

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0048

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/23/2011 (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 %	68.9	2.47	10.3	18.2	0.11				

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-QD02-0048

Operation Date Jan/23/2011 (7keV)
 Jan/24/2011 (8keV)

operated by T. Matsumoto (7keV)
 T. Matsumoto (8keV)

analyzed by T. Nagano

Mode	OI	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	68.9	2.47	10.3	18.2	0.11				

A (μm)	B (μm)	C (μm)	V (μm ³)	Porosity (%)
13.7	21.8	28.8	29185	6.03

OI: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

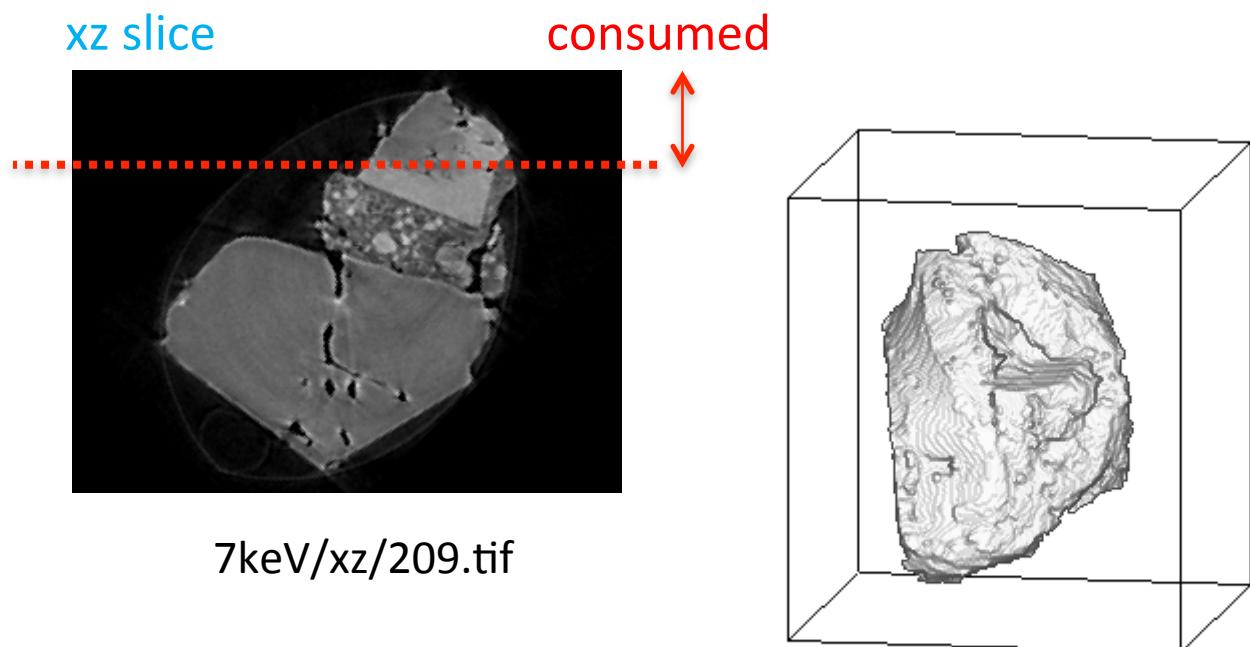
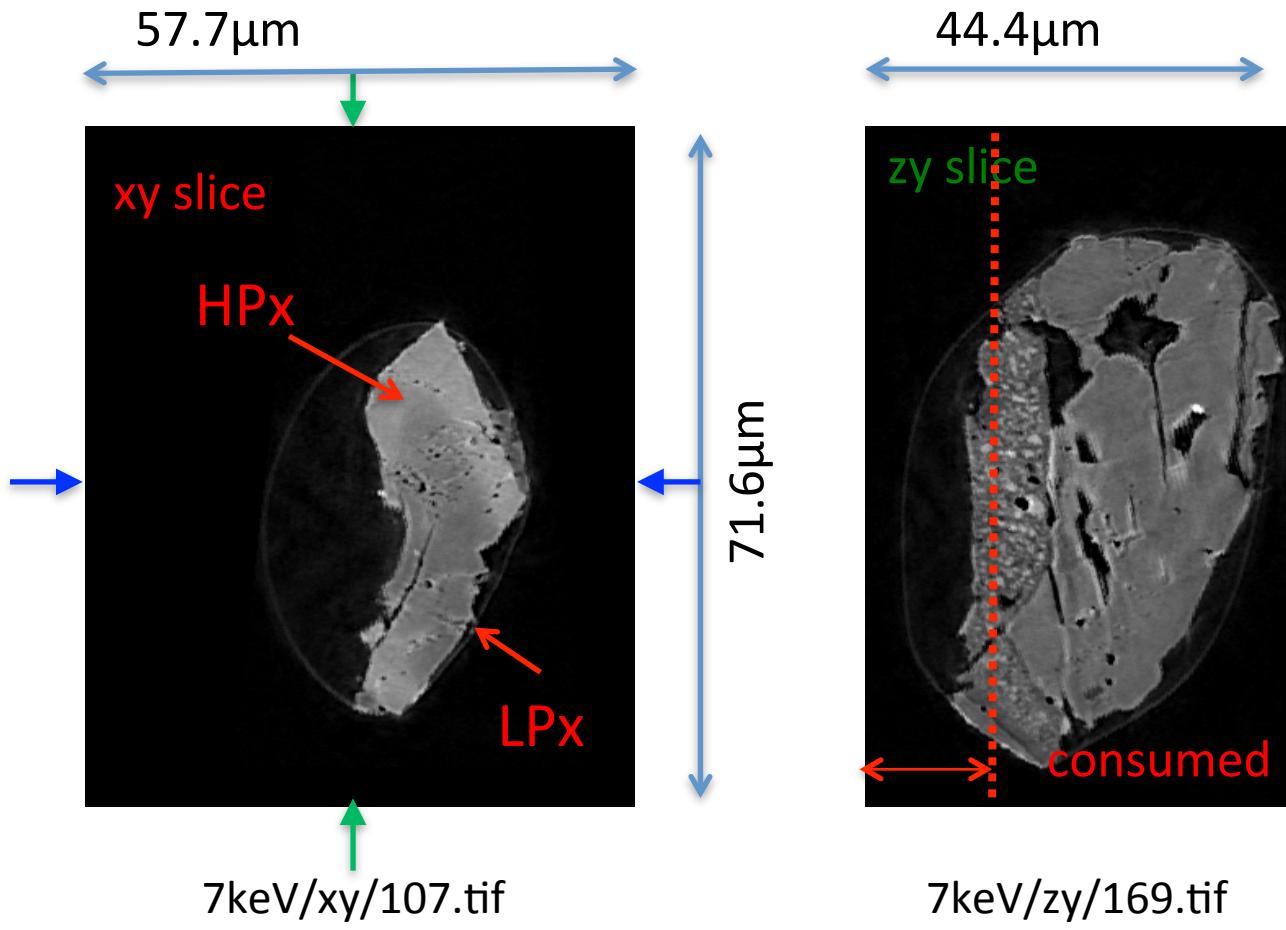
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

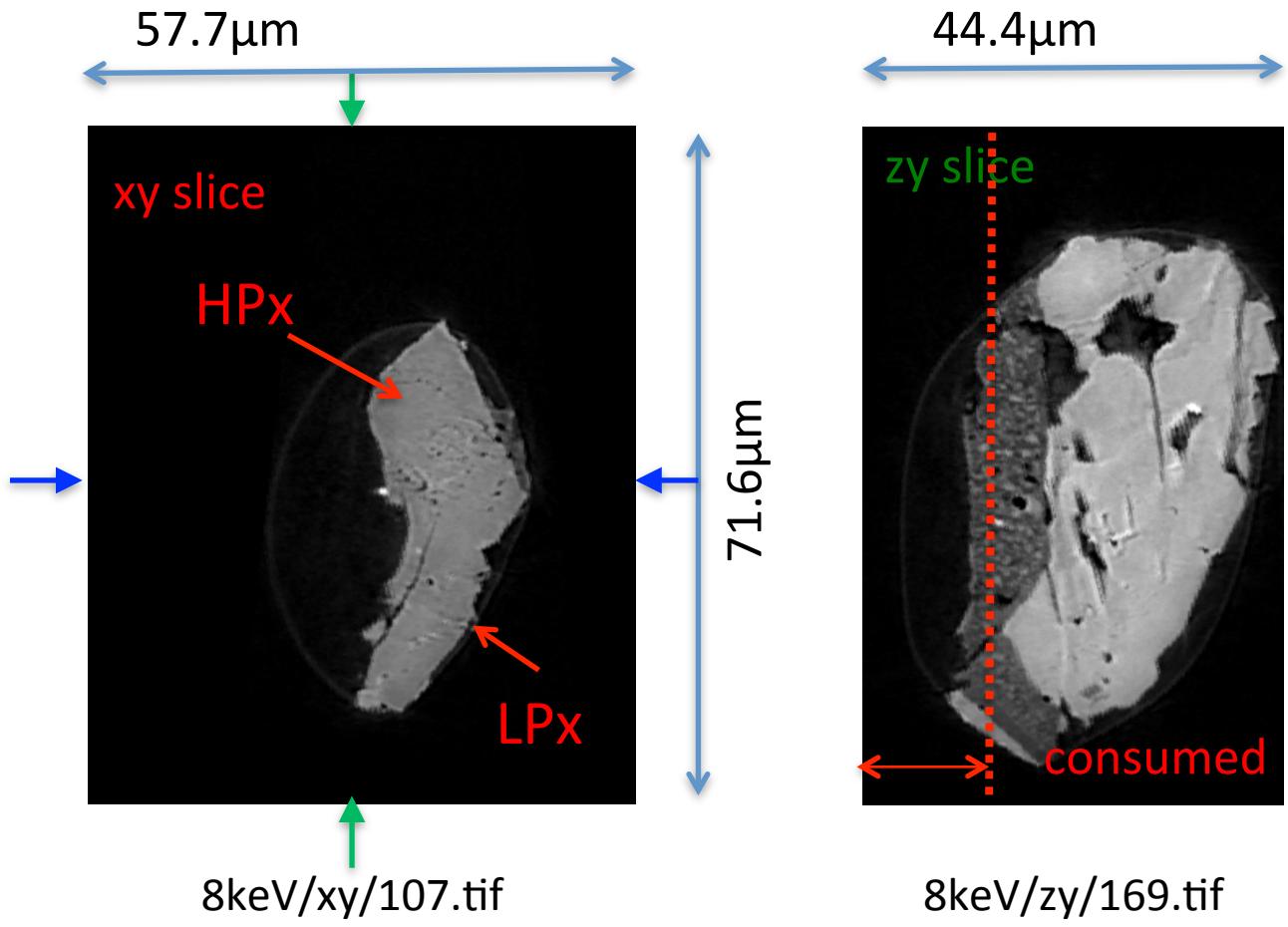
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

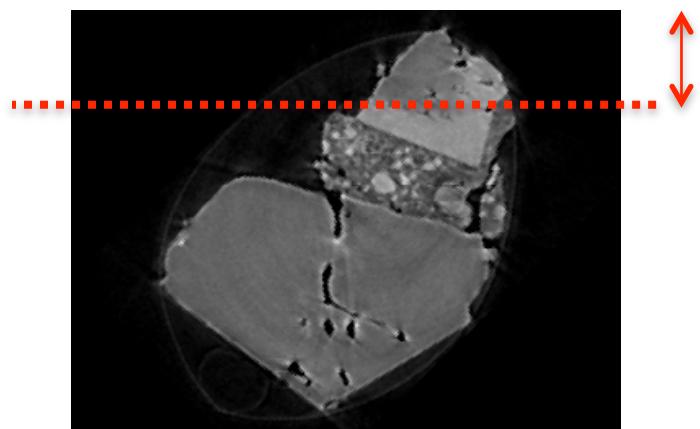
RA-QD02-0048 7keV



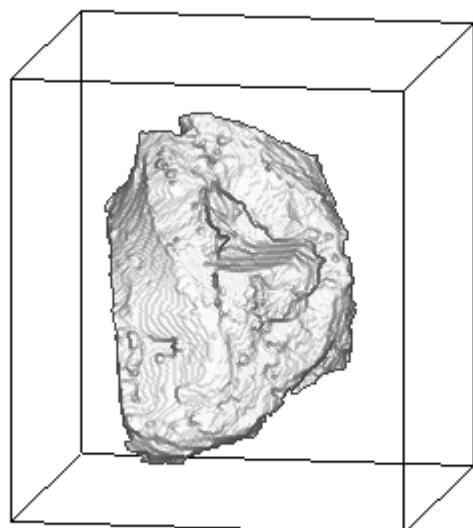
RA-QD02-0048 8keV



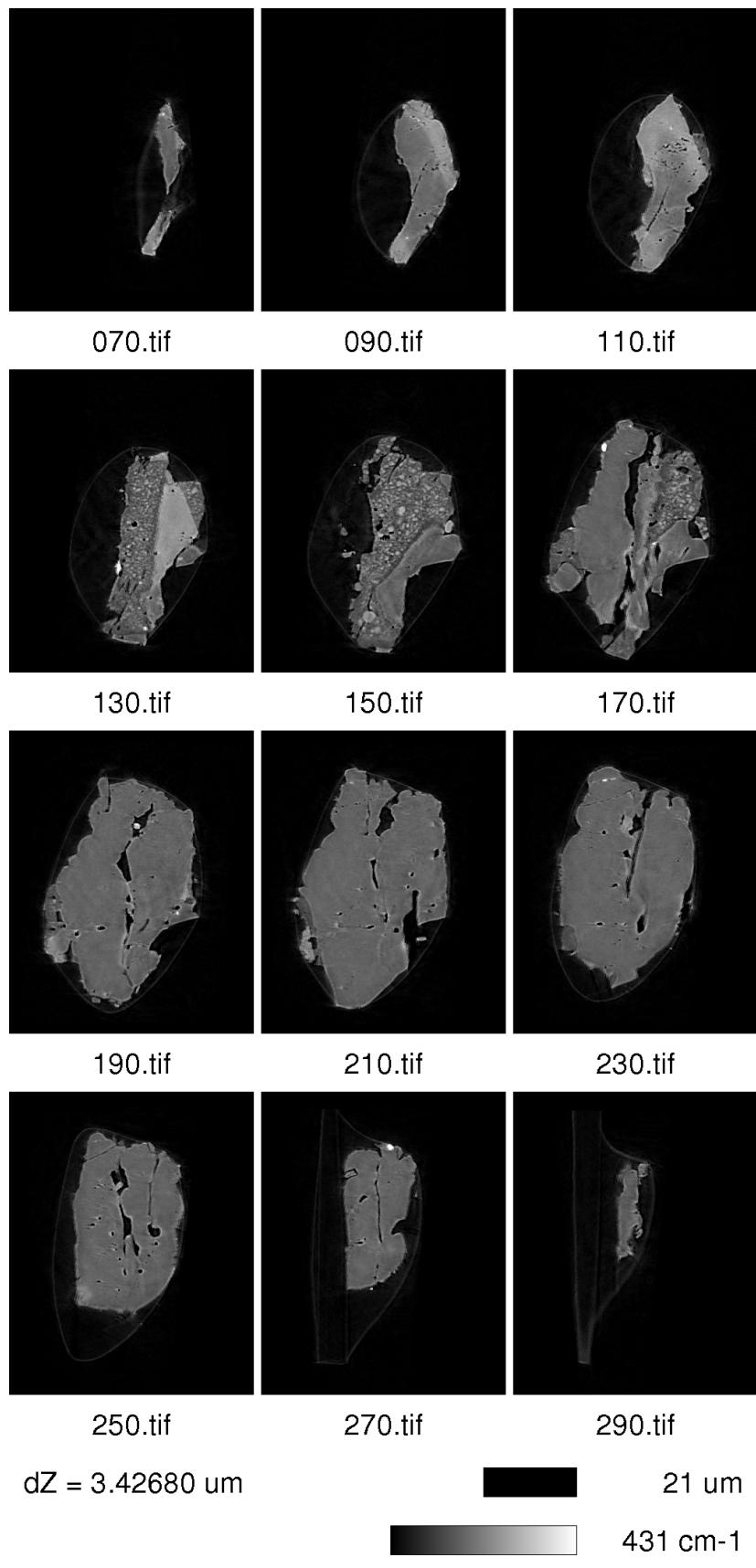
xz slice consumed



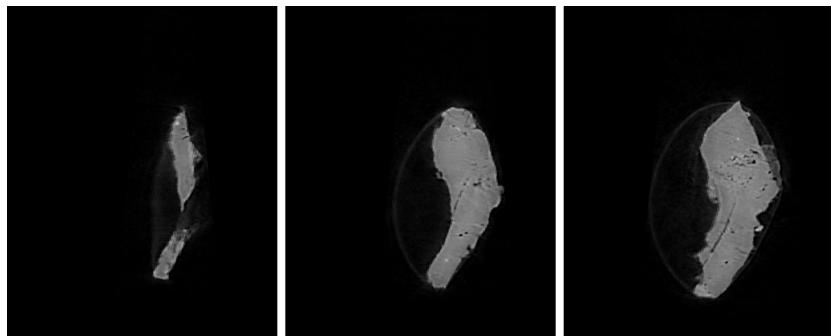
8keV/xz/209.tif



RA-QD02-0048 7keV catalogue



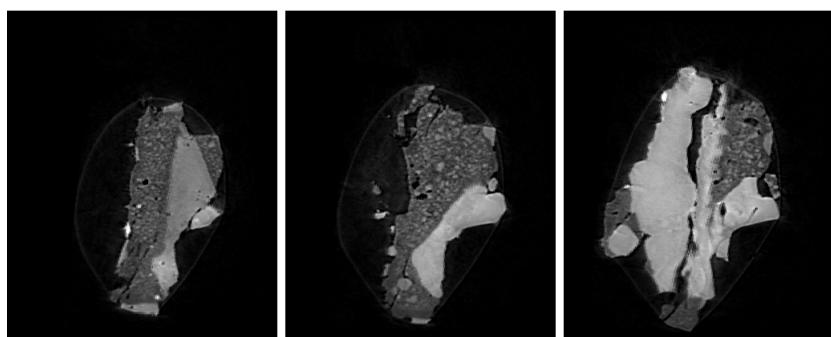
RA-QD02-0048 8keV catalogue



070.tif

090.tif

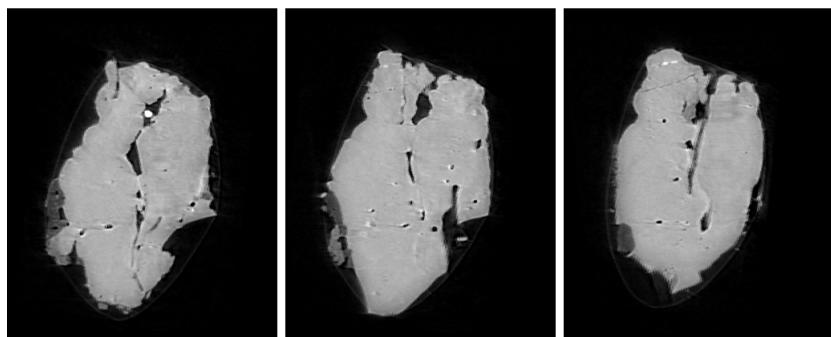
110.tif



130.tif

150.tif

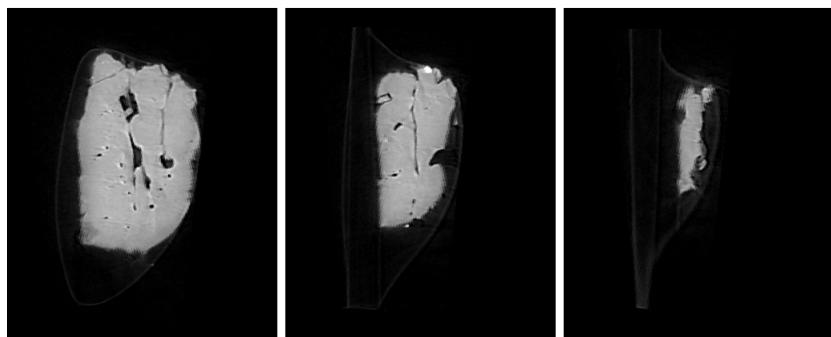
170.tif



190.tif

210.tif

230.tif



250.tif

270.tif

290.tif

$dZ = 3.42680 \text{ } \mu\text{m}$



21 μm



431 cm^{-1} (LAC)

RA-QD02-0048 Dual energy histogram

