

# Cell I1017

## Track I1

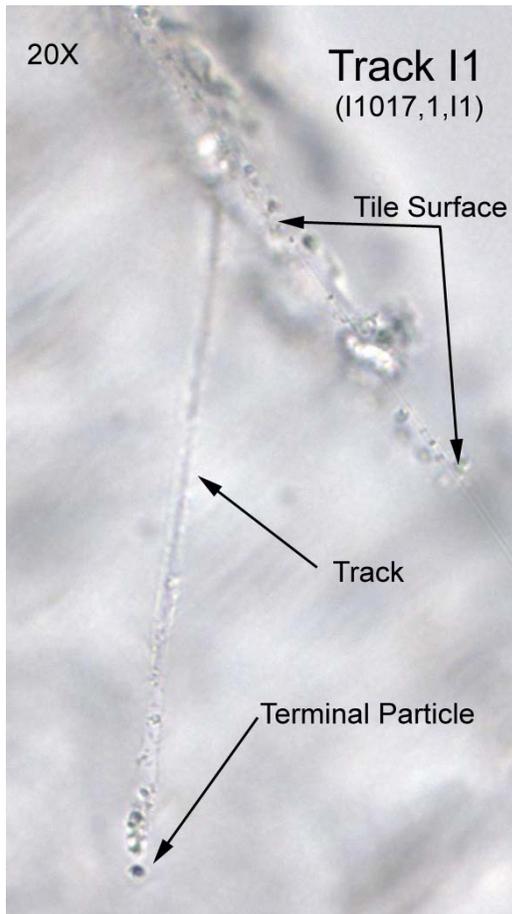
### Images

Level 2 – [I1017.jpg](#)  
[I1017A.jpg](#) (Post Keystone)

**Track and Grains:** N/A

**Level 3:** N/A

**Microtomed samples:** N/A



**Track History:** Cell I1017 has been scanned via the Stardust@Home Project and selected as a candidate tile containing a track. Track I1 is the first track removed from the Interstellar Tray and is classified as a high-angle track, meaning it may be “secondary” in nature (*i.e.*, the projectile forming this track may have been ejecta from a particle impact somewhere on the spacecraft).

Discovered by Michael Hershberg  
Extracted 12 feb 08  
Analyzed at Brenker/ESRF by XRF.  
Went to Flynn/NSLS, not analyzed by FTIR  
Went to Westphal/UCB (SSL + ALS)  
Analyzed at ALS 1.4.3, FTIR (Bechtel) on 09Apr08  
Removed from fork in plastic box with feed-throughs  
Mounted in Si3N4 window sandwich  
Analyzed at ALS 11.0.2 (Tyliszczak/Westphal)  
Analyzed at ALS 1.4.3, FTIR (Bechtel) on 07May08

### Track Characteristics:

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

### Allocation History

### Results

**Track:** XRF: analysis shows terminal particles contain significant potassium, calcium, titanium, iron, zinc and cerium.

STXM: STXM analysis found magnesium, cerium, aluminum and zinc in the 2  $\mu\text{m}$  terminal particle and in smaller fragments along the 300  $\mu\text{m}$  track. Aerogel was too thick for iron analysis, but no nickel detected. No sodium found in track fragments

FTIR: Effects of the XRF analysis are visible in multiple bands of FTIR map (CH<sub>3</sub>, CH<sub>2</sub>, OH, C=O, amide).

Aerogel density is 18 mg/cm<sup>3</sup> measured by STXM

**Data Files:** None to date.