

## Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

**Sample ID:** RA-QD02-0058

**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 %	68.5	6.95	4.41	20	-	-	-	-	-

**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-QD02-0058

Operation Date    Jan/23/2011 (7 keV)  
                      Jan/24/2011 (8 keV)  
operated by        T. Matsumoto (7 keV)  
                      Y. Ogami (8 keV)  
analyzed by        A. Shimada

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	68.5	6.95	4.41	20.0	-	-	-	-	-

A ( $\mu\text{m}$ )	B ( $\mu\text{m}$ )	C ( $\mu\text{m}$ )	V ( $\mu\text{m}^3$ )	Porosity (%)
13.8	19.5	26.7	25584	7.21

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

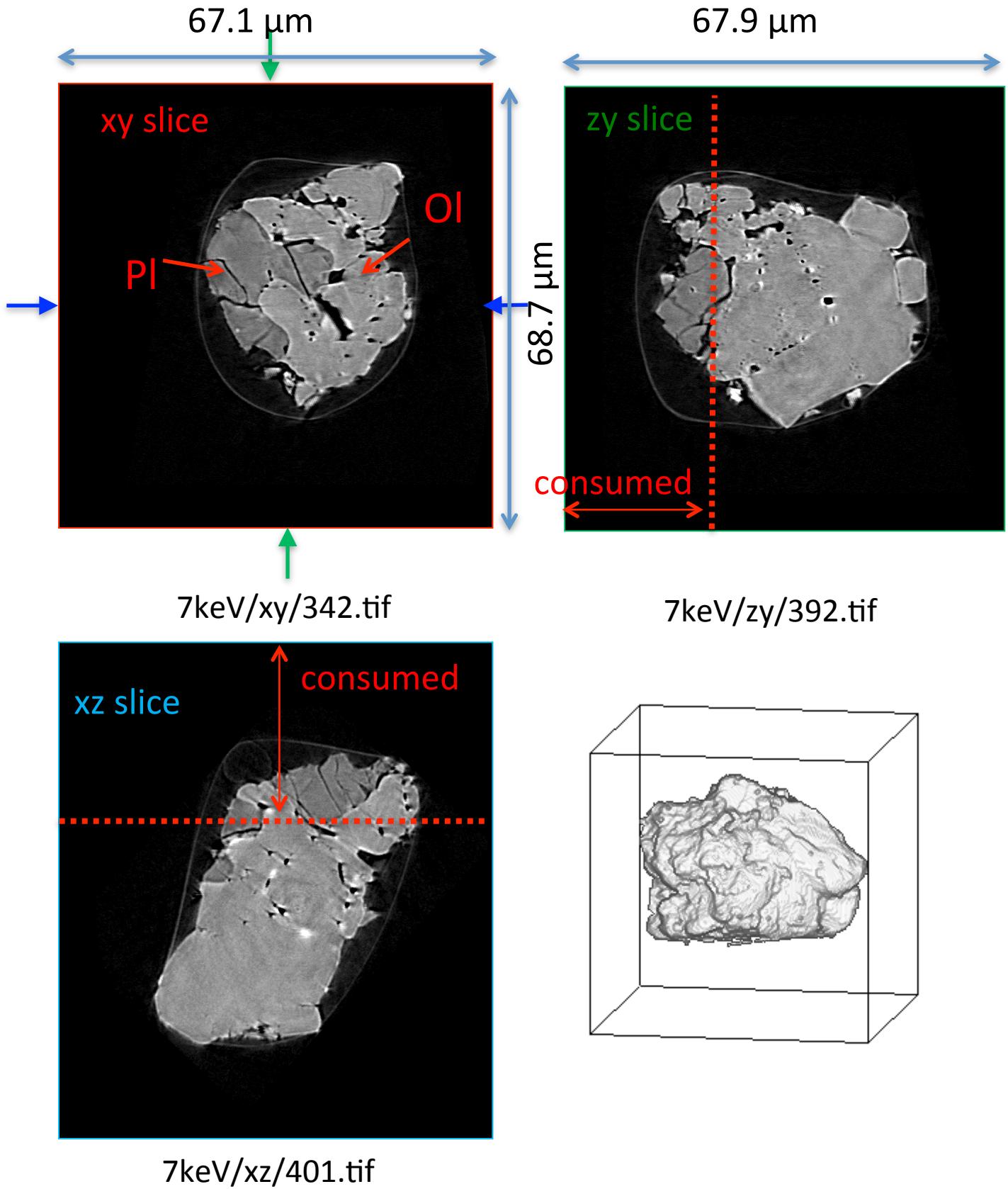
A, B, and C: shortest, middle, and longest axial radii, respectively,  
of a best-fit ellipsoid for the particle

V: particle volume without pore

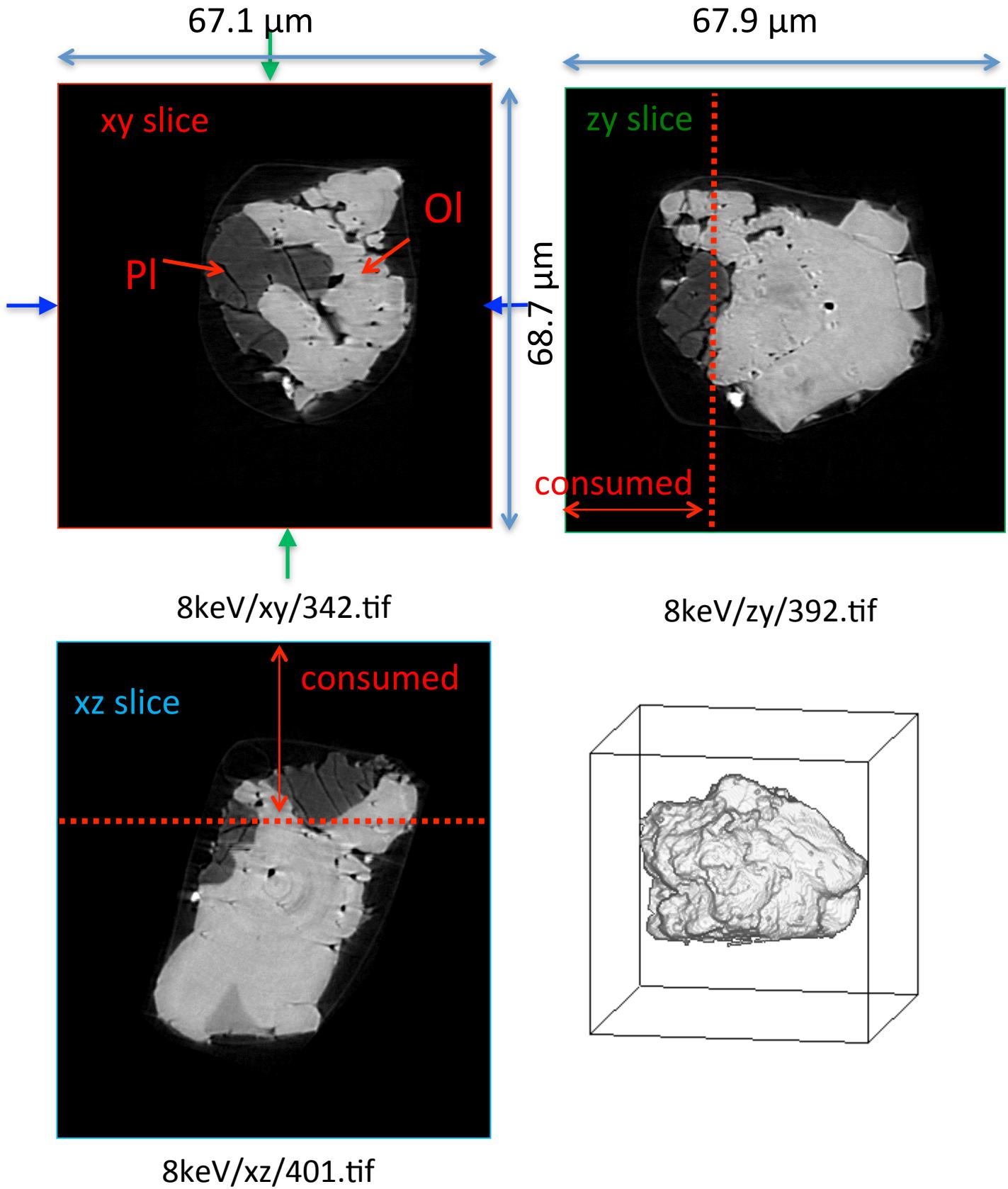
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

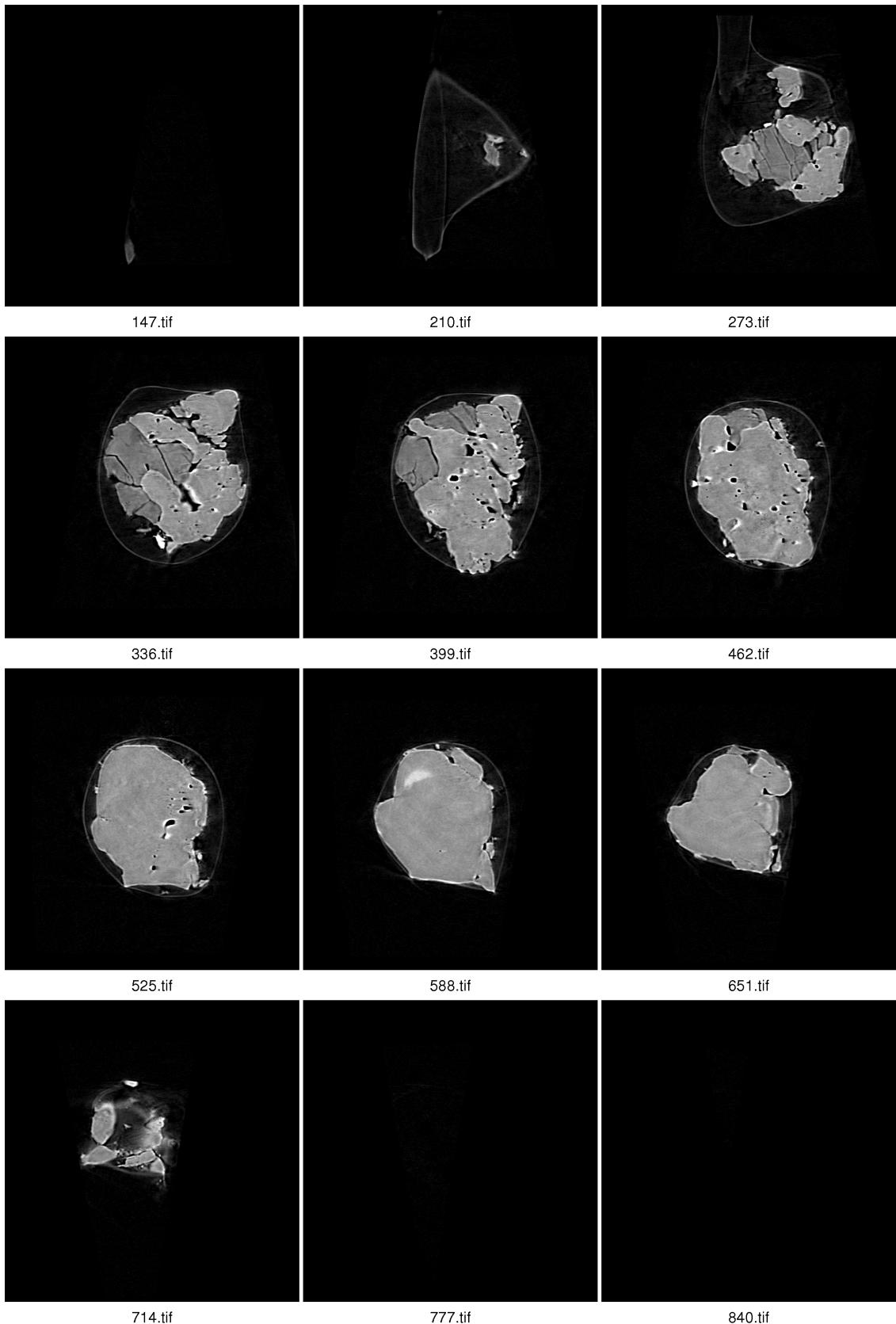
# RA-QD02-0058 7 keV



# RA-QD02-0058 8 keV



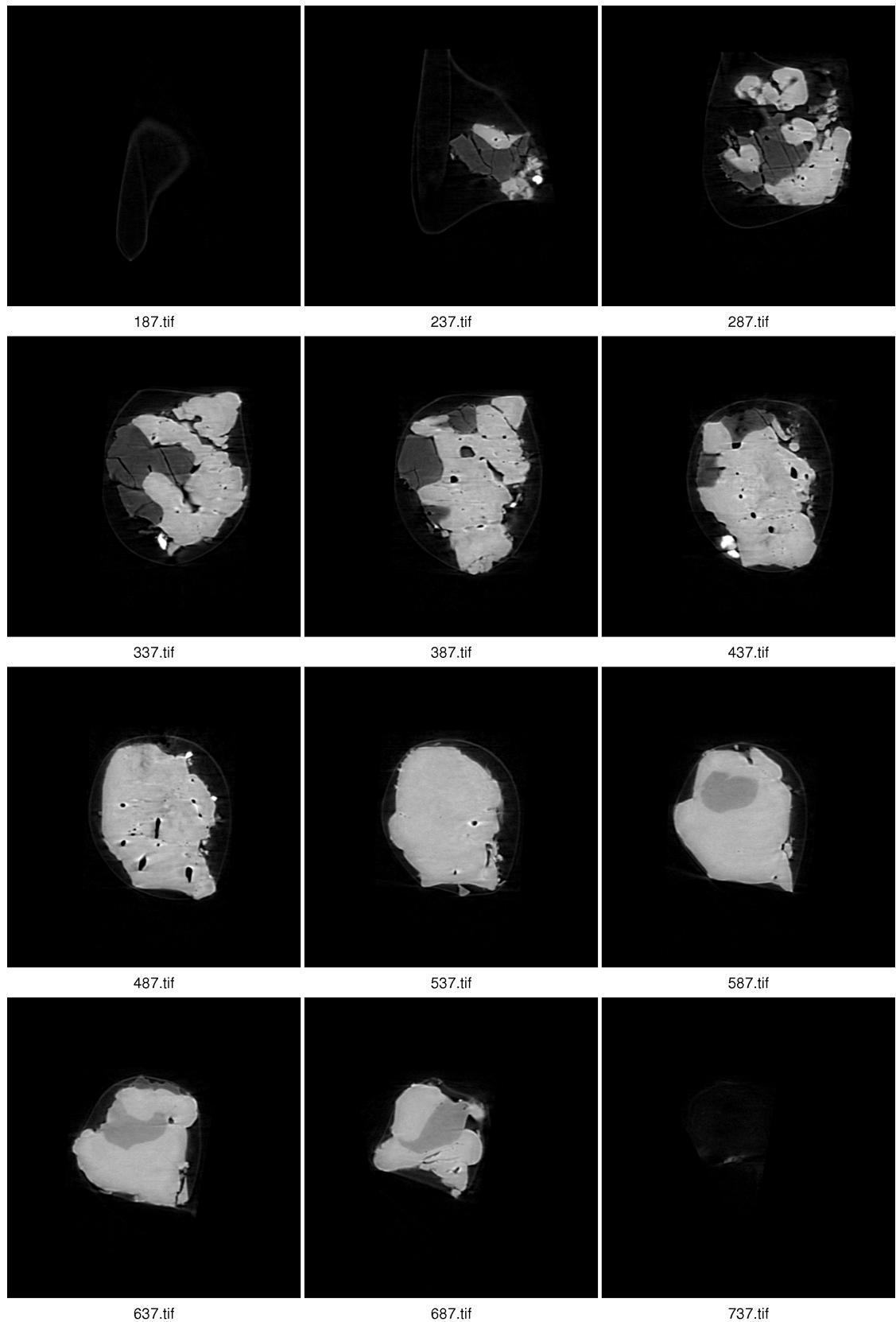
# RA-QD02-0058 7 keV catalogue



$dZ = 5.39721 \text{ } \mu\text{m}$

10  $\mu\text{m}$   
 287  $\text{cm}^{-1}$  (LAC)

# RA-QD02-0058 8 keV catalogue



$dZ = 4.28350 \text{ } \mu\text{m}$

 10  $\mu\text{m}$   
 431  $\text{cm}^{-1}$  (LAC)

## RA-QD02-0058 Dual energy histogram

