

Sample Information Sheet

Sample ID: C2012,4,128,0,0 – Already returned to JSC

Sample type (select one):
(4) keystone on fork

Type of analysis performed:
(1) 3D Laser Scanning Confocal Microscopy (LCSM)
(2) Synchrotron XRF

State of sample pre-analysis: Keystone on fork

State of sample post-analysis : Keystone off fork, housed in kapton window.

Minerals or other phases identified:
XRF results are forthcoming due to beamline malfunction during data acquisition.

Contaminant phases identified (including melted aerogel): N/A

Additional Notes:

Keystone 128 contains 4 tracks, all type A. Two of which are of substantial length, ~500 and ~250 microns respectively. The smaller two tracks are both ~35 microns in length. There may yet be more tracks in this keystone. The 4 tracks have been colloquially referred to as 128, alpha, beta, gamma and delta (listed in size decreasing order). Full mapping of track with LCSM has been completed, as well as quantitative analysis (track volumes, cross sectional area, skewness). LCSM has provided high resolution (<80 nm/pxl) morphological data on entire track structures.

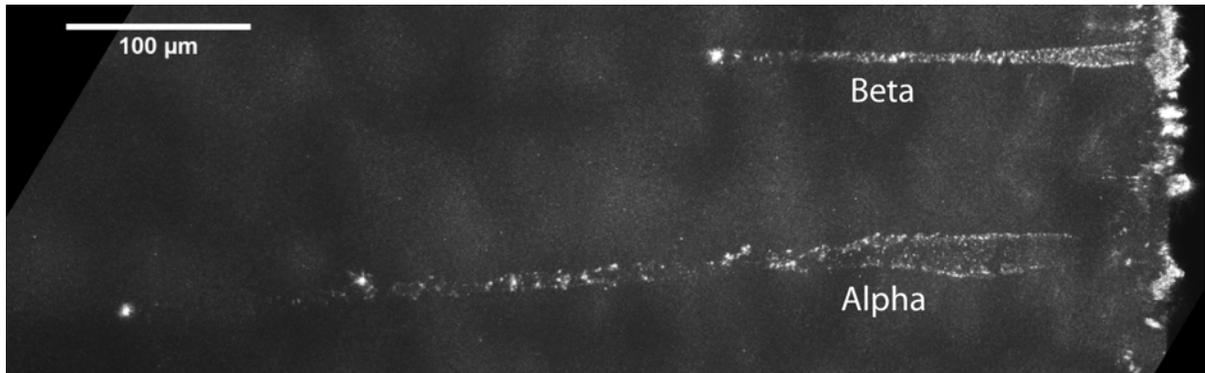


Fig 1: Greyscale LCSM projection (Cropped), Keystone #128 (12 Bit, 0.450 μ m/pxl). Brighter areas indicate higher reflectance. Tracks are not at the same depth within the keystone, the 2D projection of the 3D data makes it appear as such.