

S2 Table

PP	Visual-only				Inertial-only			
	β_0	β_1	γ_0	γ_1	β_0	β_1	γ_0	γ_1
1	-0.31	0.79	97.67	87.63	-0.34	1.04	12.84	1.22
2	0.07	0.45	5.97	0.98	0.08	1.09	8.44	2.04
3	0.02	0.83	18.42	11.16	0.01	1.14	17.81	-2.97
4	0.08	0.50	23.14	-1.89	0.10	0.92	29.67	13.87
5	0.04	0.61	71.19	55.79	0.02	1.10	53.50	35.77
6	0.05	0.92	26.27	16.67	0.04	0.90	46.98	36.37
7	0.13	0.72	15.03	0.27	0.14	0.71	16.26	3.35
8	0.10	1.14	27.63	20.46	0.15	1.13	16.55	-12.40
9	0.08	1.12	27.23	14.52	0.06	1.41	60.13	50.24

S2 Table. Parameter estimates unisensory models. Parameter estimates for models fitted to data obtained in unisensory conditions. β_0 corresponds to constant bias; β_1 corresponds to heading-dependent bias, where values < 1 indicate bias *towards* and values > 1 *away* from the fore-aft axis; γ_0 is the constant component of the dispersion parameter; and γ_1 corresponds to variability of the dispersion as a function of heading angle. All parameters, except those italicized, are significantly different from zero at the 0.01-level (according to Wald χ^2 -tests).