SDSS J1306+0356

Sys	ID	Ion	Z	W ₀ (Å)	$\log(N)$ (cm^{-2})	b (kms ⁻¹)	comp recovery rate %	system recovery rate %
1	a	MgII 2796 MgII 2803	$2.23758 \pm 6.7 \times 10^{-5}$	0.059 ± 0.006 0.031 ± 0.005	$12.21^{+0.14}_{-0.23}$	$23.4^{+2.25}_{-3.53}$		
1	b	MgII 2796 MgII 2803	$2.23848 \pm 4.8 \times 10^{-5}$	0.123 ± 0.006 0.064 ± 0.005	$12.54_{-0.15}^{+0.10}$	$33.8^{+2.49}_{-3.90}$		
2	a	MgII 2796 MgII 2803	$2.37776 \pm 1.5 \times 10^{-5}$	0.306 ± 0.010 0.195 ± 0.009	$13.10^{+0.04}_{-0.07}$	$19.0^{+1.52}_{-2.41}$		
2	b	MgII 2796 MgII 2803	$2.37840 \pm 1.5 \times 10^{-5}$	0.140 ± 0.008 0.111 ± 0.008	$13.13^{+0.09}_{-0.14}$	$4.97^{+0.45}_{-0.71}$		
2	С	FeII 2600 FeII 2586 FeII 2382 FeII 2344 FeII 1608	$2.37780 \pm 1.4 \times 10^{-5}$	$\begin{array}{c} 0.080 \pm 0.003 \\ 0.029 \pm 0.002 \\ 0.084 \pm 0.053 \\ 0.038 \pm 0.040 \\ 0.009 \pm 0.439 \end{array}$	$12.91^{+0.08}_{-0.13}$	$7.52_{-5.79}^{+3.69}$		
2	С	FeII 2600 FeII 2586 FeII 2382 FeII 2344 FeII 1608	$2.37833 \pm 1.3 \times 10^{-5}$	$\begin{array}{c} 0.036 \pm 0.003 \\ 0.023 \pm 0.003 \\ 0.035 \pm 0.053 \\ 0.026 \pm 0.056 \\ 0.009 \pm 0.438 \end{array}$	$13.03^{+0.30}_{-0.48}$	$1.36^{+0.40}_{-0.36}$		
3	a	MgII 2796 MgII 2803	$2.52974 \pm 2.4 \times 10^{-5}$	0.184 ± 0.011 0.134 ± 0.041	$13.04^{+0.05}_{-0.08}$	$8.33^{+0.88}_{-1.39}$		
3	b	MgII 2796 MgII 2803	$2.53114 \pm 4.2 \times 10^{-5}$	$\begin{array}{c} 0.766 \pm 0.049 \\ 0.501 \pm 0.025 \end{array}$	$13.58^{+0.03}_{-0.06}$	$39.0^{+0.58}_{-2.65}$		
3	c	MgII 2796 MgII 2803	2.53254 ± 0.00041	$\begin{array}{c} 0.908 \pm 0.017 \\ 0.857 \pm 0.023 \end{array}$	$14.80^{+0.04}_{-0.12}$	$24.3_{-1.11}^{+0.08}$		
3	d	MgII 2796 MgII 2803	2.53316 ± 0.00142	$\begin{array}{c} 0.864 \pm 0.020 \\ 0.621 \pm 0.022 \end{array}$	$13.75^{+0.04}_{-0.05}$	$36.7^{+0.27}_{-0.44}$		
3	e	MgII 2796 MgII 2803	$2.53429 \pm 5.8 \times 10^{-5}$	0.558 ± 0.018 0.416 ± 0.021	$13.54^{+0.04}_{-0.06}$	$25.3_{-0.88}^{+0.78}$		
3	f	MgII 2796 MgII 2803	$2.53515 \pm 3.0 \times 10^{-5}$	0.223 ± 0.015 0.161 ± 0.017	$13.13^{+0.04}_{-0.07}$	$10.5_{-1.40}^{+1.00}$		
3	h	FeII 2600 FeII 2586 FeII 2382 FeII 2344 FeII 1608	2.53106 ± 0.00010	0.167 ± 0.008 0.050 ± 0.008 0.187 ± 0.081 0.070 ± 1.860 0.016 ± 3.537	$13.14^{+0.08}_{-0.19}$	$59.3^{+0.75}_{-3.00}$		
3	i	FeII 2600 FeII 2586	$2.53117 \pm 2.0 \times 10^{-5}$	$0.110 \pm 0.004 \\ 0.048 \pm 0.004$	$13.20^{+0.04}_{-0.11}$	$6.42^{+1.06}_{-1.07}$		

		FeII 2382		0.108 ± 0.047		
		FeII 2344		0.058 ± 0.923		
		FeII 1608		0.016 ± 1.930		
3	j	FeII 2600	$2.53217 \pm 7.9 \times 10^{-5}$	0.320 ± 0.004	$14.50^{+0.08}_{-0.16}$	$9.86^{+0.45}_{-0.62}$
		FeII 2586		0.260 ± 0.004	-0.10	-0.02
		FeII 2382		0.306 ± 0.138		
		FeII 2344		0.234 ± 1.536		
		FeII 1608		0.130 ± 1.547		
3	i	FeII 2600	2.53256 ± 0.00019	0.605 ± 0.005	$14.26^{+0.11}_{-0.19}$	$25.6^{+1.64}_{-3.67}$
0	•	FeII 2586	2.00200 ± 0.00010	0.397 ± 0.005	11.20_0.19	20.0_3.67
		FeII 2382		0.582 ± 0.139		
		FeII 2344		0.427 ± 0.163		
		FeII 1608		0.168 ± 1.936		
3	j	FeII 2600	2.53288 ± 0.00103	0.825 ± 0.006	$14.26^{+0.03}_{-0.05}$	$37.1^{+0.92}_{-1.39}$
9	J	FeII 2586	2.00200 ± 0.00100	0.454 ± 0.006	$14.20_{-0.05}$	$57.1_{-1.39}$
		FeII 2382		0.494 ± 0.000 0.808 ± 0.135		
		FeII 2344		0.503 ± 0.133 0.513 ± 2.144		
		FeII 1608		0.513 ± 2.144 0.183 ± 2.003		
3	k	FeII 2600	$2.53427 \pm 9.8 \times 10^{-5}$	0.103 ± 2.003 0.313 ± 0.005	$13.63^{+0.04}_{-0.07}$	$18.1^{+1.21}_{-1.85}$
3	K	FeII 2586	$2.53427 \pm 9.6 \times 10$	0.313 ± 0.005 0.135 ± 0.005	$13.03_{-0.07}$	10.1 - 1.85
		FeII 2382		0.133 ± 0.003 0.319 ± 0.023		
		FeII 2344		0.319 ± 0.023 0.172 ± 0.811		
		FeII 2544 FeII 1608		0.172 ± 0.811 0.049 ± 1.098		
4			$2.54463 \pm 5.8 \times 10^{-5}$	0.049 ± 1.098 0.100 ± 0.018	14.25+0.24	0.19+0.19
4	a	MgII 2796	$2.54403 \pm 5.8 \times 10^{-5}$		$14.35^{+0.24}_{-0.51}$	$2.13^{+0.19}_{-0.24}$
_		MgII 2803	0.40000 0.00010	0.092 ± 0.017	12.00±0.09	00.0+4.12
5	a	MgII 2796	3.48939 ± 0.00010	0.320 ± 0.013	$13.09^{+0.09}_{-0.10}$	$23.0^{+4.12}_{-4.12}$
-	1	MgII 2803	9 40091 7 510=5	0.183 ± 0.023	1471+0.27	$c_{00} + 0.21$
5	b	MgII 2796	$3.49031 \pm 7.5 \times 10^{-5}$	0.242 ± 0.019	$14.71^{+0.27}_{-0.21}$	$6.22^{+0.21}_{-0.30}$
		MgII 2803	110000 0.0 10-5	0.227 ± 0.026	10.00±0.05	40 0±1 61
6	a	MgII 2796	$4.13988 \pm 2.2 \times 10^{-5}$	0.396 ± 0.045	$13.68^{+0.05}_{-0.04}$	$18.2^{+1.61}_{-1.87}$
_	_	MgII 2803		0.410 ± 0.012	0 08	+ 1.02
6	b	MgII 2796	$4.14100 \pm 6.2 \times 10^{-5}$	0.153 ± 0.040	$13.05^{+0.08}_{-0.08}$	$6.12^{+1.03}_{-1.06}$
		MgII 2803	_	0.129 ± 0.019	10.06	+1.20
6	\mathbf{c}	FeII 2600	$4.13985 \pm 1.4 \times 10^{-5}$	0.238 ± 0.006	$13.79^{+0.06}_{-0.06}$	$10.3^{+1.39}_{-1.37}$
		FeII 2586		0.137 ± 0.006		
		FeII 2382		0.231 ± 0.011		
		FeII 2344		0.163 ± 0.009		
		FeII 1608		0.057 ± 0.284		
		FeII 1260		0.018 ± 0.215		
6	d	AlII 1670	$4.13979 \pm 7.8 \times 10^{-5}$	0.146 ± 0.001	$12.77_{-0.06}^{+0.04} \\ 13.20_{-0.18}^{+0.12}$	$15.4_{-2.94}^{+1.86} \\ 31.1_{-2.78}^{+2.79}$
7	a	CIV 1548	$4.52890 \pm 4.8 \times 10^{-5}$	0.053 ± 0.001	$13.20^{+0.12}_{-0.18}$	$31.1^{+2.79}_{-2.78}$
		CIV 1550		0.029 ± 0.001		
7	b	CIV 1548	4.53044 ± 0.00018	0.019 ± 0.002	$12.71^{+0.40}_{-0.64}$	$37.4^{+8.82}_{-14.1}$
		CIV~1550		0.009 ± 0.002		
8	a	MgII 2796	$4.61458 \pm 5.7 \times 10^{-5}$	0.632 ± 0.044	$13.84^{+0.46}_{-0.43}$	$25.4^{+7.53}_{-12.4}$
		~			0.40	12.4

		MgII 2803		0.638 ± 0.014		
8	b	MgII 2796	4.61490 ± 0.00059	0.030 ± 0.014 0.102 ± 0.043	$14.91^{+0.73}_{-1.10}$	$1.58^{+9.15}_{3.6}$
O	D	MgII 2803	1.01100 ± 0.00000	0.087 ± 0.007	11.01_1.10	1.003.6
8	\mathbf{c}	CIV 1548	4.61256 ± 0.00010	0.029 ± 0.002	$12.91^{+0.27}_{-0.43}$	$38.4^{+5.59}_{-8.78}$
O	C	CIV 1550	1.01200 ± 0.00010	0.025 ± 0.002 0.015 ± 0.002	12.01_0.43	90.1_8.78
8	d	CIV 1548	$4.61459 \pm 2.5 \times 10^{-5}$	0.015 ± 0.002 0.185 ± 0.001	$13.81^{+0.05}_{-0.07}$	$34.8^{+0.88}_{-1.38}$
O	a	CIV 1550	1.01100 ± 2.0 ×10	0.109 ± 0.001 0.109 ± 0.002	10.01_0.07	91. 0_1.38
8	e	CIV 1548	$4.61586 \pm 3.5 \times 10^{-5}$	0.090 ± 0.002	$13.47^{+0.07}_{-0.11}$	$24.0^{+1.99}_{-3.12}$
O	C	CIV 1550	1.01000 ± 0.0 ×10	0.049 ± 0.001	10.11 _0.11	21.0_3.12
8	f	FeII 2600	$4.61420 \pm 2.6 \times 10^{-5}$	0.188 ± 0.008	$13.63^{+0.07}_{-0.08}$	$8.24^{+0.74}_{-0.73}$
O	•	FeII 2586	1.01120 ± 2.0 //10	0.112 ± 0.019	10.00_0.08	0.21_0.73
		FeII 2382		0.112 ± 0.010 0.199 ± 0.007		
		FeII 2344		0.143 ± 0.008		
		FeII 1608		0.042 ± 0.003		
		FeII 1260		0.012 ± 0.166		
8	g	FeII 2600	$4.61492 \pm 2.8 \times 10^{-5}$	0.192 ± 0.010	$13.49^{+0.06}_{-0.08}$	$9.60^{+1.06}_{-0.68}$
	0	FeII 2586		0.094 ± 0.015	_0.08	-0.68
		FeII 2382		0.204 ± 0.007		
		FeII 2344		0.096 ± 0.006		
		FeII 1608		0.034 ± 0.003		
		FeII 1260		0.009 ± 0.181		
8	h	SiII 1526	$4.61426 \pm 1.0 \times 10^{-5}$	0.120 ± 0.001	$14.65^{+0.11}_{-0.18}$	$6.75^{+0.33}_{-0.52}$
		SiII 1304		0.095 ± 0.017	-0.18	-0.52
		SiII 1260		0.134 ± 0.191		
		SiII 1193		0.115 ± 0.275		
		SiII 1190		0.106 ± 0.070		
8	i	SiII 1526	$4.61498 \pm 1.3 \times 10^{-5}$	0.091 ± 0.001	$14.23^{+0.09}_{-0.15}$	$5.88^{+0.32}_{-0.53}$
		SiII 1304		0.068 ± 0.016	0.10	0.55
		SiII 1260		0.105 ± 0.176		
		SiII 1193		0.088 ± 0.297		
		SiII 1190		0.080 ± 0.070		
8	j	AlII 1670	$4.61410 \pm 5.2 \times 10^{-5}$	0.097 ± 0.006	$13.15_{-0.23}^{+0.15} 12.73_{-0.07}^{+0.05} 12.77_{-0.33}^{+0.21}$	$5.36_{-0.65}^{+0.41} 57.5_{-0.9}^{+0.62} 18.1_{-5.53}^{+3.54}$
8	k	AlII 1670	4.61481 ± 0.00025	0.191 ± 0.011	$12.73^{+0.05}_{-0.07}$	$57.5^{+0.62}_{0.9}$
9	\mathbf{a}	CIV 1548	$4.64938 \pm 7.9 \times 10^{-5}$	0.021 ± 0.002	$12.77^{+0.21}_{-0.33}$	$18.1^{+3.54}_{-5.53}$
		CIV 1550		0.011 ± 0.004		-
9	b	CIV 1548	$4.65352 \pm 3.5 \times 10^{-5}$	0.047 ± 0.002	$13.14^{+0.10}_{-0.16}$	$17.5^{+3.61}_{-5.66}$
		CIV 1550		0.025 ± 0.004		
10	a	CIV 1548	$4.66812\pm1.4 imes10^{-5}$	0.107 ± 0.001	$13.95^{+0.05}_{-0.09}$	$7.98^{+0.82}_{-1.29}$
		CIV 1550		0.087 ± 0.002		
10	b	CIV 1548	$4.66866 \pm 5.2 \times 10^{-5}$	0.264 ± 0.005	$13.94^{+0.06}_{-0.09}$	$62.6^{+3.66}_{-5.74}$
		CIV 1550		0.152 ± 0.006		
11	a	CIV 1548	$4.71100 \pm 8.6 \times 10^{-5}$	0.065 ± 0.003	$13.27^{+0.13}_{-0.20}$	$42.2^{+2.42}_{-3.80}$
		CIV 1550		0.034 ± 0.004		
12	a	CIV 1548	$4.72314 \pm 8.8 \times 10^{-5}$	0.086 ± 0.004	$13.38^{+0.13}_{-0.20}$	$47.4^{+4.96}_{-7.79}$
		CIV 1550		0.045 ± 0.004		

13	a	CIV 1548	$4.74582\pm9.3\times\!10^{-5}$	0.041 ± 0.004	$13.05^{+0.16}_{-0.26}$	$27.5^{+4.82}_{-7.57}$
		CIV 1550		0.021 ± 0.004		
14	a	MgII 2796	4.86294 ± 0.00326	0.796 ± 0.012	$15.76^{+0.28}_{-0.24}$	$18.1^{+0.28}_{-0.67}$
		MgII 2803		0.763 ± 0.025		
14	b	MgII 2796	4.86387 ± 0.09870	0.899 ± 0.013	$14.73^{+0.15}_{-0.20}$	$21.1^{+0.41}_{-0.46}$
		MgII 2803		0.794 ± 0.071	0.20	0.40
14	$^{\mathrm{c}}$	MgII 2796	4.86544 ± 0.00031	0.486 ± 0.010	$13.27^{+0.03}_{-0.00}$	$27.0^{+2.82}_{6.1}$
		MgII 2803		0.259 ± 0.035	- 0.00	0.1
14	d	MgII 2796	4.86647 ± 0.00013	0.324 ± 0.009	$13.84^{+0.21}_{-0.39}$	$8.67^{+0.81}_{-0.58}$
	-	MgII 2803		0.272 ± 0.030	-0.39	-0.58
14	e	MgII 2796	4.86732 ± 0.00032	0.465 ± 0.011	$13.40^{+0.06}_{-0.05}$	$27.4^{+0.29}_{1.4}$
1-1	C	MgII 2803	$\pm .00702 \pm 0.00002$	0.409 ± 0.011 0.317 ± 0.017	$10.40_{-0.05}$	21.41.4
14	\mathbf{f}	MgII 2796	$4.86869 \pm 4.6 \times 10^{-5}$	0.317 ± 0.017 0.212 ± 0.014	$13.14^{+0.01}_{-0.15}$	$8.10^{+1.16}_{-2.04}$
14	1	-	$4.00009 \pm 4.0 \times 10$		$^{13.14}_{-0.15}$	$6.10_{-2.04}$
1.4		MgII 2803	4.05070 9.510-5	0.162 ± 0.011	19.10+0.18	1 01+0.54
14	g	CIV 1548	$4.85878 \pm 3.5 \times 10^{-5}$	0.020 ± 0.003	$13.12^{+0.18}_{-0.29}$	$1.61^{+0.54}_{-0.61}$
	,	CIV 1550	100070 100 100 5	0.015 ± 0.002	10.00+0.04	0.4.4+1.19
14	h	CIV 1548	$4.86050 \pm 3.2 \times 10^{-5}$	0.228 ± 0.004	$13.93^{+0.04}_{-0.07}$	$34.1^{+1.19}_{-1.87}$
		CIV 1550	_	0.128 ± 0.003	1.0.04	10.24
14	i	CIV 1548	$4.86224 \pm 5.0 \times 10^{-5}$	0.208 ± 0.003	$13.91^{+0.04}_{-0.06}$	$29.4^{+0.34}_{-0.54}$
		CIV 1550		0.126 ± 0.003	1004	.1.00
14	j	CIV 1548	$4.86331 \pm 3.0 \times 10^{-5}$	0.172 ± 0.002	$13.95^{+0.04}_{-0.06}$	$15.1^{+1.06}_{-1.68}$
		CIV 1550		0.114 ± 0.003		
14	k	CIV 1548	$4.86440 \pm 6.7 \times 10^{-5}$	0.196 ± 0.002	$14.00^{+0.04}_{-0.07}$	$19.3^{+1.14}_{-1.77}$
		CIV 1550		0.132 ± 0.005		
14	1	CIV 1548	4.86538 ± 0.00013	0.201 ± 0.003	$13.89^{+0.03}_{-0.05}$	$29.7^{+0.64}_{-0.42}$
		CIV 1550		0.121 ± 0.004	0.00	0.12
14	\mathbf{m}	CIV 1548	4.86662 ± 0.00023	0.108 ± 0.002	$13.76^{+0.04}_{-0.07}$	$10.7^{+1.41}_{-2.22}$
		CIV 1550		0.074 ± 0.002	0.01	2.22
14	n	CIV 1548	4.86703 ± 0.00094	0.107 ± 0.003	$13.58^{+0.04}_{-0.06}$	$18.5^{+0.64}_{-1.05}$
		CIV 1550		0.061 ± 0.003	-0.06	-1.05
		CIV 1550		0.061 ± 0.005		
14	р	FeII 2600	4.86234 ± 0.00038	0.245 ± 0.017	$13.56^{+0.06}_{-0.07}$	$12.9^{+0.95}_{-0.94}$
	Р	FeII 2586	1.00201 ± 0.00000	0.106 ± 0.011	20.07	-0.94
		FeII 2382		0.209 ± 0.021		
		FeII 2344		0.203 ± 0.021 0.114 ± 0.022		
		FeII 1608		0.038 ± 0.006		
		FeII 1260		0.010 ± 0.000		
14	a	FeII 2600	4.86282 ± 0.00022	0.010 ± 0.012 0.176 ± 0.012	$13.91^{+0.07}_{-0.10}$	$6.23^{+0.68}_{-0.05}$
14	q	FeII 2586	4.00202 ± 0.00022	0.170 ± 0.012 0.129 ± 0.012	$10.91_{-0.10}$	$0.23_{-0.05}$
		FeII 2382		0.129 ± 0.012 0.184 ± 0.021		
		FeII 2344		$\begin{array}{c} 0.112 \pm 0.025 \\ 0.060 \pm 0.005 \end{array}$		
		FeII 1608				
1.4		FeII 1260	4.00970 0.110=5	0.022 ± 0.012	10.07+0.06	22.0+1.80
14	r	FeII 2600	$4.86379 \pm 6.1 \times 10^{-5}$	0.411 ± 0.015	$13.67^{+0.06}_{-0.08}$	$33.2^{+1.80}_{-2.83}$
		FeII 2586		0.152 ± 0.017		

		FeII 2382		0.474 ± 0.034		
		FeII 2344		0.169 ± 0.066		
		FeII 1608		0.051 ± 0.006		
		FeII 1260		0.014 ± 0.017		
14	\mathbf{S}	FeII 2600	$4.86710 \pm 4.6 \times 10^{-5}$	0.302 ± 0.015	$13.43^{+0.10}_{-0.12}$	$46.0^{+6.65}_{-7.36}$
		FeII 2586		0.099 ± 0.019	0.12	1.50
		FeII 2382		0.351 ± 0.028		
		FeII 2344		0.114 ± 0.020		
		FeII 1608		0.033 ± 0.008		
		FeII 1260		0.008 ± 0.018		
14	\mathbf{t}	SiII 1526	$4.86271 \pm 4.2 \times 10^{-5}$	0.312 ± 0.003	$14.43^{+0.04}_{-0.07}$	$28.8^{+1.08}_{-1.71}$
		SiII 1304		0.197 ± 0.110	0.01	1.11
		SiII 1260		0.416 ± 0.018		
		SiII 1193		0.348 ± 0.236		
		SiII 1190		0.304 ± 0.404		
14	u	SiII 1526	4.86371 ± 0.00015	0.072 ± 0.002	$14.07^{+0.13}_{-0.20}$	$4.56^{+0.41}_{-0.65}$
		SiII 1304		0.053 ± 0.074	0.20	0.00
		SiII 1260		0.081 ± 0.013		
		SiII 1193		0.068 ± 0.158		
		SiII 1190		0.063 ± 0.279		
14	V	SiII 1526	4.86416 ± 0.00045	0.138 ± 0.003	$13.88^{+0.03}_{-0.05}$	$22.9^{+0.28}_{-0.47}$
		SiII 1304		0.076 ± 0.085	0.00	0.11
		SiII 1260		0.285 ± 0.017		
		SiII 1193		0.217 ± 0.211		
		SiII 1190		0.158 ± 0.316		
14	W	SiII 1526	4.86674 ± 0.00047	0.225 ± 0.006	$14.05^{+0.04}_{-0.06}$	$58.6^{+0.37}_{-0.53}$
		SiII 1304		0.123 ± 0.113	0.00	0.00
		SiII 1260		0.632 ± 0.032		
		SiII 1193		0.438 ± 0.286		
		SiII 1190		0.279 ± 0.335		
14	X	SiII 1526	$4.86757 \pm 7.1 \times 10^{-5}$	0.072 ± 0.002	$14.86^{+0.28}_{-0.43}$	$3.29^{+0.29}_{-0.45}$
		SiII 1304		0.055 ± 0.057	0.49	0.40
		SiII 1260		0.089 ± 0.013		
		SiII 1193		0.076 ± 0.172		
		SiII 1190		0.063 ± 0.181		
14	У	AlII 1670	$4.86258 \pm 7.3 \times 10^{-5}$	0.213 ± 0.007	$13.03^{+0.05}_{-0.09}$	$17.8^{+1.54}_{-2.44}$
14	Z	AlII 1670	4.86375 ± 0.00022	0.351 ± 0.009	$13.03^{+0.05}_{-0.09}$ $13.11^{+0.03}_{-0.06}$	$17.8^{+1.54}_{-2.44}$ $48.7^{+0.66}_{-1.01}$
14	aa	AlII 1670	$4.86728 \pm 7.5 \times 10^{-5}$	0.181 ± 0.011	$12.79^{+0.04}_{-0.06}$	$31.8_{-0.77}^{+0.47}$ $9.03_{-5.71}^{+3.62}$
14	bb	AlII 1670	$4.86873 \pm 6.0 \times 10^{-5}$	0.061 ± 0.005	$12.31^{+0.05}_{-0.08}$	$9.03^{+3.62}_{-5.71}$
14	cc	MgI 2852	4.86302 ± 0.00011	0.251 ± 0.025	$12.35^{+0.10}_{-0.13}$	$41.3^{+3.60}_{-5.12}$
14	$\mathrm{d}\mathrm{d}$	MgI 2852	4.86751 ± 0.00056	0.047 ± 0.006	$11.76^{+0.10}_{-0.20}$	$3.94^{+2.80}$
14	ee	MgI 2852	4.86883 ± 0.00054	0.045 ± 0.009	$11.76_{-0.29}^{+0.13}$ $11.54_{-0.15}^{+0.25}$ $16.06_{-0.52}^{+1.07}$	$\begin{array}{c} 41.3^{+3.60}_{-5.12} \\ 41.3^{+3.60}_{-5.12} \\ 3.94^{+2.80}_{-0.57} \\ 22.9^{+4.78}_{-2.49} \\ 14.1^{+1.12}_{-0.33} \end{array}$
15	a	MgII 2796	4.87902 ± 0.00011	0.834 ± 0.073	$16.06^{+1.07}$	$14.1^{+1.12}$
10	a	MgII 2803	1.0,002 ± 0.00011	0.627 ± 0.009	20.00-0.52	
15	b	MgII 2796	4.88060 ± 0.00037	1.036 ± 0.060	$14.05^{+0.27}_{-0.03}$	$32.9^{+5.66}_{16}$
10	D	111611 2100	1.00000 ± 0.00001	1.000 ± 0.000	-1.00-0.03	-16.

		MgII 2803		0.705 ± 0.008		
15	c	MgII 2796	4.88203 ± 0.00685	0.831 ± 0.031	$13.52^{+0.00}_{-0.00}$	$74.5^{+10.1}_{-10.9}$
10		MgII 2803	1.00200 ± 0.00000	0.481 ± 0.011	10.02_0.00	1.0_10.9
15	d	MgII 2796	4.88216 ± 0.00029	0.953 ± 0.030	$16.17^{+0.40}_{-0.90}$	$17.0^{+0.21}_{-1.67}$
10	u	MgII 2803	4.00210 ± 0.00025	0.770 ± 0.008	$10.11_{-0.90}$	$11.0_{-1.67}$
15	e	CIV 1548	4.87703 ± 0.00013	0.064 ± 0.004	$13.25^{+0.14}_{-0.23}$	$38.9^{+4.74}_{-7.42}$
10	C	CIV 1540 CIV 1550	4.07709 ± 0.00019	0.032 ± 0.004	$10.20_{-0.23}$	$30.9_{-7.42}$
15	f	CIV 1548	$4.87897 \pm 3.0 \times 10^{-5}$	0.032 ± 0.004 0.021 ± 0.002	$13.26^{+0.24}_{-0.38}$	$1.47^{+0.38}_{-0.47}$
10	1	CIV 1550	4.07037 ± 3.0 ×10	0.021 ± 0.002 0.017 ± 0.002	$10.20_{-0.38}$	-0.47
15	g	CIV 1548	$4.88007 \pm 3.9 \times 10^{-5}$	0.017 ± 0.002 0.152 ± 0.004	$13.79^{+0.04}_{-0.07}$	$20.1^{+1.24}_{-1.97}$
10	8	CIV 1540 CIV 1550	4.00007 ± 3.3 ×10	0.192 ± 0.004 0.097 ± 0.003	$10.73_{-0.07}$	$20.1_{-1.97}$
15	h	CIV 1548	$4.88118 \pm 4.7 \times 10^{-5}$	0.037 ± 0.003 0.139 ± 0.004	$13.72^{+0.05}_{-0.08}$	$22.0_{-2.27}^{+1.44}$
10	11	CIV 1540 CIV 1550	4.00110 ± 4.7 ×10	0.133 ± 0.004 0.082 ± 0.003	$10.72_{-0.08}$	$22.0_{-2.27}$
15	i	CIV 1548	4.88340 ± 0.00013	0.022 ± 0.003 0.022 ± 0.003	$12.80^{+0.25}_{-0.40}$	$22.1_{-10.5}^{+6.80}$
10	1	CIV 1540 CIV 1550	4.00940 ± 0.00019	0.012 ± 0.003 0.012 ± 0.003	$12.00_{-0.40}$	22.1 - 10.5
15	j	FeII 2600	4.87921 ± 0.00010	0.532 ± 0.003 0.532 ± 0.070	$13.84^{+0.08}_{-0.10}$	$37.3^{+2.33}_{-1.71}$
10	J	FeII 2586	4.87921 ± 0.00010	0.332 ± 0.016 0.219 ± 0.016	$13.04_{-0.10}$	$57.5_{-1.71}$
		FeII 2382		0.589 ± 0.077		
		FeII 2344		0.308 ± 0.017 0.308 ± 0.047		
		FeII 1608		0.078 ± 0.008		
		FeII 1260		0.020 ± 0.016		
15	k	FeII 2600	$4.88068 \pm 9.2 \times 10^{-5}$	0.375 ± 0.014	$13.72^{+0.06}_{-0.06}$	$22.3^{+0.00}_{0.2}$
10	11	FeII 2586	1.00000 ± 3.2 ×10	0.162 ± 0.012	10.12_0.06	22.90.2
		FeII 2382		0.417 ± 0.088		
		FeII 2344		0.217 ± 0.036		
		FeII 1608		0.058 ± 0.012		
		FeII 1260		0.016 ± 0.014		
15	1	FeII 2600	$4.88143 \pm 7.0 \times 10^{-5}$	0.167 ± 0.008	$14.47^{+0.18}_{-0.22}$	$4.67^{+0.16}_{0.0}$
10	-	FeII 2586	1.00110 ± 1.0 7.10	0.141 ± 0.009	1111 -0.22	0.0
		FeII 2382		0.163 ± 0.073		
		FeII 2344		0.149 ± 0.106		
		FeII 1608		0.079 ± 0.018		
		FeII 1260		0.042 ± 0.012		
15	\mathbf{m}	FeII 2600	$4.88236 \pm 5.5 \times 10^{-5}$	0.510 ± 0.010	$13.94^{+0.07}_{-0.08}$	$28.3^{+1.44}_{-1.37}$
		FeII 2586		0.295 ± 0.016	-0.08	-1.37
		FeII 2382		0.443 ± 0.040		
		FeII 2344		0.334 ± 0.045		
		FeII 1608		0.095 ± 0.017		
		FeII 1260		0.026 ± 0.016		
15	n	SiII 1526	4.87860 ± 0.00013	0.121 ± 0.002	$14.24^{+0.09}_{-0.14}$	$8.78^{+0.74}_{-1.16}$
		SiII 1304		0.087 ± 0.029	-0.14	-1.10
		SiII 1260		0.153 ± 0.013		
		SiII 1193		0.127 ± 0.149		
		SiII 1190		0.106 ± 0.160		
15	О	SiII 1526	4.87937 ± 0.00022	0.266 ± 0.003	$14.28^{+0.03}_{-0.06}$	$27.9^{+0.23}_{-0.14}$
					0.00	0.11

		SiII 1304		0.165 ± 0.040		
		SiII 1260		0.393 ± 0.017		
		SiII 1193		0.334 ± 0.189		
		SiII 1190		0.264 ± 0.214		
15	p	SiII 1526	4.88057 ± 0.00023	0.128 ± 0.002	$13.89^{+0.04}_{-0.05}$	$14.8^{+1.19}_{-1.88}$
		SiII 1304		0.073 ± 0.033		
		SiII 1260		0.202 ± 0.013		
		SiII 1193		0.168 ± 0.137		
		SiII 1190		0.129 ± 0.177		
15	\mathbf{q}	SiII 1526	4.88136 ± 0.00038	0.153 ± 0.002	$13.95^{+0.04}_{-0.07}$	$23.2^{+0.05}_{-1.39}$
		SiII 1304		0.087 ± 0.035		
		SiII 1260		0.294 ± 0.016		
		SiII 1193		0.228 ± 0.140		
		SiII 1190		0.173 ± 0.198		
15	\mathbf{r}	SiII 1526	4.88186 ± 0.01290	0.232 ± 0.004	$14.05^{+0.08}_{-0.13}$	$59.2^{+5.06}_{-5.64}$
		SiII 1304		0.117 ± 0.050		
		SiII 1260		0.608 ± 0.023		
		SiII 1193		0.420 ± 0.188		
		SiII 1190		0.279 ± 0.269		
15	\mathbf{s}	SiII 1526	4.88246 ± 0.00060	0.224 ± 0.003	$14.18^{+0.04}_{-0.07}$	$23.3^{+0.81}_{-0.83}$
		SiII 1304		0.136 ± 0.042		
		SiII 1260		0.307 ± 0.016		
		SiII 1193		0.261 ± 0.131		
		SiII 1190		0.217 ± 0.190		
15	\mathbf{t}	AlII 1670	4.87872 ± 0.00224	0.116 ± 0.005	$12.60^{+0.05}_{-0.08}$	$16.4^{+1.75}_{-2.74}$
15	u	AlII 1670	4.87925 ± 0.00304	0.113 ± 0.005	$12.56^{+0.04}_{-0.06}$	$18.3^{+0.59}_{-0.91}$
15	\mathbf{v}	AlII 1670	4.88000 ± 0.00059	0.070 ± 0.004	$12.38^{+0.04}_{-0.07}$	$10.6^{+1.96}_{-3.09}$
15	W	AlII 1670	4.88069 ± 0.00017	0.094 ± 0.004	$12.85^{+0.05}_{-0.08}$	$6.28^{+0.33}_{-0.52}$
15	У	AlII 1670	$4.88138 \pm 8.5 \times 10^{-5}$	0.128 ± 0.004	$13.99^{+0.16}_{-0.25}$	$5.58^{+0.26}_{-0.42}$
15	${f z}$	AlII 1670	$4.88232\pm8.5 imes10^{-5}$	0.234 ± 0.007	$12.96^{+0.04}_{-0.06}$	$28.1^{+0.95}_{-1.50}$
16	a	CIV 1548	$4.97670 \pm 7.5 \times 10^{-5}$	0.049 ± 0.004	$13.17^{+0.12}_{-0.20}$	$22.6_{-6.50}^{+4.13}$
		CIV 1550		0.026 ± 0.004		
17	a	CIV 1548	5.02347 ± 0.00022	0.025 ± 0.018	$12.88^{+0.20}_{-0.32}$	$8.97^{+12.2}_{-7.97}$
		CIV 1550		0.013 ± 0.006	0.02	, , ,
18	a	CIV 1548	$5.04281 \pm 5.4 \times 10^{-5}$	0.020 ± 0.007	$13.45^{+0.45}_{-0.72}$	$1.17^{+0.38}_{-0.17}$
		CIV 1550		0.017 ± 0.005		0.11
19	\mathbf{a}	CIV 1548	$5.14296 \pm 9.8 \times 10^{-5}$	0.037 ± 0.004	$13.04^{+0.13}_{-0.20}$	$17.4^{+2.59}_{-4.09}$
		CIV 1550		0.020 ± 0.005	0.20	1.00
20	\mathbf{a}	CIV 1548	$5.24734 \pm 6.9 \times 10^{-5}$	0.027 ± 0.005	$13.03^{+0.13}_{-0.20}$	$3.44^{+1.63}_{-2.44}$
		CIV~1550		0.016 ± 0.004		
21	b	CIV 1548	5.80738 ± 0.00017	0.053 ± 0.008	$13.13^{+0.28}_{-0.37}$	$33.2^{+18.0}_{-17.3}$
		CIV~1550		0.027 ± 0.008	0.01	10