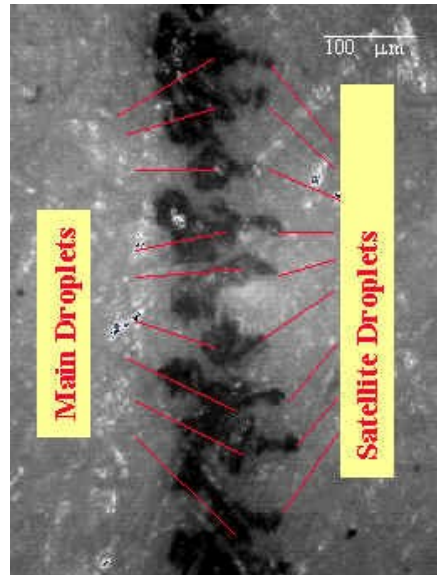


It can be seen from the above animated sequence that the jet column experiences instability and breaks up into a stream of small satellite droplets following the primary droplets. The existence of these small droplets can significantly lower the inkjet printing quality since they have different trajectories from the primary one. As a result, they will fall on different locations from that of the primary droplet (as shown below).



Sample line inkjet printing from a HP printhead, showing the primary and the satellite droplets. Consequently, the printing resolution (as usually characterized by the dots per inch (DPI)) is degraded. The trajectories of these droplets can also be visualized using a CCD video camera. It is clear from the following inkjet injection photograph that the satellite droplet stream has a different trajectory from that of the primary droplet stream.

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