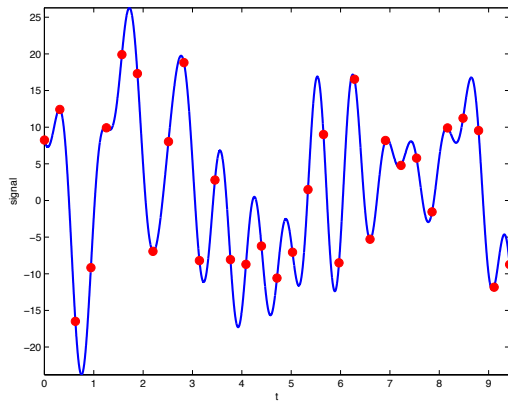# Compressed sensing in the eye (Kovacic et al)
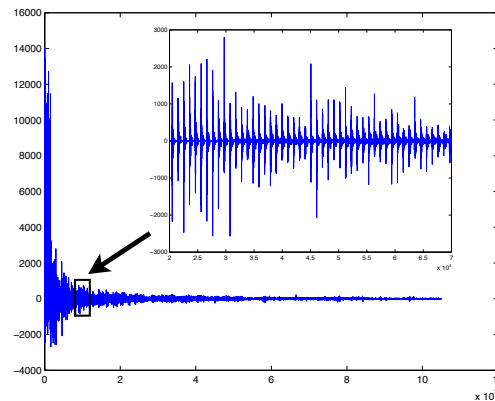
Inspiration: Compressed Sensing

Shannon-Nyquist: Signal with bandwidth B must be sampled uniformly at rate 2B to be reconstructed

But, Experimental Fact: Natural Images Sparse in Fourier Domain

(Field 94)

Megapixel Image

(Candes 08, Romberg 07)

Wavelet Coefficients

sampling rate << 2B

25K Reconstruction sampled at 96,000

random pixels