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| --- | --- | --- | --- | --- | --- | --- |
| **Table Sx**. Model selection for percent dissolved oxygen (% DO) with candidate GAM models\* assessed in each time point, corresponding to 10, 31, 59, and 89 days post addition of burned or unburned plant material to experimental mesocosms. Dawn and dusk measurements represent discrete back-to-back measurements over a 36 h period. | | | | | | |
| *Metric* | *Time* | *Model* | | *df* | *AIC* | *ΔAIC* |
| % DO | T1-dawn1 | | ~Treatment + s(plant material, by= Treatment) | 9.7 | 226.4 |  |
|  |  | | ~Treatment + s(plant material) | 6.7 | **221.5** | -3.9 |
|  |  | | ~s(plant material) | 5.6 | 225.4 |  |
|  | T1-dusk1 | | ~Treatment + s(plant material, by= Treatment) | 9.3 | 258.5 |  |
|  |  | | ~Treatment + s(plant material) | 6.5 | **254.3** | -3.1 |
|  |  | | ~s(plant material) | 5.4 | 257.4 |  |
|  | T1-dawn2 | | ~Treatment + s(plant material, by= Treatment) | 9.9 | 230.6 |  |
|  |  | | ~Treatment + s(plant material) | 6.8 | **228.9** | -4.7 |
|  |  | | ~s(plant material) | 5.6 | 233.6 |  |
|  | T2-dawn1 | | ~Treatment + s(plant material, by= Treatment) | 8.4 | **231.2** | -4.8 |
|  |  | | ~Treatment + s(plant material) | 4.0 | 237.8 |  |
|  |  | | ~s(plant material) | 3.0 | 236.0 |  |
|  | T2-dusk1 | | ~Treatment + s(plant material, by= Treatment) | 8.2 | **246.9** | -4.3 |
|  |  | | ~Treatment + s(plant material) | 4.0 | 251.7 |  |
|  |  | | ~s(plant material) | 3.0 | 251.2 |  |
|  | T2-dawn2 | | ~Treatment + s(plant material, by= Treatment) | 8.8 | **229.5** | -7.4 |
|  |  | | ~Treatment + s(plant material) | 4.0 | 238.5 |  |
|  |  | | ~s(plant material) | 3.0 | 237.0 |  |
|  | T3-dawn1 | | ~Treatment + s(plant material, by= Treatment) | 10.0 | **198.3** | -22.8 |
|  |  | | ~Treatment + s(plant material) | 6.5 | 222.3 |  |
|  |  | | ~s(plant material) | 5.5 | 221.1 |  |
|  | T3-dusk1 | | ~Treatment + s(plant material, by= Treatment) | 12.4 | **215.3** | -22.9 |
|  |  | | ~Treatment + s(plant material) | 6.9 | 237.2 |  |
|  |  | | ~s(plant material) | 5.9 | 238.2 |  |
|  | T3-dawn2 | | ~Treatment + s(plant material, by= Treatment) | 10.2 | **195.7** | -25.4 |
|  |  | | ~Treatment + s(plant material) | 6.6 | 221.4 |  |
|  |  | | ~s(plant material) | 5.5 | 221.1 |  |
|  | T4-dawn1 | | ~Treatment + s(plant material, by= Treatment) | 6.5 | 208.2 |  |
|  |  | | ~Treatment + s(plant material) | 5.0 | 208.2 |  |
|  |  | | ~s(plant material) | 4.1 | **206.3** | 0.0 |
|  | T4-dusk1 | | ~Treatment + s(plant material, by= Treatment) | 7.1 | **229.0** | -2.0 |
|  |  | | ~Treatment + s(plant material) | 5.6 | 232.5 |  |
|  |  | | ~s(plant material) | 4.7 | 231.0 |  |
|  | T4-dawn2 | | ~Treatment + s(plant material, by= Treatment) | 6.0 | 198.5 |  |
|  |  | | ~Treatment + s(plant material) | 4.0 | 196.6 |  |
|  |  | | ~s(plant material) | 3.1 | **195.0** | 0.0 |
| *\*Treatment +* *s(plant material, by= Treatment)* GAM has parametric terms (*Treatment*) and separate smoothers for each treatment. *Treatment + s(plant material)* GAM has a global smoother allowing for off-set intercepts according to treatments. The *s(plant material)* GAM fits a global smoother to all data. *Bold* represents the selected models. Delta AIC (*ΔAIC*) is the difference between the selected model and the global smoother model | | | | | | |
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