

# Getting Familiar With Synchrotron-CT Data

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# 1 Data Characteristics

- number of projections:
- resolution:
- number of angles:
- Rotation axis
- ...

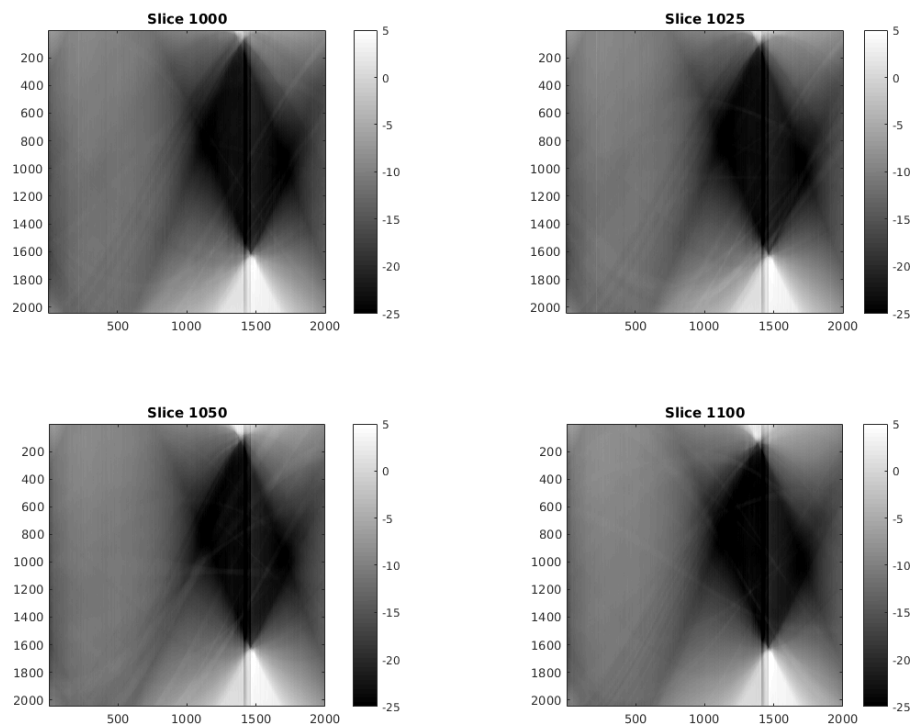
## 2 Reading The Data

### 2.1 Projections

show 4 different projection out of 100

### 2.2 Sinogram

show 4 sinograms over different slices



for individual images refer to index section 5.1

## 3 FBP Reconstruction

### 3.1 Reconstruction without zero-padding default filter

Show 4 different reconstructed images

## **3.2 Reconstruction with zero-padding**

### **3.2.1 Using matlab default filter**

Show 4 different reconstructed images

### **3.2.2 Comparing frequency scaling (?) one slice**

try with 0.7 0.4 0.6...

### **3.2.3 Comparing matlab Filters**

try all filters proposed for iradon

## **3.3 Reduced number of projections**

show 2000, 1000, 700, 400, 200, 100 projections

show difference between ref (2000)

## 4 iterative reconstruction

## 5 Index

### 5.1 Sinogram

