

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0054

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/25/2011 (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 %	99.6				0.37				

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-QD02-0054

Operation Date Jan/25/2011 (7 keV)
 Jan/24/2011 (8 keV)
operated by T. Matsumoto (7 keV)
 T. Ogami (8 keV)
analyzed by T. Nagano

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	99.6				0.37				

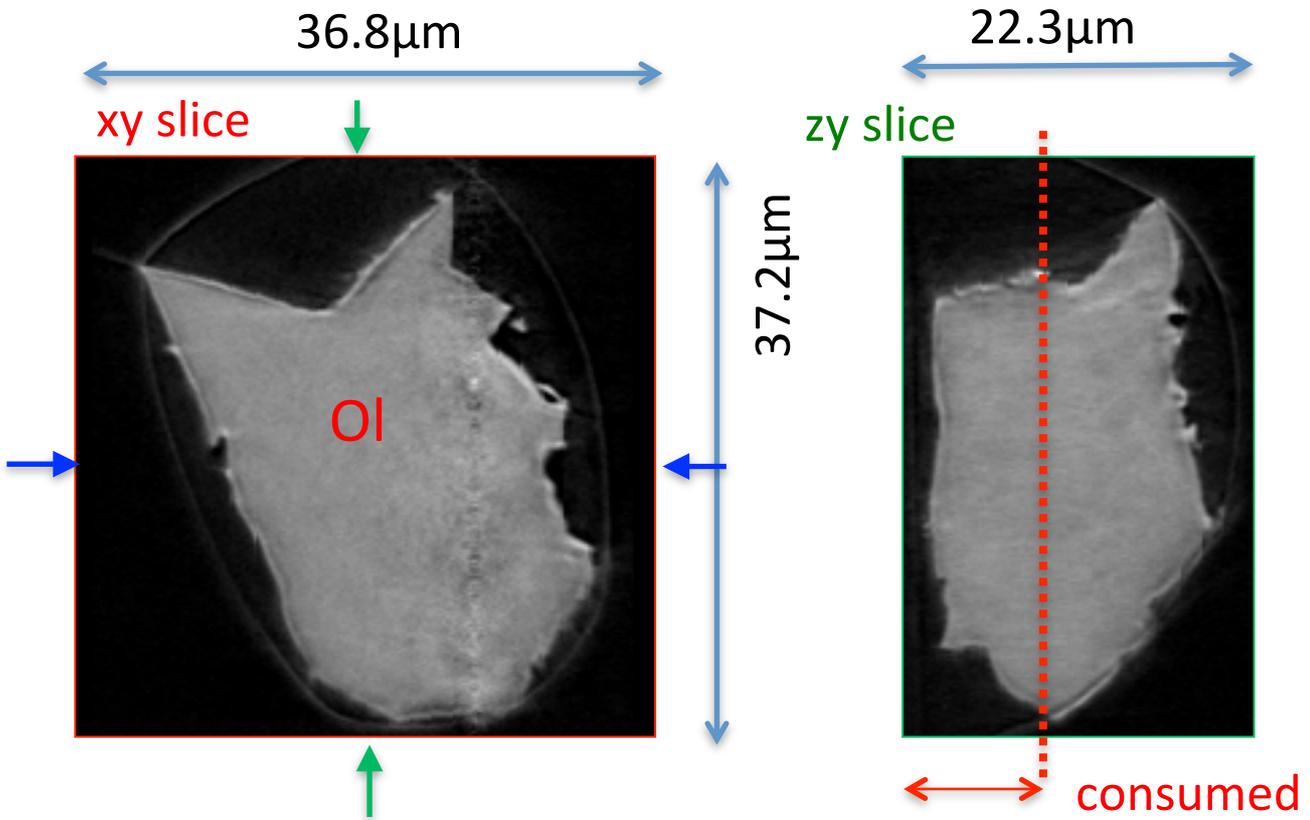
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
10.178	12.657	18.297	8031	0.01

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

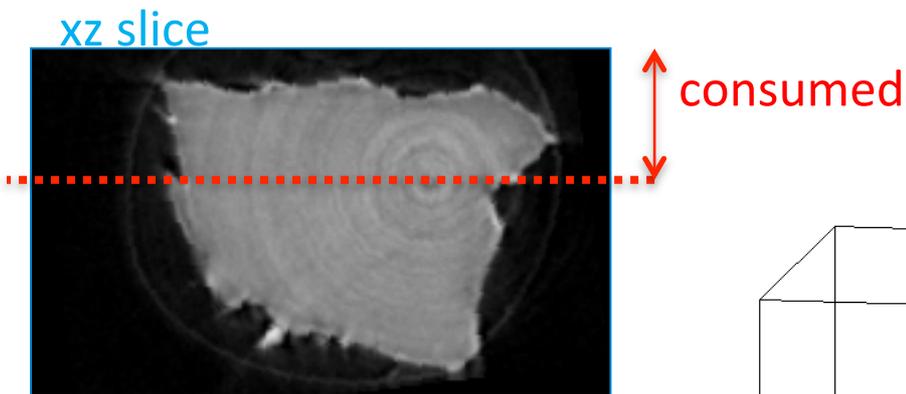
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0054 7keV

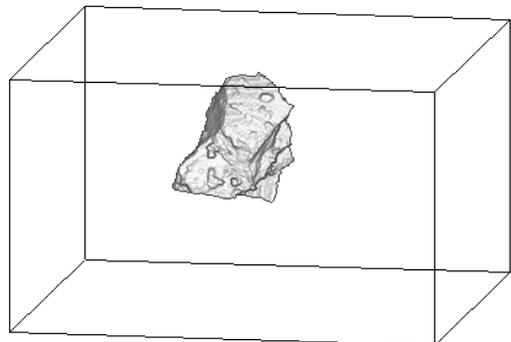


7keV/xy/073.tif

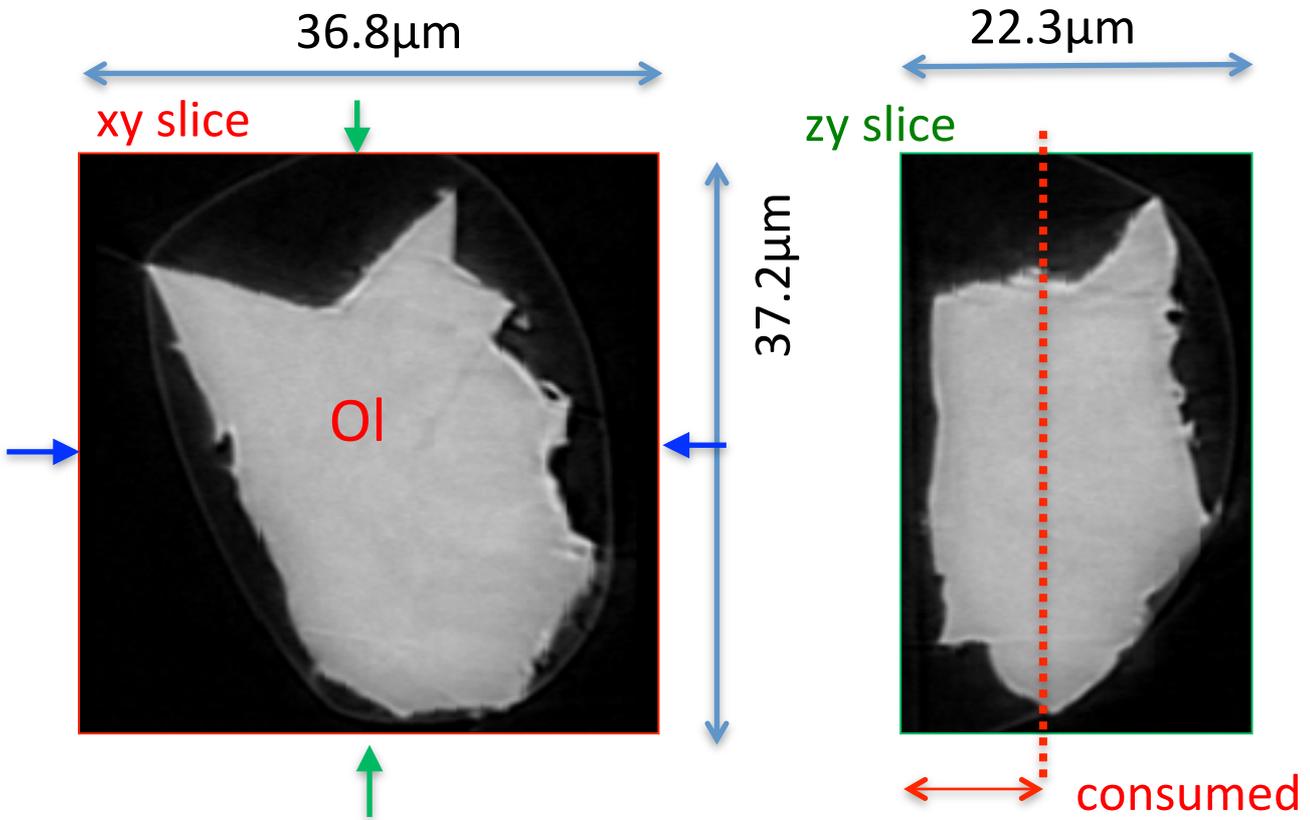
7keV/zy/108.tif



7keV/xz/109.tif

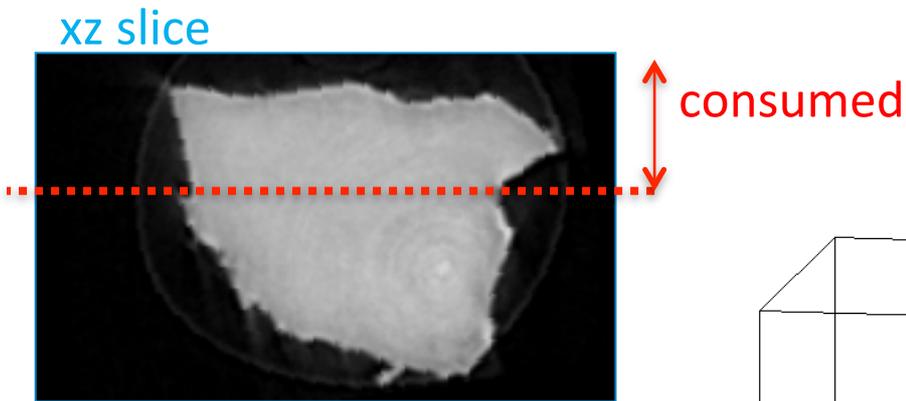


RA-QD02-0054 8keV

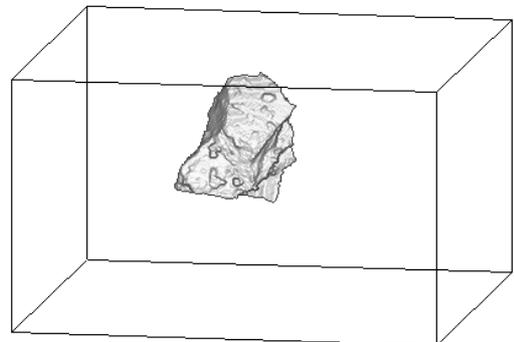


7keV/xy/073.tif

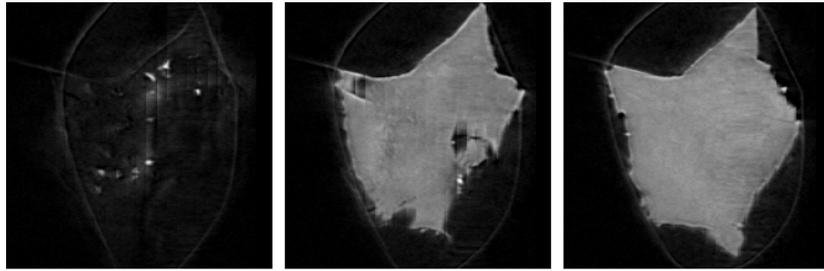
7keV/zy/108.tif



7keV/xz/109.tif



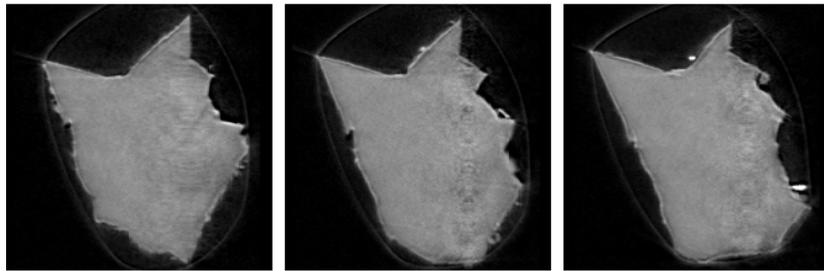
RA-QD02-0054 7keV catalogue



034.tif

043.tif

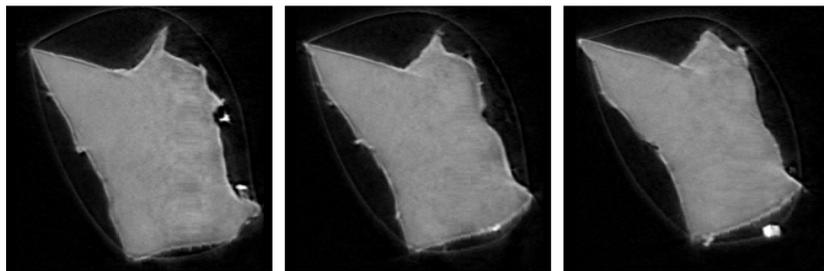
052.tif



061.tif

070.tif

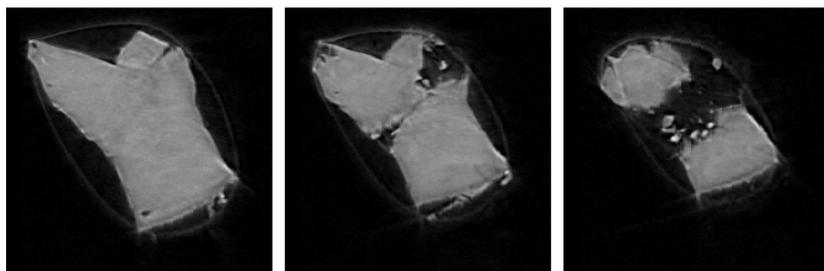
079.tif



088.tif

097.tif

106.tif



115.tif

124.tif

133.tif

dZ = 1.54 μm

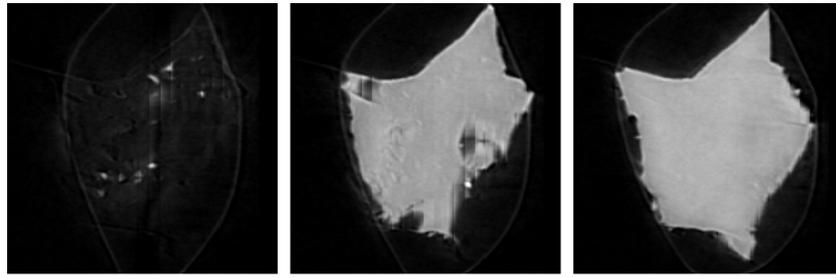


21 μm



287 cm^{-1} (LAC)

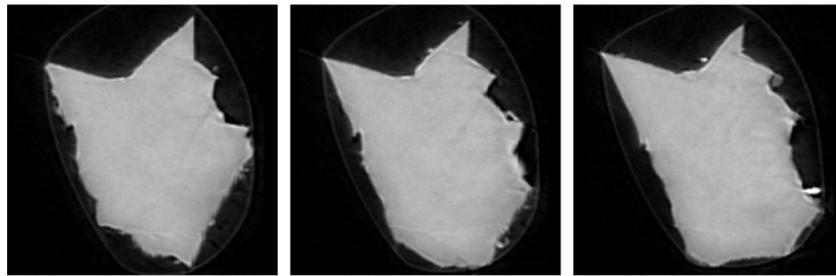
RA-QD02-0054 8keV catalogue



034.tif

043.tif

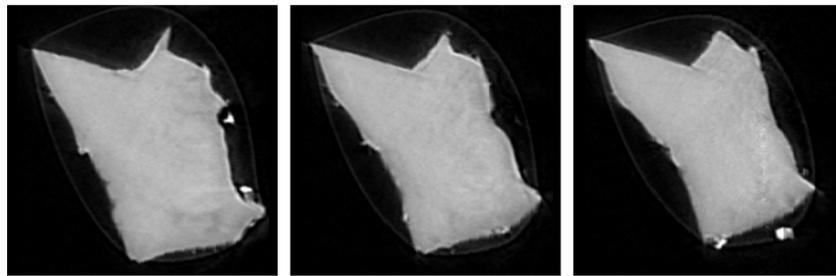
052.tif



061.tif

070.tif

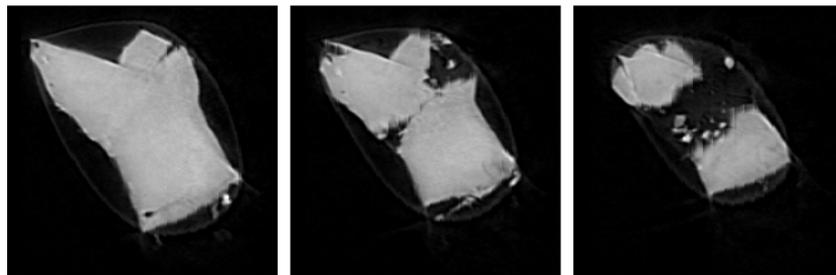
079.tif



088.tif

097.tif

106.tif



115.tif

124.tif

133.tif

dZ = 1.54 μm



21 μm



431 cm^{-1} (LAC)

RA-QD02-0054 Dual energy histogram

