

TABLE I. Localization unsigned error (RMSE) and bias (population medians \pm MAD). Metrics are calculated across sources in the horizontal plane (top), in front (middle), and at positive elevations (bottom). Gray cells indicate significant differences to the real reference condition at $p < 0.05$, and bold numbers indicate an effect size $|r| \geq 0.75$ (strong effect).

	Real (Static)		Virtual (Static)		Real (Dynamic)		Virtual (Dynamic)	
Horizontal Sources	Reference	Headph.	Indiv.	KU100	Reference	Headph.	KEMAR	KU100
Azimuth Error ($^\circ$)	0.9 ± 0.2	1.3 ± 0.6	1.4 ± 0.3	2.2 ± 1.5	1.1 ± 0.3	1.5 ± 0.3	1.5 ± 0.4	1.6 ± 0.5
Azimuth Bias ($^\circ$)	0.0 ± 0.5	-0.1 ± 0.5	0.2 ± 0.5	-0.0 ± 0.8	-0.6 ± 0.3	-0.4 ± 0.4	-0.7 ± 0.5	-0.7 ± 0.4
Elevation Error ($^\circ$)	3.4 ± 2.2	12.9 ± 3.5	5.2 ± 1.7	9.5 ± 3.8	1.8 ± 1.0	8.7 ± 2.6	14.0 ± 4.7	19.2 ± 3.3
Elevation Bias ($^\circ$)	1.0 ± 1.0	7.3 ± 3.8	2.0 ± 0.5	5.3 ± 3.2	1.4 ± 1.6	4.4 ± 3.2	10.5 ± 5.7	16.1 ± 3.7
Frontal Sources	Reference	Headph.	Indiv.	KU100	Reference	Headph.	KEMAR	KU100
Azimuth Error ($^\circ$)	0.6 ± 0.2	1.0 ± 0.3	0.7 ± 0.4	0.7 ± 0.3	1.0 ± 0.2	1.3 ± 0.4	1.3 ± 0.3	1.1 ± 0.3
Azimuth Bias ($^\circ$)	-0.2 ± 0.5	-0.0 ± 0.7	0.2 ± 0.5	0.1 ± 0.4	-0.9 ± 0.2	-0.9 ± 0.3	-0.8 ± 0.6	-0.9 ± 0.5
Elevation Error ($^\circ$)	1.4 ± 0.7	11.2 ± 3.0	8.3 ± 3.1	17.7 ± 3.2	2.2 ± 1.2	10.5 ± 2.5	18.6 ± 4.6	23.2 ± 4.6
Elevation Bias ($^\circ$)	0.8 ± 1.0	6.4 ± 3.4	0.9 ± 1.7	15.3 ± 7.1	1.5 ± 1.3	8.0 ± 4.6	14.0 ± 3.3	20.2 ± 6.2
Elevated Sources	Reference	Headph.	Indiv.	KU100	Reference	Headph.	KEMAR	KU100
Azimuth Error ($^\circ$)	3.9 ± 2.7	19.9 ± 5.9	14.3 ± 6.6	17.9 ± 5.5	2.4 ± 0.5	2.8 ± 0.9	2.8 ± 0.8	3.1 ± 1.1
Azimuth Bias ($^\circ$)	-0.2 ± 0.9	-0.5 ± 2.7	0.1 ± 2.7	2.4 ± 2.4	-1.4 ± 0.4	-1.3 ± 0.8	-1.2 ± 1.0	-1.3 ± 0.7
Elevation Error ($^\circ$)	9.6 ± 2.4	16.2 ± 1.6	17.1 ± 2.6	18.0 ± 2.8	3.3 ± 0.7	4.6 ± 1.4	9.7 ± 2.5	7.3 ± 1.4
Elevation Bias ($^\circ$)	0.2 ± 2.2	-2.5 ± 3.4	-8.3 ± 5.6	-9.2 ± 3.8	1.0 ± 0.9	1.4 ± 0.8	-1.3 ± 3.0	0.8 ± 1.6