

Cell I1007

Track I4

Images

Level 2 – [I1007.jpg](#)

Track and Grains: N/A

Level 3: N/A

Microtomed samples: N/A

Track History: Cell I1007 has been scanned via the Stardust@Home Project and selected as a candidate tile containing a track.

Discovered by Mike Bunch
Fourth off-normal track.
Went Westphal/UCB on a fork
Analyzed at ALS 1.4.3, FTIR (Bechtel) on 11Apr08
Back at UCB remounted between Si3N4 windows, analyzed by STXM on 11.0.2
Analyzed at ALS 1.4.3, FTIR (Bechtel) on 07May08

Track Characteristics:

Type: Type A Carrot
Length / Depth: ?
Grain diameters:?

Allocation History

Results

Track: FTIR analysis indicates large organic contamination, primarily in CH₂ and amide regions. The contamination is distributed homogeneously throughout the keystone. No obvious changes between two measurements (~1 month apart).

STXM analysis found magnesium, cerium, aluminum, sodium and zinc in a 1 μm terminal particle, probably as a glass; Zn-XANES showed the zinc to be oxidized. Fragments along the track are not the same composition as the terminal particle since no Mg, Ce, Al were detected. This terminal particle is likely to be glass from the space craft – from an IDP strike onto a solar panel. The track diameter is 2.5 μm and the aerogel density is 15±1 mg/cm³ derived from 1 absorption image of the keystone (1313eV).

Data Files:

Image taken at 500x.

