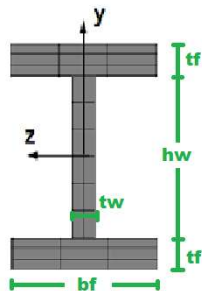
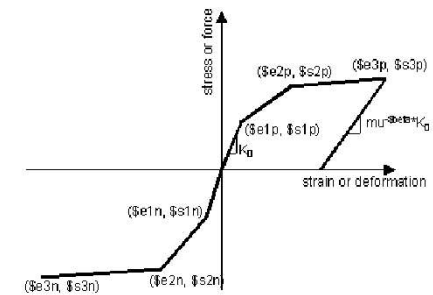
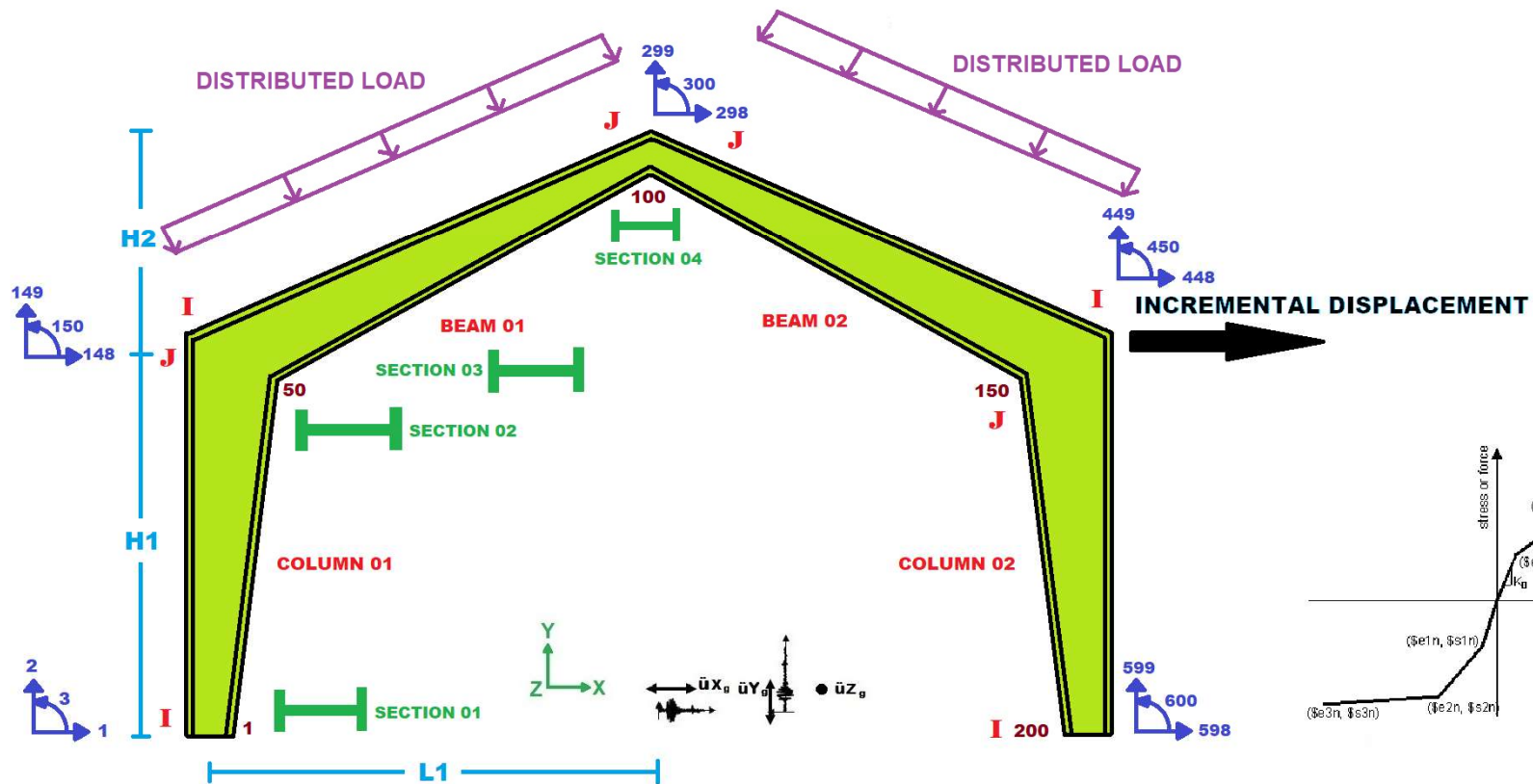


IN THE NAME OF ALLAH

**NONLINEAR PUSHOVER ANALYSIS OF A  
NONPRISMATIC STEEL GABLE FRAME.  
MODELING OF NONPRISMATIC ELEMENT  
WITH MULTI PRISMATIC ELEMENTS.**

THIS PROGRAM WRITTEN BY SALAR DELAVAR GHASHGHAEE (QASHQAI)



# **NONLINEAR PUSHOVER ANALYSIS OF A NONPRISMATIC STEEL GABLE FRAME**

Spyder (Python 3.12)

File Edit Search Source Run Debug Consoles Projects Tools View Help

STEEL\_GABLE\_FRAME\_DYNAMIC.py

STEEL\_GABLE\_FRAME\_PUSHOVER.py

```
1 #####
2 # IN THE NAME OF ALLAH #
3 # NONLINEAR PUSHOVER ANALYSIS OF A NONPRISMATIC STEEL GABLE FRAME #
4 # I SECTION COLUMN WITH FINITE PRISMATIC COLUMN #
5 # -----#
6 # MODELING OF NONPRISMATIC ELEMENT WITH MULTI PRISMATIC ELEMENTS #
7 # -----#
8 # THIS PROGRAM WRITTEN BY SALAR DELAVAR QASHQAI #
9 # EMAIL: salar.d.ghashghaei@gmail.com #
10 #####
11
12 #####-----
13 #import the os module
14 import os
15 import time as TI
16 import numpy as np
17 import openseespy.opensees as op
18 import ANALYSIS_FUNCTION as S03
19 import PLOT_2D as S04
20 import BILINEAR CURVE as S05
21
22 #####-----
23 import matplotlib.pyplot as plt
24 import matplotlib.image as mpimg
25
26 # Load the image
27 image_path = 'STEEL_GABLE_FRAME.PNG'
28 image = mpimg.imread(image_path)
29
30 # Display the image
31 plt.figure(figsize=(30, 16))
32 plt.imshow(image)
33 plt.axis('off') # Hide axes
34 plt.show()
35 #####-----
```

13 %

Help Variable Explorer Debugger Plots Files

Console 1/A

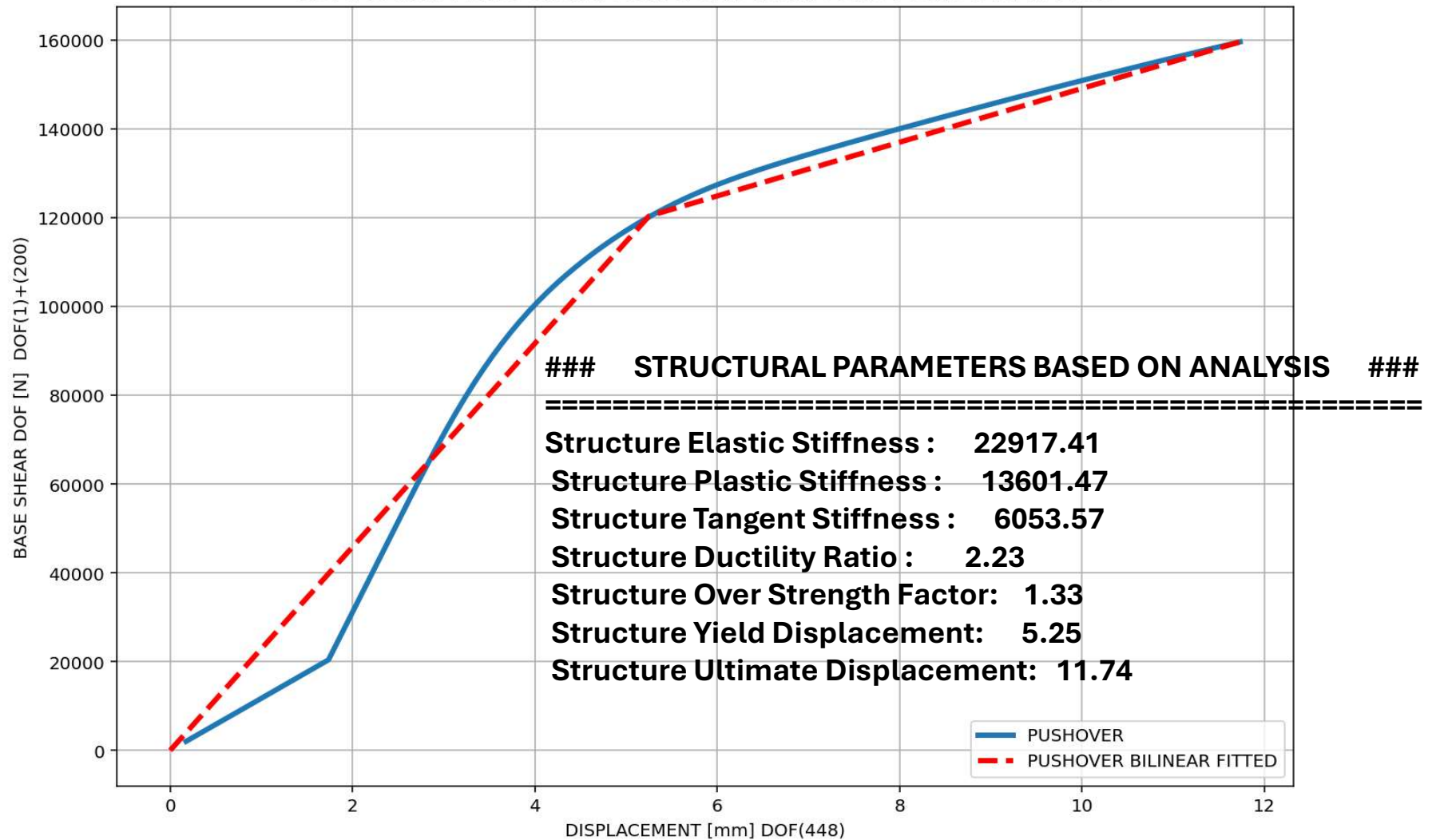
```
Structure Yield Displacement: 5.25
Structure Ultimate Displacement: 11.74
C:
\Users\Dell\Desktop\OPENSEES_FILES\STEEL_GABLE_FRAME\PLOT_2D.
py:43: UserWarning: Legend does not support handles for Text
instances.
See: https://matplotlib.org/stable/tutorials/intermediate/
legend_guide.html#implementing-a-custom-legend-handler
ax.legend()

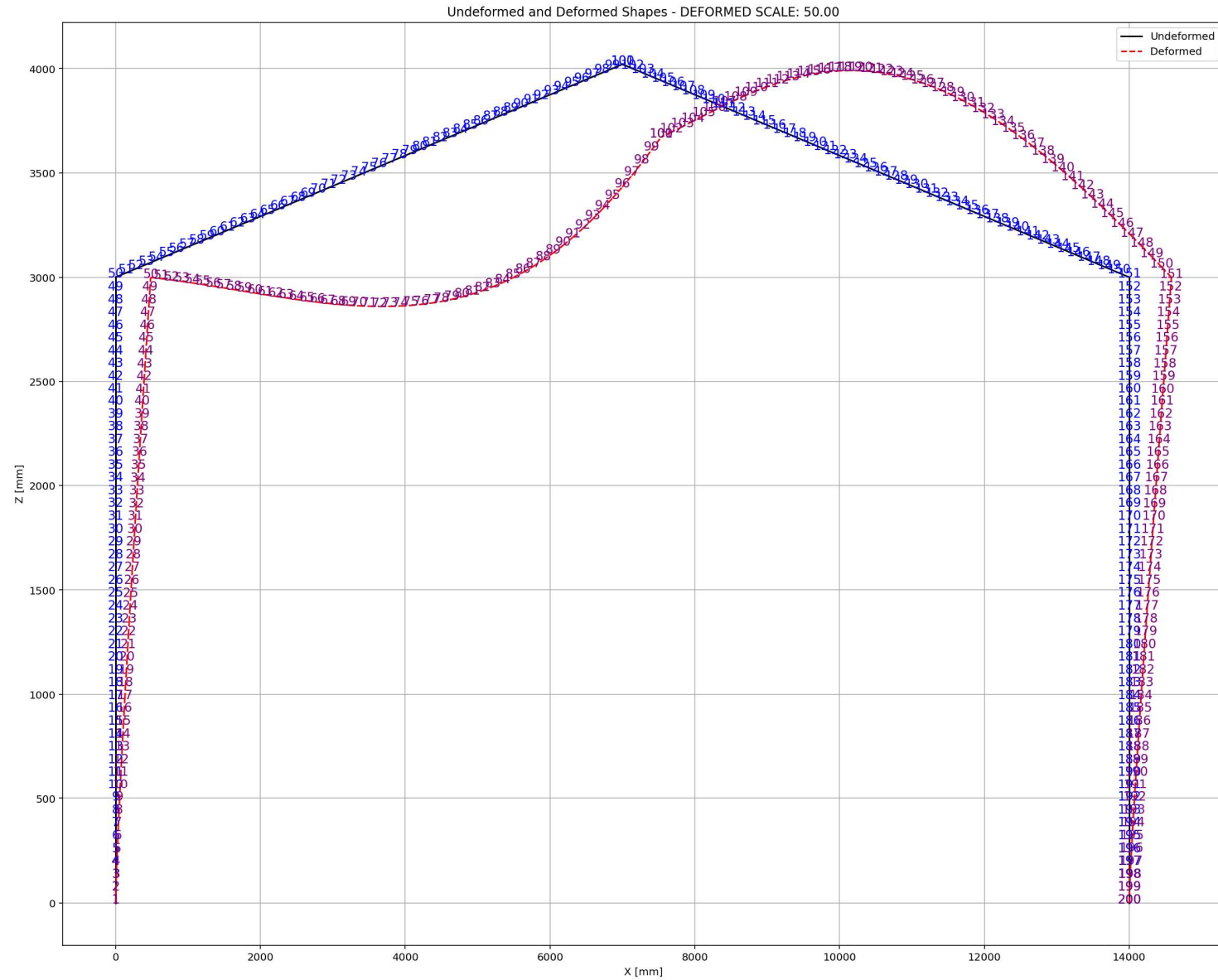
In [3]:
```

IPython Console History

Inline Conda: anaconda3 (Python 3.12.7) ✓ | SP: Python Line 1, Col 1 UTF-8 CRLF RW Mem 35%

DISPLACEMENT BASE-SHEAR CURVE FOR DYNAMIC AND PUSHOVER ANALYSIS





# **NONLINEAR DYNAMIC ANALYSIS OF A NONPRISMATIC STEEL GABLE FRAME**



