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Exploring He II $\lambda 1640$ emission line properties at $z \sim 2-4$ (Corrigendum)

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ABSTRACT

Key words. galaxies: ISM – galaxies: star formation – galaxies: evolution – galaxies: high-redshift – errata, addenda

Due to an error introduced to the equivalent width measuring code during the refereeing process, the final published equivalent widths (EWs) were artificially elevated. Table 3 and Fig. 10 have been updated with the correct values. The He II $\lambda 1640$ EW values

still show an enhancement compared to the values predicted by the models. Our final conclusions therefore remain unchanged due to this update.

Table 3. EWs of the MUSE He II $\lambda 1640$ sample used in this analysis.

ID	He II $\lambda 1640$		C III]1907		C III]1909		O III]1661		O III]1666		Si III]1883		Si III]1892	
	EW	Δ EW	EW	Δ EW	EW	Δ EW	EW	Δ EW	EW	Δ EW	EW	Δ EW	EW	Δ EW
1024	3.1	0.6	6.0	0.9	4.0	0.5	1.3	0.6	2.8	0.6	3.6	0.7	3.2	1.1
1036	3.0	1.1	12.4	0.8	8.5	1.0	2.1	0.7	4.8	0.7	4.6	0.6	2.5	0.8
1045	3.6	0.9	11.5	1.2	6.3	1.1	3.2	0.8	4.6	0.8	4.1	0.7	3.8	0.8
1079	8.2	2.0	21.3	1.8	14.4	1.5	3.6	1.1	7.2	1.4	7.3	1.9	3.0	1.4
1273	10.3	−99.0	7.2	−99.0	12.4	−99.0	10.2	−99.0	10.1	−99.0	14.5	−99.0	7.0	−99.0
3621	4.8	0.8	7.1	0.8	3.0	0.8	2.1	0.5	3.8	0.5	2.9	0.5	4.1	0.7
87	3.2	0.4	5.7	0.5	5.0	0.5	1.5	0.5	4.3	0.5	4.5	0.7	2.2	0.7
109	10.7	2.2	–	–	–	–	9.7	1.8	37.2	4.3	–	–	–	–
144	17.9	2.4	28.9	3.1	20.2	3.8	8.8	1.4	16.9	1.9	7.7	1.9	3.0	1.8
97	24.7	−99.0	–	–	–	–	5.1	−99.0	1.3	−99.0	–	–	–	–
39	26.9	3.5	18.6	−99.0	12.0	−99.0	8.5	2.4	6.3	2.0	39.4	−99.0	23.3	−99.0
84	50.3	−99.0	10.4	−99.0	0.3	−99.0	1.7	−99.0	6.9	−99.0	6.6	−99.0	12.0	−99.0
161	9.1	2.6	0.7	0.6	1.5	0.7	0.2	0.7	0.2	0.4	0.0	0.4	0.4	0.6

Notes. All EWs are in Å. EW errors were obtained from bootstrap resampling of the spectrum and account for the uncertainty in continuum fitting. If a line is not covered by the spectral range of MUSE, the EW is shown by a long dash. If a line is covered but the continuum level around the considered line is below the error level, the Δ EW is shown by a long dash. In these cases, the EW was computed assuming that the continuum level equals the noise level, and the EW presented should be considered as a lower limit.

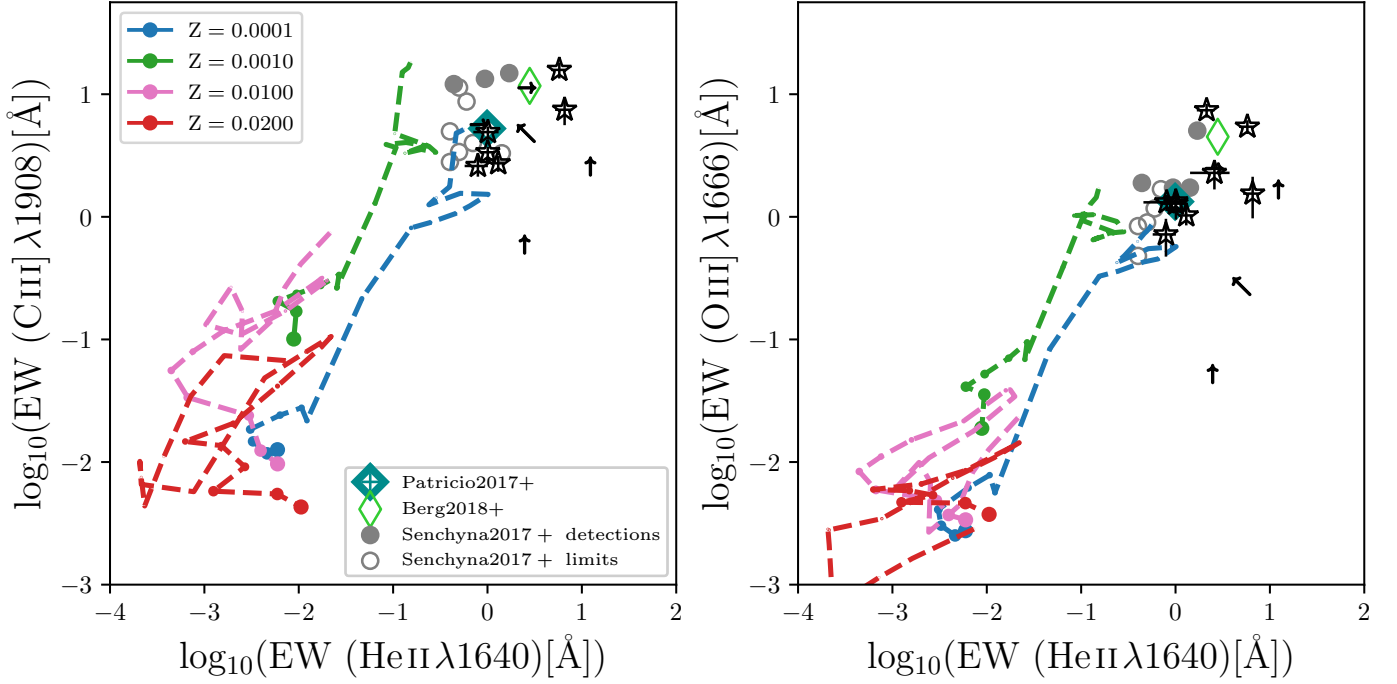


Fig. 10. EW comparison of the MUSE He II $\lambda 1640$ sample using BPASS stellar population models. *Left:* C III] $\lambda 1907$ +C III] $\lambda 1909$ EW vs. He II $\lambda 1640$ EW. *Right:* O III] $\lambda 1666$ EW vs. He II $\lambda 1640$ EW. Galaxies with $S/N \geq 2.5$ are shown by stars, and others are shown as lower limits to the EW as triangles. We compare our observed EWs with model tracks from the [Xiao et al. \(2018\)](#) BPASS binary tracks. Models were computed for a $\log_{10}(n_H) = 1.0$ and $U_s = -1.5$ at different metallicities between $2 Z_{\odot}$ to $1/200$ th Z_{\odot} . The size of the symbols increases with time. EWs from the literature are also shown for comparison.

References

Xiao, L., Stanway, E. R., & Eldridge, J. J. 2018, [MNRAS](#), 477, 904