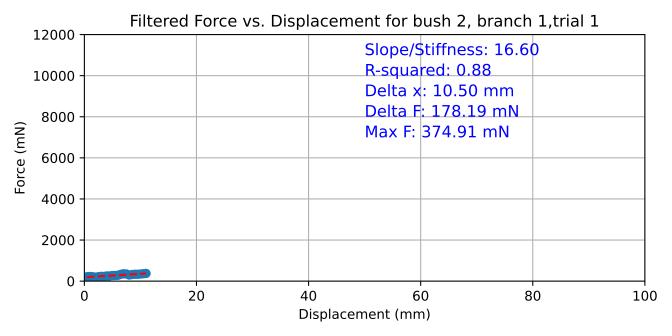


Bush 1 data

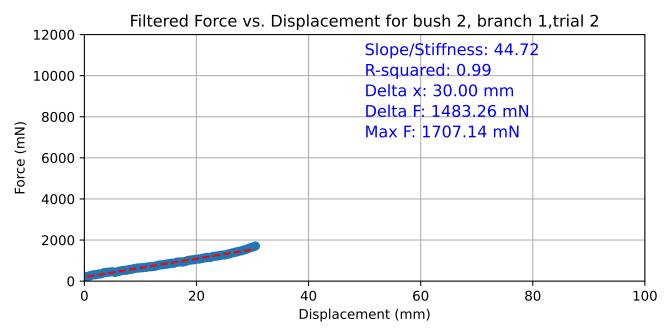
Branch 1, Trial 1, stiffness: 16,76 mN/mm, diameter: 4.94 mm, height: 915 mm

250 -	delta x: 31.5 mm,	delta F: 566.4	3 mN/mm, ma	x Force: 769 m	m	
	Branch 1, Trial 2, delta x: 23.5 mm,	stiffness: 30.14 delta F: 722.2	1 mN/mm, diar 6 mN/mm, ma	neter: 4.4 mm, x Force: 935 m	height: 800 r m	mm
200 -	Branch 1, Trial 3, delta x: 32.0 mm,	stiffness: 89.23 delta F: 2855.	3 mN/mm, diar 89 mN/mm, m	neter: 5.3 mm. ax Force: 3072	height: 680 r mm	mm
	Branch 2, Trial 1, delta x: 31.0 mm,	stiffness: 122.9 delta F: 3764.	97 mN/mm, dia 87 mN/mm, m	ameter: 10.9 m ax Force: 3980	m, height: 88 mm	5 mm
150 -	Branch 2, Trial 2, delta x: 33.5 mm,	stiffness: 200.6 delta F: 6883.	52 mN/mm, dia 68 mN/mm, m	meter: 10,4 m ax Force: 7083	m, height: 79 mm	5 mm
	Branch 2, Trial 3, delta x: 22.5 mm,	stiffness: 430.6 delta F: 9635.	57 mN/mm, dia 03 mN/mm, m	meter: 12.7 m ax Force: 9933	m, height: 67 mm	0 mm
	Branch 3, Trial 1, delta x: 21.0 mm,	stiffness: 452.5 delta F: 9600.	52 mN/mm, dia 02 mN/mm, m	meter: 13.7 m ax Force: 9898	m, height: 86 mm	0 mm
50 -	Branch 3, Trial 2, delta x: 12.0 mm,	stiffness: 791.2 delta F: 9509.	25 mN/mm, dia 41 mN/mm, m	meter: 18.2 m ax Force: 1000	m, height: 76 5 mm	5 mm
_	Branch 3, Trial 3, delta x: 8.0 mm,	stiffness: 1233 delta F: 9471.2	.56 mN/mm, d 6 mN/mm, ma	iameter: 20.8 r x Force: 9816 r	nm, height: 6 nm	55 mm
0 1	50	100	150	200	250	300

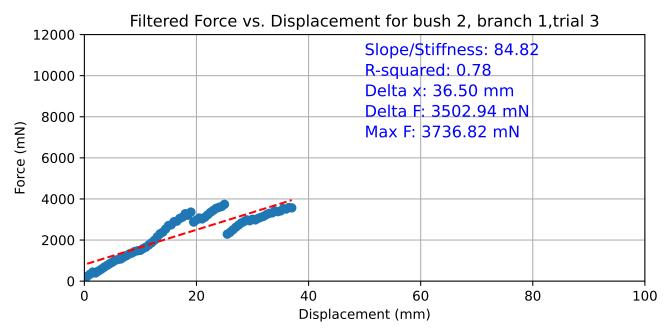
1.0					
0.8 -	delta x: 31.5 mr Branch 1, Trial 2 delta x: 23.5 mr	n, delta F: 566.4 :, stiffness: 30.14 n, delta F: 722.2	6 mN/mm, diame 3 mN/mm, max l 4 mN/mm, diame 6 mN/mm, max l	Force: 769 mm eter: 4.4 mm, he Force: 935 mm	ight: 800 mm
0.6 -	delta x: 32.0 mr Branch 2, Trial 1 delta x: 31.0 mr	n, delta F: 2855. ., stiffness: 122.9 n, delta F: 3764.	3 mN/mm, diame 89 mN/mm, max 97 mN/mm, diam 87 mN/mm, max	k Force: 3072 mr neter: 10.9 mm, k Force: 3980 mr	n height: 885 mm n
0.4 -	delta x: 33.5 mr Branch 2, Trial 3 delta x: 22.5 mr	n, delta F: 6883. , stiffness: 430.6 n, delta F: 9635.	52 mN/mm, diam 68 mN/mm, max 57 mN/mm, diam 03 mN/mm, max	r Force: 7083 mr neter: 12.7 mm, r Force: 9933 mr	n height: 670 mm n
0.2 -	delta x: 21.0 mr Branch 3, Trial 2 delta x: 12.0 mr Branch 3, Trial 3	n, delta F: 9600. , stiffness: 791.2 n, delta F: 9509. , stiffness: 1233	52 mN/mm, diam 02 mN/mm, max 25 mN/mm, diam 41 mN/mm, max .56 mN/mm, diai 6 mN/mm, max l	(Force: 9898 mr neter: 18.2 mm, (Force: 10005 m meter: 20.8 mm	n height: 765 mm nm , height: 655 mm
0.0	0.2	· 		1	
0.0	0.2	0.4	0.6	0.8	1.0







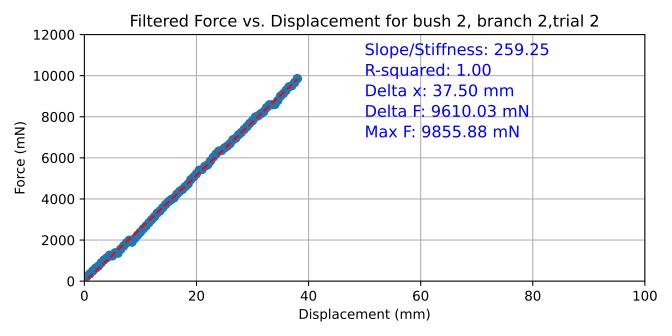








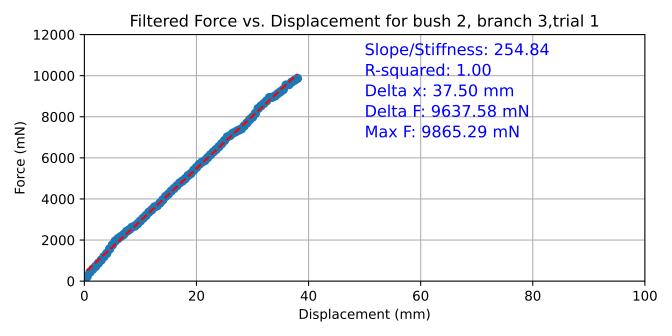




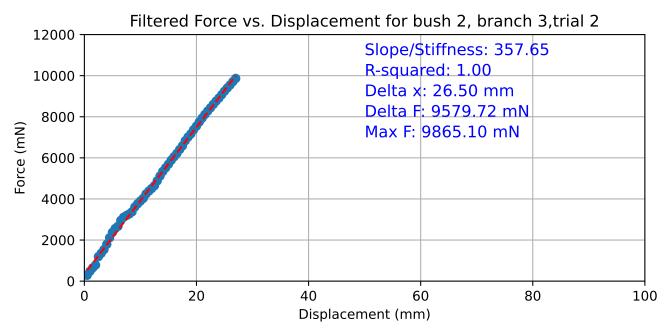


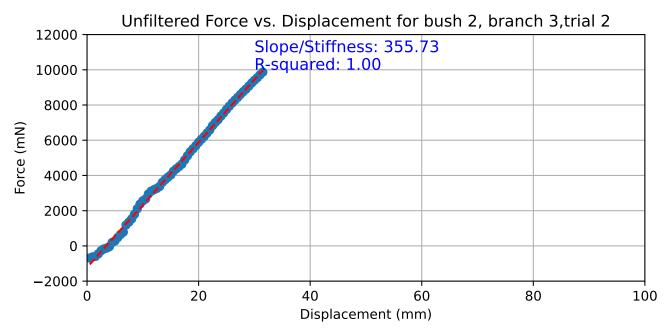


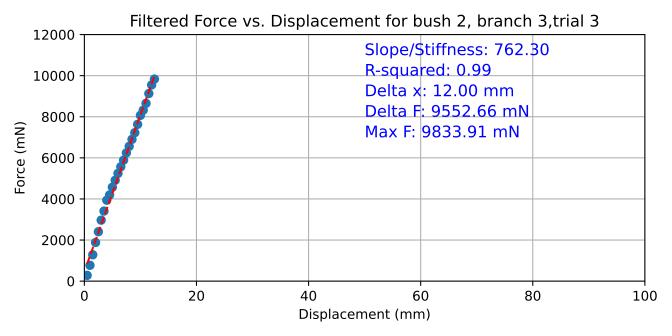






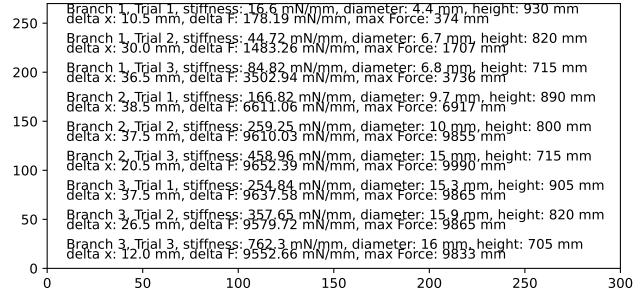


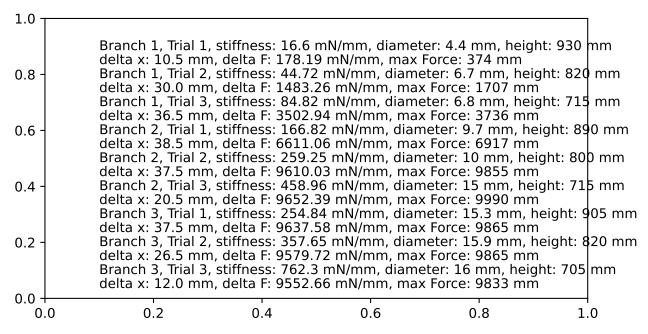


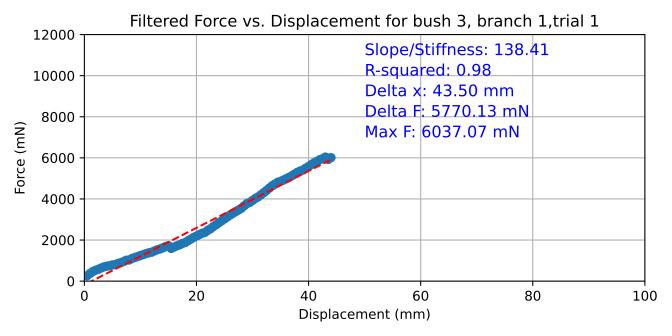




Bush 2 data

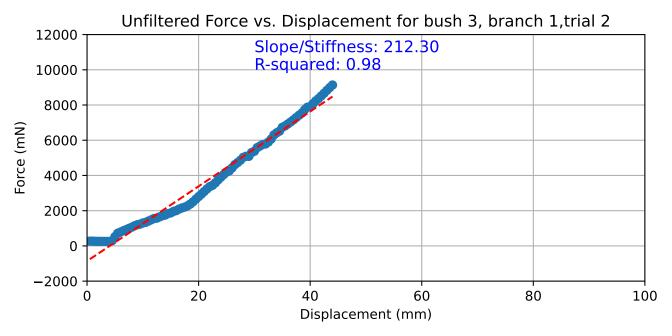


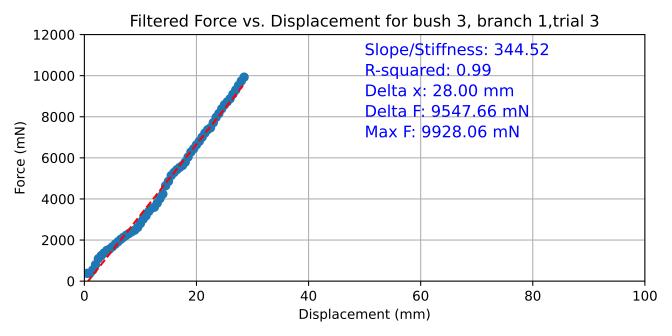




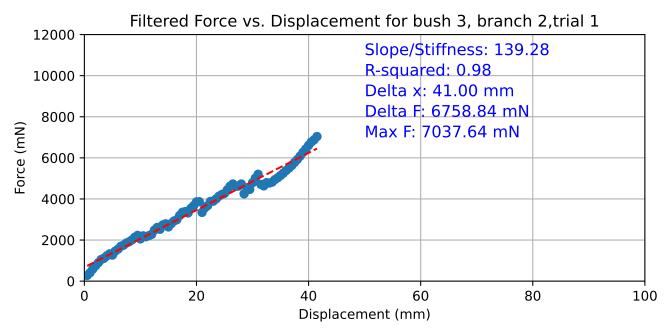


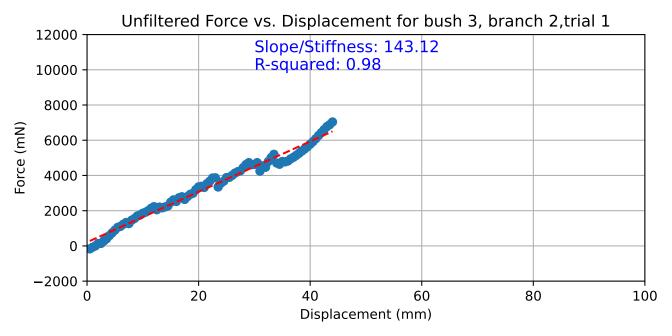


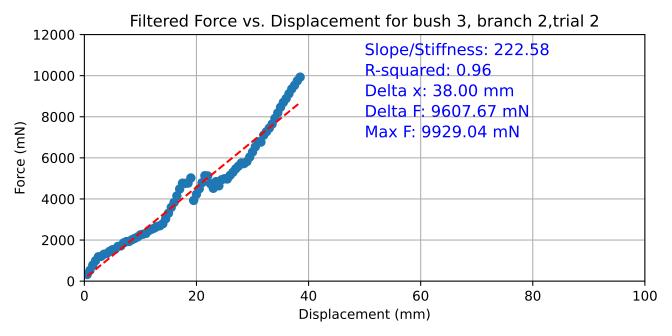


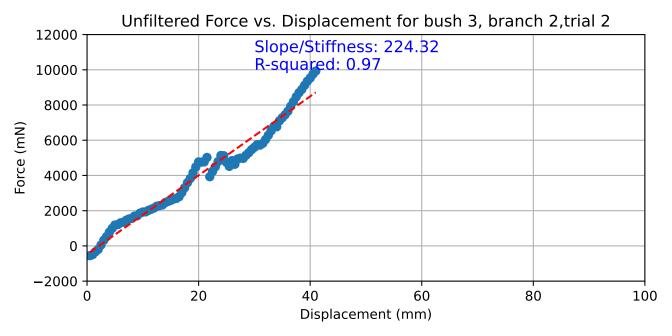




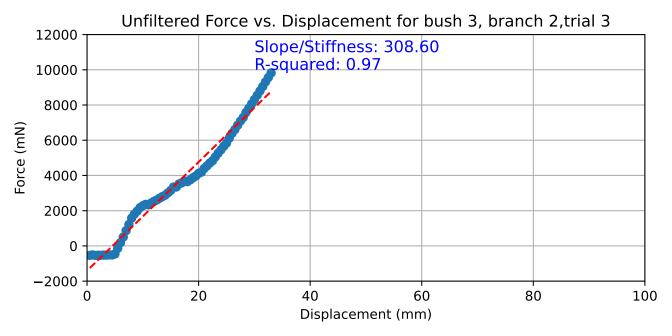




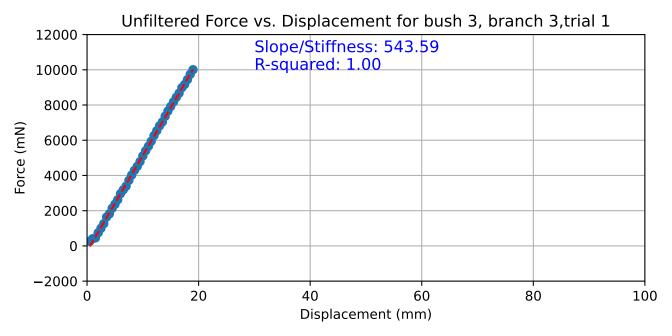






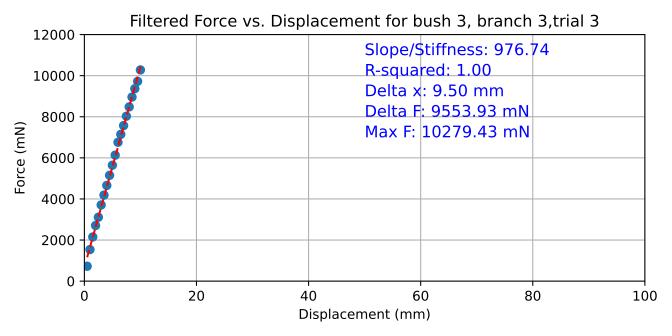






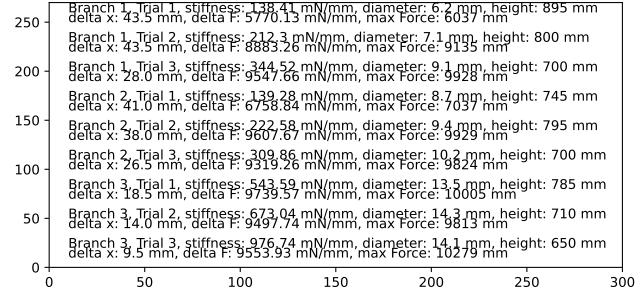


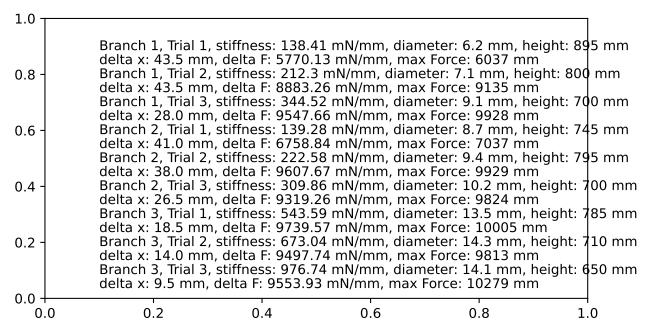


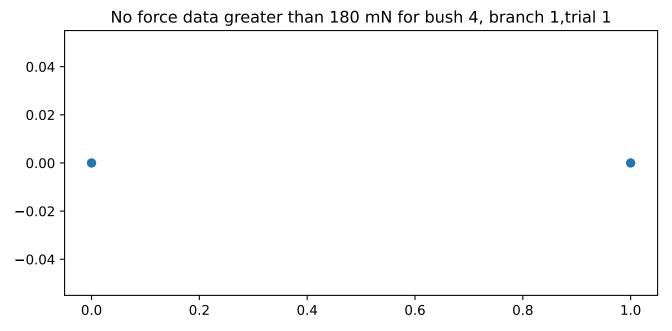




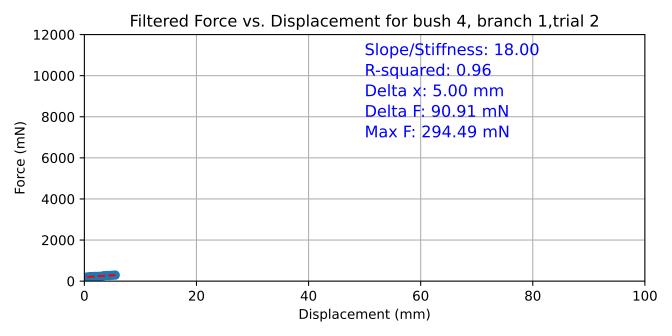
Bush 3 data



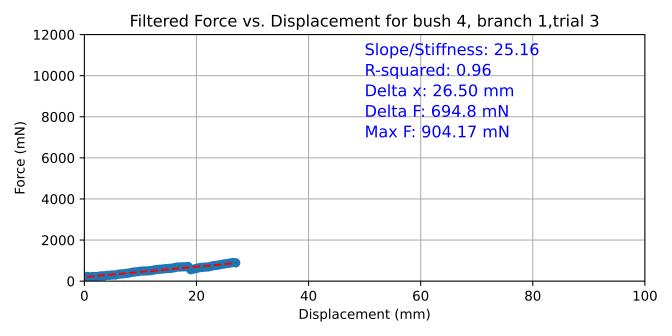




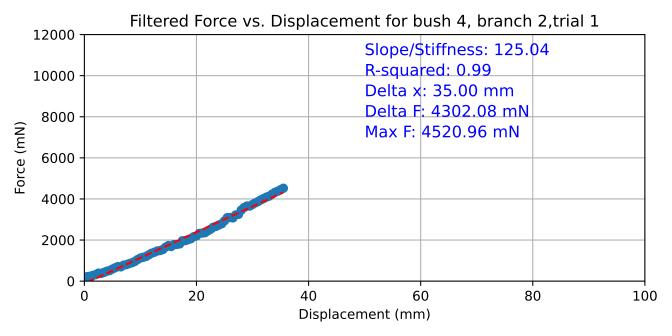


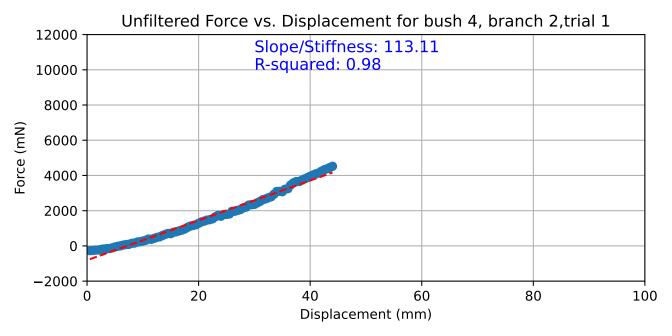


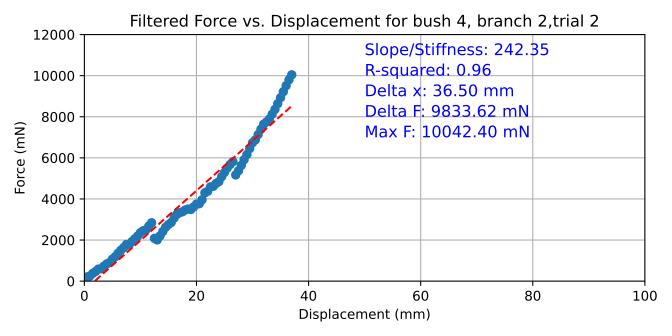




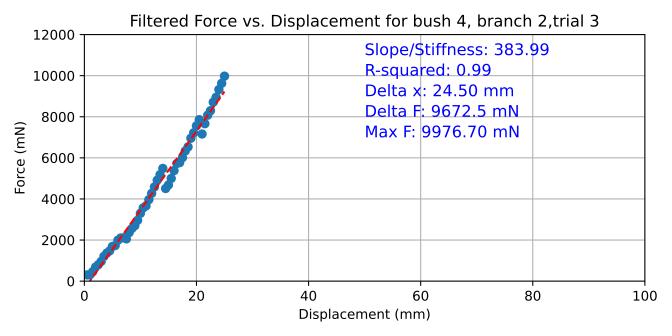


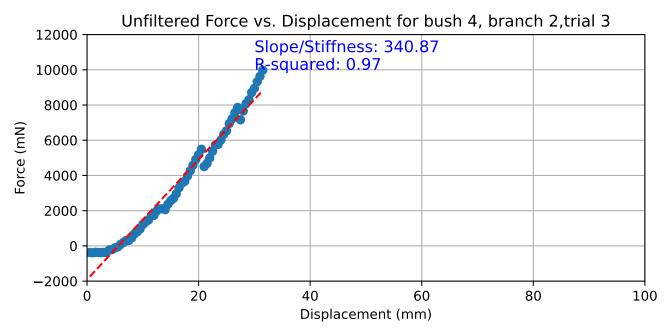


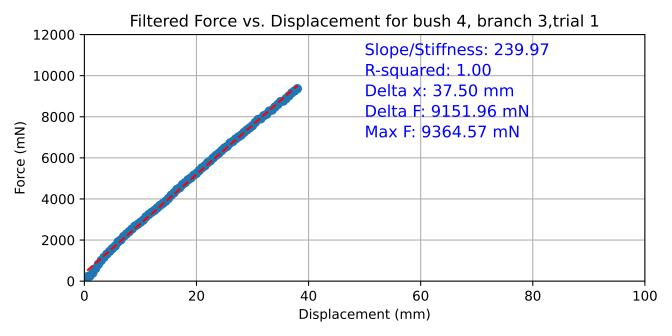




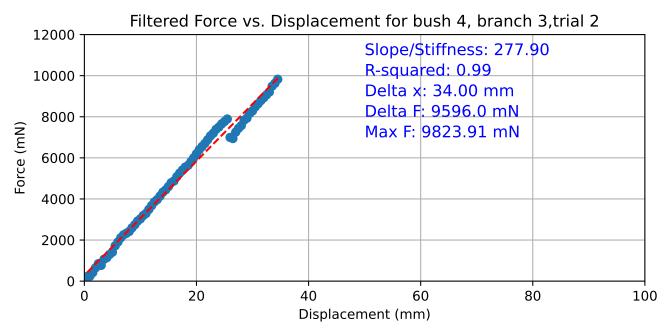




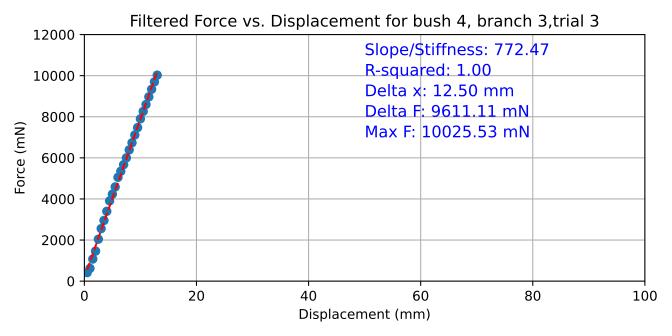






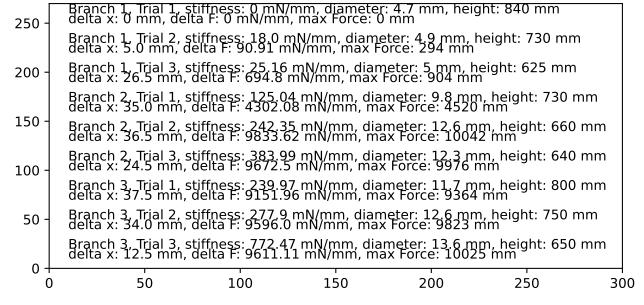


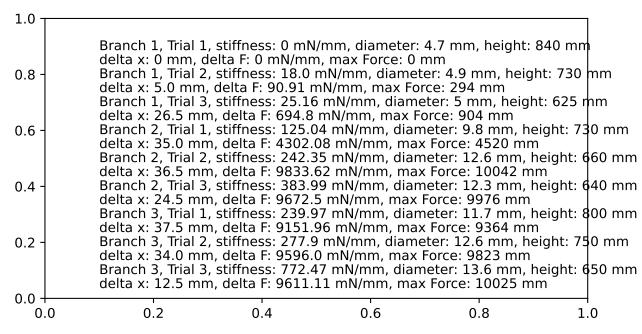


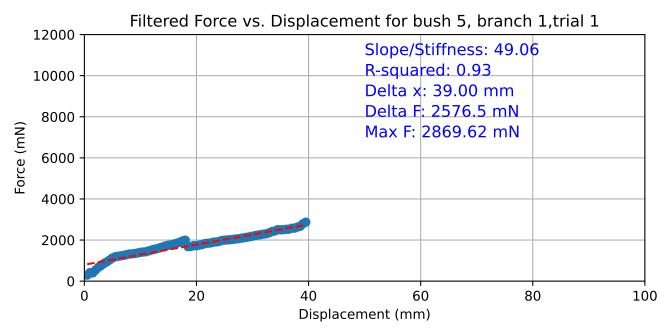




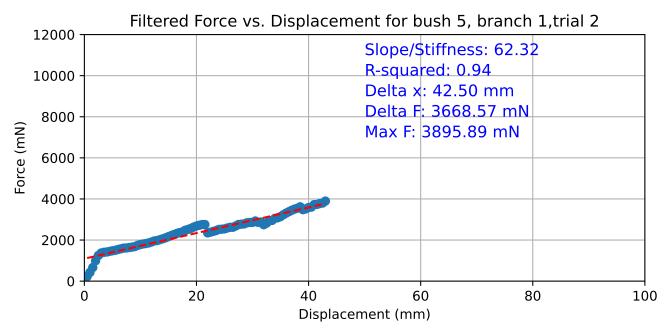
Bush 4 data

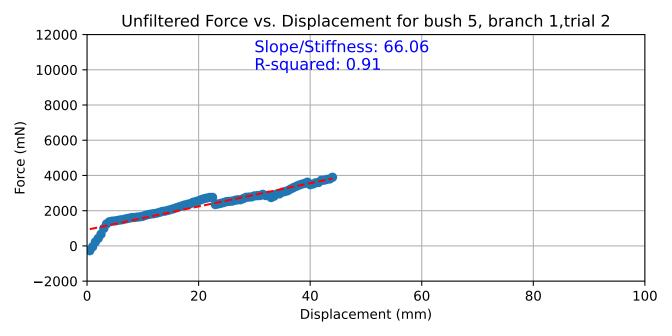


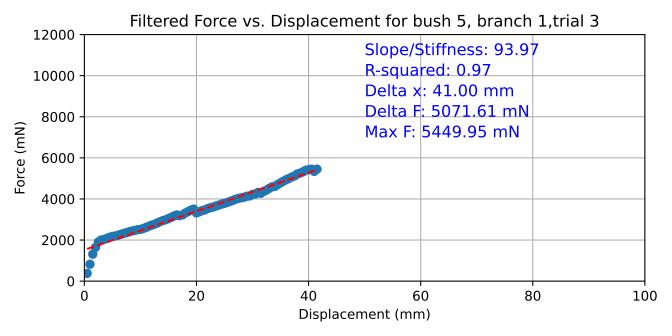


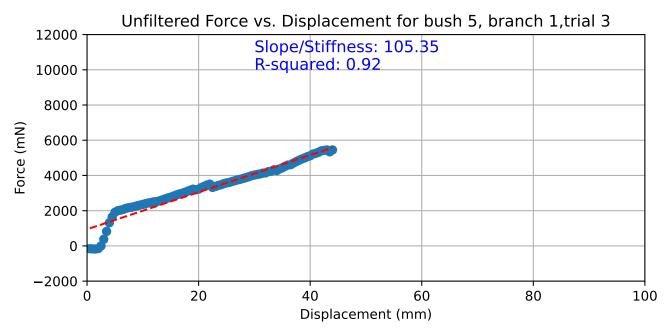


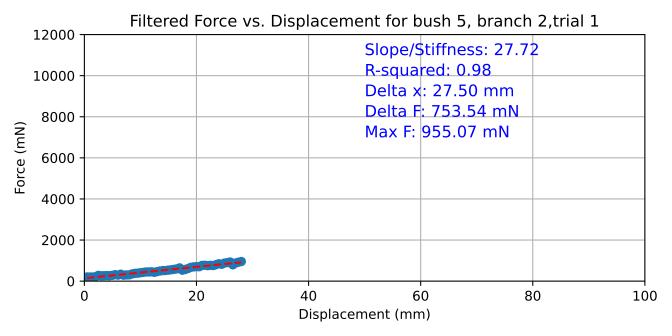




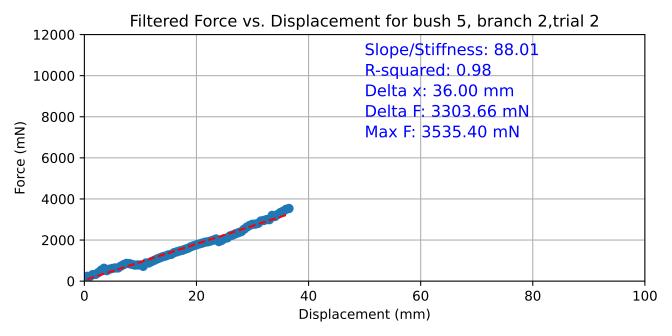


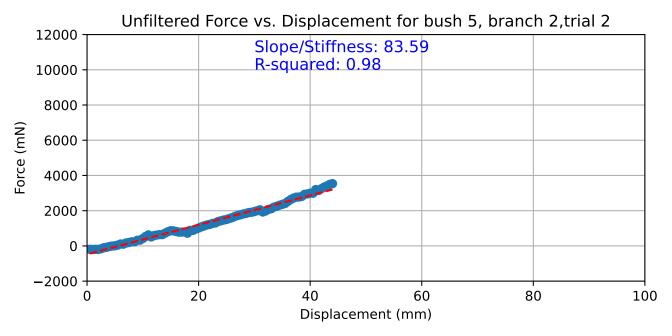


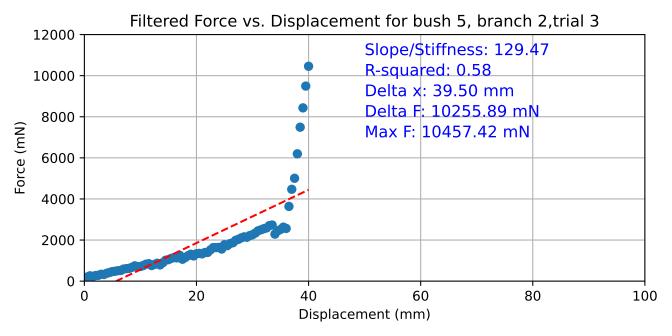


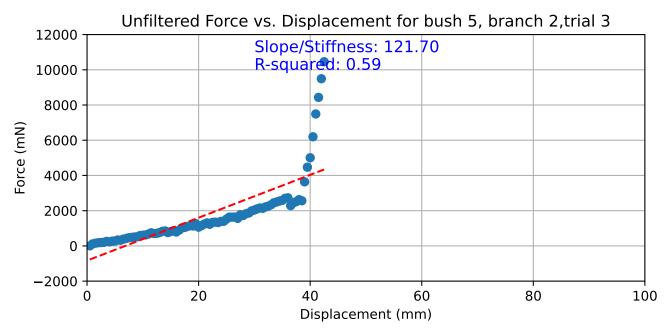


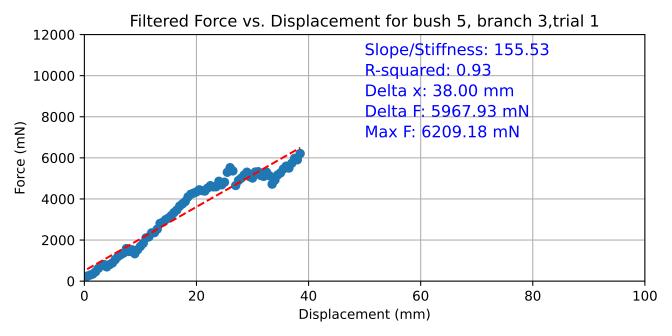


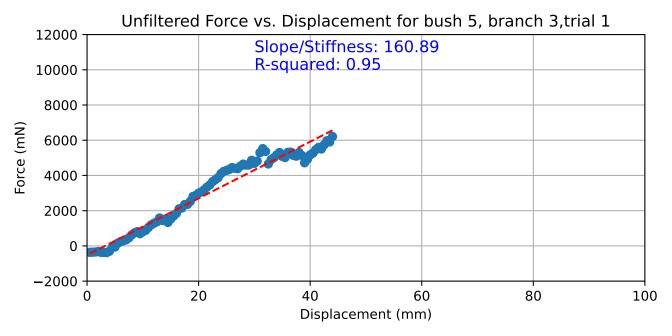


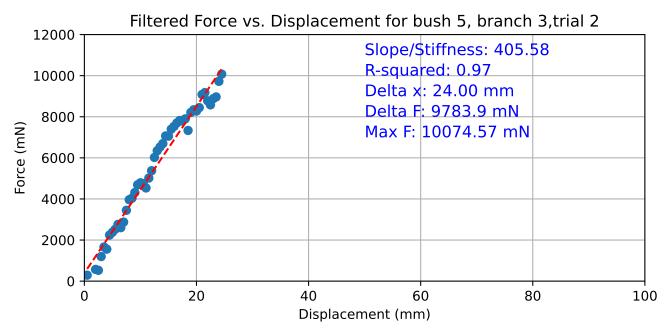


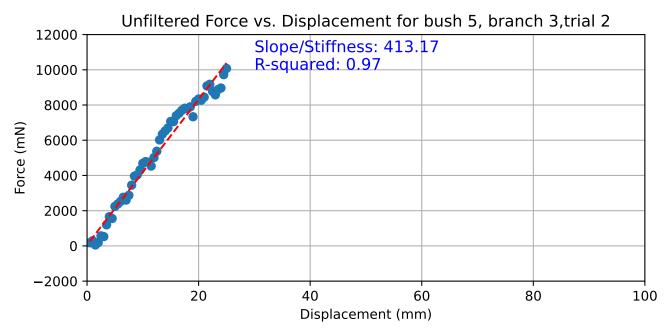


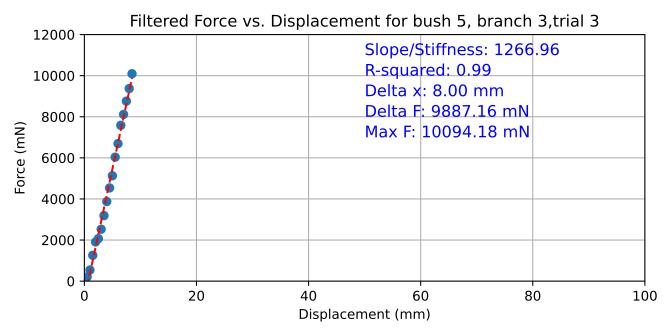


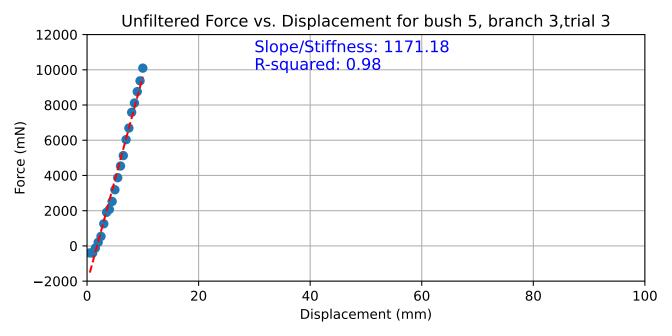








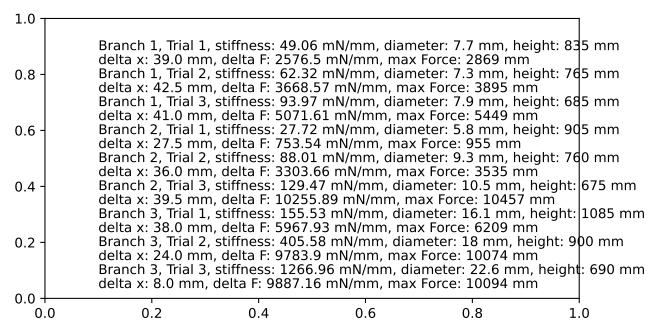


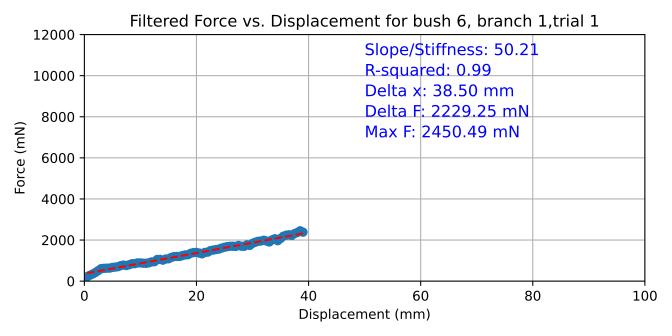


Bush 5 data

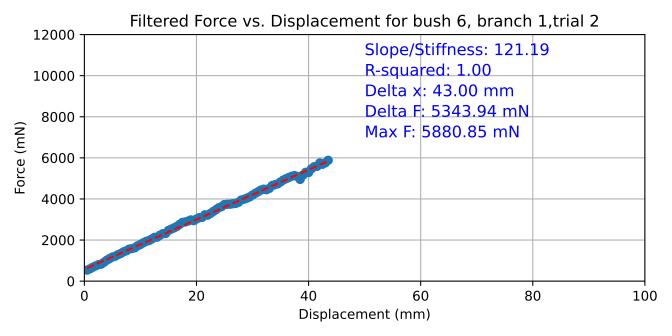
Branch 1, Trial 1, stiffness: 49,06 mN/mm, diameter: 7.7 mm, height: 835 mm

250 -	delta x: 39.0 mm,	delta F: 2576.	5 mN/mm, ma	x Force: 2869 i	mm ³	
	Branch 1. Trial 2, s delta x: 42.5 mm,	stiffness: 62.32 delta F: 3668.	2 mN/mm, diar 57 mN/mm, m	neter: 7.3 mm. ax Force: 3895	height: 765 r mm	mm
200 -	Branch 1, Trial 3, s delta x: 41.0 mm,	stiffness: 93,97 delta F: 5071.	7 mN/mm, diar 61 mN/mm, m	neter: 7.9 mm ax Force: 5449	height: 685 r mm	mm
	Branch 2, Trial 1, s delta x: 27.5 mm,	stiffness: 27.72 delta F: 753.5	2 mN/mm, diar 4 mN/mm, ma	neter: 5.8 mm, x Force: 955 m	, height: 905 r im	mm
150 -	Branch 2, Trial 2, s delta x: 36.0 mm,	stiffness: 88.01 delta F: 3303.	L mN/mm, diar 66 mN/mm, m	neter: 9.3 mm ax Force: 3535	height: 760 r mm	mm
	Branch 2, Trial 3, s delta x: 39.5 mm,	stiffness: 129.4 delta F: 10255	17 mN/mm, dia 5.89 mN/mm, r	meter: 10.5 m nax Force: 104	m, height: 67 57 mm	5 mm
	Branch 3, Trial 1, s delta x: 38.0 mm,	stiffness: 155.5 delta F: 5967.	53 mN/mm, dia 93 mN/mm, m	meter: 16.1 m ax Force: 6209	m, height: 10 mm	85 mm
50 -	Branch 3, Trial 2, s delta x: 24.0 mm,	stiffness: 405.5 delta F: 9783.	58 mN/mm, dia 9 mN/mm, ma	meter: 18 mm x Force: 10074	, height: 900 mm	mm
	Branch 3, Trial 3, s delta x: 8.0 mm, c	iameter: 22.6 j x Force: 10094	mm, height: 6 . mm	90 mm		
0 1	50	100	150	200	250	300

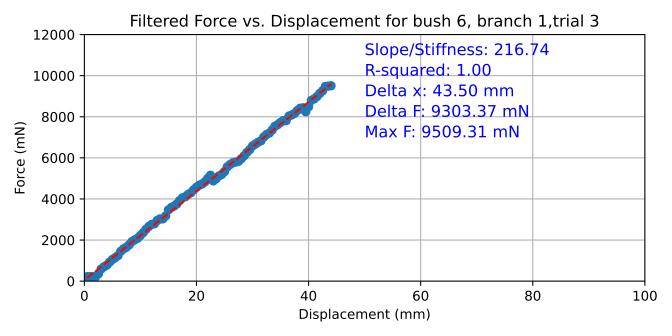


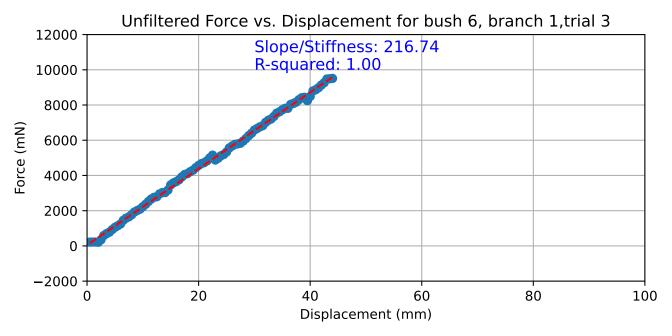


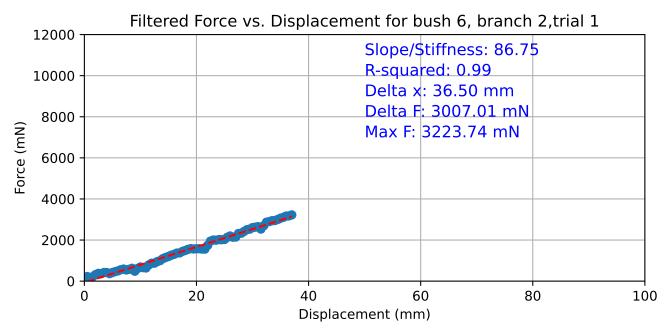


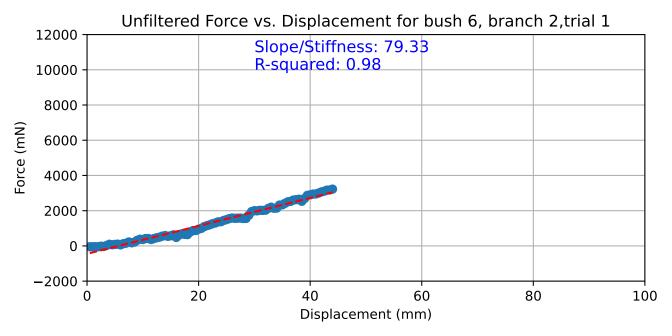


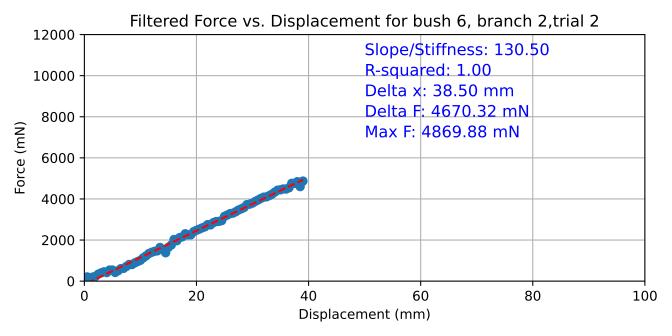








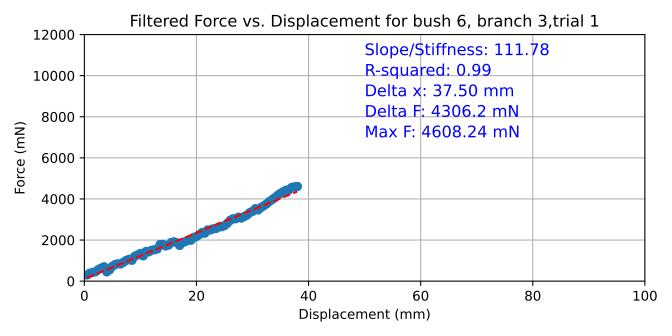


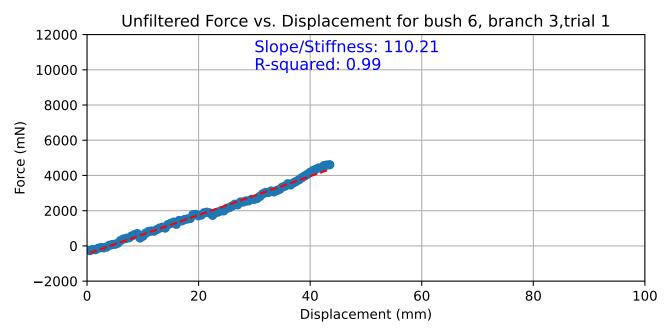


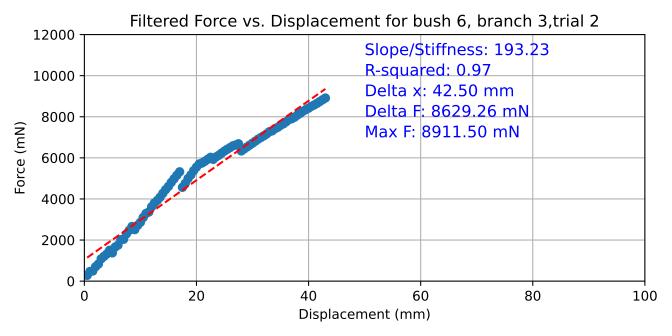


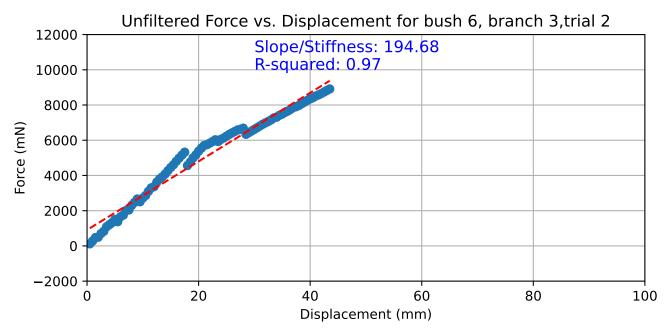












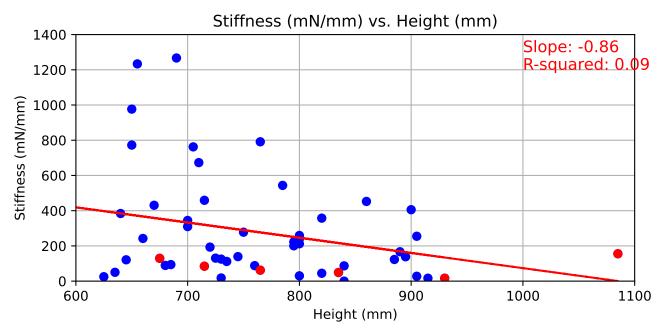


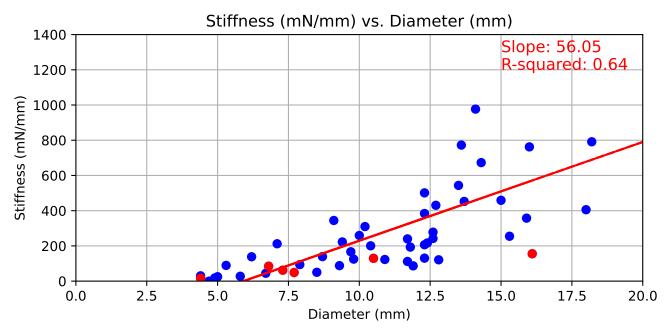


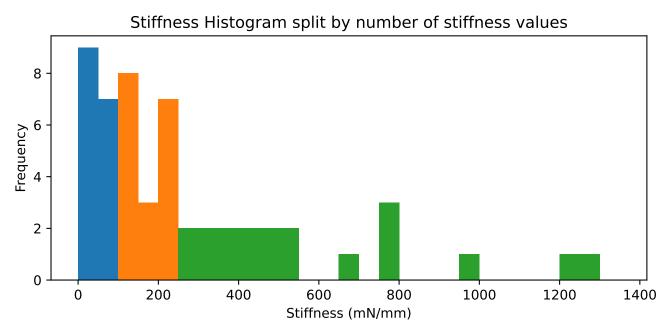
Bush 6 data

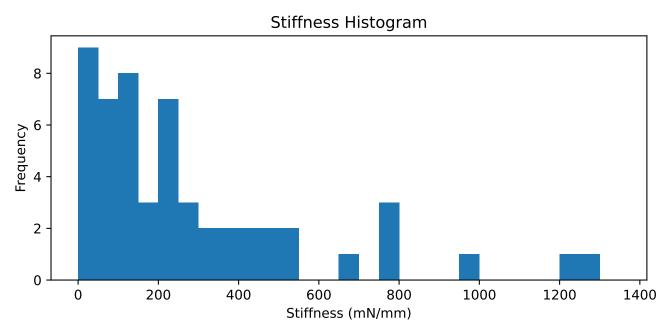
250 -	Branch 1, Trial 1, s delta x: 38.5 mm,					
	Branch 1, Trial 2, s delta x: 43.0 mm,	tiffness: 121.1 delta F: 5343.9	9 mN/mm, dia 94 mN/mm, m	ameter: 12.8 mm lax Force: 5880 n	, height: 645 im	mm
200 -	Branch 1, Trial 3, s delta x: 43.5 mm,	tiffness: 216.7 delta F: 9303.3	4 mN/mm, dia 37 mN/mm, m	ameter: 12.4 mm lax Force: 9509 m	, height: 560 im	mm
	Branch 2, Trial 1, s delta x: 36.5 mm,	tiffness: 86.75 delta F: 3007.0	mN/mm, diar 01 mN/mm, m	meter: 11.9 mm, lax Force: 3223 n	height: 840 n nm	nm
150 -	Branch 2, Trial 2, s delta x: 38.5 mm,	tiffness: 130.5 delta F: 4670.:	mN/mm, diar 32 mN/mm, m	meter: 12.3 mm, lax Force: 4869 n	height: 725 n nm	nm
	Branch 2, Trial 3, s delta x: 40.5 mm,	tiffness: 206.4 delta F: 8288.0	1 mN/mm, dia 09 mN/mm, m	ameter: 12.3 mm lax Force: 8603 m	, height: 590 im	mm
	Branch 3, Trial 1, s delta x: 37.5 mm,	tiffness: 111.7 delta F: 4306.2	8 mN/mm, dia 2 mN/mm, ma	ameter: 11.7 mm ix Force: 4608 mr	, height: 735 n	mm
50 -	Branch 3, Trial 2, s delta x: 42.5 mm,	tiffness: 193.2 delta F: 8629.2	3 mN/mm, dia 26 mN/mm, m	ameter: 11.8 mm lax Force: 8911 m	, height: 720 im	mm
	Branch 3, Trial 3, s delta x: 20.0 mm,	tiffness: 501.1 delta F: 9684.:	4 mN/mm, dia 36 mN/mm, m	ameter: 12.3 mm lax Force: 9903 m	, height: 595 im	mm
0 +	50	100	150	200	250	——— 300
_				_	_	

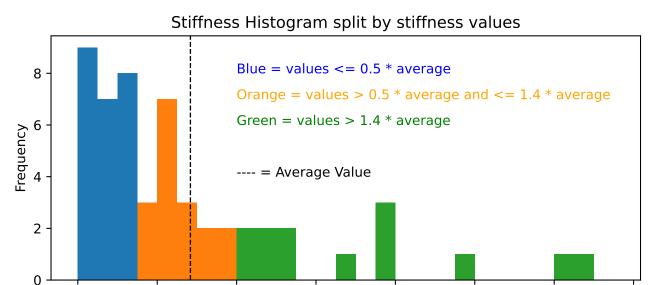
Branch 1, Trial 1, stiffness: 50.21 mN/mm, diameter: 8.5 mm, height: 635 mm delta x: 38.5 mm, delta F: 2229.25 mN/mm, max Force: 2450 mm 0.8 - Branch 1, Trial 2, stiffness: 121.19 mN/mm, diameter: 12.8 mm, height: 645 m delta x: 43.0 mm, delta F: 5343.94 mN/mm, max Force: 5880 mm Branch 1, Trial 3, stiffness: 216.74 mN/mm, diameter: 12.4 mm, height: 560 m delta x: 43.5 mm, delta F: 9303.37 mN/mm, max Force: 9509 mm 0.6 - Branch 2, Trial 1, stiffness: 86.75 mN/mm, diameter: 11.9 mm, height: 840 mm delta x: 36.5 mm, delta F: 3007.01 mN/mm, max Force: 3223 mm	
delta x: 43.0 mm, delta F: 5343.94 mN/mm, max Force: 5880 mm Branch 1, Trial 3, stiffness: 216.74 mN/mm, diameter: 12.4 mm, height: 560 m delta x: 43.5 mm, delta F: 9303.37 mN/mm, max Force: 9509 mm 0.6 - Branch 2, Trial 1, stiffness: 86.75 mN/mm, diameter: 11.9 mm, height: 840 mm	m
delta x: 43.5 mm, delta F: 9303.37 mN/mm, max Force: 9509 mm 0.6 - Branch 2, Trial 1, stiffness: 86.75 mN/mm, diameter: 11.9 mm, height: 840 mn	
	• • •
delta x: 36.5 mm, delta F: 3007.01 mN/mm, max Force: 3223 mm	1
Branch 2, Trial 2, stiffness: 130.5 mN/mm, diameter: 12.3 mm, height: 725 mn	1
delta x: 38.5 mm, delta F: 4670.32 mN/mm, max Force: 4869 mm	•
0.4 - Branch 2, Trial 3, stiffness: 206.41 mN/mm, diameter: 12.3 mm, height: 590 m	m
delta x: 40.5 mm, delta F: 8288.09 mN/mm, max Force: 8603 mm Branch 3, Trial 1, stiffness: 111.78 mN/mm, diameter: 11.7 mm, height: 735 m	m
delta x: 37.5 mm, delta F: 4306.2 mN/mm, max Force: 4608 mm	
0.2 - Branch 3, Trial 2, stiffness: 193.23 mN/mm, diameter: 11.8 mm, height: 1/20 m	m
delta x: 42.5 mm, delta F: 8629.26 mN/mm, max Force: 8911 mm	
Branch 3, Trial 3, stiffness: 501.14 mN/mm, diameter: 12.3 mm, height: 595 m delta x: 20.0 mm, delta F: 9684.36 mN/mm, max Force: 9903 mm	m
0.0	
0.0 0.2 0.4 0.6 0.8 1.0	



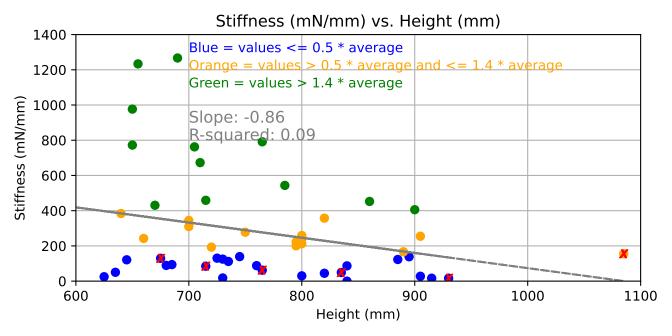


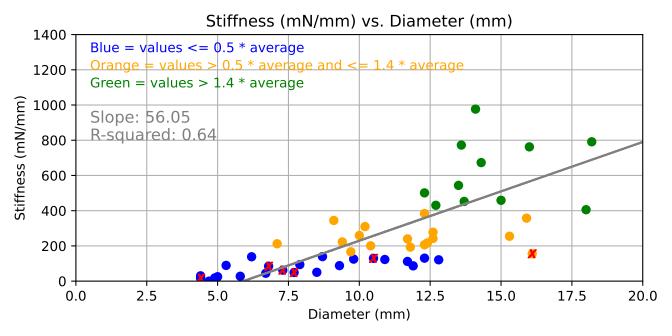


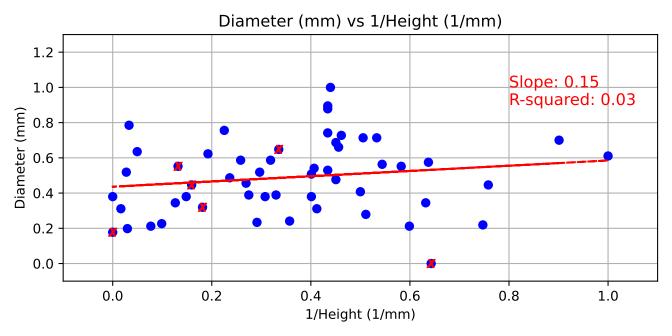




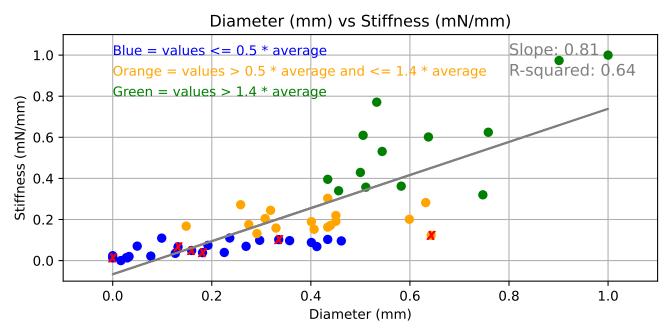
Stiffness (mN/mm)







Diameter (mm) vs 1/Height (1/mm) Blue = values \leq 0.5 * average 1.2 Orange = values > 0.5 * average and <= 1.4 * average Green = values > 1.4 * average 1.0 Diameter (mm) 8.0 0.6 0.4 0.2 0.0 0.0 0.2 0.8 1.0 0.4 0.6 1/Height (1/mm)



1/Height (1/mm) vs Stiffness (mN/mm) Slope: 0.33 Blue = values \leq 0.5 * average 1.0 R-squared: 0.09 Orange = values > 0.5 * average and <= 1.4 * average Stiffness (mN/mm) 0.0 0.4 0.7 Green = values > 1.4 * average 0.4 0.0 0.0 0.2 0.8 1.0 0.4 0.6 1/Height (1/mm)