# Notebook

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#### 1 Title

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#### 1.1 Introduction

- Why am I studying this topic?
- What are my hypothesis?
- What is done in this notebook?
- Some background (on models and observations) and underlying theory (check for 2-3 papers with assistants and teachers if needed)
- Present equations if needed (Latex)

#### 1.1.1 Notebook Imports

```
/Users/skmcneill/anaconda3/envs/philadelphia_refinery/lib/python3.7/
site-packages/plotly/graph_objs/_deprecations.py:558:
DeprecationWarning:

plotly.graph_objs.YAxis is deprecated.
Please replace it with one of the following more specific types
- plotly.graph_objs.layout.YAxis
- plotly.graph_objs.layout.scene.YAxis

/Users/skmcneill/anaconda3/envs/philadelphia_refinery/lib/python3.7/
site-packages/plotly/graph_objs/_deprecations.py:531:
DeprecationWarning:

plotly.graph_objs.XAxis is deprecated.
Please replace it with one of the following more specific types
- plotly.graph_objs.layout.XAxis
- plotly.graph_objs.layout.scene.XAxis
```

#### 1.2 Import Data

Load data needed for analysis.

#### 1.3 Cleanup Data

Like families, tidy datasets are all alike but every messy dataset is messy in its own way. Tidy datasets provide a standardized way to link the structure of a dataset (its physical layout) with its semantics (its meaning). In this section, I'll provide some standard vocabulary for describing the structure and semantics of a dataset, and then use those definitions to define tidy data. tidyr

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## 1.4 Analysis/Modeling

### 1.5 Results

- Focus on main analysis steps and findingsRemove intermediate results or move to supplement

### 1.6 Conclusion

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