Table S5: Model evaluation indicators: Area Under the Curve (AUC) , sensitivity, specificity, and True Skill Statistic (TSS) ± Standard Deviation (SD) obtained for each species.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Species | AUC (mean±SD) | Sensitivity | Specificity | TSS |
| *Amphibalanus eburneus* | 0.988 ± 0.003 | 0.952 ± 0.016 | 0.968 ± 0.002 | 0.920 ± 0.014 |
| *Botrylloides violaceus* | 0.982 ± 0.001 | 0.991 ± 0.009 | 0.983 ± 0.003 | 0.973 ± 0.007 |
| *Botryllus schlosseri* | 0.918 ±0.004 | 0.992 ± 0.005 | 0.953 ± 0.001 | 0.945 ± 0.005 |
| *Carcinus maenas* | 0.911 ± 0.002 | 0.973 ± 0.002 | 0.973 ± 0.003 | 0.946 ± 0.003 |
| *Chionoecetes opilio* | 0.757 ± 0.005 | 0.991 ± 0.002 | 0.931 ± 0.007 | 0.922 ± 0.006 |
| *Ciona intestinalis* | 0.953 ± 0.003 | 0.99 ± 0.002 | 0.975 ± 0.003 | 0.966 ± 0.004 |
| *Littorina littorea* | 0.919 ± 0.004 | 0.986 ± 0.002 | 0.962 ± 0.010 | 0.948 ± 0.008 |
| *Membranipora membranacea* | 0.939 ± 0.001 | 0.989 ± 0.001 | 0.972 ± 0.005 | 0.961 ± 0.005 |
| *Molgula manhattensis* | 0.973 ± 0.003 | 0.991 ± 0.004 | 0.959 ± 0.005 | 0.950 ± 0.003 |
| *Mya arenaria* | 0.908 ± 0.005 | 0.984 ± 0.001 | 0.959 ± 0.001 | 0.942 ± 0.001 |
| *Paralithodes camtschaticus* | 0.964 ± 0.001 | 0.979 ± 0.025 | 0.967 ± 0.010 | 0.946 ± 0.015 |
| *Codium fragile* spp. *fragile* | 0.992 ± 0.002 | 0.977 ± 0.020 | 0.969 ± 0.007 | 0.946 ± 0.014 |
| *Dumontia contorta* | 0.961 ± 0.002 | 0.993 ± 0.004 | 0.975 ± 0.004 | 0.967 ± 0.003 |
| *Sargassum muticum* | 0.975 ± 0.001 | 0.974 ± 0.006 | 0.985 ± 0.002 | 0.960 ± 0.007 |
| *Undaria pinnatifida* | 0.994 ± 0.002 | 0.987 ± 0.022 | 0.983 ± 0.011 | 0.970 ± 0.012 |
| *Acartia tonsa* | 0.977 ±0.004 | 0.919 ± 0.053 | 0.955 ± 0.005 | 0.875 ± 0.051 |
| *Aurelia limbata* | 0.965 ±0.012 | 0.875 ± 0.125 | 0.912 ± 0.004 | 0.787 ± 0.125 |
| *Mnemiopsis leidyi* | 0.962 ± 0.002 | 0.945 ± 0.026 | 0.951 ± 0.013 | 0.896 ± 0.014 |
| *Alexandrium tamarense* | 0.944 ± 0.004 | 0.952 ± 0.036 | 0.885 ± 0.018 | 0.838 ± 0.024 |
| *Dinophysis caudata* | 0.77 ± 0.004 | 0.974 ± 0.001 | 0.836 ± 0.008 | 0.810 ± 0.008 |
| *Dinophysis dens* | 0.992 ± 0.01 | 0.917 ± 0.095 | 0.983 ± 0.002 | 0.899 ± 0.094 |
| *Gonyaulax polygramma* | 0.837 ± 0.007 | 0.901 ± 0.012 | 0.835 ± 0.010 | 0.745 ± 0.016 |
| *Heterocapsa triquetra* | 0.945 ± 0.005 | 0.951 ± 0.015 | 0.929 ± 0.007 | 0.880 ± 0.015 |