

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0009

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/22/2011(7keV)

 Jan/22/2011(8keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	7.33	83.9	-	8.78	-	-	-	-	-

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-QD02-0009

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

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	7.33	83.9	-	8.78	-	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
9.44	26.644	40.079	42245	8.81

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

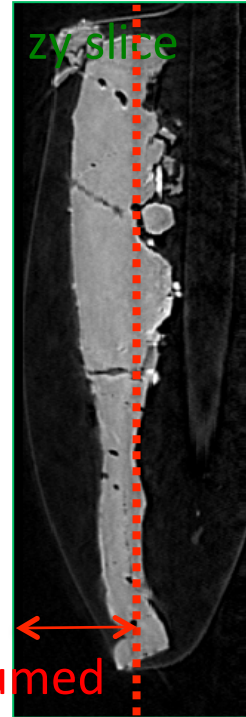
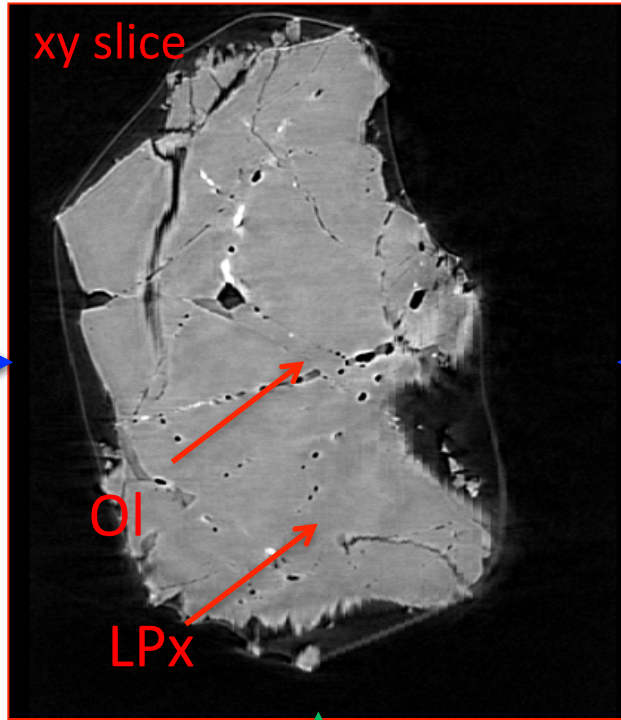
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

RA-QD02-0009 7 keV

71.1 μm

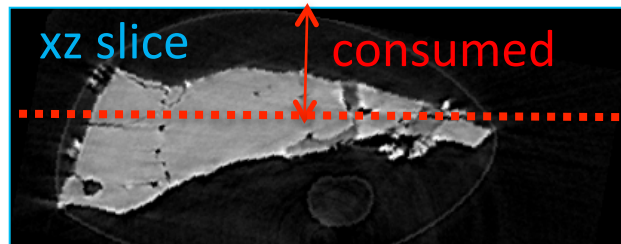
27.4 μm



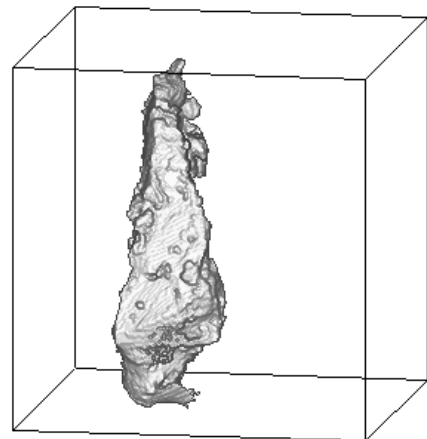
82.6 μm

7keV/xy/104.tif

7keV/zy/207.tif



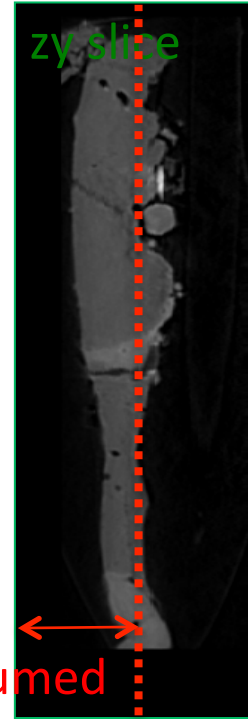
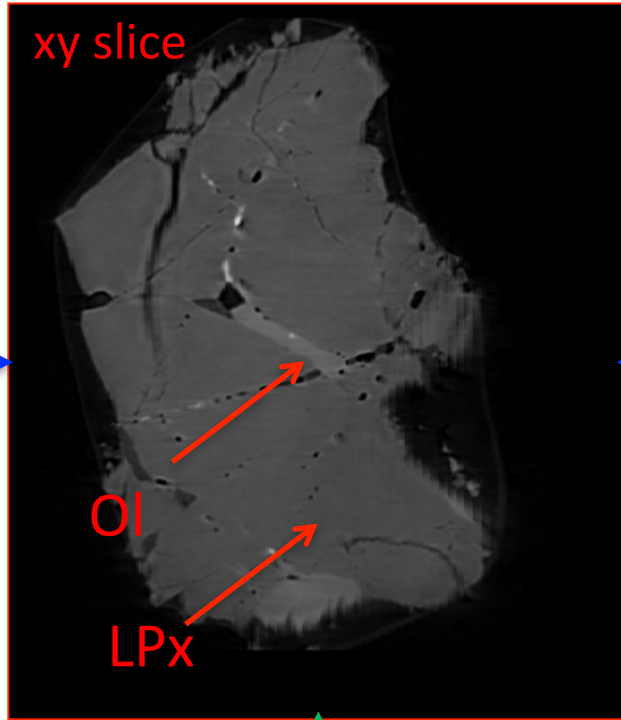
7keV/xz/241.tif



RA-QD02-0009 8 keV

71.1 μm

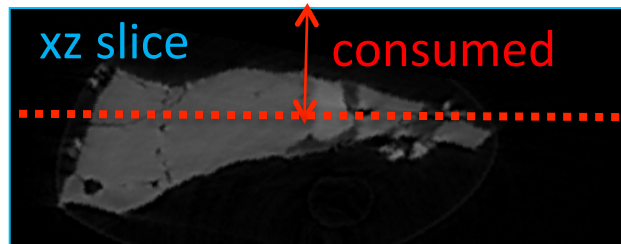
27.4 μm



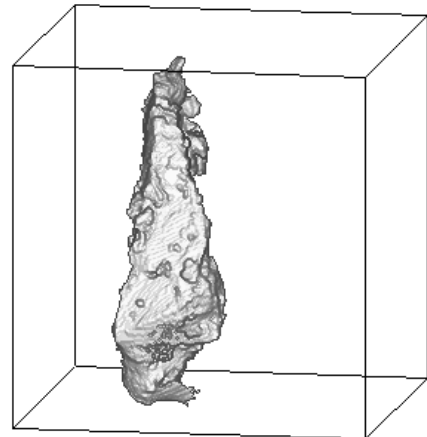
82.6 μm

7keV/xy/104.tif

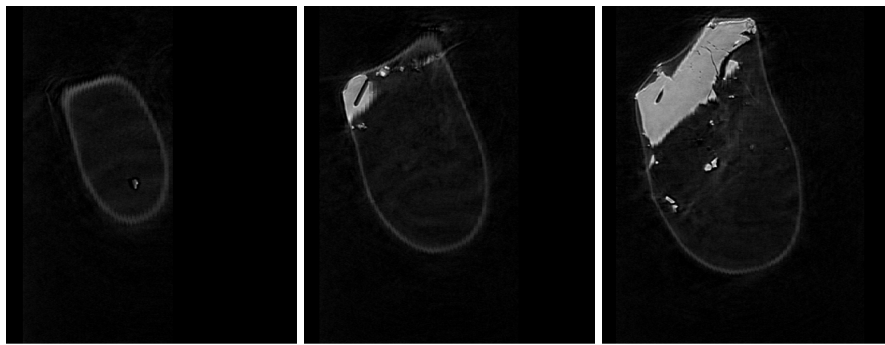
7keV/zy/207.tif



7keV/xz/241.tif



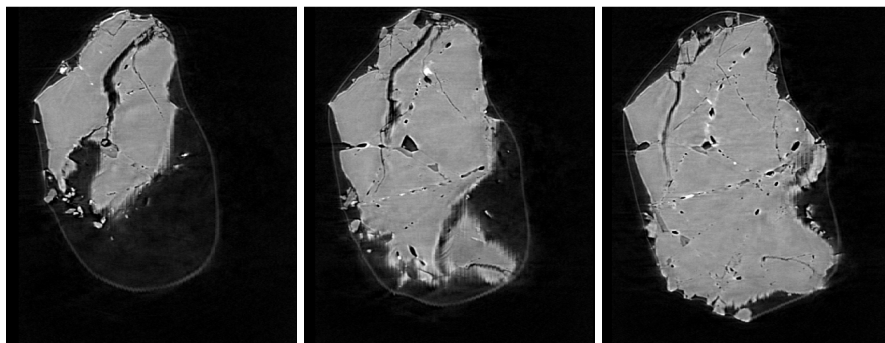
RA-QD02-0009 7 keV catalogue



036.tif

048.tif

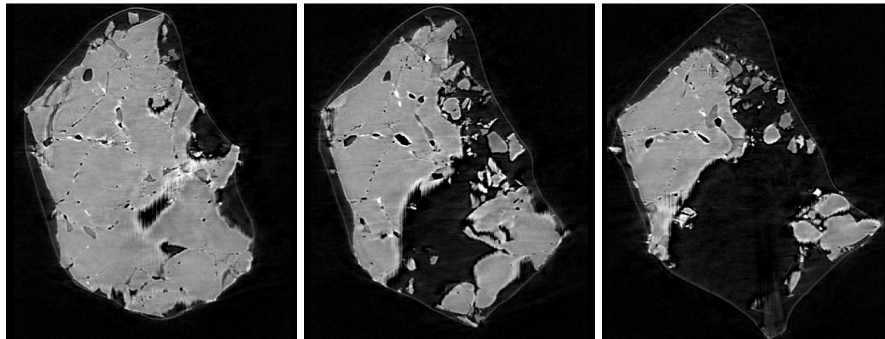
060.tif



072.tif

084.tif

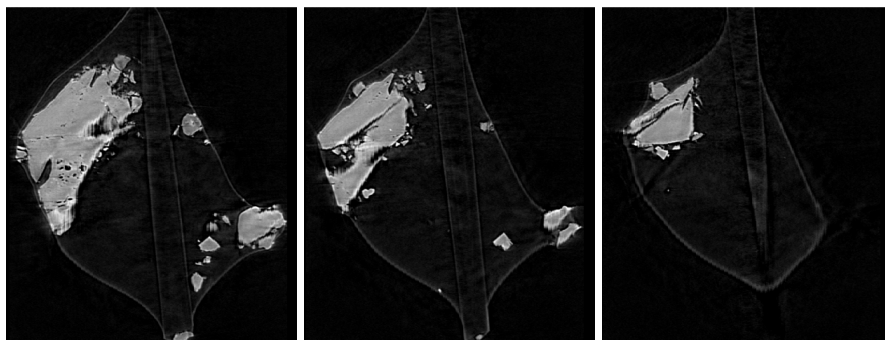
096.tif



108.tif

120.tif

132.tif

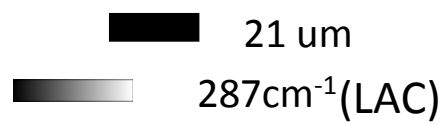


144.tif

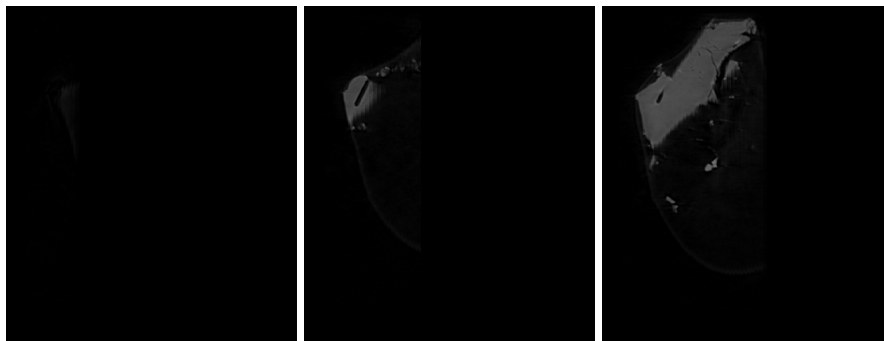
156.tif

168.tif

dZ = 2.05608 um



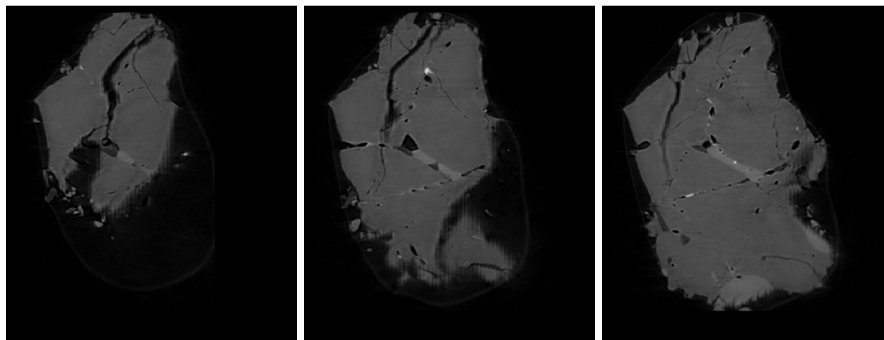
RA-QD02-0009 8 keV catalogue



036.tif

048.tif

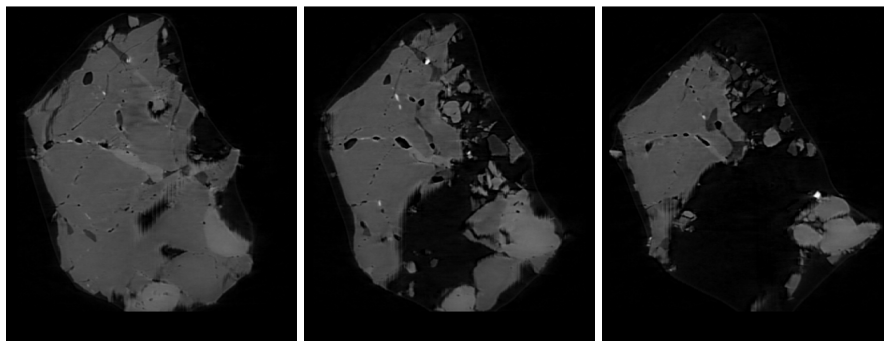
060.tif



072.tif

084.tif

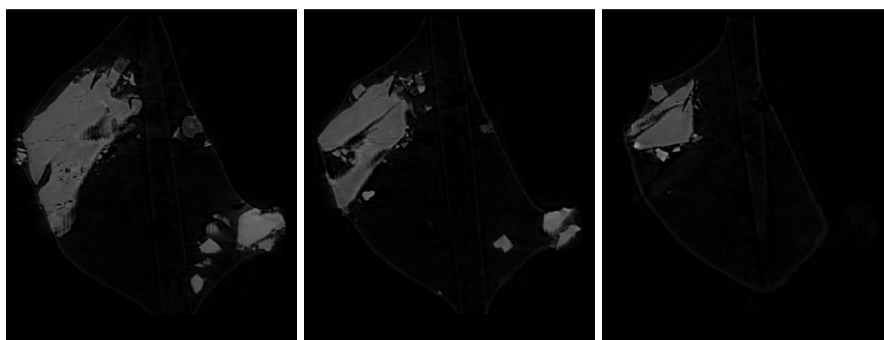
096.tif



108.tif

120.tif

132.tif

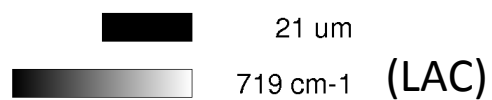


144.tif

156.tif

168.tif

dZ = 2.05608 um



RA-QD02-0009 Dual energy histogram

