

Supporting Information: Reducing temperature errors in transcranial MR-guided focused ultrasound using a reduced-field-of-view sequence

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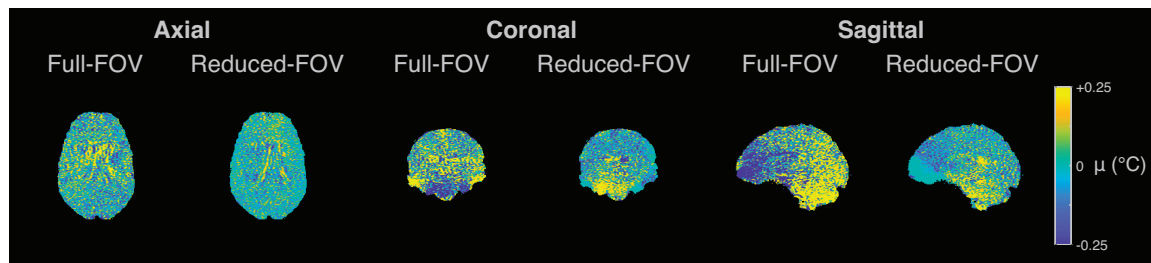
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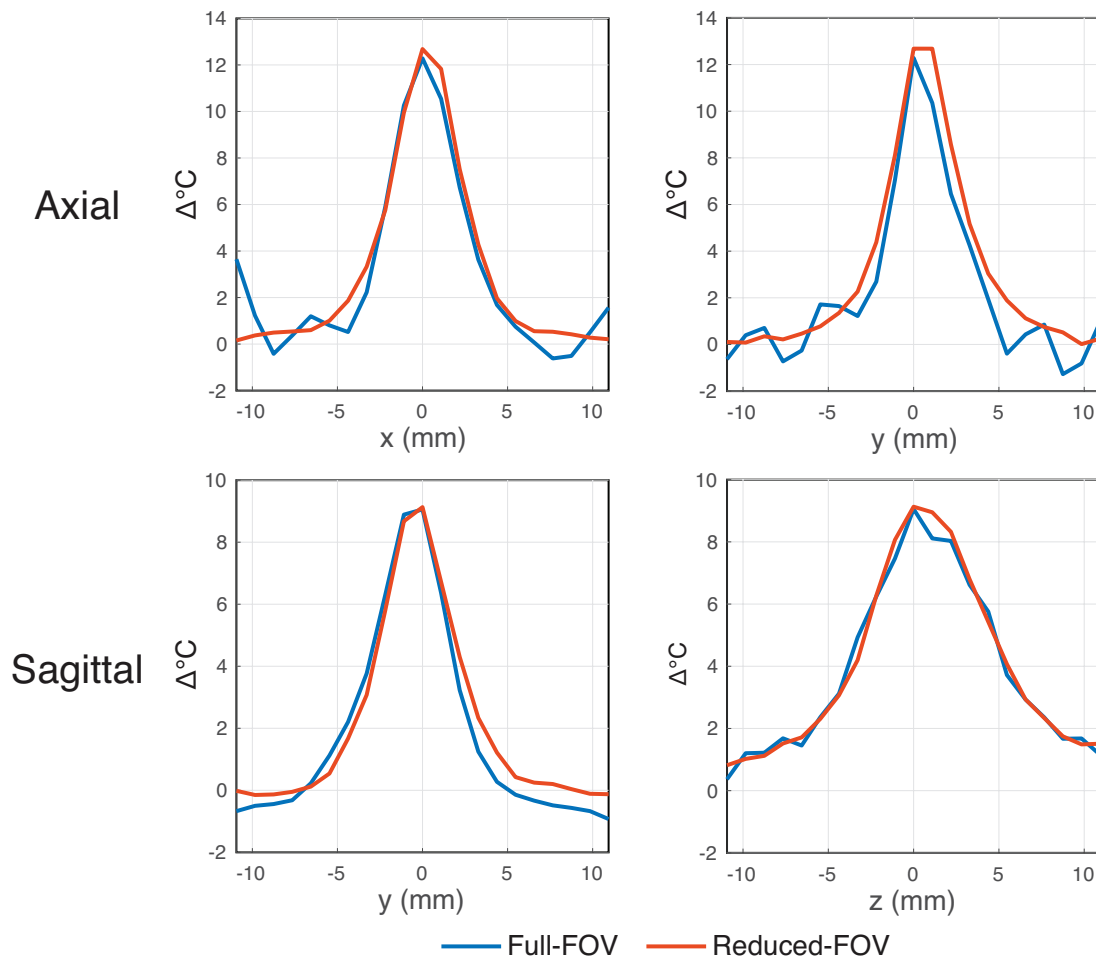
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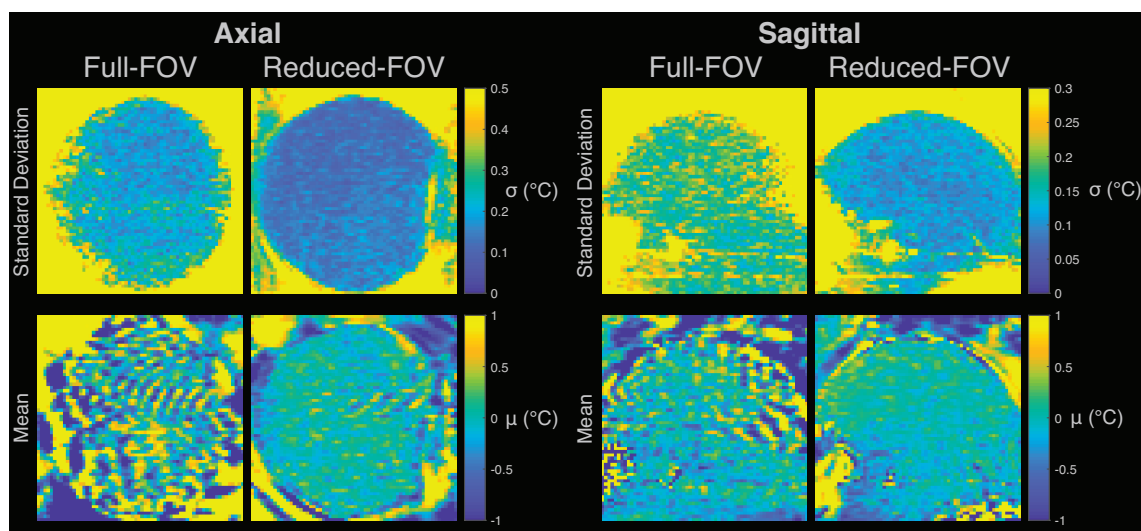
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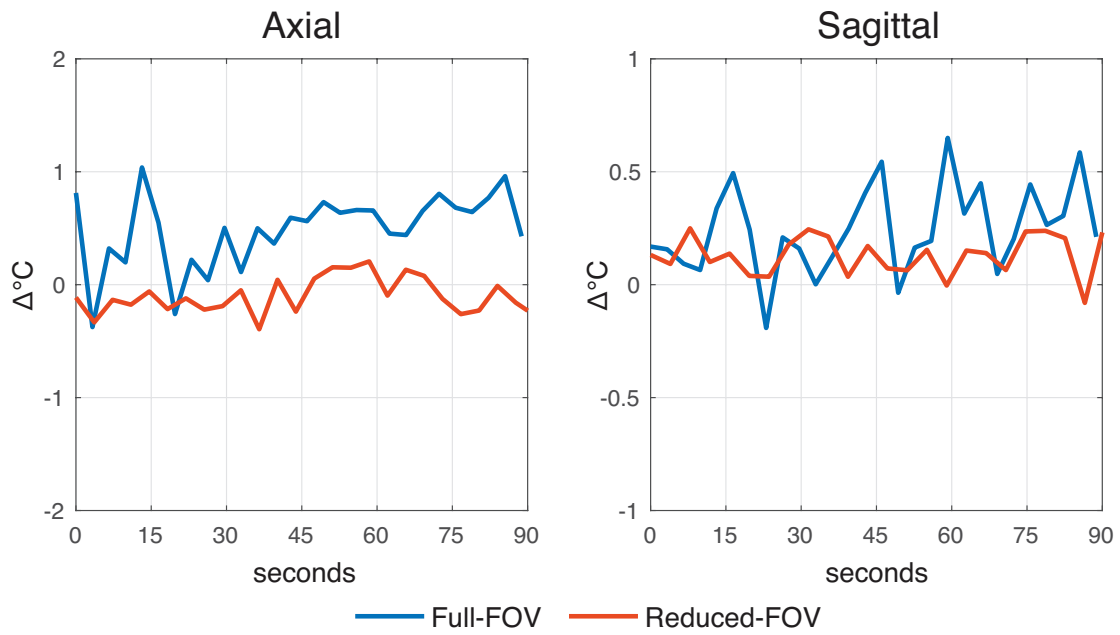
Supporting Information Figure S1: Through-time mean in vivo temperature error maps. The time- and space-average temperatures were all smaller than 0.01 $^{\circ}$ C.



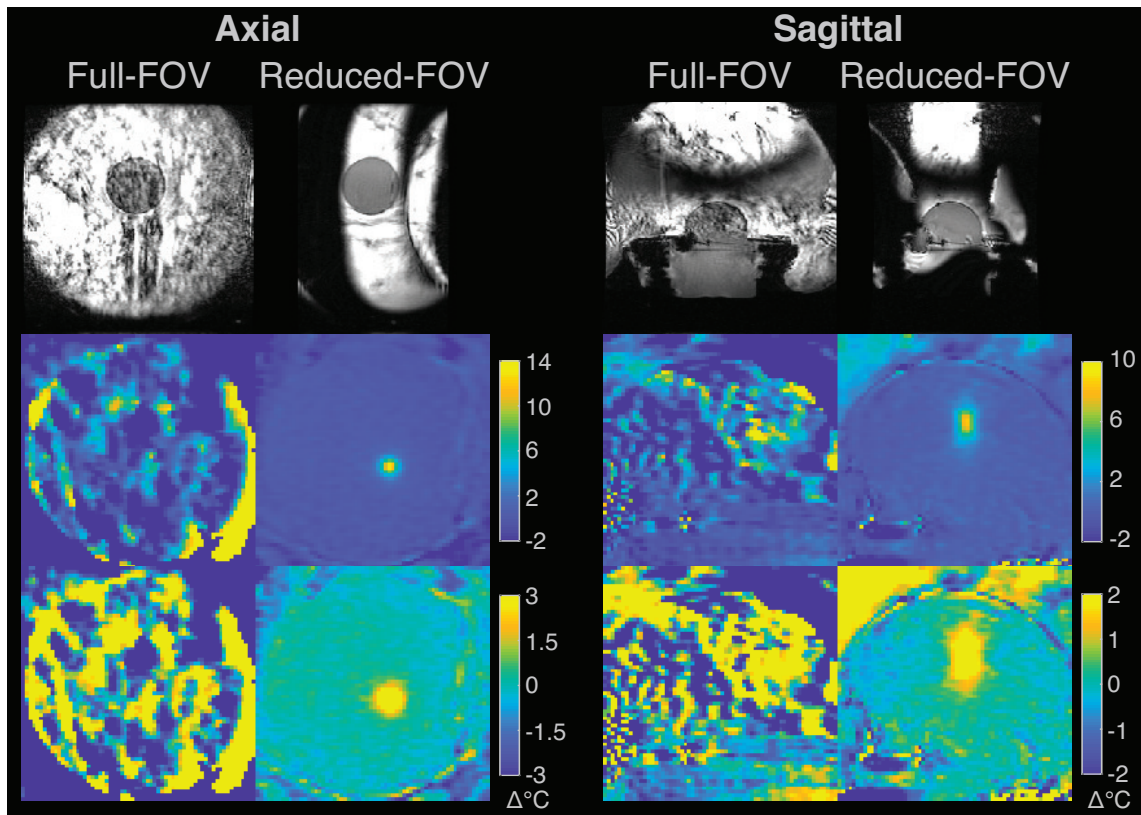
Supporting Information Figure S2: Temperature profiles through the hot spot at peak heat, for the axial and sagittal phantom heating experiments shown in Figures 3 and 4.



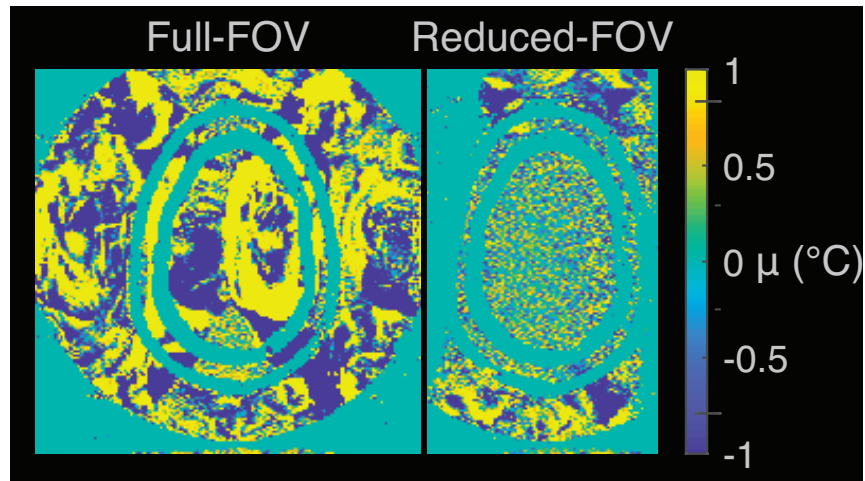
Supporting Information Figure S3: Through-time temperature standard deviation and mean temperature error maps for axial and sagittal full- and reduced-FOV gel phantom scans without heating.



Supporting Information Figure S4: Gel phantom temperature errors versus time in the same voxels as Figure 4, from a scan acquired without FUS heating.



Supporting Information Figure S5: Temperature maps measured in a gel phantom during FUS heating, using the first image in the time series (immediately after water flow has been shut off) as the baseline image, rather than the second image as in Figure 3. The top row shows the magnitudes of the baseline (second time point) images for the full- and reduced-FOV sequences, in axial and coronal slice orientations. The second row shows temperature maps zoomed-in to the phantom at peak heat, and the third row shows the same maps with windowing adjusted to better visualize background temperature errors.



Supporting Information Figure S6: Through-time mean temperature error maps for the under-sampled head phantom experiment. The time- and space-averaged temperature error over the phantom's brain region were 1.2° for the full-FOV scan, and 0.072° for the reduced-FOV scan.