|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | |  | |  | |
| Model |  | Predictors | | | | | | |  | | dev.expl | | % change dev.expl |
|  |  | A | s(lon,lat) | s(lon, lat)· population | s(oxy, sal) | s(depth) | s(RV) |  | |  | |  | |
| full model.1 | | 4.2 | 26.1 | 18.4 | 21.9 | 6.3 | 8.5 |  | | 44.0 | |  | |
|  |  | 4.4 |  | 28.1 | 22.8 | 6.3 | 8.6 |  | | 40.3 | | -8.4 | |
|  |  | 5.0 | 28.0 |  | 26.8 | 6.4 | 8.5 |  | | 30.1 | | -31.7 | |
|  |  | 4.2 | 26.1 | 21.2 |  | 6.2 | 8.5 |  | | 41.7 | | -5.3 | |
|  |  | 4.3 | 26.1 | 16.6 | 24.2 |  | 8.4 |  | | 40.8 | | -7.4 | |
|  |  | 4.3 | 26.1 | 18.6 | 21.3 | 6.3 |  |  | | 42.7 | | -2.9 | |

**S5 Table. Summary statistics of the full model.1 and reduced versions ‘leaving-out-one’ term at time.** Intercept (A) and estimated degrees of freedom for each term of the full best model (model.1) and reduced models ‘leaving-out-one’ term at time. The deviance explained (dev.expl.) and the % change in the dev.expl. are reported for each reduced model in relation to the full best model (model.1).