

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0024

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/22/2011(7keV)

 Jan/24/2011(8keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	42.23	26.22	20.1	11.29	0.15	0.02	-	-	-

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-QD02-0024

Operation Date Jan/22/2011 (7 keV)
 Jan/24/2011 (8 keV)
operated by Y. Ogami (7 keV)
 M. Uesugi (8 keV)
analyzed by R. Noguchi

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	42.23	26.22	20.1	11.29	0.15	0.02	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
24.2	38.7	45.0	153827	1.93

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

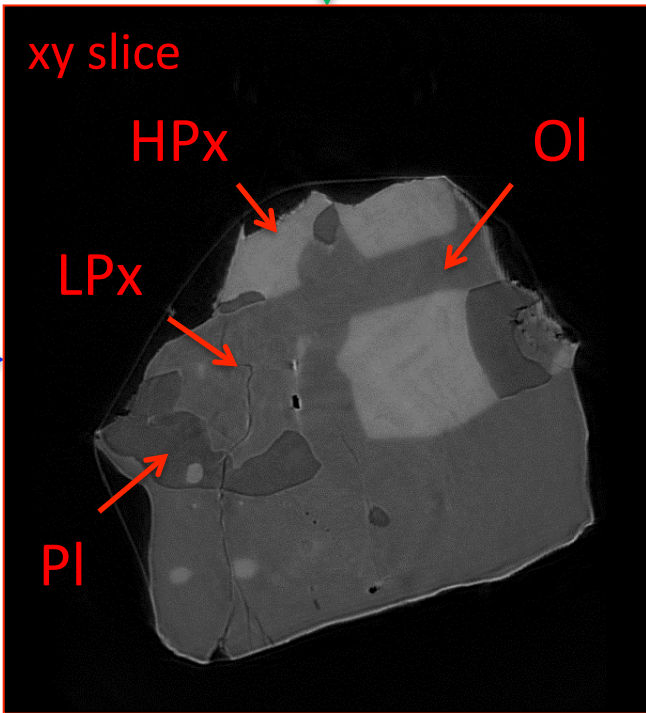
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

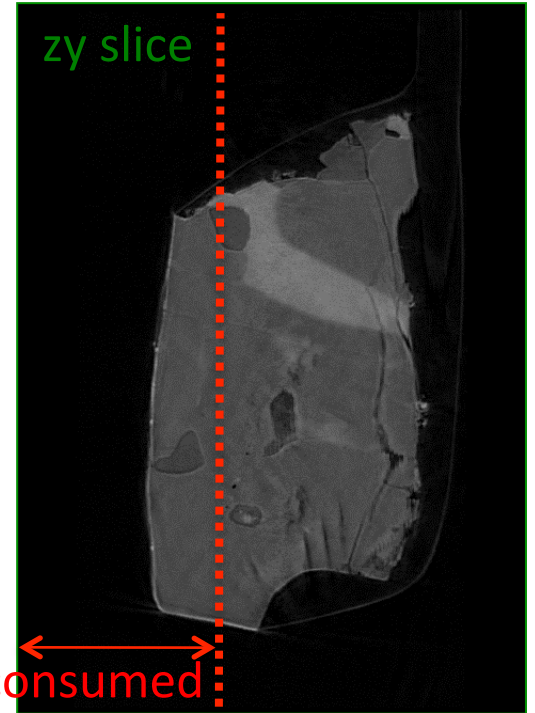
RA-QD02-0024 7 keV

103.5 μm

69.0 μm

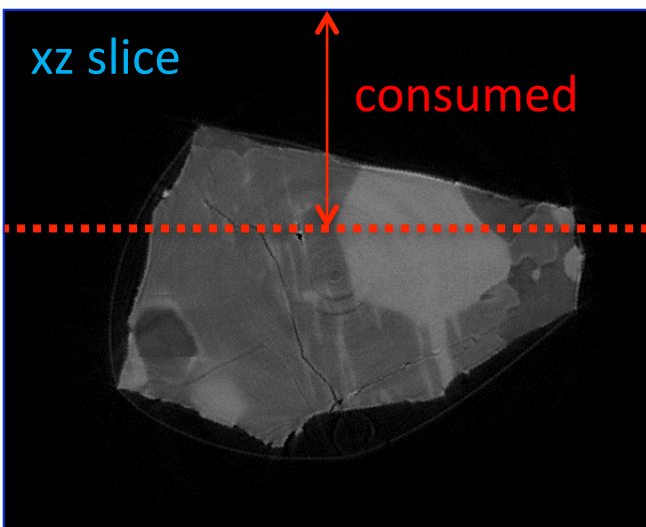


113.4 μm

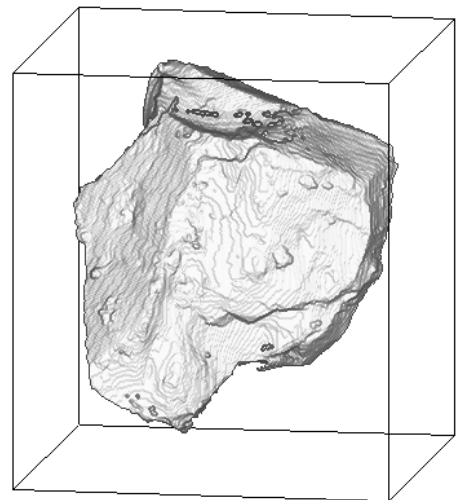


7keV/xy/193.tif

7keV/zy/307.tif



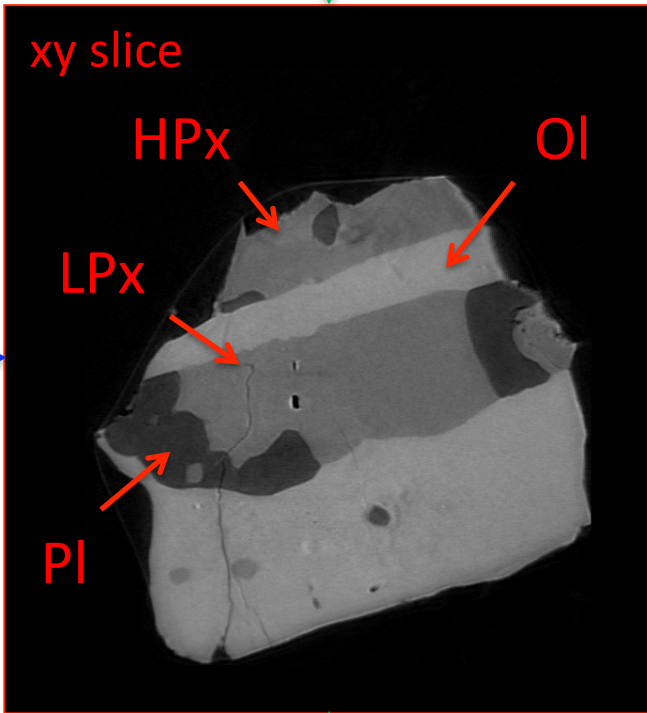
7keV/xz/331.tif



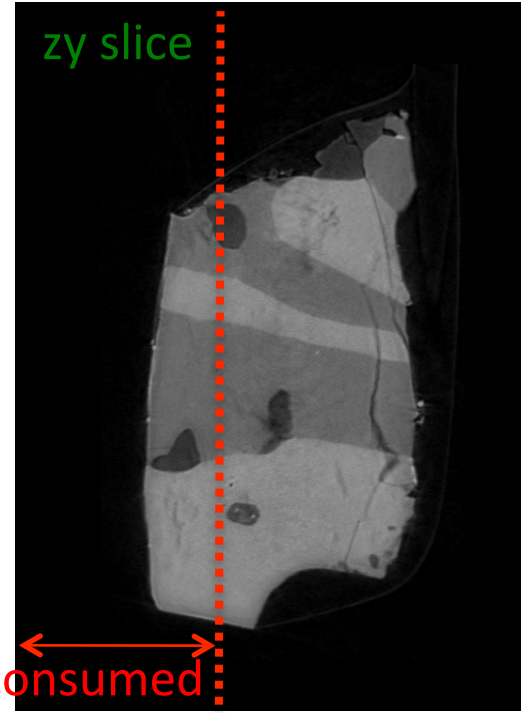
RA-QD02-0024 8 keV

103.5 μm

69.0 μm

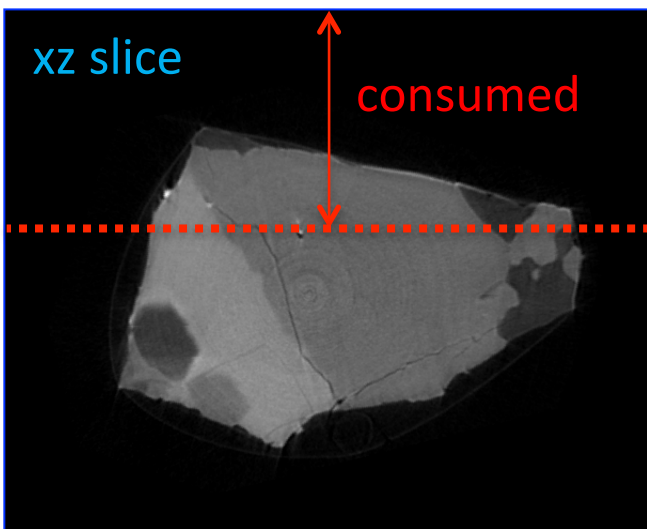


113.4 μm

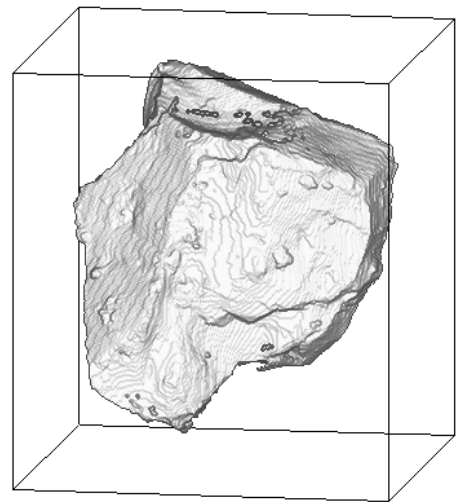


8keV/xy/193.tif

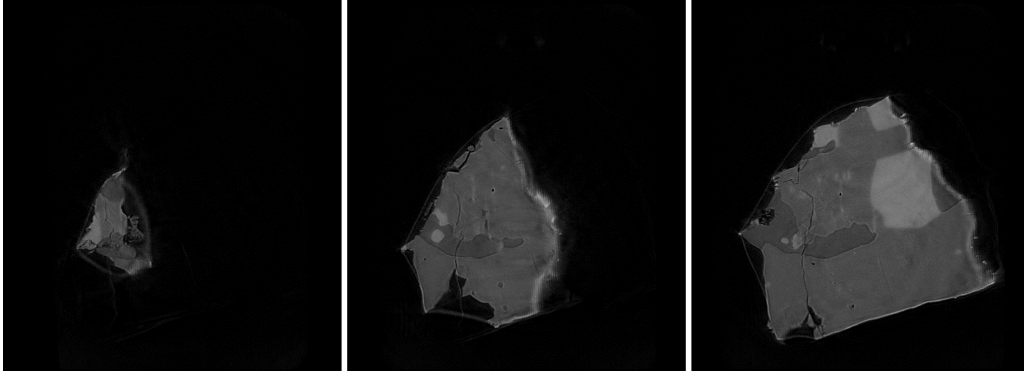
8keV/zy/307.tif



8keV/xz/331.tif



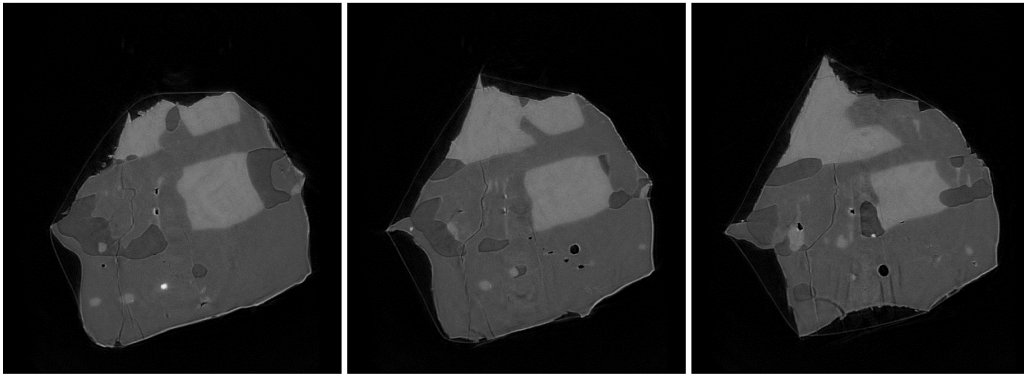
RA-QD02-0024 7 keV catalogue



115.tif

143.tif

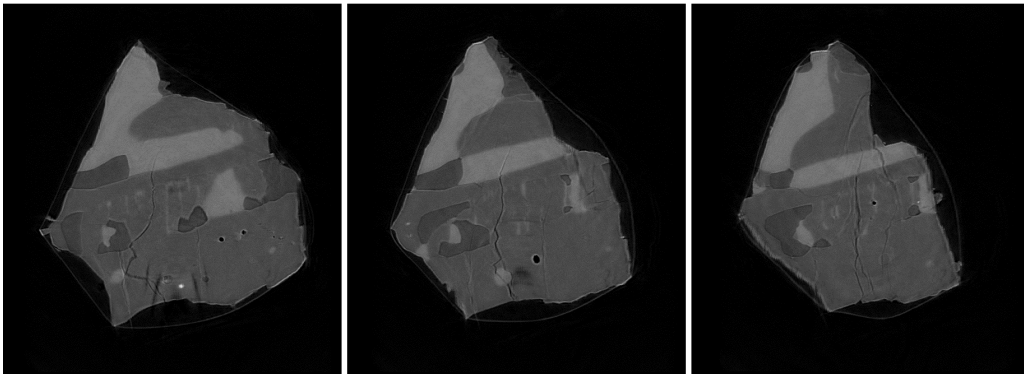
171.tif



199.tif

227.tif

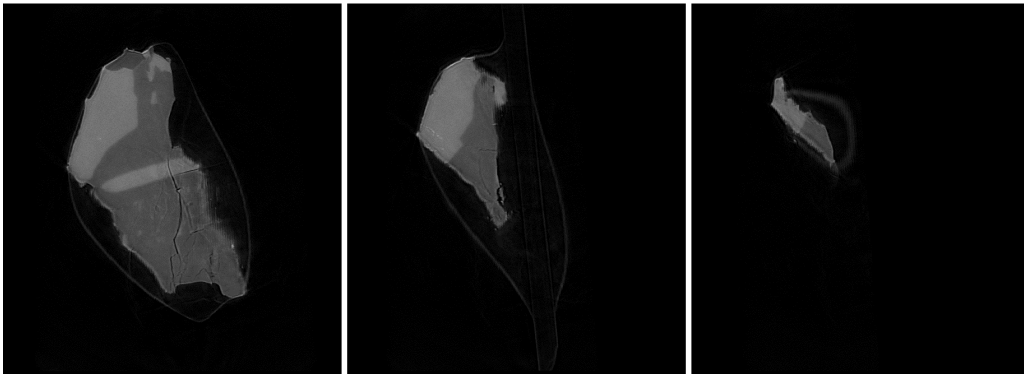
255.tif



283.tif

311.tif

339.tif

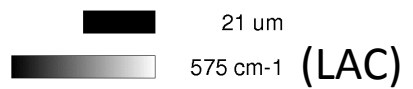


367.tif

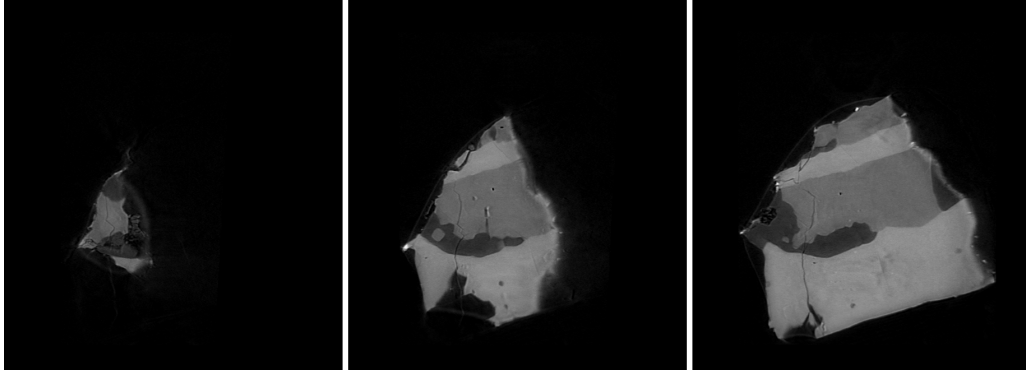
395.tif

423.tif

dZ = 4.79752 um



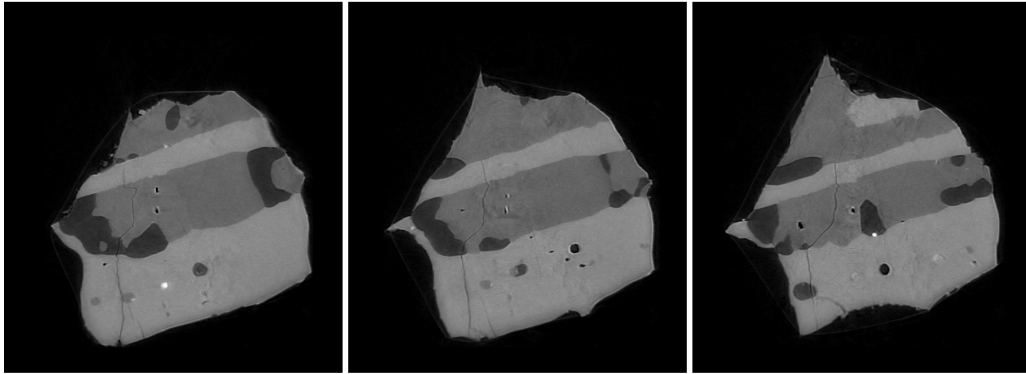
RA-QD02-0024 8 keV catalogue



115.tif

143.tif

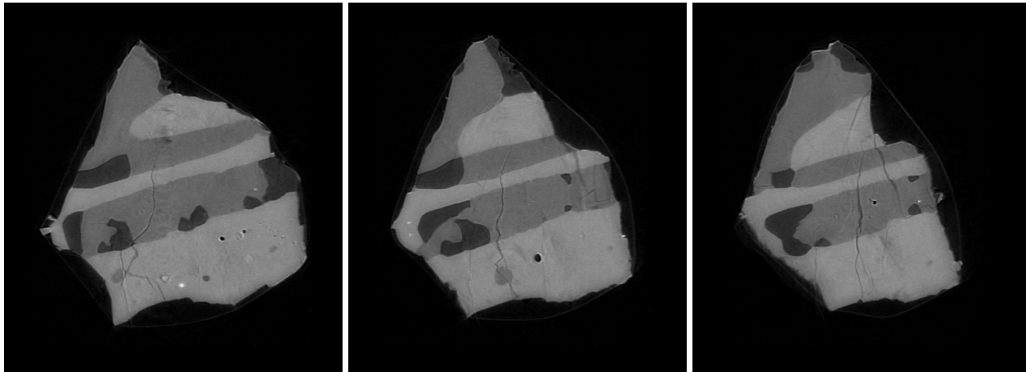
171.tif



199.tif

227.tif

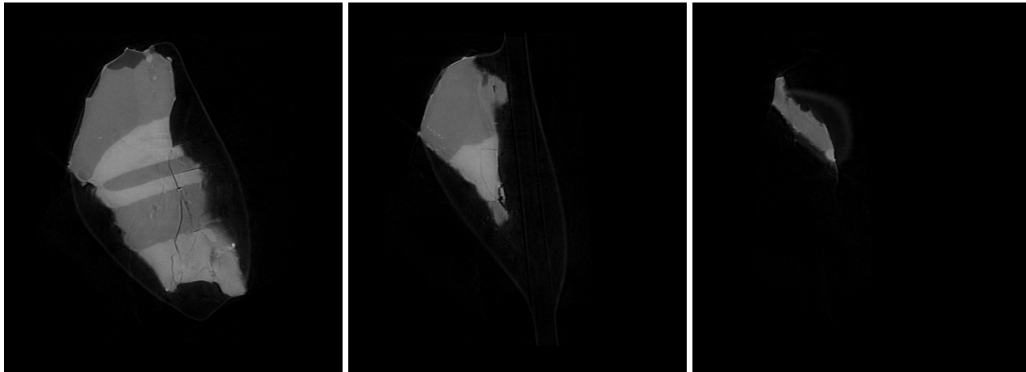
255.tif



283.tif

311.tif

339.tif




367.tif

395.tif

423.tif

dZ = 4.79752 um

 21 um
575 cm⁻¹ (LAC)

RA-QD02-0024 Dual energy histogram

