| **Habitat preference formula** | **N pars.** | **AIC** | **ΔAIC** | **Model number** | **RMSE** |
| --- | --- | --- | --- | --- | --- |
| **te(depth, velocity, k = 3) + s(temp, k = 4)** | **12** | **424.57** | **0.00** | **5** | **53.65** |
| te(velocity, temp, k = 3) + s(depth, k = 4) | 12 | 432.45 | 7.89 | 3 | 56.34 |
| te(depth, temp, k = 3) + s(velocity, k = 4) | 12 | 469.52 | 44.95 | 4 | 58.77 |
| s(velocity, k = 4) + s(temp, k = 4) + s(depth, k = 4) | 10 | 472.75 | 48.19 | 2 | 60.83 |
| velocity + temp + depth | 4 | 527.42 | 102.85 | 1 | 71.71 |
| diffusion only | 1 | 643.74 | 219.18 | 6 | 101.79 |