

# Results and Analysis

This section contains the result and accuracies of the following models:

[Cross Sectional Accuracies](#)

[Direct Temporal Transferability](#)

[Forward Classifier](#)

[Predicted Distribution of Districts in 2019](#)

## Cross Sectional Accuracies

Model trained and tested on the same year.

### On Census Year 2001 (Weighted F1 Score)

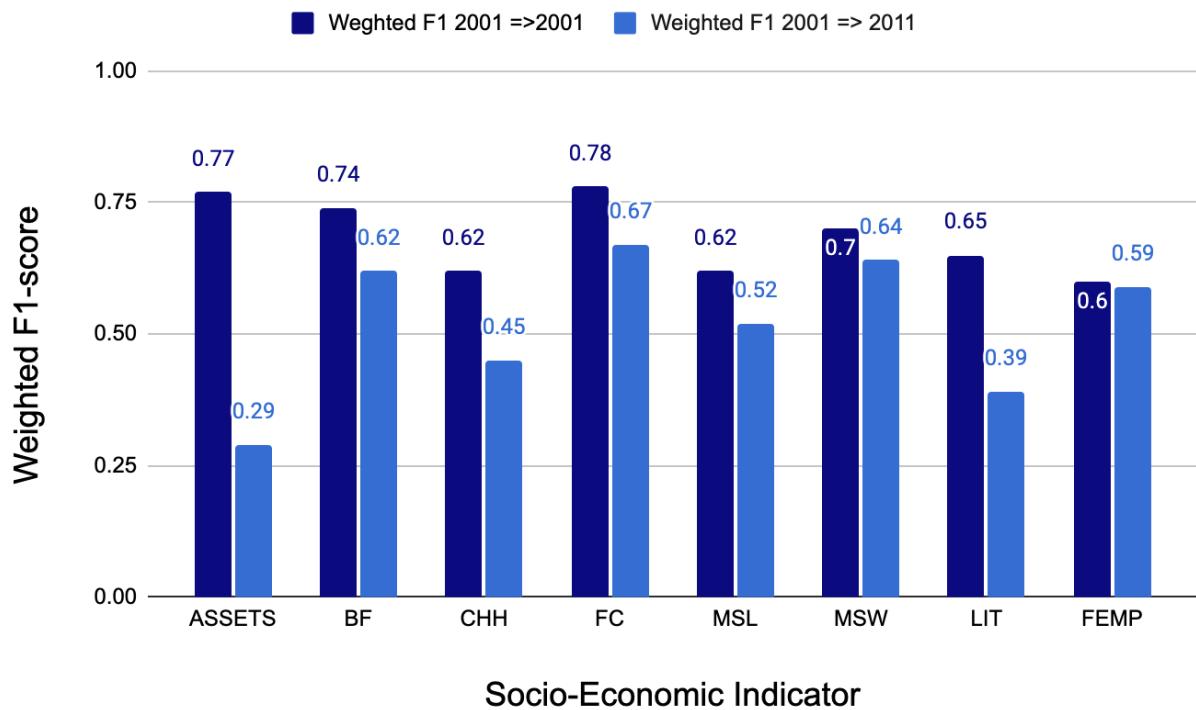
Aa Indicator	# SVC	# Random Forrest	# XGBoost
<u>ASSETS</u>	0.65	0.71	0.77
<u>BF</u>	0.69	0.76	0.74
<u>CHH</u>	0.53	0.6	0.62
<u>FC</u>	0.63	0.73	0.78
<u>MSL</u>	0.61	0.62	0.62

Aa Indicator	# SVC	# Random Forrest	# XGBoost
<u>MSW</u>	0.67	0.72	0.7
<u>LIT</u>	0.49	0.59	0.65
<u>FEMP</u>	0.61	0.62	0.6

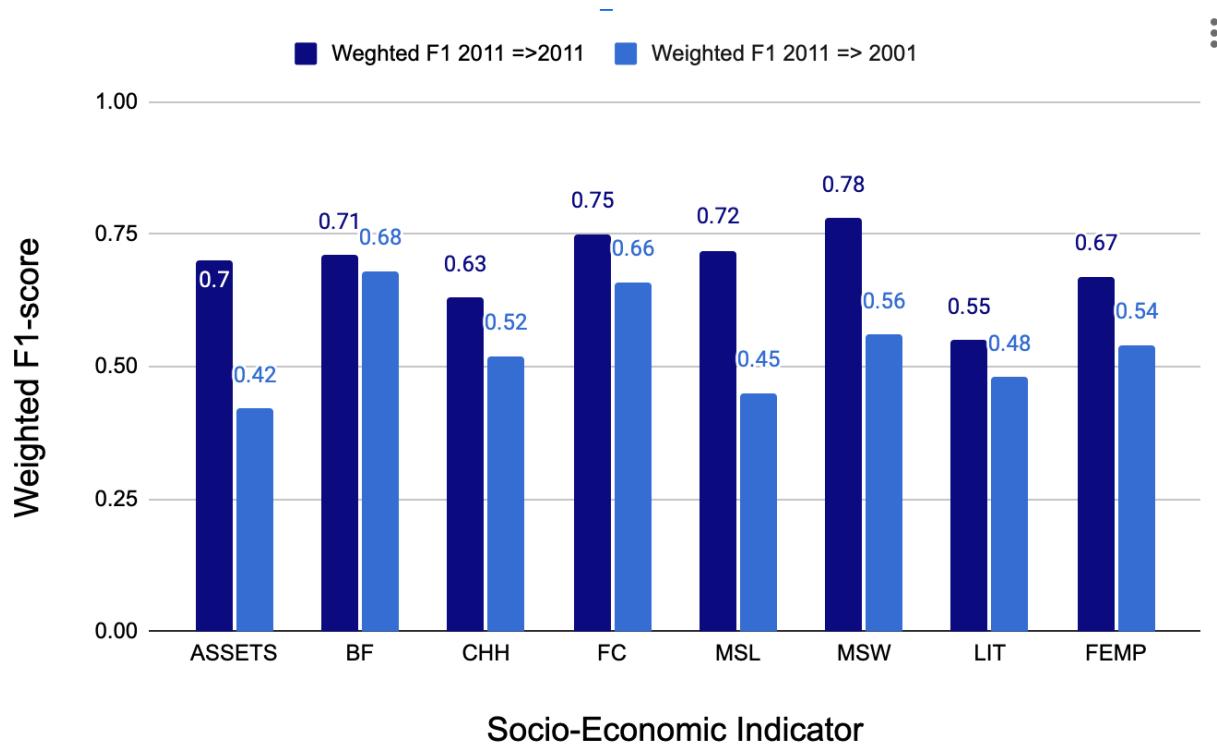
### On Census Year 2011 (Weighted F1 Score)

Aa Indicator	# SVC	# Random Forrest	# XGBoost
<u>ASSETS</u>	0.61	0.7	0.7
<u>BF</u>	0.63	0.69	0.71
<u>CHH</u>	0.55	0.64	0.63
<u>FC</u>	0.6	0.77	0.75
<u>MSL</u>	0.66	0.72	0.72
<u>MSW</u>	0.76	0.83	0.78
<u>LIT</u>	0.53	0.6	0.55
<u>FEMP</u>	0.58	0.63	0.67

### Direct Temporal Transferability

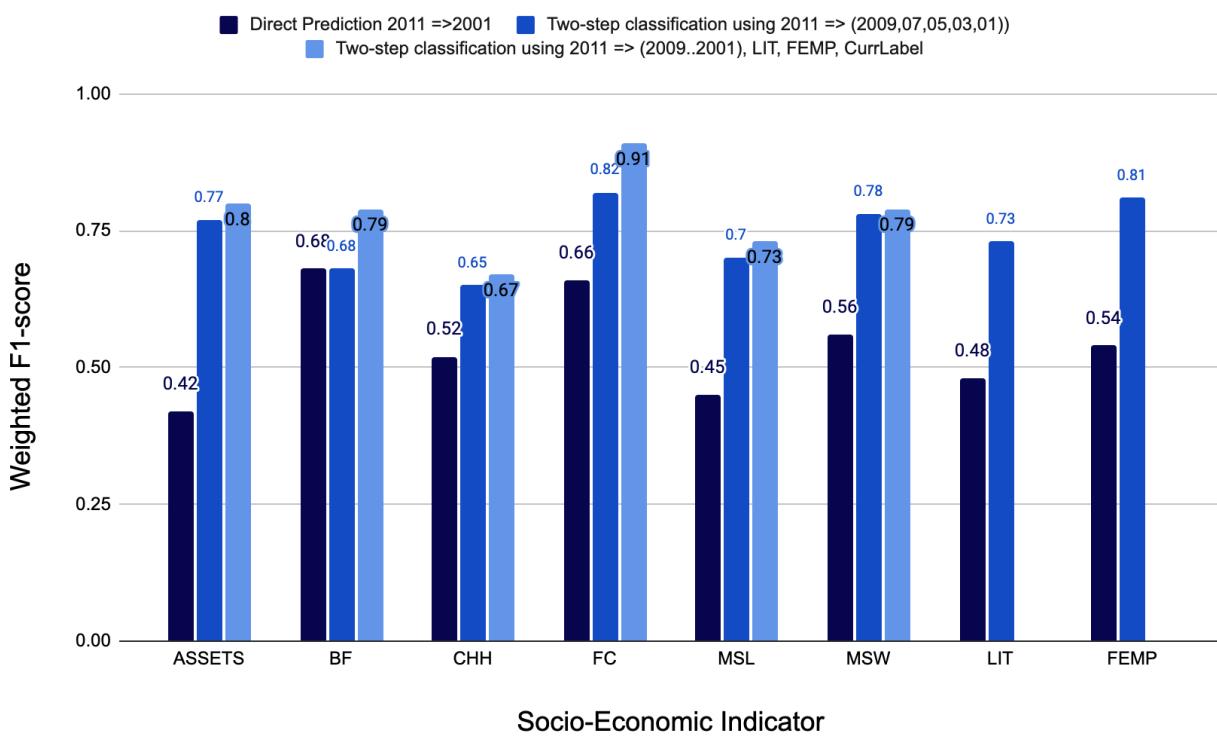
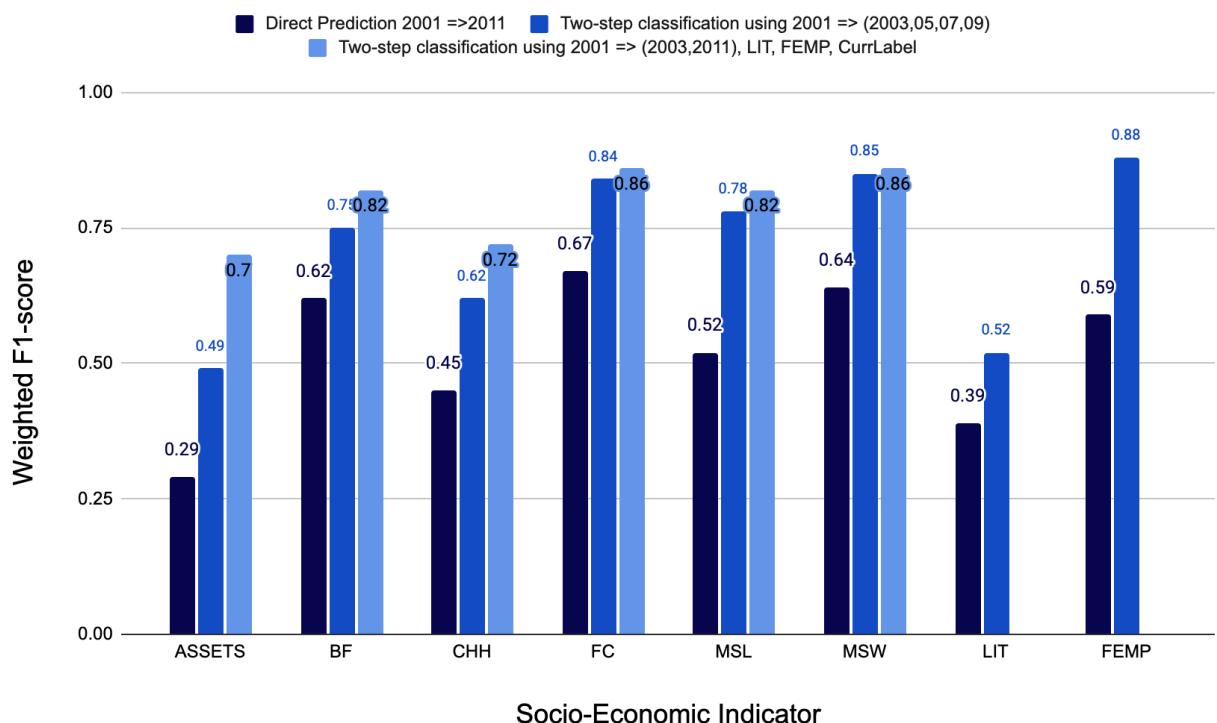


Comparison between cross sectional and single step forward classifier accuracies.

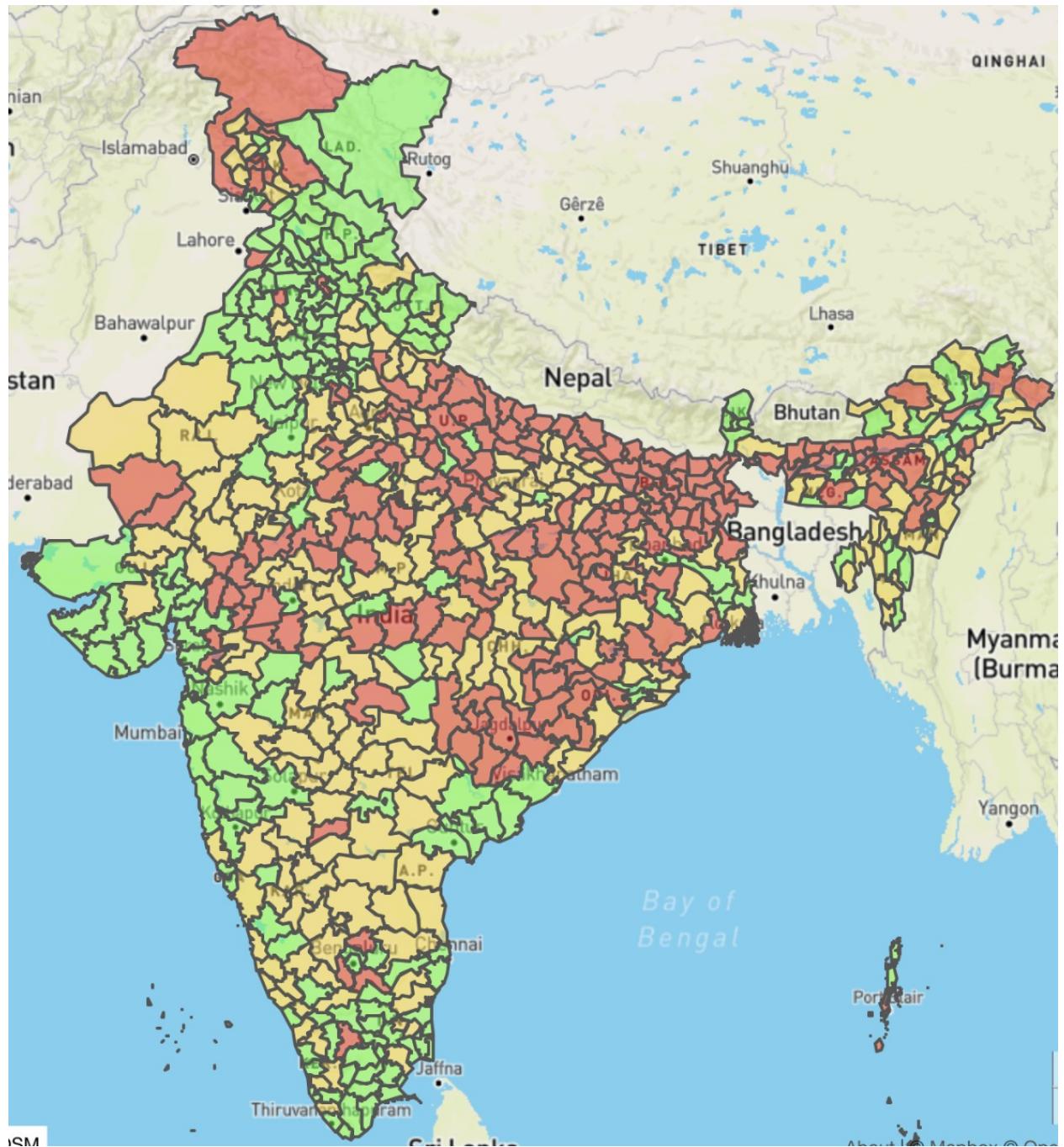


Comparison between cross sectional and single step backward classifier accuracies.

## Forward Classifier



## Predicted Distribution of Districts in 2019



Plot depicting AQI for district in 2019.