

# Sparse q-ball imaging towards efficient visual exploration of HARDI data

## Supplementary Material

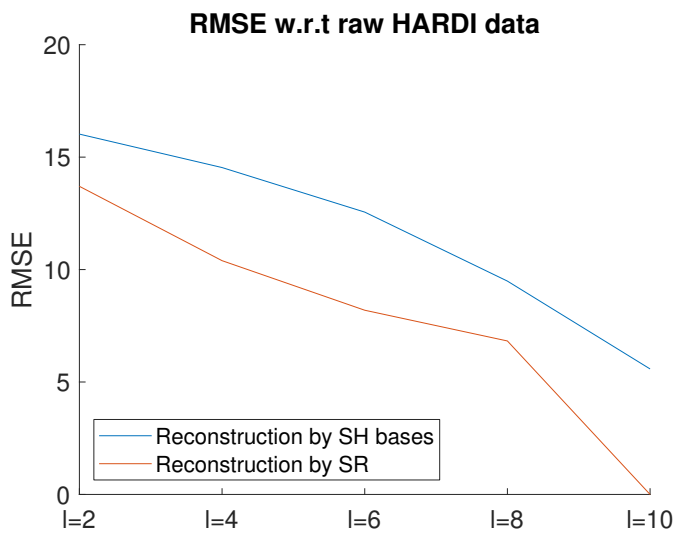


Figure 1: illustrates the comparison of RMSE for reconstructed w.r.t raw HARDI data based on SH bases and sparse representation. Sparsity level refers to the number of non-zero coefficients out of 128 atoms for sparse representation. We match sparsity with the number of SH bases to facilitate a fair comparison, e.g.,  $l = 2, 4, 6, 8, 10$  for spherical harmonics bases corresponds to sparsity levels 6, 15, 28, 45, 66, respectively.

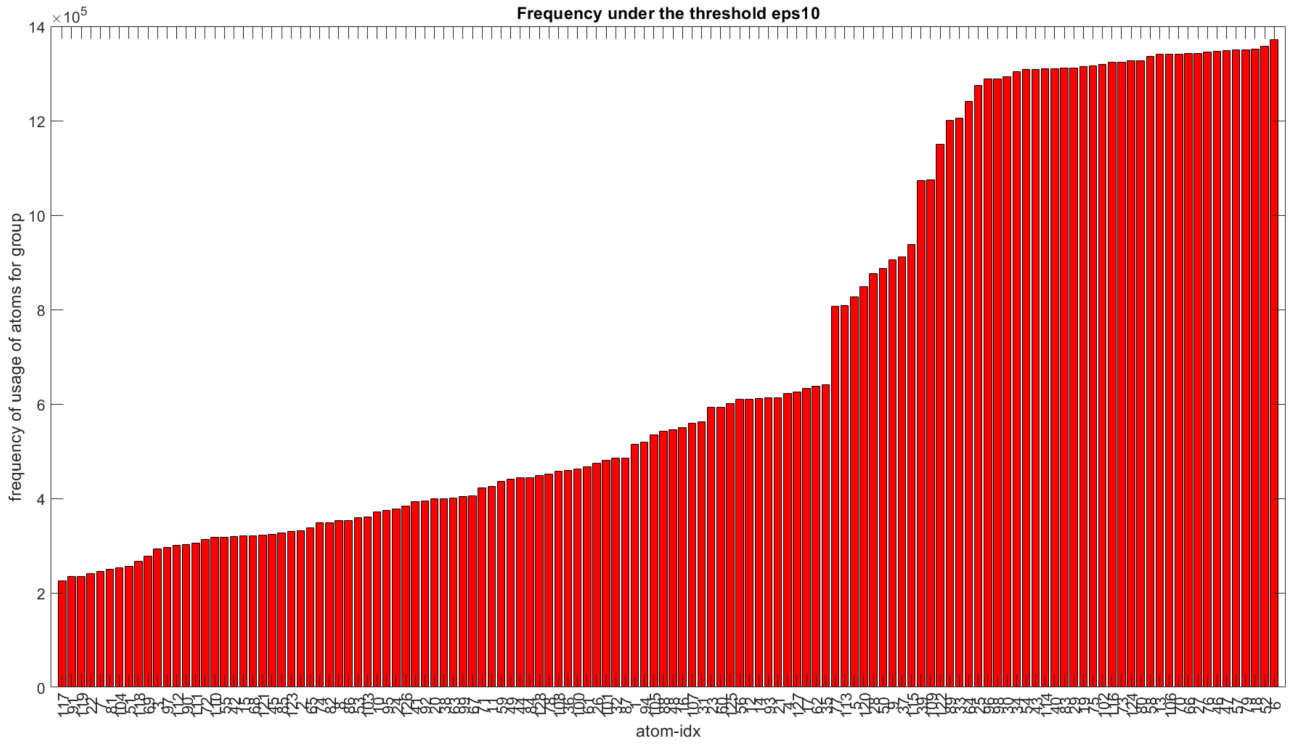


Figure 2: Sorted histograms of the frequency of atoms using error level eps10 for reconstructing the raw HARDI data, support for *Exp : Group*

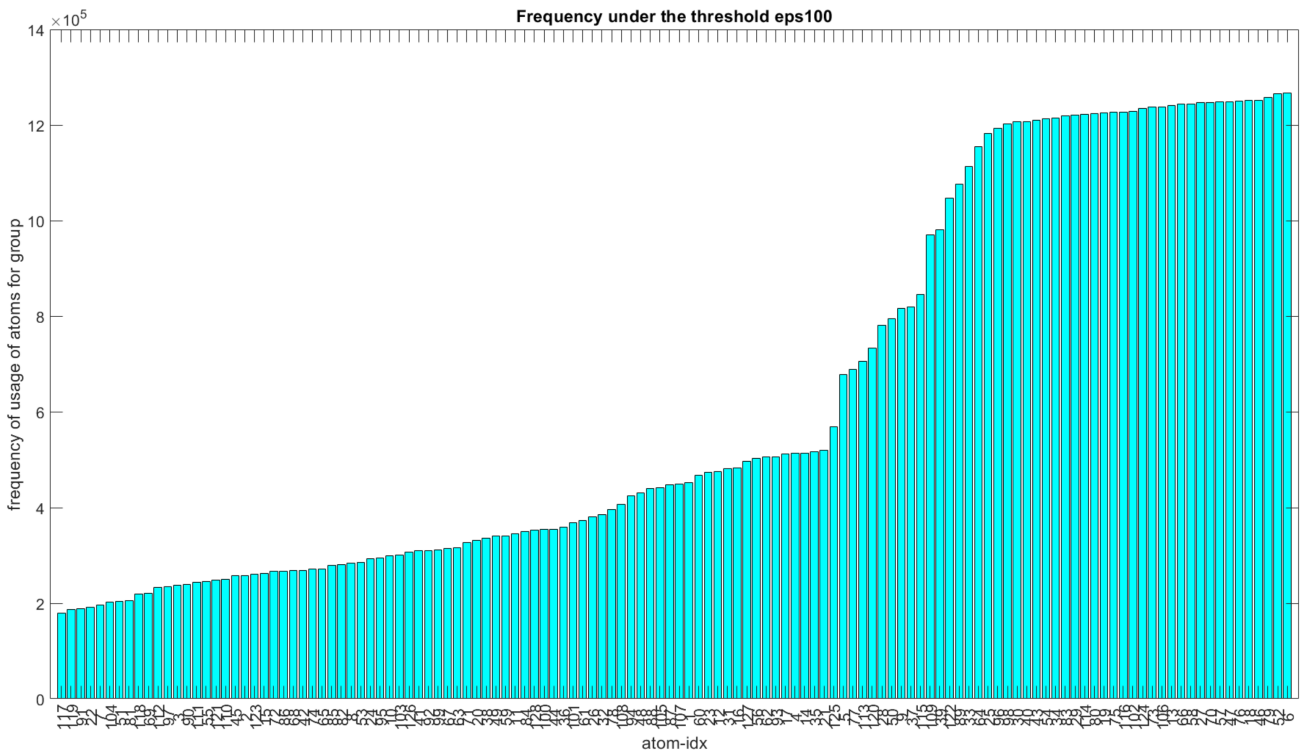


Figure 3: Sorted histograms of the frequency of atoms using error level eps100 for reconstructing the raw HARDI data, support for *Exp : Group*

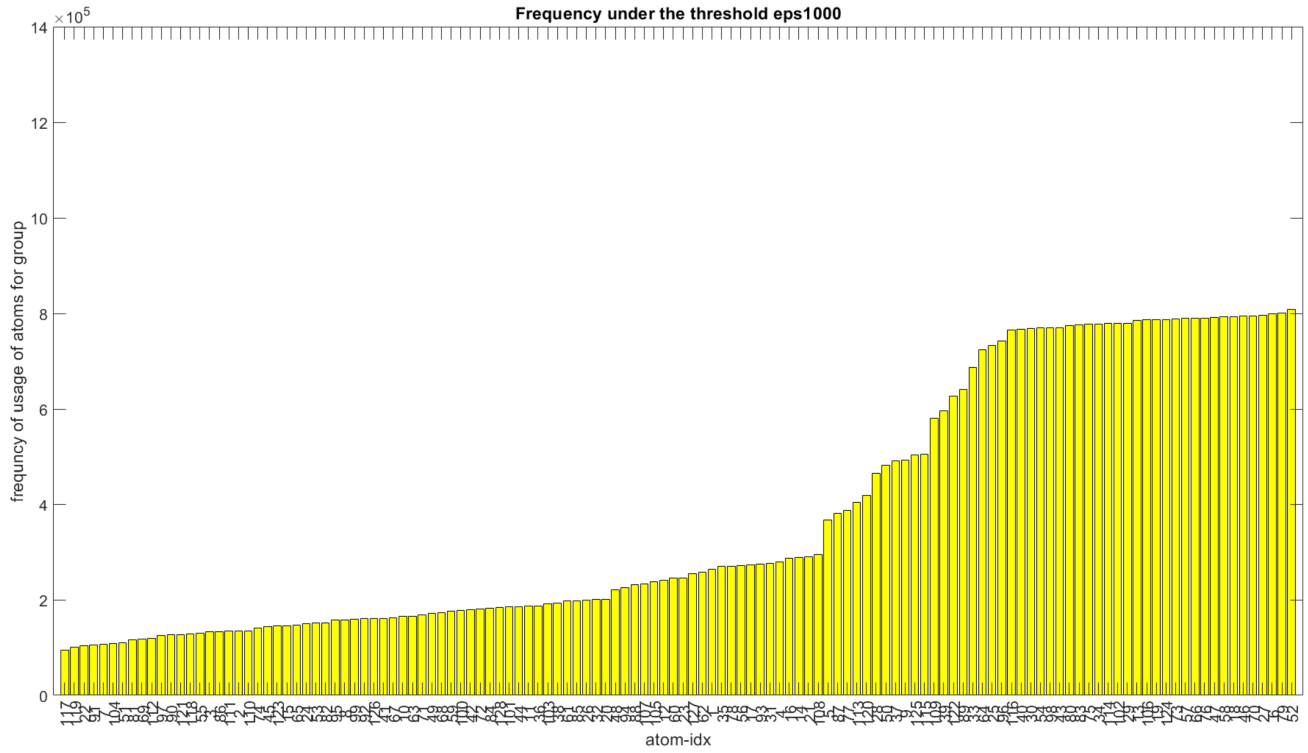


Figure 4: Sorted histograms of the frequency of atoms using error level eps1000 for reconstructing the raw HARDI data, support for *Exp : Group*

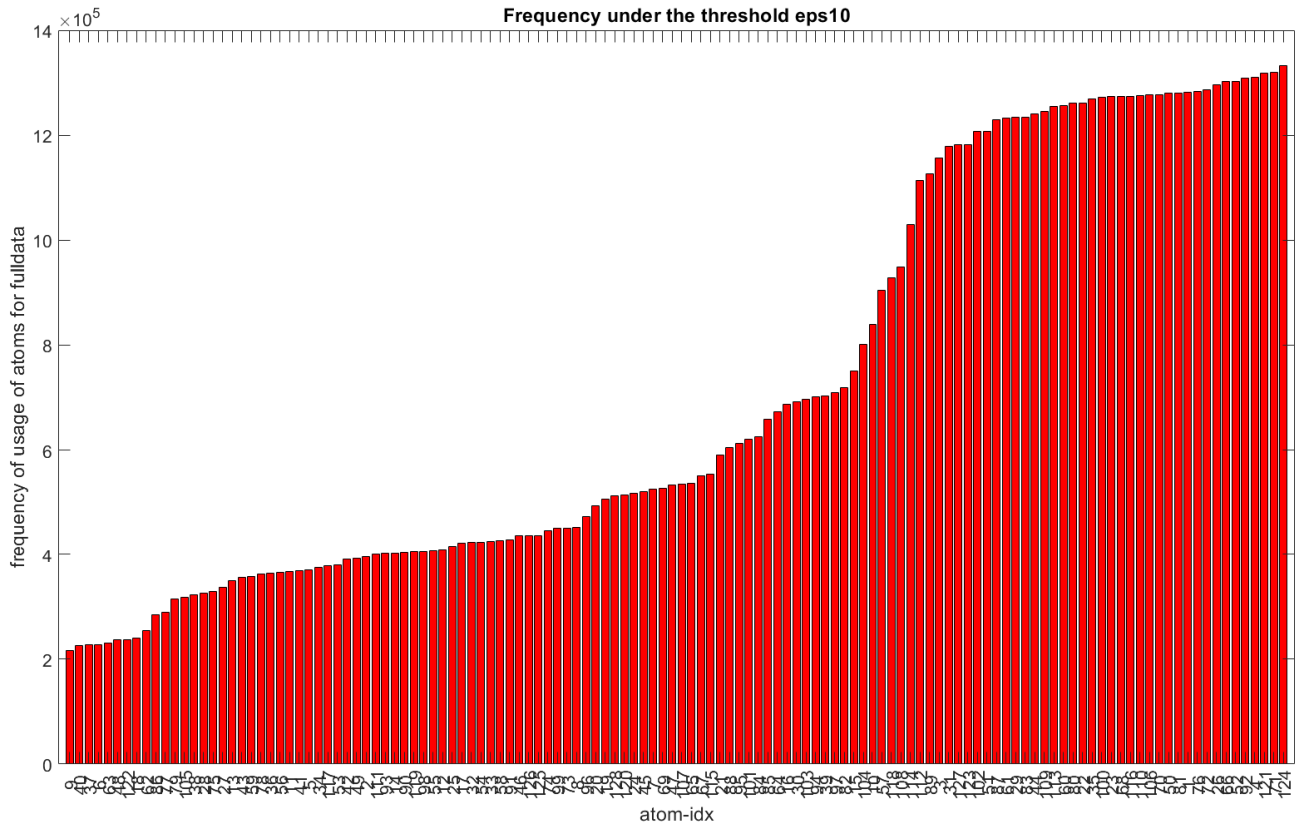


Figure 5: Sorted histograms of the frequency of atoms using error level eps10 for reconstructing the raw HARDI data, support for *Exp : Individual*

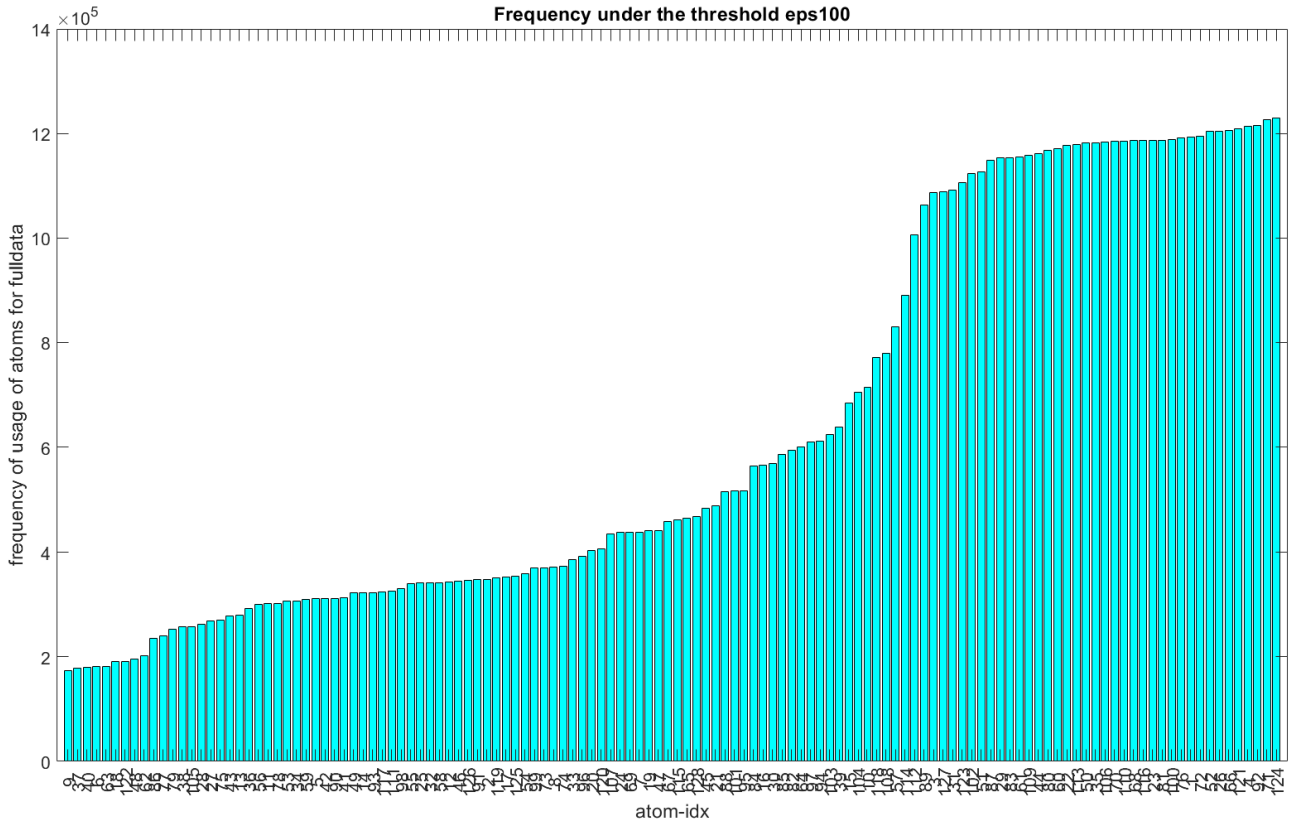


Figure 6: Sorted histograms of the frequency of atoms using error level eps100 for reconstructing the raw HARDI data, support for *Exp : Individual*

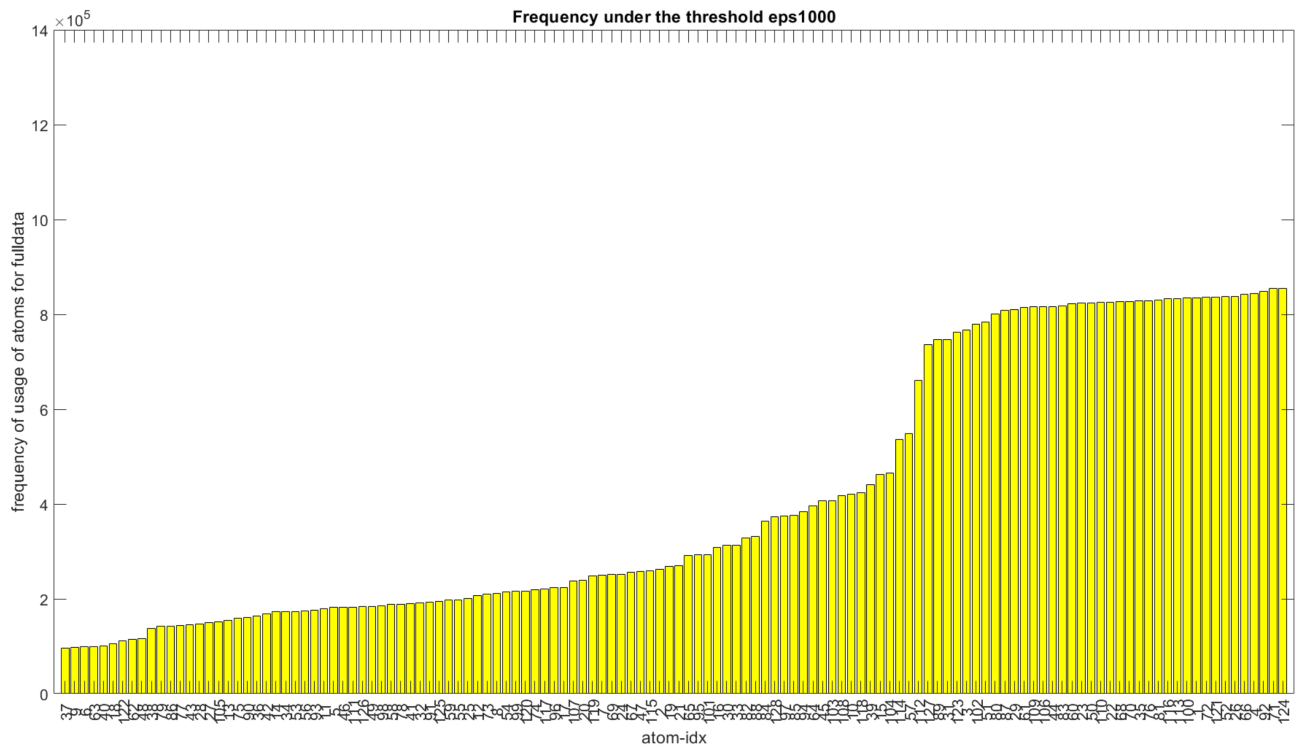


Figure 7: Sorted histograms of the frequency of atoms using error level eps1000 for reconstructing the raw HARDI data, support for *Exp : Individual*