



# Electricity Consumption in North Carolina

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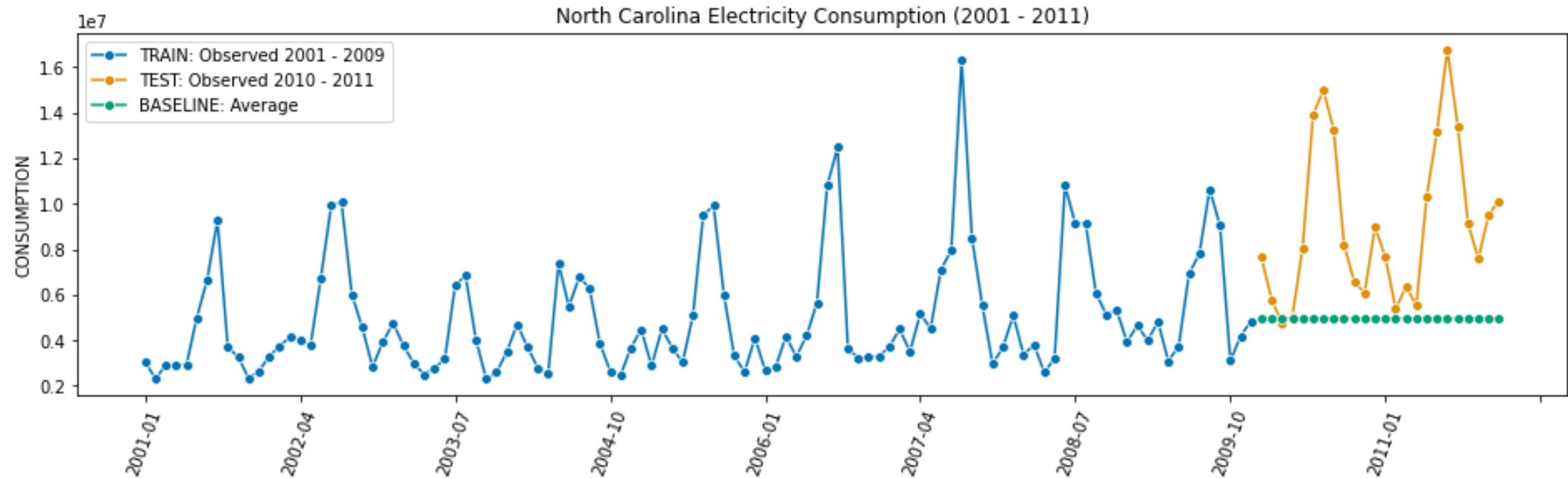
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USING DATA FROM EIA  
(US ENERGY  
INFORMATION  
ADMINISTRATION) ARE  
THERE ANY PATTERNS  
IN ELECTRICITY USAGE  
IN NORTH CAROLINA  
FROM 2001 THROUGH  
2011, AND CAN WE USE  
THIS DATA TO MAKE A  
PREDICTIVE TIME-  
SERIES MODEL?

# Problem Statement

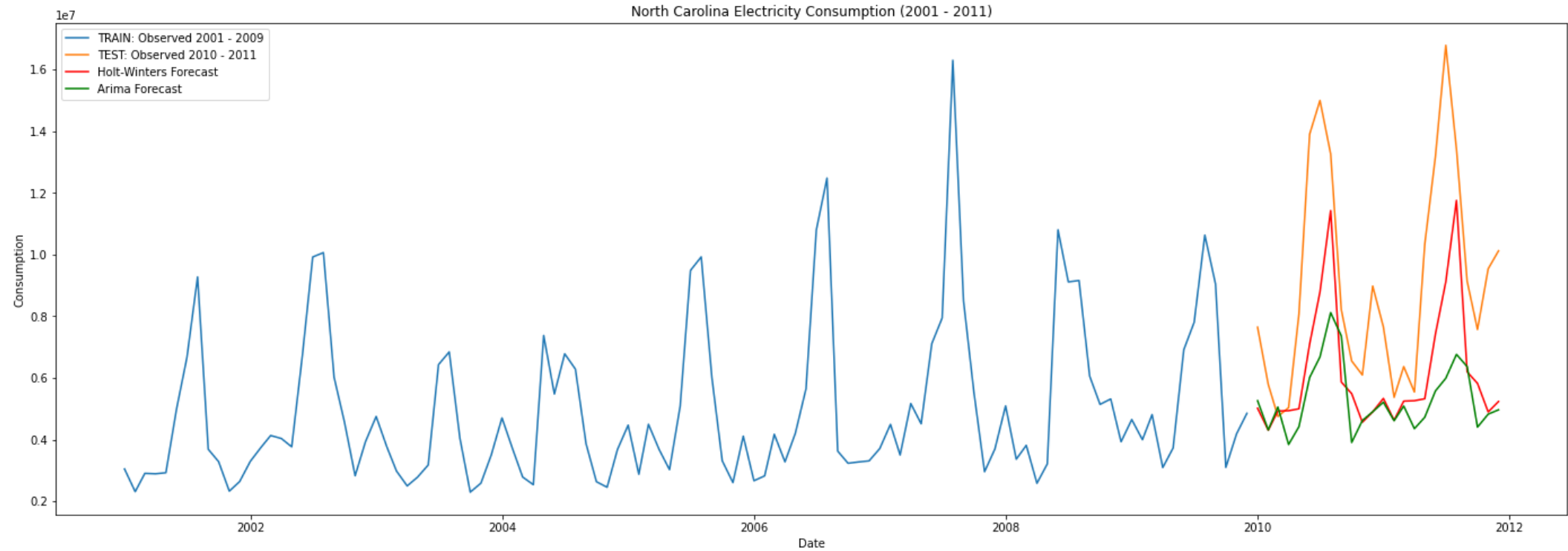
# Null Model

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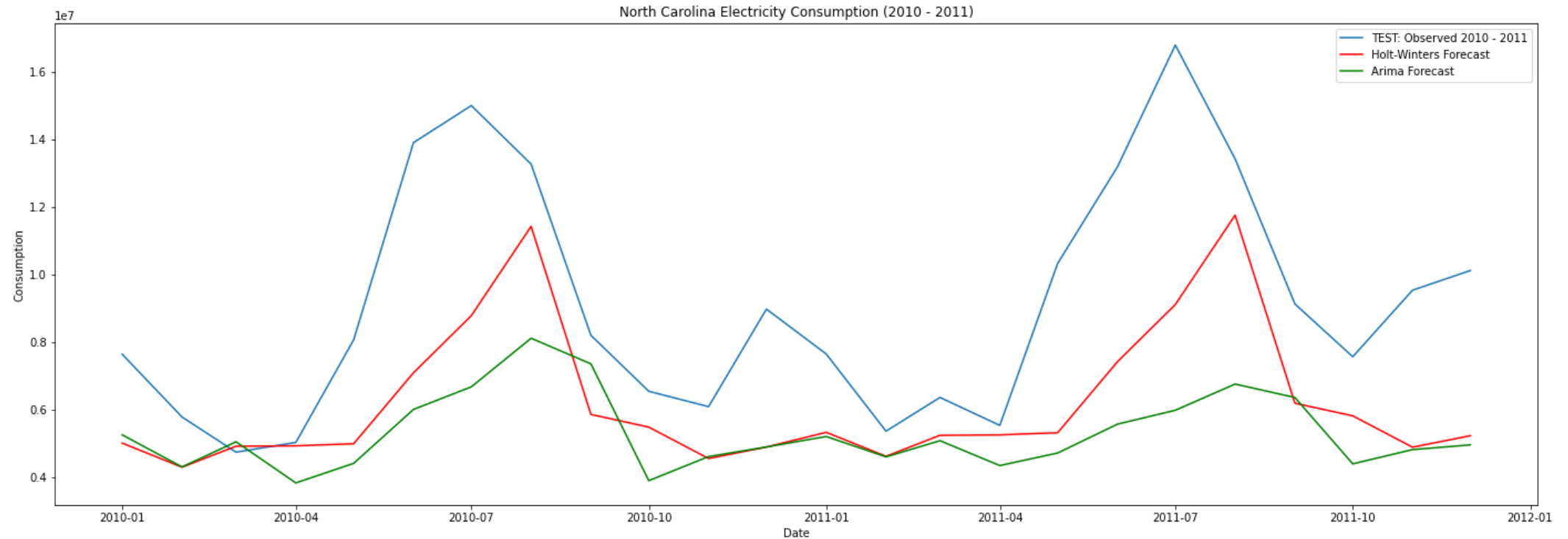
# Holt-Winters and SARIMAX

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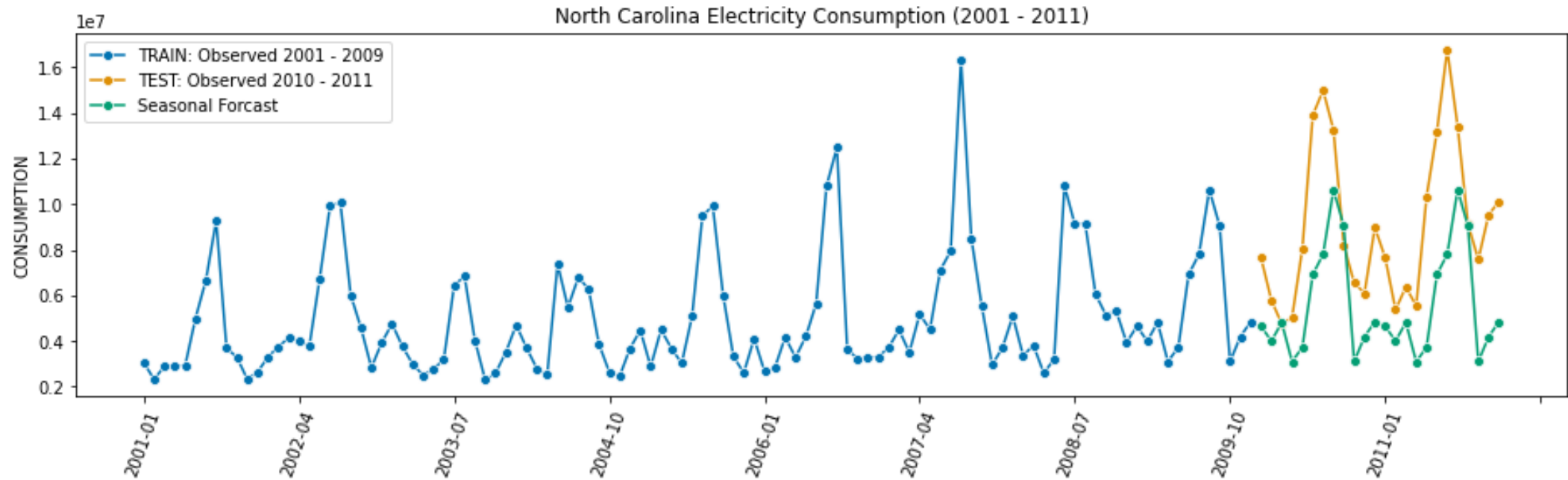
# Holt-Winters and SARIMAX

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# Seasonal Model

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# Best Models

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Model\Score	RMSE	MAE
Holt-Winters	3631847	2920368
Seasonal	4294624	3603229
Auto-Regression	4414239	3663597
SARIMAX	4713245	3813522
Null Model	5359973	4164017

Holt Winters out-performed all models

## Some Surprises:

Seasonal actually out-performed SARIMAX and Auto-Regression

Although a simple model, Auto-Regression did ok.

SARIMAX did not do so well.

# Questions?

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