Untitled

February 9, 2024

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[278], line 7
      4 file_path = f"./PM_BC_jan/{caseName}/Point{str(point)}.dat"
      6 data = pd.read_csv(file_path, delim_whitespace=True, header=None)
----> 7 amplitude_r, phase_r, stdDev_r =
  ↪rebuild_signal(data.iloc[:, 9], Targetfreq, 5e-9, plot=True)
      8 amplitude_t, phase_t, stdDev_t = rebuild_signal(data.iloc[:, 13],
  ↪Targetfreq, 5e-9, plot=True)
      9 amplitude_p, phase_p, stdDev_p = rebuild_signal(data.iloc[:, 16],
  ↪Targetfreq, 5e-9, plot=True)

Cell In[277], line 22, in rebuild_signal(data_series, target_freq_hz,
  ↪timestep_duration, truncate_start, truncate_end, plot)
     18 reduction = 5
     19 reduced_data = reduce_array(truncated_data, reduction)
---> 22 fft_result = fft(truncated_data_array)
     23 fft_frequencies = np.fft.fftfreq(len(truncated_data),
  ↪d=timestep_duration)
     24 index_target = np.argmin(np.abs(fft_frequencies - target_freq_hz))

NameError: name 'truncated_data_array' is not defined
```

10000

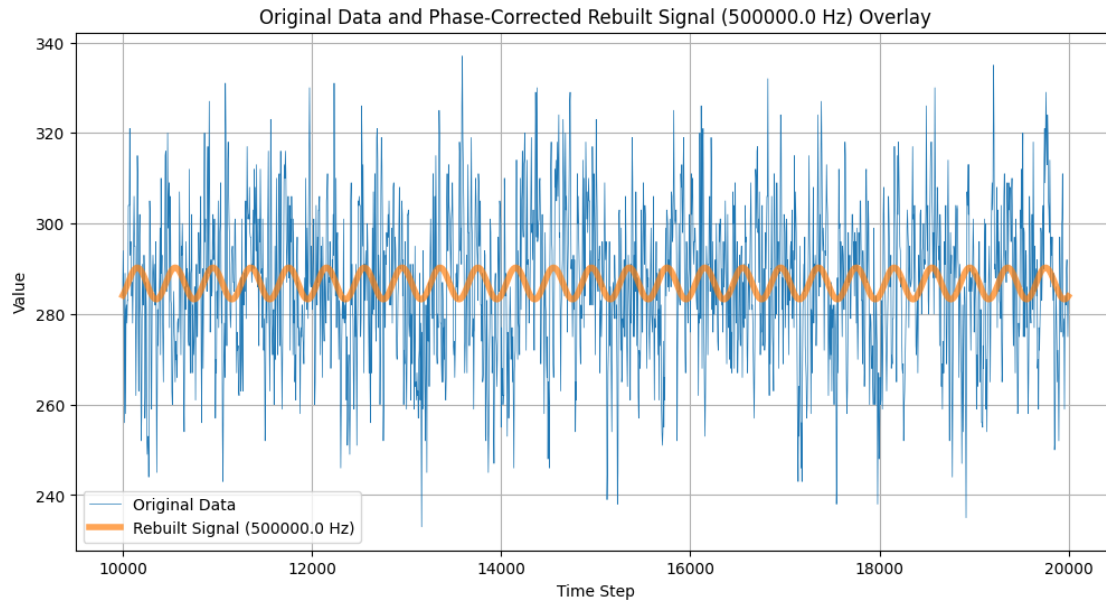[264]: array([284, 293, 290, …, 277, 273, 279], dtype=int64)

2000

[265]: array([284, 294, 287, …, 285, 275, 283], dtype=int64)

200000.0
25
2000
[5.0000e-05 5.0025e-05 5.0050e-05 … 9.9925e-05 9.9950e-05 9.9975e-05]

Original Data and Phase-Corrected Rebuilt Signal (500000.0 Hz) Overlay


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3.511889665309893
-2.4269020501050576
```

[269]: (2000,)

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[NbConvertApp] Converting notebook Untitled.ipynb to pdf
[NbConvertApp] Support files will be in Untitled_files\
[NbConvertApp] Making directory .\Untitled_files
[NbConvertApp] Writing 30719 bytes to notebook.tex
[NbConvertApp] Building PDF
[NbConvertApp] Running xelatex 3 times: ['xelatex', 'notebook.tex', '-quiet']
[NbConvertApp] Running bibtex 1 time: ['bibtex', 'notebook']
[NbConvertApp] WARNING | b had problems, most likely because there were no
citations
[NbConvertApp] PDF successfully created
[NbConvertApp] Writing 928859 bytes to Untitled.pdf
```