

## Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

**Sample ID:** RA-QD02-0011-2

**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 %	89.3	-	2.63	7.05	0.81	0.21	-	-	-

**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<sub>2</sub> hold in sample holder.

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

See attached sheets.

# RA-QD02-0011-2

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 %	89.3	-	2.63	7.05	0.81	0.21	-	-	-

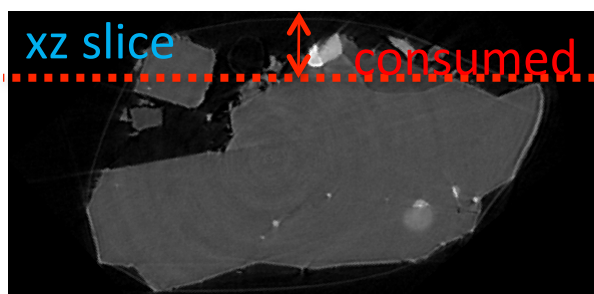
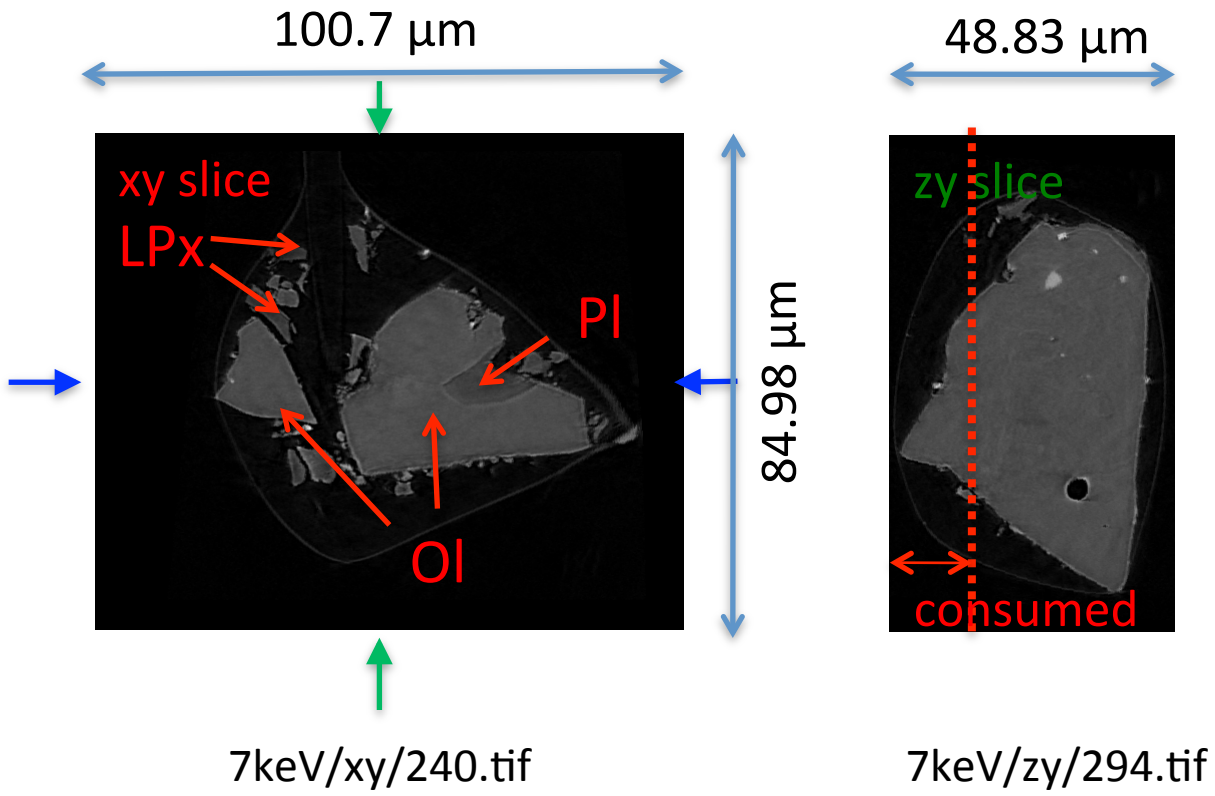
A ( $\mu\text{m}$ )	B ( $\mu\text{m}$ )	C ( $\mu\text{m}$ )	V ( $\mu\text{m}^3$ )	Porosity (%)
20.5	31.2	40.2	94409	0.3226

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

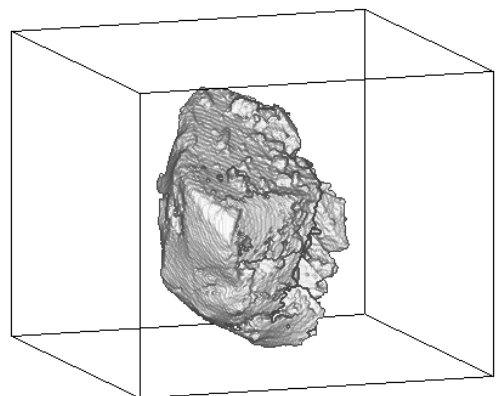
A, B, and C: shortest, middle, and longest axial radii, respectively,  
of a best-fit ellipsoid for the particle

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

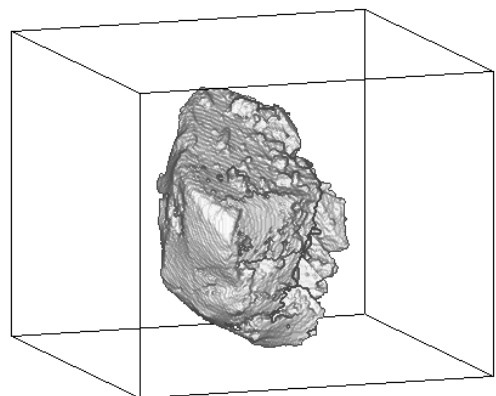
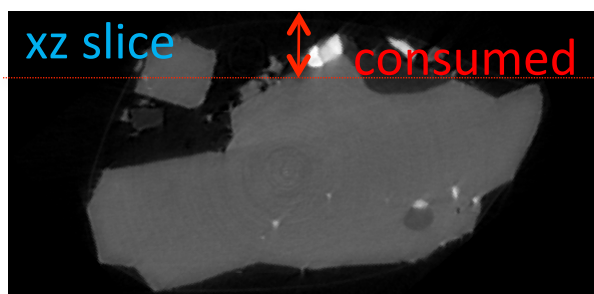
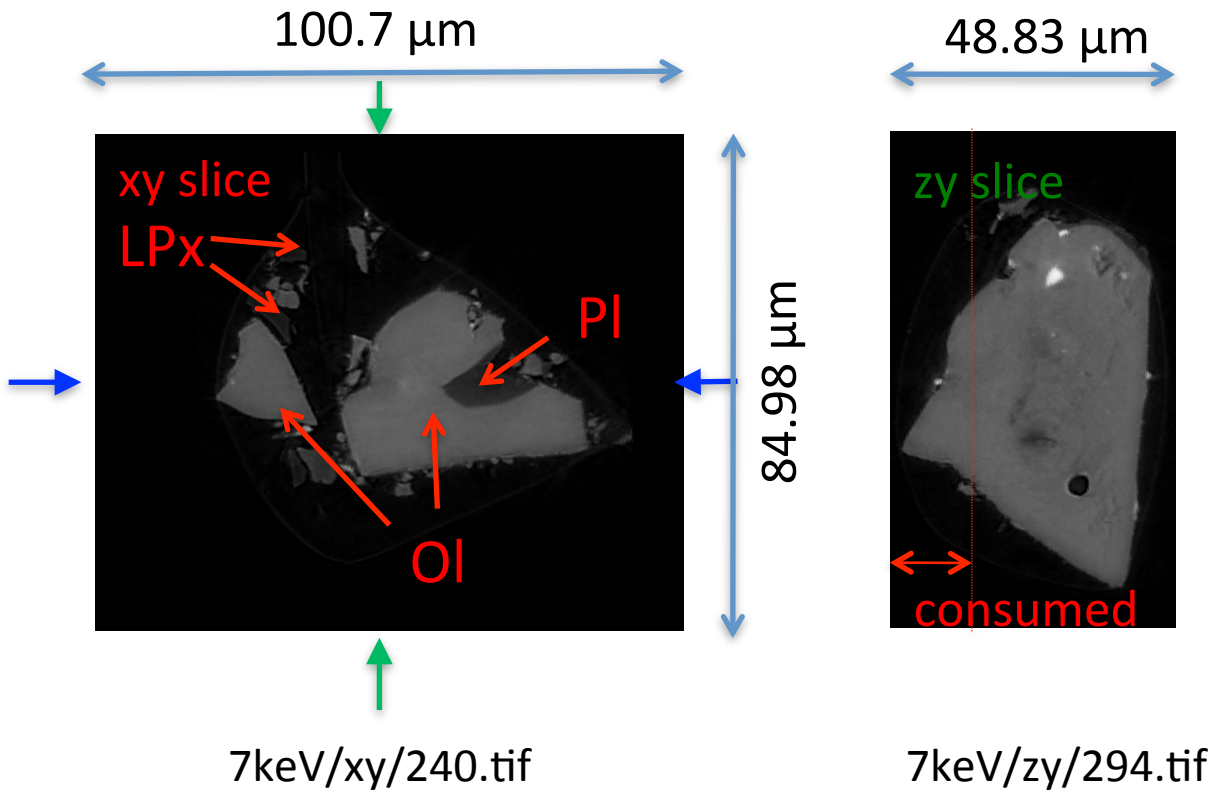
# RA-QD02-0011-2 7 keV



7keV/xz/248.tif

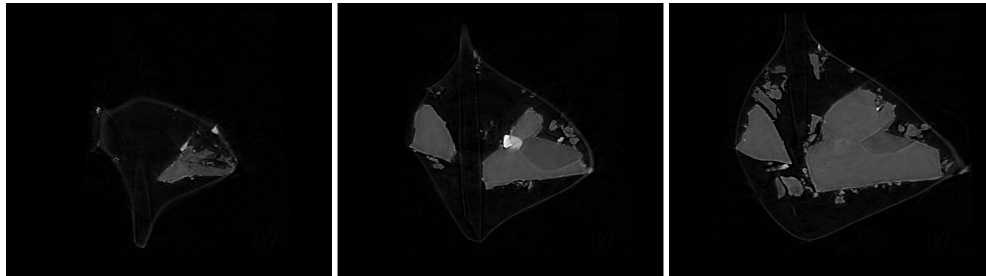


# RA-QD02-0011-2 8 keV



7keV/xz/248.tif

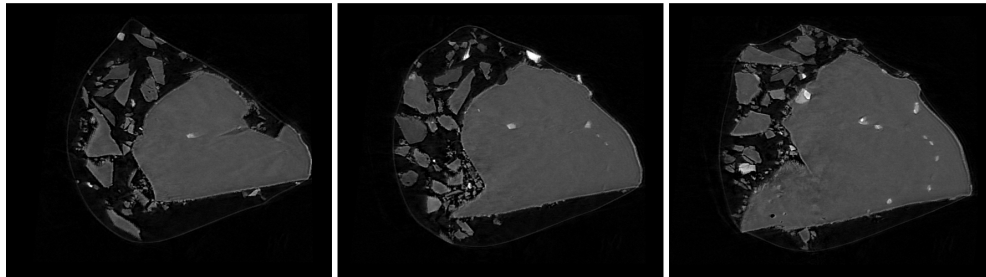
# RA-QD02-0011-2 7 keV catalogue



195.tif

217.tif

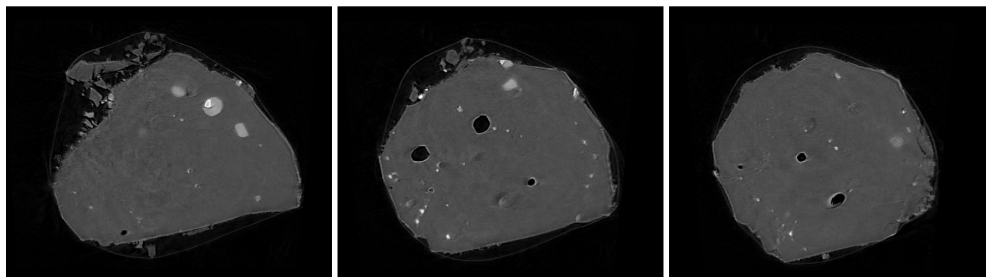
239.tif



261.tif

283.tif

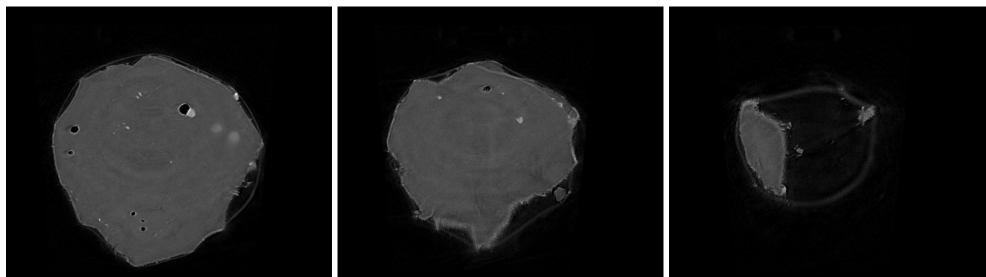
305.tif



327.tif

349.tif

371.tif





393.tif

415.tif

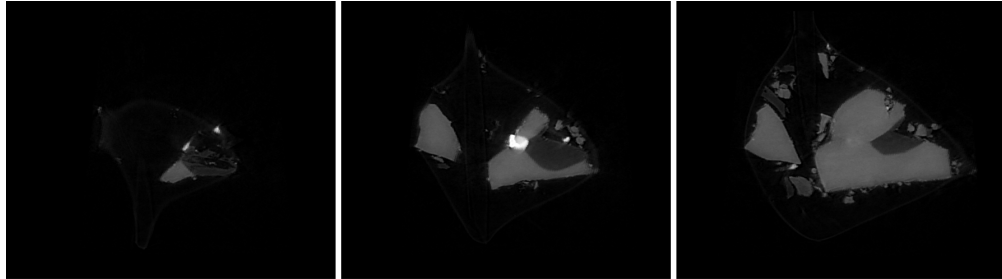
437.tif

dZ = 3.76948  $\mu\text{m}$

 20  $\mu\text{m}$

 575 $\text{cm}^{-1}$  (LAC)

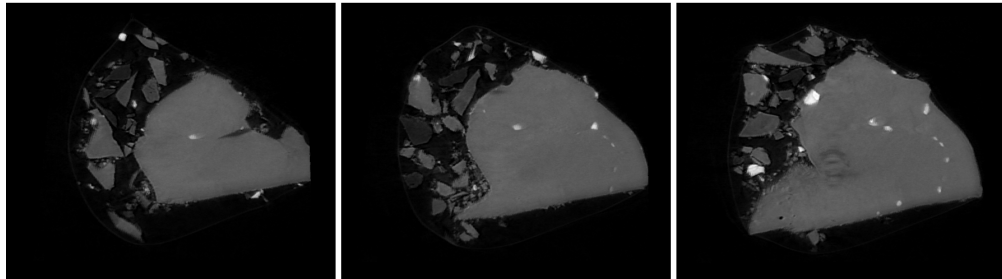
# RA-QD02-0011-2 8 keV catalogue



195.tif

217.tif

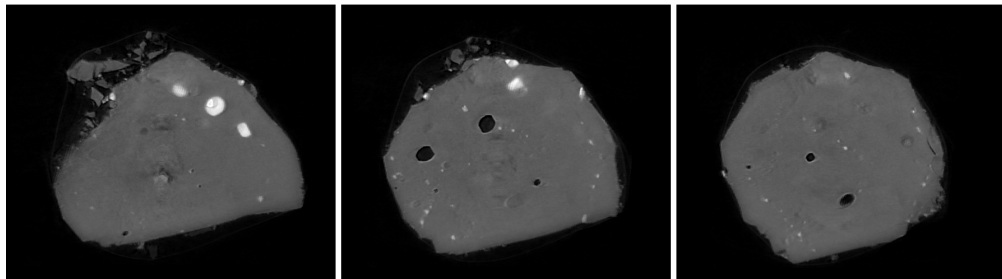
239.tif



261.tif

283.tif

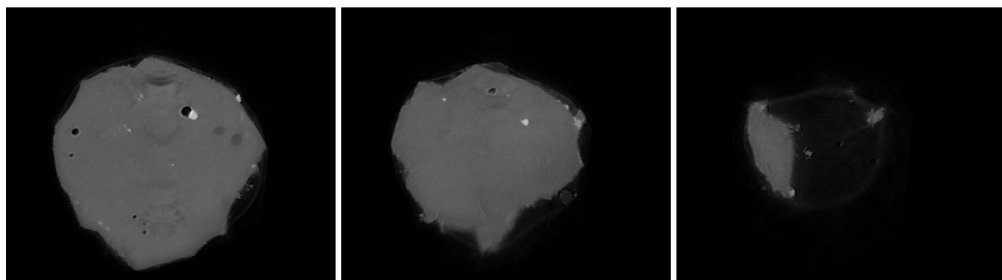
305.tif



327.tif

349.tif

371.tif



393.tif

415.tif

437.tif

dZ = 3.76948 um

20 um

862cm<sup>-1</sup> (LAC)

# RA-QD02-0011-2 Dual energy histogram

