

Cometary Cell C2101

Images

[Aerogel Cell: C2101-01.jpg](#)
[C2101-03.jpg](#)
[C2101_T1_20x.jpg](#)

Cell History: Cell C2101 was removed from the cometary grid on May 18, 2006.

Track Information: The tile has several small-sized tracks.

Feature Images

Allocation History

Results

Log Entries

Note: All track / features (e.g., T1) numbers assigned during the Level 3 scanning are to be considered “**Temporary**” and in do not relate to the “Official” track number that is assigned when a given features is extracted (e.g., Keystoned) from a tile. Abbreviations: EH – Entrance Hole, TP – Terminal Particle, MTW – Maximum Track / Bulb Width, TL – Track Length.

06-12-06 – T.H. See

Removed **C101** from cabinet, determined Level 2 orientation, and mounted tile in Level 3 fixture in the Level 2 orientation.

Setup system for Depth Profiles and commenced data acquisition at 10:00 am.

Completed Depth Profiles @ ~10:35, including several interruptions from phone calls and having the system generate one “Runtime Error” forcing a reboot.

Tracks

C101-T1 – Bifurcated small carrot-shaped track toward the front surface of the tile. The tile appears to have cracked, possibly during the insertion of the Fiducial marks, but no way to really tell. However, whenever it happened, it appears to have been after the formation of this track as the lower half appears to be offset a bit to the right and forward from the main upper body or entrance hole are. Max track length measures 2170 (1680) for the longer of the four tracks, with the others measuring ~ 1735, 1610, and 1560 μm in length for the other tracks. All show nice terminal particles at the ends, and in fact, show what appear to be particles all along the tracks. Terminal particles sizes range from ~ 5 μm to ~ 15 μm in size. Entrance hole on the order of 50 μm , while max track width above the bifurcated tracks is ~ 155 μm .

C101-T2 – Smallish carrot-shaped track toward the back surface of the tile. Two stylus visible exiting the bottom of the main body, measuring ~ 990 & 780 μm in length. Terminal particles visible at the ends of each track, the larger appearing to be on the order of 15 μm across. Entrance hole is ~ 20 μm across and the max track width is ~ 55 μm .

C101-T3 – Extremely large, turnip-shaped feature with at least 5 styli exiting out of the bottom of the turnip top portion. Deepest penetration appears to be on the order of 7855 μm in to the tile. Other terminal particles are ~ 6430, 5670, 6610, & 4733 μm deep in to the aerogel. Terminal particles clearly visible at the ends of each stylus that was send. Entrance hole is on the order of 450 μm across, while the widest portion of the upper turnip is ~ 2100 μm . The turnip portion or top half is ~ 4140 μm long.

C101-T4 – Located directly behind the large turnip feature of T3. Will have to reverse tile and image from the back side. Original image (*i.e.*, C101-T4-LocationImage.jpg) shows location only.

Imaged again from reverse side since feature was block via T3. Bulbous bifurcated track with two terminal particles visible. Tracks measure 1275 & 974 from side, not the angular measurements. Terminal particles less than 10 μm in size. Entrance hole, what is noticeable is $\sim 80 \mu\text{m}$ wide and max track width is $\sim 300 \mu\text{m}$. Entrance hole not well defined.

C101-T5 – Small carrot-shaped track about halfway in the tile from front to back, and is about 5 to 7 mm passed halfway from left to right. Entrance hole measures ~ 15 to $20 \mu\text{m}$, with max track width $\sim 35 \mu\text{m}$ across. Track length is $\sim 345 \mu\text{m}$ with an obvious terminal particle at the end of the track and what appears to be a similar sized ($\sim 5 \mu\text{m}$) particle $\sim \frac{3}{4}$ of the way down the track..

Took images of some tracks with the yellow light.

Took 7x & 20x Top View with yellow light.

Reversed tile to image T4 from the other side.

Completed tile @ $\sim 12:40$.

Placed tile back in container and storage cabinet.