MOON 1609 344 km **DSCOVR** EARTH

The Oracle Of DSCOVR

Introduction

The Objective

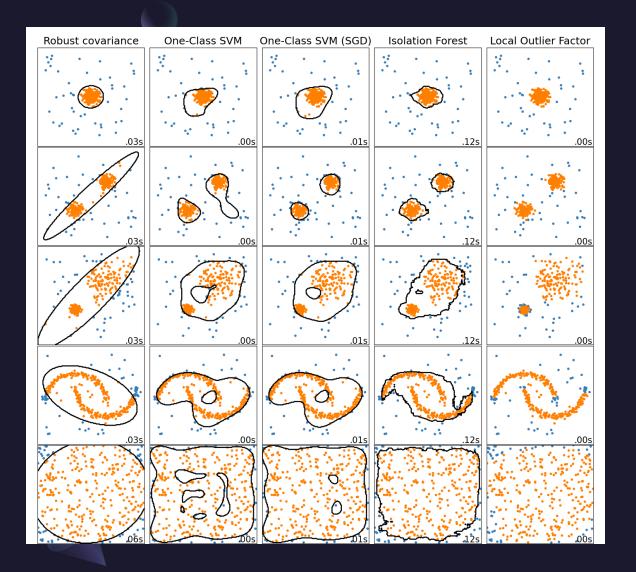


- Find anomalies in data which may contain inaccuracies.
- Forecast future geo-magnetic storms.



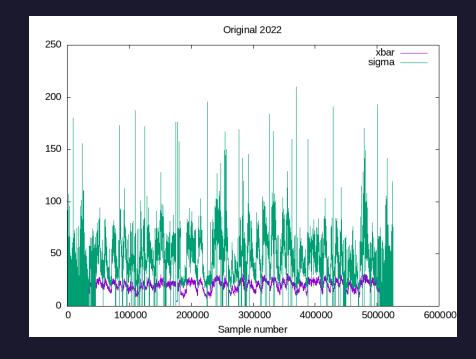
Anomaly Detection

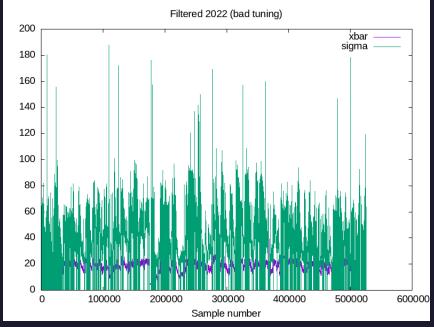
- Train a model to find outliers.
- Use the model on each new line to classify good/bad data.

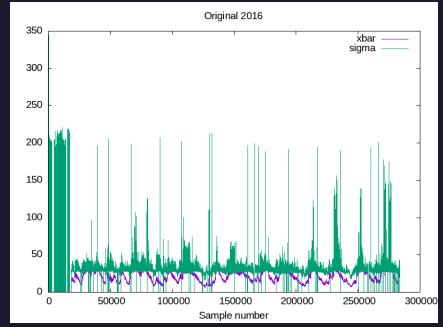


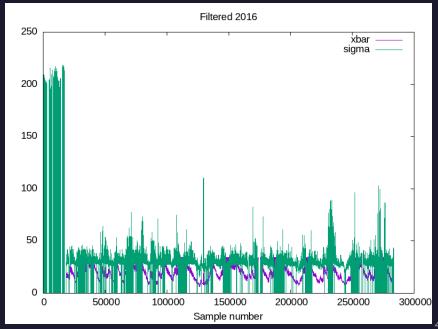
Anomaly Detection

Results / Output



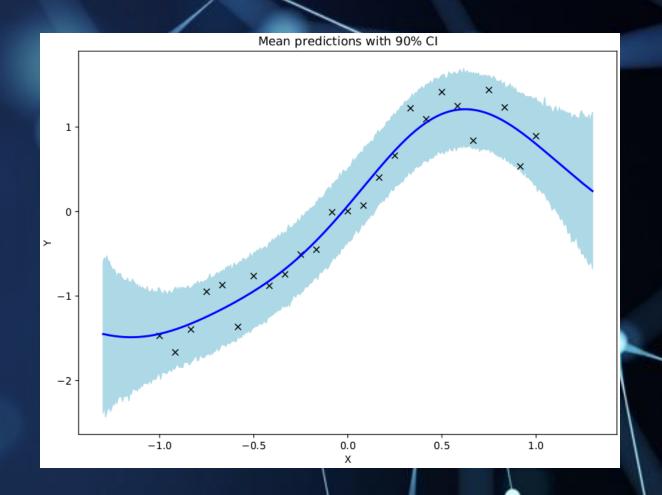






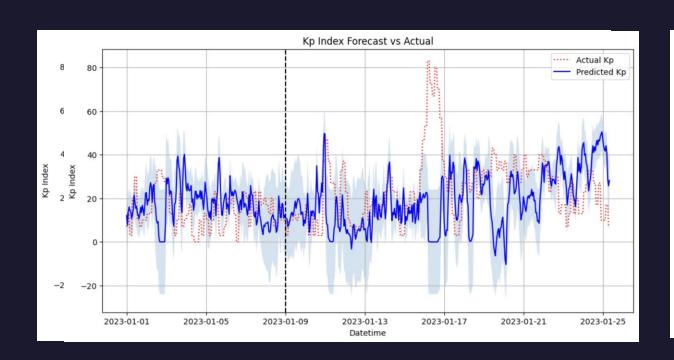
Forecasting

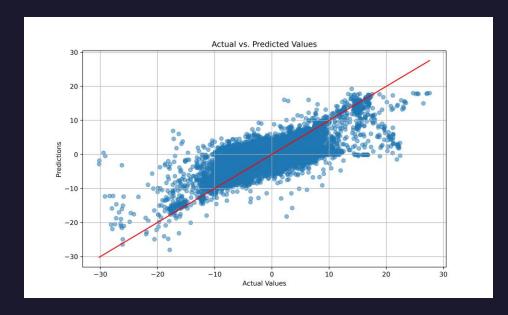
- Convert minute Kp data into hour data sets.
- Use 50 dimensional feature space to train Gaussian model.
- Produce a forecast of geo-magnetic conditions.

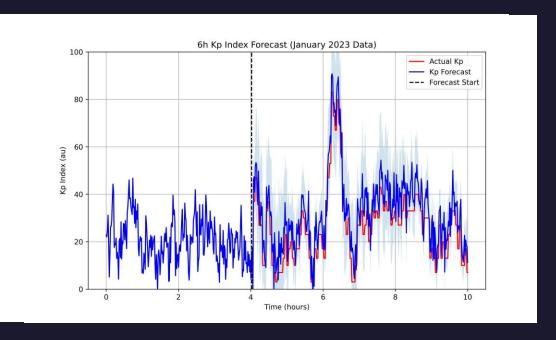


Forecasting

Results / Output































Conclusion

- We believe we have achieved our objectives.
- We created a holistic pipeline for an ML model to clean and analyze the data to make high-quality predictions.
- In future, we could do more to investigate the validity of the data.