

Progress Report*

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1 Introduction

Stellar flares refers to

2 Data

The data we used in this project is the light curve

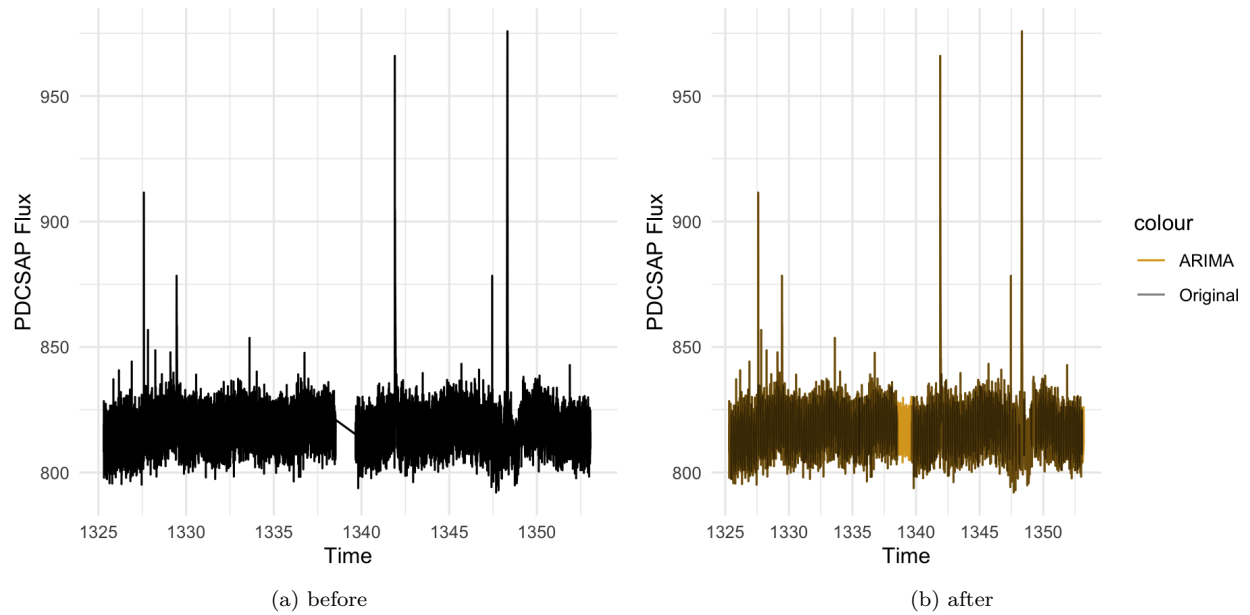


Figure 1: model results

3 Methods

3.1 Time Series Analysis

3.2 Machine Learning Methods

4 Results

*Code and data are available at: <https://github.com/Florence-Liu/Stellar-Flare>

4.1 Time Series Model

4.1.1 With Missing Value Imputation

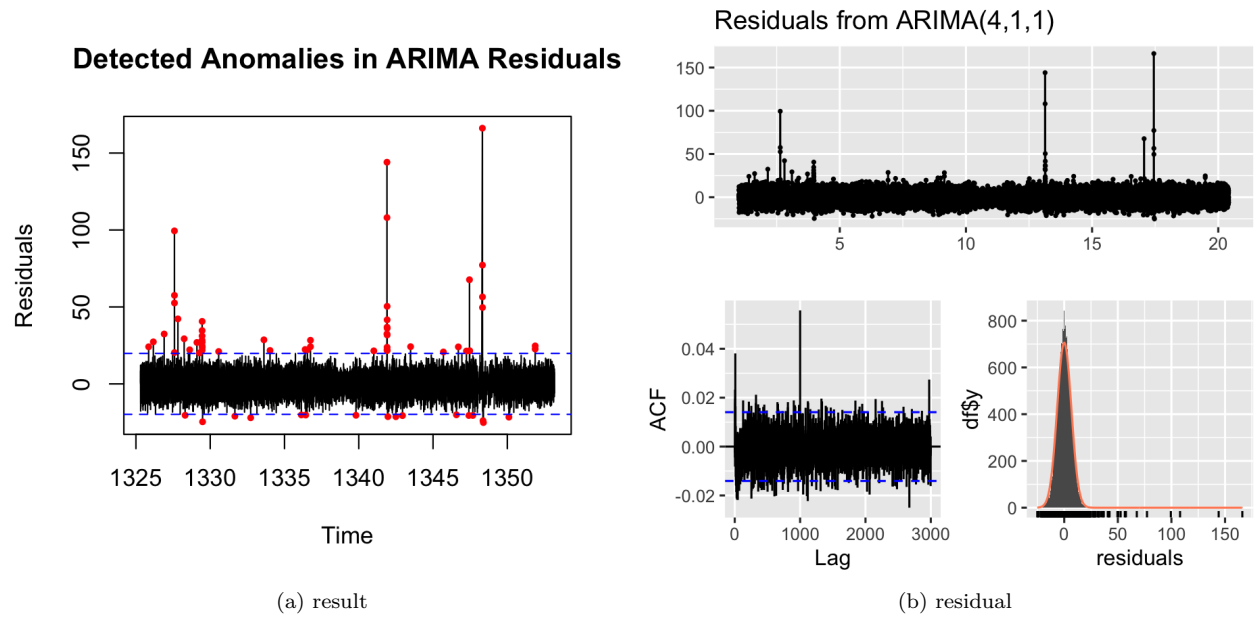


Figure 2: model results

4.1.2 Without Missing Value Imputation

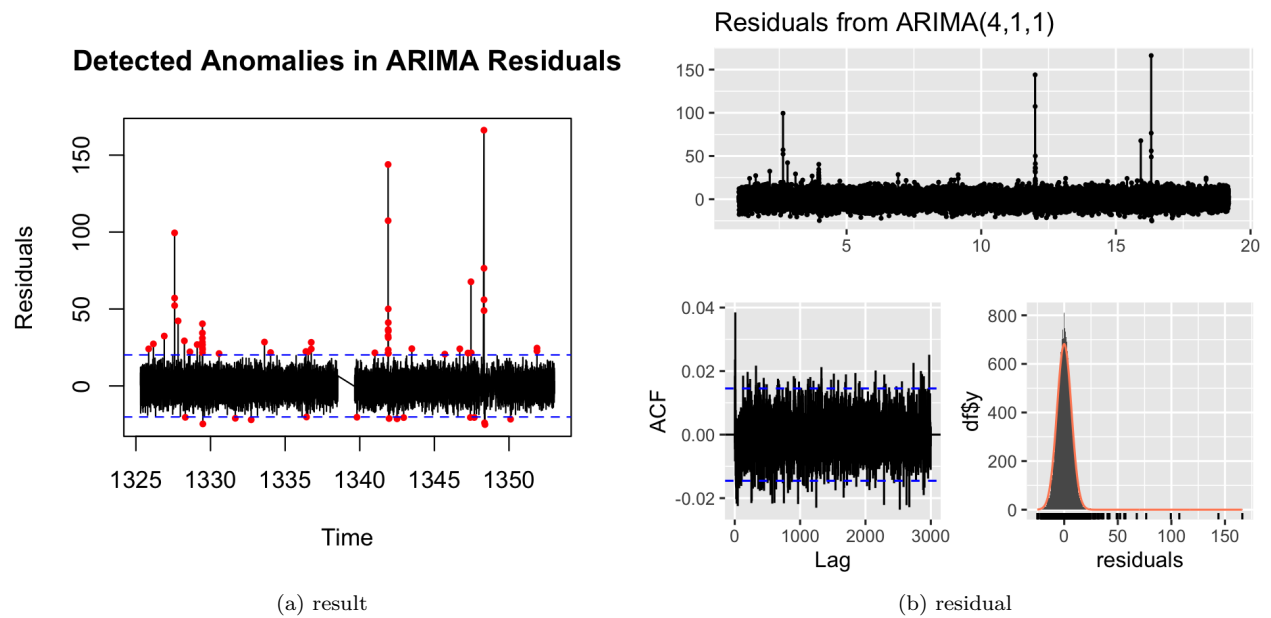


Figure 3: model results

4.2 Machine Learning Model

4.2.1 With Missing Value Imputation

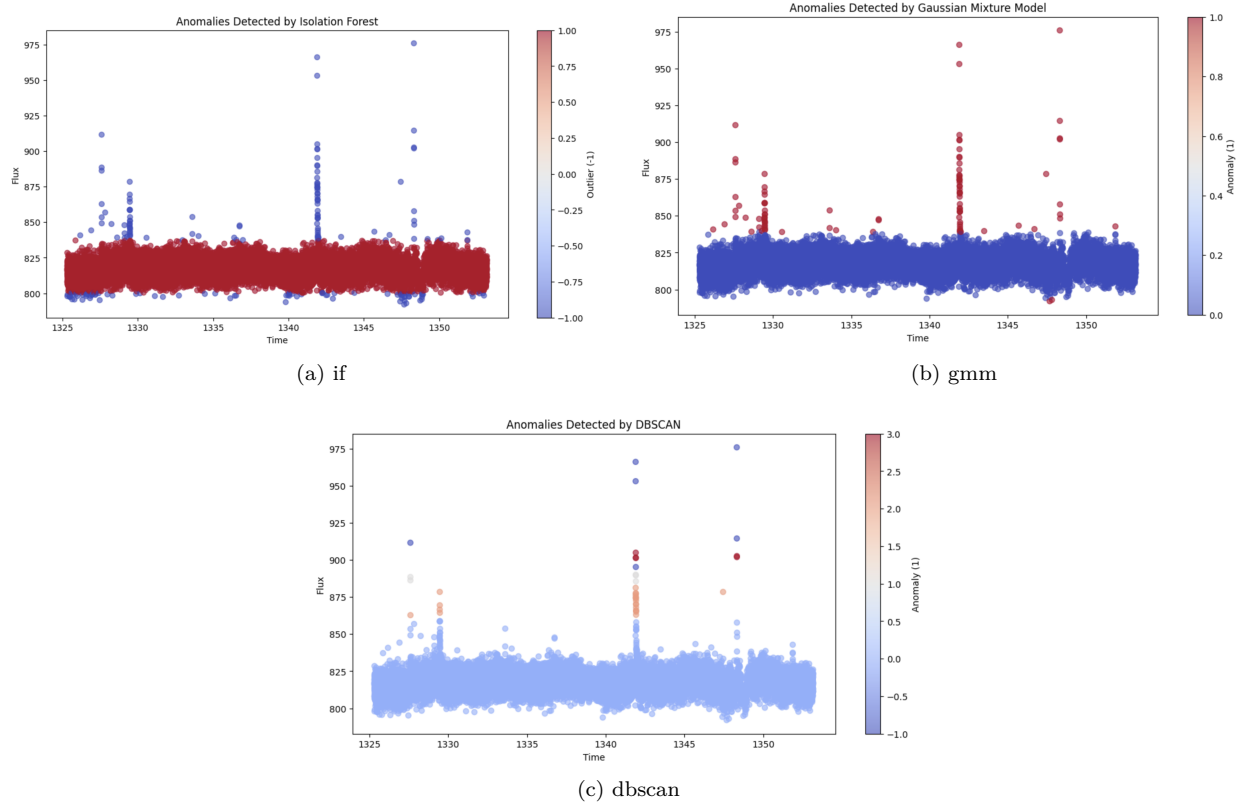


Figure 4: model results

4.2.2 Without Missing Value Imputation

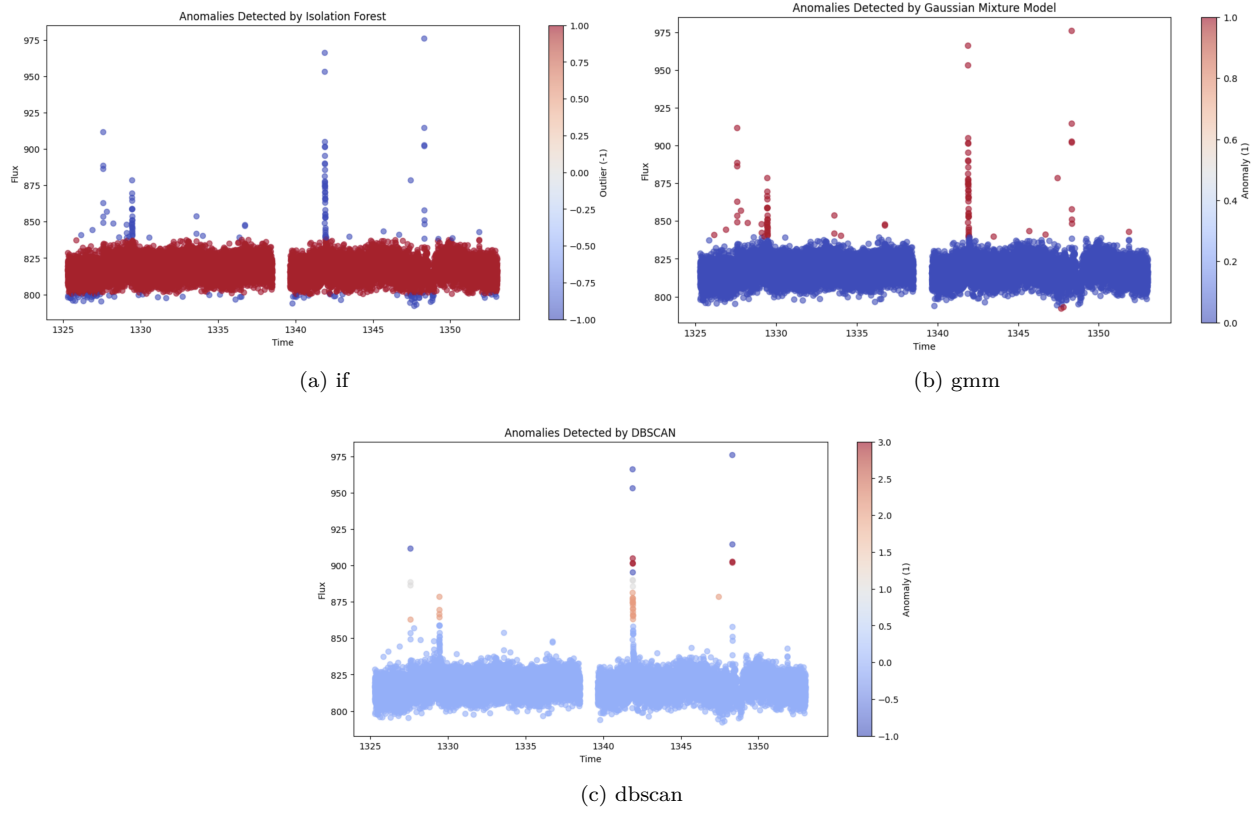


Figure 5: model results

5 Discussion

5.1 Current Work

decide to use no imputation data, why

5.2 Next Steps

Tune parameter

decide validation and metric to compare model performance