

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0047

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 %	92.9	5.33	1.76						

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-QD02-0047

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

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	92.9	5.33	1.76						

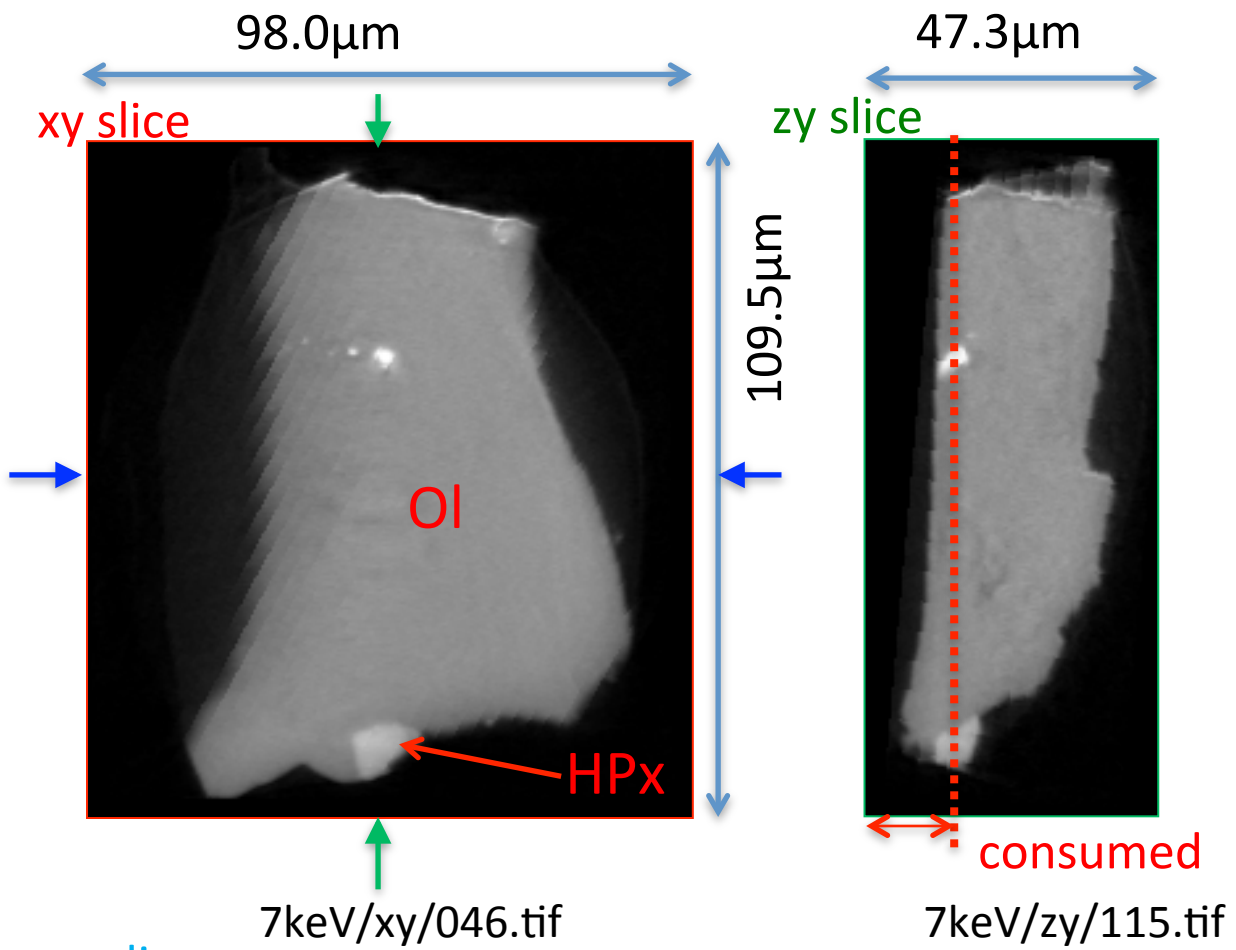
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
16.1	46.1	54.0	148570	0.00

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

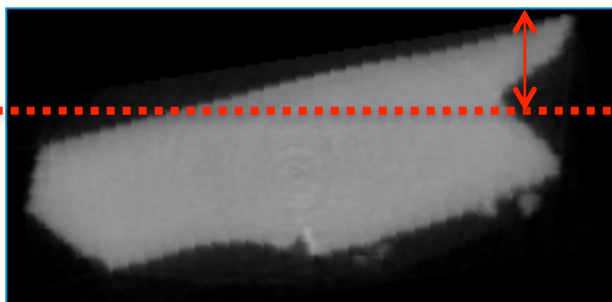
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

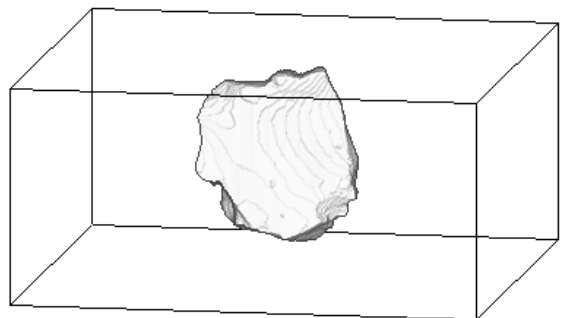
RA-QD02-0047 7keV



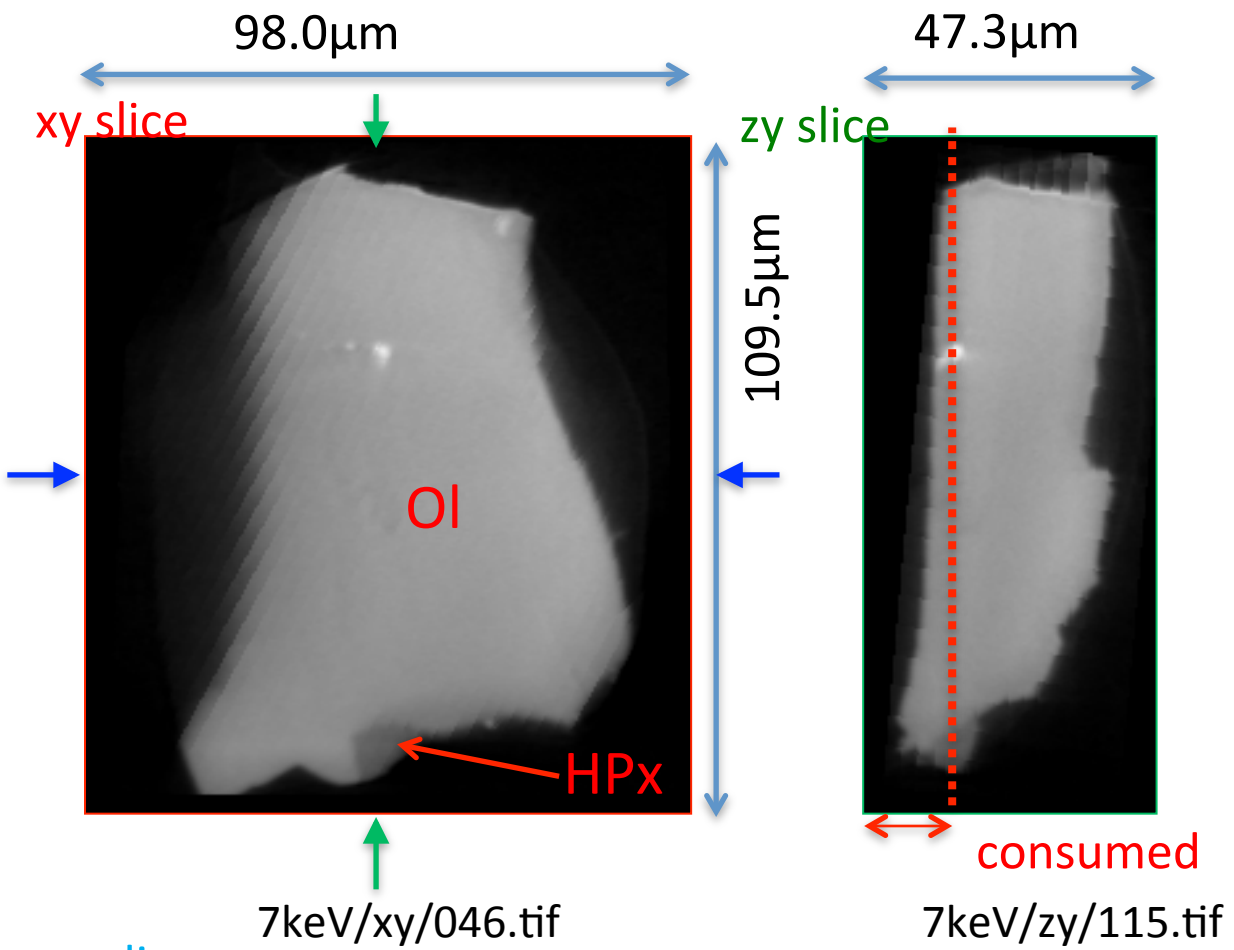
xz slice



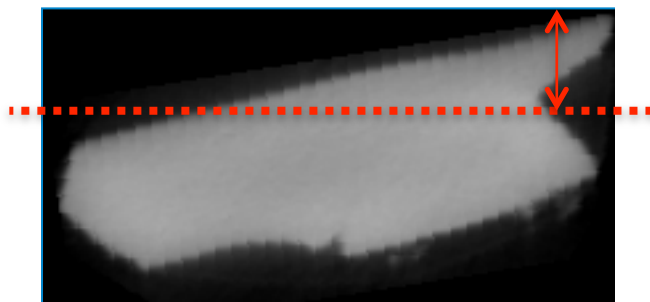
7keV/xz/129.tif



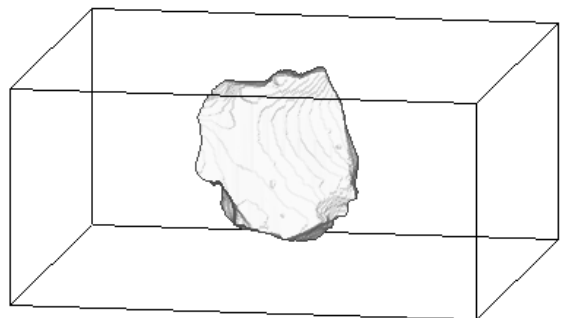
RA-QD02-0047 8keV



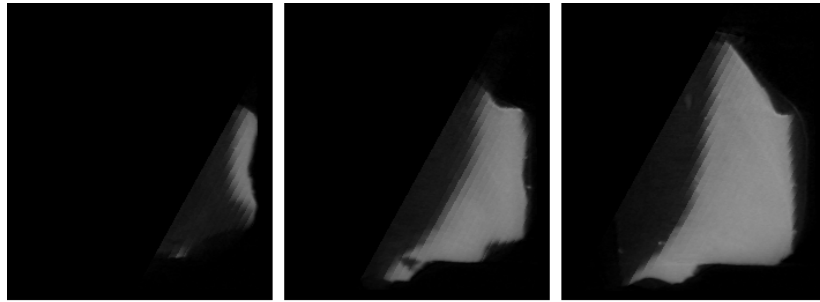
xz slice



7keV/xz/129.tif



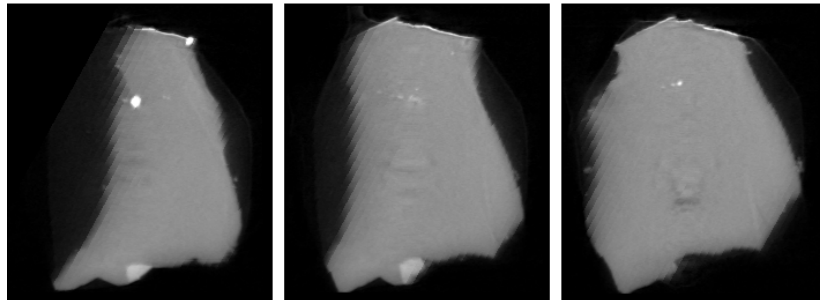
RA-QD02-0047 7keV catalogue



016.tif

024.tif

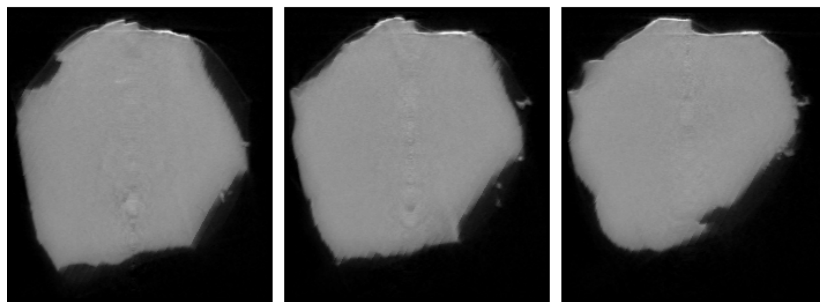
032.tif



040.tif

048.tif

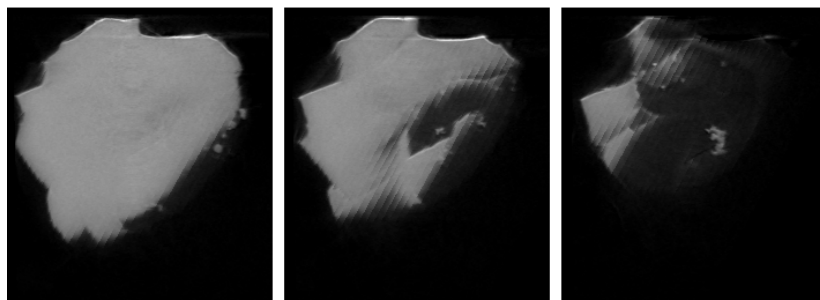
056.tif



064.tif

072.tif

080.tif



088.tif

096.tif

104.tif

dZ = 3.408 um

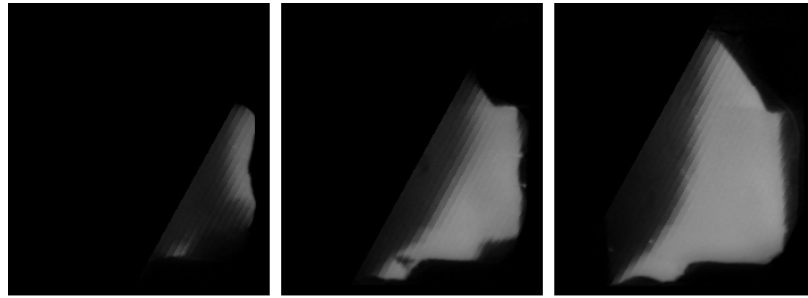


54 um



287 cm⁻¹ (LAC)

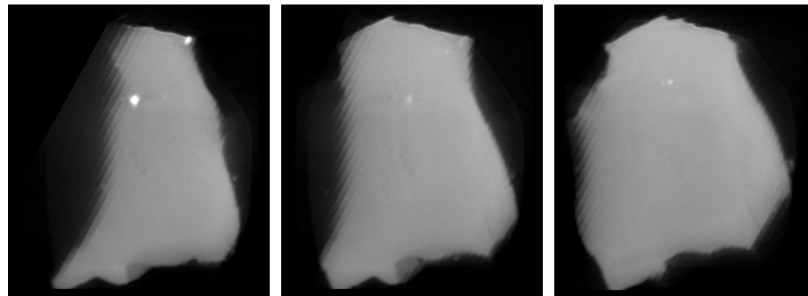
RA-QD02-0047 8keV catalogue



016.tif

024.tif

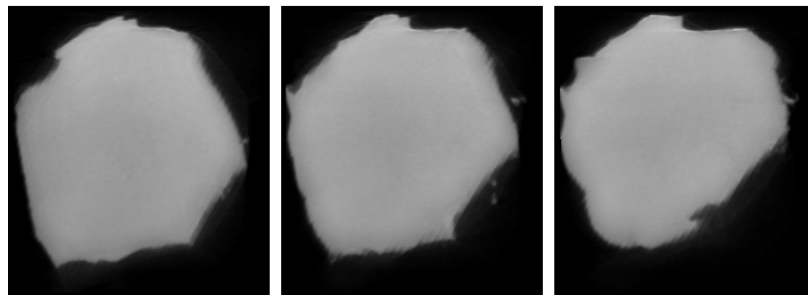
032.tif



040.tif

048.tif

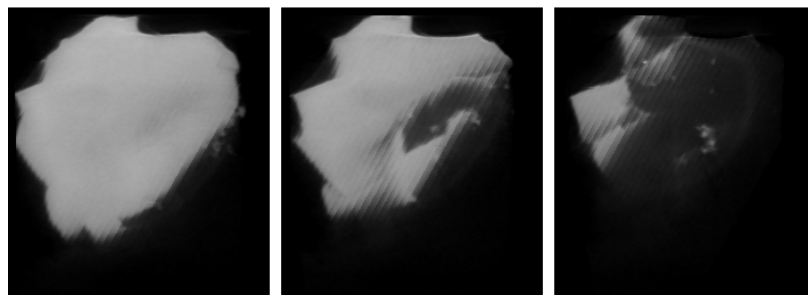
056.tif



064.tif

072.tif

080.tif



088.tif

096.tif

104.tif

dZ = 3.408 um



54 um



431 cm-1 (LAC)

RA-QD02-0047 Dual energy histogram

