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| How to obtain temporal trend estimates from cor\_bsts? |  |

Hi,  
  
I am trying to analyze temporal trends in a binomial response variable and as the autocorrelation options available for "normal" models are not (yet?) implemented for binomial models in brms, I would like to try out the bayesian structural time series model using cor\_bsts. However, although the basic idea seems pretty simple, I have slight problems understanding how it works as I am pretty new to brms and statistics related to autocorrelation structures.  
  
More specifically, I try to model the temporal trend across time in the proportion of habitat patches occupied by a species in a set of different independent regions. Ideally, I would model the relationship with time as a predictor, add a random intercept and slope for each region (different regions might respond differently), and add a first order autocorrelation term to account for temporal autocorrelation, i.e. something like:  
  
fit <- brm(occupied\_patches|trials(total\_patches) ~ Time + (1 + Time|Region),  
                            data=data,  
                            family = binomial(link="logit),  
                            autocor = cor\_ar(formula = ~ Time|Region, p=1))  
  
Now, I might have got it all wrong to begin with, but after briefly skimming through some internet tutorials regarding the bsts-package to find out more about bayesian structural time series models I have come to understand that with the bayesian structural time series models I should not include time as a covariate (temporal trends are modeled separately via the local level terms?) nor should I try to include a random slope for each grouping variable (the local level terms are analyzed within each group separately anyways). So, if I got it right this far, the model would shrink to something like:  
  
fit <- brm(occupied\_patches|trials(total\_patches) ~ (1|Region),  
                            data=data,  
                            family = binomial(link="logit),  
                            autocor = cor\_bsts(formula = ~ Time|Region))  
  
The brmsfit object then has Time\*Region number of local level estimates, but is there a way to obtain the estimates for each grouping level separately as now they are a list with running numbers?  
  
  
  
My apologies if the question is irrelevant or if I have got it all wrong to begin with, but I would appreciate any help with this.  
  
  
  
Cheers,  
  
-Aapo K.