Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0011-1

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	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	33.2	-	40.2	26.6	-	-	-	-	-

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:

N_2 hold in sample holder.

Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0011-1

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

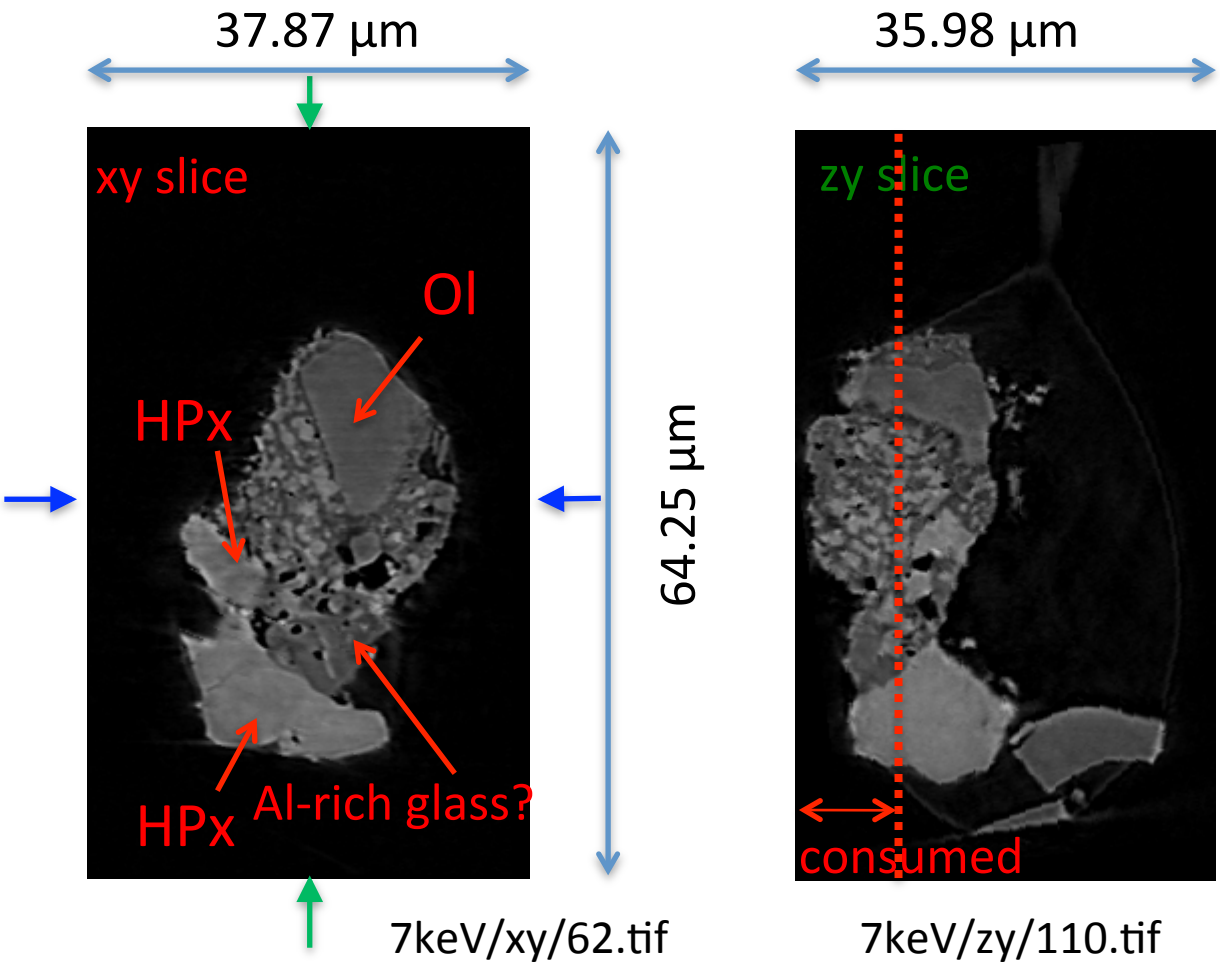
Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	33.2	-	40.2	26.6	-	-	-	-	-

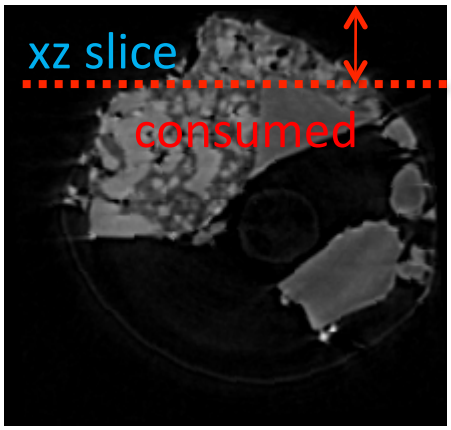
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
12.8	18.3	23.4	11326	11.014

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

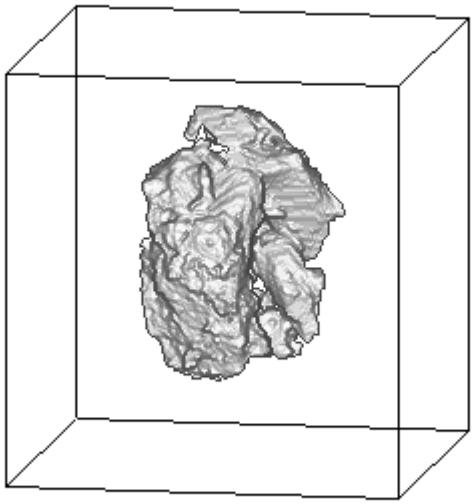
A, B, and C: shortest, middle, and longest axial radii, respectively, of a best-fit ellipsoid for the particle
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0011-1 7 keV

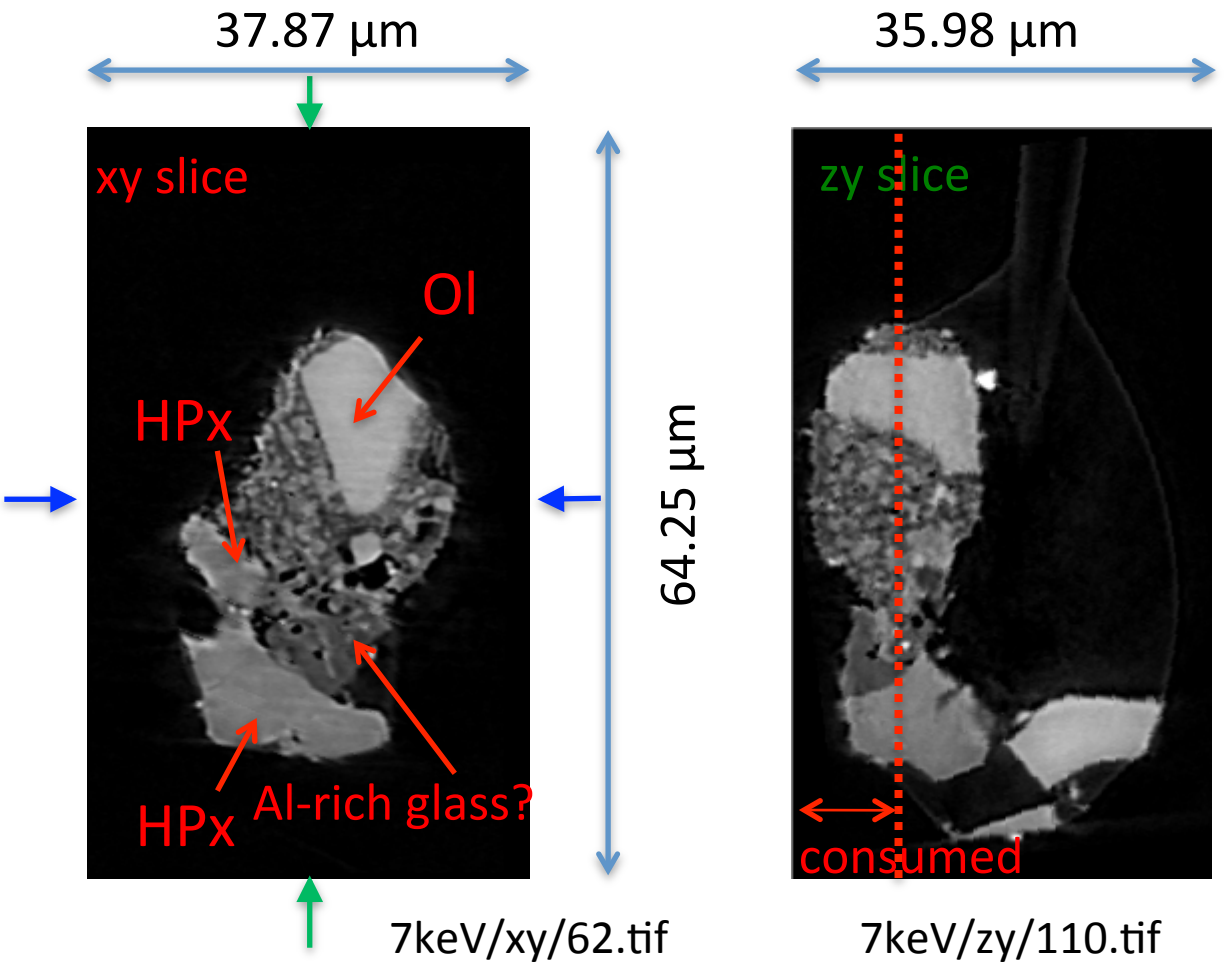




7keV/xz/187.tif

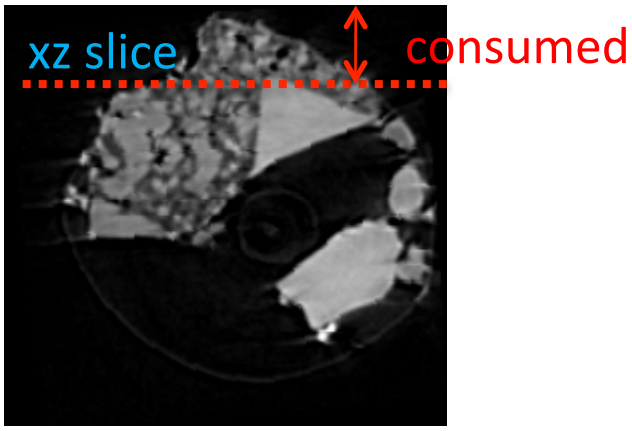


RA-QD02-0011-1 8 keV

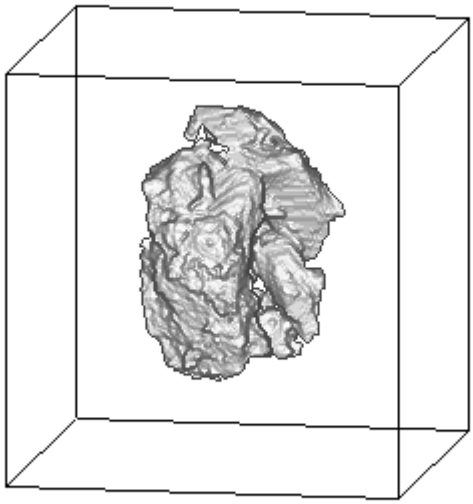


7keV/xy/62.tif

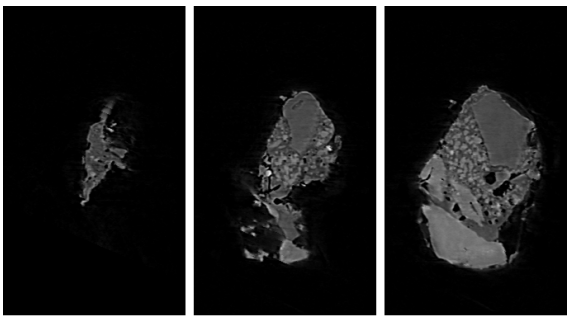
7keV/zy/110.tif



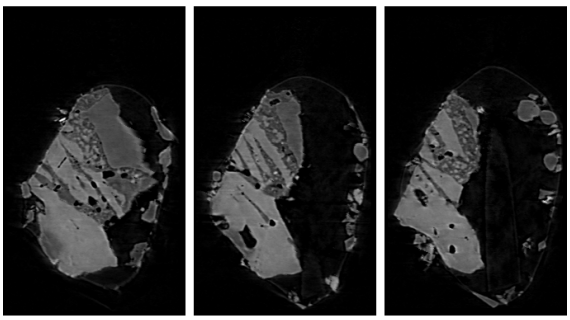
7keV/xz/187.tif



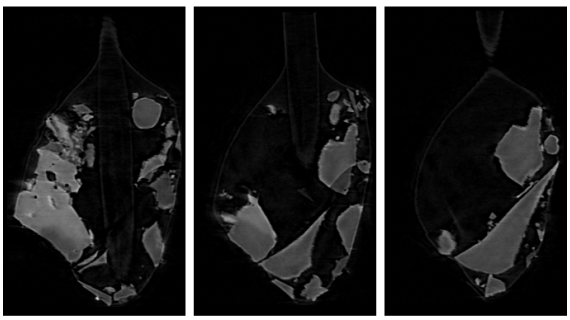
RA-QD02-0011-1 7 keV catalogue



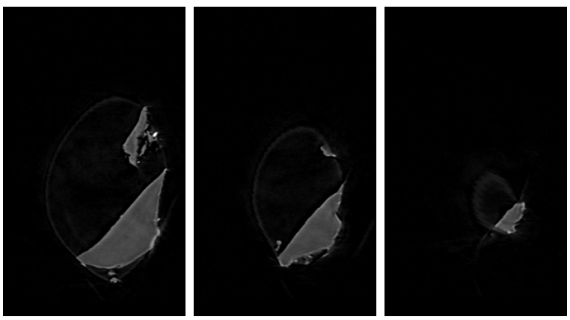
037.tif 053.tif 069.tif



085.tif 101.tif 117.tif



133.tif 149.tif 165.tif

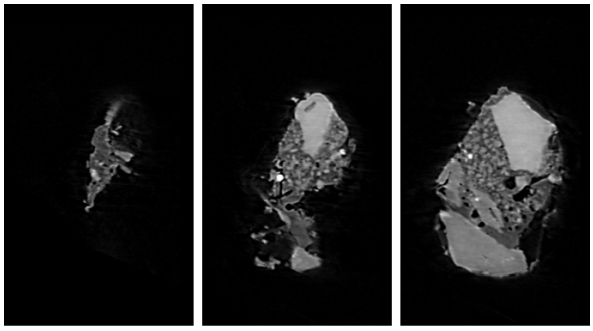


181.tif 197.tif 213.tif

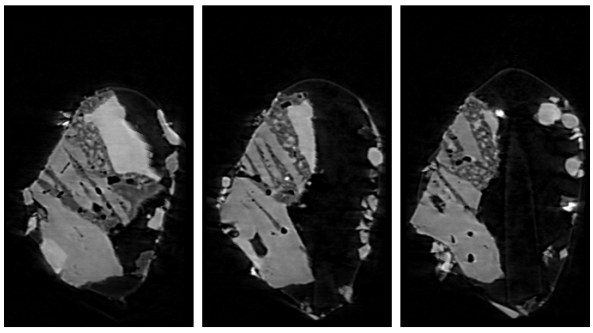
dZ = 2.7424 um 20 um

575cm^{-1} (LAC)

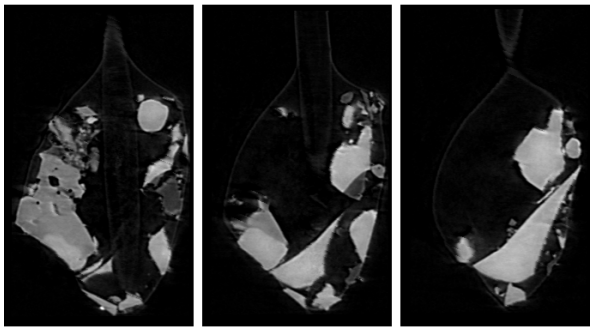
RA-QD02-0011-1 8 keV catalogue



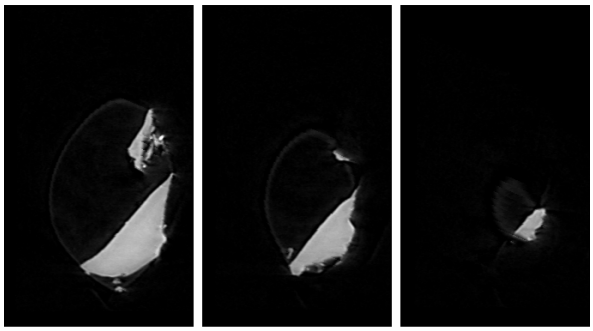
037.tif 053.tif 069.tif



085.tif 101.tif 117.tif



133.tif 149.tif 165.tif



181.tif 197.tif 213.tif

dZ = 2.7424 um 20 um

431cm^{-1} (LAC)

RA-QD02-0011-1 Dual energy histogram