|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |   |   |   |   |   |   |   |   |   |   |
| 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).