

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0013

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/22/2011 (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 %	53.5	5.76	4.4	33.96	-	0.35	-	-	-

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-QD02-0013

Operation Date Jan/22/2011 (7 keV)
Jan/24/2011 (8 keV)
operated by T. Uesugi (7 keV)
T. Matsumoto (8 keV)
analyzed by T. Matsumoto

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	53.5	5.76	4.4	35.96	-	0.35	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
35.4	39.9	45.5	234404	4.75

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

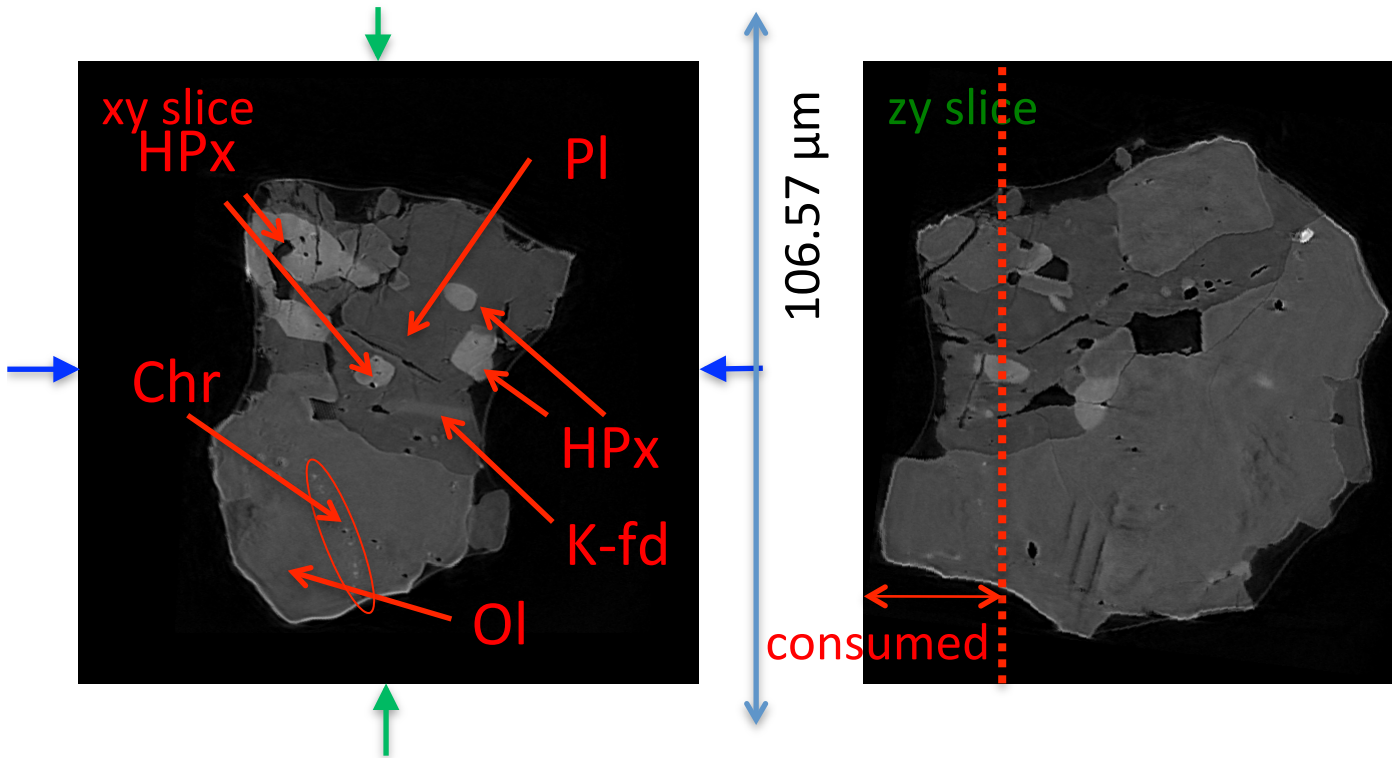
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

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

RA-QD02-0013 7 keV

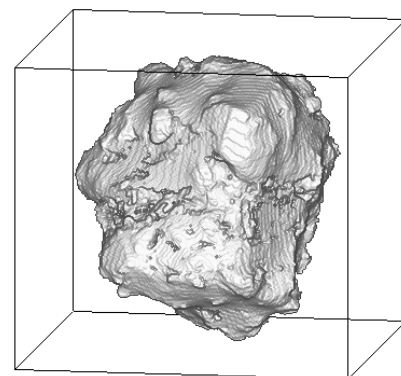
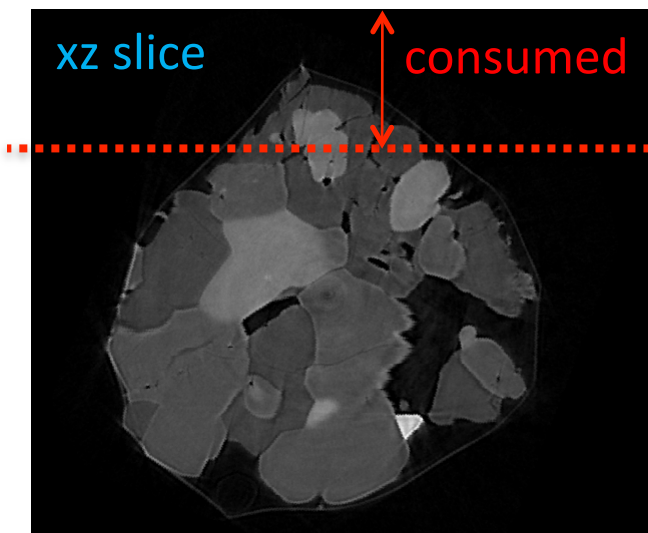
106.23 μm

90.46752 μm



7keV/xy/204.tif

7keV/zy/310.tif

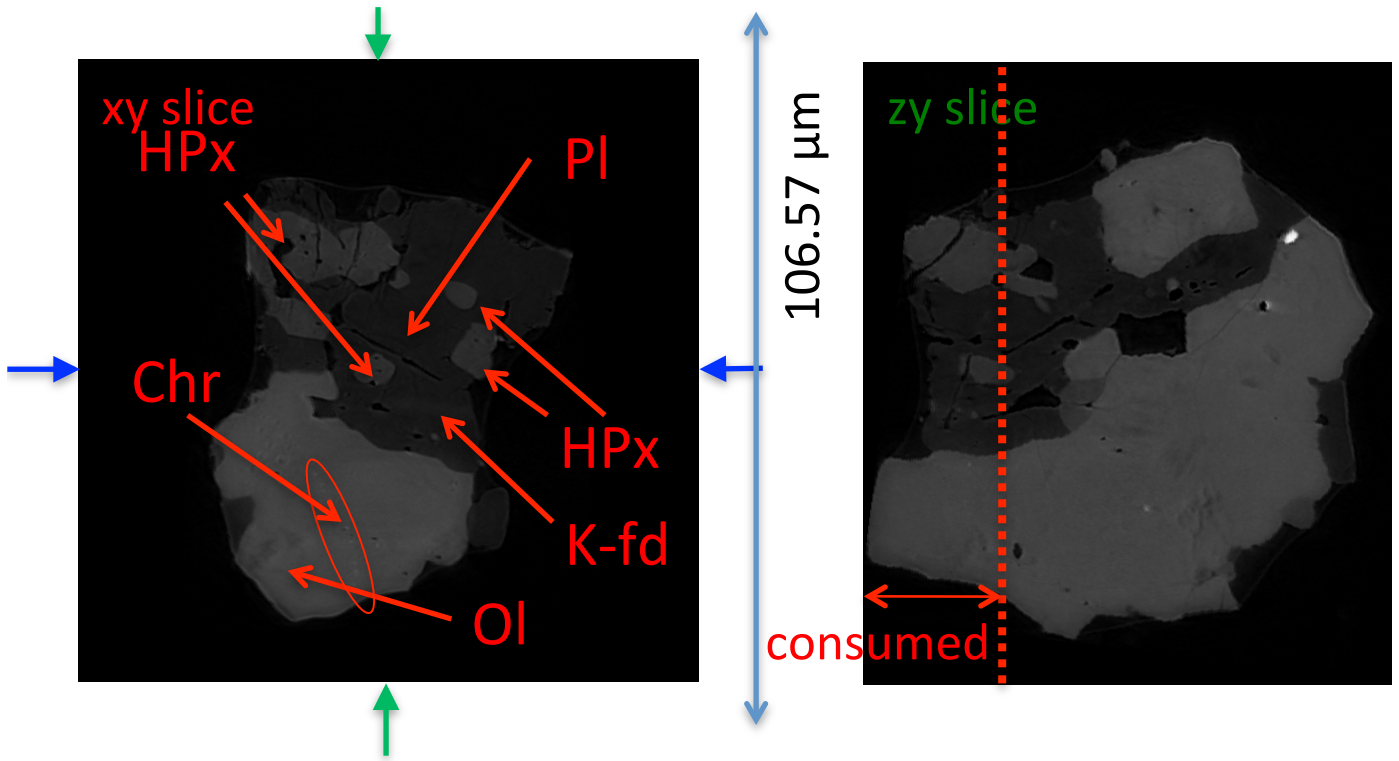


7keV/xz/311.tif

RA-QD02-0013 8 keV

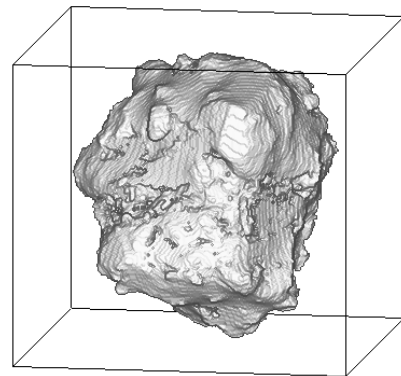
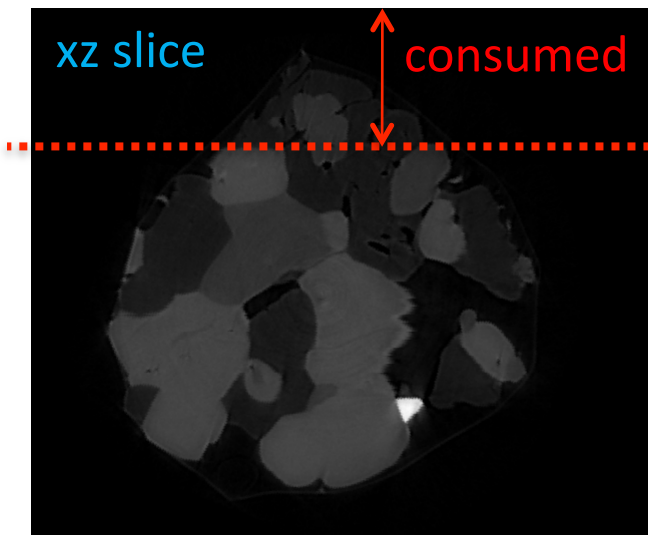
106.23 μm

90.46752 μm



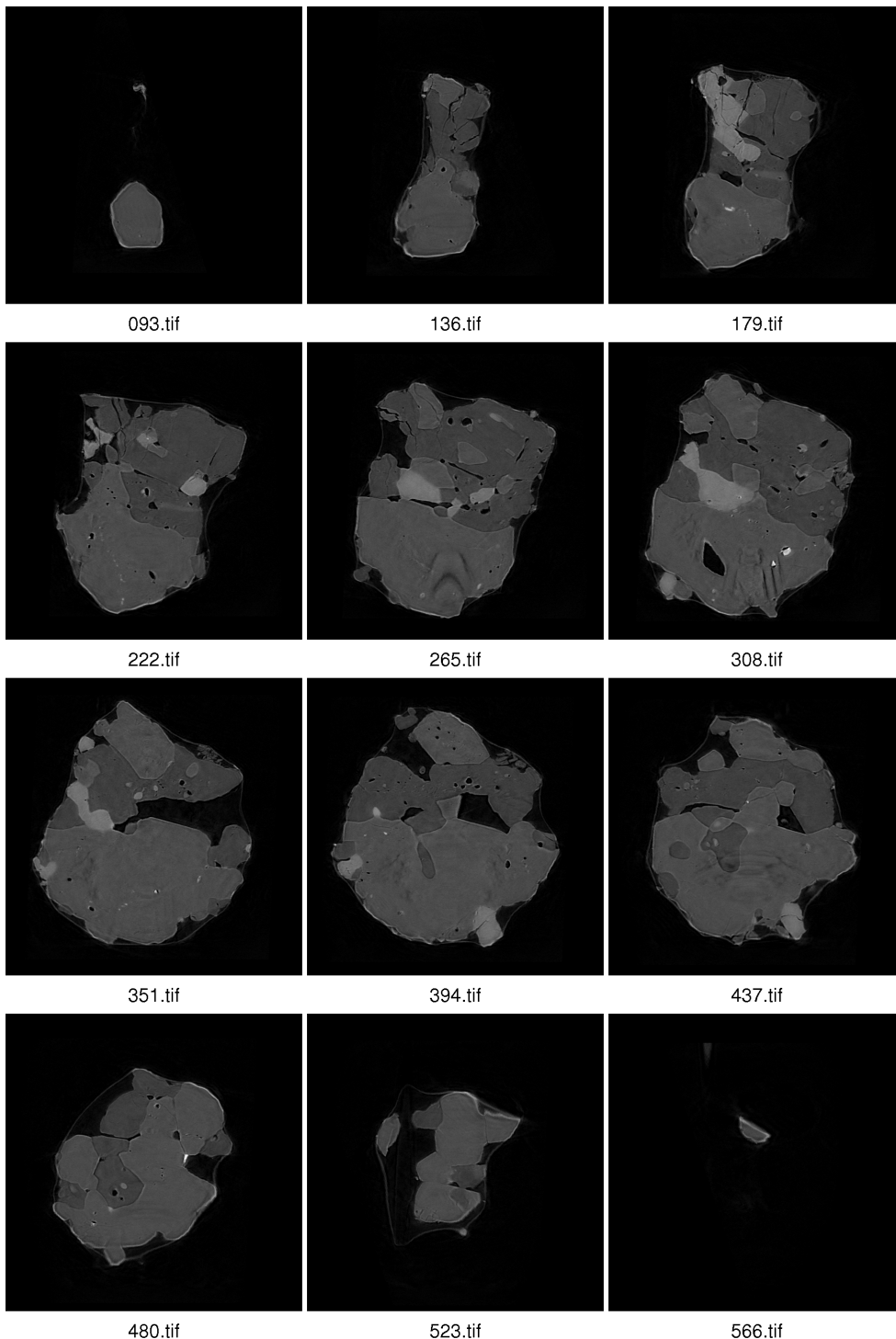
7keV/xy/204.tif

7keV/zy/310.tif




7keV/xz/311.tif

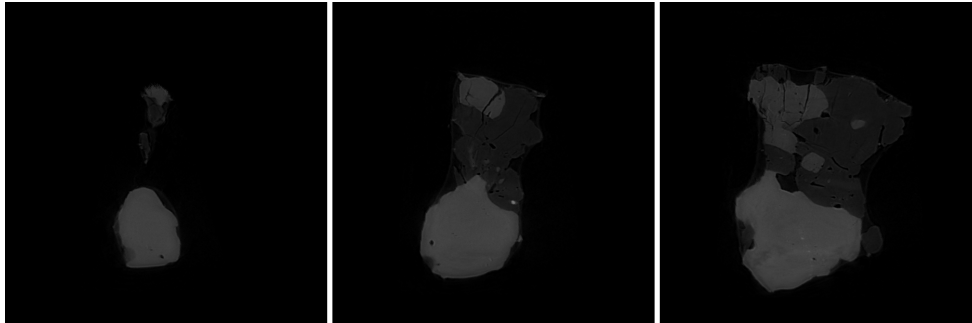
RA-QD02-0013 7 keV catalogue



dZ = 7.3702 μm

 20 μm
575 cm^{-1} (LAC)

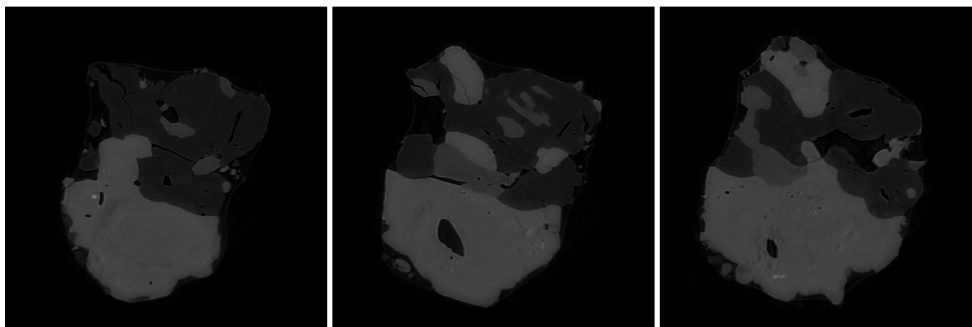
RA-QD02-0013 8 keV catalogue



108.tif

151.tif

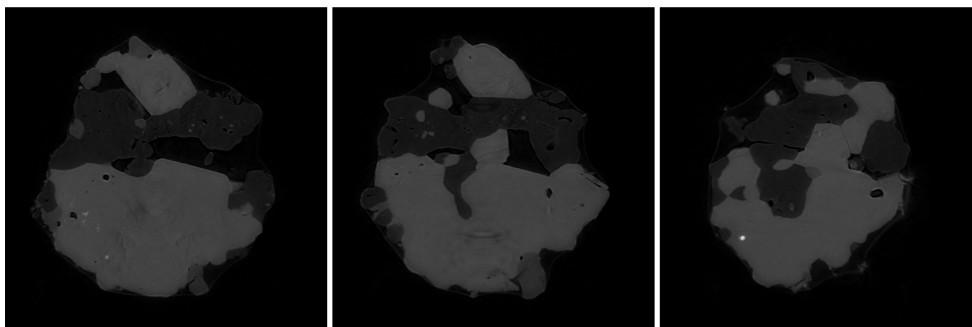
194.tif



237.tif

280.tif

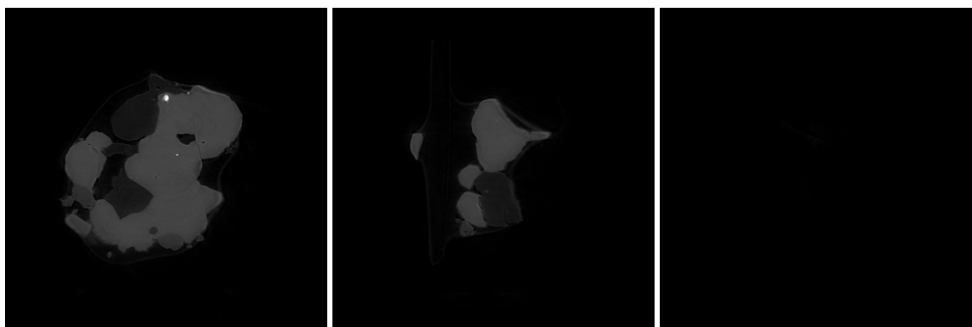
323.tif



366.tif

409.tif

452.tif




495.tif

538.tif

581.tif

dZ = 7.3702 μm

 20 μm
1150 cm^{-1} (LAC)

RA-QD02-0013 Dual energy histogram

