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## Restoration of HST images with missing data

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**Abstract:** Missing data are a fairly common problem when restoring Hubble Space Telescope observations of extended sources. On Wide Field and Planetary Camera images cosmic ray hits and CCD hot spots are the prevalent causes of data losses, whereas on Faint Object Camera images data are missed out due to reseau marks, blemishes, areas of saturation and the omnipresent frame edges. This contribution discusses a technique for "filling in" missing data by statistical inference using information from the surrounding pixels. The major gain consists in minimizing adverse spill-over effects to the restoration in areas neighbouring those where data are missing. When the mask delineating the support of "missing data" is made dynamic, cosmic ray hits etc. can be detected on the fly during restoration.