

## Peer Review

### STAT 634

#### Introduction

**“For instance, Chung, et al. (2011)<sup>2</sup> applied a two-step phenology model, per research by Cesaraccio, et al. (2004)<sup>3</sup> and Jung, et al. (2005)”**

Perhaps make a simple reference to the authors/citation, to be more concise and improve the flow of the introduction.

Overall good introduction, maybe add some more detail to improve the flow of the introduction. Remember, the audience wants to be pulled into the reading via introduction, so making it sound simple and nice while explaining the objective of the study is ideal.

#### Data

I like the first couple of paragraphs, good flow, straight to the point. I would only change the title of this section, perhaps “Data exploration/analysis”, something more specific.

**“(or from)..”**

I think commas are better here

**“When there longer stretches of missing data such as long runs of missing daily data or years of missing data, missing values were sometimes imputed if the run was not too long and when the trend of the data approximated a stationary series with white noise. Trended series or series with a clear random walk or moving average were either imputed over flat areas of the trend only or were predicted through fitting the series to an ARIMA model and forecasting the missing values from the time series.”**

I believe that these sentences can be improved by being more concise and also some punctuation corrections could be made. Some run on sentences and some commas/periods could be added.

Overall nice data section, only thing I would change is just the mentioned parts. Remember, the data section's purpose is, from what I infer, to mention the data retrieval and exploration. Stick to the title you wish to name it and follow the theme. In this section, it is primarily data retrieval/input, so stick to that theme and focus on that objective.

## Methodology

This section goes over the objective of the methodology section. I think that it covers all the necessary points. The first paragraph can maybe be named "overview", so that it can have a title like the rest of the section. In regards to this section and the Results section, I would switch up a few details. Some discussion of the results are made prior to the Results, I would either add a Discussion section and put that detail there, or just ensure that the results are provided as a reference (for example, Figure 1 illustrates, Table 1 shows...) that way the reader does not feel confused or lost when you are referring to results of the study.

### **"highest adjusted [R-squared]"**

Not sure why this format was used

### **"AR, MA, ARMA, ARIMA, or SARIMA"**

Perhaps explain what some of these are, remember the audience might not know what some analysis techniques are. This is acceptable for the data analysis paper, but for an actual report I think it's better to give a brief overview of the time series analysis used, such as the equation, parameters, explaining them, etc. Not an entire section to it per se, but just a simple summary at least.

Overall section was organized well and each part of the methodology was broken up and explained clearly. Only changes I would make were the suggestions mentioned above and adding more subsections throughout for organizational purposes.

## Results

### **"Tables 7, 8, and 9 show the coefficients and standard errors for the multiple linear regression models with SARIMA adjusted errors"**

Mention this near those tables. Overall, keep the discussion nearby the results

Like mentioned earlier, include the results either throughout the report as tables/figures as references and not just at the end of the report, or mention them before any discussion of them. Overall it is well put together, just the organization of the report is what can be improved. Nicely detailed however, and explained well. I hope you guys take what I put down as consideration and get a good final report. Wish you guys the best.