

The Structure of Comets Revealed by the Debris from Breakingup of 73P/SW3. J. J. Vaubaillon,
W. T. Reach

The final analysis of the broken comet 73P/Schwassmann-Wachmann 3 still reveals a non-power-law size distribution, with a drop around 100 microns in radius. Does this reflect the process of formation or disintegrating undergone by the comet? Dynamical modeling of the width of the observed dust trail cannot be explained with classical models. The trail width can be explained by the extreme physical conditions experienced by the comet during the 1995 outburst. The influence of volatile material on the shape of the stream is discussed. Consequences for the macroscopic structure of the comet are derived and applied to comet 17P/Holmes.