Erratum: Improved Monte Carlo Glauber predictions at present and future nuclear colliders [Phys. Rev. C **97**, 054910 (2018)]

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We correct an error made in the calculation of the overlap area, shown in the top panels of Fig. 16 and reported in Tables XI–XXI, of the original article. In the original article, we report the overlap area, defined in Eq. (5), for various systems. It is computed in the Monte Carlo Glauber approach by evaluating the area of wounded nucleons with two fine-grained grids, one for participants from each nucleus as explained in Appendix B of Ref. [1]. This approach avoids approximations using participant position distributions and *ad hoc* normalizations. However, we made an error by taking the “AND” rather than the “OR” of the two fine-grained grids. The former computes the true geometrical intersect of the participants but not the total area the participant distributions actually cover. The corrected figure is shown in Fig. 1, whereas the numerical values are given in Tables I–III.

The overall conclusions of the original article are not affected.

FIG. 1. Overlap area (A_T) as a function of centrality for PbPb collisions at $\sqrt{s_{NN}} = 2.76, 5.02$, and 39 TeV (bottom to top curves in the left panel) and for pPb collisions at $\sqrt{s_{NN}} = 5.02, 8.16$ and 63 TeV (bottom to top curves in the right panel). The two panels replace the two top panels of Fig. 16 in the original paper.

TABLE I. Mean overlap area $A_{\perp}$ and standard deviation in fm² for PbPb collisions. Replaces corresponding columns in Tables IX–XIII.

Centrality	PbPb, 2.76 TeV	PbPb, 5.02 TeV	PbPb, 5.5 TeV	PbPb, 10.6 TeV	PbPb, 39 TeV
0–5%	144 ± 4.67	145 ± 3.9	145 ± 3.81	146 ± 3.17	147 ± 2.31
5–10%	133 ± 7.96	136 ± 7.48	137 ± 7.38	140 ± 6.55	144 ± 4.79
10–15%	117 ± 8.14	122 ± 8.42	122 ± 8.43	127 ± 8.61	135 ± 7.95
15–20%	103 ± 7.89	108 ± 8.19	108 ± 8.21	113 ± 8.53	122 ± 9
20–25%	91.3 ± 7.65	95.3 ± 7.95	95.8 ± 8.03	100 ± 8.33	109 ± 8.91
25–30%	80 ± 7.43	84.2 ± 7.73	84.7 ± 7.79	88.6 ± 8.11	96.9 ± 8.76
30–35%	70.6 ± 7.22	74.1 ± 7.52	74.5 ± 7.57	78.3 ± 7.92	86 ± 8.56
35–40%	61.7 ± 7.02	64.8 ± 7.34	65.3 ± 7.39	68.8 ± 7.72	76 ± 8.38
40–45%	53.4 ± 6.85	56.4 ± 7.15	56.8 ± 7.22	60 ± 7.55	66.7 ± 8.24
45–50%	45.8 ± 6.68	48.6 ± 6.99	48.9 ± 7.06	51.9 ± 7.41	58.1 ± 8.07
50–55%	38.8 ± 6.49	41.3 ± 6.84	41.6 ± 6.89	44.4 ± 7.23	50 ± 7.93
55–60%	32.3 ± 6.32	34.6 ± 6.67	34.9 ± 6.7	37.3 ± 7.1	42.5 ± 7.82
60–65%	26.4 ± 6.15	28.3 ± 6.5	28.6 ± 6.58	30.8 ± 6.95	35.3 ± 7.7
65–70%	21 ± 5.94	22.6 ± 6.3	22.8 ± 6.36	24.8 ± 6.78	28.7 ± 7.57
70–75%	16.2 ± 5.61	17.6 ± 6.02	17.7 ± 6.08	19.3 ± 6.5	22.6 ± 7.35
75–80%	12.1 ± 5.09	13.2 ± 5.48	13.4 ± 5.52	14.6 ± 5.96	17.3 ± 6.84
80–85%	8.98 ± 4.33	9.81 ± 4.69	9.92 ± 4.73	10.9 ± 5.13	13 ± 5.99
85–90%	6.67 ± 3.45	7.32 ± 3.76	7.4 ± 3.8	8.14 ± 4.14	9.76 ± 4.87
90–95%	5.02 ± 2.53	5.51 ± 2.76	5.56 ± 2.78	6.14 ± 3.05	7.39 ± 3.62
95–100%	3.76 ± 1.54	4.13 ± 1.69	4.19 ± 1.72	4.62 ± 1.89	5.6 ± 2.27
0–100%	50.7 ± 41.7	51.9 ± 41.9	52.1 ± 41.9	53.4 ± 42	55.9 ± 42.2

TABLE II. Mean overlap area $A_{\perp}$ and standard deviation in fm² for pPb collisions. Replaces corresponding columns in Tables XIV–XVIII.

Centrality	pPb, 5.02 TeV	pPb, 8.16 TeV	pPb, 8.8 TeV	pPb, 17 TeV	pPb, 63 TeV
0–5%	9.51 ± 1.2	10.4 ± 1.24	10.6 ± 1.25	12 ± 1.3	15 ± 1.38
5–10%	9.37 ± 1.22	10.3 ± 1.27	10.4 ± 1.27	11.8 ± 1.33	14.8 ± 1.43
10–15%	9.22 ± 1.24	10.1 ± 1.29	10.3 ± 1.29	11.6 ± 1.36	14.6 ± 1.47
15–20%	9.04 ± 1.27	9.91 ± 1.33	10 ± 1.33	11.4 ± 1.4	14.3 ± 1.52
20–25%	8.81 ± 1.3	9.67 ± 1.36	9.8 ± 1.37	11.1 ± 1.44	13.9 ± 1.58
25–30%	8.56 ± 1.34	9.38 ± 1.4	9.52 ± 1.4	10.7 ± 1.48	13.5 ± 1.65
30–35%	8.25 ± 1.37	9.03 ± 1.44	9.16 ± 1.46	10.3 ± 1.55	12.9 ± 1.73
35–40%	7.88 ± 1.41	8.61 ± 1.49	8.72 ± 1.5	9.81 ± 1.6	12.2 ± 1.8
40–45%	7.43 ± 1.45	8.2 ± 1.52	8.23 ± 1.53	9.23 ± 1.65	11.4 ± 1.88
45–50%	6.95 ± 1.46	7.58 ± 1.54	7.68 ± 1.56	8.58 ± 1.67	10.6 ± 1.92
50–55%	6.43 ± 1.46	6.99 ± 1.55	7.07 ± 1.56	7.91 ± 1.68	9.7 ± 1.93
55–60%	5.9 ± 1.43	6.4 ± 1.52	6.48 ± 1.54	7.23 ± 1.67	8.85 ± 1.91
60–65%	5.39 ± 1.39	5.84 ± 1.48	5.9 ± 1.49	6.58 ± 1.62	8.02 ± 1.89
65–70%	4.91 ± 1.32	5.32 ± 1.41	5.37 ± 1.42	5.96 ± 1.54	7.25 ± 1.8
70–75%	4.49 ± 1.22	4.83 ± 1.3	4.9 ± 1.32	5.43 ± 1.44	6.59 ± 1.69
75–80%	4.11 ± 1.1	4.43 ± 1.18	4.49 ± 1.19	4.96 ± 1.3	6.02 ± 1.53
80–85%	3.8 ± 0.964	4.1 ± 1.04	4.14 ± 1.04	4.57 ± 1.14	5.53 ± 1.36
85–90%	3.54 ± 0.814	3.81 ± 0.869	3.85 ± 0.884	4.25 ± 0.967	5.53 ± 1.14
90–95%	3.33 ± 0.649	3.57 ± 0.688	3.61 ± 0.695	3.99 ± 0.767	4.81 ± 0.898
95–100%	3.15 ± 0.451	3.39 ± 0.483	3.43 ± 0.487	3.78 ± 0.533	4.55 ± 0.626
0–100%	6.5 ± 2.53	7.09 ± 2.78	7.18 ± 2.82	8.06 ± 3.19	999 ± 4.02

TABLE III. Mean overlap area $A_{\perp}$ and standard deviation in fm² for XeXe collisions at $\sqrt{s_{\text{NN}}} = 5.44$ TeV as well as AuAu and CuCu collisions at $\sqrt{s_{\text{NN}}} = 0.2$ TeV. Replaces corresponding columns in Tables XIX–XXI.

Centrality	XeXe, 5.44 TeV	AuAu, 0.2 TeV	CuCu, 0.2 TeV
0–5%	111 ± 6.89	123 ± 7.49	51.8 ± 4.11
5–10%	99.5 ± 7.5	106 ± 7.22	45.5 ± 4.18
10–15%	88.5 ± 7.64	92.5 ± 6.91	40 ± 4.15
15–20%	78.7 ± 7.63	80.8 ± 6.65	35 ± 4.12
20–25%	69.8 ± 7.59	70.6 ± 6.43	30.6 ± 4.08
25–30%	61.7 ± 7.5	61.4 ± 6.26	26.6 ± 4.03
30–35%	54.2 ± 7.42	53.2 ± 6.09	23 ± 4
35–40%	47.4 ± 7.36	45.8 ± 5.95	19.7 ± 3.96
40–45%	41.1 ± 7.28	39.1 ± 5.79	16.8 ± 3.9
45–50%	35.2 ± 7.2	33 ± 5.66	14.1 ± 3.82
50–55%	29.8 ± 7.09	27.4 ± 5.49	11.8 ± 3.71
55–60%	24.8 ± 6.98	22.3 ± 5.29	9.78 ± 3.54
60–65%	20.2 ± 6.75	17.9 ± 5.07	8.04 ± 3.3
65–70%	16.3 ± 6.38	13.9 ± 4.75	6.59 ± 3
70–75%	12.9 ± 5.83	10.6 ± 4.31	5.45 ± 2.66
75–80%	10.2 ± 5.12	7.95 ± 3.75	4.52 ± 2.31
80–85%	8.11 ± 4.3	5.92 ± 3.09	3.78 ± 1.93
85–90%	6.47 ± 3.46	4.43 ± 2.42	3.18 ± 1.57
90–95%	5.18 ± 2.58	3.34 ± 1.75	2.69 ± 1.19
95–100%	4.06 ± 1.63	2.48 ± 1.04	2.26 ± 0.774
0–100%	41.2 ± 33.5	41.1 ± 36.5	18.1 ± 15.4

[1] C. Loizides, Glauber modeling of high-energy nuclear collisions at the subnucleon level, [Phys. Rev. C **94**, 024914 \(2016\)](#).