Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0014

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	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	87.54	10.94	-	1.52	-	-	-	-	-

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-QD02-0014

Operation Date Jan/26/2011 (7 keV)
Jan/26/2011 (8 keV)
operated by J. Matsuno (7 keV)
M. Uesugi (8 keV)
analyzed by T. Matsumoto

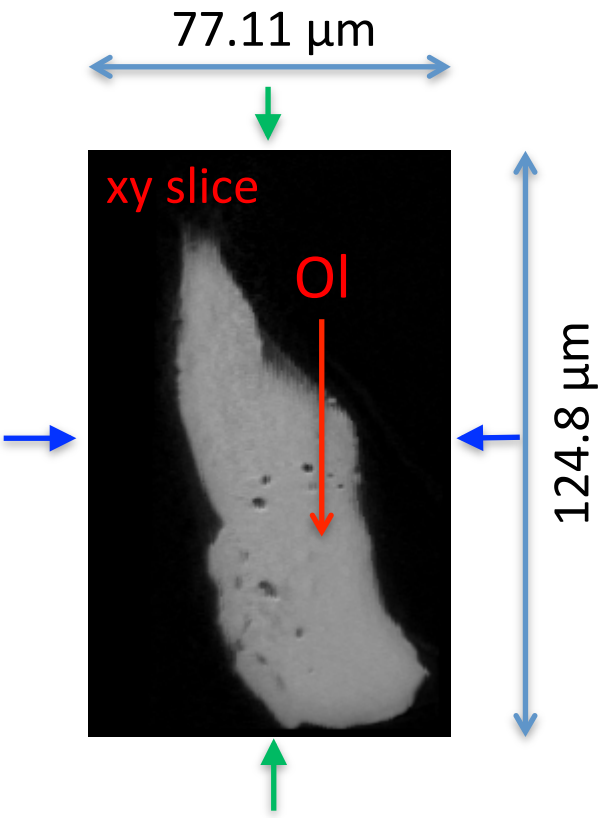
Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	87.54	10.94	-	1.52	-	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
19.0	28.7	65.6	125823	0.67201

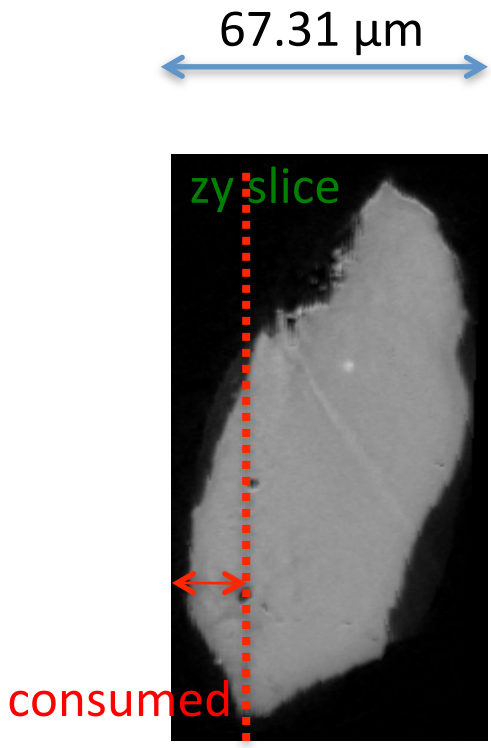
Ol: olivine
LPx: low calcium pyroxene
HPx: high calcium pyroxene
Pl: plagioclase
Tr: troilite
Tae: taenite
Chm: chromite
CP: calcium phosphate
Kam: kamacite

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

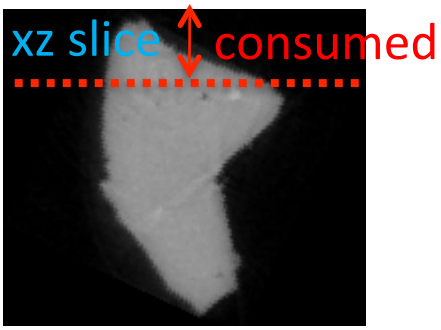
RA-QD02-0014 7 keV

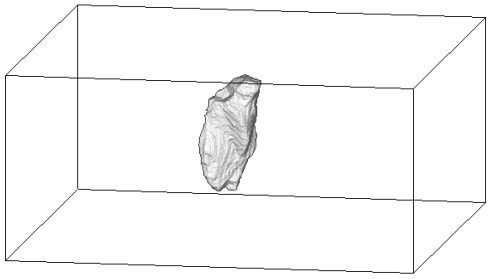


7keV/xy/69.tif



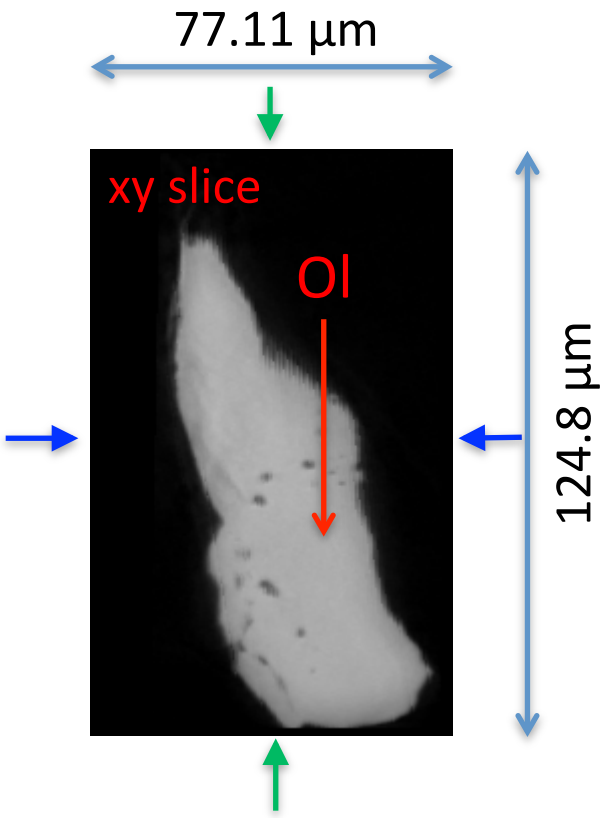
7keV/zy/90.tif



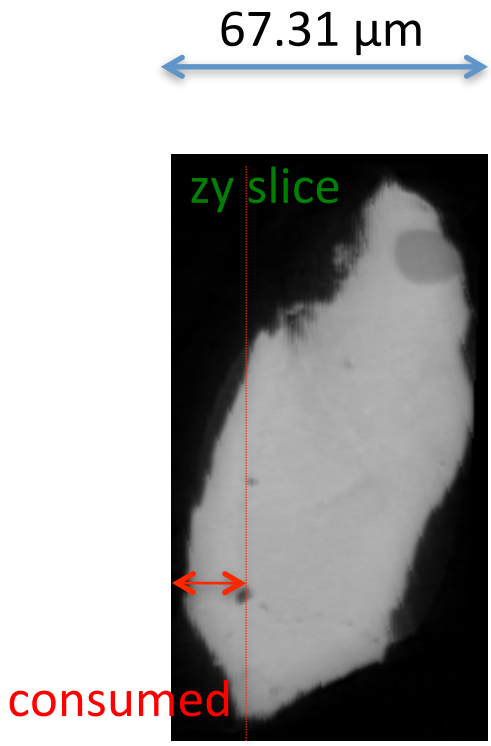


7keV/xz/146.tif

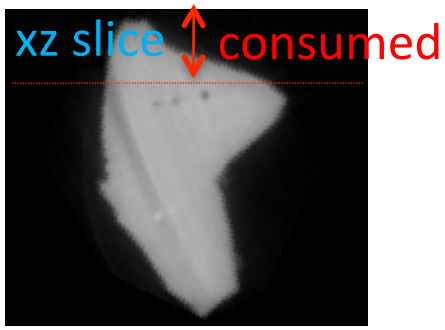
RA-QD02-0014 8 keV

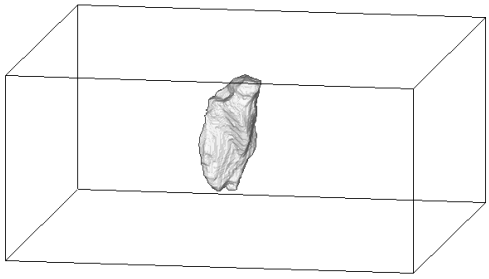


7keV/xy/69.tif



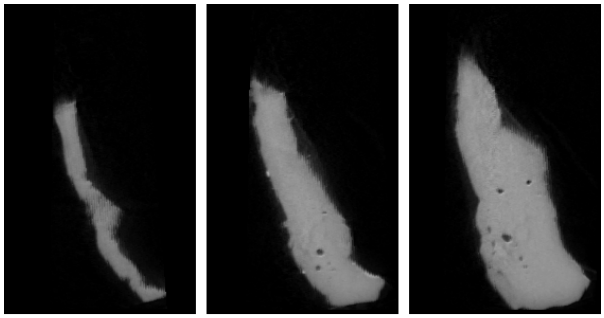
7keV/zy/90.tif



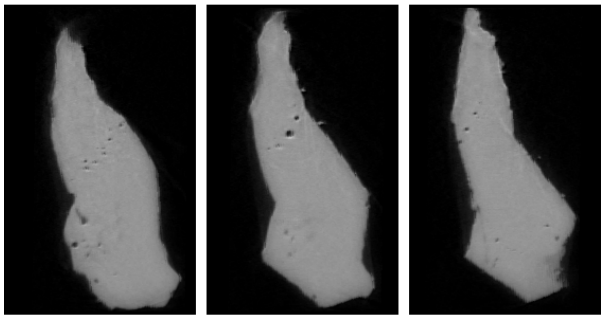


7keV/xz/146.tif

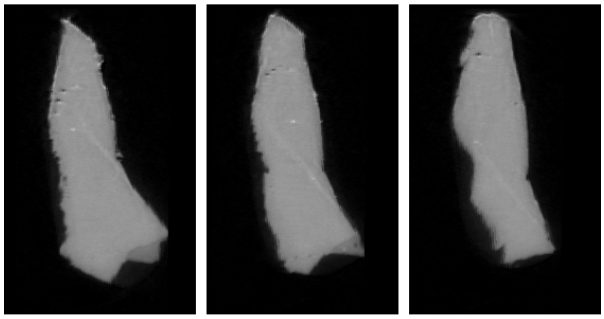
RA-QD02-0014 7 keV catalogue



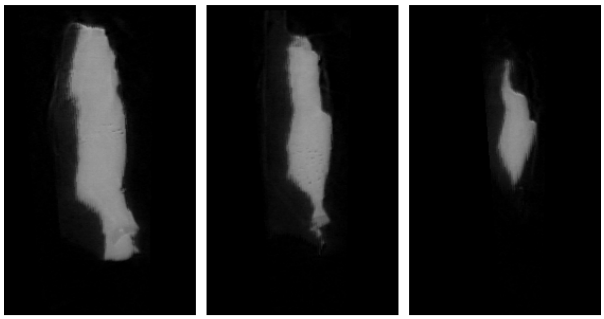
042.tif 054.tif 066.tif



078.tif 090.tif 102.tif



114.tif 126.tif 138.tif

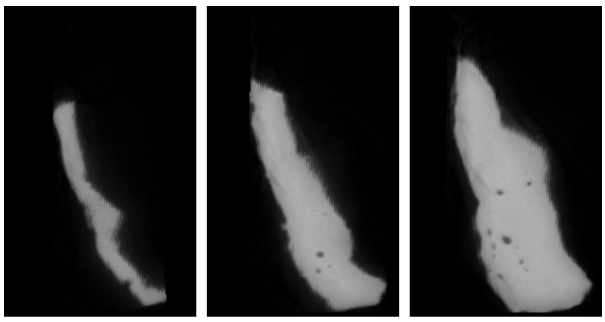


150.tif 162.tif 174.tif

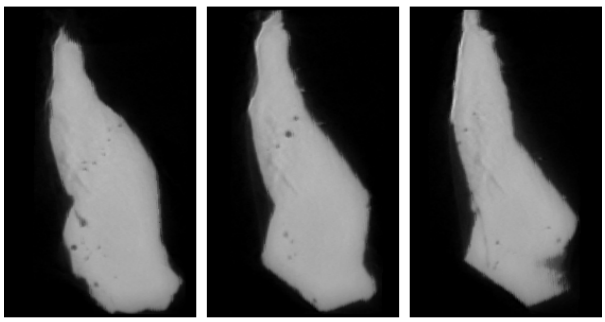
dZ = 2.55 um 54 um

287 cm-1 (LAC)

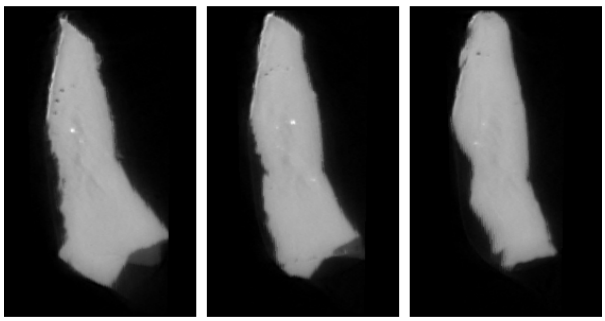
RA-QD02-0014 8 keV catalogue



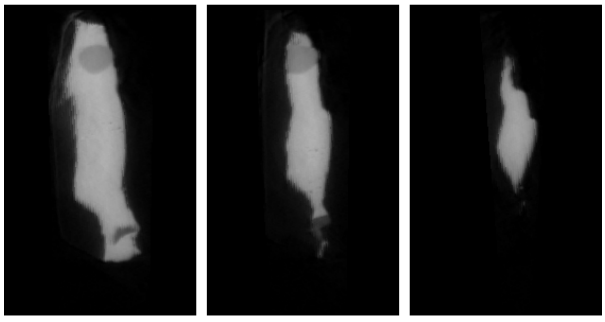
042.tif 054.tif 066.tif



078.tif 090.tif 102.tif



114.tif 126.tif 138.tif



150.tif 162.tif 174.tif

dZ = 2.55 um 54 um

431 cm-1 (LAC)

RA-QD02-0014 Dual energy histogram