

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0021

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 %	-	95.41	4.22	-	0.37	-	-	-	-

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-QD02-0021

Operation Date Jan/23/2011 (7 keV)

Jan/24/2011 (8 keV)

operated by Y. Ogami (7 keV)

Y. Ogami (8 keV)

analyzed by T.Matsumoto

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	-	95.41	4.22	-	0.37	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
8.51	16.83	28.2	11543	6.53

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

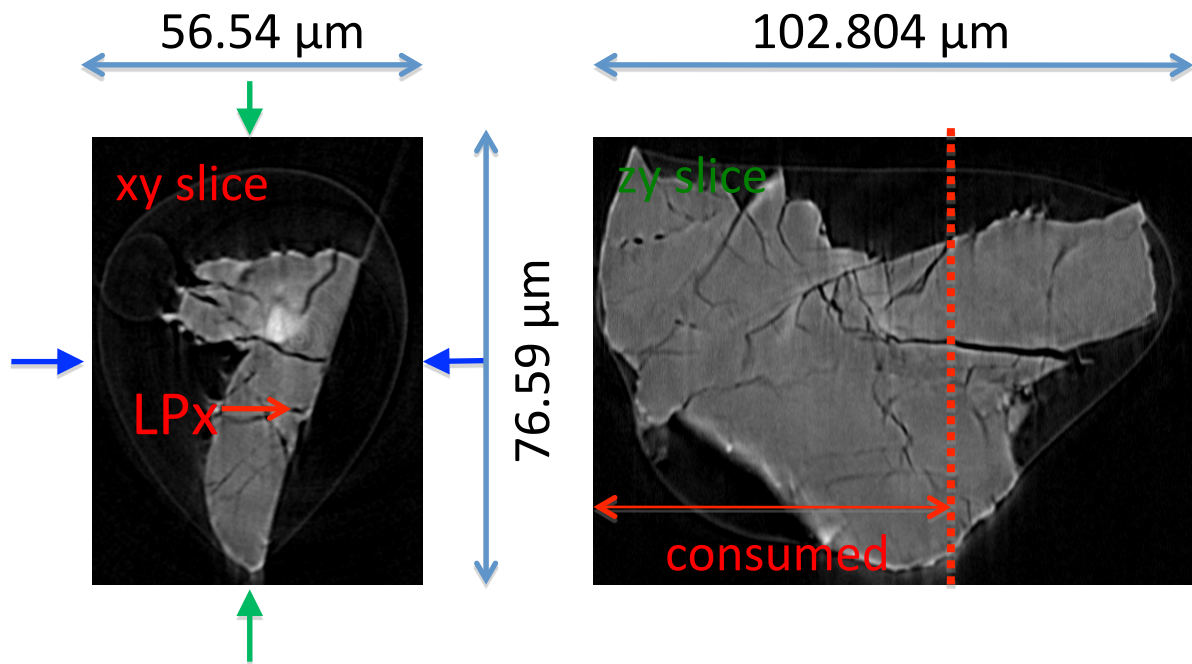
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

dz: CT image interval

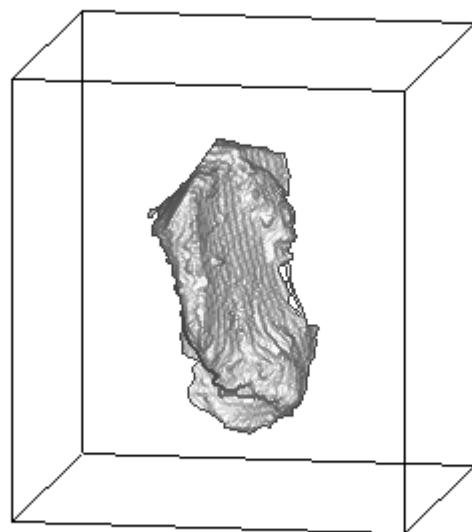
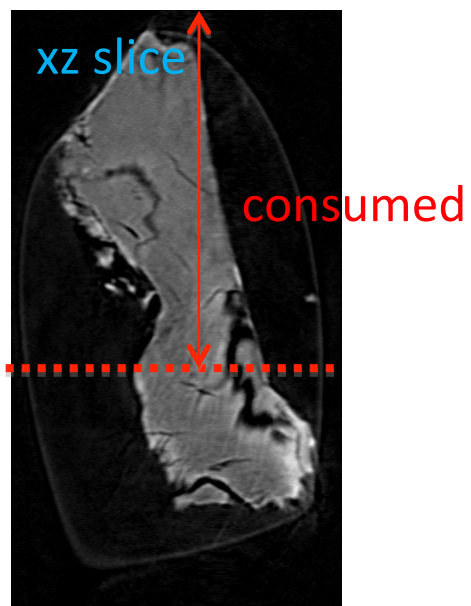
LAC: linear attenuation coefficient of X-ray

RA-QD02-0021 7 keV



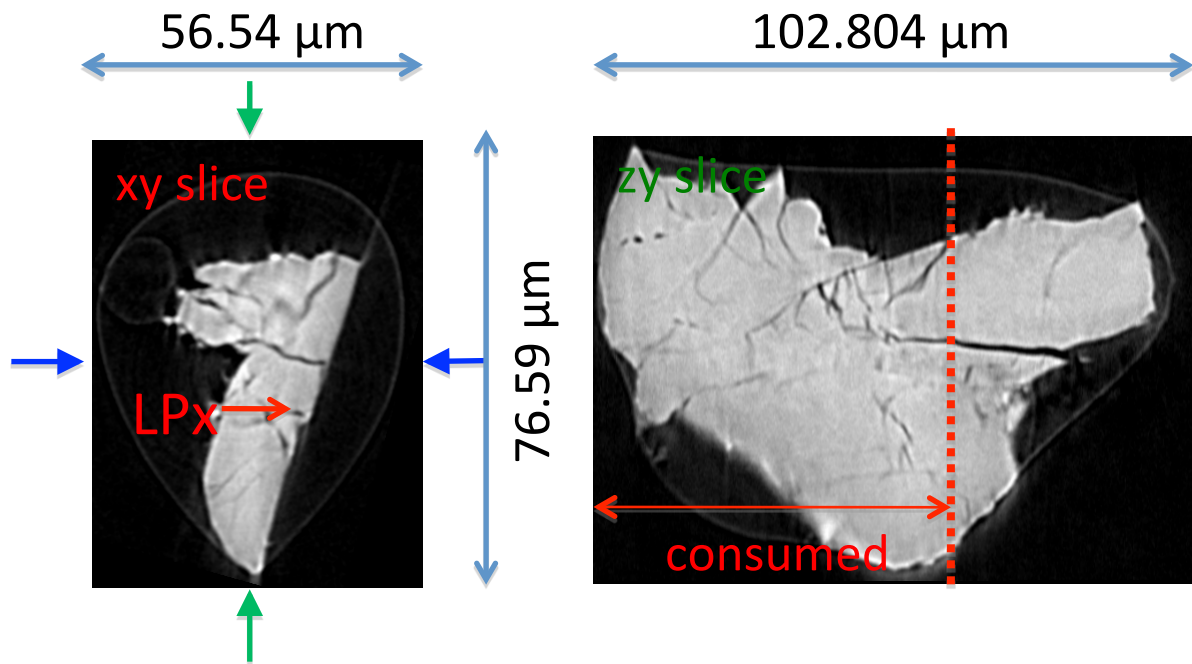
7keV/xy/300.tif

7keV/zy/165.tif



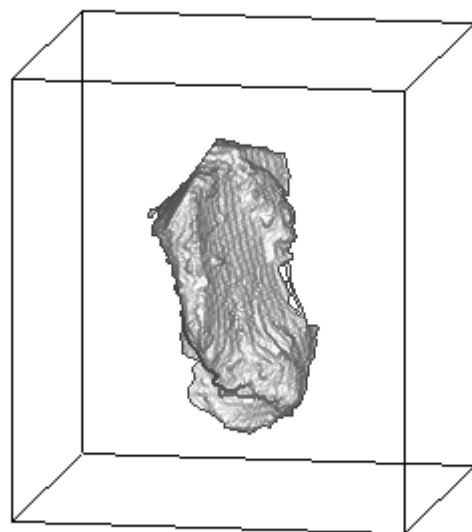
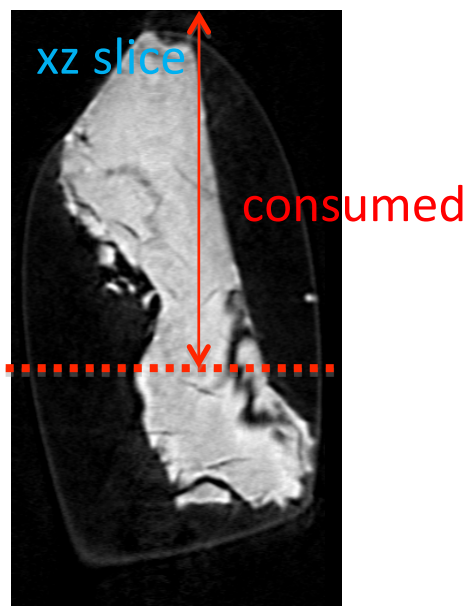
7keV/xz/223.tif

RA-QD02-0021 8 keV



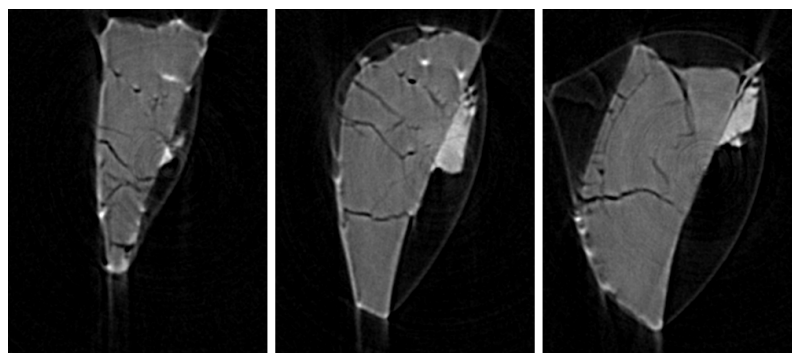
7keV/xy/300.tif

7keV/zy/165.tif



7keV/xz/223.tif

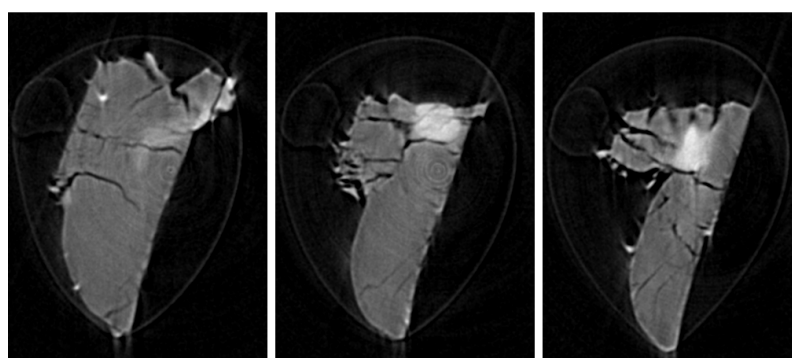
RA-QD02-0021 7 keV catalogue



048.tif

097.tif

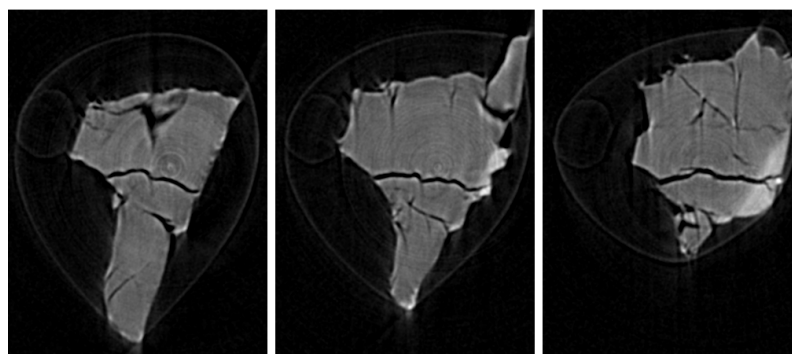
146.tif



195.tif

244.tif

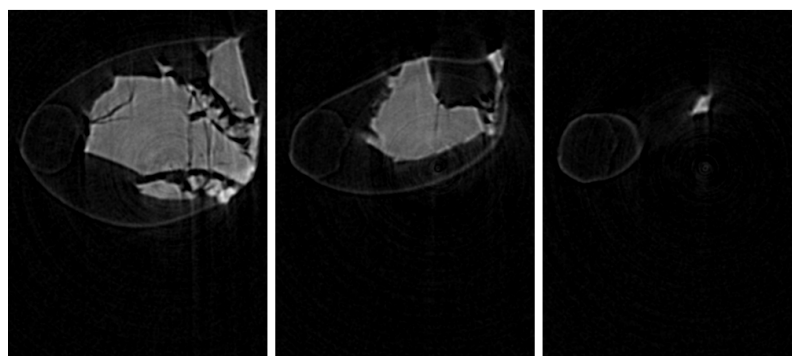
293.tif



342.tif

391.tif

440.tif

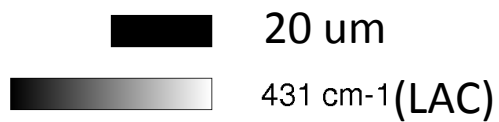


489.tif

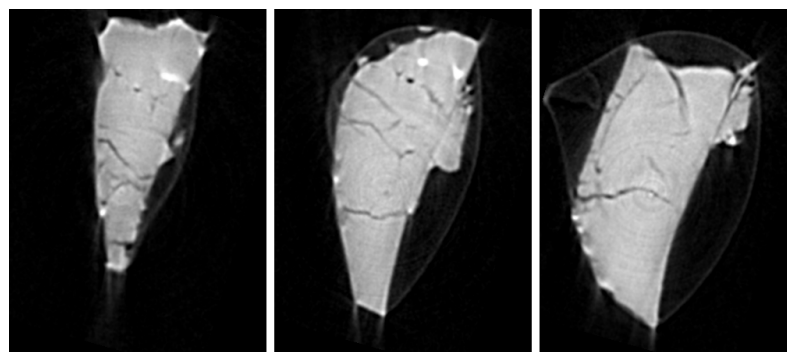
538.tif

587.tif

dZ = 8.3986 μm



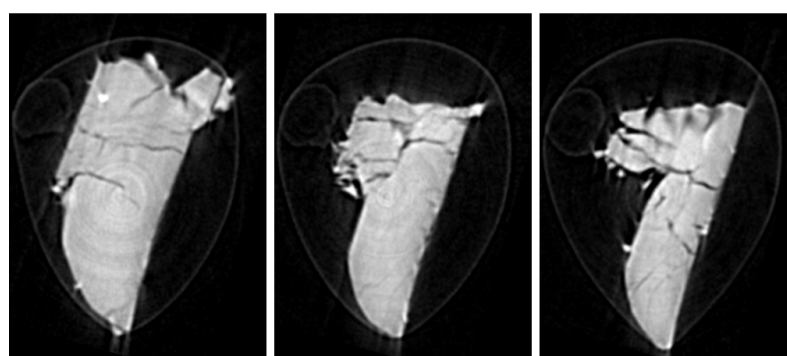
RA-QD02-0021 8 keV catalogue



048.tif

097.tif

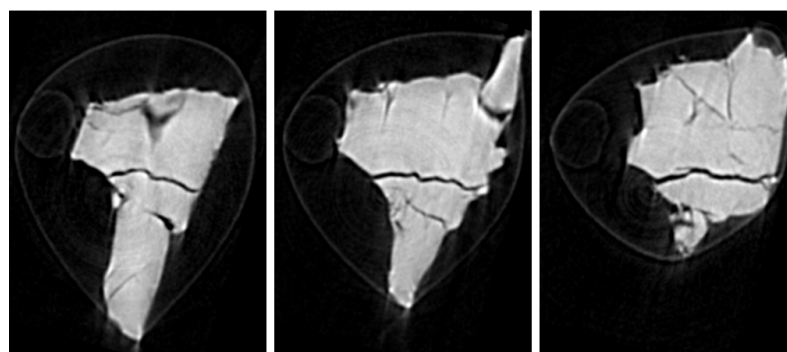
146.tif



195.tif

244.tif

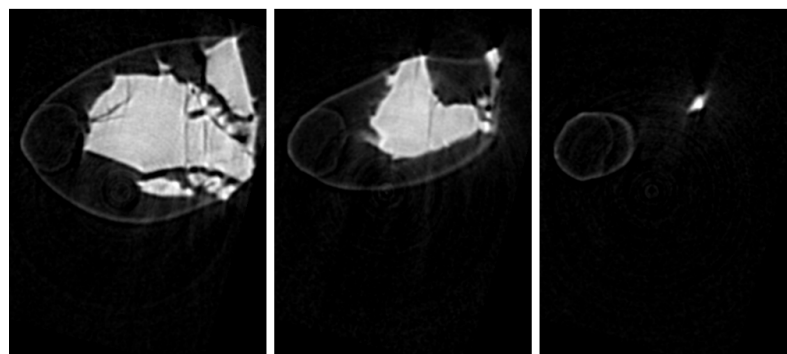
293.tif



342.tif

391.tif

440.tif



489.tif

538.tif

587.tif

dZ = 8.3986 μm



20 μm



287 cm^{-1} (LAC)

RA-QD02-0021 Dual energy histogram

