General information about GAMs

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Model construction

s = represent smooth function

Define knots

k = knots. 12 month per year or 24 sampling event per year. Seleccione 12 por Simpson, del siguiente enlace https://fromthebottomoftheheap.net/2014/05/09/modelling-seasonal-data-with-gam/

bs= basis spline

bs= basis spline Smooth classes are invoked directly by s terms https://stat.ethz.ch/R-manual/R-devel/library/mgcv/html/smooth.terms.html

bf

Note that we use the bf() argument to specify this nonlinear model.

Output

Hay que ver el Smooth Terms: -> sds(sdate_1) -> sds(stimes_1) is the variance parameter, which has the effect of controlling the wiggliness of the smooth - the larger this value the more wiggly the smooth. https://fromthebottomoftheheap.net/2018/04/21/fitting-gams-with-brms/

Check models

pp_check()

https://tem11010.github.io/regression_brms/ The pp_check allows for graphical posterior predictive checking. We can generate figures to compare the observed data to simulated data from the posterior predictive distribution. This is a great graphical way to evaluate your model.

Here, nsamples refers to the number of draws from the posterior distribution to use to calculate yrep values.

```
pp_check(model, nsamples=100)
```