

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0055

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/23/2011 (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 %	-	-	1.58	98.3	0.16	-	-	-	-

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-QD02-0055

Operation Date Jan/23/2011 (7 keV)
Jan/24/2011 (8 keV)
operated by Y. Ogami (7 keV)
R. Noguchi (8 keV)
analyzed by A. Shimada

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	-	-	1.58	98.3	0.16	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
10.7	17.0	28.2	18566	2.90

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

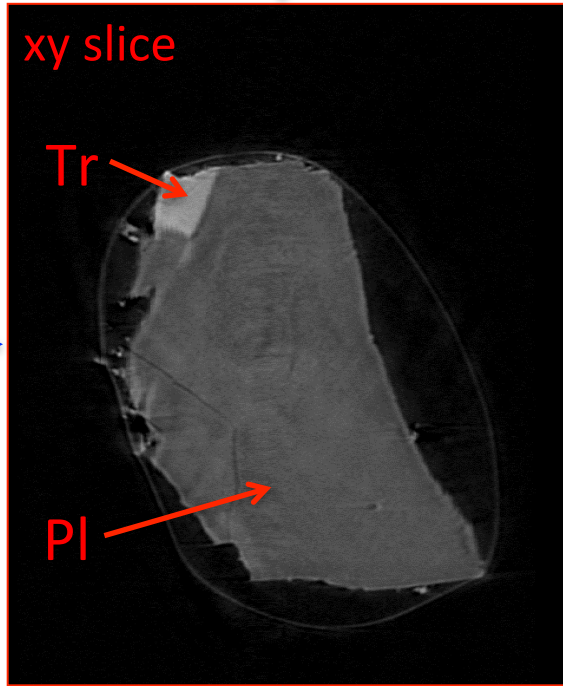
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

RA-QD02-0055 7 keV

55.1 μm

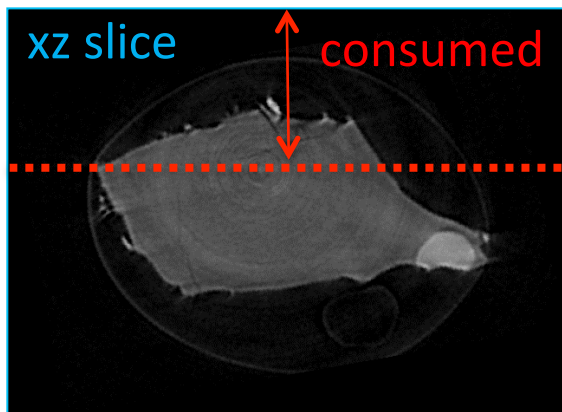
40.0 μm



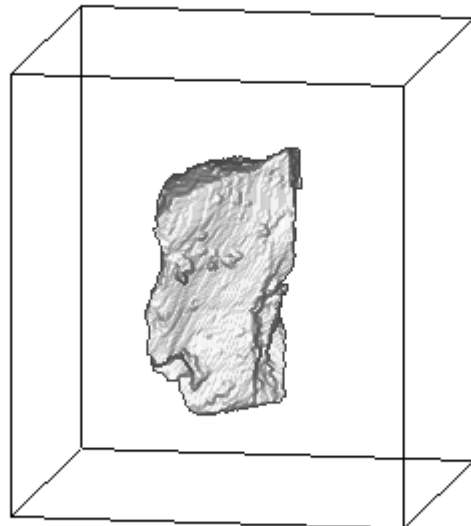
67.3 μm

7keV/xy/164.tif

7keV/zy/322.tif



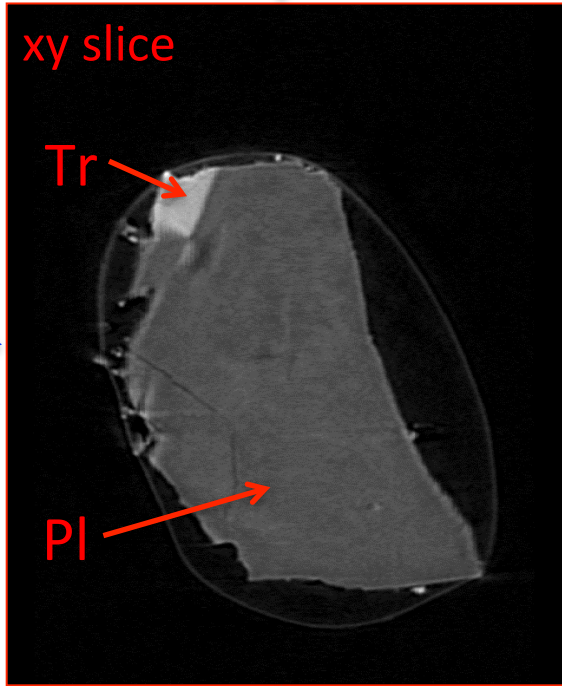
7keV/xz/393.tif



RA-QD02-0055 8 keV

55.1 μm

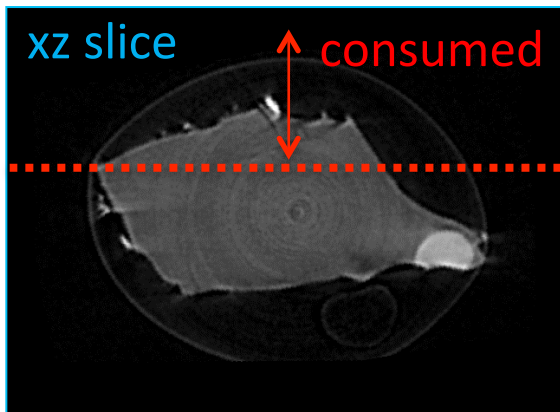
40.0 μm



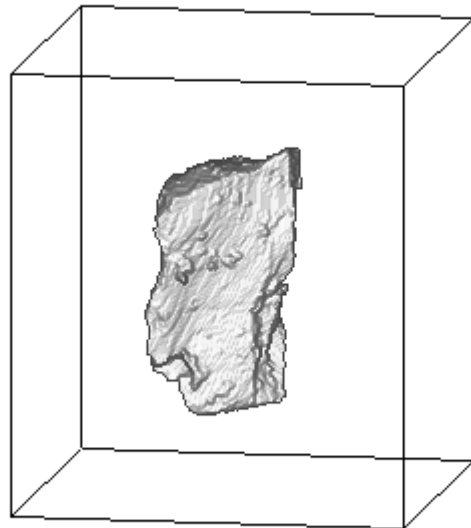
67.3 μm

8keV/xy/164.tif

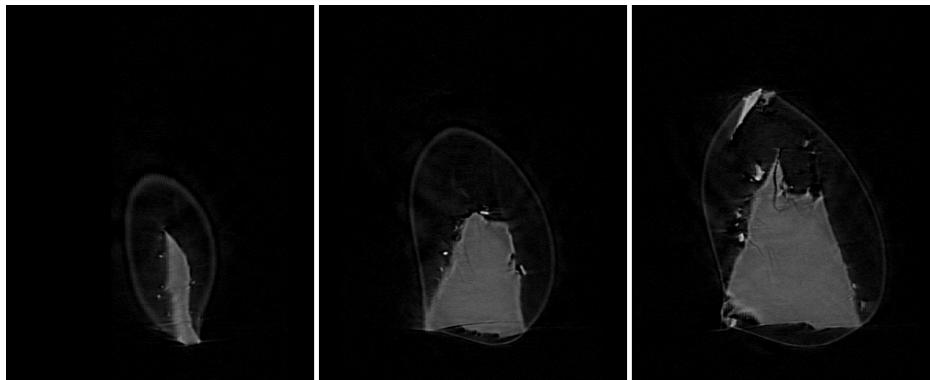
8keV/zy/322.tif



8keV/xz/393.tif



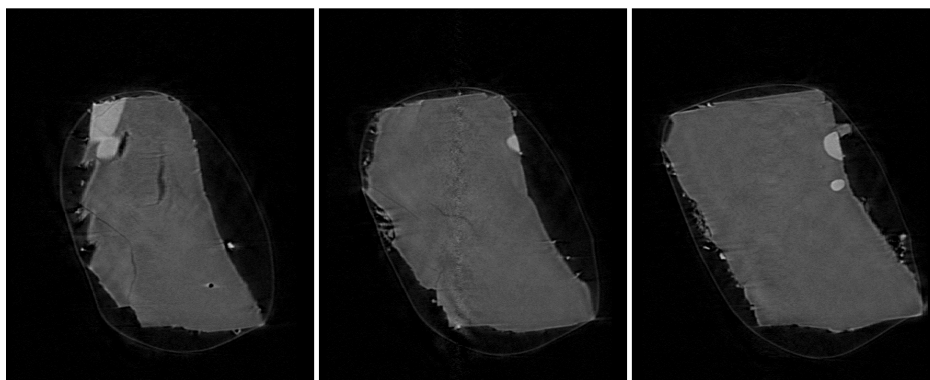
RA-QD02-0055 7 keV catalogue



063.tif

094.tif

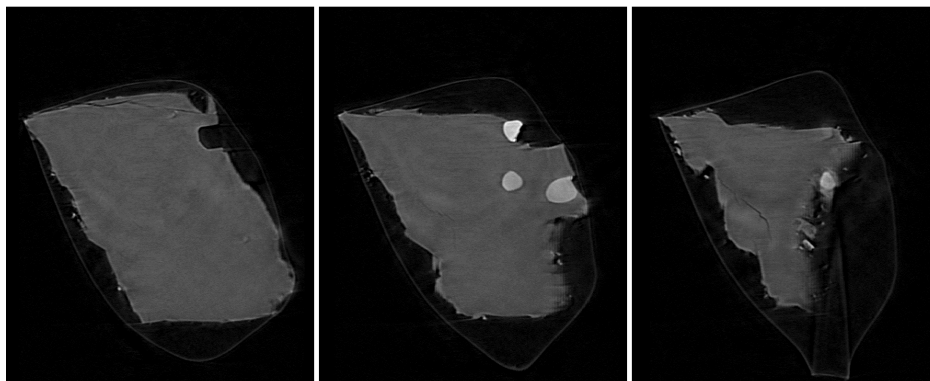
125.tif



156.tif

187.tif

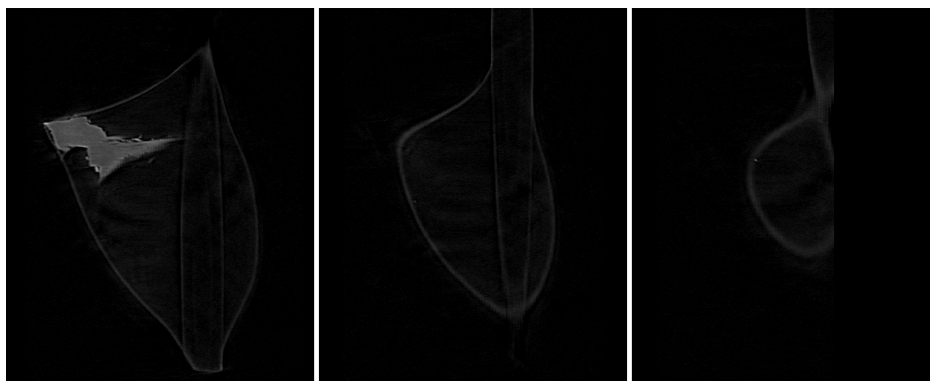
218.tif



249.tif

280.tif

311.tif



342.tif

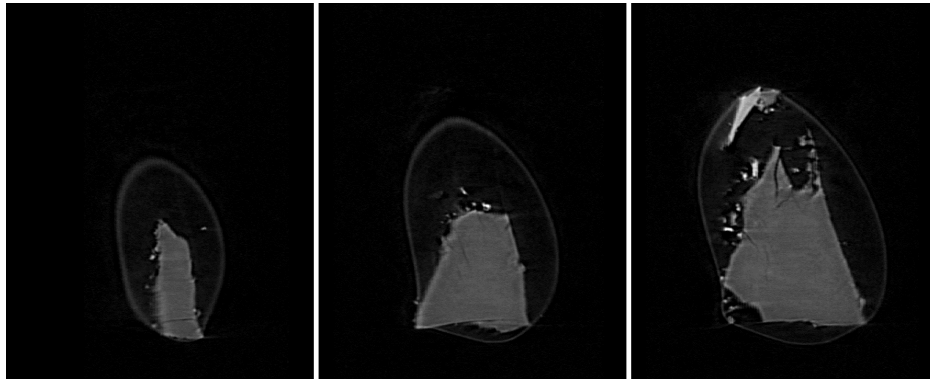
373.tif

404.tif

dZ = 2.65577 um

10 um
431 cm⁻¹ (LAC)

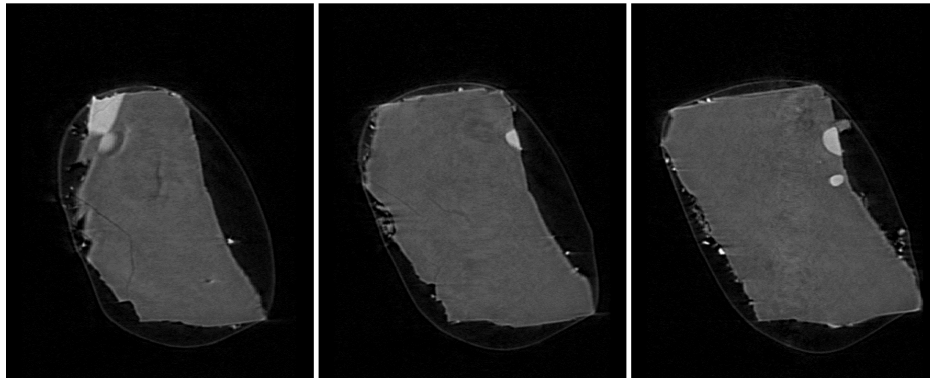
RA-QD02-0055 8 keV catalogue



073.tif

102.tif

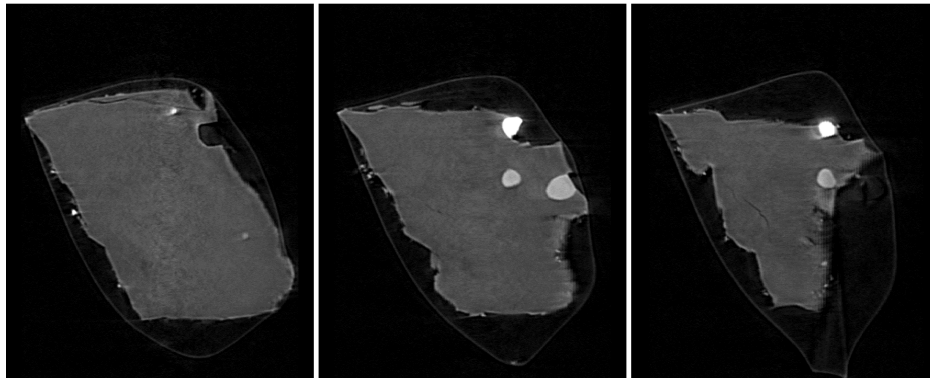
131.tif



160.tif

189.tif

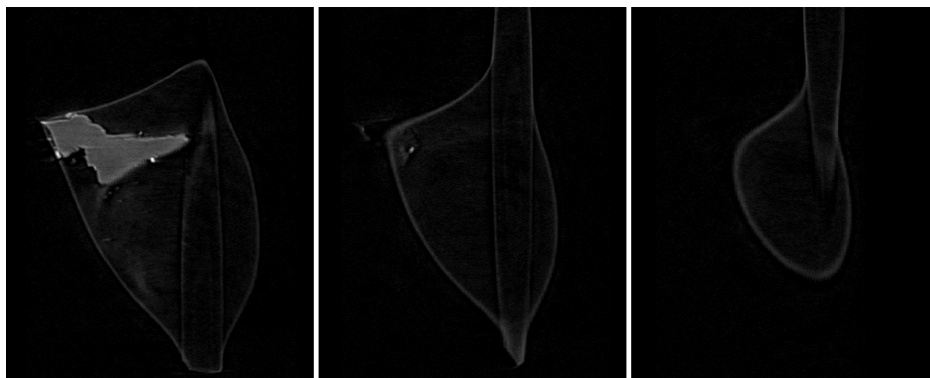
218.tif



247.tif

276.tif

305.tif



334.tif

363.tif

392.tif

dZ = 2.48443 um



(LAC)

RA-QD02-0055 Dual energy histogram

