

**OFDA (IWTO 47) – Summary of the Test Results**

Mean Fibre Diameter					
Sample	Participants	Average of all Laboratories $\mu\text{m}$	SD $\mu\text{m}$	CV %	Acceptable Range $\mu\text{m}$
638	38	17.64	0.09	0.53	17.34 - 17.94
639	38	18.36	0.10	0.56	18.06 - 18.66
640	38	21.59	0.09	0.44	21.19 - 21.99
641	38	25.24	0.14	0.56	24.74 - 25.74
642	38	26.51	0.16	0.60	26.01 - 27.01
643	38	29.54	0.15	0.50	28.94 - 30.14
644	38	31.47	0.18	0.56	30.87 - 32.07
645	38	37.14	0.23	0.61	36.24 - 38.04

Results outside IH Limits of Acceptance	Number of Laboratories	Percentage of all Laboratories
0	36	94.74
1	2	5.26
>1	0	0.00

Coefficient of Variation of the Fibre Diameter Distribution		
Sample	Average of Mean Fibre Diameters of all Laboratories $\mu\text{m}$	Average of Coefficients of Variation of all Laboratories %
638	17.64	20.61
639	18.36	19.28
640	21.59	22.16
641	25.24	22.11
642	26.51	21.72
643	29.54	26.73
644	31.47	24.13
645	37.14	23.00

**O.F.D.A. Apparatus**

Mean Fibre Diameter - Micrometre -								
LabNo	Sample No							
	638	639	640	641	642	643	644	645
9006	17.64	18.26	21.54	25.00	26.24	29.15	31.03	36.52
9008	17.72	18.40	21.72	25.27	26.48	29.55	31.67	36.87
9010	17.71	18.36	(21.17)	25.61	26.28	29.34	31.25	37.10
9015	17.62	18.32	21.48	25.12	26.63	29.47	31.57	37.07
9017	17.67	18.38	21.63	25.29	26.37	29.46	31.25	37.00
9018	17.65	18.48	21.58	25.12	26.68	29.43	31.52	37.33
9020	17.53	18.25	21.48	25.19	26.51	29.31	31.37	36.96
9021	17.71	18.36	21.76	25.40	26.58	29.72	31.38	37.14
9023	17.51	18.35	21.68	25.38	26.60	29.74	31.84	37.56
9024	17.42	18.10	21.30	25.08	26.27	29.48	30.97	36.73
9026	17.64	18.29	21.51	25.28	26.69	29.58	31.55	37.41
9028	17.69	18.38	21.63	25.23	26.57	29.61	31.56	37.38
9031	17.68	18.33	21.58	25.24	26.57	29.53	31.56	37.31
9033	17.60	18.25	21.60	25.28	26.52	29.68	31.40	37.17
9034	17.60	18.34	21.63	25.30	26.56	29.68	31.66	37.36
9035	17.51	18.41	21.60	25.30	26.64	29.67	31.37	37.16
9036	17.73	18.45	21.78	25.32	26.67	29.72	31.55	37.28
9039	17.77	18.41	21.57	25.19	26.60	29.49	31.54	37.22
9041	17.61	18.31	21.60	25.28	26.63	29.54	31.68	37.38
9043	17.67	18.38	21.60	25.30	26.30	29.67	31.50	37.10
9049	17.81	18.43	21.57	25.06	26.02	(28.79)	31.43	37.05
9051	17.70	18.48	21.63	25.32	26.60	29.57	31.63	37.35
9052	17.71	18.61	21.67	25.49	26.50	29.55	31.39	37.12
9053	17.62	18.23	21.43	25.10	26.25	29.35	31.42	37.00
9054	17.77	18.38	21.66	25.30	26.53	29.39	31.62	37.26
9060	17.73	18.52	21.68	25.40	26.65	29.56	31.61	37.31
9061	17.41	18.30	21.54	25.10	26.34	29.25	31.28	36.91
9065	17.74	18.40	21.71	25.03	26.48	29.56	31.33	37.28
9068	17.59	18.27	21.52	25.36	26.58	29.46	31.57	37.63
9069	17.58	18.32	21.57	25.13	26.45	29.53	31.55	37.17
9072	17.61	18.45	21.50	24.89	26.57	29.56	31.52	36.94
9073	17.59	18.31	21.62	25.27	26.60	29.88	31.48	37.20
9076	17.69	18.33	21.64	25.33	26.56	29.63	31.62	37.17
9078	17.53	18.18	21.50	25.18	26.42	29.57	31.32	37.03
9086	17.55	18.38	21.58	25.22	26.43	29.62	31.32	36.85
9087	17.73	18.50	21.60	25.18	26.85	29.62	31.65	36.75
9088	17.64	18.58	21.54	25.38	26.57	29.51	31.40	37.14
9089	17.55	18.38	21.47	25.12	26.58	29.37	31.38	37.15
Average	17.64	18.36	21.59	25.24	26.51	29.54	31.47	37.14
SD	0.09	0.10	0.09	0.14	0.16	0.15	0.18	0.23
CV %	0.53	0.56	0.44	0.56	0.60	0.50	0.56	0.61
Evaluation without outliers (in brackets) according to DIXON/GRUBBS								

**O.F.D.A. Apparatus**

Deviation from Average - Micrometre -									
LabNo	Sample No								No outside
	638	639	640	641	642	643	644	645	
9006	0.00	-0.10	-0.05	-0.24	-0.27	-0.39	-0.44	-0.62	0
9008	0.08	0.04	0.13	0.03	-0.03	0.01	0.20	-0.27	0
9010	0.07	0.00	-0.42	0.37	-0.23	-0.20	-0.22	-0.04	1
9015	-0.02	-0.04	-0.11	-0.12	0.12	-0.07	0.10	-0.07	0
9017	0.03	0.02	0.04	0.05	-0.14	-0.08	-0.22	-0.14	0
9018	0.01	0.12	-0.01	-0.12	0.17	-0.11	0.05	0.19	0
9020	-0.11	-0.11	-0.11	-0.05	0.00	-0.23	-0.10	-0.18	0
9021	0.07	0.00	0.17	0.16	0.07	0.18	-0.09	0.00	0
9023	-0.13	-0.01	0.09	0.14	0.09	0.20	0.37	0.42	0
9024	-0.22	-0.26	-0.29	-0.16	-0.24	-0.06	-0.50	-0.41	0
9026	0.00	-0.07	-0.08	0.04	0.18	0.04	0.08	0.27	0
9028	0.05	0.02	0.04	-0.01	0.06	0.07	0.09	0.24	0
9031	0.04	-0.03	-0.01	0.00	0.06	-0.01	0.09	0.17	0
9033	-0.04	-0.11	0.01	0.04	0.01	0.14	-0.07	0.03	0
9034	-0.04	-0.02	0.04	0.06	0.05	0.14	0.19	0.22	0
9035	-0.13	0.05	0.01	0.06	0.13	0.13	-0.10	0.02	0
9036	0.09	0.09	0.19	0.08	0.16	0.18	0.08	0.14	0
9039	0.13	0.05	-0.02	-0.05	0.09	-0.05	0.07	0.08	0
9041	-0.03	-0.05	0.01	0.04	0.12	0.00	0.21	0.24	0
9043	0.03	0.02	0.01	0.06	-0.21	0.13	0.03	-0.04	0
9049	0.17	0.07	-0.02	-0.18	-0.49	-0.75	-0.04	-0.09	1
9051	0.06	0.12	0.04	0.08	0.09	0.03	0.16	0.21	0
9052	0.07	0.25	0.08	0.25	-0.01	0.01	-0.08	-0.02	0
9053	-0.02	-0.13	-0.16	-0.14	-0.26	-0.19	-0.05	-0.14	0
9054	0.13	0.02	0.07	0.06	0.02	-0.15	0.15	0.12	0
9060	0.09	0.16	0.09	0.16	0.14	0.02	0.14	0.17	0
9061	-0.23	-0.06	-0.05	-0.14	-0.17	-0.29	-0.19	-0.23	0
9065	0.10	0.04	0.12	-0.21	-0.03	0.02	-0.14	0.14	0
9068	-0.05	-0.09	-0.07	0.12	0.07	-0.08	0.10	0.49	0
9069	-0.06	-0.04	-0.02	-0.11	-0.06	-0.01	0.08	0.03	0
9072	-0.03	0.09	-0.09	-0.35	0.06	0.02	0.05	-0.20	0
9073	-0.05	-0.05	0.03	0.03	0.09	0.34	0.01	0.06	0
9076	0.05	-0.03	0.05	0.09	0.05	0.09	0.15	0.03	0
9078	-0.11	-0.18	-0.09	-0.06	-0.09	0.03	-0.15	-0.11	0
9086	-0.09	0.02	-0.01	-0.02	-0.08	0.08	-0.15	-0.29	0
9087	0.09	0.14	0.01	-0.06	0.34	0.08	0.18	-0.39	0
9088	0.00	0.22	-0.05	0.14	0.06	-0.03	-0.07	0.00	0
9089	-0.09	0.02	-0.12	-0.12	0.07	-0.17	-0.09	0.01	0
IH Limits of Acceptance ±	0.30	0.30	0.40	0.50	0.50	0.60	0.60	0.90	

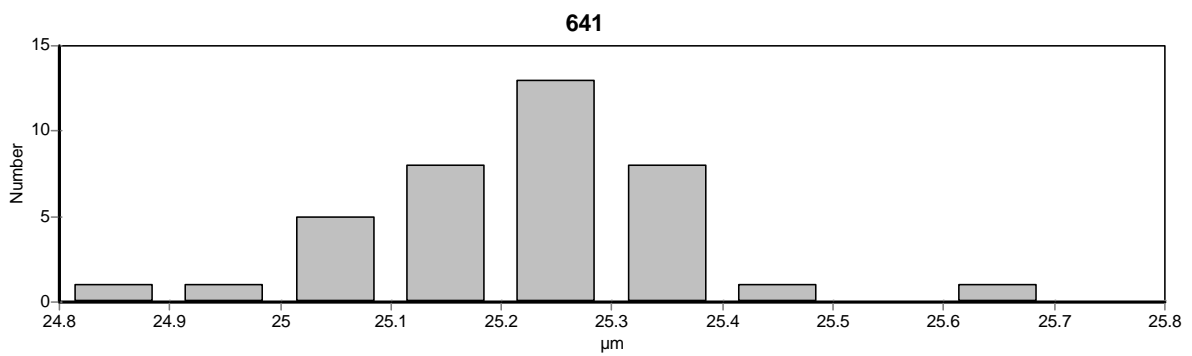
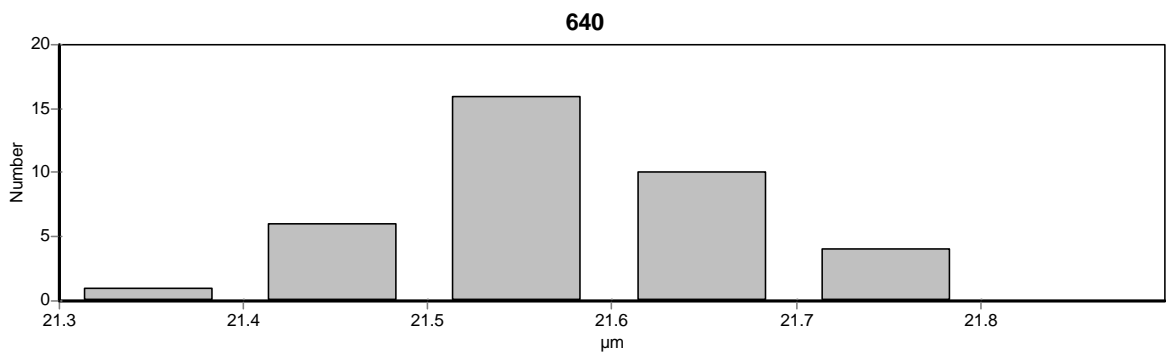
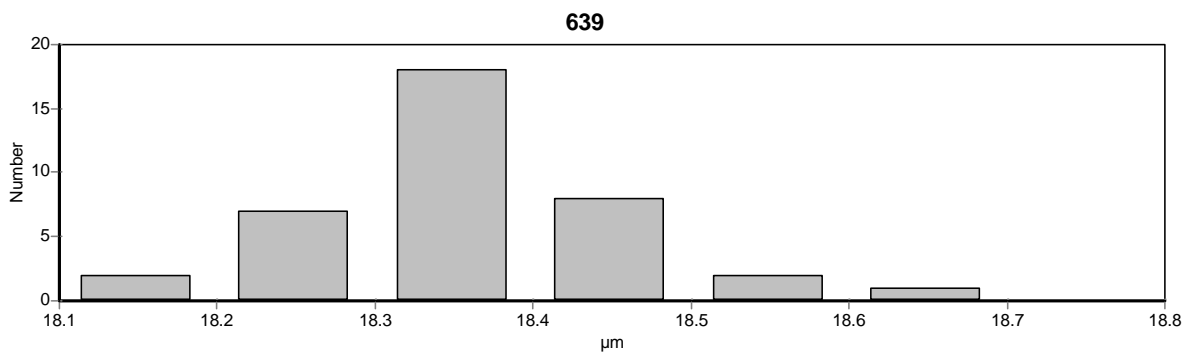
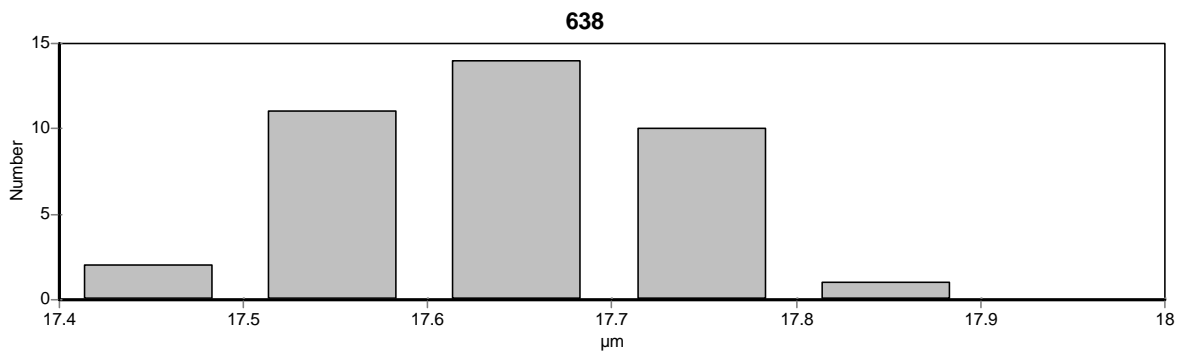
<b>O.F.D.A. Apparatus</b>
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Coefficient of Variation of Fibre Diameter Distribution / Mean CV (%)								
LabNo	Sample No							
	638	639	640	641	642	643	644	645
9006	19.85	18.53	21.78	21.82	21.49	26.67	24.12	22.55
9008	20.12	18.88	22.02	22.12	21.40	26.40	23.85	22.62
9010	20.55	20.18	22.98	21.78	22.99	(24.51)	(22.81)	23.12
9015	20.06	18.84	22.03	21.70	21.21	26.24	23.44	21.99
9017	20.37	18.94	21.36	21.76	21.77	26.20	23.62	22.16
9018	21.00	19.50	22.00	22.20	21.60	26.60	24.40	23.90
9020	20.63	19.03	22.03	22.14	21.67	27.00	24.19	23.16
9021	20.27	19.02	22.11	22.30	21.66	27.01	24.75	23.07
9023	21.36	19.70	22.95	22.98	22.42	27.20	24.58	23.32
9024	22.20	20.81	23.71	22.79	22.72	26.91	24.49	23.46
9026	20.23	18.86	21.94	22.03	21.65	26.63	23.96	22.72
9028	20.06	18.89	21.91	22.10	21.62	27.09	24.40	23.32
9031	20.76	19.44	22.35	20.85	21.65	26.69	23.88	22.78
9033	21.88	20.46	23.07	23.01	22.25	27.18	24.31	23.32
9034	20.95	19.76	22.53	22.55	21.79	26.99	24.28	23.08
9035	20.10	18.90	21.60	21.70	21.50	26.40	23.90	22.70
9036	20.54	19.13	21.99	21.91	21.42	26.55	23.86	22.70
9039	21.89	20.02	22.56	22.45	21.91	26.81	23.97	22.87
9041	20.60	19.34	22.33	22.21	21.79	26.67	24.41	23.50
9043	20.25	19.20	21.68	21.98	21.63	26.55	24.22	23.03
9049	20.05	19.03	21.93	22.05	21.70	27.07	24.65	23.82
9051	20.52	19.48	22.65	22.38	21.62	27.17	24.13	23.29
9052	21.01	19.76	22.26	22.43	21.88	26.03	24.53	23.40
9053	21.48	19.65	22.71	22.58	22.10	26.63	24.46	23.11
9054	21.06	19.31	22.01	21.99	21.90	27.43	24.34	23.47
9060	20.50	19.00	22.20	22.00	21.50	26.80	24.20	23.10
9061	19.55	18.20	21.21	21.39	21.01	26.39	23.50	22.76
9065	20.80	19.46	22.06	22.45	21.87	26.96	24.39	22.93
9068	21.03	20.05	22.34	22.27	21.52	27.55	24.23	23.35
9069	21.61	19.75	22.02	22.55	21.87	26.98	24.09	22.96
9072	20.68	20.12	22.80	22.67	21.52	27.03	24.32	23.20
9073	20.43	19.18	21.98	22.04	21.96	26.25	24.07	22.91
9076	19.97	18.53	21.88	21.99	21.66	26.61	24.04	22.85
9078	21.38	19.75	22.65	22.70	22.23	26.87	24.32	22.77
9086	19.93	18.52	21.60	21.67	21.22	26.22	23.58	22.60
9087	19.50	18.35	20.97	21.35	20.65	25.62	23.37	22.33
9088	20.23	18.67	22.12	21.82	21.32	26.80	24.00	23.13
9089	19.90	18.50	21.65	21.45	21.60	26.83	23.83	22.69
Average	20.61	19.28	22.16	22.11	21.72	26.73	24.13	23.00
SD	0.66	0.61	0.54	0.46	0.43	0.40	0.34	0.41
CV %	3.18	3.16	2.44	2.10	1.98	1.49	1.42	1.78
Evaluation without outliers (in brackets) according to DIXON/GRUBBS								

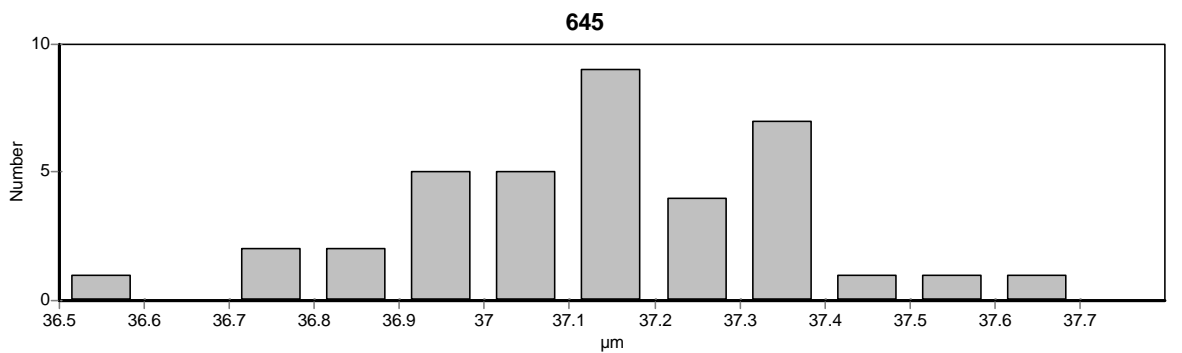
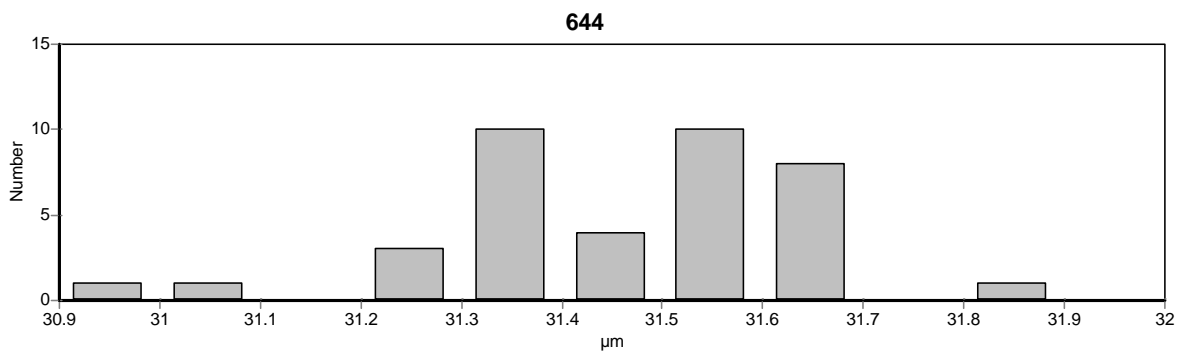
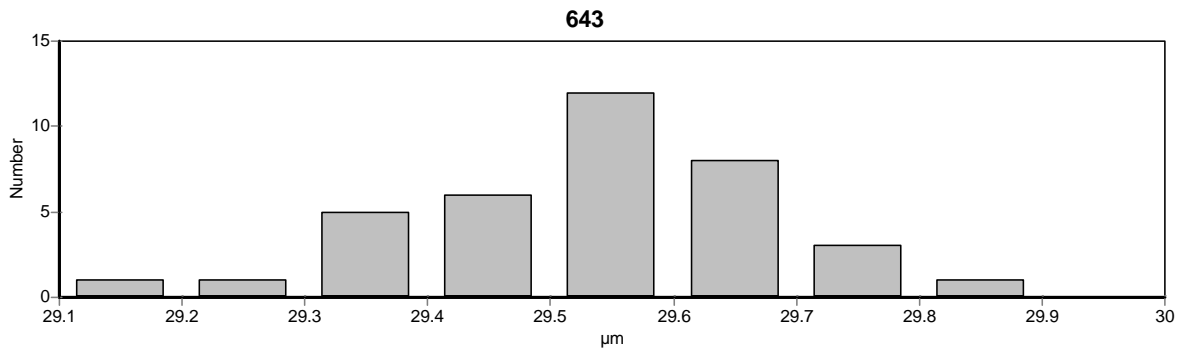
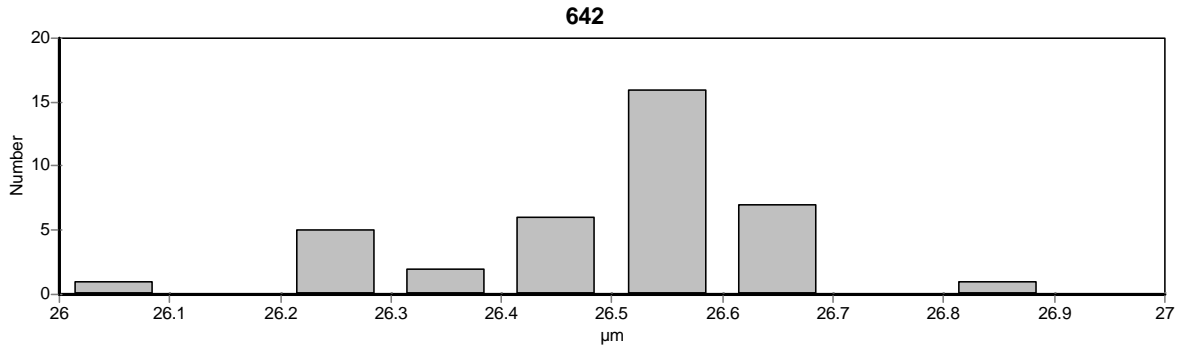
<b>O.F.D.A. Apparatus</b>
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Mean Fibre Curvature - deg/mm (calibrated) -								
LabNo	Sample No							
	638	639	640	641	642	643	644	645
9006	77	87	63	52	51	52	44	41
9008	75	88	62	51	51	51	44	41
9017	76	88	62	54	53	50	44	41
9018	75	84	63	55	53	52	47	43
9020	80	69	69	62	58	48	48	45
9023	84	99	69	58	57	55	46	42
9024	75	88	64	54	54	53	46	43
9028	77	87	53	51	51	51	44	41
9031	64	71	56	49	49	49	45	42
9033	74	86	62	53	52	51	46	42
9034	69	77	58	51	49	49	44	41
9035	73	80	61	52	51	50	45	42
9039	70	87	64	52	52	52	45	42
9041	71	81	61	52	52	52	44	42
9043	74	83	62	52	52	51	44	40
9049	75	73	68	65	54	46	51	46
9051	76	85	62	51	50	50	44	40
9052	82	84	( 76)	62	58	( 59)	50	44
9053	73	87	62	54	53	52	46	43
9060	78	84	62	53	52	51	45	42
9065	75	85	61	51	50	50	45	41
9068	74	84	63	52	52	51	45	41
9069	72	82	60	53	53	53	46	45
9072	76	84	62	54	51	51	45	40
9073	76	88	62	52	53	50	45	39
9076	72	83	61	51	51	50	44	41
9078	74	84	62	54	52	51	46	42
9086	78	87	61	53	51	50	45	41
9087	75	87	63	51	49	49	44	41
9088	83	78	67	66	55	51	47	46
9089	68	77	56	47	47	47	41	38
Number	31	31	31	31	31	31	31	31
Average	74.9	83.5	62.0	53.8	52.1	50.6	45.3	41.9
Median	75.0	84.0	62.0	52.0	52.0	51.0	45.0	42.0
SD	4.2	5.8	3.5	4.4	2.5	1.8	1.9	1.9
CV %	5.6	7.0	5.6	8.2	4.8	3.5	4.2	4.4
Min	64	69	53	47	47	46	41	38
Max	84	99	76	66	58	59	51	46
Evaluation without outliers (in brackets) according to DIXON/GRUBBS								

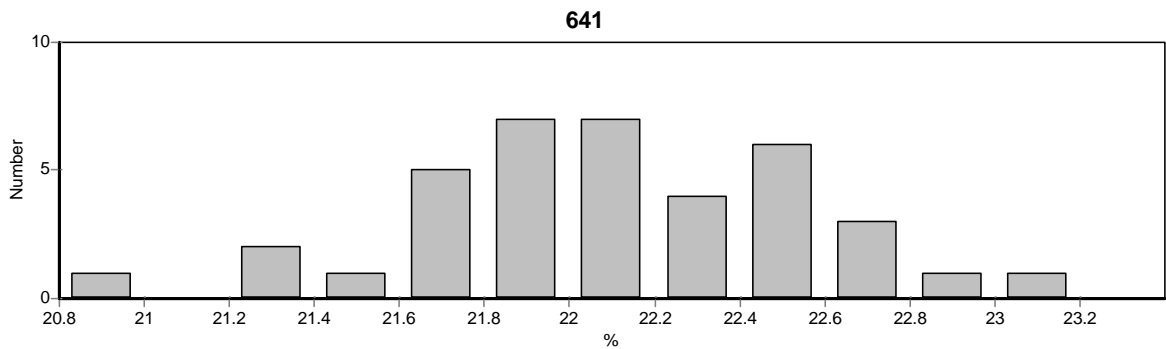
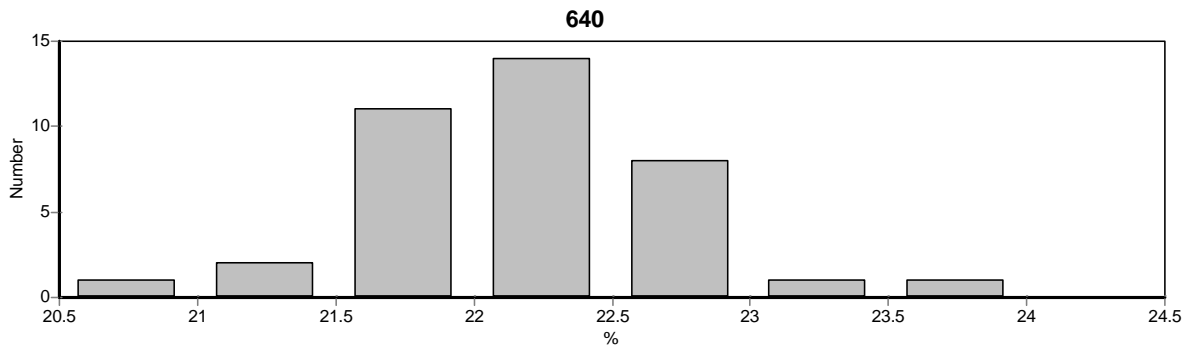
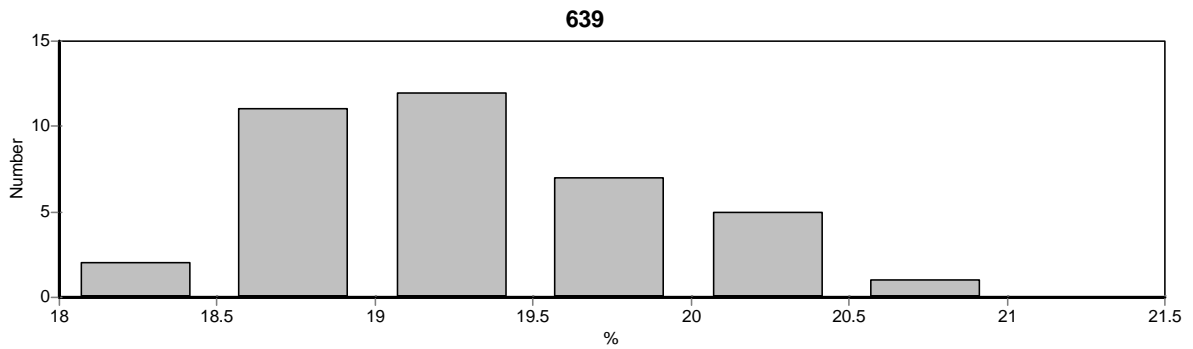
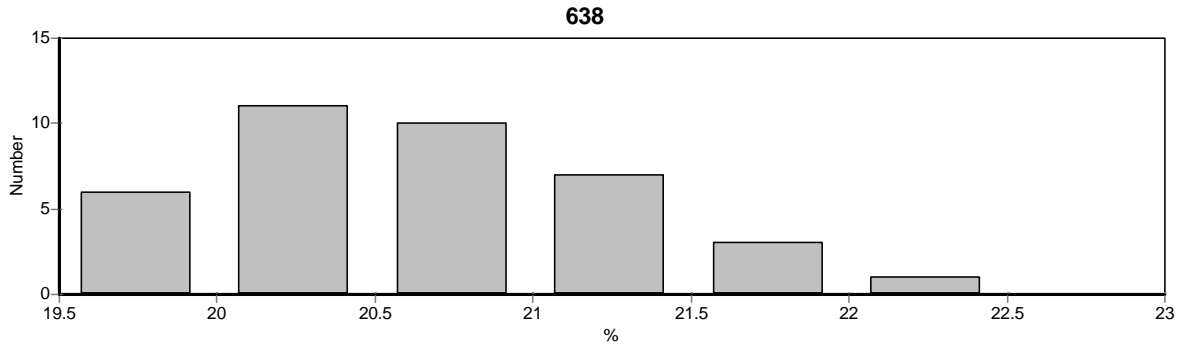
O.F.D.A. Apparatus - Diameter



O.F.D.A. Apparatus - Diameter

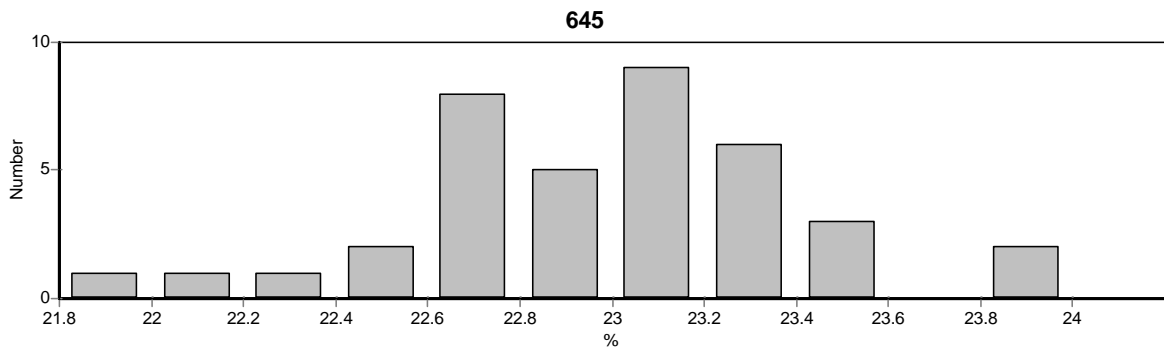
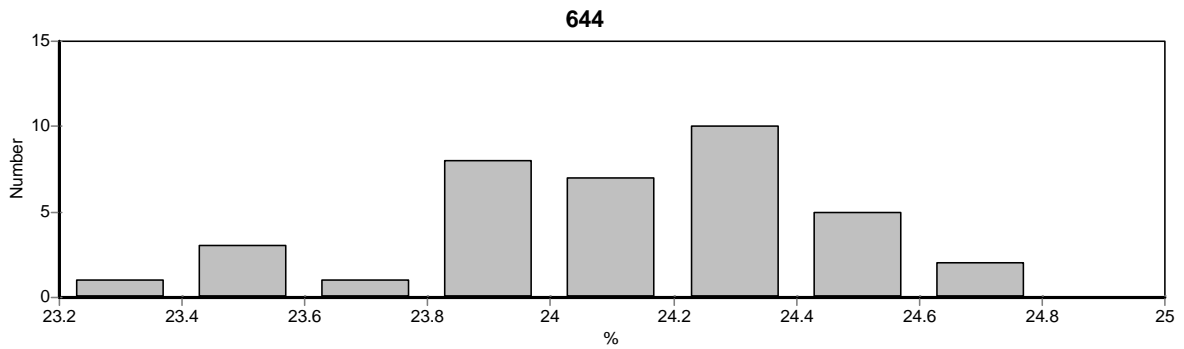
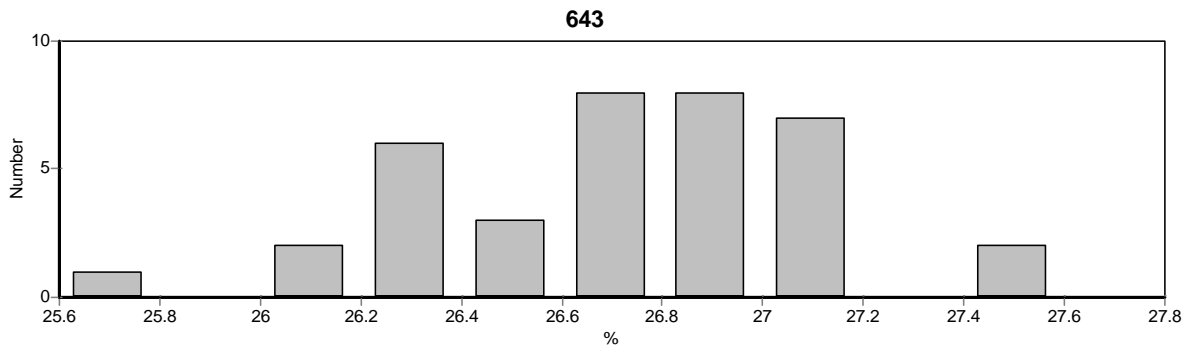
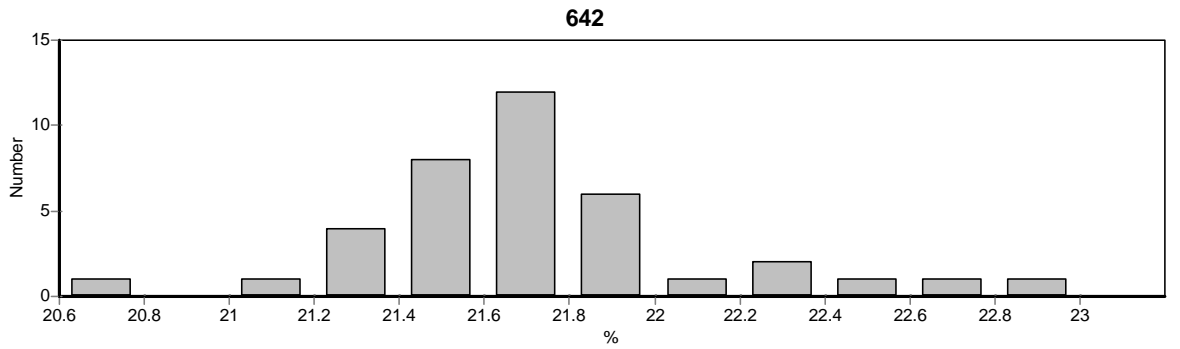


O.F.D.A. Apparatus - CV

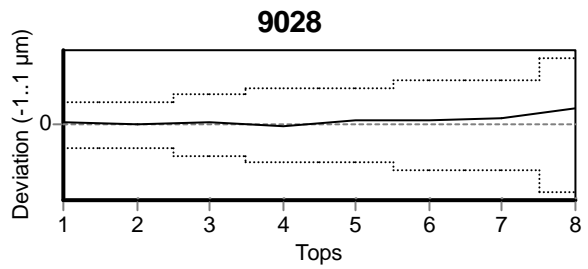
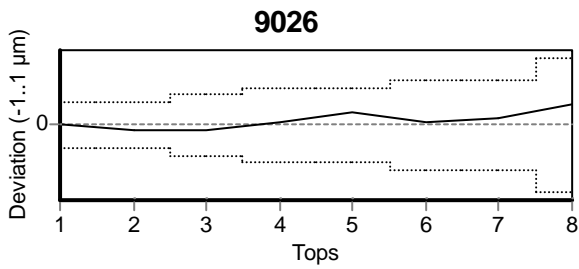
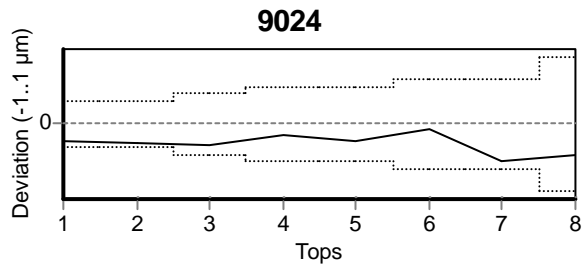
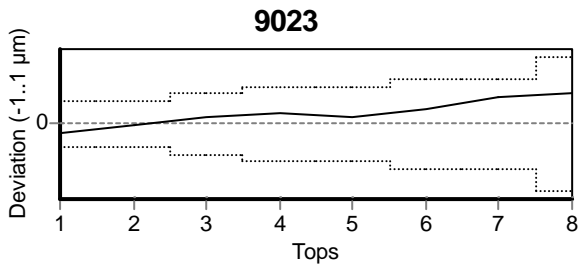
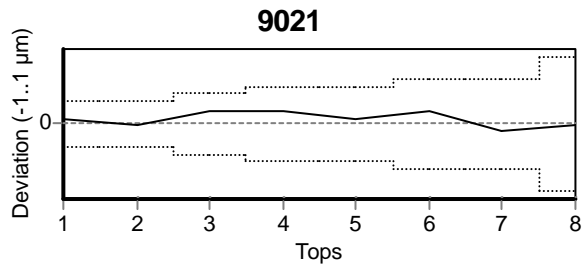
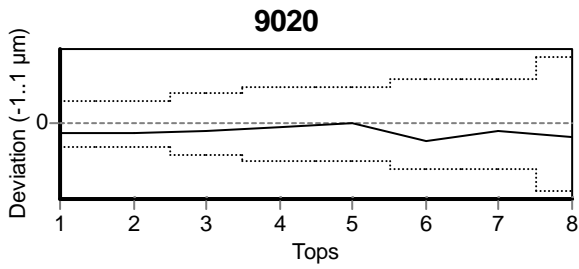
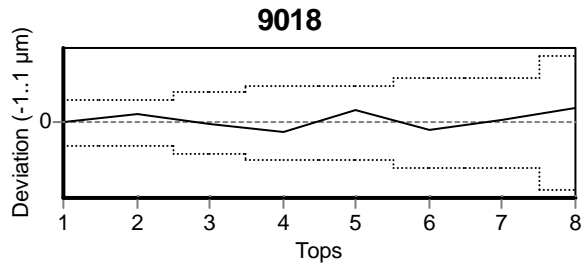
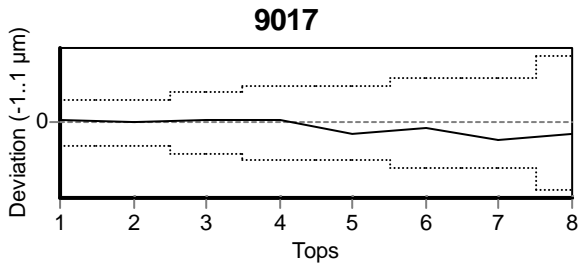
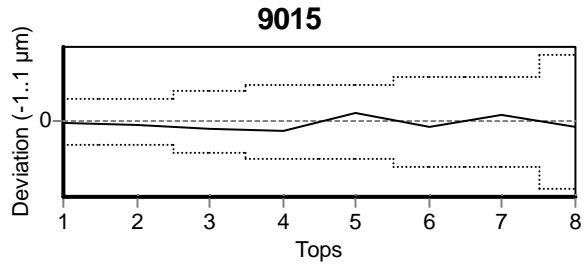
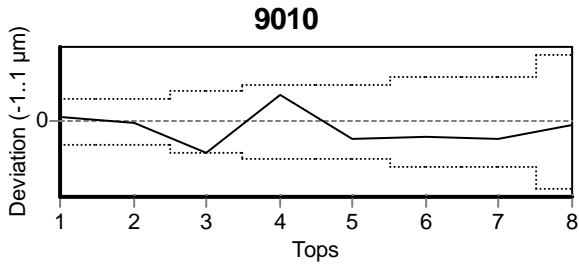
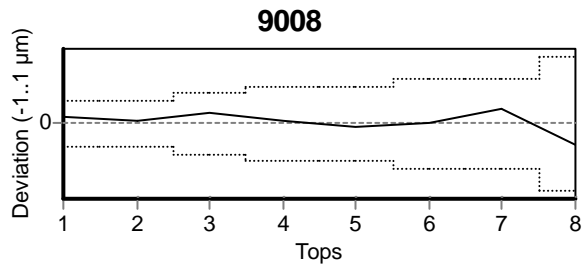
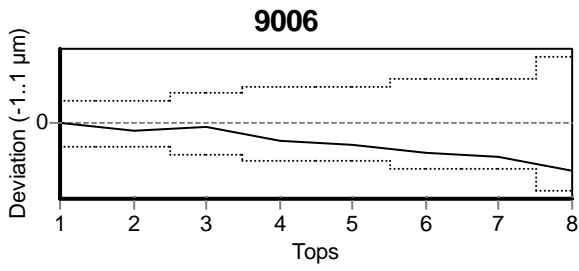




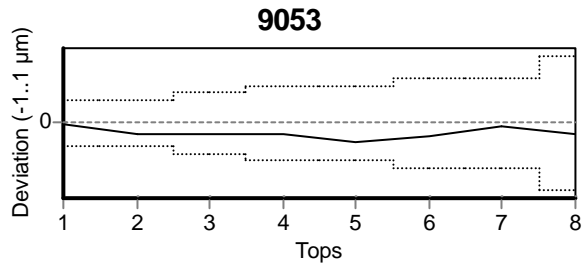
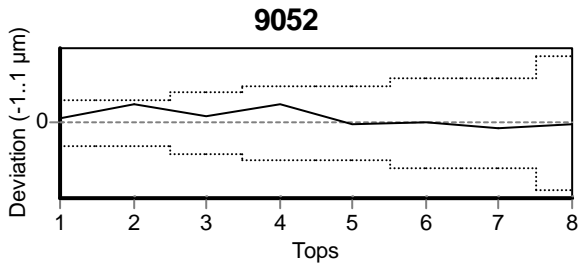
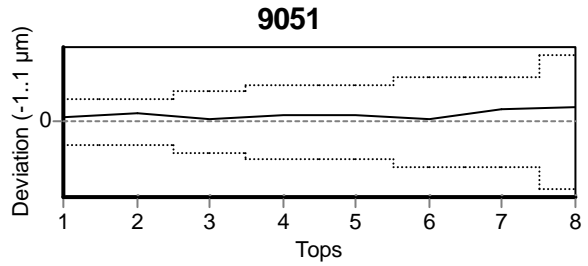
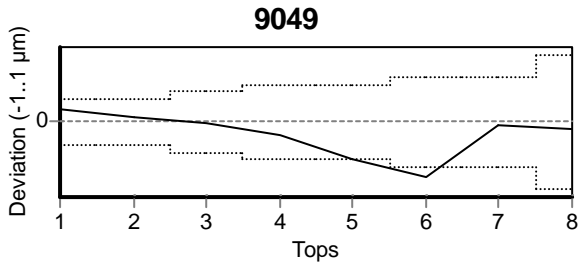
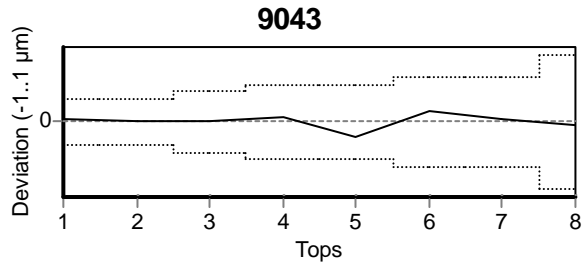
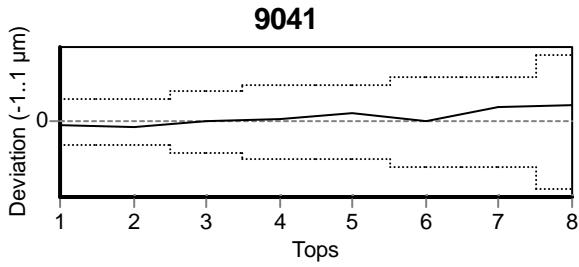
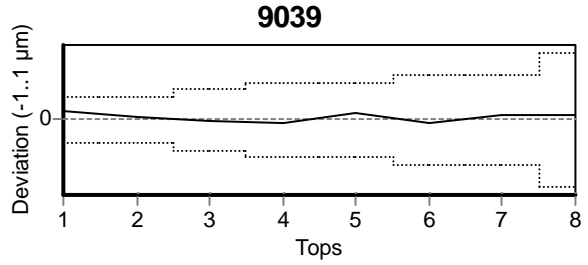
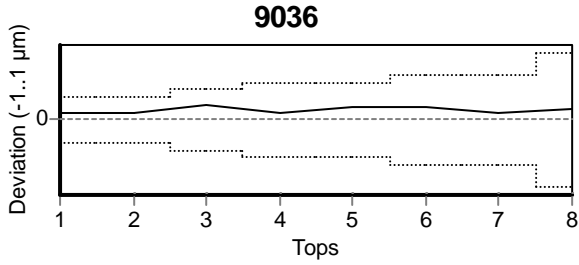
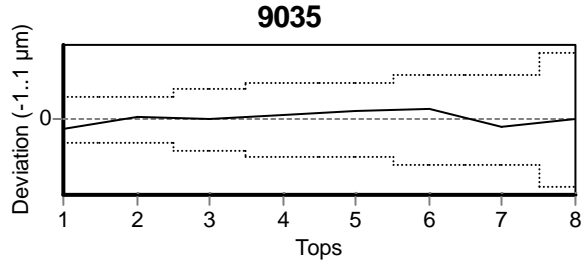
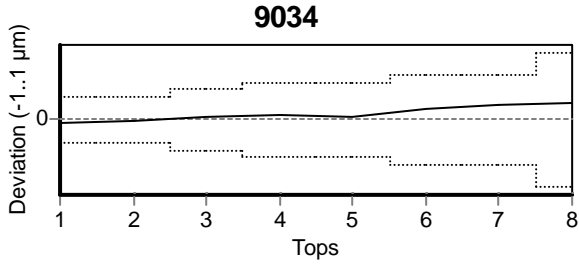
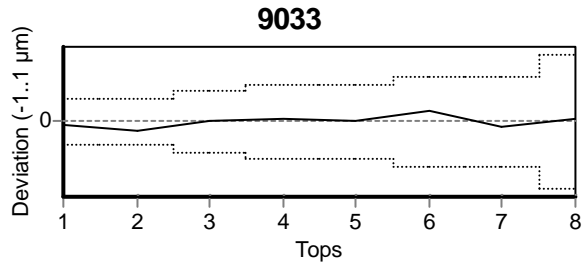
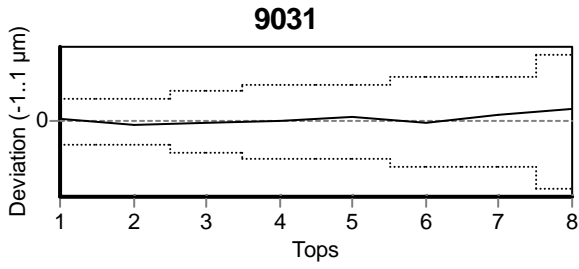
O.F.D.A. Apparatus - CV



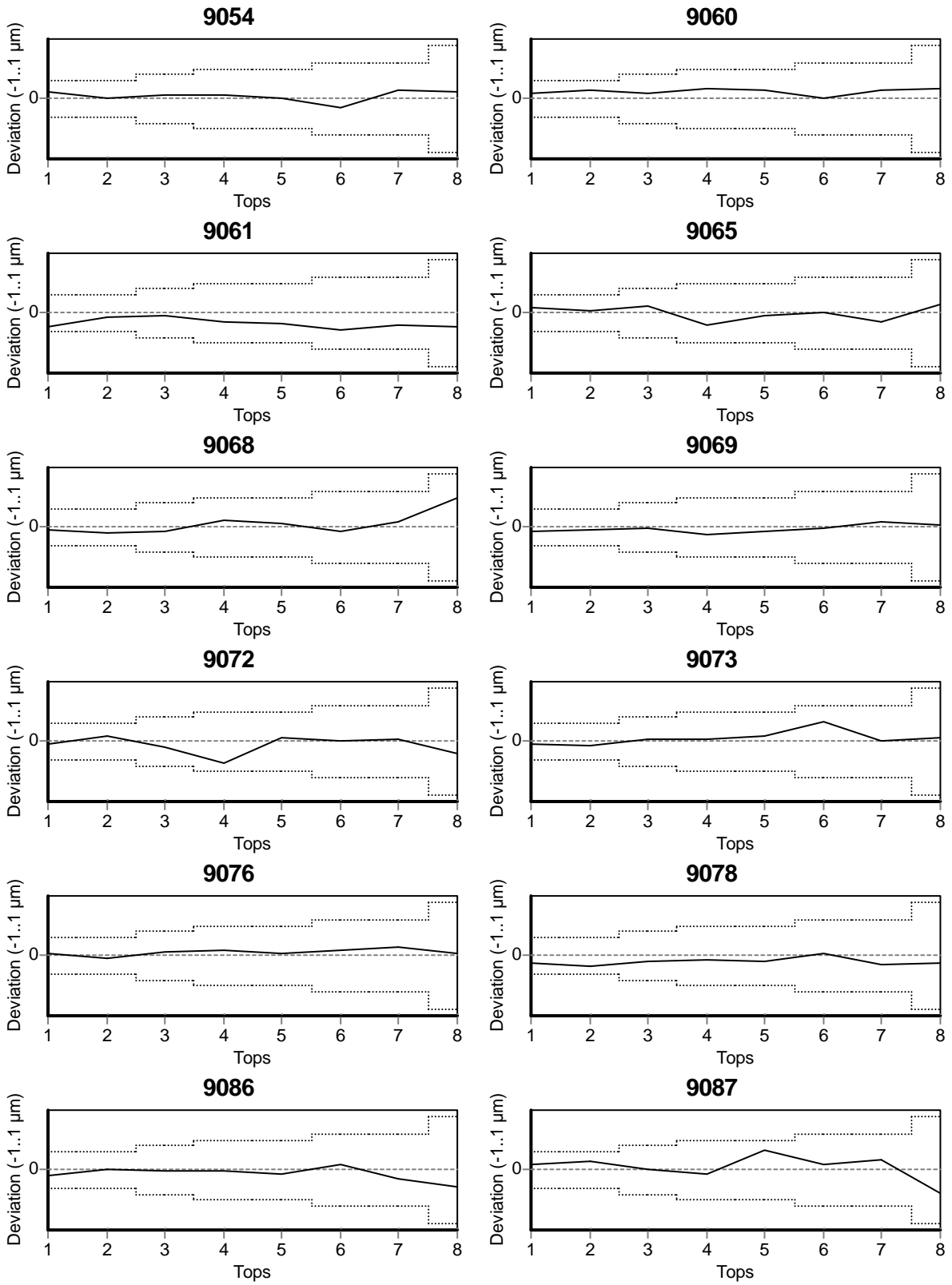
O.F.D.A. Apparatus



O.F.D.A. Apparatus



O.F.D.A. Apparatus



O.F.D.A. Apparatus

