

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0066

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography Jan/25/2011 (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 %	100	-	-	-	-	-	-	-	-

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-QD02-0066

Operation Date Jan/25/2011 (7 keV)
 Jan/24/2011 (8 keV)
operated by Y. Ogami(7 keV)
 T. Matsumoto (8 keV)
analyzed by A. Shimada

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	100	-	-	-	-	-	-	-	-

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
6.98	26.4	32.3	18473	5.32

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

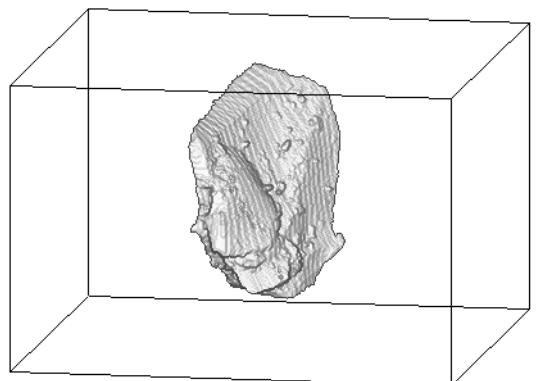
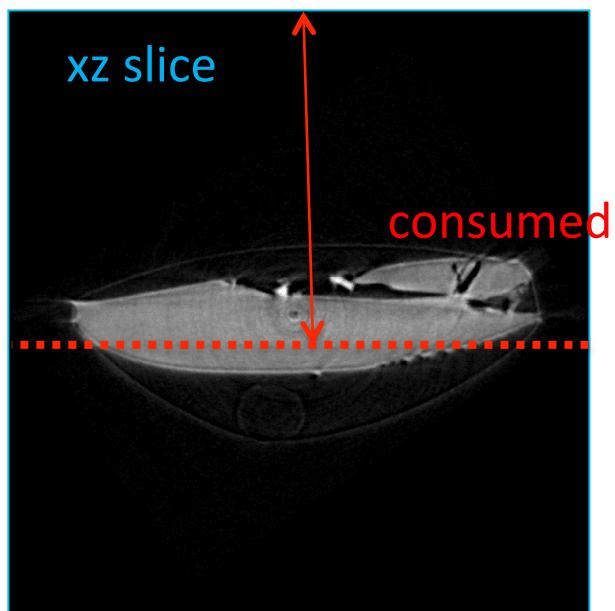
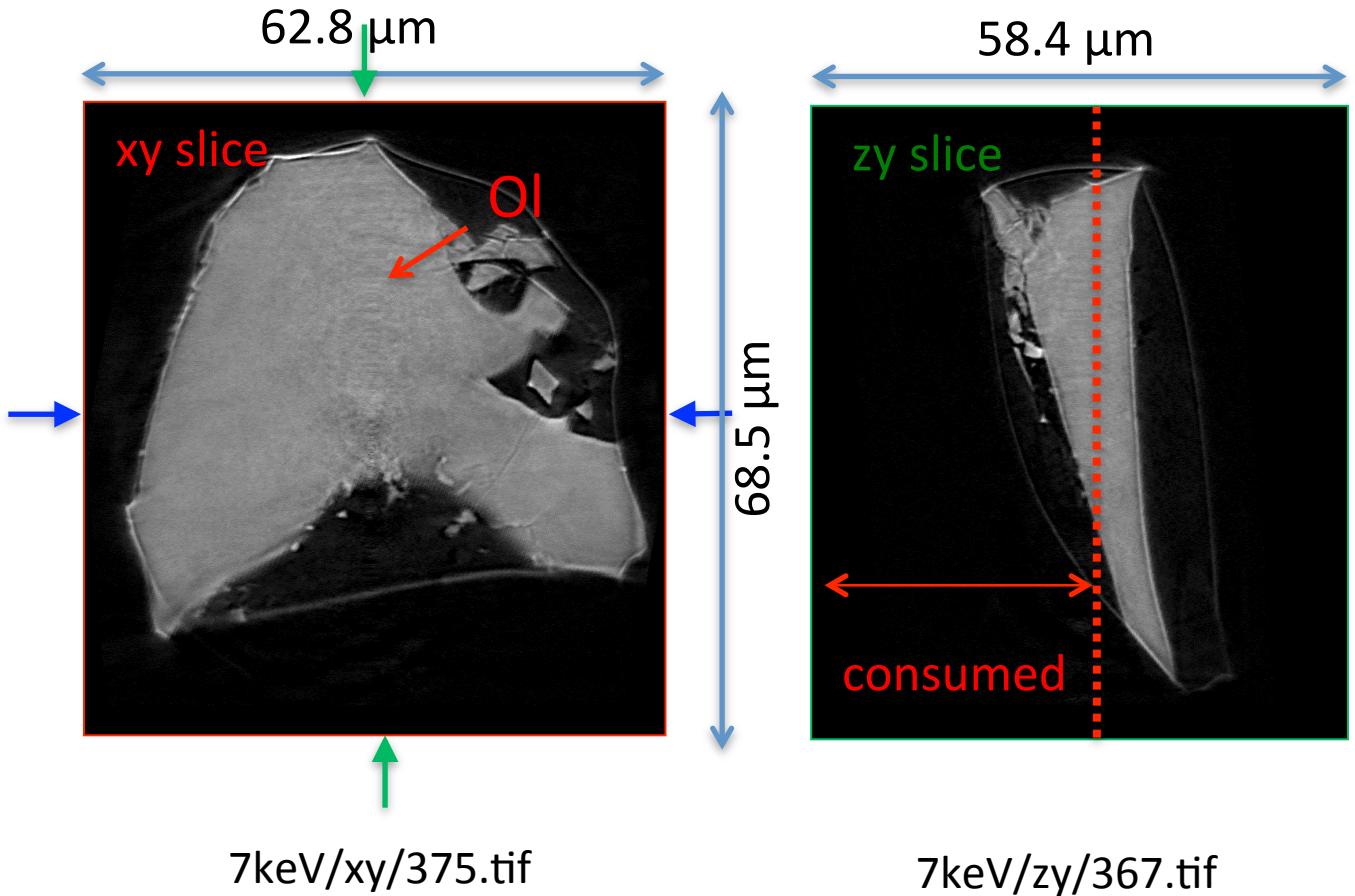
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

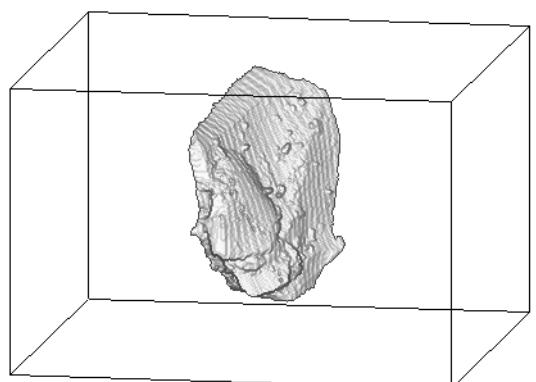
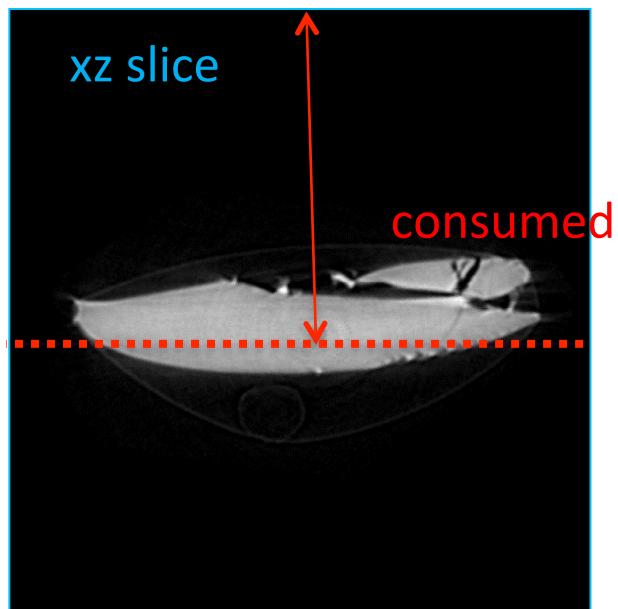
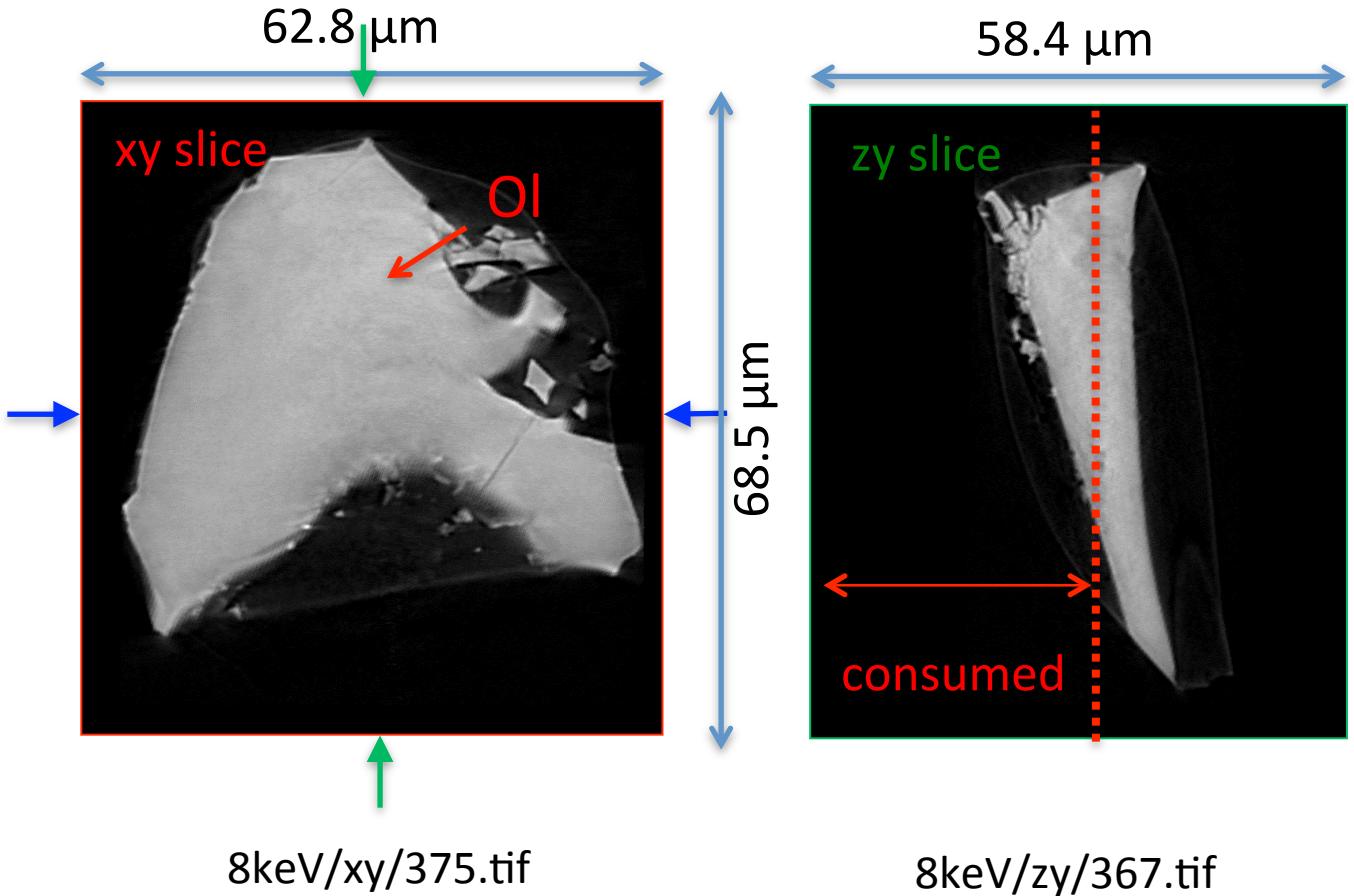
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

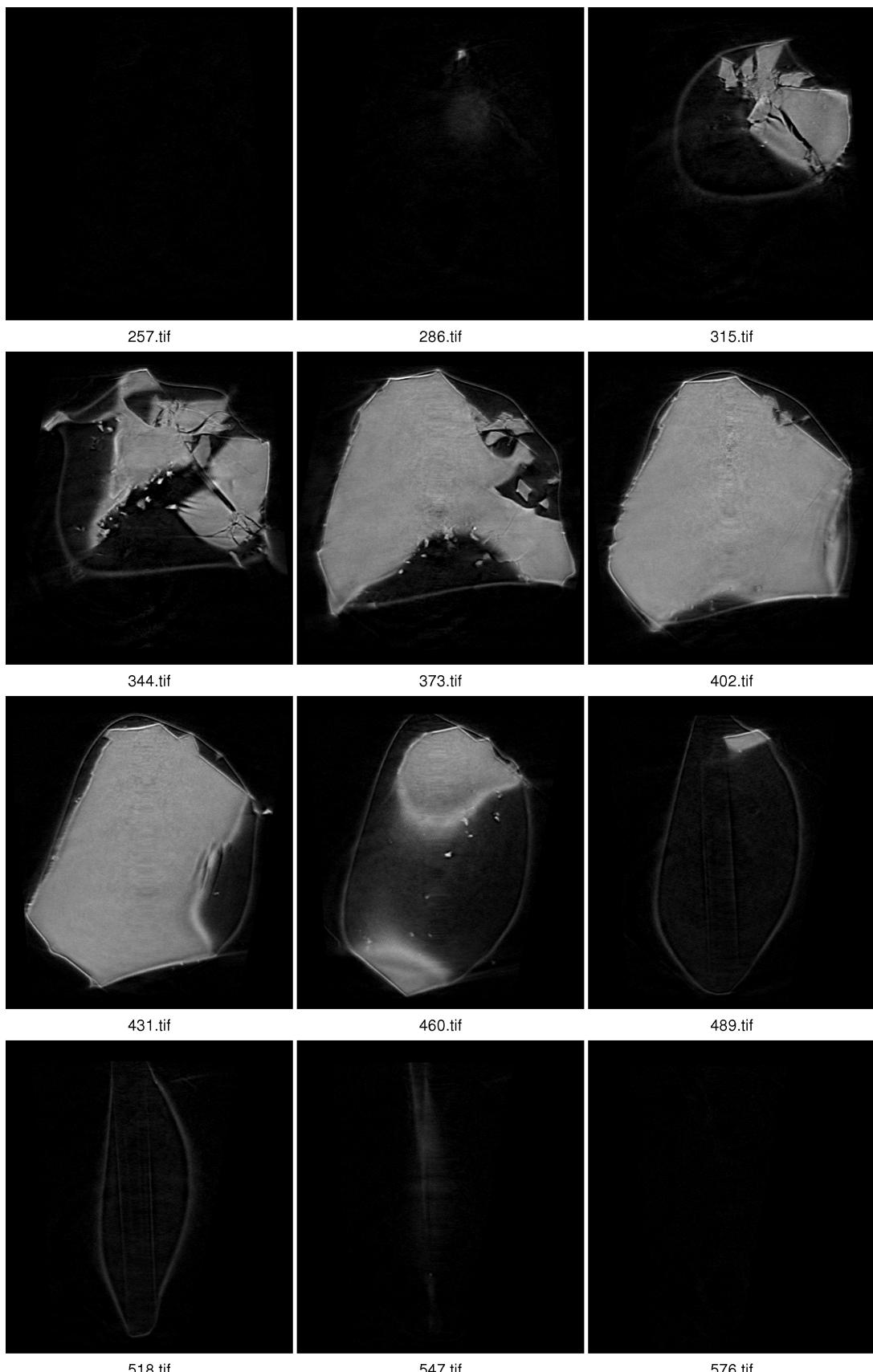
RA-QD02-0066 7 keV



RA-QD02-0066 8 keV



RA-QD02-0066 7 keV catalogue



$dZ = 2.48443 \text{ } \mu\text{m}$

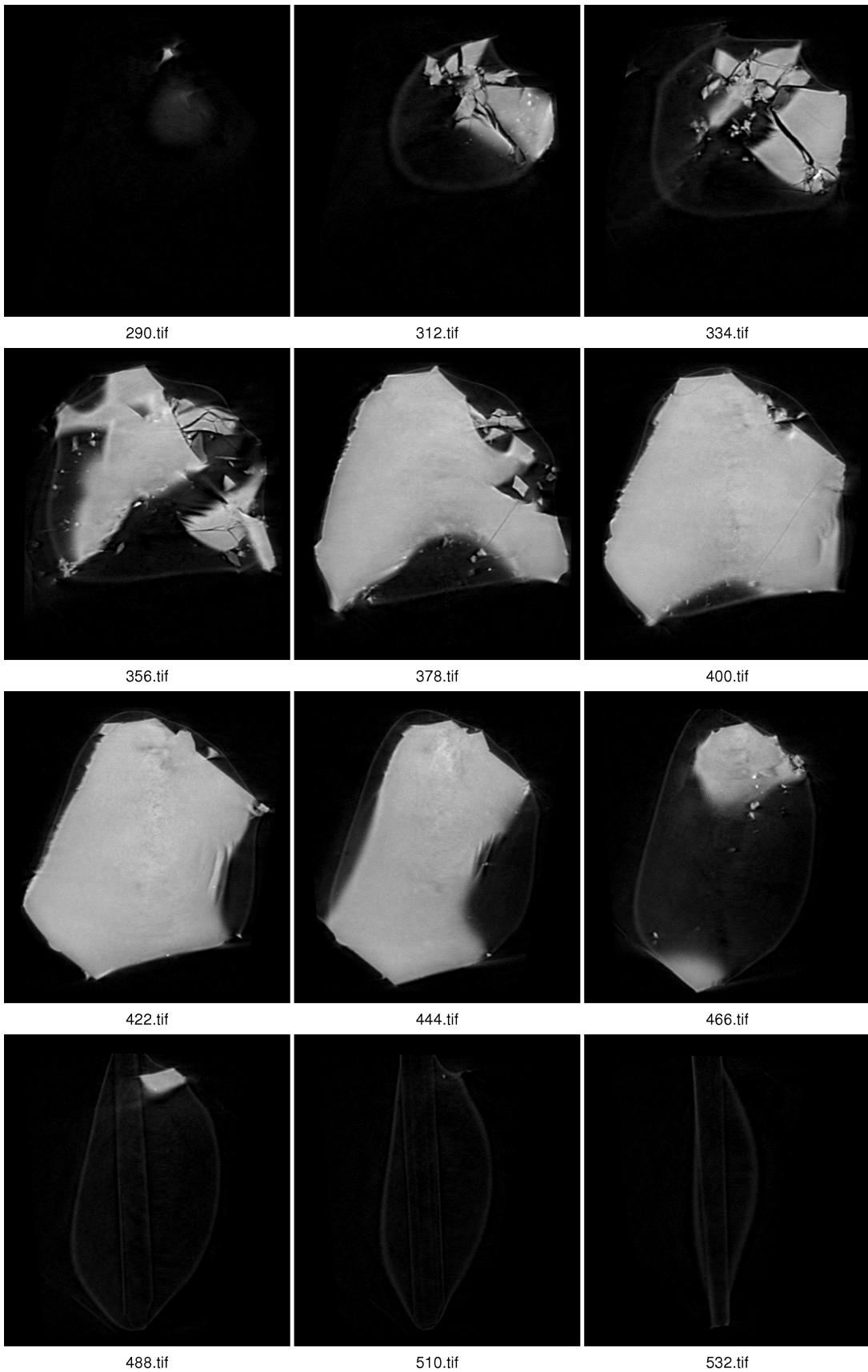
547.tif

576.tif

10 μm

287 cm^{-1} (LAC)

RA-QD02-0066 8 keV catalogue



$dZ = 1.88474 \mu\text{m}$

10 μm

431 cm^{-1} (LAC)

RA-QD02-0066 Dual energy histogram

