

xGASS: Total cold gas scaling relations and molecular-to-atomic gas ratios of galaxies in the local Universe

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Supporting information: GASS-low data release

We present here the full data release of GASS-low, the low mass extension of GASS, which includes new Arecibo observations of 208 galaxies.

Table A1 lists optical and UV quantities for the GASS-low galaxies, ordered by increasing right ascension. Tables A2 and A3 present the measured HI parameters and upper limits for the 120 detected galaxies and 88 non-detections, respectively, ordered by increasing right ascension. The content of these catalogs is explained in detail in Appendix A of the paper.

Figures A1 and A2 show SDSS images and Arecibo HI-line spectra of GASS-low detections and non-detections, respectively. The objects in each figure are ordered by increasing GASS number (indicated on the top right corner of each spectrum). The SDSS images show a 1 arcmin² field, i.e. only the central part of the region sampled by the Arecibo beam (the half-power full width of the beam is $\sim 3.5'$ at the frequencies of our observations). Therefore, companions that might be detected in our spectra typically are not visible in the postage stamps, but are noted in Appendix B of the paper. The HI spectra are always displayed over a 3000 km s⁻¹ velocity interval, which includes the full 12.5 MHz bandwidth adopted for our observations. The HI-line profiles are calibrated, smoothed (to a velocity resolution between 5 and 15 km s⁻¹ for the detections, as listed in Table A2, or to 15 km s⁻¹ for the non-detections), and baseline subtracted. A red, dotted line indicates the heliocentric velocity corresponding to the optical redshift from SDSS. In Figure A1, the shaded area and two vertical dashes show the part of the profile that was integrated to measure the HI flux and the peaks used for width measurement, respectively.

Table A1: SDSS and UV parameters of GASS-low galaxies

GASS (1)	SDSS ID (2)	Other name (3)	z_{SDSS} (4)	$\log M_{\star}$ ($M_{\odot}$) (5)	$R_{50,z}$ ($''$) (6)	R_{50} ($''$) (7)	R_{90} ($''$) (8)	$\log \mu_{\star}$ ($M_{\odot} \text{ kpc}^{-2}$) (9)	ext_r (mag) (10)	r (mag) (11)	$(b/a)_r$ (12)	incl (deg) (13)	$\text{NUV}-r$ (mag) (14)	SFR ($M_{\odot} \text{ yr}^{-1}$) (15)
124009	J000619.61+141938.7	–	0.0182	9.66	3.52	3.82	11.17	8.63	0.31	15.47	0.394	70	5.27	0.078
124012	J000629.29+141056.5	–	0.0178	9.74	6.03	6.72	16.28	8.27	0.34	15.79	0.144	90	4.26	0.162
124006	J001947.33+003526.8	–	0.0177	9.75	3.47	3.36	10.58	8.76	0.07	14.75	0.753	42	3.82	0.539
124004	J002534.40+005048.6	–	0.0178	9.31	5.35	6.11	11.54	7.93	0.06	15.32	0.917	24	2.21	0.326
124002	J004903.69+152907.9	–	0.0183	9.25	2.60	2.57	6.02	8.48	0.17	15.72	0.479	64	2.33	0.209
101021	J011653.58+000911.2	–	0.0190	9.22	4.22	5.03	11.03	8.00	0.09	15.49	0.686	48	2.21	0.276
101031	J014755.16+124131.0	–	0.0175	9.17	5.51	6.56	14.74	7.79	0.17	15.56	0.492	63	2.41	0.154
101030	J014803.60+125604.6	–	0.0175	9.10	7.06	8.85	17.38	7.50	0.18	15.99	0.659	50	2.90	0.061
101000	J014853.12+132526.2	–	0.0155	9.41	4.28	3.99	12.06	8.35	0.18	15.86	0.787	39	4.91	0.096
101012	J014902.52+125539.0	–	0.0174	9.83	3.77	4.01	9.92	8.78	0.22	15.06	0.642	52	5.17	0.027
101024	J014917.63+132759.9	–	0.0166	9.28	3.81	4.18	9.82	8.26	0.21	16.17	0.735	44	5.57	0.067
101016	J014918.93+130252.0	–	0.0178	9.72	2.53	2.74	6.50	8.99	0.24	15.53	0.845	33	5.51	0.007
101019	J014920.31+131754.5	–	0.0171	9.06	4.78	4.57	11.24	7.83	0.21	16.68	0.673	49	3.92	0.092
101011	J014933.52+131400.0	–	0.0167	9.95	4.66	4.96	14.21	8.75	0.20	14.84	0.768	41	5.92	0.013
101017	J014953.83+125833.7	–	0.0156	9.35	2.92	2.94	8.24	8.62	0.24	16.01	0.657	50	5.22	0.009
101008	J014954.10+130735.9	–	0.0170	9.34	3.21	3.65	9.59	8.45	0.19	16.15	0.760	42	5.55	0.015
101010	J015015.67+130826.8	–	0.0161	9.17	1.94	2.13	5.31	8.77	0.20	16.86	0.888	28	4.30	0.027
101001	J015032.27+133942.2	–	0.0174	9.08	6.29	6.76	16.15	7.59	0.22	16.50	0.200	90	2.54	0.079
101018	J015036.88+130636.8	–	0.0165	9.25	5.14	4.78	12.77	7.98	0.20	15.90	0.933	22	3.40	0.082
107019	J074842.59+263223.2	–	0.0155	9.16	2.25	2.42	7.62	8.66	0.09	16.16	0.764	41	3.46	0.060
107026	J075433.01+294238.8	UGC 04084	0.0167	9.37	7.67	8.57	18.95	7.74	0.11	15.02	0.346	73	1.89	0.384
108143	J080038.05+133923.0	CGCG 059-012	0.0158	9.13	5.65	6.08	13.15	7.81	0.09	15.77	0.529	60	2.77	0.122
108136	J080048.38+100500.9	–	0.0137	9.48	4.18	4.40	11.26	8.54	0.06	15.54	0.359	72	3.98	0.110
108111	J080116.61+091553.3	CGCG 059-015	0.0155	9.95	3.50	3.57	9.56	9.07	0.06	14.58	0.292	77	5.25	–
108080	J080134.48+091817.4	–	0.0153	9.31	4.31	4.86	11.13	8.26	0.06	15.96	0.790	39	3.96	0.022
108065	J080158.49+150331.5	UGC 04175	0.0161	10.10	7.31	8.80	22.07	8.54	0.09	14.04	0.619	53	3.99	0.271
108145	J080206.54+092238.3	–	0.0138	9.16	4.36	4.85	11.20	8.18	0.06	16.15	0.400	69	3.48	0.074
108022	J080210.94+092141.8	–	0.0160	10.05	3.46	3.64	10.17	9.14	0.06	14.63	0.780	40	5.65	–
108052	J080212.07+103234.1	–	0.0145	9.60	4.05	4.22	11.19	8.65	0.06	15.22	0.783	40	4.37	0.093
108078	J080221.93+100906.6	–	0.0152	9.01	2.88	3.01	7.47	8.31	0.06	16.44	0.462	65	3.64	0.022
108013	J080237.85+093000.3	CGCG 059-027	0.0159	10.09	3.02	3.15	9.90	9.31	0.06	14.38	0.626	53	5.24	0.020
108116	J080327.64+094235.8	–	0.0145	9.37	5.24	5.22	11.87	8.19	0.06	15.37	0.638	52	3.25	0.164
108011	J080706.39+075258.4	–	0.0155	9.04	1.49	1.49	4.42	8.90	0.07	15.89	0.737	44	2.38	0.216
108014	J081006.06+245519.5	IC 0497	0.0140	10.09	5.27	5.95	16.85	8.93	0.13	13.78	0.628	53	4.11	1.106
108019	J081012.17+224620.2	–	0.0156	9.37	4.62	4.73	10.14	8.24	0.12	15.85	0.528	60	4.38	0.233
108049	J081104.76+061754.9	CGCG 031-065	0.0145	9.41	6.07	6.71	12.42	8.11	0.08	14.82	0.859	32	2.35	0.250
108029	J081115.92+251045.7	NGC 2536	0.0137	9.62	5.48	6.45	16.83	8.44	0.12	14.04	0.677	49	2.04	0.949
108129	J081214.82+350925.3	–	0.0175	9.47	4.08	4.32	11.68	8.35	0.14	14.97	0.438	67	2.78	0.380
108147	J081523.40+284407.2	CGCG 149-006	0.0197	9.64	8.60	9.48	17.22	7.77	0.09	14.68	0.775	40	2.18	0.616
108044	J081702.26+153746.3	–	0.0190	9.04	1.89	1.98	5.05	8.51	0.11	17.06	0.285	78	2.87	0.065
108113	J081825.77+295734.4	CGCG 149-012	0.0199	9.88	5.06	5.32	10.85	8.46	0.11	14.99	0.860	31	2.74	0.601
108142	J081915.85+191847.6	IC 2290	0.0190	9.61	6.17	6.66	12.98	8.06	0.14	14.69	0.672	49	2.03	0.886

Table A1: – *continued*

GASS (1)	SDSS ID (2)	Other name (3)	z_{SDSS} (4)	$\log M_\star$ ($M_\odot$) (5)	$R_{50,z}$ ($''$) (6)	R_{50} ($''$) (7)	R_{90} ($''$) (8)	$\log \mu_\star$ ($M_\odot \text{ kpc}^{-2}$) (9)	ext_r (mag) (10)	r (mag) (11)	$(b/a)_r$ (12)	incl (deg) (13)	NUV– r (mag) (14)	SFR ($M_\odot \text{ yr}^{-1}$) (15)
108114	J081924.28+210012.8	–	0.0130	9.67	5.21	6.54	17.62	8.59	0.14	14.93	0.464	65	–	0.001
108058	J082126.80+242711.1	–	0.0198	10.12	3.87	4.21	13.23	8.94	0.09	14.65	0.621	53	4.41	0.337
108097	J082201.90+042333.2	–	0.0142	9.34	4.95	5.15	10.86	8.23	0.07	15.37	0.850	33	3.66	0.055
108055	J082203.60+084509.3	IC 0502	0.0138	10.04	4.88	5.23	13.68	8.96	0.08	14.15	0.962	16	5.90	0.010
108053	J082213.57+041151.7	–	0.0129	9.46	3.21	3.30	9.57	8.81	0.06	15.25	0.409	69	5.82	0.004
108006	J082225.92+040947.7	–	0.0149	9.30	2.48	2.74	7.88	8.74	0.07	15.91	0.960	17	5.04	0.023
108024	J082404.23+210042.7	–	0.0155	9.45	3.01	3.00	8.56	8.70	0.11	15.60	0.537	59	5.52	0.018
108061	J082425.83+041451.6	CGCG 032-019	0.0136	10.17	4.39	4.74	15.01	9.20	0.07	13.73	0.424	68	5.25	0.032
108101	J082701.39+214224.4	CGCG 119-101	0.0153	9.99	3.11	3.10	8.84	9.22	0.13	13.77	0.326	75	4.27	0.123
108093	J083530.18+234034.3	CGCG 119-128	0.0168	9.94	4.75	4.96	11.49	8.72	0.11	14.63	0.380	71	3.41	0.674
108140	J083941.65+274332.2	–	0.0185	9.01	3.83	4.31	9.85	7.90	0.12	16.34	0.235	83	2.69	0.069
108021	J085518.73+272046.1	–	0.0173	9.64	3.04	3.36	7.62	8.78	0.10	14.97	0.867	31	2.53	0.505
108051	J085603.98+132519.2	–	0.0140	9.11	5.06	5.11	13.97	8.00	0.09	15.14	0.821	36	3.52	0.060
108017	J085651.34+271612.3	–	0.0186	9.91	3.10	3.16	9.01	8.98	0.09	14.98	0.538	59	4.19	0.056
109129	J090130.48+123943.6	–	0.0193	9.23	4.19	4.46	11.78	8.00	0.10	16.00	0.200	90	2.51	0.275
109038	J090316.50+181539.8	NGC 2741	0.0116	9.21	3.60	3.76	10.07	8.55	0.08	14.75	0.408	69	1.88	0.739
109101	J090404.86+220341.6	CGCG 121-011	0.0104	9.01	7.01	8.00	16.30	7.86	0.09	14.69	0.577	57	2.02	0.138
109022	J090439.32+181526.5	NGC 2745	0.0121	9.81	2.38	2.48	8.15	9.47	0.08	14.50	0.719	45	5.35	0.006
109014	J090518.34+182631.9	NGC 2747	0.0140	9.87	4.13	4.37	11.66	8.93	0.09	14.43	0.481	64	5.61	0.009
109083	J090805.39+083038.4	–	0.0182	9.81	2.95	3.32	7.49	8.94	0.15	15.40	0.398	69	3.74	0.500
109066	J090923.67+223050.1	–	0.0149	9.99	3.07	3.20	9.09	9.25	0.16	14.63	0.383	71	4.05	0.276
109009	J090952.13+094737.0	VIII Zw 039	0.0183	9.38	1.87	1.88	5.01	8.89	0.17	15.71	0.578	56	2.39	0.194
109060	J091105.57+092058.4	VIII Zw 040	0.0122	9.64	2.16	2.27	6.86	9.38	0.20	14.86	0.888	28	5.23	0.014
109134	J091313.69+114616.7	–	0.0167	9.43	2.50	2.64	7.13	8.77	0.08	16.52	0.461	65	3.76	0.226
109021	J091657.98+064254.3	–	0.0186	9.54	2.22	2.36	6.82	8.90	0.10	15.79	0.612	54	5.09	0.040
109036	J091840.62+134946.1	UGC 04931	0.0116	10.11	7.02	7.99	20.80	8.87	0.09	13.43	0.531	60	–	0.452
109057	J092015.61+011719.7	–	0.0175	9.92	4.52	4.83	14.74	8.71	0.08	14.93	0.763	41	5.80	0.036
109099	J092033.28+004315.7	–	0.0172	9.02	5.32	6.69	11.75	7.68	0.09	16.40	0.991	8	3.14	0.033
109102	J092115.45+030903.9	IC 0534	0.0117	9.38	6.32	8.01	20.80	8.22	0.14	14.47	0.300	77	2.09	0.380
109020	J092414.56+110638.1	UGC 05003	0.0114	9.54	7.97	9.83	21.40	8.20	0.09	14.46	0.445	66	3.45	0.115
109045	J092515.42+105312.2	CGCG 062-030	0.0120	9.86	7.53	7.77	17.14	8.53	0.09	14.33	0.350	73	4.23	0.115
109031	J092515.88+113548.7	–	0.0118	9.23	4.91	5.03	13.37	8.28	0.10	15.64	0.510	61	5.14	0.004
109064	J092548.49+112715.2	NGC 2873	0.0108	9.46	5.61	6.28	14.72	8.47	0.09	14.93	0.458	65	5.19	0.003
109126	J093459.07+254932.4	–	0.0132	9.14	4.53	4.46	10.37	8.17	0.06	15.16	0.737	44	2.46	0.163
109005	J093505.80+093857.2	–	0.0114	9.61	3.05	3.25	10.30	9.11	0.09	14.56	0.885	28	5.29	0.008
109103	J093640.73+024212.7	–	0.0189	9.45	4.01	4.26	9.72	8.28	0.10	16.15	0.224	84	3.74	0.136
109097	J093834.45+085316.4	–	0.0108	9.95	4.75	5.24	13.86	9.11	0.11	13.85	0.286	78	5.48	0.027
109072	J094031.83+285809.5	UGC 05154	0.0189	9.68	3.46	5.79	18.05	8.63	0.06	14.87	0.364	72	2.16	0.578
109108	J094419.42+095905.2	–	0.0102	9.62	2.80	3.36	7.86	9.28	0.08	15.26	0.593	55	4.57	0.077
109075	J094834.50+145356.7	–	0.0195	9.77	3.63	3.95	10.80	8.66	0.10	15.27	0.839	34	5.56	0.036
109077	J095118.36+090821.2	–	0.0178	9.50	5.45	5.73	11.81	8.12	0.09	15.54	0.399	69	3.00	0.106
109120	J095127.77+071549.3	CGCG 035-070	0.0131	9.12	4.16	4.58	9.35	8.23	0.13	15.33	0.382	71	2.54	0.104

Table A1: – *continued*

GASS (1)	SDSS ID (2)	Other name (3)	z_{SDSS} (4)	$\log M_{\star}$ ($M_{\odot}$) (5)	$R_{50,z}$ ($''$) (6)	R_{50} ($''$) (7)	R_{90} ($''$) (8)	$\log \mu_{\star}$ ($M_{\odot} \text{ kpc}^{-2}$) (9)	ext_r (mag) (10)	r (mag) (11)	$(b/a)_r$ (12)	incl (deg) (13)	NUV– r (mag) (14)	SFR ($M_{\odot} \text{ yr}^{-1}$) (15)
109058	J095203.80+193904.0	CGCG 092-061	0.0161	9.91	6.59	6.75	16.40	8.44	0.08	14.46	0.295	77	3.14	0.440
109106	J095351.48+133654.3	CGCG 063-100	0.0163	9.65	7.36	7.76	17.44	8.08	0.09	14.56	0.491	63	2.63	0.484
109094	J095546.29+032417.2	CGCG 036-002	0.0171	9.26	6.58	6.93	14.17	7.74	0.06	15.23	0.556	58	2.22	0.257
109079	J095700.35+153320.3	–	0.0145	9.21	1.89	1.84	5.08	8.92	0.09	15.53	0.773	40	2.74	0.187
109035	J095824.07+102146.2	–	0.0180	10.09	3.61	3.70	10.93	9.05	0.11	14.58	0.574	57	5.80	0.013
109034	J095828.36+111809.2	–	0.0178	9.22	1.79	1.92	5.58	8.80	0.09	16.50	0.873	30	4.58	0.033
109135	J095830.55+101058.7	–	0.0174	9.13	7.52	7.57	14.84	7.48	0.10	16.00	0.697	47	2.77	0.065
109132	J095859.58+102244.0	–	0.0184	9.02	4.30	3.69	9.93	7.81	0.12	16.82	0.330	74	4.34	0.071
110010	J100103.36+043709.3	CGCG 036-020	0.0135	9.66	4.28	4.30	11.99	8.72	0.06	14.55	0.767	41	5.06	0.075
110038	J100216.28+191256.3	CGCG 093-028	0.0166	10.00	3.49	3.89	11.80	9.06	0.08	14.60	0.674	49	3.38	0.514
110013	J101712.71+131131.3	CGCG 064-101	0.0175	9.71	5.83	6.40	13.17	8.28	0.12	14.80	0.450	66	2.77	0.427
110058	J101819.17+131352.5	–	0.0183	9.05	4.70	5.39	12.36	7.77	0.13	15.80	0.400	69	2.18	0.156
110080	J101837.31+031548.9	CGCG 036-090	0.0144	9.20	4.14	4.85	12.08	8.23	0.10	15.60	0.243	82	2.33	0.269
110047	J102003.66+253418.2	–	0.0181	9.27	1.60	1.71	4.08	8.93	0.06	16.68	0.426	67	3.50	0.053
110060	J102052.18+253354.9	–	0.0199	10.15	4.63	5.25	12.80	8.81	0.06	15.05	0.483	63	5.51	0.116
110056	J102154.57+112755.8	–	0.0170	9.01	2.69	2.64	7.49	8.28	0.09	16.02	0.481	64	2.67	0.088
110019	J102901.59+260912.6	–	0.0173	9.02	2.38	2.57	6.49	8.37	0.07	16.24	1.000	1	4.00	0.129
110057	J102923.06+260413.6	–	0.0166	9.36	5.57	6.12	14.11	8.02	0.07	15.42	0.321	75	2.82	0.253
110042	J103158.43+113622.8	–	0.0190	10.06	2.17	2.23	6.63	9.42	0.12	14.84	0.428	67	5.43	0.042
110055	J103525.10+031739.9	–	0.0189	9.10	4.34	5.25	11.58	7.86	0.10	16.00	0.451	66	2.43	0.100
110017	J103539.30+283356.9	UGC 05749	0.0147	9.85	5.25	5.72	12.04	8.66	0.07	13.61	0.888	28	2.14	1.376
110059	J103913.14+310650.4	–	0.0189	9.41	6.90	10.39	19.11	7.77	0.04	15.36	0.667	50	2.19	0.235
110054	J104402.46+221527.1	–	0.0196	9.75	5.10	5.21	11.75	8.34	0.06	14.88	0.636	52	3.46	0.199
110007	J104649.35+180151.8	–	0.0198	9.40	3.32	3.30	9.24	8.36	0.08	16.19	0.356	73	5.31	0.005
111066	J111357.61+105218.2	–	0.0198	9.26	3.20	3.24	8.83	8.24	0.04	16.32	0.490	63	3.81	0.043
111053	J112139.74+112924.6	–	0.0199	9.29	2.34	2.33	5.26	8.54	0.08	15.93	0.971	14	2.50	0.205
111093	J112739.14+234528.5	CGCG 126-054	0.0197	9.28	6.84	6.99	15.63	7.61	0.05	14.91	0.495	63	1.82	0.547
111030	J113103.69+201408.2	CGCG 126-075	0.0140	10.09	7.36	7.94	17.72	8.65	0.06	14.08	0.565	57	3.61	2.691
111086	J113914.72+145932.7	CGCG 097-038	0.0143	9.64	4.61	4.73	12.31	8.59	0.11	15.02	0.284	78	3.79	0.414
111080	J114011.68+171844.4	UGC 06631	0.0118	10.01	7.20	7.92	17.39	8.74	0.07	13.62	0.556	58	3.03	0.620
111047	J114253.93+000942.6	CGCG 012-064	0.0185	9.16	3.19	3.65	8.26	8.20	0.08	15.51	0.739	44	1.42	0.476
111036	J114313.27+200754.9	–	0.0183	9.42	3.34	3.72	9.59	8.44	0.05	16.00	0.561	58	5.26	0.033
111024	J114423.13+163304.5	–	0.0129	9.66	3.58	3.81	9.72	8.91	0.09	14.64	0.680	49	5.10	0.012
111088	J115417.76+325139.5	UGC 06878	0.0106	9.31	7.90	8.44	20.20	8.04	0.07	14.79	0.219	85	2.64	0.158
111004	J115751.37+275207.2	NGC 4004B	0.0112	10.05	4.44	4.73	13.77	9.24	0.07	13.79	0.616	54	4.60	0.202
111049	J115756.49+250405.8	NGC 3999	0.0138	9.68	2.85	2.94	9.10	9.07	0.06	14.95	0.519	61	5.25	0.020
111063	J115825.43+250551.5	NGC 4011	0.0141	9.61	5.07	5.54	14.78	8.49	0.07	15.05	0.379	71	4.84	0.119
111028	J115949.61+305039.9	IC 2986	0.0104	10.00	4.86	5.40	16.29	9.18	0.05	13.65	0.838	34	5.12	0.038
112065	J120108.03+152353.6	–	0.0172	9.67	2.91	3.04	7.72	8.85	0.11	15.21	0.886	28	5.49	0.018
112106	J120336.94+023749.6	–	0.0193	9.33	3.14	4.44	11.96	8.35	0.07	16.48	0.329	75	3.81	0.044
112068	J120409.73+014933.5	CGCG 013-056	0.0172	9.67	5.84	7.51	19.90	8.26	0.07	14.52	0.620	53	3.31	0.351
112014	J120432.18+022711.2	–	0.0200	9.58	3.25	3.30	8.73	8.55	0.08	15.94	0.288	78	5.34	0.049

Table A1: – *continued*

GASS (1)	SDSS ID (2)	Other name (3)	z_{SDSS} (4)	$\log M_\star$ ($M_\odot$) (5)	$R_{50,z}$ ($''$) (6)	R_{50} ($''$) (7)	R_{90} ($''$) (8)	$\log \mu_\star$ ($M_\odot \text{ kpc}^{-2}$) (9)	ext_r (mag) (10)	r (mag) (11)	$(b/a)_r$ (12)	incl (deg) (13)	NUV– r (mag) (14)	SFR ($M_\odot \text{ yr}^{-1}$) (15)
112019	J121156.80+273835.5	CGCG 158-040	0.0133	10.16	4.14	4.39	12.91	9.26	0.06	13.85	0.479	64	5.70	0.015
112100	J121830.09+041824.4	–	0.0191	9.14	7.55	7.25	14.06	7.41	0.05	15.73	0.715	46	2.08	0.184
112112	J122540.14+203142.4	–	0.0183	9.92	6.62	7.92	18.47	8.34	0.09	15.06	0.248	81	3.76	0.494
112051	J123822.14+014045.0	–	0.0163	9.71	2.14	2.19	6.05	9.20	0.06	15.26	0.587	56	5.47	0.014
112080	J124128.94+260518.9	NGC 4613	0.0164	9.95	5.28	5.51	11.83	8.66	0.04	14.42	0.826	35	3.03	0.491
112054	J124408.63+252458.1	–	0.0174	9.65	1.75	1.82	5.27	9.27	0.03	15.49	0.681	48	5.13	0.012
112001	J124523.92+090510.4	VCC 2020	0.0191	10.18	3.00	3.15	10.49	9.25	0.06	14.43	0.418	68	5.42	0.023
112050	J124841.02+342839.3	–	0.0142	9.42	3.49	3.26	10.35	8.61	0.04	14.43	0.769	41	1.90	1.126
112089	J125026.62+264407.2	–	0.0194	9.06	2.72	3.05	8.24	8.20	0.03	17.03	0.273	79	4.77	0.013
112016	J125321.68+262141.1	–	0.0193	9.51	3.43	3.66	10.77	8.46	0.03	15.84	0.332	74	4.86	0.022
112116	J125606.10+274041.1	CGCG 160-020	0.0165	9.12	3.32	3.23	7.81	8.23	0.02	15.11	0.615	54	1.69	1.254
112004	J125747.86+274610.0	–	0.0193	9.36	2.62	2.71	7.37	8.54	0.03	16.38	0.594	55	5.19	0.006
112003	J125754.36+272926.3	–	0.0166	9.81	7.19	7.63	14.52	8.24	0.03	14.98	0.492	63	4.82	0.661
112002	J125756.51+272256.2	–	0.0174	9.11	3.46	3.51	8.56	8.13	0.03	16.73	0.983	11	4.64	0.055
112017	J125801.71+275112.8	–	0.0190	9.52	2.76	2.95	8.90	8.67	0.03	16.03	0.736	44	4.92	0.006
112012	J125807.54+261936.6	–	0.0190	9.81	3.59	3.91	10.65	8.73	0.02	15.42	0.562	58	5.41	0.010
112006	J125826.93+293644.9	–	0.0195	10.04	5.41	5.74	14.49	8.59	0.03	14.61	0.615	54	5.36	0.022
112060	J125838.41+273238.7	–	0.0199	9.95	2.56	2.58	7.22	9.13	0.03	15.23	0.630	53	5.46	0.018
112035	J125905.29+273839.9	CGCG 160-073	0.0181	9.67	5.30	6.03	16.77	8.29	0.03	14.34	0.824	35	2.63	0.761
112084	J125910.30+273711.5	–	0.0191	9.93	2.37	2.46	7.47	9.20	0.03	15.19	0.839	34	5.39	0.024
112011	J125937.48+280958.0	–	0.0191	9.44	2.49	2.67	7.98	8.67	0.03	16.18	0.671	49	5.06	0.007
113040	J130009.14+275159.3	CGCG 160-243	0.0177	9.32	3.00	2.98	7.40	8.46	0.03	15.44	0.717	45	2.75	0.899
113032	J130010.41+273542.0	–	0.0187	9.56	3.36	3.60	8.69	8.55	0.03	15.90	0.709	46	5.99	0.004
113012	J130016.51+275803.0	NGC 4894	0.0155	9.80	2.96	3.25	10.37	9.06	0.03	14.87	0.493	63	4.51	0.016
113060	J130018.57+274855.9	–	0.0179	9.43	4.17	4.59	11.54	8.27	0.02	16.11	0.836	34	5.71	0.003
113128	J130018.77+275613.3	–	0.0176	9.69	4.13	4.60	11.15	8.55	0.03	15.30	0.614	54	5.50	0.010
113047	J130019.10+273313.4	–	0.0196	10.20	3.49	3.61	10.20	9.11	0.02	14.70	0.781	40	6.09	0.010
113100	J130035.67+273427.2	–	0.0170	9.89	5.26	6.01	14.23	8.58	0.03	15.04	0.233	83	4.27	0.386
113051	J130109.23+274905.9	CGCG 160-092	0.0197	10.05	3.57	4.04	13.56	8.94	0.02	14.90	0.726	45	5.26	0.040
113004	J130113.62+275451.3	–	0.0195	9.73	2.90	3.23	11.26	8.81	0.03	15.58	0.920	24	5.23	0.016
113078	J130234.79+275656.8	–	0.0193	10.01	5.75	6.18	15.25	8.51	0.02	14.77	0.488	63	5.90	–
113025	J130235.17+272621.9	–	0.0181	9.41	4.87	5.55	15.17	8.11	0.03	15.48	0.546	59	4.34	0.349
113052	J130407.96+275753.8	–	0.0198	9.93	5.71	5.06	14.56	8.41	0.03	15.02	0.757	42	5.47	0.011
113001	J130411.24+272925.6	–	0.0178	9.93	4.89	5.27	13.42	8.63	0.03	14.96	0.818	36	4.57	0.636
113098	J131335.27+290735.5	–	0.0200	9.86	3.84	3.97	9.91	8.68	0.03	15.98	0.264	80	4.03	0.217
113110	J131954.35+311405.8	–	0.0185	9.50	5.64	6.53	15.33	8.05	0.03	15.73	0.209	86	3.20	0.095
113056	J132006.91+143235.7	CGCG 101-026	0.0121	9.60	3.52	3.50	10.12	8.92	0.08	14.55	0.680	49	5.05	0.012
113115	J132051.77+312159.5	CGCG 160-206	0.0168	9.70	6.24	6.58	15.67	8.24	0.03	14.96	0.219	85	2.82	0.371
113124	J132251.07+314933.3	CGCG 161-035	0.0178	9.41	6.52	8.10	16.83	7.86	0.05	14.94	0.414	68	1.89	0.555
113024	J132341.57+313846.7	CGCG 161-041	0.0166	9.84	7.82	9.56	20.52	8.20	0.04	14.55	0.775	40	3.37	0.231
113038	J132421.17+355449.5	UGC 08432	0.0185	10.13	6.85	7.61	17.48	8.51	0.04	14.03	0.435	67	2.83	1.188
113118	J133829.71+305912.7	–	0.0160	9.12	3.89	4.61	10.33	8.12	0.05	15.37	0.857	32	2.10	0.239

Table A1: – *continued*

GASS (1)	SDSS ID (2)	Other name (3)	z_{SDSS} (4)	$\log M_{\star}$ ($M_{\odot}$) (5)	$R_{50,z}$ ($''$) (6)	R_{50} ($''$) (7)	R_{90} ($''$) (8)	$\log \mu_{\star}$ ($M_{\odot} \text{ kpc}^{-2}$) (9)	ext_r (mag) (10)	r (mag) (11)	$(b/a)_r$ (12)	incl (deg) (13)	NUV– r (mag) (14)	SFR ($M_{\odot} \text{ yr}^{-1}$) (15)
113005	J134629.61+035241.9	CGCG 045-095	0.0178	9.18	4.01	3.87	11.35	8.06	0.06	15.53	0.260	80	2.98	0.328
113091	J135049.15+171655.5	–	0.0175	9.16	5.78	6.19	15.59	7.74	0.07	15.55	0.267	80	1.98	0.204
113133	J135138.25+053334.8	–	0.0188	9.32	4.99	4.95	12.20	7.96	0.07	15.68	0.387	70	2.63	0.121
113010	J135305.43+155040.3	CGCG 102-075	0.0102	9.98	4.82	5.12	15.05	9.17	0.08	13.78	0.477	64	4.35	0.107
113105	J135705.54+193238.2	CGCG 103-021	0.0173	9.14	2.99	3.12	8.42	8.30	0.17	15.61	0.633	52	1.87	0.306
113123	J135834.56+063426.6	–	0.0173	9.07	4.53	4.95	10.32	7.87	0.08	16.27	0.455	65	2.17	0.088
113122	J135845.41+203942.7	–	0.0161	9.89	3.47	3.73	8.19	8.98	0.10	15.18	0.459	65	3.94	0.585
113011	J135906.39+175604.9	–	0.0176	9.11	1.91	1.86	5.10	8.64	0.07	15.91	0.511	61	2.37	0.200
114141	J140043.65+315339.0	IC 4357	0.0146	9.45	8.27	9.32	19.67	7.87	0.05	14.19	0.661	50	1.48	0.900
114001	J140220.56+322653.4	CGCG 191-037	0.0145	10.13	4.58	4.98	15.71	9.07	0.05	14.24	0.364	72	4.95	0.080
114104	J140412.86+083102.0	–	0.0161	9.12	2.83	2.85	7.50	8.39	0.07	16.15	0.530	60	3.16	0.060
114039	J140449.46+112343.8	CGCG 074-086	0.0138	10.18	3.68	4.01	13.69	9.35	0.05	13.78	0.813	36	5.59	0.025
114044	J140452.67+213800.6	CGCG 132-073	0.0165	10.02	3.57	3.54	9.86	9.07	0.08	14.06	0.759	42	2.58	2.080
114047	J140509.31+102529.5	–	0.0179	9.07	2.25	2.25	6.54	8.45	0.06	16.03	0.484	63	3.19	0.057
114075	J140510.39+114616.9	–	0.0174	9.23	3.42	3.33	10.52	8.26	0.06	15.71	0.330	75	3.79	0.027
114115	J140832.77+030127.4	CGCG 046-057	0.0175	9.65	6.85	7.46	19.06	8.07	0.09	15.00	0.184	90	3.09	0.327
114057	J140859.33+144529.5	CGCG 103-085	0.0172	10.17	3.88	4.05	12.68	9.11	0.04	14.29	0.371	71	–	0.046
114110	J141057.77+062218.1	NGC 5491B	0.0197	10.03	3.73	5.24	15.03	8.88	0.07	14.95	0.532	60	–	0.477
114033	J141212.71+155207.9	NGC 5504B	0.0174	9.91	4.52	5.00	11.76	8.70	0.04	14.38	0.709	46	3.14	0.533
114058	J141513.81+155239.8	CGCG 103-128	0.0178	10.16	4.89	4.97	13.62	8.87	0.05	14.10	0.720	45	5.43	0.062
114127	J141733.87+250652.0	–	0.0172	9.53	4.18	4.54	10.74	8.40	0.05	15.60	0.365	72	3.86	0.086
114091	J141842.39+245519.8	–	0.0150	9.06	3.47	3.71	10.07	8.21	0.05	15.52	0.722	45	2.92	0.058
114085	J142118.67+123021.4	–	0.0165	9.31	2.05	2.13	7.67	8.84	0.06	15.61	0.730	44	2.44	0.232
114025	J142520.69+254229.2	–	0.0154	9.16	2.74	2.82	7.92	8.50	0.05	16.23	0.639	52	4.52	0.029
114096	J142554.78+254604.8	–	0.0156	9.33	4.95	5.32	12.36	8.14	0.05	15.84	0.526	60	4.87	0.007
114077	J142615.47+252759.5	–	0.0165	9.19	1.95	2.00	5.67	8.76	0.06	16.13	0.660	50	2.69	0.152
114076	J142621.41+100948.0	–	0.0162	9.18	1.84	2.07	5.41	8.82	0.08	16.15	0.482	63	3.04	0.144
114038	J142714.65+255319.1	–	0.0159	9.83	5.50	5.71	14.30	8.53	0.05	14.86	0.822	36	5.88	0.007
114065	J142723.43+255240.2	–	0.0133	9.11	5.01	4.93	11.12	8.04	0.05	16.05	0.833	34	3.89	0.035
114036	J142750.81+255017.0	CGCG 133-060	0.0147	10.20	6.41	6.85	17.52	8.83	0.06	13.93	0.533	60	5.62	0.205
114005	J142805.10+254949.6	–	0.0152	9.42	5.33	5.58	12.79	8.19	0.06	15.62	0.865	31	4.83	0.052
114008	J142812.79+254949.8	IC 1018	0.0132	9.61	2.69	3.03	9.31	9.09	0.06	14.99	0.862	31	5.48	0.006
114037	J142834.44+272010.9	–	0.0135	9.42	3.20	3.24	7.21	8.73	0.06	15.49	0.644	51	3.75	0.031
114144	J142835.76+254231.9	CGCG 133-067	0.0136	9.86	10.37	10.82	23.85	8.15	0.06	14.50	0.342	74	4.57	0.116
114010	J142846.66+271502.4	–	0.0147	9.71	2.21	2.18	7.30	9.27	0.06	14.67	0.526	60	3.19	2.070
114048	J142855.80+254415.4	–	0.0159	9.97	6.26	6.70	16.48	8.56	0.06	14.42	0.765	41	5.83	–
122001	J223649.85+142312.9	CGCG 429-012	0.0175	10.17	3.46	3.71	12.99	9.20	0.18	14.25	0.519	61	4.89	0.175
122002	J224110.65+132023.6	CGCG 429-021	0.0173	9.47	5.38	6.43	14.84	8.11	0.16	14.81	0.355	73	2.24	0.488
123003	J232028.21+150420.9	–	0.0128	9.57	2.06	2.15	6.98	9.32	0.12	14.95	0.932	22	4.78	0.033
123011	J232511.36+151159.5	UGC 12590	0.0143	10.11	4.16	4.27	13.95	9.14	0.18	13.85	0.345	73	5.29	0.025

Table A2: H I Properties of GASS-low detections

GASS (1)	SDSS ID (2)	z_{SDSS} (3)	T_{on} (min) (4)	Δv (km s ⁻¹) (5)	z (6)	W_{50} (km s ⁻¹) (7)	W_{50}^c (km s ⁻¹) (8)	F (Jy km s ⁻¹) (9)	rms (mJy) (10)	S/N (11)	log M_{HI} (M _⊙) (12)	log $M_{\text{HI}}/M_{\star}$ (13)	Q (14)
124012	J000629.29+141056.5	0.0178	5	15	0.017 712	267± 5	256	0.65± 0.10	0.64	11.4	8.94	−0.81	1*
124004	J002534.40+005048.6	0.0178	5	12	0.017 816	130± 2	122	0.71± 0.07	0.72	17.5	8.99	−0.32	1
124002	J004903.69+152907.9	0.0183	4	12	0.018 269	205± 3	195	0.67± 0.11	0.90	10.6	8.98	−0.26	1*
101021	J011653.58+000911.2	0.0190	5	12	0.018 956	180± 4	170	0.93± 0.10	0.88	15.9	9.15	−0.06	1*
101031	J014755.16+124131.0	0.0175	5	12	0.017 465	173± 3	164	0.86± 0.07	0.67	19.7	9.05	−0.12	1
101030	J014803.60+125604.6	0.0175	10	10	0.017 445	44± 1	39	0.42± 0.03	0.57	25.0	8.74	−0.36	1*
101000	J014853.12+132526.2	0.0155	59	12	0.015 768	115± 3	107	0.09± 0.02	0.21	8.6	8.01	−1.40	1
101016	J014918.93+130252.0	0.0178	50	15	0.017 242	207± 48	196	0.40± 0.03	0.20	24.5	8.70	−1.01	5*
101001	J015032.27+133942.2	0.0174	10	12	0.017 372	202± 5	193	1.10± 0.07	0.56	27.9	9.15	0.07	1
101018	J015036.88+130636.8	0.0165	59	12	0.016 531	69± 7	62	0.07± 0.02	0.24	7.5	7.94	−1.31	1*
107019	J074842.59+263223.2	0.0155	25	12	0.015 537	172± 3	164	0.22± 0.04	0.33	10.1	8.35	−0.81	1*
107026	J075433.01+294238.8	0.0167	5	10	0.016 672	223± 3	215	3.58± 0.11	1.02	53.3	9.63	0.26	1
108143	J080038.05+133923.0	0.0158	23	12	0.015 754	101± 7	94	0.26± 0.04	0.51	10.3	8.45	−0.68	1*
108136	J080048.38+100500.9	0.0137	35	12	0.013 696	212± 11	203	0.28± 0.04	0.37	10.5	8.35	−1.12	1
108145	J080206.54+092238.3	0.0138	20	15	0.013 736	91± 10	82	0.10± 0.03	0.30	6.3	7.90	−1.26	2*
108078	J080221.93+100906.6	0.0152	30	12	0.015 277	157± 3	148	0.18± 0.04	0.39	7.4	8.26	−0.76	1*
108011	J080706.39+075258.4	0.0155	15	10	0.015 441	80± 23	74	0.34± 0.03	0.48	18.3	8.54	−0.50	1*
108014	J081006.06+245519.5	0.0140	4	10	0.013 923	233± 9	225	5.67± 0.10	0.93	91.3	9.67	−0.41	5*
108019	J081012.17+224620.2	0.0156	30	15	0.015 624	101± 13	92	0.12± 0.03	0.30	7.3	8.10	−1.26	5*
108049	J081104.76+061754.9	0.0145	4	12	0.014 520	121± 3	113	0.56± 0.07	0.81	12.8	8.70	−0.71	1*
108029	J081115.92+251045.7	0.0137	4	5	0.013 713	96± 4	92	12.60± 0.06	1.22	342.5	10.01	0.39	5*
108129	J081214.82+350925.3	0.0175	5	10	0.017 485	223± 2	214	2.34± 0.11	0.96	37.1	9.49	0.02	1*
108147	J081523.40+284407.2	0.0197	5	12	0.019 787	127± 4	118	1.16± 0.07	0.77	26.8	9.29	−0.35	1
108044	J081702.26+153746.3	0.0190	10	12	0.018 980	243± 4	233	0.59± 0.07	0.52	14.7	8.96	−0.08	1
108113	J081825.77+295734.4	0.0199	4	12	0.019 894	259± 2	248	1.60± 0.16	1.22	16.4	9.43	−0.44	1
108142	J081915.85+191847.6	0.0190	4	12	0.018 993	208± 2	198	1.68± 0.14	1.13	20.8	9.42	−0.20	1
108097	J082201.90+042333.2	0.0142	30	12	0.014 160	110± 12	102	0.15± 0.03	0.31	9.8	8.12	−1.22	1*
108024	J082404.23+210042.7	0.0155	5	12	0.015 481	474± 6	460	2.27± 0.17	0.92	21.1	9.37	−0.08	5*
108093	J083530.18+234034.3	0.0168	5	15	0.016 775	223± 15	212	0.88± 0.10	0.74	14.6	9.03	−0.91	1*
108140	J083941.65+274332.2	0.0185	4	12	0.018 499	194± 6	185	0.85± 0.10	0.88	14.0	9.10	0.08	1*
108021	J085518.73+272046.1	0.0173	10	12	0.017 309	190± 7	181	0.62± 0.07	0.58	15.7	8.90	−0.73	1
108051	J085603.98+132519.2	0.0140	8	12	0.014 033	56± 3	49	0.18± 0.03	0.56	8.6	8.18	−0.93	1*
108017	J085651.34+271612.3	0.0186	15	12	0.018 610	284± 1	273	0.68± 0.06	0.44	18.6	9.01	−0.90	1
109129	J090130.48+123943.6	0.0193	5	12	0.019 510	330± 15	317	1.42± 0.11	0.71	22.3	9.36	0.13	5*
109038	J090316.50+181539.8	0.0116	4	12	0.011 598	172± 11	164	1.88± 0.09	0.86	33.8	9.04	−0.17	1
109101	J090404.86+220341.6	0.0104	4	12	0.010 397	166± 4	158	2.23± 0.09	0.81	43.2	9.02	0.01	1
109083	J090805.39+083038.4	0.0182	8	12	0.018 246	148± 10	140	0.48± 0.07	0.72	11.1	8.84	−0.97	1*
109066	J090923.67+223050.1	0.0149	5	12	0.014 907	254± 5	244	2.39± 0.09	0.70	43.1	9.36	−0.63	1
109009	J090952.13+094737.0	0.0183	8	12	0.018 293	151± 15	142	0.33± 0.06	0.60	8.9	8.67	−0.70	1*
109134	J091313.69+114616.7	0.0167	10	15	0.016 685	253± 14	241	0.41± 0.07	0.49	9.7	8.69	−0.74	1
109021	J091657.98+064254.3	0.0186	40	12	0.018 663	205± 3	196	0.16± 0.03	0.26	8.6	8.38	−1.17	1

Table A2: – *continued*

GASS (1)	SDSS ID (2)	z_{SDSS} (3)	T_{on} (min) (4)	Δv (km s ⁻¹) (5)	z (6)	W_{50} (km s ⁻¹) (7)	W_{50}^c (km s ⁻¹) (8)	F (Jy km s ⁻¹) (9)	rms (mJy) (10)	S/N (11)	$\log M_{\text{HI}}$ (M _⊙) (12)	$\log M_{\text{HI}}/M_{\star}$ (13)	Q (14)
109099	J092033.28+004315.7	0.0172	35	12	0.017 172	63± 1	56	0.10± 0.02	0.34	7.1	8.08	−0.94	1
109102	J092115.45+030903.9	0.0117	5	5	0.011 735	251± 1	246	9.65± 0.10	1.25	157.8	9.76	0.38	1
109020	J092414.56+110638.1	0.0114	4	12	0.011 491	228± 1	220	0.71± 0.11	0.88	10.9	8.61	−0.93	1*
109126	J093459.07+254932.4	0.0132	4	12	0.013 152	56± 4	49	0.24± 0.05	0.88	7.4	8.25	−0.89	1*
109103	J093640.73+024212.7	0.0189	10	12	0.018 926	226± 6	216	0.44± 0.06	0.51	11.4	8.83	−0.63	1
109072	J094031.83+285809.5	0.0189	5	10	0.018 880	252± 1	243	2.74± 0.10	0.84	46.4	9.62	−0.06	1
109108	J094419.42+095905.2	0.0102	4	12	0.010 247	236± 1	227	0.72± 0.10	0.77	12.4	8.51	−1.10	1*
109077	J095118.36+090821.2	0.0178	8	12	0.017 869	257± 3	246	0.54± 0.08	0.64	10.6	8.87	−0.64	1*
109120	J095127.77+071549.3	0.0131	4	12	0.013 046	165± 11	157	0.69± 0.10	0.90	12.0	8.70	−0.42	1*
109058	J095203.80+193904.0	0.0161	5	10	0.016 061	281± 1	272	3.03± 0.10	0.84	48.9	9.53	−0.38	1*
109106	J095351.48+133654.3	0.0163	10	12	0.016 261	173± 10	165	0.43± 0.05	0.50	13.1	8.69	−0.96	1
109094	J095546.29+032417.2	0.0171	4	12	0.017 052	180± 5	171	0.70± 0.08	0.75	14.0	8.94	−0.32	1*
109079	J095700.35+153320.3	0.0145	4	12	0.014 490	182± 1	173	0.55± 0.09	0.83	10.0	8.70	−0.51	1*
109034	J095828.36+111809.2	0.0178	65	12	0.017 889	182± 14	173	0.14± 0.02	0.22	9.3	8.27	−0.94	1*
109135	J095830.55+101058.7	0.0174	4	12	0.017 412	78± 1	70	0.30± 0.06	0.81	8.4	8.59	−0.54	1*
110038	J100216.28+191256.3	0.0166	5	5	0.016 665	240± 3	233	3.37± 0.09	1.12	62.7	9.60	−0.39	1*
110013	J101712.71+131131.3	0.0175	8	12	0.017 539	243± 4	233	0.83± 0.09	0.69	15.6	9.04	−0.67	1*
110058	J101819.17+131352.5	0.0183	9	10	0.018 326	170± 6	162	1.45± 0.06	0.60	41.7	9.32	0.27	5*
110080	J101837.31+031548.9	0.0144	5	12	0.014 460	205± 3	196	1.58± 0.09	0.80	27.8	9.15	−0.05	1*
110056	J102154.57+112755.8	0.0170	50	12	0.016 962	113± 3	105	0.08± 0.02	0.24	6.5	8.00	−1.01	1
110019	J102901.59+260912.6	0.0173	54	12	0.017 272	87± 1	79	0.06± 0.02	0.24	5.8	7.91	−1.11	2*
110057	J102923.06+260413.6	0.0166	5	12	0.016 975	460± 4	446	2.11± 0.13	0.72	25.7	9.41	0.05	5*
110055	J103525.10+031739.9	0.0189	5	15	0.018 830	178± 5	168	0.49± 0.08	0.61	10.9	8.87	−0.23	1
110017	J103539.30+283356.9	0.0147	5	10	0.014 747	166± 4	158	1.92± 0.08	0.86	39.6	9.25	−0.60	1
110059	J103913.14+310650.4	0.0189	5	10	0.018 910	218± 2	209	1.74± 0.09	0.85	31.4	9.43	0.01	1
110054	J104402.46+221527.1	0.0196	15	12	0.019 757	127± 6	119	0.39± 0.04	0.40	17.5	8.81	−0.94	1*
111053	J112139.74+112924.6	0.0199	95	15	0.019 944	89± 7	80	0.04± 0.01	0.17	5.1	7.88	−1.41	2*
111093	J112739.14+234528.5	0.0197	5	12	0.019 677	93± 6	85	2.62± 0.06	0.76	72.1	9.64	0.36	1
111030	J113103.69+201408.2	0.0140	8	15	0.014 026	237± 19	227	0.71± 0.08	0.54	15.7	8.77	−1.31	1
111086	J113914.72+145932.7	0.0143	15	12	0.014 080	168± 12	160	0.60± 0.04	0.39	23.8	8.70	−0.94	5*
111080	J114011.68+171844.4	0.0118	4	12	0.011 751	236± 10	228	1.39± 0.10	0.82	22.5	8.92	−1.10	1
111047	J114253.93+000942.6	0.0185	4	12	0.018 473	145± 6	136	1.15± 0.10	0.96	19.9	9.23	0.07	1*
111088	J115417.76+325139.5	0.0106	4	12	0.010 644	232± 2	223	2.76± 0.11	0.85	43.6	9.13	−0.18	1
111004	J115751.37+275207.2	0.0112	4	12	0.011 391	221± 22	213	1.76± 0.10	0.79	30.3	8.99	−1.06	5*
111063	J115825.43+250551.5	0.0141	30	12	0.014 190	117± 3	109	0.09± 0.03	0.31	5.7	7.90	−1.71	2*
112068	J120409.73+014933.5	0.0172	20	12	0.017 255	151± 9	143	0.22± 0.04	0.40	8.8	8.44	−1.24	1*
112014	J120432.18+022711.2	0.0200	10	5	0.019 987	42± 1	39	1.10± 0.03	0.96	57.0	9.27	−0.31	5*
112100	J121830.09+041824.4	0.0191	5	12	0.019 087	90± 2	82	0.57± 0.06	0.80	15.3	8.95	−0.19	1
112112	J122540.14+203142.4	0.0183	5	10	0.018 276	288± 3	278	3.37± 0.13	1.00	45.1	9.68	−0.23	1*
112080	J124128.94+260518.9	0.0164	4	12	0.015 714	402± 8	389	4.64± 0.14	0.82	57.1	9.69	−0.26	5*
112054	J124408.63+252458.1	0.0174	35	12	0.017 292	292± 4	281	0.25± 0.04	0.29	10.3	8.51	−1.13	1
112050	J124841.02+342839.3	0.0142	5	10	0.014 193	154± 5	148	2.59± 0.09	0.95	49.9	9.35	−0.06	1

Table A2: – *continued*

GASS (1)	SDSS ID (2)	z_{SDSS} (3)	T_{on} (min) (4)	Δv (km s ⁻¹) (5)	z (6)	W_{50} (km s ⁻¹) (7)	W_{50}^c (km s ⁻¹) (8)	F (Jy km s ⁻¹) (9)	rms (mJy) (10)	S/N (11)	$\log M_{\text{HI}}$ (M _⊙) (12)	$\log M_{\text{HI}}/M_{\star}$ (13)	Q (14)
112116	J125606.10+274041.1	0.0165	14	10	0.016 325	117± 5	110	0.24± 0.04	0.56	9.0	8.44	−0.68	1*
112035	J125905.29+273839.9	0.0181	19	15	0.018 083	68± 5	59	0.15± 0.03	0.41	8.4	8.33	−1.34	1*
113098	J131335.27+290735.5	0.0200	25	12	0.020 037	306± 2	294	0.50± 0.05	0.38	15.2	8.93	−0.93	1
113110	J131954.35+311405.8	0.0185	10	12	0.018 529	226± 2	216	0.58± 0.07	0.53	14.6	8.93	−0.57	1
113056	J132006.91+143235.7	0.0121	25	15	0.012 198	176± 3	166	0.16± 0.04	0.34	6.7	8.02	−1.58	1
113115	J132051.77+312159.5	0.0168	5	12	0.016 865	266± 2	255	0.90± 0.10	0.74	15.0	9.04	−0.66	1*
113124	J132251.07+314933.3	0.0178	5	12	0.017 859	189± 2	180	1.86± 0.08	0.73	37.4	9.41	−0.00	1*
113024	J132341.57+313846.7	0.0166	10	10	0.016 605	169± 3	162	0.59± 0.06	0.58	17.6	8.84	−1.00	1
113038	J132421.17+355449.5	0.0185	4	10	0.018 536	304± 2	293	3.20± 0.13	0.99	41.9	9.67	−0.46	1*
113118	J133829.71+305912.7	0.0160	14	12	0.015 961	109± 2	101	0.73± 0.04	0.52	27.3	8.90	−0.22	1*
113005	J134629.61+035241.9	0.0178	15	12	0.017 892	121± 4	113	0.26± 0.04	0.48	9.9	8.55	−0.62	1
113091	J135049.15+171655.5	0.0175	5	10	0.017 485	214± 2	206	2.85± 0.10	0.89	50.0	9.57	0.41	1*
113133	J135138.25+053334.8	0.0188	10	15	0.018 720	180± 7	169	0.57± 0.06	0.47	16.6	8.93	−0.38	1
113010	J135305.43+155040.3	0.0102	4	12	0.010 237	276± 4	267	0.74± 0.12	0.88	10.4	8.53	−1.45	1*
113105	J135705.54+193238.2	0.0173	4	12	0.017 289	199± 4	190	1.25± 0.10	0.82	21.9	9.20	0.07	1
113123	J135834.56+063426.6	0.0173	10	12	0.017 299	150± 6	142	0.44± 0.05	0.52	13.9	8.75	−0.32	1*
113122	J135845.41+203942.7	0.0161	10	15	0.016 158	185± 27	175	0.51± 0.07	0.48	14.3	8.76	−1.13	1*
113011	J135906.39+175604.9	0.0176	10	12	0.017 575	204± 5	195	1.10± 0.06	0.54	28.9	9.16	0.06	1*
114141	J140043.65+315339.0	0.0146	4	10	0.014 583	220± 1	212	5.75± 0.10	0.90	98.1	9.72	0.27	1
114001	J140220.56+322653.4	0.0145	8	15	0.014 490	331± 17	319	0.61± 0.10	0.60	10.3	8.74	−1.38	1*
114104	J140412.86+083102.0	0.0161	40	12	0.016 258	90± 3	83	0.09± 0.02	0.26	6.9	7.99	−1.14	1
114044	J140452.67+213800.6	0.0165	5	12	0.016 485	217± 20	208	1.34± 0.09	0.72	25.4	9.19	−0.83	1*
114047	J140509.31+102529.5	0.0179	20	12	0.018 126	236± 12	225	1.47± 0.05	0.40	47.7	9.32	0.24	5*
114075	J140510.39+114616.9	0.0174	40	15	0.017 419	59± 9	51	0.08± 0.02	0.22	8.4	8.01	−1.22	1
114115	J140832.77+030127.4	0.0175	5	12	0.017 545	225± 2	215	2.04± 0.12	0.94	29.0	9.43	−0.22	1*
114110	J141057.77+062218.1	0.0197	4	10	0.019 640	461± 6	447	8.13± 0.18	1.13	70.9	10.13	0.10	5*
114033	J141212.71+155207.9	0.0174	4	7	0.017 505	207± 3	200	6.45± 0.10	1.08	110.0	9.93	0.01	5*
114127	J141733.87+250652.0	0.0172	10	15	0.017 285	289± 3	277	0.47± 0.08	0.49	10.3	8.78	−0.75	1
114091	J141842.39+245519.8	0.0150	30	12	0.015 010	57± 4	50	0.10± 0.02	0.35	7.3	7.97	−1.09	1*
114085	J142118.67+123021.4	0.0165	10	12	0.016 488	169± 6	160	0.44± 0.06	0.55	12.4	8.71	−0.60	1
114077	J142615.47+252759.5	0.0165	20	12	0.016 518	143± 4	135	0.16± 0.03	0.32	8.3	8.27	−0.92	1*
114076	J142621.41+100948.0	0.0162	8	12	0.016 141	188± 3	179	0.47± 0.07	0.60	11.4	8.72	−0.46	1*
114005	J142805.10+254949.6	0.0152	9	12	0.015 244	122± 7	114	0.44± 0.05	0.55	14.7	8.64	−0.78	5*
114144	J142835.76+254231.9	0.0136	4	15	0.013 513	265± 1	255	0.55± 0.10	0.66	9.4	8.64	−1.22	1*
114010	J142846.66+271502.4	0.0147	15	12	0.014 663	258± 0	249	0.29± 0.05	0.39	9.3	8.42	−1.29	1
122001	J223649.85+142312.9	0.0175	4	15	0.017 512	424± 7	410	0.90± 0.13	0.67	11.7	9.07	−1.10	1*
122002	J224110.65+132023.6	0.0173	5	12	0.017 302	255± 5	245	1.70± 0.09	0.69	31.1	9.34	−0.13	1*

Table A3: GASS-low non-detections

GASS (1)	SDSS ID (2)	z_{SDSS} (3)	T_{on} (min) (4)	rms (mJy) (5)	$\log M_{\text{HI}, \text{lim}}$ ($M_{\odot}$) (6)	$\log M_{\text{HI}, \text{lim}}/M_{\star}$ (7)	Note (8)
124009	J000619.61+141938.7	0.0182	90	0.16	7.95	-1.70	...
124006	J001947.33+003526.8	0.0177	65	0.21	8.05	-1.71	...
101012	J014902.52+125539.0	0.0174	35	0.28	8.14	-1.68	*
101024	J014917.63+132759.9	0.0166	45	0.23	8.03	-1.25	...
101019	J014920.31+131754.5	0.0171	68	0.19	7.97	-1.09	...
101011	J014933.52+131400.0	0.0167	20	0.39	8.26	-1.69	...
101017	J014953.83+125833.7	0.0156	48	0.22	7.95	-1.40	...
101008	J014954.10+130735.9	0.0170	48	0.21	8.02	-1.33	*
101010	J015015.67+130826.8	0.0161	39	0.26	8.04	-1.13	...
108111	J080116.61+091553.3	0.0155	10	0.43	8.24	-1.72	...
108080	J080134.48+091817.4	0.0153	36	0.30	8.07	-1.25	*
108065	J080158.49+150331.5	0.0161	5	0.65	8.45	-1.65	...
108022	J080210.94+092141.8	0.0160	8	0.63	8.43	-1.61	*
108052	J080212.07+103234.1	0.0145	30	0.27	7.97	-1.63	...
108013	J080237.85+093000.3	0.0159	10	0.59	8.40	-1.69	*
108116	J080327.64+094235.8	0.0145	25	0.30	8.03	-1.34	...
108114	J081924.28+210012.8	0.0130	20	0.31	7.95	-1.73	*
108058	J082126.80+242711.1	0.0198	15	0.42	8.44	-1.68	...
108055	J082203.60+084509.3	0.0138	4	0.69	8.34	-1.70	...
108053	J082213.57+041151.7	0.0129	15	0.42	8.07	-1.39	...
108006	J082225.92+040947.7	0.0149	30	0.27	8.00	-1.29	...
108061	J082425.83+041451.6	0.0136	4	0.72	8.35	-1.83	...
108101	J082701.39+214224.4	0.0153	8	0.55	8.33	-1.66	*
109022	J090439.32+181526.5	0.0121	8	0.50	8.09	-1.73	*
109014	J090518.34+182631.9	0.0140	10	0.47	8.19	-1.69	...
109060	J091105.57+092058.4	0.0122	15	0.38	7.98	-1.67	...
109036	J091840.62+134946.1	0.0116	4	0.68	8.19	-1.93	*
109057	J092015.61+011719.7	0.0175	20	0.39	8.30	-1.62	...
109045	J092515.42+105312.2	0.0120	5	0.65	8.19	-1.67	...
109031	J092515.88+113548.7	0.0118	10	0.52	8.09	-1.14	...
109064	J092548.49+112715.2	0.0108	10	0.51	7.99	-1.47	*
109005	J093505.80+093857.2	0.0114	10	0.51	8.04	-1.57	...
109097	J093834.45+085316.4	0.0108	4	0.72	8.14	-1.81	...
109075	J094834.50+145356.7	0.0195	74	0.20	8.11	-1.66	*
109035	J095824.07+102146.2	0.0180	10	0.49	8.42	-1.67	...
109132	J095859.58+102244.0	0.0184	69	0.19	8.03	-0.99	*
110010	J100103.36+043709.3	0.0135	20	0.31	7.98	-1.68	...
110047	J102003.66+253418.2	0.0181	74	0.17	7.97	-1.30	*
110060	J102052.18+253354.9	0.0199	14	0.47	8.49	-1.66	*
110042	J103158.43+113622.8	0.0190	15	0.41	8.40	-1.67	*
110007	J104649.35+180151.8	0.0198	89	0.17	8.04	-1.36	...
111066	J111357.61+105218.2	0.0198	95	0.16	8.02	-1.23	*
111036	J114313.27+200754.9	0.0183	69	0.20	8.04	-1.38	...
111024	J114423.13+163304.5	0.0129	15	0.41	8.05	-1.61	*
111049	J115756.49+250405.8	0.0138	20	0.35	8.05	-1.63	*
111028	J115949.61+305039.9	0.0104	4	0.72	8.11	-1.90	...
112065	J120108.03+152353.6	0.0172	53	0.22	8.03	-1.64	*
112106	J120336.94+023749.6	0.0193	85	0.20	8.09	-1.24	*
112019	J121156.80+273835.5	0.0133	4	0.64	8.28	-1.88	...
112051	J123822.14+014045.0	0.0163	40	0.28	8.10	-1.61	...
112001	J124523.92+090510.4	0.0191	12	0.45	8.43	-1.75	...
112089	J125026.62+264407.2	0.0194	89	0.16	8.00	-1.06	*
112016	J125321.68+262141.1	0.0193	90	0.16	8.00	-1.51	*
112004	J125747.86+274610.0	0.0193	82	0.15	7.97	-1.39	*
112003	J125754.36+272926.3	0.0166	35	0.29	8.13	-1.68	*
112002	J125756.51+272256.2	0.0174	55	0.22	8.05	-1.05	*
112017	J125801.71+275112.8	0.0190	71	0.18	8.03	-1.49	*
112012	J125807.54+261936.6	0.0190	50	0.22	8.13	-1.68	*
112006	J125826.93+293644.9	0.0195	18	0.36	8.36	-1.69	...
112060	J125838.41+273238.7	0.0199	30	0.24	8.20	-1.75	*
112084	J125910.30+273711.5	0.0191	44	0.25	8.19	-1.74	*

Table A3: – *continued*

GASS (1)	SDSS ID (2)	z_{SDSS} (3)	T_{on} (min) (4)	rms (mJy) (5)	$\log M_{\text{HI},\text{lim}}$ ($M_{\odot}$) (6)	$\log M_{\text{HI},\text{lim}}/M_{\star}$ (7)	Note (8)
112011	J125937.48+280958.0	0.0191	79	0.18	8.03	−1.41	*
113040	J130009.14+275159.3	0.0177	65	0.19	8.01	−1.31	*
113032	J130010.41+273542.0	0.0187	69	0.18	8.01	−1.55	*
113012	J130016.51+275803.0	0.0155	20	0.32	8.11	−1.69	*
113060	J130018.57+274855.9	0.0179	64	0.20	8.03	−1.39	*
113128	J130018.77+275613.3	0.0176	68	0.24	8.09	−1.60	*
113047	J130019.10+273313.4	0.0196	10	0.52	8.52	−1.68	*
113100	J130035.67+273427.2	0.0170	14	0.48	8.37	−1.53	*
113051	J130109.23+274905.9	0.0197	19	0.32	8.32	−1.72	*
113004	J130113.62+275451.3	0.0195	80	0.20	8.10	−1.63	*
113078	J130234.79+275656.8	0.0193	20	0.36	8.35	−1.66	*
113025	J130235.17+272621.9	0.0181	65	0.21	8.06	−1.34	*
113052	J130407.96+275753.8	0.0198	30	0.28	8.26	−1.67	...
113001	J130411.24+272925.6	0.0178	20	0.36	8.28	−1.65	*
114039	J140449.46+112343.8	0.0138	4	0.83	8.42	−1.76	...
114057	J140859.33+144529.5	0.0172	5	0.75	8.57	−1.60	...
114058	J141513.81+155239.8	0.0178	8	0.66	8.54	−1.62	...
114025	J142520.69+254229.2	0.0154	32	0.25	7.99	−1.17	*
114096	J142554.78+254604.8	0.0156	35	0.25	8.01	−1.32	*
114038	J142714.65+255319.1	0.0159	20	0.30	8.10	−1.73	*
114065	J142723.43+255240.2	0.0133	19	0.34	8.00	−1.11	*
114036	J142750.81+255017.0	0.0147	4	0.74	8.43	−1.77	*
114008	J142812.79+254949.8	0.0132	18	0.30	7.94	−1.66	*
114037	J142834.44+272010.9	0.0135	19	0.36	8.03	−1.38	*
114048	J142855.80+254415.4	0.0159	10	0.45	8.28	−1.70	...
123003	J232028.21+150420.9	0.0128	25	0.27	7.87	−1.71	...
123011	J232511.36+151159.5	0.0143	5	0.59	8.31	−1.80	*

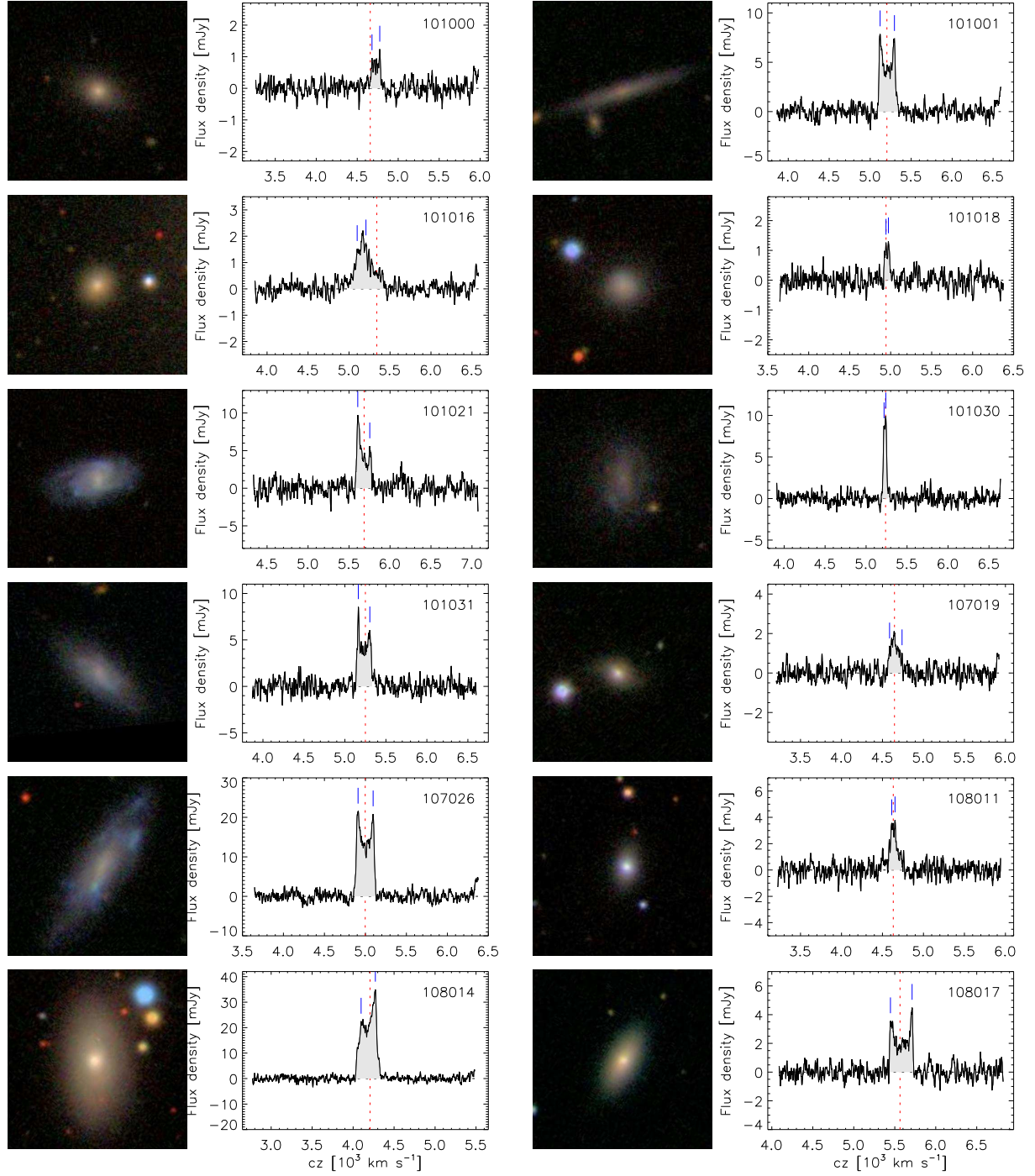


Figure A1: SDSS postage stamp images (1 arcmin^2) and HI-line profiles of GASS-low detected galaxies, ordered by increasing GASS number (indicated in each spectrum). The HI spectra are calibrated, smoothed and baseline subtracted. A dotted line and two dashes indicate the heliocentric velocity corresponding to the SDSS redshift and the two peaks used for width measurement, respectively.

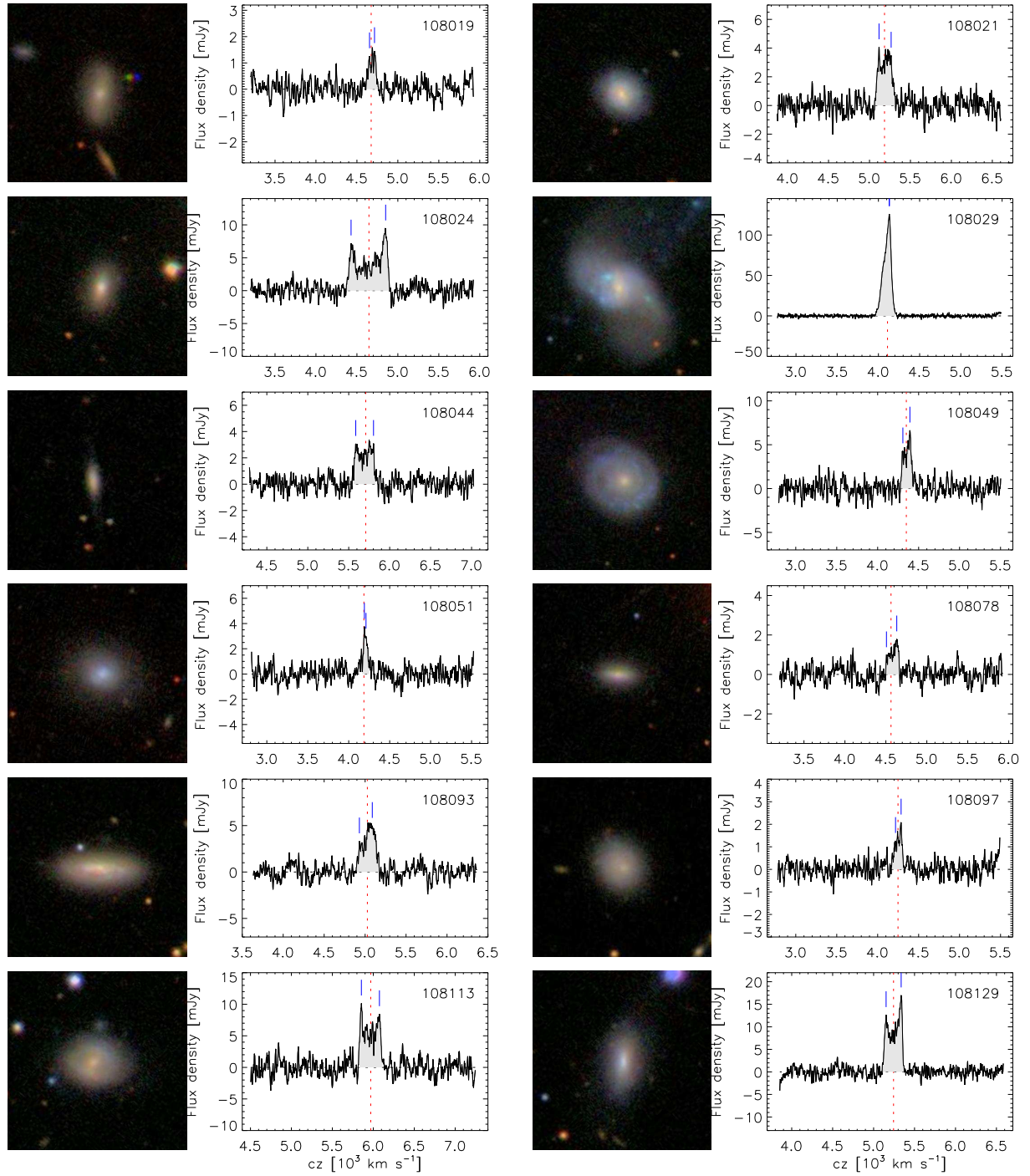


Figure A1: *continued*

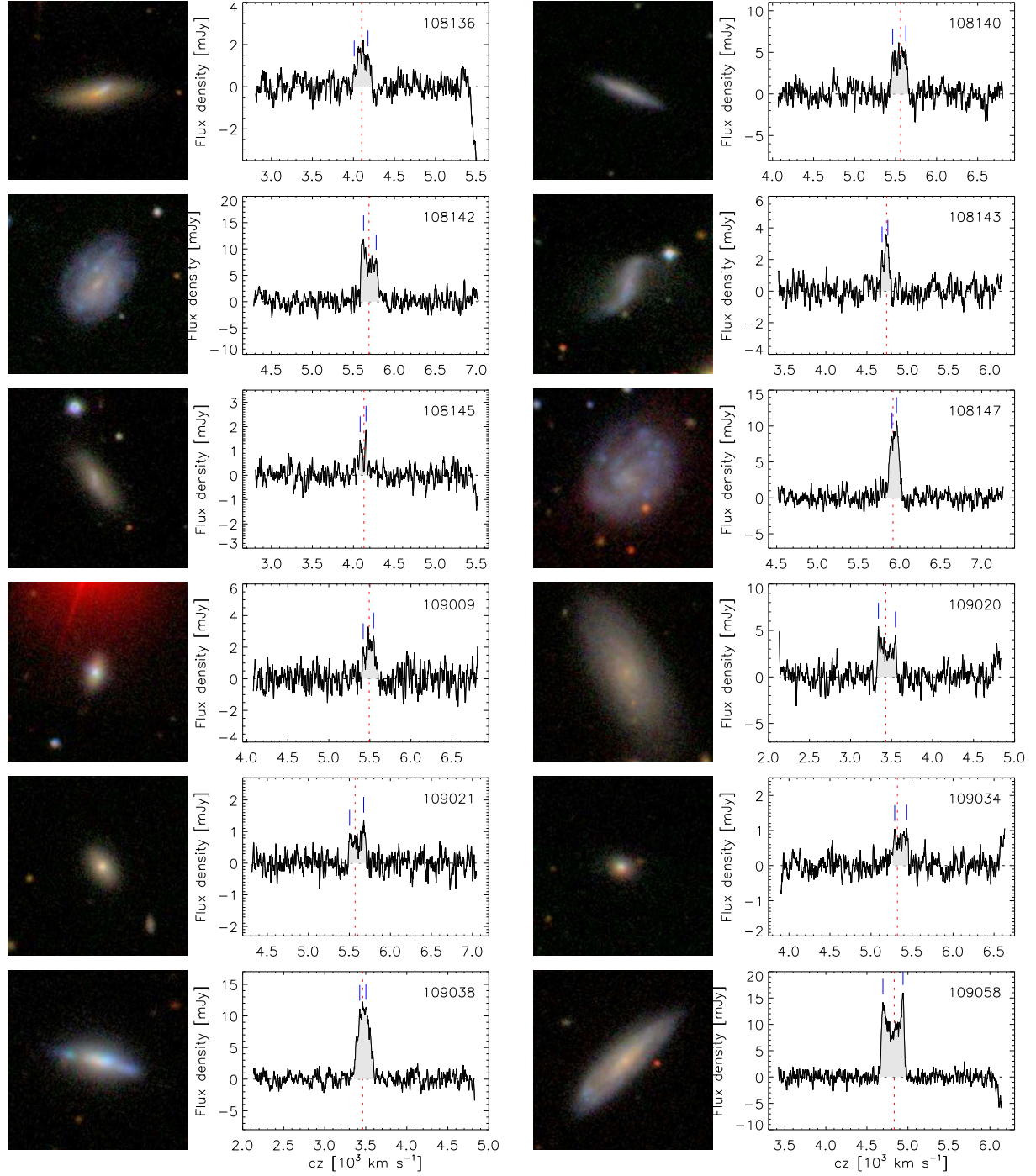


Figure A1: *continued*

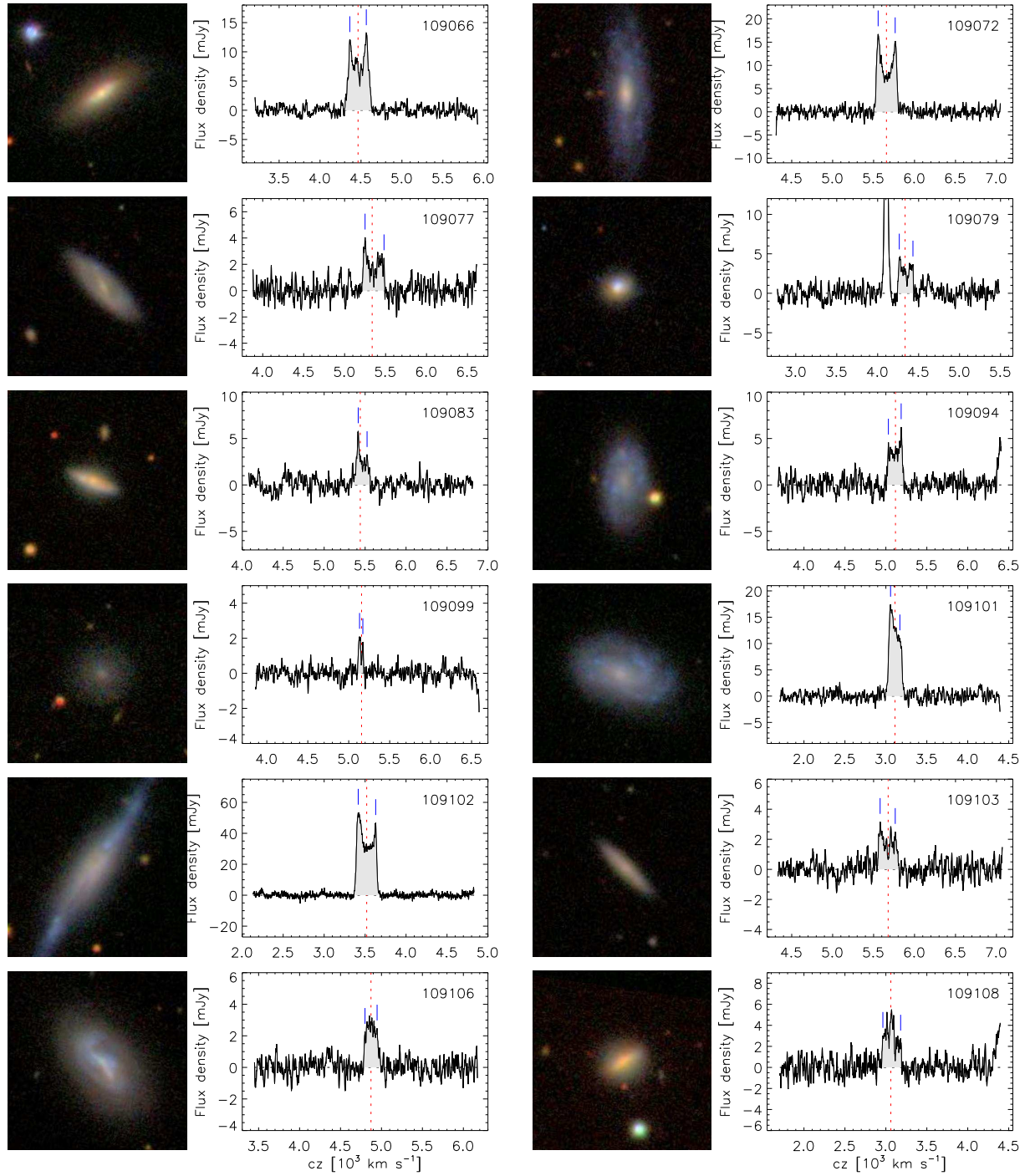


Figure A1: *continued*

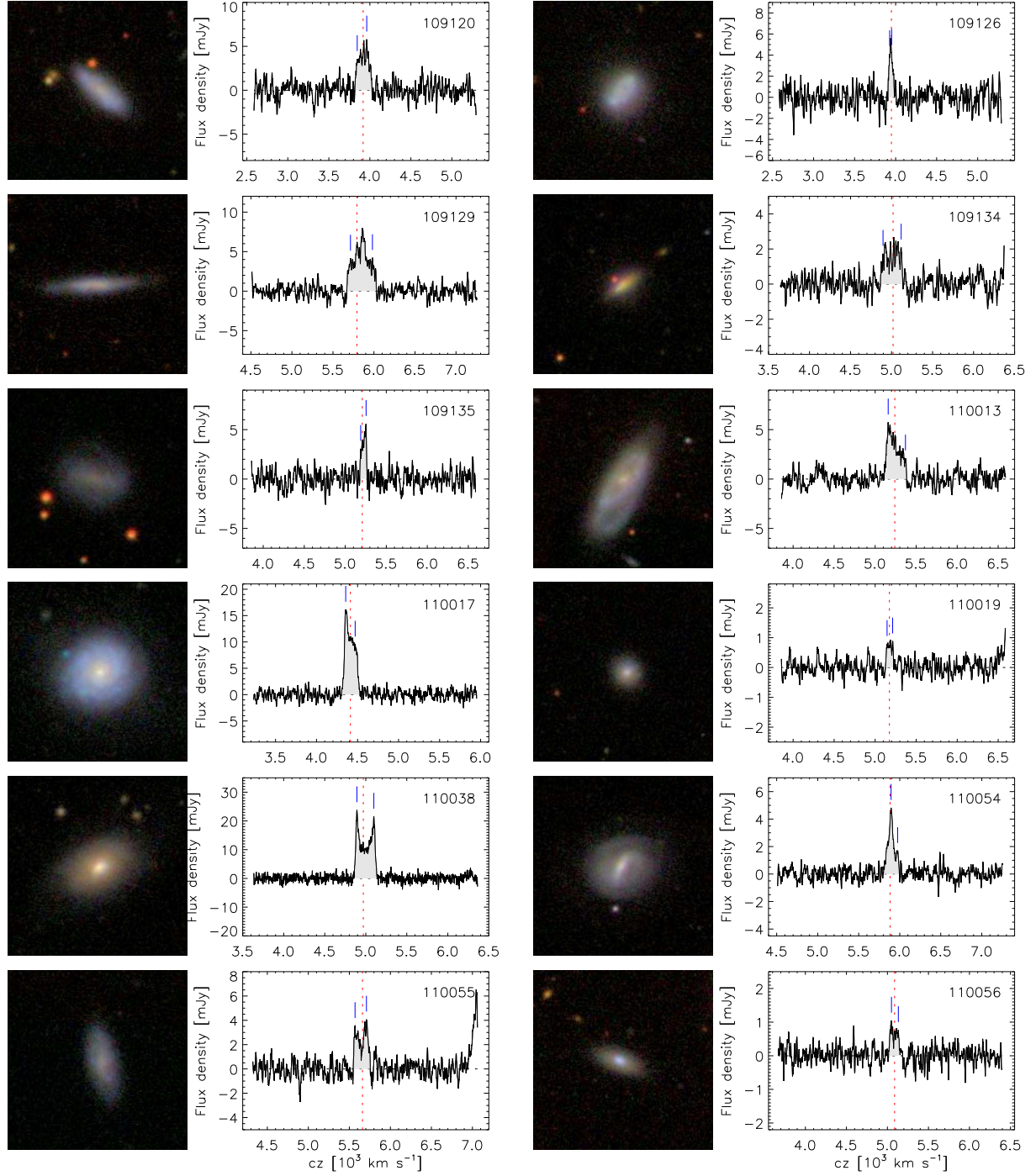


Figure A1: *continued*

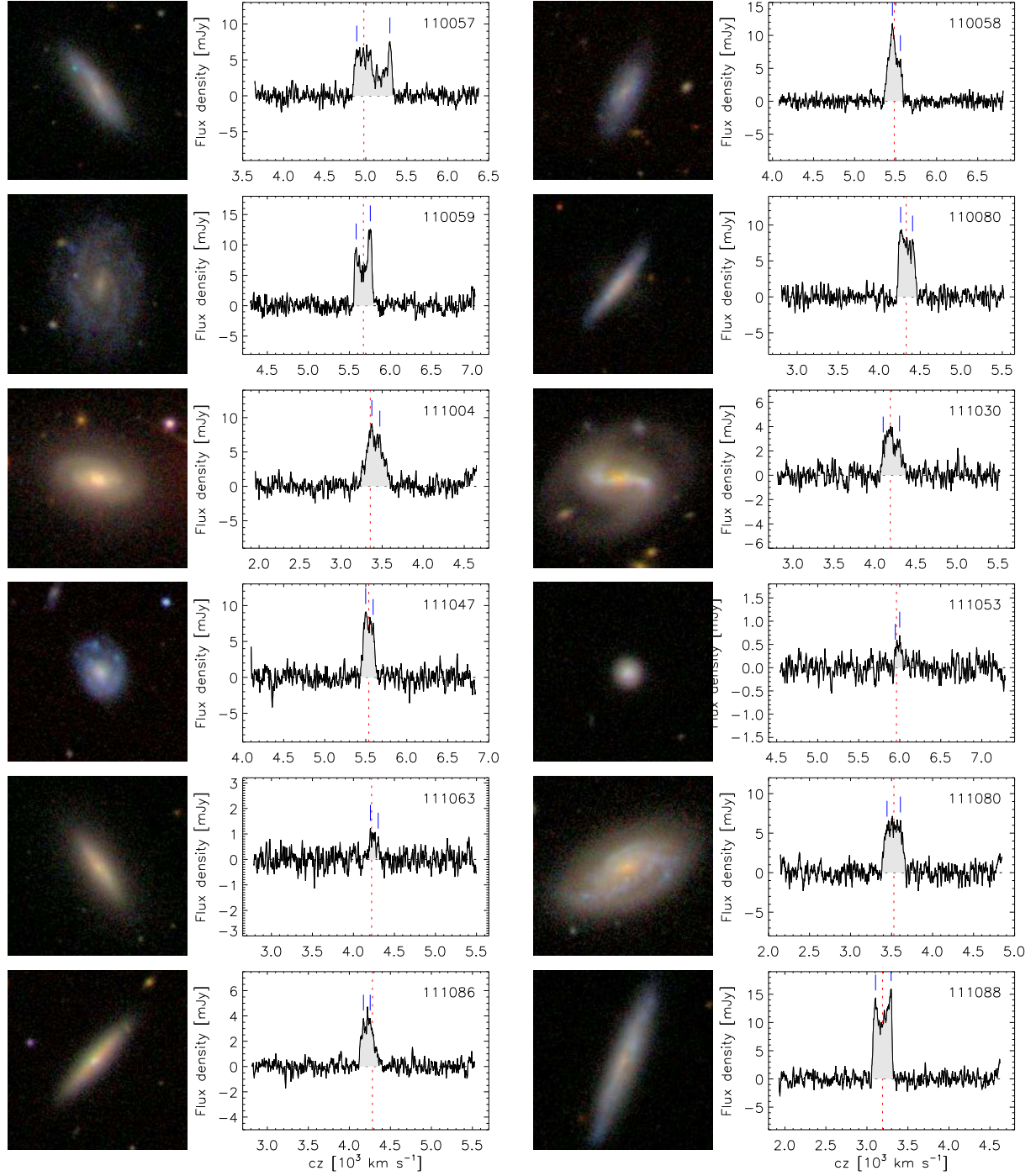


Figure A1: *continued*

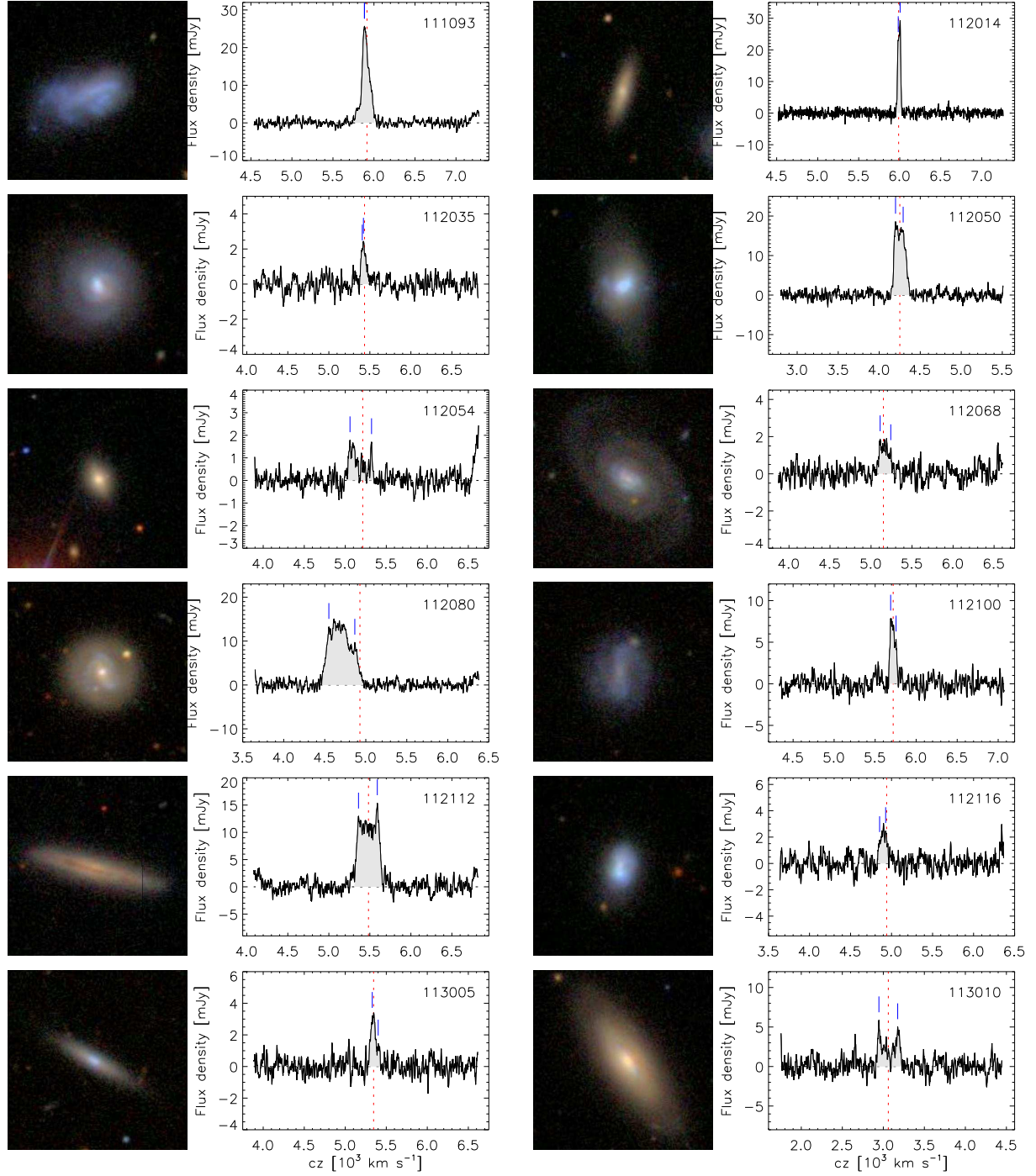


Figure A1: *continued*

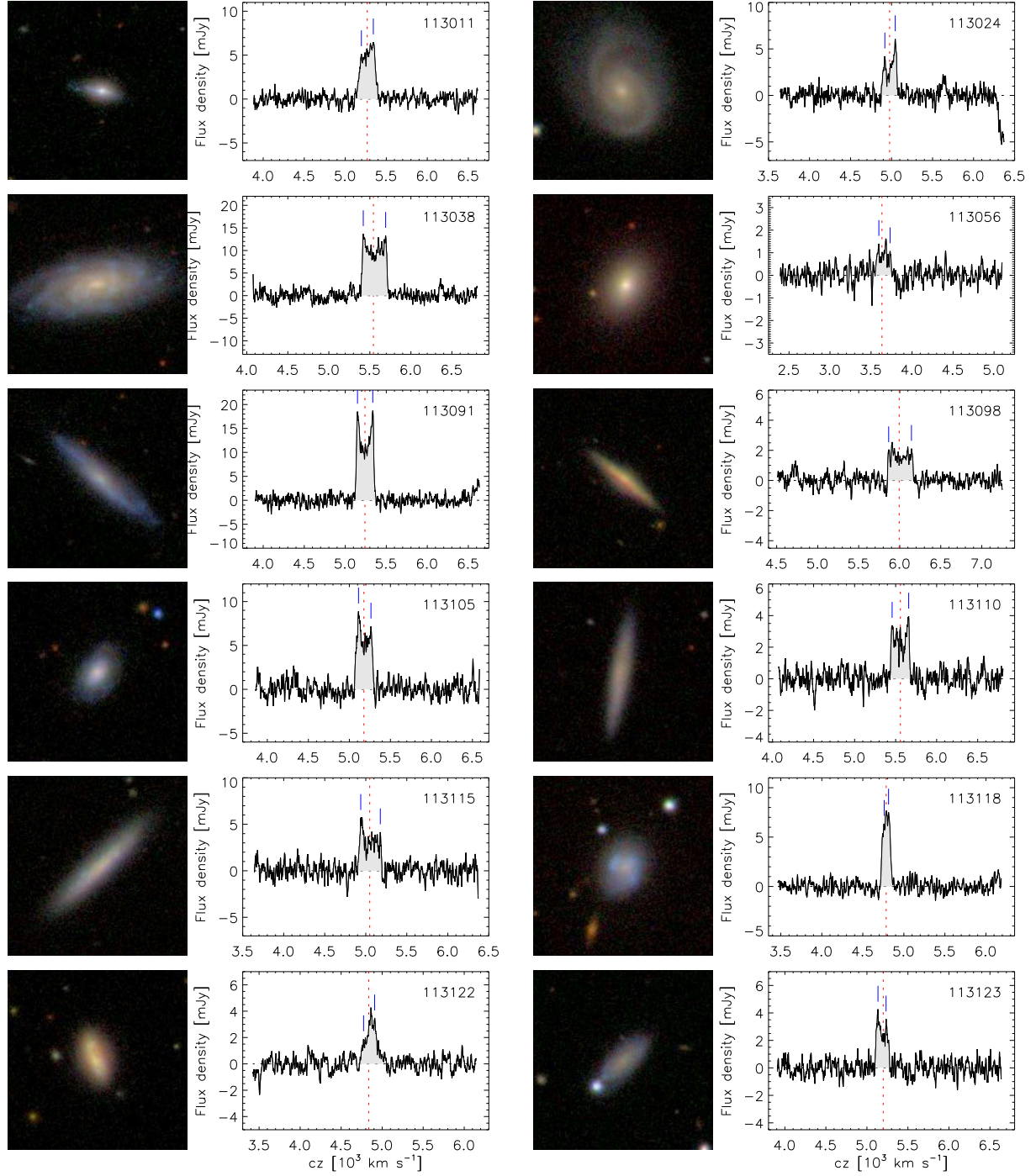


Figure A1: *continued*

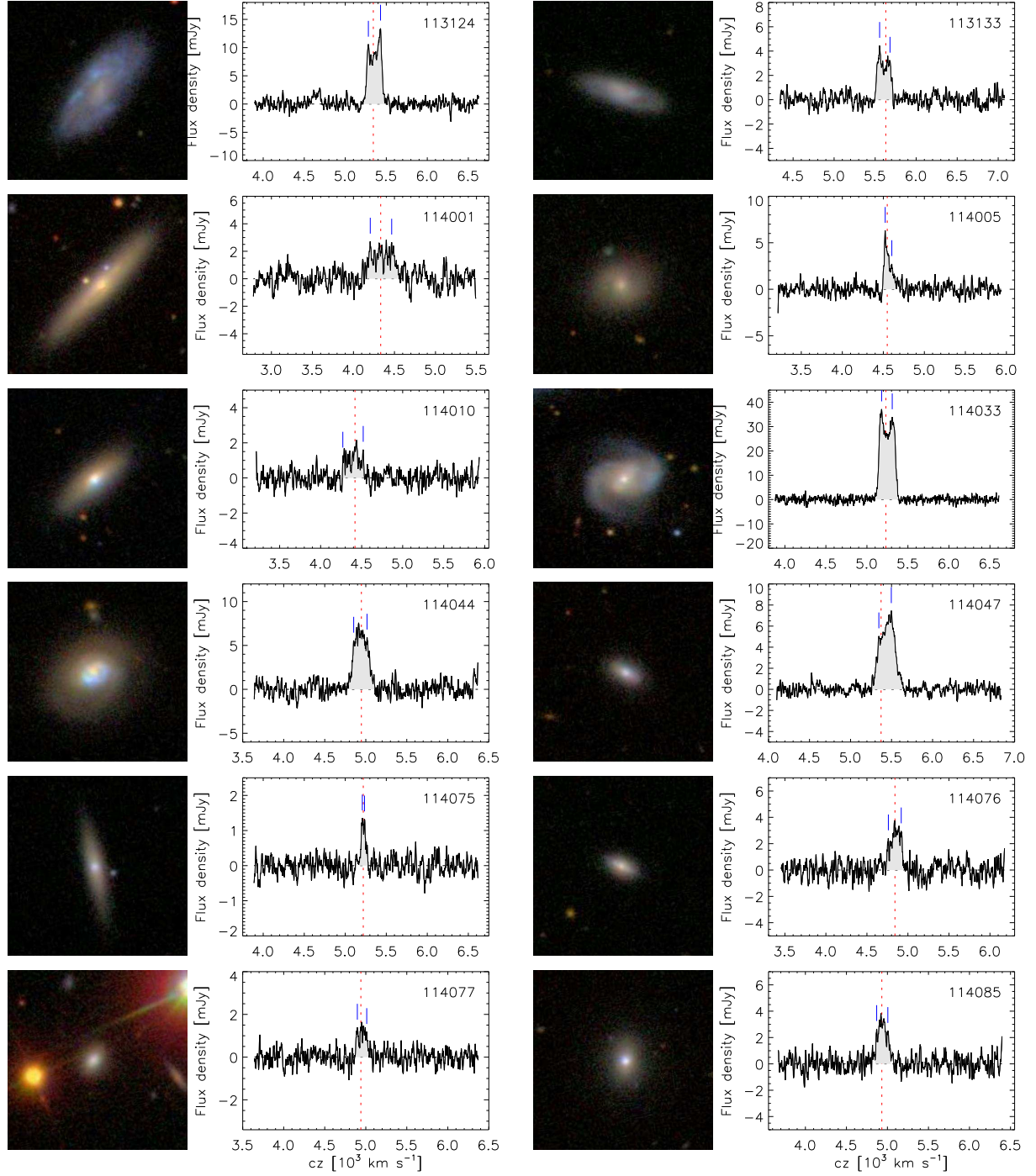


Figure A1: *continued*

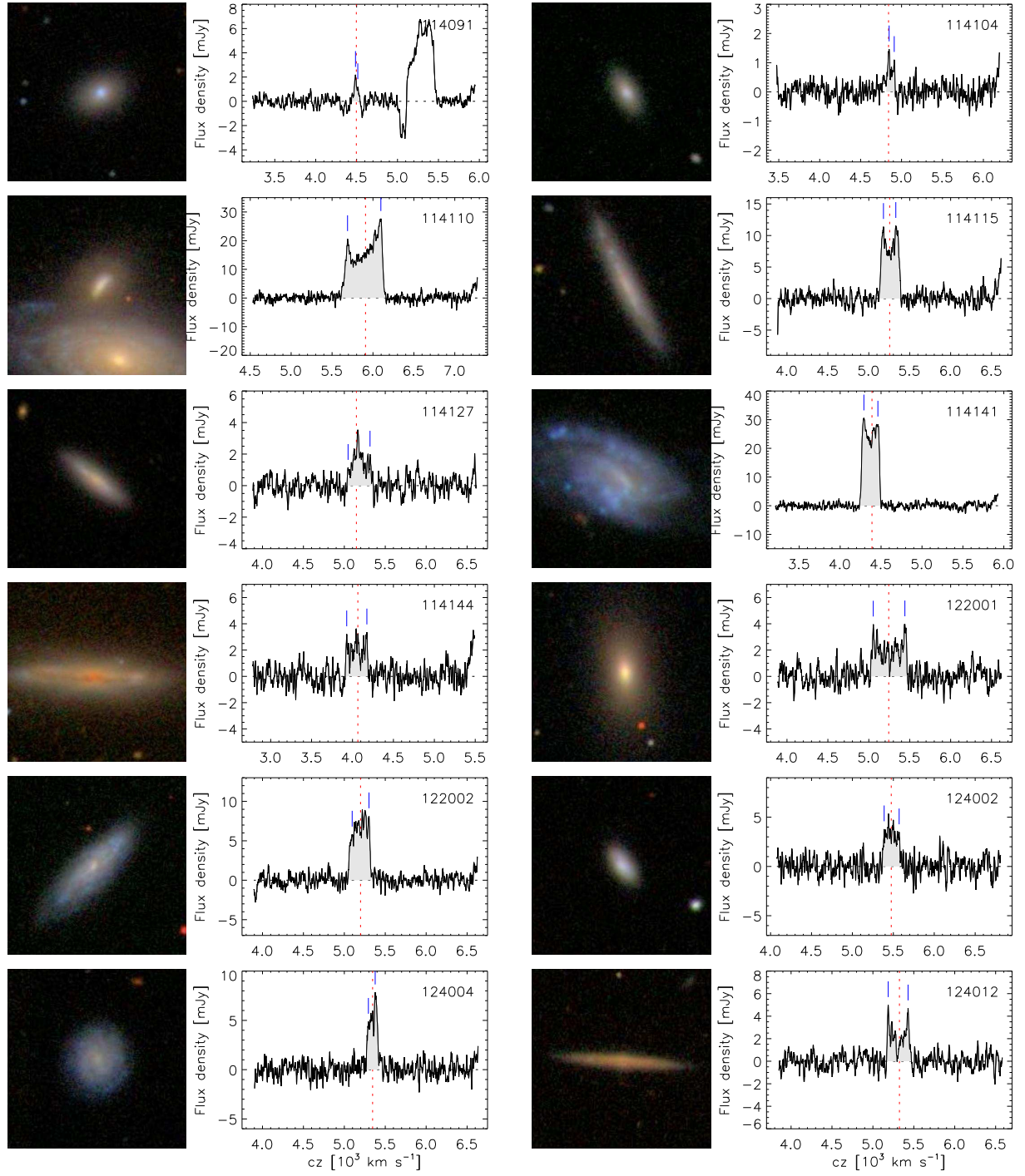


Figure A1: *continued*

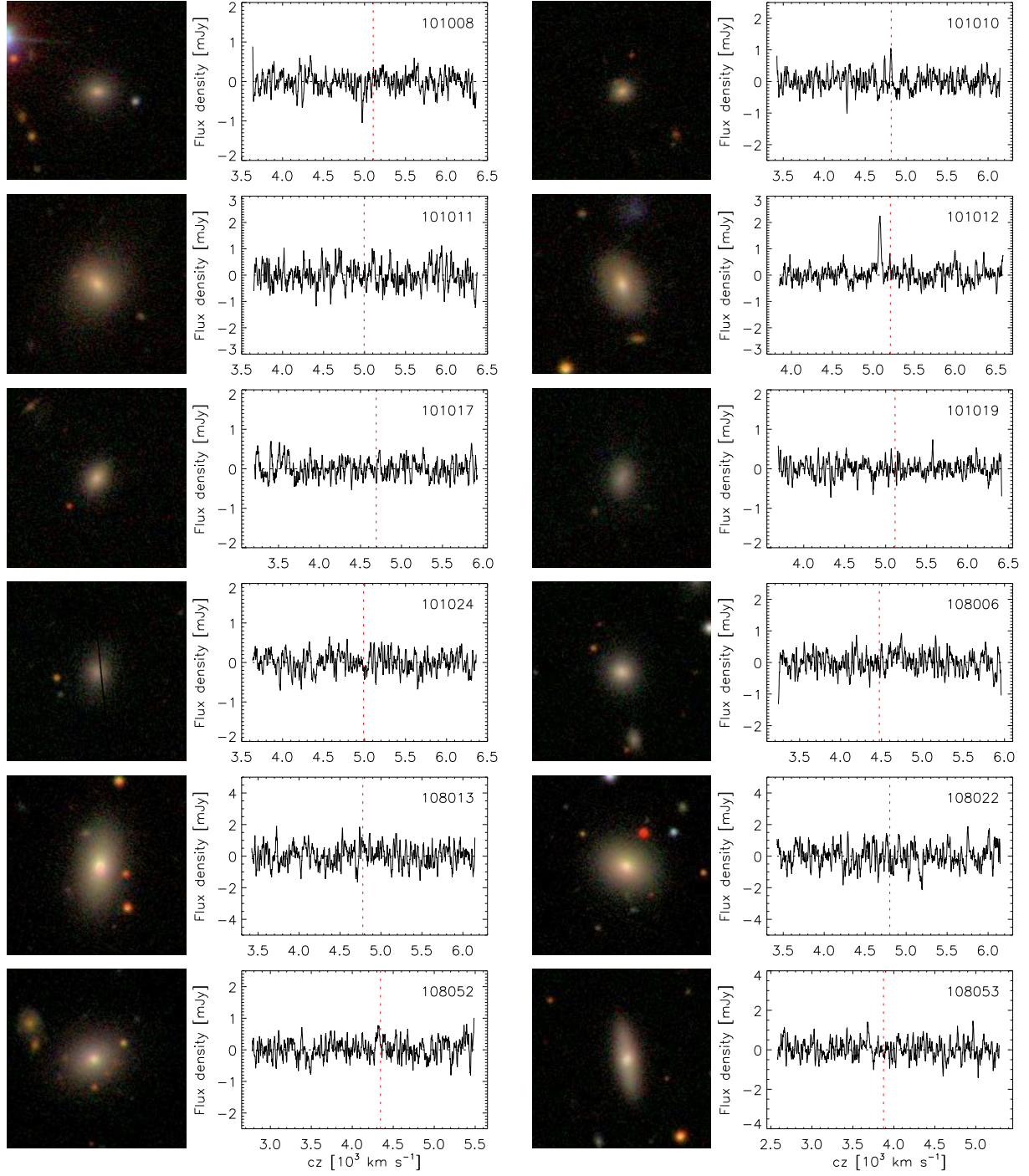


Figure A2: Same as Fig. A1 for non-detections.

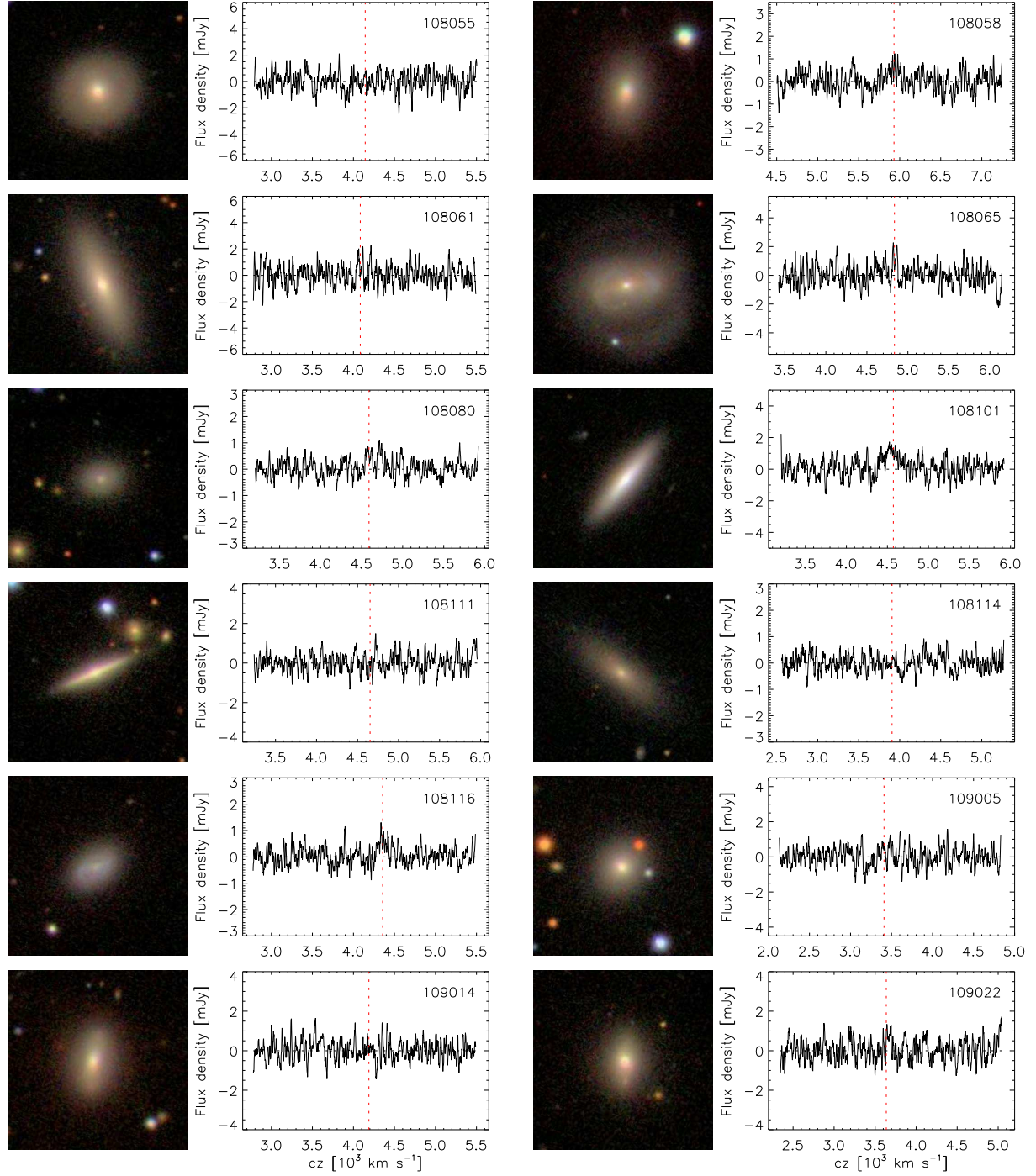


Figure A2: *continued*

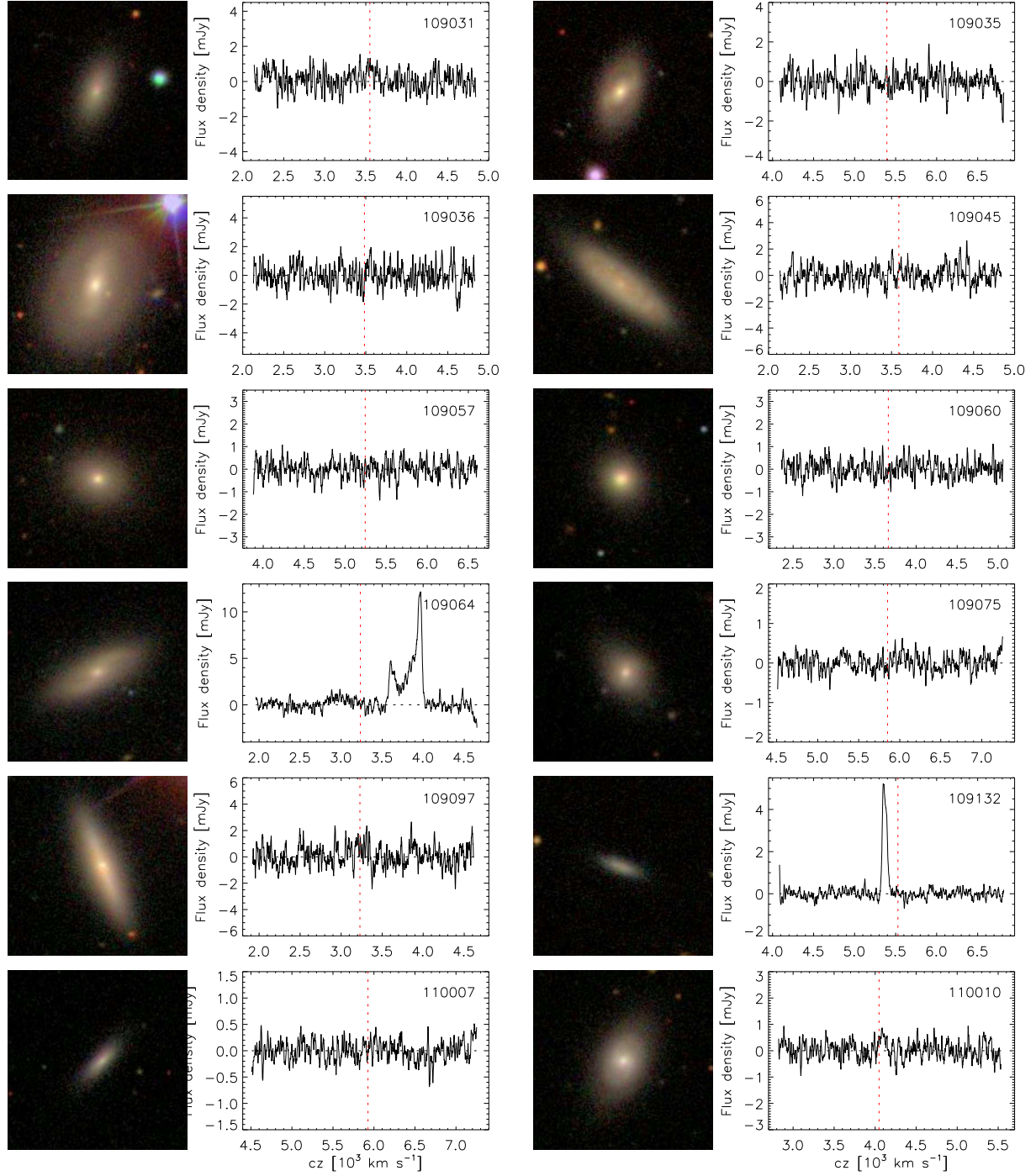


Figure A2: *continued*

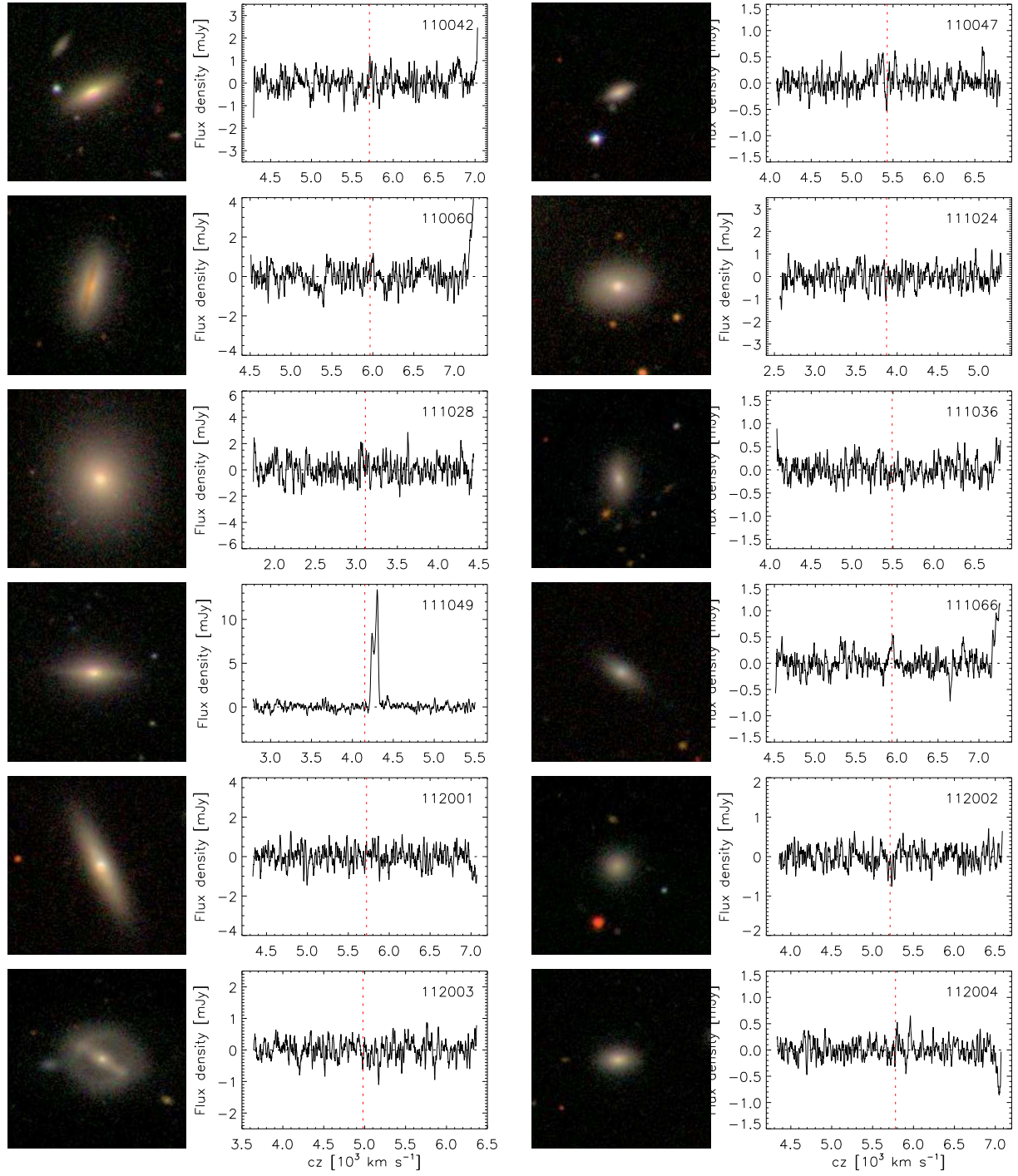


Figure A2: *continued*

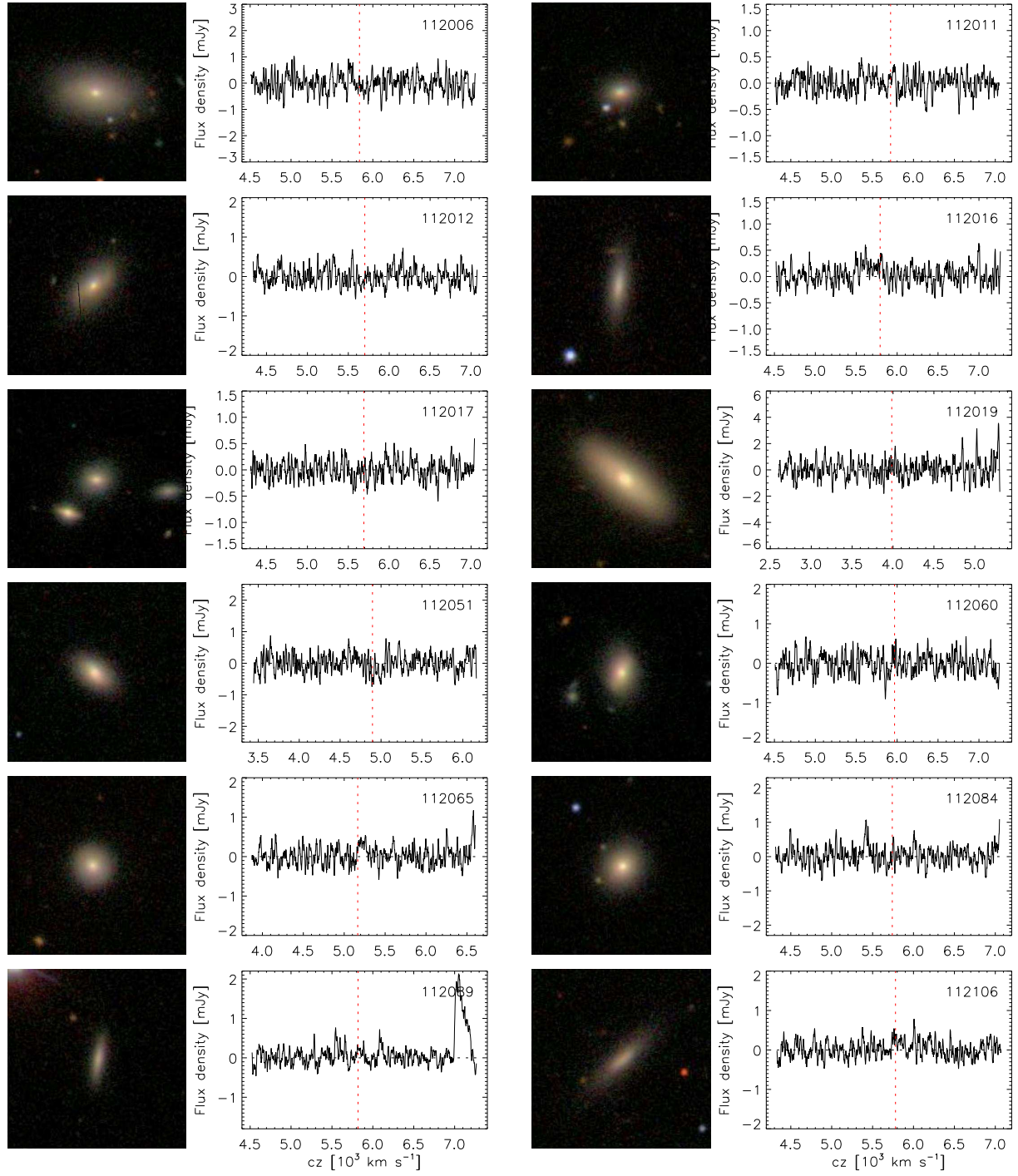


Figure A2: *continued*

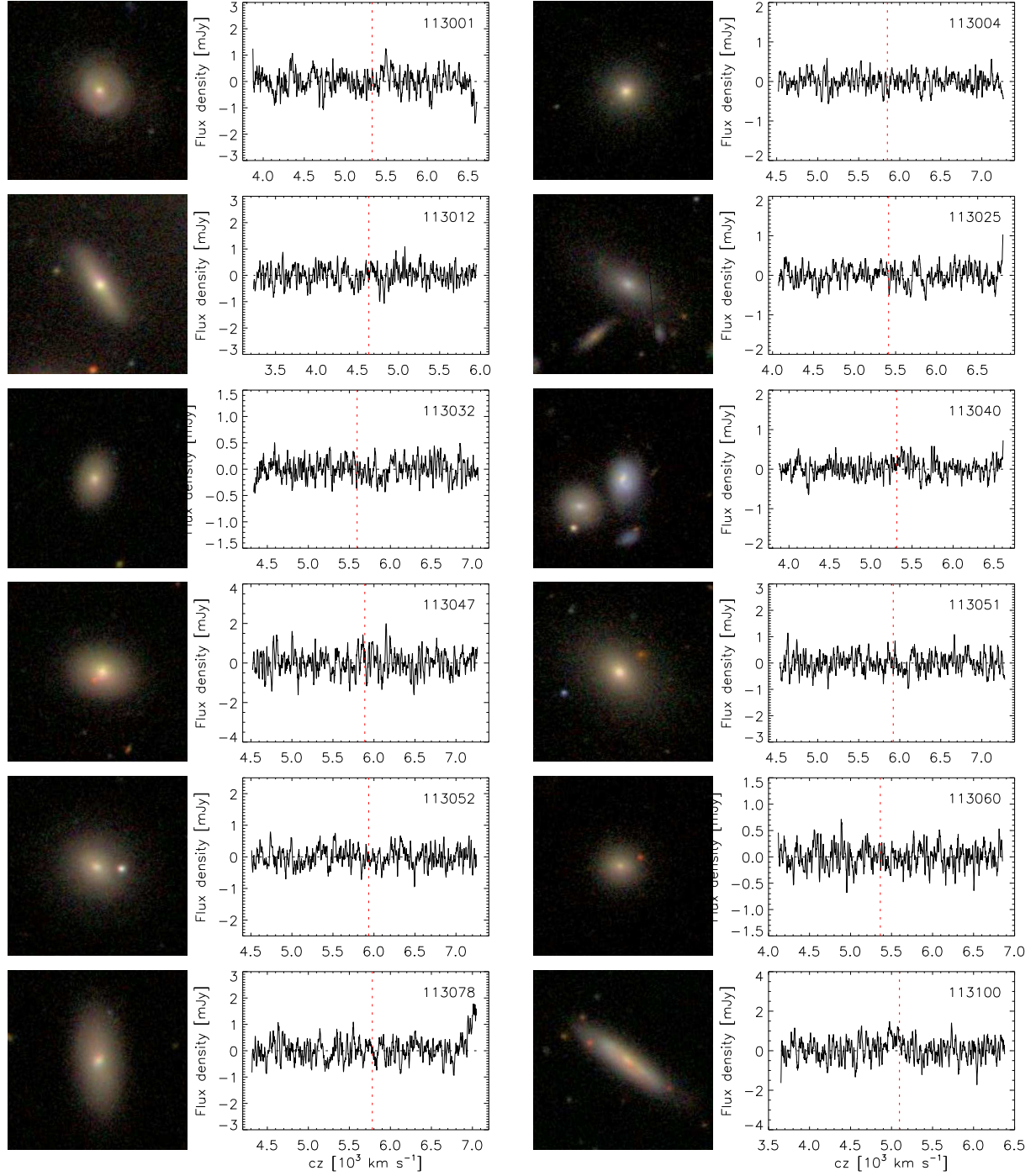


Figure A2: *continued*

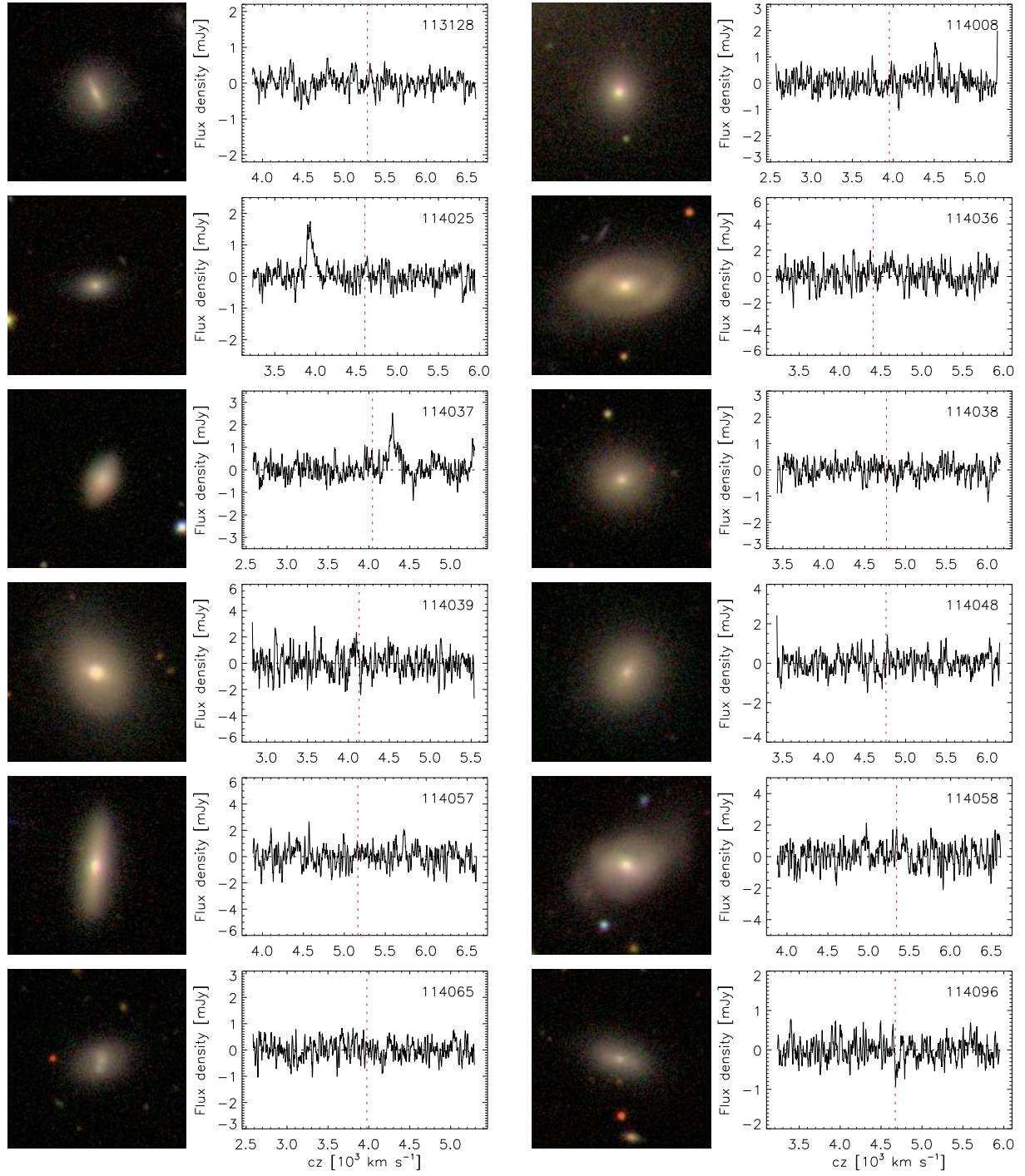


Figure A2: *continued*

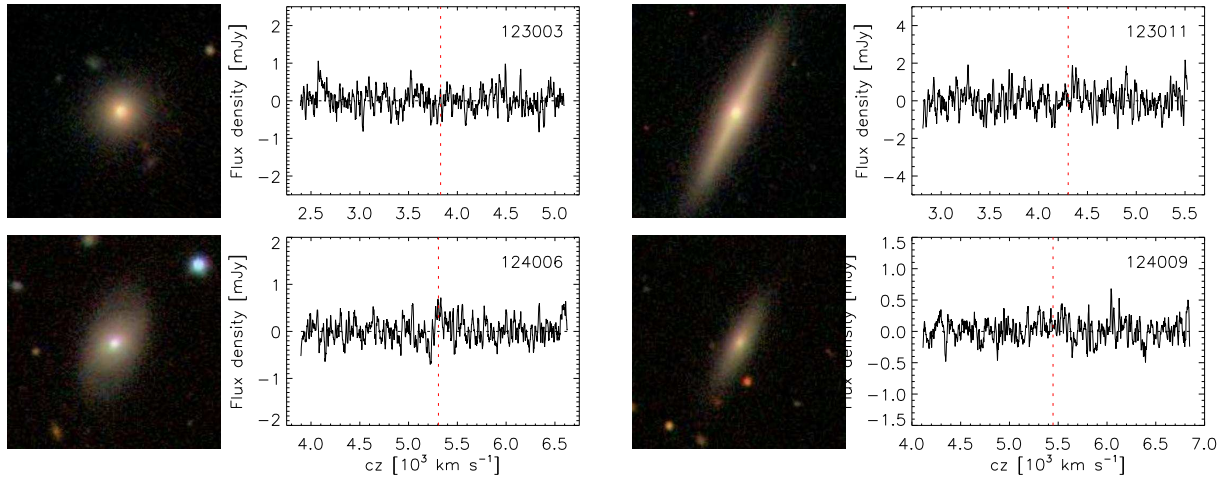


Figure A2: *continued*