International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 1
General Evaluation

Section One: Result Distribution
Section Two: Instrument Evaluation
Section Three: Within Limits Evaluation

Section One: Result Distribution

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- -Summary Table
- -Distribution Graphs

Optional Parameters
- -Summary Table
- -Distribution Graphs

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System Provided by:
Generation 10 Limited

This report is an outcome of the Project CFC/ICAC/33 – CSITC,
which benefitted from support from the Common Fund for Commodities
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** Faserinstitut Bremen are a Cooperation Partner with ICA Bremen*

Global - Round Trial 2014 - 1

Inter-Instrument Averages, Inter-Instrument Variations, Typical within-instrument Variations

Micronaire							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			4.348	3.971	4.336	4.248	
Reference Values for Evaluation			4.348	3.971	4.336	4.248	
Number Of Instruments			123	123	123	123	**123**
Inter-Instrument Variation	based on 30 tests	SD	0.070	0.077	0.066	0.066	**0.070**
		CV %	1.6	1.9	1.5	1.6	**1.7**
	based on 6 tests	SD	0.074	0.083	0.072	0.071	**0.075**
		CV %	1.7	2.1	1.7	1.7	**1.8**
	based on single tests	SD	0.084	0.093	0.082	0.079	**0.084**
		CV %	1.9	2.3	1.9	1.8	**2.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.025	0.027	0.022	0.023	**0.024**
		CV %	0.6	0.7	0.5	0.5	**0.6**
	between single tests on one day	SD	0.037	0.042	0.034	0.033	**0.037**
		CV %	0.9	1.1	0.8	0.8	**0.9**
	between all tests on different days	SD	0.048	0.051	0.045	0.043	**0.047**
		CV %	1.1	1.3	1.0	1.0	**1.1**

Strength							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			29.322	24.367	27.769	33.561	
Reference Values for Evaluation			29.322	24.367	27.769	33.561	
Number Of Instruments			122	122	122	122	**122**
Inter-Instrument Variation	based on 30 tests	SD	0.716	0.694	0.723	0.828	**0.740**
		CV %	2.4	2.8	2.6	2.5	**2.6**
	based on 6 tests	SD	0.843	0.781	0.808	0.924	**0.839**
		CV %	2.9	3.2	2.9	2.8	**2.9**
	based on single tests	SD	0.982	0.973	0.968	1.044	**0.992**
		CV %	3.3	4.0	3.5	3.1	**3.5**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.346	0.349	0.382	0.332	**0.352**
		CV %	1.2	1.4	1.4	1.0	**1.2**
	between single tests on one day	SD	0.555	0.587	0.502	0.582	**0.557**
		CV %	1.9	2.4	1.8	1.7	**2.0**
	between all tests on different days	SD	0.660	0.655	0.644	0.691	**0.662**
		CV %	2.2	2.7	2.3	2.1	**2.3**

Length							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			1.0955	0.9821	1.0596	1.2150	
Reference Values for Evaluation			1.0955	0.9821	1.0596	1.2150	
Number Of Instruments			123	122	123	123	**123**
Inter-Instrument Variation	based on 30 tests	SD	0.0092	0.0124	0.0090	0.0101	**0.0102**
		CV %	0.8	1.3	0.9	0.8	**0.9**
	based on 6 tests	SD	0.0103	0.0137	0.0107	0.0115	**0.0116**
		CV %	0.9	1.4	1.0	0.9	**1.1**
	based on single tests	SD	0.0151	0.0177	0.0149	0.0157	**0.0159**
		CV %	1.4	1.8	1.4	1.3	**1.5**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0051	0.0056	0.0057	0.0055	**0.0055**
		CV %	0.5	0.6	0.5	0.5	**0.5**
	between single tests on one day	SD	0.0110	0.0115	0.0099	0.0103	**0.0107**
		CV %	1.0	1.2	0.9	0.9	**1.0**
	between all tests on different days	SD	0.0124	0.0128	0.0114	0.0115	**0.0120**
		CV %	1.1	1.3	1.1	1.0	**1.1**

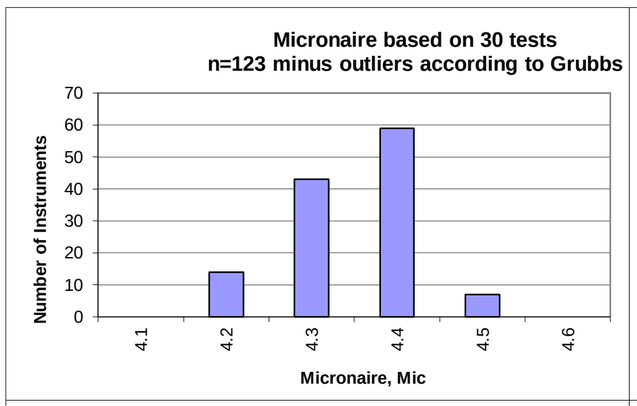
Uniformity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			80.768	79.806	80.430	83.861	
Reference Values for Evaluation			80.768	79.806	80.430	83.861	
Number Of Instruments			123	123	123	123	**123**
Inter-Instrument Variation	based on 30 tests	SD	0.411	0.537	0.435	0.480	**0.466**
		CV %	0.5	0.7	0.5	0.6	**0.6**
	based on 6 tests	SD	0.519	0.573	0.530	0.561	**0.546**
		CV %	0.6	0.7	0.7	0.7	**0.7**
	based on single tests	SD	0.745	0.794	0.732	0.740	**0.753**
		CV %	0.9	1.0	0.9	0.9	**0.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.269	0.262	0.265	0.270	**0.267**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between single tests on one day	SD	0.531	0.538	0.515	0.498	**0.521**
		CV %	0.7	0.7	0.6	0.6	**0.6**
	between all tests on different days	SD	0.589	0.590	0.600	0.559	**0.584**
		CV %	0.7	0.7	0.7	0.7	**0.7**

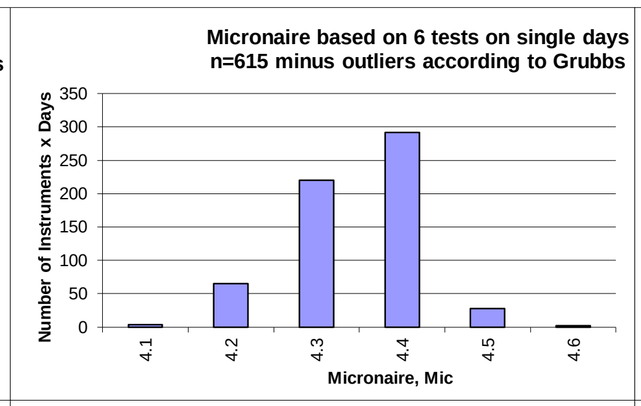
Color Rd							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			80.005	74.973	76.817	79.299	
Reference Values for Evaluation			80.005	74.973	76.817	79.299	
Number Of Instruments			118	118	118	118	**118**
Inter-Instrument Variation	based on 30 tests	SD	0.659	0.660	0.678	0.767	**0.691**
		CV %	0.8	0.9	0.9	1.0	**0.9**
	based on 6 tests	SD	0.627	0.739	0.689	0.798	**0.713**
		CV %	0.8	1.0	0.9	1.0	**0.9**
	based on single tests	SD	0.681	0.767	0.720	0.863	**0.758**
		CV %	0.9	1.0	0.9	1.1	**1.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.192	0.214	0.170	0.194	**0.192**
		CV %	0.2	0.3	0.2	0.2	**0.2**
	between single tests on one day	SD	0.193	0.234	0.182	0.211	**0.205**
		CV %	0.2	0.3	0.2	0.3	**0.3**
	between all tests on different days	SD	0.283	0.306	0.270	0.312	**0.293**
		CV %	0.4	0.4	0.4	0.4	**0.4**

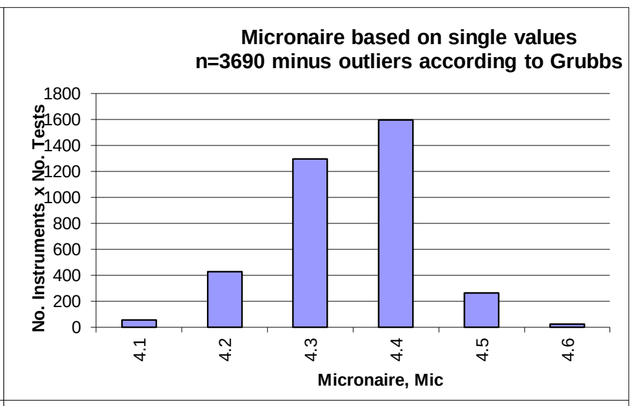
Color +b							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			9.293	10.600	10.196	11.627	
Reference Values for Evaluation			9.293	10.600	10.196	11.627	
Number Of Instruments			118	118	118	118	**118**
Inter-Instrument Variation	based on 30 tests	SD	0.214	0.197	0.183	0.250	**0.211**
		CV %	2.3	1.9	1.8	2.2	**2.0**
	based on 6 tests	SD	0.243	0.224	0.214	0.264	**0.236**
		CV %	2.6	2.1	2.1	2.3	**2.3**
	based on single tests	SD	0.277	0.266	0.242	0.301	**0.272**
		CV %	3.0	2.5	2.4	2.6	**2.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.111	0.103	0.086	0.112	**0.103**
		CV %	1.2	1.0	0.8	1.0	**1.0**
	between single tests on one day	SD	0.105	0.101	0.096	0.107	**0.102**
		CV %	1.1	0.9	0.9	0.9	**1.0**
	between all tests on different days	SD	0.156	0.154	0.140	0.181	**0.158**
		CV %	1.7	1.5	1.4	1.6	**1.5**

Test Result Distributions
Micronaire

Cotton 1







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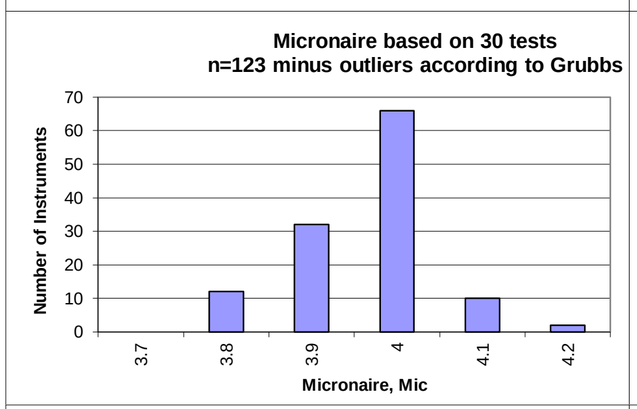

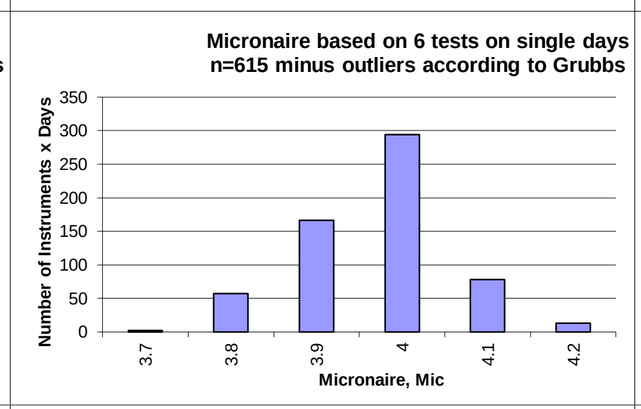

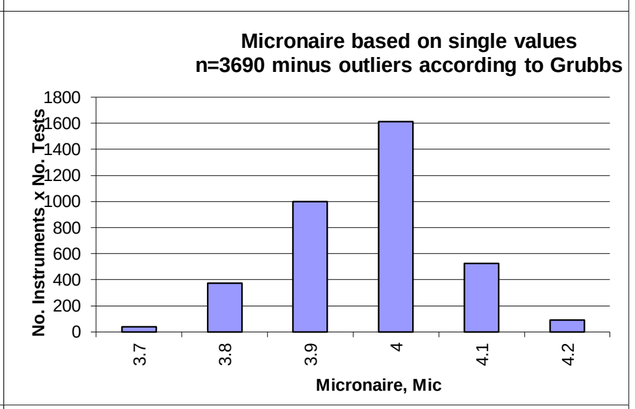

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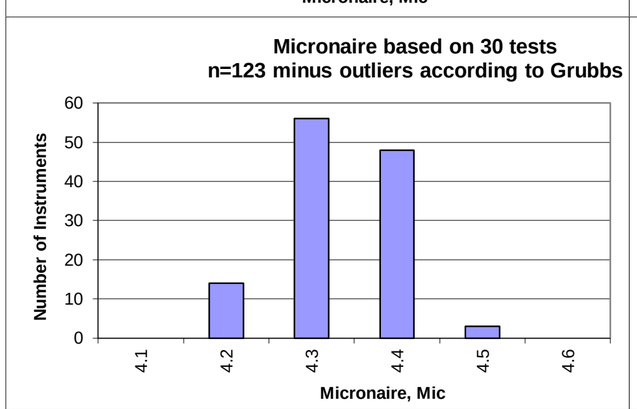
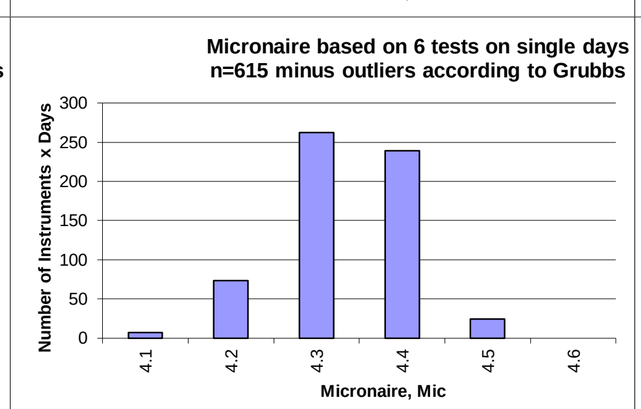
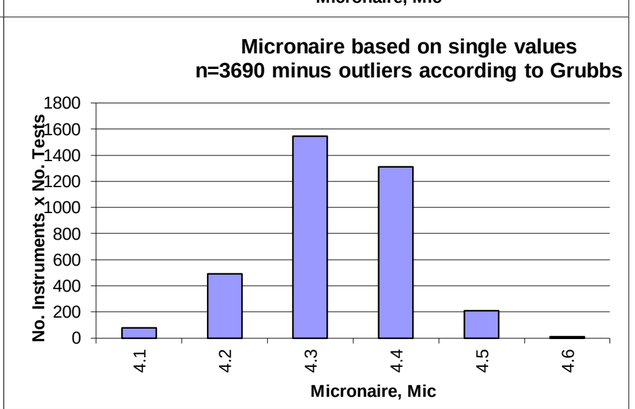
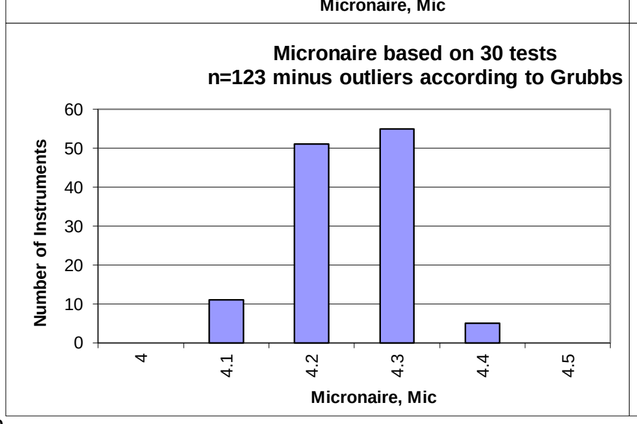
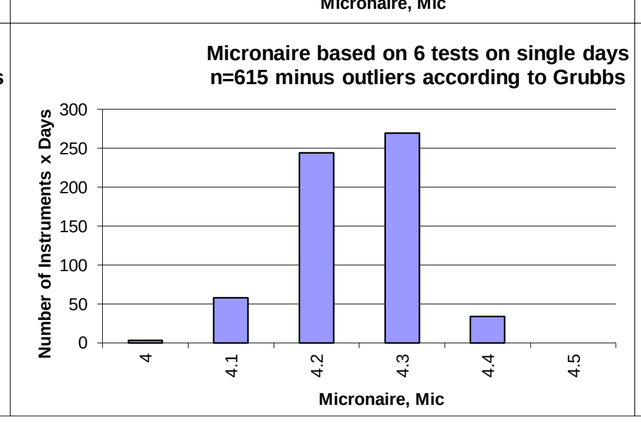


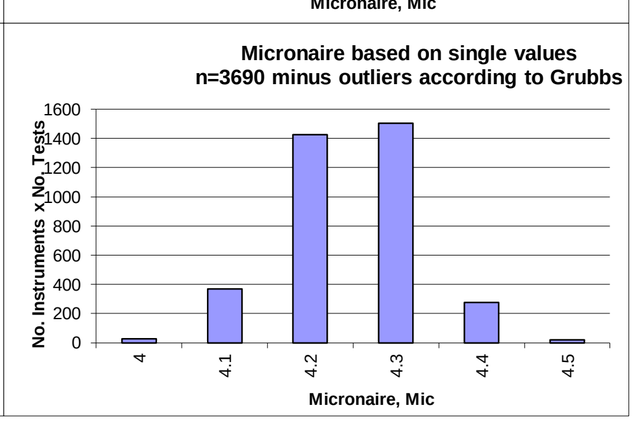




Cotton 4







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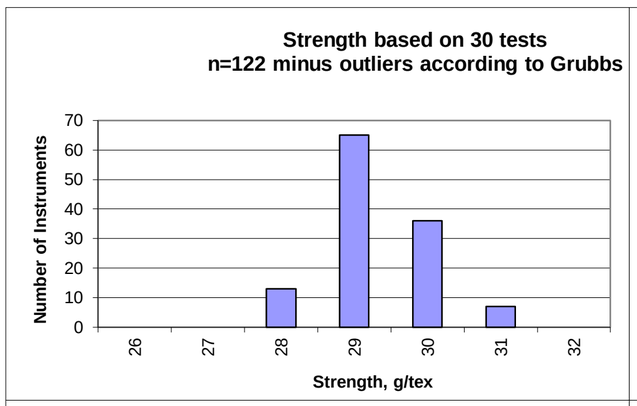
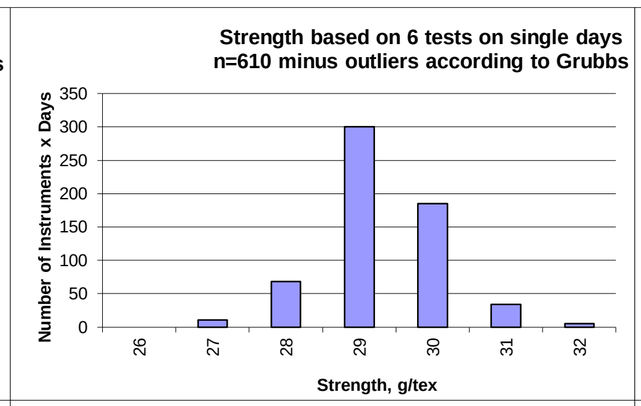
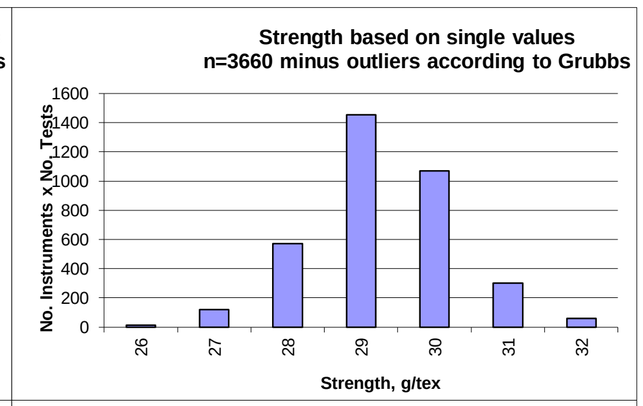
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength

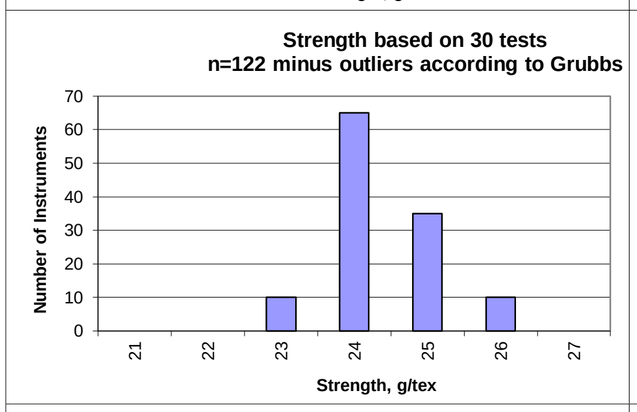
Cotton 1

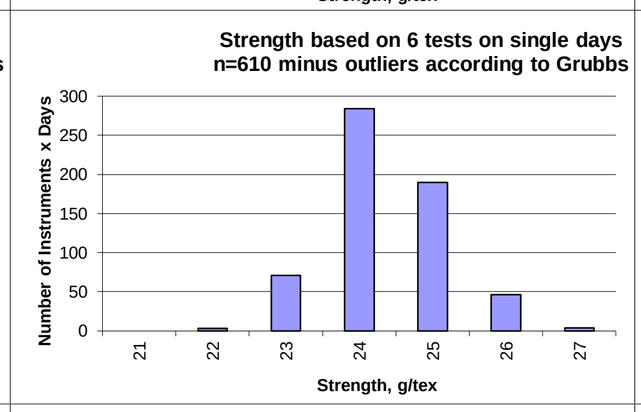


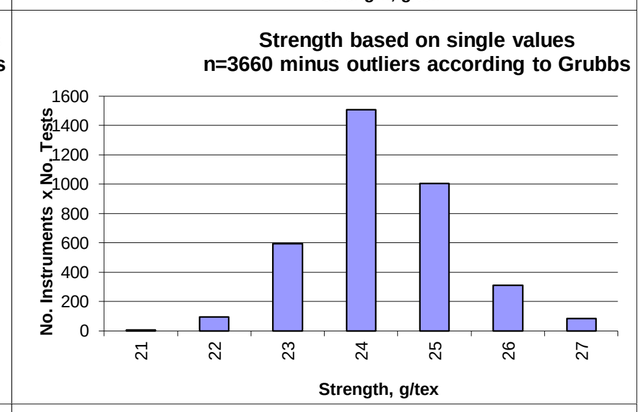




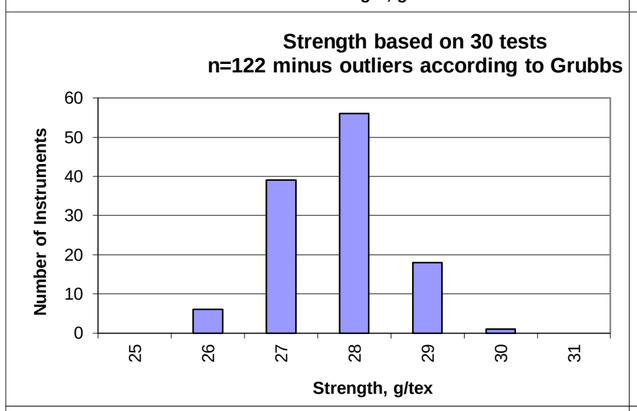
Cotton 2

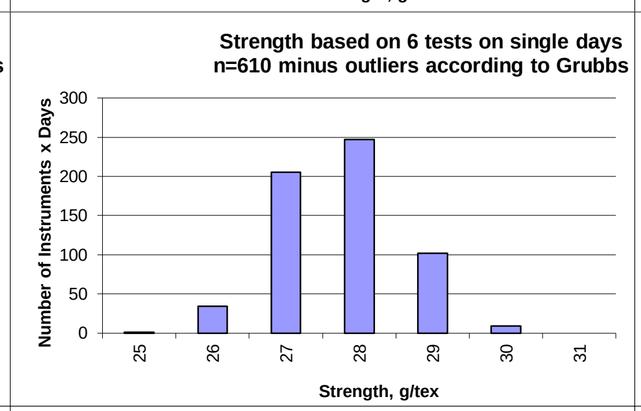


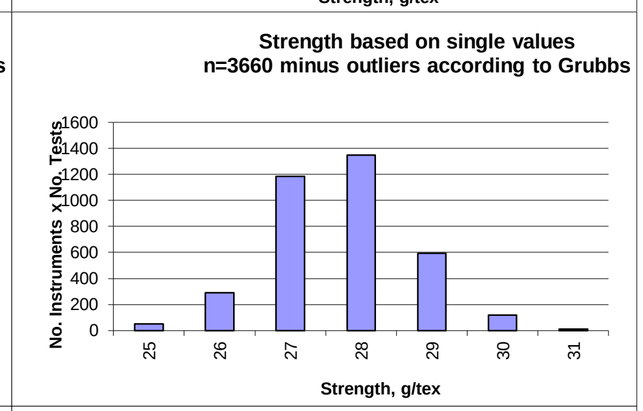




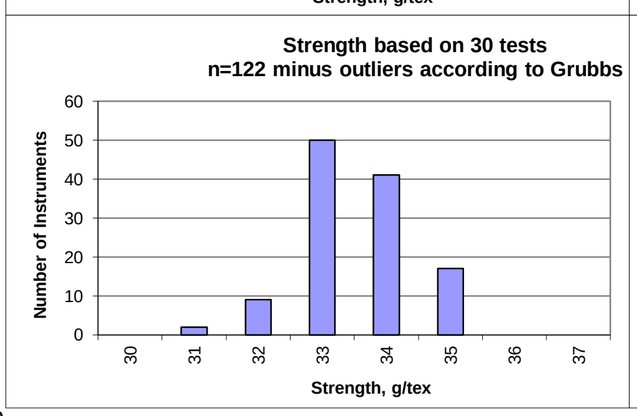
Cotton 3

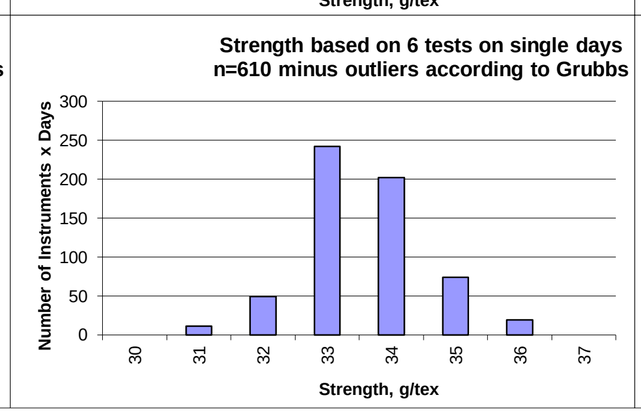


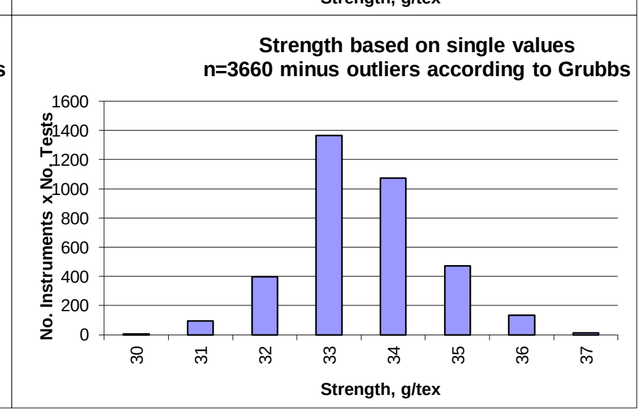




Cotton 4







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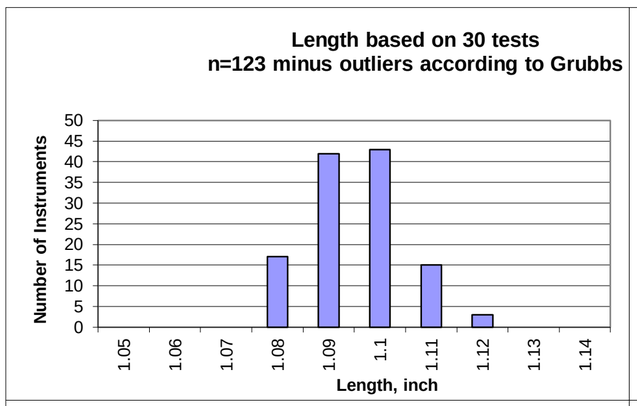
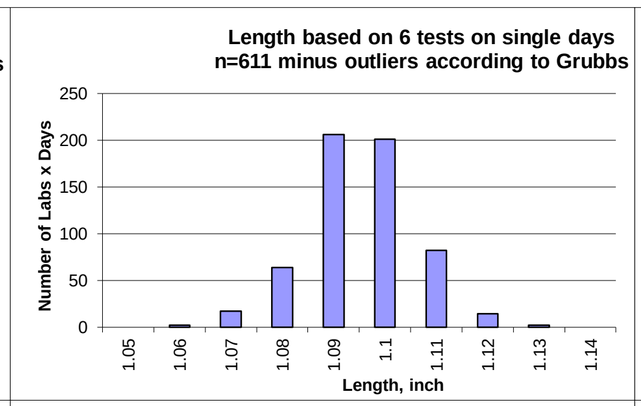
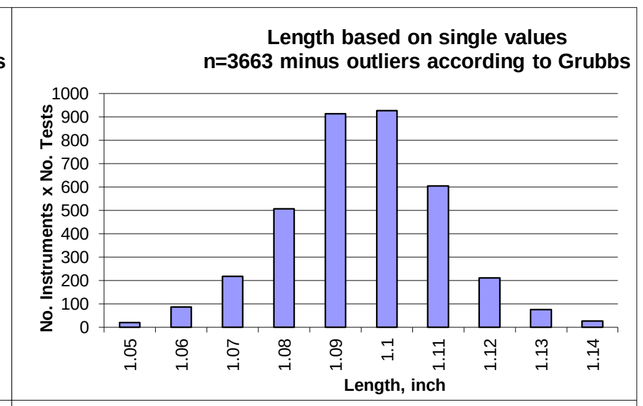
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length

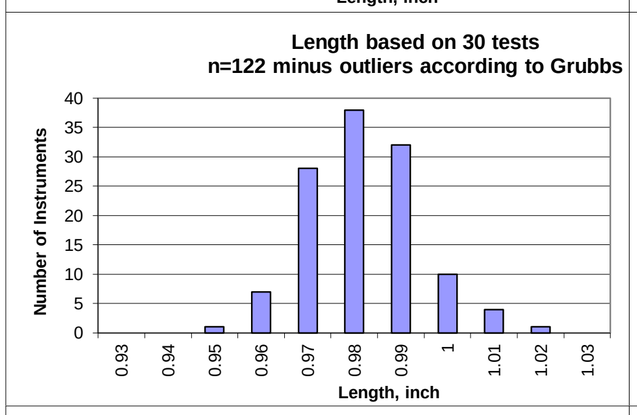
Cotton 1

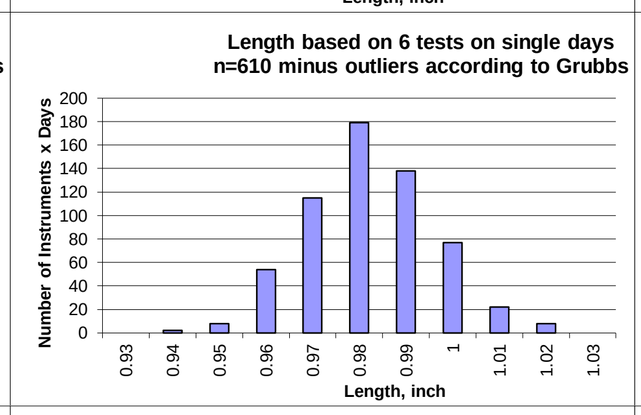


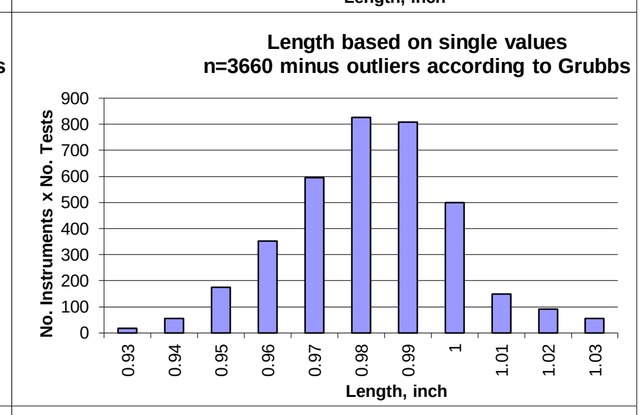




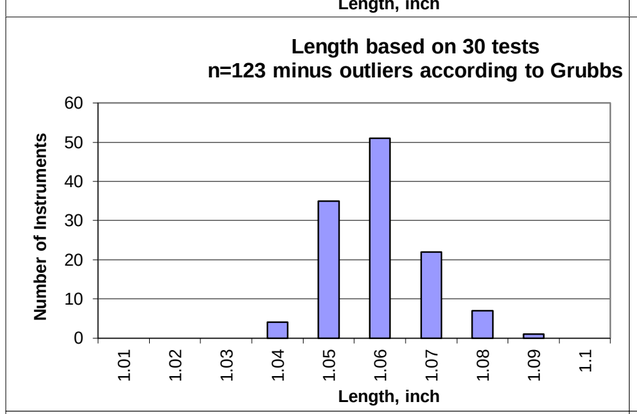
Cotton 2

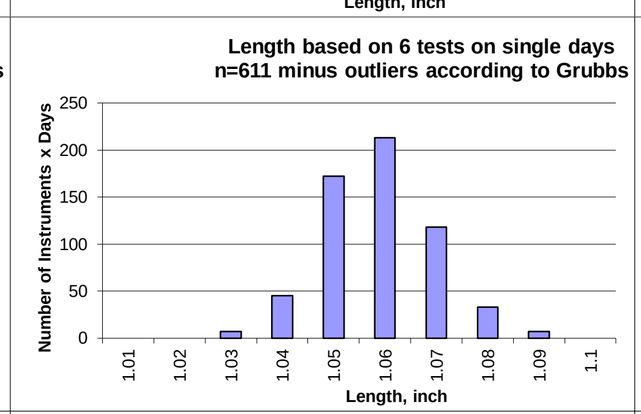


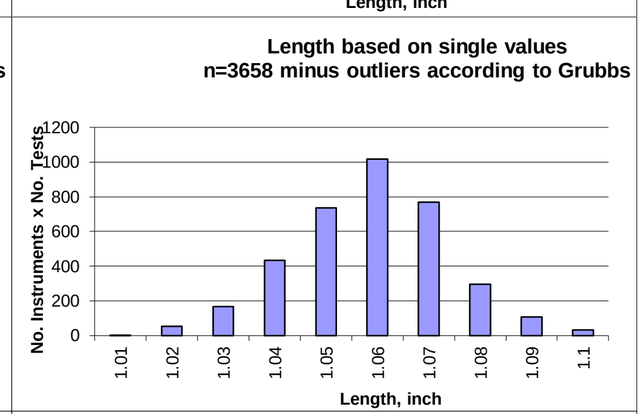




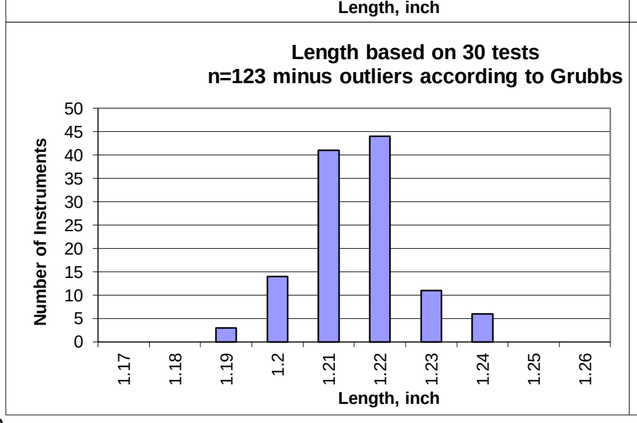
Cotton 3

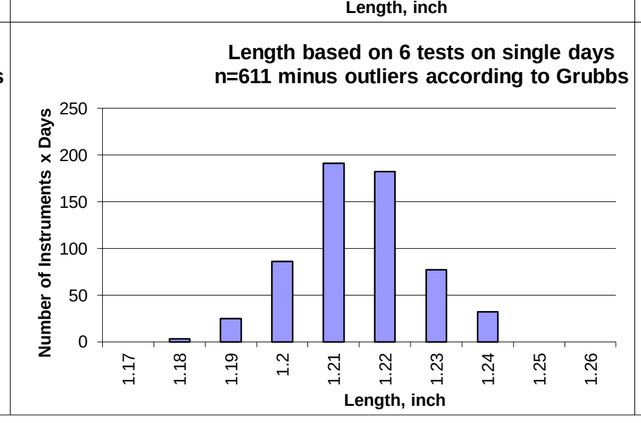


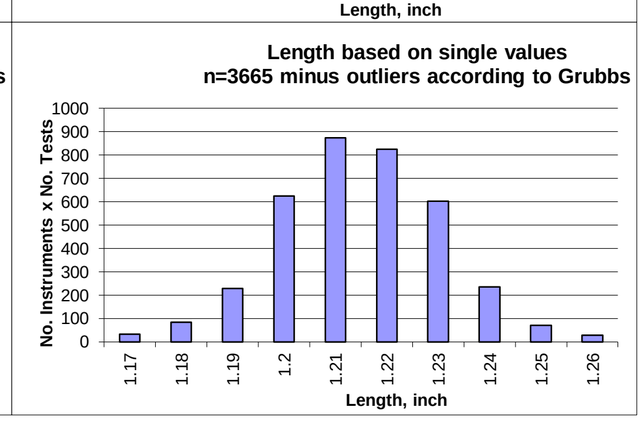




Cotton 4







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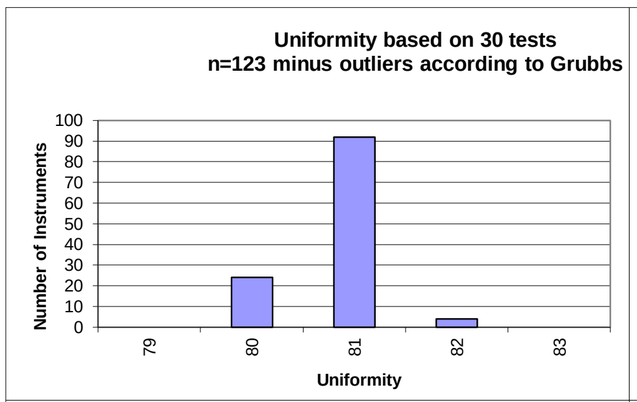
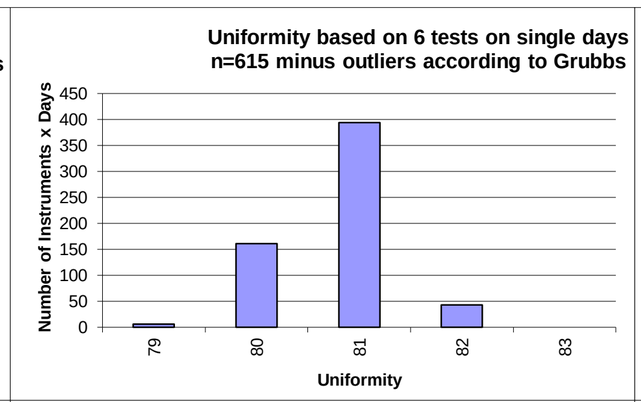
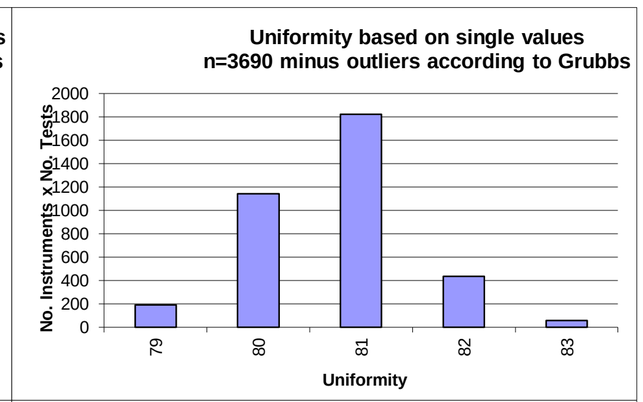
Test Result Distributions
Uniformity

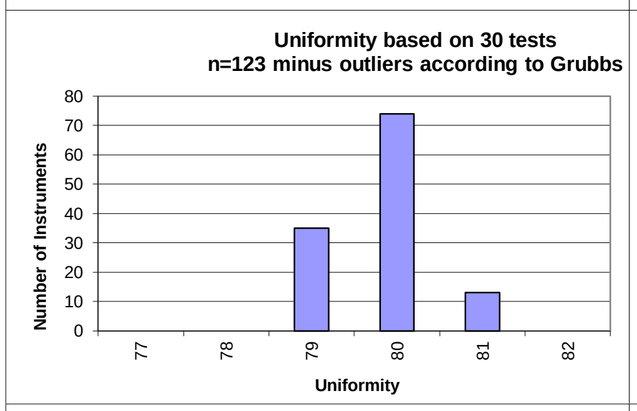
Cotton 1

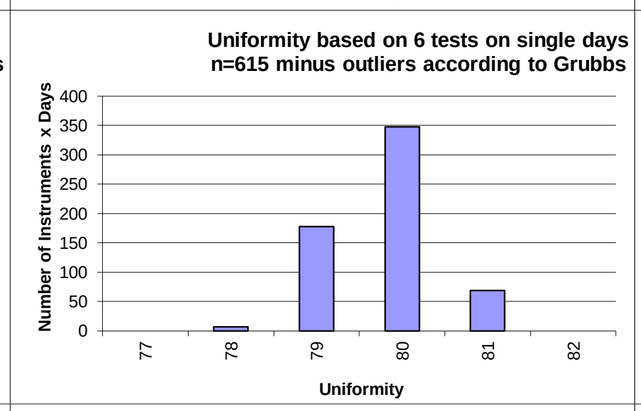


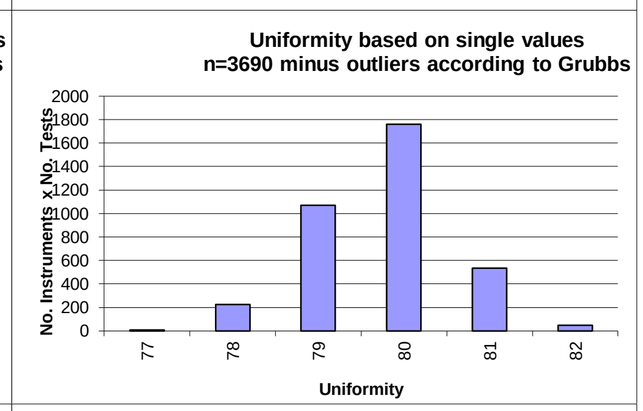




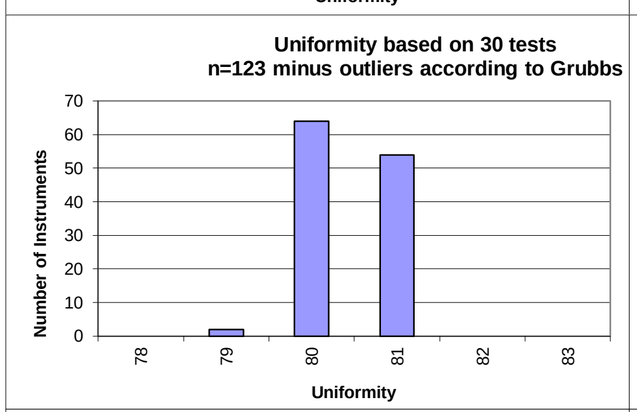
Cotton 2

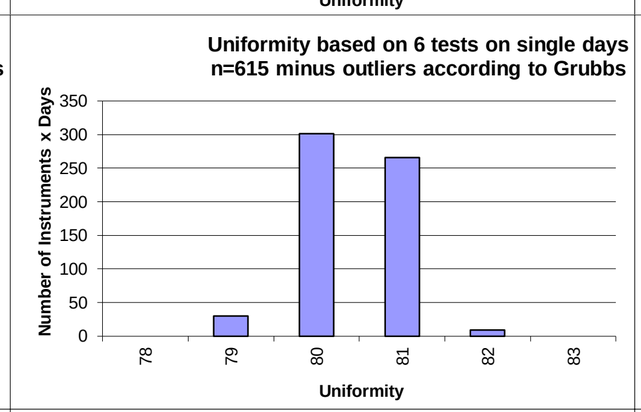


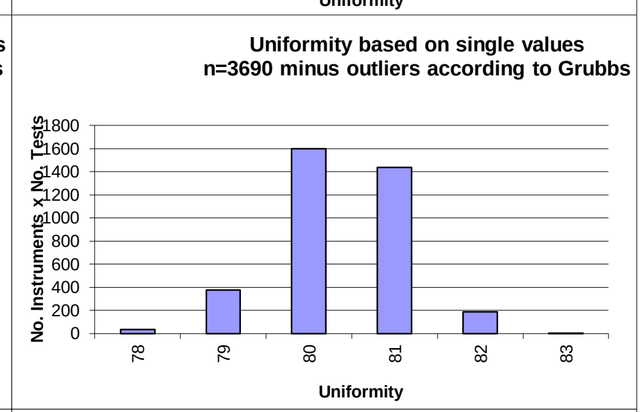




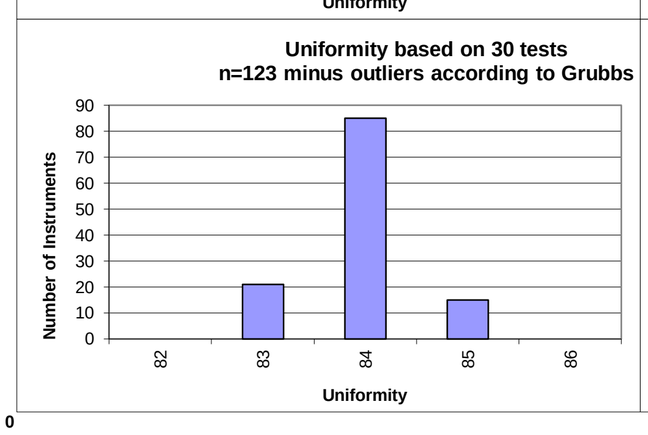
Cotton 3

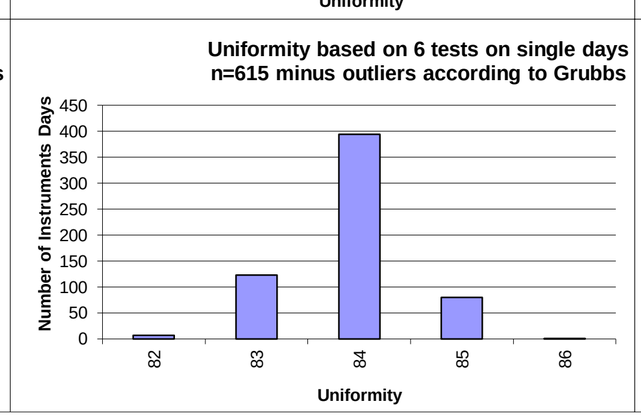


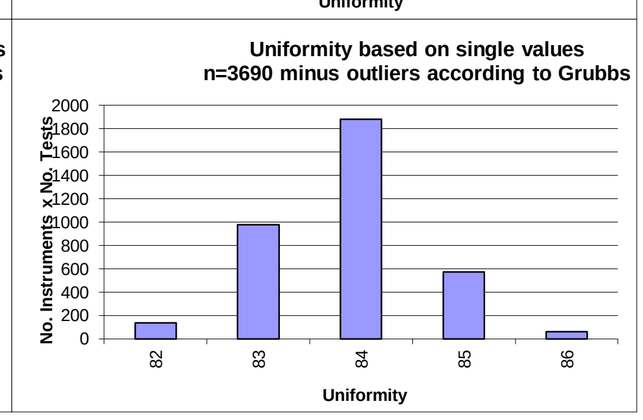




Cotton 4







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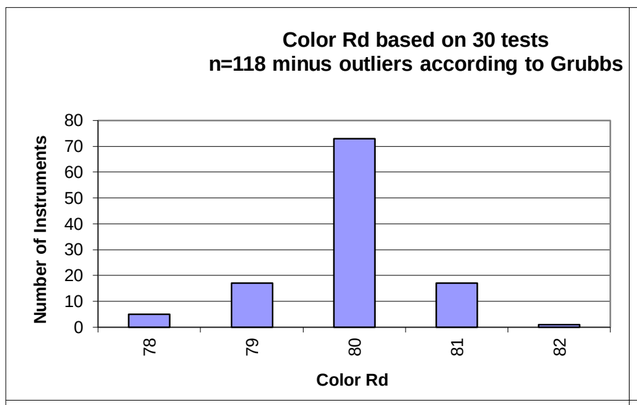
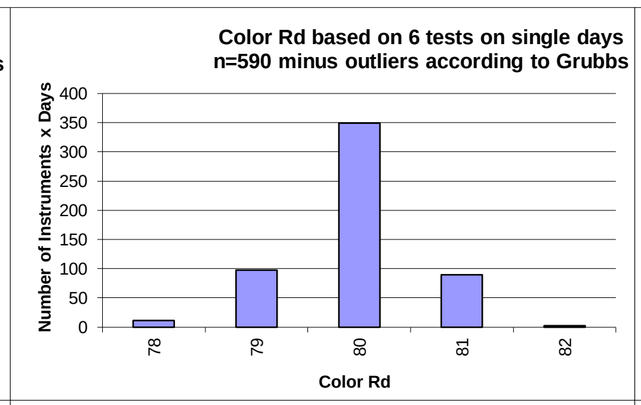
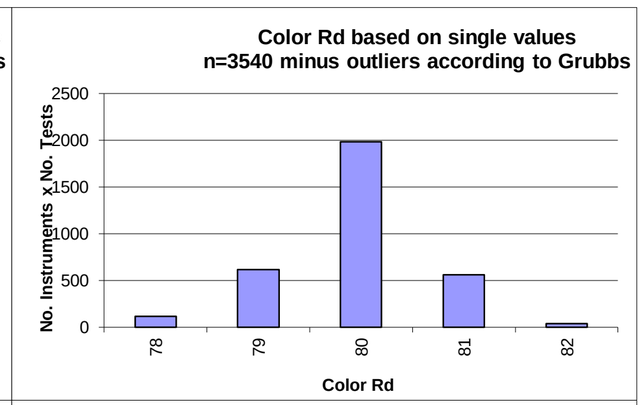
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd

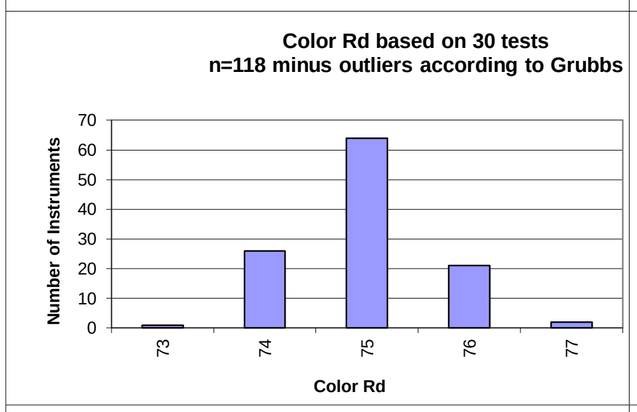
Cotton 1

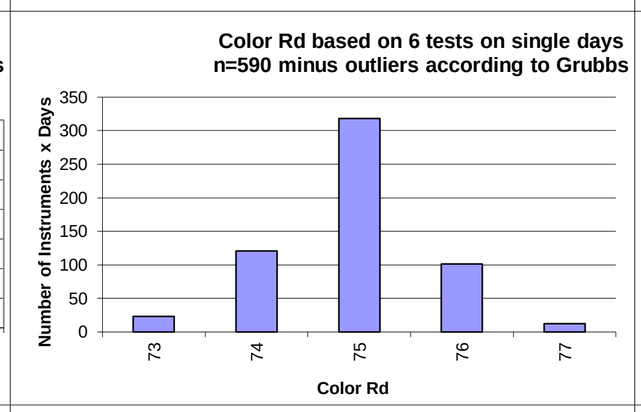


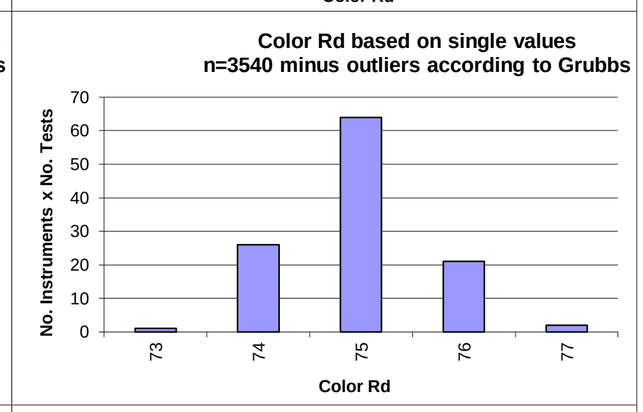




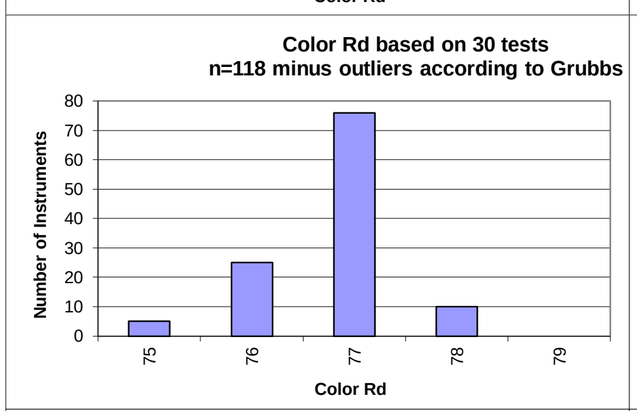
Cotton 2

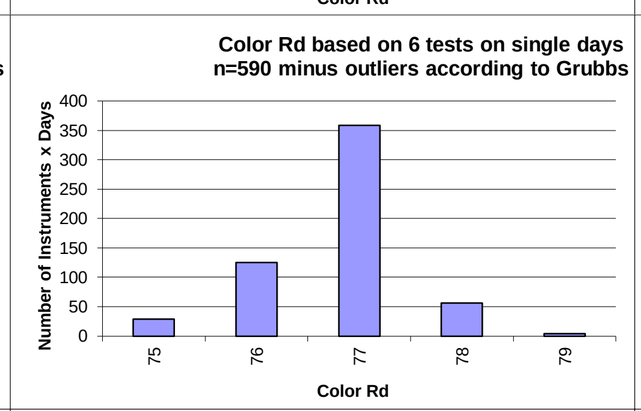


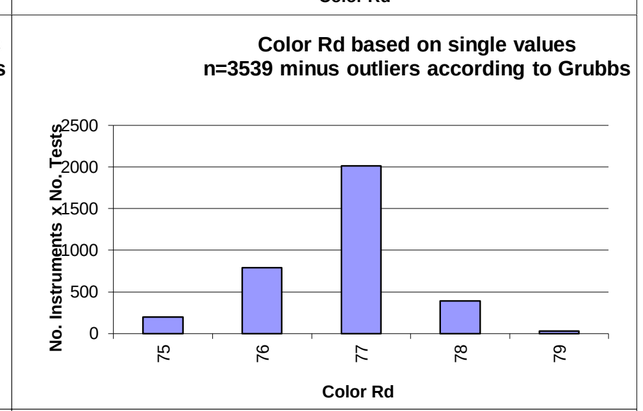




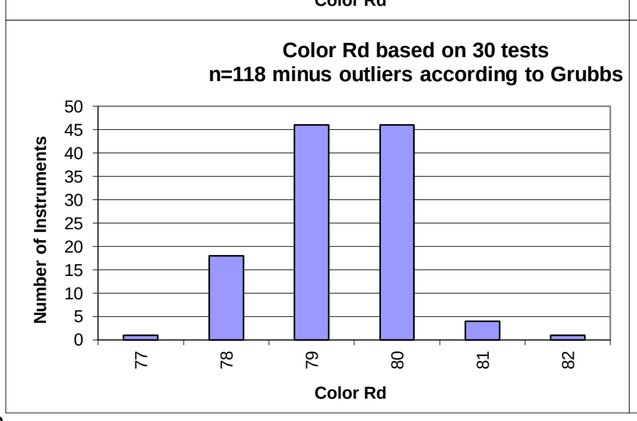
Cotton 3

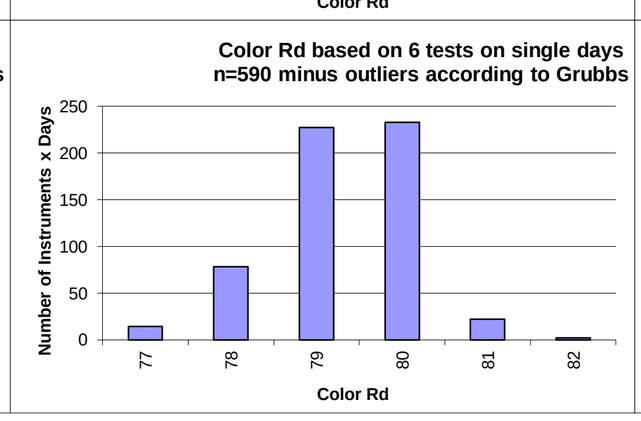


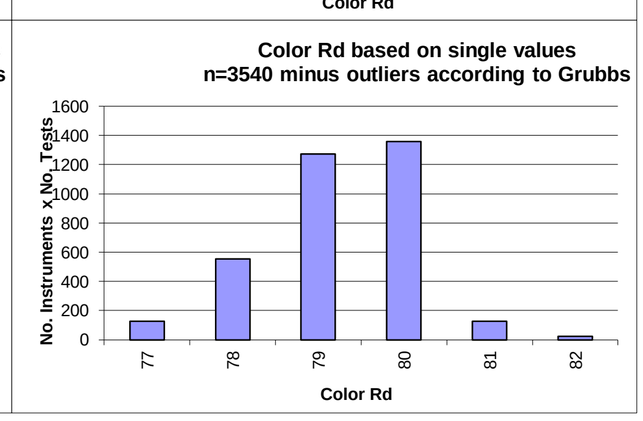




Cotton 4







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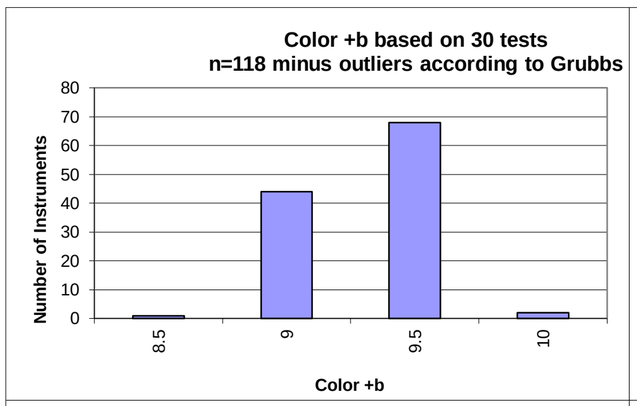
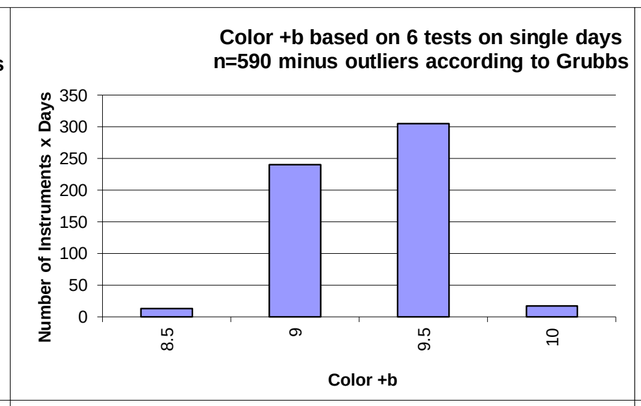
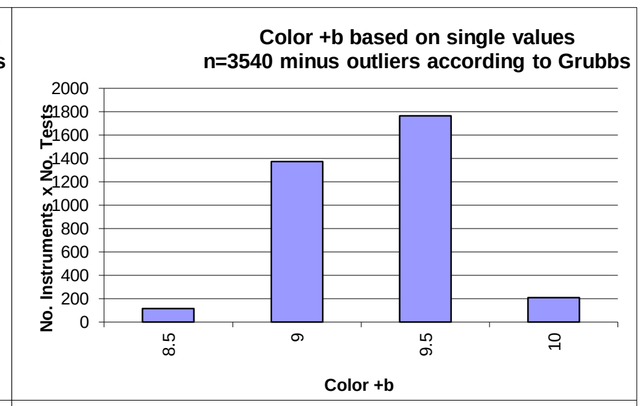
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color +b

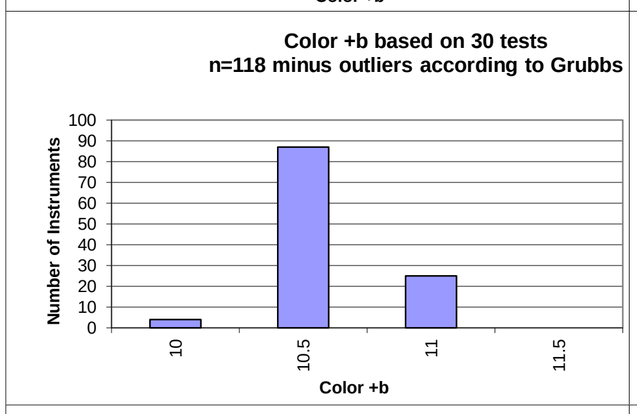
Cotton 1

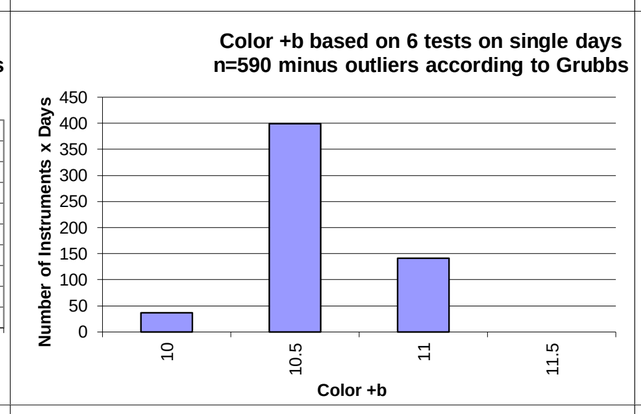


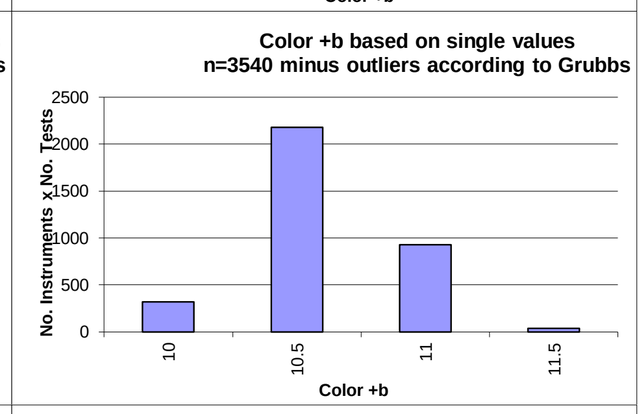




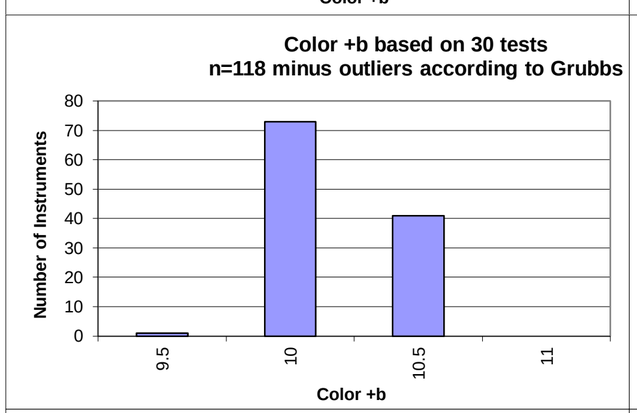
Cotton 2

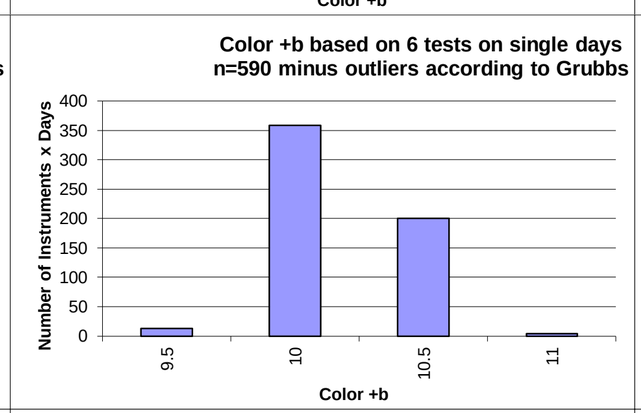


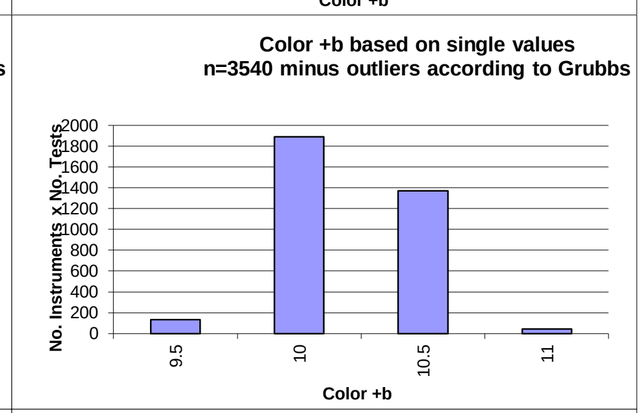




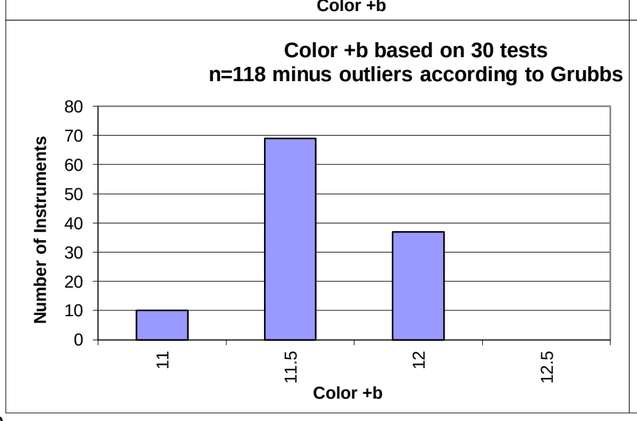
Cotton 3

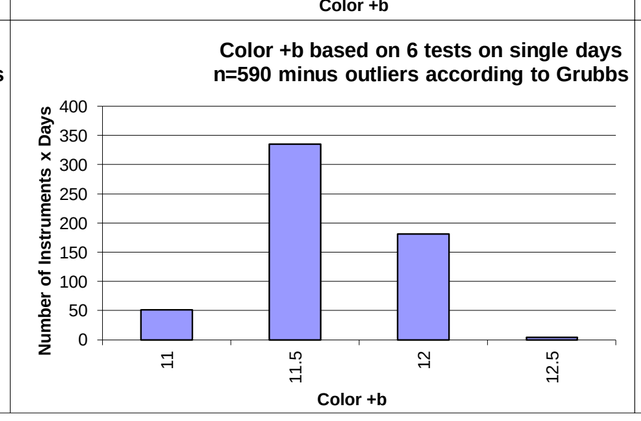


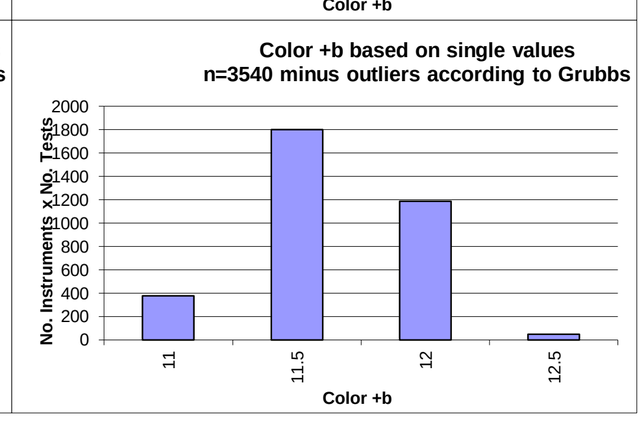




Cotton 4







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(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Optional Parameters

Inter-Instrument Averages, Inter-Instrument Variations, Typical within-instrument Variations

Trash Count							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			19.45	23.96	14.18	14.72	
Reference Values for Evaluation			19.45	23.96	14.18	14.72	
Number Of Instruments			90	90	90	88	**90**
Inter-Instrument Variation	based on 30 tests	SD	8.71	8.43	5.67	6.01	**7.21**
		CV %	44.8	35.2	40.0	40.8	**40.2**
	based on 6 tests	SD	8.82	8.80	5.92	6.35	**7.47**
		CV %	45.3	36.7	41.7	43.1	**41.7**
	based on single tests	SD	9.10	9.37	6.39	7.00	**7.97**
		CV %	46.8	39.1	45.1	47.6	**44.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.98	2.62	1.84	1.55	**2.00**
		CV %	10.2	10.9	13.0	10.6	**11.2**
	between single tests on one day	SD	2.32	2.80	2.15	1.92	**2.30**
		CV %	11.9	11.7	15.2	13.1	**13.0**
	between all tests on different days	SD	3.14	4.07	2.99	2.65	**3.21**
		CV %	16.1	17.0	21.1	18.0	**18.0**

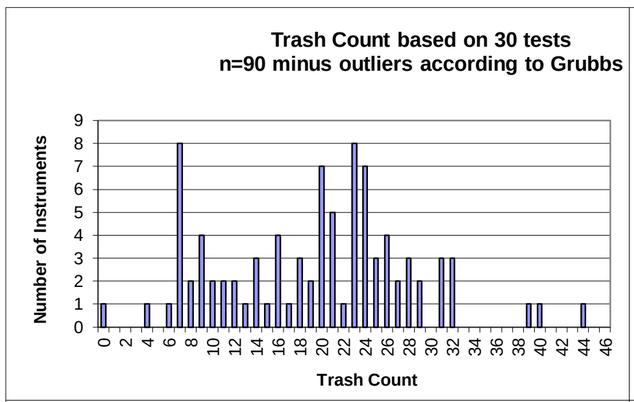
Trash Area							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.180	0.311	0.149	0.138	
Reference Values for Evaluation			0.180	0.311	0.149	0.138	
Number Of Instruments			90	90	90	88	**90**
Inter-Instrument Variation	based on 30 tests	SD	0.053	0.108	0.052	0.038	**0.063**
		CV %	29.5	34.9	34.7	27.3	**31.6**
	based on 6 tests	SD	0.065	0.112	0.055	0.045	**0.069**
		CV %	35.9	35.9	37.0	32.8	**35.4**
	based on single tests	SD	0.076	0.126	0.061	0.055	**0.080**
		CV %	42.1	40.6	40.6	40.1	**40.9**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.026	0.049	0.023	0.020	**0.029**
		CV %	14.3	15.6	15.7	14.2	**14.9**
	between single tests on one day	SD	0.033	0.055	0.028	0.028	**0.036**
		CV %	18.3	17.5	18.7	20.2	**18.7**
	between all tests on different days	SD	0.045	0.081	0.040	0.037	**0.051**
		CV %	25.1	26.1	26.9	27.1	**26.3**

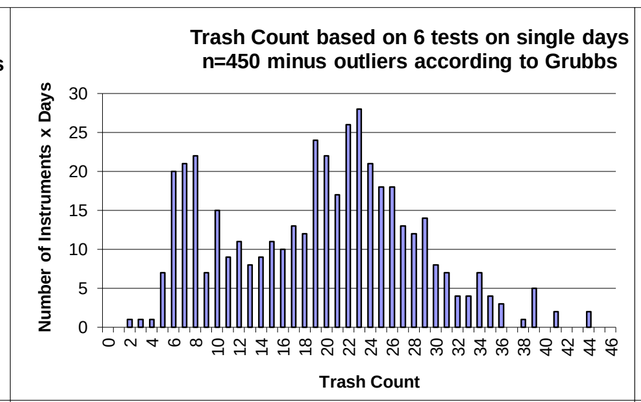
Maturity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			85.67	83.79	84.70	86.09	
Reference Values for Evaluation			85.67	83.79	84.70	86.09	
Number Of Instruments			91	92	91	89	**91**
Inter-Instrument Variation	based on 30 tests	SD	1.81	2.02	2.42	2.16	**2.10**
		CV %	2.1	2.4	2.9	2.5	**2.5**
	based on 6 tests	SD	1.84	2.01	2.50	2.18	**2.13**
		CV %	2.1	2.4	2.9	2.5	**2.5**
	based on single tests	SD	1.88	2.07	2.39	2.20	**2.13**
		CV %	2.2	2.5	2.8	2.6	**2.5**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.22	0.22	0.22	0.25	**0.23**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between single tests on one day	SD	0.35	0.41	0.32	0.38	**0.36**
		CV %	0.4	0.5	0.4	0.4	**0.4**
	between all tests on different days	SD	0.45	0.48	0.47	0.48	**0.47**
		CV %	0.5	0.6	0.6	0.6	**0.6**

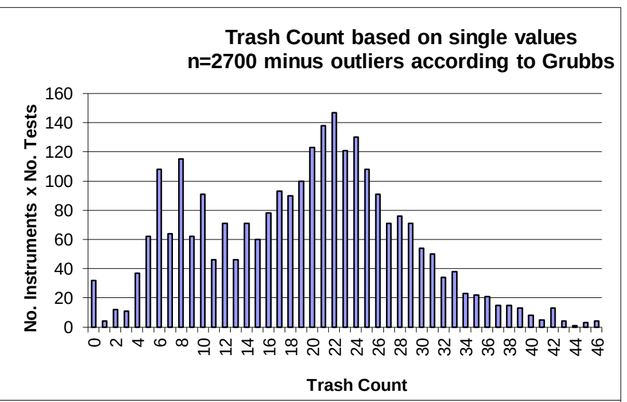
SFI							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			10.11	11.97	11.24	7.16	
Reference Values for Evaluation			10.11	11.97	11.24	7.16	
Number Of Instruments			108	108	108	106	**108**
Inter-Instrument Variation	based on 30 tests	SD	0.69	1.16	0.97	0.82	**0.91**
		CV %	6.8	9.7	8.7	11.5	**9.2**
	based on 6 tests	SD	0.82	1.19	1.04	0.84	**0.97**
		CV %	8.1	9.9	9.2	11.8	**9.8**
	based on single tests	SD	1.03	1.44	1.18	0.88	**1.13**
		CV %	10.2	12.1	10.5	12.3	**11.3**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.27	0.34	0.32	0.16	**0.27**
		CV %	2.7	2.8	2.9	2.2	**2.7**
	between single tests on one day	SD	0.47	0.65	0.52	0.28	**0.48**
		CV %	4.7	5.4	4.6	3.9	**4.7**
	between all tests on different days	SD	0.55	0.72	0.61	0.32	**0.55**
		CV %	5.5	6.0	5.4	4.4	**5.3**

Test Result Distributions
Trash Count

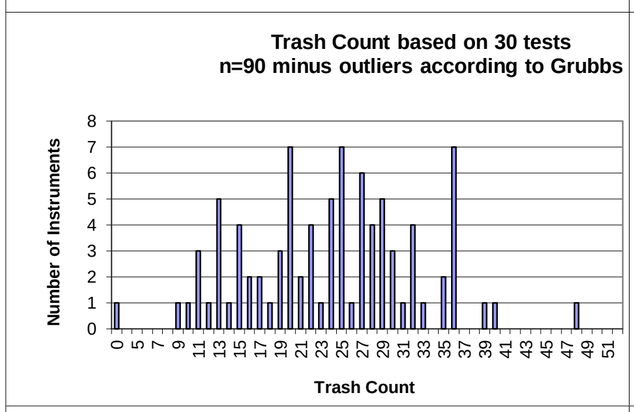
Cotton 1

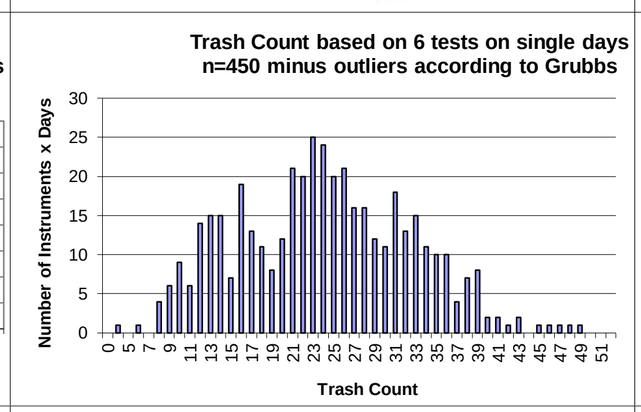


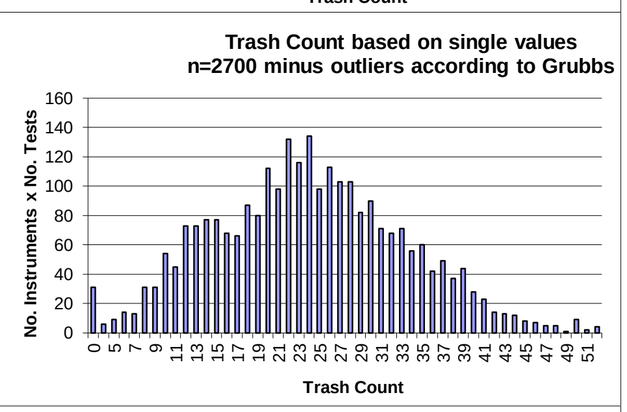




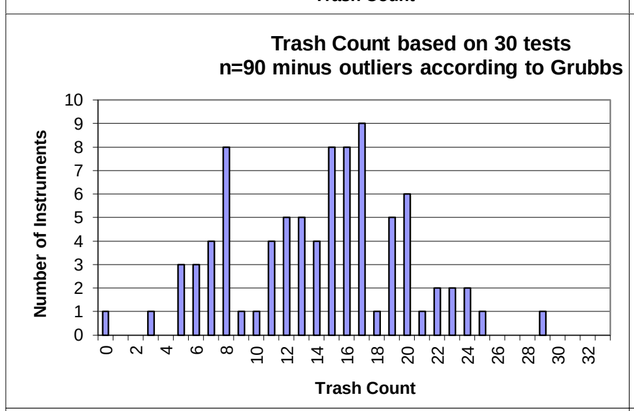
Cotton 2

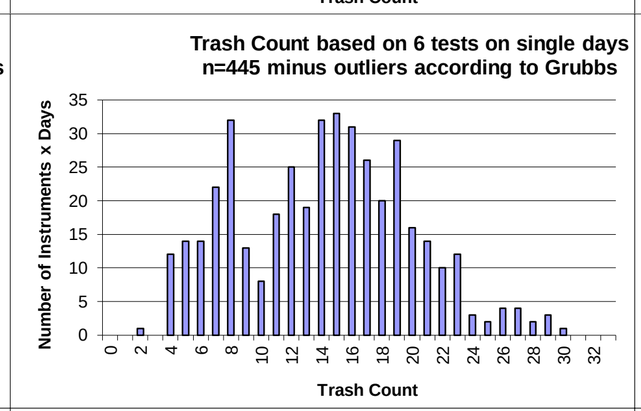


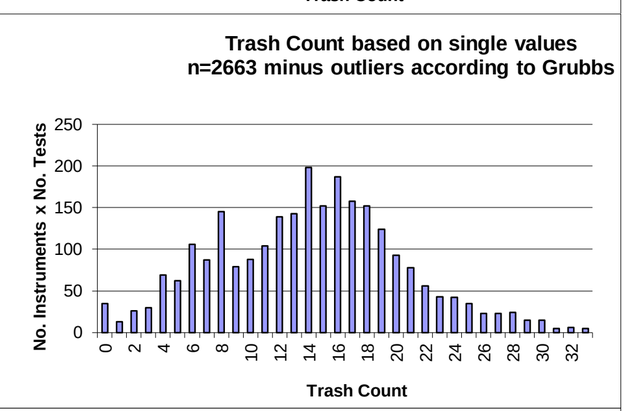




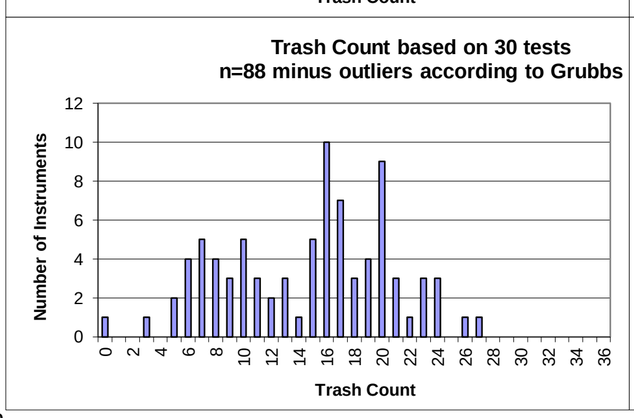
Cotton 3

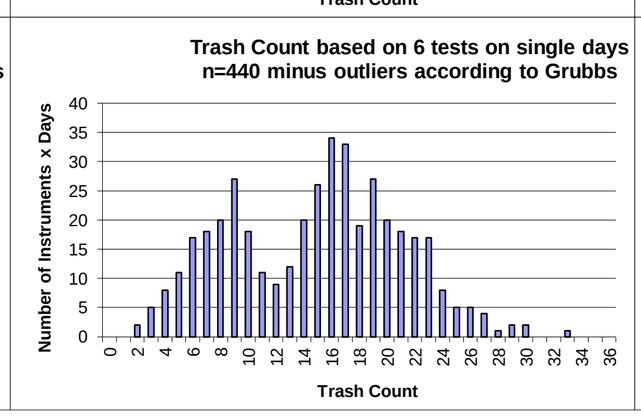


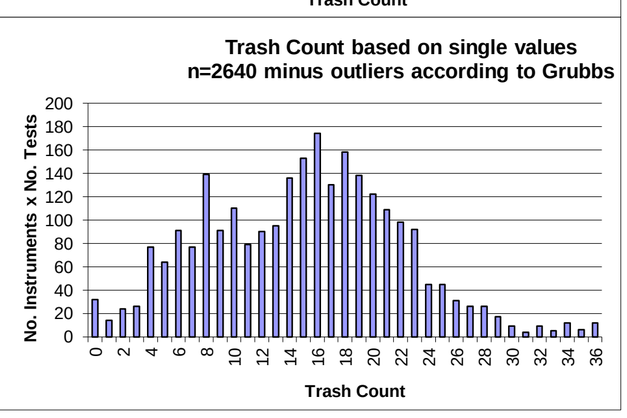




Cotton 4





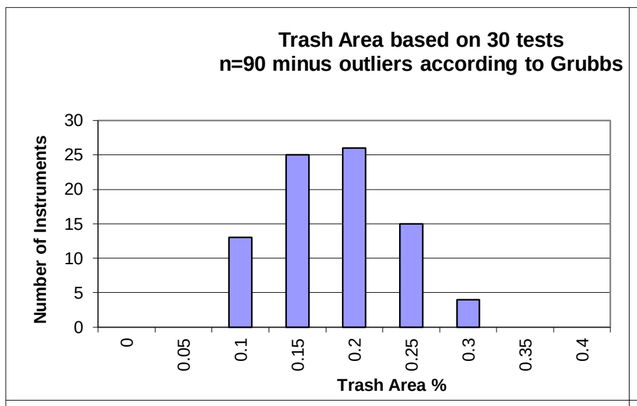


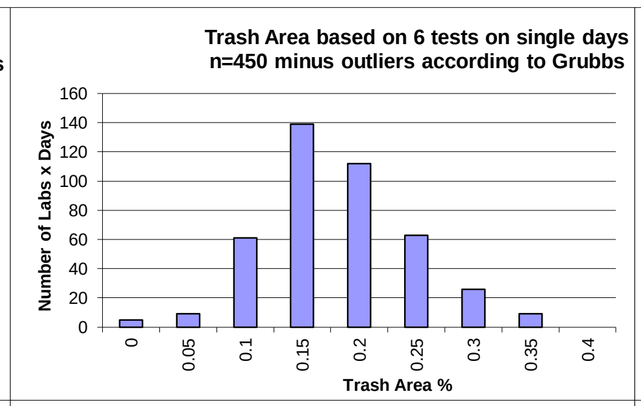
0

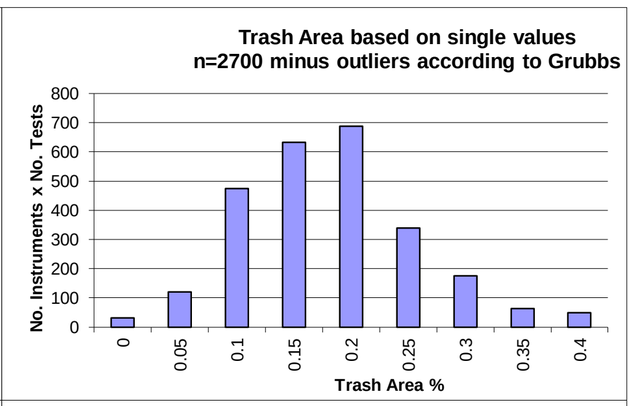
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area

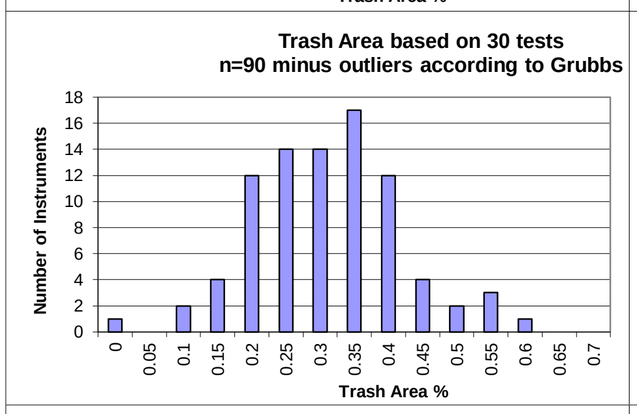
Cotton 1

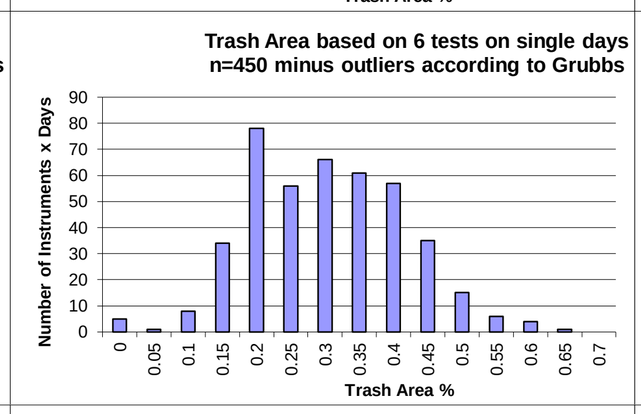


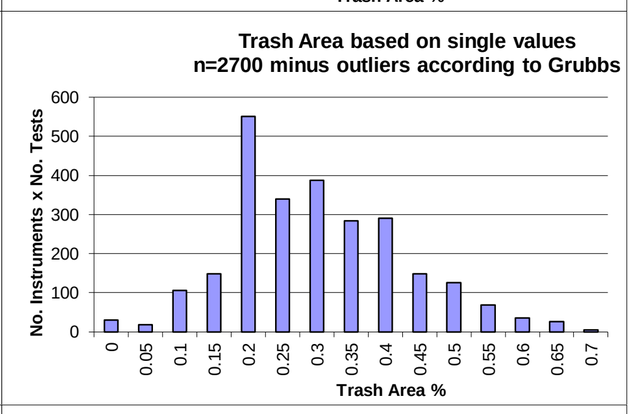




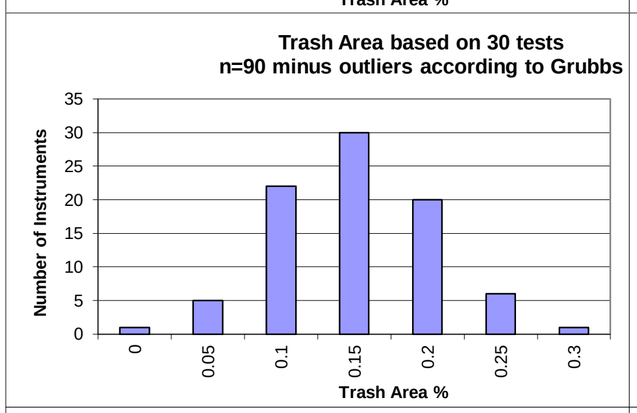
Cotton 2

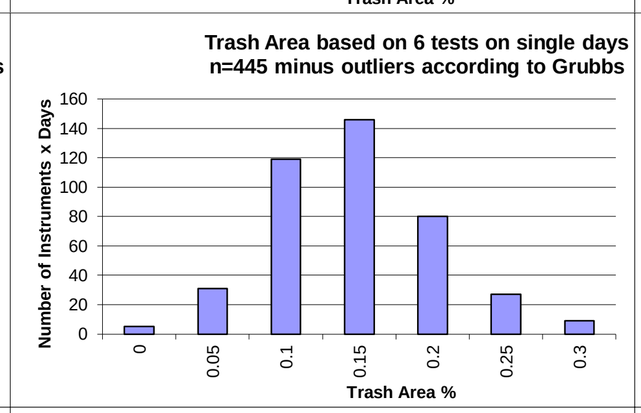


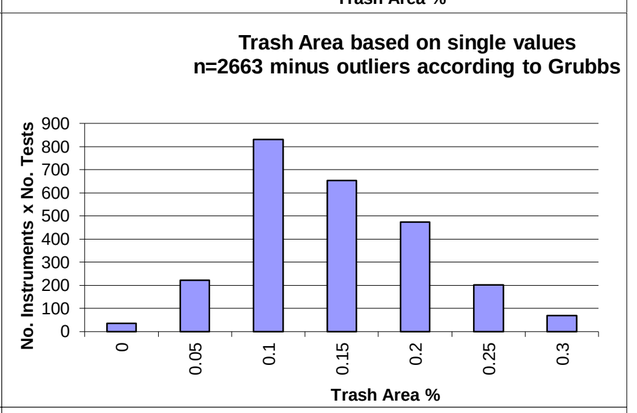




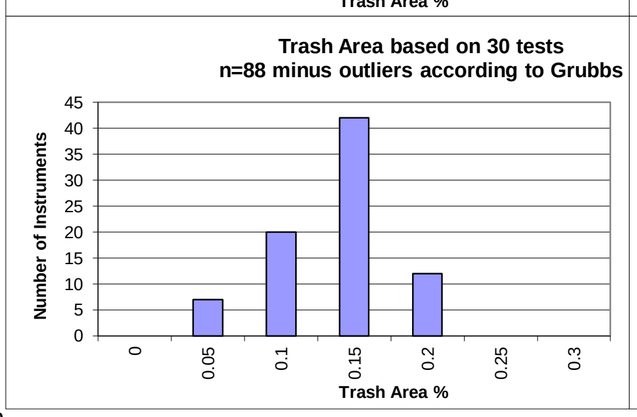
Cotton 3

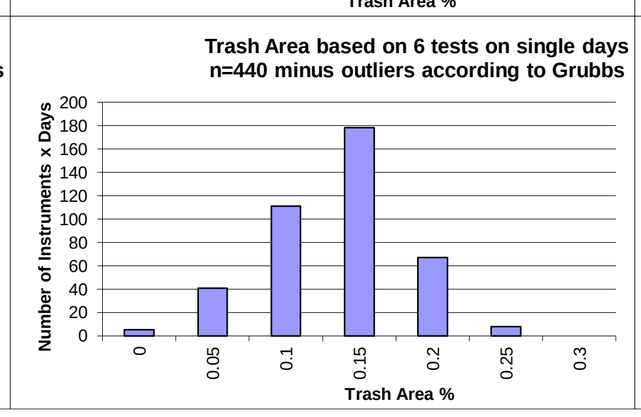


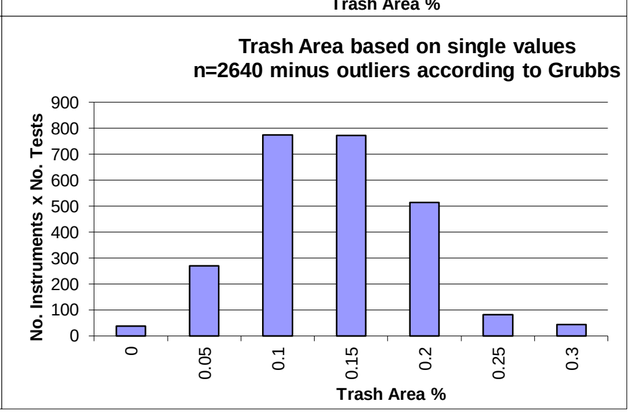




Cotton 4







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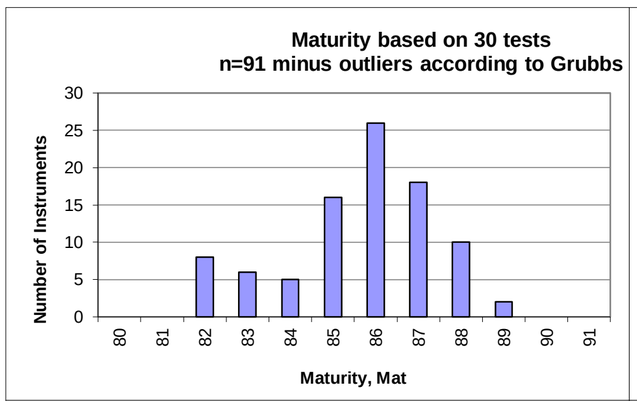
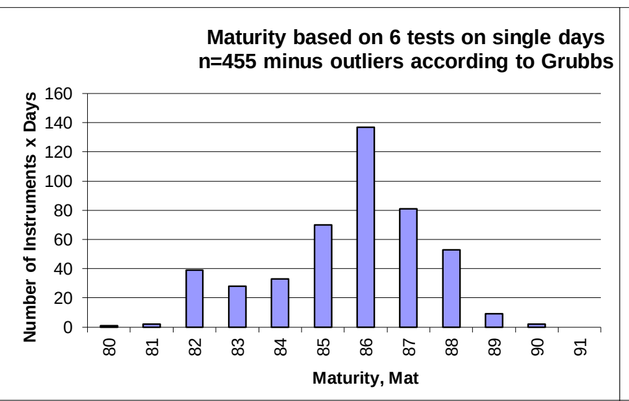
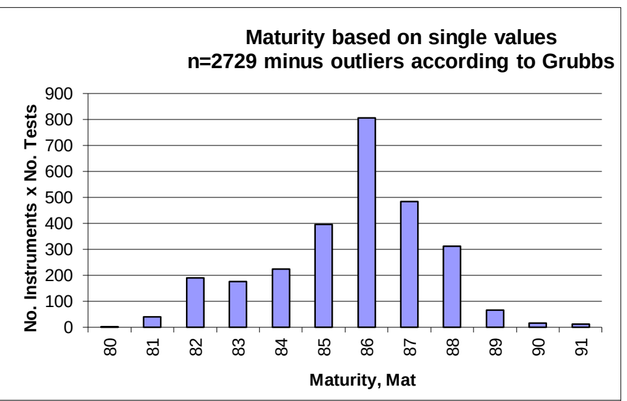
Test Result Distributions
Maturity

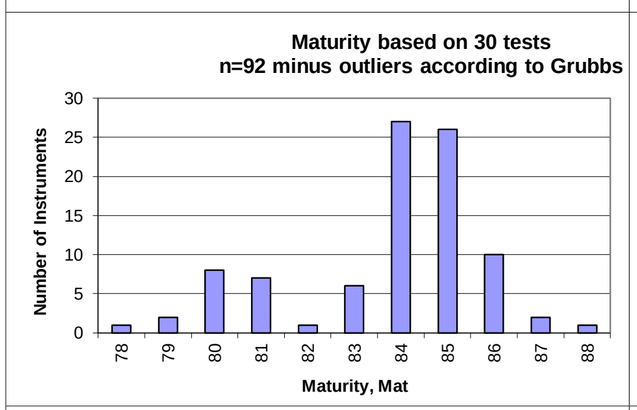
Cotton 1

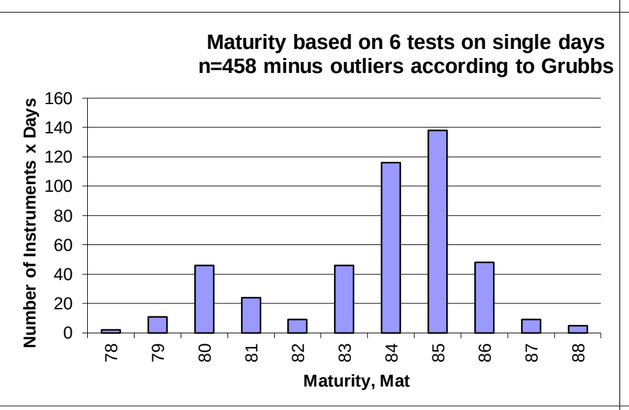


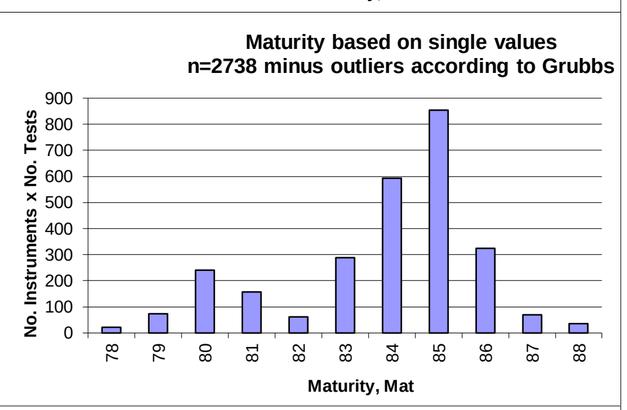




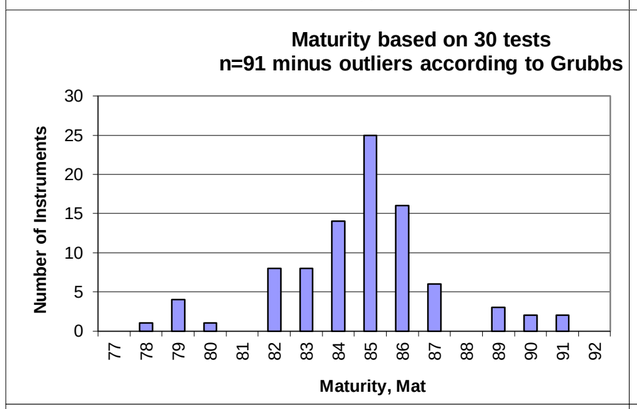
Cotton 2

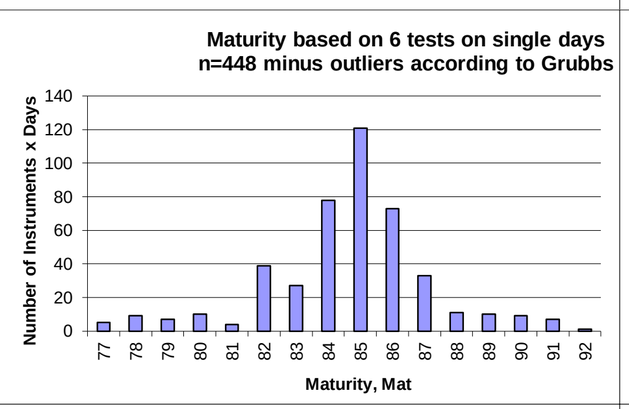


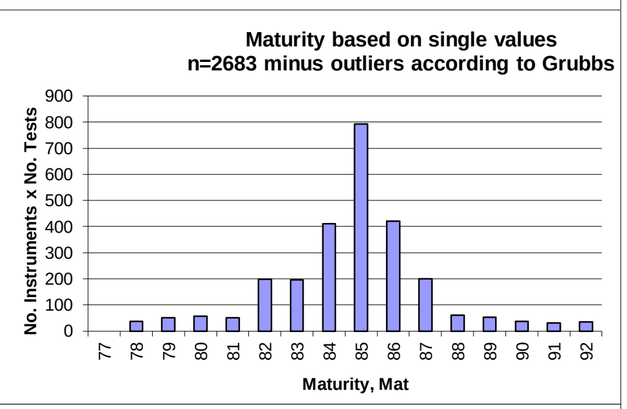




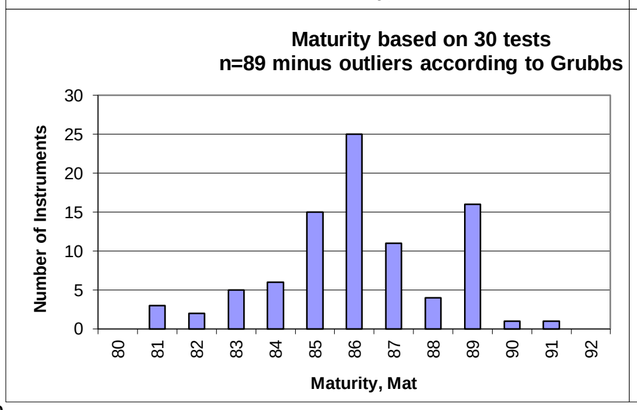
Cotton 3

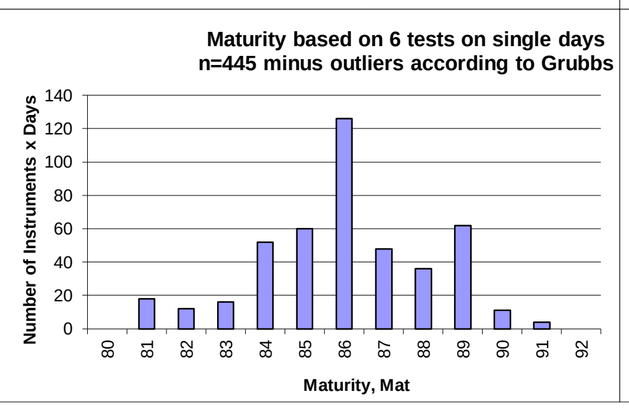


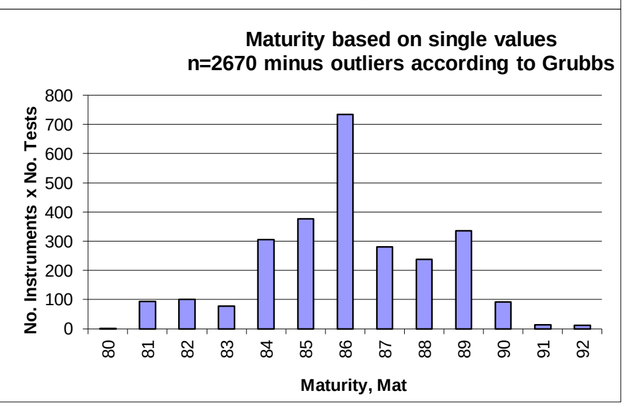




Cotton 4







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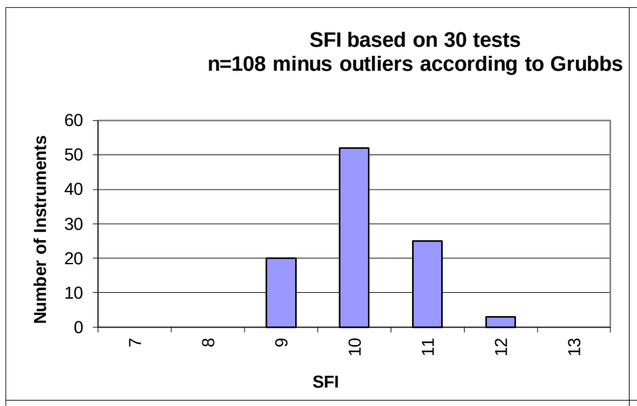
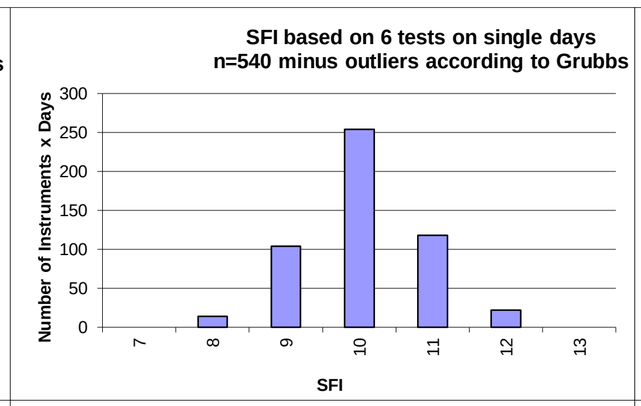
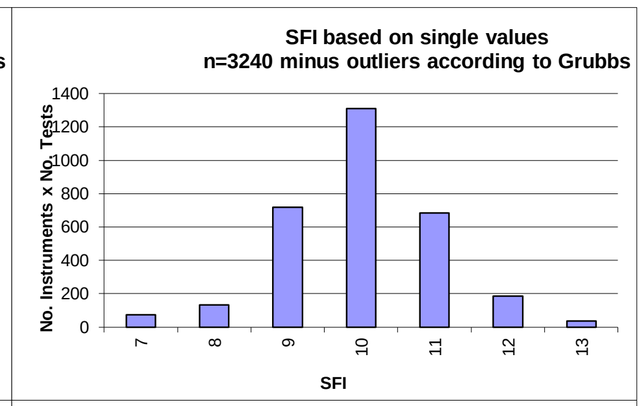
Test Result Distributions
SFI

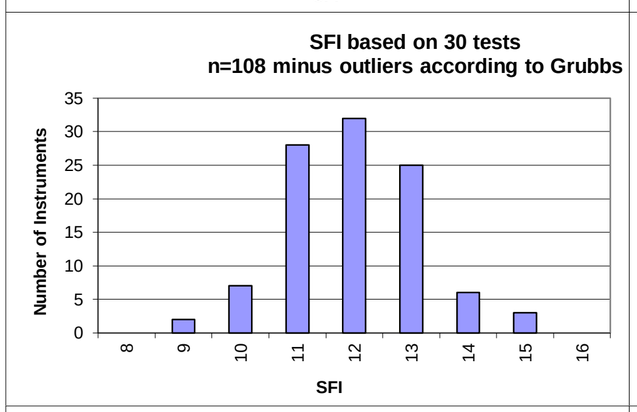
Cotton 1

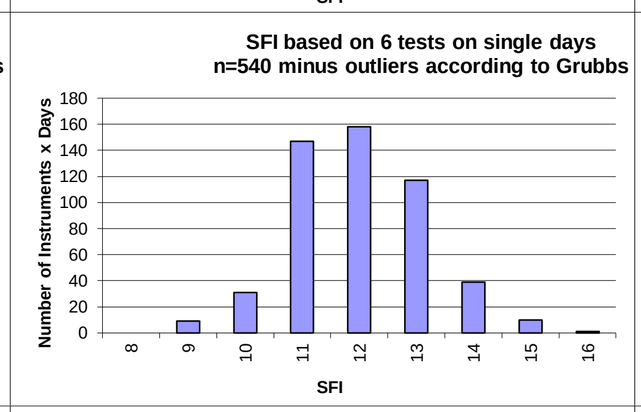


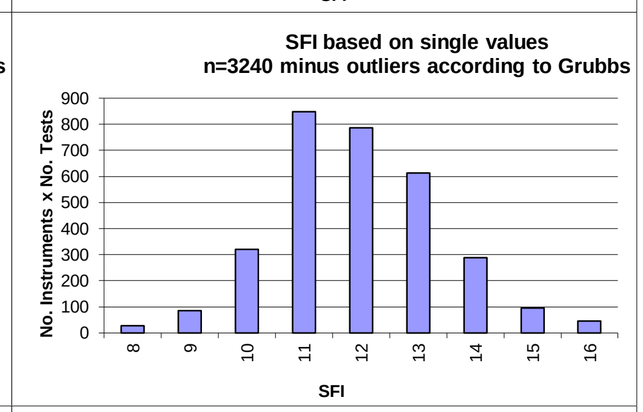




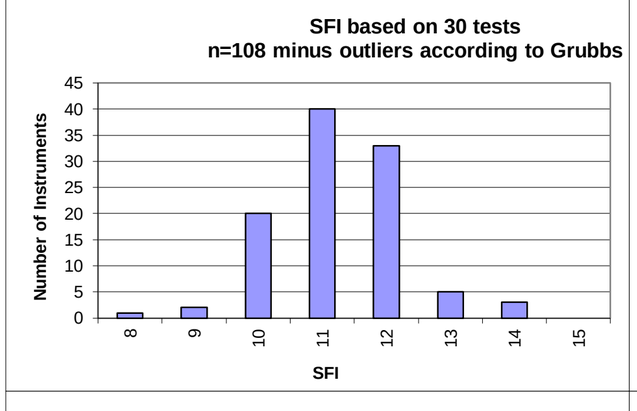
Cotton 2

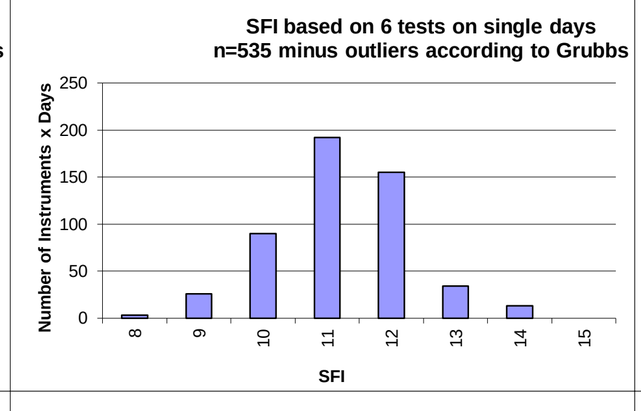


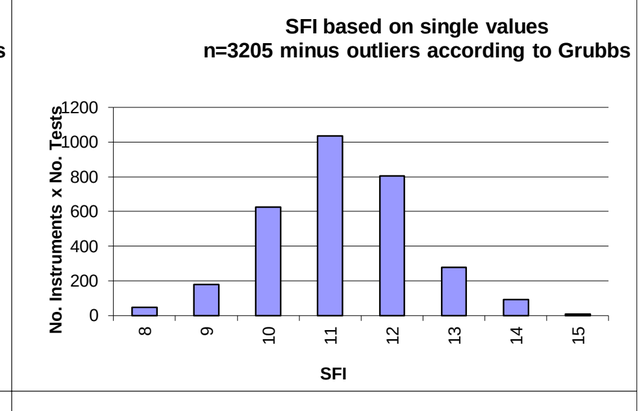




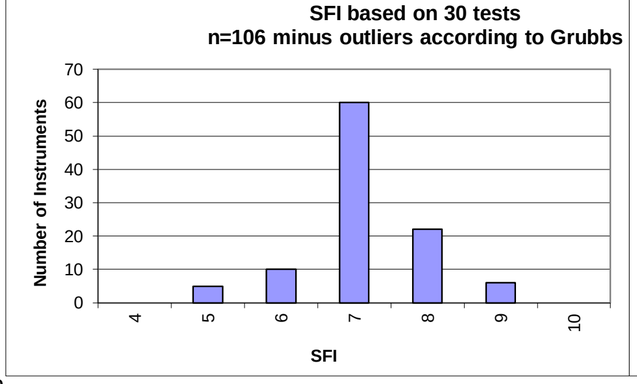
Cotton 3

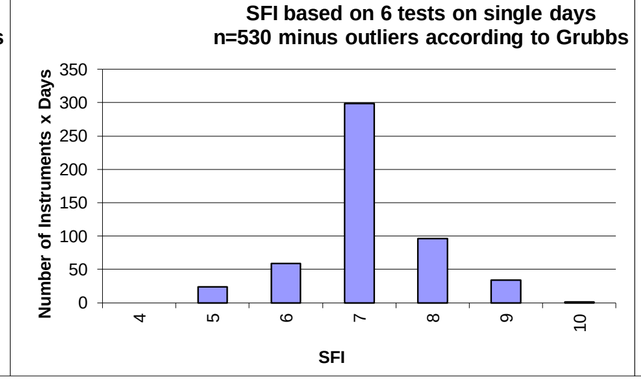


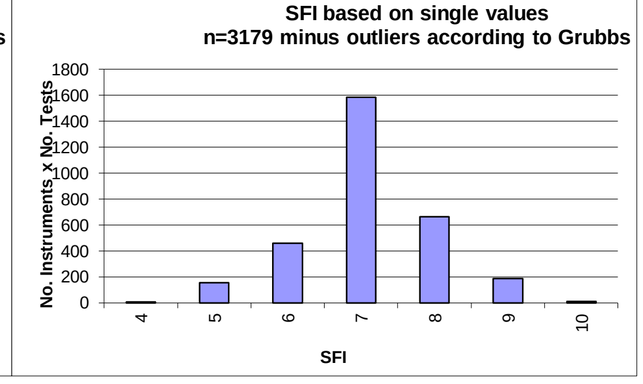




Cotton 4







0

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International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 1
General Evaluation

Section One: Result Distribution
Section Two: Instrument Evaluation
Section Three: Within Limits Evaluation

Section Two: Instrument Evaluation

Content:

-Evaluation of Combined Parameters
-Evaluation of Single Parameters

Executed By:
Faserinstitut Bremen e.V., Bremen, Germany*
USDA-AMS, Memphis, TN, USA

System Provided by:
Generation 10 Limited

This report is an outcome of the Project CFC/ICAC/33 – CSITC,
which benefitted from support from the Common Fund for Commodities
and the European Union, partners in Commodity Development.

** Faserinstitut Bremen are a Cooperation Partner with ICA Bremen*

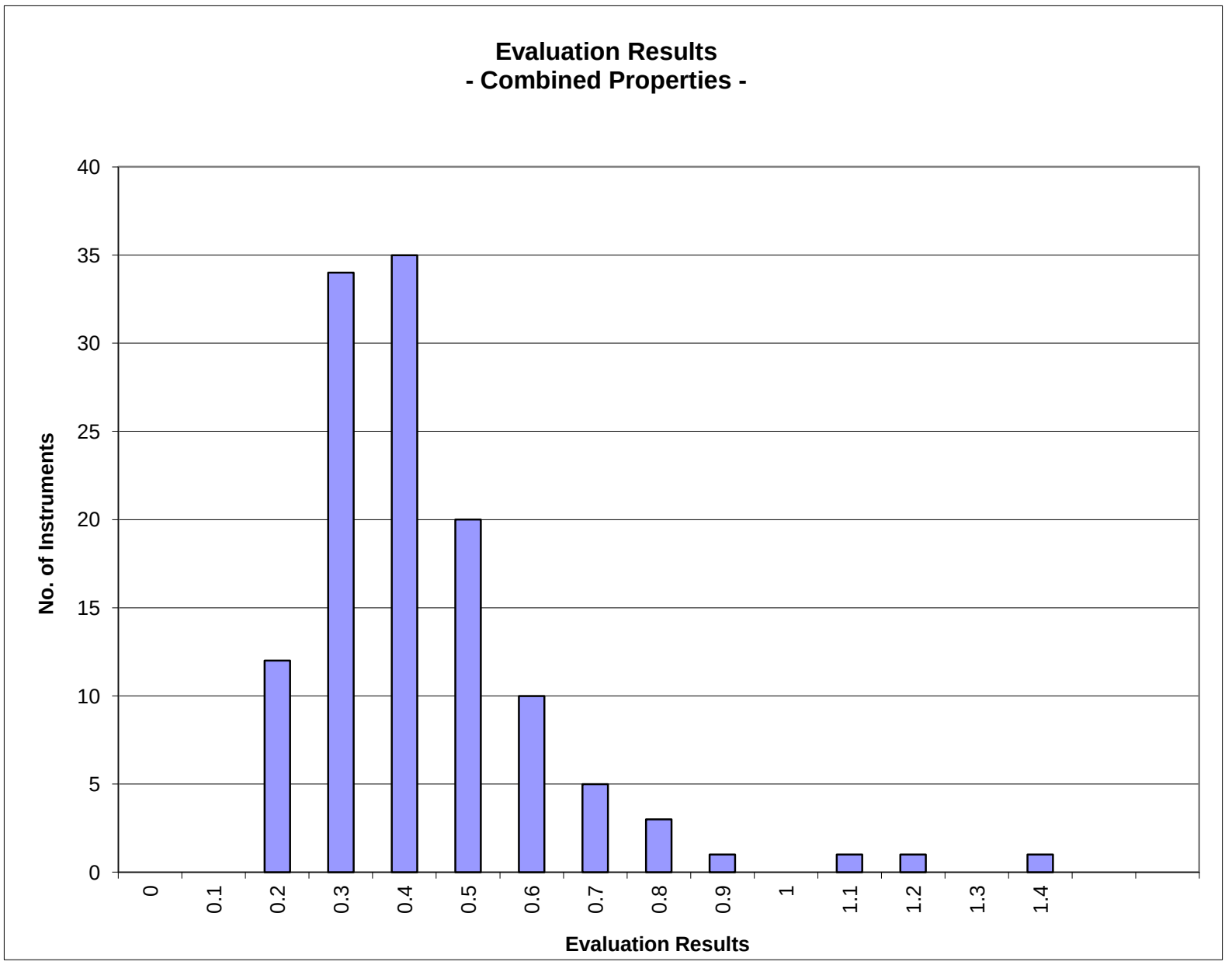
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2014 - 1

		Evaluation Combined Prop.
Statistics	Average	0.43
	Median	0.40
	Best Instrument	0.15
	Worst Instrument	1.40



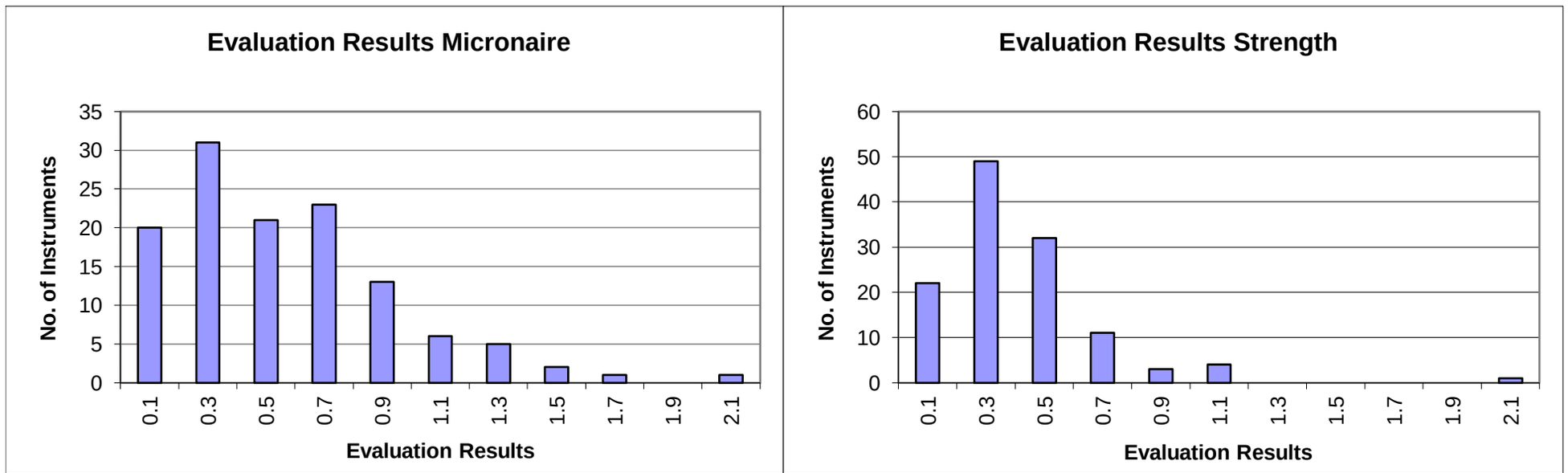
x-Axis shows midpoints of classes

The evaluation results are entered based on the unrounded values

(classes are defined as > lower limit and <= upper limit)

Instrument Evaluation
- Graph of Single Properties -
According to ICAC CSITC Task Force Recommendations
Global - Round Trial 2014 - 1

		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.56	0.41	0.44	0.39	0.41	0.36
	Median	0.48	0.34	0.39	0.31	0.28	0.27
	Best Instr.	0.09	0.09	0.11	0.10	0.06	0.05
	Worst Instr.	2.17	2.09	2.43	1.49	2.92	2.92



x-Axis shows midpoints of classes
The evaluation results are entered based on the unrounded values

International Cotton Advisory Committee

CSITC
Global - Round Trial 2014 - 1
General Evaluation

Section One: Result Distribution
Section Two: Instrument Evaluation
Section Three: Within Limits Evaluation

Section Three: Within Limits Evaluation

Content:

-Based on Average of 30 Test Results
-Based on Single Test Results

Executed By:
Faserinstitut Bremen e.V., Bremen, Germany*
USDA-AMS, Memphis, TN, USA

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Within Limits Evaluation

Based on average of 30 test results for each sample

	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
Limits	0.20	2.0	0.030	2.0	1.5	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	99.2	97.5	97.2	99.8	92.6	98.9
Completely within limits	97.6	93.4	92.7	99.2	85.6	98.3
% of Instruments ≥75% within limits	99.2	98.4	97.6	100.0	91.5	99.2
% of Instruments ≥50% within limits	100.0	99.2	99.2	100.0	95.8	99.2

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL141-001-02	100	100	100	100	100	100
GL141-001-04	100	100	100	100	0	100
GL141-001-07	100	100	100	100	75	100
GL141-001-08	100	100	100	100	100	100
GL141-002-01	100	100	100	100	100	100
GL141-003-01	100	75	100	100		
GL141-003-02	100	100	100	100		
GL141-003-03	100	100	100	100		
GL141-004-01	100	100	100	100	100	100
GL141-005-01	100	100	100	100	100	100
GL141-005-02	100	100	100	100	100	100
GL141-005-03	100	100	75	100	100	100
GL141-005-04	100	100	100	100	100	100
GL141-006-01	100	100	75	100	100	100
GL141-007-01	100	100	100	100	100	100
GL141-008-20	100	100	100	100	100	100
GL141-008-21	100	100	100	100	100	100
GL141-009-01	100	100	100	100	100	100
GL141-010-01	100	100	100	100	50	100
GL141-012-01	100	100	100	100	100	100
GL141-013-01	100	100	100	100	50	100
GL141-014-52	100	100	100	100	100	100
GL141-014-55	100	100	100	100	100	100
GL141-015-01	100	100	100	100	100	100
GL141-016-01	100	75	75	100	100	100
GL141-016-03	100	100	100	100	100	100
GL141-017-01	100	100	100	100	100	100
GL141-017-02	100	100	100	100	100	100
GL141-018-03	100	100	100	100	100	100
GL141-019-01	100	100	100	100	100	100
GL141-019-12	100	100	100	100	100	100
GL141-020-01	100	100	75	100	75	100
GL141-021-01	100	100	100	100	100	100
GL141-022-01	100	100	100	100	100	100
GL141-024-01	100	100	100	75	0	100
GL141-025-03	100	100	100	100	100	100
GL141-026-01	100	100	100	100	100	100
GL141-026-02	100	100	100	100	100	100
GL141-027-03	100	100	100	100	100	100

GL141-027-04	100	100	100	100	100	100
GL141-027-06	100	100	100	100	100	100
GL141-028-01	100	100	100	100	100	100
GL141-028-04	100	100	100	100	75	100
GL141-029-04	100	100	100	100	100	100
GL141-030-01	100	100	100	100	100	100
GL141-031-01	100	100	100	100	100	100
GL141-033-02	100	100	100	100	100	100
GL141-034-01	100	100	100	100	25	100
GL141-035-01	100	100	100	100	100	100
GL141-036-01	100	100	100	100	100	100
GL141-036-04	100	100	100	100	100	100
GL141-036-05	100	100	100	100	100	100
GL141-039-01	100	100	100	100	50	100
GL141-040-01	100	100	50	100	100	100
GL141-040-02	100	0	0	100	100	100
GL141-041-01	100	100	100	100	100	100
GL141-041-03	100	100	100	100	100	100
GL141-042-02	100	100	100	100	100	100
GL141-042-06	100	100	100	100	100	100
GL141-043-01	100	100	100	100	100	100
GL141-043-02	100	100	100	100	100	100
GL141-044-02	100	100	100	100	75	100
GL141-046-01	100	75	50	100		
GL141-047-01	100	100	100	100	100	100
GL141-048-04	50		100	100	50	0
GL141-049-01	100	75	100	100	100	100
GL141-050-01	100	100	100	100	100	100
GL141-051-01	100	100	100	100	100	100
GL141-052-08	100	100	100	100	100	100
GL141-052-09	100	100	100	100	100	100
GL141-053-01	100	100	100	100	100	100
GL141-054-01	100	100	100	100	100	100
GL141-056-01	100	100	100	100	100	100
GL141-057-01	100	100	100	100	75	100
GL141-058-01	100	100	100	100	100	100
GL141-058-02	100	100	100	100	100	100
GL141-058-03	100	100	100	100	100	100
GL141-058-04	100	100	100	100	100	100
GL141-059-13	100	100	100	100	100	100
GL141-060-25	100	100	100	100	75	100
GL141-060-26	100	100	100	100	75	100
GL141-061-01	100	100	100	100	100	100
GL141-062-01	100	100	100	100	100	75
GL141-064-01	100	100	100	100	100	100
GL141-065-01	100	100	100	100	100	100
GL141-067-01	100	100	100	100	100	100
GL141-067-02	100	100	100	100	100	100
GL141-068-01	100	100	100	100	100	100
GL141-069-01	100	100	100	100	100	100
GL141-070-01	100	100	100	100	100	100
GL141-070-02	100	100	100	100	100	100
GL141-071-16	100	100	75	100	100	100
GL141-071-25	100	100	100	100	100	100
GL141-073-18	100	100	100	100	100	100
GL141-074-01	100	100	100	100	100	100
GL141-075-01	100	100	100	100	100	100
GL141-079-01	100	100	100	100	100	100
GL141-079-02	100	100	100	100	50	100
GL141-079-03	100	100	100	100	100	100

GL141-080-01	100	100	100	100	100	100
GL141-081-01	100	100	100	100	100	100
GL141-082-01	100	100	100	100	100	100
GL141-082-02	100	100	100	100	100	100
GL141-083-09	100	100	100	100	100	100
GL141-083-10	100	100	100	100	100	100
GL141-084-01	100	100	100	100	100	100
GL141-086-01	100	100	100	100	100	100
GL141-087-01	100	100	100	100	100	100
GL141-088-01	100	100	100	100	100	100
GL141-089-01	100	100	100	100	100	100
GL141-089-02	100	100	100	100	100	100
GL141-090-01	100	100	100	100	100	100
GL141-091-01	100	100	100	100	0	100
GL141-091-02	100	100	100	100	100	100
GL141-091-04	100	100	100	100	100	100
GL141-092-01	75	50	100	100	25	100
GL141-094-01	100	100	100	100		
GL141-094-02	100	100	100	100	100	100
GL141-095-01	100	75	100	100	100	100
GL141-095-03	75	75	75	100	100	100
GL141-096-04	100	100	100	100	100	100
GL141-097-01	100	100	100	100	100	100
GL141-097-03	100	100	100	100	100	100

Within Limits Evaluation

Based on Single Test Results

	Micronaire	Strength	Length	Uniformity	Color Rd	Color +b
Limits	0.20	2.0	0.030	2.0	1.5	1.0
	units	g/tex	inch	%	units	units
Average % Results within Limits	96.7	92.7	94.6	97.5	90.8	98.1
% of Instruments 100% within limits	51.2	28.7	27.6	57.7	52.5	82.2
% of Instruments ≥95% within limits	83.7	63.1	70.7	87.8	66.9	94.9
% of Instruments ≥75% within limits	96.7	92.6	97.6	96.7	85.6	97.5
% of Instruments ≥65% within limits	99.2	95.9	98.4	99.2	92.4	98.3
% of Instruments ≥50% within limits	99.2	98.4	99.2	100.0	95.8	98.3

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL141-001-02	100	83	98	97	96	100
GL141-001-04	100	99	97	99	10	96
GL141-001-07	99	94	90	100	70	100
GL141-001-08	82	87	96	97	100	100
GL141-002-01	98	94	95	97	100	100
GL141-003-01	100	64	98	98		
GL141-003-02	94	95	100	99		
GL141-003-03	98	94	98	100		
GL141-004-01	99	85	93	97	100	100
GL141-005-01	100	97	100	99	100	100
GL141-005-02	100	96	100	100	100	100
GL141-005-03	100	93	88	94	100	98
GL141-005-04	100	93	87	93	98	100
GL141-006-01	97	81	78	94	100	100
GL141-007-01	100	88	93	100	100	100
GL141-008-20	100	100	100	100	100	100
GL141-008-21	100	100	100	100	100	100
GL141-009-01	97	100	96	99	100	100
GL141-010-01	98	72	98	99	47	100
GL141-012-01	100	95	94	95	95	100
GL141-013-01	83	90	94	98	57	100
GL141-014-52	99	100	100	100	100	100
GL141-014-55	100	100	100	100	100	100
GL141-015-01	99	100	97	100	99	100
GL141-016-01	100	82	93	95	95	95
GL141-016-03	96	78	90	95	78	93
GL141-017-01	99	96	98	99	99	100
GL141-017-02	89	96	98	100	100	100
GL141-018-03	100	97	98	98	100	100
GL141-019-01	100	93	98	100	92	100
GL141-019-12	100	88	99	99	93	100
GL141-020-01	81	99	83	97	78	48
GL141-021-01	85	89	93	100	88	100
GL141-022-01	90	100	100	100	100	98
GL141-024-01	99	93	78	72	21	97
GL141-025-03	100	94	98	98	100	100

GL141-026-01	100	100	100	100	100	100
GL141-026-02	100	100	100	100	100	100
GL141-027-03	100	100	100	100	100	100
GL141-027-04	100	100	100	100	100	100
GL141-027-06	100	100	100	100	100	100
GL141-028-01	100	98	98	100	100	100
GL141-028-04	93	73	96	99	58	100
GL141-029-04	98	97	86	93	100	100
GL141-030-01	100	97	100	100	95	100
GL141-031-01	100	76	88	88	71	100
GL141-033-02	100	100	100	100	100	100
GL141-034-01	96	98	99	100	52	99
GL141-035-01	98	100	97	100	100	100
GL141-036-01	100	100	100	100	100	100
GL141-036-04	100	100	100	100	100	100
GL141-036-05	100	100	100	100	100	100
GL141-039-01	98	96	98	98	63	99
GL141-040-01	90	94	65	89	100	100
GL141-040-02	87	26	21	73	94	100
GL141-041-01	99	96	95	95	87	96
GL141-041-03	96	98	98	99	100	100
GL141-042-02	98	100	98	100	100	100
GL141-042-06	99	100	99	100	100	100
GL141-043-01	100	99	96	100	92	100
GL141-043-02	96	86	93	99	96	100
GL141-044-02	95	89	98	99	67	100
GL141-046-01	100	83	64	100		
GL141-047-01	98	83	85	100	99	100
GL141-048-04	49		86	88	67	22
GL141-049-01	100	88	93	99	83	100
GL141-050-01	100	99	98	100	93	99
GL141-051-01	90	83	88	100	72	100
GL141-052-08	99	98	96	97	100	100
GL141-052-09	100	97	97	99	91	100
GL141-053-01	98	100	98	100	100	100
GL141-054-01	98	100	95	100	96	95
GL141-056-01	99	100	100	100	100	100
GL141-057-01	96	97	88	99	69	100
GL141-058-01	100	100	99	100	100	100
GL141-058-02	100	98	95	100	100	100
GL141-058-03	100	99	98	98	100	100
GL141-058-04	100	99	100	100	100	100
GL141-059-13	99	100	98	98	100	100
GL141-060-25	100	98	98	99	77	100
GL141-060-26	99	97	99	100	75	100
GL141-061-01	100	90	100	100	100	100
GL141-062-01	94	79	98	98	78	68
GL141-064-01	100	93	100	100	100	100
GL141-065-01	98	98	100	100	99	100
GL141-067-01	100	99	100	100	98	100
GL141-067-02	100	100	100	100	100	100
GL141-068-01	100	100	100	100	100	100
GL141-069-01	100	98	99	100	100	100
GL141-070-01	100	100	100	100	100	100
GL141-070-02	100	100	100	100	100	100
GL141-071-16	100	98	93	100	100	100
GL141-071-25	100	95	94	100	100	100
GL141-073-18	97	93	83	100	97	100
GL141-074-01	100	98	93	83	93	99
GL141-075-01	100	97	95	98	100	100

GL141-079-01	100	86	98	100	94	100
GL141-079-02	100	98	100	100	72	100
GL141-079-03	100	99	100	100	100	100
GL141-080-01	93	97	97	100	100	100
GL141-081-01	100	100	100	100	93	100
GL141-082-01	100	99	97	100	100	100
GL141-082-02	100	100	90	100	100	100
GL141-083-09	95	97	99	100	100	93
GL141-083-10	100	93	98	100	100	100
GL141-084-01	90	63	91	72	100	100
GL141-086-01	88	73	100	58	92	96
GL141-087-01	94	99	96	94	93	96
GL141-088-01	99	100	89	100	73	97
GL141-089-01	100	94	100	100	100	100
GL141-089-02	100	96	98	100	95	100
GL141-090-01	98	100	94	100	97	93
GL141-091-01	99	96	98	98	28	100
GL141-091-02	100	90	99	100	100	100
GL141-091-04	99	100	100	100	100	100
GL141-092-01	68	59	97	100	41	97
GL141-094-01	99	93	96	100		
GL141-094-02	100	84	98	100	100	100
GL141-095-01	67	71	85	88	95	100
GL141-095-03	68	49	76	90	85	100
GL141-096-04	100	100	93	97	97	100
GL141-097-01	99	100	98	100	92	100
GL141-097-03	98	98	82	95	94	100