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Erratum: “VERTICO II: How HI-identified Environmental Mechanisms Affect the Molecular Gas in Cluster Galaxies” (2022, ApJ, 933, 10)

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1. Updated Table

In the published article the uncertainties in columns 10 and 12 of Table 1 are incorrect. The same is true for the values of def_{HI} for IC 3418 and VCC 1581 in column 10. The corrected Table 1 is provided here. As the correct values were used in the figures, this correction has no implications for the results and conclusions in the published article.



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Table 1
Cold Gas Properties of the VERTICO Sample

Galaxy	R.A. (J2000)	Decl. (J2000)	v_{opt}	$\log M_*$	R_*	cl.	$\log M_{\text{HI}}$	$\text{def}_{\text{HI},R_*}$	$\text{def}_{\text{HI},M_*}$	$\log M_{\text{mol}}$	def_{H_2}
...	(km s^{-1})	(M_\odot)	(kpc)	...	(M_\odot)	(dex)	(dex)	(M_\odot)	(dex)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
IC 3392	12 ^h 28 ^m 43 ^s .27	14°59'57" 48	1678	9.51 ± 0.1	8.6	III	7.63 ± 0.35	1.15 ± 0.12	1.50 ^{+0.34} _{-0.34}	8.73 ± 0.02	-0.13 ^{+0.02} _{-0.02}
IC 3418	12 ^h 29 ^m 43 ^s .92	11°24'16" 88	38	8.37	-	-	≤6.9	-	≥2.47	≤7.44	≥ - 0.003
NGC 4064	12 ^h 04 ^m 11 ^s .26	18°26'39" 12	1000	9.47 ± 0.1	18	III	7.6 ± 0.26	1.79 ± 0.2	1.50 ^{+0.26} _{-0.26}	8.41 ± 0.02	-0.22 ^{+0.02} _{-0.11}
NGC 4189	12 ^h 13 ^m 47 ^s .47	13°25'34" 68	1995	9.75 ± 0.1	9.6	0	8.75 ± 0.06	0.25 ± 0.04	0.63 ^{+0.09} _{-0.06}	8.69 ± 0.01	-0.24 ^{+0.07} _{-0.01}
NGC 4192	12 ^h 13 ^m 48 ^s .58	14°53'57" 12	-118	10.78 ± 0.1	57	IV	9.63 ± 0.04	0.51 ± 0.2	0.23 ^{+0.05} _{-0.05}	9.26 ± 0.01	0.37 ^{+0.2} _{-0.12}
NGC 4216	12 ^h 15 ^m 54 ^s .19	13°08'54" 96	30	10.91 ± 0.1	38	IV	9.25 ± 0.09	0.76 ± 0.2	0.70 ^{+0.09} _{-0.1}	8.96 ± 0.01	0.56 ^{+0.06} _{-0.19}
NGC 4222	12 ^h 16 ^m 22 ^s .56	13°18'25" 20	225	9.45 ± 0.2	15	0	8.81 ± 0.1	0.32 ± 0.04	0.28 ^{+0.1} _{-0.18}	8.06 ± 0.03	0.11 ^{+0.04} _{-0.31}
NGC 4254 ^a	12 ^h 18 ^m 49 ^s .68	14°25'05" 52	2453	10.52 ± 0.1	17	I	9.65 ± 0.04	-0.1 ± 0.02	-0.03 ^{+0.04} _{-0.08}	9.88 ± 0.00	-0.51 ^{+0.12} _{-0.02}
NGC 4293 ^a	12 ^h 21 ^m 13 ^s .47	18°23'03" 12	717	10.5 ± 0.1	19	III	7.43 ± 0.48	2.25 ± 0.2	2.16 ^{+0.48} _{-0.49}	8.86 ± 0.01	0.49 ^{+0.09} _{-0.02}
NGC 4294	12 ^h 21 ^m 17 ^s .81	11°30'39" 24	421	9.38 ± 0.1	17	I	9.21 ± 0.03	-0.11 ± 0.02	-0.18 ^{+0.04} _{-0.13}	7.75 ± 0.07	0.28 ^{+0.1} _{-0.2}
NGC 4298 ^a	12 ^h 21 ^m 33 ^s .12	14°36'19" 80	1122	10.11 ± 0.1	15	II	8.69 ± 0.08	0.41 ± 0.02	0.68 ^{+0.1} _{-0.18}	9.08 ± 0.01	-0.12 ^{+0.06} _{-0.05}
NGC 4299	12 ^h 21 ^m 40 ^s .71	11°30'06" 12	209	9.06 ± 0.1	8.6	I	9.04 ± 0.02	-0.43 ± 0.02	-0.72 ^{+0.53} _{-0.3}	7.58 ± 0.08	-0.38 ^{+0.17} _{-0.17}
NGC 4302	12 ^h 21 ^m 42 ^s .24	14°35'57" 12	1111	10.47 ± 0.1	26	II	9.17 ± 0.07	0.39 ± 0.02	0.41 ^{+0.07} _{-0.11}	9.09 ± 0.01	0.24 ^{+0.05} _{-0.02}
NGC 4321 ^a	12 ^h 22 ^m 54 ^s .77	15°49'33" 24	1579	10.71 ± 0.1	31	0	9.46 ± 0.02	0.35 ± 0.12	0.36 ^{+0.04} _{-0.02}	9.84 ± 0.00	-0.16 ^{+0.17} _{-0.01}
NGC 4330	12 ^h 23 ^m 16 ^s .95	11°22'04" 08	1567	9.63 ± 0.15	18	II	8.65 ± 0.1	0.8 ± 0.04	0.64 ^{+0.11} _{-0.1}	8.34 ± 0.03	-0.01 ^{+0.03} _{-0.04}
NGC 4351	12 ^h 24 ^m 01 ^s .30	12°12'15" 12	2388	9.37 ± 0.1	5.1	I	8.48 ± 0.06	0.23 ± 0.02	0.55 ^{+0.06} _{-0.14}	7.85 ± 0.04	0.14 ^{+0.11} _{-0.18}
NGC 4380	12 ^h 25 ^m 22 ^s .16	10°01'00" 12	935	10.11 ± 0.1	11	IV	8.1 ± 0.19	1.13 ± 0.2	1.27 ^{+0.2} _{-0.25}	8.59 ± 0.01	0.37 ^{+0.06} _{-0.05}
NGC 4383	12 ^h 25 ^m 25 ^s .47	16°28'11" 64	1663	9.44 ± 0.1	6.4	0	9.47 ± 0.05	-0.81 ± 0.2	-0.39 ^{+0.05} _{-0.07}	8.37 ± 0.02	-0.21 ^{+0.02} _{-0.17}
NGC 4388	12 ^h 25 ^m 46 ^s .61	12°39'46" 44	2538	10.07 ± 0.1	26	II	8.57 ± 0.26	1.16 ± 0.12	0.84 ^{+0.28} _{-0.3}	8.89 ± 0.01	0 ^{+0.1} _{-0.03}
NGC 4394	12 ^h 25 ^m 55 ^s .66	18°12'52" 20	772	10.34 ± 0.1	18	IV	8.64 ± 0.03	0.62 ± 0.2	0.90 ^{+0.07} _{-0.03}	7.98 ± 0.04	1.26 ^{+0.05} _{-0.04}
NGC 4396	12 ^h 25 ^m 59 ^s .66	15°40'10" 20	-115	9.36 ± 0.1	19	I	8.94 ± 0.08	0.3 ± 0.04	0.08 ^{+0.09} _{-0.15}	8.05 ± 0.04	-0.1 ^{+0.14} _{-0.17}
NGC 4402 ^a	12 ^h 26 ^m 07 ^s .34	13°06'45" 00	190	10.13 ± 0.1	26	II	8.57 ± 0.18	0.74 ± 0.12	0.82 ^{+0.19} _{-0.23}	9.10 ± 0.01	-0.1 ^{+0.04} _{-0.07}
NGC 4405	12 ^h 26 ^m 07 ^s .11	16°10'51" 60	1751	9.75 ± 0.1	8.3	III	7.65 ± 0.26	0.95 ± 0.2	1.73 ^{+0.27} _{-0.26}	8.27 ± 0.02	0.18 ^{+0.07} _{-0.02}
NGC 4419	12 ^h 26 ^m 56 ^s .35	15°02'51" 36	-228	10.06 ± 0.1	13	III	7.76 ± 0.63	1.37 ± 0.2	1.65 ^{+0.63} _{-0.63}	9.10 ± 0.00	-0.23 ^{+0.09} _{-0.02}
NGC 4424 ^a	12 ^h 27 ^m 11 ^s .69	09°25'14" 16	447	9.89 ± 0.1	11	II	8.28 ± 0.07	0.97 ± 0.2	1.14 ^{+0.1} _{-0.1}	8.31 ± 0.01	0.35 ^{+0.03} _{-0.06}
NGC 4450	12 ^h 28 ^m 29 ^s .23	17°05'04" 56	2048	10.7 ± 0.1	22	IV	8.45 ± 0.08	1.17 ± 0.2	1.35 ^{+0.09} _{-0.08}	8.67 ± 0.01	1 ^{+0.16} _{-0.03}
NGC 4457 ^a	12 ^h 28 ^m 59 ^s .02	03°34'14" 16	738	10.42 ± 0.1	12	III	8.29 ± 0.11	0.92 ± 0.2	1.29 ^{+0.13} _{-0.12}	9.02 ± 0.01	0.27 ^{+0.02} _{-0.03}
NGC 4501	12 ^h 31 ^m 59 ^s .33	14°25'10" 92	2120	11 ± 0.1	35	II	9.22 ± 0.06	0.58 ± 0.12	0.80 ^{+0.07} _{-0.07}	9.69 ± 0.00	-0.03 ^{+0.15} _{-0.05}
NGC 4522	12 ^h 33 ^m 39 ^s .72	09°10'26" 76	2332	9.66 ± 0.1	16	II	8.53 ± 0.13	0.86 ± 0.02	0.79 ^{+0.13} _{-0.13}	8.30 ± 0.02	0.06 ^{+0.02} _{-0.04}
NGC 4532	12 ^h 34 ^m 19 ^s .35	06°28'05" 52	2154	9.25 ± 0.1	8	0	9.29 ± 0.03	-0.06 ± 0.06	-0.25 ^{+0.12} _{-0.06}	8.25 ± 0.02	-0.58 ^{+0.15} _{-0.15}
NGC 4533	12 ^h 34 ^m 22 ^s .03	02°19'33" 24	1753	9.2 ± 0.1	9.6	-	8.43 ± 0.11	0.51 ± 0.04	0.59 ^{+0.13} _{-0.37}	6.94 ± 0.26	0.6 ^{+0.3} _{-0.3}
NGC 4535 ^a	12 ^h 34 ^m 20 ^s .26	08°11'53" 52	1973	10.49 ± 0.1	29	I	9.52 ± 0.02	0.41 ± 0.12	0.07 ^{+0.02} _{-0.1}	9.41 ± 0.01	-0.06 ^{+0.08} _{-0.02}
NGC 4536 ^a	12 ^h 34 ^m 27 ^s .12	02°11'16" 08	1894	10.19 ± 0.1	42	0	9.68 ± 0.02	0.16 ± 0.12	-0.26 ^{+0.03} _{-0.08}	9.35 ± 0.01	-0.24 ^{+0.01} _{-0.09}
NGC 4548 ^a	12 ^h 35 ^m 26 ^s .64	14°29'43" 80	498	10.65 ± 0.1	26	IV	8.81 ± 0.03	0.82 ± 0.12	0.96 ^{+0.04} _{-0.03}	8.99 ± 0.01	0.63 ^{+0.07} _{-0.09}
NGC 4561	12 ^h 36 ^m 08 ^s .14	19°19'21" 72	1441	9.09 ± 0.1	6.1	0	9.15 ± 0.03	-0.71 ± 0.02	-0.64 ^{+0.41} _{-0.46}	7.31 ± 0.19	-0.04 ^{+0.24} _{-0.24}
NGC 4567	12 ^h 36 ^m 33 ^s .07	11°15'29" 16	2213	10.25 ± 0.1	12	0	8.97 ± 0.03	0.13 ± 0.12	-0.27 ^{+0.03} _{-0.05}	8.84 ± 0.00	0.33 ^{+0.02} _{-0.02}
NGC 4568	12 ^h 36 ^m 34 ^s .34	11°14'21" 84	2260	10.47 ± 0.1	22	0	9.18 ± 0.05	0.38 ± 0.12	0.40 ^{+0.05} _{-0.1}	9.41 ± 0.00	-0.08 ^{+0.05} _{-0.02}
NGC 4569 ^a	12 ^h 36 ^m 50 ^s .12	13°09'55" 08	-220	10.86 ± 0.1	50	III	8.79 ± 0.1	1.47 ± 0.2	1.12 ^{+0.11} _{-0.11}	9.58 ± 0.00	-0.23 ^{+0.08} _{-0.19}
NGC 4579 ^a	12 ^h 37 ^m 43 ^s .44	11°49'05" 52	1627	10.92 ± 0.1	21	IV	8.75 ± 0.12	0.95 ± 0.2	1.20 ^{+0.12} _{-0.12}	9.31 ± 0.00	0.22 ^{+0.08} _{-0.17}
NGC 4580	12 ^h 37 ^m 48 ^s .38	05°22'06" 24	1227	9.94 ± 0.1	8.6	III	7.45 ± 0.34	1.53 ± 0.2	1.99 ^{+0.36} _{-0.35}	8.55 ± 0.01	0.17 ^{+0.03} _{-0.03}
NGC 4606	12 ^h 40 ^m 57 ^s .62	11°54'43" 56	1653	9.61 ± 0.1	13	III	7.4 ± 0.22	1.64 ± 0.2	1.86 ^{+0.23} _{-0.23}	8.14 ± 0.02	0.18 ^{+0.02} _{-0.02}
NGC 4607	12 ^h 41 ^m 12 ^s .39	11°53'09" 60	2284	9.64 ± 0.1	12	III	8.34 ± 0.16	0.82 ± 0.12	0.96 ^{+0.16} _{-0.16}	8.58 ± 0.01	-0.24 ^{+0.01} _{-0.03}

Table 1
(Continued)

Galaxy	R.A. (J2000)	Decl. (J2000)	v_{opt} (km s^{-1})	$\log M_*$ (M_{\odot})	R_* (kpc)	cl.	$\log M_{\text{HI}}$ (M_{\odot})	$\text{def}_{\text{HI},R_*}$ (dex)	$\text{def}_{\text{HI},M_*}$ (dex)	$\log M_{\text{mol}}$ (M_{\odot})	def_{H_2} (dex)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
NGC 4651	12 ^h 43 ^m 42 ^s .72	16°23'37" 68	788	10.31 ± 0.1	13	0	9.61 ± 0.03	−0.3 ± 0.02	0.09 ^{+0.04} _{−0.03}	8.67 ± 0.01	−0.46 ^{+0.04} _{−0.01}
NGC 4654 ^a	12 ^h 43 ^m 56 ^s .76	13°07'32" 52	1035	10.26 ± 0.1	12	II	9.47 ± 0.03	0.12 ± 0.02	−0.01 ^{+0.03} _{−0.04}	9.33 ± 0.00	−0.15 ^{+0.03} _{−0.01}
NGC 4689 ^a	12 ^h 47 ^m 45 ^s .68	13°45'42" 12	1522	10.16 ± 0.1	19	IV	8.67 ± 0.05	0.68 ± 0.12	0.73 ^{+0.06} _{−0.12}	9.02 ± 0.01	0.04 ^{+0.01} _{−0.09}
NGC 4694 ^a	12 ^h 48 ^m 15 ^s .08	10°59'00" 60	1211	9.94 ± 0.1	19	II	8.4 ± 0.03	0.83 ± 0.2	1.03 ^{+0.12} _{−0.08}	8.23 ± 0.02	0.5 ^{+0.03} _{−0.04}
NGC 4698	12 ^h 48 ^m 22 ^s .99	08°29'15" 00	1032	10.49 ± 0.1	19	I	9.21 ± 0.03	0.02 ± 0.2	0.37 ^{+0.04} _{−0.1}	7.94 ± 0.10	1.4 ^{+0.12} _{−0.1}
NGC 4713	12 ^h 49 ^m 57 ^s .65	05°18'39" 60	631	9.31 ± 0.16	10	0	9.46 ± 0.03	−0.31 ± 0.04	−0.42 ^{+0.1} _{−0.03}	8.38 ± 0.02	−0.56 ^{+0.22} _{−0.24}
NGC 4772	12 ^h 53 ^m 29 ^s .12	02°10'06" 24	1042	10.18 ± 0.1	9.9	0	8.92 ± 0.06	0.15 ± 0.2	0.48 ^{+0.06} _{−0.11}	7.40 ± 0.27	1.7 ^{+0.27} _{−0.29}
NGC 4808	12 ^h 55 ^m 48 ^s .94	04°18'15" 12	738	9.63 ± 0.1	11	0	9.55 ± 0.03	−0.58 ± 0.04	−0.27 ^{+0.03} _{−0.04}	8.74 ± 0.01	−0.41 ^{+0.01} _{−0.03}
VCC 1581	12 ^h 34 ^m 45 ^s .30	06°18'02" 00	2039	8.47 ± 0.1	-	-	8.5 ± 0.04	−0.06 ± 0.06	0.62 ^{+0.36} _{−0.36}	≤6.84	≥0.69




Notes. Columns are (1) common name; (2) R.A. (J2000) of the galaxy optical center; (3) decl. (J2000) of the galaxy optical center; (4) optical heliocentric recession velocity; (5) stellar mass (see Section 3.2.1 in the published article); (6) optical radius, defined as the isodensity radius of the stellar mass distribution, where $\Sigma_* = 1 M_{\odot} \text{pc}^{-2}$ (see Section 3.2.1 in the published article); the uncertainty is dominated by the resolution of the stellar mass surface density maps, and therefore equals 0.3 kpc for all galaxies; (7) H I classification from VIVA (see Section 3.6 in the published article); (8) H I mass, from Table 3 in Chung et al. (2009); (9) H I deficiency, from Table 3 in Chung et al. (2009; see also Section 3.1 in the published article); (10) H I deficiency, calculated using the predicted H I mass from field galaxies at fixed stellar mass (see Section 3.1 in the published article); (11) molecular gas mass, from Table 2 in Brown et al. (2021); (12) molecular gas deficiency (see Section 3.2 in the published article). Columns (2)–(4) are drawn from the NASA/IPAC Extragalactic Database (NASA/IPAC Extragalactic Database (NED), 2019).

^a The ALMA observations of these galaxies are from the archive; see Section 2 in the published article for more details.

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