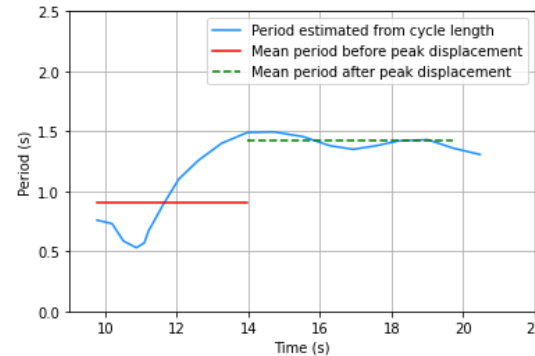
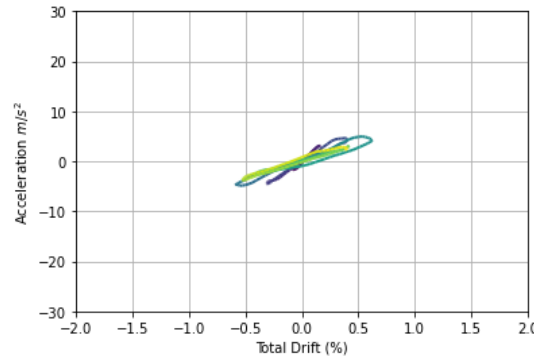
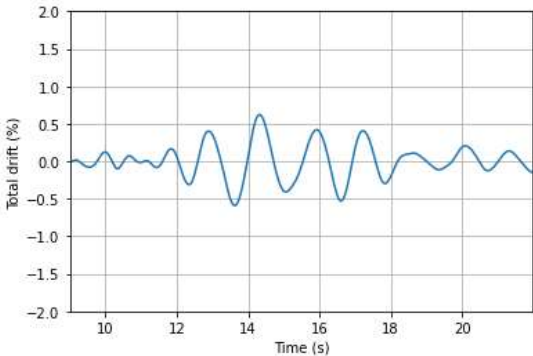
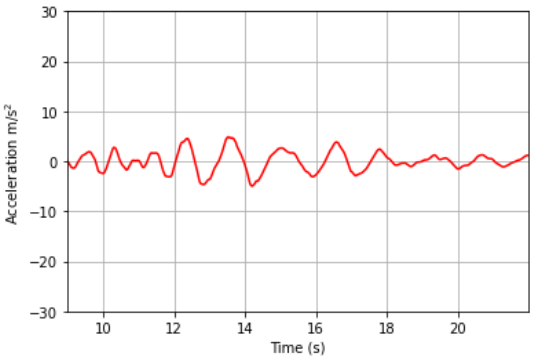
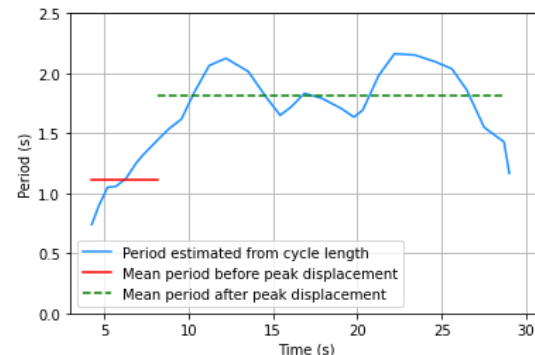
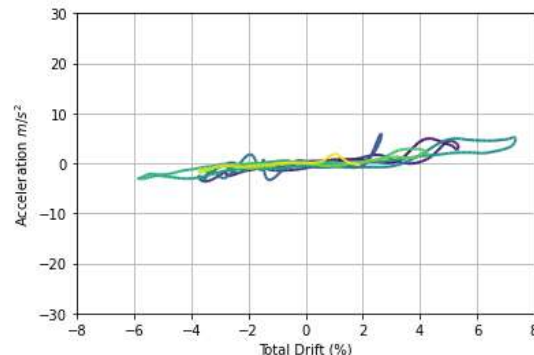
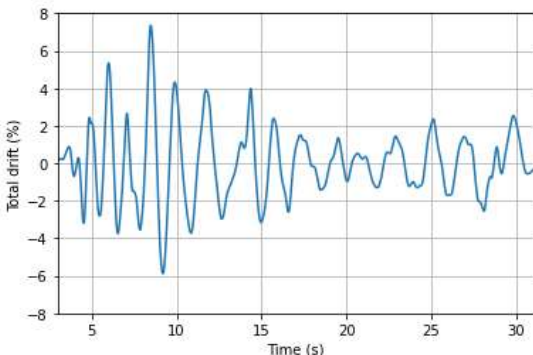
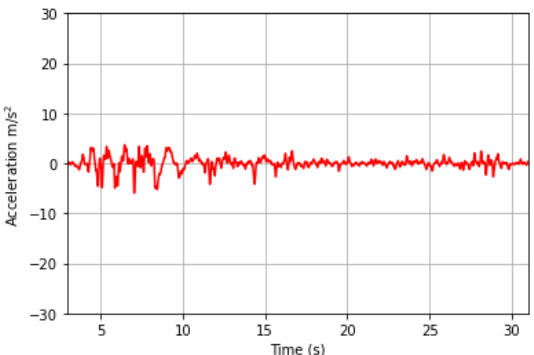


	Roof Acceleration	Roof drift ratio	Acceleration – displacement plot	Period time history
<p>Tohoku Wang 2011 (1)</p> <p>Damage Classification = 3</p> <p>9 Storey RC wall building.</p> <p>Period Change = 36% , 0.96 to 1.31s</p> <p>Peak displacement = 31 cm, 1.0% @ 81.3s</p>				
<p>Tohoku Wang 1978 (2)</p> <p>Damage Classification = 1</p> <p>9 Storey RC wall building</p> <p>Period Change = 7%, 0.97 to 1.04s</p> <p>Peak displacement = 21cm, 0.6% @ 14.7s</p>				
<p>7 storey RC hotel EW building (3)</p> <p>Damage Classification = 3</p> <p>7 Storey RC Frame building</p> <p>Period Change = 30%, 1.53 to 1.99s</p> <p>Peak displacement= 23 cm, 1.2% @ 9.3s</p>				
<p>7 storey RC hotel NS building (4)</p> <p>Damage Classification: 2</p> <p>7 Storey RC Frame Building</p> <p>Period Change = 18%, 1.73 to 2.04s</p> <p>Peak displacement = 20 cm, 1% @ 10.7s</p>				

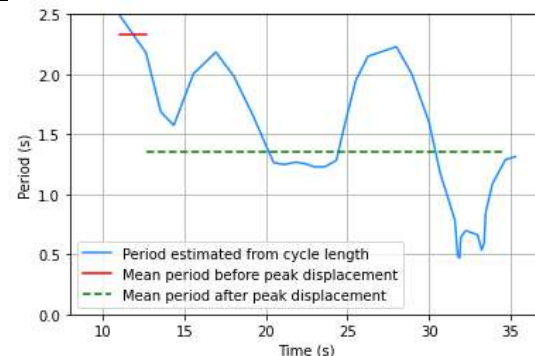
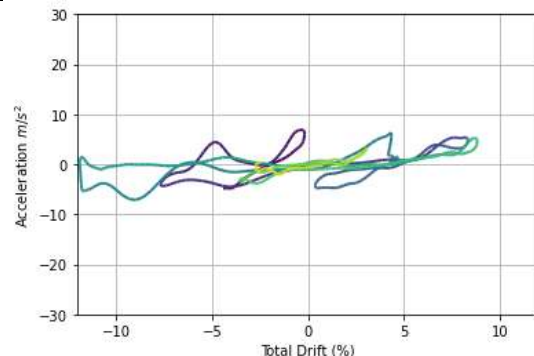
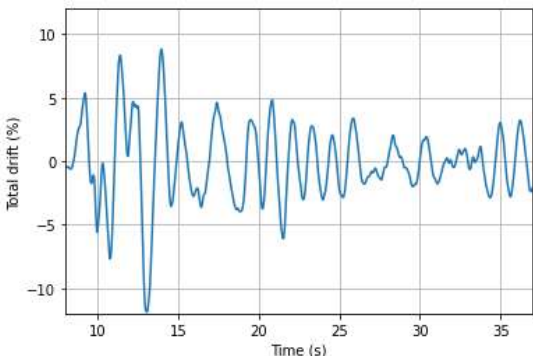
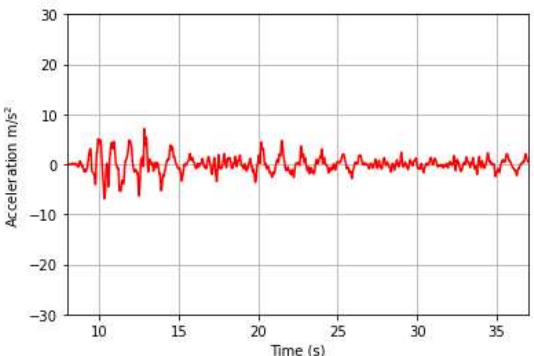
10 storey RC hotel building (5)
Damage Classification = 3
10 Storey RC Wall building
Period Change = 56%, 0.91 to 1.42s
Peak Displacement = 20cm, 0.6s @ 14.3s



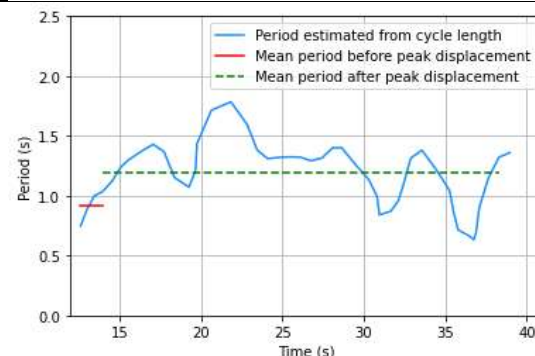
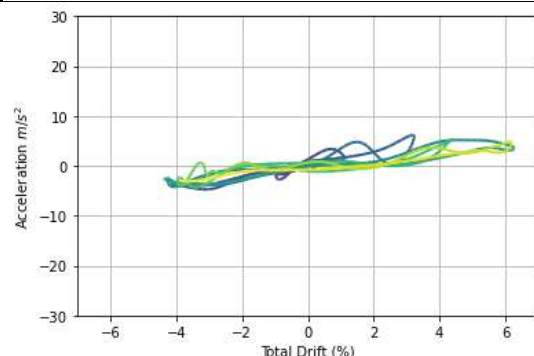
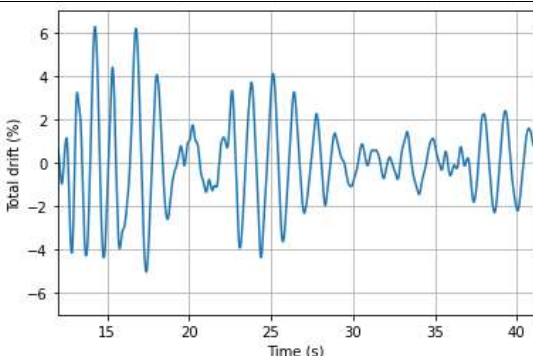
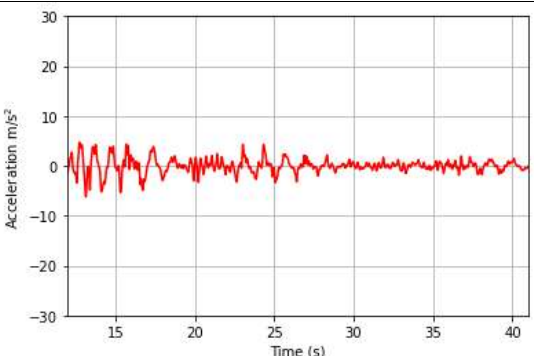
University of Illinois concrete structure H1 S (6)
Damage Classification = 2
10 Storey scaled Concrete Frame, uniform story height
Period Change = 64% , 1.11 to 1.81s
Peak Displacement = 18 cm, 7.4% @ 8.5s

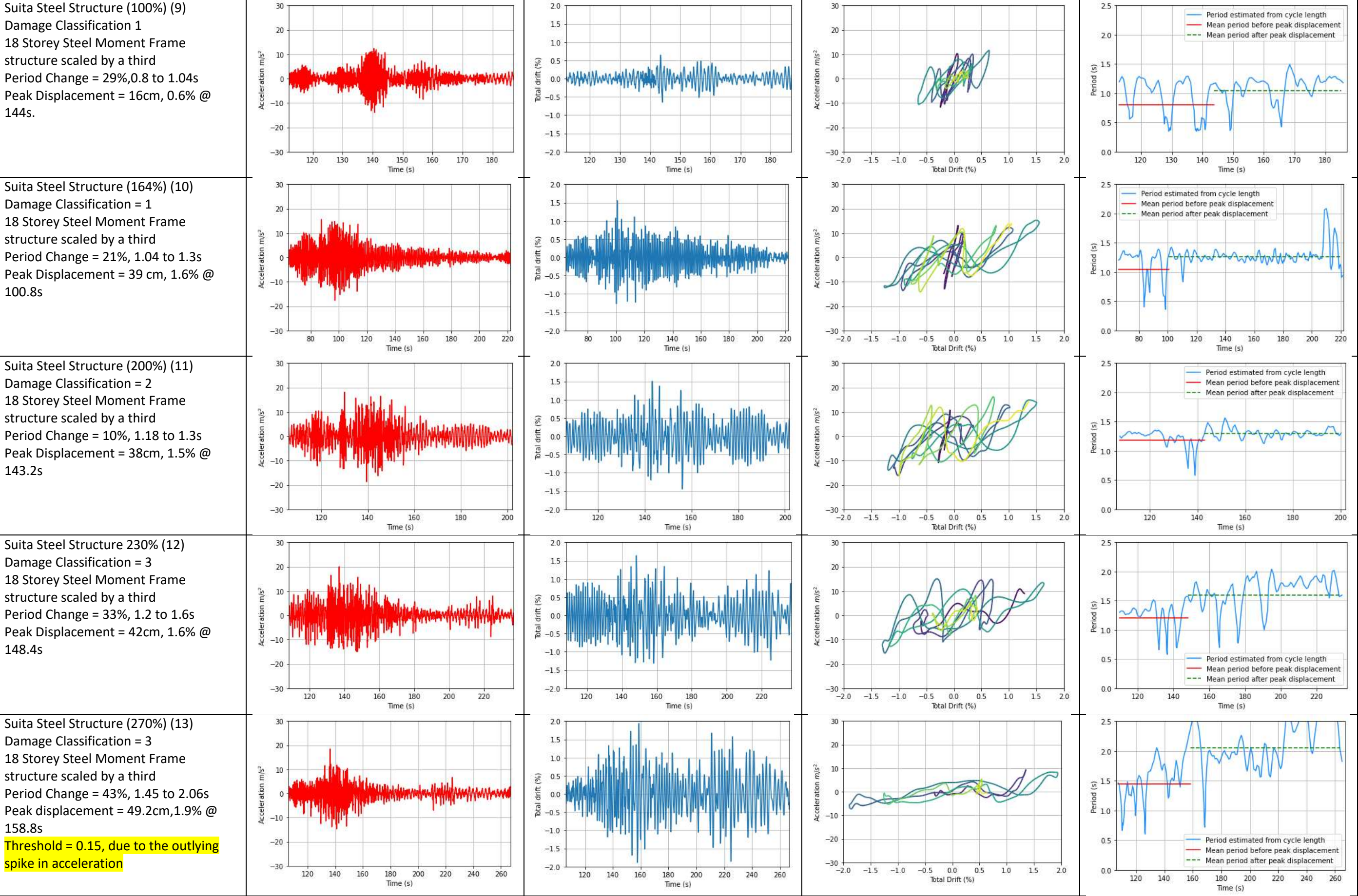


University of Illinois concrete structure MF1 S (7)
Damage Classification = 1
10 Storey scaled RC Frame non uniform storey height
Period Change = -42%, 2.33 to 1.35s
Peak displacement = 29cm, 11.9% @ 13.1s
Start plot = 8s

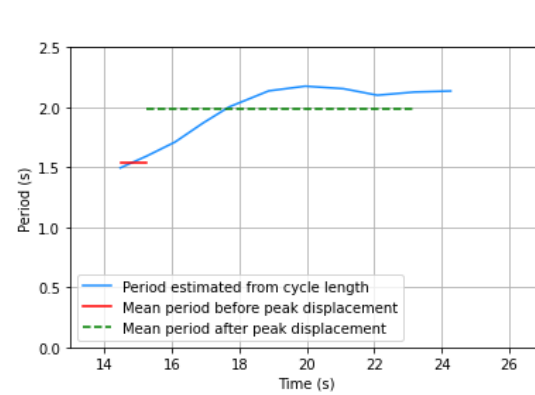
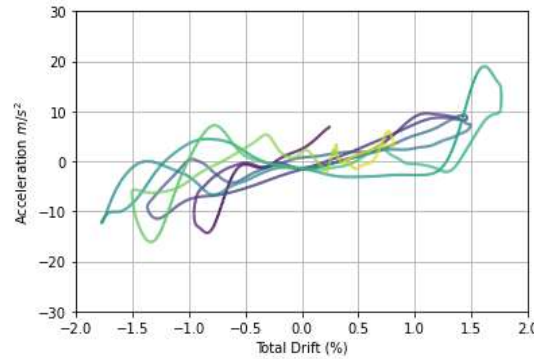
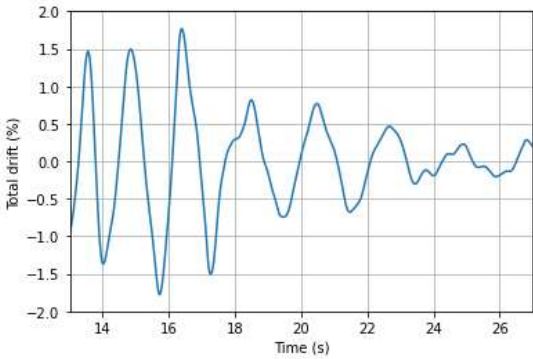
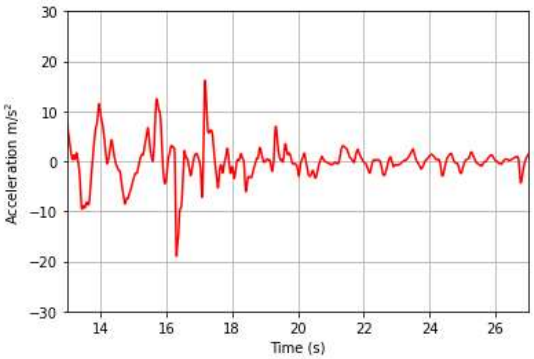


University of Illinois concrete structure MF2 S (8)
Damage Classification = 1
10 Storey RC Frame discontinued beam
Period Change = 30%, 0.92 to 1.19s
Peak Displacement = 15 cm, 6.3% @ 14.3s

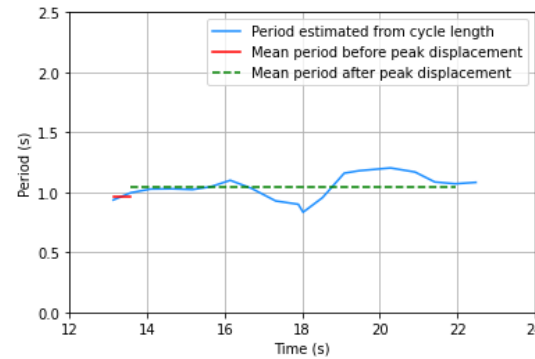
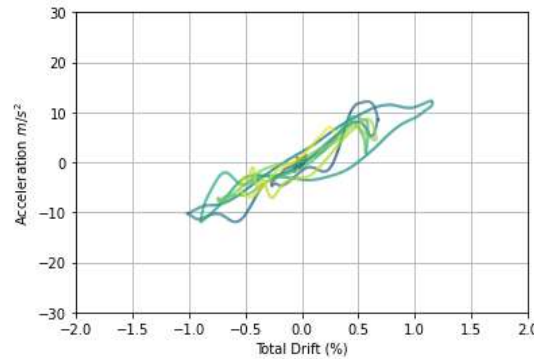
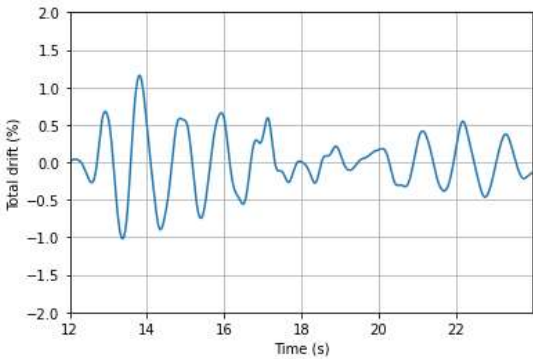
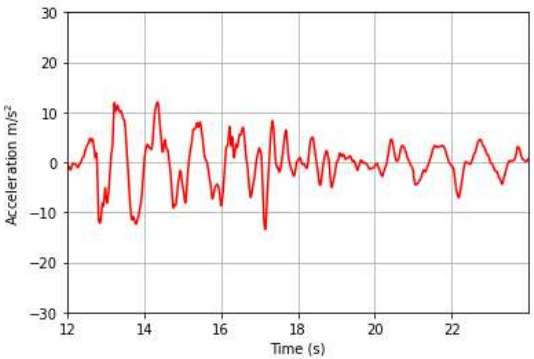




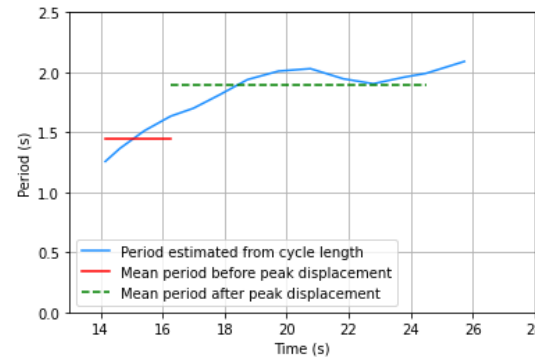
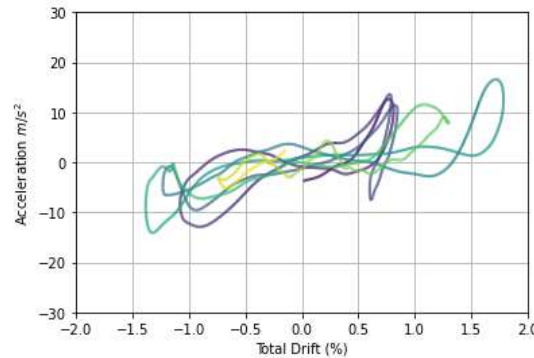
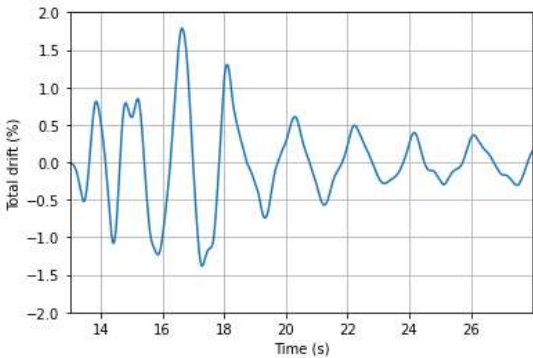
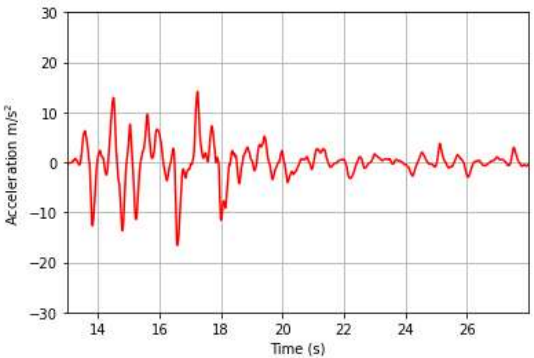
2015 E defense EW (14)
Damage Classification = 2
10 Storey full scale RC Frame
Period Change = 29%, 1.54s to 1.99s
Peak displacement = 45cm, 1.8% @ 15.7s



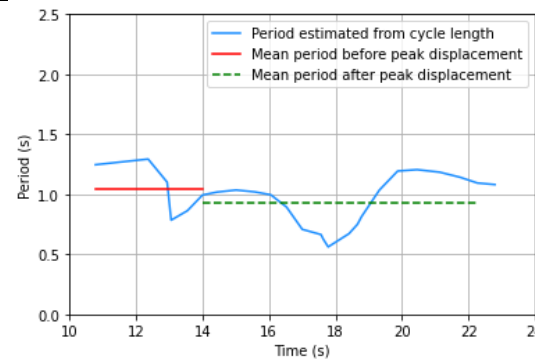
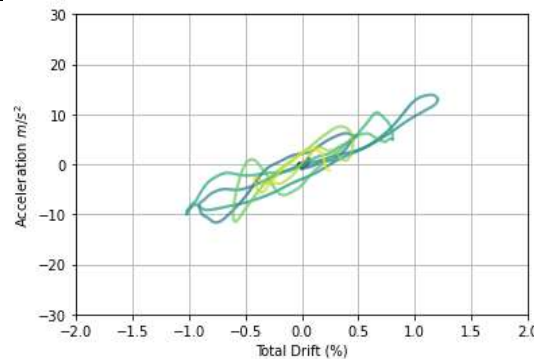
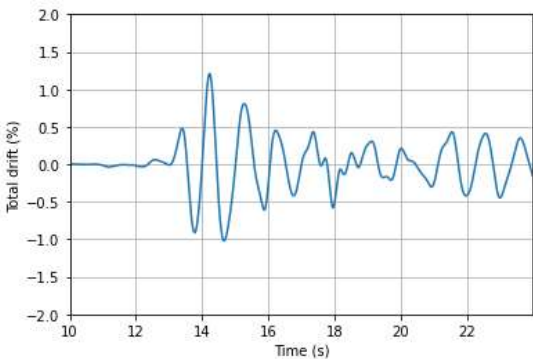
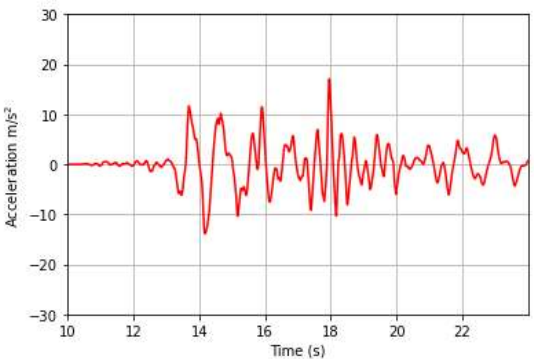
2015 E defense 10 Story Structure NS (15)
Damage Classification = 1
10 Storey full scale RC Wall
Period Change = 8%, 0.97 to 1.04s
Peak displacement = 32cm, 1.2% @ 13.8s



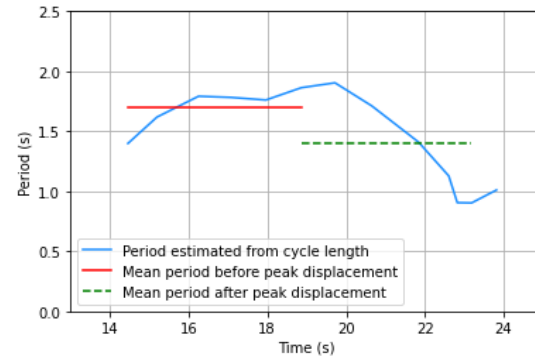
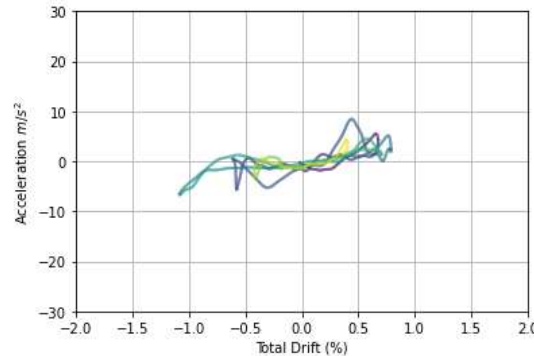
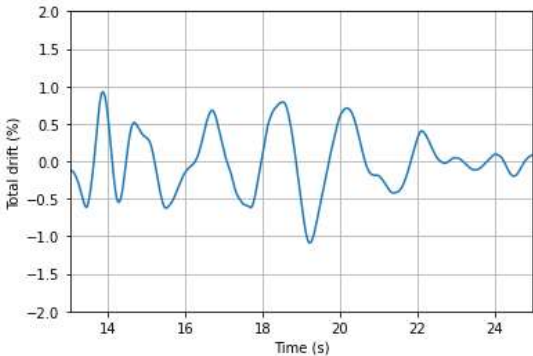
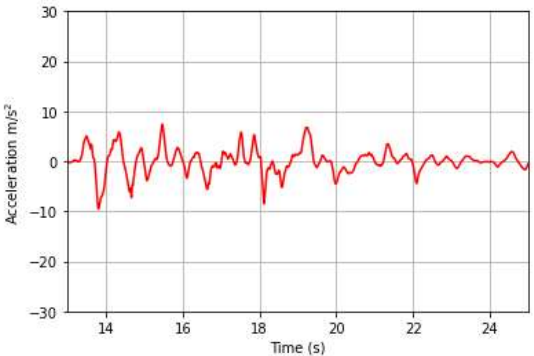
2018 E defense 10 Story EW Run 9 (16)
Damage Classification = 1
10 Storey full scale RC Frame
Period Change = 31%, 1.44 to 1.89s
Peak Displacement = 49cm, 1.8% @ 16.6s



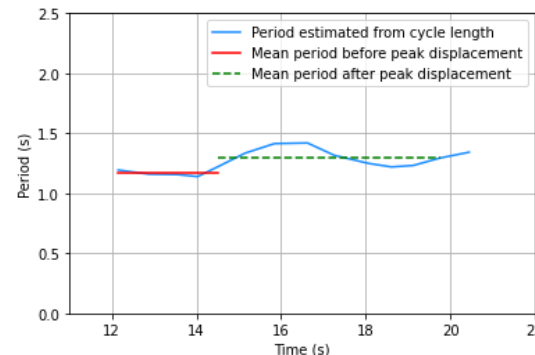
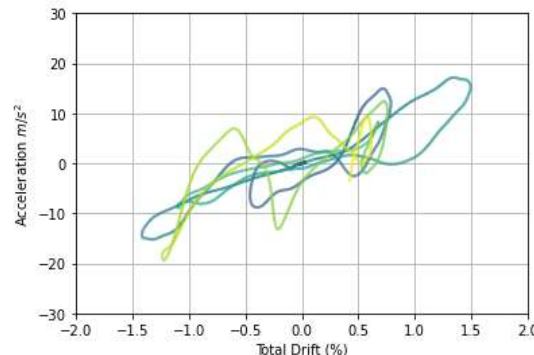
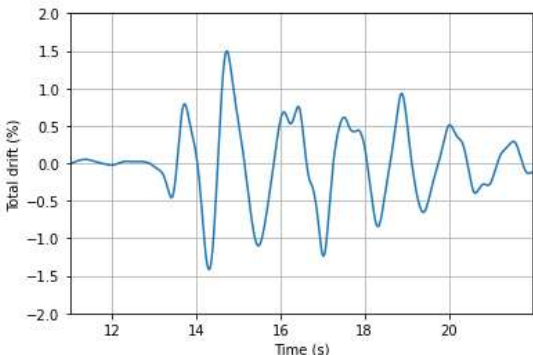
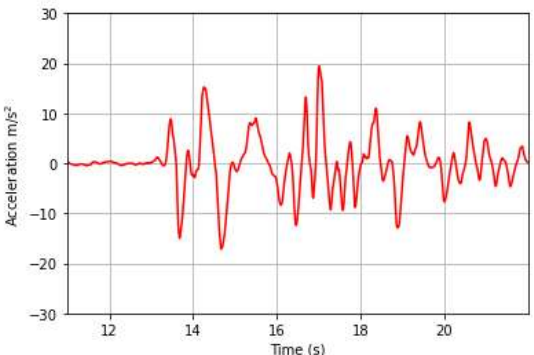
2018 E defense 10 Storey NS Run 9 (17)
Damage Classification = 1
10 Storey full scale RC Wall
Period Change = -12%, 1.05 to 0.93s
Peak Displacement = 33cm, 1.2% @ 14.2s
START PLOT = 10s



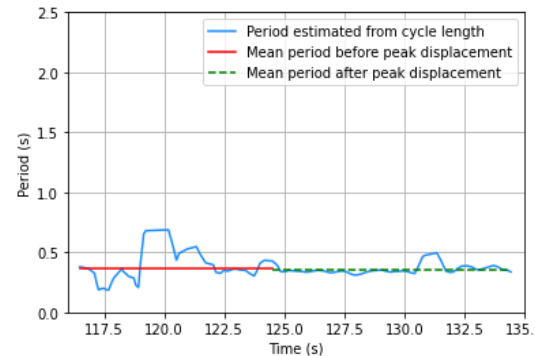
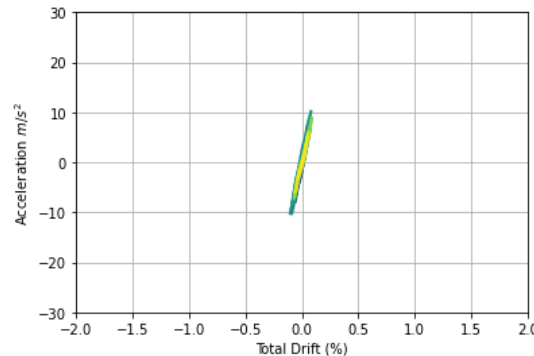
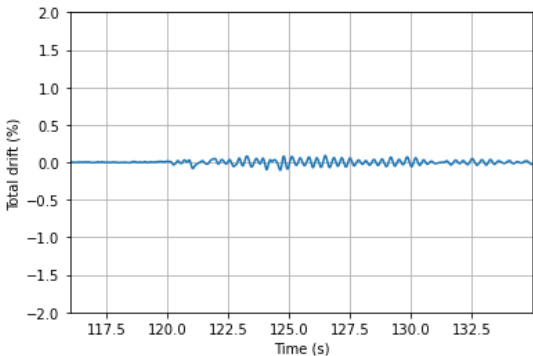
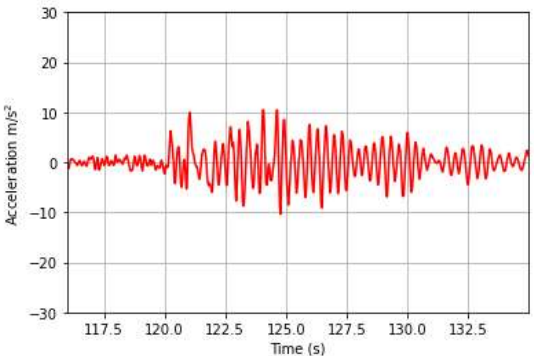
2018 E defense EW Run 10 (18)
Damage Classification = 1
10 Storey full scale RC Frame
Period Change = -18%, 1.7 to 1.4s
Peak Displacement = 30cm, 1.1% @
19.2s



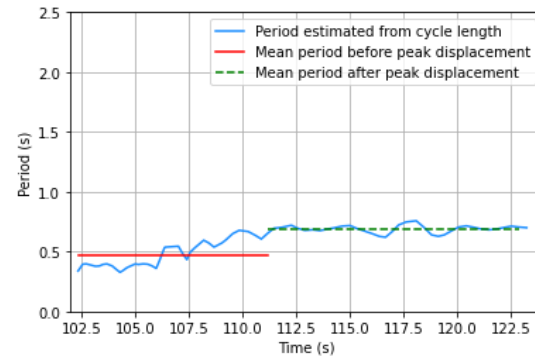
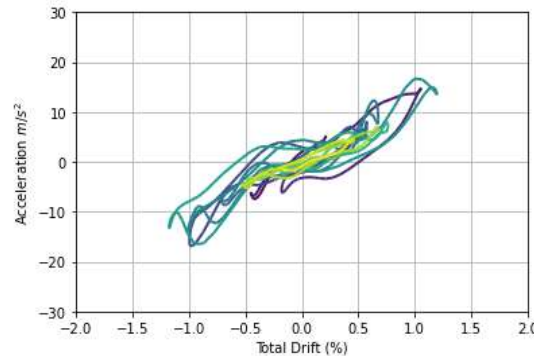
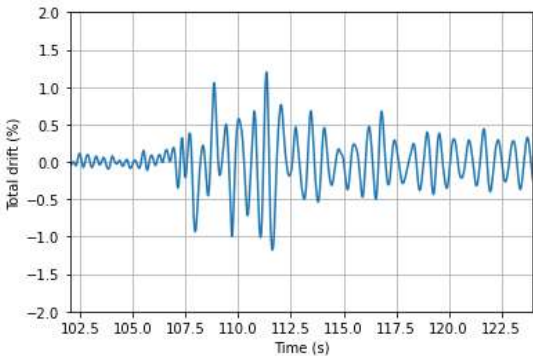
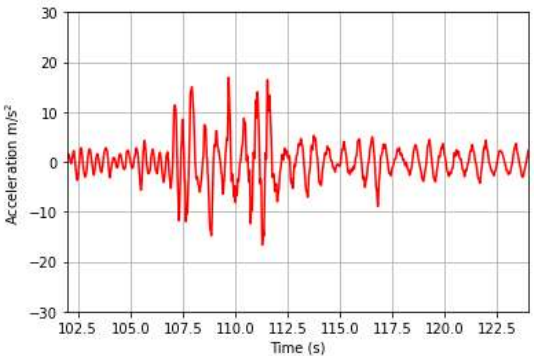
2018 E defense NS Run 10 (19)
Damage classification = 1
10 Storey full scale RC Wall
Period Change = 11%, 1.17 to 1.3s
Peak Displacement = 41 cm, 1.5% @
14.7 seconds
Start plot = 11s



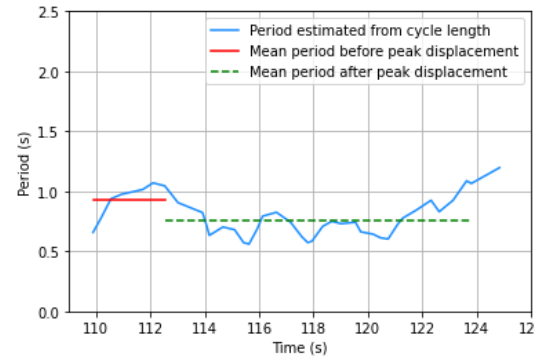
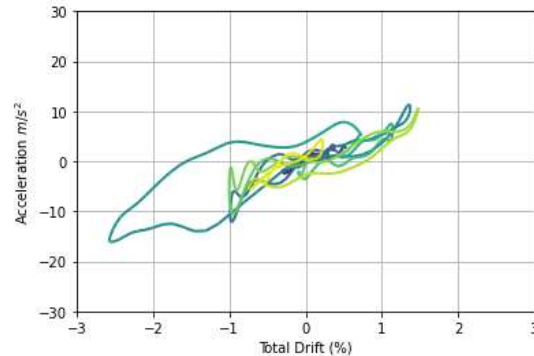
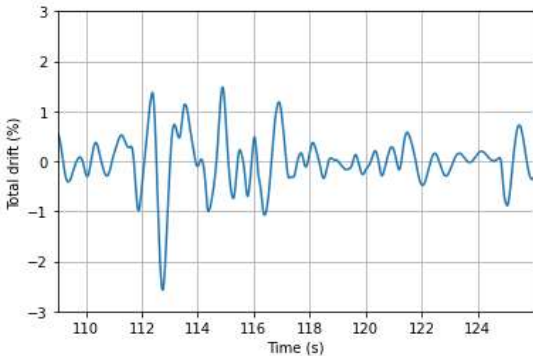
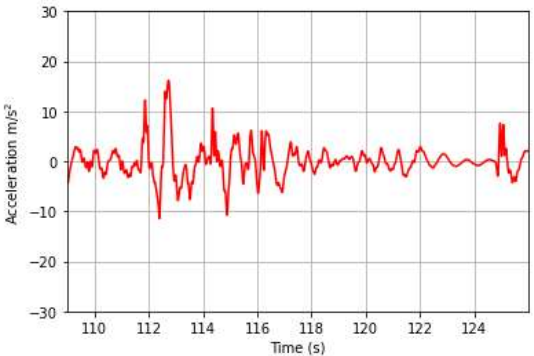
2019 RC Frame (100%) (20)
Damage Classification = 1
3 Storey RC Frame
Period Change = -2%, 0.37 to 0.36s
Peak Displacement = 3cm, 0.1% @
124.6s



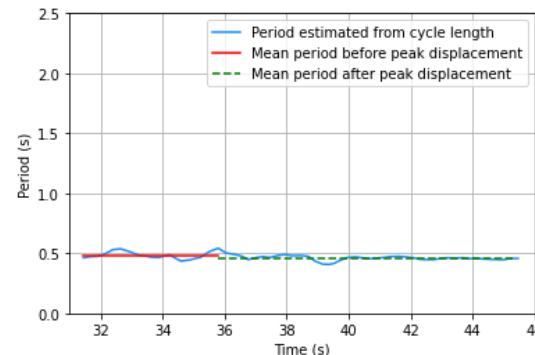
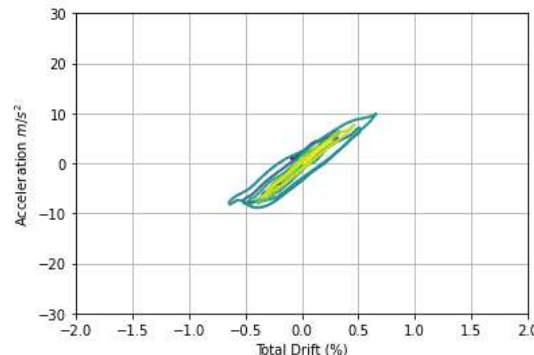
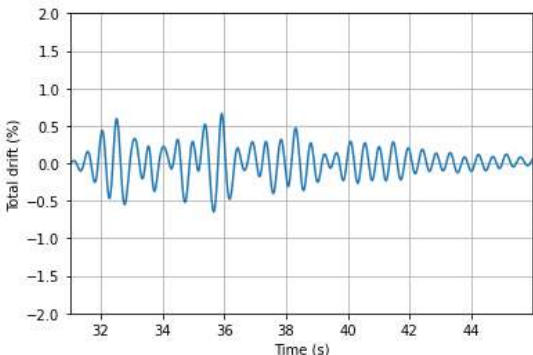
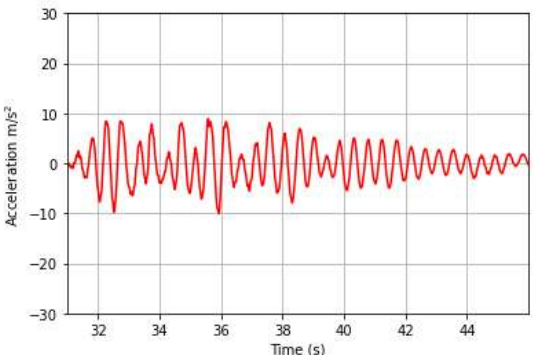
2019 RC Frame (150%) (21)
Damage Classification = 1
3 Storey RC Frame
Period Change = 47%, 0.47 to 0.7s
Peak Displacement = 12cm, 1.2% @
111.3s



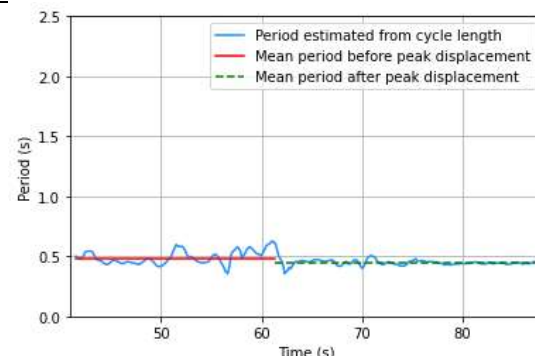
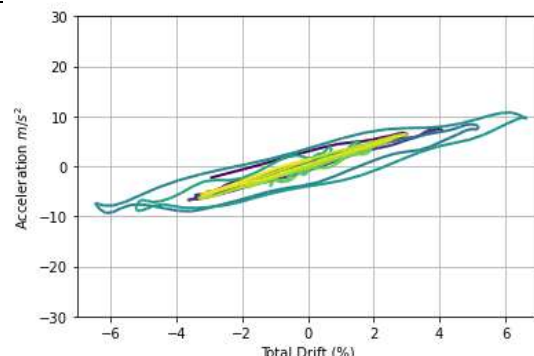
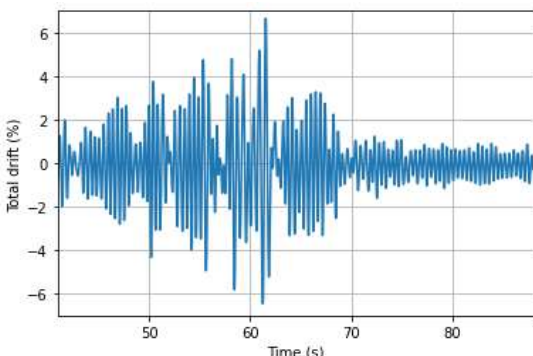
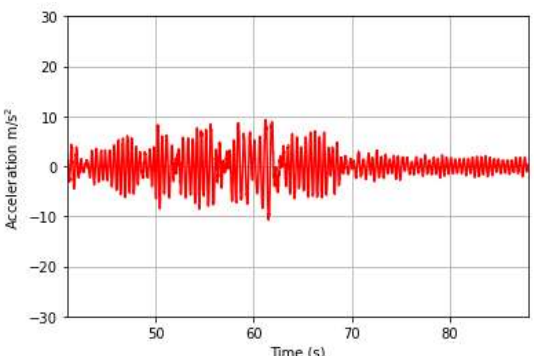
2019 RC Frame (160%) (22)
Damage Classification = 1
3 Storey RC Frame
Period Change = -19%, 0.93 to 0.75s
Peak Displacement = 27cm, 2.6% @ 112.7s



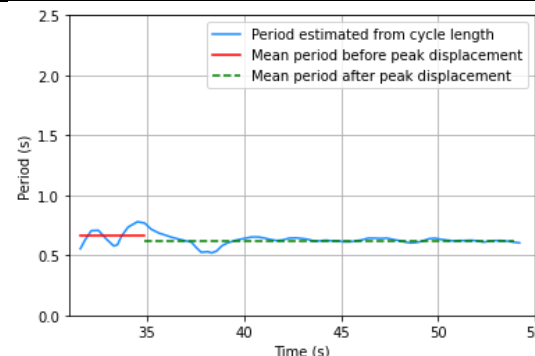
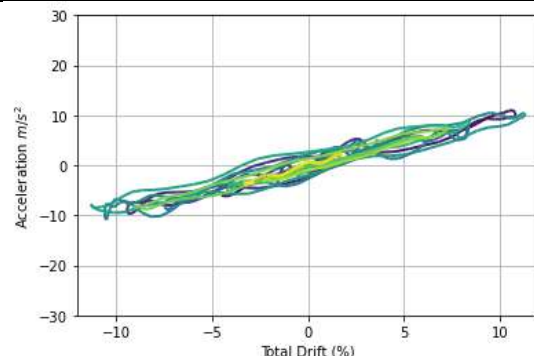
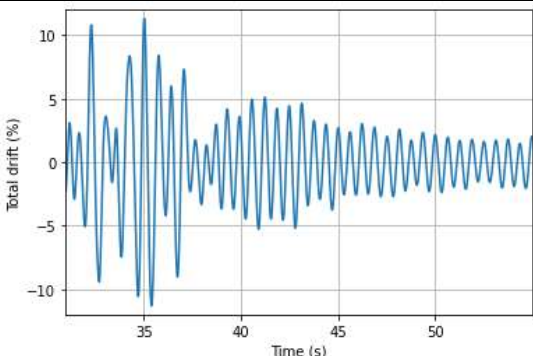
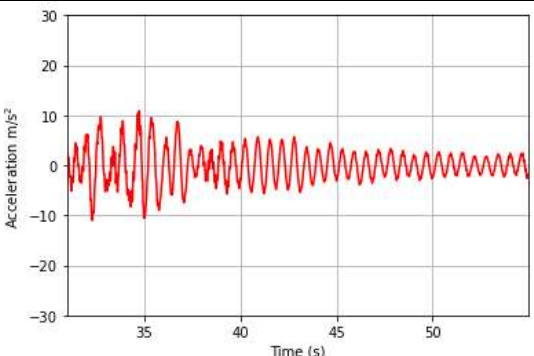
3 Storey Steel Frame REHS 120% (23)
Damage Classification = 1
3 Storey Steel cantilevered frame
Period Change = -5%, 0.48 to 0.46s
Peak Displacement = 7cm, 0.7% @ 35.9s

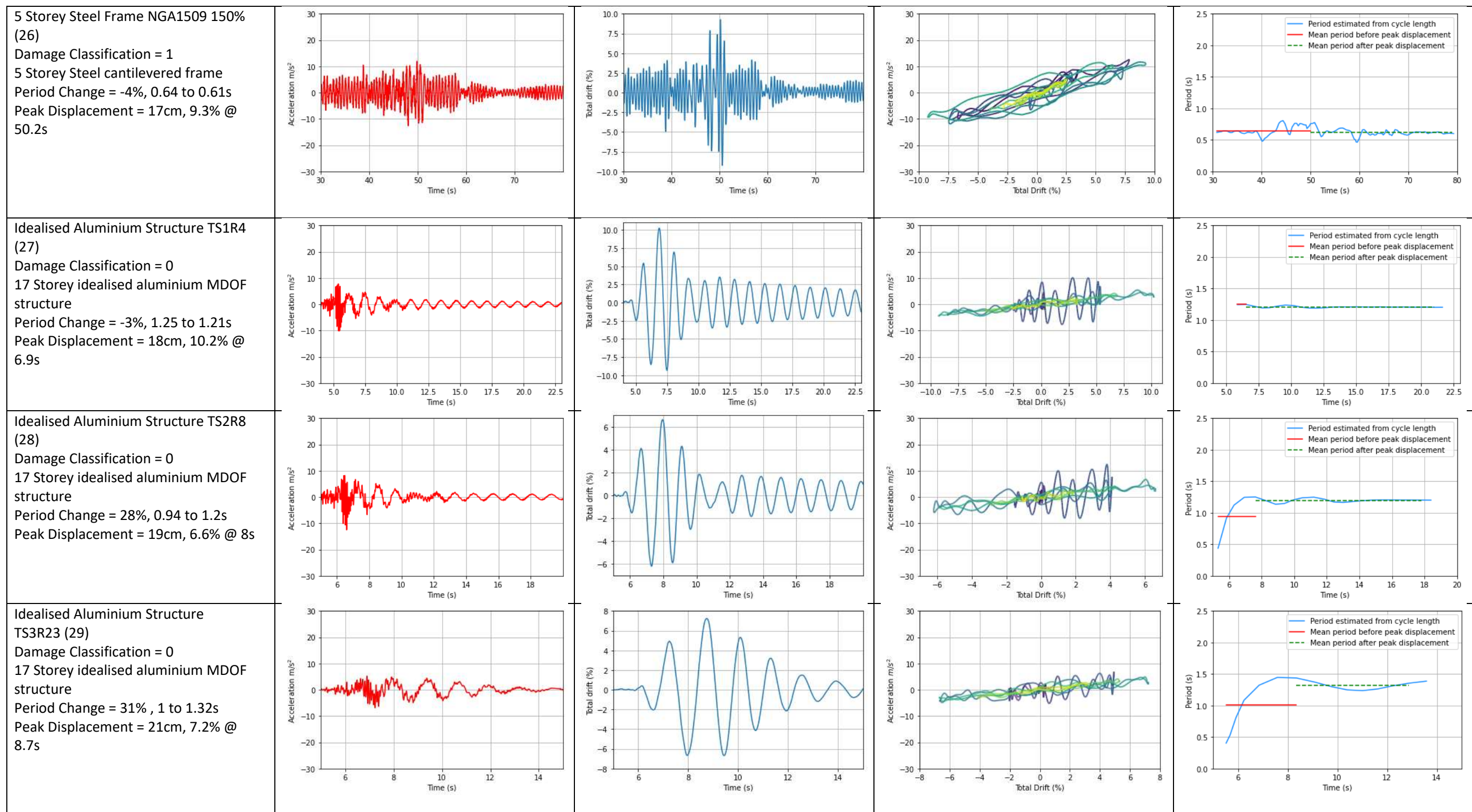


3 Storey Steel Frame (NGA1509 150% (24)
Damage Classification = 1
3 Storey Steel cantilevered frame
Period Change = -8%, 0.49 to 0.45s
Peak Displacement = 7cm, 6.7% @ 61.6s

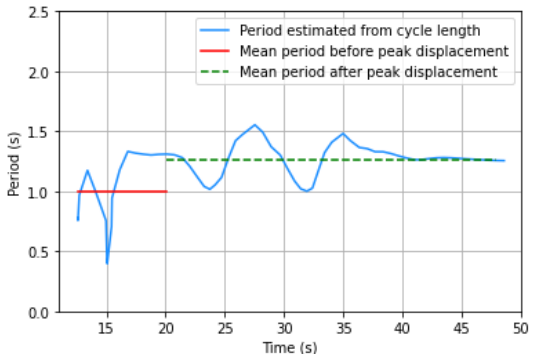
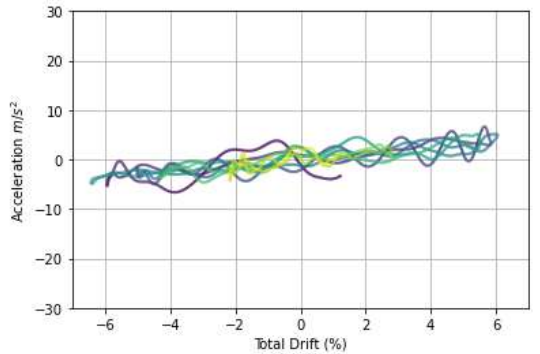
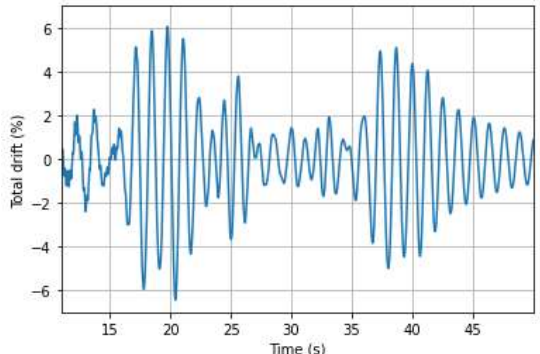
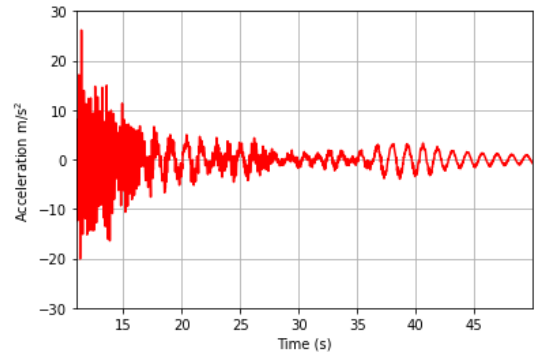


5 Storey Steel Frame REHS 120% (25)
Damage Classification = 1
5 Storey Steel cantilevered frame
Period Change = -7%, 0.67 to 0.62s
Peak Displacement = 12cm, 11.3% @ 35s.

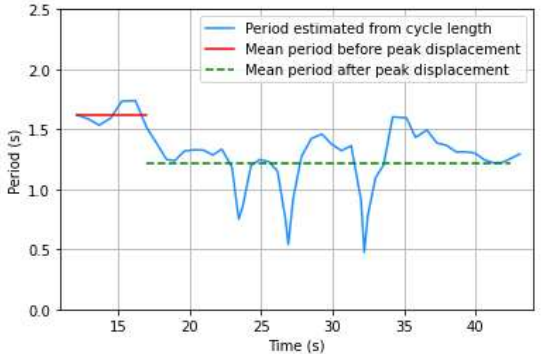
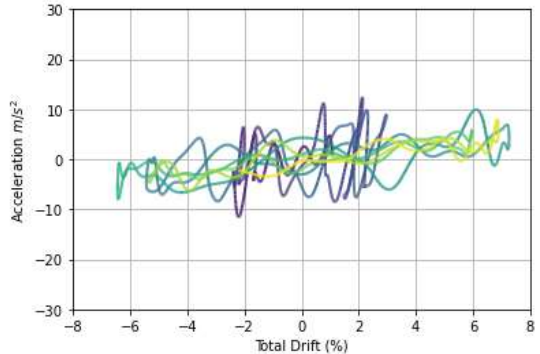
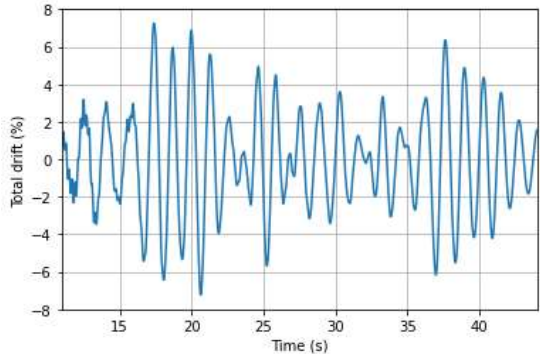
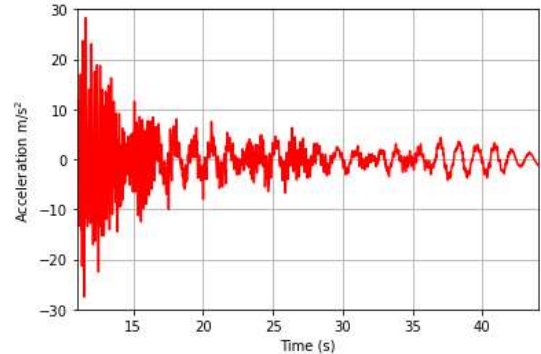




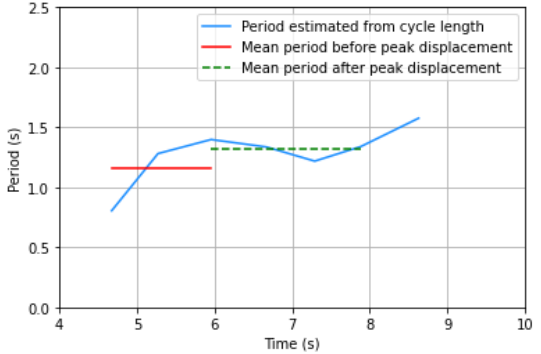
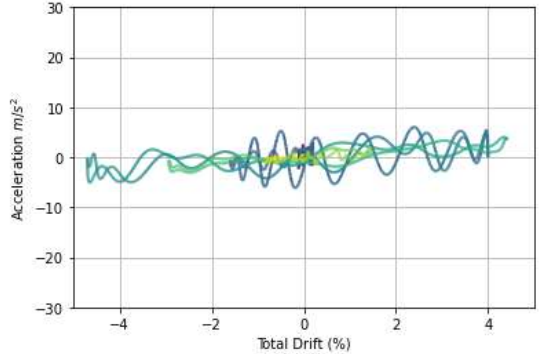
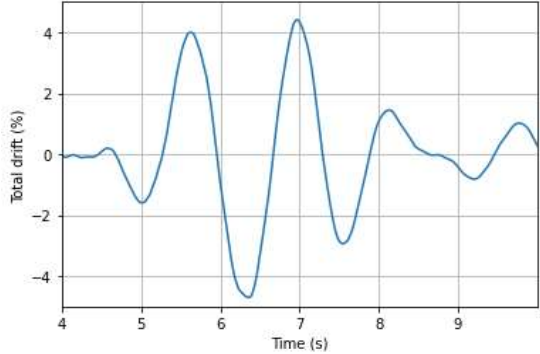
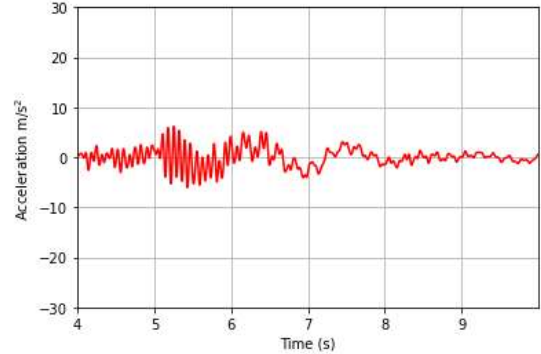
Idealised Aluminium Structure
TS4R13 (30)
Damage Classification = 0
17 Storey idealised aluminium MDOF
structure
Period Change = 27%, 1 to 1.27s
Peak Displacement = 19cm, 6.4% @
20.4s
Change threshold function to use
disp_relative



Idealised Aluminium Structure
TS5R13 (31)
Damage Classification = 0
17 Storey idealised aluminium MDOF
structure
Period Change = -25% , 1.62 to 1.21s
Peak Displacement = 21cm, 7.3% @
17.4s
Change threshold function to use disp
relative and show period using the
unaveraged period



Idealised Aluminium Structure
TS6R22 (32)
Damage Classification = 0
17 Storey idealised aluminium MDOF
structure
Period Change = 14% , 1.16 to 1.32s
Peak Displacement = 14cm, 4.7% @
6.4s
Use unaveraged period function here



Idealised Aluminium Structure
TS7R35 (33)
Damage Classification = 0
17 Storey idealised aluminium MDOF
structure
Period Change = 1%, 1.09 to 1.1s
Peak Displacement = 22cm, 7.6% @
7.1s
Start plot = 5.5
End plot = 15
Use unaverage period

