Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0042

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 %	1.29	90.27	1.02	7.02	0.24	0.02			0.01

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-QD02-0042

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. Nagano

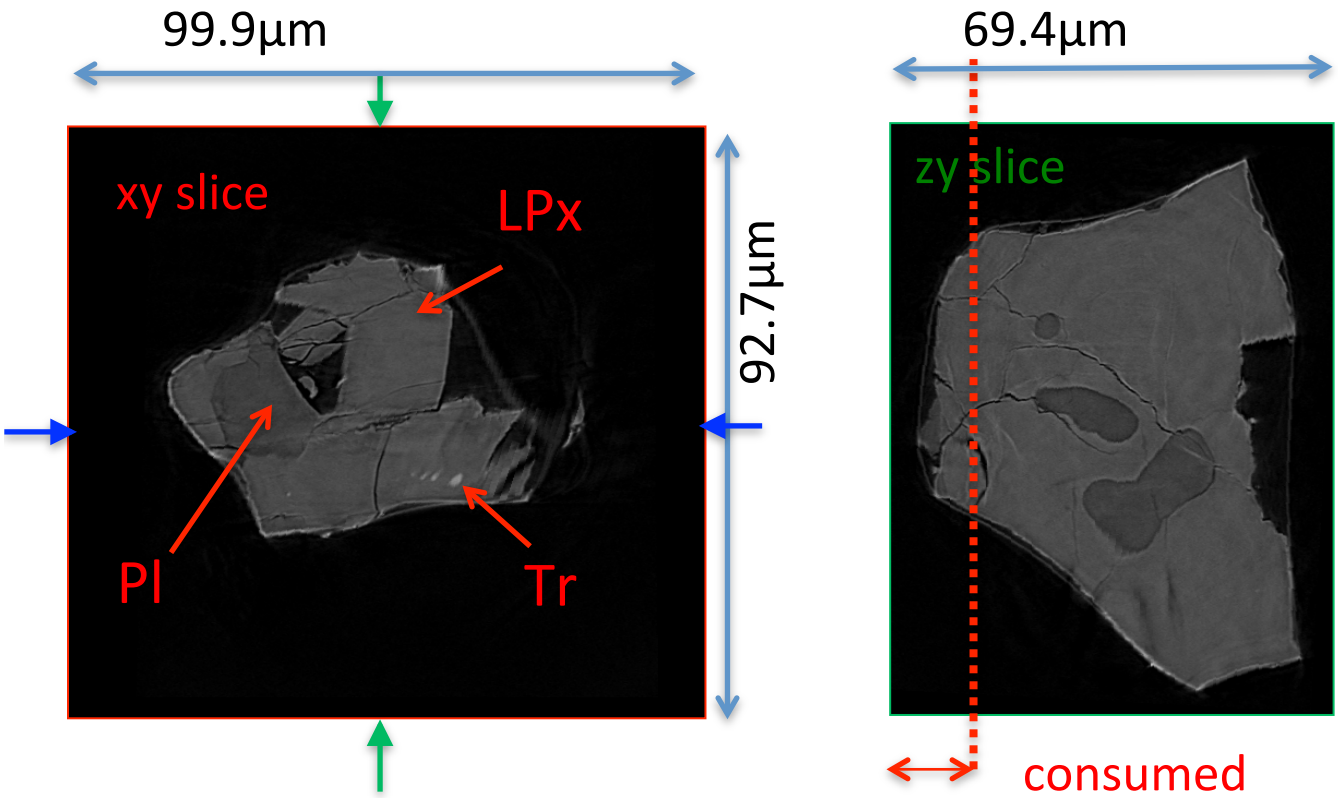
Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	1.29	90.27	1.02	7.02	0.24	0.02			0.01

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
30.7	39.2	48.1	211257	0

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

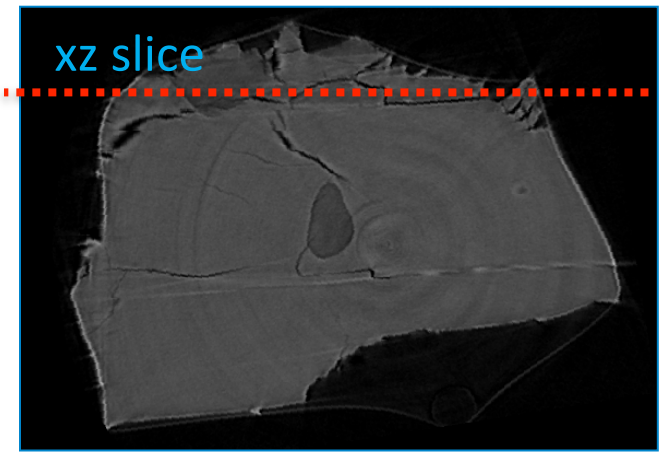
A, B, and C: shortest, middle, and longest axial radii, respectively, of a best-fit ellipsoid for the particle
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0042 7keV



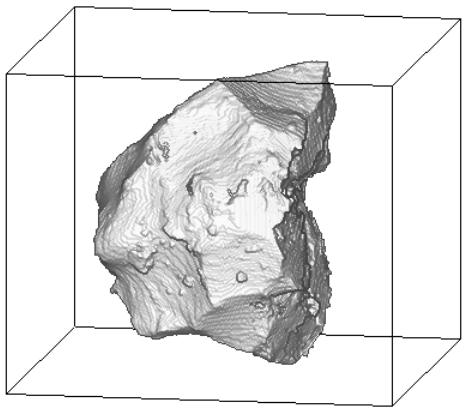
7keV/xy/116.tif

7keV/zy/292.tif

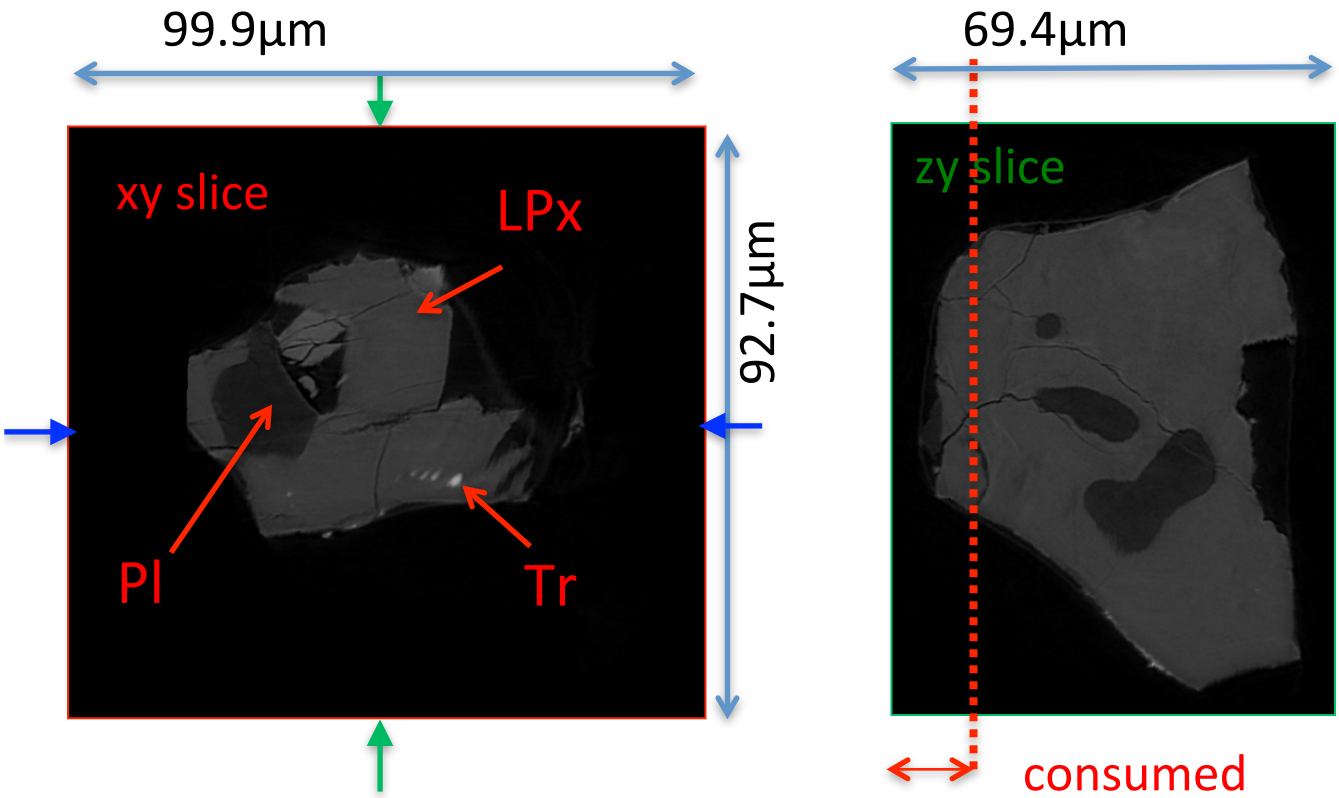


consumed

7keV/xz/271.tif

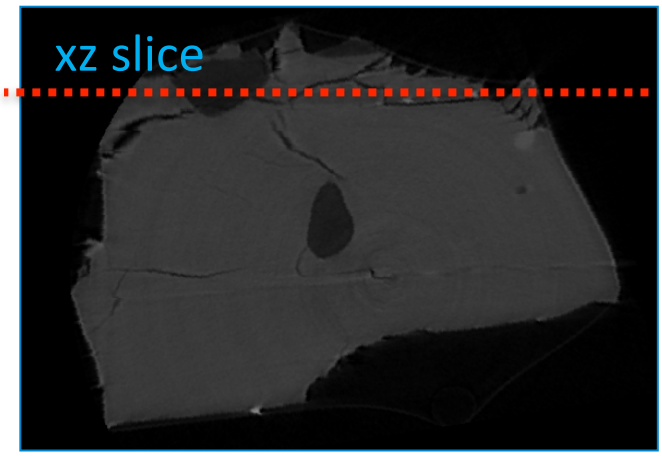


RA-QD02-0042 8keV



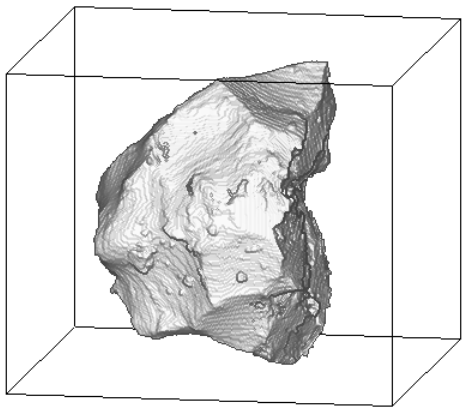
8keV/xy/116.tif

8keV/zy/292.tif

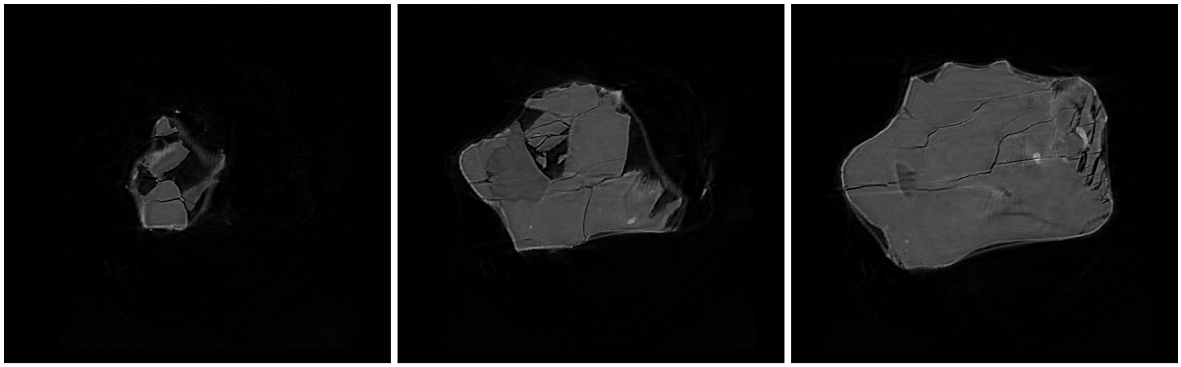


consumed

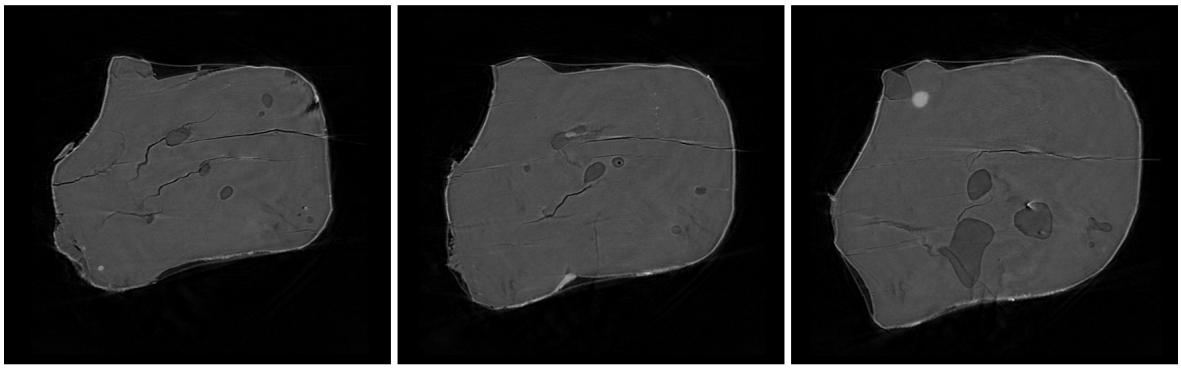
8keV/xz/271.tif



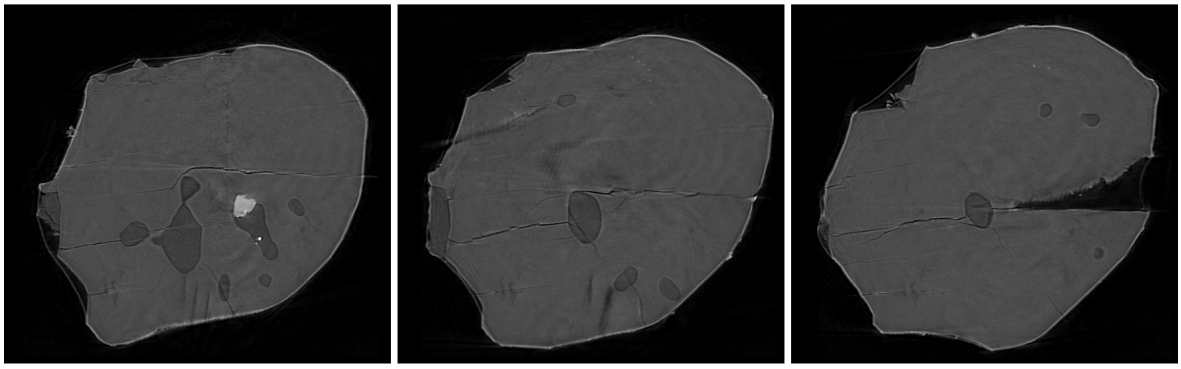
RA-QD02-0042 7keV catalogue



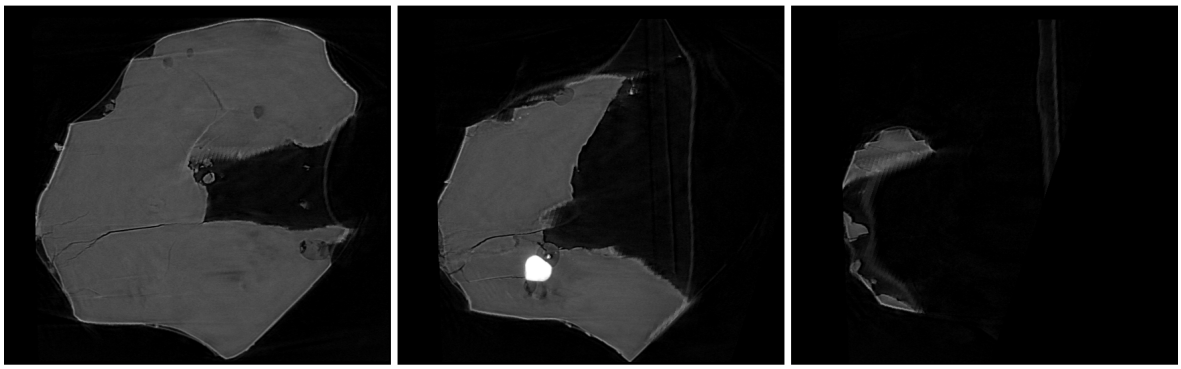
081.tif 113.tif 145.tif



177.tif 209.tif 241.tif



273.tif 305.tif 337.tif



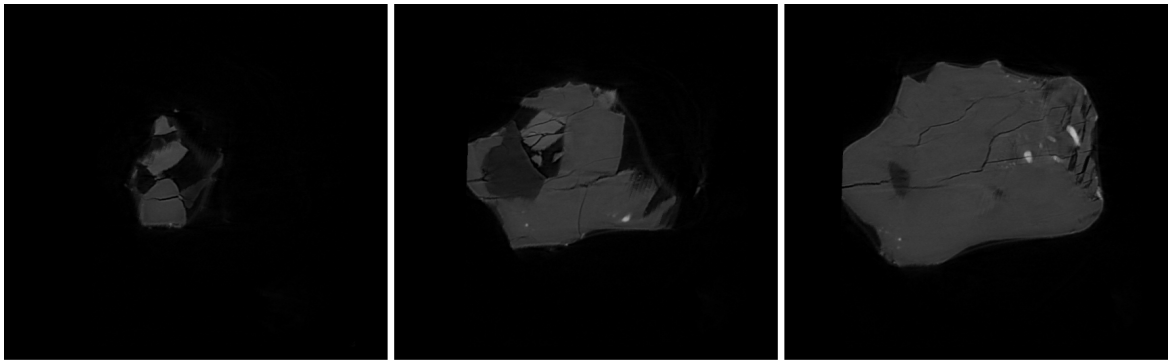
369.tif 401.tif 433.tif

dZ = 5.48288 um

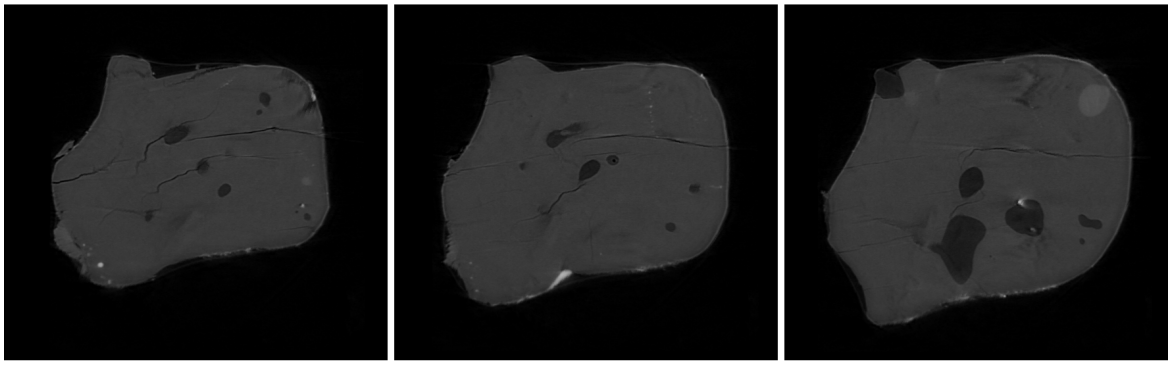
21 um

575 cm-1 (LAC)

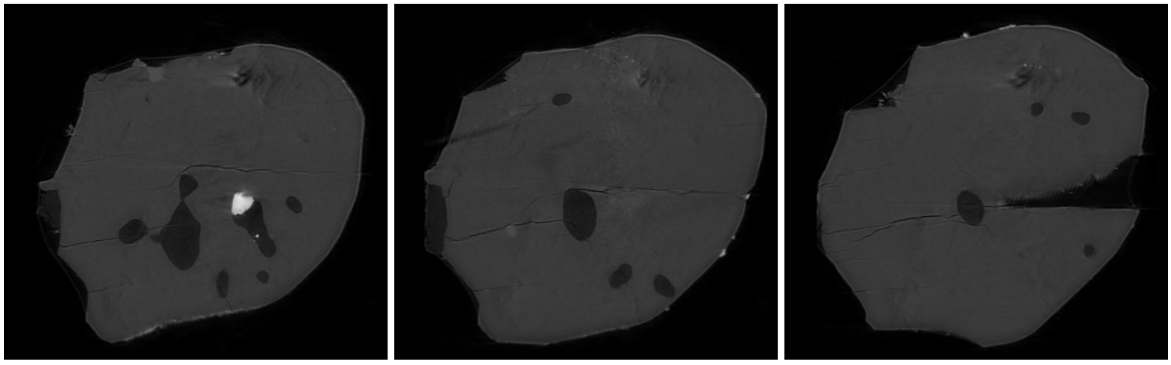
RA-QD02-0042 8keV catalogue



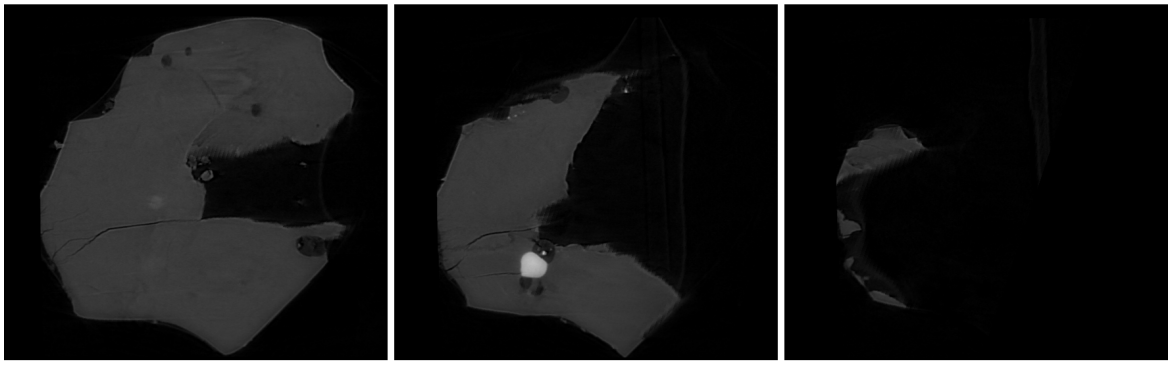
081.tif 113.tif 145.tif



177.tif 209.tif 241.tif



273.tif 305.tif 337.tif



369.tif 401.tif 433.tif

dZ = 5.48288 um

21 um

1006 cm-1 (LAC)

RA-QD02-0042 Dual energy histogram