

Table 2. List of new local void dwarf candidates: HI data

KKR	HI-flux	S_{\max}	velocity	line width	distance	M_{Bt}	HI mass	M_{HI}/L_B	Comments
No.	Jy km s ⁻¹	mJy	km s ⁻¹	km s ⁻¹	Mpc		10 ⁷ M _⊙		
1	2	3	4	5	6	7	8	9	10
1		±6							
2	1.26	19 ± 6.3	3260 ± 3	57 95 96	43.2	-17.14	55	0.5	
3	2.1	110 ± 9.6	63 ± 2	18 27 28	1.9	-9.57	0.17	1.58	
4		±6.8							
5	8.74	74 ± 4.2	1470 ± 3	93 106 109	19.2	-15.17	76	4.2	
6	2.76	61 ± 6.8	1546 ± 2	34 73 74	19.9	-15.18	26	1.4	
7		±6.5							
8		±5.8							
9		±9							
10		±10							
11	2.64	75 ± 9	590 ± 3	29 46 49	10.2	-13.41	6.5	1.8	
12	4.10	102 ± 8	1793 ± 3	42 60 65	24.4	-15.67	58	2.0	
13	4.83	49 ± 7.9	802 ± 2	39 44 47	12.2	-14.23	17	2.2	
14		±11							
15	1.44	40 ± 8.4	1588 ± 4	23 44 61	21.1	-14.47	15	1.6	
16	2.67	37 ± 7.8	1616 ± 3	99 109 111	21.3	-15.72	29	0.95	
17		±8.1							
18	1.25	44 ± 7	722 ± 2	38 44 45	10.5	-14.40	3.3	0.36	
19		±9							
20	4.32	46 ± 8	1775 ± 2	80 106 108	24.1	-15.81	59	1.8	
21	6.12	57 ± 5.7	1719 ± 2	82 93 94	24.3	-15.52	85	3.4	
22	2.72	151 ± 10	3261 ± 1	19 25 27	44.7	-17.02	130	1.3	
23	5.83	66 ± 6.5	1084 ± 2	103 114 116	16.0	-15.50	35	1.4	
24		±12							
25	2.20	101 ± 10	-135 ± 2	14 30 35					local H I
26	2.31	59 ± 7	2251 ± 2	60 71 72	31.6	-15.66	54	1.9	
27		±6.7							
28		±8.1							
29		±8.4							
30	4.90	68 ± 5.8	1484 ± 2	80 87 91	21.4	-15.35	53	2.5	
31		±11							
32		±7.4							
33	8.06	74 ± 8	2596 ± 2	128 137 144	36.3	-17.10	250	2.3	
34	4.17	52 ± 6	1504 ± 5	89 102 106	22.1	-14.84	48	3.6	
35		±7.2							
36		±12							
37		±13							
38		±12							
39	2.58	59 ± 10	2043 ± 4	41 69 73	30.0	-15.03	55	3.4	
40	3.75	47 ± 7.9	2492 ± 3	106 115 116	36.1	-16.97	120	1.2	confused
41		±8							
42	0.84	29 ± 5	1510 ± 7	27 38 41	23.4	-14.42	11	1.2	
43		±12							
44		±11							
45	5.31	81 ± 10	1435 ± 2	72 89 92	21.5	-15.29	58	2.8	

kk_r3 = kk230 (e.g. Huchtmeier et al. 2000).

kk_r40: UGC 11111 (at 3.3') and UGC 11113 (at 3.8') with similar radial velocities.

Table 2. continued

KKR	HI-flux	S_{\max}	velocity	line width	distance	M_{Bt}	HI mass	M_{HI}/L_B	Comment
No.	Jy km s^{-1}	mJy	km s^{-1}	km s^{-1}	Mpc		$10^7 M_{\odot}$		
1	2	3	4	5	6	7	8	9	10
46	3.53	36 ± 8.4	3779 ± 5	50 127 130	54.2	-16.77	240	3.1	
47		± 9.3							
48	1.88	30 ± 7	3158 ± 3	48 51 92	45.9	-16.53	94	1.5	
49	3.57	55 ± 8.2	785 ± 4	72 91 99	14.4	-15.78	17	0.6	
50		± 11							
51		± 12							
52		± 18							
53		± 12							
54		± 11							
55	≥ 1 :	68 ± 9.3	23:	≥ 44 :	5.4	-14.8	≥ 0.7	≥ 0.07	local HI?
56	5.6:	470 ± 8.5	-135:	10 22 24:	6.4	-14.4	5.4	≥ 0.56	local HI
57		± 7.9							
58	16.04	101 ± 9.4	2756 ± 2	246 277 280	40.7	-19.95	630	0.42	
59	≥ 36	680 ± 8	≤ 17 :	≥ 64 :	4.7	-17.0	≥ 18.8	≥ 0.32	local HI?
60		± 9.1							
61	6.35	110 ± 8	919 ± 2	74 81 90	16.0	-14.82	3.8	2.9	
62		± 18							
63		± 8.1							
64		± 9.7							
65		± 10							
66		± 7.8							
67		± 14							
68	19.5	291 ± 7.4	1145 ± 1	72 86 90	19.2	-16.68	170	2.3	confused?
69	14.3	190 ± 8.5	1143 ± 1	74 90 94	19.2	-15.24	120	6.4	confused
70		± 11							
71	5.64	191 ± 14	693 ± 2	26 35 40	13.1	-14.03	23	3.6	
72		± 6.1							
73		± 5.9							
74		± 6.4							
75	3.56	38 ± 4.3	1469 ± 5	97 124 128	22.4	-14.24	42	5.4	
76		± 7							
77	0.45	32 ± 8.4	3665 ± 2	29 33 40	51.7	-16.63	28	0.4	
78		± 6.9							
kkr 55, kkr 56, kkr 59 are possible companions of NGC 6946.									
kkr 69 within 4.1 arcmin from kkr 68, confused.									

Void circle (they are indicated in Table 2: in italics for upper limits and as bold face for detections), 8 of these galaxies were detected in HI. Only one of these (kkr 49) lies within the Void volume ($V_0 = 1076 \text{ km s}^{-1}$) very close to its projected edge. The velocity distribution of the 14 undetected galaxies is unknown. There is no reason to assume they may be fainter and smaller or have less HI mass than other galaxies in this sample on the average. If all galaxies would be in the background ($V_0 \geq 1500 \text{ km s}^{-1}$) the void would be empty. If they all would be hidden

by Local HI emission they would be a local phenomenon (Local Group or nearby group). So they would not populate the LV except perhaps the rim of the LV. The most unfavorable situation for an empty void would be a velocity distribution similar to that of the surrounding area outside the Local Void circle. In that case we would expect a total of two or three dwarf galaxies within the Void volume. The situation is complicated by the fact that the centre of the Void circle is situated close to the galactic equator; hence a large part of the Void area is affected by

