228 2229 2230	1638.3+6709 1641.8+5122 1645.8+3001 1642.6+6543 1645.8+4841	1643.0+6703 1643.0+5116 1647.8+2955 1642.8+6537 1647.2+4835	98.64 37.60 78.62 40.66 50.90 38.60 96.75 37.65 75.04 40.22	121 248 75 45 III 310 185 I-II: 95 172 321 222 III	43 0 0 17.6 71 0 6 17.4 55 0 5 16.9 43 0 0 17.7 51 0 5 16.8	2276 2277 2278 2279 2280	1734.6+6404 1733.0+7056 1738.6+3955 1741.5+2446 1742.8+6346	1734.9+6402 1732.4+7054 1740.2+3953 1743.6+2444 1743.1+6344	93.56 32.53 101.66 31.96 65.35 30.08 49.10 25.26 93.16 31.64	88 78 II 318 126 III 114 66 III: 275 217 39 65 II-III	51 50 49 50 79	00000	11,11,11
2231 2232 2233 2234 2234 2235	1645.5+5635 1646.9+6150 1650.9+4315 1649.8‡5631 1653.3+4006	1646.5+5629 1647.5+6144 1652.5+4310 1650.8+5625 1655.0+4001	85.28 39.42 91.84 38.21 67.97 39.35 85.08 38.85 63.97 38.67	59 327 III 218 281 291 250 III 307 320 II-III 272 81 III	51 0 6 17.9 70 1 0 18.1 33 0 6 17.4 51 0 6 17.7 73 0.1511 1 5 17.1	2281 2282 2283 2284 2284	1742.8+6440 1743.6+7149 1744.9+6940 1751.3+5417 1752.8+4250	1743.0+6438 1742.8+7147 1744.5+6938 1752.3+5416 1754.3+4249	94.22 31.61 102.56 31.01 100.05 31.11 82.16 30.18 69.26 28.09	43 113 267 168 III 272 53 I 130 191 III: 272 220 II	33 79 65 40	0 0 0 6 0.1830 1 6 0 5	71
2236 2237 2238 2239 2240	1651.0+7133 1654.3+5519 1655.9+3718 1654.4+5859 1654.0+6649	1655.3+514 1655.3+5514 1657.6+3713 1655.2+5854 1654.1+6644	103.34 35.09 83.45 38.38 60.50 37.84 88.06 37.86 97.67 36.24	205 158 I: 277 254 III 124 252 II-III 165 128 II: 38 237 III	59 0 5 17.1 54 0 6 17.7 68 0 6 17.4 39 0 5 17.1 165 0.138 3 6 17.4	2286 2287 2288 2289 2289	1752.2+5205 1743.5+7936 1752.4+5942 1753.2+5805 1751.6+7320	1753.3+5204 1740.0+7934 1753.1+5941 1754.0+5804 1750.4+7319	79.66 29.79 111.49 29.86 88.43 30.45 86.57 30.25 104.24 30.26	120 74 II: 258 264 70 164 III: 60 78 229 247	69 4 6 6 9 4 4 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	00000	16. 17. 17.
2241 2243 2243 2244 2244	1656.5+5430 1656.5+5430 1700.0+3508 1700.9+3407 1700.9+3336	1659.7+3232 1657.6+5425 1701.8+3503 1702.7+3402 1702.7+3331	54.79 36.64 82.37 38.15 57.98 36.68 56.78 36.31 56.15 36.20	171 322 262 209 III 78 137 II 67 83 I-II: 66 55 II	30 0.0635 0 3 15.6 38 0 5 16.9 63 0 5 17.1 89 0.0970 2 5 16.6 63 0 5 16.5	2291 2292 2293 2294 2294	1755.7+5109 1756.2+5350 1800.5+5738 1736.1+8555 1800.3+6913	1756.9+5108 1757.2+5349 1801.3+5738 1723.3+8552 1759.9+6913	78.68 29.13 81.74 29.42 86.15 29.24 118.59 28.61 99.45 29.78	296 345 91 168 321 51 III: 153 284 II: 228 346 II-III	82 66 38 97 I 48	2 0 1 0 0 4 0 6 0 6	17. 16. 16.
2246 2247 2248 2248 2250	1700.4+6417 1652.0+8139 1659.9+7705 1707.9+3431 1709.1+3945	1700.7+6412 1647.4+8133 1657.8+7700 1709.7+3427 1710.8+3941	94.43 36.19 114.49 31.22 109.36 32.65 57.61 34.97 63.98 35.62	219 56 III 219 56 III 136 135 II 298 101 III 109 61 III:	146 0.225 3 6 17.6 35 0.0392 0 3 15.3 34 0.0663 0 3 15.5 39 0.0809 0 3 15.4 52 0.0654 1 5 16.5	2296 2297 2298 2299 2300	1756.5+7741 1804.4+4222 1805.6+5013 1807.6+4356 1806.6+7640	1754.0+7740 1805.9+4222 1806.8+5013 1809.1+4356 1804.5+7640	109.20 29.51 69.31 25.91 77.93 27.43 71.16 25.73 107.98 29.04	237 158 157 193 III: 214 292 II-III 127 278 211 101 III	30 40 I: 37 60 62	01000	15 17 17 17

	DB	5 17.1 0 17.1 5 16.6 5 17.	5 17. 6 17. 0 17. 6 17.	5 16. 5 17. 6 17.	4 15. 5 17. 6 17. 5 17. 0 17.	5 17. 0 16. 6 17. 5 17.	5 17. 5 16. 0 16. 0 17. 6 17.	5 17. 4 16. 5 16. 5 17.	0 17. 0 17. 5 16. 6 17. 0 17.	0 17. 6 17. 6 17. 5 17. 0 17.	0 17. 6 17. 0 17. 3 15. 5 16.
	z R	000011244 2	1161 2	00000	0542 0	00000	0808 2	0.0648 1 0943 1	1 2 2 0 0 1	00001	1.224 3 0.0587 1.0881 1
	C	50 45 51 81 112 0	89 0 57 34 64	50 69 63 72 94	47 0 55 55 61 41	61 79 50 61	59 94 0 37 45 73	67 50 0 78 61 0	73 101 46 0 86 72	46 70 52 50 50	50 146 0 41 52 0 56 0
	$y = T_{B-M}$	62 III 253 52 II-III 303 III 213 III	144 II-III: 182 II 251 II-III 270 295 III	13 II-III 16 II 13 III 14 I: 101 III	91 I-II 26 III 32 III 120 III: 59	132 III 32 196 III 61 III 76 III	242 II 242 II 31 178 206 II-III	261 I: 263 II-III 292 III 54 II-III 167 II-III	95 95 11-III 246 II-III	284 172 III 279 III 70 I-II:	164 165 165 40 III
	ы	294 294 277 277	275 300 261 261 261 260	233 212 207 197 185	182 182 171 165 165	195 156 155 150	144 143 131 118 81	71 68 107 68 68	109 244 34 32 32	34 21 21 330	321 322 320 305 312
	9 1	39.39-42.12 36.37-43.10 52.74-36.39 37.70-43.05 55.95-34.92	54.74-35.72 26.77-46.03 36.64-43.70 68.05-26.97 37.69-43.40	38.88-43.55 39.16-43.88 46.44-41.29 31.35-46.36	48.41-40.96 47.00-41.56 32.04-46.71 34.33-46.27 32.82-46.73	26.14-48.16 32.17-46.98 57.28-37.00 48.17-41.75 33.40-46.86	45.90-42.87 45.19-43.17 32.37-47.43 57.48-37.75 52.16-41.44	59.69-37.54 38.93-46.93 31.18-48.90 33.56-48.40 27.83-49.75	79.30-22.14 117.39.22.43 65.90-34.28 53.67-41.80 73.94-27.83	39.83-47.35 58.65-39.22 54.49-41.61 34.42-49.05 66.71-34.26	70.07-31.80 59.74-39.15 64.81-35.88 49.84-44.57
	RA(2000)Dec	2134.4-1323 2134.5-1549 2134.4-0135 2135.8-1454 2135.3+0123	2135.8+0007 2136.6-2314 2137.0-1552 2136.1+1426 2137.1-1503	2139.1-1419 2140.7-1416 2141.1-0819 2142.0-2018	2142.8-0652 2142.9-0805 2144.1-1958 2144.6-1820 2144.9-1928	2145.1-2412 2145.3-1958 2144.7+0103 2145.2-0725 2146.0-1908	2145.9-0926 2146.0-1002 2147.3-1959 2147.5+0044 2150.4-0442	2150.9+0217 2152.0-1538 2152.2-2111 2152.3-1932 2153.1-2331	2151.8+2508 2138.7+8306 2153.6+0814 2154.1-0357 2153.6+1740	2154.6-1514 2154.4+0037 2154.8-0320 2155.7-1913 2155.3+0845	2155.6+1229 2156.1+0120 2156.1+0631 2157.5-0747 2157.8-1122
pa	RA(1950)Dec	2131.7-1337 2131.7-1603 2131.8-0149 2133.1-1508 2132.8+0110	2133.2-0006 2133.8-2328 2134.3-1606 2133.7+1413 2134.4-1517	2136.4-1433 2138.0-1430 2138.4-0833 2139.2-2032 2140.2-1855	2140.2-0706 2140.2-0819 2141.3-2012 2141.8-1834 2142.1-1942	2142.3-2426 2142.5-2012 2142.1+0050 2142.6-0739 2143.2-1922	2143.2-0940 2143.3-1016 2144.5-2013 2144.9+0031 2147.8-0457	2148.4+0203 2149.3-1553 2149.4-2126 2149.5-1947 2150.3-2346	2149.5+2454 2141.3+8253 2151.1+0800 2151.5-0412 2151.2+1726	2151.9-1529 2151.8+0023 2152.2-0335 2152.9-1928 2152.8+0831	2153.2+1215 2153.6+0106 2153.6+0617 2154.9-0802 2155.1-1137
- Continued	Abell	2351 2352 2353 2354 2354	2356 2357 2358 2359 2360	2361 2362 2363 2364 2364	2366 2367 2368 2369 2370	2371 2372 2373 2374 2374	2376 2377 2378 2379 2380	2381 2382 2383 2384 2385	2386 2387 2388 2389 2390	2391 2392 2393 2394 2395	2396 2397 2398 2399 2400
TABLE 3-	R D m	1 0 4 15.8 0 6 17.4 0 0 16.7 0 5 17.0 0 5 17.0	0 5 17.0 0 6 17.8 0 4 16.4 0 5 17.0	0 4 16.0 0 4 15.8 0 6 17.4 0 5 17.2 0 4 16.3	0 6 17.4 3 6 17.6 0 5 17.0 1 1 3 15.4 2 5 16.9	0 6 17.6 0 6 17.6 0 0 17.3 1 0 16.8 0 0 16.8	1 0 17.4 1 0 16.8 2 4 16.4 1 0 17.5 3 2 6 17.4	0 0 16.3 0 0 17.5 0 5 16.8 0 6 17.4 0 6 17.4	0 6 17.4 0 6 17.4 0 5 17.0 3 1 5 17.0 0 5 17.1	0 5 17.0 0 6 17.5 0 5 17.1 7 1 6 17.6 0 5 16.9	0 5 16.5 6 1 4 16.4 0 0 17.1 0 5 17.1
	12	0.087			0.211 0.056		0.047		0.1128	0.1447	0.1190
	O	119 44 34 53	47 39 41 67	60 74 89 121 66	85 186 68 68 85	9 9 9 9 9 9	58 67 81 56 91	30 37 57 76 114	: 79 64 76 50	101 104 62 75 107	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	x y T_{B-M}	131 47 II: 207 339 III 88 130 135 329 II 98 140 III:	100 321 III: 93 234 II: 51 126 II-III 100 157 III: 273 238 II	282 81 III 224 291 III 81 196 III 82 229 III 234 54 III	80 285 II-III 152 326 II 293 176 III 307 266 II-III 161 107	104 238 II-III 260 18 III 153 271 272 23 163 102	143 34 90 87 273 153 173 251 140 253 II-III	139 49 128 200 113 77 II 64 79 III 37 265 II-III	21 297 III 218 234 II-III 175 31 III 172 282 II-III 154 98 III	166 189 II-III 145 105 III: 134 173 III 116 317 II 77 132 III	67 84 III 68 240 III: 42 191 330 29 III 326 144
	9 1	99.95 28.48 85.96 26.69 115.04 28.47 99.15 28.02 101.92 27.87	105.71 27.82 90.73 25.59 101.61 26.98 109.13 26.95 104.28 26.18	101.08 25.58 98.96 24.88 109.94 26.59 110.62 26.59 100.82 24.57	111.79 26.52 100.03 23.74 109.78 25.80 75.68 13.58 102.26 23.54	105.13 23.14 105.73 21.12 112.63 23.98 23.70-29.16 19.15-31.95	103.80 17.47 115.54 23.94 28.78-33.56 38.18-32.10 24.83-37.10	40.85-31.65 30.96-35.75 28.43-36.86 21.45-39.44 25.89-38.85	26.75-38.92 26.24-41.53 21.59-43.32 27.71-42.08 38.36-38.95	25.52-42.70 38.60-39.05 46.81-35.82 29.02-42.87 39.91-39.98	38.95-40.53 27.52-44.17 41.55-40.07 57.76-32.64 47.75-38.14
	RA(2000)Dec	1814.8+6939 1819.9+5708 1800.5+8253 1819.6+6855 1822.8+7121	1825.1+7442 1834.1+6110 1833.6+7101 1842.1+7742 1847.4+7318	1849.7+7022 1853.6+6821 1850.3+7823 1851.5+7859 1900.8+6957	1855.3+8002 1908.3+6903 1905.3+7808 1920.8+4357 1916.5+7059	1931,3+7324 2000,4+7312 1957,1+8011 2024,3-2018 2030,2-2454	2030.2+6952 2027.0+8236 2048.2-1748 2055.7-0959 2057.8-2202	2058.2-0745 2059.5-1656 2100.8-1914 2104.2-2515 2106.1-2146	2107.3-2109 2117.5-2220 2121.0-2607 2121.1-2127 2121.2-1247	2121.7-2311 2121.9-1239 2122.4-0523 2125.6-2047 2127.1-1207	2127.9-1301 2129.5-2212 2129.7-1102 2131.4+0356 2132.0-0553
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pa	RA(1950)Dec	2308.8+0736 2308.9+0319 2309.7-2513 2309.8-2145 2310.1-2229	2310.4-2154 2310.4-1715 2310.3+1002 2310.5-1358 2310.6-1615	2311.1+1428 2311.2+3209 2311.8-1433 2312.3+1349 2313.2-2123	2313.3-2039 2313.7-0625 2314.3-2228 2315.3-1308 2315.6+0142	2315.0-0232 2315.9+1828 2316.7-0243 2316.7+0218 2317.2-2221	2317.3-2247 2318.1-2314 2318.2-0448 2318.5-2150 2319.0-2330	2319.2-1714 2319.2+0240 2319.6-2042 2319.6+2717 2320.2-2631	2320.8-2042 2320.9-2241 2321.2+0853 2321.5+1633 2321.8+0149	2321.8+1752 2322.0+1422 2322.0+1422 2322.0+0748 2322.3-2048	2322.4-2341 2322.7-1223 2323.2+2733 2324.0-2403 2324.1-2241
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	l b	85.64-38.75 48.34-61.09 94.53-26.89 51.56-60.56 72.09-51.68	84.76-40.87 78.29-47.18 85.79-40.01 38.51-63.66 73.68-51.28	63.92-56.97 83.07-43.94 93.78-30.20 35.64-64.60	89.25-36.9 83.66-43.5 33.50-64.9 52.44-61.6 86.34-40.8	38.67-64.7 86.70-40.9 49.11-63.1 89.56-38.0 60.86-59.7	34.22-65.6 31.26-66.1 40.56-65.2 57.18-61.8 91.49-36.7	40.14-65.6 96.61-28.9 53.83-63.0 37.94-66.0	38.53-66.0 73.83-54.8 44.55-65.4 40.93-65.9 39.44-66.3	37.62-66.7 33.82-67.0 55.18-63.4 62.51-61.1 82.17-49.3	38.46-66.7 42.14-66.3 43.87-66.1 59.42-62.5 40.81-66.6
	RA(2000)Dec	2254.0+1527 2255.1-1632 2254.8+2928 2256.1-1454 2256.5-0031	2256.6+1320 2256.7+0530 2257.3+1429 2257.9-2143 2258.3+0026	2258.9-0736 2259.6+1006 2259.4+2615 2300.3-2311 2259.7+3103	2260.0+1831 2300.2+1038 2300.8-2409 2300.9-1504	2302.3-2158 2301.9+1403 2303.5-1709 2303.2+1744 2303.6-1034	2304.1-2401 2305.2-2518 2305.7-2123 2306.3-1314 2306.1+1936	2307.0-2140 2306.6+2830 2307.2-1512 2307.6-2239 2306.7+4039	2307.8-2225 2308.3-0210 2308.7-1952 2308.8-2128 2309.5-2209	2310.1-2257 2310.1-2429 2310.0-1454 2310.3-1048 2310.1+0523	2310.8-2239 2310.9-2107 2311.4-2025 2311.3-1248 2311.6-2144
	RA(1950)Dec	2251.5+1512 2252.4-1649 2252.4+2912 2253.5-1511 2253.9-0048	2254.1+1304 2254.2+0514 2254.8+1413 2255.2-2200 2255.7+0010	2256.3-0753 2257.1+0950 2257.0+2559 2257.6-2328 2257.3+3047	2257.5+1815 2257.7+1022 2258.1-2426 2258.3-1521 2258.2+1344	2259.6-2215 2259.4+1347 2300.9-1726 2300.7+1728 2301.0-1051	2301.4-2418 2302.5-2535 2303.0-2140 2303.7-1331 2303.6+1920	2304.3-2157 2304.2+2814 2304.6-1529 2304.9-2256 2304.4+4023	2305.1-2242 2305.7-0227 2306.0-2009 2306.1-2145 2306.8-2226	2307.4-2314 2307.4-2446 2307.4-1511 2307.7-1105 2307.6+0507	2308.1-2256 2308.2-2124 2308.7-2042 2308.7-1305 2308.9-2201
	Abell	2501 2502 2503 2503 2504	2506 2507 2508 2509 2510	2511 2512 2513 2514 2514	2516 2517 2518 2519 2520	2521 2522 2523 74 2524 2525	2526 2527 2528 2528 2529 2530	2531 2532 2533 2534 2534 2535	2536 2537 2538 2539 2540	2541 2542 2543 2544 2544	2546 2547 2548 2549 2550

	z RD m	0 5 16. 0 6 17. 0 6 17. 0 5 17. 2 5017.	0 0 16. .0414 1 3 14. .185 3 6 17. 0 5 17.	0 6 17. 0 6 17. 0 6 17. 0 6 17. .0556 0 4 15.	.0265 0 1 13. 0 6 17. 0 5 17. 0 6 17.	0 5 16. 0 5 17. 0 6 18. 0 6 17.	0 0 16. 1 0 17. 0 0 16. 0 6 17. 0 6 17.	0 6 17. 0 6 17. 0 0 16. 0 6 17. 0 6 17.	.1124 1 5 16. 1 0 16. 0 6 17. 0 6 18.	0 0 16. 0 6 17. 0 6 17. 0 958 3 5 17. 0 6 17.	0 0 16. 0 5 17. 0 5 17. 0 6 17.
	O	83 159 73 96 80	35 51 0 143 0 58 45	147 77 127 87 34 0	34 0 165 86 77 142 0	81 70 68 84 60 0	37 72 40 108 126	54 64 44 80 1	50 0 52 131 93 38	41 64 73 132 0 I 91	39 97 83 I: 58 59 0
	x y T_{B-M}	190 295 III 174 218 III 167 250 III 161 56 III 0 248 III:	153 232 152 300 III 152 114 III 151 266 II-III 307 29	130 215 III 93 46 III 254 101 III 82 258 II: 74 137	249 300 I 228 32 I 57 241 III 46 302 III 31 215 I-II	17 100 III: 199 262 III 14 235 III 333 225 III 329 101 II	329 134 166 43 325 114 186 329 III 171 295 III	160 118 II: 159 321 III 158 53 295 209 III 147 114 II-III	135 308 II 126 233 268 337 III: 267 251 III	255 286 244 134 II 239 47 III 238 261 I: 232 171 II-III	227 179 226 125 III 225 58 II: 219 276 II-III
	9 1	101.94-38.96 75.92-66.80 99.19-45.52 80.97-64.64	85.42-62.03 96.66-50.30 73.28-68.50 66.67-70.68 33.66-75.18	77.46-67.38 102.09-43.94 39.32-75.92 88.38-62.31 96.89-53.66	106.71-33.81 34.37-76.62 101.85-46.39 95.68-56.56 81.33-68.52	98.12-54.72 107.58-34.74 95.75-57.95 95.73-58.14 101.74-49.13	98.80-54.20 110.07-27.12 101.96-48.93 57.41-75.54 55.90-76.07	42.84-77.52 58.12-76.03 37.33-77.84 83.34-69.19 42.86-77.77	58.16-76.54 110.46-29.46 105.28-45.28 74.08-73.53 39.93-78.37	94.31-63.14 104.34-49.04 64.17-76.40 102.81-52.52 107.20-42.63	98.58-59.68 92.25-66.07 101.08-56.19 77.47-73.77 99.63-58.64
	m RA(2000)Dec	2341.9+2103 2343.3-1022 2343.7+1412 2344.3-0723 2344.4-2152	2344.9-0406 2344.8+0908 2345.0-1218 2345.1-1528 2345.3-2558	2346.7-1025 2349.4+1624 2349.7-2443 2350.2-0337 2350.8+0606	2350.9+2708 2351.8-2600 2352.2+1402 2352.9+0310 2354.2-1024	2355.1+0524 2355.1+2626 2355.3+0155 2355.6+0144 2355.6+1125	2355.8+0602 2355.8+3421 2355.9+1139 2355.3-2027 2356.5-2102	2357.4-2420 2357.5-2033 2357.6-2533 2358.2-1031 2358.5-2424	2359.4-2048 0000.0+3209 0000.2+1549 0000.2-1544	0001.4-0305 0002.1+1202 0002.2-1933 0002.6+0825	0003.4+0053 0003.4-0606 0003.5+0437 0003.8-1516
pa	RA(1950)Dec	2339.4+2047 2340.7-1039 2341.2+1356 2341.7-0740 2341.8-2209	2342.3-0423 2342.3+0852 2342.4-1235 2342.5-1545 2342.7-2615	2344.1-1042 2346.9+1608 2347.1-2500 2347.6-0354 2348.2+0550	2348.4+2652 2349.2-2617 2349.6+1346 2350.3+0254 2351.6-1041	2352.5+0508 2352.6+2610 2352.7+0139 2353.0+0128 2353.0+1109	2353.2+0546 2353.3+3405 2353.3+1123 2352.7-2044 2353.9-2119	2354.9-2437 2354.9-2050 2355.0-2550 2355.6-1048 2355.9-2441	2356.8-2105 2357.5+3153 2357.6+1533 2357.6-1601 2357.8-2525	2359.5+1146 2359.5+1146 2359.6-1950 2360.0+0809	0000.8+0037 0000.8-0623 0000.9+0421 0001.2-1533
-Continued	Abell	2651 2653 2653 2653 2654 2655	2656 2657 2658 2659 2659	2661 2662 2663 2663 2664	2666 2667 2668 2669 2669	2671 2672 2673 2674 2675	2676 2677 2678 2678 2680	2681 2682 2683 2683 2685	2686 2687 2688 2689 2690	2691 2692 2693 2694 2695	2696 2697 2698 2699 2700
TABLE 3-	z R D m	0 6 17.7 0 6 17.7 0 0 17.7 0 0 17.1 0 5 17.1	0 5 17.1 0 0 17.6 0 5 17.1 0 6 17.4 0 6 17.6	0 5 17.2 0 6 17.7 0 5 17.2 0 6 17.5 0 6 17.7	0.1832 2 5 17.2 0 5 17.0 0.0705 0 4 15.9 0 0 16.5 0 6 17.8	0 6 17.9 0.0621 0 4 15.9 0.1784 3 5 17.2 0 6 18.0 0.0609 0 3 15.6	0.0573 0 3 15.2 0 5 17.1 0 6 17.7 0 6 17.5 0.0675 0 3 15.2	0.186 3 6 17.8 0.0312 1 1 13.8 0 6 17.5	0 6 17.8 0 5 16.6 0 0 5 17.2 0 6 17.7 0 5 16.7	0 6 17.7 0 0 16.8 0 6 17.7 0 5 16.6 0.246 4 6 18.0	0.193 3 6 17.6 0 0 17.1 0 6 17.6 0 5 16.9 1 0 17.1
	M C	111 55 46 31 111 54	III: 78 38 59 69 69 130	74 III 97 88 III 54	III 94 95 35 38 129	76 II: 41 142 103 45	47 II 50 83 100 31	136 144 96 52 121	110 60 II: 123 II 92 63	87 49 77 59 II:205	135 48 67 50 57
	x y T_{B-}	218 113 III 78 309 II-I 203 64 197 215 191 171 II-I	184 286 II-I 35 95 172 262 III 172 24 III 29 94 III	31 273 III 29 95 II-III 19 79 II 143 266 II-III 142 160 III	307 110 II-I 305 318 II: 140 78 II 288 345 295 180 III	285 233 III 128 315 II-I 283 110 III: 275 110 III 260 267	258 301 I-II 105 127 II-I 93 127 III 84 194 III 247 336	250 147 I: 247 279 III 240 195 II: 87 294 II: 235 56 III	234 261 III 225 317 II 211 146 II-II 210 51 II-II 208 220 III	46 90 III 206 196 201 262 III 203 135 II 199 289 II-I	199 237 III 51 229 196 -1 III 47 169 I-II
	q 1	36.27-70.77 97.86-37.40 33.67-71.21 42.15-70.66 39.82-71.01	46.13-70.45 92.96-46.77 45.09-70.81 31.62-71.91 96.77-41.44	98.52-38.37 53.33-69.64 66.06-66.47 45.94-71.30 39.99-71.95	90.04-52.20 92.92-48.79 100.59-36.47 100.16-37.45 91.35-51.16	99.28-39.41 102.78-32,43 90.68-52.41 90.89-52.48	100.47-38.42 101.76-35.87 38.84-72.98 43.02-72.80 98.10-43.45	87.04-57.34 75.31-65.04 96.83-45.93 103.46-33.06 68.27-68.12	75.22-65.45 101.33-38.36 72.30-67.30 95.98-48.61 100.90-40.16	37.20-74.00 74.13-66.70 101.41-39.47 88.25-57.97 77.20-65.48	75.65-66.21 103.74-34.45 67.31-69.39 103.35-35.52 103.92-34.22
	RA(2000)Dec	2326.7-2425 2326.7+2118 2327.9-2520 2328.5-2231 2329.0-2321	2329.6-2112 2329.7+1117 2330.5-2139 2330.5-2605 2330.4+1716	2330.4+2037 2330.9-1838 2331.2-1256 2332.9-2134 2333.0-2333	2333.2+0536 2333.3+0928 2333.8+2300 2334.0+2158 2334.1+0654	2334.4+1953 2334.9+2725 2335.0+0536 2335.7+0536 2336.3+2031	2336.5+2109 2336.7+2354 2337.0-2409 2337.7-2255 2337.5+1549	2337.7+0017 2337.8-0913 2338.1+1311 2338.3+2701 2338.6-1322	2338.8-0933 2339.1+2127 2340.5-1142 2340.4+1030 2340.5+1939	2340.9-2450 2340.9-1046 2341.0+2026 2341.2+0005 2341.4-0902	2341.4-1000 2341.3+2547 2341.6-1428 2341.5+2440 2341.6+2603
	m RA(1950) Dec	2324.1+2442 2324.2+2102 2325.3-2537 2325.9-2248 2326.4-2338	2327.0-2129 2327.2+1101 2327.9-2156 2327.9-2622 2327.9+1700	2327.9+2021 2328.3-1855 2328.6-1313 2330.3-2151 2330.4-2350	2330.7+0520 2330.8+0912 2331.3+2244 2331.5+2142 2331.6+0638	2331.9+1937 2332.4+2709 2332.5+0520 2333.1+0520 2333.8+2015	2334.0+2053 2334.2+2338 2334.4-2426 2335.1-2312 2335.0+1533	2335.1+0001 2335.2+0930 2335.6+1255 2335.8+2645 2336.0-1339	2336.2-0950 2336.6+2111 2337.9-1159 2337.9+1014 2338.0+1923	2338.3-2507 2338.3-1103 2338.5+2010 2338.6+0011 2338.8-0919	2338.8-1017 2338.8+2531 2339.0-1445 2339.0+2424 2339.1+2547
	Abell	2601 2602 2603 2603 2604	2606 2607 2608 2609 2610	2611 2612 2613 2614 2614	2616 2617 2618 2619 2620	2621 2622 2623 2623 2623 2623	2626 2627 2628 2629 2639	2631 2632 2633 2634 2634	2636 2637 2638 2639 2640	2641 2642 2643 2644 2644	2646 2647 2648 2649 2650

ABLE 3—Continued

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Abell	m Abell RA(1950)Dec	m RA(2000)Dec	q 1	ы	y	x y T_{B-M} C	C	z	R D m		8
2701	0001.7-0952		88 31-69 22	21.6	260		ď		-	[a
2702	0002.3+3107	0004.9+3123			202	207	3 2	32 0 0 17.1	0	, ,	7:5
2703	0002.8+1549		107.10-45.35		29		46	0.0144	0	2	7.1
2704	0003.0-1209				13	II	86		0	9	7.7
2705	0003.4+1531	0006.0+1547	7	191	332	III	64		0	2	7.1
2706	0003.5+1051		_		84	III			0	n N	7.2
2707	0003.8-1041		88.38-70.19		216	II-II:			0	9	7.6
2708	0004.0-1712				188	ii:			0	9	7.4
2709	0004.1-1015	0006.7-0958			239	III			0	2	7.2
2710	0004.1-1539	0006.7-1522	79.16-74.30		182 271]	I-II:	64		0	2	0 5 17.2
		1				!	i			,	1
7/11	0004.4+2449	0007.0+2505	110.36-36.69		55 191]	III	73		0	9	0 6 17.5
2712	0004.4-1821	0007.0-1804	72.09-76.32		126	III	71		0	9	7.5

TABLE 4
SOUTHERN "ABELL CATALOG"

B	17.3 17.3 17.3	16.3 15.0 17.3 17.3	17.0	17.	15. 17. 17. 16.	16.9 17.1 17.1	17.71	17.71
Δ	200	4 6 10 10 4	စစစညည	വവഴയ	w rv A 4 A	00000	00000	იიიიი
æ	707	8 70 11 0	000 n	04444	2	00400	ппппп	04484
Z		0.0498	0.114	0.114	0.0312		0.308	
Previous	Ω	s BO	0 D	BO	BDORS B D	DR B	a k	
Obs	100	20 1C 1C 10 10,10	10,10 10,10 10,10 10,10	10 10 10,10 10,10	2C 10 2C 10,1C	10,20 10 10 10	2C, 10 1C, 10 1C 10, 1C	10, 10 10, 10 20, 20
m ₁₀	18.7 18.0 16.9	16.1 15.4 17.8 17.5	16.8 18.0: 18.6 19.3	18.0 19.1 18.8: 18.3:	15.1: 17.3 18.6 16.1 18.7	16.8 18.6 19.1 19.1	18.3 19.3 19.5 18.0	18.7 19.1: 19.5 17.5
m ₃	17.6 17.3 16.3	15.3 14.5 16.7: 16.7	16.3 17.1 17.5 18.4	16.8 18.0 17.8 17.4	13.3: 16.8 17.8: 15.1: 17.5	15.6 18.0 17.9 17.6	16.8 19.0 18.3 19.3	18.3 18.4 18.7 16.5
m_1	17.4 16.4 16.0	14.2: 13.6? 16.3: 15.4	15.2? 17.0 15.5 17.2:	14.5 14.7: 16.5 16.4	13.0: 16.1 17.6: 13.9	14.2 15.8* 17.4 17.5 15.8:	16.4 18.1 17.9 18.9	17.6 18.5 18.0 16.0
٥	58 45 112	44. 52 61 41	192 51 47 92	47 68 56 79	39 744 57	41 63 42 42	59 66? 69 137: 62	35 56: 70 109 69:
T_{B-M}	I-II III-III	11-11 11-11 11-11 11-11	1111111111111	I I: II: II-III? II	!!!! !!!! !!!!	111 111-111 111-111	!!! !!! !!! !!!	111-111 111-111 1111 1111
T_A	I IR RI	ннижн	RI I RI? IR	RILIR	u H i H I	RI I I I I I I	R R R R I:	HÄHLL
Abell	2713 2714 2715	2716 2717 2718 2719 2720	2721 2722 2723 2724 2725	2726 2727 2728 2729 2730	2731 2732 2733 2734 2735	2736 2737 2738 2739 2740	2741 2742 2743 2744 2745	2746 2747 2748 2749 2750
_	E 4. 0	511426	167 98 35 51	251 310 110 321	43 180 1184 211 266	295 78 131 220 245	287 223 75 129 275	92 182 248 150
x II y	57 33 166 254 166 169	162 36 160 102 53 44 149 251 136 256	130 16 123 5 153 5 116 5	111 21 155 33 132 11 79 33	113 , 123 14 73 14 65 2: 120 26	74 2 116 3 303 2 106 2	2944 296 22 33 11 50 27	104 9 288 18 261 24 282 19
Ycen	-131 90 5	-128 -62 -120 87 92	3 -66 -129 -113 108	87 146 -54 157 -48	-121 16 20 47 102	131 -86 -33 56 81	123 59 -89 111	-72 18 84 -14
Gen	107	2 111 15 28	34 11 11 58	53 32 85 77	51 91 99 44	90 48 84 -139 58	120 104 131 131	60 -124 -97 -118
Field	F292 F050 F349	F472 F349 F472 F538	F349 F293 F028 F409	F409 F002 F111 F538	F149 F078 F349 F409	F241 F078 F193 F539	F349 F473 F241 F409	F078 F410 F539 F350
9	-67.79 -48.42 -77.13	-79.20 -76.48 -72.26 -78.54 -75.98	-77.69 -73.41 -39.71 -79.29	-80.19 -34.96 -55.54 -75.81	-59.25 -52.11 -78.70 -80.98	-72.88 -50.31 -65.65 -77.75	-80.23 -80.84 -69.40 -81.24 -72.76	-50.63 -81.70 -77.91 -79.11
-	325.33 - 309.79 - 354.08 -	29.93 - 349.21 - 333.29 - 50.79 - 71.02 -	352.11 - 333.55 - 306.13 - 4.11 - 73.42 -	24.59 - 304.80 - 312.29 - 77.57 -	313.93 - 310.17 - 350.20 - 19.47 -	328.44 - 309.11 - 318.08 - 74.34 -	357.51 - 53.27 - 321.54 - 8.91 -	308.87 - 15.15 - 78.68 - 344.84 -
Dec	03 40	10 57 56 07	58 08 51 43	00 00 47 41	22 26 26 4 8 8	14 20 19 12	2 28 3 38 6 21 2 37	6 04 9 22 8 12 4 57 08
RA (2000) Dec	.6 -47 .5 -68 .8 -34	.9 -27 .3 -35 .7 -41 .0 -23	.1 -34 .0 -40 .0 -77 .2 -31	.3 -28 .4 -82 .0 -60 .4 -16	.2 -56 .2 -64 .2 -34 .3 -28	.0 -42 .0 -66 .6 -50 .7 -18	7.00 E.E.	.2 -66 .0 -18 .0 -34
RA (00 02.6 00 02.5 00 02.8	00 03 00 03 00 04 00 05	00 06 00 07 00 07 00 07	00 07 00 08 00 09 00 09	000000000000000000000000000000000000000	00 12 00 12 00 12 00 12	00 13 00 14 00 14	00 14 00 15 00 16 00 16 00 16
Dec	-47 26 -68 20 -34 57	27 27 27 36 14 12 13 24 18 18	-35 00 -41 15 -77 25 -32 08 -18 00	-28 24 -82 17 -61 04 -17 04 -35 58	-57 16 -64 43 -34 43 -29 09 -68 05	-42 31 -66 37 -50 36 -18 59 -63 29	32 45 23 55 46 38 30 40	-66 21 -29 39 -18 29 -35 14
RA (1950) Dec	000	6.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	97656	æ ⊔ ñ e 4.	77788	26444	24000 24000	ထက္ကက္က
RA (0000	00000 00000 00000	00 00 00 00 04 4 4 4 4 4 4 4 4 4 4 4 4	00 04 00 05 00 05 00 06 00 07	00 07 00 07 00 08 00 08	00 09 00 09 00 10 00 10	00000	00000
Abell	2713 2714 2715	2716 2717 2718 2718 2720	2721 2722 2723 2723 2724 2725	2726 2727 2728 2728 2729	2731 2732 2733 2734 2734	2736 2737 2738 2739 2740	2741 2742 2743 2744 2744	2746 2747 2748 2749 2750

	17 17 17 16	717171	17 17 17 16 17 17 17 17 17 17 17	7777	717171	7171	17 16 17 17	717171	17 17 17 17	17 17 17 16 15
	വഴവഴവ	വവവവവ	വവഴവഴ	വഴഴവഴ	9999	വഴവഴ	99999	വവയവയ	စစညစစ	N N N 4 4
#	7770	10000	00444	00111	01011	10101	0000	44004	40040	00444
8			0.1124							0.1126
Previous	B B DR	DR.	DOR	Ω	р ВВ	0 m m	Q	aa 8a	o ä	800 8 00 9 0
Obs	1C, 10 1C 2C 1C, 10 2C	10 20,10 10 20	20 20, 10, 10, 10, 10, 10, 10	20000	50000 50000	22222	10 10 10 10	12000	10 10 10 10	10,10 10,10 10,10
m ₁₀	17.6: 19.1 17.7 19.1 16.7:	17.1 18.1 17.0 17.1	18.7 16.9 18.3 16.7	19.0 17.8 18.6 18.4	16.8 17.7 18.5 18.5 19.1	19.1 18.0 16.8 18.0 17.1	19.1 16.3 18.6 18.7 19.0	18.7 17.5 19.3 17.8	18.9 19.0 17.6 18.6	17.7 18.1 17.3 16.0 15.6
m ₃	16.77 17.7 17.0: 18.4 16.1:	16.5 16.8 15.7 15.8 16.8	17.6 16.5 17.5 15.8	18.5 16.8 18.1 17.8 16.8	14.7 16.8 16.7 17.5 18.3	17.9 17.1 15.5 16.8 15.7	18.6 16.1 18.2 17.6 18.3	18.2 16.1 18.0 16.7	18.2 18.5 16.3 17.7	16.0 17.8 16.0 15.1
m ₁	15.77 17.1 16.2 18.0 15.7:	15.4 16.4 15.4 15.7	15.9 16.0 14.9 15.7	18.0 15.5 18.1 16.8	13.5 16.4 16.8 18.2	17.4 16.0 14.8 15.1	17.8 15.9 17.7 17.4	18.1 16.0 17.7 15.4 16.5	17.7 18.1 15.6 17.5 16.6	15.7 16.5 14.1 15.0
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ТВ-М		::::::::::::::::::::::::::::::::::::::	II III-III? II	11-111: 11-11 11-11	II-II III-III II III	HHHH				
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ц.	Field xcen ycen x11	7.75 -86.56 F411 -119 36 283 2 3.46 -84.76 F350 138 165 26 3 1.139 -82.34 F540 -64 -11 228 1 7.85 -86.85 F411 -106 45 270 2 7.24 -64.85 F150 32 137 132 3	.16 -60.90 F150 34 -76 130 .48 -82.17 F351 -110 9 274 1 .37 -66.79 F194 65 -27 99 1 .15 -73.17 F242 103 49 61 2 .09 -55.99 F112 4 -72 160	83 -87.51 F411 -76 66 240 2 02 -78.81 F295 -127 83 291 2 71 -83.24 F540 -15 -47 179 1 50 -87.67 F411 -62 61 226 2 00 -79.66 F540 11 153 153 3	4.45 -80.87 F540 16 88 148 4.83 -63.26 F150 80 47 84 5.25 -66.98 F195 -145 -23 309 3.99 -53.52 F079 -4 62 168 3.97 -60.34 F150 88 -109 76	3.58 -52.93 F079 8 29 156 1 6.08 -78.65 F295 -65 68 229 2 5.46 -76.25 F295 -63 -60 227 1 6.53 -71.36 F243 -91 -55 255 15	3.31 -54.70 F079 20 123 144 3.25 -66.85 F195 -103 -29 267 3.19 -77.60 F295 -34 12 198 3.05 -88.60 F11 3 56 132 3.05 -68.55 F194 163 5 7	98 -61.75 F150 120 -38 44 .23 -86.46 F474 65 62 99 .57 -61.43 F150 129 -55 35 .37 -66.51 F195 -89 155 253 .15 -70.26 F195 -89 155 253	86 -69.51 F195 -82 115 246 2 87 -36.87 F013 -86 -34 250 1 44 -77.87 F295 -4 26 168 1 85 -66.14 F195 -71 -5 235 3 31 -77.28 F295 -1 -5 165 1	1.34 -68.17 F195 -67 44 231 2.19 -86.81 F474 113 33 51 1.70 -88.79 F414 118 -149 46 1.11 -86.85 F414 22 -17 72 7.84 -78.28 F295 23 51 141	7.38 -87.15 F411 98 3 66 1.21 -82.63 F351 90 23 74 7.18 -76.30 F295 42 -54 122 9.17 -83.63 F541 -83 -67 247 1.27 -87.41 F411 125 36 39
ц.	l b Field xcen ycen x11	357.75 -86.56 F411 -119 36 283 2 333.46 -84.76 F350 138 165 26 3 101.39 -82.74 F840 -64 -11 228 1 357.85 -86.85 F411 -106 45 270 2 307.24 -64.85 F150 33 137 132 3	306.16 -60.90 F150 34 -76 130 319.48 -82.17 F351 -110 9 274 1 307.37 -66.79 F194 65 -27 99 1 309.15 -73.17 F242 103 49 61 2 305.09 -55.99 F112 4 -72 160	357.83 -87.51 F411 -76 66 240 2 312.02 -78.81 F295 -127 83 291 2 106.71 -83.24 F540 -15 -47 179 1 352.50 -87.67 F411 -62 61 226 2 115.00 -79.66 F540 11 153 153 3	114.45 -80.87 F540 16 88 148 304.83 -63.26 F150 80 47 84 305.25 -66.98 F195 -145 -23 309 303.99 -53.52 F079 -4 62 168 303.97 -60.34 F150 88 -109 76	303.58 -52.93 F079 8 29 156 1 306.08 -78 65 F295 -65 68 229 2 305.46 -76.25 F295 -63 -60 227 1 116.35 -84.18 F540 -91 -55 255 16	303.31 -54.70 F079 20 123 144 303.25 -66.85 F195 -103 -29 267 303.19 -77.60 F295 -34 12 198 303.90 -88.60 F411 15 56 132 303.05 -68.55 F194 163 57 1	302.98 -61.75 F150 120 -38 44 125.23 -86.46 F474 65 62 99 302.57 -61.43 F150 129 -55 35 302.37 -66.51 F195 -89 155 253 302.15 -70.26 F195 -89 155 253	301.86 -69.51 F195 -82 115 246 2 302.87 -36.87 F013 -86 -34 250 1 300.44 -77.87 F295 -4 26 168 1 301.85 -66.14 F195 -7 -5 255 300.31 -77.28 F295 -1 -5 165 1 165 1	301.34 -68.17 F195 -67 44 231 142.19 -86.81 F474 113 33 51 231.70 -88.79 F474 118 -149 46 231.71 -86.85 F411 92 -17 72 297.84 -78.28 F295 23 51 141	277.38 -87.15 F411 98 3 66 291.21 -82.63 F351 90 23 74 297.18 -76.30 F295 42 -54 122 139.17 -83.63 F541 -83 -67 247 261.27 -87.41 F411 125 36 39
ц.	Dec l b Field xcen yeen xil	9 04 357.75 -86.56 F411 -119 36 283 2 1 36 333.46 -84.76 F350 138 165 26 3 9 58 101.39 -82.34 F540 -64 -11 228 1 8 54 357.85 -86.85 F411 -106 45 270 2 2 10 307.24 -64.85 F150 32 137 132 3	6 09 306.16 -60.90 F150 34 -76 130 4 36 319.48 -82.17 F351 -110 9 274 1 0 14 307.37 -66.79 F194 65 -27 99 1 3 50 309.15 -73.17 F242 103 49 61 2 1 05 305.09 -55.99 F112 4 -72 160	8 32 357.83 -87.51 F411 -76 66 240 2 8 09 312.02 -78.81 F295 -127 83 291 2 8 37 106.71 -83.24 F540 -15 -47 179 1 8 37 352.50 -87.67 F411 -62 61 226 2 6 52 115.00 -79.66 F540 11 153 153 3	8 05 114.45 -80.87 F540 16 88 148 3 50 304.83 -63.26 F150 80 47 84 0 07 305.25 -66.98 F195 -145 -23 309 0 07 305.25 -66.98 F195 -145 -23 309 6 46 303.97 -60.34 F150 88 -109 76	111 303.58 -52.93 F079 8 29 156 1 127 306.08 -78.65 F295 -65 68 229 2 151 305.46 -76.25 F295 -63 -60 227 1 116.35 -84.18 F240 -91 -55 255 116 15 304.53 -71.36 F243 -91 -55 255 1	2 5 303.31 -54.70 F079 20 123 144 0 16 303.25 -66.85 F195 -103 -29 267 0 31 303.19 -77.60 F295 -34 12 198 13 303.05 -88.66 F411 132 66 132 8 34 303.05 -68.55 F194 163 57 1	5 22 302.98 -61.75 F150 120 -38 44 35 125.23 -86.46 F474 65 62 99 5 41 302.57 -61.43 F150 129 -55 35 6 51 302.15 -66.51 F195 -89 155 253	7 36 301.86 -69.51 F195 -82 115 246 2 0 15 302.87 -36.87 F013 -86 -34 250 1 9 14 300.44 -77.87 F295 -4 26 168 1 9 8 301.85 -66.14 F195 -71 -55 235 9 49 300.31 -77.28 F295 -1 -5 155 1	8 56 301.34 -68.17 F195 -67 44 231 4 06 142.19 -86.81 F474 113 33 51 7 30 231.70 -88.79 F474 118 -149 46 8 47 297.84 -78.28 F411 92 -17 72 8 47 297.84 -78.28 F295 23 51 141	9 41 277.38 -87.15 F411 98 3 66 4 19 291.21 -82.63 F351 90 23 74 0 44 297.18 -76.30 F295 42 -54 122 0 59 139.17 -83.63 F541 -83 -67 247 9 02 261.27 -87.41 F411 125 36 39
ц.	l b Field xcen ycen x11	.6 -29 04 357.75 -86.56 F411 -119 36 283 2 .9 -31 36 333.46 -84.76 F350 138 165 26 3 .5 -19 58 101.39 -82.34 F540 -64 -11 228 1 .7 -28 54 357.85 -86.85 F411 -106 45 270 2 .5 -52 10 307.24 -64.85 F150 32 137 132 3	.6 -34 36 306.16 -60.90 F150 34 -76 130 6 -34 36 319.48 -82.17 F351 -110 9 274 1 5 -50 14 307.37 -66.79 F194 65 -27 99 1 5 -43 50 309.15 -73.17 F242 103 49 61 2 6 -61 05 305.09 -55.99 F112 4 -72 160	2 -28 32 357.83 -87.51 F411 -76 66 240 2 5 -38 09 312.02 -78.81 F295 -127 83 291 2 -4 -20 37 106.71 -83.24 F540 -15 -47 179 1 -4 -28 37 352.50 -87.67 F411 -62 61 226 2 -16 52 115.00 -79.66 F540 11 153 153 3	8 -18 05 114.45 -80.87 F540 16 88 148 .7 -53 50 304.83 -63.26 F150 80 47 84 .8 -50 07 305.25 -66.98 F195 -145 -23 309 .8 -63 35 303.99 -53.52 F079 -4 62 168 .7 -56 46 303.97 -60.34 F150 88 -109 76	9 -64 11 303.58 -52.93 F079 8 29 156 1 3 -38 27 306.08 -78.65 F295 -65 68 229 2 3 -40 51 305.46 -76.25 F295 -63 -60 227 1 6 -21 20 116.35 -84.18 F540 48 -87 116 1 5 -45 45 304.53 -71.36 F243 -91 -55 255 1	.6 -62 25 303.31 -54.70 F079 20 123 144 .7 -50 16 303.25 -66.85 F195 -103 -29 267 .2 -39 31 303.19 -77.60 F295 -34 12 198 .3 -28 31 303.90 -88.60 F411 32 66 132 .48 34 303.05 -68.55 F194 133 56	3 -55 22 302.98 -61.75 P150 120 -38 44 .1 -23 35 125.23 -86.46 P474 65 62 99 .7 -55 41 302.57 -61.43 P150 129 -55 35 .9 -50 30 302.37 -66.51 P195 -89 155 253	7 -47 36 301.86 -69.51 F195 -82 115 246 2 7 -80 15 302.87 -36.87 F013 -86 -34 250 1 .2 -39 14 300.44 -77.87 F295 -4 26 168 1 .4 -50 58 301.85 -66.14 F195 -71 -65 235 1 -4 39 49 300.31 -77.28 F295 -1 -5 165 1	.1 -48 56 301.34 -68.17 F195 -67 44 231 .6 -24 06 142.19 -86.81 F474 113 33 51 .6 -27 30 231.70 -88.79 F474 118 -149 46 .6 -27 30 282.11 -86.85 F411 92 -17 72 .7 -38 47 297.84 -78.28 F295 23 51 141	.1 -29 41 277.38 -87.15 F411 98 3 66 .7 -34 19 291.21 -82.63 F351 90 23 74 .6 -40 44 297.18 -76.30 F295 42 -54 122 .1 -20 59 139.17 -83.63 F541 -83 -67 247 .3 -29 02 261.27 -87.41 F411 125 36 39
ц.	Dec l b Field xcen yeen xil	6 -29 04 357.75 -86.56 F411 -119 36 283 2 9 -31 36 333.46 -84.76 F350 138 165 26 3 5 -19 58 101.39 -82.34 F540 -64 -11 228 1 5 -28 54 357.85 -86.85 F411 -106 45 270 2 5 -52 10 307.24 -64.85 F150 32 137 132 3	2 -56 09 306.16 -60.90 F150 34 -76 130 6 -34 36 319.48 -82.17 F351 -110 9 274 1 5 -50 14 307.37 -66.79 F194 65 -27 99 1 5 -43 50 309.15 -73.17 F242 103 49 61 2 5 -61 05 305.09 -55.99 F112 4 -72 160	2 -28 32 357.83 -87.51 F411 -76 66 240 2 5 -38 09 312.02 -78.81 F295 -127 83 291 2 4 -20 37 106.71 -83.24 F540 -15 -47 179 1 4 -28 37 35.250 -87.67 F411 -62 61 226 2 5 -16 52 115.00 -79.66 F540 11 153 153 3	8 -18 05 114.45 -80.87 F540 16 88 148 7 -53 50 304.83 -63.26 F150 80 47 84 8 -50 07 305.25 -66.98 F195 -145 -23 309 8 -63 35 303.99 -53.52 F079 -4 62 168 7 -56 46 303.97 -60.34 F150 88 -109 76	9 -64 11 303.58 -52.93 F079 8 29 156 1 3 -38 27 306.08 -78.65 F295 -65 68 229 2 3 -40 51 305.46 -76.25 F295 -63 -60 227 1 5 -45 45 304.53 -71.36 F24.18 -91 -55 255 15	6 -62 25 303.31 -54.70 F079 20 123 144 7 -50 16 303.25 -66.85 F195 -103 -29 267 2 -39 31 303.19 -77.60 F295 -34 12 198 3 -28 31 303.90 -88.60 F11 13 56 132 2 -48 34 303.05 -68.55 F194 163 57 1	3 -55 22 302.98 -61.75 F150 120 -38 44 1 -23 35 125.23 -86.46 F474 65 62 99 7 -55 41 302.57 -61.43 F150 129 -55 35 9 -50 36 302.37 -66.51 F195 -84 -46 248 0 -46 51 302.15 -70.26 F195 -89 155 253	7 -47 36 301.86 -69.51 F195 -82 115 246 2 7 -80 15 302.87 -36.87 F013 -86 -34 250 1 2 -39 14 300.44 -77.87 F295 -4 26 168 1 4 -39 58 301.85 -66.14 F195 -71 -65 235 1 4 -39 49 300.31 -77.28 F295 -1 -5 165 1	-48 56 301.34 -68.17 F195 -67 44 231 -24 06 142.19 -86.81 F474 113 33 51 -27 30 231.70 -88.79 F474 118 -149 46 -38 47 297.84 -78.28 F411 92 -17 72 -38 47 297.84 -78.28 F295 23 51 141	1 -29 41 277.38 -87.15 F411 98 3 66 7 -34 19 291.21 -82.63 F351 90 23 74 6 -40 44 297.18 -76.30 F295 42 -54 122 1 -20 59 139.17 -83.63 F541 -83 -67 247 3 -29 02 261.27 -87.41 F411 125 36 39
ц.	RA (2000) Dec l b Field xcen yeen x!!	38.6 -29 04 357.75 -86.56 F411 -119 36 283 2 38.9 -31 36 333.46 -84.76 F350 138 165 26 3 39.5 -19 58 101.39 -82.34 F540 -64 -11 228 1 39.7 -228 54 35.85 -86.85 F411 -106 45 270 39.5 -52 10 307.24 -64.85 F150 32 137 132 3	5 00 40.2 -56 09 306.16 -60.90 F150 34 -76 130 3 00 40.6 -34 36 319.48 -82.17 F351 -110 9 274 1 1 00 40.5 -50 14 307.37 -66.79 F194 65 -27 99 1 7 00 41.5 -43 50 309.15 -73.17 F242 103 49 61 2 2 00 41.5 -61 05 305.09 -55.99 F112 4 -72 160	42.2 -28 32 357.83 -87.51 F411 -76 66 240 2 42.5 -38 09 312.02 -78.81 F295 -127 83 291 2 43.4 -20 37 106.71 -83.24 F540 -15 -47 179 1 43.4 -28 37 352.50 -87.67 F411 -62 61 226 2 45.5 -16 52 115.00 -79.66 F540 11 153 153 3	45.8 -18 05 114.45 -80.87 F540 16 88 148 45.7 -53 50 304.83 -63.26 F150 80 47 84 45.8 -50 07 305.25 -66.98 F195 -145 -23 309 45.8 -63 35 303.99 -53.52 F079 -4 62 168 47.7 -56 46 303.97 -60.34 F150 88 -109 76	47.9 -64 11 303.58 -52.93 F079 8 29 156 1 48.3 -38 27 306.08 -78.65 F295 -65 68 229 2 48.3 -40 51 305.46 -76.25 F295 -63 -60 227 1 48.6 -42 5 10 116.35 -84.18 F540 48 -87 116 48.5 -45 45 304.53 -71.36 F243 -91 -55 255 1	49.6 -62 25 303.31 -54.70 F079 20 123 144 50.7 -50 16 303.25 -66.85 F195 -103 -29 267 51.2 -39 31 303.90 -78.60 F411 198 51.3 -48 34 303.05 -68.55 F194 163 57 1	51.3 -55 22 302.98 -61.75 F150 120 -38 44 52.1 -23 35 125.23 -86.46 F474 65 62 99 52.7 -55 41 302.57 -61.43 F150 129 -55 35 52.9 -50 36 302.37 -66.51 F195 -84 -46 248 53.0 -46 51 302.15 -70.26 F195 -89 155 253	53.7 -47 36 301.86 -69.51 F195 -82 115 246 2 52.7 -80 15 302.87 -36.87 F013 -86 -34 250 1 54.2 -39 14 300.44 -77.87 F295 -4 26 168 1 54.2 -59 58 301.85 -66.14 F195 -71 -65 235 54.4 -39 49 300.31 -77.28 F295 -1 -5 165 1 65	55.1 -48 56 301.34 -68.17 F195 -67 44 231 56.0 -24 06 142.19 -86.81 F474 113 33 51 56.6 -27 30 231.70 -88.79 F474 118 -149 46 56.6 -27 30 03 281.70 -88.75 F411 92 -17 72 56.7 -38 47 297.84 -78.28 F295 23 51 141	57.1 -29 41 277.38 -87.15 F411 98 3 66 58.7 -34 19 291.21 -82.63 F351 90 23 74 58.6 -40 44 297.18 -76.30 F295 42 -54 122 59.1 -20 59 139.17 -83.63 F541 -83 -67 247 59.3 -29 02 261.27 -87.41 F411 125 36 39
ц.	Dec RA (2000) Dec l b Field xcen yeen x11	1 00 38.6 -29 04 357.75 -86.56 F411 -119 36 283 2 3 00 38.9 -31 36 333.46 -84.76 F350 138 165 26 3 5 00 39.5 -19 58 101.39 -82.34 F540 -64 -11 228 1 10 0 39.7 -28 54 357.85 -86.85 F411 -106 45 270 2 7 00 39.5 -52 10 307.24 -64.85 F150 32 137 132 3	00 40.2 -56 09 306.16 -60.90 F150 34 -76 130 00 40.6 -34 36 319.48 -82.17 F351 -110 9 274 1 00 40.5 -50 14 307.37 -66.79 F194 65 -27 99 1 00 41.5 -43 50 309.15 -73.17 F242 103 49 61 2 00 41.5 -61 05 305.09 -55.99 F112 4 -72 160	00 42.2 -28 32 357.83 -87.51 F411 -76 66 240 2 00 42.5 -38 09 312.02 -78.81 F295 -127 83 291 2 00 43.4 -20 37 106.71 -83.24 F540 -15 -47 179 1 00 43.4 -28 37 352.50 -87.67 F411 -62 61 226 2 00 45.5 -16 52 115.00 -79.66 F540 11 153 153 35	00 45.8 -18 05 114.45 -80.87 F540 16 88 148 00 45.7 -53 50 304.83 -63.26 F150 80 47 84 00 45.8 -50 07 305.25 -66.98 F155 145 -23 309 00 45.8 -63 35 303.99 -53.52 F079 -4 62 168 00 47.7 -56 46 303.97 -60.34 F150 88 -109 76	00 47.9 -64 11 303.58 -52.93 F079 8 29 156 1 00 48.3 -38 27 306.08 -78.65 F295 -65 68 229 2 00 48.3 -40 51 305.46 -76.25 F295 -63 -60 227 1 00 48.5 -21 20 116.35 -84.18 F243 -91 -55 255 116 00 48.5 -45 45 304.53 -71.36 F243 -91 -55 255 1	2 00 49.6 -62 25 303.31 -54.70 F079 20 123 144 3 00 50.7 -50 16 303.25 -66.85 F195 -103 -29 267 8 00 51.2 -39 31 30.19 -77.60 F295 -34 12 198 8 00 51.3 -28 31 303.90 -88.60 F11 135 56 132 1 00 51.2 -48 34 303.05 -68.55 F194 163 57 1	2 00 51.3 -55 22 302.98 -61.75 F150 120 -38 44 2 00 52.1 -23 35 125.23 -86.46 F474 65 62 99 3 00 52.7 -55 41 302.57 -61.43 F150 129 -55 35 3 00 52.9 -50 36 302.37 -66.51 F195 -84 -46 248 3 00 53.0 -46 51 302.15 -70.26 F195 -89 155 253	2 00 53.7 -47 36 301.86 -69.51 F195 -82 115 246 2 2 00 52.7 -80 15 302.87 -36.87 F013 -86 -34 250 1 1 00 54.2 -39 14 300.44 -77.87 F295 -4 26 168 1 5 00 54.2 -50 58 301.85 -66.14 F195 -71 -65 235 6 00 54.4 -39 49 300.31 -77.28 F295 -1 -5 165 1	00 55.1 -48 56 301.34 -68.17 F195 -67 44 231 00 56.0 -24 06 142.19 -86.81 F474 113 33 51 00 56.6 -27 30 231.70 -88.79 F474 118 -149 46 00 56.7 -38 47 297.84 -78.28 F411 92 -17 72 00 56.7 -38 47 297.84 -78.28 F295 23 51 141	00 57.1 -29 41 277.38 -87.15 F411 98 3 66 00 58.7 -34 19 291.21 -82.63 F351 90 23 74 00 58.6 -40 44 297.18 -76.30 F295 42 -54 122 00 59.1 -20 59 139.17 -83.63 F541 -83 -67 247 00 59.3 -29 02 261.27 -87.41 F411 125 36 39
ц.	(1950) Dec RA (2000) Dec l b Field x con year x ll	6.1 -29 21 00 38.6 -29 04 357.75 -86.56 F411 -119 36 283 2 6.5 -31 53 00 38.9 -31 36 333.46 -84.76 F350 138 165 26 3 7.0 -20 15 00 39.5 -19 58 101.39 -82.34 F540 -64 -11 228 1 7.2 -29 11 00 39.7 -28 54 357.85 -86.85 F411 -106 45 270 2 7.2 -52 27 00 39.5 -52 10 307.24 -64.85 F150 32 137 132 3	7.9 -56 26 00 40.2 -56 09 306.16 -60.90 F150 34 -76 130 8.2 -34 53 00 40.6 -34 36 319.48 -82.17 F351 -110 9 274 1 8.2 -50 31 00 40.5 -50 14 307.37 -66.79 F194 65 -27 99 1 9.1 -44 07 00 41.5 -43 50 309.15 -73.17 F242 103 49 61 2 9.3 -61 22 00 41.5 -61 05 305.09 -55.99 F112 4 -72 160	9.7 -28 49 00 42.2 -28 32 357.83 -87.51 F411 -76 66 240 201 -38 26 00 42.5 -38 09 312.02 -78.81 F295 -127 83 291 201 20.9 -20 54 00 43.4 -20 37 106.71 -83.24 F540 -15 -47 179 10.9 -28 54 00 43.4 -28 37 352.50 -87.67 F411 -62 61 226 23.0 -17 09 00 45.5 -16 52 115.00 -79.66 F540 11 153 153 35	3.3 -18 22 00 45.8 -18 05 114.45 -80.87 F540 16 88 148 3.4 -54 07 00 45.7 -53 50 304.83 -63.26 F150 80 47 84 3.5 -50 24 00 45.8 -50 07 305.25 -66.98 F195 -145 -23 309 3.7 -653 52 00 45.8 -53 50 303.99 -53.52 F150 88 -109 76 5.5 -57 03 00 47.7 -56 46 303.97 -60.34 F150 88 -109 76	5.8 -64 28 00 47.9 -64 11 303.58 -52.93 F079 8 29 156 1 5.9 -38 44 00 48.3 -38 27 306.08 -78.65 F295 -65 68 229 2 5.9 -41 08 00 48.3 -40 51 305.46 -76.25 F295 -63 -60 227 1 6.1 -21 37 00 48.5 -45 45 304.53 -71.36 F243 -91 -55 255 1	7.5 -62 42 00 49.6 -62 25 303.31 -54.70 F079 20 123 144 8.4 -50 33 00 50.7 -50 16 303.25 -66.85 F195 -103 -29 267 20 8.8 -39 48 00 51.2 -39 31 303.99 -77.60 F295 -34 12 198 8.9 -34 48 00 51.3 -28 31 303.90 -88 50 F411 163 57 1	9.1 -55 39 00 51.3 -55 22 302.98 -61.75 F150 120 -38 44 9.6 -23 52 00 52.1 -23 35 125.23 -86.46 F474 65 62 99 0.5 -55 58 00 52.7 -55 41 302.57 -61.43 F150 129 -55 35 0.7 -55 53 00 52.9 -50 36 302.37 -66.51 F195 -84 -46 248 0.7 -47 08 00 53.0 -46 51 302.15 -70.26 F195 -89 155 253	1.4 -47 53 00 53.7 -47 36 301.86 -69.51 F195 -82 115 246 2 1.6 -80 32 00 52.7 -80 15 302.87 -36.87 F013 -86 -34 250 1 1.8 -39 31 00 54.2 -39 14 300.44 -77.87 F295 -4 26 168 1 2.0 -51 15 00 54.2 -50 58 301.85 -66.14 F195 -71 -65 235 2 2.1 -40 06 00 54.4 -39 49 300.31 -77.28 F295 -1 -5 165 1	2.8 -49 13 00 55.1 -48 56 301.34 -68.17 F195 -67 44 231 3.6 -24 23 00 56.0 -24 06 142.19 -86.81 F474 113 33 51 4.2 -27 47 00 56.6 -27 30 231.70 -88.79 F474 118 -149 46 4.2 -30 20 00 56.7 -38 47 297.84 -78.28 F411 92 -17 72 4.4 -39 04 00 56.7 -38 47 297.84 -78.28 F295 23 51 141	4.7 -29 58 00 57.1 -29 41 277.38 -87.15 F411 98 3 66 6.3 -34 36 00 58.7 -34 19 291.21 -82.63 F351 90 23 74 6.3 -41 01 00 58.6 -40 44 297.18 -76.30 F295 42 -54 122 6.6 -21 16 00 59.1 -20 59 139.17 -83.63 F541 -83 -67 247 6.9 -29 19 00 59.3 -29 02 261.27 -87.41 F411 125 36 39
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	T_{B-M}	III: III-III: III-III?		1-11 111-111 111-111	III III III-III	I-II I-II II-III I	1-11 11-111 11-1111	11. 11. 11. 11. 11.			11-11 11-11 11-11 11-11
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	xcen	-51 99 -	-82 -1 -77 105 40 1		21 -93 -18 -42	20 125 155 63		1	-132 -101 -97 -35 -87		-14 -115 114 -1
	Field	F244 F542 F151 F412	F476 F476 F352 F352	F296 F196 F352 F196	F244 F152 F196 F413	F476 F413 F413 F413	F413 F413 F413 F413	F413 F413 F413 F413	F297 F245 F477 F543	F152 F543 F414 F477	F477 F477 F354 F477
	q	-72.19 -80.36 -60.89 -82.85	8.00.0	6.56.6.5	9,4,6,4,8	-80.56 -80.68 -80.24 -80.69	-80.56 -80.40 -80.29 -79.98	00497	-75.04 -68.31 -76.97 -74.06	-62.26 -76.15 -76.76 -76.94 -76.86	-76.26 -76.32 -75.71 -76.16
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Тв-м		1-11	1 111-111 111-111	111-111 111-111 111-111	111 11-111 111-1111	111111	111-111 111 111-111	111 11-111 11-111 11-11	II II-III III I-II	III III-III III-III
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nx.	183 254 108 128 311	107 101 288 200 297	135 185 183 60 276	249 100 89 252 138	77 66 259 55 55	257 252 44 230 290	217 180 72 173 121	262 178 245 246 235	163 159 287 79 155	62 153 41 200 314
ycen	86 -51 -92 147	22 32 1 9	-78 102 -65 -17	-66 81 137 -72 -49	-100 142 -70 134 54	-41 -54 -116 -85	-138 144 90 -28	71 71 71 126 119 -36	-55 -101 -96 -70 -2	-100 160 79 77
x cen	-19 -90 56 36 -147	57 63 -124 -36	29 -21 -19 104	-85 64 75 -88 26	87 98 -95 109	-93 -88 120 -126	153 16 19 19	-98 -14 -81 -82 -71	1 -123 85 9	102 11 123 -36 -150
Field	F114 F354 F013 F052	F477 F013 F544 F197	F414 F354 F354 F477	F544 F414 F414 F298 F354	F414 F414 F418 F414	F478 F418 F414 F478	F478 F298 F354 F298	F415 F153 F246 F415	F478 F478 F355 F544	F197 F153 F197 F415
q	-57.12 -74.11 -38.01 -44.79	-74.87 -37.38 -72.63 -63.96	-74.49 -73.99 -72.82 -74.24	-72.85 -74.16 -73.93 -69.64	-73.34 -73.50 -73.21 -73.33	-73.06 -73.01 -72.68 -72.71 -67.67	-72.57 -70.54 -71.85 -68.88	-72.15 -59.68 -64.40 -71.81	-71.37 -71.42 -69.99 -69.98	-60.91 -60.67 -63.20 -70.98
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	Lcen	119 -117 -17 -122	76 83 97 -87	-85 37 -148 115 -61	32 -124 -149 -41	-55 -99 -103	41 48 124 -76	-114 64 140 -78 -112	-125 10 -73 -113	-23 0 8 8 7 9 7	-53 -46 -11 -11
	Field	F544 F198 F198 F545	F298 F478 F298 F198	F545 F415 F299 F298	F246 F299 F081 F154	F053 F479 F299 F415	F355 F355 F415 F299	F154 F246 F416 F082	F247 F003 F154 F356	F416 F416 F416 F416	F356 F247 F546 F154
	9	-67.87 -61.72 -70.64 -63.07	-67.15 -69.34 -67.31 -62.28 -50.63	-66.47 -69.51 -66.54 -65.91	-65.74 -65.71 -50.09 -56.36	-47.53 -68.05 -68.52 -66.84	67.05 67.82 67.95 66.24	-55.97 -65.89 -64.09 -66.65	-62.22 -30.90 -57.85 -65.81	-65.71 -65.14 -65.22 -65.13	-64.57 -60.42 -63.01 -56.48
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T_{B-M}	111111111111111111111111111111111111111	1 1117 1117 11-11	HI-III HI-III R HI-III				1-11 11-111 1-11		111-111 11-111-111-111-111-111-111-111-	111 111 111-111 1
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na nx	79 278 115 284 196 210 100 274 288 271					83 151 182 78 178 57 60 186 146 98	444	86 172 168 167 155 226 228 62 107 250		
Ycen	1114 120 110 107	86,39	-30 103 72 67	41 37 26 115	152 149 -68 111	-13 -86 107 22 -66	-62 1118 1130 49	86 102 86	42 1129 1111	30 30 108 108
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q	-58.69 -56.58 -43.16 -56.30	9.00.47	5.24.6	-56.28 -40.83 -57.16 -43.46	-41.78 -56.08 -52.34 -55.09	-49.88 -52.22 -51.11 -54.91	-51.53 -53.64 -53.08 -54.15	-40.18 -51.31 -54.33 -52.71	-53.49 -53.65 -40.24 -53.62	~ ~ ~ ~ ~ ~ ~ ~
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	ycen	63 124 34 151 -13	-56 -2 -8 117 118	-42 26 -91 -113 48	110 78 166 74 59	43 52 60 128 99	136 91 -5 68 68	-43 -113 115	41 100 153 15	106 -131 -15 -15	122 122 53
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	Field	F418 F358 F358 F358	F419 F419 F156 F358 F482	F358 F419 F200 F156	F358 F419 F482 F358	F358 F358 F358 F549	F419 F483 F549 F201	F419 F419 F419 F302	F032 F419 F302 F549	F083 F419 F201 F419	F549 F419 F419 F419
	q	-52.82 -53.20 -53.12 -52.84 -40.78	-52.62 -52.32 -48.92 -52.44	-52.33 -51.90 -49.31 -47.16	-51.88 -51.20 -49.64 -51.58	-51.54 -51.42 -51.41 -47.81	-50.34 -49.36 -48.29 -50.64	-50.22 -50.11 -50.20 -47.05	-37.67 -49.05 -48.77 -49.64	-43.32 -49.05 -47.22 -48.98	-46.49 -48.85 -48.25 -47.37
	-	225.51 231.90 234.72 231.08 285.35	229.26 227.66 265.06 232.17 215.97	237.01 226.87 261.80 269.46 226.34	232.41 225.44 215.26 233.52 264.91	234.43 242.22 233.94 209.38	223.94 217.58 213.05 257.06 242.20	229.25 229.79 231.35 240.30	288.63 225.41 223.92 243.16 217.18	275.91 228.27 262.05 228.70 236.32	213.96 229.11 224.94 219.54
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TABLE 4—Continued	

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	Тв-м	II-III III III-III II-III	11-111 111-111 1111 1-11	III-III III-III III-III		III-III III-III III			II III-III III-III?	:: :::::::::::::::::::::::::::::::::::	111-111 111-111 11-1
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	Field	F549 F156 F359 F250 -	F015 F419 F156	F419 F359 F483 F302	F084 - F420 - F483 - F084 -	F420 F420 F420 F420	F420 F250 F201 F118 -	F084 F360 - F250 F250	F250 F360 - F250 F303	F084 F084 F250 F118	F250 F250 F084 F551 -
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Field xcen ycen x11	0.49 F185 -1 -10 165 0.87 F105 -2 64 166 0.26 F185 4 153 160 8.28 F7399 -46 -2 210 9.35 F7026 -112 -146 276	1.96 -29.39 F339 10 73 154 2.25 -27.17 F461 27 39 137 2.10 -27.42 F461 36 24 128 1.33 -27.65 F461 36 10 128 6.26 -32.29 F185 112 137 52	58.34 -31.15 F339 67 -109 97 27.76 -32.17 F105 75 -161 89 45.94 -32.54 F185 124 121 40 13.06 F025 74 -46 90 45.24 -32.95 F186 -124 89 288	.10 F025 77 -55 87 .39 F186 -95 -106 259 .11 F339 125 -86 39 .45 F339 140 90 24 8 258 .97 F462 -94 8 258	2 -32.32 F340 -109 21 273 17 -33.62 F340 -55 -90 219 5 -34.33 F284 118 -104 46 9 -31.43 F462 -18 -7 182 19 2 6 -34.76 F186 -27 103 191 29	88 -34.43 F340 -1 -25 165 -22 -33.36 F400 -12 81 176 -40 -33.11 F462 54 -87 110 -44 -33.59 F073 125 -33 39 -44 -33.83 F073 132 10 32	3.80 F400 11 77 153 4.65 F400 20 -112 144 3.78 F400 19 121 145 1.66 F026 -94 83 258 6.11 F186 51 -85 113	.59 -32.76 F528 -40 -83 204 .11 -35.46 F106 -24 98 188 .55 -35.80 F340 75 -6 89 .71 -36.36 F186 63 -63 101 .33 -35.27 F400 71 -21 93	5.78 F340 92 98 72 6.75 F234 7 -88 157 5.22 F400 76 20 88 5.25 F400 80 -51 84	.53 -35.46 F400 86 -2 78 .53 -36.67 F186 81 -113 83 .21 -33.31 F528 8 -21 156 .87 -36.19 F340 121 132 43 .94 -35.68 F401 -159 39 323
b Field xcen ycen XII	2.80 -30.49 F185 -1 -10 165 2.75 -30.87 F105 -2 64 166 6.35 -30.26 F185 4 153 160 5.90 -28.28 F399 -46 -2 210 1.38 -29.35 F026 -112 -146 276	00.5 -38 31 1.96 -29.39 P339 10 73 154 01.6 -29 12 12.25 -27.17 F461 27 39 137 02.5 -29 24 12.10 -27.42 F461 36 24 128 02.6 -30 07 11.33 -27.65 F461 36 -10 128 05.8 -52 16 346.26 -32.29 F185 112 137 52	0 06.3 -41 56 358.34 -31.15 F339 67 -109 97 0 08.1 -67 54 327.76 -32.17 F105 75 -161 89 0 07.3 -52 33 345.94 -32.54 F185 124 121 40 0 14.0 -80 39 313.06 -30.06 F025 74 -46 90 0 9.8 -53 10 345.24 -32.95 F186 -124 89 288	12.86 -30.10 P025 77 -55 87 40.89 -33.39 F186 -95 -106 259 59.08 -32.11 F339 125 -86 39 2.95 -31.65 F339 140 90 24 12.57 -29.97 F462 -94 8 258	1.52 -32.32 F340 -109 21 273 1 59.27 -33.62 F340 -55 -90 219 53.05 -34.33 F284 118 -104 46 12.69 -31.43 F462 -18 -7 182 1 45.56 -34.76 F186 -27 103 191 2	25.3 -40 21 0.88 -34.43 F340 -1 -25 165 26.4 -33 21 9.22 -33.36 F400 -12 81 176 27.2 -31 31 11.40 -33.11 F462 54 -87 110 29.3 -70 24 324.44 -33.59 F073 125 -33 39 29.9 -69 31 325.44 -33.83 F073 132 10 32	-33 25 9.26 -33.80 F400 11 77 153 -36 57 5.08 -34.65 F400 20 -112 144 -32 36 10.24 -33.78 F400 19 121 145 -78 05 15.58 -31.16 F026 -94 83 258 -56 25 341.21 -36.11 F186 51 -85 113	0 31.9 -26 24 17.59 -32.76 F528 -40 -83 204 0 33.4 -63 01 333.11 -35.46 F106 -24 98 188 0 32.8 -39 59 1.55 -35.80 F340 75 -6 89 0 33.8 -56 00 341.71 -36.36 F186 63 -63 101 0 33.9 -35 15 7.33 -35.27 F400 71 -21 93	0 34.1 -38 01 3.99 -35.78 F240 92 98 72 0 34.8 -51 30 34.29 -36.75 F234 7 -88 157 0 34.4 -34 29 8.28 -35.22 F400 76 20 88 0 34.7 -34 04 8.79 -35.20 F400 80 -51 84 0 34.8 -35 49 6.69 -35.55 F400 80 -51 84	0 35.2 -34 54 7.82 -35.46 F400 86 -2 78 0 36.6 -56 55 340.53 -36.67 F186 81 -113 83 0 36.0 -25 16 19.21 -33.31 F528 8 -21 156 0 36.7 -37 23 4.87 -36.19 F340 121 132 43 0 37.1 -34 03 8.94 -35.68 F401 -159 39 323
(2000) Dec l b Field xcen ycen x11	52.2 -55 05 342.80 -30.49 F185 -1 -10 165 52.8 -63 44 332.75 -30.87 F105 -2 64 166 52.6 -52 01 346.35 -30.26 F185 4 153 160 59.2 -34 54 55 -30.26 F185 4 153 160 60.0 62 14 311.38 -29.35 F026 -112 -146 276	57.2 -38 40 20 00.5 -38 31 1.96 -29.39 F339 10 73 154 58.5 -29 21 20 01.6 -29 12 12.25 -27.17 F461 27 39 137 59.4 -29 33 20 02.5 -29 24 12.10 -27.42 F461 36 24 128 59.5 -30 16 20 02.6 -30 07 11.33 -27.65 F461 36 -10 128 02.0 -52 25 -20 05.8 -52 16 346.26 -32.29 F185 112 137 52	0 02.9 -42 05 20 06.3 -41 56 358.34 -31.15 F339 67 -109 97 0 03.2 -68 03 20 08.1 -67 54 327.76 -32.17 F105 75 -161 89 0 03.5 -52 42 20 07.3 -52 33 345.94 -32.54 F185 124 121 40 0 05.7 -80 48 8 20 14.0 -80 39 311.06 -30.06 F025 74 -46 90 0 06.0 -53 19 20 09.8 -53 10 345.24 -32.95 F186 -124 89 288	0 16.2 -80 47 312.86 -30.10 F025 77 -55 87 0 12.5 -56 48 340.89 -33.39 F186 -95 -106 259 0 12.0 -41 29 359.08 -32.11 F339 125 -86 39 0 12.7 -38 09 2.95 -31.65 F339 140 90 24 0 14.3 -29 44 12.57 -29.97 F462 -94 8 258	0 14.9 -39 28 1.52 -32.32 F340 -109 21 273 10 20.1 -41 33 359.27 -33.62 F340 -55 -90 219 0 20.8 -46 45 353.05 -34.33 F284 118 -104 46 0 20.9 -30 0 2 12.5 69 -31.43 F46.2 -18 -7 182 10 21.9 -52 56 345.56 -34.76 F186 -27 103 191 2	-40 31 20 25.3 -40 21 0.88 -34.43 F340 -1 -25 165 -33 31 20 26.4 -33 21 9.22 -33.36 F400 -12 81 176 -13 41 20 27.2 -31 31 11.40 -33.11 F462 54 -87 110 -70 34 20 29.3 -70 24 324.44 -33.59 F073 125 -33 39 -69 42 20 29.9 -69 1 325.44 -33.83 F073 132 10 32	0 29.5 -33 25 9.26 -33.80 F400 11 77 153 0 29.2 -36 57 5.08 -34.65 F400 20 -112 144 0 29.2 -32 36 10.24 -33.78 F400 19 121 145 0 33.0 -78 05 315.58 -31.66 F026 -94 83 258 0 32.2 -56 25 341.21 -36.11 F186 51 -85 113	28.9 - 26 35 20 31.9 - 26 24 17.59 - 32.76 F528 - 40 - 83 204 29.1 - 63 12 20 33.4 - 63 01 333.11 - 35.46 F106 - 24 98 188 29.5 - 40 10 20 32.8 - 39 59 1.55 - 35.80 F340 75 - 6 89 29.9 - 56 11 20 33.8 - 56 00 341.71 - 36.36 F186 63 - 63 101 30.7 - 35 26 20 33.9 - 35 15 7.33 - 35.27 F400 71 - 21 93	2 20 34.1 -38 01 3.99 -35.78 F340 92 98 72 2 20 34.8 -51 30 34.29 -36.75 F234 7 -88 157 2 2 20 34.4 -34 29 8.79 -35.22 F400 76 20 88 5 20 34.7 -34 04 8.79 -35.20 F400 80 -51 84 0 20 34.8 -35 49 6.69 -35.55 F400 80 -51 84	32.0 -35 05 20 35.2 -34 54 7.82 -35.46 F400 86 -2 78 32.7 -57 06 20 36.6 -56 55 340.53 -36.67 F186 81 -113 83 33.0 -25 27 20 36.0 -25 16 19.21 -33.31 F528 8 -21 156 33.5 -37 34 20 36.7 -37 23 4.87 -36.19 F340 121 132 43 33.5 -37 14 20 37.1 -34 03 8.94 -35.68 F401 -159 39 323

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H	77707	10170	40044	10711	40444	01110	00108	00000	00448	00448
z	0.0708	(0.0200)		0.0456			0.0386	(0.0487)	(0.0165)	0.0306
Previous	g 00 8	œ		ра _в 8		BQ	1A	O	DQS 1A Q	
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m ₁₀	19.1 19.4 16.4 17.7	16.1 18.4 19.0 18.9	18.9 17.8 19.1? 19.6	14.9 18.1 17.8 19.1	19.1 19.4 18.9 19.2	19.6 18.3? 17.5: 18.8	17.6 19.4 15.4 17.3	18.0 19.3 19.3 18.7	17.4 15.1 19.2 14.5:	18.2 15.0 18.8 17.6 18.5
m³	18.0 18.8 15.8 16.0	15.4 17.6 18.6 17.1 17.8	17.4 17.2 18.4 19.0	13.9 17.4 7 17.0 18.6	18.1 18.4 18.1 118.5	: 18.3 ? 17.0 : 17.0 17.5 18.0	16.1 18.9 13.9 16.6 17.3	17.1 18.5 18.9 17.7	16.8 17.1 17.3 13.5 18.2?	16.7 13.4 17.7 16.4 18.0
m ₁	17.5 18.6 15.1 16.4	15.4 17.5 18.1 16.4 17.2	16.7 16.7 17.8 18.4	13.6 16.5 16.7 17.5 17.5	17.8 18.0 17.8 18.1:	18.1 16.7 15.8 17.1	15.4 18.0 13.8 15.6	16.8 18.0 17.5:	15.5 13.4 16.0 13.1: 18.0?	15.6 12.7 17.1 15.7 17.7
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T_{B-M}		11 11-11 11-11 11-11	1-11 111 111-111 1 11-111	1-11: 11-111 111-111 111:		III III-III II?	::::::::::::::::::::::::::::::::::::::		1 11-11 11-11 11-111	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
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_	8 23 50 H FC	44040	78001	ৰ ৰ ল ত ত	6 6 8 5 G	ស្តេចខុន	61004	40000	ঠ ত ন ত ক	ក្នុក្សិស្ត ————————————————————————————————————
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	-76 221 88 -92 302 72 -85 281 79 -93 220 71	80 261 244 -40 79 124 -4 279 160 150 194 14 72 248 236	150 141 206 273 112	2 219 2 134 3 181 5 238 9 228		137 76 232 131 70	62 66 226 -43 139 121 195 240 259 136 240 300 130 168 294		159 136 189 306 129	
cen XII	221 302 281 220 220	80 261 40 79 -4 279 50 194 72 248	4 23 150 3 -146 141 2 46 206 9 -119 273 2 -33 112	2 219 2 134 3 181 5 238 9 228	92 228 -88 281 84 221 129 212 158 210	161 137 -91 76 106 232 28 131 -16 70	62 66 -43 139 95 240 136 240 130 168	166 297 163 297 285	5 -128 159 8 -125 136 5 147 189 2 -35 306 5 130 129	239 1114 150 102
sen Ycen XII	-57 -76 221 138 -92 302 117 -85 281 -56 -93 220 105 -21 269	97 80 261 85 -40 79 115 -4 279 -30 -150 194 -84 72 248	14 23 150 23 -146 141 -42 46 206 -109 -119 273 52 -33 112	110 219 130 134 -3 181 115 238 149 228	92 228 -88 281 84 221 129 212 158 210	29 27 161 137 21 88 -91 76 21 -68 106 232 29 33 28 131 21 94 -16 70	98 62 66 25 -43 139 -76 95 240 -76 136 240 -4 130 168	86 -2 80 166 02 -133 105 297 86 1 64 163 42 -133 -84 297 42 -121 55 285	26 5 -128 159 86 28 -125 136 64 -25 147 189 35 35 130 129	5 -64 239 5 70 114 4 81 150 2 -55 102 7
xcen Ycen XII	34.21 F074 -57 -76 221 36.40 F401 -138 -92 302 36.51 F144 -117 -85 281 35.86 F463 -56 -93 220 36.83 F401 -105 -21 269	37.40 F341 -97 80 261 34.77 F528 85 -40 79 37.79 F187 -115 -4 279 36.34 F001 -84 72 248	36,67 F463 14 23 150 37,48 F463 23 -146 141 37,80 F401 -42 46 206 36,38 F529 -109 -119 273 37,61 F463 52 -33 112	9.24 F187 -55 110 219 9.65 F341 30 130 134 0.35 F286 -74 115 238 0.45 F235 -74 115 238	0.53 F286 -64 92 228 7.27 F107 -117 -88 281 0.66 F286 -57 84 221 0.82 F286 -48 129 212 0.81 F235 -46 158 210	37.38 F529 27 161 137 40.59 F401 88 -91 76 30.95 F011 -68 106 232 38.21 F529 33 28 131 40.51 F401 94 -16 70	06 F341 98 62 66 27 F187 25 -43 139 64 F464 -76 95 240 63 F286 -4 130 168	70 F286 -2 80 166 83 F402 -133 105 297 75 F286 1 64 163 106 F342 -133 -84 297 06 F342 -121 55 285	1.41 F026 5 -128 159 2.15 F286 28 -125 136 0.37 F464 -25 147 189 0.15 F530 -142 -35 306 2.30 F235 35 130 129	2.28 F402 -75 -64 239 2.67 F286 50 70 114 3.44 F026 14 81 150 2.85 F286 62 -55 102 3.11 F235 87 10 77
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	cen Ycen XII	-90 203 -30 203 1 87 238 2 147 186 3 74 291 2	5 126 189 5 6 199 0 22 134 4 25 110 2 -96 246	3 15 242 3 49 242 5 -29 239 0 -41 144 3 124 106	8 24 136 18 7 -86 147 7 7 -137 147 2 7 99 117 26	6 86 48 2 3 -59 121 1 6 -27 190 1 6 12 108 1 7 5 107 1	8 -124 115 288 2 -3 -65 167 0 67 52 97 8 -94 76 258 0 102 -32 62	0 14 254 7 -2 221 7 14 261 7 132 127 9 59 75	98 102 262 20 79 184 16 89 180 02 -83 62 02 102 62	9 -167 50 331 1 -2 -106 166 9 -160 -85 324 9 -163 147 327 6 -5 31 169	-97 187 69 226 70 183 77 133 107 42
	ield xcen ycen x11	2.64 F148 -39 -90 203 9.42 F110 -39 -30 203 1 9.99 F536 -74 87 238 2 9.42 F347 -22 147 186 3 9.42 F192 -127 74 291 2	52.10 F110 -25 126 189 46.45 F077 -35 6 199 69.18 F347 30 22 134 72.07 F470 54 25 110	1.41 F408 -78 15 242 1.61 F408 -78 49 242 1.18 F408 -75 -29 239 2.24 F536 20 -41 144 0.44 F347 58 124 106	6.34 F077 28 24 136 18 9.01 F110 17 -86 147 7 1.08 F240 17 -137 147 2 6.50 F148 47 99 117 26 6.48 F077 47 26 117 12	1.12 F347 116 86 48 2 2.52 F240 43 -59 121 1 1.68 F002 -26 -27 190 1 6.37 F240 55 12 108 1 3.62 F240 5 107 18	1.89 F348 -124 115 288 8.55 F192 -3 -65 167 1.71 F110 67 52 97 1.95 F348 -94 76 258 3.58 F240 3 -3 62	4.92 F537 -90 14 254 3.35 F606 -57 -2 221 1.27 F078 -97 14 261 2.06 F192 37 132 127 4.63 F408 95 95 75	2.82 F078 -98 102 262 5.74 F471 -20 79 184 5.86 F471 -16 89 180 3.77 F408 102 -83 62 8.24 F077 102 102 62	6.06 F409 -167 50 331 5.61 F471 -2 -106 166 5.75 F409 -160 -85 324 6.19 F409 -163 147 327 3.88 F606 -5 31 169	0.90 F348 -23 -97 187 7.70 F050 -62 69 226 3.01 F348 -19 70 183 6.71 F471 31 77 133 8.48 F077 122 107 42
	Field xcen ycen x11	.64 F148 -39 -90 203 .42 F510 -39 -30 203 1 .99 F536 -74 87 238 2 .24 F347 -22 147 186 3 .42 F192 -127 74 291 2	5.10 F110 -25 126 189 6.45 F077 -35 6 199 9.18 F347 30 22 134 2.07 F408 -82 -96 246	.41 F408 -78 15 242 .16 F408 -78 49 242 .18 F408 -75 -29 239 .24 F536 20 -41 144 .44 F347 58 124 106	.34 F077 28 24 136 18 .01 F110 17 -86 147 7 .08 F240 17 -137 147 2 .50 F148 47 99 117 26 .50 F148 F077 47 26 117 26	.12 F347 116 86 48 2 .52 F240 43 -59 121 1 .68 F002 -26 -27 190 1 .37 F077 56 12 108 1 .62 F240 5 107 108 1	.89 F348 -124 115 288 .55 F192 -3 -65 167 .71 F110 67 52 97 .85 F348 -94 76 258 .86 F240 102 -32 62	.92 F537 -90 14 254 .35 F606 -57 -2 221 .27 F078 -97 14 261 .06 F192 37 132 127 .63 F408 89 59 75	.82 F078 -98 102 262 .74 F471 -20 79 184 .86 F471 -16 89 180 .27 F408 102 -83 62 .24 F077 102 02 62	.06 F409 -167 50 331 .61 F471 -2 -106 166 .75 F409 -160 -85 324 .19 F409 -163 147 327 .88 F606 -5 31 169	.70 F050 -62 69 226 .01 F348 -19 70 183 .71 F471 31 77 133 .48 F077 122 107 42
	b Field xcen ycen x11	20.10 -52.64 F148 -39 -90 203 16.63 -49.42 F110 -39 -30 203 1 19.73 -49.49 F536 -74 87 238 2 59.27 -69.24 F347 -22 147 186 3 28.16 -59.42 F192 -127 74 291 2	18.59 -52.10 F110 -25 126 189 13.58 -46.45 F077 -35 6 199 21.94 -66.18 F347 30 22 134 21.33 -72.07 F408 -54 25 110 59.05 -70.60 F408 -82 -96 246	4.90 -71.41 F408 -78 15 242 6.74 -71.61 F408 -78 49 242 2.40 -71.18 F408 -75 -29 239 33.76 -72.24 F536 20 -41 144 56.19 -70.44 F347 58 124 106	12.59 -46.34 F077 28 24 136 18 14.47 -49.01 F110 17 -86 147 7 27.25 -61.08 F240 17 -137 147 2 20.97 -56.50 F148 47 99 117 26 12.27 -46.48 F077 47 26 117 28	52.79 -71.12 F347 116 86 48 2 28.32 -62.52 F240 43 -59 121 1 04.66 -31.68 F002 -26 -27 190 1 11.92 -46.37 F077 56 12 108 1 29.57 -63.62 F240 55 107 108 1	53.52 -71.89 F348 -124 115 288 21.68 -58.55 F192 -3 -65 167 15.00 -51.71 F110 67 52 97 50.56 -71.95 F348 -94 76 258 27.10 -63.58 F240 102 -32 62	39.32 -74.92 F537 -90 14 254 55.63 -73.35 F606 -57 -2 221 14.09 -51.27 F078 -97 14 261 24.28 -62.06 F192 37 132 127 4.09 -74.63 F408 89 59 75	15.03 -52.82 F078 -98 102 262 24.42 -75.74 F471 -20 79 184 25.16 -75.86 F471 -16 89 180 474 -713.77 F408 102 -83 62 11.82 -48.24 F077 102 102 62	3 48.7 -28 47 22.45 -76.06 F409 -167 50 331 48.8 -31 46 10.38 -75.61 F471 -2 -106 166 3 48.9 -31 17 12.25 -75.75 F409 -160 -85 324 3 49.4 -26 59 29.97 -76.19 F409 -163 147 327 56.3 -19 11 59.20 -73.88 F606 -5 31 169	39.92 -70.90 F348 -23 -97 187 11.18 -47.70 F050 -62 69 226 47.47 -73.01 F348 -19 70 183 24.11 -76.71 F471 31 77 133 11.37 -48.48 F077 122 107 42
	(2000) Dec l b Field xcen ycen x11	2 23.4 -61 27 320.10 -52.64 F148 -39 -90 203 3 24.9 -65 20 316.63 -42 F110 -39 -30 203 1 24.7 -23 06 33.73 -49.42 F110 -39 -30 203 1 24.7 -23 06 33.73 -49.99 F536 -74 87 238 2 3 24.8 -36 57 359.27 -69.24 F347 -22 147 186 3 2 26.3 -53 20 328.16 -59.42 F192 -127 74 291 2	3 27.6 -62 24 318.59 -52.10 F110 -25 126 189 3 28.6 -68 55 313.58 -46.45 F077 -35 6 199 3 30.3 -39 19 351.94 -69.18 F347 30 22 134 3 30.5 -29 16 21.33 -72.07 F408 -82 26 246 3 31.2 -36 30 359.05 -70.60 F408 -82 -96 246	3 31.7 -34 26 4.90 -71.41 F408 -78 15 242 3 11.8 -33 49 6.74 -71.61 F408 -78 49 242 3 31.9 -35 16 2.40 -71.18 F408 -75 -29 239 3 32.4 -25 29 33.76 -72.24 F536 20 -41 144 3 32.5 -37 26 356.19 -70.44 F347 58 124 106	3 34.9 -69 19 312.59 -46.34 F077 28 24 136 18 3 55.1 -66 22 314.47 -49.01 F110 17 -86 147 7 3 35.4 -52 18 327.25 -61.08 F240 17 -137 147 2 3 36.4 -57 55 320.97 -56.50 F148 47 99 117 26 3 37.9 -69 17 312.27 -46.48 F077 47 26 117 18	3 8.2 - 38 06 352.79 -71.12 F347 116 86 48 2 3 38.4 -50 51 328.32 -62.52 F240 43 -59 121 1 3 40.3 -85 12 304.66 -31.68 F002 -26 -27 190 1 3 39.8 -69 29 311.92 -46.37 F077 55 12 108 1 3 39.8 -69 38 329.57 -63.62 F240 57 5 107 1	3 40.9 -37 31 353.52 -71.89 F348 -124 115 288 3 41.7 -55 58 321.68 -58.55 F192 -3 -65 167 3 43.2 -63 47 315.00 -51.71 F110 67 52 97 3 43.6 -38 16 350.56 -71.95 F348 -94 76 258 452.5 50 19 3 27.10 -63.58 F240 102 -32 62	3 45.4 -24 29 39.32 -74.92 F537 -90 14 254 3 46.2 -19 47 55.63 -73.35 F606 -57 -2 221 3 46.3 -64 25 314.09 -51.27 F078 -97 14 261 3 46.7 -52 18 324.28 -62.06 F192 37 132 127 46.7 -53 36 4.09 -74.63 F408 89 59 75	3 47.2 -62 46 315.03 -52.82 F078 -98 102 262 3 47.2 -28 19 24.42 -75.74 F471 -20 79 184 3 47.7 -28 08 25.16 -75.86 F471 -16 89 180 3 48.2 -36 16 344 -73.77 F408 102 -83 62 3 48.3 -67 311.82 -48.24 F077 102 102 62	3 48.7 -28 47 22.45 -76.06 F409 -167 50 331 48.8 -31 46 10.38 -75.61 F471 -2 -106 166 3 48.9 -31 17 12.25 -75.75 F409 -160 -85 324 3 49.4 -26 59 29.97 -76.19 F409 -163 147 327 56.3 -19 11 59.20 -73.88 F606 -5 31 169	3 50.4 -41 34 339.92 -70.90 F348 -23 -97 187 50.6 -68 26 311.18 -47.70 F050 -62 69 226 3 50.8 -38 25 347.47 -73.01 F348 -19 70 183 51.6 -28 22 24.11 -76.71 F471 31 77 133 3 52.2 -67 40 311.37 -48.48 F077 122 107 42

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8	17.2 17.2 16.8 17.2	17.3 17.2 17.3 15.5 17.3	17.4 17.4 17.3 17.3	17.2 17.1 16.9 17.3	17.4 17.3 17.4 17.2	17.3
Ω	ຍວວວວ	စ က စ ည စ	00000	စစသသသ	မအစမစ	9
H	00444	00444	00101	04044	0000	7
22		0.0456				
Previous	m m	BBD BB		BDR D B	æ	
Obs	10 10, 10,30 10,10	20 10 20,10 10	10 10,10 10,10	22222	10, 10 10 10 10 10, 10	10
m ₁₀	17.8 18.1 16.6 18.2:	18.5 18.0 18.4 15.3	19.1 18.9 18.1 18.1	17.6 16.9 16.7 18.7	19.6 18.6 19.1 17.1 19.0	18.7
m ₃	16.3 17.5 15.6 17.3	17.6 17.4 17.4: 14.4 17.3	18.7 18.3 18.3 17.5	16.5 16.3: 15.3 17.3	18.9 17.5 18.0 16.3? 18.3	17.8
m ₁	15.4 15.2* 15.0: 17.0	17.3 16.5 17.5 12.0? 15.9*	18.4 16.7 17.9: 17.0	15.6 15.9 14.8? 16.8	18.7 16.0 17.5 15.7 17.9	17.2
C	36 39 64? 73:	443 55 56 54	40 38 61 38 64:	39 47 20 20 30 30	115 45 45 60 40	64
T_{B-M}	1-11 111-111 111 113	::::::::::::::::::::::::::::::::::::::				111-11
T_A	IRRRI	r ir ir ir ir ir ir ir ir ir ir ir ir ir	RHRRHR	ниянн	R R R	н
Abell	4051 4052 4053 4054 4055	4056 4057 4058 4059 4060	4061 4062 4063 4064 4065	4066 4067 4068 4069 4070	4071 4072 4073 4074 4075	4076
ия	270 206 277 231 88	295 183 63 167 179	1 228 5 138 5 273 1 151	63 116 177 175 1 75	**	244
llx	223 187 96 90 254	129 180 230 228 192	234 195 219 193 214	32 191 198 198	194 190 182 185	171
ycen	106 42 113 67 -76	131 19 -101 15	64 109 -13 -80	-101 -48 -89 -33	89 -74 -98 -87	80
ld xcen	-59 -23 -90	35 -16 -64 -28	-70 -31 -55 -29	132 -27 74 -34	-30 -26 -18 -21 -16	-7
Field	F078 F012 F471 F471	F348 F012 F349 F349	F472 F078 F409 F1111	F077 F111 F348 F538 F409	F409 F538 F241 F349	F193
9	-53.14 -37.76 -77.42 -77.49	-74.51 -37.37 -75.00 -76.06	-77.23 -50.97 -78.19 -55.92	-45.02 -55.30 -73.64 -76.97 -78.33	-78.65 -76.95 -68.14 -75.81	-66.78
1	313.94 - 27.21 - 23.21 - 54.85 -	348.50 306.08 350.28 356.84	46.27 - 311.83 - 26.92 - 314.71 - 56.18 -	308.79 - 314.20 - 340.71 - 56.30 - 13.79 -	25.06 - 57.70 - 326.88 - 348.99 -	324.25 -66.78
Dec	22 44 17 40 11 11	17 17 17 16 37 16 40 28	13 32 13 14 44 15 15 15 15 15 15 15 15 15 15 15 15 15	11 30 40 23 22 22 22 22 22 22 22 22 22 22 22 22	28 21 20 24 26 33 44 44	18 14
RA (2000) Dec	5 -62 1 -78 1 -78 2 -27 4 -21	.0 -37 .5 -79 .6 -36 .7 -34	2 -23 7 -65 3 -27 6 -59	9 -71 0 -60 8 -39 0 -21	7 -28 7 -21 7 -46 8 -36	.8 -48
RA (23 53.5 23 54.1 23 55.2 23 55.2 4.8	23 56.0 23 56.5 23 56.6 23 56.7 23 57.1	23 57.2 23 57.7 23 58.3 23 58.6 23 58.6	23 58.9 23 59.0 23 59.8 00 00.0	00 00.7 00 00.7 00 00.7 00 00.8	00 01.8
Dec	53 01 79 16 87 57 88 49	-37 34 -79 42 -36 54 -34 57	-23 49 -65 30 -28 01 -60 16	-71 47 -60 57 -39 45 -21 40	-28 23 -21 23 -46 50 -36 41 -47 01	18 31
RA (1950) Dec	9 -63 2 -27 6 -28 -21					.2 -48
RA (23 52 50 50 50 50 50 50 50 50 50 50 50 50 50	23 53.4 23 53.8 23 54.0 23 54.1 23 54.1	23 54.6 23 55.1 23 55.7 23 56.0 23 56.0	23 56.3 23 56.4 23 57.2 23 57.5 23 57.7	23 57.8 23 58.1 23 58.1 23 58.2 23 58.5	23 59.2
		4056 4057 4058 4059 4060	4061 4062 4063 4064 4065	4066 4067 4068 4069 4070	4071 4072 4073 4074 4075	4076

TABLE 5 SUPPLEMENTARY SOUTHERN CLUSTERS

	B	17.1 16.1 17.0 17.2	15.6 17.5 17.1 16.2 17.4	17.4 15.3 17.4 17.5	17.5 17.3 17.3 17.2	16.1 17.5 17.4 17.4	17.4 17.3 15.8 16.7	17.4 17.3 17.3 17.4	17.3 16.2 17.3 17.4	15.5 17.3 17.4 16.4	17.1 17.2 17.3 17.2
	R D	00000 04 W W 4	04000 w n w 4 n	26636	0000 0000	01000 4000	2000 000 004 000	2000	0 0 0 1 0	0 0 0 1 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0	0000
	z]	0.0395	0.0270	COMMO						0.0498	
	Previous	αΩ	Ω	BO	BD D	ø	ଝ	щQ	Q	o g	M M
	Obs	00000	1000C	99999	00000	10 10 10 50	01100 10000	10000	10000 10000	10 20 10 10	99999
	m ₁₀	16.9 15.9 16.8 17.7	15.4 20.3 17.0 16.0	19.5 15.1 20.1 20.2 16.8	20.6 18.0 18.3 17.7	16.0 20.2 19.4 19.3	19.7 18.1 15.6 16.5	19.3 18.6 18.0 19.6	18.1 15.9 18.1 19.7 18.6	15.3 18.1 18.0 19.9	16.9 17.1 18.1 17.1
	m ₃	15.0 14.7 15.3 15.9	14.2 19.1 15.9 15.1	19.3 14.0: 19.1 19.6	20.0 15.9 17.7 16.1	15.1 18.8 19.1 18.8	19.2 17.8 14.7 15.5	18.9 18.4 17.6 19.1	17.4 15.0 16.1 19.4 17.8	14.4 17.5 16.1 18.9 15.3?	16.0 15.7 17.4 15.8
	m ₁	13.4 14.5 14.5 15.4 13.9	12.9 18.0: 14.8 15.9	19.2 13.6: 18.7? 19.3 16.1	19.4 15.6 16.5 15.4	14.3 18.5 18.7 16.7*	18.9 16.0 14.6 15.4	17.6 15.4* 16.9 18.9	15.6* 13.9 15.6 18.4	13.6? 15.4 15.4 18.7 14.6?	15.1* 15.4 15.9? 15.4
	٥	-8: 11: 11: -8	7: 78 -18? -12 28	-11 3 (53) (70)	(113) -23 19 17 28	12 12 22 24	85 19 3 -8 -20?	11 11 11 12	29 16 52 21	26 18 54 20	9 6: 29 -43 (78)
	T_{B-M}	1-11 11-11 11-11	1 11-11 1-11	1-11 11-111? 111 111: 11-111	111 111-111 111-111	111 1111 1111	!!-!! !!! !!!	!!! !!!-!!!	11-111 1-11 11-11 11-1	::::::::::::::::::::::::::::::::::::::	111 111-111 111:
College	T_A	IRII	ниня	R I I R I I R	нинк	H H H H	RI I I RI:	Винин	R I I I I I I I I I I I I I I I I I I I	H I I I I	нныны
	Abell	\$0001 \$0002 \$0003 \$0004 \$0005	\$0006 \$0007 \$0008 \$0009 \$0010	S0011 S0012 S0013 S0014 S0015	\$0016 \$0017 \$0018 \$0019 \$0020	\$0021 \$0022 \$0023 \$0024 \$0024	\$0026 \$0027 \$0028 \$0029 \$0030	\$0031 \$0032 \$0033 \$0034 \$0035	\$0036 \$0037 \$0038 \$0039 \$0040	S0041 S0042 S0043 S0044 S0044	\$0046 \$0047 \$0048 \$0049 \$0050
- -	i										
TEMPINITY I	ng nx	168 118 166 155 161 264 161 151 34 114	143 125 133 324 145 276 7 180 98 204	105 172 93 135 96 84 87 77 304 300	83 320 48 271 102 140 101 263 103 163	146 199 120 220 78 182 89 244 73 186	221 127 89 177 218 302 79 286 129 107	75 270 231 175 58 111 63 301 224 196	215 211 214 30 214 244 160 142 203 324	178 255 284 160 137 194 164 291 237 43	189 292 240 330 235 207 234 238 213 320
1100	Ycen	100 100 130 150	-39 112 160 40	-29 -80 -87	156 107 -24 99	35 18 80 22	-37 13 138 122 -57	106 11 137 137	47 134 80 -22 160	91 -4 30 127 121	128 166 43 74 156
	Lcen	130	21 31 19 157 66	59 71 68 77 140	81 62 63 61	18 44 75 91	-57 75 -54 85 35	89 106 101 -60	-51 -50 - -50 -	-14 120 27 -73 -	-25 -76 -71 -70
	Field	F409 F409 F409 F292	F409 F538 F050 F292	F293 F349 F193 F193	F149 F293 F078 F050	F002 F241 F078 F050	F539 F050 F539 F050	F050 F294 F078 F050	F294 F294 F294 F539	F350 F079 - F539 F410	F294 F150 F150 F150
	q	-78.75 -78.95 -79.27 -46.59 -69.30	-79.24 -75.10 -48.90 -70.60	-74.65 -77.82 -64.73 -64.69 -76.66	-64.27 -76.74 -51.50 -48.93	-32.98 -72.06 -52.39 -48.65	-80.05 -47.42 -77.61 -49.44	-49.18 -76.17 -51.20 -49.81	-76.90 -73.85 -77.45 -80.63	-81.86 -52.18 -80.13 -84.30 -59.80	-78.46 -65.05 -62.80 -63.38
	1	11.97 15.44 26.10 308.83	11.99 74.61 309.35 327.36 19.22	335.74 347.87 317.90 317.40 78.88	316.77 337.33 309.20 308.09	304.03 323.34 308.86 307.61	73.32 307.14 84.64 307.66	307.44 327.28 307.72 307.33	327.47 321.70 328.74 79.44	344.96 307.45 85.00 28.85 309.92	328.97 312.17 310.95 311.16
	RA (2000) Dec	00 02.6 -30 37 00 02.8 -29 55 00 03.2 -27 53 00 03.8 -69 59 00 04.6 -45 37	00 04.8 -30 29 00 05.2 -16 46 00 06.9 -67 40 00 07.1 -44 22 00 08.5 -29 00	00 08.5 -39 37 00 09.3 -35 21 00 10.9 -51 12 00 12.1 -51 19 00 12.7 -17 13	00 12.8 -51 48 00 13.7 -37 45 00 14.2 -65 10 00 15.5 -67 50 00 16.5 -69 43	00 15.9 -84 04 00 17.3 -43 41 00 18.0 -64 21 00 18.2 -68 10 00 18.9 -64 17	00 19.1 -20 27 00 19.0 -69 26 00 19.4 -17 11 00 19.4 -67 23 00 19.7 -80 49	00 20.4 -67 40 00 22.1 -39 32 00 22.3 -65 39 00 22.3 -67 04 00 22.8 -39 08	00 23.7 -38 52 00 23.7 -42 15 00 23.8 -38 15 00 24.0 -20 10 00 24.9 -36 45	00 25.5 -33 01 00 25.5 -64 43 00 25.8 -19 12 00 25.8 -27 23 00 25.7 -56 58	00 26.1 -37 21 00 26.4 -51 37 00 26.6 -53 56 00 26.8 -53 21 00 27.2 -46 49
	RA (1950) Dec	00 00.0 -30 54 00 00.2 -30 12 00 00.6 -28 10 00 01.3 -70 16 00 02.1 -45 54	00 02.2 -30 46 00 02.6 -17 03 00 04.4 -67 57 00 04.6 -44 39 00 06.0 -29 17	00 06.0 -39 54 00 06.8 -35 38 00 08.4 -51 29 00 09.6 -51 36 00 10.2 -17 30	00 10.3 -52 05 00 11.2 -38 02 00 11.8 -65 27 00 13.1 -68 07 00 14.1 -70 00	00 14.1 -84 21 00 14.8 -43 58 00 15.6 -64 38 00 15.8 -68 27 00 16.5 -64 34	00 16.6 -20 44 00 16.7 -69 43 00 16.9 -17 28 00 17.1 -67 40 00 17.7 -81 06	00 18.1 -67 57 00 19.6 -39 49 00 20.0 -65 56 00 20.0 -67 21 00 20.3 -39 25	00 21.2 -39 09 00 21.2 -42 32 00 21.3 -38 32 00 21.5 -20 27 00 22.4 -37 02	00 23.0 -33 18 00 23.2 -65 00 00 23.3 -19 29 00 23.3 -27 40 00 23.3 -57 15	00 23.6 -37 38 00 24.0 -51 54 00 24.2 -54 13 00 24.4 -53 38 00 24.8 -47 06
	Abell	\$0001 \$0002 \$0003 \$0004 \$0005	\$0006 \$0007 \$0008 \$0009 \$0010	\$0011 \$0012 \$0013 \$0014 \$0015	\$0016 \$0017 \$0018 \$0019 \$0020	\$0021 \$0022 \$0023 \$0024 \$0025	\$0026 \$0027 \$0028 \$0029 \$0030	\$0031 \$0032 \$0033 \$0034 \$0035	\$0036 \$0037 \$0038 \$0039 \$0040	S0041 S0042 S0043 S0044 S0045	\$0046 \$0047 \$0048 \$0049 \$0050

	В	17.0 17.2 17.3 17.4	16.9 17.3 16.7 17.0	17.2 17.4 17.2 16.8	16.8 17.5 17.4 17.0	17.4 17.4 17.2 15.9	17.4 17.0 16.1 17.2	16.9 16.7 17.2 17.2	16.6 17.4 17.2 17.2	17.4 16.4 17.3 17.4	16.6 17.1 17.3 16.9
-	Ω	വഴഴവ	ຍນນຍນ	ស្លាស្ស	ນນູຍຄ	0 0 W 4 0	∿ υ 4• υ υ	ស ស ស ស 🛧	രവവരവ	04000	വയയവ
	R	00000	00001	04000	00000	04000	00000	00000	00000	40000	00000
	z			(0.0417)		0.0283		0.11 (0.0196)			
	Previous	Ω α	Q QQ	උසුසු දූ	ä	Ω	88 a a	М		Дσ	Ω
	Obs	22223	700 100 100 100	00000	10,10 10,10	99999	00000	99999	00000	20020	22222
	m_{10}	16.8 17.5 18.6 17.9	16.7 18.3 16.5 20.2	17.6 20.1 17.0 16.6 18.6	16.6 21.0 20.0 16.8 17.3	19.3 19.7 17.5 15.7 18.1	19.3 16.8 15.9 17.5	16.7 16.5 17.0 17.4 ? 16.0	16.4 19.1 17.5 17.3 18.6	20.1 16.2 18.6 20.0 18.6	16.4 16.9 18.0 16.7 17.5
	m ₃	16.3 18.3 19.1 15.9	15.4 17.5 15.6 15.6 19.5	15.7 119.4 115.8 115.4	15.7 20.0 19.3 15.9	18.7 18.9 16.8 15.3	18.8 15.4 15.1 15.0 17.2	16.1 15.1 15.7 17.0	15.7 18.9 16.0 16.0	19.5 15.4 18.0 19.5	15.4 17.0 15.6 15.8
	m	14.6 15.6 16.1 18.8	14.6 16.5 14.9 15.3	15.4 18.8 14.1 17.0	15.0 18.6 13.5 15.3	18.0: 18.6: 15.5 17.3	16.8 13.1 15.1 15.3	15.6 15.8 15.4 13.7	15.11 15.3 13.0	19.1 15.1 16.5 19.2 18.0	14.3: 15.9 15.4
	O	26: 26: 1 48 -40:	112 20 1 7 4 4 7 3	21 (71) -44 10	15 (93) 100 -5: 15:	19 65 21 21: 26	1 2 9 9 8 1 4 9 9 8 1 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	26 111 112 111	4 2 9 8 8 8 8 8	68 27: 17 43	23 25 3 28
	T_{B-M}	1 11 111-111 11-1	II. II. R I.II II.II	11-111 11? 11. 11-11	::::::::::::::::::::::::::::::::::::::	11-11 11-11 11 11 11 11 11 11 11 11 11 11 11 11 1	II. III	II-III II III	111111		II-III
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	, ycen	163 29 28 1-114	1 79 31 1-147 62	32 129 137 144 126	60 10 1-167 97	80 46 113 -13	-49 -2 79 111 72	33 -10 29 13 126	103 -26 46 118	-15 85 -148 24 -47	166 -61 -3 17 50
	xcen	-62 -29 -37 -60	-113 -98 120 -128	61 20 2 -160 -38	42 -166 -65 -137 -77	-117 -75 -107 -147	83 86 -136 49	-126 10 -19 -116	-115 117 15 -25 -16	81 -84 127 87 139	-73 43 -134 -66
	Field	F294 F150 F242 F194	F079 F079 F242 F540	F294 F194 F150 F295	F150 F243 F474 F295	F295 F351 F295 F195	F150 F150 F195 F079	F195 F079 F351 F411	F195 F150 F351 F295 F295	F474 F195 F1150 F112	F195 F079 F541 F195
	9	-79.19 -62.59 -72.23 -64.86	53.76 51.27 47.97 69.20	-77.49 -69.54 -64.77 -77.99 -54.69	-63.45 -72.51 -87.61 -79.04	-78.77 -83.01 -77.68 -67.16	61.49 62.37 68.87 52.60	68.01 52.21 82.86 87.56	69.32 61.97 83.20 79.60	87.86 68.96 59.71 57.86 61.60	70.45 51.26 82.62 67.67 88.07
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	ycen	125 125 -9 35	98 35 15 -64	55 -113 -27 23	-112 108 141 30	118 -105 69 29 -61	114 -19 -71 35	107 -75 -52 124 101	1 -95 -16 -141	-107 115 132 93 29	-29 -100 35 58 129
	Lcen	-62 14 60 -87	22 74 101 99 -42	-2 62 63 -118 -9	-8 -8 -35 -101	53 111 118 29 31	-83 137 -52 53 53	73 62 18 74	3 93 88	25 105 -92 -30 71	74 -118 80 155 -105
	Field	F195 F295 F002 F013	F295 F002 F411 F411	F243 F079 F295 F195	F195 F195 F541 F412 F295	F243 F295 F295 F195	F113 F295 F013 F195	F051 F195 F412 F412	F412 F113 F541 F412 F195	F412 F195 F080 F296	F412 F196 F151 F195
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	xcen	109 -94 -140 -19	52 -12 -61 -92	85 -4 117 -64 -51	-45 -45 0 22 119	-51 -49 90 32 -126	108 66 -90 -75	-59 79 -90 -81	63 -154 27 134 -12	-110 91 -120 107 53	-50 131 22 57 59
	Field	F412 F196 F113 F413	F296 F113 F013 F413	F113 F196 F296 F052	F413 F353 F413 F080	F052 F052 F244 F413	F029 F413 F543 F543	F543 F353 F080 F114	F353 F197 F152 F413	F030 F353 F414 F080	F114 F353 F052 F543
	9	-82.71 -64.88 -57.18 -82.96 -70.11	-75.74 -56.89 -35.93 -81.56 -79.82	-58.23 -64.61 -72.84 -48.87 -79.34	-79.64 -79.10 -80.42 -52.25 -59.15	-47.54 -47.95 -67.62 -79.84	-43.17 -79.21 -75.15 -74.64 -71.80	-76.15 -75.62 -53.84 -57.42 -54.39	-76.09 -65.68 -59.14 -77.89	-43.61 -74.79 -77.60 -53.07	-53.84 -76.11 -46.82 -72.61
	7	241.85 292.14 296.08 226.30 285.82	275.08 295.02 301.34 214.40 249.87	293.19 288.18 276.40 297.00 245.90	241.02 247.05 219.20 295.37	297.20 296.97 282.61 216.31	298.59 218.84 175.21 174.69 271.61	183.96 256.13 292.83 290.37	252.14 281.40 288.46 224.27 180.67	297.55 255.85 222.37 292.26 287.16	291.70 240.65 295.44 179.58 187.61
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	RA (1950) Dec	01 18.7 -30 43 01 18.8 -51 53 01 18.9 -59 49 01 20.3 -28 48 01 22.4 -46 10	01 23.5 -39 44 01 23.9 -59 58 01 25.0 -81 21 01 27.0 -27 17 01 27.9 -33 10	01 28.5 -58 25 01 29.7 -51 36 01 30.2 -42 22 01 31.4 -68 02 01 31.6 -32 47	01 32.1 -31 51 01 32.1 -33 05 01 32.2 -28 01 01 32.6 -64 30 01 32.7 -57 16	01 33.7 -69 21 01 34.2 -68 55 01 34.7 -47 56 01 34.8 -27 31 01 35.1 -20 12	01 35.6 -73 50 01 37.7 -27 58 01 38.1 -17 47 01 39.3 -17 20 01 39.9 -42 22	01 40.5 -20 06 01 41.2 -36 37 01 41.2 -62 31 01 41.4 -58 41 01 41.7 -61 55	01 42.0 -35 33 01 42.9 -49 24 01 43.3 -56 42 01 43.5 -29 06 01 44.1 -18 27	01 44.1 -73 12 01 44.8 -37 03 01 44.9 -28 43 01 46.4 -63 07 01 46.6 -56 07	01 46.6 -62 17 01 47.8 -33 04 01 49.2 -69 41 01 49.5 -17 02 01 49.9 -19 47
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	ycen	28 23 66 66	-149 76 77 65	-91 -17 116 -22 -46	146 4 84 -55 158	146 -53 132 -10	21 60 97 161 104	100 -123 22 59 51	85 94 -1 103	-99 18 18 78	145 -8 131 -111
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	Field	F245 F543 F354 - F197	F354 F543 F013 F081	F013 F081 F477 F298 -	F298 - F245 F197 F354	F245 F197 F298 F245	F415 - F245 F298 F197	F415 F415 F354 F197	F053 - F415 F197 F014	F081 F415 F415 F415	F415 F298 F081 F355
	q	68.95 73.53 75.18 65.05 56.68	72.86 72.37 56.74 38.15 51.26	35.38 50.58 73.75 70.62	72.18 67.54 64.85 72.66 73.75	68.77 62.44 71.15 66.68 53.62	72.53 71.81 67.52 70.64 64.01	71.93 71.61 71.03 63.21 71.01	47.14 70.92 71.25 63.45 34.58	49.88 70.38 70.53 70.17	70.27 67.60 51.84 68.57 60.50
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IABLE	T_{B-M} C m_1 m_3 m_{10} Obs Previous z R D	III -59 15.1 15.8 16.7 10 0 5 16.1 III 16 15.6 16.0 16.8 10 0 5 17.1 III 12 18.0 18.9 19.1 10 BQ 0 6 17.1 III 7 17.6 18.1 18.6 10 BQ 0 6 17.	II 22 17.4 18.4 19.4: 1C 0 6 17. III 34 19.5 19.7 19.9 10 0 6 17. III 26: 15.9 17.4 18.0 10 0 6 17. I -89 14.2 15.9 16.1 10 BD 0 4 16.	II 0 15.3 16.0 16.8 20 0 5 16. II 10 15.4 16.5 17.1 10 D 0 5 17.1 11 24 14.97 16.1 17.2 10 0 5 17.1 11 11 11 14.97 16.1 17.2 10 0 6 17.1 11 11 11 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 17.1 17.1 10 0 6 1 16.1 10 0 6 1 16.1 10.1 10 0 6 1 16.1 10.1 10	III-III 28: 16.0 17.5 18.0 10 B 0 6 17. I-II 13: 15.3: 15.6: 16.0: 10 s 0 4 16. I-II 17 15.5 15.9 17.4 10 BDQ 0 5 17. II-III 112 19.1 19.5 20.0 1C 2 6 17.	III 21 16.7 17.4 18.3 20 BDQ 0.1716 0 6 17. III 23 18.1 18.8 19.2 10 BDQ 0.1716 0 6 17. III 28 14.2 15.4 18.8 10 BDQ 0.1716 0 6 17. III 26 13.3 17.5 18.3 20 0 6 17. III -10 14.7 15.5 16.1 10	III 41 18.2 19.4 19.8 10 0 6 17. III: 8 17.6 18.3 18.7 1C 0 6 17. III: 23 15.4 15.8 17.9 10 0 6 17. III-III 23 15.7 16.0 10 D (0.2197) 0 4 16.	III-III 7 17.57 18.7 19.4 10 0 6 17.7 17.57 18.1 19.3 10 0 6 17.7 11.1 17 17.6 18.07 18.7 1C 0 6 17.7 1III 26 16.0 18.5: 19.3 20 BQ 0 6 17.7 1 1 (104) 17.9: 19.2 20.1: 2C 16.0 18.5 19.3 2C	III 120 18.57 18.9 19.8 1C 2 6 17.9 18.1 18.8 19.8 1C 2 6 17.1 1 2 0 18.1 18.8 19.5 10 10 10 10 10 10 10 10 10 10 10 10 10	I-II 58 14.6 15.3 16.7 10 BD 0 5 16.7 10.1 III 58 18.1 19.0 19.8 10 1 6 17.1 III 30.1 19.1 19.8 19.0 10 0 6 17.1 III 20 17.8 18.8 19.3 10 0 6 17.1	II 21: 15.1 16.1 17.4 10 0 5 17. I-II -15: 14.9 15.9 16.8 10 0 5 17. II 4 15.6 15.9 17.0 20 D 0 5 17. II: 83 18.7 19.3 20.0 1C 2 6 17. I-II -3 13.5 14.7 16.1 10 B 0.0484 0 4 16.

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	m	18.0 13.5* 15.4 18.5	19.3 14.8 16.0	15.1 15.1 14.0 18.1	19.2 14.6 13.9 15.1	16.0 17.9 13.8 12.9	15.2 14.7 18.4: 14.6	15.4 13.7 16.2 16.7	.0 18.9 15.3 17.3	16.1 15.4 16.5? 18.8?	13.6 15.3 19.1 18.3
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	ТВ-М	111-111 111-111 111 1111		11-11 11-111	111 1-11 11-11	III II-II	::::::::::::::::::::::::::::::::::::::		11-11 11-11 11-11 111	1 1-11 11-111 111?	11111
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TABLE 5—		117 215 173 26 203	132 213 173 203 108	246 226 236 97	223 36 311 50	212 38 279 264 113	173 177 272 285 173	70 95 137 198 81	160 129 307 54 275	206 286 290 259	296 56 300 83
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	Field	F153 F246 F246 F081	F415 F081 F415 F115	F081 F081 F478 F355	F415 F246 F545 F545 F479	F299 F299 F545 F115	F014 F198 F355 F299	F299 F081 F198 F115	F247 F545 F115 F299	F416 F198 F247 F356	F247 F299 F154 F053
	q	-57.11 -65.07 -64.56 -47.42 -67.12	-69.37 -50.36 -69.13 -54.20	-50.80 -50.47 -68.21 -67.86	-68.76 -62.53 -65.18 -67.16	-66.31 -64.92 -65.08 -54.58 -59.64	-36.51 -60.24 -66.90 -65.97	-64.34 -47.98 -59.50 -53.29 -47.66	-62.54 -64.97 -54.67 -63.65	-64.93 -59.95 -61.07 -64.71	-62.07 -62.13 -54.12 -46.14 -62.08
	1	279.35 261.12 262.53 290.13	227.56 287.23 225.33 282.50 242.29	286.48 286.77 208.45 242.65 198.17	222.74 266.27 194.09 205.92 218.04	248.97 256.09 195.82 280.22 270.85	297.59 268.76 235.71 245.07 281.56	253.87 287.64 269.44 280.89	260.04 203.15 278.34 253.83 264.50	224.01 263.15 259.15 231.92 271.52	253.51 252.29 275.84 287.22 250.98
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	Abell	S0251 S0252 S0253 S0254 S0255	S0256 S0257 S0258 S0259 S0260	S0261 S0262 S0263 S0264 S0265	S0266 S0267 S0268 S0269 S0270	\$0271 \$0272 \$0273 \$0274	\$0276 \$0277 \$0278 \$0279 \$0280	S0281 S0282 S0283 S0284 S0285	\$0286 \$0287 \$0288 \$0289 \$0290	S0291 S0292 S0293 S0294 S0295	\$0296 \$0297 \$0298 \$0299 \$0300

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	Field	F416 F356 F053 F247 F154	F300 - F199 F116 -	F082 F115 F199 F247	F356 F199 F347 · F356	F248 - F014 F155 F248 F199	F199 F031 F248 F199	F054 F300 F417 F248 F248	F248 F417 F200 F155	F200 F248 F248 F248	F200 F418 F083 F054
	q	-63.96 -63.48 -42.84 -61.05	-61.22 -56.76 -56.18 -49.74 -57.50	-46.38 -49.78 -57.31 -59.93	61.14 56.44 58.27 61.08	-57.22 -35.87 -51.71 -56.26	-54.01 -41.24 -56.08 -54.88	-43.74 -58.11 -58.38 -56.07	-56.01 -57.78 -52.89 -51.96	54.39 55.71 55.88 55.54	-53.57 -56.69 -45.52 -43.96
	7	229.02 - 239.02 - 290.63 - 253.54 - 273.47 -	250.31 - 267.11 - 268.48 - 281.16 - 264.67 -	285.69 - 280.83 - 263.91 - 252.61 - 266.36 -	241.13 - 263.70 - 202.84 - 230.95 - 248.45 -	258.71 - 295.87 - 272.93 - 259.02 - 265.84 -	266.67 - 289.56 - 257.71 - 262.37 - 264.77	285.88 - 244.13 - 225.36 - 254.60 - 256.85 -	253.77 - 226.18 - 265.63 - 267.81 - 221.63	259.08 - 252.27 - 251.03 - 251.93 - 254.75 -	260.74 225.72 280.81 283.48
	RA (2000) Dec	2 49.6 -31 11 2 49.7 -35 38 2 48.6 -71 22 2 51.7 -42 47 2 52.0 -55 14	2 53.9 -41 16 2 54.0 -50 58 2 54.3 -51 55 2 53.8 -61 53 2 54.7 -49 27	02 54.4 -66 24 02 54.8 -61 42 02 57.0 -49 12 02 58.2 -42 47 02 59.2 -51 01	3 00.3 -37 02 3 01.9 -49 33 3 03.2 -17 48 3 03.1 -32 09 3 03.8 -40 55	3 05.3 -46 46 3 02.7 -79 23 3 08.7 -56 39 3 10.0 -47 19 3 09.8 -51 40	3 09.8 -52 14 13 09.4 -72 06 13 12.7 -46 43 13 12.6 -49 37 13 13.1 -51 14	3 12.3 -68 25 13 13.9 -39 05 13 15.2 -29 14 13 16.3 -45 07 13 17.1 -46 31	3 17.5 -44 42 3 18.1 -29 38 3 18.2 -52 15 3 19.3 -53 52 3 20.4 -27 06	3 20.1 -48 06 3 20.5 -43 59 3 20.8 -43 16 3 21.7 -43 51 3 21.8 -45 32	3 22.4 -49 19 3 23.0 -29 17 3 23.0 -64 33 3 22.9 -67 00 3 22.2 -74 19
	RA (1950) Dec	02 47.5 -31 24 0 02 47.7 -35 51 0 02 48.3 -71 35 0 02 49.8 -43 00 02 50.5 -55 27 0	02 52.0 -41 29 0 02 52.4 -51 11 0 02 52.7 -52 08 0 02 52.7 -62 06 0 02 53.0 -49 40 0	02 53.6 -66 37 0 02 53.7 -61 55 0 02 55.3 -49 25 0 02 56.4 -42 59 0 02 57.6 -51 13 0	02 58.3 -37 14 0 03 00.3 -49 45 0 03 00.9 -18 00 0 03 01.0 -32 21 0 03 01.9 -41 07	03 03.6 -46 58 0 03 04.4 -79 35 0 03 07.4 -56 51 0 03 08.3 -47 31 0 03 08.3 -51 52 0	03 08.3 -52 26 03 09.4 -72 18 03 11.0 -46 55 03 11.0 -49 49 03 11.6 -51 26	03 11.8 -68 37 0 03 12.0 -39 17 0 03 13.1 -29 26 0 03 14.6 -45 18 0 03 15.4 -46 42 0	03 15.8 -44 53 0 03 16.0 -29 49 0 03 16.7 -52 26 0 03 17.9 -54 03 0 03 18.3 -27 17 0	03 18.5 -48 17 0 03 18.8 -44 10 0 03 19.0 -43 27 0 03 20.0 -44 02 0 03 20.1 -45 43 0	03 20.8 -49 30 0 03 20.9 -29 28 0 03 22.3 -64 44 0 03 22.4 -67 11 0 03 22.7 -74 30 0
	Abell	\$0301 \$0302 \$0303 \$0304 \$0305	\$0306 \$0307 \$0308 \$0309 \$0310	S0311 S0312 S0313 S0314 S0315	\$0316 \$0317 \$0318 \$0319 \$0320	80323 80323 80323 80323 80324	\$0326 \$0327 \$0328 \$0329 \$0330	\$0331 \$0332 \$0333 \$0334 \$0335	\$0336 \$0337 \$0338 \$0339 \$0340	S0341 S0342 S0343 S0344 S0345	\$0346 \$0347 \$0348 \$0349 \$0350

	a	17.4 17.2 16.0 16.9	16.2 16.8 17.2 17.4	17.0 16.2 16.6 17.0	16.3 16.2 17.2 17.2	17.2 16.1 10.3 17.2 16.7	17.2 15.6 17.0 17.3	17.2 17.2 17.2 15.7	17.3 17.2 17.4 17.1	17.2	17.3 17.3 16.6 17.5
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	8	0.0410			0.0598	0.0758	0.0425		0.0605	0.0454	0.0394
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	m ₁₀	19.3 17.5 15.8 16.7 17.2	16.0 16.6 17.1 19.5	16.8 16.0 16.4 16.8	16.1 16.0 17.2 17.5 16.7	17.1 15.9 10.1 17.4	17.1 15.4 16.8 18.0	18.0 17.4 17.8 7 15.5 : 16.6	18.1 17.0 ? 19.9 17.1 16.5	20.1 17.1 16.1 17.7 16.8	18.0 18.0 17.6 16.4
	m ₃	18.6 16.8 15.3 15.6	15.1 15.5 16.8 19.3	16.0 15.9 15.6 15.6	15.3 14.7 15.9 16.6	16.0 15.3 9.6 16.8	7 15.4 14.6 15.9 17.5	17.4 16.2 16.2 14.8	17.1 15.9 18.5 15.4	19.2 16.7 14.9 16.9	16.8 17.1 17.3 16.1
	m ₁	16.6 15.8 15.2 15.4	14.6 14.5 18.9 15.0	14.5 15.3 15.3 14.5	14.8 15.4 15.4 15.6	15.7 14.5 9.4 16.4	13.1 13.7 15.5 15.5	16.8 15.7 13.4 15.0	17.0 15.4 18.1 14.9	18.6 14.5 16.2	15.8 16.6 15.1 19.2
	C	17 19 26: -42	10 26 13 12	27 -74 5 9:	-5 -13 12 23	4 7: 13	11: 19: -67 -70	27 26 14	17 -35 (80) -65	77 11 12 15:	26 20 27 11 (79)
	T_{B-M}	1 111-111 111 11-11	1-11 11-111 111-111	1 11-11 11-111-11-11-11-11-11-11-11-11-1	111111	11-111 1-11 111 111		1-11 11 11-111 1	111 111-1117 11-111	1117 1-11 11-111 11-111	11-111 11-111 11-111 1-11
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	Ycen	27 112 -84 112 -82	-62 -68 -130 38	119 32 66 18 -139	68 -18 102 47 129	-21 -31 -21	106 -17 16 27 -13	124 -62 -103 -72 163	-55 -87 -57 -57	71 31 -35 -98	16 -77 -67 -60 -92
	Lcen	-140 -130 -46 -70	109 130 4 15 13	54- 146 50 52	-139 -98 -26 -93	-82 -116 2 71 71	116 -90 -4 149 79	16 13 78 -103	-55 -19 -160 -43	68 80 24 -35	40 21 84 16 -69
	Field	F358 F358 F200 F116	F248 F481 F200 F548	F358 F083 F301 F301	F156 F249 F358 F117	F117 F156 F358 F200	F301 F156 F083 F548	F083 F083 F362 F358	F419 F117 F359 F003	F482 F054 F249 F419	F083 F419 F249 F156
	q	-56.29 -56.07 -52.13 -48.97	-53.59 -54.40 -51.89 -52.99 -51.98	-54.55 -44.86 -54.54 -54.05	-50.03 -52.83 -54.14 -47.46 -53.87	-46.67 -48.94 -53.63 -50.57	-53.03 -48.58 -44.03 -49.76 -37.62	-44.80 -42.95 -52.19 -51.77	-51.59 -45.05 -51.81 -30.39	-50.15 -40.90 -50.55 -51.08	-43.32 -50.57 -49.33 -47.28
	1	234.88 - 232.07 - 263.46 - 272.09 - 282.35	254.74 - 220.61 - 260.48 - 214.55 - 259.35 -	231.97 - 279.56 - 233.66 - 243.67 -	265.72 - 252.97 - 232.51 - 272.87 - 231.68 -	274.38 - 268.05 - 236.73 - 260.38 - 262.38	240.68 - 267.43 - 279.28 - 211.23 - 290.21	276.65 - 280.69 - 238.88 - 245.97 - 230.81	229.40 - 275.12 - 235.36 - 265.26 - 265.26	217.89 - 284.07 - 252.71 - 227.48 - 261.79 -	278.66 230.24 253.24 264.36
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	RA (1950) Dec	03 23.7 -34 30 03 24.9 -32 56 03 24.9 -51 35 03 26.6 -57 54 03 27.4 -66 32	03 28.0 -46 09 03 29.2 -26 16 03 30.8 -49 59 03 31.5 -22 27 03 31.8 -49 18	03 32.0 -32 50 03 32.1 -64 25 03 32.2 -33 49 03 33.0 -39 40 03 33.5 -42 35	03 33.6 -53 45 03 33.8 -45 20 03 34.0 -33 08 03 34.6 -59 07 03 35.2 -32 38	03 35.9 -60 24 03 36.0 -55 35 03 36.6 -35 37 03 38.7 -50 23 03 39.0 -51 46	03 39.1 -38 00 03 39.5 -55 22 03 39.6 -64 43 03 41.9 -19 29 03 42.0 -75 10	03 42.7 -62 43 03 42.8 -66 10 03 43.6 -36 57 03 44.0 -41 20 03 45.1 -31 58	03 45.4 -31 05 03 45.4 -61 39 03 45.5 -34 47 03 45.5 -85 47 03 45.7 -54 11	03 45.8 -23 41 03 45.8 -69 24 03 46.7 -45 42 03 47.1 -29 50 03 47.3 -51 49	03 47.4 -64 43 03 50.4 -31 30 03 53.2 -46 17 03 53.2 -53 57 03 53.7 -36 43
	Abell	\$0351 \$0352 \$0353 \$0353 \$0354	\$0356 \$0357 \$0358 \$0359 \$0359	\$0361 \$0362 \$0363 \$0364 \$0364	\$0366 \$0367 \$0368 \$0368 \$0369	\$5 \$5 \$7 \$037 \$7 \$037 \$7	\$0376 \$0377 \$0378 \$0379 \$0380	S0381 S0382 S0383 S0384 S0384	\$0386 \$0387 \$0388 \$0389 \$0390	S0391 S0392 S0393 S0394 S0395	\$0396 \$0397 \$0398 \$0399 \$0400

	B	17.2 16.8 17.6 15.7 16.9	17.2 17.4 17.2 17.2	16.1 16.3 17.2 17.4	16.8 17.3 15.4 17.4	17.4 17.5 17.0 16.9	15.6 17.5 17.1 16.1	17.2 16.8 16.5 16.8 17.5	17.2 17.2 17.3 17.4	17.5 17.0 17.6 17.4	17.2 17.3 17.2 15.9
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	m³	16.7 15.9 20.5 15.3	16.5 19.2 16.8 16.0	15.3 15.7 15.4 19.1	15.1 17.6 14.4: * 18.9	18.7 19.6 16.1 15.5	15.4 19.3 16.0 15.3	16.8 15.8 15.3 15.3	15.4 17.1 19.2 15.9	19.7 15.8 20.8 19.5	16.3 15.8 15.9 15.3
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	C	10 -56? (61) 23	12 1 29 8 -29	-17 -1 -7 07	-13 19 12 15	20 13 12 11:	-18 73 20 -3 91	16 -70 2 7 58	0 -8 3: 96	102 -48 0* 49:	27 28 0 -16
	T_{B-M}	111-111 111: 111: 11-11		I-II III-III III-III	1-11 11: 11: 11: 11: 11:		1 111-111 111 111:	1-11 11 11 113		11 11-11 111? 1111	
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ABLE	y.	213 200 195 34	210 152 66 242 179	153 322 216 193 111	19 99 73 44	9 8 8 4 4 9 8 8 3 9 9 8 8 2 6	00 00 76 63	40 40 40 40 40 40	09 01 885 71	34 81 37 57	1110 1118 224 232
1/	nx i	23772	66 2 190 1 107 278 2 100 1	36 2 1 64 1 64 1 1 69 1 69 1 1 69 1 69 1 1 69 1	26 2 32 2 32 2	51 2 24 1 24 2 39 1	38 1 219 2 224 1 38 286 2	65 2 02 1 55 1 37 2	115 3 116 2 117 96 1	89 2 77 1 85 2 80 1	78 1 65 1 56 2 53 2
	ycen	31 5 1 2 3 1 2 3 2 3 2 3 2 3 2 3 3 3 3 3 3 3	w ca co co	182281	555 2 655 2 09 1 20 2	32 33 2 2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 98 8 2 2 9 2 2 2	70 28 2 50 1 30 1	45 1 37 1 27 1 07 1	70 83 2 93 1 11 1	54 46 60 15 15 15
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	9	7.4.0 6.96.0 7.4.0 7.4.0 7.4.0 7.4.0	2.73 F 7.78 F 3.71 F 0.53 F	1.94 F 2.23 F 6.71 F 3.48 F	7.94 F 1.20 F 8.08 F 7.12 F	6.65 F 7.39 F 7.48 F 3.29 F	2.94 F 3.97 F 6.30 F 3.78 F	5.87 F 8.83 F 5.16 F 1.33 F	54 12 12 13 15 15 15	1.44 F 4.14 F 1.85 F 5.75 F	4.52 F 3.83 F 3.14 F
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	(2000) D	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 -63 6 -50 2 -61 5 -68 6 -59	3 -64 7 -56 7 -63 1 -24 -60	2 - 4 0 - 4 2 - 4 7 - 4	9 -27 11 -22 5 -44 6 -43 0 -60	5 -60 0 -19 7 -75 8 -61 2 -57	8 -48 6 -69 5 -50 1 -17	7 - 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 -18 3 -51 3 -20 9 -43 6 -74	0 -45 8 -30 7 -33 3 -27 1 -68
	RA (20	55.5	57.6 58.6 58.2 57.5	00.8 01.7 02.7 04.4 03.7	04.8 03.7 06.0	07.9 08.1 07.5 08.0	08.5 06.7 10.0	12.6 14.6 16.6	18.8 18.8 19.9	20.5	2233
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	4 (19	54.2 54.3 55.1 56.0	57.0 57.2 57.4 57.7	00.3 00.6 02.1 02.3	03.2 03.3 04.2 04.5	05.9 05.9 06.0	07.7 07.8 07.8 08.1	11.4 12.7 13.2 14.9	17.1 17.2 17.2 17.5	18.2 19.0 19.1 20.3	21.5 21.8 21.8 22.3 23.1
	RA	88888	00000	44444	00000	00000	00000	00000	00000	00000	44444
	Abell	\$0401 \$0402 \$0403 \$0404 \$0405	\$0406 \$0407 \$0408 \$0409 \$0410	S0411 S0412 S0413 S0414 S0415	S0416 S0417 S0418 S0419 S0420	\$0421 \$0422 \$0423 \$0424 \$0425	S0426 S0427 S0428 S0429 S0430	\$0431 \$0432 \$0433 \$0434 \$0435	S0436 S0437 S0438 S0439	S0441 S0442 S0443 S0444 S0445	S0446 S0447 S0448 S0449 S0449

	B	17.4 16.8 17.0 16.7 17.0	17.4 17.1 17.2 16.3 17.5	16.8 17.2 15.3 16.1 15.3	17.2 16.6 16.7 17.2 16.8	16.9 17.0 16.8 17.1	16.1 16.6 16.3 16.2 17.1	16.6 17.5 17.2 16.1 17.1	16.9 15.2 16.8 16.0	16.9 16.9 16.9 17.3	15.8 17.4 17.2 14.9
	Ω	വവവവയ	δ τυ τυ 4 . 0	ででしょ し	വവവവവ	വവവവവ	40440	លេសល4ល	ល ម ល 4 ល	໙໙໙໙໙	44000
	R	40000	0000m	00000	00000	00000		0000	00000	00000	0000
	8			0.0539	0.0675		0.0363		0.0372		0.0329
	Previous		ф	дS	Ω		ø	Ω			BD
	Obs	100000	10000	22222	22222	99999	99998	22222	99999	22222	99999
	m ₁₀	20.1 16.6 16.8 16.5	19.8 16.9 17.2 16.1	16.6 17.4 15.1 15.9	17.3 16.5 16.5 18.9	16.7 16.8 16.7 17.5	15.9 16.4 16.1 16.0	16.4 20.4 17.2 15.9	16.7 15.0 16.6 15.8	16.6 16.8 16.8 19.6	15.6 15.6 19.3 18.6
	m³	19.5 15.9 15.0 15.0	19.5 15.9 16.4: 15.4	16.0 17.0 13.7 14.7	15.9 15.9 15.4 15.3	15.6 15.9 15.3 16.8	15.5 15.5 15.4 16.8	15.4 19.6 16.8 14.7	15.4 14.2 16.0 15.2	15.8 15.5 18.5 18.6	15.4 14.8 18.4 17.1
	m	19.2 15.7 15.3 13.8	19.4 15.1 15.4 15.1	14.61 13.3 12.2 12.6	16.17 15.4 16.6	14.1 15.1 16.0 16.0	14.8	41 119 119 119 119 119 119 119 119 119 1	14.8 13.3 15.0 13.8	15.4 15.4 18.0	15.1 13.4 16.6 15.5
	Ö	(78) -17: 29: -15	41 -29 20 0 (133)	12 24 26 27:	17 -50: 1 20 13	22 -41 2 26:	12440	(50) 26 5	22 3 13;	-16 -3 -29: 0	-10 -22 27 27 -11?
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Ţ	nx.	124 37 163 214	42 206 286 277 150	194 125 134 1117 241	240 1114 253 220	195 318 150 145	282 1118 164 1113	157 314 278 272	173 172 126 253 115	250 ; 69 65 59	214 118 201 51
	Ycen	119 66 120 81 79	44 99 140	-32 114 57 -93	1117 160 -64 -47	81 -135 -18 -18	114 117 180 180	124 138 138 138	-23 16 18 -109	111 -70 -101 -74	-54 11 -151 41 129
	x cen	40 127 120 -50	122 -122 -113 14	-30 39 47 -77	-76 -89 -32 -56	-31 -154 14 19	-118 46 0 51 -14	7 -150 -114 -108	0 1 1 8 4 0 8 8 9 0	-86 95 105 17	-50 46 -37 113
	Field	F303 F420 F360 F250	F250 F202 F421 - F084	F202 F360 F157 F360	F421 F055 F251 F551	F421 F361 - F551 F551	F304 - F421 F202 F004	F421 F158 - F361 - F361 -	F251 F421 F361 F421	F361 F551 F551 F551 F251	F361 F251 F361 F421
	q	-44.20 -42.97 -43.65 -44.16	-43.89 -43.49 -42.86 -42.31	-43.08 -42.96 -42.35 -43.21 -42.02	-41.56 -38.40 -43.00 -39.41	-40.91 -42.03 -39.11 -38.35	-42.16 -41.81 -40.96 -41.46	-40.36 -40.68 -40.82 -41.13	-41.55 -41.53 -39.90 -40.95	40.27 37.31 37.41 37.14	-40.09 -40.52 -40.09 -38.44
	1	40.35 27.93 33.40 48.23 55.29	251.57 - 256.18 - 229.61 - 227.43 - 273.40 -	58.06 33.67 62.43 38.97 29.74	227.20 - 278.83 - 251.95 - 218.41 -	28.36 38.12 20.78 18.16 57.79	43.16 56.57 32.60 58.97 99.07	29.48 64.76 34.46 37.86 85.69	250.83 - 249.87 - 230.22 - 239.65 - 226.89 -	34.32 - 19.87 - 20.62 - 53.57 -	38.44 49.97 40.83 30.05
	16	71087	46 07 08 18 2	200000	84.0 / 8	04000	86048	114 022 032 037 037 037	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 112 114 117 26 26 26 27	2 2 4 4 7
) Dec	-32 4 -43 2 -43 2 -48 2	445 4621 4629 4629	132 4 132 4 136 4 136 4	-22 -46 -20 -31 -44	-2283 -2255 -201 -201	-39 -39 -31 -51 -85 -85	-29 -33 -33 -73 -73	1445 12443 1365 1270	-212- -212- -2114-	-35 -37 -29 -62 -62 -62
	(2000)	6.0	7.9 6.9 6.9 7.6 7.6	8 8 8 0 4 6 4 5 6 6	7 2 7 6 2		6.6 6.9 6.9 7.8 7.9	8.8 8.1 9.9 7.6	24482	4.0 6.0 4	6.15
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	0) Dec	122 132 132 132 132 132 132 132 132 132	1 1 1 1 1 1 4 4 5 5 5 5 5 5 5 5 5 5 5 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-27 -67 -20 -31	1778	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133	-445 -239 -27	-32 -21 -21 -47	134
	(1950)	0.4444	8 6 6 5 5 2	98979	9.7 0.1 0.7 1.3	84444 80478	46.000	6.8 8.0 8.3 8.5	88000 70400	0.5	C 4 4 2 3 C 8 8 2 5
	RA	00000 44444 44444	00000 44444	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0000 4440 0000 0000	00000 44444 60000	00400	004	00 00 00 00 00 00 00 00 00 00 00 00 00	00000 44444	0 4 4 4 4 4 4 4 4 4 4 4 4
	Abell	\$0451 \$0452 \$0453 \$0453 \$0455	\$0456 \$0457 \$0458 \$0459 \$0460	\$0461 \$0462 \$0463 \$0464 \$0465	\$0466 \$0467 \$0468 \$0469 \$0470	S0471 S0472 S0473 S0474 S0475	\$0476 \$0477 \$0478 \$0479 \$0480	\$0481 \$0482 \$0483 \$0484 \$0485	\$0486 \$0487 \$0488 \$0488 \$0490	\$0491 \$0492 \$0493 \$0494 \$0495	\$0496 \$0497 \$0498 \$0499 \$0500
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	Ħ	17.0 17.3 17.5 17.3	17.4 17.3 17.1 16.9 17.1	17.1 15.9 16.6 17.1 16.0	17.4 17.3 17.1 17.3	14.6 16.9 17.3 15.2	17.3 16.5 16.6 17.1 17.1	17.1 16.7 17.1 16.0 15.5	14.8 15.8 15.6 17.3	16.3 15.7 17.1 17.3 15.6	16.6 16.7 17.1 16.6 15.6
ŀ	Q	N 0 0 0 4	വവവഴഴ	ល4លល4	စစည္စစ	20985	വവവവ	ღ ო 4 ო	04m9m	44000	មេខាធាធា
	굞	00100	00000	00000	00000	00000	00000	00000	00010	00000	00000
	z	0.0768				0.0150			0.0358	0.0519	0.0403
	Previous	Д				Q Q	ဝိဝဝ		Œ	ВО	
	Obs	20000	100000	100000	10 10 10 10 10	55555	10,10 20 10,10 10	22222	20000	10000	20000
	m ₁₀	16.9 19.1 20.4: 19.9	21.0 19.4 17.1 16.8 17.3	17.4 15.8 16.5 17.1	20.9 19.8 17.2 20.1	14.5 16.8 19.8 15.1	19.3 16.4 16.5 17.1	17.5 16.6 17.3 15.9	14.7 15.7 15.5 19.7 15.3	16.2 15.6 17.4 19.4	16.5 16.7 17.3 16.5 15.5
	m ₃	15.6 18.8 19.7 19.4	20.3 19.0 16.4 15.8	16.7 15.4 15.9 15.9	20.0 19.0 16.1 19.0:	12.9 15.6 19.1 13.5	18.8 15.5 15.5 15.7 16.1	17.3 15.7 16.0 15.3	13.8 15.4 15.1 19.1	15.8 15.1 15.9 18.6	15.1 16.1 16.1 14.5
	m ₁	13.5* 18.3 19.2: 19.2:	19.9 18.8 15.4 15.1	15.2 13.7 15.2 15.7 15.7	19.3 18.2: 15.4: 19.4	12.1 15.1 18.4: 12.9	17.8 15.0 15.1 15.1	15.8 14.6 15.5 13.3	12.7 15.0 14.4 18.7 12.8	15.1 13.8 15.4 17.5	14.8 115.9 115.3
	ت ا	2 21 (67) 86 -12	(121) 0 22 -51 20	15 21 -52 -23? 16	(93) 85 29 86 (83)	0 19 17 24	19: 21: 25: 11	112 122 124 17	-22 -11: 74:	-97 -111 28 28	23 -54? -57:
	Тв-м			!! !!!! !!!!!		1 1-11 11-111 11-111	11-11	IIIIIII	11-11		
	T_A	HHHH	пиния	HHHHH	r r r r	HILI	R IR IR I	ннннн	нанна	RI I I	R I I I
Continued	Abell	\$0501 \$0502 \$0503 \$0504 \$0505	\$0506 \$0507 \$0508 \$0509 \$0510	S0511 S0512 S0513 S0514 S0515	S0516 S0517 S0518 S0519 S0520	S0521 S0522 S0523 S0524 S0524	\$0526 \$0527 \$0528 \$0529 \$0530	S0531 S0532 S0533 S0534 S0535	\$0536 \$0537 \$0538 \$0539 \$0540	S0541 S0542 S0543 S0544 S0544	S0546 S0547 S0548 S0549 S0550
TABLE 5	RA (1950) Dec RA (2000) Dec l b Field xcen ycen x11 y11	501 04 48.9 -51 13 04 50.1 -51 07 258.30 -39.57 F202 156 -68 8 96 850.2 04 49.2 -37 39 04 50.9 -37 33 240.72 -39.20 F304 32 127 132 291 853 04 50.1 -47 42 04 51.5 -47 37 253.73 -39.54 F203 90 124 254 288 504 04 54.1 -55 16 04 55.1 -55 11 263.39 -38.41 F158 -23 -14 187 150 505 04 56.7 -46 41 04 58.1 -46 36 252.42 -38.42 F252 -110 -90 274 74	506 04 59.0 -24 29 05 01.1 -24 24 225.21 -34.32 F486 -111 28 275 192 507 04 59.4 -34 31 05 01.2 -34 26 237.20 -36.69 F361 124 24 40 188 508 05 01.7 -38 52 05 03.4 -38 47 242.65 -36.92 F305 -108 61 2.72 225 509 05 03.1 -37 17 05 04.8 -37 12 240.75 -36.42 F305 -95 146 259 310 510 05 05.1 -39 31 05 06.8 -39 27 243.56 -36.36 F305 -72 27 236 191	1 05 06.6 -62 03 05 07.1 -61 59 271.56 -35.90 F085 -12 160 176 324 3 05 07.3 -37 49 241.64 -35.69 F305 -50 115 214 279 3 05 09.9 -37 49 241.75 -35.85 F305 -25 -150 186 14 4 05 10.2 -42 45 47.75 -35.50 F305 -19 -18 183 146 5 05 11.3 -41 46 246.59 -35.48 F305 -8 -97 172 67	6 05 13.3 -27 12 05 15.3 -27 08 229.44 -32.05 F486 61 -118 103 46 7 05 14.2 -25 19 05 16.2 -25 15 227.40 -31.29 F486 72 -21 92 143 8 05 14.2 -25 03 8 05 15.4 -50 34 257.42 -35.60 F204 -136 -36 300 128 9 05 14.2 -22 41 05 17.0 -22 37 224 56 -30.29 F486 84 125 80 289 0 05 15.4 -54 35 05 16.4 -54 31 262.27 -35.41 F158 142 16 22 180	1 05 17.3 -37 09 05 19.0 -37 05 241.19 -33.61 F305 56 154 108 318 2 05 17.5 -56 17 05 18.4 -56 13 264.34 -35.05 F159 -96 -68 260 96 3 05 18.4 -56 20 05 20.4 -26 26 229.03 -30.75 F486 123 -80 41 84 4 05 19.8 -61 20 05 20.4 -61 7 270.45 -34.45 F120 -146 -75 310 89 5 05 20.2 -49 59 05 21.5 -49 56 256.67 -34.62 F204 -86 1 250 165	6 05 21.8 -46 06 05 23.2 -46 03 252.00 -34.07 F252 124 -60 40 104 7 05 23.6 -32 45 05 25.5 -32 42 236.43 -31.39 F423 16 -146 148 18 8 05 24.1 -45 01 05 25.6 -44 58 250.76 -33.55 F253 -113 -3 277 161 9 05 24.4 -55 21 05 25.4 -55 13 263.79 -34.10 F159 -46 -17 210 147 0 05 25.3 -56 16 05 26.2 -56 13 264.29 -33.97 F159 -38 -66 202 98	1 05 25.6 -49 30 05 26.9 -49 27 256.15 -33.72 F204 -39 28 203 192 2 05 25.7 -51 18 05 26.9 -51 15 258.31 -33.81 F204 -37 -68 201 96 3 05 29.1 -50 29 257.41 -33.42 F204 -37 -68 201 96 4 05 29.6 -49 17 05 30.9 -49 14 255.95 -33.06 F204 -5 40 169 204 5 05 31.6 -36 23 05 33.3 -36 20 241.01 -30.65 F363 -48 -74 212 90	6 05 32.5 -30 50 05 34.4 -30 48 234.87 -29.05 F423 119 -45 45 119 7 05 33.5 -59 26 05 34.2 -59 24 268.07 -32.84 F120 -61 32 225 196 8 05 34.2 -45 50 05 33.7 -42 48 248.50 -31.44 F306 -39 -151 203 13 9 05 34.6 -39 48 05 36.2 -39 46 245.04 -30.81 F306 -36 12 200 176 0 05 38.5 -40 52 05 40.1 -40 50 246.42 -30.29 F306 4 -45 160 119	1 05 39.5 -59 44 05 40.2 -59 42 268.42 -32.08 F120 -20 16 184 180 2 05 43.7 -48 07 05 45.0 -48 05 254.90 -30.61 F204 120 101 44 265 3 05 44.6 -47 12 05 46.0 -47 10 253.87 -30.33 F204 131 149 33 313 4 05 44.8 -29 53 05 46.7 -29 51 234.73 -26.24 F424 -4 8 168 172 5 05 44.9 -32 36 05 46.8 -32 34 237.64 -27.03 F363 101 127 63 291	546 05 46.7 -32 41 05 48.5 -32 40 237.85 -26.69 F364 -151 125 315 289 547 05 46.8 -47 26 05 48.2 -47 25 254.20 -30.00 F205 -121 137 285 301 548 05 47.5 -42 57 05 49.0 -42 56 249.16 -29.07 F254 -163 109 327 273 549 05 48.8 -32 17 05 50.7 -32 16 237.57 -26.15 F424 40 -121 124 43 550 05 49.1 -34 48 05 50.9 -34 47 240.29 -26.81 F364 -122 12 286 176

	B	17.2 16.2 17.3 17.2	17.1 17.1 14.9 15.1	15.8 16.1 16.1 16.4	15.7 16.9 16.4 16.5	16.2 16.0 16.0 15.4	16.7 17.1 16.1 17.1	16.0 17.4 17.1 16.0 14.8	17.1 17.1 16.9 16.4 17.2	16.1 17.3 15.0 17.2 15.9	17.1 15.8 17.0 15.7 17.2
	Ω	N40N4	ຕອຕຕອ	44440	40404	44460	បល404	40040	ប ស ស 4 ស	40004	N 4 N 4 N
	H.	00000	00000	00000	00000	00000	00000	00000	00000	04000	00000
	Z				0.0405	(0.0140)		0.0473			
	Previous		Ω		α				ВО	a	æΩ
	Obs	22222	99999	99999	20000	22222	32228	22222	22222	33333	99999
	m ₁₀	18.1 16.1 19.1 19.7	17.2 17.4 14.8 15.0	15.7 16.1 16.1 16.4	15.6 16.8 16.4 16.0	16.2 16.0 16.0 15.4	16.7 18.0 16.1 18.0	16.1 20.8 19.2 16.0	17.5 17.3 17.2 16.5 19.8	16.2 : 20.6 15.1 20.1 16.0	19.5 16.0 17.1 15.7 19.3
	m ₃	17.6 15.1 18.6 19.1	16.0 16.0 13.8 14.0	14.6 15.6 15.4 15.4	15.3 15.9 14.6 15.2	15.7 15.3 15.4 15.0	15.9 16.8 15.4 17.8	15.5 19.8 18.6 15.5	16.4 15.9 15.6 15.2	14.6 19.3 13.7 19.1	15.1 15.2 15.2 18.8
	m_1	17.5 14.4: 16.0 17.7 13.4	15.4 13.6 13.9 13.9	14.0 15.8 15.0 15.0	15.1 15.3 13.9 13.1	14.1 14.6 14.6 14.5	15.2 16.1 14.8 17.5 13.8	15.0 19.3 17.7 15.1 12.3	16.1 15.3 13.4 14.6	12.6 19.0 13.5 18.7	18.7 15.1 14.7 17.4
	C	22 24 26 26	29 114 17 -10	-30: -30: 19:	7 -26: -13 -13	-17 -10 -9: 19:	-52: 27 -17 15	18 (99) 29 1	0 12 7 13 13	-24 (63) 0 (48)	4: -32: -18
	Тв-м	III-II III-II	 	111111	11-11	11-11		111111	111111		
	T_A	RHHR	RI I I I	H H H H H	RI II	RI I RI RI	HHHH	нннан	ннняя	RELEGI	жняян
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5.5											
TABLE	yn	182 319 208 133 34	227 321 169 219 236	129 284 288 286 143	156 281 299 292 28	264 219 274 161 234	188 211 205 174 64	236 276 92 236 159	64 53 301 327	168 222 286 225 62	44 275 286 138 160
	nx	257 106 283 203 215	242 200 63 208 40	253 147 162 129	150 81 176 90	325 107 50 99 305	80 100 323 42	144 266 90 15	21 170 136 193	74 152 78 136 212	211 170 202 280 280 189
	Ycen	18 155 44 -31 -130	63 157 5 5 55 72	-35 120 124 -21	-8 117 135 128 -136	100 55 110 -3 70	24 47 41 10 -100	72 112 -72 72 -5	-100 -111 147 137 163	58 122 122 61 -102	-120 111 122 -26 -4
	xcen.	-93 -119 -39 -51	-78 -36 101 -44	1117 -89 17 17 35	14 12 10	-161 57 114 65 -141	84 148 64 -159	20 -102 74 149 169	158 143 -6 -28 -29	90 86 84 48	-47 -6 -38 -116 -25
	Field	F205 F120 F307 F555	F254 F205 F120 F307	F120 F425 F364 F254 F205	F254 F086 F425 F205 F425	F364 F364 F364 F364 F366	F254 F364 F425 F308 F205	F489 F087 F489 F160	F033 F160 F365 F365	F365 F161 F308 F087	F366 F366 F058 F162
	q	-29.91 -30.57 -27.33 -21.05	-27.73 -28.38 -29.84 -25.92 -29.40	-29.53 -22.28 -23.72 -26.02 -27.65	-26.36 -29.05 -20.81 -26.46	-22.21 -25.33 -22.08 -25.40	-24.95 -21.80 -20.12 -23.30	17.61 27.47 17.65 25.62 27.43	-28.13 -26.14 -19.19 -18.65	18.40 23.42 18.30 25.22 17.04	-17.15 -14.79 -25.22 -21.56
	1	6.84 5.27 6.04	2.53 2.67 2.25	69.52 - 33.78 - 38.95 - 58.10 -	2.42 2.11 5.07 5.18	9.95 1.33 2.54 0.64	252.08 - 241.22 - 236.35 - 247.17 - 260.04 -	11.06 - 72.40 - 14.09 - 72.16 -	87.80 - 65.90 - 40.16 - 50.27 -	13.45 13.14 13.93 16.33	5.66 5.48 0.28
		0 2 2 2 8 2 2 4 2 4 4 4 4 4 4 4 4 4 4 4 4	50 250 51 255 50 256 36 249	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	111 25 448 27 330 23 33 235 33 235	07 23 59 25 64 25 40 24 24	34 10 16 16 17 12 12 12 12 12 13	22 27 23 25 27 25 25 27 25 27 25 27 27 27 27 27 27 27 27 27 27 27 27 27	33 26 29 26 59 24	56 24 57 26 57 26 57 27 00 24	20 24 01 24 48 27 32 26 09 27
) Dec	-49 4 -57 0 -39 1 -37 2	143 159 159 158 158 158	122 132 142 150 150	-45 1 -62 4 -47 3 -32 3	1413	440-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	-23 -53 -53 -64 -64	-76 3 -32 1 -41 5	-34 5 -53 5 -63 5 -37 0	-37 2 -33 0 -67 4 -65 3
	(2000)	6.2	8.0	0.04.00.0	07.1 - 06.1 - 09.2 - 11.0 -	9505	4.0.0.0.0	23.2.8	40000	48048 60484	ເບລະໝຸດເບ ເບລະໝຸດເບ
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	ာ့	41 07 13 37 29	25 20 36 36	2 4 4 4 4 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9	111 48 30 37	07 59 64 40	33 06 15 47 50	221 24 54	32 58 16 27 57	54 54 54 57	17 58 45 29 06
	50) Dec	-49 -57 -39 -20	1.59 1.59 1.59 1.58	-27 -32 -42 -50	-45 -27 -47 -32	- 143 - 145 - 145 - 145 - 145	-44 -34 -29 -59	-23 -26 -53 -64	-76 -56 -32 -41	-34 -53 -63 -63	-37 -32 -67 -55 -60
	RA (1950)	49.4 50.3 52.4 54.1 55.5	56.1 56.1 57.4 59.6	000.3 001.6 04.3	05.7 05.7 07.2 08.3	09.8 10.0 10.2 11.1	13.0 13.5 13.6 14.9	15.7 19.7 20.4 21.9 22.2	22.5 23.0 23.6 26.7 29.0	32.5 37.8 38.4 41.5	43.8 47.5 48.9 54.3
	ם	05 05 05 05	00000	99999	99999	99999	99999	98888	99999	99999	90000
	Abell	\$0551 \$0552 \$0553 \$0553 \$0554	S0556 S0557 S0558 S0559 S0559	\$0561 \$0562 \$0563 \$0564 \$0564	\$0566 \$0567 \$0568 \$0569 \$0570	\$0571 \$0572 \$0573 \$0574 \$0575	S0576 S0577 S0578 S0579 S0580	\$0581 \$0582 \$0583 \$0584 \$0585	\$0586 \$0587 \$0588 \$0589 \$0590	\$0591 \$0592 \$0593 \$0594 \$0595	\$0596 \$0597 \$0598 \$0599 \$0600

B	16.0 16.3 17.1 16.6	16.5 17.2 16.8 17.0	16.9 17.0 16.8 17.5	17.5 15.6 17.2 17.4	17.4 16.1 17.1 15.8 17.5	17.2 17.3 15.1 17.4	15.6 17.2 17.3 17.3	13.4 17.5 14.7 16.1	17.1 16.2 17.7	16.7 17.3 17.3 16.6
ρ	44000	សសសស4	ນອນນນ	വരവാര	04040	വഴനാവ	യയവവന	10024	ωυ 4 ω ω	ហេហហេហ
<u>بر</u>	00000	0000	00000	0000	00004	00000	00044	04400	00010	00000
22	0.0441							0.0087		
Previous								KS B		×
Obs	20202	10000	22222	10,10 10,10 10	22222	99999	00000	10 10,10 10	00000	200000
m ₁₀	16.1 16.4 18.2 16.7 17.8	16.8 18.0 17.5 17.5	17.3 17.8 16.8 20.1	20.8 15.4? 17.5 20.0	19.6 16.0 16.8 15.7 19.8	17.4 19.4 15.1 19.4 17.0	15.6 17.4 16.9 19.8	13.2 20.0 20.0 14.8 15.8	19.9 16.7 19.8 20.8	16.4 17.5 16.7 16.7 17.0
m ₃	15.4 15.6 17.3 15.9	15.6 16.5 16.1 16.9 15.9	16.1 17.0 16.0 19.3	20.0 14.2: 15.9 19.4	18.9 15.3 15.9 14.8	17.9 19.1 14.7 18.9 15.8	14.1 16.0 16.0 18.9	12.1 19.5 19.3 13.6	19.5 15.3 15.4 19.0	15.6 16.1 16.0 15.9 15.9
m ₁	14.3 15.4 16.8 15.1	15.4 15.9 15.7 16.1	15.5 15.7 15.1 19.1 15.3	19.5 12.6 15.6 19.2	18.5 14.7 13.7 14.6 18.8	15.5 18.3 13.1 18.6	13.0 15.7 15.1 18.0	11.7 19.3 18.5 12.7 13.2:	18.8 13.7 18.8 19.1?	13.67 15.8 15.1 15.1
٥	16 25 25 25	22 22 0 -53	18 10 103	(113) 23 -41 (76) -6	114 -132 -13 59	16 127 18 18	-15 25 77 76	94 64 14 10	21 6 -13 55 127	25 25 -52 15
ТВ-М	1-11 111 111-111	11-11 111-11 11-111 1	111111111111111111111111111111111111111	III: III:	III. III. III		I II-II II-III III:			
T_A	жнны	RHHHH	RILI	RIIRRR	RILI	RI I I I I I I I I I I I I I I I I I I	ннйнн	ннжён	ннны	пннян
Abell	\$0601 \$0602 \$0603 \$0604 \$0605	\$0606 \$0607 \$0608 \$0609 \$0610	S0611 S0612 S0613 S0614 S0615	S0616 S0617 S0618 S0619 S0620	\$0621 \$0622 \$0623 \$0624 \$0625	\$0626 \$0627 \$0628 \$0629 \$0630	\$0631 \$0632 \$0633 \$0634 \$0635	\$0636 \$0637 \$0638 \$0639 \$0640	S0641 S0642 S0643 S0644 S0645	S0646 S0647 S0648 S0649 S0650
yıı	184 159 239 174	-3 148 292 1184 315	169 265 276 311	59 159 204 139	281 64 64	323 149 190 311	179 221 84 241 258	164 208 228 115	261 304 145 211 264	214 294 27 139
ll x	167 95 37 286 143	196 280 281 184	158 103 192 32	173 58 139 88 255	200 183 29 153 270	138 132 102 103 85	66 254 211 92 128	126 74 26 219 208	249 67 247 270 256	169 190 162 143
ycen	20 75 10	.167 -16 128 20 151	101 112 147 154	-105 -25 -43	117 -158 63 104 -100	159 -15 26 147 83	15 57 77 94	0 4 4 4 4 0 8 4 4 8 0	97 140 -19 47	50 130 -137 -25 108
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Field	F207 F207 F034 F208 -	F209 F006 - F124 F018 -	F562 F562 F496 F565 -	F498 F434 F434 F499	F374 F374 F566 F316	F374 F374 F316 F374	F316 F375 F375 F436	F375 F436 F375 F264 F437	F376 F214 F318 F569 -	F437 F376 F318 F502
9	-18.89 -17.78 -24.75 -16.16	-12.34 -25.81 -13.74 -23.24 6.24	10.48 12.32 12.71 22.35 19.41	17.79 23.31 17.09 16.82 21.05	17.22 13.43 28.06 13.42 26.11	18.56 16.12 12.85 18.79 18.09	13.09 18.72 17.04 24.55	19.19 24.37 21.21 10.91 24.42	22.15 9.84 16.11 34.30	26.06 23.24 14.58 30.98
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	m3	16.1 18.0 18.8 15.7	18.3 18.9 16.3 18.6 15.9	16.0 19.3 15.7 15.6 14.9	16.0 15.2 16.0 15.5	16.3 19.3 15.6 17.5	15.6 14.7 15.6 16.8	17.3 19.4 15.7 16.0	19.1 14.4 18.3 15.1	16.0 18.9 16.0 17.5	16.1 18.1 16.1 16.0
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	x cen	-73 -36 -34	18 29 118 -86	23 140 48 -162 122	43 100 52 -3	-35 -82 108 -29	96 -138 -133	127 -3 10 18 -81	113 129 -85 0 63	-48 -93 149 156	-114 58 56 -23 109
	Field	F502 F377 F438 F265	F438 F438 F502 F503	F319 F438 F319 F266	F503 F319 F503 F216	F266 F504 F266 F439 F504	F378 F440 F379 F379	F266 F572 F440 F440	F572 F440 F573 F267	F441 F380 F321 F321	F574 F380 F506 F268 F380
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	A (1950) Dec RA (2000)	34.1 -35 16 12 36.8 -35 3 35.1 -42 24 12 37.8 -34 4 35.4 -34 29 12 38.1 -34 8 35.5 -38 34 12 38.2 -38 5 36.8 -43 25 12 39.5 -43 4	38.4 -33 06 12 41.1 -33 2 40.7 -42 40 12 43.5 -42 5 44.4 -33 2 43.6 -42 20 12 46.4 -42 3 45.7 -21 32 12 48.4 -21 4	46.8 -19 33 12 49.4 -19 46.8 -43 48 12 49.6 -44 48.5 -22 16 12 51.2 -22 48.8 -26 11 12 51.5 -26 50.4 -27 25 12 53.1 -27	51.7 -17 46 12 54.3 -18 55.4 -27 57 12 58.1 -28 55.0 -33 24 12 59.7 -33 00.9 -19 15 13 03.6 -19 01.4 -19 46 13 04.1 -20	03.3 -37 19 13 06.1 -37 04.3 -19 59 13 07.0 -20 06.4 -44 31 13 09.3 -44 10.5 -32 41 13 13.3 -32 11.4 -29 56 13 14.2 -30	12.4 -33 23 13 15.2 -33 17.6 -40 45 13 20.5 -41 18.1 -27 03 13 20.9 -27 18.7 -35 32 13 21.5 -35 19.2 -26 43 13 22.0 -26	20.2 -34 37 13 23.0 -34 21.9 -25 46 13 24.7 -26 23.0 -36 59 13 25.9 -41 25.0 -40 52 13 27.9 -41 25.8 -20 41 13 28.5 -20	28.2 -27 47 13 31.0 -28 32.5 -39 49 13 35.4 -40 35.0 -45 03 13 38.0 -45 40.0 -34 43 13 42.9 -34 40.6 -37 56 13 43.5 -38	41.3 -19 33 13 44.0 -19 41.7 -34 03 13 44.6 -34 43.3 -39 39 13 46.3 -39 44.6 -31 54 13 47.5 -32 45.3 -36 14 13 48.2 -36	46.9 -34 44 13 49.8 -34 48.1 -35 53 13 51.0 -36 49.7 -32 09 13 52.6 -32 50.1 -34 07 13 53.0 -34 50.6 -38 06 13 53.6 -38
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	B	17.5 16.5 13.9 16.4	16.2 15.9 15.8 17.4	15.8 17.5 17.3 17.4	17.5 17.3 17.5 17.5 16.3	17.2 16.7 17.4 16.9 15.6	17.2 17.3 14.8 17.5	17.6 17.5 17.6 17.6 17.0	17.4 16.6 17.0 17.1	16.8 17.0 17.0 15.6 17.0	16.8 15.7 17.1 17.2
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	m ₃	18.1 14.5 12.4? 14.1	14.2 15.0 14.8 15.7	14.8 15.8 15.6 15.0	19.4 17.3 19.4 14.6	16.1 15.5 15.7 15.6	16.1 17.2 19.3 19.4	19.7 18.7 19.4 18.6	17.8 15.6 16.1 16.1	16.1 16.7 16.8 15.1	16.3 15.4 16.5 18.5?
	m I	17.8 11.1 12.9	13.65 13.65 15.1 15.1	12.9 19.3 15.0 14.9	18.9 16.0 18.5 18.9 13.8	15.2 14.5 15.3 12.9	15.5 16.3 11.8 19.1 17.8	19.5 18.0 19.1 18.0	16.7 14.9 15.4 15.7 18.0	15.4 15.6 15.6 14.2	15.1 14.3 16.0 17.9 13.8
	C	26 118 198 3	13 10 11 11 11 13	(44) 0* -22	74 25 172 102 -8?	23 44 11 11 6:	24: 1 4 -17 116	82 130 131 28 13	29 111 24 26 -15?	12 16 -31 -32	-13 25 (80)
	Тв-м	11.11	I-II II? II-II	HHHHH		1-11 1-11 11-111					II III-III II3
	$T_{\mathcal{A}}$	RRRRR	IRRI IR	Hiii	ж ёнжн	ннн	нйнйи	нёнан	"####	нанна	нннн
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E 5 –											
TABLE	ñ.	139 199 233 189	291 278 213 305	46 109 242	44 300 70 231 286	53 53 53 818 84 84	307 1115 36 309 274	279 157 270 125	246 1195 272 204	51 51 76 93	141 138 179 57 314
T	nx	224 264 159 307	79 64 63 226 193	191 258 327 103	196 80 177 139	221 208 132 122	97 238 109 93	242 162 230 191	242 242 258 241 281	164 : 91 232 197	132 103 178 147
	Ycen	135 25 133 133	127 114 49 141	-118 150 -55 67 78	-120 136 -94 67	75 -111 54 -6 120	143 -49 145 110	115 -7 106 -39 -23	82 31 92 108 40	-41 -113 -65 -88 -71	-23 -26 -107 150
	x cen	-60 -100 113 -143	85 100 101 -62	-27 - -94 -163 61	-132 -134 -605	157 144 132 142 142	67 -74 55 71 -83	-78 -66 -27 72	-15 -78 -94 -77 -117	1440 1383	32 -14 17
	Field	F510 F578 F384 F325	F578 F384 F511 F511	F511 F272 F447 F511	F447 F385 F447 F447	F327 F327 F580 F327	F327 F448 F386 F386	F581 F448 F581 F582 F008	F515 F009 F009 F009	F009 F023 F023 F102	F044 F102 F024 F071
	q	35.03 40.79 26.55 20.82	41.19 26.75 25.63 36.22 22.52	31.55 17.43 27.79 34.04 24.49	25.57 25.34 26.52 28.24 19.97	19.17 15.96 35.80 17.16	19.24 24.85 18.94 23.26 35.07	35.10 24.80 34.83 29.29	23.78 -23.30 -22.47 -22.58 17.38	-25.32 -23.44 -23.30 -17.11	-22.65 -18.72 -24.59 -23.49
	1	320.23 322.84 319.63 318.23	327.92 321.84 321.41 327.32	325.73 320.23 325.04 329.20	326.90 326.87 327.86 329.72	325.42 324.04 337.33 326.06	328.23 331.64 328.70 331.61	341.09 333.39 341.21 344.57	347.02 307.52 308.41 308.86	307.04 310.56 311.69 325.72	318.20 327.99 313.98 322.47 317.06
-1	RA (2000) Dec	13 54.1 -25 43 13 54.9 -19 36 14 06.3 -39 58 14 06.3 -39 49 14 09.3 -25 27	14 09.5 -17 52 14 12.3 -33 08 14 12.4 -34 19 14 16.0 -22 36 14 18.4 -37 10	14 18.8 -27 25 14 21.7 -42 23 14 22.9 -31 07 14 26.1 -23 57 14 33.3 -33 46	14 34.7 -32 28 14 34.7 -32 41 14 36.1 -31 14 14 39.4 -28 57 14 41.7 -37 57	14 41.9 -38 49 14 43.0 -42 17 14 47.5 -19 12 14 49.4 -40 21 14 51.4 -37 59	14 53.7 -37 33 14 53.8 -31 07 14 56.5 -37 36 14 57.5 -32 30 14 59.6 -18 09	14 59.9 -18 04 15 00.3 -30 20 15 00.9 -18 14 15 24.8 -20 55 15 44.5 -85 26	15 47.6 -23 39 16 04.6 -84 21 16 03.4 -83 11 16 15.6 -82 57 16 41.8 -19 21	17 10.5 -85 54 17 05.4 -82 11 17 16.0 -81 12 17 28.6 -66 41 17 33.2 -76 22	17 53.2 -75 27 17 52.4 -65 29 18 03.9 -79 45 18 22.2 -71 59 18 28.2 -77 10
	RA (1950) Dec	13 51.3 -25 29 13 52.2 -19 22 14 00.7 -33 44 14 03.3 -39 35 14 06.5 -25 13	14 06.7 -17 38 14 09.3 -32 54 14 09.4 -34 05 14 13.2 -22 23 14 15.4 -36 57	14 15.9 -27 12 14 18.6 -42 10 14 20.0 -30 54 14 23.2 -23 44 14 30.3 -33 33	14 31.4 -32 15 14 31.7 -32 28 14 33.1 -31 01 14 36.4 -28 45 14 38.6 -37 45	14 38.8 -38 37 14 39.8 -42 05 14 44.7 -19 00 14 46.2 -40 09 14 48.3 -37 47	14 50.6 -37 21 14 50.8 -30 55 14 53.3 -37 24 14 54.4 -32 18 14 56.8 -17 58	14 57.1 -17 53 14 57.3 -30 09 14 58.1 -18 03 15 21.9 -20 45 15 30.8 -85 17	15 44.6 -23 30 15 52.4 -84 13 15 52.9 -83 03 16 05.1 -82 50 16 38.9 -19 16	16 53.0 -85 50 16 55.0 -82 07 17 06.4 -81 09 17 23.5 -66 39 17 26.1 -76 20	17 46.3 -75 27 17 47.4 -65 29 17 55.2 -79 45 18 16.2 -72 01 18 20.8 -77 12
	Abell	S0751 S0752 S0753 S0754 S0755	S0756 S0757 S0758 S0759 S0760	S0761 S0762 S0763 S0764 S0765	S0766 S0767 S0768 S0769 S0770	\$0771 \$0772 \$0773 \$0774 \$0775	S0776 S0777 S0778 S0779 S0780	S0781 S0782 S0783 S0784 S0785	S0786 S0787 S0788 S0789 S0790	S0791 S0792 S0793 S0794 S0795	\$0796 \$0797 \$0798 \$0799 \$0800

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	O	-30 8? (55) (92) 8	-36: 29 29	-24: -17 21 3 (66)	13 74 105 24 18	(87) 23 21 7	-9 -10 19 23 (128)	21 15 15 26:	-1 13 131 17 15	76 155 88 14 23	7 10 10 10 10
	T_{B-M}	II II-III? II-III	111111	!!! !!!!		!!!! !!!-!!! !!!	11-11 11-11 11-11 11-11	I II: III-III III	::::: :-:::: :-::::		
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	eu				67 2 -86 2 -54 2	-51 1 -79 1 91 2 -39 1	153 2 104 157 2 87 53	143 2 -70 2 56 3 5 2 119 1	119 2 78 1 56 1 103 -59	-38 30 1 -69 89 119	-82 -28 -28 -23 -23 -23 -23
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	Field	F230 F281 F071 F071	F183 F010 F231 F025	F184 F197 F142 F338	F105 F232 F073 F142 F338	F232 F283 F185 F283	F073 F283 F185 F283 F398	F399 F339 F011 F399	F399 F339 F185	F105 F339 F105 F185	F105 F461 F399 F186
	9	-17.41 -15.72 -24.52 -23.65	21.90 27.36 21.60 27.57	24.98 20.96 24.180 26.99	28.50 27.04 28.94 28.41 24.57	27.38 26.94 28.43 27.25 28.66	29.95 27.75 29.46 27.95 25.92	26.00 28.84 29.08 27.97	27.43 29.10 29.42 31.66	32.15 30.43 32.22 32.59	32.51 29.10 30.20 32.88
	1	343.36 347.82 321.76 327.30	341.28 - 311.61 - 347.66 - 311.50 -	344.89 - 3.05 - 337.99 - 357.43 - 345.09 -	332.83 - 345.75 - 323.91 - 355.89 -	347.19 - 352.25 - 344.75 - 353.17 -	328.98 - 356.40 - 346.31 - 356.08 - 6.31 -	8.35 - 358.71 - 310.43 - 5.94 -	8.27 - 310.15 - 1.60 - 345.44 - 341.89 -	330.47 - 1.34 - 329.79 - 345.25 -	331.46 - 10.26 - 5.88 - 343.78 -
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	RA (1950) Dec	18 23.5 -51 34 18 24.2 -46 58 18 27.1 -72 55 11 18 31.9 -67 48 11 18 42.5 -63 23 1	18 47.4 -54 55 18 55.8 -82 22 18 56.9 -49 10 19 02.0 -82 28 19 06.1 -75 23	19 13.3 -52 31 19 18.0 -35 21 1 19 25.1 -59 06 1 19 25.4 -41 16 1 19 26.5 -52 45 1	19 26.8 -63 42 1 19 27.5 -52 11 1 19 27.8 -71 32 1 19 28.2 -61 01 1 19 30.0 -39 47 1	19 31.2 -50 59 1 19 34.0 -46 29 1 19 35.6 -53 17 1 19 36.8 -45 45 1 19 37.5 -82 58 1	19 39.4 -67 07 19 43.0 -43 04 19 43.6 -52 05 19 43.7 -43 23 19 45.5 -34 03	19 48.4 -32 19 11 19 51.1 -41 19 11 19 53.7 -83 15 2 19 54.6 -34 56 1 19 54.7 -52 46 1	19 54.8 -32 48 1 19 56.0 -83 29 2 19 57.0 -38 59 2 19 57.5 -53 04 2 19 59.4 -56 06 2	20 00.9 -65 46 2 20 01.8 -39 25 2 2 20 02.0 -66 20 2 20 03.6 -53 17 2 20 03.8 -52 43 2	20 03.8 -64 54 2 20 04.7 -31 35 2 20 05.1 -35 33 2 20 05.2 -54 37 2 20 06.1 -54 07 2
i	Abell	S0801 S0802 S0803 S0804 S0805	\$0806 \$0807 \$0808 \$0809 \$0810	S0811 S0812 S0813 S0814 S0815	S0816 S0817 S0818 S0819 S0820	S0821 S0822 S0823 S0824 S0825	\$0826 \$0827 \$0828 \$0828 \$0839	S0831 S0832 S0833 S0834 S0835	\$0836 \$0837 \$0838 \$0838 \$0839 \$0840	S0841 S0842 S0843 S0844 S0845	S0846 S0847 S0848 S0849 S0850

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	Previous	ဖ	8	BD	Δ	MО			BD	S D S	μ
	Obs	99999	22222	89999	83333	22222	99999	20000	98999	22222	99999
	m ₁₀	13.4 16.7 17.0 15.6	18.0 17.1 18.6 16.4	16.4 19.3 17.1 20.1 18.1	15.1 16.8 16.7 16.8 19.3	18.6 17.5 17.3 20.2:	16.8 18.1 18.4 19.3	17.5 16.1 16.6 17.5 16.0	17.8 17.5 17.1 15.9	15.4 16.0 16.6 15.9	18 15.6 16.8 14.5
	m³	11.7 15.5 15.4 15.3	17.3 2 16.0 18.1 15.4 16.1	15.3 18.6 15.6 19.5 16.6	13.6 15.9 15.1 16.2	18.4 16.5 15.9 19.6	15.4 17.4 17.1 18.6	16.4 14.7 16.0 16.7 14.6	16.1 16.4 15.4 14.8 15.0	15.3 15.5 15.8 15.0	16.8 15.1 15.2 15.2
	m_1	10.1 14.5 13.7 13.7	17.0: 15.2? 18.0 15.3	14.4 17.8 15.4 19.4	12.6 14.6 14.8 15.8	18.0 15.7 13.8 18.7 15.8	15.1 15.1 15.6 17.3	15.9 13.8 15.4 15.5	15.4 15.4 15.1 14.7	14.2 14.6 14.8 13.7 15.6	15.9 12.9 13.7 11.2
i	C	9 7 9 4 9	27 115 22	14 120 120 26	23 13 25 25	9 28 -29? 127 15	22.2 23.3 24.4 24.4	11 11 20 22:	9 4 1 1 7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2: -65 -42	28 25: 3
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	Dec l b Field xcen ycen x11	2 -41 10 0.45 -39.01 F341 -23 -72 187 9 5 -71 53 322.08 -34.87 F074 -5 -108 169 5 1 -24 05 21.72 -36.04 F529 -85 41 249 20 8 -42 45 358.45 -39.59 F286 -115 109 279 27 8 -25 30 20.17 -36.80 F529 -64 -36 228 12	4 -51 57 346.52 -39.45 F235 -97 -114 261 50 3 -43 03 358.08 -40.06 F286 -89 93 253 257 0 -37 34 5.23 -39.40 F741 38 121 126 285 5 -43 31 357.48 -40.29 F286 -77 68 241 232 4 -64 39 330.40 -37.66 F106 114 6 50 170	6 -42 57 358.25 -40.84 F286 -48 99 212 2 7 -50 18 348.53 -40.74 F235 -35 -25 199 1 6 -67 07 327.32 -37.23 F074 38 147 126 3 6 -28 53 16.62 -39.54 F464 -92 51 256 2 0 -40 59 0.87 -41.21 F341 95 -63 69 1	7 -41 25 0.30 -41.36 F341 102 -87 62 7 -38 30 4.18 -41.20 F341 107 70 57 2 9 -37 59 4.89 -41.39 F341 121 97 43 2 6 -57 39 338.74 -40.54 F144 59 115 105 2	8 -44 49 355.72 -42.30 F286 31 -1 133 163 9 -39 38 2.73 -42.29 F341 155 10 9 174 5 -42 51 358.38 -42.46 F286 40 103 124 267 9 -47 10 352.54 -42.35 F286 99 -128 125 36 8 -27 00 19.62 -41.08 F464 16 152 148 316	7 -76 55 315.72 -34.24 F026 27 151 137 315 0 -59 24 336.04 -41.40 F145 -131 17 295 181 0 -45 36 354.50 -44.22 F287 -126 -45 290 119 8 -22 46 5.71 -41.73 F599 -80 -159 244 5 0 -53 12 344.06 -43.25 F188 -100 85 264 249	1 -48 48 350.04 -44.04 F235 134 51 30 215 0 -72 18 320.49 -36.78 F047 84 132 80 296 6 -45 23 354.77 -44.52 F287 -111 -33 275 131 5 -85 28 342.30 -43.17 F188 -82 17 246 181	8 -51 19 346-53 -43.89 F235 140 -84 24 80 6 -63 35 330.58 -40.51 F107 7 66 157 230 7 -32 58 12.22 -44.50 F402 59 101 105 265 4 -46 353 03 -44.71 F287 -93 -97 257 67 2 -21 05 28.39 -42.43 F599 -12 -69 176 95	4 -56 19 339.65 -43.23 F188 -49 -79 213 85 0 -20 11 29.63 -42.32 F599 -1 -20 165 144 2 -63 02 331.00 -41.20 F107 35 95 129 259 4 -30 54 15.30 -45.19 F465 -68 -57 232 107 3 -48 01 350.86 -45.35 F236 -65 94 229 258	3 -32 03 13.70 -45.55 F465 -57 -120 221 9 -39 31 3.00 -46.53 F342 116 -85 48 0 -38 25 4.60 -46.74 F342 131 74 33 2 3 -83 56 308.25 -31.02 F011 -14 45 178 2 7 -28 52 18.48 -46.21 F465 4 53 160 2
	A (2000) Dec l b Field xcen yeen x11	49.2 -41 10 0.45 -39.01 F341 -23 -72 187 9 51.5 -71 53 322.08 43.87 F074 -5 -108 169 5 50.1 -24 05 21.72 -36.04 F529 -85 41 249 20 51.8 -42 45 358.45 -39.59 F286 -115 109 279 27 51.8 -25 30 20.17 -36.80 F529 -64 -36 228 12	52.4 -51 57 346.52 -39.45 R235 -97 -114 261 50 54.3 -43 03 358.08 -40.06 R286 -89 93 253 257 55.0 -37 34 5.23 -39.80 R341 38 121 126 285 55.5 -43 31 37.48 -40.29 R286 -77 68 241 232 57.4 -64 39 330.40 -37.66 R106 114 6 50 170	58.6 -42 57 358.25 -40.84 F286 -48 99 212 2 59.7 -50 18 348.53 -40.74 F235 -35 -25 199 1 00.6 -67 07 327.32 -37.23 F074 38 147 126 3 00.6 -28 53 16.62 -39.54 F464 -92 51 256 2 01.0 -40 59 0.87 -41.21 F341 95 -63 69 1	01.7 -41 25 0.30 -41.36 F341 102 -87 62 01.7 -38 30 4.18 -41.20 F341 107 70 57 2 02.9 -37 59 4.89 -41.39 F341 121 97 43 2 05.1 43 26 25.62 -42.02 F286 16 74 148 2 06.6 -57 39 338.74 -40.54 F144 59 115 105 2	06.8 -44 49 355.72 -42.30 F286 31 -1 133 163 06.9 -39 38 2.73 -42.29 F341 155 10 9 174 07.5 -42 51 358.38 -42.46 F286 40 103 124 267 07.9 -47 10 19.62 -41.35 F286 39 -128 125 36 09.8 -27 00 19.62 -41.08 F464 16 152 148 316	15.7 -76 55 315.72 -34.24 F026 27 151 137 315 17.0 -59 24 336.04 -41.40 F145 -131 17 295 181 18.0 -45 36 354.50 -44.22 F287 -126 -45 290 119 17.8 -22 46 25.71 -41.73 F599 -80 -159 244 519.0 -53 12 344.06 -43.25 F188 -100 85 244 249	19.1 -48 48 350.04 -44.04 F235 134 51 30 215 21.0 -72 18 320.49 -36.78 F047 84 132 80 296 19.6 -45 23 354.77 -44.52 F287 -111 -33 275 131 27.5 -85 01 307.42 -30.19 F011 -23 -13 187 151 20.5 -54 28 342.30 -43.17 F188 -82 17 246 181	20.8 -51 19 346.53 -43.89 F235 140 -84 24 80 21.6 -63 35 330.58 -40.51 F107 7 66 157 230 20.4 -45 58 12.22 -44.50 F402 59 101 105 265 21.4 -46 28.39 -44.71 F287 -93 -97 257 67 23.2 -21 05 28.39 -42.43 F599 -12 -69 176 95	-56 19 339.65 -43.23 F188 -49 -79 213 85 -20 11 29.63 -42.32 F599 -1 -20 165 144 -63 02 331.00 -41.20 F107 35 95 129 259 -30 54 15.30 -45.19 F465 -68 -57 232 107 -48 01 350.86 -45.35 F236 -65 94 229 258	26.3 -32 03 13.70 -45.55 F465 -57 -120 221 28.9 -39 31 3.00 -46.53 F342 116 -85 48 30.0 -38 25 4.60 -46.74 F342 131 74 33 2 36.3 -83 56 308.25 -31.02 F011 -14 45 178 2 31.7 -28 52 18.48 -46.21 F465 4 53 160 2
	(2000) Dec 1 b Field xeen yeen x11	9.2 -41 10 0.45 -39.01 F341 -23 -72 187 9 1.5 -71 53 322.08 34.87 F074 -5 -108 169 5 0.1 -24 05 21.72 -36.04 F229 -85 41 249 20 1.8 -42 45 358.45 -39.59 F286 -115 109 279 27 1.8 -25 30 20.17 -36.80 F529 -64 -36 228 12	2.4 -51 57 346.52 -39.45 F235 -97 -114 261 50 4.3 -43 03 358.08 -40.06 F286 -89 93 253 257 5.5 -37 34 5.23 -39.80 F341 38 121 126 285 5.5 -43 31 330.48 -40.29 F286 -77 68 241 232 7.4 -64 39 330.40 -37.66 F106 114 6 50 170	8.6 -42 57 358.25 -40.84 F286 -48 99 212 2 9.7 -50 18 348.53 -40.74 F235 -35 -25 199 1 0.6 -67 07 327.32 -37.23 F074 38 147 126 3 0.6 -28 53 16.62 -39.54 F464 -92 51 256 2 1.0 -40 59 0.87 -41.21 F341 95 -63 69 1	7 -41 25 0.30 -41.36 F341 102 -87 62 7 -38 30 4.18 -41.20 F341 107 70 57 2 9 -37 59 4.89 -41.39 F341 121 97 43 2 6 -57 39 338.74 -40.54 F144 59 115 105 2	6.8 -44 49 355.72 -42.30 F286 31 -1 133 163 6.9 -39 38 2.73 -42.29 F341 155 10 9 174 7.5 -42 51 358.38 -42.46 F286 40 103 124 267 7.9 -47 10 19.62 -41.08 F464 16 152 148 316 9.8 -27 00 19.62 -41.08 F464 16 152 148 316	5.7 -76 55 315.72 -34.24 F026 27 151 137 315 7.0 -59 24 336.04 -41.40 F145 -131 17 295 181 8.0 -45 36 354.50 -44.22 F287 -126 -45 290 119 7.8 -22 46 25.71 -41.73 F599 -80 -159 244 5 9.0 -53 12 344.06 -43.25 F188 -100 85 244 249	1 -48 48 350.04 -44.04 F235 134 51 30 215 0 -72 18 320.49 -36.78 F047 84 132 80 296 6 -45 23 354.77 -44.52 F287 -111 -33 275 131 5 -85 28 342.30 -43.17 F188 -82 17 246 181	0.8 -51 19 346.53 -43.89 F235 140 -84 24 80 1.6 -63 35 330.58 -40.51 F107 7 66 157 230 7 -32 58 12.22 -44.50 F402 59 101 105 265 1.4 -46 36 353.03 -44.71 F287 -93 -97 257 67 3.2 -21 05 28.39 -42.43 F599 -12 -69 176 95	4.4 -56 19 339.65 -43.23 F188 -49 -79 213 85 4.0 -20 11 29.63 -42.32 F599 -1 -20 165 144 6.2 -63 05 331.00 -41.20 F107 35 95 129 259 6.4 -30 54 315.30 -45.19 F465 -68 -57 232 107 6.3 -48 01 35.86 -45.35 F236 -65 94 229 258	6.3 -32 03 13.70 -45.55 F465 -57 -120 221 8.9 -39 31 3.00 -46.53 F342 116 -85 48 0.0 -38 25 4.60 -46.74 F342 131 74 33 2 6.3 -83 56 308.25 -31.02 F011 -14 45 178 2 1.7 -28 52 18.48 -46.21 F465 4 53 160 2
	RA (2000) Dec l b Field xcen yeen x11	0 49.2 -41 10 0.45 -39.01 F341 -23 -72 187 9 0 51.5 -71 53 322.08 -34.87 F074 -5 -108 169 5 0 50.1 -24 05 21.72 -36.04 F529 -85 41 249 20 0 51.8 -42 45 358.45 -39.59 F286 -115 109 279 270 51.8 -25 30 20.17 -36.80 F529 -64 -36 228 12	0 52.4 -51 57 346.52 -39.45 F235 -97 -114 261 50 0 54.3 -43 03 358.08 -40.06 F286 -89 93 253 257 0 55.0 -37 34 5.23 -39.80 F341 38 121 126 285 0 55.5 -43 31 37.48 -40.29 F286 -77 68 241 232 0 57.4 -64 39 330.40 -37.66 F106 114 6 50 170	0 58.6 -42 57 358.25 -40.84 F286 -48 99 212 2 0 59.7 -50 18 348.53 -40.74 F235 -35 -25 199 1 1 00.6 -67 07 327.32 -37.23 F074 38 147 126 3 1 00.6 -28 53 16.62 -39.54 F464 -92 51 256 2 1 01.0 -40 59 0.87 -41.21 F341 95 -63 69 1	1 01.7 -41 25 0.30 -41.36 F341 102 -87 62 1 01.7 -38 30 4.18 -41.20 F341 107 70 57 2 1 02.9 -37 59 4.89 -41.39 F341 121 97 43 2 1 05.1 -43 26 357 62 -42.02 F286 1 74 148 2 1 06.6 -57 39 338.74 -40.54 F144 59 115 105 2	1 06.8 -44 49 355.72 -42.30 F286 31 -1 133 163 1 06.9 -39 38 2.73 -42.29 F341 155 10 9 174 1 07.5 -42 51 358.38 -42.46 F286 40 103 124 267 1 07.9 -47 10 35.54 -42.35 F286 39 -128 125 36 1 09.8 -27 00 19.62 -41.08 F464 16 152 148 316	1 15.7 -76 55 315.72 -34.24 F026 27 151 137 315 1 17.0 -59 24 336.04 -41.40 F145 -131 17 295 181 1 18.0 -45 36 354.50 -44.22 F287 -126 -45 290 119 1 17.8 -22 46 5.71 -41.73 F599 -80 -159 244 5 1 19.0 -53 12 344.06 -43.25 F188 -100 85 264 249	1 19.1 -48 48 350.04 -44.04 F235 134 51 30 215 1 21.0 -72 18 320.49 -36.78 F047 84 132 80 296 1 19.6 -45 23 354.77 -44.52 F287 -111 -33 275 131 1 27.5 -85 01 307.42 -30.19 F011 -23 -13 187 151 1 20.5 -54 28 342.30 -43.17 F188 -82 17 246 181	1 20.8 -51 19 346.53 -43.89 F235 140 -84 24 80 1 21.6 -63 35 330.58 -40.51 F107 7 66 157 230 1 20.7 -32 58 12.22 -44.50 F402 59 101 105 265 1 21.4 -46 36 33.03 -44.71 F287 -93 -97 257 67 1 23.2 -21 05 28.39 -42.43 F599 -12 -69 176 95	1 24.4 -56 19 339.65 -43.23 F188 -49 -79 213 85 1 24.0 -20 11 29.63 -42.32 F599 -1 -20 165 144 1 26.2 -63 02 331.00 -41.20 F107 35 95 129 259 1 25.4 -30 54 15.30 -45.19 F465 -68 -57 232 107 1 26.3 -48 01 310.86 -45.35 F236 -65 94 229 258	26.3 -32 03 13.70 -45.55 F465 -57 -120 221 28.9 -39 31 3.00 -46.53 F342 116 -85 48 30.0 -38 25 4.60 -46.74 F342 131 74 33 2 36.3 -83 56 308.25 -31.02 F011 -14 45 178 2 31.7 -28 52 18.48 -46.21 F465 4 53 160 2
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	m ₁₀	16.3 19.4 18.0 17.6	17.3 20.9 20.9 19.7 21.0	15.4: 21.1: 17.5 17.3 21.3	20.1 18.6 16.6 18.1	20.0 17.5 19.4 18.0	19.3 17.7 20.2 16.1 18.8	16.5 20.8: 19.8 17.9 20.1:	16.7 19.6 20.6 19.1 16.5	19.7 15.5 18.2 19.3	15.9 16.3: 20.1 17.4
	m3	15.3 18.8 17.0 17.1	16.2 19.8 19.8 19.1 20.0	14.5: 20.5 16.8 16.8	18.8? 16.1 17.0 17.4 17.5:	19.6 16.7 18.6 17.0	18.9 16.1 19.7 15.2 17.9	15.4 19.3: 18.0: 17.3	15.4 19.1 20.0 18.6 15.5	19.3 14.3 17.7 18.8 16.7	15.3 15.5 19.2? 16.5
	m	14.0 18.3 16.8 16.5	15.3: 19.1 19.2 18.8 19.3	14.0 20.2: 16.6 16.0 20.2	18.1: 16.0 15.9 17.3	18.1 15.1? 17.3 15.3 18.6	18.0 15.4 19.5 13.9	15.1 18.7: 17.5 16.1 19.2:	14.4 18.3 19.5 17.3	19.1 14.1 15.1 17.4	14.9 15.0 18.8? 15.4
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	ТВ-М	III-III III-III	11-111 11-111 1111 1111?		1-11: 111 111-111	I.I. II-III III		::::::::::::::::::::::::::::::::::::::	!!!-!!!: !!!-!!!		
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TABLE	Ni.	272 186 188 209 149	266 54 285 83 257	41 198 196 203	196 266 86 154 221	86 67 57 172 246	58 197 218 91 308	209 205 262 229 33	63 76 56 151 97	227 144 196 295 96	244 45 70 202 118
T	n _x	253 124 221 135 137	218 43 28 128 21	239 87 295 121 67	217 258 239 181	181 62 153 217 155	139 137 8 119 163	247 -3 120 323 76	46 302 63 118	263 249 62 277 139	247 204 86 219 66
	ycen	108 22 24 45	102 -110 121 -81	-123 34 39 -3	32 102 -78 -10 57	-78 -97 -107 8	-106 33 54 -73 144	45 41 98 65 -131	-101 -88 -108 -13	63 -20 32 131 -68	80 -94 -94 -46
	x cen	-89 40 -57 29	-54 121 136 36 143	-75 · 77 -131 43	-53 -94 -75 -17	-17 102 111 ·	25 - 156 45	-83 167 -159 88	1118 · 101 · 46 ·	-99 -85 102 -113	183 140 155 155
	Field	F291 F191 F291 F049	F291 F239 F239 F407	F347 F191 F536 F049	F110 F536 F240 F470	F347 F027 F470 F240	F470 F470 F191 F470 F605	F012 F191 F347 F292	F470 F471 F347 F240	F471 F471 F240 F078	F537 F292 F110 F028
	9	-64.81 -57.53 -64.45 -41.64	65.30 59.67 62.67 68.25	-65.96 -58.18 -69.21 -41.67	-50.37 -69.58 -60.84 -70.74	-67.39 -35.17 -71.05 -62.31	-71.33 -71.58 -59.44 -71.77	-37.52 -59.40 -70.02 -67.43	-73.04 -73.20 -68.91 -63.22	-74.29 -74.33 -64.54 -53.20	74.71 66.40 49.63 42.39
	1	348.35 - 329.42 - 344.56 - 311.43 -	347.33 - 332.13 - 338.67 - 2.23 -	348.49 - 328.73 - 36.13 - 311.05 -	317.94 - 40.23 - 331.45 - 19.46 - 354.94 -	348.90 - 306.76 - 13.79 - 333.03 -	13.71 - 21.85 - 327.15 - 15.48 - 56.73 -	307.76 - 326.51 - 355.22 - 341.53 -	13.14 - 13.74 - 344.32 - 329.46 -	23.49 - 17.42 - 328.81 - 315.78 -	331.42 -6 331.92 -6 312.94 -4 308.83 -4
	RA (2000) Dec	23 14.0 -42 43 23 14.5 -54 19 23 17.1 -44 17 23 17.6 -73 54 23 17.7 -75 01	23 17.5 -42 50 23 17.5 -51 48 23 18.0 -47 27 23 18.3 -36 17 23 19.0 -47 59	23 19.1 -42 05 23 19.3 -54 05 23 20.1 -24 07 23 21.4 -74 00 23 22.0 -54 46	23 22.7 -64 05 23 23.2 -22 49 23 24.3 -51 11 23 24.6 -29 55 23 24.7 -38 40	23 25.2 -41 12 23 26.8 -81 19 23 26.9 -31 44 23 27.2 -49 36 23 27.7 -38 13	23 28.2 -31 43 23 28.3 -29 07 23 29.1 -53 38 23 29.9 -31 06 23 29.9 -17 06	23 30.9 -78 50 23 30.7 -53 52 23 31.3 -37 55 23 34.4 -43 28 23 36.0 -42 11	23 36.2 -31 36 23 36.8 -31 24 23 37.1 -41 44 23 38.5 -49 59 23 39.5 -45 58	23 40.6 -28 35 23 41.3 -30 13 23 44.9 -49 06 23 45.0 -62 14 23 45.5 -56 02	23 46.0 -23 15 23 46.4 -46 58 23 46.6 -66 13 23 47.6 -74 00 23 47.8 -35 35
) Dec	-43 00 -54 36 -44 34 -74 11	-43 07 -52 05 -47 44 -36 34 -48 16	-42 22 -54 22 -24 24 -74 17 -55 03	-64 22 -23 06 -51 28 -30 12 -38 57	-41 29 -81 36 -32 01 -49 53	-32 00 -29 24 -53 55 -31 23	-79 07 -54 09 -38 12 -43 45	-31 53 -31 41 -42 01 -50 16	28 52 30 30 49 23 62 31 56 19	23 32 47 15 66 30 74 17 35 52
	RA (1950)	23 11.2 - 23 11.6 - 23 14.3 - 23 14.3 - 23 14.3 -	23 14.7 - 23 15.2 - 23 15.2 - 23 15.6 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 23 16.2 - 24 16.	23 16.4 23 17.5 23 17.4 23 18.2	23 19.7 23 20.6 23 21.5 23 21.9	23 22 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	23 25.5 23 25.6 23 26.3 23 27.2 23 27.3	23 27.6 23 27.9 23 28.6 23 31.7	23 33.6 23 34.2 23 35.4 23 35.4 23 35.8 1 1 1	23 38.0 23 42.2 23 42.2 23 42.3 23 42.3	233 4 4 3 2 3 4 4 4 3 3 4 4 3 3 4 4 3 3 4 4 5 3 3 4 4 5 3 3 4 5 5 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	Abell	\$1101 \$1102 \$1103 \$1104 \$1105	\$1106 \$1107 \$1108 \$1109 \$1110	S1111 S1112 S1113 S1114	\$1116 \$1117 \$1118 \$1119 \$1120	\$1121 \$1122 \$1123 \$1124 \$1125	\$1126 \$1127 \$1128 \$1129 \$1130	S1131 S1132 S1133 S1134 S1135	S1136 S1137 S1138 S1139 S1140	S1141 S1142 S1143 S1144 S1145	S1146 S1147 S1148 S1149 S1150
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m³	19.4 19.3 19.1 18.6 14.3	19.1 13.2: 16.3 18.4 19.9	15.7 16.7 14.8 15.1 13.7	15.8 19.5 17.5 16.4	13.7 15.4 14.6 19.3
m ₁	18.7 17.9: 16.7 18.3	18.0 12.8 15.4 18.1	15.5 14.9? 14.5 13.6	15.4 19.2 17.3 15.1	12.7 13.8 13.6 17.6
ပ	218 20: -1: 12	19 10 10 10 66)	71 2 8 4 E	-46 78 22 12 26	8 27 15
Тв-м	HIIII	::::::::::::::::::::::::::::::::::::::	III-III II-III		III IIII I
$T_{\mathbf{A}}$	* # * H H	RI I I	HHHHH	нннн	rrii.
Abell	S1151 S1152 S1153 S1153	S1156 S1157 S1158 S1159 S1160	S1161 S1162 S1163 S1164 S1165	S1166 S1167 S1168 S1169 S1170	\$1171 \$1172 \$1173 \$1174
ın	211 210 279 250 202	184 180 99 190	225 279 282 159	316 151 170 74 323	283 219 207 315
ux	172 186 18 18 247 312	239 288 89 219 246	245 251 97 219 213	181 194 182 73 182	183 179 177 174
Ycen	47 46 115 86 38	20 16 18 18	61 115 85 118 -5	152 -13 -90 159	119 55 43 151
x cen	-22 -22 146 -83	-124 75 -55 -82	-81 -87 -55 -49	-17 -30 -18 -18	-15 -13
Field	717 92 78 09				
	F477 F246 F074	F078 F192 F078 F241	F349 F472 F606 F293	F050 F538 F111 F292 F293	F409 F293 F241 F293
q					
q 1	21.99 -75.96 F4 335.95 -68.99 F2 329.62 -66.26 F3 314.42 -52.62 F0 21.39 -76.37 F4	313.51 -51.52 F078 359.57 -75.30 F349 319.23 -59.27 F192 313.03 -51.74 F078 332.98 -69.26 F241	1.07 -76.32 F349 49.68 -76.59 F472 65.08 -74.40 F606 346.78 -74.56 F293 16.61 -78.10 F409	310.70 -49.44 F050 61.58 -76.28 F538 314.55 -56.31 F111 327.06 -68.28 F292 347.46 -75.59 F293	27.95 -78.88 F409 341.73 -74.35 F293 330.46 -70.42 F241 346.59 -75.62 F293
RA (2000) Dec 1 b	-75.96 -68.99 -66.26 -52.62	-51.52 -75.30 -59.27 -51.74	-76.32 -76.59 -74.40 -74.56	-49.44 -75.28 -56.31 -68.28	-78.88 -74.35 -70.42 -75.62
1	48.3 -28 54 21.99 -75.96 48.5 -43 33 335.95 -68.99 49.3 -47 31 329.62 -66.26 49.5 -63 06 314.42 -52.62 50.2 -29 01 21.39 -76.37	50.3 -64 20 313.51 -51.52 51.9 -34 25 359.57 -75.30 52.1 -55 56 319.23 -59.27 53.6 -64 14 313.03 -51.74 54.0 -44 22 332.98 -69.26	55.6 -33 39 1.07 -76.32 55.8 -22 35 49.68 -76.59 56.0 -18 10 65.08 -74.40 57.6 -37 37 346.78 -74.56 58.7 -29 51 16.61 -78.10	59.7 -66 54 310.70 -49.44 000.3 -19 59 61.58 -75.28 00.4 -59 39 314.55 -56.31 00.8 -46 24 327.06 -68.28 01.1 -36 50 347.46 -75.59	01.4 -27 32 27.95 -78.88 01.4 -38 46 341.73 -74.35 01.8 -43 57 330.46 -70.42 01.9 -36 59 346.59 -75.62

TABLE 5—Continued

	B	17.2 17.3 17.2 16.5 15.2	17.2 17.4 17.3 16.7	17.4 17.2 17.3 17.2	17.3 15.9 15.8 15.8 17.0	16.3 17.3 17.2 17.2 16.0	17.2 17.2 17.4 16.5 17.4	17.3 17.3 17.4 17.3	17.2 17.2 17.2 17.2 17.2	17.4 17.3 17.4 17.4 17.4	17.4 17.2 17.3 17.3
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	8	0.0640	0.121	0.1087	0.0610 0.1086	0.0566	0.0604	0.152			
	Previous										
	Obs	10,10 10,10 20,10 10,10	10, 10 10, 10 10	10,1C 1C 1C 2C,10	20 10 10 10	10 10 10 10 20,10	10,10 10,10 20 20	99999	10,20 10 10 10	99999	50000 50000
	m ₁₀	17.9 18.5: 17.8 16.3	17.1 18.8: 18.0 16.5	19.0: 17.8 18.1 17.8 16.9	18.7 15.8 15.6 15.6	16.1 18.0 17.7 17.1 15.9	17.4 18.0 19.1 16.4 19.0	18.1 18.5 19.2 18.4 18.6	17.9: 17.6 17.5 17.2	19.1 18.7 19.1 19.1	19.7 17.8 18.6 18.5
	m ₃	16.8 17.8 17.0 15.6 14.3:	16.6 17.3? 17.6 15.1 18.6	17.9 ? 16.7 ? 17.5 : 17.0 16.0	17.8 15.0 15.2 14.8	15.5 17.6 ? 15.9 ? 15.9 15.3	16.5 18.8 18.6 15.4	16.4 18.3 18.4 17.2	16.3; 16.7 16.2 16.6	18.3 17.7 17.8 18.0 19.2	19.4 16.8 18.1 17.9
	ı,	16.2: 17.4 16.0 15.4	15.9 16.9 16.2 18.0	17.3 16.00 17.00 15.3	17.5 14.4 15.1 15.1 15.3	14.01 15.8 15.4 16.6	15.8 16.0 17.6 14.0	15.4 18.0 17.2 16.1	15.93 16.93 16.0	17.5 16.4 16.8 16.8	19.1 16.7 16.7 16.3
	Ö	58 76: 96: 29	52 66: 192 46 139	146 141 29 77 34	67 50 32 41:	27 72 28 34 30	77 81: 41: 60	79 449 76 55	40 64 92 29	74 65 98 66:	203 59 59 80: 77:
	T_{B-M}	. II II: III-III				::::::::::::::::::::::::::::::::::::::	II-II II-II II -III II:		::: ::::::::::::::::::::::::::::::::::		11-1117 1-11 11-111 11: 1-11
S.	T_A	RI? R R RI:	8 1 8 8 8 8	жжжнн	нннжн	нанян	ж ж ж н	яндыя	RRRR	* K K K	RRRRR
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ZONE											
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	yıı	314 250 167 178 210	93 276 112 112 177	224 194 229 223	248 297 167 55	228 247 289 188	75 80 232 49 280	206 171 102 158 107	46 74 194 252 271	117 98 92 233 292	255 110 228 306 170
OVERLAP Z	ng nx	115 314 109 250 94 167 291 178 282 210	278 93 227 276 213 112 149 112 119 177	118 68 117 224 93 194 83 299 79 223	39 248 257 297 240 167 188 55 208 94	170 228 175 247 147 289 92 188 53 57	58 75 35 80 270 232 202 49 227 280	213 206 201 171 156 102 148 158 247 107	223 46 220 74 216 194 162 252 157 271	186 117 143 98 117 92 105 233 258 292	34 255 172 110 146 228 109 306 63 170
	ycen x11	15 09 91 82	21117	2292	39 40 88 08	64 170 83 175 125 147 24 92 -107 53	-89 58 -84 35 68 270 -115 202 116 227				
	"x "	49 150 115 55 86 109 70 3 94 27 14 291 18 46 282	278 9 227 27 213 11 149 11	6 118 6 0 117 22 0 93 19 5 83 29 9 79 22	84 39 33 257 3 240 09 188 70 208	4 170 3 175 5 147 7 53	9 58 4 35 8 270 5 202 6 227	213 201 156 148 247	18 223 90 220 30 216 88 162 07 157	186 143 117 105 258	1 34 4 172 4 146 2 109 6 63
	ycen x11	9 150 115 5 86 109 0 3 94 7 14 291 8 46 282	-71 278 9 112 227 27 -52 213 11 -52 149 11 13 119 17	6 -96 118 6 7 60 117 22 1 30 93 19 1 135 83 29 5 59 79 22	5 84 39 3 133 257 6 3 240 4 -109 188 4 -70 208	64 170 83 175 125 147 24 92 -107 53	-89 58 -84 35 68 270 -115 202 116 227	42 213 7 201 -62 156 -6 148 -57 247	-118 223 -90 220 30 216 88 162 107 157	-47 186 -66 143 -72 117 69 105 128 258	91 34 3 -54 172 8 64 146 5 142 109 1 6 63
	d xcen ycen x11	5.40 F538 49 150 115 6.36 F538 55 86 109 7.60 F538 70 3 94 8.46 F539 -127 14 291 1.19 F473 -118 46 282	1.81 F473 -114 -71 278 9 1.53 F473 -63 112 227 27 2.94 F473 -49 -52 213 11 1.19 F539 15 -52 149 11 0.57 F539 45 13 119 17	2.19 F539 46 -96 118 6 4.43 F473 47 60 117 22 4.43 F473 81 135 83 29 4.34 F473 85 59 79 22	4.54 F473 125 84 39 4.42 F474 -93 133 257 6.51 F474 -76 3 240 4.31 F540 -24 -109 188 7.82 F474 -44 -70 208	1.25 F540 -6 64 170 5.86 F474 -11 83 175 0.18 F540 17 125 147 2.15 F540 72 24 92 4.57 F540 111 -107 53	8.84 F474 106 -89 58 8.42 F474 129 -84 35 5.90 F475 -106 68 270 4.16 F541 -38 -115 202 4.72 F475 -63 116 227	5.69 F475 -49 42 213 5.98 F475 -37 7 201 2.90 F541 8 -62 156 5.28 F475 16 -6 148 1.08 F542 -83 -57 247	1.38 F542 -59 -118 223 1.01 F542 -56 -90 220 9.34 F542 -5 30 216 7.91 F542 7 107 157	1.56 F476 -22 -47 186 0.81 F476 21 -66 143 0.36 F476 47 -72 117 9.45 F476 59 69 105 5.16 F543 -94 128 258	8.07 F476 130 91 34 6.41 F477 -8 -54 172 5.43 F477 18 64 146 4.27 F477 55 142 109 4.22 F477 101 6 63
	Field xcen ycen x11	.40 F538 49 150 115 .36 F538 55 86 109 .60 F538 70 3 94 .46 F539 -127 14 291 .19 F473 -118 46 282	53 -81.81 F473 -114 -71 278 9 10 -81.53 F473 -63 112 227 27 8-82.94 F473 -49 -52 213 11 13 -81.19 F539 15 -52 149 11 58 -80.57 F539 45 13 119 17	18 -82.19 F539 46 -96 118 6 76 -83.78 F473 47 60 117 22 83 -84.43 F473 81 135 83 29 86 -83.30 F473 85 59 79 22	42 -84.54 F473 125 84 39 08 -84.42 F474 -93 133 257 38 -86.51 F474 -76 3 240 00 -84.31 F540 -24 -109 188 89 -87.82 F474 -44 -70 208	25 F540 -6 64 170 86 F474 -11 83 175 118 F540 17 125 147 15 F540 17 2 24 92 57 F540 111 -107 53	15 -88.84 F474 106 -89 58 90 -88.42 F474 129 -84 35 68 -85.90 F475 -106 68 270 65 -84.16 F541 -138 -115 202 58 -84.72 F475 -63 116 227	83 -85.69 F475 -49 42 213 67 -85.98 F475 -37 7 201 37 -82.90 F541 8 -62 156 57 -85.28 F475 16 -6 148 42 -81.08 F542 -83 -57 247	55 -81.38 F542 -59 -118 223 59 -81.01 F542 -56 -90 220 59 -73.34 F542 -5 30 216 01 -77.91 F542 2 88 162 23 -77.52 F542 7 107 157	56 F476 -22 -47 186 81 F476 21 -66 143 36 F476 47 -72 117 16 F543 -94 128 258	.07 F476 130 91 34 .41 F477 -8 -54 172 .43 F477 18 64 146 .27 F477 55 142 109 .22 F477 101 6 63
	b Field xcen ycen x11	77 -75.40 F538 49 150 115 05 -76.36 F538 55 86 109 71 -77.60 F538 70 3 94 27 -78.46 F539 -127 14 291 51 -81.19 F473 -118 46 282	3 -81.81 F473 -114 -71 278 9 0 -81.53 F473 -63 112 227 27 8 -82.94 F473 -49 -52 213 11 3 -81.19 F539 15 -52 149 11 8 -80.57 F539 45 13 119 17	8 -82.19 F539 46 -96 118 6 6 -83.78 F473 47 60 117 22 3 -84.43 F473 71 30 93 19 6 -83.30 F473 81 135 83 29 9 -84.34 F473 85 59 79 22	-84.54 F473 125 84 39 -84.42 F474 -93 133 257 -86.51 F474 -76 3 240 -84.31 F540 -24 -109 188 -87.82 F474 -44 -70 208	7 -81.25 F540 -6 64 170 8 -85.86 F474 -11 83 175 0 -80.18 F540 17 125 147 1 -82.15 F540 72 24 92 4 -84.57 F540 111 -107 53	5 -88.84 F474 106 -89 58 0 -88.42 F474 129 -84 35 8 -85.90 F475 -106 68 270 5 -84.16 F541 -115 202 8 -84.72 F475 -63 116 227	3 -85.69 F475 -49 42 213 7 -85.98 F475 -37 7 201 7 -85.29 F475 16 -6 148 2 -81.08 F542 -83 -57 247	5 -81.38 F542 -59 -118 223 9 -81.01 F542 -56 -90 220 9 -79.34 F542 -52 30 216 1 -77.91 F542 7 107 157	0 -81.56 F476 -22 -47 186 6 -80.81 F476 21 -66 143 1 -80.36 F476 47 -72 117 2 -79.45 F476 59 69 105 7 -75.16 F543 -94 128 258	8 -78.07 F476 130 91 34 0 -76.41 F477 -8 -54 172 4 -75.43 F477 18 64 146 8 -74.27 F477 55 142 109 2 -74.22 F477 101 6 63
	Dec l b Field xcen ycen x11	6 53 75.17 -75.40 F538 49 150 115 8 06 72.05 -76.36 F538 55 86 109 9 39 67.71 -77.60 F538 70 3 94 9 30 72.27 -78.46 F539 -127 14 291 3 53 52.51 -81.19 F473 -118 46 282	6 02 38.53 -81.81 F473 -114 -71 278 9 2 3 9 63.10 -81.53 F473 -63 112 227 27 5 4 3 42.68 -82.94 F473 -49 -52 213 11 0 4 3 78.13 -81.19 F539 15 -52 149 11 0 9 30 85.58 -80.57 F539 45 13 119 17	33 77.18 -82.19 F539 46 -96 118 6 38 65.76 -83.78 F473 47 60 117 22 10 63.83 -84.43 F473 81 135 83 29 38 69.89 -84.34 F473 85 59 79 22	10 78.42 -84.54 F473 125 84 39 18 92.08 -84.42 F474 -93 133 257 39 77.38 -86.51 F474 -76 3 240 47 102.00 -84.31 F540 -44 -109 188 03 61.89 -87.82 F474 -44 -70 208	3 2 111.57 -81.25 F540 -6 64 170 3 11 104.58 -85.86 F474 -11 83 175 7 23 115.30 -80.18 F540 17 125 147 9 16 121.11 -82.15 F540 77 24 92 1 43 129.14 -84.57 F540 111 -107 53	5 22 173.15 -88.84 F474 106 -89 58 51 180.90 -88.42 F474 129 -84 35 15 16 180.50 -88.42 F475 -106 68 270 15.2 149.65 -84.16 F541 -138 -115 202 27 154.58 -84.72 F475 -63 116 227	3 58 166.83 -85.69 F475 -49 42 213 4 38 175.67 -85.98 F475 -37 7 201 53 152.37 -82.90 F541 8 -62 156 4 53 185.57 -85.28 F475 16 -6 148 1 02 171.42 -81.08 F542 -83 -57 247	56 177.55 -81.38 F542 -59 -118 223 28 175.59 -81.01 F542 -56 -90 220 12 166.59 -79.34 F542 -55 30 216 10 167.01 -77.91 F542 2 88 162 46 166.23 -77.52 F542 7 107 157	5 39 205.00 -81.56 F476 -22 -47 186 6 00 208.26 -80.81 F476 21 -66 143 6 06 209.31 -80.36 F476 47 -72 117 3 28 195.12 -79.45 F476 59 69 105 7 25 174.67 -75.16 F543 -94 128 258	3 01 195.58 -78.07 F476 130 91 34 5 47 210.70 -76.41 F477 -8 -54 172 3 35 202.34 -75.43 F477 18 64 146 2 07 197.98 -74.27 F477 55 142 109 4 39 207.82 -74.22 F477 101 6 63
	Dec l b Field xcen ycen x11	53 75.17 -75.40 F538 49 150 115 06 72.05 -76.36 F538 55 86 109 39 67.71 -77.60 F538 70 3 94 30 72.27 -78.46 F539 -127 14 291 53 52.51 -81.19 F473 -118 46 282	1 -26 02 38.53 -81.81 F473 -114 -71 278 9 7 -22 39 63.10 -81.53 F473 -63 112 227 27 5 -25 43 42.68 -82.94 F473 -49 -52 213 11 9 -20 43 78.13 -81.19 F539 15 -52 149 11 2 -19 30 85.58 -80.57 F539 45 13 119 17	4 -21 33 77.18 -82.19 F539 46 -96 118 6 6 -23 38 65.76 -83.78 F473 47 60 117 22 6 -24 10 63.83 -84.43 F473 81 135 83 29 7 -23 38 69.89 -84.34 F473 85 59 79 22	.8 -23 10 78.42 -84.54 F473 125 84 39 .1 -22 18 92.08 -84.42 F474 -93 133 257 .5 -24 43 17.02 -084.31 F540 -24 -109 188 .0 -26 03 61.89 -87.82 F474 -44 -70 208	.2 -18 32 111.57 -81.25 F540 -6 64 170 .8 -23 11 104.58 -85.86 F474 -11 83 175 .0 -17 23 115.30 -80.18 F540 17 125 147 .0 -19 16 121.11 -82.15 F540 77 24 92 .0 -21 43 129.14 -84.57 F540 111 -107 53	4 -26 22 173.15 -88.84 F474 106 -89 58 4 -26 16 180.90 -88 42 F474 129 -84 35 0 -23 30 151.68 -85.90 F475 -106 68 270 149.65 -84.16 F541 -38 -115 202 4 -22 35 154.58 -84.72 F475 -63 116 227	58 166.83 -85.69 F475 -49 42 213 38 175.67 -85.98 F475 -37 7 201 53 152.37 -82.90 F541 8 -62 156 53 185.57 -85.28 F475 16 -6 148 02 171.42 -81.08 F542 -83 -57 247	6 177.55 -81.38 F542 -59 -118 223 8 175.59 -81.01 F542 -56 -90 220 2 166.59 -79.34 F542 -5 30 216 167.01 -77.91 F542 2 88 162 6 166.23 -77.52 F542 7 107 157	39 205.00 -81.56 F476 -22 -47 186 00 208.26 -80.81 F476 21 -66 143 06 209.31 -80.36 F476 47 -72 117 28 195.12 -79.45 F476 59 69 105 25 174.67 -75.16 F543 -94 128 258	0 -23 01 195.58 -78.07 F476 130 91 34 9 -25 47 210.70 -76.41 F477 -8 -54 172 0 -23 35 202.34 -75.43 F477 18 64 146 1 -22 07 197.98 -74.27 F477 55 142 109 8 -24 39 207.82 -74.22 F477 101 6 63
	l b Field xcen ycen x11	-16 53 75.17 -75.40 F538 49 150 115 -18 06 72.05 -76.36 F538 55 86 109 -19 39 67.71 -77.60 F538 70 3 94 -19 30 72.27 -78.46 F539 -127 14 291 -23 53 52.51 -81.19 F473 -118 46 282	-26 02 38.53 -81.81 F473 -114 -71 278 9 -22 39 63.10 -81.53 F473 -63 112 227 27 -25 43 42.68 -82.94 F473 -49 -52 213 11 -20 43 78.13 -81.19 F539 15 -52 149 11 -19 30 85.58 -80.57 F539 45 13 119 17	-21 33 77.18 -82.19 F539 46 -96 118 6 -23 38 65.76 -83.78 F473 47 60 117 22 -24 10 63.83 -84.43 F473 81 135 83 29 -22 13 78.86 -83.30 F473 85 59 79 22	-23 10 78.42 -84.54 F473 125 84 39 -22 18 92.08 -84.42 F474 -93 133 257 -24 39 77.38 -86.51 F474 -76 3 240 -21 47 102.00 -84.31 F540 -24 -109 188 -26 03 61.89 -87.82 F474 -44 -70 208	-18 32 111.57 -81.25 F540 -6 64 170 -23 11 104.58 -85.86 F474 -11 83 175 -17 23 115.30 -80.18 F540 17 125 147 -19 16 121.11 -82.15 F540 72 24 92 -21 43 129.14 -84.57 F540 111 -107 53	-26 22 173.15 -88.84 F474 106 -89 58 -26 16 180.90 -88.42 F474 129 -84 35 -23 30 151.68 -85.90 F475 -106 68 270 -21 52 149.65 -84.16 F541 -38 -115 202 -22 35 154.58 -84.72 F475 -63 116 227	-23 58 166.83 -85.69 F475 -49 42 213 -24 38 175.67 -85.98 F475 -37 7 201 -20 53 152.37 -85.29 F475 16 -6 156 -24 53 185.57 -85.28 F475 16 -6 148 -21 02 171.42 -81.08 F542 -83 -57 247	-21 56 177.55 -81.38 F542 -59 -118 223 -21 28 175.59 -81.01 F542 -56 -90 220 -19 12 166.59 -79.34 F542 -52 30 216 -18 10 167.01 -77.91 F542 2 88 162 -17 46 166.23 -77.52 F542 7 107 157	-25 39 205.00 -81.56 F476 -22 -47 186 -26 00 208.26 -80.81 F476 21 -66 143 -25 00 195.11 -90.35 F476 47 -72 117 -23 28 195.12 -79.45 F476 59 69 105 -17 25 174.67 -75.16 F543 -94 128 258	-23 01 195.58 -78.07 F476 130 91 34 -25 47 210.70 -76.41 F477 -8 -54 172 -23 35 202.34 -75.43 F477 18 64 146 -22 07 197.98 -74.27 F477 55 142 109 -24 39 207.82 -74.22 F477 101 6 63
	RA (2000) Dec l b Field x cen yeen x ll	0 06.5 -16 53 75.17 -75.40 F538 49 150 115 0 07.1 -18 06 72.05 -76.36 F538 55 86 109 0 08.2 -19 39 67.71 -77.60 F538 70 3 94 0 13.6 -19 30 72.27 -78.46 F539 -127 14 291 0 15.1 -23 53 52.51 -81.19 F473 -118 46 282	15.1 -26 02 38.53 -81.81 F473 -114 -71 278 9 19.7 -22 39 63.10 -81.53 F473 -63 112 227 27 20.5 -25 43 42.68 -82.94 F473 -49 -52 213 11 24.9 -20 43 78.13 -81.19 F539 15 -52 149 11 27.2 -19 30 85.58 -80.57 F539 45 13 119 17	27.4 -21 33 77.18 -82.19 F539 46 -96 118 6 28.6 -23 38 65.76 -83.78 F473 47 60 117 22 30.5 -24 10 63.83 -84.43 F473 81 135 83 29 31.7 -22 13 78.86 -83.30 F473 85 59 79 22	0 34.8 -23 10 78.42 -84.54 F473 125 84 39 0 39.1 -22 18 92.08 -84.42 F474 -93 133 257 0 40.5 -24 39 77.38 -86.51 F474 -76 3 240 0 42.7 -13 1 7 102.00 -84.31 F540 -24 -109 188 0 43.0 -26 03 61.89 -87.82 F474 -44 -70 208	44.2 -18 32 111.57 -81.25 F540 -6 64 170 45.8 -23 11 104.58 -85.86 F474 -11 83 175 46.0 -17 23 115.30 -80.18 F540 17 125 147 50.4 -19 16 121.11 -82.15 F540 72 24 92 54.0 -21 43 129.14 -84.57 F540 111 -107 53	0 55.4 -26 22 173.15 -88.84 F474 106 -89 58 0 57.4 -26 16 180.90 -88.42 F474 129 -84 35 10.00 -23 30 151.68 -85.90 F475 -106 68 270 1 02.7 -21 52 149.65 -84.16 F541 -38 -115 202 1 03.4 -22 35 154.58 -84.72 F475 -63 116 227	04.5 -23 58 166.83 -85.69 F475 -49 42 213 05.5 -24 38 175.67 -85.98 F475 -37 7 201 06.3 -20 53 152.37 -82.90 F475 16 -6 148 20.0 -21 02 171.42 -81.08 F542 -83 -57 247	21.7 -21 56 177.55 -81.38 F542 -59 -118 223 22.1 -21 28 175.59 -81.01 F542 -56 -90 220 22.5 -19 12 166.59 -79.34 F542 -52 30 216 26.7.2 -18 10 167.01 -77.91 F542 2 88 162 27.2 -17 46 166.23 -77.52 F542 7 107 157	1 28.6 -25 39 205.00 -81.56 F476 -22 -47 186 1 32.3 -26 00 208.26 -80.81 F476 21 -66 143 1 34.3 -26 06 209.31 -80.36 F476 47 -72 117 1 35.3 -23 28 195.12 -79.45 F476 59 69 105 1 40.1 -17 25 174.67 -75.16 F543 -94 128 258	41.0 -23 01 195.58 -78.07 F476 130 91 34 51.9 -25 47 210.70 -76.41 F477 -8 -54 172 54.0 -23 35 202.34 -75.43 F477 18 64 146 57.1 -22 07 197.98 -74.27 F477 55 142 109 00.8 -24 39 207.82 -74.22 F477 101 6 63
	Dec RA (2000) Dec l b Field xcen ycen x11	-17 10 00 06.5 -16 53 75.17 -75.40 F538 49 150 115 -18 23 00 07.1 -18 06 72.05 -76.36 F538 55 86 109 -19 56 00 08.2 -19 39 67.71 -77.60 F538 70 3 94 -19 47 00 13.6 -19 30 72.27 -78.46 F539 -127 14 291 -24 10 00 15.1 -23 53 52.51 -81.19 F473 -118 46 282	-26 19 00 15.1 -26 02 38.53 -81.81 F473 -114 -71 278 9 -22 56 00 19.7 -22 39 63.10 -81.53 F473 -63 112 227 27 -26 00 00 20.5 -25 43 42.68 -82.94 F473 -49 -52 213 11 -21 00 00 24.9 -20 43 78.13 -81.19 F539 15 -52 149 11 -19 47 00 27.2 -19 30 85.58 -80.57 F539 45 13 119 17	-21 50 27.4 -21 33 77.18 -82.19 F539 46 -96 118 6 -23 55 00 28.6 -23 38 65.76 -83.78 F473 47 60 117 22 -24 27 00 30.5 -24 10 63.83 -84.43 F473 71 30 93 19 -22 30 03 31.7 -22 13 78.86 -83.30 F473 81 135 89 29 79 22 -23 55 03 31.7 -23 38 69.89 -84.34 F473 85 59 79 22	-23 27 00 34.8 -23 10 78.42 -84.54 F473 125 84 39 -22 35 00 39.1 -22 18 92.08 -84.42 F474 -93 133 257 -24 56 00 40.5 -24 39 77.38 -86.51 F474 -76 3 240 -25 04 04.5.7 -21 47 102.00 -84.31 F540 -24 -109 188 -26 20 00 43.0 -26 03 61.89 -87.82 F474 -44 -70 208	-18 49 00 44.2 -18 32 111.57 -81.25 F540 -6 64 170 -23 28 00 45.8 -23 11 104.58 -85.86 F474 -11 83 175 -17 40 00 46.0 -17 23 115.30 -80.18 F540 17 125 147 -12 33 00 50.4 -19 16 121.11 -82.15 F540 77 2 4 92 -22 00 00 54.0 -21 43 129.14 -84.57 F540 111 -107 53	-26 39 00 55.4 -26 22 173.15 -88.84 F474 106 -89 58 -26 33 00 57.4 -26 16 180.90 -88.42 F474 129 -84 35 -23 47 01 0.0 -23 30 151.68 -88.90 F475 -106 68 270 -22 09 01 02.7 -21 52 149.65 -84.16 F541 -38 -115 207 -22 52 01 03.4 -22 35 154.58 -84.72 F475 -63 116 227	-24 15 01 04.5 -23 58 166.83 -85.69 F475 -49 42 213 -24 55 01 05.5 -24 38 175.67 -85.98 F475 -37 7 201 -21 10 06.3 -20 31 152.37 -85.28 F475 -37 7 201 -25 09 09 -24 53 185.57 -85.28 F475 16 -6 148 -21 18 01 20 -21 02 171.42 -81.08 F542 -83 -57 247	-22 12 01 21.7 -21 56 177.55 -81.38 F542 -59 -118 223 -21 44 01 22.1 -21 28 175.59 -81.01 F542 -56 -90 220 -19 28 01 22.5 -19 12 166.59 -79.34 F542 -52 30 216 -18 26 01 26.7 -18 10 167.01 -77.91 F542 2 88 162 -18 02 01 27.2 -17 46 166.23 -77.52 F542 7 107 157	-25 55 01 28.6 -25 39 205.00 -81.56 F476 -22 -47 186 -26 16 01 32.3 -26 00 208.26 -80.81 F476 21 -66 143 -26 22 01 34.3 -26 06 209.31 -80.35 F476 47 -72 117 -23 44 01 35.3 -23 28 195.12 -79.45 F476 59 69 105 -17 41 01 40.1 -17 25 174.67 -75.16 F543 -94 128 258	-23 17 01 41.0 -23 01 195.58 -78.07 F476 130 91 34 -26 02 01 51.9 -25 47 210.70 -76.41 F477 -8 -54 172 -23 50 01 54.0 -23 35 202.34 -75.43 F477 18 64 146 -22 22 01 57.1 -22 07 197.98 -74.27 F477 55 142 109 -24 54 02 00.8 -24 39 207.82 -74.22 F477 101 6 63
	(1950) Dec l b Field x_{cen} y_{cen} x_{ll}	17 10 00 06.5 -16 53 75.17 -75.40 F538 49 150 115 18 23 00 07.1 -18 06 72.05 -76.36 F538 55 86 109 19 56 00 08.2 -19 39 67.71 -77.60 F538 70 3 94 19 47 00 13.6 -19 30 72.27 -78.46 F539 -127 14 291 24 10 00 15.1 -23 53 52.51 -81.19 F473 -118 46 282	26 19 00 15.1 -26 02 38.53 -81.81 F473 -114 -71 278 9 22 56 00 19.7 -22 39 63.10 -81.53 F473 -63 112 227 27 26 00 00 20.55 -25 43 42.68 -82.94 F473 -49 -52 21 31 11 10 47 00 24.9 -20 43 78.13 -81.19 F539 15 -52 149 11 19 47 00 27.2 -19 30 85.58 -80.57 F539 45 13 119 17	21 50 00 27.4 -21 33 77.18 -82.19 F539 46 -96 118 6 23 55 00 28.6 -23 38 65.76 -83.78 F473 47 60 117 22 22 22 30 03.13 -22 13 78.86 -83.30 F473 81 135 83 29 23 55 00 31.7 -23 38 69.89 -84.34 F473 85 59 79 22	22 37 00 34.8 -23 10 78.42 -84.54 F473 125 84 39 22 35 00 39.1 -22 18 92.08 -84.42 F474 -93 133 257 24 56 00 40.5 -24 39 77.38 -86.51 F474 -93 133 257 24 56 00 42.7 -21 47 102.00 -84.31 F540 -24 -109 188 26 20 00 43.0 -26 03 61.89 -87.82 F474 -44 -70 208	3 49 00 44.2 -18 32 111.57 -81.25 F540 -6 64 170 3 28 00 45.8 -23 11 104.58 -85.86 F474 -11 83 175 40 00 46.0 -17 23 115.30 -80.18 F540 17 125 147 5 33 00 50.4 -19 16 121.11 -82.15 F540 77 24 92 5 00 00 54.0 -21 43 129.14 -84.57 F540 111 -107 53	26 39 00 55.4 -26 22 173.15 -88.84 F474 106 -89 58 26 33 00 57.4 -26 16 180.90 -88.42 F474 129 -84 35 22 49 01 02.7 -21 52 149.65 -84.16 F541 -138 -115 20 22 52 01 03.4 -22 35 154.58 -84.72 F475 -63 116 227	24 15 01 04.5 -23 58 166.83 -85.69 F475 -49 42 213 21 01 05.5 -24 38 175.67 -85.98 F475 -37 7 201 21 10 01 06.3 -26 39 185.37 -85.28 F475 16 -6 186 25 09 01 09.9 -24 53 185.57 -85.28 F475 16 -6 148 21 18 01 20.0 -21 02 171.42 -81.08 F542 -83 -57 247	22 12 01 21.7 -21 56 177.55 -81.38 F542 -59 -118 223 21 44 01 22.1 -21 28 175.59 -81.01 F542 -56 -90 220 19 28 01 22.5 -19 12 166.59 -79.34 F542 -55 30 216 18 26 01 26.7 -18 10 167.01 -77.91 F542 2 88 162 18.07 27.2 -17 46 166.23 -77.52 F542 7 107 157	25 55 01 28.6 -25 39 205.00 -81.56 F476 -22 -47 186 26 16 01 32.3 -26 00 208.26 -80.81 F476 21 -66 143 26 22 01 34.3 -26 06 209.31 -80.36 F476 47 -72 117 23 34 40 135.3 -23 28 195.12 -79.45 F476 59 69 105 17 41 01 40.1 -17 25 174.67 -75.16 F543 -94 128 258	23 17 01 41.0 -23 01 195.58 -78.07 F476 130 91 34 26 02 01 51.9 -25 47 210.70 -76.41 F477 -8 -54 172 23 50 01 54.0 -23 35 202.34 -75.43 F477 18 64 146 22 2 01 57.1 -22 07 197.98 -74.27 F477 55 142 109 24 54 02 00.8 -24 39 207.82 -74.22 F477 101 6 63
	Dec RA (2000) Dec l b Field xcen ycen x11	5 -17 10 00 06.5 -16 53 75.17 -75.40 F538 49 150 115 5 -18 23 00 07.1 -18 06 72.05 -76.36 F538 55 86 109 719 56 00 08.2 -19 39 67.71 -77.60 F538 70 3 94 119 47 00 13.6 -19 30 72.27 -78.46 F539 -127 14 291 6 -24 10 00 15.1 -23 53 52.51 -81.19 F473 -118 46 282	2.6 -26 19 00 15.1 -26 02 38.53 -81.81 F473 -114 -71 278 9 7.2 -22 56 00 19.7 -22 39 63.10 -81.53 F473 -63 112 227 27 8.0 -26 00 00 24.9 -26 43 48.18 48.19 45.39 15 -52 149 111 4.7 -19 47 00 27.2 -19 30 85.58 -80.57 F539 45 13 119 17	4.9 -21 50 00 27.4 -21 33 77.18 -82.19 F539 46 -96 118 6 6.1 -23 55 00 28.6 -23 38 65.76 -83.78 F473 47 60 117 22 8.0 -24 27 00 31.5 -24 10 63.83 184.73 71 30 93 19 8.8 -22 30 31.7 -23 38 69.89 -84.34 F473 85 59 79 22	2.3 -23 27 00 34.8 -23 10 78.42 -84.54 F473 125 84 39 6.6 -22 35 00 39.1 -22 18 92.08 -84.42 F474 -93 133 257 8.0 2.4 4.5 7.3 8-65.51 F474 -76 3 240 9.2 -22 0.4 0.4 2.7 1.4 7 -76 1.8 9.2 -2.5 20 0.4 3.7 1.2 1.0 1.8 9 -84.31 F540 -24 -109 1.8 9.5 -26 20 0.4 3.0 -26 0.3 61.89 -87.82 F474 -44 -70 208	1.7 -18 49 00 44.2 -18 32 111.57 -81.25 F540 -6 64 170 3.3 -23 28 00 45.8 -23 11 104.58 -85.86 F474 -11 83 175 5.5 -17 40 00 46.0 -17 23 115.30 -80.18 F540 17 125 147 7.9 -19 33 00 50.4 -19 16 121.11 -82.15 F540 77 24 92 1.5 -22 00 00 54.0 -21 43 129.14 -84.57 F540 111 -107 53	3.0 -26 39 00 55.4 -26 22 173.15 -88.84 F474 106 -89 58 55.0 -26 33 00 57.4 -26 16 180.90 -88.42 F474 129 -84 35 00 57.4 -20 16 180.90 -88.42 F474 129 -84 35 00 31 -22 32 47 01 00.00 -23 30 1549.65 -84.16 F541 -138 -115 202 1.0 -22 52 01 03.4 -22 35 154.58 -84.72 F475 -63 116 227	2.1 -24 15 0.1 04.5 -23 58 166.83 -85.69 F475 -49 42 213 3.1 -24 55 175.67 -85.98 F475 -37 7 201 3.9 -21 10 010 06.3 -24 53 155.77 -85.28 F475 -37 7 201 7.5 -25 09 01 09.9 -45 53 185.57 -85.28 F475 16 -6 148 7.6 -21 18 01 20.0 -21 02 171.42 -81.08 F542 -83 -57 247	9.3 -22 12 01 21.7 -21 56 177.55 -81.38 F542 -59 -118 223 9.7 -21 44 01 22.1 -21 28 175.59 -81.01 F542 -56 -90 220 01 -19 28 01 22.5 -19 12 166.59 -79.34 F542 -5 30 216 4.3 -18 26 01 26.7 -18 10 167.01 -77.91 F542 2 88 162 4.8 -18 02 01 27.2 -17 46 166.23 -77.52 F542 7 107 157	6.2 -25 55 01 28.6 -25 39 205.00 -81.56 F476 -22 -47 186 9.9 -26 16 01 32.3 -26 00 208.26 -80.81 F476 21 -66 143 2.0 -26 22 01 34.3 -26 06 209.31 -80.36 F476 47 -72 117 2.9 -23 44 01 35.3 -23 28 195.12 -79.45 F476 59 69 105 7.7 -17 41 01 40.1 -17 25 174.67 -75.16 F543 -94 128 258	8.6 -23 17 01 41.0 -23 01 195.58 -78.07 F476 130 91 34 9.6 -26 02 01 51.9 -25 47 210.70 -76.41 F477 -8 -54 172 1.7 -23 50 01 54.0 -23 35 202.34 -75.43 F477 18 64 146 4.8 -22 22 01 57.1 -22 07 197.98 -74.27 F477 55 142 109 8.5 -24 54 02 00.8 -24 39 207.82 -74.22 F477 101 6 63

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z	22161	44666	0.1160	0.0406	0.1050	OHNNH	00010	0.0666	0.0472	0.041
Previous										
Obs	30000	10 20,10 10 10,10	2C 1C 10 1C,20 2C,10	10,1C 20 1C,10 20 20	00000	10, 10 10, 20 10, 20 10, 10	00000	10,10 10,10 10,10	10 30 10 10,20	10 10 10,10
m ₁₀	18.3 19.0 17.8 18.6	18.4 18.7 17.3 19.2 17.2	18.5 16.9 16.8 19.8	19.2 16.0 16.4 18.2	19.0 16.8 18.1 17.8	18.5 18.3 18.8 18.1	17.1 17.6 18.7 18.1 18.8	15.8 20.0 19.4 18.0	17.7 15.5 18.5 19.2	14.6 16.8 18.8 17.5
m³	18.3 18.6 17.5 17.6:	17.1 18.1 16.0 18.6 16.5	17.8 16.5 16.0 19.3	18.6 14.6 15.6: 17.7 17.8	18.5 16.2 17.3 16.6 17.1	18.0 17.0 17.6 17.5 17.5	15.7 17.0 18.1 16.9 17.5	15.1 19.1: 18.5: 17.3	16.4 14.7 17.5 18.5:	13.5 15.8 18.3 16.5
mı	17.5 17.5 16.0 17.5: 16.9	16.2 16.8 15.3 17.9	17.5 16.2 15.1 18.8 18.0	18.4 14.3 15.1 16.4:	17.8 14.8: 16.1 16.1	16.7 16.5: 17.0 16.8? 15.7:	15.1 16.4 17.7 16.7:	14.8 18.7 17.9? 17.1	16.2 14.4 17.2 17.6	13.3 15.6 17.6 16.2
C	93 106 68 149: 65	58 73 101 85 82:	25 50 133 58: 57	44 28 32 61 136:	91: 90 105 89 133	36 73 102 124 72:	0 93 48 78 91	58 33 95 60 60	74 37 84 92	92 50 143 62 98
Тв-м	11 11-11 12-11	11-111 11 113 1113		1-11 11-11 11-11	11-111 11 11 11	11 1-11 11-11 1-111	117 111-111 1 1111 1-11	11-111 111-111: 111-111	III-III	1-11 11-11 11-111 11-111
T_A	E E E E	H K K K K K K K K K K K K K K K K K K K	нижжи	r R R IR	R. IIR	R R I I	RI R:	RRI	RRI	RIIR
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Уш	119 164 91 137	320 40 186 72 86	53 306 156 39	333 222 201 156	149 196 141 281	70 34 38 310	334 195 121 136	46 238 137 136	175 189 125 112	131 108 131 133
x_{ll} y_{ll}	48 119 273 164 183 91 180 137 34 51	27 320 192 40 74 186 152 72 68 86	198 53 171 306 249 156 76 39 57 175	218 333 42 222 104 201 274 156 264 116	263 149 122 196 257 141 226 281 217 274	216 70 201 34 182 38 33 310 292 292	198 334 204 195 270 121 119 84 142 136	121 46 330 238 291 102 184 137 272 136	146 175 274 289 249 125 262 31 182 112	254 131 243 108 224 287 208 311 182 133
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Xcen Ycen XII	5 48 11 0 273 16 3 183 9 7 180 13	56 27 32 24 192 4 22 74 18 92 152 7 78 68 8	1 198 5 2 171 30 8 249 15 5 76 3	9 218 3 8 42 2 7 104 2 8 274 1 8 264 1	5 263 14 2 122 19 3 257 14 7 226 28 0 217 27	94 216 7 30 201 3 26 182 3 46 33 31 28 292 29	0 198 33 1 204 19 3 270 12 0 119 8 142 13	8 121 2 291 7 184 8 272	11 146 25 274 39 249 33 262 52 182	254 243 224 208 182
cen Ycen XII	16 -45 48 11 09 0 273 16 19 -73 183 9 16 -27 180 13 30 -113 34 5	37 156 27 32 28 -124 192 4 90 22 74 18 12 -92 152 7 96 -78 68 8	4 -111 198 5 7 142 171 30 5 -8 249 15 8 -125 76 3 7 11 57 17	54 169 218 3 22 58 42 2 60 37 104 2 10 -8 274 1 00 -48 264 1	99 -15 263 14 42 32 122 19 93 -23 257 14 62 117 226 28 53 110 217 27	2 -94 216 7 7 -130 201 3 8 -126 182 3 1 146 33 31	4 170 198 33 0 31 204 19 6 -43 270 12 5 -80 119 8 2 -28 142 13	3 -118 121 5 74 330 7 -62 291 0 -27 184 3 -28 272	3 11 146 125 274 5 -39 249 3 -133 262 3 -52 182	-33 254 9 -56 243 0 123 224 4 147 208 -31 182
Xcen Ycen XII	4.11 F477 116 -45 48 11 3.20 F478 -109 0 273 16 1.80 F478 -19 -73 183 9 1.60 F478 -16 -27 180 13 9.43 F544 130 -113 34 5	.27 F544 137 156 27 32 68 F545 -28 -124 192 4 68 F475 90 22 74 18 .39 F479 12 -92 152 7 .79 F479 96 -78 68 8	63.09 F546 -34 -111 198 5 60.91 F546 -7 142 171 30 63.03 F480 -85 -8 249 15 60.97 F546 88 -125 76 3 59.91 F546 107 11 57 17	6.95 F547 -54 169 218 3 9.02 F480 122 58 42 2 5.89 F547 60 37 104 2 9.88 F549 -110 -8 274 1 9.94 F549 -100 -48 264 1	9.73 F549 -99 -15 263 14 0.82 F482 42 32 122 19 9.66 F549 -93 -23 257 14 8.21 F549 -62 117 226 28 8.10 F549 -53 110 217 27	49.34 F549 -52 -94 216 7 49.26 F549 -37 -130 201 3 48.91 F549 -18 -126 182 3 44.65 F549 131 146 33 31 44.63 F550 -128 128 292 29	42.66 F550 -34 170 198 33 42.64 F484 -40 31 204 19 40.69 F551 -106 -43 270 12 41.62 F851 22 -28 142 13 38.34 F551 22 -28 142 13	36.31 F552 -166 74 330 36.32 F552 -166 74 330 37.75 F852 -127 -62 291 37.75 F885 -20 -27 184 35.97 F552 -108 -28 272	33.72 F486 -110 125 274 29.48 F487 -85 -39 249 27.27 28.36 F487 -18 -52 182 28.36 F487 -18 -52 182	24.84 F488 -90 -33 254 21.94 F555 -79 -56 243 20.30 F555 -60 123 224 15.19 F556 -44 147 208 18.66 F498 -18 -31 182
Field xcen ycen x11	.11 F477 116 -45 48 11 .20 F478 -109 0 273 16 .80 F478 -19 -73 183 9 .60 F478 -16 -27 180 13 .43 F544 130 -113 34 5	27 F544 137 156 27 32 68 F545 -28 -124 192 4 8 F545 90 22 14 18 39 F479 12 -92 152 7 79 F479 96 -78 68 8	0.09 F546 -34 -111 198 5 91 F546 -7 142 171 30 0.03 F480 -85 -8 249 15 97 F546 88 -125 76 31 91 F546 107 11 57 17	95 F547 -54 169 218 3 02 F480 122 58 42 2 89 F547 60 37 104 2 88 F549 -110 -8 274 1 94 F549 -100 -48 264 1	.73 F549 -99 -15 263 14 .82 F482 42 32 122 19 .66 F549 -93 -23 257 14 .21 F549 -62 117 226 28 .10 F549 -53 110 217 27	9.34 F549 -52 -94 216 7 9.26 F549 -37 -130 201 3 8.91 F549 -18 -126 182 3 4.65 F549 131 146 33 31 4.63 F550 -128 128 292 29	6 F550 -34 170 198 33 4 F484 -40 31 204 19 7 F551 -106 -43 270 12 2 F484 2 -80 119 8 4 F551 22 -28 142 13	8.50 F551 43 -118 121 6.31 F552 -166 74 330 6.52 F552 -127 -62 291 7.75 F485 -20 -27 184 5.97 F552 -108 -28 272	3.49 F552 18 11 146 3.72 F486 -110 125 274 9.48 F487 -85 -39 249 7.27 F554 -18 -52 182 8.36 F487 -18 -52 182	84 F488 -90 -33 254 94 F555 -79 -56 243 30 F555 -60 123 224 19 F556 -44 147 208 66 F498 -18 -31 182
Dec l b Field xcen yeen x11	5 36 211.45 -74.11 F477 116 -45 48 11 45 209.00 -73.20 F478 -109 0 273 16 6 08 214.50 -71.80 F478 -19 -73 183 9 5 17 211.86 -71.60 F478 -16 -27 180 13 1 52 202.92 -69.43 F544 130 -113 34 5	6 51 190.62 -67.27 F544 137 156 27 32 2 05 205.17 -67.68 F545 -28 -124 192 4 9 21 21 217.51 -64.68 F545 90 22 124 18 6 8 6 30 217.51 -66.39 F479 12 -92 152 7 6 16 217.49 -64.79 F479 96 -78 68 8	1 53 208.13 -63.09 F546 -34 -111 198 5 7 10 199.15 -60.91 F546 -7 142 171 30 4 56 215.15 -63.03 P480 -85 -8 249 15 2 09 210.06 -60.97 F546 88 -125 76 31 9 39 205.44 -59.91 F546 107 11 57 17	6 42 201.69 -56.95 F547 -54 169 218 3 3 41 214.30 -59.02 F480 122 58 42 2 9 02 212.12 -55.89 F549 -100 -8 274 10 45 213.49 -49.94 F549 -100 -48 264 1	0 10 212.64 -49.73 F549 -99 -15 263 14 4 16 218.83 -50.82 F482 42 32 122 19 0 17 212.87 -49.66 F549 -93 -23 257 14 7 40 209.44 -48.21 F549 -62 117 226 28 7 48 209.71 -48.10 F549 -53 110 217 27	1 37 215.19 -49.34 F549 -52 -94 216 7 2 17 216.29 -49.26 F549 -37 -130 201 3 2 13 216.32 -48.91 F549 -18 -126 182 3 7 07 210.59 -44.65 F549 131 146 33 31 7 25 211.06 -44.63 F550 -128 128 292 29	6 41 211.03 -42.66 F550 -34 170 198 33 4 19 221.98 -42.64 F484 -40 31 204 19 0 43 217.75 -40.69 F551 -106 -43 270 12 6 22 22.52.21 -41.62 F484 45 -80 119 8 0 27 218.41 -38.34 F551 22 -28 142 13	2 07 220.58 -38.50 F551 43 -118 121 8 28 216.68 -36.31 F552 -166 74 330 10 219.96 -36.52 F552 -127 -62 291 5 27 225.31 -37.75 F485 -20 -27 184 0 25 219.41 -35.97 F552 -108 -28 272	9 42 219.56 -33.49 F552 18 11 146 2 37 223.18 -33.72 F486 -110 125 274 2 54 225.64 -27.27 F554 -98 -13 262 5 57 229.35 -28.36 F487 -18 -52 182	5 37 230.30 -24.84 F488 -90 -33 254 1 04 226.19 -21.94 F555 -79 -56 243 7 44 223.05 -20.30 F555 -60 123 224 7 15 224.84 -15.19 F556 -44 147 208 5 51 256.59 18.66 F498 -18 -31 182
(2000) Dec l b Field x cen yeen x ll	2.1 -25 36 211.45 -74.11 F477 116 -45 48 11 5.5 -24 45 209.00 -73.20 F478 -109 0 273 16 2.9 -26 08 214.50 -71.80 F478 -19 -73 183 9 3.2 -25 17 211.86 -71.60 F478 -16 -27 180 13 9.0 -21 52 202.92 -69.43 F544 130 -113 34 5	9.2 -16 51 190.62 -67.27 F544 137 156 27 32 73 -22 05 205.17 -67.68 F545 -28 -124 192 4 619 21 20.72 -64.68 F545 90 22 174 18 74 -26 30 217.51 -66.39 F479 12 -92 152 74 4.5 -26 16 217.49 -64.79 F479 96 -78 68 8	7.8 -21 53 208.13 -63.09 F546 -34 -111 198 5 9.9 -17 10 199.15 -60.91 F546 -7 142 171 30 1.4 -24 56 215.12 -63.03 F480 -85 -8 249 15 1.5 -2.09 210.06 -60.97 F546 88 -125 76 38 8.9 -19 39 205.44 -59.91 F546 107 11 57 17	7.2 -16 42 201.69 -56.95 F547 -54 169 218 3 8.2 -23 41 214.30 -59.02 F480 122 58 42 2 6.2 -19 05 207.15 -55.89 F549 -10 -8 274 164 2 6.4 -20 05 212.29 48.88 F549 -110 -8 274 15.4 -20 45 213.49 -49.94 F549 -100 -48 264 1	5.5 -20 10 212.64 -49.73 F549 -99 -15 263 14 5.7 -24 16 218 83 -50.82 F482 42 32 122 19 6.0 -20 17 212.87 -49.66 F549 -93 -23 257 14 6.5 -14 0 209.44 -48.21 F549 -62 117 226 28 9.3 -17 48 209.71 -48.10 F549 -53 110 217 27	9.3 -21 37 215.19 -49.34 F549 -52 -94 216 7 0.5 -22 17 216.29 -49.26 F549 -37 -130 201 3 2.0 -22 13 216.32 -48.91 F549 -18 -126 182 3 3.7 -17 07 210.59 -44.65 F549 131 146 33 31 4.3 -17 25 211.06 -44.63 F550 -128 128 292 29	1.9 -16 41 211.03 -42.66 F550 -34 170 198 33 2.9 -24 19 221.98 -42.64 F484 -40 31 204 19 7.0 -20 43 217.75 -40.69 F551 -106 -43 270 12 0.0 -26 22 225.21 -41.62 F484 45 -80 119 87.2 -20 27 218.41 -38.34 F551 22 -28 142 13	.8 -22 07 220.58 -38.50 F551 43 -118 121 .3 -18 28 216.68 -36.31 F552 -166 74 330 .3 -21 25 21 25 21 -62 291 .3 -25 27 225.31 -37.75 F485 -20 -27 184 .9 -20 25 219.41 -35.97 F552 -108 -28 272	8.0 -19 42 219.56 -33.49 F552 18 11 146 1.3 -22 37 223.18 -33.72 F486 -110 125 274 5.3 -25 43 228.64 -29.48 F487 -85 -39 249 0.6 -22 26 255.56 -27.27 F554 -98 -133 262 0.9 -25 57 229.35 -28.36 F487 -18 -52 182	6.9 -25 37 230.30 -24.84 F488 -90 -33 254 2.9 -21 04 226.19 -21.94 F555 -79 -56 243 4.6 -17 44 223.05 -20.30 F555 -60 123 224 7.1 -17 15 224.84 -15.19 F556 -44 147 208 2.9 -25 51 256.59 18.66 F498 -18 -31 182
Dec l b Field xcen yeen x11	.1 -25 36 211.45 -74.11 F477 116 -45 48 11 5 -24 45 209.00 -73.20 F478 -109 0 273 16 5 -26 08 214.50 -71.80 F478 -19 -73 183 9 2 -25 17 211.86 -71.60 F478 -16 -27 180 13 0 -21 52 202.92 -69.43 F544 130 -113 34 5	.2 -16 51 190.62 -67.27 F544 137 156 27 32 .3 -22 05 205.17 -67.68 F545 -28 -124 192 4 .4 -19 21 200.27 -66.58 F545 90 22 74 18 .4 -68 30 217.51 -66.39 F479 12 -92 152 77 .5 -26 16 217.49 -64.79 F479 96 -78 68 8	.8 -21 53 208.13 -63.09 F546 -34 -111 198 5 .9 -17 10 199.15 -60.91 F546 -7 142 171 30 .4 -24 56 215.12 -63.03 F480 -85 -8 249 15 .5 -25 09 210.06 -60.97 F546 88 -125 76 31 .9 -19 39 205.44 -59.91 F546 107 11 57 17	-16 42 201.69 -56.95 F547 -54 169 218 3 -23 41 214.30 -59.02 F480 122 58 42 2 -20 65 212.29 -49.88 F549 -110 -8 274 1 -20 45 213.49 -49.94 F549 -100 -48 264 1	-20 10 212.64 -49.73 F549 -99 -15 263 14 -24 16 218.83 -50.82 F482 42 32 122 19 -17 212.87 -49.66 F5549 -93 -23 257 14 -17 40 209.44 -48.21 F549 -62 117 226 28 -17 48 209.71 -48.10 F549 -53 110 217 27	3 -21 37 215.19 -49.34 F549 -52 -94 216 7 5 -22 17 216.29 -49.26 F549 -37 -130 201 3 0 -22 13 216.32 -48.91 F549 -18 -126 182 3 7 -17 07 210.59 -44.65 F549 131 146 33 31 3 -17 25 211.06 -44.63 F550 -128 128 292 29	9 -16 41 211.03 -42.66 F550 -34 170 198 33 9 -24 19 221.98 -42.64 F484 -40 31 204 19 0 -20 43 217.75 -40.69 F551 -106 -43 270 12 0 -26 22 225.21 -41.62 F484 45 -80 119 8 2 -20 27 218.41 -38.34 F551 22 -28 142 13	-22 07 220.58 -38.50 F551 43 -118 121 -18 28 216.68 -36.31 F552 -166 74 330 -21 01 219.96 -36.52 F552 -127 -62 291 -25 27 225.31 -37.75 F445 -20 -27 184 -20 25 219.41 -35.97 F552 -108 -28 272	0 -19 42 219.56 -33.49 F552 18 11 146 3 -22 37 223.18 -33.72 F486 -110 125 274 3 -25 43 228.64 -29.48 F487 -85 -39 249 6 -22 26 225.56 -27.27 F554 -98 -133 262 9 -25 57 229.35 -28.36 F487 -18 -52 182	-25 37 230.30 -24.84 F488 -90 -33 254 -21 04 226.19 -21.94 F555 -79 -56 243 -17 44 223.05 -20.30 F555 -60 123 224 -17 15 224.84 -15.19 F556 -44 147 208 -25 51 256.59 18.66 F498 -18 -31 182
Dec RA (2000) Dec <i>l b</i> Field x_{cen} y_{cen} z_{ll}	5 51 02 02.11 -25 36 211.45 -74.11 F477 116 -45 48 11 6 00 02 05.5 -24 45 209.00 -73.20 F478 -109 0 273 16 5 23 02 12.9 -26 08 214.50 -71.80 F478 -19 -73 183 9 5 32 02 13.2 -25 17 211.86 -71.60 F478 -16 -27 180 13 2 06 02 19.0 -21 52 202.92 -69.43 F544 130 -113 34 5	05 02 19.2 -16 51 190.62 -67.27 F544 137 156 27 32 19 02 27.3 -22 05 205.17 -67.68 F545 -28 -124 192 4 13 02 37.6 -19 21 200.72 -64.68 F545 90 22 77 14 18 18 02 37.4 -26 30 217.51 -66.39 F479 12 -92 152 74 18 18 02 37.4 -26 16 217.49 -64.79 F479 96 -78 68 8	06 02 47.8 -21 53 208.13 -63.09 F546 -34 -111 198 5 2 3 02 49.9 -17 10 199.15 -60.91 F546 -7 142 171 30 2 51.4 -24 56 215.12 -63.03 F480 -85 -8 249 15 1 02 57.6 -22 09 210.06 -60.97 F546 88 -125 76 31 02 58.9 -19 39 205.44 -59.91 F546 107 11 57 17	5 54 03 07.2 -16 42 201.69 -56.95 F547 -54 169 218 3 53 03 08.2 -23 41 214.30 -59.02 F480 122 58 42 2 17 03 16.2 -19 05 207.115 -55.89 F549 -110 -8 274 104 2 10 03 44.6 -20 00 212.29 -49.88 F549 -110 -8 274 10 55 03 45.4 -20 45 213.49 -49.94 F549 -100 -48 264 1	20 03 45.5 -20 10 212.64 -49.73 F549 -99 -15 263 14 26 03 45.7 -24 16 218.83 -50.82 F482 42 32 122 19 27 03 46.0 -20 17 212.87 -49.66 F5549 -93 -23 257 14 209.44 -48.21 F549 -62 117 226 28 58 03 49.3 -17 48 209.71 -48.10 F549 -53 110 217 27	47 03 49.3 -21 37 215.19 -49.34 F549 -52 -94 216 7 27 03 50.5 -22 17 216.29 -49.26 F549 -37 -130 201 3 2 2 03 52.0 -22 13 216.32 -48.91 F549 -18 -126 182 3 3 3 4 04 04.3 -17 25 211.06 -44.65 F549 13 128 292 29	6 49 04 11.9 -16 41 211.03 -42.66 F550 -34 170 198 33 4 26 04 22.9 -24 19 221.98 -42.64 F484 -40 31 204 19 0 50 04 27.0 -20 43 217.75 -40.69 F551 -106 -43 270 12 6 29 04 30.00 -25.21 216.41 -38.34 F551 22 -28 142 13	2 13 04 38.8 -22 07 220.58 -38.50 F551 43 -118 121 8 34 04 43.3 -18 28 216.68 -36.31 F552 -166 74 330 10 70 04 46.3 -21 01 219.96 -36.52 F552 -127 -62 291 5 33 04 46.7 -25 27 225.31 -37.75 F485 -20 -27 184 0 31 04 47.9 -20 25 219.41 -35.97 F552 -108 -28 272	9 47 04 58.0 -19 42 219.56 -33.49 F552 18 11 146 2 42 05 01.3 -22 37 223.18 -33.72 F486 -110 125 274 2 46 05 25.3 -25 43 228.64 -29.48 F487 -85 -39 249 2 29 05 30.6 -22 26 225.56 -27.27 F554 -98 -133 262 6 00 05 30.9 -25 57 229.35 -28.36 F487 -18 -52 182	39 05 46.9 -25 37 230.30 -24.84 F488 -90 -33 254 05 05 52.9 -21 04 226.19 -21.94 F555 -79 -56 243 45 05 54.6 -17 44 223.05 -20.30 F555 -60 123 224 14 06 17.1 -17 15 224.84 -15.19 F556 -44 147 208 38 09 32.9 -25 51 256.59 18.66 F498 -18 -31 182
(1950) Dec RA (2000) Dec <i>l b</i> Field <i>x</i> _{cen} <i>y</i> _{cen} <i>x</i> _{ll}	8 -25 51 02 02.1 -25 36 211.45 -74.11 F477 116 -45 48 11 2 -25 00 02 05.5 -24 45 209.00 -73.20 F478 -109 0 273 16 6 -26 23 02 12.9 -26 08 214.50 -71.80 F478 -19 -73 183 9 9 -25 32 02 13.2 -25 17 211.86 -71.60 F478 -16 -27 180 13 7 -22 06 02 19.0 -21 52 202.92 -69.43 F544 130 -113 34 5	.8 -17 05 02 19.2 -16 51 190.62 -67.27 F544 137 156 27 32 0.2 27.3 -22 05 205.17 -67.68 F545 -28 -124 192 4 13. 19.5 0.2 27.3 -22 05 205.17 -67.68 F545 -28 -124 192 4 18. 2 1.3 -19.5 0.2 37.4 -19.1 2.0 1.2 -64.5 10.2 17.51 -66.39 F479 12 -92 152 77 326.29 0.2 44.5 -26 16 217.49 -64.79 F479 96 -78 68 8	.5 -22 06 02 47.8 -21 53 208.13 -63.09 F546 -34 -111 198 5 6 -17 23 02 49.9 -17 10 199.15 -60.91 F546 -7 142 171 30 13 02 49.9 -17 10 199.15 -60.91 F546 -7 142 171 30 14 -22 10 25 51.4 -24 56 215.12 -63.03 F480 -85 -8 249 15 16 4 -22 21 02 57.6 -22 09 210.06 -60.97 F546 88 -125 76 31 6 -19 51 02 58.9 -19 39 205.44 -59.91 F546 107 11 57 17	.9 -16 54 03 07.2 -16 42 201.69 -56.95 F547 -54 169 218 3 0.0 -23 53 03 08.2 -23 41 214.30 -59.02 F480 122 58 42 2 19 -19 17 03 16.2 -19 05 212.29 -49.88 F549 -10 -8 274 104 2 2 -20 55 03 45.4 -20 45 213.49 -49.94 F549 -100 -48 264 1	3 -20 20 03 45.5 -20 10 212.64 -49.73 F549 -99 -15 263 14 6 -24 26 03 45.7 -24 16 218.83 -50.82 F482 42 32 122 19 8 -20 27 03 46.0 -20 17 212.87 -49.66 F549 -93 -23 257 14 1 7 50 03 48.6 -17 40 209.44 -48.21 F549 -62 117 226 28 0 -17 58 03 49.3 -17 48 209.71 -48.10 F549 -53 110 217 27	.1 -21 47 03 49.3 -21 37 215.19 -49.34 F549 -52 -94 216 7 3 -22 27 03 50.5 -22 17 216.29 -49.26 F549 -37 -130 201 3 -22 27 03 50.5 -22 17 216.29 -49.26 F549 -37 -136 201 3 -4 -17 16 04 03.7 -17 07 210.59 -44.65 F549 131 146 33 31 0 -17 34 04 04.3 -17 25 211.06 -44.63 F550 -128 128 292 292	.6 -16 49 04 11.9 -16 41 211.03 -42.66 F550 -34 170 198 33 .8 -24 26 04 22.9 -24 19 221.98 -42.64 F484 -40 31 204 19 .8 -20 50 04 27.0 -20 43 217.75 -40.69 F551 -106 -43 270 12 .9 -26 29 04 30.0 -26 22 22.5.21 -41.62 F484 45 -80 119 8 .0 -20 33 04 37.2 -20 27 218.41 -38.34 F551 22 -28 142 13	.7 -22 13 04 38.8 -22 07 220.58 -38.50 F551 43 -118 121 1 -18 34 04 43.3 -18 28 216.68 -36.31 F552 -166 74 330 1 -121 07 04 46.3 -21 01 219.96 -36.52 F552 -127 -62 291 6.5 -25 33 04 46.7 -25 27 225.31 -77.75 F485 -20 -27 184 7 -20 31 04 47.9 -20 25 219.41 -35.97 F552 -108 -28 272	.8 -19 47 04 58.0 -19 42 219.56 -33.49 F552 18 11 14622 42 05 01.3 -22 37 223.18 -33.72 F486 -110 125 27422 24 05 05 30.3 -22 43 228.64 -29.48 F487 -85 -39 24922 29 05 30.6 -22 26 225.56 -27.27 F554 -98 -133 26226 00 05 30.9 -25 57 229.35 -28.36 F487 -18 -52 182	.9 -25 39 05 46.9 -25 37 230.30 -24.84 F488 -90 -33 254 .8 -21 05 05 52.9 -21 04 226.19 -21.94 F555 -79 -56 243 .4 -17 45 05 54.6 -17 44 223.05 -20.30 F555 -60 123 224 .9 -17 14 06 17.1 -17 15 224.84 -15.19 F556 -44 147 208 .7 -25 38 09 32.9 -25 51 256.59 18.66 F498 -18 -31 182
Dec RA (2000) Dec <i>l b</i> Field x_{cen} y_{cen} z_{ll}	-25 51 02 02.1 -25 36 211.45 -74.11 F477 116 -45 48 11 15 0 02 05.5 -24 45 209.00 -73.20 F478 -109 0 273 16 -26 23 02 12.9 -26 08 214.50 -71.80 F478 -19 -73 183 9 -25 32 02 13.2 -25 17 211.86 -71.60 F478 -16 -27 180 13 -22 06 02 19.0 -21 52 202.92 -69.43 F544 130 -113 34 5	8 -17 05 02 19.2 -16 51 190.62 -67.27 F544 137 156 27 32 05 -22 19 02 27.3 -22 05 205.17 -67.68 F545 -28 -124 192 4 13 150 23 6.6 -19 21 22 -64.68 F545 90 22 74 18 2 -26 43 02 37.4 -26 30 217.51 -66.39 F479 12 -92 152 7 3 3 -26 29 02 44.5 -26 16 217.49 -64.79 F479 96 -78 68 8	5 -22 06 02 47.8 -21 53 208.13 -63.09 F546 -34 -111 198 5 6 -17 23 02 49.9 -17 10 199.15 -60.91 F546 -7 142 171 30 2 -25 09 02 51.4 -24 56 215.12 -63.03 F480 -85 -8 249 15 4 -22 21 02 57.6 -22 09 210.06 -60.97 F546 88 -125 76 31 6 -19 51 02 58.9 -19 39 205.44 -59.91 F546 107 11 57 17	9 -16 54 03 07.2 -16 42 201.69 -56.95 F547 -54 169 218 3 0 -23 53 03 08.2 -23 41 214.30 -59.02 F480 122 58 42 2 9 -19 17 03 16.2 -19 05 210.15 -55.89 F549 10 -8 274 104 2 4 -20 10 03 44.6 -20 00 212.29 -49.88 F549 -110 -8 274 1 2 -20 55 03 45.4 -20 45 213.49 -49.94 F549 -100 -48 264 1	-20 20 03 45.5 -20 10 212.64 -49.73 F549 -99 -15 263 14 -24 26 03 45.7 -24 16 218.83 -50.82 F482 42 32 122 19 12 20 27 03 46.0 -20 17 212.97 -49.66 F559 -93 -23 257 14 -17 50 03 48.6 -17 40 209.44 -48.21 F549 -62 117 226 28 -17 58 03 49.3 -17 48 209.71 -48.10 F559 -53 110 217 27	-21 47 03 49.3 -21 37 215.19 -49.34 F549 -52 -94 216 7 -22 27 03 50.5 -22 17 216.29 -49.26 F549 -37 -130 201 3 52.5 0 5 52.0 -22 13 216.32 -48.91 F5549 -18 -126 182 3 17 16 04 03.7 7 07 210.59 -44.65 F949 131 146 33 31 -17 34 04 04.3 -17 25 211.06 -44.63 F550 -128 128 292 29	6 -16 49 04 11.9 -16 41 211.03 -42.66 F550 -34 170 198 33 8 -24 26 04 22.9 -24 19 221.98 -42.64 F484 -40 31 204 19 8 -20 50 04 27.0 -20 43 217.75 -40.69 F551 -106 -43 270 12 9 -26 29 04 30.0 -26 22 225.21 -41.62 F484 45 -80 119 8 0 -20 33 04 37.2 -20 27 218.41 -38.34 F551 22 -28 142 13	7 -22 13 04 38.8 -22 07 220.58 -38.50 F551 43 -118 121 1-18 34 04 43.3 -18 28 216.68 -36.31 F552 -166 74 330 1-21 07 04 46.3 -21 01 219.96 -36.52 F552 -127 -62 291 6 -25 33 04 46.7 -25 27 225.31 -37.75 F485 -20 -27 184 7 -20 31 04 47.9 -20 25 219.41 -35.97 F552 -108 -28 272	8 -19 47 04 58.0 -19 42 219.56 -33.49 F552 18 11 146 2 -22 42 05 01.3 -22 37 223.18 -33.72 F486 -110 125 274 3 -25 46 05 25.3 -25 43 228.64 -29.48 F487 -85 -39 249 5 -22 29 05 30.6 -22 26 225.56 -27.27 F554 -98 -133 262 9 -26 00 '05 30.9 -25 57 229.35 -28.36 F487 -18 -52 182	9 -25 39 05 46.9 -25 37 230.30 -24.84 F488 -90 -33 254 8 -21 05 05 52.9 -21 04 226.19 -21.94 F555 -79 -56 243 4 -17 45 05 54.6 -17 44 223.05 -20.30 F555 -60 123 224 9 -17 14 06 17.1 -17 15 224.84 -15.19 F556 -44 147 208 7 -25 38 09 32.9 -25 51 256.59 18.66 F498 -18 -31 182

TABLE 6—Continued

	в	17.2 17.3 17.4 17.4	13.0 17.2 17.4 17.4	17.4 17.4 17.6 17.5	17.5 17.6 17.6 17.2	17.4 17.6 17.6 17.5	17.6 17.5 17.5 17.3	16.1 17.1 17.5 17.5	17.6 17.5 15.3 17.6 17.5	17.4 17.2 17.4 17.5	17.5 17.4 17.6 17.6
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	z		0.0114					0.0449	0.035		
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	m ₁₀	17.1 18.0 18.9 18.6	12.7: 16.8 17.3: 17.7	17.8: 17.8 19.2 18.7 19.3	18.7 19.4 18.8 16.8	17.7: 19.1 19.0 18.9 17.5	19.3 18.0 18.3 16.9	15.7 16.7 18.0 18.0	18.9 18.6 14.9 19.3	17.5: 16.8 17.5 18.4 18.8	18.0 17.5 17.6 19.4 17.8
	m ₃	2 16.5 2 17.0 17.9 2 17.9	11.8 16.0 16.6 17.0	7 17.0? 7 17.0 7 18.9 18.0	7 17.9 18.9 18.4 15.5	16.8 18.4 18.0 18.4	18.7 16.8 17.6 16.3	14.5 15.9 17.4 7 17.3	18.5 18.3 13.9 18.7	7 17.0: 16.4 16.1 * 18.0	* 16.6 17.0 17.5 18.1
	m	14.61 16.11 17.5 17.61	11.5 15.6 15.6 15.8 18.4	16.67 16.17 17.87 17.7	17.37 18.6 18.3 15.1 18.9	16.3 17.7 17.2 17.9 15.9	18.3 16.7 17.0 16.0 18.1	13.5 15.1 16.0 15.83	18.0 17.0 13.0 18.5 17.5	16.11 15.5 15.4 16.3	12.9 15.9 18.6 15.0
	C	33 83 84 65	39 25 32* 162: 68	53 85 50 89 73	69 25 47:	60 44 83 155 97	49: 53: 12	92: 13 88 114 0	30: 116 104: 50 40	69: 92 93 85	35 73 83 85
	T_{B-M}	::::::::::::::::::::::::::::::::::::::	III III-III II III	!!! !!-!! !!-!!	I-II II: II: III	!! !! !! !! !!	11-11 11-11 11-11-1	I II III-III III-III	111111111111111111111111111111111111111	1 1 1 1 1 1 1 1	
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	yı.	124 304 212 212 1206	43 206 269 33 235	66 1 96 1 194 2 193	1 236 1 184 7 228 1 153 5 100	253 253 3 271 1 96 5 220	3 135 7 253 4 279 3 137 4 104	7 319 2 91 5 215 8 67 0 101	2 13 5 165 9 57 8 270 1 110	7 155 5 104 6 85 4 106 9 157	5 156 0 190 0 193 9 267 0 48
	n _x	55 69 261 231 190	209 277 265 69 286	281 274 121 232 250	74 211 57 224 85	175 264 233 81 176	213 137 274 273 154	197 92 35 238 190	122 110 279 208 208 101	287 265 256 204 169	1337
	1 Yeen	140 140 181 181 181	-121 42 105 -131	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	72 20 20 11 11 -64	102 102 107 107 107 56	-29 7 89 115 6 -27 0 -60	3 155 2 -73 9 51 4 -97 6 -63	2 -151 4 1 5 -107 4 106 3 -54	3 -9 1 -60 2 -79 0 -58	9 -8 4 26 4 29 5 103 4 -116
	x cer	109 95 -97 -67	-45 -113 -101 95 -122	-117 -110 43 -68 -86	90 -47 107 -60 79	-11 -100 -69 83 -12	-49 -110 -109 10	1227	4.2.1.4.0	-123 -101 -92 -40 -5	9 11 3 5
	Field	F565 F498 F567 F500	F501 F569 F569 F569	F570 F570 F502 F570	F570 F571 F503 F504	F572 F505 F505 F572	F506 F574 F507 F575	F575 F507 F507 F576	F576 F576 F509 F509	F510 F510 F510 F510	F510 F518 F510 F511
	9	22.96 22.41 28.27 25.77 25.51	26.50 34.18 35.25 33.49	34.47 35.03 32.25 36.98 32.94	39.05 39.17 35.42 34.72 38.58	42.30 37.99 38.23 39.96 42.87	36.71 44.18 39.72 42.07 36.46	45.45 36.22 38.51 40.46	39.18 41.95 35.04 38.57 35.21	35.64 34.61 34.23 34.32 35.03	34.65 39.78 34.96 35.60
	1	253.77 255.75 257.24 262.82	269.59 266.15 265.61 272.17 270.87	272.82 272.58 274.53 272.38 277.52	275.28 278.58 280.94 283.77 282.15	285.02 288.11 288.79 288.33 291.72	295.97 299.47 300.70 302.85 303.59	304.91 305.01 306.42 310.09 311.39	312.65 313.58 312.63 315.33 316.89	318.91 319.08 319.14 320.42	322.88 325.84 324.38 326.90 331.41
	A (2000) Dec	8.4 -20 58 2.2 -22 39 3.8 -19 21 2.9 -24 29 6.2 -25 24	6.7 -27 30 4.6 -19 28 5.6 -18 20 1.2 -22 43 5.2 -18 58	5.4 -22 07 5.8 -21 32 66.2 -24 45 9.2 -19 45 7.6 -25 15	11.8 -18 57 11.9 -19 54 13.3 -24 05 11.8 -25 32 20 -21 28	55.9 -18 37 000.7 -23 24 03.2 -23 18 03.5 -21 32 16.7 -19 14	26.6 -25 49 40.9 -18 37 43.9 -23 07 51.2 -20 48 53.8 -26 24	57.2 -17 24 58.9 -26 37 03.4 -24 17 14.9 -22 04 18.8 -21 26	24.1 -23 04 25.1 -20 13 27.1 -27 09 33.5 -23 17 42.2 -26 17	48.8 -25 26 50.6 -26 23 51.3 -26 44 55.7 -26 21 58.6 -25 24	03.8 -25 24 05.6 -19 46 08.4 -24 41 15.7 -23 18 31.5 -22 24
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	a	17.6 17.6 17.4 17.5	17.1 17.1 17.1 17.2	17.4 17.2 17.2 17.3	17.2 17.3 17.4 17.2	17.3 17.4 17.4 16.8	17.2 17.3 16.9 17.2	17.3 17.2 15.8 17.4	16.3 17.4 17.3 17.3	17.4 17.3 17.3	17.3 17.3 17.0 17.4
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	m³	17.2: 17.8 17.2 16.8 17.5	16.0 16.8 17.0 18.6 16.8	18.5 17.8 18.0 17.6 16.8	16.8 16.8? 18.0 16.8 17.0	17.5 18.1 18.6 16.0	17.0 17.5 16.4 17.4	17.8 16.0 15.1 17.8	16.0 18.5 17.3 17.9?	19.1 18.0 15.9 18.1	17.5 17.8 16.0 16.8
	m ₁	15.2 17.8 17.0 16.8 15.7	15.3 15.9 16.7 17.7	18.0 17.3 17.8 17.3	15.8 16.3 16.1 15.8	16.7 15.5* 18.0 15.6	16.5 16.1 15.4 17.1	17.4 15.4 14.5 16.7	15.3 17.9 16.7? 17.3?	18.7 16.8 14.9 17.3	17.3 16.1 15.0 16.1
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	T_{B-M}	II III-III I	11-11	ii: ii: ii:-iii?	III-III III III	111-111 111-111		III-III II II II II I	1-11 112 111-111 1112	!!-!!! !-!! !-!!	H_H_H
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	b Field xcen ycen x11	1.57 F603 19 -65 145 9 1.19 F603 32 29 132 19 3.08 F534 46 -71 118 9 1.65 F603 40 -18 124 14 3.54 F534 71 -68 93 9	3.59 F534 79 -43 85 12 3.66 F603 123 -107 41 5 4.65 F535 -104 80 268 24 4.93 F535 -99 32 263 19 4.70 F604 -83 -123 247 4	10 -63.21 F604 -67 -42 231 12 09 -65.72 F535 -55 34 219 19 24 -66.19 F535 -42 -32 206 13 54 -65.25 F604 -41 -89 205 7 12 -65.63 F604 -24 -104 188 6	6.11 F535 -14 108 178 27 6.06 F535 -13 122 177 28 6.00 F604 -4 -8 168 15 6.03 F604 -2 -95 166 6 6.35 F604 6 -131 158 3	7.08 F535 15 13 149 17 6.77 F535 19 95 145 25 6.38 F604 23 -75 141 28 6.18 F604 29 -39 135 12	6.69 F604 34 -108 130 5 7.66 F535 43 -12 121 15 6.79 F604 42 -94 122 7 7.11 F604 48 -133 116 3 5.11 F604 53 147 111 31	36 -67.00 F604 51 -102 113 01 -67.42 F604 85 -77 79 75 -68.05 F604 90 -39 74 1 75 -68.05 F604 102 -133 62 49 -68.69 F535 135 120 29 2	64 -68.58 F605 -126 -123 290 32 -69.08 F536 -124 92 288 2 1-68.76 F605 -108 92 28 2 18 6 -69.29 F536 -115 81 279 2 34 -66.93 F605 -104 152 268 3	24 -68.55 F605 -96 -35 260 1 31 -70.25 F536 -94 -85 258 30 -69.49 F605 -92 123 256 270 -68.78 F605 -60 -42 24 1	94 -70.14 F536 -71 71 235 28 03 -70.21 F536 -51 124 215 28 95 -70.66 F536 -49 47 213 21 25 -70.81 F536 -48 16 212 18 52 -71.22 F536 -35 -35 199 12
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	b Field xcen ycen x11	8.74 -61.57 F603 19 -65 145 9 2.34 -61.19 F603 32 29 132 19 8.23 -63.08 F534 46 -71 118 9 0.74 -61.65 F603 40 -18 124 14 8.54 -63.54 F534 71 -68 93 9	9.62 -63.59 F534 79 -43 85 12 8.48 -63.66 F603 123 -107 41 5 5.55 -64.65 F535 -104 80 268 24 3.58 -64.93 F535 -99 32 263 19 8.54 -64.70 F604 -83 -123 247 4	9.10 -63.21 F604 -67 -42 231 12 4.09 -65.72 F535 -55 34 219 19 1.24 -66.19 F535 -42 -32 206 13 0.54 -65.25 F604 -41 -89 205 7 0.12 -65.63 F604 -24 -104 188 6	7.84 -66.11 F535 -14 108 178 27 8.45 -66.06 F535 -13 122 177 28 4.46 -65.39 F604 -4 -8 168 15 0.81 -66.00 F604 -2 -95 166 6 9.44 -66.35 F604 6 -131 158 3	3.82 -67.08 F535 15 13 149 17 7.66 -66.77 F535 19 95 145 25 8.44 -66.76 F604 23 111 127 2.10 -66.33 F604 23 -75 141 8 3.78 -66.18 F604 29 -39 135 12	0.73 -66.69 F604 34 -108 130 5 2.90 -67.66 F535 43 -12 121 15 1.44 -66.79 F604 42 -94 122 7 9.92 -67.11 F604 48 -133 116 3 1.88 -65.11 F604 53 147 111 31	1.36 -67.00 F604 51 -102 113 3.01 -67.42 F604 85 -77 79 4.78 -67.28 F604 90 -39 74 1 0.75 -68.05 F604 102 -133 62 0.49 -68.69 F535 135 120 29 2	1.64 -68.58 F605 -126 -123 290 9.32 -69.08 F536 -124 92 288 2 12 -68.76 F605 -108 -97 272 8.86 -69.29 F536 -115 81 279 2 4.34 -66.93 F605 -104 152 268 3	6.24 -68.55 F605 -96 -35 260 1 0.31 -70.25 F536 -94 -85 258 0.00 -69.49 F506 -92 123 258 6.70 -68.78 F605 -82 -32 246 1 6.68 -69.19 F605 -60 -42 224 1	.03 -70.14 F536 -71 71 235 23 .03 -70.21 F536 -51 124 215 28 .95 -70.66 F536 -49 47 213 21 .25 -70.81 F536 -48 16 212 18 .52 -71.22 F536 -35 -35 199 12
	(2000) Dec 1 b Field x _{cen} y _{cen} x _{II}	2 49.5 -20 59 38.74 -61.57 F603 19 -65 145 9 2 50.5 -19 14 42.34 -61.19 F603 32 29 132 19 2 50.8 -26 05 28.23 -63.08 F534 46 -71 118 9 2 51.2 -20 07 40.74 -61.65 F603 40 -18 124 14 2 52.9 -26 01 28.54 -63.54 F534 71 -68 93 9	2 53.5 -25 33 29.62 -63.59 F534 79 -43 85 12 2 57.9 -21 44 38.48 -63.66 F603 123 -107 41 5 3 00.5 -23 14 35.58 -64.65 F555 -104 80 2.68 24 3 00.8 -24 07 35.58 -64.65 F555 -104 80 2.68 24 3 00.8 -24 07 35.58 -64.93 F555 -99 32 2.63 19 3 02.2 -22 01 38.54 -64.70 F604 -83 -123 247 4	3 03.6 -17 10 49.10 -63.21 F604 -67 -42 231 12 3 04.4 -24 05 34.09 -65.72 F535 -55 34 219 19 3 05.4 -25 19 31.24 -66.19 F535 -42 -32 206 13 3 05.6 -21 23 40.54 -65.25 F604 -41 -89 205 7 3 06.9 -21 40 40.12 -65.63 F604 -24 -104 188 6	3 07.7 -22 42 37.84 -66.11 F535 -14 108 178 27 3 07.8 -22 27 38.45 -66.06 F535 -13 122 177 28 3 08.8 -219 34 44.46 -65.39 F604 -4 -8 168 15 3 08.8 -21 31 40.81 -66.00 F604 -2 -95 166 6 3 09.5 -22 09 39.44 -66.35 F604 6 -131 158 3	3 10.1 -24 29 33.82 -67.08 F535 15 13 149 17 3 10.4 -22 57 37.66 -66.77 F535 19 95 145 25 3 10.7 -22 39 38.44 -66.76 F535 23 111 141 27 3 10.9 -21 08 42.10 -66.33 F604 29 -75 141 8 3 11.3 -20 27 43.78 -66.18 F604 29 -39 135 12	3 11.6 -21 46 40.73 -66.69 F604 34 -108 130 5 3 12.3 -24 57 32.90 -67.66 F535 43 -12 121 15 3 12.4 -21 32 41.44 -66.79 F604 42 -94 122 7 3 12.9 -22 12 39.92 -67.11 F604 48 -133 116 3 3 13.0 -16 58 51.88 -65.11 F604 53 147 111 31	3 13.2 -21 38 41.36 -67.00 F604 51 -102 113 3 15.7 -21 10 43.01 -67.42 F604 85 -77 79 3 16.2 -20 29 44.78 -67.28 F604 90 -39 74 13 3 17.1 -22 11 40.75 -68.05 F604 102 -133 62 3 19.6 -22 28 40.49 -68.69 F535 135 120 29 2	3 19.7 -22 02 41.64 -68.58 F605 -126 -123 290 20 20.7 -22 59 39.32 -69.08 F536 -124 92 288 2 2 21.2 -21 35 43.12 -68.76 F605 -108 -97 27 2 2 21.4 -23 12 38.86 -69.29 F536 -115 81 279 2 3 21.7 -16 59 54.34 -66.93 F605 -104 152 268 3	3 22.1 -20 27 46.24 -68.55 F605 -96 -35 260 1 3 23.0 -26 17 30.31 -70.25 F536 -94 -85 258 3 23.3 -22 26 41.30 -69.49 F536 -92 123 258 3 23.3 -20 23 46.70 -68.78 F605 -82 -32 246 1 3 24.9 -20 33 46.68 -69.19 F605 -60 -42 224 1	3 25.0 -23 24 38.94 -70.14 F536 -71 71 235 28 26.6 -22 25 42.03 -70.21 F536 -51 124 215 28 3 26.8 -23 51 37.95 -70.66 F536 -49 47 213 21 3 26.9 -24 26 36.25 -70.81 F536 -48 16 212 18 3 27.9 -25 23 33.52 -71.22 F536 -35 -35 199 12

103

TABLE 6—Continued

į	RA (2000) Dec	1	q	Field	Lcen	ycen	ıı nı	Abell	T_{A}	T_{B-M}	O	m_1	m ₃	m_{10}	Obs	Previous	z	æ	D m
23 28.4 23 29.1 23 29.4 23 30.3 23 30.3	-22 34 -23 25 -21 08 -26 08	41.98 -7 46.26 -7 31.44 -7 -95 -7	-70.65 -71.05 -70.38 -71.87	F536 F536 F605 F605	-23 -21 -21 -5	116 70 -76 -76	193 280 185 234 168 88 169 88 158 62	2605 2605 2605 2609 2609 2609	RILIRI	11-11 11-11 11-11	44 42 73 73	17.3? 15.3 17.3? 15.9		18.7: 17.4 19.2 17.8 18.2	10,10 10 10 10			111100	17.3 17.2 17.4 17.2
23 30.8 23 32.9 23 33.1 23 37.0 23 37.8	3 -18 40 9 -23 31 1 -21 33 0 -24 11 3 -22 54	53.21 -6 40.08 -7 46.04 -7 38.73 -7	-69.64 -71.92 -71.34 -72.99	F605 F536 F536 F536	12 26 41 76 87	120 64 28 97	152 284 138 228 123 68 88 192 77 261	2612 2615 2614 2628 2629	RILLI	 !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	85 130 9 64 83	18.4: 16.9 17.9 17.5	19.0: 17.8 18.8 17.6 18.0	19.6 19.1 19.6 18.1 18.9	20200			7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.4 17.4 17.4 17.3
23 40.9 23 44.5 23 45.5 23 49.9 23 51.7	9 -24 53 5 -21 53 5 -26 05 9 -24 45 7 -26 03	37.03 -7 48.30 -7 33.22 -7 34.15 -7	-74.01 -73.91 -75.24 -75.97	F536 F606 F537 F537	122 -78 - -88 -35	-10 -72 -71	42 154 242 50 252 92 199 164 178 93	2641 2655 2660 2663 2663	HHHH		80 -10 20 63: 132	16.8 16.1 14.9 17.7 17.0	17.7 17.3 15.4 18.4		20 20 20 20			2001E	
23 55.3 23 56.5 23 57.5 23 57.6 23 57.6	3 -20 27 5 -21 02 5 -20 34 6 -24 20 6 -25 35	57.41 -7 55.90 -7 58.06 -7 42.90 -7 37.18 -7	-75.54 -76.07 -76.04 -77.56	F606 F538 F537 F537	57 72 58 58	1 4 4 4 5 5 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5	107 126 92 95 230 120 106 186 106 119	2679 2680 2682 2681 2681	H KI		82 185 96? 51:	16.8 16.8 15.4 15.9	17.3 17.8 16.0 17.1 16.7	18.1 18.5 17.1 18.8	20,1C 10,1C 1C,10 20			00000	17.3 17.3 17.1 17.1 17.4
23 58.4 23 59.1 00 00.3 00 02.2	-24 25 -20 46 -25 12 -19 35	42.75 -7 58.13 -7 39.58 -7 64.05 -7	-77.76 -76.46 -78.36 -76.42	F537 F538 F472 F538	69 -46 -31 -6	118 -55 9	95 182 210 109 195 140 170 173	2685 2686 2690 2693	REEL	1-11 111 1 111-111 :	44 61 37 61	15.5 14.3: 14.7 17.0:		18.2: 16.3 16.8 18.4	20 1C,20 20 20	J	0.1124	0404	17.2 16.4 16.9 17.3

TABLE 7A Notes for Table 4

TABLE 7A—Continued

Continued	Abell Field Notes	2829 F411 1st IS NEARLY EDGE-ON SPIRAL; 2nd & 3rd HAVE FAINT CORONAE.		F195 1st & 4th HAVE FAINT CORONAE. BRIGHTEST ARE FOSSIBLY FOREGROUND CONTAMINATION Brightest are foreground: roo data rejected	F150	2832 F414 IB IBS CODIS. 9823 Dita I CACETV CATTED DI	F195	F195	2836 F195 1st (=11594) IS SPIRAL (FOREGROUND?). SEVERAL SUPERPOSITIONS AND INTERPACTOR AT A VIEG IN PIET D.	F013		F195	2040 F295 18t HAS FAINT CORONA, CENTERED ON Std. 2841 P195 1st HAS CORONA (cD)	F474	2844 F411 SOMEWHAT ELONGATED AND SCATTERED.	F411	Q:1 & Q:4; OTHERWISE SCATTERED.	F412 3rd HAS CORONA. QUITE SCATTERED.	F295	2849 F641 SCATTERED. 2850 F411 1st HAS VERY FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED.	F412	2852 F.295 3rd HAS FAINT CORONA. 2853 F.295 2nd HAS FAINT CORONA. IRREGULAR.	F195	9865 F942 Convenient HATIONS, POSSIBLY SUPERFUSITION OF CLUSIERS.	F295	F295	2859 F051 1st HAS FAINT CORONA. SOMEWHAT LINEARLY CONDENSED. F079 1st HAS VERY FAINT CORONA. BRIGHTEST ARE ELLIPTICALS. SCATTERED.		F080 1st HAS VERY FAINT CORONA. SCATTERED. NEAR Q:4-S PLATE EDGE, COUNT 1.0W7	F295	2861 F195 MANY FAINT GROUPS NEARBY. 2862 FK41 3-4 HAS FAINT CORONA		2864 F051 SCATTERED. DOZO 1- H LO EN INDI CONTROLIT CONTROLIT CONTROLITY INC. LINCOLD		F080 1st HAS VERY FAINT CORONA. SEVERAL SPIRALS AMONG BRIGHTEST.	F352	F151	2009 F 2430 Group superposed. 2870 F 195 1st HAS CORONA (cD). SPIRAL-RICH. NEAR Q2:N PLATE EDGE & PARTIALLY
-	l I					_													_																			
IABLE IA-CO	Notes	EXTREMELY ELONGATED WITH BRIGHTEST MEMBERS NEARLY LINEARLY	Oct is spiral. Sc superposed.	Scattered. 1st & 3rd ARE CLOSE PAIR WITH CORONAE: 2nd IS LENTICULAR. SCATTERED.	SOMEWHAT CENTRALLY CONDENSED.	IST HAS FAINT CORONA.	1st HAS CORONA (cD). SOMEWHAT CENTRALLY CONDENSED.	1st IS ELONGATED WITH CORONA. LINEARLY CONDENSED, SOMEWHAT	ELONGATED.	1st use orone. Group nf.	HAVE VERY FAINT CORONAE AND ARE OFF-CENT	1st HAS VERY FAINT CORONA. SCATTERED. NEAR Q:4-S PLATE EDGE, COUNT	2 - 3 groups superposed?		1st & 3rd HAVE FAINT CORONAE; 2nd IS SPIRAL. SLIGHTLY CENTRALLY CONDENSED	16t HAS FAINT CORONA AND IS OFF-CENTER. CONCENTRATIONS IN Q:1 & Q:4.	Group superposed?	BRIGHTEST HAVE FAINT CORONAE. SEVERAL BRIGHT SUPERPOSITIONS. BRIGHTEST ARE LINEARLY CONDENSED	1st HAS CORONA AND BRIGHT, NEARBY COMPANIONS. MORPHOLOGICALLY	DIVERSE. 1st HAS FAINT ELONGATED CORONA. SCATTERED. bgc has this cluster		near piate edge. 1st HAS FAINT CORONA. SCATTERED WITH SUPERPOSED CLUSTER IN Q:4. See	Note for A2801.	18t PROBABLY FOREGROUND, 3rd HAS FAINT COROINA.	1st IS PERIPHERAL ELLIPTICAL; 3rd IS SPINDLE. SOMEWHAT SCATTERED.	SCATTERED. SPARSE BACKGROUND.	18t HAS CORONA (ED.). SYMMETRACAL AND CENTRALLY CONDENSED. 1st HAS FAINT CORONA.	MORPHOLOGICALLY DIVERSE AND LOOSELY SCATTERED.	1st in foreground? Group superposed.	1st HAS FAINT CORONA. THIS MAY BE A SUBGROUP OF A NEARBY	(SUPERPOSED?) CLUSTER.	SCATTERED, BUT WITH SOME SLIGHT CONCENTRATIONS.	1st IS ELONGATED WITH FAINT CORONA. SCATTERED.	SOME COMTAMINATION WITH BRIGHTER FOREGOUND GALAXIES. MAJOR	CONCENTRATION TO E-NE.	ora is spiral. Group superposed?	SCATTERED IN TENDRILS.	SOMEWHALL CENTRALLY CONDENSED. 3rd HAS FAINT CORONA. SCATTERED. RICH BACKGROUND.
-	Field Notes	F150 EXTREMELY ELONGATED WITH BRIGHTEST MEMBERS NEARLY LINEARLY		F410 Scattered. F079 1st & 3rd ARE CLOSE PAIR WITH CORONAE: 2nd IS LENTICULAR. SCATTERED.	•••	F150 16 HAS FAHIT CURONA.	1st HAS CORONA (cD). SOMEWHAT CENTRALLY CONDENSI	F051 1st IS ELONGATED WITH CORONA LINEARLY CONDENSED, SOMEWHAT	ELONGATED.		1st & 2nd HAVE VERY FAINT CORONAE AND ARE OFF-CENT	S VERY FAINT CORONA. SCATTERED. NEAR Q:4-S PL	F410 2-3 groups superposed?	SCATTERED.	E FAINT CORONAE; 2nd IS SPIRAL. SLIGHTLY	F079 1st HAS FAINT CORONA AND IS OFF-CENTER, CONCENTRATIONS IN Q:1 & Q:4.		F411 BRIGHTEST HAVE FAINT CORONAE, SEVERAL BRIGHT SUPERPOSITIONS. RRIGHTEST ARE LINEARTY CONDENSED	ORONA AND BRIGHT, NEARBY COMPANIONS. MC		combined with A2804; his data rejected.	F33U Near plake edge. F411 1st HAS FAINT CORONA, SCATTERED WITH SUPERPOSED CLUSTER IN Q.4. See		FIGURE 186 PROBABLY FOREGROUND, STABAS FAINT CORONA. FIRM 145 9-4 4-4 HAVE FAINT CORONAE.	1st IS PERIPHERAL ELLIPTICAL; 3rd IS SPINDLE. SOMEWHA	•	F411 18t HAS CORONA (cD?). SYMMETRICAL AND CENTRALLY CONDENSED. F295 1st HAS FAINT CORONA.		F540 1st in foreground? Group superposed. R150 1st HAS RAINT CORONA TOORDIY SCATTERED	1st HAS FAINT CORONA. THIS MAY BE A SUBGROUP OF A	(SUPERPOSED?) CLUSTER.	SCATTERED, BUT WITH SOME SLIGHT CONCENTRATIONS	F079 1st IS ELONGATED WITH FAINT CORONA. SCATTERED. FINE 1-4 HAS CORONAL SERVED AT CONCEMENDATIONS	SOME COMTAMINATION WITH BRIGHTER FOREGOUND GA	CONCENTRATION TO E-NE.		F079 SCATTERED IN TENDRILS. F105 SOMEWHAT CENTRALITY CONDENSED	

Notes	lst has corona. Gronn sunernosed	SCATTERED WITH SEVERAL SMALL CONCENTRATIONS.	1st HAS FAINT CORONA. DUMBBELL-SHAPED.	1st HAS CORONA. 1st IS SPINDLE POSSIBLY FOREGROTIND TWO MATOR CONCENTRATIONS.	SUPERPOSITION?	1st HAS CORONA. MORPHOLOGICALLY DIVERSE.	SCATTERED AND SINUOUS.	1st has corona.	1st HAS CORONA, 3rd IS LENTICULAR.	2nd & 3rd ARE SPINDLES. SEVERAL CONCENTRATIONS.	3rd IS EDGE-ON SPIRAL. 1st PROBABLY FOREGROUND.	3rd HAS FAINT CORONA. SOME SUPERPOSITION WITH NEARBY CLUSTERS.	1st IS PROBABLY FOREGROUND SPINDLE. IRREGULAR.	1st HAS VERY FAINT CORONA.	PINWHEEL SHAPE.	1st HAS FAINT CORONA. CLUSTER LOOKS LIKE A PINWHEEL.	SPIRAL-SHAPED CLUSTER.	LOOSELY SCATTERED.	1st & 3rd HAVE CORONAE, SCATTERED.	Group superposed.	Near calibration cutout.	SOMEWHAT ELONGATED.	1st & 3rd HAVE FAINT CORONAE; 2nd IS SPIRAL. SCATTERED.	SOMEWHAT DUMBBELL-SHAPED WITH FAINT CORE AND TWO (NE-SW)	CONCENTRATIONS.	1st IS LENTICULAR, SCATTERED, NORTH OF SAO 167275.	let HAS VERY FAINT CORONA AND IS SUPERPOSED ON 2nd. MORPHOLOGICALLY	DIVERSE AND SCATTERED.	1st HAS FAINT CORONA.	Compact	1st & 3rd HAVE FAINT CORONAE. CENTRALLY CONDENSED.	3rd HAS FAINT CORONA. RATHER SYMMETRIC AND CENTRALLY CONDENSED.	LOOSELY SCATTERED BACKGROUND OF FAINT GALAXIES.	1st IS LENTICULAR WITH FAINT ENVELOPE. SCATTERED.	1st PROBABLY FOREGROUND.	SOMEWHAT SERPENTINE:	3 - 4 concentrations.	1st IS DIFFUSE OVAL, 3rd HAS FAINT CORONA. MANY LENTICULARS.	SCATTERED. GROUPS AT EDGE.	Group superposed.	1st HAS FAINT CORONA (FOREGROUND?). SOMEWHAT CENTRALLY CONDENSED.	SCATTERED.	SLIGHT CONCENTRATION. NEAR Q:1-NW CALIBRATION CUTOUT, COUNT LOW.	1st HAS FAINT CORONA.	1st HAS CORONA.	ELONGATED.	SCALTERED.	3-A 1 EMED-1917 EQUECACOUND 30.	18t IS PROBABLY FOREGROUND, CENTERED ON 2nd, SCATTERED.	18t HAS FAIN I CORONA. SOMEWHAT SYMMETRICAL.	DARCHINGH H-O.
Field	F152 F196	F413	F353	F476 F413		F413	F413	F244	F413	F413	F476	F413	F413	F353	F413	F413	F353	F413	F477	F297	F244	F245	F477	F543		F477	F543	,	F353	F354	F413	F414	F414	F477	F477	F353	F 354	F477	F114	F354	F013	F052	F544	F013	F014	F543	F 344	181 1	F414	F414 F354	•
Abell	2917	2919	2920	2921		2923	2924	2925	2926	2927		2928	2929	2930	2931	2932	2934		2935	2936	2937		2938	2939	:	2940	2942		2943			!	2945	2946	2947	2948		2950	2951	2952	2953	2954	2922	2957	;	2958	9050	6067	2900	1087	<u>;</u>
i Notes	OBSCURED BY BETA PHE.		Ū		SCATTERED.				•					Group superposed. 1st has corona.						CONDENSED		LOOSELY SCATTERED SHEGROUP OF NEARBY CLUSTER TO SE?	Plate edge.							1st IS SPIRAL, 3rd HAS FAINT CORONA.	_	1 1st IS DISTORTED (DWARF?) SPIRAL (FOREGROUND?). LOOSELY SCATTERED.		_		_	Ĭ		3 rd IS SPINDLE.		••	3 3rd HAS BRIGHT DIFFUSE ENVELOPE (CORONA).		BRIGHT FOREGROUND SPIRAL SUPERPOSED.		•					Group superposed.
Field	e G G	F352	F243	F243	F 290	F113	F243	F244	F412	F352	F195	F541	F113	F352	F352	F296	F195	F113	F10F	F 130	F541	F296	F352	F352	F195	F196	F475	F412	F475	F476	F296	F113	F352	F080	F195		F244	F412	F413	F244	F412	F476	F476	F296	F352	F352	F296	F352	F413	7700	
Abell	1																																																		

AŁ	Abell F	Field	Abell	Field	Notes
			;	;	
%			3004	F198	1st HAS FAINT CORONA (cD). MORPHOLOGICALLY DIVERSE. 3-4 HAS BAINT CORONA TWO CONCENTRATIONS
Ñ	0067	F344 IST MAY BE FOREGROUND; 3rd HAS FAINT CORONA. AFFEARS SOMEWHAT SPIRAL RICH	3	F545	ARC-SHAPED WITH TWO CONCENTRATIONS.
8	2967	F414 SCATTERED WITH SLIGHT CONCENTRATION AT EDGE.	3006	F298	LOOSELY SCATTERED. MAY BE SUPERPOSITION OF SEVERAL GROUPS.
72			3007	F478	IRREGULAR. 1st HAS FAINT CORONA. SEVERAL BRIGHT FOREGROUND GALAXIES
ౙ			9006	0000	IN FIELD. Soveright in the over the profit to be covered with their by of homer from his
8			9008	F 298	SOMEWHAT ELONGATED, COUNT MAY BE CONTAMINATED BY CLUSTER TO N-W.
స	2971 I	F414 SCATTERED AND MORPHOLOGICALLY DIVERSE; SOMEWHAT SPIRAL-RICH. MANY	3010	F081	18t HAS PAINT CORONA BRIGHT FORECROIND IENTICII AR IGNORED PART OF
č	1 6200	FAINT GALAXIES IN FIELD.			LARGE DISTANT CLOUD.
4 E			3011	F545	CENTERED ON 3rd. NEAR Q1:N CALIBRATION CUTOUT; COUNT LOW?
1 %			3012	F415	1st IS SO. SOMEWHAT CENTRALLY CONDENSED; SLIGHT CONCENTRATION
22.		LOOSELY SCATTERED: IN A LARGE CLOUD OF FAINT GALAXIE			TOWARD EDGES AS WELL.
25			3013	F299	1st HAS CORONA. SCATTERED.
28	2977 I	F478 SCATTERED.	3014	F246	SCATTERED. PART OF A LARGE CLOUD OF FAINT GALAXIES.
25	2978 I			F298	MORPHOLOGICALLY DIVERSE AND SCATTERED.
			3019	F.198	1st HAS FAINT CORONA; 2nd IS (FOREGROUND) FACE-ON SO. CENTRALLY
స			9100	0700	CONDENSED.
ౙ	2980 I		orne	F 240	BRIGHT FOREGROUND GALANIES IGNORED. PART OF A LARGE CLOUD OF FAINT
			5	97.00	GALAALES.
8	2981 1		2002	F.240	PARI OF A LARGE CLOUD OF FAINT GALAXIES. BRIGHT FOREGROUND GALAXIES
				0000	IGNORED. 14 HAS COBONA (-D) VEDY DICH WITH CATANTES EAINTED THAN COHNTING
				887 J	IST HAS CONCINA (CD). VEKI KICH WITH GALAAIES FAINTEK THAN COUNTING TIMP
.08			3018	FORT	MINITE. SOMEWHAT CENTRALLY CONDENSED AND LENTICITAR BLEICH DART OF LARGE
		F354 Scattered.		100 1	CLOHD(?)
N 6		-	3019	F154	1st is spiral. Two clusters seen in projection?
N 6	2882	1 WO CONCENTRATIONS. ELONGALED AND SOMEWHALL STAFFED.	3020	F198	1st HAS VERY FAINT CORONA.
iκ			3021	F053	1st & 2nd HAVE VERY FAINT CORONAE. SCATTERED.
۰ ۳			3022	F479	Group superposed nf. 3rd is spiral.
•			3023	F415	ELONGATED.
			3024	F299	SEVERAL RELATIVELY BRIGHT SPIRALS IN CORE. SOMEWHAT ELONGATED.
*	2989	-	3025	F415	SCATTERED.
1 Ki		(3027	F355	1st and 3rd have coronae.
1			3028	F415	CLUSTER MEANDERS A BIT.
ឌ	2991	F478 SCATTERED MOTLEY CLUSTER. 1st IS EDGE-ON LENTICULAR. 3rd IS		F416	1st HAS FAINT CORONA.
			-	F479	1st has corons.
ส ี			6700	F 299	2nd 15 SFIRAL (566); 5rd HAS FAINT CORONA. MORPHOLOGICALLY DIVERSE AND COMPANDATE OF ATERIA
ส	2993		3030	F108	AND SOMEWHAL ELOGALED. 1st HAC FAINT CORONA MANY FAINT CALAYIFG AND CROTIPG IN STIRROTTING
2	700	F355 3rd has corons.	8		REGION.
4 č			3031	F154	Scattered.
4 6		MODDHOLOGICALLY DIVERSE IS LOCKED SCATTERED	3032	F545	SCATTERED.
á			3033	F246	SCATTERED, MOSTLY SPIRALS. NEAR ID CUTOUT; COUNT LOW?
72	2997		3034	F416	1st HAS FAINT CORONA.
ដ			3035	F081	SCATTERED.
				F082	LOOSELY SCATTERED.
ឥ			3036	F246	ELONGATED. RELATED TO NEARBY FAINT GROUPS!
й		F545 SCATTERED.	3037	F003	SOMEWHAI OEN IRALLII CONDENSED, NO DOMINANI GALAAY. 1st & 2nd HAVE FAINT CORONAE, SCATTFRED.
÷ ₹	3001	FO44 IST MAY BE FUREGROUND, LOUSELY SCALLERED. F107 FIONCATED 14 & 5-4 PROBABLY FORECROTIND		F004	3rd HAS VERY FAINT CORONA. SCATTERED.
5			3038	F154	Group superposed.
ౙ	3003			F198	1st HAS VERY FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED.
			-		

Notes	Group superposed. 1st has corona.	DUMBBELL-LIKE CONCENTRATIONS. 1st (SPINDLE) IS PROBABLY FOREGROUND.	SCATTERED WITH TWO CONCENTRATIONS. 2-4 HAS PAINT CODONA	Std HAS FAILT CONORA. 1st & 3rd ARE SPINDLES.	1st HAS FAINT CORONA. MORPHOLOGICALLY DIVERSE. NEAR N PLATE EDGE,	COUNT LOW.	1st is spiral.	SCALLEAGED. 1st IS DISTURBED SPIRAL, PROBABLY FOREGROUND, SPARSELY POPULATED	CORE.	1st IS SPINDLE. SCATTERED, BUT SOMEWHAT ELONGATED.	IST HAS CORONA (cD); 2nd IS SPIRAL. MORPHOLOGICALLY DIVERSE. STINCTLISTERING OR STIPERPOSITION IN NW	1st & 2nd HAVE CORONAE. MORPHOLOGICALLY DIVERSE.	1st IS cD. TWO CLUSTERS SUPERPOSED? SECOND (S-SE) IS SPIRAL-RICH.	1st and 3rd HAVE CORONAE. MORPHOLOGICALLY DIVERSE. NEAR E-SE PLATE FINGE. COUNT LOW	1st HAS FAINT CORONA, 3rd IS S(t). SPIRAL-RICH. SUPERPOSED(?) WITH	ANOTHER N-E.	LOOSELY SCATTERED, SOMEWHAT MORPHOLOGICALLY DIVERSE. NW OF SAO	LOOSELY SCATTERED.	1st & 2nd IN COMMON ENVELOPE. 3rd HAS FAINT CORONA.	1st HAS VERY FAINT CORONA; 2nd IS LENTICULAR.	1st HAS FAINT CORONA. SOME SUBCLUSTERING OR SUPERPOSITION IN NE	Near Aludes survived a	1st HAS FAINT CORONA.	1st IS SUPERPOSITION (E+E) (FOREGROUND?). SCATTERED.	1st HAS CORONA (cD). 9-3 15 50 MITTIN CREET AD MITCH FULL AND PREPRICE TODE COLUMN AD ENVISE ODE	OR IS SO WITH SIEBLAR NOCEEUS AND DIFFUSE IRREGULAR ENVELOFE. 1st HAS EXTENDED CORONA (5D?)	1st HAS FAINT CORONA. TWO CONCENTRATIONS; RATHER SERPENTINE.	SUBCLUSTERED. UNUSUAL FILAMENTS OF GALAXIES. NEAR Q:4-S PLATE EDGE,	SOME SUBCLUSTERING AND FILAMENTARY STRUCTURE. NEAR S PLATE EDGE,	COUNT SOMEWHAT LOW.	MORPHOLOGICALLY DIVERSE AND SPIRAL-RICH.	186 HAS COMMA (cd.), SOME SUFEMFORTHON WITH CHOSTER TO SW, COUNT CONTAMINATED.	1st IS ELONGATED WITH CORONA; 2nd HAS CORONA. MORPHOLOGICALLY	DIVERSE.	1st & 2nd HAVE CORONAE. MORPHOLOGICALLY DIVERSE.	18t, 2nd, & std have fally Comman. 1st HAS CORONA (cD), MORPHOLOGICALLY DIVERSE WITH SOME	SUBCLUSTERING OR SUPERPOSITION.	1st HAS FAINT, EXTENDED CORONA (cD?). SOMEWHAT CENTRALLY CONDENSED. 1st HAS ELONGATED CORONA. SOMEWHAT CENTRALLY CONDENSED.	1st HAS FAINT CORONA.	SOMEWHAT ELLIPTICAL IN APPEARANCE. SOMEWHAT ELONGATED NEAR O.4.W PLATE ENGE	SOMEWHAI ELONGAIED. NEAR Q'4-W FLAIE ELIGE.
Field	F356	F199	F480	F417	F300	į	F357	F417	;	F082	F199	F417	F481	F480	F481	9	F248	F082	F300	F116	F199	F257	F248	F054	F248	F 246	F248	F300	F301		F200	F 240	F199		F200	F 248	2	F199	F301	F547	r 046
Abell		3085	3086	3088	3089		3000	3091		3092	3093	3094			3095	000	3096	3097	3098	3099	3100	3101	3102	3103	3104	3106	3107				3108	9109	3110		1111	3112	}	3113	3114	3115	
Notes	1st has corona.		Ist HAS FAINT CORONA.					Scautered. Group superposed. Several clusters superposed? Scattered. Group superposed. 1st and 3rd in foreground?			3rd HAS CORONA. SEVERAL CLOSE OR INTERACTING PAIRS.			LOOSELY SCATTERED.	1st HAS VERY FAINT CORONA. MORPHOLOGICALLY DIVERSE, AND LOOSELY	SCATTERED.	LOOSELY SCATTERED.	SCATTERED WITH TWO CONCENTRATIONS	3rd is spiral.	Group superposed p.	Nearer cluster superposed. 1st in foreground?	Commenced and an annual and an an annual and an an an an an an an an an an an an an	3rd APPEARS TO HAVE FAINT CORONA. A FEW BRIGHT FOREGROUND GALAXIES	IN FIELD.	1st HAS VERY FAINT CORONA.	18t HAS CORONA (CD). COMEWHAT ELONGATED IN A CHARTE OF BAINT CALAYTEC		CONCENTRATED.	SCAI LERED. NEAR FLAIE EDGE, COUNT SOMEWHAT LOW(?). Plate edge.	1st has corona. 3rd is spiral. = RPO9.	1st HAS CORONA (cD); 2nd IS SPIRAL. NEAR Q4:S PLATE EDGE, COUNT	SCRETTERED MANY CALAYIRS AT DIATE INST.	1st HAS FAINT CORONA. LOOSELY SCATTERED.	2nd IS SPINDLE. SOMEWHAT ELONGATED WITH CONCENTRATIONS.	1st HAS CORONA (cD). MORPHOLOGICALLY DIVERSE.	186 AFFEARS TO HAVE CORONA AND COMPANION. SCATTERED.	1st & 3rd HAVE FAINT CORONAE; 2nd IS SPINDLE. SOMEWHAT CENTRALLY	CONDENSED.	3rd HAS FAINT CORONA. TWO CONCENTRATIONS.	SCATTERED.	18t HAS FAINT CORONA.
Field	F356	F416	F416	F198	F199	F356	F 247	F154	F115	F416	F416 F199	F416	F198	F199	F247		F199	F480	F356	F356	F154 F014	F154	F247		F480	F 460	F247	THE 47	F547	F154	F199	F480	F247	F199	F199	F248	F082	F300	F417	F480	1 900
Abell	3039	3042	3043	3045	9	3046	3047	3049	3051	3052	3055	3056	3057	3058	3059	0	3060		908 09	3064	3065 3066	3067	3068		3069	3071	3072	9079	6106	3074		3075	3076	3077	3078	8100	3080	3081	3082	3083	\$000

Abell		Field	Abell	Field	Notes
3116				F201	1st PROBABLY FOREGROUND. CENTRALLY CONDENSED.
3117			3164	F117	1st HAS FAINT CORONA (cD?), CONCENTRATIONS TO N. NEAR Q:1-N PLATE FIGE COINT COMPANIATION
3118		FOR THE STATE OF T		F156	EDGE, COUNT SOMEWHAT DOW.
31			3166	F358	1st HAS CORONA. SEVERAL CONCENTRATIONS.
		-	3168	F482	A463 nf just off this plate. Plate edge. Group superposed.
3120		F200 1st HAS EXTENDED CORONA (cD), CENTRALLY CONDENSED.	3169	F358	SEVERAL CONCENTRATIONS.
3199			3171	F 150	DOMEDBELL-SHAFED. 1-+ HAS FAINT CORONA CENTRALLY CONDENSED
3123		i i	3173	F358	SCATTERED WITH SEVERAL CONCENTRATIONS.
3124		_	3174	F549	SCATTERED.
3125			3175	F549	1st HAS CORONA (cD). MANY FAINT GALAXIES IN FIELD BELOW MAGNITUDE
3127					CUTOFF.
3128			3177	F483	Ist is peculiar.
	7	F200 1st, 2nd, & 3rd HAVE FAINT CORONAE. MORPHOLOGICALLY DIVERSE.	3178	F549	1st HAS ELONGATED ENVELOPE (S0?). SCATTERED WITH MANY VERY FAINT MEMBERS
116		CENT TALLY CONDENSED.	9170	E901	MEMBERT CHADEN (TWO CLOSE FAINT CROTIDES)
3131			3180	F309	DOMINISTALISM ED (140 CHOSE, ININI GROOTS).
3132			3184	F302	1st has corona 3rd is sniral
5				F359	lst has corona.
3133			3185	F549	2nd IS SO(2) WITH ENVELOPE
3134			3186	F031	1st HAS FAINT CORONA. TWO CONCENTRATIONS ABOUT BRIGHTEST MEMBERS.
3135		F301 BRIGHT QUADRUPLET OF ELLIPTICALS AT CENTER. SEVERAL CONCENTRATIONS		F032	1st & 2nd HAVE FAINT CORONAE. TWO CONCENTRATIONS.
11		AND SOME SUPERPOSITION.	3189	F302	Group superposed.
3136			3190	F549	1st HAS FAINT CORONA.
	FC	F064 1st & 3rd HAVE VERY FAINT CORONAE; 2nd IS SPINDLE. CENTRALLY	3191	F083	1st IS EDGE-ON SPIRAL (FOREGROUND?); BRIGHTEST ARE MORPHOLOGICALLY
ì				,	DIVERSE. SOMEWHAT CENTRALLY CONDENSED.
3137		F348 ELUNGATED.	9109	FILT	SOMEWHAT CENTRALLY CONDENSED AND MORPHOLOGICALLY DIVERSE.
3139			0180	F201	18t HAS COROUN (ED). FOSSIBLE FOREGROOND CONTAMINATION AT 3-E EDGE. 1st HAS FAINT CORONA (ED). BRIGHTEST MEMBERS ARE LENTICHLARS.
3140		01 VERY CENTRALLY CONDENSED, 3rd HAS VERY FAINT CORONA.	3196	F549	1st MAY BE FOREGROUND, 3rd IS FACE-ON SPIRAL, SCATTERED.
3142			3201	F549	SCATTERED.
3143		1st HAS FAINT CORONA. SOMEWHAT ELONGATED.	3202	F156	SEVERAL CONCENTRATIONS. MAY BE SUPERPOSITION OF TWO OR MORE
3144		F156 1st HAS FAINT CORONA (cD?). SCATTERED AND OVERLAPPING WITH SEVERAL			CLUSTERS.
3			3203	F359	Spiral superposed f.
3145	45 F301		3204	F250	SCATTERED.
91.46		DIFFORD COLD.	3200	F019	18t HAS VERY INITI COUNTY AND COMPANION. A 95050 — A 77450 S. C., L 1 N.,
3147			3207	F419	= $A3206$. = $AC122$ in Couch and inewell (1984). = $A3907$
3148			3208	F156	WINDMILLIKE SHAPE
3149		54 SCATTERED WITH CONCENTRATION AT WEST EDGE.	3210	F156	1st HAS FAINT CORONA.
3150			3215	F201	LOOSELY SCATTERED WITH SINGLE, SOMEWHAT DENSE, CONCENTRATION TO S.W.
3151			3216	F083	SOMEWHAT SCATTERED. SLIGHT PERIPHERAL CONCENTRATION.
3152			3217	F420	SOMEWHAT CENTRALLY CONDENSED.
3153			3218	F483	Group superposed n.
3154			3219	F083	1st HAS FAINT CORONA (cD?). SOMEWHAT CENTRALLY CONDENSED.
3155			0666	F084	Ist has corona.
9150		19 = ACLEI II COUGH AND INVESTIGATION AND ADDICATED TO ACCOUNT AND COUCHE DESCRIPTION OF THE ACCOUNTY AND ACC	3220	6101	SOMEWHAT ELONGALED.
Te .			3222	F420	18t IS LENTICULAR (FOREGROUND?). SCATTERED AND PART OF A LARGE
3159					CLOUD OF FAINT GALAXIES.
3161				F483	Several concentrations. Scattered. Group superposed?
3163	63 F200	00 1st PROBABLY FOREGROUND. SOMEWHAT CENTRALLY CONDENSED.	3223	F420	1st HAS CORONA (cD?). ELONGATED WITH CONCENTRATIONS IN Q:1 & Q:4.
		-			

Field	1 INEAR MAINLY FAIRT CALAXIES IN A SOMEWHAT PINWHEEL DISTRIBUTION. 1840. 1841. 1842. 1841. 1842. 1841. 1842. 1841. 1843. 1844. 1843. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1844. 1845. 1844. 184	
Abell	3270 3271 3271 3271 3272 3273 3281 3281 3282 3283 3284 3284 3284 3286 3286 3286 3286 3286 3286 3286 3286	
		-
Notes	MORPHOLOGICALLY DIVERSE. SCATTERED AND PART OF A LARGE CLOUD OF GALAXIES. 1st HAS CORONA (O.D. MORPHOLOGICALLY DIVERSE. 1st HAS CORONA (O.D. MORPHOLOGICALLY DIVERSE. 1st HAS CORONA (O.D. MORPHOLOGICALLY DIVERSE. 1st SPROULE, SCATTERED. 1st Spiral, Gregoual' 3sd has corona. 1st SPROULE, SCATTERED. 1st spiral, Group superposed. 1st spiral, Group superposed. 1st spiral, Group superposed. 1st bas ocrona. 1st bas danke with count. 1st bashal. 1st bas	
Field Notes	MORPHOLOGICALLY DIVERSE. SCATTERED AND PART OF A LARGE CLOUD OF GALAXIES. F112 18 I HAS CORONA, COLONA CRATTERED. F220 F220 F230 F240 F240 F250 F250 F250 F250 F250 F250 F250 F25	

Notes	1st HAS FAINT CORONA; 2nd & 3rd ARE LENTICULARS. 1st HAS VERY FAINT CORONA. CENTRALLY CONDENSED WITH BRIGHTER FOREGROINN GROIP STIPERDSEN		Near plate edge. Group superposed s.			SCATTERED. 3rd HAS FAINT CORONA. SCATTERED.	FAIRLY SCATTERED.	SOMEWHAT LINEAR WITH CONCENTRATIONS.	1st HAS FAINT CORONA. CONCENTRATION IN Q:1-11. IN A CTOTID.	1st FACE-ON SPIRAL, MORPHOLOGICALLY DIVERSE. POSSTRIA PART OF LARGE CLOUD OR SUPERCLUSTER	SCATTERED.	SOMEWHAT SCATTERED.	1st & 2nd HAVE CORONAE. DENSE CONCENTRATION TO E-NE. ELUNGALED. 1st HAS CORONA: 2rd IS SO	1st HAS FAINT CORONA.	1st HAS FAINT CORONA; 3rd IS TRIPLET IN COMMON ENVELOPE. SUPERPOSED ON OF HEMBE TO COURTE	ON CLUSTER, IO SOUTH. 18t HAS CORONA (cD), BRIGHTEST CLUSTER MEMBERS MOSTLY SPIRALS.	1st HAS CORONA, 2nd & 3rd ARE SPIRALS. CURIOUS LINE OF BRIGHT	GALAAIES. MORTHOLOGICALLY DIVERSE. 14. IS PRORARIY FORFICEOTIND FILIPTICAL.	Scattered. 1st has corons.	1st HAS VERY FAINT CORONA. SCATTERED WITH SLIGHT CONCENTRATION IN 0-4	-		1st & 2nd HAVE FAINT CORONAE. SOMEWHAT CENTRALLY CONDENSED. N-W OF			CENTRALLY CONDENSED.	1st has citain. 1st HAS VERY FAINT CORONA. SOMEWHAT SCATTERED.	Group superposed.	= RPO13.	THE LAND COUNTY, MONT HOUSE DIVERSE, NEAR WITH FINE EDGE & CALIBRATION CUTOUT, COUNT LOW.	1st & 3rd HAVE CORONAE. DOMINATED BY BRIGHT MORPHOLOGICALLY DIVERSE	GALMANES. 1st is double in corona. 3rd is spiral. $= RPO14$.	1st HAS CORONA.	SOMEWHAT ELONGATED.	lst is spiral. SOMEWHAT SCATTERED.
Field	F120 F204	F205	F253	F363 F424	F488	F306	F488	F424	F364	F364	F555	F555	F307	F364	F254	F205	F364	F307	F556	F556	F556	F556	F160	F205	F206	E-05.5	F489	F255	F087	F 900	F365	F161	F365	F489	F556 F556
Abell	3362 3363			3364	3365	3366	3367	3369	3370 3371	3372	3374	3375	3377	3378	3379	3380	3381	3389	3383		3384		3385			3396	3387	3388	3389	0600		3391	3392	1000	
d Notes	(NW) CONCENTRATION. 1 IS HAS CORONA AND DOUBLE NUCLEUS (cD). 2nd IS SUPERPOSED ON RING CALLAY BOLICHY TINEAR			2 MAJOR FAINT CONCENTRATION IN Q:1 (NW). 2 1st HAS FAINT CORONA.		4 1st 4AS CORONA (cD), FAIRLY CENTRALLY CONDENSED. 4 1st & 3rd HAVE FAINT CORONAE, SCATTERED.	1st		3 1st APPEARS TO BE SUPERPOSITION. 5 1st HAS CORONA (cd)		. 02		3 IST & STATAVE CORONAE, MORPHOLOGICALLY DIVERSE. 3 IST HAS CORONA AND IS STIPERPOSITION		CONCENTRATIONS (SUBCLUSTERING) TO N.			4 Its HAS VERY FAINT CORONA. SCATTERED. 3 1st has corona In a sunarchister		3 In a supercluster. 4 1st HAS BAINT CORONA SOMEWHAT BY ONCATED WITH SEYEDAL			4 1st HAS FAINT CORONA. SOMEWHAT SCATTERED.	. •		4 1st HAS VERY FAINT CORONA, SOMEWHAT CENTRALLY CONDENSED, BRIGHT PAPECROTIME STIP AT STIPED PAGED.			4 1st HAS FAINT CORONA. NEAR W PLATE EDGE. (Q-1). 1-4 IS PACE ON SPIDAT SPIDAT PICH AND DIVERSE MORPHICE OCICATIVE		•••				4 Ist HAS FAINT CORONA AND SEVERAL FAINT COMPANIONS. SOMEWHAT CONDENSED.
Field	F423	F423		F252 F252	F203	F204	F252	F004	F423	F204	F204	F423	F423	F204	DARO	F253	F423	F204	F204	F253	107.1	F204	F204	F204	F306	F204	F253	F423	F424	F424	F363	r 300	F306	F253	F204
Abell	3323	3325		3328 3329	3330	3331	3332	3333	3335	3337	3338	3340	3341				3344	3345	3346	3347	200	3348	3349	3350	3351	3352		3353	9954	#000 1	3355	9990	3357	3359	3361
1														:	112	2																			

F161 F206 F206 F206 F206 F207 F207 F207 F207 F207 F207 F207 F207	lat has corona. = RPO15. let 1S PROBABLY FOREGROUND. 3rd HAS FAINT CORONA. let 1S PROBABLY FOREGROUND. 3rd HAS FAINT CORONA. SCATTERED WITH SLIGHT CENTRAL CONDENSATION. Poorer cluster near n. 1st has corona. He AS FAINT CORONA. ENFERGULAR AND SOMEWHAT CENTRALLY CONDENSED. 1st HAS FAINT CORONA. SEVERAL BRIGHT MEMBERS ARE SPINDLES. 1st HAS FAINT CORONA. SEVERAL BRIGHT MEMBERS ARE SPINDLES. 1st HAS FAINT CORONA. SEVERAL BRIGHT MEMBERS ARE SPINDLES. SOMEWHAT LOW? SOMEWHAT LOW? SOMEWHAT CONDENSED. 1st SPROBABLY POREGROUND SPINDLE. 3rd HAS FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED. 1st HAS CORONA (cD). SOME SUPERPOSITION WITH CLUSTER TO E-SE. 1st HAS CORONA (cD). SOME SUPERPOSITION WITH CLUSTER TO E-SE. AND SPIRALS. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE. THAS CORONA (cD). MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED AND SOMEWHAT SCATTERED. 1st HAS VERY FAINT CORONA, 3rd IS SPIRAL. Superposed on, and count probably contaminated, by ASGI9. 1st HAS VERY FAINT CORONA, 3rd IS SPIRAL. SUPERAL CORONA AND IS SUPERPROSITION WITH SMALLER. FAINTERS. 1st HAS PRINT CORONA, 3rd IS SUPRAL. VERY SCATTERED. 1st HAS RAINT FORONA AND IS SUPREPROSITION WITH SMALLER. SAINTERED.	3452 3453 3453 3455 3456 3456 3463 3468 3472 3472 3473 3474 3474 3474 3476 3476 3476 3476	F437 F376 F576 F576 F576 F576 F570 F438 F265 F570 F577 F570 F570 F577 F577 F573 F573 F574 F577 F573 F574 F577 F577 F577 F577 F577 F577 F577	SCATTERED. 35 da HAS PAINT CORONA. SCATTERED. 154 HAS PAINT CORONA. SCATTERED. 155 HAS PAINT CORONA. SCATTERED. 156 HAS PAINT CORONA. 151 in foreground. 152 A 34d HAVE CORONA. 153 in foreground group superposed. 154 in foreground group superposed. 155 Lad PROBABLY FOREGROUND. SCATTERED. 156 A 27d HROBE OF PROBECT ON SPIRAL. 157 TWO OF THE FOREGROUND SCATTERED. 157 TWO OF THE FOREGROUND SCATTERED. 158 THAS CONONA. 159 THAS CORONA. 150 THAS PAINT CORONA. SUPERPOSITION WITH CLUSTER TO N.E. SLIGHTLY 150 TALS FAINT CORONA. SOMEWHAT SPIRAL AND LENTICULAR-RICH. 151 THAS FAINT CORONA. SCATTERED WITHOUT CENTRAL CONDENSATION. 150 THAS PAINT CORONA. 150 THAS FAINT CORONA. 151 THAS CORONA. 152 THAS CORONA. 154 THAS CORONA. 155 THAS CORONA. 156 THAS CORONA. 157 THAS CORONA. 158 THAS CORONA. 159 THAS CORONA. 150 THAS CORONA. 150 THAS CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 151 THAS FAINT CORONA. 152 THAS FAINT CORONA. 154 THAS FAINT CORONA. 155 THAS FAINT CORONA. 156 THAS FAINT CORONA. 157 THAS FAINT CORONA. 158 THAS FAINT CORONA. 159 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 151 THAS FAINT CORONA. 152 THAS FAINT CORONA. 154 THAS FAINT CORONA. 155 THAS FAINT CORONA. 156 THAS FAINT CORONA. 157 THAS FAINT CORONA. 158 THAS FAINT CORONA. 159 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 151 THAS FAINT CORONA. 151 THAS FAINT CORONA. 152 THAS FAINT CORONA. 155 THAS FAINT CORONA. 156 THAS FAINT CORONA. 157 THAS FAINT CORONA. 158 THAS FAINT CORONA. 159 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA. 150 THAS FAINT CORONA.
F499 F499 F374 F435	18t HAND AND AND IS SOFEAR COLUMN WITH SMALLES, FAILTEN CALLANDS. SEVERAL CONCENTRATIONS. MANY FAINT GALAXIES IN SURROUNDING FIELD. SEVERAL CONCENTRATIONS. MANY FAINT GALAXIES IN SURROUNDING FIELD. SPIRAL. SPIRAL. Is the Scoons. Group superposed ii.	3491 3492 3493 3494	F378 F379 F504 F440	SPIRAL-RICH. SCATTERED. 1st IS FACEON SPIRAL (FOREGROUND?), 2nd HAS CORONA. SCATTERED. 1st HAS FAINT CORONA. SOMEWHAT SCATTERED. PART OF A LARGER CLOUD?
F435 F435 F436 F375 F375 F375 F375	1st has corona. Group superposed n. SCATTERED. VUMEROUS SCATTERED FAINT BACKGROUND GALAXIES. SCATTERED. VUMEROUS SCATTERED FAINT BACKGROUND GALAXIES. Two concentrations. 1st IS SO. MORPHOLOGICALLY DIVERSE AND SCATTERED. SLIGHTLY ELONGATED. SCATTERED. SLIGHTLY CENTRALLY CONDENSED, BUT HAS SLIGHT EXCESS AT EDGE. SLIGHTLY CENTRALLY CONDENSED AROUND BRIGHTEST, BUT OTHERWISE SCATTERED. Two clusters seen in projection? Two clusters seen in projection? SCATTERED. (SUPERPOSITION OF TWO CLUSTERS?)	3495 3496 3497 3499 3499 3500 3501	F440 F440 F440 F440 F440 F440	SOMEWHAT DUMBBELL-SHAPED; MAY BE TWO CLUSTERS SUPERPOSED. POSSIBLY PART OF LARGE CLOUD. SCATTERED. Ist HAS PENT CORONA. SOMEWHAT CUSP-SHAPED. PART OF LARGER SYSTEM? Ist HAS VERY FAINT CORONA. SOMEWHAT ELONGATED. POSSIBLY PART OF A LARGER CLOUD. Ist HAS VERY FAINT CORONA. SYMMETRICAL. APPEARS TO BE PART OF A LARGER CLOUD. Ist HAS VERY FAINT CORONA. MAY BE SUPERPOSED ON FAINTER CLOUD OF GALAXIES. CONFUSED REGION. Ist HAS PAINT CORONA. SCATTERED AND POSSIBLY PART OF A LARGE CLOUD. Ist HAS FAINT CORONA. SCATTERED AND POSSIBLY PART OF A LARGE CLOUD.

d Notes				1 1st HAS FAINT CORONA. NEAR W PLATE EDGE, COUNT LOW.	-	1 1st HAS CORONA, 3rd IS SPIRAL.		1 1st HAS CORONA. 1st 9d 1. 9d HAVE EAINT CORONAE SOMEWHAT SPIRAL BICH		1 1st IS BRIGHTER OF PAIR, SEVERAL CONCENTRATIONS. SEVERAL INTERACTING PAIRS	. –		1 1st HAS CORONA, SEVERAL SUPERPOSITIONS AND SUBCLUSTERS. 1 1st HAS CORONA & IS SUPERPOSED DIVERSE WITH SEVERAL CONCENTRATIONS		SUPERPOSED, MORPHOLOGICALLY DIVERSE. 14 IS LATE ELLIPTICAL SUPERPOSED ON ANOTHER CLUSTER TO N.E. COUNT.	-	_				1 1st HAS FAINT CORONA. MORPHOLOGICALLY DIVERSE. 1 1st HAS FAINT CORONA.		STELLAR NUCLEUS AND DIFFUSE CORONA. 1 of HAS RAINT CORONA			3 1st IS OFF-CENTER WITH FAINT CORONA. 2nd HAS, CORONA AND IS SIIDERPOSITION (INTER ACTING?)	-		1st IS ELONGATED OD WITH EXTENDED CORONA.			186 HAS CORONA AND POSSIBLE GLOBOLAR CLUSTERS. 1 146 HAS FAINT CORONA, NEAR N-NE PLATE EDGE WITH SAO 204916 & 17		1st HAS CORONA. MORPHOLOGICALITY DIVERSE	-
Field	F443 F508	F382 F508	F382 F382	F444	F269	F444	F444	F444	F382	F444	F444	F444	F444 F444	F383	F270		F444 F270	F324	F383	F38	F383	F383	F383	F325	i	F383	F383	i	F445	3	F383	F383		F445	F510
Abell	3540	3543	3545 3545	3546	3548	3549	3551	3552	3554	3555	3556	3557	3558	3560	3561		3562 3563		3564	3565	3566	3568	3569	3570			3571		3572	3	3573	3575		3576	3
Notes	OF A LARGE CLOUD. 1st HAS VERY FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED, BUT ELONGATED. NEARBY GROUP	SUPERPOSED, PART OF LARGE CLOUD?	1st & 2nd HAVE CORONAE. MORPHOLOGICALLY DIVERSE WITH CONCENTRATIONS. 1st HAS CORONA, 2nd IS SPINDLE.	list HAS CORONA. SUPERPOSED ON EDGE OF CLUSTER TO N-NE.	ord HAS CURUNA. 1st IS OFF-CENTER WITH FAINT CORONA. MORPHOLOGICALLY DIVERSE	WITH CONCENTRATIONS.	SCATTERED, MORFHOLOGICALLY DIVERSE. SUPERPOSITION? 1st HAS VERY FAINT CORONA.	let HAS FAINT CORONA.	18t HAS FAINT CORONA AND IS AT EDGE OF CLUSTER. GENERALLY SCATTERED WITH SOME CENTRAL CONCENTRATION.	1st & 3rd HAVE FAINT CORONAE.	tes & and received in the Constitution of the second superposed. Ist and 3rd are spiral. Hardly a cluster, or very		1st APPEARS TO BE SUPERPOSITION, SLIGHTLY CENTRALLY CONDENSED.	SCATTERED.	SCATTERED.	Scart tanker. Group superposed.	Scattered. SCATTERED.	1st IS ELONGATED WITH FAINT ELONGATED CORONA (cD?). SCATTERED.	SCALLEAGE.	1st HAS CORONA.	FAIRLY COMPACT. 1st NEAR CENTER.	Centaurus. Counts completed on F323. Position for N4696.	Centaurus. Counts completed on F322.	det man familia Comona. Group superposed sf. 1st has corons. = RPO16.	Group superposed sf. 1st has corona.	SOMEWHAT ELONGATED AND SCATTERED.	Frace edge. Ist nas corons.	1st & 3rd HAVE CORONAE. SOME OVERLAP WITH NEARBY GROUP TO N-NE.	ist has corona.	SCATTERED.	1st is spindle.	1st HAS VERY FAINT CORONA. SLIGHTLY ELONGATED. 1st HAS FAINT CORONA. SOMEWHAT ELONGATED.	1st & 2nd HAVE CORONAE, 3rd IS EDGE-ON SPIRAL. IN NW CORNER NEAR	CALIBRATION CUTOUT; COUNT LOW.	OCALIERED. BARCHIEST ARE MORTHOLOGICALLI DIVERSE. 1st HAS FAINT CORONA. SCATTERED.
	OF A 1st H SOMI	SUP.	lst &	lst H	3rd H 1st IS	MIT	SCA 1st H	let I	WIT	1st 8	Gro	opac	1 12	SC	SS	3 &	S C	18t	is S	į	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3 3	ਹੈ :	Š	Ğ	S	18 T	184	1 2 2 2	SC	18t i	lst 1 H	18t & 1	CAL	1st H
Field	OF A F505 1st H. F440 SOM1	-		F505 1st H				F267 1st I		F268 1st 8	-	-	F506 1st	. • •	F574 SCA		F506 Sca.		_		F574 FA		F323 Cen	_		F575 SO			F443 1st			F575 1st H		CAL	

TABLE 7A—Continued

Notes	3rd HAS FAINT CORONA. Two concentrations. Group superposed. SCATTERED, WITH CONCENTRATION IN Q:1. Std HAS BAINT CORONA A MAY CALA XTES BAINTER THAN M3 ± 2	ist has corona. 3rd HAS VERY FAINT CORONA AND SEVERAL FAINT COMPANIONS. SOMEWHAT	OBSCURED BY GAS & DUST CLOUD. 1st HAS FAINT CORONA, 3rd IS SPIRAL, FAINT GALAXIES SOMETIMES	CONFUSED WITH FAINT TRAILED STARS; COUNT LOW? Sad HAS VERY FAINT CORONA SIGHTLY CONTRALLY CONDENSED. 14 TS FACE ON SOMY CARTTEDERY AND WITH A PEW PER ATTURY PERICHT	CALL AND WITH A FEW RELATIVED BRIGHT	lst IS PROBABLY FOREGROUND. SOMEWHAT CENTRALLY CONDENSED. SOMEWHAT SCATTERED.		1st IS SPINDLE, 2nd IS SO. SCATTERED. 1st HAS CORONA. SOMEWHAT CENTRALLY CONDENSED AND QUITE	ie. Orphologically diverse.	1st MAY BE SPIRAL (FACE-ON). MANY GALAXIES IN SURROUNDING FIELD. PART OF STIPERCLITETER?	CALL OF SUFERCING LERS: 1st HAS VERY FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED.			MIDELI SCALLERED. 184 HAS FAINT CORONA. SLIGHTLY SCATTERED WITH CONCENTRATION IN S.W.	lst HAS FAINT CORONA. RATHER COMPACT WITH TWO MAJOR CONCENTRATIONS; SOMEWHAT DUMBBELL	CHARLES OF THE CAMPAGE AND THE	1st 1s Frodably Forections Ellist 11Cal. Scallered. = AC106 in Couch and Newell (1984).	dewhat scattered. Densed	SELECTED CENTRALES COUNTERVED. SHOT BAS CORONA. NEAR 9.1-N PLATE EDGE. COUNT LOW. SOME EVIDENCE OF	SUBCLUSIERING/CONCENTRATION (GOA has this as one cluster with ASSE4).	1st & 2nd HAVE CORONAE (cD's). LINEARLY CONDENSED. MAY BE SUPERPOSITION OF TWO CLUSTERS.	Very compact.	MALLI CONDENSED ALIHOOGH SOMEWHAT	CLOSE COMPANION.	1st HAS FAINT CORONA. SEVERAL FOREGROUND GALAXIES (THIN SPINDLES)	1st HAS FAINT CORONA. SEVERAL FOREGROUND GALAXIES (THIN SPINDLE). In FIELD. 1st IS SPINDLE (FOREGROUND?). SOMEWHAT CENTRALLY (AND LINEARLY)	let HAS FAINT CORONA. SEVERAL FOREGROUND GALAXIES (THIN SPINDLES) IN FIELD. Ist IS SPINDLE (FOREGROUND?). SOMEWHAT CENTRALLY (AND LINEARLY) CONDENSED. Ist HAS FAINT CORONA. SCATTERED WITH EVIDENCE OF SUBCLUSTERING (OR	164 HAS FAINT CORONA. SEVERAL FOREGROUND GALAXIES (THIN SPINDLES) IN FIELD. JOAL IS SPIND. 104 IS SPIND. 105 HAS FAINT CORONA. SCATTERED WITH EVIDENCE OF SUBCLUSTERING (OR SUBCRUSTERING (OR SUBCRUSTERING COR SUBFREDSTITION) TO S.W. 105 HAS FAINT CORONA. GOINT CONTAMINATED BY SIDERPOGRITION
Field				J 1.7 -	. 02 .	- 02	83 SCATTERED.61 Foreground group superposed?		~		-	39 = RPO22. 85 SOMEWHAT SCATTERED.	-			••												
	4 F183 6 F282 7 F045 8 F283		1 F283	3 F185			8 F283 9 F461	0 F011 1 F185		4 F399		6 F339 0 F185	1 F284		F026 5 F185	010	F 186	5 F025		i	F186	F339		F340 F340		5 F186		
Abell	3634 3636 3637 3638	3639	3641	3643	9 9	3645	3648 3649	3650 3651	3653	3654	3655	3656 3660	3661	3664	3665			3666	3667			3668	ě	3671		3675	3675 3676	3675
																										_		
	POSSIBLE LARGE GROUP OF FOREGROUND GALAXIES SUPERPOSED. TWO CONCENTRATIONS. 2nd 18 FACE-ON SBa. SAO 182123 OBSCURES PART OF CLUSTER. 1st HAG CORONA	1st HAS CORONA. 1st HAS CORONA (cD?). NEAR Q:4-W PLATE EDGE. COUNT LOW.	SOMEWHAT COMPACT. PART OF CLOUD OF FAINT GALAXIES? SOMEWHAT SCATTERED.	1st IS NEARLY FACE-ON SPIRAL. SCATTERED. GCATTERED.	SYALIERED. 3rd HAS FAINT CORONA, SCATTERED.	Group superposed. 1st is spiral (in foreground?). 1st and 3rd have coronae.	BRIGHTEST APPEAR TO BE UNRESOLVED SPIRALS. SLIGHTLY CENTRALLY CONDENSED.	BRIGHTEST APPEAR UNRESOLVED. SCATTERED. MORPHOLOGICALLY DIVERSE. RICH IN SPINDLES.	SOMEWHAT COMPACT. SCATTERED.	1st HAS FAINT CORONA. SCATTERED, MANY FAINT EVELD CALAYTES IN NEIGHBORHOOD (CLOTING)	SCALIERED, MANT FAINT FIELD CALAXIES IN NEIGHBURHOUD (CLOUD!). 1st MAY BE FOREGROUND, SCATTERED.	Three concentrations. ELONGATED.	1st has corons. 3rd is spiral.	= RFOZI. NEAR S PLATE EDGE, COUNT LOW.	SCATTERED. 1st HAS FAINT CORONA. TWO CONCENTRATIONS.	1st HAS VERY FAINT CORONA. SLIGHTLY ELONGATED.	Laree concentrations. Group superposed?	DRONA. SCATTERED.	SINGLE CONCENTRATION WITH OTHER SCALLERED GALAALES.	3rd & 10th ARE SPIKALS, 2nd HAS CORONA. FAIRLY SCATTERED; MANY FAINT GALAXIES NEARBY.	SCATTERED. 1st HAS VERY FAINT CORONA. 1st IS SPINDLE: 3RD HAS CORONA.	1st IS FOREGROUND. 2nd IS FACE-ON SPIRAL. COUNT MAY BE CONTAMINATED BY FAINT STARE	1st HAS VERY FAINT CORONA. SLIGHTLY CENTRALLY CONDENSED.	1st, 2nd, & 3rd HAVE FAINT CORONAE. SLIGHTLY ELONGATED. 1st IS SPIRAL, 2nd HAS FAINT CORONA. SCATTERED.	1st, 2nd, & 3rd HAVE FAINT CORONAE. SOMEWHAT SPIRAL-RICH.	INT CORONAE, WEAR CONCENTRATIONS	184. Z. ZDA HAVE FAINT CORONAE. WEAR CONCENTRATIONS IN Q:1 & Q:2. SUPERPOSITION? 184 HAS FAINT CORONA. SOMEWHAT ELONGATED N.S.	INT CORONAE. WEAK CONCENTRATIONS RONA. SOMEWHAT ELONGATED N-S. . NEARLY ROUND ELLIPTICAL. SOMEWHA
Field Notes	F510 POSSIBLE LARGE GROUP OF FOREGROUND GALAXIES SUPERPOSED. TWO CONCENTRATIONS. F510 2nd IS FACE-ON SB SAO 182123 OBSCURES PART OF CLUSTER. F511 1st HAS CORONA			F578 1st IS NEARLY FACE-ON SPIRAL. F511 SCATTERED. F511 SCATTERED.			F511 BRIGHTEST APPEAR TO BE UNRESOLVED SPIRALS. SLIGHTLY CENTRALLY CONDENSED.			F579 1st HAS FAINT CORONA. F570 SCATTERED MANY FAINT FIFTD CATAXIES IN NEICHBORHOOD (CLOUDS)	SCALLERED, MANY FAINT FIELD GALAXIES IN NEIGHBORH 1st MAY BE FOREGROUND, SCATTERED.	F447 Three concentrations. F579 ELONGATED.	F272 1st has corona. 3rd is spiral.				_	1st HAS FAINT CORONA. SCATTERED.	SINGLE CONCENTRATION WITH OTHER SCATTERED GALA 1st HAS FAINT ORROWS		F514 SCATTERED. 1st HAS VERY FAINT CORONA. F582 1st IS SPINDLE: 3RD HAS CORONA.				1st, 2nd, & 3rd HAVE FAINT CORONAE. SOMEWHAT SPIRAL-R	F043 1st & 2nd HAVE FAINT CORONAE. WEAK CONCENTRATIONS IN Q:1 & Q:2.		

TABLE 7A—Continued

| Abell Field 3682 F400 3684 F026 3684 F026 3688 F400 3689 F400 3690 F400 3690 F400 3691 F340 3692 F400 3693 F400 3693 F400 3694 F400 3695 F400 3695 F400 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3700 F401 3712 F401 3713 F401 3714 F266 3724 F266 3724 F266 3727 F401 3728 F010 3729 F402 3720 F402 | Notes GALAXY. Ist HAS FAINT CORONA AND APPEARS TO BE INTERACTING WITH AN Sc GALAXY. Ist HAS FAINT CORONA AND APPEARS TO BE INTERACTING WITH AN Sc GALAXY. Ist HAS FAINT CORONA. SCATTERED. Ist HAS VERY FAINT CORONA. SCATTERED. Ist HAS VERY FAINT CORONA. SCATTERED. Ist HAS VERY FAINT CORONA. SCATTERED. SCATTERED. Ist HAS VERY FAINT CORONA. SCATTERED. Ist MAS FAINT CORONA. SCATTERED. COOSELY SCATTERED. CONCENTRATION TO SE. SENGHANT LENTICULAR. RICH BRIGHTEST ARE ELLIPTICALS, HOWEVER. BE ONGATED. SOMEWHAT LENTICULAR. RICH BRIGHTEST ARE ELLIPTICALS, HOWEVER. Ist MAS CORONA. Ist MAS CORONA. Ist MAS CORONA. Ist MAS CORONAE. Group superposed. Ist MAS CORONA. Group superposed. Ist HAS CORONA. END DAIL HAS CORONA. BRIGHTEST CLUSTER MEMBERS ARE DOMINATED BY ROUND ELLIPTICALS. Ist MAS CORONA. Ist MAS CORONA. END DAIL MAS CORONA. END DAIL MAS CORONA. BRIGHTEST CLUSTER MEMBERS ARE DOMINATED BY ROUND ELLIPTICALS. Ist MAS CORONA. CENTERED ON 3rd. SEVERAL THIN SPINDLES NEAR CENTER. CENTERED NOT 3rd. SEVERAL THIN SPINDLES. Ist MAS FAINT CORONA. ORDING SIDE IN COMMON ENVELOPE. SCATTERED. Ist AS FAINT CORONA. SOMEWHAT ELONGATED. This soften superposed. Ist MAS RAINT CORONA. SOMEWHAT ELONGATED. SCATTERED AND SOMEWHAT CENTRALLY CONDENSED. SCATTERED AND SOMEWHAT ELONGATED. Plate edge. SCATTERED NEAR PARE NOT REMEMBERS. HIST SALVE OF A RAMBLING CLOUD OF GALAXIES. HIST SALVE PARE PARE PARE PARE PARE PARE PAGE SCATTERED. Ist as SALVE CORONA. SOMEWHAT ELONGATED. Plate edge. SCATTERED NEAR PARE PARE PARE PAGE BORED. Plate edge. SCATTERED NEAR PARE PARE PAGE BORED. SCATTERED NEAR PARE PARE PAGE BORED. SCATTERED NEAR PAGE PARE PAGE BORED. Plate edge. SCATTERED NEAR PAGE PARE PAGE BORED. SCATTERED SORTED. SCATTERED SORTED. SCATTERED SORTED. SCATTERED. Abell 3737 3737 3738 3738 3741 3742 3744 3746 3746 3762 3763 3763 3763 3763 3764 3763 3764 3776 3776 | Field Field Field Field F402 F202 F286 F286 F286 F286 F286 F286 F286 F28 | Group superposed. 1st and 3rd are spirals. Group superposed. SERFENTINE-LIKE. GOOD SUPERPOSED. SERPENTINE-LIKE. GOOD SUPERPOSED. SERPENTINE-LIKE. GOOD SUPERPOSED. SERPENTINE-LIKE. GOOD SUPERPOSED. SILGETTY ELONGATED. NEARER GROUP NEIGHBORING. SERPENTINE-LIKE. SILGETTY ELONGATED. CONSIDERABLE MEMBERSHIP PAINTER THAN MAGNITUDE. COUTOFF (RPO) and HGC have probable foreground group included). SILGETTY ELONGATED CONSIDERABLE MEMBERSHIP PAINTER THAN MAGNITUDE. COUTOFF (RPO) and HGC have probable foreground group included). SILGETTY ELONGATED CONDONNA. Ist AS and ARE SOFIC, BOTH HAVE CORONAE. SCATTERED WITH SEVERAL CONCENTRATIONS OR SUPERPOSITIONS. SILGETTY CENTRALITY CONDENSED. SOMEWHAT ELONGATED AND MARPHOLOGICALLY DIVERSE. PART OF A LARGE CLOUD OF GLANXIES. SCATTERED AND MORPHOLOGICALLY DIVERSE. PART OF A LARGE CLOUD OF GENTRALITY CONDENSED. SCATTERED.
|--|--|--|--|--|
| | lat in foreground? Let & 3rd HAVE CORONAE, 2nd IS SPIRAL. SCATTERED, BUT WITH SEVERAL CONCENTRATIONS. SCATTERED, 3rd IS SPINDLE. SCATTERED WITH CONSIDERABLE FAINT POPULATION BELOW MAGNITUDE CUTOFF. | 3779
3782
3783
3784 | F531
F011
F145
F287
F465 | 1st Have Sug. 1st Have Step Faint Corona and is off-center. Somewhat elongated. Foreground spiral ignored. Foreground spiral ignored. Foreground spiral some concentration at edge. = RPO30. 1st Has Faint corona. Symmetrical and centrally condensed. Scattered. Group superposed? |

TABLE 7A—Continued

Notes	Group superposed sf. Another cluster nff. 1st HAS FAINT CORONA; 2nd & 3rd ARE LENTICULAR. FIVE FOREGROUND	GALAXIES IN FIELD.	SCATTERED. DOMINATED BY A FEW ELLIPTICALS.	Group superposed s.	1st HAS VERY FAINT CORONA; 3rd IS SPIRAL. SOMEWHAT ELONGATED WITH	CONCENTRATION TO S-E.	Another cluster sf.	LOOSELY SCATTERED.	Two concentrations. Cream anneanced Scattered	1st is foreground spindle 1.5 arcmin north. N7230 5 arcmin s-w.	1st IS SPINDLE.	1st MAY BE FOREGROUND. SLIGHTLY CENTRALLY CONDENSED, BUT OTHERWISE	RAMBLING.	18t has corona, sta is spiral. 1st IS PAIR IN COMMON (?) ENVELOPE, LOOSELY SCATTERED.	1st IS ELONGATED (ALONG CLUSTER MAJOR AXIS) AND MAY BE BINARY; HAS EXTENDED ENVELOPE.	1st is extended with corona.	1st is spiral.	Group superposed of.	SCALLEAGED, SEIGHT CONCENTRALION 10 S-E. Two concentrations.	1st IS ROUND ELLIPTICAL AT EDGE. CENTRALLY CONDENSED.	let has corons. Groun sunernosed let has corons and sunernosed star	1st and 3rd have coronae.	Three concentrations. = RPO41; position wrong in Olowin (1986,	1987). Chaper supernosed 1st and 3rd uncertain	2nd IS LENTICULAR, 3rd HAS FAINT CORONA.	Plate edge.	1st is muchine system in corons. Plate edge. 1st has very large corons.	1st multiple in corona.	1st HAS FAINT EXTENDED CORONA, 2nd IS SPIRAL.	1st is spiral, 3rd has corona.	2nd HAS CORONA. SUMEWHAT CENTRALLY CONDENSED AND MORPHOLOGICALLY DIVERSE.	1st HAS CORONA. CENTRALLY CONDENSED. NEAR E CALIBRATION CUTOUT.	1st has corons. = RPO44.	Group superposed. 1st 1s spirsl. Names sluster superposed. 2sd is suited.	Mearer cluster superposed, ord is spiral. Plate edge.	Two concentrations.	LOOSELY SCATTERED.	CENTARLIY CONDENSED CLUSTER DOMINATED BY BRIGHT ELLIPTICALS.	Group superposed.	1st has corons.	1st HAS CORONA.
Field	F344 F467	1070	F467	F237	F344		F344	F404	F237	F601	F289	F344	D408	F289	F344	F344	F344	F405	F344	F289	F190	F405	F190	F190	F467	F344	F189	F190	F289	F405	F076	F467	F468	F405	F147	F190	F345	F345	F468	F468	F534
Abell	3835 3837	900	3838	3841	3842			3844	3845 3846	3847	3848	3853	2054	3855	3856		3857	3858	3861	3862	3864	3866	3869	3870	3873	3874	0100		3876	3878	3879	3880		3881	3884	3886	3887	3888	3889	3892	3893
						-			-			_			INI							-														_					
Notes	ry close double. = RPO29. LONGATED WITH EXTENDED CORONA. SOMEWHAT SCATTERED.	uster superposed sp. Scattered.	d. Brit shabed: May be stidendostrion of the Crotide		iral.	oncentrations. Group superposed nf.	corona.	orona.	J. SOMEWHAT ELONGATED.	corona. Plate edge.	LY SCATTERED.	ERED. 1st PROBABLY FOREGROUND.	HAT CENTRALLY CONDENSED.	itom Abs/4 superposed.	LATTENED ELLIPTICAL OR LENTICULAR (FOREGROUND?). MANY FAINT PRO	149-5 with position corrected? Galaxy at position of S149-5	ground (Corwin and Emerson 1982) and may have faint	ons, or is superposed on cluster members. = RPO33.	S FAIN I CORONA. BRIGHT FOREGROUND LENTICULAR IGNORED. HAT ELONGATED.	HAT CENTRALLY CONDENSED.	CORONA (cD), TRACE OF SUBCLUSTERING IN Q:1 (NW).	FAINT CORONA (cD?) WITH STAR SUPERPOSED TO S. SCATTERED	OME CONCENTRATIONS.	uperposed f. 1st in foreground? Inserposed of 1st in foreground?	uporposed as: too as soldseduid:	orona. Plate edge.	Orona.	ercluster.	uperposed.	uperposed; bright galaxy superposed.	slaxy superposed. = RPO36.	Destposed.	uperposed f. 1st has corona.	ge; data from this plate rejected. Dwarf galaxy superposed.		sec. Littiple cD. = RPO38.	d. Group superposed?	uperposed.	ENTICULAR, 3rd HAS CORONA. = A3833.	i. 18t and ord nave coronae. Indextremely bright star of	uperposed nf. Scattered, but rich.
	1st is very close double. = RPO29. 1st IS ELONGATED WITH EXTENDED CORONA. SOMEWHAT	Nearer cluster superposed sp. Scattered.	Scattered. Dimerry of TWO CE	DOMBBELL-SHAFED; MAI BE SUFERFUSITION OF 1WO GE 1st & 2nd ARE PRORABLY FOREGROTIND		•			531 1st IS SO. SOMEWHAT ELONGATED. CENTRA 11 V. CONDENSED.					268 Gataxies from Abyly superposed. 531 Several concentrations			is in foreground (Corwin and Emerson 1982) and may have faint	companions, or is superposed on cluster members. = RPO33.			287 1st HAS CORONA (cD). TRACE OF SUBCLUSTERING IN Q:1 (NW). Superposed on more distant cluster? 1st has corns. — RPO34	1st HAS FAINT CORONA (cD?) WITH STAR SUPERPOSED TO		108 Group superposed f. 1st in foreground? 288 Group superposed of 1st in foreground?			400 18t has corons.			-	145 Dwarf galaxy superposed. = RPO36. 189 Plate edge.				= KFU37.		•.	_	167 1st IS LENTICULAR, 3rd HAS CORONA. = A3833.		
Abell Field Notes	C.,	F403 Nearer cluster superposed sp. Scattered.		F287 1st & 2nd ARE PRORARLY FOREGROUND	F188	F531	F403	F236	3197 F531 1st IS 50. SOMEWHAT ELONGATED.	F075	F287	F011		3804 F531 Georgea from Ash 4 superposed.	F531	3806 F145 Is this S149-5 with position corrected? Galaxy at position of S149-5	is in foreground (Corwin and Emerson 1982) and may have faint	r c	3801 F331 ZEG HAS FAINT CORONA. BRIGHT FOREGROUND LENTICULAR IGNORED. SOMEWHAT ELONGATED.	F531	3809 F287 1st HAS CORONA (cD), TRACE OF SUBCLUSTERING IN Q:1 (NW). F388 Singernand on more distinct cluster? 1st has coons - RPO34	1st HAS FAINT CORONA (cD?) WITH STAR SUPERPOSED TO		F108 Group superposed f. 1st in foreground? 3811 F988 Group superposed of 1st in foreground?	F403	3813 F403 1st has corona. Plate edge.		F237	F237	F237	3822 F145 Dwarf galaxy superposed. = RPO36. F189 Plate edge.	F403	F532	3825 F145 Plate edge, data from this plate rejected. Dwarf galaxy superposed.	897 F14K Distance	F146		F288	F467	2002 F 1900 — A 2002. Is a fail of a large contage. 2013 T 201 — A 2014 P 2014 B 1900 F 1900	

TABLE 7A—Continue

	ERPOSED ON PART O									D.			SUPERPOSED ON	RALLY CONDENSED.				O GALAXY.	ND FOREGROOM							RGE CLOUD OF								CANDING AT	OMEWHAT								
Notes	SCATTERED, SEVERAL CONCENTRATIONS AND APPEARS SUPERPOSED ON PART OF NEIGHBORING CLUSTER.	Group superposed sf. 1st has corons.	1st HAS FAINT CORONA. SCATTERED.	1st is peculiar spiral. Group superposed.	lst is spiral.	Group superposed.	Group superposed.	In a supercluster.	GIOUP SUPELPUSCU II. ELONGATED AND STIPERPOSED ON CLIISTER TO S.E.	SOMEWHAT CENTRALLY CONDENSED, OTHERWISE SCATTERED.	LOOSELY SCATTERED.	In a supercluster. Two concentrations.	18t HAS FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED. SUPERPOSED ON	NEIGHBURING CLUSTER. 1st HAS VERY PAINT CORONA. PAIRLY SYMMETRIC AND CENTRALLY CONDENSED.	Two concentrations.	In a supercluster.	1st is spiral.	1st HAS FAINT CORONA. NW OF SAO 191733 AND FOREGROUND GALAXY.	181 IS ELONGALED WITH FAINT CORONA. NW OF SAC 191783 AND FOREGROUND GALAXY.	Three concentrations. Two clusters seen in projection?	1st IS FOREGROUND FACE-ON SPIRAL.	1st HAS FAINT CORONA. SLIGHTLY CENTRALLY CONDENSED.	1st and 3rd are spind es. CONCENTRATED TOWARD EDGE.	1st in foreground?	1st has corons.	1st IS SO(?). MORPHOLOGICALLY DIVERSE AND PART OF A LARGE CLOUD OF	FAIN I GALAALES. Two concentrations group superposed	Group superposed p. 1st is spiral.	Several pretty bright stars superposed.	Group superposed. 1st in foreground? 2nd $m = 17.7$.	TWO SLIGHT CONCENTRATIONS.	Group superposed.	Scattered.	Cloud superposed.	1st & 2nd PROBABLY FOREGROUND. 3rd HAS FAINT CORONA. SOMEWHAT. Crntrally Condensed.	Scattered.	Group superposed? 1st in foreground?	= RPO46.	1st HAS FAINT CORONA.	let has corons.	Group superposed. Scattered. Nearby cluster superposed s.	Group superposed. 1st has corona.	1st HAS FAINT CORONA AND IS OFF CENTER.
Field	F290	F147	F469	F406	F407	F406	F 407	F 14 (F-940	F290	F291	F147	F290	F991	F147	F148	F346	F470	F409	F347	F535	F049	F239	F407	F110	F049	F230	F110	F077	F604	F536	F347	F347	F191	F192	F148	F077	F347	F470	F408	r 408 F 408	F408	F536
Abell	3956	3957	3958	3959	0000	3960	9906	3086	3060	3970		3971	3972		3975	3976	3977	3980		3984	3982	3986	3987	3989	3880	3992	3003	3994	3882	3996	3008	4000	4004	4002		4006	4004	4008	4009	4010	4011	4013	4014
-					_																_																						
Notes	STRANDS OF FAINT GALAXIES. FOORITY SCAPTEBED BITS COMEWHAT LINEARLY CONCENTRATED	Group superposed. Plate edge. Magnitudes uncertain.	= A2462. 1st has corona. Plate edge.	1st HAS CORONA; 2nd IS DIFFUSE BLUNT SPINDLE. = A2462.	MANY FAINT GALAXIES BELOW COUNT LIMIT. FOREGROUND CONTAMINATION.	SCATTERED	1 We concentrations.	SOMEWHAT ELONGATED WITH LARGE FAINT MEMBERSHIP BELOW MAGNITUDE	CULOFF	DIJONGALED.	SLIGHTLY CENTRALLY CONDENSED, BUT OTHERWISE SCATTERED.	ELONGATED.	1st HAS FAINT CORONA (cD?). SCATTERED AND SLIGHTLY OVERLAPPING WITH	NEIGHBORING CLUSTER.	1st is spirat. 1st is spiral.	Plate edge. 1st is spiral.	Two concentrations.		1st IS SPIRAL (FOREGROUND?); 2nd HAS FAINT CORONA. SCATTERED. Scattered in streams	1st HAS FAINT CORONA.	In a supercluster.	1st has corona. 3rd is spiral.	MORPHOLOGICALLY DIVERSE AND SCATTERED. SEVERAL CONCENTRATIONS. OVERLADS WITH NEIGHBORING OF HETER	1st is peculiar.	Scattered.	Two clusters superposed? Confused area.	Group superposed. Near calibration cutout.	18t is dentificadar. Scaltered But somewhat more concentrated in 4:1 & Q:4.	S-shaped. Group superposed.	= AC113 in Couch and Newell (1984).	Three concentrations.	Plate edge.	Group superposed?	Two concentrations.	Group superposed p. In a supercluster.	11st BAS FAINT, ELONGATED CORONA, AND A CLOSE COMPANION.	1st HAS FAINT CORONA. ELONGATED.	1st is spiral or group superposed?	1st is peculiar, or superposed on cluster?		1st HAS FAINT CORONA, NEAR S-E PLATE CALIBRATION CUTOUT.	SCATTERED.	SCATTERED.
	F663 STRANDS OF FAINT GALAXIES. F945 LONGENT SCATTERED BITT COMEWHAT LINEARLY CONCENTRATED		F602 = A2462. 1st has corona. Plate edge.					F290 SOMEWHAT ELONGATED WITH LARGE FAINT MEMBERSHIP BELOW MAGNITUDE	BOOK BY CALOFF.	•		ELONGATED.	1st HAS FAINT CORONA (cD?). SCATTERED AND SLIGHTL	NEIGHBORING CLUSTER.			-	In a supercluster.	(EGROUND?); 2nd HAS FAINT CORONA.	•		1st has corona. 3rd is spiral.	F290 MORPHOLOGICALLY DIVERSE AND SCATTERED. SEVERAL CONCENTRATIONS. OVERLADS WITH NEIGHBORING CLIEFER				GOM TARWINGS	& Q:4.			F406 Three concentrations.				F147 Group superposed p. In a supercluster.	11 & Supercluster: 1st HAS FAINT, ELONGATED CORONA, AND A CLOSE COM	1st HAS FAINT CORONA. ELONGATED.	_	1st	1st HAS FAINT CORONA.	DRONA. NEAR S-E PLATE CALIBRATION		F290 SCATTERED.

d Notes	Group superposed. Ist is spiral. Ist HAS FAINT CORONA. SCATTERED. Ist HAS FAINT CORONA. SOMEWHAT SCATTERED. 13 - 4 concentrations. In a supercluster. Group superposed. Part of A40772. Group superposed. Fart of A40772. Group superposed. Advin Spiral. Ist has corona. Part of A40772. Ist HAS PAINT CORONA. RELATIVELY COMPACT.
Field	F111 F3409 F409 F409 F409 F538 F538 F241 F292 F292
Abell	4067 4068 4070 4071 4072 4073 4075 4075
Notes	Group superposed a. 1st has corona. 3rd is spiral. Group superposed a. 1st has corona. 3rd is spiral. 1st, 2nd, 2st dat ARE ELIPTICALS, LATTER TWO HAVE VERY FAINT CORONALS. SOMEWHAT SCATTERED. 10.0SELY SCATTERED, SOMEWHAT ELONGATED. 3rd is doubte or has star superposed. Scattered. Group superposed. SCATTERED. 1st HAS VERY FAINT CORONA. SOMEWHAT ELONGATED. 1st HAS VERY FAINT CORONA. SOMEWHAT ELONGATED. 1st HAS VERY FAINT CORONA. SOMEWHAT ELONGATED. 1st HAS CORONA. SOMEWHAT ELONGATED. 1st HAS CORONA. SOMEWHAT INDEARLY CONDENSED. 1st HAS CORONA. SOMEWHAT INDEARLY CONDENSED. 1st HAS CORONA. SOMEWHAT LINEARLY CONDENSED. 1st HAS CORONA. SOMEWHAT LINEARLY CONDENSED. 1st HAS CORONA. NEAR W PLATE EDGE; COUNT LOW. 1st HAS CORONA. TWO CONCENTRATIONS. SCATTERED. 1st HAS CORONA. TWO CONCENTRATIONS. SCATTERED. 1st HAS CORONA. Group superposed. Group superposed. Group superposed. Group superposed. Group superposed. 1st HAS CORONA. 1st HAS PAINT CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS PAINT CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS PAINT CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS PAINT CORONA. 1st HAS PAINT CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st
Field	F408 F110 F240 F240 F240 F240 F240 F240 F408 F408 F409 F409 F409 F409 F409 F409 F409 F409
Abell	4017 4018 4020 4020 4021 4022 4033 4033 4034 4034 4033 4033 4034 4033 4033 4033 4033 4033 4033 4034 4034 4035 4035
'	119

TABLE 7B Notes for Table 5

	Abell	Field	Notes	Abell	Field	Notes
	S0001	F409		S0039	F539	TWO CONCENTRATIONS.
	S0002	F409	DOMINATED BY BRIGHT ELLIPTICALS. BRIGHT STAR OBSCURES SOME MEMBERS.	S0040	F294	3rd HAS FAINT CORONA AND IS LOCATED IN CENTER OF CLUSTER.
	S0003	F409	1st HAS CORONA, 3rd IS SPINDLE.	20041	F350	lst has corons. Core-halo structure, = KFO6.
	50004	F050	1st HAS FAINT CORONA (cDf.); 3rd IS SPINDLE: SCATTERED.	20042	F070	18t HAS FAILT COROUNS, 2nd 18 LEDIT LOCAL TEACH.
	20002	F.292	SCATTERED, MORPHOLOGICALLY DIVERSE. NEAR Q:3-E CALIBRATION CUTOUT,	S0043	FU19	18t HAS FAINT CORONA; 2nd 13 SFINDLE, SCALLERED. SCATTERED
	Schools	E400	COUNT SOMEWHAT LOW.	S0045	F 059	JOAN I DIVED. TWO concentrations
	20000	F 403	ISE HAS CONCINA (CD.): 244 IS STIMAL: MORE HOLOGICALLE DIVERDE: NEARRY CLISTER SUPERPOSED	S0045	F150	SOMEWHAT ELONGATED.
	80008	F050	1st HAS FAINT CORONA (CD2), DISPLACED FROM CENTER, 2nd IS SPINDLE:	S0046	F294	SCATTERED, 1st IS FOREGROUND SPIRAL NEAR N EDGE OF CLUSTER.
				S0047	F150	1st IS SPINDLE. NEAR Q:1-N PLATE EDGE, COUNT SOMEWHAT LOW.
•		F078	1st HAS CORONA (cD?); 2nd IS SPINDLE; 3rd IS SPIRAL. BRIGHTEST ARE	S0048	F150	1st PROBABLY FOREGROUND SPIRAL(?). LOOSELY SCATTERED.
			LENTICULARS AND SPIRALS.	S0049	F150	1st HAS FAINT CORONA. SCATTERED.
	S0009	F292	1st HAS FAINT CORONA, 3rd IS SPINDLE.	S0050	F194	Group superposed.
	S0010	F409	1st HAS CORONA.	S0051	F294	1st HAS FAINT CORONA. NEAR N-PLATE EDGE JUST W OF N FIDUCIAL MARK.
	S0011	F293	1st MAY HAVE EXTREMELY FAINT CORONA.			COUNT LOW.
	S0012	F349	1st has corona. 3rd is spiral. Two clusters seen in projection?	S0052	F150	SOMEWHAT SCATTERED.
			= RPO3.	S0053	F242	1st & 2nd ARE CLOSE PAIR OF ELLIPTICALS.
	S0013	F193	1st is spiral.	S0054	F194	Group superposed.
	S0014	F193	Group superposed.	S0055	F150	1st HAS FAINT CORONA, 3rd IS SPIRAL. LOOSELY SCATTERED. Superposed
	S0015	F539	1st HAS CORONA: 3rd IS S0.			on AS54.
	20016	F140	Groun amornoad Craftond	S0056	F078	1st IS SPIRAL (FOREGROUND?) BRIGHTEST MEMBERS ARE ELLIPTICALS.
	20010	E 1 1 2 2	Out the type power. Jeanwater.			CONCENTRATIONS TO BASE
	2001	F078	CIU A D SI TINAL.		F079	1st IS FOREGROUND(*) SPIRAL. FILIPTICALS DOMINATE BRIGHTEST.
12	20010	FOFO	14 IS COID AI. 3-A IS COUNT F CCATTEBED			CONCENTRATION AT EASTERN EDGE
20	COOS	F050	BUILD OF HEALT, SHIPLE SOUTH BUILD. BUILD THE TO SHIPLE SOUTH BUILD.	S0057	F078	TOOSEIN SCATTERED AT THE EDGE OF A LARGE CLOUD
)	2005	200			F079	SCATTERED AT EDGE OF LARGE CLOTIN
	20091	E003	SCALIBERT. 104 IS SDIPAL MODDHOT OCICATIV DIVERSE AND FLONGATION	80058	F050	1st HAS CORONA (cd.) APPEARS SUPERPOSED ON A LARGE, CLOUD OF FAINT
	20021	F 002	18th IS STIMATE, MORTHOLOGICALLE DIVERSE AND ELONGALED.	8	30	GALAXIES (IN 0.1).
	2002	F070	LATE INVINITUIL AD DADE OF A CEDEAT CLOTTE OF BAINT CALAVIDS		F051	1st HAS FAINT CORONA S.E. OF CLOTID OF FAINT GALAXIES. SOME
	2002	F050	18th DELOCATION TO STREET OF A STREET CHOICE OF TAILS. 1st IS DEPORABLY FOREGROUND SPINNTE IN A LARGE CLOTTO OF FAINT			SUPERPOSITION.
			CONTRIBUTION OF A VITE	80059	F949	1st HAS CORONA
	2000	D070	OCAL TEMED WALANTES.	09005	F540	to the order
	2005	FOIO	AND THE STATE OF STAT	S0061	F294	3rd HAS PAINT CORONA LOOSELY SCATTERED.
h.		E070	NAME OF THE PROPERTY OF THE OFFICE OF THE CATAVIES	20062	F194	Grain annarmand
	2000	F 01 2	9-14 A DATENDED DANGE COLOUD OF FAIR I GABARIES.	2008	F150	OF THE PROPERTY OF THE PROPERTY SCATTERED
	07000	1001	of the family occopies with the control of the cont	89000	F-90K	124 HAS CODONA, 9-2 8-2-3 ADE COID AND
	2002	1.000 J	18t HAS VERT FAINT CORONA; 3rd IS CLOSE PAIR IN COMMON ENVELOPE.	COOR	E 230	IN IND COLOURS AND WE BE THE STATEMENT OF THE STATEMENT OF THE CONTRACT OF THE STATEMENT OF
	00000	00.10	SOMEWRAL ELONGALED.	2006	F150	COATTEDED BIT WITH COME CONTROL
	20000	1000	WIDELI SOCALIERED. FOR THE SOCALIERED TO THE SOCIETY OF THE SOCIE	20067	F943	OUTLIBUID DOI WILL COMM CONCENTIONS.
	2002	r 050	BAIGHTEST MEMBERS IEND IOWARDS EDGE OF CHOSTER, MOSTER TICALS.	19005	E 410	The property of the confidence of the confidence of the property of the confidence o
	20030	F012	18t HAS COKONA 2 2nd 18 FACE-ON SPIKAL. SCALTEKED AND SOMEWHAI	90000	F 411	186 FROBABLI FOREGROUND, SOMEWHAI SIMMEIRICAL.
.4.		5	MORE HOLOGICALLY DIVERSE.	COUCO	F 114	GOOD III. 14. TA CODOMA CCATTEDED CHEEDED ON COMEACT CTHETED TO CE
•		F013	1st HAS CORONA. SOMEWHAI CENTRALLY CONDENSED AND MORPHOLOGICALLY	20002	F 280	18t HAS CONDING SOAL LEAGUE. SOUFERFORD ON CONFIGURE 10 SE.
	1000	2	DIVERSE	2000	r411	18t 13 E(!). SCAI LEKED, Q:3 CONCENTRATION, AND SUPERPOSED IN Q:1
	50031	F050	1st IS LENTICULAR. SOMEWHAT COMPACT.	50071	T-90E	ON MICH CEUSTER.
	20037	F.294	1st IS FUREGROUND S(r). SCATTERED.	2007	687.1	STORES HAS FAILT COUNCING. COMPETED BY & ZOID FOSSIBLE FORESCHOUND.
	S0033	F078	1st IS SPINDLE. SCATTERED. IN A LARGE CLOUD.	20072	F 351	18 IS SU. SOMEWHAT ELONGALED. FOREGROUND SU SUFERFUSED.
	, 000	F079	18t IS SPINDLE: IN A LARGE CLOUD.	20013	F 280	IN THAS COUNTY AND SOFTERFORD OF CONTRACTOR SOCIETY EARLY. SO THE TELEFORD OF SALES AND SOFTER CONTRACTOR OF SALES AND SOFTER SO
	S0034	F050	COMPACI, CENTRALLY CONDENSED.	30014	F 190	ord has failed concinal booseled some lened. Sufferenced on failed
))	50035	F294	MORPHOLOGICALLY DIVERSE.	S0075	F051	OLOSIERA(!). 1st HAS VERY FAINT CORONA DENSEST PART OF A LARGE MEANDERING
	20037	F249	184 IS FOREGROUND 30: SCALLERED.			CLOUD OF FAINT GALAXIES.
	2000	F294	1st HAS CORONA	80076	F150	1st HAS FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED. SEVERAL BRIGHT
	50038	F294	1st HAS FAINT EXTENDED CORONA, SCATTERED.			FOREGROUND GALAXIES IN FIELD.
4.						

ב- כחונותנמ 	Abell Field Notes	S0114 F412 SCATTERED. S0115 F195 1st HAS CORONA (cD). S0116 F195 1st IS BRIGHT SR'r). MEMBERS SCATTERED WITH SOME EVIDENCE OF	F195	S0118 F541 1st HAS VERY FAINT CORONA AND CLOSE COMPANION. SOMEWHAT SCATTERED. S0119 F412 IRREGIILAR 1st HAS FAINT CORONA	F295	LOW. S0121 F243 Group superposed.	S0122 F295 1st & 2nd HAVE FAINT CORONAE.	F 295	S0125 F195 3rd HAS FAINT CORONA. SEVERAL FOREGROUND SPIRALS.	F295	S0128 F013 1st HAS CORONA; 2nd IS SPIRAL. SCATTERED AND MORPHOLOGICALLY DIVERSE.	S0129 F195 1st HAS FAINT CORONA, 3rd IS SPIRAL. LOOSELY SCATTERED.	F051	S0132 F195 DUMBBELL-SHAPED.	F412	S0135 F195 SCATTERED. S0136 F412 14t HAS FAINT CORONA	F113	F412	S0140 F195 1st IS FOREGROUND SBa. LOOSELY SCATTERED. S0141 F412 1st HAS CORONA & POSSIBLE GLOBULARS: 2nd IS SB(?).	F195	F296	S0146 F412 SCATTERED. S0149 F105 LOOSFLY SCATTERED	F196	S0151 F412 1st HAS FAINT CORONA AND IS OFF CENTER. F413 1st HAS CORONA 1st COMPANION BITH IS OFF CENTED	F196	S0153 F113 1st & 2nd PROBABLY FOREGROUND SPIRALS. S0154 F413 1st HAS CORONA.	F296	F113	MORPHOLOGICALLY DIVERSE. S0159 F413 1st IS SB. SCATTERED IN SCATTERED BACKGROUND.	F353	S0161 F.113 1st HAS VERY FAINT CORONA, BRIGHTEST ARE MOSTLY ELLIPTICALS. SCATTERED.	S0162 F196 Spiral superposed. = RPO7. S0163 F296 1st HAS FAINT CORONA. LOOSELY SCATTERED, MORPHOLOGICALLY DIVERSE.
-																																
ו קקמטן	Notes	1st & 3rd HAVE CORONAE. 1st HAS CORONA (cD). SOMEWHAT CENTRALLY CONDENSED. 1st IS S0. SLIGHTLY CENTRALLY CONDENSED.		1st & 3rd HAVE FAINT CORONAE. MORPHOLOGICALLY DIVERSE. SOMEWHAT SOMEWHAT CONCENTRATED IN Q.1.	1st HAS FAINT CORONA (cD?) AND IS SUPERPOSITION. SLIGHTLY CENTRALIX CONDENSED.	CENTRALDI CONDENSEL) SOALIERED. 1st & 2nd ARE SPIRALS, 3rd IS SUPERPOSITION. SOMEWHAT SCATTERED	WITH CONCENTRATIONS. 1st HAS VERY FAINT CORONA AND IS STIBEREDOSTITION BRIGHT.	FOREGROUND(?) SPIRAL SUPERPOSED.	1st HAS FAINT CORONA. LOOSELY SCATTERED. 3-J IS SPIRAT (S.). SCATTERED AND MORPHOLOGICALLY DIVERSE	1st IS FOREGROUND SO. LOOSELY SCATTERED.	IRREGULARLY SCATTERED. 1st IS SO. LOOSELY SCATTERED WITH SOME FOREGROUND CONTAMINATION.	184 HAS FAINT CORONA. SOMEWHAT SCATTERED. LOORETY SCATTERED, SOME IRRECTIL AR CONCENTRATIONS	1st IS So(?), POSSIBLY FOREGROUND. NEAR QI:N PLATE EDGE, COUNT	LOW. SUPERPOSED ON SEVERAL MORE DISTANT CLUSTERS & GROUPS.		1st HAS FAINT CORONA. SEVERAL BRIGHT SPIRALS INCLUDED, ONE SUPERPOSED PAIR, SCATTERED.	SCATTERED, BUT MORE CONCENTRATED IN Q:1 & Q:2.	SOME SUPERPOSITION WITH CLUSTER TO N.	STA HAS CORONA & COMPANIONS, CURIOUS LINEAR CONCENTRATION S-E OF CENTER.	1st IS SUPERPOSITION WITH CORONA; 2nd HAS CORONA. SCATTERED WITH CONCENTRATION IN 0.3	1st & 2nd HAVE FAINT CORONAE. LARGE MEMBERSHIP OF FAINT GALAXIES.	SUPERPOSED ON CLOUD? 2nd HAS VERY FAINT CORONA: 1st IS OFF CENTER.	1st HAS FAINT CORONA. SCATTERED.	MORPHOLOGICALLY DIVERSE AND SCATTERED. SOMEWHAT DIIMBRELL-SHAPED	164 & 2nd ARE FLATTENED ELLIPTICALS WITH CORONAE. 18t MAY BE	FUREGROUND, SCATTERED. 1st & 2nd ARE FLATTENED ELLIPTICALS. SCATTERED AND SOMEWHAT	MORPHOLOGICALLY DIVERSE.	1st HAS CORONA (S0?). MORPHOLOGICALLY DIVERSE AND SCATTERED.	1st IS SPINDLE, 2nd IS BINARY. LOOSELY SCATTERED. Spiral superposed.	1st HAS CORONA. CENTRALLY CONDENSED. NEAR Q.2-N EDGE, COUNT	SOMEWHAT LOW. 1st, 2nd, & 3rd HAVE CORONAE. CENTRALLY CONDENSED ALTHOUGH	SOMEWHAT IRREGULAR. BRIGHTEST HAVE FAINT CORONAE. AT Q:4-W PLATE EDGE, COUNT LOW.
ו אמנין ו	Field Notes	F150 1st & 3rd HAVE CORONAE. F195 1st HAS CORONA (cD). SOMEWHAT CENTRALLY CONDENSED. F079 1st IS S0. SLIGHTLY CENTRALLY CONDENSED.	1st IS SO. LOOSELY SCATTERED. 1st & 2nd ARE SPIRALS. SCATTERED.	PHOLOGICALLY DIVERSE. SO	F411 1st HAS FAINT CORONA (cD?) AND IS SUPERPOSITION. SLIGHTLY CONTRAITY CONTRAITS CATTTERED	F195 1st & 2nd ARE SPIRALS, 3rd IS SUPERPOSITION. SOMEWHAT SCATTERED	WITH CONCENTRATIONS. F105 1st HAS VERY FAINT CORONA AND IS STIDERPOSETTION RRIGHT		F150 184 HAS FAINT CORONA, LOOSELY SCATTERED. F351 3-4 IS SPIRAT (S.), SCATTERED AND MORPHOLOGICALLY DIVERSE		IRREGULARLY SCATTERED. 1st IS S0. LOOSELY SCATTERED WITH SOME FOREGROUND CONTAIN	F150 1st HAS FAINT CORONA. SOMEWHAT SCATTERED. F150 TOOSELY SCATTERED SOME PREFITING		LOW, SUPERPOSED ON SEVERAL MORE DISTANT CLUSTERS & GROUPS. F079 1st & 2nd HAVE CORONAE, CONCENTRATION IN 0.4	1st HAS FAINT CORONA.	L BRIGHT SPIRALS INCLUDED, ON	F411 SCATTERED, BUT MORE CONCENTRATED IN Q:1 & Q:2. F105 14 IS BY ATTYPINED FIT IDPLICATORS OF SUBMIT BY TATABLE ATTYPINED FIT IDPLICATORS.	SOME SUPERPOSITION WITH CLUSTER TO N.	F285 3rd HAS CORONA & COMPANIONS, CURIOUS LINEAR CONCENTRATION S-E OF CENTER.	F351 1st IS SUPERPOSITION WITH CORONA; 2nd HAS CORONA. SCATTERED WITH	F002 1st & 2nd HAVE FAINT CORONAE, LARGE MEMBERSHIP OF FAINT GALAXIES.	SUPERPOSED ON CLOUD? F003 2nd HAS VERY FAINT CORONA: 1st IS OFF CENTER		F411 MORPHOLOGICALLY DIVERSE AND SCATTERED. F295 SOMEWHAT DIMARRIL-SHAPED		FOREGROUND: SCATTERED. FOR3 1st & 2nd ARE FLATTENED ELLIPTICALS. SCATTERED AND SOMEWHAT	MORPHOLOGICALLY DIVERSE. FA11 1+ HAS PAINT CORONA LOGETY SCATTERED.		F195 1st IS SPINDLE, 2nd IS BINARY. LOOSELY SCATTERED. F243 Spiral superposed.	_	E CORONAE. CENTRALLY CONDENSED ALTHOUG	SOMEWHAT IRREGULAR. F080 BRIGHTEST HAVE FAINT CORONAE. AT Q:4-W PLATE EDGE, COUNT LOW.

ld Notes			14 SCATTERED. 43 SOMEWHAT ELONGATED		13 1st HAS FAINT CORONA. SOMEWHAT SCATTERED WITH GROUP SUPERPOSED. 81 1st HAS CORONA (-D.) CENTRALITY CONDENSED AND MORPHOLOGICALLY	_		SPIRAL-RICH. 14 14 ISTENTICITAR SCATTERED & SOMEWHAT SPIRAT-BICH			FOREGROUND. 184 IS ELLIPTICAL WITH VERY FAINT CORONA. LOOSELY SCATTERED.	•	88 181 IS SPIKAL, MOKPHOLOGICALLY DIVERSE & SCALTERED, NEAR CALIBRATION CITTOUT COUNT SOMEWHAT LOW			8/ 1st HAS FAINT CORONA.			98 IST HAS FAINT CORONA; 2nd MAY BE FOREGROUND FACE-ON SPIRAL. I DOSEITY SCATTERED			FII4 IST HAS VERY FAINT CORONA (cD?). SCATTERED. GROUPS NEARBY.			97 LOOSELY SCATTERED, MORE CONCENTRATED TO EDGE. 15 SCATTERED 1st PROBABLY FORECROIM		54 Scattered. Group superposed.			F355 1st has corons. Group superposed n. In a supercluster. F052 1st HAS CORONA (cD), SOMEWHAT MORPHOLOGICALLY DIVERSE.			F415 ISTINDLE. SEVERAL CONCENTRATIONS. F197 1st HAS CORONA SOME STRCLIISTERING AND/OR STIPERPOSITION TO NE		14 SCATTERED. 81 14 HAS CORONA (AD) DESCRIPER ARE SEED ATS		15 SCATTERED. NEARER GROUP SUPERPOSED. 78 SCATTERED	
l Field	2 F543		5 F114 7 F543		F013		1 F013	F014		4 F298	5 F298		5 F298	7 F245		5 F197	. —		3 F298	-					0 F197 1 F415			4 F197 F198							0 F014		3 F415 4 F478	
Abell	S0202	S0204	S0205	S0208	S0209	700	S0211		S0212	S0214	S0215	Š	S0216	S0217	Š	50218	S0221	S0222	S0223	S0224	č	S0225	S0227	S0229	S0230 S0231	S0232	S0233	50234	S0235	S0236		S0237	S0238 S0239		S0240	S0242	S0243 S0244	S0245
Notes	1st HAS VERY FAINT CORONA, SCATTERED, NOT CENTRALLY CONDENSED.	1st HAS FAINT CORONA, 2nd IS SB(r). 1st HAS CORONA AND FAINT COMPANIONS.	FOREGROUND CLUSTER SUPERPOSED? SOME SUPERPOSITION WITH FAINTER	LOOSELY SCATTERED, SOMEWHAT ELONGATED.	1st IS LENTICULAR. BRIGHTEST ARE MORPHOLOGICALLY DIVERSE. LOOSELY	SCALIERED. 1st IS LENTICULAR. SCATTERED.	1st HAS FAINT CORONA. LOOSELY SCATTERED.	1st HAS FAINT CORONA; 3rd IS SAB(r). SCATTERED.	nearer custors superposed:	1st IS SPIRAL (FOREGROUND?); 3rd HAS CORONA. SCATTERED.	18t & ZNG ARE SPIRALS; STG HAS FAINT CORONA. SCALTERED. 1st IS SUPERPOSITION. SOMEWHAT CENTRALLY CONDENSED.	ELONGATED.	SCATTERED 1st PROBABLY FOREGROUND.	100100 100	SCATTERED AND SOMEWHAT DUMBBELL-SHAPED.	SCATIERED. TWO BRIGHT FOREGROUND(2) SPIRALS IGNORED SCATTERED	2nd IS SPIRAL. LOOSELY SCATTERED.	1st & 3rd HAVE VERY FAINT CORONAE. SOMEWHAT CENTRALLY CONDENSED.	1st HAS FAINT CORONA, LOOSELY SCATTERED. 1st HAS FAINT CORONA, BEICHTEST CALAYIES FORM CHAIN	18t IS SO. SCATTERED.	Another cluster near np.	1st HAS FAINT CORONA.	SOMEWHAT Y-SHAPED WITH THREE CONCENTRATIONS.	ICALS.	BRIGHTEST ELLIPTICALS HAVE FAINT CORONAE. SCATTERED WITH THREE	Plate edge.	BRIGHTEST GALAXIES MAY BE FOREGROUND.	SCATTERED. SOMEWHAT DIIMBREIL-SHAPED.	1st IS ELONGATED WITH CORONA. BRIGHT FOREGROUND SPIRAL IGNORED.	SCATTERED. 1st HAS PAINT CORONA FOREGROUIND SPIRAL IGNORED.	1st IS ELONGATED WITH CORONA (cD?). NEAR Q:4-S PLATE EDGE, COUNT	LOW.	1st in foreground group?	LOOSELY SCATTERED.	1st IS ELONGATED WITH FAINT CORONA. SOMEWHAT LINEARLY CONDENSED.	SCALLERED. 1st IS SO WITH EXTENDED ENVELOPE. WIDELY SCATTERED. NEAR Q.2-N	PLATE EDGE, COUNT LOW.	SCATTERED. IN CLOUD OF FAINT GALAXIES.
Field	F353	F413 F353	F413	F080	F113	F114	F052	F052	F413	F029	F030	F543	F543	047	F543	F353	F114	F114	F114	F197	F152	F413	F543	F029	F030	F297	F353	F413	F080	F081	F114		F152	F081	F114	F032	F543	F245
Abell	S0165	S0166 S0167	S0168	S0169	S0170		S0171	S0172	S0174	S0176	S0177	S0178	S0179	20100	S0181	S0182 S0183		S0184	S0185	S0187	S0188	S0189	S0190	S0191		S0192	,	S0193	S0194				S0195 S0196		90100	S0199	20000	S0201
																	1	22																				

Notes T CORONA AND IS OFF-CENTER. SCATTERED AND SLIGHTLY T CORONA. SUPERPOSED ON ANOTHER CLUSTER TO S.E. & 24 HAVE RAINT CORONA. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA, STARBY. ANTERED. LOCATED IN CHAIN OF GROUPS. ATTERED. LOCATED IN CHAIN OF GROUPS. ATTERED. LOCATED IN CHAIN OF GROUPS. T CORONA; 3rd IS LENTICULAR. PART OF A LARGE DISTANT ANY EAINT CORONAE. MORPHOLOGICALLY DIVERSE AND ESTRACALLY CONDENSED. T CORONA; 3rd IS LENTICULAR. PART OF A LARGE DISTANT ANY EAINT CORONAE. MORPHOLOGICALLY DIVERSE AND ESTREACH CONDENSED. T CORONAS, 3rd IS LENTICULAR. PART CLUSTER TO TO SEPCENCATED. DNA; 3rd IS BARRED SPIRAL. NEAR E PLATE EDGE, COUNT SUPPOSED ON MORE DISTANT CLUSTER TO N.E. T CORONA. SOMEWHAT CONTENED. T CORONA. SOMEWHAT OF OVERLAPPING WITH CLUSTER TO N.E. T CORONA. SOMEWHAT OF OVERLAPPING WITH CLUSTER TO N.E. T CORONA. SOMEWHAT OF OVERLAPPING WITH CLUSTER D. T CORONA. SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED. T CORONAL SOATTERED WITH CONCENTRATION IN SW. THEN THE SOATTERED WITH CONCENTRATION IN SW. TREALLY DIVERSE. TO CORONE SHARL PART OF A LOOSELY SCATTERED CLOUD OF TUES.	Notes	ELONGATED. 1st APPEARS TO BE SPIRAL(?). 1st HAS VERY PAINT CORONA. SCATTERED.	TWO CONCENTRATIONS, SOMEWHAT DUMBBELL-SHAPED. SUPERPOSITION OF TWO	SCATTERED.	1st HAS FAINT CORONA.	1st HAS FAINT CORONA. MORPHOLOGICALLY DIVERSE AND SCATTERED.	ist HAS FAINT CORONA, MORPHOLOGICALLY DIVERSE. SCATTERED, COUNT CONTAMINATED BY BRIGHTER FOREGROUND GALAXIES?	Group superposed, 1st has corona.	Spiral superposed. Group superposed n.	1st HAS CORONA (cD).	1st HAS CORONA (cD).	18t HAS CORONA. MORPHOLOGICALLY DIVERSE. SOMEWHAT SUPERPOSED ON	CLUSTER TO S.SW.	1st HAS CORONA. LOOSELY SCATTERED.	1st and 3rd are spiral.	1st HAS VERY FAINT CORONA AND IS SUPERPOSITION. MORPHOLOGICALLY	DIVERSE AND SPIRAL-RICH.	BRIGHT ELLIPTICAL WITH HALO & FAINT COMPANION SUPERPOSED.	1st IS SBB. SOME EVIDENCE OF SUBCLUSIERING TO EAST OF CENTER.	18t HAS FAHAT COROLAR, 2444 IS SFIRMED, DOUGELT SCALLERED. 18t IS IRREGULAR SUPERPOSITION, 2nd HAS CORONA, SEVERAL SUPERPOSED	(INTERACTING?) GALAXIES.	DUMBBELL-SHAPED AND MORPHOLOGICALLY DIVERSE.	18t IS (FOREGROUND!) STINDLE. ELOINGALED. 1st HAS CORONA: 2nd IS LENTYCIII.AR. SOMEWHAT LENTYCIII.AR-RICH AND	CENTRALLY CONDENSED.	SOMEWHAT LINEARLY CONDENSED WITH TWO CONCENTRATIONS (SUPERPOSITIO	OF TWO CLUSTERS?).	SCATTERED.	1st HAS CORONA. LOOSELY SCATTERED.	MORPHOLOGICALLY DIVERSE WITH CONCENTRATION N-NE. NEAR N PLATE	Scattered. 1st is spindle.	Scattered. 1st is spindle. 3rd is peculiar. 10th is spiral.	1st (FLATTENED ELLIPTICAL?) HAS FAINT CORONA. APPEARS SPIRAL-RICH.	All galaxies out-of-focus, count uncertain.	Ist has corona. 144 hag baint corona several syspected for porected galaxies	IGNORED.	1st & 2nd ARE S0's. NEAR Q2:N PLATE EDGE, COUNT SOMEWHAT LOW.	FACE-ON SPIRAL WITH JET(?) SE OF CENTER. LOOSELY SCATTERED.	LOOSELY SCATTERED.	1st (cD) & 2nd HAVE CORONAE; 3rd IS SPIRAL. Near plate addre Groun sunarroad	Group superposed.	1st HAS CORONA; 3rd IS SPIRAL. SOMEWHAT DUMBBELL-SHAPED. 1st HAS FAINT CORONA; 3rd IS SPIRAL. LOOSELY SCATTERED.
Notes T CORONA AND IS OFF-CENTER. SCATTERED AND SLIGHTLY T CORONA. SUPPERPOSED ON ANOTHER CLUSTER TO S.E. & 24 HAVE RAINT CORONAE. T CORONA. ELONGUED. T CORONA. ELONGUED. T CORONA. ELONGUED. T CORONA. ELONGUED. T CORONA. ELONGUED. T CORONA, ELONGUED. T CORONA, ELONGUED. T CORONA, ELONGUED. T CORONA; BABY. T CORONA; BABY. T CORONA; BABY. T CORONA; BABY. T CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C CORONAE. T C C C C C C C C C C C C C C C C C C C	Field	F545	F299	F198	F416	F198	F199 F247	F356	F154	F247	F299	F299		F299	F356	F053	i	F247	F300	F199		F116	F 199		F115	F100	F247	F199	F300	F356	F357	F199	F547	F356		F199	F247	F248	F 14	F155	F248 F199
Notes T CORONA AND IS OFF-CENTER. SCATTERED A T CORONA AND IS OFF-CENTER. SCATTERED A T CORONA. SUPERPOSED ON ANOTHER CLUST & 3td HAVE FAINT CORONAE. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA. ELONGATED. T CORONA, SUPERPRIST. ATTERED. LOCATED IN CHAIN OF GROUPS. ESPIRALLS. MORPHOLOGICALLY DIVERSE. SCATEBROUNDS. T CORONA, 3td IS LENTICULAR. PART OF A LAB TAVE FAINT CORONAE. MORPHOLOGICALLY DI SELONGATED. DNA; 3td IS LENTICULAR. PART OF A LAB T CORONA, 3td IS LENTICULAR. PART OF A LAB SELONGATED. ONA (LD?). SCATTERED WITH SILGHT CONCENT SRACE-ON SPIRALS. SCATTERED. ONA (LD?). SCATTERED. ONA (LD?). SCATTERED. T CORONAE. FE FAINT CORONAE. FE FAINT CORONAE. FOSEITON WITH 3td. SOMEWHAT SCATTERED. T CORONA. SOMEWHAT CALAXIES. GALAXIES SOMEWHAT CALAXIES. GALAXIES SOMEWHAT CALAXIES. GALAXIES SOMEWHAT CANTRALLY CONDENSE T CORONA. SOMEWHAT CANTRALLY CONDENSE T CORONA. SOMEWHAT CANTRALLY CONDENSE T CORONA. 2nd IS SPIRAL WITH DUST LANE. SC DNA. BRIGHTERD WITH CONCENTRATION IN Q.2. E. SCATTERED WITH CONCENTRATION IN Q.2. E. LOOSELY SCATTERED ARGER CLOUD. ROUND SFIRAL. PART OF A LOOSELY SCATTER RROUND SFIRAL. PRISE.	Abell	S0287 S0288	S0289	S0290	S0291	S0292	S0293	S0294	S0295	S0296	20902	2002	0	S0300	S0302	S0303		S0304	50300	S0308		S0309	50311		S0312	50313	S0314	S0315	S0316			S0317	S0318	S0319 S0330		S0321			S0322		S0324 S0325
		-	1st HAS FAINT CORONA. SUPERPOSED ON ANOTHER CLUST										1st AND 3rd HAVE FAINT CORONAE. MORPHOLOGICALLY DI			1st & 2nd ARE FACE-ON SPIRALS. SCATTERED WITH SMALL		SOUTH, SUPERPOSED ON MORE DISTANT CLUSTER.	IST DAY CONOINA; STO IS BARRED STIRAL. NEAR E FLATE ED I.OW(?)				-		1st HAS FAINT CORONA. SOMEWHAT OVERLAPPING WITH	SCALTERED. IN CLOUD OF FAINT GALAXIES. RRIGHTEST GALAXIES SOMEWHAT CENTRALLY CONDENSE	SCATTERED.													_	1st IS FOREGROUND SPIRAL. PART OF A LOOSELY SCATTERED CLOUD OF FAINT GALAXIES.
Field Field	1 1							F246			F415									F355	F545	F415			F299	F246		F545	F115	F014		F198	F355	F.299	F115	F299	F081	F198	F115	F246	F247
Abell Abel	bell	346	47	P	49	2 2	2	33	4	2	2.0	5	28	0.5	8	61	62	č	3	64	92	99	9 6	2	- 9	2		2	4 7	9		13	9 2	2	80	22 53	2	83	% %	98	

Notes	SCATTERED. 1st HAS FAINT CORONA. COUNT MAY BE CONTAMINATED BY CLUSTER TO N. 1st HAS CORONA SCATTERED.		1st HAS FAINT CORONA. SPIRAL-BICH.	1st IS ELONGATED AND WITH CORONA. SCATTERED.			18t IS SPIKAL; 3rd HAS FAINT CURONA.	18t HAS FALIN CONOUN. NEARD I CHOSTERS SUFERFUSED. Fornex Cluster, 1st HAS CORONA AND GLOBILLARS, OTHER FILIPTICALS			18t HAS VERY FAINT CORONA. SCATTERED WITH SEVERAL PAIRS OF BRIGHT (FOREGROUIND) INTERACTING	GALAXIES SUPERPOSED.	1st HAS CORONA (cD?). OVERLAPS TO WEST WITH ANOTHER.	SCATTERED WITH CONCENTRATIONS IN Q.2 & Q.4. SOMEWHAT ELONGATED.		1st HAS CORONA. SCATTERED.	1st HAS FAINT CORONA. SCATTERED.	1st HAS FAINT CORONA.	1st IS FACE-ON SPIRAL (FOREGROUND?). SCATTERED.	SCATIERED.	1st HAS CORONA, SEVERAL CONCENTRATIONS, NEAR IN PLATE EDGE, COUNT	LOW.	STAR SUPERPOSED ON 1st; 3rd IN COMPACT GROUP. SCATTERED.	Group superposed? 3rd is spiral.	1st HAS DOUBLE NUCLEUS (COMPANION SUPERPOSED?); 2nd HAS FAINT	OCHOINA: MAINT FAINT MEMBERS IN Q'ILQ'E-N. 18t HAS COMPANION SUPERPOSED OR DOUBLE NUCLEUS: 2nd HAS VERY FAINT	CORONA. MANY FAINT GALAXIES IN Q:1.	1st HAS FAINT CORONA. SCATTERED.	1st and 3rd in foreground?	1st & 3rd HAVE CORONAE: 2nd IS FACE-ON SPIRAL.	SOMEWHAT ELONGATED.	SOMEWHAT ELONGATED.	SCALLERED; SOMEWHAL STINAL-NICH: 1st IS ELLIPTICAL, 2nd IS SPIRAL, 3rd HAS FAINT CORONA. SCATTERED.	2nd & 3rd HAVE FAINT ENVELOPES. SLIGHT CENTRAL CONCENTRATION.	SEVERAL BRIGHT GROUPS NEARBY.	Group superposed! 1st multiple. 1st HAS VERY FAINT CORONA SCATTIERED	SLIGHTLY CENTRALLY CONDENSED AND DOMINATED BY A BRIGHT ELLIPTICAL	WITHOUT APPARENT CORONA.	186 MAS VEIG FAILT COROTA: SCALLERED, NEAR Q.IW FEALE EDGE, COOK! LOW.	1st HAS CORONA (cD). WIDELY SCATTERED WITH SUPERPOSITION OR SUBCLUSTERING.	
Field	F358 F301		F249	F358	F117	F358	F117	F358		F200	F200		F156	F083		F032	F083	F117	F083	F308	F358		F117	F359	F003	F004		F156	F482	F249	F200	F201	F 1050 F 249	F156	200	F 359	F249	F950	1.400	F156	
Abell	S0363 S0364 S0365	20366	S0367	S0368	S0369	S0370	50371	S0373		S0374	S0375 S0376		S0377	S0378	50380		S0381		S0382	S0383	S0385		S0387	S0388	S0389			S0390	50391	S0393	S0395	20308	S0398	S0399	00700	S0400	S0402			S0404	
eld Notes	SOME EVIDENCE OF SUBCLUSTERING (OR SUPERPOSITION) AT WESTERN EDGE. 1814 & 2nd HAVE FAINT CORONAE. SCATTERED AND MORPHOLOGICALLY DIVIDEST				••			ALCONORELY SCATTERED & MORPHOLOGICALLY DIVERSE, SUPERPOSITION WITH	_		248 1st IS SPIRAL; 3rd HAS FAINT CORONA. SCATTERED, MORPHOLOGICALLY DIVERSE 1: SOMEWHAT SPIRAL, RICH			155 1st has very faint corons.		1st HAS FAINT CORONA.				WITH SOME CENTRAL CONCENTRATION. MORPHOLOGICALLY DIVERSE AND COMEWHAT SDIRAL BICH			,		CLUSTER SUPERPOSED?	US4 IST IS SU (FOREGROUND!). SCATTERED, MORPHOLOGICALLY DIVERSE, AND SPIRAL-RICH.			558 SCATTERED.				150 Finace coge. 1st nas corona. 083 1st HAS FAINT CORONA: 2nd & 3rd ARE SPIRALS. MORPHOLOGICALLY			249 IST HAS FAINT CORONA.	1st IS PROBABLY FOREGROUND. LOOSELY SCATTERED.				
Field	F199	F199					F300				F248	F417		F155					F248	F948				F083		F034) F031		F358			F117	F 155			F.249		F548			
Abell	S0326 S0327	S0328	20390		S0330	S0331	50332	50334		S0335	S0336	S0337	S0338	S0339	50340	1	S0342		S0344	20345	S0346	50347	S0348		07007	50349	S0350	S0351	S0352	20995	S0354		S0355		S0356	C0357	S0358	S0359	S0361	S0362	
11																		10	24																						

Notes	1st HAS CORONA. QUITE SCATTERED AND MORPHOLOGICALLY DIVERSE.	18t HAS CORONA. NEAR W-INW FLATE EDGE, COUNT DOW: 1st HAS FAINT CORONA. TWO BRIGHT CONCENTRATIONS.	ELONGATED WITH BRIGHTEST MEMBERS SOMEWHAT CENTRALLY CONDENSED.	18t IS SUFERFOSTITON: 1st HAS FAINT CORONA WITH FAINT COMPANION SUPERPOSED.	2nd & 3rd HAVE FAINT CORONAE. SCATTERED.	1st IS ELONGATED WITH FAINT CORONA.	COMPACT.	IST AFFEARS TO BE SUFERFUSITION WITH FAINT FLUME. SUMEWHAT	SCATTERED AND MORPHOLOGICALLY DIVERSE, MAY BE SUPERPOSED ON	FAINTER CLUSTER.	3rd HAS FAINT CORONA.	1st IS SPINDLE.	1st & 2nd (SPIRALS) PROBABLY FOREGROUND. 3rd HAS CORONA. LOUSELY SCARMINGER	SCALIERED. 1st HAS BAINT CORONA SCATTERED	1st IS ELONGATED WITH CORONA; 2nd IS SPIRAL; 3rd HAS CORONA.	MORPHOLOGICALLY DIVERSE.	1st HAS CORONA. SCATTERED. SUPERPOSED ON CLUSTER TO E-SE.	1st IS ELLIPTICAL(?) WITH CORONA.	STORY FAINT COROUNTS TO CONTRACT FOR THE BROWN	ISE & 2nd HAVE FAINT CORONAE. SCALLERED. NEAR GEN FEALE EDGE, COINT SLIGHTLY LOW	1st HAS FAINT CORONA. CLUSTER CENTERED ON 3rd.	1st & 2nd MAY BE FOREGROUND. SCATTERED.	MORPHOLOGICALLY DIVERSE AND SCATTERED.	1st & 2nd HAVE CORONAE, 3rd IS SB(r).	18t & 2nd Ake Spirals, std is Spindle.	186 MAS CONCINA (CD.). WIDELI SCALLERED AND MORFHOLOGICALLI DIVERSE. SCATTERED SIDERPOSED ON DISTANT CLIISTER IN 0.3	1st IS (FOREGROUND?) SPIRAL: 2nd & 4th HAVE CORONAE.	1st IS SB(r)b (FOREGROUND?). MORPHOLOGICALLY DIVERSE.	1st IS (FOREGROUND?) SO. SCATTERED.	1st HAS CORONA & SUPERPOSED COMPANIONS. SCATTERED.	1st HAS CORONA (cD). LENTICOLAR-RICH. SOMEWHAT SCATTERED.	ISU & ZHU BAYE VERI FAINI CONCINEE. SCATTERED, 1st & 3-d HAVE VERY FAINT CORONAE.	1st IS SPIRAL (PROBABLY FOREGROUND); 2nd IS SUPERPOSITION.	SCATTERED.	1st HAS FAINT CORONA. SCATTERED. LITTLE CENTRAL CONDENSATION.	1st IS INTERACTING PAIR, 2nd & 3rd HAVE CORONAE.	IST HAS COROTA (6D:). SCALLERED AND SCHIEFINAL MORE HOLOGICALELI DIVERSE.	1st HAS FAINT CORONA. CONCENTRATION TO NE.	1st HAS CORONA (cD). SCATTERED AND MORPHOLOGICALLY DIVERSE.	SCATTERED.	1st HAS CORONA. SCATTERED AND SPIRAL-RICH. 1st & 3rd HAVE FAINT CORONAE. SCATTERED. NEAR N PLATE EDGE, COUNT	SOMEWHAT LOW?	1st HAS FAINT CORONA, 3rd IS SB(r)bc. SEVERAL CONCENTRATIONS.	180 & 2HU ARE SUFERFUSITIONS, SUALIERED, CONCENTRATION (UN
Field	F420	F421	F420	F421	F250	F202	F250	F 202	F420	!	F421	F421	F.202	F360	F157		F360	F421	F421	F 055	F251	F551	F421	F421	F 301	F 551	F202	F304	F202	F421	F202	F004	F421	F360	F361	F361	1001	F251	F251	F421	F361 F421		F361	F 991
Abell	S0449	S0450	S0452	50453	S0454	S0455	S0456	20407	S0458			S0459	S0461	S0469	S0463		S0464	S0465	50400	20407	S0468	S0469	S0470	S0471	50472	S0474	S0475	S0476	S0477	S0478	50479	20400	S0481	S0483		S0484 C0485	20406	S0486	S0487	S0488	S0489 S0490		S0491	76500
ld Notes			1st HAS CORONA. SOMEWHAT MORPHOLOGICALLY DIVERSE.	15 IST HAS CORONA.					17 IST HAS CORONAL SCALLEMED. DRIGHTEST MEMBERS ARE STIMALS AND SUS.		1st IS SPIRAL. BRIGHTEST ARE SPIRALS AND LENTICULARS. SC.			53 IST IS SPINDLE, SUATTERED AND SLIGHTLY LENTICOLAR-RICH.				10 1st HAS FAINT CORONA, 2nd IS LENS. SERPENTINE APPEARANCE.		50 SCATTIERED; IN A SCATTIERED CLOUD OF GALAXIES.		1st IS ELONGATED WITH CORONA.	•			18 Two groups superposed.						30 Ist in foreground? 2nd m = 19.2.	, ,_			50 2nd cluster 15' f (obscured by bright star) in same supercluster.	1st has faint corona, scallered and moreholdscalled	SOUTH OF CALIBRATION CUTOUT: COUNT SOMEWHAT LOW.		Nearer group superposed f.	50 SLIGHTLY CENTRALLY CONDENSED. BRIGHTER GROUP SUPERPOSED. 12 14 IS DISTORTED SPIRAL. MORPHOLOGICALLY DIVERSE.		•	00 1st HAS FAINT CORONA. SCATIERED.
Field	F003	F004	F014	F015	F201	F084	F117	F055	F117	F117	F083	F117	F250	F083	F303	F201		F250	F420	F250	F117	F117	F550	F032	F117	F118	F 201		F201	F202	F250	F350	F250	F250		F550	F420	F 201	F202	F550	F250	F250	F420	F360
Abell	S0405			SOAOR	S0407	S0408		S0409	S0410	S0412	S0413	S0415	S0416	20417	20410	S0419		S0420	S0421	S0423	S0425	S0426	S0427	S0428	S0429	50430	50431	70100	S0433		S0434	50435	50437	S0438		S0439	S0440 S0449	20447		S0443	S0444 S0445	S0446	S0447	S0448
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Abell	ll Field	Notes	Abell	Field	Notes
SOA03	2 F551	SUPEROSITION?) IN Q.3. WITHELY SCATTERED, AND MORPHOLOGICALTY DIVERSE	S0532 S0533	F204	1st HAS CORONA, WIDELY SCATTERED.
S0494		1st HAS FAINT CORONA (cD?). NEARER LOOSELY SCATTERED CLUSTER	S0534	F204	1st IS (FOREGROUND?) SPINDLE; 3rd HAS FAINT CORONA.
į		SUPERPOSED.			MORPHOLOGICALLY DIVERSE.
S0495	5 F202	IST HAS FAINT CORONA AND SUPERPOSED FAINT COMPANION. MORPHOLOGICALLY DIVERSE	S0535 S0536	F363 F423	1st is fureground spindle, 3rd is brighter of pair. 1st has corona
	F251	1st HAS FAINT CORONA AND FAINT COMPANION.		F424	1st HAS CORONA (cD). NEAR W PLATE EDGE (Q-4), COUNT LOW?
S0496		SCATTERED. CENTER DOMINATED BY BRIGHT SPIRALS AND INTERACTING	S0537	F120	1st HAS CORONA (cD); 2nd IS SA(r).
		PAIRS.	80238	F306	1st HAS FAINT CORONA. LENTICULAR-RICH. NEAR Q:4-S PLATE EDGE,
S0497	7 F251	1st HAS CORONA (cD). LOOSELY SCATTERED, MORPHOLOGICALLY DIVERSE.			COUNT SOMEWHAT LOW.
000	ľ	INCLUDES DOUBLE RING SB(r).	S0539	F306	1st & 2nd MAY HAVE FAINT CORONAE. SOMEWHAT ELONGATED.
S0498	F 301	SCALLERED.	S0540	F 300	184 HAS BALENDED AND ELONGALED CONCINA, MORT HOLOGICALEL DIVERSE.
S0500		1st IS SPIRAL: 3rd IS ELLIPTICAL SPIRAL-RICH, NEAR O: 1-W PLATE			GROUP AT NORTHERN EDGE.
			S0542	F204	1st HAS CORONA (cD), BRIGHTER MEMBERS ARE MOSTLY SPIRALS.
S0501	1 F202	1st IS PROBABLY FOREGROUND ELLIPTICAL. 2nd & 3rd ARE SPIRALS.			MORPHOLOGICALLY DIVERSE.
S0502		1st HAS VERY FAINT CORONA. SCATTERED.		F205	1st HAS CORONA (cD). BRIGHTEST CLUSTER MEMBERS ARE S & SO.
S0503		lst is spiral.			MORPHOLOGICALLY DIVERSE.
S0504			S0543	F204	1st, 2nd, & 3rd ARE SPIRALS. SCATTERED.
S0505	5 F251	1st HAS FAINT CORONA AND IS OFF-CENTER. NEAR Q:3-E PLATE EDGE AND		F205	1st & 2nd ARE SPIRALS. SCATTERED. NEAR Q1:N CALIBRATION CUTOUT,
		CALIBRATION CUTOUT. COUNT LOW.			COUNT LOW.
		1st IS OFF-CENTER WITH CORONA. MORPHOLOGICALLY DIVERSE.	S0544	F424	1st IS S0.
		Very compact.	S0545	F363	1st IS LENTICULAR WITH CORONA. MORPHOLOGICALLY DIVERSE.
12		SCATTERED.	S0546	F364	1st IS FACE-ON SPIRAL. SPIRAL-RICH. PECULIAR PAIR (DUMBBELL)
		FAIRLY SCATTERED. CONCENTRATION IN Q.1.	17 100	7000	INCLUBED.
S0509		SCATTERED.	S0547	F.204	18t HAS CORONA (cD), SEVERAL SPINDLES.
S0510		SCATIBILED.		F205	18t has corona (cd), brightest closter members are lenticolars. 1st has corona (cd): 3-d is spinite so. bich
50511	1 FU63	IS IS DECECON EVILLY INCAL, SOCIAL LEBED. DESCRIPTION MONDEDE IN CONTENT AT INDA D DISTRIBITION MODDIFFICATIVE	COSAB	F 201	SOMEWHAT SPIRAL BICH MORPHOLOGICALLY DIVERSE NEAR OLLW PLATE
3091		BRIGHTEST MEMBERS IN SOMEWRAL LINEAR DISTRIBUTION: MORFROLOGICALLI DIVERSE.	01000	107.1	EDGE, COUNT SOMEWHAT LOW.
S0513	3 F305	SCATTERED, MORPHOLOGICALLY DIVERSE.		F307	IN Q:4-SE CORNER, COUNT LOW.
S0514		SCATTERED. 18t IS LENTICULAR. COUNT MAY BE CONTAMINATED BY	S0549	F364	1st HAS CORONA. NEAR N(W) CALIBRATION CUTOUT, COUNT SOMEWHAT LOW.
		FOREGROUND GROUP.		F424	1st HAS CORONA AND COMPANION.
S0515	5 F305	1st, 2nd, & 3rd HAVE FAINT CORONAE. FOREGROUND SPIRAL IGNORED.	S0550	F363	1st HAS CORONA, 3rd IS SPINDLE WITH CORONA.
		DUMBBELL SHAPED.		F364	1st HAS CORONA. SEVERAL CONCENTRATIONS.
S0516		Compact.	S0551	F205	SCATTERED.
S0517		1st has corona.	S0222	F120	1st IS LENTICULAR (FOREGROUND?); 3rd IS ELLIPTICAL.
S0518	8 F204	1st HAS VERY FAINT CORONA AND APPEARS TO BE SUPERPOSITION.	2	1000	MORPHOLOGICALLY DIVERSE.
		SCATIERED.	20993	F 307	SCALLEMEN.
S0519		3rd has corona.	S0554	F000	SCATTERED. 18t HAS FAINT CORONA (cD:).
00100		1st in foreground? 2nd m = 18.7. 3rd has corona.	ccenc	F 307	18t HAS ELONGALED CORONA.
20520	1 1205	181 188 COTOLS.	SOSSA	F254	34 HAS BAINT CORONA MORPHOLOGICALLY DIVERSE
50521		18t HAS FAINT CORONA. NEAR QUE'N FLAIE EDGE, COOK SOMEWHAT EOW.	S0557	F205	1st HAS FAINT CORONA, SCATTERED.
S0523		1st is smiral.	S0558	F120	1st, 2nd, & 3rd ARE SPIRALS. MORPHOLOGICALLY DIVERSE, SPIRAL-RICH.
S0524		1st & 2nd ARE INTERACTING SPIRALS. SPIRAL-RICH.	S0559	F307	MORPHOLOGICALLY DIVERSE. 1st IS S0.
S0525	5 F204		S0560	F120	1st HAS CORONA (cD); 2nd IS SB(r).
S0526		1st APPEARS TO HAVE VERY FAINT CORONA. FOREGROUND GALAXIES IGNORED.	S0561	F120	1st HAS CORONA (cD?); 2nd & 3rd ARE SPIRALS. SOMEWHAT SPIRAL-RICH.
S0527		1st HAS CORONA.	S0562	F425	2nd HAS ELONGATED CORONA. SCATTERED AND SOMEWHAT MORPHOLOGICALLY PRIMESES
00100		184 HAS CORONA AND FAINT COMPANION.	COERS	D984	DIVERSE.
50528	F 252	18t IS LENS. SOMEWHAT SPIKAL-KICH. = KPOIZ.	S0564	F 254	18t IS INDANUE FROE-ON SD(F). 3rd HAS FAINT CORONA.
50529		186 BAS YEAT FAIN LOUNDING BRACHTEST MEMBERS OF CENTERS.	5000	F307	1st HAS CORONA AND FAINT CLOSE COMPANION.
			_		

Notes	2nd HAS FAINT CORONA; 3rd IS IN CLOSE PAIR. ELONGATED (SE-NW) WITH SEVERAL CLOSE PAIRS.	1st HAS FAINT CORONA; 2nd IS IN CLOSE PAIR. MORPHOLOGICALLY DIVERSE.	1st HAS CORONA, 2nd IS SPIRAL. S-W OF SAO 235635. NEAR Q4:S PLATE	EDICE, COUNT DOW. 1st HAS VERY FAINT CORONA. SCATTERED WITH A SLIGHT CONCENTRATION	IN Q:1.	1st HAS FAINT CORONA. SCATTERED. 1st APPEARS TO BE INTERACTING WITH CLOSE COMPANION.	1st IS SB(r). SCATTERED.	1st HAS CORONA.	1st HAS FAINT CORONA. SCATTERED AND MORPHOLOGICALLY DIVERSE. SCATTERED	1st HAS FAINT CORONA.	Group superposed sp.	GALAXY IS A MEMBER.	Group superposed.	18t has corona. 1st HAC CORONA (ch) COMEWHATT CENTRALIY CONDENSED	18t HAS FAINT CORONA; 3rd IS SPIRAL. SOMEWHAT SCATTERED.	Group superposed. Focus/seeing worse than average; counts	under dam. 1st HAS CORONA.	1st HAS FAINT CORONA. SCATTERED.	1st HAS CORONA. NEAR S PLATE EDGE, COUNT LOW.	186 HAS CORONA (ED.:). SOMEWHAT SCALLERED AND MOM HOLOGICALD! DIVERSE.	1st IS SB(?). SCATTERED, BUT ONLY GROUPING IN THIS REGION.	Group superposed nf.	1st HAS CORONA. MANY FAINT GALAXIES WITH SOME CONCENTRATIONS.	18t HAS CORONA, SOLITERED. 1st HAS CORONA, ISOLATED.	SCATTERED, 1st IS SPINDLE.	1st HAS CORONA. MORPHOLOGICALLY DIVERSE.	1st HAS CORONA AND FAINT SUPERPOSED COMPANION; 2nd IS SB(r).	18t IS ELONGATED WITH EXTENDED CORONA (cD?). MORPHOLOGICALLY	DIVERSE AND SCATTERED.	1st & 2nd HAVE CORONAE. MORPHOLOGICALLY DIVERSE, SOMEWHAT	ELONGATED. SOMEWHAT OVAL IN APPEARANCE, 1st IS SPIRAL(?).	1st spiral, in foreground?	1st & 3rd HAVE FAINT CORONAE. MORPHOLOGICALLY DIVERSE AND SOMEWHAT SPIRAL-RICH	1st IS SPIRAL (FOREGROUND?); 3rd HAS FAINT CORONA. SCATTERED AND	MORPHOLOGICALLY DIVERSE.	1st IS SPIKAL. MORPHOLOGICALLY DIVERSE, SPIKAL-KICH. 1st HAS CORONA(?); 2nd IS SB(r)b. MORPHOLOGICALLY DIVERSE.	1st in foreground? 2nd $m = 19.5$.	1st PROBABLY FOREGROUND. 2nd HAS CORONA. SCATTERED. 1st IS THICK SPINDLE WITH FAINT CORONA.	
Field	F005	F006	F209	F005		F006	F018	F431	F562	F496	F565	101.1	F498	FSSS	F434	F434	F499	F374	F374	F 300	F316	F567	F374	F316	F374	F374	F316	F375		F375	F375	F375	F264	F437	,	F214	F569	F437 F376	
Abell	S0605		S0606	S0607		S0608	6090S	S0610	S0611 S0612	S0613	S0614 S0615	01000	S0616	71905	S0618	S0619	S0620	S0621	S0622	30023	S0624	S0625	S0626	S0628	S0629	S0630	S0631	S0633		S0636	S0638		S0639	S0640	9	S0643 S0643	S0645	S0646 S0647	
Notes	SCATTERED. 1st IS PAIR IN COMMON ENVELOPE; 3rd IS SB(r). MORPHOLOGICALLY	DIVERSE. 14 IS PLONG ATED WITH CORONA (CD2) IN VERY DENGE STAR RIPLD	AINT STARS?	1st HAS CORONA, SCATTERED.	1st HAS CORONA (FACE-ON SPIRAL?).	1st HAS CORONA AND KNOTTY ARC, SCATTERED.		MORPHOLOGICALLY DIVERSE, SOMEWHAT SPIRAL-RICH.	1st HAS CORONA. SOME OVERLAP WITH CLUSTER TO NW.	18. IS CLOSE FAIR IN COMMON(!) ENVELOYE. MORFHOLOGICALLI DIVERSE, POSSIBLY WITH NEARER GROUPS SUPERPOSED.		SCALLERED AND DIVERSE, THIS MAY BE SUPERPOSITION OF TWO GROUPS.	1st HAS CORONA. SCATTERED.	1st HAS VERY FAINT CORONA.	IST IS ELUNGATED WITH CURONA (cD). AT QZ:N FLATE EDGE, COUNT LOW.	1st IS ELONGATED WITH CORONA (cD), BRIGHTEST MEMBERS ARE SO'S.	IST IS EDGE-ON ELLIPTICAL WITH EXTENDED CORONA. BRIGHTEST ARE TENTRITIABLE	1st & 2nd HAVE FAINT CORONAE. SOMEWHAT SCATTERED; BRIGHTEST	OFF-CENTER.	Group superposed. ELONGATED	1st IS ELONGATED WITH CORONA (cD).	1st & 2nd HAVE FAINT CORONAE; 3rd IS SPINDLE. MORPHOLOGICALLY	DIVERSE. AT Q.3-E PLATE EDGE, COUNT LOW.	1st HAS FAINT CORONA (THICK SPINDLE).	18t IS SOMDREAD, SEA IS SEB. MORE HOLOGICALLE DIVERSE. 1st HAS FAINT CORONA. IN DIFFRACTION RINGS OF SAO 196857 & 196861:	COUNT LOW.	1st IS SPIRAL, 3rd HAS CORONA.	Group superposed. 3rd is spiral.	Group superposed np.	1st HAS CORONA, 3rd IS SUPERPOSITION.	FOREGROUND SPIRAL IN FIELD. JUST SOUTH OF SAO 197183.	TRUE. TO TAILLY CONCIN. COURT MAY BE SOMEWHAT BOW DUE TO MUN STAR. FIELD.	1st HAS FAINT CORONA; 2nd IS SUPERPOSITION. SCATTERED.	18t has fain I Corona. Scallered, members primarily ellipticals and Lenticulars.	1st, 2nd, & 3rd HAVE CORONAE. MORPHOLOGICALLY DIVERSE.	1st HAS VERY FAINT CORONA, 2nd IS SPIRAL. BRIGHTEST MEMBERS ARE MOSTLY SPIRAL.	SCATTERED. BRIGHTEST ARE ELLIPTICALS.	SCATTERED. SLIGHT CONDENSATION NEAR BRIGHTEST ELLIPTICALS. 1st IS PACE-ON EARLY SPIRAL: 3rd IS LATE SPIRAL.	
Field	F205 F254	FORE	900	F425 F205		F425			F364			F254			F.160	F205	F.206	F489		F087		F086	;	F160 F265				F161 F308			F366 F366	000.1	F058			F207	F034	F035 F208	
Abell	S0565 S0566	CO5.67		S0568 S0569	S0570	20571	20911	S0572	S0573	50514	S0575	50577	S0578	S0579	20280	1,	27	S0581	0	S0582 S0583	S0584	S0585		50587	S0589		S0591	S0592 S0593	S0594	S0595	S0596 S0507	8000	S0598	RROOG	S0601	S0602	S0603	S0604	

Notes	1st & 3sd IN COMMON ENVELOPE. 1st HAS CLOSE COMPANION. 1st IS ELONGGATED WITH CORONA. SOMEWHAT SPIRAL-RICH. SCATTERED. SEVERAL UNESCOLVED SPIRALS INCLUDED. 1st & 2ad CLOSE AND OFF-CENTER; CENTERED ON 3sd. 1st HAS CORONA. AND TWO COMPANIONS. 1st HAS CORONA AND TWO COMPANIONS. 1st HAS CORONA AND TWO COMPANIONS. 1st HAS CORONA. AND TWO COMPANIONS. 1st HAS CORONA. SOMEWHAT SPIRAL-RICH. 1st HAS CORONA. SOMEWHAT SPIRAL. 2sd IS FACE-ON SPIRAL. 2sd IS FALLY CORONA. SOMEWHAT CENTRALIY CONDENSED. 1st HAS CORONA. SUGHTIY CONDENSED. 1st HAS CORONA. SUGHTIY CENTRALLY CONDENSED AND MORPHOLOGICALLY DIVERSE. 1st HAS CORONA. SUGHTIY CENTRALLY CONDENSED AND MORPHOLOGICALLY DIVERSE. 1st HAS CORONA. AND SOMEWHAT SPIRAL. 1st HAS CORONA. MORPHOLOGICALLY DIVERSE, SPIRAL-RICH. 2sd HAYE BENDY. 2sd HAYE FAILT CORONA. SCATTERED. 2sd HAYE BENDY. 2sd HAYE FAILT CORONA. SOLGHLY DIVERSE, SPIRAL-RICH. 2sd HAYE FAILT CORONA. AND SPIRAL. 1st HAS CORONA. MORPHOLOGICALLY DIVERSE, SPIRAL-RICH. 2sd HAYE FAILT CORONA. AND IN SUPERPOSITION. WIDELY SCATTERED. MORPHOLOGICALLY DIVERSE. NARRE GROUP TO N.E. 1st HAY SINT CORONA. NEAR WEST FIDUCIAL MARK. 1st HAS FAINT CORONA. AND REAL WEST FIDUCIAL MARK. 1st HAS FAINT CORONA. AND REAL WEST FIDUCIAL MARK. 1st HAS FAINT CORONA. AND REAL WEST FIDUCIAL MARK. 1st HAS FAINT CORONA. LOSE QUARTET WITH (COMMON?) ENVELOPES INCLUDED. 2st HAS FAINT CORONA. LOSE QUARTET WITH (COMMON?) ENVELOPES.	SCALI LEGED AND MORTHOLOGICALLY UN ERGE. 1st HAS CORONA. DOMINATED BY BRIGHT SPIRALS. 1st HAS FAINT CORONA. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE. 1st HAS CORONA, 3rd IS LENTICULAR. MORPHOLOGICALLY DIVERSE.
Field	F441 F380 F321 F321 F321 F574 F576 F380 F380 F381 F268 F381 F268 F374 F575 F575 F575 F575 F575 F575 F577 F	F382 F508 F508
Abell	\$0691 \$0694 \$0694 \$0696 \$0696 \$0696 \$0696 \$0696 \$0696 \$0696 \$0701 \$0702 \$0703 \$0711	S0729 S0730 S0731
ld Notes	1st HAS FAINT CORONA. RELATIVELY SPIRAL-RICH. 1st HAS RORONA, 3rd 18 FACEAN SB(pbc. TWO INTERACTING I 1st HAS RORONA, 3rd 18 SUPERPOSITION. MORPHOLOGI DIVERSE, SOMEWHAT SPIRAL-RICH. 1st HAS PAINT CORONA, 2rd 18 SPIRAL, 3rd LENTICULAR. NEAR PLATE EDGE, COUNT SOMEWHAT LOW. 1st & 3rd HAVE CORONA, 2rd 18 EDGE-ON SPIRAL. 1st HAS CORONA, 2rd 18 EDGE-ON SPIRAL. 1st HAS PRINT CORONA. SCATTERED AND MORPHOLOGICALL) 1st EN THORES SPIRALE. 1st HAS PRINT CORONA. SCATTERED. 1st HAS PRINT CORONA. SCATTERED. 1st HAS PRINT CORONA. MORPHOLOGICALLY DIVERSE AND SC SPIRAL-RICH. Two concentrations. 1st HAS PRINT CORONA. MORPHOLOGICALLY DIVERSE AND SC SPIRAL-RICH. Two STRAL RICH. Two SUMEWHAT SPIRAL-RICH SEVERAL CLOSE (INTERACTING?) P 1st HAS FAINT CORONA. 2rd & 3rd ARE IN INTERACTING?) P 1st HAS FAINT CORONA. 2rd & 3rd ARE IN INTERACTING?) P 1st HAS CORONA. 1st HAS PAINT CORONA. SCATTERED. 1st HAS CORONA. And IS SUFFALL. 1st HAS CORONA. And IS SUFFALL. 1st HAS CORONA. AND PHOLOGICALLY DIVERSE AND SOMEWH CONDENSED. 1st HAS CORONA. MORPHOLOGICALLY DIVERSE AND SOMEWH CONDENSED. 1st HAS CORONA. AND IS LOCATED AT EDGE OF C HAS CORONA. AND PHOLOGICALLY DIVERSE. 1st HAS CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAINT CORONA. SCATTERED. 1st HAS VERY FAI	18. IS STRAIL, 2nd SB(r). 3rd HAS FAINT CORONA. NEAR S FLAIE EDIGE, COUNT LOW. 11 1st HAS CORONA. FAIRLY MORPHOLOGICALLY DIVERSE. 11st HAS FAINT CORONA. 2nd IS SUPERPOSITION. SUPERPOSED(?) WITH ANOTHER CLUSTER S-SW.
Field		F267
Abell	\$20648 \$20648 \$20650 \$20654 \$20654 \$20654 \$20656 \$20666 \$2	S0689 S0690
u i	128	

TABLE 7B—Continued

d Notes	7 let & 2nd HAVE FAINT CORONAE. SCATTERED WITH SOME FOREGROUND CALLYIES STIPERPOSED		-			1 In a supercluster.			9 1st & 2nd ARE CLOSE PAIR OF ELLIPTICALS. SOMEWHAT SYMMETRICAL. 5 1st APPEARS TO BE SUPERPOSITION. FAINT STARS MAY CONTAMINATE COUNT.							12 1st & 2nd ARE SPIRALS; 3rd IS DISTURBED (SUPERPOSITION?). SOMEWHAT CENTRALITY CONCENTRATED.				CENTRALLY CONDENSED. 44 18t IS SPINDLE. SCATTERED AND SOMEWHAT MORPHOLOGICALLY DIVERSE.	11 lst and 3rd are spirals.						_	33 18t PROBABLY FOREGROUND LENTICULAR(?); 3rd HAS CORONA. SCALLERED CLUSTER IN DENSE STAR FIELD.	0,2	11 1st & 2nd HAVE CORONAE. MORPHOLOGICALLY DIVERSE, SOMEWHAT SPIRAL- RICH.	. 02			
Field	5 F327	3 F327	F386				F008		F009				F023 F024			4 F102	5 F044		7 F102	8 F024		1 F230		F281 3 F071		F104		6 F183		8 F231	9 F025			
Abell	S0776	S0778		S0779	S0781	S0783	S0784 S0785		S0786	S0787	S0789	S0790 S0792		S0793		S0794	S0795	S0796	S0797	S0798	S0799	S0801	S0802	S0803	S0805			S0806	S0807	S0808	S0809	S0810	S0813 S0814	S0815
	CONTENT			LS WITH (COMMON?)	CORONAE.					OMMON ENWELOPE		Ξ	RINGED	IT LOW.	3 OF		JW.		į	INA.				CATTERED						RED BY SAO			AME ORCCITE ATTON BY	E OBSCORATION DI
Notes	SCATTERED AND MORPHOLOGICALLY DIVERSE.	18t IS SPINDLE, 2nd IS SPINAL. NEAR GI-IN FLAIE EDGE SOMEWHAT LOW.	18t HAS FAINT CORONA. DOMINATED BY BRIGHT LENTICULARS.	CENTER DOMINATED BY QUARTET OF BRIGHT ELLIPTICALS WITH (COMMON?)	VE	ELONGATED. NEAR Q:4-W PLATE EDGE, COUNT LOW.	1st HAS CORONA; POSSIBLY A FACE-ON SPIRAL. 1st HAS CORONA. SCATTERED, MORPHOLOGICALLY DIVERSE.	1st HAS FAINT CORONA. SOMEWHAT SCATTERED.	1st, 2nd, & 3rd ARE LENTICULARS.	1st HAS CORONA. NEAR QUILL S PLATE EDGE; COUNT LOW.	INCLUDED. BRIGHTEST ARE MORPHOLOGICALLY DIVERSE.	1st HAS VERY FAINT CORONA; 2nd & 3rd ARE SPIRALS. BRIGHT (INTERACTING?) TRIPLET INCLUDED.	1st IS SB(r); 3rd IS LENTICULAR. SPIRAL-RICH WITH TWO RIN CALAXIES	1st HAS FAINT CORONA. NEAR N-EDGE OF PLATE, Q.II; COUNT LOW	1st APPEARS TO BE UNRESOLVED SPIRAL. 1st IS LENTICULAR, 3rd HAS FAINT CORONA. SOME EVIDENCE OF	SUB-CLUSTERING TO NE.	ZEG & STG HAVE FAINT CORONAE. 1st & 2nd HAVE FAINT CORONAE. NEAR ID-CUTOUT; COUNT LOW	1st has corona. And is spindle. 2nd APPEARS TO BE PAIR IN COMMON(?) ENVELOPE.	1st HAS FAINT CORONA.	1st & 2nd ARE SPIRALS (FOREGROUND?); 3rd HAS FAINT CORONA. 1st has corona. 3rd is spiral. = RPO18.	1st & 3rd ARE ELONGATED WITH CORONAE.	TWO CONCENTRATIONS; SOMEWHAT DUMBBELL-SHAPED. 1st HAS CORONA (cD2), SCATTERED.	1st is spiral. Scattered. = RPO19.	1st and 2nd superposed? Core-halo structure. = RPO20. 1st HAS VERY FAINT CORONA: 2nd & 3rd APPEAR TO BE SB's. SCATTERED	AND MORPHOLOGICALLY DIVERSE.	1st is spiral. ELONGATED AND MORPHOLOGICALLY DIVERSE.	Plate edge.	1st IS SO WITH CLOSE COMPANION. SPIRAL_RICH	1st HAS CORONA, 2nd IS SPIRAL.	1st & 3rd ARE SPINDLES, SPIRAL-RICH, PARTIALLY OBSCURED pressor TO N	209659 IO IN. 1st HAS VERY FAINT CORONA: 2nd IS SPIRAL.	1st IS ELONGATED WITH CORONA. SCATTERED.	184, 204, & 3rd HAVE CORONAE. SCATTERED. 1-4 TAS CORDINA AND ENTIRE TENENTITIES AD COMPANION SOME ORSCITRATION BY	1st HAS CORONA AND FAINT LENTICULAR COMPANION: SOM SAO 206037.
Field Notes	FE68 SCATTERED AND MORPHOLOGICALLY DIVERSE.	. 01	F382 18t HAS FAINT CORONA. F383 DOMINATED BY BRIGHT LENTICULARS.		F576 RATHER ELONGATED. CENTERED ON 1st. 1st & 2nd HAVE COI		F444 1st HAS CORONA; POSSIBLY A FACE-ON SPIRAL. F324 1st HAS CORONA. SCATTERED, MORPHOLOGICALLY DIVERSE.	1st HAS FAINT CORONA. SOMEWHAT SCATTERED.	F383 1st, 2nd, & 3rd ARE LENTICULARS. F305 1st HAS CORONA SOMEWHAT SPIRAL-RICH			1st HAS VERY FAINT CORONA; 2nd & 3rd ARE SPIRALS. BH (INTERACTING?) TRIPLET INCLUDED.	3rd IS LENTICULAR. SPIRAL-RICH WITH TWO		F383 1st APPEARS TO BE UNRESOLVED SPIRAL. F383 1st IS LENTICULAR, 3rd HAS FAINT CORONA. SOME EVIDENCI		2nd & 3rd HAVE FAINT CORONAE. 1st & 2nd HAVE FAINT CORONAE. NEAR ID-CUTOUT; COU			F578 1st & 2nd ARE SPIRALS (FOREGROUND?); 3rd HAS FAINT CORC F384 1st has corons. 3rd is spiral. = RPO18.		F511 TWO CONCENTRATIONS; SOMEWHAT DUMBBELL-SHAPED. F578 1st HAS CORONA (cD2). SCATTERED.		F384 1st and 2nd superposed? Core-halo structure. = RPO20. F511 1st HAS VERY FAINT CORONA: 2nd & 3rd APPEAR TO BE SB's. St		F326 1st is spiral. F511 ELONGATED AND MORPHOLOGICALLY DIVERSE.		F511 1st IS S0 WITH CLOSE COMPANION. F385 SPIRAL-BICH	1st HAS CORONA, 2nd IS SPIRAL.	1st & 3rd ARE SPINDLES. SPIRAL-RICH. PARTIALLY OBSCU	E327 18t HAS VERY FAINT CORONA: 2nd IS SPIRAL.			F327 1st HAS CORONA AND FAINT LENTICOLAR COMPANION: SOM SAO 206037.

OPE. SORGE	Notes	ON FAINT CLUSTER TO S. 1st HAS VERY FAINT CORONA. 1-4 HAS VERY FAINT CORONA. 1-4 HAS VERY FAINT CORONA.	. 02		1st IS ELONGATED WITH CORONA. MORPHOLOGICALLY DIVERSE. NEAR Q.2-E PLATE EDGE; COUNT LOW.		3rd IS SB(r). WIDELY SCATTERED. 1ST IS cD WITH MULTIPLE NUCLEUS AND CORONA.		_			BRIGHTEST ARE SPIRALS. SCATTERED. BRIGHTEST GALAXIES ARE LINEARLY CONCENTRATED MORPHOLOGICALLY		1st HAS CORONA (cD) BUT MAY BE FOREGROUND. FOREGROUND GROUP SITPERPOSED				-,	_	.	1st HAS FAINT CORONA; 2nd IS LENTICULAR.	- • •		SEVERAL BRIGHT FOREGROUND GALAXIES IN FIELD. 1st HAS CORONA.		EARLY SPIRAL SUPERPOSED. 1st HAS FAINT CORONA: 3rd IS SB(r). BRIGHTEST ARE SPIRALS.	. 02 .	1st, 2nd, and 3rd HAVE COROINAE. MORE HOUSICALLY DIVERSE. 2nd HAS CORONA, 3rd IS SPINDLE, SI-RICH.		1st HAS CORONA WITH AN ELLIPTICAL SUPERPOSED. COUNT CONTAMINATED BY NEARBY CLIETERS		1st HAS CORONA. COUNT CONTAMINATED BY SUPERPOSITION WITH	NEIGHBORING CLUS LERS. 14 HAS EXTENDED CORONA. SOME OVERLAP WITH NEARBY CLUSTERS.		
GROUND GROUND GROUND E. TWO E. TWO E. TWO C. TERED. TERED. TAY ND ATTONS ATTONS TAY ND TAY TAY ND TAY ND TAY TAY ND TAY TAY TAY TAY TAY TAY TAY TAY TAY TAY	11 1	F233				F234															F340			F597						F341					
Notes to 2	Abell		S0862 S0863	S0865	S0866		S0867 S0868	S0869	S0871	S0872	208(3	S0875		S0877	S0878	S0880	S0882	S0884	S0885	S0886	20887	S0888	20890	S0891	S0892	S0893		S0894	S0896	S0897	S0898	S0899	S0900	S0902	S0904
																_														_					_
Field Field	Notes	Group superposed. Group superposed. 4. 0. 1. And Control of the part of the pa	1				1st HAS FAINT CORONA. 1st HAS FAINT CORONA, SCATTERED.	PHOLOGICALLY DIV	BRUGHT FOREGROUND GALAAIES IGNORED. 1st HAS CORONA.	1st HAS FAINT CORONA, 2nd IS SPIRAL.	SCATTERED: SOME OVERLAP WITH NEARBY RICH CLUSTER TO E-SE. 1st (cD?) & 2nd HAVE CORONAE. ELONGATED AND MORPHOLOGICALLY	DIVERSE. 1-4 HAS CORONA AND POSSIBLE GLOBIII AR CLIISTERS: 2-4 IS SPIRAL	SPIRAL-RICH.	3rd HAS EXTENDED ENVELOPE. SOMEWHAT ELONGATED AND SCATTERED.	1st HAS CORONA (cD?). SLIGHTLY CENTRALLY CONDENSED AND QUITE	DEOGICALLY DIVERSE. 2nd HAS F		Several concentrations. Counting aperture centered on largest concentration.	Rich, scattered. Nearer cluster superposed sf.	1st HAS CORONA (cD). SLIGHTLY CENTRALLY CONDENSED.	WIDELY SCATTERED.	1wo concentrations.	1st HAS CORONA (cD). SCATTERED AND MORPHOLOGICALLY DIVERSE.	1st HAS FAINT CORONA (cD). SOMEWHAT SPIRAL AND LENTICULAR-RICH.	18t & 2nd HAVE FAINT COROINAE. SCALLERED AND MORFHOLOGICALLY DIVERSE.	1st [=N6868] HAS CORONA AND GLOBULAR CLUSTERS. 2nd [=N6861] AND 3rd [=N6851] APE ELLIPTICALS	1st & 3rd HAVE CORONA S. 2nd IS SPIRAL.	18t & ZDA AKE SPIKALS. SCALTEKED. 1st HAS CORONA (4D?) 2nd IS SO ELONGATED WITH TWO CONCENTRATIONS	(GOA has this as one cluster with A3687). MORPHOLOGICALLY	DIVERSE.	Three concentrations.	1st IS PROBABLY FOREGROUND SPIRAL. SCATTERED AND SOMEWHAT SPIRAL-	FAICH.	1st HAS CORONA (cD). CONCENTRATION IN Q:4 10 SW. 1st HAS CORONA (cD).	1st IS S0 (FOREGROUND?); 2nd & 3rd HAVE FAINT CORONAE. SUPERPOSED
Abell Abell S0817 S0819 S0820 S0820 S0822 S0823 S0824 S0824 S0834 S0844 S0844 S0844 S0845 S0848 S084		Group superposed. Group superposed. 1.4.6.0.1 bits of one batts on statement at a state of statement of the	SOMEWHAT SPIRAL-RICH. SCATTERED. THE ART CONTINUES OF DESIGNATIVE OF THE PRICE.	LINEARLY CONDENSED. MORPHOLOGICALLY DIVERSE. A FEW GALAXIES PRESENT.	1st, 2nd, & 3rd HAVE FAINT ENVELOPES. 1st HAS VERY FAINT CORONA: 2nd HAS EXTENDED ENVELOPE.	1st in foreground?		SCATTERED, ELONGATED, AND QUITE MORPHOLOGICALLY DIV								MORFHOLOGICALLY DIVERSE. 1st HAS CORONA (cD). MORPHOLOGICALLY DIVERSE. 2nd HAS F	BULGE.																		

d Notes		INCLUDED. ELONGATED.
Field	F531 F531 F531 F531 F531 F531 F538 F538 F538 F538 F600 F108 F108 F601 F601 F601 F601 F601 F601 F601 F601	F344
Abell	\$8962 \$8964 \$9964 \$8964 \$8964 \$8964 \$8964 \$8964 \$8964 \$8964 \$8964 \$8964 \$8964	S1015
d Notes	Two concentrations. Plate edge. 3rd is spiral. 1st and 10th are spiral. = RPO24. 1st and 10th are spiral. = RPO24. 1st HAS CORONA (cD). SOMEWHAT SCATTERED AND MORPH Group superposed. = AC103 in Couch and Newell (1984) and Sharple et al. (1985). 3rd HAS FAINT CORONA. SCATTERED AND SUPERPOSED ON BACKGROUND OF GALAXIES. 1st HAS VERY FAINT CORONA. MORPHOLOGICALLY DIVERSE AND 1st HAS VORONA (cD). SOME SUPERPOSITION WITH NEARBY WELL AS SUBCLUSTERING. 3rd HAS FAINT CORONA. MORPHOLOGICALLY DIVERSE AND 1st HAS CORONA (cD). SEVERAL CONCENTRATIONS. SUPERPOSITION WITH NEARBY WELL AS SUBCLUSTERING. 1st HAS CORONA (cD). SEVERAL CONCENTRATIONS. SUPERPOSITION WITH SORDAN (cD). SEVERAL CONCENTRATIONS. 2nd IS SPIRAL. PART OF A LARGE CLOUD OF GALAXIES. 1st HAS CORONA (cD). SUGHTLY ELONGATED AND MORPHOLOFERSE. 1st IS SPIRAL. 3rd has corona and ring. = RPO25. 1st IS SPIRAL. SCATTERED AND SOMEWHAT OVERLAPPIT (TO NE. TO NE	1st in Inica Stitutus, and in Stitutus. Monthologically Divense. Corwin noted two concentrations (also in F531), but Olowin has two
l Field		r 046
Abell	\$0900 \$0900 \$0900 \$0901 \$0911	S0961

Notes		Group superposed. SCATTERED.		ELONGATED. 1st IS DIFFIISE OVAI. WITH CORONA			•				and Newell (1985).		-						1st HAS CORONA AND IS SUPERPOSITION.		•			SEVERAL CONCENTRATIONS IN Q.2 AND Q.4. PART OF A LARGE CLOUD OF DAINT CATAVIES							•.	1st HAS FAINT CORONA. ELONGATED. NEAR (PART OF?) LARGE CLOUD OF						Two concentrations, group superposed.		Group superposed. SCATTERED				SCALTERED.			
Field			F290	F603	F190	F191	F239			r 400	E076	F010	F 230	F239	F290	F239		F346	F011	F049			F470	F049	F901	F535	F291	F346	F347	F191	F291	F049	F040	F291		F239	F407	F239	F 04.0	F 191	F049		F110	F 536	F470	F347	
Abell	S1068	S1069	S1070	S1071	S1072		S1074	S1075	S1076	21016	C1078	51018	51080	S1082	S1084	S1085	S1086	S1090	S1091	S1093		S1096	100	21087	\$1008	S1099	\$1101			S1102	S1103	S1104	21105	S1106		S1107	81109	S1110	51111	S1112 S1113	S1114		S1116	S1117	S1119	S1120	
Notes	VERY SCATTERED. 1st IS SPIRAL, 3rd HAS FAINT CORONA.	Plate edge. 1st is spiral, foreground? 1st is spiral. = RPO42.	= RPO43.	1st HAS IRREGULAR ENVELOPE. SOMEWHAT ELONGATED. 1st & 2nd ARE SPIRATS, SCATTERED, BITT SOMEWHAT CENTRALLY CONDENSED.	1st & 2nd ARE SPIRALS. SOMEWHAT SCATTERED.	Group superposed.	Two concentrations.	1st HAS CORONA (cD). SCATTERED.	Group superposed. 3rd is spiral.	Group superposed.	Group superposed sp.	To support power. In a connection $m/3 \pm 9$ halow plate limit	III & SUPPECTURES: INIQ) + L SUSTON PROSE INTO:	18t HAS FAINT CORONA (cD2). SOMEWHAT MORPHOLOGICALLY DIVERSE WITH	CONCENTRATION TO N.	10th is spiral.	Group superposed. 1st has corona.	Sb near sp. Group superposed.	Plate edge.	16t HAS FAINT CORONA. LOOSELY SCATTERED.	1st HAS CORONA AND SEVERAL FAINTER COMPANIONS.	SPIRAL-RICH.		18t has faint corona, scallered, suferfosed somewhat on closler to N.W.	lat has corona. Plate adde	SCATTERED WITH SOME EVIDENCE OF SUBCLUSTERING.	1st has corona. Near calibration cutout. Part of A3895?	LOOSELY SCATTERED, BUT SOMEWHAT LINEARLY CONCENTRATED.	Group superposed. Plate edge. Magnitudes uncertain.	2nd & 3rd HAVE FAINT CORONAE.	This is nearer of two clusters seen in projection.	1st IS FOREGROUND SPIRAL. 2nd & 3rd HAVE FAINT CORONAE.	ANALY HOLOGICALDED IN PRINCE 1st HAS FAINT CORONA LOCKETY SCATTERED	1st HAS CORONA (cD) (SUPERPOSED?). SOMEWHAT MORPHOLOGICALLY	DIVERSE.	1st IS LATE ELLIPTICAL (?). SLIGHTLY CENTRALLY CONDENSED.	18t & 2nd HAVE FAINT CORONAGE 3rd ISPINDLE. SOMEWHAT SCATTERED	AND SUPERPOSED ON MORE DISTANT GALAXIES.	18t HOS FRING COROLA (U.S.). SOCITEDAD AND SEIGHTED OVERLANT ING MITTH NEICHDODING OFFICERD	WILL INDIGHTOLING CLOSTER. 14 HAS PAINT CORONA BRIGHTEST ARE MORPHOLOGICALLY DIVERSE.	1st HAS VERY FAINT CORONA. CONCENTRATED AT EDGE.	ELONGATED. GROUP SUPERPOSED.	Group superposed.	IST HAS CORONA & SUPERPOSED COMPANION. NEAR Q.Z-E PLATE EDGE,	ELONGATED AND BRANCHED.	1st HAS CORONA (cD). SOMEWHAT SPINDLE-RICH. APPEARS X-SHAPED.	
Field	F345	F189	F190	F027	F049	F405	F190	F076	F405	F 190	F405	F147	F345	F076		F190	F468	F405	F406	F345	F534	F345	F289	F 340	F533	F345	F405	F345	F406	F290	F147	F345	F345	F076	:	F049	F.590	0064	067 3	F011	F049	F290	F406	F345	F290	F290	
Abell	S1016	S1020	S1023	S1024 S1027		S1028	S1029	S1030	S1031	51032	51033	51035	51036	S1038		S1039	S1040	S1041		S1042	S1043	S1045	S1046	51047	\$1048	S1049	S1050	S1051		S1052	S1053	S1055	51056	S1057		S1058	S1059	01080	21000	S1061	S1062	S1063	S1064	SIU65	S1066	S1067	
																					13	2																									

Notes	Int HAS CORONA, 2nd IS SPINDLE. SOMEWHAT MORPHOLOGICALLY DIVERSE.
Field	F293
Abell	S1174
Notes	Group superposed. 1st SPROBABET AF CORGEGROUND SPIRAL. 1st SPROBABET STREET S
Field	F347 Gi F7347 Gi F7470 Iss F7470 Iss F7470 Iss F7470 Iss F7470 Iss F7470 Iss F7470 Iss F7471 Gi F7471
Abell	S1122 S1123 S1124 S1125 S1126 S1126 S1127 S1130 S1131 S1131 S1132 S1133 S1134 S1134 S1134 S1144 S1144 S1144 S1144 S1146 S1155 S1156 S1156 S1156 S1156 S1156 S1156 S1156 S1156 S1157 S1156 S1157 S1156 S1157 S1158
4	133

TABLE 7C Notes for Table 6

Notes	TWO CONCENTRATIONS (CLUSTERS SUPERPOSED?). MANY FAINT GALAXIES IN	3rd HAS CORONA AND COMPANION (POSSIBLE DOUBLE NUCLEUS?).	1st IS SPINDLE; 3rd HAS CORONA. NEAR W PLATE EDGE, COUNT LOW(?). 3rd HAS CORONA.	1st IS EDGE-ON LENTICULAR; 3rd HAS CORONA.	1st HAS CORONA. SEVERAL SPINDLES NEAR 1st.	IST HAS CORONA. 14 HAS CORONA TWO CONCENTRATIONS (CITIETERS STIPERPOSED?)	3rd HAS CORONA.	SCATTERED.	1st IS SPIRAL; 3rd HAS CORONA.	3rd IS SPIRAL.	SOMEWHAT ELONGATED.	1st HAS CORONA; 3rd IS SPINDLE.	Near calibration cutout. 1st has corona.	1st HAS FAINT CORONA (cD?).	18t HAS CORONA; COMPACT AND MORPHOLOGICALLY DIVERSE.	Nearer cluster superposed.	GLOUP SUPERIOR FOR FORTHALT DAY	Change and March 1914 and 1914	Story superposed: treat table curous. 5' error in Abell (1958) declination.	Group superposed n.	2nd HAS CORONA (cD).	COMPACT: 1st IS SPINDLE.	Diffuse images.	1st IS EDGE-ON SPIRAL. SOMEWHAT SCATTERED. NEAR Q-4:W PLATE EDGE,	COUNT LOW.	THE MASS CALCULAS. FIL ONC ATTENT WITH SEVER AT CONCENTR ATTIONS	SCATTERED: CONCENTRATION AT SOUTHERN EDGE, GROUP SUPERPOSED.	Group superposed.	RICH IN ELLIPTICALS.	NEAR W PLATE EDGE.	1st HAS VERY FAINT CORONA. SOMEWHAT CENTRALLY CONDENSED.	1st HAS VERY FAINT CORONA.	186 DAS FAINT CORONA; STAIS SPINDLE. AT O.S.E PLATE EDGE: COINT LOW?	SOMEWHAT V-SHAPED IN APPEARANCE	AT Q:2-E PLATE EDGE, COUNT LOW?	SOMEWHAT SERPENTINE.	1st has corons.	ELONGATED AND SCATTERED.	ELONGATED.	SOMEWHAT CENTRALLY CONDENSED.	18t HAS COROTA (cD): SOMEWHAT CENTRALLY CONDENSED. SCATTERED DAD IS COTE AT	Group superposed n.	SCATTERED.	DUMBBELL-SHAPED WITH TWO CONCENTRATIONS. 1B(s)m IN FIELD.	On edge of calibration cutout.	ELONGATED.
Field	F477	F477	F478 F477	F478	F477	F478 F478	F478	F544	F478	F544	F545	F478	F479	F545	1040	F4/9	0770	F 400	F546	F546	F480	F480	F546	F547	F546	F547	F547	F547	F480	F481	F547	F548	F 048	F549	F548	F549	F482	F549	F549	F549	F 348	F483	F549	F549	F550	F049
Abell		0289	0297		0302	0395	0327	0341	0343			0353		2960	0000	0380	999	0.00	999	0386	0389	0402			0406	201	0416		0419		0428	0453	0456	2010	0457		0458	0459	0462	0463	0404	0469		0472	613	5.40
Notes	1st HAS FAINT CORONA. SLIGHTLY ELONGATED.	3rd HAS CORONA. TWO CONCENTRATIONS.	3rd HAS CORONA. NEAR W PLATE EDGE, COUNT LOW. MORPHOLOGICALLY DIVERSE.	1st and 3rd are spirals.	MOST OF CLUSTER LOST IN CALIBRATION CUTOUT. rpo data not used.	Group superposed. Crotto stipersposed.	Group superposed n.	1st & 2nd HAVE FAINT CORONAE: 3rd IS SO.	SOMEWHAT ELONGATED.	Plate edge; all data uncertain.	1st PROBABLY FOREGROUND; 2nd HAS FAINT CORONA. ELONGATED.	1st has corona and companion. Group superposed.	lst has corona.	Scattered.	GROUP SOF EMP (SEL):	Flate edge. Magnitudes uncertain. Plate edge 1st has corona	1 sever ough, to una colours	Isk has column and star superposed.	Group in. 1st has corona. 3rd is spiral.	1st has corona.	Plate edge.	1st HAS FAINT CORONA.	Three concentrations. Group superposed f.	let IS SUPERFOSED FOREGROUND (?) SB(?). MORPHOLOGICALLY DIVERSE.	Group superposed s. 1st multiple with corona. CONFIISED CENTER-SEVERAL GALAXIES ARE SUPERPOSITIONS INCLIDING 1st		1st HAS CORONA.	1st IS BRIGHT DIFFUSE OVAL WITH CORONA.	1st HAS CORONA (cD).	3rd HAS FAINT CORONA.	1st HAS ENVELOPE (S0? or E+?).	3rd HAS CORONA.	SOMEWHAT ELONGALED.	Groups supernosed at and n.	3rd IS SPINDLE. NEAR PLATE EDGE AND PLATE ID CUTOUT, COUNT LOW.	1st IS SPINDLE. NEAR CALIBRATION CUTOUT, COUNT LOW?	Two clusters seen in projection?	1st is spiral.	Group p.	1st IS SPINDLE.	186 HAS FAINT CORONA AND IS STIPERPOSTFION MANY FAINT CALAXIES IN	SURROUNDING FIELD.	COUNT LOW DUE TO FIELD STARS.	SOMEWHAT COMPACT AND MORPHOLOGICALLY DIVERSE.	1st HAS CORONA.	18t HAS FAINT CURONA.
Field	F538	F539	F472	F473	F472	F473	F473	F539	F539	F473	F539	F473	F473	F473	F 0.58	F 340	T 1 1	F 0#0	F540	F540	F474	F541	F474	F475	F474 F475		F475	F475	F541	F475	F541	F475	F\$41	F542	F475	F476	F542	F542	F542	F476	F4/0	075	F476	F543	F477	F544
Abell	0002	9100	0014	0014	0015	0020	0022	0027	0033	0035		0042	0047	0000		0086	8	0000	6600	0107	0114		0118	0100	0122		0127	0133		0135	:	0140	0141	0177	0183			0185	0197	020	0210	£170	0215	0235	0264	0283
11 1																				1	34																									

Notes	1st HAS FAINT CORONA; 2nd IS SPINDLE. SOMEWHAT ELONGATED. SOMEWHAT WEDGE-SHAPED AND SCATTERED. 1st has corona. Plate edge.	1st HAS FAINT CORONA. 1st HAS VERY FAINT CORONA. SCATTERED. ELONGATED AND SCATTERED.	NEARER CLUSTER POSSIBLY SUPERPOSED. 1st HAS ELONGATED CORONA (cd), SOMEWHAT CONCENTRATED IN O:1/2 NEAR	Q:1 PLATE EDGE, COUNT LOW.	18t HAS CORONA, STRAL-RICH. 1st HAS FAINT CORONA, 3sd IS SPINDLE. 1st IS SPINDIE (FORECROINT)?? 3sd HAS PAINT CORONA	1st IS SO. SOMEWHAT SCATTERED AND MORPHOLOGICALLY DIVERSE.	lst outlying. Seems too poor to be an Abell cluster.	1st HALL STATE CORONA. SOMEWHAT ELONGATED. 1st 9.nd 4s 3nd HAVE CORONAE MORPHOLOGICALLY DIVIDED	lst has corons.	Group superposed.	18t is spirat. 2nd & 3rd HAVE CORONAE. TWO CONCENTRATIONS.	1st HAS CORONA.	1st IS FOREGROUND SPIRAL. 2nd IS RING, 3rd HAS FAINT CORONA.	1st FOREGROUND, 3rd HAS CORONA.	1st HAS FAINT CORONA. FAIRLY SCATTL'RED	1st, 2nd, & 3rd ARE UNRESOLVED SPIRALS IN CENTER. SCATTERED.	IST HAS FAINT CORONA. FOREGROUND SPIRAL IGNORED. SCATTERED AND	MORFHOLOGICALLI DIVERSE. 1st HAS FAINT CORONA. FOREGROIIND FACE-ON SPIRAL, IGNORED	AT Q:4-W PLATE EDGE, COUNT LOW.	1st IS (FOREGROUND?) SPIKAL. 3rd HAS FAINT CORONA. SCATTERED.	1st IS FOREGROUND SPIRAL, SCATTERED.	3rd HAS FAINT CORONA.	18t IS ELLIT FICAL WITH FAINT ENVELOFE. 1ST HAS CORONA, MANY FAINT GALAXIES.	1st and 3rd have coronae.	SCATTERED.	18t HAS CORONA. 1st HAS CORONA SEVERAL CONCENTRATIONS	Plate edge.	1st HAS FAINT CORONA.	1st HAS CORONA. 3rd IS SPIRAL. Group superposed np.	1st has corons. Two clusters seen in projection?	3rd has corons. 1st HAS CORONA, 2nd IS SUPERPOSITION.	Two clusters seen in projection?	1st IS PROBABLY FOREGROUND SPIRAL. 2nd HAS FAINT CORONA. SLIGHTLY CENTRALLY CONCENTRATED.
Field	F505 F506 F574 F576	F507 F574 F575	F507	F507	F507	F576	F509	F576	F509	F509	F510	F510	F510 F510	F510	F578 F510	F511	Foll	F579	F580	F580	F580	F512	F597	F529	F598	F 598	F529	F598	F598	F530	F530	F530	F531
Abell	1450 1537 1584 1604	1625	1633	1648	1664 1699	1709	1727	1732		1757	1611	1802	1816 1822	1846	1853 1857	1883	1924		9	1945	;	1981	2328	2330	9339	2333	2335		2336 2337	2338	2341 2344	2347	2357
Notes	lst in foreground? 2nd m = 17.4. Plate edge. 4 min error in Abell (1958) right ascension. 1st HAS VERY FAINT CORONA. SOMEWHAT SCATTERED. COMPACT AND SOMEWHAT SYMMETRICAL.	Near plate corner. 1st HAS FAINT CORONA (cD?). SOMEWHAT SYMMETRIC AND MORPHOLOGICALLY. DIVERSE.	Near plate edge. Group superposed.	1st HAS FAIT CORONA. DUMBBELL-SHAPED, POSSIBLY A SUPERPOSITION OF TWO CHISTERS	1 WO CLUSIEMS. 1st is spiral. Two concentrations.	rand 3rd have coronae.	Near plate edge. Nearer cluster annearmoad nf	lst has corona. Plate edge.	SOMEWHAT ELONGATED, MORPOLOGICALLY DIVERSE.	1st HAS FAINT CORONA.	ELONGALED. 1st HAS FAINT CORONA. TWO CONCENTRATIONS.	Two concentrations.	Group superposed. 1st has corona. Galaxies of AS617 superposed. Abell (1958) richness	(2) incorrect.	1st IS FOREGROUND SPIRAL. Abell (1958) richness (2) probably incorrect.	1st has corona. In rich star field.	TWO CONCENTRATIONS. 1st IS SPINDLE.	tst nas cotons and star superposed. Group superposed f. 1st has corons.	1st & 2nd HAVE CORONAE. SCATTERED & MORPHOLOGICALLY DIVERSE. NEAR	4:1-N CALIBRATION CUTOUT; COUNT LOW. 1st and 10th are spiral. Counts completed on F437, 1515.	1st has corona.	Plate edge.	of its spinate. 1st HAS CORONA, BACKGROUND OF VERY FAINT GALAXIES.	1st has corona.	lst has corona.	180 IS SU (FROBABLY FUREGROUND): 2nd HAS CORONA. of of 9: 43466 is other	1st HAS FAINT CORONA.	1st has corona.	1st HAS STELLAR NUCLEUS & SINGLE ANSA; PROBABLY FOREGROUND. NEAR W PLATE EDGE: COHNT POSSIRLY LOW	1st HAS FAINT CORONA. ANOTHER CONCENTRATION TO SE, TWO CLUSTERS	SUPERPOSED? Group superposed.	10th is spiral.	SOME SUBCLUSTERING. 1st is spiral. Plate edge.
Field	F550 F550 F551 F551	F484 F551	F552 F552	F551	F552 F485	F486	F552 F487	F553	F488	F555	F556	F556	F498 F565		F566 F498	F565	F366	F500	F437	F501	F569	F568	F502	F570	F570	F 502	F503	F570	F503	F504	F571	F572	F505 F572
Abell	0474 0490 0499	0200	0507 0510	0514	0533		0543		0548	0550	0555		0823 0842		0857		900	9960	1060		1088	1090	1146	,	1163	1181	1217	1233	1311	1347	1352	1418	1440
1													13:	5																			

Notes	1st HAS PAINT CORONA. 1st IS PORECROUND SPINDLE, 3rd HAS FAINT CORONA. 1st IS PORECROUND SPINDLE, 3rd HAS PAINT CORONA. Ares rich and confused. 1st is forground? 2nd m = 153. SUPERPOSED ON ANOTIERE CLUSTER TO N.E. 1st HAS FAINT CORONA. Ares rich and confused. 1st & 2nd INTERACTING IN COMMON CORONA. 1st has corona. Ares rich and confused. 1st has corona. 1st has corona. Are rich and confused. 1st has corona. 1st and 3d are spiral. 2nd IS MARITY ACCOMMON ENVELOPE. 1st and 3d are spiral. 2nd IS MARITY ACCOMMON. 2nd ES GARAITY ACCOMMON. 2nd ES GARAITY ACCONSTINA. 2nd IS GARAITY ACCOMMON. 1st is applied. 2nd AS GARAITY ACCOMMON. 1st is applied. 2nd IS GARAITY ACCOMMON. 1st is applied. 2nd IS GARAITY ACCOMMON. 1st and 3d are spiral. 2nd IS GARAITY ACCOMMON. 1st and 3d are spiral. 2nd IS GARAITY ACCOMMON. 1st is applied. 2nd IS GARAITY ACCOMMON. 1st is applied. 2nd IS GARAITY ACCOMMON. 1st and 3d are applied. 2nd IS GARAITY ACCOMMON. 1st and 3d are applied. 2nd IS GARAITY ACCOMMON. 1st and 3d are accoma. 3nd IS GARAITY ACCOMMON. 1st and 3d are add 3rd have coronae. 1st has corona. 3nd IS GARAITA ACCOMMON. 3nd IS GARAITA CORONA. 4nd IS GORONA. 4nd IS GORONA. 4nd IS GORONA. 4nd IS GORONA. 4nd IS SPINDLE. 5croup superposed. 4nd IS GORONA. 5croup superposed. 4nd IS GORONA. 5croup superposed.
Field	F535 F535 F604 F604 F604 F605 F605 F605 F605 F605 F605 F605 F605
Abell	25.40 25.41 25.42 25.43 25.44 25.45
	MLLY DIVERSE. BRIGHTEST seion. = A3897. EAR DISTRIBUTION OF TTERED. Y EDGE-ON).
Notes	1st IS FORECROUND SPINDLE, 3rd HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 1st HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. 3rd HAS CORONA. MORPHOLOGICALLY DIVERSE. 1st HAS CORONA. AT E PLATE EDGE; COUNT LOW. 1st HAS VERY FAINT CORONA. 1st HAS CORONA. AND ENTREPOSITION. 1st HAS CORONA. SPIRAL-RICH & MORPHOLOGICALLY DIVERSE. BRIGHTEST GALAXIES ARE LINEARLY DISTRIBUTED. 1st HAS CORONA. As dis SPINDLE. 1st HAS CORONA. SPIRAL-RICH & MORPHOLOGICALLY DIVERSE. BRIGHTEST GALAXIES ARE LINEARLY DISTRIBUTED. 1st HAS CORONA. SPIRAL-RICH & MORPHOLOGICALLY DIVERSE. 1st HAS CORONA. SPIRAL-RICH & MORPHOLOGICALLY ENTRED. 1st HAS CORONA. Sad & 10th ARE SPIRALS (NEARLY EDGE-ON). 3rd IS LENTICALAR. 1st HAS CORONA. Sad & 10th ARE SPIRALS. 3rd IS LENTICALED. 1st HAS CORONA. Sad & 10th ARE SPIRALE. 1st HAS CORONA. Sad IS SPINDLE. 1st HAS PAINT CORONA. ELONGATED. 3rd IS LENTICALED. 3rd HAS ENTICALED. 3rd HAS FAINT CORONA. 3rd HAS FORDRA. 3rd HAS FORDRA. 3rd HAS FORDRA.
Field	F600 F600 F600 F600 F600 F600 F600 F601 F601
Abell	2365 2369 2370 2371 2371 2372 2375 2375 2378 2384 2401 2401 2402 2416 2417 2417 2418 2481 2481 2481 2481 2481 2487 2487 2487 2487 2487 2487 2487 2487

ABLE 7C—Continued

F537 COUNT VERY LOW.	Notes
F606 F537 F538 F606 F472 F638 F638 F606 F606 F606 F606	. TOW.
F537 F472 F538 F606 F472 F537 F638 F608 F608	MORPHOLOGICALLY DIVERSE. BRIGHTER GALAXIES IN CORE.
F472 F538 F606 F472 F537 F538 F606 F606	
F538 F606 F472 F537 F538 F606 F606	1st PROBABLY FOREGROUND. 2nd & 3rd HAVE CORONA. OVERLAPS NE WITH AARSI
F538 F606 F537 F538 F606 F606	foreground? Ind m = 13 8
F606 F537 F538 F606 F538	1st IS FACE-ON SPIRAL: 2nd HAS FAINT CORONA. SOMEWHAT ELONGATED.
F472 F537 F538 F606 F538	1st IS FACE-ON SPIRAL; 2nd HAS CORONA AND TWO COMPANIONS; 3rd HAS
F472 F533 F538 F506 F538	
F537 F538 F606 F538	1st PROBABLY FOREGROUND. 3rd HAS DOUBLE NUCLEUS WITH CORONA OR IS
F537 F538 F538 F606 F538	ION OF TWO.
F538 F538 F538 F538	3rd APPEARS TO HAVE DOUBLE NUCLEUS (OR PAIR IN COMMON ENVELOPE?).
F538 F606 F538 F538	foreground? 2nd m = 18.0.
F606 F538	1st MAY BE SUPERPOSITION; APPEARS IRREGULAR. SCATTERED.
F538	CONA. SOMEWHAT ELONGATED.
DK 20	IT CORONA. CONCENTRATION IN Q:3.
1000	SCATTERED.

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