

Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0067

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 | Ol | LPx | HPx | Pl | Tr | Tae | Chm | CP | Kam |
|-------|------|-----|-----|------|----|-----|-----|----|-----|
| Vol % | 47.6 | - | - | 52.4 | - | - | - | - | - |

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-QD02-0067

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 % | 47.6 | - | - | 52.4 | - | - | - | - | - |

| A (μm) | B (μm) | C (μm) | V (μm^3) | Porosity (%) |
|---------------------|---------------------|---------------------|-----------------------|--------------|
| 5.81 | 20.3 | 23.8 | 9834 | 0.02 |

Ol: olivine

LPx: low calcium pyroxene

HPx: high calcium pyroxene

Pl: plagioclase

Tr: troilite

Tae: taenite

Chm: chromite

CP: calcium phosphate

Kam: kamacite

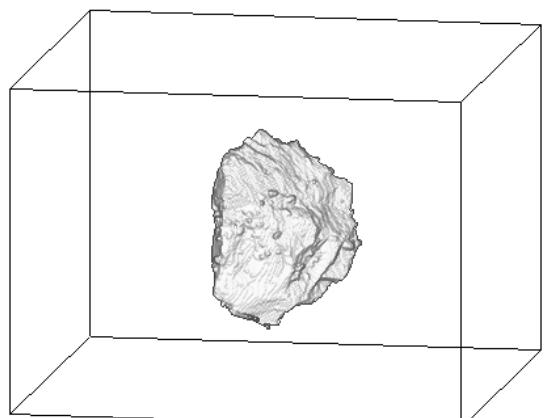
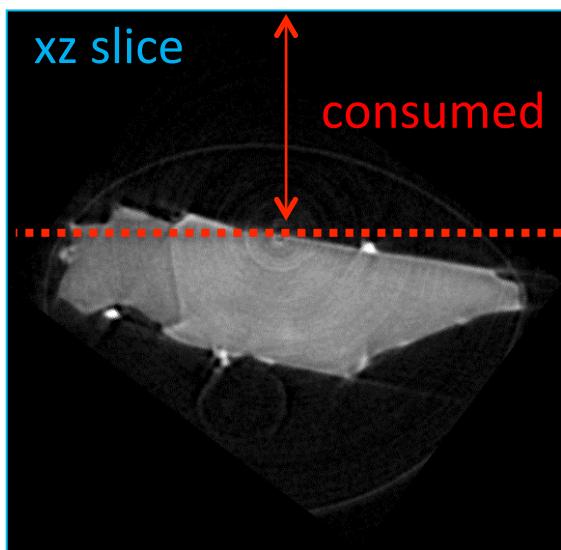
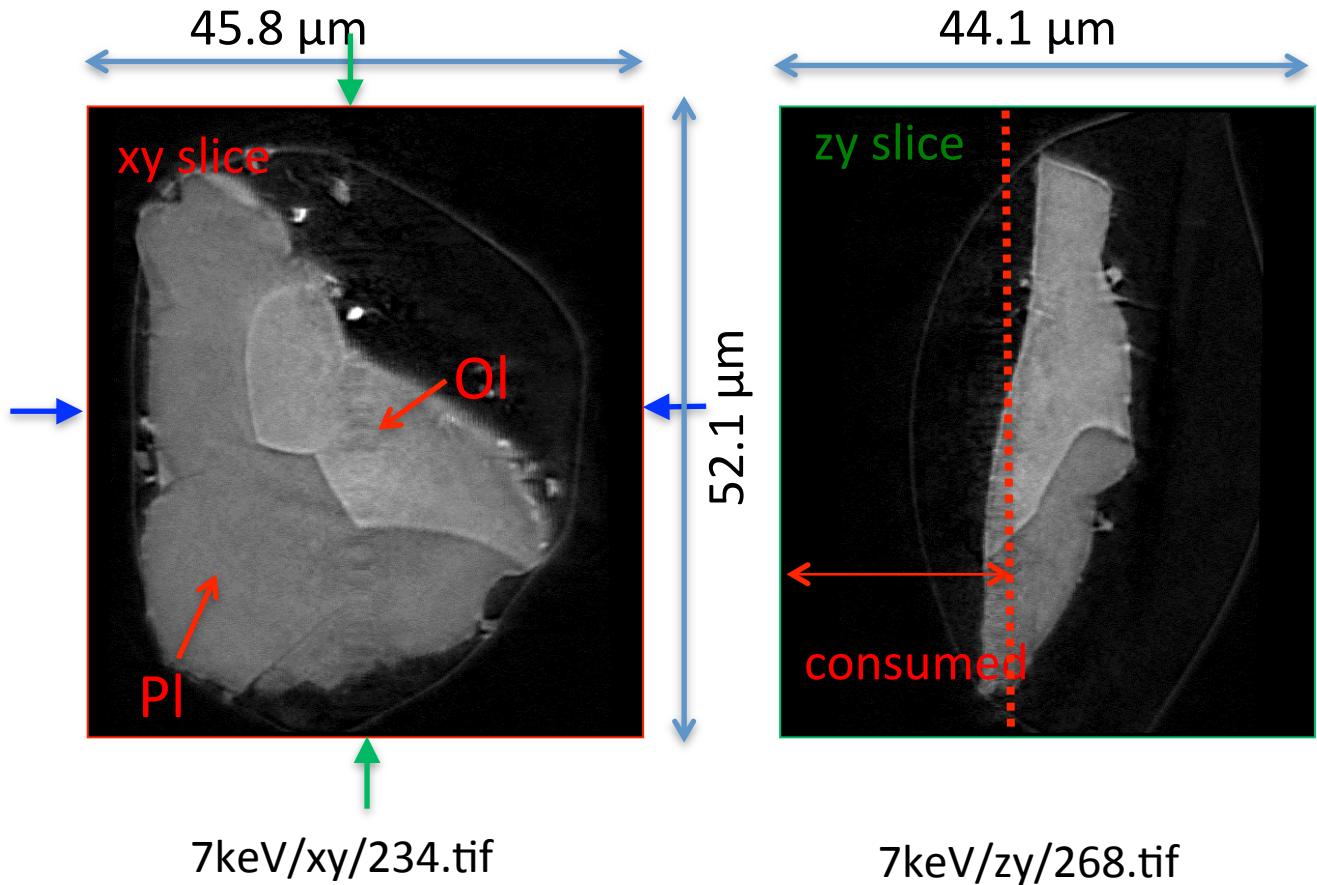
A, B, and C: shortest, middle, and longest axial radii, respectively,
of a best-fit ellipsoid for the particle

V: particle volume without pore

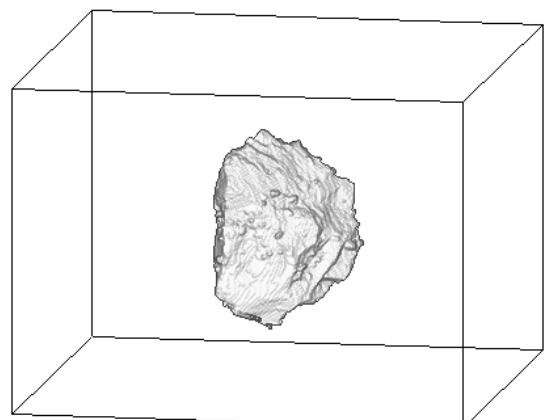
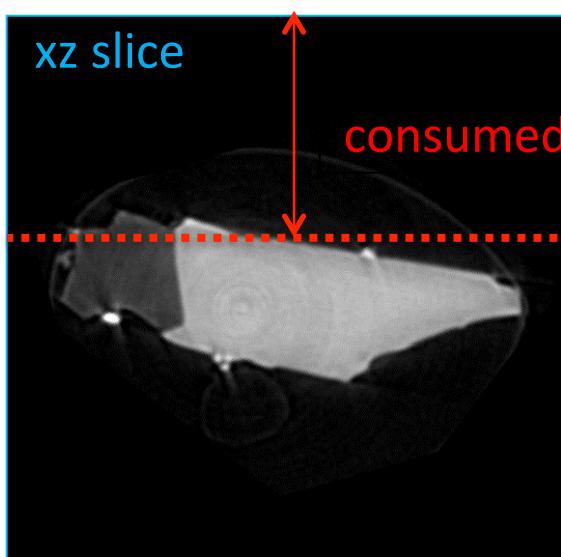
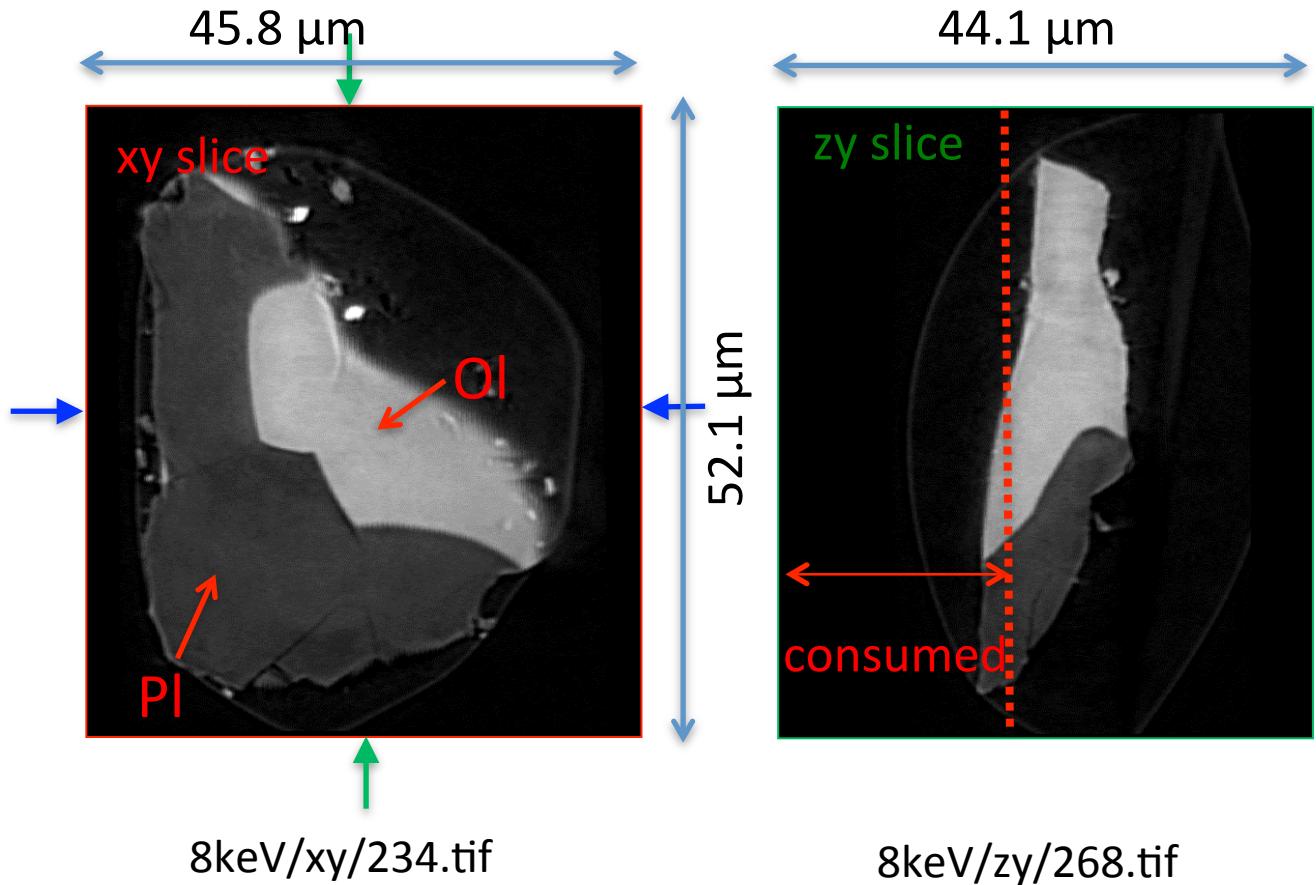
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

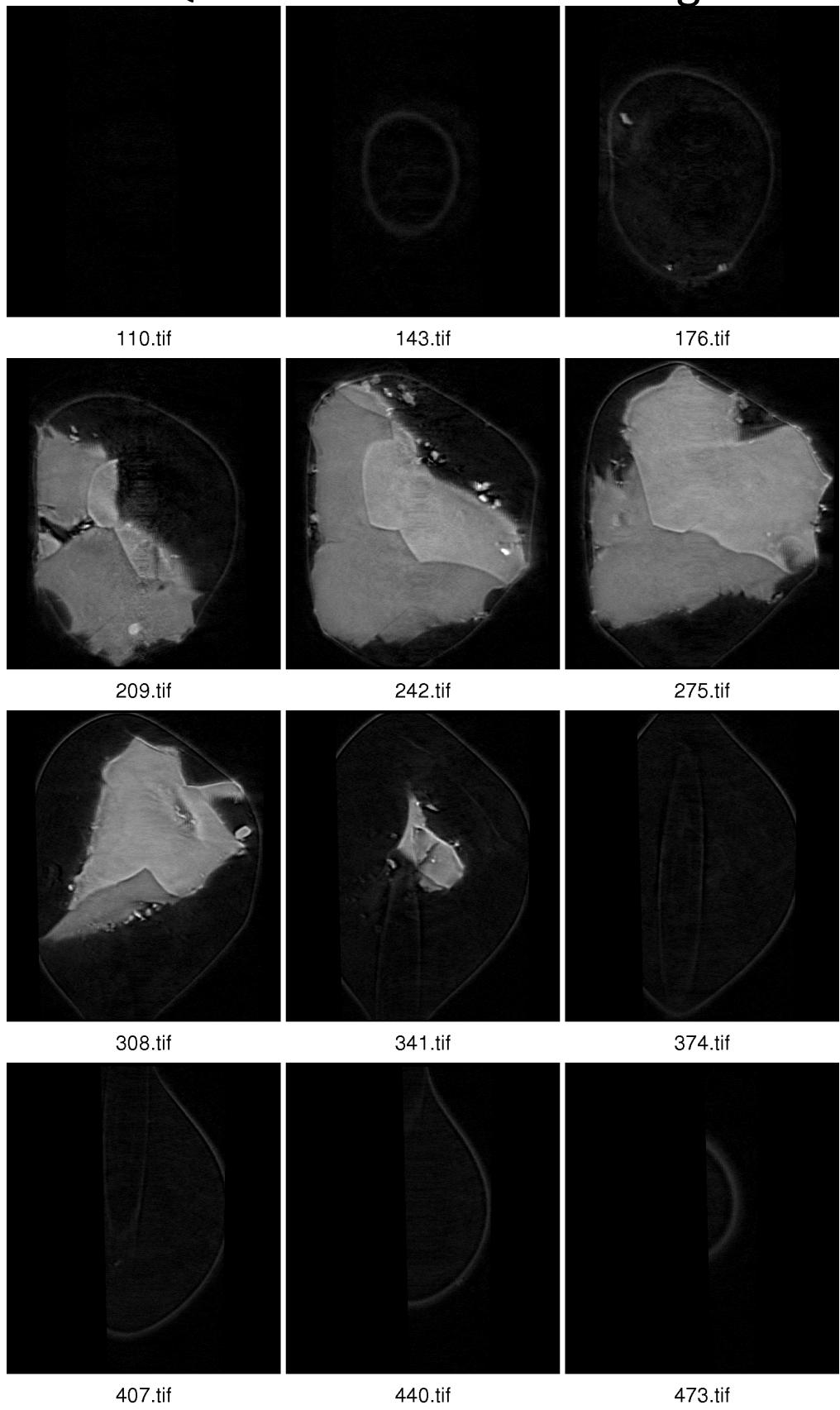
RA-QD02-0067 7 keV



RA-QD02-0067 8 keV



RA-QD02-0067 7 keV catalogue

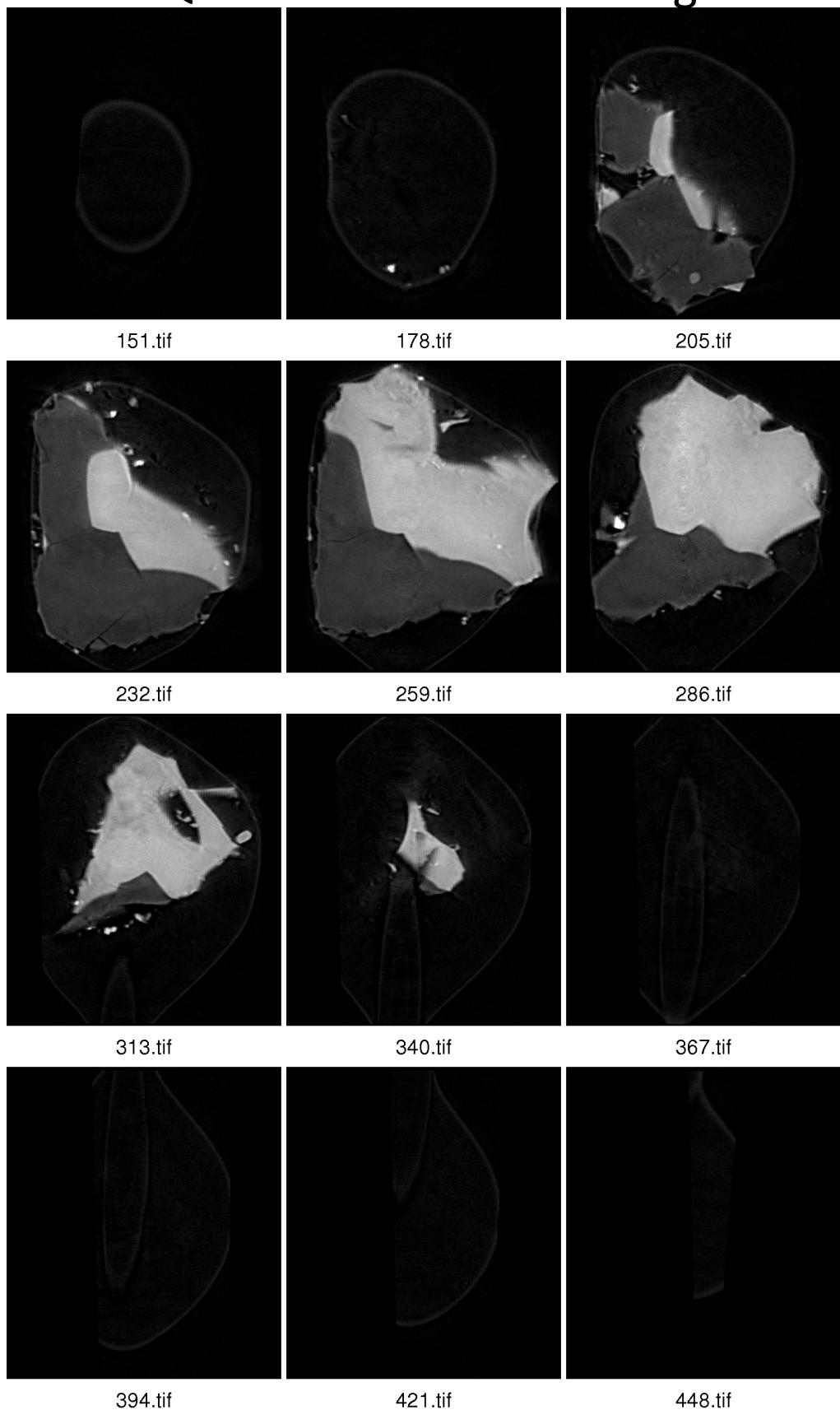


$dZ = 2.82711 \text{ } \mu\text{m}$

10 μm

287 cm^{-1} (LAC)

RA-QD02-0067 8 keV catalogue



$dZ = 2.31309 \text{ } \mu\text{m}$

10 μm
 431 cm^{-1} (LAC)

RA-QD02-0067 Dual energy histogram

