

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0034

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 %	49.1	37.43	11.0	-	2.50	-	-	-	-

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-QD02-0034

Operation Date Jan/23/2011 (7 keV)
 Jan/24/2011 (8 keV)
operated by T. Ogami (7 keV)
 T. Ogami (8 keV)
analyzed by J. Matsuno

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	49.1	37.43	11.0	-	2.50	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm ³)	Porosity (%)
9.1	12.6	26.8	9293	8.02

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

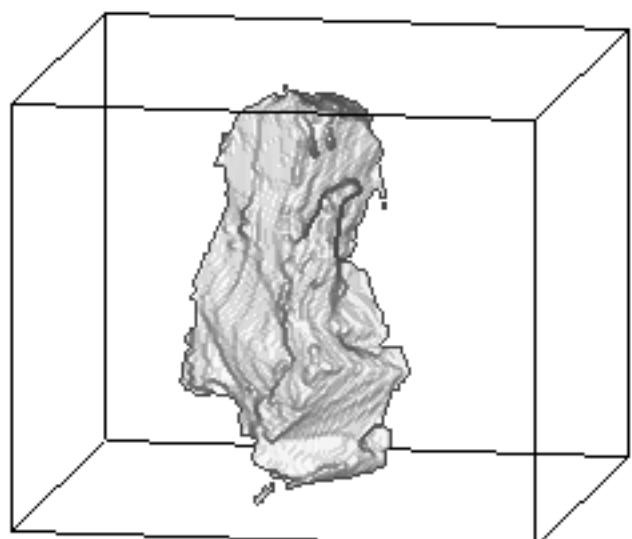
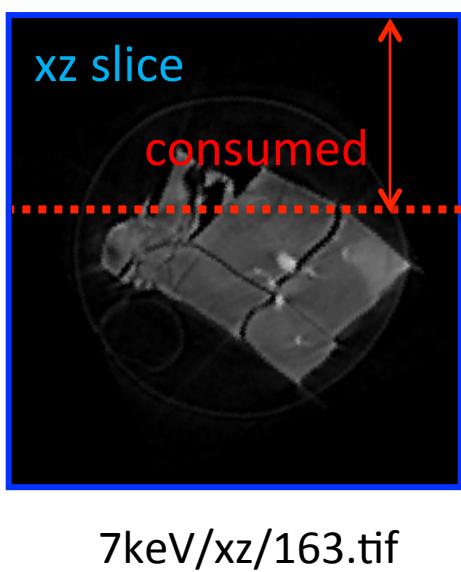
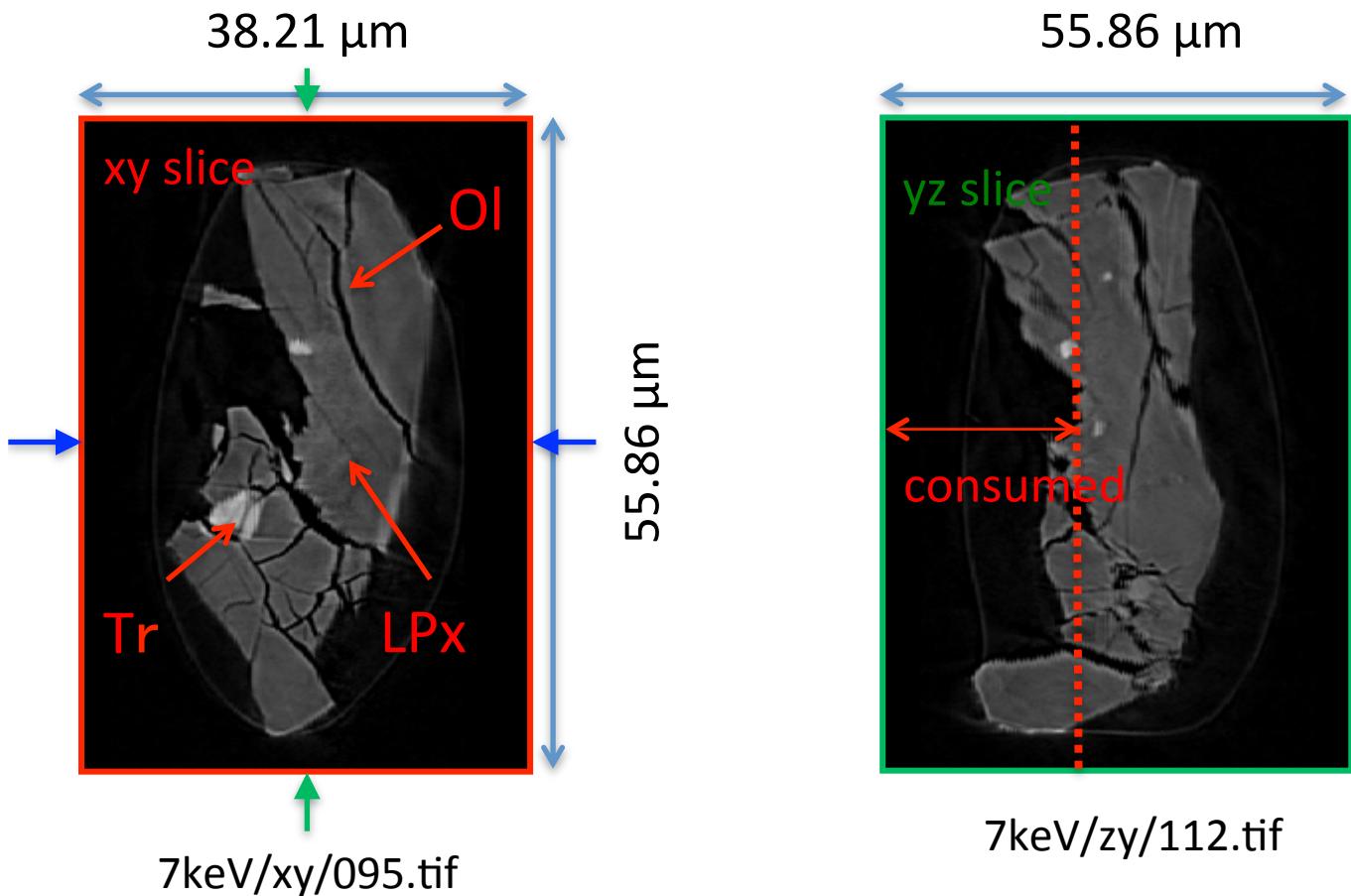
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

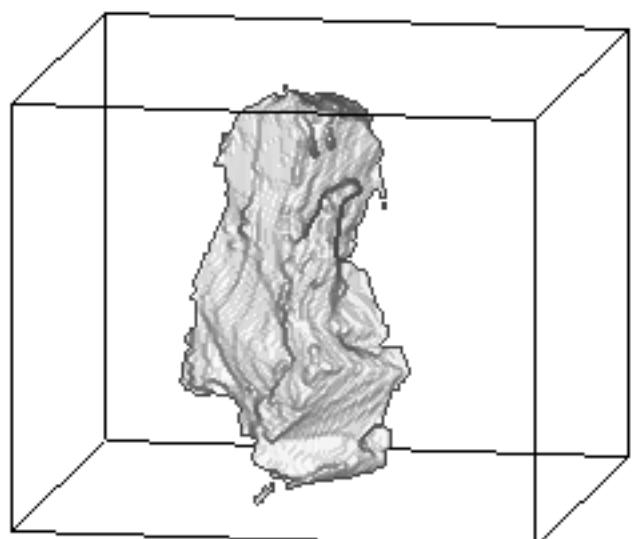
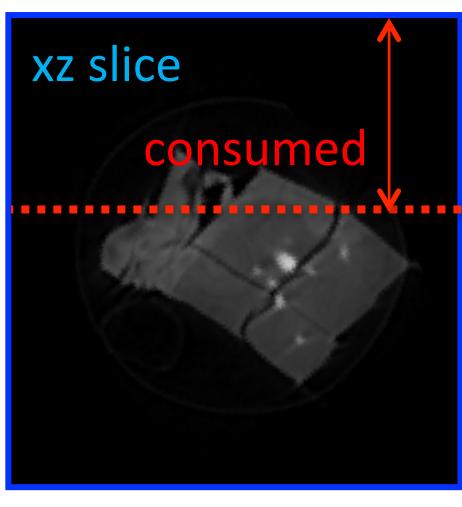
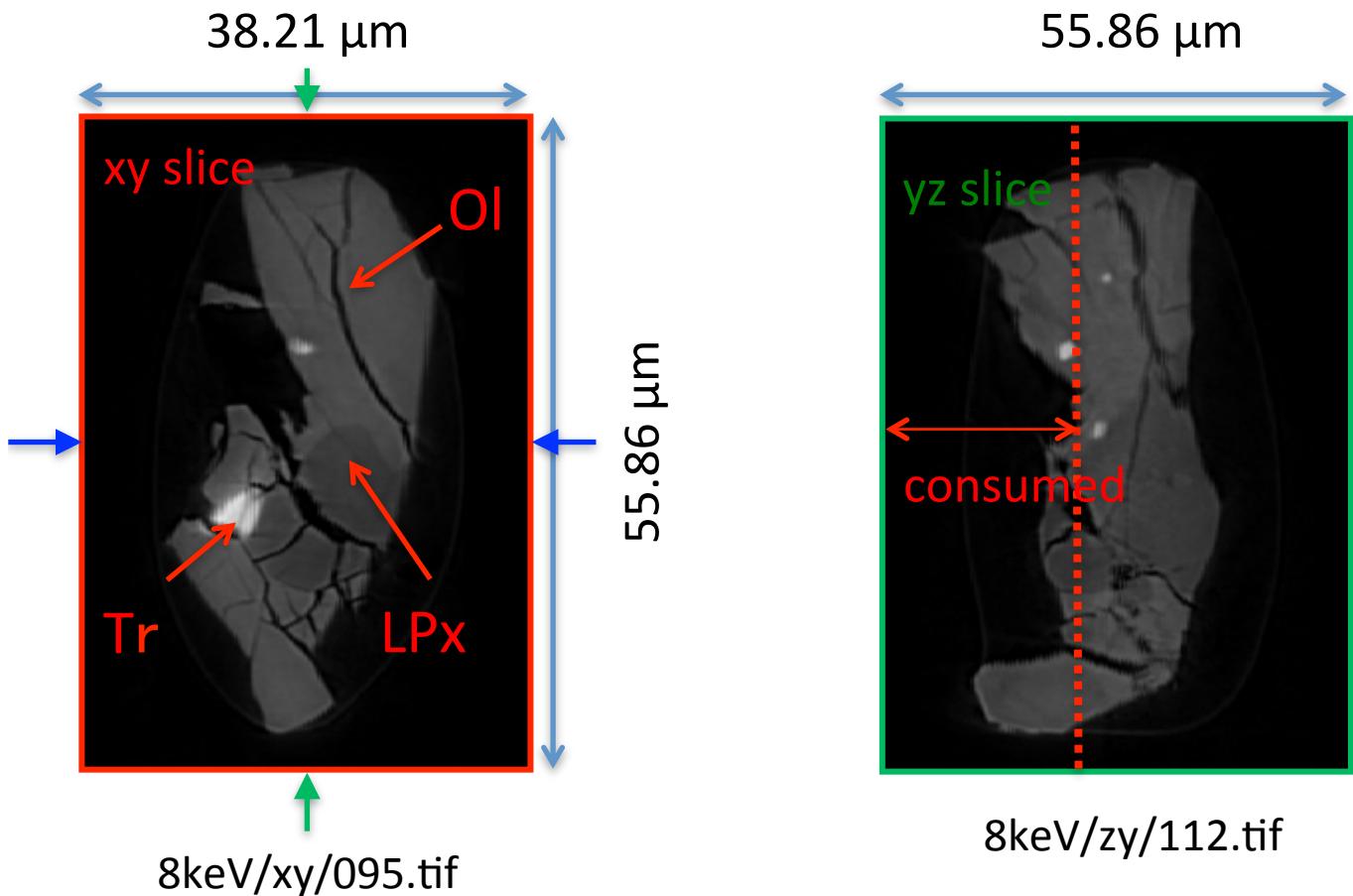
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

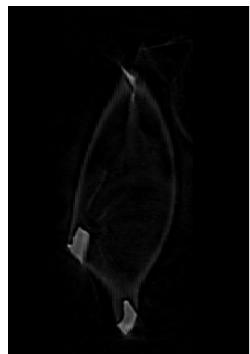
RA-QD02-0034 7 keV



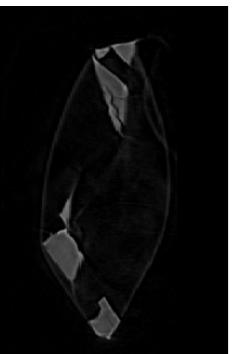
RA-QD02-0034 8 keV



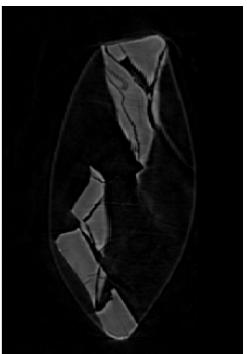
RA-QD02-0034 7 keV catalogue



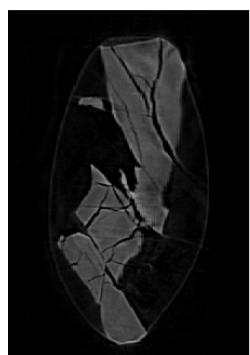
051.tif



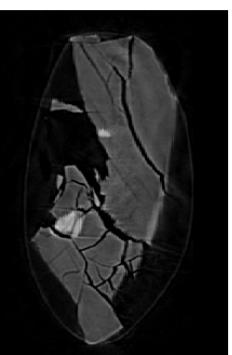
062.tif



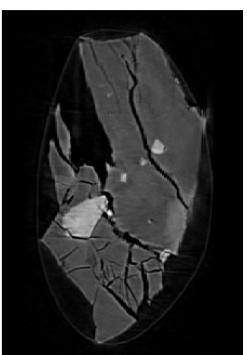
073.tif



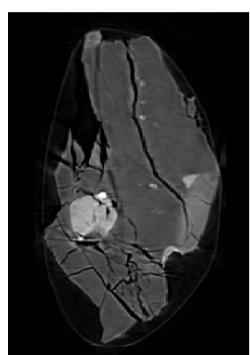
084.tif



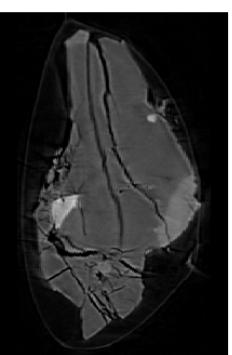
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106.tif



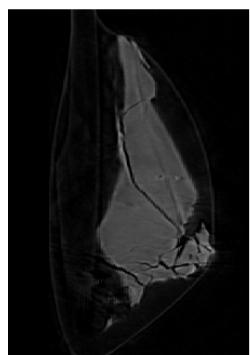
117.tif



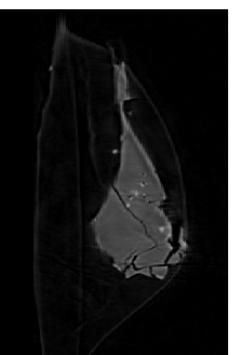
128.tif



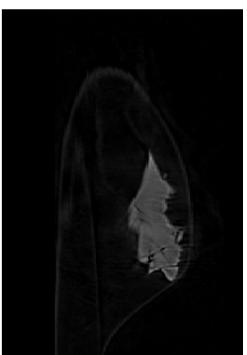
139.tif



150.tif



161.tif



172.tif

$dZ = 1.88474 \text{ } \mu\text{m}$

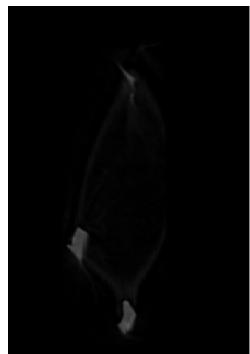


21 μm



575 cm^{-1} (LAC)

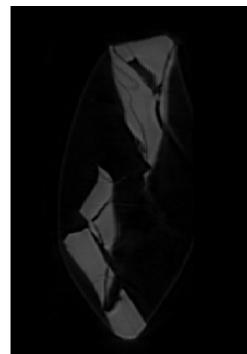
RA-QD02-0034 8 keV catalogue



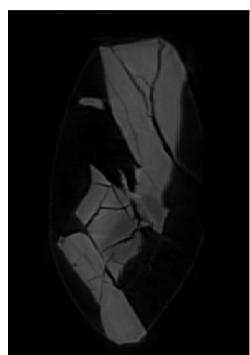
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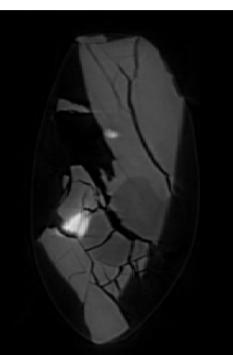
062.tif



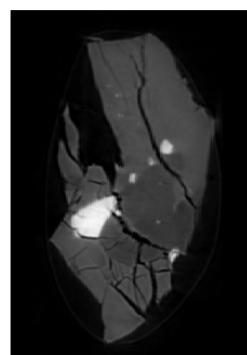
073.tif



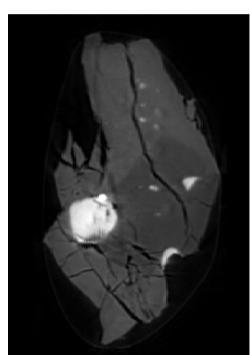
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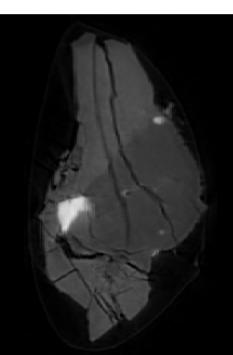
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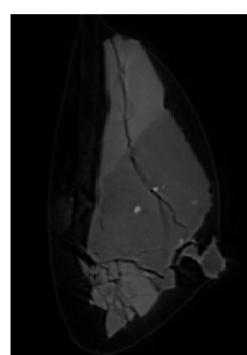
106.tif



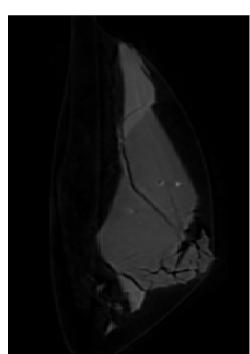
117.tif



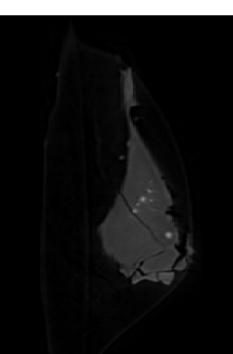
128.tif



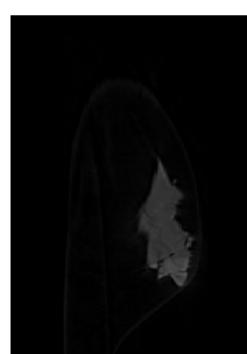
139.tif



150.tif



161.tif



172.tif

$dZ = 1.88474 \text{ } \mu\text{m}$



21 μm

1006 cm^{-1} (LAC)

RA-QD02-0034 Dual energy histogram

