

Data S4

DNA shape features improve transcription factor binding site predictions *in vivo*

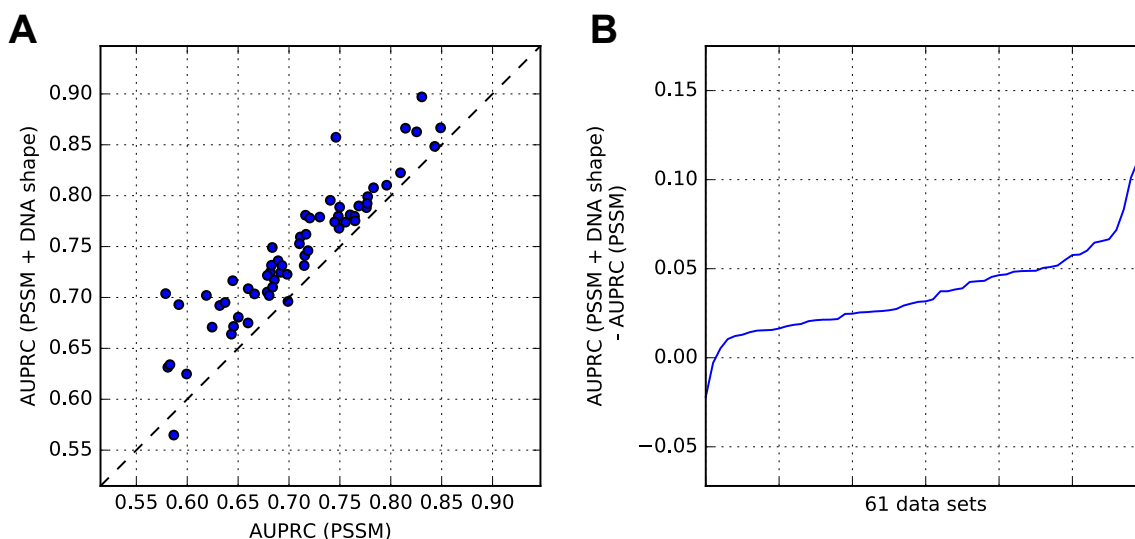
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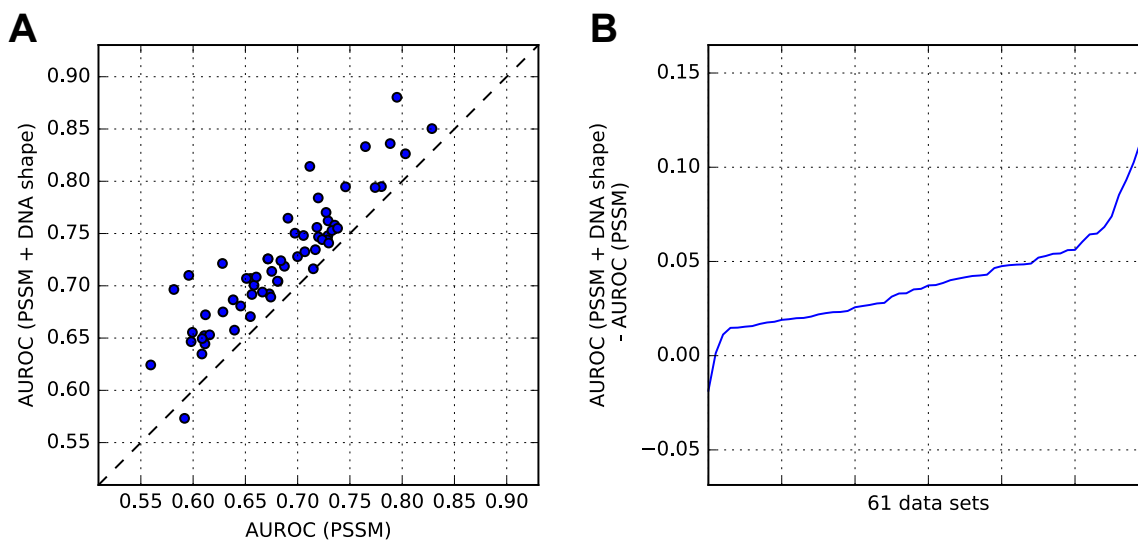
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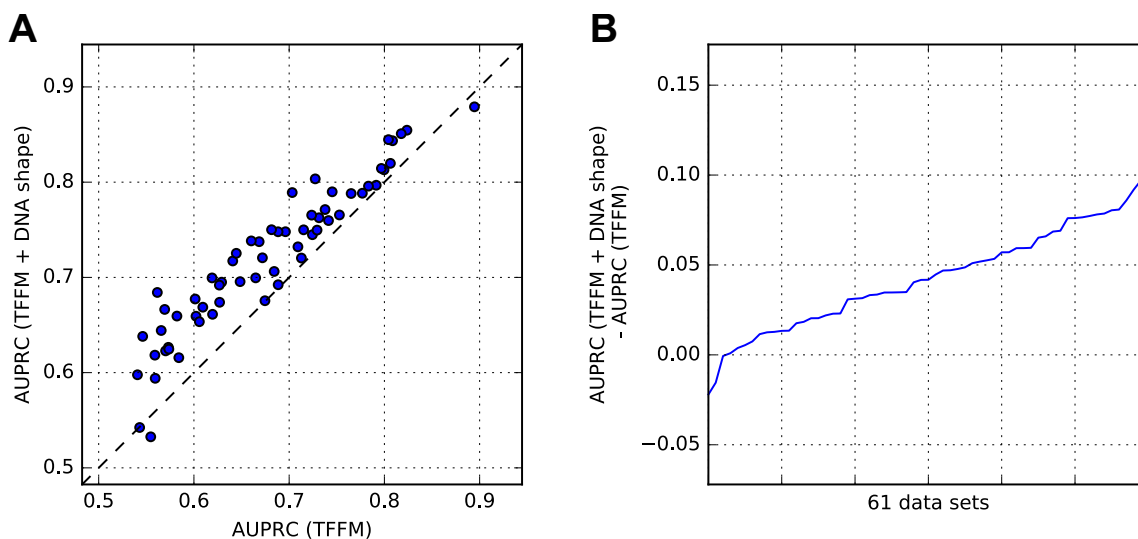
* Co-corresponding authors



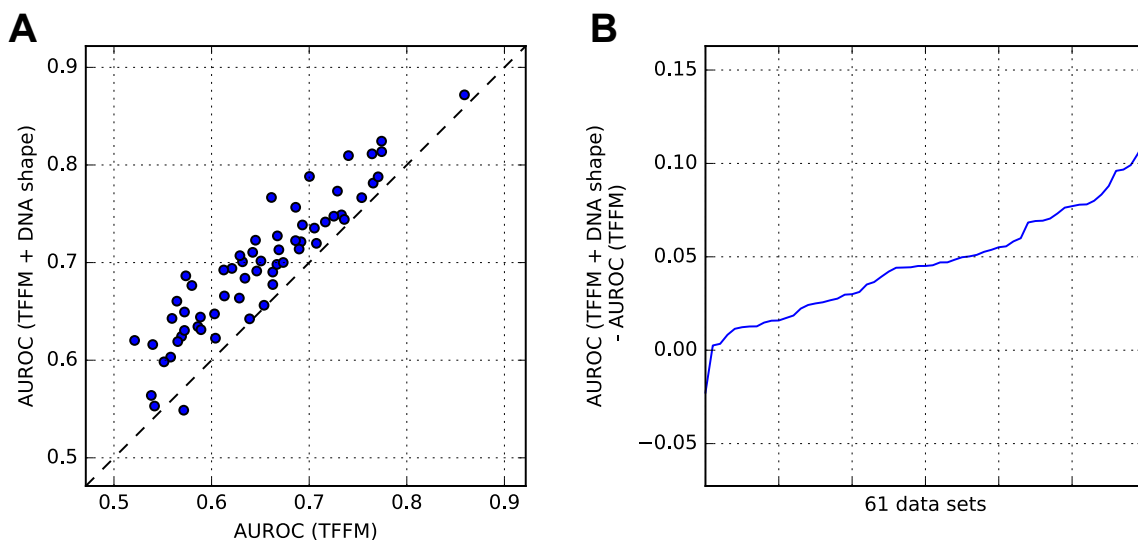
Related to Figure 2. Impact of DNA shape on predicting TFBSs when considering recurrent ChIP-seq regions for each TF. **A.** Comparison of the AUPRC obtained for the recurrent ENCODE human ChIP-seq peak regions associated with 61 TFs when using either the PSSM scores (x-axis) or the PSSM + DNA shape classifiers (y-axis). The dashed line represents equal AUPRC values obtained with the two methods. **B.** Improvement in predictive power obtained when considering DNA shape features (y-axis) as the difference between AUPRC values obtained with the PSSM + DNA shape classifiers and PSSM scores. The higher the difference, the stronger the improvement when DNA shape information is incorporated. Note that the data sets (x-axis) were ranked by increasing difference values.



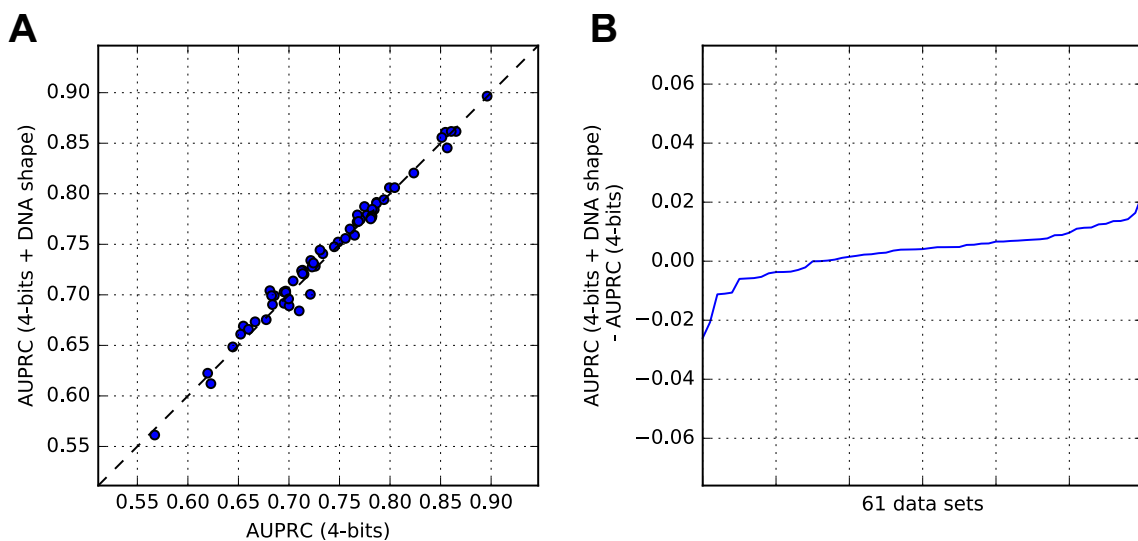
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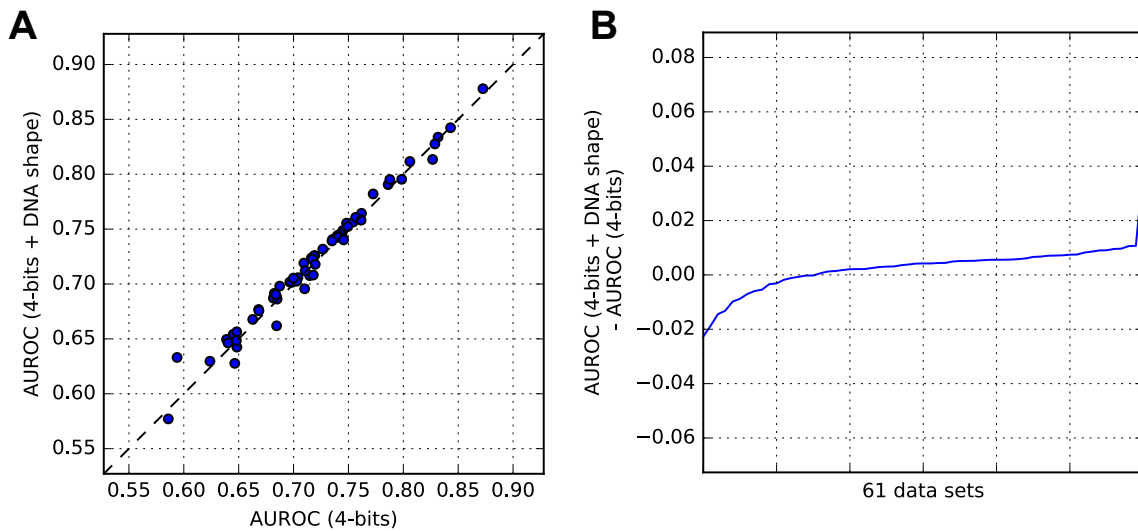
Related to Figure 2. Impact of DNA shape on predicting TFBSs when considering recurrent ChIP-seq regions for each TF. **A.** Comparison of the AUPRC obtained for the recurrent ENCODE human ChIP-seq peak regions associated with 61 TFs when using either the TFFM scores (x-axis) or the TFFM + DNA shape classifiers (y-axis). The dashed line represents equal AUPRC values obtained with the two methods. **B.** Improvement in predictive power obtained when considering DNA shape features (y-axis) as the difference between AUPRC values obtained with the TFFM + DNA shape classifiers and TFFM scores. The higher the difference, the stronger the improvement when DNA shape information is incorporated. Note that the data sets (x-axis) were ranked by increasing difference values.



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Related to Figure 2. Impact of DNA shape on predicting TFBSs when considering recurrent ChIP-seq regions for each TF. **A.** Comparison of the AUPRC obtained for the recurrent ENCODE human ChIP-seq peak regions associated with 61 TFs when using either 4-bits (x-axis) or 4-bits + DNA shape classifiers (see (Zhou et al., 2015) for the 4-bits encoding). The dashed line represents equal AUPRC values obtained with the two methods. **B.** Improvement in predictive power obtained when considering DNA shape features (y-axis) as the difference between AUPRC values obtained with 4-bits + DNA shape and 4-bits classifiers. The higher the difference, the stronger the improvement when DNA shape information is incorporated. Note that the data sets (x-axis) were ranked by increasing difference values.



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