Week 2

July 16, 2014

# plotter script

- 324 sloc
- reads `RotationShield` and FieldMapping VI input
- uses new normalization method
    - average of data points near $(0, 0, 0)$ vs. polynomial fit
    - calculates desired normalization level - average B_x of measured maps
- handles custom field slices
- to-do: field gradients, interpolation, smooth plots

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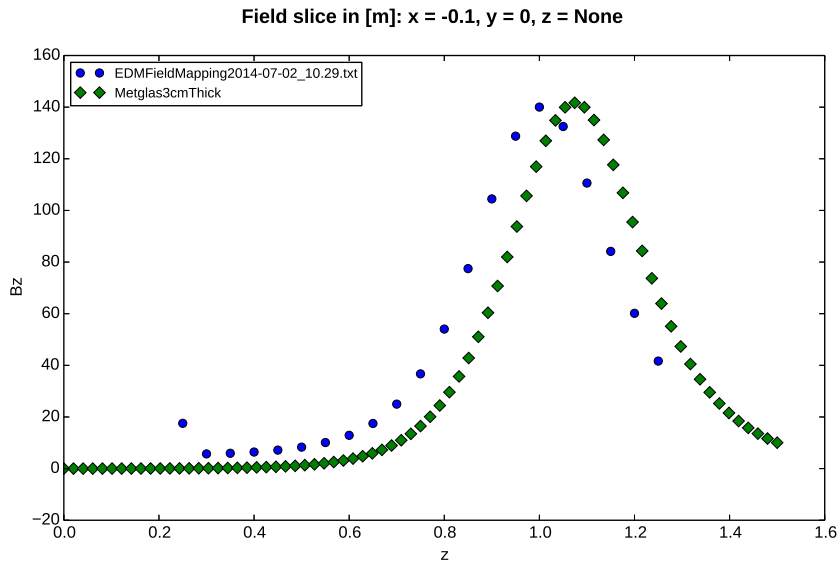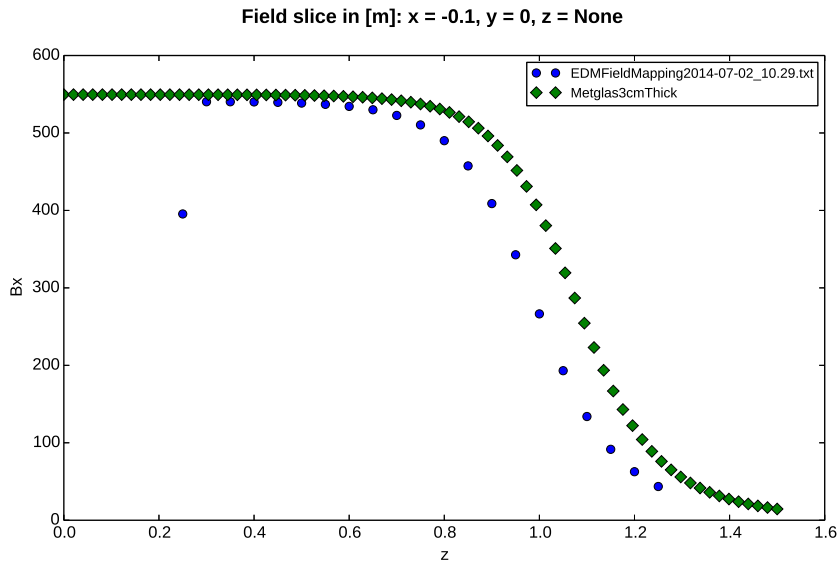
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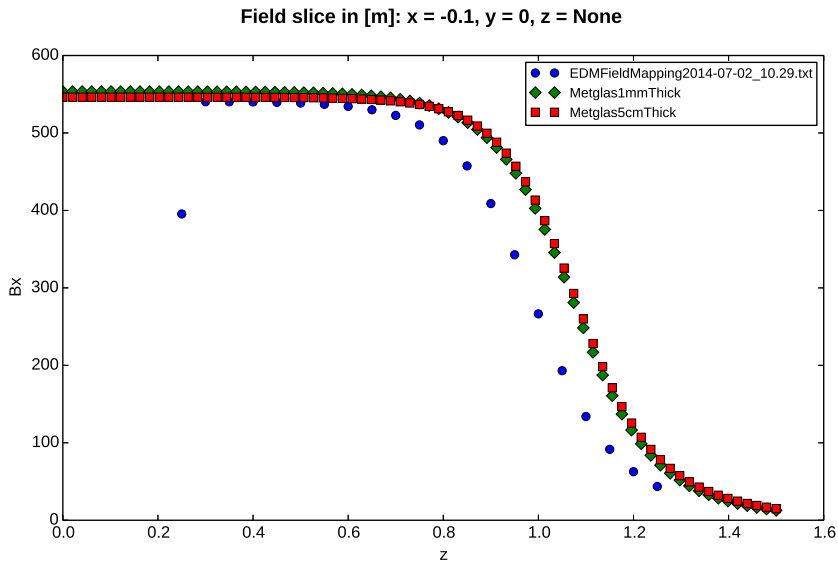- extended metglas far (10 cm) above B_0 coil to highlight effects

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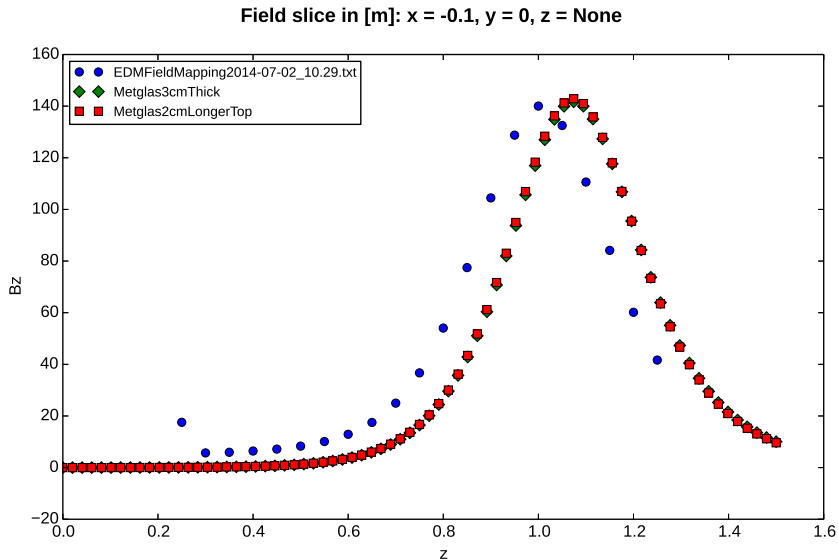- extended metglas far (10 cm) above B_0 coil to highlight effects

varying thickness: small change in B magnitude, no shift
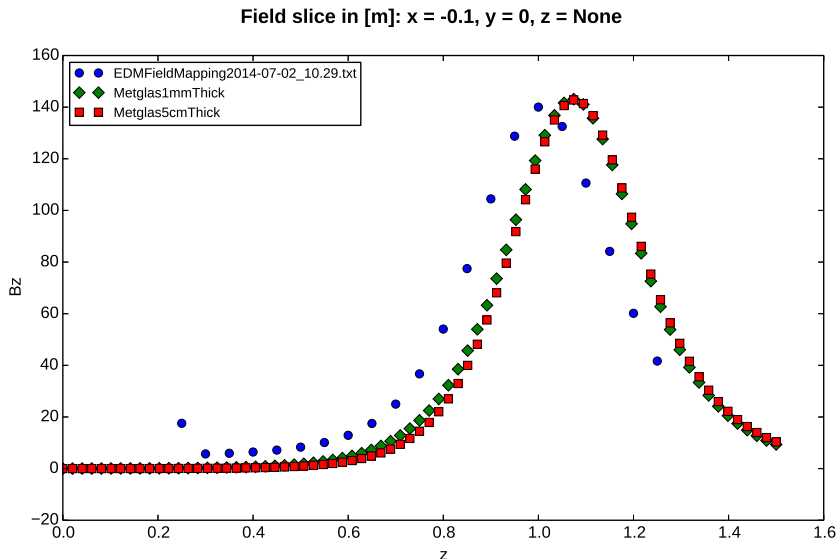
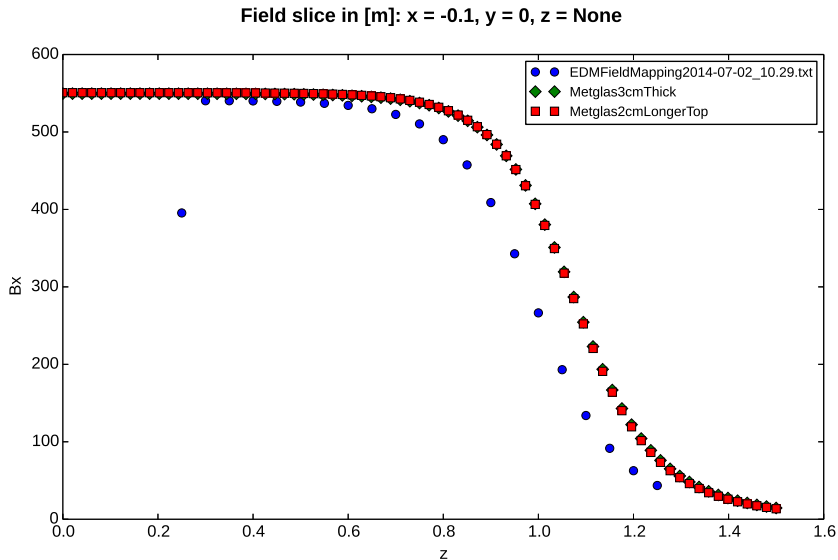**Field slice in [m]: x = -0.1, y = 0, z = None**

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- Metglas3cmThick
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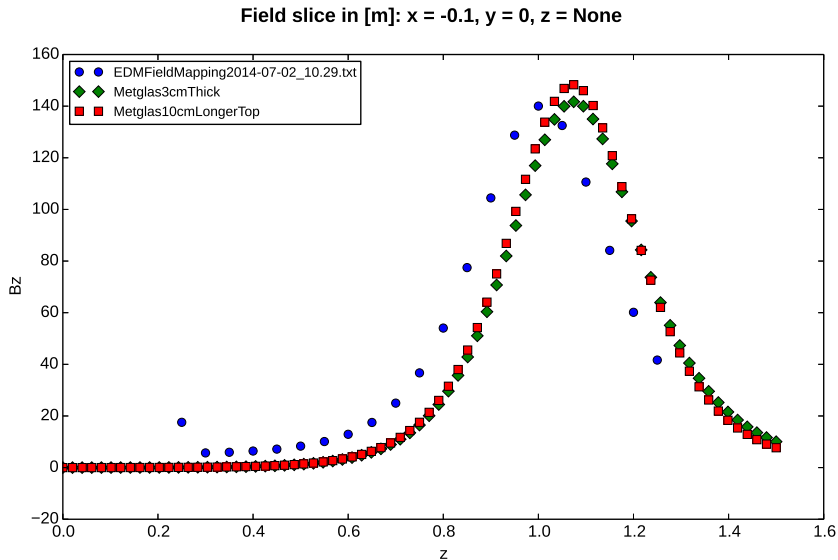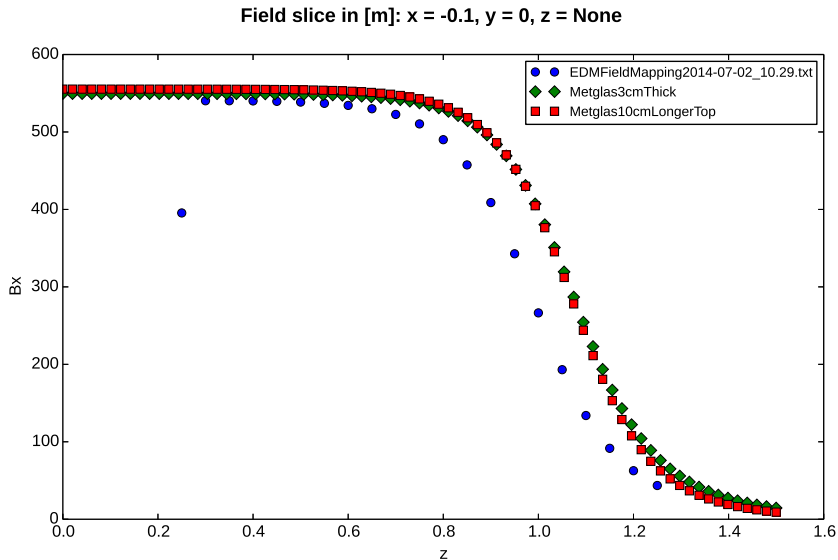
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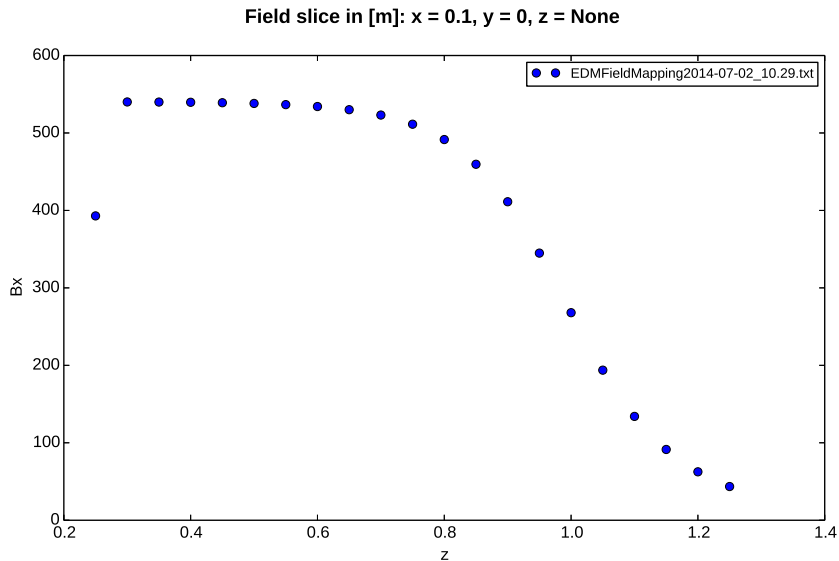 - but before applying the field it builds an interaction matrix - requires azimuthal symmetry

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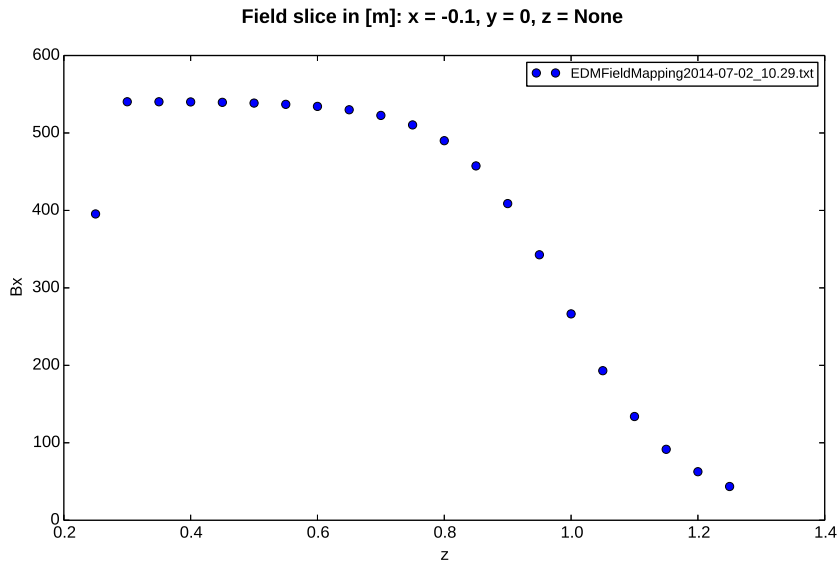 - but before applying the field it builds an interaction matrix - requires azimuthal symmetry
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azimuthal symmetry: $0°$, B_z axis flipped

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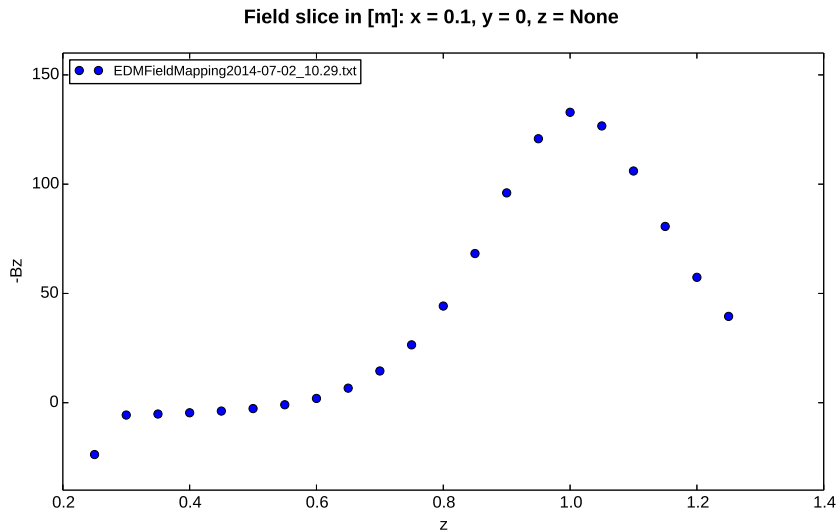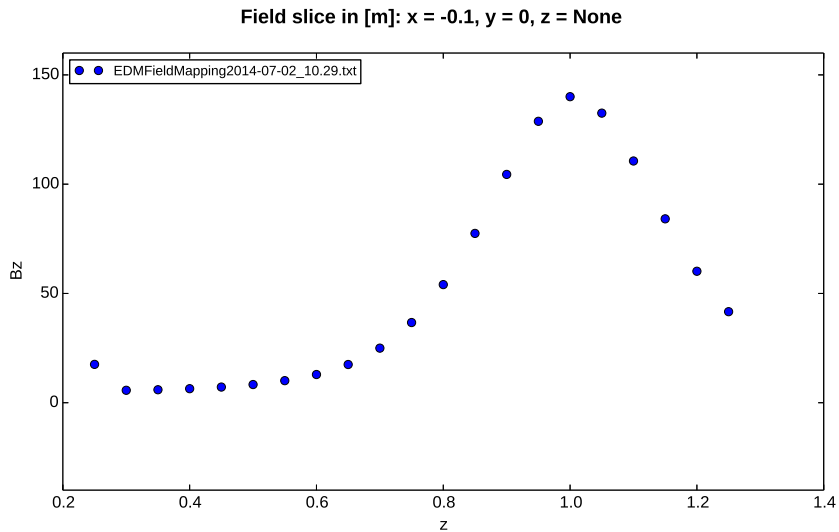
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- rigorously check centering, dimensions of experimental setup