

# HI observations of nearby galaxies

## I. The first list of the Karachentsev catalog

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**Abstract.** We present HI observations of the galaxies in the first list of the Karachentsev catalog of previously unknown nearby dwarf galaxies (Karachentseva & Karachentsev 1998). This survey covers all known nearby galaxy groups within the Local Volume (i.e. within 10 Mpc) and their environment, that is about 25% of the total sky. A total of 257 galaxies have been observed with a detection rate of 60%. We searched a frequency band corresponding to heliocentric radial velocities from  $-470 \text{ km s}^{-1}$  to  $\sim +4000 \text{ km s}^{-1}$ . Non-detections are either due to limited coverage in radial velocity, confusion with Local HI (mainly in the velocity range  $-140 \text{ km s}^{-1}$  to  $+20 \text{ km s}^{-1}$ ), or lack of sensitivity for very weak emission. 25% of the detected galaxies are located within the Local Volume. Those galaxies are dwarf galaxies judged by their optical linear diameter ( $1.4 \pm 0.2 \text{ kpc}$  on the average), their mean total HI mass ( $4.6 \cdot 10^7 M_{\odot}$ ), and their observed linewidths ( $39 \text{ km s}^{-1}$ ).

**Key words:** galaxies: distances and redshifts; dwarf; fundamental parameters; general

## 1. Introduction

The only way to study the smallest galaxies is to search for them in our cosmic neighborhood. The first systematic catalog of nearby galaxies was prepared by Kraan-Korteweg & Tammann (1979) who collected all known galaxies with corrected radial velocities  $v_0 \leq 500 \text{ km s}^{-1}$ , a total of 179 objects (hereafter called the KKT sample). Since that time the number of known galaxies within the Local Volume (i.e. within a distance

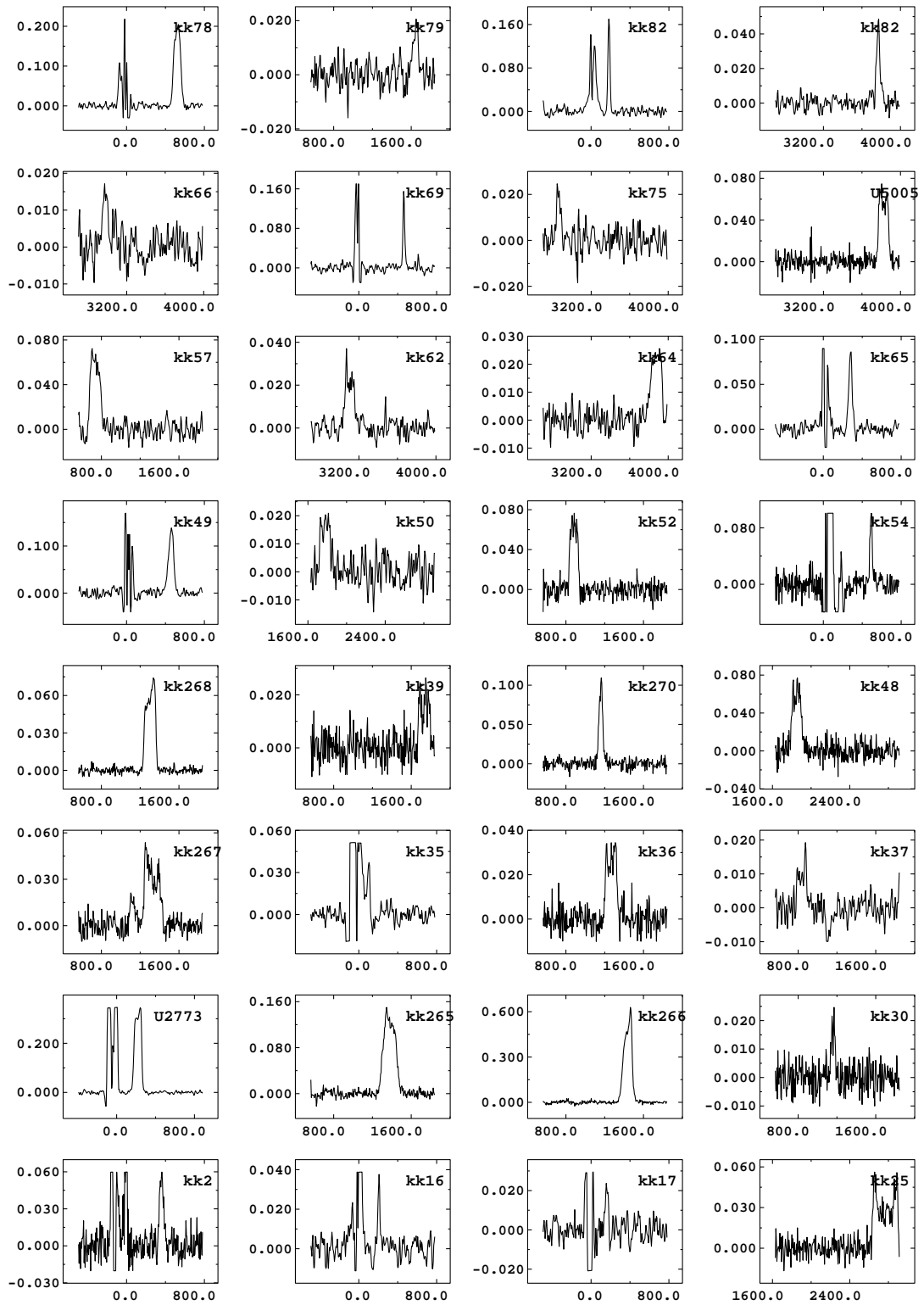
of 10 Mpc) increased to 303 objects (Karachentsev et al. 1999). For the past decade the initial KKT sample has been increased almost two times in number due to the mass redshift surveys of galaxies from the known catalogues, revealing new nearby galaxies in the Milky Way “Zone of Avoidance”, as well as special searches for dwarf galaxies in nearby groups. The increasing numbers of galaxies in the Local Volume is mainly due to many new dwarf galaxies. This fact demonstrates how incomplete our knowledge about the galaxy population of even the Local Volume is.

A couple of years ago Karachentseva & Karachentsev (1998; hereafter KK98) initiated an all-sky search for candidates for new nearby dwarf galaxies using the second Palomar Sky Survey and the ESO/SERC plates of the southern sky. The results of the first two segments of the survey have been published, they cover large areas around the known galaxy groups in the Local Volume (KK98) and the area of the Local Void (Karachentseva et al. 1999). In a next step to derive distances we will measure radial velocities. Later on we will aim for more exact photometric distances. In this paper we present the first follow-up observations, the HI search for the galaxies in KK98. The HI search for dwarf irregular galaxies seems quite efficient as these galaxies are HI rich in general and with adequate velocity resolution, say  $5 \text{ km s}^{-1}$ , all the HI of a given galaxy will be within a few velocity channels. The characteristic signature of a dwarf galaxy profile, a nearly gaussian structure, is different from radio interference and easily will lead to a good signal-to-noise ratio.

## 2. Observations

Observations were performed with three different radio telescopes for different declination ranges. The 100-m radiotelescope at Effelsberg was used for declinations greater

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**Fig. 1.** HI profiles observed with the 100-m radio telescope at Effelsberg which has a HPBW of  $9'.3$  at a wavelength of 21 cm. Observations were obtained in the total power mode [ON – OFF] which yields a residual of the Local HI emission around  $0 \text{ km s}^{-1}$ . The profiles are arranged in ascending R.A. starting at the bottom left corner

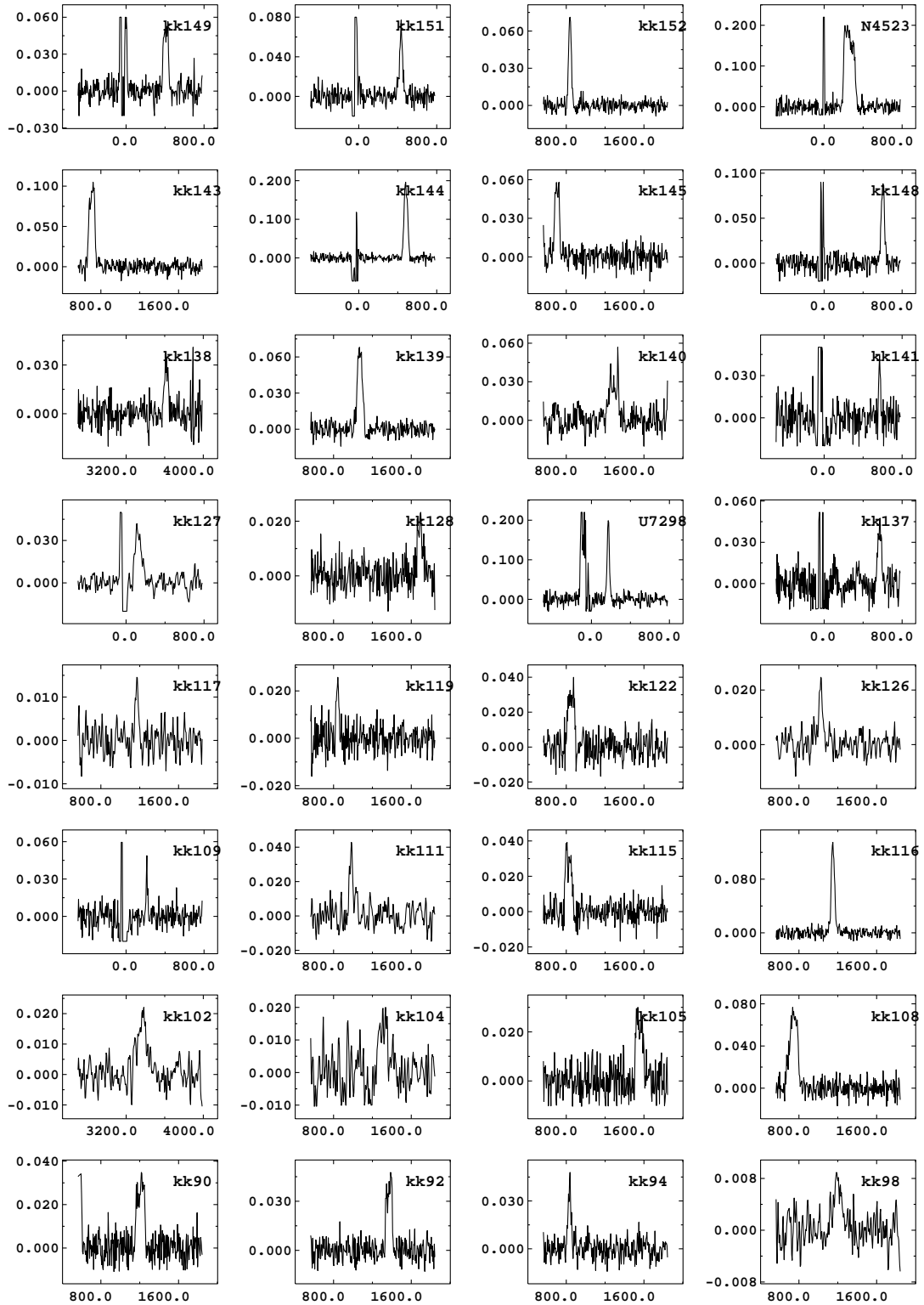


Fig. 1. continued

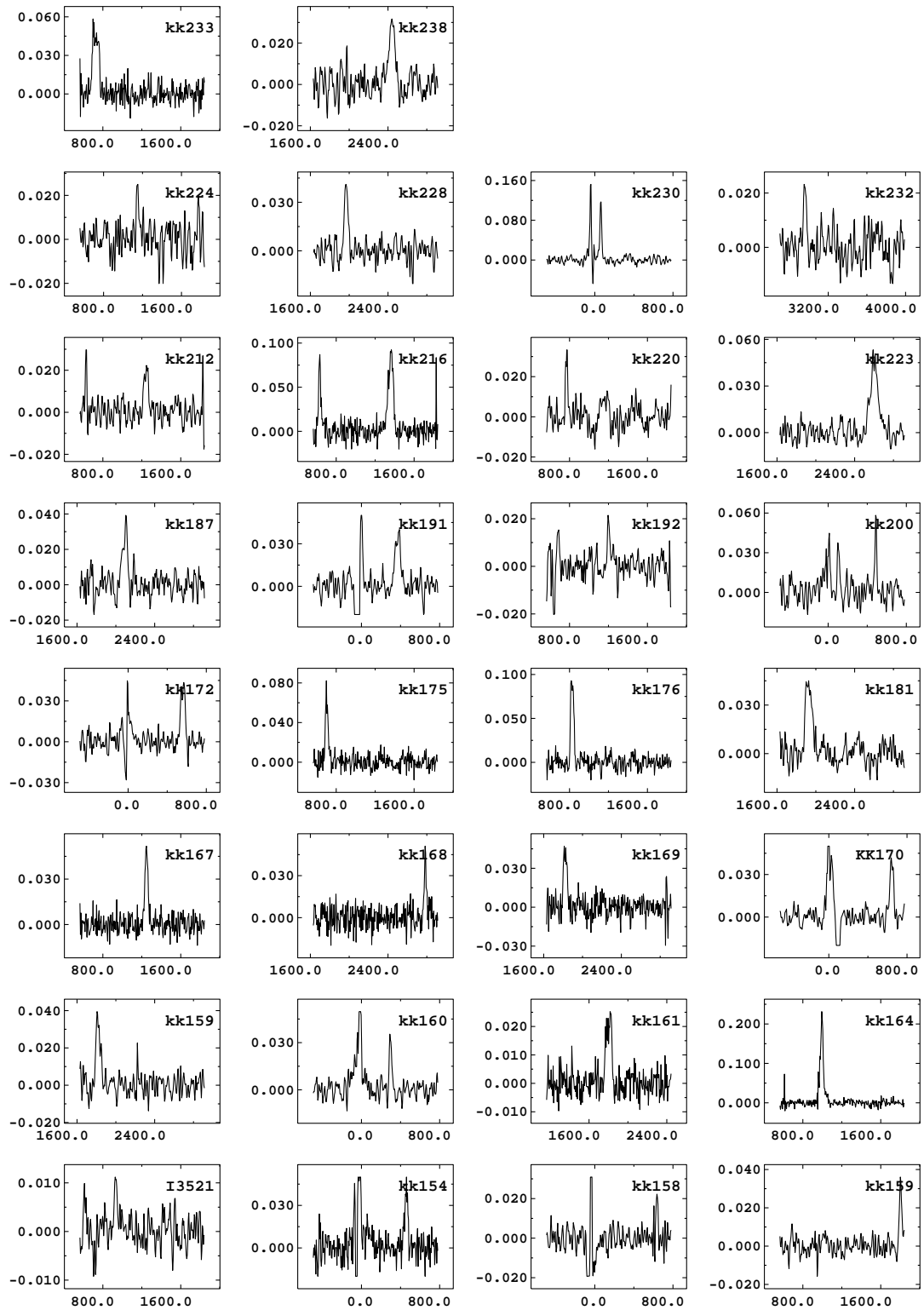
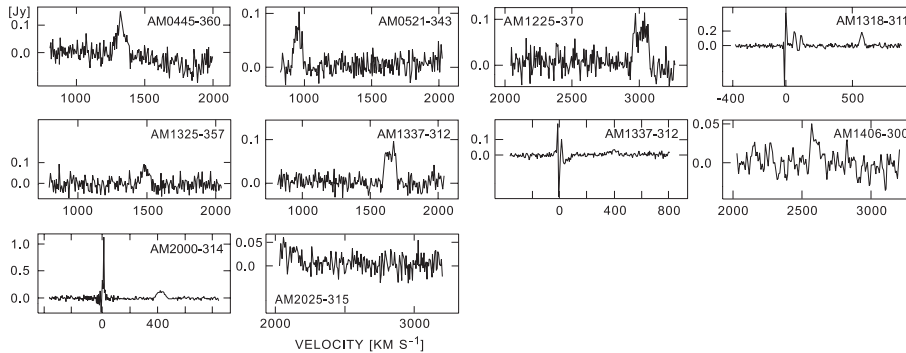


Fig. 1. continued



**Fig. 2.** HI profiles observed with the Nançay radio telescope (HPBW of  $3'.6 \times 22'$  for the declination range in question)

than  $-31^\circ$ , the Nançay radio telescope was selected for galaxies in the declination range  $-38^\circ \leq -31^\circ$ , and the compact array of the Australia Telescope was used for galaxies south of  $-38^\circ$ .

### 2.1. Effelsberg observations

The radio telescope at Effelsberg has been used in the total power mode (ON – OFF) combining a reference field 5 min earlier in R.A. with the on-source position. A dual channel HEMT receiver had a system noise of 30 K.

The 1024 channel autocorrelator was split into 4 bands (bandwidth 6.25 MHz) of 256 channels each shifted in frequency by 5 MHz with respect to their neighbor in order to cover a velocity range from  $-470$  to  $3970$   $\text{km s}^{-1}$  overlapping 1.5 MHz between channels. The resulting channel separation was  $5.1$   $\text{km s}^{-1}$  yielding a resolution of  $6.2$   $\text{km s}^{-1}$  ( $10.2$   $\text{km s}^{-1}$  after Hanning smoothing). The HI profiles observed with the 100-m radiotelescope are presented in Fig. 1 in order of increasing R.A. as in Table 1. The half power beam widths (HPBW) of the Effelsberg telescope at this wavelength is  $9'.3$ .

### 2.2. Nançay observations

For 15 galaxies in the declination range  $-38^\circ \leq -31^\circ$  the Nançay radio telescope was used with the same velocity resolution and coverage. Major differences to the description given for the Effelsberg observations were a different system noise (45 K), a different antenna beam ( $3'.6 \times 22'$  in R.A. and Dec. for this declination range), and shorter integration phases with a cycle of 2 minutes for the ON and the OFF positions. Nine galaxies have been detected (Fig. 2).

### 2.3. Compact Array of the Australia Telescope

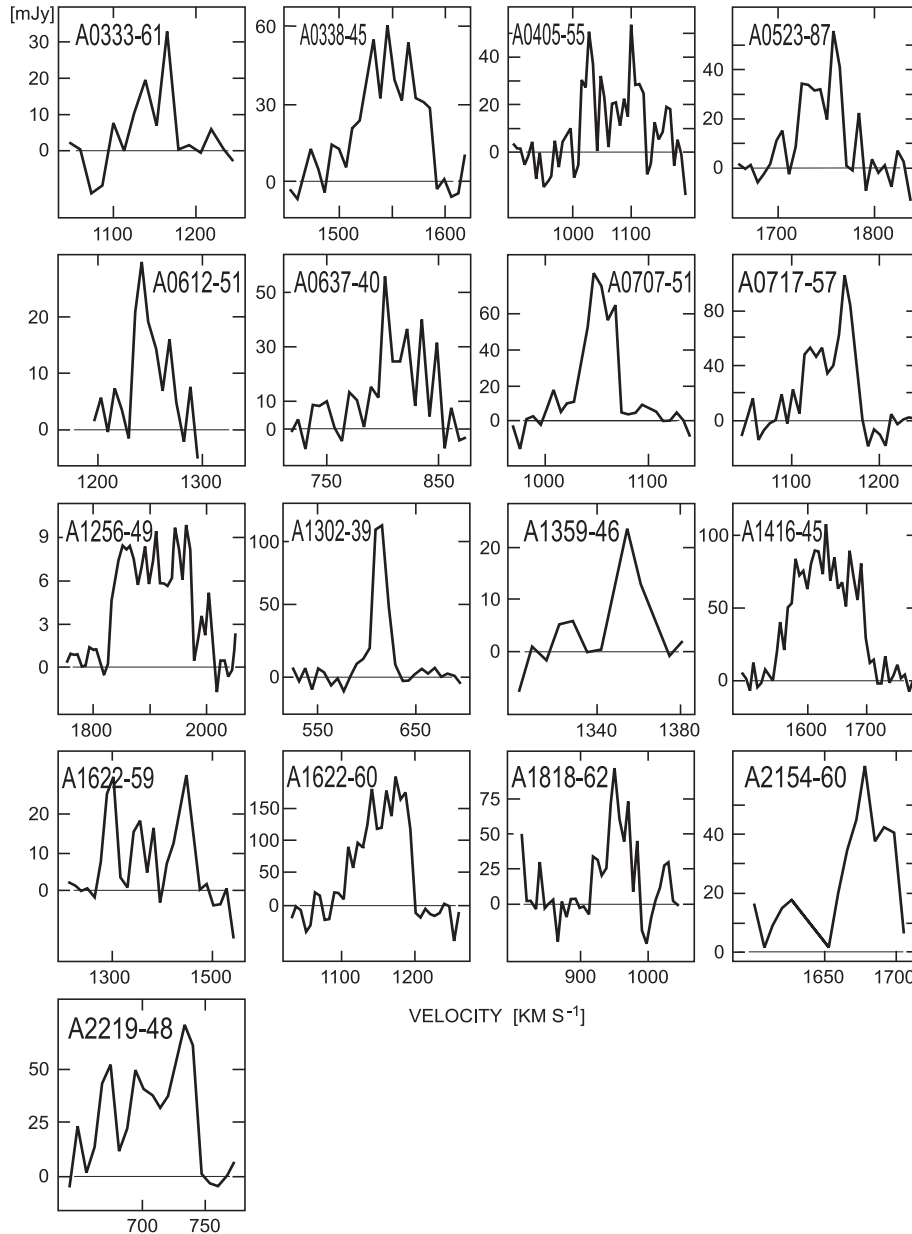
40 of the 57 galaxies south of declination  $-38^\circ$  have been observed with the Compact Array of the Australia

Telescope. For this HI search we have chosen the 750A antenna array configuration in order to yield an antenna beam comparable to the optical size of the smallest galaxies (i.e.  $\sim 1'$ ). The frequency setup and correlator configuration was such that we obtained a velocity coverage from  $-450$  to  $+2900$   $\text{km s}^{-1}$  and a channel separation of  $6.6$   $\text{km s}^{-1}$  (i.e. a resolution of  $7.9$   $\text{km s}^{-1}$ ). Each galaxy was observed for 10 min every few hours. With five to six observations per target position we achieved a regular coverage of the  $uv$  plane for these “snapshot mode” observations. The resulting integrated HI profiles are given in Fig. 3 (for a more detailed discussion of these data see Huchtmeier et al. in preparation). We may miss some flux with the interferometer (missing flux) as the observed HI emission extends over more than  $2'$  per channel for over 60% of the galaxies. Galaxies from the kk98 sample not observed are: kk 11, kk 63, kk179, kk 184, kk 189, kk 190, kk 197, kk 203, kk 211, kk 213, kk 214, kk 217, kk 221, kk 222, kk 235, kk 244, kk 248.

## 3. The data

Our search list was an early version of the list of KK98 containing a few additional galaxies which did not make it into the final version because of their morphology and/or size (i.e. they were too small). Particularly, we took into account the results of HI searches for nearby dwarf galaxies made by Kraan-Korteweg et al. (1994), Huchtmeier et al. (1995), Burton et al. (1996), Huchtmeier & van Driel (1996), Huchtmeier et al. (1997) and Cote et al. (1997). The optical data of our galaxies are given in Table 1. The kk-number (or other identification if there is no kk-number) is given in Col. 1, R.A. and Dec. (1950) follow in Cols. 2 and 3. The optical diameters  $a$  and  $b$  in the de Vaucouleurs ( $D_{25}$ ) system follow in Cols. 4 and 5, the morphological type in Col. 6 where we use the following coding:

- Im - irregular blue object with bright knot(s);
- Ir - irregular without knots or with amorphous condensations, the colour is neutral or bluish;



**Fig. 3.** HI profiles observed with the Australia Telescope Compact Array. The synthesized antenna beam is of the order of  $1'$

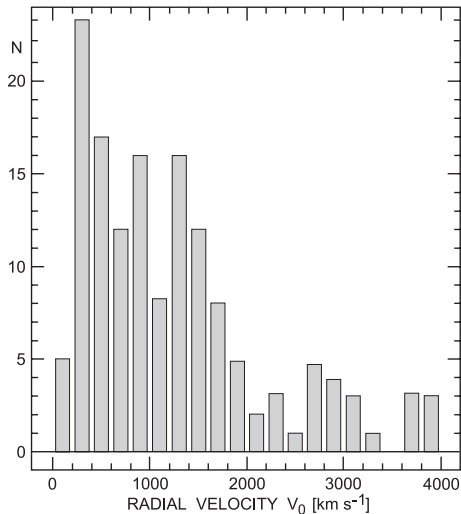
Sm - disturbed spiral or irregular with signs of spiral structure;

Sph - spheroidal, with very low brightness gradient or without any, the color is neutral or redish.

The optical surface brightness (SB) has been coded (see KK98): high (H), low (L), very low (VL), and extremely low (EL) in Col. 7. The total blue magnitude  $B_t$  and its reference follow in Cols. 8 and 9. “NED” - data are from the NASA/Extragalactic Database, “IK” - visual estimates from POSS (typical error is about 0.4 mag) by I. Karachentsev, “6 m” - accurate photometric data from the 6-m telescope CCD-frames obtained by Karachentsev

and coworkers (unpublished); “UH” - photometric data from U. Hopp (Calar Alto) unpublished. The Galactic extinction follows in Col. 10. Other names (identifications) are listed in Col. 11.

Results of the HI observations are summarized in Table 2. The kk-number is given in Col. 1, the HI-flux [ $\text{Jy km s}^{-1}$ ] follows in Col. 2, the maximum emission and/or the rms noise [mJy] in Col. 3, the heliocentric radial velocity plus error in Col. 4, the line widths at the 50%, the 25%, and the 20% level of the peak emission in Col. 5. Distances (Col. 6) have been derived with different methods, there are photometric distances in



**Fig. 4.** The histogram shows the number of galaxies per velocity interval of  $200 \text{ km s}^{-1}$ . The distribution of corrected radial velocities ( $v_0$ ) of our galaxy sample demonstrates the local character of these galaxies

some cases, in other cases the group membership yields a distance. If no other distance estimate is available, we assumed a Hubble constant of  $75 \text{ km s}^{-1} \text{ Mpc}^{-1}$  to derive a “kinematic” distance. The absolute magnitude is given in Col. 7, the integrated HI mass (Col. 8) was calculated as (e.g. Roberts 1969)

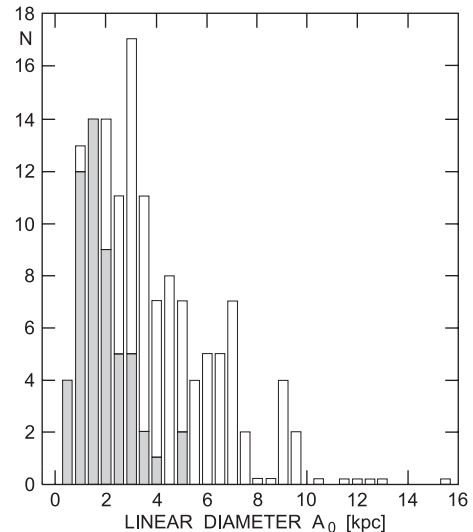
$$(M_{\text{HI}}/M_{\odot}) = 2.355 \cdot 10^5 \times D^2 \times \int S_v dv$$

where  $D$  is the distance of the galaxy in Mpc and  $\int S_v dv$  is the integrated HI flux in  $\text{Jy km s}^{-1}$ . The relative HI content  $M_{\text{HI}}/L_B$  follows in Col. 9. Finally, Col. 10 contains comments relative to the telescope used for the observation: unless otherwise noted observations have been performed with the 100-m radiotelescope at Effelsberg, N - marks the Nançay radio telescope, ATCA - the Australia Telescope Compact Array at Culgoora, NSW.

In a number of cases emission at negative radial velocities has been observed (kk 20, kk 236, kk 237; only kk 236 has been plotted as an example). The Dwingeloo HI survey (Hartmann & Burton 1997) has been consulted: in all cases of negative radial velocities extended HI emission was found suggesting that we observed high velocity clouds in our Galaxy.

#### 4. Discussion

A great majority (73%) of our galaxies are of type Im (26) and Ir (162), about 20% are of type Sph/Ir (12) and Sph (39), while the rest of 8% is a collection of different types from spiral to Im/Sm and BCD. The detection rate of our sample galaxies depends on the morphological type.

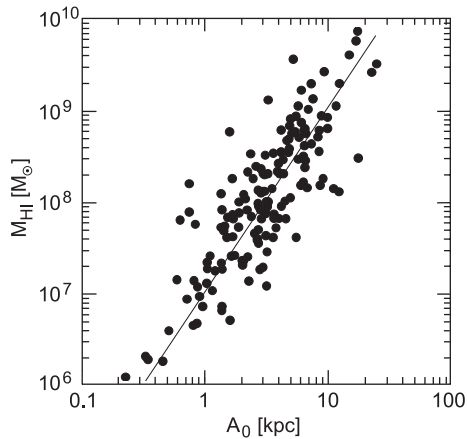


**Fig. 5.** The distribution of the optical linear diameter  $A_0$  in kpc for the whole sample in the de Vaucouleurs ( $D_{25}$ ) system is given here. Galaxies within 10 Mpc (i.e. within the Local Volume) are shown by shaded areas. The medium value for the shaded areas is  $1.4 \pm 0.2 \text{ kpc}$

75% of the spirals (type S0 to Sm/Im and BCD) were detected; the detection rate for types Im and Ir is very similar close to 60%, whereas the detection rate for types Sph/Ir and Sph is considerably lower at 33 and 23%, respectively. The detection rate depends on the optical surface brightness (SB) class, too. From high SB to low, very low, and extremely low SB the detection rate decreases from 70% to 58%, 49%, and 43%, respectively. This trend reflects the type dependence and the fact that we deal with fainter galaxies as we descend from high SB to very low SB, the median absolute magnitudes for the detected galaxies change from  $-15.43$  (H) to  $-13.92$  (VL) for our brightness classes.

A number of the galaxies within the present sample are associated with nearby groups of galaxies (e.g. Tully 1988) according to their position, radial velocity and relative resolution:

- NGC 672 group: kk 13, kk 14, kk 15;
- NGC 784 group: kk 16, kk 17;
- Maffei group: kk 19, kk 21, kk 22, kk 23, kk 35, kk 44;
- Orion group: kk 49;
- M 81 group: kk 81, kk 83, kk 85, kk 89, kk 89, kk 91;
- Leo group: kk 94;
- CVn cloud: kk 109, UGC 7298, kk 137, kk 141, kk 144, kk 148, kk 149, kk 151, kk 154, kk 158, kk 160, kk 191, kk 206, kk 220, kk 230;
- Centaurus group: kk 170, kk 179, kk 182, kk 190, kk 191, kk 195, kk 197, kk 200, kk 211, kk 217, kk 218;
- NGC 6946 group: kk 250, kk 251, kk 252;



**Fig. 6.** The total mass of neutral hydrogen  $M_{\text{HI}}$  of the galaxies in our sample is plotted versus the linear extent (in kpc). The full line represents the regression line for the KKT sample (Huchtmeier & Richter 1988)

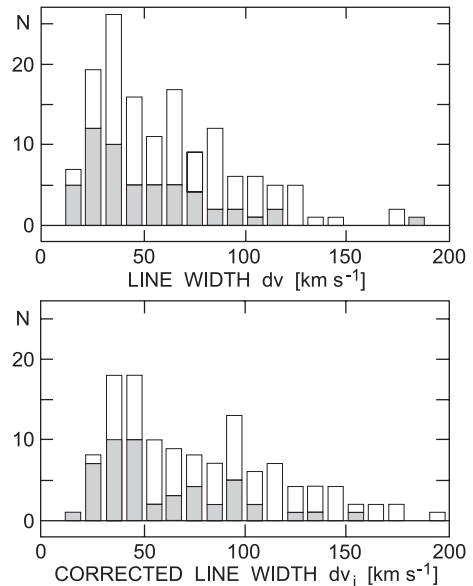
Virgo cluster: kk 111, kk 127, kk 128, kk 140, NGC 4523, IC3517, kk 164, kk 168, kk 169, kk 172, kk 173, U 8091.

There are a few cases of high  $M_{\text{HI}}/L_B$  values in Table 2. Four of the five galaxies with  $M_{\text{HI}}/L_B \geq 5$  are actually found to be confused by emission from nearby galaxies (see footnotes to Table 2).

The present sample of galaxies as presented in Tables 1 and 2 will be discussed now in some detail with the help of global parameters. The distribution of radial velocity ( $v_0$ , corrected for the rotation of our galaxy) is given in Fig. 4. Apart from a few background objects most of the galaxies belong to the local supercluster, about 25% are within the Local Volume. From this situation it is clear that the great majority of the galaxies in the present sample are dwarfish in nature. This will be shown more convincingly below when we compare several other global parameters of these objects.

Next we will look at the optical linear diameter  $A_0$  (in kpc). The histogram in Fig. 5 presents the number of galaxies binned in intervals of 0.5 kpc width. The distribution of the optical linear diameters of our galaxies extends from 0.2 kpc to 26 kpc, yet the great majority is smaller than 8 kpc in diameter (in the de Vaucouleurs  $D_{25}$  system). Galaxies in the Local Volume (indicated by shaded areas) are even smaller with a median value of  $1.4 \pm 0.2$  kpc.

Now we will use the correlation of two global parameters to compare the present sample of galaxies with the previously known galaxies in the Local Volume. In Fig. 6 the total mass of neutral hydrogen  $M_{\text{HI}}$  of the galaxies is plotted versus their linear extent  $A_0$  for this sample of galaxies. The full line is the regression line for the KKT sample (Huchtmeier & Richter 1988). This regression line seems to be an excellent fit for the present sample, too.



**Fig. 7.** The distribution of line widths of our galaxy sample is given for the observed values ( $dv$ ) in the upper panel and for the (for inclination corrected values ( $dv_i$ ) in the lower panel. Galaxies within the Local Volume (i.e. within 10 Mpc) are marked by the shaded areas

The average HI mass of the galaxies in the Local Volume is  $4.6 \cdot 10^7 M_{\odot}$ .

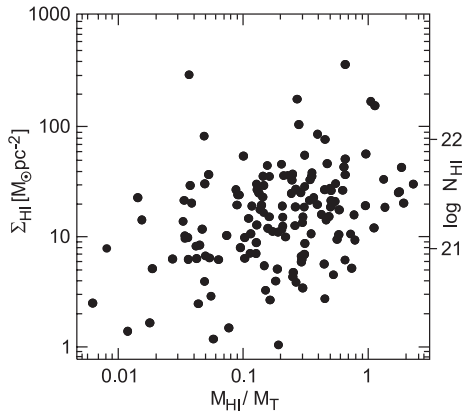
The HI masses in Fig. 6 cover a range from  $10^6$  to  $10^{10}$  solar masses. The HI luminosity function for galaxies has been studied with galaxies of  $10^7$  and more solar masses in HI so far. With the data of the new dwarf galaxies within the Local Volume we will be able in the end to discuss the HI luminosity function starting from  $10^6$  solar masses.

The galaxies in our sample have small line widths on the average. In Fig. 7 we present the distribution of observed line widths in the upper panel and the (for inclination) corrected line widths in the lower panel. The optical axial ratio has been used here to derive the inclination. Galaxies within the Local Volume are indicated by the shaded areas. The peak of the line width distribution of the galaxies within the Local Volume is  $39 \text{ km s}^{-1}$  for the uncorrected and  $47 \text{ km s}^{-1}$  for the corrected line widths.

The three global parameters we have considered so far point altogether toward the dwarfish character of the Local Volume objects in our sample: the average linear diameter of  $1.4 \pm 0.2$  kpc (Fig. 5), the mean total HI mass of  $4.6 \cdot 10^7 M_{\odot}$  and the small line width of less than  $50 \text{ km s}^{-1}$ .

Two more global parameters are shown in Fig. 8, pseudo HI surface density  $\Sigma_{\text{HI}}$  and the relative HI content  $M_{\text{HI}}/M_T$ . The pseudo HI surface density is obtained by dividing the total HI mass  $M_{\text{HI}}$  of the galaxy by the disk area of the galaxy as defined by its optical diameter  $A_0$ . This quantity is given in units of solar mass per square





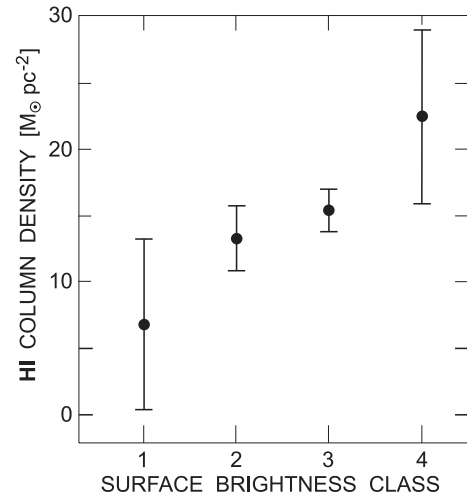
**Fig. 8.** The pseudo column density of neutral hydrogen ( $\Sigma_{\text{HI}}$  in  $M_{\odot} \text{pc}^{-2}$ ) of our sample as plotted versus the relative HI-content ( $M_{\text{HI}}/M_{\text{T}}$ )

parsec as well as in the usual HI column density  $N_{\text{HI}}$  in  $\text{atoms cm}^{-2}$ . This quantity is plotted versus the relative HI content  $M_{\text{HI}}/M_{\text{T}}$ . Our galaxies fill the usual range in HI surface density as well as in relative HI content as observed for normal galaxies (e.g. HR). The present sample of galaxies is relatively rich in HI. Some of the scatter in the diagram is due to uncertainties in observed quantities, especially the inclination which is used to correct the line width which itself enters the total mass calculation by the square. The optical diameters are uncertain for galaxies at low galactic latitudes due to the high foreground extinction, e.g. Cas 2, ESO 137-G27, BK12, ESO 558-11. If we exclude the confused galaxies and those with heavy galactic extinction all entries in Fig. 8 with  $\Sigma_{\text{HI}} \geq 100 M_{\odot} \text{pc}^{-2}$  are gone. Low values of the HI surface density are not only due to the uncertainties of observational data, the gas content of dwarf galaxies is very sensitive to outside influences (tidal interactions) due to their shallow gravitational potential.

Finally we plot the HI surface brightness versus the optical surface brightness (Fig. 9). The surface brightness class (Table 1, Col. 7) has been coded from 4 to 1 from high SB to extremely low SB in steps of 1. The different errors of the mean values of each class essentially depend on the different population size of each SB class. However, there is a definite trend of the HI surface density to grow with increasing optical SB by a factor of 2 to 4 (e.g. van der Hulst et al. 1993; de Blok 1997).

## 5. Conclusion

In this paper we presented an HI search for 257 candidates for nearby dwarf galaxies. A detection rate of 60% on the average is quite high keeping in mind the limited velocity band and the fact that single-dish telescopes are literally “blind” for weak emission in the velocity range of



**Fig. 9.** This figure presents a correlation between the pseudo HI column density with the optical surface brightness of the galaxy in our actual sample. The surface brightness class is taken from KK98; 1 = extremely low, 2 = very low, 3 = low, 4 = high SB. The error bars correspond to twice the rms error of the mean of each SB class

the local HI emission (i.e. within  $-140$  to  $+20 \text{ km s}^{-1}$ ) and for 20% of HI-poor (spheroidal and Sph/Ir) objects in the sample. Most of the detected galaxies are located within the local supercluster, and about 25% are members of the Local Volume. The dwarfs within the Local Volume have a mean linear diameter of  $1.4 \pm 0.2 \text{ kpc}$ , a mean observed linewidths of  $39 \text{ km s}^{-1}$ , and a mean total HI mass of  $4.6 \cdot 10^7 M_{\odot}$ . The smallest galaxies have HI masses of just over  $10^6$  solar masses. Once this full-sky survey will be finished we will be able to discuss the luminosity function of the Local Volume including these tiny dwarf galaxies. This investigation is especially needed as recent determinations of the galaxy luminosity function exhibit an increase for low mass objects. The exact value of this increase will be important for deriving the mass density in the local universe.

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## References

- Burton W.B., Verheijen E.B., Kraan-Korteweg R.C., Henning P.A., 1996, *A&A* 293, L33
- Cote S., Freeman K.C., Carignan C., Quinn P.J., 1997, *AJ* 114, 1313
- de Blok W.J.G., 1997, Ph.D. Thesis, University of Groningen
- Gallagher J.S., Littleton J.E., Mathews L.D., 1995, *AJ* 109, 2003
- Hartmann D., Burton W.B., 1997, *Atlas of Galactic Neutral Hydrogen*. Cambridge University Press, Cambridge
- Huchra J., 1995, *A catalog of galaxy redshifts*
- Huchtmeier W.K., Bohnenstengel H.-D., 1981, *A&A* 100, 72
- Huchtmeier W.K., Lercher G., Seeberger R., Saurer W., Weinberger R., 1995, *A&A* 293, L33
- Huchtmeier W.K., van Driel W., 1996, *A&A* 305, L25
- Huchtmeier W.K., Karachentsev I.D., Karachentseva V.E., 1997, *A&A* 322, 375
- Huchtmeier W.K., Richter O.G., 1988, *A&A* 203, 237 (HR)
- Huchtmeier W.K., Richter O.-G., 1989, *A general catalog of HI observations of galaxies*. Springer-Verlag, New York
- van der Hulst J.M., Skillman E.D., Smith T.R., Bothun G.D., McGaugh S.S., de Blok W.J.G., 1993, *AJ* 106, 548
- Karachentsev I.D., Makarov D.I., Huchtmeier W.K., 1999, *A&AS* (in press)
- Karachentseva V.E., Karachentsev I.D., 1998, *A&AS* 127, 409
- Karachentseva V.E., Karachentsev I.D., Richter G.M., 1999, *A&AS* 135, 221
- Kraan-Korteweg R.C., Tammann G.A., 1979, *Astron. Nachr.* 300, 181 (KKT)
- Kraan-Korteweg R.C., Loan A.J., Burton W.B., et al., 1994, *Nat* 372, 77
- Mathews L.D., Gallagher J.S., Littleton J.E., 1995, *AJ* 110, 581
- Paturel G., Fouque P., Bottinelli L., Gouguenheim L., 1992, *Catalogue of Principal Galaxies*, Lyon (PGC)
- Roberts M.S., 1969, *AJ* 74, 859
- Schombert J.M., Bothun G.D., Schneider S.E., McGaugh S.S., 1992, *AJ* 103, 1107
- Tully R.B., 1988, *Nearby Galaxy Catalog*. Cambridge Univ. Press

**Table 1.** List of new Local Volume dwarf candidates

KK	R.A. (1950.0)	Dec.	<i>a</i>	<i>b</i>	Type	S.B.	<i>B<sub>t</sub></i>	Ref.(B)	<i>A<sub>b</sub></i>	Identification
	h m s	° ′ ″	arcmin							
1	2	3	4	5	6	7	8	9	10	11
1	00 12 31.6	−38 45 43	0.9	0.35	Im	H				AM 0012–384
2	00 12 53.5	−21 43 17	2.3	1.3	S0	H	13.12	NED	0.06	NGC 59
3	00 13 00.0	−32 27 36	1.5	1.3	Im	H				FG 11
4	00 29 27.4	−33 32 30	0.9	0.8	Sph/Ir	L				FG 16, AM 0029–333
5	00 32 52.7	+36 13 21	5:	3:	Sph	EL				And III
6	00 34 43.3	+47 53 57	0.5	0.48	Ir	L				
7	00 35 18.6	−43 46 46	0.6	0.4	Im	H				AM 0035–434
261	00 38 30.5	−26 32 28	0.6	0.3	Ir	VL				
8	00 42 56.2	+37 45 51	4:	3:	Sph	EL				And I
9	00 46 51.9	−18 20 48	1.2	1.1	Sph	L				K 2
10	00 47 56.0	−20 10 44	1.3	1.2	Sph/Ir	L				FG 24
12	01 13 41.9	+33 09 20	4:	2.5:	Sph	EL				And II
13	01 39 29.5	+26 06 57	0.7	0.35	Ir	L	16.57	UH	0.29	
14	01 41 54.0	+27 02 14	1.6	0.6	Ir	L	17.47	6m	0.24	
15	01 43 53.6	+26 33 07	0.6	0.18	Ir	VL	18.22	UH	0.26	
262	01 43 55.7	+14 26 33	1.0	0.7	Ir	H	15.3	IK	0.08	UGC 1242
263	01 47 10.5	+28 40 03	0.7	0.55	Ir	L	18.4	IK	0.18	
16	01 52 30.2	+27 42 34	0.8	0.28	Ir	L	16.3	IK	0.29	
17	01 57 18.1	+28 35 26	0.6	0.3	Ir	L	17.2	IK	0.20	
18	01 57 22.0	+67 30 36	1.3	0.9	Sph?	EL				
264	02 01 46.3	+72 30 23	0.8	0.8	Ir	L	18.7	IK	2.96	
19	02 02 02.4	+68 45 57	2.2	1.7	Ir	L	16.38	6m	4.44	Cas 1
20	02 31 39.9	+22 21 45	1.2	0.7	Sph	VL				
21	02 31 52.2	+59 09 42	2.4:	1.0:	Ir	EL	19.5	IK	4.19	MB 1
22	02 51 54.1	+58 39 35	1.6	0.5	Ir	EL	19.8	IK	5.68	MB 3
23	02 53 01.1	+58 42 37	2.0:	0.3:	SB	EL	18.8	IK	6.20	Cas 2
24	02 53 54.5	+17 15 25	0.6	0.4	Ir?	L				
25	03 07 59.9	+60 09 28	2.8	0.8	Ir?	VL	19.0	IK	6.00	
26	03 18 53.2	+62 36 27	1.8	0.9	Ir	L				Cam C
27	03 20 29.5	−66 30 04	1.2	0.4	Ir	L				
28	03 28 35.2	+47 37 28	1.4	0.8	Ir	H	15.04	NED	2.41	UGC 2773
265	03 29 09.1	+67 56 36	2.0	0.8	Ir	L	17.0	IK	3.45	K 37=BK 7
29	03 33 18.9	−61 15 37	1.8	0.9	Im	EL	16.38	NED	0.05	FG 82, AM 0333–611
266	03 33 44.4	+67 26 00	2.0	0.7	Ir?	L	17.0	IK	3.44	BK 8
30	03 37 12.6	+68 02 50	1.0	0.5	Sph?	VL	18.6	IK	2.34	
31	03 37 26.2	−18 49 42	0.7	0.6	Ir/Sph	L				
32	03 37 26.8	+19 35 30	0.8	0.7	Ir	L				
267	03 38 25.0	+68 06 11	2.2	0.3	Ir?	L	17.7	IK	2.24	BK 12
33	03 38 39.9	+67 52 57	0.4:	0.4:	Ir	VL				
34	03 38 56.9	−45 30 52	1.5	1.5	Im	H	14.84	NED	0.0	AM 0338–453
35	03 40 23.7	+67 42 26	2.5	1.7	Ir	VL	17.2		2.5	
36	03 42 47.0	+67 30 57	1.0	0.6	Ir	L	17.4	IK	2.67	
37	03 47 15.0	+70 56 34	0.9	0.4	Ir?	VL	16.9	IK	2.37	BK 17
268	03 53 22.5	+69 08 24	1.1	0.6	Sph?	L	17.2	IK	2.72	BK 19
38	03 58 47.0	−62 38 57	0.7	0.5	Im	H				AM 0358–623

Table 1. continued

KK	R.A. (1950.0) Dec.			<i>a</i>	<i>b</i>	Type	S.B.	<i>B<sub>t</sub></i>	Ref.(B)	<i>A<sub>b</sub></i>	Identification			
	h	m	s	°	'	"								
1	2		3	4		5	6	7	8	9	10	11		
	arcmin													
269	03	59	34.8	+71	25	44	1.2	0.5	Ir	VL	17.0	IK	1.17	BK 21
39	04	00	06.0	+71	20	00	1.1:	0.9:	Ir?	EL	18.5	IK	1.12	
40	04	05	56.0	-55	27	21	1.6	1.0	Im	H	14.73	NED	0.0	AM 0405-552
270	04	06	44.0	+70	38	33	0.9	0.4	Ir	L	16.6	IK	1.17	
41	04	19	26.7	+72	41	27	3.7	2.1	Sph?	VL				Cam A
42	04	39	44.4	+61	15	47	0.6	0.6	Ir?	VL				
43	04	45	11.0	-36	00	18	2.2	0.8	Im/Sm	H	15.23	NED	0.0	AM 0445-360
271	04	46	40.8	+67	04	29	0.6	0.35	Sph?	L	17.7	IK	0.92	
44	04	48	03.3	+67	01	02	2.2	1.1	Ir	L	16.71	UH	0.93	
45	05	21	35.2	-34	37	13	0.55	0.4	Im	H	16.8	IK	0.0	AM 0521-343
46	05	23	05.4	-87	05	14	1.4	0.7	Im	L	15.90	NED	0.61	FG 154, AM 0522-870
47	05	27	49.0	-87	37	36	1.0	0.45	Im	L				AM 0528-873
48	05	28	26.3	-24	54	44	1.7:	0.3:	Im/Sm	VL	16.17	NED	0.06	AM 0528-245
49	05	39	00.7	+06	39	28	0.7	0.5	Im?	H	16.1	IK	2.85	
50	05	47	25.5	+02	52	10	0.5	0.4	Ir	VL	18.3	IK	2.87	
51	05	48	47.9	+02	53	48	2.1	0.5	Ir	EL				
52	06	02	18.4	-19	37	03	1.2	0.5	Ir	L	17.06	NED	0.38	
53	06	12	51.5	-51	31	41	1.1	0.6	Im	L	16.54	NED	0.15	AM 0612-513
54	06	24	16.7	-26	14	06	0.6	0.3	Ir	H	15.6	IK	0.43	AM 0624-261
55	06	37	55.8	-40	40	24	0.7	0.45	Ir	VL	16.23	NED	0.33	AM 0637-404
56	06	39	49.0	+36	41	03	1.3	0.4	Ir?	L	17.9	IK	0.66	
57	07	04	49.9	-21	57	29	1.9	1.1	Ir	L	15.8	IK	2.81	
58	07	07	56.2	-51	23	08	1.4	1.1	Ir	L	15.31	NED	0.25	FG 203
59	07	17	41.2	-57	19	06	2.1	1.6	Im/Sm	VL	16.1	IK	0.43	FG 206, AM 0717-571
60	07	20	23.0	+46	06	10	1.1	0.4	Ir	L				
61	07	29	13.1	+66	59	40	3:	2:	Sph	VL				DDO 44
62	07	31	50.6	+42	12	13	0.6	0.4	Ir	L	17.6	IK	0.21	
64	07	39	30.0	+69	41	09	0.6	0.2	Ir	L	16.6	IK	0.12	
65	07	39	40.2	+16	40	47	0.9	0.5	Ir	H	15.6	NED	0.09	
66	07	44	05.4	+40	18	42	0.7	0.4	Ir	L	17.0	IK	0.22	
67	08	00	34.9	+15	17	03	1.0	0.5	Ir	L				
68	08	27	17.0	-84	58	57	1.1	1.0	Ir?	H				
69	08	49	44.1	+33	59	13	2.4:	1.8:	Sph?	EL	16.8	IK	0.07	
70	08	52	16.3	+33	45	02	1.1	1.0	Sph?	EL				
71	09	06	56.7	-23	09	51	0.45	0.35	Ir/Sph	L	18.7	IK	0.73	AM 0906-231
72	09	09	28.5	-23	46	35	0.6	0.5	Sph	L				
73	09	10	15.6	-24	02	05	0.9	0.8	Sph	L				
74	09	12	18.0	-23	20	55	0.8	0.4	Im	L				FG 247, AM 0912-232
75	09	12	48.9	-25	40	30	0.9	0.6	Ir	L	18.0	IK	0.73	
U5005	09	21	37.4	+22	29	20	1.3	0.9	S?	H	15.9	IK	0.10	UGC 5005
76	09	38	23.6	-76	21	41	2.1	0.8	Ir	L				
77	09	46	08.5	+67	44	25	2.4	1.8	Sph	VL				
78	09	47	23.6	+31	41	26	0.5	0.3	Ir	H	17.6	IK	0.03	
79	09	50	03.5	+29	32	46	0.6	0.4	BCD?	H	17.0	IK	0.02	
80	09	50	45.0	+29	40	57	1.1	0.6	Ir	L				

Table 1. continued

KK	R.A. (1950.0)	Dec.	$a$	$b$	Type	S.B.	$B_t$	Ref.(B)	$A_b$	Identification
	h m s	° ' "	arcmin							
1	2	3	4	5	6	7	8	9	10	11
81	09 53 00.8	+68 49 47	2.6	2.6	Sph	VL				K 61
82	10 00 25.3	-05 57 55	0.6	0.5	Ir	L	17.73	NED	0.05	
82	10 00 25.3	-05 57 55	0.6	0.5	Ir	L	17.73	NED	0.05	
83	10 01 18.0	+66 48 00	1.7	1.7	Sph	VL				DDO 71, K 63
84	10 03 05.8	-07 30 20	1.9	1.3	Sph	L				K 65
85	10 03 09.0	+68 04 19	2.0	1.0	Sph	L				K 64, UGC 5442
86	10 05 22.0	+30 44 09	1.0	0.6	Ir?	L				MCG 5-24-18
87	10 12 37.6	-44 36 08	1.2	1.0	Sm?	H				AM 1012-443
88	10 13 57.4	-39 44 23	0.9	0.5	Ir	VL				AM 1013-394
89	10 22 47.6	+67 54 32	2.0	2.0	Sph	VL	15.8	NED	0.06	DDO 78
90	10 26 26.1	+23 01 57	1.0	0.15	Ir/S	VL	16.8	IK	0.0	
91	10 31 00.0	+66 16 00	1.0	0.8	Sph	VL				BK 6N
92	10 33 30.1	+27 47 52	0.8	0.7	Ir	L	16.9	IK	0.04	
93	10 43 45.8	+14 17 16	1.2	1.1	Ir	VL				
94	10 44 18.1	+13 15 48	1.2	0.6	Ir	VL	17.9	IK	0.04	
95	10 46 03.6	+64 59 20	2.2:	1.7:	Ir	VL				UGCA 220
96	10 47 48.8	+12 37 34	1.2:	0.8:	Sph	EL				
97	10 55 35.3	+20 22 35	0.7	0.5	Ir	L				
98	11 09 37.7	+17 01 32	0.9	0.4	Sph/Ir	VL	17.4	IK	0.0	F 640-3
99	11 11 11.2	-47 46 02	0.35	0.25	Im	H				AM 1111-474
100	11 11 22.9	+11 36 10	1.2	0.5	Ir	VL				
101	11 14 19.1	-32 22 39	0.7	0.4	Sph?	L				AM 1114-322
102	11 20 21.2	+19 44 58	0.6	0.4	Ir?	L	17.1	IK	0.0	F 570-3
103	11 21 03.8	+19 31 52	0.6	0.4	Sph	VL				
104	11 26 14.5	+18 33 25	1.1	0.7	Ir?	VL	17.1	IK	0.0	F 571-10
105	11 26 40.7	+46 23 23	0.8	0.5	Ir?	L	16.6	IK	0.0	
106	11 27 08.7	+52 40 54	0.8	0.7	Sph?	VL	16.7	IK	0.0	K 78
107	11 31 40.1	+17 26 14	0.7	0.4	Ir	L				
108	11 37 23.0	+46 45 29	0.7	0.6	Sph?	VL	17.7	IK	0.01	
109	11 44 33.5	+43 56 59	0.6	0.4	Ir?	L	17.5	IK	0.0	
110	11 46 01.0	+56 11 44	0.6	0.6	Ir?	L				
111	11 51 27.3	+16 59 55	0.6	0.45	Ir?	L	17.0	IK	0.14	
113	11 52 17.9	+47 04 59	0.5	0.3	Ir?	VL				
114	11 53 55.1	-36 27 39	0.5	0.35	Im	H				
115	11 55 37.1	+49 09 34	0.7	0.55	Im	H	16.2	IK	0.05	MCG 8-22-48
116	11 56 18.5	+46 00 45	1.3	0.7	Ir	L	15.8	IK	0.0	UGCA 259
117	11 57 24.6	+44 59 50	0.6	0.6	Ir?	L	17.1	IK	0.0	
118	11 58 42.9	+54 03 01	0.6	0.15	Ir	VL				
119	11 59 13.5	+28 38 26	0.8	0.7	Ir	L	17.0	IK	0.0	
120	12 00 56.2	-25 11 35	2.5	1.9	Im/Sm	L	16.8	IK	0.43	FG 320;AM 1200-251
121	12 02 52.3	+43 59 13	1.1	0.6	Ir	VL				
122	12 04 04.8	+55 02 38	1.0	0.25	Ir	L	16.4	IK	0.0	
123	12 04 20.5	+17 37 01	0.9	0.2	Ir	L				
124	12 06 16.1	+52 50 29	0.5	0.3	Ir?	EL				
125	12 10 16.9	+69 12 20	0.7	0.6	Sph?	VL				
126	12 10 47.5	+28 41 44	0.6	0.3	Ir	L	16.7	IK	0.02	

Table 1. continued

KK	R.A. (1950.0)	Dec.	<i>a</i>	<i>b</i>	Type	S.B.	<i>B<sub>t</sub></i>	Ref.(B)	<i>A<sub>b</sub></i>	Identification
	h m s	° ' "	arcmin							
1	2	3	4	5	6	7	8	9	10	11
127	12 10 51.5	+30 12 00	0.9	0.25	Ir	H	16.22	UH	0.04	
128	12 11 17.1	+05 37 54	0.6	0.4	Ir	L	17.0	IK	0.0	GR 5
129	12 11 38.9	+16 14 35	1.1	1.1	Sph	VL				K 88,VCC 108
U7298	12 14 02.2	+52 30 29	1.1	0.6	Ir	L	15.95	6m	0.04	UGC 7298
130	12 15 17.6	+28 45 09	0.6	0.3	Ir	L				K 95
131	12 15 58.1	+28 55 31	0.6	0.5	Sph/Ir	VL				K 98
132	12 16 38.5	+48 00 25	0.6	0.5	Sph/Ir	VL				
133	12 17 04.1	+43 39 50	0.4	0.3	Ir	L				
134	12 17 05.3	+47 43 54	0.3	0.3	Sph?	L				
135	12 17 09.5	+58 19 18	0.8	0.4	Ir	VL				
136	12 18 13.5	+47 16 43	0.5	0.5	Sph?	L				
137	12 19 13.0	+38 15 06	0.9	0.5	Ir	VL	16.08	UH	0.0	K 105
138	12 19 27.0	+28 31 09	0.9	0.5	Sph/Ir	VL	17.8	IK	0.08	
139	12 19 37.9	+40 01 23	0.9	0.4	Ir	L	16.7	IK	0.0	
140	12 20 15.7	+08 11 27	0.6	0.5	Ir	L	15.8	NED	0.0	VCC 584
141	12 20 23.2	+34 06 23	0.4	0.3	Ir	L	17.5	IK	0.0	
142	12 21 48.5	-42 00 57	1.0	0.5	Ir?	L				AM 1221-420
143	12 22 34.0	+61 20 20	1.0	0.7	Ir	L	16.59	UH	0.0	MCG 10-18-44
144	12 22 58.6	+28 45 33	1.5	0.5	Ir	L	16.5	IK	0.09	
145	12 24 18.6	+62 39 23	1.1	0.7	Ir	L	16.61	UH	0.01	UGC 7544
146	12 24 19.1	+13 27 15	1.0	0.35	Sm	L				DDO 124
147	12 25 20.3	-37 03 12	2.0	0.25	Im/Sm?	H	15.59	NED	0.20	AM 1225-370
148	12 25 32.4	+22 51 57	0.8	0.4	Ir	H	16.2	IK	0.07	UGC 7584
149	12 26 25.8	+42 27 20	0.8	0.45	Ir	L	15.01	NED	0.0	MCG 7-26-11
150	12 27 28.2	+08 12 24	1.1	0.7	Im	L				UGC 7636
151	12 27 57.5	+43 10 38	1.2	0.5	Ir?	L	15.8	IK	0.0	MCG 7-26-12
VPC873	12 30 02.9	+14 51 23	0.2	0.2	Ir	H				
152	12 30 58.4	+33 37 42	1.2	0.4	Ir	H	16.5	IK	0.03	MCG 06-28-9
N4523	12 31 16.9	+15 26 39	2.3	2.0	SBd?	H	14.42	NED	0.0	NGC 4523
I3517	12 31 58.8	+09 25 52	1.0	0.6	Ir	H	15.38	NED	0.0	IC3517
I3521	12 32 07.1	+07 26 12	1.2	0.6	BCD	H	13.98	NED	0.0	IC3521
153	12 32 44.4	+58 39 45	0.5	0.3	Ir	L				K 162
154	12 34 56.4	+39 01 12	0.7	0.4	Ir	H	15.74	6m	0.0	Arp 211
155	12 35 13.0	+07 22 42	1.2	1.0	Ir	L				UGC 7795
156	12 38 09.0	+47 38 21	0.5	0.2	Ir	L				
157	12 38 31.3	-40 53 03	1.7	0.4	Ir	VL				AM 1238-405
158	12 39 06.9	+40 05 13	1.1	0.7	Ir	L	16.7	IK	0.0	
159	12 40 48.0	+35 41 16	0.7	0.5	Ir?	L	17.4	IK	0.0	
160	12 41 35.8	+43 56 15	0.8	0.6	Ir	L	17.0	IK	0.0	
161	12 42 10.0	+71 03 52	1.1	0.7	Ir?	L	16.6	IK	0.0	K 195
162	12 42 57.3	+18 34 25	0.9	0.7	Ir?	EL				
163	12 43 37.6	+62 14 21	0.9	0.4	Ir?	VL				
164	12 45 26.9	+04 42 24	1.1	0.6	Ir	H	15.5	IK	0.01	
165	12 46 27.6	+32 14 33	0.7	0.7	Ir?	L				
166	12 46 49.5	+35 53 05	1.7	1.0	Sph	L				

Table 1. continued

KK	R.A. (1950.0)		Dec.		<i>a</i>	<i>b</i>	Type	S.B.	<i>B<sub>t</sub></i>	Ref.(B)	<i>A<sub>b</sub></i>	Identification		
	h	m	s	°	'	"								
1	2		3	4		5	6	7	8	9	10	11		
				arcmin										
167	12	49	17.8	+26	22	56	0.8	0.5	Ir?	L	16.7	IK	0.02	
168	12	50	37.8	+03	42	44	0.5	0.4	Ir?	VL	17.3	IK	0.0	
169	12	50	41.3	+12	54	24	0.8	0.6	Ir	L	17.1	IK	0.05	
170	12	52	11.5	-28	04	12	0.8	0.6	Im	L	17.01	NED	0.30	AM 1252-280
171	12	53	03.1	+33	15	22	0.7	0.6	Ir?	L				
172	12	54	14.0	+12	12	10	1.3	1.0	Ir	L	16.3	IK	0.07	UGC 8061
173	12	56	07.5	+18	04	58	0.7	0.45	Ir	L	17.2		0.11	
U8091	12	56	10.5	+14	29	17	1.6	0.9	Ir	H	14.68	NED	0.04	UGC 8091
174	12	56	29.7	-49	21	08	2.2	1.6	Ir	L	16.52	NED	0.89	FG 363
175	12	56	38.7	+35	45	03	0.6	0.4	Ir?	L	17.1	IK	0.01	
176	12	57	17.1	-19	08	26	1.7	0.7	Sph/Ir	VL	17.5	IK	0.17	
177	13	00	15.2	+22	16	02	0.8	0.7	Sph?	VL				F 575-1
178	13	00	32.8	+26	20	46	0.8	0.3	Ir	L				F 508-1
180	13	02	02.1	+18	01	37	1.4	0.7	Sph/Ir	VL				F 575-4
181	13	02	09.2	+27	02	31	0.7	0.6	Ir	L	17.25	NED	0.0	F 508-v1
182	13	02	12.8	-39	48	54	1.0	0.55	Ir	L	16.33	NED	0.37	
272	13	03	33.1	-49	33	38	1.6	0.6	Ir	L				ESO 219-G027
183	13	04	14.8	+18	16	08	0.6	0.45	Sph?	L	17.9		0.07	
185	13	06	36.8	+33	28	07	0.6	0.5	Ir	L				
186	13	07	03.5	-23	16	35	0.7	0.3	Im	H				AM 1307-231
187	13	07	23.3	-26	19	43	1.0	0.8	Im	H	17.3	IK	0.31	AM 1307-263
188	13	08	47.7	+37	26	39	0.9	0.6	Ir	L				
191	13	11	24.8	+42	18	31	0.8	0.7	Sph?	EL	18.2	IK	0.0	
192	13	12	02.7	+36	50	08	0.7	0.5	Sph?	L	16.7	IK	0.0	
193	13	13	16.4	+41	45	55	0.6:	0.6:	Ir/Sph	EL				
194	13	15	07.3	+44	39	44	0.6:	0.4:	Ir?	VL				
195	13	18	20.5	-31	16	05	1.3	0.6	Ir	VL	17.4	IK	0.23	
196	13	18	49.9	-44	48	05	0.6	0.4	Ir?	L				AM 1318-444
198	13	20	07.0	-33	18	23	0.6	0.5	Sph?	L				
199	13	20	31.4	-28	56	34	0.4	0.35	Ir	EL				
200	13	21	48.1	-30	42	43	1.3	0.8	Im	H	16.67	NED	0.19	K 15, AM 1321-304
201	13	22	20.0	-37	21	50	1.3	0.7	Ir/Sph	VL				AM 1321-372
202	13	22	37.7	-29	00	39	0.6	0.45	Ir	L				
204	13	25	28.7	-37	54	37	1.6	1.1	Ir?	L	14.97	NED	0.24	FG 393, AM 1325-375
205	13	26	46.8	+67	53	28	1.2	0.5	Ir	L				UGC 8509
206	13	31	18.6	+49	21	30	1.0	0.6	Ir	H	14.6	PGC		MCG 8-25-18
207	13	31	31.6	+56	45	26	0.6	0.4	Ir?	VL				
208	13	33	46.5	-29	19	00	6::	2.5:	Ir	EL	14.3			
209	13	35	52.8	+49	22	26	0.4	0.25	Ir	L				
210	13	37	31.2	-31	26	47	1.4	0.6	Im?	L	16.57	NED	0.11	FG 403
212	13	39	12.6	+43	32	31	0.8	0.6	Ir?	L	15.9	IK	0.0	MCG 07-28-51
215	13	40	45.2	-45	39	22	0.5	0.5	Im	L				AM 1340-453
216	13	41	24.2	+43	42	43	1.1	0.5	Ir	H	14.8	NED	0.0	UGC 8688
218	13	43	48.7	-29	43	47	1.7	0.7	Sph?	VL				
219	13	45	21.9	+39	37	26	0.7	0.4	Ir?	L	17.3			

Table 1. continued

KK	R.A. (1950.0)		Dec.		$a$	$b$	Type	S.B.	$B_t$	Ref.(B)	$A_b$	Identification		
	h	m	s	°	'	"	arcmin							
1	2	3	4	5	6	7	8	9	10	11				
220	13	45	22.2	+33	27	25	0.8:	0.7:	Ir	L	16.5	IK	0.0	
223	13	46	07.8	+40	48	08	0.4	0.3	Ir?	L	17.4	IK	0.0	
224	13	46	52.8	+43	50	54	1.0	0.4	Ir	L	16.9	IK	0.0	
225	13	52	51.5	+37	55	42	0.45	0.3	Ir	L				
226	13	53	01.2	-45	24	47	1.1	0.7	Ir	L				
227	13	54	03.7	+40	32	50	0.7	0.45	Ir	L				
228	13	57	21.1	+52	36	16	0.9	0.8	Ir?	L	16.6	IK	0.0	UGC 8914
229	13	59	54.3	-46	51	45	0.8	0.6	Ir	L	16.55	NED	0.49	AM 1359-465
230	14	05	01.5	+35	18	09	0.6	0.5	Ir	VL	16.9	IK	0.0	
274	14	06	37.4	-30	02	30	0.8	0.6	Im	H	16.8	IK	0.22	
231	14	15	34.6	+23	18	21	0.8	0.3	Ir	L				
275	14	16	00.0	-45	05	15	1.2	0.6	Im	H	14.62	NED	0.30	AM 1415-450
232	14	40	48.0	+50	01	40	0.9	0.5	Ir	VL	17.2	IK	0.05	
233	14	45	51.4	+53	02	31	1.1	0.7	Ir	L	15.9	IK	0.0	MCG 9-24-40
234	14	57	13.6	-51	31	55	1.7	0.6	Ir	VL				FG 434
236	15	04	09.5	+56	03	24	0.9	0.7	Sph?	VL	19.17	UH	0.01	
237	15	06	46.1	+56	27	03	0.7	0.5	Ir?	L	18.21	UH	0.17	K 233
238	15	11	59.0	-22	56	23	0.8	0.6	Im	L	17.11	NED	0.47	FG 458, AM 1511-225
239	15	25	33.2	-42	36	36	1.9	0.7	Ir	L				FG 444
240	16	22	23.0	-59	50	33	2.9	0.7	Sm?	L	14.8	IK	0.90	ESO 137- G27
241	16	22	59.4	-60	20	53	1.6	1.0	Ir	VL	16.6	IK	0.89	FG 447
242	17	53	18.0	+70	08	41	0.8	0.6	Sph?	EL	19.0	IK	0.14	
243	18	18	05.0	-62	17	44	0.9	0.6	Ir	L	16.59	NED	0.44	FG 458, AM 1818-622
245	19	16	17.0	+63	52	54	1.5	1.2	BCD	H				NGC 6789
246	20	00	48.0	-31	49	24	1.2:	0.5:	Ir	VL	17.06	NED	0.44	FG 492
247	20	04	51.7	-61	12	30	0.9	0.6	Ir	L				AM 2004-611
249	20	25	58.8	-31	51	07	0.8	0.4	Ir	L	15.65	NED	0.26	AM 2025-315
250	20	29	14.4	+60	16	22	1.8	0.8	Ir	VL	15.74	UH	1.31	UGC 11583
251	20	29	31.9	+60	11	03	1.6	0.8	Ir?	VL	16.49	UH	1.28	
252	20	30	33.5	+60	38	34	0.9	0.9	Sph?	VL	16.15	6m	1.95	
253	20	33	30.7	-69	21	58	1.0	0.9	Ir	L				AM 2033-692
254	20	33	46.2	+60	55	12	1.5	0.9	Ir?	EL				
255	21	54	21.4	-60	32	42	2.5	1.2	Ir	L	16.39	NED	0.0	FG 532, AM 2154-603
256	22	09	04.6	-43	25	29	0.6	0.5	Im	L				AM 2209-432
257	22	19	25.2	-48	39	26	2.2	1.3	Ir	L	15.3	IK	0.0	FG 545
258	22	37	56.3	-31	03	40	1.6	0.8	Ir?	L				K 20, FG 554, AM 2237-310
259	23	09	36.4	-44	03	01	4:	2.2:	Sm?	L				FG 569
260	23	11	46.9	-43	52	39	4.5	1.8	Ir	VL				



**Table 2.** List of new Local Volume dwarf candidates

KK	HI-flux	$S_{\max}$	velocity	line width	distance	$M_{Bt}$	HI mass	$M_{\text{HI}}/L_B$	Comments
No.	$\text{Jy km s}^{-1}$	mJy	$\text{km s}^{-1}$	$\text{km s}^{-1}$	Mpc		$10^7 M_{\odot}$		
1	2	3	4	5	6	7	8	9	10
1		$\pm 15$							ATCA
2	2.66	$57 \pm 5.9$	$361 \pm 2$	50 62 76	5.4	-15.70	1.9	0.06	
3		$\pm 24$							N
4		$\pm 35$							N
5		$\pm 3.5$							
6		$\pm 4$							
7		$\pm 20$							ATCA
261	2.6	$87 \pm 13$	$2694 \pm 2$	32 40 41	35.9				
8		$\pm 3.3$							
9		$\pm 8$							
10		$\pm 8.3$							
12		$\pm 3.6$							
13	1.33	$40 \pm 7$	$357 \pm 9$	31 45 52	7.0	-13.15	1.5	0.53	
14	3.04	$74 \pm 6$	$420 \pm 4$	36 56 60	7.9	-12.53	4.4	2.73	
15	0.9	$27 \pm 6$	$368 \pm 4$	25 37 40	7.2	-11.69	1.1	1.51	
262	1.1	$18 \pm 7$	$7356 \pm 3$	105 124 126	99.8	-20.55	2.6	0.10	
263	0.92	$25 \pm 7$	$3841 \pm 4$	38 48 50	53.5	-15.49	6.1	2.48	
16	0.97	$37 \pm 5$	$206 \pm 3$	22 32 34	4.9	-12.76	5.6	0.28	
17	0.95	$28 \pm 5$	$156 \pm 3$	34 52 53	4.2	-11.34	5.1	0.95	
18		$\pm 3.8$							
264	3.28	$34 \pm 6$	$2918 \pm 7$	128 143 155	42.0	-17.38	130	0.98	
19	46.4	$930 \pm 4.6$	$35 \pm 2$	49	3.5	-15.87	14	0.39	
20	11.18	$760 \pm 2.2$	$-70.2 \pm 1$	14 20 22					
21	9.0	$160 \pm 10$	$189 \pm 3$	60 79 85	5.3	-13.57	6.0	1.44	
22	30.8	$330 \pm 30$	$96 \pm 2$	100 116 ..	3.9	-14.19			
23	205	$960 \pm 10$	$112 \pm 2$	187 202 204	4.1	-16.04	40.6	2.05	
24		$\pm 3.7$							
25	8.84	$54 \pm 3.7$	$2767 \pm 2$	260 273 277	39.5	-19.35	330	0.38	
26		$\pm 2.6$							
27		$\pm 6$							ATCA
28	26.1	$349 \pm 30$	$216 \pm 1$	81 92 96	4.3	-15.83	11.0	0.34	
265	26.1	$202 \pm 5$	$1378 \pm 2$	144 178 187	21.1	-18.33	280	0.83	
29	0.95	$33 \pm 3$	$1152 \pm 5$	38 52 56	12.6	-14.38	3.6	0.41	ATCA
266	54.24	$629 \pm 5.4$	$1434 \pm 1$	53 119 125	21.8	-18.60	600	1.41	
30	0.89	$20 \pm 2.3$	$1159 \pm 6$	45 59 61	18.1	-15.23	7.0	0.36	
31		$\pm 8.1$							
32		$\pm 8$							
267	2.14	$32 \pm 3.1$	$1140 \pm 8$	99 110 ..	20.4	-16.67	15.0	0.19	
33		$\pm 5$							
34	3.26	$61 \pm 4$	$1554 \pm 3$	60 77 80	18.4	-16.48	26.0	0.43	ATCA
35	0.82	$35 \pm 6$	$119 \pm 3$	25 .. ..	2.1	-12.11	0.085	0.08	
36	3.45	$33 \pm 2.8$	$1267 \pm 7$	120 134 142	19.5	-16.87	31.0	0.35	
37	1.24	$19.5 \pm 2.9$	$836 \pm 5$	101 109 111	13.8	-16.41	5.4	0.09	
268	7.68	$80 \pm 2.2$	$1302 \pm 2$	120 134 138	20.0	-17.20	71	0.61	
38		$\pm 7$			7.3				ATCA

kk 4: heliocentric velocity =  $1651 \text{ km s}^{-1}$  (NED)

kk 7, 9, 10: undetected in HI (2)

kk 8, 12, 5: ANDI, II, III have been searched for HI within the radial velocity range  $-550$  to  $770 \text{ km s}^{-1}$

kk 18, 26, 32: undetected in HI (3)

kk 20: probably local HI

kk 35: resolved, companion to IC 342

Table 2. continued

KK	HI-flux	$S_{\max}$	velocity	line width	distance	$M_{Bt}$	HI mass	$M_{HI}/L_B$	Comment
No.	Jy km s <sup>-1</sup>	mJy	km s <sup>-1</sup>	km s <sup>-1</sup>	Mpc		10 <sup>7</sup> $M_{\odot}$		
1	2	3	4	5	6	7	8	9	10
269	6.83	69 ± 5	1734 ± 2	120 133 136	25.8	-16.48	110	1.75	
39	2.0	21 ± 3.5	1732 ± 4	123 125 126	25.7	-14.73	17	1.42	
40	2.87	53 ± 5	1066 ± 2	101 109 112	11.4	-15.69	8.8	0.30	ATCA
270	4.6	110 ± 5	1159 ± 1	42 57 59	18.1	-16.09	36	0.85	
41		± 4.1							
42		± 5							
43	7.95	135 ± 26	1372 ± 6	46 111 130	15.7	-16.04	46	1.14	
271	0.79	12 ± 4	1581 ± 25		23.4	-15.22	10	0.54	
44	4.47	220 ± 15	77 ± 1	18 28 32	2.2	-11.14	0.50	1.12	
45	4.5	108 ± 15	955 ± 3	58 78 83	9.9	-13.26	10	3.29	
46	1.34	54 ± 5	1745 ± 3	43 48 50	21.0	-16.69	14	0.19	ATCA
47		± 6.4							ATCA
48	6.87	72 ± 4.9	1850 ± 2	96 120 121	22	-16.11	80	1.86	
49	8.92	140 ± 6.7	455 ± 2	55 84 87	4.8	-15.26	4.9	0.25	
50	2.08	21 ± 5.1	1776 ± 4	111 117 118	22.1	-16.36	23	0.42	
51		± 4.9							
52	5.85	74 ± 4.1	883 ± 2	94 105 108	9.1	-13.36	11	3.27	
53	0.85	29 ± 3	1253 ± 3	34 42 44	13.2	-14.39	3.5	0.39	ATCA
54	3.12	97 ± 6.4	491 ± 2	29 35 39	3.4	-12.71	0.89	0.47	
55	1.26	53 ± 5	824 ± 6	51 63 66	7.5	-13.59	1.7	0.39	ATCA
56	0.8	13 ± 3	2287 ± 6	58 83 85	30.6	-15.53	18.0	0.70	
57	7.26	73 ± 6	738 ± 3	116 132 136	6.7	-16.29	7.8	0.15	
58	2.15	82 ± 5	1054 ± 2	27 35 37	10.3	-15.07	5.4	0.32	ATCA
59	4.04	94 ± 6	1145 ± 2	21 45 67	11.5	-14.71	13.0	1.06	ATCA
60		± 4.3							
61		± 6							
62	2.71	37 ± 3.4	3100 ± 10	94 114 124	41.5	-15.90	110	3.07	
64	2.90	25 ± 3.5	3867 ± 5	125 153 156	53.5	-17.48	200	1.28	
65	3.43	86 ± 5	279 ± 5	38 60 68	2.2	-11.39	0.39	0.70	
66	1.61	17 ± 4	2976 ± 9	63 73 76	39.7	-16.38	60	1.08	
67		± 4.7							
68		± 6							ATCA
69	3.58	154 ± 6	464 ± 1	20 30 33	5.7	-12.12	2.6	2.42	
70		± 5							
71	1.54	49 ± 5.7	179 ± 3	27 38 41					
72		± 6							
73		± 5.3							
74		± 5.2							
75	1.40	27 ± 5.1	2866 ± 4	68 79 81	34.6	-15.54	40	1.56	
U5005	6.93	0.66 ± 3.6	3824 ± 4	109 122 126	49.7	-17.79	390	1.92	
76		± 7							ATCA
77		± 5.5							
78	15.8	204 ± 4.9	520 ± 2	80 99 104	6.3	-11.56	15	22.92	
79	1.2	20 ± 4	1638 ± 8	61 73 90	21.0	-14.75	13	1.01	
80		± 3.3							
kk 42: undetected in HI (3)									
kk 61: undetected in HI (6), companion of NGC 2403									
kk 65: companion of UGC 3974									
kk 68: $v = 738$ km s <sup>-1</sup> (1)									
kk 69, 70: companion of NGC 2683									
kk 71: local HI?									
kk 74: undetected in HI (5)									
kk 78: UGC 5272B, confusion with UGC 5272 at 1.9'									

Table 2. continued

KK	HI-flux	$S_{\max}$	velocity	line width	distance	$M_{Bt}$	HI mass	$M_{\text{HI}}/L_B$	Comment
No.	$\text{Jy km s}^{-1}$	mJy	$\text{km s}^{-1}$	$\text{km s}^{-1}$	Mpc		$10^8 M_{\odot}$	$10^9 M_{\odot}$	
1	2	3	4	5	6	7	8	9	10
81		$\pm 8.5$							
82	3.94	$165 \pm 6$	$185 \pm 1$	21 31 35					
82	1.54	$40 \pm 3.2$	$3769 \pm 6$	35 48 55	47.3	-15.75	84	2.53	
83		$\pm 6.2$							
84		$\pm 7$							
85		$\pm 5.7$							
86		$\pm 4.6$							
87		$\pm 6$							ATCA
88		$\pm 7$							ATCA
89	0.84	$27 \pm 6.3$	$2788 \pm 2$	32 62 63	37.2	-17.11	27	0.25	
90	2.5	$33 \pm 3.8$	$1206 \pm 4$	95 105 108	14.9	-14.66	13	1.15	
91		$\pm 6.8$							
92	2.74	$46 \pm 3.9$	$1371 \pm 3$	71 79 81	17.5	-14.39	19.0	2.19	
93		$\pm 6$							
94	1.52	$42 \pm 3.5$	$833 \pm 3$	28 52 55	9.4	-12.21	3.1	2.63	
95		$\pm 4.5$							
96		$\pm 6.7$							
97		$\pm 6.5$							
98	0.78	$9 \pm 2.2$	$1205 \pm 20$	48 118 120	14.7	-13.68	4.0	0.87	
99		$\pm 6$							ATCA
100		$\pm 6$							
101		$\pm 26$							N
102	1.58	$19.6 \pm 3.3$	$3366 \pm 5$	86 117 120	43.8	-16.22	71	1.49	
103		$\pm 8.8$							
104	1.36	$21 \pm 5.6$	$1303 \pm 3$	62 114 116	16.2	-14.08	8.4	1.26	
105	2.04	$28 \pm 3.7$	$1555 \pm 3$	80 96 98	21.4	-15.18	21	1.16	
106	0.28	$15 \pm 4.2$	$592 \pm 5$	23 30 32	8.9	-13.09	0.53	0.20	
107		$\pm 5$							
108	6.99	$72 \pm 3.8$	$736 \pm 3$	88 110 138	10.5	-12.46	18	12.12	
109	0.7	$37 \pm 4.5$	$214 \pm 3$	11 23 36	3.4	-10.28	0.19	0.95	
110		$\pm 4$							
111	1.79	$34 \pm 3.8$	$980 \pm 4$	41 52 54	12.0	-13.62	0.61	1.40	
113		$\pm 4.3$							
114		$\pm 31$							N
115	2.29	$37 \pm 3$	$826 \pm 4$	74 91 94	12.0	-14.32	7.4	0.90	
116	5.81	$129 \pm 3.1$	$1151 \pm 2$	41 52 54	16.1	-15.41	35	1.53	
117	0.44	$14 \pm 3$	$1171 \pm 10$	38 50 54	16.3	-13.96	2.5	0.42	
118		$\pm 4.8$							
119	0.71	$23 \pm 3$	$841 \pm 3$	34 42 44	10.9	-13.23	2.0	0.65	
120	17.12	$253 \pm 6.5$	$1785 \pm 1$	70 85 89	20.8	-15.30	180	8.73	
121		$\pm 3.4$							
122	2.32	$33 \pm 4$	$850 \pm 2$	72 91 93	12.7	-14.52	8.5	0.85	
123		$\pm 7.6$							
124		$\pm 4.6$							
125		$\pm 4$							
126	1.24	$25 \pm 3.5$	$1028 \pm 10$	36 57 62	13.5	-14.17	5.1	0.71	
kk 82: 15' from PGC 29086 ( $v = 662 \text{ km s}^{-1}$ ) kk 84: companion of NGC 3115 kk 87: heliocentric velocity $969 \text{ km s}^{-1}$ (NED) kk 88: heliocentric velocity 263 and $2982 \text{ km s}^{-1}$ (6) kk 89: highly probably member of M 81 group, HI emission probably not from this object kk 94, 96: near Leo triplet kk 103: heliocentric velocity $1894 \text{ km s}^{-1}$ (NED) kk 108: NGC 3782 ( $v = 739 \text{ km s}^{-1}$ ) at 7.6' NW, definitely confused in HI									

Table 2. continued

KK	HI-flux	$S_{\max}$	velocity	line width	distance	$M_{Bt}$	HI mass	$M_{HI}/L_B$	Comments
No.	$\text{Jy km s}^{-1}$	mJy	$\text{km s}^{-1}$	$\text{km s}^{-1}$	Mpc		$10^7 M_{\odot}$		
1	2	3	4	5	6	7	8	9	10
127	2.87	$41 \pm 4.4$	$131 \pm 6$	64 112 117	1.6	-10.23	0.18	0.92	
128	1.80	$24 \pm 3.2$	$1690 \pm 2$	56 73 76	21.0	-14.72	19	1.58	
129		$\pm 6.1$							
U7298	5.44	$193 \pm 6.5$	$172 \pm 1$	26 38 41	3.5	-12.01	1.6	1.66	
130		$\pm 4.6$							
131		$\pm 7.8$							
132		$\pm 7.8$							
133		$\pm 4.7$							
134		$\pm 5$							
135		$\pm 4.2$							
136		$\pm 3.9$							
137	1.63	$43 \pm 5.2$	$567 \pm 4$	42 55 58	8.0	-13.60	2.6	0.60	
138	1.39	$45 \pm 7.7$	$3614 \pm 2$	47 61 63	48.0	-15.86	82	2.40	
139	3.85	$65 \pm 2.9$	$1074 \pm 3$	60 80 83	14.9	-14.40	20	2.22	
140	3.22	$57 \pm 3.7$	$1290 \pm 3$	90 100 115	15.8	-15.25	20	1.03	
141	0.83	$38 \pm 4.9$	$569 \pm 2$	22 28 30	7.8	-12.03	0.85	0.84	
142		$\pm 7$							ATCA
143	6.2	$98 \pm 3.8$	$706 \pm 2$	66 80 85	11.2	-13.75	19	3.88	
144	8.41	$187 \pm 3.7$	$483 \pm 1$	45 60 64	6.3	-12.91	7.9	3.48	
145	3.1	$6.1 \pm 9$	$707 \pm 4$	50 73 78	11.2	-13.78	9.5	1.88	
146		$\pm 4.1$							
147	21.3	$121 \pm 23$	$3026 \pm 3$	173 284 288	37.1	-18.06	6.90	2.64	N
148	3.36	$85 \pm 3.6$	$602 \pm 3$	38 54 59	7.6	-13.46	4.6	1.21	
149	3.0	$56 \pm 4.2$	$407 \pm 2$	60 62 71	6.1	-14.10	2.7	0.39	
150		$\pm 6.1$							
151	2.71	$69 \pm 3.6$	$431 \pm 8$	33 35 70	6.5	-13.53	2.7	0.68	
VPC873		$\pm 2.9$							
152	2.33	$72 \pm 2.2$	$838 \pm 3$	34 43 45	11.4	-14.13	7.4	1.05	
N4523	20.54	$194 \pm 6.1$	$260 \pm 2$	120 134 139	2.6	-12.71	3.4	1.80	
I3517	1.81	$29 \pm 6.2$	$438 \pm 3$	74 106 108	4.7	-13.11	0.92	0.34	
I3521	0.38	$11 \pm 3.2$	$932 \pm 8$	34 44 50	11.1	-16.45	1.1	0.2	
153		$\pm 4.9$							
154	2.18	$46 \pm 5.4$	$455 \pm 4$	31 42 60	6.6	-13.53	2.3	0.56	
155		$\pm 4.1$							
156		$\pm 4.7$							
157		$\pm 6$							ATCA
158	0.66	$26 \pm 4.6$	$636 \pm 2$	27 33 34	9.1	-13.24	1.4	0.45	
159	1.83	$38 \pm 4.6$	$1822 \pm 4$	43 73 75	24.7	-14.66	26.0	2.28	
160	0.87	$36 \pm 4.7$	$299 \pm 3$	28 40 44	4.9	-11.53	0.51	0.80	
161	2.28	$30 \pm 3.1$	$1800 \pm 5$	72 82 88	26.3	-15.63	24	0.88	
162		$\pm 4.5$							
163		$\pm 4.6$							
164	9.04	$214 \pm 4.5$	$993 \pm 2$	30 47 50	11.9	-15.07	30	1.82	
165		$\pm 3.7$							
166		$\pm 7.6$							

kk 127: in spite of  $v = 131 \text{ km s}^{-1}$  the galaxy looks distant  
 kk 129: undetected in HI (7)  
 kk 138: NGC 4295 ( $v = 8568 \text{ km s}^{-1}$ ) at  $4'$ , no confusing object to be seen  
 kk 146: heliocentric velocity  $162 \text{ km s}^{-1}$  (6)  
 kk 150: heliocentric velocity  $468 \text{ km s}^{-1}$  (6)  
 kk 155: heliocentric velocity  $61 \text{ km s}^{-1}$  (6)  
 kk 162: the object looks like an emulsion defect  
 kk 164:  $v = 4660 \text{ km s}^{-1}$  (NED), NGC 4688 ( $v = 987 \text{ km s}^{-1}$ ) at  $6.7'$  SW: confused

Table 2. continued

KK No.	HI-flux Jy km s <sup>-1</sup>	S <sub>max</sub> mJy	velocity km s <sup>-1</sup>	line width km s <sup>-1</sup>	distance Mpc	M <sub>Bt</sub>	HI mass 10 <sup>7</sup> M <sub>⊙</sub>	M <sub>HI</sub> /L <sub>B</sub>	Comments
1	2	3	4	5	6	7	8	9	10
167	1.99	51 ± 3.2	1247 ± 4	37 50 52	16.6	-14.55	13	1.24	
168	1.35	45 ± 4.3	2785 ± 4	39 41 54	35.8	-15.53	33	1.31	
169	1.65	39 ± 4.2	1818 ± 2	46 54 55	23.4	-14.88	20	1.40	
170	1.71	43 ± 4.3	641 ± 3	35 55 59	6.5	-12.57	1.7	1.04	
171		± 10							
172	2.0	43 ± 5.1	560 ± 3	53 64 66	6.6	-12.96	2.1	0.88	
173	2.58	74 ± 8.4	1015 ± 2	20 70 75					
U8091	8.78	310 ± 7	214 ± 1	27 38 41	2.2	-12.48	0.98	0.75	
174	8.76	9.2 ± 1	1905 ± 2	138 145 147	22.2	-16.19	100	2.18	ATCA
175	2.28	68 ± 4	701 ± 3	38 43 48	9.9	-13.00	5.3	2.15	
176	3.41	92 ± 5.0	828 ± 1	41 48 50	8.9	-12.62	6.2	3.58	
177		± 4.8							
178		± 7.2							
180		± 8							
181	3.64	45 ± 6.5	1930 ± 3	88 100 102	25.8	-14.86	60	4.39	
182	2.12	108 ± 6	613 ± 1	16 22 24	5.2	-12.78	1.3	0.66	ATCA
272		± 7							ATCA
183	2.23	29 ± 8.1	1573 ± 3	87 93 95	5.2	-10.75	1.4	4.53	
185		± 5.7							
186		± 9.8							
187	1.70	39 ± 5.9	2087 ± 6	38 80 85	25.3	-15.27	26	1.31	
188		± 8.5							
191	2.41	40 ± 6	368 ± 6	62 81 92	5.9	-10.71	2.0	6.69	
192	0.67	22 ± 5.8	1203 ± 9	27 37 40	16.8	-14.52	4.0	0.40	
193		± 4.4							
194		± 6							
195	5.5	200 ± 20	564 ± 4	21 27 30	4.9	-11.51	3.1	5.0	N
196		± 36							ATCA
198		± 32							N
199		± 7							
200	1.33	57 ± 8	485 ± 3	20 31 34	3.9	-11.62	0.51	0.74	
201		± 28							N
202		± 6.9							
204	5.6	95 ± 20	1463 ± 8	71 89 98	16.7	-16.50	37	0.60	N
205		± 4.3							
206	6.2	115 ± 9	588 ± 2	57 71 89	9	-15.43	12	0.51	
207		± 5							
208	36.2	878 ± 12	400 ± 2	36 59 65					
209		± 5.2							
210	6.4	100 ± 18	1650 ± 2	89 98 102	20.2	-15.31	62	2.97	N
212	1.07	23 ± 4.4	1241 ± 6	57 65 68	17.9	-15.44	9.0	0.39	
215		± 7							ATCA
216	5.30	90 ± 5.1	1355 ± 6	63 82 89	19.4	-16.77	50	0.63	
218		± 15							
219	0.85	17 ± 4.6	1276 ± 3	68 98 99	17.9	-14.15	6.4	0.90	

kk 170: HI detection by Matthewson & Gallagher (1995)

kk 174:  $v = 1905 \text{ km s}^{-1}$  conflicts with the galaxy morphology

kk 177, 180: undetected in HI (7)

kk 191: NGC 5055 ( $v = 510 \text{ km s}^{-1}$ ,  $W = 406 \text{ km s}^{-1}$ ) at 24.1' E, possible confusion through far sidelobe

kk 192: NGC 5033 ( $v = 876 \text{ km s}^{-1}$ ,  $W = 452 \text{ km s}^{-1}$ ) at 10.8' W, different velocity range, no confusion

kk 205: undetected in HI (6)

kk 208: 20' from NGC 5236, confusion with the extended HI-halo of M 83 (4)

Table 2. continued

KK	HI-flux	$S_{\max}$	velocity	line width	distance	$M_{Bt}$	HI mass	$M_{\text{HI}}/L_B$	Comments
No.	$\text{Jy km s}^{-1}$	mJy	$\text{km s}^{-1}$	$\text{km s}^{-1}$	Mpc		$10^7 M_{\odot}$		
1	2	3	4	5	6	7	8	9	10
220	0.8	$33 \pm 5.6$	$769 \pm 2$	27 33 34	11.1	-13.76	2.3	0.47	
223	4.26	$53 \pm 5.5$	$2594 \pm 8$	69 130 138	35.8	-15.45	130	5.51	
224	0.84	$25 \pm 6.7$	$1156 \pm 6$	26 43 54	16.8	-14.49	5.3	0.55	
225		$\pm 6.3$							
226		$\pm 7$							ATCA
227		$\pm 7.8$							
228	1.55	$41 \pm 5.9$	$1972 \pm 3$	44 64 66	28.1	-15.68	30	1.02	
229	0.31	$25 \pm 3$	$1355 \pm 1$	14 21 24	15.3	-14.95	1.7	0.12	ATCA
230	1.87	$113 \pm 6.4$	$61 \pm 1$	20 29 32	1.9	-9.57	0.17	1.58	
274	6.3	$57 \pm 15$	$2598 \pm 6$	62 73 78	32.5	-16.06	160	3.79	N
231		$\pm 7.1$							
275	9.08	$106 \pm 5$	$1633 \pm 3$	122 148 153	19.2	-17.30	79	0.61	ATCA
232	0.86	$24 \pm 5.5$	$2960 \pm 9$	37 47 51	41.5	-16.11	36	0.83	
233	4.18	$55 \pm 4.5$	$724 \pm 2$	76 91 93	11.9	-14.60	14	1.26	
234		$\pm 6$							ATCA
236	5.18	$20 \pm 6$	$-150 \pm 1$	21 34 36					
237	5.22	$174 \pm 5.6$	$-177 \pm 1$	24 34 37					
238	2.03	$32 \pm 5.9$	$2435 \pm 9$	58 88 92	36.0	-16.22	64	1.34	
239		$\pm 6$							ATCA
240	5.2	$30 \pm 3$	$1371 \pm 5$	176 188 191	16.1	-17.55	13	0.08	ATCA
241	12.32	$174 \pm 8$	$1152 \pm 3$	65 90 84	13.2	-15.03	51	3.17	ATCA
242	2.03	$44 \pm 3$	$426 \pm 6$	100 118 133	9.1	-11.01	8	20.15	
243	2.17		$957 \pm 2$	32 60 70	11.0	-14.18	6.8	0.78	
245		$\pm 4$							
246	8.3	$149 \pm 30$	$358 \pm 3$	53 60 71	5.4	-12.28	5.3	3.68	N
247		$\pm 7$							ATCA
249	18.8	$68 \pm 20$	$2089 \pm 10$	124 131 158	28.5	-17.09	360	2.93	N
250	20.0	$244 \pm 6$	$127 \pm 2$	90 104 107	5.6	-14.54	15	1.44	
251	14.62	$223 \pm 8$	$126 \pm 2$	64 87 94	5.6	-13.72	11	2.23	
252	1.36	$45 \pm 5$	$132 \pm 3$	27 47 50	5.6	-14.56	1.1	0.10	
253		$\pm 7$							ATCA
254		$\pm 8$							
255	1.16	$63 \pm 4$	$1682 \pm 1$	36 44 48	21.1	-15.45	12	0.52	ATCA
256		$\pm 7$							ATCA
257	3.36	$70 \pm 5$	$705 \pm 1$	77 80 84	8.8	-14.59	6.2	0.58	ATCA
258		$\pm 32$							N
259		$\pm 7$							ATCA
260		$\pm 6$							ATCA
<p>kk 223: 6.5 arcmin NE of UGC 8726 (<math>v = 2334 \text{ km s}^{-1}</math>), confused  kk 227: companion of NGC 5371  kk 236, 237: probably local HI  kk 242: near NGC 6503, no obvious confusing object within the antenna beam and 1st sidelobes  kk 245: resolved into stars with the 6-m telescope (SAO), <math>v = -157 \text{ km s}^{-1}</math> (1)  kk 254: undetected in HI (3)  kk 260: near NGC 7531</p>									
<p>1. Huchra J. (1995)  2. Gallagher J.S. et al. (1995).  3. Huchtmeier W.K. et al. (1997).  4. Huchtmeier W.K. et al. (1981).  5. Matthews L.D. et al. (1995).  6. Huchtmeier W.K. &amp; Richter O.G. (1989b).  7. Schombert J.M. et al. (1992).</p>									