Supplementary Materials for "Stochastic k-Neighborhood Selection for Supervised and Unsupervised Learning"
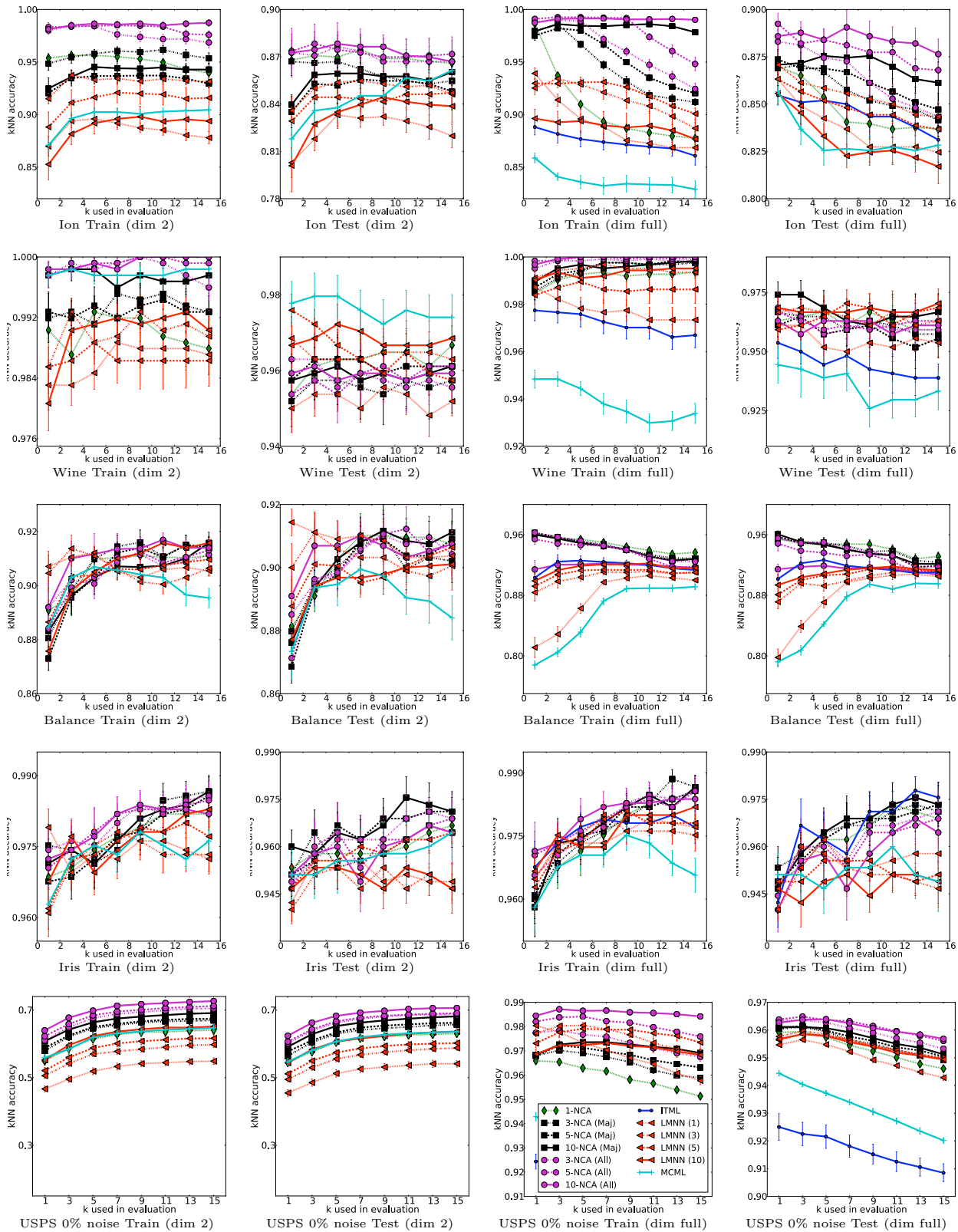
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On the following pages we provide the full quantitative results comparing kNCA to NCA, LMNN, MCML, and (when applicable) ITML on 7 datasets (4 UCI, plus USPS with 3 noise levels).

Ion Train (dim 2) · Ion Test (dim 2) · Ion Train (dim full) · Ion Test (dim full)

Wine Train (dim 2) · Wine Test (dim 2) · Wine Train (dim full) · Wine Test (dim full)

Balance Train (dim 2) · Balance Test (dim 2) · Balance Train (dim full) · Balance Test (dim full)

Iris Train (dim 2) · Iris Test (dim 2) · Iris Train (dim full) · Iris Test (dim full)

USPS 0% noise Train (dim 2) · USPS 0% noise Test (dim 2) · USPS 0% noise Train (dim full) · USPS 0% noise Test (dim full)

Legend:
- 1-NCA
- 3-NCA (Maj)
- 5-NCA (Maj)
- 10-NCA (Maj)
- 3-NCA (All)
- 5-NCA (All)
- 10-NCA (All)
- ITML
- LMNN (1)
- LMNN (3)
- LMNN (5)
- LMNN (10)
- MCML

USPS 25% noise Train (dim 2)

USPS 25% noise Test (dim 2)

USPS 25% noise Train (dim full)

USPS 25% noise Test (dim full)

USPS 50% noise Train (dim 2)

USPS 50% noise Test (dim 2)

USPS 50% noise Train (dim full)

USPS 50% noise Test (dim full)