

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0032

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	Ap	Kam
Vol %	52.4	1.44	30.9	15.0	-	-	-	-	-

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-QD02-0032

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

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	52.4	1.44	30.9	15.0	-	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
10.8	15.4	20.7	12895	7.42

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

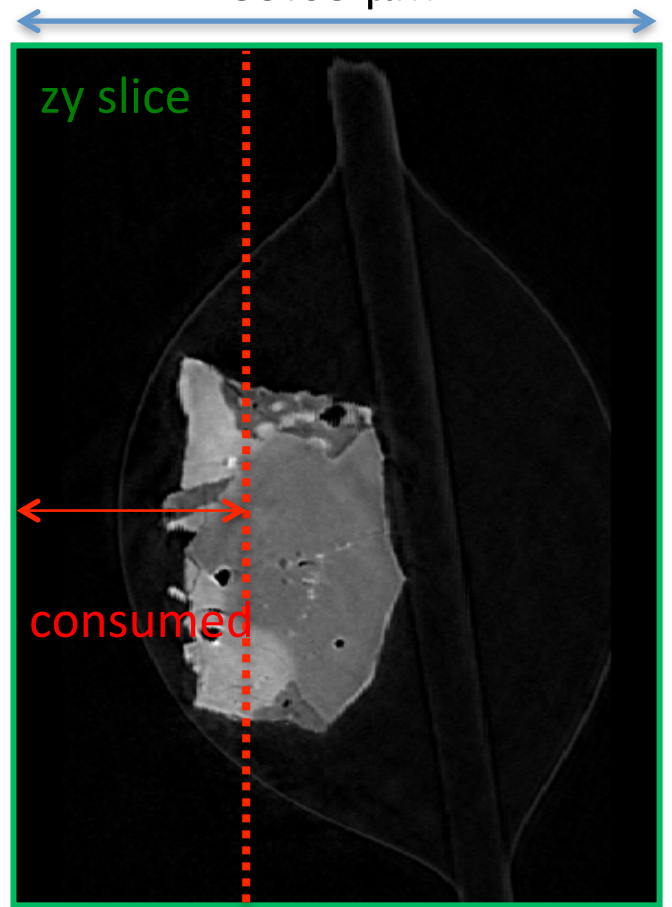
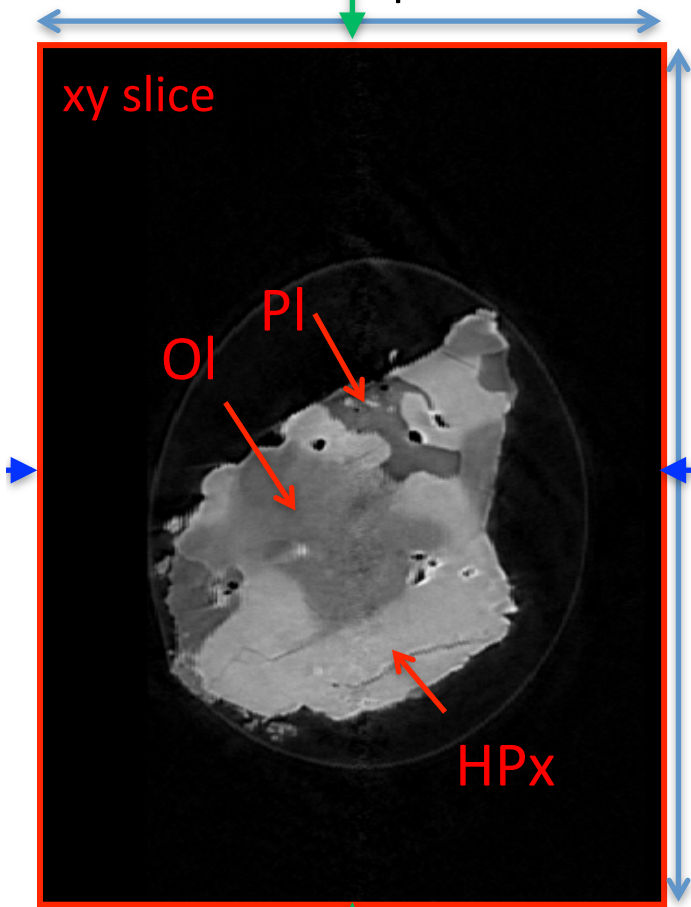
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

RA-QD02-0032 7 keV

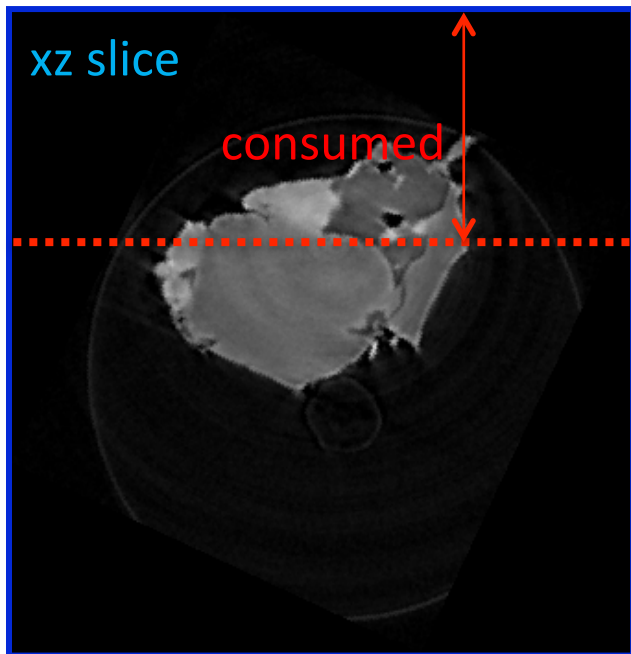
57.57 μm

59.63 μm

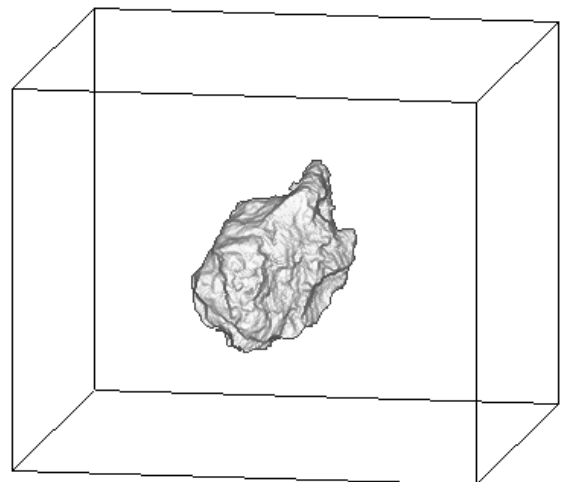


7keV/xy/122.tif

7keV/zy/168.tif



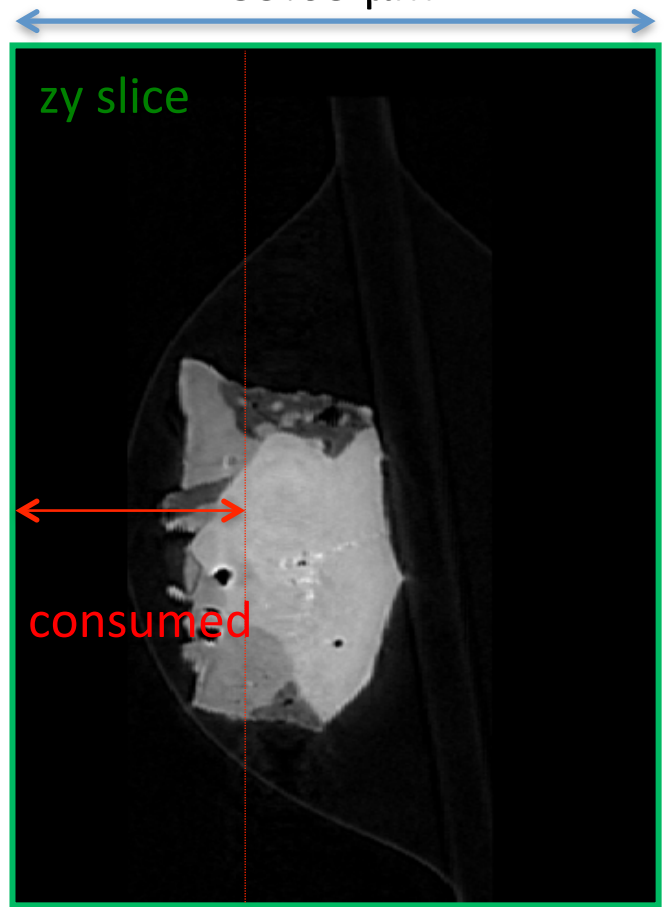
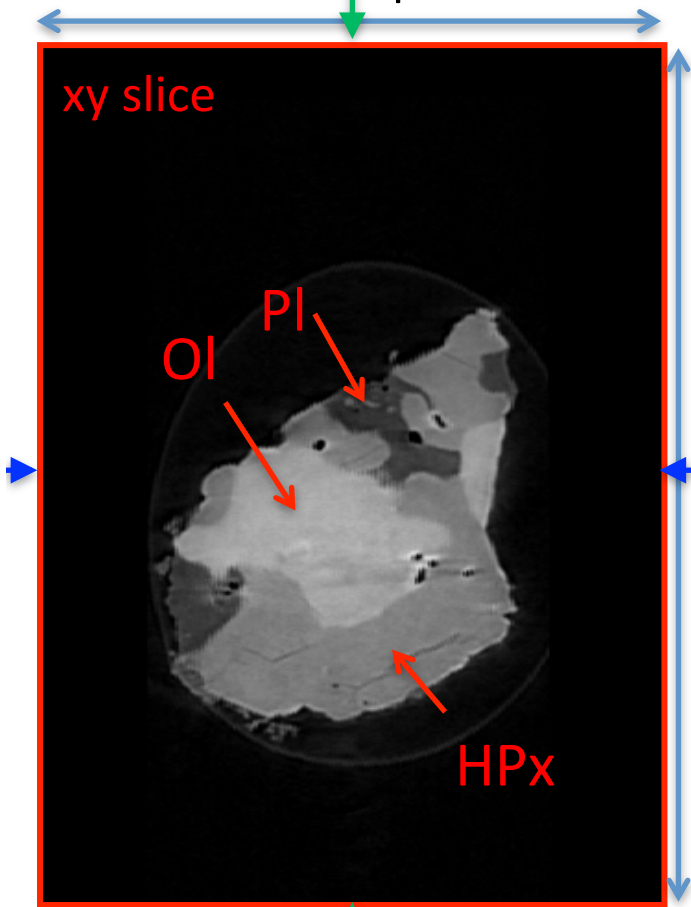
7keV/xz/232.tif



RA-QD02-0032 8 keV

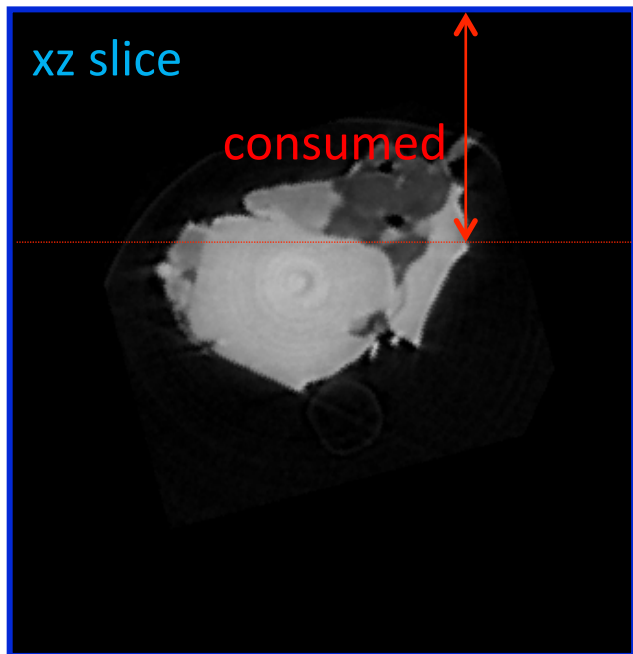
57.57 μm

59.63 μm

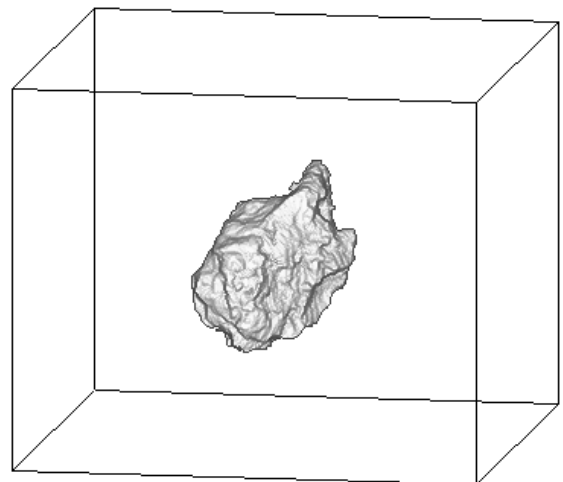


8keV/xy/122.tif

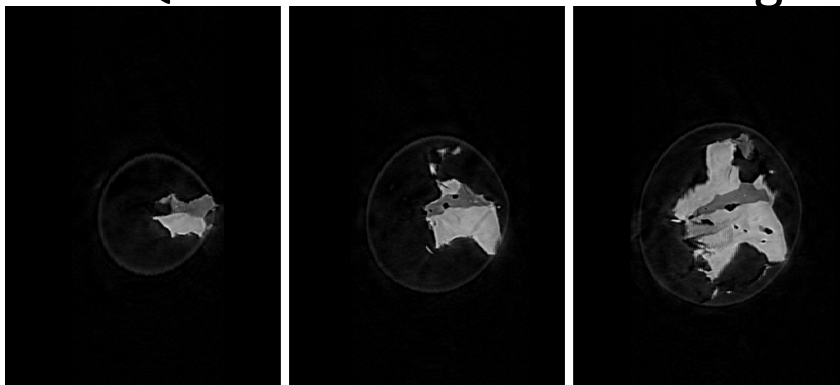
8keV/zy/168.tif



8keV/xz/232.tif



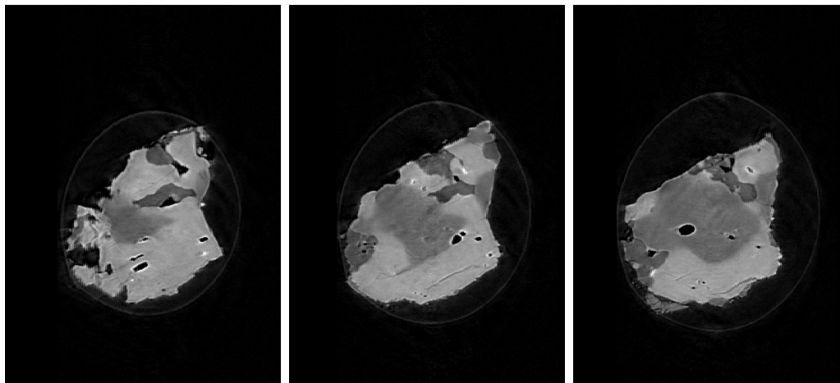
RA-QD02-0032 7 keV catalogue



071.tif

083.tif

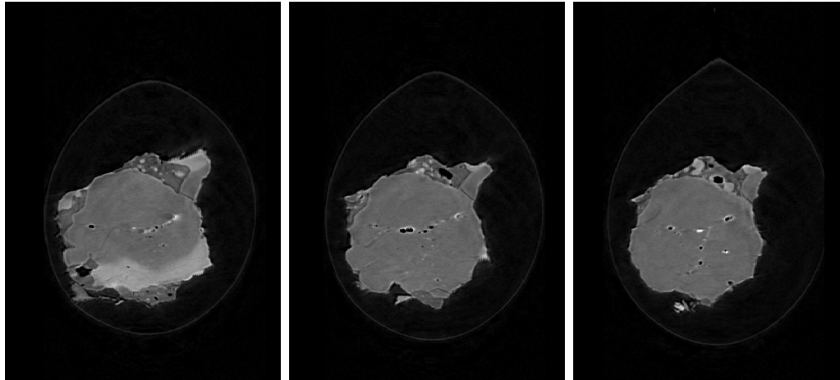
095.tif



107.tif

119.tif

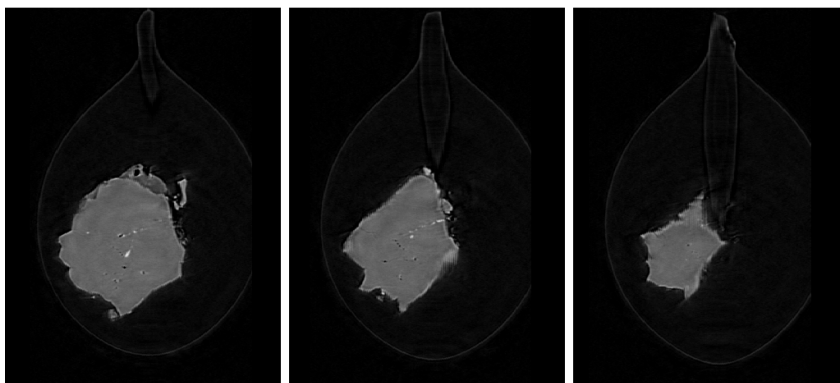
131.tif



143.tif

155.tif

167.tif

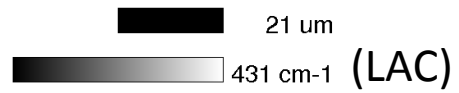


179.tif

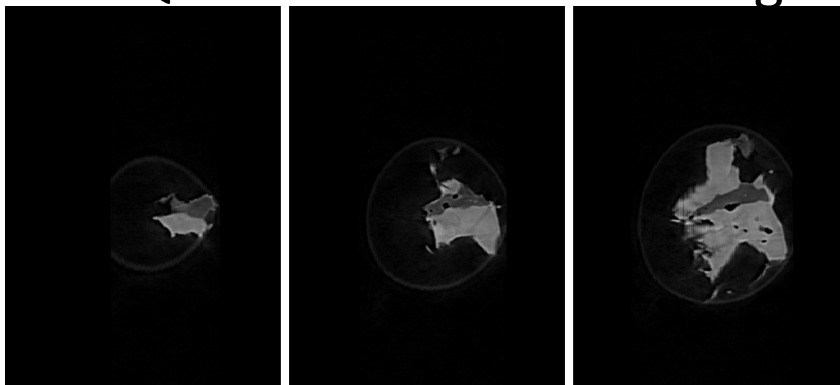
191.tif

203.tif

dZ = 2.05608 um



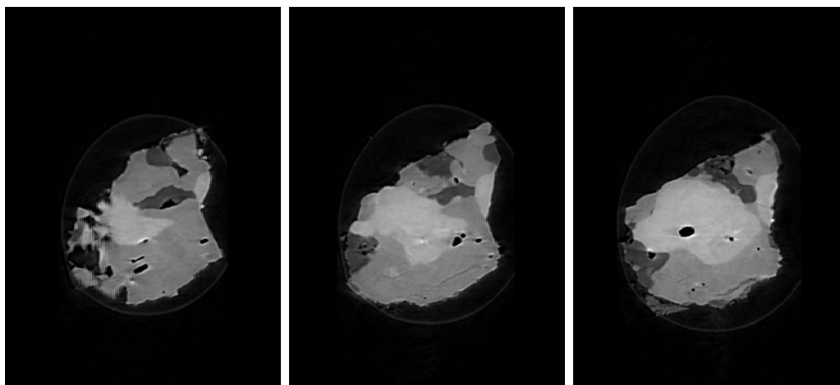
RA-QD02-0032 8 keV catalogue



071.tif

083.tif

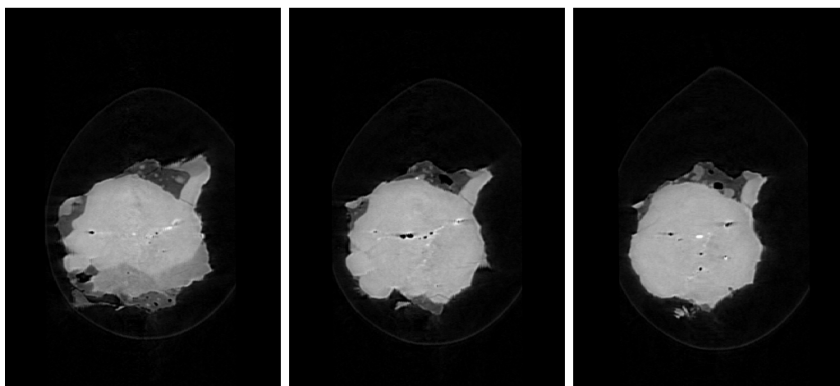
095.tif



107.tif

119.tif

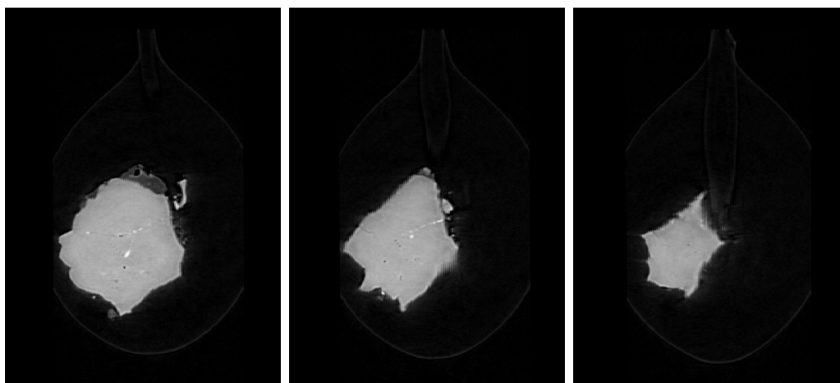
131.tif



143.tif

155.tif

167.tif

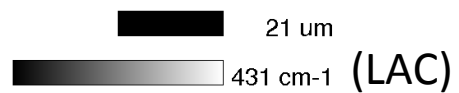


179.tif

191.tif

203.tif

dZ = 2.05608 um



RA-QD02-0032 Dual energy histogram

