

Table S1 T1W-MPRAGE sequence parameters

Parameter	3 T	7 T
Repetition time (ms)	2000	2500
Echo time (ms)	2.26	1.99
Inversion time (ms)	900	1050
Pixel Bandwidth (mm)	200	250
Flip angle	12°	5°
Acquisition time (s)	277	599

Table S2 Estimate (= mean difference between FastSurfer minus FreeSurfer)±standard error, intraclass correlation coefficient and Bonferroni-adjusted p-value with patient as random effect and FreeSurfer as reference

Region			3 T			7 T		
			Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
ASEG		brainsegvol	70906.15±1844.44	0.999	<0.001	4779.84±6040.83	0.986	1
		left-lateral-ventricle	-177.32±53.40	0.999	1	-60.15±48.38	0.998	1
		left-inf-lat-vent	-98.63±12.83	0.974	<0.001	-92.53±54.62	0.586	1
		left-cerebellum-white-matter	-145.01±223.65	0.887	1	-776.37±0.00	0	1
		left-cerebellum-cortex	3484.40±336.29	0.972	<0.001	4852.25±569.54	0.924	<0.001
		left-thalamus	937.26±72.05	0.956	<0.001	696.19±95.58	0.881	<0.001
		left-caudate	159.53±18.34	0.979	<0.001	77.45±23.39	0.96	0.944
		left-putamen	314.63±61.48	0.938	0.042	338.74±88.66	0.839	0.322
		left-pallidum	228.06±31.07	0.861	0.001	-242.55±49.82	0.685	0.037
		left-hippocampus	671.13±96.44	0.836	0.002	771.85±175.69	0.366	0.097
		left-amygdala	430.39±23.57	0.929	<0.001	470.19±49.28	0.65	<0.001
		left-accumbens-area	7.54±13.08	0.829	1	59.82±15.59	0.781	0.311
		left-ventraldc	417.67±33.84	0.949	<0.001	415.94±53.06	0.793	<0.001
		left-choroid-plexus	-43.26±29.14	0.849	1	105.77±21.54	0.76	0.034
		right-lateral-ventricle	-75.46±38.57	0.999	1	-159.97±50.74	0.998	1
		right-inf-lat-vent	-87.83±13.65	0.975	0.005	-35.93±29.00	0.809	1
		right-cerebellum-white-matter	-109.41±262.97	0.826	1	81.15±677.05	0.103	1
		right-cerebellum-cortex	4904.13±338.52	0.971	<0.001	4226.51±459.45	0.933	<0.001
		right-thalamus	670.30±68.39	0.958	<0.001	695.47±81.24	0.905	<0.001
		right-caudate	150.14±20.35	0.991	0.001	113.14±43.52	0.941	1
		right-putamen	266.74±69.41	0.938	0.435	518.62±75.10	0.881	<0.001
		right-pallidum	254.50±29.12	0.891	<0.001	-127.33±50.22	0.619	1
		right-hippocampus	568.72±20.09	0.989	<0.001	698.56±93.97	0.669	<0.001
		right-amygdala	425.87±39.64	0.845	<0.001	525.58±59.15	0.588	<0.001
		right-accumbens-area	70.22±13.71	0.912	0.042	123.02±21.89	0.773	0.008
		right-ventraldc	362.35±46.87	0.925	<0.001	407.82±65.05	0.748	0.002
		right-choroid-plexus	-43.72±32.97	0.817	1	44.93±26.17	0.782	1
		3rd-ventricle	47.31±10.10	0.997	0.092	37.24±11.41	0.994	1
		4th-ventricle	96.21±25.61	0.991	0.513	112.73±55.94	0.916	1
		brain-stem	410.36±88.44	0.991	0.099	2696.88±355.90	0.609	<0.001
		csf	173.49±19.57	0.965	<0.001	152.44±21.26	0.939	<0.001
DKT	Frontal lobe	ctx-lh-caudalmiddlefrontal	526.52±228.11	0.595	1	-323.96±213.91	0.7	1
	Frontal lobe	ctx-rh-caudalmiddlefrontal	815.58±230.06	0.661	0.768	40.93±197.94	0.809	1
	Frontal lobe	ctx-lh-rostralmiddlefrontal	264.24±476.14	0.726	1	-1943.82±440.22	0.807	0.093

Table S2 (continued)

Table S2 (continued)

Region		3 T			7 T		
		Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
Frontal lobe	ctx-rh-rostralmiddlefrontal	272.23±305.76	0.864	1	-1891.81±440.61	0.773	0.119
Frontal lobe	ctx-lh-superiorfrontal	9294.29±576.21	0.698	<0.001	4977.03±448.38	0.844	<0.001
Frontal lobe	ctx-rh-superiorfrontal	12897.91±693.43	0.775	<0.001	8060.79±614.58	0.801	<0.001
Frontal lobe	ctx-lh-lateralorbitofrontal	2649.75±275.67	0.574	<0.001	2074.74±202.41	0.851	<0.001
Frontal lobe	ctx-rh-lateralorbitofrontal	2774.17±292.09	0.62	<0.001	1530.80±166.85	0.886	<0.001
Frontal lobe	ctx-lh-medialorbitofrontal	1279.75±157.53	0.674	<0.001	101.53±172.62	0.504	1
Frontal lobe	ctx-rh-medialorbitofrontal	1101.96±169.73	0.622	0.004	-12.92±126.51	0.627	1
Frontal lobe	ctx-lh-parsopercularis	1047.03±142.32	0.761	0.001	359.78±125.84	0.771	1
Frontal lobe	ctx-rh-parsopercularis	1667.95±157.03	0.642	<0.001	1018.48±126.92	0.751	<0.001
Frontal lobe	ctx-lh-parsorbitalis	1424.34±90.37	0.299	<0.001	1043.78±105.49	0.449	<0.001
Frontal lobe	ctx-rh-parsorbitalis	1524.26±80.88	0.529	<0.001	1081.65±83.24	0.678	<0.001
Frontal lobe	ctx-lh-parstriangularis	1791.20±205.40	0.498	<0.001	983.04±197.29	0.575	0.029
Frontal lobe	ctx-rh-parstriangularis	1111.22±169.97	0.584	0.004	413.99±184.11	0.587	1
Cingulate cortex	ctx-lh-caudalanteriorcingulate	380.11±79.37	0.887	0.076	-35.11±86.41	0.831	1
Cingulate cortex	ctx-rh-caudalanteriorcingulate	-532.17±88.88	0.812	0.01	-911.96±90.38	0.801	<0.001
Cingulate cortex	ctx-lh-rostralanteriorcingulate	1649.83±238.60	0.378	0.002	712.89±172.55	0.618	0.168
Cingulate cortex	ctx-rh-rostralanteriorcingulate	888.06±89.67	0.781	<0.001	178.87±78.14	0.781	1
Cingulate cortex	ctx-lh-posteriorcingulate	-892.76±109.09	0.84	<0.001	-1147.55±117.88	0.752	<0.001
Cingulate cortex	ctx-rh-posteriorcingulate	-679.20±138.09	0.625	0.06	-1018.39±134.97	0.663	<0.001
Cingulate cortex	ctx-lh-isthmuscingulate	-1236.47±106.70	0.706	<0.001	-1412.19±105.01	0.632	<0.001
Cingulate cortex	ctx-rh-isthmuscingulate	-1064.48±78.88	0.801	<0.001	-1186.58±71.58	0.788	<0.001
Sensorimotor cortex	ctx-lh-precentral	677.69±358.31	0.587	1	-1171.23±343.07	0.739	0.761
Sensorimotor cortex	ctx-rh-precentral	482.64±330.74	0.785	1	-1317.38±314.96	0.832	0.151
Sensorimotor cortex	ctx-lh-postcentral	4466.64±207.61	0.76	<0.001	2433.32±212.97	0.816	<0.001
Sensorimotor cortex	ctx-rh-postcentral	3880.79±236.91	0.783	<0.001	1401.79±394.51	0.5	0.567
Sensorimotor cortex	ctx-lh-paracentral	699.04±113.50	0.75	0.007	154.50±113.42	0.782	1
Sensorimotor cortex	ctx-rh-paracentral	-281.57±125.97	0.839	1	-567.37±122.70	0.805	0.06
Parietal lobe	ctx-lh-inferiorparietal	2079.42±363.01	0.793	0.015	1202.74±342.09	0.783	0.613
Parietal lobe	ctx-rh-inferiorparietal	3191.52±432.17	0.732	0.001	1624.80±455.86	0.716	0.554
Parietal lobe	ctx-lh-superiorparietal	191.90±381.37	0.459	1	-1874.53±393.65	0.652	0.045
Parietal lobe	ctx-rh-superiorparietal	102.07±441.03	0.669	1	-1723.20±526.56	0.507	1
Parietal lobe	ctx-lh-supramarginal	939.73±330.54	0.784	1	-36.56±301.88	0.78	1
Parietal lobe	ctx-rh-supramarginal	1001.10±419.83	0.613	1	-791.50±346.43	0.666	1
Parietal lobe	ctx-lh-precuneus	703.84±328.77	0.723	1	-128.96±259.87	0.783	1

Table S2 (continued)

Table S2 (continued)

Region			3 T			7 T			
			Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj	
Brainstem	Parietal lobe	ctx-rh-precuneus	1162.01±293.46	0.813	0.349	579.76±440.76	0.476	1	
	Temporal lobe	ctx-lh-middletemporal	8953.54±379.85	0.71	<0.001	7630.62±292.40	0.773	<0.001	
	Temporal lobe	ctx-rh-middletemporal	7540.86±350.44	0.732	<0.001	6358.76±437.13	0.631	<0.001	
	Temporal lobe	ctx-lh-superiortemporal	10052.55±360.20	0.731	<0.001	8064.64±317.91	0.762	<0.001	
	Temporal lobe	ctx-rh-superiortemporal	10128.32±322.08	0.702	<0.001	8214.62±439.42	0.63	<0.001	
	Temporal lobe	ctx-lh-inferiortemporal	5350.53±358.26	0.548	<0.001	4356.50±216.36	0.842	<0.001	
	Temporal lobe	ctx-rh-inferiortemporal	6005.28±239.15	0.82	<0.001	4645.17±194.88	0.845	<0.001	
	Temporal lobe	ctx-lh-fusiform	2107.09±288.02	0.524	0.001	1306.47±250.41	0.708	0.018	
	Temporal lobe	ctx-rh-fusiform	2041.17±281.55	0.511	0.001	1317.66±227.54	0.651	0.006	
	Temporal lobe	ctx-lh-parahippocampal	626.00±56.02	0.691	<0.001	271.17±150.21	0.008	1	
	Temporal lobe	ctx-rh-parahippocampal	446.00±74.58	0.517	0.01	309.51±69.50	0.502	0.086	
	Temporal lobe	ctx-lh-entorhinal	1031.29±45.61	0.697	<0.001	674.49±59.63	0.516	<0.001	
	Temporal lobe	ctx-rh-entorhinal	1001.61±52.72	0.713	<0.001	619.37±72.27	0.584	<0.001	
	Temporal lobe	ctx-lh-transversetemporal	353.10±78.29	0.022	0.126	201.16±0.00	0	1	
	Temporal lobe	ctx-rh-transversetemporal	341.41±61.41	0.047	0.02	154.98±40.43	0.363	0.314	
	Occipital lobe	ctx-lh-cuneus	1876.13±173.82	0.459	<0.001	1874.29±175.11	0.222	<0.001	
	Occipital lobe	ctx-rh-cuneus	1452.77±136.39	0.441	<0.001	1581.18±98.67	0.59	<0.001	
	Occipital lobe	ctx-lh-lateraloccipital	1807.01±479.79	0.34	0.504	562.42±419.38	0.29	1	
	Occipital lobe	ctx-rh-lateraloccipital	1878.45±470.26	0.458	0.327	1631.46±321.19	0.56	0.024	
	Occipital lobe	ctx-lh-lingual	1538.93±219.16	0.617	0.002	1704.49±205.03	0.7	<0.001	
	Occipital lobe	ctx-rh-lingual	1204.03±290.12	0.507	0.244	1541.09±177.70	0.764	<0.001	
	Occipital lobe	ctx-lh-pericalcarine	-1499.02±116.44	0.705	<0.001	-936.70±125.34	0.653	<0.001	
	Occipital lobe	ctx-rh-pericalcarine	-1391.62±167.10	0.567	<0.001	-908.19±134.40	0.66	<0.001	
	Insula	ctx-lh-insula	-3523.15±251.81	0.67	<0.001	-3612.58±244.54	0.651	<0.001	
	Insula	ctx-rh-insula	-2968.98±178.05	0.82	<0.001	-3022.70±269.89	0.651	<0.001	
	Brainstem		medulla	-15.77±16.63	0.984	1	151.18±60.25	0.712	1
			pons	-78.63±20.37	0.999	0.421	1481.41±294.75	0.673	0.027
			scp	-13.07±2.60	0.98	0.05	34.12±7.18	0.801	0.047
		midbrain	142.28±45.06	0.96	1	546.22±123.32	0.517	0.09	
		whole_brainstem	34.80±66.58	0.997	1	2212.93±406.15	0.68	0.011	
Amygdala		lh-lateral-nucleus	39.91±8.47	0.938	0.087	84.06±24.40	0.469	0.711	
		lh-basal-nucleus	33.49±6.01	0.938	0.019	56.07±19.45	0.447	1	
		lh-accessory-basal-nucleus	40.29±6.07	0.869	0.003	44.57±12.45	0.471	0.537	

Table S2 (continued)

Table S2 (continued)

Region		3 T			7 T		
		Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
Hippocampus	lh-anterior-amygdaloid-area-aaa	5.68±1.16	0.86	0.063	7.66±3.00	0.245	1
	lh-central-nucleus	12.64±2.36	0.658	0.028	8.15±2.17	0.48	0.373
	lh-medial-nucleus	8.60±1.55	0.612	0.02	3.09±0.86	0.745	0.501
	lh-cortical-nucleus	6.49±1.23	0.672	0.033	3.96±1.22	0.431	1
	lh-corticoamygdaloid-transitio	11.58±2.74	0.925	0.209	23.07±8.30	0.552	1
	lh-paralaminar-nucleus	1.09±0.64	0.92	1	3.49±2.11	0.487	1
	lh-whole_amygdala	159.79±19.55	0.954	<0.001	234.12±71.98	0.456	1
	rh-lateral-nucleus	62.75±7.30	0.97	<0.001	157.40±26.31	0.465	0.004
	rh-basal-nucleus	35.58±4.57	0.971	<0.001	77.25±14.49	0.613	0.014
	rh-accessory-basal-nucleus	31.13±2.63	0.961	<0.001	51.14±8.11	0.708	0.002
	rh-anterior-amygdaloid-area-aaa	7.46±0.85	0.955	<0.001	15.88±1.98	0.63	<0.001
	rh-central-nucleus	10.78±1.03	0.882	<0.001	9.40±1.21	0.807	<0.001
	rh-medial-nucleus	4.08±1.08	0.726	0.494	5.33±0.66	0.891	<0.001
	rh-cortical-nucleus	4.12±0.42	0.921	<0.001	5.11±0.73	0.784	<0.001
	rh-corticoamygdaloid-transitio	11.09±1.93	0.957	0.015	28.61±5.62	0.714	0.023
	rh-paralaminar-nucleus	0.96±0.74	0.942	1	3.49±1.58	0.706	1
	rh-whole_amygdala	167.95±16.55	0.971	<0.001	353.61±57.55	0.592	0.003
	lh-hippocampal_tail	28.10±9.09	0.9	1	66.25±23.16	0.529	1
	lh-subiculum-body	20.98±5.61	0.802	0.533	31.07±9.45	0.585	0.991
	lh-ca1-body	12.55±1.96	0.957	0.005	11.42±6.27	0.73	1
	lh-subiculum-head	4.69±2.55	0.934	1	24.30±9.13	0.561	1
	lh-hippocampal-fissure	9.98±3.49	0.897	1	32.94±8.41	0.646	0.263
	lh-presubiculum-head	2.32±2.98	0.839	1	23.38±5.58	0.715	0.148
	lh-ca1-head	42.12±6.35	0.941	0.003	67.85±23.47	0.594	1
	lh-presubiculum-body	7.91±2.51	0.944	1	15.67±5.94	0.776	1
	lh-parasubiculum	2.74±1.45	0.911	1	10.21±2.75	0.684	0.405
	lh-molecular_layer_hp-head	25.41±2.81	0.97	<0.001	21.76±3.74	0.878	0.006
	lh-molecular_layer_hp-body	21.32±3.40	0.927	0.006	13.35±3.74	0.824	0.544
	lh-gc-ml-dg-head	15.99±1.07	0.987	<0.001	35.57±7.54	0.614	0.05
	lh-ca3-body	11.84±0.83	0.987	<0.001	12.41±2.18	0.855	0.007
	lh-gc-ml-dg-body	13.69±2.91	0.717	0.087	19.25±4.67	0.596	0.17
	lh-ca4-head	14.00±1.17	0.979	<0.001	31.25±6.62	0.604	0.049
	lh-ca4-body	12.34±2.34	0.825	0.033	18.25±4.29	0.597	0.13

Table S2 (continued)

Table S2 (continued)

Region	3 T			7 T		
	Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
lh-fimbria	5.84±2.31	0.86	1	15.45±3.22	0.822	0.042
lh-ca3-head	17.39±1.65	0.974	<0.001	30.14±6.31	0.504	0.044
lh-hata	7.94±1.15	0.937	0.002	10.47±2.71	0.654	0.294
lh-whole_hippocampal_body	106.47±16.53	0.914	0.005	136.87±34.48	0.72	0.235
lh-whole_hippocampal_head	132.60±12.03	0.981	<0.001	254.92±62.54	0.627	0.188
lh-whole_hippocampus	267.17±31.84	0.963	<0.001	458.04±112.96	0.649	0.197
rh-hippocampal_tail	23.07±5.81	0.943	0.343	23.41±5.64	0.951	0.161
rh-subiculum-body	14.14±1.83	0.977	<0.001	23.19±4.23	0.764	0.011
rh-ca1-body	11.46±1.70	0.963	0.003	21.83±3.42	0.825	0.002
rh-subiculum-head	0.33±1.58	0.961	1	9.84±2.77	0.931	0.566
rh-hippocampal-fissure	7.37±2.10	0.958	0.829	20.20±3.52	0.848	0.007
rh-presubiculum-head	2.62±1.92	0.906	1	17.62±2.34	0.916	<0.001
rh-ca1-head	25.42±3.15	0.983	<0.001	36.68±7.18	0.917	0.023
rh-presubiculum-body	6.14±1.41	0.971	0.165	9.83±2.37	0.865	0.159
rh-parasubiculum	4.58±1.51	0.916	1	10.78±1.64	0.804	0.001
rh-molecular_layer_hp-head	15.26±1.93	0.981	<0.001	8.78±2.80	0.905	1
rh-molecular_layer_hp-body	17.87±2.12	0.97	<0.001	17.86±2.62	0.915	<0.001
rh-gc-ml-dg-head	14.06±1.13	0.984	<0.001	29.03±4.16	0.792	<0.001
rh-ca3-body	13.52±1.83	0.945	0.001	13.83±2.02	0.852	<0.001
rh-gc-ml-dg-body	10.77±1.28	0.956	<0.001	15.08±2.06	0.876	<0.001
rh-ca4-head	12.85±0.96	0.984	<0.001	26.16±3.75	0.765	<0.001
rh-ca4-body	10.61±1.26	0.956	<0.001	13.66±1.98	0.857	<0.001
rh-fimbria	2.41±1.55	0.958	1	12.66±2.05	0.912	0.003
rh-ca3-head	16.63±1.41	0.979	<0.001	26.95±3.95	0.773	<0.001
rh-hata	6.91±0.83	0.969	<0.001	10.05±2.04	0.722	0.032
rh-whole_hippocampal_body	86.93±9.94	0.969	<0.001	127.95±18.41	0.815	<0.001
rh-whole_hippocampal_head	98.66±10.84	0.981	<0.001	175.90±25.27	0.884	<0.001
rh-whole_hippocampus	208.66±19.00	0.984	<0.001	327.26±46.08	0.875	<0.001
Thalamic Nuclei						
lh-av	-3.74±1.24	0.98	1	4.11±1.34	0.969	1
lh-cem	-0.33±0.83	0.959	1	5.88±0.93	0.949	0.002
lh-cl	-0.25±0.37	0.993	1	1.30±0.33	0.986	0.265
lh-cm	-1.22±3.17	0.93	1	9.54±3.00	0.905	1
lh-ld	-0.86±0.50	0.985	1	0.28±0.32	0.989	1
lh-lgn	-18.10±4.06	0.896	0.138	8.36±3.49	0.935	1

Table S2 (continued)

Table S2 (continued)

Region	3 T			7 T		
	Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
lh-lp	-3.49±1.34	0.976	1	-1.83±1.15	0.971	1
lh-l-sg	3.44±1.03	0.687	1	2.38±0.57	0.969	0.158
lh-mdl	-2.60±2.60	0.918	1	4.57±2.57	0.936	1
lh-mdm	-5.74±6.75	0.941	1	24.47±8.36	0.91	1
lh-mgn	17.13±2.40	0.817	0.002	10.40±1.44	0.943	<0.001
lh-mv(re)	0.40±0.26	0.951	1	2.36±0.43	0.931	0.011
lh-pc	-0.03±0.06	0.868	1	0.24±0.03	0.926	<0.001
lh-pf	3.47±1.14	0.877	1	4.06±0.58	0.956	<0.001
lh-pt	-0.17±0.08	0.957	1	0.21±0.07	0.954	1
lh-pua	1.94±2.44	0.932	1	8.23±3.23	0.929	1
lh-pui	-16.68±4.37	0.944	0.456	7.85±6.11	0.954	1
lh-pul	9.77±3.24	0.918	1	23.72±5.12	0.959	0.059
lh-pum	-56.10±12.31	0.955	0.115	30.38±16.96	0.947	1
lh-va	-15.11±3.66	0.944	0.254	15.48±4.61	0.882	0.851
lh-vamc	-1.43±0.37	0.914	0.418	1.74±0.37	0.858	0.055
lh-vla	-26.44±4.89	0.949	0.025	9.00±6.78	0.877	1
lh-vlp	-29.09±7.06	0.957	0.258	11.63±9.30	0.903	1
lh-vm	-2.04±0.54	0.874	0.51	0.33±0.32	0.902	1
lh-vpl	-47.79±9.41	0.96	0.045	3.57±11.22	0.912	1
lh-whole_thalamus	-195.06±60.11	0.951	1	188.24±74.83	0.917	1
rh-av	-4.25±1.13	0.971	0.494	2.57±0.88	0.982	1
rh-cem	-0.63±0.54	0.976	1	3.98±0.92	0.955	0.113
rh-cl	-0.21±0.37	0.987	1	0.82±0.35	0.979	1
rh-cm	0.29±3.11	0.914	1	3.39±3.39	0.888	1
rh-ld	-1.25±0.50	0.981	1	-0.01±0.31	0.983	1
rh-lgn	-12.21±3.15	0.917	0.411	-0.07±2.97	0.934	1
rh-lp	-4.70±1.09	0.985	0.186	-1.33±1.33	0.961	1
rh-l-sg	5.75±0.92	0.55	0.006	1.60±0.67	0.833	1
rh-mdl	-7.92±2.86	0.908	1	1.71±2.91	0.888	1
rh-mdm	-21.50±7.37	0.93	1	11.78±7.31	0.911	1
rh-mgn	18.85±2.41	0.258	<0.001	4.50±1.41	0.856	1
rh-mv(re)	0.33±0.24	0.953	1	2.25±0.44	0.909	0.02
rh-pc	-0.26±0.05	0.938	0.066	0.15±0.04	0.963	0.225
rh-pf	3.72±0.94	0.891	0.334	2.65±0.49	0.969	0.012

Table S2 (continued)

Table S2 (continued)

Region	3 T			7 T		
	Estimate±standard error (mm ³)	ICC	p.adj	Estimate±standard error (mm ³)	ICC	p.adj
rh-pt	-0.14±0.07	0.958	1	0.08±0.10	0.926	1
rh-pua	-1.88±3.02	0.92	1	0.52±2.18	0.941	1
rh-pui	-22.85±3.80	0.957	0.009	-10.24±3.00	0.908	0.764
rh-pul	5.24±3.24	0.949	1	6.12±3.91	0.913	1
rh-pum	-72.54±11.31	0.963	0.005	-17.45±10.94	0.906	1
rh-va	-17.96±3.36	0.943	0.028	14.72±3.15	0.949	0.055
rh-vamc	-1.99±0.35	0.925	0.015	1.10±0.28	0.955	0.236
rh-vla	-29.01±5.32	0.955	0.024	6.29±6.48	0.925	1
rh-vlp	-30.64±7.19	0.96	0.198	6.92±9.86	0.916	1
rh-vm	-2.22±0.53	0.812	0.219	-0.32±0.43	0.854	1
rh-vpl	-44.97±13.27	0.886	1	-11.94±14.19	0.822	1
rh-whole_thalamus	-242.95±54.23	0.956	0.133	29.81±64.67	0.899	1

ICC, intraclass correlation coefficient; ASEG, Automatic Segmentation; DKT, Desikan-Killiany-Tourville Atlas; lh, left hemisphere; rh, right hemisphere; DC, Diencephalon.

Table S3 Mean volume±standard deviation (mm³) of the results of the FreeSurfer script “HippocampalSubfieldsAndNucleiOfAmygdala” on 3 T and 7 T of patients with non-lesional epilepsy

Brain region	FreeSurfer				FastSurfer			
	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data
Lateral-nucleus (lh)	725±71	732±81	619±55	644±58	715±71	723±85	544±75	536±85
Basal-nucleus (lh)	506±47	499±53	458±55	441±47	509±46	503±58	370±59	356±61
Accessory-Basal-nucleus (lh)	308±32	292±33	254±32	252±31	325±30	302±35	222±40	206±39
Anterior-amygdaloid-area-AAA (lh)	61±7	61±8	54±8	55±8	62±6	62±8	43±9	45±9
Central-nucleus (lh)	57±9	65±11	35±5	43±7	64±10	70±12	34±7	38±7
Medial-nucleus (lh)	29±6	28±7	17±5	16±3	36±6	32±6	13±4	13±2
Cortical-nucleus (lh)	30±4	28±5	22±4	23±4	34±4	31±5	17±5	16±4
Corticoamygdaloid-transitio (lh)	202±21	187±20	206±24	202±24	209±21	196±21	183±30	175±27
Paralaminar-nucleus (lh)	57±6	60±6	57±7	53±6	55±5	59±6	43±7	43±7
Whole_amygdala (lh)	1975±180	1951±205	1722±168	1729±168	2009±179	1978±214	1470±221	1429±224
Lateral-nucleus (rh)	730±90	714±85	655±60	652±67	724±87	699±86	619±95	596±88
Basal-nucleus (rh)	500±69	481±65	449±51	427±50	501±66	480±67	430±73	388±68
Accessory-Basal-nucleus (rh)	304±38	286±36	260±25	247±32	314±40	290±38	277±46	238±38
Anterior-amygdaloid-area-AAA (rh)	61±8	59±7	58±6	57±5	62±8	60±8	59±11	54±12
Central-nucleus (rh)	56±9	62±7	41±5	46±5	63±10	68±9	45±5	46±7
Medial-nucleus (rh)	29±5	29±4	19±3	19±2	34±5	34±4	24±6	23±5
Cortical-nucleus (rh)	30±4	30±5	22±2	23±3	33±4	32±5	25±4	23±4
Corticoamygdaloid-transitio (rh)	203±26	187±23	195±25	195±26	207±27	191±25	211±34	196±30
Paralaminar-nucleus (rh)	55±9	57±9	54±9	53±7	54±7	56±8	47±8	47±8
Whole_amygdala (rh)	1970±239	1906±225	1753±162	1719±190	1993±239	1910±235	1737±257	1610±239
Hippocampal_tail (lh)	565±50	523±48	546±79	513±82	598±56	545±56	549±81	500±98
subiculum-body (lh)	245±21	264±20	226±24	226±24	252±20	269±22	238±26	217±30
CA1-body (lh)	131±26	138±24	131±33	146±40	135±25	144±24	141±40	136±43
subiculum-head (lh)	204±26	208±30	191±32	183±42	194±21	202±28	198±35	170±34
hippocampal-fissure (lh)	168±28	132±26	197±31	174±33	165±29	133±25	218±38	149±39
presubiculum-head (lh)	154±18	137±14	142±25	124±31	145±16	135±13	144±28	113±22
CA1-head (lh)	564±79	637±84	522±88	537±76	557±71	630±80	566±129	505±98
presubiculum-body (lh)	179±26	171±23	164±35	151±28	181±28	173±25	173±32	145±26

Table S3 (continued)

Table S3 (continued)

Brain region	FreeSurfer				FastSurfer			
	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data
parasubiculum (lh)	78±10	75±13	78±14	72±11	76±9	77±9	71±15	64±12
molecular_layer_HP-head (lh)	358±47	221±36	330±49	322±54	353±42	223±34	161±24	309±62
molecular_layer_HP-body (lh)	233±28	166±34	218±25	237±67	241±28	173±35	117±16	201±36
GC-ML-DG-head (lh)	168±27	190±30	149±26	145±22	170±26	190±30	164±40	132±30
CA3-body (lh)	90±19	87±24	78±14	88±21	98±21	91±25	70±21	74±18
GC-ML-DG-body (lh)	137±15	141±21	124±14	118±15	141±14	147±22	122±18	110±17
CA4-head (lh)	139±23	152±26	122±22	117±17	141±23	151±25	137±34	105±24
CA4-body (lh)	122±12	124±10	108±12	105±13	126±13	128±10	108±16	96±13
fimbria (lh)	85±20	89±20	110±21	104±20	82±19	89±20	93±15	107±21
CA3-head (lh)	135±27	150±30	117±21	118±21	139±27	151±31	117±29	105±30
HATA (lh)	68±11	63±12	60±9	60±11	69±11	66±13	58±14	52±10
Whole_hippocampal_body (lh)	1221±121	1179±106	1158±125	1175±168	1257±116	1213±111	1062±145	1087±164
Whole_hippocampal_head (lh)	1868±244	1835±238	1711±255	1678±239	1844±224	1825±229	1615±315	1554±295
Whole_hippocampus (lh)	3655±401	3537±377	3416±427	3366±435	3699±385	3583±383	3226±520	3142±521
Hippocampal_tail (rh)	591±58	524±50	508±71	464±98	599±64	531±55	534±83	453±82
subiculum-body (rh)	239±22	252±20	202±19	200±27	249±26	256±22	232±29	204±32
CA1-body (rh)	139±26	145±25	113±21	112±28	144±28	151±26	142±33	122±24
subiculum-head (rh)	180±22	191±24	184±27	175±26	174±21	188±22	192±38	163±34
hippocampal-fissure (rh)	152±30	129±23	151±17	144±17	152±31	129±23	202±37	157±43
presubiculum-head (rh)	136±14	126±15	130±19	123±24	131±14	126±16	144±33	120±27
CA1-head (rh)	546±70	615±80	502±67	526±59	544±69	616±81	553±92	511±84
presubiculum-body (rh)	155±15	150±15	122±17	133±27	158±16	152±16	136±21	123±18
parasubiculum (rh)	71±8	67±13	65±11	63±17	69±7	67±11	68±16	64±14
molecular_layer_HP-head (rh)	340±37	208±23	316±35	349±38	338±38	210±21	143±18	367±48
molecular_layer_HP-body (rh)	232±32	167±38	194±24	188±34	243±38	178±40	120±24	167±23
GC-ML-DG-head (rh)	167±21	189±27	139±16	138±20	168±22	191±28	166±33	139±27
CA3-body (rh)	100±18	104±19	77±13	78±11	113±25	109±22	87±24	80±18
GC-ML-DG-body (rh)	137±14	136±11	115±13	107±17	145±19	140±12	132±25	99±14
CA4-head (rh)	137±16	151±20	114±12	111±14	139±17	152±21	140±28	113±21
CA4-body (rh)	122±13	124±11	104±11	95±13	131±19	129±14	120±24	92±14
fimbria (rh)	76±17	80±20	104±16	92±15	71±15	74±18	93±11	102±18

Table S3 (continued)

Table S3 (*continued*)

Brain region	FreeSurfer				FastSurfer			
	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data	3 T with T1-weighted data	3 T with T1- and T2-weighted data	7 T with T1-weighted data	7 T with T1- and T2-weighted data
CA3-head (rh)	141±22	160±27	109±14	123±20	142±23	159±27	126±25	125±26
HATA (rh)	68±11	62±13	59±8	61±13	67±12	63±13	65±14	59±15
Whole_hippocampal_body (rh)	1201±123	1157±112	1032±113	1005±119	1255±155	1189±124	1062±157	989±119
Whole_hippocampal_head (rh)	1787±201	1770±213	1619±186	1668±164	1772±204	1771±214	1597±269	1661±268
Whole_hippocampus (rh)	3579±355	3451±351	3158±343	3138±344	3626±396	3491±369	3193±496	3103±450

Table S4 Results (P) of Tukey's Test for the four FreeSurfer segmentations

Segmented region	3 T T1-weighted vs. 3 T T1- weighted+T2- weighted	3 T T1- weighted vs. 7 T T1-weighted	3 T T1-weighted vs. 7 T T1- weighted+T2- weighted	3 T T1- weighted+T2- weighted vs. 7 T T1-weighted	3 T T1-weighted+T2- weighted vs. 7 T T1-weighted+T2- weighted	7 T T1-weighted vs. 7 T T1- weighted+T2- weighted
Left hemisphere: whole_ hippocampus	0.978	0.994	0.952	0.999	0.999	0.993
fimbria	0.997	0.035	0.504	0.057	0.633	0.488
CA-1-head	0.305	0.909	0.984	0.087	0.164	0.99
CA-1-body	0.963	0.999	0.619	0.985	0.882	0.7
GCMDLG-head	0.372	0.784	0.601	0.064	0.031	0.99
GCMDLG-body	0.961	0.909	0.655	0.656	0.362	0.96
CA3-head	0.666	0.761	0.835	0.163	0.212	0.999
CA-3-body	1.000	0.934	1.000	0.938	1.000	0.923
CA-4-head	0.643	0.73	0.425	0.136	0.046	0.958
CA-4-body	0.977	0.767	0.658	0.522	0.412	0.998
HATA	0.874	0.685	0.568	0.984	0.948	0.998
subiculum-head	0.996	0.982	0.976	0.933	0.919	1.000
subiculum-body	0.871	0.994	0.993	0.737	0.729	1.000
Right hemisphere: whole_ hippocampus	0.815	0.028	0.017	0.191	0.13	0.997
fimbria	0.942	0.001	0.155	0.005	0.398	0.222
CA-1-head	0.106	0.505	0.794	0.003	0.012	0.963
CA-1-body	0.964	0.069	0.065	0.022	0.021	1.000
GCMDLG-head	0.079	0.041	0.027	<0.001	<0.001	0.998
GCMDLG-body	0.957	0.003	<0.001	0.012	<0.001	0.618
CA3-head	0.421	0.012	0.125	0.000	0.003	0.75
CA-3-body	0.969	0.008	0.005	0.002	0.001	0.998
CA-4-head	0.235	0.017	0.005	<0.001	<0.001	0.965
CA-4-body	1.000	0.004	<0.001	0.003	<0.001	0.505
HATA	0.638	0.181	0.345	0.816	0.959	0.981
subiculum-head	0.79	0.984	0.824	0.941	0.293	0.616
subiculum-body	0.751	<0.001	<0.001	<0.001	<0.001	1.000