

Reliability Measures

To estimate the confidence in predictions, we computed the overall sensitivity (Q_3) as a function of the probability assigned to the predicted state at each position. For instance, at a threshold prediction probability of 0.6, with 57% of sequence positions in this category, we achieved a Q_3 of 78.8%. On the other hand, at a threshold prediction probability of 0.8, with 19% of positions in this category, we obtained a Q_3 of 89.9% (Table 1). In terms of the prediction confidence and the positions covered, IPSSP performs uniformly better than BSPSS.

Table 1: Percentage of true positives for predictions made in a set of positions having the *a posteriori* probability of the predicted state above the threshold. To reduce 8 states to 3, the second conversion rule (H, G to H, E, B to E and all other states to L) is used.

Prediction Confidence (% Positions)			
Prediction Threshold	0.4	0.6	0.8
BSPSS	0.6639 (95.505)	0.7857 (48.580)	0.8977 (12.888)
IPSSP	0.6829 (97.108)	0.7884 (57.022)	0.8995 (19.168)