

Phase encoded image

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Image Result

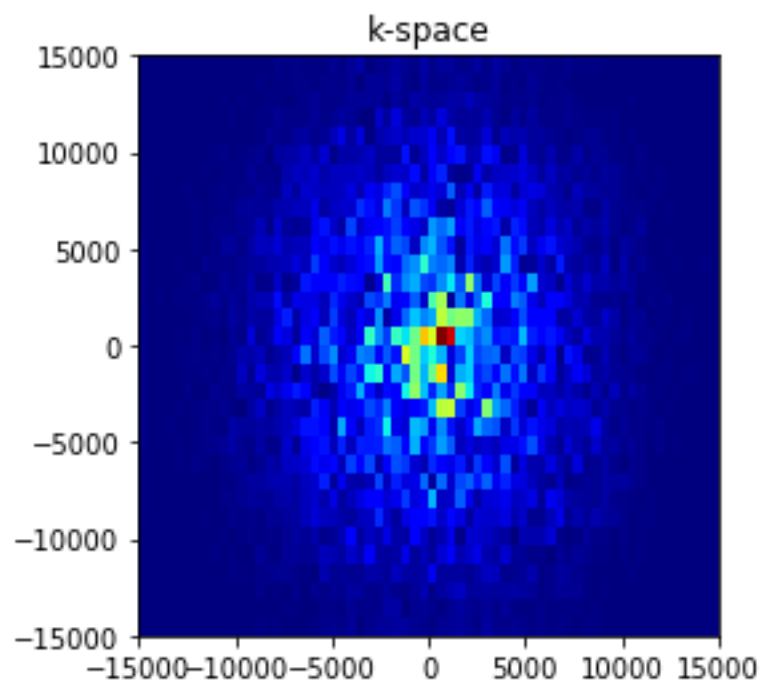


Fig. Phase-Encoded k-Space

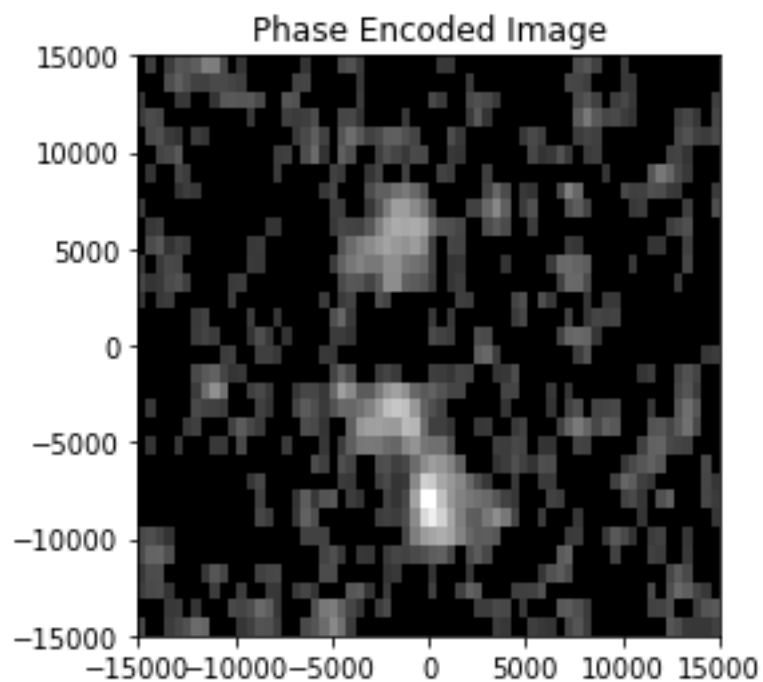


Fig. Reconstructed Image
from Phase-Encoded k-Space

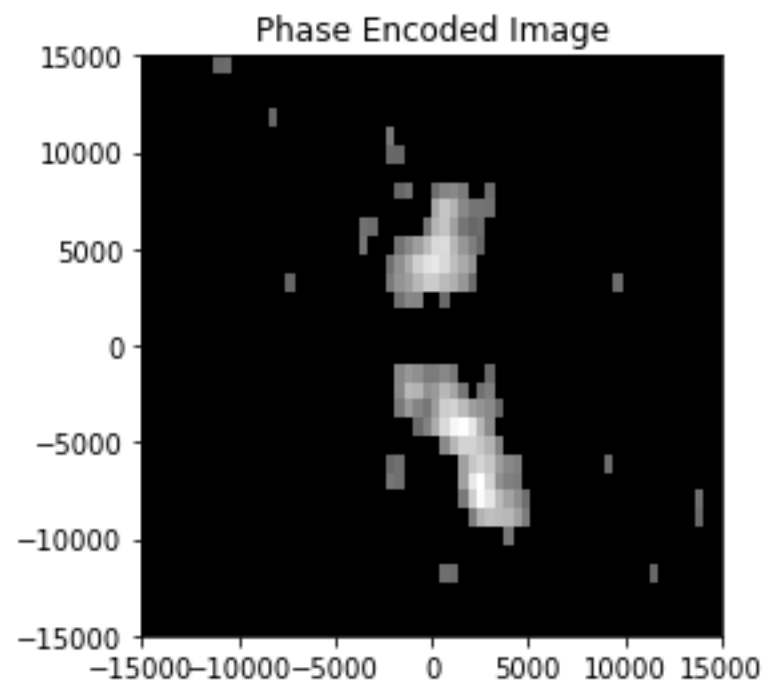


Fig. Phase-Encoded Image
with Filter

Disclosure

- **Data Collection and Enhancement**

Implemented phase encoding to acquire k-space data.

Applied a 2D Hamming window to smooth the data and reduce artifacts.

- **Image Reconstruction**

Used a 2D Fourier Transform to reconstruct the spatial-domain image.

- **Testing and Calibration**

Adjusted resolution and tested varying numbers of projection angles, yielding consistent results.

- **Findings and Speculations**

Reconstructed image matched the phantom, but artifacts persisted in one phantom.

Suspected causes: environmental factors like temperature variations or electromagnetic noise.