

Description of the data sets provided in open access to test a phase retrieval codes.

Any use of the data and publication must cite and acknowledge the following publication.

O. Cherkas, T. Beuvier, D. Breiby, Y. Chushkin, F. Zontone, A. Gibaud, *Direct observation of micro-particle porosity changes in solid-state vaterite to calcite transformation by Coherent X-ray Diffraction Imaging*, *Crystal Growth and Design*, **14**, 4183-4188, (2017)

Filename	Wavelength (Å)	Sample to detector distance (m)	Exposure time per frame (s)	Angular range (start, stop, step)	Average flux (ph/s)	Beam size (µm)	Detector pixel size (µm)	3D matrix size (px)	Material
T25_60_3D.npy	1.53	2.54	17.0	-84,78,0.5	2.4e+10	10x10	55	568	Vaterite microsphere
T25r_60_3D.npy	1.53	2.54	15.0	-80,80,0.5	2.9e+10	10x10	55	568	Calcite microsphere