

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0027

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/22/2011 (7 keV)

 Jan/24/2011 (8 keV)

Elements or phases identified: (Mg, Si, olivine, pyroxene, aromatic carbon, etc.)

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	-	14.98	-	14.0	63.1	-	-	-	-

Contaminant phases identified: (Al, SUS, carbon particles, etc.)

N/A

Sample handling:

Exposed in atmosphere.

State of sample pre-analysis:

Attached to carbon fiber with resin.

State of sample post-analysis:

N₂ hold in sample holder.

Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0027

Operation Date Jan/22/2011 (7 keV)
 Jan/24/2011 (8 keV)
operated by T. Matsumoto (7 keV)
 T. Matsumoto (8 keV)
analyzed by J. Matsuno

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	-	14.98	-	14.0	63.1	-	-	-	-

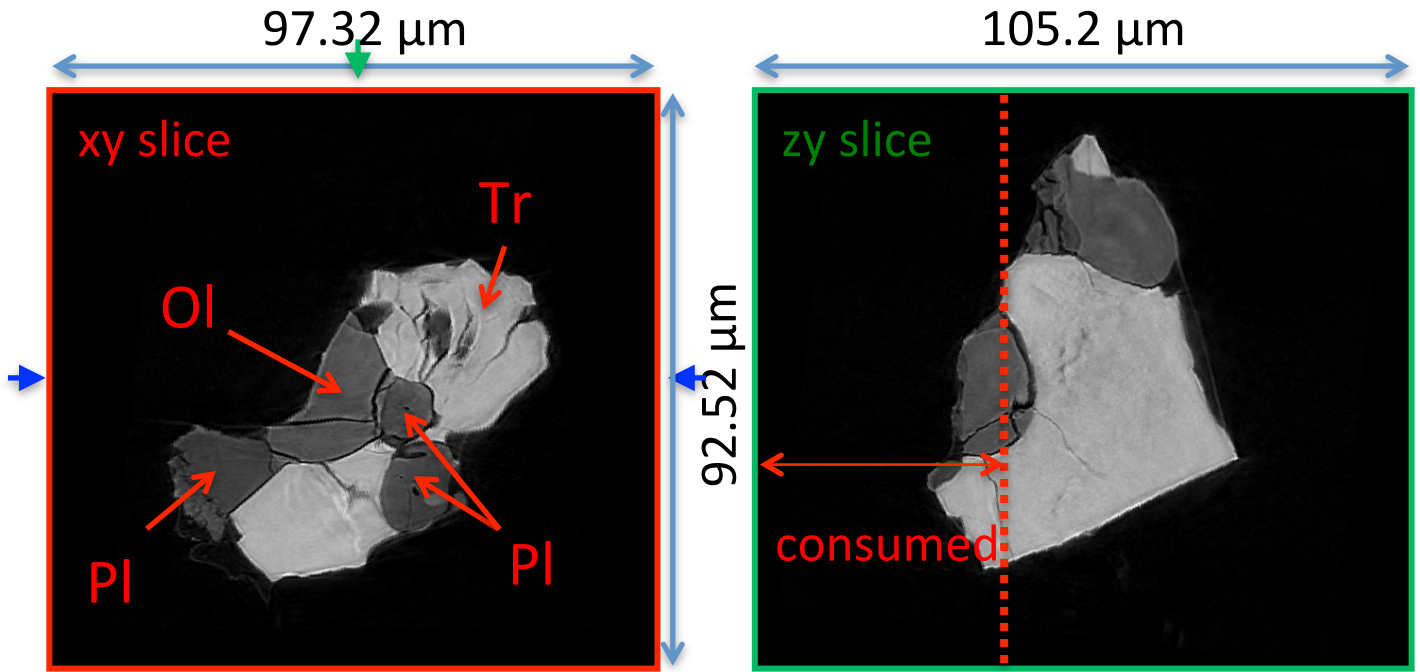
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
20.7	28.0	41.5	88316	3.46

Ol: olivine
LPx: low calcium pyroxene
HPx: high calcium pyroxene
Pl: plagioclase
Tr: troilite
Tae: taenite
Chm: chromite
CP: calcium phosphate
Kam: kamacite

A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

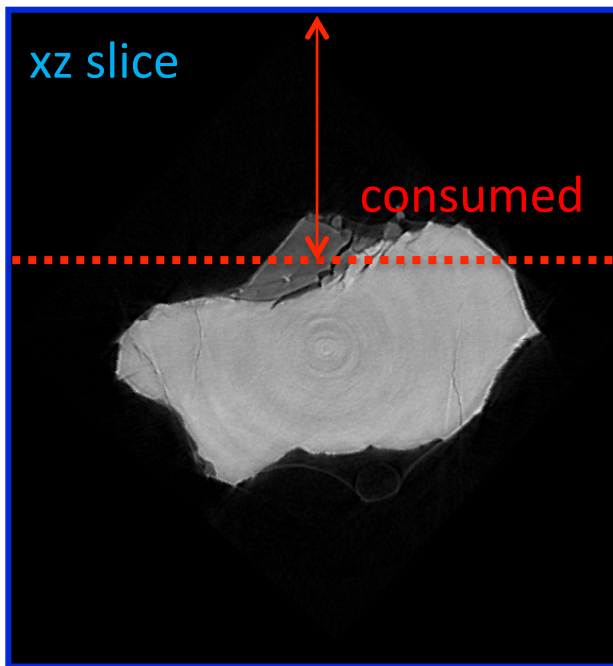
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0027 7 keV

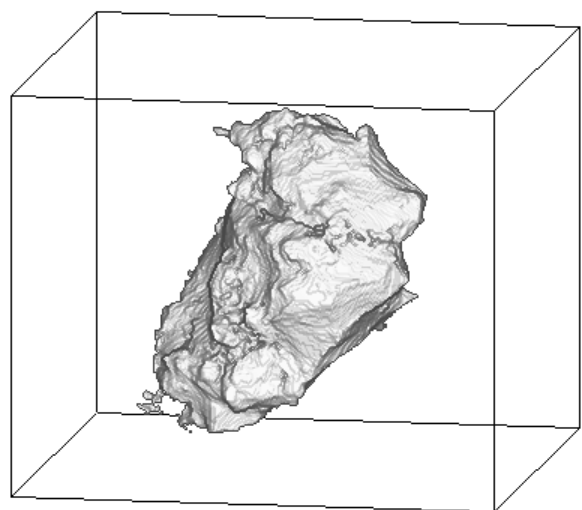


7keV/xy/225.tif

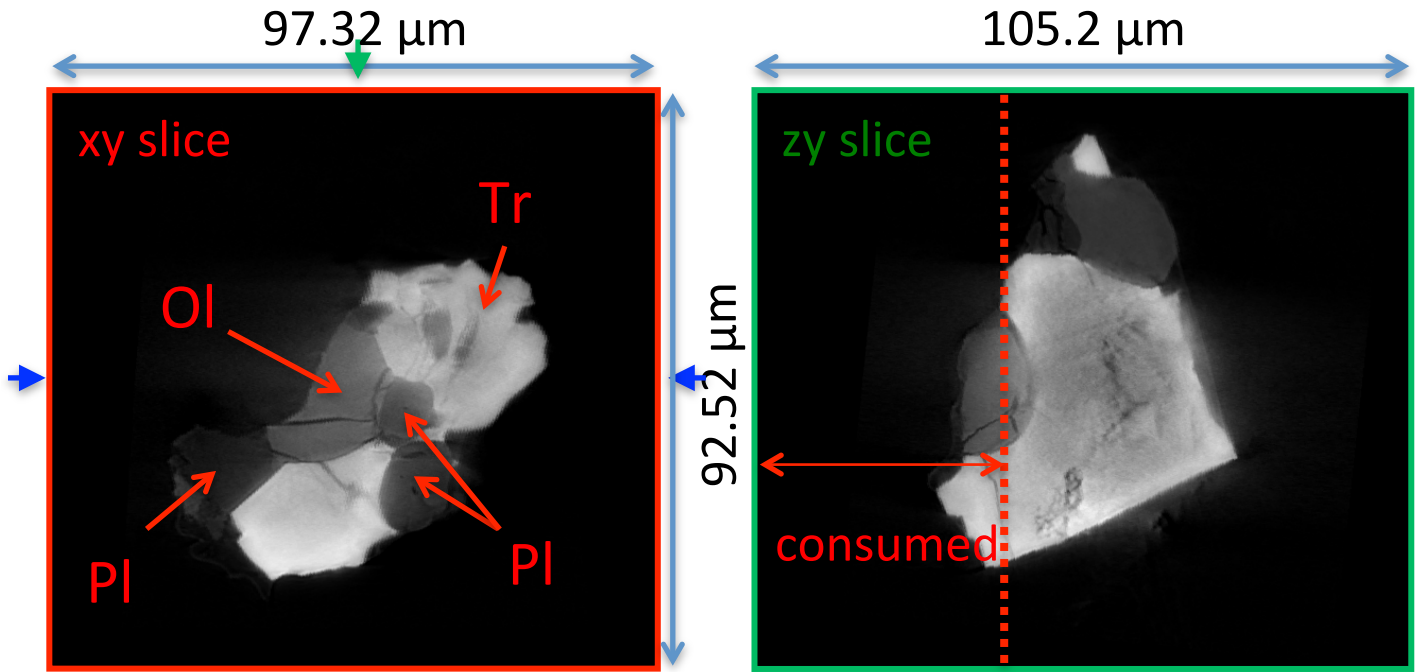
7keV/zy/284.tif



7keV/xz/270.tif

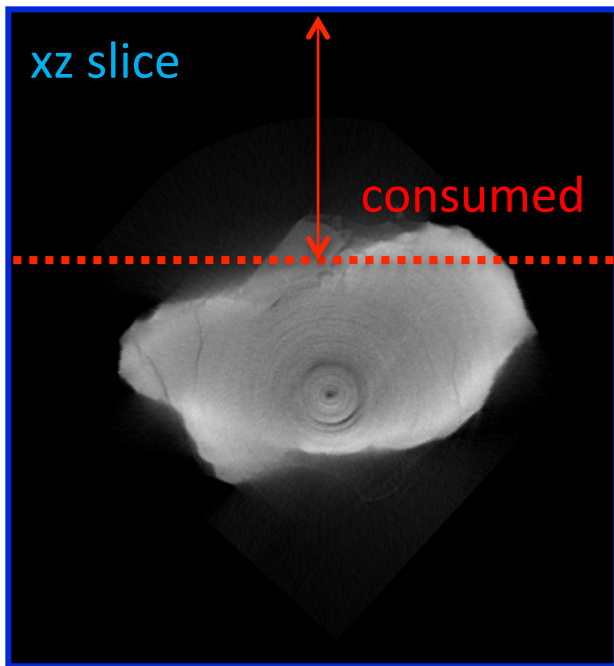


RA-QD02-0027 8 keV

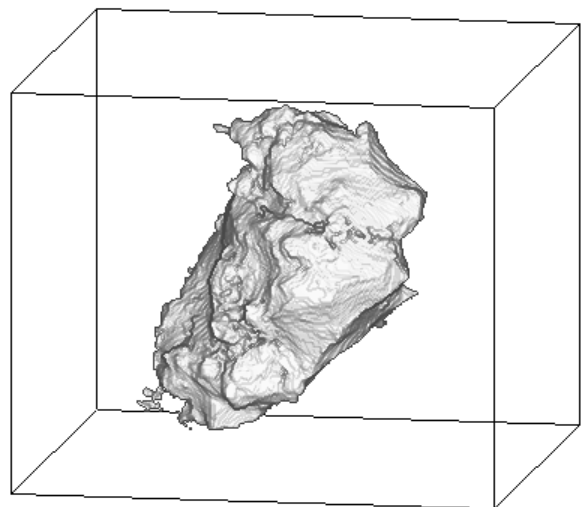


8keV/xy/225.tif

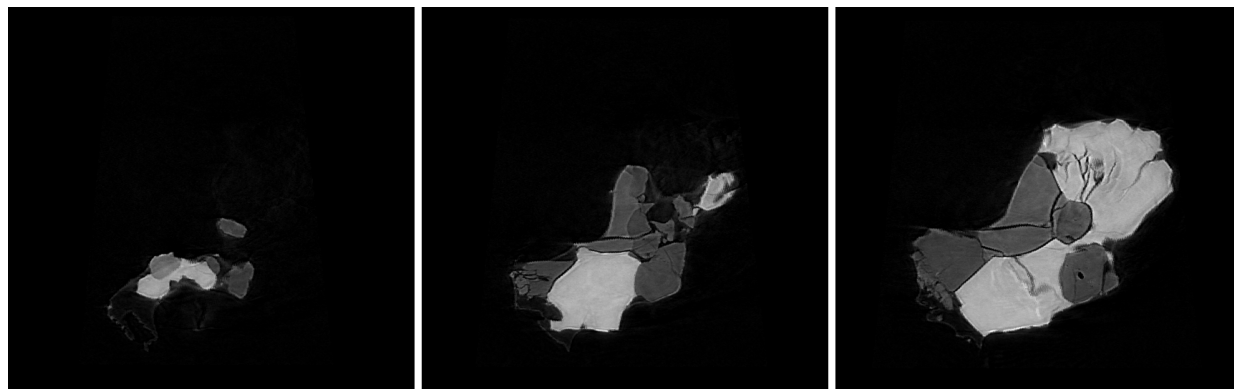
8keV/zy/284.tif



8keV/xz/207.tif



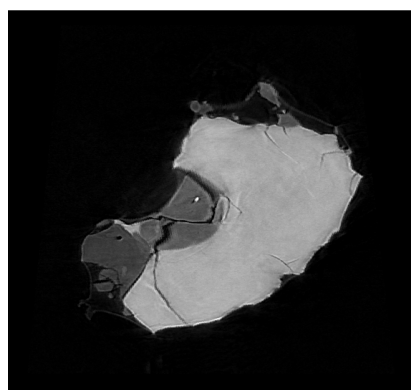
RA-QD02-0027 7 keV catalogue



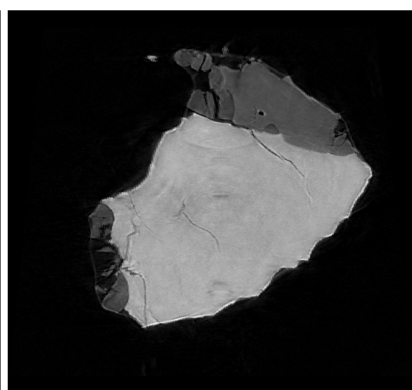
176.tif

202.tif

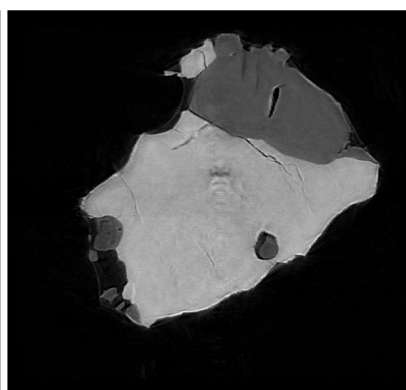
228.tif



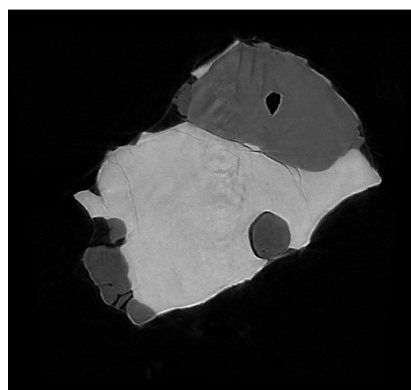
254.tif



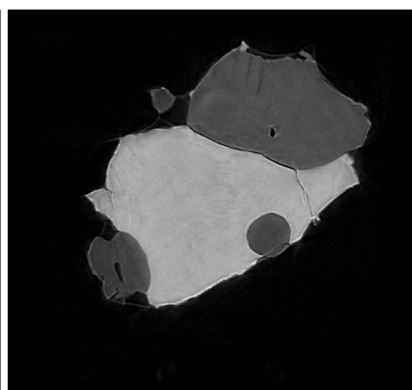
280.tif



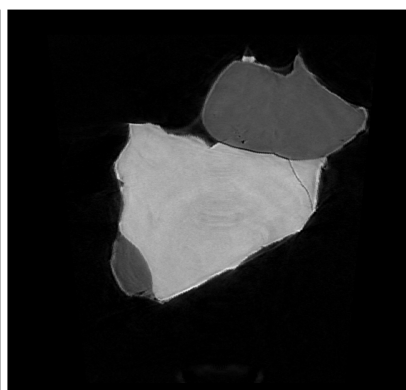
306.tif



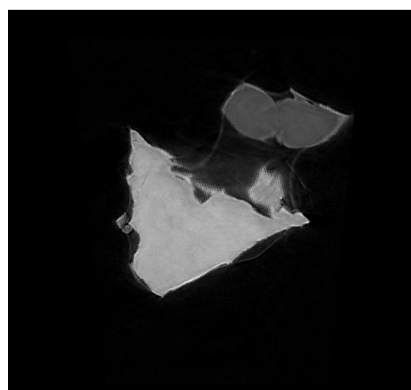
332.tif



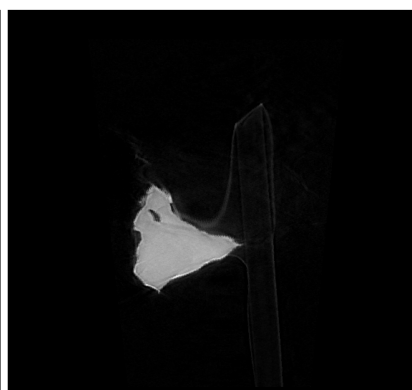
358.tif



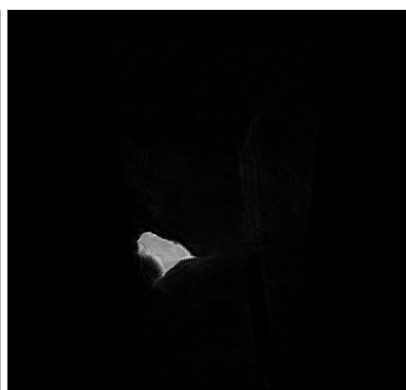
384.tif



410.tif



436.tif

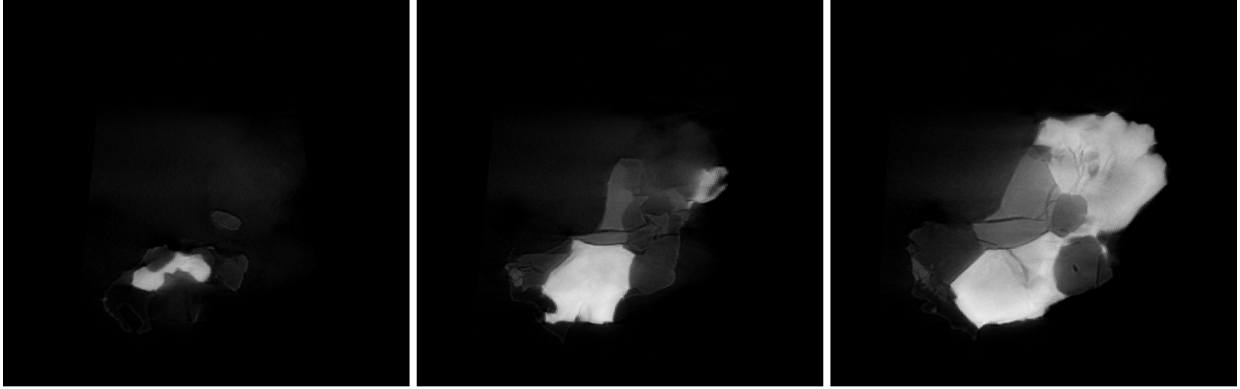


462.tif

dZ = 4.45484 um

21 um
575 cm⁻¹ (LAC)

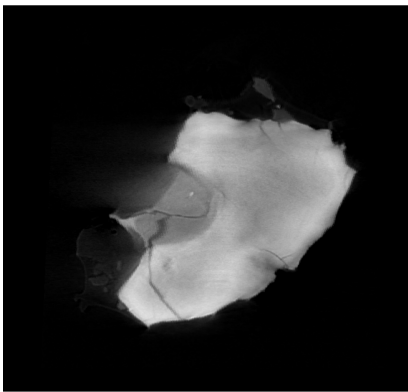
RA-QD02-0027 8 keV catalogue



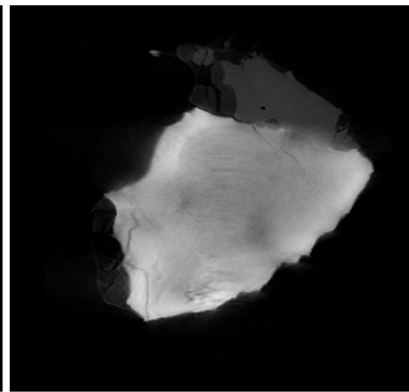
176.tif

202.tif

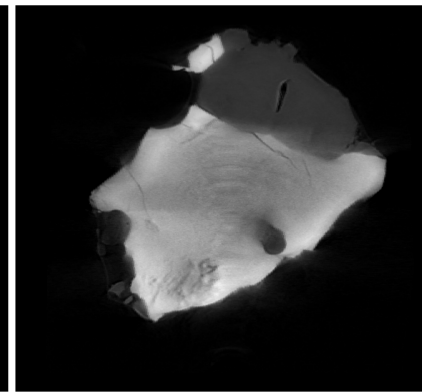
228.tif



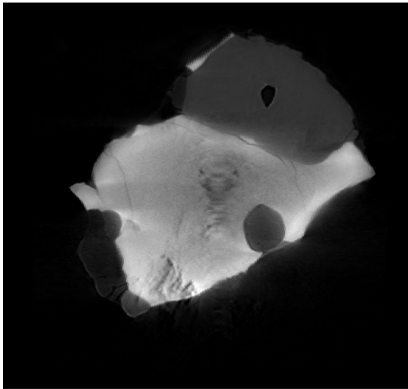
254.tif



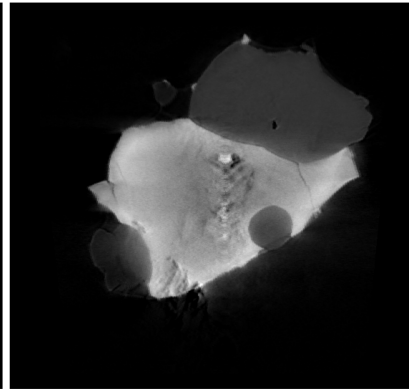
280.tif



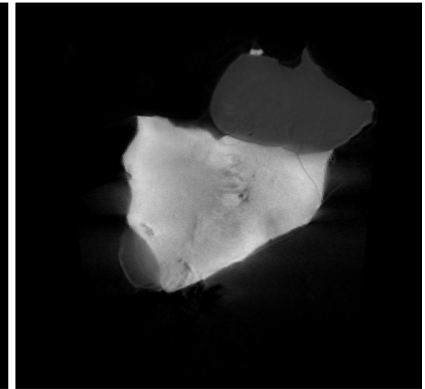
306.tif



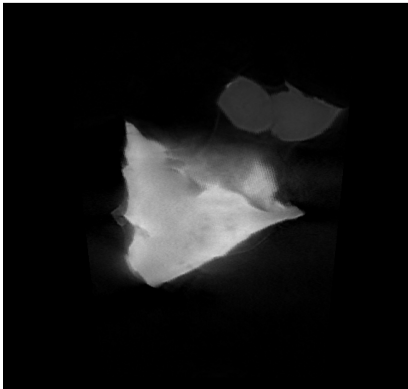
332.tif



358.tif



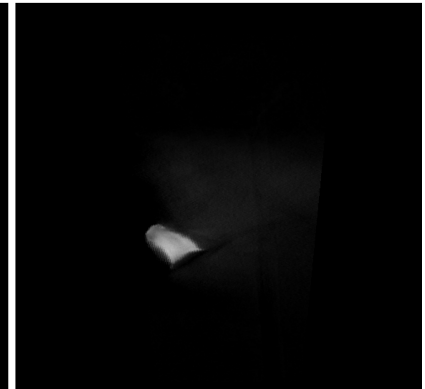
384.tif



410.tif



436.tif



462.tif

dZ = 4.45484 um

21 um
150 cm⁻¹ (LAC)

RA-QD02-0027 Dual energy histogram

