STARDUST CURATION & SCIENCE AT JSC.

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Introduction: Dust particles released from comet 81P/Wild-2 were captured in silica aerogel on-board the STARDUST spacecraft and returned to Earth on January 15, 2006. STARDUST recovered thousands of particles ranging in size from 1 to 100 micrometers. During the six month Preliminary Examination period an international consortium of 180 scientists investigated their mineralogy/petrology, organic/inorganic chemistry, optical properties and isotopic compositions [1-7]. The Stardust samples are now available for research by the entire research community.

On-line Catalog available at **http://curator.jsc.nasa.gov/stardust/**
includes all curatorial information for a given particle, track, or tile, including allocation history, analytical summary, and photo documentation as well as the procedure for sample requests.

Photo Documentation:
Level 1 – provides a low resolution record of each individual aerogel cell in its most pristine, "as received" condition
Level 2 – high resolution, plan view mosaics of aerogel cells and Al mounting foils, recording their positions in a cell-specific reference frame
Level 3 –detailed documentation of individual aerogel tiles following extraction, portrays individual tracks from the side.
Level 4 – documentation of individual tracks extracted by either the keystone system [8] or ultrasonic microblades [9].

References:[1] Brownlee D. et al. (2006) *Science, 314,* 1711-1716. [2] Zolensky M.E. et al. (2006) *Science, 314,* 1735-39. [3] Horz F. et al. (2006) *Science, 314,* 1716-1719. [4] Keller L.P. et al. (2006) *Science, 314,* 1728-1731. [5] Flynn G.J. et al. (2006) *Science, 314,* 1731-1735. [6] Sandford S.A. et al. (2006) *Science, 314,* 1720-1724. [7] McKeegan K.D. et al. (2006) *Science, 314,* 1724-28. [8] Westphal A.J. et al. (2004) *Meteoritics & Planet. Sci., 39,* 1375-1386. [9] Ishii H.A. et al. (2005) *Meteoritics & Planet. Sci., 40,* 1741-1747.