

```
1 function plotNormBaseShear(figName, folder, direction, legendName)
2     arguments;
3     figName = "temp";
4     folder = "dynamic_EW";
5     direction = "EW"
6     legendName = ""
7 end
8
9
10 filename = "." + folder + "\Results_dynamic\Reaction.txt";
11 dataLines = [1, Inf];
12 opts = delimitedTextImportOptions("NumVariables", 13);
13 opts.DataLines = dataLines;
14 opts.Delimiter = " ";
15 opts.VariableNames = ["time", "Fx1", "Fy1", "Fz1", "Mx1", "My1", "Mz1", "Fx2", "Fy2", "Fz2", "Mx2", "My2", "Mz2"];
16 opts.VariableTypes = ["double", "double", "double", "double", "double", "double", "double", "double", "double", "double", "double", "double", "double",
"double"];
17 Reaction = readtable(filename, opts);
18
19 W = 21365;
20
21 figure(1); hold on;
22 if direction == "EW"
23     plt = plot(Reaction.time, (Reaction.Fx1 + Reaction.Fx2)/W);
24 elseif direction == "NS"
25     plt = plot(Reaction.time, (Reaction.Fy1 + Reaction.Fy2)/W);
26 end
27
28 if legendName ~= ""; plt.DisplayName = legendName; legend(); end;
29
30 title("Total Normalized Base Shear in the " + direction + " Direction");
31 grid on;
32 xlabel("Time (sec)");
33 ylabel("Normalized Base Shear [kip/kip]");
34 h = findobj('Type','line'); set(h, 'LineWidth', 2);
35 xlim([0, 20]);
36 print_figure(figName)
37 end
```