

A

Project

On

Study of Milky Way galaxy using open star cluster

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Abstract

In this project, our main aim is to study the structure of Milky Way galaxy with the help of open clusters. We selected 1850 open star clusters from the catalogue of Dias et al. (2002). The fundamental parameters like age, distance, reddening, longitude, latitude and metallicity are also acquired from the same catalogue. We also studied the variation of different parameters of the clusters with Galactic parameters in different quadrants of the Galaxy. Our analysis show that most of the open clusters located along the spiral arms of our Galaxy.

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1. Introduction

1.1 Galaxy

A galaxy is a gravitationally bound system of stars, interstellar gas, dust, and dark matter. The word galaxy is derived from the Greek *galaxias* literally "milky", a reference to the Milky Way. Examples of galaxies range from dwarfs with just a few thousand (10^3) stars to giants with one hundred trillion (10^{14}) stars, each orbiting their galaxy's own center of mass.

The word *galaxy* derives from the Greek term for our own galaxy due to its appearance as a "milky" band of light in the sky. Galaxies can be categorized according to their visual morphology, including elliptical, spiral and irregular.

There are approximately 170 billion (1.7×10^{11}) galaxies in the observable universe. Most galaxies are 1,000 to 100,000 parsec in diameter and usually separated by distances of the order of millions of parsecs (or mega parsecs). The space between galaxies is filled with a tenuous gas with an average density less than one atom per cubic meter. The majority of galaxies are gravitationally organized into associations known galaxy group, clusters and superclusters.

Tens of thousands of galaxies have been cataloged, but only a few have well-established names, such as the Andromeda Galaxy, the Magellanic clouds, the Whirlpool Galaxy and the Sombrero Galaxy. Astronomers work with numbers from certain catalog, such as the Messier catalog, the NGC (New General Catalog , the IC (Index Catalog), the CGCG (Catalog of Galaxies and of Clusters of Galaxies), the MCG (Morphological Catalog of Galaxies) and UGC (Uppasala General Catalog of Galaxy). All of the well-known galaxies appear in one or more of these Catalog but each time under a different number.



Fig 1. The galaxy NGC 4414

Because it is customary in science to assign names to most of the studied objects, even to the smallest ones, the Belgian astrophysicist Gerard Bodifée and the classicist Michel Berger started a new catalog (CNG Catalog of Named Galaxies) in which a thousand of well-known galaxies are given meaningful, descriptive names in Latin in accordance with the binomial nomenclature that one uses in other sciences such as biology, anatomy, paleontology and in other fields of astronomy such as the geography of Mars.

1.2 Classification of galaxy

Galaxies come in three main types: elliptical, spirals, and irregulars. A slightly more extensive description of galaxy types based on their appearance is given by the Hubble sequence. The Hubble sequence is entirely based upon visual morphological type.

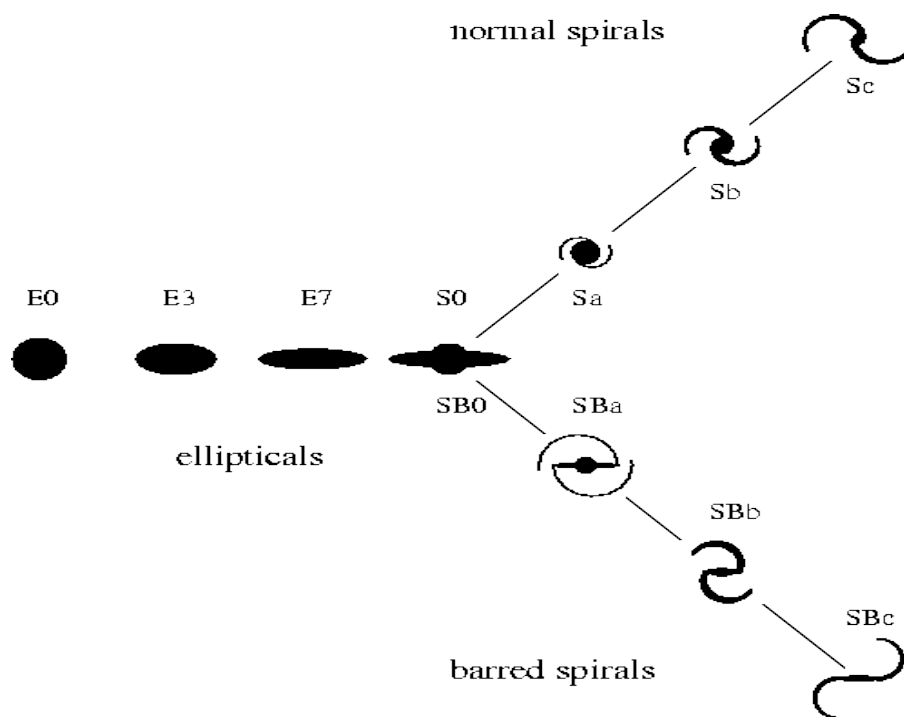


Fig 2. Classification according to Hubble. Elliptical galaxy are sub-divided namely from E0 to E7. Spiral and barred spiral galaxy are divided in three class .

1.3 ELLIPTICAL GALAXY -

These galaxies have an ellipsoidal profile, giving them an elliptical appearance regardless of the viewing angle. Hubble further divide it into sub classes from E0 to E7 based on their morphology. These galaxies also have a low portion of open clusters and a reduced rate of new star formation. Instead they are dominated by generally older, more evolved stars that are orbiting the common center of gravity in random directions. The stars contain low abundances of heavy elements because star formation ceases after the initial burst. In this sense they have some similarity to the much smaller globular cluster.

The largest galaxies are giant elliptical. Many elliptical galaxies are believed to form due to the interaction of galaxies, resulting in a collision and merger. They can grow to enormous sizes (compared to spiral galaxies, for example), and giant elliptical galaxies are often found near the core of large galaxy clusters. Starburst galaxies are the result of such a galactic collision that can result in the formation of an elliptical galaxy.



Fig 3. Elliptical galaxy NGC 1132

1.4 SPIRAL GALAXY-

A spiral galaxy is a certain kind of galaxy originally described by Edwin Hubble in 1936 and, as such, forms part of the Hubble sequence. Spiral galaxies consist of a flat, rotating disk containing stars, gas and dust, and a central concentration of stars known as the bulge. These are surrounded by a much fainter halo of stars, many of which reside in globular clusters. Spiral galaxies are named for the spiral structures that extend from the center into the disk. The spiral arms are sites of ongoing star formation and are brighter than the surrounding disk because of the young, hot OB stars that inhabit them.

1.4a Structure of Spiral galaxies -

Spiral galaxies consist of five distinct components:

- A flat, rotating disc of (mostly newly created) stars and interstellar matter.
- A central stellar bulge of mainly older stars, which resembles an elliptical galaxy.
- A near-spherical halo of stars, including many in globular clusters.
- A supermassive black hole at the very center of the central bulge.
- A near-spherical dark matter halo.

The relative importance, in terms of mass, brightness and size, of the different components varies from galaxy to galaxy.

A bulge is a huge, tightly packed group of stars. The term commonly refers to the central group of stars found in most spiral galaxies.

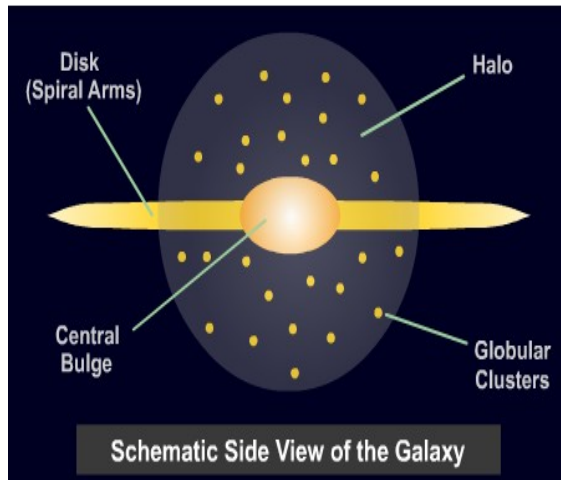


Fig. 4: Schematic side view of the galaxy

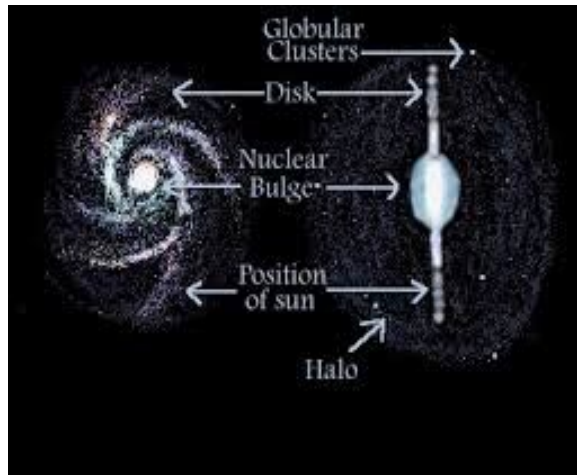


Fig. 5: Face on view of the galaxy.

In the above picture center part is called nuclear bulge or center bulge. Center is surrounded by a circle called halo where globular cluster are formed and the arms define the disk.

Using the Hubble classification, the bulge of Sa galaxies is usually composed of Population II stars that are old, red stars with low metal content. Further, the bulge of Sa and SBa galaxies tends to be large. In contrast, the bulges of Sc and SBc galaxies are much smaller and are composed of young, blue population I star.

Spiral arms are regions of stars that extend from the center of spiral and barred spiral galaxies. These long, thin regions resemble a spiral and thus give spiral galaxies their name. Naturally, different classification of spiral galaxies have distinct arm-structures. Sc and SBc galaxies, for instance, have very "loose" arms, whereas Sa and SBa galaxies have tightly wrapped arms (with reference to the Hubble sequence). Either way, spiral arms contain many young, blue stars (due to the high mass density and the high rate of star formation), which make the arms so bright.

1.4b ORIGIN OF SPIRAL STRUCTURE-

The pioneer of studies of the rotation of the Galaxy and the formation of the spiral arms was Bertil Lindblad in 1925. He realized that the idea of stars arranged permanently in a spiral shape was untenable. Since the angular speed of rotation of the galactic disk varies with distance from the center of the galaxy, a radial arm would quickly become curved as the galaxy rotates. The arm would, after a few galactic rotations, become increasingly curved and wind around the galaxy ever tighter. This is called the *winding problem*. Measurements in the late 1960s showed that the orbital velocity of star in spiral galaxies with respect to their distance from the galactic center is indeed higher than expected

from Newtonian dynamics but still cannot explain the stability of the spiral structure. The first acceptable theory for the spiral structure was devised by C. C. Lin and Frank Shu in 1964, attempting to explain the large-scale structure of spirals in terms of a small-amplitude wave propagating with fixed angular velocity, that revolves around the galaxy at a speed different from that of the galaxy's gas and stars. They suggested that the spiral arms were manifestations of spiral density waves - they assumed that the stars travel in slightly elliptical orbits, and that the orientations of their orbits is correlated i.e. the ellipses vary in their orientation (one to another) in a smooth way with increasing distance from the galactic center. This is illustrated in the diagram. It is clear that the elliptical orbits come close together in certain areas to give the effect of arms. Stars therefore do not remain forever in the position that we now see them in, but pass through the arms as they travel in their orbits.

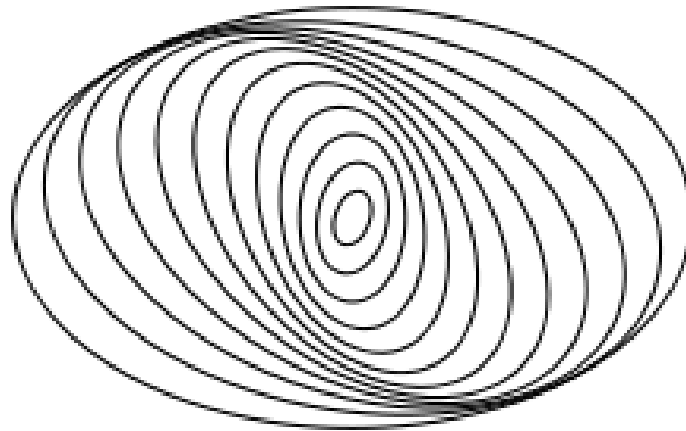


Fig 6. Spiral galaxy arms diagram

The following hypothesis exist for star formation caused by density waves:

- As gas clouds move into the density wave, the local mass density increases. Since the criteria for cloud collapse depends on density, a higher density makes it more likely for clouds to collapse and form stars.
- As the compression wave goes through, it triggers star formation on the leading edge of the spiral arms.
- As clouds get swept up by the spiral arms, they collide with one another and drive shock wave through the gas, which in turn causes the gas to collapse and form stars.

The arms appear brighter because there are more young stars (hence more massive, bright stars). These massive, bright stars also die out quickly, which would leave just the darker background stellar distribution behind the waves, hence making the waves visible.

In the Hubble classification scheme, spiral galaxies are listed as type *S*, followed by a letter (*a*, *b*, or *c*) that indicates the degree of tightness of the spiral arms and the size of the central bulge. An *Sa* galaxy has tightly wound, poorly defined arms and possesses a relatively large core region. At the other extreme, an *Sc* galaxy has open, well-defined arms and a small core region. A galaxy with poorly defined arms is sometimes referred to as a flocculent spiral galaxy; in contrast to the grand design spiral galaxy that has prominent and well-defined spiral arms.



Fig 7. Spiral galaxy NGC 6384



Fig 8. Spiral galaxy M101

1.5 BARRED-SPIRAL GALAXY -

Majority of spiral galaxies, including our own Milky Way galaxy, have a linear, bar-shaped band of stars that extends outward to either side of the core, then merges into the spiral arm structure. In the Hubble classification scheme, these are designated by an *SB*, followed by a lower-case letter (*a*, *b* or *c*) that indicates the form of the spiral arms (in the same manner as the categorization of normal spiral galaxies). Bars are thought to be temporary structures that can occur as a result of a density wave radiating outward from the core, or else due to a tidal interaction with another galaxy. Many barred spiral galaxies are active, possibly as a result of gas being channeled into the core along the arms.



Fig 9. Barred spiral galaxy - NGC 1365



Fig10 . Barred-spiral galaxy - NGC 1300

Our own galaxy, the Milky Way, is a large disk-shaped barred-spiral galaxy about 30 kilo parsecs in diameter and a kilo parsec thick. It contains about two hundred billion (2×10^{11}) stars and has a total mass of about six hundred billion (6×10^{11}) times the mass of the Sun.

Our own Milky Way has recently (in the 1990s) been confirmed to be a barred spiral, although the bar itself is difficult to observe from our position within the galactic disk. The most convincing evidence for its existence comes from a recent survey, performed by the Spitzer Space Telescope, of stars in the galactic center.



Fig11. The Milky Way

Galileo Galilei wrote, "the galaxy is nothing else but a mass of innumerable stars planted together in clusters."

2. GALACTIC COORDINATES -

The galactic coordinate system is the key to understanding where objects are located within the Galaxy. It was established in 1958 by the International Astronomical Union and is useful for specifying an object's location relative to the Sun and the galactic core of the Milky Way.

The galactic coordinate system is a celestial coordinate system in spherical coordinates, with the Sun as its center, the primary direction aligned with the approximate center of the Milky Way galaxy, and the fundamental plane approximately in the galactic plane. It uses the right handed convention, meaning that coordinates are positive toward the north and toward the east in the fundamental plane.

2.1 GALACTIC LONGITUDE-

Longitude (symbol l) measures the angular distance of an object eastward along the galactic equator from the galactic center. Analogous to terrestrial longitude, galactic longitude is usually measured in degrees ($^{\circ}$).

2.2 GALACTIC LATITUDE -

Latitude (symbol b) measures the angular distance of an object perpendicular to the galactic equator, positive to the north, negative to the south. For example, the north galactic pole has a latitude of $+90^{\circ}$. Analogous to terrestrial latitude, galactic latitude is usually measured in degrees.

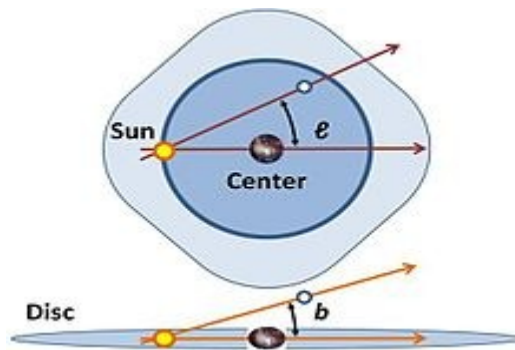


Fig 12. The galactic coordinates use the sun as the origin. Galactic longitude (l) is measured with primary direction from the Sun to the center of the galaxy in the galactic plane, while the galactic latitude (b) measures the angle of the object above the galactic plane.

The first Galactic coordinate system was used by William Herschel in 1785. A number of different coordinate systems, each differing by a few degrees, were used until 1932 when Lund observatory assembled a set of conversion tables that defined a standard Galactic coordinate system based on a North pole at RA 12h40m, Dec +28 (in the 1990.0 epoch convention) and a 0° longitude at the point where the Galactic plane and the Celestial plane intersect.

Galactic longitude is measured from 0° to 360° , counter clockwise as seen from the north galactic pole. 0° galactic longitude is arbitrarily defined as the direction pointing to our galactic center. Within the plane of our galaxy (0° galactic latitude), the main points of longitude and the Milky Way constellations which lie in their directions are as follows:

- 0° is in the direction of Sagittarius.
- 90° is in the direction of Cygnus.
- 180° is in the direction of the galactic anti-center in Auriga.
- 270° is in the direction of Vela.

The galactic equator (i.e., 0° galactic latitude) is coincident with the plane of the Milky Way Galaxy

and is shown as the red circle in the image above. Galactic latitude is the angle above or below this plane (e.g. the yellow angle above). Thus, objects with a galactic latitude near 0° will be located within the Milky Way's spiral arms. Objects with a positive galactic latitude will be above the arms in the northern galactic hemisphere.

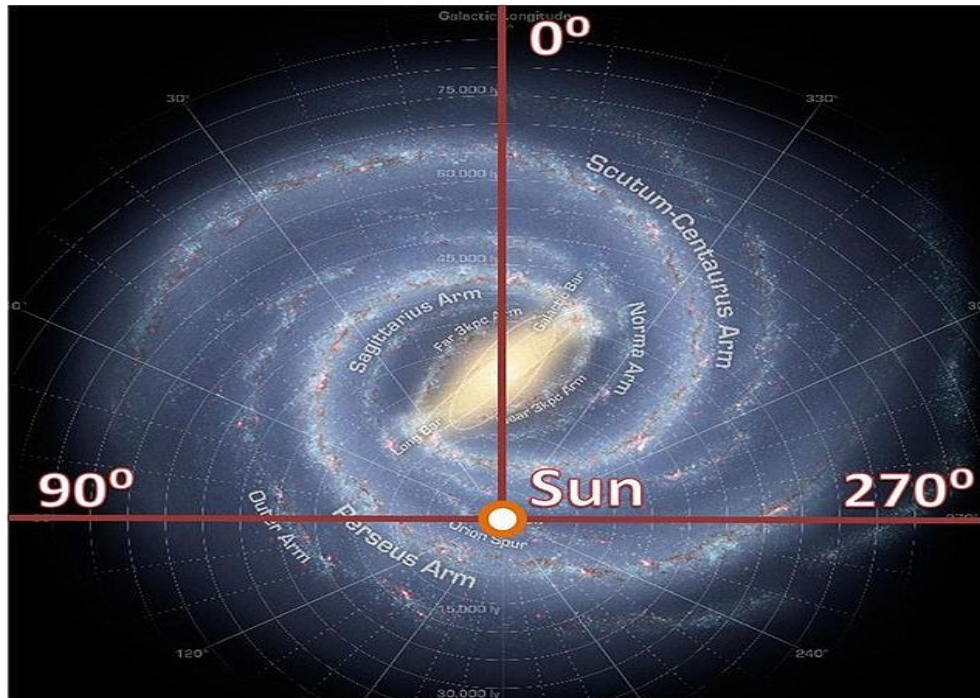


Fig 13. Galactic coordinate. Line joining Sun to galactic center (pale yellow) is 0 degree . Angle increase in anticlockwise. Different quadrant consists different properties as we will discuss later.

3. Open cluster:

An open cluster is a group of up to a few thousand stars that were formed from the same giant molecular cloud, and are still loosely gravitationally bound to each other. An open cluster, also known as galactic cluster is a group of up to a few thousand stars that were formed from the same giant molecular cloud and have roughly the same age. Open clusters generally survive for a few hundred million years, with the most massive ones surviving for a few billion years

More than 1,800 open clusters have been discovered within the milky way galaxy, and many more are thought to exist. They are loosely bound to each other by mutual gravitational attraction and become disrupted by close encounters with other clusters and clouds of gas as they orbit the galactic center, resulting in a migration to the main body of the galaxy as well as a loss of cluster members through internal close encounters. Open clusters have been found only in spiral and irregular galaxies, in which active star formation is occurring.



Fig 14. Open cluster M16

In contrast, globular clusters are very tightly bound by gravity.

Telescopic observations revealed two distinct types of clusters, one of which contained thousands of stars in a regular spherical distribution and was found all across the sky but preferentially towards the center of the Milky Way. The other type consisted of a generally sparser population of stars in a more irregular shape. These were generally found in or near the galactic plane of the Milky Way. Astronomers dubbed the former globular clusters, and the latter open clusters. Because of their location, open clusters are occasionally referred to as *galactic clusters*, a term that was introduced in 1925 by the Swiss-American astronomer Robert Julius Trumpler.



Fig 15. open cluster - Pleiades.



Fig 16. Globular cluster M13.

3.1 Location of open and globular clusters-

The formation of an open cluster begins with the collapse of part of a giant molecular cloud, a cold dense cloud of gas and dust containing up to many thousands of times the mass of the Sun. These clouds have densities that vary from 10^2 to 10^6 molecules of neutral hydrogen per cm^3 , with star formation occurring in regions with densities above 10^4 molecules per cm^3 .

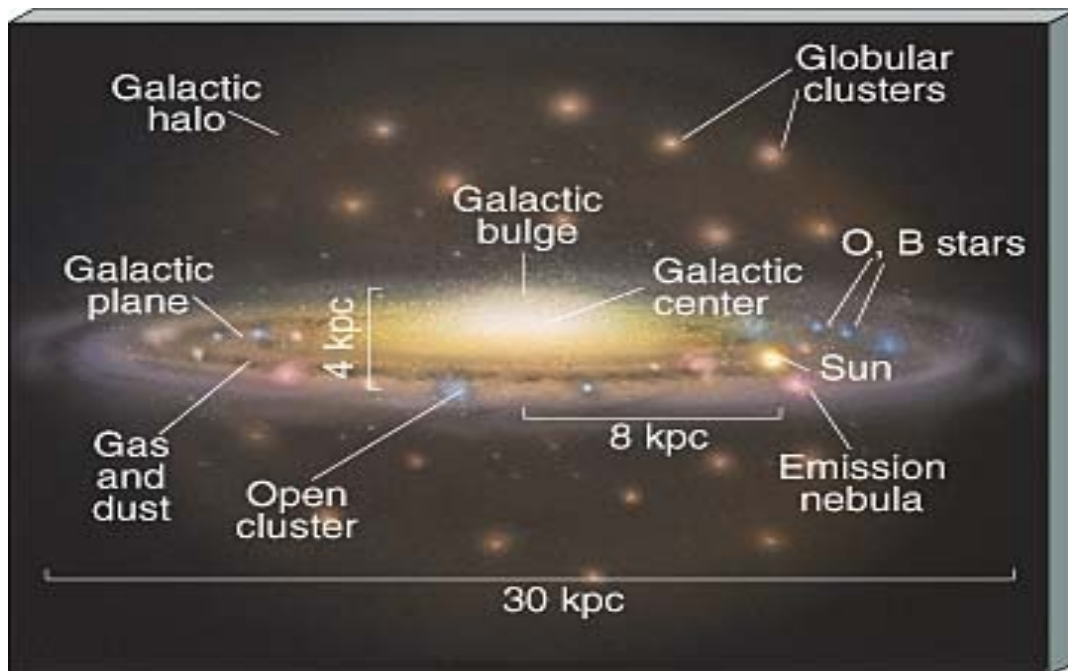


Fig 17. Location of objects in galaxy . Bright center part is called galactic bulge or galactic center. Open cluster form in disk along with gas and dust, emission nebula, Sun and O,B type stars. Globular cluster are formed in halo. The distance between Sun to galactic center is 8 kpc . The thickness of disk is 4000 pc. Diameter of galaxy is 30000 pc.

3.2 Why we use open clusters -

Open clusters are key objects in the study of stellar evolution. Because the cluster members are of similar age and chemical composition, their properties (such as distance, age, metallicity) are more easily determined than they are for isolated stars. A number of open clusters, such as the Pleiades, Hyades or the Alpha Persei Cluster are visible with the naked eye. Some others, such as the Double cluster, are barely perceptible without instruments, while many more can be seen using binoculars or telescopes . The wild duck cluster, M11, is an example.

There are over 18,00 known open clusters in our galaxy, but the true total may be up to ten times higher than that. In spiral galaxies, open clusters are largely found in the spiral arms where gas densities are highest and so most star formation occurs, and clusters usually disperse before they have had time to travel beyond their spiral arm. Open clusters are strongly concentrated close to the galactic plane

In our galaxy, the distribution of clusters depends on age, with older clusters being preferentially found at greater distances from the galactic center, generally at substantial distances above or below the galactic plane. Tidal force are stronger nearer the center of the galaxy, increasing the rate of disruption of clusters, and also the giant molecular clouds which cause the disruption of clusters are concentrated towards the inner regions of the galaxy, so clusters in the inner regions of the galaxy tend to get dispersed at a younger age than their counterparts in the outer regions.

4. DATA USED -

We have used the cluster's data taken from Dias open cluster catalogue . We selected 2167 open cluster with the parameters longitude, latitude, age, metallicity, reddening, proper motion . The work is based on the data included in the Hipparcos Catalog , Tycho2 catalog and UCAC4 catalog . For tracing the arms we use the parameters age, longitude, latitude, metallicity, reddening and ignoring proper motion from the list. After ignoring the doubtful cluster we get 1850 cluster as listed below in the Table 1. Using the longitude we divided these cluster in four quadrant. We got 377, 476, 519 and 477 number of clusters in the first, second, third and fourth quadrant respectively .

To determine the cartesian coordinates of the clusters in the galaxy we used the following relations.

$$x = D \cdot \sin(l) \cdot \cos(b)$$

$$y = -D \cdot \cos(b) \cdot \cos(l)$$

$$z = D \cdot \sin(b)$$

$$R = \sqrt{(D \cdot \cos(b))^2 + 72.25 - 2 \cdot D \cdot 8.5 \cdot \cos(l) \cdot \cos(b)}$$

Here R define as distance from galactic center to star (object) and is known as galacto-centric distance .

l = longitude, b = latitude, D = distance from Sun to object

4.1 ANALYSIS OF DATA

In this section we will discuss the characteristic properties of different parameters of the clusters in all four galactic quadrants.

4.1a Variation of metallicity with galacto-centric distance-

Metallicity (Fe/H) is define as the amount of metal present in stars with respect to Sun. If it is lesser than Sun it is negative and if its value is greater then the Sun's value it is positive. Open cluster are metal rich than globular cluster.

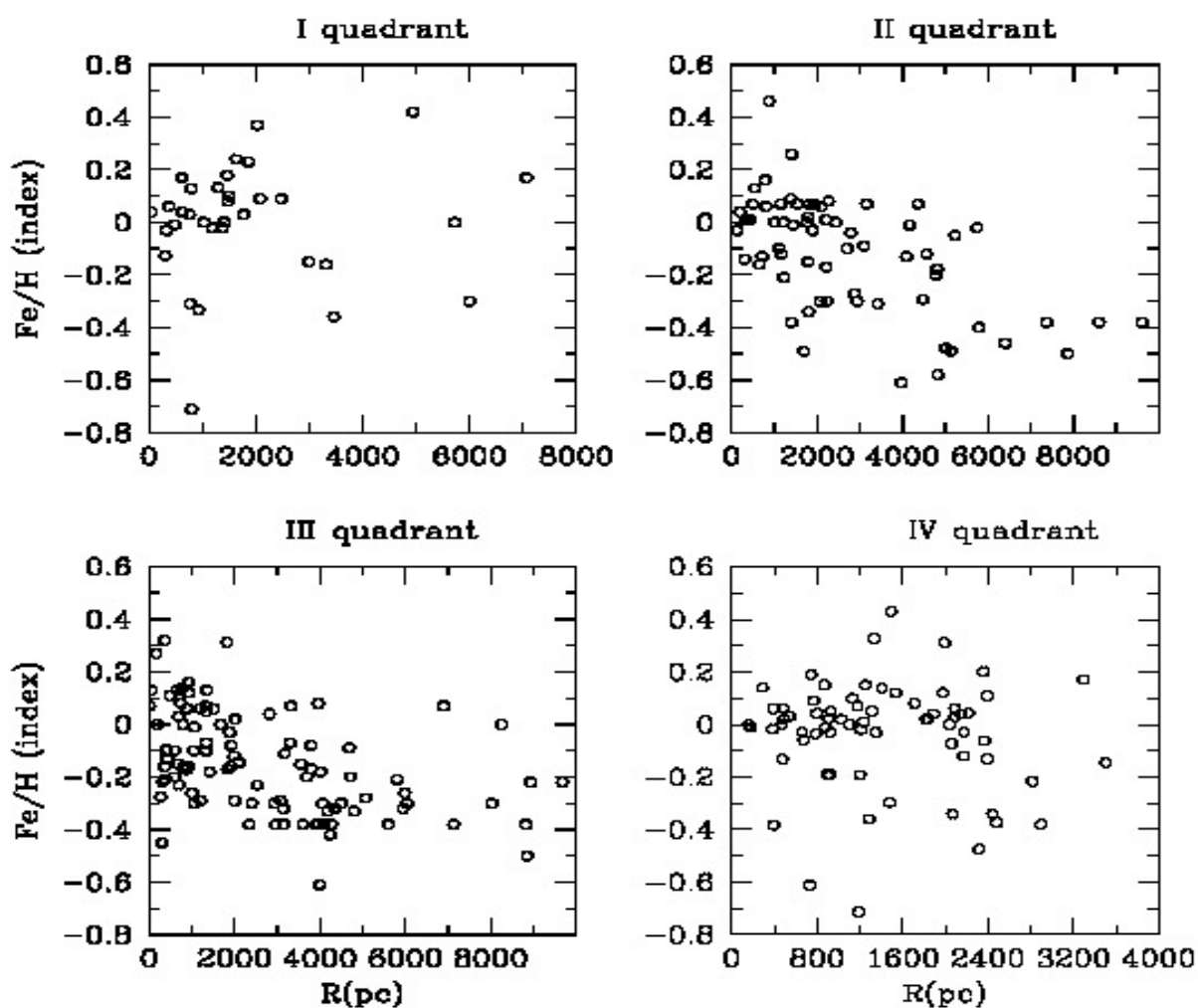


Fig 18: Plot of metallicity with galactocentric distance of the clusters in first, second, third and fourth quadrant.

Fig 18 shows the variation of metallicity with galacto-centric distance of the clusters in all the four galactic quadrants. This figure indicates that metallicity is decreasing with galacto-centric distance of the clusters in the second and third galactic quadrants. This means high metallicity clusters are lying towards galactic center and poor metallicity clusters are away from Galaxy center in the second and third quadrants. Our study indicate that young star clusters are near the galaxy center. This may be possible because of the presence of more gas and dust in the second and third Galactic quadrants. No clear trend is visible in the first and fourth Galactic quadrants.

4.1b Variation of reddening with longitude -

Reddening is defined as the absorption and scattering of electromagnetic radiation by dust and gas between an emitting astronomical object and observer. It was first recognized by Robert julius Trumpler in 1930.

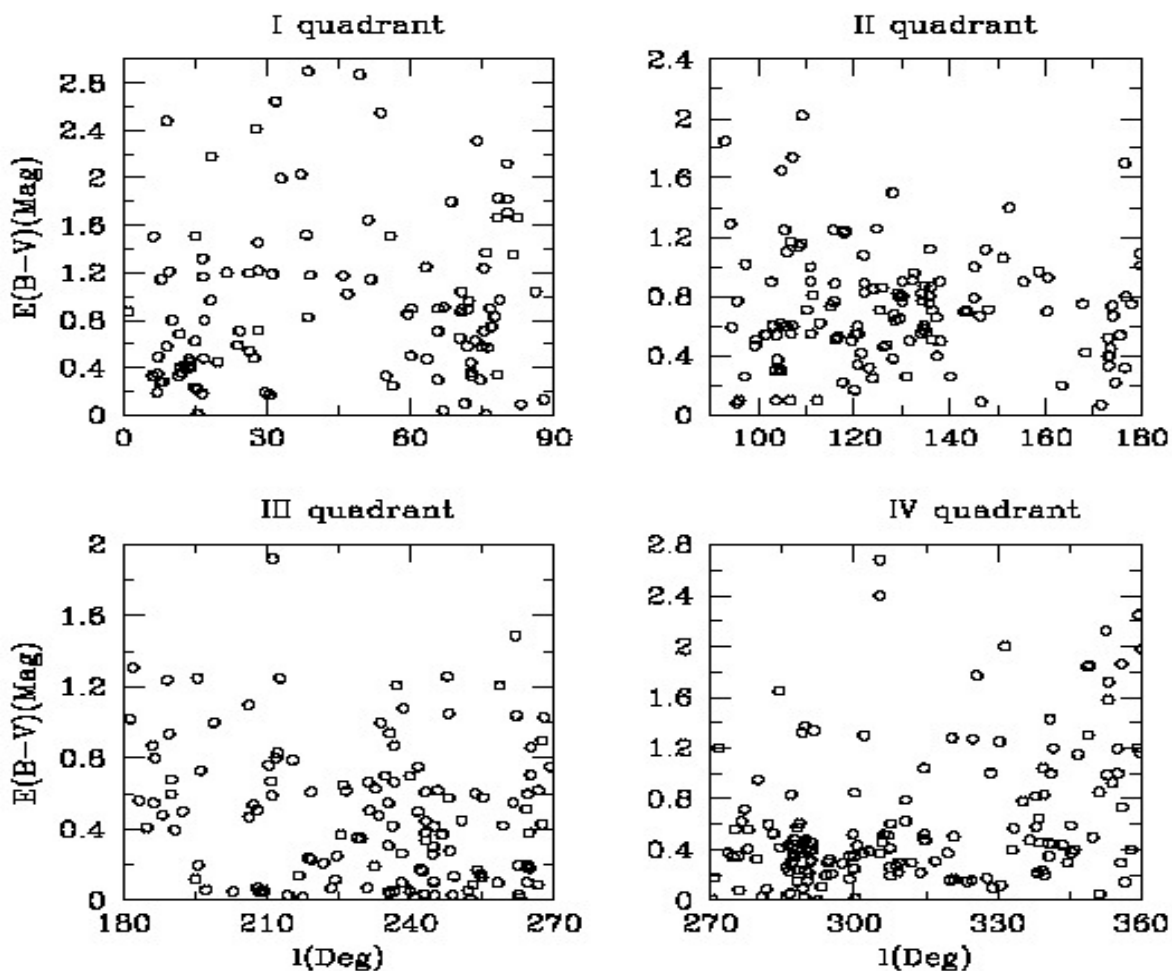


Fig 19: Plot between longitude and reddening.

Fig. 19 shows the relation between reddening and longitudes of the clusters. This figure shows the random variation of reddening with longitude in third and fourth Galactic quadrants. In the first quadrant reddening is increasing up to around 50 degree longitude. In the second Galactic quadrant

reddening is decreasing with longitudes. Our study show that matter in the first quadrants is increasing with longitude. This may be possible due to the presence of dense Galactic arms in the first quadrants. In the second quadrant density of matter in the arms are becoming thin.

4.1c Variation of distance from Sun with scale height of the clusters (z)

The Z component is the height of the clusters from Galactic plane. For many year open cluster have been used to trace the structure of our Galaxy. Young clusters are placed in the Galactic plane whereas the older cluster preferentially lie at higher Z value. The fact of heavy element abundance in galactic disc decreasing with increasing distance from the center is fairly well established. The open cluster are concentrated with Z value of up to 300 pc to the extent that no old clusters are found in the galactic plane at all. The clusters are not distributed uniformly in galactic disk with and distance.

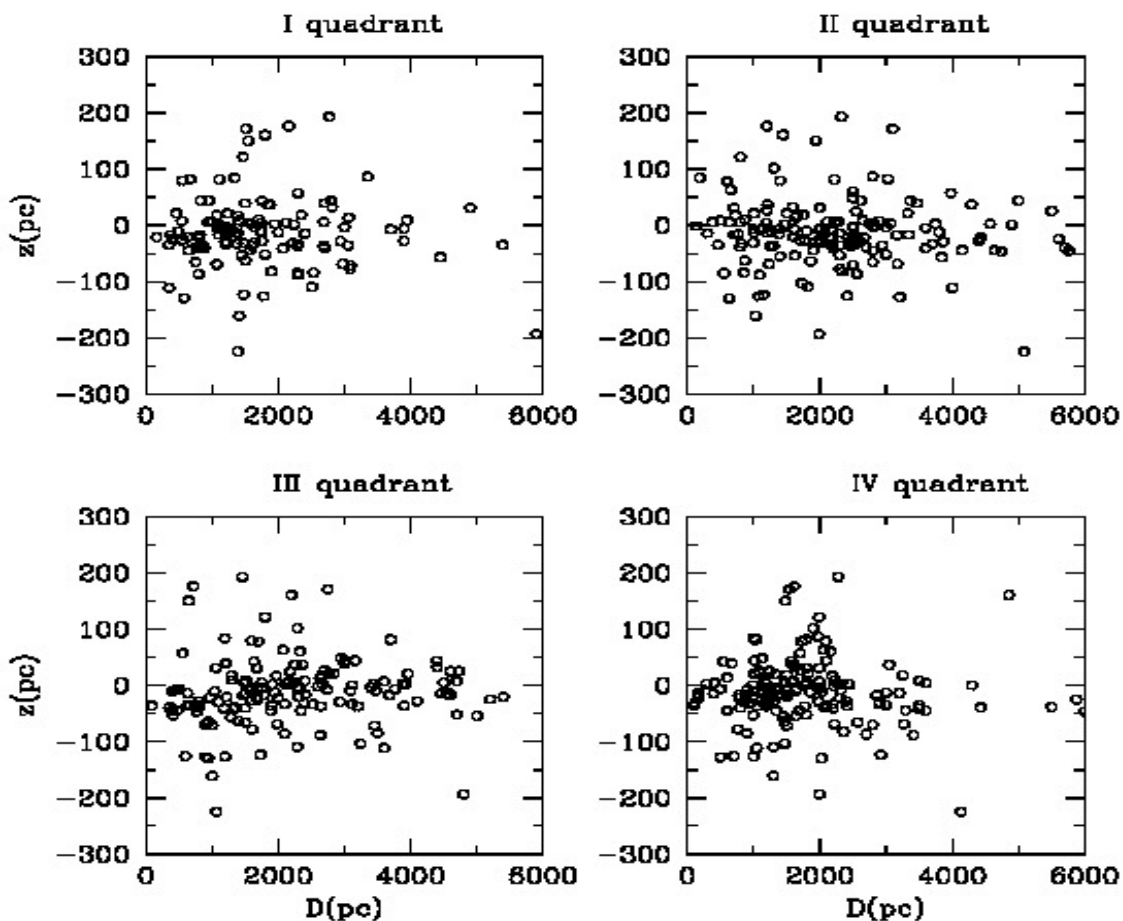


Fig 20: Plot between distance and height from the disk.

Fig. 20 shows the variation of Z with the distance of the clusters. This figure shows that distribution of the open clusters lie between ± 200 pc scale height. This indicates that thickness of the disc is around 400 pc. Distribution of the clusters in the first and fourth quadrant indicate that after 4 kpc distance, star cluster density is very less. On the other hand the distribution of clusters in second and third quadrants show more density in comparison of first and fourth quadrants.

4.1d Variation of longitude (l) with height (Z) -

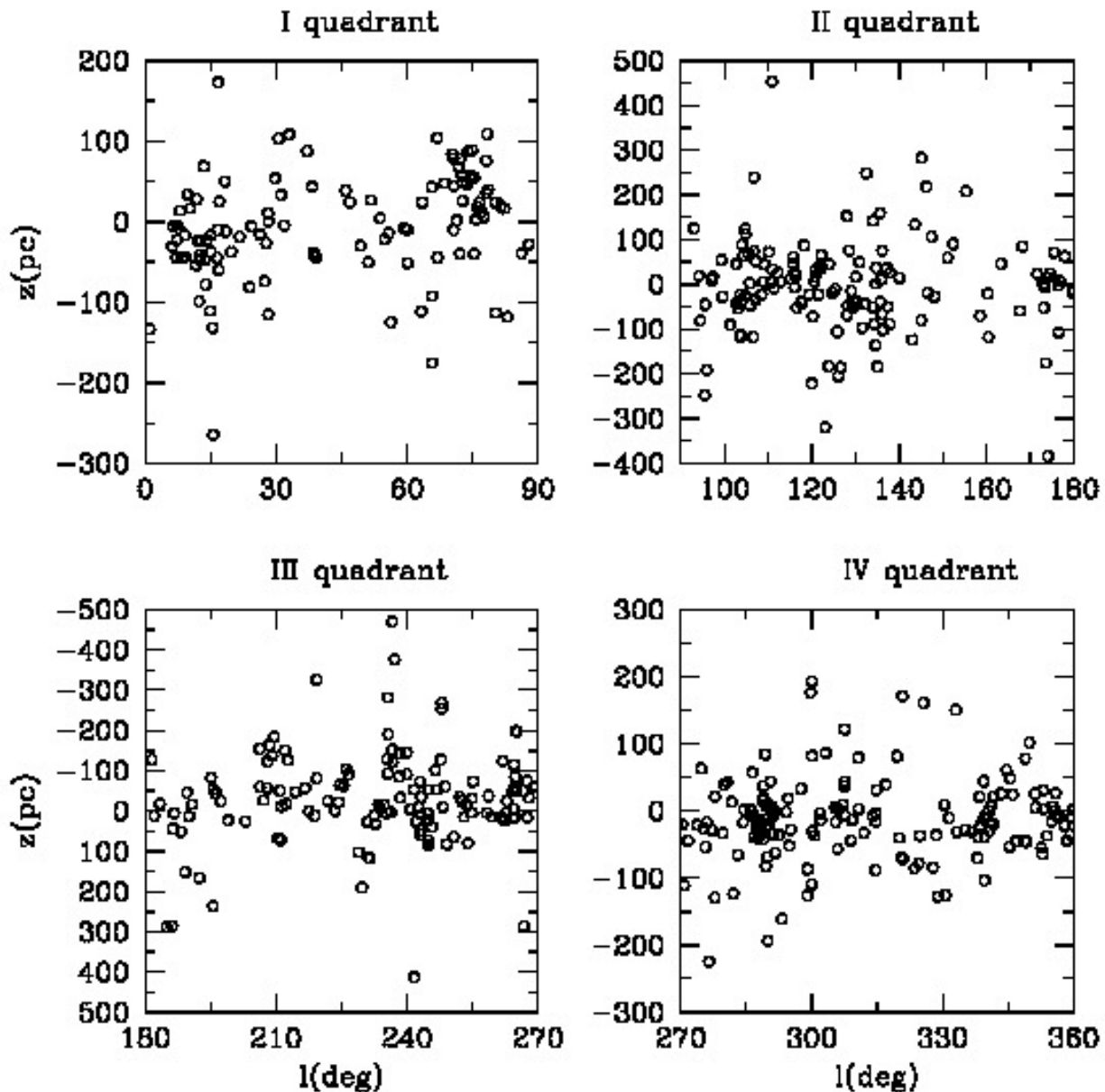


Fig 21. Plot between longitude and height from galactic disk.

Fig. 21 shows the distribution of clusters in longitude versus height (Z) plot. This diagram is useful to study the structure of Galactic disc. In all the four quadrants, the number of clusters below the Galactic plane are slightly more than the number of clusters above the Galactic plane. This indicates that disc is slightly bend towards southern hemisphere.

4.1e Location of open cluster in the Milky Way -

Fig. 22 shows the position of clusters in X-Y plane of the Galaxy. X and Y coordinates have been calculated using the relation in Introduction. The present figure shows that most of the clusters are located towards Galactic center. The number of clusters are 100,100,100 and 100 in the first, second, third and fourth Galactic quadrant respectively.

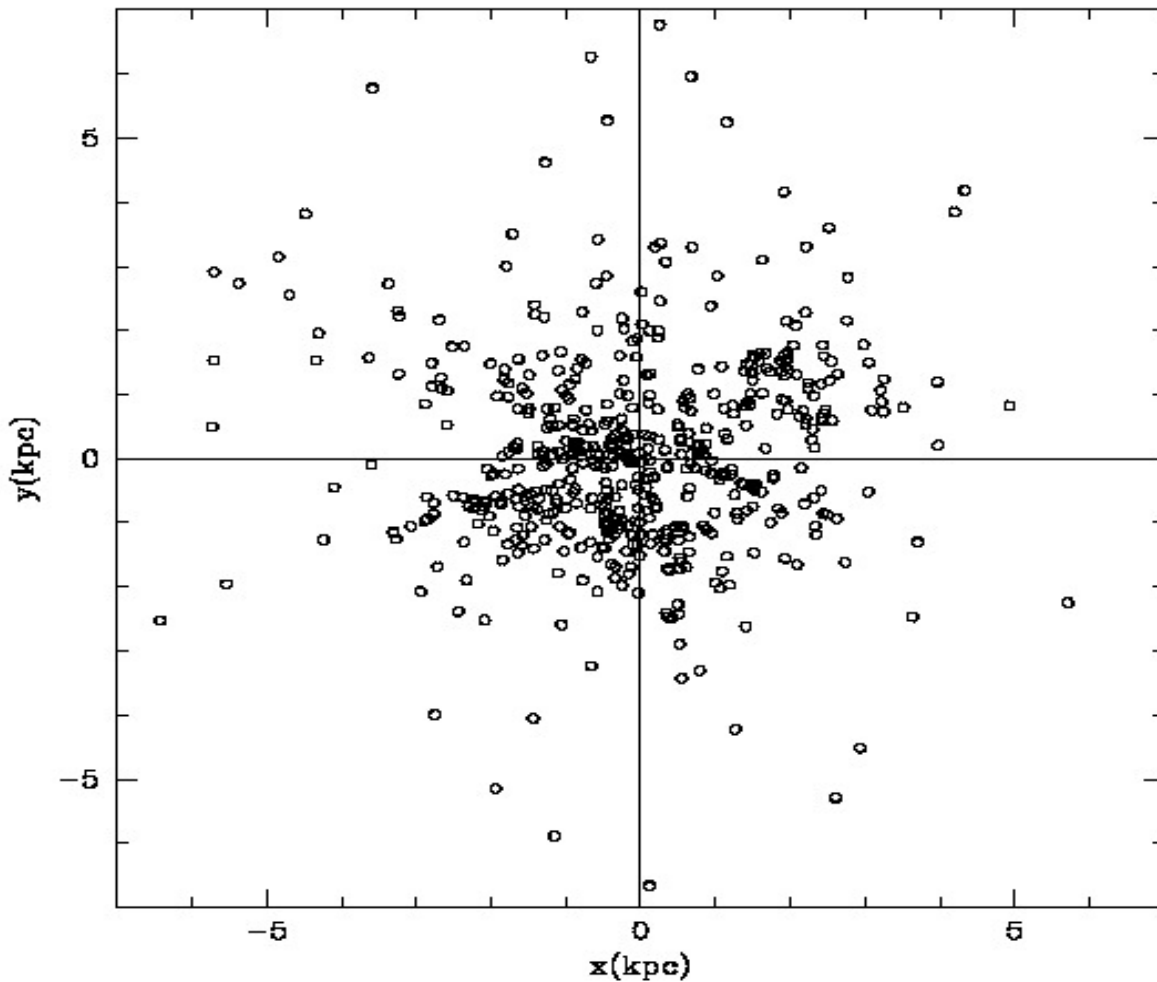


Fig 22: Position of open clusters in our Milky Way.

5. Summary

Under this project we have studied the structure of the Milky Way using open star clusters. In addition to this we have also studied the variation of different parameters of the clusters with Galactic parameters. Our study indicate that disc of the Milky Way is slightly bend towards southern hemisphere. Most of the star clusters are located towards Galactic center. Reddening plots show that it is increasing in the first quadrant while it is decreasing in the second quadrant. Metallicity plots show a decreasing trend with galacto-centric distance in the second and third quadrants. Distance versus scale height plots indicate that open clusters are located upto 6kpc from galactic center in the disc of our Galaxy. This graph also indicates that thickness of the Galactic disc is around 400 pc. Thickness of the disc is not uniform. With the help of X-Y plot of the clusters we found that few clusters follow the spiral arms of the Milky Way.

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It would be wrong on my part if I forget to mention those who had a big hand in the successful completion of my project.

I am also thankful to the research scholars to give me kind support during the completion of my project.

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2. Binney James and Merrifield Michael (1998) - Galactic Astronomy , PRINCETON UNIVERSITY PRESS princeton, New Jersey

name	longitude	latitude	M	D	color	age	Name	longitude	latitude	M	D	color	age
	(deg)	(deg)	(indx)	(pc)	(mag)	(yr)		(deg)	(deg)	(index)	(pc)	(mag)	(year)
Berkeley58	116.7534	-01.2888	*	2700	0.720	8.470	NGC2186	203.5508	-06.1919	*	2700	0.27	8.3
NGC7801	114.7295	-11.3145	*	1275	0.17	9.23	FSR0956	196.9185	-02.5390	*	1786	0.437	8.735
FSR0459	116.4684	-02.9939	*	3800	1.103	8.950	Czernik25	202.3093	-05.2583	*	1980	0.58	8.11
Stock18	117.6245	02.2680	*	1242	0.71	8.10	FSR0937	195.3180	-01.3173	*	2397	0.937	8.710
Berkeley59	118.2210	04.9962	*	1000	1.241	6.100	NGC2194	197.2502	-02.3495	-0.08	3781	0.383	8.515
Berkeley104	117.6301	01.2063	0.07	4365	0.45	8.89	Kronberger12	188.7921	+02.3868	*	1775	0.97	8.20
Czernik1	117.7262	-00.9531	*	2530	1.23	6.70	FSR0940	195.5535	-01.2850	*	4610	0.874	8.665
SAI1	116.1649	-10.5835	*	2170	0.34	9.10	Ferrero11	208.1229	-07.9040	*	1500	0.20	8.42
ASCC1	118.1525	00.1973	*	4000	0.16	8.25	SkiffJ0614+12.9	197.3140	-02.0975	*	3150	0.57	8.40
Berkeley1	117.7961	-01.9787	*	2420	0.78	8.60	NGC2204	226.0136	-16.1066	-0.23	2629	0.085	8.896
King13	117.9675	-01.3059	*	3100	0.82	8.5	Ivano2	196.2134	-01.1978	*	2084	0.73	7.15
Alessi20	117.6423	-03.6912	*	600	0.22	6.48	NGC2202	203.6216	-04.9048	*	900	0.00	8.74
FSR0474	117.8381	-02.7227	*	4638	1.145	8.900	FSR0891	189.2091	+03.0109	*	2886	1.239	7.200
FSR0480	118.5850	-01.0899	*	5492	0.937	9.300	Collinder89	188.1998	+03.6843	*	800	0.48	7.50
JuchertSaloran1	118.5471	-02.6105	*	3859	0.83	9.05	Koposov62	187.2503	+04.1974	*	2800	0.34	9.40
Berkeley60	118.8438	-01.6702	0.07	4365	0.86	8.20	FSR0902	190.9763	+02.2849	*	1633	1.041	8.810
ASCC2	118.4625	-06.8874	*	1200	0.10	8.83	FSR0953	196.6800	-00.5820	*	2600	0.48	8.70
FSR0486	118.9685	-03.3141	*	1850	0.550	8.900	SkiffJ0619+18.5	192.8454	+01.5649	*	2642	0.125	9.250
Mayer1	119.4438	-00.9214	*	1430	0.500	7.740	NG2220	252.4997	-23.9259	*	1170	0.06	9.48
King1	119.7626	01.6898	*	1080	0.76	9.6	NGC2215	215.9933	-10.1024	*	1293	0.300	8.369
SAI4	119.7542	00.0038	*	1600	0.27	8.70	Collinder91	207.4146	-05.5221	*	1467	0.521	8.640
Stock20	119.9259	-00.1020	*	1100	0.200	8.337	FSR0941	195.5896	+00.7543	-0.21	5800	0.80	8.70
NGC103	119.7966	-01.3889	*	3026	0.406	8.126	Berkeley73	215.2781	-09.4237	-0.22	9800	0.11	9.18
Berkeley2	119.7069	-02.3078	*	5250	0.8	8.9	Collinder92	205.1093	-03.9811	*	2670	0.521	9.145
FSR0494	120.0728	01.0301	*	5087	0.521	9.300	Dolidze22	205.6208	-04.1224	*	2152	0.67	8.55
FSR0496	120.2567	01.2889	*	1123	0.770	9.055	NGC2219	213.9603	-08.2877	*	2023	0.40	8.90
SAI6	120.0512	-02.0506	*	2700	0.89	8.50	FSR0927	193.8370	+02.3285	*	1296	0.115	8.495
FSR0498	120.3626	-00.3449	-0.34	1800	0.150	8.550	FSR0957	197.0167	+00.9764	*	2308	0.573	8.910
NGC129	120.2702	-02.5424	*	1625	0.548	7.886	Teutsch11	197.6489	+00.6472	*	3443	0.70	8.70
Stock21	120.1339	-04.8338	*	1700	0.416	8.825	Bochum1	192.4313	+03.4008	*	2803	0.502	6.686
ASCC3	120.0209	-07.4769	*	1700	0.17	7.90	FSR0929	194.2587	+02.4741	*	1508	0.645	9.100
NGC133	120.6778	00.5665	*	630	0.60	7.00	Teutsch12	197.9216	+00.5811	*	8900	0.64	8.48
NGC136	120.5618	-01.2717	-0.05	5220	0.70	8.40	FSR 0948	195.9442	+01.6825	*	2330	0.08	9.00
King14	120.7452	00.3663	*	2960	0.34	7.9	NGC2225	218.7800	-09.8605	-0.38	3200	0.35	9.11
King15	120.7482	-00.9263	0.07	3162	0.70	8.40	NGC2232	214.4324	-07.5422	0.32	359	0.030	7.727
NGC146	120.8612	00.5368	*	3470	0.55	7.11	NGC2224	198.9676	+00.5439	*	2415	1.00	7.00
Patchick78	121.0100	02.3133	*	1507	0.60	9.25	ASCC24	216.6401	-08.2268	*	400	0.14	6.96
NGC189	121.4992	-01.7436	*	752	0.42	7.00	NGC2234	195.5336	+02.8318	-0.33	4800	1.25	7.70
Stock24	121.5523	-00.8902	*	2818	0.50	8.08	Alessi53	202.2580	-00.6649	*	4570	0.80	8.40
FSR0508	121.9301	02.1279	*	5501	1.199	9.180	NGC2243	239.4782	-18.0142	-0.42	4458	0.051	9.032
Dias1	121.9639	01.2131	*	1690	1.08	7.1	NGC2236	204.3697	-01.6993	-0.30	2930	0.479	8.538
NGC225	122.0111	-01.0827	*	657	0.274	8.114	FSR1031	207.4839	-03.1655	*	1180	0.437	8.790
Czernik2	121.9681	-02.7071	*	1775	0.74	8.00	Collinder96	207.9636	-03.3859	*	962	0.510	7.031

King16	122.0949	01.3264	*	1920	0.89	7.0	Czernik26	214.3475	-06.5082	-0.38	8872	0.38	9.0
Berkeley4	122.2377	01.5218	*	2460	0.83	7.1	vdBergh80	219.2612	-08.9312	*	2100	0.61	6.70
NGC188	122.8431	22.3841	-0.03	2047	0.082	9.632	Collinder95	201.7471	+00.0056	*	556	0.01	*
Berkeley61	122.6465	04.3300	*	3798	0.69	8.25	NGC2239	206.1704	-02.2728	*	3900	1.10	6.70
FSR0516	122.8635	03.0968	*	810	2.040	8.830	FSR0979	200.7902	+00.6299	*	2095	0.291	8.600
King2	122.8740	-04.6882	-0.02	5750	0.31	9.78	Collinder97	205.3696	-01.7581	*	630	0.00	8.00
FSR0519	123.0456	01.7800	*	1450	0.700	9.220	Juchert18	204.6021	-01.3118	*	3000	0.899	9.300
IC1590	123.1226	-06.2428	*	2940	0.32	6.54	FSR0977	200.1757	+01.1021	*	1933	1.145	8.700
FSR0521	123.1283	-03.0210	*	2534	0.562	9.210	NGC2244	206.3059	-02.0719	*	1660	0.47	6.28
ASCC4	123.1377	-01.2909	*	750	0.30	8.34	FSR0974	199.6592	+01.6003	*	2600	0.52	8.60
CasadoAlessi1	123.2671	-13.3036	*	302	0.09	8.20	Berkeley23	192.6061	+05.4458	0.07	6918	0.40	8.90
FSR0522	123.1778	02.9229	*	1506	0.874	9.075	NGC2250	215.4678	-06.2382	*	1795	0.48	8.78
ASCC5	123.8552	-07.0199	*	1500	0.25	7.03	Basel8	203.7791	-00.1200	*	1328	0.370	8.102
SkiffJ005868.4	123.5814	05.6062	*	1600	0.85	9.10	FSR1063	211.2516	-03.8602	*	1970	0.58	8.60
Berkeley62	123.9817	01.0979	*	2320	0.85	7.2	NGC2251	203.5771	+00.1057	-0.10	1329	0.186	8.427
Czernik3	124.2649	-00.0581	*	1410	1.42	8.00	NGC2252	206.2479	-01.2610	*	900	0.10	8.84
NGC366	124.6777	-00.5908	*	1785	1.256	7.410	NGC2254	204.3274	+00.0466	*	2364	0.398	8.307
Pfleiderer1	124.6521	02.8313	*	7200	0.94	9.00	FSR1065	211.7634	-03.7429	*	1298	0.416	8.935
NGC381	124.9390	-01.2225	0.07	1148	0.40	8.505	Ruprecht1	223.9523	-09.6843	*	1720	0.26	8.70
Stock3	125.3511	-00.4402	*	1363	0.708	7.850	Collinder104	206.9426	-01.1158	*	2025	0.833	8.500
Platais2	128.4464	-30.6034	*	190	0.050	8.313	Basel7	203.8157	+00.5299	*	1684	0.396	8.033
NGC433	125.8878	-02.6086	*	2323	0.86	7.50	Trumpler5	202.8647	+01.0496	-0.30	2400	0.60	9.70
NGC436	126.1104	-03.9085	*	3014	0.460	7.926	vdBergh1	208.5551	-01.8082	*	1687	0.710	8.025
FSR0534	126.0486	-01.4142	*	1800	0.600	8.700	Collinder106	206.0044	-00.4626	-0.26	1000	0.12	9.90
FSR0537	126.3167	-02.3412	*	2075	0.666	9.000	Collinder107	207.1539	-00.8885	*	1738	0.54	7.00
NGC457	126.6348	-04.3824	*	2429	0.472	7.324	Berkeley24	212.1511	-03.4355	*	4700	0.4	9.34
FSR0536	126.1294	00.3728	*	3001	1.199	8.397	NGC2260	212.7178	-03.6503	*	1985	1.25	7.00
FSR0538	126.3252	01.0239	*	2146	1.062	8.860	NGC2259	201.7618	+02.0752	0.07	3311	0.59	8.50
FSR0542	126.8304	00.3847	0.07	1934	0.833	8.350	Collinder110	209.6492	-01.9785	*	1950	0.50	9.15
SAI14	126.8929	00.0203	*	6460	0.55	9.10	NGC2262	210.5674	-02.1039	-0.38	3600	0.55	9.00
NGC559	127.1952	00.7480	*	2430	0.82	8.35	FSR1053	210.2428	-01.8528	*	2032	0.500	8.860
FSR0547	127.6167	-01.8052	*	2800	0.300	8.900	FSR0975	199.7936	+03.5367	*	1916	0.583	8.680
NGC581	128.0524	-01.8039	*	2194	0.382	7.336	vdBergh83	236.5605	-14.4007	*	1893	0.666	7.685
Czernik4	128.1795	-00.9445	*	1630	1.06	8.00	NGC2264	202.9358	+02.1958	-0.15	667	0.051	6.954
Trumpler1	128.2242	-01.1326	*	2469	0.68	7.30	Berkeley25	226.6118	-09.6995	-0.20	11400	0.11	9.70
NGC609	127.7404	02.0872	*	3981	0.350	9.232	NGC2265	201.2248	+03.2683	*	2160	0.48	8.48
FSR0546	127.5934	03.4015	*	2501	1.099	9.000	FSR1077	212.6466	-02.5235	*	1753	0.562	8.370
FSR0549	127.8287	03.5075	*	6001	0.450	9.300	Alessi15	210.4893	-01.0991	*	1599	0.27	9.25
FSR0551	128.0319	02.5027	*	3500	1.499	6.680	NGC2269	207.8873	+00.2986	*	1687	0.398	8.416
FSR0553	128.2369	02.1538	*	7500	0.999	8.600	NGC2266	187.7897	+10.2940	-0.38	3000	0.20	8.80
NGC637	128.5458	01.7326	*	2500	0.64	7.0	Alessi16	210.1022	-00.7552	*	1191	0.27	9.05
NGC657	130.2212	-06.2988	*	1372	0.34	9.20	Teutsch13	210.8241	-01.0322	*	2780	0.67	7.48
NGC654	129.0821	-00.3574	*	2410	0.82	7.0	NGC2270	208.9832	-00.0775	*	1400	0.06	8.64
NGC659	129.3753	-01.5340	*	1938	0.652	7.548	Dolidze24	210.6625	-00.7339	*	1261	0.146	8.450
Collinder463	127.1919	09.3890	*	702	0.259	8.373	Patchick90	212.6459	-01.7414	*	6310	0.41	8.95

NGC663	129.4667	-00.9405	*	2420	0.80	7.4	Dolidze25	211.9423	-01.2732	*	6800	0.8	6.8
ASCC6	130.3457	-04.3365	*	1200	0.30	8.17	SAI69	222.8036	-06.6555	*	7140	0.35	9.10
Berkeley5	129.2927	00.7599	*	6200	1.30	8.90	ASCC25	190.1810	+09.7281	*	1400	0.16	8.86
S1	130.0513	-00.9566	*	2200	0.77	7.4	NGC2287	231.0196	-10.4446	-0.23	710	0.01	8.4
Berkeley6	130.0974	-00.9766	*	2520	0.90	7.5	Collinder115	210.7968	-00.2926	*	1917	0.23	8.55
IC166	130.0714	-00.1889	-0.178	4800	0.80	9.0	vdBergh85	211.2280	-00.4014	*	1641	1.92	7.85
Berkeley7	130.1379	00.3764	*	2570	0.80	6.60	Dolidze49	212.4398	-00.9757	*	2398	0.625	8.330
Czernik5	130.5575	-00.5605	*	2750	1.20	8.45	NG2286	215.3058	-02.2732	*	2600	0.66	8.30
NGC752	137.1251	-23.2541	00.01	457	0.034	9.050	Ruprecht4	222.0471	-05.3389	-0.09	4700	0.30	8.90
NGC744	132.4037	-06.1593	*	1207	0.384	8.248	Bochum2	212.3015	-00.3898	*	2661	0.831	6.665
NGC743	131.2028	-01.6334	*	1618	0.95	8.70	Berkeley75	234.3069	-11.1881	-0.22	9100	0.04	9.60
ASCC7	131.5453	-02.7685	*	2000	0.50	7.36	Berkeley26	207.6822	+02.3663	-0.35	12589	0.75	9.60
Berkeley8	127.3517	13.2129	*	3150	0.75	9.50	ASCC26	206.3555	+03.0695	*	800	0.13	8.09
Czernik6	130.8865	01.0566	*	2700	0.26	7.00	FSR1025	206.9434	+02.7985	*	1905	0.312	8.930
Czernik7	131.1586	00.5238	*	3300	0.70	8.34	ESO30903	251.9679	-18.0394	*	1753	0.48	8.80
SAI16	131.4312	00.6218	*	7700	0.70	9.15	Berkeley27	207.7844	+02.6074	*	5035	0.05	9.30
Riddle4	132.2226	-01.2376	*	1993	0.91	7.70	NGC2301	212.5581	+00.2792	0.060	870	0.03	8.2
Stock2	133.3339	-01.6942	-0.14	303	0.38	8.23	NGC2302	219.2966	-03.1175	*	1500	0.23	7.08
NGC869	134.6322	-03.7408	-0.3	2079	0.575	7.069	Berkeley28	210.4075	+01.5065	*	2557	0.761	7.846
Basel10	134.3000	-02.6153	*	1944	0.774	7.608	FSR1051	209.7785	+01.8327	*	1202	0.312	8.800
Berkeley63	132.5063	02.4960	*	5700	0.96	7.48	Alessi59	211.0820	+01.1942	*	3500	0.59	7.6
FSR0578	133.4424	00.0607	*	2668	1.457	8.985	FSR1085	213.3018	+00.3009	*	1330	0.08	8.60
SAI17	134.1653	-01.7237	*	3800	0.98	8.90	Berkeley29	197.9835	+08.0248	-0.31	14871	0.157	9.025
ASCC8	134.0234	-01.3230	*	2200	0.55	6.76	ASCC27	217.1182	-01.4574	*	1200	0.09	8.75
Berkeley64	131.9189	04.6052	-0.61	3981	1.05	9.00	DC4	225.3387	-05.5727	*	2304	0.583	8.700
NGC884	135.0659	-03.5877	-0.3	2940	0.56	7.1	FSR1029	207.2350	+03.6439	*	1791	0.729	8.635
FSR0584	134.0493	00.8403	*	2009	1.041	9.100	ASCC28	213.3829	+00.5074	*	800	0.05	8.34
FSR0591	135.1519	-01.8092	*	2200	1.249	8.950	ASCC29	214.7267	-00.1157	*	750	0.05	8.06
Tombaugh4	134.1821	01.0592	*	3850	1.25	8.7	NGC2306	219.6930	-02.6046	*	1200	0.05	8.85
Teutsch55	134.0788	01.3526	*	6020	0.82	6.70	NGC2304	197.2157	+08.9012	-0.32	4400	0.10	8.80
Markarian6	134.6646	00.0923	*	698	0.606	7.214	Ruprecht5	230.0041	-07.5546	*	1834	0.104	8.775
FSR0596	135.6500	-02.3100	*	1417	0.521	9.150	SAI72	213.2273	+01.0741	*	3150	0.82	8.50
IC1805	134.7256	00.9190	*	2344	0.87	6.48	NGC2309	219.8446	-02.2456	*	2511	0.35	8.40
Czernik8	135.7957	-01.5784	*	1409	0.803	7.904	Collinder121	235.7016	-09.9906	*	1100	0.04	7.08
NGC957	136.2875	-02.6449	*	2200	0.71	7.0	ASCC30	219.0925	-01.5961	*	800	0.15	8.20
Czernik9	135.4172	-00.4868	*	1660	1.05	8.8	FSR1144	219.4878	-01.7240	*	5664	0.729	8.800
SAI21	134.5161	02.0479	*	1860	0.58	8.50	Berkeley31	206.2536	+05.1199	-0.0	8272	0.080	9.313
King4	136.0146	-01.1976	*	3172	0.863	7.605	Berkeley33	225.4245	-04.6220	-0.26	6000	0.36	8.90
Czernik11	135.8695	-00.5709	*	1210	1.00	8.54	Berkeley30	210.7801	+02.8581	*	4790	0.50	8.48
Trumpler2	137.3765	-03.9710	*	725	0.40	7.95	NGC2311	217.7588	-00.6935	*	2290	0.33	8.60
FSR0611	137.2734	-03.4707	*	1000	0.500	8.750	Berkeley32	207.9520	+04.4045	-0.29	3078	0.15	9.70
Berkeley65	135.8344	00.2679	*	2274	1.121	6.995	FSR1080	212.9404	+01.9138	*	1429	0.079	8.735
Czernik12	138.0795	-04.7542	*	2000	0.26	9.10	NGC2312	204.5626	+06.2896	*	2245	0.16	8.52
NGC1039	143.6580	-15.6132	0.07	499	0.070	8.249	FSR1163	221.9258	-02.4008	*	2276	0.666	8.755
FSR0614	137.7652	-02.9034	*	2434	0.833	8.800	NGC2318	226.0483	-04.4597	*	1335	0.65	7.70

NGC1027	135.7473	01.5624	*	1030	0.41	8.4	Ivanov9	217.4942	-00.0158	*	736	0.02	7.90
Czernik13	135.6586	02.3104	*	3961	0.755	6.854	FSR1171	223.1172	-02.7605	*	4110	0.65	9.50
ASCC9	137.8776	-01.7514	*	2900	0.90	6.79	Wit1	219.1317	-00.6801	*	2830	0.437	8.785
Teutsch162	136.1323	02.1195	*	2050	0.51	7.00	Berkeley34	214.1589	+01.8843	*	7280	0.45	9.45
IC1848	137.1910	00.9205	*	2200	0.660	6.70	Tombaugh1	232.3342	-07.3140	*	3000	0.40	9.00
SAI24	138.0295	01.5018	00	1000	0.500	7.200	Ivanov4	221.8575	-02.0283	*	717	0.21	7.00
SAI25	139.7085	-01.3411	*	2290	0.84	9.15	NGC2319	211.2581	+03.4087	*	1100	0.05	8.61
Berkeley66	139.4337	00.2186	-0.48	5000	1.28	9.60	ASCC31	210.8906	+03.6983	*	600	0.15	8.63
NGC1193	146.8125	-12.1630	-0.293	4571	0.19	9.7	Wit2	216.8479	+00.8029	*	1456	0.885	8.000
NGC1220	143.0364	-03.9631	*	1800	0.70	7.778	Alessi33	237.8828	-09.6046	*	750	0.08	8.18
Trumpler3	137.9763	04.5548	*	460	0.19	8.30	Alessi60	215.2005	+01.9446	*	2906	0.31	8.40
NGC1245	146.6474	-08.9308	-0.04	2818	0.24	9.03	NGC2323	221.6722	-01.3311	*	950	0.20	8.0
King5	143.7757	-04.2865	-0.30	2230	0.67	9.1	Tombaugh2	232.8321	-06.8802	-0.3	6080	0.30	9.01
Stock23	140.0524	02.1465	*	380	0.26	7.51	ASCC33	236.6762	-08.7292	-0.16	800	0.05	7.26
Czernik14	140.9287	00.9064	*	2175	1.71	8.40	Czernik27	208.5403	+05.5279	-0.38	4285	0.07	9.05
Czernik15	145.0998	-03.9660	*	1155	1.00	7.30	Bochum3	218.7886	+00.3503	*	1762	0.24	7.89
FSR0628	140.5451	02.9899	*	5001	1.049	9.250	vdBergh92	224.6104	-02.5089	*	1500	0.25	7.59
Melotte20	146.5676	-05.8625	0.04	185	0.090	7.854	NGC2324	213.4472	+03.2974	-0.17	3800	0.25	8.65
AlessiTeutsch9	155.7354	-17.7959	*	700	0.10	8.65	Auner1	231.9966	-06.1551	-0.50	8900	0.32	9.51
King6	143.3584	-00.1387	0.46	871	0.50	8.40	FSR1150	220.3142	-00.0965	*	5250	0.94	8.30
Czernik16	145.8367	-02.9864	*	2580	1.29	8.30	BDSB96	225.4753	-02.5680	*	1400	0.37	6.70
NGC1342	154.9518	-15.3421	-0.16	665	0.319	8.655	Ruprecht150	240.0152	-09.6469	*	1490	0.416	8.150
ASCC11	150.5641	-09.2301	*	650	0.15	8.61	Haffner4	227.9401	-03.5862	-0.3	4500	0.50	8.70
Berkeley9	146.0646	-02.8222	*	1480	0.79	9.3	ESO42732	241.6481	-10.3406	*	1786	0.125	9.105
NGC1348	146.9689	-03.7089	0.07	1820	1.02	8.11	Ruprecht10	232.5545	-05.8511	*	2900	0.38	9.04
Berkeley10	138.6158	08.8786	-0.49	1700	0.75	9.06	Berkeley76	225.0987	-01.9982	*	12600	0.55	9.18
SAI30	128.5255	21.2692	*	3100	1.25	8.00	NGC2335	223.6004	-01.1826	-0.18	1417	0.393	8.210
FSR0634	142.9653	03.2882	*	2301	1.149	8.952	Collinder466	224.2236	-01.4726	*	2123	0.46	8.80
IC348	160.4899	-17.8021	*	385	0.929	7.641	NGC2331	189.7280	+15.2177	*	1285	0.06	9.23
Melotte22	166.5707	-23.5211	-0.03	133	0.030	8.131	FSR1209	227.0242	-02.8805	*	4500	0.416	8.975
Juchert11	147.0712	-00.5076	*	3000	1.901	8.900	Ruprecht12	239.9388	-09.3049	*	900	0.05	7.56
Tombaugh5	143.9423	03.5726	*	1750	0.80	8.30	Ruprecht11	233.2667	-05.9813	*	1241	0.312	8.700
NGC1444	148.0963	-01.2921	*	1199	0.712	7.964	FSR1202	226.1317	-02.3203	*	1706	0.312	9.320
Czernik17	142.5567	06.1850	*	2120	0.87	8.60	FSR1170	222.6413	-00.5101	*	4933	0.729	9.200
Juchert9	145.1203	03.6802	*	4400	0.79	7.6	NGC2338	219.8848	+01.0118	*	1800	0.48	8.74
FSR0654	147.9482	00.3452	*	4000	1.420	8.508	Ruprecht13	237.8889	-08.1439	*	1300	0.26	9.0
FSR0655	148.1213	00.2872	*	1742	1.228	8.720	NGC2343	224.2681	-01.1728	-0.30	1056	0.118	7.104
FSR0656	148.5711	00.3621	*	1400	0.949	8.895	NGC2345	226.5799	-02.3141	*	2251	0.616	7.853
King7	149.7745	-01.0190	-0.17	2200	1.25	8.82	FSR1204	226.3150	-02.1680	*	2964	0.437	9.120
Alicante1	146.2699	03.1394	*	3981	0.67	6.60	FSR1113	216.3012	+03.2480	*	1737	0.312	8.180
Juchert19	149.7401	-00.1971	*	1340	0.28	9.30	Berkeley35	212.6023	+05.3599	*	4400	0.0	9.04
FSR0660	150.1120	-00.5519	-0.49	5126	0.625	9.220	ASCC34	209.6722	+06.9927	*	550	0.04	8.55
NGC1496	149.8470	00.1872	*	1230	0.45	8.80	Dias3	222.6003	+00.3654	*	4650	0.64	9.15
FSR0667	151.1422	-00.6527	*	1818	0.937	8.080	Alessi21	223.4370	+00.0037	*	500	0.07	7.47
NGC1502	143.6724	07.6577	*	1000	0.70	7.00	NGC2349	222.7797	+00.3509	*	1628	0.61	8.88

NGC1513	152.5899	-01.5742	*	1320	0.67	8.11	ASCC35	213.4631	+05.6892	*	800	0.06	8.49
Juchert20	154.4937	-03.4220	*	2420	0.70	8.55	NGC2352	236.7742	-06.2630	*	1750	0.32	8.08
FSR0674	153.4089	-01.8774	*	3400	1.020	8.560	FSR1183	224.2060	+00.3205	*	2436	0.208	9.225
NGC1528	152.0568	00.2578	*	1090	0.26	8.6	NGC2351	224.7680	+00.0679	*	1882	0.92	8.38
SAI36	159.3061	-06.8655	*	3000	0.55	9.10	NGC2354	238.3684	-06.7918	-0.3	4085	0.307	8.126
IC361	147.4836	05.7007	*	1070	1.117	7.718	FSR1153	220.5972	+02.4875	*	1706	0.437	9.150
Mayer2	151.1762	02.1237	*	1589	1.06	7.40	NGC2353	224.6854	+00.3842	*	1170	0.10	8.10
Berkeley11	157.0815	-03.6421	0.01	2200	0.95	8.041	ASCC36	234.3172	-04.6369	*	750	0.00	8.51
NGC1545	153.3588	00.1845	-0.13	711	0.303	8.448	Collinder132	242.9893	-08.8024	*	472	0.037	7.080
FSR0671	152.4064	01.4822	*	3501	1.399	7.900	Berkeley36	227.4920	-00.5661	*	6140	0.40	9.50
FSR0756	168.6483	-13.7201	*	1800	0.97	8.48	Alessi3	257.9214	-15.3778	-0.2	288	0.11	8.70
FSR0686	156.8877	-02.1575	*	1638	1.020	8.610	NGC2358	231.0252	-02.2797	*	630	0.02	8.72
Czernik18	168.2873	-12.2868	*	1052	0.27	9.00	NGC2355	203.3897	+11.8026	-0.0	1949	0.22	8.90
NGC1605	158.5738	-01.5790	*	2559	0.97	7.61	ESO36710	247.3385	-10.4999	*	3027	0.916	8.315
NGC1624	155.3572	02.6077	*	4585	0.90	7.35	Basel11a	228.2558	-00.7763	*	1520	0.0	8.30
Platais3	139.3455	16.1484	*	200	0.10	8.70	Collinder135	248.7650	-11.1322	-0.2	316	0.032	7.407
FSR0714	162.0235	-02.7457	*	1819	0.625	9.060	NGC2360	229.8071	-01.4261	-0.0	1887	0.111	8.749
FSR0719	162.2942	-02.5982	*	3500	0.620	8.945	ASCC37	237.6905	-05.4541	*	1600	0.00	8.73
Berkeley68	162.1251	-02.4075	*	1678	0.671	8.391	Teutsch49	231.6354	-02.1873	*	3840	1.60	8.90
Berkeley12	161.6696	-01.9910	0.07	3162	0.70	9.60	NGC2362	238.1789	-05.5482	*	1480	0.10	6.70
FSR0723	162.6004	-02.7053	*	3103	0.750	8.965	Bica4	235.6199	-04.1072	*	3930	0.94	7.8
FSR0733	163.9440	-03.8093	*	1500	0.500	9.060	Ruprecht15	233.5438	-02.9031	*	3416	0.37	8.70
Alessi2	152.2918	06.3292	*	501	0.18	8.50	Haffner6	227.8605	+00.2580	*	3054	0.450	8.826
FSR0717	162.2671	-02.1383	*	1700	0.450	9.050	NGC2367	235.5965	-03.8374	*	1400	0.05	6.70
FSR0721	162.4360	-02.2212	*	3662	0.874	8.800	Berkeley37	217.2301	+05.9347	-0.38	5623	0.00	9.20
Ruprecht148	160.3362	-00.3962	*	3028	0.702	7.724	NGC2364	223.0030	+03.0201	*	1919	0.31	8.30
ASCC12	163.0341	-01.8562	*	500	0.15	8.42	FSR1255	233.7033	-02.6322	*	1607	0.312	8.700
NGC1664	161.6768	-00.4459	*	1199	0.254	8.465	Saurer1	214.6894	+07.3861	-0.38	13200	0.14	9.70
FSR0702	160.1304	00.9633	*	2501	0.999	8.900	Juchert12	236.5620	-04.1222	*	2128	0.87	7.85
FSR0735	164.1786	-01.8329	*	2500	0.51	8.70	Berkeley77	219.2530	+05.1813	*	4630	0.12	8.8
Teutsch5	167.5829	-04.1166	*	2325	0.77	9.35	King23	217.2876	+06.2946	*	3113	0.16	8.95
Berkeley13	155.0851	05.9245	*	2470	0.66	9.0	Haffner7	242.6732	-06.8042	*	4500	0.13	9.18
Czernik19	174.0987	-08.8321	*	2500	0.67	7.40	Ruprecht16	233.7885	-02.0548	*	2160	0.71	8.20
SkiffJ045843.0	163.0074	00.1451	*	2125	0.18	8.95	Haffner8	227.5334	+01.3445	0.0	1182	0.03	9.15
FSR0744	167.0846	-02.7641	*	1250	0.700	8.850	Ruprecht17	237.1283	-03.7312	*	5785	1.208	6.000
Berkeley14	162.8730	00.7070	*	5500	0.52	9.20	Berkeley78	211.7849	+09.5988	*	4800	0.01	9.45
FSR0759	169.0413	-03.8640	*	3801	0.999	9.200	NGC2374	228.4147	+01.0198	*	1468	0.090	8.463
FSR0722	162.5304	01.3438	*	2501	0.999	8.800	Ivanov6	238.4801	-04.2833	*	442	1.08	7.20
Berkeley15	162.2656	01.6091	0.00	1202	0.23	9.40	Collinder140	244.9298	-07.5912	-0.10	405	0.030	7.548
FSR0753	168.3839	-03.0854	*	3001	1.099	8.300	Ruprecht18	239.9280	-04.9414	-0.01	1056	0.700	7.648
FSR0732	163.8671	00.4898	*	2800	0.300	9.500	NGC2383	235.2700	-02.4610	*	3400	0.33	8.45
FSR0734	164.0603	00.5194	*	1193	0.050	8.350	Haffner9	231.7964	-00.5873	*	1900	0.54	8.15
NGC1708	155.7638	06.8513	*	630	0.300	8.755	NGC2384	235.3899	-02.3928	*	3070	0.31	7.15
NGC1746	179.0749	-10.6451	*	800	0.300	8.645	FSR1270	235.6345	-02.2814	*	4541	0.666	9.400
NGC1750	179.1782	-10.6956	*	630	0.34	8.30	Waterloo7	230.2790	+00.6219	*	2800	0.42	*

NGC1758	179.1545	-10.4898	*	760	0.34	8.60	FSR1253	233.2334	-00.9335	*	2640	0.62	8.40
Bica6	166.9858	-01.0032	*	1600	0.42	9.00	Melotte66	259.5593	-14.2437	-0.33	4313	0.143	9.445
SAI41	167.6696	-01.3351	*	5200	0.51	9.30	Trumpler6	238.3313	-03.6409	*	2083	0.62	8.65
SkiffJ050730.8	173.7711	-05.8432	*	8701	0.10	9.10	Ruprecht20	242.4514	-05.7523	-0.29	1208	0.10	8.50
NGC1778	168.9032	-02.0153	*	1469	0.336	8.155	DC3	250.2782	-09.7080	*	4317	0.541	9.260
SAI43	158.6090	05.6858	*	3840	0.18	8.95	ASCC38	221.9800	+05.3650	*	500	0.07	8.60
King17	167.2985	-00.7447	*	4710	0.56	8.4	NGC2395	204.6052	+13.9878	*	512	0.120	9.070
Teutsch132	167.6854	-00.6323	*	5370	0.75	6.70	Trumpler7	238.2134	-03.3315	*	1474	0.266	7.430
NGC1802	179.6640	-09.2608	*	2100	0.581	9.150	NGC2396	227.5233	+02.6272	*	588	0.05	* *
FSR0716	162.2592	03.6189	*	4500	0.416	8.805	FSR1275	236.3964	-02.1594	*	3750	0.60	9.40
NGC1798	160.7031	04.8497	-0.12	4571	0.51	8.90	Czernik29	230.7976	+00.9353	*	3000	0.47	8.45
ASCC13	163.4007	03.2604	*	800	0.20	7.71	NGC2394	210.7832	+11.4690	*	940	0.13	8.95
Dolidze16	173.2149	-03.4682	*	868	0.333	7.600	Haffner10	230.8175	+01.0068	*	3700	0.55	9.30
Kronberger18	169.6447	00.0334	*	3250	1.29	8.00	ESO55913	235.6091	-01.5734	*	2749	0.25	9.00
SAI46	170.6749	-00.4414	*	4290	0.78	9.45	Haffner24	233.4319	-00.3259	*	2936	0.48	7.90
NGC1857	168.4053	01.2594	*	1545	0.97	8.20	NGC2401	229.6653	+01.8540	*	5888	0.35	7.80
ASCC14	171.8366	-01.0291	-0.10	1100	0.18	8.61	Mayer3	233.7547	-00.1868	*	2494	1.00	7.10
Czernik20	168.2857	01.4445	*	3370	0.422	7.173	Ruprecht23	238.0821	-02.4054	*	3060	0.54	8.78
Berkeley17	175.6462	-03.6479	-0.10	2700	0.58	10.00	Ivanov7	230.9830	+01.4841	*	2299	0.37	8.55
Berkeley18	163.6316	05.0171	-0.4	5800	0.46	9.63	Bochu5	232.4543	+00.7697	-0.17	872	0.194	7.545
ASCC15	170.9846	00.0772	0.26	1400	0.28	8.60	FSR1234	231.1545	+01.5277	*	4336	0.666	6.700
NGC1893	173.5850	-01.6804	*	6000	0.45	6.48	Czernik30	226.3686	+04.1733	-0.38	7145	0.25	9.40
Collinder62	167.2769	02.6840	*	1472	0.500	8.905	Bochum4	232.7531	+00.7738	*	2291	0.63	7.00
SAI47	166.3700	03.5457	*	3860	0.60	8.50	FSR1227	229.8607	+02.4340	*	1706	0.437	8.440
Berkeley19	176.9015	-03.5880	-0.50	7870	0.32	9.40	Ruprecht24	228.8979	+02.9605	*	1983	0.35	7.78
SAI48	173.6941	-01.3633	*	1800	0.31	9.35	Bochum6	234.7452	-00.2179	*	3981	0.70	7.00
Berkeley69	174.4351	-01.7867	*	2860	0.65	8.95	ASCC39	237.9530	-01.7186	*	1500	0.00	8.71
ASCC17	176.5624	-03.0711	*	2000	0.32	7.12	NGC2413	229.6013	+02.9180	*	440	0.04	8.46
FSR0775	172.6393	-00.3228	*	1300	0.570	8.720	NGC2414	231.4116	+01.9456	*	3455	0.508	6.976
Berkeley70	166.8944	03.5803	-0.01	4168	0.48	9.67	ASCC40	229.9738	+02.8474	*	700	0.11	8.58
NGC1896	177.3223	-03.4513	*	2600	0.600	9.100	FSR1243	232.0237	+01.9787	*	2283	0.645	8.640
NGC1883	163.0829	06.1589	-0.20	4800	0.35	9.00	Teutsch61	235.3755	+00.1512	*	1920	0.55	6.95
SAI49	159.5097	08.5861	*	2720	0.47	9.05	Haffner11	242.3889	-03.5198	*	5800	0.50	8.90
Czernik21	171.8890	00.4534	*	2300	0.72	9.55	NGC2421	236.2706	+00.0690	*	2200	0.42	7.90
FSR0777	173.0465	-00.1187	*	1000	0.400	7.625	NGC2422	230.9582	+03.1303	0.11	490	0.070	7.861
Waterloo2	168.4101	03.0939	*	550	0.171	8.330	Czernik31	236.2692	+00.2754	*	3200	0.48	8.20
NGC1907	172.6193	00.3063	*	1800	0.52	8.5	ESO42905	246.5014	-05.4011	*	3596	0.81	9.10
Stock8	173.3731	-00.1885	*	2005	0.40	6.30	NGC2423	230.4836	+03.5369	0.14	766	0.097	8.867
Kronberger1	173.1072	00.0466	*	1900	0.52	7.5	Alessi18	241.4231	-02.5553	*	6287	0.645	9.010
NGC1912	172.2496	00.6952	-0.38	1400	0.25	8.5	Ruprecht26	232.0608	+02.6828	0.31	1820	0.35	8.60
Teutsch52	170.4413	02.2819	*	3240	1.22	8.70	Melotte71	228.9488	+04.4979	-0.32	3154	0.113	8.371
NGC1931	173.8977	00.2814	*	3086	0.738	7.002	Ruprecht27	241.6011	-02.5265	*	1490	0.03	8.95
FSR0761	169.4139	03.6644	*	3743	0.354	8.985	NGC2425	231.5042	+03.2971	-0.15	3550	0.21	9.34
NGC1960	174.5345	01.0721	*	1330	0.22	7.4	NGC2420	198.1072	+19.6341	-0.38	2480	0.04	9.3
FSR0807	176.4900	-00.1104	*	1300	1.70	6.70	Melotte72	227.8411	+05.3607	-0.38	3981	0.20	8.78

Koposov36	177.0661	-00.4062	*	1700	0.83	8.35	ArpMadore2	248.1255	-05.8762	*	13341	0.570	9.335
FSR0815	177.0679	-00.1921	*	2153	1.041	8.655	NGC2428	233.0711	+02.7140	-0.14	2100	0.05	8.68
FSR0812	176.7813	00.1200	*	3300	0.8	7.00	NGC2430	232.9082	+02.8973	0.13	650	0.17	8.68
Stock10	171.6183	03.5617	*	380	0.07	7.90	ESO49303	242.4936	-02.4987	*	1400	0.10	8.60
FSR0816	177.0986	00.1882	*	2100	0.999	8.750	Bochum15	247.9879	-05.4834	*	2806	0.576	6.742
FSR0817	177.6322	-00.1055	*	1359	0.416	9.050	Haffner13	245.0089	-03.7247	*	714	0.05	* *
Teutsch1	175.5595	01.2062	*	3372	0.54	7.85	NGC2439	246.4425	-04.4666	*	1300	0.37	7.00
Koposov27	175.5581	01.2112	*	3700	0.45	8.65	NGC2432	235.4712	+01.7783	*	1900	0.23	8.70
Berkeley71	176.6250	00.8943	*	3260	0.81	9.0	ESO42913	245.6481	-03.9271	*	1606	0.437	9.020
Teutsch2	170.7532	04.6420	*	3610	0.48	8.95	NGC2437	231.8576	+04.0644	0.05	1510	0.10	8.4
FSR0821	178.7487	-00.1848	-0.21	1213	0.562	9.100	NGC2451A	252.5754	-07.2986	0.0	189	0.01	7.78
FSR0823	179.1227	-00.2252	*	1100	0.550	8.805	ESO36811	249.3728	-05.2442	*	1490	0.06	9.00
Teutsch45	177.9387	00.5331	*	6770	0.75	7.00	NGC2451B	252.0509	-06.7264	-0.45	302	0.055	7.648
FSR0826	179.6802	-00.5104	*	2100	1.09	7.00	NGC2447	240.0387	+00.1346	-0.10	1037	0.046	8.588
NGC2013	156.5136	13.4168	*	1100	0.23	9.18	NGC2448	240.7594	-00.2636	*	1040	0.02	7.19
Teutsch10	179.9556	-00.2944	*	2600	1.01	7.50	Haffner14	243.9855	-02.0505	*	3483	0.60	8.35
Koposov10	174.6454	03.7044	*	2000	0.81	8.60	Ruprecht32	241.5663	-00.5728	*	5346	0.50	7.08
Basel4	179.2295	01.1993	*	3000	0.45	8.30	Haffner15	247.9516	-04.1576	*	3500	1.05	7.30
King8	176.3949	03.1194	-0.460	6403	0.580	8.618	Ruprecht34	237.2025	+02.1566	*	2630	0.00	9.00
Koposov43	179.9008	01.7438	*	2800	0.38	9.30	Ruprecht35	246.6620	-03.2462	*	3910	0.45	8.60
NGC2099	177.6354	03.0915	0.089	1383	0.302	8.540	Berkeley39	223.4615	+10.0945	-0.20	4780	0.12	9.90
Koposov12	176.1594	05.9998	*	2000	0.51	8.78	Herschel1	219.3531	+12.3527	*	370	0.02	8.44
NGC2126	163.1864	13.1445	*	1090	0.27	9.1	ESO36814	248.2136	-03.9407	*	4230	1.04	8.80
Kronberger60	179.8072	04.7498	*	1960	0.84	8.90	NGC2453	243.2752	-00.9397	*	2150	0.446	7.187
NGC2165	162.1613	15.1305	*	1445	0.23	9.18	Ruprecht36	242.5928	-00.3335	*	1681	0.166	7.606
NGC2192	173.4149	10.6544	-0.31	3467	0.16	9.15	Teutsch25	243.9930	-01.1370	*	1980	0.57	9.00
ASCC23	167.5205	14.4219	*	600	0.07	8.45	FSR1315	243.2193	-00.6189	*	2391	0.333	8.500
NGC2240	179.2122	11.8464	0.07	1551	0.146	9.200	NGC2455	238.3537	+02.3204	*	2650	0.54	8.26
NGC2281	174.9015	16.8813	0.13	558	0.063	8.554	ESO31114	256.9481	-08.3727	*	1613	0.10	9.00
NGC2666	175.9159	39.2775	*	860	0.03	9.51	Ruprecht37	234.9400	+04.5268	*	5250	0.00	9.48
NGC3231	141.9238	44.6530	*	715	0.02	9.15	Haffner16	242.0973	+00.4673	-0.11	3165	0.175	7.078
Collinder285	109.8667	44.6770	*	25	0.00	8.30	Czernik32	245.8860	-01.7298	-0.38	4100	0.85	9.00
NGC6832	92.0048	16.3491	*	1750	0.10	9.48	FSR1294	239.3163	+02.3201	*	2255	0.729	8.700
NGC6939	95.9028	12.3045	0.00	1800	0.33	9.20	Haffner17	247.7055	-02.5271	*	2880	1.26	7.70
Patchick103	90.0907	07.6473	*	2220	0.71	8.90	SAI81	244.5841	-00.5463	*	2770	0.40	9.20
Berkeley53	90.3888	03.6931	-0.09	3100	1.52	9.09	NGC2477	253.5633	-05.8377	0.07	1341	0.31	8.85
FSR0290	90.4196	03.1902	*	1200	0.799	8.900	SAI82	248.8262	-03.0395	*	1150	0.39	8.65
NGC7031	91.3361	02.3031	*	900	0.854	8.138	NGC2467	243.1723	+00.3777	*	1355	0.338	7.103
FSR0288	90.0553	00.9276	*	1734	0.791	8.470	Haffner18	243.1514	+00.4467	*	6028	0.611	6.893
SAI143	91.3128	01.4932	*	6520	1.72	9.25	Haffner19	243.0809	+00.5236	*	6400	0.38	6.65
Berkeley91	90.0202	00.2810	-0.13	4100	1.2	9.35	AlessiTeutsch3	266.4551	-12.8466	*	800	0.10	8.57
Basel15	90.8196	-00.1050	*	1355	0.67	8.50	ASCC43	244.7361	-00.3846	*	1000	0.10	8.28
Berkeley55	93.0267	01.7979	*	3981	1.85	7.70	Ruprecht41	243.7791	+00.3702	*	3150	0.13	8.84
NGC7055	97.4486	05.5976	*	1275	1.10	8.90	Ruprecht152	253.5395	-05.3007	*	8020	0.67	8.78
Teutsch144	92.7429	00.4635	*	2280	0.70	8.90	NGC2479	235.9844	+05.3809	*	1585	0.05	9.00

NGC7058	92.8986	00.5900	*	404	0.079	8.350	Waterloo3	242.5620	+01.4434	*	5200	0.34	*
FSR0295	92.3210	-00.1623	*	1230	0.799	8.800	NGC2482	241.6258	+02.0346	-0.07	1343	0.093	8.604
FSR0296	92.4994	-00.2756	*	2400	0.731	8.938	NGC2483	244.7908	+00.2393	*	1659	0.303	7.089
NGC7067	91.2161	-01.6951	*	3600	0.75	8.00	Trumpler9	243.0719	+01.2846	*	2289	0.248	8.001
FSR0304	93.5589	00.6709	*	1423	0.729	8.785	NGC2489	246.7128	-00.7731	0.080	3957	0.374	7.264
Berkeley92	97.9256	05.0703	-0.38	8630	0.80	9.50	Haffner20	246.9721	-00.9306	*	3117	0.569	8.121
Kronberger81	95.2667	02.0702	*	7500	1.801	8.600	Ruprecht42	243.3263	+01.6388	*	970	0.208	8.400
NGC7071	91.4257	-02.0240	*	1684	1.14	8.48	Kronberger85	250.9660	-02.8405	*	8500	1.17	8.80
FSR0314	95.5932	02.0566	*	1710	1.041	8.140	Ruprecht44	245.7456	+00.4823	*	4730	0.619	6.941
FSR0306	94.2004	00.4726	*	2328	1.291	7.500	ESO4909	244.9435	+01.0838	*	1212	0.42	7.80
NGC7082	91.1986	-02.9047	-0.01	1442	0.237	8.233	ESO56105	240.7760	+03.6548	*	3677	0.37	8.35
Platais1	92.5613	-01.6460	*	1268	0.357	8.244	NGC2506	230.5639	+09.9347	-0.20	3750	0.10	9.00
NGC7086	94.4066	00.2201	*	1298	0.807	8.142	NGC2509	237.8401	+05.8480	*	912	0.15	9.90
NGC7092	92.4027	-02.2418	0.01	326	0.013	8.445	Haffner21	244.8501	+01.6331	*	2951	0.106	7.920
FSR0317	96.1217	01.5791	*	1934	0.833	8.800	ESO31121	257.1519	-05.8473	*	2330	0.49	10.10
FSR0307	94.2537	-00.7748	*	1500	0.500	9.150	Ruprecht154	259.5807	-07.3023	*	2311	0.562	8.570
NGC7093	91.0428	-04.3483	-0.15	1785	0.61	8.95	Alessi34	264.9227	-10.4438	*	1100	0.18	7.89
FSR0312	94.4532	-00.7436	*	2700	0.889	8.660	Ruprecht47	248.2522	-00.1879	*	3006	0.28	7.89
FSR0320	96.3764	01.2404	*	4724	1.020	8.850	Ruprecht48	249.1313	-00.6378	*	3030	0.29	8.60
Kronberger84	96.2719	01.1030	*	1075	0.61	8.78	Ruprecht49	244.7159	+02.2682	*	1823	0.259	7.930
FSR0324	96.5417	01.2651	*	4499	0.660	9.000	NGC2527	246.0874	+01.8550	-0.10	601	0.038	8.649
FSR0326	96.7518	01.0830	*	8435	1.770	8.700	Ruprecht52	249.3355	-00.1567	*	2177	0.87	8.20
Trumpler37	99.3117	03.7342	*	835	0.470	7.054	NGC2533	247.7996	+01.3098	*	1700	0.14	8.84
ASCC114	97.0705	01.0022	*	550	0.26	7.75	BH19	249.8787	-00.0178	*	3050	0.71	8.45
FSR0316	96.0707	-00.3329	*	1940	0.500	8.915	Teutsch50	253.0184	-02.0120	*	3240	0.86	9.48
NGC7129	105.4044	09.8852	*	1070	0.97	8.08	SAI86	253.5932	-02.1173	*	3030	0.69	8.60
FSR0323	96.4835	-00.3920	*	6699	0.600	8.950	NGC2547	264.4649	-08.5975	-0.16	361	0.186	7.585
Barkhatova2	95.5868	-01.5480	*	1676	0.77	6.85	NGC2539	233.7054	+11.1115	0.13	1363	0.082	8.570
NGC7127	97.9072	01.1503	*	1445	0.90	8.60	FSR1363	252.1903	-00.6272	*	3112	1.041	8.990
NGC7128	97.3420	00.4296	*	2307	1.018	7.254	Ruprecht53	245.8315	+03.5808	*	1700	0.11	8.59
NGC7142	105.3468	09.4852	0.08	2300	0.35	9.48	FSR1380	256.7439	-03.4908	*	2290	1.28	8.65
Teutsch74	100.3644	03.5968	*	2650	1.05	9.05	Ruprecht54	250.0318	+00.9591	*	5470	0.13	8.90
FSR0334	98.7085	01.5444	*	2201	0.271	9.310	NGC2546	254.8552	-01.9859	0.120	919	0.134	7.874
FSR0319	96.1612	-01.5887	*	1680	0.849	8.600	Haffner22	246.7749	+03.3770	*	2344	0.00	9.55
FSR0333	98.4883	01.0634	*	6001	1.099	8.895	Ruprecht55	250.6912	+00.8042	*	4600	0.45	7.00
FSR0322	96.4666	-02.1020	*	1867	0.450	9.250	Ruprecht56	257.2908	-03.5129	*	410	0.12	8.70
FSR0325	96.6288	-02.0230	*	1800	0.481	8.450	SAI88	258.5218	-04.2238	*	8240	0.92	9.00
FSR0336	99.0925	00.9640	*	1116	0.500	9.100	NGC2548	227.8725	+15.3929	0.080	770	0.03	8.6
FSR0338	99.2425	00.9493	*	14655	2.082	8.100	BH23	254.0812	-00.9594	*	480	0.06	8.40
IC5146	94.3833	-05.4948	*	852	0.593	6.00	Ruprecht58	250.4357	+01.5652	*	2229	0.06	8.85
NGC7160	104.0117	06.4573	0.16	789	0.375	7.278	Ruprecht57	246.3158	+04.3784	*	2340	0.167	8.615
Berkeley93	105.0720	07.3186	*	5600	1.5	8.0	ASCC45	253.6325	-00.3109	*	3000	0.60	7.12
ASCC115	97.4507	-02.5431	*	600	0.15	8.59	ASCC46	264.4407	-07.3286	*	900	0.10	7.71
ASCC116	99.4941	-00.3178	*	5000	0.51	7.03	Pismis2	258.8512	-03.3378	-0.07	3310	0.05	9.06
NGC7175	99.7170	-00.0751	*	1930	0.87	8.40	Pismis1	255.1120	-00.7112	*	5907	0.578	7.928

ASCC117	104.8494	05.3942	*	1200	0.30	6.67	NGC2567	249.7951	+02.9610	0.00	1677	0.128	8.469
NGC7209	95.4961	-07.3385	-0.12	1168	0.168	8.617	NGC2571	249.1060	+03.5322	0.05	1342	0.137	7.488
FSR0341	99.6442	-01.8317	*	6000	0.700	9.000	Ivanov8	254.0122	+00.2497	*	3888	1.08	9.20
Collinder471	110.8981	13.0837	*	2003	0.999	6.880	Moitinho1	261.9351	-05.1121	*	1394	1.489	6.500
FSR0342	99.7624	-02.2126	*	2088	0.625	8.850	Ruprecht59	253.0703	+00.9392	*	874	0.088	7.727
AlessiTeutsch5	104.4507	04.1479	*	900	0.30	7.02	NGC2579	254.6742	+00.2126	*	1033	0.15	7.61
FSR0358	103.3452	02.2085	*	2578	2.311	9.300	NGC2580	249.8710	+03.6747	*	4000	0.28	8.20
NGC7226	101.4048	-00.5956	*	2616	0.536	8.436	AH03J082236.4	254.9778	+00.3291	*	750	0.13	6.95
IC1434	99.9417	-02.7098	*	2600	0.13	8.90	NGC2588	252.2796	+02.4492	*	4950	0.30	8.65
FSR0364	104.1519	03.2287	*	3399	0.731	9.150	Collinder185	255.0556	+00.5571	*	1486	0.21	8.11
FSR0354	102.8121	01.2281	*	1169	0.500	8.000	NGC2587	249.4587	+04.4723	*	2700	0.10	8.70
NGC7235	102.7011	00.7822	*	3330	0.90	6.90	ESO31203	259.2418	-02.1209	*	2170	0.52	8.90
vdBergh150	112.0625	13.9057	*	3990	1.228	8.800	Ruprecht60	264.1028	-05.5101	*	6160	0.64	8.60
vdBergh152	110.2717	11.3646	*	1964	0.729	9.295	Ruprecht61	253.4958	+02.1355	-0.38	3900	0.30	9.11
Teutsch126	101.9754	-00.6001	*	1740	0.22	8.60	Saurer2	257.9948	-01.0014	*	6600	1.07	9.30
NGC7243	98.8568	-05.5237	0.06	808	0.220	8.058	ESO31204	259.4605	-01.7192	*	2410	0.49	8.75
NGC7245	101.3677	-01.8520	*	3467	0.45	8.65	ESO37013	254.1716	+02.1282	*	2760	0.13	9.05
King9	101.4377	-01.8310	*	7900	0.37	9.5	SAI90	260.0115	-01.8521	*	2740	1.02	9.05
Kumar21	104.7184	02.8344	*	2500	1.651	7.680	FSR1390	258.6856	-00.8106	*	2644	1.208	7.050
IC1442	101.3633	-02.2029	*	2346	0.541	6.982	Ruprecht157	241.6393	+11.5845	*	2059	0.75	7.75
FSR0369	105.1524	03.4094	*	4427	1.770	9.100	BH34	262.5755	-02.9694	*	950	0.03	8.48
FSR0356	103.0913	-00.0820	*	2200	0.600	9.100	Pismis3	257.8649	+00.5019	*	1394	1.300	9.027
FSR0366	104.3593	01.7664	*	5610	1.103	8.715	ESO31303	260.4346	-01.3068	*	3048	0.92	8.85
PismisMoreno1	106.7237	05.3047	*	800	0.550	7.400	AlessiTeutsch7	258.2955	+00.2746	*	900	0.10	7.88
SBB2	102.7828	-00.7007	*	3600	5.89	6.70	ESO37017	255.9468	+02.0305	*	2695	0.458	9.000
Teutsch127	102.8091	-00.6735	*	3600	5.89	6.70	Teutsch64	260.6847	-01.2981	*	2980	0.96	8.90
ASCC119	97.7320	-08.3871	*	1000	0.10	8.83	Ruprecht63	265.8014	-05.0157	*	3760	0.61	8.70
NGC7261	104.0335	00.9208	*	2830	0.88	8.20	ASCC48	257.3945	+01.6155	*	400	0.00	9.09
Berkeley94	103.0946	-01.1844	*	2630	0.608	6.996	Pismis4	262.8633	-02.4388	-0.20	593	0.013	7.533
SBB4	103.5834	-00.5976	*	2270	0.10	6.70	BH37	262.3533	-01.7845	*	11220	1.05	8.84
Teutsch53	105.7420	02.5411	*	5502	1.599	8.850	SAI91	267.6493	-05.4849	*	3090	0.51	8.80
NGC7296	101.8831	-04.5880	0.00	2450	0.24	8.45	FSR1412	262.9265	-01.9155	*	3473	1.978	9.250
Berkeley95	105.4706	01.2032	*	3343	1.25	7.65	NGC2627	251.5835	+06.6507	-0.12	2000	0.12	9.15
Teutsch76	106.8210	03.3079	*	4150	1.17	7.00	Ruprecht64	259.7564	+00.5296	*	800	0.06	8.45
Berkeley96	103.7095	-02.0993	*	3180	0.54	7.60	Pismis5	259.3398	+00.9181	*	869	0.421	7.197
ASCC120	104.7362	-00.6001	*	2500	0.62	7.08	FSR1429	264.4836	-02.9644	*	6737	2.665	8.500
ASCC121	103.5642	-02.5911	*	2500	0.30	7.73	NGC2635	255.5997	+03.9568	-0.61	4000	0.35	8.78
FSR0357	103.1022	-03.4147	*	2500	0.400	8.835	NGC2645	264.7868	-02.9082	*	1668	0.380	7.283
FSR0365	104.1789	-02.2116	*	3864	0.822	8.905	Ruprecht65	263.0749	-01.5508	*	500	0.07	8.57
ASCC122	95.9111	-15.9022	*	700	0.10	6.98	FSR1443	265.7209	-03.5382	*	1966	1.031	8.820
FSR0377	105.7811	00.0555	*	2300	0.600	7.700	FSR1441	265.5403	-03.3647	*	1864	0.458	8.770
Teutsch39	95.4654	-17.8142	*	810	0.08	7.30	FSR1415	263.7368	-01.8118	*	3530	1.87	9.25
Berkeley97	106.6429	00.3644	*	2410	0.77	8.40	NGC2632	205.9196	+32.4843	0.27	187	0.009	8.863
NGC7352	105.8957	-01.0536	*	2550	1.10	7.70	Ruprecht66	258.4933	+02.2857	*	3760	0.90	8.78
Czernik42	107.1242	01.1467	*	2585	1.74	7.00	Pismis7	259.0521	+01.9942	*	4900	0.69	8.70

FSR0381	106.6366	-00.3918	*	3392	0.770	8.980	Pismis8	265.0825	-02.5792	*	1312	0.706	7.427
FSR0385	106.9581	00.1168	*	1726	0.979	8.850	Ruprecht67	262.7974	-00.7922	*	1504	0.432	8.256
ASCC123	104.7461	-03.9987	*	250	0.10	8.41	IC2395	266.6365	-03.5919	0.00	800	0.09	6.80
Berkeley98	103.8561	-05.6475	*	3739	0.13	9.4	NGC2659	264.1789	-01.6502	*	1713	0.514	6.890
NGC7380	107.1408	-00.8838	*	2222	0.602	7.077	NGC2660	265.9288	-03.0127	0.04	2826	0.313	9.033
Teutsch54	107.8984	00.5745	*	2890	0.58	8.95	ESO43203	250.6520	+08.8870	*	1831	0.271	9.200
Alessi37	101.7345	-11.4831	*	600	0.15	8.48	NGC2658	254.5554	+06.0698	0.02	2021	0.043	9.152
NGC7394	104.7945	-06.4217	*	1310	0.35	8.78	ESO31311	258.5859	+03.0013	*	3708	0.19	9.45
FSR0384	106.7497	-02.9525	*	4799	0.604	8.925	ESO31312	260.5864	+01.4691	*	1401	1.145	8.500
King18	107.7624	-01.0167	*	3010	0.69	8.10	Ruprecht68	257.2650	+04.2585	*	1990	0.39	9.15
FSR0404	109.6169	02.3604	*	5763	2.165	8.400	SAI94	265.4328	-02.1803	*	3910	0.48	9.10
FSR0406	109.8613	02.7643	*	7001	1.449	9.000	Bochum7	265.1887	-01.9577	*	5754	0.86	7.00
NGC7419	109.1335	01.1199	*	2300	2.02	7.15	Collinder197	261.4858	+00.9913	*	838	0.548	7.128
King10	108.4814	-00.3956	*	3379	1.138	7.446	Collinder196	253.9436	+06.9580	*	661	0.17	7.90
FSR0394	108.3173	-00.8068	*	4739	0.999	9.200	NGC2670	267.4854	-03.6250	*	1188	0.430	7.690
NGC7423	107.6125	-02.2748	*	4150	0.75	9.15	NGC2671	262.1477	+00.7869	*	1660	1.04	7.90
NGC7429	108.9551	00.2720	*	1190	1.16	7.60	ESO26006	266.6998	-02.8415	*	1711	0.31	8.80
ASCC125	110.1782	02.7653	*	1500	0.71	7.01	Trumpler10	262.7907	+00.6740	-0.13	424	0.034	7.542
NGC7438	106.7097	-04.9007	*	1000	0.350	8.800	Teutsch38	259.3792	+03.4428	*	900	0.02	8.14
FSR0401	109.4022	-00.2315	*	3208	1.145	8.600	ESO26007	266.3638	-02.1920	*	4374	0.08	9.40
FSR0413	110.7280	02.6690	*	1800	1.549	8.250	Ruprecht71	266.3728	-01.8952	*	1300	0.05	8.78
FSR0414	110.8579	02.7494	*	831	0.625	8.790	BH54	264.4821	-00.2839	*	1102	0.60	6.85
FSR0416	110.9304	02.7631	*	700	0.550	7.850	NGC2678	216.0349	+31.4207	*	900	0.03	9.36
Reiland1	109.9929	-00.0861	*	1664	0.52	9.00	Chupina1	215.3988	+31.6939	*	1783	0.79	7.10
Kronberger23	110.2037	00.0146	*	3065	1.10	8.00	Alessi43	262.5038	+01.4779	*	850	0.20	7.48
ASCC126	106.5858	-08.4542	*	800	0.10	7.26	NGC2682	215.6961	+31.8963	0.03	808	0.03	9.45
Pfleiderer3	110.6935	00.4704	*	4570	1.50	9.00	ESO21103	269.2319	-03.7672	*	3770	0.90	9.05
King19	110.5698	00.1445	*	1967	0.547	8.557	FSR1430	264.6446	+00.0765	*	2840	2.50	8.85
ASCC127	112.2603	04.1352	*	350	0.10	7.82	ESO37125	258.0101	+05.8550	*	2198	0.27	9.55
NGC7510	110.9026	00.0645	*	3480	0.90	7.35	BH55	261.5274	+03.7486	*	4108	0.42	9.05
FSR0417	110.9690	-00.7487	*	2329	0.666	8.830	BH56	264.4882	+01.4634	*	680	0.20	7.24
FSR0425	111.5717	00.5655	*	2644	1.208	8.700	Muzzio1	267.9264	-01.4660	*	1300	1.03	6.70
FSR0422	111.4682	00.1401	*	1200	0.700	8.664	Collinder205	269.2092	-01.8435	*	1853	0.75	7.20
Markarian50	111.3502	-00.2250	*	2114	0.810	7.095	ESO26017	267.4882	+00.6495	*	1366	0.90	7.85
ASCC128	109.9354	-05.9628	*	900	0.13	8.44	Platais9	266.8760	+03.3779	*	174	*	8.00
Berkeley99	115.9519	10.1065	-0.58	4900	0.30	9.50	NGC2818	261.9796	+08.5843	-0.17	1855	0.121	8.626
NGC7654	112.8189	00.4346	*	1400	0.57	8.2	NGC2849	265.2743	+06.3574	*	6170	0.32	9.0
Czernik43	112.8414	00.1341	*	2510	0.62	7.6	ESO31414	263.5775	+08.0784	*	1870	0.750	8.650
Berkeley100	113.6596	02.4578	*	3775	1.00	8.05	Pismis12	268.6397	+03.2162	*	1714	0.27	9.40
AlessiJ232755	111.2292	-05.3654	*	1000	0.18	8.69	ESO26107	268.8954	+04.0514	*	3360	1.145	9.000
FSR0442	113.9936	02.0319	*	1252	1.437	9.000	Turner5	264.5368	+11.1250	-0.21	400	0.10	8.49
NGC7686	109.5128	-11.6078	*	1534	0.20	9.30	ESO31514	266.7948	+09.2086	*	1789	0.62	7.85
SkiffJ233060.2	113.0152	-01.0398	*	1859	0.31	8.90	ESO43509	262.7189	+19.8342	*	2255	0.729	8.425
FSR0435	112.9848	-01.5268	*	805	0.531	8.350	ESO43533	266.2644	+18.6379	*	2860	1.04	8.15
Berkeley101	114.5040	02.6314	*	2693	0.98	8.75	ESO43602	266.2067	+22.2381	*	2150	0.83	8.25

King20	112.8415	-02.8648	*	1900	0.65	8.30	Melotte111	221.3538	+84.0248	0.07	96	0.013	8.652
Czernik44	113.9075	00.4517	*	3450	1.48	8.20	NGC1520	291.1373	-35.7047	*	775	0.06	9.30
Stock12	111.5116	-08.6550	*	480	0.06	8.40	NGC1785	280.0140	-35.2469	*	3080	0.06	8.70
NGC7708	117.3993	10.7883	*	1607	0.42	9.30	NGC1901	279.0397	-33.6065	-0.018	460	0.03	8.78
AveniHunter1	110.5655	-12.5351	*	500	0.10	8.26	ESO12326	273.0994	-16.2726	*	550	0.13	8.33
SAI149	114.0252	-01.0468	*	2370	1.29	8.20	NGC2516	273.8158	-15.8558	0.060	409	0.101	8.052
Berkeley102	113.0131	-04.8310	-0.38	9638	0.41	9.50	NGC2609	276.1456	-12.7539	*	1320	0.23	8.90
FSR0441	113.9823	-03.1100	*	1998	0.521	8.650	IC2391	270.3622	-06.8387	-0.01	175	0.008	7.661
FSR0443	114.3022	-02.6428	*	1250	0.999	8.802	Mamajek1	292.4817	-21.6534	*	97	0.00	6.9
Stock17	115.1232	00.3188	*	2144	0.736	6.775	NGC2669	270.8352	-06.0925	*	1046	0.180	7.927
Berkeley103	114.5571	-02.4903	-0.38	7379	0.87	8.95	BH52	270.8096	-06.0467	*	667	0.05	*
FSR0448	115.1973	-00.9850	*	2012	1.249	8.550	ESO21101	270.2250	-05.4526	*	3413	0.729	8.760
Negueruela1	115.7847	01.2414	*	2800	1.249	6.980	ESO16509	274.9233	-05.9213	*	450	0.05	8.96
King11	117.1632	06.4774	-0.27	2892	1.270	9.048	Platais8	277.6824	-07.6209	-0.296	132	*	7.78
Teutsch23	115.7923	01.0020	*	2680	0.77	7.00	Pismis11	271.6567	-00.7077	*	3600	1.2	7.0
King21	115.9465	00.6827	0.060	2103	0.886	7.163	ESO21109	271.9441	-00.7966	*	5823	1.12	9.05
Pfleiderer4	115.9678	00.2704	*	7900	0.62	9.80	ASCC51	286.2453	-14.0800	*	500	0.05	8.53
FSR0451	115.6669	-01.1728	*	1732	0.645	8.700	Teutsch48	274.1787	-02.1691	*	7900	1.06	8.70
ASCC130	116.2075	00.3364	*	3400	0.52	7.03	BH63	271.6313	+00.3992	*	2300	1.9	8.84
King12	116.1210	-00.1508	*	2490	0.51	7.85	Ruprecht75	276.7874	-04.4814	*	4300	0.24	9.15
Kronberger55	116.3246	00.6652	*	1260	1.13	8.60	NGC2866	273.1232	-00.7638	*	2600	0.66	8.30
Harvard21	116.2057	-00.3539	*	1937	0.85	8.25	FSR1471	270.7151	+02.1302	*	2700	1.22	9.00
NGC7788	116.4211	-00.7763	*	2750	0.49	8.20	Ruprecht76	273.7544	-00.9373	*	1262	0.376	7.734
NGC7789	115.5319	-05.3849	0.02	1795	0.28	9.15	BH66	276.0027	-03.0062	*	7000	0.40	8.90
NGC7790	116.5887	-01.0084	*	2944	0.531	7.749	Miller1	275.0100	-01.9016	*	3910	0.38	9.30
NGC7795	116.3755	-02.1625	*	2105	1.00	8.65	BH67	273.7590	-00.3755	*	7500	0.95	9.11
FSR0460	116.5752	-01.5329	*	5875	1.103	8.705	Ruprecht77	276.4640	-03.1170	*	4129	0.622	7.501
NGC7762	118.1271	05.6443	*	780	0.66	9.3	IC2488	277.8298	-04.4192	0.10	1134	0.231	8.113
Blanco1	15.5719	-79.2611	0.04	269	0.010	7.796	ASCC52	275.9642	-02.4087	*	1500	0.04	8.75
NGC7826	61.8749	-77.6528	*	620	0.03	9.34	Teutsch103	270.7505	+03.2061	*	2790	0.62	8.75
Latham1	72.3197	+84.5915	*	786	0.223	8.300	Ruprecht78	275.7058	-01.8814	*	1641	0.350	7.987
DolDzim5	60.8662	+43.8757	*	900	0.02	9.30	Pismis14	275.1503	-01.1450	*	1314	0.56	7.35
Dolidze27	7.6156	+24.6639	*	2107	0.874	8.970	NGC2910	275.3143	-01.1761	*	2607	0.336	8.203
DolDzim7	36.2942	+29.1659	*	1140	0.13	9.30	Basel20	277.7763	-03.6655	*	2024	0.406	7.419
Mamajek2	17.0254	+12.3089	*	161	0.80	8.10	BH72	275.5032	-01.1797	*	3190	0.48	9.10
DutraBica60	3.7307	+03.9596	*	3054	1.478	9.200	BH73	273.6335	+00.9508	*	5557	0.67	9.10
IC4665	30.6191	+17.0820	-0.03	352	0.174	7.634	NGC2925	275.9359	-01.2537	*	774	0.08	7.85
DutraBica45	3.6557	+01.7830	*	1192	2.852	9.100	Teutsch66	275.2820	-00.4726	*	5510	1.15	8.30
Collinder350	26.7489	+14.6626	*	280	0.37	8.61	Pismis15	272.4928	+02.8690	-0.38	2900	0.53	9.11
Collinder351	0.5548	-00.5293	*	1310	0.70	8.20	BH75	276.9907	-02.0530	*	2500	0.54	8.25
Alessi31	15.1976	+07.6546	*	650	0.25	9.01	FSR1500	276.8304	-01.2041	*	2209	1.176	8.850
Ruprecht133	1.0052	-01.1501	*	6664	0.874	7.880	ASCC53	280.5657	-05.3662	*	2500	0.15	8.12
Ruprecht134	0.2703	-01.6431	*	3497	0.874	9.500	SAI108	276.2745	-00.3544	*	2910	0.66	8.50
Ruprecht168	1.2378	-01.0850	*	1263	0.291	8.325	NGC2972	274.6856	+01.7570	-0.073	2062	0.343	7.968
NGC6469	6.5926	+01.9595	*	1100	0.58	8.40	Ruprecht79	277.0986	-00.8180	*	1979	0.717	7.093

Czernik37	2.2123	-00.6428	*	1700	1.06	8.78	NGC2982	270.7517	+06.7012	*	2624	0.40	8.30
DutraBica28	1.3911	-01.1776	*	7575	1.874	8.400	Ruprecht80	270.7540	+06.7077	-0.373	2500	0.30	8.33
FSR0022	6.1804	+00.8461	*	4340	1.749	9.650	FSR1496	276.2021	+00.6884	*	1380	0.562	8.580
NGC6494	9.8936	+02.8343	0.04	628	0.356	8.477	SAI109	275.3973	+01.7530	*	7690	0.23	9.20
FSR0023	6.5838	+00.7829	*	2418	1.499	8.700	BH78	279.1588	-02.6067	*	4602	1.00	8.60
Ruprecht135	16.4204	+06.2339	-0.71	810	0.63	9.58	ASCC54	277.9035	-00.9036	*	1200	0.05	8.84
Ruprecht136	5.1993	-00.4686	*	1405	1.124	8.795	Ruprecht82	277.7307	-00.4733	*	2455	0.29	8.50
Ruprecht169	5.1488	-00.5151	*	1390	0.66	9.00	FSR1509	278.6658	-01.0822	*	2080	1.17	8.75
Trumpler31	2.2483	-02.2929	*	986	0.35	8.87	NGC3033	279.5956	-02.0714	*	922	0.327	7.845
NGC6507	11.5537	+03.0279	*	1230	0.85	8.60	Ruprecht84	285.3196	-08.8177	*	1800	0.10	8.56
Ruprecht138	5.2861	-00.5847	*	930	0.18	9.30	Ruprecht83	278.5052	-00.6091	*	2459	0.453	8.450
Ruprecht137	4.8507	-00.9210	*	1450	0.67	8.90	NGC3036	283.6615	-06.8303	-0.714	1200	0.40	8.61
Ruprecht139	6.4102	-00.2354	*	550	0.15	9.05	Pismis16	277.8287	+00.6890	*	1824	0.557	7.839
Collinder359	29.7495	+12.5172	*	249	0.193	7.506	ASCC55	280.6160	-02.0923	*	1100	0.19	8.45
Bochum14	6.3876	-00.4988	*	578	1.508	6.996	Collinder213	276.8351	+02.7765	*	1400	0.07	8.84
NGC6525	37.3783	+15.8905	*	1436	0.14	9.30	Ruprecht160	274.6338	+05.9916	*	976	0.167	8.450
ESO58926	7.9517	+00.3280	*	2434	1.145	6.500	FSR1518	279.6166	+00.3769	*	1602	0.396	8.865
NGC6514	7.0858	-00.2872	*	816	0.190	7.368	NGC3105	279.9147	+00.2636	*	8530	0.95	7.30
NGC6520	2.8811	-02.8435	*	1900	0.42	8.18	BH84	282.0550	-02.4166	*	2924	0.60	7.25
Teutsch14a	7.9069	-00.0303	*	1720	1.54	8.00	Ruprecht85	280.2023	+00.0693	*	1400	0.21	8.70
NGC6531	7.6772	-00.3547	*	1205	0.281	7.070	BH85	276.9144	+04.5436	*	1501	0.23	8.85
FSR0035	9.6860	+00.7639	*	2525	1.208	6.600	NGC3114	283.3317	-03.8395	0.02	911	0.069	8.093
NGC6530	6.0828	-01.3313	*	1330	0.333	6.867	BH87	280.7188	+00.0590	*	1203	0.38	8.40
FSR0031	8.9061	-00.2678	*	1468	1.759	8.550	Schuster1	281.0103	-00.2538	*	5212	2.52	8.35
Collinder468	3.5998	-03.2499	*	7376	0.500	9.500	Trumpler11	284.4423	-04.8606	*	3100	0.21	*
FSR0039	10.2494	+00.3213	*	2940	0.802	6.000	Hogg5	283.8635	-03.7752	*	2622	0.56	8.20
NGC6546	7.3279	-01.3818	-0.334	938	0.491	7.849	Trumpler12	283.8278	-03.6981	*	1300	0.05	8.81
ASCC93	8.3294	-01.0495	*	2500	0.28	7.22	BH88	278.6997	+03.3735	*	1770	0.60	8.10
vdBergh113	9.1101	-00.7182	-0.358	3470	0.58	7.50	FSR1535	283.3275	-02.6981	*	2863	1.603	8.700
DolDzim9	58.0989	+22.2589	*	2330	0.06	9.36	ASCC56	286.3898	-06.8759	*	800	0.11	8.08
NGC6554	11.7617	+00.6485	*	2488	0.687	6.600	ASCC57	287.9686	-08.5965	-0.296	1500	0.13	8.70
ESO52138	6.4754	-02.3891	*	1800	0.22	8.10	BH90	283.1275	-01.4558	*	2572	0.526	7.943
Collinder367	7.1382	-02.1371	*	1200	0.35	6.84	ESO09218	287.1283	-06.6552	*	10607	0.500	9.024
NGC6561	13.4336	+01.1586	*	3400	0.40	6.92	ASC58	281.7116	+01.3281	*	600	0.09	7.04
ESO45672	2.3595	-05.4017	*	1211	1.041	9.490	Ruprecht87	279.3723	+04.8834	*	1876	0.416	8.980
NGC6568	9.4086	-01.6512	*	1000	0.25	8.71	BH91	284.0403	-01.6011	*	740	0.08	8.21
ESO52205	7.0005	-03.0015	*	660	1.82	9.50	Ruprecht88	286.6608	-05.1861	*	750	0.040	8.980
FSR0051	16.7097	+02.2454	*	4415	1.166	6.100	BH92	282.9836	+00.4376	*	1249	0.20	*
NGC6573	9.0631	-02.0904	*	460	2.48	7.00	ASCC59	283.7837	-00.5128	*	550	0.05	8.60
FSR0046	13.3500	+00.0682	*	4736	1.936	8.400	NGC3228	280.6971	+04.5453	0.03	544	0.028	7.932
Markarian38	11.9832	-00.9312	0.180	1471	0.405	6.882	Teutsch44	282.1820	+02.2620	*	7410	0.64	8.84
ASCC94	15.5445	+00.9138	*	850	0.20	8.78	ESO06208	290.3387	-10.2121	*	1983	0.042	9.440
NGC6583	9.2825	-02.5336	0.37	2040	0.51	9.00	SAI113	285.0651	-01.8946	*	2382	0.979	8.685
ASCC95	6.1578	-04.2783	*	1500	0.32	8.04	Trumpler13	285.5153	-02.3525	*	2400	0.30	8.50
Collinder469	12.7333	-00.8709	*	1481	0.418	7.799	Westerlund2	284.2758	-00.3359	*	2850	1.65	6.30

NGC6595	11.4220	-01.7124	*	1640	0.94	8.65	Collinder220	284.5675	-00.3420	*	1547	0.221	8.083
Turner4	12.4553	-01.1735	*	2330	*	7.00	NGC3255	286.0885	-02.6349	*	1445	0.25	8.30
Turner2	12.3516	-01.2429	*	1190	0.36	8.00	IC2581	284.5880	+00.0350	-0.34	2446	0.415	7.142
Trumpler32	17.2066	+01.2880	*	1720	0.64	8.48	Hogg8	286.5245	-02.7277	*	7194	0.73	9.15
NGC6596	14.3071	-00.2881	*	1100	0.15	8.60	Collinder223	286.3576	-01.7051	-0.217	2820	0.25	8.0
Turner3	12.3597	-01.3416	*	1790	*	7.46	ASCC60	285.6710	-00.3223	*	800	0.10	8.36
Dias5	11.6607	-01.7443	*	1760	0.33	7.14	Bochum9	286.7838	-01.5693	*	710	0.11	8.38
NGC6604	18.2466	+01.6949	*	1696	0.970	6.810	NGC3293	285.8562	+00.0736	*	2327	0.263	7.014
NGC6603	12.8598	-01.3059	*	3600	0.79	8.30	Loden165	286.1170	-00.3609	*	1900	0.25	9.48
Alessi19	40..2163	+12.7580	*	550	0.04	8.00	Carraro1	286.2357	-00.2895	*	1900	0.25	9.48
NGC6611	16.9540	+00.7935	*	1800	0.80	6.11	NGC3324	286.2283	-00.1884	-0.474	2317	0.438	6.754
NGC6613	14.1827	-01.0111	*	1296	0.450	7.223	BH99	286.5578	-00.6245	*	507	0.055	7.605
Ferrero1	0.6583	-08.1576	*	750	0.15	8.27	NGC3330	284.1877	+03.8484	*	894	0.050	8.229
NGC6618	15.0952	-00.7453	0.132	1300	1.51	6.00	DC5	286.7938	-00.4999	*	4430	0.833	6.050
Kronberger2	16.8158	+00.0273	*	3065	1.10	8.00	Saurer3	285.0959	+02.9986	*	9550	0.76	9.30
Kharchenko2	16.6611	-00.3203	*	1990	0.72	8.0	Bochum10	287.0163	-00.3147	*	2027	0.306	6.857
Kronberger25	16.5827	-00.4670	*	1220	1.32	7.70	Melotte101	289.8641	-05.5605	*	1995	0.48	7.89
Kharchenko3	16.6796	-00.4475	*	2130	0.72	8.0	IC2602	289.6014	-04.9061	0.00	161	0.024	7.507
NGC6625	19.0447	+00.7954	*	1335	1.21	8.70	Aless5	288.0832	-02.0497	-0.382	398	0.15	7.60
Dolidze52	15.0236	-01.6297	*	1318	0.625	7.300	Trumpler14	287.4081	-00.5773	*	2900	0.36	6.00
Trumpler33	12.3970	-03.2281	-1.544	1755	0.357	7.685	Collinder228	287.6677	-01.0471	*	2201	0.342	6.830
Ruprecht170	21.0504	+01.2001	*	1159	0.250	9.550	Collinder232	287.4929	-00.5436	*	2300	0.48	6.30
Dolidze28	16.9654	-01.0351	*	1258	0.937	8.250	Trumpler15	287.4100	-00.3688	*	1853	0.434	6.926
Bica3	18.4440	-00.4153	*	1640	2.18	7.4	Trumple16	287.6238	-00.6517	*	2900	0.36	6.00
NGC6631	19.4814	-00.1770	*	2600	0.45	8.60	ASCC61	286.4095	+01.9373	*	1700	0.23	7.96
NGC6633	36.0112	+08.3278	0.06	376	0.182	8.629	Bochum11	288.0250	-00.8560	*	2412	0.576	6.764
FSR0059	19.7439	-00.5593	*	1550	1.083	8.400	Ruprecht91	286.8698	+01.4918	*	900	0.01	8.63
FSR0054	17.1564	-02.2765	*	2325	0.833	8.905	ASCC62	288.4364	-00.6657	*	3000	0.24	7.50
Dias6	19.6040	-01.0278	*	2239	0.87	8.85	NGC3446	281.8610	+12.7895	*	1485	0.16	9.00
NGC6639	18.9148	-01.5202	*	700	0.20	8.86	BH106	286.0484	+04.6996	*	1879	0.406	8.000
Ruprecht141	19.6941	-01.2011	*	1800	0.45	7.48	Teutsch31	288.3728	+00.0160	*	3250	1.09	8.78
IC4725	13.7023	-04.4335	0.17	620	0.476	7.965	Ruprecht162	289.6379	-02.5445	*	3019	0.312	9.365
FSR0052	16.7844	-02.9176	*	1173	0.479	7.500	Ruprecht92	289.4822	-01.9899	0.201	2362	0.461	7.798
Ruprecht142	19.8710	-01.3524	*	1735	0.91	8.60	Kronberger39	289.5248	-01.9556	*	11100	0.90	*
Ruprecht171	16.4778	-03.1122	*	1140	0.12	9.50	ASCC63	289.1279	-00.6732	*	3500	0.45	7.24
Ruprecht143	20.0035	-01.3982	*	1649	0.666	8.795	Trumpler17	288.6692	+00.4485	*	2189	0.605	7.706
NGC6645	15.7817	-03.5882	*	1245	0.36	8.60	Graham1	290.3190	-02.9948	*	3600	*	*
NGC6649	21.6349	-00.7852	*	1369	1.201	7.566	Collinder236	289.5392	-01.2603	0.042	800	0.07	8.37
Ruprecht144	20.7487	-01.2778	*	1600	0.77	8.65	Bochum12	289.8543	-01.7752	*	2218	0.24	7.61
Alessi40	13.9073	-05.6008	0.129	800	0.40	7.88	Hogg5	288.8339	+00.6915	*	3049	0.38	7.45
NGC6664	24.2941	-00.2868	*	1164	0.709	7.162	Turner6	289.0982	+00.3186	*	3250	1.32	7.90
IC4756	36.3807	+05.2423	-0.01	484	0.192	8.699	Teutsch106	289.1641	+00.2966	*	6660	1.02	8.78
Stephenson2	26.2296	-00.1438	*	5900	1.2	7.30	NGC3496	289.5147	-00.4113	*	990	0.469	8.471
Trumpler34	24.1194	-01.2637	*	1273	1.166	8.150	Sher1	289.6373	-00.2419	*	5875	1.374	6.713
Dolidze32	28.1203	+00.4382	*	1381	1.457	6.000	Pismis17	289.4693	+00.1394	-0.145	3504	0.471	7.023

NGC6683	26.3546	-00.7877	*	1197	0.54	7.00	ASCC64	290.1422	-00.7682	*	1500	0.15	7.92
Teutsch145	27.2373	-00.4085	*	2700	1.90	8.30	Ruprecht163	293.1627	-07.1232	*	1297	0.110	7.700
ASCC98	1.5482	-12.9421	*	800	0.04	8.33	NGC3532	289.5708	+01.3468	0.02	492	0.028	8.477
Trumpler35	28.2808	+00.0113	*	1206	1.218	7.862	Feinstein1	290.0251	+00.3847	*	1159	0.40	7.00
AndrewsLindsay5	27.7335	-00.6668	*	2289	2.415	6.000	BH110	290.8211	-01.0513	*	5593	0.42	9.00
Berkeley79	31.1378	+00.8328	*	2300	1.19	7.81	Teutsch143a	290.6892	-00.3075	*	5483	0.46	8.85
NGC6694	23.8786	-02.9134	*	1600	0.589	7.931	BH111	291.9401	-03.1666	*	2700	0.25	8.35
FSR0087	29.0899	-00.4424	*	1174	1.562	8.250	NGC3572	290.7047	+00.2022	*	1995	0.389	6.891
FSR0098	33.0315	+01.1526	*	5387	1.999	6.100	Basel17	290.2649	+01.3351	*	1636	0.16	*
NGC6698	9.2547	-10.7917	*	1150	0.32	9.28	Hogg10	290.7985	+00.0767	*	1776	0.460	6.784
Basel1	27.3553	-01.9465	*	2178	0.482	7.893	Loden309	290.7941	+00.0930	*	600	0.25	8.63
FSR0089	29.4907	-00.9801	*	1516	1.853	8.300	ASCC65	291.1159	-00.5714	*	3500	0.40	7.09
ASCC99	15.8934	-07.9182	*	280	0.15	8.71	Trumpler18	290.9864	-00.1346	*	1358	0.315	7.194
FSR0101	35.1453	+01.7521	*	1900	2.37	8.950	Hogg11	290.9033	+00.1194	*	2270	0.32	7.08
Czernik38	37.1279	+02.6330	*	1910	2.03	7.00	Collinder240	290.8752	+00.2054	*	1577	0.310	7.160
FSR0094	31.8157	-00.1211	*	2069	2.644	6.000	NGC3590	291.2038	-00.1783	*	1651	0.449	7.231
FSR0090	29.6208	-01.3854	*	1388	0.895	8.695	Hogg12	291.2058	-00.1721	*	2000	0.40	7.48
Ruprecht145	16.4883	-08.0308	-0.127	320	0.18	7.50	Stock13	290.5095	+01.5958	*	1577	0.218	7.222
NGC6704	28.2189	-02.2182	*	2974	0.717	7.863	ASCC66	289.2932	+04.8400	*	1000	0.10	7.76
NGC6705	27.3070	-02.7759	0.23	1877	0.428	8.4	Trumpler19	290.1715	+02.8949	*	1900	0.08	9.65
NGC6709	42.1203	+04.7152	*	1075	0.304	8.178	NGC360	291.6173	-00.5222	*	6900	1.338	6.00
Teutsch146	33.1122	+00.0563	*	3800	1.83	8.60	IC2714	292.4021	-01.7990	0.01	1238	0.341	8.542
Collinder394	14.8830	-09.2356	*	690	0.235	7.803	ESO09308	293.5065	-04.0410	*	14000	0.80	9.74
Stephenson1	66.8628	+15.5149	*	390	0.040	7.731	Melotte105	292.9039	-02.4119	0.08	1715	0.83	8.55
Berkeley80	32.1827	-01.2062	0.00	1413	1.31	8.60	FSR1586	292.8325	-01.1983	*	2420	1.60	8.65
NGC6716	15.3951	-09.5927	-0.31	789	0.220	7.961	BH118	291.6032	+02.3641	*	1493	0.27	8.60
Archinal1	38.2557	+01.7782	*	1413	1.52	7.10	NGC3680	286.7641	+16.9184	-0.19	938	0.066	9.077
PooleJ1855+10.8	42.9586	+04.1049	*	4389	0.895	8.975	Ruprecht164	293.2375	+00.6126	*	780	0.11	9.00
Alessi62	52.7710	+08.7373	*	546	0.167	8.950	Loden372	292.5555	+02.7568	*	1200	0.40	8.55
PooleJ1856+10.8	43.0354	+03.9143	*	4496	1.666	9.000	Loden402	293.4675	+00.7032	*	2450	0.18	8.20
ESO52401	9.0617	-12.9827	*	2800	0.30	9.50	NGC3766	294.1169	-00.0304	*	2218	0.20	7.32
NGC6724	42.8416	+03.5773	*	1105	1.00	8.95	IC2944	294.8489	-01.6541	*	1794	0.320	6.818
NGC6728	25.7485	-05.6858	*	1000	0.15	8.93	ASCC67	294.5630	+00.7105	*	1500	0.30	7.67
NGC6735	33.5557	-02.2587	*	1466	0.87	8.70	Lynga15	295.0526	-00.6724	*	932	0.323	8.430
NGC6743	60.3669	+10.9226	*	1111	0.19	9.15	Ruprecht95	294.8398	+00.6686	*	1251	0.042	9.060
NGC6738	44.3979	+03.1021	*	700	0.05	9.16	Stock14	295.2173	-00.6623	*	2399	0.21	7.30
ASCC100	64.3770	+12.6631	*	350	0.02	8.01	FSR1595	295.6135	-00.6832	*	4430	0.833	9.500
Berkeley81	33.6923	-02.4837	-0.15	3000	1.00	9.00	SAI116	295.7636	-00.2259	*	2200	0.98	8.60
NGC6737	17.4338	-10.6702	*	2120	0.76	8.70	NGC3909	292.4570	+13.3628	*	1100	0.13	9.30
FSR0100	34.3303	-02.7843	*	2687	2.186	8.000	NGC3960	294.3672	+06.1826	0.02	1850	0.29	9.1
ESO39701	3.5920	-16.9842	*	1089	0.19	9.10	Ruprecht96	295.8901	-00.0960	*	860	0.25	9.00
Alessi56	43.2107	+00.9673	*	3900	2.00	*	Loden481	295.8281	+00.7629	*	1520	0.24	8.19
Juchert3	40.3607	-00.6997	*	828	1.67	8.95	Teutsch77	296.2961	-00.4897	*	1450	0.45	9.48
Czernik39	38.6474	-01.6383	*	1340	2.90	7.00	Ruprecht97	296.7920	-00.4901	-0.03	1357	0.229	8.343
NGC6755	38.5977	-01.6874	*	1421	0.826	7.719	Ruprecht98	297.3060	-02.2895	*	494	0.162	8.508

NGC6756	39.0884	-01.6813	0.10	1507	1.18	7.79	Feigelson1	300.2173	-15.6085	*	114	0.02	6.602
FSR0107	36.3092	-03.2109	*	2883	0.625	9.025	NGC4052	297.2911	-00.9066	*	1209	0.156	8.495
Riddle15	48.3565	+02.4554	*	6288	1.42	9.10	Juchert13	297.5308	-01.7512	*	2944	0.73	9.05
Berkeley82	46.8534	+01.6242	*	860	1.021	7.493	AlessiTeutsch8	297.0691	+01.3932	*	650	0.10	8.65
FSR0124	45.9483	+01.0518	*	2110	1.176	6.950	Ruprecht99	297.6325	-01.4770	*	660	0.05	9.29
FSR0123	45.9483	+01.0518	*	3026	1.228	8.750	Ruprecht100	297.7210	-00.2067	*	2856	0.687	8.870
ASCC101	67.9938	+11.5876	*	350	0.00	8.52	ASCC69	299.0466	-07.2372	*	1000	0.17	7.91
NGC6773	39.9758	-03.0033	*	2160	1.16	8.00	NGC4103	297.5736	+01.1551	*	1632	0.294	7.393
Berkeley43	45.6520	-00.1814	0.00	1030	2.3	8.5	FSR1605	298.3795	-02.7080	*	1828	0.437	8.900
Ruprecht147	21.0122	-12.8163	*	295	0.25	9.40	Loden565	297.6692	+01.7804	*	650	0.20	8.05
NGC6775	35.0071	-06.0630	*	1185	0.48	8.95	Ruprecht101	298.2052	-00.4959	*	2318	0.52	9.05
Berkeley44	53.2120	+03.3544	*	1800	1.40	9.11	Alessi52	298.5456	-00.1621	*	3325	1.08	9.15
Berkeley45	50.0402	+01.1457	*	2350	1.4	8.6	Ruprecht102	298.6057	-00.1636	*	2702	0.750	8.890
ESO33723	0.4981	-21.3205	*	1995	0.312	9.200	Saurer4	298.7891	-01.0227	*	6190	1.24	9.18
NGC6791	69.9585	+10.9039	0.42	5035	0.160	9.92	ASCC70	299.0116	-01.8359	*	2700	0.35	6.92
Alessi57	50.1968	+00.7656	*	3900	2.11	*	NGC4230	298.0246	+07.4448	*	1445	0.23	9.23
FSR0126	48.5468	-00.1818	*	1305	1.312	8.480	Loden615	299.6585	-02.1074	*	1000	0.05	8.63
Juchert1	47.7274	-01.0006	*	2623	1.27	9.10	ASCC71	299.9908	-04.8239	*	1300	0.25	7.88
NGC6793	56.1668	+03.3171	*	1100	0.17	8.64	ESO13013	299.3803	+03.0176	*	4319	0.63	9.10
FSR0134	51.6765	+00.5773	*	2669	1.145	6.400	NGC4337	299.3130	+04.5560	*	489	0.146	8.454
ASCC102	63.2685	+06.6429	*	1500	0.00	8.79	NGC4349	299.7193	+00.8297	-0.12	2176	0.384	8.315
Kronberger13	49.1666	-00.9787	*	1380	1.13	8.60	Ruprecht104	299.6591	+02.2696	*	1250	0.050	9.100
FSR0118	44.0653	-03.8539	*	3308	1.249	8.760	BH131	300.1162	-00.6800	*	6250	0.62	9.10
FSR0129	49.3933	-01.3204	*	1303	2.873	6.700	Loden 624	299.9662	+01.0106	*	731	0.250	8.470
NGC6800	59.2368	+03.9449	*	1000	0.40	8.59	BH132	300.2635	-01.3216	*	5229	0.645	9.400
ESO52508	15.1190	-18.0219	*	1640	0.36	9.00	Harvard5	299.9844	+01.9545	0.07	1184	0.160	8.032
Berkeley47	52.5611	-00.0578	*	1070	1.5	8.7	NGC4439	300.0681	+02.6389	*	1785	0.348	7.909
King26	50.4121	-01.3417	*	2600	1.27	8.64	Hogg23	300.1488	+01.8527	*	1250	0.07	8.31
Teutsch40	57.8572	+02.6448	*	2980	0.96	8.90	Ruprecht165	299.7573	+06.2975	*	1609	0.521	7.245
FSR0133	51.1217	-01.1656	*	2478	1.645	7.000	Hogg14	300.0612	+02.9277	*	969	0.229	8.099
Teutsch42	53.7701	+00.1639	*	1600	2.55	7.5	FSR1617	300.6740	-03.8089	*	1278	0.521	8.000
NGC6802	55.3256	+00.9167	0.03	1778	0.84	8.98	ESO13109	300.0259	+04.8720	*	2276	0.85	7.35
FSR0131	51.1035	-01.4272	*	2814	2.186	8.415	NGC4463	300.6434	-02.0138	*	1050	0.434	7.505
Kronberger79	54.1791	-00.6120	*	2700	1.30	8.35	ASCC72	300.6944	+01.8416	*	1100	0.16	8.13
FSR0142	55.7842	-00.1881	*	4394	1.509	7.000	Ruprecht105	300.8850	+01.2367	*	950	0.05	9.01
Stock1	60.2469	+02.2573	*	318	0.16	8.48	ASCC73	301.4963	-04.4596	*	650	0.05	8.19
Teutsch35	69.4579	+07.2609	*	700	0.00	8.37	Collinder261	301.6836	-05.5276	-0.03	2190	0.27	9.95
NGC6811	79.2105	+12.0149	-0.02	1215	0.160	8.799	Trumpler20	301.4698	+02.2046	0.17	3300	0.46	9.11
Teutsch27	54.7350	-01.2427	*	2480	0.96	8.78	NGC4609	301.8948	-00.1416	0.05	1320	0.37	7.7
ASCC104	54.9015	-01.5566	*	800	0.33	7.71	Hogg15	302.0474	-00.2417	*	3200	1.3	6.6
Saure5	61.0312	+01.7345	*	8329	1.15	9.05	BH140	303.0936	-04.2954	*	3106	1.85	8.20
Kronberger31	61.6435	+01.9082	*	11900	0.84	*	NGC4755	303.2057	+02.5089	*	1976	0.388	7.216
NGC6819	73.9838	+08.4915	0.09	2511	0.12	9.38	NGC4815	303.6249	-02.0970	*	3079	0.808	8.369
ASCC105	62.7898	+02.1519	*	500	0.09	8.00	NGC4852	304.0352	+03.2398	*	1100	0.45	8.30
SkiffJ1942+38.6	72.7196	+07.5567	*	1801	1.312	8.400	Danks1	305.3390	+00.0796	*	3600	2.68	6.48

Alessi44	40.2079	-10.6408	*	500	0.35	8.42	Danks2	305.3934	+00.0880	*	3600	2.40	6.70
Czernik40	57.4762	-01.1001	*	3090	0.99	8.90	NGC5045	305.4739	-00.6305	*	1500	0.37	7.11
Teutsch43	65.0566	+03.1878	*	2100	1.38	9.30	BH144	305.3459	-03.1559	-0.51	12000	0.70	8.90
NGC6823	59.4018	-00.1439	*	3176	0.854	6.5	NGC5043	306.0129	+02.6505	*	970	0.15	8.79
FSR0160	62.7100	+01.3456	*	1721	0.687	8.950	Collinder268	305.5413	-04.3473	*	1963	0.308	8.759
Turner9	64.7609	+02.5052	*	852	*	8.20	Stock16	306.1486	+00.0631	*	1810	0.52	6.90
Roslund1	54.5997	-03.4000	*	670	0.05	8.47	Ruprecht107	305.9266	-02.2431	*	1442	0.458	7.478
Kronberger4	63.8439	+01.8844	*	7900	0.56	*	FSR1645	306.4199	+00.7242	*	3602	0.364	9.400
Turner8	63.5764	+01.7088	*	2160	1.16	9.70	Teutsch79	306.4945	-01.0246	*	1250	2.56	8.78
Roslund2	60.1935	-00.2826	*	2000	0.90	6.89	ESO32415	309.3413	+20.5830	*	2818	0.000	9.700
Teutsch7	60.7537	-00.5640	0.17	7070	1.57	8.48	Loden807	306.7593	+00.1412	-0.19	925	0.20	8.30
FSR0154	59.9998	-01.0754	*	2769	1.208	8.505	FSR1651	307.3096	+03.6103	*	5409	0.729	9.000
FSR0158	62.3163	+00.2758	*	2289	0.937	8.690	NGC5138	307.5356	+03.5178	0.120	1986	0.262	7.986
Turner1	63.4533	+00.8295	*	1675	0.476	7.460	Basel18	307.1342	+00.2625	0.043	2226	0.515	7.590
ASCC107	58.8653	-01.8905	*	700	0.20	8.41	ESO06507	305.9925	-08.6218	*	3835	0.48	9.10
NGC6827	58.2631	-02.3372	*	4550	0.78	8.98	Hogg16	307.4772	+01.3372	*	1585	0.411	7.047
Dias7	58.2793	-02.4538	*	2540	0.42	9.30	Collinder271	307.1027	-01.6401	*	1169	0.287	8.322
NGC6828	46.8310	-09.2745	*	600	0.20	8.56	FSR1657	307.9298	+03.7544	*	1469	0.822	8.455
NGC6830	60.1353	-01.7997	0.24	1639	0.501	7.572	Collinder272	307.5947	+01.2016	0.060	2095	0.604	7.020
Czernik41	62.0054	-00.7008	*	1360	1.28	8.7	NGC5168	307.7315	+01.5616	*	1777	0.431	8.001
Saurer6	68.0099	+02.8508	*	9330	0.77	9.29	Ruprecht108	308.2518	+03.9836	*	901	0.136	8.424
FSR0182	69.1824	+03.3636	*	3354	1.312	8.200	Trumpler21	307.5743	-00.2965	*	1263	0.197	7.696
Dias8	50.3355	-07.8214	*	2220	0.30	9.35	Loden915	308.3701	+03.1706	*	500	0.15	8.44
NGC6834	65.6981	+01.1890	*	2067	0.708	7.883	Loden848	307.5020	-02.0241	*	626	0.050	8.300
Harvard20	56.2792	-04.6539	*	1540	0.247	7.476	C1331622	307.8593	+00.0447	*	819	0.23	*
NGC6837	50.5189	-08.0088	*	943	0.25	9.00	Collinder275	308.2808	+02.2222	*	1952	0.458	8.600
ASCC108	74.4549	+05.9859	*	1100	0.05	8.64	ASCC74	308.6624	+03.5671	*	550	0.05	8.50
ASCC109	70.3390	+03.5114	*	450	0.00	8.31	Pismis18	308.2260	+00.3101	*	2240	0.50	9.08
NGC6839	56.1143	-05.1516	*	1410	0.29	9.15	Loden894	308.1277	-01.9494	*	709	0.150	8.445
NGC6840	51.1615	-08.2530	*	1970	0.25	9.11	BH151	308.6700	+00.5964	*	3800	*	*
NGC6843	51.2929	-08.4035	*	1945	0.30	9.11	SAI118	308.7199	-00.8746	*	1140	0.17	9.75
NGC6846	68.6905	+01.9196	*	4450	1.05	8.7	Dias4	308.7889	-00.7342	*	2150	0.60	9.10
NGC6847	66.8821	+00.7835	*	1894	0.58	8.70	NGC5269	308.9554	-00.6682	*	1410	0.52	8.20
SAI132	68.1188	+01.4357	*	2860	0.94	8.75	Loden1010	309.5034	+01.9058	*	700	0.20	8.69
FSR0165	64.1032	-01.2950	*	1993	1.249	8.200	Loden991	309.2162	+00.1949	*	1481	0.458	8.625
Kronberger52	67.6284	+00.8565	*	705	2.45	8.11	NGC5281	309.1610	-00.7137	0.00	1108	0.225	7.146
Loiano1	69.0526	+01.7037	*	2700	0.44	8.40	ASCC75	309.3323	-00.2428	*	3000	0.30	6.65
Roslund3	58.8105	-04.6817	*	1467	0.348	8.036	Collinder277	308.6720	-03.8317	*	2204	0.416	8.300
NGC6856	89.6829	+13.5275	*	1704	0.16	9.26	NGC5288	309.0102	-02.4915	*	2158	0.65	8.25
Berkeley49	70.9790	+02.5754	*	2090	1.18	8.90	Loden995	309.2995	-02.7538	-0.131	2400	0.30	8.34
Patchick89	83.6449	+10.1291	*	1845	0.33	9.35	ASCC76	308.9766	-04.2447	*	600	0.27	7.45
FSR0163	63.2241	-02.4196	*	2628	1.249	6.910	Loden1095	310.6823	+02.1846	*	2088	0.625	6.550
Kronberger68	67.6524	+00.2486	*	710	2.19	8.30	NGC5316	310.2292	+00.1145	-0.02	1215	0.267	8.202
Toepler1	70.3053	+01.7214	*	2793	0.65	7.85	ESO44574	318.2539	+29.0257	*	2048	0.85	8.20
Berkeley83	66.0567	-00.9219	0.00	5728	1.30	8.95	Loden1101	310.7477	+00.0696	*	2430	0.791	6.960

FSR0162	63.2106	-02.7513	*	3412	1.041	8.550	Loden1171	311.7586	+03.3189	*	500	0.20	8.45
Kronberger69	68.5295	+00.4454	*	6140	1.80	7.85	Loden1152	311.5188	+02.3823	*	789	0.200	8.590
FSR0188	70.6455	+01.7414	*	2588	1.041	6.500	Lynga1	310.8494	-00.3373	0.040	1900	0.45	8.00
Teutsch8	71.8602	+02.4259	*	1600	0.58	7.0	NGC5359	308.6803	-08.2906	*	2500	0.10	8.30
FSR0198	72.1764	+02.6070	*	1700	0.96	7.00	NGC5381	311.6017	+02.1145	*	1170	0.06	9.20
Dolidze36	77.6594	+05.9822	*	900	0.22	8.83	Loden1202	312.3021	+02.8381	*	1330	0.250	8.670
NGC6858	51.3598	-10.3043	*	1310	0.13	9.40	Ruprecht110	309.9496	-05.6086	-0.359	1300	0.00	8.74
ASCC110	70.4504	+01.3946	*	800	0.15	8.75	NGC5460	315.7462	+12.6281	-0.06	700	0.092	8.2
Dolidze37	73.9412	+03.5760	*	1400	2.311	7.585	Loden1225	312.5802	+01.6933	*	1500	0.20	8.67
Kronberger54	69.1073	+00.5187	*	1715	0.94	8.40	ASCC77	312.0012	-00.8639	*	2200	0.30	6.99
NGC6866	79.5603	+06.8395	*	1470	0.10	8.8	Loden1289	313.7688	+03.2553	*	1278	0.833	8.090
Berkeley84	70.9256	+01.2721	*	2750	0.73	8.65	ESO02106	307.2214	-16.3409	*	1745	0.21	9.10
Alessi10	31.6535	-20.9885	*	513	0.22	8.35	Loden1282	313.5892	+01.9796	*	1753	0.874	8.600
FSR0167	65.1613	-02.4049	*	4023	2.415	8.900	Ruprecht167	313.9212	+02.0418	*	2000	0.10	8.57
ESO46138	11.2444	-28.1892	*	2402	0.458	8.975	Loden1256	313.1115	-00.2882	*	1400	0.30	8.41
Roslund4	66.9839	-01.2702	*	2000	0.91	6.6	ESO17506	314.6419	+03.9601	*	550	0.20	8.60
FSR0190	70.7287	+00.9626	*	2645	0.895	7.200	Lynga2	313.8652	-00.4518	*	900	0.22	7.95
Dolidze38	77.2080	+04.9996	*	1200	0.15	8.95	NGC5593	316.3148	+05.6068	*	850	0.00	8.77
DolDzim10	76.6517	+04.6287	*	1670	0.55	9.00	NGC5606	314.8408	+00.9938	*	1805	0.474	7.075
NGC6871	72.6447	+02.0542	*	1574	0.443	6.958	NGC5617	314.6703	-00.0998	0.31	2000	0.48	7.90
Kronberger28	72.5355	+01.8522	*	550	2.26	8.60	Loden1378	315.6737	+02.1861	*	2088	0.937	8.000
Basel6	74.9059	+03.2979	*	1548	0.580	7.977	Pismis19	314.7122	-00.3015	*	1500	1.48	8.90
FSR0192	71.1006	+00.8544	*	2331	1.437	9.345	Trumpler22	314.6474	-00.5809	*	1516	0.521	7.950
Biurakan1	72.7318	+01.7445	*	1600	0.33	7.25	Turner7	316.4448	+03.3087	*	1800	1.39	9.90
NGC6873	60.4507	-06.1542	*	1250	0.35	8.94	Loden1339	314.5948	-01.4779	*	3412	1.041	7.950
FSR0170	65.9292	-02.6891	*	3810	1.228	9.180	Hogg17	314.8975	-00.8998	*	1310	0.594	8.030
Biurakan2	72.7508	+01.3457	*	1106	0.360	7.011	FSR1688	316.9989	+03.8950	*	912	0.625	8.060
Dolidze1	73.6570	+01.8280	*	1445	0.625	7.600	NGC5662	316.9370	+03.3939	-0.03	666	0.311	7.968
FSR0189	70.6581	-00.1514	*	3924	0.874	6.100	Ruprecht111	315.6595	+00.2983	*	1121	0.37	9.15
Roslund5	71.4003	+00.2731	*	389	0.098	7.832	ESO44729	329.0595	+28.0267	*	1634	0.104	9.500
IC1311	77.6883	+04.2787	-0.30	6026	0.28	9.20	Juchert10	315.9974	-00.3010	*	3200	2.06	8.90
Berkeley50	72.4510	+00.8587	*	2653	0.75	8.35	NGC5715	317.5284	+02.0840	*	1500	0.42	8.90
ASCC111	74.6214	+02.0780	*	1600	0.30	7.05	Loden1375	315.1665	-03.2581	*	1346	0.479	8.840
NGC6883	73.2774	+01.1754	*	1380	0.30	*	ESO13412	317.0114	+00.5733	*	2088	0.937	8.900
Ruprecht172	73.1193	+01.0030	*	1100	0.20	8.91	Loden1409	315.9513	-01.7479	*	619	0.125	8.450
NGC6882	65.7808	-03.8484	-0.02	1380	0.300	7.710	BH 164	314.2881	-06.0748	*	440	0.13	8.20
Berkeley51	72.1470	+00.2913	*	1300	1.6	9.05	NGC5749	319.5289	+04.5445	*	1031	0.376	7.728
AH03J2011+26.7	65.7373	-03.9211	*	2567	0.90	7.35	Hogg18	320.7652	+06.4262	*	1535	0.503	7.759
NGC6885	65.5295	-04.0741	*	597	0.08	9.16	Teutsch80	317.4151	-01.0876	*	2500	1.61	8.1
Kronberger72	75.1097	+02.1375	*	1055	0.55	8.70	NGC5764	320.9680	+05.8730	*	2800	1.00	8.30
FSR0178	67.8813	-02.8305	*	3700	1.34	9.18	ESO00806	306.5592	-21.4417	*	1380	0.312	9.300
Kronberger73	74.3168	+01.2648	*	1695	0.97	8.60	Ruprecht112	316.8288	-03.1113	*	810	0.150	8.345
Berkeley52	67.8986	-03.1772	*	4900	1.50	9.30	NGC5800	322.4423	+05.9465	*	1170	0.06	9.20
FSR0219	78.1425	+03.5187	*	1238	1.666	7.200	NGC5822	321.5731	+03.5928	0.05	933	0.103	8.95
Patchick75	72.1107	-00.5103	*	1442	0.73	8.95	ASCC78	314.7702	-08.6468	-0.062	2400	0.00	8.48

Dolidze3	74.6008	+01.0451	*	1032	0.562	8.290	NGC5823	321.1247	+02.4602	*	1192	0.090	8.900
IC4996	75.3733	+01.3160	*	2398	0.71	6.87	FSR1697	320.8113	+01.5693	*	1562	0.874	8.560
AlessiTeutsch11	87.4576	+09.2777	*	550	0.08	8.15	Loden2115	321.9461	+03.2624	*	1876	0.416	8.875
FSR0195	72.0705	-00.9920	*	2303	0.895	6.560	Pismis20	320.5164	-01.2002	*	3272	1.28	6.864
vdBergh130	76.9083	+02.0721	*	3990	1.228	8.800	Lynga3	321.0425	-00.7023	*	1369	1.301	8.550
Feibelman1	75.8267	+01.3204	*	117	0.000	6.600	ASCC79	320.0418	-02.8647	*	800	0.16	6.86
Dolidze40	75.7603	+01.2396	*	2702	1.062	8.400	FSR1698	320.8207	-02.0538	*	1608	0.833	8.500
Kronberger74	74.7916	+00.5783	*	1760	0.87	9.00	ASCC80	320.9226	-02.7318	*	1500	0.17	7.93
Collinder419	78.0985	+02.7807	*	740	0.34	6.85	NGC5925	324.3610	+01.7202	*	1170	0.06	9.20
FSR0232	79.6861	+03.8262	*	901	1.172	8.200	Alessi8	326.4864	+04.2608	*	575	0.09	8.15
Teutsch124	70.2420	-02.6105	*	840	1.82	9.84	ESO09906	318.7587	-06.9769	*	1274	0.229	8.900
Berkeley85	75.7257	+00.9813	*	1760	0.77	9.0	Lynga4	324.6540	+00.6565	*	1100	0.70	9.11
FSR 0223	78.4257	+02.6484	*	1427	0.708	9.005	Harvard9	325.6156	+01.8991	*	4854	1.770	6.950
Dolidze42	76.1218	+01.0650	*	972	0.571	7.542	Loden2313	327.1995	+02.2704	*	1410	0.05	8.74
FSR0222	78.3947	+02.5318	*	2466	1.832	6.550	Lynga5	324.7897	-01.1937	*	1771	1.270	7.450
Berkeley86	76.6667	+01.2726	*	1112	0.898	7.116	Loden2326	327.5065	+01.9857	*	900	0.41	8.3
Kronberger58	78.7753	+02.6287	*	1515	1.35	8.20	Johansson1	327.8995	+01.8001	*	570	0.17	8.30
Berkeley88	84.5515	+06.3956	*	6319	0.88	9.20	ASCC81	328.8356	+02.8480	*	700	0.15	8.38
Berkeley87	75.7149	+00.3044	*	633	1.369	7.152	ASCC82	320.5548	-07.7406	*	800	0.00	8.67
NGC6904	66.1352	-06.3112	*	1355	0.39	9.00	FSR1715	329.5309	+03.2700	*	3584	1.020	9.300
Collinder421	79.4298	+02.5420	*	1050	0.64	8.4	FSR1714	329.3841	+02.8820	*	1423	0.729	8.485
NGC6910	78.6825	+02.0136	*	1139	0.971	7.127	NGC5998	343.8165	+19.8093	*	1170	0.06	9.20
Kronberger57	75.3472	-00.4998	*	1295	1.06	8.20	Collinder292	325.0769	-02.6427	*	1500	0.10	8.73
NGC6913	76.9051	+00.5937	*	1148	0.744	7.111	ASCC83	328.1023	+01.1060	*	600	0.15	8.40
Dolidze8	80.0420	+02.6936	*	1078	1.666	8.855	NGC5999	326.0082	-01.9249	0.00	2050	0.45	8.60
Berkeley89	83.1595	+04.8220	*	2040	1.05	9.05	ASCC84	323.5653	-05.4451	*	900	0.15	7.68
FSR0224	78.4661	+01.3623	*	1150	2.165	8.865	ESO27501	333.0240	+05.8531	*	1475	0.40	7.85
Dolidze9	79.8981	+02.2937	*	1063	0.833	8.000	NGC6005	325.7800	-02.9859	*	2690	0.45	9.08
FSR0210	76.2069	-00.5445	*	1434	0.833	8.715	Ruprecht113	324.5944	-04.6437	*	810	0.15	8.23
FSR0213	77.6282	+00.3810	*	884	0.833	6.500	ESO38905	339.9142	+12.9498	*	4785	0.312	9.550
Teutsch30	75.3542	-01.4248	*	1600	1.24	6.9	Trumpler23	328.8509	-00.4765	*	1900	0.58	8.95
Teutsch28	74.6447	-02.0837	*	3100	1.44	9.95	Moffat1	328.5465	-00.9811	*	2100	1.00	7.00
Roslund6	78.1207	+00.2970	*	450	0.06	8.47	NGC6025	324.5508	-05.8840	0.19	756	0.159	7.889
Dolidze44	80.1559	+01.5617	*	1499	0.687	8.155	Lynga6	330.3692	+00.3232	*	1600	1.250	7.430
Wit4	82.3557	+02.9572	*	1490	0.729	8.315	Ruprecht114	327.2340	-03.4932	*	1948	0.937	9.135
FSR0236	80.2773	+00.9477	*	1656	2.811	8.100	NGC6031	329.2813	-01.4981	0.02	1823	0.371	8.069
Bica1	80.1378	+00.7435	*	1800	2.12	6.60	Ruprecht115	330.9588	-00.8493	0.04	2160	0.65	8.78
Bica2	80.2226	+00.7867	*	1800	1.82	6.60	NGC6067	329.7454	-02.2048	0.138	1417	0.380	8.076
FSR0260	83.7511	+03.3021	*	852	1.395	8.275	Pismis22	331.4683	-00.5970	*	1000	2.00	7.60
Kronberger59	79.3532	+00.0042	*	780	0.84	8.00	Ruprecht176	331.9091	-00.2802	*	1499	0.687	8.455
NGC6940	69.8602	-07.1470	0.03	770	0.214	8.858	Harvard10	329.8356	-03.2844	*	1312	0.36	8.34
NGC6938	64.9104	-10.7426	*	1250	0.13	9.11	NGC6087	327.7258	-05.4256	-0.01	891	0.175	7.976
FSR0238	80.4770	+00.6174	*	1186	1.332	8.580	Lynga9	334.5432	+01.0698	*	1700	1.18	8.85
Berkeley90	84.8774	+03.7845	*	2070	1.19	8.05	Ruprecht116	332.3864	-01.6828	*	900	0.10	8.95
FSR0255	82.9275	+02.2005	*	1238	1.666	8.300	Ruprecht117	332.4910	-01.6227	*	974	0.146	8.940

FSR0245	81.4984	+00.6179	*	1790	1.353	6.100	Pismis23	334.6680	+00.4295	*	2600	2.00	8.48
FSR0249	81.7483	+00.7349	*	857	1.041	8.700	ESO2206	333.0887	-01.1865	*	1220	0.833	8.475
FSR0251	82.3301	+00.7571	*	1233	1.666	7.900	Ruprecht118	332.5471	-01.7983	*	1343	0.41	8.11
NGC6950	61.1073	-15.1976	*	1070	0.06	9.26	NGC6124	340.7407	+06.0162	*	512	0.750	8.147
Dolidze47	77.4677	-03.4178	*	2293	0.770	8.400	NGC6134	334.9170	-00.1976	0.15	1260	0.35	8.95
FSR0225	78.5752	-02.8002	*	1546	0.791	8.150	Ruprecht119	333.2759	-01.8794	*	956	0.570	6.853
Turner11	76.8704	-04.2616	*	1905	1.13	8.60	Hogg19	335.0882	-00.3016	*	3266	0.60	9.10
Ruprecht174	78.0183	-03.3953	*	2110	0.32	8.90	Patchick94	336.4589	+00.8539	*	4126	1.312	9.070
Alessi12	67.4655	-11.5078	*	537	0.08	8.10	NGC6152	332.9179	-03.1668	*	1030	0.30	*
FSR0258	83.5844	+00.6784	*	1318	0.625	8.930	NGC6169	339.3778	+02.5151	*	1011	0.239	7.510
Rupecht175	77.0275	-04.6042	*	2686	0.479	8.760	NGC6167	335.2223	-01.4272	*	1108	0.779	7.887
FSR0237	80.2922	-02.0972	*	3091	1.707	6.770	Ruprecht120	336.3854	-00.4932	*	2000	0.70	8.18
FSR0274	87.1551	+02.5899	*	3948	0.833	8.910	Collinder307	334.3989	-02.3473	*	1551	0.83	8.40
SAI137	82.0964	-01.7144	*	1060	0.89	8.70	NGC6178	338.4047	+01.2107	*	1014	0.219	7.248
DolDzim11	78.1192	-05.2408	*	2545	0.42	9.30	Lynga11	338.1816	+00.4540	*	2300	0.70	8.80
FSR0261	83.9882	-01.0903	*	1758	0.854	8.255	NGC6192	340.6473	+02.1223	0.12	1547	0.637	8.130
NGC6991	87.4084	+01.5349	*	700	0.00	9.11	ESO27704	340.3703	+01.8692	*	1790	1.166	8.720
FSR0284	89.0667	+02.5985	*	1734	0.791	8.470	NGC6193	336.7106	-01.5736	*	1155	0.475	6.775
NGC6997	85.4785	-00.4670	*	1513	0.625	8.425	Ruprecht121	338.7140	+00.1059	*	929	0.187	8.100
NGC6996	85.4658	-00.4778	*	760	0.52	8.54	NGC6200	337.9959	-01.0689	*	2054	0.581	6.928
FSR0275	87.1950	+00.9749	*	2533	0.874	9.240	Hogg21	337.9563	-01.4367	*	2799	0.822	6.800
FSR0273	86.2037	-01.0528	*	2153	1.041	7.800	Lynga12	335.6974	-03.4608	*	1000	0.22	8.75
Teutsch22	85.6787	-01.5192	*	2700	0.86	8.55	NGC6204	338.5597	-01.0395	-1.053	1200	0.46	7.90
NGC7011	88.1254	+00.6072	*	1236	1.08	8.60	BH197	339.4788	-00.3346	*	1633	1.041	7.500
FSR0282	88.7513	+01.0517	*	1887	0.687	8.775	Hogg22	338.5606	-01.1432	*	1216	0.647	6.780
Berkeley54	83.1289	-04.1427	*	2300	0.77	9.60	Westerlund1	339.5554	-00.3989	*	5500	4.35	6.70
Collinder428	86.2115	-01.4098	*	1000	0.10	*	ESO51803	355.0608	+12.4282	*	1266	0.369	9.170
Teutsch156	88.2434	+00.2660	*	3930	0.94	8.95	ASCC85	339.8986	-00.2109	*	1200	0.20	7.42
SAI141	88.0686	+00.1097	*	4940	0.94	8.60	Lynga13	341.6051	+00.9093	*	1327	1.197	7.750
FSR0270	86.1536	-01.6966	*	2220	0.833	8.745	NGC6216	340.6724	+00.0062	*	4300	0.45	7.54
NGC7024	84.2645	-03.8770	*	1760	1.10	8.70	NGC6208	333.7545	-05.7648	-0.03	939	0.210	9.069
Basel12	88.2946	-01.2460	*	1466	0.57	8.50	BH200	341.1516	+00.2826	*	1475	1.00	7.35
Dolidze45	81.9602	-07.1711	*	2928	0.521	8.935	NGC6231	343.4643	+01.1842	*	1243	0.439	6.843
NGC7039	87.8792	-01.7049	*	951	0.131	7.820	ESO33208	344.3971	+01.8071	*	1200	0.20	8.17
NGC7037	79.1329	-09.7607	*	1760	1.10	8.70	Lynga14	340.9189	-01.0885	*	881	1.428	6.712
ASCC113	82.8849	-06.6534	*	450	0.00	8.14	FSR1732	337.7319	-03.6596	*	7086	0.770	9.200
IC1369	89.5755	-00.4189	0.09	2083	0.572	8.640	BH202	344.2586	+01.5939	*	1607	0.87	8.05
Basel13	88.7501	-01.2442	*	1236	0.34	8.80	NGC6242	345.4683	+02.4657	*	1131	0.377	7.608
NGC7044	85.8904	-04.1499	-0.16	3326	0.66	9.10	BH205	344.6041	+01.6167	*	2160	0.30	7.12
Berkeley56	85.9908	-05.2212	*	12100	0.40	9.60	NGC6249	341.5372	-01.1856	*	981	0.443	7.386
Basel14	88.5889	-03.5906	*	964	0.65	8.30	NGC6250	340.6832	-01.9196	*	865	0.350	7.415
NGC7062	89.9587	-02.7481	0.08	1480	0.452	8.465	NGC6253	335.4598	-06.2506	0.43	1510	0.20	9.70
NGC7063	83.0584	-09.8825	*	689	0.091	7.977	BH208	347.8285	+03.3212	*	3910	0.98	9.55
NGC7084	69.9629	-24.3014	*	765	0.10	9.18	NGC6259	341.9974	-01.5166	0.020	1031	0.498	8.336
NGC7193	70.0936	-34.2790	*	1080	0.03	9.65	AlessiTeutsch12330.6617	-10.3339	*	700	0.12	7.07	

Alessi13	238.5486	-56.9815	0.17	100	*	*	NGC6268	346.0486	+01.2998	*	1080	0.40	7.60
Melotte25	180.0638	-22.3429	0.13	45	0.010	8.896	BH211	344.9656	+00.4578	*	1579	0.645	8.710
NGC1647	180.3366	-16.7717	*	540	0.370	8.158	ASCC87	355.1501	+08.0106	*	900	0.26	8.52
NGC1662	187.6950	-21.1142	-0.09	437	0.304	8.625	Harvard13	339.6058	-04.0332	*	1467	0.833	7.940
Platais4	180.7904	-10.8585	*	276	*	8.00	Teutsch84	344.4392	-00.4543	*	2200	1.12	9.0
NGC1817	186.1561	-13.0960	-0.16	1972	0.334	8.612	ESO04313	317.7172	-19.3386	*	1490	0.104	9.315
ESO48654	228.5805	-30.6814	*	2856	0.687	8.650	NGC6281	347.7306	+01.9725	0.00	479	0.148	8.497
Dolidze19	195.1044	-15.3171	*	1710	1.041	8.590	ESO33220	347.4916	+01.7331	*	1695	0.791	8.050
DolDzim2	192.2398	-13.5598	*	1220	0.65	8.90	BH214	348.9040	+02.6083	*	1723	1.301	7.700
Mamajek3	197.2713	-15.5560	*	92	0.06	7.30	ASC88	349.8889	+03.0752	*	1900	0.50	7.17
Dolidze21	196.5852	-15.1032	*	3599	1.25	8.25	Teutsch85	347.3421	-00.3903	*	1260	1.50	8.78
Berkeley20	203.4833	-17.3728	-0.30	8400	0.12	9.78	NGC6318	347.9024	-00.6876	*	2100	1.20	8.20
DolDzim3	180.6765	-03.5379	*	2530	0.77	8.60	BH217	346.7817	-01.5133	*	1693	1.15	7.65
FSR0842	181.5062	-03.8916	*	1881	1.020	7.300	Bochum13	351.2014	+01.3598	*	1077	0.854	6.823
Collinder69	195.0478	-12.0035	*	400	0.12	6.70	NGC6322	345.2791	-03.0564	*	996	0.590	7.058
NGC1981	208.0071	-18.9392	*	380	0.07	6.70	BH221	353.9967	+03.0091	*	750	0.20	8.01
NGC1976	209.0101	-19.3859	*	414	0.05	7.11	BH222	349.1268	-00.4413	*	6000	1.85	7.78
NGC1977	208.4721	-19.1272	*	500	0.05	7.08	HavlenMoffat1	348.7034	-00.7665	*	3300	1.84	6.60
NGC1980	209.5230	-19.5931	*	550	0.05	6.67	BH223	351.3111	+00.6228	*	414	0.050	7.140
DolDzim4	181.3931	-03.4099	*	1220	1.10	8.00	NGC6334	351.1458	+00.4751	*	1025	1.06	8.70
NGC1996	181.7791	-03.0505	*	1400	0.15	8.45	Ruprecht123	349.9632	-00.9748	*	714	0.20	*
NGC2026	187.2342	-05.0591	*	1418	0.60	8.74	Alessi24	328.8934	-14.7542	-0.133	500	0.10	7.03
Koposov77	185.9645	-04.1056	*	5400	0.56	9.08	Trumpler25	349.1562	-01.7738	*	1490	0.729	8.170
NGC2061	238.9295	-27.9304	*	542	0.03	9.32	NGC6357	353.1648	+00.8948	*	1205	1.35	8.60
FSR0850	183.5280	-02.2495	*	2149	0.479	9.000	Pismis24	353.1609	+00.8922	*	1995	1.72	7.00
Collinder74	199.0311	-10.3896	*	2510	0.38	9.11	IC4651	340.0881	-07.9067	0.15	888	0.116	9.057
FSR0846	182.5537	-00.7412	*	1063	0.521	8.635	AH03J172534.4	353.0907	+00.6408	*	290	1.58	6.85
Czernik23	180.5387	+00.8116	*	2500	0.38	8.45	Trumpler26	357.5247	+02.8445	*	1000	0.35	8.85
Berkeley72	186.2726	-02.5497	*	3500	0.43	8.65	Ruprecht125	348.5006	-03.4028	*	1500	0.10	8.77
FSR0849	183.3519	-00.5687	*	1836	0.562	7.300	Antalova2	355.1718	+00.9870	*	3500	3.90	9.10
Berkeley21	186.8398	-02.5086	-0.83	5000	0.76	9.34	Antalova3	355.5022	+00.9857	*	2588	1.353	8.415
DutraBica83	182.0577	+00.4249	*	1586	1.31	7.15	Harvard16	351.7364	-01.6453	*	1604	0.229	8.050
FSR0852	184.1321	-00.4097	*	2200	0.32	9.00	FSR1758	349.1953	-03.3406	*	1948	1.405	8.675
NGC2112	205.8724	-12.6146	0.16	940	0.60	9.25	Collinder333	354.0999	-00.1733	*	855	0.11	8.90
Teutsch51	182.7434	+00.4811	*	3300	1.06	8.9	BH231	355.9106	+00.9072	*	1699	1.863	6.670
NGC2132	268.6904	-30.2003	*	974	0.06	9.22	Antalova4	355.1166	+00.2086	*	1802	0.999	6.000
Czernik24	188.0524	-02.2160	*	4600	0.26	9.40	IRAS173012917	358.3695	+02.1382	*	2025	0.521	8.300
Basel11b	187.4423	-01.1139	*	1800	0.48	8.4	NGC6383	355.6897	+00.0412	*	985	0.298	6.962
Berkeley22	199.8766	-08.0785	-0.32	6000	0.59	9.52	FSR1767	352.6009	-02.1661	*	1457	2.124	6.700
NGC2129	186.6013	+00.1443	*	2200	0.80	7.00	Trumpler27	355.0635	-00.7422	-0.193	1211	1.194	7.063
NGC2141	198.0444	-05.8105	-0.18	4033	0.250	9.231	ESO33402	347.7599	-05.5093	*	3210	0.521	9.200
NGC2143	202.2354	-08.0372	*	800	0.00	9.15	Trumpler28	356.0099	-00.3043	0.326	1343	0.733	7.290
FSR0894	189.5866	-00.7570	*	3465	0.937	6.610	NGC6396	353.9299	-01.7737	*	1192	0.926	7.506
FSR0883	188.1049	+00.1449	*	2075	0.666	8.370	ESO13913	333.9820	-13.8049	*	1500	0.20	8.78
FSR0932	194.6002	-03.4937	*	1090	0.39	8.90	Ruprecht127	352.8804	-02.4976	*	1466	0.990	7.351

IC2157	186.3820	+01.2461	*	2040	0.548	7.800	Collinder338	351.7338	-03.3376	*	880	0.25	8.65
ESO42506	235.3963	-22.2878	*	1100	0.00	9.40	ESO39312	353.5174	-02.2914	*	8208	1.332	10.100
IC2156	186.2945	+01.2997	*	2100	0.67	8.40	ASCC90	354.2877	-01.9156	*	500	0.30	8.81
FSR0942	195.5864	-03.5934	-0.29	2000	0.59	9.00	NGC6404	355.6585	-01.1767	0.11	2400	0.92	8.70
FSR0900	190.7787	-00.7739	*	1243	0.396	7.145	NGC6400	352.5815	-03.2417	*	950	0.11	8.78
NGC2158	186.6341	+01.7808	-0.28	5071	0.360	9.023	NGC6405	356.5802	-00.7766	0.06	487	0.144	7.974
FSR0903	191.0064	-00.6125	*	1444	1.249	8.725	Alessi9	344.2880	-08.9684	-0.580	211	*	*
NGC2169	195.6076	-02.9345	*	1052	0.199	7.067	Ruprecht128	354.7778	-02.8633	*	2276	0.354	8.890
Kharchenko1	186.5814	+02.1706	*	2520	0.30	8.0	NGC6416	356.9316	-01.5491	-0.613	741	0.251	8.087
NGC2168	186.5910	+02.1913	-0.16	912	0.20	8.25	Dutra Bica58	359.9942	+00.1556	*	1182	1.978	6.000
Koposov53	184.9025	+03.1301	*	5300	0.41	7.95	BH245	359.4211	-00.5178	*	1000	2.25	7.17
FSR0858	185.4404	+02.8899	*	2977	0.562	8.735	Collinder347	359.7381	-00.3334	*	1514	1.16	7.08
Dias2	203.9665	-07.2455	*	2835	0.61	8.90	NGC6425	357.9402	-01.6054	0.09	778	0.399	7.347
DC8	180.5740	+05.5929	*	2100	0.72	9.00	Ruprecht130	359.2214	-00.9600	0.03	2100	1.20	7.70
DutraBica84	186.1317	+02.5914	*	6309	0.87	6.95	ASCC91	353.1316	-04.9368	-0.035	800	0.10	8.65
Platais5	228.8006	-18.7582	*	272	*	7.78	DutraBica51	358.4404	-01.9189	*	1346	3.123	6.000
NGC2175	190.0426	+00.4824	*	1627	0.598	6.953	NGC6444	355.3927	-03.7589	*	560	0.12	9.00
NGC2180	203.8491	-07.0090	*	910	0.0	8.85	NGC6451	359.4775	-01.6005	-0.34	2080	0.672	8.134
Koposov63	186.5164	+02.5269	*	3000	0.26	9.15	Basel5	359.7670	-01.8729	*	766	0.32	8.87
FSR0952	196.6599	-02.9993	*	1734	0.481	8.750	NGC6475	355.8606	-04.5005	0.14	301	0.103	8.475
FSR0924	193.3279	-01.1184	*	2981	0.895	8.650	ESO22902	341.3528	-13.5320	*	2362	0.104	9.700
FSR0923	193.2296	-01.0188	*	1500	1.35	8.70	ESO13954	335.2822	-17.1419	*	1706	0.33	9.10
Pismis27	190.0783	+00.7969	*	1000	0.68	7.70	NGC6529	355.7071	-07.2997	*	*	*	*
FSR0939	195.5397	-02.1917	*	2421	0.250	9.400	NGC6588	330.8435	-20.8782	*	960	0.10	9.20
NGC2184	211.4270	-10.5815	*	640	0.08	8.37	Mamajek4	343.7770	-16.9973	*	385	0.05	8.8
ESO23130	345.8711	-24.7192	*	3276	0.073	9.500	ESO28124	351.2847	-16.6191	*	3830	0.573	8.945
ESO23607	345.8270	-43.9007	*	2933	0.042	9.750							

In table M means metallicity and D= distance of star cluster from the Sun.