

**On-line Table 1: Anatomic location of significant regions revealed by TBSS analysis for FA, ISO, and ISO maps**

Significant Regions	No. of Significant Voxels in Cluster	Minimal P-FWE	MNI Coordinates		
			X	Y	Z
FA					
Genu, body, and splenium of corpus callosum; Rt. retrolenticular part of internal capsule; bilateral anterior corona radiata; bilateral superior corona radiata; bilateral posterior corona radiata; bilateral posterior thalamic radiation; bilateral cingulum in cingulate gyri; Lt. cingulum in the hippocampus; bilateral superior longitudinal fasciculus; bilateral tapetum	6341	.041	-31	-41	18
ISO					
Genu, body, and splenium of corpus callosum; Rt. retrolenticular part of internal capsule; bilateral posterior corona radiata; bilateral posterior thalamic radiation; Lt. cingulum in cingulate gyrus; Rt. superior longitudinal fasciculus; bilateral tapetum	3089	.005	13	-38	8
MVF					
Cluster 1					
Body and splenium of corpus callosum <sup>a</sup> ; Rt. posterior limb of internal capsule; Rt. retrolenticular part of internal capsule; Rt. superior corona radiata; Rt. posterior corona radiata; Rt. posterior thalamic radiation; Rt. sagittal stratum; Rt. external capsule; Rt. cingulum in cingulate gyrus; Rt. cingulum in hippocampus; Rt. fornix (cres)/stria terminalis; Rt. superior longitudinal fasciculus; Rt. uncinate fasciculus; Rt. tapetum	5254	.034	40	-11	-18
Cluster 2					
Body and splenium of corpus callosum <sup>a</sup> ; Lt. superior corona radiata; Lt. posterior corona radiata; Lt. posterior thalamic radiation <sup>b</sup> ; Lt. cingulum in cingulate gyrus; Lt. superior longitudinal fasciculus	3769	.043	-27	-51	19
Cluster 3					
Lt. posterior limb of internal capsule; Lt. retrolenticular part of internal capsule; Lt. posterior thalamic radiation <sup>b</sup> ; Lt. sagittal stratum; Lt. external capsule; Lt. cingulum in hippocampus; Lt. fornix (cres)/stria terminalis; Lt. uncinate fasciculus	1983	.043	-39	-9	-21

**Note:**—Lt. indicates left; P-FEW, family-wise error corrected P value; Rt., right.

<sup>a</sup>Significant regions included both in clusters 1 and 2.

<sup>b</sup>Significant regions included both in clusters 2 and 3.

**On-line Table 2: Summary of the status of quantitative metrics in NAWM and lesions of patients with MS compared with the WM of healthy controls**

	R1	R2	Proton Density	FA	Mean Diffusivity	Axial Diffusivity	Radial Diffusivity	ICVF	ISO	ODI	MVF	AVF	G-Ratio
NAWM	Decreased	No change	No change	Decreased	Increased	No change	Increased	No change	Increased	Decreased	Decreased	Decreased	No change
Lesion	Decreased	Decreased	Increased	Decreased	Increased	Increased	Increased	Decreased	No change	Decreased	Decreased	Decreased	Increased