Data in "Magnetic measurements on micron-size samples under high pressure using designed NV centers"

**Figure Data.xlsx**

| Figure | Data Sheets | Notes |
|---|---|---|
| Fig1 | Fig1C | 2x 1-D plot (top panel) + 2x 1-D plot (bottom panel) |
| Fig2 | Fig2a | 2-D plot |
| | Fig2b | 2-D plot |
| | Fig2c | 2-D plot |
| | Fig2d | 2-D plot |
| Fig3 | Fig3A | 2x 1-D plot |
| | Fig3B-1 | 2-D plot |
| | Fig3B-2 | 2-D plot |
| | Fig3B-3 | 2-D plot |
| Fig4 | Fig4A-1 | 2-D plot |
| | Fig4A-2 | 2-D plot |
| | Fig4A-3 | 2-D plot |
| | Fig4A-4 | 2-D plot |
| | Fig4A-5 | 2-D plot |
| | Fig4A-6 | 2-D plot |
| | Fig4A-7 | 2-D plot |
| | Fig4A-8 | 2-D plot |
| | Fig4B | 1-D plot + specifications of averaging square |
| - | - | - |
| FigS2 | FigS2 | 1-D plot |
| FigS4 | FigS4 | 1-D plot |
| FigS6 | FigS6-x | 2-D plot (top panel, x component) |
| | FigS6-y | 2-D plot (top panel, y component) |
| | FigS6-z | 2-D plot (top panel, z component) |
| | FigS6-n | 2-D plot (top panel, norm) |
| | FigS6-xf | 2-D plot (top panel, filtered x component) |
| | FigS6-yf | 2-D plot (top panel, filtered y component) |
| | FigS6-zf | 2-D plot (top panel, filtered z component) |
| | FigS6-nf | 2-D plot (top panel, filtered norm) |
| FigS9 | FigS9A-x | 2-D plot (x component) |
| | FigS9A-y | 2-D plot (y component) |
| | FigS9A-z | 2-D plot (z component) |
| | FigS9B-x | 2-D plot (x component) |
| | FigS9B-y | 2-D plot (y component) |
| | FigS9B-z | 2-D plot (z component) |
| | FigS9C-x | 2-D plot (x component) |
| | FigS9C-y | 2-D plot (y component) |
| | FigS9C-z | 2-D plot (z component) |
| | FigS9D-x | 2-D plot (x component) |

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|---|---|---|
| | FigS9D-y | 2-D plot (y component) |
| | FigS9D-z | 2-D plot (z component) |
| FigS10 | FigS10A-mt | 2-D plot (top left panel) |
| | FigS10A-mb | 2-D plot (bottom left panel) |
| | FigS10A-exp | 2-D plot (right panel) |
| | FigS10B-mt | 2-D plot (top left panel) |
| | FigS10B-mb | 2-D plot (bottom left panel) |
| | FigS10B-exp | 2-D plot (right panel) |
| FigS11 | FigS11A-x | 2-D plot (x component) |
| | FigS11A-y | 2-D plot (y component) |
| | FigS11A-z | 2-D plot (z component) |
| | FigS11B-x | 2-D plot (x component) |
| | FigS11B-y | 2-D plot (y component) |
| | FigS11B-z | 2-D plot (z component) |
| | FigS11C-x | 2-D plot (x component) |
| | FigS11C-y | 2-D plot (y component) |
| | FigS11C-z | 2-D plot (z component) |
| | FigS11D-x | 2-D plot (x component) |
| | FigS11D-y | 2-D plot (y component) |
| | FigS11D-z | 2-D plot (z component) |
| FigS12 | FigS12A-x | 2-D plot (x component) |
| | FigS12A-y | 2-D plot (y component) |
| | FigS12A-z | 2-D plot (z component) |
| | FigS12B-x | 2-D plot (x component) |
| | FigS12B-y | 2-D plot (y component) |
| | FigS12B-z | 2-D plot (z component) |
| | FigS12C-x | 2x 1-D plot (x component) |
| | FigS12C-y | 2x 1-D plot (y component) |
| | FigS12C-z | 2x 1-D plot (z component) |
| FigS13 | FigS13B | 2-D plot |
| | FigS13C | 2x 1-D plot |
| FigS14 | FigS14C-1x | 2-D plot (x component) |
| | FigS14C-1y | 2-D plot (y component) |
| | FigS14C-1z | 2-D plot (z component) |
| | FigS14C-1n | 2-D plot (norm) |
| | FigS14C-2x | 2-D plot (x component) |
| | FigS14C-2y | 2-D plot (y component) |
| | FigS14C-2z | 2-D plot (z component) |
| | FigS14C-2n | 2-D plot (norm) |
| | FigS14C-3x | 2-D plot (x component) |
| | FigS14C-3y | 2-D plot (y component) |
| | FigS14C-3z | 2-D plot (z component) |
| | FigS14C-3n | 2-D plot (norm) |

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|---|---|---|
| FigS15 | FigS15-1 | 2-D plot |
| | FigS15-2 | 2-D plot |
| | FigS15-3 | 2-D plot |
| | FigS15-4 | 2-D plot |
| | FigS15-5 | 2-D plot |
| | FigS15-6 | 2-D plot |
| | FigS15-7 | 2-D plot |
| | FigS15-8 | 2-D plot |
| | FigS15-9 | 2-D plot |
| | FigS15-10 | 2-D plot |
| | FigS15-11 | 2-D plot |
| | FigS15-12 | 2-D plot |
| | FigS15-13 | 2-D plot |
| | FigS15-14 | 2-D plot |
| | FigS15-15 | 2-D plot |
| | FigS15-16 | 2-D plot |
| | FigS15-17 | 2-D plot |
| | FigS15-18 | 2-D plot |
| | FigS15-19 | 2-D plot |
| | FigS15-20 | 2-D plot |
| | FigS15-21 | 2-D plot |
| | FigS15-22 | 2-D plot |
| | FigS15-23 | 2-D plot |
| | FigS15-24 | 2-D plot |
| FigS16 | FigS16 | 6x 1-D plot |

**Raw Data**

- Iron/ESR Maps contains the raw ESR maps for the Iron experiment. Iron/Pruby is the list of pressure values corresponding to each ESR map, and Iron/size_pix gives the spatial size corresponding to each pixel.
- MgB2/ESR Maps contains the raw ESR maps for the MgB2 experiment. MgB2/T is the list of temperature values corresponding to each ESR map, and MgB2/size_pix gives the spatial size corresponding to each pixel.

**Matlab Codes**

*PlotIronData.m*:
Code used to open the raw data of the Iron experiments and extract the ESR for each pixel.

*PlotMgB2Data.m*:
Code used to open the raw data of the MgB2 experiments and extract the ESR for each pixel.

*SimulatedIronMagneticField.m* (requires *SphereField.m*, *CarttoPol.m*, *PoltoCart.m*):
Code used to calculate and plot the magnetic field created by an iron sphere, at a 2D plane of observation.