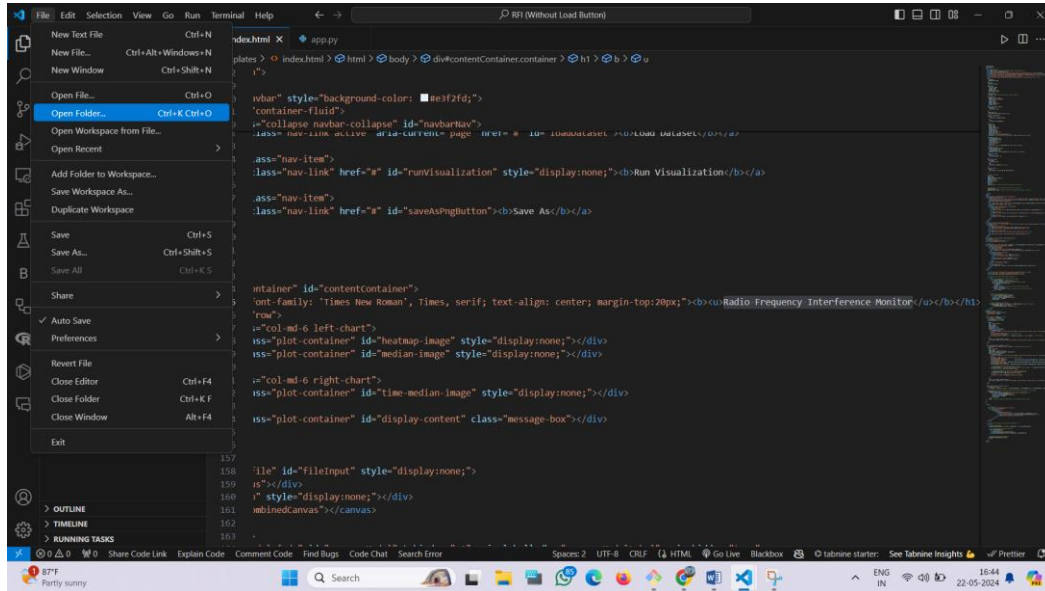
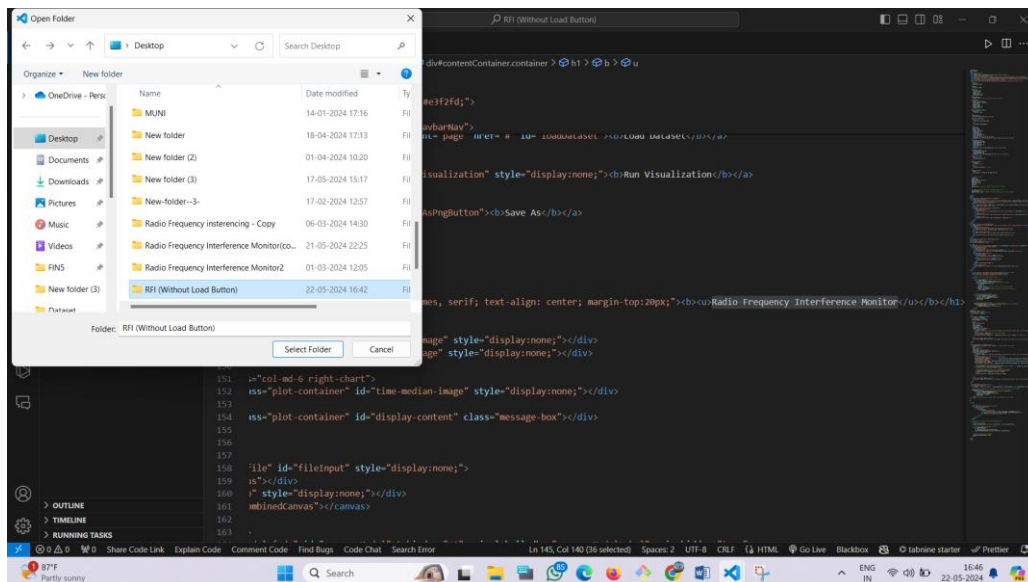


Radio Frequency Interference Monitor

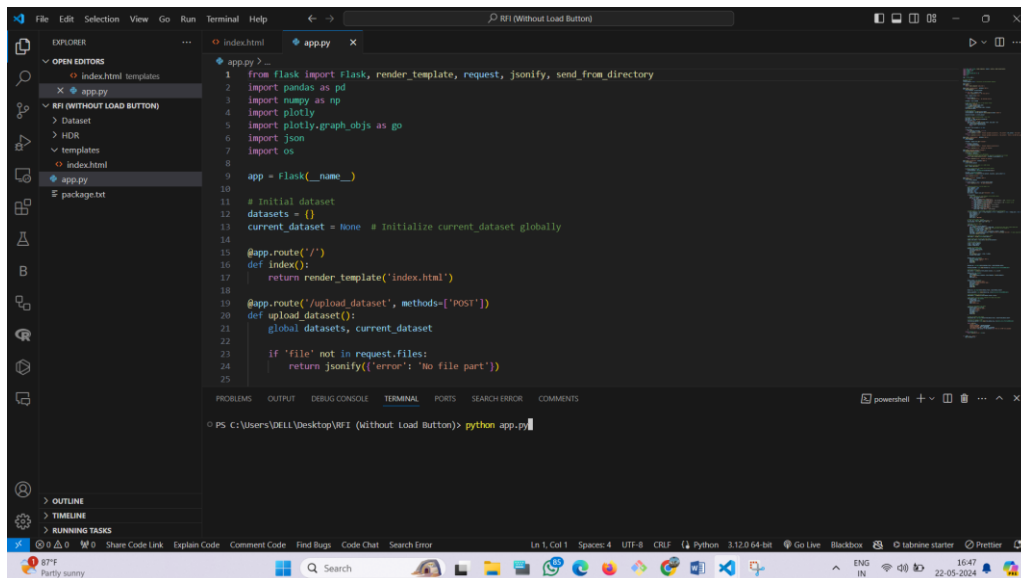
Steps:-



Step 1:- Open the new folder in Visual Studio Code.



Step 2: - Select the folder named "RFI(Without Load Button)".



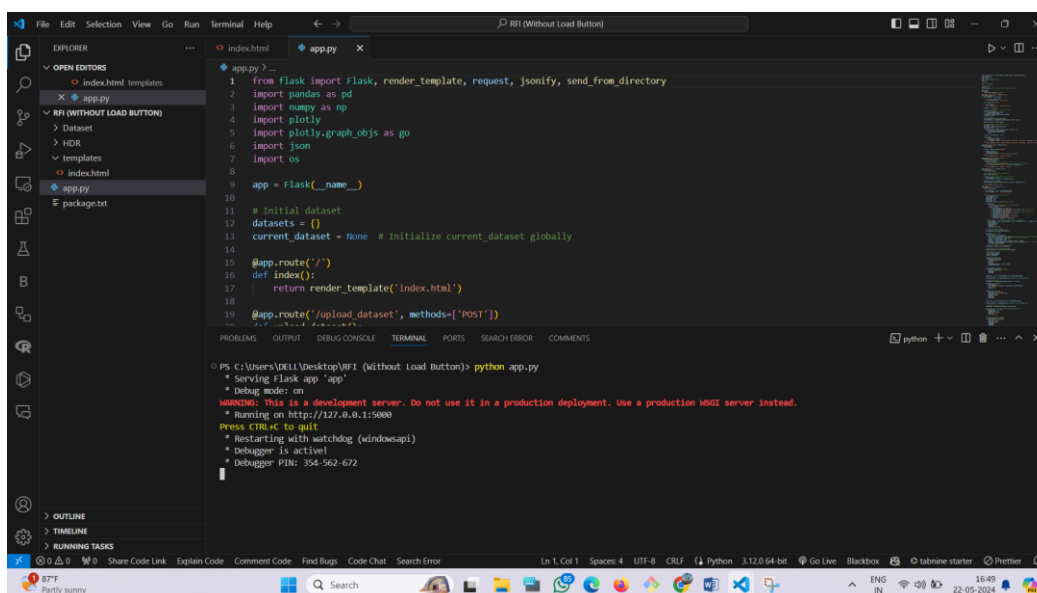
The screenshot shows the Visual Studio Code editor with the 'app.py' file open. The file contains Python code for a Flask web application. The terminal at the bottom shows the command 'python app.py' being executed.

```
1 from flask import Flask, render_template, request, jsonify, send_from_directory
2 import pandas as pd
3 import numpy as np
4 import plotly
5 import plotly.graph_objs as go
6 import json
7 import os
8
9 app = Flask(__name__)
10
11 # Initial dataset
12 datasets = {}
13 current_dataset = None # Initialize current_dataset globally
14
15 @app.route('/')
16 def index():
17     return render_template('index.html')
18
19 @app.route('/upload_dataset', methods=['POST'])
20 def upload_dataset():
21     global datasets, current_dataset
22
23     if 'file' not in request.files:
24         return jsonify({'error': 'no file part'})
25
```

Terminal output:

```
PS C:\Users\DELL\Desktop\RFI (Without Load Button)> python app.py
```

Step 3:- Select the Python code, open the terminal, and type “python app.py”.

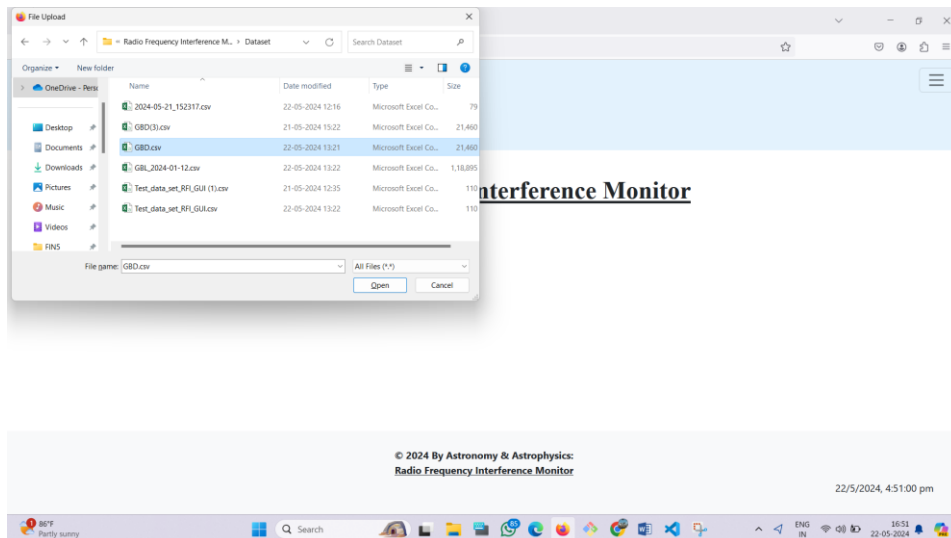


The screenshot shows the Visual Studio Code editor with the 'app.py' file open. The terminal at the bottom shows the output of the 'python app.py' command, indicating that the Flask application is running on http://127.0.0.1:5000.

```
PS C:\Users\DELL\Desktop\RFI (Without Load Button)> python app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with watchdog (windowsapi)
* Debugger is active!
* Debugger PID: 354-562-672
```

Step 4 :- The URL will be generated.

Step 5 :- Copy the URL and paste it into a browser, after pasting the URL in Browser, the web application will get displayed.



Step 6 :- Click on the "Load" button.

Step 7 :- Select the CSV file.

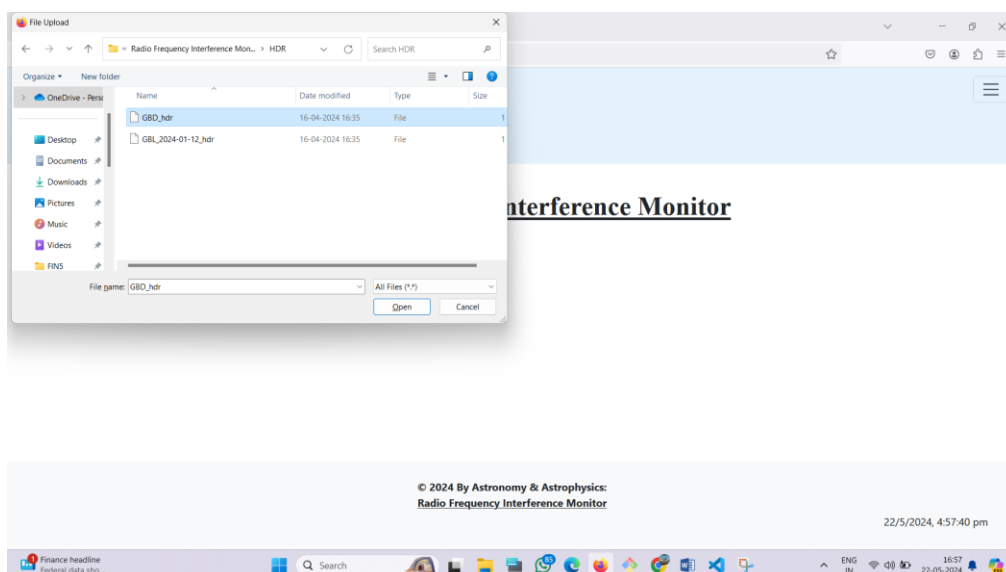
Step 8:- If there is no HDR file with the same name as the CSV file in the HDR folder, an error message will be displayed.

If an HDR file with the same name exists, its content will be displayed on the frontend.

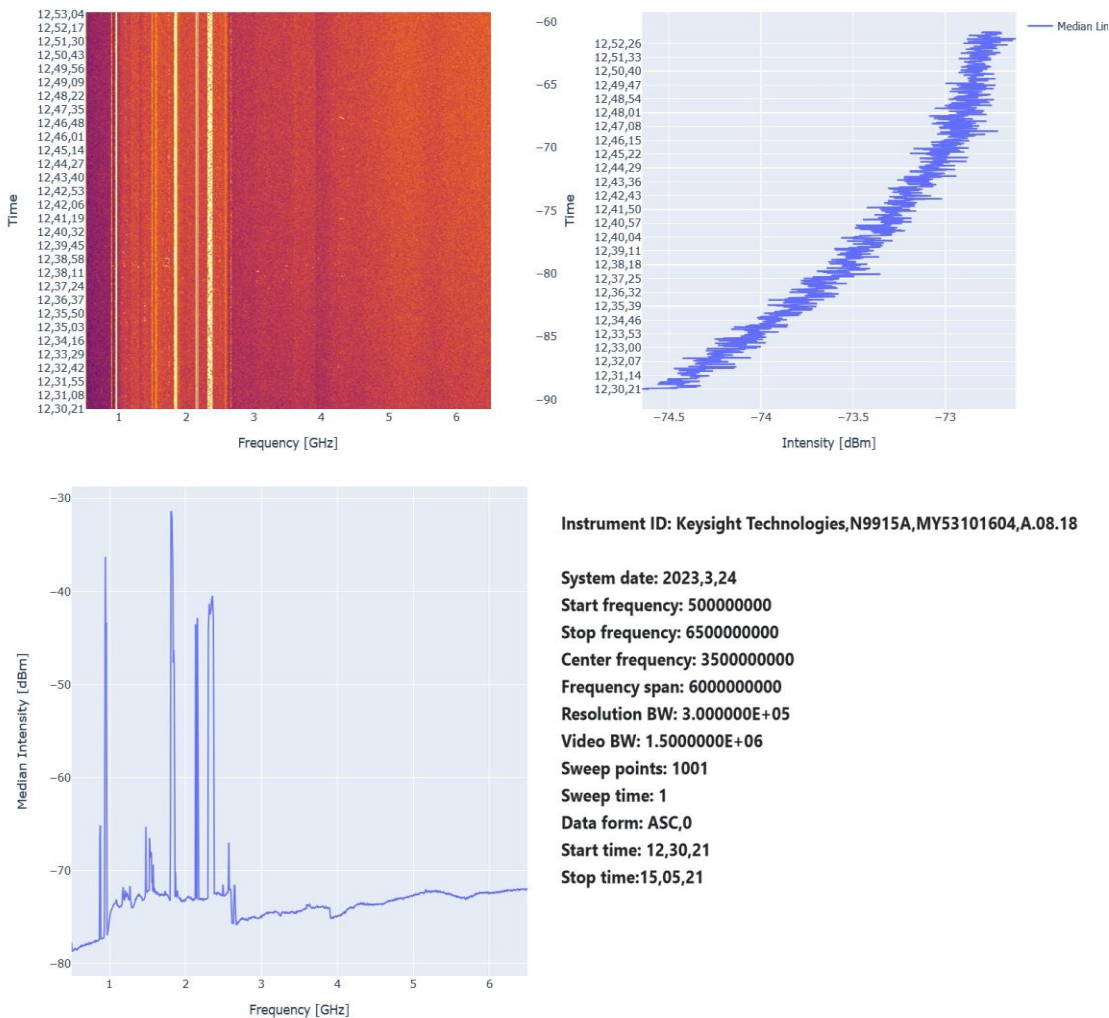
For example:

If user select GBD.csv and GBD.hdr exists in the HDR folder, it will read and display the content of the HDR file.

If user select Test_data.csv and Test_data.hdr does not exist in the HDR folder, an error message "Hdr Not Found!!!" will be displayed.

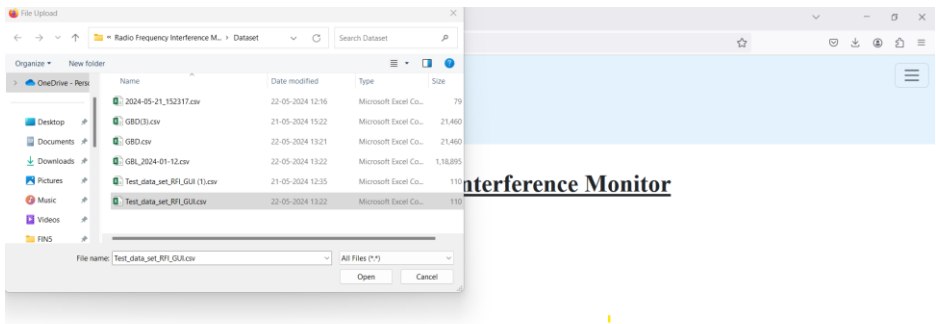


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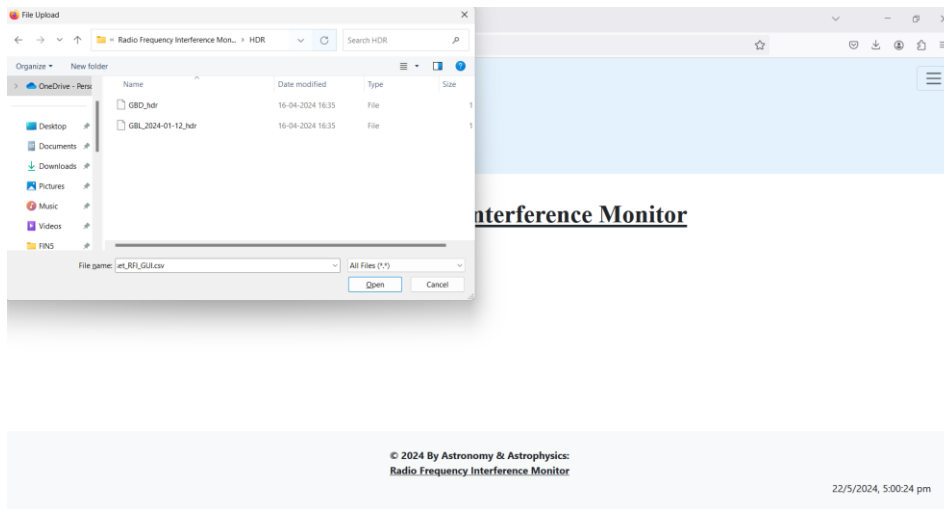


Instrument ID: Keysight Technologies,N9915A,MY53101604,A.08.18

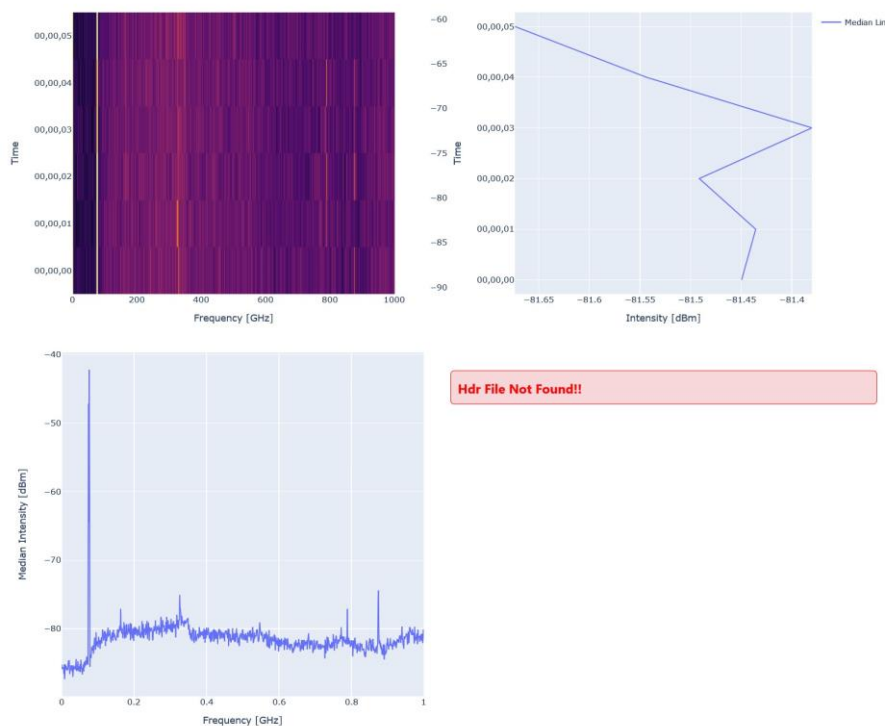
System date: 2023,3,24
Start frequency: 500000000
Stop frequency: 6500000000
Center frequency: 3500000000
Frequency span: 6000000000
Resolution BW: 3.000000E+05
Video BW: 1.5000000E+06
Sweep points: 1001
Sweep time: 1
Data form: ASC,0
Start time: 12,30,21
Stop time:15,05,21



Interference Monitor



Radio Frequency Interference Monitor



To install the required packages, in the Visual Studio Code terminal, type:

```
pip install -r packages.txt
```