

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0023

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/26/2011 (7 keV)

 Jan/26/2011 (8 keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	96.61	-	-	-	0.39	-	-	-	-

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-QD02-0023

Operation Date Jan/26/2011 (7 keV)
 Jan/26/2011 (8 keV)
operated by T. Nagano (7 keV)
 T. Ogami (8 keV)
analyzed by T. Matsumoto

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	99.61	-	-	-	0.39	-	-	-	-

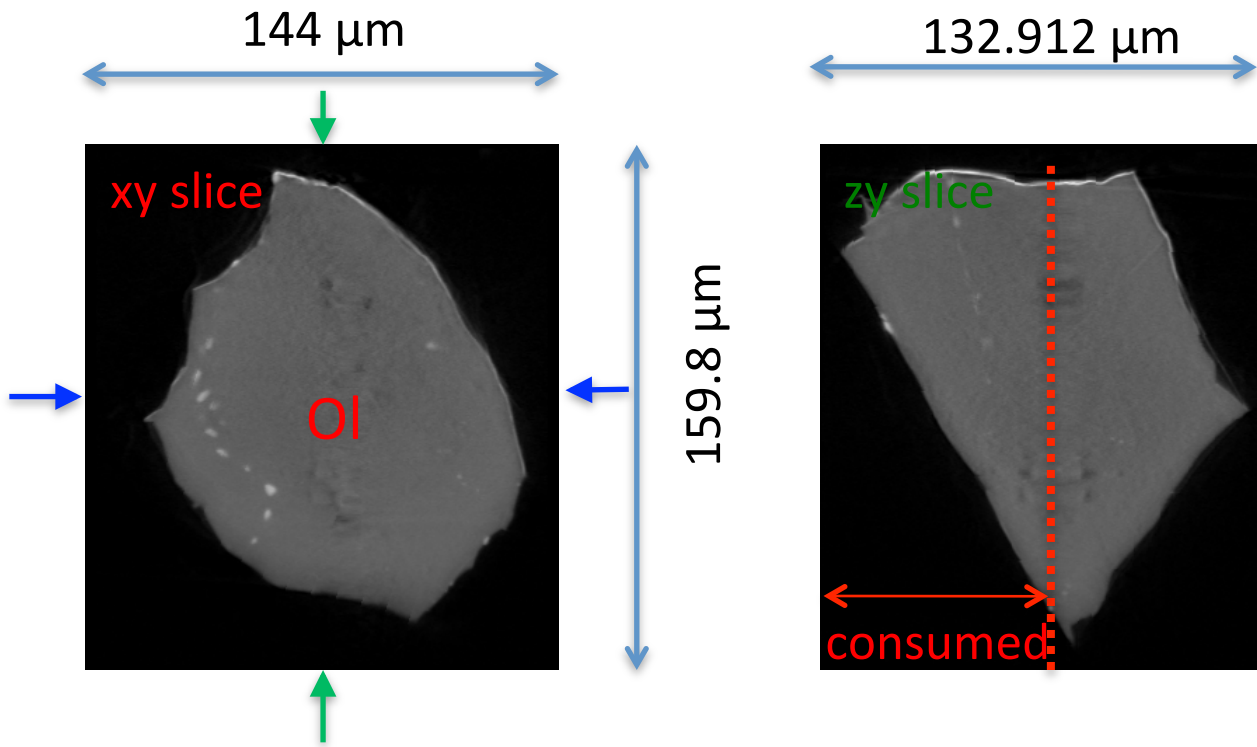
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
49.0	59.8	74.7	781079	0.00026

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

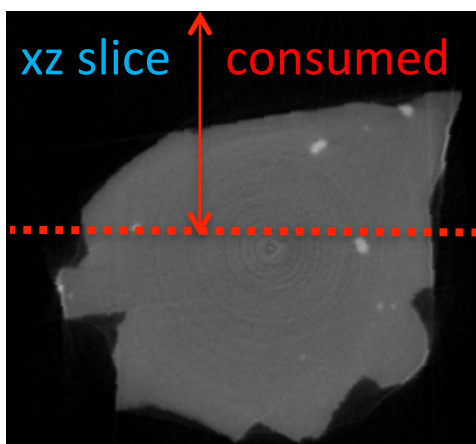
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0023 7 keV

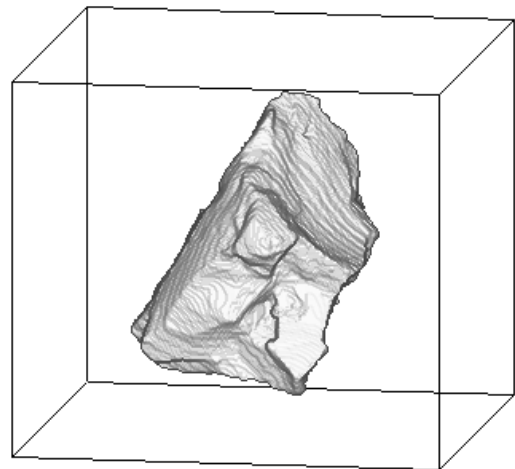


7keV/xy/166.tif

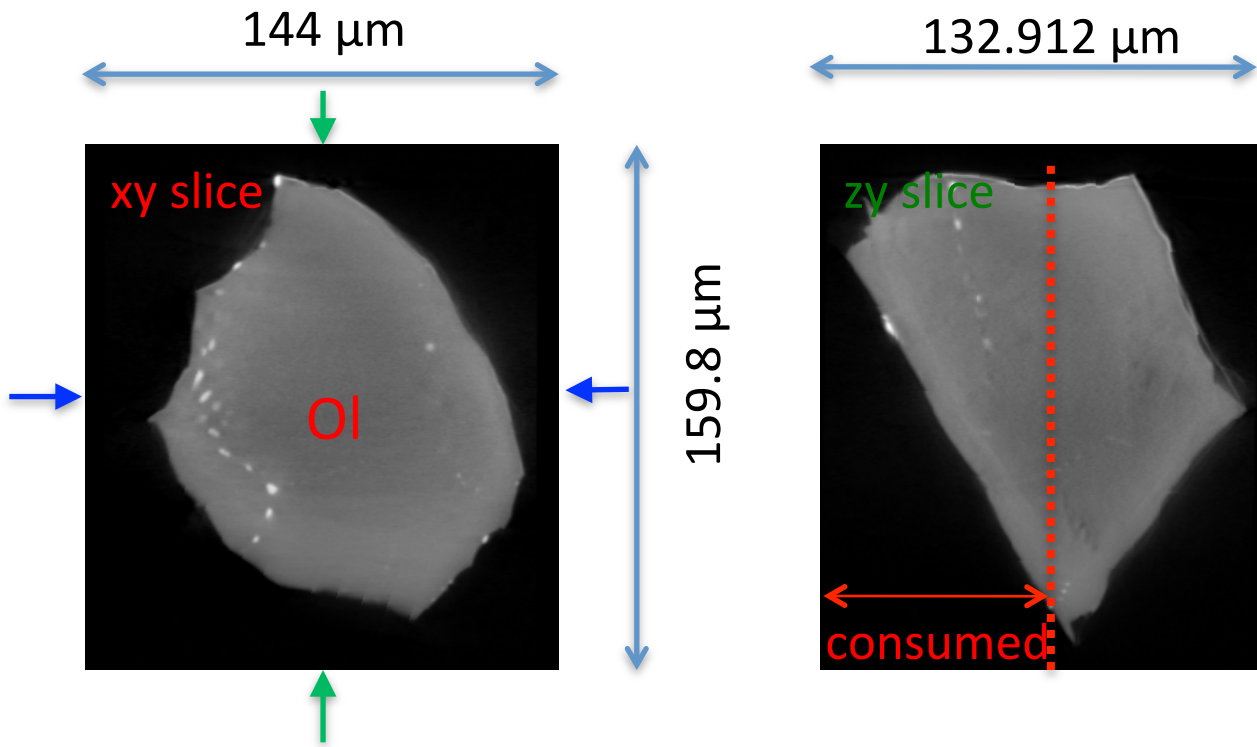
7keV/zy/169.tif



7keV/xz/188.tif

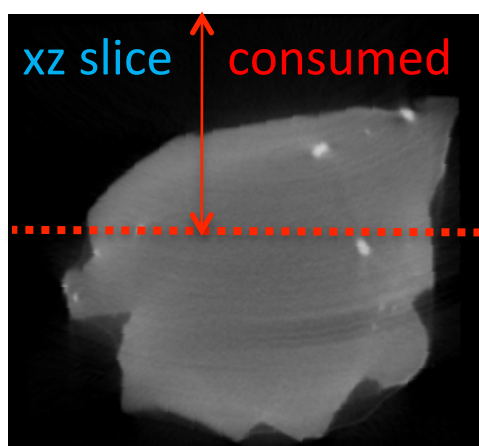


RA-QD02-0023 8 keV

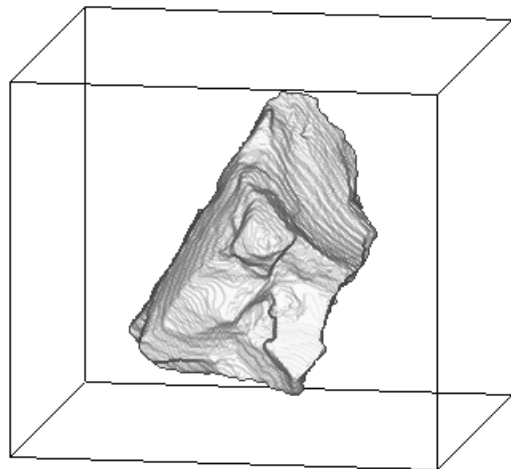


7keV/xy/166.tif

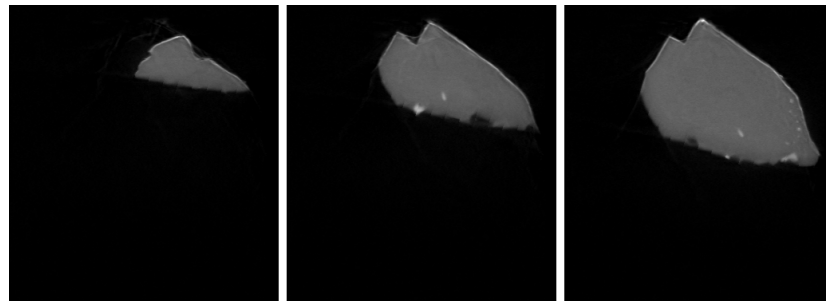
7keV/zy/169.tif



7keV/xz/188.tif



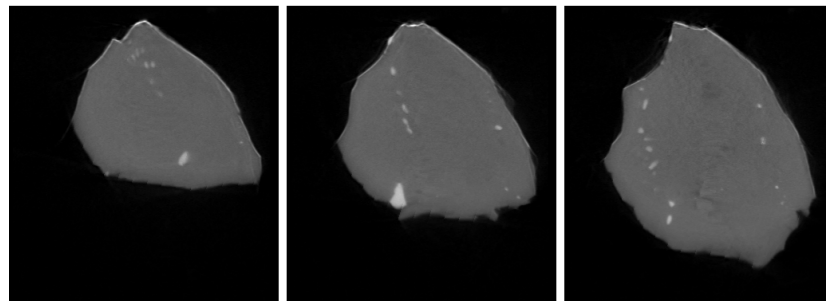
RA-QD02-0023 7 keV catalogue



034.tif

059.tif

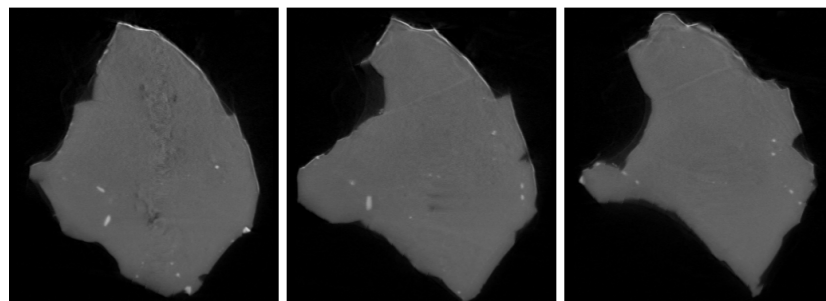
084.tif



109.tif

134.tif

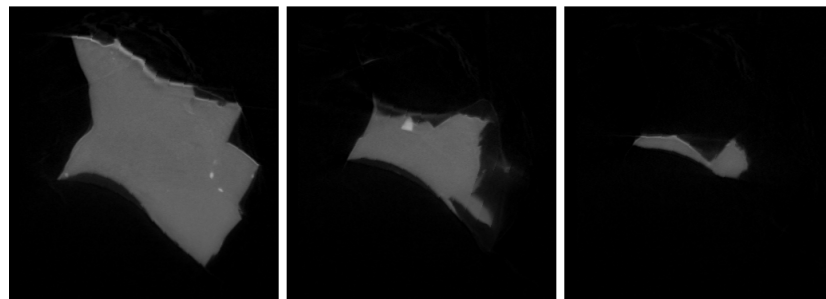
159.tif



184.tif

209.tif

234.tif




259.tif

284.tif

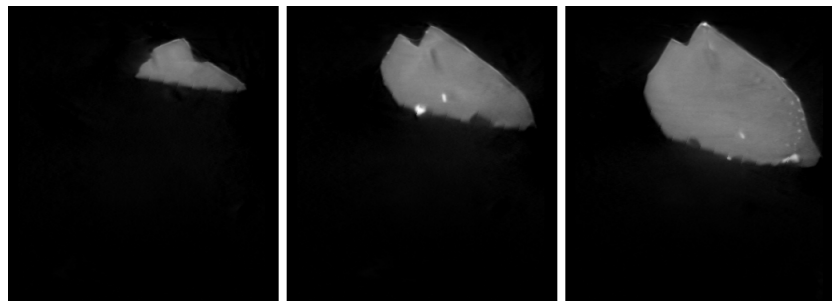
309.tif

dZ = 21.30 μm

 54 μm

 431 cm^{-1} (LAC)

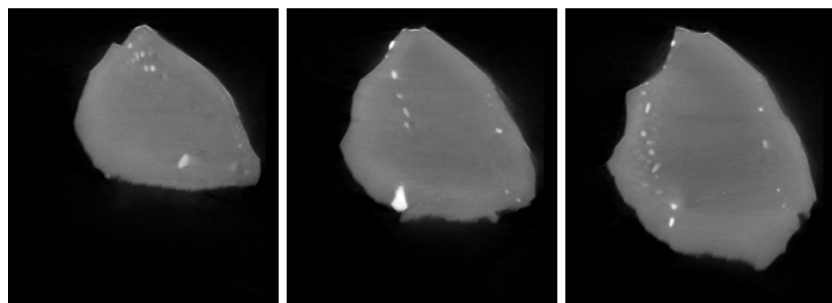
RA-QD02-0023 8 keV catalogue



034.tif

059.tif

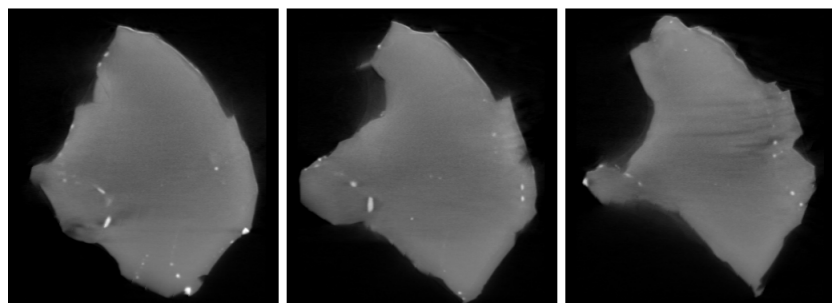
084.tif



109.tif

134.tif

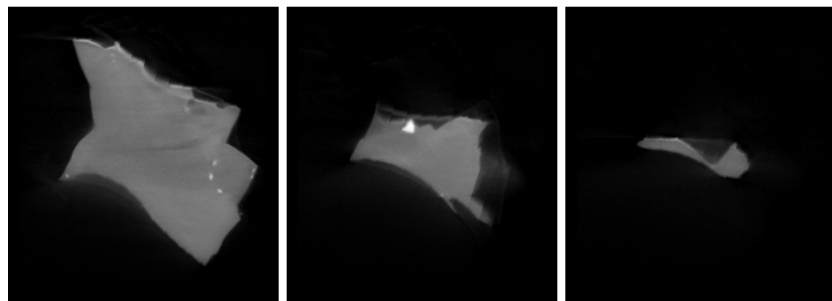
159.tif



184.tif

209.tif

234.tif




259.tif

284.tif

309.tif

dZ = 21.30 μm

 54 μm

 575 cm^{-1} (LAC)

RA-QD02-0023 Dual energy histogram

