

Table S5. Phase Locking Value, measured as weighted phase lag index (WPLI).

Band	Channels	Basal	Saline	FG-7142	DBS1	DBS2	DBS3	DBS4	DBS5	POST-DBS
Slow Waves	dHPC-iHPC	0.890 ± 0.024	0.901 ± 0.018	0.260 ± 0.016***	0.398 ± 0.030***	0.645 ± 0.044***	0.673 ± 0.042***	0.669 ± 0.047***	0.710 ± 0.031***	0.888 ± 0.019
	dHPC-BLA	0.869 ± 0.024	0.865 ± 0.021	0.350 ± 0.037***	0.553 ± 0.041***	0.555 ± 0.036***	0.659 ± 0.047***	0.686 ± 0.037***	0.769 ± 0.020***	0.825 ± 0.035
	iHPC-BLA	0.896 ± 0.017	0.884 ± 0.033	0.253 ± 0.034***	0.470 ± 0.031***	0.459 ± 0.041***	0.714 ± 0.031***	0.834 ± 0.034***	0.774 ± 0.032***	0.861 ± 0.019†
	vHPC-dHPC	0.812 ± 0.034	0.801 ± 0.039	0.282 ± 0.033***	0.419 ± 0.034***	0.698 ± 0.063***	0.787 ± 0.044***	0.826 ± 0.042*	0.779 ± 0.043***	0.869 ± 0.028
	vHPC-iHPC	0.807 ± 0.039	0.813 ± 0.025	0.255 ± 0.039***	0.412 ± 0.047***	0.579 ± 0.051***	0.803 ± 0.039	0.795 ± 0.036	0.697 ± 0.037***	0.845 ± 0.028
	vHPC-BLA	0.884 ± 0.019	0.889 ± 0.026	0.371 ± 0.034***	0.749 ± 0.041*	0.664 ± 0.048**	0.747 ± 0.035†	0.911 ± 0.025	0.854 ± 0.034	0.849 ± 0.035
Delta	dHPC-iHPC	0.414 ± 0.031	0.383 ± 0.033	0.428 ± 0.033	0.532 ± 0.045†	0.582 ± 0.048***	0.458 ± 0.046	0.556 ± 0.045***	0.720 ± 0.046***	0.540 ± 0.049***
	dHPC-BLA	0.583 ± 0.038	0.583 ± 0.044	0.652 ± 0.042	0.600 ± 0.048	0.596 ± 0.043	†0.510 ± 0.043	0.607 ± 0.050	0.544 ± 0.054	0.497 ± 0.056
	iHPC-BLA	0.337 ± 0.026	0.318 ± 0.022	0.796 ± 0.029***	0.664 ± 0.046***	0.484 ± 0.052***	0.482 ± 0.048	0.493 ± 0.042***	0.425 ± 0.032***	0.328 ± 0.032
	vHPC-dHPC	0.542 ± 0.068	0.527 ± 0.065	0.453 ± 0.081***	0.389 ± 0.080***	0.405 ± 0.066	0.455 ± 0.080**	0.411 ± 0.087**	0.532 ± 0.080	0.438 ± 0.088
	vHPC-iHPC	0.325 ± 0.026	0.293 ± 0.037	0.780 ± 0.034***	0.483 ± 0.042	0.604 ± 0.054**	0.345 ± 0.043	0.349 ± 0.041	0.316 ± 0.026	0.326 ± 0.022
	vHPC-BLA	0.367 ± 0.035	0.359 ± 0.051	0.811 ± 0.041***	†0.588 ± 0.067	0.761 ± 0.045***	0.607 ± 0.066**	0.705 ± 0.061***	0.497 ± 0.083	0.213 ± 0.030
Low Theta	dHPC-iHPC	0.218 ± 0.024	0.252 ± 0.026	0.771 ± 0.028***	0.693 ± 0.039***	0.689 ± 0.043***	0.652 ± 0.045***	0.714 ± 0.052***	0.374 ± 0.043***	0.266 ± 0.031*
	dHPC-BLA	0.227 ± 0.027	0.282 ± 0.030	0.767 ± 0.028***	0.524 ± 0.044***	0.518 ± 0.038***	0.366 ± 0.033	0.328 ± 0.037**	0.247 ± 0.029	0.259 ± 0.037*
	iHPC-BLA	0.339 ± 0.040	0.334 ± 0.044	0.290 ± 0.045***	0.328 ± 0.050**	0.415 ± 0.060	0.320 ± 0.051***	0.413 ± 0.057	0.348 ± 0.039	0.424 ± 0.062
	vHPC-dHPC	0.291 ± 0.033	0.257 ± 0.033	0.801 ± 0.032***	0.613 ± 0.039**	0.519 ± 0.044	0.591 ± 0.057*	0.597 ± 0.071*	0.331 ± 0.035	0.321 ± 0.033
	vHPC-iHPC	0.291 ± 0.016	0.285 ± 0.044	0.827 ± 0.042***	0.482 ± 0.068	0.309 ± 0.054	0.497 ± 0.061	0.515 ± 0.061**	0.343 ± 0.049	0.296 ± 0.023
	vHPC-BLA	0.239 ± 0.025	0.273 ± 0.022	0.788 ± 0.032***	0.527 ± 0.061**	0.475 ± 0.053***	0.435 ± 0.061	0.382 ± 0.051	0.312 ± 0.033	0.213 ± 0.024
Beta	dHPC-iHPC	0.091 ± 0.013	0.102 ± 0.012	0.097 ± 0.011	0.109 ± 0.012	0.139 ± 0.017***	0.117 ± 0.015*	0.124 ± 0.015	0.135 ± 0.017***	0.128 ± 0.015***
	dHPC-BLA	0.110 ± 0.014	0.108 ± 0.015	0.118 ± 0.013	0.131 ± 0.013***	0.125 ± 0.012†	0.133 ± 0.016***	0.130 ± 0.015*	0.141 ± 0.018***	0.154 ± 0.014***
	iHPC-BLA	0.168 ± 0.012	0.164 ± 0.014	0.419 ± 0.023***	0.433 ± 0.027***	0.343 ± 0.031***	0.246 ± 0.017**	0.158 ± 0.019	0.169 ± 0.014	0.167 ± 0.011
	vHPC-dHPC	0.163 ± 0.018	0.135 ± 0.028	0.147 ± 0.027	0.127 ± 0.022*	0.106 ± 0.016	0.159 ± 0.019	0.135 ± 0.024	0.138 ± 0.025	0.115 ± 0.028
	vHPC-iHPC	0.111 ± 0.017	0.109 ± 0.019	0.411 ± 0.023***	0.310 ± 0.029***	0.291 ± 0.038***	0.242 ± 0.027*	0.353 ± 0.034***	0.097 ± 0.023	0.115 ± 0.011
	vHPC-BLA	0.143 ± 0.022	0.146 ± 0.015	0.482 ± 0.018***	0.280 ± 0.026***	0.289 ± 0.041*	0.233 ± 0.028	0.179 ± 0.030	0.177 ± 0.025	0.142 ± 0.021

Note: Mean ± se (bold: statistical significance in pairwise comparisons to basal period; ***p<0.001; **p<0.01, *p<0.05; †: 0.08<p<0.05)