

Groups of galaxies within 80 Mpc. II. The catalogue of groups and group members

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Abstract. — This paper gives a catalogue of the groups and associations obtained by means of a revised hierarchical algorithm applied to a sample of 4143 galaxies with diameters D_{25} larger than 100 arcsec and redshifts smaller than 6000 km s^{-1} (the method and the groups properties are detailed in Paper I). In the present paper, the 264 groups of galaxies obtained in this way (and which contain at least 3 sample galaxies) are listed, with the loose associations surrounding them and the individual members of each aggregate as well; moreover, the location of every entity among 13 regions corresponding roughly to superclusters, is specified. Finally, 1729 galaxies belong to the groups, and 466 to the associations, i.e. the total fraction of galaxies within the various aggregates amounts to 53%.

Key words: clusters: of galaxies — galaxies: general.

1. The local universe.

The aim of this study is to investigate the distribution of galaxies within our Local Universe, defined as a sphere centered on us, and having a radius of 80 Mpc ($H_0 = 75 \text{ km s}^{-1} \text{ Mpc}^{-1}$). By analogy with Tully & Fisher' work (1987), this volume has been divided into 13 regions (see Sect. 2), corresponding roughly to superclusters. Eight superclusters are identified: our Local Supercluster (Reg. 1), the Southern Supercluster (Reg. 5), the Antlia-Hydra Supercluster (Reg. 3), the Centaurus Supercluster (Reg. 9), the Indus Supercluster (Reg. 6), the Lynx-Ursa Major Supercluster (Reg. 10), the Perseus-Pisces Supercluster (Reg. 13), and the Nearer Sculptor Supercluster (Reg. 12).

Adding Virgo I to the Abell's cluster catalogue (1958) and its extension into the Southern Hemisphere (Abell *et al.* 1989), 23 clusters of galaxies are known to lie within our Local Universe (redshifts smaller than 0.02). Ten have been recognized as clusters by our algorithm, five as groups, and eight have not been found, all with redshifts larger than 0.015.

2. The list of groups.

Table 1 lists the 246 groups and the 18 clusters of at least three members, obtained by application of the revised hierarchical algorithm described in Paper I (Gourgoulhon *et al.* 1991), to a catalogue of 5554 galaxies, extracted from the Catalogue of Principal Galaxies (Paturel *et al.* 1989a,b, hereafter PGC). This list is limited down to a diameter $D_{25} = 100''$, and is complete to this limit. 4143 galaxies in this catalogue have known radial velocities smaller than 6000 km s^{-1} , and constitute the actual sample to which our algorithm has been applied.

Our distinction between group and cluster deserves additional comments: as explained in Paper I, our algorithm cannot recognize aggregates of galaxies having large velocity dispersions ($\geq 300 \text{ km s}^{-1}$). This is so because large velocity differences are interpreted in our treatment as implying distance differences. Thus such aggregates are automatically split by the method into several entities along the line-of-sight, which are probably not dynamically independent units. In the case where these groups occupy nearly the same position on the sky plane, and lie at the coordinates of a known cluster, they have been gathered into a unique entity, to which the name of the known cluster has been given. These clusters appear in Table 1 with the suffix "cr" in column (5) (preferred to "cl" because of a possible confusion with "clouds"). Some

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other well-known clusters have not been split by the algorithm, and thus appear in Table 1 without “cr”.

In columns (1) and (2) of Table 1 is given the luminosity-weighted mean position of the group in right ascension and declination. Column (3) gives the luminosity-weighted mean recession velocity of the group, expressed in the galactocentric frame of rest (see de Vaucouleurs *et al.* 1991 for details). Column (5) gives the common name of the group, using the convention of naming the group from its brightest member (not its largest). In some cases, common names were adopted from literature, even though they did not refer to the brightest member. Literal names, or names from the Abell (1958) catalogue of clusters of galaxies, were preferred to the name of the brightest galaxy when available. An unpublished list of groups and group members (Corwin 1967) has been of great help for the identification of our groups. Columns (6) and (7) give the corresponding name of the group in de Vaucouleurs’ list (1975) and in the Nearby Galaxies Catalog (Tully 1987). It must be emphasized that only 5 de Vaucouleurs’ groups among 54 are not recognized in the present study: two are questionable according to de Vaucouleurs (1975) (his groups G12 and G14), two span a too large range in recession velocity to be real (G24 and G28), and the last one (G48) had only two of its members included in our sample.

Column (4) must be explained in greater details. Following Tully & Fisher (1987), we examined how our groups fall into their seven regions of space, defined as boxes in cartesian supergalactic coordinates (SGX, SGY and SGZ: see their Atlas for details). Every group with a recession velocity smaller than 3000 km s^{-1} fell into one of the seven regions, except a few ones which were on the borders of their regions and some discrepancies. All these cases were examined, and a region number attributed, in general agreement with the Nearby Galaxies Catalog. For groups with velocities larger than 3000 km s^{-1} , maps were drawn in the three projections (SGX-SGY, SGX-SGZ, SGY-SGZ), and identification of groups in the same region of space was performed. This led to define six new regions, numbered from 8 to 13. This is only a preliminary division of space, waiting for a more complete redshift coverage in the range from 3000 to 6000 km s^{-1} . Note that these new regions do not fill the whole space, but look more like superclusters.

Definition of these new regions led us to slight changes in the borders of the Tully-Fisher’s regions. In Table 2, those limits which have been changed are underlined. Changes affect mainly region 2, from which a part has been removed (the Centaurus cloud) and transferred to the Centaurus cluster (new Reg. 9), and region 6, which has been enlarged to encompass the whole Indus supercluster.

3. The list of group members.

Table 2 lists the possible and secure members of the groups. In Paper I, following Tully (1987), we have defined associations as unbound collections of groups and individual galaxies, having an average density five times smaller than in the groups. So for every one of the 13 regions defined above, we list all the galaxies belonging to associations, either as member of a group, or as a direct member of the association. This procedure gives an idea about possible members of the groups, had we defined our groups by a smaller limit in average density. The numbering of the associations within a region is arbitrary, and we have used it to give some indication about the closeness of the different associations from a central one (generally giving #1 to the main concentration in the region, #2 to a nearby smaller concentration, and so-on).

The list of individual members of our clusters must be considered with some cautions: indeed, the way we have built these clusters is not totally impersonal, as explained in section 2, and some outlying galaxies may have been included; in the case of the Virgo cluster, the attraction of new members is so strong that possibly unrelated galaxies have been accreted onto the actual cluster: this seems to be the case of some galaxies around NGC 4517 and NGC 4636, which belong in fact to the Southern Extension of the Virgo Cluster ($\delta < 5^\circ$).

The 264 groups and clusters contain 1729 galaxies, and the associations around them add 466 galaxies as possible members, raising the maximum number of galaxies in these groups up to 53% of the 4143 galaxies. Other associations exist, but they do not contain groups of at least three galaxies. A complete listing can be provided to interested readers. However, we aim at publishing a final list of members later (Garcia *et al.*, in preparation), including every galaxy in the PGC with a redshift smaller than 6000 km s^{-1} , whatever its diameter or magnitude. For this purpose, spectroscopic observations are in progress at optical telescopes (O.H.P. and E.S.O.) and with the Nançay radiotelescope.

Acknowledgements.

Harold Corwin is warmly thanked for providing us with his unpublished list of groups of galaxies, complementing and listing all the members of the well-known de Vaucouleurs’ groups. Any people who contributed to the Extragalactic Data Base from which our sample was extracted, through the PGC, is acknowledged, as well as the many observers who filled the list of redshifts across the years.

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TABLE 1.

α_{1950}	δ_{1950}	V_{GSR} km s ⁻¹	Region	Name	dev	Tully	α_{1950}	δ_{1950}	V_{GSR} km s ⁻¹	Region	Name	dev	Tully
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
000225.2	+155121	1146	6	NGC 7814		65-6	034249.9	-041933	3958	11	NGC 1417		
001029.1	-234123	503	1	NGC 45			034431.3	+674804	171	1	IC 342	G 2	14-11
002642.1	+023513	4350	6	NGC 128			034900.3	-462657	916	5	NGC 1433	G21	53-7
002828.5	-331222	1556	6	NGC 134	G39	61-18	040448.6	-172612	1762	5	NGC 1519		
003328.7	-311730	177	1	Sculptor	G 1	14-13	041045.1	-322920	1124	5	NGC 1532		53-13
003552.9	+010259	4407	6	NGC 173			041630.4	-555456	1000	5	Dorado cr	G16	53-1
004417.2	+320538	4887	13	NGC 266			042919.2	+002542	3609	11	NGC 1589		
010726.5	+322503	5292	13	NGC 383			044346.9	-055357	4607	11	NGC 1667		
011030.8	-313412	5751	12	NGC 439			044807.7	-593056	1161	5	NGC 1672	G22	53-3
011454.7	+034324	5512	12	NGC 467			045550.0	-110445	4436	11	NGC 1721		
011545.2	-584757	5051	12	NGC 484			045728.2	-105421	3965	11	NGC 1725		
011900.9	+035818	2372	5	NGC 488		52-12	050158.3	-090043	3384	11	NGC 1779		
012154.9	+332405	4869	13	NGC 507 cr	G40		050500.7	-374808	939	5	NGC 1792		53-10
012157.5	+091410	2515	5	NGC 524			050710.7	-321324	717	5	NGC 1800		
012329.7	-013829	5467	12	NGC 541			050906.2	-153650	1833	3	NGC 1832		34-3
013054.4	-071725	1907	5	NGC 584	G33	52-7	052702.3	-640642	1012	5	NGC 1947		53-4
013528.1	+150302	792	1	NGC 628		17-4	053843.1	+691431	4110	10	NGC 1961		
014646.3	+053223	1592	5	NGC 676			054825.8	-181248	2886	3	IC 438		
014717.9	+213200	2880	5	NGC 691			060925.3	+705254	4138	10	UGC 3426		
014721.1	-101805	1877	5	NGC 681	G33	52-8	061321.6	-212350	2559	3	NGC 2207	G36	34-8
014832.4	+273212	458	1	NGC 672			061850.5	-271324	1452	3	NGC 2217		34-1
015027.6	-134930	1717	5	NGC 720	G33	52-9	064228.4	+603350	2069	2	NGC 2273		24-1
015101.0	+060335	4945	13	Abell 262 cr			064349.8	-270456	1732	3	NGC 2280		
020448.0	+3060210	3461	12	NGC 825			070631.8	+852402	2509	4	NGC 2276		
020847.5	+371345	4689	13	NGC 841			070756.2	+714833	3177	10	UGC 3697		
021304.5	+055219	1612	5	NGC 864			072311.5	-621505	3002	3	NGC 2417		
021552.1	+141510	3941	12	NGC 877			072904.3	+854330	2125	4	NGC 2300		
022009.9	-211619	1495	5	NGC 908		52-6	073334.5	-691452	1193	5	NGC 2442		53-17
022440.9	+333243	671	1	NGC 925			073739.1	+664916	231	1	NGC 2403	G 2	14-10
022512.6	-012352	1393	5	NGC 936	G 7	17-1	074228.1	-495310	823	5	NGC 2427		
022916.7	-110242	4560	12	NGC 945	G15	52-3	080803.5	+500124	565	1	NGC 2541	G 6	
023151.0	+323344	4748	13	NGC 973			081559.0	-260533	1456	3	NGC 2559		31-21
023157.8	+394258	713	1	NGC 1023			081833.9	+223238	4229	3	Cancer II cr		
023755.3	-082050	1438	5	NGC 1052	G 7	17-1	084028.2	-202431	1570	3	ESO 563-16		
023942.5	+321031	5284	13	NGC 1060	G15	52-1	084213.4	+741027	2335	1	NGC 2633		
024023.6	+000505	1126	5	NGC 1068			084405.0	+732324	3689	10	IC 520		
024252.8	-295653	1229	5	NGC 1097	G15	52-2	084408.0	-334217	1918	3	NGC 2663		12-10
025805.8	+350527	5024	13	NGC 1167		51-3	085343.1	+780332	1516	1	NGC 2655	G41	13-6
030204.4	+423659	2813	1	NGC 1186			090425.0	+601940	1400	1	NGC 2768		53-22
030226.2	-154825	2593	5	NGC 1209			090605.0	-683558	1357	5	NGC 2836		
030857.5	-260528	1626	5	NGC 1255		51-5	090723.4	+070938	1222	3	NGC 2775		31-14
033026.4	-353738	1446	5	Fornax I cr	G53	51-1	0910747.6	-144853	1794	3	NGC 2781		
033136.7	-213755	1533	5	Eridanus	G31	51-4, 7, 8	091100.1	+401951	2543	2	NGC 2782		54-3
033319.9	-050942	4055	11	NGC 1376			091200.3	-231845	547	5	NGC 2835		
033426.2	-185106	1976	5	NGC 1359			091749.0	-230541	2378	3	NGC 2815		31-16
033854.7	+710503	1342	1	UGC 2800		12-19	091847.4	-114807	1726	3	NGC 2855		13-5
							091946.3	+634744	1728	1	NGC 2805		

TABLE 1. (continued)

α_{1950}	δ_{1950}	V_{GSR} km s ⁻¹	Region	Name	dev	Tully	α_{1950}	δ_{1950}	V_{GSR} km s ⁻¹	Region	Name	dev	Tully
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
092122.1	+344347	1649	2	NGC 2859			115708.5	-184317	1502	2	NGC 4038		22- 1
093805.1	+051745	1847	3	NGC 2962			115753.0	+470357	903	1	UMa I S	G32	12- 1, 2, 3
094020.7	-204927	2027	3	NGC 2986			115823.1	-242133	1601	2	ESO 505-3		
094219.8	+324418	1373	2	NGC 2964			120001.8	+315239	757	1	NGC 4062		
094305.8	-305322	851	5	NGC 2997	G42	31-12	120017.5	+632856	1434	1	NGC 4125		12- 5
094310.9	+011247	1731	3	NGC 2967	G 8	54- 1	120400.1	-291606	1692	2	NGC 4105	G44	22- 5
094803.9	+722620	1359	1	NGC 2985		31-19	120443.8	-301804	2002	2	IC 764		
095435.9	-263217	2282	3	NGC 3054		12- 7	120520.2	+691309	2444	4	NGC 4128		
095558.1	-190546	3642	3	NGC 3091		31- 5	120754.6	+185642	2409	1	UGC 7170		
095654.7	-325107	2503	3	NGC 3087			120809.8	+021356	1188	1	NGC 4179		
100245.4	-072849	494	1	NGC 3115		31- 4	120928.3	+291846	3844	8	NGC 4169		
100618.7	+692049	127	1	NGC 3031	G 2	14-10	120947.8	+394328	1043	1	NGC 4151	G17	12- 6
100757.1	-282539	872	5	NGC 3175		54- 2	121534.4	+360303	294	1	CVn I	G 3	14- 7
101112.4	+033855	1127	2	NGC 3166		21-10	121547.9	+661633	2816	4	NGC 4256		
101442.7	+221431	1283	2	NGC 3190	G47	21- 6	121633.7	+061740	2234	1	Virgo W cr	G46	11-24
101512.0	-264907	2242	3	NGC 3203			121653.2	+292403	966	1	NGC 4274	G13	14- 1
102053.8	+200723	1143	2	NGC 3227	G47	21- 6	121959.6	+454007	548	1	CVn II	G10	14- 4
102439.9	-394229	2570	3	NGC 3250			122024.7	-335008	2506	9	NGC 4304		23- 5
102545.7	+285932	1308	2	NGC 3245	G54	21- 8	122158.7	+140855	2267	1	Virgo M		
102550.6	-434647	2410	3	NGC 3256			122412.3	+753117	1802	4	NGC 4291		42-13
102758.4	-341035	2849	3	Antlia cr		31- 2	122558.2	-390247	2811	9	IC 3370		
102846.1	-443644	2741	3	NGC 3263			122608.1	+033731	1592	1	Virgo I cr	G26	11- 4
103458.5	-264625	3328	3	Abell 1060 cr			122934.7	+114835	895	1	NGC 4303	G18, 19, 25	11- 1
103703.4	-235445	886	5	ESO 501-23			123115.6	+640234	2988	4	NGC 4521		
104014.6	-363118	2805	3	NGC 3347			123315.5	+311447	683	1	NGC 4631	G10	14- 6
104124.6	+135621	1198	2	NGC 3338		21- 5	123331.0	-034718	949	1	NGC 4546		
104746.5	+332856	1577	2	NGC 3396	G43	21- 9	123642.1	+260923	1243	1	NGC 4565	G13	14- 1
104819.2	+173216	1099	2	NGC 3370		21- 3	123717.0	-104750	957	1	NGC 4594	G35	11-14
105909.4	+131628	702	1	Leo I	G 9,11	15- 1, 2	124041.3	+020619	1292	1	NGC 4643		
110727.7	-371110	2750	3	NGC 3557		31-10	124254.5	-005448	1485	1	NGC 4666		
111053.1	-263256	1203	2	NGC 3585			124445.8	-100021	2258	1	NGC 4658		11-27
111457.1	+174821	991	2	NGC 3607	G49	21- 1, 2	124509.4	-404351	3225	9	Centaurus cr		23- 1
111705.3	+581230	2106	1	NGC 3613		12-12	124851.2	-144805	3881	9	NGC 4756		
111750.9	+182945	1384	2	NGC 3626	G49	21- 1, 2	124913.3	+725013	1771	4	NGC 4750		
111807.1	+583507	1773	1	NGC 3642		12-12	124953.3	-423026	1837	2	NGC 4751		
111824.5	+033257	1273	2	NGC 3640		21-11	125003.7	-262528	3085	9	ESO 507-25		
112017.3	-094518	1665	2	NGC 3672	G23	22- 7	125016.0	-070454	1191	1	NGC 4697	G20	11-10, 11, 12
112030.1	+432704	783	1	NGC 3675		15- 9	125216.4	+005513	1084	1	NGC 4753		
112133.4	+385039	2074	1	NGC 3665		13- 8	125819.6	-135436	2507	1	NGC 4902		11-30
113722.9	+364054	1510	1	NGC 3813		13- 7	130059.4	-150440	1182	1	NGC 4856		
113813.6	+250235	3558	8	NGC 3798			130158.0	-300018	3125	9	NGC 4936		
114020.6	+562000	2482	1	NGC 3780			130434.2	-280439	2087	1	NGC 4965		
114306.9	-102138	1564	2	NGC 3892	G23	22- 2	130455.9	-491956	1261	2	NGC 4976		
114405.5	+540316	1148	1	UMa I N	G34	12- 1, 2, 3	130635.9	-070458	1628	1	NGC 4995		
114732.5	-283004	1497	2	NGC 3923	G44	22- 4	130704.8	+441341	466	1	NGC 5194	G 5	11-17
115023.9	+372934	934	1	NGC 3941	G17		131004.3	-192147	2694	1	NGC 5018		14- 5
115546.6	+281615	3493	8	NGC 4008			131024.9	+370708	962	4	NGC 5033		43- 1

TABLE 1. (continued)

α_{1950}	δ_{1950}	V_{GSR}	Region	Name	dev	Tully	α_{1950}	δ_{1950}	V_{GSR}	Region	Name	dev	Tully
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
131211.1	-161252	2569	1	NGC 5044		11-31	200006.9	-555345	4440	6	ESO 185-54 cr		
131300.0	-464543	2809	9	NGC 5064			200607.4	-482834	2838	6	Telescopium cr	G52	61-1
131610.2	-431405	3309	9	NGC 5090			200927.3	-454341	5231	6	IC 4956		
131650.7	-263519	1883	1	NGC 5101		11-22	201337.0	-710306	3828	6	Pavo I	G38	
131822.5	-210617	1644	1	NGC 5084		11-21	202157.8	-251811	3206	6	NGC 6907		
132217.0	-372460	1328	1	NGC 5121		16-4	210552.7	-474735	4932	6	NGC 7014		
132223.5	-411737	390	1	NGC 5128		14-15	213138.9	-433709	2551	6	NGC 7079		
132411.2	-292443	4150	9	NGC 5135			214957.8	-484212	1880	6	NGC 7144		
132958.5	-332426	3622	9	IC 4296			215338.5	-345902	2625	6	NGC 7154		
133457.9	+085929	1116	4	NGC 5248			215706.5	-433828	2375	6	NGC 7166		
134324.8	-481344	2749	9	NGC 5333		41-8	215924.7	-324112	2732	6	NGC 7172		
134501.2	-294541	4499	9	IC 4329 cr		23-3	220442.1	-643560	2826	6	NGC 7179		
134812.8	+603128	2072	4	NGC 5322			221111.3	-461204	1996	6	IC 5181		
135016.1	+410809	2482	4	NGC 5371 cr		42-8	223441.6	+340633	1033	6	NGC 7331		
135229.4	+051401	1185	4	NGC 5364		42-1	224224.6	-394855	2291	6	NGC 7368		
135424.2	-434400	2360	9	NGC 5365		41-7	224417.3	-225256	3369	6	NGC 7377		
135458.9	-290322	2497	9	IC 4351			224429.9	-651228	3343	6	IC 5250		
135507.1	+374857	3584	7	NGC 5395		11-35	225421.5	-365526	1966	6	NGC 7421		
140102.1	+545219	363	1	NGC 5457			225518.3	-361234	1668	6	IC 1459		
140135.9	-332122	4070	9	NGC 5419		14-9	225643.9	-410414	1008	1	NGC 7424		
140243.2	+552300	2047	4	NGC 5485		42-6	225816.2	+154502	2277	6	NGC 7448		
140423.8	-052013	2608	4	NGC 5427			230754.4	-430303	1603	6	NGC 7582		
140904.5	-471207	1330	1	ESO 221-26			230939.8	-284918	1599	6	NGC 7507		
141601.0	+362603	3203	7	NGC 5557			231541.9	+081841	3987	6	Pegasus cr		
141810.7	+035038	1511	4	NGC 5566		41-3	232115.3	+403801	589	6	NGC 7640		
142719.9	+572142	2085	4	NGC 5678		42-7	233252.6	-371127	690	1	NGC 7713		
142834.4	+035247	1732	4	NGC 5668		41-3	233301.2	+151142	4213	6	NGC 7711		
143135.2	+495053	2316	4	NGC 5676		42-3	233340.9	+014919	2908	6	NGC 7714		
143913.3	+010054	1750	4	NGC 5746		41-2	233726.9	-064146	2136	6	NGC 7721		
145105.0	+035050	1592	4	NGC 5775		41-2							
145536.8	-190346	3270	4	NGC 5791									
145625.7	-162940	2928	4	NGC 5796									
150214.0	+013543	1851	4	NGC 5846		41-1							
150949.1	+561746	877	4	NGC 5866		44-1							
151149.6	+552128	3441	7	NGC 5908									
151652.2	-233451	2328	4	NGC 5898		41-11							
152430.9	+413110	2774	7	NGC 5930		72-1							
153312.3	+160730	2001	7	NGC 5962		71-1							
160855.9	+003740	2066	7	NGC 6070		71-4							
171521.1	+720015	1366	4	NGC 6340									
175311.6	+181611	3091	7	NGC 6500									
180958.4	+392305	3026	7	NGC 6585									
181922.2	-713855	3519	6	IC 4682									
184806.2	-632446	4575	6	IC 4765									
185901.6	-641850	746	1	NGC 6744		19-1							
190249.3	-550229	3110	6	NGC 6753 cr		61-4							
191416.1	-601710	4063	6	NGC 6769 cr									

TABLE 2.

REGION 1 : The principal plane of the Local Supercluster : 63 groups, 2 clusters
 $-40 \leq \text{SGX} \leq +40$ $-10 \leq \text{SGY} \leq +40$ $-5 \leq \text{SGZ} \leq +3$

ASSOCIATION 1 :

Note that this association is the same as Region 2, Association 1 and Region 4,
 Association 9.

Virgo I cluster :

NGC 4037	NGC 4064	NGC 4124	NGC 4178
NGC 4192	NGC 4204	NGC 4206	NGC 4212
NGC 4216	NGC 4222	NGC 4237	NGC 4239
NGC 4262	NGC 4267	NGC 4293	NGC 4294
NGC 4298	NGC 4299	NGC 4302	NGC 4305
NGC 4307	NGC 4309	NGC 4312	NGC 4313
NGC 4316	NGC 4321	NGC 4330	NGC 4336
NGC 4339	NGC 4340	NGC 4341	NGC 4343
NGC 4350	NGC 4352	NGC 4356	NGC 4365
NGC 4371	NGC 4374	NGC 4377	NGC 4379
NGC 4380	NGC 4382	NGC 4383	NGC 4387
NGC 4394	NGC 4396	NGC 4402	NGC 4406
NGC 4411A	NGC 4411B	NGC 4413	NGC 4416
NGC 4417	NGC 4419	NGC 4421	NGC 4423
NGC 4424	NGC 4425	NGC 4429	NGC 4430
NGC 4431	NGC 4435	NGC 4438	NGC 4440
NGC 4442	NGC 4445	NGC 4450	NGC 4452
NGC 4455	NGC 4457	NGC 4459	NGC 4461
NGC 4469	NGC 4472	NGC 4474	NGC 4476
NGC 4477	NGC 4478	NGC 4482	NGC 4486
NGC 4488	NGC 4489	NGC 4492	NGC 4497
NGC 4498	NGC 4503	NGC 4516	NGC 4517
NGC 4519	NGC 4522	NGC 4523	NGC 4526
NGC 4531	NGC 4532	NGC 4535	NGC 4539
NGC 4540	NGC 4544	NGC 4548	NGC 4550
NGC 4551	NGC 4552	NGC 4564	NGC 4567
NGC 4568	NGC 4569	NGC 4570	NGC 4571
NGC 4578	NGC 4579	NGC 4580	NGC 4586
NGC 4592	NGC 4595	NGC 4596	NGC 4606
NGC 4607	NGC 4608	NGC 4612	NGC 4620
NGC 4621	NGC 4623	NGC 4630	NGC 4633
NGC 4634	NGC 4635	NGC 4636	NGC 4638
NGC 4639	NGC 4647	NGC 4649	NGC 4651
NGC 4654	NGC 4659	NGC 4660	NGC 4665
NGC 4688	NGC 4689	NGC 4694	NGC 4698
NGC 4701	NGC 4710	NGC 4733	NGC 4746
NGC 4754	NGC 4758	NGC 4762	NGC 4808
NGC 4880	IC 755	IC 776	IC 3044
IC 3074	IC 3100	IC 3105	IC 3115
IC 3259	IC 3311	IC 3322	IC 3322A
IC 3371	IC 3392	IC 3476	IC 3576
IC 3583	IC 3718	IC 3742	IC 3773
IC 3881	UGC 7003	UGC 7239	UGC 7307

UGC 7332	UGC 7557	UGC 7596	UGC 8032
UGC 8285			
NGC 4179 group :			
NGC 4116	NGC 4123	NGC 4179	
NGC 4303 group :			
NGC 4303	NGC 4324	NGC 4420	NGC 4496A
NGC 4517A	NGC 4527	NGC 4533	NGC 4536
NGC 4581	NGC 4599	IC 3474	UGC 7387
UGC 7522	UGC 7612	UGC 7780	
NGC 4546 group :			
NGC 4546	NGC 4597	MCG -1-32-23	
NGC 4594 group :			
NGC 4487	NGC 4504	NGC 4594	NGC 4722
NGC 4802	MCG -1-32-28	MCG -2-32-15	MCG -2-33-47
NGC 4843 group :			
NGC 4643	UGC 7824	UGC 7911	
NGC 4666 group :			
NGC 4632	NGC 4666	NGC 4684	MCG -1-33-14
NGC 4697 group :			
NGC 4691	NGC 4697	NGC 4699	NGC 4700
NGC 4731	NGC 4742	NGC 4775	NGC 4781
NGC 4818	NGC 4941	NGC 4948	NGC 4951
NGC 4958	IC 3908	UGCA 295	MCG 0-33-28
MCG -1-33-1	MCG -1-33-3	MCG -1-33-11	MCG -1-33-33
MCG -1-33-60	MCG -1-33-61	MCG -1-33-82	MCG -2-33-15
MCG -2-34-6			
NGC 4753 group :			
NGC 4753	NGC 4771	NGC 4772	NGC 4809
NGC 4845	NGC 4900	NGC 4904	UGC 7982
UGC 8041			
NGC 4856 group :			
NGC 4856	NGC 4984	MCG -2-33-88	MCG -3-33-32
NGC 4274 group :			
NGC 4173	NGC 4245	NGC 4251	NGC 4274
NGC 4310	NGC 4314	IC 3215	
NGC 4856 group :			
NGC 4494	NGC 4525	NGC 4562	NGC 4565
NGC 4725	NGC 4747		
Leo I group :			
NGC 3299	NGC 3351	NGC 3368	NGC 3377
NGC 3377A	NGC 3379	NGC 3384	NGC 3412
NGC 3489	NGC 3593	NGC 3599	NGC 3623
NGC 3627	NGC 3628		
Others :			
NGC 3239	NGC 3365	NGC 3423	NGC 3495
NGC 3521	NGC 4030	NGC 4032	NGC 4129
NGC 4203	NGC 4359	NGC 4713	NGC 5088
NGC 5147	UGC 5974	UGC 7053	UGC 7943
UGC 8385	MCG -1-34-14	MCG -2-33-85	MCG -2-35-10

TABLE 2. (continued)

ASSOCIATION 2 : <u>Virgo M group :</u> NGC 4152 NGC 4254 NGC 4501 IC 3365	NGC 4168 NGC 4351 IC 769 IC 3475	NGC 4189 NGC 4388 IC 3061	NGC 4193 NGC 4473 IC 3099	ASSOCIATION 7 : <u>NGC 5084 group :</u> NGC 5084 ESO 576-50 <u>Others :</u> NGC 5037	NGC 5087 NGC 5054	NGC 5134 ESO 576-40	ESO 575-61
<u>Virgo W cluster :</u> NGC 4197 NGC 4235 NGC 4270 NGC 4378 <u>Others :</u> NGC 3976 MCG 0-32-4	NGC 4215 NGC 4241 NGC 4273 NGC 4480	NGC 4224 NGC 4260 NGC 4281 IC 3225	NGC 4233 NGC 4261 NGC 4289	ASSOCIATION 8 : <u>NGC 4995 group :</u> NGC 4942	NGC 4981	NGC 4995	IC 4212
ASSOCIATION 3 : <u>UGC 7170 group :</u> UGC 7133 <u>Other :</u> NGC 4158	NGC 4385 UGC 7170	NGC 4866 UGC 7186	UGC 8085	ASSOCIATION 9 : <u>UMa L N group :</u> NGC 3631 NGC 3733 NGC 3846A NGC 3917 NGC 3992 UGC 6251 UGC 6802	NGC 3657 NGC 3756 NGC 3850 NGC 3953 NGC 3998 UGC 6575 UGC 6840	NGC 3718 NGC 3795 NGC 3898 NGC 3972 NGC 4102 UGC 6616 UGC 6923	NGC 3729 NGC 3804 NGC 3913 NGC 3982 NGC 4142 UGC 6667 UGC 6983
ASSOCIATION 4 : <u>NGC 4658 group :</u> NGC 4658	NGC 4682	MCG -1-33-32	MCG -2-33-20	<u>UMa L S group :</u> NGC 3726 NGC 3906 NGC 3949 NGC 4051 NGC 4111 NGC 4157 NGC 4346 UGC 6818 UGC 7089	NGC 3769 NGC 3922 NGC 4010 NGC 4085 NGC 4117 NGC 4183 IC 749 UGC 6917	NGC 3877 NGC 3924 NGC 4013 NGC 4088 NGC 4138 NGC 4217 IC 750 UGC 6930	NGC 3893 NGC 3938 NGC 4026 NGC 4100 NGC 4143 NGC 4220 UGC 6628 UGC 6956
ASSOCIATION 5 : <u>NGC 4902 group :</u> NGC 4891 <u>NGC 5018 group :</u> NGC 5006 ESO 576-11 <u>NGC 5044 group :</u> NGC 5017 MCG -2-34-10 MCG -3-34-41 <u>Others :</u> NGC 5077 ESO 508-11	NGC 4899 NGC 5018 NGC 5044 MCG -3-33-31 PGC 46402 NGC 5105	NGC 4902 NGC 5022 NGC 5049 MCG -3-34-4 IC 4216	ESO 576-3 NGC 5073 MCG -3-34-14 IC 4237	<u>NGC 3675 group :</u> NGC 3600 <u>NGC 3941 group :</u> NGC 3930 <u>NGC 4151 group :</u> NGC 4145 UGC 7175 <u>Others :</u> NGC 3310 UGC 6446	NGC 3675 NGC 3941 NGC 4151 UGC 7207 NGC 3556 UGC 7534	UGC 6161 UGC 6792 NGC 4369 UGC 5848 UGC 8146	UGC 6955 UGC 7125 UGC 6399
ASSOCIATION 6 : <u>NGC 4965 group :</u> NGC 4965 <u>NGC 5101 group :</u> NGC 5061 IC 4231 <u>Other :</u> ESO 444-37	ESO 443-69 NGC 5078	ESO 443-79 NGC 5085	NGC 5101	ASSOCIATION 10 : <u>UGC 2800 group :</u> UGC 2800 <u>Others :</u> NGC 1485	UGC 2813 IC 356	UGC 2855 IC 396	UGC 2890

TABLE 2. (continued)

ASSOCIATION 11 : NGC 2633 group : NGC 2633 Other : IC 529	NGC 2634	NGC 2634A	UGC 4390	ASSOCIATION 19 : NGC 2805 group : NGC 2805	NGC 2820	NGC 2880	
ASSOCIATION 12 : NGC 2655 group : NGC 2591 UGC 4701 Others : NGC 3057	NGC 2655	NGC 2715	NGC 2748	ASSOCIATION 20 : NGC 3665 group : NGC 3652	NGC 3658	NGC 3665	
ASSOCIATION 13 : NGC 2985 group : NGC 2985 Others : NGC 3252	UGC 4238	UGC 5114	UGC 5203	ASSOCIATION 21 : NGC 3813 group : NGC 3755	NGC 3813	UGC 6603	
ASSOCIATION 14 : NGC 3613 group : NGC 3613	NGC 3027	UGC 5455		ASSOCIATION 22 : NGC 2403 group : NGC 2366 NGC 3031 group : NGC 2976 NGC 4236 UGC 5336 IC 342 group : NGC 1560 UGCA 105	NGC 2403 NGC 3031 IC 2574 UGC 5692 NGC 1569	UGC 4305 NGC 3034 UGC 5139 UGC 8201 IC 342	NGC 3077 UGC 5247 UGCA 92
ASSOCIATION 15 : NGC 3642 group : NGC 3610 NGC 3683 Other : NGC 3440	NGC 3619	NGC 3642	NGC 3674	ASSOCIATION 23 : CVn I group : NGC 4150 NGC 4244 UGC 7599 CVn II group : NGC 4096 NGC 4258 NGC 4485 UGC 7267 UGC 7608 UGC 7719	NGC 4163 NGC 4395 UGC 7698 NGC 4144 NGC 4288 NGC 4490 UGC 7271 UGC 7639 UGC 7774	NGC 4190 UGC 6817 NGC 4242 NGC 4389 NGC 4618 UGC 7301 UGC 7690	NGC 4214 UGC 7559 NGC 4248 NGC 4460 NGC 4625 UGC 7408 UGC 7699
ASSOCIATION 16 : NGC 3780 group : Other : NGC 3683A	NGC 3888	UGC 6774		NGC 4062 group : NGC 4020 NGC 4631 group : NGC 4136 NGC 4414 NGC 4627 NGC 5194 group : NGC 4449 NGC 5194 IC 3687 UGC 7949 UGC 8651	NGC 4062 NGC 4278 NGC 4448 NGC 4631 NGC 4736 NGC 5195 IC 4182 UGC 8313	UGC 6900 NGC 4338 NGC 4534 NGC 4656 NGC 5023 NGC 5229 IC 4263 UGC 8320	UGC 7007 NGC 4393 NGC 4559 UGC 7916 NGC 5055 NGC 5238 UGC 7577 UGC 8331
ASSOCIATION 17 : NGC 4125 group : NGC 3945 NGC 4205 Others : NGC 3682	NGC 4036 NGC 4441 NGC 3879	NGC 4041 IC 758 UGC 6378	NGC 4125 UGC 6534 UGC 6912	NGC 5457 group : NGC 5204 UGC 8508	NGC 5457 UGC 8837	NGC 5474 UGC 9405	NGC 5585
ASSOCIATION 18 : NGC 2768 group : NGC 2654 Other : NGC 2950	NGC 2742	NGC 2768					

TABLE 2. (continued)

<u>Others :</u> NGC 3738 NGC 4707	NGC 3741 UGC 6782	NGC 4068 UGC 8760	NGC 4605 UGC 9240	ASSOCIATION 32 : NGC 672 group : NGC 672 <u>Other :</u> UGC 1281	NGC 784	IC 1727
ASSOCIATION 24 : NGC 45 group : NGC 24	NGC 45	NGC 59		ASSOCIATION 33 : NGC 925 group : NGC 925 NGC 1023 group : NGC 891 NGC 1058 <u>Others :</u> NGC 746	NGC 959	UGC 1865 UGC 1924
ASSOCIATION 25 : <u>Sculptor group :</u> NGC 55 NGC 7793	NGC 247 IC 1574	NGC 253 ESO 471-6	NGC 300 ESO 540-31		NGC 949 UGC 2014	NGC 1003 UGC 2034
ASSOCIATION 26 : NGC 5128 group : NGC 4945 NGC 5236 NGC 5408 ESO 381-20 <u>Others :</u> NGC 5068 MCG -3-33-30	NGC 5102 NGC 5237 ESO 270-17 ESO 383-87 ESO 223-9	NGC 5128 NGC 5253 ESO 324-24 PGC 51659 ESO 274-1	NGC 5206 NGC 5264 ESO 325-11	ASSOCIATION 34 : NGC 1186 group : NGC 1171 <u>Others :</u> NGC 1160	NGC 1186 NGC 1169	IC 284 IC 239
ASSOCIATION 27 : NGC 2541 group : NGC 2500 <u>Others :</u> NGC 2537	NGC 2541 IC 2233	NGC 2552 UGC 4426	ESO 318-13	ASSOCIATION 35 : NGC 6744 group : NGC 6684 IC 4824 <u>Others :</u> NGC 6673	NGC 6684A ESO 141-42 IC 4951	NGC 6744 IC 4710
ASSOCIATION 28 : NGC 3115 group : NGC 3115	MCG -1-26-12	MCG -1-26-21		ASSOCIATION 36 : NGC 7424 group : NGC 7412A	NGC 7424	NGC 7456 NGC 7462
ASSOCIATION 29 : NGC 5121 group : NGC 5121 <u>Other :</u> ESO 382-41	NGC 5121A	ESO 324-23	ESO 382-45	ASSOCIATION 37 : NGC 7713 group : NGC 7713	IC 5332	ESO 348-9
ASSOCIATION 30 : ESO 221-26 group : IC 4402 ESO 271-10	ESO 221-26	ESO 222-1	ESO 222-4			
ASSOCIATION 31 : NGC 628 group : NGC 628 UGC 1200 <u>Others :</u> UGC 891	NGC 660	UGC 1176	UGC 1195			
	UGCA 20					

TABLE 2. (continued)

Region 2 : The Crater and Leo Clouds : 24 groups -2Z ≤ SGX ≤ +30 and +10.5 ≤ SGX ≤ +30			-14.5 ≤ SGZ ≤ -5.5		
			+11.5 ≤ SGY ≤ +32.5		
			+11.5 ≤ SGY ≤ +32.5		
			-16.5 ≤ SGZ ≤ -14.5		
ASSOCIATION 1 :					
Note that this association is the same as Region 1, Association 1 and Region 4, Association 9.					
<u>NGC 3607 group :</u>					
NGC 3501	NGC 3507	NGC 3596	NGC 3607		
NGC 3608	NGC 3681	NGC 3684	NGC 3686		
UGC 6112	UGC 6171	UGC 6324			
<u>NGC 3640 group :</u>					
NGC 3611	NGC 3630	NGC 3640	NGC 3664		
UGC 6345					
<u>Others :</u>					
NGC 3666	NGC 3705	NGC 3810	NGC 3818		
UGC 6594	UGC 6670	MCG -1-30-22	MCG -1-30-27A		
MCG -1-30-43					
ASSOCIATION 2 :					
<u>NGC 3626 group :</u>					
NGC 3592	NGC 3626	NGC 3659			
<u>Others :</u>					
UGC 6151	UGC 6258				
ASSOCIATION 3 :					
<u>NGC 3338 group :</u>					
NGC 3338	NGC 3346	NGC 3389			
<u>NGC 3370 group :</u>					
NGC 3370	NGC 3443	NGC 3447	NGC 3454		
NGC 3455	UGC 5945				
<u>Others :</u>					
NGC 3279	NGC 3485				
ASSOCIATION 4 :					
<u>NGC 3190 group :</u>					
NGC 3162	NGC 3185	NGC 3187	NGC 3190		
NGC 3193					
<u>NGC 3227 group :</u>					
NGC 3226	NGC 3227	UGC 5675			
<u>NGC 3245 group :</u>					
NGC 3245	NGC 3245A	NGC 3254	NGC 3277		
<u>Others :</u>					
NGC 3098	NGC 3287	NGC 3301	NGC 3437		
UGC 5524					
<u>ASSOCIATION 5 :</u>		<u>ASSOCIATION 6 :</u>		<u>ASSOCIATION 7 :</u>	
NGC 2964 group :		NGC 3396 group :		NGC 2782 group :	
NGC 2964		NGC 3381		NGC 2782	
<u>Others :</u>		NGC 3430			
NGC 3026					
UGC 5393					
NGC 3067		NGC 3396		UGC 4871	
NGC 3118		NGC 3395		UGC 4867	
UGC 5478		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
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		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
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		NGC 3396		UGC 4871	
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		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4867	
		NGC 3396		UGC 4871	
		NGC 3395		UGC 4	

TABLE 2. (continued)

Region 3 : The Antlia-Hydra Region : 25 groups, 3 clusters					-30 ≤ SGZ ≤ -17	
and					-17 ≤ SGZ ≤ -15	
-35 ≤ SGX ≤ +20					-15 ≤ SGY ≤ +37	
-35 ≤ SGX ≤ +10					-15 ≤ SGY ≤ +37	
ASSOCIATION 1 :						
Antlia cluster :						
				NGC 3224	NGC 3241	NGC 3258
				NGC 3267	NGC 3269	NGC 3271
				NGC 3275	NGC 3289	NGC 3390
				NGC 3449	IC 2560	IC 2580
				IC 2587	ESO 437-14	ESO 437-42
				ESO 437-65	ESO 375-26	
				NGC 3054 group :	ESO 437-67	
				NGC 3051	NGC 3054	NGC 3084
				NGC 3089	ESO 499-26	
				NGC 3087 group :		
				NGC 3038	NGC 3087	NGC 3108
				NGC 3120	NGC 3157	IC 2539
				ESO 373-26		
				NGC 3203 group :	NGC 3203	ESO 436-1
				NGC 3173		
				NGC 3250 group :	NGC 3250B	NGC 3250E
				NGC 3250		ESO 317-23
				NGC 3256 group :	NGC 3256C	ESO 317-20
				NGC 3256		ESO 263-48
				NGC 3263 group :	NGC 3366	ESO 263-29
				NGC 3263		NGC 3358
				NGC 3347 group :	NGC 3347A	
				NGC 3347	ESO 318-4	
				ESO 317-54		
				NGC 3557 group :	NGC 3557B	ESO 377-10
				NGC 3557		
				ESO 377-21	NGC 3564	
				Others :		
				NGC 3001	NGC 3081	NGC 3318
				NGC 3482	NGC 3533	NGC 3573
				NGC 3706	NGC 3742	NGC 3783
				IC 2531	IC 2537	ESO 213-11
				ESO 263-15	ESO 263-23	ESO 319-11
				ESO 377-31	ESO 378-3	ESO 500-6
ASSOCIATION 2 :						
Abell 1060 cluster :						
				NGC 3285	NGC 3308	NGC 3312
				NGC 3313	NGC 3314B	NGC 3393
				IC 2594	IC 2597	ESO 436-39
				ESO 436-46	ESO 437-4	ESO 437-30
				ESO 437-44	ESO 501-1	ESO 501-51
				ESO 501-56	ESO 501-68	ESO 501-82

TABLE 2. (continued)

Other : NGC 3483				ASSOCIATION 10 : NGC 2775 group : NGC 2775	UGC 4781	UGC 4797	
ASSOCIATION 3 : NGC 2781 group : NGC 2763 NGC 2855 group : NGC 2855	NGC 2781	MCG -2-24-1		ASSOCIATION 11 : NGC 2962 group : NGC 2962 NGC 2967 group : NGC 2967 UGC 5238 Others : NGC 3055	NGC 2966 NGC 3023 UGC 5249 UGC 5376	UGC 5107 UGC 5224	UGC 5228
Other : NGC 2848	MCG -2-24-11	MCG -2-24-12					
ASSOCIATION 4 : NGC 2815 group : NGC 2815	NGC 2865	ESO 564-32		ASSOCIATION 12 : NGC 2417 group : NGC 2369	NGC 2369A	NGC 2417	ESO 123-16
Other : NGC 2821							
ASSOCIATION 5 : NGC 2986 group : NGC 2935	NGC 2983	NGC 2986		ASSOCIATION 13 : NGC 1832 group : NGC 1832	MCG -2-14-4	MCG -3-14-1	
Other : ESO 565-29							
ASSOCIATION 6 : NGC 3091 group : NGC 3052	NGC 3091	ESO 566-19		ASSOCIATION 14 : IC 438 group : IC 438	IC 2143	MCG -3-15-21	
Other : NGC 3124				ASSOCIATION 15 : NGC 2207 group : NGC 2179 Other : NGC 2223	NGC 2207	IC 2163	
ASSOCIATION 7 : Cancer II cluster : NGC 2535 NGC 2563 NGC 2599 UGC 4304 UGC 4416	NGC 2545 NGC 2565 IC 509 UGC 4308	NGC 2554 NGC 2575 UGC 4257 UGC 4329	NGC 2558 NGC 2595 UGC 4299 UGC 4386	ASSOCIATION 16 : NGC 2217 group : NGC 2217 Other : ESO 488-60	ESO 426-1	ESO 489-22	ESO 489-29
ASSOCIATION 8 : NGC 2559 group : NGC 2559 ESO 563-16 group : ESO 563-12 Others : NGC 2613	NGC 2566 ESO 563-14 ESO 494-21	IC 2311 ESO 563-16 ESO 562-19		ASSOCIATION 17 : NGC 2280 group : NGC 2280 Others : NGC 2292 ESO 491-9	NGC 2293 NGC 2325	ESO 490-10 ESO 427-34	ESO 490-45 ESO 428-9
ASSOCIATION 9 : NGC 2663 group : NGC 2663	ESO 371-20	ESO 371-24					

TABLE 2. (continued)

[illegible]

TABLE 2. (continued)

ASSOCIATION 10 : <u>NGC 5427 group</u> :		Region 5 : The Southern Supercluster : 31 groups, 2 clusters		$-27 \leq \text{SGX} \leq +30$ $-30 \leq \text{SGY} \leq +11$ $-18 \leq \text{SGZ} \leq -1.5$		$-40 \leq \text{SGX} \leq -27$ $-30 \leq \text{SGY} \leq 0$ $-18 \leq \text{SGZ} \leq -1.5$	
NGC 5426	NGC 5427	NGC 5468	NGC 5493				
ASSOCIATION 11 : <u>NGC 5791 group</u> :		ASSOCIATION 1 : Fornax Lcluster :					
Others :	ESO 580-52	ESO 581-6	ESO 581-13	NGC 1310	NGC 1316	NGC 1317	NGC 1326
NGC 5793	ESO 580-45			NGC 1326A	NGC 1326B	NGC 1336	NGC 1339
				NGC 1340	NGC 1350	NGC 1351	NGC 1351A
				NGC 1365	NGC 1366	NGC 1374	NGC 1375
				NGC 1379	NGC 1380	NGC 1380A	NGC 1381
				NGC 1386	NGC 1387	NGC 1389	NGC 1399
				NGC 1404	NGC 1406	NGC 1425	NGC 1427
				NGC 1427A	NGC 1437	NGC 1460	NGC 1484
				IC 335	IC 1913	IC 1993	IC 2006
				ESO 302-9	ESO 302-14	ESO 357-7	ESO 357-12
				ESO 358-10	ESO 358-25	ESO 358-50	ESO 358-54
				ESO 358-60	ESO 358-61	ESO 358-63	ESO 359-3
				PGC 12625			
				Eridanus group :			
				NGC 1232	NGC 1297	NGC 1300	NGC 1325
				NGC 1325A	NGC 1332	NGC 1353	NGC 1371
				NGC 1377	NGC 1385	NGC 1395	NGC 1398
				NGC 1401	NGC 1407	NGC 1415	NGC 1422
				NGC 1426	NGC 1438	NGC 1439	NGC 1440
				NGC 1452	NGC 1482	IC 346	IC 1952
				IC 1953	IC 1962	ESO 482-5	ESO 482-35
				ESO 482-46	ESO 547-9	ESO 548-5	ESO 548-21
				ESO 548-47	ESO 549-18		
				<u>NGC 1097 group</u> :			
				NGC 1079	NGC 1097	IC 1826	
				<u>NGC 1255 group</u> :			
				NGC 1201	NGC 1255	NGC 1302	ESO 480-25
				ESO 481-14	ESO 481-18	ESO 481-19	
				<u>NGC 1532 group</u> :			
				NGC 1532	NGC 1537	ESO 420-9	
				Others :			
				NGC 986A	NGC 1145	NGC 1172	NGC 1179
				NGC 1187	NGC 1292	NGC 1412	NGC 1461
				IC 1898	ESO 301-9	ESO 360-7	MCG -3-10-41
				MCG -3-10-42			
				ASSOCIATION 2 : <u>NGC 1519 group</u> :			
				NGC 1519	ESO 550-5	MCG -3-11-12	PGC 14377

TABLE 2. (continued)

ASSOCIATION 3 : NGC 1359 group : NGC 1359 Others : NGC 1309 MCG -2-10-9	NGC 1383 NGC 1354 MCG -3-9-41	NGC 1393 NGC 1357 MCG -3-9-47	ESO 548-32 NGC 1421	ASSOCIATION 10 : NGC 691 group : NGC 678 IC 167 Others : NGC 697	NGC 680 UGC 1197	NGC 691 UGC 1547	IC 163
ASSOCIATION 4 : NGC 1209 group : NGC 1189	NGC 1199	NGC 1209		ASSOCIATION 11 : NGC 488 group : NGC 470 NGC 524 group : NGC 489 Others : NGC 485 UGC 634	NGC 474 NGC 524 NGC 493 UGC 711	NGC 488 NGC 532 NGC 514 UGC 1110	NGC 520 NGC 522 UGC 1133
ASSOCIATION 5 : NGC 584 group : NGC 584 NGC 615 NGC 681 group : NGC 681 NGC 720 group : NGC 720 Others : NGC 755	NGC 586 NGC 636 NGC 701 MCG -2-5-50 MCG -1-4-42	NGC 596 MCG -1-4-44 MCG -2-5-53 MCG -2-5-57 MCG -1-5-17	NGC 600 MCG -1-5-14 MCG -2-6-6 MCG -2-6-16				
ASSOCIATION 6 : NGC 908 group : NGC 899 ESO 545-2 Other : ESO 479-4	NGC 907 ESO 545-16	NGC 908	ESO 544-30	ASSOCIATION 12 : Dorado cluster : NGC 1515 NGC 1546 NGC 1566 NGC 1602 IC 2058 NGC 1672 group : NGC 1672 NGC 1947 group : NGC 1892 Others : NGC 1249 NGC 1796 ESO 84-15 ESO 120-12	NGC 1533 NGC 1549 NGC 1574 NGC 1617 IC 2085 NGC 1688 NGC 1947	NGC 1536 NGC 1553 NGC 1581 IC 2038 ESO 157-49 NGC 1703 NGC 2082	NGC 1543 NGC 1556 NGC 1596 IC 2056 NGC 1824
ASSOCIATION 7 : NGC 936 group : NGC 936 NGC 1052 group : NGC 988 NGC 1042 NGC 1110 NGC 1068 group : NGC 1055 UGC 2302 Others : NGC 941 UGC 1945	NGC 955 NGC 991 NGC 1051 NGC 1068 UGCA 44 NGC 1087 UGC 2345	UGC 1839 NGC 1022 NGC 1052 NGC 1073 NGC 1140 MCG -1-7-20	UGC 1862 NGC 1035 NGC 1084 UGC 2275 IC 1870	ASSOCIATION 13 : NGC 1433 group : NGC 1411 NGC 1494 IC 2000 Others : NGC 1291 ESO 300-14	NGC 1433 NGC 1495 ESO 249-36 NGC 1487	NGC 1448 NGC 1527 NGC 1512	NGC 1493 IC 1970 IC 1914
ASSOCIATION 8 : NGC 676 group : NGC 676	NGC 693	NGC 718		ASSOCIATION 14 : NGC 1792 group : NGC 1792 Others : NGC 1679 ESO 362-11	NGC 1808 IC 2135 ESO 362-19	NGC 1827 ESO 305-17 ESO 363-15	ESO 305-9 ESO 361-15
ASSOCIATION 9 : NGC 864 group : NGC 864	UGC 1670	UGC 1803					

TABLE 2. (continued)

[illegible]

TABLE 2. (continued)

Others : NGC 6875 NGC 6909 ESO 285-48	NGC 6875A IC 4946	NGC 6887 ESO 234-43	NGC 6902 ESO 234-49	ASSOCIATION 14 : NGC 7144 group : NGC 7144 ESO 236-35 IC 5181 group : NGC 7232 Others : NGC 7213	NGC 7145 NGC 7233 IC 5170	NGC 7151 IC 5181	NGC 7155
ASSOCIATION 8 : IC 4956 group : NGC 6878A Other : ESO 285-1	IC 4956	ESO 284-45		ASSOCIATION 15 : NGC 7368 group : NGC 7368 Other : NGC 7307	ESO 345-46	ESO 346-1	
ASSOCIATION 9 : NGC 7014 group : NGC 7014 ESO 235-57	NGC 7038	ESO 235-53	ESO 235-55				
ASSOCIATION 10 : NGC 6907 group : NGC 6907 Other : ESO 462-16	IC 4999	IC 5005		ASSOCIATION 16 : NGC 7079 group : NGC 7070 ESO 287-37 Others : ESO 287-9	NGC 7070A ESO 287-43 ESO 287-13	NGC 7079	NGC 7097
ASSOCIATION 11 : NGC 7377 group : NGC 7359 Others : NGC 7392	NGC 7377 ESO 603-12	ESO 534-24 ESO 603-20		ASSOCIATION 17 : NGC 7166 group : NGC 7162	NGC 7162A	NGC 7166	ESO 288-25
ASSOCIATION 12 : NGC 7421 group : NGC 7418A IC 1459 group : NGC 7418 IC 5270 NGC 7582 group : NGC 7412 NGC 7582 IC 5267 ESO 347-2A Others : NGC 7410 ESO 347-29	NGC 7421 IC 1459 IC 5271 NGC 7496 NGC 7590 IC 5267A IC 5240 ESO 406-42	IC 5264 IC 5269B ESO 407-7 NGC 7531 NGC 7599 IC 5267B IC 5273	IC 5269 IC 5269C ESO 407-9 NGC 7552 NGC 7632 IC 5325 ESO 292-14	ASSOCIATION 18 : NGC 134 group : NGC 115 ESO 410-18 Others : NGC 150 ASSOCIATION 19 : NGC 7179 group : NGC 7179 Others : NGC 7020 NGC 7126 ASSOCIATION 20 : NGC 7154 group : NGC 7154 NGC 7179 group : NGC 7163 ESO 404-27	NGC 131 NGC 254 NGC 7192 NGC 7083 IC 5096 ESO 404-12 NGC 7172	NGC 134 NGC 289 NGC 7219 NGC 7096 IC 5120 ESO 404-17 NGC 7174	NGC 148 IC 1558 ESO 108-23 NGC 7125 IC 5156
ASSOCIATION 13 : NGC 7507 group : NGC 7507	NGC 7513	ESO 469-15		ASSOCIATION 21 : NGC 7721 group : NGC 7721	MCG -1-60-16	MCG -1-60-26	

TABLE 2. (continued)

Region 7 : The second upper plane of the Local Supercluster : 8 groups -40 ≤ SGX ≤ +40 0 ≤ SGY ≤ +50 +19 ≤ SGZ ≤ +45			
ASSOCIATION 22 :			
<u>NGC 128 group :</u> NGC 128	UGC 282	UGC 329	
<u>NGC 173 group :</u> NGC 173	NGC 201		
ASSOCIATION 23 :			
<u>Pegasus cluster :</u> NGC 7495	NGC 7536	NGC 7562	
NGC 7563	NGC 7610	NGC 7619	
NGC 7626	UGC 12388	UGC 12423	
UGC 12553			
ASSOCIATION 24 :			
<u>NGC 7711 group :</u> NGC 7691	NGC 7711	UGC 12653	
ASSOCIATION 25 :			
<u>NGC 7714 group :</u> NGC 7714	UGC 12690		
<u>Others :</u> NGC 7716			
ASSOCIATION 26 :			
<u>NGC 7448 group :</u> NGC 7437	NGC 7448	UGC 12308	
UGC 12350	NGC 7454		
ASSOCIATION 27 :			
<u>NGC 7331 group :</u> NGC 7320	UGC 12082		
<u>Others :</u> NGC 7217	NGC 7292		
ASSOCIATION 28 :			
<u>NGC 7640 group :</u> NGC 7640	UGC 12588	UGC 12632	
ASSOCIATION 29 :			
<u>NGC 7814 group :</u> NGC 14	NGC 7814	UGC 17	UGC 122
UGC 12893			
ASSOCIATION 1 :			
<u>NGC 5962 group :</u> NGC 5951	NGC 5953	NGC 5962	
<u>Others :</u> NGC 5957	NGC 5970	UGC 9991	
ASSOCIATION 2 :			
<u>NGC 6070 group :</u> NGC 6070	UGC 10288	UGC 10290	
<u>Other :</u> IC 1158			
ASSOCIATION 3 :			
<u>NGC 5930 group :</u> NGC 5930	UGC 9856	UGC 9858	
<u>Other :</u> NGC 5899			
ASSOCIATION 4 :			
<u>NGC 5908 group :</u> NGC 5874	NGC 5876	NGC 5905	NGC 5908
UGC 9759			
<u>Others :</u> NGC 5820	NGC 5821	NGC 5875	UGC 9849
ASSOCIATION 5 :			
<u>NGC 5395 group :</u> NGC 5351	NGC 5394	NGC 5395	UGC 8806
<u>Other :</u> UGC 8917			
ASSOCIATION 6 :			
<u>NGC 5557 group :</u> NGC 5529	NGC 5557	NGC 5590	UGC 9113
<u>Others :</u> NGC 5656	UGC 9291		
ASSOCIATION 7 :			
<u>NGC 6585 group :</u> NGC 6585	UGC 11132	UGC 11140	
ASSOCIATION 8 :			
<u>NGC 6500 group :</u> NGC 6467	NGC 6500	NGC 6501	
<u>Other :</u> UGC 10966			

TABLE 2. (continued)

[illegible]

TABLE 2. (continued)

ASSOCIATION 5 : IC 4351 group : IC 4351 Others : NGC 5494	ESO 445-75 ESO 446-31	ESO 445-89	Region 10 : part of the Lynx-Ursa Major Supercluster : 4 groups +35 ≤ SGX ≤ +55 +11.5 ≤ SGY ≤ +32.5 -5 ≤ SGZ ≤ +3			
ASSOCIATION 6 : NGC 5135 group : NGC 5124 NGC 5182 Other : ESO 444-47	NGC 5135 ESO 444-21	NGC 5152	NGC 5153	ASSOCIATION 1 : NGC 1961 group : NGC 1961 UGC 3379 UGC 3426 group : UGC 3416	UGC 3319 UGC 3342 UGC 3422 UGC 3426	UGC 3344
ASSOCIATION 7 : IC 4329 cluster : NGC 5292	NGC 5328	IC 4329	ESO 445-2	ASSOCIATION 2 : UGC 3697 group : UGC 3644 UGC 3804	UGC 3697 UGC 3701	UGC 3714
ASSOCIATION 8 : NGC 5419 group : NGC 5419 Others : ESO 383-88	NGC 5488	ESO 445-81	ESO 446-17	ASSOCIATION 3 : IC 520 group : NGC 2614 Other : NGC 2810	NGC 2629 IC 520	
ASSOCIATION 9 : IC 4296 group : NGC 5114 IC 4299 Others : NGC 5202	NGC 5140 ESO 383-5 NGC 5302	NGC 5193 ESO 383-60	IC 4296			
ASSOCIATION 10 : NGC 4756 group : NGC 4756 Others : NGC 4782	IC 3799 NGC 4783	MCG -2-33-17 NGC 4825	NGC 4863			

TABLE 2. (continued)

Region 11 : The Eridanus II Cloud : 7 groups +10 ≤ SGX ≤ +25	-40 ≤ SGY ≤ -10	-55 ≤ SGZ ≤ -30.5	Region 12 : The Nearer Sculptor Supercluster : 7 groups -40 ≤ SGX ≤ +45	-80 ≤ SGY ≤ -30.5	-30 ≤ SGZ ≤ -1.5
ASSOCIATION 1 : NGC 1376 group : NGC 1358 NGC 1417 group : NGC 1417 MCG -1-10-36	NGC 1376 NGC 1441 MCG -1-10-37	MCG -1-10-13 NGC 1453 MCG -1-10-35	ASSOCIATION 1 : NGC 877 group : NGC 876 Others : UGC 1814	NGC 877 UGC 1946	UGC 1817
ASSOCIATION 2 : NGC 1589 group : NGC 1586 UGC 3080 Other : NGC 1550	NGC 1587	NGC 1589 NGC 1620	ASSOCIATION 2 : NGC 825 group : NGC 825 Others : NGC 827	IC 208 UGC 1646	IC 1776
ASSOCIATION 3 : NGC 1667 group : NGC 1645 Others : NGC 1594 MCG -1-13-22	NGC 1667 NGC 1600	IC 2101 NGC 1618 NGC 1622	ASSOCIATION 3 : NGC 467 group : NGC 455 NGC 541 group : NGC 541 UGC 892 Others : NGC 521	NGC 467 NGC 545 UGC 921 NGC 533	IC 89 NGC 560 NGC 585 UGC 890
ASSOCIATION 4 : NGC 1721 group : NGC 1721 Other : MCG -2-13-19	NGC 1728	MCG -2-13-21	ASSOCIATION 4 : NGC 945 group : NGC 945 Others : MCG -2-7-36	NGC 977 MCG -2-7-38	MCG -2-7-32 MCG -2-7-33
ASSOCIATION 5 : NGC 1725 group : NGC 1725 Others : NGC 1720	MCG -2-13-25 NGC 1726	MCG -2-13-31 MCG -2-13-34	ASSOCIATION 5 : NGC 439 group : NGC 418	NGC 439	IC 1637
ASSOCIATION 6 : NGC 1779 group : NGC 1752	NGC 1779	IC 401 IC 402	ASSOCIATION 6 : NGC 484 group : NGC 434 Others : IC 1597	NGC 466 IC 1649	NGC 484

TABLE 2. (continued)

[illegible]