

LAMPIRAN 1

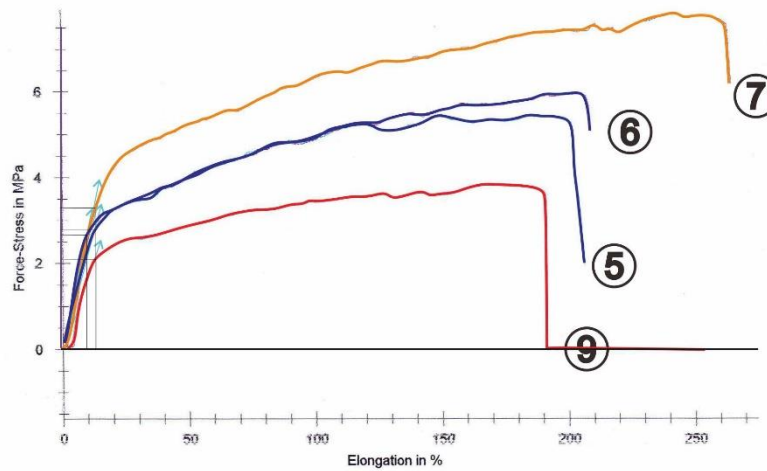
Parameter table:

Heading :
 Company name : 844/PS/08/17
 Customer : Angga Ardinista
 Test speed : 10 mm/min

Tester : Rachmat
 Test standard : Tensile strength
 Material : PVA+Curcuma Mangga 0%

Results:

Nr	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
5	0,0594	10	20	3,5452	5,9683	204,4507
6	0,0594	10	20	3,2439	5,4612	150,0747
7	0,0594	10	20	4,6373	7,8070	242,3806
9	0,0594	10	20	2,2892	3,8538	174,1242

Series graphics:**Statistics:**

Series n = 4	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
x	0,0594	10	20	3,4289	5,7725	192,7575
s	0,000	0,000	0,000	0,9673	1,6285	39,8673
v	0,00	0,00	0,00	28,21	28,21	20,68

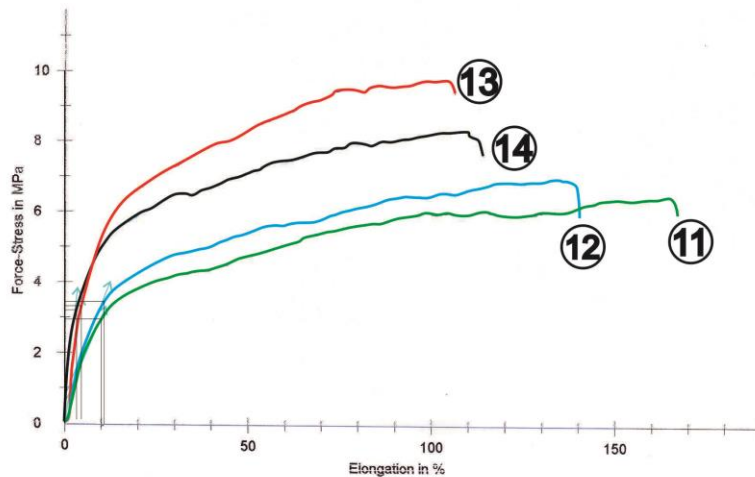
Parameter table:

Heading :
 Company name : 844/PS/08/17
 Customer : Angga Ardinista
 Test speed: 10 mm/min

Tester : Rachmat
 Test standard : Tensile strength
 Material : PVA+Curcuma Mangga 2%

Results:

Nr	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
11	0,04641	10	20	3,0140	6,4944	164,1929
12	0,04641	10	20	3,2457	6,9935	133,9933
13	0,04641	10	20	4,5387	9,7795	103,9297
14	0,04641	10	20	3,8693	8,3372	109,5382

Series graphics:**Statistics:**

Series n = 4	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
\bar{x}	0,04641	10	20	3,6669	7,9012	127,9135
s	0,000	0,000	0,000	0,6843	1,4744	27,4835
v	0,00	0,00	0,00	18,66	18,66	21,49

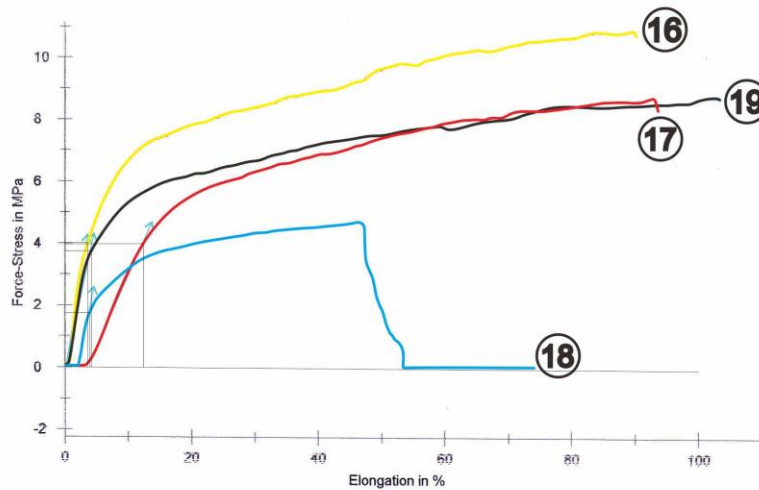
Parameter table:

Heading :
 Company name : 844/PS/08/17
 Customer : Angga Ardinista
 Test speed : 10 mm/min
 Tester : Rachmat
 Test standard : Tensile strength
 Material : PVA+Curcuma Mangga 5%

Results:

Nr	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
16	0,05029	10	20	5,4644	10,8658	89,3470
17	0,05029	10	20	4,4066	8,7623	92,8542
18	0,05029	10	20	2,3728	4,7183	46,2821
19	0,05029	10	20	4,3969	8,7430	102,1443

Series graphics:



Statistics:

Series n = 4	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
x	0,05029	10	20	4,1602	8,2724	82,6569
s	0,000	0,000	0,000	1,2926	2,5703	24,8437
v	0,00	0,00	0,00	31,07	31,07	30,06

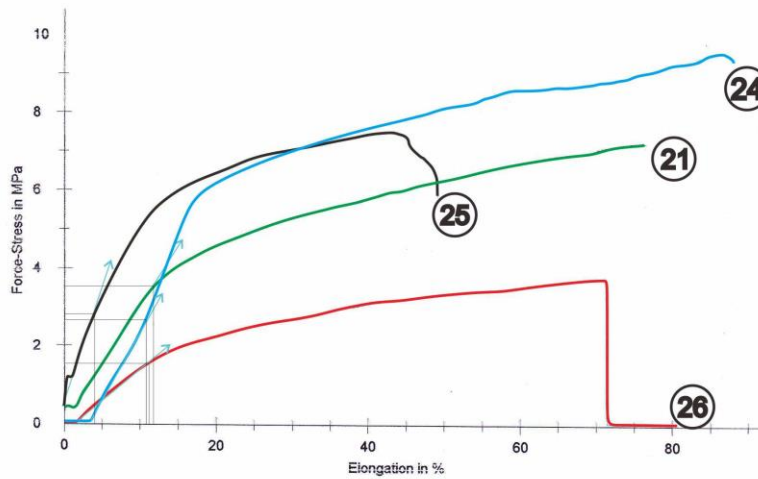
Parameter table:

Heading :
 Company name: 844/PS/08/17
 Customer : Angga Ardinista
 Test speed: 10 mm/min
 Tester : Rachmat
 Test standard : Tensile strength
 Material : PVA+Curcuma Mangga 10%

Results:

Nr	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
21	0,06269	10	20	4,5484	7,2553	76,1146
24	0,06269	10	20	6,0025	9,5750	86,6294
25	0,06269	10	20	4,7069	7,5082	42,6118
26	0,06269	10	20	2,3455	3,7415	70,7157

Series graphics:



Statistics:

Series n = 4	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
\bar{x}	0,06269	10	20	4,4008	7,0200	69,0179
s	0,000	0,000	0,000	1,5171	2,4201	18,8033
v	0,00	0,00	0,00	34,47	34,47	27,24

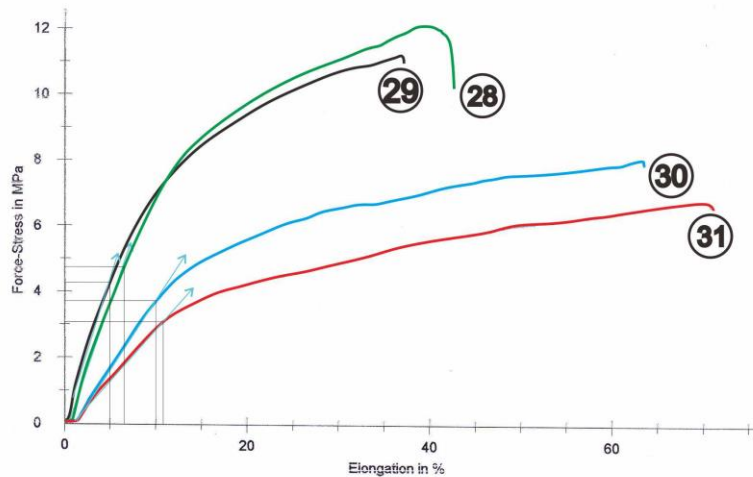
Parameter table:

Heading :
 Company name: 844/PS/08/17
 Customer : Angga Ardinista
 Test speed: 10 mm/min

Tester : Rachmat
 Test standard : Tensile strength
 Material : PVA+Curcuma Mangga 15%

Results:

Nr	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
28	0,05212	10	20	6,3187	12,1235	39,3516
29	0,05212	10	20	5,8405	11,2058	36,8129
30	0,05212	10	20	4,1978	8,0541	63,2108
31	0,05212	10	20	3,5478	6,8070	69,6622

Series graphics:**Statistics:**

Series n = 4	a0 mm	b0 mm	Lc mm	FMax N	Tensile Strength MPa	Strain at Fmax. %
\bar{x}	0,05212	10	20	4,9762	9,5476	52,2594
s	0,000	0,000	0,000	1,3160	2,5250	16,6132
v	0,00	0,00	0,00	26,45	26,45	31,79

A. Tabulasi data pengujian tarik

Sampel	Tensile Strenght (Mpa)				
	(A) 0%	(B) 2%	(C) 5%	(D) 10%	(E) 15%
1	5,9683	6,4944	10,8658	7,2553	12,1235
2	5,4612	6,9935	8,7623	9,575	11,2058
3	7,807	9,7795	4,7183	7,5082	8,0541
4	3,8538	8,3372	8,743	3,7415	6,807
Rata-rata	7,6968	10,5349	11,0298	9,3600	12,7301
s	1,6285	1,4743	2,5703	2,4201	2,5250

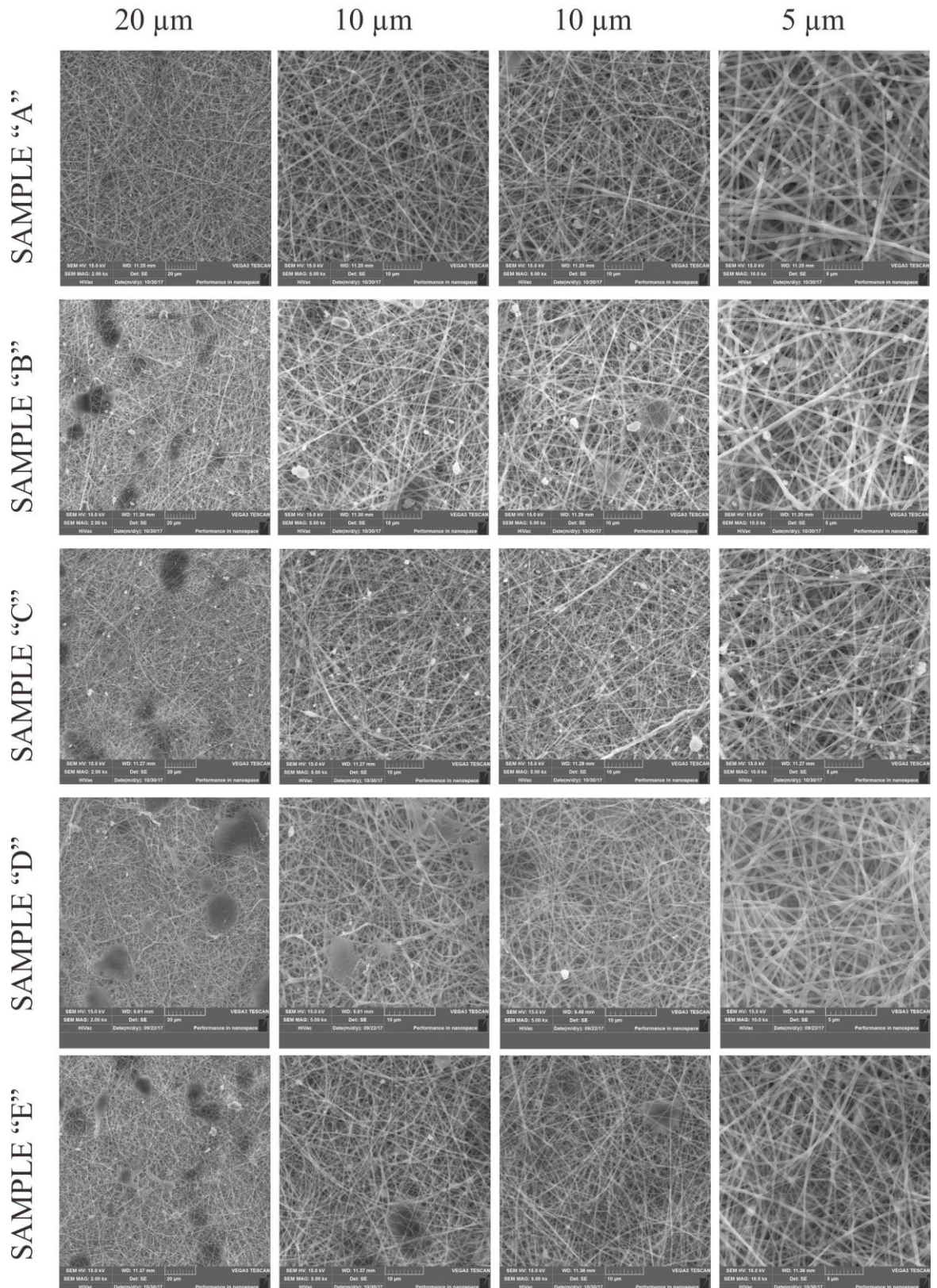
Sampel	Strain at Fmax				
	(A) 0%	(B) 2%	(C) 5%	(D) 10%	(E) 15%
1	204,451	164,193	89,347	76,115	39,352
2	150,075	133,993	92,854	86,629	36,813
3	242,381	103,930	46,282	42,612	63,211
4	174,124	109,538	102,144	70,716	69,662
Rata-rata	192,758	127,914	82,657	69,018	52,259
s	39,867	27,484	24,844	18,803	16,613

Sampel	F Max (N)				
	(A) 0%	(B) 2%	(C) 5%	(D) 10%	(E) 15%
1	3,5452	3,014	5,464	4,548	6,319
2	3,2439	3,246	4,407	6,003	5,841
3	4,6373	4,539	2,373	4,707	4,198
4	2,2892	3,869	4,397	2,346	3,548
Rata-rata	3,429	3,667	4,160	4,401	4,976
s	0,967	0,684	1,293	1,517	1,316

LAMPIRAN 2

LAMPIRAN 2

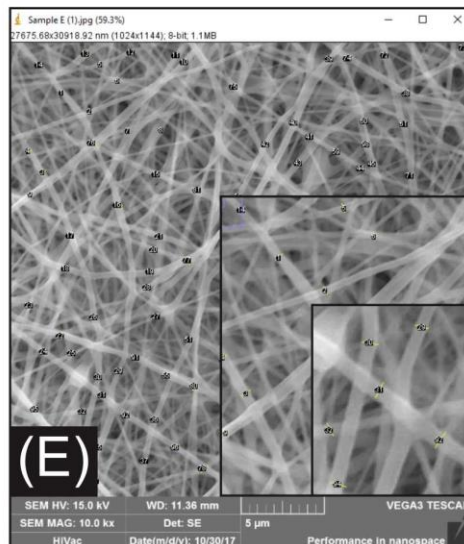
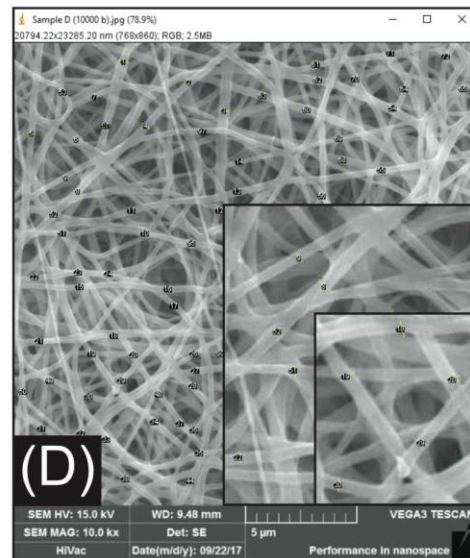
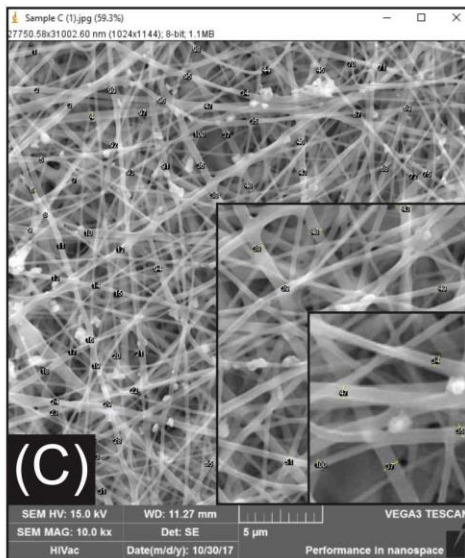
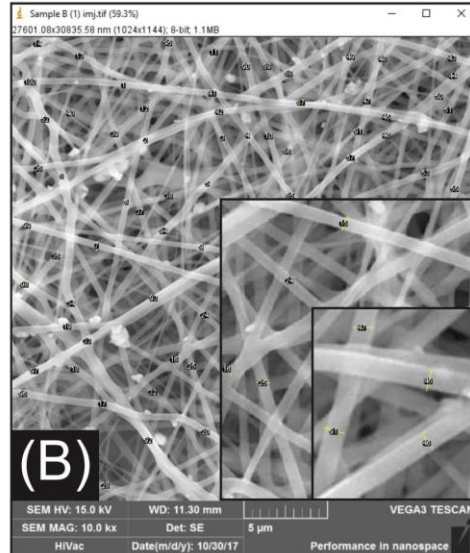
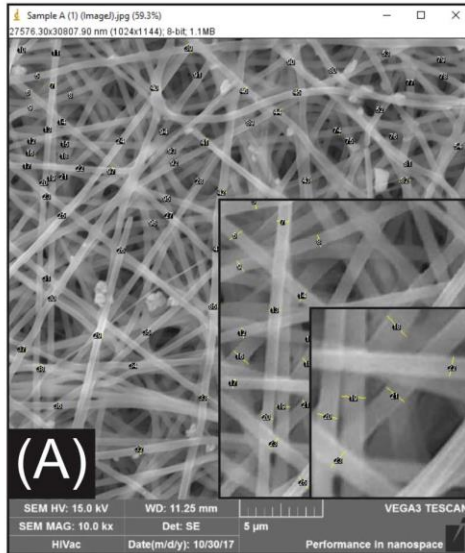
A. Hasil SEM Sample PVA & Curcuma Mangga Val



LAMPIRAN 3

LAMPIRAN 3

A. Hasil pengukuran distribusi diameter menggunakan ImageJ



A. Tabel hasil pengukuran diameter serat nano

No	A (0%)	B (2%)	C (5%)	D (10%)	E(15%)
1	619.536	378.320	315.523	496.636	274.044
2	508.114	388.739	379.402	319.347	251.190
3	403.950	337.735	294.106	460.200	251.190
4	465.749	248.505	546.800	375.607	158.866
5	361.415	421.038	276.369	329.391	251.190
6	424.100	404.313	333.135	258.444	223.297
7	456.833	539.084	204.402	250.766	290.667
8	380.009	491.868	260.563	344.855	166.436
9	350.298	404.313	253.579	270.758	268.369
10	356.648	426.183	347.521	273.154	212.165
11	322.584	463.737	307.666	315.239	166.436
12	437.790	307.325	401.148	266.513	166.436
13	294.608	411.438	268.582	276.120	160.073
14	335.184	366.616	258.677	217.357	131.579
15	338.771	460.593	235.562	235.350	424.329
16	340.719	411.438	217.553	216.606	189.766
17	584.951	438.782	358.615	250.766	284.649
18	287.188	501.377	333.135	297.697	184.211
19	488.434	407.891	275.777	310.553	200.415
20	418.361	446.171	199.554	266.513	210.526
21	358.820	340.946	241.041	201.811	242.620
22	398.275	307.325	228.529	255.273	259.180
23	348.155	325.689	166.567	235.350	332.871
24	381.822	324.571	241.041	198.556	217.006
25	463.321	377.358	250.992	235.350	249.653
26	458.601	412.320	435.106	266.513	186.081
27	545.291	419.501	211.466	285.404	153.446
28	514.497	398.987	302.854	170.288	166.436
29	458.601	361.182	347.521	242.173	212.165
30	570.636	343.306	199.554	234.657	176.532
31	534.545	395.736	347.052	274.938	294.219
32	411.068	394.101	319.634	170.288	242.620
33	541.286	478.474	235.562	300.421	316.884
34	485.487	453.528	266.753	251.415	205.533
35	407.525	460.243	325.704	258.444	248.263
36	420.660	361.182	325.704	220.335	294.219

37	380.847	335.697	390.844	280.801	372.161
38	541.955	325.441	461.676	260.329	268.369
39	464.884	340.946	256.777	180.505	134.185
40	562.028	249.640	365.824	210.504	217.006
41	574.506	379.066	401.148	281.958	191.582
42	498.831	323.949	300.691	180.505	238.300
43	539.795	397.771	379.832	242.173	212.165
44	538.600	368.702	260.563	251.415	259.180
45	533.791	387.907	220.533	235.350	131.579
46	488.383	348.904	415.929	293.842	260.513
47	530.155	323.450	325.202	285.404	176.532
48	575.627	331.340	446.217	268.341	259.180
49	436.823	363.854	228.529	282.536	294.219
50	538.600	292.521	382.828	216.606	274.745
51	472.278	319.937	276.369	235.350	357.933
52	340.640	476.872	186.009	275.530	166.436
53	451.429	377.786	451.670	242.845	263.158
54	479.475	392.459	342.793	262.820	186.081
55	533.186	363.410	251.641	252.708	217.006
56	511.670	377.786	325.704	296.051	248.263
57	451.429	348.904	217.553	204.219	279.741
58	495.102	348.904	245.735	306.859	248.263
59	323.160	370.450	210.693	350.478	242.620
60	396.602	321.447	199.554	332.836	141.715
61	443.414	366.506	235.562	344.855	205.533
62	398.628	334.251	307.666	331.855	178.913
63	401.448	345.182	282.212	315.239	196.146
64	533.791	401.809	426.391	218.106	126.511
65	318.134	380.766	241.041	325.411	214.150
66	361.304	440.527	299.058	276.120	188.953
67	474.321	343.306	245.735	210.504	300.303
68	457.722	353.044	282.790	342.485	249.345
69	394.156	375.213	253.579	252.708	200.031
70	463.321	384.143	162.601	296.051	238.622
71	419.125	339.047	145.659	306.859	255.442
72	457.722	348.904	307.666	310.553	246.240
73	528.023	355.777	457.414	235.350	188.953
74	596.796	385.820	242.391	270.758	267.220
75	437.192	379.066	260.563	228.323	183.163
76	444.141	339.047	210.693	234.657	188.953
77	428.254	377.358	325.704	199.375	196.146

78	466.786	334.251	399.108	251.415	298.761
79	414.485	254.126	217.553	331.855	192.982
80	361.304	413.688	280.472	282.536	241.547
81	380.847	325.441	325.704	344.855	298.310
82	458.777	335.697	472.853	266.513	158.987
83	668.143	331.340	194.585	191.880	197.807
84	535.599	281.266	217.553	308.448	271.257
85	403.451	319.937	396.235	315.239	158.442
86	503.974	348.904	472.853	217.357	215.806
87	407.030	361.182	217.553	234.657	171.558
88	394.156	453.528	251.641	191.880	200.847
89	378.726	250.286	435.106	342.485	229.793
90	398.628	337.615	275.185	339.139	212.165
91	425.611	375.213	237.631	163.455	320.145
92	438.296	482.840	245.735	234.657	342.105
93	418.283	467.206	180.668	342.960	242.620
94	420.660	470.306	263.056	244.058	308.018
95	460.574	384.143	333.288	188.075	329.736
96	417.415	364.878	260.641	249.627	263.158
97	332.561	386.160	366.103	245.182	236.842
98	365.792	464.715	184.301	299.674	153.446
99	486.420	423.189	271.340	180.618	153.446
100	458.601	333.405	224.294	244.058	94.883

Mean	446.872	376.261	294.672	267.729	228.218
SD	77397,68	57100,22	82545,38	56888,16	59271,4
Min	287.188	248.505	145.659	163.455	94.883
Max	668.143	539.084	546.800	496.636	424.329