

Multi-frequency MRE for elasticity quantitation and optimal tissue discrimination: a two-platform liver fibrosis mimicking phantom study

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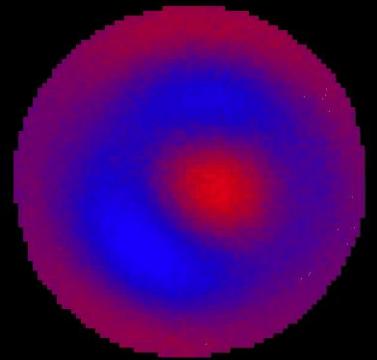
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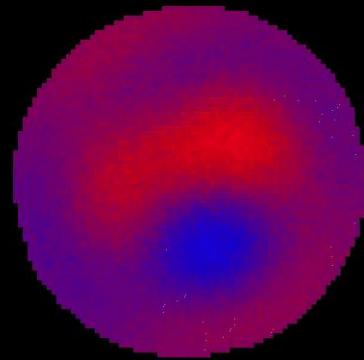
Supplementary materials

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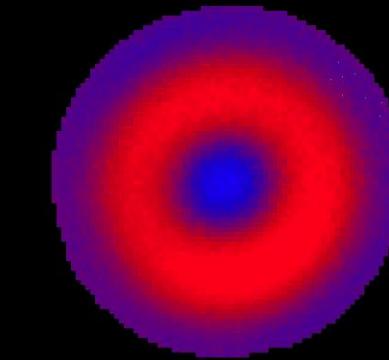
**Raw displacement fields in C2 at 40 Hz
at 1.5 T and in slice 12/24**



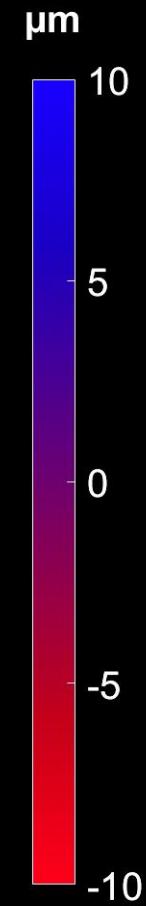
$U_x \leftarrow$



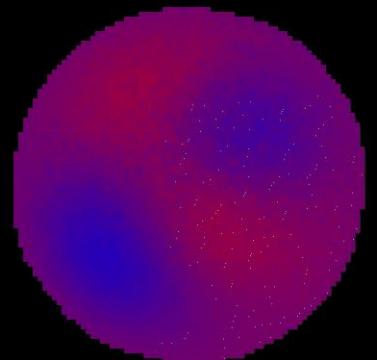
$U_y \uparrow$



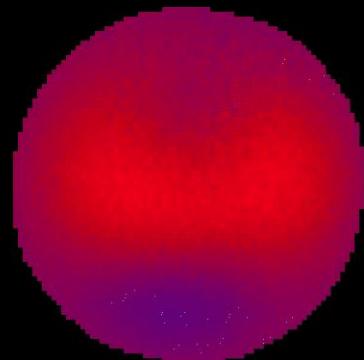
$U_z \otimes$



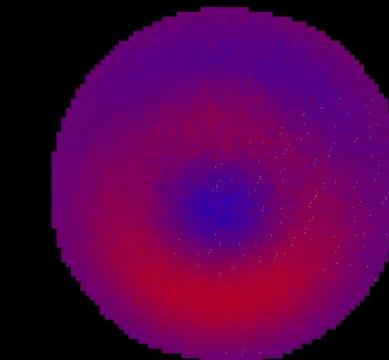
at 3 T and in slice 12/24



$U_x \leftarrow$

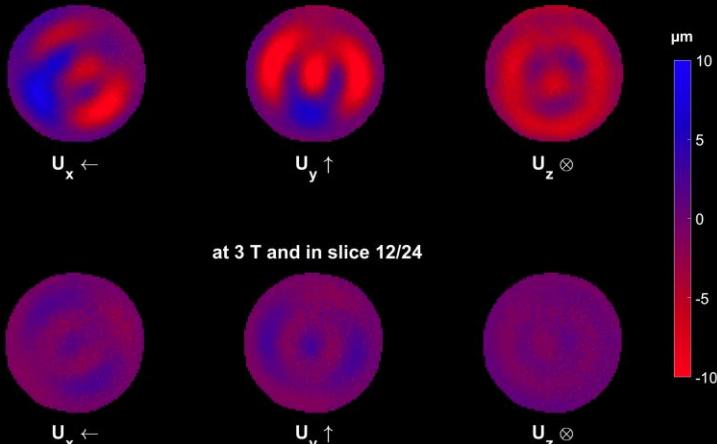


$U_y \uparrow$

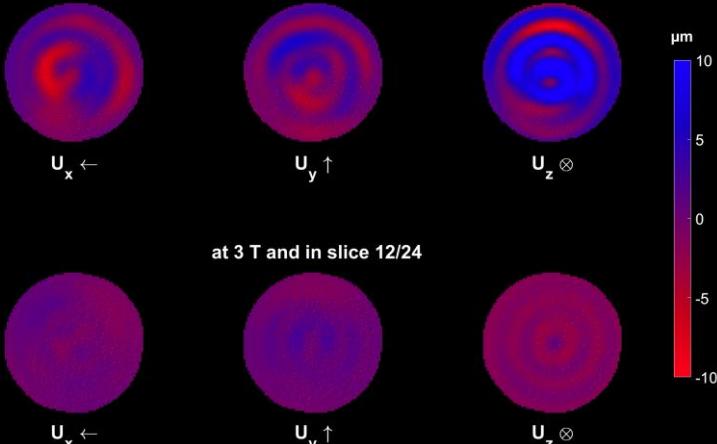


$U_z \otimes$

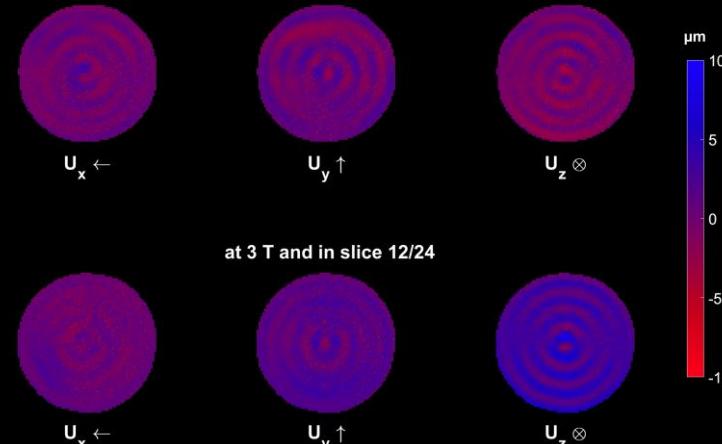
Raw displacement fields in C2 at 60 Hz
at 1.5 T and in slice 12/24



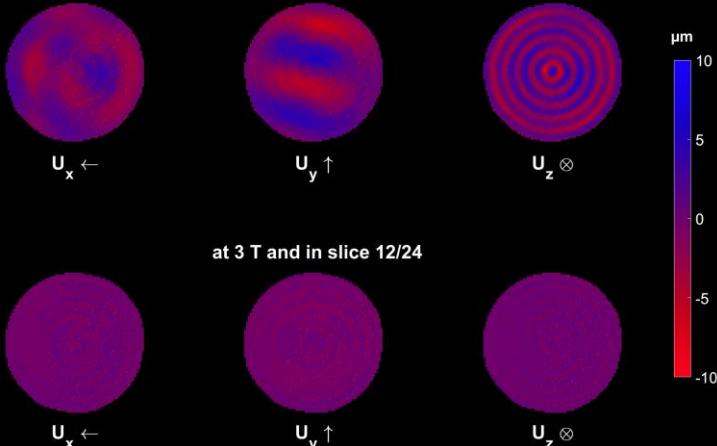
Raw displacement fields in C2 at 90 Hz
at 1.5 T and in slice 12/24



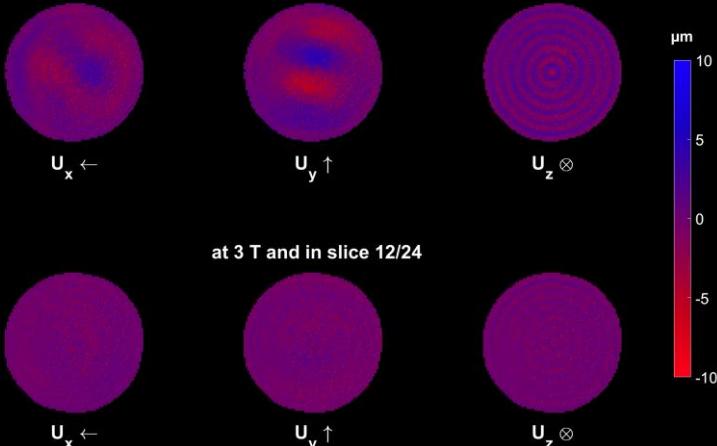
Raw displacement fields in C2 at 130 Hz
at 1.5 T and in slice 12/24



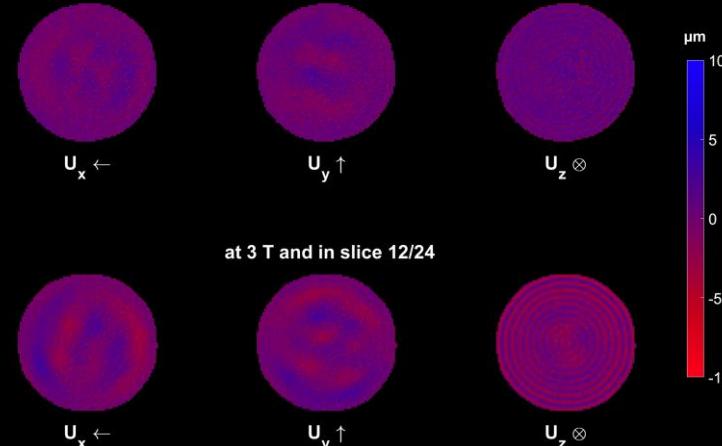
Raw displacement fields in C2 at 175 Hz
at 1.5 T and in slice 12/24



Raw displacement fields in C2 at 207 Hz
at 1.5 T and in slice 12/24



Raw displacement fields in C2 at 320 Hz
at 1.5 T and in slice 12/24



Raw displacement fields at 60 Hz
at 1.5 T and in slice 12/24

C1



$U_x \leftarrow$



$U_y \uparrow$



$U_z \otimes$

μm

15

10

5

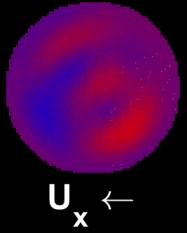
0

-5

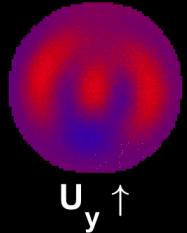
-10

-15

C2



$U_x \leftarrow$

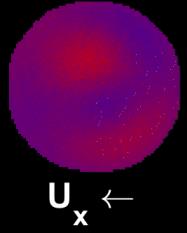


$U_y \uparrow$

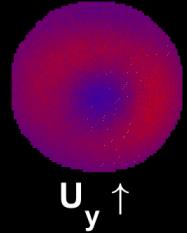


$U_z \otimes$

C3



$U_x \leftarrow$

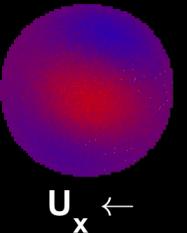


$U_y \uparrow$



$U_z \otimes$

C4



$U_x \leftarrow$



$U_y \uparrow$

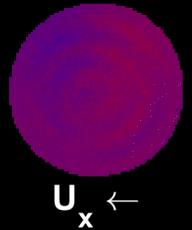


$U_z \otimes$

Raw displacement fields at 1.5 T and f_{opt}

at 60 Hz in slice 12/24

C1



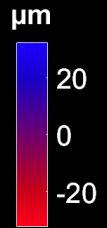
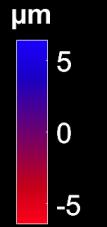
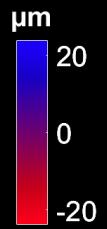
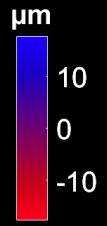
$U_x \leftarrow$



$U_y \uparrow$

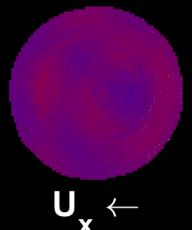


$U_z \otimes$



at 175 Hz in slice 12/24

C2



$U_x \leftarrow$



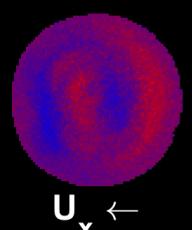
$U_y \uparrow$



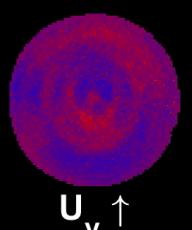
$U_z \otimes$

at 207 Hz in slice 12/24

C3



$U_x \leftarrow$



$U_y \uparrow$



$U_z \otimes$

at 320 Hz in slice 12/24

C4



$U_x \leftarrow$



$U_y \uparrow$

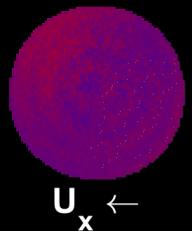


$U_z \otimes$

Raw displacement fields at 3 T and f_{opt}

at 60 Hz in slice 12/24

C1



$U_x \leftarrow$



$U_y \uparrow$

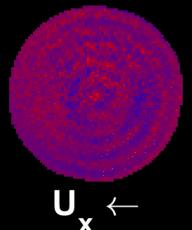


$U_z \otimes$

μm

5
0
-5

C2



$U_x \leftarrow$



$U_y \uparrow$

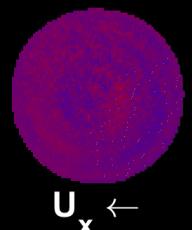


$U_z \otimes$

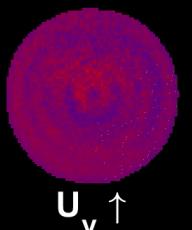
μm

2
0
-2

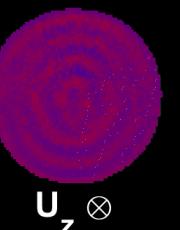
C3



$U_x \leftarrow$



$U_y \uparrow$

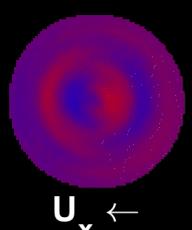


$U_z \otimes$

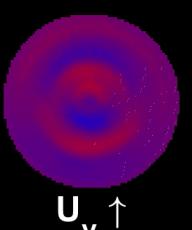
μm

5
0
-5

C4



$U_x \leftarrow$



$U_y \uparrow$



$U_z \otimes$

μm

20
0
-20