

Monday, March 15, 2004
STARDUST MISSION
2:15 p.m. Salon A

Chairs: B. C. Clark
M. E. Zolensky

- 2:15 p.m. Brownlee D. E. * Anderson J. D. Atkins K. Bhaskaran S. Chevront A. R. Clark B. C. Duxbury T. C. Economou T. Hanner M. S. Hörz F. Kissel J. McDonnell J. A. M. Green S. Newburn R. L. Perkins D. E. Price S. Ryan R. E. Sandford S, Sekanina Z, Tsou P. Tuzzolino A. J. Villinga J. M. Williams K. E. Zolensky M. E.
The Stardust — A Successful Encounter with the Remarkable Comet Wild 2 [#1981]
On January 2, 2004 the Stardust spacecraft completed a close flyby of comet Wild2 (P81). Flying at a relative speed of 6.1 km/s within 237 km of the 5 km nucleus, the spacecraft took 72 close-in images, measured the flux of impacting particles and did TOF mass spectrometry.
- 2:30 p.m. Newburn R. Jr.* Acton C. H. Jr. Bhaskaran S. Brownlee D. Chevront A. Duxbury T. Hanner M. Semenov B. Sandford S. Tsou P.
Stardust Imaging of Comet Wild 2: First Look [#1437]
The Stardust spacecraft flew within the coma of comet Wild 2 and took 72 images where the surface and jets were resolved.
- 2:45 p.m. Tuzzolino A. J. * Economou T. E. McDonnell J. A. M. Green S. F. McBrite N.
Preliminary Results from the Dust Flux Monitoring Instrument During the Encounter of Stardust Spacecraft with Wild-2 Comet [#1782]
On January 2, 2004, the Stardust spacecraft successfully encountered the Wild-2 comet. The Dust Flux Monitoring Instrument (DFMI) provided quantitative measurements of dust particle fluxes and particle mass distributions throughout the entire flythrough.
- 3:00 p.m. Clark B. C. * Economou T. E. Green S. F. Sandford S. A. Zolensky M. E.
Streaming Clumps Ejection Model and the Heterogeneous Inner Coma of Comet Wild 2 [#1801]
It is modeled that a significant component of the jets of some comets are released as aggregate clumps, which then fragment and shed particles after release, leading to a heterogeneous innermost coma.
- 3:15 p.m. Kissel J. * Silén J.
Stardust: First Results from the Cometary and Interstellar Dust Analyzer [#1913]
The Cometary and Interstellar Dust Analyzer was active during the flyby at comet Wild-2. For about 90 seconds around the spacecrafts closest approach to the nucleus impacts of dust particles were registered and mass spectra taken.
- 3:30 p.m. Tsou P. * Brownlee D. E. Hörz F. Newburn R. L. Sandford S. A. Sekanina Z. Zolensky M. E.
STARDUST Sample Collection at Wild 2 and Its Preliminary Examination [#1898]
This abstract compares the model predictions with the in situ measurements and Wild 2 images and assesses the likely samples to be returned for analysis on January 15, 2006. The organization of the Preliminary Examination is presented.
- 3:45 p.m. Anderson J. D. * Lau E. L. Clark B. C. Asmar S. W.
Stardust Dynamic Science at Wild 2: First Look [#1957]
This paper presents preliminary results from the Dynamic Science Investigation on the Stardust mission. Both radio science data and spacecraft attitude control data from the encounter with comet 81P/Wild 2 on January 2, 2004 will be discussed.

4:00 p.m. Zolensky M. * Sandford S. Hörz F. Brownlee D. Tsou P. Clark B.
*Preliminary Sample Analysis Plan for the Cometary and Interstellar Samples Being Returned
by the Stardust Spacecraft [#1367]*
Description of the plan for the preliminary analysis of comet coma and interstellar dust samples being
returned by the Stardust Spacecraft in January 2006.

4:15 p.m. EXTENDED DISCUSSION OF STARDUST PRELIMINARY EXAMINATION TEAM