

Erratum: A Study of High-redshift AGN Feedback in SZ Cluster Samples

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Key words: errata, addenda: X-rays: galaxies: clusters – cooling flows – radio continuum: galaxies.

This is an erratum to the paper ‘A Study of High-redshift AGN Feedback in SZ Cluster Samples’ published in MNRAS 471, 1766 (2017). Due to an error, R_{500} was calculated incorrectly, causing the X-ray luminosities within this radius, $L_X(< R_{500})$, to be incorrect. We have included here a corrected version of Table 2 and Fig. 4. The conclusions of the original paper are unchanged.

Table 2. Cluster and cRS Properties.

System ^a	z	$L_X(< r_{\text{cool}})$ (10^{42} erg s ⁻¹)	r_{cool} (kpc)	M_{500}^{SZ} ($10^{14} M_{\odot}$)	$L_X(< R_{500})$ (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.1–2.4 keV] (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.5–7.0 keV] (10^{44} erg s ⁻¹)	R_{500} (kpc)	$L_{843\text{MHz}}^b$ (10^{32} erg s ⁻¹ Hz ⁻¹)	SFR ^c (M_{\odot} yr ⁻¹)
CF Sample										
SPT-CL J0000-5748	0.7019(1)	868 ⁺⁶⁷ ₋₄₈	130	4.29 ± 0.71 (5)	14.86 ± 1.13	8.79 ± 0.50	12.55 ± 0.86	880	8.83 ± 0.33	52 ⁺⁵⁹ ₋₃₀
SPT-CL J0033-6326	0.597 (5)	178 ⁺¹⁷ ₋₁₈	101	4.72 ± 0.88 (1)	9.02 ± 1.24	4.61 ± 0.44	7.44 ± 0.81	952	< 0.88	<43
ACT-CL J0102-4915*	0.87 (5)	589 ⁺¹⁰ ₋₉	152	14.43 ± 2.1 (1)	114.8 ± 2.1	55.10 ± 0.72	93.05 ± 1.32	1239	0.16 ± 0.03	93 ⁺¹²⁰ ₋₅₅
SPT-CL J0232-4420*	0.284 (5)	930 ⁺³³ ₋₂₉	125	12.01 ± 1.80 (1)	29.06 ± 0.47	13.73 ± 0.47	23.62 ± 0.90	1467	1.27 ± 0.08	17 ⁺¹⁹ ₋₁₀
SPT-CL J0234-5831	0.415(1)	836 ⁺⁸⁶ ₋₆₇	130	7.64 ± 1.5 (5)	17.25 ± 1.10	10.14 ± 0.53	14.58 ± 0.84	1201	2.60 ± 0.10	59 ⁺³⁵ ₋₂₂
ACT-CL J0304-4921	0.392 (5)	464 ⁺²⁹ ₋₂₄	100	7.57 ± 1.2 (1)	13.60 ± 0.76	7.07 ± 0.28	11.26 ± 0.52	1207	0.11 ± 0.01*	<15
ACT-CL J0326-0043*	0.448 (4)	1709 ⁺⁹⁰ ₋₇₅	660	7.4 ± 1.4 (2)	26.08 ± 2.11	15.05 ± 1.02	21.97 ± 1.58	1172	0.17 ± 0.02	...
SPT-CL J0334-4659	0.485 (5)	429 ⁺¹⁶ ₋₁₆	125	5.52 ± 0.95 (1)	11.05 ± 0.72	6.21 ± 0.32	9.27 ± 0.53	1048	1.10 ± 0.08	79 ⁺⁴⁵ ₋₃₉
SPT-CL J0417-4748	0.581 (5)	1268 ⁺⁵⁰ ₋₆₂	142	7.41 ± 1.15 (1)	23.79 ± 1.29	13.69 ± 0.63	20.03 ± 0.97	1113	< 1.38	<28
ACT-CL J0616-5227	0.684 (6)	258 ⁺⁹ ₋₂₂	107	6.8 ± 2.9 (3)	13.29 ± 1.45	7.34 ± 0.57	11.12 ± 1.02	1038	6.99 ± 0.31	...
SPT-CL J2011-5725*	0.2786 (1)	301 ⁺¹² ₋₁₀	131	3.18 ± 0.89 (5)	6.16 ± 0.36	4.26 ± 0.20	5.28 ± 0.29	944	< 0.15	...
SPT-CL J2043-5035	0.7234 (1)	1375 ⁺³⁵ ₋₃₈	287	4.71 ± 1.0 (5)	20.87 ± 0.72	13.59 ± 0.44	17.76 ± 0.61	904	< 1.41	160 ⁺¹²³ ₋₆₉
SPT-CL J2106-5845	1.132 (1)	1201 ⁺⁵⁵ ₋₆₀	146	8.36 ± 1.71 (5)	49.52 ± 3.35	29.65 ± 1.47	41.81 ± 2.18	933	8.73 ± 0.99	200 ⁺²⁴⁰ ₋₁₀₀
ACT-CL J2129+0005*	0.234 (4)	638 ⁺¹⁵ ₋₁₅	101	7.3 ± 1.6 (2)	18.12 ± 0.53	9.63 ± 0.22	15.11 ± 0.37	1265	0.690 ± 0.03	...
SPT-CL J2232-6000	0.594 (5)	312 ⁺¹⁹ ₋₁₅	110	5.55 ± 0.97 (1)	9.69 ± 0.74	6.16 ± 0.39	8.24 ± 0.60	1005	< 0.87	<33
SPT-CL J2331-5051	0.576 (1)	662 ⁺⁴² ₋₃₆	116	5.14 ± 0.71 (5)	14.20 ± 0.96	8.16 ± 0.40	11.95 ± 0.71	987	1.80 ± 0.134	23 ⁺³⁶ ₋₁₄
SPT-CL J2341-5119	1.003 (1)	364 ⁺³⁰ ₋₂₂	77	5.61 ± 0.82 (5)	21.65 ± 2.06	11.68 ± 0.73	18.01 ± 1.43	858	4.15 ± 0.58	<170
SPT-CL J2343-5411	1.075 (1)	318 ⁺⁴⁴ ₋₄₈	116	3.0 ± 0.5 (5)	6.56 ± 0.81	4.96 ± 0.59	5.51 ± 0.75	677	< 3.75	33 ⁺⁴² ₋₁₉
SPT-CL J2344-4242*	0.595 (2)	13913 ⁺²⁷³ ₋₃₁₈	173	12.5 ± 1.57 (6)	94.90 ± 3.86	44.23 ± 1.36	76.50 ± 2.42	1317	11.57 ± 0.41	1900 ⁺⁹²⁶ ₋₅₂₅
SPT-CL J2355-5056	0.3196 (1)	85 ⁺⁶ ₋₈	93	4.07 ± 0.57 (5)	4.50 ± 0.44	2.76 ± 0.19	3.82 ± 0.34	1109	< 0.20	...
NCF Sample										
SPT-CL J0013-4906	0.406 (5)	205 ⁺¹⁹ ₋₁₅	67	7.08 ± 1.15(1)	12.32 ± 0.88	7.20 ± 0.40	10.40 ± 0.67	1174	< 0.60	<8.6
ACT-CL J0014-0056	0.533 (4)	270 ⁺¹⁶ ₋₂₄	80	7.6 ± 1.4 (2)	17.42 ± 1.20	8.09 ± 0.38	14.03 ± 0.72	1144	< 0.47	...
SPT-CL J0014-4952	0.752 (2)	123 ⁺⁹⁵ ₋₄₈	78	5.31 ± 0.92 (1)	13.89 ± 0.90	8.66 ± 0.49	11.79 ± 0.72	930	< 2.59	<92
ACT-CL J0022-0036	0.805 (4)	76 ⁺⁹ ₋₁₀	47	7.3 ± 1.2 (2)	19.02 ± 1.34	10.21 ± 0.57	15.84 ± 0.93	1013	9.55 ± 0.36	...
SPT-CL J0040-4407	0.35 (2)	349 ⁺²⁶ ₋₂₆	61	10.18 ± 1.32 (6)	15.13 ± 2.11	7.11 ± 0.70	12.24 ± 1.34	1354	< 0.41	<14
SPT-CL J0058-6145	0.83 (5)	84 ⁺⁸ ₋₁₅	57	4.36 ± 0.81 (1)	8.06 ± 1.02	5.03 ± 0.49	6.84 ± 0.79	844	2.60 ± 0.33	24 ⁺³⁴ ₋₁₃
ACT-CL J0059-0049	0.786 (4)	142 ⁺¹³ ₋₁₇	69	6.9 ± 1.2 (2)	20.82 ± 1.81	10.17 ± 0.62	16.96 ± 1.14	1001	< 1.20	...
SPT-CL J0102-4603	0.72 (5)	21 ⁺⁵ ₋₃	66	4.49 ± 0.85 (1)	3.66 ± 0.48	2.62 ± 0.30	3.12 ± 0.42	891	< 2.33	15 ⁺²⁰ ₋₉
SPT-CL J0106-5943	0.348 (5)	86 ⁺⁸ ₋₈	58	6.23 ± 1.05 (1)	7.96 ± 0.50	4.48 ± 0.22	6.68 ± 0.37	1150	0.23 ± 0.08	<7.3
SPT-CL J0123-4821	0.62 (5)	12 ⁺⁴ ₋₂	32	4.46 ± 0.87 (1)	5.90 ± 0.50	3.57 ± 0.23	5.00 ± 0.39	925	< 0.113*	<39
SPT-CL J0142-5032	0.73 (5)	49 ⁺³⁹ ₋₁₉	40	5.75 ± 0.95 (1)	10.54 ± 1.35	6.26 ± 0.61	8.91 ± 0.99	964	< 0.19*	92 ⁺⁵⁴ ₋₃₄
SPT-CL J0151-5954	0.29 (5)	0.80 ^{+0.89} _{-0.52}	17	3.24 ± 0.90 (1)	0.261 ± 0.065	0.217 ± 0.047	0.220 ± 0.057	945	0.37 ± 0.04	<140

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Table 2 – continued

System ^a	z	$L_X(< r_{\text{cool}})$ (10^{42} erg s ⁻¹)	r_{cool} (kpc)	M_{500}^{SZ} (10^{14} M $_{\odot}$)	$L_X(< R_{500})$ (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.1–2.4 keV] (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.5–7.0 keV] (10^{44} erg s ⁻¹)	R_{500} (kpc)	$L_{843\text{MHz}}^b$ (10^{32} erg s ⁻¹ Hz ⁻¹)	SFR ^c (M $_{\odot}$ yr ⁻¹)
ACT-CL J0152-0100*	0.23 (4)	133 ⁺⁵ ₋₄	67	7.9 ± 1.6 (2)	13.41 ± 0.64	5.93 ± 0.19	10.69 ± 0.38	1301	0.068 ± 0.009	...
SPT-CL J0156-5541	1.22 (5)	242 ⁺²⁷ ₋₁₈	58	3.63 ± 0.70 (1)	13.63 ± 1.59	8.24 ± 0.77	11.52 ± 1.24	684	< 5.12	<530
SPT-CL J0200-4852	0.498 (5)	106 ⁺²⁹ ₋₄₂	49	4.76 ± 0.90 (1)	7.33 ± 0.95	3.78 ± 0.32	6.06 ± 0.61	992	< 0.95	<29
ACT-CL J0206-0114	0.676 (4)	340 ⁺¹⁸ ₋₂₆	76	5.7 ± 1.1 (2)	13.71 ± 1.15	7.83 ± 0.55	11.50 ± 0.85	982	3.18 ± 0.17	...
SPT-CL J0212-4657	0.655 (5)	50 ⁺⁶ ₋₆	66	5.88 ± 0.98 (1)	8.45 ± 0.73	6.06 ± 0.51	7.17 ± 0.64	1000	< 0.77*	<49
ACT-CL J0215-5212	0.48 (6)	96 ⁺¹⁷ ₋₂₇	69	5.8 ± 1.7 (3)	2.64 ± 0.58	1.65 ± 0.26	2.25 ± 0.46	1067	4.33 ± 0.17	...
ACT-CL J0217-5245	0.34 (3)	...	...	4.42 ± 0.89 (1)	4.60 ± 0.45	2.53 ± 0.16	3.83 ± 0.32	1029	0.91 ± 0.05	<9.2
ACT-CL J0232-5257	0.556 (5)	...	...	5.36 ± 0.94 (1)	8.90 ± 1.04	4.80 ± 0.50	7.41 ± 0.73	1009	< 0.74	<26
ACT-CL J0235-5121	0.278 (5)	...	...	6.41 ± 1.08 (1)	7.79 ± 0.46	4.42 ± 0.16	7.38 ± 0.30	1192	0.16 ± 0.03	<14
ACT-CL J0237-4939	0.334 (5)	...	...	3.99 ± 0.86 (1)	3.25 ± 0.25	1.88 ± 0.10	2.74 ± 0.19	997	< 0.370	...
SPT-CL J0243-5930	0.65(1)	232 ⁺¹⁷ ₋₁₇	90	4.18 ± 0.89 (5)	13.69 ± 1.26	7.14 ± 0.50	11.34 ± 0.84	894	< 1.09	<35
ACT-CL J0245-5302*	0.3 (3)	69 ⁺⁶ ₋₇	46	6.6 ± 1.0 (4)	19.16 ± 0.68	8.82 ± 0.22	15.44 ± 0.42	1194	0.317 ± 0.043	...
SPT-CL J0252-4824	0.421 (5)	8 ⁺² ₋₂	34	4.79 ± 0.93 (1)	5.17 ± 0.50	2.87 ± 0.20	4.33 ± 0.35	1025	< 0.64	<5.9
SPT-CL J0256-5617	0.64(1)	...	...	4.25 ± 0.89 (5)	10.81 ± 1.36	6.18 ± 0.56	9.10 ± 0.95	903	< 1.05	<35
SPT-CL J0304-4401	0.458 (5)	64 ⁺¹⁰ ₋₇	53	8.55 ± 1.32 (1)	17.19 ± 1.24	8.90 ± 0.48	14.21 ± 0.84	1225	< 0.028*	<6.1
SPT-CL J0307-5042	0.55 (5)	77 ⁺⁸ ₋₄	74	5.26 ± 0.93 (1)	9.13 ± 0.75	4.86 ± 0.29	7.59 ± 0.52	1005	< 0.334*	<25
SPT-CL J0307-6225	0.59(1)	73 ⁺¹⁶ ₋₁₇	97	4.68 ± 0.96 (5)	8.38 ± 0.85	5.17 ± 0.41	7.11 ± 0.67	951	2.69 ± 0.19	<44
SPT-CL J0310-4646	0.709 (5)	117 ⁺¹¹ ₋₁₈	69	4.31 ± 0.83 (1)	8.99 ± 1.19	4.84 ± 0.44	7.49 ± 0.80	883	< 2.24	34 ⁺²¹ ₋₁₃
SPT-CL J0324-6236	0.72(1)	...	...	4.68 ± 0.86 (5)	8.12 ± 1.26	5.47 ± 0.69	6.90 ± 1.01	903	3.98 ± 0.25	<57
ACT-CL J0346-5438	0.53 (5)	58 ⁺¹¹ ₋₁₁	49	5.47 ± 0.94 (1)	9.07 ± 0.92	5.57 ± 0.91	7.70 ± 0.72	1026	2.93 ± 0.12	<5.7
SPT-CL J0348-4514	0.358 (5)	64 ⁺⁸ ₋₆	80	6.17 ± 1.03 (1)	5.61 ± 0.53	3.33 ± 0.24	4.74 ± 0.41	1142	< 0.0668*	<5.7
SPT-CL J0352-5647	0.66(1)	80 ⁺¹¹ ₋₉	74	4.00 ± 0.86 (5)	7.60 ± 0.64	5.17 ± 0.44	4.27 ± 0.56	878	< 1.13	<50
SPT-CL J0406-4804	0.737 (5)	82 ⁺²⁵ ₋₂₅	61	4.61 ± 0.83 (1)	7.93 ± 1.05	5.08 ± 0.57	6.75 ± 0.85	893	< 2.46	41 ⁺²⁶ ₋₁₅
SPT-CL J0411-4819	0.424 (5)	202 ⁺⁸ ₋₉	74	8.18 ± 1.27 (1)	15.73 ± 0.61	8.42 ± 0.28	13.10 ± 0.44	1223	< 0.639*	27 ⁺⁵ ₋₁₁
SPT-CL J0426-5455	0.62(1)	...	...	4.93 ± 1.00 (5)	6.17 ± 0.70	3.93 ± 0.35	5.24 ± 0.56	956	< 0.97	51 ⁺⁴¹ ₋₂₂
ACT-CL J0438-5419	0.421 (5)	909 ⁺³³ ₋₃₃	119	10.8 ± 1.62 (1)	31.04 ± 1.41	13.26 ± 0.40	24.41 ± 0.81	1344	< 0.38	<24
SPT-CL J0441-4854	0.79 (5)	265 ⁺²¹ ₋₂₄	89	4.74 ± 0.83 (1)	11.61 ± 1.29	7.37 ± 0.69	9.86 ± 1.04	882	< 2.92	<61
SPT-CL J0446-5849	1.16 (5)	...	...	3.68 ± 0.82 (5)	5.62 ± 1.44	4.12 ± 1.02	4.74 ± 1.27	694	< 4.82	330 ⁺²⁷⁰ ₋₁₇₀
SPT-CL J0449-4901	0.79 (2)	...	...	4.57 ± 0.86 (6)	10.56 ± 1.38	5.38 ± 0.45	8.69 ± 0.89	871	18.66 ± 0.96	88 ⁺¹¹⁰ ₋₄₇
SPT-CL J0456-5116	0.562 (5)	38 ⁺⁶ ₋₇	47	5.09 ± 0.89 (1)	8.04 ± 0.66	4.38 ± 0.25	6.71 ± 0.47	989	4.34 ± 0.19	<32
SPT-CL J0509-5342	0.4626(1)	207 ⁺¹³ ₋₁₁	90	5.36 ± 0.71 (5)	10.60 ± 0.70	6.03 ± 0.29	8.91 ± 0.50	1047	< 0.48	33 ⁺³⁰ ₋₁₂
SPT-CL J0517-5430	0.295(1)	13 ⁺¹² ₋₅	36	6.46 ± 1.32 (5)	17.04 ± 0.64	7.96 ± 0.23	13.79 ± 0.40	1188	< 0.17	2.5 ^{+1.3} _{-0.82}
SPT-CL J0528-5300	0.7648(1)	...	...	3.18 ± 0.61 (5)	3.15 ± 0.86	2.15 ± 0.46	2.68 ± 0.69	780	16.50 ± 0.54	<34
SPT-CL J0534-5005	0.881(1)	...	...	2.68 ± 0.61 (5)	2.00 ± 1.02	...	1.67 ± 0.78	704	< 2.29	50 ⁺²⁹ ₋₁₉
SPT-CL J0542-4100*	0.642 (5)	78 ⁺²⁴ ₋₂₅	41	5.16 ± 0.94 (1)	9.62 ± 0.95	5.65 ± 0.40	8.13 ± 0.71	963	8.53 ± 0.33	<28
SPT-CL J0547-5345	1.067 (1)	453 ⁺⁵² ₋₅₈	90	5.25 ± 0.75 (5)	23.74 ± 2.86	13.90 ± 1.28	20.00 ± 2.12	819	< 3.68	110 ⁺⁸⁹ ₋₅₃
SPT-CL J0552-5709	0.423 (1)	212 ⁺¹¹ ₋₁₃	51	3.75 ± 0.54 (5)	6.31 ± 0.44	4.49 ± 0.28	5.37 ± 0.38	944	1.46 ± 0.10	<17
SPT-CL J0555-6405	0.345 (5)	21 ⁺⁸ ₋₅	39	7.69 ± 1.22 (1)	11.51 ± 1.39	6.22 ± 0.54	9.63 ± 0.93	1235	< 0.24	...
ACT-CL J0559-5249	0.609 (5)	32 ⁺¹⁵ ₋₁₄	31	5.78 ± 0.95 (1)	10.64 ± 0.93	5.80 ± 0.35	8.88 ± 0.65	1013	7.88 ± 0.42	<19
SPT-CL J0655-5234	0.47 (5)	...	...	5.1 ± 0.93 (1)	4.89 ± 0.70	2.65 ± 0.27	4.12 ± 0.51	1027	< 0.50	<3.1
ACT-CL J0707-5522	0.296 (7)	...	...	5.7 ± 1.7 (7)	7.85 ± 0.51	3.67 ± 0.34	6.36 ± 0.34	1139	0.17 ± 0.02	...
SPT-CL J2023-5535	0.232 (1)	39 ⁺²⁰ ₋₁₇	29	7.86 ± 1.24 (1)	12.33 ± 0.68	6.06 ± 0.26	10.10 ± 0.44	1298	0.26 ± 0.02	...
SPT-CL J2031-4037	0.342 (5)	289 ⁺²⁵ ₋₂₄	78	9.83 ± 1.5 (1)	20.55 ± 1.96	10.33 ± 0.71	16.90 ± 1.26	1342	1.645 ± 0.070	<7.5
SPT-CL J2034-5936	0.92 (1)	132 ⁺¹⁶ ₋₁₇	71	4.32 ± 0.89 (5)	12.47 ± 0.98	8.61 ± 0.65	10.61 ± 0.84	812	3.91 ± 0.60	<99
SPT-CL J2035-5251	0.47 (1)	271 ⁺²³ ₋₂₂	47	6.18 ± 1.25 (5)	5.80 ± 0.69	3.54 ± 0.31	4.92 ± 0.54	1094	1.14 ± 0.91	31 ⁺²⁹ ₋₁₆
SPT-CL J2135-5726	0.427 (1)	...	...	5.68 ± 1.11 (5)	9.39 ± 0.72	5.38 ± 0.33	7.90 ± 0.54	1082	0.35 ± 0.09	<13
SPT-CL J2145-5644	0.48 (1)	112 ⁺¹³ ₋₁₇	48	6.39 ± 1.25 (5)	14.53 ± 1.17	8.02 ± 0.48	12.16 ± 0.84	1102	< 0.52	<3.6
SPT-CL J2146-4632	0.933 (1)	...	...	5.36 ± 1.07 (5)	10.56 ± 0.76	7.55 ± 0.53	8.96 ± 0.68	869	15.49 ± 0.62	<9.6
SPT-CL J2148-6116	0.571 (1)	...	...	4.04 ± 0.89 (5)	7.89 ± 0.70	4.66 ± 0.32	6.66 ± 0.53	913	1.69 ± 0.21	<39
ACT-CL J2154-0049	0.488 (4)	100 ⁺⁶ ₋₉	61	5.7 ± 1.3 (2)	6.15 ± 0.45	3.34 ± 0.19	5.14 ± 0.32	1058	< 0.38	...
SPT-CL J2218-4519	0.65 (5)	...	...	5.31 ± 0.92 (1)	8.92 ± 1.04	5.16 ± 0.42	7.51 ± 0.74	969	9.18 ± 0.67	4.4 ⁺⁵ _{-2.4}
SPT-CL J2222-4834	0.652 (5)	175 ⁺¹⁰ ₋₁₅	84	5.42 ± 0.93 (1)	10.31 ± 0.89	6.31 ± 0.46	8.74 ± 0.70	975	< 1.82	<52
SPT-CL J2233-5339	0.48 (5)	312 ⁺²⁰ ₋₁₇	85	5.48 ± 0.98 (1)	12.46 ± 1.15	6.30 ± 0.39	10.25 ± 0.74	1047	< 0.52	<13
SPT-CL J2236-4555	1.16 (5)	...	...	4.02 ± 0.74 (1)	12.02 ± 2.41	6.36 ± 0.82	9.96 ± 1.56	723	< 7.54	50 ⁺⁶⁰ ₋₃₀
SPT-CL J2245-6206	0.58 (5)	46 ⁺²¹ ₋₁₄	55	5.4 ± 0.94 (1)	10.93 ± 0.91	6.13 ± 0.39	9.18 ± 0.66	1002	9.18 ± 0.66	<5.2
SPT-CL J2248-4431*	0.351 (2)	2370 ⁺⁴³ ₋₅₂	142	17.97 ± 2.18 (6)	77.43 ± 2.40	31.24 ± 0.65	59.05 ± 1.32	1636	0.64 ± 0.21	...
SPT-CL J2258-4044	0.83 (5)	85 ⁺¹⁵ ₋₁₂	73	5.88 ± 0.95 (1)	10.78 ± 0.91	7.02 ± 0.51	9.17 ± 0.76	933	< 5.82*	10 ⁺¹² _{-5.7}
SPT-CL J2259-6057	0.75 (5)	235 ⁺¹⁸ ₋₁₇	74	5.61 ± 0.94 (1)	14.29 ± 1.04	7.90 ± 0.41	11.95 ± 0.73	948	13.90 ± 0.44	<84
SPT-CL J2301-4023	0.73 (5)	114 ⁺⁸ ₋₇	59	4.81 ± 0.86 (1)	6.92 ± 0.66	4.50 ± 0.35	5.89 ± 0.54	908	0.86 ± 0.02*	36 ⁺⁵³ ₋₁₉

Table 2 – *continued*

System ^a	z	$L_X(< r_{\text{cool}})$ (10^{42} erg s ⁻¹)	r_{cool} (kpc)	M_{500}^{SZ} ($10^{14} M_{\odot}$)	$L_X(< R_{500})$ (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.1–2.4 keV] (10^{44} erg s ⁻¹)	$L_X(< R_{500})$ [0.5–7.0 keV] (10^{44} erg s ⁻¹)	R_{500} (kpc)	$L_{843\text{MHz}}^b$ (10^{32} erg s ⁻¹ Hz ⁻¹)	SFR ^c (M_{\odot} yr ⁻¹)
SPT-CL J2306-6505	0.53 (5)	20^{+16}_{-8}	36	5.73 ± 0.98 (1)	8.12 ± 0.71	5.01 ± 0.37	6.89 ± 0.57	1042	< 0.66	< 39
SPT-CL J2325-4111*	0.358 (5)	25^{+7}_{-5}	40	7.55 ± 1.2 (1)	14.98 ± 1.35	6.14 ± 0.36	11.64 ± 0.75	1222	< 0.43	< 6.7
SPT-CL J2335-4544	0.547 (5)	...	...	6.17 ± 1.02 (1)	11.59 ± 1.04	6.64 ± 0.46	9.75 ± 0.76	1061	1.56 ± 0.14	41^{+61}_{-27}
ACT-CL J2337+0016*	0.275 (4)	38^{+6}_{-4}	43	8.4 ± 1.7 (2)	16.05 ± 0.98	7.76 ± 0.32	13.10 ± 0.62	1306	< 0.098	...
SPT-CL J2337-5942	0.775 (5)	387^{+35}_{-34}	98	8.14 ± 1.14 (5)	29.92 ± 2.37	17.50 ± 1.09	25.27 ± 1.94	1063	< 1.67	$1.0^{+1.5}_{-0.7}$
SPT-CL J2345-6406	0.94 (5)	106^{+8}_{-15}	89	5.1 ± 0.86 (1)	11.54 ± 1.30	7.12 ± 0.62	9.79 ± 0.98	852	< 2.59	250^{+130}_{-89}
SPT-CL J2352-4657	0.73 (5)	...	...	4.42 ± 0.83 (1)	5.37 ± 0.46	3.22 ± 0.27	4.54 ± 0.49	883	< 2.40	< 9.5
SPT-CL J2359-5009	0.775 (1)	35^{+14}_{-8}	62	3.54 ± 0.54 (5)	4.42 ± 0.56	2.93 ± 0.29	3.76 ± 0.47	805	5.96 ± 0.31	$8.4^{+13}_{-6.0}$

References: (1) Bleem et al. (2015); (2) Hasselfield et al. (2013); (3) Hilton et al. (2013); (4) Marriage et al. (2011); (5) Reichardt et al. (2013); (6) Ruel et al. (2014); (7) Sifón et al. (2013).

^aAlternative names for ACT-CL J0102-4915 (El Gordo); ACT-CL J0152-0100 (A267); SPT-CL J0232-4420 (RXJ0232.2-4420); ACT-CL J0245-5302 (AS0295); ACT-CL J0326-0043 (MACS J0326-0043); SPT-CL J0542-4100 (RDCS J0542-4100); SPT-CL J2011-5725 (RXJ2011.3-5725); ACT-CL J2129+0005 (RXJ2129.6+0005); SPT-CL J2248-4431 (AS1063); SPT-CL J2325-4111 (ACOS1121); ACT-CL J2337+0016 (A2631); SPT-CL J2344-4242 (Phoenix). The asterisk marks systems with uncertain core positions.

^bRest-frame monochromatic radio luminosity at 843 MHz using the flux densities from SUMSS (Bock, Large & Sadler 1999), except ACT-CL J0014-0056, ACT-CL J0022-0036, ACT-CL J0059-0049, ACT-CL J0152-0100, ACT-CL J0206-0114, ACT-CL J2129-0005, ACT-CL J2154-0049, and ACT-CL J2337-0016 where NVSS flux densities were used (Condon et al. 1998); ACT-CL J0326-0043 where the FIRST flux density was used (Helfand, White & Becker 2015); and for ACT-CL J0102-4915 and ACT-CL J0152-0100 where the GMRT flux density at 610 MHz from Lindner et al. (2014) and Kale et al. (2013), respectively, was used. The systems marked with asterisk are the ones for which we have GMRT data at 325 MHz (Intema et al. in preparation). For SPT-CL J0106-5943, SPT-CL J2135-5726 and SPT-CL J2248-4431, we measured the flux densities from SUMSS images (5.7 ± 1.9 mJy, 5.3 ± 2.5 mJy and 15.4 ± 4.9 mJy, respectively). The numbers without errors are the upper limit using the noise in the SUMSS or NVSS image: $6\text{--}10$ mJy beam⁻¹ (depending on the declination) for SUMSS (Mauch et al. 2003) and 2.5 mJy beam⁻¹ for NVSS (Condon et al. 1998).

^cStar formation rates from McDonald et al. (2016).

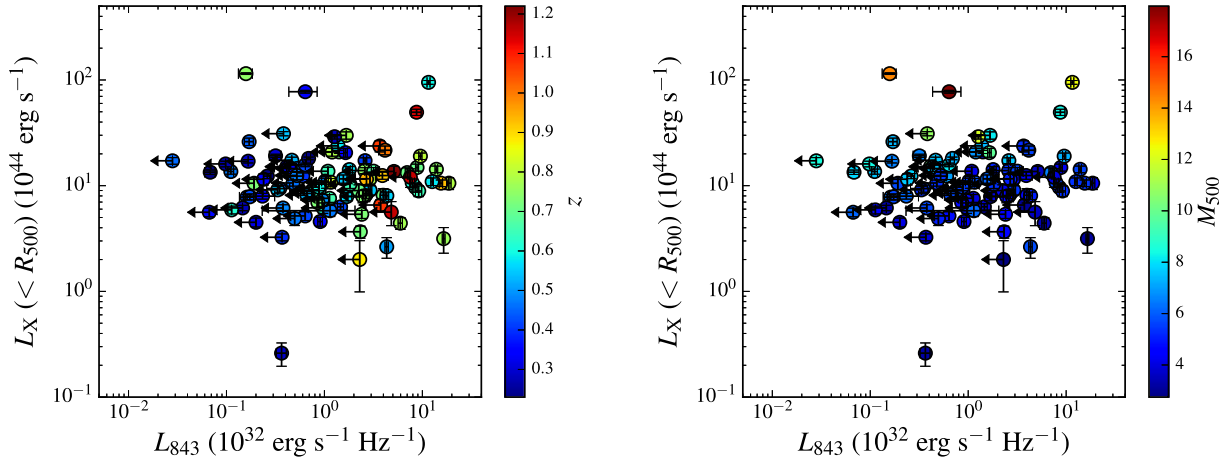


Figure 4. Total bolometric X-ray luminosity inside the R_{500} region, $L_X(< R_{500})$, versus the rest-frame 843 MHz monochromatic radio luminosity for the central radio source, L_{843} . The colour denotes the redshift in the left panel and M_{500} in the right panel.

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