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Ning Chen (n_chen@126.com), Faculty of Information & Control Engineering, Shenyang Jianzhu University, Shenyang, 110168, Peoples Rep of China, and Clifford Reiter* (reiterc@lafayette.edu), Department of Mathematics, Lafayette College, Easton, PA 18042. Fractal Forecasting Missing Image Data.

Fractal forecasting is a technique for extrapolating time series data that contains an underlying deterministic chaos. Here we apply similar techniques, modified to use two space dimensions instead of one time dimension, to fill-in and extrapolate missing image data. The technique is successful at replacing significant amounts of missing data with reasonable data derived from the image itself. (Received August 16, 2006)