

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0019

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 %	90.34	-	-	7.69	1.96	-	-	-	-

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-QD02-0019

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

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	90.34	-	-	7.69	1.96	-	-	-	-

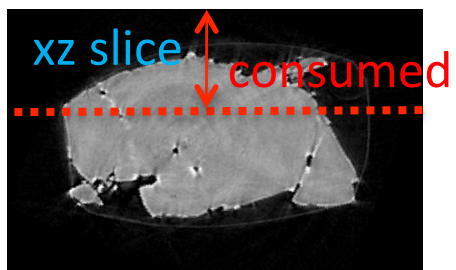
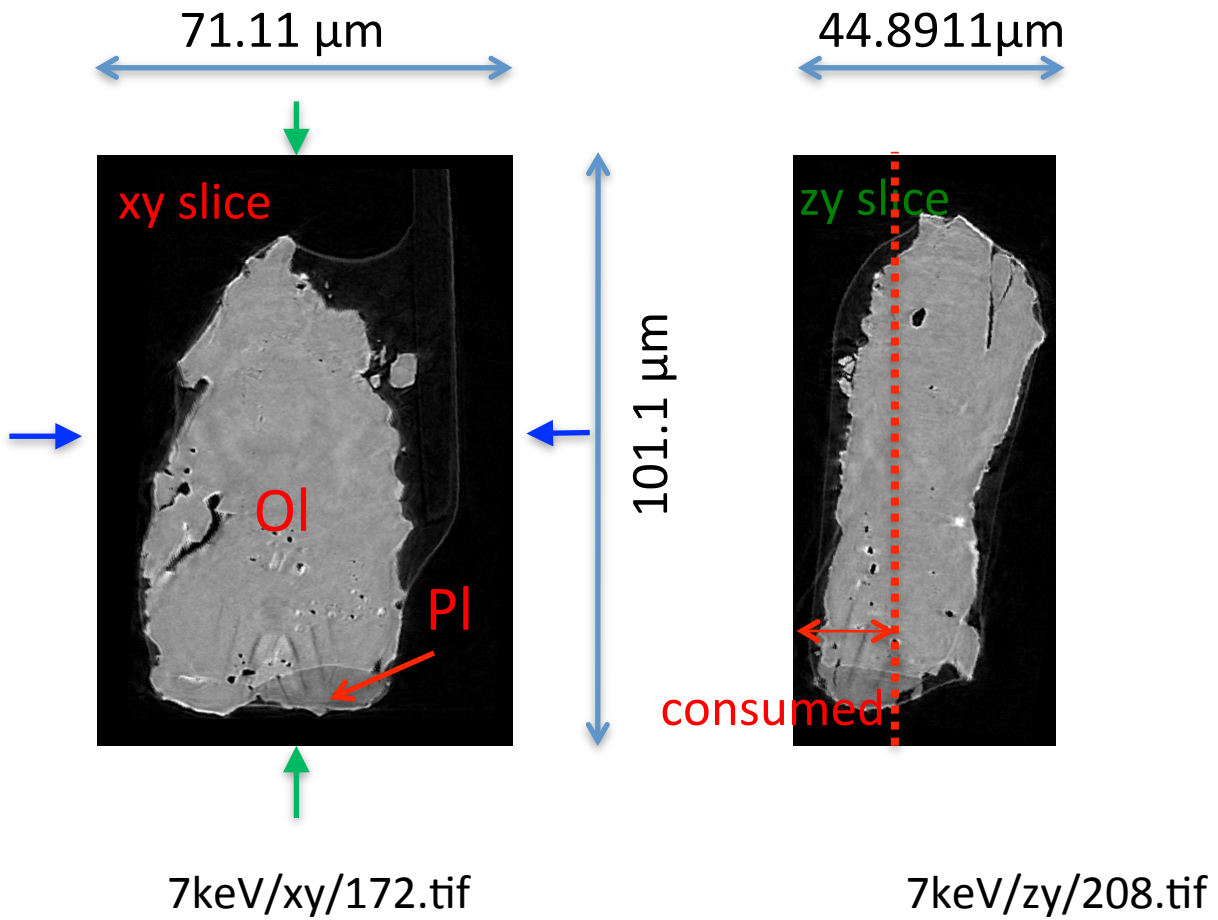
A (μm)	B (μm)	C (μm)	V(μm^3)	Porosity (%)
15.8	26.9	49.1	76372	3.89

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

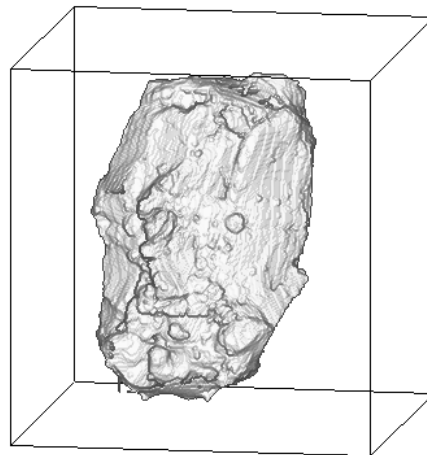
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

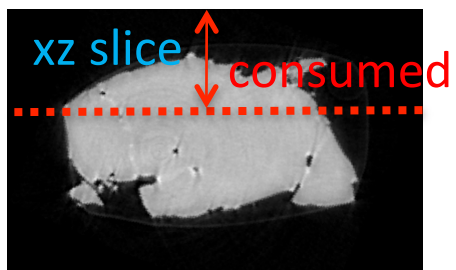
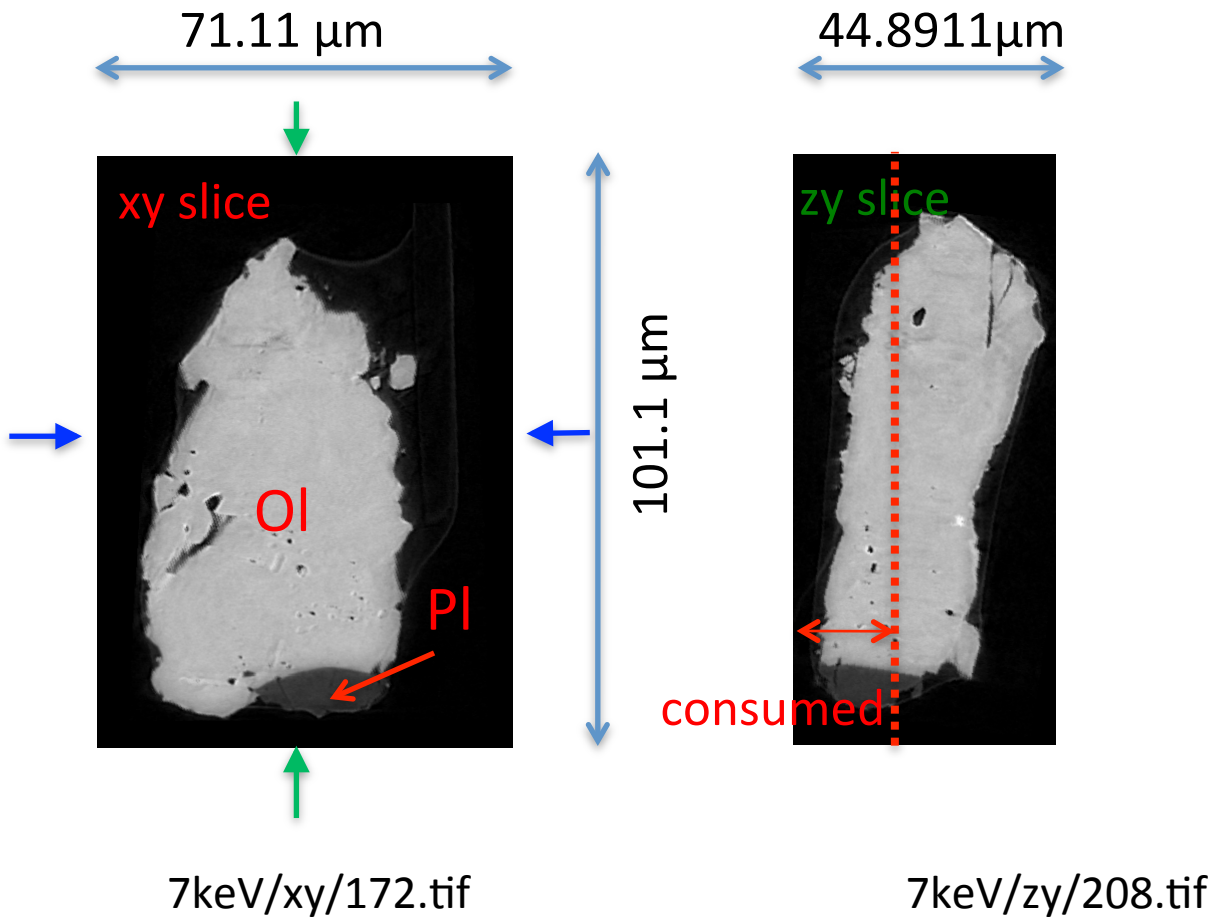
RA-QD02-0019 7 keV



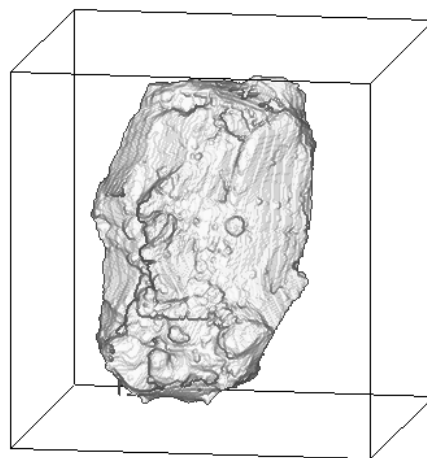
7keV/xz/295.tif



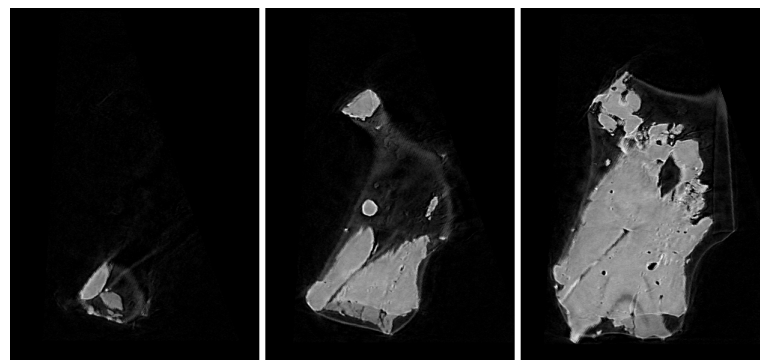
RA-QD02-0019 8 keV



7keV/xz/295.tif



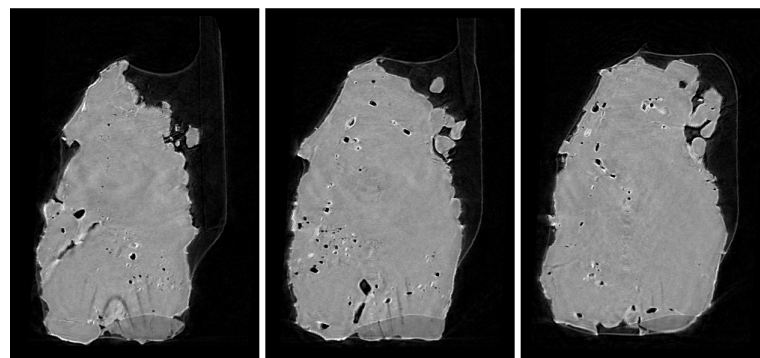
RA-QD02-0019 7 keV catalogue



108.tif

128.tif

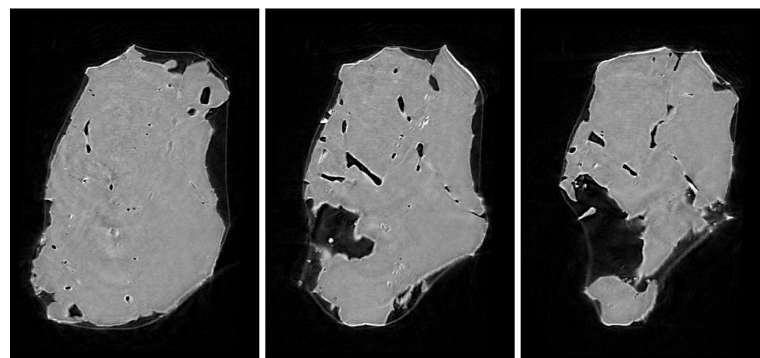
148.tif



168.tif

188.tif

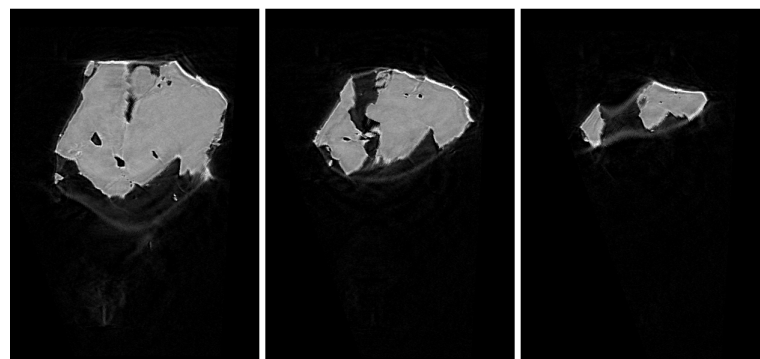
208.tif



228.tif

248.tif

268.tif




288.tif

308.tif

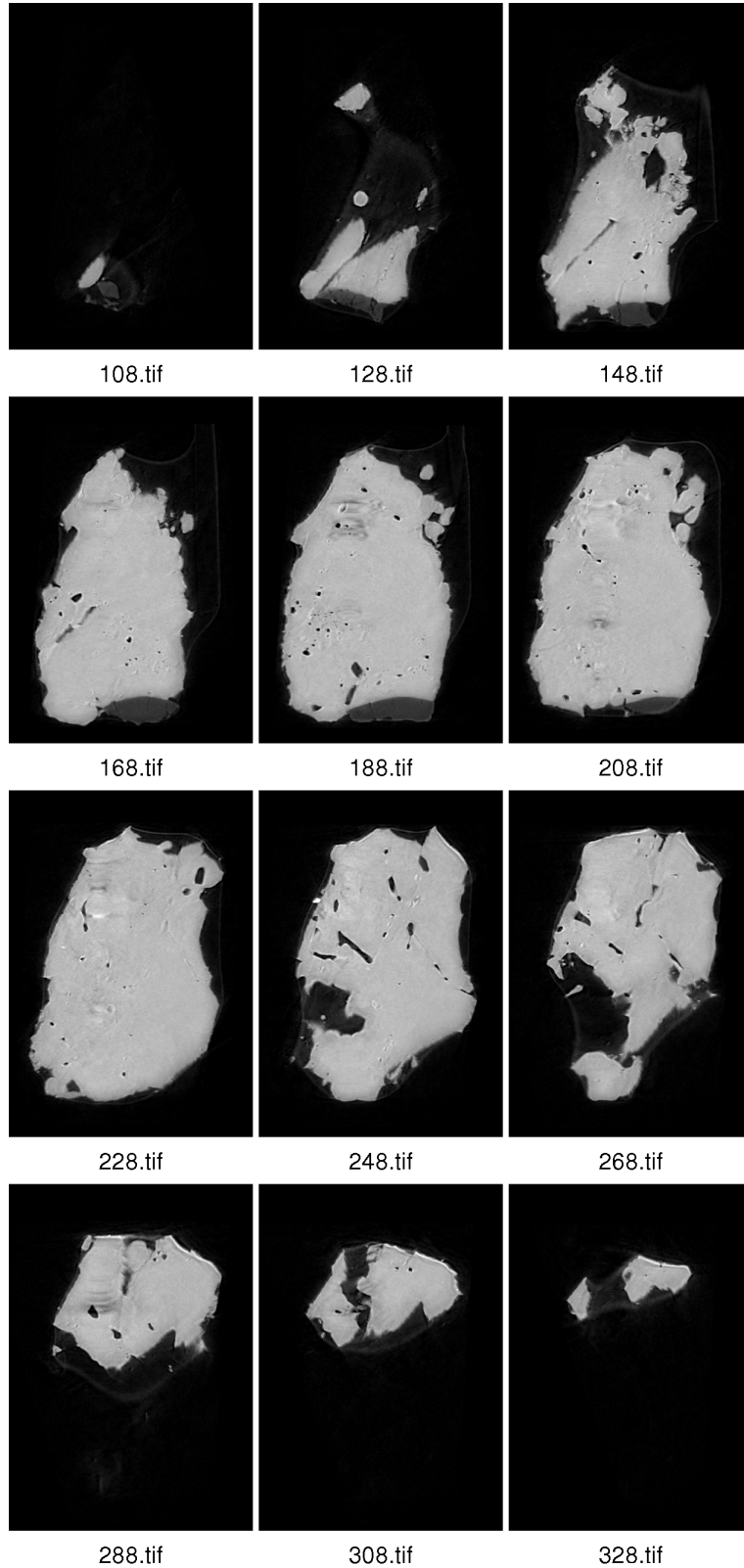
328.tif

dZ = 3.4280 μm

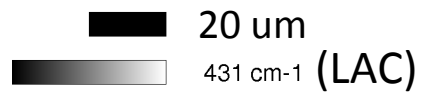
 20 μm

 287 cm^{-1} (LAC)

RA-QD02-0019 8 keV catalogue



dZ = 3.4280 μm



RA-QD02-0019 Dual energy histogram

