

**INTER IIT TECH MEET
ANALYSIS REPORT
MID PREP PROBLEM STATEMENT 2
ISRO VISUALIZATION TOOL
TEAM 14**

We conducted the detailed analysis for two objects:

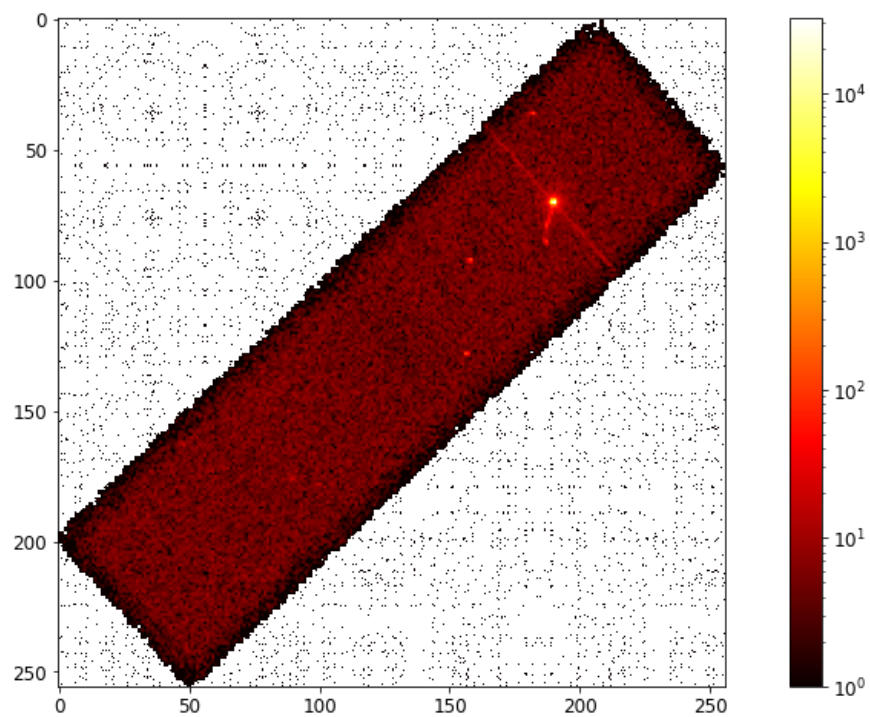
1. The Quasar 4C19.44
2. The Pulsar SMC X-1

These were done by taking the following 2 observation files from the Chandra X-ray Catalog 2 (CXC 2) archives:

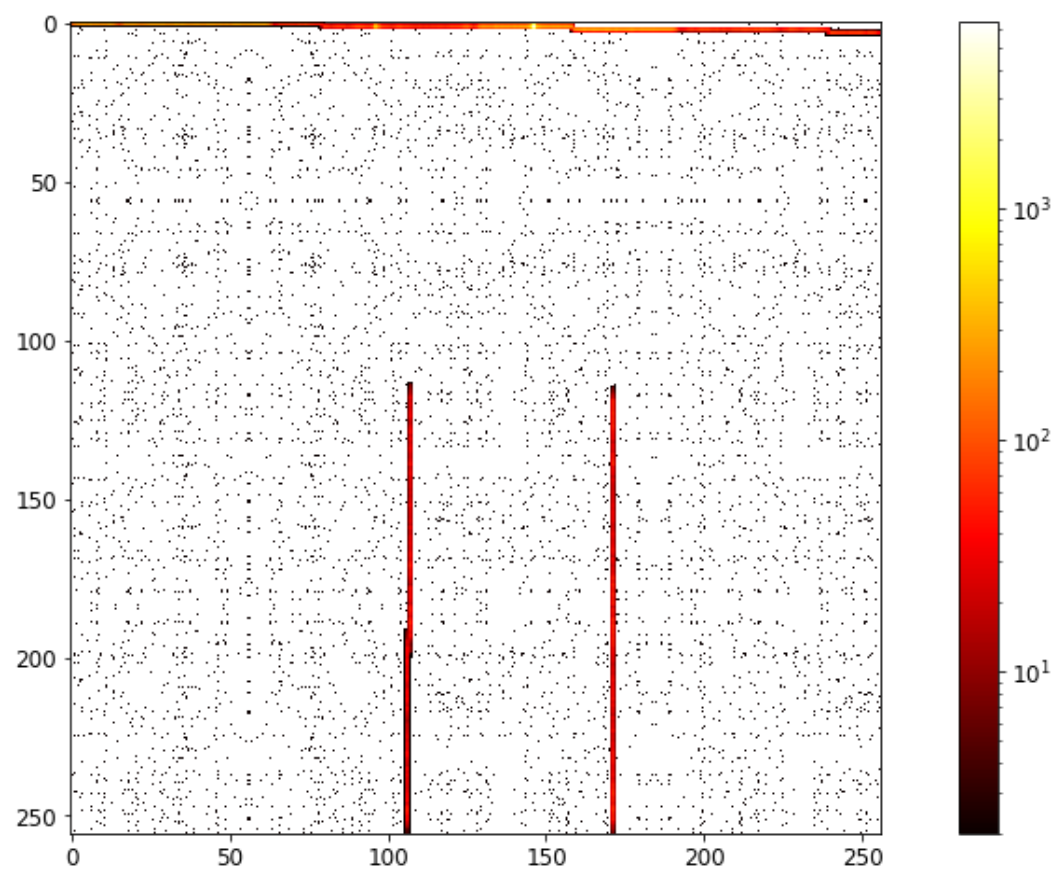
1. For the Quasar: `acisf07302N003_evt2.fits` (Corresponding Observation ID 7302)
2. For the Pulsar: `acisf01023N004_evt2.fits` (Corresponding Observation ID 1023)

The results of the analysis are as follows:

1. Plotted Image:
 - a. Quasar:



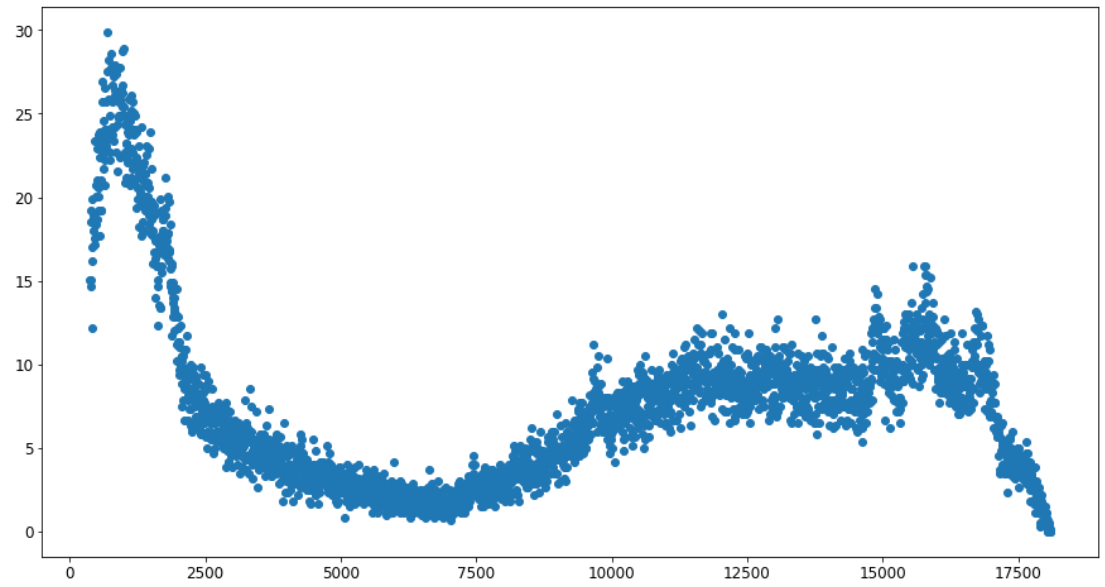
b. Pulsar:



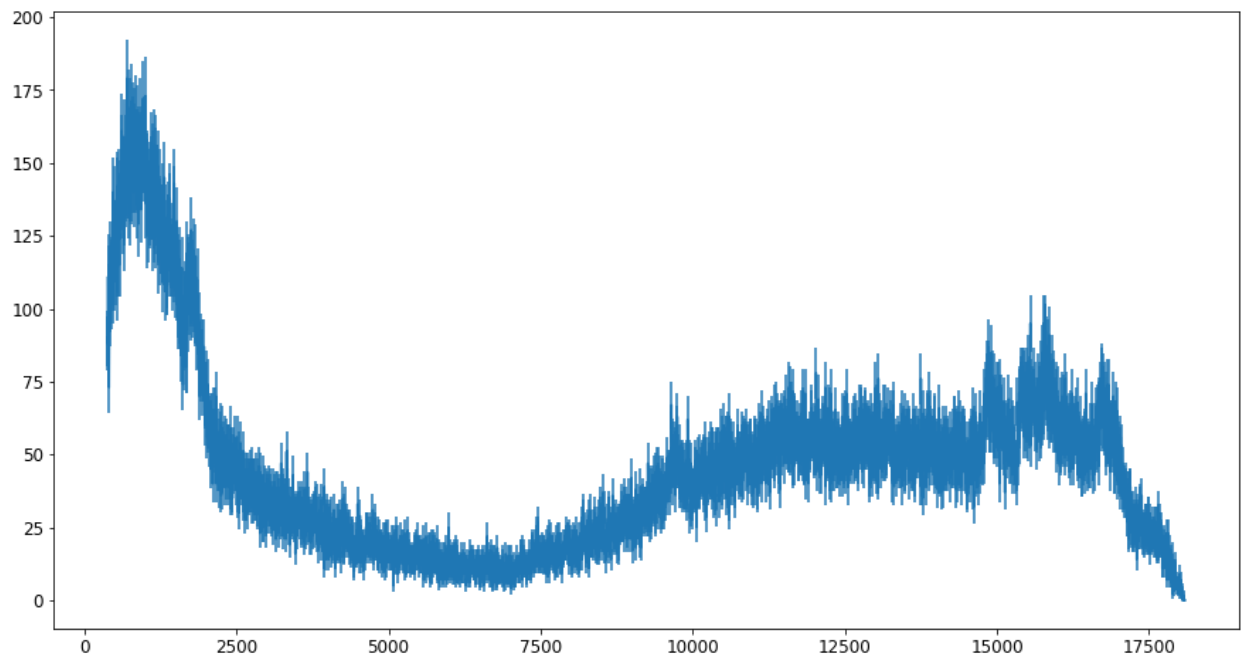
2. Obtained Spectrum:

a. Quasar:

i. Flux vs Energy:

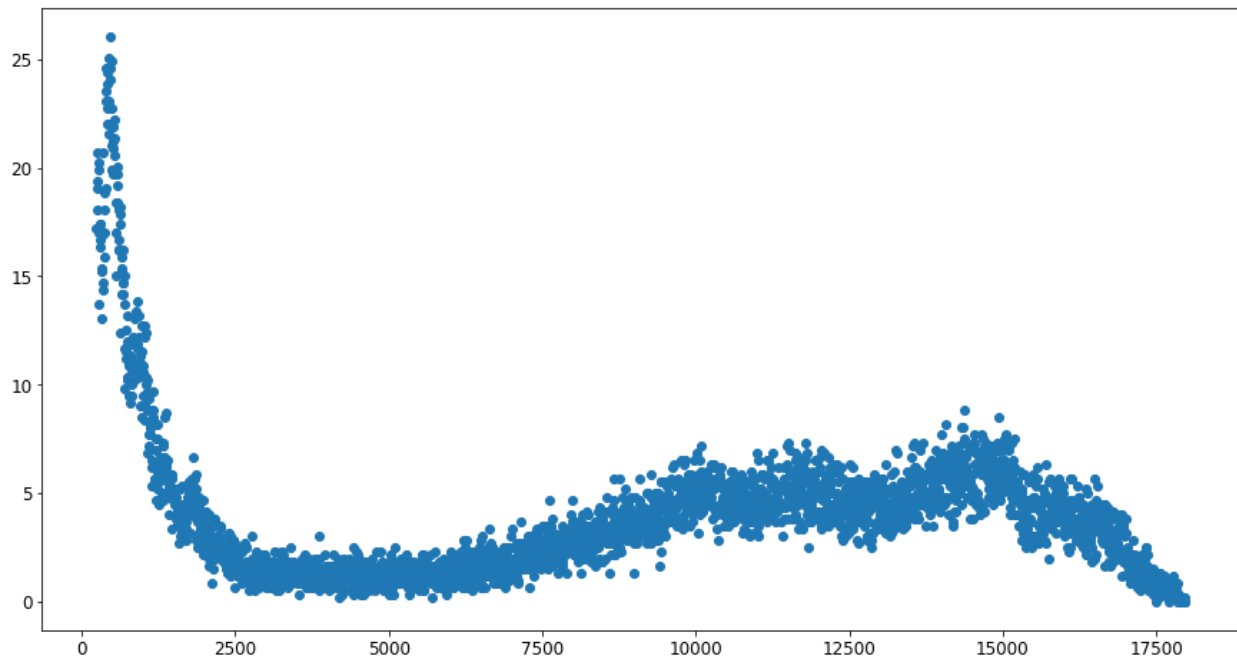


ii. Error in FLux vs Energy:

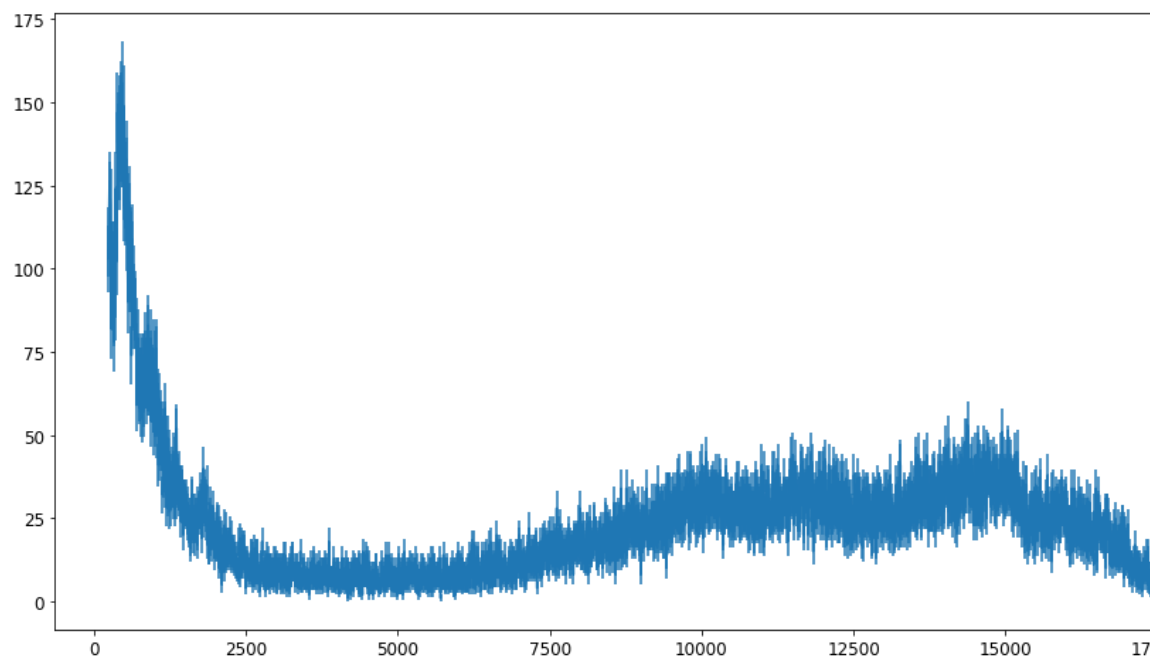


b. Pulsar:

i. Flux vs Energy:

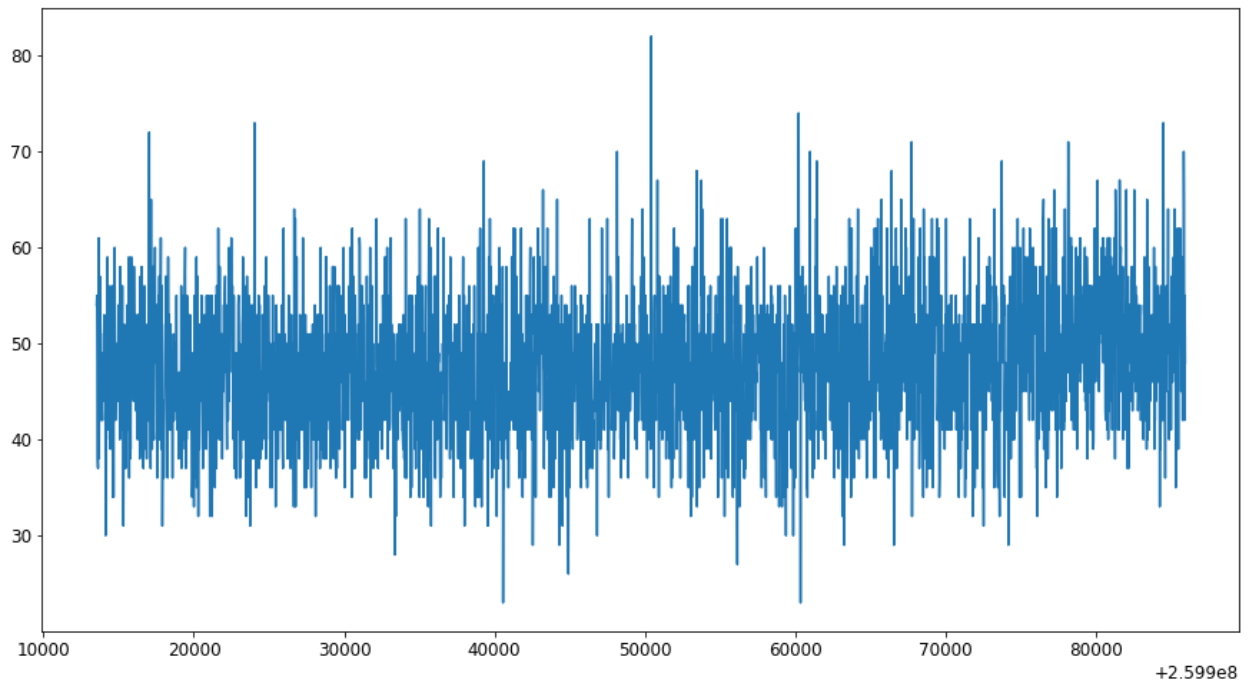


ii. Error in FLux vs Energy:

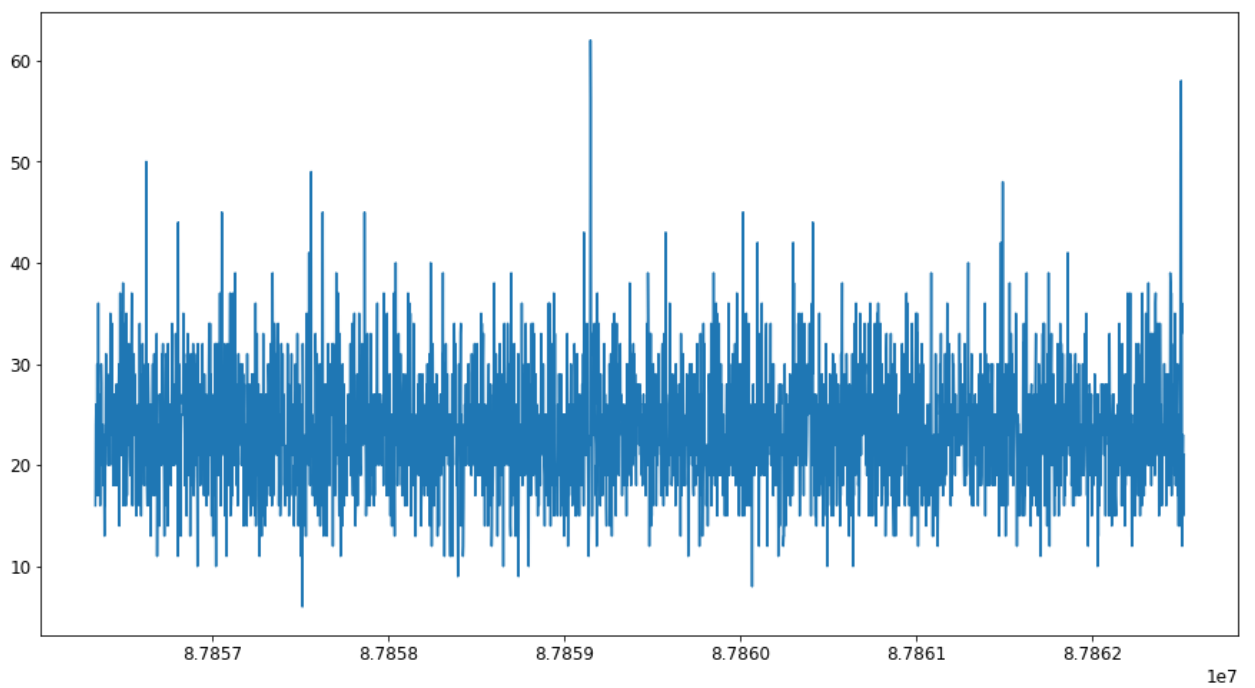


3. Light Curve:

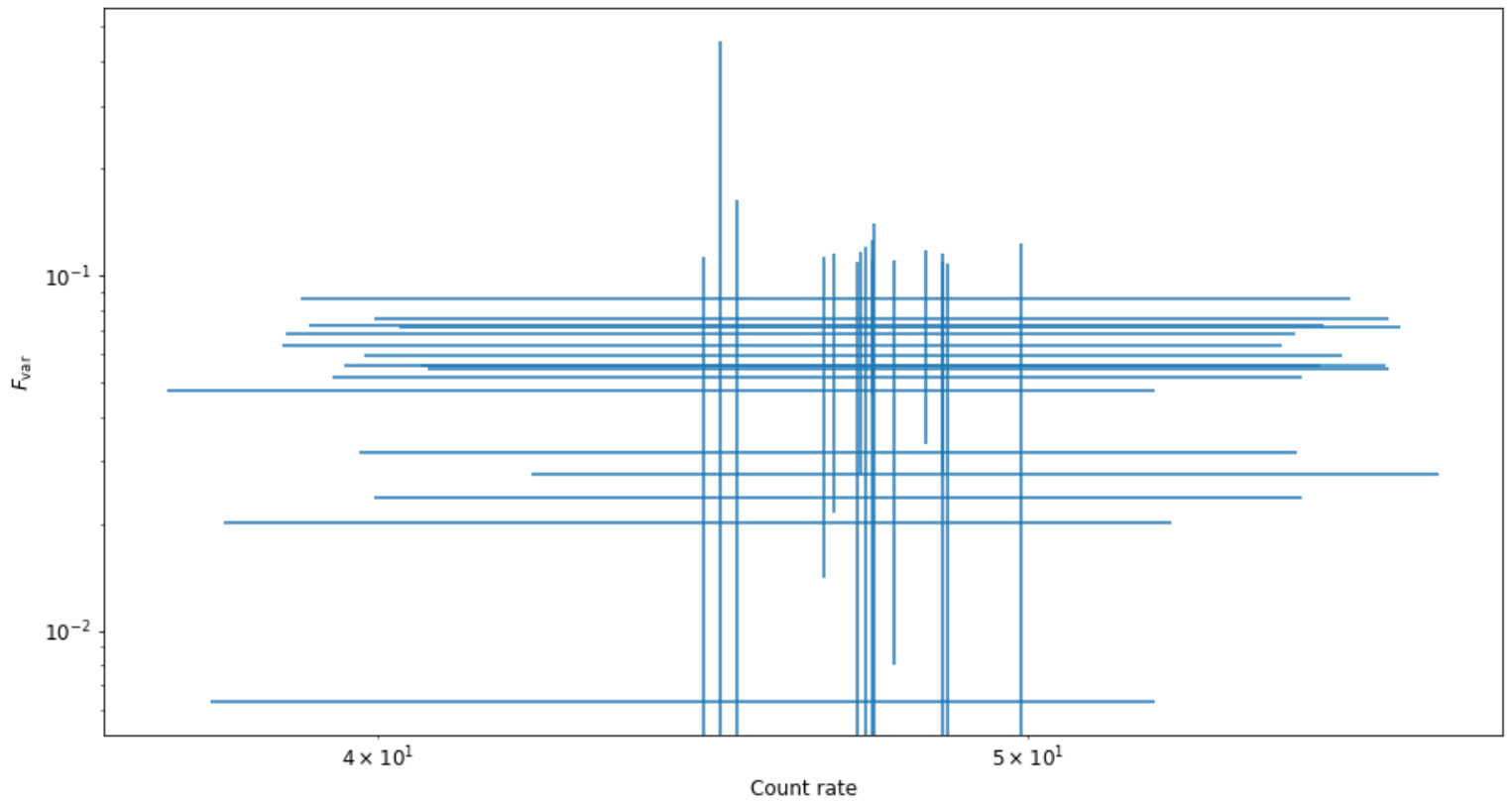
a. Quasar:

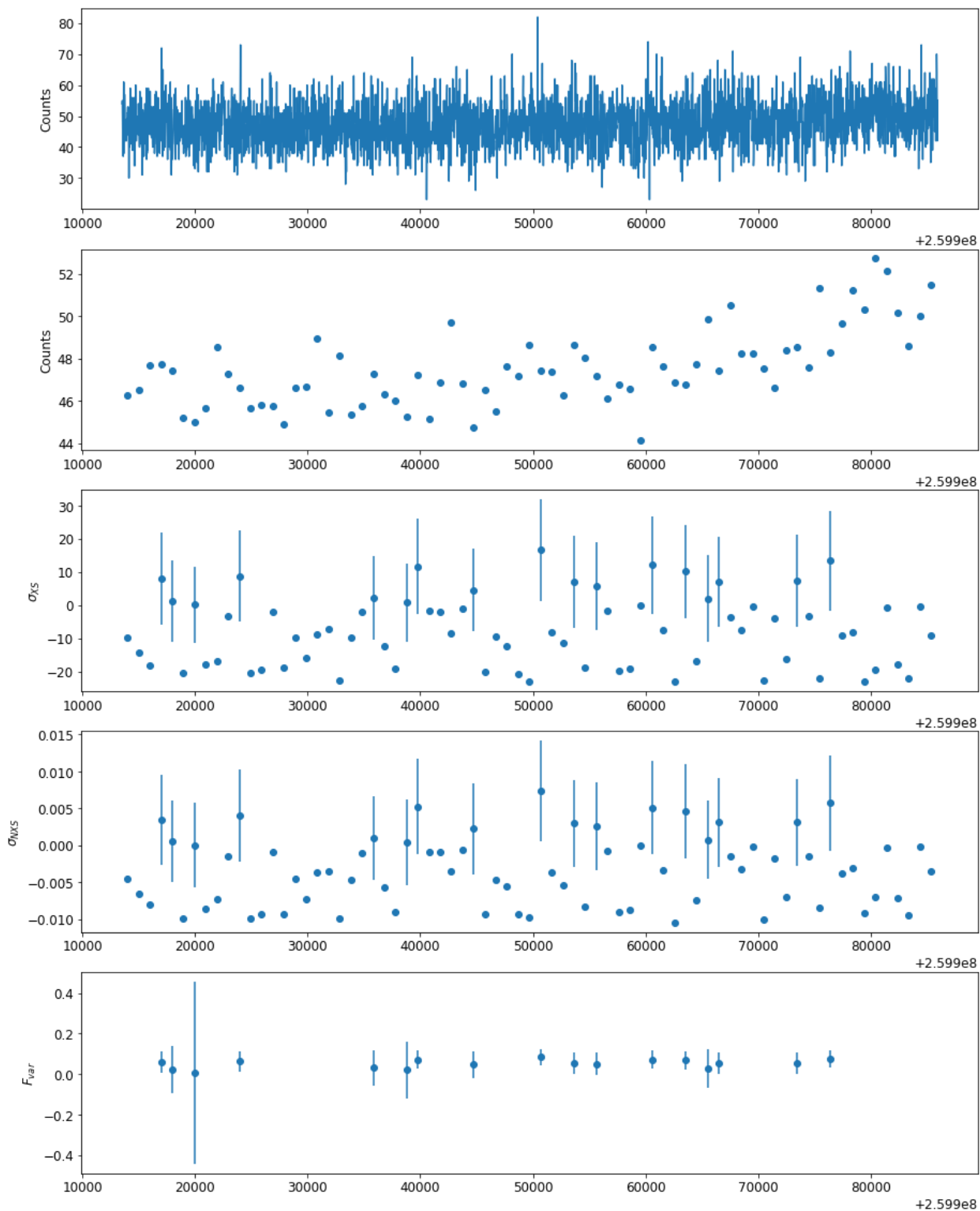


b. Pulsar:

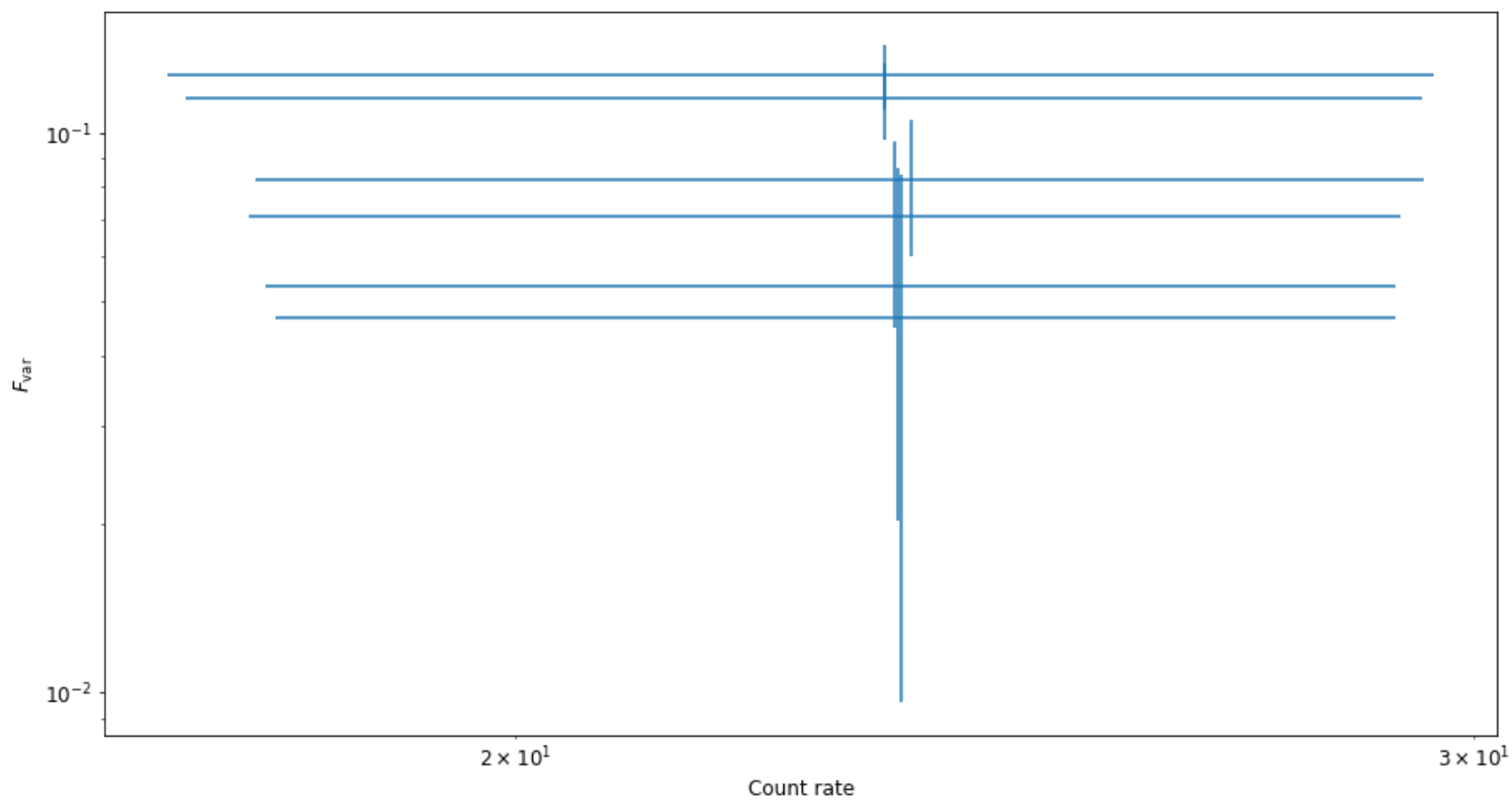


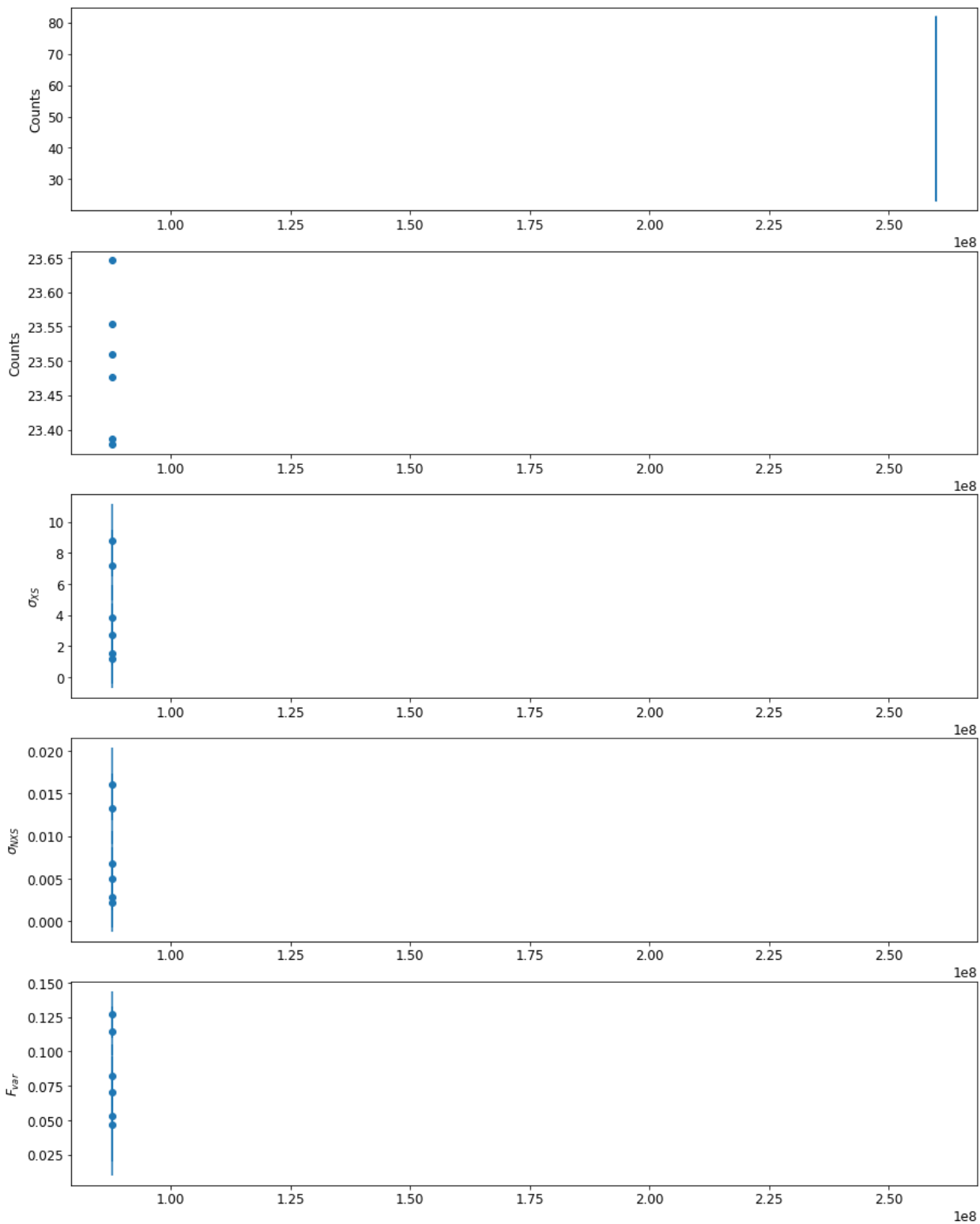
4. RMS Intensity Diagram:
a. Quasar:





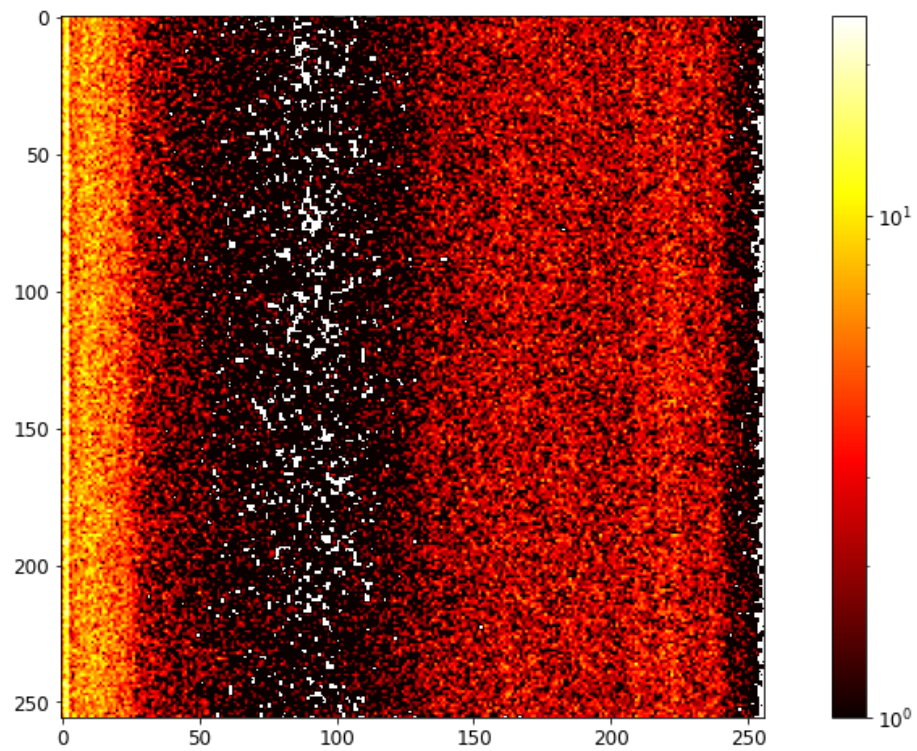
b. Pulsar:





5. Power Spectrum: (Time vs Frequency with Flux (Intensity represented by the colour))

a. Quasar:



b. Pulsar:

