

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0031

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/26/2011 (7 keV)

 Jan/26/2011 (8 keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	75.4	-	1.55	18.3	3.39	-	1.41	-	-

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-QD02-0031

Operation Date Jan/26/2011 (7 keV)

Jan/26/2011 (8 keV)

operated by J. Matsuno (7 keV)

T. Ogami (8 keV)

analyzed by J. Matsuno

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	75.4	-	1.55	18.3	3.39	-	1.41	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
21.5	49.1	83.4	317019	0.02

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

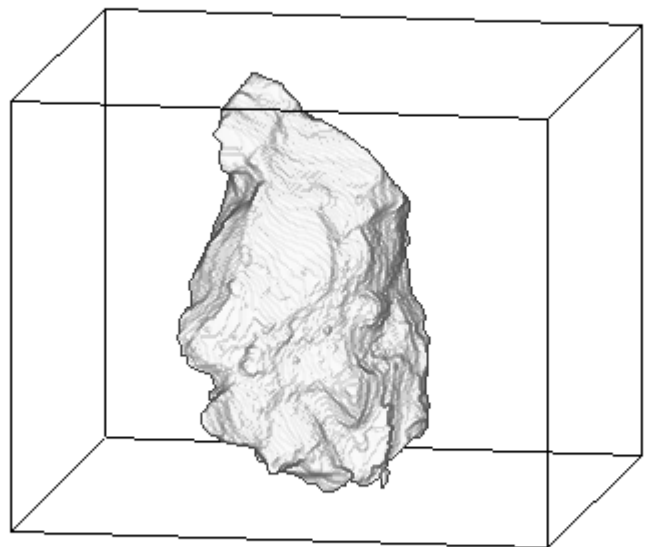
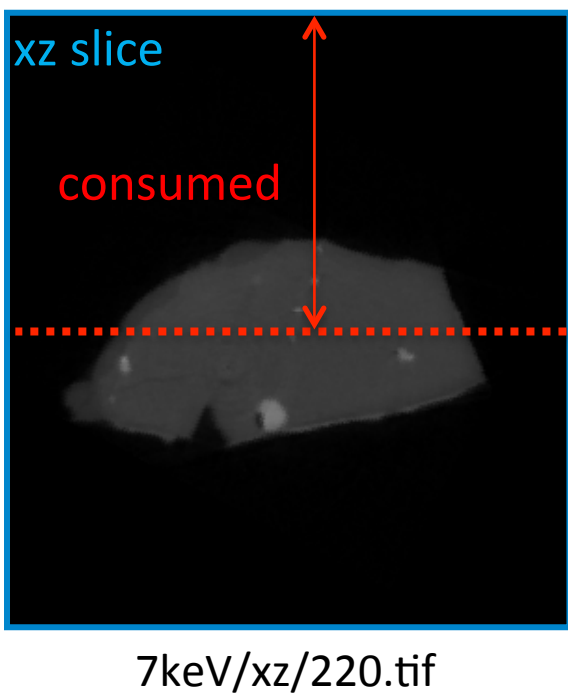
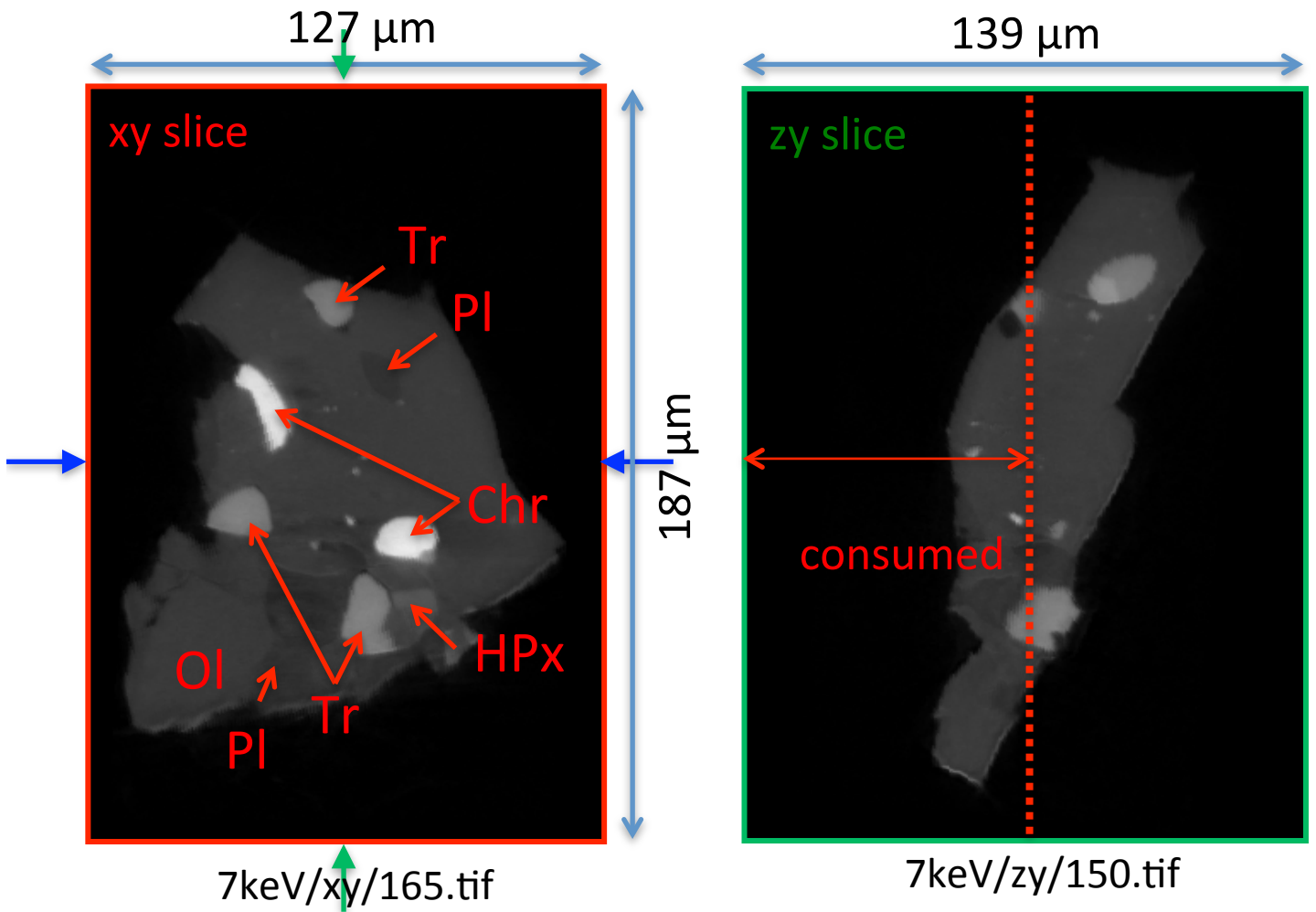
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

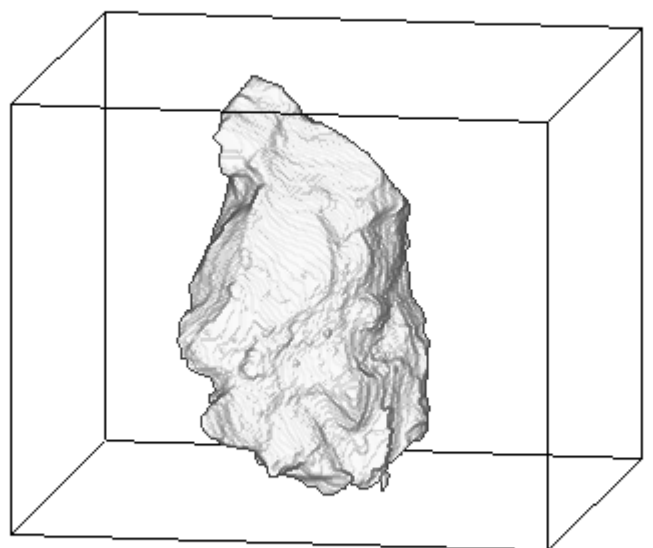
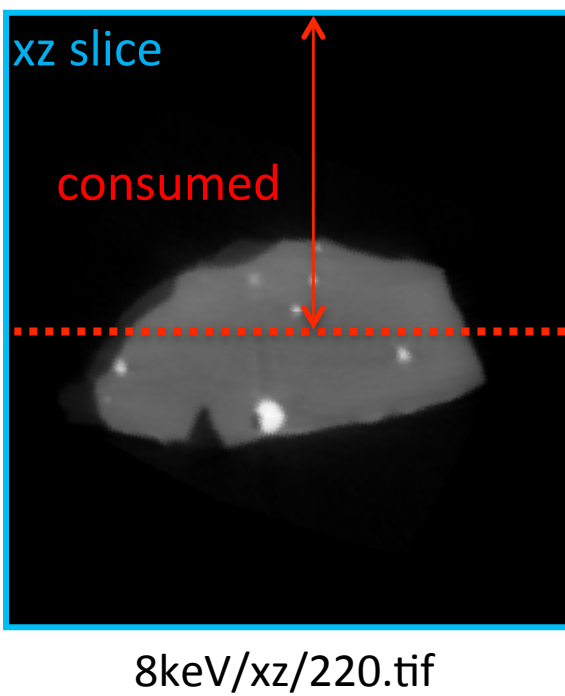
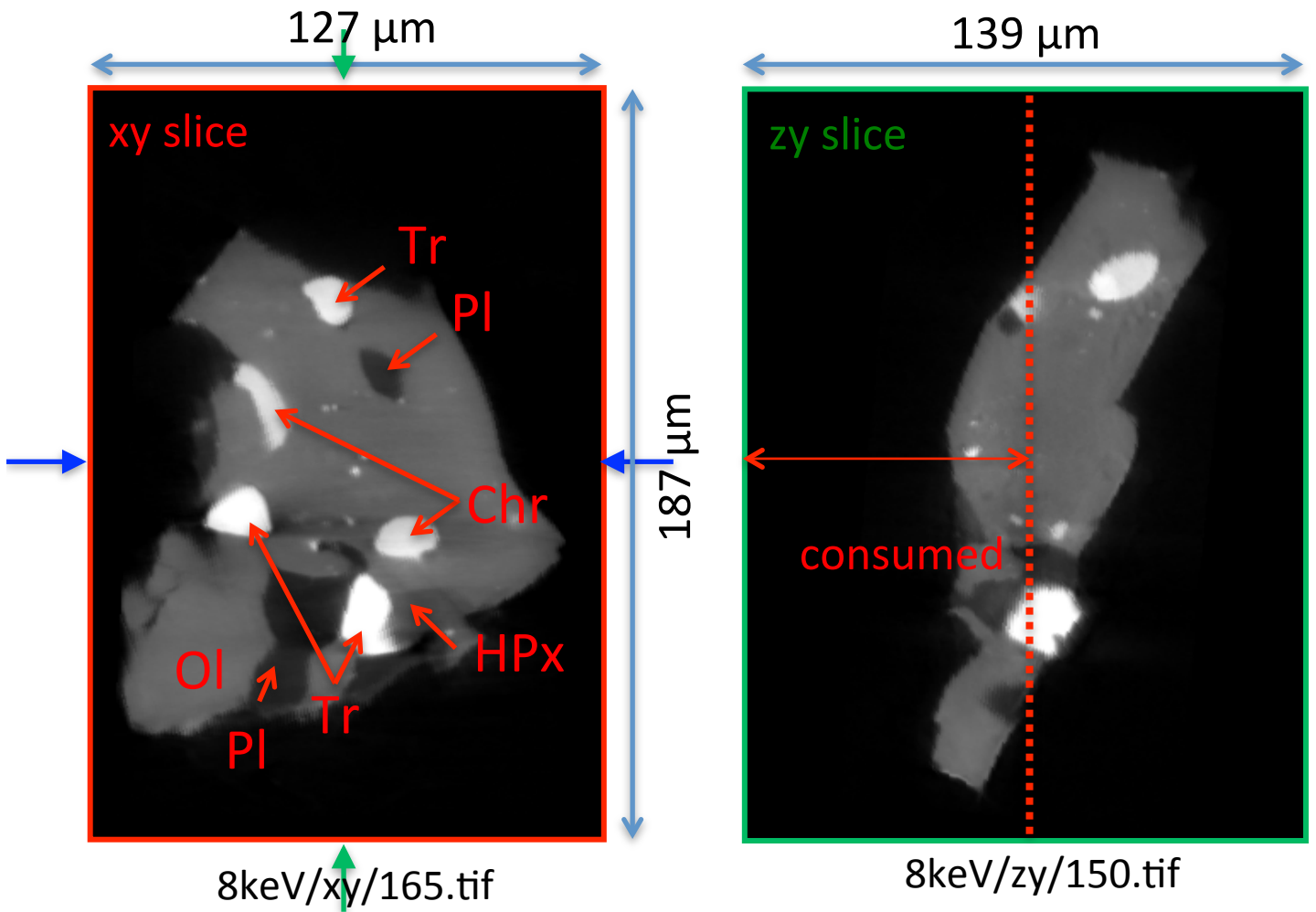
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

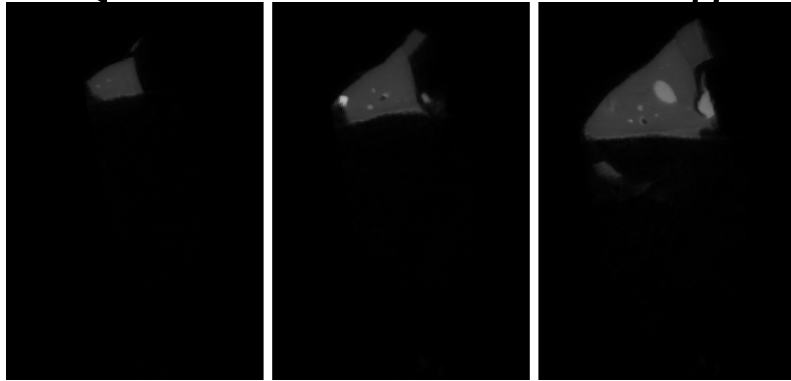
RA-QD02-0031 7 keV



RA-QD02-0031 8 keV



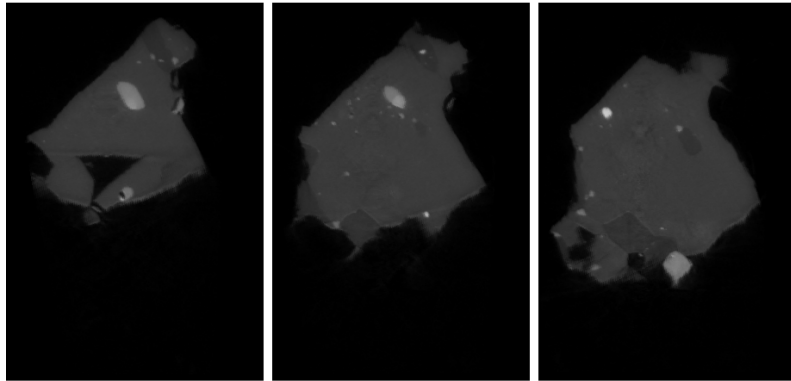
RA-QD02-0031 7 keV catalogue



066.tif

080.tif

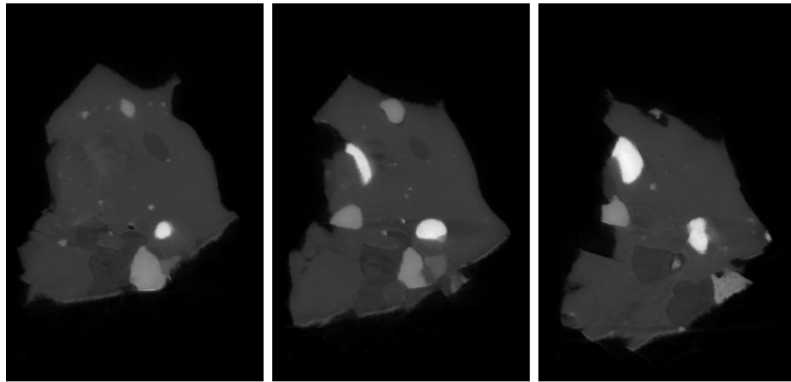
094.tif



108.tif

122.tif

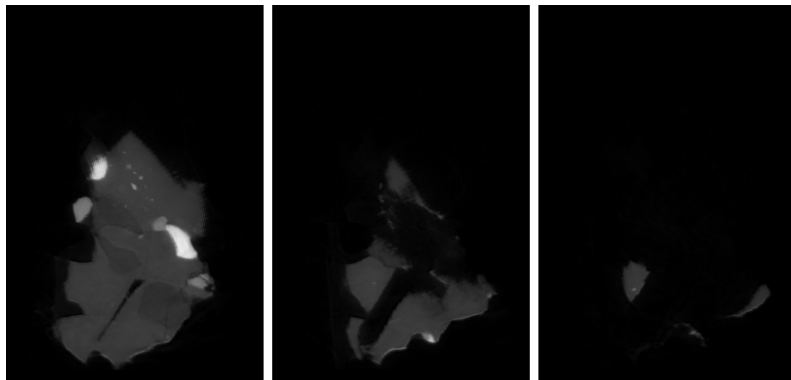
136.tif



150.tif

164.tif

178.tif



192.tif

206.tif

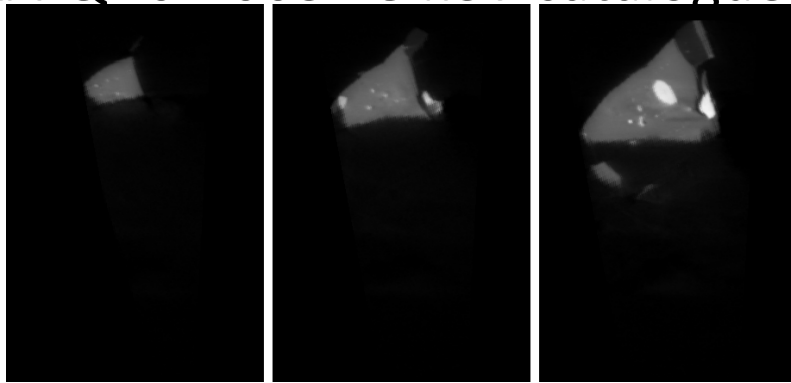
220.tif

dZ = 5.964 μm

54 μm

719 cm^{-1} (LAC)

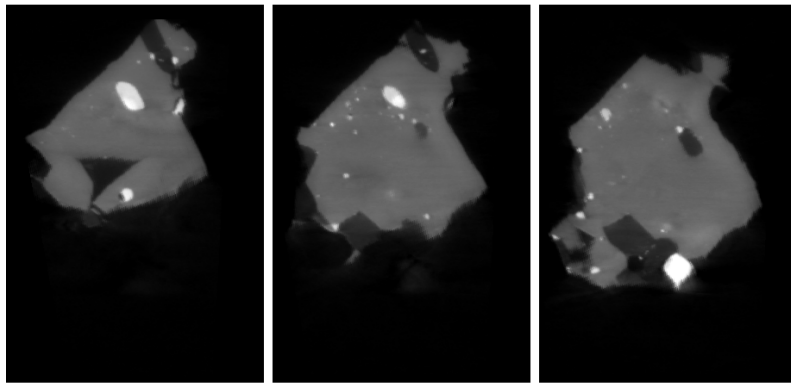
RA-QD02-0031 8 keV catalogue



066.tif

080.tif

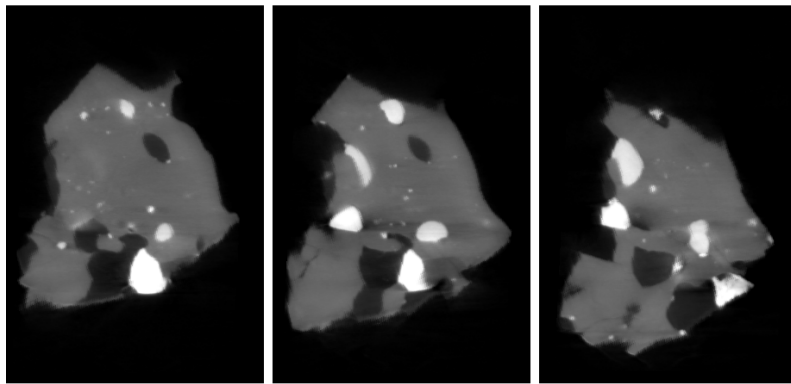
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108.tif

122.tif

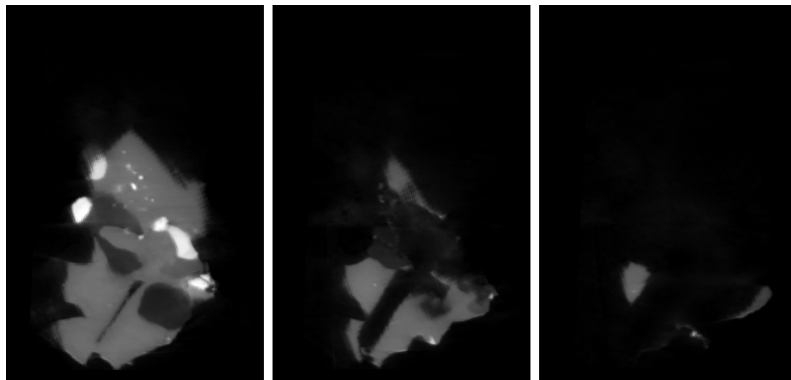
136.tif



150.tif

164.tif

178.tif



192.tif

206.tif

220.tif

dZ = 5.964 um

54 um

719 cm⁻¹ (LAC)

RA-QD02-0031 Dual energy histogram

