Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0043

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 %	90.4		3.47	6.08	0.05				

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-QD02-0043

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

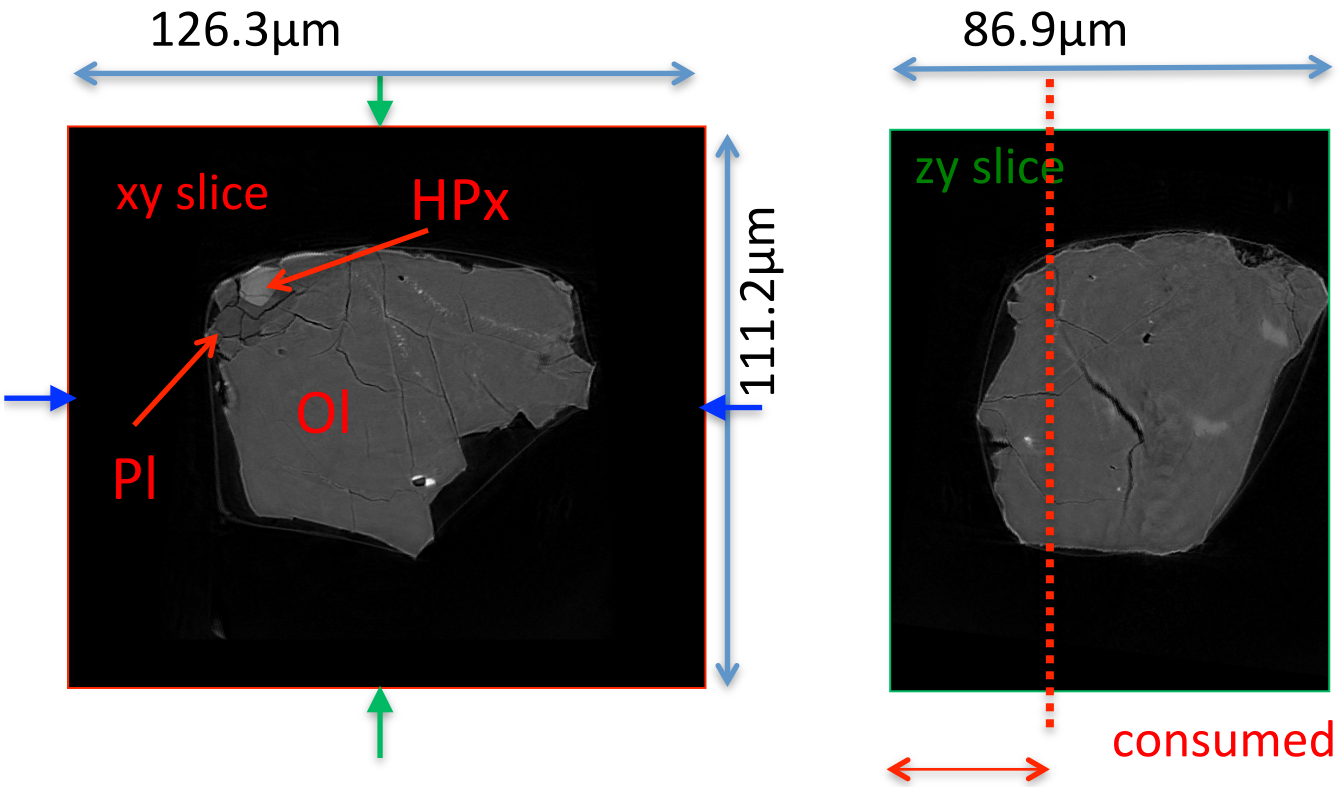
Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	90.4		3.47	6.08	0.05				

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
29.7	36.5	43.7	171230	4.59

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

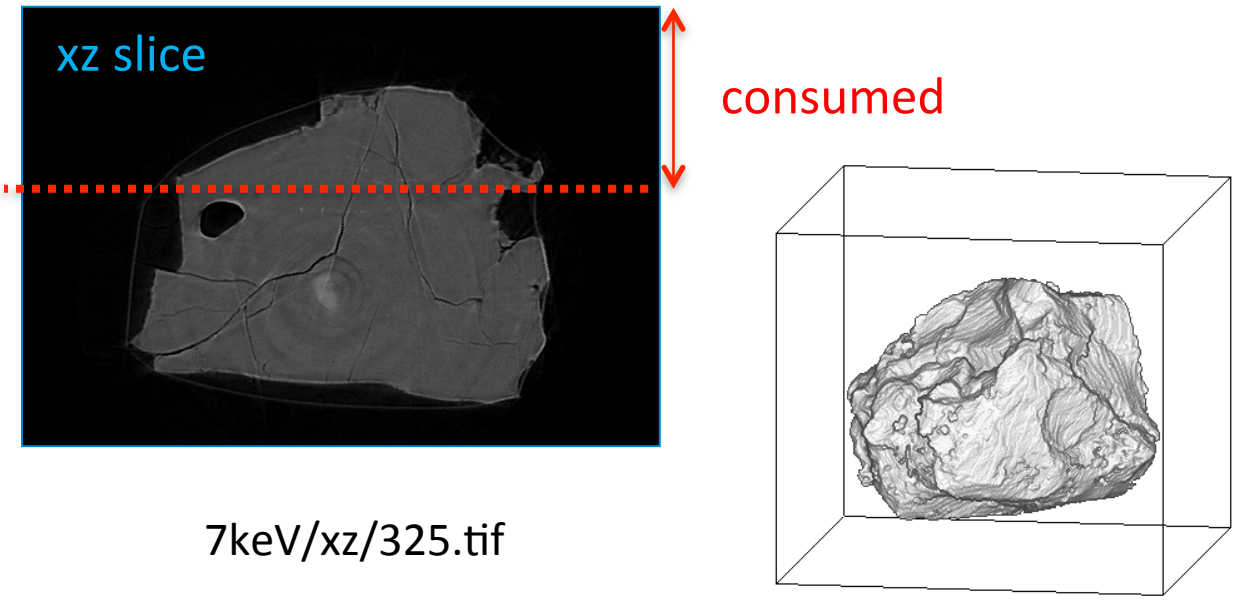
A, B, and C: shortest, middle, and longest axial radii, respectively, of a best-fit ellipsoid for the particle
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0043 7keV



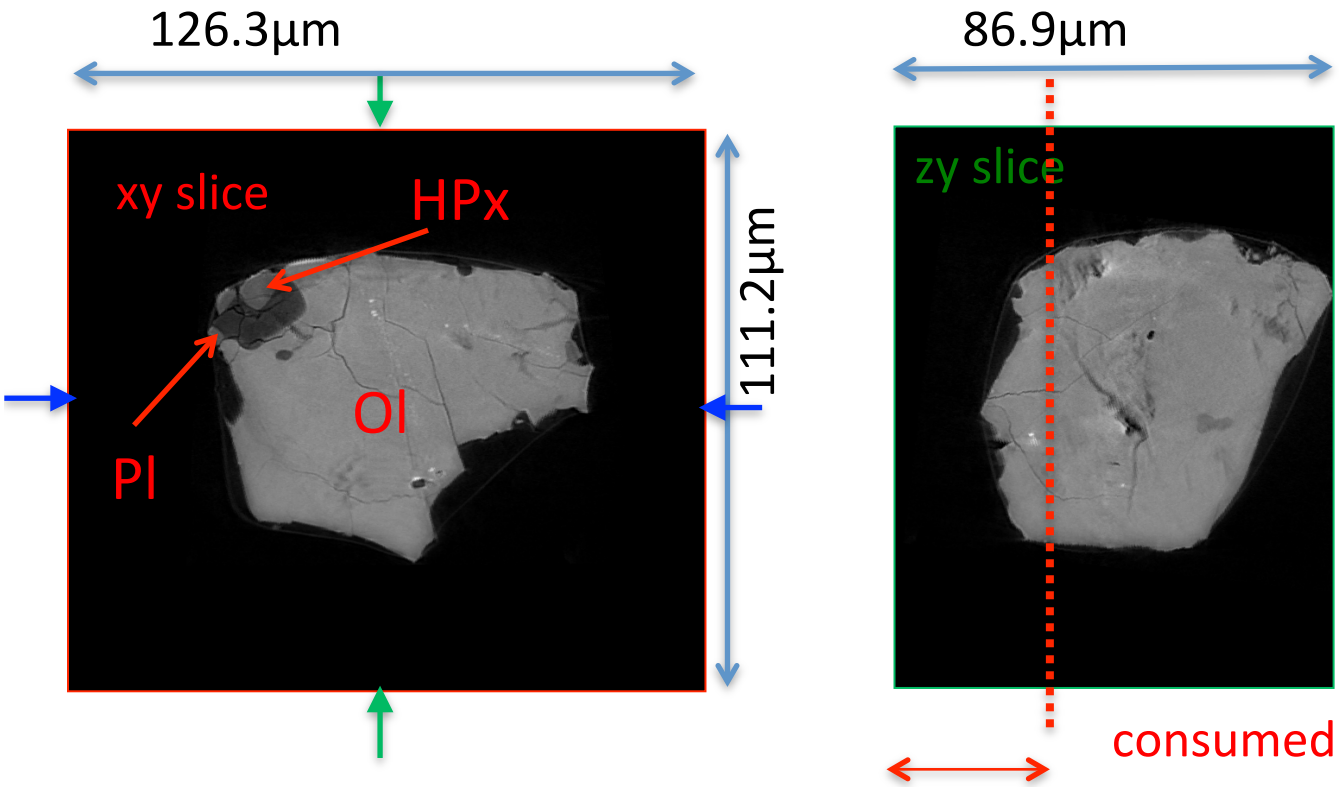
7keV/xy/282.tif

7keV/zy/369.tif



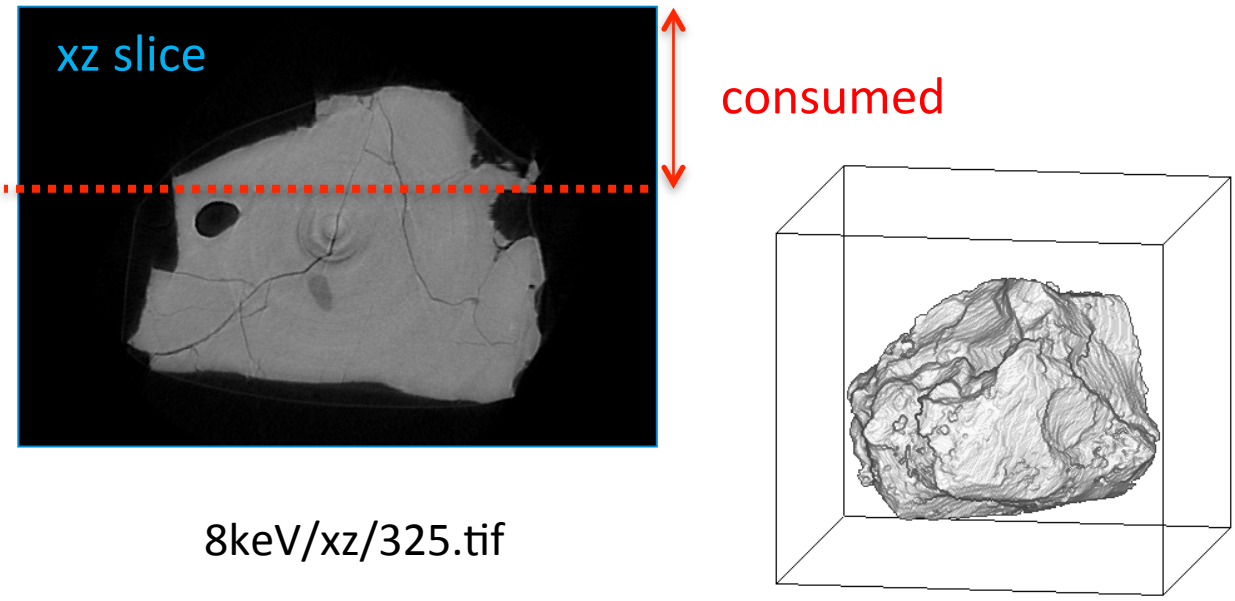
7keV/xz/325.tif

RA-QD02-0043 8keV



8keV/xy/282.tif

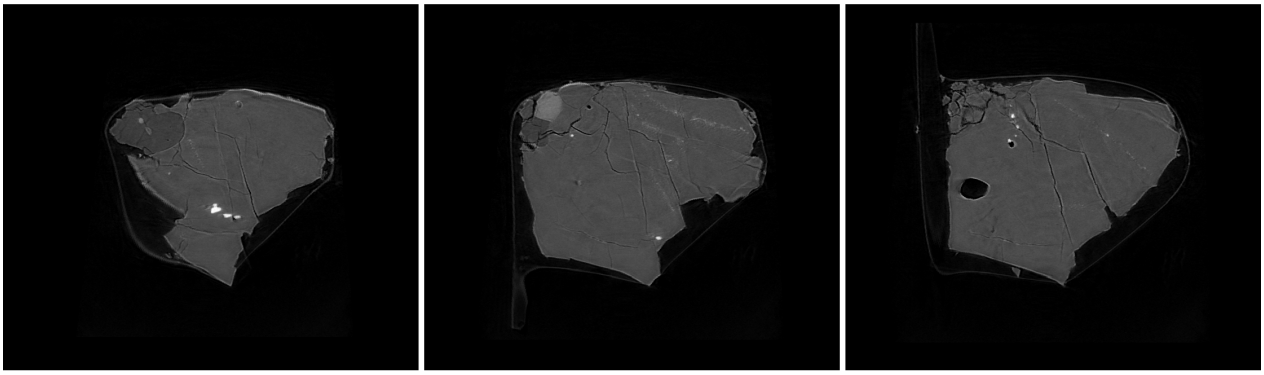
8keV/zy/369.tif



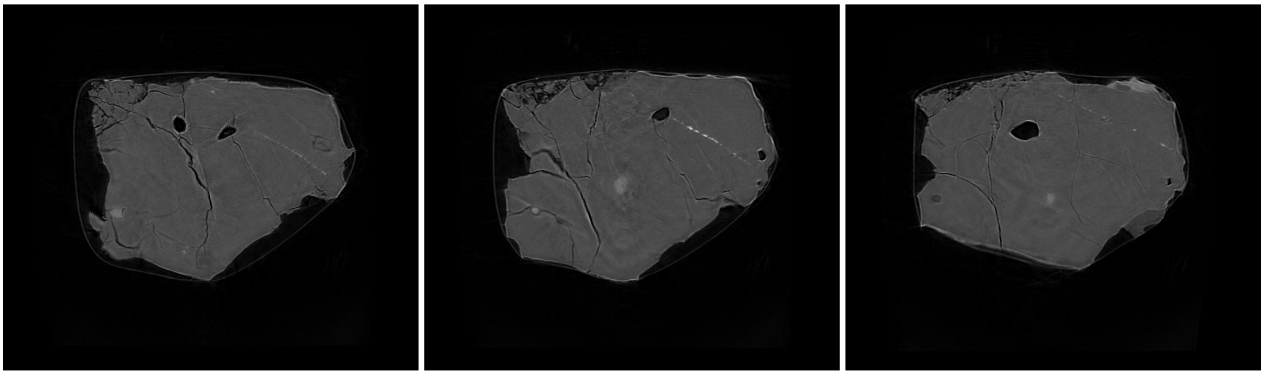
8keV/xz/325.tif

RA-QD02-0043 7keV catalogue

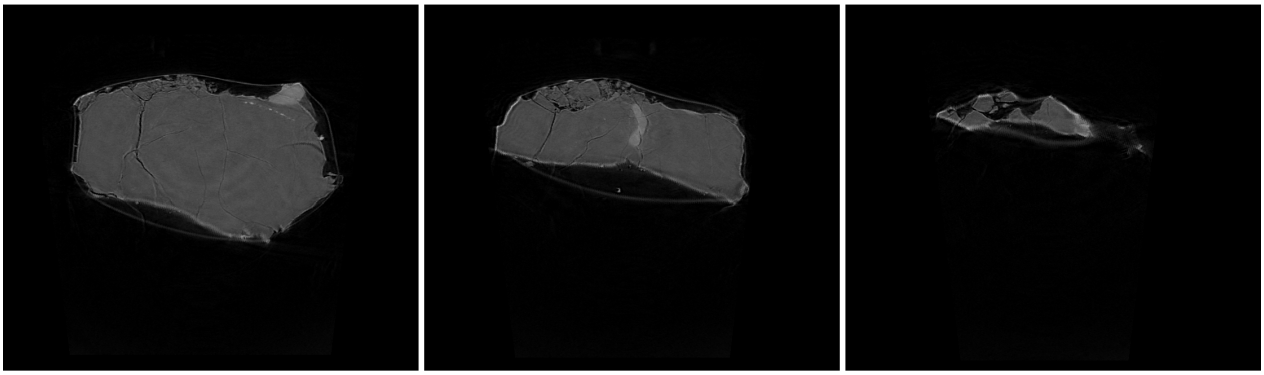
133.tif | 174.tif | 215.tif



256.tif | 297.tif | 338.tif



379.tif | 420.tif | 461.tif



502.tif | 543.tif | 584.tif

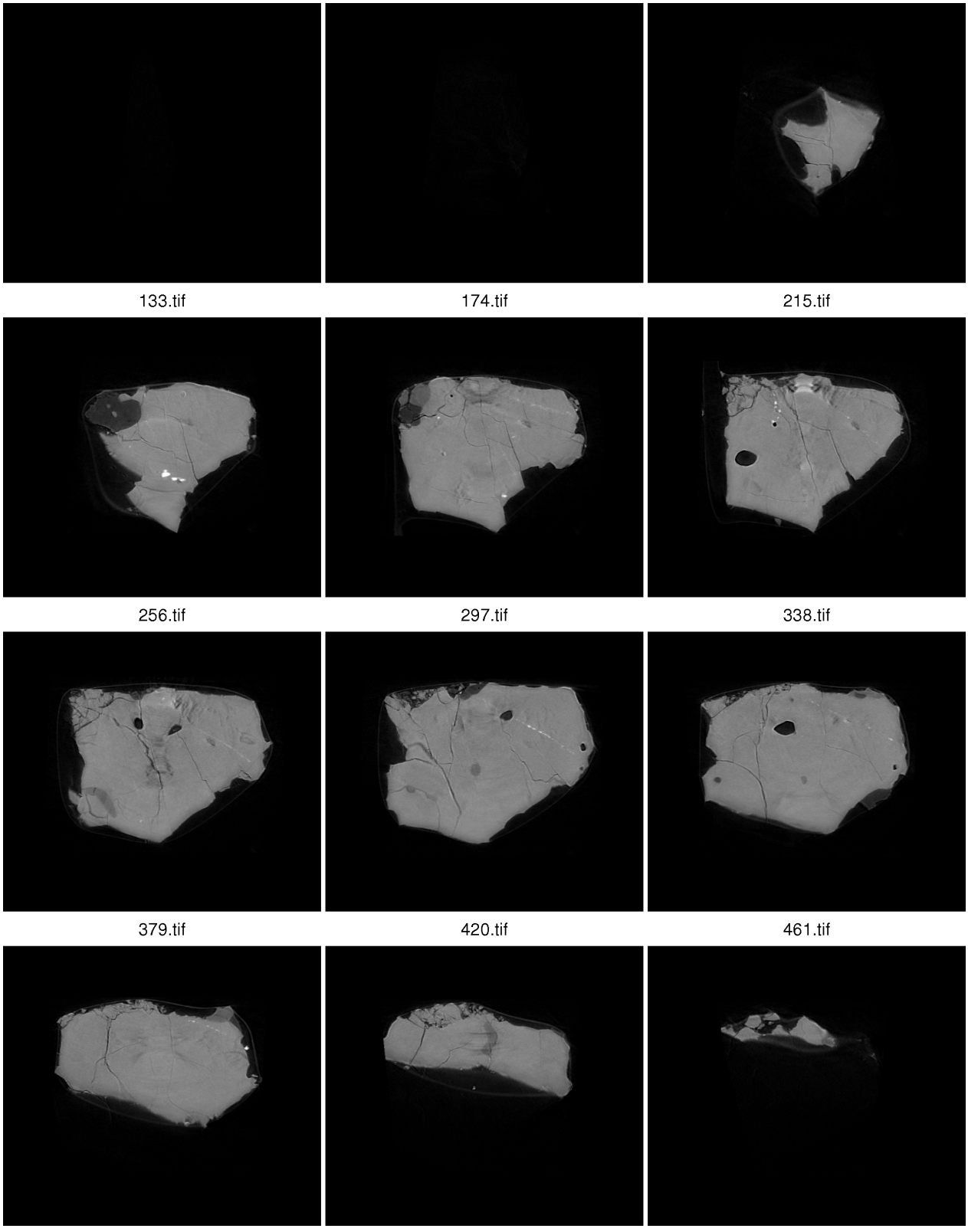
dZ = 7.02494 um

21 um

575 cm-1

(LAC)

RA-QD02-0043 8keV catalogue



RA-QD02-0043 Dual energy histogram