CATALOGUE OF GALAXIES AND OF CLUSTERS OF GALAXIES

VOLUME I

F. ZWICKY E. HERZOG P. WILD

CATALOGUE OF GALAXIES

AND OF

CLUSTERS OF GALAXIES

prepared by

F. Zwicky

Carnegie Institution of Washington

California Institute of Technology

with the collaboration of

E. Herzog

and

P. Wild

Volume I

covering the Palomar survey fields

of the declination zones 0°, +6°, +12°,

between 7^h and 18^h in right ascension.

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		h m	° '	° '	° '	
1	1491	7 17	+ 0 00	216 14	+ 6 13	2
2	933	7 41	+ 0 00	219 04	+ 11 31	4
3	1298	8 05	- 0 30	222 28	+ 16 34	6
4	1305	8 29	- 0 30	225 35	+ 21 47	8
5	469	8 53	- 0 30	228 56	+ 26 57	12
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7	1318	9 41	- 0 30	236 44	+ 36 58	20
8	470	10 05	- 0 30	241 25	+ 41 45	24
9	467	10 29	- 0 30	246 51	+ 46 19	28
10	1397	10 53	- 0 30	253 14	+ 50 35	32
11	1400	11 17	- 0 30	260 50	+ 54 25	36
12	471	11 41	- 0 30	269 52	+ 57 40	40
13	1401	12 04	- 0 30	279 59	+ 60 05	44
14	1405	12 28	- 0 30	291 53	+ 61 39	48
15	1578	12 52	- 0 30	304 36	+ 62 05	52
16	1595	13 16	- 0 30	317 12	+ 61 21	56
17	465	13 40	- 0 30	328 48	+ 59 32	60
18	1424	14 04	- 0 30	338 56	+ 56 47	64
19	1440	14 28	- 0 30	347 31	+ 53 21	68
20	1613	14 52	- 0 30	354 44	+ 49 22	72
21	1402	15 16	- 0 30	0 49	+ 45 01	76
22	151	15 40	- 0 30	6 01	+ 40 23	80
23	761	16 04	- 0 30	10 31	+ 35 33	84
24	143	16 28	+ 0 00	14 59	+ 30 49	86
25	155	16 52	+ 0 00	18 33	+ 25 43	88
26	1154	17 16	+ 0 00	21 49	+ 20 31	90
27	1144	17 40	+ 0 00	24 52	+ 15 16	92
28	773	18 04	+ 0 00	27 46	+ 9 58	94

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FIELD No.	Survey Plate No.	Center of Field 1950.0 α	δ	I.A.U. Galactic Coordinates λ	β	Page No.
		h m	° ′	° ′	° ′	
29	999	7 17	+ 6 00	210 51	+ 8 57	96
30	1527	7 41	+ 6 00	213 36	+ 14 17	98
31	27	8 05	+ 5 30	216 54	+ 19 23	100
32	642	8 29	+ 5 30	219 51	+ 24 41	104
33	1358	8 53	+ 5 30	223 02	+ 29 57	108
34	28	9 17	+ 5 30	226 29	+ 35 10	112
35	233	9 41	+ 5 30	230 20	+ 40 18	116
36	1359	10 05	+ 5 30	234 45	+ 45 19	120
37	1399	10 29	+ 5 30	239 56	+ 50 11	124
38	722	10 53	+ 5 30	246 11	+ 54 47	128
39	1392	11 17	+ 5 30	253 52	+ 59 03	134
40	495	11 41	+ 5 30	263 30	+ 62 47	140
41	1611	12 04	+ 5 30	274 56	+ 65 37	144
42	1560	12 28	+ 5 30	289 13	+ 67 32	148
43	104	12 52	+ 5 30	305 00	+ 68 05	154
44	1561	13 16	+ 5 30	320 33	+ 67 11	160
45	90	13 40	+ 5 30	334 16	+ 64 58	164
46	96	14 04	+ 5 30	345 32	+ 61 45	168
47	1418	14 28	+ 5 30	354 33	+ 57 51	172
48	1421	14 52	+ 5 30	1 46	+ 53 28	178
49	1429	15 16	+ 5 30	7 40	+ 48 47	182
50	1082	15 40	+ 5 30	12 36	+ 43 52	188
51	1067	16 04	+ 5 30	16 50	+ 38 49	192
52	88	16 28	+ 6 00	21 05	+ 33 54	196
53	1056	16 52	+ 6 00	24 26	+ 28 39	200
54	169	17 16	+ 6 00	27 30	+ 23 22	202
55	780	17 40	+ 6 00	30 25	+ 18 03	204
56	164	18 04	+ 6 00	33 12	+ 12 44	206

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FIELD No.	Survey Plate No.	Center of Field 1950.0 α	δ	I.A.U. Galactic Coordinates λ	β	Page No.
		h m	° ′	° ′	° ′	
57	1354	7 17	+ 12 00	205 23	+ 11 38	208
58	1003	7 41	+ 12 00	208 00	+ 16 55	210
59	247	8 05	+ 11 30	211 08	+ 22 01	214
60	456	8 29	+ 11 30	213 53	+ 27 21	218
61	438	8 53	+ 11 30	216 46	+ 32 40	220
62	1508	9 17	+ 11 30	219 53	+ 37 59	224
63	990	9 41	+ 11 30	223 19	+ 43 15	228
64	74	10 05	+ 11 30	227 15	+ 48 27	232
65	238	10 29	+ 11 30	231 54	+ 53 33	236
66	976	10 53	+ 11 30	237 35	+ 58 30	240
67	66	11 17	+ 11 30	244 53	+ 63 12	246
68	468	11 41	+ 11 30	254 30	+ 67 06	250
69	1385	12 04	+ 11 30	267 13	+ 70 55	254
70	1563	12 28	+ 11 30	284 46	+ 73 21	260
71	41	12 52	+ 11 30	305 41	+ 74 05	268
72	1420	13 16	+ 11 30	326 02	+ 72 53	272
73	1079	13 40	+ 11 30	342 27	+ 70 06	276
74	1051	14 04	+ 11 30	354 34	+ 66 17	280
75	65	14 28	+ 11 30	3 27	+ 61 52	286
76	1087	14 52	+ 11 30	10 12	+ 57 05	290
77	1422	15 16	+ 11 30	15 33	+ 52 05	296
78	136	15 40	+ 11 30	19 57	+ 46 56	300
79	168	16 04	+ 11 30	23 43	+ 41 43	304
80	1372	16 28	+ 12 00	27 37	+ 36 39	308
81	251	16 52	+ 12 00	30 38	+ 31 20	312
82	505	17 16	+ 12 00	33 26	+ 26 00	314
83	1580	17 40	+ 12 00	36 08	+ 20 41	316
84	123	18 04	+ 12 00	38 46	+ 15 22	318

INTRODUCTION

INTRODUCTION

PART I. GENERAL DESCRIPTION OF THE CATALOGUE

This catalogue consists essentially of two distinct parts:

(a) a list of individual galaxies, designed to be complete to apparent magnitude $m_p = +15.5$ and

(b) a list of clusters of galaxies to the limit of the 48-inch Schmidt telescope on Palomar Mountain.

Unlike many other catalogues it does not attempt to cover the whole sky all in one piece, but is split into sections of 36 square degrees, each covering the area of an individual print of the National Geographic Society-Palomar Observatory Sky Survey.

Galaxies

The list of individual galaxies gives the 1950.0 coordinates and apparent photographic magnitudes of the galaxies together with other information, such as NGC/IC numbers, radial velocities, Harvard magnitudes and types and individual peculiarities. In order to achieve the desired degree of completeness, it includes all objects down to an estimated magnitude $m_p = +15.7$, thus allowing for a possible error of ± 0.2 magnitude in the estimates.

Clusters of Galaxies

The list of clusters of galaxies gives the 1950.0 coordinates of the center, the character and population, the estimated distance, and the diameter of each cluster. It includes only rich clusters containing at least fifty galaxies in the luminosity range from m_{max} to $m_{max}+3$, where m_{max} is the apparent photographic magnitude of the brightest galaxy in the cluster.

Charts

Along with the lists for each section of the catalogue goes a chart in which all objects, individual galaxies as well as clusters of galaxies, are plotted to scale, the galaxies in different symbols according to their brightness and the clusters with their contour lines as determined on the original 48-inch Schmidt plates of the Sky Survey. For convenience and as reference points, some GC stars have been included in the charts.

Size of Fields

It must be kept in mind that the lists of galaxies do not cover the whole area of the corresponding Survey plate, but only the exact area of 36 square degrees framed by the grid on the chart, the center of which, owing to precession, is not identical with the center of the plate, from which it may be displaced by as much as half a degree. It was always possible, however, to keep the whole grid of 6 degrees by 6 degrees completely within the limits of the corresponding plate.

Coordinates of Galaxies and Clusters

The positions of galaxies and of clusters of galaxies are given to the nearest minute of arc in declination and to the nearest tenth of a minute of time in right ascension. The positions of clusters are given in the well known form of abbreviated numbers according to the following examples:

$$1543.6 + 1928 = 15^{h}43.^{m}6 + 19°28'$$

$$0736.4 - 0307 = 7^{h}36.^{m}4 - 3°07'$$

The positions of the GC reference stars, on the other hand, are given more accurately, to the nearest second of arc in declination and to the nearest tenth of a second of time in right ascension.

Redshifts and Harvard Magnitudes

In the list of individual galaxies, the redshifts of galaxies as published by HUMASON, MAYALL and SANDAGE (Astronomical Journal 61, 1956) are given in a separate column and in the form of symbolic velocities of recession, $V_s = c \frac{\Delta \lambda}{\lambda}$, which are heliocentric but not corrected for solar motion. They are expressed in kilometers per second.

The Harvard magnitudes m_H as published in the SHAPLEY-AMES catalogue of bright galaxies (Harvard Annals 88, No. 2, 1932) are given in the column headed "Remarks," together with the nebular types from the same source.

Magnitudes from Other Sources

The photoelectric and photographic magnitudes as published recently by BIGAY (Annales d'Astrophysique, 14, No. 4, 1951); PETTIT (Astrophysical Journal, 120, 1954); HUMASON, MAYALL and SANDAGE (Astronomical Journal, 61, 1956) and HOLMBERG (Lund Meddelande, II, No. 136, 1958) could not be included in the same column and are given in a separate list at the end of each table.

Additional Remarks

All entries in this column are self-evident, except m_H defined above. The following explanations, however, seem to be necessary:

(a) Double or multiple systems of galaxies are designated as such only if the individual components are not listed separately.

(b) Galaxies have been labeled as compact or as diffuse only if it seemed possible that they might easily be mistaken for stars or else overlooked entirely because of low surface brightness.

Types of Clusters of Galaxies

In the list of clusters of galaxies the individual clusters have been characterized and divided into three groups in accordance with the following classification:

(a) Compact clusters show a single outstanding concentration among the bright member galaxies. Within this concentration ten or more galaxies appear in actual contact. Many of these clusters display a high degree of spherical symmetry.

(b) Medium compact clusters are characterized either by a single concentration where, however, the ten brightest galaxies are not in contact but separated by several of their own diameters, or by several distinct condensations, some of which may be quite compact.

(c) Open clusters contain no very obvious condensations, but in various locations the number of galaxies per square degree is at least five times as great as in the surrounding field, so that the cluster appears as a cloud superposed on the background.

Distances of Clusters

The estimated distances of the clusters are classified according to the following standards, based on the redshifts rather than on a definite distance scale:

Near:			$V_s \leq 15{,}000$ km/sec
MD = medium distant:	15,000 km/sec	$<$	$V_s \leq 30{,}000$ km/sec
D = distant:	30,000 km/sec	$<$	$V_s \leq 45{,}000$ km/sec
VD = very distant:	45,000 km/sec	$<$	$V_s \leq 60{,}000$ km/sec
ED = extremely distant:	60,000 km/sec	$<$	V_s

The following clusters may serve as examples:

Distance	Cluster	Position	V_s
Near	Virgo	1224 + 1320	1,200 km/sec
Near	Coma A	1255 + 2820	7,400 km/sec
MD	Corona Borealis	1520 + 2754	21,000 km/sec
D	Ursa Major II	1055 + 5702	40,000 km/sec
VD	Coma B	1304 + 3110	55,000 km/sec
ED	Hydra II	0855 + 0321	61,000 km/sec

Populations and Diameters of Clusters

The population of a cluster is the number of galaxies actually counted within the outline of that cluster as given on the chart minus the estimated number of background galaxies in the same area. The diameter of the cluster is defined as that of a circle covering approximately the same area as the cluster on the original Survey plate. It is expressed in centimeters, so that it is highly important to know the exact scale of those plates, which is 672 seconds of arc or 11.2 minutes of arc per centimeter.

Symbols Used on the Charts

On the charts, the following symbols have been adopted for galaxies of different brightness:

✖			m_p	≤	11.0	●	13.1 ≤	m_p	≤ 14.0
■	11.1 ≤	m_p	≤	12.0	○	14.1 ≤	m_p	≤	15.0
□	12.1 ≤	m_p	≤	13.0	△	15.1 ≤	m_p	≤	15.7

The GC Stars, of which only a few have been selected on each plate, are represented on the charts by a cross: ┼, and the contour lines of the clusters are numbered on the outside according to the following example:

12 = Cluster No. 12 on the chart

Since the fields published in this first section of the catalogue are not far from the celestial equator, the square grids on the charts do not deviate much from the actual coordinate lines of the sky and have been labeled accordingly. For the sake of accuracy, however, the deviations of the outermost RA-lines from the vertical lines of the grid have been indicated, where necessary, near the top and the bottom of the charts by a short vertical dash.

Galactic Coordinates of Field Centers

Since galactic coordinates are very important in the field of extragalactic research they have been calculated for all the field centers and, for reasons of convenience, they are given in the table of contents. These coordinates are based on the new system, recently adopted by the International Astronomical Union, which is characterized as follows:

North Galactic Pole: $\alpha_o = 12^h 49^m 00^s.0$, $\delta_o = +27°24'00''$ (1950.0)

North Celestial Pole 1950.0: $\lambda_o = 123°00'00''$

PART II. THE CONSTRUCTION OF THE CATALOGUE

Equipment Used in the Investigation

Two telescopes were used in the investigation:

(a) the 18-inch Schmidt with a scale of 37.4 minutes of arc per centimeter and

(b) the 48-inch Schmidt with a scale of 11.2 minutes of arc per centimeter.

The former covers a circular area with a diameter of 8-3/4 degrees; the latter, a square area of 6-1/2 by 6-1/2 degrees.

Selection of the Galaxies

For the purpose of selection and identification of the individual galaxies, the whole area to be included in the catalogue was photographed with the 18-inch Schmidt on Eastman 103a-0 films with 10-minute exposures, allowing for ample overlaps, so as to get almost a double coverage of the region. Of all these photographs a negative enlargement on the exact scale of the 48-inch Schmidt was obtained by means of an intermediate step on Kodak-33 plates and subsequently used for labeling and identifying the galaxies on the 48-inch Survey plates.

Measurement of the Coordinates

In order to obtain the positions of the galaxies, rectangular coordinates were determined on the original 18-inch films by superposing a transparent millimeter reticle of the kind used on regular graph paper. In estimating the coordinates to the nearest 0.1 millimeter, sufficient accuracy of $\pm$ 0.4 minutes of arc was achieved. Along with the galaxies enough GC-Stars were measured all over the field to determine the exact position of the reticle on the film. Subsequently, the spherical coordinates of the galaxies were computed from the rectangular ones by a procedure similar to TURNER's method for the reduction of refractor plates but using second-order terms to account for the larger size of the field. Actually the expansion has been carried out to terms of the third and fourth order, but, for declinations smaller than about 35 degrees, these have been found negligible within the required degree of accuracy.

The calculated positions, finally, were plotted to the exact scale of the 48-inch Schmidt plates, and the objects were identified once more on these plates and on the enlargements of the 18-inch films, thus providing a check against all possible errors. Furthermore, the 48-inch plates were searched for such objects as might have been missed on the 18-inch films yet are bright enough to be included in the lists.

Photometry of Galaxies

The apparent photographic magnitudes of the galaxies were measured on Schraffier films made of the same fields with the 18-inch Schmidt on either Agfa Commercial or Eastman IIa-0 films. These photographs were obtained by guiding the telescope in a regular pattern, so as to cause the out-of-focus images of all objects to describe squares approximately 1 minute of arc across. The exposure time was determined by the guiding pattern; it increased from 23 minutes at the equator to 26 minutes at declination +30°. The squares thus obtained were compared by means of a stepscale consisting of a series of carefully selected squares on a piece of Schraffier film, covering the range between magnitudes 10 and 15 in about 30 steps. The stepscale was calibrated and adjusted to each individual field by using the stars of a Selected Area in the field, or, in the absence of such, by means of the galaxies in the overlaps of the surrounding fields. Inasmuch as it proved to be relatively easy to estimate the density of a given square to the nearest one- or two-tenths of a step on the scale, this procedure must be regarded as a pretty accurate one.

To the magnitudes thus obtained a correction had to be applied, however, in order to compensate for systematic errors arising from the fact that the diameters of at least the larger objects are comparable to the size of the Schraffier squares and are therefore likely to influence the result of the measurements decisively. This correction was determined in such a way that, for the brightest objects, that is for those between magnitudes 10 and 13, our scale of magnitudes would fit, in the average, the scale of the SHAPLEY-AMES catalogue of galaxies, while the faintest objects below $m_p = +14.5$ were left unchanged.

Faintest Objects in the Catalogue

Since the Schraffier method could be used successfully down to about magnitude 15.2 or 15.5, depending on the galactic latitude, the fainter objects had to be selected on, and their magnitude estimated from, the 48-inch plates. This was relatively easy, except where our limiting magnitude was cutting through a larger cluster of galaxies, making it exceedingly difficult to decide which objects should be included in our lists and which not. Usually the decision was made in favor of the fainter objects, especially if their exclusion might have introduced any danger of confusion. Therefore it may well be that our faintest magnitude range $m_p = 15.7$ contains many objects that are actually somewhat fainter.

Identification of NGC/IC Objects

In order to assign the proper NGC/IC catalogue numbers, all NGC/IC objects within the field were precessed to 1950.0, and the positions so obtained were compared with the direct measurements. Agreement within ± 3 minutes of arc was considered satisfactory, though in some crowded areas a plot to scale was necessary for the identification. Some larger errors could be corrected, but sometimes it proved impossible

to reach a final conclusion, and the matter was dropped entirely, rather than to include questionable identifications.

Selection of the Clusters

The clusters of galaxies were generally spotted on the Eastman 103a-E plates of the Sky Survey, but frequently, if the quality of these plates was inadequate for the purpose, additional plates were obtained, some of these on Eastman 103a-D.

Whenever the presence of a cluster was indicated by a concentration of galaxies of a certain brightness range and sufficient density, the individual galaxies were marked on the plate and an equal-population contour line or isopleth was drawn where the number of galaxies per square degree was found to be about twice as large as in the immediate neighborhood. This isopleth was accepted as the general outline of the cluster and is accurately reproduced on the charts. Usually, the center of gravity of the area included in the contour line was taken as the center of the cluster.

If, as a consequence of the patchy distribution of interstellar and intergalactic obscuring matter, it happened that dark lanes appeared to separate various parts of one and the same cluster, the different parts, although not actually physical entities, were drawn as separate clusters and registered accordingly.

Large Nearby Clusters

No contour lines have been drawn for the Virgo Cluster or similar aggregates which cover very large areas of the sky and extend over many fields of the Sky Survey. Nevertheless, approximate centers of these large clusters are given for completeness in the remarks beside the lists of the corresponding fields. On the other hand, no detailed explorations of these clusters are as yet available which would allow us to present reliable data on their apparent sizes or their total populations in a given range of magnitudes.

Distances of the Clusters

The distances of the clusters were estimated from the apparent magnitudes and diameters of the brightest members, according to actual experience on clusters with known redshifts. These estimates are rather crude, and in regions of the sky where interstellar or intergalactic absorption interferes they become even more uncertain. Absolute distances of the various clusters cannot be given at the present time, because the relation between distance and redshift has not yet been established quantitatively. On HUBBLE's old distance scale V_s was thought to be proportional to the distance, increasing by 550 km/sec per megaparsec. This relation, however, is now considered incorrect by a considerable but as yet unknown factor.

Population of the Clusters

The member galaxies of a cluster were counted only within its contour line, but not all galaxies in that area could be included in the actual population. A reduction had to be applied to the counted number of galaxies in order to allow for an adequate background. Furthermore, it is clear that only those galaxies could be included which are clearly above the threshold images of the plate and are easily distinguished from stars. As one goes to more and more distant clusters, these various effects rapidly deplete the recognizable population of these clusters. Another systematic effect that reduces the number of identifiable rich clusters as well as the population of clusters is related to the fact that not all plates have been taken in the same zenith distance. As we go away from the zenith, the atmospheric extinction increases and the astronomical seeing deteriorates, thus dimming the images of the galaxies and enlarging those of the stars. Faint galaxies therefore cease to be distinguishable from faint stars and are lost for the counts. The result will be an increasing depletion of the observable populations and of the average numbers of clusters per square degree as we move north or south from the declination +33°24', which marks the zenith at the Palomar Observatory. This depletion must be considered in addition to those due to the presence of interstellar or intergalactic absorption, but whereas the latter cannot be avoided as long as we work exclusively with conventional photographic telescopes, the former could be eliminated by using telescopes of equal performance in various other latitudes. Whatever the cause may be, these various effects must be kept in mind if the data given in our tables are to be used for the purpose of statistical analysis.

Faintest Clusters

According to our definition, the population of all clusters listed in the catalogue should be at least 50. However, for extremely distant clusters it may happen that the limit of the plate falls in the interval between m_{max} and $m_{max}+3$, so that not all galaxies in that interval can be observed. Therefore, for the sake of completeness, we have included some clusters for which actually fewer than 50 member galaxies could be counted but for which we had reason to believe that the population would surpass 50 galaxies if the whole interval of 3 magnitudes were observable.

Another difficulty deserves to be mentioned in this connection. It may happen once in a while that a nearby resolvable dwarf galaxy contains a great number of red giants but only an insignificant population of equally bright blue stars, so that it becomes essentially indistinguishable from an extremely distant cluster of galaxies. Only photographs with the 200-inch telescope under the best seeing conditions could possibly lead to such a distinction. The great number of ED-clusters, however, made it impossible to follow such a course. Our list of clusters, therefore, may actually contain some objects which, at a closer look, might reveal themselves as nearby dwarf galaxies.

Uniformity of the Survey

In order to assure the uniformity of the survey of the clusters of galaxies all data, except for the positions of the clusters, were deduced by F. ZWICKY alone. Furthermore, a great number of fields were worked over twice and several years apart. Also, for many fields, more than one plate was used for the analysis. The plate material used consisted both of the accepted and many rejected plates of the Sky Survey, as well as of a great number of plates obtained specifically for the present program.

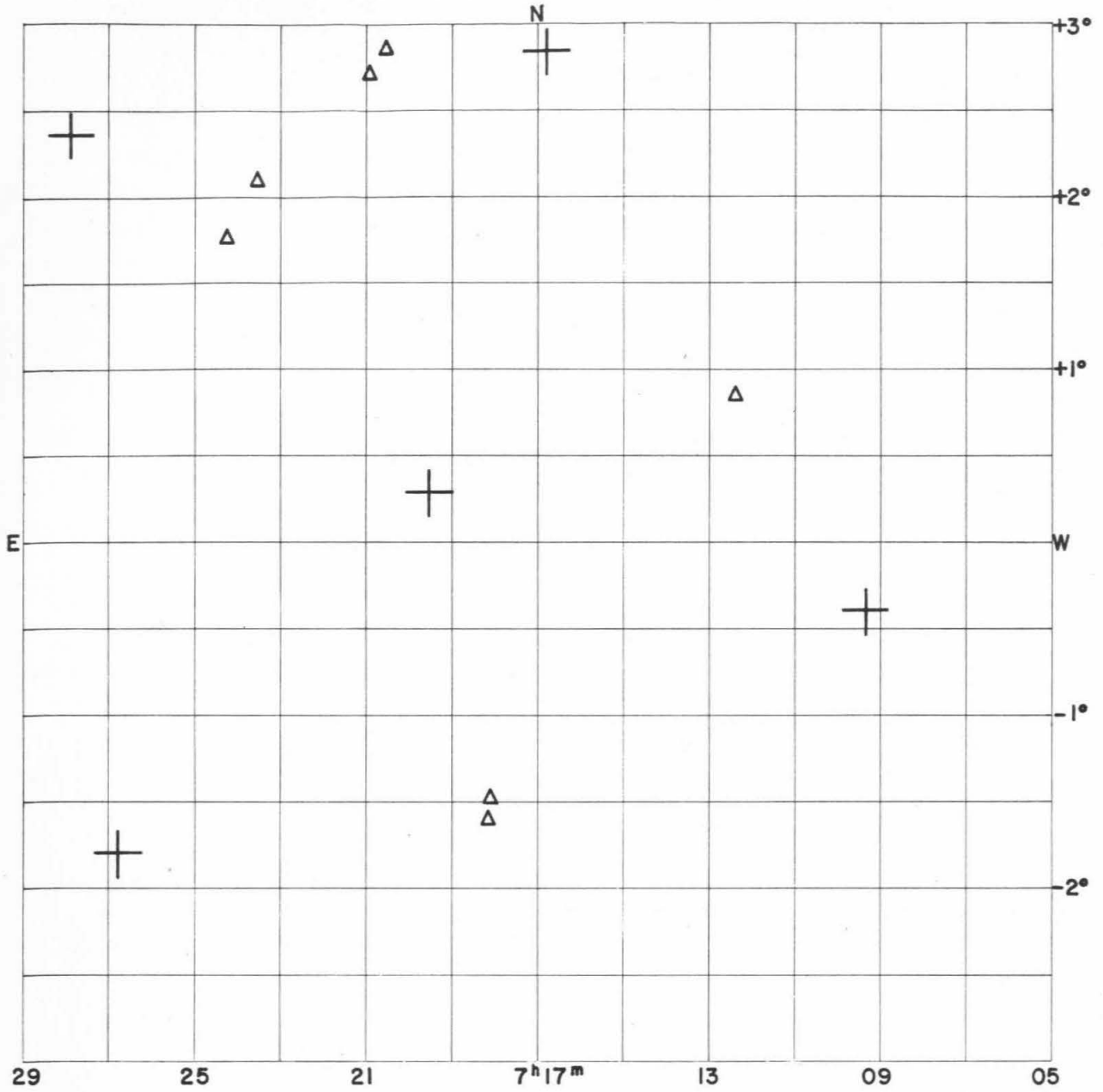
Construction of the Charts

The charts were first drawn on paper in the original size in order to supply a working sketch. The final drawings that were to be used in the photographic reproduction, however, were made on a glass plate with the 1/2-degree grid on the back and in contact with the original Survey Plates. Thus, the symbols of galaxies and GC stars as well as the contour lines of the clusters are in absolute accordance with the sky, even if for some unforeseen reason the corresponding entries in the lists should be erroneous. Of these original drawings on glass a contact negative was obtained from which the final prints were manufactured to the exact scale of the Survey prints of the Sky Atlas. The printing stocks for the catalogue, however, had to be reduced to one-half of that size, so as to permit reproduction in a handy volume.

Acknowledgments

The construction of the catalogue has been supported in part by a continued grant from the Office of Naval Research, United States Navy. We also wish to thank the California Institute of Technology for their support in the production of the master charts and lists.

CATALOGUE



FIELD No. 1

7^h17^m 0°00'

Survey Plate No. 1491

GC STARS

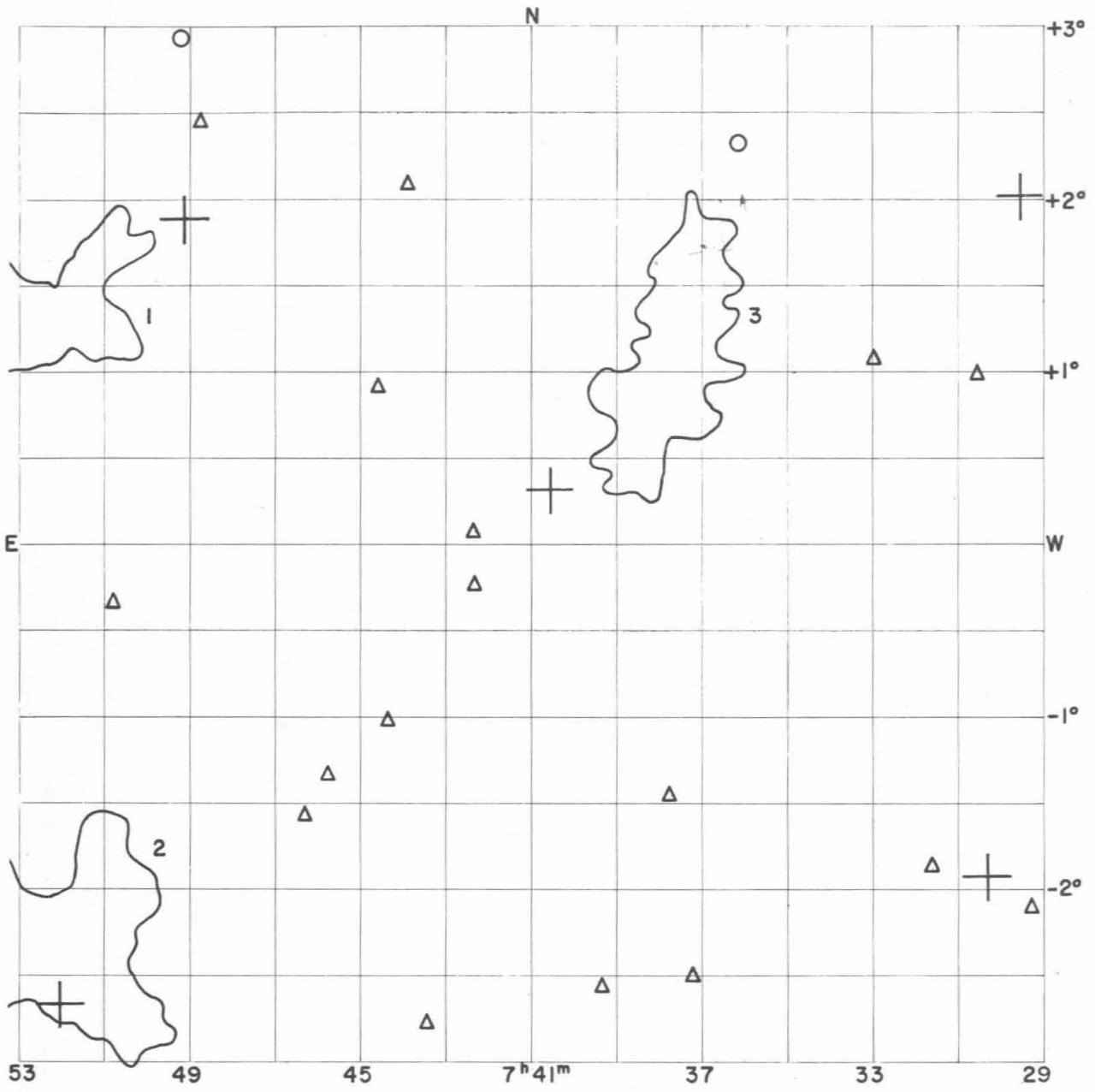
Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
9518	7 09 18.6	- 0 24 30	4.09
9739	7 16 45.6	+ 2 50 02	6.06
9821	7 19 29.5	+ 0 16 24	6.00
10017	7 26 47.0	- 1 48 03	5.80
10045	7 27 52.9	+ 2 22 03	7.03

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
7 12.4	+ 00 51		15.7		
7 18.1	- 01 28		15.5		
7 18.2	- 01 36		15.6		
7 20.6	+ 02 52		15.3		compact
7 20.9	+ 02 43		15.1		
7 23.5	+ 02 05		15.4		
7 24.2	+ 01 45		15.6		



FIELD No. 2

7^h41^m 0°00'

Survey Plate No. 933

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10085	7 29 30.1	+ 2 01 19	5.26
10100	7 30 17.9	- 1 55 34	6.76
10381	7 40 31.4	+ 0 18 33	6.36
10622	7 49 06.4	+ 1 53 45	5.11
10693	7 52 02.2	- 2 39 49	7.15

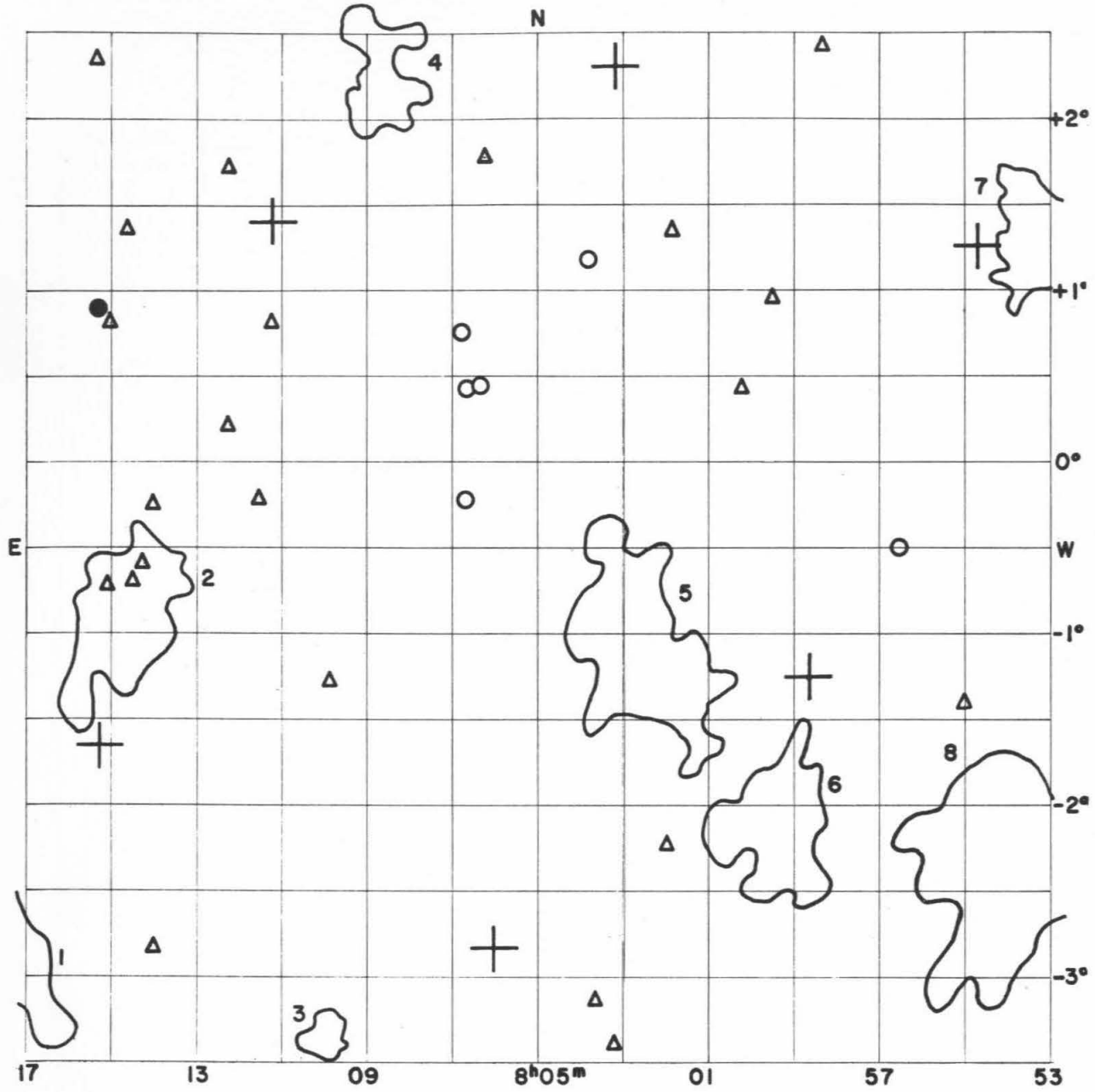
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0737.5 + 0108	open	140	5.4	MD	3
0752.4 + 0123	medium compact	123	4.7	MD	1
0753.1 - 0221	medium compact	230	7.8	MD	2

Average number of galaxies per cluster = 164.3

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
7 29.3 - 02 07		15.7		
7 30.6 + 00 58		15.7		
7 31.6 - 01 53		15.6		
7 32.9 + 01 04		15.6		very diffuse
7 36.1 + 02 20		14.8		
7 37.2 - 02 31		15.5		diffuse
7 37.8 - 01 28		15.5		diffuse
7 39.3 - 02 35		15.4		
7 42.4 - 00 15		15.6		
7 42.4 + 00 03		15.6		
7 43.5 - 02 48		15.7		
7 43.9 + 02 05		15.4		double system
7 44.4 - 01 02		15.7		
7 44.6 + 00 55		15.7		
7 45.8 - 01 21		15.6		
7 46.3 - 01 36		15.5		
7 48.8 + 02 27		15.6		
7 49.2 + 02 57		14.7		
7 50.8 - 00 21		15.3		



FIELD No. 3

8^h05^m - 0°30'

Survey Plate No. 1298

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10755	7 54 41.8	+ 1 15 43	6.44
10870	7 58 40.7	- 1 15 09	4.88
10985	8 03 11.8	+ 2 18 32	6.77
11051	8 06 04.9	- 2 50 13	4.41
11185	8 11 15.0	+ 1 24 32	8.6
11306	8 15 20.3	- 1 38 41	7.6

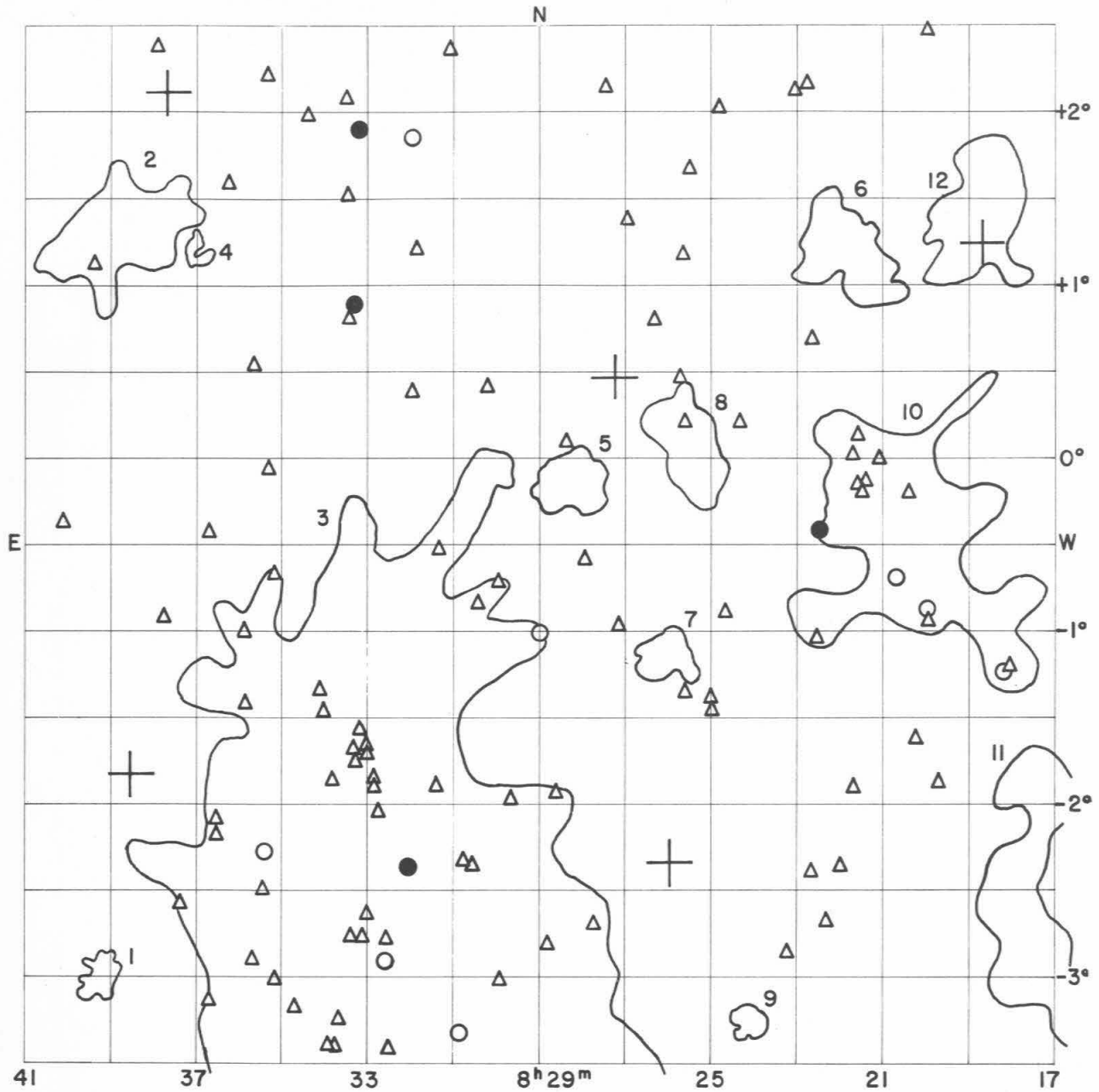
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0752.4 + 0123	medium compact	123	4.7	MD	7
0753.1 - 0221	medium compact	230	7.8	MD	8
0759.5 - 0206	compact	115	3.8	MD	6
0802.6 - 0104	medium compact	223	4.9	MD	5
0808.8 + 0219	compact	93	2.8	D	4
0810.0 - 0320	compact	67	1.3	VD	3
0814.8 - 0055	medium compact	153	4,0	D	2
0817.6 - 0236	open	121	4.6	MD	1

Average number of galaxies per cluster = 140.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
7 55.0 - 01 25		15.5		
7 56.6 - 00 30	487*	14.2		
7 58.2 + 02 26		15.4		
7 59.5 + 00 57		15.5		multiple system
8 00.2 + 00 25		15.5		
8 01.8 + 01 20		15.6		
8 02.0 - 02 14		15.7		
8 03.2 - 03 25		15.5		
8 03.7 - 03 08		15.1		
8 03.8 + 01 11	494*	14.3		
8 06.2 + 01 46		15.4		
8 06.3 + 00 27		14.9		
8 06.6 + 00 25		14.7		
8 06.7 - 00 13		14.5		
8 06.8 + 00 45		14.4		
8 09.9 - 01 17		15.3		
8 11.2 + 00 48		15.2		
8 11.5 - 00 08		15.3		
8 12.2 + 01 42		15.6		
8 12.3 + 00 13		15.4		
8 14.1 - 02 50		15.3		
8 14.1 - 00 15		15.3		
8 14.4 - 00 36		15.6		
8 14.6 - 00 42		15.6		
8 14.7 + 01 22		15.3		very diffuse
8 15.1 + 00 49		15.7		
8 15.2 - 00 44		15.5		
8 15.4 + 00 54	2555	13.5		
8 15.4 + 02 20		15.5		



FIELD No. 4

8^h29^m - 0°30'

Survey Plate No. 1305

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11385	8 18 41.1	+ 1 13 32	7.6
11587	8 25 57.8	- 2 21 01	6.29
11622	8 27 13.6	+ 0 26 29	7.56
11909	8 37 42.5	+ 2 05 55	6.86
11934	8 38 32.8	- 1 50 00	8.6

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0817.6 - 0236	open	121	4.6	MD	11
0818.8 + 0124	medium compact	153	3.3	MD	12
0820.1 - 0029	open	90	6.5	Near	10
0821.8 + 0113	medium compact	117	3.0	D	6
0824.1 - 0316	medium compact	69	1.0	VD	9
0825.5 + 0005	medium compact	88	2.6	MD	8
0826.0 - 0108	open	75	1.6	VD	7
0828.3 - 0008	medium compact	71	2.0	VD	5
0832.6 - 0235	open	490	17.4	Near	3
0837.0 + 0113	medium compact	75	1.0	VD	4
0838.8 + 0119	medium compact	119	3.5	MD	2
0839.3 - 0300	compact	135	1.5	VD	1

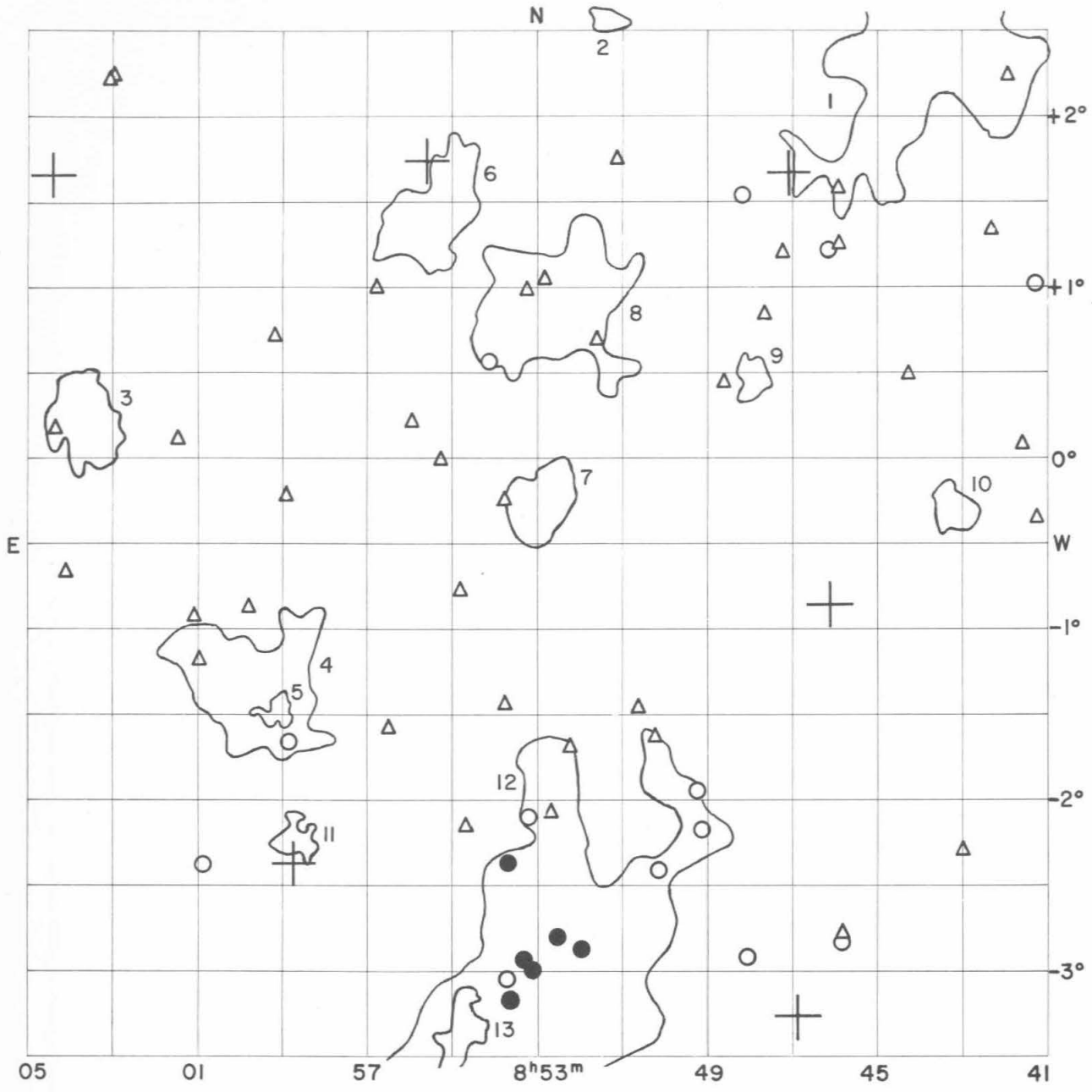
Average number of galaxies per cluster = 133.6

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
8 18.0 - 01 13		15.1		
8 18.2 - 01 15		15.0		double nebula, collision
8 19.7 - 01 54		15.6		
8 19.9 - 00 57		15.5		
8 19.9 - 00 53		14.9		
8 19.9 + 02 29		15.7		diffuse
8 20.2 - 01 38		15.7		
8 20.4 - 00 12		15.2		
8 20.7 - 00 42		14.8		
8 21.0 00 00		15.1		double system
8 21.4 - 00 08		15.1		
8 21.5 - 00 13		15.5		
8 21.6 - 00 09		15.4		
8 21.6 + 00 08		15.6		
8 21.7 - 01 56		15.7		compact
8 21.7 + 00 01		15.7		double system
8 21.9 - 02 22		15.7		
8 22.3 - 02 42		15.5		double system
8 22.5 - 01 03		15.5		
8 22.5 - 00 26	2590	14.0		
8 22.6 - 02 25		15.4		
8 22.6 + 00 40		15.6		
8 22.8 + 02 09		15.4		
8 23.0 + 02 07		15.5		
8 23.2 - 02 54		15.6		
8 24.3 + 00 12		15.4		
8 24.6 - 00 55		15.5		compact
8 24.8 + 02 01		15.3		
8 25.0 - 01 28		15.5		
8 25.0 - 01 24		15.5		
8 25.5 + 01 40		15.7		compact
8 25.6 - 01 22		15.3		
8 25.6 + 00 11		15.2		
8 25.6 + 01 10		15.2		
8 25.7 + 00 27		15.1		
8 26.4 + 00 47		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
8 27.0 + 01 22		15.7		
8 27.1 - 00 59		15.5		
8 27.5 + 02 08		15.6		
8 27.7 - 02 44		15.5		
8 27.9 - 00 36		15.6		double system
8 28.4 + 00 04		15.5		
8 28.6 - 01 57		15.6		
8 28.8 - 02 50		15.6		
8 29.0 - 01 02		15.0		
8 29.6 - 02 00	510*	15.2		double nebula, collision
8 29.9 - 03 02		15.3		double system
8 29.9 - 00 44		15.5		
8 30.2 + 00 24		15.2		
8 30.4 - 00 52		15.5		double nebula
8 30.5 - 02 22		15.5		
8 30.8 - 03 20		14.9		
8 30.8 - 02 21		15.4		
8 31.1 + 02 20		15.6		
8 31.4 - 01 56		15.7		
8 31.4 - 00 33		15.7		triple system
8 31.8 + 01 11		15.6		
8 31.9 + 01 50		14.7		double system
8 32.0 - 02 22	2615	13.5		
8 32.0 + 00 22		15.5		
8 32.5 - 03 26		15.6		diffuse
8 32.6 - 02 56		15.0		
8 32.6 - 02 48		15.6		
8 32.8 - 02 04		15.6		
8 32.9 - 01 56		15.5		
8 32.9 - 01 53	514*	15.3		
8 33.0 - 02 40		15.7		diffuse
8 33.0 - 01 44	515*	15.6		
8 33.0 - 01 40	2616	15.2		compact
8 33.1 - 02 48		15.7		
8 33.1 - 01 35		15.3		
8 33.2 - 01 47		15.7		
8 33.2 + 01 54		13.9		
8 33.3 + 00 52	2618	13.9		
8 33.3 - 01 42	516*	15.7		
8 33.4 - 02 48		15.7		
8 33.5 + 00 47		15.7		
8 33.5 + 01 30		15.4		
8 33.5 + 02 04		15.2		
8 33.7 - 03 16		15.7		triple system, collision
8 33.8 - 03 25		15.7		
8 33.8 - 01 54	517*	15.4		
8 33.9 - 03 25		15.6		
8 34.0 - 01 29		15.4		
8 34.1 - 01 22		15.6		triple system
8 34.4 + 01 58		15.3		compact
8 34.7 - 03 12		15.5		compact
8 35.1 - 03 02		15.1		
8 35.1 - 00 41		15.5		
8 35.3 - 00 05		15.6		triple system
8 35.3 + 02 11		15.7		
8 35.4 - 02 17		14.5		extremely compact
8 35.5 - 02 32		15.5		
8 35.7 - 02 56		15.6		
8 35.7 + 00 30		15.7		diffuse

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
8 35.9	- 01 27		15.6		very compact
8 35.9	- 01 02		15.7		
8 36.3	+ 01 34		15.3		double system
8 36.6	- 02 12		15.3		
8 36.6	- 02 07		15.3		double system
8 36.8	- 03 10		15.7		compact
8 36.8	- 00 27		15.7		double nebula
8 37.4	- 02 37		15.6		compact
8 37.8	- 00 58		15.7		
8 38.0	+ 02 21		15.5		
8 39.5	+ 01 05		15.4		double system
8 40.1	- 00 23		15.3		



FIELD No. 5

8^h53^m - 0°30'

Survey Plate No. 469

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12159	8 46 04.7	- 0 51 33	6.56
12172	8 46 51.0	- 3 15 23	5.19
12176	8 47 01.9	+ 1 40 08	6.91
12398	8 55 33.2	+ 1 44 09	6.50
12468	8 58 43.5	- 2 21 50	7.87
12581	9 04 25.0	+ 1 39 52	6.41

CLUSTERS OF GALAXIES

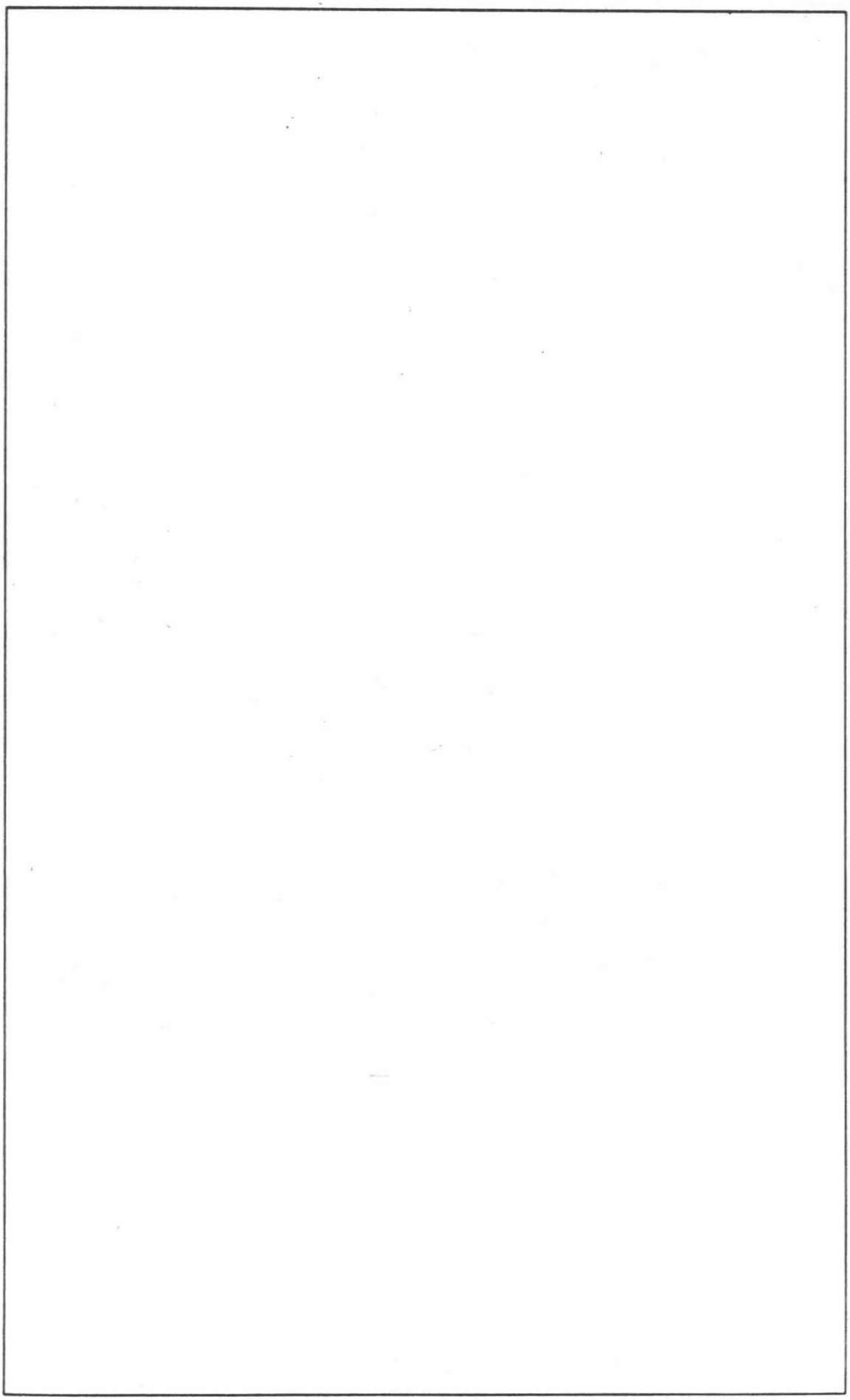
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0843.1 - 0017	compact	78	1.4	VD	10
0843.8 + 0215	open	147	6.5	MD	1
0847.8 + 0029	compact	116	1.3	VD	9
0851.2 + 0234	open	53	0.9	VD	2
0852.7 + 0054	open	163	4.4	Near	8
0852.9 - 0015	medium compact	115	2.2	VD	7
0853.5 - 0312	open	189	10.4	Near	12
0854.8 - 0323	medium compact	74	1.7	D	13
0855.5 + 0125	open	126	2.9	MD	6
0858.7 - 0215	compact	104	1.3	VD	11
0859.2 - 0130	medium compact	63	1.1	VD	5
0859.7 - 0120	medium compact	141	4.2	D	4
0903.7 + 0011	compact	96	2.4	D	3

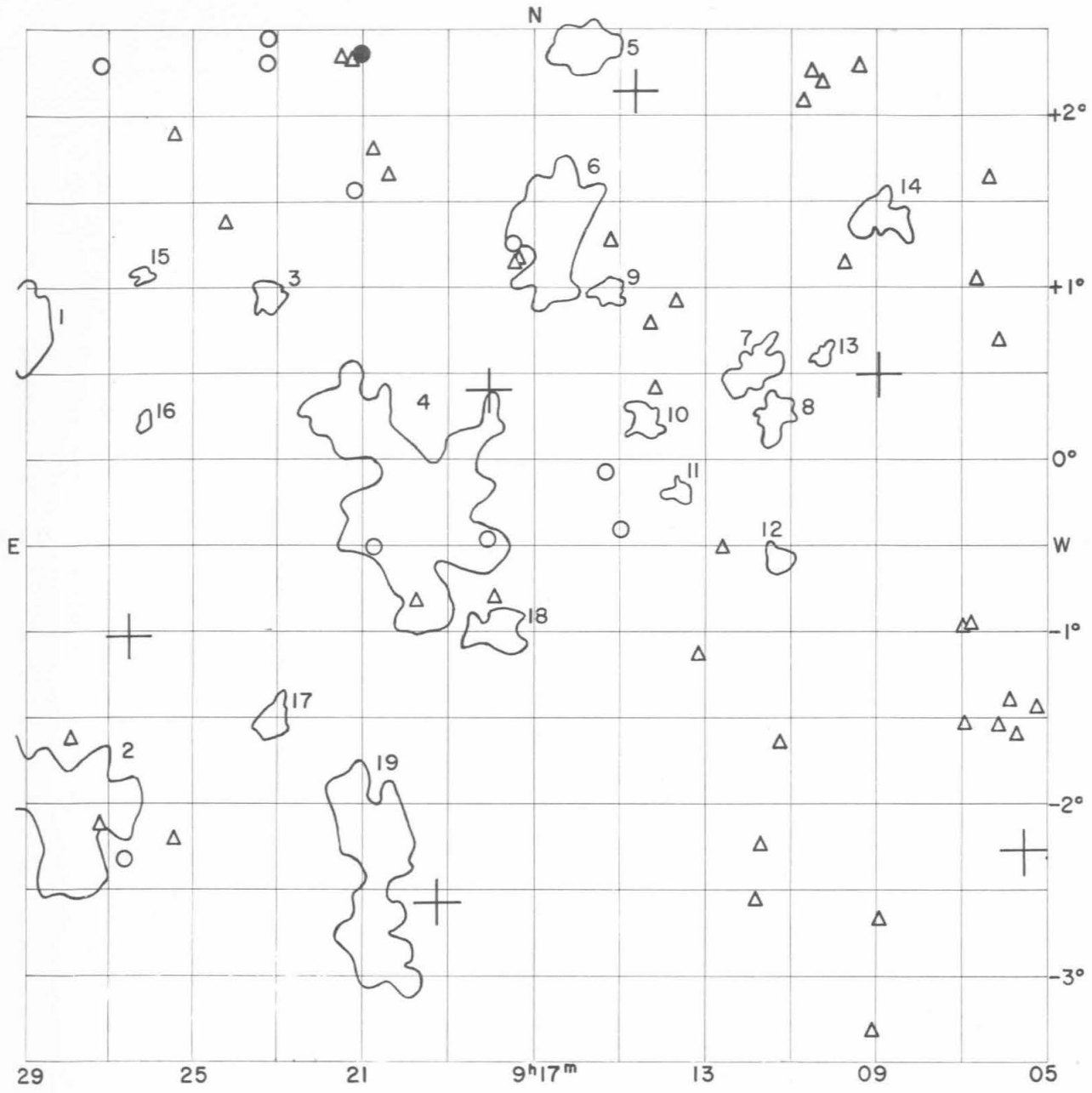
Average number of galaxies per cluster = 112.7

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
8 41.2 - 00 21		15.6		
8 41.3 + 01 01		15.0		
8 41.6 + 00 05		15.7		
8 41.9 + 02 15		15.7		
8 42.3 + 01 20		15.7		
8 42.9 - 02 18		15.6		very compact
8 44.3 + 00 29		15.6		
8 45.8 - 02 50		14.7		
8 45.8 - 02 47		15.6		
8 45.8 + 01 15		15.7		
8 45.8 + 01 35		15.7		
8 46.1 + 01 13		14.9		
8 47.2 + 01 11		15.3		
8 47.6 + 00 50		15.7		compact
8 48.0 - 02 55		15.0		
8 48.1 + 01 32		15.0		
8 48.6 + 00 26		15.5		extremely compact
8 49.1 - 02 10		14.5		double system, tidal effect
8 49.2 - 01 58		14.2		13^m star superposed
8 50.1 - 02 25	2690	14.1		
8 50.2 - 01 38		15.5		double nebula
8 50.6 - 01 28		15.5		
8 51.1 + 01 44		15.2		
8 51.6 + 00 41		15.5		
8 51.9 - 02 53	2695	13.3		
8 52.2 - 01 42		15.6		
8 52.5 - 02 48	2697	13.6		
8 52.7 - 02 05		15.4		compact
8 52.8 + 01 02		15.6		
8 53.1 - 03 00	2698	13.2		
8 53.2 - 02 06		14.8		
8 53.2 + 00 58		15.2		
8 53.3 - 02 57	2699	13.6		
8 53.6 - 03 10	2708	13.6		
8 53.7 - 03 04	2709	14.8		

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
8 53.7	- 02 23	2706	13.8		
8 53.8	- 01 27		15.5		
8 53.8	- 00 15		15.3		
8 54.1	+ 00 33		14.7		
8 54.7	- 02 10		15.7		
8 54.8	- 00 48		15.6		
8 55.2	- 00 01		15.1		
8 55.9	+ 00 12		15.3		
8 56.5	- 01 36		15.3		
8 56.8	+ 00 59		15.4		
8 58.8	- 01 40	525*	14.9		
8 58.9	- 00 14		15.6		
8 59.2	+ 00 42		15.6		
8 59.8	- 00 54		15.5		
9 00.9	- 02 23		14.8		extremely compact
9 01.0	- 01 11		15.2		
9 01.1	- 00 57		15.7		
9 01.5	+ 00 06		15.7		
9 03.0	+ 02 14		15.6		
9 03.1	+ 02 13		15.7		
9 04.1	- 00 40		15.5		compact
9 04.4	+ 00 10		15.6		





FIELD No. 6

9^h17^m - 0°30'

Survey Plate No. 430

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12609	9 05 29.7	- 2 16 23	7.12
12680	9 08 55.2	+ 0 29 48	6.96
12809	9 14 37.1	+ 2 08 22	6.84
12882	9 18 02.7	+ 0 23 40	6.82
12914	9 19 13.1	- 2 34 46	7.10
13078	9 26 29.6	- 1 02 16	6.29

CLUSTERS OF GALAXIES

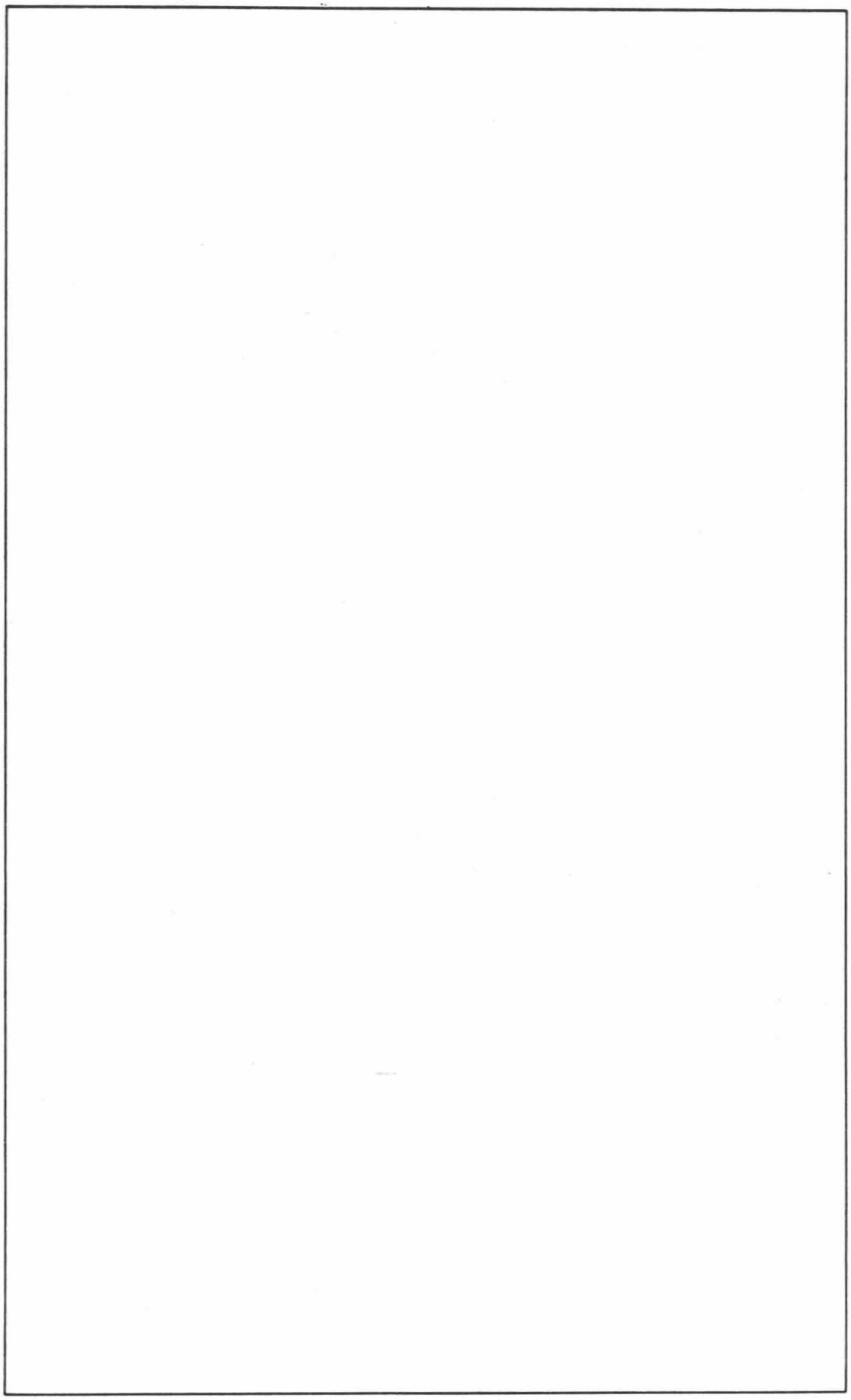
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0908.8 + 0126	open	71	1.6	VD	14
0910.2 + 0037	medium compact	46	0.6	ED	13
0911.2 - 0035	compact	65	0.9	ED	12
0911.4 + 0015	compact	63	1.3	VD	8
0911.8 + 0031	medium compact	63	1.6	VD	7
0913.6 - 0010	compact	87	0.8	VD	11
0914.4 + 0014	compact	53	1.1	VD	10
0915.3 + 0059	medium compact	54	0.8	ED	9
0915.9 + 0225	compact	78	1.7	VD	5
0916.6 + 0121	open	74	2.9	D	6
0917.9 - 0100	open	61	1.5	VD	18
0919.7 - 0016	open	154	5.3	MD	4
0920.6 - 0226	open	117	3.8	MD	19
0923.1 - 0130	medium compact	60	1.2	VD	17
0923.2 + 0057	compact	59	1.0	VD	3
0926.1 + 0013	compact	66	0.4	ED	16
0926.2 + 0105	medium compact	36	0.5	ED	15
0928.0 - 0203	medium compact	136	4.3	D	2
0929.1 + 0047	medium compact	103	2.3	MD	1

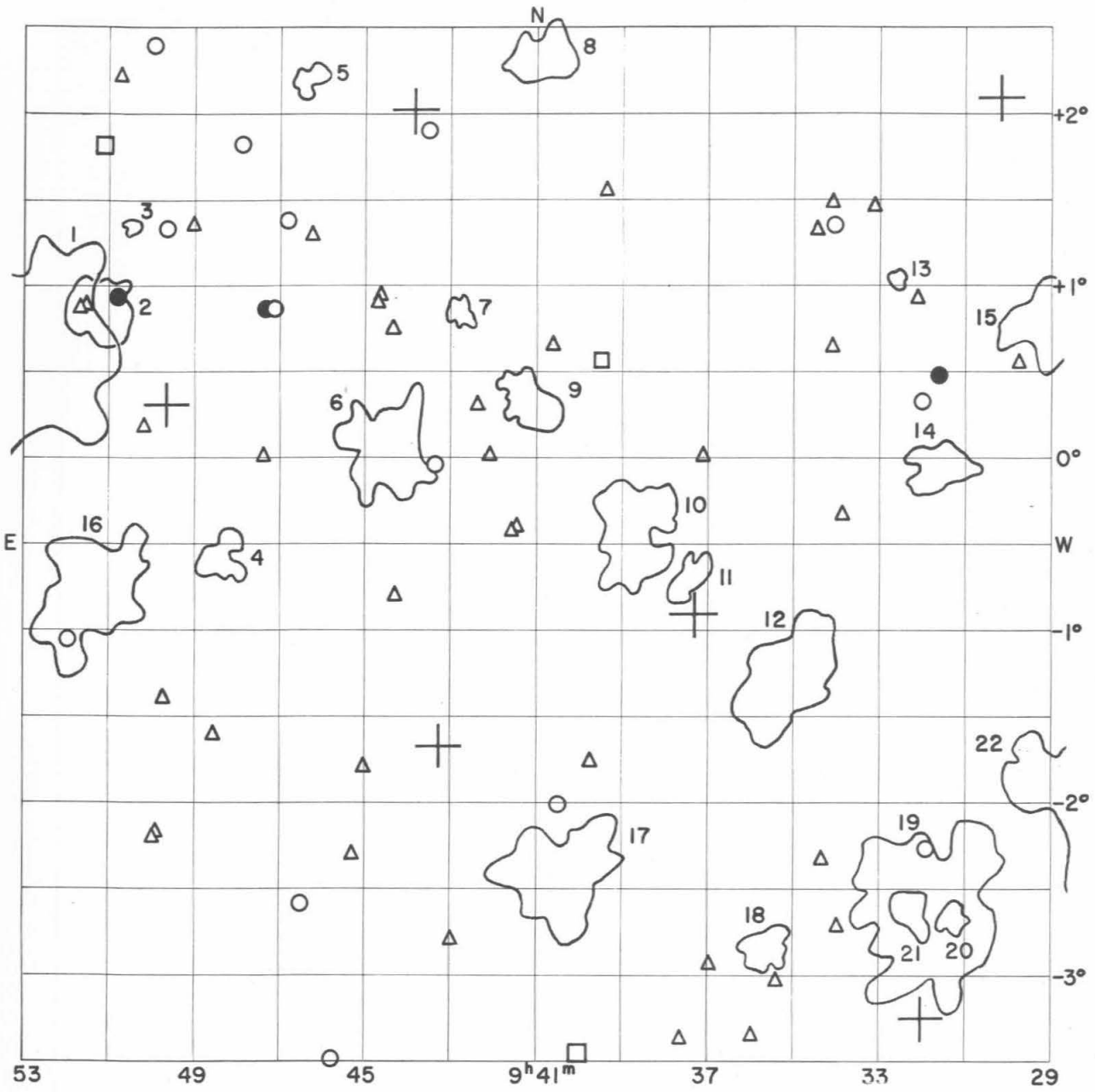
Average number of galaxies per cluster = 76.1

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 05.2 - 01 27		15.6		
9 05.7 - 01 36		15.6		
9 05.9 - 01 25		15.3		
9 06.1 - 01 33		15.2		
9 06.2 + 00 42		15.3		
9 06.4 + 01 38		15.7		diffuse
9 06.6 + 01 02		15.6		
9 06.8 - 00 58		15.4		
9 06.9 - 01 32		15.1		
9 07.0 - 00 59		15.5		
9 08.9 - 02 41		15.3		
9 09.1 - 03 20		15.5		
9 09.4 + 02 17		15.7		diffuse
9 09.7 + 01 08		15.7		
9 10.2 + 02 11		15.7		
9 10.5 + 02 15		15.4		
9 10.7 + 02 04		15.5		
9 11.3 - 01 39		15.6		
9 11.7 - 02 15		15.4		compact
9 11.8 - 02 35		15.7		diffuse
9 12.6 - 00 30		15.7		
9 13.1 - 01 08		15.6		
9 13.6 + 00 55		15.6		
9 14.1 + 00 25		15.4		
9 14.3 + 00 47		15.5		
9 14.9 - 00 25		15.0		
9 15.2 + 01 16		15.7		diffuse
9 15.3 - 00 04	531*	14.9		
9 17.3 + 01 09		15.4		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 17.4 + 01 08		15.5		
9 17.5 + 01 15		14.1		
9 17.9 - 00 48		15.4		
9 18.1 - 00 28		14.8		
9 19.7 - 00 50	535*	15.6		
9 20.4 + 01 38		15.4		
9 20.7 - 00 31		14.2		
9 20.8 + 01 47		15.6		
9 21.0 + 02 20	2861	14.0		
9 21.1 + 01 33		14.8		double system
9 21.2 + 02 19		15.4		
9 21.5 + 02 20		15.5		
9 23.2 + 02 18	2878	14.9		
9 23.2 + 02 26	2877	14.7		
9 24.1 + 01 22		15.7		
9 25.5 - 02 13		15.7		diffuse
9 25.5 + 01 53		15.7		
9 26.6 - 02 20	539*	14.3		
9 27.2 + 02 17	2898	14.8		
9 27.3 - 02 08		15.6		
9 27.9 - 01 38		15.7		





FIELD No. 7

9^h41^m - 0°30'

Survey Plate No. 1318

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13172	9 30 06.4	+ 2 05 11	6.15
13224	9 32 01.4	- 3 15 54	7.18
13341	9 37 18.2	- 0 54 54	4.10
13447	9 43 15.5	- 1 40 53	7.9
13459	9 43 48.8	+ 2 01 04	5.69
13583	9 49 38.2	+ 0 18 41	6.29

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0928.0 - 0203	medium compact	136	4.3	D	22
0929.1 + 0047	medium compact	103	2.3	MD	15
0931.2 - 0241	compact	65	1.0	VD	20
0931.5 - 0002	medium compact	102	1.7	VD	14
0931.7 - 0238	open	130	4.8	MD	19
0932.2 - 0239	medium compact	87	1.3	VD	21
0932.6 + 0103	compact	67	0.5	ED	13
0935.2 - 0118	medium compact	148	2.9	VD	12
0935.6 - 0251	medium compact	57	1.4	VD	18
0937.4 - 0043	compact	66	1.3	VD	11
0938.8 - 0027	open	137	2.6	VD	10
0940.4 - 0226	open	114	3.4	MD	17
0940.9 + 0220	medium compact	122	1.8	VD	8
0941.1 + 0019	compact	101	1.7	VD	9
0942.8 + 0051	compact	57	0.9	VD	7
0944.5 + 0002	medium compact	91	2.7	D	6
0946.4 + 0212	medium compact	65	1.0	ED	5
0948.5 - 0035	medium compact	91	1.4	VD	4
0950.6 + 0120	compact	62	0.4	ED	3
0951.3 + 0052	medium compact	115	2.2	D	2
0951.5 - 0048	open	122	3.4	D	16
0953.1 + 0028	open	173	6.3	MD	1

Average number of galaxies per cluster = 100.5

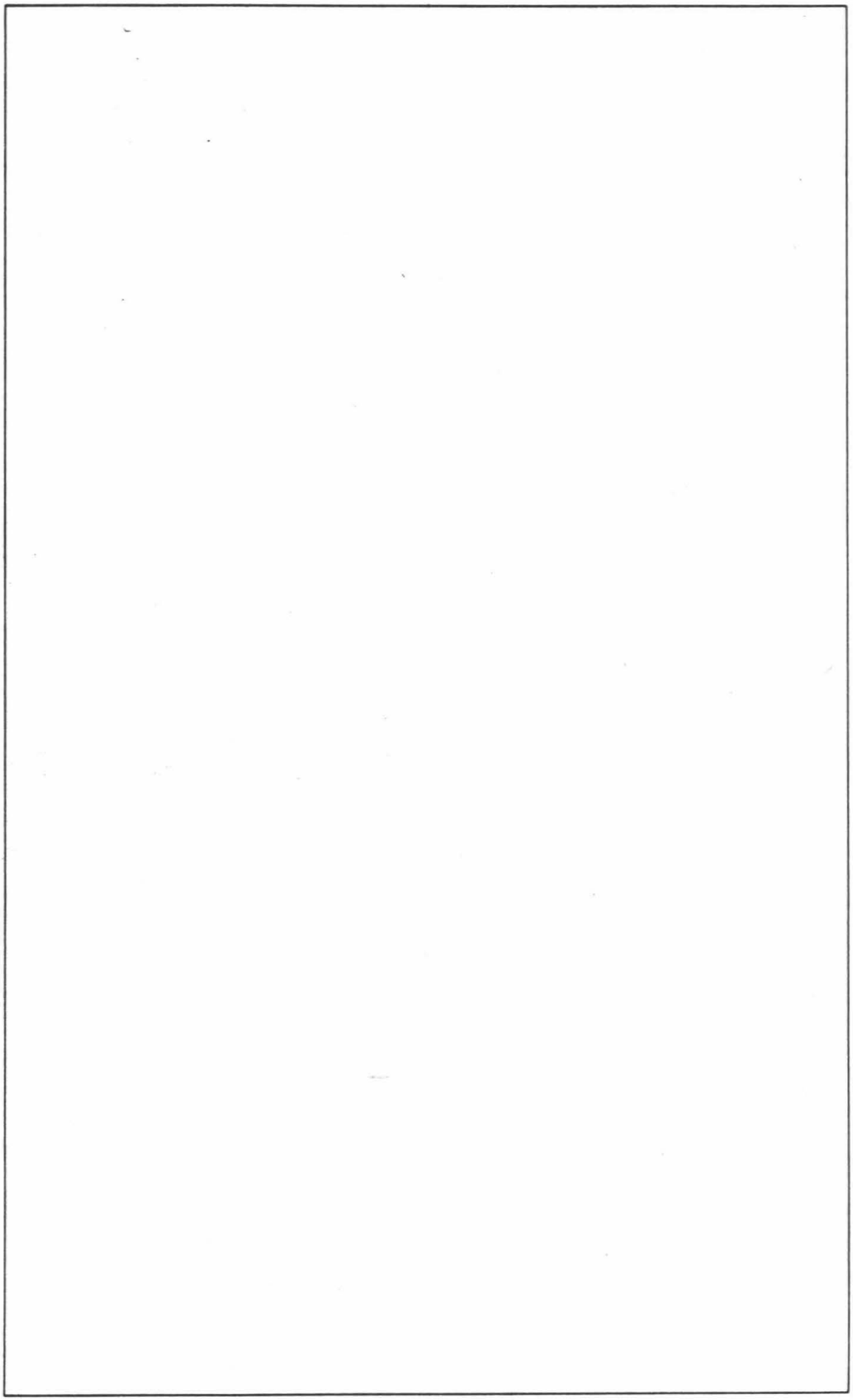
GALAXIES

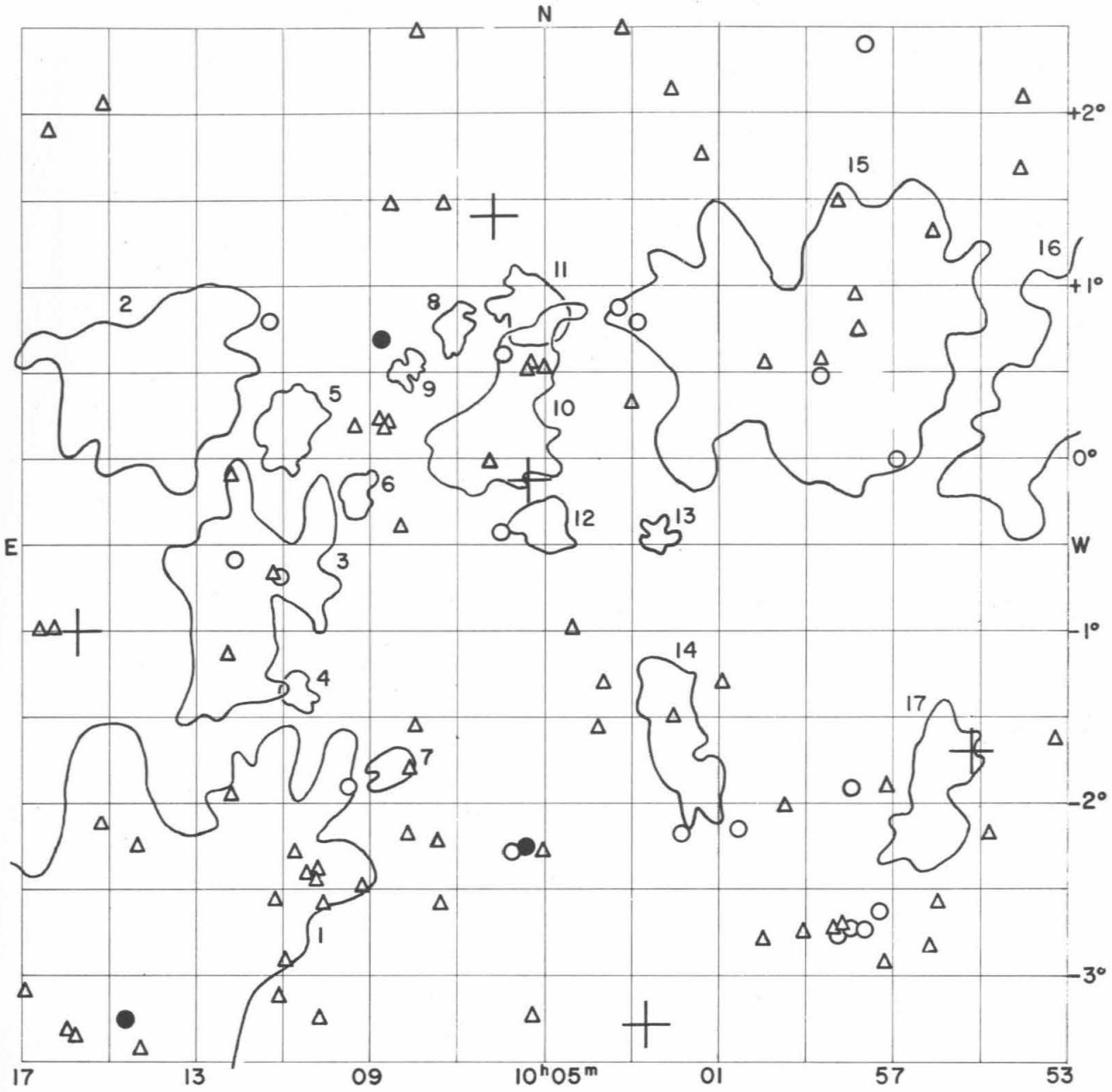
Position α 1950 δ (h m, ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
9 29.8 + 00 33		15.3		
9 31.6 + 00 29		13.9		double system
9 31.9 - 02 16	2917	14.5		
9 32.0 + 00 19		14.7		
9 32.1 + 00 56		15.6		
9 33.1 + 01 28		15.7		
9 33.8 - 00 20		15.6		diffuse
9 34.0 - 02 43		15.7		
9 34.0 + 01 21		14.9		
9 34.1 + 00 38		15.6		
9 34.1 + 01 29		15.5		
9 34.3 - 02 20		15.5		
9 34.5 + 01 20		15.4		extremely compact
9 35.4 - 03 02		15.7		
9 36.0 - 03 20		15.7		
9 37.0 - 02 57		15.6		
9 37.1 00 00	2951	15.1		double nebula
9 37.6 - 03 21		15.6		very compact
9 39.4 + 01 33		15.7		
9 39.5 + 00 34	2967	12.2	+ 2245	m_H = 12.4 S
9 39.8 - 01 46		15.7		
9 40.0 - 03 28	2974	12.3	+ 2013	m_H = 12.7 E
9 40.5 - 02 01		14.7		
9 40.6 + 00 39		15.4		
9 41.5 - 00 25		15.5		
9 41.6 - 00 26		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
9 42.1	+ 00 01		15.5		
9 42.3	+ 00 18		15.7		
9 42.9	- 02 48		15.5		
9 43.3	- 00 02	560*	14.6		
9 43.5	+ 01 54		14.1		
9 44.3	- 00 48		15.6		
9 44.3	+ 00 44		15.3		
9 44.6	+ 00 56		15.5		
9 44.7	+ 00 54		15.6		
9 45.0	- 01 48		15.5		
9 45.3	- 02 18		15.7		
9 45.8	- 03 30		14.5		
9 46.2	+ 01 17		15.7		
9 46.5	- 02 36	3017	14.4		
9 46.8	+ 01 22	3015	14.2		
9 47.1	+ 00 51	3018	14.2		
9 47.3	+ 00 51	3023	13.5		double nebula
9 47.4	00 00	566*	15.5		compact
9 47.8	+ 01 48		14.6		
9 48.6	- 01 37		15.7		
9 49.0	+ 01 20		15.7		extremely compact
9 49.6	+ 01 19		15.0		
9 49.8	- 01 25		15.5		double nebula, contact
9 49.9	- 02 11		15.6		
9 49.9	+ 02 22	3039	14.4		
9 50.0	- 02 13		15.5		double system, connected
9 50.2	+ 00 10		15.4		
9 50.8	+ 00 56	3042	13.8		
9 50.8	+ 02 12		15.6		
9 51.1	+ 01 48	3044	12.4		m_H = 12.6 S
9 51.6	+ 00 53		15.7		
9 51.7	+ 00 52		15.3		
9 52.0	- 01 04	3047	14.2		double system

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2967	12.2	Sc	-	-	-	-	-	-
2974	-	-	11.85	E4	11.9	E4	-	-





FIELD No. 8

10^h05^m - 0°30'

Survey Plate No. 470

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13712	9 55 11.2	- 1 42 11	6.72
13860	10 02 40.5	- 3 16 27	7.54
13916	10 05 22.7	- 0 07 35	4.50
13932	10 06 06.8	+ 1 24 21	6.56
14141	10 15 42.9	- 0 59 37	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0953.1 + 0028	open	173	6.3	MD	16
0956.1 - 0155	medium compact	103	3.0	D	17
0958.9 + 0038	medium compact	387	9.3	Near	15
1001.9 - 0139	medium compact	135	3.1	D	14
1002.4 - 0026	compact	70	1.0	VD	13
1005.0 - 0022	medium compact	98	1.8	VD	12
1005.3 + 0053	medium compact	117	2.2	D	11
1006.0 + 0014	medium compact	118	4.0	Near	10
1007.1 + 0046	medium compact	78	1.4	VD	8
1008.2 + 0032	medium compact	55	1.1	ED	9
1008.6 - 0148	compact	119	1.2	VD	7
1009.4 - 0011	medium compact	94	1.2	VD	6
1010.8 - 0121	medium compact	67	1.1	ED	4
1010.9 + 0011	compact	117	2.3	MD	5
1012.0 - 0047	medium compact	209	5.2	Near	3
1014.1 + 0027	open	220	5.6	MD	2
1020.4 - 0316	medium compact	1150	21.8	Near	1

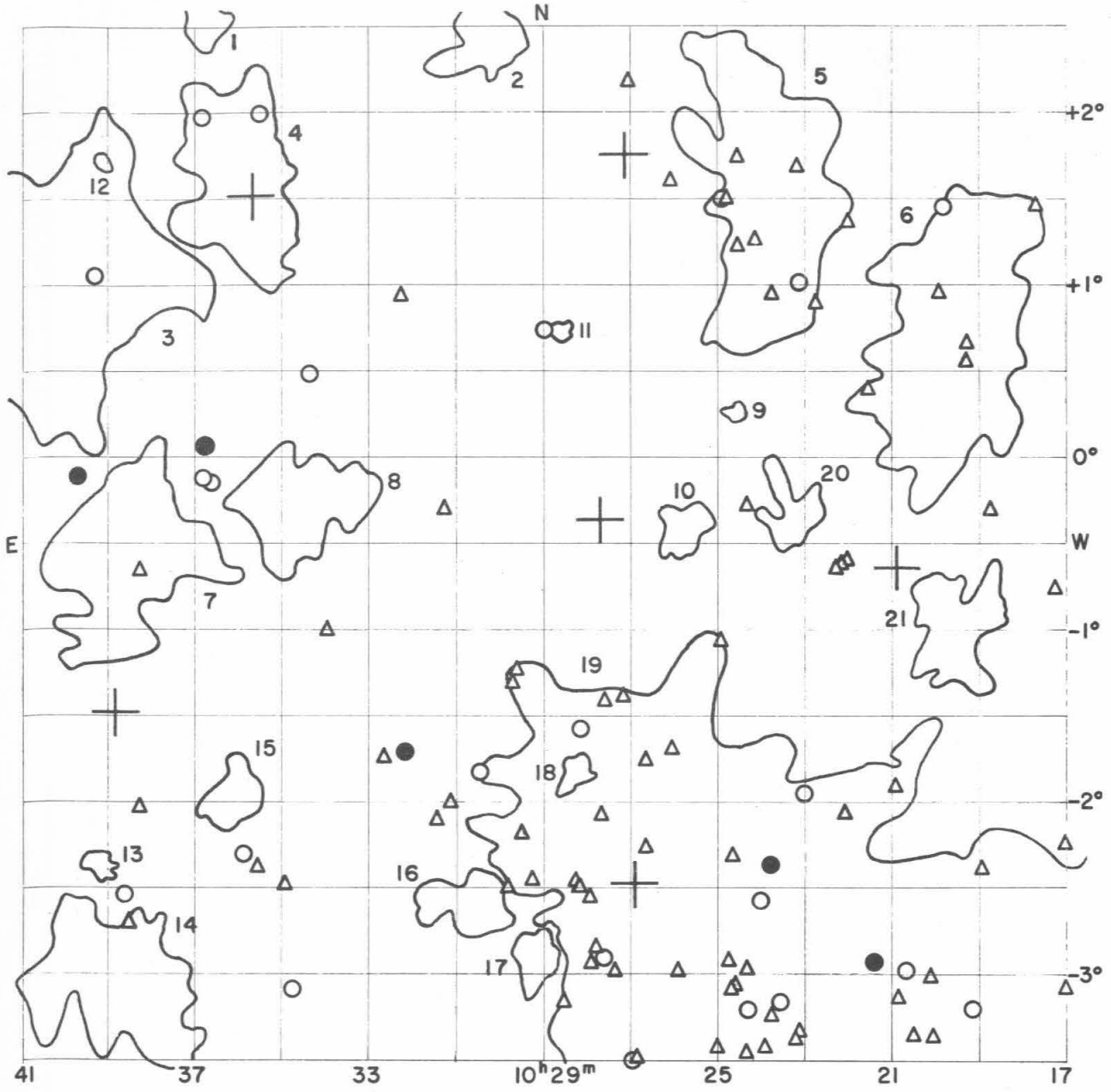
Average number of galaxies per cluster = 194.7

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 53.3 - 01 37		15.7		compact
9 54.0 + 01 40	3062	15.1		
9 54.0 + 02 06		15.7		compact
9 54.8 - 02 10		15.7		diffuse
9 56.0 - 02 35		15.4		
9 56.1 + 01 18		15.2		
9 56.2 - 02 50		15.7		
9 56.9 00 00		14.7		
9 57.2 - 02 56		15.6		
9 57.2 - 01 55		15.5		
9 57.3 - 02 38	3083	14.2		
9 57.6 - 02 44	3086	14.5		
9 57.6 + 02 24		14.6		
9 57.7 + 00 45		15.7		
9 57.8 + 00 57		15.1		
9 58.0 - 02 43	3090	14.2		
9 58.0 - 01 55		14.3		
9 58.2 - 02 42		15.5		extremely compact
9 58.3 - 02 46	3092	14.5		
9 58.3 + 01 30		15.4		diffuse spiral
9 58.4 - 02 43	3093	15.1		
9 58.6 + 00 28		15.0		
9 58.6 + 00 35		15.4		
9 59.1 - 02 45	3101	15.6		
9 59.5 - 02 01		15.7		
9 59.9 - 02 47		15.6		
10 00.0 + 00 33		15.2		
10 00.6 - 02 08		14.3		
10 00.9 - 01 18		15.6		double nebula
10 01.4 + 01 45		15.4		compact
10 01.9 - 02 10		14.6		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	'				
10	02.1	-	01 30		15.6		double nebula
10	02.1	+	02 08		15.6		compact
10	02.8	+	00 47		15.0		
10	03.0	+	00 19		15.5		resolved dwarf system Sextans C
10	03.2	+	02 29		15.5		double nebula
10	03.3	+	00 53	590*	14.2		double nebula
10	03.7	-	01 18		15.2		double system
10	03.8	-	01 34		15.6		
10	04.4	-	01 00		15.4		diffuse
10	05.0	-	02 17		15.5		
10	05.0	+	00 31		15.7		
10	05.3	-	03 14		15.3		
10	05.3	+	00 33		15.4		
10	05.4	-	02 15	592*	14.0		
10	05.4	+	00 31		15.5		very compact
10	05.8	-	02 17	593*	14.2		
10	05.9	+	00 37		15.0		double system
10	06.0	-	00 25	594*	14.7		
10	06.3	-	00 02		15.5		
10	07.3	+	01 28		15.3		
10	07.4	-	02 35		15.5		double system
10	07.5	-	02 13		15.5		very diffuse
10	07.9	+	02 29		15.2		
10	08.0	-	01 33		15.3		
10	08.1	-	02 11		15.1		
10	08.1	-	01 48		15.3		
10	08.3	-	00 24		15.7		
10	08.6	+	00 12		15.5		
10	08.6	+	01 28		15.2		
10	08.7	+	00 10		15.6		
10	08.8	+	00 13		15.4		
10	08.8	+	00 41		14.0		
10	09.2	-	02 30		15.1		
10	09.3	+	00 10		15.4		
10	09.5	-	01 54		15.0		compact
10	10.1	-	02 36		15.6		
10	10.2	-	03 15		15.7		
10	10.2	-	02 24		15.4		
10	10.3	-	02 27		15.0		
10	10.5	-	02 25		15.6		
10	10.8	-	02 17		15.3		
10	11.0	-	02 56		15.6		
10	11.1	-	03 08		15.7		
10	11.1	-	00 41		14.4		
10	11.2	-	02 35		15.7		diffuse
10	11.2	-	00 40		15.5		
10	11.4	+	00 47		15.0		
10	12.1	-	00 35		14.8		
10	12.2	-	01 57		15.7		diffuse
10	12.2	-	00 06		15.6		
10	12.3	-	01 08		15.3		
10	14.3	-	03 26		15.7		
10	14.4	-	02 15		15.7		
10	14.7	-	03 15	600*	13.3		
10	15.2	-	02 08		15.5		
10	15.2	+	02 03		15.7		
10	15.8	-	03 22		15.7		
10	16.0	-	03 20		15.6		
10	16.3	-	01 00		15.7		

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 16.4	+ 01 54		15.1		
10 16.6	- 01 00		15.6		
10 16.9	- 03 05		15.3		double system



FIELD No. 9

10^h29^m - 0°30'

Survey Plate No. 467

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14267	10 20 54.8	- 0 38 54	6.62
14403	10 26 56.3	- 2 28 57	5.24
14412	10 27 08.3	+ 1 44 57	6.85
14431	10 27 44.1	- 0 22 48	4.95
14623	10 35 43.1	+ 1 30 15	8.0
14694	10 38 51.5	- 1 28 42	6.40

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1019.5 + 0041.	open	169	6.5	Near	6
1019.6 - 0100	open	89	2.8	D	21
1020.4 - 0316	medium compact	1150	21.8	Near	19
1023.3 - 0020	open	75	1.9	VD	20
1023.6 + 0133	open	341	6.4	D	5
1024.6 + 0016	compact	56	0.5	ED	9
1025.8 - 0025	compact	111	1.6	VD	10
1028.3 - 0149	medium compact	52	1.1	ED	18
1028.6 + 0045	compact	61	0.6	ED	11
1029.2 - 0255	medium compact	83	1.4	VD	17
1030.2 + 0225	open	125	2.1	D	2
1030.8 - 0235	medium compact	119	2.2	VD	16
1034.5 - 0015	medium compact	134	3.5	D	8
1036.0 + 0140	medium compact	240	4.7	D	4
1036.1 - 0158	medium compact	76	1.9	VD	15
1036.7 + 0236	medium compact	84	1.9	D	1
1038.6 - 0033	medium compact	200	5.2	D	7
1038.8 - 0301	open	227	4.7	D	14
1039.1 + 0145	compact	55	0.5	ED	12
1039.2 - 0221	medium compact	56	0.8	VD	13
1039.7 + 0102	medium compact	335	7.3	MD	3

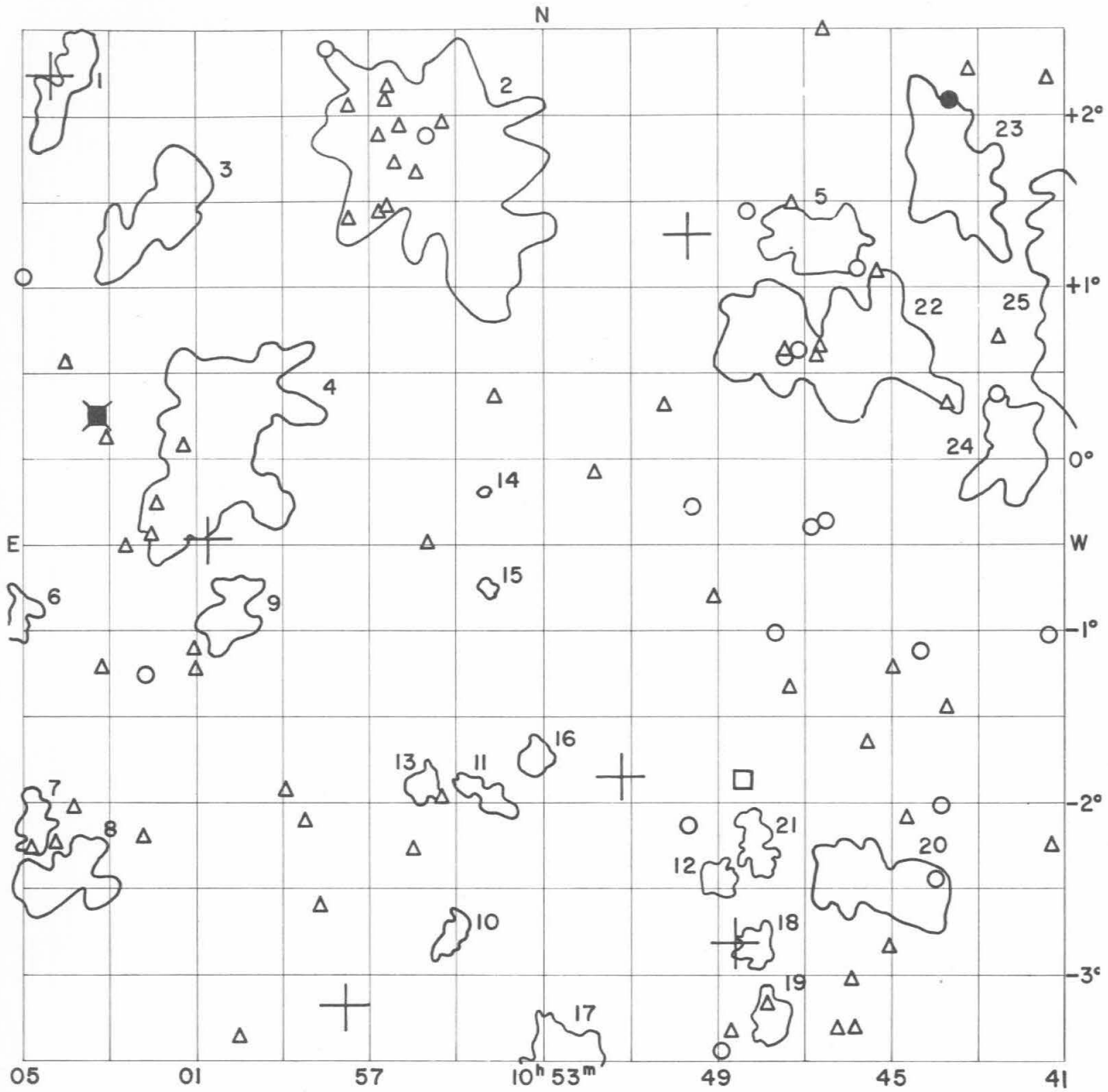
Average number of galaxies per cluster = 182.8

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 16.9 - 03 05		15.3		double system
10 17.0 - 02 14		15.7		
10 17.3 - 00 46		15.7		
10 17.7 + 01 28		15.7		extremely diffuse
10 18.8 - 00 18		15.3		
10 19.0 - 02 24		15.7		compact
10 19.2 - 03 12		14.8		very compact
10 19.3 + 00 33		15.1		
10 19.3 + 00 40		15.4		
10 19.8 + 01 27	605*	14.5		
10 19.9 + 00 56		15.2		
10 20.1 - 03 21		15.5		compact
10 20.2 - 03 01		15.6		
10 20.6 - 03 21		15.5		
10 20.8 - 03 00		14.6		
10 20.9 - 03 08		15.5		
10 20.9 - 01 55		15.6		
10 21.4 - 02 56		13.4		
10 21.6 + 00 24		15.2		
10 22.0 - 00 36		15.5		
10 22.0 + 01 21		15.3		
10 22.1 - 02 04		15.2		
10 22.1 - 00 37		15.6		diffuse
10 22.3 - 00 38		15.5		
10 22.8 + 00 54		15.3		
10 23.0 - 01 58	609*	14.4		
10 23.1 - 03 20		15.6		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 23.1	+ 01 00		15.0		
10 23.1	+ 01 41		15.4		compact
10 23.2	- 03 22		15.5		
10 23.6	- 03 09		15.0		
10 23.8	- 03 14		15.7		
10 23.8	- 02 22	3243	14.0		
10 23.8	+ 00 56		15.3		
10 24.0	- 03 25		15.7		compact
10 24.0	- 02 35		14.9		
10 24.1	+ 01 15		15.3		
10 24.4	- 03 27		15.6		
10 24.4	- 03 12	614*	14.8		
10 24.4	- 02 59		15.7		
10 24.4	- 00 17		15.5		compact
10 24.6	- 03 04		15.2		compact
10 24.6	+ 01 13		15.4		
10 24.6	+ 01 44		15.1		
10 24.7	- 03 05		15.6		
10 24.7	- 02 19		15.7		very diffuse
10 24.8	- 02 56		15.3		
10 24.8	+ 01 30		15.4		
10 24.9	+ 01 31		14.9		double system
10 25.0	- 03 26		15.7		
10 25.0	- 01 04		15.4		
10 25.9	- 02 59		15.5		
10 26.1	- 01 42		15.7		
10 26.1	+ 01 36		15.6		
10 26.7	- 02 15		15.4		compact
10 26.7	- 01 46		15.6		diffuse
10 26.9	- 03 29		15.5		
10 27.0	- 03 30		15.0		
10 27.1	+ 02 10		15.3		double nebula
10 27.2	- 01 23		15.7		
10 27.4	- 02 59		15.3		double system
10 27.6	- 02 55		14.4		
10 27.6	- 01 25		15.6		
10 27.7	- 02 05		15.6		diffuse
10 27.8	- 02 50		15.6		
10 28.0	- 02 57		15.7		compact
10 28.0	- 02 34		15.7		extremely diffuse
10 28.1	- 01 35		15.0		
10 28.3	- 02 30		15.3		
10 28.4	- 02 28		15.1		
10 28.6	- 03 10		15.7		
10 29.0	+ 00 43		14.3		
10 29.2	- 02 28		15.6		double system
10 29.5	- 02 11		15.1		
10 29.6	- 01 15		15.1		double system
10 29.7	- 01 18		15.4		
10 29.8	- 02 30		15.7		
10 30.5	- 01 50		14.9		
10 31.1	- 02 00		15.4		
10 31.3	- 00 18		15.6		
10 31.5	- 02 07		15.4		
10 32.2	- 01 43		13.8		
10 32.2	+ 00 55		15.6		very compact
10 32.7	- 01 45		15.7		
10 34.0	- 01 00		15.3		
10 34.4	+ 00 29		14.7		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 34.8	- 03 06	627*	14.1		
10 34.9	- 02 29		15.2		very compact
10 35.5	+ 02 00		15.0		
10 35.6	- 02 24		15.3		
10 35.9	- 02 19		14.7		
10 36.6	- 00 09	632*	14.8		
10 36.7	+ 00 03	3325	14.0		
10 36.8	- 00 08	633*	14.5		
10 36.8	+ 01 58		14.7		
10 38.3	- 02 03		15.4		
10 38.3	- 00 40		15.7		
10 38.6	- 02 42		15.6		diffuse
10 38.7	- 02 34		14.8		
10 39.3	+ 01 03		14.9		
10 39.7	- 00 07	3339=3340	13.6		



FIELD No. 10

10^h53^m - 0°30'

Survey Plate No. 1397

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14919	10 48 32.9	- 2 49 37	6.18
14940	10 49 39.5	+ 1 17 28	6.28
14975	10 51 10.9	- 1 51 47	5.72
15111	10 57 29.1	- 3 12 13	7.28
15186	11 00 41.1	- 0 28 53	6.13
15282	11 04 21.2	+ 2 13 38	5.66

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1039.7 + 0102	medium compact	335	7.3	MD	25
1042.1 + 0004	medium compact	151	2.5	D	24
1043.4 + 0141	medium compact	221	3.6	D	23
1045.3 - 0228	medium compact	190	3.3	VD	20
1046.3 + 0038	medium compact	127	4.6	Near	22
1046.7 + 0116	medium compact	112	2.4	D	5
1047.8 - 0315	medium compact	81	1.4	VD	19
1048.0 - 0250	medium compact	78	1.3	ED	18
1048.0 - 0215	compact	109	1.5	VD	21
1049.0 - 0226	compact	87	1.1	ED	12
1052.8 - 0345	medium compact	224	3.8	VD	17
1053.2 - 0144	compact	68	1.1	ED	16
1054.4 - 0157	medium compact	81	1.1	VD	11
1054.4 - 0044	compact	43	0.5	ED	15
1054.4 - 0010	compact	44	0.4	ED	14
1055.1 - 0245	compact	60	1.0	ED	10
1055.4 + 0142	medium compact	224	6.5	Near	2
1055.9 - 0154	compact	65	1.1	ED	13
1100.3 - 0053	medium compact	85	2.1	VD	9
1100.6 + 0005	open	137	5.1	MD	4
1102.0 + 0126	medium compact	147	2.7	MD	3
1104.0 + 0211	compact	155	2.3	D	1
1104.1 - 0226	medium compact	97	2.4	D	8
1104.8 - 0206	medium compact	64	1.5	VD	7
1105.1 - 0055	medium compact	64	1.2	ED	6

Average number of galaxies per cluster = 122.0

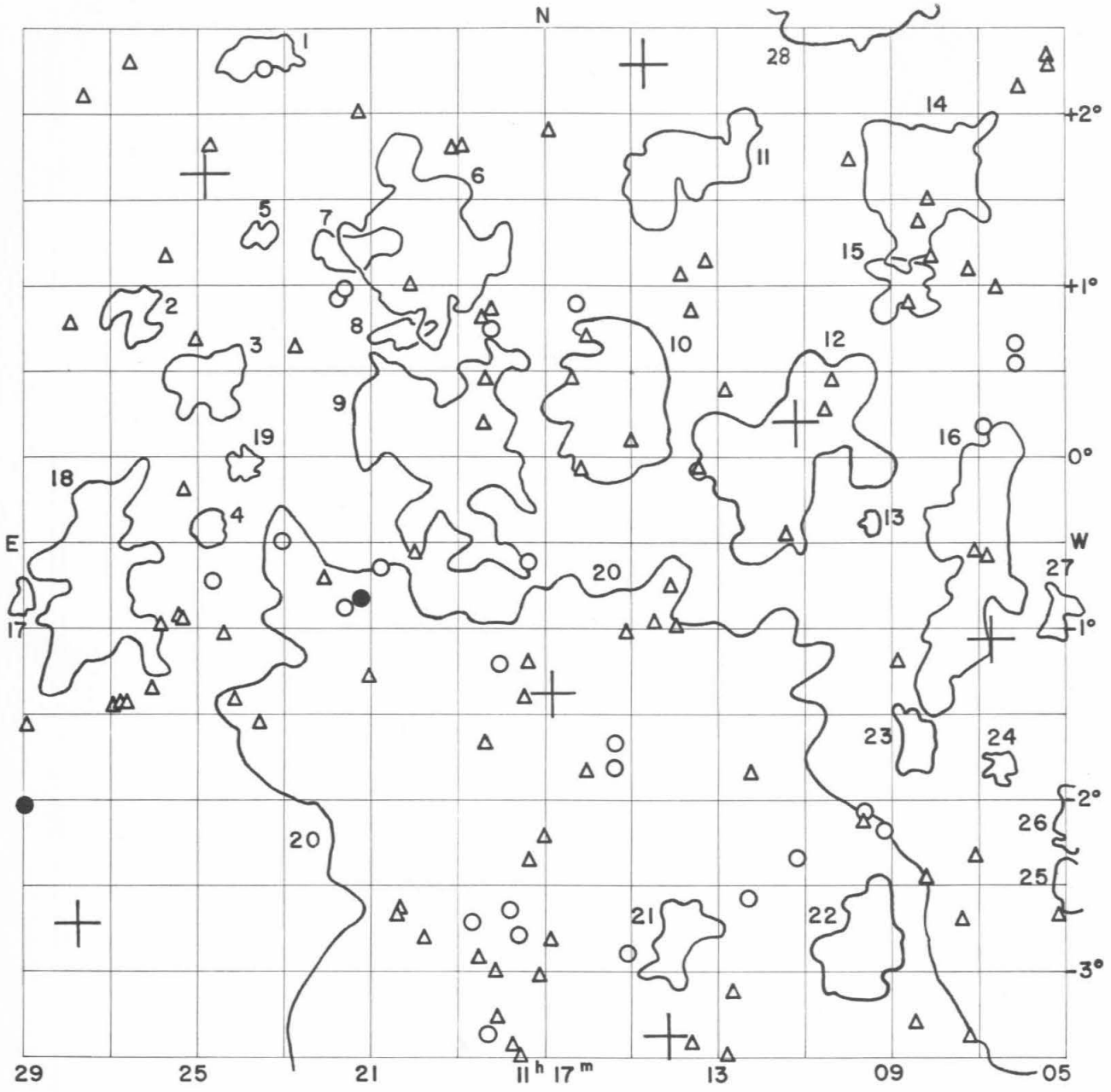
GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 41.3	- 02 15		15.5		very diffuse spiral
10 41.3	+ 02 13		15.5		extremely diffuse spiral
10 41.4	- 01 01		14.1		
10 42.5	+ 00 43		15.1		
10 42.6	+ 00 23		15.0		
10 43.2	+ 02 17		15.4		
10 43.7	+ 00 19		15.5		
10 43.7	+ 02 05	3365	13.6		
10 43.8	- 01 27		15.6		
10 43.9	- 02 01		14.8		double nebula
10 44.0	- 02 27		14.8		
10 44.4	- 01 07		14.4		
10 44.7	- 02 05		15.5		
10 45.0	- 01 13		15.2		
10 45.1	- 02 50		15.7		
10 45.4	+ 01 05		15.1		
10 45.6	- 01 39		15.4		
10 45.8	- 03 18		15.6		
10 45.8	+ 01 07		14.3		
10 45.9	- 03 02		15.7		
10 46.3	- 03 19		15.5		
10 46.5	- 00 22		14.7		
10 46.6	+ 02 30		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 46.7 + 00 39		15.7		
10 46.8 - 00 24		14.9		
10 46.8 + 00 36		15.2		
10 47.1 + 00 38		14.9		
10 47.3 + 01 29		15.5		
10 47.4 - 01 20		15.7		diffuse
10 47.5 + 00 36		14.8		
10 47.5 + 00 38		15.6		
10 47.7 - 01 00		14.7		
10 47.9 - 03 10		15.7		
10 48.3 + 01 27	649*	14.9		double nebula
10 48.5 - 01 52	651*	12.9		
10 48.8 - 03 20		15.1		
10 49.0 - 03 27		14.5		
10 49.1 - 00 48		15.6		compact
10 49.6 - 00 17	653*	14.2		
10 49.7 - 02 07		14.8		compact
10 50.3 + 00 19		15.4		
10 51.8 - 00 05	655*	15.3		
10 54.1 + 00 21		15.7		compact
10 55.3 - 01 59		15.7		
10 55.3 + 01 58		15.4		
10 55.6 - 00 30		15.2		
10 55.7 + 01 54		14.9		triple system
10 55.9 + 01 39	660*	15.7		
10 56.0 - 02 17		15.7		
10 56.3 + 01 56	661*	15.7		
10 56.5 + 01 43		15.1		
10 56.6 + 01 28		15.1		
10 56.6 + 02 10		15.2		triple system
10 56.7 + 02 05		15.6		
10 56.8 + 01 27		15.4		very compact
10 56.8 + 01 52	662*	15.6		
10 57.5 + 01 24		15.7		
10 57.5 + 02 03		15.6		diffuse
10 58.0 + 02 24		15.0		
10 58.1 - 02 37		15.4		
10 58.5 - 02 07		15.7		
10 58.9 - 01 56		15.3		
11 00.0 - 03 22		15.4		diffuse
11 01.0 - 01 14		15.4		compact
11 01.1 - 01 06		15.1		
11 01.3 + 00 04		15.6		
11 01.9 - 00 16		15.7		
11 02.0 - 00 27		15.6		compact
11 02.2 - 02 13		15.7		
11 02.2 - 01 15		14.8		
11 02.7 - 00 31		15.1		
11 03.1 + 00 07		15.7		
11 03.2 - 01 13		15.6		
11 03.3 + 00 15	3521	10.1	+ 789	m_H = 10.3 Sc
11 03.8 - 02 02		15.7		
11 04.0 + 00 34		15.6		
11 04.3 - 02 14		15.7		diffuse
11 04.8 - 02 16		15.6		compact
11 05.0 + 01 03	671*	14.8		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3521	9.9	Sbc	9.76	Sb	9.6	Sb	10.06	Sb



FIELD No. 11

11^h17^m - 0°30'

Survey Plate No. 1400

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15336	11 06 40.4	- 1 03 43	6.75
15430	11 11 12.0	+ 0 12 10	5.40
15511	11 14 07.1	- 3 22 41	4.58
15520	11 14 43.0	+ 2 17 09	5.44
15566	11 16 49.9	- 1 22 45	7.0
15717	11 24 48.6	+ 1 39 02	7.7
15779	11 27 45.5	- 2 43 39	5.07

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1104.1 - 0226	medium compact	97	2.4	D	25
1104.8 - 0206	medium compact	64	1.5	VD	26
1105.1 - 0055	medium compact	64	1.2	ED	27
1106.4 - 0149	medium compact	49	1.0	ED	24
1107.0 - 0037	open	265	4.2	D	16
1108.3 + 0137	medium compact	210	3.8	D	14
1108.4 - 0139	open	90	1.6	VD	23
1108.6 + 0100	medium compact	110	1.9	VD	15
1109.4 - 0023	compact	49	0.6	ED	13
1109.7 - 0253	medium compact	123	3.0	D	22
1110.0 + 0243	medium compact	209	4.3	MD	28
1111.2 + 0002	open	183	4.9	MD	12
1113.8 + 0144	medium compact	219	3.3	VD	11
1113.9 - 0250	open	84	2.1	VD	21
1115.4 + 0019	medium compact	163	4.3	D	10
1116.0 - 0410	open	1763	28.7	Near	20
1119.1 + 0005	open	235	5.0	MD	9
1119.8 + 0115	medium compact	183	4.6	MD	6
1120.2 + 0045	compact	80	1.5	VD	8
1121.4 + 0112	compact	82	1.8	VD	7
1123.5 + 0221	open	98	1.7	D	1
1123.6 + 0118	medium compact	53	0.8	ED	5
1124.0 - 0003	compact	59	1.1	ED	19
1124.8 - 0025	medium compact	58	1.0	ED	4
1124.9 + 0026	compact	97	2.3	VD	3
1126.5 + 0050	medium compact	79	1.6	VD	2
1127.4 - 0045	open	173	4.5	MD	18
1129.0 - 0049	compact	52	0.8	ED	17

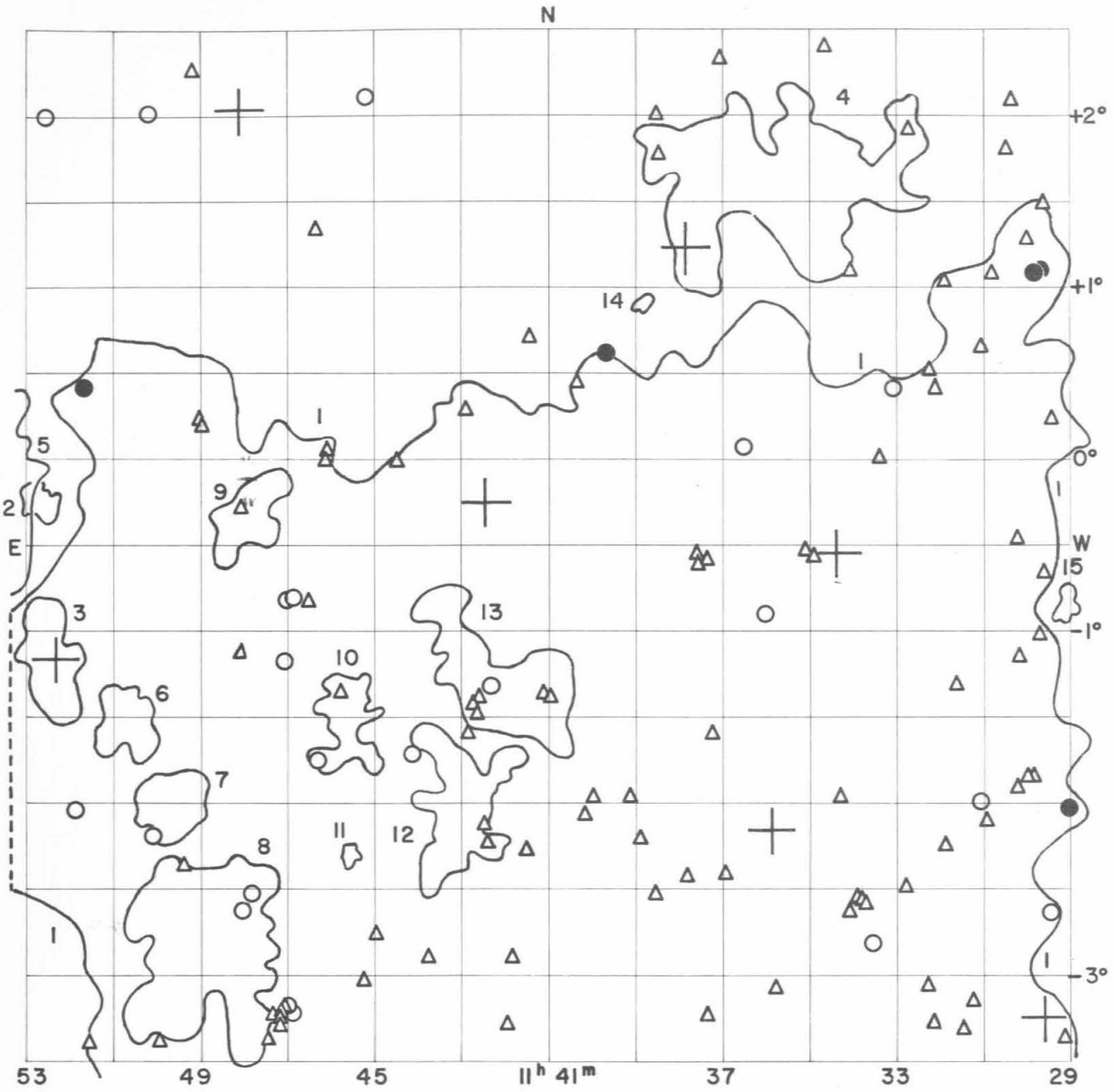
Average number of galaxies per cluster = 178.3

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
11 05.1 - 02 40		15.7		
11 05.4 + 02 17		15.3		diffuse
11 05.4 + 02 19		15.7		
11 06.1 + 00 33		14.8		double system
11 06.1 + 00 40		15.0		
11 06.1 + 02 09		15.3		double system
11 06.6 + 00 59		15.6		
11 06.8 - 00 35		15.3		
11 06.8 + 00 10	678*	14.5		
11 07.0 - 02 19		15.5		
11 07.1 - 00 33		15.6		
11 07.2 - 03 23		15.4		double system
11 07.2 + 01 05		15.6		
11 07.4 - 02 42		15.6		multiple system
11 08.0 + 01 10		15.7		
11 08.2 - 02 28		15.5		
11 08.2 + 01 30		15.4		
11 08.4 + 01 22		15.5		
11 08.5 - 03 18		15.5		
11 08.6 + 00 54		15.7		
11 08.9 - 01 11		15.7		

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
11 09.2	- 02 10		14.7		
11 09.6	- 02 04		15.0		
11 09.7	- 02 07		15.6		diffuse
11 10.0	+ 01 43		15.5		compact
11 10.4	+ 00 26		15.6		diffuse
11 10.5	+ 00 16		15.3		compact
11 11.1	- 02 20		14.9		
11 11.5	- 00 28		15.3		double system
11 12.2	- 01 51		15.1		
11 12.3	- 02 34		14.9		
11 12.7	- 03 07		15.7		
11 12.8	- 03 29		15.2		
11 12.8	+ 00 23		15.2		double system
11 13.2	+ 01 08		15.4		double nebula
11 13.4	- 00 04		15.5		
11 13.6	- 03 25		15.6		
11 13.6	+ 00 51		15.5		diffuse
11 13.8	+ 01 03		15.7		
11 14.0	- 01 00		15.7		
11 14.1	- 00 45		15.7		
11 14.5	- 00 58		15.6		
11 15.0	+ 00 05		15.6		
11 15.1	- 02 54		14.8		
11 15.1	- 01 02		15.1		
11 15.4	- 01 49		14.3		
11 15.4	- 01 40	680*	14.6		
11 16.0	- 01 50		15.4		compact
11 16.0	+ 00 42		15.2		extremely compact
11 16.2	- 00 05		15.4		
11 16.3	+ 00 54		14.9		
11 16.4	+ 00 27		15.4		
11 16.8	- 02 49		15.5		double system
11 16.9	+ 01 54		15.7		compact
11 17.0	- 02 13		15.6		extremely diffuse
11 17.2	- 03 02		15.7		
11 17.4	- 02 21		15.6		
11 17.4	- 01 12		15.6		
11 17.4	- 00 36		14.1		
11 17.5	- 01 25		15.3		
11 17.6	- 03 30		15.6		
11 17.6	- 02 46		14.4		
11 17.8	- 03 26		15.7		extremely diffuse
11 17.8	- 02 38		14.9		
11 18.1	- 03 16		15.5		
11 18.1	- 01 13		14.7		double system
11 18.2	- 03 00		15.5		
11 18.2	+ 00 51		15.4		
11 18.3	- 03 22		14.8		
11 18.3	+ 00 44		14.3		triple system
11 18.4	- 01 41		15.6		
11 18.4	+ 00 11		15.4		double system
11 18.4	+ 00 27		15.2		
11 18.5	- 02 55		15.3		
11 18.5	+ 00 48		15.1		
11 18.7	- 02 42		15.0		
11 18.9	+ 01 48		15.6		
11 19.1	+ 01 47		15.6		
11 19.8	- 02 48		15.7		
11 20.0	- 00 34		15.6		

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
11 20.1	+ 01 00		15.7		
11 20.3	- 02 38		15.3		
11 20.4	- 02 40		15.3		
11 20.8	- 00 39		14.4		
11 21.0	- 01 17		15.3		
11 21.2	- 00 50	3662	13.8		
11 21.3	+ 02 00		15.3		diffuse
11 21.6	- 00 53		15.0		
11 21.6	+ 00 58		14.8		
11 21.8	+ 00 55		14.7		
11 22.0	- 00 43		15.5		
11 22.7	+ 00 37		15.2		
11 23.0	- 00 30		14.2		
11 23.5	+ 02 15		14.7		
11 23.6	- 01 34		15.2		
11 24.1	- 01 25		15.1		very compact
11 24.4	- 01 03		15.3		diffuse
11 24.7	- 00 43		15.0		
11 24.7	+ 01 48		15.7		diffuse
11 25.0	+ 00 40		15.3		
11 25.3	- 00 57		15.3		
11 25.3	- 00 11		15.6		
11 25.4	- 00 56		15.4		
11 25.7	+ 01 09		15.2		
11 25.8	- 00 59		15.7		
11 26.0	- 01 20	697*	15.3		
11 26.6	- 01 26		15.6		
11 26.6	+ 02 17		15.6		diffuse
11 26.7	- 01 26		15.4		
11 26.9	- 01 28		15.5		
11 27.6	+ 02 06		15.6		diffuse
11 27.9	+ 00 46		15.7		compact
11 28.9	- 01 34		15.5		
11 29.0	- 02 01		14.0		



FIELD No. 12

11^h41^m - 0°30'

Survey Plate No. 471

GC STARS

Nos.	R.A. h m s	Decl. ° ' "	m_p
15825	11 29 33.4	- 3 15 19	8.5
15927	11 34 23.3	- 0 32 51	4.47
15967	11 35 50.7	- 2 09 33	6.25
16023	11 37 50.2	+ 1 13 46	6.83
16114	11 42 27.7	- 0 14 20	7.35
16215	11 48 05.4	+ 2 02 47	3.80
16290	11 52 17.8	- 1 10 09	7.9

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1129.0 - 0049	compact	52	0.8	ED	15
1135.5 + 0138	open	237	5.8	D	4
1138.8 + 0055	compact	48	0.5	ED	14
1141.7 - 0158	open	2320	33.2	Near	1
1142.0 - 0118	compact	211	3.6	D	13
1143.0 - 0202	compact	254	3.4	VD	12
1145.5 - 0218	compact	57	0.6	ED	11
1145.6 - 0132	medium compact	113	2.3	D	10
1148.0 - 0020	open	114	2.3	VD	9
1148.9 - 0249	medium compact	353	5.2	D	8
1149.7 - 0200	medium compact	82	2.2	VD	7
1150.8 - 0130	medium compact	87	2.1	D	6
1152.5 - 0110	medium compact	96	2.6	D	3
1152.8 - 0015	medium compact	72	1.1	VD	2
1154.6 - 0008	medium compact	416	6.3	MD	5

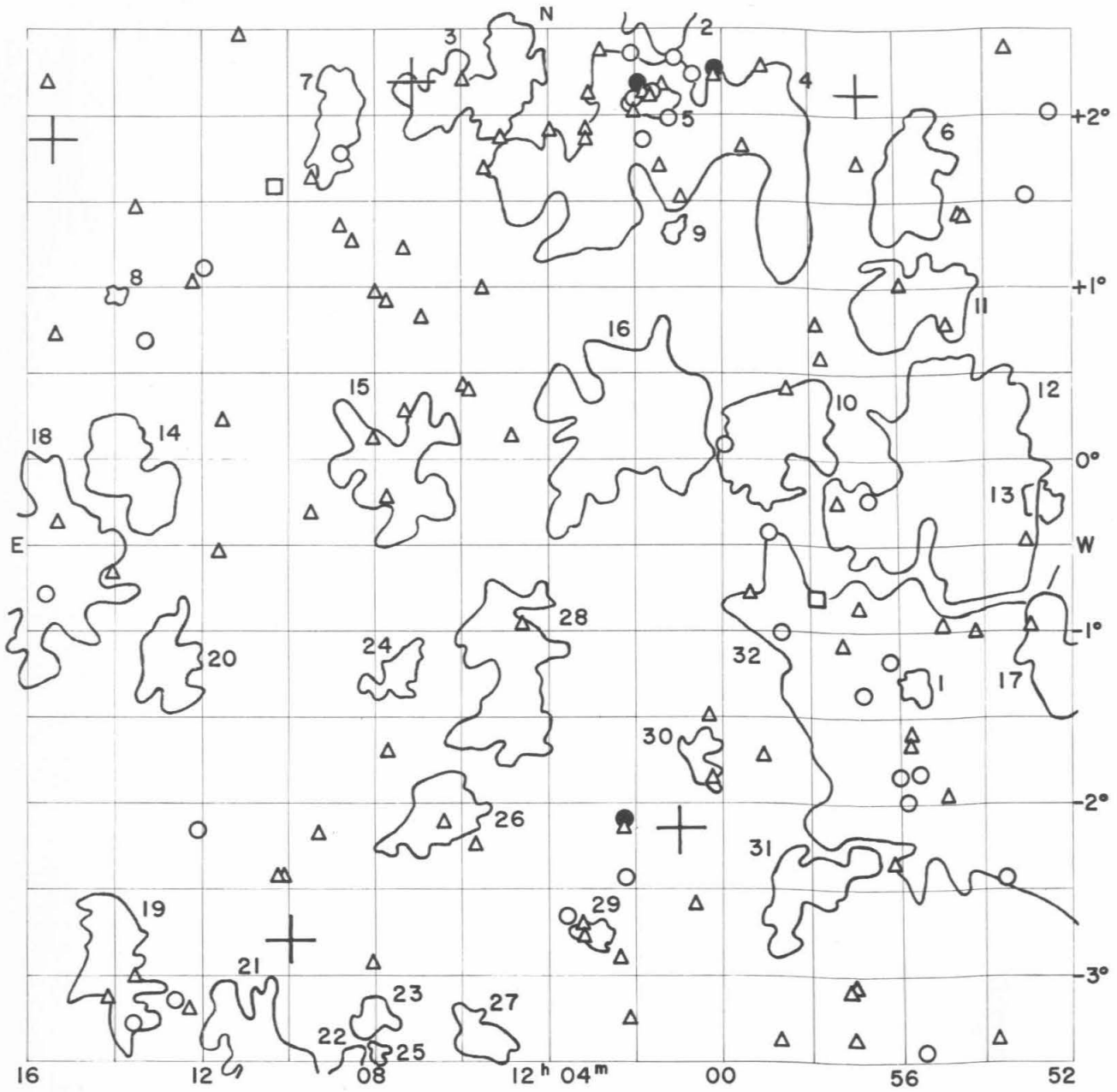
Average number of galaxies per cluster = 300.8

GALAXIES

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 29.0	- 02 01		14.0		
11 29.1	- 03 21		15.7		diffuse
11 29.5	- 02 38		14.7		
11 29.5	+ 00 14		15.6		diffuse
11 29.6	- 00 39		15.7		compact
11 29.6	+ 01 30		15.6		
11 29.7	- 01 01		15.4		
11 29.7	+ 01 06	3719	13.8		
11 29.8	- 01 50		15.7		double nebula
11 29.8	+ 01 05	3720	13.7		m_H = 13.0
11 30.0	- 01 51		15.7		
11 30.0	+ 01 17		15.6		
11 30.2	- 01 55		15.5		compact
11 30.2	- 01 09		15.3		
11 30.2	- 00 27		15.7		diffuse
11 30.4	+ 02 06		15.3		diffuse
11 30.5	+ 01 49		15.6		
11 30.8	+ 01 05		15.5		
11 30.9	- 02 06		15.5		diffuse
11 31.0	- 02 00		14.9		
11 31.0	+ 00 40		15.5		
11 31.2	- 03 09		15.6		
11 31.5	- 03 19		15.4		triple nebula
11 31.6	- 01 18		15.4		
11 31.8	- 02 15		15.2		
11 31.9	+ 01 02		15.7		double system
11 32.1	+ 00 25		15.7		very diffuse
11 32.2	- 03 17		15.7		
11 32.2	+ 00 31		15.4		compact
11 32.3	- 03 03		15.6		
11 32.7	+ 01 55		15.3		
11 32.8	- 02 29		15.6		diffuse
11 33.1	+ 00 25		14.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
11 33.4	00 00		15.7		double nebula
11 33.6	- 02 49		15.0		
11 33.7	- 02 35		15.3		
11 33.8	- 02 34		15.2		
11 33.9	- 02 32		15.5		
11 34.0	- 02 38		15.6		compact
11 34.0	+ 01 06		15.1		double nebula
11 34.3	- 01 58		15.2		diffuse
11 34.6	+ 02 25		15.7		very diffuse
11 34.9	- 00 34		15.7		
11 35.1	- 00 32		15.6		
11 35.8	- 03 04		15.6		
11 36.0	- 00 55		14.5		
11 36.5	+ 00 04	716*	14.9		
11 36.9	- 02 25		15.4		
11 37.0	+ 02 20		15.7		very diffuse
11 37.2	- 01 36		15.6		
11 37.4	- 03 14		15.7		compact
11 37.4	- 00 36		15.5		
11 37.6	- 00 37		15.1		
11 37.6	- 00 34		15.2		
11 37.8	- 02 26		15.5		
11 38.5	+ 01 46		15.5		
11 38.5	+ 02 00		15.1		
11 38.6	- 02 32		15.4		
11 38.9	- 02 13		15.7		double system
11 39.1	- 01 58		15.5		
11 39.7	+ 00 37		13.7		
11 40.0	- 01 59		15.7		compact
11 40.2	- 02 05		15.6		
11 40.4	+ 00 26		15.5		
11 40.9	- 01 23	725*	15.1		
11 41.1	- 01 21		15.6		
11 41.4	+ 00 42		15.6		
11 41.5	- 02 16		15.7		extremely diffuse
11 41.8	- 02 54		15.7		
11 42.0	- 03 17		15.7		
11 42.3	- 01 19	728*	14.7		
11 42.4	- 02 13		15.6		triple system
11 42.4	- 02 07		15.6		
11 42.5	- 01 23		15.5		
11 42.6	- 01 29		15.4		
11 42.7	- 01 25		15.3		
11 42.8	- 01 36		15.5		
11 42.9	+ 00 17		15.3		
11 43.7	- 02 54		15.5		
11 44.1	- 01 43		15.0		
11 44.5	- 00 01		15.1		
11 44.9	- 02 45		15.6		
11 45.2	- 03 02		15.7		
11 45.2	+ 02 06		15.0		
11 45.8	- 01 21		15.6		
11 46.1	+ 00 02		15.7		
11 46.2	- 00 01		15.6		double system
11 46.3	- 01 45		14.7		
11 46.3	+ 01 20		15.2		
11 46.5	- 00 50		15.3		
11 46.8	- 03 14		15.0		
11 46.8	- 00 48		14.8		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	'				
11	46.9	- 03	11		14.9		
11	46.9	- 00	48	3907	14.4		
11	47.0	- 03	12		15.2		
11	47.0	- 01	10		14.8		
11	47.1	- 03	17		15.3		
11	47.1	- 03	15		15.4		compact
11	47.1	- 03	14		15.5		diffuse
11	47.3	- 03	14		15.1		
11	47.4	- 03	22		15.2		compact
11	47.8	- 02	32		15.0		
11	48.0	- 02	38		14.2		
11	48.0	- 01	08		15.5		
11	48.0	- 00	17		15.4		
11	49.0	+ 00	11		15.4		compact
11	49.0	+ 00	13		15.6		
11	49.2	+ 02	16		15.5		
11	49.4	- 02	22		15.4		
11	50.0	- 03	23	2969*	15.3		very diffuse
11	50.1	- 02	11		14.1		
11	50.2	+ 02	01		14.4		
11	51.6	- 03	24		15.6		
11	51.7	+ 00	25	745*	13.7		
11	51.9	- 02	02		14.4		
11	52.6	+ 02	00		14.9		



FIELD No. 13

12^h04^m - 0°30'

Survey Plate No. 1401

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16394	11 56 50.3	+ 2 06 20	7.03
16469	12 00 58.1	- 2 10 07	7.6
16608	12 07 07.5	+ 2 10 43	6.13
16674	12 09 57.0	- 2 48 45	7.36
16776	12 15 24.0	+ 1 51 10	7.9

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1141.7 - 0158	open	2320	33.2	Near	32
1152.5 - 0110	open	96	2.6	D	17
1152.8 - 0015	medium compact	72	1.1	VD	13
1154.6 - 0008	medium compact	416	6.3	MD	12
1155.6 - 0119	medium compact	65	0.9	ED	1
1155.7 + 0137	open	123	2.8	D	6
1155.8 + 0056	open	183	2.8	D	11
1158.2 - 0230	compact	191	2.4	VD	31
1158.9 + 0006	compact	327	3.6	VD	10
1200.6 - 0145	medium compact	74	1.4	VD	30
1201.1 + 0119	medium compact	55	0.7	ED	9
1201.3 + 0151	medium compact	220	6.7	Near	4
1201.5 + 0205	compact	81	1.1	VD	5
1201.5 + 0236	medium compact	101	2.3	MD	2
1202.1 + 0015	open	203	4.9	D	16
1203.0 - 0246	compact	81	1.0	ED	29
1204.8 - 0115	open	186	3.7	VD	28
1205.5 + 0208	open	236	3.1	VD	3
1205.6 - 0322	medium compact	108	1.5	VD	27
1206.6 - 0203	compact	145	2.5	VD	26
1207.5 - 0114	medium compact	86	1.5	ED	24
1207.7 - 0004	medium compact	177	3.6	D	15
1208.0 - 0327	compact	63	0.5	ED	25
1208.1 - 0315	medium compact	72	1.2	ED	23
1208.6 - 0337	compact	79	1.4	VD	22
1208.9 + 0158	open	109	2.0	VD	7
1210.9 - 0329	open	189	3.4	D	21
1212.8 - 0110	medium compact	98	2.2	VD	20
1213.8 - 0005	medium compact	167	2.5	VD	14
1214.0 + 0057	compact	53	0.5	ED	8
1214.1 - 0258	medium compact	151	2.7	D	19
1215.9 - 0036	medium compact	272	5.6	MD	18

Average number of galaxies per cluster = 212.5

GALAXIES

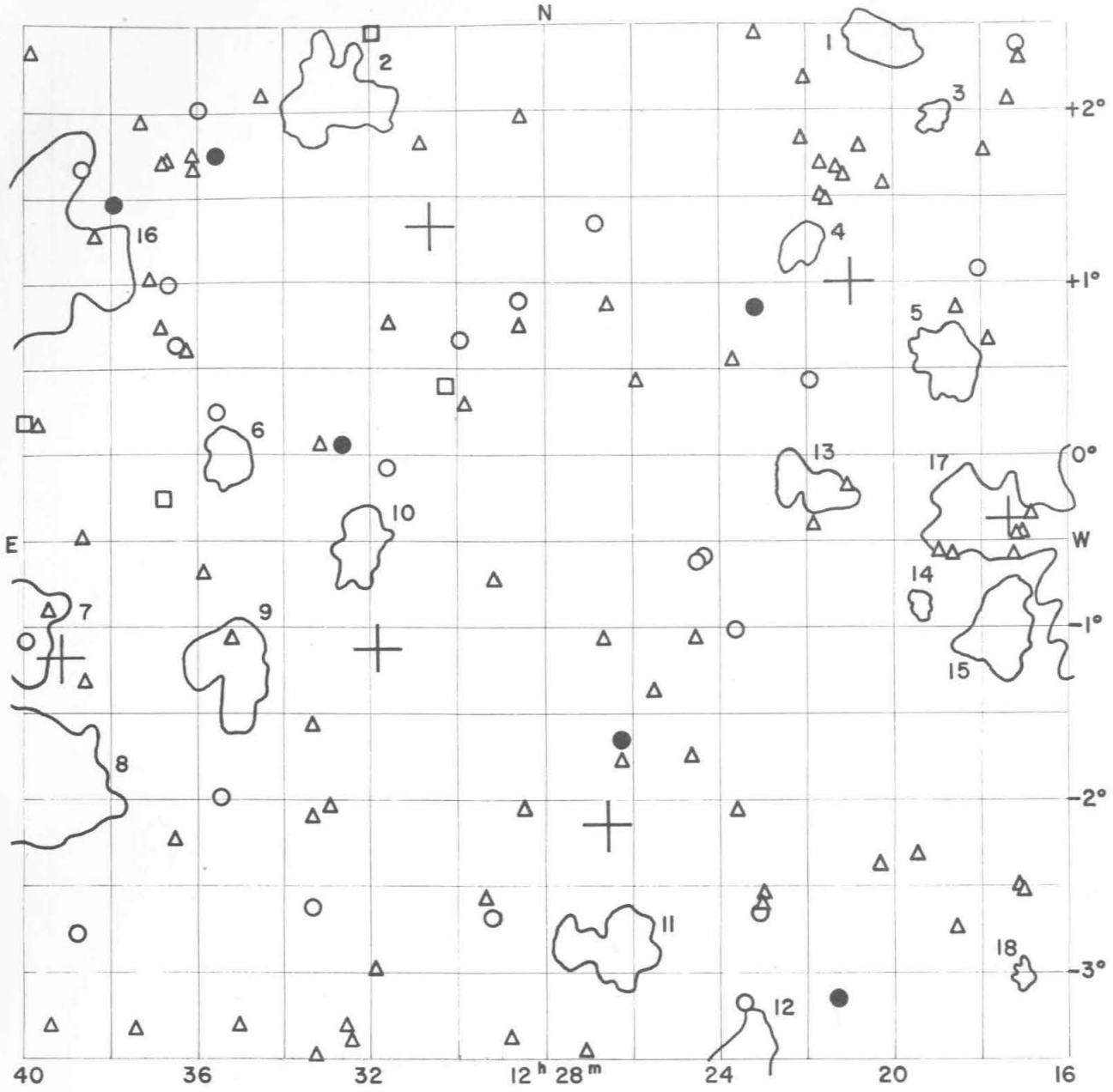
Position α 1950 δ (h m, ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
11 52.6 + 02 00		14.9		
11 53.0 - 00 58		15.3		
11 53.1 - 00 28		15.7		
11 53.1 + 01 32		14.1		diffuse spiral
11 53.5 - 02 26	3979	14.2		triple system
11 53.6 + 02 24		15.7		diffuse
11 53.7 - 03 22		15.6		
11 54.2 - 01 00		15.4		
11 54.4 + 01 25		15.5		
11 54.5 + 01 26		15.2		
11 54.8 + 00 47		15.6		
11 54.9 - 01 57		15.7		
11 55.0 - 00 58		15.2		
11 55.5 - 03 27		14.9		
11 55.6 - 01 49	4006=2983*	14.2		
11 55.7 - 01 36		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
11 55.8	- 01 40		15.5		
11 55.9	- 01 59		14.5		
11 55.9	+ 01 00		15.4		triple system
11 56.0	- 01 50		14.7		
11 56.2	- 02 21		15.3		
11 56.2	- 01 10		14.6		double nebula
11 56.6	- 00 13	753*	14.3		
11 56.7	- 03 23		15.1		compact
11 56.8	- 01 21	754*	14.5		
11 56.8	+ 01 43		15.6		diffuse
11 56.9	- 00 51		15.6		
11 57.0	- 03 05		15.6		
11 57.1	- 03 23		15.2		
11 57.2	- 03 06		15.7		
11 57.3	- 01 05		15.5		
11 57.4	- 00 15		15.5		diffuse
11 57.8	- 00 48	4030	12.4	+ 1509	m_H = 11.2 Sb
11 57.8	+ 00 35		15.3		
11 57.9	+ 00 47		15.3		
11 58.5	+ 00 24		15.3		
11 58.6	- 01 00		14.4		triple nebula
11 58.9	- 00 25		15.0		
11 59.0	- 01 44		15.6		
11 59.1	+ 02 17		15.7		compact
11 59.4	- 00 46		15.3		double system
11 59.6	+ 01 49		15.7		compact
11 59.9	+ 00 05	4044	14.6		
12 00.2	- 01 52		15.7		diffuse
12 00.2	+ 02 14		15.2		
12 00.2	+ 02 16	4045	13.5		m_H = 12.8
12 00.3	- 01 30		15.4		triple system
12 00.6	- 02 35		15.5		
12 00.7	+ 02 14		14.7		
12 01.0	+ 01 31		15.7		compact
12 01.1	+ 02 20		14.8		
12 01.2	+ 01 59		15.0		
12 01.4	+ 02 11		15.4		
12 01.5	+ 01 41		15.4		
12 01.5	+ 02 08	4063	15.0		
12 01.6	+ 02 07		15.5		
12 01.8	+ 01 51		14.6		
12 01.8	+ 02 08		15.3		
12 01.9	+ 02 11	4073	13.8		m_H = 13.2 double system
12 02.0	+ 02 01		15.7		
12 02.0	+ 02 05	2989*	14.8		
12 02.1	- 03 15		15.5		
12 02.1	+ 02 04	4077	14.5		
12 02.1	+ 02 21	4075	14.7		
12 02.2	- 02 26		14.9		
12 02.3	- 02 09		15.4		
12 02.3	- 02 05	4079	14.0		
12 02.4	- 02 55		15.3		
12 02.8	+ 02 22		15.6		
12 03.1	+ 02 06		15.2		
12 03.2	- 02 47		15.7		
12 03.2	+ 01 52		15.1		
12 03.2	+ 01 53		15.3		
12 03.3	- 02 42		15.7		
12 03.6	- 02 39		15.0		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 04.0 + 01 54		15.4		
12 04.6 - 00 58		15.6		
12 04.8 + 00 08		15.5		
12 05.1 + 01 51		15.3		
12 05.4 + 01 40		15.5		diffuse
12 05.5 + 00 59		15.5		
12 05.7 - 02 15		15.5		
12 05.8 + 00 23		15.2		extremely compact
12 06.0 + 00 25		15.1		
12 06.0 + 02 11		15.7		
12 06.4 - 02 07		15.5		
12 06.9 + 00 49		15.4		
12 07.4 + 00 16		15.6		
12 07.4 + 01 13		15.4		
12 07.7 - 01 42		15.6		compact
12 07.7 + 00 55		15.6		
12 07.8 - 00 14		15.3		
12 08.0 - 02 57		15.6		double system
12 08.0 + 00 06		15.5		
12 08.0 + 00 58		15.5		
12 08.5 + 01 15		15.1		very compact
12 08.8 + 01 20		15.6		
12 08.8 + 01 46		14.9		
12 09.3 - 02 11		15.5		
12 09.4 + 01 38		15.4		
12 09.5 - 00 19		15.6		
12 10.0 - 02 27		15.5		compact
12 10.2 - 02 27		15.6		
12 10.3 + 01 35	4179	12.8	+ 1279	m_H = 11.8 E
12 11.1 + 02 28		15.6		diffuse
12 11.5 + 00 12		15.6		
12 11.7 - 00 33		15.5		diffuse
12 12.0 + 01 06		15.0		
12 12.1 - 02 10		14.6		
12 12.2 + 01 01		15.3		
12 12.3 - 03 12		15.4		
12 12.6 - 03 09		14.8		
12 13.3 + 00 40		14.8		
12 13.6 - 03 17		14.8		
12 13.6 - 03 01		15.7		
12 13.6 + 01 27		15.1		
12 14.0 - 00 40		15.5		
12 14.2 - 03 09		15.7		diffuse
12 15.3 - 00 22		15.2		
12 15.4 + 00 43		15.4		diffuse irregular dwarf system
12 15.6 - 00 47		14.7		
12 15.6 + 02 10		15.7		diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4030	11.2	Sb	-	-	-	Sc	-	-
4045	12.3	-	-	-	-	-	-	-
4179	12.0	-	11.94	E7	11.7	E7	-	-



FIELD No. 14

12^h28^m - 0°30'

Survey Plate No. 1405

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16813	12 17 20.8	- 0 23 21	4.00
16891	12 20 56.7	+ 0 59 30	8.5
17014	12 26 35.7	- 2 09 11	7.6
17106	12 30 35.2	+ 1 19 13	8.5
17136	12 31 49.3	- 1 07 57	7.14
17270	12 39 07.5	- 1 10 32	2.91

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1215.9 - 0036	medium compact	272	5.6	MD	17
1217.1 - 0301	compact	67	0.7	ED	18
1217.6 - 0101	open	120	2.4	VD	15
1218.8 + 0033	open	127	2.1	D	5
1219.0 + 0158	compact	67	0.9	ED	3
1219.4 - 0053	compact	53	0.7	ED	14
1220.2 + 0225	compact	180	2.2	VD	1
1221.9 - 0012	open	104	2.0	VD	13
1222.0 + 0114	compact	94	1.3	VD	4
1223.7 - 0338	open	115	2.7	D	12
1226.6 - 0254	open	99	2.4	D	11
1232.3 - 0033	medium compact	82	1.9	VD	10
1232.8 + 0206	open	142	3.0	MD	2
1235.2 - 0114	medium compact	118	2.5	MD	9
1235.4 + 0000	compact	104	1.6	VD	6
1240.2 - 0058	open	116	2.8	D	7
1241.3 + 0125	open	447	8.2	MD	16
1243.7 - 0139	medium compact	601	8.7	MD	8

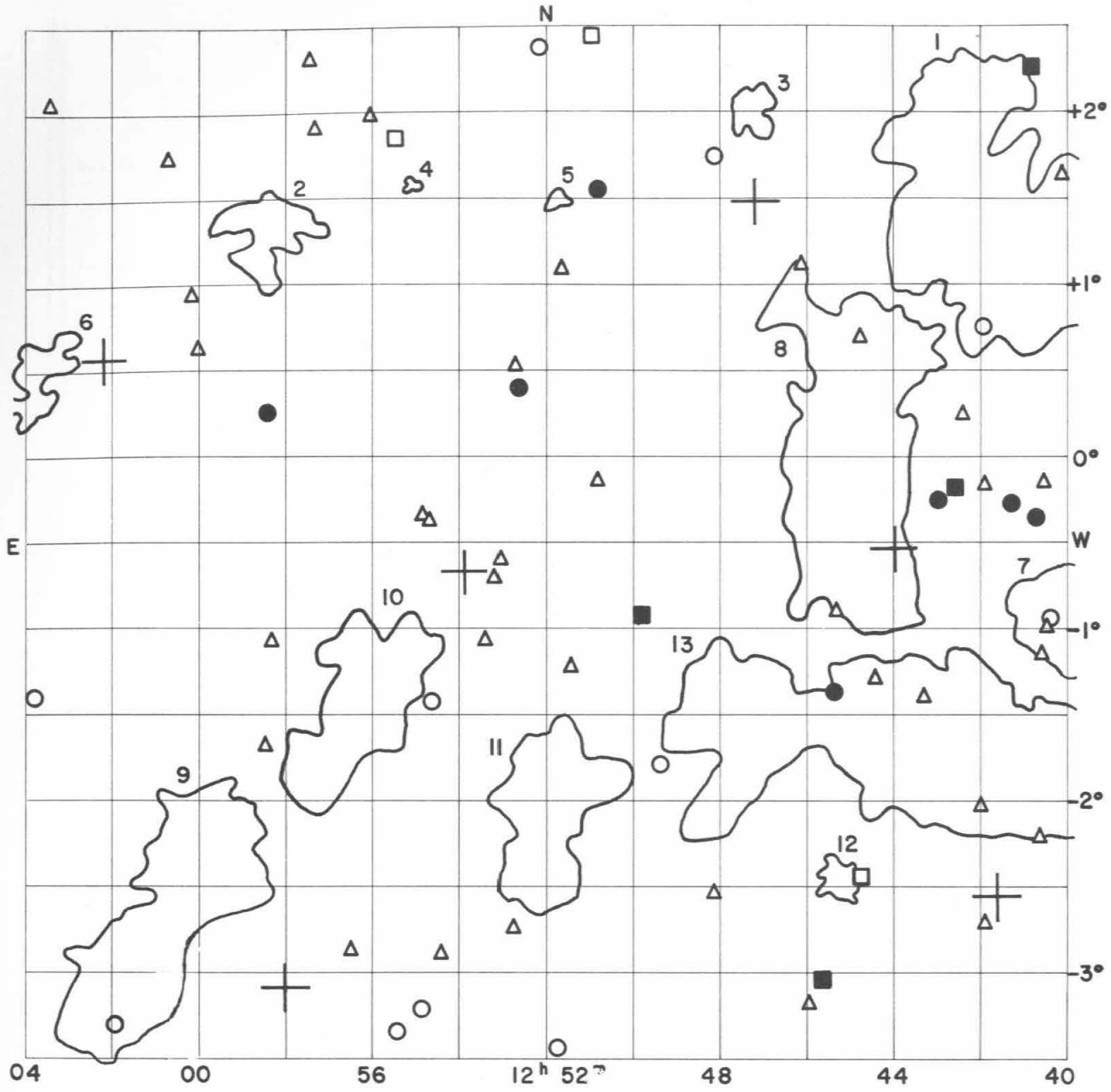
Average number of galaxies per cluster = 161.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
12 16.8 - 00 20		15.7		double system
12 17.0 - 02 32		15.5		
12 17.1 - 02 30		15.7		
12 17.1 - 00 27		15.7		compact
12 17.1 + 02 19		15.6		
12 17.2 - 00 28		15.3		
12 17.2 + 02 22		14.6		
12 17.3 - 00 35		15.4		
12 17.4 + 02 04		15.2		
12 17.8 + 00 40		15.5		
12 17.9 + 01 46		15.2		
12 18.0 + 01 05		15.0		
12 18.6 - 02 45		15.4		
12 18.6 + 00 51		15.5		
12 18.7 - 00 34		15.6		
12 19.0 - 00 33		15.6		
12 19.5 - 02 19		15.5		
12 20.2 + 01 34		15.5		
12 20.3 - 02 23		15.6		
12 20.8 + 01 46		15.5		
12 21.0 - 00 11		15.3		
12 21.1 + 01 37		15.5		
12 21.3 - 03 09	4348	13.6		m_H = 13.1
12 21.3 + 01 40		15.6		
12 21.7 + 01 41		15.6		
12 21.8 - 00 24		15.7		
12 21.9 + 00 27		14.9		
12 22.1 + 01 50		15.7		
12 22.1 + 02 11		15.6		
12 23.0 - 02 37		15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 23.0 - 02 33		15.3		double system
12 23.1 - 02 40		14.9		
12 23.1 + 02 27		15.7		extremely diffuse
12 23.2 + 00 52	4385	13.4		m_H = 12.9 S
12 23.4 - 03 11		15.0		
12 23.6 - 02 04		15.6		compact
12 23.7 - 01 01		14.9		multiple system
12 23.7 + 00 33		15.5		
12 24.3 - 00 35	4418	14.2		
12 24.5 - 00 37		15.0		double nebula
12 24.6 - 01 04		15.5		compact
12 21.6 + 01 29		15.3		double nebula
12 24.7 - 01 45		15.2		
12 21.7 + 01 30		15.4		diffuse
12 25.5 - 01 22		15.4		
12 25.9 + 00 25		15.6		
12 26.3 - 01 46		15.1		
12 26.3 - 01 39	4454	13.5		m_H = 12.8 E
12 26.6 + 00 52		15.5		
12 26.7 - 01 04		15.7		double system
12 26.8 + 01 20		15.0		
12 27.1 - 03 28		15.5		diffuse
12 28.5 - 02 04		15.5		compact
12 28.5 + 01 57		15.6		diffuse
12 28.6 + 00 44		15.7		diffuse
12 28.6 + 00 53	4493	14.9		double system
12 28.8 - 03 23		15.4		
12 29.2 - 02 42		14.9		compact
12 29.2 - 00 44		15.6		
12 29.4 - 02 36		15.6		
12 29.8 + 00 17		15.7		
12 29.9 + 00 40		14.1		
12 30.2 + 00 24	4517	12.4	+ 1218	m_H = 11.6
12 30.8 + 01 47		15.3		
12 31.6 - 00 05		14.8		
12 31.6 + 00 45		15.5		double system
12 31.9 - 03 00		15.7		double system
12 32.0 + 02 28	4536	12.3	+ 1927	m_H = 11.2 Sc
12 32.4 - 03 24		15.7		
12 32.5 - 03 19		15.6		double system
12 32.6 + 00 03	4541	14.0		
12 32.9 - 02 03		15.4		
12 33.1 + 00 03		15.1		double system
12 33.2 - 03 29		15.7		diffuse
12 33.2 - 02 38		14.9		
12 33.3 - 02 07		15.1		
12 33.3 - 01 35		15.6		
12 34.5 + 02 05		15.5		compact
12 35.0 - 03 18		15.4		
12 35.2 - 01 05		15.3		
12 35.5 - 02 00		14.1		
12 35.6 + 00 14		14.9		
12 35.6 + 01 44	4581	13.4		
12 35.8 - 00 42		15.7		
12 36.0 + 02 01		14.7		
12 36.1 + 01 39		15.2		
12 36.1 + 01 44		15.3		
12 36.2 + 00 35		15.7		
12 36.5 - 02 15		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 36.5 + 00 38		14.4		compact
12 36.7 - 00 15	4592	12.6		m_H = 12.4 S
12 36.7 + 00 59		14.6		
12 36.7 + 01 42		15.4		
12 36.8 + 00 43		15.6		
12 36.8 + 01 41		15.6		double nebula
12 37.1 + 01 01		15.4		
12 37.3 + 01 56		15.5		very diffuse
12 37.4 - 03 20		15.6		diffuse
12 37.9 + 01 27	4599	13.7		
12 38.4 + 01 16		15.7		
12 38.6 - 01 20		15.7		
12 38.7 - 00 30		15.7		
12 38.7 + 01 40		14.3		
12 38.8 - 02 47		14.9		
12 39.4 - 03 19		15.3		
12 39.4 - 00 55		15.6		
12 39.7 + 00 09		15.6		double system
12 39.9 + 02 19		15.7		
12 40.0 - 01 05		14.3		
12 40.0 + 00 10	4632	12.6		m_H = 12.1 Sc



FIELD No. 15

12^h52^m - 0°30'

Survey Plate No. 1578

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17319	12 41 37.1	- 2 34 08	6.65
17359	12 43 58.6	- 0 32 55	8.13
17416	12 47 11.7	+ 1 28 08	8.1
17560	12 53 52.6	- 0 41 00	6.56
17649	12 58 01.3	- 3 06 01	6.12
17734	13 02 11.2	+ 0 33 52	7.19

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1240.2 - 0058	open	116	2.8	D	7
1241.3 + 0125	open	447	8.2	MD	1
1243.7 - 0139	medium compact	601	8.7	MD	13
1245.0 - 0002	medium compact	222	7.0	Near	8
1245.1 - 0230	compact	106	1.1	VD	12
1247.2 + 0200	compact	105	1.5	VD	3
1251.8 + 0129	compact	51	0.6	ED	5
1251.9 - 0205	open	182	4.3	D	11
1255.1 + 0135	compact	47	0.4	ED	4
1256.3 - 0129	compact	240	4.4	MD	10
1258.4 + 0118	open	99	2.8	MD	2
1300.9 - 0244	medium compact	242	5.6	MD	9
1303.9 + 0027	open	88	2.3	D	6

Average number of galaxies per cluster = 195.8

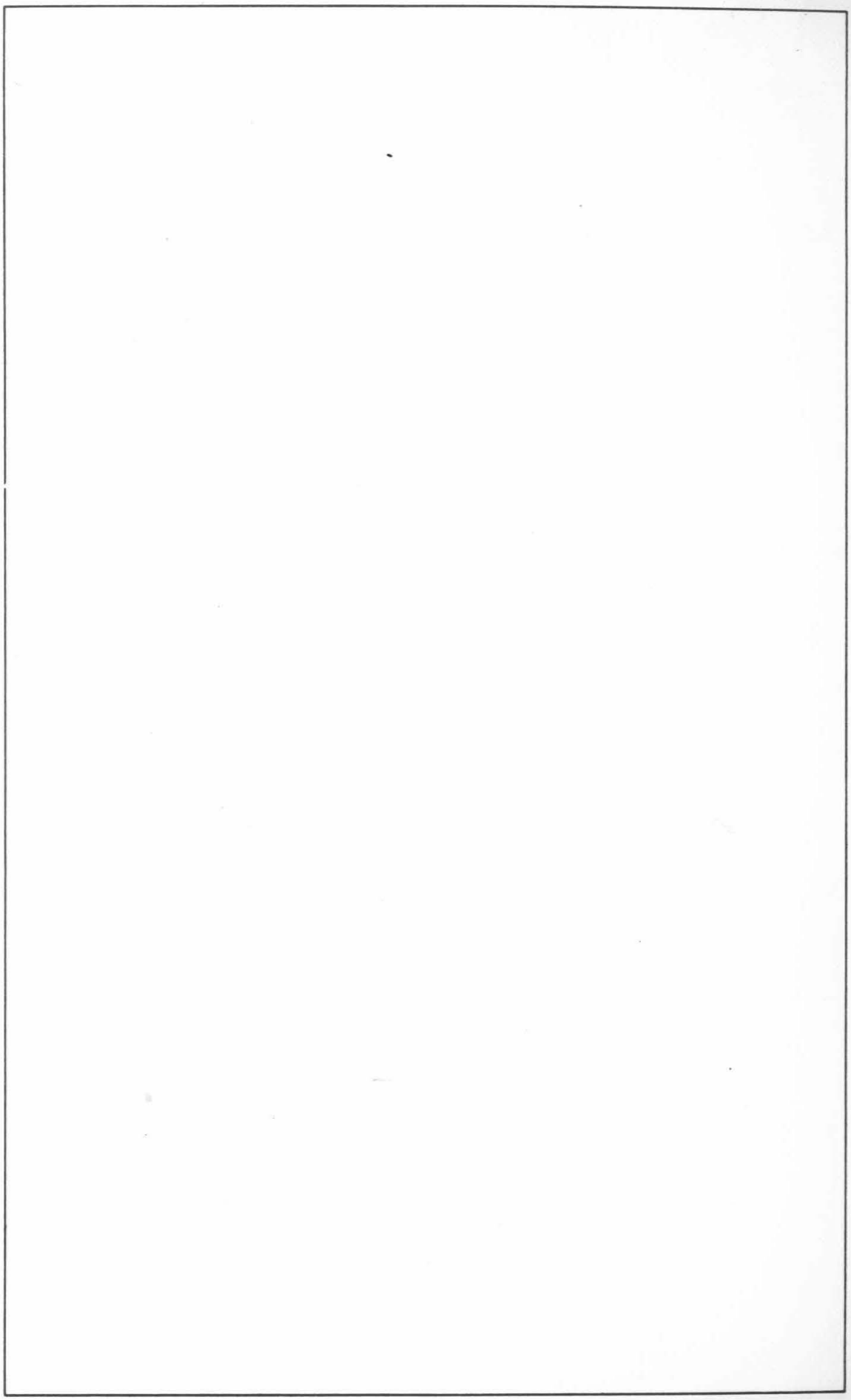
GALAXIES

Position α 1950 h m	Position δ 1950 ° '	NGC IC*	m_p	V_s km/sec	Remarks
12 40.1	+ 01 38		15.3		diffuse
12 40.4	- 00 57		14.3		
12 40.5	- 01 00		15.5		very diffuse
12 40.5	- 00 09		15.7		
12 40.6	- 02 14		15.6		
12 40.6	- 01 09		15.6		compact
12 40.7	- 00 22	4642	13.8		
12 40.8	+ 02 16	4643	11.9	+ 1432	m_H = 11.6 Sba
12 41.3	- 00 16	4653	13.7		m_H = 13.1
12 41.9	- 02 44		15.1		
12 41.9	- 00 10		15.7		
12 41.9	+ 00 45		14.9		
12 42.0	- 02 02		15.7		extremely diffuse
12 42.4	+ 00 14		15.6		
12 42.6	- 00 10	4666	12.0	+ 1645	m_H = 11.3 Sc
12 43.0	- 00 15	4668	13.5		m_H = 13.0
12 43.3	- 01 24		15.5		compact
12 44.4	- 01 17		15.6		extremely diffuse
12 44.7	- 02 27	4684	12.4		m_H = 12.2 Sa
12 44.8	+ 00 41		15.6		
12 45.3	- 01 22	4690	14.0		
12 45.3	- 00 55		15.7		
12 45.6	- 03 03	4691	12.0		m_H = 11.8 SB
12 46.0	- 03 11		15.6		
12 46.1	+ 01 06		15.3		
12 48.1	- 02 33		15.7		
12 48.1	+ 01 44		14.8		
12 49.3	- 01 48		14.8		
12 49.8	- 00 56	4753	11.7	+ 1364	m_H = 10.5 I
12 50.8	- 00 09		15.6		triple nebula
12 50.8	+ 01 32	4771	13.3		m_H = 12.9 S
12 50.9	+ 02 26	4772	12.9		m_H = 12.6 S
12 51.5	- 01 14		15.5		
12 51.7	- 03 27		15.0		
12 51.7	+ 01 04		15.7		

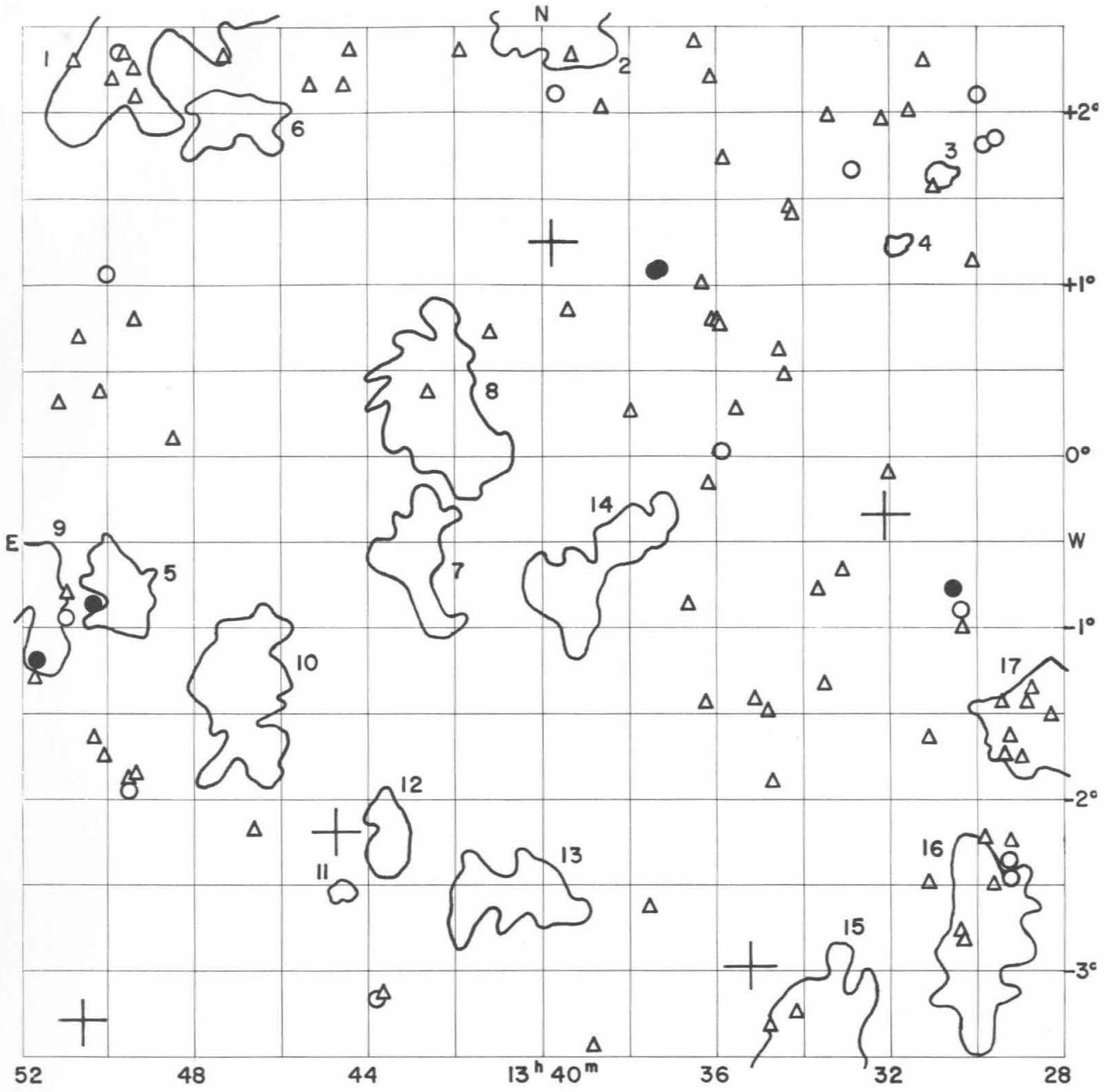
Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 52.1	+ 02 22		14.8		
12 52.6	+ 00 23		13.6		
12 52.7	+ 00 30		15.6		compact
12 52.8	- 02 45		15.5		
12 53.0	- 00 37		15.7		diffuse
12 53.2	- 00 43		15.5		double system
12 53.4	- 01 05		15.3		
12 54.4	- 02 55		15.7		
12 54.6	- 01 26		14.3		
12 54.6	- 00 23		15.6		
12 54.8	- 03 13		14.3		
12 54.8	- 00 21		15.6		
12 55.4	- 03 21	4843	14.1		
12 55.5	+ 01 50	4845	12.9		m_H = 12.6 S
12 56.0	+ 01 58		15.7		
12 56.5	- 02 53		15.6		
12 57.3	+ 01 54		15.4		
12 57.4	+ 02 18		15.5		double nebula
12 58.3	- 01 05		15.2		
12 58.4	+ 00 14	4904	13.2		m_H = 12.8 S
12 58.5	- 01 42		15.3		extremely diffuse double system
13 00.0	+ 00 36		15.7		double system
13 00.2	+ 00 55		15.6		
13 00.7	+ 01 43		15.5		
13 01.9	- 03 18		14.3		very diffuse spiral
13 03.4	+ 02 02		15.1		very compact
13 03.8	- 01 25		14.8		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4643	-	-	-	-	-	SB0	-	-
4653	-	-	-	-	-	-	12.69	Sc-
4666	-	-	11.58	S0	11.5	Sc	11.40	Sc-
4668	-	-	-	-	-	-	13.44	Ir.I
4753	-	-	10.98	S0 p	10.7	S0 p	-	-



Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
13	13.2	- 00 11		15.6		very diffuse
13	13.3	- 03 28		15.2		double system
13	13.4	- 03 23		15.4		
13	14.0	- 01 50		14.5		
13	14.3	- 02 48		15.5		double system
13	14.5	- 02 00	4218*	14.4		
13	14.5	+ 02 05		15.2		
13	14.6	- 01 56		15.4		compact
13	14.6	+ 00 47		15.7		diffuse
13	14.6	+ 01 10		15.5		
13	14.9	- 02 55		14.9		
13	15.1	- 00 44		15.5		
13	15.4	- 00 03		14.5		
13	15.6	- 00 58		14.3		
13	15.6	+ 00 29		15.6		
13	16.1	+ 00 05		15.6		very compact
13	16.4	+ 00 04		15.7		
13	16.5	- 02 15	4224*	14.6		
13	17.0	- 02 39		14.9		
13	17.7	- 03 23		15.4		
13	18.0	- 02 01	5095	14.8		
13	18.1	- 01 11		15.6		
13	18.4	+ 01 45		14.9		
13	18.8	+ 00 36	5104	14.5		
13	18.9	- 01 54		15.7		
13	19.2	+ 00 28		15.2		
13	19.3	+ 00 24		15.2		
13	19.6	- 02 50		15.5		
13	19.8	- 02 09	4229*	14.2		
13	20.7	- 01 54		15.7		compact
13	21.1	+ 01 37		15.6		
13	21.8	- 02 50		15.7		
13	22.0	+ 01 50		15.5		
13	22.5	- 00 39		15.1		
13	23.2	- 03 15		15.6		very compact
13	23.8	+ 02 21	5147	12.7		m_H = 12.1 S
13	24.0	- 03 00		15.7		extremely diffuse
13	25.1	+ 00 42		15.3		
13	25.9	+ 00 08		15.6		
13	26.1	- 01 47		14.6		
13	26.5	+ 00 12		15.7		
13	26.7	+ 00 58		15.7		very diffuse
13	26.8	- 03 25		14.5		
13	27.2	- 00 02		15.6		very diffuse
13	27.3	- 01 10		14.6		
13	27.5	- 01 28	5183	13.6		
13	27.5	+ 00 33	891*	14.7		
13	27.6	- 01 25	5184	13.7		
13	27.6	+ 00 46		15.5		multiple system
13	27.8	- 02 39		15.3		
13	27.9	- 00 21		15.6		



FIELD No. 17

13^h40^m - 0°30'

Survey Plate No. 465

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18351	13 32 08.6	- 0 20 28	3.44
18420	13 35 11.7	- 2 58 54	6.74
18523	13 39 48.2	+ 1 14 56	7.9
18634	13 44 44.2	- 2 11 40	7.7
18760	13 50 36.5	- 3 17 45	7.51

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1327.6 - 0134	medium compact	358	4.8	MD	17
1329.8 - 0251	open	147	4.7	MD	16
1330.8 + 0138	medium compact	56	0.8	ED	3
1331.8 + 0114	compact	58	0.6	ED	4
1333.6 - 0321	open	126	3.8	MD	15
1338.9 - 0042	open	141	3.2	D	14
1339.5 + 0233	compact	293	3.6	MD	2
1340.6 - 0234	open	105	2.7	D	13
1342.4 + 0016	medium compact	186	4.1	MD	8
1343.0 - 0036	open	100	2.6	D	7
1343.6 - 0213	open	88	1.7	VD	12
1344.7 - 0232	medium compact	48	0.7	ED	11
1346.9 - 0124	open	133	3.6	VD	10
1347.0 + 0200	open	79	2.3	D	6
1348.7 + 0249	open	166	7.3	Near	1
1349.8 - 0046	open	63	2.3	VD	5
1351.8 - 0048	medium compact	101	2.6	D	9

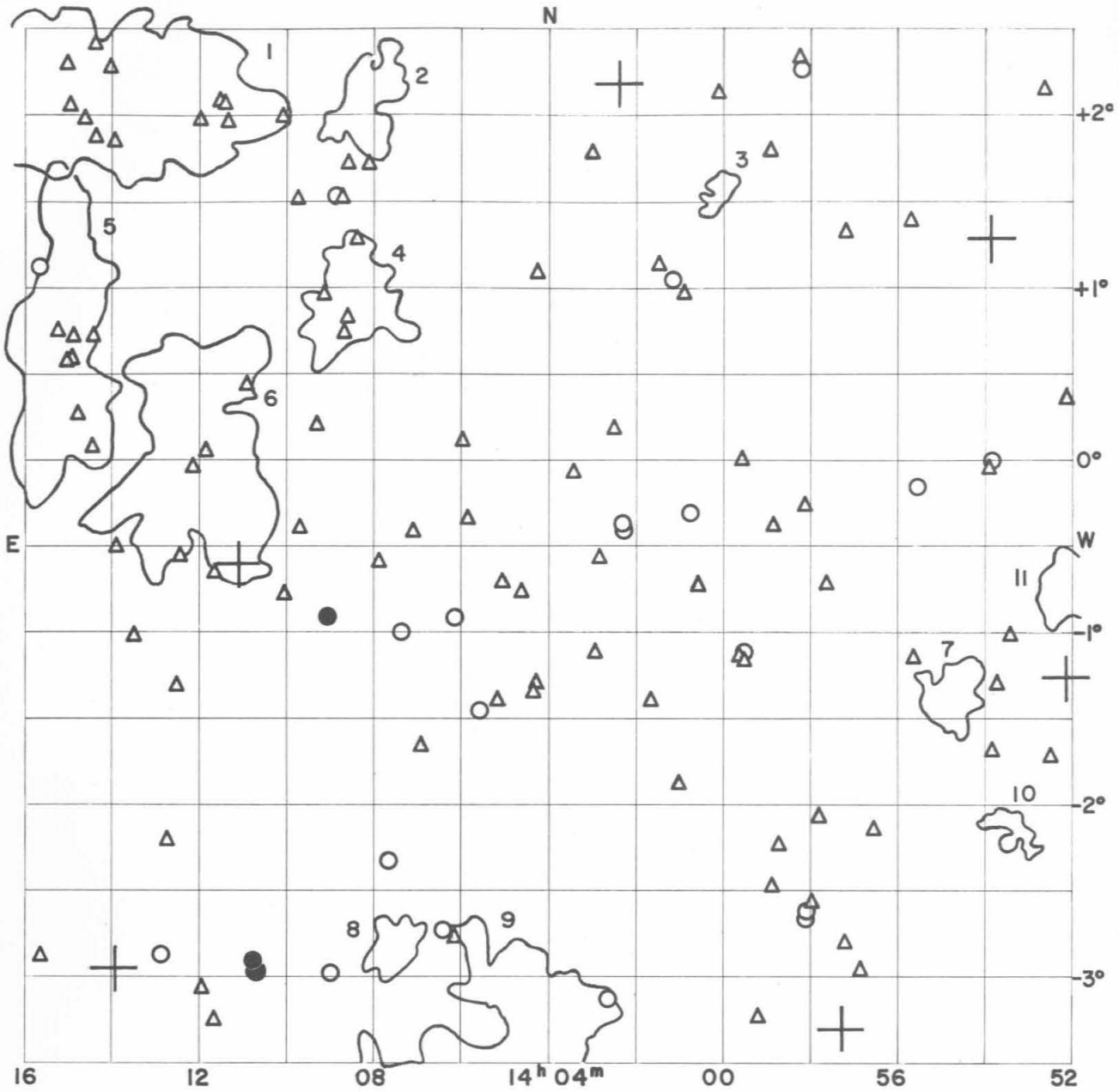
Average number of galaxies per cluster = 132.2

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
13 28.3 - 01 31	5192	15.2		
13 28.8 - 01 21	5196	15.5		
13 28.9 - 01 26	5197	15.4		
13 29.0 - 01 46		15.6		
13 29.2 - 02 28	892*	14.5		
13 29.2 - 02 21	893*	14.9		
13 29.3 - 02 14		15.6		
13 29.3 - 01 38		15.4		
13 29.4 - 01 45		15.3		
13 29.5 - 01 26	5202	15.6		
13 29.6 - 02 30		15.6		diffuse
13 29.6 + 01 52		14.8		
13 29.8 - 02 14		15.7		
13 29.8 + 01 50		14.9		
13 30.0 + 02 06		14.5		
13 30.1 + 01 07		15.4		
13 30.3 - 02 50		15.2		
13 30.4 - 02 46		15.1		double nebula
13 30.4 - 01 00		15.4		
13 30.4 - 00 54		14.5		
13 30.6 - 00 46	5211	13.9		
13 31.0 + 01 34		15.2		
13 31.1 - 02 29		15.5		
13 31.1 - 01 38		15.3		
13 31.3 + 02 18		15.5		
13 31.6 + 02 01		15.2		
13 32.0 - 00 05		15.4		
13 32.3 + 01 58		15.4		
13 32.8 + 01 40	5227	14.6		
13 33.1 - 00 40		15.5		compact
13 33.5 - 01 20		15.4		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
13 33.5	+ 01 59		15.2		
13 33.7	- 00 47		15.4		triple system, tidal effect
13 34.1	- 03 15		15.6		double nebula
13 34.3	+ 01 25		15.3		
13 34.4	+ 01 27		15.4		
13 34.5	+ 00 29		15.5		
13 34.6	+ 00 37		15.7		double system
13 34.7	- 01 55		15.3		
13 34.8	- 03 19		15.7		
13 34.8	- 01 30		15.7		
13 35.1	- 01 25		15.6		
13 35.6	+ 00 16		15.6		
13 35.8	+ 01 44		15.3		double nebula
13 35.9	+ 00 01	903*	14.7		
13 35.9	+ 00 45		15.7		
13 36.0	+ 00 47	904*	15.1		
13 36.2	- 00 10		15.6		
13 36.2	+ 00 48		15.6		extremely diffuse
13 36.2	+ 02 12		15.7		
13 36.3	- 01 27		15.7		
13 36.3	+ 01 00		15.6		
13 36.5	+ 02 25		15.7		
13 36.7	- 00 52		15.3		
13 37.4	+ 01 05	5257	13.7		pair with tidal action
13 37.5	+ 01 05	5258	13.8		
13 37.6	- 02 38		15.5		
13 38.0	+ 00 15		15.7		
13 38.7	+ 02 02		15.2		double system
13 38.9	- 03 27		15.7		
13 39.4	+ 02 19		15.5		triple system
13 39.5	+ 00 51		15.6		
13 39.7	+ 02 06		14.9		
13 41.2	+ 00 43		15.6		
13 41.9	+ 02 21	5285	15.5		
13 42.6	+ 00 22		15.5		very compact
13 43.7	- 03 08		15.6		extremely diffuse
13 43.8	- 03 11		14.8		double system
13 44.4	+ 02 21		15.6		
13 44.6	+ 02 09		15.6		
13 45.4	+ 02 09		15.7		
13 46.6	- 02 11		15.6		compact
13 47.4	+ 02 19		15.6		compact
13 48.5	+ 00 05		15.3		
13 49.3	- 01 52		15.7		diffuse
13 49.4	+ 00 47		15.6		
13 49.4	+ 02 05		15.1		
13 49.5	- 01 58	5327	14.2		
13 49.5	- 01 53		15.3		
13 49.5	+ 02 15		15.1		
13 49.7	+ 02 20		15.7		
13 49.8	+ 02 20	5331	14.3		double system
13 50.0	+ 02 11		15.2		
13 50.1	- 01 46		15.4		
13 50.1	+ 01 03	947*	14.2		
13 50.2	+ 00 22		15.4		
13 50.3	- 01 39		15.1		
13 50.4	- 00 52	5334	13.7		m_H = 12.5 S
13 50.7	+ 00 40		15.5		
13 50.8	+ 02 17		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
13 51.0	- 00 58		15.0		
13 51.0	- 00 49		15.1		
13 51.1	+ 00 18		15.1		
13 51.7	- 01 11	5345	13.8		
13 51.8	- 01 18	'	15.7		



FIELD No. 18

14^h04^m -0°30'

Survey Plate No. 1424

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18800	13 52 07.9	- 1 15 29	5.30
18841	13 53 54.9	+ 1 17 39	5.94
18919	13 57 13.6	- 3 18 26	6.30
19007	14 02 26.9	+ 2 11 17	8.5
19188	14 11 05.9	- 0 36 38	5.81
19255	14 13 54.5	- 2 57 53	6.03

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1351.8 - 0048	medium compact	101	2.6	D	11
1353.2 - 0210	medium compact	68	1.3	VD	10
1354.7 - 0123	open	108	2.1	VD	7
1400.1 + 0134	medium compact	69	1.1	ED	3
1406.4 - 0334	open	279	6.9	Near	9
1407.6 - 0250	compact	105	1.6	D	8
1408.1 + 0206	open	143	2.4	VD	2
1408.5 + 0056	medium compact	165	2.9	D	4
1412.2 + 0000	compact	632	6.0	D	6
1413.8 + 0207	medium compact	382	6.9	MD	1
1415.3 + 0038	open	121	5.5	Near	5

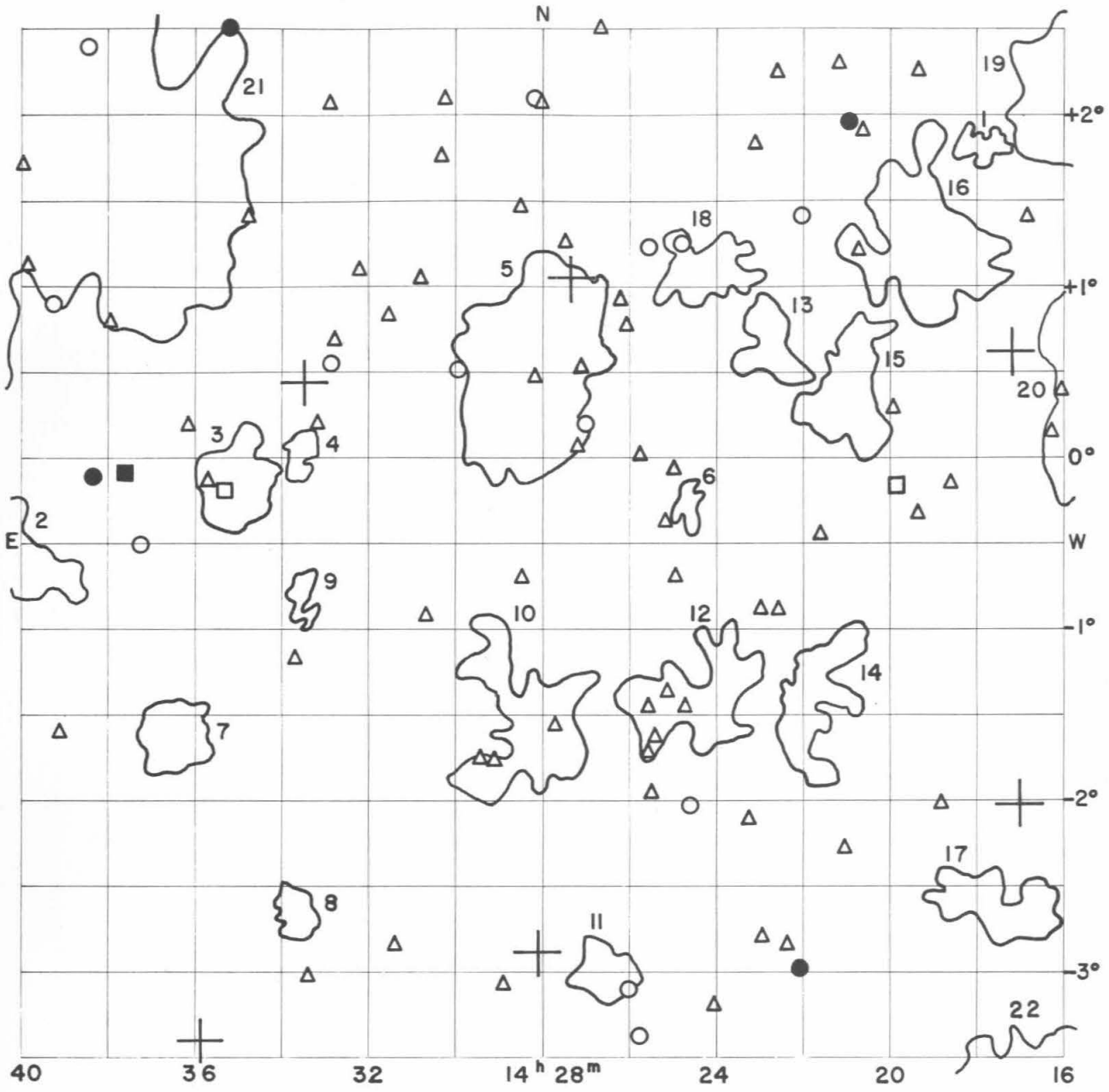
Average number of galaxies per cluster = 197.5

GALAXIES

Position α 1950 δ h m ° '	NGC IC*	m_p	V_s km/sec	Remarks
13 52.1 + 00 21		15.7		double nebula
13 52.5 - 01 44		15.6		
13 52.7 + 02 09		15.7		
13 53.4 - 01 01		15.1		
13 53.7 - 01 18		15.7		
13 53.8 - 01 42		15.7		
13 53.8 00 00	5366	14.7		
13 53.9 - 00 03		15.6		
13 55.6 - 01 08		15.5		
13 55.6 - 00 09		14.8		
13 55.7 + 01 23		15.2		double nebula
13 56.5 - 02 09		15.4		
13 56.8 - 02 58	5392	15.1		
13 57.1 - 02 49		15.7		very diffuse
13 57.2 + 01 19		15.3		
13 57.7 - 00 43		15.5		compact
13 57.8 - 02 05		15.5		
13 57.9 - 02 35		15.5		
13 58.0 - 02 40	968*	14.8		double system
13 58.0 - 02 37	5400	14.5		
13 58.1 - 00 16		15.4		
13 58.2 + 02 16		14.7		
13 58.3 + 02 20		15.6		
13 58.7 - 02 15		15.6		
13 58.8 - 02 28		15.7		diffuse
13 58.8 - 00 23		15.2		
13 59.0 + 01 47		15.6		
13 59.2 - 03 15		15.3		
13 59.5 - 01 09		15.3		very compact
13 59.5 - 01 07		14.8		
13 59.6 - 01 08		15.6		
13 59.6 00 00		15.4		
14 00.1 + 02 08		15.7		
14 00.6 - 00 44		15.5		
14 00.8 - 00 18		14.7		
14 00.9 + 00 58		15.2		
14 01.0 - 01 54		15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 01.1 + 01 04		15.0		
14 01.5 + 01 09		15.3		
14 01.7 - 01 24		15.7		
14 02.3 - 00 24		14.8		
14 02.3 - 00 22		14.7		
14 02.6 - 03 08		14.6		
14 02.6 + 00 10		15.3		
14 02.9 - 00 35		15.4		
14 03.0 - 01 07		15.6		double nebula
14 03.0 + 01 47		15.7		double nebula
14 03.5 - 00 04		15.3		
14 04.3 - 01 18		15.2		
14 04.3 + 01 05		15.7		triple system
14 04.4 - 01 21		15.1		
14 04.6 - 00 47		15.6		
14 05.1 - 00 43		15.7		
14 05.2 - 01 25		15.6		
14 05.6 - 01 28	5478	14.7		
14 05.8 - 00 21		15.6		
14 05.9 + 00 06		15.2		
14 06.1 - 02 46	977*	15.3		
14 06.1 - 00 55	976*	14.1		
14 06.4 - 02 44	978*	15.0		
14 06.9 - 01 40		15.6		
14 07.1 - 00 25		15.6		
14 07.4 - 01 00		14.8		
14 07.6 - 02 20		14.4		
14 07.8 - 00 36		15.1		
14 08.1 + 01 42		15.6		
14 08.4 + 01 16		15.5		
14 08.6 + 00 48		15.3		
14 08.6 + 01 42		15.2		
14 08.7 + 00 43		15.7		
14 08.7 + 01 30		15.4		
14 08.9 - 03 00	985*	14.8		
14 08.9 + 01 31	986*	14.8		
14 09.0 - 00 55	5496	13.4		m_H = 12.8 S
14 09.2 + 00 57		15.6		
14 09.3 + 00 11		15.5		double system
14 09.7 - 00 23		15.3		
14 09.8 + 01 30	5501	15.1		
14 10.0 - 00 47		15.6		double system
14 10.1 + 01 59		15.7		very diffuse
14 10.7 - 02 59	5506	13.6		
14 10.8 - 02 55	5507	13.7		
14 10.9 + 00 25		15.6		
14 11.3 + 01 57		15.6		
14 11.4 + 02 03		15.6		
14 11.5 + 02 04		15.5		compact
14 11.6 - 03 16		15.7		double system
14 11.7 - 00 39		15.2		
14 11.8 + 00 02		15.4		double system
14 11.9 - 03 04		15.4		
14 12.0 + 01 58		15.5		triple system
14 12.1 - 00 03		15.4		double system
14 12.4 - 00 34		15.4		
14 12.5 - 01 19		15.6		
14 12.7 - 02 12		15.5		
14 12.8 - 02 53		15.0		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
14	13.5	- 01 01		15.5		
14	13.9	- 00 31		15.3		
14	14.0	+ 01 50		15.7		
14	14.1	+ 02 16		15.6		
14	14.4	+ 01 52		15.3		
14	14.4	+ 02 24		15.6		compact
14	14.5	+ 00 04		15.7		
14	14.5	+ 00 42		15.7		diffuse
14	14.7	+ 01 58		15.7		
14	14.8	+ 00 15		15.5		
14	14.9	+ 00 43		15.6		
14	15.0	+ 00 35		15.7		
14	15.0	+ 02 02		15.2		
14	15.1	+ 00 33		15.7		
14	15.1	+ 02 16		15.3		quadruple system
14	15.3	+ 00 45		15.5		compact
14	15.6	- 02 53		15.6		double nebula
14	15.7	+ 01 07	942*	14.9		



FIELD No. 19

14^h28^m -0°30'

Survey Plate No. 1440

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19323	14 16 57.7	- 2 02 07	5.24
19329	14 17 07.6	+ 0 36 49	6.17
19542	14 27 17.3	+ 1 03 02	5.80
19567	14 28 06.5	- 2 53 18	8.1
19677	14 33 25.6	+ 0 26 12	8.04
19724	14 35 52.7	- 3 23 44	7.35

CLUSTERS OF GALAXIES

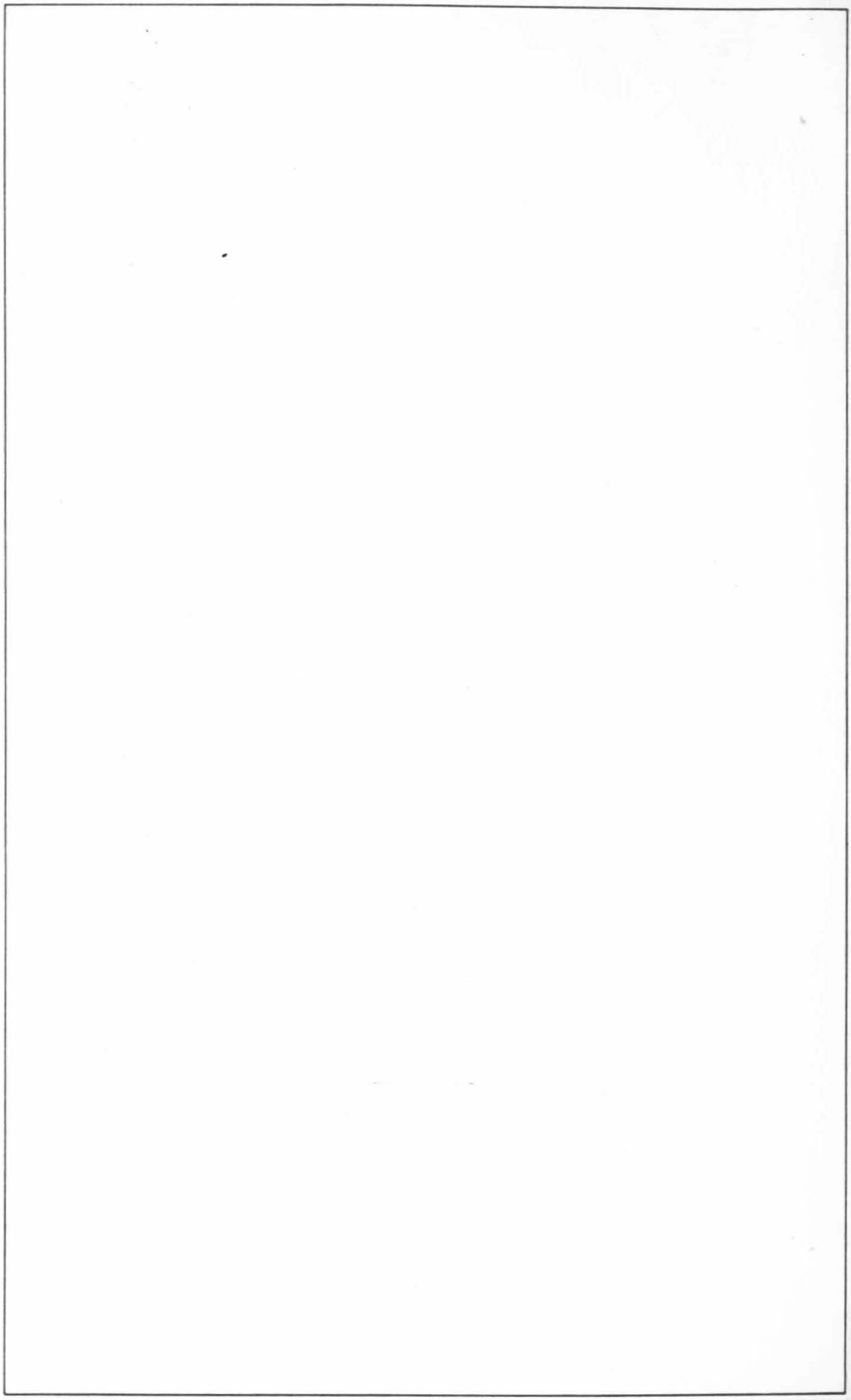
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1413.8 + 0207	medium compact	382	6.9	MD	19
1415.3 + 0038	open	121	5.5	Near	20
1417.0 - 0344	open	164	4.5	MD	22
1417.5 - 0239	open	105	2.6	VD	17
1417.8 + 0150	medium compact	80	1.3	VD	1
1419.0 + 0115	open	217	5.3	MD	16
1421.0 + 0022	medium compact	238	2.9	VD	15
1421.8 - 0127	open	112	2.7	MD	14
1422.7 + 0040	open	96	2.1	D	13
1424.2 + 0106	medium compact	136	2.3	D	18
1424.5 - 0127	open	95	3.3	MD	12
1424.6 - 0017	medium compact	71	1.0	ED	6
1426.5 - 0300	medium compact	87	1.8	D	11
1428.2 + 0029	open	208	5.6	MD	5
1428.3 - 0135	open	105	3.7	MD	10
1433.6 + 0001	medium compact	62	1.2	VD	4
1433.7 - 0239	medium compact	83	1.4	ED	8
1433.7 - 0050	medium compact	60	1.2	ED	9
1435.1 - 0009	medium compact	152	2.4	D	3
1436.6 - 0138	open	121	2.3	VD	7
1440.3 - 0036	medium compact	169	3.2	D	2
1440.3 + 0128	open	345	13.3	Near	21

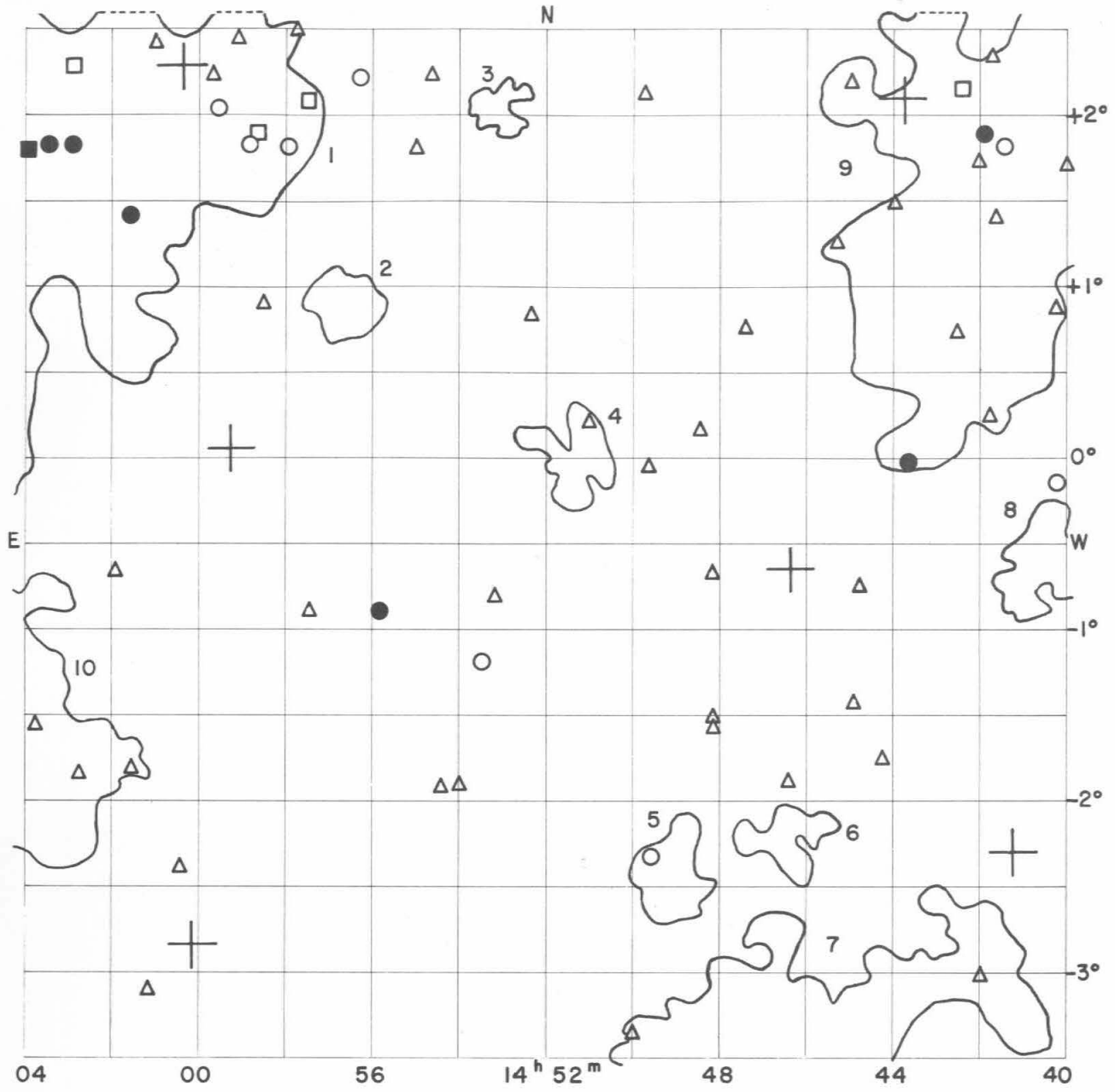
Average number of galaxies per cluster = 145.9

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
14 16.0	+ 00 23		15.6		
14 16.3	+ 00 08		15.5		triple system
14 16.8	+ 01 24		15.6		
14 18.6	- 00 09		15.6		
14 18.8	- 02 01		15.7		
14 19.3	+ 02 15		15.2		double system
14 19.4	- 00 19		15.7		
14 19.8	- 00 09	5584	12.8		m_H = 12.8 S
14 19.9	+ 00 17		15.4		triple nebula
14 20.6	+ 01 54		15.2		compact
14 20.7	+ 01 12		15.3		
14 20.9	+ 01 57		13.6		
14 21.0	- 02 17		15.6		
14 21.2	+ 02 18		15.7		
14 21.6	- 00 27		15.7		
14 22.1	- 02 59	5604	13.8		
14 22.1	+ 01 24		14.9		double system
14 22.4	- 02 51		15.4		double system
14 22.6	- 00 54		15.6		
14 22.6	+ 02 14		15.6		
14 23.0	- 02 48		15.3		
14 23.0	- 00 54		15.4		
14 23.1	+ 01 49		15.6		diffuse spiral
14 23.3	- 02 07		15.7		
14 24.1	- 03 12		15.4		
14 24.6	- 02 03	5618	14.8		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 24.8 - 01 28		15.7		double system
14 24.8 + 01 15	1010*	14.8		
14 25.0 - 00 42		15.2		
14 25.0 - 00 04		15.7		
14 25.1 - 01 22		15.6		
14 25.2 - 00 23		15.6		diffuse
14 25.5 - 01 38		15.7		
14 25.6 - 01 58		15.6		
14 25.6 - 01 27		15.3		double nebula
14 25.6 + 01 13	1011*	14.7		compact
14 25.7 - 01 44		15.5		
14 25.8 - 03 23		14.6		diffuse
14 25.8 - 00 00		15.5		
14 26.0 - 03 07		14.9		diffuse
14 26.1 + 00 46		15.2		
14 26.2 + 00 55		15.7		
14 26.7 + 02 30		15.2		
14 27.0 + 00 11		14.7		
14 27.1 + 00 35		15.7		compact
14 27.2 + 00 03		15.7		
14 27.5 + 01 15		15.6		
14 27.7 - 01 35		15.7		
14 28.0 + 02 03		15.5		
14 28.2 + 00 28		15.5		double system
14 28.2 + 02 05		14.8		
14 28.5 - 00 43		15.3		
14 28.5 + 01 27		15.4		double system
14 28.9 - 03 05		15.2		diffuse
14 29.1 - 01 47		15.7		very diffuse
14 29.4 - 01 46		15.6		
14 29.9 + 00 30		14.6		double system
14 30.2 + 02 05		15.5		double system
14 30.3 + 01 44		15.5		triple system
14 30.7 - 00 56		15.6		
14 30.8 + 01 02		15.6		
14 31.4 - 02 51		15.7		double nebula
14 31.6 + 00 49		15.3		compact
14 32.2 + 01 05		15.5		
14 32.8 + 00 40		15.5		compact
14 32.9 + 00 32		14.9		compact
14 32.9 + 02 04		15.7		
14 33.2 + 00 11	5680	15.4		
14 33.4 - 03 02		15.7		compact
14 33.7 - 01 11		15.7		very diffuse spiral
14 34.7 + 01 24		15.6		very compact
14 35.2 + 02 28	5690	13.1		m_H = 12.9 S
14 35.3 - 00 12	5691	12.9		m_H = 13.0
14 35.7 - 00 09		15.4		
14 36.1 + 00 10		15.6		
14 37.2 - 00 32	5705	14.5		
14 37.6 - 00 05	5713	11.7		m_H = 11.8 Sb
14 38.0 + 00 46		15.5		diffuse
14 38.4 - 00 07	5719	13.8		
14 38.5 + 02 22	5725	14.5		
14 39.1 - 01 37		15.7		extremely diffuse
14 39.2 + 00 52		14.9		
14 39.9 + 01 05		15.5		
14 40.0 + 01 42		15.1		





FIELD No. 20

14^h52^m - 0°30'

Survey Plate No. 1613

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19829	14 41 11.0	- 2 17 38	7.17
19884	14 43 43.1	+ 2 06 08	3.76
19932	14 46 19.8	- 0 38 27	6.06
20212	14 59 15.1	+ 0 03 22	5.91
20228	15 00 08.9	- 2 50 08	6.48
20237	15 00 22.3	+ 2 17 11	4.62

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1440.3 - 0036	medium compact	169	3.2	D	8
1440.3 + 0128	open	345	13.3	Near	9
1446.3 - 0322	open	442	8.5	MD	7
1446.5 - 0214	medium compact	75	2.1	MD	6
1449.1 - 0227	open	70	2.4	D	5
1451.3 + 0000	medium compact	112	2.4	VD	4
1453.1 + 0202	medium compact	81	1.6	D	3
1456.6 + 0055	medium compact	87	2.3	D	2
1505.2 - 0142	open	373	9.2	MD	10
1510.0 + 0315	open	2295	31.4	Near	1

Average number of galaxies per cluster = 404.9

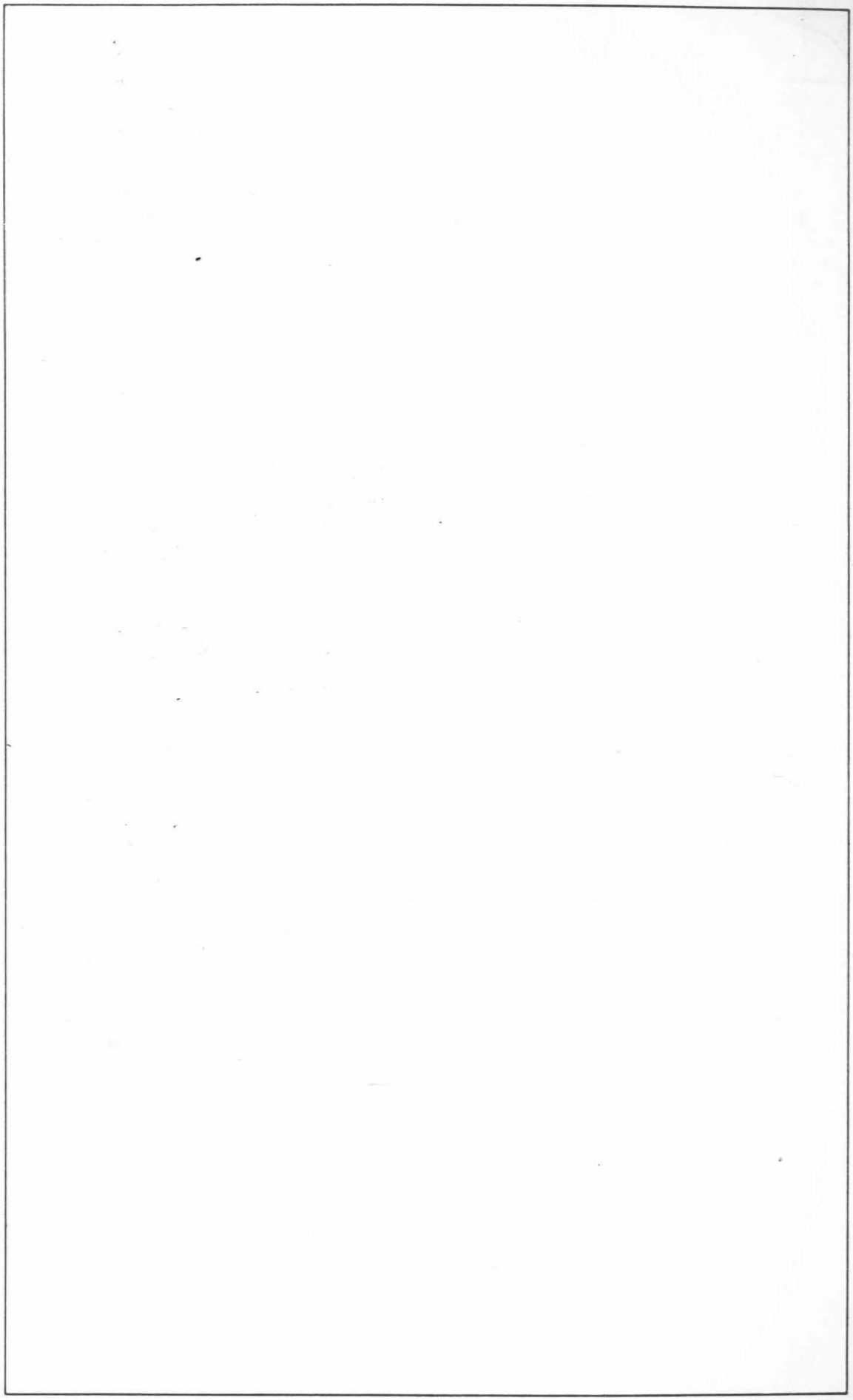
GALAXIES

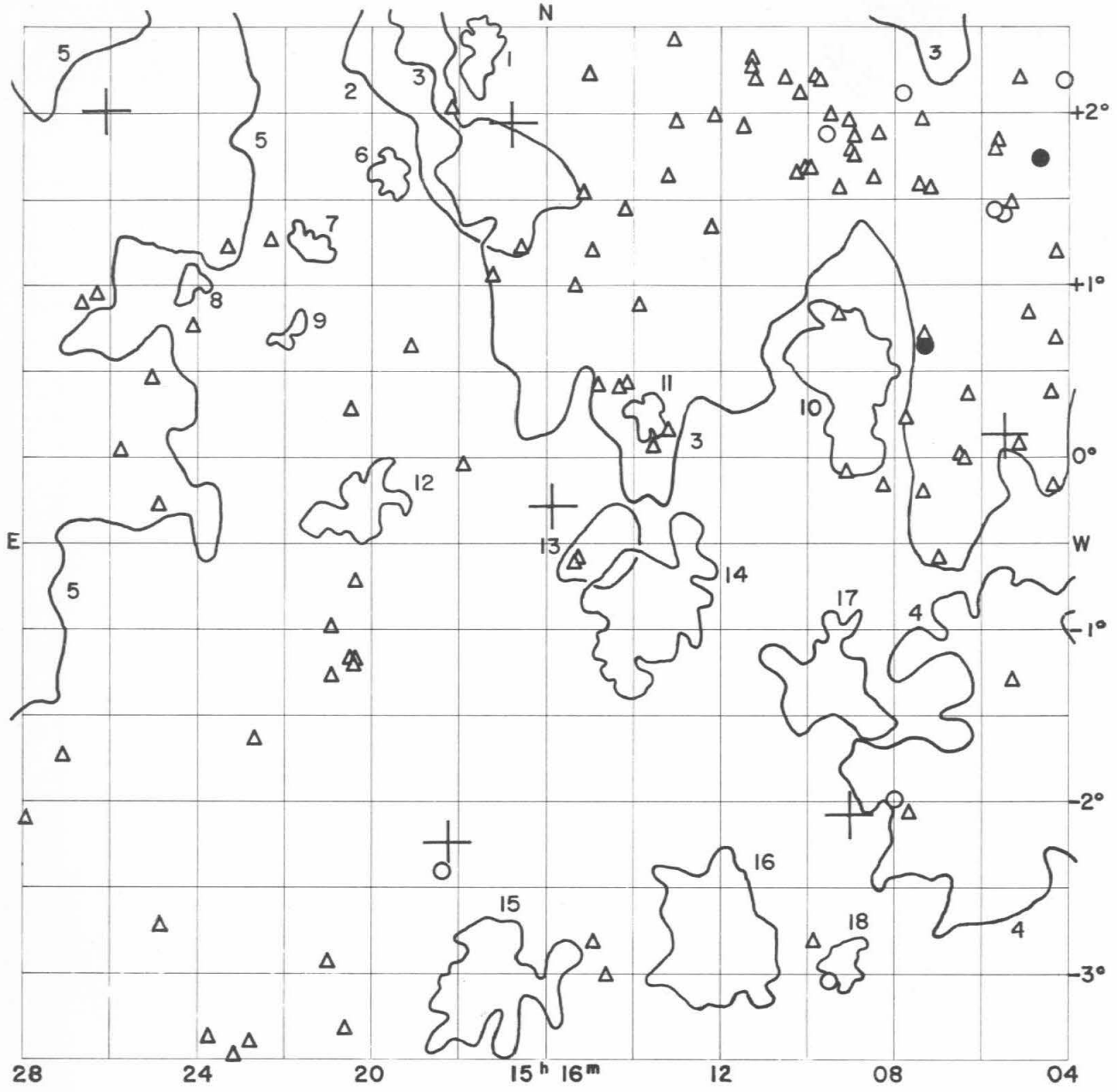
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
14 40.0 + 01 42		15.1		
14 40.2 - 00 09	5733	14.6		
14 40.3 + 00 53		15.4		
14 41.4 + 01 49	5738	14.7		
14 41.6 + 01 25		15.4		double system
14 41.7 + 02 20		15.7		
14 41.8 + 00 15		15.3		double nebula
14 41.9 + 01 54	5740	13.2		m_H = 12.8
14 42.0 - 03 02		15.5		extremely diffuse spiral
14 42.0 + 01 46		15.7		
14 42.5 + 00 44		15.5		
14 42.5 + 02 10	5746	12.3	+ 1836	m_H = 11.8 Sb
14 43.7 - 00 01	5750	13.1		m_H = 12.6 Sb
14 44.0 + 01 29	1054*	15.2		
14 44.2 - 01 45		15.7		
14 44.7 - 00 45		15.5		diffuse
14 44.9 - 01 26		15.6		double system
14 44.9 + 02 11		15.5		
14 45.2 + 01 15		15.6		
14 46.4 - 01 53		15.5		
14 47.4 + 00 45		15.4		compact
14 48.1 - 01 35		15.6		diffuse
14 48.1 - 01 31		15.3		double system
14 48.1 - 00 40	1059*	15.6		compact
14 48.4 + 00 09		15.5		double system
14 49.6 - 02 20	5768	14.2		
14 49.6 - 00 03		15.4		
14 49.8 + 02 07		15.7		
14 50.0 - 03 21		15.2		
14 51.0 + 00 12		15.3		double system
14 52.3 + 00 50		15.5		
14 53.1 - 00 49		15.6		diffuse
14 53.5 - 01 12		14.6		diffuse spiral
14 54.0 - 01 55		15.1		
14 54.4 - 01 56		15.2		compact
14 54.6 + 02 13		15.6		double system
14 55.0 + 01 46		15.7		
14 55.8 - 00 55	5792	13.5		m_H = 12.9 S

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 56.3	+ 02 13		14.9		
14 57.4	- 00 55		15.5		
14 57.4	+ 02 05	5806	12.9	+ 1301	m_H = 12.5 Sb
14 57.7	+ 02 29		15.5		
14 57.9	+ 01 48	5811	14.8		
14 58.5	+ 00 53		15.6		
14 58.6	+ 01 53	5813	12.5	+ 1882	m_H = 12.2 E
14 58.8	+ 01 49	5814	14.7		
14 59.1	+ 02 21		15.6		
14 59.5	+ 02 01		15.0		
14 59.7	+ 02 13		15.3		
15 00.4	- 02 24		15.4		
15 01.1	+ 02 25		15.7		double nebula
15 01.2	- 03 06		15.2		diffuse spiral
15 01.6	- 01 50		15.6		
15 01.6	+ 01 24	5831	13.1	+ 1684	m_H = 12.7 E
15 01.9	- 00 40		15.3		very diffuse
15 02.8	- 01 51		15.3		
15 02.8	+ 02 16	5838	12.1	+ 1427	m_H = 12.1 S
15 02.9	+ 01 48	5839	13.9		
15 03.5	+ 01 48	5845	13.8		
15 03.8	- 01 34		15.7		compact
15 04.0	+ 01 46	5846	11.9	+ 1771	m_H = 11.6 E double system
				+ 2321	companion

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5740	-	-	12.48	Sb	-	-	12.55	Sb+
5746	-	-	11.47	Sb	11.3	Sb	11.47	Sb-
5806	-	-	12.34	Sb	12.4	Sb	-	-
5813	-	-	11.98	E1	11.8	E1	-	-
5831	-	-	12.55	E3	12.6	E3	-	-
5838	-	-	11.88	S0	11.9	S0	-	-
5846	11.3	E0	11.26	E0	-	E0+E3	11.16	E





FIELD No. 21

15^h16^m - 0°30'

Survey Plate No. 1402

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
20355	15 05 26.6	+ 0 08 06	8.6
20424	15 08 59.6	- 2 04 20	7.02
20570	15 15 52.1	- 0 16 48	6.04
20591	15 16 45.4	+ 1 57 12	5.18
20626	15 18 12.1	- 2 13 54	6.50
20805	15 26 06.5	+ 2 00 52	5.12

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1505.2 - 0142	open	373	9.2	MD	4
1508.9 + 0026	compact	276	3.5	MD	10
1509.1 - 0257	medium compact	72	1.2	VD	18
1509.5 - 0118	medium compact	181	2.8	VD	17
1510.0 + 0315	open	2295	31.4	Near	3
1512.0 - 0247	medium compact	198	3.9	D	16
1513.7 - 0051	medium compact	202	3.8	MD	14
1513.7 + 0015	compact	77	1.2	VD	11
1514.7 - 0031	compact	142	2.3	VD	13
1517.1 - 0303	open	96	3.2	D	15
1517.5 + 0220	medium compact	114	1.6	VD	1
1518.2 + 0205	open	295	5.9	MD	2
1519.6 + 0140	medium compact	73	1.2	VD	6
1520.3 - 0018	open	72	2.1	VD	12
1521.5 + 0115	compact	86	1.2	VD	7
1521.9 + 0045	medium compact	55	0.6	ED	9
1524.2 + 0101	medium compact	52	1.0	VD	8
1528.4 + 0049	medium compact	1774	17.3	MD	5

Average number of galaxies per cluster = 357.4

GALAXIES

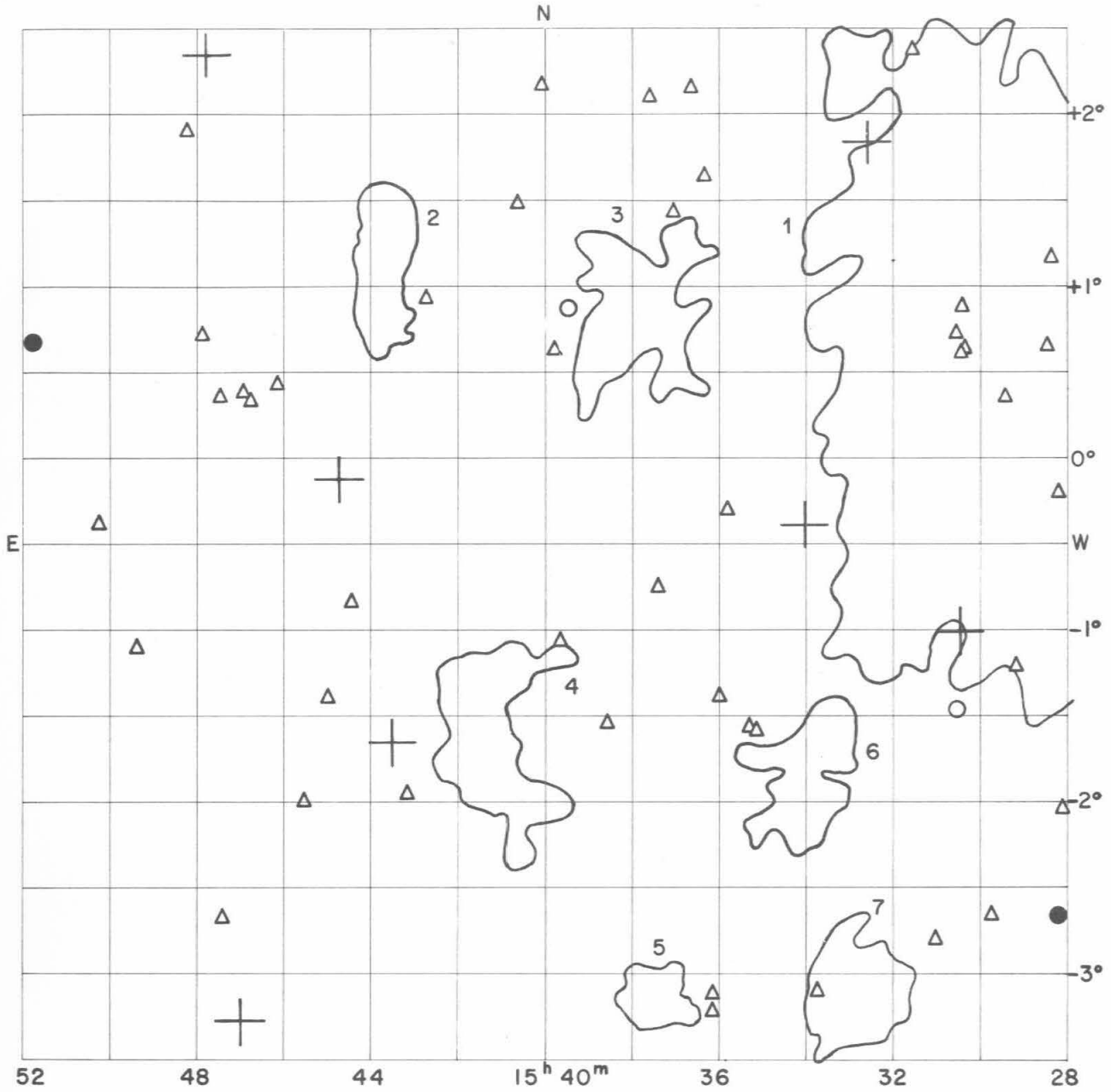
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 04.1 + 02 12	5848	14.8		
15 04.2 + 01 11		15.3		
15 04.3 + 00 41		15.6		
15 04.4 - 00 10		15.6		double nebula
15 04.4 + 00 22		15.4		
15 04.7 + 01 44	5850	13.6	+ 2398	m_H = 12.9 SB
15 04.9 + 00 50		15.5		
15 05.1 + 00 04		15.7		
15 05.1 + 02 13		15.7		diffuse
15 05.3 - 01 17		15.5		double system
15 05.3 + 01 29		15.6		
15 05.5 + 01 25		14.9		
15 05.6 + 01 50		15.6		
15 05.7 + 01 26		14.7		
15 05.7 + 01 47		15.7		
15 06.3 + 00 22		15.5		
15 06.4 - 00 01		15.7		compact
15 06.5 + 00 01		15.4		
15 07.0 - 00 35		15.5		
15 07.1 + 01 34		15.2		
15 07.3 - 00 11		15.6		
15 07.3 + 00 39	5865=5869	13.5		
15 07.3 + 00 43	5868	15.2		
15 07.4 + 01 35		15.4		
15 07.4 + 01 58		15.3		
15 07.6 - 02 04		15.5		
15 07.8 + 00 13		15.6		
15 07.8 + 02 07		15.0		
15 07.9 - 01 59		14.9		
15 08.2 - 00 10		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 08.3 + 01 52		15.6		double nebula
15 08.4 + 01 37		15.6		
15 08.8 + 01 45		15.6		
15 08.8 + 01 52		15.7		compact
15 08.9 + 01 46		15.5		
15 09.0 - 00 05		15.4		
15 09.0 + 01 57		15.3		double system
15 09.2 + 00 50		15.5		
15 09.2 + 01 33		15.6		
15 09.5 - 03 03		15.0		
15 09.5 + 01 52		14.9		
15 09.5 + 02 00		15.6		
15 09.7 + 02 11		15.6		compact
15 09.8 - 02 50		15.6		
15 09.8 + 02 13		15.6		compact
15 09.9 + 01 40		15.5		
15 10.0 + 01 41		15.3		double system
15 10.1 + 02 07		15.3		
15 10.2 + 01 38		15.2		
15 10.5 + 02 12		15.7		
15 11.2 + 02 12		15.6		
15 11.3 + 02 16		15.6		compact
15 11.3 + 02 18		15.7		compact
15 11.5 + 01 55		15.7		
15 12.1 + 01 59		15.5		
15 12.2 + 01 20	5887	15.2		
15 13.0 + 01 57		15.5		diffuse
15 13.0 + 02 25		15.1		
15 13.1 + 00 09		15.6		
15 13.2 + 01 37		15.4		very diffuse
15 13.5 + 00 03		15.1		Serpens resolved dwarf system
15 13.9 + 00 53		15.2		
15 14.1 + 00 25		15.6		compact
15 14.2 + 01 26		15.5		diffuse
15 14.3 + 00 24		15.7		
15 14.6 - 03 01		15.3		
15 14.8 + 00 24		15.7		
15 14.9 - 02 50		15.7		
15 14.9 + 01 11		15.5		
15 15.0 + 02 13	4537*	15.6		
15 15.1 + 01 32		15.4		compact
15 15.2 - 00 36		15.6		diffuse
15 15.3 - 00 37		15.7		
15 15.4 + 01 00		15.7		
15 16.5 + 01 13		15.7		compact
15 17.2 + 01 03		15.7		diffuse
15 17.8 - 00 04		15.3		very compact
15 18.1 + 02 00		15.4		compact
15 18.3 - 02 25	5913	14.6		
15 19.1 + 00 38		15.1		
15 20.3 - 01 11		15.7		compact
15 20.3 - 00 44		15.6		
15 20.4 - 01 13		15.6		compact
15 20.4 + 00 16		15.6		diffuse
15 20.5 - 01 10		15.3		
15 20.6 - 03 20		15.5		diffuse
15 20.9 - 01 17		15.6		
15 20.9 - 01 00		15.6		
15 21.0 - 02 57		15.6		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 22.3	+ 01 15		15.6		double system
15 22.7	- 01 39		15.4		double system
15 22.8	- 03 24		15.7		
15 23.1	- 03 29	1119*	15.3		double nebula
15 23.3	+ 01 12		15.7		
15 23.8	- 03 23		15.4		compact
15 24.1	+ 00 45		15.6		
15 24.8	- 02 44		15.2		
15 24.9	- 00 17		15.7		
15 25.0	+ 00 27		15.3		
15 25.8	+ 00 02		15.5		
15 26.3	+ 00 56		15.5		compact
15 26.7	+ 00 53		15.4		
15 27.1	- 01 45		15.5		
15 27.9	- 02 06		15.2		double system

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951	Pettit 1954	Humason, Mayall, Sandage 1956	Holmberg 1958
5850	12.4 SBb	11.80 SBb	11.8 SBb	11.56 Sb+



FIELD No. 22

15^h40^m - 0°30'

Survey Plate No. 151

GC STARS

Nos.	R.A. h m s	Decl. ° ' "	m_p
20896	15 30 23.2	- 1 01 05	5.76
20946	15 32 32.8	+ 1 50 06	6.58
20980	15 33 59.6	- 0 23 49	6.51
21187	15 43 30.3	- 1 38 57	5.37
21215	15 44 43.9	- 0 06 58	7.23
21269	15 47 00.5	- 3 16 43	3.63
21280	15 47 45.9	+ 2 20 51	5.33

CLUSTERS OF GALAXIES

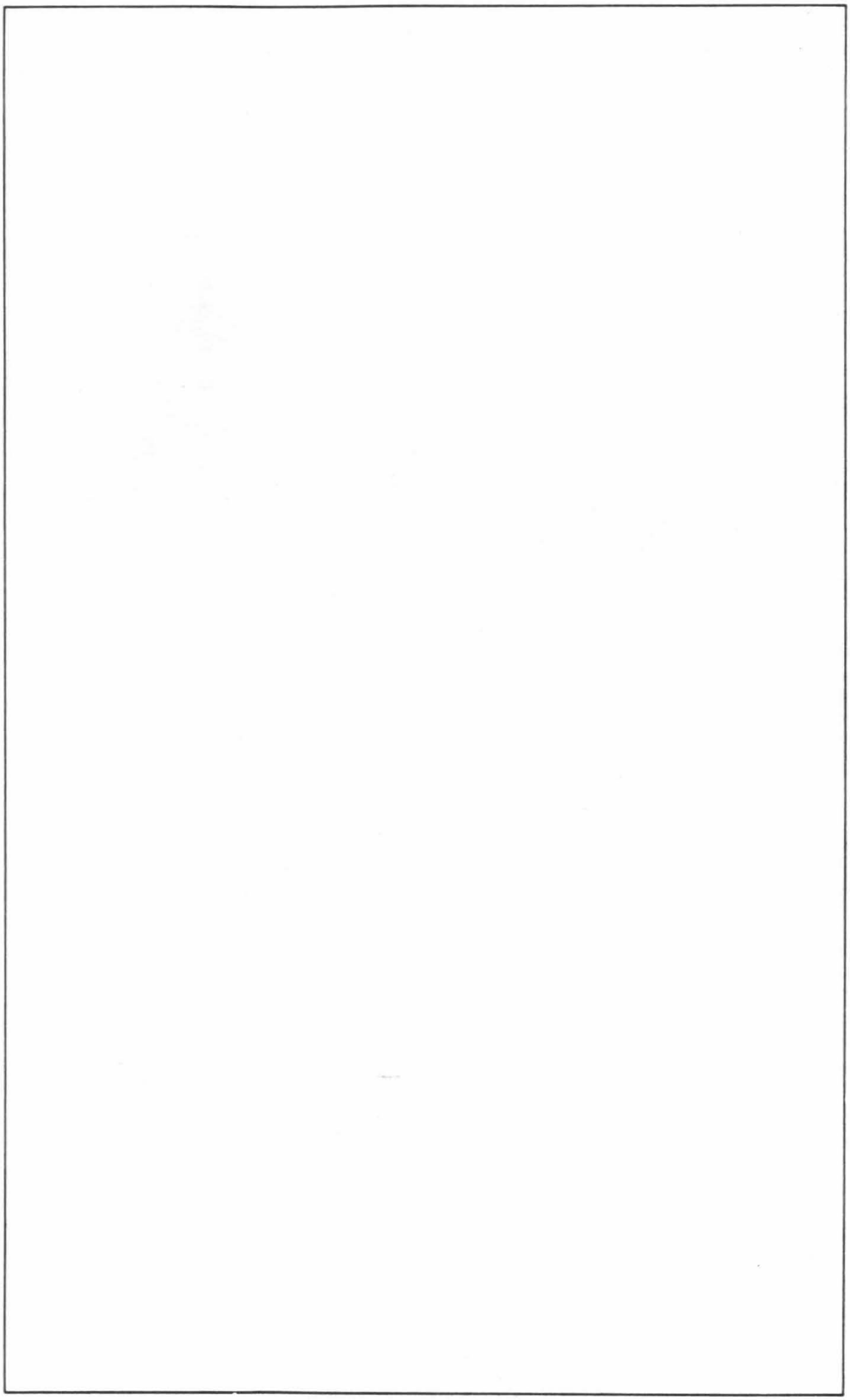
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1528.4 + 0049	medium compact	1774	17.3	MD	1
1532.8 - 0307	open	112	3.5	MD	7
1534.0 - 0153	compact	209	3.3	D	6
1537.5 - 0308	compact	182	2.1	VD	5
1537.9 + 0052	medium compact	127	4.3	MD	3
1541.4 - 0141	open	119	4.1	MD	4
1543.8 + 0105	medium compact	94	3.1	D	2

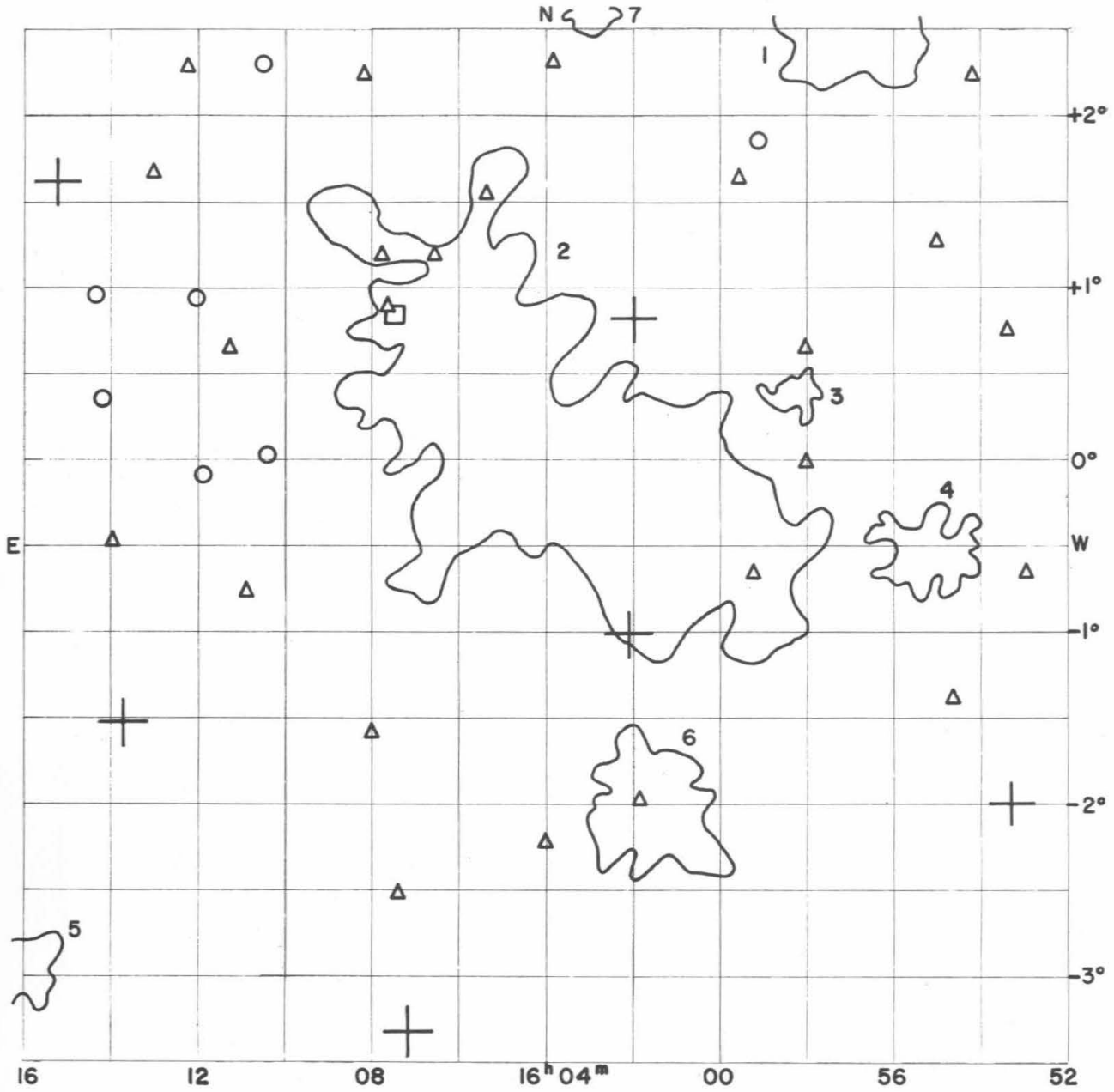
Average number of galaxies per cluster = 373.9

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
15 28.1 - 02 02		15.3		
15 28.2 - 02 39	5937	13.1		
15 28.2 - 00 11		15.6		
15 28.4 + 01 09		15.5		
15 28.5 + 00 39		15.7		
15 29.2 - 01 12		15.7		
15 29.4 + 00 21		15.7		
15 29.7 - 02 39		15.7		extremely diffuse
15 30.3 + 00 38		15.6		
15 30.4 + 00 36		15.5		
15 30.4 + 00 52		15.7		
15 30.5 - 01 28	1125*	14.5		
15 30.6 + 00 44		15.4		
15 31.0 - 02 48		15.5		
15 31.6 + 02 22		15.7		
15 33.8 - 03 06		15.7		
15 35.1 - 01 36		15.3		
15 35.3 - 01 35	1128*	15.5		compact
15 35.8 - 00 18		15.7		
15 36.0 - 01 24		15.7		diffuse
15 36.1 - 03 13		15.3		
15 36.1 - 03 07		15.6		
15 36.3 + 01 38		15.6		
15 36.6 + 02 08		15.6		
15 37.0 + 01 25		15.7		very diffuse
15 37.4 - 00 45		15.7		diffuse spiral
15 37.6 + 02 05		15.5		
15 38.6 - 01 33		15.2		
15 39.5 + 00 52		14.7		
15 39.7 - 01 04		15.7		
15 39.8 + 00 37		15.7		very diffuse
15 40.0 + 02 10		15.2		
15 40.6 + 01 28		15.6		
15 42.7 + 00 55		15.7		very diffuse
15 43.1 - 01 58		15.6		
15 44.5 - 00 50		15.4		
15 45.0 - 01 24	1136*	15.4		compact
15 45.5 - 02 00		15.5		
15 46.1 + 00 25		15.7		
15 46.8 + 00 19		15.5		
15 46.9 + 00 22		15.1		double system

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 47.5	- 02 41		15.7		
15 47.5	+ 00 20		15.4		
15 47.9	+ 00 42		15.7		
15 48.2	+ 01 53		15.7		diffuse
15 49.5	- 01 06		15.6		
15 50.3	- 00 23		15.4		
15 51.8	+ 00 40	6010	13.3		





FIELD No. 23

16^h04^m -0°30'

Survey Plate No. 761

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
21389	15 53 19.1	- 2 01 08	7.0
21597	16 01 56.6	+ 0 48 33	7.04
21601	16 02 07.0	- 1 01 27	7.8
21738	16 07 13.3	- 3 20 12	5.41
21877	16 13 44.6	- 1 31 33	6.94
21909	16 15 11.3	+ 1 37 06	6.59

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1555.2 - 0032	medium compact	109	2.4	MD	4
1556.5 + 0245	open	140	5.5	Near	1
1558.2 + 0024	medium compact	75	1.3	VD	3
1601.5 - 0201	medium compact	99	3.7	Near	6
1602.9 + 0235	medium compact	61	1.2	VD	7
1603.7 + 0006	open	438	11.6	Near	2
1616.9 - 0309	medium compact	109	3.4	MD	5

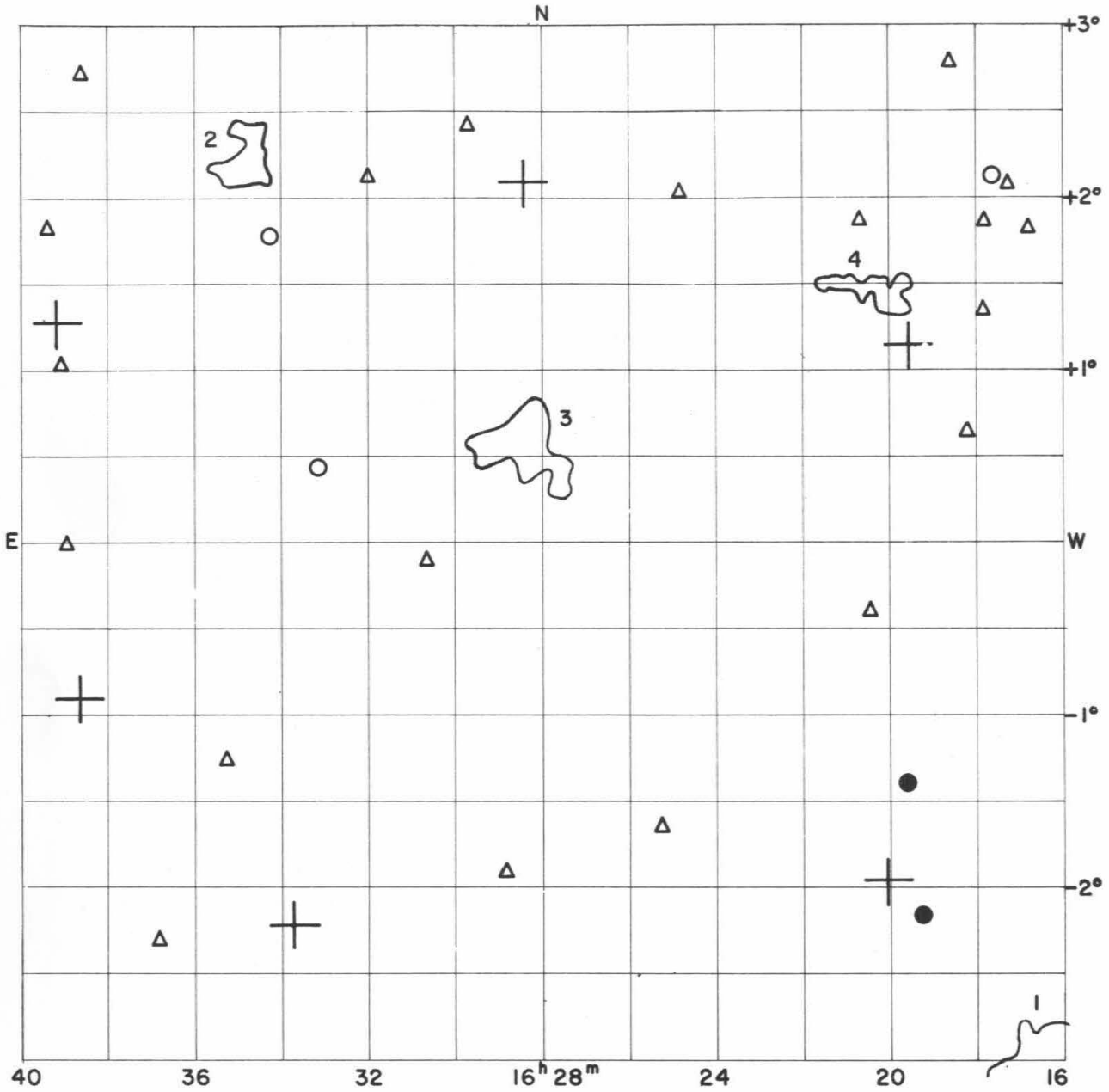
Average number of galaxies per cluster = 147.3

GALAXIES

Position α 1950 δ h m ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 52.9 - 00 40		15.1		
15 53.4 + 00 45		15.5		
15 54.1 + 02 14		15.4		
15 54.6 - 01 24		15.4		
15 55.0 + 01 16		15.5		
15 58.0 - 00 01		15.6		very diffuse
15 58.0 + 00 39		15.3		
15 59.0 + 01 51	1158*	14.4		
15 59.2 - 00 40		15.5		
15 59.5 + 01 38		15.7		
16 01.8 - 02 00	6033	15.3		compact
16 03.8 + 02 18		15.3		
16 04.0 - 02 14		15.7		
16 05.3 + 01 32		15.1		
16 06.5 + 01 10		15.5		
16 07.4 - 02 32		15.7		
16 07.4 + 00 50	6070	13.0	2105	m_H = 12.7 S
16 07.6 + 00 53		15.6		double nebula
16 07.7 + 01 10		15.1		
16 08.0 - 01 36		15.6		
16 08.2 + 02 14		15.4		
16 10.3 + 00 01		14.9		
16 10.5 + 02 18	6080	14.1		double nebula
16 10.8 - 00 46		15.4		diffuse
16 11.2 + 00 39		15.5		
16 11.8 - 00 05		14.7		
16 12.0 + 00 56		15.0		very diffuse spiral
16 12.2 + 02 15		15.7		diffuse
16 13.0 + 01 39		15.2		
16 14.0 - 00 29		15.5		
16 14.2 + 00 21		14.8		
16 14.4 + 00 56	6100	14.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6070	-	-	12.44	Sc	12.3	Sc	-	-



FIELD No. 24

16^h28^m 0°00'

Survey Plate No. 143

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
22007	16 19 32.2	+ 1 08 42	4.80
22019	16 20 03.0	- 1 57 49	6.11
22203	16 28 23.4	+ 2 05 31	3.85
22321	16 33 43.7	- 2 13 10	5.87
22448	16 38 36.6	- 0 54 18	6.26
22460	16 39 10.4	+ 1 16 30	5.86

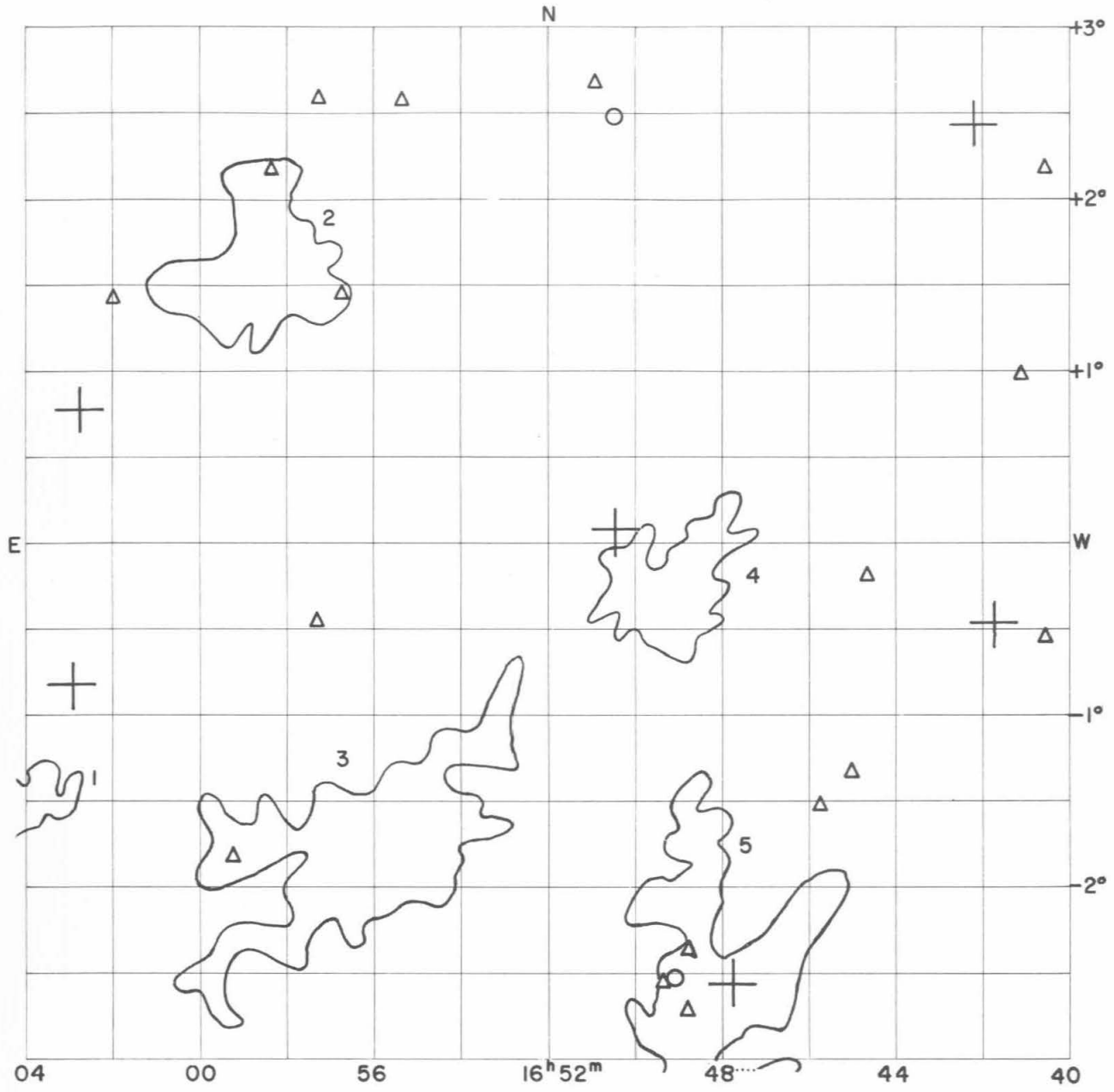
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1616.9 - 0309	medium compact	109	3.4	MD	1
1620.3 + 0130	medium compact	68	1.4	D	4
1628.5 + 0035	medium compact	83	2.4	MD	3
1634.9 + 0216	medium compact	80	1.6	VD	2

Average number of galaxies per cluster = 85.0

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 16.8	+ 01 50		15.4		
16 17.3	+ 02 05		15.2		
16 17.6	+ 02 08		14.3		
16 17.8	+ 01 20		15.3		
16 17.8	+ 01 52		15.5		
16 18.2	+ 00 38		15.5		double system
16 18.6	+ 02 48		15.6		compact
16 19.3	- 02 10	6118	13.2		m_H = 12.3 S
16 19.6	- 01 24	1213*	13.9		compact
16 20.5	- 00 25		15.7		
16 20.7	+ 01 53		15.1		
16 24.8	+ 02 01		15.2		
16 25.3	- 01 40		15.3		
16 28.9	- 01 56		15.6		
16 29.7	+ 02 25		15.7		
16 30.6	- 00 07		15.3		double system
16 32.0	+ 02 06		15.3		
16 33.1	+ 00 25		14.9		compact
16 34.2	+ 01 45		14.7		
16 35.3	- 01 16		15.1		
16 36.8	- 02 20		15.5		
16 38.7	+ 02 43		15.2		
16 39.0	- 00 02		15.7		
16 39.1	+ 01 00		15.6		
16 39.4	+ 01 48		15.5		



FIELD No. 25

16^h52^m 0°00'

Survey Plate No. 155

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
22514	16 41 43.4	- 0 27 55	7.38
22528	16 42 11.4	+ 2 25 27	7.6
22661	16 47 45.6	- 2 34 08	6.32
22728	16 50 27.4	+ 0 04 32	6.78
23050	17 02 44.0	+ 0 46 28	5.94
23058	17 02 57.5	- 0 49 31	5.62

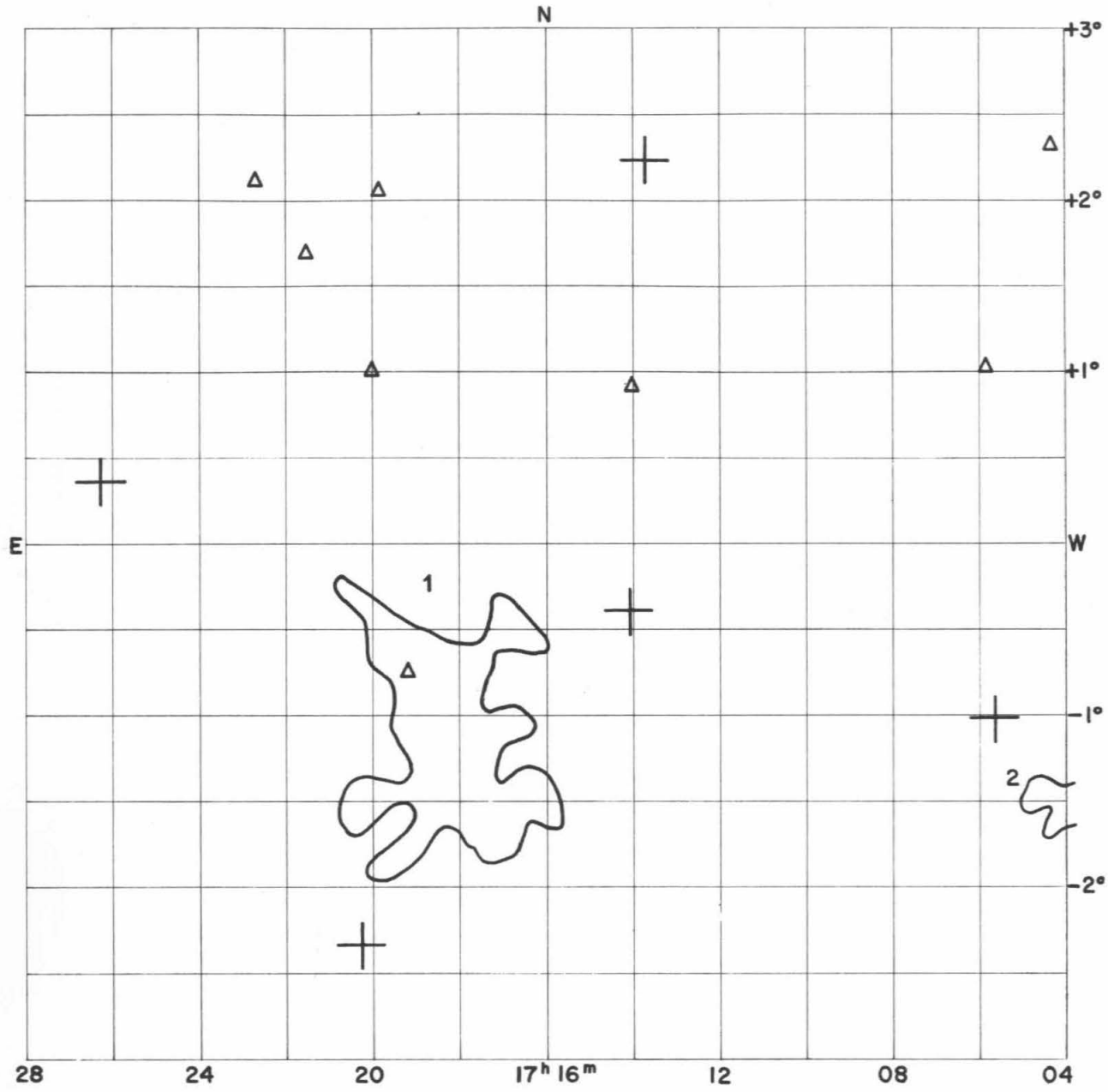
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1648.6 - 0307	open	195	9.3	Near	5
1649.2 - 0016	open	129	3.9	MD	4
1656.0 - 0145	medium compact	165	6.7	Near	3
1658.5 + 0136	open	90	4.6	MD	2
1703.8 - 0129	compact	64	2.1	D	1

Average number of galaxies per cluster = 128.6

GALAXIES

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 40.5	- 00 34		15.2		double nebula
16 40.6	+ 02 11		15.2		
16 41.1	+ 00 58		15.6		
16 44.6	- 00 11	6220	15.5		
16 45.0	- 01 20		15.6		
16 45.8	- 01 32		15.7		extremely diffuse
16 48.8	- 02 44		15.6		
16 48.8	- 02 23		15.7		very diffuse
16 49.1	- 02 32		14.9		double system
16 49.4	- 02 34		15.6		
16 50.5	+ 02 29	6240	14.7		multiple collision
16 50.9	+ 02 40		15.7		
16 55.4	+ 02 33		15.7		extremely diffuse
16 56.7	+ 01 27		15.4		double system
16 57.2	+ 02 34		15.3		
16 57.3	- 00 28		15.7		resolvable dwarf system
16 58.3	+ 02 09		15.4		
16 59.2	- 01 51		15.6		
17 02.0	+ 01 24		15.4		



FIELD No. 26

17^h16^m 0°00'

Survey Plate No. 1154

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
23120	17 05 38.7	- 1 00 54	6.02
23312	17 13 42.9	+ 2 14 26	6.02
23320	17 14 02.5	- 0 23 26	4.82
23493	17 20 14.6	- 2 20 25	6.30
23677	17 26 16.5	+ 0 22 10	5.16

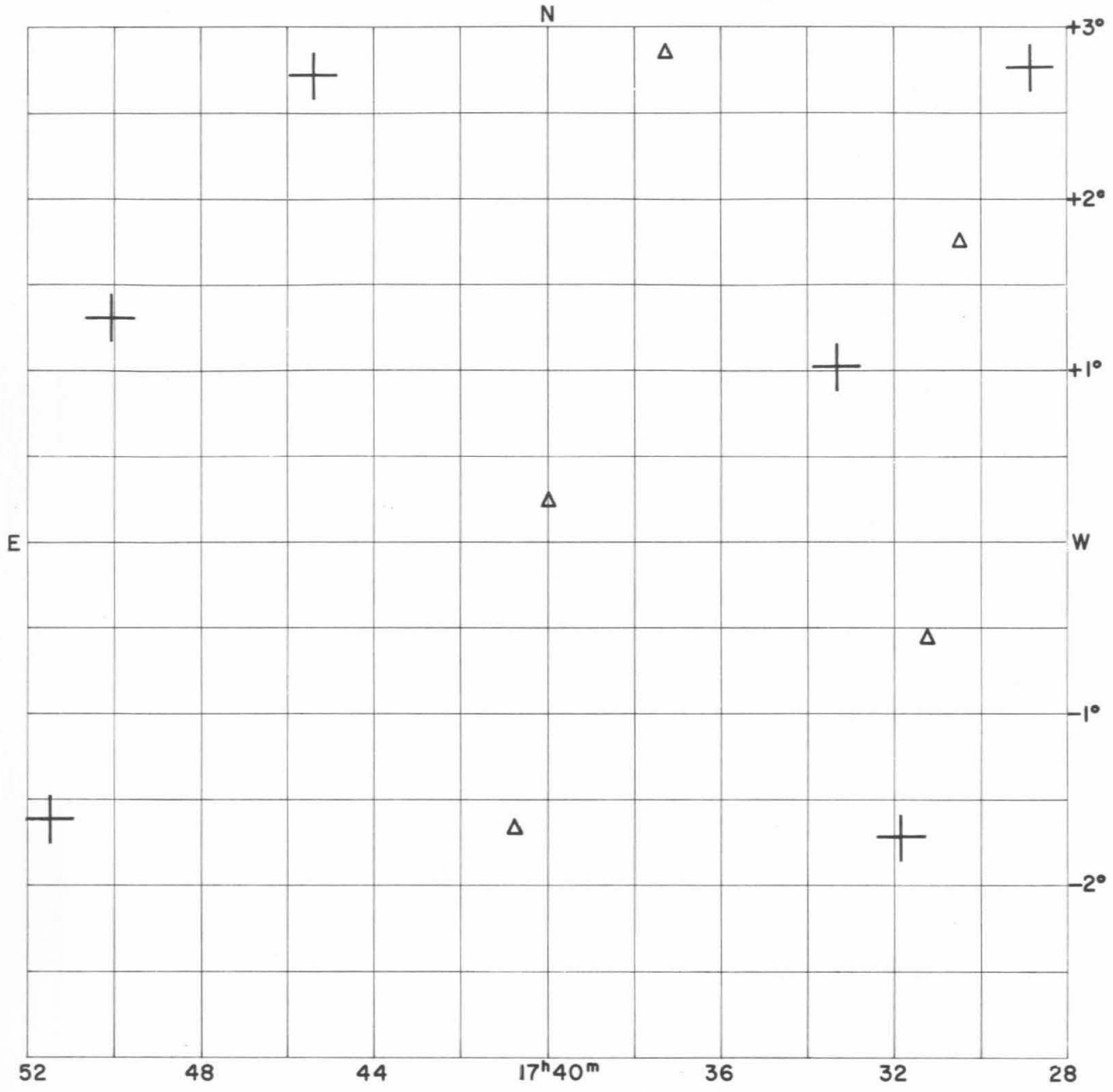
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1703.8 - 0129	compact	64	2.1	D	2
1718.1 - 0108	medium compact	112	5.8	Near	1

Average number of galaxies per cluster = 88.0

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 04.3	+ 02 18		15.2		
17 05.8	+ 01 01		15.5		compact
17 14.0	+ 00 55		15.7		diffuse
17 19.2	- 00 45		15.3		
17 19.8	+ 02 03		15.1		double system
17 20.0	+ 01 00		15.4		
17 21.5	+ 01 41		15.5		
17 22.7	+ 02 07		15.6		



FIELD No. 27

17^h40^m 0°00'

Survey Plate No. 1144

GC STARS

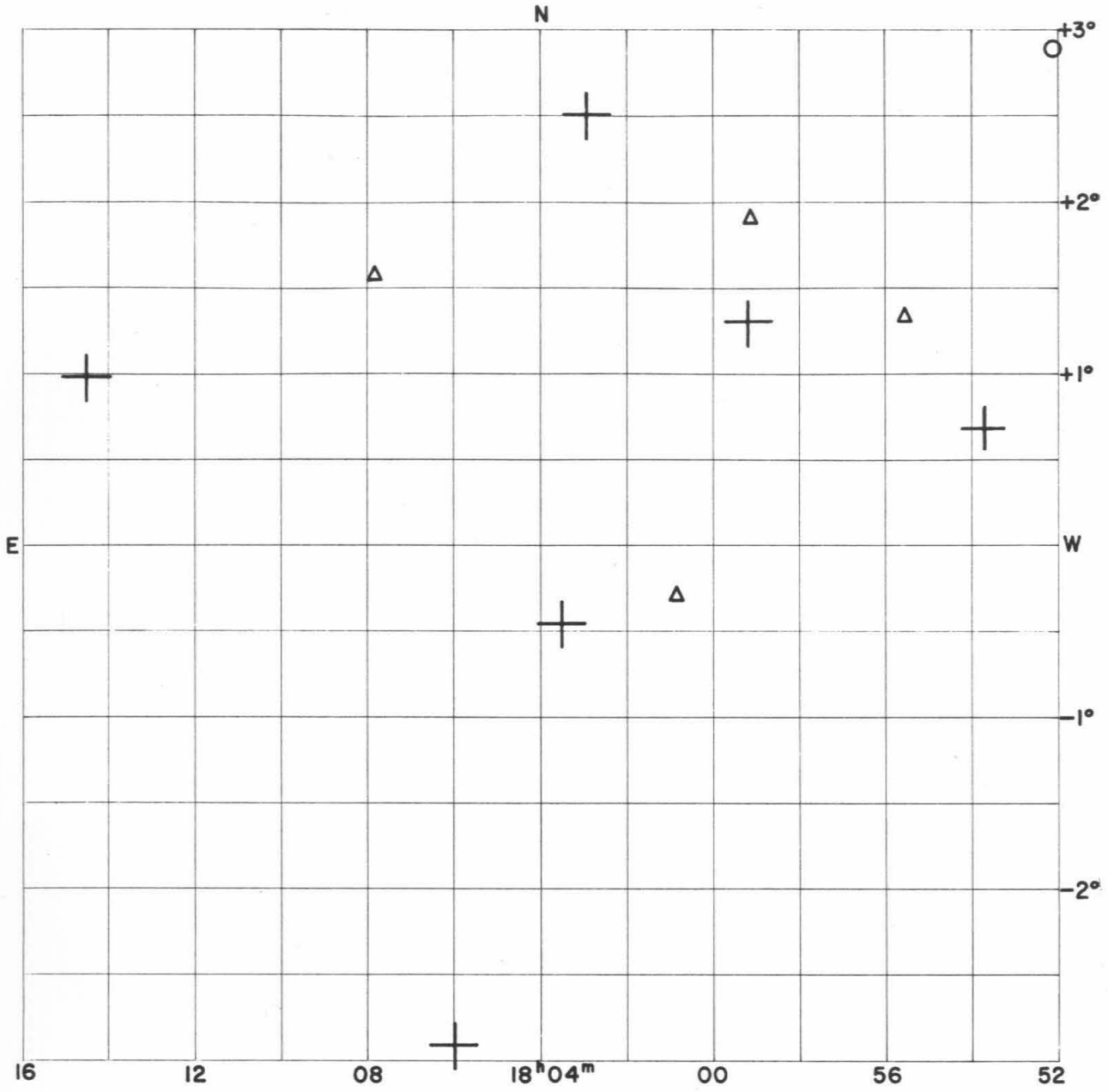
Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
23732	17 28 50.8	+ 2 45 37	5.59
23814	17 31 53.2	- 1 43 34	7.9
23848	17 33 18.0	+ 1 01 39	7.64
24162	17 45 23.0	+ 2 43 28	3.74
24295	17 50 03.3	+ 1 18 56	6.15
24335	17 51 28.0	- 1 36 36	6.53

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
17 30.5	+ 01 45		15.5		compact
17 31.3	- 00 34		15.6		compact
17 37.4	+ 02 51		15.3		
17 40.0	+ 00 14		15.5		
17 40.8	- 01 40		15.4		



FIELD No. 28

18^h04^m 0°00'

Survey Plate No. 773

GC STARS

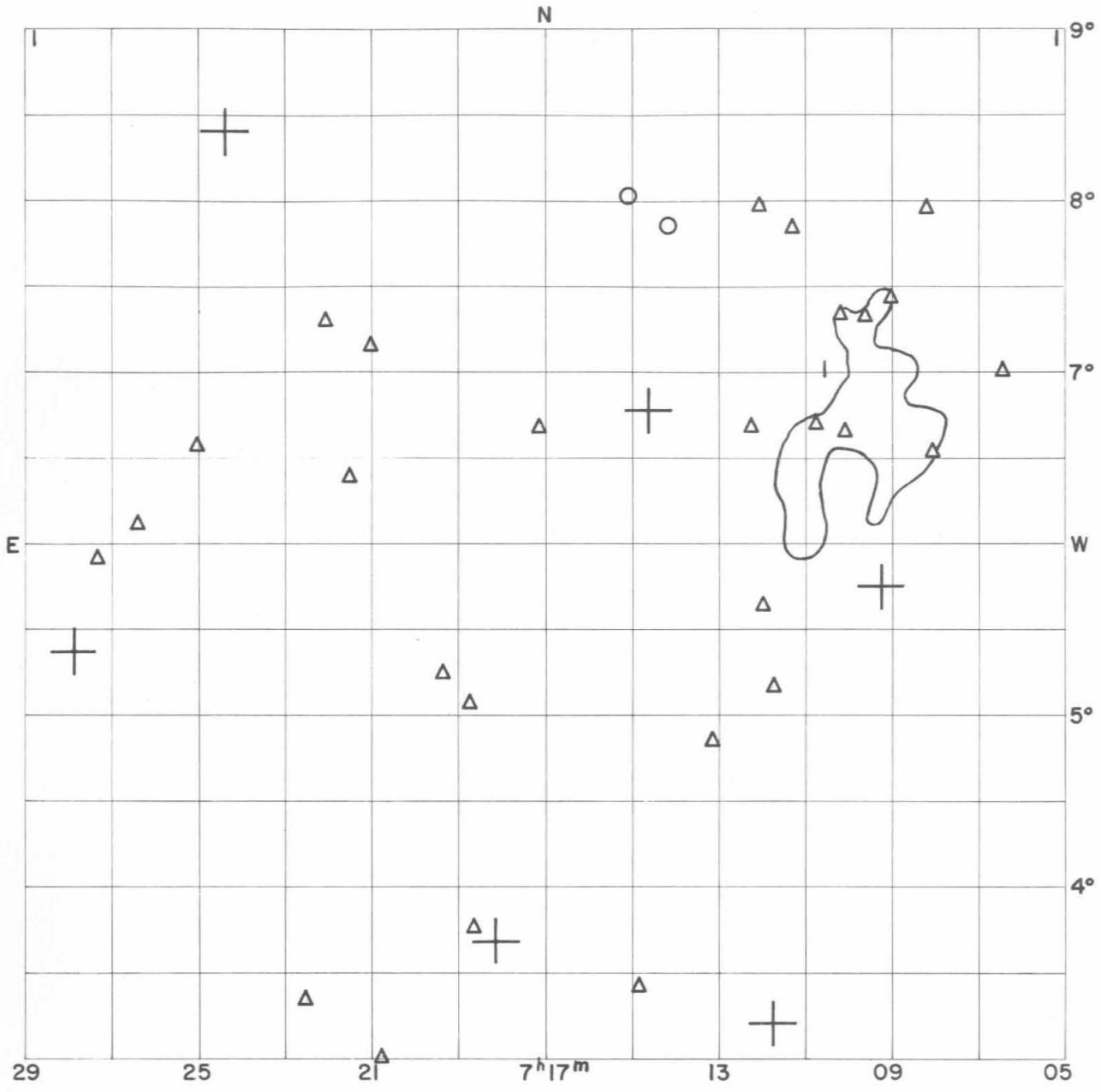
Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
24393	17 53 45.4	+ 0 40 35	5.73
24534	17 59 12.9	+ 1 18 17	4.44
24641	18 02 55.6	+ 2 30 34	4.07
24659	18 03 33.2	- 0 27 08	6.52
24726	18 06 02.0	- 2 54 59	6.85
24949	18 14 32.3	+ 0 59 13	6.60

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
17 52.1	+ 02 53		14.9		
17 55.6	+ 01 20		15.7		very diffuse
17 59.1	+ 01 55		15.4		
18 00.9	- 00 18		15.6		6' west of NGC 6535
18 07.8	+ 01 34		15.7		extremely diffuse



FIELD No. 29

7^h17^m + 6°00'

Survey Plate No. 999

GC STARS

Nos.	R.A. h m s	Decl. ° ' "	m_p
9516	7 09 11.3	+ 5 44 21	6.04
9590	7 11 42.8	+ 3 11 55	5.56
9679	7 14 36.7	+ 6 46 17	6.44
9781	7 18 06.0	+ 3 40 35	6.84
9947	7 24 26.4	+ 8 23 30	3.09
10046	7 27 54.1	+ 5 21 37	7.5

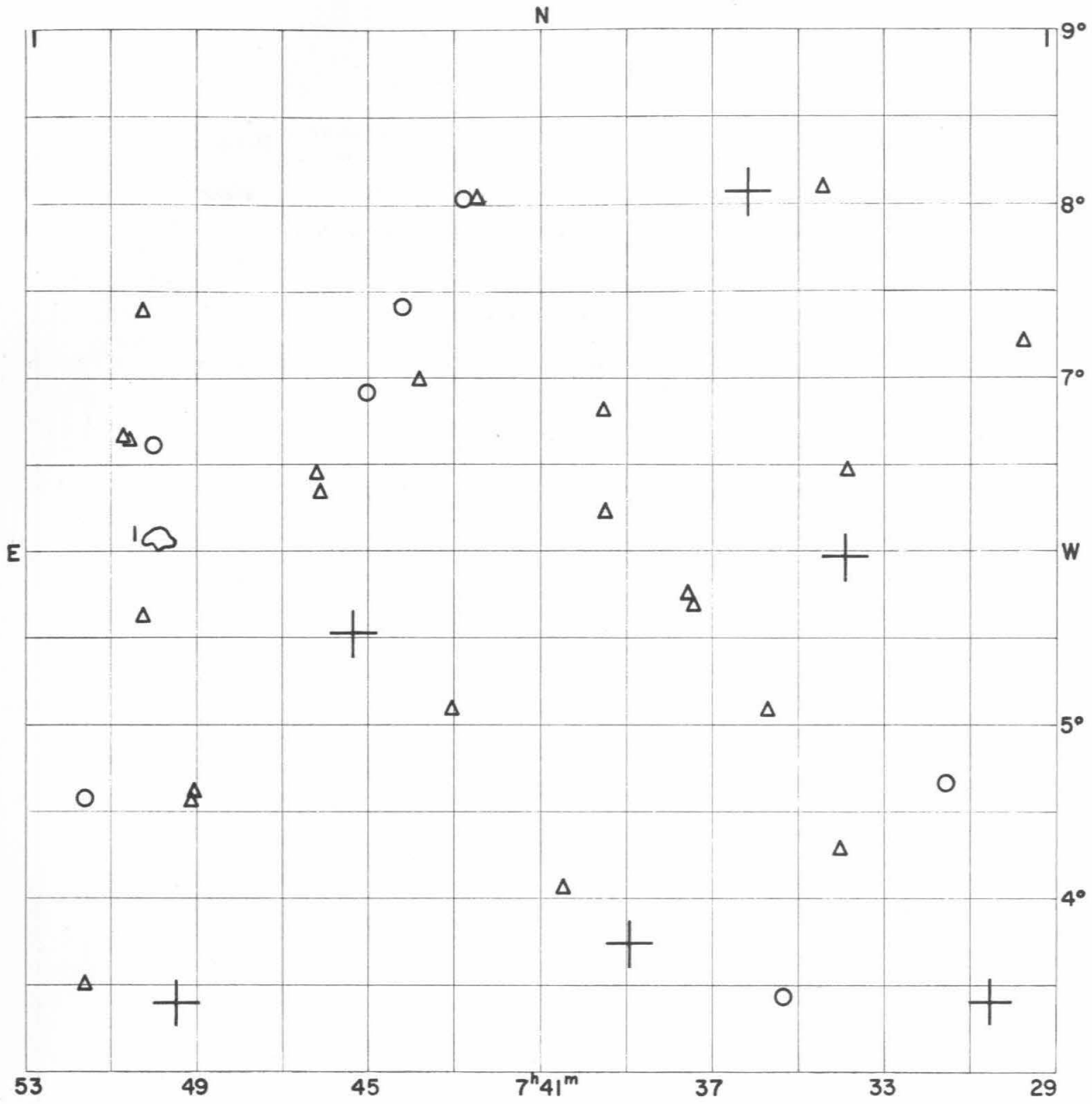
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0709.5 + 0642	open	75	5.0	Near	1

Average number of galaxies per cluster = 75.0

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
7 06.3	+ 07 01		15.6		
7 08.0	+ 06 32		15.0		
7 08.1	+ 07 58		15.3		compact
7 09.0	+ 07 26		15.5		
7 09.5	+ 07 20		15.2		
7 10.0	+ 06 39		15.4		diffuse
7 10.2	+ 07 20		15.7		
7 10.7	+ 06 42		15.5		compact
7 11.2	+ 07 50		15.5		
7 11.7	+ 05 09		15.3		double nebula
7 11.9	+ 05 37		15.6		
7 12.0	+ 07 58		15.5		
7 12.2	+ 06 40		15.3		
7 13.1	+ 04 51		15.4		compact
7 14.2	+ 07 51		14.9		
7 14.8	+ 03 25		15.7		
7 15.0	+ 08 02		14.7		double system
7 17.1	+ 06 40		15.5		triple system
7 18.7	+ 03 45		15.6		
7 18.8	+ 05 04		15.6		
7 19.4	+ 05 14		15.7		
7 20.8	+ 03 00		15.3		
7 21.0	+ 07 09		15.7		
7 21.5	+ 06 23		15.6		
7 22.1	+ 07 18		15.5		compact
7 22.6	+ 03 19		15.6		
7 25.1	+ 06 34		15.4		diffuse
7 26.5	+ 06 06		15.5		
7 27.4	+ 05 55		15.3		compact



FIELD No. 30

7^h41^m + 6°00'

Survey Plate No. 1527

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10104	7 30 34.4	+ 3 23 54	5.66
10194	7 33 55.0	+ 5 58 26	5.94
10263	7 36 09.0	+ 8 04 55	7.22
10347	7 38 57.6	+ 3 44 34	5.87
10509	7 45 24.0	+ 5 32 06	6.95
10630	7 49 29.8	+ 3 24 28	6.59

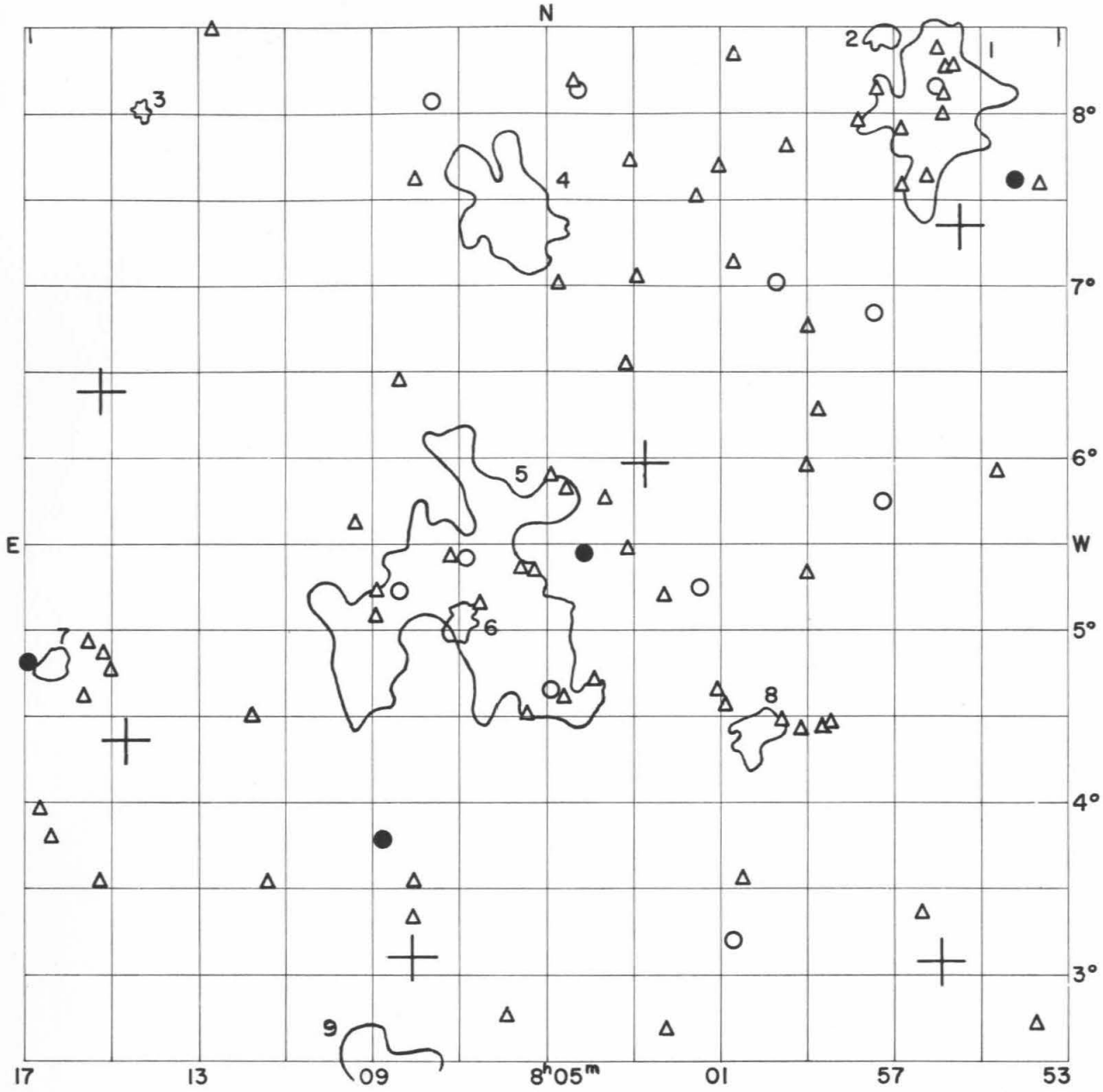
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0750.0 + 0604	compact	46	0.7	VD	1

Average number of galaxies per cluster = 46.0

GALAXIES

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	° '				
7 29.7	+ 07 12		15.7		
7 31.6	+ 04 39		14.5		
7 33.8	+ 06 28		15.7		very diffuse
7 34.0	+ 04 16		15.4		
7 34.4	+ 08 06		15.6		compact
7 35.4	+ 03 25		14.4		
7 35.7	+ 05 05		15.7		diffuse
7 37.4	+ 05 41		15.6		diffuse
7 37.6	+ 05 45		15.3		compact
7 39.5	+ 06 14		15.6		
7 39.5	+ 06 49		15.5		diffuse
7 40.5	+ 04 04		15.5		
7 42.5	+ 08 03		15.1		
7 42.8	+ 08 03		14.8		
7 43.1	+ 05 05		15.1		
7 43.9	+ 06 59		15.7		diffuse
7 44.2	+ 07 25		14.7		
7 45.1	+ 06 55		15.0		
7 46.2	+ 06 20		15.4		
7 46.3	+ 06 27		15.6		compact
7 49.1	+ 04 38		15.2		
7 49.2	+ 04 34		15.3		
7 50.1	+ 06 37		14.8		
7 50.3	+ 05 37		15.1		
7 50.4	+ 07 24		15.6		
7 50.7	+ 06 38		15.3		
7 50.8	+ 06 40		15.4		
7 51.7	+ 03 30		15.5		
7 51.7	+ 04 35	2470	14.2		



FIELD No. 31

8^h05^m + 5°30'

Survey Plate No. 27

'GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10766	7 55 24.7	+ 7 20 58	6.31
10779	7 55 53.6	+ 3 04 20	6.53
10973	8 02 44.8	+ 5 58 15	7.8
11108	8 08 03.8	+ 3 05 56	7.07
11285	8 14 40.6	+ 4 22 29	6.68
11304	8 15 19.5	+ 6 23 24	7.05

CLUSTERS OF GALAXIES

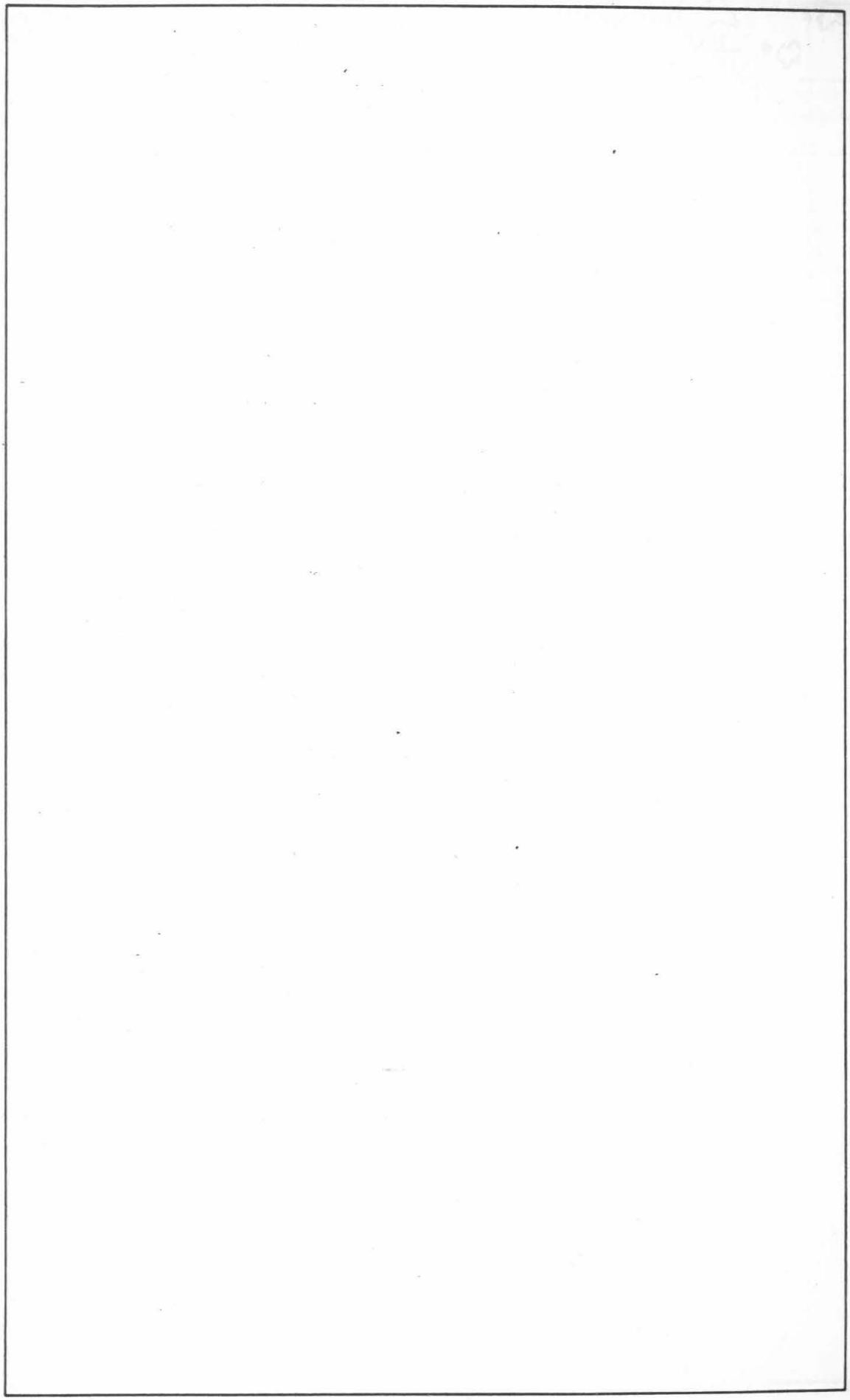
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0755.9 + 0805	medium compact	90	4.0	Near	1
0757.2 + 0828	compact	47	0.8	VD	2
0800.3 + 0424	medium compact	70	1.4	D	8
0805.9 + 0728	compact	119	3.3	MD	4
0806.8 + 0514	medium compact	220	6.5	Near	5
0807.0 + 0504	compact	79	1.1	VD	6
0808.8 + 0219	compact	93	2.8	D	9
0814.5 + 0802	compact	100	0.5	ED	3
0816.5 + 0449	compact	59	0.9	D	7

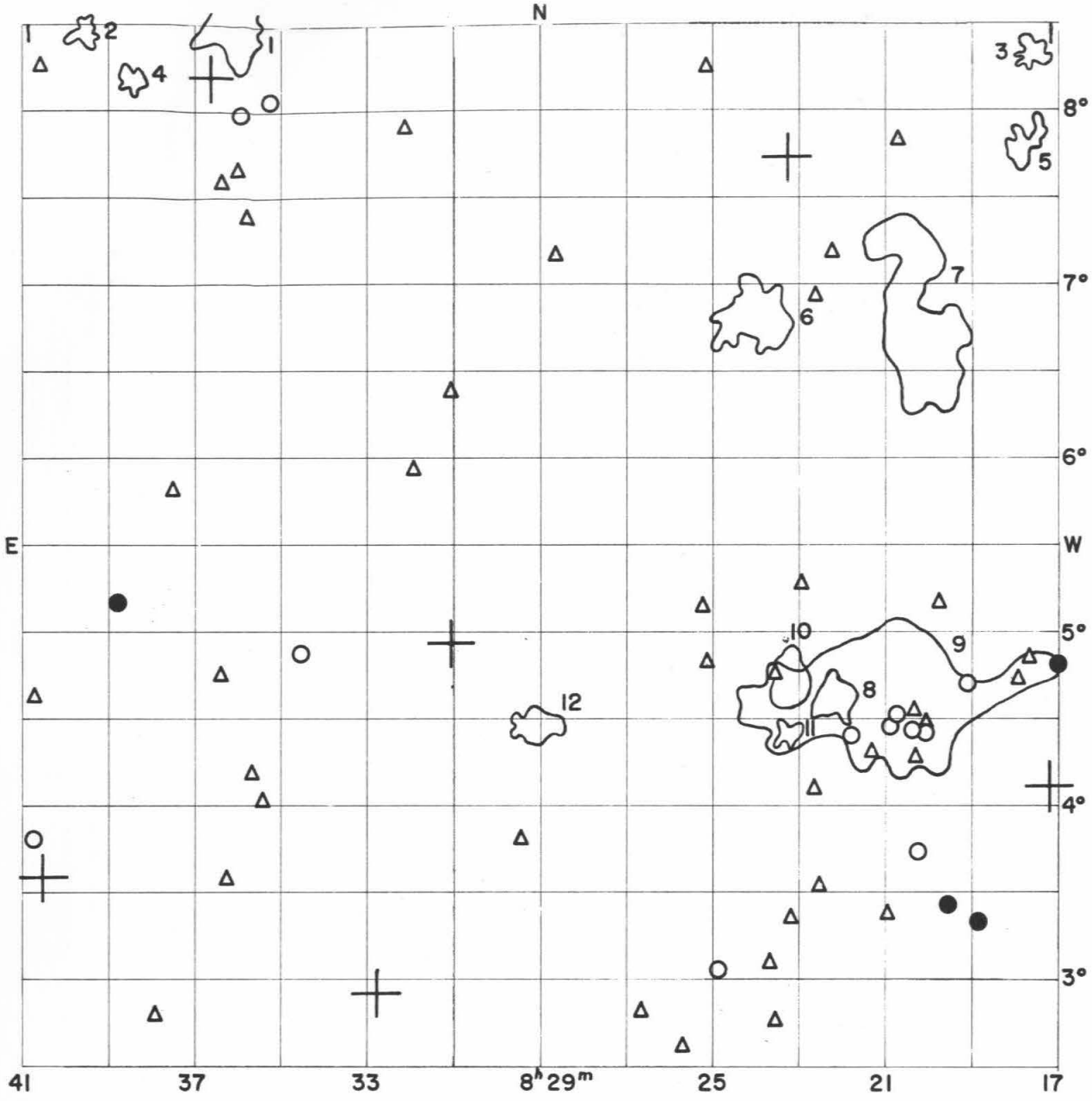
Average number of galaxies per cluster = 97.4

GALAXIES

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	° ′				
7 53.5	+ 07 35		15.5		
7 53.8	+ 02 41		15.7		
7 54.1	+ 07 37	2485	13.3		
7 54.5	+ 05 55		15.6		
7 55.5	+ 08 17		15.5		
7 55.8	+ 08 00		15.4		
7 55.8	+ 08 07	2491	15.6		
7 55.8	+ 08 17		15.5		
7 55.9	+ 08 10	2496	14.8		
7 55.9	+ 08 23		15.3		
7 56.2	+ 07 38	2499	15.1		
7 56.4	+ 03 20		15.5		
7 56.7	+ 07 54		15.6		compact
7 56.8	+ 07 35		15.6		
7 57.2	+ 05 45	2504	14.1		
7 57.3	+ 08 09		15.2		
7 57.4	+ 06 50		14.7		
7 57.7	+ 07 57		15.1		
7 58.4	+ 04 27		15.6		compact
7 58.6	+ 04 25		15.4		compact
7 58.7	+ 06 16		15.3		
7 59.0	+ 05 19		15.6		
7 59.0	+ 05 57		15.7		
7 59.0	+ 06 46		15.2		
7 59.2	+ 04 25		15.5		
7 59.4	+ 07 49		15.3		
7 59.6	+ 04 28		15.5		
7 59.7	+ 07 01		14.8		
8 00.5	+ 03 32		15.4		
8 00.7	+ 03 10		15.0		
8 00.7	+ 07 08		15.4		
8 00.7	+ 08 20		15.7		
8 00.8	+ 04 34		15.6		
8 01.0	+ 07 42		15.4		
8 01.1	+ 04 39		15.6		
8 01.5	+ 05 15		14.4		
8 01.5	+ 07 31		15.2		very compact
8 02.2	+ 02 39		15.6		
8 02.3	+ 05 12		15.3		
8 02.9	+ 07 03		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
8 03.0 + 07 44		15.2		double nebula, collision
8 03.1 + 05 28		15.7		
8 03.2 + 06 33		15.6		
8 03.7 + 05 46		15.4		
8 03.9 + 04 42		15.4		
8 04.1 + 05 27		13.9		
8 04.3 + 08 09	2526	14.6		
8 04.4 + 08 11	2228*	15.3		
8 04.6 + 05 49		15.7		
8 04.7 + 04 36		15.2		
8 04.8 + 07 00		15.4		
8 04.9 + 04 39		14.9		extremely compact
8 04.9 + 05 54		15.6		
8 05.3 + 05 21		15.2		
8 05.5 + 04 30		15.5		
8 05.6 + 05 21		15.7		
8 05.9 + 02 45		15.2		
8 06.5 + 05 10		15.5		
8 06.8 + 05 25	498*	14.6		
8 07.2 + 05 25		15.5		very compact
8 07.6 + 08 05		14.9		
8 08.0 + 07 37		15.1		
8 08.1 + 03 19		15.5		compact
8 08.1 + 03 31		15.7		triple system
8 08.4 + 06 27		15.2		
8 08.4 + 05 14	2231*	15.0		double system
8 08.8 + 03 46	2538	13.8		
8 08.9 + 05 14		15.6		
8 09.0 + 05 05		15.7		compact
8 09.4 + 05 37		15.6		compact
8 11.4 + 03 32		15.4		
8 11.8 + 04 29		15.4		
8 12.8 + 08 30		15.4		
8 15.1 + 04 46		15.4		very diffuse
8 15.2 + 04 52		15.6		
8 15.3 + 03 32		15.3		
8 15.6 + 04 55		15.7		diffuse
8 15.7 + 04 36		15.7		
8 16.4 + 03 47		15.4		compact
8 16.7 + 03 56		15.7		
8 17.0 + 04 49	2561	14.0		





FIELD No. 32

8^h29^m + 5°30'

Survey Plate No. 642

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11353	8 17 12.2	+ 4 06 23	6.29
11505	8 23 13.9	+ 7 43 44	5.23
11732	8 31 05.4	+ 4 55 43	6.13
11768	8 32 48.6	+ 2 55 01	6.48
11871	8 36 43.6	+ 8 11 42	6.49
11987	8 40 36.7	+ 3 34 46	4.32

CLUSTERS OF GALAXIES

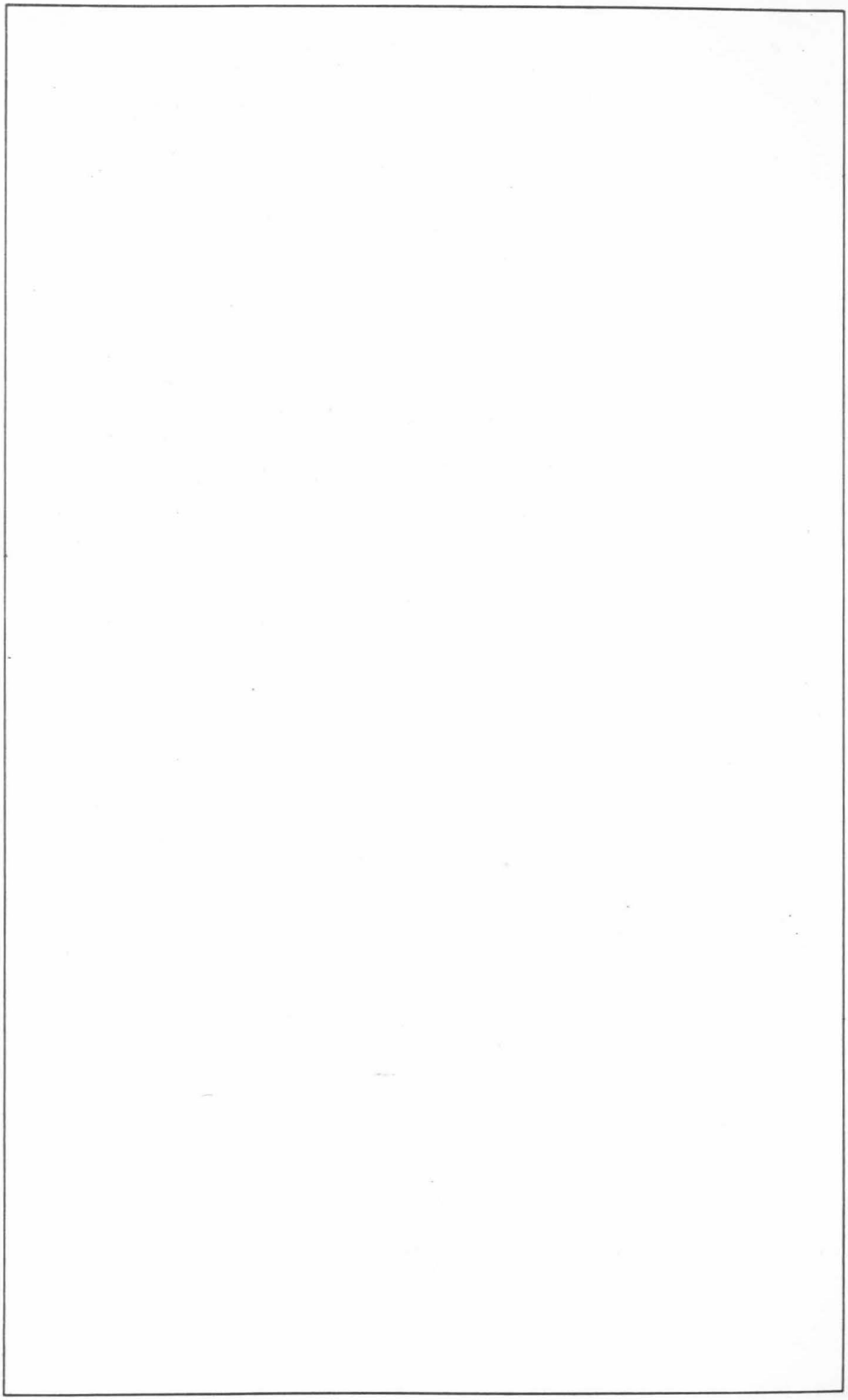
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0817.4 + 0820	medium compact	58	0.9	D	3
0817.6 + 0748	compact	81	1.1	VD	5
0820.1 + 0647	open	122	3.6	MD	7
0820.6 + 0436	medium compact	163	5.5	Near	9
0822.1 + 0437	compact	130	1.3	VD	8
0823.1 + 0444	medium compact	61	1.5	D	10
0823.2 + 0425	compact	47	0.7	VD	11
0824.0 + 0650	open	79	2.2	D	6
0829.1 + 0428	open	89	1.3	VD	12
0836.2 + 0832	medium compact	112	2.6	MD	1
0838.6 + 0810	compact	66	0.7	VD	4
0839.8 + 0828	medium compact	58	0.8	VD	2

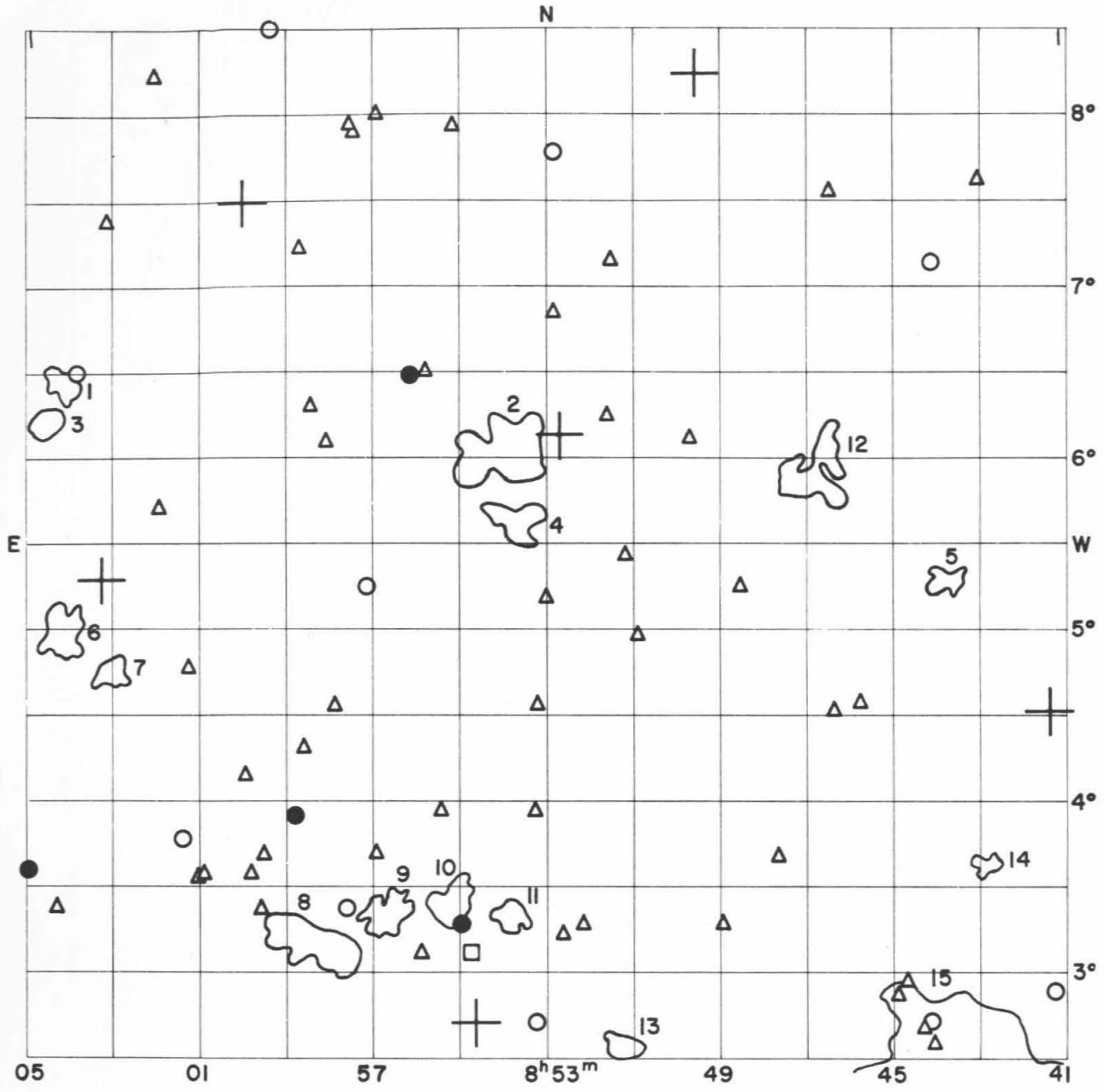
Average number of galaxies per cluster = 88.8

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
8 17.0	+ 04 49	2561	14.0		
8 17.6	+ 04 52		15.2		
8 17.8	+ 04 44		15.1		
8 18.8	+ 03 20	2327*	13.9		
8 19.0	+ 04 42		14.9		
8 19.6	+ 03 25	503*	14.0		
8 19.7	+ 05 10		15.5		
8 20.0	+ 04 25	504*	14.3		
8 20.0	+ 04 29		15.1		compact
8 20.2	+ 03 44		14.7		
8 20.3	+ 04 17		15.2		
8 20.3	+ 04 26		14.6		compact
8 20.3	+ 04 33		15.2		
8 20.6	+ 07 50		15.7		diffuse
8 20.7	+ 04 32	505*	14.8		
8 20.8	+ 04 28	506*	14.7		very compact
8 20.9	+ 03 22		15.4		
8 21.3	+ 04 19		15.3		
8 21.7	+ 04 25		14.9		
8 22.2	+ 07 11		15.4		
8 22.5	+ 03 32		15.2		
8 22.6	+ 04 05		15.1		compact
8 22.6	+ 06 56		15.1		
8 22.9	+ 05 17		15.3		compact
8 23.2	+ 03 20		15.3		
8 23.5	+ 04 45		15.5		
8 23.6	+ 02 45		15.3		double nebula
8 23.7	+ 03 05		15.1		
8 24.9	+ 03 02		14.7		double nebula
8 25.1	+ 08 16		15.6		
8 25.2	+ 04 49		15.4		
8 25.2	+ 05 08		15.4		compact
8 25.7	+ 02 36		15.1		
8 26.7	+ 02 48		15.7		diffuse
8 28.7	+ 07 10		15.6		
8 29.5	+ 03 48		15.1		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
8 31.1 + 06 22		15.6		
8 32.0 + 05 56		15.4		
8 32.2 + 07 55		15.4		triple system
8 34.6 + 04 52		15.0		
8 35.4 + 08 04		15.0		double nebula, connected
8 35.5 + 04 01		15.5		double system
8 35.8 + 04 11		15.4		
8 35.9 + 07 23		15.4		
8 36.0 + 07 59		14.8		
8 36.1 + 07 40		15.1		
8 36.3 + 03 34		15.5		double nebula
8 36.5 + 04 44		15.1		
8 36.5 + 07 35		15.3		
8 37.6 + 05 49		15.2		
8 38.0 + 02 47	519*	15.4		very compact
8 38.9 + 05 09	2644	13.4		
8 40.7 + 08 16		15.3		
8 40.8 + 03 48		14.8		
8 40.8 + 04 37		15.6		





FIELD No. 33

8^h53^m + 5° 30'

Survey Plate No. 1358

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12007	8 41 22.1	+ 4 30 58	6.33
12243	8 49 35.2	+ 8 15 18	6.59
12327	8 52 45.1	+ 6 08 13	3.30
12377	8 54 37.9	+ 2 43 05	6.84
12499	9 00 05.0	+ 7 29 46	6.07
12564	9 03 20.5	+ 5 17 36	5.41

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0842.8 + 0336	compact	57	0.6	ED	14
0843.7 + 0516	medium compact	82	1.0	VD	5
0843.8 + 0215	open	147	6.5	MD	15
0846.8 + 0554	medium compact	74	1.5	D	12
0851.2 + 0234	open	53	0.9	VD	13
0853.7 + 0537	medium compact	65	1.3	VD	4
0853.9 + 0319	medium compact	56	1.0	VD	11
0854.0 + 0602	medium compact	80	2.0	D	2
0855.2 + 0324	compact	124	1.2	ED	10
0856.7 + 0320	compact	107	1.2	VD	9
0858.4 + 0310	medium compact	152	2.0	VD	8
0903.0 + 0445	compact	75	0.9	VD	7
0904.2 + 0459	compact	85	1.4	D	6
0904.3 + 0626	open	67	1.1	VD	1
0904.6 + 0613	compact	56	1.0	VD	3

Average number of galaxies per cluster = 85.3

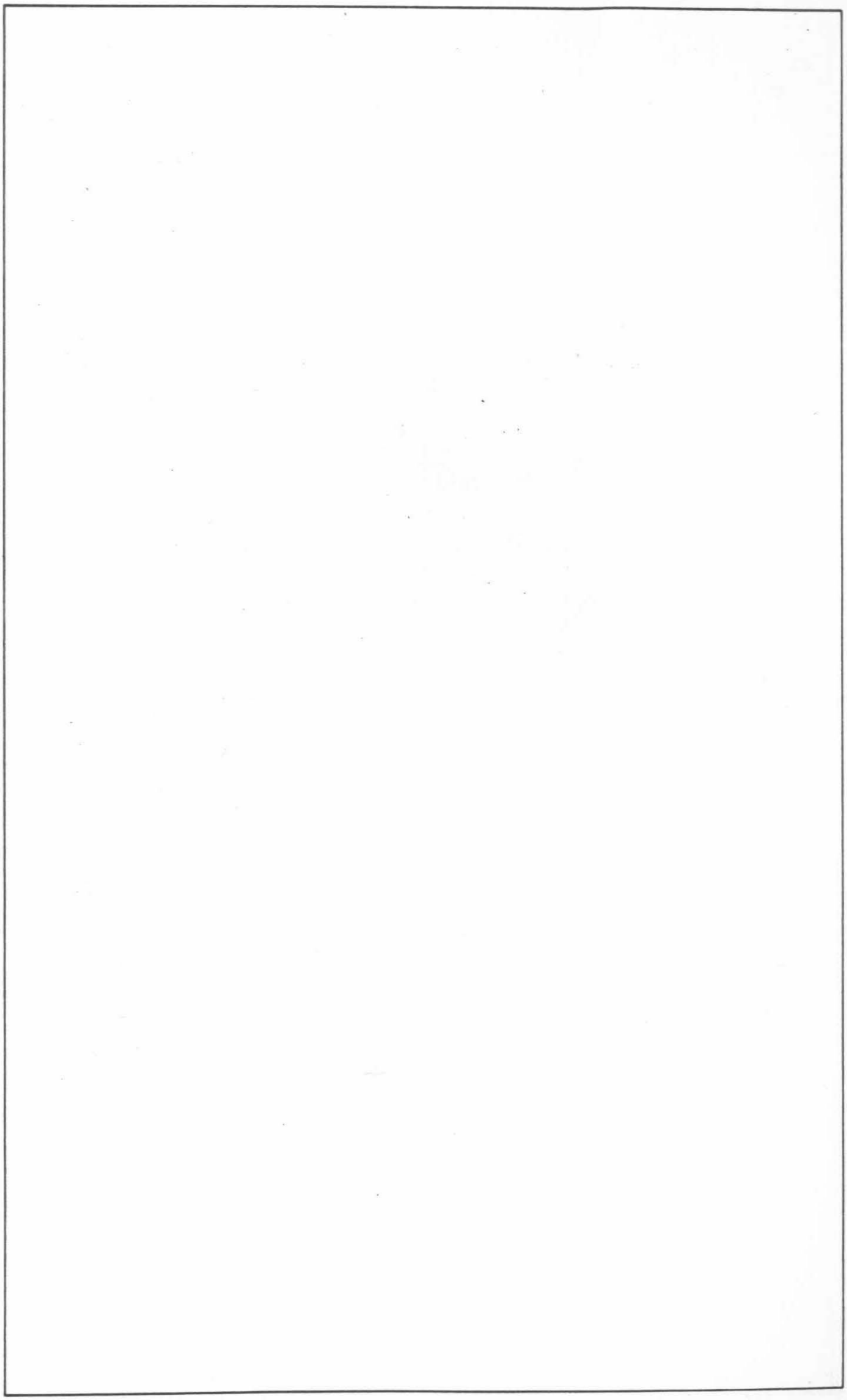
GALAXIES

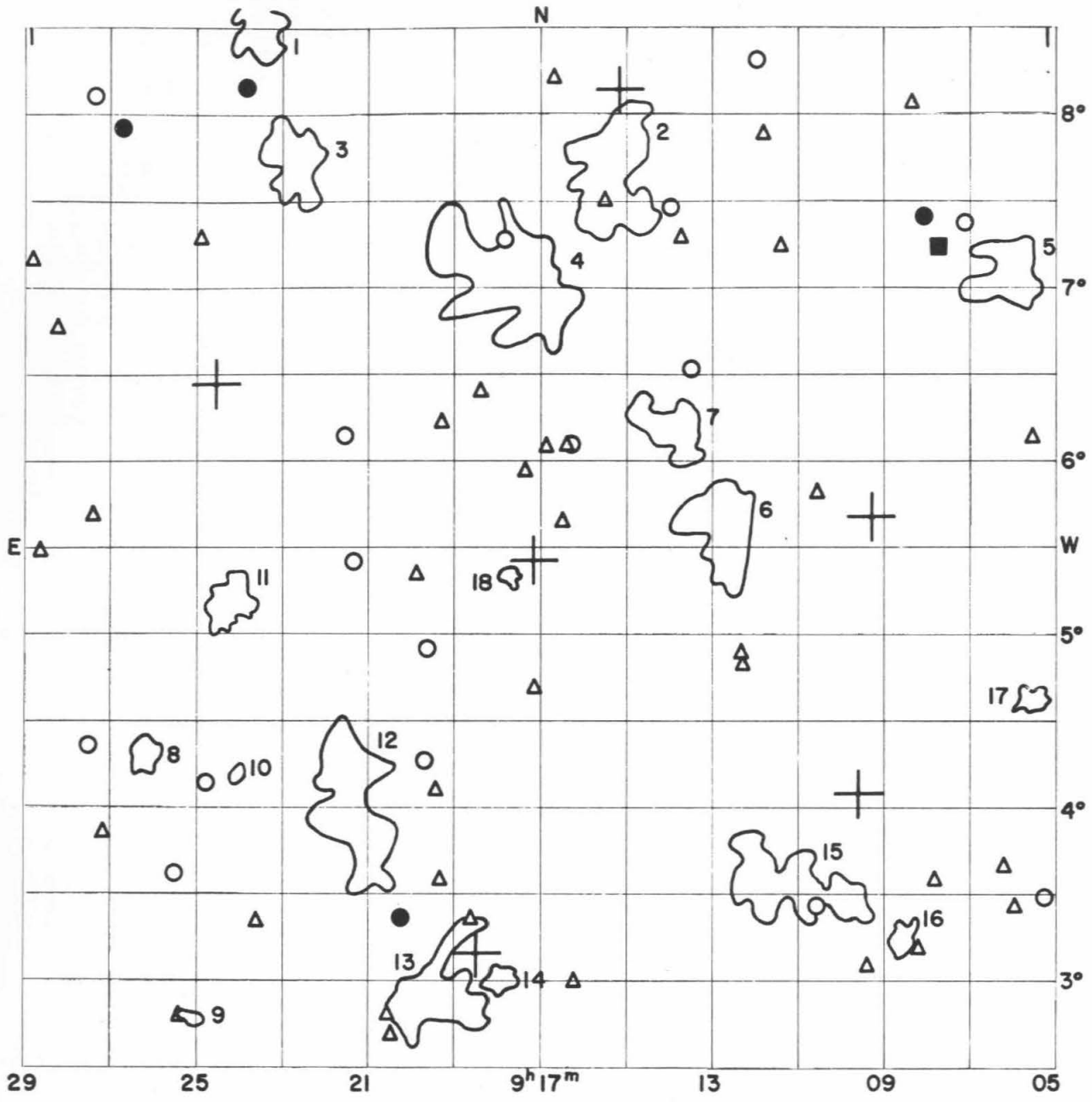
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
8 41.2 + 02 54		15.0		
8 42.9 + 07 38		15.4		
8 44.0 + 02 35		15.4		compact
8 44.0 + 02 43	521*	14.8		
8 44.1 + 07 09		14.8		
8 44.2 + 02 40		15.6		
8 44.7 + 02 57		15.2		
8 44.9 + 02 52		15.6		
8 45.7 + 04 34		15.7		
8 46.3 + 04 31		15.6		
8 46.4 + 07 34		15.3		
8 47.6 + 03 40		15.4		
8 48.5 + 05 15		15.3		
8 48.9 + 03 16	2420*	15.1		compact
8 49.7 + 06 07		15.5		
8 50.9 + 04 58		15.6		
8 51.2 + 05 26		15.5		
8 51.5 + 07 10		15.4		double nebula
8 51.6 + 06 15		15.7		diffuse double system
8 52.1 + 03 16		15.6		
8 52.6 + 03 13		15.6		
8 52.8 + 07 47		14.9		
8 52.9 + 06 51		15.5		
8 53.0 + 05 10		15.4		
8 53.2 + 04 33		15.7		
8 53.3 + 02 43		14.9		
8 53.3 + 03 56		15.5		
8 54.7 + 03 06	2713	12.9		m_H = 12.7 S
8 54.9 + 03 16	2716	13.7	+ 3537	
8 55.2 + 07 56		15.5		
8 55.5 + 03 56		15.7		compact
8 55.8 + 06 31		15.5		double system, connecting bridge
8 55.9 + 03 06	2426*	15.1		

Position α 1950 h m	Position δ 1950 ° '	NGC IC*	m_p	V_s km/sec	Remarks
8 56.2	+ 06 30	2718	13.3		
8 57.0	+ 03 41		15.7		
8 57.0	+ 08 01		15.6		
8 57.1	+ 05 15		14.8		
8 57.5	+ 07 55		15.4		
8 57.6	+ 03 22	2723	14.5	+ 3725	
8 57.6	+ 07 57		15.7		compact
8 57.9	+ 04 33		15.6		
8 58.1	+ 06 05		15.7		
8 58.5	+ 06 18		15.3		compact
8 58.6	+ 04 18		15.7		
8 58.8	+ 07 13		15.3		
8 58.9	+ 03 55	2729	14.0		
8 59.5	+ 03 40		15.4		double system
8 59.5	+ 08 30	2731	14.2		
8 59.6	+ 03 21		15.5		diffuse
8 59.8	+ 03 34		15.2		
9 00.0	+ 04 09		15.7		
9 00.8	+ 03 34		15.2		
9 01.0	+ 03 34		15.1		
9 01.3	+ 04 46		15.6		
9 01.4	+ 03 47		14.9		
9 02.0	+ 05 43	2432*	15.5		
9 02.2	+ 08 14		15.3		very compact
9 03.3	+ 07 24		15.3		
9 03.9	+ 06 30		14.9		
9 04.3	+ 03 23		15.1		
9 05.0	+ 03 35	2765	13.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2713	-	-	12.90	SBb	-	-	-	-
2716	-	-	13.08	Sa	12.7	Sa	-	-
2723	-	-	-	-	-	S0	-	-





FIELD No. 34

9^h17^m + 5°30'

Survey Plate No. 28

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12690	9 09 17.8	+ 5 40 28	6.21
12695	9 09 36.3	+ 4 04 23	6.11
12825	9 15 10.9	+ 8 09 25	7.19
12863	9 17 13.6	+ 5 25 42	6.51
12896	9 18 33.2	+ 3 09 14	7.02
13034	9 24 38.9	+ 6 27 10	6.71

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0905.5 + 0437	medium compact	46	0.7	VD	17
0906.0 + 0706	medium compact	107	2.1	VD	5
0908.6 + 0314	medium compact	72	1.0	VD	16
0911.1 + 0332	open	163	2.5	D	15
0912.7 + 0540	medium compact	167	2.4	D	6
0913.9 + 0610	medium compact	123	1.7	D	7
0915.4 + 0740	open	104	2.8	MD	2
0917.7 + 0520	compact	44	0.4	ED	18
0917.8 + 0704	open	97	3.6	Near	4
0918.0 + 0300	compact	75	0.9	ED	14
0919.4 + 0255	medium compact	138	2.2	MD	13
0921.4 + 0358	medium compact	105	2.9	MD	12
0922.8 + 0745	open	78	2.0	MD	3
0923.6 + 0830	medium compact	99	2.0	D	1
0924.1 + 0411	compact	40	0.5	ED	10
0924.4 + 0511	open	97	1.4	VD	11
0925.1 + 0246	compact	55	0.5	ED	9
0926.3 + 0418	compact	91	1.0	VD	8

Average number of galaxies per cluster = 94.5

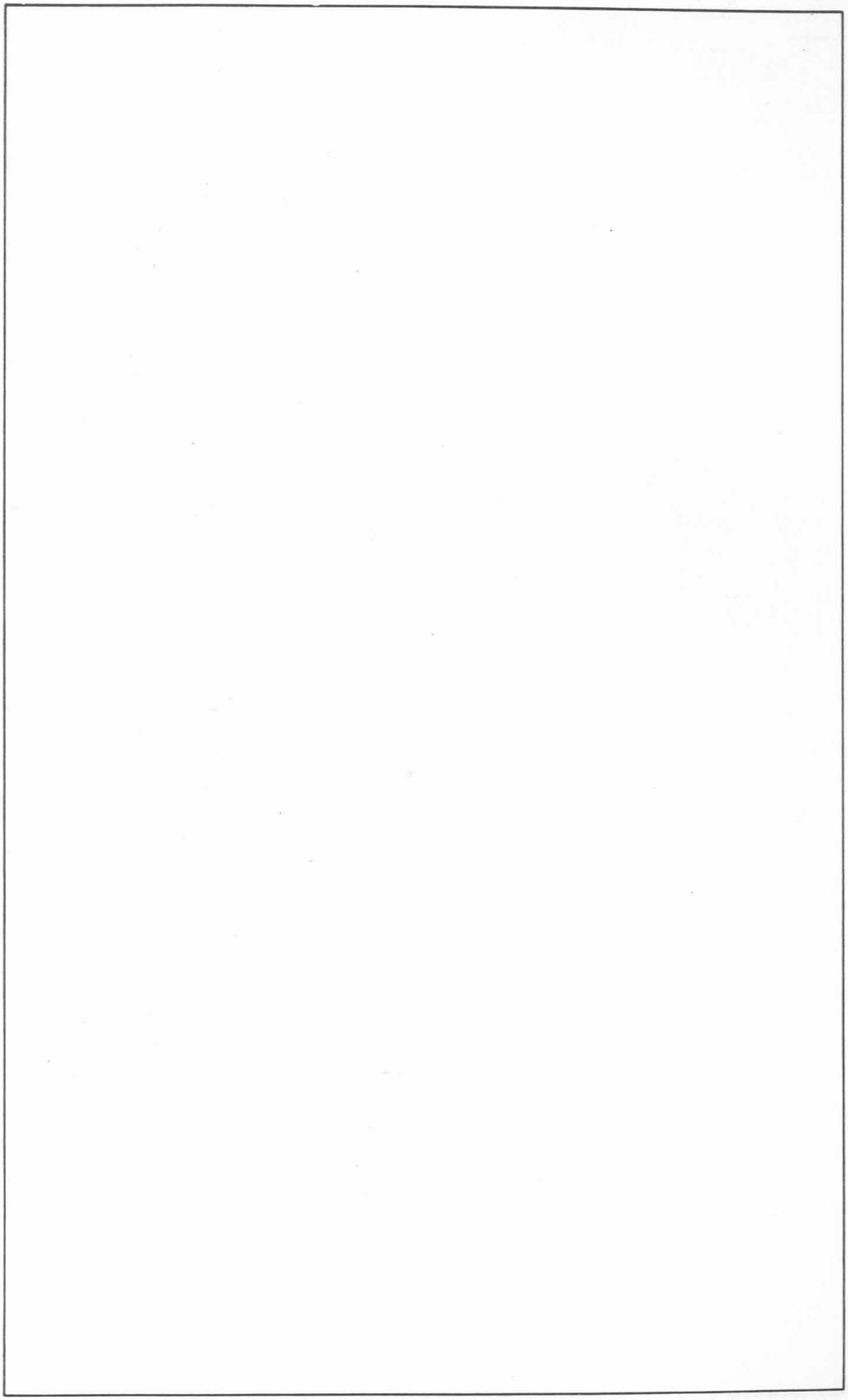
GALAXIES

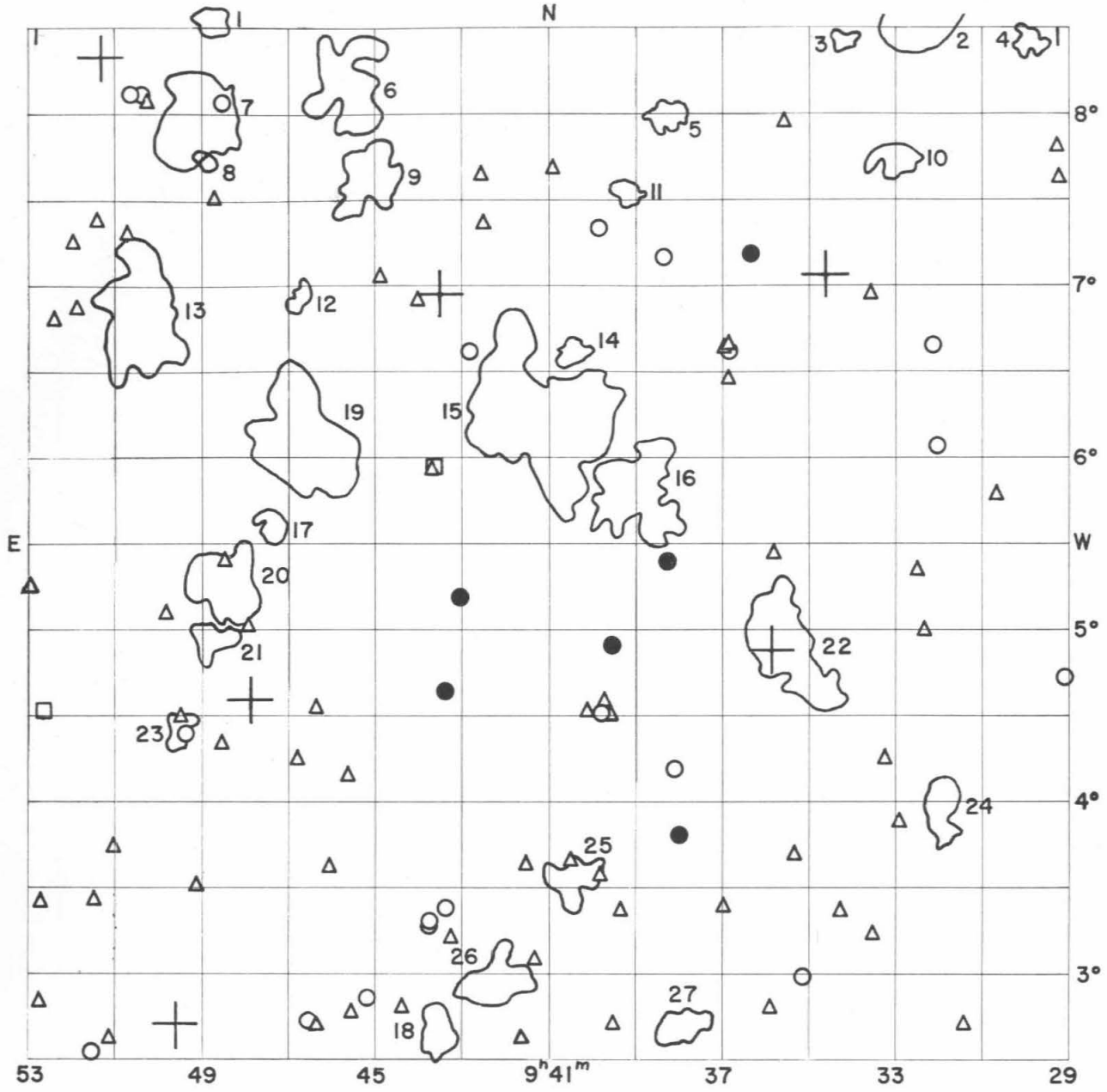
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 05.3 + 03 29		14.8		
9 05.5 + 06 08		15.7		extremely diffuse
9 05.9 + 03 25		15.6		
9 06.2 + 03 39		15.1		
9 07.0 + 07 23	2773	14.5		
9 07.7 + 07 15	2775	11.4	+ 1135	m_H = 11.5 Sa
9 07.8 + 03 35		15.5		
9 08.0 + 07 25	2777	13.9		
9 08.2 + 03 10		15.3		
9 08.3 + 08 05		15.6		
9 09.4 + 03 04		15.7		
9 10.6 + 03 26		14.7		
9 10.6 + 05 49		15.5		
9 11.4 + 07 15		15.6		compact
9 11.8 + 07 54		15.5		
9 11.9 + 08 19		14.7		
9 12.2 + 04 50		15.6		
9 12.3 + 04 54		15.7		
9 13.5 + 06 33		14.9		
9 13.7 + 07 18		15.5		compact
9 14.0 + 07 29		14.8		
9 15.5 + 07 31		15.5		
9 16.3 + 03 00		15.7		
9 16.3 + 06 06		14.9		
9 16.5 + 05 39		15.7		
9 16.5 + 06 06		15.5		
9 16.7 + 08 14		15.4		
9 16.9 + 06 06		15.7		
9 17.1 + 04 41		15.6		
9 17.4 + 05 56		15.4		

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
9 17.8	+ 07 17		15.0		
9 18.4	+ 06 25		15.6		compact
9 18.6	+ 03 22	534*	15.1		
9 19.3	+ 06 13		15.7		
9 19.4	+ 03 35		15.3		
9 19.5	+ 04 06		15.6		diffuse
9 19.7	+ 04 16		14.9		
9 19.7	+ 04 55		14.8		
9 19.9	+ 05 21		15.6		
9 20.3	+ 03 21	2858	13.8		
9 20.5	+ 02 42		15.2		diffuse
9 20.6	+ 02 49		15.1		
9 21.4	+ 05 25		14.9		
9 21.6	+ 06 09	2864	14.8		double nebula
9 23.6	+ 03 20		15.4		
9 23.9	+ 08 10	2882	13.5		
9 24.8	+ 04 09	2481*	14.5		
9 25.0	+ 07 17		15.7		
9 25.4	+ 02 47		15.5		
9 25.6	+ 03 38		14.6		
9 26.8	+ 07 57	2894	13.4		
9 27.3	+ 03 52		15.7		
9 27.5	+ 05 41		15.6		
9 27.5	+ 08 07	540*	14.8		
9 27.7	+ 04 22	2900	14.6		
9 28.4	+ 06 47		15.4		
9 28.8	+ 05 30		15.6		
9 28.9	+ 07 10		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2775	11.2	Sa	11.38	Sa	11.3	Sa	-	-





FIELD No. 35

9^h41^m + 5°30'

Survey Plate No. 233

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13283	9 34 34.4	+ 7 03 39	5.14
13316	9 35 50.9	+ 4 52 34	4.78
13452	9 43 31.9	+ 6 56 25	5.99
13545	9 47 54.0	+ 4 34 43	6.24
13582	9 49 37.4	+ 2 41 17	5.88
13615	9 51 27.9	+ 8 18 41	7.09

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0929.6 + 0825	medium compact	75	0.9	ED	4
0932.0 + 0356	medium compact	122	1.3	VD	24
0932.2 + 0834	open	96	2.6	D	2
0932.9 + 0745	compact	106	1.2	VD	10
0934.0 + 0825	medium compact	51	0.6	ED	3
0935.4 + 0453	open	144	2.6	D	22
0937.9 + 0241	compact	113	1.3	VD	27
0938.1 + 0800	compact	108	1.0	ED	5
0938.9 + 0547	medium compact	262	2.5	VD	16
0939.1 + 0733	compact	74	0.7	ED	11
0940.4 + 0636	compact	70	0.8	VD	14
0940.5 + 0331	compact	146	1.4	ED	25
0941.1 + 0611	compact	363	4.0	MD	15
0942.2 + 0257	open	165	1.7	VD	26
0943.6 + 0240	compact	81	1.3	VD	18
0945.1 + 0739	medium compact	129	1.9	D	9
0945.6 + 0810	open	105	2.3	D	6
0946.7 + 0605	medium compact	210	3.2	MD	19
0946.8 + 0656	medium compact	51	0.6	ED	12
0947.4 + 0536	medium compact	70	0.9	ED	17
0948.5 + 0515	medium compact	115	2.1	MD	20
0948.7 + 0831	compact	61	0.9	VD	1
0948.8 + 0456	medium compact	75	1.1	VD	21
0949.0 + 0745	compact	32	0.5	ED	8
0949.1 + 0759	open	138	2.4	D	7
0949.6 + 0425	medium compact	79	1.0	ED	23
0950.5 + 0649	open	143	2.8	MD	13

Average number of galaxies per cluster = 117.9

GALAXIES

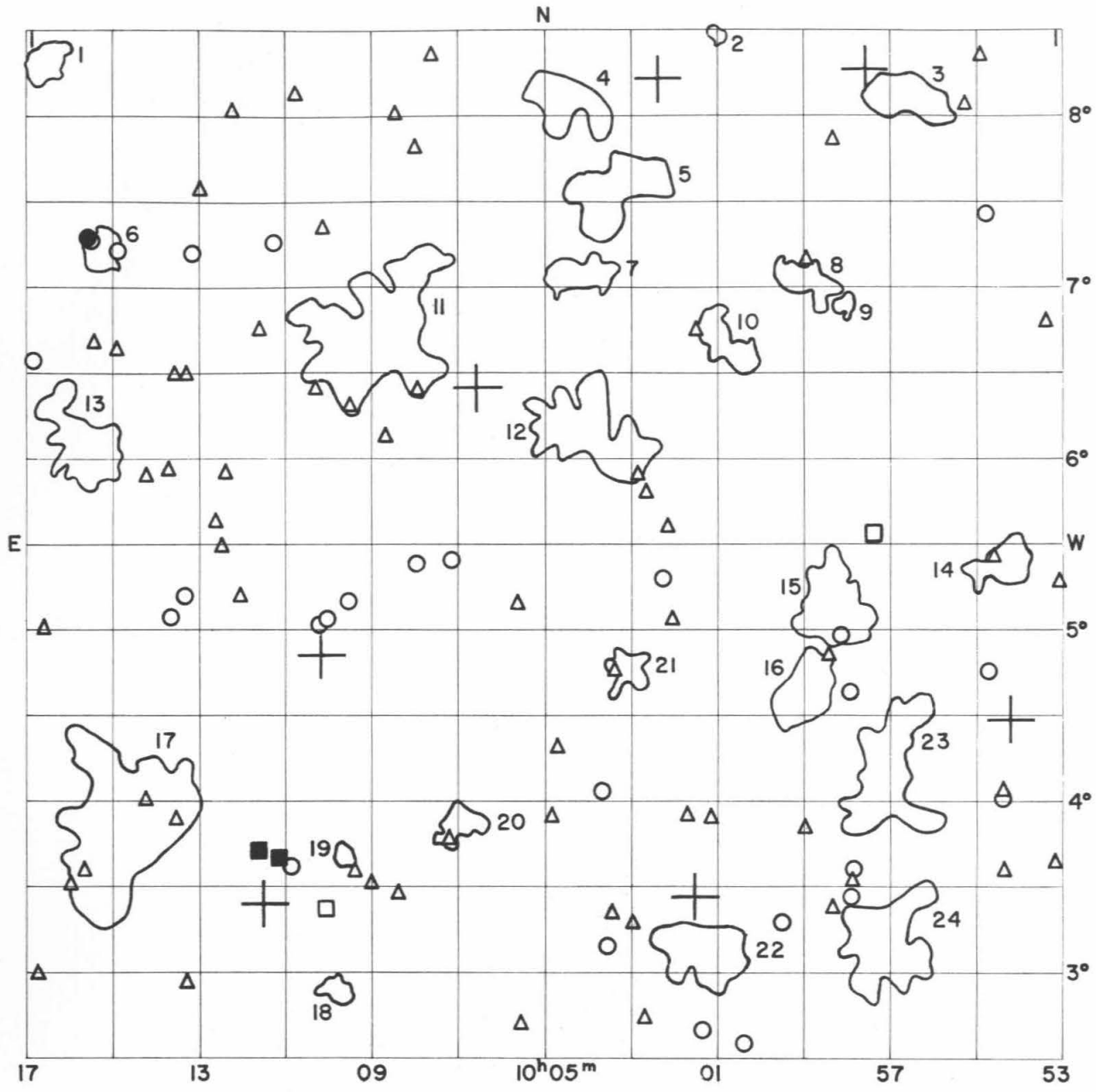
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
9 29.0 + 04 43		14.6		
9 29.1 + 07 38		15.6		
9 29.1 + 07 48		15.6		diffuse
9 30.6 + 05 46		15.5		
9 31.4 + 02 41		15.5		
9 32.0 + 06 04		14.9		
9 32.1 + 06 39		15.0		
9 32.3 + 05 00		15.6		
9 32.5 + 05 20		15.2		
9 32.8 + 03 53		15.6		
9 33.3 + 04 14		15.3		
9 33.5 + 03 14		15.5		
9 33.5 + 06 57		15.7		
9 34.3 + 03 21		15.6		
9 35.1 + 02 58	2936/2937	14.4		E+ irregular multiple system
9 35.3 + 03 41		15.7		
9 35.6 + 07 58		15.7		compact
9 35.8 + 05 26		15.6		
9 35.9 + 02 47		15.4		
9 36.3 + 07 11	2948	13.8		
9 36.7 + 06 38		15.0		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
9	36.8	+ 06 27		15.5		
9	36.8	+ 06 40		15.2		
9	36.9	+ 03 22		15.6		
9	36.9	+ 06 39		15.3		
9	38.0	+ 03 48	2960	13.6		
9	38.1	+ 04 10	549*	14.8		
9	38.3	+ 05 24	2962	13.1		m_H = 12.9 S
9	38.3	+ 07 10	551*	14.5		
9	39.3	+ 03 21		15.4		
9	39.5	+ 02 41		15.7		double system
9	39.6	+ 04 30		15.7		
9	39.6	+ 04 54	2966	14.0		
9	39.8	+ 03 35		15.5		
9	39.8	+ 04 30		14.1		double nebula
9	39.8	+ 04 35		15.5		
9	39.8	+ 07 20		14.7		
9	40.1	+ 04 31		15.4		
9	40.6	+ 03 39		15.3		
9	40.9	+ 07 41		15.5		
9	41.4	+ 03 05		15.4		
9	41.5	+ 03 37		15.6		
9	41.6	+ 02 38		15.2		
9	42.5	+ 07 21		15.7		diffuse
9	42.6	+ 07 38		15.6		double system
9	42.9	+ 06 37		15.0		
9	43.0	+ 05 10	2987	13.9		
9	43.3	+ 03 12		15.3		triple system
9	43.4	+ 03 22	561*	15.0		double system
9	43.4	+ 04 38		14.0		
9	43.6	+ 05 56	2990	12.5		m_H = 13.0
9	43.7	+ 05 55		15.3		double nebula
9	43.8	+ 03 16	563*	14.7		
9	43.8	+ 03 18	564*	14.1		
9	44.0	+ 06 55		15.3		compact
9	44.4	+ 02 47		15.1		
9	44.9	+ 07 03		15.6		diffuse
9	45.2	+ 02 51		14.4		
9	45.5	+ 02 46		15.6		double system
9	45.6	+ 04 08		15.4		
9	46.0	+ 03 36		15.3		
9	46.4	+ 02 42		15.3		
9	46.4	+ 04 32		15.1		
9	46.6	+ 02 43		14.6		
9	46.8	+ 04 14		15.5		
9	48.0	+ 05 01		15.2		
9	48.6	+ 04 20		15.5		
9	48.6	+ 05 24		15.5		
9	48.7	+ 08 04		14.4		
9	48.8	+ 07 30		15.3		
9	49.1	+ 03 30		15.5		
9	49.4	+ 04 23		15.0		
9	49.5	+ 04 29		15.4		
9	49.9	+ 05 05		15.4		
9	50.4	+ 08 05		15.2		
9	50.5	+ 08 07		14.8		
9	50.8	+ 07 18		15.5		
9	50.8	+ 08 07		15.0		
9	51.0	+ 03 43		15.6		very compact
9	51.1	+ 02 37		15.5		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
9 51.5	+ 03 25		15.6		
9 51.6	+ 07 23		15.2		
9 51.7	+ 02 31		14.9		
9 52.0	+ 06 52		15.6		
9 52.1	+ 07 15		15.7		
9 52.5	+ 06 47		15.5		
9 52.7	+ 04 31	3055	12.3	+ 1913	$m_H = 12.5$ S
9 52.8	+ 02 50		15.6		
9 52.8	+ 03 25		15.7		
9 53.0	+ 05 16		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3055	12.6	SBc	12.72	Sc	12.6	Sc	-	-



FIELD No. 36

10^h05^m + 5°30'

Survey Plate No. 1359

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13691	9 54 12.8	+ 4 28 52	6.80
13755	9 57 34.4	+ 8 17 06	4.89
13836	10 01 33.1	+ 3 26 43	6.42
13856	10 02 26.0	+ 8 14 03	7.24
13943	10 06 37.7	+ 6 25 00	6.83
14022	10 10 12.3	+ 4 51 45	5.91
14049	10 11 32.2	+ 3 24 19	7.7

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0954.3 + 0523	open	76	1.5	VD	14
0956.5 + 0806	medium compact	114	1.7	VD	3
0957.0 + 0406	open	151	2.8	MD	23
0957.1 + 0309	medium compact	140	2.8	D	24
0958.0 + 0654	medium compact	52	0.6	ED	9
0958.3 + 0507	medium compact	128	2.3	D	15
0958.9 + 0702	medium compact	79	1.4	VD	8
0959.0 + 0438	medium compact	120	1.9	D	16
1000.8 + 0639	medium compact	117	1.4	VD	10
1001.0 + 0828	compact	40	0.5	ED	2
1001.3 + 0305	medium compact	139	2.1	D	22
1003.0 + 0445	open	53	1.1	VD	21
1003.4 + 0734	medium compact	139	2.2	MD	5
1003.9 + 0608	open	163	2.7	MD	12
1004.2 + 0704	medium compact	93	1.4	VD	7
1004.5 + 0805	open	91	1.8	VD	4
1007.0 + 0351	medium compact	88	1.2	VD	20
1009.0 + 0643	open	153	3.6	MD	11
1009.6 + 0340	compact	61	0.5	ED	19
1009.8 + 0254	compact	58	0.9	ED	18
1014.8 + 0352	open	187	4.3	MD	17
1015.4 + 0712	open	70	1.2	ED	6
1015.8 + 0603	medium compact	145	2.5	MD	13
1016.7 + 0820	medium compact	99	1.3	VD	1

Average number of galaxies per cluster = 106.5

GALAXIES

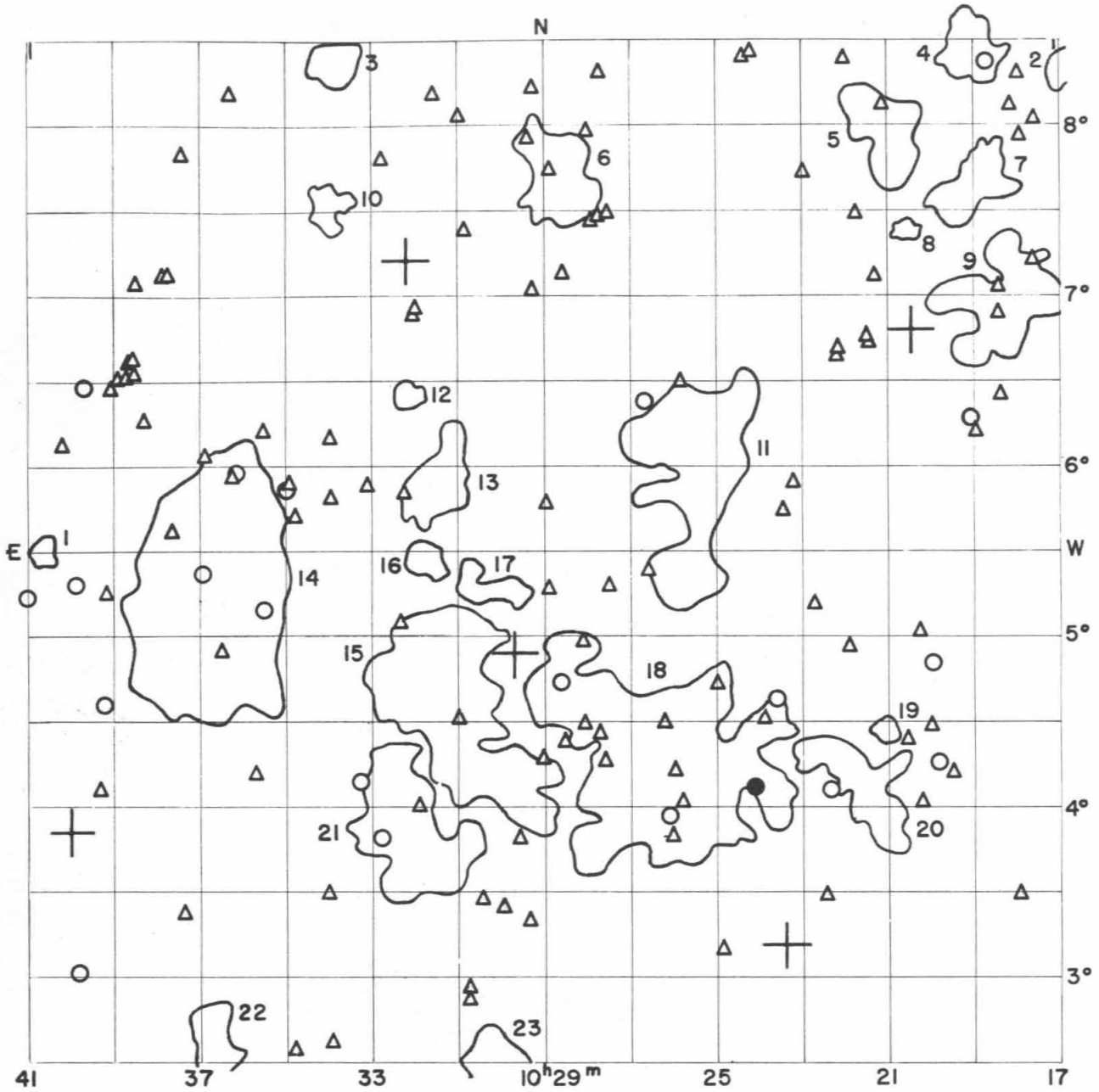
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
9 53.0 + 05 16		15.3		
9 53.1 + 03 37		15.7		
9 53.2 + 06 48		15.5		
9 54.3 + 03 35		15.6		
9 54.4 + 04 00		14.8		
9 54.4 + 04 03		15.2		
9 54.5 + 05 25		15.5		
9 54.7 + 04 46		15.0		
9 54.7 + 07 26		15.0		
9 54.8 + 08 21		15.3		
9 55.1 + 08 04		15.6		compact
9 57.4 + 05 34		12.2		resolved dwarf system, Sextans B
9 57.8 + 03 31		15.6		double nebula
9 57.8 + 03 37		14.5		
9 57.9 + 03 27		14.8		diffuse
9 57.9 + 04 39		14.2		
9 58.1 + 04 58		14.6		
9 58.2 + 07 51		15.7		
9 58.4 + 03 23		15.1		
9 58.4 + 04 50		15.5		
9 58.9 + 07 10		15.6		
9 59.0 + 03 50		15.4		
9 59.6 + 03 17	588*	14.9		
10 00.4 + 02 35		15.0		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 01.1	+ 03 55		15.4		
10 01.4	+ 02 39		14.9		double system
10 01.5	+ 06 45		15.2		compact
10 01.7	+ 03 55		15.3		
10 02.0	+ 05 03		15.4		
10 02.1	+ 05 36		15.7		
10 02.3	+ 05 18		14.7		
10 02.6	+ 05 49		15.5		
10 02.7	+ 02 44		15.2		
10 02.8	+ 05 55		15.6		
10 03.0	+ 03 17		15.3		
10 03.4	+ 04 45		15.7		
10 03.5	+ 03 20		15.6		
10 03.6	+ 03 08	3117	14.6		
10 03.7	+ 04 04		14.8		
10 04.8	+ 03 55		15.7		
10 04.8	+ 04 19		15.1		
10 05.6	+ 02 42		15.5		compact
10 05.6	+ 05 09		15.6		
10 07.2	+ 03 47		15.6		
10 07.2	+ 05 25		14.6		
10 07.6	+ 08 21		15.6		compact
10 07.9	+ 06 25		15.4		
10 08.0	+ 05 23		14.9		
10 08.0	+ 07 49		15.5		compact
10 08.4	+ 03 28		15.6		
10 08.5	+ 08 01		15.2		
10 08.7	+ 06 08		15.1		
10 09.0	+ 03 31		15.7		
10 09.4	+ 03 35		15.3		double nebula
10 09.5	+ 06 19		15.6		
10 09.6	+ 05 10		14.5		
10 10.1	+ 03 22	3156	12.8		m_H = 13.1
10 10.1	+ 05 04		14.9		
10 10.1	+ 07 21		15.6		
10 10.3	+ 05 02		14.9		double nebula
10 10.4	+ 06 25		15.1		double nebula
10 10.8	+ 08 09		15.7		
10 10.9	+ 03 38	3165	14.5		
10 11.1	+ 03 40	3166	11.2	+ 1381	m_H = 11.6 Sc
10 11.4	+ 07 16		14.4		
10 11.7	+ 03 43	3169	11.9	+ 1297	m_H = 11.9 Sa
10 11.7	+ 06 45		15.2		
10 12.0	+ 05 12		15.6		
10 12.3	+ 08 03		15.7		
10 12.5	+ 05 29		15.4		
10 12.5	+ 05 55		15.1		double system
10 12.7	+ 05 38		15.1		
10 13.1	+ 07 34		15.1		
10 13.2	+ 07 12		15.0		double system, tidal effects
10 13.3	+ 02 56		15.3		diffuse double nebula
10 13.3	+ 06 30		15.4		
10 13.4	+ 05 12		14.7		very compact
10 13.6	+ 03 54		15.4		
10 13.6	+ 06 30		15.7		
10 13.7	+ 05 04		14.6		
10 13.8	+ 05 56		15.6		
10 14.3	+ 04 00		15.5		
10 14.3	+ 05 55		15.6		

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 15.0	+ 06 38		15.1		
10 15.0	+ 07 13		15.0		
10 15.6	+ 06 41		15.5		
10 15.6	+ 07 17	601*	15.0		
10 15.7	+ 03 36		15.5		
10 15.7	+ 07 18	602*	13.4		
10 16.0	+ 03 30		15.6		
10 16.7	+ 05 01		15.1		
10 16.8	+ 03 00		15.6		
10 17.0	+ 06 35		14.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3166	-	-	11.38	Sa	11.2	Sa	11.49	Sa
3169	-	-	11.30	Sa	11.2	Sa	11.24	Sa
Sex B	-	-	-	-	-	-	11.82	-



FIELD No. 37

10^h29^m + 5° 30'

Survey Plate No. 1399

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14255	10 20 23.5	+ 6 47 50	6.28
14322	10 23 23.6	+ 3 11 01	6.75
14476	10 29 42.7	+ 4 54 09	7.21
14533	10 32 11.6	+ 7 12 42	5.17
14723	10 40 02.6	+ 3 50 41	6.63

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1016.7 + 0820	medium compact	99	1.3	VD	2
1018.2 + 0658	open	194	2.9	MD	9
1018.9 + 0739	open	139	2.0	VD	7
1018.9 + 0828	open	112	1.9	D	4
1020.5 + 0724	compact	76	0.7	ED	8
1020.9 + 0759	open	177	2.3	D	5
1021.0 + 0426	compact	98	0.7	ED	19
1021.5 + 0406	open	256	2.4	VD	20
1025.4 + 0558	open	192	4.3	MD	11
1026.1 + 0412	medium compact	634	6.3	Near	18
1028.7 + 0742	open	160	2.5	D	6
1030.2 + 0225	open	125	2.1	D	23
1030.2 + 0516	open	109	1.4	VD	17
1031.1 + 0434	medium compact	483	5.0	D	15
1031.5 + 0555	open	108	2.2	D	13
1031.8 + 0528	open	80	1.2	VD	16
1032.2 + 0350	open	141	3.5	MD	21
1032.2 + 0625	compact	78	0.8	ED	12
1033.9 + 0824	open	76	1.4	VD	3
1034.0 + 0732	medium compact	96	1.4	VD	10
1036.7 + 0236	medium compact	84	1.9	D	22
1036.8 + 0514	compact	510	6.6	MD	14
1040.7 + 0530	medium compact	69	0.9	ED	1

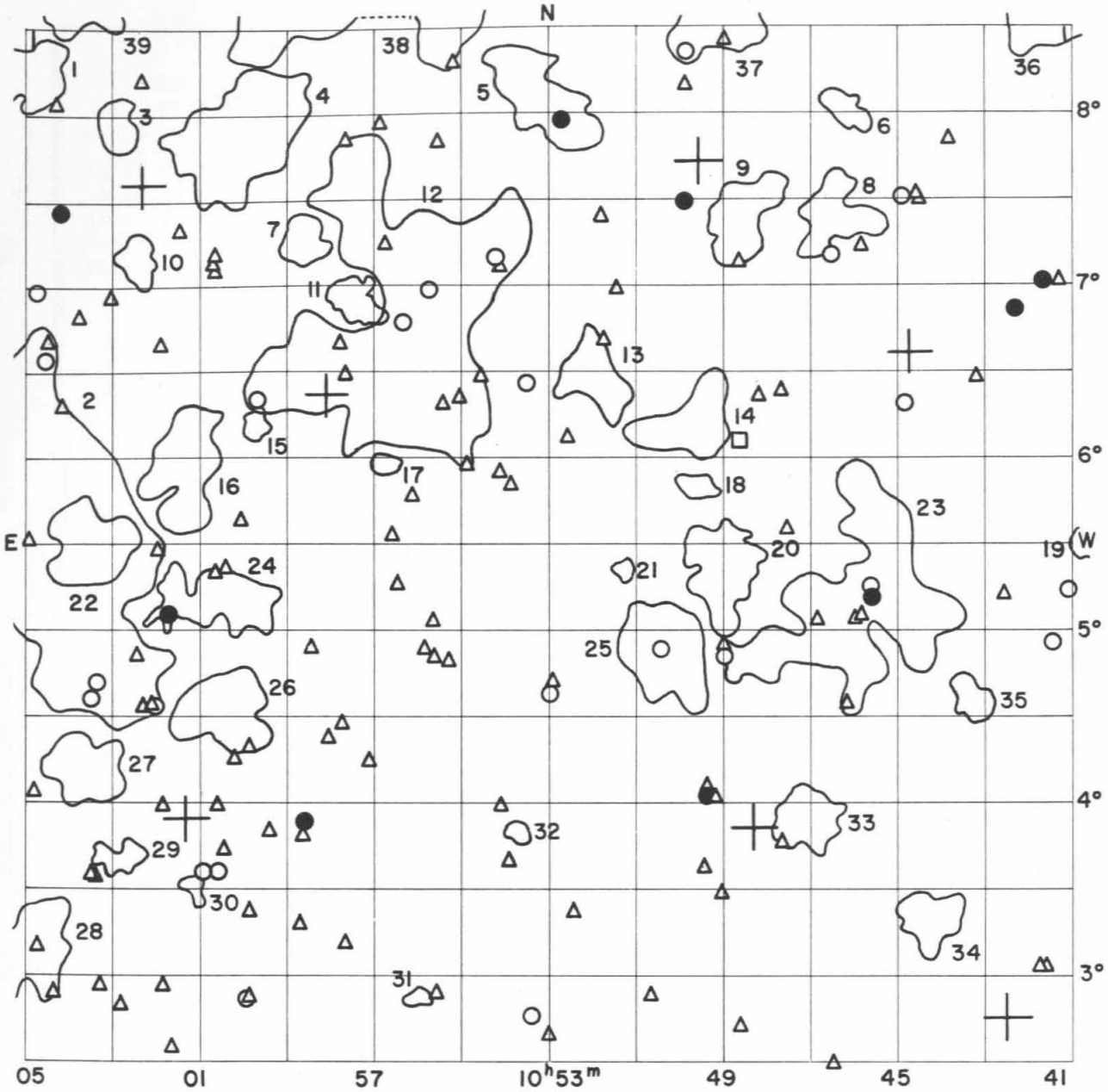
Average number of galaxies per cluster = 178.1

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 17.5 + 07 13		15.5		
10 17.5 + 08 01		15.4		
10 17.8 + 07 57		15.5		
10 17.9 + 03 29		15.6		double nebula
10 17.9 + 08 17		15.5		diffuse
10 18.0 + 08 07		15.3		
10 18.2 + 06 25		15.3		
10 18.3 + 06 55		15.6		compact
10 18.3 + 07 03		15.6		
10 18.6 + 08 22		15.0		
10 18.9 + 06 12		15.1		
10 19.0 + 06 17		15.0		
10 19.4 + 04 11		15.7		
10 19.8 + 04 15		14.2		
10 19.9 + 04 29		15.6		
10 19.9 + 04 50		14.6		
10 20.2 + 04 00		15.1		
10 20.3 + 05 01		15.1		
10 20.5 + 04 24		15.6		
10 21.0 + 08 07		15.7		
10 21.2 + 07 07		15.6		
10 21.4 + 06 44		15.3		
10 21.5 + 06 45		15.5		
10 21.6 + 07 28		15.7		diffuse
10 21.8 + 04 56		15.7		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 21.9	+ 08 24		15.5		
10 22.1	+ 06 40		15.5		
10 22.1	+ 06 41		15.1		compact
10 22.3	+ 04 06		15.0		
10 22.4	+ 03 28		15.5		double system
10 22.7	+ 05 12		15.5		
10 22.9	+ 07 43		15.5		very compact
10 23.1	+ 05 54		15.7		
10 23.4	+ 05 44		15.3		
10 23.5	+ 04 37		15.0		
10 23.9	+ 04 31		15.3		
10 24.1	+ 04 07	3246	13.8		
10 24.1	+ 08 26		15.2		
10 24.3	+ 08 24		15.4		compact
10 24.9	+ 03 09		15.5		very compact
10 25.0	+ 04 43		15.3		diffuse
10 25.8	+ 04 01		15.5		multiple system
10 25.8	+ 06 29		15.7		very diffuse
10 26.0	+ 03 49		15.2		star 14.3 superposed
10 26.0	+ 04 11		15.6		
10 26.1	+ 03 56		15.0		
10 26.2	+ 04 28		15.4		
10 26.6	+ 05 23		15.3		
10 26.6	+ 06 23		14.9		
10 27.5	+ 04 15		15.5		double nebula
10 27.5	+ 05 18		15.2		
10 27.5	+ 07 29		15.7		
10 27.7	+ 04 25		15.7		
10 27.7	+ 07 28		15.3		
10 27.7	+ 08 19		15.1		
10 27.9	+ 07 26		15.5		double nebula
10 28.0	+ 07 58		15.7		
10 28.1	+ 04 28		15.6		
10 28.1	+ 04 58		15.2		double system
10 28.5	+ 04 21		15.6		
10 28.6	+ 04 44		14.6		
10 28.6	+ 07 07		15.6		triple system, tidal effect
10 28.8	+ 05 16		15.7		
10 28.8	+ 07 44		15.6		
10 28.9	+ 05 47		15.6		
10 29.0	+ 04 16		15.5		
10 29.2	+ 08 14		15.1		
10 29.3	+ 07 02		15.7		
10 29.4	+ 03 19		15.4		
10 29.4	+ 07 55		15.6		
10 29.6	+ 03 48		15.6		
10 30.0	+ 03 23		15.6		
10 30.4	+ 03 27		15.7		
10 30.7	+ 02 52		15.1		
10 30.7	+ 02 55	621*	15.3		
10 30.8	+ 07 23		15.2		close double nebula
10 31.0	+ 04 31		15.2		
10 31.0	+ 08 04		15.2		
10 31.6	+ 08 11		15.3		
10 31.9	+ 04 00		15.7		extremely diffuse
10 32.0	+ 06 53		15.2		very compact
10 32.0	+ 06 55		15.3		compact
10 32.2	+ 05 50		15.6		
10 32.3	+ 05 04		15.1		double nebula

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 32.8	+ 03 49	623*	15.0		
10 32.8	+ 07 48		15.7		
10 33.1	+ 05 52		15.1		
10 33.3	+ 04 09		15.0		
10 33.9	+ 02 37		15.6		double system, tidal effect
10 33.9	+ 05 48		15.3		double system
10 34.0	+ 03 29		15.6		
10 34.0	+ 06 09		14.7		
10 34.7	+ 05 41		15.6		
10 34.8	+ 02 34		15.4		triple system
10 34.9	+ 05 53		15.1		
10 35.0	+ 05 51	628*	14.8		
10 35.5	+ 05 09		15.0		
10 35.6	+ 06 12		15.5		
10 35.7	+ 04 11		15.5		
10 36.2	+ 05 57		14.6		
10 36.3	+ 05 55		15.5		
10 36.4	+ 08 11		15.7		
10 36.5	+ 04 54		15.6		
10 36.9	+ 05 22	3326	14.2		
10 36.9	+ 06 03		15.3		
10 37.4	+ 03 22		15.7		diffuse
10 37.5	+ 07 50		15.3		
10 37.6	+ 05 37		15.4		
10 37.8	+ 07 06		15.7		
10 37.9	+ 07 07		15.6		
10 38.3	+ 06 15	634*	15.1		
10 38.5	+ 07 04		15.7		
10 38.6	+ 06 32		15.6		
10 38.6	+ 06 38		15.2		compact
10 38.7	+ 06 37		15.4		diffuse
10 38.8	+ 06 31		15.6		
10 39.0	+ 06 30		15.3		
10 39.1	+ 06 27		15.7		
10 39.2	+ 05 15	3337	15.3		
10 39.3	+ 04 05		15.5		double system
10 39.3	+ 04 36	636*	14.9		
10 39.7	+ 06 28		15.0		double system
10 39.9	+ 03 01		14.9		
10 40.0	+ 05 18	3341	14.9		
10 40.3	+ 06 07		15.5		
10 41.0	+ 05 14		15.0		



FIELD No. 38

10^h53^m + 5°30'

Survey Plate No. 722

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14789	10 42 34.9	+ 2 45 05	6.57
14846	10 44 43.2	+ 6 36 38	7.01
14915	10 48 22.0	+ 3 51 22	7.11
14939	10 49 34.2	+ 7 43 38	7.9
15130	10 58 09.3	+ 6 22 13	5.08
15208	11 01 24.2	+ 3 54 30	7.11
15235	11 02 26.3	+ 7 36 24	4.66

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1040.7 + 0530	medium compact	69	0.9	ED	19
1041.4 + 0843	medium compact	277	3.7	D	36
1043.2 + 0436	open	79	1.4	VD	35
1044.2 + 0319	open	72	1.8	D	34
1045.8 + 0510	medium compact	241	4.0	Near	23
1046.1 + 0801	medium compact	99	1.3	ED	6
1046.4 + 0725	open	224	2.1	VD	8
1047.1 + 0354	medium compact	147	2.0	D	33
1048.6 + 0722	open	144	2.1	D	9
1049.0 + 0520	medium compact	231	2.3	VD	20
1049.2 + 0902	open	172	5.5	Near	37
1049.6 + 0549	open	56	0.8	ED	18
1049.7 + 0610	open	174	2.2	VD	14
1050.4 + 0451	open	235	2.6	D	25
1051.2 + 0520	compact	40	0.5	ED	21
1052.0 + 0629	open	123	2.0	D	13
1053.2 + 0805	open	178	2.8	D	5
1053.8 + 0350	compact	61	0.5	ED	32
1056.0 + 0252	medium compact	45	0.5	ED	31
1056.1 + 0644	open	353	5.6	Near	12
1056.8 + 0557	compact	61	0.7	ED	17
1056.9 + 0922	medium compact	479	10.0	Near	38
1057.6 + 0655	open	101	1.5	VD	11
1058.8 + 0716	medium compact	98	1.5	VD	7
1059.8 + 0611	medium compact	59	1.0	VD	15
1100.2 + 0753	medium compact	267	3.7	MD	4
1100.6 + 0431	medium compact	268	2.2	VD	26
1100.7 + 0510	open	118	2.3	MD	24
1101.1 + 0329	compact	61	0.6	ED	30
1101.4 + 0556	open	194	2.3	VD	16
1102.6 + 0709	compact	114	1.4	ED	10
1102.9 + 0340	medium compact	71	1.3	ED	29
1103.1 + 0756	medium compact	122	1.6	VD	3
1103.6 + 0529	medium compact	213	2.2	VD	22
1103.6 + 0838	compact	152	2.4	VD	39
1103.8 + 0411	compact	197	2.0	VD	27
1105.0 + 0815	compact	252	2.0	VD	1
1105.5 + 0304	medium compact	223	3.6	MD	28
1106.2 + 0516	medium compact	540	10.6	Near	2

Average number of galaxies per cluster = 169.5

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 41.0	+ 05 14		15.0		
10 41.2	+ 07 01	3349	15.2		triple system
10 41.4	+ 04 56		15.0		
10 41.6	+ 03 03		15.3		
10 41.6	+ 07 01	3356	13.3		
10 41.7	+ 03 03		15.2		
10 42.2	+ 06 52	3362	13.6		
10 42.5	+ 05 12		15.7		very diffuse
10 43.1	+ 06 28		15.6		double system

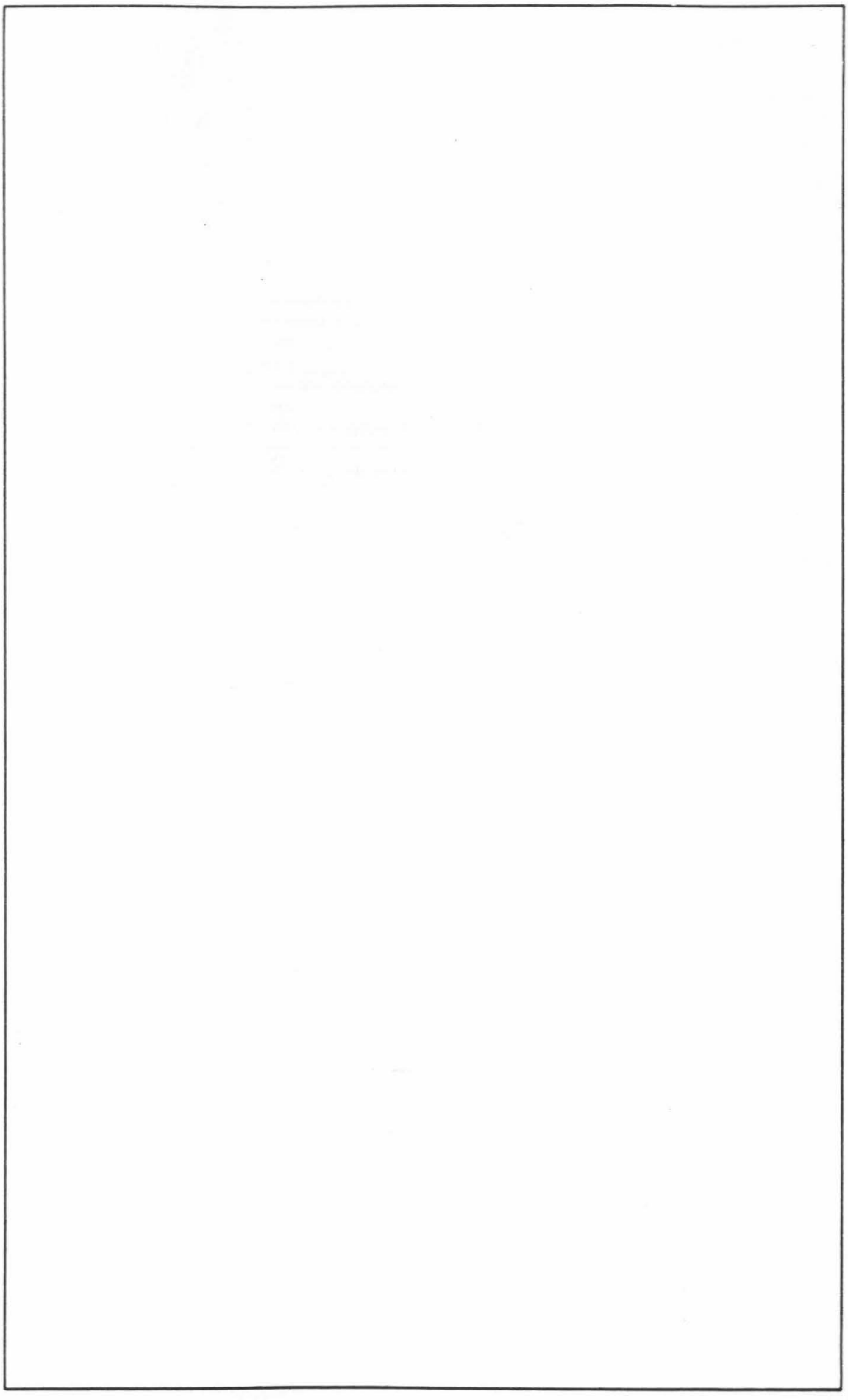
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 43.8 + 07 51		15.7		compact
10 44.5 + 07 30		15.5		
10 44.5 + 07 32		15.1		
10 44.8 + 06 19	3376	14.4		
10 44.8 + 07 31		14.5		
10 45.6 + 05 11	3385	13.7		
10 45.6 + 05 16	3386/3387	14.8		double nebula
10 45.8 + 05 05		15.5		
10 45.8 + 07 14		15.4		
10 45.9 + 05 04		15.3		
10 46.1 + 04 34		15.6		double system
10 46.5 + 02 30		15.3		
10 46.5 + 07 11		14.2		
10 46.9 + 05 04		15.1		
10 47.5 + 05 35		15.2		
10 47.6 + 03 46		15.3		
10 47.6 + 06 23		15.5		
10 48.2 + 06 21		15.3		
10 48.6 + 02 42		15.6		
10 48.6 + 06 06	3423	12.1		m_H = 11.9 Sc
10 48.6 + 07 08		15.3		
10 49.0 + 03 29		15.6		double system
10 49.0 + 04 51		14.7		
10 49.0 + 04 55		15.7		
10 49.0 + 08 26		15.3		diffuse
10 49.2 + 04 03		15.6		
10 49.4 + 04 04	3434	13.4		
10 49.4 + 04 05		15.6		
10 49.5 + 03 38		15.2		very compact
10 49.8 + 08 21		15.0		
10 49.9 + 07 30	3441	13.9		
10 49.9 + 08 10		15.2		double system
10 50.4 + 04 54		14.1		
10 50.7 + 02 53		15.4		
10 51.4 + 07 00		15.4		
10 51.7 + 06 41		15.6		
10 51.8 + 07 25		15.7		compact
10 52.5 + 03 22		15.7		
10 52.6 + 06 07		15.3		compact
10 52.7 + 07 58	3462	13.4		
10 52.9 + 04 43		15.6		very compact
10 53.0 + 02 39		15.5		
10 53.0 + 04 38		14.9		compact
10 53.4 + 02 46		15.0		
10 53.5 + 06 26		14.8		compact
10 53.9 + 03 40		15.6		
10 53.9 + 05 51		15.5		
10 54.1 + 03 59		15.7		
10 54.1 + 05 55		15.2		
10 54.1 + 07 07		15.2		extremely compact
10 54.2 + 07 10		14.9		
10 54.6 + 06 28		15.7		
10 54.9 + 05 58		15.2		
10 55.1 + 06 20		15.6		very compact
10 55.2 + 08 18		15.1		
10 55.3 + 04 49		15.7		
10 55.5 + 06 18		15.1		diffuse
10 55.6 + 02 54		15.4		
10 55.6 + 07 50		15.2		

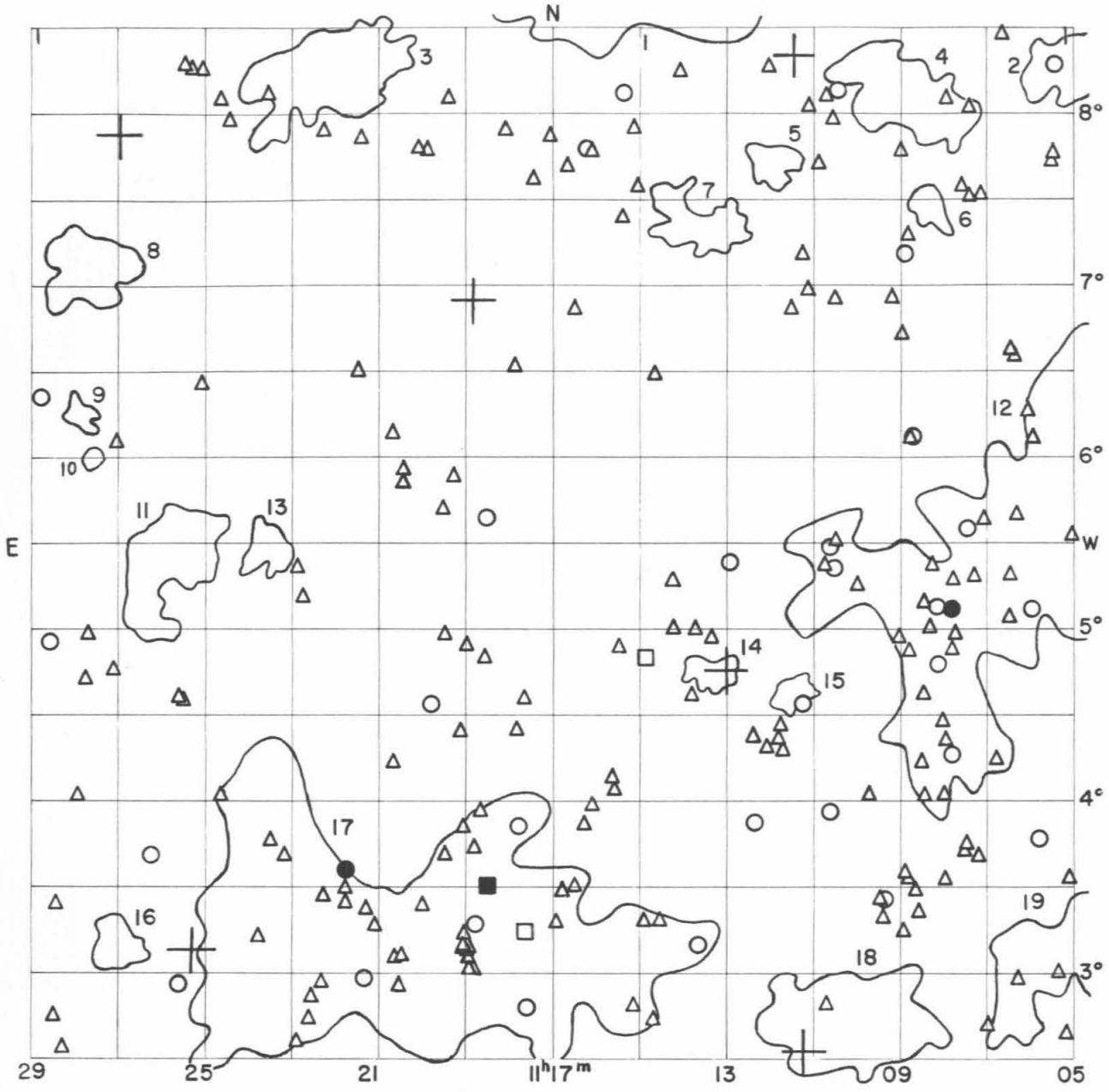
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 55.7 + 04 51		15.1		
10 55.7 + 05 03		15.7		
10 55.8 + 06 59		15.0		compact
10 55.9 + 04 54		15.3		
10 56.2 + 05 47		15.6		
10 56.4 + 06 47		15.0		
10 56.5 + 05 16		15.5		
10 56.6 + 05 33		15.4		
10 56.8 + 07 15		15.5		
10 56.9 + 07 57		15.6		diffuse
10 57.2 + 04 15		15.2		
10 57.7 + 03 11		15.5		double system
10 57.7 + 06 29		15.3		
10 57.7 + 07 51		15.6		
10 57.8 + 04 27		15.1		double system
10 57.8 + 06 40		15.4		
10 58.1 + 04 23		15.7		
10 58.5 + 04 54		15.5		
10 58.7 + 03 49		15.5		double system
10 58.7 + 03 54	3495	13.1		m_H = 12.7 S
10 58.8 + 03 18		15.1		
10 59.4 + 03 51		15.1		
10 59.8 + 06 20		15.0		
10 59.9 + 02 54		15.1		
10 59.9 + 03 22		15.2		
10 59.9 + 04 19		15.3		
11 00.0 + 02 53		15.0		
11 00.1 + 05 39		15.5		compact
11 00.2 + 04 15		15.6		
11 00.5 + 03 44		15.3		
11 00.5 + 05 22		15.3		
11 00.6 + 03 36		14.4		
11 00.7 + 04 00		15.5		very compact
11 00.7 + 05 20		15.6		
11 00.8 + 07 06		15.5		compact
11 00.8 + 07 11		15.2		
11 00.9 + 07 08		15.4		compact
11 01.1 + 03 36		15.0		
11 01.6 + 07 20		15.2		compact
11 01.7 + 02 34		15.6		double nebula
11 01.8 + 05 06		14.0		
11 01.9 + 02 56		15.3		
11 01.9 + 03 59		15.1		
11 02.0 + 05 28		15.2		
11 02.0 + 06 40		15.3		
11 02.1 + 04 33		14.5		
11 02.2 + 04 33		15.2		
11 02.4 + 04 33		15.1		
11 02.5 + 04 51		15.4		
11 02.5 + 08 13		15.2		
11 02.8 + 02 49		15.7		
11 03.2 + 06 58		15.5		double system
11 03.3 + 02 56		15.4		
11 03.5 + 03 35		15.3		compact
11 03.5 + 04 42		14.4		
11 03.6 + 03 35		15.1		
11 03.6 + 04 36		14.7		
11 03.9 + 06 50		15.6		
11 04.3 + 06 18		15.7		double nebula

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
11 04.4 + 02 53		15.7		
11 04.4 + 07 26	3526	13.7		
11 04.5 + 08 04		15.1		
11 04.6 + 06 40		15.5		
11 04.7 + 06 34	669*	14.3		
11 04.8 + 03 10		15.4		
11 04.8 + 06 59	670*	14.7		
11 04.9 + 04 04		15.3		
11 05.0 + 05 32		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3423	-	-	-	-	-	-	11.48	Sc+





FIELD No. 39

11^h17^m + 5°30'

Survey Plate No. 1392

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15434	11 11 19.0	+ 2 32 30	6.79
15437	11 11 26.0	+ 8 20 05	5.90
15476	11 13 03.8	+ 4 45 07	7.9
15604	11 18 52.6	+ 6 54 32	6.57
15729	11 25 21.9	+ 3 07 54	5.18
15764	11 27 05.0	+ 7 52 32	6.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1105.0 + 0815	compact	252	2.0	VD	2
1105.5 + 0304	medium compact	223	3.6	MD	19
1106.2 + 0516	medium compact	540	10.6	Near	12
1108.3 + 0727	compact	123	1.4	ED	6
1108.8 + 0806	open	165	3.5	MD	4
1110.0 + 0243	medium compact	209	4.3	MD	18
1111.5 + 0438	compact	84	1.1	VD	15
1111.9 + 0743	medium compact	109	1.5	VD	5
1113.3 + 0445	medium compact	107	1.3	VD	14
1113.7 + 0720	open	155	2.1	MD	7
1115.6 + 0840	open	309	6.7	D	1
1119.7 + 0305	medium compact	510	10.0	Near	17
1122.2 + 0814	open	231	4.0	MD	3
1123.6 + 0529	medium compact	102	1.6	VD	13
1126.0 + 0521	open	270	3.3	VD	11
1127.1 + 0309	medium compact	130	1.6	MD	16
1127.7 + 0600	compact	61	0.6	ED	10
1127.8 + 0706	open	133	2.2	D	8
1128.0 + 0615	medium compact	84	1.0	VD	9

Average number of galaxies per cluster = 199.8

GALAXIES

Position α 1950 h m δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 05.0 + 05 32		15.3		
11 05.1 + 03 32		15.5		diffuse
11 05.2 + 02 38		15.1		
11 05.3 + 07 43		15.3		
11 05.3 + 07 45		15.5		
11 05.3 + 08 16		14.6		
11 05.4 + 03 00		15.6		
11 05.8 + 03 46		14.7		
11 05.8 + 06 06		15.4		compact
11 05.9 + 05 06	3535	14.3		
11 06.0 + 06 16		15.7		
11 06.2 + 05 40		15.5		
11 06.3 + 02 57		15.3		
11 06.3 + 06 35		15.2		
11 06.4 + 05 18		15.6		diffuse
11 06.4 + 06 37		15.1		
11 06.5 + 05 03		15.6		diffuse
11 06.6 + 08 28		15.2		double system, tidal effect
11 06.7 + 04 14		15.7		extremely diffuse
11 07.0 + 02 41		15.7		
11 07.0 + 05 38		15.5		
11 07.0 + 07 31		15.6		
11 07.1 + 03 41		15.1		
11 07.2 + 05 18		15.6		double nebula
11 07.3 + 07 30		15.1		
11 07.3 + 08 02		15.7		
11 07.4 + 03 45		15.5		double nebula
11 07.4 + 05 35		14.7		
11 07.5 + 03 43		15.6		

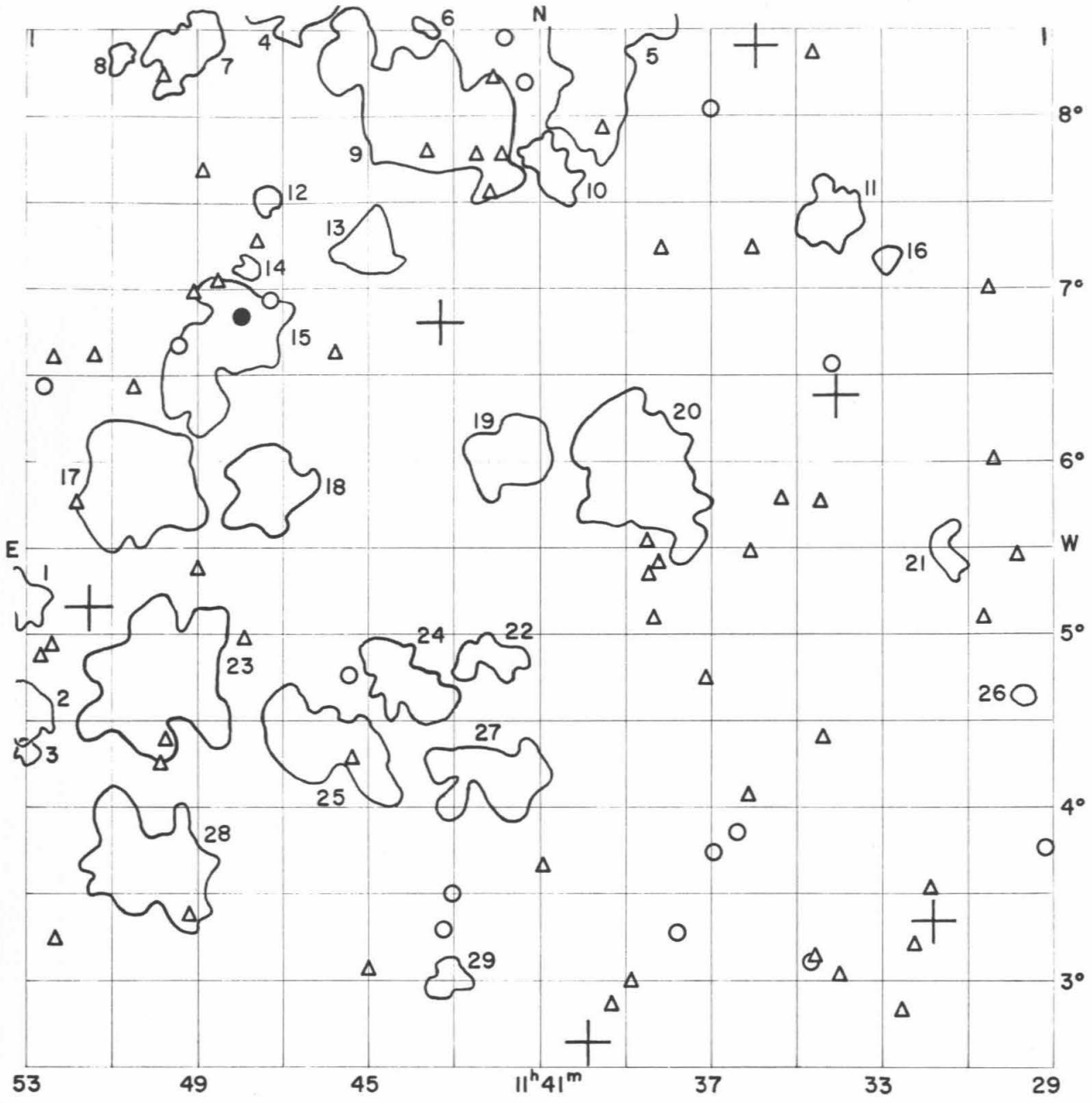
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
11 07.5 + 07 34		15.4		
11 07.7 + 04 58		15.2		
11 07.8 + 04 15		15.0		
11 07.8 + 04 52		15.2		compact
11 07.8 + 05 06		14.0		double nebula
11 07.8 + 05 17		15.1		
11 07.8 + 08 05		15.4		
11 07.9 + 03 32		15.2		
11 07.9 + 04 20		15.3		
11 08.0 + 04 02		15.2		very compact
11 08.0 + 04 28		15.3		
11 08.1 + 04 47		15.0		
11 08.1 + 05 07		14.9		
11 08.2 + 05 22		15.6		diffuse
11 08.3 + 05 00		15.5		triple system
11 08.4 + 05 08		15.1		
11 08.5 + 04 01		15.7		compact
11 08.5 + 04 37		15.6		compact
11 08.6 + 03 21		15.2		
11 08.6 + 04 13		15.3		
11 08.7 + 03 28		15.4		compact
11 08.7 + 06 06	3567	14.4		
11 08.8 + 03 33		15.4		
11 08.8 + 03 35		15.4		
11 08.8 + 04 52		15.6		diffuse
11 08.8 + 06 06		15.1		
11 08.8 + 07 11		14.6		
11 08.8 + 07 17		15.6		
11 08.9 + 03 14		15.6		
11 08.9 + 06 43		15.5		compact
11 08.9 + 07 47		15.5		
11 09.0 + 04 56		15.2		compact
11 09.1 + 06 56		15.7		
11 09.4 + 03 19		15.4		compact
11 09.4 + 03 25		14.6		
11 09.5 + 03 26		15.2		
11 09.8 + 04 02		15.3		
11 09.9 + 05 15		15.6		
11 10.4 + 08 08		15.0		
11 10.5 + 05 20		14.9		
11 10.5 + 05 30		15.5		
11 10.5 + 06 55		15.3		
11 10.5 + 07 58		15.4		
11 10.6 + 05 28		14.8		triple system
11 10.6 + 08 06		15.7		
11 10.7 + 03 56	3580	14.7		
11 10.7 + 05 22		15.5		
11 10.8 + 02 49		15.1		multiple system
11 10.8 + 07 42		15.6		
11 11.0 + 08 01		15.6		very compact
11 11.1 + 06 58		15.2		
11 11.2 + 07 10		15.6		
11 11.3 + 04 33		14.9		
11 11.5 + 06 51	678*	15.1		
11 11.7 + 04 17		15.6		
11 11.8 + 04 21		15.6		
11 11.8 + 04 26		15.4		
11 12.0 + 08 16		15.6		double nebula
11 12.1 + 04 17		15.1		double system

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 12.4	+ 03 53		14.7		double system
11 12.5	+ 04 21		15.1		double nebula
11 12.9	+ 05 23	3601	14.1		
11 13.4	+ 04 56		15.6		
11 13.6	+ 03 09		14.5		
11 13.8	+ 04 36		15.2		
11 13.8	+ 04 59		15.2		
11 14.0	+ 08 14		15.3		
11 14.3	+ 05 00		15.6		
11 14.3	+ 05 16		15.7		double system
11 14.6	+ 03 18		15.5		
11 14.7	+ 06 28		15.6		
11 14.8	+ 02 43		15.2		
11 14.9	+ 03 18		15.1		
11 14.9	+ 04 50	3611	12.4	+ 1754	m_H = 12.5
11 15.0	+ 07 34		15.1		
11 15.1	+ 02 48		15.7		compact
11 15.1	+ 07 55		15.7		
11 15.4	+ 07 24		15.5		
11 15.4	+ 08 07		14.9		
11 15.5	+ 04 53		15.5		
11 15.6	+ 04 05		15.4		
11 15.7	+ 04 08		15.1		double system
11 16.1	+ 03 58		15.6		compact
11 16.1	+ 07 46		15.2		
11 16.2	+ 07 48	3624	14.7		
11 16.3	+ 03 52		15.4		
11 16.5	+ 06 51		15.7		
11 16.6	+ 03 30		15.1		
11 16.7	+ 07 41		15.3		
11 16.8	+ 03 28		15.4		
11 16.9	+ 03 17		15.7		
11 17.1	+ 07 52		15.5		
11 17.5	+ 07 36		15.6		
11 17.6	+ 02 48		14.4		
11 17.7	+ 03 14	3630	12.8		m_H = 12.8 S
11 17.7	+ 04 36		15.2		compact
11 17.9	+ 03 51	3633	14.3		
11 17.9	+ 04 24		15.3		
11 17.9	+ 06 31		15.6		
11 18.1	+ 07 54		15.3		
11 18.5	+ 03 30	3640	11.8	+ 1354	m_H = 11.6 E
11 18.6	+ 04 50		15.6		
11 18.6	+ 05 38		14.9		
11 18.7	+ 03 57		15.5		compact
11 18.8	+ 03 01	683*	15.5		diffuse
11 18.8	+ 03 08		15.3		
11 18.8	+ 03 17	3643	14.8		
11 18.8	+ 03 43		15.4		
11 18.9	+ 03 01		15.6		
11 18.9	+ 03 05	3644=684*	15.2		
11 18.9	+ 03 09		15.5		
11 19.0	+ 03 09		15.4		
11 19.0	+ 03 10	3647	15.6		
11 19.0	+ 03 15	3645	15.5		diffuse
11 19.0	+ 04 54		15.5		double nebula
11 19.1	+ 03 51		15.6		
11 19.2	+ 04 24		15.6		
11 19.3	+ 05 53		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
11 19.4 + 08 05	2758*	15.3		double nebula
11 19.5 + 03 40		15.5		
11 19.5 + 04 58		15.2		
11 19.6 + 05 41		15.4		
11 19.9 + 04 33		14.8		
11 19.9 + 07 47		15.5		
11 20.0 + 03 24		15.5		
11 20.1 + 07 47		15.5		
11 20.5 + 03 05		15.5		
11 20.5 + 05 51		15.6		
11 20.5 + 05 55	686*	15.3		
11 20.6 + 02 56		15.6		
11 20.6 + 03 04		15.5		
11 20.7 + 04 14		15.7		extremely diffuse
11 20.7 + 06 08		15.2		
11 21.1 + 03 17		15.1		
11 21.3 + 03 22		15.3		
11 21.4 + 02 58		14.8		
11 21.4 + 07 51		15.7		
11 21.5 + 06 30		15.1		
11 21.8 + 03 25		15.6		
11 21.8 + 03 30		15.4		
11 21.8 + 03 36	3664	13.6		m_H = 12.9 S
11 22.3 + 02 57		15.6		double nebula
11 22.3 + 07 54		15.6		very compact
11 22.4 + 03 27		15.2		
11 22.6 + 02 52		15.7		double nebula
11 22.7 + 02 44		15.7		double nebula
11 22.8 + 05 11		15.2		compact
11 22.9 + 02 36		15.6		
11 22.9 + 05 22		15.7		compact
11 23.2 + 03 41		15.3		double nebula
11 23.5 + 03 46		15.2		
11 23.6 + 08 07		15.5		
11 23.8 + 03 12		15.4		
11 24.5 + 07 58		15.6		
11 24.7 + 04 02		15.2		
11 24.8 + 08 05	2830*	15.2		
11 25.2 + 06 25		15.2		diffuse
11 25.2 + 08 16		15.1		
11 25.4 + 08 15		15.6		compact
11 25.6 + 04 36		15.5		diffuse spiral
11 25.6 + 08 17		15.3		
11 25.7 + 02 56		14.1		
11 25.7 + 04 37		15.3		
11 26.3 + 03 41		14.9		
11 27.2 + 04 46		15.4		
11 27.2 + 06 05		15.6		
11 27.8 + 04 43		15.4		
11 27.8 + 04 58		15.2		
11 28.0 + 04 01		15.1		
11 28.3 + 02 34		15.6		
11 28.5 + 03 25		15.1		
11 28.6 + 02 45		15.7		
11 28.7 + 04 56		15.0		double system
11 28.9 + 06 21		14.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3611	-	-	12.78	Sa	12.8	Sa	-	-
3640	-	-	11.69	E2	11.6	E2	-	-



FIELD No. 40

11^h41^m + 5°30'

Survey Plate No. 495

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15867	11 31 48.4	+ 3 20 17	5.81
15912	11 34 00.0	+ 6 23 05	7.04
15971	11 35 52.9	+ 8 24 40	5.47
16074	11 39 51.8	+ 2 38 24	6.96
16135	11 43 17.4	+ 6 48 35	4.20
16276	11 51 30.7	+ 5 09 25	7.9

CLUSTERS OF GALAXIES

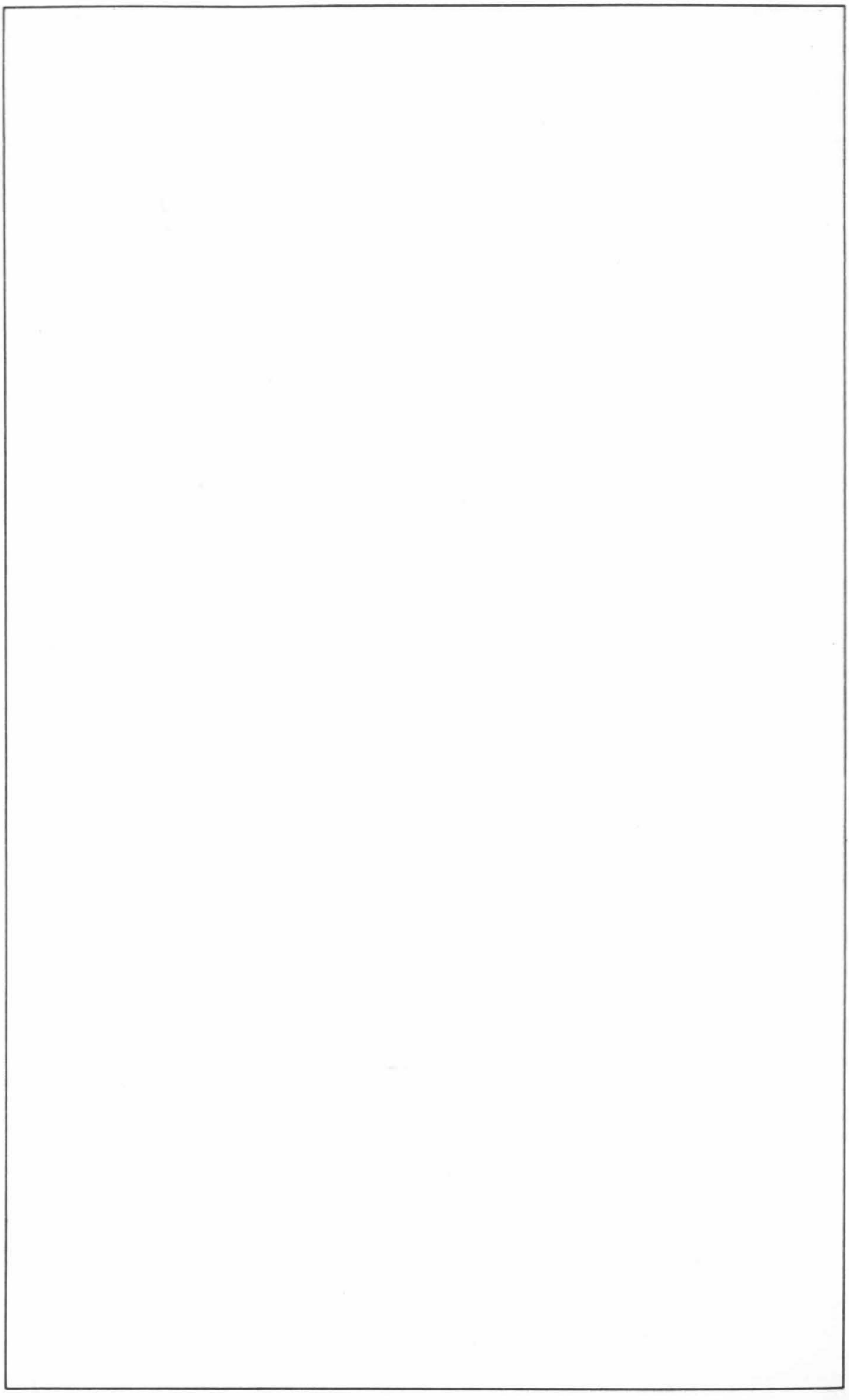
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1129.6 + 0438	compact	53	0.5	ED	26
1131.4 + 0528	medium compact	103	1.3	ED	21
1132.8 + 0710	compact	64	0.8	VD	16
1134.0 + 0726	medium compact	179	2.0	D	11
1138.7 + 0556	medium compact	310	4.5	MD	20
1139.6 + 0820	medium compact	205	4.0	MD	5
1140.7 + 0741	medium compact	111	1.7	D	10
1141.8 + 0601	medium compact	178	2.3	D	19
1142.1 + 0410	open	131	2.4	D	27
1142.1 + 0454	open	82	1.6	VD	22
1143.0 + 0300	medium compact	89	1.2	VD	29
1143.6 + 0803	open	304	5.5	MD	9
1143.6 + 0832	compact	71	0.6	ED	6
1144.0 + 0442	open	107	2.3	D	24
1145.0 + 0716	medium compact	106	1.9	D	13
1145.9 + 0421	open	140	3.5	MD	25
1146.8 + 0840	medium compact	137	2.5	D	4
1147.3 + 0549	medium compact	90	2.3	MD	18
1147.5 + 0730	medium compact	74	0.8	ED	12
1147.9 + 0706	compact	65	0.7	ED	14
1148.6 + 0642	open	119	3.7	Near	15
1149.4 + 0821	open	106	2.2	MD	7
1149.9 + 0444	medium compact	243	4.7	MD	23
1150.0 + 0339	open	103	2.9	Near	28
1150.4 + 0552	open	130	4.0	MD	17
1150.9 + 0820	compact	82	0.8	ED	8
1153.0 + 0419	compact	42	0.7	ED	3
1153.2 + 0433	medium compact	104	2.1	D	2
1154.6 + 0520	medium compact	267	3.4	MD	1

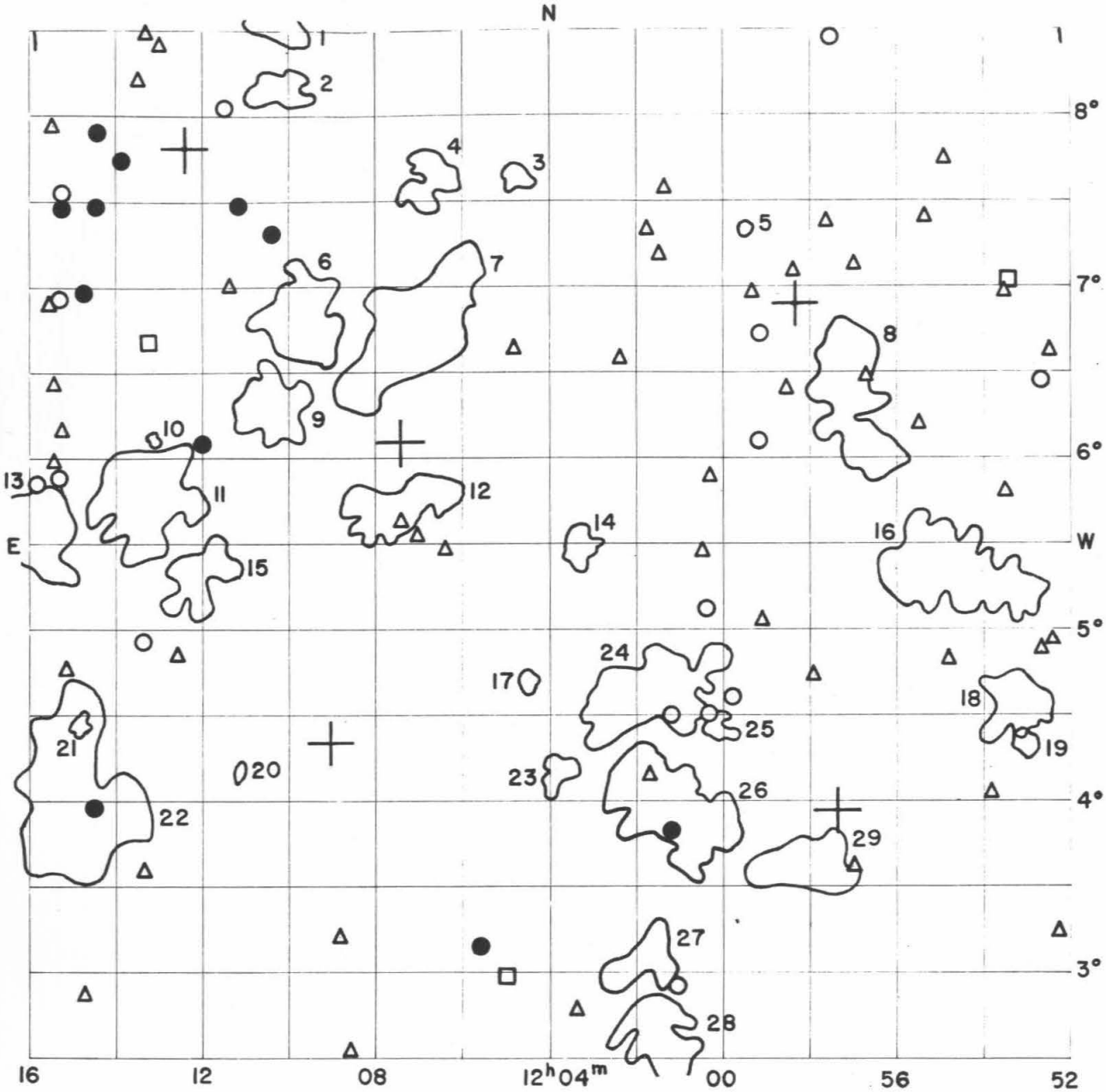
Average number of galaxies per cluster = 130.9

GALAXIES

Position α 1950 δ h m ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 29.1 + 03 46	3716	14.5		
11 29.8 + 05 27		15.3		
11 30.3 + 06 00		15.2		
11 30.4 + 07 00		15.5		
11 30.6 + 05 05		15.6		
11 31.8 + 03 32		15.5		
11 32.2 + 03 11		15.4		compact
11 32.5 + 02 49		15.4		
11 33.9 + 03 01		15.3		
11 34.1 + 06 34		14.8		compact
11 34.3 + 04 24		15.4		
11 34.4 + 05 46		15.4		
11 34.5 + 03 07		15.3		
11 34.6 + 03 06		15.0		
11 34.6 + 08 22		15.4		
11 35.3 + 05 47		15.5		
11 36.0 + 05 28		15.7		
11 36.0 + 07 14		15.4		
11 36.1 + 04 04		15.4		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
11 36.3 + 03 51		14.7		
11 36.9 + 03 45		14.7		
11 36.9 + 08 02		15.0		
11 37.1 + 04 45		15.3		
11 37.7 + 03 16		14.8		
11 38.1 + 07 14		15.7		
11 38.2 + 05 25		15.5		
11 38.3 + 05 05		15.1		
11 38.4 + 05 20		15.2		
11 38.5 + 05 32		15.4		double nebula
11 38.8 + 02 59		15.7		
11 39.3 + 02 51		15.3		diffuse
11 39.5 + 07 56		15.6		compact
11 40.9 + 03 40		15.2		
11 41.3 + 08 12	3843	14.1		
11 41.8 + 07 46		15.6		
11 41.8 + 08 27		14.9		
11 42.1 + 07 33		15.6		
11 42.1 + 08 14		15.7		
11 42.5 + 07 46		15.7		
11 43.0 + 03 30	730*	14.7		
11 43.2 + 03 18		14.9		
11 43.6 + 07 47		15.6		diffuse
11 44.9 + 03 03		15.3		
11 45.3 + 04 17		15.2		
11 45.4 + 04 46		14.4		
11 45.8 + 06 37		15.7		
11 47.3 + 06 57		15.0		
11 47.6 + 07 16		15.3		
11 47.9 + 04 58		15.5		
11 48.0 + 06 51	3914	13.8		
11 48.6 + 07 02		15.5		diffuse
11 48.9 + 07 41		15.7		
11 49.0 + 05 22		15.5		compact
11 49.1 + 06 59		15.2		
11 49.2 + 03 21		15.5		
11 49.5 + 06 41		14.8		
11 49.7 + 04 23		15.4		double system
11 49.8 + 04 15		15.6		
11 49.9 + 08 14		15.5		
11 50.6 + 06 25		15.6		
11 51.4 + 06 37		15.3		double system
11 51.8 + 05 45		15.6		
11 52.3 + 03 14		15.2		diffuse
11 52.4 + 04 56		15.1		
11 52.4 + 06 36		15.5		
11 52.6 + 06 27		14.5		
11 52.7 + 04 52		15.4		





FIELD No. 41

12^h04^m + 5°30'

Survey Plate No. 1611

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16406	11 57 23.2	+ 3 56 01	5.24
16425	11 58 18.6	+ 6 53 35	4.57
16616	12 07 30.5	+ 6 05 06	5.74
16655	12 09 06.7	+ 4 20 02	6.85
16728	12 12 30.8	+ 7 48 30	8.5

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1153.0 + 0419	compact	42	0.7	ED	19
1153.2 + 0433	medium compact	104	2.1	D	18
1154.6 + 0520	medium compact	267	3.4	MD	16
1157.0 + 0620	open	117	3.1	D	8
1158.2 + 0336	compact	235	2.3	VD	29
1159.5 + 0720	compact	44	0.4	ED	5
1200.2 + 0426	compact	63	1.0	D	25
1201.1 + 0357	medium compact	357	3.4	D	26
1201.5 + 0236	medium compact	101	2.3	MD	28
1201.6 + 0439	medium compact	241	3.3	D	24
1201.9 + 0303	open	126	1.9	VD	27
1203.4 + 0529	medium compact	71	1.2	VD	14
1203.9 + 0409	open	57	1.1	VD	23
1204.5 + 0441	compact	49	0.6	ED	17
1204.8 + 0739	compact	62	0.8	ED	3
1206.8 + 0737	medium compact	124	1.6	VD	4
1207.2 + 0644	open	223	3.4	MD	7
1207.5 + 0542	medium compact	108	2.3	D	12
1209.8 + 0649	open	119	2.5	D	6
1210.2 + 0832	open	75	1.5	D	1
1210.3 + 0810	open	98	1.6	D	2
1210.4 + 0619	compact	125	2.3	D	9
1211.3 + 0410	compact	36	0.4	ED	20
1212.1 + 0520	open	69	2.0	D	15
1213.3 + 0606	compact	44	0.5	ED	10
1213.4 + 0545	open	120	3.0	MD	11
1215.0 + 0427	compact	49	0.5	ED	21
1215.1 + 0400	compact	253	4.2	MD	22
1215.9 + 0534	medium compact	119	2.4	D	13

Average number of galaxies per cluster = 120.6

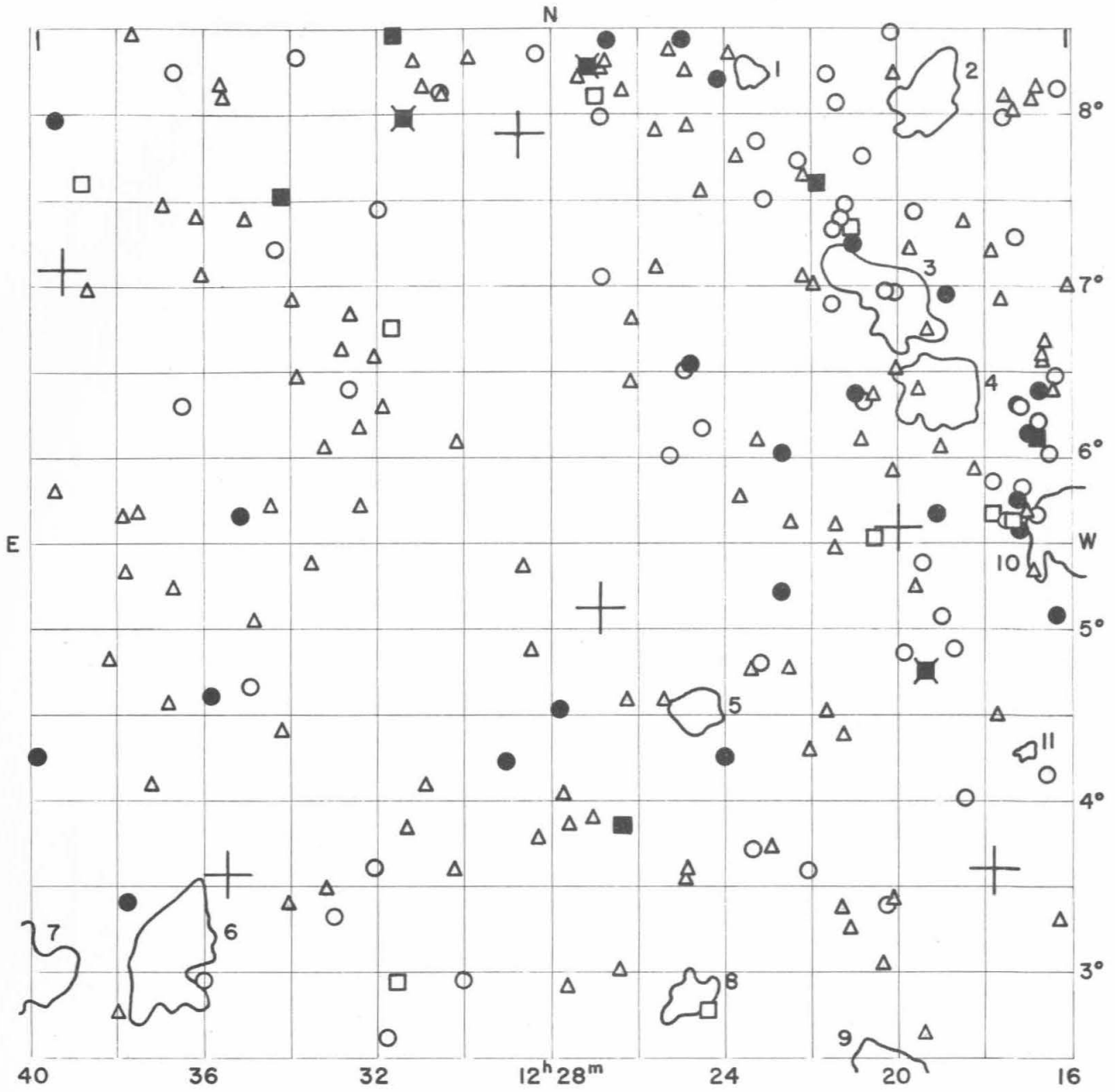
GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
11 52.3 + 03 14		15.2		diffuse
11 52.4 + 04 56		15.1		
11 52.4 + 06 36		15.5		
11 52.6 + 06 27		14.5		
11 52.7 + 04 52		15.4		
11 53.3 + 07 02	3976	12.8		m_H = 12.4 S
11 53.4 + 06 58		15.5		
11 53.5 + 05 47		15.7		diffuse
11 53.8 + 04 02		15.7		
11 54.8 + 04 49		15.2		compact
11 54.8 + 07 45	748*	15.2		
11 55.3 + 07 24		15.4		
11 55.5 + 06 11		15.2		compact
11 56.7 + 06 28		15.3		
11 56.9 + 07 07		15.3		
11 57.0 + 03 36		15.5		
11 57.5 + 08 28	4029	14.5		
11 57.6 + 07 22		15.4		
11 57.9 + 04 44		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
11 58.4 + 07 05		15.3		
11 58.5 + 06 23		15.6		
11 59.1 + 05 02		15.3		
11 59.2 + 06 06		14.9		
11 59.2 + 06 43		14.7		
11 59.4 + 06 58		15.1		double system
11 59.8 + 04 37	4043	14.1		
12 00.3 + 05 53		15.1		
12 00.4 + 04 31		15.0		compact
12 00.4 + 05 07	756*	14.8		
12 00.5 + 05 27		15.3		
12 01.1 + 02 55		14.6		
12 01.2 + 03 50	4058	14.0		
12 01.3 + 04 30		14.8		
12 01.4 + 07 10		15.6		diffuse
12 01.4 + 07 34		15.2		
12 01.7 + 04 09		15.4		
12 01.8 + 07 19		15.7		
12 02.4 + 06 35		15.4		very compact
12 03.5 + 02 47		15.1		
12 04.8 + 06 37		15.6		compact
12 05.1 + 02 58	4116	13.0	+ 1304	m_H = 12.4 S
12 05.6 + 03 10	4123	13.1		m_H = 12.3 S
12 06.4 + 05 28		15.5		
12 07.1 + 05 32		15.3		
12 07.5 + 05 38		15.3		
12 08.6 + 02 32		15.3		
12 08.8 + 03 12		15.5		very diffuse
12 10.5 + 07 19	4180	13.2		
12 11.3 + 07 28	4191	13.9		
12 11.5 + 07 00		15.2		
12 11.6 + 08 03		15.0		diffuse
12 12.0 + 06 05	4197	13.8		
12 12.6 + 04 51		15.3		
12 13.1 + 08 25		15.3		
12 13.3 + 06 40	4215	13.0		m_H = 12.8 E
12 13.4 + 03 35		15.2		
12 13.4 + 04 56		14.8		
12 13.5 + 08 29		15.4		
12 13.7 + 08 12		15.7		
12 14.0 + 07 44	4224	13.3		m_H = 13.0
12 14.6 + 03 58	4234	13.4		m_H = 13.0
12 14.6 + 07 28	4235=3098*	13.2		m_H = 12.8 S
12 14.6 + 07 54	4233	13.2		m_H = 13.0
12 14.8 + 02 52		15.7		
12 14.9 + 06 58	4241=3102*	13.6		
12 15.2 + 04 46		15.7		
12 15.3 + 06 09		15.5		
12 15.4 + 05 52	4249	14.8		
12 15.4 + 06 56	3115*	14.4		
12 15.4 + 07 28	4246=3113*	14.0		
12 15.4 + 07 33	4247	14.7		
12 15.5 + 05 58		15.3		double system
12 15.6 + 06 25	773*	15.2		
12 15.6 + 07 56		15.6		
12 15.7 + 06 53		15.5		
12 15.9 + 05 50	4252	15.0		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4116	11.8	-	12.57	SBc	12.5	SBc	12.29	Sc+
4123	11.4	-	-	-	-	-	11.79	Sc+
4215	12.6	-	-	-	-	-	-	-
4224	-	-	-	-	-	-	12.89	Sa
4234	12.4	-	-	-	-	-	-	-
4235	-	-	-	-	-	-	12.58	Sa
4233	-	-	-	-	-	-	13.03	S0
4241	-	-	-	-	-	-	13.00	Sa
4246	-	-	-	-	-	-	13.33	Sc-
3115*	-	-	-	-	-	-	13.66	Sc-



FIELD No. 42

12^h28^m + 5°30'

Survey Plate No. 1560

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16828	12 17 48.6	+ 3 35 27	5.10
16871	12 19 59.4	+ 5 35 00	6.46
17019	12 26 55.6	+ 5 06 51	7.09
17063	12 28 48.9	+ 7 52 48	6.16
17203	12 35 31.4	+ 3 33 26	6.25
17279	12 39 25.1	+ 7 04 51	5.49

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1215.9 + 0534	medium compact	119	2.4	D	10
1217.0 + 0417	compact	42	0.5	ED	11
1219.0 + 0624	medium compact	106	2.3	VD	4
1219.2 + 0806	compact	193	2.1	D	2
1220.0 + 0657	medium compact	113	2.7	MD	3
1220.2 + 0225	compact	180	2.2	VD	9
1223.4 + 0815	compact	70	0.9	VD	1
1224.7 + 0431	medium compact	96	1.6	VD	5
1224.8 + 0251	medium compact	83	1.5	VD	8
1236.8 + 0305	medium compact	225	3.4	D	6
1239.9 + 0258	medium compact	110	2.2	MD	7

Average number of galaxies per cluster = 121.5

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks	
12 16.0	+ 07 00		15.5			
12 16.3	+ 03 17		15.4			
12 16.3	+ 08 08	3131*=3132*	14.8			
12 16.4	+ 05 04	4255	13.5			
12 16.4	+ 06 28	3136*	14.7			
12 16.5	+ 06 00	4257	15.0			
12 16.5	+ 06 22		15.3			
12 16.6	+ 04 08		14.5			
12 16.6	+ 06 40		15.2			
12 16.7	+ 06 34		15.3			
12 16.7	+ 06 35		15.3			
12 16.8	+ 05 39	4259	14.5			
12 16.8	+ 06 06	4261	12.0	+ 2202	m_H = 11.7	E
12 16.8	+ 06 11		14.8			
12 16.8	+ 06 22	4260	13.1		m_H = 12.7	S
12 16.8	+ 08 09	3148*	15.3		diffuse	
12 16.9	+ 08 05	3150*	15.5			
12 16.9	+ 05 19		15.2			
12 17.0	+ 05 40	3153*	15.2			
12 17.0	+ 06 07	4264	13.9			
12 17.1	+ 05 49	4266	15.0			
12 17.1	+ 06 17	3155*	15.0			
12 17.2	+ 05 34	4268	13.9			
12 17.2	+ 06 18	4269	13.9			
12 17.2	+ 07 16		15.0			
12 17.3	+ 05 45	4270	13.3	+ 2347	m_H = 12.8	E
12 17.3	+ 08 00		15.6			
12 17.4	+ 05 37	4273	12.3	+ 2302	m_H = 12.2	Sb
12 17.5	+ 05 37	4277	15.0			
12 17.5	+ 08 06		15.5			
12 17.6	+ 06 55		15.4			
12 17.6	+ 07 58	4276	14.1			
12 17.7	+ 04 29		15.2			
12 17.8	+ 05 40	4281	12.5	+ 2602	m_H = 12.2	Sa
12 17.8	+ 05 51	4282	14.7			
12 17.8	+ 07 11		15.4			
12 18.2	+ 05 55	4287	15.2			

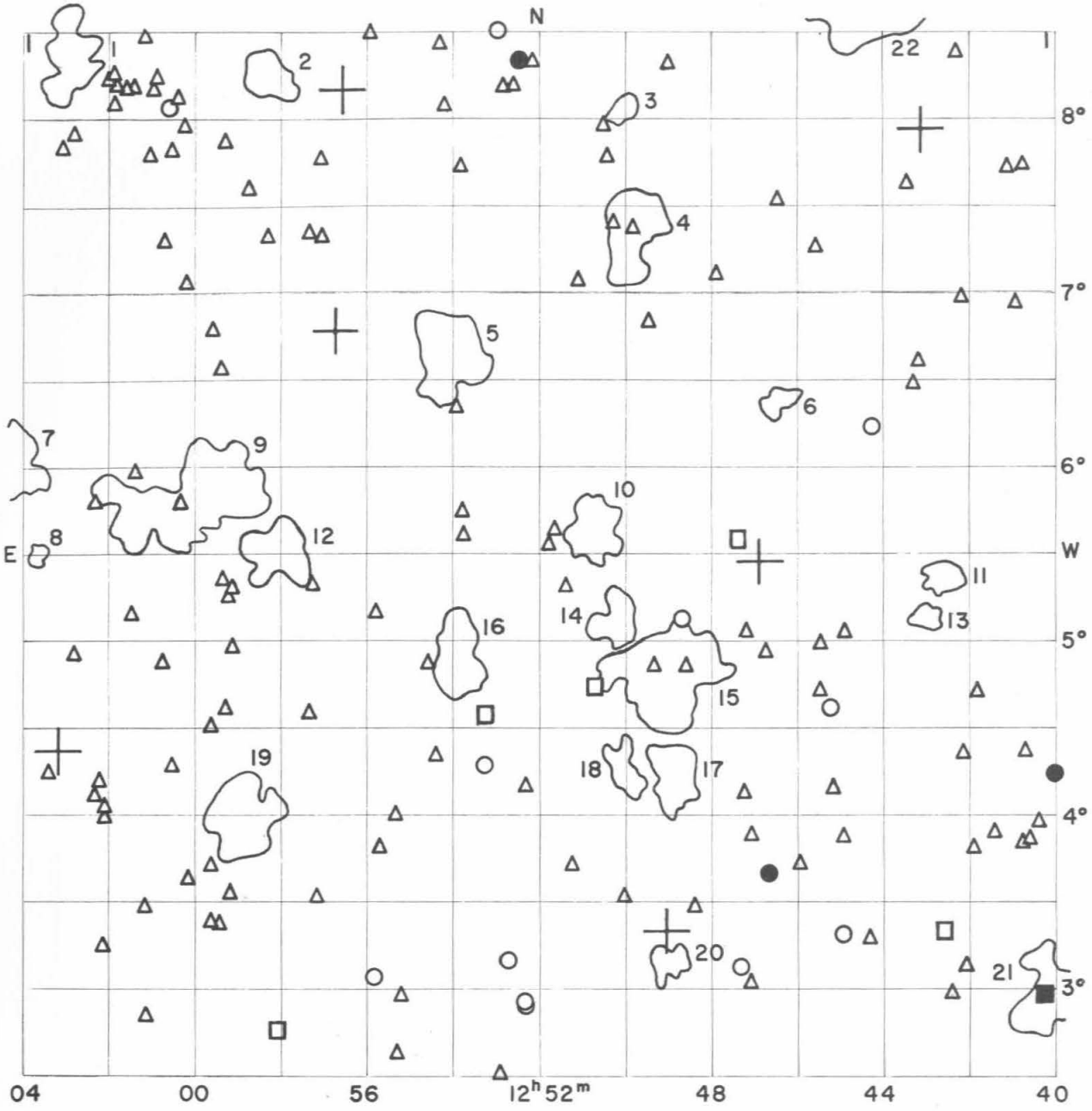
Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 18.5	+ 04 00	4289	15.0		
12 18.5	+ 07 21		15.7		
12 18.7	+ 04 52	4292	14.1		
12 18.9	+ 06 56	4296/4297	14.0		double system
12 19.0	+ 05 03		14.9		
12 19.0	+ 06 02	782*	15.1		
12 19.1	+ 05 39	4300	13.9		
12 19.3	+ 04 45	4303	10.9	+ 1671	m_H = 10.4 SBc
12 19.4	+ 02 37		15.5		
12 19.4	+ 05 23		14.9		
12 19.4	+ 06 43		15.3		diffuse
12 19.6	+ 05 14		15.6		
12 19.6	+ 06 23		15.6		
12 19.7	+ 07 25	4309	14.3		
12 19.8	+ 07 12	3218*	15.6		diffuse
12 19.9	+ 04 50		14.9		
12 20.0	+ 06 57	3225*	14.9		
12 20.1	+ 03 25		15.3		compact
12 20.1	+ 05 55		15.6		
12 20.1	+ 06 30		15.5		
12 20.1	+ 08 14		15.3		
12 20.2	+ 08 29	4318	14.1		
12 20.3	+ 03 24		14.9		
12 20.3	+ 06 57	3229*	15.0		
12 20.4	+ 03 02		15.3		
12 20.5	+ 05 32	4324	12.5	+ 1714	m_H = 12.5 S
12 20.6	+ 06 21	4326	15.1		
12 20.8	+ 06 19	4333	14.8		
12 20.8	+ 07 45	4334	14.9		
12 20.9	+ 06 05		15.7		
12 21.0	+ 06 21	4339	13.1	+ 1278	
12 21.1	+ 03 14		15.2		
12 21.1	+ 07 14	4343	13.5	+ 714	
12 21.1	+ 07 20	3256*	13.0		
12 21.2	+ 07 28	3259*	14.7		
12 21.3	+ 03 21		15.4		
12 21.3	+ 04 22		15.3		
12 21.4	+ 05 27		15.3		diffuse
12 21.4	+ 07 23	3260*	14.5		
12 21.4	+ 08 04	3265*=3266*	14.6		(= NGC 4353?)
12 21.5	+ 05 35		15.5		
12 21.5	+ 07 19	3267*	14.6		
12 21.6	+ 06 53	3268*	14.2		
12 21.7	+ 04 30		15.2		
12 21.7	+ 08 14	3271*	15.0		
12 21.9	+ 07 35	4365	11.5	+ 1231	m_H = 11.0 E
12 22.0	+ 07 00		15.4		
12 22.1	+ 03 35		14.9		
12 22.1	+ 04 16		15.3		
12 22.2	+ 07 38		15.2		
12 22.3	+ 07 02		15.5		
12 22.4	+ 07 43	4370	14.1		
12 22.5	+ 05 37		15.4		
12 22.6	+ 04 45		15.5		
12 22.7	+ 05 12	4378	13.2		m_H = 12.8 E*
12 22.7	+ 06 01	4376	13.9		
12 23.0	+ 03 43		15.3		
12 23.1	+ 07 30		14.4		
12 23.2	+ 04 47		15.0		

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 23.3	+ 06 05		15.2		
12 23.3	+ 07 50	3322*	14.7		
12 23.4	+ 03 42		15.0		
12 23.5	+ 04 45		15.1		compact
12 23.7	+ 05 45		15.2		double nebula
12 23.8	+ 07 44	789*	15.2		
12 23.9	+ 08 20		15.4		
12 24.0	+ 04 14	4412	13.2		m_H = 12.8 S
12 24.2	+ 08 12	4416	13.5		
12 24.4	+ 02 46	4420	12.7		m_H = 12.5 S
12 24.6	+ 06 09	4423	14.4		
12 24.6	+ 07 32		15.3		very diffuse
12 24.8	+ 03 34		15.4		
12 24.9	+ 03 32		15.4		
12 24.9	+ 06 32	4430	13.4		
12 24.9	+ 07 55		15.3		
12 24.9	+ 08 15		15.6		
12 25.0	+ 06 30	4432	15.0		
12 25.0	+ 08 26	4434	13.2		
12 25.4	+ 04 34		15.7		
12 25.4	+ 06 00		15.0		
12 25.4	+ 08 22		15.2		
12 25.7	+ 07 06		15.6		
12 25.7	+ 07 53		15.2		
12 26.2	+ 06 47	4453	15.4		double nebula
12 26.3	+ 04 34		15.5		
12 26.3	+ 06 25		15.6		
12 26.4	+ 03 51	4457	11.9		m_H = 11.7 S
12 26.4	+ 08 08		15.2		
12 26.5	+ 03 00		15.2		diffuse
12 26.8	+ 08 18	4465	15.4		
12 26.8	+ 08 26	4464	13.5	+ 1199	
12 26.9	+ 07 03	3414*	14.2		
12 26.9	+ 08 16	4467	15.2	+ 1474	
12 27.0	+ 07 58	4466	14.7		
12 27.0	+ 08 06	4470	12.9		
12 27.1	+ 03 54		15.6		
12 27.2	+ 08 16	4472	10.2	+ 1013	m_H = 10.1 E
12 27.5	+ 08 12		15.4		very diffuse
12 27.6	+ 03 51		15.5		
12 27.7	+ 02 54		15.3		diffuse
12 27.8	+ 04 01		15.1		
12 27.9	+ 04 31	4480	13.4		
12 28.4	+ 03 46		15.2		compact
12 28.4	+ 08 21	4492=3438*	14.1	+ 1735	
12 28.6	+ 04 52		15.4		
12 28.7	+ 05 21		15.4		
12 29.1	+ 04 13	4496	13.3		m_H = 12.0 S
12 30.0	+ 02 56	3474*	15.0		
12 30.0	+ 08 19		15.3		
12 30.3	+ 03 34		15.3		diffuse
12 30.3	+ 06 04		15.4		
12 30.6	+ 08 06		15.2		
12 30.6	+ 08 07	4518	15.0		
12 30.9	+ 04 04		15.7		diffuse
12 31.1	+ 08 08		15.4		
12 31.3	+ 08 18		15.2		
12 31.4	+ 03 49		15.3		diffuse
12 31.5	+ 07 58	4526	10.6	+ 447	m_H = 10.7 Sa

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 31.6 + 02 56	4527	12.4	+ 1727	m_H = 11.3 S
12 31.8 + 02 36	4533	14.7		
12 31.8 + 06 45	4532	12.3		m_H = 12.1 I
12 31.8 + 08 28	4535	11.1	+ 2014	m_H = 11.1 S
12 32.0 + 06 17		15.4		
12 32.1 + 03 36	4538	14.8		
12 32.1 + 07 26	3521*	14.2		
12 32.2 + 06 34		15.3		very diffuse
12 32.5 + 05 42		15.7		
12 32.5 + 06 09		15.4		
12 32.7 + 06 49		15.2		
12 32.8 + 06 23	4543	14.6		
12 33.0 + 03 19	4544	14.4		
12 33.0 + 06 36		15.4		
12 33.2 + 03 29		15.7		
12 33.3 + 06 02		15.5		
12 33.6 + 05 21		15.6		
12 34.0 + 06 27		15.3		
12 34.0 + 08 20		15.0		
12 34.1 + 03 23		15.7		
12 34.1 + 06 54	3576*	15.2		
12 34.2 + 04 23		15.4		diffuse
12 34.3 + 07 31	4570	11.8	+ 1730	m_H = 12.0 E
12 34.5 + 07 12	3589*/3591*	14.6		double nebula, pec.
12 34.6 + 05 42		15.7		
12 34.9 + 05 01		15.7		
12 35.0 + 04 38	4576	14.7		
12 35.2 + 05 38	4580	13.1		m_H = 12.8 Sc
12 35.2 + 07 23		15.4		diffuse
12 35.7 + 08 05		15.5		double system
12 35.8 + 08 10		15.3		
12 35.9 + 04 35	4586	13.5		m_H = 13.0
12 36.0 + 02 56	4587	14.4		
12 36.2 + 07 02	4588	15.1		
12 36.3 + 07 24		15.5		
12 36.7 + 06 17	4591	14.1		
12 36.8 + 05 13		15.4		diffuse
12 36.9 + 04 33		15.7		
12 36.9 + 08 14	3617*	14.8		
12 37.1 + 07 27		15.4		
12 37.3 + 04 05		15.6		
12 37.6 + 05 39		15.7		
12 37.8 + 03 24	4600	13.7		
12 37.9 + 05 19		15.7		
12 37.9 + 08 27		15.4		triple nebula
12 38.0 + 02 45		15.5		
12 38.0 + 05 38		15.7		
12 38.3 + 04 48		15.7		
12 38.8 + 06 58		15.2		
12 39.0 + 07 35	4612	12.9		m_H = 12.6 E
12 39.6 + 05 48		15.6		
12 39.6 + 07 57	4623	13.6		m_H = 13.2
12 40.0 + 04 14	4630	13.4		m_H = 13.1

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4259	-	-	-	-	-	-	14.58	S0
4260	12.3	-	-	-	-	-	-	-
4261	11.70	E2	-	-	-	E3	-	-
4268	-	-	-	-	-	-	13.79	S0
4270	-	-	-	-	-	E7	13.13	S0
4273	11.6	-	12.14	Sc	12.2	Sc	12.35	Sc-
4277	-	-	-	-	-	-	14.48	S
4281	11.9	-	12.33	S0	12.3	S0	12.32	S0
4303	10.16	SBc	10.16	Sc	10.0	Sc	10.01	Sc
4324	12.3	-	-	-	-	Sa	-	-
4339	-	-	-	-	-	E0	-	-
4343	-	-	-	-	-	E0	14.16	S0
4365	10.67	E3	-	-	10.9	E2	-	-
4378	11.8	-	-	-	-	-	-	-
4412	12.4	-	-	-	-	-	-	-
4457	11.6	-	-	-	-	-	-	-
4464	-	-	-	-	-	E3	-	-
4467	-	-	-	-	-	E2	-	-
4472	9.17	E1	-	-	-	E1	9.33	E
4480	-	-	-	-	-	-	13.03	Sc-
4492	-	-	13.45	Sa	13.2	Sa	-	-
4496	11.5	-	-	-	-	-	11.93	Sc+
4526	10.9	-	10.70	S0	10.6	S0	-	-
4527	11.5	-	11.55	Sb	11.4	Sb	11.29	Sb-
4532	11.9	-	-	-	-	-	12.17	Ir.I
4535	10.74	Sc	-	-	-	Sc	10.37	Sc-
4570	11.8	-	11.81	E	11.8	E7	-	-
4576	-	-	-	-	-	-	14.18	Sc-
4580	12.4	-	-	-	-	-	-	-
4586	11.7	-	-	-	-	-	12.54	Sa
4612	12.1	-	-	-	-	-	-	-
3259*	-	-	-	-	-	-	14.24	Sc-
3267*	-	-	-	-	-	-	14.12	Sc-



FIELD No. 43

$12^h52^m + 5° 30'$

Survey Plate No. 104

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17346	12 43 05.4	+ 7 56 47	5.24
17411	12 46 54.2	+ 5 26 43	7.43
17449	12 49 04.1	+ 3 19 41	6.12
17621	12 56 38.0	+ 8 10 13	8.1
17625	12 56 48.5	+ 6 46 31	7.32
17745	13 03 12.6	+ 4 21 32	8.06

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1239.9 + 0258	medium compact	110	2.2	MD	21
1242.6 + 0523	medium compact	79	1.1	ED	11
1243.0 + 0508	medium compact	61	0.8	ED	13
1244.2 + 0842	open	120	3.6	MD	22
1246.5 + 0623	medium compact	79	0.9	ED	6
1248.9 + 0413	medium compact	112	1.8	VD	17
1249.0 + 0310	medium compact	66	0.9	VD	20
1249.0 + 0447	medium compact	245	3.1	MD	15
1249.9 + 0722	medium compact	174	2.3	VD	4
1250.0 + 0415	medium compact	86	1.3	VD	18
1250.1 + 0804	compact	55	0.8	ED	3
1250.2 + 0506	medium compact	92	1.5	VD	14
1250.7 + 0539	open	110	1.9	VD	10
1253.9 + 0455	compact	195	1.9	VD	16
1254.1 + 0639	compact	233	2.4	VD	5
1258.2 + 0531	open	95	2.1	D	12
1258.5 + 0816	medium compact	105	1.7	ED	2
1258.9 + 0359	medium compact	142	2.2	D	19
1300.3 + 0546	medium compact	174	3.2	MD	9
1303.0 + 0823	open	107	2.1	VD	1
1303.8 + 0530	compact	56	0.6	ED	8
1304.4 + 0605	open	163	2.2	D	7

Average number of galaxies per cluster = 120.9

GALAXIES

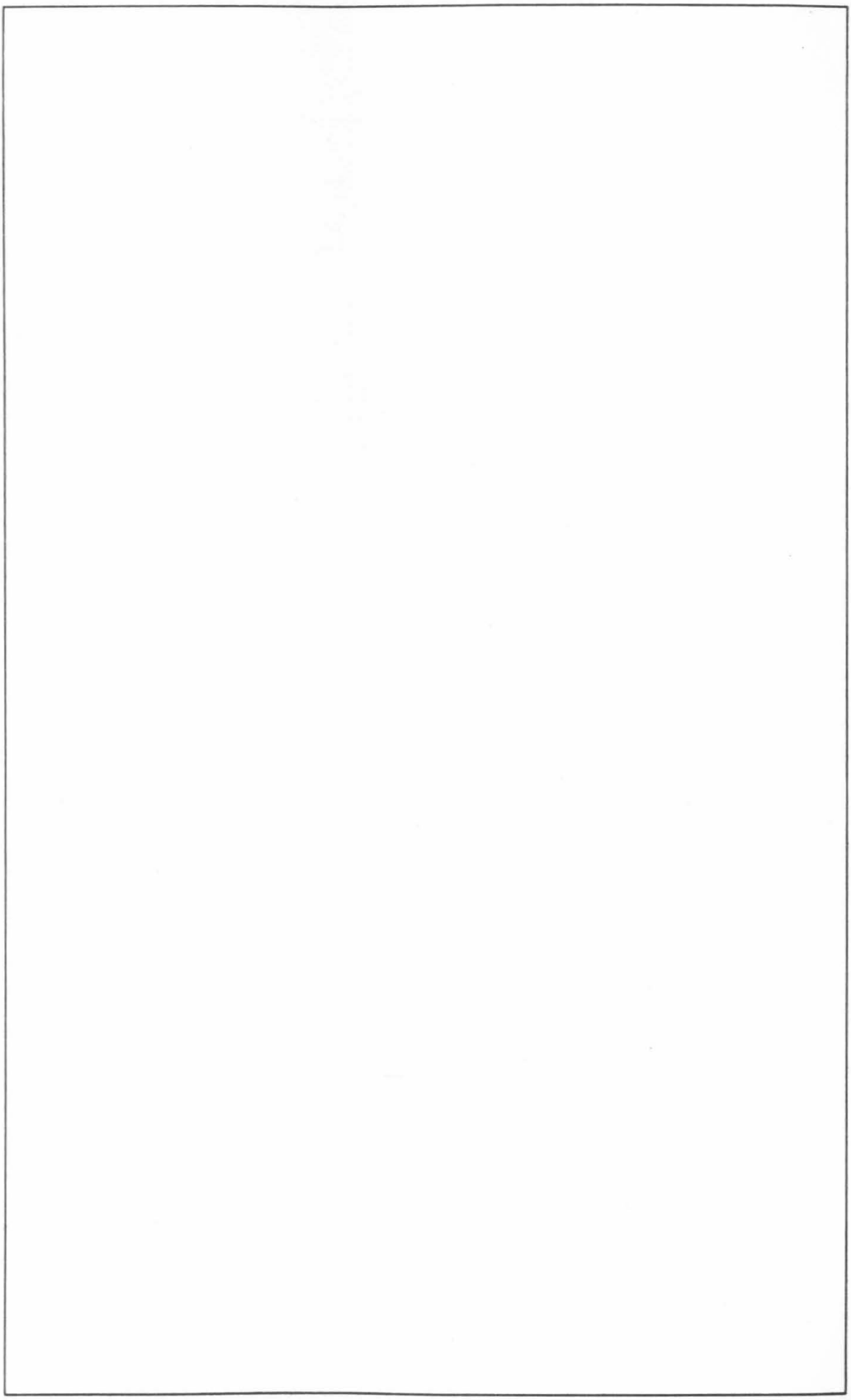
Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
12 40.0	+ 04 14	4630	13.4		m_H = 13.1
12 40.3	+ 02 58	4636	11.8	+ 964	m_H = 10.8 E
12 40.4	+ 03 57		15.1		
12 40.6	+ 03 51		15.4		
12 40.6	+ 07 44		15.5		
12 40.7	+ 04 21		15.6		double system
12 40.8	+ 03 49		15.4		
12 40.8	+ 06 57		15.6		
12 41.0	+ 07 43		15.3		double system
12 41.4	+ 03 53		15.5		
12 41.8	+ 04 42		15.3		double nebula, tidal effect
12 41.9	+ 03 48		15.3		
12 42.1	+ 03 07		15.6		very compact
12 42.1	+ 06 58		15.6		
12 42.2	+ 04 20		15.6		
12 42.3	+ 08 22	3716*=3719*	15.5		
12 42.4	+ 02 58		15.7		
12 42.5	+ 03 20	4665	12.4	+ 785	m_H = 11.8 Sa
12 43.2	+ 06 36		15.7		
12 43.3	+ 06 28		15.5		compact
12 43.4	+ 07 37		15.7		double system
12 44.2	+ 03 16		15.5		diffuse
12 44.2	+ 06 14		14.7		
12 44.9	+ 03 18		15.0		
12 44.9	+ 03 52		15.5		double nebula
12 44.9	+ 05 02		15.6		double system

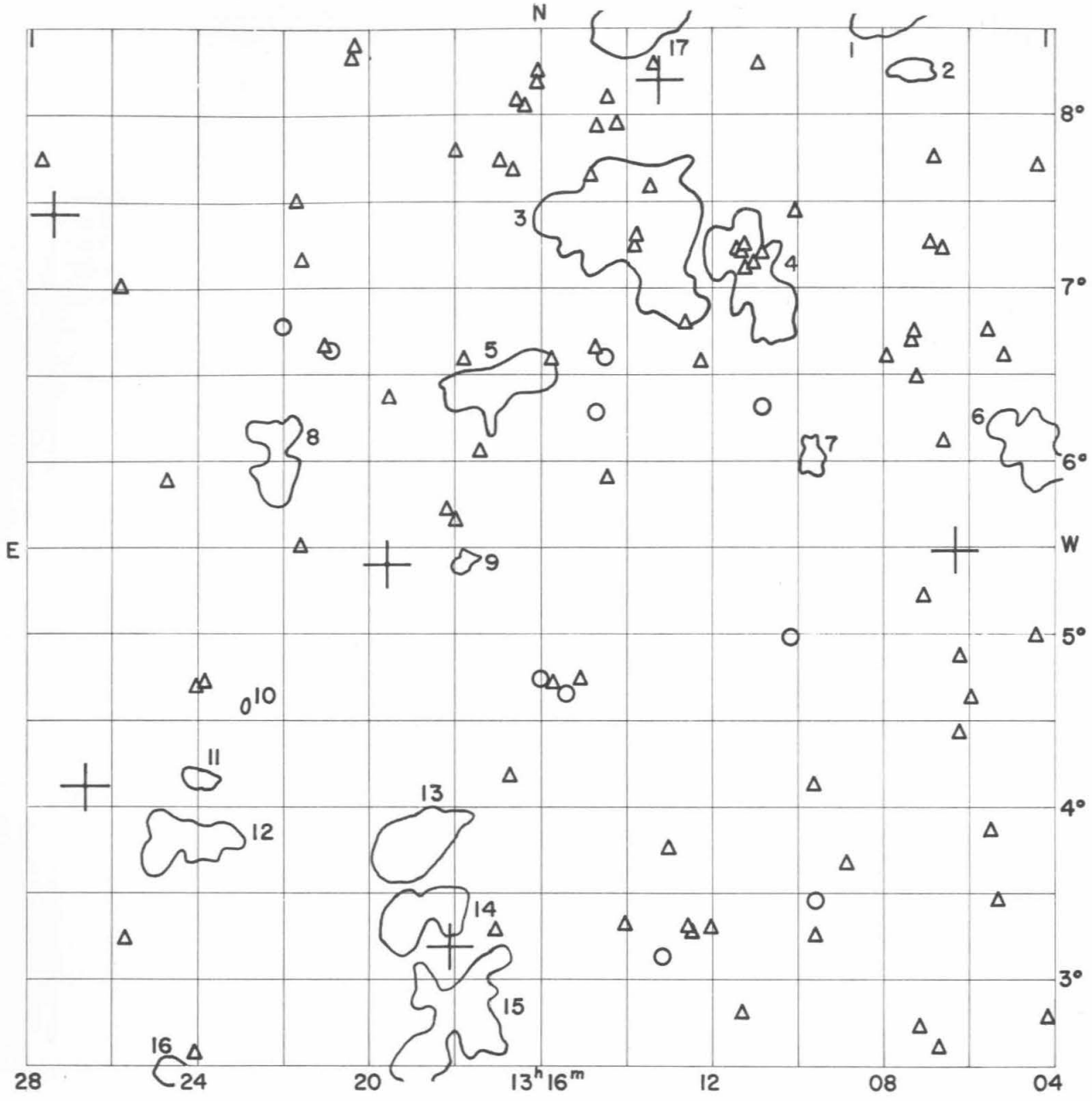
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 45.2 + 04 09		15.2		
12 45.2 + 04 36	4688	14.5		m_H = 13.0
12 45.4 + 04 42		15.5		
12 45.5 + 04 58		15.7		
12 45.6 + 07 15		15.7		
12 45.9 + 03 42		15.6		
12 46.5 + 07 31		15.7		
12 46.7 + 03 40	4701	13.1		m_H = 12.8 E
12 46.7 + 04 56		15.5		
12 47.0 + 03 52		15.4		
12 47.1 + 03 01		15.7		compact
12 47.2 + 04 07		15.7		
12 47.2 + 05 02		15.6		
12 47.3 + 03 08		14.6		
12 47.4 + 05 35	4713	12.3	+ 664	m_H = 12.3 Sc
12 47.9 + 07 05		15.7		
12 48.4 + 03 28		15.4		
12 48.6 + 04 51		15.6		compact
12 48.7 + 05 08	4734	14.3		
12 49.0 + 08 18		15.5		
12 49.4 + 04 50		15.6		double system, companion 2' east
12 49.5 + 06 49		15.4		compact
12 49.8 + 07 22		15.7		compact
12 50.0 + 03 31		15.7		
12 50.3 + 07 24		15.6		
12 50.4 + 07 46		15.7		
12 50.5 + 07 57		15.5		
12 50.7 + 04 44	4765	13.0		m_H = 12.9
12 51.1 + 07 04		15.5		
12 51.3 + 03 43		15.7		very compact
12 51.4 + 05 18		15.7		
12 51.7 + 05 37		15.5		
12 51.8 + 05 32		15.6		
12 52.2 + 08 19	4791	15.1		
12 52.3 + 02 55	4810	14.8		
12 52.3 + 02 56	4809	14.9		
12 52.3 + 04 08		15.5		
12 52.5 + 08 20	4795/4796	13.5		double system m_H = 13.1
12 52.6 + 08 11		15.5		
12 52.7 + 03 10	4799	14.4		
12 52.9 + 02 30		15.7		diffuse
12 52.9 + 08 11		15.3		
12 53.1 + 08 30	4803	15.0		
12 53.3 + 04 17		15.0		
12 53.3 + 04 34	4808	12.5		m_H = 12.5 Sc
12 53.8 + 05 36		15.7		
12 53.8 + 05 45		15.2		
12 53.8 + 07 43		15.5		double system
12 53.9 + 06 20		15.6		
12 54.2 + 08 04		15.5		
12 54.4 + 04 20		15.3		
12 54.4 + 08 25		15.4		
12 54.5 + 04 52		15.7		
12 55.2 + 02 58		15.4		diffuse
12 55.4 + 02 37		15.7		very compact
12 55.4 + 04 00		15.7		
12 55.7 + 03 48		15.6		
12 55.8 + 03 04		15.0		
12 55.8 + 05 09		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 56.1 + 08 29		15.2		
12 57.1 + 03 30		15.7		
12 57.1 + 07 19		15.7		double system
12 57.2 + 07 46		15.6		
12 57.3 + 04 35		15.6		
12 57.4 + 05 19		15.5		
12 57.4 + 07 20		15.6		
12 58.1 + 02 46	4900	12.8	+ 1054	m_H = 11.8 Sp
12 58.4 + 07 19		15.6		
12 58.8 + 07 35		15.5		
12 59.2 + 03 33		15.4		
12 59.2 + 04 57		15.4		compact
12 59.2 + 05 18		15.6		
12 59.3 + 04 36		15.5		
12 59.3 + 05 16		15.4		
12 59.4 + 03 22		15.6		triple system
12 59.4 + 07 52		15.6		
12 59.5 + 05 20		15.5		compact
12 59.5 + 06 33		15.5		compact
12 59.6 + 03 22		15.3		compact
12 59.6 + 03 42		15.7		
12 59.7 + 04 30		15.7		
12 59.7 + 06 47		15.6		
13 00.2 + 03 38		15.5		
13 00.3 + 07 03		15.6		
13 00.4 + 05 47		15.3		quadruple system
13 00.4 + 07 57		15.6		compact
13 00.5 + 08 07		15.7		
13 00.6 + 04 16		15.2		diffuse
13 00.6 + 07 49		15.5		
13 00.7 + 08 04		14.9		
13 00.8 + 04 52		15.4		double system
13 00.8 + 07 17		15.7		
13 01.0 + 08 14		15.6		
13 01.1 + 02 50		15.4		compact
13 01.1 + 03 27		15.5		
13 01.1 + 08 10		15.4		
13 01.2 + 07 47		15.4		
13 01.3 + 08 28		15.7		
13 01.4 + 05 58		15.5		
13 01.5 + 05 08		15.7		
13 01.6 + 08 11		15.2		
13 01.7 + 08 10		15.5		compact
13 01.9 + 08 11		15.6		close double nebula
13 02.0 + 08 04		15.7		
13 02.0 + 08 15		15.6		double system
13 02.1 + 03 14		15.4		
13 02.1 + 03 59		15.5		double system
13 02.1 + 04 02		15.5		
13 02.2 + 04 10		15.6		
13 02.2 + 08 14		15.6		
13 02.4 + 04 05		15.3		double system
13 02.4 + 05 48		15.4		
13 02.8 + 04 55		15.6		
13 02.9 + 07 54		15.6		double nebula
13 03.2 + 07 49		15.5		
13 03.4 + 04 13		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4636	-	-	-	-	10.6	E0	-	-
4665	-	-	-	-	-	SBa	-	-
4713	-	-	-	-	-	Sc	-	-
4795	12.7	-	-	-	-	-	-	-
4900	11.9	SBc	12.07	Sc	11.9	Sc	-	-





FIELD No. 44

13^h16^m + 5°30'

Survey Plate No. 1561

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17811	13 06 18.8	+ 5 28 58	6.91
17952	13 13 16.3	+ 8 13 00	6.89
18050	13 18 09.2	+ 3 12 14	6.23
18091	13 19 38.3	+ 5 24 59	5.87
18229	13 26 41.6	+ 4 07 46	8.1
18249	13 27 29.6	+ 7 26 11	6.29

CLUSTERS OF GALAXIES

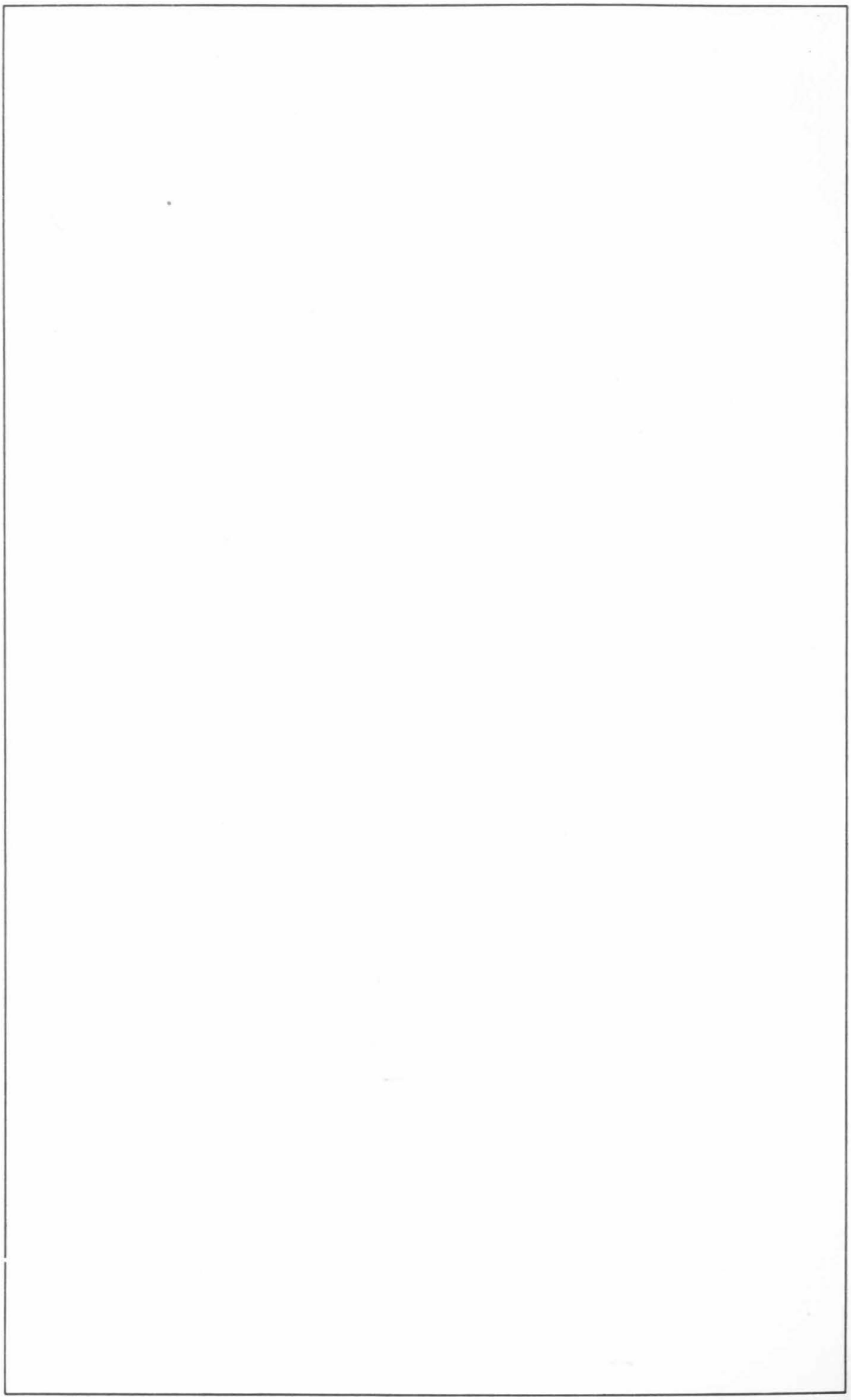
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1304.4 + 0605	open	163	2.2	D	6
1307.2 + 0816	medium compact	62	0.8	ED	2
1307.8 + 0835	medium compact	71	1.8	D	1
1309.7 + 0601	medium compact	59	0.9	ED	7
1311.0 + 0706	medium compact	114	2.6	MD	4
1313.0 + 0849	open	156	4.5	MD	17
1313.7 + 0721	open	162	4.3	MD	3
1317.0 + 0627	open	132	2.2	VD	5
1317.8 + 0525	compact	53	0.7	ED	9
1318.0 + 0248	open	99	2.6	MD	15
1318.9 + 0323	medium compact	104	2.0	VD	14
1319.0 + 0346	open	96	2.3	VD	13
1322.2 + 0600	medium compact	122	2.0	ED	8
1322.9 + 0435	compact	30	0.3	ED	10
1324.0 + 0409	medium compact	49	0.8	ED	11
1324.3 + 0349	compact	190	2.1	VD	12
1324.6 + 0229	medium compact	70	0.9	ED	16

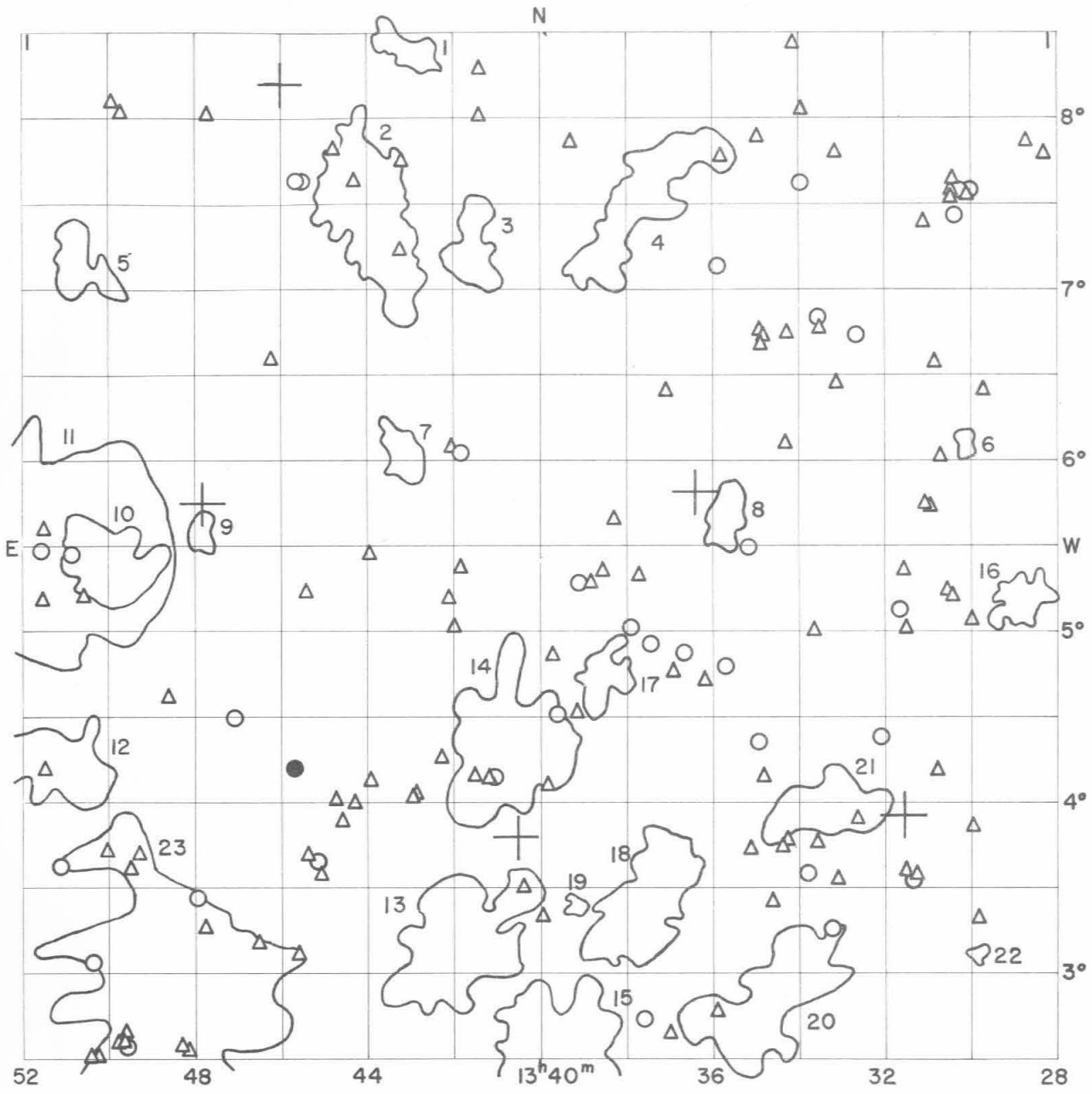
Average number of galaxies per cluster = 101.9

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
13 04.2 + 02 47		15.6		eccentric nucleus
13 04.3 + 07 43		15.5		
13 04.4 + 05 00		15.6		close double nebula
13 05.1 + 06 36		15.3		
13 05.3 + 03 28		15.6		
13 05.5 + 03 52		15.6		very compact
13 05.5 + 06 45		15.2		
13 05.9 + 04 38		15.5		double system
13 06.2 + 04 25		15.4		
13 06.2 + 04 52		15.4		
13 06.5 + 07 14		15.5		double nebula
13 06.6 + 06 07		15.6		
13 06.7 + 02 37	4991	15.5		double system
13 06.8 + 07 16		15.1		
13 06.8 + 07 46		15.7		
13 07.0 + 05 13		15.3		
13 07.2 + 02 44		15.5		double nucleus
13 07.2 + 06 29		15.6		
13 07.2 + 06 45		15.7		
13 07.3 + 06 43		15.4		
13 07.9 + 06 36		15.7		
13 08.8 + 03 40		15.4	+2994	
13 09.6 + 03 15		15.6		
13 09.6 + 03 28	5013	15.0		
13 09.6 + 04 08		15.3		
13 10.0 + 07 27		15.2		
13 10.2 + 05 00	5019	14.5		
13 10.8 + 06 20	5027	14.8		
13 10.8 + 07 12		15.4		
13 10.9 + 08 18		15.7		
13 11.0 + 07 09		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
13 11.2 + 07 07		15.5		
13 11.2 + 07 15		15.1		
13 11.3 + 02 49		15.5		double system
13 11.3 + 07 13		15.4		
13 11.4 + 07 13		15.1		
13 12.0 + 03 18		15.5		
13 12.2 + 06 35		15.5		
13 12.5 + 03 17		15.3		
13 12.6 + 03 18		15.3		
13 12.6 + 06 48		15.6		
13 13.0 + 03 46		15.4		
13 13.2 + 03 08	5050	14.7		
13 13.3 + 08 18		15.2		double nebula
13 13.4 + 07 35		15.5		
13 13.8 + 07 19		15.5		
13 13.9 + 07 15		15.6		
13 14.0 + 03 20		15.4		
13 14.2 + 07 57		15.6		double system
13 14.4 + 08 06	5059	15.5		
13 14.5 + 05 55		15.5		double nebula
13 14.5 + 06 37		15.0		
13 14.7 + 06 18	5060	14.2		
13 14.7 + 06 40		15.5		
13 14.7 + 07 56		15.7		
13 14.8 + 07 39		15.7		
13 15.1 + 04 45		15.6		
13 15.4 + 04 40	871*	14.8		
13 15.8 + 04 44	873*	15.3		
13 15.8 + 06 35		15.1		
13 16.0 + 04 45	876*	14.8		
13 16.1 + 08 12	5071	15.5		
13 16.1 + 08 16		15.7		
13 16.4 + 08 03	4223*	15.4		triple system
13 16.6 + 08 05	5075	15.1		
13 16.7 + 04 11		15.6		
13 16.7 + 07 42		15.2		
13 17.0 + 07 45		15.5		
13 17.1 + 03 17		15.1		
13 17.4 + 06 04		15.3		
13 17.8 + 06 36		15.3		
13 18.0 + 05 40		15.3		
13 18.0 + 07 48		15.6		very compact
13 18.2 + 05 44		15.4		
13 19.6 + 06 22		15.4		
13 20.4 + 08 25		15.4		
13 20.5 + 08 21		15.6		
13 20.9 + 06 39	5118	14.4		
13 21.1 + 06 40		15.5		
13 21.6 + 05 31		15.4		
13 21.6 + 07 10		15.5		
13 21.7 + 07 31		15.6		double system
13 22.0 + 06 47		14.7		
13 23.9 + 04 44		15.5		
13 24.0 + 04 43		15.3		
13 24.1 + 02 35	5148	15.4		
13 24.8 + 05 54		15.7		
13 25.7 + 03 15	5159	15.2		
13 25.9 + 07 01		15.5		
13 27.8 + 07 45		15.3		double nebula





FIELD No. 45

13^h40^m + 5°30'

Survey Plate No. 90

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18335	13 31 35.8	+ 3 54 54	4.93
18450	13 36 27.1	+ 5 48 59	7.9
18540	13 40 32.8	+ 3 47 25	5.62
18657	13 46 05.0	+ 8 12 31	6.66
18698	13 47 54.0	+ 5 44 40	6.25

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1328.8 + 0510	open	114	1.7	D	16
1329.8 + 0306	compact	46	0.5	ED	22
1330.0 + 0605	compact	61	0.8	ED	6
1333.3 + 0358	open	142	2.6	VD	21
1334.8 + 0249	open	154	3.7	D	20
1335.7 + 0540	medium compact	96	1.4	ED	8
1337.6 + 0324	open	185	3.3	D	18
1337.7 + 0732	open	155	3.3	MD	4
1338.6 + 0445	open	82	1.6	D	17
1339.2 + 0323	compact	45	0.5	ED	19
1339.5 + 0233	compact	293	3.6	MD	15
1340.8 + 0419	open	284	4.1	D	14
1341.6 + 0714	open	107	1.8	D	3
1341.9 + 0310	medium compact	293	4.0	MD	13
1343.1 + 0601	compact	92	1.4	VD	7
1343.2 + 0825	open	94	1.5	D	1
1344.0 + 0727	open	290	3.8	D	2
1348.0 + 0535	compact	89	0.9	ED	9
1348.7 + 0249	open	166	7.3	Near	23
1350.1 + 0524	medium compact	164	2.7	MD	10
1350.9 + 0709	medium compact	158	1.8	VD	5
1351.5 + 0414	compact	270	2.8	VD	12
1353.7 + 0553	open	290	11.2	Near	11

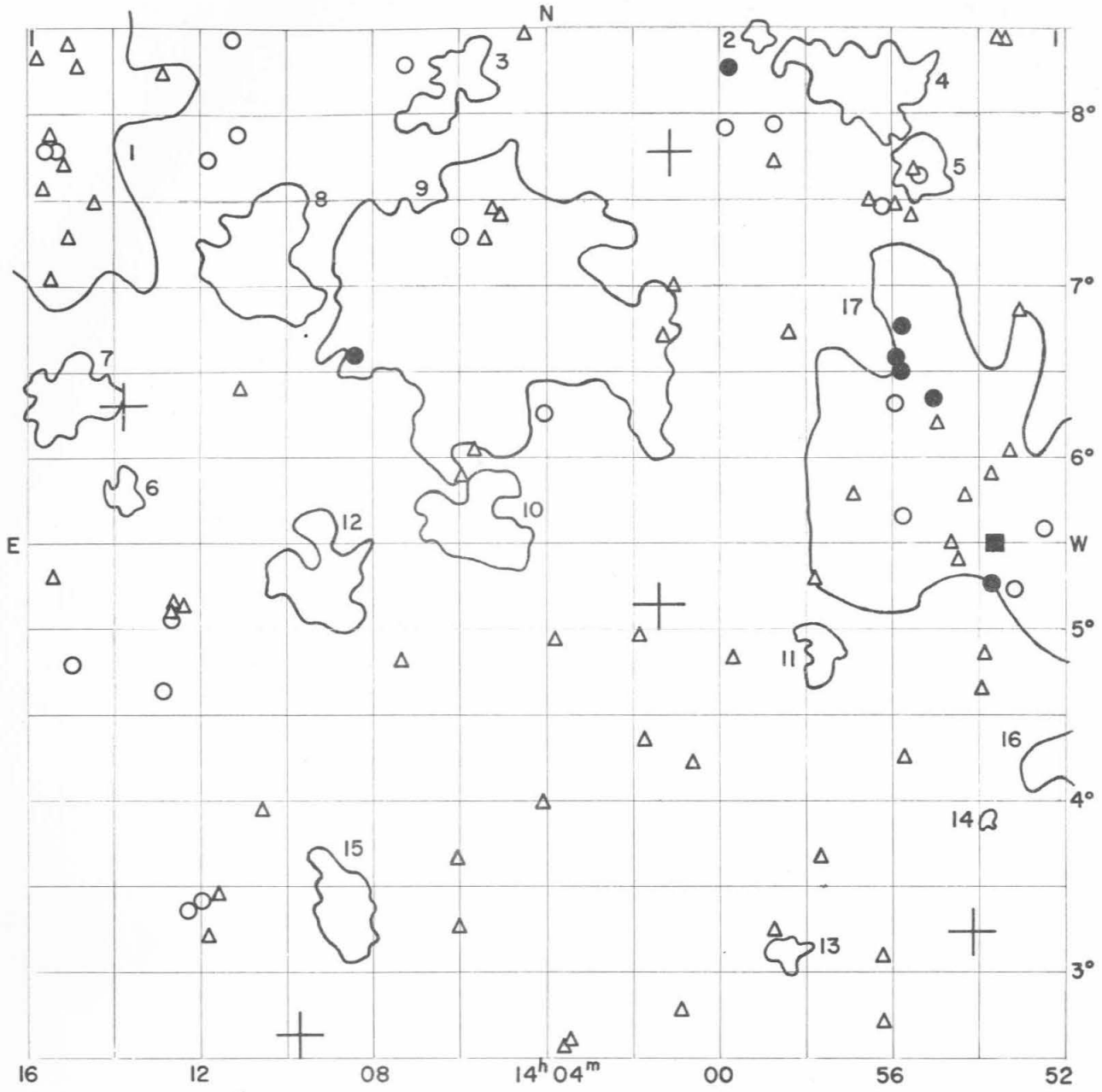
Average number of galaxies per cluster = 159.6

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
13 28.1 + 07 48		15.4		
13 28.6 + 07 52		15.6		very compact
13 29.7 + 06 25		15.5		
13 29.8 + 03 18		15.6		compact
13 29.9 + 03 51		15.7		
13 29.9 + 05 03		15.6		
13 29.9 + 07 35	5208	14.4		
13 30.0 + 07 34		15.5		
13 30.1 + 07 36	5209	14.7		
13 30.3 + 07 26	5210	14.4		
13 30.3 + 07 35		15.6		compact
13 30.3 + 07 39		15.4		
13 30.4 + 05 12		15.7		
13 30.4 + 07 33		15.4		
13 30.5 + 05 15		15.6		compact
13 30.7 + 06 01		15.3		
13 30.8 + 04 10		15.6		
13 30.8 + 06 35		15.2		compact
13 30.9 + 05 44		15.4		
13 31.0 + 05 45		15.3		
13 31.0 + 07 24		15.5		
13 31.3 + 03 34		15.4		
13 31.4 + 03 32		14.6		
13 31.5 + 03 36		15.7		
13 31.5 + 05 00		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
13 31.5 + 05 21		15.4		compact
13 31.6 + 05 07	896*	15.0		
13 32.1 + 04 23		14.9		
13 32.6 + 03 54		15.5		
13 32.6 + 06 44	5224	15.0		
13 33.0 + 06 27		15.4		
13 33.1 + 03 32		15.7		
13 33.1 + 07 48		15.3		
13 33.2 + 03 15	5231	14.7		
13 33.5 + 06 47		15.7		
13 33.5 + 06 50	5235	14.9		
13 33.6 + 03 45		15.5		
13 33.7 + 05 00		15.4		compact
13 33.8 + 03 35		14.9		
13 33.9 + 07 38	5239	14.7		
13 33.9 + 08 04		15.6		
13 34.0 + 08 28		15.6		
13 34.2 + 06 45		15.1		
13 34.3 + 03 46		15.5		
13 34.3 + 06 06		15.7		
13 34.4 + 03 44		15.6		
13 34.7 + 03 25		15.6		
13 34.8 + 04 09		15.3		
13 34.8 + 06 44		15.4		
13 34.9 + 04 21	5246	14.8		
13 34.9 + 06 41		15.3		
13 34.9 + 06 46		15.3		
13 34.9 + 07 54		15.4		
13 35.1 + 03 43		15.5		
13 35.2 + 05 30		15.0		
13 35.7 + 04 47	5252	14.5		
13 35.8 + 07 48		15.7		
13 35.9 + 02 46		15.7		
13 35.9 + 07 08		15.0		
13 36.2 + 04 42		15.4		
13 36.7 + 04 52		14.9		
13 36.9 + 04 45		15.5		
13 37.0 + 02 38		15.6		
13 37.0 + 06 25		15.2		very diffuse double system
13 37.5 + 04 56		15.0		
13 37.7 + 02 43		14.9		
13 37.7 + 05 19	5261	15.3		
13 37.9 + 05 01		14.9		
13 38.3 + 05 40		15.6		
13 38.5 + 05 21		15.3		
13 38.8 + 05 17		15.4		
13 39.1 + 04 30		15.5		
13 39.1 + 05 17		14.6		
13 39.3 + 07 52		15.7		diffuse
13 39.7 + 04 30	5270	14.7		
13 39.8 + 04 52		15.7		
13 39.9 + 04 06		15.6		
13 40.0 + 03 19		15.7		
13 40.4 + 03 30		15.7		
13 41.1 + 04 08		15.0		
13 41.2 + 04 08		15.5		
13 41.4 + 08 01		15.7		compact
13 41.5 + 08 17		15.4		
13 41.6 + 04 09		15.2		

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
13 41.8	+ 06 02		14.7		
13 41.9	+ 05 22		15.6		
13 42.0	+ 05 02		15.3		diffuse
13 42.1	+ 06 06		15.7		
13 42.2	+ 05 11		15.7		
13 42.3	+ 04 16		15.4		
13 42.8	+ 04 03		15.4		
13 42.9	+ 04 01		15.6		compact
13 43.3	+ 07 15		15.7		compact
13 43.3	+ 07 46		15.4		
13 44.0	+ 04 07		15.6		
13 44.0	+ 05 27		15.6		
13 44.3	+ 04 00		15.3		
13 44.3	+ 07 38		15.2		
13 44.6	+ 03 54		15.4		
13 44.8	+ 04 01		15.4		
13 44.8	+ 07 50		15.5		
13 45.1	+ 03 35		15.5		
13 45.2	+ 03 39	939*	14.7		
13 45.4	+ 03 42	940*	15.3		
13 45.5	+ 05 14		15.7		
13 45.6	+ 03 05		15.6		compact
13 45.6	+ 07 38		14.7		double system
13 45.7	+ 04 12	5300	13.7		m_H = 12.3 S
13 45.7	+ 07 38		14.9		
13 46.3	+ 06 36		15.7		
13 46.6	+ 03 10		15.7		compact
13 47.1	+ 04 29		14.4		
13 47.8	+ 03 15		15.7		diffuse
13 47.8	+ 08 03		15.6		
13 48.0	+ 03 26	943*	14.8		
13 48.2	+ 02 33		15.1		
13 48.3	+ 02 34		15.3		double nebula
13 48.6	+ 04 36		15.5		
13 49.3	+ 03 42		15.3		
13 49.5	+ 03 37		15.6		
13 49.6	+ 02 34	5329	14.4		double system
13 49.7	+ 02 36		15.7		
13 49.7	+ 02 39		15.7		diffuse
13 49.8	+ 02 35		15.6		
13 49.9	+ 08 03		15.2		compact
13 50.0	+ 08 06		15.7		
13 50.1	+ 03 43		15.6		
13 50.3	+ 02 30		15.2		
13 50.4	+ 03 04	5335	14.5		
13 50.5	+ 02 30		15.4		
13 50.7	+ 05 13		15.7		
13 50.9	+ 05 27	5338	14.3		
13 51.2	+ 03 37	952*	14.9		
13 51.5	+ 04 12		15.4		
13 51.6	+ 05 11		15.6		
13 51.6	+ 05 36		15.2		
13 51.7	+ 05 29	5348	14.5		



FIELD No. 46

14^h04^m + 5°30'

Survey Plate No. 96

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18847	13 54 08.6	+ 3 13 49	6.93
18989	14 01 07.7	+ 7 47 10	6.35
18993	14 01 25.0	+ 5 08 25	6.28
19157	14 09 43.8	+ 2 38 38	4.90
19254	14 13 50.6	+ 6 18 44	7.91

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1351.5 + 0414	compact	270	2.8	VD	16
1353.7 + 0553	open	290	11.2	Near	17
1353.8 + 0354	compact	40	0.5	ED	14
1355.3 + 0743	open	89	1.8	D	5
1356.4 + 0813	open	183	3.2	D	4
1357.7 + 0451	compact	111	1.6	D	11
1358.5 + 0305	compact	92	1.1	ED	13
1359.2 + 0826	medium compact	52	0.8	VD	2
1405.5 + 0654	medium compact	958	8.5	MD	9
1405.7 + 0538	medium compact	172	2.8	MD	10
1406.2 + 0809	medium compact	145	2.0	D	3
1408.6 + 0321	open	107	2.3	VD	15
1409.2 + 0517	open	137	2.7	D	12
1410.8 + 0710	medium compact	218	3.6	D	8
1413.9 + 0548	medium compact	87	1.1	VD	6
1415.1 + 0621	open	124	2.2	D	7
1416.0 + 0752	medium compact	720	8.0	Near	1

Average number of galaxies per cluster = 223.2

GALAXIES

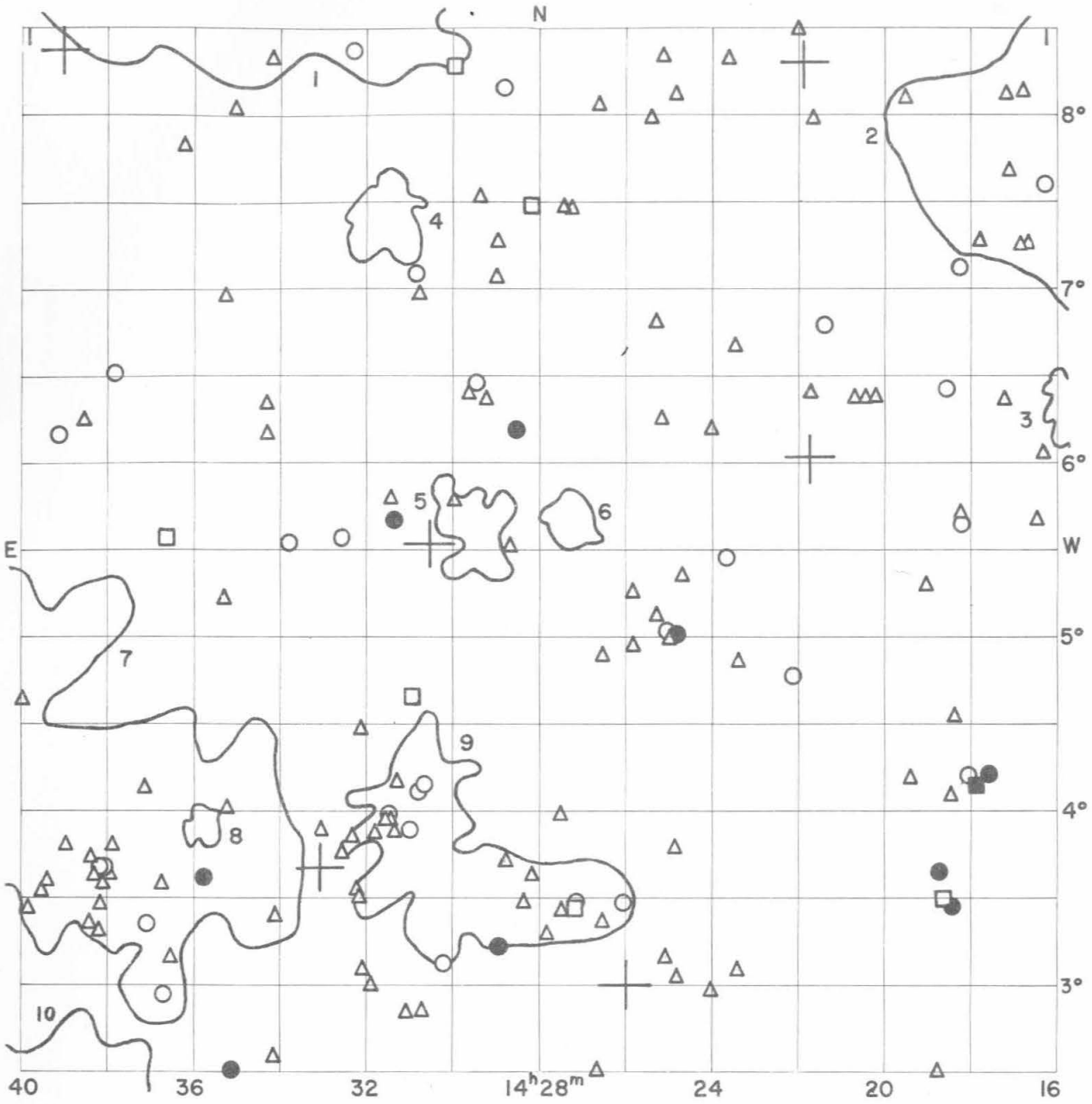
Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
13 52.4 + 05 35	5356	14.1		
13 52.9 + 06 51		15.1		very compact
13 53.0 + 05 14	5360	14.9		
13 53.1 + 06 02		15.3		
13 53.2 + 08 27		15.2		
13 53.5 + 08 27		15.3		
13 53.6 + 05 30	5363	11.4	+ 1138	m_H = 11.1 I
13 53.6 + 05 54		15.7		double nebula
13 53.7 + 05 16	5364	13.2	+ 1393	m_H = 11.8 Sc
13 53.8 + 04 50		15.7		
13 53.9 + 04 38		15.3		
13 54.2 + 05 46		15.4		compact
13 54.4 + 05 24		15.7		diffuse
13 54.6 + 05 30	5373	15.3		compact
13 54.9 + 06 12		15.5		
13 55.0 + 06 21	5374	13.7		
13 55.3 + 07 39		14.8		
13 55.5 + 07 25		15.2		
13 55.5 + 07 41		15.3		
13 55.7 + 04 14		15.7		
13 55.7 + 05 39	966*	15.0		
13 55.7 + 06 30	5382	14.0		
13 55.7 + 06 46	5384	14.0		
13 55.8 + 06 35	5386	13.7		
13 55.8 + 07 29		15.1		
13 55.9 + 06 19	5387	14.8		
13 56.2 + 02 42		15.6		
13 56.2 + 03 05		15.2		compact
13 56.2 + 07 28		15.0		
13 56.5 + 07 30		15.4		
13 56.9 + 05 47		15.2		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
13	57.6	+ 03 40		15.6		
13	57.8	+ 05 17		15.2		
13	58.3	+ 06 43		15.5		
13	58.7	+ 07 44		15.3		
13	58.7	+ 07 57	5405	14.5		
13	58.8	+ 03 14		15.7		
13	59.7	+ 04 49		15.2		
13	59.7	+ 08 17	5417	13.8		
13	59.8	+ 07 56	5418	14.4		
14	00.6	+ 04 13		15.6		
14	00.9	+ 02 45		15.5		double nebula
14	01.0	+ 07 01		15.3		
14	01.2	+ 06 42		15.6		double system
14	01.7	+ 04 20		15.2		
14	01.8	+ 04 57		15.5		compact
14	03.5	+ 02 35		15.6		
14	03.6	+ 02 33		15.1		double system
14	03.8	+ 04 57		15.4		diffuse
14	04.0	+ 06 16	5470	14.5		
14	04.1	+ 03 59		15.3		
14	04.5	+ 08 29		15.5		double nebula
14	05.0	+ 07 25		15.5		
14	05.2	+ 07 27		15.3		
14	05.4	+ 07 17		15.5		
14	05.7	+ 06 02		15.2		
14	06.0	+ 03 15		15.3		
14	06.0	+ 03 39		15.4		
14	06.0	+ 05 54		15.4		
14	06.0	+ 07 18		14.5		
14	07.3	+ 08 19	5487	14.6		
14	07.4	+ 04 49		15.1		
14	08.5	+ 06 36	5491	13.9		
14	10.6	+ 03 56		15.3		double system
14	11.1	+ 06 24		15.7		
14	11.2	+ 07 54	5514	14.5		
14	11.3	+ 08 27		14.7		double system in contact
14	11.6	+ 03 27		15.2		
14	11.8	+ 03 12		15.6		triple system
14	11.9	+ 07 45	5519	14.6		
14	12.0	+ 03 25	988*	14.8		
14	12.3	+ 03 21	989*	14.4		
14	12.4	+ 05 08		15.7		
14	12.6	+ 05 10		15.3		
14	12.7	+ 05 03		14.6		
14	12.7	+ 05 06		15.3		
14	12.9	+ 04 38	5521	14.3		
14	12.9	+ 08 15		15.6		
14	14.6	+ 07 30		15.4		
14	15.0	+ 04 47		14.9		
14	15.0	+ 08 17		15.5		compact
14	15.1	+ 07 17	5537	15.1		
14	15.2	+ 07 43	5538	15.4		
14	15.2	+ 08 25	5535/5539	15.4		multiple system
14	15.4	+ 07 47	5542	15.0		
14	15.5	+ 05 18		15.5		
14	15.6	+ 07 02		15.3		
14	15.6	+ 07 53	5543	15.3		
14	15.7	+ 07 48	5546	14.1		
14	15.8	+ 07 34		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
14 15.9	+ 08 20		15.5		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5363	-	-	11.35	Irr. II	11.2	Irr.	11.13	Irr. II
5364	10.9	Sc	11.18	Sc	11.0	Sc	11.04	Sc-



FIELD No. 47

14^h28^m + 5°30'

Survey Plate No. 1418

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19428	14 21 41.9	+ 6 02 45	5.08
19433	14 21 50.6	+ 8 18 43	6.22
19514	14 26 00.1	+ 3 00 40	7.10
19617	14 30 33.1	+ 5 32 38	6.91
19671	14 33 05.1	+ 3 41 08	7.6
19789	14 39 11.3	+ 8 22 28	5.03

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1415.1 + 0621	open	124	2.2	D	3
1416.0 + 0752	medium compact	720	8.0	Near	2
1427.3 + 0540	open	101	1.6	D	6
1429.4 + 0536	open	117	2.3	D	5
1429.9 + 0336	medium compact	127	4.5	Near	9
1431.6 + 0724	open	103	2.3	MD	4
1435.8 + 0355	compact	96	1.2	VD	8
1436.0 + 0926	open	920	16.5	Near	1
1438.4 + 0405	medium compact	428	11.3	Near	7
1440.3 + 0128	open	345	13.3	Near	10

Average number of galaxies per cluster = 308.1

GALAXIES

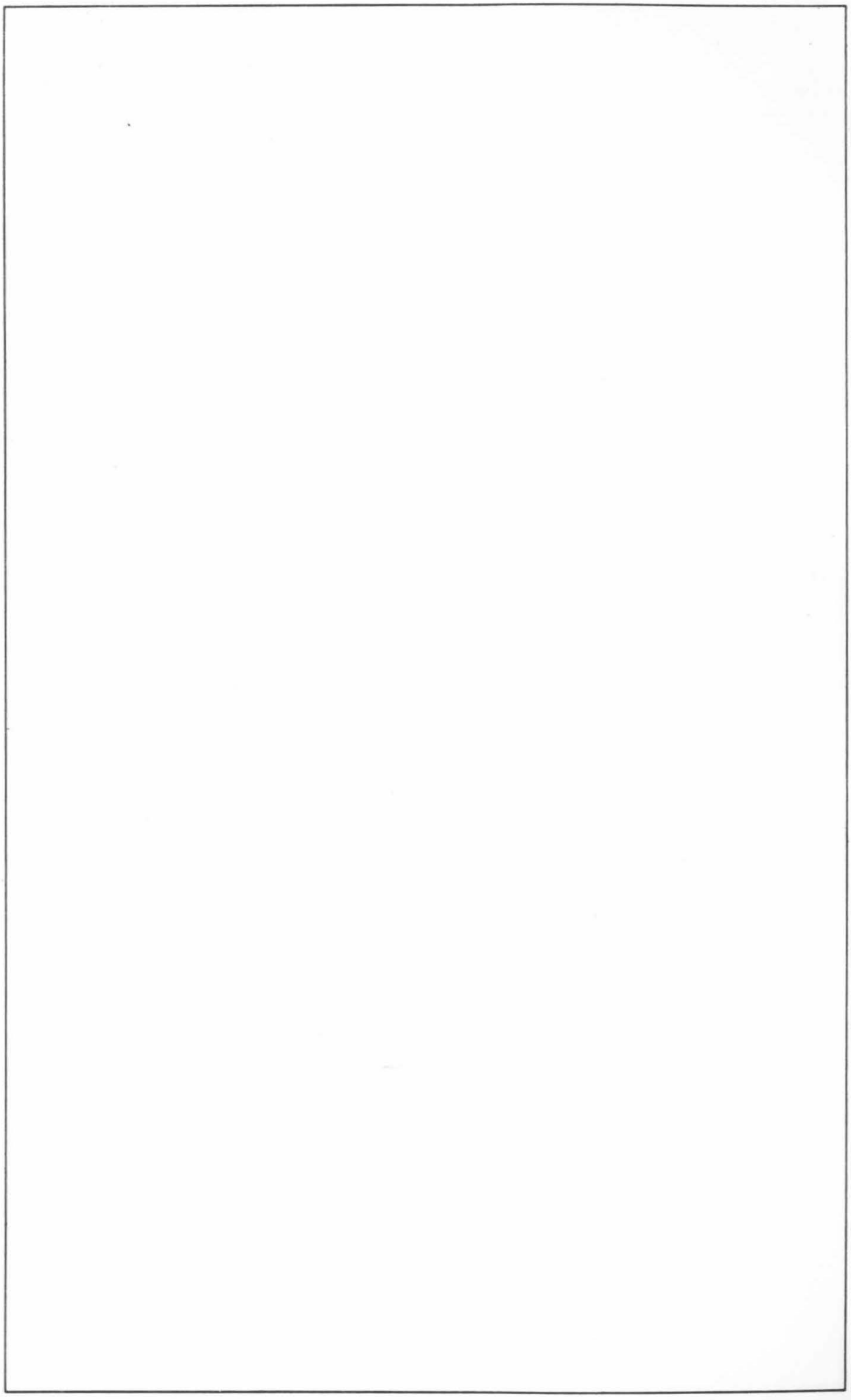
Position α 1950 h m	Position δ. ° '	NGC IC*	m_p	V_s km/sec	Remarks
14 16.1	+ 07 36	5549	14.2		
14 16.2	+ 06 04		15.6		
14 16.4	+ 05 40	5551	15.1		
14 16.5	+ 07 16	5552	15.2		
14 16.6	+ 08 09		15.5		
14 16.8	+ 07 15	5554	15.2		
14 17.0	+ 07 41		15.4		
14 17.0	+ 08 08		15.7		
14 17.1	+ 06 22		15.5		double system
14 17.5	+ 04 13	5560	13.7		
14 17.7	+ 07 17	5563	15.3		
14 17.8	+ 04 09	5566	12.0	+ 1455	m_H = 11.9 SBb
14 18.0	+ 04 12	5569	14.9		
14 18.2	+ 05 39		15.0		
14 18.2	+ 05 43		15.2		
14 18.2	+ 07 08	5573	15.0		
14 18.3	+ 04 33		15.1		compact
14 18.4	+ 03 28	5574	13.4	+ 1716	m_H = 13.1
14 18.4	+ 04 05		15.6		
14 18.5	+ 03 30	5576	12.3	+ 1528	m_H = 11.9 E
14 18.5	+ 06 26	5575	14.5		
14 18.7	+ 03 40	5577	13.6		
14 18.8	+ 02 31		15.3		
14 18.9	+ 05 17		15.3		
14 19.4	+ 04 11		15.1		
14 19.4	+ 08 07		15.4		
14 20.1	+ 06 24		15.5		
14 20.4	+ 06 24		15.6		
14 20.6	+ 06 23		15.6		
14 21.3	+ 06 48	5599	14.7		
14 21.6	+ 06 25		15.4		double system
14 21.6	+ 07 59		15.6		triple system
14 21.9	+ 08 30		15.4		diffuse
14 22.1	+ 04 46	1007*	15.0		
14 23.4	+ 03 05		15.3		diffuse
14 23.4	+ 04 52		15.2		
14 23.4	+ 06 40		15.2		compact
14 23.6	+ 05 27		14.8		double system
14 23.6	+ 08 20		15.3		compact

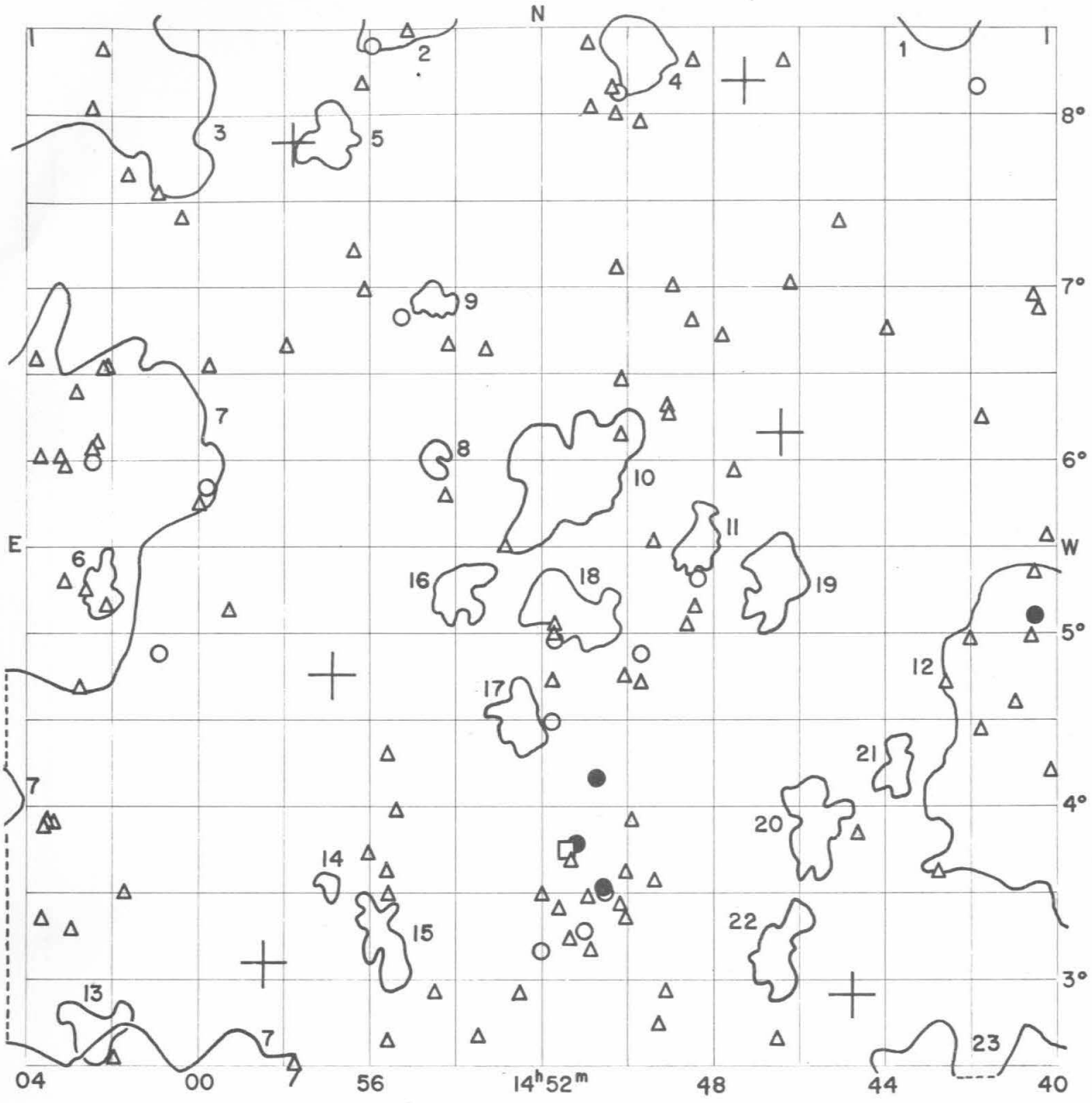
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 24.0 + 02 58		15.3		
14 24.0 + 06 12		15.1		
14 24.7 + 05 21		15.7		
14 24.8 + 03 02		15.4		
14 24.8 + 05 01	5619	14.0		
14 24.8 + 08 07		15.7		
14 24.9 + 03 47		15.1		
14 25.0 + 05 00		15.3		
14 25.0 + 05 02	4424*	14.8		
14 25.1 + 03 10		15.1		
14 25.1 + 08 21		15.2		
14 25.2 + 06 16		15.5		
14 25.3 + 05 07		15.4		
14 25.3 + 06 49		15.3		
14 25.4 + 07 59		15.7		
14 25.8 + 04 57		15.6		
14 25.8 + 05 16		15.1		
14 26.0 + 03 29		15.0		
14 26.5 + 03 22		15.3		
14 26.5 + 04 54		15.2		
14 26.6 + 08 04		15.1		
14 26.7 + 02 30		15.2		
14 27.1 + 03 29	5636	14.6		
14 27.2 + 03 27	5638	12.5	+ 1677	m_H = 12.6 E
14 27.2 + 07 28		15.5		
14 27.5 + 03 26		15.3		
14 27.5 + 03 59	1022*	15.3		
14 27.5 + 07 28		15.5		
14 27.8 + 03 17		15.7		compact
14 28.1 + 03 38		15.6		
14 28.2 + 07 30	5645	12.8		m_H = 12.9 I
14 28.3 + 03 28		15.7		
14 28.5 + 06 12	5652	13.8		
14 28.7 + 05 31		15.2		
14 28.8 + 03 42		15.5		
14 28.8 + 08 10		14.9		
14 28.9 + 03 13	1024*	14.0		
14 29.0 + 07 04		15.4		
14 29.0 + 07 17	1025*	15.3		
14 29.2 + 06 22		15.4		
14 29.4 + 07 32		15.6		
14 29.5 + 06 28	5661	14.2		
14 29.6 + 06 24		15.3		
14 30.0 + 05 47		15.7		
14 30.0 + 08 18	5665	12.6		m_H = 12.7 S
14 30.2 + 03 08		14.9		
14 30.6 + 04 10		14.9		
14 30.7 + 02 52		15.5		
14 30.8 + 04 07		14.9		
14 30.8 + 06 59		15.4		
14 30.9 + 04 40	5668	12.7	+ 1723	m_H = 12.4 S
14 30.9 + 07 05		15.0		
14 31.0 + 02 51		15.5		
14 31.0 + 03 54		15.0		
14 31.3 + 04 10		15.2		
14 31.4 + 03 54		15.5		
14 31.4 + 05 40	5674	13.7		
14 31.5 + 03 58		15.4		compact
14 31.5 + 04 00		15.0		double nebula

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 31.5 + 05 48		15.6		
14 31.6 + 03 58		15.4		compact
14 31.8 + 03 53		15.3		
14 31.9 + 03 00		15.7		
14 32.1 + 03 05		15.6		
14 32.1 + 04 29		15.3		
14 32.2 + 03 30		15.3		
14 32.3 + 03 33		15.2		double nebula
14 32.3 + 03 52		15.3		
14 32.3 + 08 23		14.9		
14 32.6 + 03 45		15.2		
14 32.6 + 05 34	5679	14.2		large triple system
14 33.0 + 03 54		15.7		
14 33.8 + 05 33		14.9		
14 34.1 + 03 24		15.4		
14 34.2 + 02 36		15.5		double system
14 34.3 + 08 20		15.5		
14 34.4 + 06 10		15.2		
14 34.4 + 06 21		15.6		double nebula
14 35.1 + 08 03		15.6		
14 35.2 + 02 30	5690	13.1		m_H = 12.9 S
14 35.3 + 04 01		15.5		
14 35.3 + 05 13		15.3		
14 35.3 + 06 58		15.5		
14 35.8 + 03 37	5692	13.3		
14 36.3 + 07 50		15.7		
14 36.5 + 03 09		15.4		very diffuse
14 36.7 + 02 56		14.9		
14 36.7 + 05 35	5701	12.9		m_H = 12.8 SBa
14 36.8 + 03 35		15.3		
14 37.1 + 03 22		14.9		
14 37.1 + 04 08		15.6		
14 37.9 + 03 49		15.7		compact
14 37.9 + 06 31		14.9		
14 38.0 + 03 38	1039*	15.6		
14 38.1 + 03 35	1041*	15.1		
14 38.1 + 03 40	1042*	14.9		
14 38.2 + 03 28		15.7		
14 38.2 + 03 40	5718	14.6		
14 38.3 + 03 19		15.6		
14 38.4 + 03 21		15.2		
14 38.4 + 03 37		15.5		
14 38.4 + 03 44		15.4		
14 38.6 + 06 16		15.5		compact
14 39.0 + 03 49		15.6		
14 39.2 + 06 10		14.9		
14 39.5 + 03 36		15.5		
14 39.6 + 03 32		15.5		
14 39.9 + 03 26		15.2		
14 40.0 + 04 38		15.2		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5566	-	-	11.50	Sa	11.4	SBa	-	-
5574	-	-	13.35	SB0	13.4	SB0	-	-
5576	-	-	12.01	E4	12.0	E4	-	-
5638	-	-	12.45	E1	12.4	E1	-	-
5668	-	-	12.24	Sc	12.2	Sc	-	-





FIELD No. 48

14^h52^m + 5°30'

Survey Plate No. 1421

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19902	14 44 45.5	+ 2 54 45	8.1
19934	14 46 24.2	+ 6 09 45	6.72
19951	14 47 14.8	+ 8 11 35	6.95
20174	14 56 53.2	+ 4 45 58	6.16
20184	14 57 51.4	+ 7 50 46	7.08
20199	14 58 30.4	+ 3 05 45	6.81

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1436.0 + 0926	open	920	16.5	Near	1
1438.4 + 0405	medium compact	428	11.3	Near	12
1440.3 + 0128	open	345	13.3	Near	23
1443.7 + 0413	compact	94	1.4	ED	21
1445.6 + 0351	medium compact	118	2.1	D	20
1446.5 + 0308	medium compact	106	1.9	VD	22
1446.5 + 0516	open	115	2.2	D	19
1448.3 + 0530	medium compact	130	1.4	VD	11
1449.8 + 0822	open	118	2.1	VD	4
1451.3 + 0506	medium compact	177	2.3	D	18
1451.4 + 0555	medium compact	295	3.8	D	10
1452.6 + 0430	open	138	1.8	D	17
1454.0 + 0514	medium compact	82	1.6	VD	16
1454.3 + 0915	medium compact	289	7.0	Near	2
1454.5 + 0601	medium compact	54	0.8	ED	8
1454.5 + 0656	compact	80	1.2	ED	9
1455.8 + 0314	medium compact	82	1.6	VD	15
1456.9 + 0332	compact	55	0.7	ED	14
1457.0 + 0752	open	96	1.6	VD	5
1502.4 + 0516	medium compact	66	1.4	VD	6
1502.5 + 0240	medium compact	94	1.6	D	13
1503.8 + 0853	open	1093	11.5	Near	3
1510.0 + 0315	open	2295	31.4	Near	7

Average number of galaxies per cluster = 316.1

GALAXIES

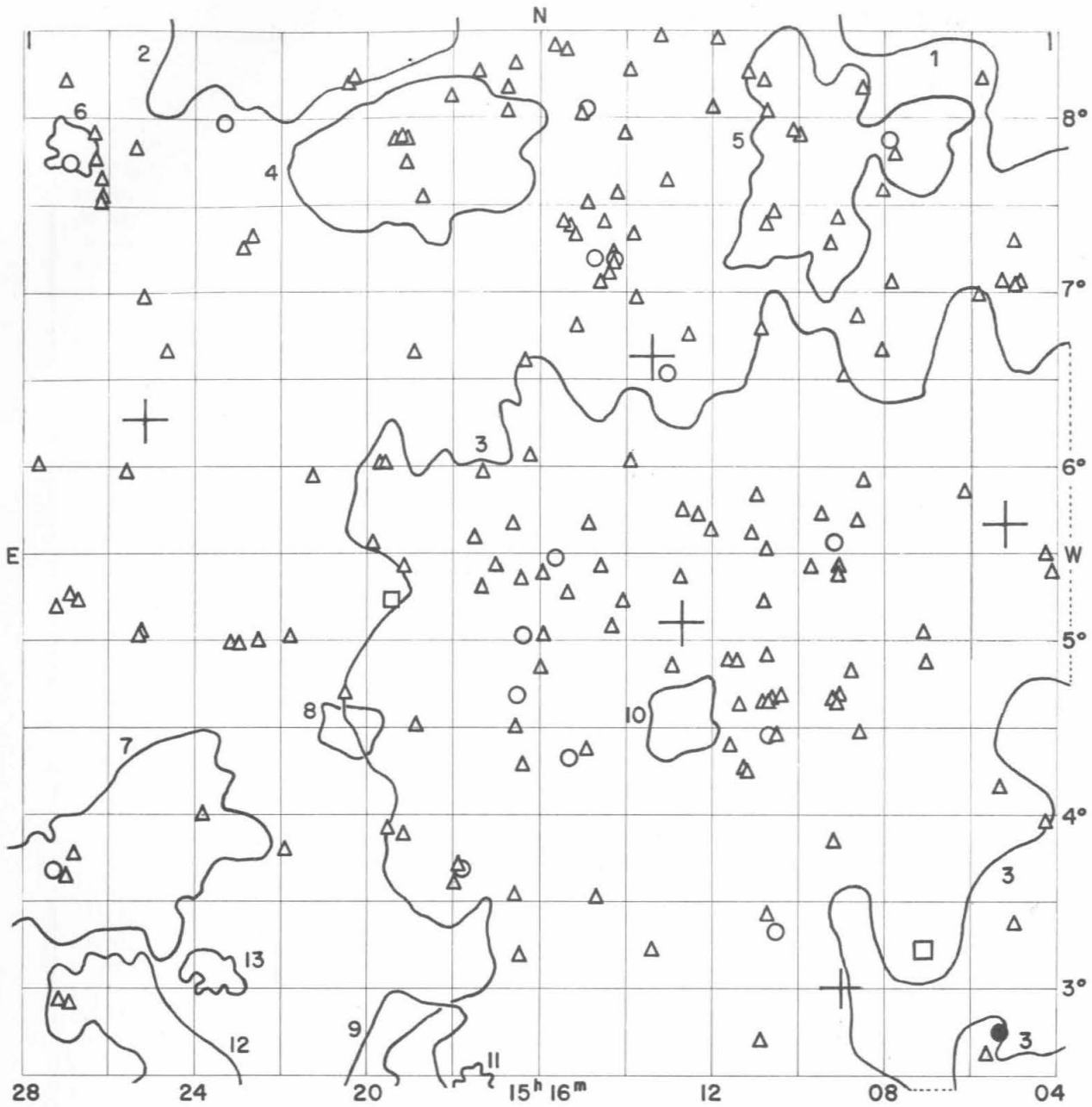
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 40.1 + 04 11		15.4		
14 40.1 + 05 34		15.5		diffuse spiral
14 40.3 + 06 53		15.7		
14 40.4 + 05 06	1048*	14.0		
14 40.4 + 05 21		15.3		
14 40.4 + 06 57		15.6		
14 40.6 + 04 59		15.4		
14 40.9 + 04 35		15.2		compact
14 41.6 + 06 14		15.7		double system
14 41.7 + 04 26		15.3		
14 41.7 + 08 10		15.0		
14 41.9 + 04 57		15.6		
14 42.5 + 04 43		15.5		
14 42.7 + 03 36		15.6		
14 43.9 + 06 45		15.4		
14 44.6 + 03 49		15.4		
14 44.9 + 07 23		15.5		
14 46.1 + 07 02		15.3		
14 46.3 + 08 19		15.2		
14 46.5 + 02 38		15.7		diffuse
14 47.5 + 05 56		15.4		double system
14 47.8 + 06 43		15.2		
14 48.4 + 05 09		15.3		
14 48.4 + 05 19	5765	14.6		double nebula
14 48.4 + 08 19		15.3		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 48.5	+ 06 49		15.5		
14 48.6	+ 05 02		15.4		
14 48.9	+ 07 00		15.1		multiple system, collision
14 49.0	+ 06 16		15.2		double system
14 49.0	+ 06 19		15.5		
14 49.1	+ 02 55		15.3		
14 49.3	+ 02 44		15.6		
14 49.4	+ 03 34		15.3		
14 49.4	+ 05 32		15.4		
14 49.7	+ 04 43		15.7		compact
14 49.7	+ 04 53	1063*	14.8		
14 49.7	+ 07 57		15.6		
14 49.8	+ 03 55		15.7		
14 50.0	+ 03 20		15.4		
14 50.0	+ 03 37		15.7		
14 50.0	+ 04 45		15.4		
14 50.1	+ 06 08		15.6		
14 50.1	+ 06 28		15.1		
14 50.2	+ 03 25		15.2		compact
14 50.2	+ 07 07		15.3		
14 50.2	+ 08 01		15.5		
14 50.2	+ 08 08	5769	14.9		
14 50.4	+ 08 09		15.3		
14 50.5	+ 03 30	1066*	14.2		
14 50.6	+ 03 32	1067*	13.6		
14 50.8	+ 03 10		15.5		
14 50.8	+ 04 09	5770	13.3		
14 50.8	+ 08 02		15.4		
14 50.9	+ 03 28		15.7		
14 50.9	+ 08 25		15.1		
14 51.0	+ 03 16	1068*	14.9		
14 51.1	+ 03 47	5774	13.9		
14 51.4	+ 03 13		15.4		
14 51.4	+ 03 41	1070*	15.4		
14 51.5	+ 03 45	5775	13.0		m_H = 12.4 S
14 51.6	+ 03 24		15.6		
14 51.7	+ 04 57	1071*	14.4		
14 51.7	+ 05 00	1073*	15.3		
14 51.7	+ 05 03	1072*	15.1		
14 51.8	+ 04 29		14.8		
14 51.8	+ 04 43		15.3		
14 52.0	+ 03 10	5776	14.7		
14 52.0	+ 03 29		15.3		
14 52.6	+ 02 55		15.4		diffuse
14 52.9	+ 05 30		15.2		
14 53.3	+ 06 38		15.6		
14 53.5	+ 02 39		15.1		
14 54.2	+ 06 40		15.2		triple system, tidal effect
14 54.3	+ 05 47		15.2		double system
14 54.5	+ 02 55		15.7		
14 55.1	+ 08 29	5790	15.1		
14 55.3	+ 06 50		14.7		
14 55.4	+ 03 58		15.6		
14 55.6	+ 02 38		15.5		
14 55.6	+ 03 37		15.3		
14 55.7	+ 03 30		15.5		
14 55.7	+ 04 18		15.6		
14 56.0	+ 03 43		15.2		
14 56.0	+ 08 25		15.0		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
14 56.2 + 06 59		15.4		
14 56.2 + 08 11		15.1		double nebula
14 56.4 + 07 12	1082*	15.2		
14 57.8 + 02 30		15.4		
14 58.0 + 06 39		15.3		
14 59.4 + 05 08		15.3		
14 59.8 + 06 33		15.5		
14 59.9 + 05 51		14.6		
15 00.0 + 05 45		15.5		
15 00.5 + 07 25		15.7		
15 01.0 + 04 53		15.0		
15 01.0 + 07 32		15.3		
15 01.8 + 03 30		15.7		
15 01.8 + 07 40		15.6		compact
15 02.0 + 02 32		15.3		
15 02.2 + 06 33		15.7		diffuse
15 02.3 + 05 10		15.6		
15 02.3 + 06 32		15.6		
15 02.3 + 08 22		15.1		
15 02.5 + 06 07		15.7		
15 02.6 + 05 59		14.9		
15 02.6 + 06 04		15.3		
15 02.6 + 08 02		15.3		
15 02.8 + 05 15		15.7		
15 02.9 + 04 41		15.3		
15 03.0 + 03 17		15.3		
15 03.0 + 06 24		15.5		
15 03.2 + 05 18		15.3		double nebula, contact
15 03.2 + 05 58		15.5		
15 03.3 + 06 01		15.3		
15 03.5 + 03 54		15.2		
15 03.6 + 03 54		15.3		
15 03.7 + 03 52		15.5		
15 03.8 + 03 20		15.6		
15 03.8 + 06 01		15.4		
15 03.9 + 06 35	5847	15.1		double system

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall Sandage 1956		Holmberg 1958	
5774	-	-	-	-	-	-	12.71	Sc-
5775	-	-	-	-	-	-	12.15	Sb+



FIELD No. 49

$15^h16^m + 5°30'$

Survey Plate No. 1429

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
20346	15 05 11.3	+ 5 41 22	6.22
20423	15 08 58.9	+ 3 00 59	7.9
20501	15 12 42.1	+ 5 07 25	5.44
20521	15 13 25.6	+ 6 38 57	6.64
20777	15 25 14.0	+ 6 16 28	7.9

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1503.8 + 0853	open	1093	11.5	Near	1
1509.4 + 0745	medium compact	415	6.0	MD	5
1510.0 + 0315	open	2295	31.4	Near	3
1512.7 + 0434	medium compact	115	2.3	MD	10
1517.5 + 0220	medium compact	114	1.6	VD	11
1518.2 + 0205	open	295	5.9	MD	9
1518.8 + 0747	medium compact	320	5.8	MD	4
1520.5 + 0429	open	74	1.8	VD	8
1521.2 + 0851	compact	640	9.0	Near	2
1523.7 + 0305	medium compact	57	1.5	VD	13
1525.6 + 0347	medium compact	358	6.5	D	7
1527.0 + 0750	open	66	1.3	VD	6
1528.4 + 0049	medium compact	1774	17.3	MD	12

Average number of galaxies per cluster = 585.8

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
15 04.0 + 05 25		15.2		
15 04.2 + 03 58	1087*/1088*	15.1		double system
15 04.2 + 05 31		15.5		compact
15 04.7 + 07 05		15.7		
15 04.8 + 07 04		15.5		
15 04.9 + 03 23		15.6		
15 04.9 + 07 19	1089*	15.4		
15 05.2 + 07 05		15.6		
15 05.3 + 02 45	5854	13.1	+ 1626	m_H = 12.7 S
15 05.3 + 04 10	5855	15.5		compact
15 05.6 + 02 37		15.3		
15 05.7 + 07 01		15.4		double system
15 05.7 + 08 15		15.4		
15 06.0 + 05 52		15.4		
15 07.0 + 03 15	5864	12.9		m_H = 12.8 S
15 07.0 + 04 53		15.6		double system
15 07.0 + 05 04		15.5		
15 07.7 + 07 49		15.4		
15 07.8 + 07 05		15.6		
15 07.8 + 07 54		15.0		
15 08.0 + 06 41		15.7		extremely diffuse
15 08.0 + 07 37		15.6		
15 08.4 + 05 56	1101*	15.4		
15 08.4 + 08 11		15.6		
15 08.6 + 04 29	1102*	15.3		
15 08.6 + 05 43		15.7		
15 08.6 + 06 53		15.4		
15 08.8 + 04 50		15.7		
15 08.9 + 06 32		15.5		double system
15 09.0 + 04 42		15.5		
15 09.0 + 05 24		15.3		
15 09.0 + 05 26		15.3		
15 09.0 + 07 26		15.1		
15 09.1 + 04 39		15.7		compact
15 09.1 + 05 35		15.0		

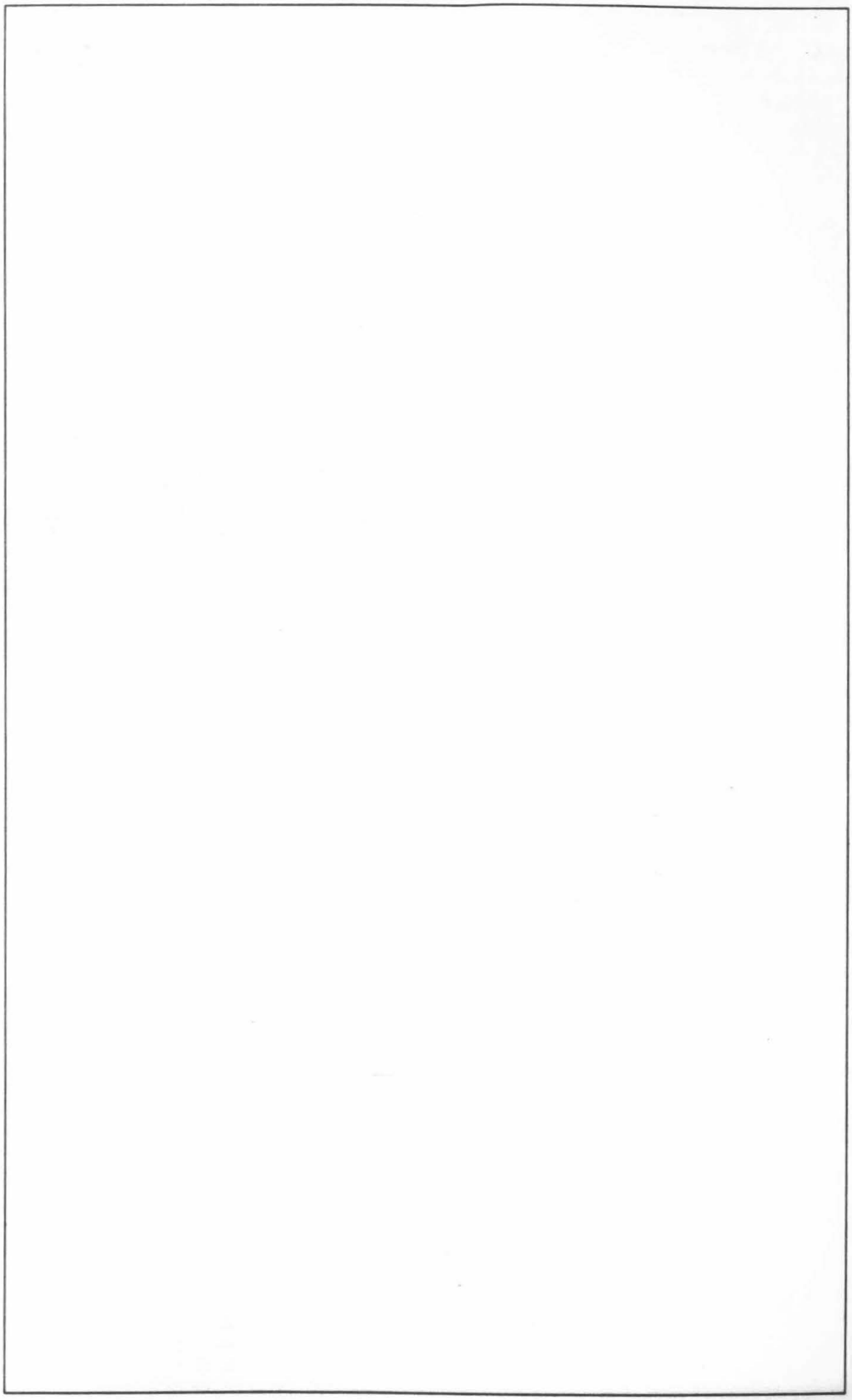
Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
15	09.2	+ 03 51		15.7		
15	09.2	+ 04 40		15.6		
15	09.2	+ 07 18		15.5		
15	09.5	+ 05 45		15.2		
15	09.7	+ 05 26		15.4		
15	09.9	+ 07 55		15.7		
15	10.1	+ 07 57		15.5		
15	10.4	+ 04 42		15.3		
15	10.5	+ 03 20		14.8		
15	10.6	+ 04 41		15.5		
15	10.6	+ 07 29		15.2		
15	10.7	+ 03 26		15.6		
15	10.7	+ 04 28		15.4		
15	10.7	+ 04 40		15.4		
15	10.7	+ 05 32		15.3		
15	10.7	+ 08 03		15.3		
15	10.8	+ 02 42		15.4		
15	10.8	+ 04 28	1105*	14.8		
15	10.8	+ 04 40		15.5		
15	10.8	+ 04 56		15.7		
15	10.8	+ 05 13		15.7		
15	10.8	+ 07 25		15.5		
15	10.8	+ 08 14		15.4		
15	10.9	+ 06 48		15.3		
15	11.0	+ 05 50		15.6		double nebula
15	11.1	+ 04 15		15.7		
15	11.1	+ 05 38		15.5		
15	11.2	+ 04 16		15.6		double nebula, tidal effect
15	11.2	+ 08 17		15.4		
15	11.4	+ 04 38		15.6		
15	11.5	+ 04 54	1106*	15.2		
15	11.6	+ 04 24		15.6		
15	11.7	+ 04 54	1107*	15.5		double nebula
15	11.9	+ 08 30		15.7		compact
15	12.0	+ 05 38		15.6		
15	12.0	+ 08 05		15.6		compact
15	12.3	+ 05 43		15.7		diffuse
15	12.5	+ 06 46		15.6		compact
15	12.8	+ 05 23		15.4		
15	12.8	+ 05 46		15.3		compact
15	12.9	+ 04 52		15.3		
15	13.0	+ 06 34		14.9		
15	13.0	+ 07 40		15.6		
15	13.2	+ 08 29		15.4		
15	13.4	+ 03 13		15.7		
15	13.8	+ 06 59		15.5		
15	13.8	+ 07 20		15.3		
15	13.9	+ 06 03		15.5		
15	13.9	+ 08 18		15.5		
15	14.0	+ 05 14		15.6		
15	14.0	+ 07 56		15.3		
15	14.2	+ 07 35		15.4		
15	14.3	+ 05 05		15.6		triple system
15	14.3	+ 07 11		15.5		
15	14.3	+ 07 12		14.8		
15	14.3	+ 07 14		15.6		
15	14.5	+ 07 07		15.3		
15	14.5	+ 07 26		15.6		double system
15	14.6	+ 05 26	1109*	15.5		

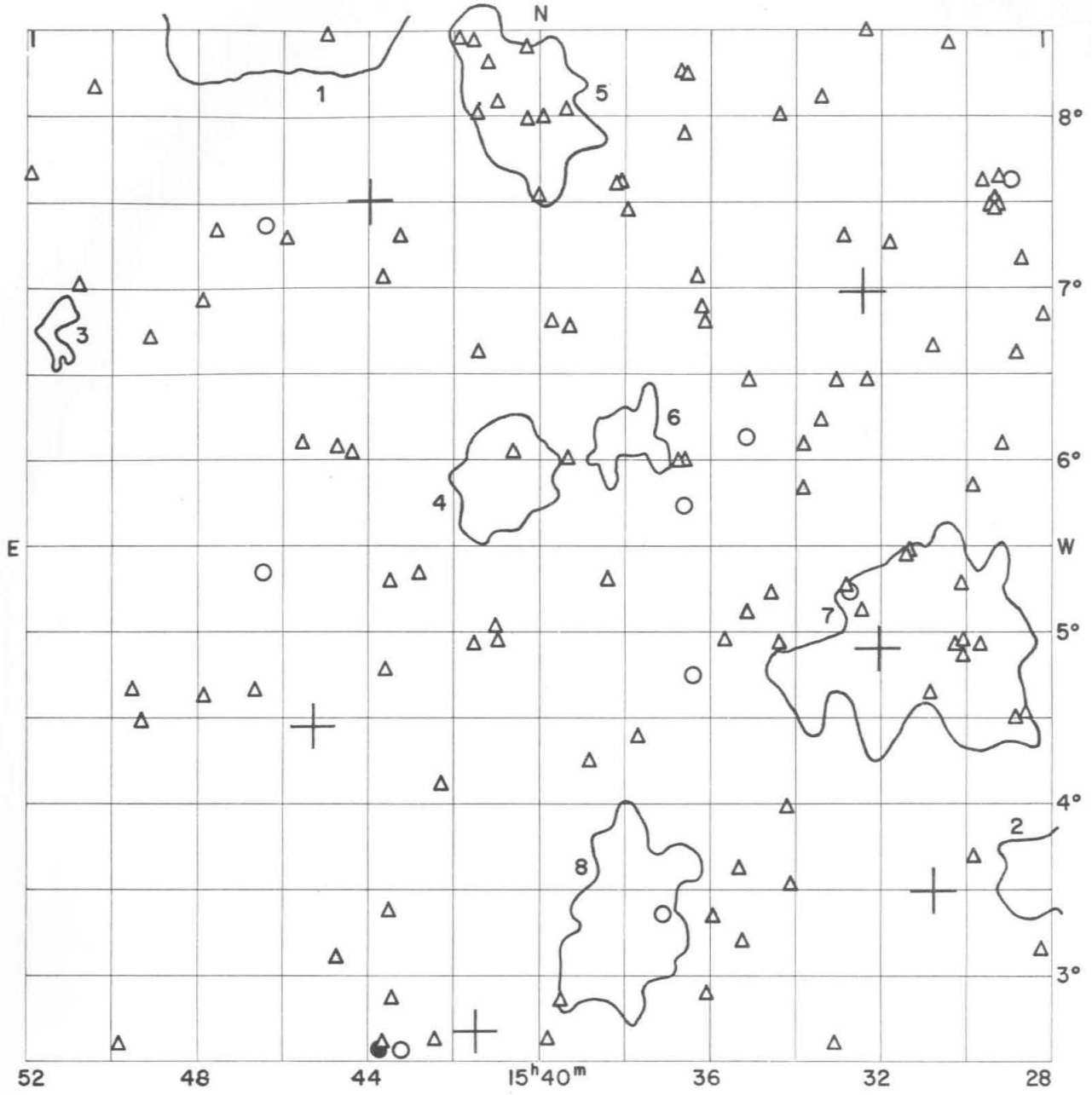
Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
15	14.7	+ 03 31		15.7		compact
15	14.7	+ 07 04		15.3		
15	14.8	+ 07 12		14.9		
15	14.9	+ 04 23		15.7		
15	14.9	+ 05 41		15.4		
15	14.9	+ 07 32		15.5		
15	14.9	+ 08 05		15.0		
15	15.0	+ 08 03		15.3		
15	15.2	+ 06 50		15.7		double system
15	15.2	+ 07 21		15.5		
15	15.3	+ 04 20		14.9		double nebula
15	15.4	+ 05 17		15.6		
15	15.4	+ 07 24	1112*	15.3		
15	15.4	+ 08 25		15.5		
15	15.5	+ 07 25		15.5		
15	15.7	+ 05 30		14.7		
15	15.7	+ 08 26		15.3		
15	15.9	+ 05 03		15.4		
15	16.0	+ 04 51		15.7		
15	16.0	+ 05 24		15.4		
15	16.2	+ 06 05		15.2		
15	16.4	+ 04 17		15.4		
15	16.4	+ 05 03		14.9		
15	16.4	+ 06 37		15.4		double system
15	16.5	+ 03 10		15.4		
15	16.5	+ 04 42		15.0		
15	16.5	+ 05 23		15.3		
15	16.6	+ 03 32		15.7		
15	16.6	+ 04 30		15.6		
15	16.7	+ 05 41		15.5		
15	16.7	+ 08 19		15.5		
15	16.8	+ 08 03		15.6		
15	16.8	+ 08 11		15.7		
15	17.0	+ 05 26		15.5		
15	17.4	+ 05 18		15.6		
15	17.4	+ 05 59		15.6		
15	17.4	+ 08 17		15.4		
15	17.5	+ 05 36		15.3		
15	17.8	+ 03 42	5911	14.7		
15	17.9	+ 03 43		15.7		
15	18.0	+ 03 37		15.4		
15	18.1	+ 08 08		15.5		
15	18.8	+ 07 33		15.6		double system
15	18.9	+ 04 31		15.6		
15	19.0	+ 06 40		15.4		
15	19.1	+ 05 25		15.5		
15	19.1	+ 07 46		15.5		
15	19.1	+ 07 54	5919	15.5		triple system
15	19.2	+ 03 54		15.4		
15	19.2	+ 07 54		15.7		very compact
15	19.4	+ 07 53	5920	15.5		
15	19.5	+ 05 15	5921	12.7	+ 1389	m_H = 12.5 SB
15	19.6	+ 03 56		15.3		
15	19.6	+ 06 02		15.2		
15	19.7	+ 06 01		15.5		
15	19.9	+ 05 34		15.2		
15	20.4	+ 08 16		15.4		
15	20.5	+ 04 42		15.5		
15	20.5	+ 08 14		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 21.3 + 05 57		15.3		
15 21.8 + 05 01		15.4		compact
15 21.9 + 03 48		15.7		
15 22.6 + 05 00		15.6		compact
15 22.8 + 07 20		15.3		
15 23.0 + 04 59		15.5		
15 23.0 + 07 16		15.5		
15 23.2 + 04 59		15.7		
15 23.5 + 08 00		14.8		
15 23.9 + 04 00		15.5		
15 24.8 + 06 40		15.5		
15 25.3 + 05 03		15.7		compact
15 25.3 + 06 59	1121*	15.6		compact
15 25.4 + 05 01		15.7		compact
15 25.5 + 07 50		15.3		
15 25.7 + 05 58		15.6		
15 26.3 + 07 32		15.3		
15 26.3 + 07 34		15.2		double system
15 26.3 + 07 39		15.6		
15 26.5 + 07 46		15.4		
15 26.5 + 07 55		15.5		
15 26.8 + 05 15		15.2		
15 26.9 + 03 46		15.6		
15 27.0 + 02 55		15.7		double nebula
15 27.0 + 03 38		15.1		
15 27.0 + 05 16		15.3		
15 27.1 + 07 45	1122*	15.0		
15 27.2 + 02 56		15.7		
15 27.2 + 08 13		15.4		
15 27.3 + 03 41		14.9		
15 27.4 + 05 11		15.3		
15 27.7 + 06 01		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5854	-	-	12.69	SBa	12.6	SBa	-	-
5921	-	-	11.59	SBb	11.6	SBb	-	-





FIELD No. 50

15^h40^m + 5°30'

Survey Plate No. 1082

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
20904	15 30 47.5	+ 3 29 25	7.4
20930	15 32 02.5	+ 4 53 51	7.02
20940	15 32 23.3	+ 6 58 18	8.1
21155	15 41 30.7	+ 2 40 27	5.80
21201	15 44 00.8	+ 7 30 30	4.42
21231	15 45 18.9	+ 4 27 05	7.20

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1525.6 + 0347	medium compact	358	6.5	D	2
1530.9 + 0454	medium compact	211	6.5	Near	7
1538.0 + 0317	medium compact	118	4.5	MD	8
1538.0 + 0610	compact	134	2.3	VD	6
1540.3 + 0803	open	95	4.5	MD	5
1540.8 + 0554	compact	163	3.6	D	4
1546.0 + 0853	open	387	8.5	Near	1
1551.6 + 0645	medium compact	84	1.2	ED	3

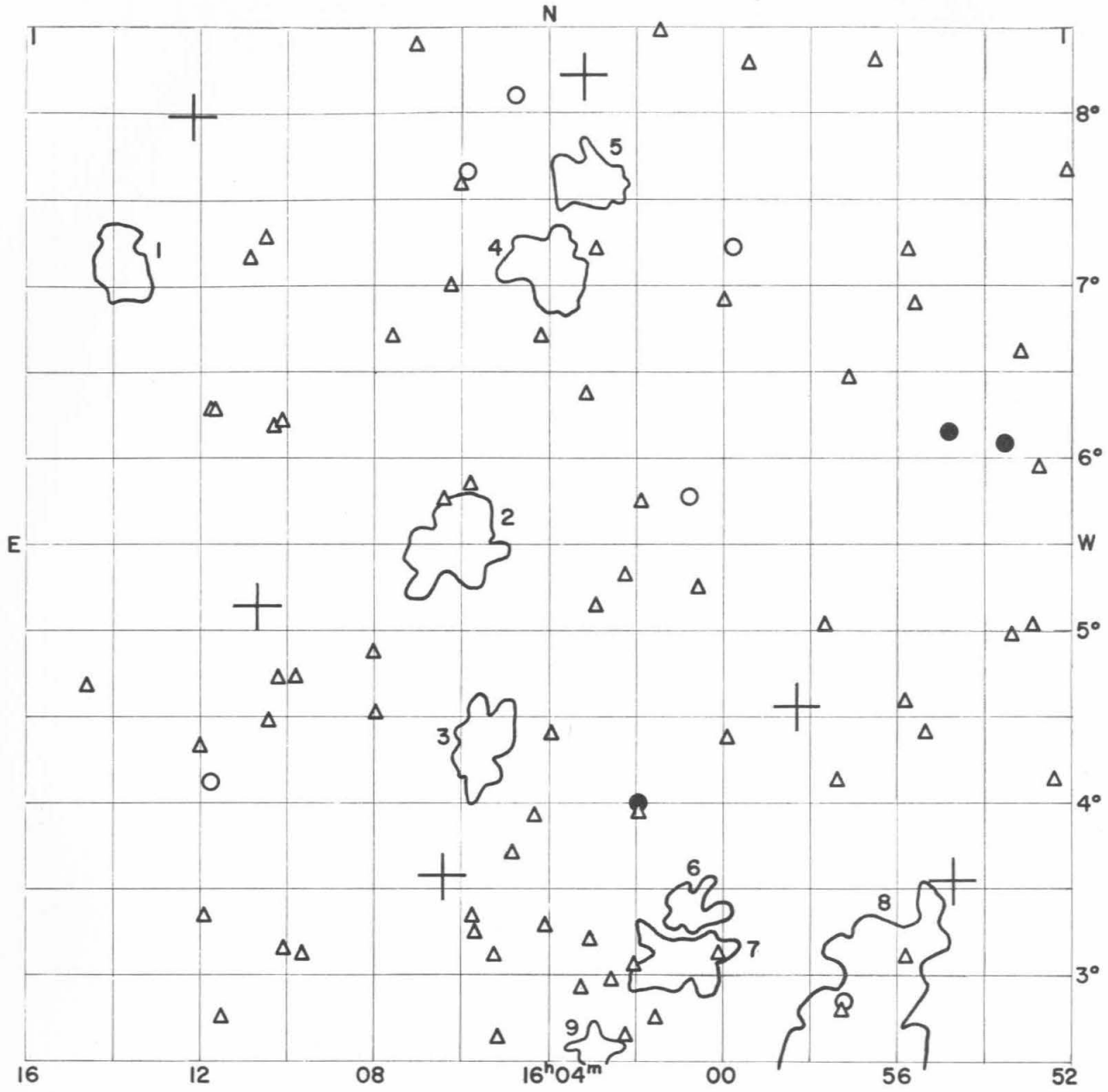
Average number of galaxies per cluster = 193.8

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 28.1	+ 06 50		15.6		
15 28.2	+ 03 08		15.6		
15 28.5	+ 04 31		15.5		double nebula
15 28.6	+ 07 10		15.5		double system
15 28.7	+ 06 36		15.5		
15 28.8	+ 04 30		15.4		
15 28.8	+ 07 38	5940	14.3		
15 29.0	+ 06 05		15.5		
15 29.1	+ 07 30	5941	15.2		
15 29.2	+ 07 28	5942	15.4		compact
15 29.2	+ 07 31		15.1		double system
15 29.2	+ 07 39		15.7		
15 29.3	+ 07 29	5944	15.2		
15 29.6	+ 04 55		15.4		double system
15 29.6	+ 07 38		15.4		diffuse
15 29.8	+ 03 40		15.5		double system
15 29.8	+ 05 51		15.4		
15 30.0	+ 04 51		15.3		
15 30.0	+ 04 57		15.4		double system
15 30.0	+ 05 16		15.4		
15 30.2	+ 04 55		15.1		
15 30.3	+ 08 26		15.4		compact
15 30.7	+ 06 40		15.6		
15 30.8	+ 04 38		15.6		compact
15 31.3	+ 05 28		15.4		
15 31.4	+ 05 27		15.3		double system
15 31.7	+ 07 16		15.4		
15 32.2	+ 06 28		15.3		
15 32.3	+ 08 30		15.6		
15 32.4	+ 05 07	5952	15.5		compact
15 32.7	+ 05 14	5955	15.0		
15 32.8	+ 05 16		15.3		
15 32.8	+ 07 18		15.4		
15 33.0	+ 06 28		15.5		double nebula
15 33.1	+ 02 35		15.6		
15 33.3	+ 08 07		15.4		very compact
15 33.4	+ 06 14		15.3		
15 33.8	+ 05 50	5960	15.1		
15 33.8	+ 06 05		15.3		
15 34.1	+ 03 31		15.4		diffuse

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 34.2	+ 03 58		15.5		
15 34.3	+ 08 00		15.6		
15 34.4	+ 04 55		15.5		compact
15 34.5	+ 05 13		15.6		
15 35.0	+ 06 27		15.7		
15 35.1	+ 05 06		15.6		very compact
15 35.1	+ 06 09	5964	14.2		
15 35.2	+ 03 11		15.4		
15 35.3	+ 03 36		15.7		diffuse
15 35.7	+ 04 57		15.2		
15 35.9	+ 03 19		15.6		
15 36.1	+ 02 53		15.3		
15 36.1	+ 06 49		15.7		
15 36.2	+ 06 54		15.7		
15 36.3	+ 07 04		15.3		
15 36.4	+ 04 45		14.4		
15 36.5	+ 08 15		15.7		compact
15 36.6	+ 05 44		14.9		compact
15 36.6	+ 06 00		15.2		
15 36.6	+ 07 54		15.3		
15 36.7	+ 08 15		15.7		
15 36.8	+ 05 59		15.5		
15 37.1	+ 03 22		15.0		
15 37.7	+ 04 22		15.6		
15 37.9	+ 07 27		15.2		
15 38.0	+ 07 38		15.6		
15 38.2	+ 07 36		15.4		
15 38.4	+ 05 18		15.5		compact
15 38.8	+ 04 14		15.5		
15 39.3	+ 06 46		15.6		
15 39.4	+ 06 00		15.5		
15 39.4	+ 08 02		15.4		
15 39.6	+ 02 50		15.5		double system
15 39.7	+ 06 49		15.2		
15 39.8	+ 02 37		15.2		
15 39.9	+ 07 59		15.7		
15 40.0	+ 07 32		15.6		
15 40.3	+ 07 58		15.5		
15 40.3	+ 08 24	5983	15.1		
15 40.6	+ 06 02		15.4		
15 41.0	+ 04 57		15.3		
15 41.0	+ 08 04		15.5		
15 41.1	+ 05 01		15.1		compact
15 41.2	+ 08 19		15.7		double system
15 41.5	+ 06 37		15.5		
15 41.5	+ 08 00		15.5		
15 41.6	+ 04 56		15.4		
15 41.6	+ 08 26		15.6		compact
15 41.9	+ 08 27		15.6		
15 42.3	+ 04 06		15.7		
15 42.5	+ 02 37		15.2		
15 42.8	+ 05 19		15.5		
15 43.2	+ 02 34		15.0		
15 43.3	+ 07 17		15.3		
15 43.5	+ 02 51		15.4		
15 43.5	+ 05 18		15.3		
15 43.6	+ 03 22		15.3		
15 43.7	+ 02 36		15.7		
15 43.7	+ 04 46		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 43.7	+ 07 03		15.2		
15 43.8	+ 02 34	5990	13.1		
15 44.4	+ 06 03		15.1		
15 44.8	+ 03 05		15.6		
15 44.8	+ 06 04		15.2		
15 45.0	+ 08 29	5997	15.5		compact
15 45.6	+ 06 05		15.4		
15 46.0	+ 07 17		15.3		
15 46.5	+ 05 20		15.0		
15 46.5	+ 07 22		14.8		
15 46.7	+ 04 40		15.6		
15 47.7	+ 07 20		15.5		
15 47.9	+ 04 37		15.4		
15 48.0	+ 06 56		15.1		
15 49.2	+ 06 42		15.6		
15 49.4	+ 04 29		15.7		
15 49.6	+ 04 40		15.5		diffuse
15 49.9	+ 02 36		15.3		
15 50.6	+ 08 10		15.7		
15 50.9	+ 07 01		15.6		
15 52.0	+ 07 40		15.6		



FIELD No. 51

16^h04^m + 5°30'

Survey Plate No. 1067

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
21419	15 54 44.7	+ 3 32 54	7.01
21508	15 58 22.0	+ 4 33 57	5.90
21622	16 03 12.5	+ 8 13 50	6.14
21717	16 06 28.9	+ 3 35 07	6.10
21815	16 10 46.9	+ 5 08 51	5.64
21854	16 12 16.9	+ 7 58 59	6.84

CLUSTERS OF GALAXIES

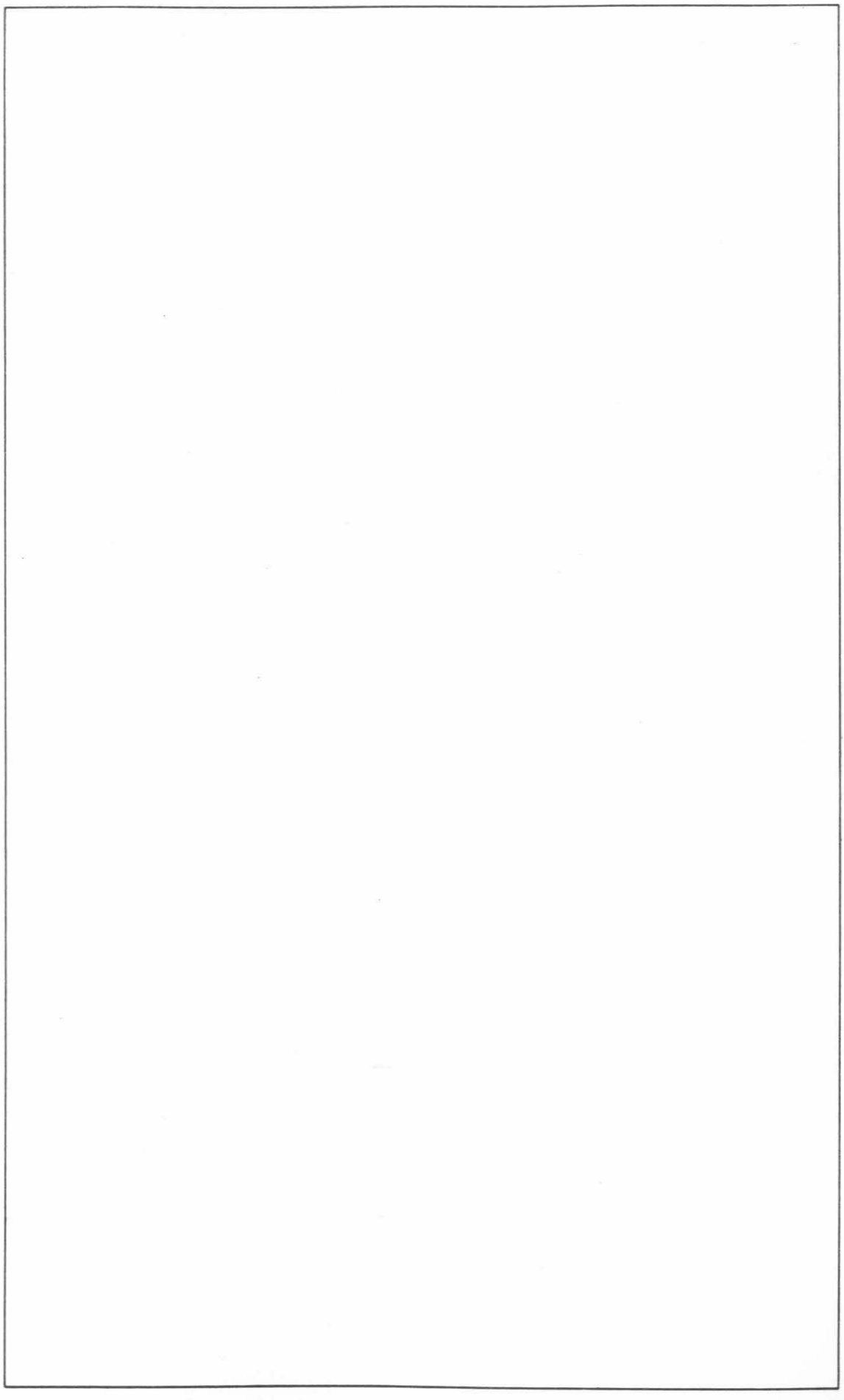
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1556.5 + 0245	open	140	5.5	Near	8
1600.7 + 0322	compact	108	1.6	VD	6
1601.0 + 0305	compact	106	2.6	MD	7
1602.9 + 0235	medium compact	61	1.2	VD	9
1603.1 + 0738	open	80	2.0	VD	5
1604.0 + 0707	compact	182	2.2	VD	4
1605.5 + 0421	medium compact	91	2.3	D	3
1606.2 + 0530	open	128	2.6	D	2
1614.0 + 0708	compact	147	2.0	VD	1

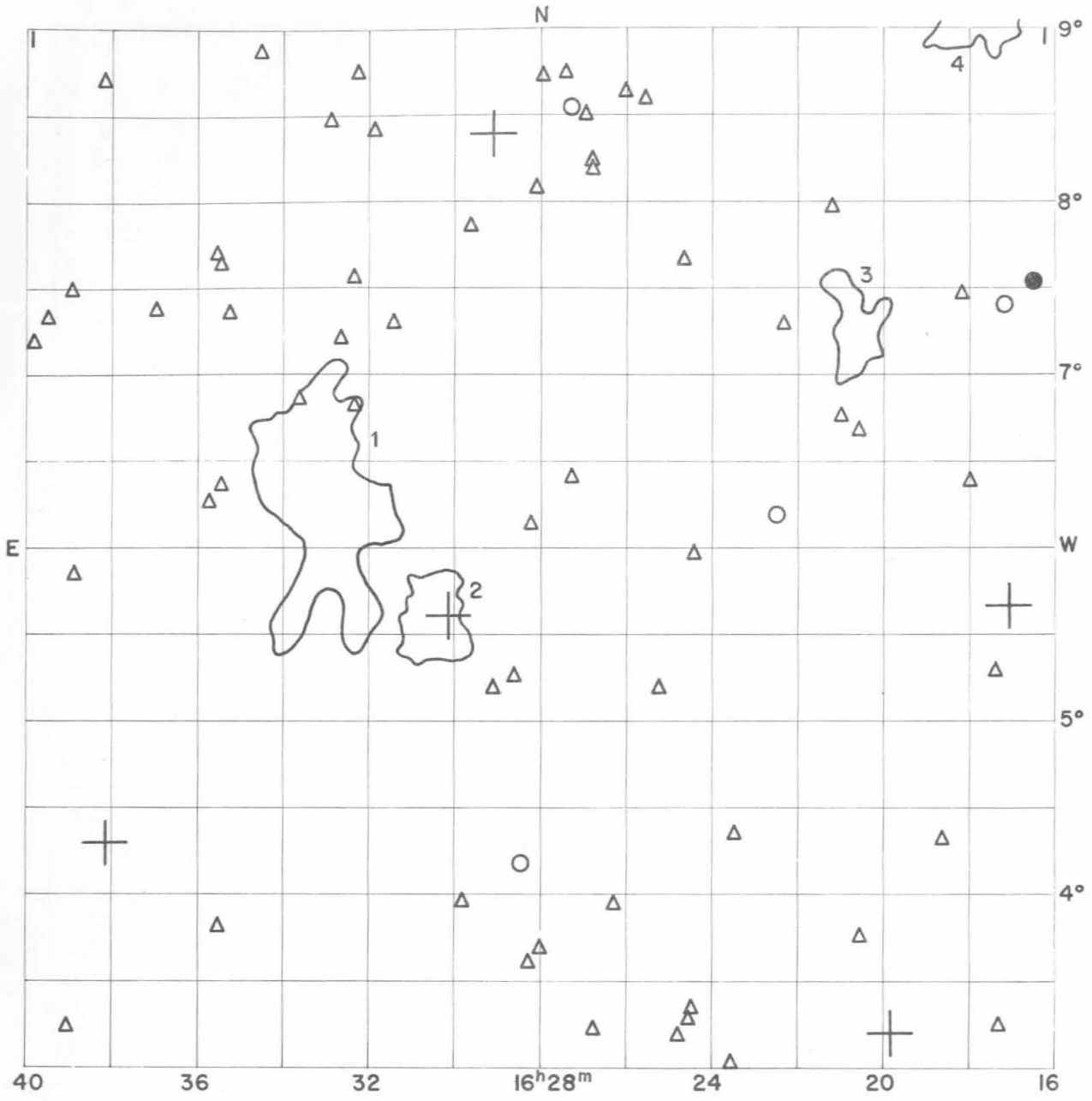
Average number of galaxies per cluster = 115.9

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 52.0	+ 07 40		15.6		
15 52.4	+ 04 08		15.7		
15 52.6	+ 05 56		15.6		
15 52.8	+ 05 02		15.7		
15 53.0	+ 06 37		15.6		diffuse
15 53.3	+ 04 59		15.5		double nebula, collision
15 53.4	+ 06 05	6014	13.8		
15 54.8	+ 06 08	6017	13.8		
15 55.3	+ 04 24		15.6		compact
15 55.6	+ 06 55		15.6		
15 55.7	+ 07 13		15.7		
15 55.8	+ 03 05		15.5		
15 55.8	+ 04 35		15.4		
15 56.4	+ 08 19		15.5		double nebula
15 57.1	+ 06 28		15.7		
15 57.2	+ 02 51		14.8		
15 57.3	+ 02 48		15.2		
15 57.4	+ 04 07		15.6		
15 57.6	+ 05 01		15.7		
15 59.4	+ 08 17		15.1		
15 59.7	+ 07 14		15.0		
15 59.9	+ 04 22		15.7		
15 59.9	+ 06 55		15.6		
16 00.1	+ 03 07		15.7		double system
16 00.6	+ 05 15		15.6		extremely diffuse
16 00.8	+ 05 47		14.7		triple system
16 01.5	+ 08 29		15.5		
16 01.6	+ 02 45		15.6		
16 01.9	+ 05 45		15.7		
16 02.0	+ 03 03		15.6		
16 02.0	+ 03 56	6037	15.2		
16 02.0	+ 04 00	6036	13.9		
16 02.2	+ 02 39		15.4		
16 02.2	+ 05 19		15.7		
16 02.6	+ 02 58		15.7		
16 02.9	+ 05 08		15.7		
16 02.9	+ 07 13		15.5		
16 03.1	+ 03 11		15.6		
16 03.2	+ 06 22		15.7		

Position 1950 α h m	Position 1950 δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 03.3	+ 02 55		15.7		
16 04.0	+ 04 25		15.4		
16 04.1	+ 03 16		15.3		double nebula
16 04.2	+ 06 43		15.3		
16 04.3	+ 03 55		15.1		
16 04.8	+ 08 06	6063	14.1		
16 04.9	+ 03 42		15.5		compact
16 05.1	+ 02 38		15.7		
16 05.2	+ 03 06		15.5		
16 05.7	+ 03 15		15.6		
16 05.8	+ 03 20		15.7		
16 05.8	+ 05 51		15.6		
16 05.9	+ 07 40	1197*	14.7		
16 06.0	+ 07 35		15.4		
16 06.2	+ 07 00		15.7		
16 06.4	+ 05 45		15.5		
16 07.1	+ 08 24		15.6		
16 07.6	+ 06 42		15.6		compact
16 08.0	+ 04 31		15.4		
16 08.1	+ 04 53		15.5		compact
16 09.7	+ 03 06		15.6		
16 09.8	+ 04 44		15.1		double system
16 10.1	+ 03 08		15.7		
16 10.2	+ 06 13		15.6		
16 10.3	+ 04 43		15.3		
16 10.4	+ 06 11		15.5		double nebula
16 10.5	+ 04 28		15.2		
16 10.6	+ 07 17		15.6		
16 10.9	+ 07 10		15.5		
16 11.6	+ 02 45		15.6		diffuse
16 11.7	+ 06 16		15.5		
16 11.8	+ 04 07		14.7		double system
16 11.8	+ 06 17		15.4		
16 12.0	+ 03 20		15.2		extremely compact
16 12.0	+ 04 20		15.6		
16 14.7	+ 04 40		15.7		





FIELD No. 52

16^h28^m + 6° 00'

Survey Plate No. 88

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
21956	16 16 58.2	+ 5 39 29	7.6
22016	16 19 49.0	+ 3 12 06	7.32
22217	16 29 05.8	+ 8 23 58	7.15
22244	16 30 07.9	+ 5 37 34	5.56
22430	16 38 09.6	+ 4 18 57	5.73

CLUSTERS OF GALAXIES

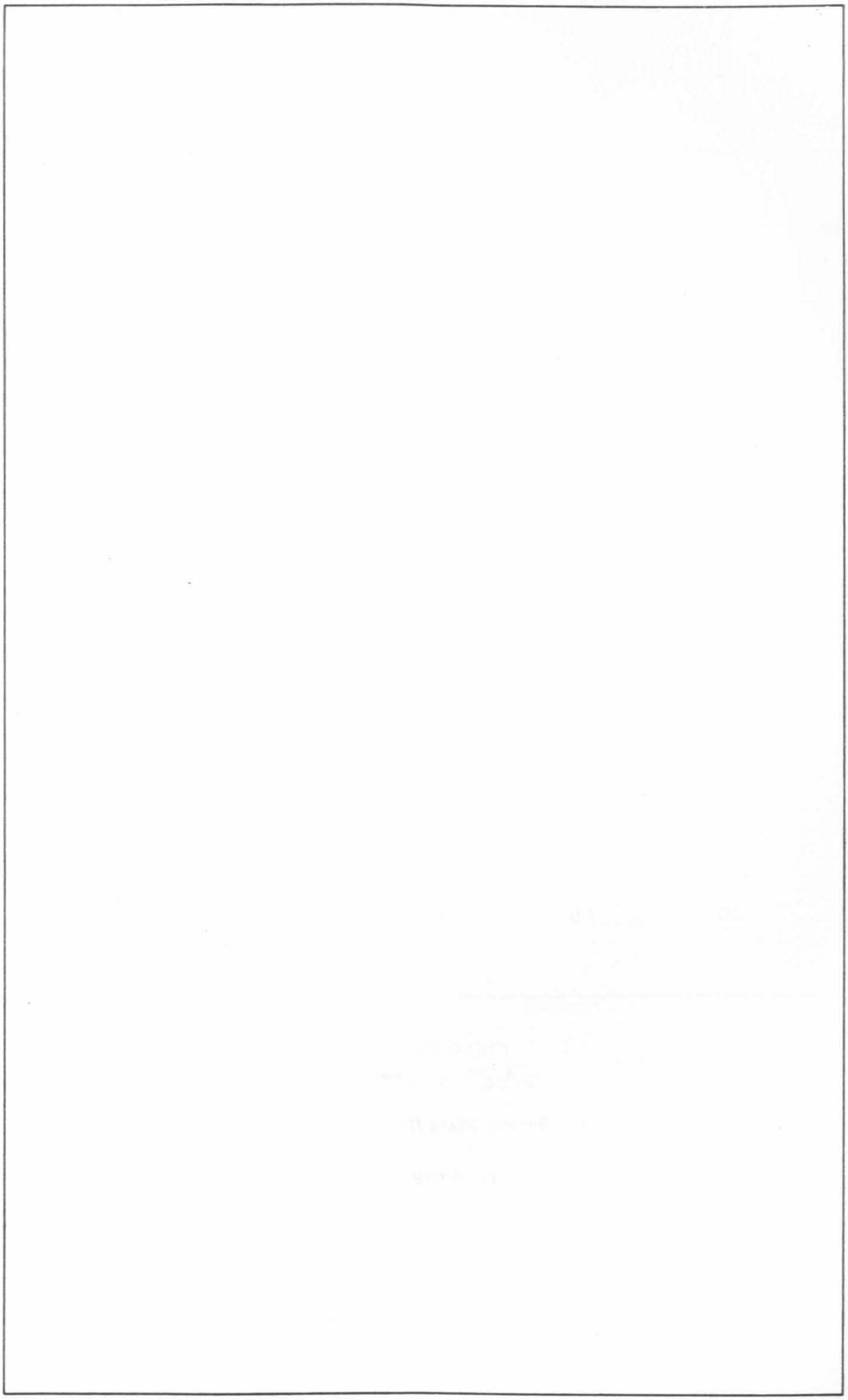
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1617.5 + 0901	medium compact	122	2.0	MD	4
1620.5 + 0716	open	129	2.3	D	3
1630.5 + 0535	compact	234	2.4	VD	2
1633.0 + 0614	open	123	4.7	MD	1

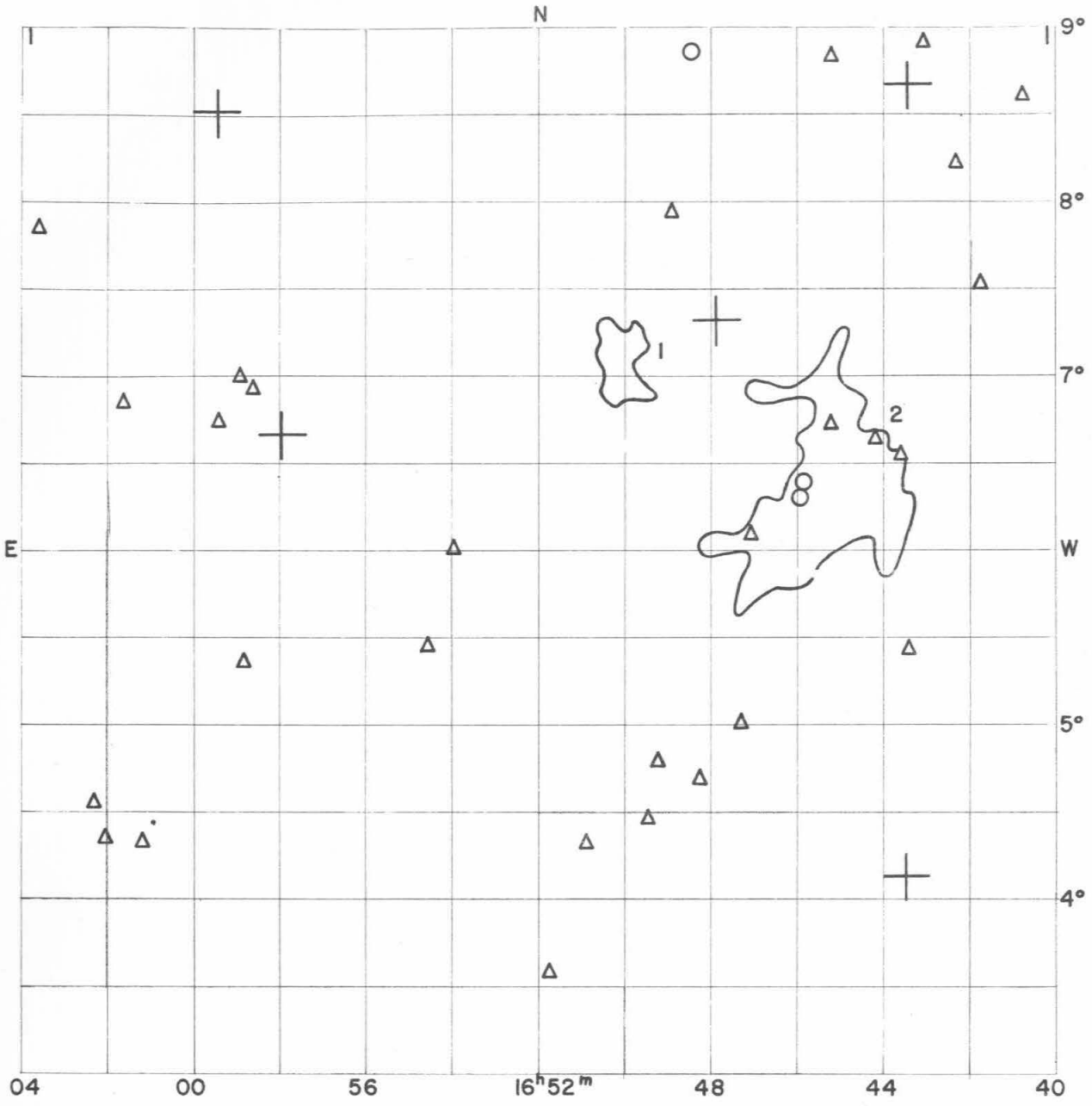
Average number of galaxies per cluster = 152.0

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
16 16.4	+ 07 32	6106	13.4		m_H = 12.9 S
16 17.1	+ 07 24		14.9		
16 17.3	+ 03 14		15.3		
16 17.3	+ 05 17		15.1		very compact
16 17.8	+ 06 24		15.7		
16 18.1	+ 07 28		15.3		
16 18.6	+ 04 19		15.4		
16 20.5	+ 03 45		15.6		
16 20.5	+ 06 41		15.7		
16 20.9	+ 06 46		15.6		compact
16 21.1	+ 07 58		15.4		
16 22.3	+ 07 25		15.3		
16 22.5	+ 06 11		15.0		
16 23.5	+ 04 21		15.7		
16 23.6	+ 03 00		15.4		
16 24.4	+ 03 20		15.5		
16 24.4	+ 05 58		15.5		
16 24.5	+ 03 17		15.6		compact
16 24.6	+ 07 40		15.2		
16 24.8	+ 03 11		15.1		double system
16 25.2	+ 05 12		15.7		diffuse spiral
16 25.5	+ 08 36		15.7		
16 26.0	+ 08 38		15.5		double nebula
16 26.2	+ 03 56		15.7		
16 26.7	+ 08 12		15.5		
16 26.7	+ 08 14		15.3		
16 26.8	+ 03 13		15.7		diffuse
16 26.9	+ 08 30		15.6		
16 27.2	+ 06 25		15.5		compact
16 27.2	+ 08 34		15.0		
16 27.4	+ 08 45		15.4		
16 27.9	+ 08 44		15.2		
16 28.0	+ 03 41		15.7		
16 28.1	+ 08 05		15.3		double nebula, collision
16 28.2	+ 03 37		15.5		compact
16 28.2	+ 06 08		15.5		
16 28.4	+ 04 11		14.9		
16 28.6	+ 05 16		15.2		
16 29.1	+ 05 10		15.5		
16 29.6	+ 07 52		15.6		
16 29.8	+ 03 57		15.4		
16 31.4	+ 07 19		15.4		double nebula
16 31.8	+ 08 25		15.7		
16 32.3	+ 06 50		15.7		diffuse

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	'				
16	32.3	+ 07	34		15.5		
16	32.3	+ 08	46		15.4		double system
16	32.7	+ 07	13		15.6		
16	32.9	+ 08	28		15.5		
16	33.6	+ 06	52		15.7		
16	34.6	+ 08	54		15.7		
16	35.3	+ 07	22		15.6		diffuse
16	35.5	+ 06	22		15.3		
16	35.5	+ 07	40		15.7		
16	35.6	+ 03	48		15.7		
16	35.6	+ 07	43		15.6		
16	35.8	+ 06	17		15.3		
16	37.0	+ 07	23		15.5		
16	38.3	+ 08	43		15.7		
16	39.0	+ 05	50		15.7		
16	39.0	+ 07	30		15.6		
16	39.1	+ 03	14		15.6		
16	39.6	+ 07	20		15.7		
16	39.9	+ 07	12		15.6		





FIELD No. 53

$16^h52^m + 6° 00'$

Survey Plate No. 1056

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
22560	16 43 25.7	+ 8 40 20	5.38
22562	16 43 28.7	+ 4 07 54	7.10
22664	16 47 53.6	+ 7 19 57	5.46
22927	16 58 02.9	+ 6 39 26	6.38
22971	16 59 34.8	+ 8 31 18	6.24

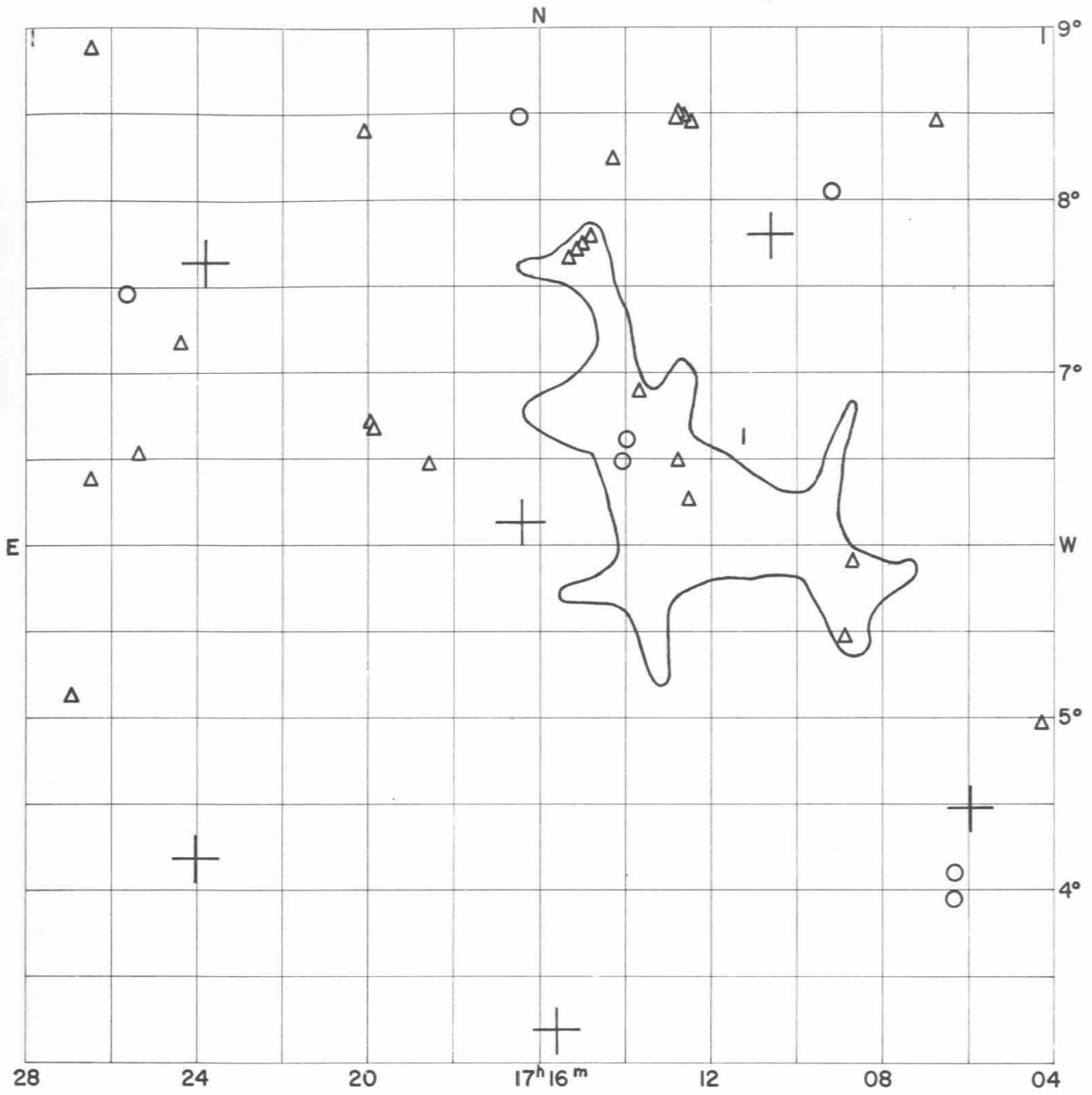
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1645.1 + 0620	open	87	5.4	Near	2
1650.0 + 0705	medium compact	60	1.9	D	1

Average number of galaxies per cluster = 73.5

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
16 40.7 + 08 37		15.5		
16 41.6 + 07 32		15.4		compact
16 42.2 + 08 15		15.4		
16 43.0 + 08 56		15.6		diffuse
16 43.4 + 05 26		15.5		
16 43.6 + 06 34		15.2		
16 44.1 + 06 39		15.6		
16 45.1 + 08 51		15.7		
16 45.2 + 06 44		15.7		
16 45.8 + 06 24	6224	15.0		
16 45.9 + 06 19	6225	15.0		
16 47.1 + 06 06		15.3		
16 47.3 + 05 00		15.5		
16 48.2 + 04 41	6230	15.5		double system
16 48.4 + 08 53	4621*	15.0		
16 48.9 + 07 57		15.6		
16 49.2 + 04 47		15.6		
16 49.5 + 04 28	6234	15.3		
16 50.9 + 04 19		15.4		
16 51.8 + 03 35		15.6		
16 54.0 + 06 01		15.3		
16 54.6 + 05 27		15.5		
16 58.7 + 06 56		15.4		
16 58.9 + 05 21		15.5		
16 59.0 + 07 00		15.2		
16 59.5 + 06 44	6280	15.5		double nebula
17 01.2 + 04 19		15.7		
17 01.7 + 06 51		15.6		
17 02.1 + 04 20		15.6		
17 02.4 + 04 32		15.4		compact
17 03.7 + 07 51		15.1		



FIELD No. 54

17^h16^m + 6°00'

Survey Plate No. 169

GC STARS

Nos.	R.A. h m s	Decl. ° ' "	m_p
23123	17 05 52.9	+ 4 29 27	7.25
23234	17 10 34.5	+ 7 48 26	6.83
23363	17 15 34.9	+ 3 11 54	6.78
23384	17 16 26.0	+ 6 08 11	6.44
23614	17 23 54.1	+ 7 38 16	5.98
23621	17 24 01.9	+ 4 10 56	4.44

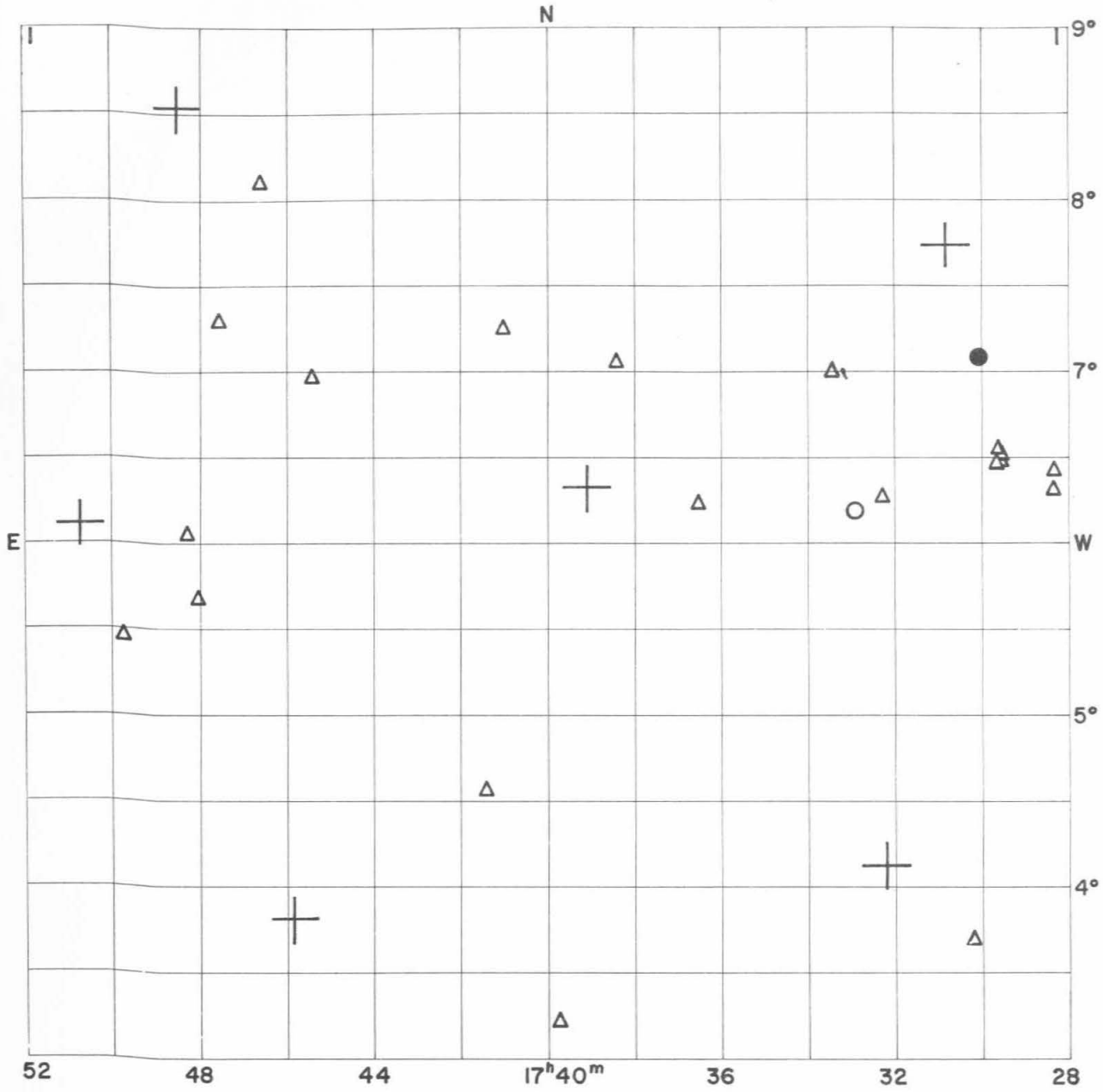
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1712.6 + 0616	open	145	8.5	Near	1

Average number of galaxies per cluster = 145.0

GALAXIES

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
17 04.2	+ 04 57		15.4		
17 06.2	+ 04 06	1242*	14.9		
17 06.3	+ 03 57	6296	14.2		
17 06.6	+ 08 28		15.7		
17 08.6	+ 05 55		15.5		
17 08.8	+ 05 28		15.7		double system
17 09.1	+ 08 03		14.8		
17 12.4	+ 08 26		15.6		
17 12.5	+ 06 16		15.4		
17 12.6	+ 08 29		15.6		compact
17 12.7	+ 08 30		15.4		compact
17 12.8	+ 06 30		15.7		
17 12.8	+ 08 28		15.2		
17 13.6	+ 06 54		15.3		
17 13.9	+ 06 37		14.7		
17 14.0	+ 06 29		14.8		
17 14.3	+ 08 15		15.3		
17 14.8	+ 07 48		15.3		
17 15.0	+ 07 45		15.4		
17 15.1	+ 07 43		15.2		
17 15.3	+ 07 39		15.7		double system
17 16.5	+ 08 29		15.0		
17 18.6	+ 06 27		15.7		
17 19.9	+ 06 40		15.3		
17 20.0	+ 06 42		15.6		
17 20.2	+ 08 24		15.5		
17 24.5	+ 07 10		15.6		diffuse
17 25.5	+ 06 31		15.5		
17 25.8	+ 07 28		15.0		
17 26.6	+ 06 22		15.2		double system
17 26.7	+ 08 52		15.6		
17 27.0	+ 05 07		15.7		



FIELD No. 55

17^h40^m + 6°00'

Survey Plate No. 780

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
23785	17 30 45.7	+ 7 45 10	7.7
23820	17 32 09.5	+ 4 07 52	7.9
23991	17 39 05.9	+ 6 20 13	5.98
24175	17 45 50.8	+ 3 49 11	6.19
24248	17 48 40.3	+ 8 32 32	6.80
24320	17 50 48.0	+ 6 06 36	5.82

CLUSTERS OF GALAXIES

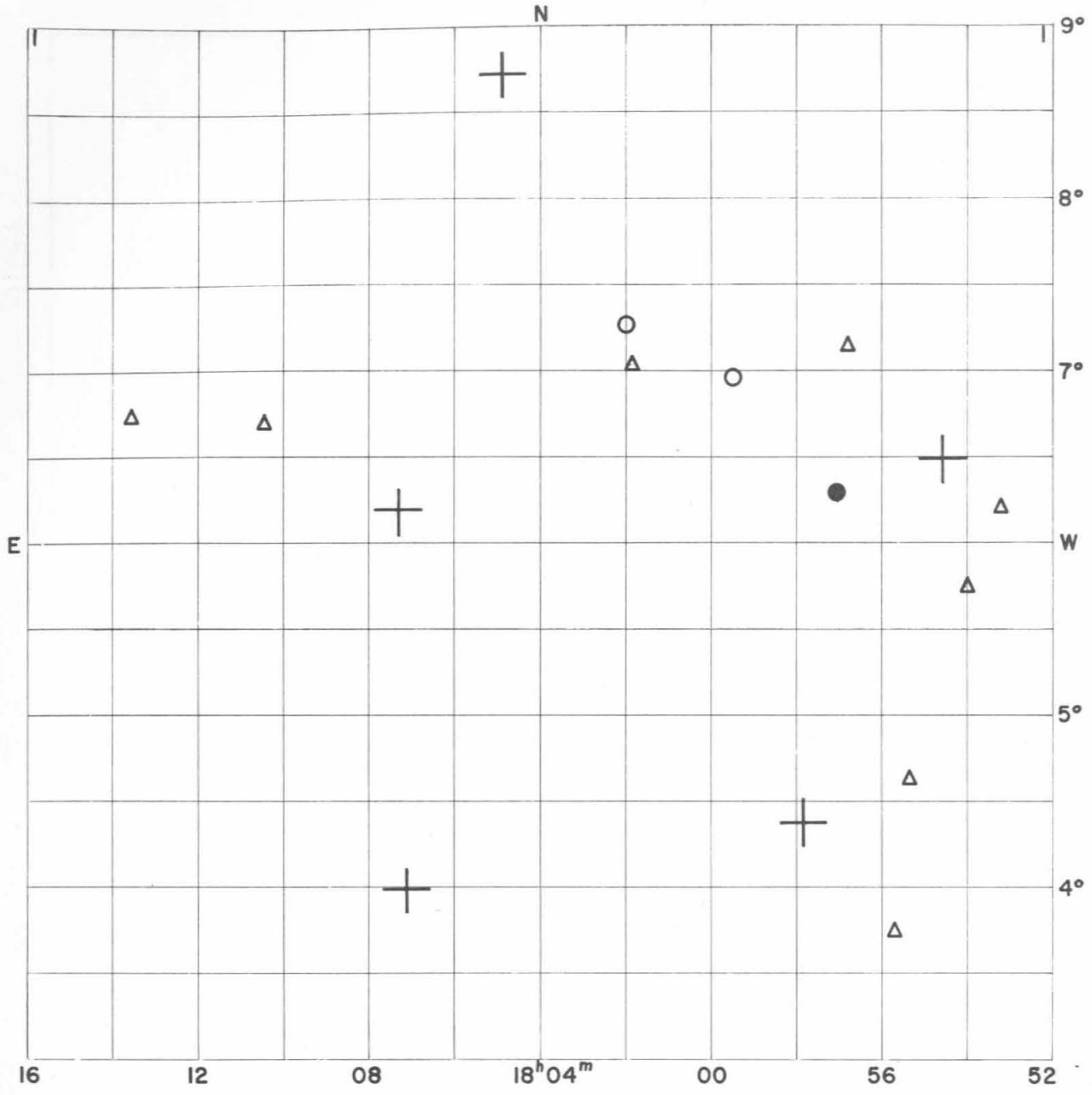
No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 28.2	+ 06 19	6378	15.1		
17 28.2	+ 06 26		15.2		
17 29.4	+ 06 31		15.5		
17 29.4	+ 06 32		15.5		compact
17 29.5	+ 06 30		15.4		
17 29.5	+ 06 34		15.4		
17 30.0	+ 07 06	6384	13.2	+ 1751	m_H = 12.7 S
17 30.1	+ 03 41		15.6		
17 32.2	+ 06 16		15.7		
17 32.8	+ 06 12		14.8		
17 33.4	+ 07 00		15.3		
17 36.5	+ 06 14		15.5		
17 38.4	+ 07 04		15.6		
17 39.7	+ 03 12		15.5		
17 41.0	+ 07 15		15.7		
17 41.4	+ 04 34		15.7		diffuse spiral
17 45.5	+ 06 58		15.6		
17 46.7	+ 08 07		15.5		extremely compact
17 47.7	+ 07 18		15.6		compact
17 48.1	+ 05 40		15.7		diffuse
17 48.3	+ 06 03		15.6		
17 49.8	+ 05 27		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6384	-	-	11.46	SBb	11.4	Sb	11.23	Sb+



FIELD No. 56

18^h04^m + 6°00'

Survey Plate No. 164

GC STARS

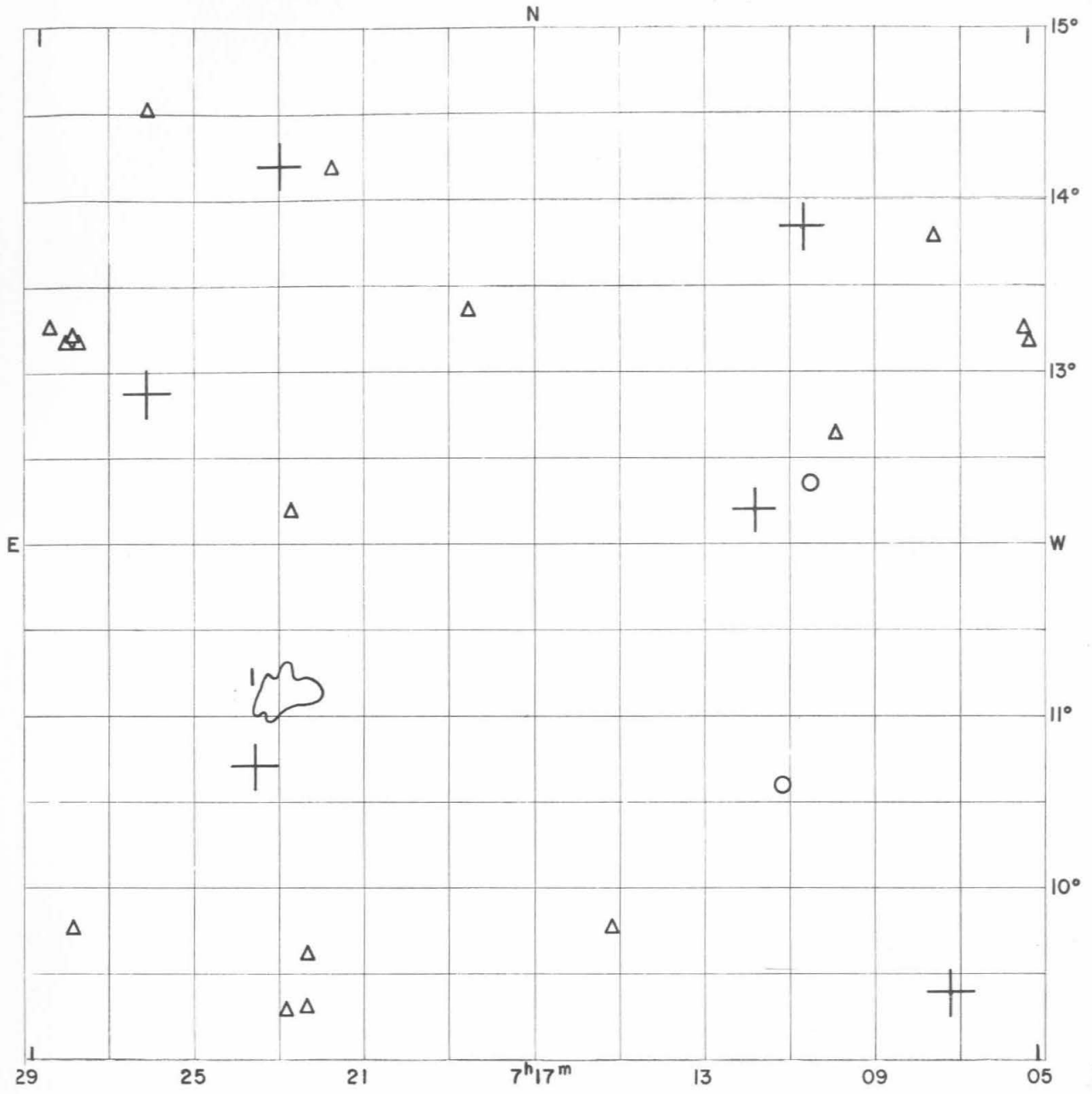
Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
24413	17 54 29.7	+ 6 29 35	6.16
24500	17 57 47.1	+ 4 22 11	4.81
24693	18 04 54.8	+ 8 43 34	4.73
24754	18 07 04.6	+ 3 59 00	5.67
24759	18 07 16.7	+ 6 11 45	7.13

CLUSTERS OF GALAXIES

No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 53.1	+ 06 12		15.5		diffuse
17 53.9	+ 05 44		15.7		compact
17 55.3	+ 04 37		15.6		
17 55.7	+ 03 44		15.4		diffuse
17 56.7	+ 07 09		15.2		large, diffuse
17 57.0	+ 06 17	6509	13.4		
17 59.5	+ 06 58		14.6		
18 01.8	+ 07 02		15.7		diffuse
18 02.0	+ 07 17		15.0		compact
18 10.5	+ 06 42		15.4		
18 13.6	+ 06 44		15.5		



FIELD No. 57

7^h17^m + 12°00'

Survey Plate No. 1354

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
9461	7 07 06.8	+ 9 23 27	6.90
9553	7 10 34.5	+ 13 50 56	6.70
9592	7 11 45.4	+ 12 12 12	5.84
9917	7 23 13.1	+ 14 12 12	7.7
9932	7 23 42.6	+ 10 42 33	6.22
9999	7 26 23.5	+ 12 51 51	6.59

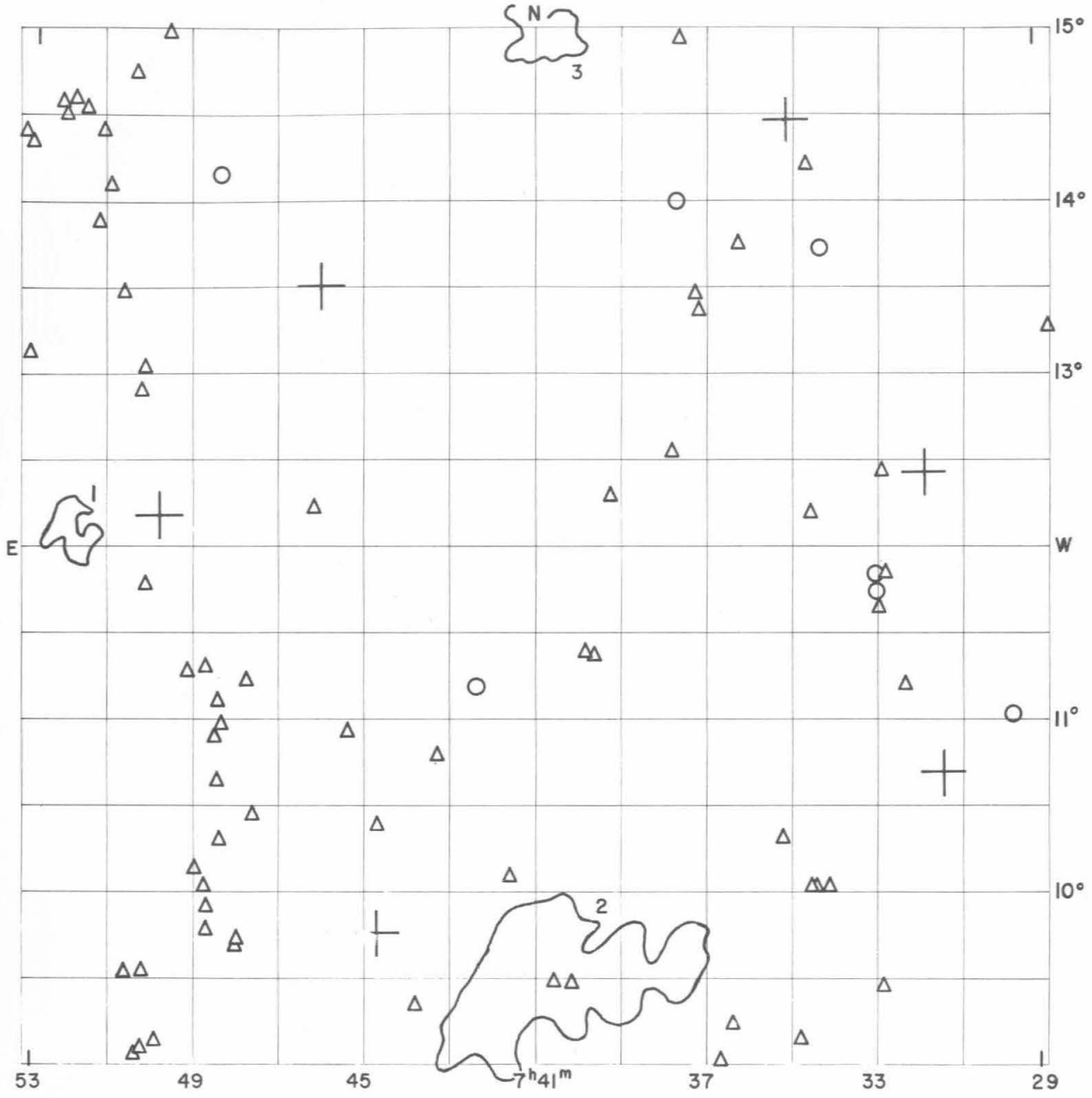
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0723.0 + 1109	compact	106	1.5	D	1

Average number of galaxies per cluster = 106.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
7 05.0 + 13 10		15.6		
7 05.2 + 13 14		15.4		quadruple system
7 07.4 + 13 47		15.7		
7 09.8 + 12 37		15.3		
7 10.4 + 12 21	2350	14.1		
7 11.1 + 10 35		14.9		
7 15.2 + 09 46		15.6		double system
7 18.6 + 13 21		15.7		very diffuse
7 21.9 + 14 11		15.6		
7 22.4 + 09 18		15.5		
7 22.4 + 09 36		15.2		diffuse
7 22.8 + 12 11		15.7		
7 22.9 + 09 16		15.7		
7 26.4 + 14 31		15.2		
7 28.0 + 09 45	2402	15.4		double system
7 28.0 + 13 10		15.4		
7 28.1 + 13 12		15.5		double system
7 28.3 + 13 10		15.1		
7 28.7 + 13 16		15.3		



FIELD No. 58

7^h41^m + 12°00'

Survey Plate No. 1003

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10117	7 31 19.9	+ 10 40 40	6.21
10129	7 31 44.9	+ 12 24 53	7.4
10224	7 35 01.0	+ 14 27 16	6.67
10495	7 44 48.8	+ 9 45 17	7.22
10539	7 46 13.8	+ 13 29 50	6.25
10639	7 49 47.2	+ 12 08 56	8.8

CLUSTERS OF GALAXIES

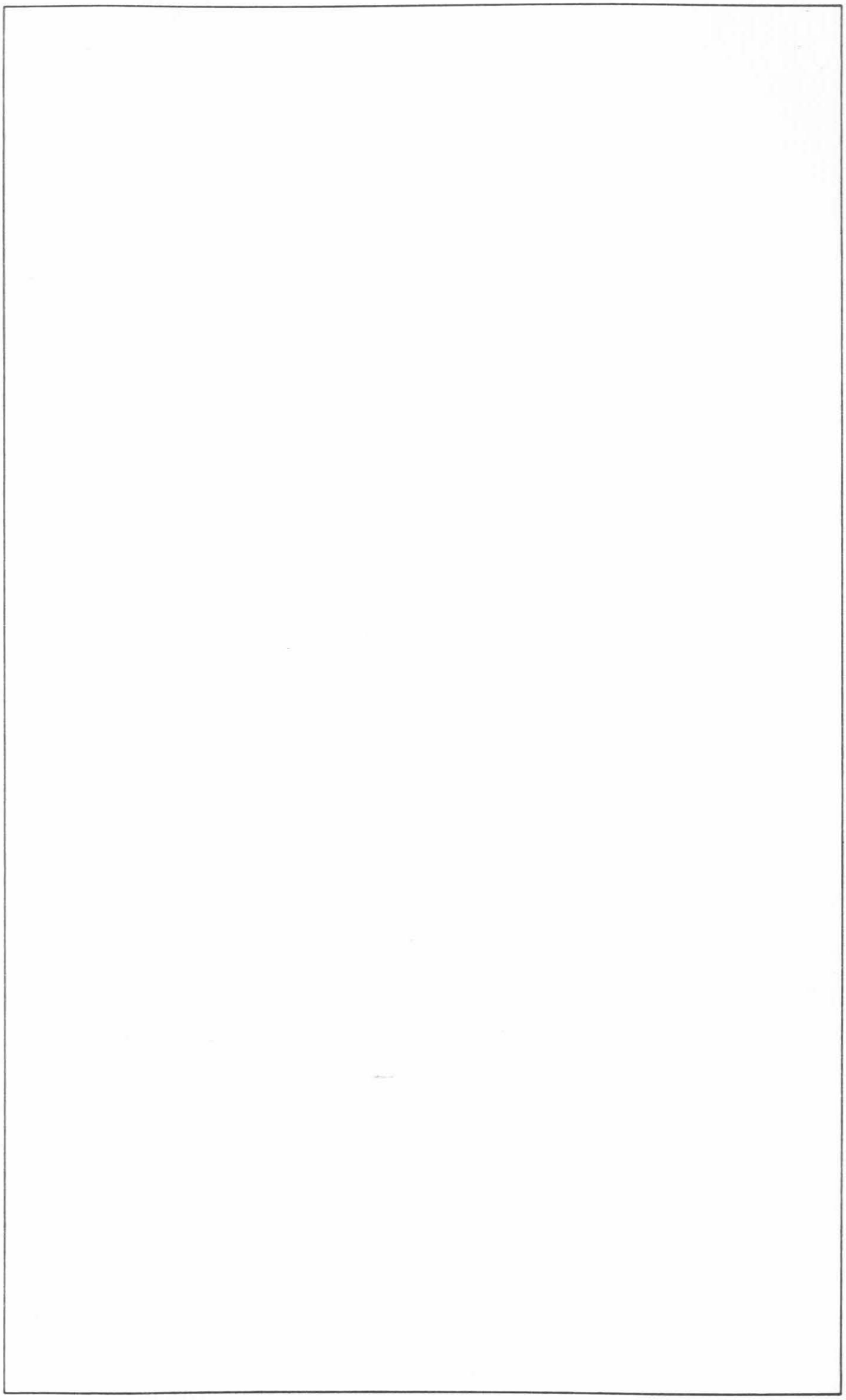
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0740.2 + 0930	medium compact	179	6.0	MD	2
0740.7 + 1455	medium compact	67	2.1	D	3
0752.1 + 1204	medium compact	64	1.5	D	1

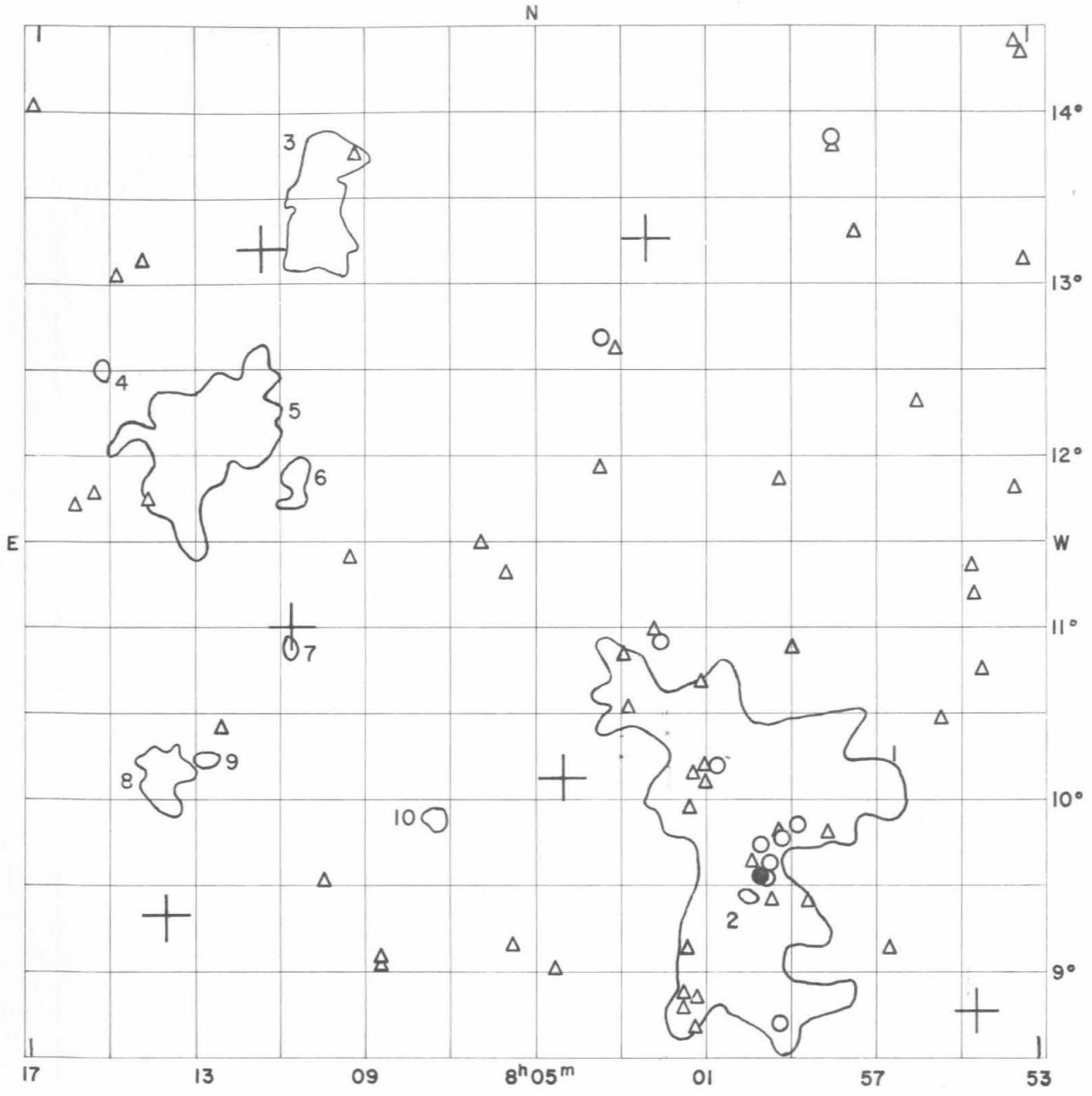
Average number of galaxies per cluster = 103.3

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
7 28.7 + 13 16		15.3		
7 29.7 + 11 00		15.0		
7 32.2 + 11 12		15.7		
7 32.6 + 11 50		15.6		
7 32.7 + 12 25		15.4		
7 32.8 + 09 27		15.7		
7 32.8 + 11 39		15.7		diffuse
7 32.9 + 11 43	2416	14.3		
7 32.9 + 11 49		15.0		
7 34.0 + 10 01		15.3		
7 34.3 + 13 43		14.1		
7 34.4 + 10 01		15.1		
7 34.4 + 12 11		15.7		
7 34.5 + 10 01		15.7		triple system
7 34.5 + 14 12		15.4		
7 34.7 + 09 08		15.2		
7 35.2 + 10 18		15.4		
7 36.2 + 13 44		15.5		
7 36.4 + 09 14		15.3		
7 36.7 + 09 01		15.3		
7 37.1 + 13 22		15.6		
7 37.2 + 13 27		15.7		
7 37.6 + 14 56		15.5		
7 37.7 + 13 59		14.7		
7 37.8 + 12 32		15.7		
7 39.3 + 12 17		15.5		
7 39.7 + 11 22		15.3		double nebula
7 39.9 + 11 23		15.6		
7 40.1 + 09 28		15.7		
7 40.6 + 09 29		15.7		
7 41.6 + 10 05		15.4		
7 42.5 + 11 11		14.8		
7 43.4 + 10 47		15.2		
7 43.9 + 09 21		15.1		
7 44.8 + 10 22		15.5		double nebula
7 45.4 + 10 56		15.7		
7 46.3 + 12 13		15.7		
7 47.8 + 10 27		15.4		
7 47.9 + 11 13		15.7		
7 48.2 + 09 42		15.7		
7 48.2 + 09 43		15.5		
7 48.5 + 10 16		15.5		
7 48.5 + 10 58		15.1		
7 48.6 + 11 06		15.5		
7 48.7 + 10 39		15.1		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
7	48.7	+ 10 54		15.3		
7	48.7	+ 14 09		14.6		
7	48.9	+ 09 45		15.6		
7	48.9	+ 09 55		15.4		double system
7	48.9	+ 10 01		15.6		
7	48.9	+ 11 18		15.3		
7	49.1	+ 10 06		15.7		
7	49.3	+ 11 15		15.5		
7	49.9	+ 14 58		15.4		
7	50.1	+ 09 06		15.6		
7	50.4	+ 11 45		15.6		
7	50.4	+ 13 02		15.5		
7	50.5	+ 09 05		15.4		
7	50.5	+ 09 32		15.3		
7	50.5	+ 12 54		15.7		
7	50.6	+ 09 03		15.5		
7	50.6	+ 14 45		15.1		
7	50.9	+ 09 32		15.6		
7	50.9	+ 13 28		15.4		
7	51.2	+ 14 05		15.3		
7	51.4	+ 14 24		15.3		
7	51.6	+ 13 52		15.3		
7	51.8	+ 14 32		15.5		
7	52.1	+ 14 35		15.1		
7	52.4	+ 14 30		15.4		
7	52.4	+ 14 34		15.4		
7	53.1	+ 14 20		15.2		
7	53.2	+ 13 07		15.3		
7	53.2	+ 14 23		15.6		





FIELD No. 59

8^h05^m + 11°30'

Survey Plate No. 247

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
10751	7 54 33.3	+ 8 46 35	6.12
10959	8 02 17.5	+ 13 15 43	5.11
11011	8 04 22.7	+ 10 07 31	6.84
11180	8 10 49.6	+ 10 59 59	7.30
11196	8 11 34.3	+ 13 12 04	6.48
11254	8 13 48.3	+ 9 20 28	3.76

CLUSTERS OF GALAXIES

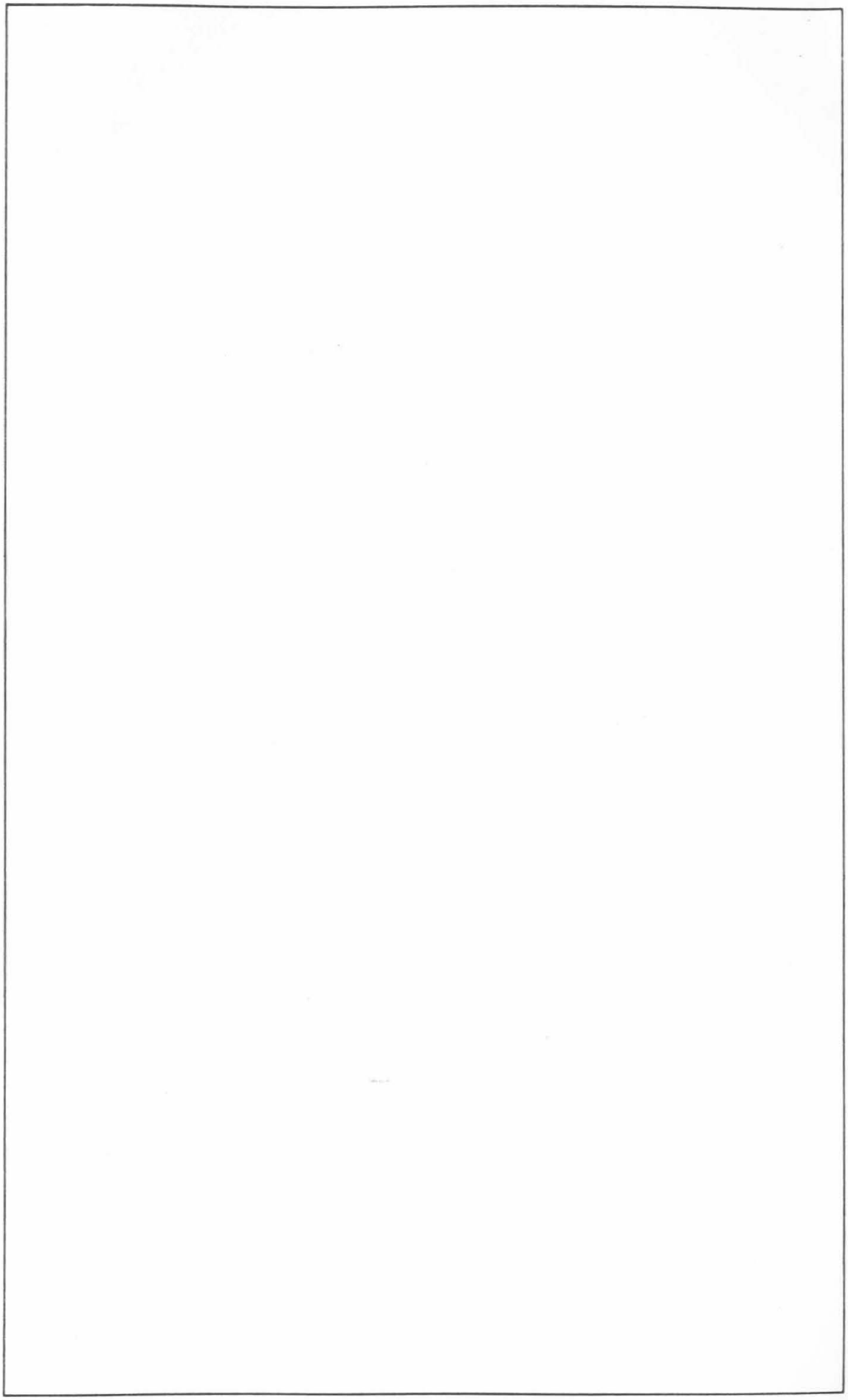
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0759.9 + 0927	compact	53	0.4	ED	2
0800.0 + 0946	open	207	8.5	Near	1
0807.4 + 0955	compact	45	0.6	ED	10
0810.2 + 1328	open	177	3.2	D	3
0810.8 + 1151	medium compact	56	1.1	VD	6
0810.9 + 1054	compact	44	0.5	VD	7
0812.9 + 1015	compact	69	0.6	ED	9
0813.0 + 1209	open	149	4.5	MD	5
0813.9 + 1008	open	81	1.8	D	8
0815.5 + 1230	compact	47	0.4	ED	4

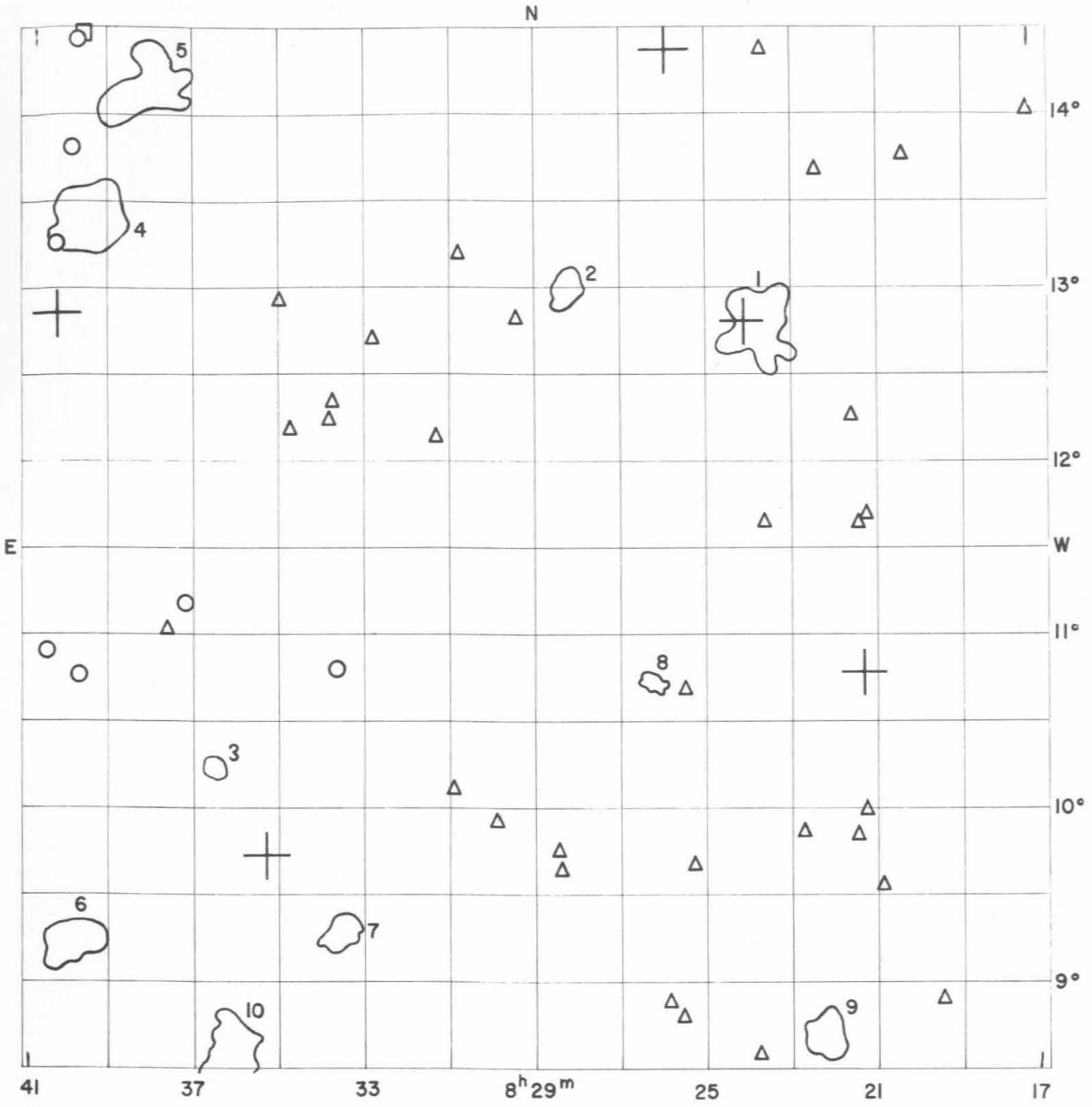
Average number of galaxies per cluster = 92.8

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
7 53.1 + 14 20		15.2		
7 53.2 + 13 07		15.3		
7 53.2 + 14 23		15.6		
7 53.5 + 11 48		15.2		
7 54.4 + 10 44		15.3		
7 54.5 + 11 11		15.3		
7 54.6 + 11 21		15.5		
7 55.3 + 10 27		15.3		
7 55.8 + 12 18		15.4		
7 56.6 + 09 08		15.6		double nebula
7 57.3 + 13 17		15.1		
7 57.8 + 13 47		15.7		double system
7 57.8 + 13 50		14.9		
7 58.0 + 09 48		15.4		
7 58.5 + 09 24		15.5		
7 58.8 + 09 51		14.6		
7 58.9 + 10 52		15.2		
7 59.2 + 08 42	2508	14.2		
7 59.2 + 09 46		14.9		
7 59.2 + 11 52		15.1		
7 59.3 + 09 49		15.3		
7 59.4 + 09 25		15.6		
7 59.4 + 09 37	2510	14.7		
7 59.5 + 09 32	2511	15.0		
7 59.7 + 09 33	2513	13.7		
7 59.7 + 09 44		15.0		
7 59.9 + 09 39		15.2		
8 00.7 + 10 11		14.5		
8 01.0 + 10 06		15.1		
8 01.0 + 10 12		15.5		
8 01.1 + 10 41		15.7		
8 01.2 + 08 50		15.1		very compact
8 01.3 + 08 40		15.2		
8 01.3 + 10 09		15.2		
8 01.4 + 09 08		15.6		
8 01.4 + 09 57		15.2		
8 01.5 + 08 47		15.5		diffuse
8 01.5 + 08 52		15.3		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
8	02.1	+ 10 55		14.9		
8	02.2	+ 10 59		15.1		
8	02.8	+ 10 32		15.1		
8	02.9	+ 10 51		15.2		
8	03.1	+ 12 37		15.3		
8	03.4	+ 12 41	2226*	14.9		
8	03.5	+ 11 56		15.2		
8	04.6	+ 09 00		15.1		
8	05.6	+ 09 09	495*	15.4		
8	05.7	+ 11 19		15.1		
8	06.3	+ 11 30		15.1		
8	08.7	+ 09 02		15.2		
8	08.7	+ 09 05		15.3		
8	09.4	+ 11 24		15.4		
8	09.4	+ 13 46		15.7		
8	10.1	+ 09 32		15.1		
8	12.5	+ 10 25		15.7		triple system
8	14.3	+ 11 44		15.4		
8	14.5	+ 13 09		15.2		
8	15.1	+ 13 03		15.1		
8	15.6	+ 11 47		15.3		
8	16.1	+ 11 43		15.6		
8	17.1	+ 14 02		15.6		





FIELD No. 60

8^h29^m + 11°30'

Survey Plate No. 456

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11454	8 21 11.2	+ 10 47 40	6.29
11525	8 23 58.1	+ 12 49 16	5.75
11584	8 25 50.0	+ 14 22 40	5.90
11836	8 35 22.8	+ 9 45 02	6.48
11983	8 40 27.2	+ 12 51 41	5.67

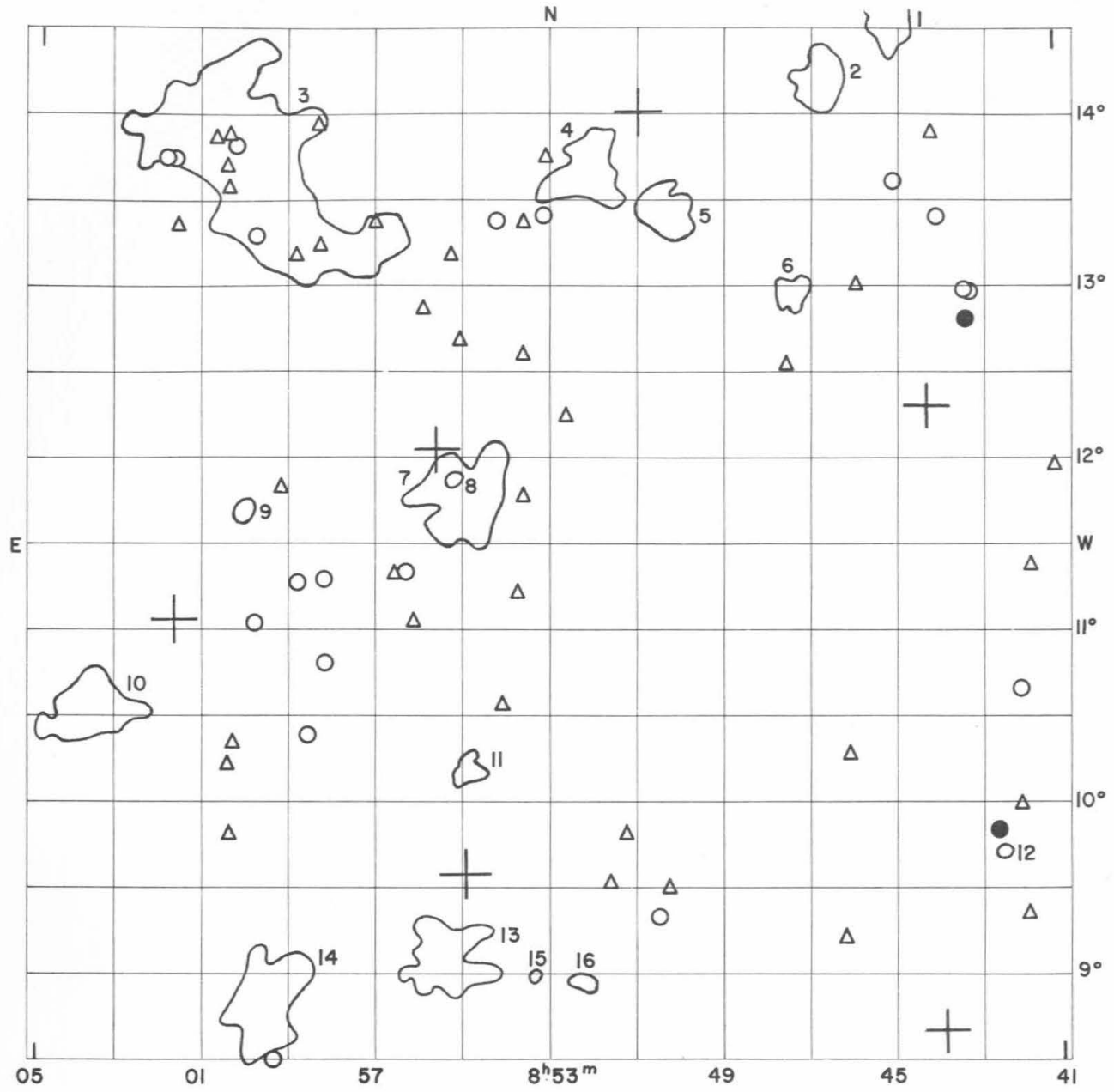
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0822.2 + 0841	compact	66	1.4	VD	9
0823.6 + 1248	open	89	2.4	D	1
0826.2 + 1044	compact	58	0.5	VD	8
0828.3 + 1300	compact	68	1.1	VD	2
0833.6 + 0917	medium compact	64	1.3	VD	7
0836.2 + 0832	medium compact	112	2.6	MD	10
0836.7 + 1014	compact	62	0.6	ED	3
0838.3 + 1410	open	106	2.3	D	5
0839.8 + 1325	medium compact	92	2.5	D	4
0840.0 + 0915	open	82	1.7	D	6

Average number of galaxies per cluster = 79.9

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
8 17.1 + 14 02		15.6		
8 19.3 + 08 55	502*	15.4		
8 20.1 + 13 47		15.2		
8 20.7 + 09 34		15.5		
8 21.0 + 11 43		15.2		
8 21.1 + 10 00		15.1		
8 21.3 + 09 52		15.5		
8 21.3 + 11 40		15.3		
8 21.4 + 12 17		15.5		
8 22.2 + 13 41		15.1		
8 22.6 + 09 52		15.6		very compact
8 23.5 + 11 40		15.4		
8 23.5 + 14 23		15.1		
8 23.7 + 08 35		15.3		
8 25.2 + 09 41		15.7		
8 25.4 + 10 42		15.3		
8 25.5 + 08 49		15.6		
8 25.8 + 08 54		15.5		
8 28.4 + 09 38		15.3		
8 28.5 + 09 47		15.2		
8 29.4 + 12 51		15.6		
8 29.9 + 09 57		15.7		double nebula
8 30.8 + 13 13		15.3		
8 30.9 + 10 07		15.5		
8 31.4 + 12 09		15.6		
8 32.9 + 12 44		15.1		
8 33.7 + 10 49		14.9		
8 33.8 + 12 21		15.7		
8 33.9 + 12 15		15.6		
8 34.9 + 12 13		15.2		
8 35.1 + 12 57		15.3		
8 37.3 + 11 11		14.9		
8 37.8 + 11 03		15.7		
8 39.9 + 10 46		14.6		
8 39.9 + 14 28	2648	13.0		
8 40.0 + 14 27		15.0		
8 40.2 + 13 50		14.5		
8 40.5 + 13 16		14.8		
8 40.6 + 10 55		15.0		



FIELD No. 61

8^h53^m + 11°30'

Survey Plate No. 438

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12091	8 43 51.3	+ 8 39 42	6.99
12104	8 44 11.7	+ 12 17 41	5.71
12280	8 51 00.2	+ 14 01 15	7.04
12389	8 55 00.3	+ 9 34 54	6.32
12406	8 55 45.3	+ 12 03 09	4.27
12538	9 01 53.3	+ 11 03 00	7.6

CLUSTERS OF GALAXIES

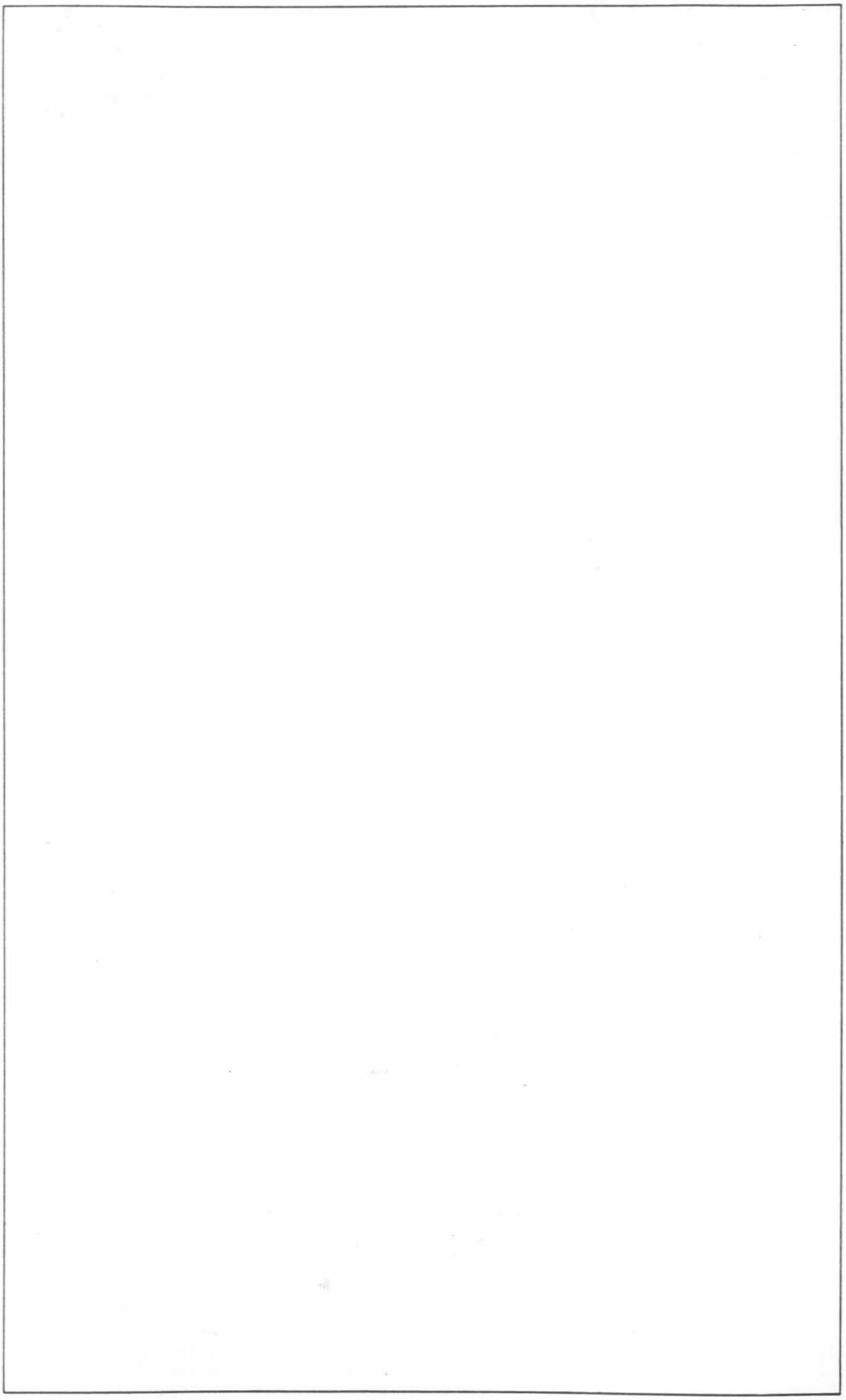
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0842.3 + 0943	compact	43	0.4	ED	12
0844.9 + 1434	medium compact	69	1.8	D	1
0846.6 + 1413	open	64	1.8	VD	2
0847.3 + 1258	compact	67	0.9	D	6
0850.2 + 1327	open	71	1.7	VD	5
0852.1 + 1340	medium compact	110	2.2	D	4
0852.2 + 0858	medium compact	56	0.7	VD	16
0853.3 + 0900	compact	49	0.4	ED	15
0854.9 + 1011	medium compact	59	0.9	VD	11
0854.9 + 1147	open	118	2.9	D	7
0855.2 + 1154	compact	58	0.4	ED	8
0855.3 + 0905	open	95	2.4	D	13
0859.6 + 0850	open	104	2.6	D	14
0900.0 + 1343	open	225	6.5	Near	3
0900.2 + 1142	compact	53	0.6	ED	9
0903.7 + 1033	compact	141	2.4	D	10

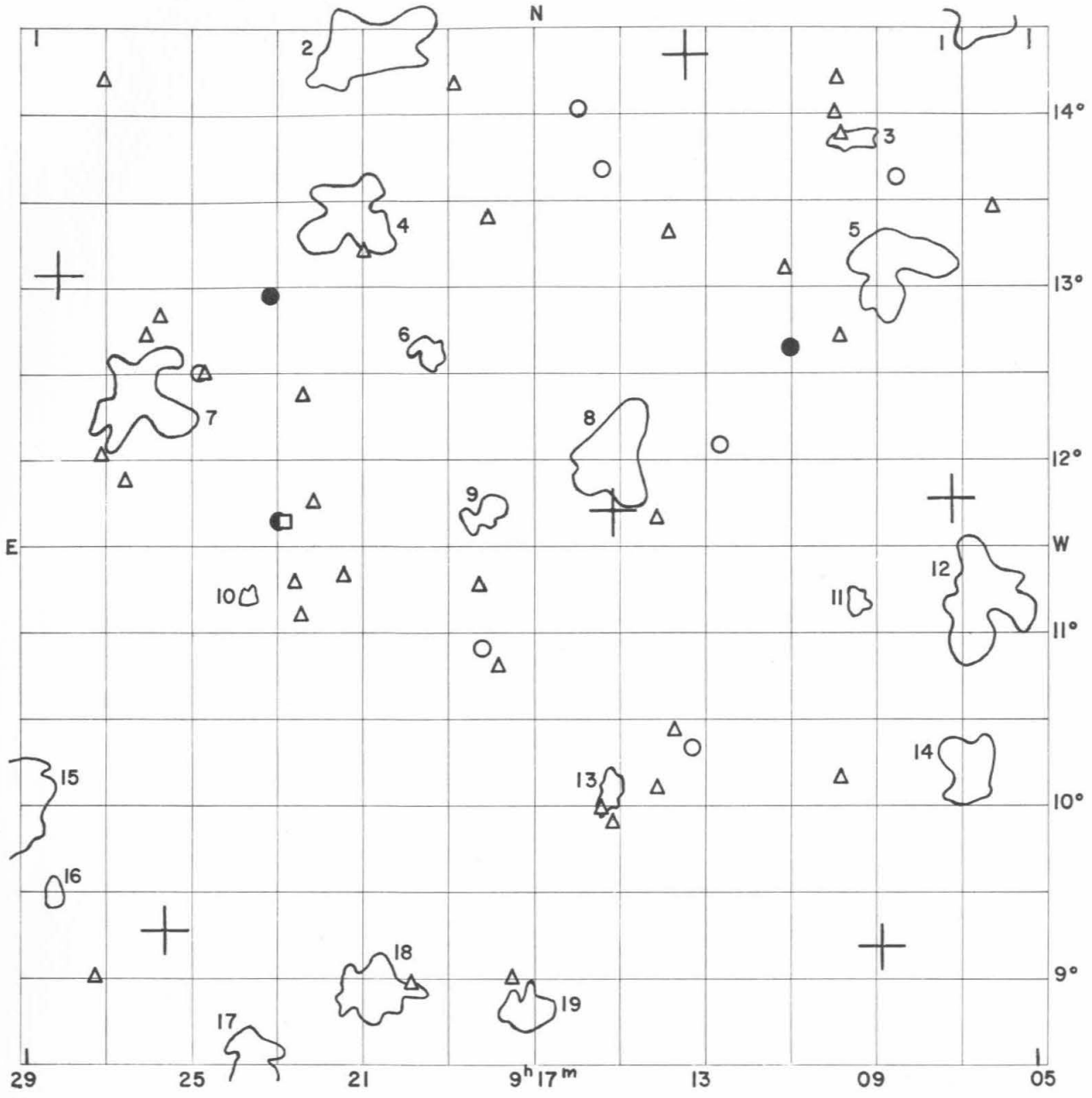
Average number of galaxies per cluster = 86.4

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
8 41.2 + 11 57	2651	15.5		
8 41.7 + 11 22		15.5		compact
8 41.8 + 09 21		15.6		
8 42.0 + 09 59		15.3		
8 42.0 + 10 40		14.9		
8 42.6 + 09 50	2657	14.0		
8 43.1 + 12 58		15.0		
8 43.2 + 12 49	2661	13.9		
8 43.3 + 12 59		15.0		
8 43.9 + 13 24		15.0		
8 44.0 + 13 54		15.5		
8 44.9 + 13 36		14.9		
8 45.8 + 13 00		15.6		
8 46.0 + 10 16		15.4		
8 46.1 + 09 13		15.7		
8 47.4 + 12 32		15.4		
8 50.3 + 09 30		15.1		
8 50.5 + 09 20	523*	15.0		
8 51.3 + 09 49		15.7		double nebula
8 51.6 + 09 32		15.6		
8 52.6 + 12 15		15.3		
8 53.1 + 13 25		14.2		
8 53.1 + 13 45		15.5		
8 53.6 + 12 37		15.1		
8 53.6 + 13 22		15.1		
8 53.7 + 11 45		15.6		multiple system
8 53.8 + 11 13		15.4		double nebula
8 54.1 + 10 34		15.7		
8 54.3 + 13 24		14.2		
8 55.1 + 12 41		15.1		
8 55.3 + 13 11		15.2		
8 55.9 + 12 52		15.2		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
8 56.2	+ 11 03		15.3		
8 56.4	+ 11 22	2720	14.2		
8 56.7	+ 11 20		15.2		
8 57.1	+ 13 23		15.3		double nebula
8 58.3	+ 10 49		14.7		
8 58.3	+ 11 17	2725	14.1		
8 58.4	+ 13 15		15.7		
8 58.4	+ 13 57		15.7		
8 58.7	+ 10 24		15.0		
8 59.0	+ 11 16	2728	14.9		
8 59.0	+ 13 11		15.3		
8 59.3	+ 11 50		15.2		
8 59.5	+ 08 30	2731	14.2		
8 59.9	+ 11 02	526*	14.7		
8 59.9	+ 13 18		14.8		
9 00.4	+ 13 50		14.9		
9 00.5	+ 09 49		15.5		double system
9 00.5	+ 10 21		15.3		double system
9 00.5	+ 13 54		15.5		
9 00.6	+ 10 13		15.4		double nebula
9 00.6	+ 13 35		15.6		
9 00.6	+ 13 43		15.1		
9 00.9	+ 13 53		15.3		
9 01.8	+ 13 22		15.3		
9 01.8	+ 13 45		14.9		
9 02.1	+ 13 46		14.8		





FIELD No. 62

9^h17^m + 11°30'

Survey Plate No. 1508

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
12648	9 07 03.5	+ 11 46 09	6.46
12676	9 08 46.0	+ 9 10 54	7.12
12779	9 13 22.7	+ 14 20 18	8.3
12824	9 15 08.7	+ 11 42 42	6.29
13062	9 25 46.9	+ 9 16 32	5.52
13136	9 28 37.1	+ 13 04 47	6.98

CLUSTERS OF GALAXIES

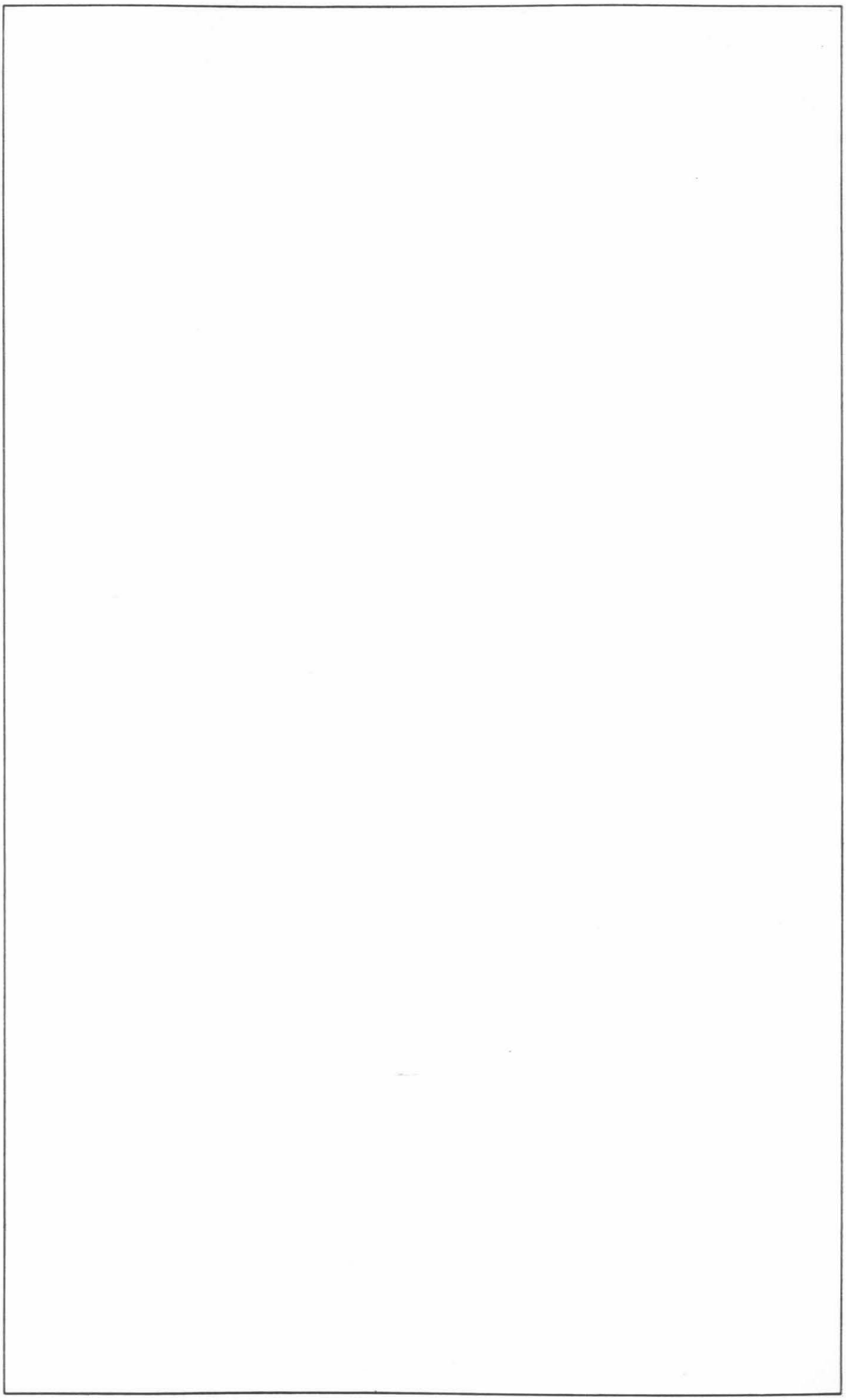
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0906.1 + 1447	medium compact	281	4.3	D	1
0906.2 + 1112	compact	272	3.0	VD	12
0906.6 + 1012	open	98	1.8	VD	14
0908.4 + 1309	open	108	2.2	MD	5
0909.2 + 1110	compact	60	0.7	VD	11
0909.3 + 1352	medium compact	66	1.0	VD	3
0915.1 + 1200	open	115	2.7	D	8
0915.2 + 1005	compact	59	1.0	VD	13
0917.2 + 0849	open	83	1.6	VD	19
0918.2 + 1141	medium compact	62	0.9	VD	9
0919.5 + 1238	compact	63	0.9	VD	6
0920.8 + 0855	medium compact	154	1.9	D	18
0920.9 + 1425	compact	258	2.5	VD	2
0921.5 + 1325	compact	94	2.3	MD	4
0923.6 + 0830	medium compact	99	2.0	D	17
0923.9 + 1113	compact	42	0.5	ED	10
0926.5 + 1222	open	121	2.7	MD	7
0928.5 + 0929	medium compact	49	0.8	ED	16
0929.6 + 0958	medium compact	181	3.4	MD	15

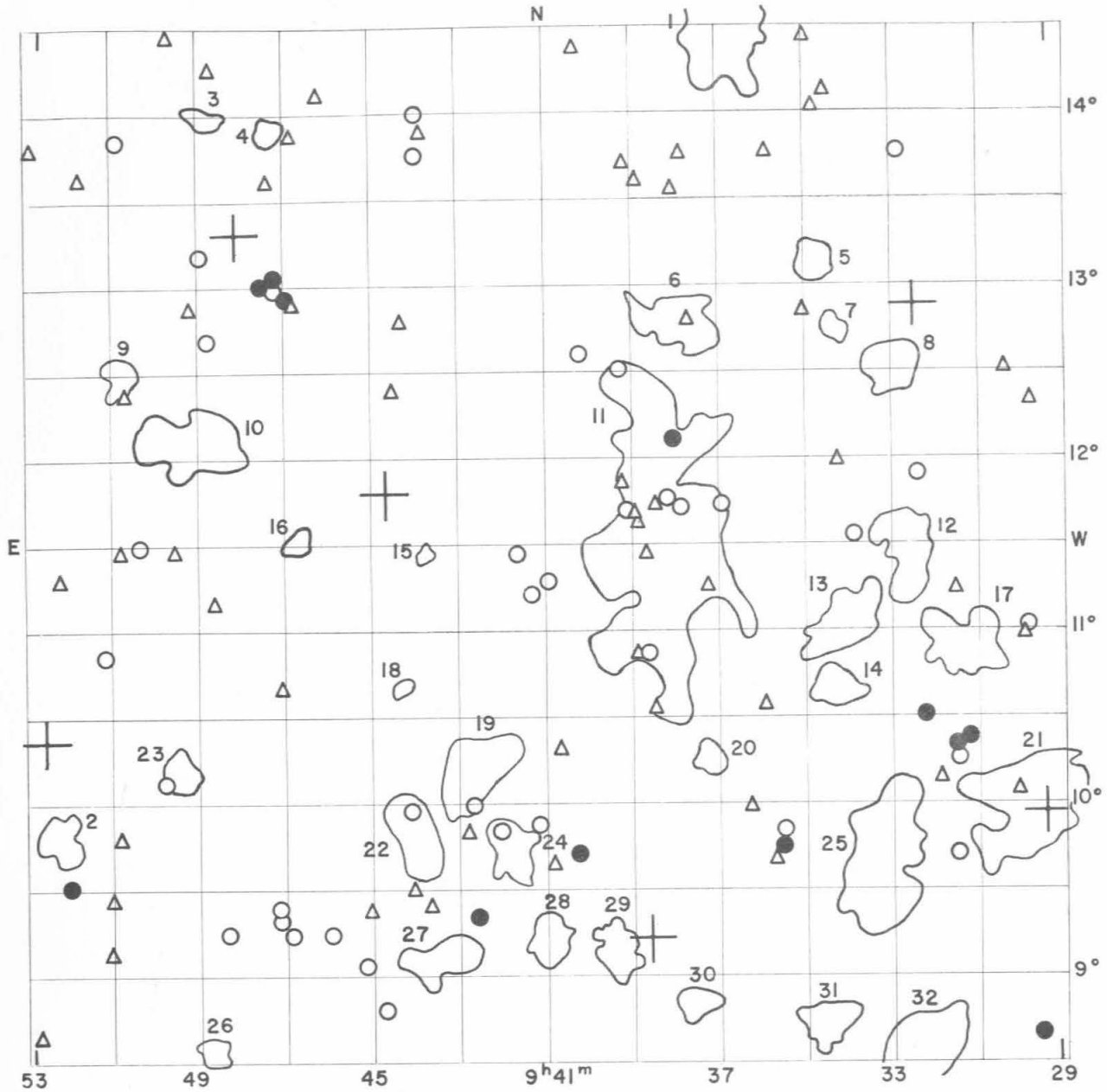
Average number of galaxies per cluster = 119.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 06.0 + 13 27		15.4		
9 08.3 + 13 38		15.0		
9 09.6 + 12 43		15.2		
9 09.6 + 13 53		15.5		
9 09.7 + 10 10		15.1		
9 09.7 + 14 13		15.7		
9 09.8 + 14 01		15.3		
9 10.9 + 12 39		13.8		
9 11.0 + 13 06		15.7		
9 12.6 + 12 06	530*	14.3		
9 13.2 + 10 20		14.7		
9 13.7 + 10 26		15.6		
9 13.8 + 13 19		15.5		
9 14.1 + 10 06		15.3		
9 14.1 + 11 40		15.4		
9 15.1 + 09 55		15.5		
9 15.4 + 09 59		15.6		
9 15.4 + 13 41		14.8		
9 16.0 + 14 02		15.0		
9 17.5 + 09 00		15.6		
9 17.8 + 10 49		15.6		
9 18.1 + 13 24		15.1		
9 18.3 + 10 55		14.9		
9 18.3 + 11 16		15.5		
9 18.9 + 14 11		15.4		
9 19.9 + 08 58		15.4		
9 21.1 + 13 12		15.5		
9 21.5 + 11 20		15.1		
9 22.3 + 11 45		15.2		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
9 22.6	+ 11 06		15.2		
9 22.6	+ 12 21		15.7		
9 22.8	+ 11 17		15.7		
9 23.0	+ 11 39	2872	13.0		
9 23.1	+ 11 39	2874/2875	13.5		
9 23.3	+ 12 57		13.9		
9 24.9	+ 12 29		15.6		
9 25.0	+ 12 30		14.7		double nebula, tidal effects
9 26.0	+ 12 50		15.1		
9 26.3	+ 12 43		15.4		
9 26.8	+ 11 52		15.5		
9 27.4	+ 09 00		15.3		
9 27.4	+ 12 01		15.7		
9 27.4	+ 14.11		15.6		





FIELD No. 63

$9^h41^m + 11°30'$

Survey Plate No. 990

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13150	9 29 16.9	+ 9 56 14	5.28
13230	9 32 17.0	+ 12 52 42	6.66
13368	9 38 34.8	+ 9 13 26	6.84
13485	9 44 44.8	+ 11 48 01	6.37
13554	9 48 19.8	+ 13 18 03	6.70
13650	9 52 43.3	+ 10 20 57	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0929.6 + 0958	medium compact	181	3.4	MD	21
0931.1 + 1055	medium compact	223	2.2	VD	17
0932.2 + 0834	open	96	2.6	D	32
0932.4 + 1126	open	177	2.5	VD	12
0932.8 + 1231	medium compact	145	1.8	VD	8
0933.1 + 0939	open	245	3.5	D	25
0933.9 + 1102	medium compact	130	2.0	D	13
0934.1 + 1040	medium compact	88	1.3	VD	14
0934.1 + 1245	compact	70	0.8	ED	7
0934.5 + 0842	medium compact	105	1.6	VD	31
0934.6 + 1309	compact	99	1.4	VD	5
0936.7 + 1425	medium compact	246	2.6	D	1
0937.1 + 1015	medium compact	84	1.0	ED	20
0937.5 + 0850	compact	51	1.0	VD	30
0937.8 + 1247	compact	222	2.3	VD	6
0938.2 + 1130	open	196	7.5	Near	11
0939.3 + 0908	compact	184	1.6	VD	29
0940.9 + 0911	compact	103	1.6	D	28
0941.8 + 0944	compact	138	1.8	VD	24
0942.7 + 1010	open	183	2.5	VD	19
0943.4 + 0905	open	95	2.2	VD	27
0943.8 + 1126	compact	55	0.5	ED	15
0944.0 + 0948	compact	181	2.0	VD	22
0944.3 + 1040	medium compact	41	0.5	ED	18
0946.8 + 1130	medium compact	60	0.8	ED	16
0947.5 + 1355	compact	83	0.8	ED	4
0948.7 + 0831	compact	61	0.9	VD	26
0949.1 + 1359	medium compact	60	0.9	ED	3
0949.3 + 1204	open	151	2.7	D	10
0949.6 + 1010	medium compact	74	1.2	VD	23
0951.0 + 1229	compact	58	1.1	VD	9
0952.4 + 0946	medium compact	107	1.4	VD	2

Average number of galaxies per cluster = 124.8

GALAXIES

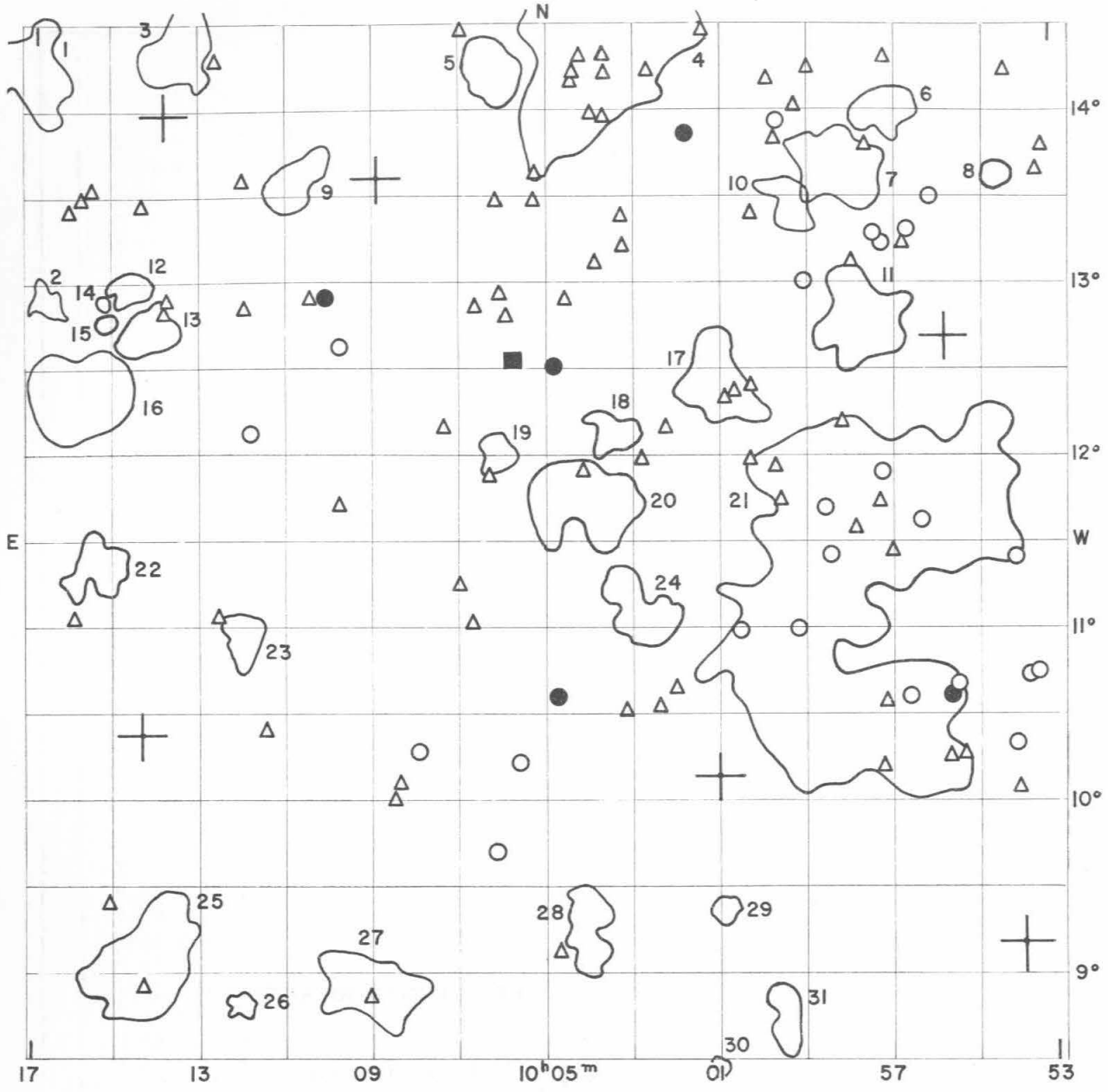
Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
9 29.5 + 08 40	2906	13.1		
9 29.6 + 12 19		15.3		
9 29.7 + 10 59		15.5		
9 29.7 + 11 02		14.8		
9 29.9 + 10 03		15.6		
9 30.2 + 12 31		15.2		
9 31.1 + 10 22	2911	13.6	+ 3140	m_H = 13.1
9 31.3 + 10 15		14.9		
9 31.4 + 09 42	2913	14.1		
9 31.4 + 10 20	2914	13.7	+ 3370	
9 31.4 + 11 14		15.2		extremely compact
9 31.8 + 10 08		15.6		
9 32.1 + 10 30	2919	13.6		
9 32.2 + 11 55		14.9		
9 32.6 + 13 47		15.0		
9 33.7 + 11 33		15.0		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
9	34.1	+ 11 58		15.5		
9	34.3	+ 14 07		15.7		
9	34.6	+ 14 01		15.6		
9	34.8	+ 14 26		15.7		
9	34.9	+ 12 51		15.1		
9	35.4	+ 09 45	2939	13.5		
9	35.4	+ 09 50	2940	14.8		
9	35.6	+ 09 40	548*	15.3		
9	35.8	+ 13 46		15.5		
9	35.9	+ 10 34		15.7		
9	36.2	+ 09 58		15.2		
9	36.8	+ 11 44		15.0		
9	37.2	+ 11 15		15.6		
9	37.6	+ 12 48		15.6		
9	37.8	+ 11 43		14.7		double nebula
9	37.8	+ 13 46		15.2		
9	38.0	+ 12 07	2958	13.9		
9	38.0	+ 13 33		15.1		
9	38.2	+ 11 47		14.9		double nebula
9	38.4	+ 10 32		15.7		
9	38.4	+ 11 44		15.6		
9	38.6	+ 10 52	552*	14.5		
9	38.6	+ 11 26		15.6		
9	38.8	+ 11 38		15.1		
9	38.8	+ 13 35		15.6		
9	38.9	+ 10 52		15.4		
9	38.9	+ 11 41		15.5		
9	39.1	+ 11 42		15.0		
9	39.1	+ 13 43		15.3		
9	39.2	+ 11 52		15.2		
9	39.2	+ 12 31	555*	14.4		
9	40.2	+ 09 43		13.7		multiple system, tidal effects
9	40.2	+ 12 36		14.6		
9	40.3	+ 14 22		15.4		double system
9	40.7	+ 10 19		15.7		quadruple nebula
9	40.8	+ 09 39		15.4		
9	41.0	+ 11 18	556*	14.3		
9	41.2	+ 09 53		14.8		
9	41.4	+ 11 13	557*	14.7		
9	41.7	+ 11 27		15.0		
9	42.0	+ 09 51	559*	15.0		
9	42.6	+ 09 20		13.8		
9	42.7	+ 09 59		14.9		
9	42.8	+ 09 50		15.5		
9	43.7	+ 09 23		15.1		
9	43.9	+ 13 54		15.2		
9	44.0	+ 13 46		14.9		
9	44.0	+ 14 00		14.5		
9	44.1	+ 09 29		15.3		
9	44.2	+ 09 58		14.6		
9	44.4	+ 12 47		15.4		double system
9	44.6	+ 12 23		15.7		
9	44.7	+ 08 48		14.9		
9	45.1	+ 09 22		15.4		double system
9	45.2	+ 09 03		14.7		
9	46.0	+ 09 14		15.0		
9	46.3	+ 14 07		15.7		diffuse spiral
9	47.0	+ 09 14		14.7		
9	47.0	+ 12 54		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 47.0 + 13 53		15.7		
9 47.1 + 12 56	3016	13.7		
9 47.2 + 09 19		14.9		
9 47.2 + 10 40		15.2		
9 47.3 + 09 23		14.6		double system
9 47.4 + 12 58	3019	15.0		
9 47.4 + 13 03	3020	13.2		
9 47.6 + 13 36		15.1		
9 47.8 + 13 00	3024	13.7		
9 48.5 + 09 14		14.4		
9 48.8 + 11 09	569*	15.1		
9 48.9 + 14 16		15.5		
9 49.0 + 12 40		15.0		
9 49.2 + 13 11		14.8		
9 49.4 + 12 52		15.3		
9 49.8 + 11 27		15.7		
9 49.9 + 10 07		14.9		
9 50.0 + 14 26		15.3		
9 50.6 + 11 29		15.0		
9 50.9 + 12 21		15.5		
9 51.0 + 09 47		15.4		
9 51.0 + 11 26		15.5		
9 51.1 + 09 25		15.6		
9 51.2 + 09 07		15.7		
9 51.2 + 13 52		15.0		
9 51.4 + 10 51		15.0		
9 52.1 + 13 37		15.3		
9 52.2 + 09 30	3049	13.5		
9 52.4 + 11 16	576*	15.4		
9 52.8 + 08 37		15.3		
9 53.3 + 13 47		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2911	-	-	13.70	S0p	13.6	S0p	-	-
2914	-	-	14.17	Sa	14.2	Sa	-	-



FIELD No. 64

10^h05^m + 11°30'

Survey Plate No. 74

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13679	9 53 47.0	+ 9 10 15	5.93
13724	9 55 32.1	+ 12 41 03	5.18
13815	10 00 53.8	+ 10 08 30	7.14
13999	10 08 57.0	+ 13 36 10	6.41
14110	10 13 59.8	+ 13 58 42	5.74
14122	10 14 24.0	+ 10 21 50	8.6

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0954.4 + 1338	compact	56	0.7	ED	8
0957.0 + 1359	open	90	1.7	VD	6
0957.5 + 1246	open	113	2.9	MD	11
0957.9 + 1111	open	290	9.0	Near	21
0958.0 + 1340	medium compact	225	2.6	D	7
0959.2 + 1327	compact	108	1.5	VD	10
0959.4 + 0844	medium compact	117	1.5	D	31
1000.9 + 0922	compact	59	0.8	ED	29
1001.0 + 0828	compact	40	0.5	ED	30
1001.0 + 1225	open	241	2.6	VD	17
1002.8 + 1105	medium compact	220	2.2	VD	24
1003.4 + 1209	medium compact	75	1.4	VD	18
1003.6 + 1443	open	306	8.4	Near	4
1004.0 + 1145	compact	341	3.2	D	20
1004.1 + 0914	open	142	2.2	VD	28
1006.1 + 1201	compact	108	1.0	VD	19
1006.3 + 1415	compact	185	1.9	VD	5
1009.0 + 0855	medium compact	119	2.9	MD	27
1010.9 + 1335	open	141	1.8	VD	9
1012.1 + 0849	compact	52	0.7	VD	26
1012.1 + 1056	medium compact	143	1.3	VD	23
1013.7 + 1422	open	169	2.5	VD	3
1014.3 + 0902	medium compact	164	3.5	MD	25
1014.3 + 1244	open	77	1.8	D	13
1014.8 + 1259	open	75	1.2	VD	12
1015.3 + 1246	medium compact	46	0.7	VD	15
1015.4 + 1254	compact	48	0.4	ED	14
1015.6 + 1121	open	107	1.6	D	22
1016.0 + 1220	compact	275	3.0	VD	16
1016.8 + 1255	open	84	1.1	VD	2
1017.0 + 1414	compact	260	2.7	D	1

Average number of galaxies per cluster = 144.4

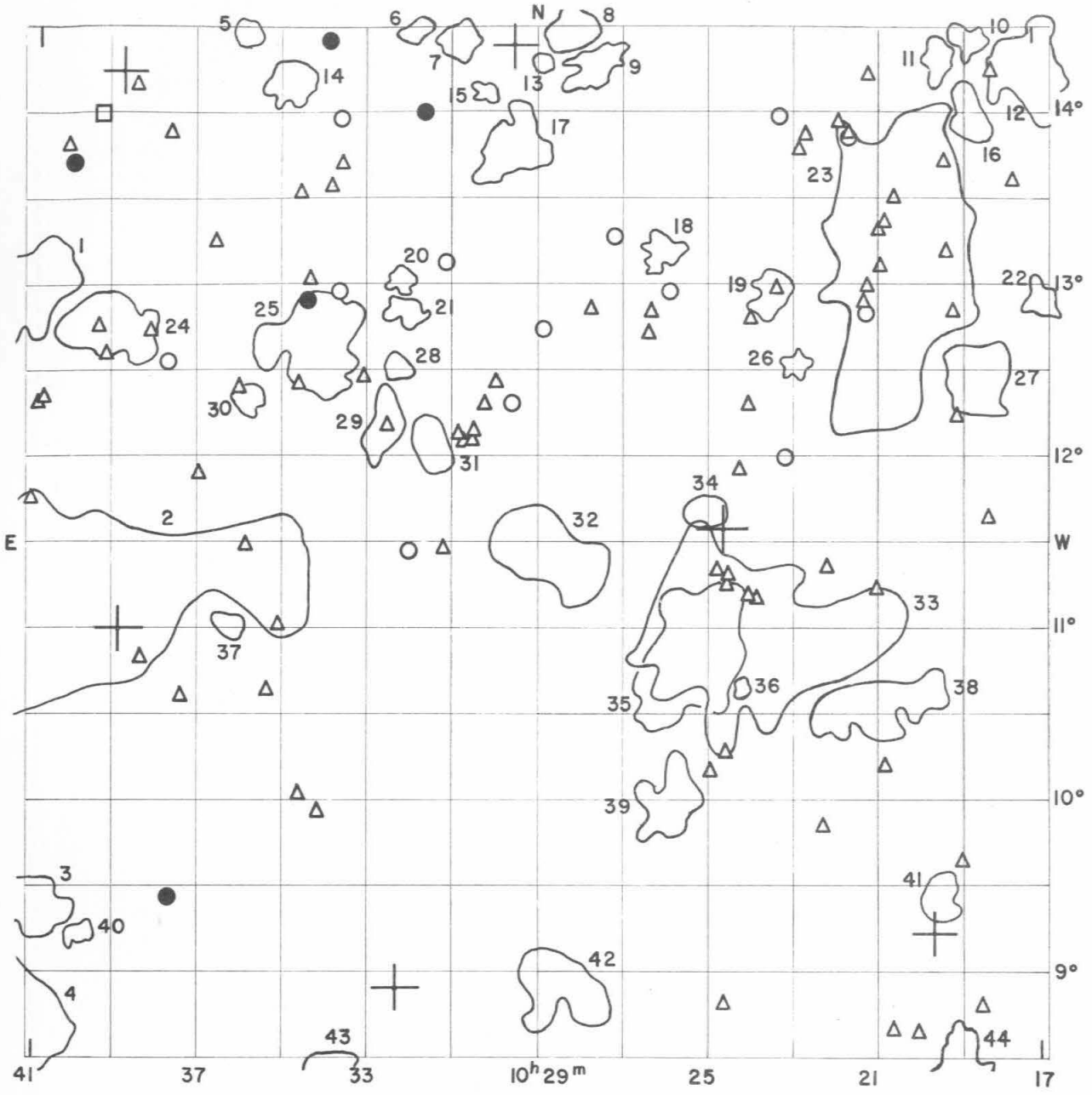
GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 53.3 + 13 47		15.3		
9 53.4 + 10 44	577*	14.4		
9 53.4 + 13 39		15.4		
9 53.6 + 10 43	578*	14.7		
9 53.7 + 10 04		15.3		
9 53.9 + 10 20		15.0		
9 53.9 + 11 24		15.0		
9 54.2 + 14 14		15.7		
9 55.1 + 10 16		15.1		
9 55.3 + 10 41	580*	15.0		
9 55.4 + 10 36	3070	13.2		
9 55.5 + 10 14		15.7		
9 55.9 + 13 29		14.7		
9 56.1 + 11 38		14.9		
9 56.4 + 10 36	584*	14.7		
9 56.5 + 13 18		15.0		double nebula
9 56.6 + 13 13		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
9 56.8 + 11 26		15.1		
9 57.0 + 10 12		15.2		
9 57.0 + 10 34		15.2		
9 57.0 + 11 54		14.6		
9 57.0 + 13 13	585*	14.8		
9 57.0 + 14 18		15.7		
9 57.1 + 11 44		15.7		
9 57.3 + 13 17	3080	14.5		
9 57.4 + 13 47		15.1		
9 57.7 + 11 35		15.1		
9 57.8 + 13 07		15.1		
9 58.0 + 12 11		15.7		
9 58.3 + 11 25		15.0		
9 58.4 + 11 42		14.9		very compact
9 58.8 + 14 15		15.3		
9 58.9 + 13 00		14.6		
9 59.0 + 11 00		14.6		
9 59.1 + 14 01		15.7		
9 59.5 + 11 44		15.5		
9 59.6 + 11 56		15.7		
9 59.6 + 13 56		14.3		
9 59.7 + 13 50		15.5		
9 59.8 + 14 11		15.5		
10 00.1 + 13 24		15.4		
10 00.2 + 11 58		15.7		
10 00.2 + 12 24		15.7		
10 00.4 + 10 59		15.0		
10 00.6 + 12 22		15.6		
10 00.8 + 12 20		15.5		
10 01.3 + 14 27		15.2		double system
10 01.7 + 13 52		13.6		
10 01.9 + 10 39		15.6		double system
10 02.2 + 12 09		15.2		
10 02.3 + 10 32		15.7		
10 02.6 + 14 14		15.7		
10 02.8 + 11 58		15.3		
10 03.1 + 10 31		15.5		
10 03.2 + 13 12		15.3		
10 03.2 + 13 23		15.6		
10 03.6 + 13 58		15.6		
10 03.6 + 14 13		15.1		
10 03.6 + 14 19		15.5		
10 03.8 + 13 07		15.2		
10 03.9 + 13 59		15.7		
10 04.1 + 11 55		15.7		
10 04.2 + 14 19		15.7		
10 04.3 + 14 13		15.6		
10 04.4 + 14 10		15.7		
10 04.5 + 12 54		15.3		
10 04.6 + 09 06		15.7		
10 04.7 + 10 36		13.5		
10 04.8 + 12 31	591*	14.0		
10 05.2 + 13 38		15.3		
10 05.3 + 13 28		15.6		
10 05.6 + 10 13	3130	14.3		
10 05.8 + 12 33		11.3		Regulus-system
10 05.9 + 12 47		15.4		
10 06.1 + 09 42		14.9		
10 06.1 + 12 56		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 06.2 + 13 28		15.6		
10 06.3 + 11 53		15.7		
10 06.7 + 11 01		15.5		
10 06.7 + 12 51		15.7		
10 07.0 + 11 15	595*	15.1		
10 07.0 + 14 28		15.5		
10 07.3 + 12 10		15.2		
10 07.9 + 10 17	596*	15.0		
10 08.4 + 10 06		15.1		
10 08.5 + 10 00		15.4		
10 09.0 + 08 51		15.5		
10 09.8 + 12 37		14.8		
10 09.9 + 11 42		15.4		
10 10.2 + 12 55	3153	13.6		
10 10.5 + 12 54		15.5		
10 11.5 + 10 23		15.3		
10 11.9 + 12 07		14.9		
10 12.1 + 12 51		15.4		
10 12.2 + 13 35		15.5		
10 12.6 + 11 04		15.6		
10 12.8 + 14 17		15.4		
10 13.9 + 12 54		15.1		
10 14.0 + 12 50		15.1		
10 14.4 + 08 55		15.5		
10 14.6 + 13 26		15.2		
10 15.2 + 09 23		15.7		
10 15.7 + 13 32		15.3		
10 16.0 + 11 02		15.7		triple system
10 16.0 + 13 29		15.5		
10 16.3 + 13 24		15.2		

Regulus system: m_p = 11.27 Ep (Holmberg)



FIELD No. 65

10^h29^m + 11°30'

Survey Plate No. 238

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14240	10 19 36.1	+ 9 13 02	6.96
14349	10 24 33.2	+ 11 34 16	6.60
14468	10 29 31.7	+ 14 23 40	5.74
14541	10 32 24.8	+ 8 54 33	5.70
14698	10 38 57.7	+ 14 14 24	7.9
14700	10 39 03.4	+ 11 00 05	7.6

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1016.8 + 1255	open	84	1.1	VD	22
1017.0 + 1414	compact	260	2.7	D	12
1018.3 + 1227	medium compact	136	2.1	D	27
1018.5 + 1359	medium compact	99	1.6	VD	16
1018.5 + 1425	compact	80	1.0	VD	10
1018.9 + 0828	open	112	1.9	D	44
1019.2 + 1418	compact	116	1.2	VD	11
1019.4 + 0925	medium compact	102	1.3	D	41
1020.1 + 1306	open	229	6.0	Near	23
1020.8 + 1031	open	139	3.0	D	38
1022.7 + 1232	compact	78	1.0	VD	26
1023.3 + 1257	compact	110	1.4	VD	19
1023.8 + 1056	medium compact	232	6.0	Near	33
1024.0 + 1038	compact	39	0.6	ED	36
1025.0 + 1141	medium compact	59	1.1	VD	34
1025.2 + 1050	medium compact	392	3.9	D	35
1025.8 + 0959	open	126	2.3	D	39
1025.9 + 1313	medium compact	77	1.1	VD	18
1027.5 + 1416	medium compact	127	1.5	VD	9
1028.1 + 1429	compact	147	1.5	VD	8
1028.4 + 0855	open	128	2.4	D	42
1028.7 + 1125	open	130	3.2	MD	32
1028.8 + 1419	compact	62	0.8	ED	13
1029.5 + 1349	open	113	2.1	D	17
1030.2 + 1408	compact	55	0.5	ED	15
1030.8 + 1426	open	85	1.4	VD	7
1031.5 + 1202	medium compact	104	1.6	VD	31
1031.8 + 1430	medium compact	60	1.0	VD	6
1032.0 + 1250	medium compact	60	1.1	VD	21
1032.1 + 1301	compact	56	0.8	ED	20
1032.3 + 1231	compact	52	0.9	ED	28
1032.7 + 1210	compact	150	1.7	ED	29
1033.9 + 0824	open	76	1.4	VD	43
1034.2 + 1240	medium compact	230	2.6	D	25
1034.9 + 1412	medium compact	122	1.6	VD	14
1035.9 + 1220	medium compact	52	0.9	VD	30
1035.9 + 1429	medium compact	76	1.0	ED	5
1036.4 + 1101	compact	67	0.8	VD	37
1039.1 + 1245	medium compact	96	2.5	MD	24
1039.3 + 1109	open	244	7.9	Near	2
1039.9 + 0913	medium compact	70	0.6	ED	40
1041.1 + 0924	compact	190	2.4	VD	3
1041.4 + 0843	medium compact	277	3.7	D	4
1041.4 + 1257	open	212	3.4	D	1

Average number of galaxies per cluster = 125.3

GALAXIES

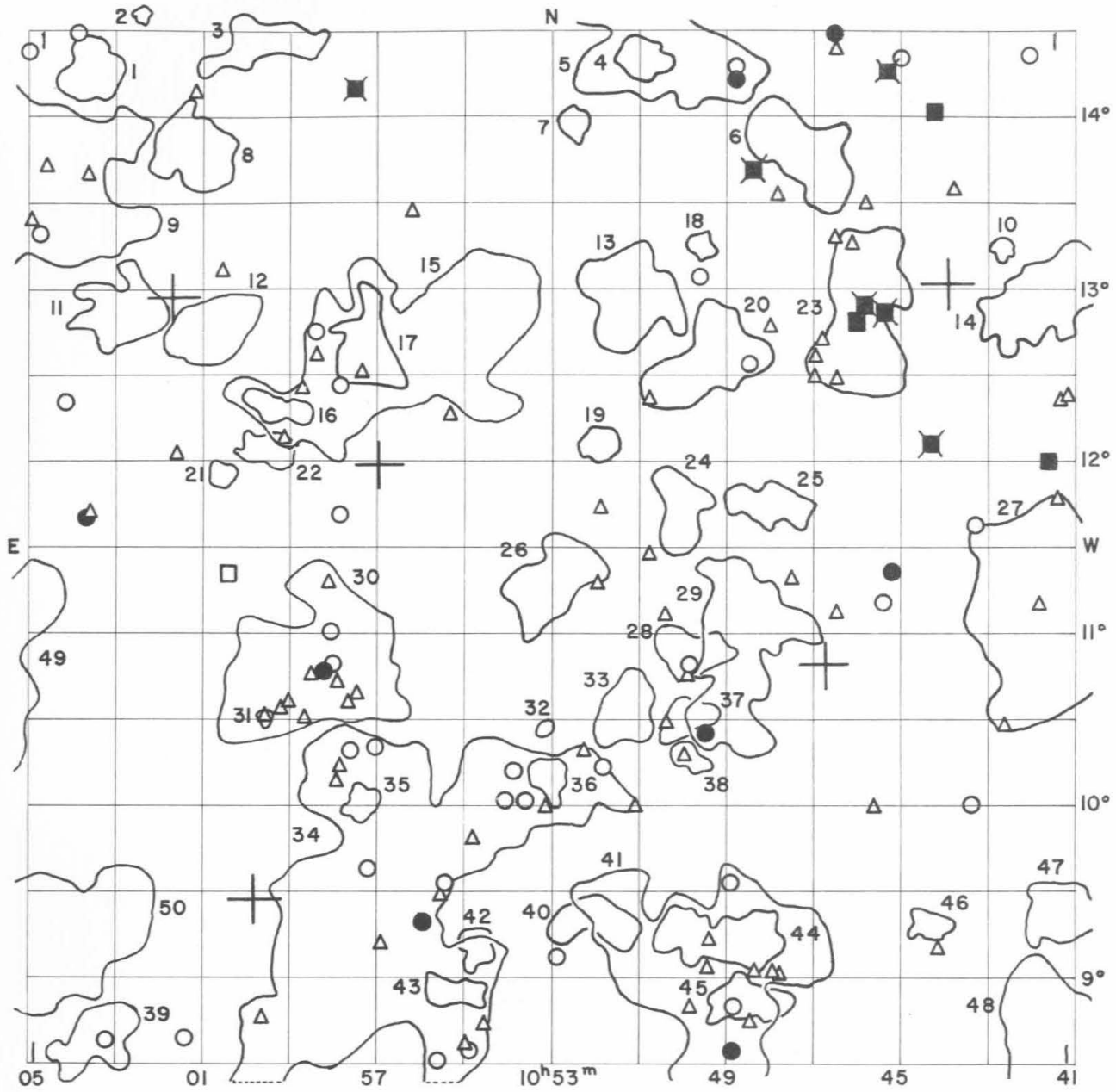
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 17.5 + 13 35		15.7		
10 18.0 + 14 14		15.6		
10 18.2 + 11 38		15.7		
10 18.4 + 08 48		15.6		
10 18.8 + 09 38		15.7		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	'				
10	18.9	+ 12	12		15.5		
10	19.0	+ 12	49		15.3		
10	19.1	+ 13	42		15.6		
10	19.2	+ 13	12		15.4		
10	19.9	+ 08	38		15.6		
10	20.4	+ 13	30		15.6		
10	20.6	+ 08	40		15.7		
10	20.6	+ 13	21		15.5		
10	20.7	+ 10	12		15.7		
10	20.7	+ 13	05		15.3		
10	20.7	+ 13	20		15.7		
10	20.8	+ 11	13	606*	15.2		
10	20.9	+ 14	13		15.2		
10	21.0	+ 12	58		15.4		
10	21.1	+ 12	49	3230	14.9		
10	21.1	+ 12	53		15.2		
10	21.5	+ 13	49		14.8		
10	21.5	+ 13	51		15.2		
10	21.7	+ 13	55		15.1		
10	22.0	+ 11	21		15.6		
10	22.2	+ 09	52		15.4		
10	22.5	+ 13	52		15.3		very compact
10	22.7	+ 13	47		15.5		
10	23.0	+ 11	59		14.8		
10	23.1	+ 13	58		14.6		multiple system
10	23.2	+ 12	58		15.3		
10	23.7	+ 11	10		15.6		
10	23.8	+ 12	48		15.6		
10	23.9	+ 11	12		15.6		
10	23.9	+ 12	18		15.4		
10	24.2	+ 11	55		15.6		
10	24.5	+ 10	17		15.7		
10	24.5	+ 11	16	613*	15.1		
10	24.5	+ 11	18	612*	15.3		
10	24.6	+ 08	48		15.6		
10	24.7	+ 11	20	615*	15.1		
10	24.9	+ 10	09		15.4		
10	25.8	+ 12	57	3253	14.4		
10	26.3	+ 12	42		15.3		
10	26.3	+ 12	50		15.7		
10	27.1	+ 13	16		14.9		
10	27.7	+ 12	52		15.7		
10	28.9	+ 12	45		14.9		
10	29.6	+ 12	19		15.0		
10	30.0	+ 12	26		15.3		
10	30.3	+ 12	18		15.3		
10	30.5	+ 12	09		15.6		
10	30.6	+ 12	06		15.6		
10	30.8	+ 12	05		15.7		
10	30.9	+ 12	08	620*	15.2		double nebula
10	31.2	+ 13	08		14.8		
10	31.3	+ 11	28		15.2		
10	31.7	+ 14	00		13.9		
10	32.0	+ 11	27	622*	14.1		
10	32.6	+ 12	11		15.5		
10	33.2	+ 12	27		15.7		
10	33.7	+ 13	42		15.2		
10	33.7	+ 13	58		14.2		
10	33.8	+ 12	57	3299	14.1		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 33.9 + 13 35		15.4		double system
10 34.0 + 14 26	3300	13.4		m_H = 13.1
10 34.3 + 09 55		15.7		
10 34.5 + 12 54	3306	13.7		
10 34.5 + 13 02		15.2		
10 34.7 + 13 32		15.3		
10 34.8 + 10 01		15.7		
10 34.8 + 12 24		15.5		
10 35.2 + 11 01		15.1		
10 35.5 + 10 38		15.1		
10 36.0 + 11 28		15.5		
10 36.2 + 12 23		15.4		triple system
10 36.8 + 13 15		15.3		double nebula, tidal effect
10 37.1 + 11 55		15.2		
10 37.6 + 10 35		15.4		
10 37.8 + 09 27	3332	13.7		
10 37.8 + 12 33		14.6		
10 37.8 + 13 53		15.2		
10 38.3 + 12 44		15.6		
10 38.5 + 10 50		15.6		
10 38.6 + 14 10		15.5		
10 39.4 + 12 35		15.7		
10 39.5 + 14 00	3338	12.1	+ 1330	m_H = 12.2 S
10 39.6 + 12 45		15.6		
10 40.2 + 13 43		13.8		
10 40.3 + 13 46		15.7		
10 40.9 + 12 22		15.2		
10 41.0 + 12 21		15.4		
10 41.1 + 11 46		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3338	-	-	13.68	Sbc	12.3	Sc	11.25	Sc-



FIELD No. 66

10^h53^m + 11°30'

Survey Plate No. 976

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14811	10 43 40.7	+ 13 00 43	6.80
14889	10 46 37.8	+ 10 48 37	5.27
15102	10 57 04.4	+ 11 58 25	6.36
15169	10 59 56.4	+ 9 26 32	7.08
15224	11 01 55.8	+ 12 56 13	6.70

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1039.3 + 1109	open	244	7.9	Near	27
1041.1 + 0924	compact	190	2.4	VD	47
1041.4 + 0843	medium compact	277	3.7	D	48
1041.4 + 1257	open	212	3.4	D	14
1042.4 + 1315	compact	53	0.7	ED	10
1044.2 + 0919	compact	108	1.1	VD	46
1045.8 + 1251	open	120	4.0	MD	23
1047.0 + 1349	medium compact	215	3.3	VD	6
1047.9 + 1146	open	75	2.2	D	25
1048.5 + 0852	medium compact	127	1.9	VD	45
1048.5 + 1056	open	173	4.3	D	29
1049.1 + 0914	medium compact	284	3.0	VD	44
1049.2 + 0902	open	172	5.5	Near	41
1049.3 + 1234	open	206	2.8	MD	20
1049.5 + 1316	compact	53	0.7	ED	18
1049.8 + 1017	compact	66	0.9	ED	38
1049.8 + 1054	compact	133	1.9	VD	28
1050.0 + 1030	compact	97	1.5	VD	37
1050.0 + 1143	medium compact	176	2.2	VD	24
1050.6 + 1431	open	150	4.8	D	5
1050.9 + 1421	medium compact	85	1.4	VD	4
1051.1 + 1258	open	151	2.8	D	13
1051.3 + 1034	medium compact	253	2.0	VD	33
1051.9 + 1207	compact	122	1.1	VD	19
1052.0 + 0921	medium compact	125	1.9	VD	40
1052.5 + 1359	medium compact	56	1.0	ED	7
1053.0 + 1118	medium compact	186	2.6	MD	26
1053.1 + 1010	medium compact	74	1.3	VD	36
1053.2 + 1027	compact	40	0.4	ED	32
1054.8 + 0911	compact	57	1.2	VD	42
1055.2 + 0855	medium compact	94	1.4	VD	43
1056.5 + 1240	open	150	6.7	Near	15
1056.9 + 0922	medium compact	479	10.0	Near	34
1057.3 + 1240	open	103	2.4	D	17
1057.5 + 1001	medium compact	74	1.0	VD	35
1058.6 + 1049	medium compact	334	5.0	Near	30
1059.6 + 1219	medium compact	78	1.3	VD	16
1059.7 + 1030	compact	40	0.5	ED	31
1059.7 + 1204	medium compact	66	1.4	VD	22
1059.8 + 1428	open	97	2.7	D	3
1100.8 + 1156	compact	46	0.7	ED	21
1101.0 + 1245	compact	245	2.3	D	12
1101.4 + 1350	compact	151	2.2	D	8
1102.8 + 1436	compact	42	0.6	ED	2
1103.2 + 1253	compact	189	2.5	D	11
1103.6 + 0838	compact	152	2.4	VD	39
1104.0 + 1417	medium compact	90	1.8	D	1
1104.8 + 0914	open	393	5.9	D	50
1105.2 + 1342	open	165	6.4	Near	9
1107.6 + 1041	open	333	8.0	Near	49

Average number of galaxies per cluster = 152.0

GALAXIES

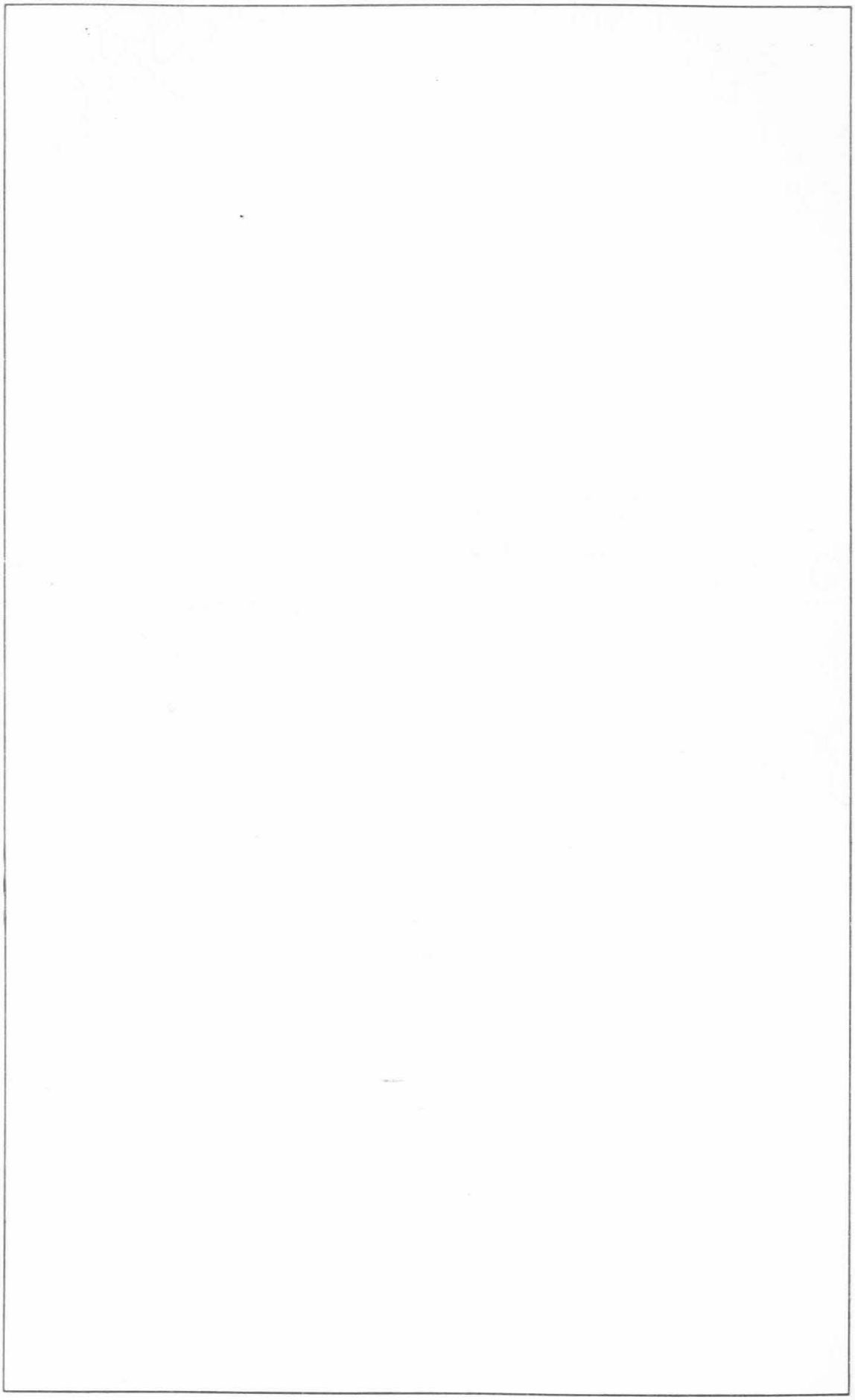
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
10 40.9 + 12 22		15.2		
10 41.0 + 12 21		15.4		
10 41.1 + 11 46		15.6		
10 41.4 + 11 58	3351	11.2	+ 688	
10 41.6 + 11 10		15.7		
10 41.7 + 14 21	3357	14.3		
10 42.4 + 10 27		15.5		
10 43.1 + 11 37		14.9		
10 43.2 + 10 00		15.0		
10 43.5 + 13 34		15.3		
10 43.9 + 14 02	3367	12.0	+ 2879	m_H = 12.3 S
10 44.0 + 09 10		15.6		
10 44.1 + 12 05	3368	10.0	+ 927	m_H = 10.4 Sa
10 44.7 + 14 20		15.0		very diffuse
10 45.0 + 11 22		14.0		
10 45.1 + 14 15	3377	10.7	+ 718	m_H = 11.6 E
10 45.2 + 11 11		14.7		
10 45.2 + 12 51	3379	9.6	+ 862	m_H = 10.8 S
10 45.5 + 09 59		15.3		
10 45.6 + 13 30		15.6		
10 45.7 + 12 54	3384	10.0	+ 781	m_H = 11.3 SBa
10 45.8 + 12 48	3389	12.0	+ 1334	m_H = 12.6 Sc
10 45.9 + 13 15		15.2		
10 46.3 + 11 06		15.7		
10 46.3 + 12 28		15.4		double nebula
10 46.3 + 14 24		15.5		
10 46.3 + 14 29	3391	13.5		
10 46.4 + 13 17		15.1		
10 46.6 + 12 41		15.6		
10 46.8 + 12 29	643*	15.3		
10 46.8 + 12 36		15.5		
10 47.4 + 11 18		15.7		
10 47.7 + 13 32		15.7		diffuse
10 47.8 + 09 01		15.4		
10 47.9 + 09 02		15.5		
10 47.9 + 12 46		15.1		
10 48.3 + 09 02		15.5		
10 48.3 + 13 41	3412	10.8	+ 861	m_H = 11.6 SBa
10 48.4 + 08 45	3417	15.3		
10 48.4 + 12 33	648*	14.9		
10 48.7 + 14 14	3419	13.4	+ 2982	
10 48.7 + 14 18		14.9		
10 48.8 + 08 34	3427	14.0		
10 48.8 + 08 50	3425	14.5		
10 48.8 + 09 33	3428	14.1		
10 49.4 + 09 03		15.5		triple system
10 49.4 + 09 13		15.2		
10 49.4 + 10 25	3433	13.6		m_H = 12.9 S
10 49.5 + 13 04		15.0		
10 49.8 + 08 50	3439	15.2		
10 49.8 + 10 46		15.5		
10 49.8 + 10 50	3438	14.3		
10 49.9 + 10 17		15.6		
10 50.3 + 11 06		15.7		
10 50.4 + 10 29	3444	15.4		
10 50.7 + 11 27		15.7		

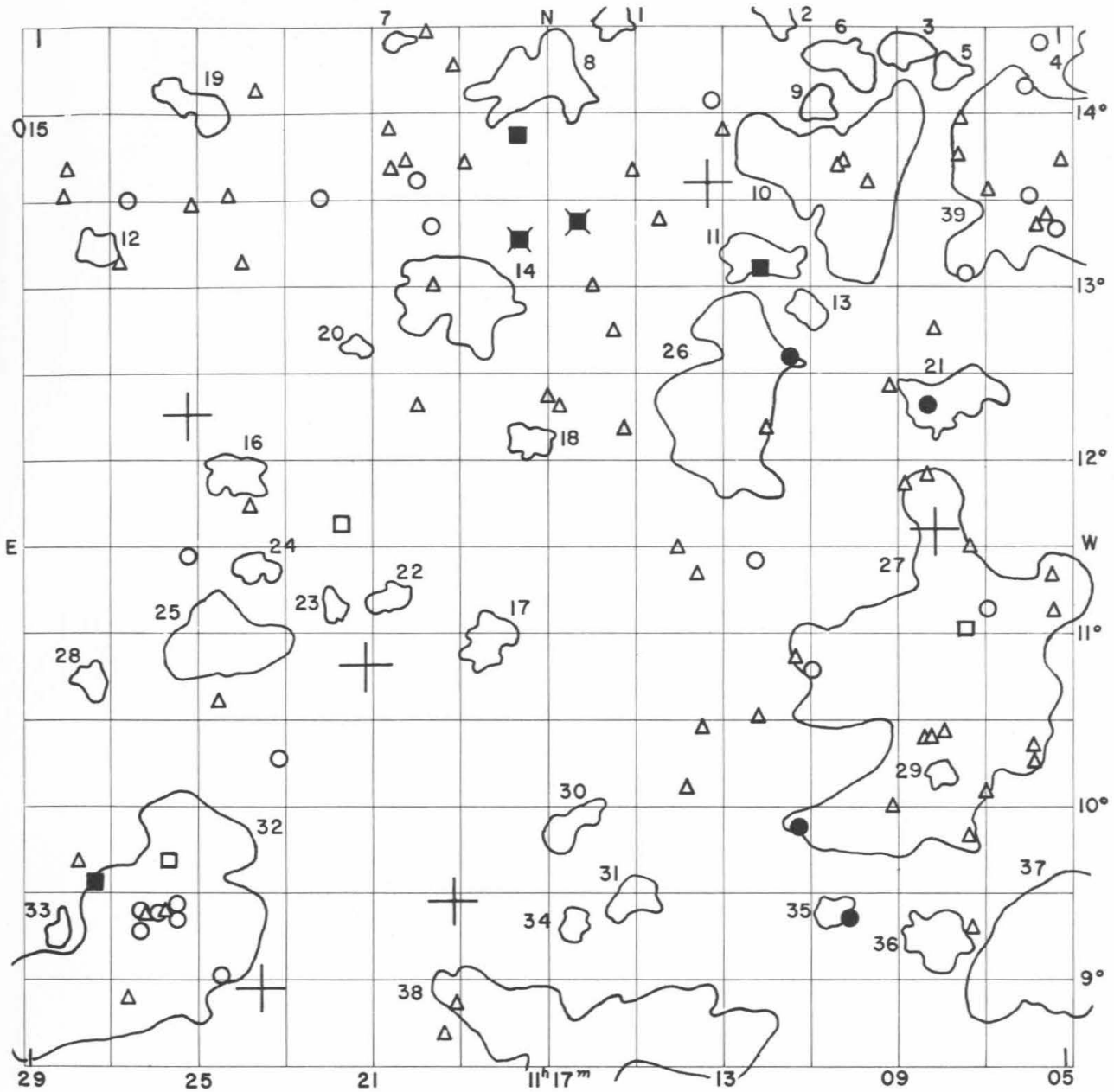
Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
10 50.7	+ 12 21		15.4		
10 51.1	+ 10 00		15.2		
10 51.9	+ 10 13		14.9		
10 51.9	+ 11 43		15.6		
10 52.0	+ 11 17		15.7		
10 52.3	+ 10 19		15.1		
10 52.9	+ 09 07		15.0		
10 53.2	+ 10 00		15.7		
10 53.6	+ 10 01	3466	14.6		
10 53.9	+ 10 12		14.7		
10 54.1	+ 10 02	3467	14.2		
10 54.6	+ 08 43		15.1		
10 54.8	+ 09 49		15.5		
10 54.9	+ 08 34		14.7		
10 55.0	+ 08 37		15.2		
10 55.4	+ 12 16		15.6		
10 55.5	+ 09 33	3476	15.0		
10 55.6	+ 09 29	3477	15.7		
10 55.7	+ 08 31	658*	14.6		
10 56.0	+ 09 19		13.7		
10 56.3	+ 13 26		15.6		
10 56.9	+ 09 12		15.5		
10 57.1	+ 10 20		14.9		
10 57.3	+ 09 38		15.0		
10 57.5	+ 10 39		15.5		
10 57.5	+ 12 30		15.1		
10 57.7	+ 10 19		14.8		double nebula
10 57.7	+ 14 10	3489	10.9	+ 692	m_H = 11.3 Sb
10 57.8	+ 10 36		15.6		
10 57.9	+ 10 13		15.5		
10 58.0	+ 10 43	663*	15.6		
10 58.0	+ 11 41		15.0		
10 58.0	+ 12 26	3491	14.1		
10 58.1	+ 10 09		15.1		
10 58.1	+ 10 49	664*	14.8		
10 58.2	+ 11 00		14.8		
10 58.3	+ 10 46	3492	14.0		
10 58.3	+ 11 17		15.1		
10 58.5	+ 12 36		15.7		
10 58.6	+ 12 45		14.6		
10 58.7	+ 10 45	666*	15.3		
10 58.8	+ 10 30		15.6		
10 58.9	+ 12 24		15.6		double nebula
10 59.2	+ 10 36		15.7		
10 59.3	+ 10 34		15.5		
10 59.4	+ 12 07		15.5		
10 59.7	+ 10 30		15.5		
10 59.8	+ 08 45		15.2		
11 00.6	+ 11 21	3506	12.9		m_H = 13.2
11 00.8	+ 13 05		15.5		
11 01.4	+ 14 08		15.1		
11 01.5	+ 08 38		15.0		
11 01.8	+ 12 02		15.7		
11 03.4	+ 08 38		15.0		
11 03.8	+ 11 41		15.7		
11 03.9	+ 11 40	3524	13.4		
11 04.0	+ 13 40		15.5		double system
11 04.3	+ 14 28		14.9		
11 04.5	+ 12 20		14.6		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 04.9	+ 13 44		15.7		
11 05.1	+ 13 18		14.8		
11 05.3	+ 13 24		15.6		
11 05.4	+ 14 23		15.0		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3351	10.8	SBb	10.81	SBb	10.5	SBb	10.48	Sb+
3367	-	-	11.97	SBc	11.9	SBc	-	-
3368	-	-	10.18	Sa	9.9	Sa	10.05	Sa
3377	-	-	11.29	E6	11.3	E6	-	-
3379	10.4	E0	10.57	E0	10.5	E0	-	-
3384	10.9	SBa	11.02	SB0	10.9	SB0	-	-
3389	12.6	Sc	12.24	Sc	12.1	Sc	-	-
3412	11.4	SBa	11.58	SB0	11.5	SB0	-	-
3419	-	-	-	-	-	S0	-	-
3489	-	-	11.01	Sap	11.0	S0p	-	-





FIELD No. 67

11^h17^m + 11°30'

Survey Plate No. 66

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	-
15361	11 08 00.1	+ 11 34 24	7.46
15487	11 13 15.0	+ 13 34 50	5.48
15609	11 19 14.9	+ 9 26 35	6.67
15652	11 21 19.2	+ 10 48 17	4.03
15694	11 23 42.7	+ 8 56 06	6.82
15730	11 25 26.3	+ 12 14 55	6.66

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1104.0 + 1417	medium compact	90	1.8	D	4
1104.8 + 0914	open	393	5.9	D	37
1105.2 + 1342	open	165	6.4	Near	39
1107.5 + 1221	medium compact	203	2.4	VD	21
1107.5 + 1414	medium compact	75	1.2	VD	5
1107.6 + 1041	open	333	8.0	Near	27
1107.9 + 1009	medium compact	71	0.8	VD	29
1108.0 + 0914	medium compact	174	1.8	VD	36
1108.7 + 1421	medium compact	107	1.5	VD	3
1109.9 + 1418	medium compact	130	1.8	D	6
1110.0 + 1337	compact	642	3.7	D	10
1110.5 + 0923	compact	104	1.0	VD	35
1110.6 + 1402	medium compact	69	1.2	VD	9
1110.9 + 1251	medium compact	65	1.0	VD	13
1111.6 + 1434	medium compact	51	1.3	D	2
1112.0 + 1310	medium compact	150	2.0	D	11
1112.8 + 1218	open	115	4.0	MD	26
1115.0 + 0927	compact	123	1.4	VD	31
1115.5 + 1431	medium compact	58	1.1	VD	1
1115.6 + 0840	open	309	6.7	D	38
1116.5 + 0919	compact	106	1.0	ED	34
1116.6 + 0953	open	75	1.3	VD	30
1117.2 + 1414	open	102	2.8	D	8
1117.5 + 1205	open	73	1.0	VD	18
1118.5 + 1056	medium compact	94	1.7	VD	17
1119.1 + 1255	open	127	3.5	D	14
1120.5 + 1425	compact	55	0.6	ED	7
1120.7 + 1110	medium compact	68	0.8	VD	22
1121.5 + 1238	medium compact	55	0.7	ED	20
1122.0 + 1108	medium compact	59	1.0	VD	23
1123.9 + 1120	open	79	1.1	VD	24
1124.4 + 1155	medium compact	107	1.5	D	16
1124.6 + 1055	medium compact	298	3.0	D	25
1125.3 + 1403	open	104	1.5	VD	19
1126.3 + 0913	open	213	6.5	Near	32
1127.6 + 1314	compact	118	1.2	VD	12
1127.7 + 1042	medium compact	74	0.8	VD	28
1128.4 + 0917	medium compact	54	0.7	VD	33
1129.4 + 1356	compact	57	0.4	ED	15

Average number of galaxies per cluster = 137.1

GALAXIES

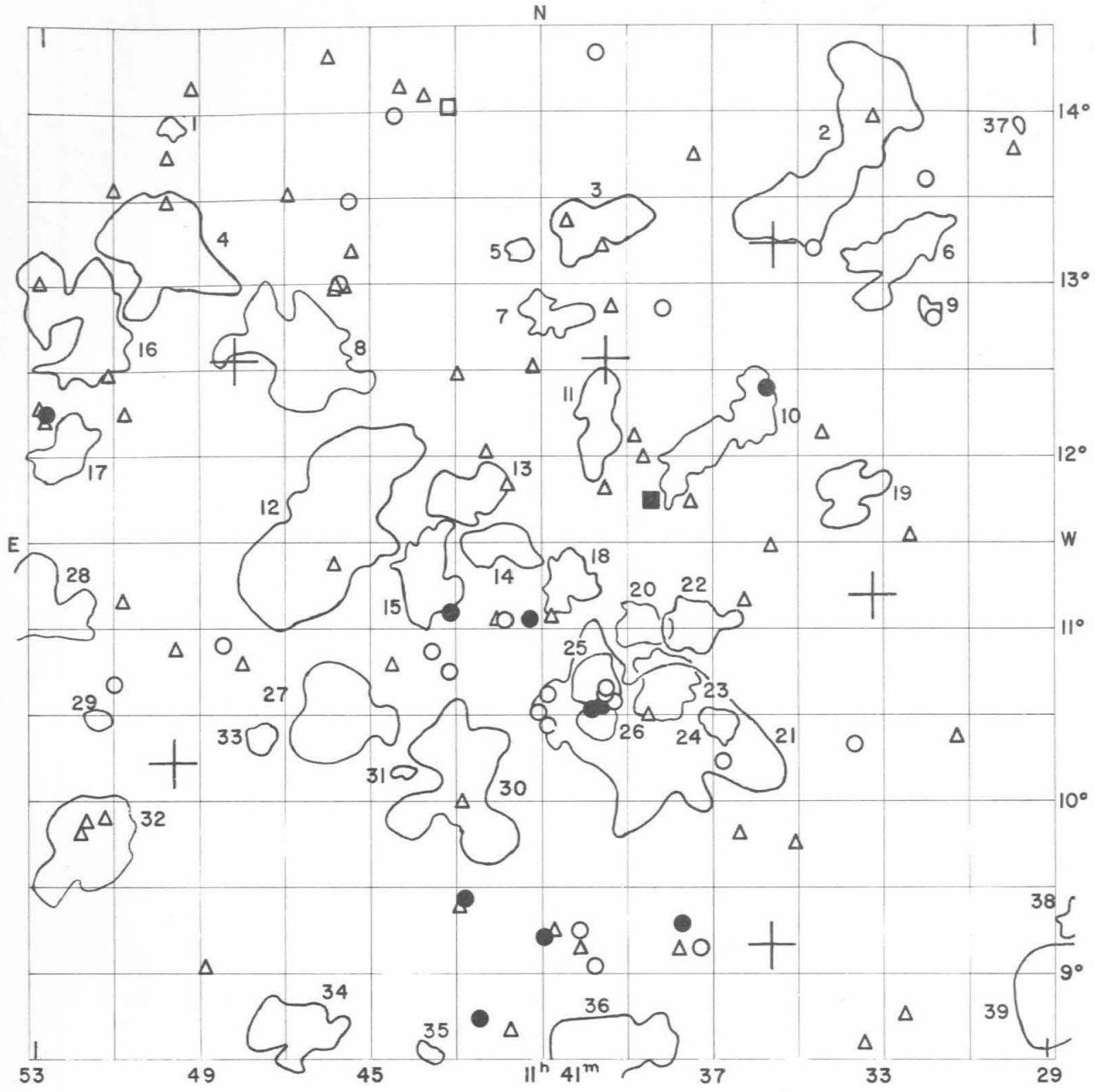
Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 04.9	+ 13 44		15.7		
11 05.1	+ 13 18		14.8		
11 05.2	+ 11 07		15.6		
11 05.3	+ 11 18		15.6		
11 05.3	+ 13 24		15.6		
11 05.4	+ 14 23		15.0		
11 05.5	+ 13 19		15.2		
11 05.7	+ 10 15		15.7		
11 05.7	+ 10 19		15.1		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
11	05.7	+ 13 30		15.0		
11	05.7	+ 14 08		14.7		
11	06.7	+ 13 33		15.4		
11	06.8	+ 10 03		15.7		
11	06.8	+ 11 07		15.0		
11	07.2	+ 09 17		15.5		
11	07.2	+ 11 29		15.7		
11	07.2	+ 13 02		14.2		double system
11	07.3	+ 09 47		15.1		
11	07.3	+ 11 00	3547	12.8		m_H = 12.9 S
11	07.3	+ 13 44		15.6		
11	07.3	+ 13 58		15.6		
11	07.8	+ 10 24		15.4		
11	08.0	+ 12 44		15.4		
11	08.1	+ 10 23		15.6		
11	08.1	+ 12 17	3559	13.7		
11	08.2	+ 10 22		15.6		
11	08.2	+ 11 53		15.4		
11	08.7	+ 11 51		15.3		
11	09.0	+ 09 59		15.7		
11	09.0	+ 12 24	2628*	15.1		
11	09.5	+ 13 35		15.5		
11	10.1	+ 09 20	676*	13.4		
11	10.1	+ 13 42		15.5		
11	10.2	+ 13 41		15.6		
11	10.9	+ 10 46	2634*	15.0		
11	11.2	+ 09 52	2637*	13.9		
11	11.3	+ 10 50	2638*	15.1		
11	11.3	+ 12 35	677*	13.6		
11	11.9	+ 12 10	2645*	15.7		
11	12.0	+ 13 05	3593	11.8	+ 547	m_H = 12.4 Sb
11	12.1	+ 10 30	2648*	15.7		
11	12.2	+ 11 24	2649*	15.0		
11	12.9	+ 13 53	2661*	15.4		
11	13.1	+ 14 03	2666*	14.6		
11	13.5	+ 10 26	2672*	15.3		
11	13.6	+ 11 19	2674*	15.3		
11	13.8	+ 10 05	2680*	15.6		
11	14.0	+ 11 28	2681*	15.2		
11	14.4	+ 13 22	2684*	15.4		
11	15.0	+ 13 39	2694*	15.3		
11	15.2	+ 12 10	2698*	15.6		
11	15.5	+ 12 44	2704*	15.5		
11	16.0	+ 12 59	2708*	15.1		
11	16.3	+ 13 22	3623	9.6	+ 705	m_H = 10.5 Sb
11	16.8	+ 12 18	2718*	15.6		
11	17.0	+ 12 22	2720*	15.6		
11	17.6	+ 13 16	3627	8.9	+ 744	m_H = 9.9 Sb
11	17.7	+ 13 52	3628	11.5	+ 842	m_H = 11.3 Sb
11	18.9	+ 13 42	2745*	15.3		
11	19.1	+ 08 51	2749*	15.6		
11	19.2	+ 14 17		15.6		
11	19.4	+ 08 40	2757*	15.1		
11	19.7	+ 13 00	2762*	15.5		
11	19.7	+ 13 21	2763*/2767*	14.9		double system
11	19.8	+ 14 29	2769*	15.6		
11	20.1	+ 12 18	2777*	15.4		
11	20.1	+ 13 36	2776*/2779*	14.9		double system
11	20.3	+ 13 43	2782*	15.2		

Position 1950 h	m	°	′	NGC IC*	m_p	V_s km/sec	Remarks
11	20.7	+ 13	40	2786*	15.2		double system
11	20.7	+ 13	55	2787*	15.5		
11	21.8	+ 11	37	3666	12.5		m_H = 12.6 Sc
11	22.3	+ 13	29	2804*	14.9		
11	23.3	+ 10	16	692*	14.1		
11	23.9	+ 14	08	2819*	15.7		
11	24.0	+ 11	43	2822*	15.2		
11	24.1	+ 13	07	2823*	15.5		
11	24.5	+ 13	31	2826*	15.1		
11	24.6	+ 09	00	2828*	14.7		
11	24.6	+ 10	35	2829*	15.4		
11	25.4	+ 11	26	2846*	14.8		
11	25.4	+ 13	28	2843*	15.4		
11	25.6	+ 09	20	2850*	14.8		
11	25.7	+ 09	25	2853*	14.6		
11	25.8	+ 09	41	3692	12.9		
11	25.9	+ 09	23	2857*	15.3		
11	26.0	+ 09	22	696*	14.5		
11	26.4	+ 09	21	2867*	15.6		double system
11	26.4	+ 09	23	698*	14.4		
11	26.5	+ 09	16	699*	14.6		
11	26.7	+ 08	53	2871*	15.2		
11	26.9	+ 13	29	2873*	14.9		double nebula
11	27.0	+ 13	08	2877*	15.7		
11	27.5	+ 09	31	3705	11.5		m_H = 12.2 S
11	27.9	+ 09	40	2887*	15.5		
11	28.3	+ 13	40	2893*	15.6		double nebula
11	28.4	+ 13	30	2894*	15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3593	-	-	11.84	S0p	11.6	S0p	-	-
3623	10.1	Sb	10.10	Sa	9.9	Sa	10.18	Sa
3627	9.5	Sb	9.67	Sb	9.5	Sb	9.65	Sb+
3628	9.9	Sb	-	-	-	Sb	10.23	Sb+



FIELD No. 68

11^h41^m + 11°30'

Survey Plate No. 468

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
15892	11 33 08.1	+ 11 11 17	6.45
15954	11 35 25.3	+ 13 14 06	7.62
15961	11 35 35.2	+ 9 09 39	6.55
16065	11 39 29.0	+ 12 33 50	7.12
16219	11 48 21.5	+ 12 33 23	6.22
16248	11 49 47.9	+ 10 13 28	7.8

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1126.3 + 0913	open	213	6.5	Near	39
1128.4 + 0917	medium compact	54	0.7	VD	38
1129.4 + 1356	compact	57	0.4	ED	37
1131.6 + 1252	compact	66	0.7	ED	9
1132.4 + 1312	open	121	2.8	MD	6
1133.6 + 1147	open	113	1.8	D	19
1133.6 + 1346	open	197	5.0	MD	2
1136.8 + 1026	compact	103	1.1	ED	24
1136.8 + 1208	open	154	3.5	D	10
1137.3 + 1101	medium compact	86	1.8	MD	22
1138.0 + 1040	compact	136	2.1	D	23
1138.3 + 1024	medium compact	138	6.0	Near	21
1138.6 + 1102	compact	125	1.5	D	20
1139.6 + 0820	medium compact	205	4.0	MD	36
1139.6 + 1213	open	137	2.4	D	11
1139.6 + 1322	open	91	2.5	MD	3
1139.7 + 1027	compact	96	1.2	VD	26
1139.7 + 1041	compact	189	1.5	VD	25
1140.4 + 1118	compact	167	1.6	D	18
1140.8 + 1250	medium compact	125	1.8	VD	7
1141.5 + 1313	compact	57	0.7	ED	5
1142.0 + 1130	medium compact	130	1.9	D	14
1142.8 + 1147	medium compact	141	2.1	D	13
1142.9 + 1005	open	204	3.6	MD	30
1143.6 + 0832	compact	71	0.6	ED	35
1143.8 + 1119	medium compact	156	2.4	MD	15
1144.3 + 1010	compact	47	0.4	ED	31
1145.8 + 1030	open	210	3.1	D	27
1146.1 + 1135	medium compact	476	5.7	MD	12
1146.8 + 0840	medium compact	137	2.5	D	34
1146.8 + 1237	medium compact	195	3.8	Near	8
1147.8 + 1021	medium compact	70	1.[illegible]	VD	33
1149.9 + 1356	compact	45	0.5	ED	1
1150.1 + 1315	medium compact	193	3.7	MD	4
1151.6 + 1028	compact	60	0.6	VD	29
1151.8 + 0944	open	127	3.4	Near	32
1152.0 + 1250	open	239	3.3	MD	16
1152.5 + 1202	medium compact	131	1.8	VD	17
1153.0 + 1109	open	111	2.8	MD	28

Average number of galaxies per cluster = 137.8

GALAXIES

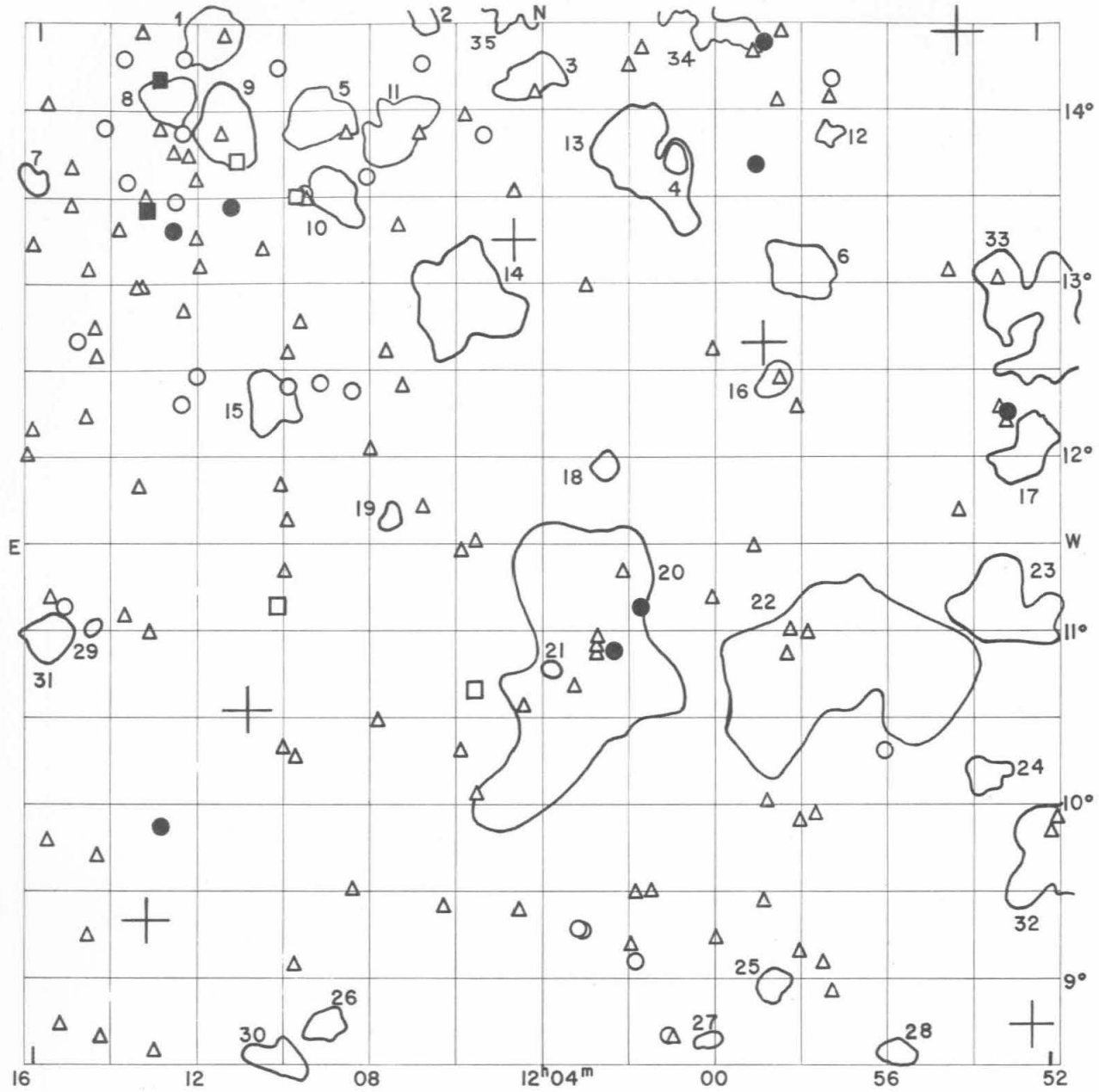
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
11 29.6 + 13 47	2914*	15.3		
11 31.1 + 10 22	2930*	15.7		
11 31.6 + 12 48	3731	14.3		double nebula
11 31.7 + 13 37	2934*	14.8		
11 32.2 + 11 32		15.5		
11 32.4 + 08 45		15.4		
11 33.0 + 13 58	2938*	15.3		triple system
11 33.4 + 08 35		15.3		
11 33.6 + 10 20	2941*	15.0		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
11	34.3	+ 12 08		15.6		
11	34.5	+ 13 12	2945*	15.0		double nebula
11	35.0	+ 09 45		15.6		
11	35.6	+ 11 28		15.3		
11	35.6	+ 12 24	3773	13.1		m_H = 13.0
11	36.2	+ 11 10		15.7		
11	36.3	+ 09 49		15.7		
11	36.7	+ 10 14		14.5		double nebula
11	37.3	+ 09 09	718*	14.6		
11	37.3	+ 13 45		15.7		
11	37.4	+ 11 45		15.7		
11	37.7	+ 09 17	719*	13.6		
11	37.8	+ 09 08	720*	15.5		
11	38.1	+ 12 52		15.0		
11	38.3	+ 11 45	3810	11.4	+ 989	m_H = 11.8 Sc
11	38.5	+ 10 30		15.5		
11	38.6	+ 12 00		15.6		
11	38.8	+ 12 07		15.3		
11	39.3	+ 10 35	3817	14.4		triple system
11	39.3	+ 12 52		15.7		
11	39.5	+ 10 38	3819	14.8		
11	39.5	+ 10 40	3820	14.9		
11	39.5	+ 11 49		15.3		
11	39.6	+ 10 33	3822	13.7		
11	39.6	+ 13 13		15.4		
11	39.7	+ 09 03		14.7		double nebula, collision
11	39.7	+ 14 21		14.9		
11	39.8	+ 10 33	3825	13.8		
11	40.1	+ 09 09		15.3		
11	40.1	+ 09 15	722*	14.9		
11	40.4	+ 13 22		15.7		double nebula
11	40.7	+ 09 15		15.7		
11	40.8	+ 11 05		15.6		
11	40.9	+ 10 26	3833	14.7		
11	40.9	+ 10 37		14.9		
11	41.0	+ 09 13	724*	13.8		
11	41.1	+ 10 32		14.9		
11	41.2	+ 12 31		15.7		
11	41.3	+ 11 04	3839	13.6		
11	41.8	+ 08 40		15.6		
11	41.9	+ 11 03	727*	15.0		
11	41.9	+ 11 51		15.3		
11	42.0	+ 11 04		15.6		
11	42.3	+ 12 02		15.7		
11	42.5	+ 08 45	3863	14.0		
11	42.8	+ 09 26		13.4		
11	42.9	+ 10 00		15.3		
11	43.0	+ 09 24		15.4		
11	43.0	+ 12 29		15.7		diffuse
11	43.2	+ 11 06	3869	13.5		
11	43.2	+ 14 03	3872	12.9	+ 3109	m_H = 12.8
11	43.3	+ 10 45		14.8		
11	43.6	+ 10 53		14.6		
11	43.8	+ 14 06		15.7		
11	44.4	+ 14 09		15.3		
11	44.5	+ 13 59		14.4		double nebula
11	44.6	+ 10 48		15.7		
11	45.6	+ 13 12		15.3		
11	45.7	+ 12 59		15.3		

Position 1950 h	m	°	′	NGC IC*	m_p	V_s km/sec	Remarks
11	45.7	+ 13	29		15.0		
11	45.8	+ 13	00	736*	14.7		
11	45.9	+ 11	22		15.7		
11	45.9	+ 13	00	737*	15.3		double nebula
11	46.0	+ 12	58		15.3		
11	46.2	+ 14	20		15.4		
11	47.1	+ 13	31		15.5		
11	48.1	+ 10	48		15.1		
11	48.6	+ 10	55		15.0		
11	48.9	+ 09	01		15.6		double nebula
11	49.5	+ 14	10		15.3		
11	49.7	+ 10	53		15.4		
11	50.0	+ 13	28		15.2		
11	50.0	+ 13	45		15.2		
11	51.0	+ 11	09		15.3		
11	51.0	+ 12	14		15.6		
11	51.2	+ 10	41		14.6		
11	51.3	+ 13	34		15.6		
11	51.4	+ 09	54		15.5		
11	51.4	+ 12	29		15.4		
11	51.8	+ 09	54		15.5		
11	52.0	+ 09	50		15.6		
11	52.9	+ 12	13		15.7		
11	52.9	+ 12	15	3968	13.3		
11	53.0	+ 12	17	3973	15.4		
11	53.1	+ 13	01		15.5		double nebula

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3810	11.2	Sc	11.20	Sc	11.1	Sc	11.30	Sc
3872	-	-	12.91	E3	13.0	E3	-	-



FIELD No. 69

12^h04^m + 11°30'

Survey Plate No. 1385

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16294	11 52 29.2	+ 8 43 19	5.62
16327	11 53 52.8	+ 14 27 53	6.94
16428	11 58 40.1	+ 12 39 22	6.93
16555	12 04 37.5	+ 13 15 52	7.00
16693	12 10 53.2	+ 10 32 25	5.81
16742	12 13 15.8	+ 9 18 45	8.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1151.8 + 0944	open	127	3.4	Near	32
1152.0 + 1250	open	239	3.3	MD	33
1152.5 + 1202	medium compact	131	1.8	VD	17
1153.0 + 1109	open	111	2.8	MD	23
1153.5 + 1010	medium compact	62	1.2	D	24
1155.6 + 0834	medium compact	68	1.0	VD	28
1156.8 + 1054	medium compact	296	6.0	Near	22
1157.1 + 1352	compact	36	0.6	ED	12
1157.8 + 1306	open	94	1.7	MD	6
1158.4 + 1227	medium compact	93	1.0	ED	16
1158.6 + 0857	medium compact	78	1.0	ED	25
1159.9 + 1449	medium compact	342	3.5	D	34
1200.1 + 0837	compact	46	0.6	ED	27
1200.8 + 1345	medium compact	59	1.1	VD	4
1201.4 + 1341	open	205	3.5	MD	13
1202.5 + 1157	medium compact	49	0.8	ED	18
1202.9 + 1051	open	272	7.0	Near	20
1203.8 + 1046	compact	49	0.5	ED	21
1204.2 + 1411	open	106	1.7	VD	3
1204.7 + 1439	medium compact	94	1.7	D	35
1205.8 + 1255	open	185	3.7	D	14
1206.8 + 1434	open	59	1.0	VD	2
1207.5 + 1353	medium compact	105	2.1	D	11
1207.6 + 1138	medium compact	42	0.7	ED	19
1208.9 + 1332	open	87	1.8	VD	10
1209.1 + 0842	medium compact	56	1.1	VD	26
1209.3 + 1357	open	101	2.0	D	5
1210.2 + 0832	open	75	1.5	D	30
1210.5 + 1220	open	59	1.8	D	15
1211.6 + 1355	open	124	2.3	D	9
1211.9 + 1426	medium compact	102	1.9	D	1
1212.8 + 1404	medium compact	96	1.5	D	8
1214.7 + 1102	compact	39	0.6	VD	29
1215.6 + 1058	open	62	1.7	D	31
1216.2 + 1337	compact	47	0.8	VD	7

Average number of galaxies per cluster = 108.5

GALAXIES

Position α 1950 δ h m ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 51.8 + 09 54		15.5		
11 52.0 + 09 50		15.6		
11 52.9 + 12 13		15.7		
11 52.9 + 12 15	3968	13.3		
11 53.0 + 12 17	3973	15.4		
11 53.1 + 13 01		15.5		double nebula
11 54.1 + 11 41		15.7		double nebula
11 54.3 + 13 03		15.3		
11 55.9 + 10 18	4012	14.6		
11 57.0 + 14 10		14.9		
11 57.1 + 14 03		15.6		
11 57.2 + 08 55		15.5		
11 57.4 + 09 05		15.5		

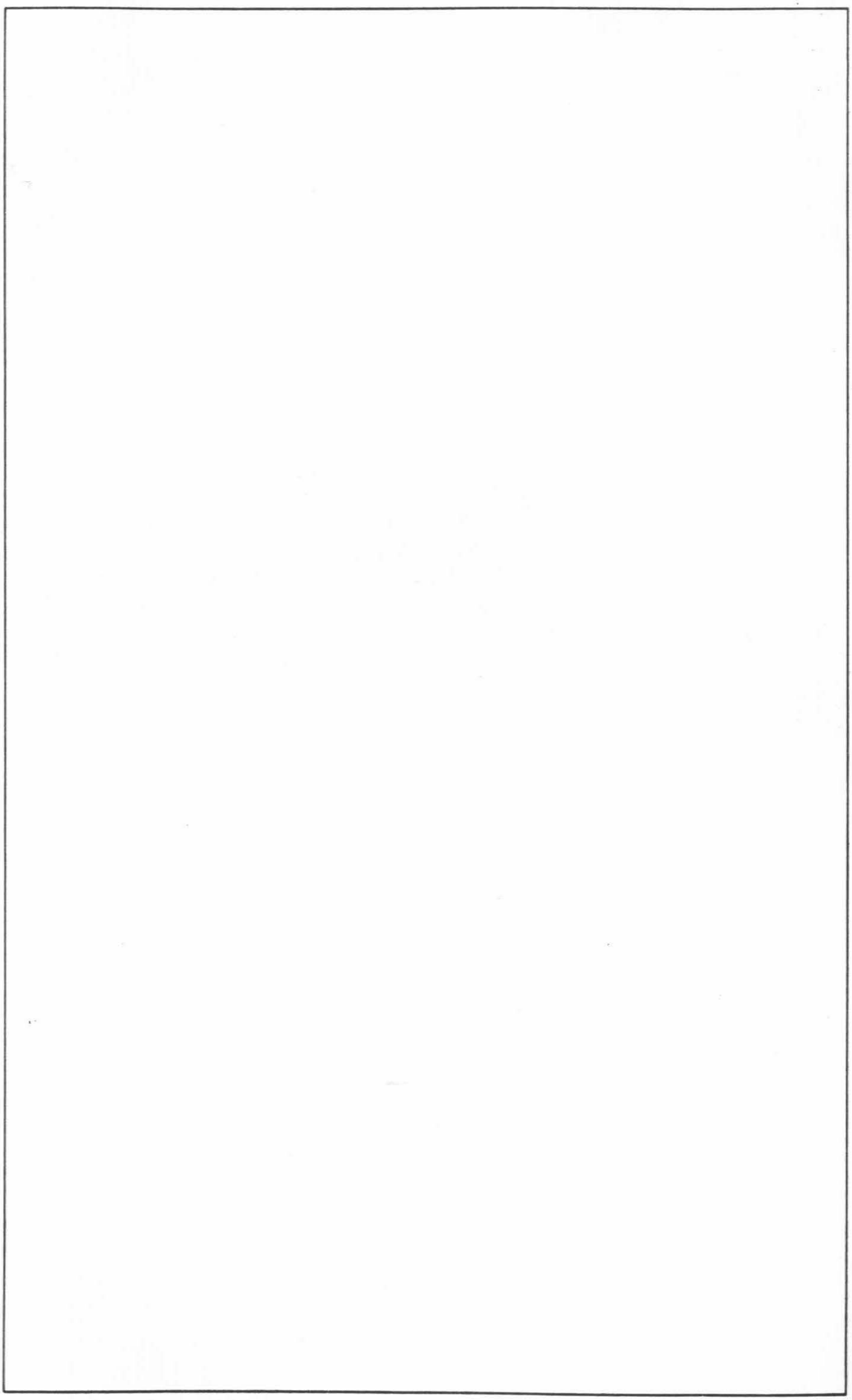
Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h m	° '					
11 57.5	+ 09	56		15.6		
11 57.7	+ 10	59		15.7		double nebula
11 57.9	+ 09	54		15.7		
11 57.9	+ 12	17		15.2		
11 58.0	+ 09	08		15.6		
11 58.1	+ 10	59		15.2		double nebula
11 58.2	+ 14	26		15.7		
11 58.3	+ 10	51		15.3		
11 58.3	+ 12	27		15.4		
11 58.4	+ 14	01		15.4		double nebula
11 58.6	+ 14	23	755*	13.9		
11 58.7	+ 10	00		15.5		
11 58.8	+ 09	27		15.4		
11 58.8	+ 13	40	4037	13.8		m_H = 12.8 S
11 58.9	+ 11	28		15.7		
11 58.9	+ 14	18		15.2		
11 59.8	+ 12	36		15.3		
11 59.9	+ 09	13		15.5		
11 59.9	+ 11	10		15.5		
12 00.9	+ 08	39		15.2		double nebula
12 01.0	+ 08	40		15.0		
12 01.4	+ 09	29		15.5		
12 01.6	+ 11	08	4067	13.2		
12 01.6	+ 14	20		15.5		
12 01.8	+ 09	05		14.9		
12 01.8	+ 09	28		15.6		
12 01.9	+ 09	10		15.6		
12 01.9	+ 14	15		15.7		
12 02.1	+ 11	19	2990*	15.1		
12 02.2	+ 10	52	4078	13.9		
12 02.7	+ 10	53	4083	15.1		
12 02.7	+ 10	55	2991*	15.5		
12 02.7	+ 10	57	4082	15.1		
12 02.9	+ 12	58	2994*	15.6		
12 03.1	+ 09	16		15.0		
12 03.2	+ 09	16		14.8		
12 03.3	+ 10	40		15.5		
12 04.2	+ 14	05		15.7		
12 04.4	+ 10	33		15.1		double nebula
12 04.5	+ 09	23		15.7		
12 04.6	+ 13	31	3004*	15.6		double nebula
12 05.4	+ 13	50	3008*	15.0		
12 05.5	+ 10	02		15.6		triple system
12 05.5	+ 11	30		15.3		
12 05.6	+ 10	39	4124=3011*	12.7		m_H = 12.5 S
12 05.8	+ 13	57		15.3		
12 05.9	+ 10	18	3013*	15.3		
12 05.9	+ 11	27	3012*	15.4		
12 06.3	+ 09	24		15.5		
12 06.8	+ 11	42	3016*	15.6		
12 06.9	+ 13	50	3017*	15.3		
12 06.9	+ 14	16	3019*	15.0		
12 07.2	+ 12	24		15.6		
12 07.4	+ 13	18	3021*	15.4		
12 07.7	+ 12	35	3024*	15.1		
12 07.8	+ 10	28	3025*	15.3		
12 08.1	+ 12	04		15.5		
12 08.2	+ 13	36	3029*	15.0		double nebula
12 08.4	+ 09	29		15.4		

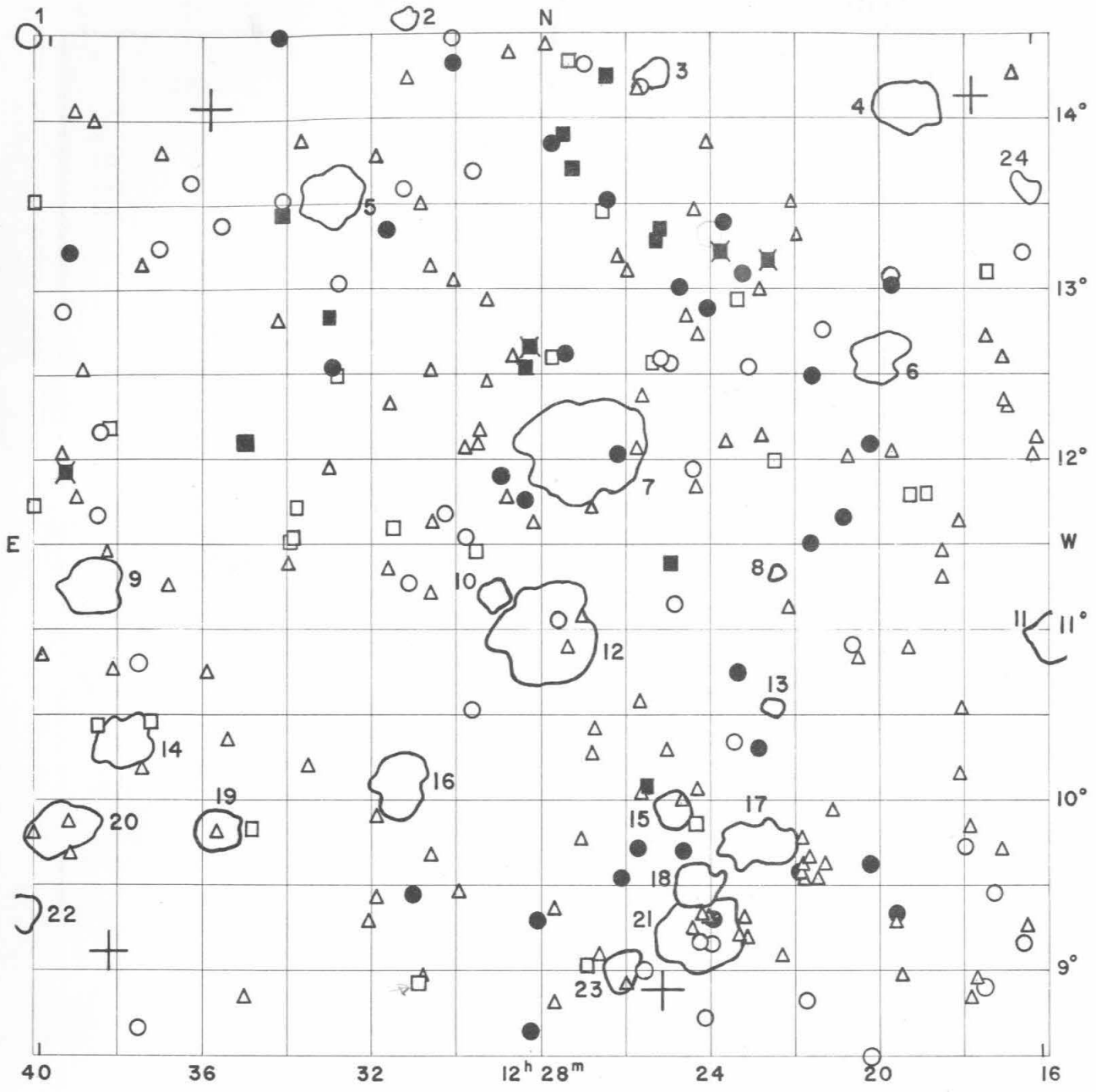
Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 08.5	+ 12 22	767*	14.6		
12 08.6	+ 13 52	3033*	15.1		
12 09.3	+ 12 25	768*	14.8		
12 09.5	+ 13 28	4164	15.7		
12 09.7	+ 12 45		15.3		
12 09.7	+ 13 31	4165/3035*	14.7		double nebula
12 09.8	+ 09 03		15.6		
12 09.8	+ 10 16	3037*	15.5		
12 09.8	+ 13 29	4168	12.7		m_H = 12.8 E
12 10.0	+ 11 37	3038*	15.7		
12 10.0	+ 12 24	769*	14.1		
12 10.0	+ 12 35	3039*	15.2		
12 10.1	+ 10 18		15.6		
12 10.1	+ 11 21	3040*	15.6		
12 10.2	+ 11 50		15.6		
12 10.3	+ 11 08	4178	12.9	+ 233	m_H = 12.4 S
12 10.3	+ 14 15	3044*	14.7		
12 10.6	+ 13 12	3046*	15.1		double nebula
12 11.3	+ 13 27	4193=3051*	13.4		
12 11.3	+ 13 42	4189=3050*	12.7		m_H = 13.0
12 11.6	+ 13 52		15.6		double nebula
12 11.6	+ 14 26	3053*	15.3		
12 12.1	+ 13 05		15.3		
12 12.2	+ 12 27	4200	14.1		
12 12.3	+ 13 15		15.6		triple system
12 12.3	+ 13 35		15.6		
12 12.5	+ 12 48	3060*	15.1		
12 12.5	+ 13 44	3059*	15.3		diffuse
12 12.5	+ 14 19	3061*	14.9		
12 12.6	+ 12 17	3063*	14.9		
12 12.6	+ 13 52	3062*	14.9		
12 12.7	+ 13 18	4206=3064*	13.8		
12 12.7	+ 13 28	771*	14.9		
12 12.8	+ 13 45	3066*	15.2		
12 13.0	+ 09 52	4207	13.7		
12 13.1	+ 08 34		15.7		
12 13.1	+ 13 53	3073*	15.6		
12 13.1	+ 14 11	4212	11.9	+ 2125	m_H = 12.1 Sc
12 13.2	+ 10 58	3074*	15.1		
12 13.4	+ 13 26	4216	11.2	+ 46	m_H = 11.3 Sb
12 13.4	+ 13 29		15.4		
12 13.5	+ 12 58	3078*	15.2		
12 13.5	+ 14 28	3080*	15.4		
12 13.6	+ 11 48	3079*	15.5		
12 13.6	+ 12 58	3081*	15.6		
12 13.8	+ 11 05		15.5		
12 13.9	+ 13 35	4222=3087*	14.6		
12 14.0	+ 13 19		15.2		
12 14.0	+ 14 17	3091*	14.7		
12 14.4	+ 08 38		15.4		
12 14.4	+ 13 54	3094*	14.1		
12 14.5	+ 09 41	3097*	15.3		
12 14.6	+ 12 34	3100*	15.3		
12 14.6	+ 12 44	3099*	15.1		
12 14.7	+ 09 14		15.5		
12 14.8	+ 12 13	3101*	15.5		
12 14.8	+ 13 04		15.4		
12 15.1	+ 12 40	3105*	15.0		
12 15.2	+ 13 27		15.1		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
12	15.3	+ 08 43	3111*	15.5		
12	15.3	+ 11 07	3107*	14.5		
12	15.3	+ 13 29	3109*	15.3		
12	15.7	+ 09 47	3118*	15.2		
12	15.7	+ 11 11		15.6		
12	15.8	+ 14 02	3120*	15.7		
12	16.0	+ 12 08	3127*	15.7		extremely diffuse
12	16.1	+ 12 01	3128*	15.2		double nebula
12	16.2	+ 13 13		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4037	12.4	-	-	-	-	-	-	-
4124	12.0	S	-	-	-	-	-	-
4165	13.5	-	-	-	-	-	14.45	Sc
4168	12.26	E	-	-	-	-	12.32	E
4178	11.5	-	-	-	-	Sc	11.75	Sc+
4189	12.29	-	-	-	-	-	12.51	Sc-
4193	-	-	-	-	-	-	13.15	Sb+
4206	-	-	-	-	-	-	12.69	Sc-
4212	11.72	Sc	-	-	-	Sc	11.71	Sc-
4216	10.93	Sb	-	-	11.1	Sb	10.88	Sb-
4222	12.4	-	-	-	-	-	-	-
3044*	13.6	-	-	-	-	-	-	-
3061*	-	-	-	-	-	-	14.27	S





FIELD No. 70

12^h28^m + 11°30'

Survey Plate No. 1563

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
16821	12 17 32.7	+ 14 07 58	6.94
16982	12 25 09.5	+ 8 53 13	6.42
17215	12 36 04.1	+ 14 04 50	7.34
17250	12 38 22.2	+ 9 06 13	7.12

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1215.6 + 1058	open	62	1.7	D	11
1216.2 + 1337	compact	47	0.8	VD	24
1219.0 + 1405	open	207	2.1	MD	4
1219.7 + 1237	open	128	1.9	D	6
1222.3 + 1121	compact	46	0.5	ED	8
1222.4 + 1033	compact	42	0.6	VD	13
1222.7 + 0946	medium compact	105	1.7	MD	17
1224.1 + 0914	medium compact	244	2.4	Near	21
1224.2 + 0931	medium compact	105	1.5	VD	18
1224.8 + 0957	medium compact	92	1.3	VD	15
1225.2 + 1417	open	78	1.0	VD	3
1226.0 + 0859	medium compact	61	1.3	Near	23
1226.9 + 1205	medium compact	477	3.7	D	7
1227.9 + 1059	compact	484	3.5	MD	12
1229.1 + 1112	compact	89	1.0	VD	10
1231.3 + 1437	compact	36	0.7	ED	2
1231.4 + 1007	medium compact	157	2.0	VD	16
1233.0 + 1334	open	148	2.1	D	5
1235.7 + 0950	medium compact	102	1.3	VD	19
1238.0 + 1020	compact	121	2.0	VD	14
1238.8 + 1116	open	138	2.0	D	9
1239.5 + 0949	open	99	2.0	Near	20
1240.7 + 0918	compact	114	1.4	D	22
1240.9 + 1429	medium compact	68	0.9	VD	1

Average number of galaxies per cluster = 132.4

This field also contains the center of the Virgo cluster of galaxies the position of which is 1224.0 + 1320.

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
12 16.0 + 12 08	3127*	15.7		extremely diffuse
12 16.1 + 12 01	3128*	15.2		double nebula
12 16.4 + 09 15	3134*	15.4		
12 16.4 + 13 11	775*	14.8		double nebula
12 16.5 + 09 08	776*	14.9		
12 16.6 + 14 15	3142*	15.4		double nebula
12 16.7 + 12 20	3147*	15.5		double nebula
12 16.8 + 12 21		15.6		
12 16.8 + 12 35	3149*	15.6		
12 17.0 + 09 38	3151*	15.1		
12 17.2 + 09 26	3156*	15.0		
12 17.2 + 12 42	3157*	15.5		
12 17.2 + 13 05	4267	12.4	+ 1260	m_H = 12.6 E
12 17.5 + 08 53		14.8		
12 17.6 + 08 55		15.1		
12 17.7 + 08 49		15.6		
12 17.7 + 09 49	3167*	15.1		
12 17.9 + 09 42	3170*	15.0		
12 17.9 + 10 07	3175*	15.5		
12 17.9 + 10 31	3174*	15.6		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
12 18.0	+ 11 37	3173*	15.6		
12 18.4	+ 11 18	3188*	15.1		
12 18.4	+ 11 27	3187*	15.6		
12 18.8	+ 11 47	4294	12.6		m_H = 13.0
12 19.1	+ 11 47	4299	12.8		m_H = 13.1
12 19.2	+ 10 53	3199*	15.4		
12 19.4	+ 08 57		15.6		
12 19.6	+ 09 16	3211*	15.5		
12 19.6	+ 09 19	4307	13.4		m_H = 13.0
12 19.6	+ 12 02	3209*	15.3		
12 19.6	+ 13 01	4305	13.8		
12 19.6	+ 13 04	4306	14.4		
12 20.1	+ 08 29	4318	14.8		
12 20.1	+ 12 05	4313	13.2		
12 20.2	+ 09 37	4316	14.0		
12 20.5	+ 10 49	4320	15.3		
12 20.6	+ 10 54	4325	15.0		
12 20.6	+ 12 00	3239*	15.6		
12 20.7	+ 11 39	4330	14.0		
12 21.1	+ 09 54	3255*	15.3		
12 21.2	+ 09 36		15.2		
12 21.2	+ 12 45	3258*	14.3		
12 21.4	+ 09 31		15.5		
12 21.5	+ 11 30	4352	14.0		
12 21.5	+ 12 29	4351	13.5		
12 21.6	+ 09 39		15.2		
12 21.6	+ 09 45		15.6		
12 21.7	+ 08 49	3273*	14.3		
12 21.7	+ 09 29		15.7		
12 21.7	+ 09 33	3274*	15.2		
12 21.7	+ 09 37		15.3		
12 21.8	+ 09 34	4360	13.9		
12 21.8	+ 13 19		15.6		
12 21.9	+ 13 31		15.4		
12 22.1	+ 11 08	3284*	15.6		
12 22.3	+ 09 04		15.3		
12 22.4	+ 11 59	4371	12.1		m_H = 12.1 SBa
12 22.5	+ 13 10	4374	10.8	+ 954	m_H = 10.9 E
12 22.7	+ 12 07	3305*	15.4		
12 22.7	+ 13 00	3303*	15.1		
12 22.8	+ 10 17	4380	13.4		m_H = 12.8 S
12 22.9	+ 09 09		15.6		
12 23.0	+ 12 32	3311*	15.0		
12 23.1	+ 09 18		15.6		
12 23.2	+ 13 05	4387	13.2	+ 511	
12 23.3	+ 09 13		15.6		
12 23.3	+ 10 44	4390	13.7		
12 23.3	+ 12 56	4388	12.2		m_H = 12.2 S
12 23.4	+ 10 20	3328*	14.9		
12 23.5	+ 12 05	3331*	15.2		
12 23.6	+ 13 23	4402	13.6		
12 23.7	+ 13 14	4406	10.9	+ 333	double nebula m_H = 10.9 E
12 23.9	+ 09 17	4410	13.6		
12 24.0	+ 09 09	4411	14.4		
12 24.0	+ 09 18	790*	15.2		
12 24.0	+ 12 53	4413	13.6		
12 24.0	+ 13 51	3344*	15.2		
12 24.1	+ 08 42	4415	14.2		
12 24.2	+ 09 19		15.3		

Position α 1950 h m	δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
12 24.2	+ 09 51	4417	12.2		m_H = 12.3 E
12 24.2	+ 12 44	3349*	15.3		
12 24.3	+ 09 09		14.4		
12 24.3	+ 10 02	3357*	15.4		
12 24.3	+ 11 51	3356*	15.5		
12 24.3	+ 13 27	3355*	15.2		
12 24.4	+ 11 56	3358*	15.0		
12 24.5	+ 09 13		15.6		
12 24.5	+ 12 50	3363*	15.5		
12 24.6	+ 09 58		15.5		
12 24.7	+ 09 42	4424	13.1		m_H = 12.6 S
12 24.7	+ 13 01	4425	13.3	+ 1883	m_H = 13.1
12 24.8	+ 11 09	3371*	15.0		
12 24.9	+ 11 23	4429	11.4	+ 1114	m_H = 11.7 Sa
12 24.9	+ 12 34	4431	14.5		
12 25.0	+ 10 16	3374*	15.6		
12 25.2	+ 12 35	4436	14.8		
12 25.2	+ 13 17	4438	12.0	- 32	m_H = 11.9 Sb
12 25.2	+ 13 21	4435	11.9	+ 869	m_H = 11.8 E
12 25.4	+ 12 34	4440	13.0		
12 25.5	+ 10 05	4442	11.2	+ 580	m_H = 11.4 SBa
12 25.6	+ 10 03		15.6		
12 25.6	+ 12 22	794*	15.1		
12 25.6	+ 14 11	4446	15.0		
12 25.7	+ 09 43	4445	13.7		
12 25.7	+ 10 34	3383*	15.5		
12 25.7	+ 12 04	3381*	15.1		
12 25.7	+ 14 10	4447	15.2		
12 25.8	+ 09 00		15.0		
12 25.9	+ 13 06	3388*	15.4		
12 26.0	+ 08 54		15.3		
12 26.1	+ 09 32	4451	13.4		
12 26.2	+ 12 02	4452	13.1		m_H = 13.2
12 26.2	+ 13 11	3393*	15.1		
12 26.4	+ 13 31	4458	13.3	+ 383	
12 26.5	+ 13 28	4461	12.2		m_H = 12.4 S
12 26.5	+ 14 15	4459	11.6	+ 1111	m_H = 11.9 E
12 26.7	+ 09 09		15.6		double nebula
12 26.7	+ 10 24		15.4		
12 26.8	+ 10 16	3412*	15.4		
12 26.8	+ 11 43	3413*	15.2		
12 26.9	+ 09 01	4469	12.6		m_H = 12.5 S
12 27.0	+ 14 20	4468	14.2		
12 27.1	+ 09 46		15.4		
12 27.1	+ 11 04	3416*	15.3		
12 27.3	+ 13 42	4473	11.2	+ 2241	m_H = 11.7 E
12 27.4	+ 10 53	3425*	15.3		
12 27.4	+ 14 21	4474	12.6	+ 1526	m_H = 12.9 E
12 27.5	+ 12 37	4476	13.3		m_H = 13.2
12 27.5	+ 13 55	4477	11.9	+ 1263	m_H = 11.8 SBa
12 27.6	+ 11 03	3427*	14.2		
12 27.7	+ 08 47		15.6		
12 27.7	+ 09 21	3430*	15.4		
12 27.8	+ 12 36	4478	12.2	+ 1482	m_H = 12.5 E
12 27.8	+ 13 51	4479	13.9	+ 822	
12 27.9	+ 14 27	3432*	15.1		
12 28.1	+ 09 17	4483	13.4		m_H = 13.3
12 28.3	+ 08 38	4488	13.8		
12 28.3	+ 11 37	3437*	15.5		

12 28.0 + 12 46 14.5 + 1486 Very compact

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 28.3 + 12 40	4486	10.4	+ 1243	m_H = 10.7 E
12 28.4 + 11 46	4491	13.7		
12 28.4 + 12 33	-	11.2		very compact
12 28.8 + 11 46	3446*	15.3		
12 28.8 + 12 36	3443*	15.6		
12 28.8 + 14 24	3442*	15.4		
12 29.0 + 11 54	4497	13.8		
12 29.3 + 12 56	3457*	15.4		
12 29.4 + 12 27	3459*	15.5		
12 29.5 + 12 10	3461*	15.4		
12 29.6 + 11 27	4503	12.4		m_H = 12.8 E
12 29.6 + 12 06	3466*	15.3		
12 29.7 + 10 31	3468*	14.6		
12 29.7 + 13 42	4506	14.2		
12 29.9 + 11 32	3470*	15.0		
12 29.9 + 12 04		15.4		
12 30.0 + 09 26		15.4		
12 30.1 + 13 03	3475*	15.4		
12 30.2 + 14 20	3476*	13.5		
12 30.2 + 14 28	3478*	15.0		
12 30.4 + 11 41	3481*	14.8	+ 7086	
12 30.6 + 11 37	3483*	15.4	+ 108	
12 30.7 + 09 40	3487*	15.1		
12 30.7 + 11 12	3490*	15.6		
12 30.7 + 12 31	3489*	15.2		
12 30.7 + 13 08	3492*	15.3		
12 30.9 + 08 57		15.3		
12 30.9 + 13 32		15.4		double nebula
12 31.0 + 08 55	4519	12.8	+ 1213	double nebula m_H = 12.6 S
12 31.1 + 09 26	4522	13.6		m_H = 12.9 S
12 31.2 + 11 16	3499*	14.5		
12 31.3 + 13 36	3501*	15.0		
12 31.3 + 14 15	3500*	15.3		
12 31.6 + 11 36	4528	12.9		
12 31.8 + 11 21	3510*	15.2		
12 31.8 + 12 21	3509*	15.3		
12 31.8 + 13 21	4531	13.3		
12 32.0 + 09 26	3517*	15.3		
12 32.0 + 09 54	3518*	15.3		
12 32.0 + 13 47	3520*	15.4		
12 32.2 + 09 17		15.4		
12 32.9 + 13 02	3540*	14.8		
12 33.0 + 11 58		15.6		
12 33.0 + 12 30	4550	12.5	+ 350	m_H = 12.7 Sa
12 33.1 + 12 32	4551	13.1	+ 978	
12 33.1 + 12 50	4552	11.1	+ 262	m_H = 11.3 E
12 33.7 + 10 12	3562*	15.6		
12 33.9 + 11 43	4564	12.2		m_H = 12.1 E
12 33.9 + 13 53	3567*	15.3		
12 34.0 + 11 31	4568	12.5	+ 2413	m_H = 12.2 S
12 34.0 + 11 32	4567	12.5	+ 2284	m_H = 12.3 S
12 34.1 + 11 23	3578*	15.1		
12 34.2 + 13 32	3583*	15.0		
12 34.3 + 13 26	4569	11.8	+ 960	m_H = 11.2 Sc
12 34.4 + 12 48	3586*	15.3		
12 34.4 + 14 29	4571	13.6		m_H = 12.8 S
12 35.0 + 09 50	4578	12.9	+ 2282	m_H = 12.5 E
12 35.1 + 08 50		15.1		
12 35.2 + 12 05	4579	11.5	+ 1752	m_H = 11.0 SBc

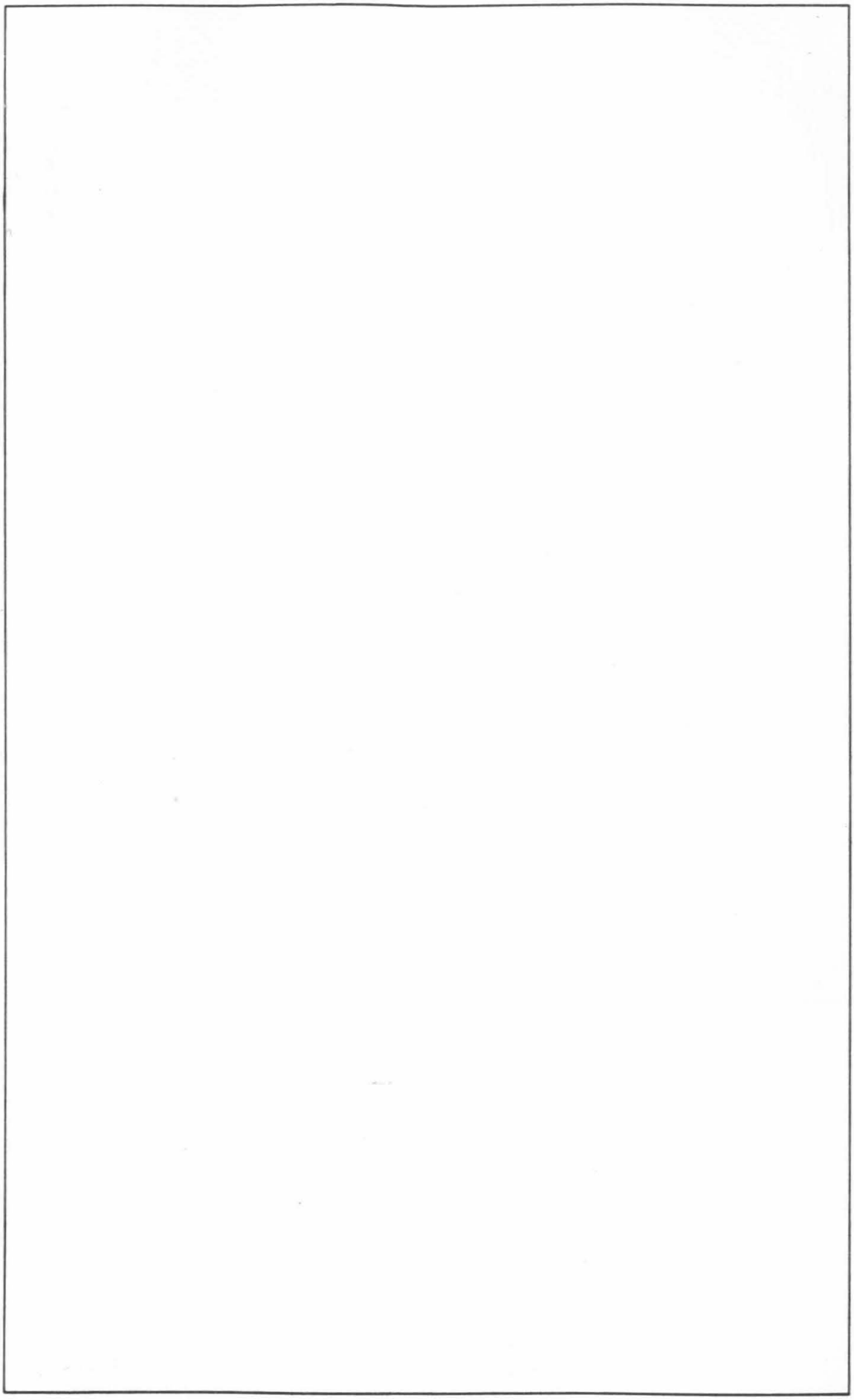
Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
12 35.6	+ 10 21	3602*	15.5		
12 35.8	+ 13 23	4584	14.2		
12 35.9	+ 09 48		15.5		
12 36.1	+ 10 45	3608*	15.4		
12 36.6	+ 13 38	3611*	14.7		
12 37.1	+ 11 15	3625*	15.5		double nebula
12 37.3	+ 13 15	3631*	14.5		
12 37.3	+ 13 48	3629*	15.2		double nebula
12 37.4	+ 10 27	4596	12.4		m_H = 12.2 SBa
12 37.7	+ 08 39	4598	14.1		
12 37.7	+ 10 09	3633*	15.4		
12 37.7	+ 13 09	3635*	15.5		
12 37.8	+ 10 47	3638*	14.6		
12 38.3	+ 10 46	3647*	15.3		
12 38.5	+ 11 27	3652*	15.1		
12 38.5	+ 12 11	4606	12.7		
12 38.7	+ 10 25	4608	12.6		m_H = 12.7 S
12 38.7	+ 11 40	3653*	14.7		
12 38.7	+ 12 09	4607	14.7		
12 38.9	+ 12 31		15.4		
12 38.9	+ 14 00	4611	15.1		
12 39.3	+ 09 41		15.3		
12 39.3	+ 11 46	3665*	15.3		
12 39.4	+ 09 51		15.3		
12 39.4	+ 14 03		15.3		
12 39.5	+ 11 55	4621	11.0	+ 414	m_H = 11.4 E
12 39.5	+ 13 13	4620	14.0		
12 39.6	+ 12 01	3672*	15.1		
12 39.6	+ 12 52	810*	14.7		
12 40.1	+ 10 50	3686*	15.6		
12 40.2	+ 09 47		15.6		
12 40.3	+ 11 43	4637/4638	12.2	+ 1080	m_H = 12.2 E, double system
12 40.4	+ 13 32	4639	12.4		m_H = 12.3 S

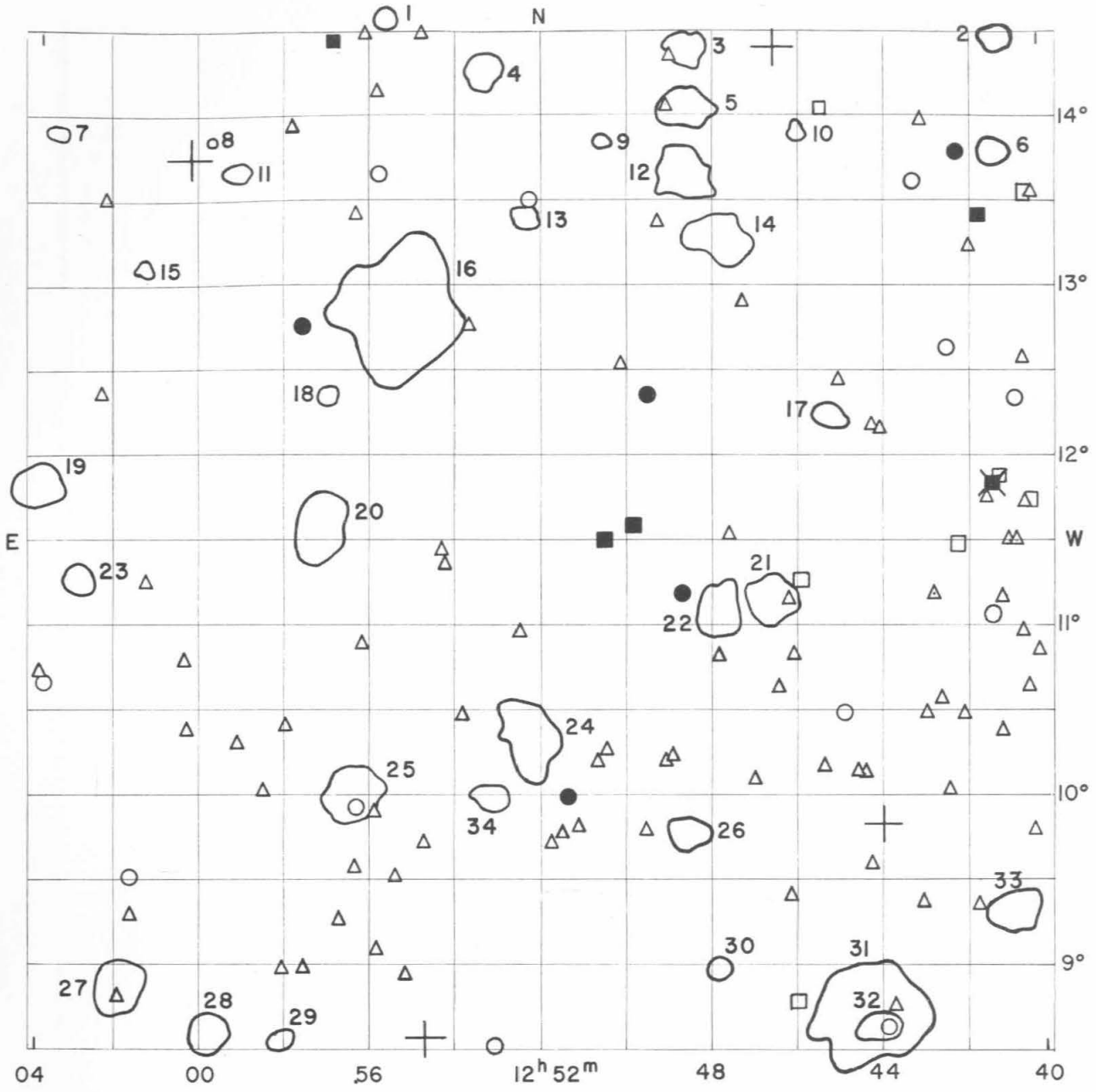
MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4267	11.59	E	-	-	-	SB0	-	-
4294	12.33	Sc	-	-	-	-	12.46	Sc-
4299	12.23	Sc	-	-	-	-	12.71	Sc+
4305	12.9	-	-	-	-	-	-	-
4306	13.2	-	-	-	-	-	-	-
4313	12.1	-	-	-	-	-	-	-
4351	12.5	-	-	-	-	-	-	-
4352	13.1	-	-	-	-	-	-	-
4371	11.90	SBa	-	-	-	-	11.83	S0
4374	10.26	E	10.49	Elp	10.5	S0	10.21	S0
4380	11.7	-	-	-	-	-	-	-
4387	-	-	-	-	-	E4	-	-
4388	11.6	-	-	-	-	-	11.73	S
4390	12.8	-	-	-	-	-	-	-
4402	12.3	-	-	-	-	-	12.47	S
4406	9.92	E2	-	-	10.3	E3	10.10	E
4413	12.9	-	-	-	-	-	-	-
4417	11.8	-	-	-	-	-	12.11	S0
4424	11.9	-	-	-	-	-	12.32	S

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4425	13.0	-	13.29	Sa	13.2	Sa	12.84	S
4429	11.0	-	10.99	Sa	10.9	S0	11.09	S0
4431	13.3	-	-	-	-	-	-	-
4435	11.20	E6	11.80	SB0	11.7	SB0	11.86	S0
4436	13.3	-	-	-	-	-	-	-
4438	11.0	Sb	11.14	Sap	11.2	Sap	10.92	Sap
4440	13.26	-	13.38	SBab	-	-	-	-
4442	11.6	-	11.35	SB0	11.4	SB0	11.61	S0
4445	-	-	-	-	-	-	13.61	S
4451	12.6	-	13.41	Sb	-	-	-	-
4452	12.9	-	12.98	Sa	-	-	-	-
4458	12.86	E0	-	-	-	E0	-	-
4459	11.6	E	11.61	S0	11.5	S0	-	-
4468	13.1	-	-	-	-	-	-	-
4469	11.8	-	-	-	-	-	-	-
4473	11.14	E5	11.30	E5	11.3	E5	-	-
4474	12.6	E	12.68	S0	12.7	S0	-	-
4476	13.06	-	-	-	-	-	-	-
4477	11.27	SBa	11.80	SB0	11.4	SB0	-	-
4478	12.10	E2	12.27	E2	12.3	E2	-	-
4479	13.12	SBa	13.57	S0	13.6	S0	-	-
4486	9.84	E	-	-	-	E0	9.56	E
4491	13.0	-	13.53	SBa	-	-	-	-
4497	12.9	-	-	-	-	-	-	-
4506	13.1	-	-	-	-	-	-	-
4519	11.8	-	-	-	-	Sc	12.22	Sc-
4528	-	-	12.98	S0	-	-	-	-
4531	12.0	-	-	-	-	-	-	-
4550	-	-	12.58	E7	12.6	E7	-	-
4551	12.8	-	-	-	-	E4	-	-
4552	11.03	E	11.12	E0	11.0	E0	-	-
4564	12.3	-	12.06	E7	-	-	12.17	E
4567	11.5	-	-	-	-	Sc	11.98	Sc-
4568	11.8	-	-	-	-	Sc	11.66	Sc-
4569	10.1	Sb	10.40	Sb	10.5	Sb	10.11	Sb+
4571	12.1	Sc	-	-	-	-	11.63	Sb+
4578	11.9	-	12.42	S0	12.3	E2	-	-
4579	10.5	-	-	-	-	Sb	10.32	Sb-
4596	11.3	-	-	-	-	-	11.41	Sa
4606	-	-	-	-	-	-	12.66	Sa
4607	-	-	-	-	-	-	13.72	S
4608	12.0	-	-	-	-	-	12.02	S0
4621	10.9	E5	10.95	E5	11.0	E5	-	-
4638	12.5	-	12.26	E6	12.2	E6	-	-
4639	12.3	-	-	-	-	-	12.11	Sb+
3258*	13.2	-	-	-	-	-	-	-
3311*	13.7	-	-	-	-	-	-	-
3476*	12.5	-	-	-	-	-	-	-
3481*	-	-	-	-	-	E3	-	-
3483*	-	-	-	-	-	Scp	-	-





FIELD No. 71

12^h52^m + 11°30'

Survey Plate No. 41

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17355	12 43 50.1	+ 9 49 08	5.86
17401	12 46 23.9	+ 14 23 42	5.64
17579	12 54 42.6	+ 8 33 51	6.77
17696	13 00 21.8	+ 13 44 30	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1240.7 + 0918	compact	114	1.4	D	33
1240.9 + 1429	medium compact	68	0.9	VD	2
1241.1 + 1348	medium compact	68	0.9	VD	6
1243.9 + 0837	open	82	1.3	VD	32
1244.2 + 0842	open	120	3.6	MD	31
1245.0 + 1215	open	66	0.8	VD	17
1245.8 + 1355	medium compact	53	0.7	VD	10
1246.4 + 1109	open	148	1.8	MD	21
1247.7 + 1318	open	70	2.0	MD	14
1247.7 + 1104	open	118	1.7	D	22
1247.8 + 0857	compact	85	0.7	VD	30
1248.4 + 0945	medium compact	103	1.2	D	26
1248.5 + 1424	open	97	1.2	VD	3
1248.5 + 1404	open	106	1.6	D	5
1248.5 + 1340	open	157	1.8	VD	12
1250.5 + 1351	medium compact	44	0.5	VD	9
1252.2 + 1020	open	151	2.2	D	24
1252.4 + 1325	medium compact	64	0.8	ED	13
1253.2 + 0959	medium compact	81	1.1	ED	34
1253.3 + 1417	open	85	1.4	D	4
1255.3 + 1251	medium compact	381	5.0	MD	16
1255.7 + 1436	medium compact	52	0.6	VD	1
1256.4 + 1001	open	196	1.9	VD	25
1257.1 + 1221	medium compact	57	0.6	ED	18
1257.3 + 1133	open	169	2.0	VD	20
1258.2 + 0833	medium compact	59	0.8	VD	29
1259.2 + 1340	open	56	0.7	ED	11
1259.8 + 1351	compact	35	0.4	ED	8
1259.9 + 0835	compact	91	1.3	VD	28
1301.5 + 1306	medium compact	52	0.6	ED	15
1302.0 + 0852	medium compact	129	1.7	D	27
1303.1 + 1116	medium compact	98	0.9	VD	23
1303.6 + 1354	compact	50	0.5	ED	7
1304.0 + 1150	open	108	1.4	D	19

Average number of galaxies per cluster = 100.4

GALAXIES

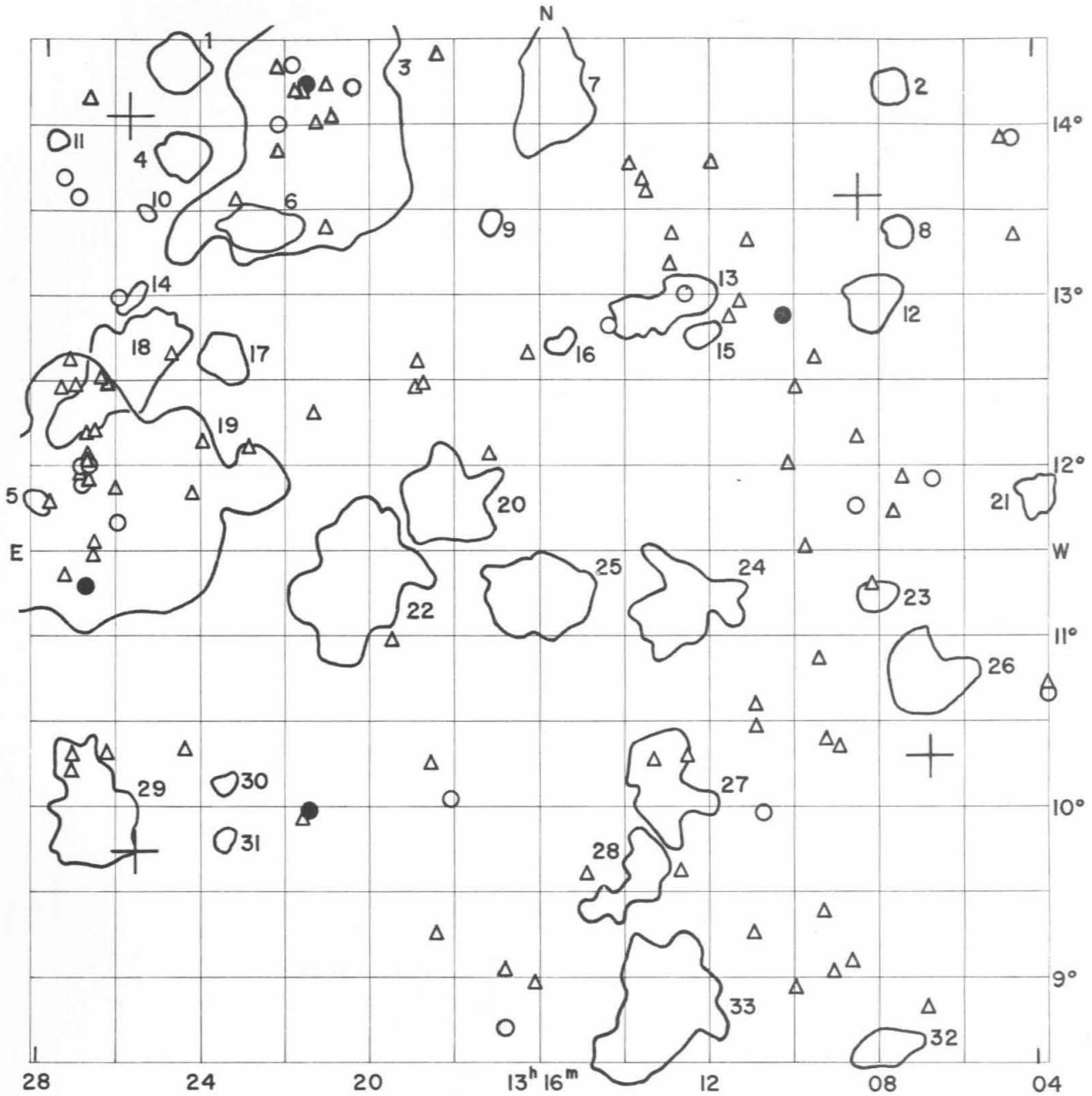
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
12 40.1 + 10 50	3686*	15.6		
12 40.2 + 09 47		15.6		
12 40.2 + 13 32		15.5		
12 40.3 + 10 38	3690*	15.3		
12 40.3 + 10 57		15.4		
12 40.3 + 11 43	4637/4638	12.2	+ 1080	m_H = 12.2 E double system
12 40.4 + 11 42		15.6		
12 40.4 + 13 32	4639	12.4		m_H = 12.3 S
12 40.5 + 12 34	4640	15.2		double nebula
12 40.6 + 11 29	3694*	15.3		double nebula
12 40.6 + 12 19	4641	14.9		
12 40.8 + 11 29	3698*	15.4		
12 41.0 + 10 22		15.6		
12 41.0 + 11 09	3702*	15.5		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h m	° '					
12 41.0	+ 11 52		4647	12.5	+ 1448	m_H = 12.0 S
12 41.1	+ 11 50		4649	10.3	+ 1317	m_H = 10.6 E
12 41.2	+ 11 03		3704*	14.7		
12 41.3	+ 11 44			15.7		
12 41.4	+ 13 25		4654	11.8		m_H = 11.7 S
12 41.5	+ 09 20		3709*	15.3		
12 41.7	+ 13 13			15.6		very compact
12 41.9	+ 10 27		3714*	15.6		
12 42.0	+ 11 28		4660	12.1	+ 1017	m_H = 12.3 E
12 42.0	+ 13 47		4659	13.3		
12 42.2	+ 10 02			15.6		
12 42.3	+ 12 37		3718*	14.7		
12 42.4	+ 10 33		3724*	15.6		
12 42.6	+ 11 10		3727*	15.6		
12 42.7	+ 10 28			15.5		
12 42.8	+ 09 22			15.7		
12 42.8	+ 13 58		3735*	15.1		
12 43.0	+ 13 36		3742*	14.6		double nebula
12 43.5	+ 08 45			15.2		
12 43.7	+ 08 37		3754*	14.9		
12 43.9	+ 12 09		815*	15.5		
12 44.1	+ 09 35			15.6		
12 44.1	+ 12 10			15.7		double nebula
12 44.2	+ 10 07		816*	15.1		
12 44.4	+ 10 08		817*=3764*	15.4		
12 44.7	+ 10 29		3773*	14.3		
12 44.8	+ 12 26		3779*	15.5		
12 45.3	+ 10 09			15.7		
12 45.3	+ 14 02		4689	12.8		m_H = 12.0 S
12 45.8	+ 11 15		4694	12.4		m_H = 12.6 E
12 45.9	+ 08 45		4698	12.1	+ 1032	m_H = 12.2 Sa
12 46.0	+ 10 50			15.7		
12 46.1	+ 09 24			15.7		double nebula
12 46.1	+ 11 11			15.6		
12 46.4	+ 10 38			15.6		
12 46.9	+ 10 05			15.7		
12 47.2	+ 12 54			15.3		
12 47.5	+ 11 32			15.7		
12 47.8	+ 10 49			15.6		
12 48.6	+ 11 11		4733	13.2		
12 48.8	+ 10 13			15.6		
12 48.9	+ 10 11			15.6		
12 48.9	+ 14 21			15.6		
12 49.0	+ 14 03			15.4		
12 49.2	+ 13 22			15.7		
12 49.4	+ 12 21		4746	13.3		
12 49.5	+ 09 48			15.6		
12 49.8	+ 11 35		4754	11.6	+ 1461	m_H = 12.0 SBa
12 50.1	+ 12 31			15.6		
12 50.4	+ 10 16			15.1		
12 50.4	+ 11 30		4762	11.1	+ 933	m_H = 11.8 Sa
12 50.6	+ 10 12			15.6		
12 51.0	+ 09 49			15.7		
12 51.3	+ 10 00		4779	13.5		
12 51.5	+ 09 47			15.7		
12 51.7	+ 09 43			15.7		
12 52.2	+ 13 30			14.8		
12 52.5	+ 10 58			15.7		
12 53.1	+ 08 30		4803	15.0		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
12 53.6	+ 12 46		15.4		
12 53.8	+ 10 28		15.3		
12 54.3	+ 11 21		15.7		
12 54.3	+ 11 26		15.7		
12 54.7	+ 09 43		15.7		
12 54.8	+ 14 30		15.6		
12 55.2	+ 08 56		15.3		
12 55.4	+ 09 31		15.4		
12 55.8	+ 13 39		14.9		
12 55.9	+ 09 05		15.7		
12 55.9	+ 09 54		15.6		
12 55.9	+ 14 09		15.2		
12 56.2	+ 10 53	840*	15.1		
12 56.2	+ 14 29		15.3		triple irregular nebula
12 56.3	+ 09 55		15.0		
12 56.4	+ 09 35		15.6		
12 56.4	+ 13 25		15.3		double nebula
12 56.7	+ 09 15		15.7		cluster of 6 - 8 nebulae
12 57.0	+ 14 27	4866	11.9	+ 1910	m_H = 12.1 Sa
12 57.6	+ 08 58		15.2		triple nebula
12 57.7	+ 12 45	4880	13.3		m_H = 13.1
12 57.9	+ 13 57		15.4		
12 58.0	+ 10 24		15.1		
12 58.1	+ 08 58		15.6		
12 58.6	+ 10 02		15.6		
12 59.2	+ 10 17		15.6		
13 00.3	+ 10 22		15.2		
13 00.5	+ 10 46		15.6		
13 01.4	+ 11 15		15.7		
13 01.8	+ 09 16		15.7		
13 01.8	+ 09 29		14.8		
13 02.1	+ 08 48		15.6		
13 02.4	+ 13 30		15.3		
13 02.5	+ 12 21		15.5		double nebula
13 03.8	+ 10 38		15.0		
13 03.9	+ 10 42		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4638	12.5	-	12.26	E6	12.2	E6	-	-
4639	12.3	-	-	-	-	-	12.11	Sb+
4647	11.0	S	12.39	Sc	12.1	Sc	12.05	Sc-
4649	9.8	E	10.11	E2	9.9	E2	9.88	E
4654	11.0	Sc	-	-	-	-	11.03	Sc
4660	11.7	-	12.06	E5	12.1	E5	-	-
4689	11.3	-	-	-	-	-	11.48	Sc
4694	12.0	-	-	-	-	-	-	-
4698	11.4	-	11.65	Sa	11.6	Sa	11.56	Sa
4754	11.4	-	11.59	SB0	11.6	SB0	-	-
4762	11.0	-	11.17	Sa	11.0	Sa	-	-
4866	-	-	12.14	Sa	12.0	Sa	-	-
4880	11.8	-	-	-	-	-	-	-



FIELD No. 72

13^h16^m + 11°30'

Survey Plate No. 1420

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
17817	13 06 42.1	+ 10 17 19	5.95
17844	13 08 18.3	+ 13 34 22	7.26
18203	13 25 40.3	+ 9 43 10	7.67
18212	13 25 59.0	+ 14 02 43	5.16

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1304.0 + 1150	open	108	1.4	D	21
1306.7 + 1046	medium compact	115	2.8	D	26
1307.2 + 1324	medium compact	77	1.1	VD	8
1307.5 + 1415	open	59	1.3	D	2
1307.8 + 0835	medium compact	71	1.8	D	32
1307.9 + 1258	open	92	1.9	D	12
1307.9 + 1114	medium compact	60	1.2	D	23
1312.0 + 1248	open	59	0.9	VD	15
1312.5 + 1113	open	123	3.0	D	24
1313.0 + 1256	medium compact	175	2.5	VD	13
1313.0 + 0849	open	156	4.5	MD	33
1313.1 + 1008	open	87	3.3	MD	27
1313.6 + 0935	medium compact	94	2.4	D	28
1315.5 + 1244	medium compact	55	0.9	VD	16
1315.7 + 1411	open	103	3.0	MD	7
1316.1 + 1115	medium compact	166	3.0	D	25
1317.3 + 1327	medium compact	43	0.8	VD	9
1318.2 + 1149	medium compact	173	2.0	MD	20
1320.4 + 1121	medium compact	155	4.6	D	22
1321.4 + 1358	open	278	8.0	Near	3
1322.7 + 1325	open	127	1.8	VD	6
1323.5 + 1239	compact	107	1.6	VD	17
1323.6 + 0949	compact	44	0.7	VD	31
1323.7 + 1008	medium compact	42	0.6	VD	30
1324.7 + 1351	medium compact	106	1.6	D	4
1324.8 + 1423	open	151	2.0	D	1
1325.6 + 1331	compact	46	0.6	ED	10
1326.0 + 1300	medium compact	59	1.1	VD	14
1326.1 + 1236	medium compact	430	4.5	VD	18
1326.7 + 1000	open	116	3.5	MD	29
1327.3 + 1145	open	449	10.5	Near	19
1327.7 + 1355	compact	46	0.6	ED	11
1328.1 + 1148	medium compact	62	0.8	ED	5

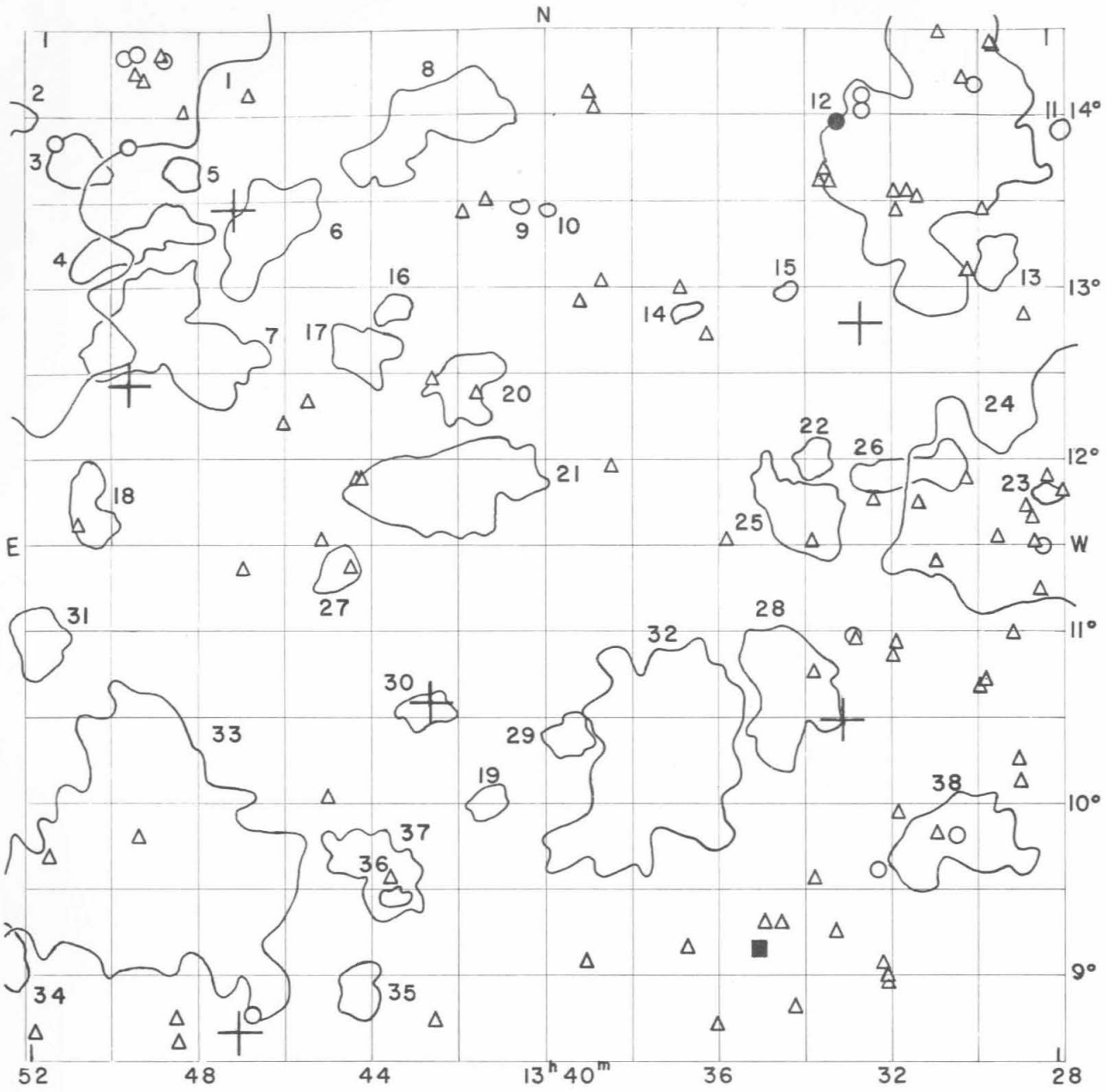
Average number of galaxies per cluster = 122.2

GALAXIES

Position α 1950 δ (h m ° ')	NGC IC*	m_p	V_s km/sec	Remarks
13 03.8 + 10 38		15.0		
13 03.9 + 10 42		15.7		
13 04.6 + 13 21		15.3		
13 04.6 + 13 55		14.9		double nebula
13 04.8 + 13 55		15.6		triple nebula
13 06.6 + 11 54	4992	14.6		
13 06.7 + 08 48		15.2		
13 07.3 + 11 56		15.3		
13 07.5 + 11 43		15.5		
13 08.0 + 11 18		15.7		double nebula
13 08.3 + 12 08		15.6		double nebula
13 08.4 + 11 44		14.4		
13 08.6 + 09 06		15.1		
13 08.8 + 10 21		15.7		
13 09.0 + 09 00		15.1		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
13 09.1	+ 10 23		15.3		
13 09.2	+ 09 22		15.4		
13 09.3	+ 10 52		15.2		
13 09.5	+ 12 37		15.7		
13 09.6	+ 11 29		15.7		double nebula
13 09.9	+ 08 55		15.4		
13 09.9	+ 12 26		15.4		
13 10.0	+ 11 59		15.2		
13 10.2	+ 12 52	5020	13.4		
13 10.7	+ 09 57		15.0		double nebula
13 10.8	+ 10 27		15.2		
13 10.8	+ 10 35		15.7		
13 10.9	+ 09 14		15.7		
13 11.1	+ 13 19		15.7		
13 11.3	+ 12 57		15.6		
13 11.5	+ 12 52		15.7		
13 11.9	+ 13 46		15.7		
13 12.5	+ 10 17		15.4		double nebula
13 12.5	+ 12 58		14.7		
13 12.6	+ 09 37		15.5		
13 12.9	+ 13 10		15.3		double nebula
13 12.9	+ 13 21		15.5		
13 13.3	+ 10 16		15.6		double nebula
13 13.4	+ 13 36		15.7		
13 13.6	+ 13 40		15.7		
13 13.9	+ 13 46		15.2		
13 14.4	+ 12 49	5058	14.6		double nebula
13 14.9	+ 09 35		15.6		
13 16.2	+ 08 57		15.7		
13 16.3	+ 12 40		15.7		
13 16.8	+ 08 41	5080	14.6		very compact
13 16.8	+ 09 01		15.5		
13 17.2	+ 12 04		15.6		
13 18.2	+ 10 03		14.6		
13 18.5	+ 09 14	5100	15.1		double nebula
13 18.5	+ 14 25		15.5		
13 18.7	+ 10 13		15.6		
13 18.8	+ 12 29		15.6		
13 19.0	+ 12 36		15.6		
13 19.1	+ 12 27		15.7		
13 19.6	+ 10 58		15.6		double nebula
13 20.5	+ 14 13	5115	14.8		
13 21.0	+ 14 02		15.5		
13 21.2	+ 13 23		15.7		
13 21.2	+ 14 14		15.3		
13 21.4	+ 13 58		15.6		
13 21.5	+ 09 58	5125	13.5		
13 21.5	+ 12 19		15.6		
13 21.7	+ 09 55		15.4		
13 21.7	+ 14 15	5129	13.3		
13 21.8	+ 14 12		15.6		double nebula
13 21.9	+ 14 12		15.4		
13 22.0	+ 14 21	5132	14.3		
13 22.4	+ 13 51		15.6		
13 22.4	+ 14 00	5136	14.7		
13 22.4	+ 14 20	5137	15.6		
13 23.0	+ 12 05		15.7		
13 23.4	+ 13 34		15.6		
13 24.1	+ 12 08	889*	15.5		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
13 24.4	+ 11 50		15.4		
13 24.5	+ 10 19		15.6		
13 24.9	+ 12 37		15.7		
13 26.2	+ 11 39	5165	14.6		
13 26.2	+ 11 52		15.6		double nebula
13 26.2	+ 12 58	5167	14.7		
13 26.5	+ 10 18		15.6		
13 26.5	+ 12 28		15.6		
13 26.6	+ 12 30		15.7		
13 26.7	+ 11 32		15.3		
13 26.7	+ 12 12		15.7		
13 26.8	+ 11 28		15.4		
13 26.9	+ 11 16	5174/5175	13.7		double nebula
13 26.9	+ 11 55		15.7		
13 26.9	+ 12 00	5171	14.7		
13 26.9	+ 12 03	5176	15.4		
13 26.9	+ 12 04		15.4		
13 26.9	+ 14 09		15.6		
13 27.0	+ 11 53	5178	15.0		
13 27.0	+ 12 01	5179	14.9		
13 27.0	+ 12 10		15.6		
13 27.1	+ 11 58		15.7		
13 27.2	+ 10 11		15.7		
13 27.2	+ 13 34	5181	14.7		
13 27.3	+ 10 17		15.6		
13 27.3	+ 12 27		15.7		
13 27.3	+ 12 37		15.6		
13 27.5	+ 11 20		15.6		
13 27.6	+ 12 26	5186	15.6		
13 27.6	+ 13 41	5185	14.7		
13 27.8	+ 11 47		15.5		



FIELD No. 73

13^h40^m + 11°30'

Survey Plate No. 1079

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18360	13 32 34.0	+ 12 46 10	6.60
18368	13 33 04.2	+ 10 27 38	6.46
18589	13 42 45.2	+ 10 34 34	6.56
18680	13 47 15.1	+ 8 39 22	6.54
18685	13 47 26.0	+ 13 26 22	6.59
18746	13 49 51.3	+ 12 24 41	5.99

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1327.3 + 1145	open	449	10.5	Near	24
1327.7 + 1355	compact	46	0.6	ED	11
1328.1 + 1148	medium compact	62	0.8	ED	23
1329.2 + 1310	medium compact	125	1.5	D	13
1330.2 + 0949	medium compact	195	3.2	MD	38
1330.7 + 1347	medium compact	373	8.5	Near	12
1331.4 + 1156	open	124	2.0	D	26
1333.6 + 1200	medium compact	79	1.2	D	22
1333.9 + 1140	medium compact	188	2.7	MD	25
1334.1 + 1040	open	490	3.7	D	28
1334.3 + 1259	medium compact	53	0.6	VD	15
1336.6 + 1251	medium compact	53	0.7	VD	14
1337.2 + 1016	medium compact	515	5.0	MD	32
1339.4 + 1025	medium compact	110	1.5	MD	29
1339.9 + 1327	compact	36	0.5	ED	10
1340.6 + 1328	compact	47	0.5	ED	9
1341.3 + 1000	compact	107	1.2	VD	19
1341.9 + 1226	medium compact	97	2.0	MD	20
1342.2 + 1149	open	173	4.5	Near	21
1342.8 + 1033	medium compact	133	1.3	VD	30
1342.9 + 1401	medium compact	359	3.5	MD	8
1343.5 + 0926	compact	58	0.7	VD	36
1343.6 + 1253	medium compact	69	0.9	VD	16
1343.8 + 0936	medium compact	189	2.7	MD	37
1344.2 + 1237	medium compact	153	2.0	VD	17
1344.3 + 0855	medium compact	123	1.6	VD	35
1344.9 + 1121	medium compact	77	1.3	D	27
1346.6 + 1320	medium compact	190	3.2	MD	6
1348.5 + 1341	compact	99	1.1	VD	5
1348.7 + 1241	medium compact	398	4.0	MD	7
1349.2 + 0940	medium compact	694	8.0	Near	33
1349.6 + 1317	open	207	3.0	D	4
1350.7 + 1142	medium compact	172	1.9	VD	18
1351.1 + 1345	medium compact	150	1.7	VD	3
1351.8 + 1056	open	103	2.0	MD	31
1352.6 + 0906	medium compact	92	1.9	VD	34
1352.7 + 1400	medium compact	75	1.1	VD	2
1358.7 + 1521	open	923	24.3	Near	1

Average number of galaxies per cluster = 199.6

GALAXIES

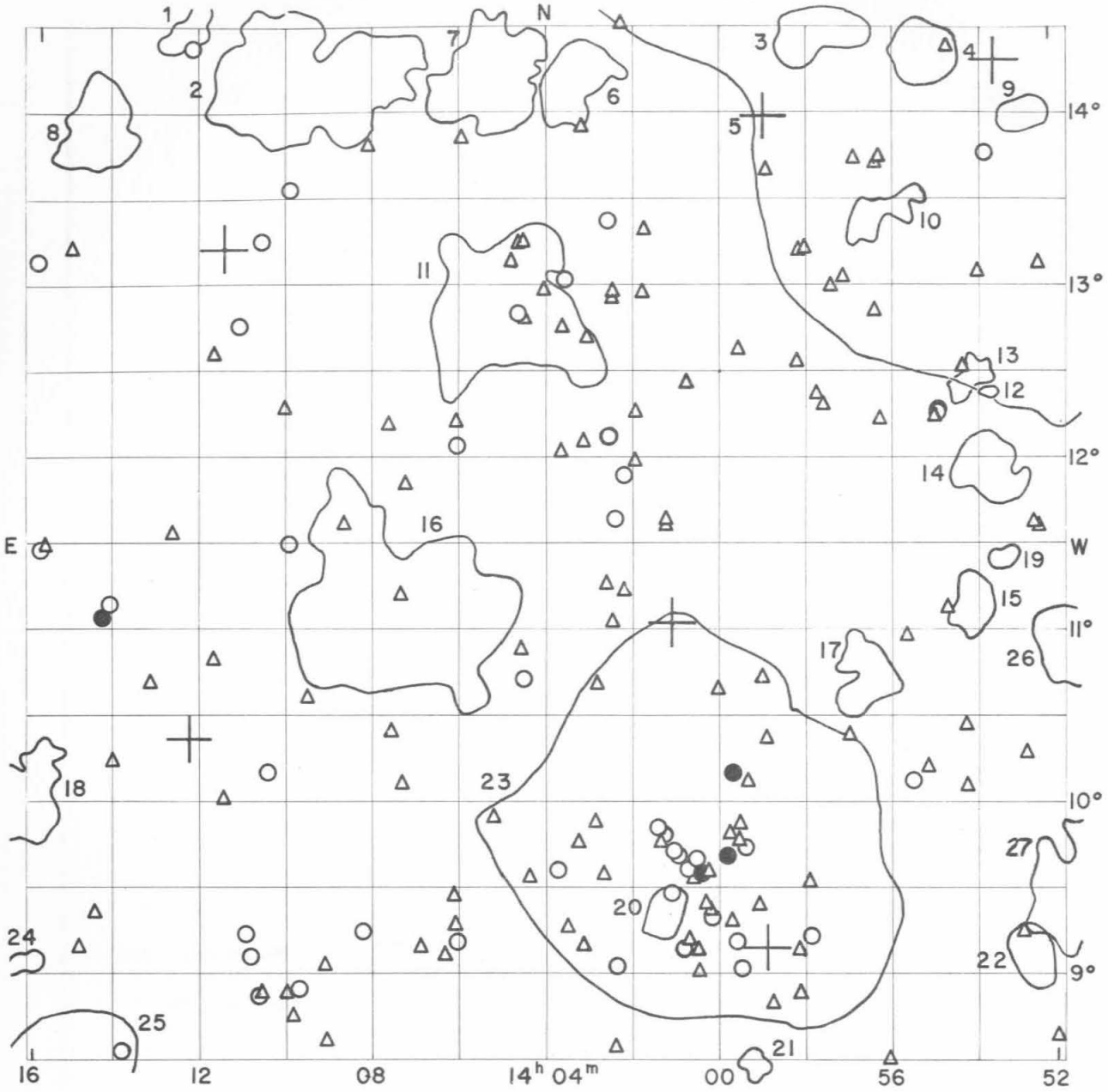
Position α 1950 δ (h m ′)	NGC IC*	m_p	V_s km/sec	Remarks
13 27.8 + 11 47		15.5		
13 28.2 + 11 52		15.6		
13 28.3 + 11 28	5191	14.9		
13 28.4 + 11 14		15.6		
13 28.5 + 11 29		15.7		
13 28.5 + 11 38		15.5		
13 28.7 + 11 42		15.5		
13 28.7 + 12 49		15.6		
13 28.8 + 10 14		15.1		
13 28.8 + 10 05		15.3		very compact

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
13	28.8	+ 10 59		15.5		
13	29.3	+ 14 23		15.7		
13	29.4	+ 11 32		15.1		
13	29.4	+ 14 24		15.3		
13	29.6	+ 10 43		15.6		
13	29.6	+ 13 26		15.3		
13	29.7	+ 10 40		15.3		
13	29.8	+ 14 10	5207	14.7		
13	30.0	+ 13 05		15.4		
13	30.1	+ 11 52		15.6		
13	30.1	+ 14 12		15.6		
13	30.4	+ 09 47		15.0		
13	30.6	+ 14 27		15.3		
13	30.8	+ 09 47		15.7		
13	30.8	+ 11 22		15.6		
13	31.1	+ 13 30		15.5		
13	31.2	+ 11 43		15.5		
13	31.4	+ 13 32		15.6		double nebula
13	31.7	+ 09 54		15.2		
13	31.7	+ 10 55		15.6		
13	31.7	+ 13 26	898*	15.6		
13	31.7	+ 13 32		15.4		
13	31.8	+ 10 49		15.7		
13	32.0	+ 08 58		15.6		
13	32.0	+ 09 00		15.6		
13	32.0	+ 09 04		15.3		very close double nebula
13	32.2	+ 09 36	900*	14.3		
13	32.3	+ 11 44		15.7		
13	32.5	+ 14 00	5222	14.1		double nebula
13	32.5	+ 14 05	5221	14.5		
13	32.7	+ 10 56		15.2		very close pair with tidal effects
13	32.7	+ 10 57		14.9		
13	33.1	+ 13 56	5230	13.4		m_H = 12.9 S
13	33.2	+ 09 14		15.5		
13	33.3	+ 13 35	901*	15.2		
13	33.4	+ 13 41		15.4		
13	33.5	+ 13 36		15.6		
13	33.7	+ 09 31		15.5		
13	33.7	+ 10 44		15.3		
13	33.8	+ 11 30		15.6		
13	34.2	+ 08 48		15.6		
13	34.6	+ 09 17		15.7		
13	34.9	+ 09 17		15.5		
13	35.0	+ 09 08	5248	11.4	+ 1212	m_H = 11.0 Sc
13	35.8	+ 11 30		15.7		
13	36.0	+ 08 42		15.5		
13	36.2	+ 12 42		15.6		
13	36.7	+ 09 09		15.7		
13	36.8	+ 12 58		15.1		
13	38.5	+ 11 57		15.6		
13	38.7	+ 13 01		15.5		
13	38.8	+ 14 01		15.5		
13	39.0	+ 14 06		15.7		
13	39.1	+ 09 03		15.7		
13	39.2	+ 12 53		15.6		
13	41.4	+ 13 29		15.7		
13	41.7	+ 12 23		15.5		
13	41.9	+ 13 25		15.6		
13	42.6	+ 08 44		15.5		double nebula

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
13 42.7	+ 12 27		15.6		
13 43.6	+ 09 32		15.1		
13 44.4	+ 11 53		15.1		
13 44.5	+ 11 52		15.4		
13 44.6	+ 11 21		15.5		
13 45.1	+ 10 01		15.4		
13 45.3	+ 11 31		15.6		
13 45.6	+ 12 19		15.3		
13 46.3	+ 12 12		15.6		
13 46.9	+ 08 45		14.9		
13 47.0	+ 14 07		15.5		
13 47.1	+ 11 20		15.6		
13 48.6	+ 08 37		15.6		double nebula
13 48.6	+ 14 01		15.4		
13 48.7	+ 08 44		15.5		
13 49.1	+ 14 20	944*	14.7		
13 49.1	+ 14 21		15.4		
13 49.5	+ 09 46		15.3		
13 49.6	+ 14 12		15.6		
13 49.7	+ 14 21	946*	14.5		
13 49.8	+ 14 15		15.5		
13 49.9	+ 13 49		14.9		
13 50.0	+ 14 20	948*	14.4		
13 51.0	+ 11 35		15.5		
13 51.6	+ 09 39		15.6		
13 51.7	+ 13 50		14.7		
13 51.9	+ 08 39		15.7		double nebula

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5248	11.0	Sc	10.98	Sc	11.0	Sc	10.36	Sc



FIELD No. 74

14^h04^m + 11°30'

Survey Plate No. 1051

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
18830	13 53 25.3	+ 14 18 02	6.15
18941	13 58 51.9	+ 9 08 10	5.88
18942	13 58 54.3	+ 13 58 24	7.12
18985	14 01 04.8	+ 11 01 50	6.43
19205	14 11 40.8	+ 13 11 35	5.54
19226	14 12 23.8	+ 10 20 07	5.36

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1349.2 + 0940	medium compact	694	8.0	Near	27
1351.8 + 1056	open	103	2.0	MD	26
1352.6 + 0906	medium compact	92	1.9	VD	22
1352.7 + 1400	medium compact	75	1.1	VD	9
1353.2 + 1123	medium compact	55	1.0	VD	19
1353.5 + 1223	compact	60	0.6	ED	12
1353.6 + 1156	open	187	2.4	VD	14
1353.9 + 1110	medium compact	121	1.7	D	15
1354.0 + 1228	medium compact	81	1.3	D	13
1355.0 + 1422	medium compact	132	2.2	D	4
1356.0 + 1327	medium compact	73	1.6	D	10
1356.4 + 1045	medium compact	185	1.7	D	17
1357.4 + 1430	compact	232	1.8	VD	3
1358.7 + 1521	open	923	24.3	Near	5
1359.2 + 0826	medium compact	52	0.8	VD	21
1400.4 + 0949	medium compact	192	12.0	Near	23
1401.2 + 0921	medium compact	75	1.4	D	20
1403.3 + 1413	medium compact	211	2.2	VD	6
1404.8 + 1254	medium compact	207	4.5	Near	11
1405.3 + 1413	compact	371	3.4	D	7
1407.3 + 1107	medium compact	681	5.5	MD	16
1409.5 + 1414	compact	548	5.0	D	2
1412.5 + 1430	open	64	1.5	VD	1
1414.6 + 1355	medium compact	181	2.8	VD	8
1416.0 + 0752	medium compact	720	8.0	Near	25
1416.2 + 0904	medium compact	63	1.0	VD	24
1416.2 + 1000	open	167	1.6	D	18

Average number of galaxies per cluster = 242.4

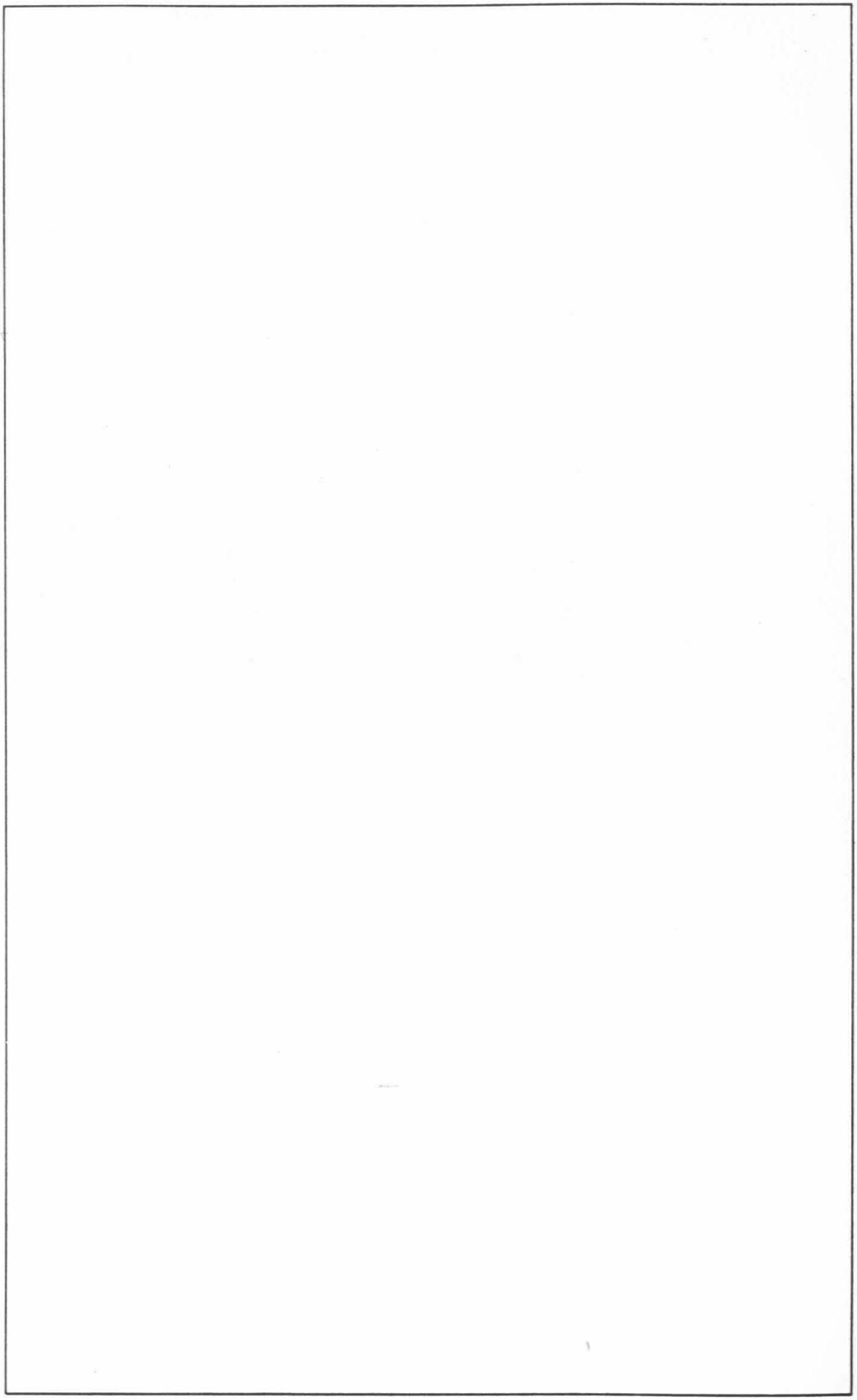
GALAXIES

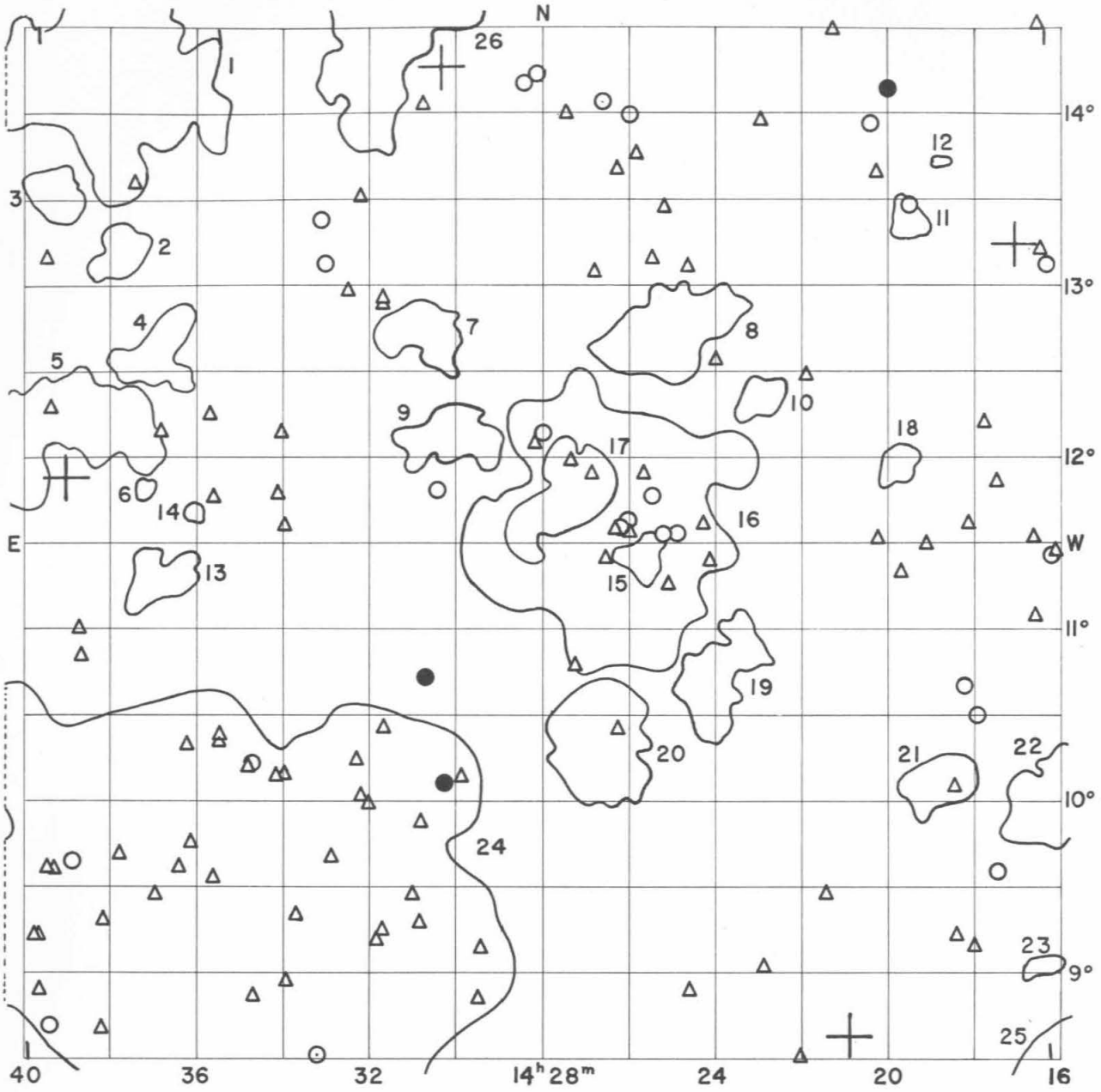
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
13 51.9 + 08 39		15.7		double nebula
13 52.3 + 11 36		15.7		
13 52.3 + 13 07		15.6		
13 52.5 + 11 36		15.5		
13 52.7 + 10 17		15.5		double nebula
13 52.8 + 09 15		15.6		double nebula
13 53.6 + 13 45	959*	14.4		
13 53.8 + 13 03		15.6		
13 54.1 + 10 06		15.7		
13 54.1 + 10 27		15.6		
13 54.1 + 12 31		15.7		
13 54.5 + 11 06		15.3		
13 54.5 + 14 23		15.1		
13 54.7 + 12 15		14.9		
13 54.7 + 12 16	962*	14.0		very compact
13 54.8 + 12 14		15.2		
13 55.0 + 10 12		15.6		
13 55.3 + 10 08		14.5		
13 55.5 + 10 58		15.6		
13 55.8 + 08 30		15.1		
13 56.1 + 12 12		15.4		
13 56.1 + 13 43		15.5		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
13	56.2	+ 12 49		15.5		
13	56.2	+ 13 42		15.3		
13	56.8	+ 10 23		15.3		
13	56.8	+ 13 43		15.6		
13	57.0	+ 13 02		15.2		
13	57.3	+ 12 59		15.2		
13	57.4	+ 12 18		15.7		
13	57.6	+ 12 21		15.2		
13	57.7	+ 09 13		14.8		
13	57.8	+ 09 33		15.6		
13	57.8	+ 13 12		15.2		
13	57.9	+ 13 12		15.5		
13	58.0	+ 08 55		15.6		
13	58.0	+ 09 09		15.4		double nebula
13	58.0	+ 12 33		15.6		
13	58.7	+ 08 51		15.3		
13	58.8	+ 10 22		15.3		
13	58.8	+ 13 39		15.7		
13	58.9	+ 10 43		15.2		double nebula
13	59.0	+ 09 25		15.7		
13	59.2	+ 10 07		15.2		
13	59.3	+ 09 44	5409	14.4		
13	59.4	+ 09 02		14.7		
13	59.4	+ 09 53		15.5		double nebula
13	59.5	+ 09 11	5411	14.6		double nebula
13	59.5	+ 09 47		15.6		
13	59.5	+ 12 37		15.6		very close triple system
13	59.6	+ 10 11	5414	13.8		triple system
13	59.7	+ 09 18		15.7		
13	59.7	+ 09 41	5416	13.6		
13	59.7	+ 09 49		15.7		triple system
14	00.0	+ 10 39		15.4		
14	00.1	+ 09 19		15.0		
14	00.1	+ 09 22		15.6		
14	00.2	+ 09 25		15.7		
14	00.2	+ 09 36		15.5		
14	00.3	+ 09 35	5423	13.9		
14	00.4	+ 09 02		15.6		
14	00.4	+ 09 09		15.6		
14	00.4	+ 09 36		15.5		
14	00.5	+ 09 40	5424	14.3		
14	00.6	+ 09 12		15.1		
14	00.6	+ 09 37	5431	14.8		
14	00.7	+ 09 09		15.0		
14	00.7	+ 12 24		15.7		
14	00.9	+ 09 41	5434	14.3		
14	01.0	+ 09 28		14.8		
14	01.0	+ 09 43		14.7		
14	01.2	+ 09 49	5436	14.9		
14	01.2	+ 11 37		15.1		close pair with tidal effects
14	01.2	+ 11 38		15.1		
14	01.3	+ 09 45	5437	15.1		
14	01.3	+ 09 51	5438	14.7		
14	01.7	+ 12 57		15.2		
14	01.7	+ 13 18		15.2		
14	01.8	+ 12 15		15.1		
14	01.9	+ 11 59		15.3		
14	02.1	+ 11 13		15.5		
14	02.2	+ 11 53		14.6		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
14	02.3	+ 08 35		15.4		
14	02.3	+ 09 04		14.9		
14	02.3	+ 14 30		15.5		
14	02.4	+ 11 02		15.1		
14	02.4	+ 11 38		14.8		
14	02.4	+ 12 57		15.2		
14	02.4	+ 12 58		15.3		
14	02.5	+ 12 07	5456	14.2		
14	02.5	+ 13 22	5459	14.5		
14	02.6	+ 09 35		15.6		
14	02.6	+ 11 15		15.3		
14	02.8	+ 09 52		15.5		
14	02.8	+ 10 39		15.1		
14	03.0	+ 12 41		15.6		
14	03.1	+ 09 09		15.3		
14	03.1	+ 12 06		15.7		
14	03.2	+ 13 53		15.6		
14	03.3	+ 09 45		15.7		
14	03.5	+ 09 16		15.2		
14	03.5	+ 13 01		14.7		
14	03.7	+ 09 36	5463	14.1		double nebula
14	03.7	+ 12 01		15.1		
14	03.7	+ 12 45		15.6		
14	04.1	+ 12 57		15.7		
14	04.4	+ 09 34		15.4		
14	04.5	+ 10 42		14.8		
14	04.5	+ 12 48		15.3		
14	04.5	+ 13 14		15.6		
14	04.6	+ 10 53		15.4		
14	04.6	+ 13 14		15.3		
14	04.7	+ 12 50		14.8		
14	04.9	+ 13 07		15.4		
14	05.2	+ 09 56		15.6		
14	06.0	+ 09 10	5482	14.2		
14	06.0	+ 13 50		15.4		
14	06.1	+ 09 17		15.4		
14	06.1	+ 09 27		15.5		
14	06.1	+ 12 03		14.9		
14	06.1	+ 12 11		15.7		
14	06.3	+ 09 07		15.6		
14	06.9	+ 09 08		15.4		
14	07.3	+ 10 06		15.3		
14	07.3	+ 11 49		15.1		
14	07.4	+ 11 12		15.3		
14	07.6	+ 10 24		15.1		
14	07.7	+ 12 10		15.4		
14	08.2	+ 09 14		14.7		
14	08.3	+ 13 47		15.2		
14	08.8	+ 11 37		15.7		
14	09.0	+ 08 36		15.1		
14	09.1	+ 09 03		15.4		
14	09.5	+ 10 37		15.4		
14	09.7	+ 08 54		14.9		
14	09.8	+ 08 45		15.2		
14	10.0	+ 08 53		15.1		
14	10.0	+ 11 29		14.9		
14	10.1	+ 13 32	5505	14.1		
14	10.2	+ 12 16		15.7		
14	10.5	+ 10 09		15.0		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	'				
14	10.6	+ 08	52		15.5		
14	10.7	+ 08	51	5511	15.0		
14	10.8	+ 09	05		14.9		
14	10.8	+ 13	14		15.0		
14	11.0	+ 09	14		15.0		
14	11.2	+ 12	44		14.4		
14	11.5	+ 10	02		15.7		
14	11.8	+ 10	49		15.2		double nebula
14	11.8	+ 12	34		15.5		double nebula
14	12.5	+ 14	21		14.3		
14	12.8	+ 11	31		15.4		
14	13.3	+ 10	40		15.3		
14	13.8	+ 08	31	5528	14.8		
14	14.1	+ 10	13		15.5		
14	14.3	+ 11	07	5531	14.7		double nebula
14	14.4	+ 11	02	5532	13.3		double nebula
14	14.5	+ 09	21		15.4		
14	14.9	+ 09	08		15.4		
14	15.2	+ 13	11		15.1		
14	15.8	+ 11	27	993*	15.4		
14	15.9	+ 11	25	994*	14.8		double nebula
14	16.0	+ 13	06	5550	14.2		





FIELD No. 75

14^h28^m + 11°30'

Survey Plate No. 65

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19319	14 16 51.0	+ 13 14 02	5.31
19401	14 20 55.1	+ 8 40 24	5.11
19615	14 30 26.1	+ 14 16 51	7.04
19793	14 39 19.3	+ 11 52 30	5.63

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1416.0 + 0752	medium compact	720	8.0	Near	25
1416.2 + 0904	medium compact	63	1.0	VD	23
1416.2 + 1000	open	167	1.6	D	22
1418.5 + 1344	medium compact	31	0.5	ED	12
1418.6 + 1006	medium compact	164	1.9	VD	21
1419.2 + 1324	medium compact	73	1.2	VD	11
1419.5 + 1158	open	89	1.2	VD	18
1422.8 + 1220	medium compact	77	1.3	D	10
1424.0 + 1043	medium compact	271	2.5	D	19
1424.9 + 1244	medium compact	307	3.5	MD	8
1425.6 + 1126	medium compact	99	1.4	D	15
1426.4 + 1132	open	335	8.5	Near	16
1426.5 + 1020	medium compact	263	3.4	D	20
1427.4 + 1146	medium compact	223	2.7	D	17
1430.1 + 1209	medium compact	237	2.5	D	9
1430.8 + 1246	open	149	2.3	MD	7
1431.9 + 1420	open	190	5.0	MD	26
1436.0 + 0926	open	920	16.5	Near	24
1436.2 + 1141	compact	49	0.7	ED	14
1437.0 + 1119	medium compact	88	1.7	D	13
1437.1 + 1235	medium compact	135	2.5	Near	4
1437.4 + 1148	compact	48	0.6	ED	6
1438.0 + 1313	medium compact	145	1.7	D	2
1438.2 + 1414	medium compact	545	6.4	MD	1
1439.3 + 1213	open	411	5.0	MD	5
1439.6 + 1331	compact	121	1.7	MD	3

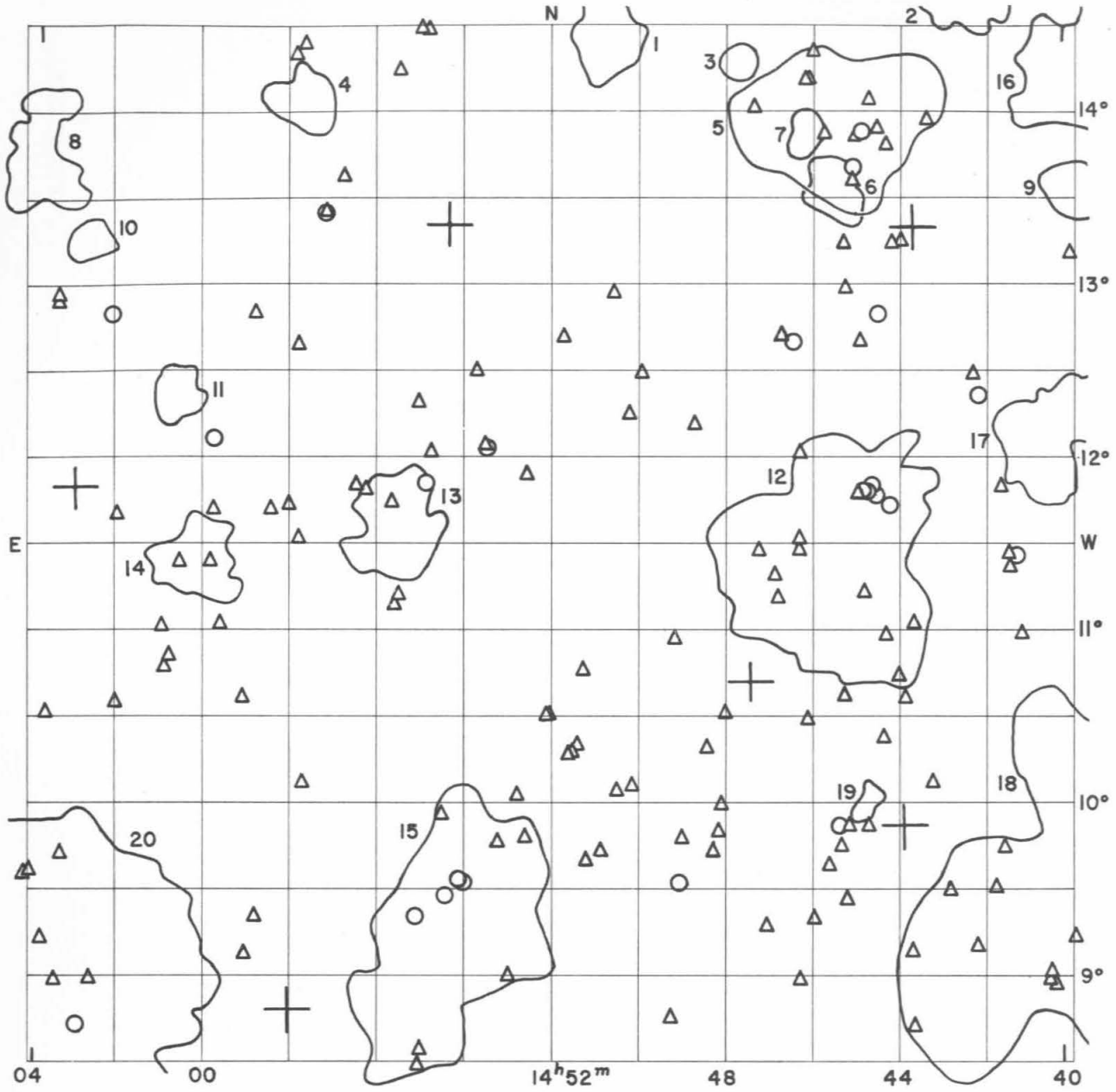
Average number of galaxies per cluster = 227.7

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
14 15.8 + 11 27	993*	15.4		
14 15.9 + 11 25	994*	14.8		double nebula
14 16.0 + 13 06	5550	14.2		
14 16.2 + 13 12		15.5		
14 16.2 + 14 29		15.4		
14 16.4 + 11 05		15.4		
14 16.4 + 11 31		15.6		
14 17.3 + 09 36		14.7		
14 17.3 + 11 51		15.4		
14 17.5 + 12 12		15.7		
14 17.7 + 10 29		14.5		
14 17.8 + 09 09		15.4		
14 17.9 + 11 37		15.7		
14 18.0 + 10 40		14.9		
14 18.2 + 10 05		15.5		
14 18.3 + 09 13		15.4		
14 18.9 + 11 30		15.5		
14 19.3 + 13 27	5583	14.2		
14 19.5 + 11 20		15.3		
14 19.8 + 14 09	5587	14.0		
14 20.0 + 11 32		15.5		
14 20.0 + 13 38		15.7		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° '				
14	20.2	+ 13 57	5591	14.5		double nebula
14	21.0	+ 14 28		15.3		
14	21.3	+ 09 28		15.4		
14	21.7	+ 12 28		15.6		
14	21.9	+ 08 30		15.4		
14	22.8	+ 09 02		15.6		
14	22.8	+ 13 58		15.3		
14	23.9	+ 12 34	1009*	15.3		
14	24.0	+ 11 23		15.5		double nebula
14	24.2	+ 11 37		15.5		
14	24.5	+ 08 54		15.1		
14	24.6	+ 13 07		15.1		
14	24.8	+ 11 34		15.0		
14	25.0	+ 11 16		15.2		
14	25.1	+ 11 33		14.9		
14	25.1	+ 13 26		15.5		
14	25.4	+ 11 47		14.9		
14	25.4	+ 13 08		15.6		
14	25.6	+ 11 55		15.1		
14	25.7	+ 13 46		15.1		
14	25.9	+ 11 35		15.4		
14	25.9	+ 11 38		14.9		double nebula
14	25.9	+ 14 00	1014*	14.1		
14	26.1	+ 11 36	5627	14.7		
14	26.2	+ 10 26		15.3		
14	26.2	+ 11 36		15.3		
14	26.6	+ 13 40		15.5		
14	26.5	+ 11 25		15.2		
14	26.6	+ 14 05		14.4		
14	26.8	+ 11 55		15.4		
14	26.8	+ 13 04		15.6		
14	27.2	+ 10 48		15.3		
14	27.3	+ 11 59		15.5		
14	27.4	+ 14 01		15.2		
14	28.0	+ 12 09	5644	14.1		
14	28.2	+ 12 06	5647	15.3		double nebula
14	28.2	+ 14 15	5648	14.1		
14	28.4	+ 14 11	5649	14.0		
14	29.4	+ 09 09		15.3		
14	29.5	+ 08 52		15.3		
14	29.9	+ 10 09		15.3		
14	30.3	+ 10 06		13.2		
14	30.5	+ 11 49		14.3		
14	30.7	+ 10 43	5666	13.5		very compact
14	30.8	+ 09 18		15.4		
14	30.8	+ 09 53		15.7		
14	30.8	+ 14 02		15.5		
14	31.0	+ 09 28		15.4		
14	31.7	+ 09 15		15.6		
14	31.7	+ 10 26		15.4		
14	31.7	+ 12 54		15.5		
14	31.7	+ 12 56		15.2		
14	31.8	+ 09 12		15.5		
14	32.1	+ 10 00		15.3		
14	32.3	+ 10 03		15.3		
14	32.3	+ 10 15		15.4		
14	32.3	+ 13 30		15.7		
14	32.6	+ 12 57		15.6		
14	32.9	+ 09 41		15.2		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 33.1	+ 13 07		14.6		
14 33.3	+ 08 31	5681	14.3		double nebula
14 33.3	+ 13 23		14.9		
14 33.7	+ 09 21		15.4		
14 33.9	+ 08 57		15.7		
14 34.1	+ 10 09		15.3		
14 34.1	+ 11 37		15.5		
14 34.2	+ 10 09		15.4		
14 34.2	+ 11 47		15.6		
14 34.2	+ 12 09		15.4		
14 34.8	+ 08 51		15.3		double nebula
14 34.8	+ 10 13		14.9		
14 34.9	+ 10 12		15.1		
14 35.6	+ 10 22		15.4		
14 35.6	+ 10 23		15.4		
14 35.7	+ 09 33	1035*	15.2		
14 35.8	+ 11 47		15.3		
14 35.8	+ 12 15		15.7		
14 36.2	+ 09 45		15.4		
14 36.4	+ 10 20		15.5		
14 36.5	+ 09 37		15.6		
14 37.0	+ 09 27		15.4		
14 37.0	+ 12 08	1038*	15.3		
14 37.7	+ 13 35		15.5		
14 37.9	+ 09 41	1040*	15.3		
14 38.2	+ 09 19		15.5		
14 38.3	+ 08 40		15.2		
14 38.8	+ 10 51		15.6		
14 38.9	+ 11 01		15.2		
14 39.1	+ 09 39	1044*	15.0		
14 39.5	+ 09 36		15.3		
14 39.6	+ 08 41		15.0		
14 39.6	+ 12 17		15.7		
14 39.7	+ 09 36		15.7		
14 39.7	+ 13 10		15.6		
14 39.8	+ 08 53		15.4		
14 39.8	+ 09 13		15.7		
14 39.9	+ 09 13		15.3		



FIELD No. 76

14^h52^m + 11°30'

Survey Plate No. 1087

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
19875	14 43 28.5	+ 13 18 43	6.70
19886	14 43 49.2	+ 9 51 34	7.17
19955	14 47 22.8	+ 10 41 59	6.96
20106	14 54 21.2	+ 13 21 03	7.8
20193	14 58 08.9	+ 8 48 07	7.6
20296	15 03 09.6	+ 11 49 30	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1436.0 + 0926	open	920	16.5	Near	18
1438.2 + 1414	medium compact	545	6.4	MD	16
1439.3 + 1213	open	411	5.0	MD	17
1439.6 + 1331	compact	121	1.7	MD	9
1442.3 + 1436	medium compact	187	2.3	D	2
1444.6 + 1001	compact	71	1.2	VD	19
1445.2 + 1356	open	155	5.5	Near	5
1445.4 + 1125	open	355	7.0	Near	12
1445.4 + 1334	compact	220	1.9	VD	6
1446.0 + 1352	medium compact	93	1.3	VD	7
1447.5 + 1418	compact	92	1.1	VD	3
1450.8 + 1427	medium compact	225	2.5	MD	1
1454.3 + 0915	medium compact	289	7.0	Near	15
1455.7 + 1136	medium compact	133	3.1	D	13
1457.9 + 1405	open	87	2.1	MD	4
1500.4 + 1126	compact	173	2.5	D	14
1500.9 + 1222	medium compact	123	1.7	VD	11
1502.9 + 1316	medium compact	103	1.2	VD	10
1503.8 + 0853	open	1093	11.5	Near	20
1504.2 + 1345	medium compact	275	2.8	D	8

Average number of galaxies per cluster = 283.6

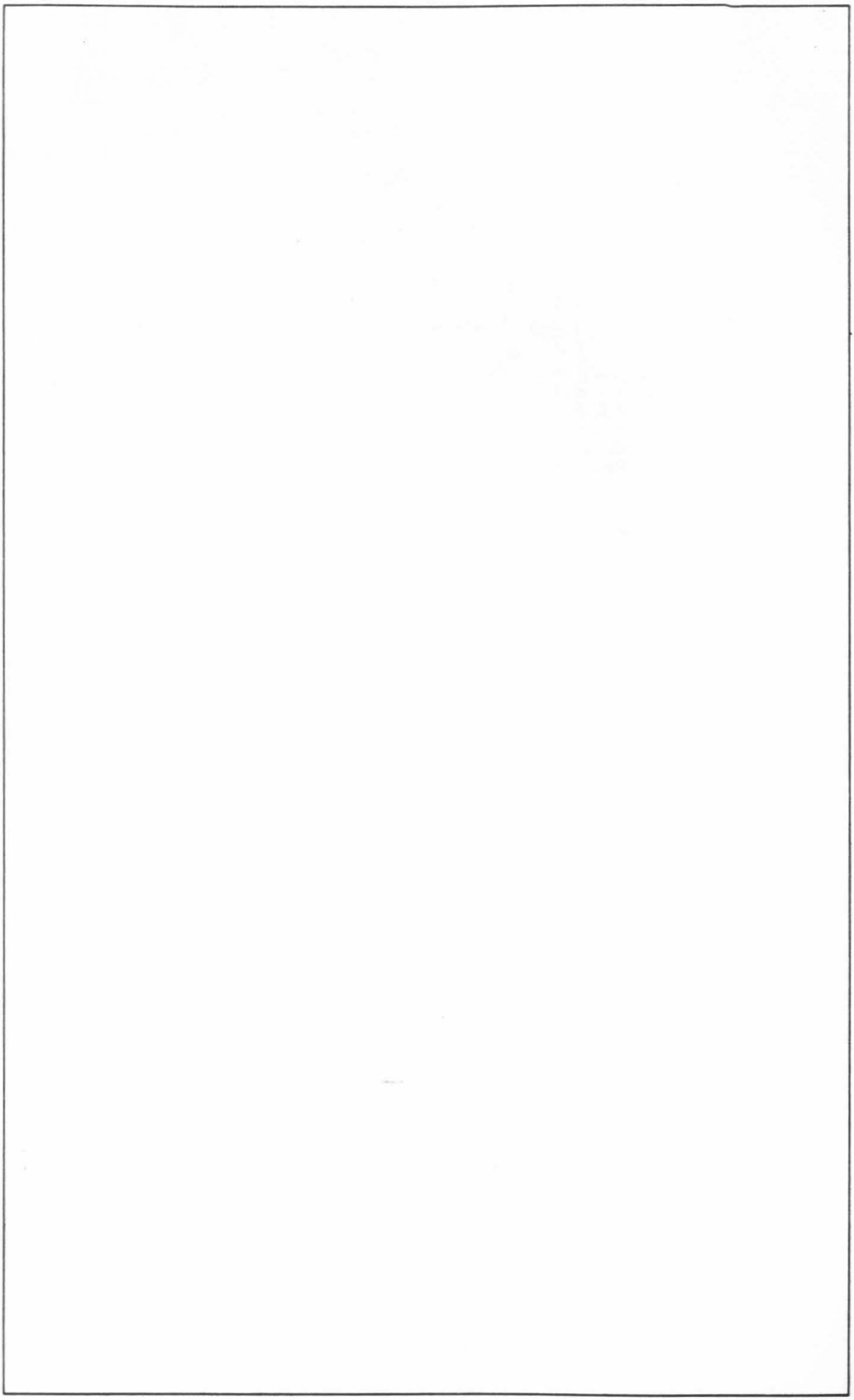
GALAXIES

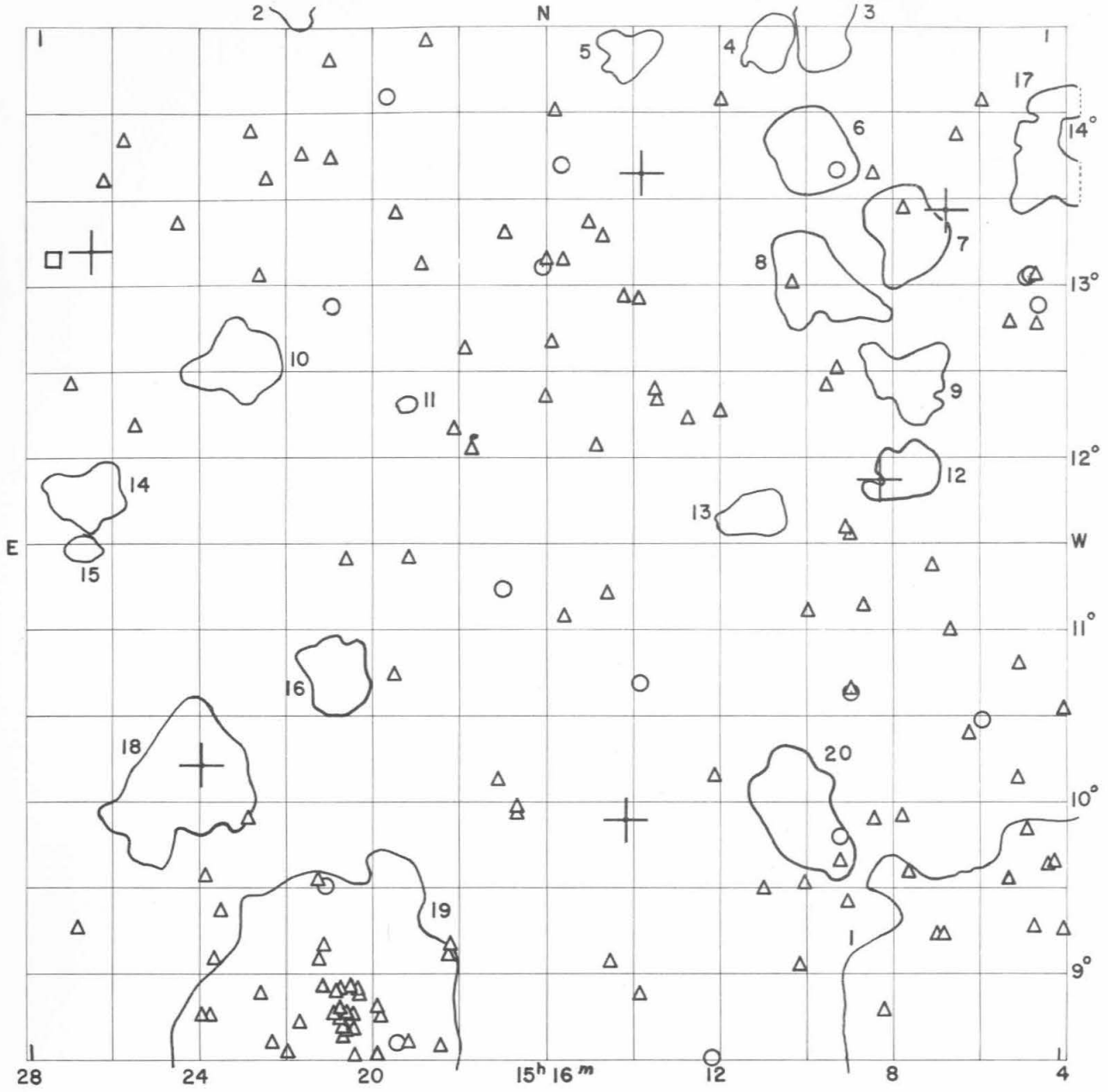
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
14 39.7 + 13 10		15.6		
14 39.9 + 09 13		15.3		
14 40.3 + 08 56		15.3		
14 40.3 + 09 02		15.6		
14 40.4 + 08 58		15.3		
14 41.0 + 10 58		15.5		
14 41.1 + 11 25	5736	14.9		
14 41.2 + 11 22		15.6		
14 41.3 + 11 26		15.2		
14 41.4 + 11 49		15.2		
14 41.5 + 09 44		15.4		
14 41.7 + 09 30		15.3		
14 42.0 + 12 21	4493*	14.4		double nebula
14 42.1 + 09 10		15.4		
14 42.1 + 12 28		15.6		double nebula
14 42.7 + 09 29		15.2		
14 43.1 + 10 07		15.7		
14 43.2 + 13 57		15.7		
14 43.5 + 08 43		15.4		triple system
14 43.6 + 09 09		15.6		
14 43.6 + 11 01		15.4		
14 43.7 + 13 14		15.4		
14 43.8 + 10 37		15.4		
14 43.8 + 10 45		15.5		double nebula
14 44.0 + 11 42		14.9		
14 44.0 + 13 14		15.4		
14 44.1 + 13 48		15.7		
14 44.2 + 10 57		15.4		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h m	°	'				
14 44.3	+ 10	23		15.7		
14 44.3	+ 12	49		15.0		
14 44.3	+ 13	53		15.2		
14 44.4	+ 11	47		15.0		
14 44.5	+ 11	50		15.0		
14 44.5	+ 14	03		15.1		
14 44.6	+ 09	53		15.7		
14 44.6	+ 11	48		14.7		
14 44.7	+ 11	12		15.3		
14 44.7	+ 11	48		14.7		
14 44.7	+ 13	52	5758	15.0		
14 44.8	+ 11	48		15.5		
14 44.8	+ 12	40		15.2		
14 44.8	+ 13	37		15.4		
14 44.8	+ 13	52		15.2		
14 44.9	+ 13	40	5759	14.9		double nebula
14 45.1	+ 09	27		15.5		
14 45.1	+ 09	53		15.6		
14 45.1	+ 12	59		15.5		
14 45.1	+ 13	14		15.3		
14 45.2	+ 10	37		15.4		
14 45.3	+ 09	44		15.1		double nebula
14 45.3	+ 09	52		15.0		
14 45.6	+ 09	38		15.4		
14 45.6	+ 13	53		15.4		
14 45.8	+ 14	21		15.7		
14 45.9	+ 09	20		15.3		double nebula
14 46.0	+ 14	10		15.2		
14 46.0	+ 14	12		15.3		
14 46.1	+ 10	29		15.2		
14 46.2	+ 11	29		15.7		
14 46.2	+ 11	32		15.3		
14 46.2	+ 12	02		15.5		
14 46.3	+ 08	59		15.3		
14 46.3	+ 12	40	5762	14.3		
14 46.6	+ 12	41	5763	15.3		
14 46.7	+ 11	11		15.3		
14 46.8	+ 11	20		15.3		
14 47.1	+ 09	16		15.6		
14 47.2	+ 11	27		15.3		triple system
14 47.2	+ 14	00		15.4		
14 47.9	+ 10	33		15.6		
14 48.1	+ 09	51		15.6		
14 48.1	+ 10	00		15.4		
14 48.3	+ 09	44		15.5		
14 48.4	+ 10	19		15.7		triple system
14 48.7	+ 12	12		15.7		
14 49.0	+ 09	32		14.9		double nebula
14 49.0	+ 09	48		15.2		
14 49.2	+ 10	56		15.2		
14 49.3	+ 08	46		15.4		
14 49.9	+ 12	30		15.2		
14 50.1	+ 10	07		15.7		
14 50.2	+ 12	16		15.7		
14 50.5	+ 10	05		15.3		
14 50.6	+ 12	57		15.2		
14 50.8	+ 09	44		15.6		
14 51.2	+ 09	41		15.7		
14 51.3	+ 10	48		15.6		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 51.4	+ 10 20		15.7		
14 51.6	+ 10 18		15.3		
14 51.7	+ 10 17		15.3		
14 51.7	+ 12 42		15.2		
14 52.1	+ 10 31		15.2		
14 52.2	+ 10 31		15.7		
14 52.6	+ 11 54	5782	15.1		
14 52.7	+ 09 48		15.5		
14 52.8	+ 10 04		15.7		
14 53.1	+ 09 01		15.1		
14 53.3	+ 09 47		15.2		double nebula
14 53.5	+ 12 04		14.9		
14 53.6	+ 12 04		15.3		
14 53.8	+ 12 31		15.6		
14 54.0	+ 09 33	1078*	14.8		
14 54.2	+ 09 34	1079*	14.8		
14 54.5	+ 09 28		14.8		
14 54.5	+ 09 57		15.3		
14 54.8	+ 12 02		15.5		
14 54.9	+ 11 52		15.0		
14 54.9	+ 14 29		15.4		
14 55.0	+ 14 29		15.3		
14 55.1	+ 08 29	5790	15.2		
14 55.1	+ 08 35		15.2		
14 55.2	+ 09 21		15.0		
14 55.2	+ 12 19		15.7		
14 55.6	+ 11 13		15.6		
14 55.6	+ 14 14		15.7		double nebula
14 55.7	+ 11 10		15.5		
14 55.7	+ 11 43		15.6		
14 56.3	+ 11 49		15.3		
14 56.5	+ 11 51		15.4		
14 56.8	+ 13 37		15.5		double nebula
14 57.3	+ 13 25		15.0		
14 57.3	+ 13 26		15.3		
14 57.8	+ 10 08		15.5		
14 57.8	+ 14 24		15.5		
14 57.9	+ 11 32		15.3		
14 57.9	+ 12 40		15.7		
14 58.0	+ 14 20		15.5		
14 58.2	+ 11 44		15.3		
14 58.5	+ 11 43		15.2		
14 58.9	+ 09 21		15.2		
14 58.9	+ 12 51		15.6		
14 59.1	+ 09 09		15.4		
14 59.3	+ 10 37		15.2		
14 59.7	+ 11 02		15.6		
14 59.8	+ 11 42		15.6		
14 59.9	+ 12 07		15.0		
15 00.0	+ 11 24		15.3		
15 00.7	+ 11 24		15.2		double nebula
15 01.0	+ 10 51		15.3		
15 01.1	+ 10 48		15.3		
15 01.1	+ 11 01		15.6		
15 02.1	+ 11 41		15.4		
15 02.2	+ 10 32		15.4		
15 02.3	+ 12 50	5837	14.5		double nebula
15 02.8	+ 08 59		15.3		
15 03.1	+ 08 42		14.5		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 03.4	+ 09 43		15.4		
15 03.6	+ 08 59		15.4		
15 03.6	+ 12 55		15.2		
15 03.6	+ 12 56		15.2		
15 03.8	+ 10 32		15.5		
15 04.0	+ 09 14		15.5		
15 04.1	+ 09 38		15.2		
15 04.2	+ 09 37		15.3		





FIELD No. 77

15^h16^m + 11°30'

Survey Plate No. 1422

GC STARS

Nos.	R.A.	Decl.	m_{-p}
	h m s	° ' "	
20373	15 06 31.4	+ 13 25 27	6.07
20402	15 08 08.0	+ 11 51 43	7.09
20527	15 13 45.6	+ 13 39 14	7.54
20536	15 14 10.6	+ 9 53 46	6.64
20757	15 24 05.9	+ 10 12 36	7.06
20816	15 26 46.6	+ 13 12 14	7.08

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1503.8 + 0853	open	1093	11.5	Near	1
1504.2 + 1345	medium compact	275	2.8	D	17
1507.4 + 1228	medium compact	130	2.5	D	9
1507.4 + 1320	medium compact	178	2.6	VD	7
1507.5 + 1157	open	106	2.0	D	12
1509.3 + 1434	medium compact	263	2.4	VD	3
1509.6 + 1303	open	95	3.3	D	8
1509.7 + 1349	open	175	2.6	D	6
1510.0 + 0957	medium compact	180	3.5	MD	20
1510.7 + 1427	compact	121	1.5	D	4
1511.1 + 1140	medium compact	83	1.7	MD	13
1514.0 + 1422	medium compact	98	1.6	D	5
1519.3 + 1220	compact	52	0.5	ED	11
1520.9 + 1045	medium compact	167	2.3	D	16
1521.2 + 0851	compact	640	9.0	Near	19
1522.0 + 1439	medium compact	94	1.4	D	2
1523.3 + 1235	open	123	2.5	D	10
1524.5 + 1006	open	253	4.0	MD	18
1526.8 + 1147	open	96	2.5	MD	14
1526.9 + 1129	medium compact	58	1.0	VD	15

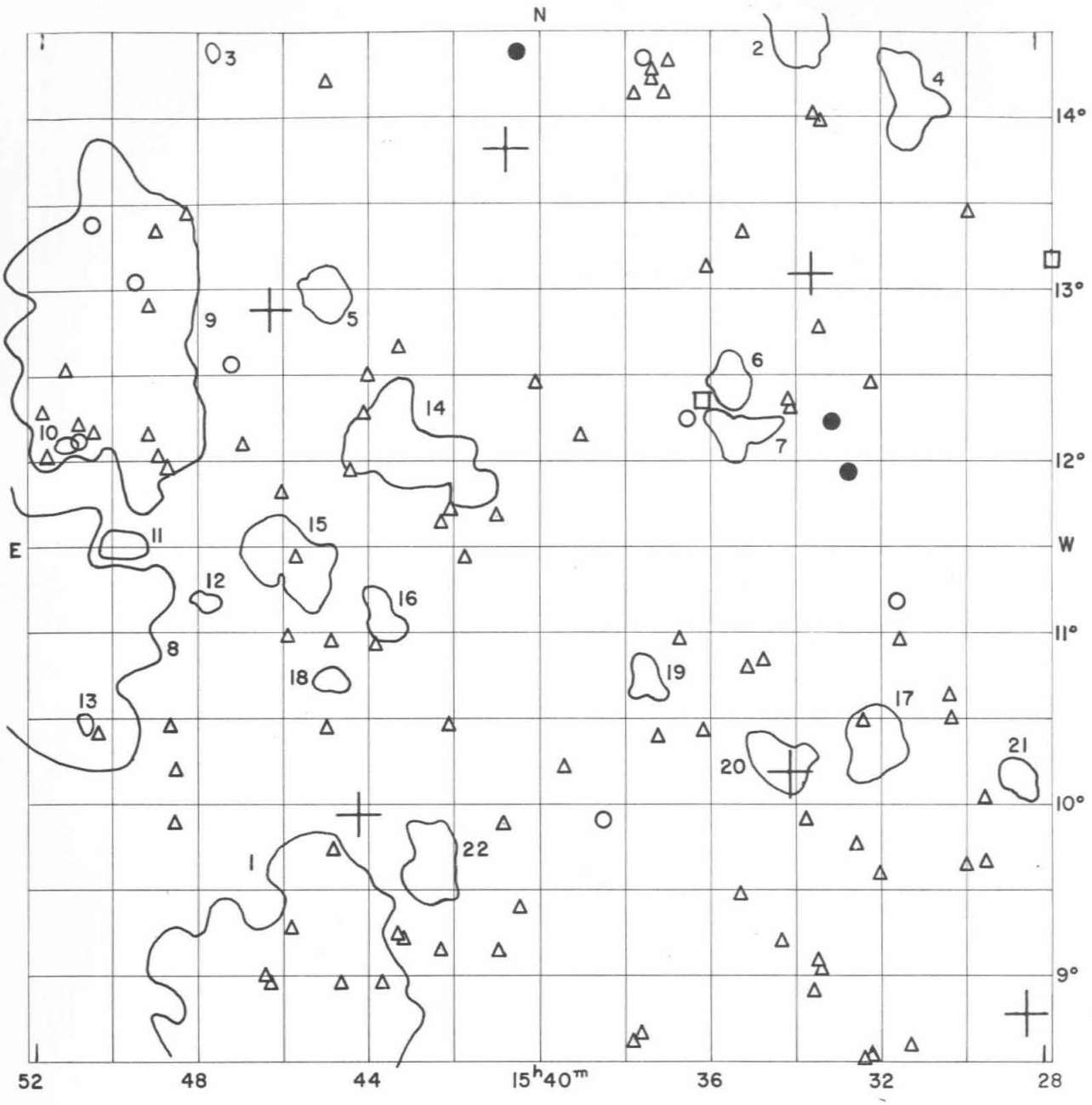
Average number of galaxies per cluster = 214.0

GALAXIES

Position α 1950 δ (h m ° ′)	NGC IC*	m_p	V_s km/sec	Remarks
15 03.8 + 10 32		15.5		
15 04.0 + 09 14		15.5		
15 04.1 + 09 38		15.2		
15 04.2 + 09 37		15.3		
15 04.4 + 12 46		15.2		
15 04.4 + 12 53		14.9		
15 04.4 + 13 03		15.3		
15 04.5 + 13 04	5851	14.9		
15 04.6 + 09 16		15.3		
15 04.6 + 13 03	5852	14.7		
15 04.7 + 09 51		15.2		
15 04.8 + 10 48		15.3		
15 04.9 + 10 08		15.5		
15 05.0 + 12 46		15.3		
15 05.1 + 09 34		15.1		
15 05.6 + 14 04		15.3		
15 05.8 + 10 29		15.0		
15 06.1 + 10 23		15.5		
15 06.2 + 13 52		15.2		double nebula
15 06.5 + 11 00		15.4		
15 06.7 + 09 15		15.5		
15 06.9 + 09 15		15.7		
15 06.9 + 11 22		15.7		
15 07.5 + 09 35		15.3		
15 07.5 + 13 27		15.2		
15 07.7 + 09 56		15.2		
15 08.1 + 08 48		15.4		
15 08.2 + 13 39		15.3		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 08.3	+ 09 55		15.6		
15 08.5	+ 11 09		15.7		
15 08.8	+ 10 38		14.8		
15 08.8	+ 10 39		15.3		
15 08.9	+ 09 25		15.7		
15 08.9	+ 11 35		15.6		
15 08.9	+ 11 36		15.5		double nebula
15 09.1	+ 09 40		15.3		
15 09.1	+ 09 48		15.0		
15 09.1	+ 12 31		15.7		
15 09.1	+ 13 40		15.0		
15 09.4	+ 12 25		15.7		
15 09.8	+ 11 07		15.4		
15 09.9	+ 09 32		15.4		
15 10.1	+ 09 02		15.7		
15 10.1	+ 13 00		15.3		
15 10.9	+ 09 29		15.6		
15 11.8	+ 12 16		15.3		
15 11.8	+ 14 05		15.4		
15 12.0	+ 10 08		15.6		
15 12.2	+ 08 32		15.0		
15 12.7	+ 12 13		15.4		
15 13.4	+ 12 20		15.5		
15 13.4	+ 12 24		15.5		
15 13.8	+ 08 52		15.5		
15 13.8	+ 10 42		14.3		
15 13.8	+ 12 55		15.2		
15 14.2	+ 12 55		15.3		
15 14.5	+ 09 04		15.5		double nebula
15 14.6	+ 11 13		15.5		
15 14.7	+ 13 17		15.2		
15 14.8	+ 12 04		15.4		
15 15.0	+ 13 21		15.5		very compact
15 15.6	+ 11 05		15.1		
15 15.6	+ 13 09		15.2		
15 15.7	+ 13 42		14.9		
15 15.8	+ 14 00		15.2		
15 15.9	+ 12 40	1113*	15.2		
15 16.0	+ 12 22		15.4		
15 16.0	+ 13 09		15.1		
15 16.1	+ 13 07		14.9		
15 16.7	+ 09 57		15.5		
15 16.7	+ 09 59		15.5		
15 16.9	+ 13 19		15.5		
15 17.0	+ 11 14		14.7		
15 17.1	+ 10 09		15.1		
15 17.7	+ 12 03		15.4		
15 17.9	+ 12 37		15.5		
15 18.2	+ 09 10		15.6		
15 18.2	+ 12 10		15.2		
15 18.3	+ 09 07		15.7		
15 18.5	+ 08 35		15.3		
15 18.9	+ 13 06		15.6		
15 18.9	+ 14 25		15.3		
15 19.2	+ 11 26		15.4		
15 19.3	+ 08 36		15.1		
15 19.5	+ 08 37	1116*	14.9		
15 19.5	+ 10 45		15.5		
15 19.5	+ 13 26		15.4		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 19.8	+ 14 06		15.0		
15 19.9	+ 08 46		15.7		
15 19.9	+ 08 50		15.7		triple system
15 20.0	+ 08 32		15.7		double nebula
15 20.3	+ 08 54		15.5		
15 20.4	+ 08 56		15.6		
15 20.5	+ 08 32		15.7		
15 20.5	+ 08 42		15.6		
15 20.6	+ 08 46		15.7		
15 20.6	+ 08 47		15.0		
15 20.6	+ 08 57		15.5		
15 20.7	+ 08 41		15.6		
15 20.7	+ 08 43		15.6		
15 20.7	+ 11 25		15.4		
15 20.8	+ 08 44		15.5		double nebula
15 20.8	+ 08 45		15.5		
15 20.8	+ 08 49		15.6		
15 20.8	+ 08 50		15.5		
15 20.8	+ 08 56		15.7		
15 20.9	+ 08 48		15.5		
15 20.9	+ 08 54		15.6		
15 21.0	+ 12 52	5926	14.8		
15 21.1	+ 09 32		14.9		
15 21.1	+ 13 44		15.5		
15 21.2	+ 08 57		15.5		
15 21.2	+ 09 10		15.7		
15 21.2	+ 14 17		15.7		
15 21.3	+ 09 06		15.7		
15 21.3	+ 09 34		15.4		
15 21.8	+ 08 44		15.6		
15 21.8	+ 13 45		15.4		
15 22.1	+ 08 34		15.5		
15 22.4	+ 08 37		15.3		
15 22.6	+ 08 54		15.6		
15 22.7	+ 13 37	1118*	15.2		
15 22.8	+ 13 04		15.4		
15 22.9	+ 09 55		15.3		
15 23.0	+ 13 54		15.2		
15 23.7	+ 09 04		15.7		
15 23.7	+ 09 23		15.3		
15 23.9	+ 08 45		15.4		
15 24.0	+ 09 34		15.4		
15 24.1	+ 08 46		15.2		compact
15 24.7	+ 13 21		15.5		
15 25.7	+ 12 10		15.7		
15 26.0	+ 13 51		15.3		
15 26.5	+ 13 36		15.4		
15 26.9	+ 09 17		15.3		
15 27.2	+ 12 25		15.7		
15 27.7	+ 13 10	5936	13.0		m_H = 12.9 S



FIELD No. 78

15^h40^m + 11°30'

Survey Plate No. 136

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
20850	15 28 29.7	+ 8 44 56	6.46
20967	15 33 30.0	+ 13 04 52	7.67
20981	15 34 05.3	+ 10 10 34	5.40
21132	15 40 50.3	+ 13 49 32	6.44
21206	15 44 19.5	+ 9 56 24	6.97
21256	15 46 29.5	+ 12 52 33	6.80

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on Chart
1528.8 + 1010	medium compact	106	1.2	VD	21
1531.0 + 1408	open	106	1.8	D	4
1532.0 + 1023	open	132	2.0	D	17
1533.8 + 1430	medium compact	117	2.0	MD	2
1534.3 + 1015	open	98	1.8	D	20
1535.3 + 1210	medium compact	80	1.6	D	7
1535.5 + 1229	medium compact	97	1.5	VD	6
1537.5 + 1044	open	78	1.2	VD	19
1542.5 + 0939	medium compact	153	1.9	D	22
1543.1 + 1203	medium compact	272	3.5	D	14
1543.7 + 1105	open	84	1.3	VD	16
1545.0 + 1044	medium compact	59	0.9	VD	18
1545.2 + 1259	compact	99	1.6	VD	5
1545.9 + 1125	open	191	2.5	D	15
1546.0 + 0853	open	387	8.5	Near	1
1547.9 + 1425	compact	65	0.5	ED	3
1548.0 + 1111	compact	56	0.7	ED	12
1550.0 + 1132	medium compact	82	1.1	VD	11
1550.4 + 1243	open	341	8.3	Near	9
1550.8 + 1029	compact	30	0.5	ED	13
1551.4 + 1208	compact	53	0.5	ED	10
1552.7 + 1112	medium compact	455	9.7	Near	8

Average number of galaxies per cluster = 142.8

GALAXIES

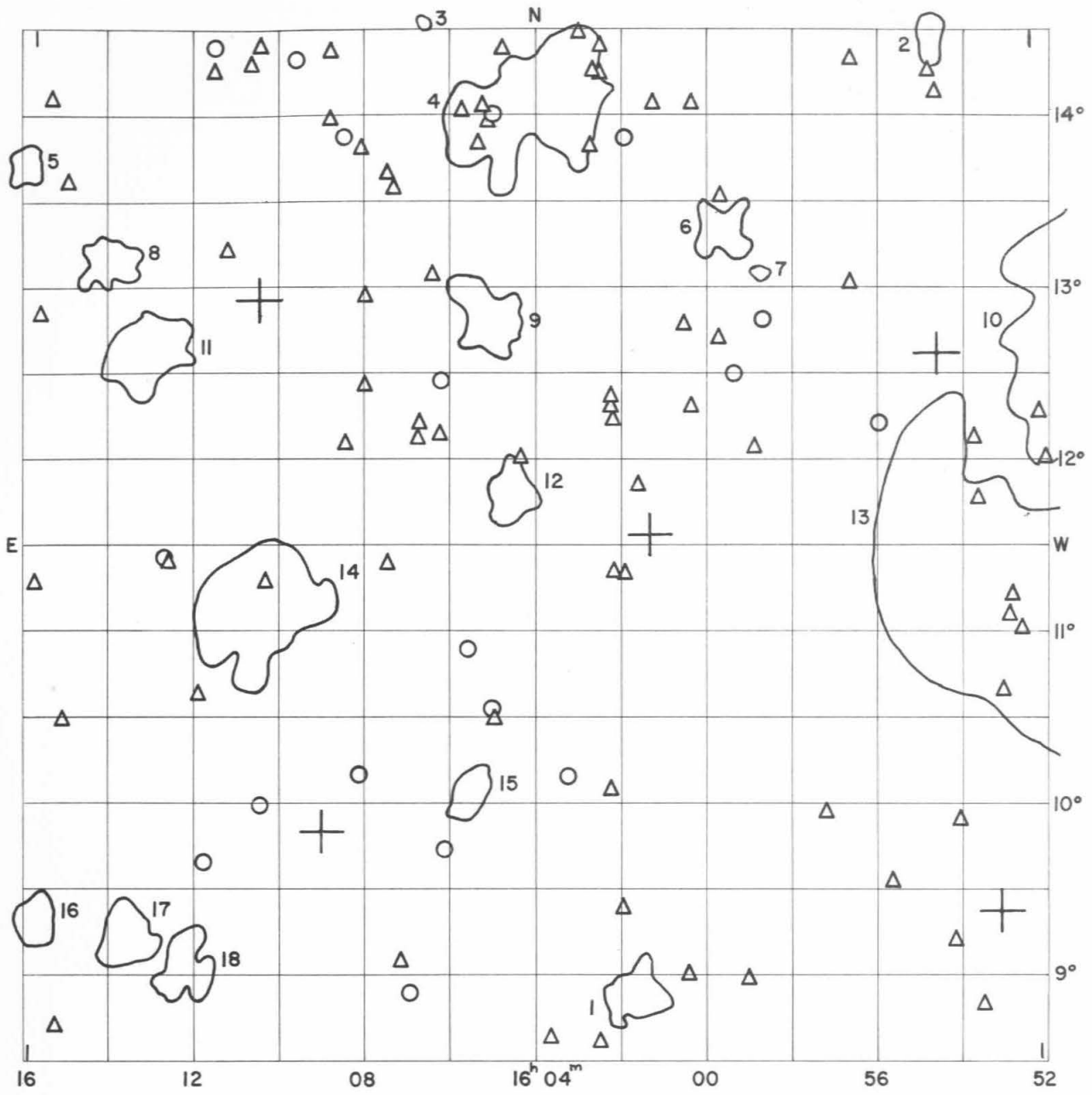
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 27.7 + 13 10	5936	13.0		m_H = 12.9 S
15 29.4 + 09 38		15.5		
15 29.4 + 10 01		15.7		
15 29.7 + 13 26		15.6		
15 29.9 + 09 38		15.5		
15 30.2 + 10 30		15.5		
15 30.2 + 10 37		15.6		
15 31.2 + 08 36		15.5		
15 31.4 + 10 57		15.5		
15 31.5 + 11 11		15.0		
15 31.9 + 09 35		15.6		
15 32.1 + 08 31		15.4		
15 32.1 + 12 26		15.2		
15 32.3 + 08 30		15.6		
15 32.3 + 10 27		15.6		
15 32.5 + 09 45		15.3		
15 32.6 + 11 55	5956	13.3		
15 33.0 + 12 13	5957	13.3		
15 33.2 + 13 57		15.7		double system
15 33.3 + 12 46		15.1		
15 33.4 + 09 02		15.5		
15 33.4 + 09 06		15.7		
15 33.4 + 14 00		15.7		
15 33.5 + 08 54		15.4		
15 33.7 + 09 54		15.4		
15 34.0 + 12 17		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 34.1 + 12 20		15.6		double system
15 34.3 + 09 11		15.5		double nebula
15 34.7 + 10 50		15.7		
15 35.0 + 10 47		15.6		
15 35.1 + 13 19		15.4		
15 35.2 + 09 29		15.5		
15 36.0 + 13 07		15.7		very diffuse
15 36.1 + 12 21	5970	12.2	+ 2081	
15 36.2 + 10 25		15.5		
15 36.5 + 12 14	1131*	14.8		
15 36.7 + 10 58		15.5		
15 36.9 + 14 19		15.5		
15 37.0 + 14 08		15.6		
15 37.3 + 10 23		15.4		
15 37.3 + 14 12		15.7		
15 37.3 + 14 16		15.6		
15 37.5 + 14 20		14.9		
15 37.7 + 08 40		15.6		
15 37.7 + 14 07		15.3		
15 37.8 + 08 37		15.6		
15 38.5 + 09 55		14.6		
15 39.0 + 12 08		15.7		
15 39.4 + 10 13		15.4		
15 40.1 + 12 26		15.7		
15 40.5 + 09 23		15.6		
15 40.6 + 14 23	5984	13.5		
15 40.9 + 09 53		15.3		
15 41.0 + 09 09		15.5		
15 41.0 + 11 40		15.5		
15 41.8 + 11 25		15.7		
15 42.1 + 11 42		15.3		
15 42.2 + 10 27	5988	15.3		
15 42.4 + 09 10		15.5		
15 42.4 + 11 39		15.2		
15 43.3 + 09 13		15.3		
15 43.4 + 09 14		15.4		
15 43.4 + 12 39		15.7		very diffuse
15 43.7 + 08 57		15.2		
15 43.9 + 10 55		15.3		
15 44.1 + 12 30		15.7		
15 44.2 + 12 18		15.5		
15 44.5 + 11 56		15.3		
15 44.7 + 08 57		15.6		triple system
15 44.8 + 09 44		15.7		
15 44.9 + 10 56		15.5		
15 45.0 + 10 26		15.6		
15 45.2 + 14 13		15.7		
15 45.8 + 09 17		15.6		
15 45.8 + 11 26		15.2		
15 46.0 + 10 58		15.6		
15 46.2 + 11 48		15.4		
15 46.4 + 08 56		15.3		
15 46.5 + 09 00		15.4		
15 47.1 + 12 05		15.2		
15 47.5 + 12 33	1141*	14.5		
15 48.5 + 13 26		15.6		
15 48.6 + 10 12		15.7		double system
15 48.7 + 09 53		15.5		
15 48.8 + 10 27		15.6		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
15 48.9	+ 11 57		15.5		
15 49.1	+ 12 01		15.7		double nebula
15 49.3	+ 12 08		15.7		
15 49.3	+ 13 20		15.6		
15 49.4	+ 12 54		15.1		
15 49.7	+ 13 03		15.0		
15 50.4	+ 10 25		15.7		
15 50.6	+ 12 10	6006	15.3		
15 50.8	+ 13 23		15.0		
15 51.0	+ 12 06	6007	14.1		
15 51.1	+ 12 13	6009	15.4		
15 51.4	+ 12 31		15.6		
15 51.8	+ 12 01		15.7		
15 51.9	+ 12 16		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5970	11.5	Sc	12.23	SBb	12.2	SBb	-	-



FIELD No. 79

16^h04^m + 11°30'

Survey Plate No. 168

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
21381	15 52 57.1	+ 9 22 08	6.99
21415	15 54 24.6	+ 12 37 18	6.94
21583	16 01 17.9	+ 11 34 13	7.29
21774	16 09 06.1	+ 9 50 26	6.46
21808	16 10 37.8	+ 12 55 36	6.96

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1550.4 + 1243	open	341	8.3	Near	10
1552.7 + 1112	medium compact	455	9.7	Near	13
1554.5 + 1429	medium compact	70	1.3	VD	2
1558.6 + 1306	compact	43	0.5	ED	7
1559.5 + 1321	open	93	1.5	VD	6
1601.7 + 0855	medium compact	87	1.8	D	1
1604.1 + 1407	medium compact	519	3.7	MD	4
1604.6 + 1149	open	115	1.7	VD	12
1605.1 + 1250	open	131	2.2	MD	9
1605.6 + 1004	medium compact	126	1.3	D	15
1606.8 + 1434	compact	39	0.5	ED	3
1610.7 + 1110	medium compact	130	4.0	Near	14
1612.4 + 0901	compact	104	2.0	D	18
1613.4 + 1239	medium compact	180	2.5	MD	11
1613.8 + 0913	medium compact	105	2.0	D	17
1614.2 + 1310	medium compact	102	2.0	MD	8
1615.9 + 0919	medium compact	98	1.4	VD	16
1616.3 + 1344	medium compact	56	1.1	VD	5

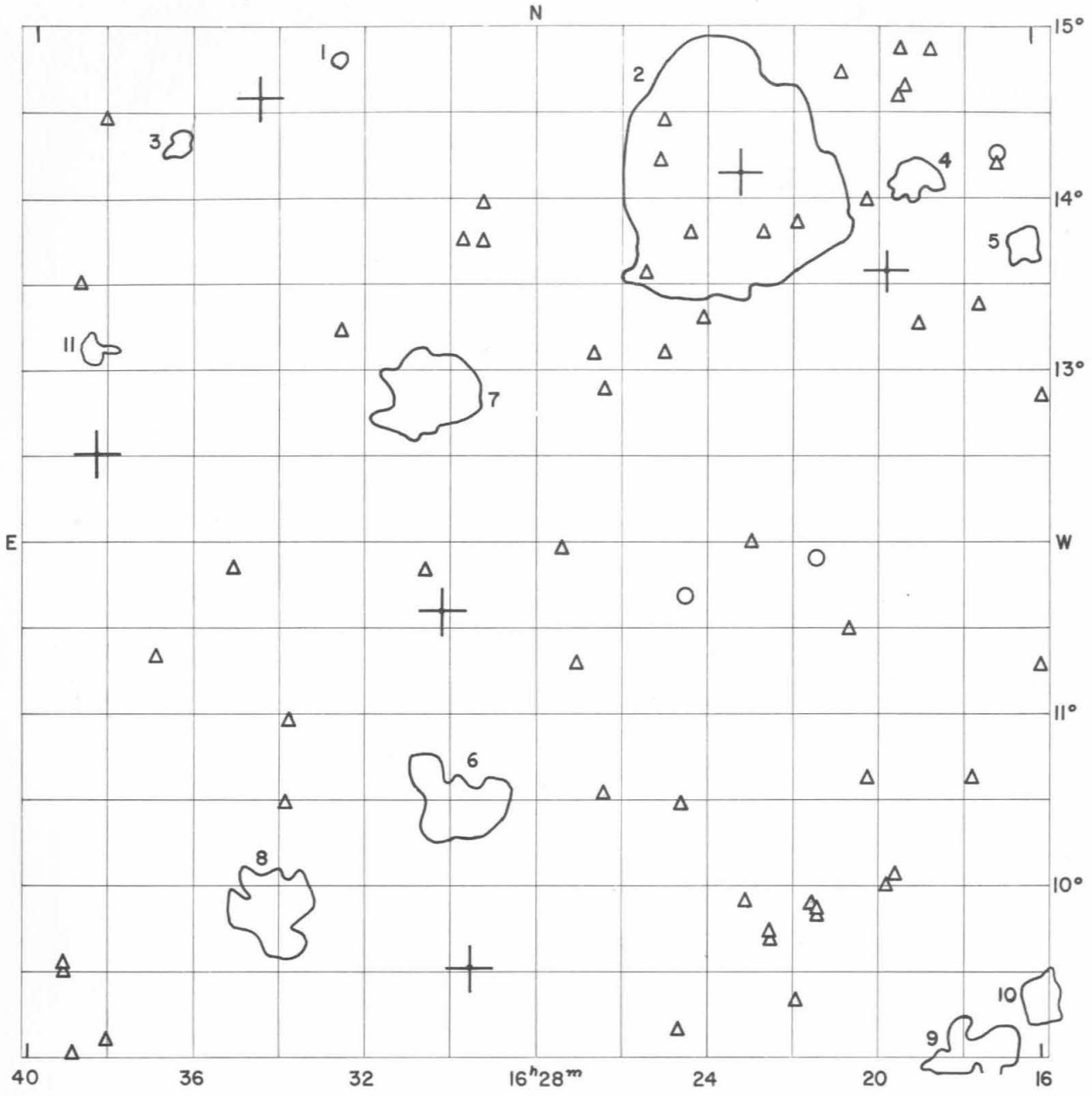
Average number of galaxies per cluster = 155.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
15 51.8 + 12 01		15.7		
15 51.9 + 12 16		15.5		
15 52.4 + 11 01		15.7		
15 52.6 + 11 06		15.5		double system
15 52.6 + 11 13		15.6		
15 52.8 + 10 40		15.5		
15 53.4 + 08 50		15.7		
15 53.4 + 11 46		15.2		
15 53.5 + 12 07		15.2		
15 53.8 + 09 55		15.7		
15 54.0 + 09 13		15.5		
15 54.4 + 14 08		15.6		
15 54.6 + 14 16		15.3		
15 55.5 + 09 33		15.6		
15 55.8 + 12 13	1149*	14.1		double system
15 56.4 + 14 20		15.4		
15 56.5 + 13 02		15.7		
15 57.1 + 09 58		15.2		
15 58.6 + 12 48		14.8		
15 58.8 + 12 05		15.7		
15 58.9 + 08 58		15.1		
15 59.2 + 12 30		14.7		
15 59.6 + 12 42	6029	15.6		double system
15 59.6 + 13 32		15.5		
16 00.3 + 09 01		15.6		double nebula
16 00.3 + 12 18		15.7		
16 00.3 + 14 04		15.5		
16 00.5 + 12 46		15.7		
16 01.2 + 14 03		15.3		
16 01.6 + 11 52		15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° '				
16 01.8 + 11 20		15.5		
16 01.9 + 09 24		15.6		
16 01.9 + 13 53	1169*	14.1		
16 02.1 + 11 21		15.4		
16 02.1 + 12 14		15.6		
16 02.2 + 10 05		15.7		
16 02.2 + 12 19		15.2		
16 02.2 + 12 23		15.4		
16 02.4 + 08 37		15.5		
16 02.5 + 14 15		15.2		
16 02.5 + 14 25		15.2		
16 02.6 + 14 15		15.4		
16 02.7 + 13 50		15.2		
16 02.9 + 14 28		15.5		double nebula
16 03.3 + 10 10		15.0		
16 03.6 + 08 38		15.6		
16 04.4 + 12 01		15.2		
16 04.8 + 14 24		15.2		
16 04.9 + 10 29		15.6		
16 05.0 + 10 33		15.0		
16 05.1 + 14 01	6065	15.0		
16 05.2 + 13 58		15.5		
16 05.3 + 13 51		15.2		
16 05.3 + 14 04	6066	15.2		
16 05.6 + 10 55	1196*	14.8		
16 05.7 + 14 02		15.6		
16 06.1 + 09 44		14.9		
16 06.3 + 12 08		15.5		
16 06.3 + 12 28	1198*	14.9		
16 06.4 + 13 04		15.4		
16 06.8 + 12 06		15.6		
16 06.8 + 12 13		15.2		
16 06.9 + 08 53		14.8		
16 07.2 + 09 05		15.4		
16 07.4 + 13 34		15.5		
16 07.5 + 11 23		15.7		
16 07.5 + 13 39		15.6		
16 08.1 + 12 26		15.1		
16 08.1 + 12 57		15.1		
16 08.2 + 10 10	1199*	14.6		
16 08.2 + 13 48		15.6		
16 08.6 + 12 04		15.5		
16 08.6 + 13 53		14.8		
16 08.9 + 13 59		15.2		
16 09.0 + 14 23	6074	15.3		double nebula
16 09.7 + 14 20	6078	14.6		
16 10.4 + 11 17		15.3		
16 10.6 + 10 00	6081=1202*	14.4		
16 10.6 + 14 24		15.6		
16 10.9 + 14 18	6083	15.2		
16 11.4 + 13 12		15.4		
16 11.7 + 14 16		15.4		
16 11.7 + 14 24		14.7		
16 11.9 + 09 39	1205*	14.6		
16 12.1 + 10 38		15.1		
16 12.8 + 11 24		15.7		
16 12.9 + 11 25	1206*	14.8		
16 15.3 + 10 30		15.3		
16 15.3 + 13 37		15.2		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 15.4	+ 08 42		15.7		double nebula
16 15.6	+ 14 05		15.5		
16 15.8	+ 11 17		15.7		
16 15.9	+ 12 50		15.4		



FIELD No. 80

16^h28^m + 12°00'

Survey Plate No. 1372

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
22009	16 19 35.4	+ 13 34 22	7.30
22090	16 23 06.4	+ 14 08 49	4.53
22233	16 29 33.0	+ 9 31 14	6.67
22250	16 30 15.8	+ 11 35 38	4.92
22342	16 34 40.6	+ 14 34 30	6.59
22446	16 38 31.5	+ 12 29 26	5.98

CLUSTERS OF GALAXIES

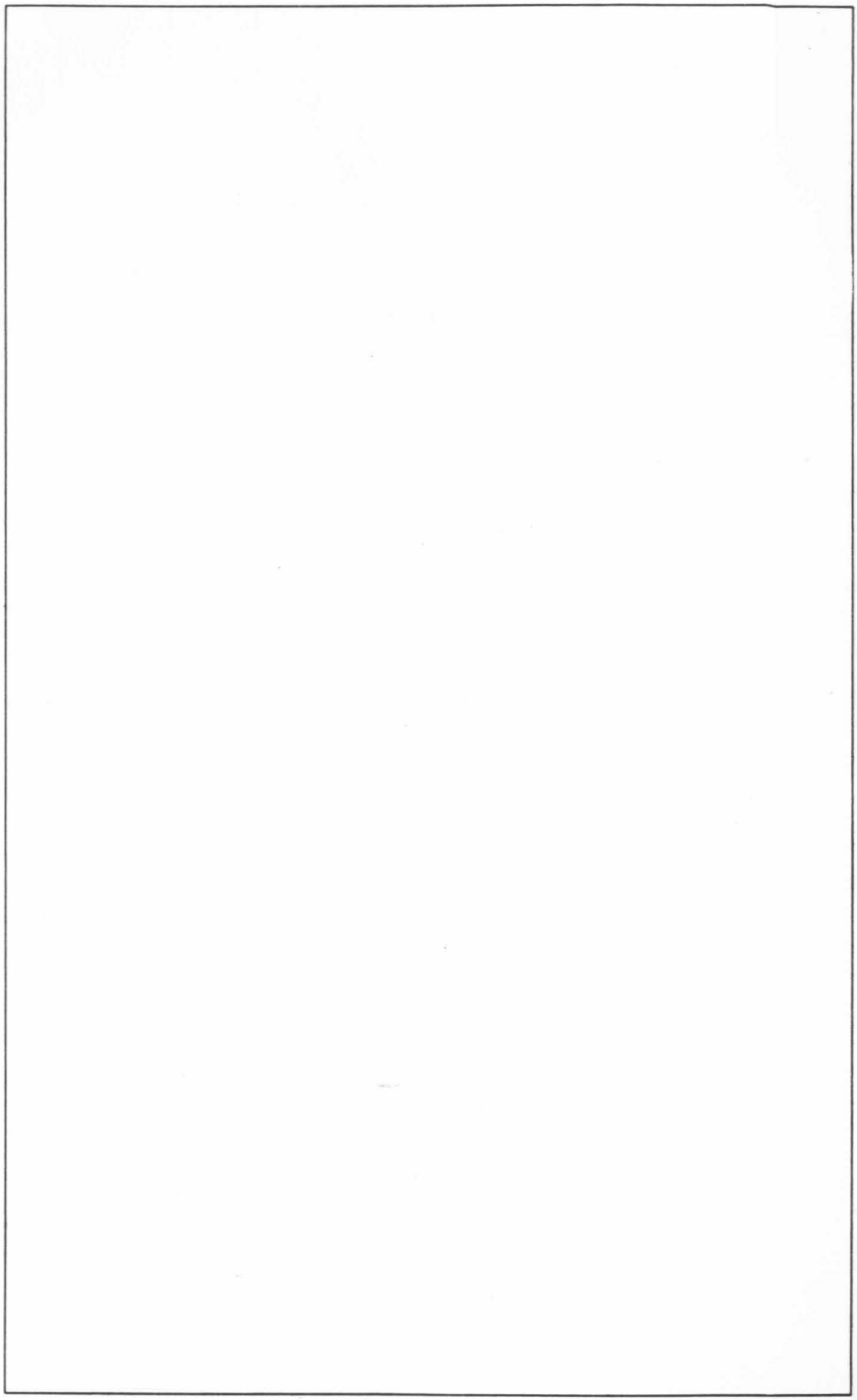
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1615.9 + 0919	medium compact	98	1.4	VD	10
1616.3 + 1344	medium compact	56	1.1	VD	5
1617.5 + 0901	medium compact	122	2.0	MD	9
1618.9 + 1407	open	96	1.4	VD	4
1623.5 + 1408	medium compact	412	7.5	MD	2
1629.8 + 1028	medium compact	126	3.0	MD	6
1630.6 + 1253	medium compact	227	2.9	MD	7
1632.8 + 1450	compact	31	0.5	ED	1
1634.3 + 0951	open	162	2.5	D	8
1636.6 + 1419	compact	54	0.9	VD	3
1638.6 + 1307	medium compact	56	0.8	VD	11

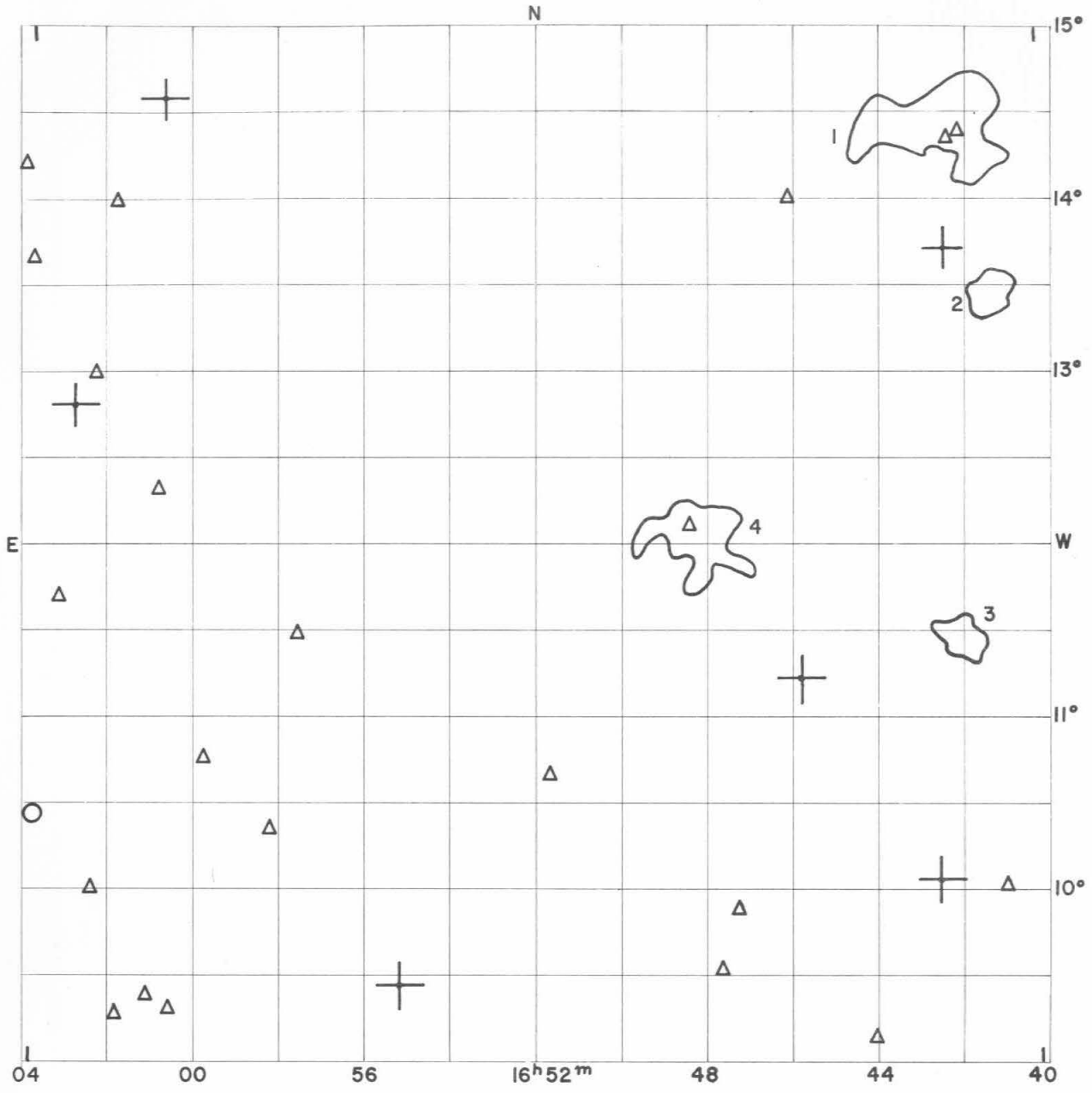
Average number of galaxies per cluster = 130.9

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 15.8	+ 11 17		15.7		
16 15.9	+ 12 50		15.4		
16 16.8	+ 14 12		15.5		
16 16.8	+ 14 15		14.8		double system
16 17.4	+ 13 22		15.6		
16 17.6	+ 10 37		15.2		double nebula
16 18.5	+ 14 50		15.5		
16 18.8	+ 13 15		15.2		double nebula
16 19.1	+ 14 38		15.3		
16 19.2	+ 14 35		15.7		double system
16 19.2	+ 14 51		15.6		
16 19.4	+ 10 03		15.5		
16 19.7	+ 10 00		15.5		
16 20.0	+ 13 57		15.7		
16 20.1	+ 10 37		15.7		
16 20.5	+ 11 29		15.6		
16 20.6	+ 14 42		15.1		
16 21.3	+ 09 49		15.6		
16 21.3	+ 09 52		15.2		
16 21.3	+ 11 54	6132	14.8		
16 21.4	+ 09 54		15.3		
16 21.7	+ 13 50		15.5		double nebula
16 21.8	+ 09 19		15.4		
16 22.4	+ 09 41		15.3		
16 22.4	+ 09 43		15.5		
16 22.5	+ 13 48		15.5		
16 22.8	+ 11 59		15.7		diffuse object
16 23.1	+ 09 54		15.6		very compact
16 23.9	+ 13 17		15.3		multiple system, peculiar structure
16 24.3	+ 13 47		15.6		
16 24.4	+ 11 41		15.0		
16 24.5	+ 10 28		15.7		diffuse object
16 24.6	+ 09 10		15.3		
16 24.8	+ 13 05		15.3		
16 24.9	+ 14 26		15.3		
16 25.0	+ 14 12		15.4		double nebula
16 25.4	+ 13 33		15.3		

Position α 1950 h m	Position δ ° '	NGC IC*	m_p	V_s km/sec	Remarks
16 26.3	+ 12 52		15.2		multiple system, tidal effects
16 26.4	+ 10 32		15.3		
16 26.6	+ 13 04		15.7		
16 27.0	+ 11 18		15.6		
16 27.4	+ 11 57		15.6		
16 29.3	+ 13 44		15.6		double nebula
16 29.3	+ 13 58		15.6		
16 29.8	+ 13 44		15.4		
16 30.6	+ 11 50		15.2		
16 32.7	+ 13 13		15.5		
16 33.9	+ 10 28		15.3		
16 33.9	+ 10 57		15.5		
16 35.2	+ 11 50		15.6		compact
16 37.0	+ 11 19		15.1		
16 38.2	+ 09 06		15.7		
16 38.3	+ 14 27		15.7		
16 38.9	+ 13 30		15.6		
16 39.0	+ 09 00		15.3		
16 39.3	+ 09 31		15.6		double nebula
16 39.3	+ 09 33		15.6		





FIELD No. 81

16^h52^m + 12°00'

Survey Plate No. 251

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
22529	16 42 15.5	+ 13 42 08	7.9
22535	16 42 29.0	+ 10 02 35	7.87
22612	16 45 44.8	+ 11 13 09	7.40
22862	16 55 18.0	+ 9 27 04	3.42
23004	17 00 54.0	+ 14 35 00	6.52
23061	17 03 03.5	+ 12 48 29	4.91

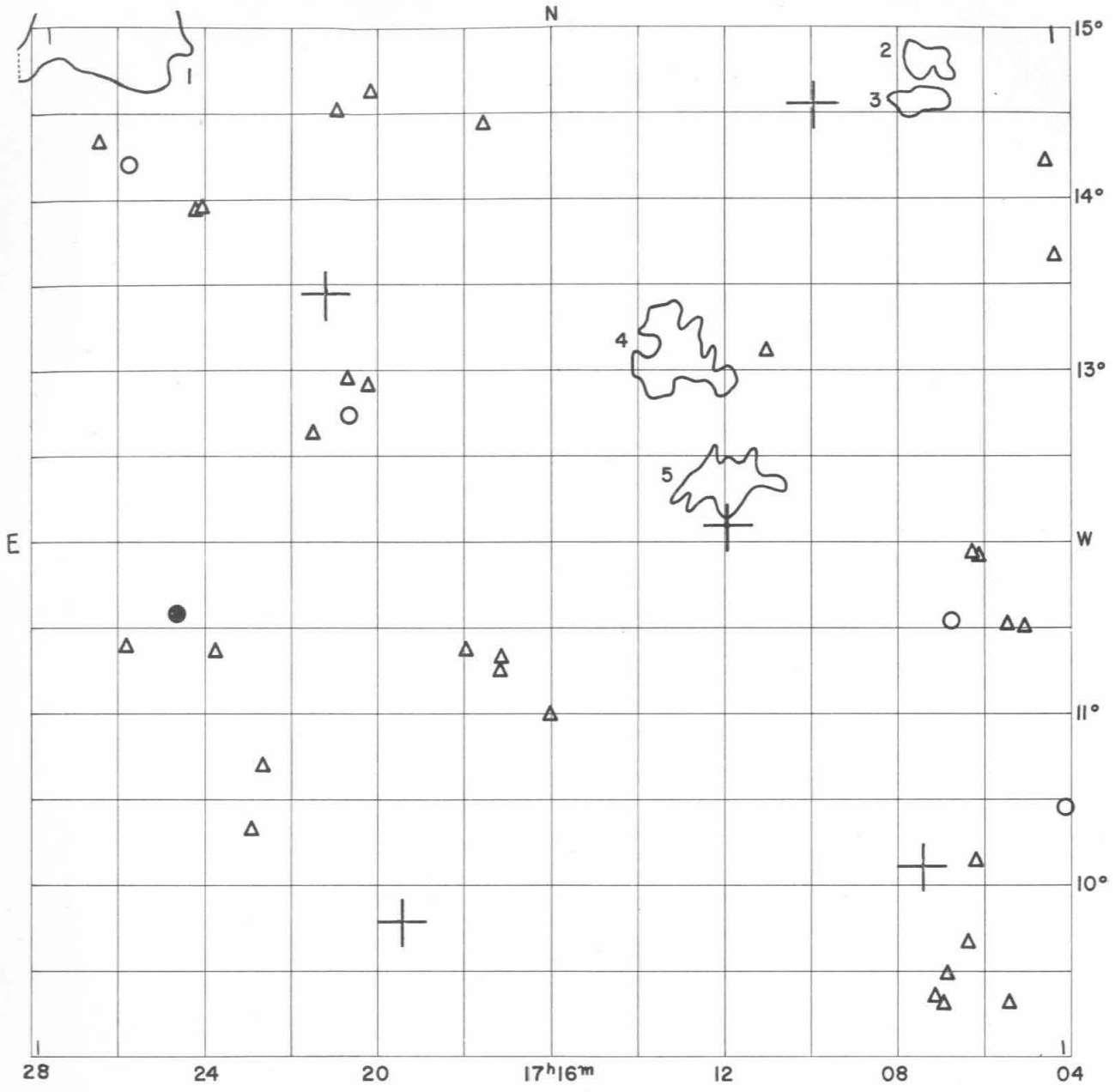
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1641.0 + 1329	compact	132	1.4	VD	2
1641.9 + 1129	medium compact	62	1.4	D	3
1642.4 + 1428	open	103	3.5	Near	1
1648.2 + 1203	medium compact	104	2.8	Near	4

Average number of galaxies per cluster = 100.3

GALAXIES

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 40.8	+ 10 01		15.3		
16 41.9	+ 14 23		15.6		very compact
16 42.2	+ 14 20		15.7		
16 43.9	+ 09 08	6219	15.2		
16 45.9	+ 13 59		15.3		diffuse
16 47.2	+ 09 52		15.7		
16 47.6	+ 09 31		15.4		
16 48.3	+ 12 05		15.7		quadruple system
16 51.7	+ 10 39		15.6		
16 57.7	+ 11 28		15.7		
16 58.3	+ 10 21		15.4		double nebula
16 59.9	+ 10 45		15.6		double nebula
17 00.7	+ 09 18		15.7		
17 01.0	+ 12 18		15.4		
17 01.3	+ 09 22		15.5		
17 02.0	+ 09 16		15.7		
17 02.0	+ 13 58		15.7		very compact
17 02.6	+ 10 00		15.1		
17 02.6	+ 13 00		15.2		
17 03.4	+ 11 41		15.3		
17 03.9	+ 10 28		14.5		
17 04.0	+ 13 40		15.7		
17 04.2	+ 14 13		15.5		



FIELD No. 82

17^h16^m + 12°00'

Survey Plate No. 505

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
23152	17 07 19.1	+ 10 06 08	7.02
23208	17 09 42.6	+ 14 32 48	7.39
23255	17 11 50.9	+ 12 05 48	7.15
23469	17 19 28.1	+ 9 47 01	7.47
23523	17 21 19.8	+ 13 26 35	7.42

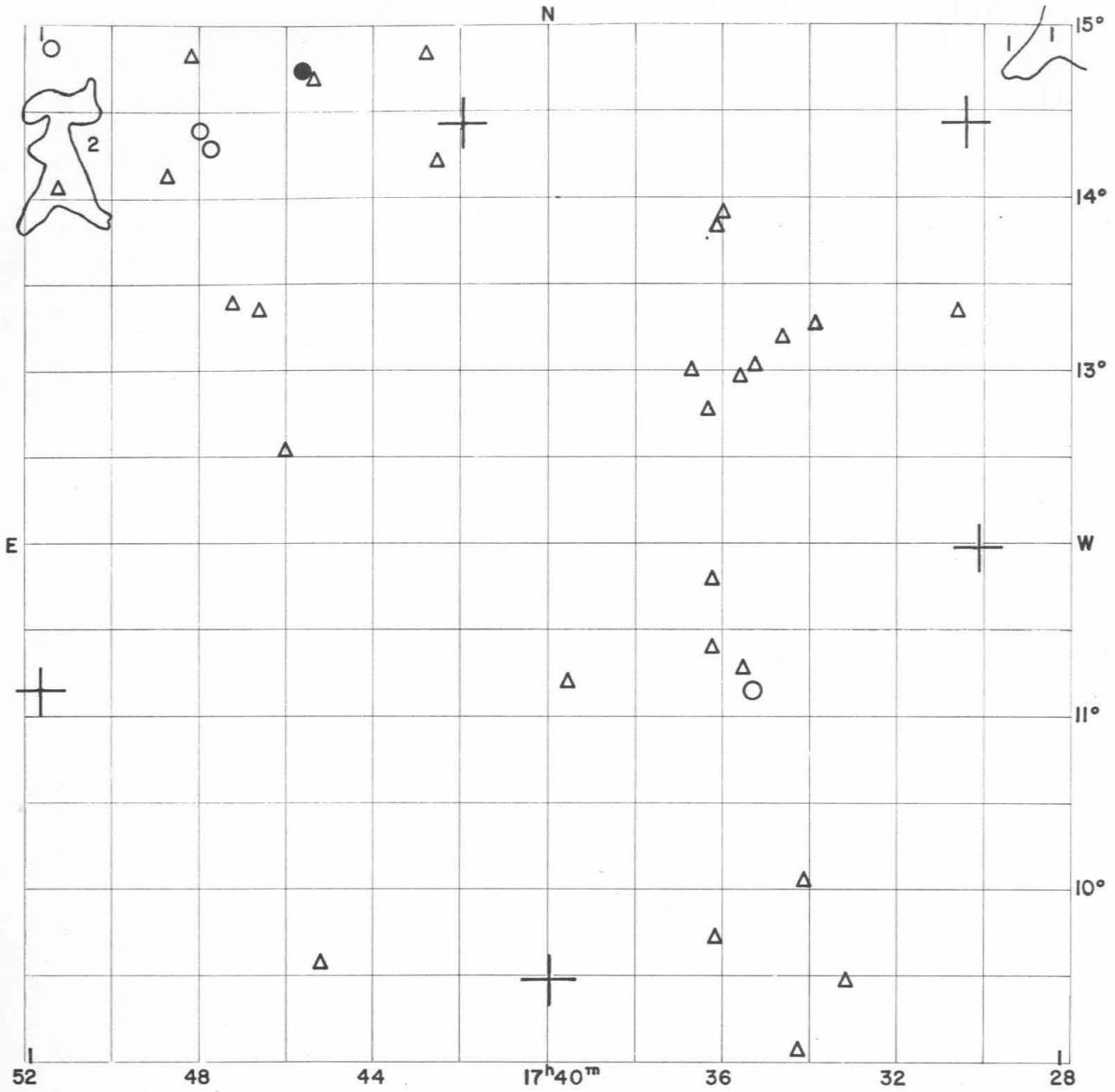
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1707.1 + 1450	compact	90	1.3	VD	2
1707.3 + 1435	medium compact	55	1.2	VD	3
1711.9 + 1221	open	84	2.4	VD	5
1713.0 + 1306	medium compact	92	2.0	MD	4
1726.8 + 1458	open	128	4.0	MD	1

Average number of galaxies per cluster = 89.8

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
17 03.9	+ 10 28		14.5		
17 04.0	+ 13 40		15.7		
17 04.2	+ 14 13		15.5		
17 04.8	+ 11 29		15.2		
17 05.2	+ 11 31		15.3		
17 05.3	+ 09 20		15.6		double nebula
17 05.9	+ 11 55		15.5		
17 06.0	+ 10 09		15.6		
17 06.2	+ 11 57		15.6		
17 06.3	+ 09 40		15.5		
17 06.6	+ 11 32		15.0		
17 06.7	+ 09 29		15.4		
17 06.8	+ 09 19		15.5		
17 07.0	+ 09 22		15.7		
17 10.9	+ 13 06		15.2		
17 16.0	+ 11 00		15.7		
17 17.2	+ 11 20		15.6		
17 17.3	+ 11 16		15.5		
17 17.6	+ 14 27		15.3		diffuse
17 18.0	+ 11 22		15.7		
17 20.4	+ 12 54		15.7		
17 20.4	+ 14 37		15.6		
17 20.8	+ 12 44	1255*	14.2		
17 20.8	+ 12 57		15.6		
17 21.1	+ 14 31		15.6		
17 21.7	+ 12 38		15.4		
17 22.8	+ 10 42		15.6		
17 23.0	+ 10 20		15.4		
17 23.9	+ 11 21		15.7		
17 24.3	+ 13 58		15.7		
17 24.4	+ 13 57		15.5		
17 24.8	+ 11 35	6368	13.7		
17 26.0	+ 11 24		15.4		double nebula
17 26.1	+ 14 13		14.3		
17 26.8	+ 14 20		15.4		



FIELD No. 83

17^h40^m + 12°00'

Survey Plate No. 1580

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
23757	17 29 55.2	+ 11 57 54	6.18
23768	17 30 07.3	+ 14 25 09	7.39
24018	17 39 59.8	+ 9 28 19	7.38
24075	17 42 00.6	+ 14 25 49	6.13
24349	17 51 53.7	+ 11 08 28	6.26

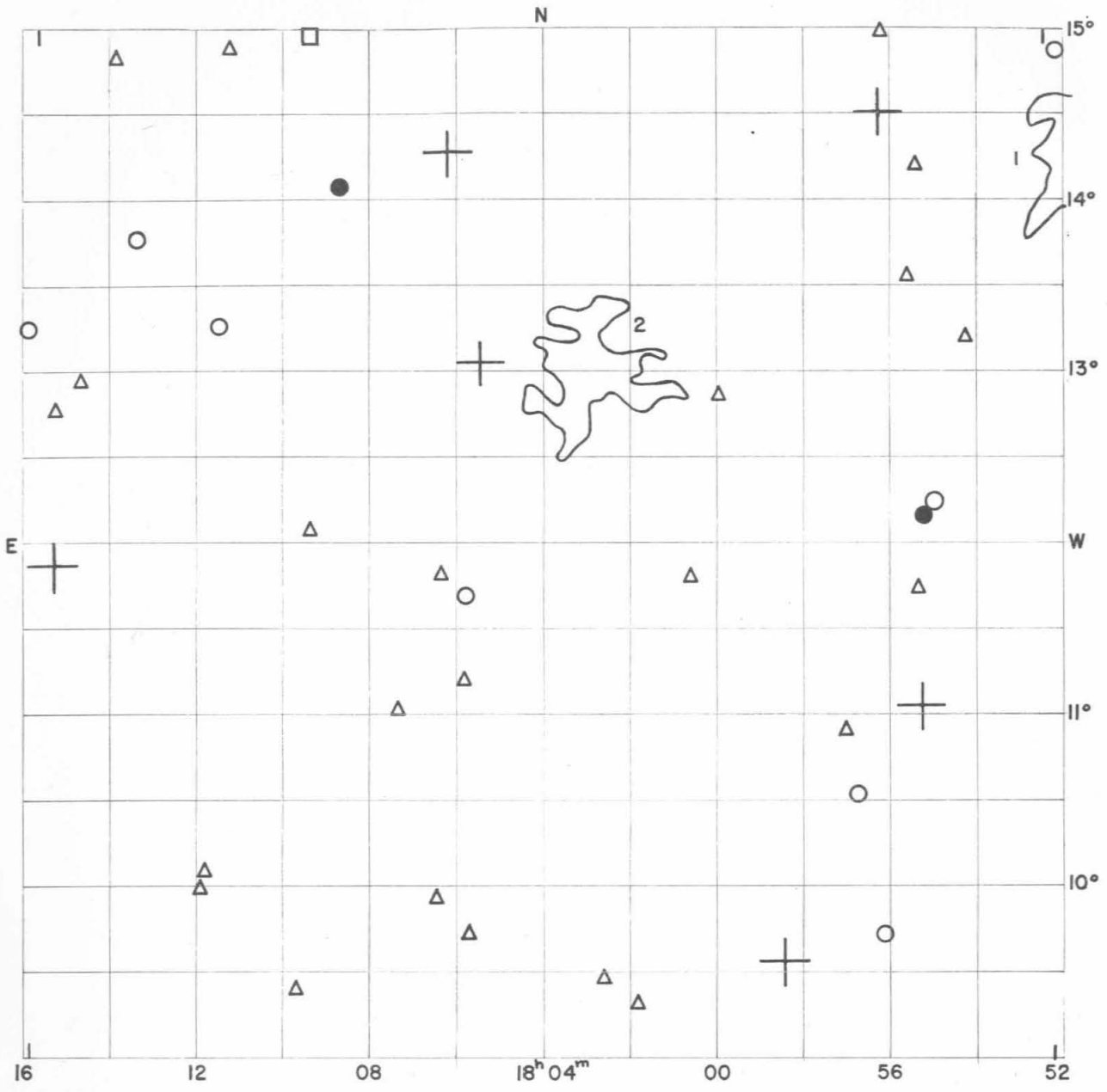
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1726.8 + 1458	open	128	4.0	MD	1
1751.6 + 1415	compact	114	3.4	MD	2

Average number of galaxies per cluster = 121.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
17 30.4 + 13 20		15.6		
17 33.1 + 09 28		15.4		
17 33.7 + 13 15		15.7		
17 34.0 + 10 03		15.5		
17 34.2 + 09 04		15.7		
17 34.5 + 13 11		15.6		
17 35.1 + 13 02		15.3		
17 35.2 + 11 10		14.8		
17 35.5 + 11 17		15.6		
17 35.5 + 12 58		15.4		
17 35.8 + 13 55		15.2		
17 36.0 + 13 50		15.5		
17 36.1 + 09 43		15.5		
17 36.2 + 11 24		15.5		
17 36.2 + 11 48		15.4		
17 36.3 + 12 46		15.5		
17 36.6 + 13 01		15.3		
17 39.6 + 11 13		15.7		
17 42.6 + 14 13		15.4		
17 42.9 + 14 50		15.7		
17 45.2 + 09 34		15.3		
17 45.5 + 14 42		15.2		
17 45.8 + 14 45		13.9		
17 46.2 + 12 32		15.3		
17 46.8 + 13 20		15.5		
17 47.4 + 13 23		15.4		
17 47.9 + 14 18		14.4		
17 48.2 + 14 24		14.7		
17 48.4 + 14 50		15.1		
17 48.9 + 14 07		15.6		
17 51.6 + 14 03		15.3		
17 51.7 + 14 52		15.0		



FIELD No. 84

$18^h04^m + 12°00'$

Survey Plate No. 123

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
24422	17 55 06.3	+ 11 02 56	6.50
24461	17 56 04.0	+ 14 30 51	7.29
24511	17 58 21.5	+ 9 33 50	7.17
24709	18 05 30.1	+ 13 03 46	6.46
24734	18 06 17.0	+ 14 16 31	6.30
24974	18 15 32.3	+ 11 51 28	7.02

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1751.6 + 1415	compact	114	3.4	MD	1
1802.8 + 1301	medium compact	96	4.0	MD	2

Average number of galaxies per cluster = 105.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
17 51.7 + 14 52		15.0		
17 53.9 + 13 12		15.6		
17 54.7 + 12 15		14.4		
17 54.9 + 12 11		13.8		
17 55.2 + 11 45		15.7		
17 55.2 + 14 12		15.4		
17 55.4 + 13 33		15.6		
17 56.0 + 09 42		15.0		
17 56.0 + 14 58		15.5		double nebula, diffuse
17 56.6 + 10 33		14.8		
17 56.8 + 10 55		15.7		
17 59.8 + 12 51		15.5		
18 00.5 + 11 49	4676*	15.6		
18 01.8 + 09 20		15.6		
18 02.6 + 09 28		15.4		
18 05.7 + 09 42		15.7		
18 05.8 + 11 12		15.7		
18 05.8 + 11 41	4688*	14.7		
18 06.4 + 11 49	4691*	15.5		
18 06.5 + 09 56		15.7		double nebula, diffuse
18 07.4 + 11 02		15.7		
18 08.8 + 14 05	6570	13.2		
18 09.5 + 12 04		15.4		nucleus eccentric, diffuse
18 09.6 + 14 57	6574	12.5	+ 2371	m_H=12.7 S
18 09.7 + 09 25		15.7		
18 11.4 + 14 52		15.6		
18 11.7 + 13 15		14.2		
18 11.9 + 10 05		15.5		
18 12.0 + 09 59		15.5		
18 13.6 + 13 45		14.7		
18 14.2 + 14 49		15.7		
18 15.0 + 12 56		15.5		
18 15.6 + 12 45		15.6		
18 16.2 + 13 15	6615	14.8		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6574	-	-	12.88	Sb	-	Sb	-	-