

Table 1. GLMM1 post-hoc tests: 'Modality' by 'Motor region' (Auditory modality)

Frequency band	Contrast	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
delta	dPMC - M1	-0.2459	0.0125	1055	-19.658	<0.0001	<0.0001
	dPMC - vPMC	-0.6434	0.0183	1055	-35.249	<0.0001	<0.0001
	M1 - vPMC	-0.3975	0.0199	1055	-19.985	<0.0001	<0.0001
theta	dPMC - M1	-0.2363	0.011	1055	-21.389	<0.0001	<0.0001
	dPMC - vPMC	-0.6711	0.0143	1055	-46.900	<0.0001	<0.0001
	M1 - vPMC	-0.4348	0.0153	1055	-28.464	<0.0001	<0.0001
alpha	dPMC - M1	-0.276	0.0119	1055	-23.159	<0.0001	<0.0001
	dPMC - vPMC	-0.5962	0.0234	1055	-25.482	<0.0001	<0.0001
	M1 - vPMC	-0.3202	0.0245	1055	-13.064	<0.0001	<0.0001
beta	dPMC - M1	-0.347	0.0101	1055	-34.155	<0.0001	<0.0001
	dPMC - vPMC	-0.783	0.02	1055	-39.084	<0.0001	<0.0001
	M1 - vPMC	-0.436	0.0205	1055	-21.324	<0.0001	<0.0001
gamma1	dPMC - M1	-0.292	0.0107	1055	-27.240	<0.0001	<0.0001
	dPMC - vPMC	-0.8827	0.0154	1055	-57.325	<0.0001	<0.0001
	M1 - vPMC	-0.5907	0.0164	1055	-35.984	<0.0001	<0.0001
gamma2	dPMC - M1	-0.193	0.0095	1055	-20.358	<0.0001	<0.0001
	dPMC - vPMC	-0.688	0.0144	1055	-47.919	<0.0001	<0.0001
	M1 - vPMC	-0.495	0.0153	1055	-32.324	<0.0001	<0.0001

Table 2. GLMM1 post-hoc tests: 'Modality' by 'Motor region' (Visual modality)

Frequency band	Contrast	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
delta	dPMC - M1	-0.0682	0.0148	1055	-4.612	<0.0001	<0.0001
	dPMC - vPMC	-0.1197	0.0245	1055	-4.892	<0.0001	<0.0001
	M1 - vPMC	-0.0515	0.0258	1055	-1.998	0.1379	0.827
theta	dPMC - M1	-0.0882	0.0146	1055	-6.046	<0.0001	<0.0001
	dPMC - vPMC	-0.0917	0.0203	1055	-4.521	<0.0001	<0.0001
	M1 - vPMC	-0.0035	0.021	1055	-0.168	>0.9999	>0.9999
alpha	dPMC - M1	-0.176	0.0148	1055	-11.883	<0.0001	<0.0001
	dPMC - vPMC	-0.1275	0.0299	1055	-4.269	<0.0001	<0.0001
	M1 - vPMC	0.0485	0.0307	1055	1.581	0.343	>0.9999
beta	dPMC - M1	-0.223	0.0154	1055	-14.442	<0.0001	<0.0001
	dPMC - vPMC	-0.071	0.026	1055	-2.734	0.019	0.115
	M1 - vPMC	0.152	0.0261	1055	5.825	<0.0001	<0.0001
gamma1	dPMC - M1	-0.2527	0.0162	1055	-15.623	<0.0001	<0.0001
	dPMC - vPMC	-0.2452	0.0199	1055	-12.307	<0.0001	<0.0001
	M1 - vPMC	0.0074	0.0203	1055	0.367	<0.0001	<0.0001
gamma2	dPMC - M1	-0.293	0.0135	1055	-21.63	<0.0001	<0.0001
	dPMC - vPMC	-0.184	0.02	1055	-9.177	<0.0001	<0.0001
	M1 - vPMC	0.108	0.0204	1055	5.309	<0.0001	<0.0001

Table 3. GLMM2 post-hoc tests: 'Frequency band' by 'Motor region'

3a	Motor region	Contrast	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
	dPMC	alpha - beta	0.015	0.003	1583	5.205	<0.0001	<0.0001
		alpha - delta	0.025	0.003	1583	7.363	<0.0001	<0.0001
		alpha - gamma1	0.024	0.003	1583	6.977	<0.0001	<0.0001
		alpha - gamma2	0.014	0.004	1583	4.052	0.001	0.036
		alpha - theta	0.014	0.003	1583	4.822	<0.0001	0.001
	dPMC	beta - delta	0.01	0.004	1583	2.409	0.242	>0.9999
		beta - gamma1	0.009	0.004	1583	2.127	0.503	>0.9999
		beta - gamma2	-0.001	0.004	1583	-0.117	>0.9999	>0.9999
		beta - theta	0	0.004	1583	-0.094	>0.9999	>0.9999
3b	dPMC	delta - gamma1	-0.001	0.005	1583	-0.249	>0.9999	>0.9999
		delta - gamma2	-0.011	0.005	1583	-2.268	0.352	>0.9999
		delta - theta	-0.01	0.004	1583	-2.438	0.223	>0.9999
	dPMC	gamma1 - gamma2	-0.009	0.005	1583	-2.017	0.659	>0.9999
		gamma1 - theta	-0.009	0.004	1583	-2.163	0.461	>0.9999
		gamma2 - theta	0	0.004	1583	0.031	>0.9999	>0.9999
	Motor region	Contrast	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
	M1	alpha - beta	0.014	0.003	1583	4.951	<0.0001	0.001
		alpha - delta	0.025	0.003	1583	7.374	<0.0001	<0.0001
		alpha - gamma1	0.032	0.003	1583	9.443	<0.0001	<0.0001
3c		alpha - gamma2	0.031	0.004	1583	8.836	<0.0001	<0.0001
		alpha - theta	0.017	0.003	1583	5.716	<0.0001	<0.0001
	M1	beta - delta	0.011	0.004	1583	2.591	0.145	>0.9999
		beta - gamma1	0.018	0.004	1583	4.280	<0.0001	0.013
		beta - gamma2	0.017	0.004	1583	3.940	0.001	0.057
		beta - theta	0.003	0.004	1583	0.774	>0.9999	>0.9999
	M1	delta - gamma1	0.007	0.005	1583	1.557	>0.9999	>0.9999
		delta - gamma2	0.006	0.005	1583	1.299	>0.9999	>0.9999
		delta - theta	-0.008	0.004	1583	-1.830	>0.9999	>0.9999
	M1	gamma1 - gamma2	-0.001	0.005	1583	-0.23	>0.9999	>0.9999
3c		gamma1 - theta	-0.015	0.004	1583	-3.483	0.008	0.344
		gamma2 - theta	-0.014	0.004	1583	-3.168	0.023	>0.9999
	Motor region	Contrast	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
	vPMC	alpha - beta	0.008	0.003	1583	2.824	0.072	>0.9999
		alpha - delta	0.025	0.004	1583	6.916	<0.0001	<0.0001
		alpha - gamma1	0.021	0.003	1583	6.303	<0.0001	<0.0001
		alpha - gamma2	0.023	0.004	1583	6.379	<0.0001	<0.0001
		alpha - theta	0.01	0.003	1583	3.287	0.016	0.699
	vPMC	beta - delta	0.017	0.004	1583	3.845	0.002	0.085
		beta - gamma1	0.013	0.004	1583	3.182	0.022	>0.9999
3c		beta - gamma2	0.015	0.004	1583	3.458	0.008	0.377
		beta - theta	0.002	0.004	1583	0.485	>0.9999	>0.9999
	vPMC	delta - gamma1	-0.003	0.005	1583	-0.711	>0.9999	>0.9999
		delta - gamma2	-0.002	0.005	1583	-0.304	>0.9999	>0.9999
		delta - theta	-0.015	0.005	1583	-3.322	0.014	0.618
	vPMC	gamma1 - gamma2	0.002	0.005	1583	0.391	>0.9999	>0.9999
		gamma1 - theta	-0.012	0.004	1583	-2.656	0.12	>0.9999
		gamma2 - theta	-0.013	0.005	1583	-2.952	0.048	>0.9999

Table 4. GLMM3 post-hoc tests: 'Direction' by 'Motor region' interaction, and 'Direction' main effect

	Frequency band	Hemisphere	Contrast	Motor region	Estimate	SE	df	t-ratio	p-value	Bonferroni p-value
4a	theta	left	M2S - S2M	AVG	0.0037	0.0016	527	2.332	0.02	0.02
4b	theta	right	M2S - S2M	dPMC	0.006	0.00160	527	3.789	<.0001	0.001
				M1	0.0032	0.002	527	1.598	0.1110	0.332
				vPMC	0.0037	0.0020	527	1.893	0.0590	0.177
4c	alpha	left	M2S - S2M	dPMC	-0.0259	0.0046	527	-5.598	<.0001	<.0001
				M1	-0.0147	0.0048	527	-3.053	0.002	0.007
				vPMC	-0.021	0.005	527	-4.137	<.0001	<.0001
4d	alpha	right	M2S - S2M	dPMC	-0.0186	0.0047	527	-3.978	<.0001	<.0001
				M1	-0.0093	0.0049	527	-1.912	0.056	0.169
				vPMC	-0.0187	0.0055	527	-3.399	0.001	0.002
4e	beta	left	M2S - S2M	dPMC	0.0002	0.0016	527	0.113	0.91	>0.9999
				M1	0.0052	0.0022	527	2.435	0.015	0.046
				vPMC	-0.0012	0.0021	527	-0.607	0.544	>0.9999
4f	beta	right	M2S - S2M	dPMC	0.005	0.0019	527	2.658	0.008	0.024
				M1	0.0094	0.0022	527	4.250	<.0001	<.0001
				vPMC	-0.0004	0.0024	527	-0.147	0.883	>0.9999
4g	gamma2	left	M2S - S2M	AVG	-0.001	0.0003	527	-3.832	<.0001	<.0001
4h	gamma2	right	M2S - S2M	AVG	-0.0007	0.0003	527	-2.689	0.007	0.007