SUPPLEMENTARY INFORMATION: VIDEOS

Imaging Multiple Sclerosis Pathology at 160µm Isotropic Resolution by Human Whole-Brain *Ex Vivo* Magnetic Resonance Imaging at 3T

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Materials and Methods

Three videos from the 200µm acquisition of brain #1 were generated, which browse through the entire brain in coronal, sagittal, or transverse direction: After cutting away "empty" image parts in all three directions, the respective 200µm dataset was converted into video streams with 17 frames per second using the software MATLAB RELEASE 2020A (THE MATHWORKS, Natick, MA, USA). The resulting uncompressed *.avi* video files were then encoded each with a H.264 video codec (4000kbps bitrate, software VLC MEDIA PLAYER 3.0.14) to generate compressed *.mp4* video files with reduced file size by a factor of approx. 15.

The videos can also be downloaded from *https://postmortem-mri.matthias-weigel.net*. The file size is between 14MB and 23MB per video.

Video Legends

Video S1: Brain #1, browsing through the 200µm URI-FLASH acquisition slice by slice in coronal slice direction from anterior to posterior.

Video S2: Brain #1, browsing through the 200µm URI-FLASH acquisition slice by slice in sagittal slice direction from right to left.

Video S3: Brain #1, browsing through the 200µm URI-FLASH acquisition slice by slice in transverse slice direction from inferior to superior.