International Cotton Advisory Committee

CSITC
Global - Round Trial 2013 - 1
General Evaluation

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Section Two: Instrument Evaluation
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Section One: Result Distribution

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Optional Parameters
- -Summary Table
- -Distribution Graphs

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

Global - Round Trial 2013 - 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)			5.032	3.689	3.096	4.192	
Reference Values for Evaluation			5.032	3.689	3.096	4.192	
Number Of Instruments			113	113	113	113	**113**
Inter-Instrument Variation	based on 30 tests	SD	0.060	0.078	0.066	0.063	**0.067**
		CV %	1.2	2.1	2.1	1.5	**1.7**
	based on 6 tests	SD	0.068	0.083	0.072	0.067	**0.072**
		CV %	1.3	2.2	2.3	1.6	**1.9**
	based on single tests	SD	0.076	0.091	0.083	0.077	**0.082**
		CV %	1.5	2.5	2.7	1.8	**2.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.028	0.027	0.024	0.025	**0.026**
		CV %	0.5	0.7	0.8	0.6	**0.7**
	between single tests on one day	SD	0.037	0.039	0.035	0.035	**0.036**
		CV %	0.7	1.1	1.1	0.8	**0.9**
	between all tests on different days	SD	0.047	0.050	0.044	0.046	**0.046**
		CV %	0.9	1.3	1.4	1.1	**1.2**

Strength							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			29.497	22.917	29.268	33.971	
Reference Values for Evaluation			29.497	22.917	29.268	33.971	
Number Of Instruments			114	114	114	114	**114**
Inter-Instrument Variation	based on 30 tests	SD	0.718	0.876	0.764	0.760	**0.779**
		CV %	2.4	3.8	2.6	2.2	**2.8**
	based on 6 tests	SD	0.936	0.945	0.982	0.955	**0.954**
		CV %	3.2	4.1	3.4	2.8	**3.4**
	based on single tests	SD	1.075	1.090	1.205	1.177	**1.136**
		CV %	3.6	4.8	4.1	3.5	**4.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.357	0.406	0.450	0.408	**0.405**
		CV %	1.2	1.8	1.5	1.2	**1.4**
	between single tests on one day	SD	0.584	0.559	0.625	0.641	**0.602**
		CV %	2.0	2.4	2.1	1.9	**2.1**
	between all tests on different days	SD	0.664	0.668	0.745	0.766	**0.711**
		CV %	2.3	2.9	2.5	2.3	**2.5**

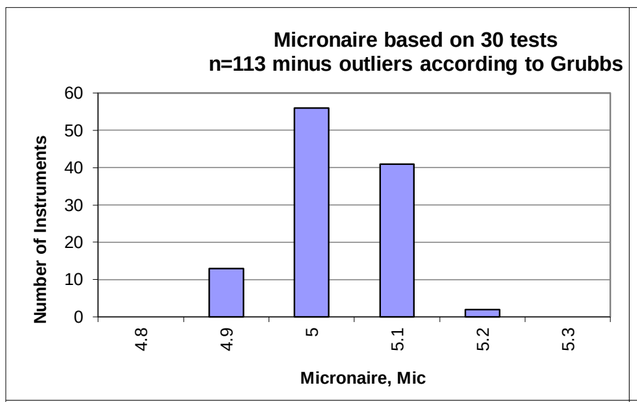
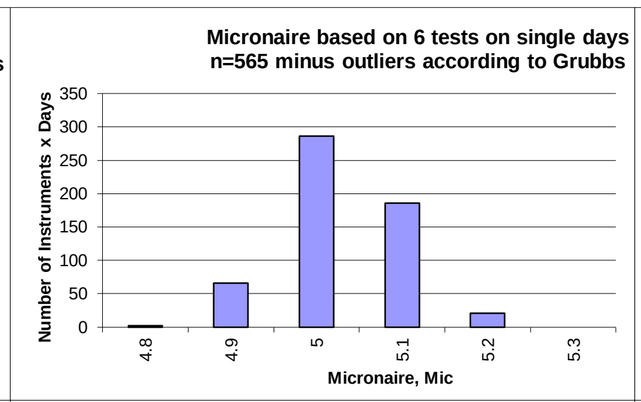
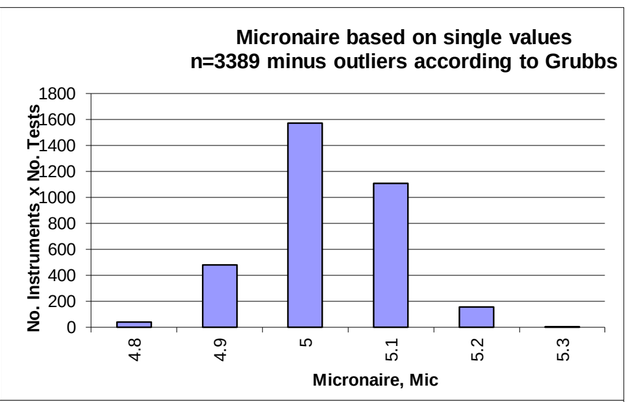
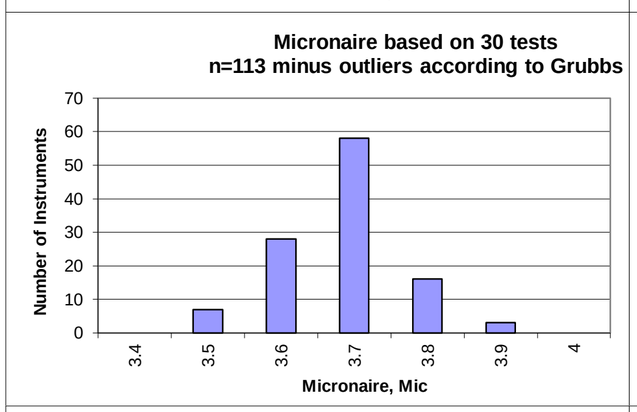
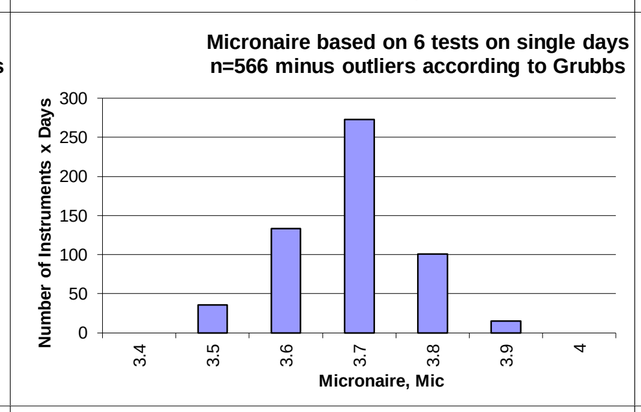
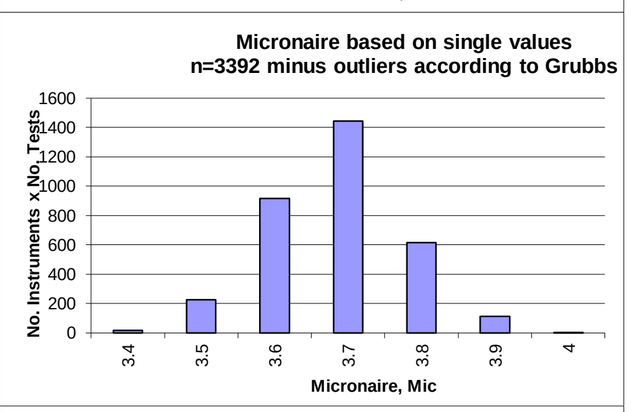
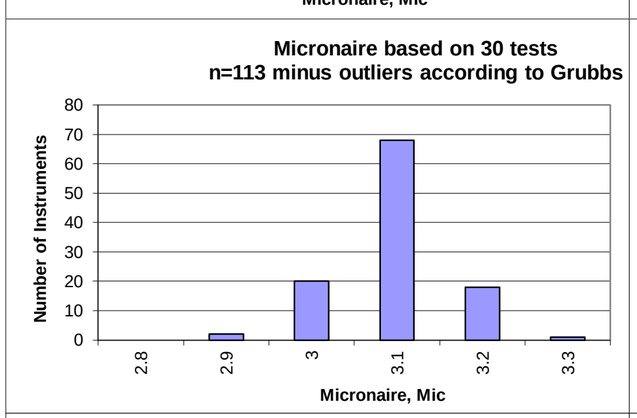
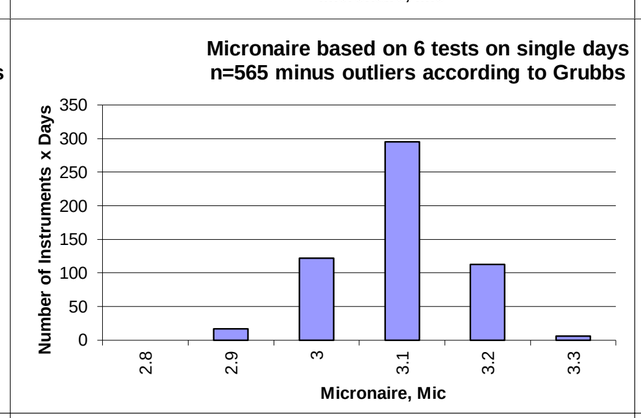
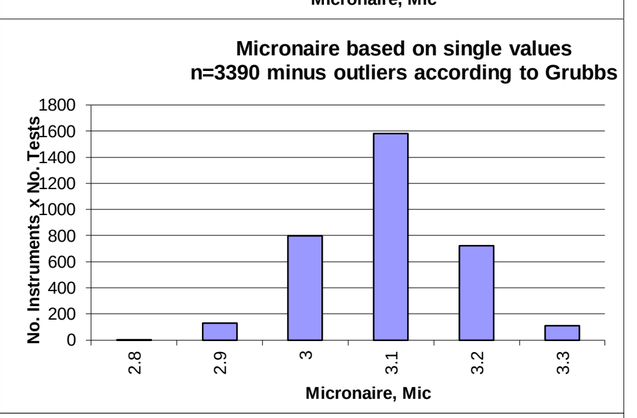
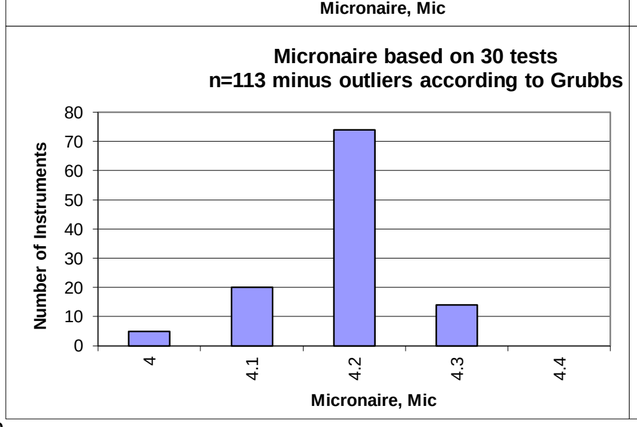
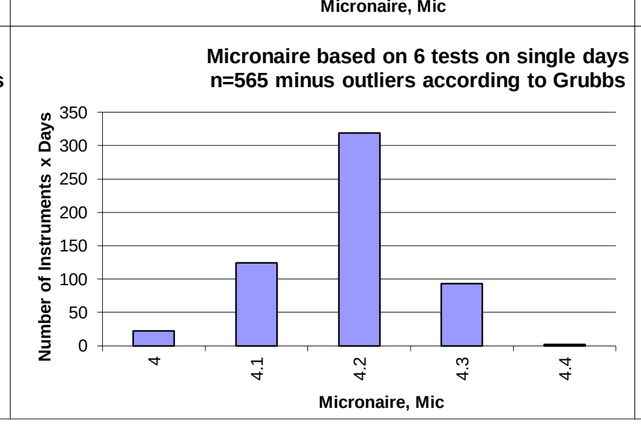
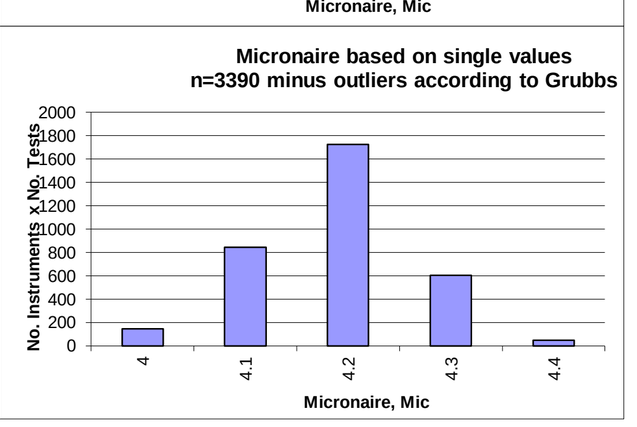
Length							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			1.0788	0.9866	1.1169	1.2102	
Reference Values for Evaluation			1.0788	0.9866	1.1169	1.2102	
Number Of Instruments			114	114	114	114	**114**
Inter-Instrument Variation	based on 30 tests	SD	0.0086	0.0129	0.0100	0.0101	**0.0104**
		CV %	0.8	1.3	0.9	0.8	**1.0**
	based on 6 tests	SD	0.0103	0.0135	0.0114	0.0112	**0.0116**
		CV %	1.0	1.4	1.0	0.9	**1.1**
	based on single tests	SD	0.0144	0.0172	0.0158	0.0155	**0.0157**
		CV %	1.3	1.7	1.4	1.3	**1.4**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.0061	0.0063	0.0066	0.0062	**0.0063**
		CV %	0.6	0.6	0.6	0.5	**0.6**
	between single tests on one day	SD	0.0091	0.0112	0.0100	0.0092	**0.0099**
		CV %	0.8	1.1	0.9	0.8	**0.9**
	between all tests on different days	SD	0.0108	0.0125	0.0114	0.0105	**0.0113**
		CV %	1.0	1.3	1.0	0.9	**1.0**

Uniformity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			83.180	78.069	81.124	84.559	
Reference Values for Evaluation			83.180	78.069	81.124	84.559	
Number Of Instruments			114	114	114	114	**114**
Inter-Instrument Variation	based on 30 tests	SD	0.660	0.754	0.443	0.450	**0.577**
		CV %	0.8	1.0	0.5	0.5	**0.7**
	based on 6 tests	SD	0.686	0.879	0.542	0.567	**0.668**
		CV %	0.8	1.1	0.7	0.7	**0.8**
	based on single tests	SD	0.852	1.068	0.769	0.782	**0.868**
		CV %	1.0	1.4	0.9	0.9	**1.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.277	0.311	0.282	0.298	**0.292**
		CV %	0.3	0.4	0.3	0.4	**0.4**
	between single tests on one day	SD	0.481	0.565	0.519	0.467	**0.508**
		CV %	0.6	0.7	0.6	0.6	**0.6**
	between all tests on different days	SD	0.549	0.671	0.578	0.553	**0.588**
		CV %	0.7	0.9	0.7	0.7	**0.7**

Color Rd							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			73.712	77.308	75.827	77.780	
Reference Values for Evaluation			73.712	77.308	75.827	77.780	
Number Of Instruments			110	110	110	110	**110**
Inter-Instrument Variation	based on 30 tests	SD	0.721	0.878	1.051	0.920	**0.892**
		CV %	1.0	1.1	1.4	1.2	**1.2**
	based on 6 tests	SD	0.779	0.916	1.101	0.943	**0.935**
		CV %	1.1	1.2	1.5	1.2	**1.2**
	based on single tests	SD	0.834	0.936	1.122	0.979	**0.968**
		CV %	1.1	1.2	1.5	1.3	**1.3**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.218	0.237	0.229	0.187	**0.218**
		CV %	0.3	0.3	0.3	0.2	**0.3**
	between single tests on one day	SD	0.218	0.231	0.233	0.221	**0.226**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between all tests on different days	SD	0.364	0.357	0.338	0.317	**0.344**
		CV %	0.5	0.5	0.4	0.4	**0.5**

Color +b							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			10.692	8.937	13.910	12.018	
Reference Values for Evaluation			10.692	8.937	13.910	12.018	
Number Of Instruments			110	110	110	110	**110**
Inter-Instrument Variation	based on 30 tests	SD	0.297	0.265	0.334	0.289	**0.296**
		CV %	2.8	3.0	2.4	2.4	**2.6**
	based on 6 tests	SD	0.324	0.281	0.353	0.319	**0.319**
		CV %	3.0	3.1	2.5	2.7	**2.8**
	based on single tests	SD	0.341	0.308	0.382	0.324	**0.339**
		CV %	3.2	3.4	2.7	2.7	**3.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.110	0.108	0.124	0.116	**0.115**
		CV %	1.0	1.2	0.9	1.0	**1.0**
	between single tests on one day	SD	0.108	0.111	0.116	0.101	**0.109**
		CV %	1.0	1.2	0.8	0.8	**1.0**
	between all tests on different days	SD	0.163	0.168	0.179	0.169	**0.170**
		CV %	1.5	1.9	1.3	1.4	**1.5**

Test Result Distributions
Micronaire

Cotton 1			
Cotton 2			
Cotton 3			
Cotton 4			

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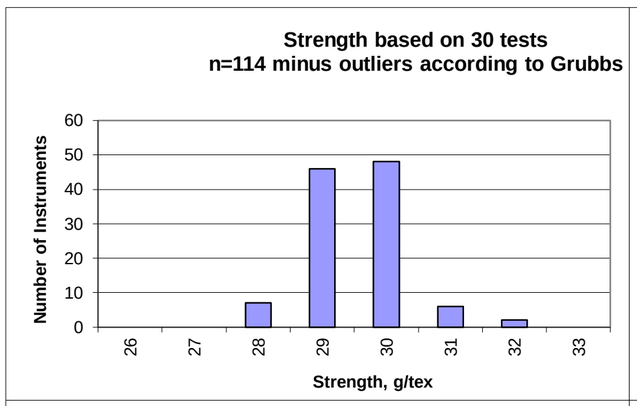
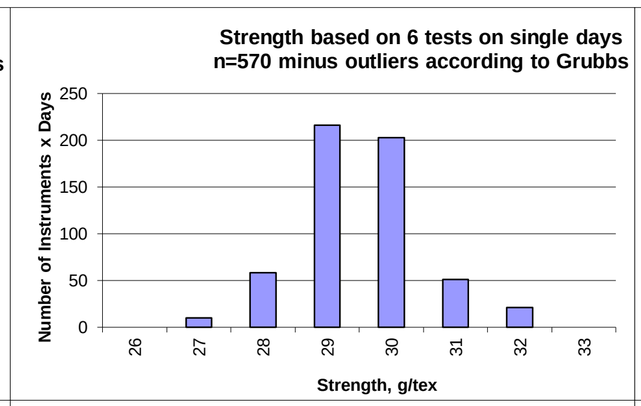
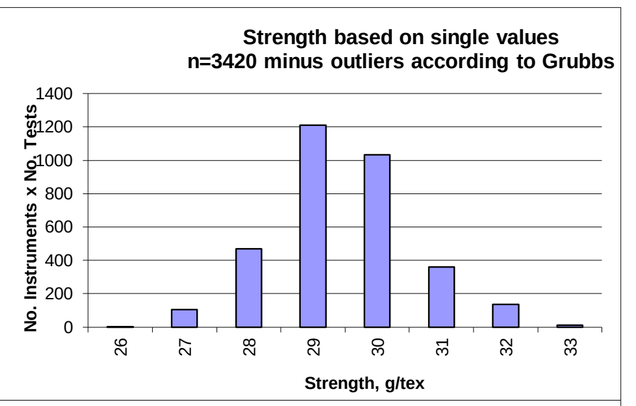
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method.)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Strength

Cotton 1







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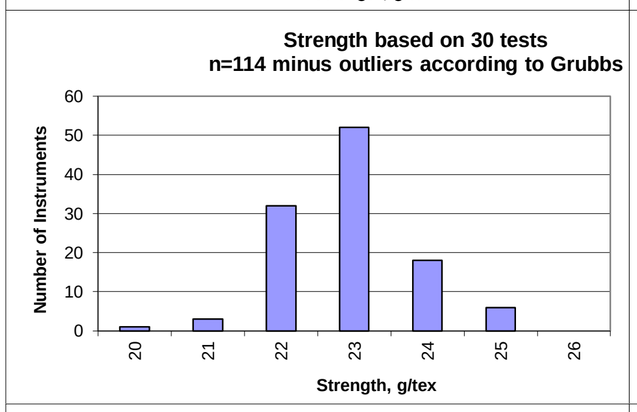

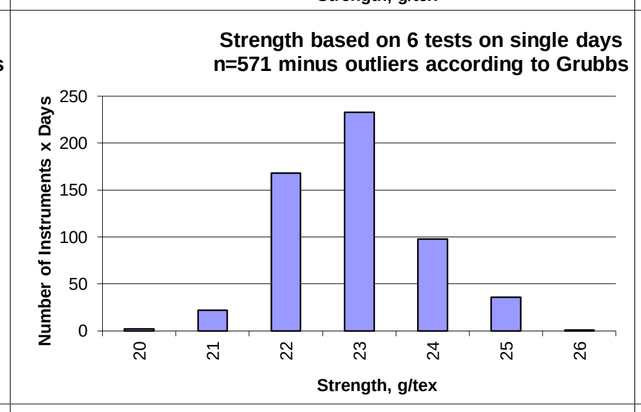

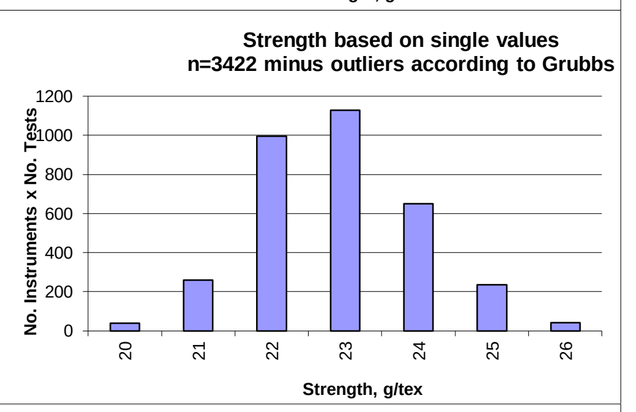

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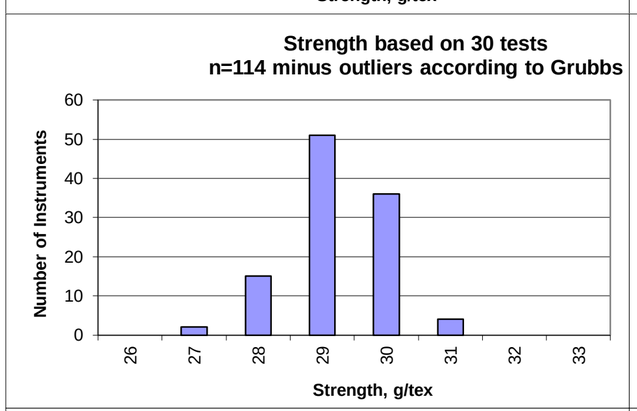

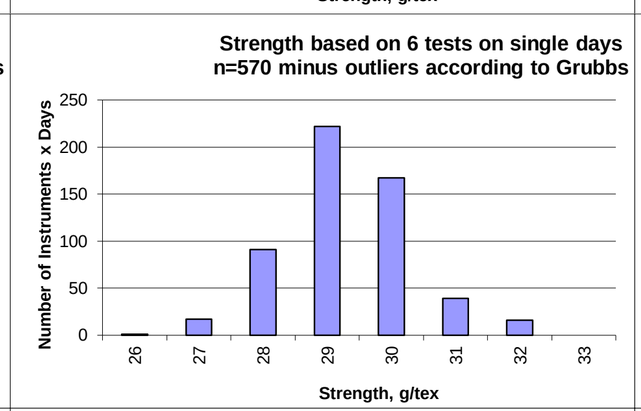

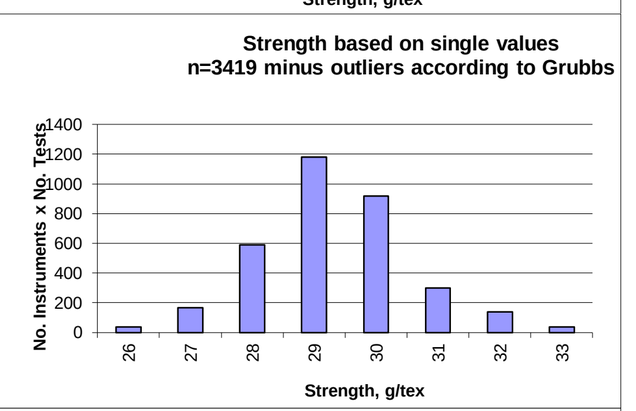

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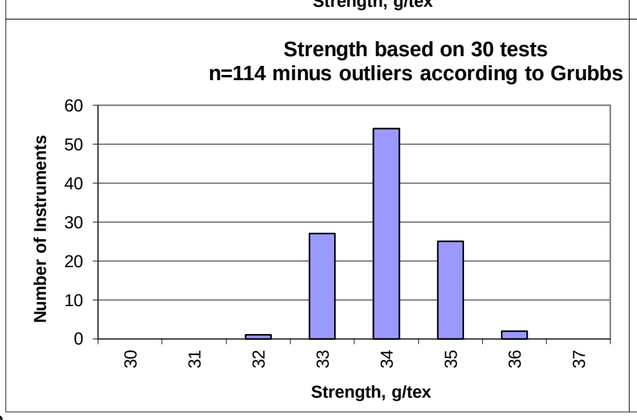

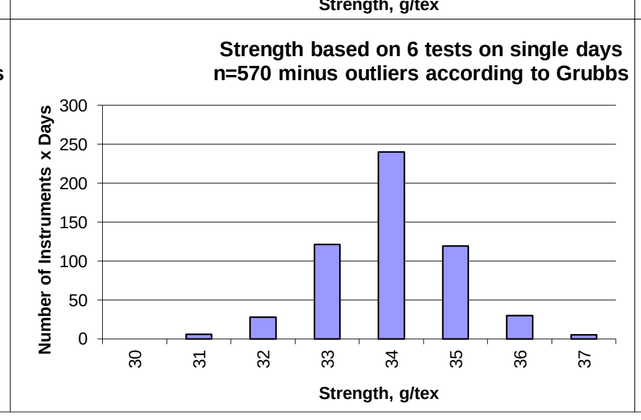

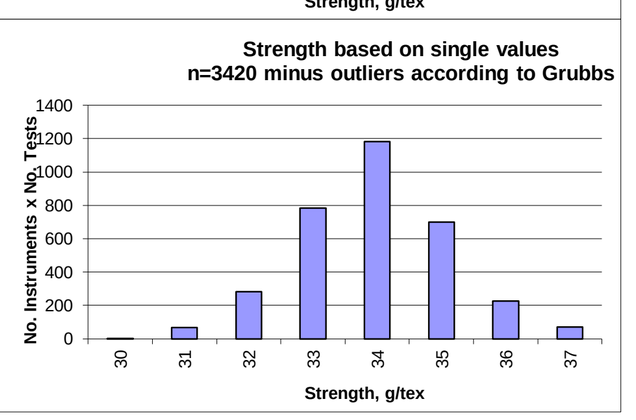

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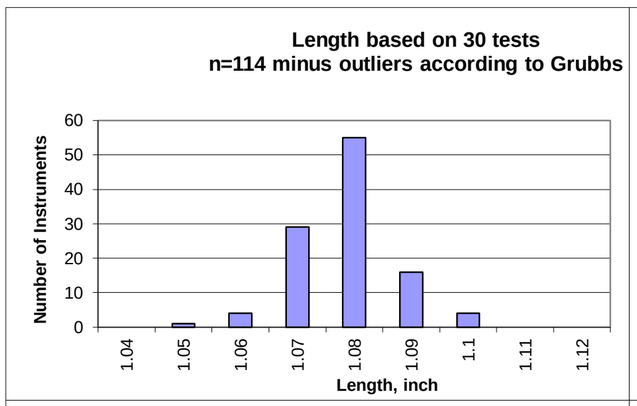
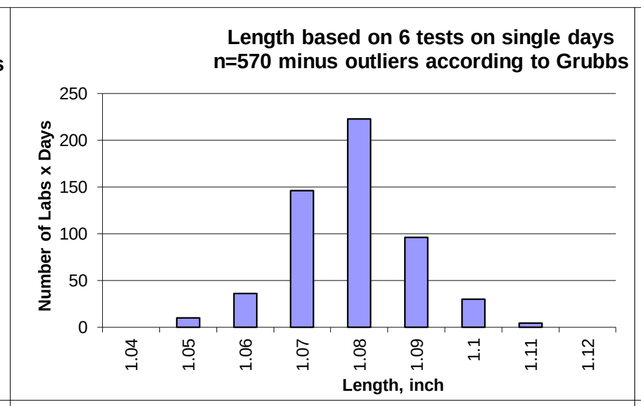
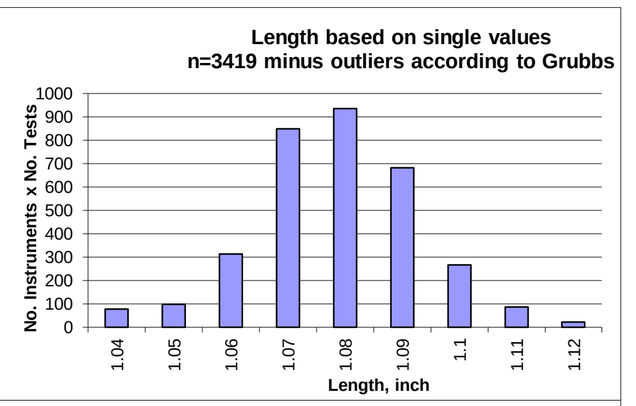
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Length

Cotton 1







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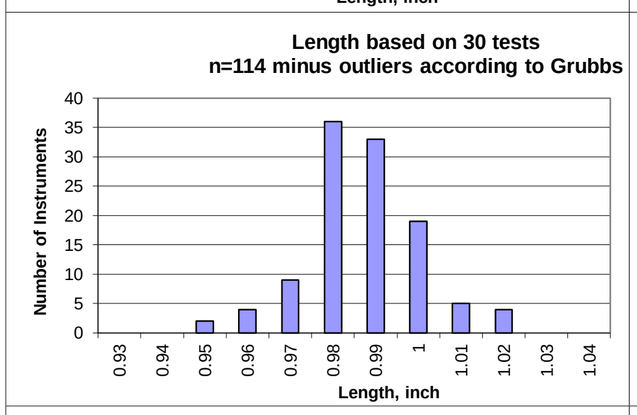

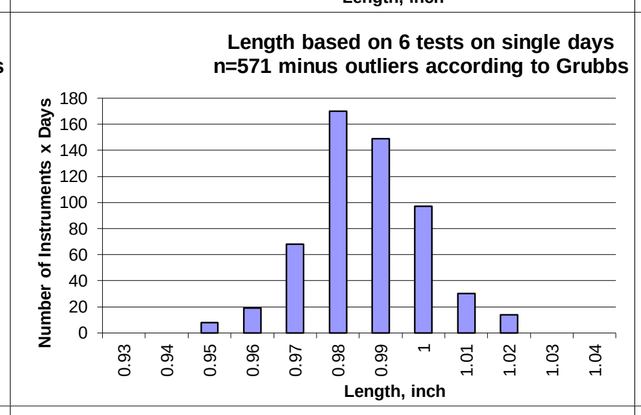

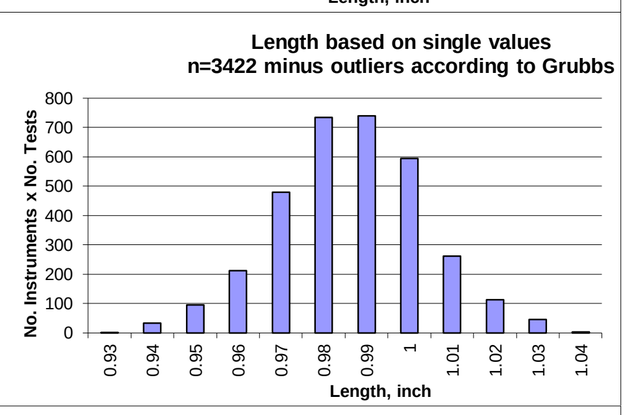

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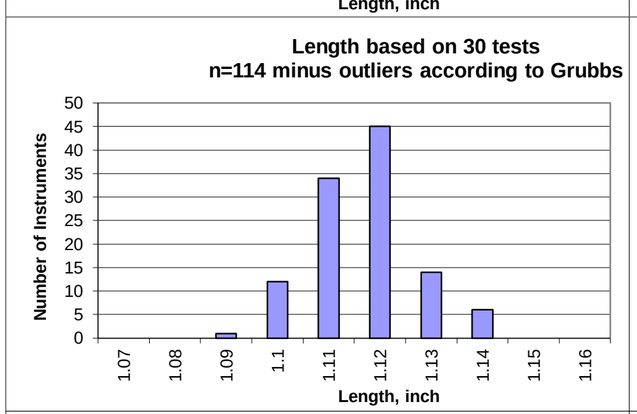

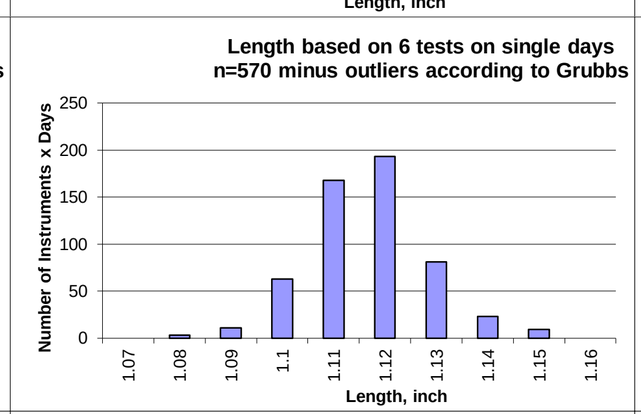

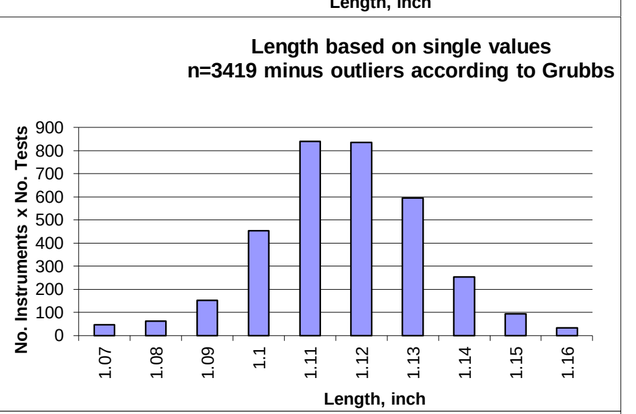

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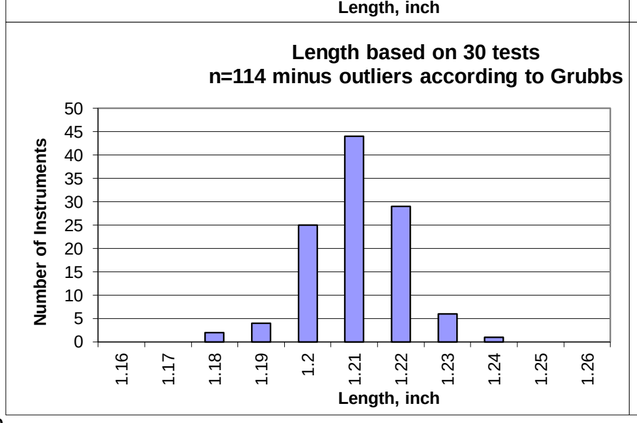

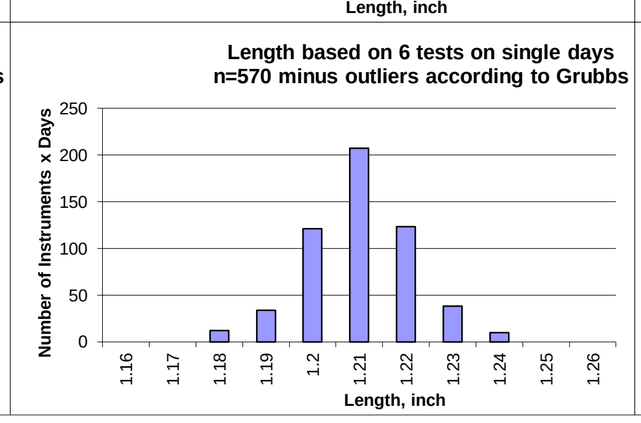

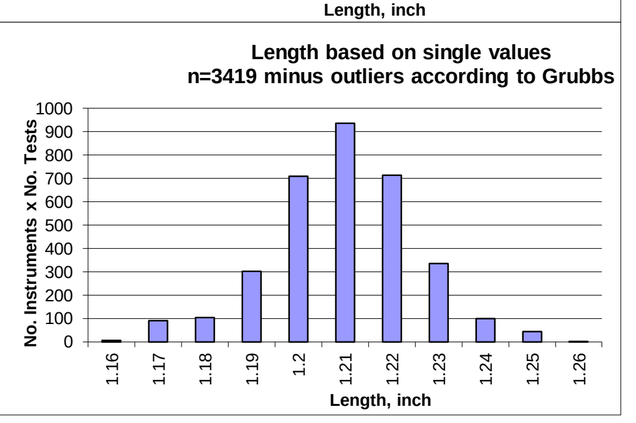

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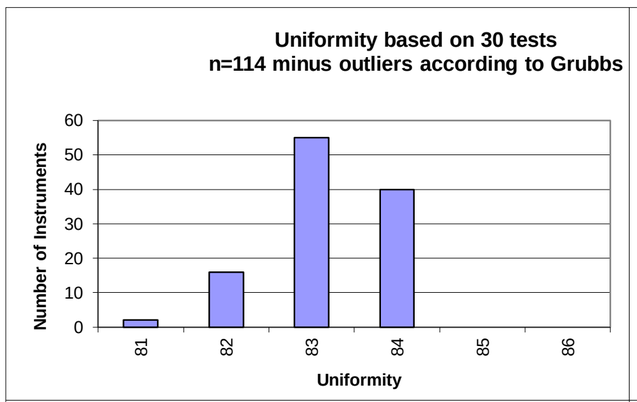
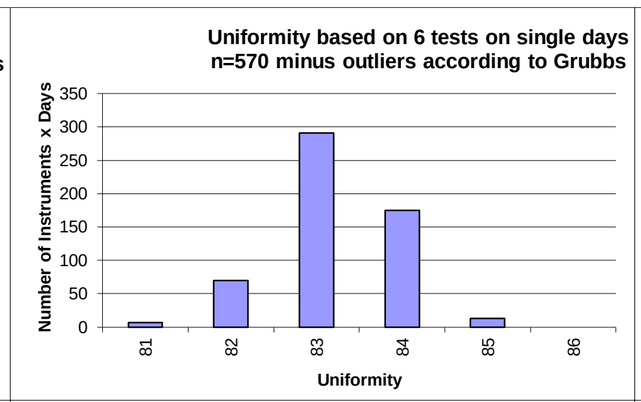
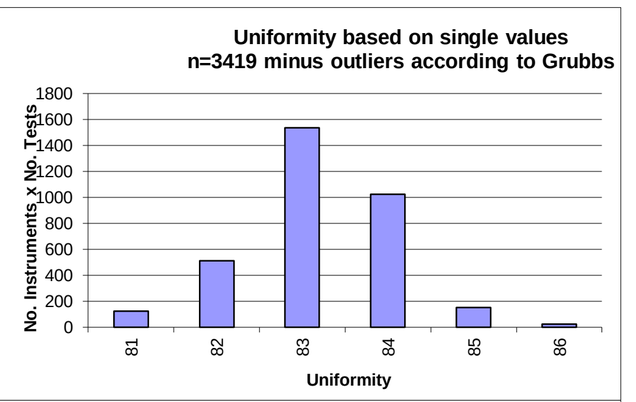
Test Result Distributions
Uniformity

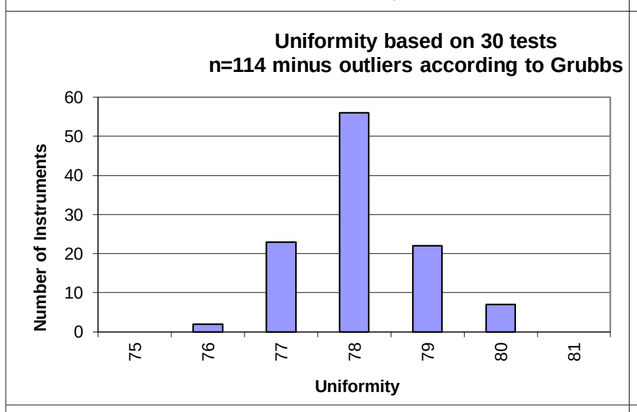
Cotton 1

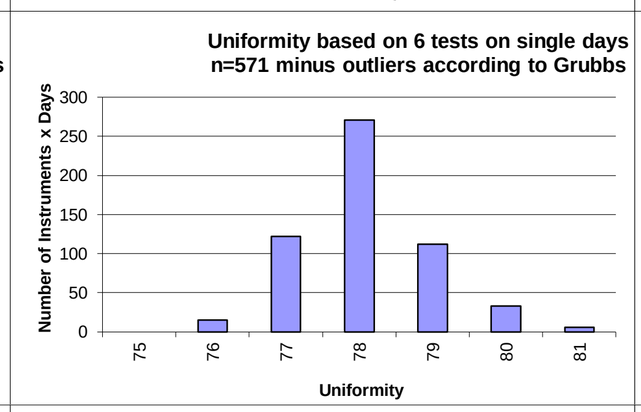


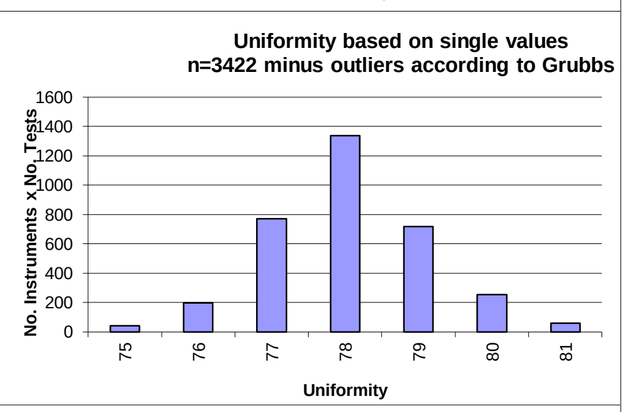




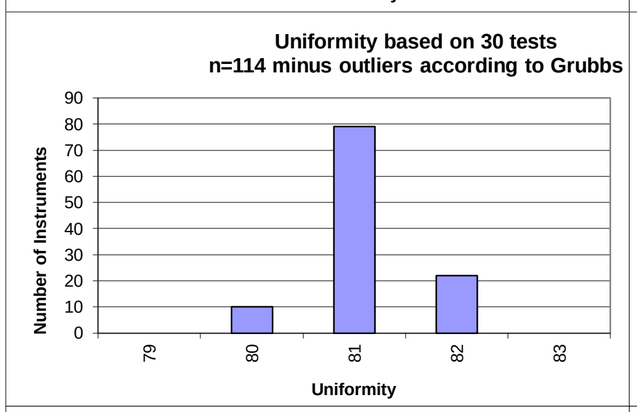
Cotton 2

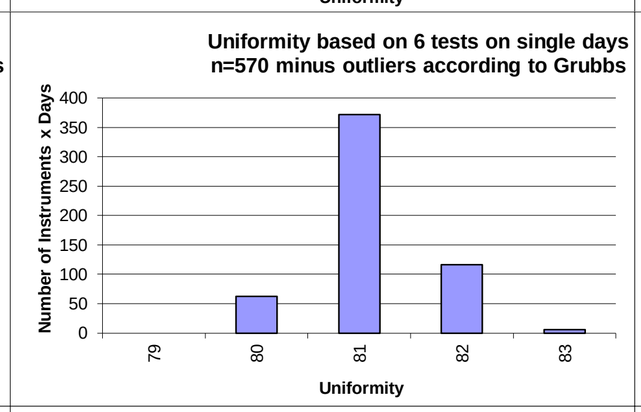


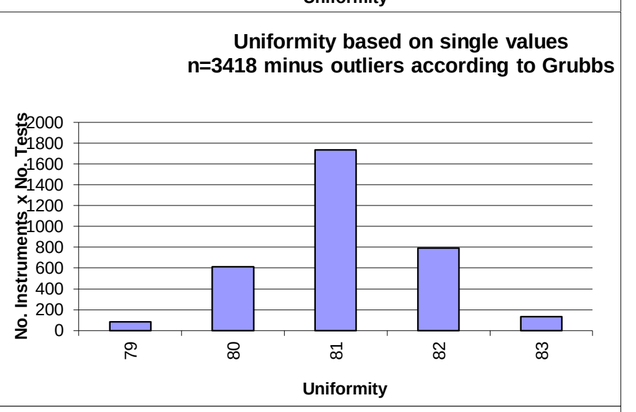




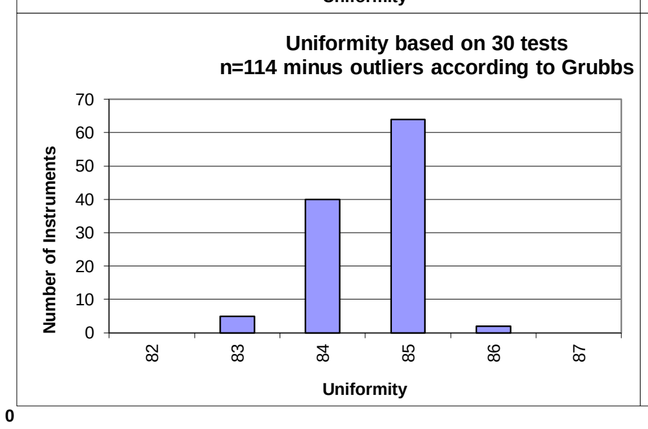
Cotton 3

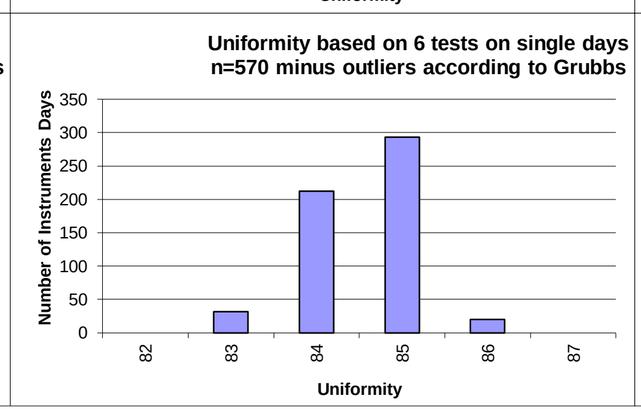


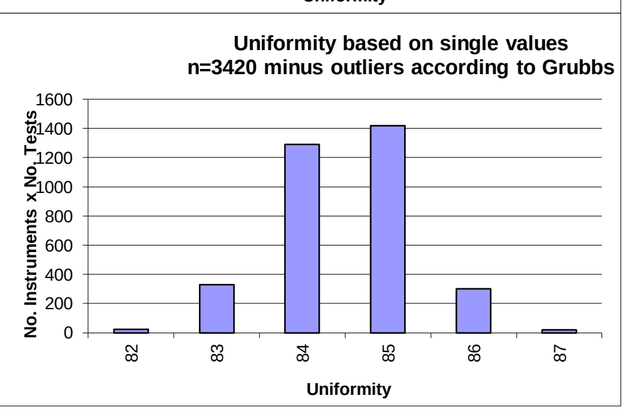




Cotton 4







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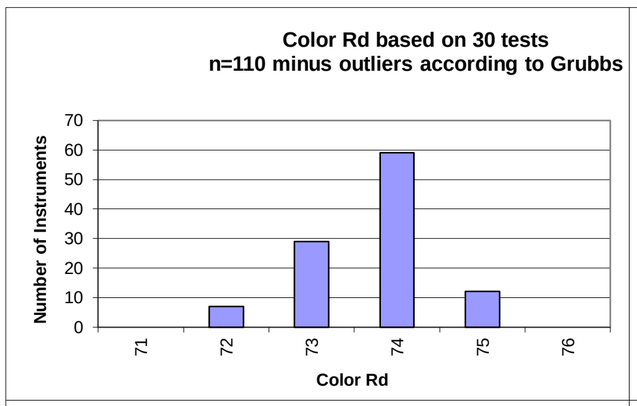
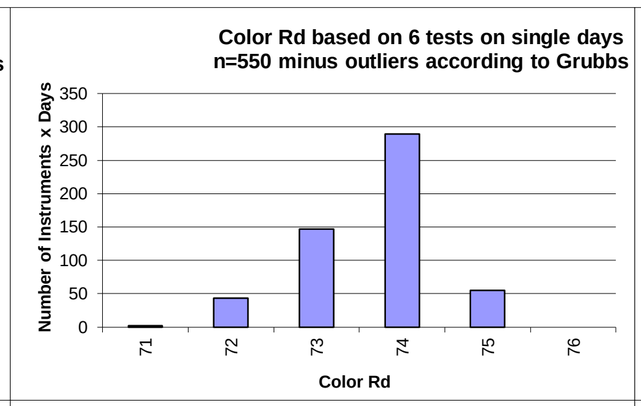
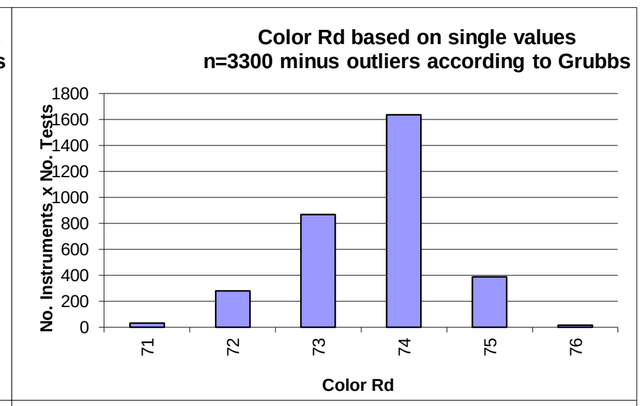
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color Rd

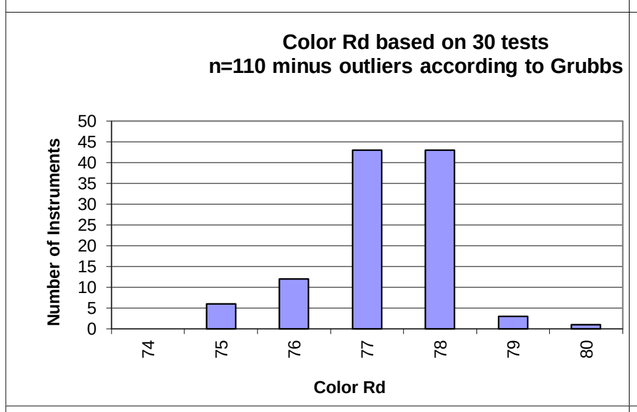
Cotton 1

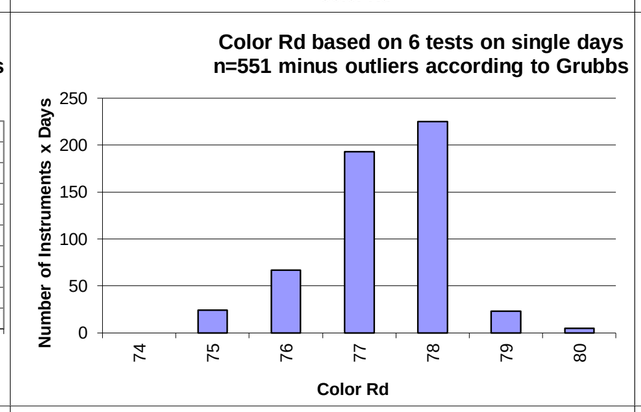


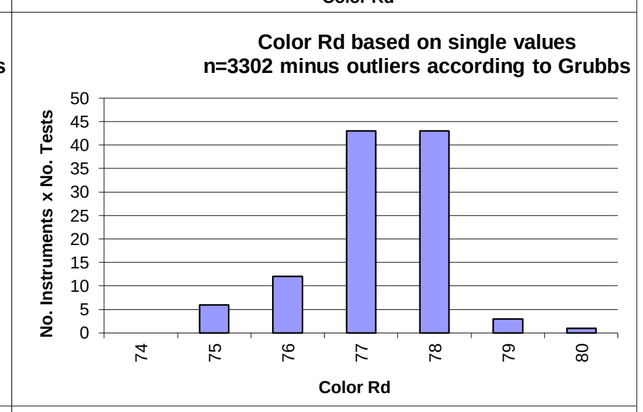




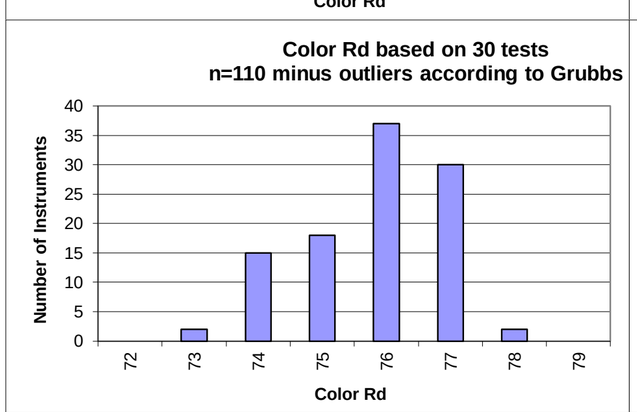
Cotton 2

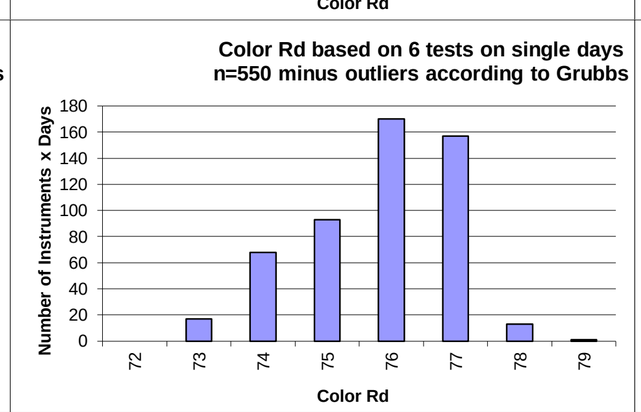


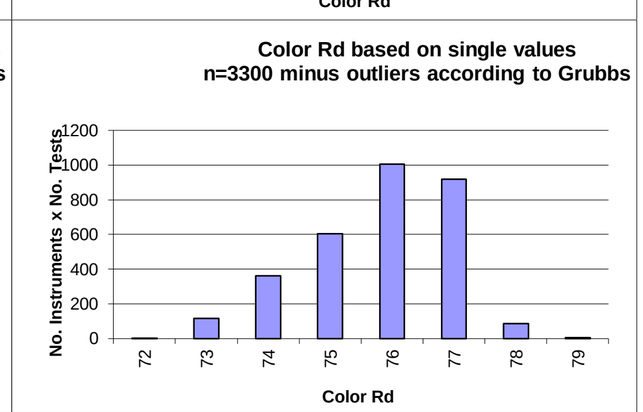




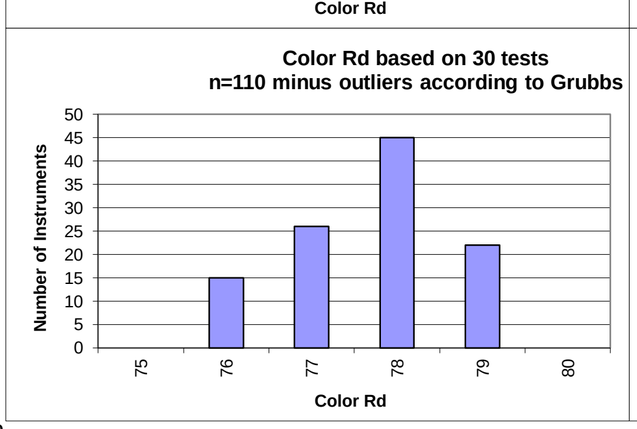
Cotton 3

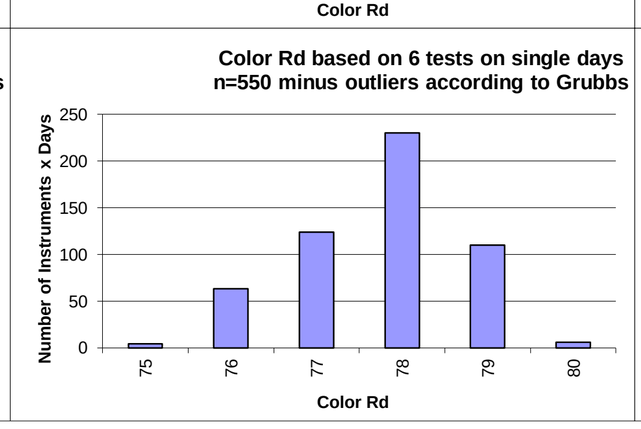


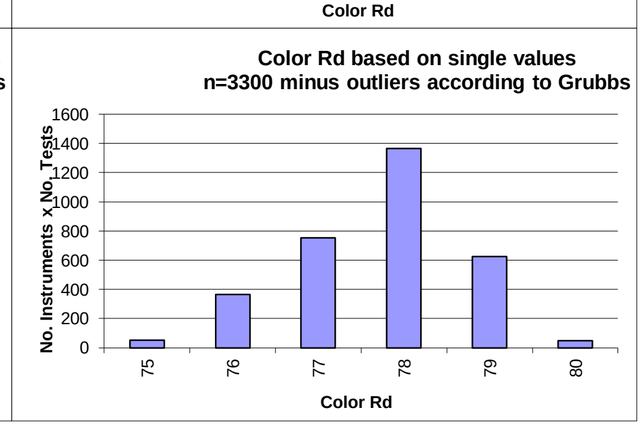




Cotton 4







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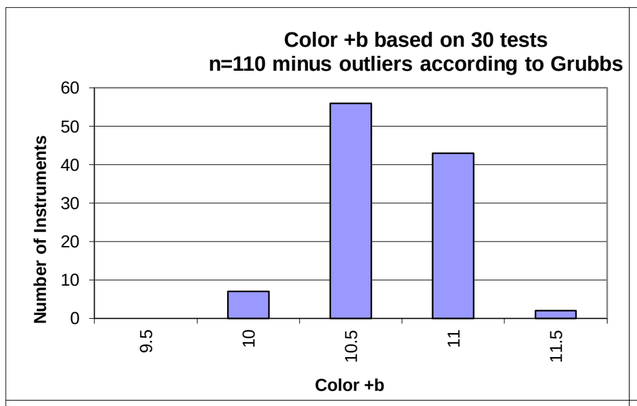
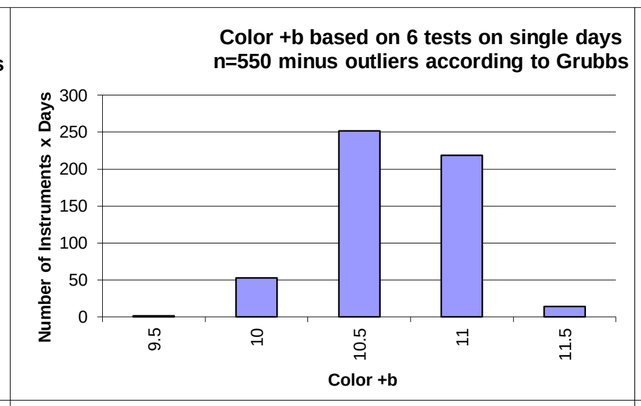
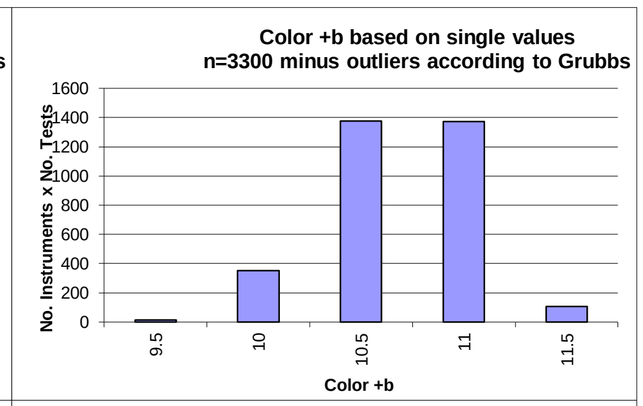
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Color +b

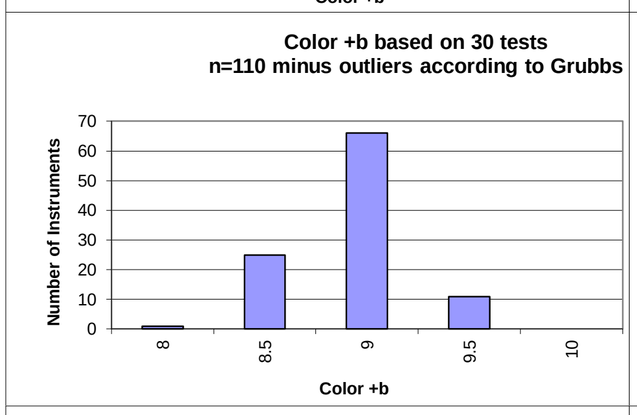
Cotton 1

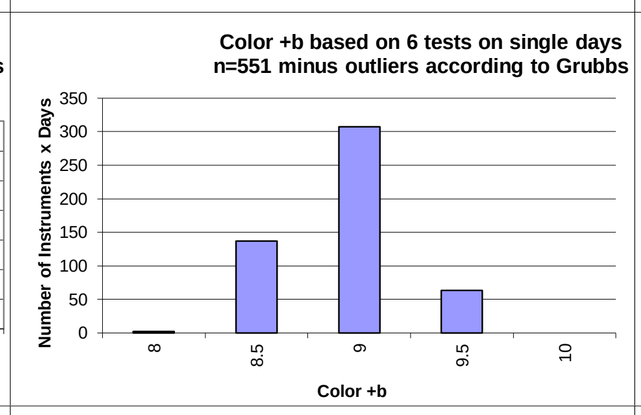


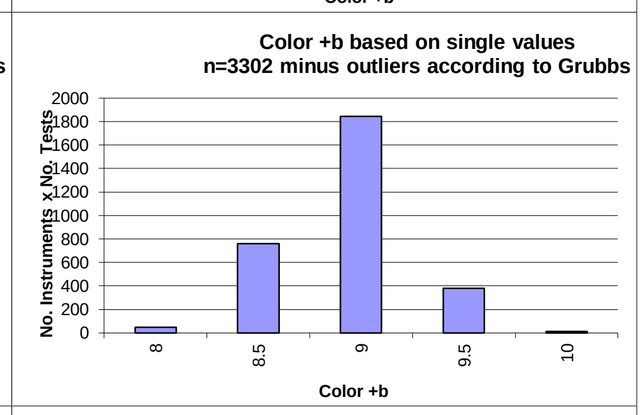




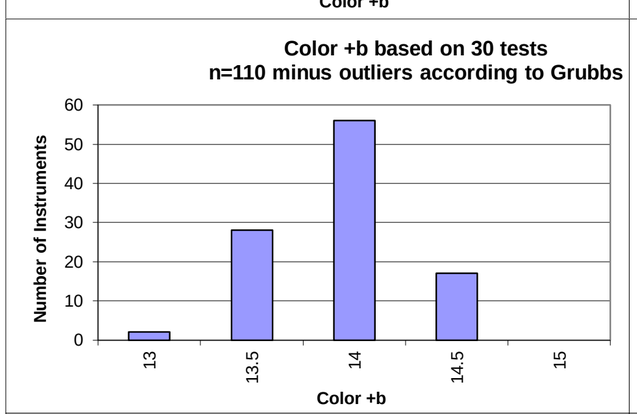
Cotton 2

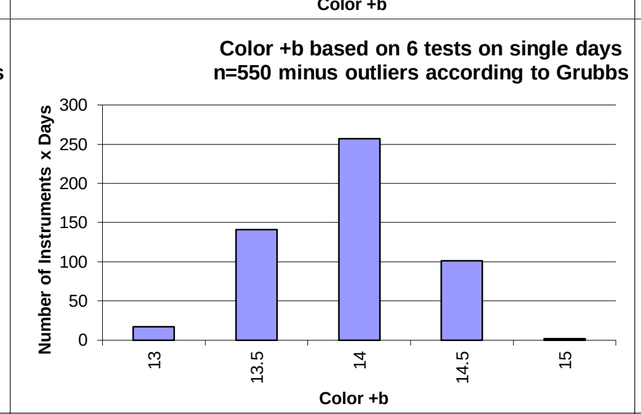


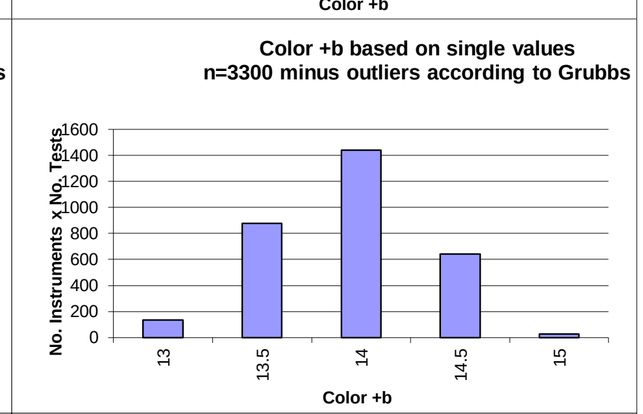




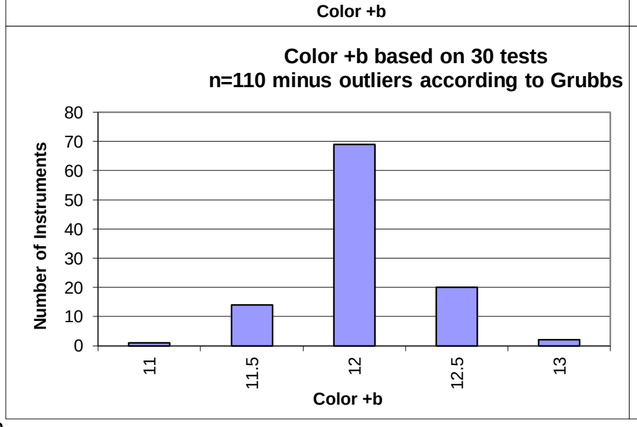
Cotton 3

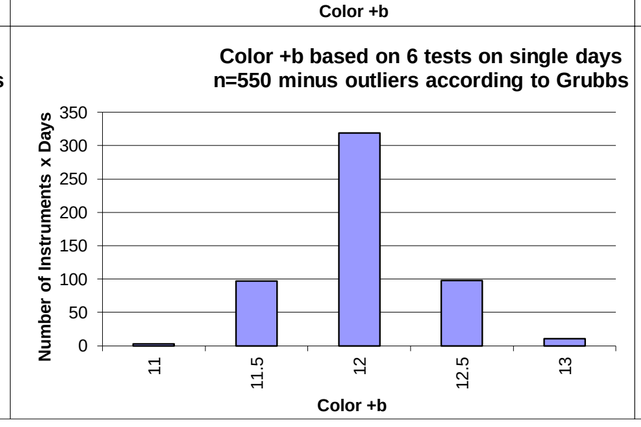


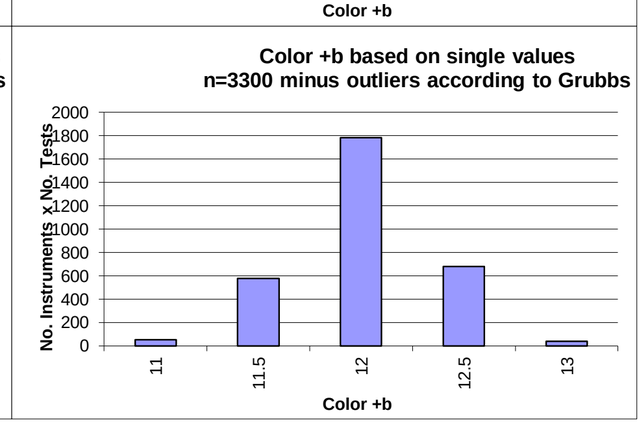




Cotton 4







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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)			12.91	26.69	19.42	14.48	
Reference Values for Evaluation			12.91	26.69	19.42	14.48	
Number Of Instruments			84	84	84	84	**84**
Inter-Instrument Variation	based on 30 tests	SD	6.15	13.20	9.76	7.46	**9.14**
		CV %	47.6	49.5	50.3	51.5	**49.7**
	based on 6 tests	SD	6.33	13.66	10.09	7.69	**9.44**
		CV %	49.0	51.2	52.0	53.2	**51.3**
	based on single tests	SD	6.95	13.98	10.35	8.18	**9.87**
		CV %	53.8	52.4	53.3	56.5	**54.0**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	1.94	2.75	2.16	1.55	**2.10**
		CV %	15.0	10.3	11.1	10.7	**11.8**
	between single tests on one day	SD	2.26	2.89	2.38	2.15	**2.42**
		CV %	17.5	10.8	12.2	14.8	**13.9**
	between all tests on different days	SD	3.12	4.60	3.49	2.86	**3.52**
		CV %	24.1	17.2	18.0	19.8	**19.8**

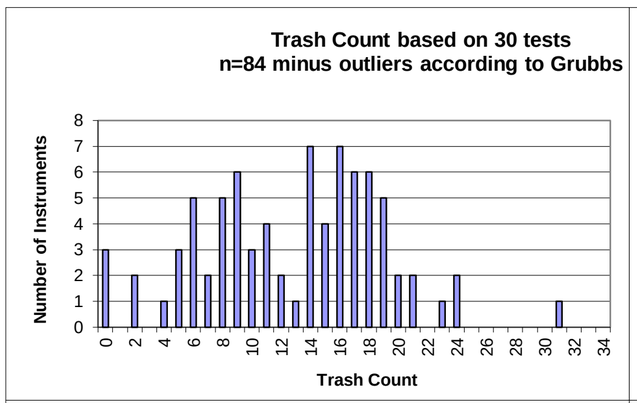
Trash Area							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			0.131	0.246	0.185	0.151	
Reference Values for Evaluation			0.131	0.246	0.185	0.151	
Number Of Instruments			84	84	84	84	**84**
Inter-Instrument Variation	based on 30 tests	SD	0.044	0.098	0.066	0.061	**0.068**
		CV %	34.1	39.9	35.9	40.8	**37.7**
	based on 6 tests	SD	0.051	0.092	0.075	0.061	**0.070**
		CV %	39.0	37.5	40.7	40.2	**39.4**
	based on single tests	SD	0.058	0.101	0.083	0.066	**0.077**
		CV %	44.7	41.1	45.2	43.6	**43.6**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.022	0.031	0.025	0.023	**0.025**
		CV %	17.2	12.7	13.3	15.5	**14.7**
	between single tests on one day	SD	0.026	0.037	0.030	0.022	**0.029**
		CV %	19.7	15.1	16.0	14.7	**16.4**
	between all tests on different days	SD	0.038	0.051	0.045	0.033	**0.042**
		CV %	28.9	20.7	24.4	21.7	**23.9**

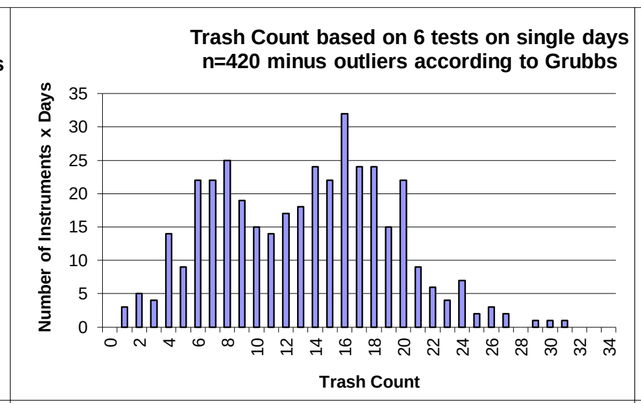
Maturity							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			87.61	82.77	81.06	86.09	
Reference Values for Evaluation			87.61	82.77	81.06	86.09	
Number Of Instruments			82	82	82	81	**82**
Inter-Instrument Variation	based on 30 tests	SD	2.82	2.98	2.59	2.26	**2.66**
		CV %	3.2	3.6	3.2	2.6	**3.2**
	based on 6 tests	SD	2.82	2.90	2.43	2.32	**2.62**
		CV %	3.2	3.5	3.0	2.7	**3.1**
	based on single tests	SD	2.89	2.97	2.48	2.34	**2.67**
		CV %	3.3	3.6	3.1	2.7	**3.2**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.23	0.24	0.26	0.24	**0.24**
		CV %	0.3	0.3	0.3	0.3	**0.3**
	between single tests on one day	SD	0.35	0.33	0.40	0.35	**0.36**
		CV %	0.4	0.4	0.5	0.4	**0.4**
	between all tests on different days	SD	0.49	0.47	0.49	0.48	**0.48**
		CV %	0.6	0.6	0.6	0.6	**0.6**

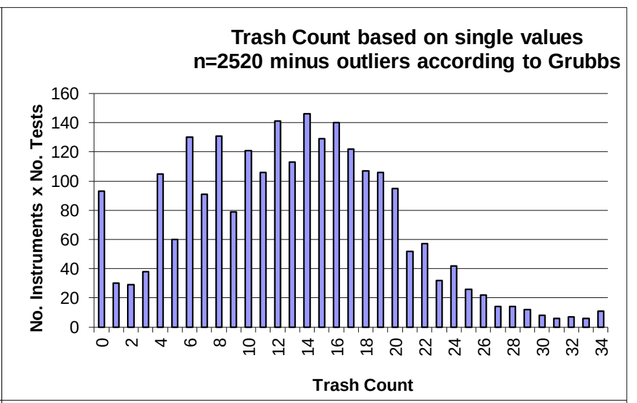
SFI							
			Cotton 1	**Cotton 2**	**Cotton 3**	**Cotton 4**	**Average**
Average of Instruments (Grubbs)			7.60	14.66	9.55	6.59	
Reference Values for Evaluation			7.60	14.66	9.55	6.59	
Number Of Instruments			96	95	95	95	**95**
Inter-Instrument Variation	based on 30 tests	SD	1.15	1.97	1.40	1.30	**1.45**
		CV %	15.2	13.4	14.6	19.7	**15.7**
	based on 6 tests	SD	1.11	1.84	1.34	1.30	**1.40**
		CV %	14.6	12.5	14.1	19.7	**15.2**
	based on single tests	SD	1.37	2.18	1.46	1.34	**1.58**
		CV %	18.0	14.9	15.2	20.3	**17.1**
Typical within-instrument Variation (Median)	between different days with each 6 tests	SD	0.23	0.48	0.35	0.18	**0.31**
		CV %	3.0	3.3	3.7	2.7	**3.2**
	between single tests on one day	SD	0.39	0.81	0.56	0.27	**0.51**
		CV %	5.2	5.5	5.9	4.0	**5.2**
	between all tests on different days	SD	0.45	0.91	0.64	0.33	**0.58**
		CV %	5.9	6.2	6.7	5.0	**6.0**

Test Result Distributions
Trash Count

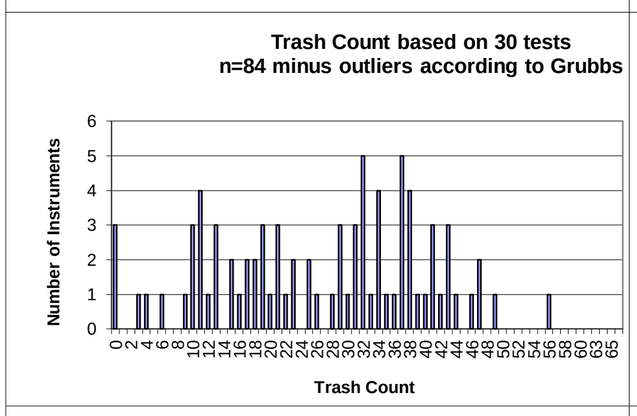
Cotton 1

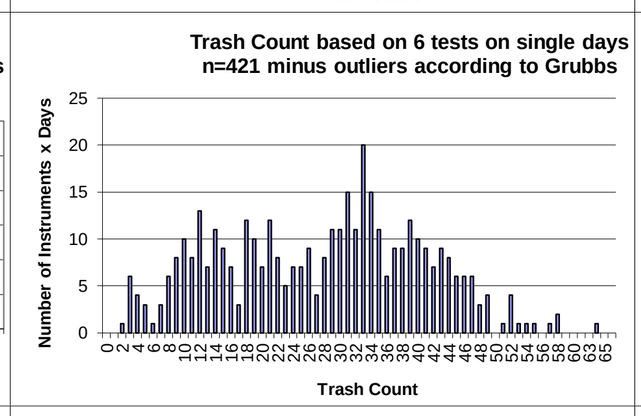


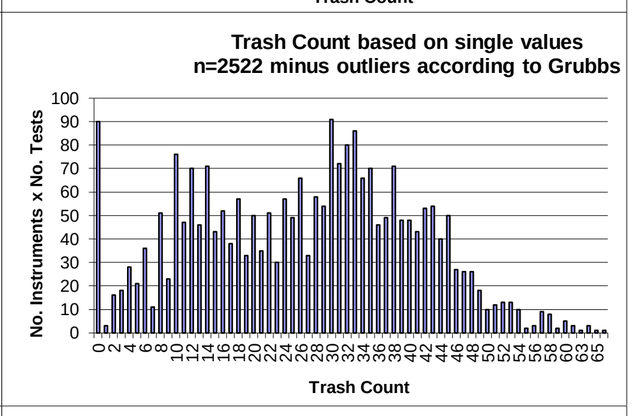




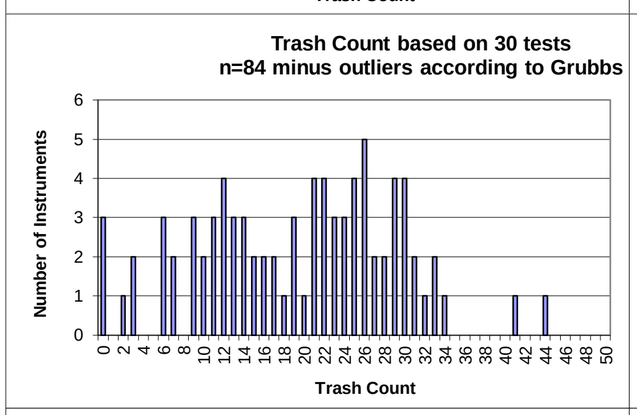
Cotton 2

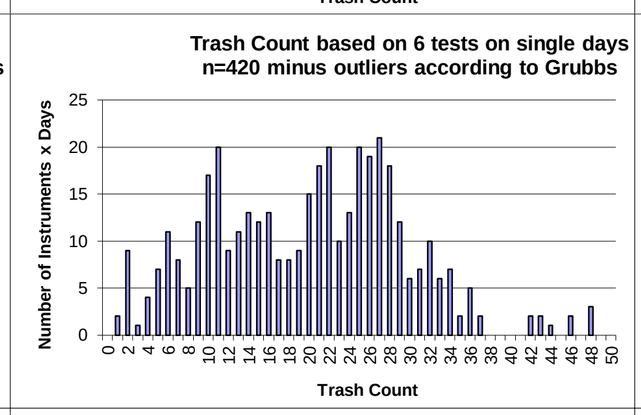


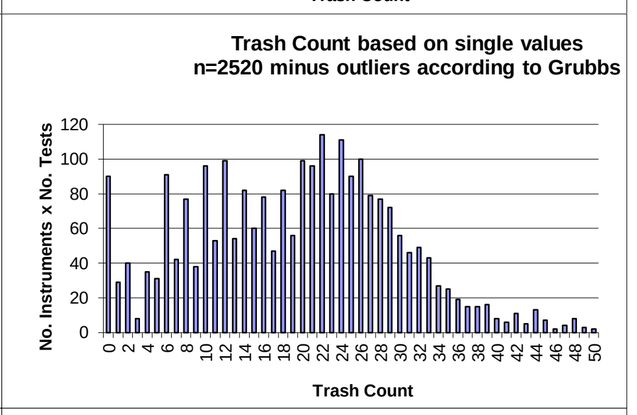




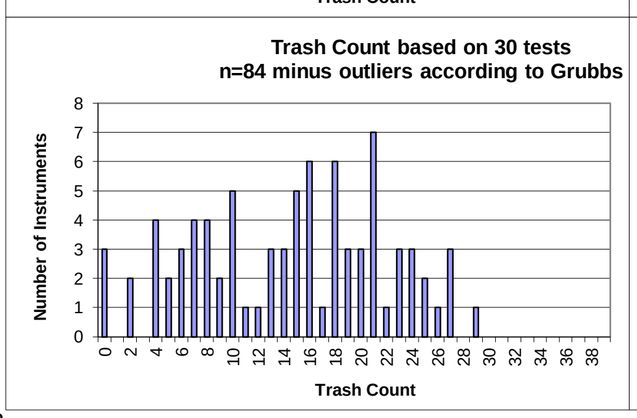
Cotton 3

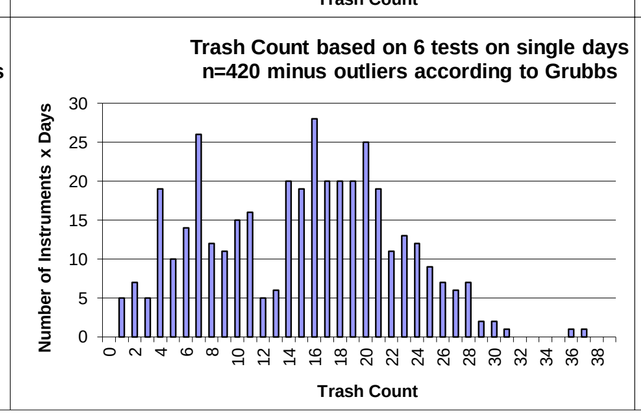


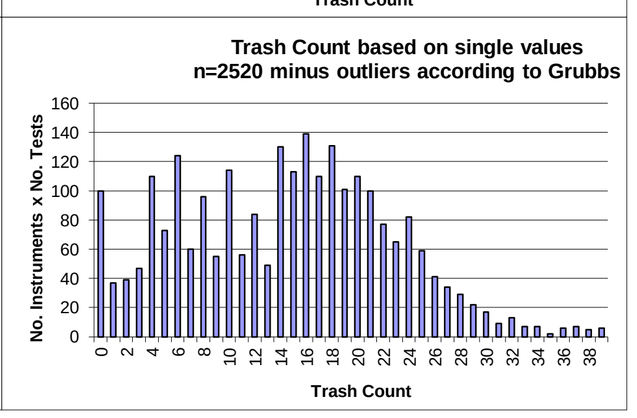




Cotton 4







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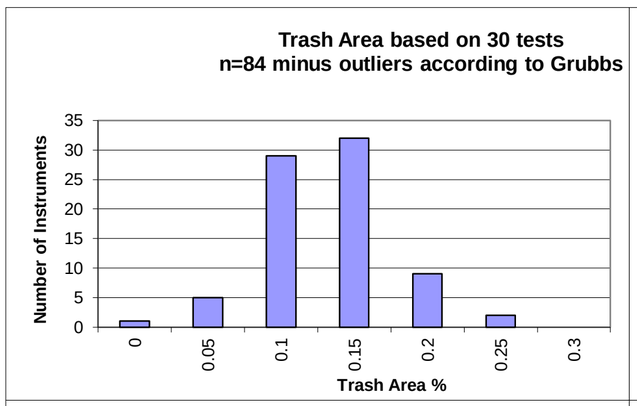
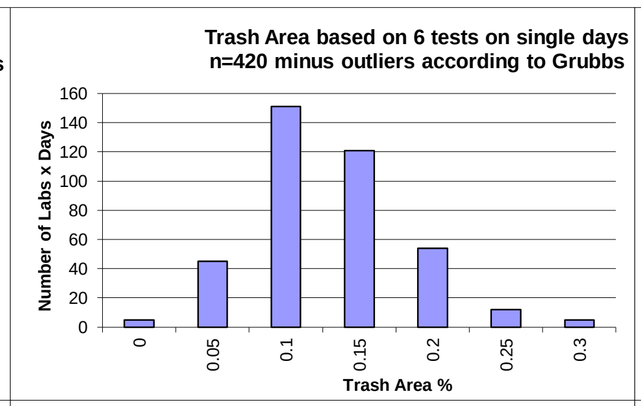
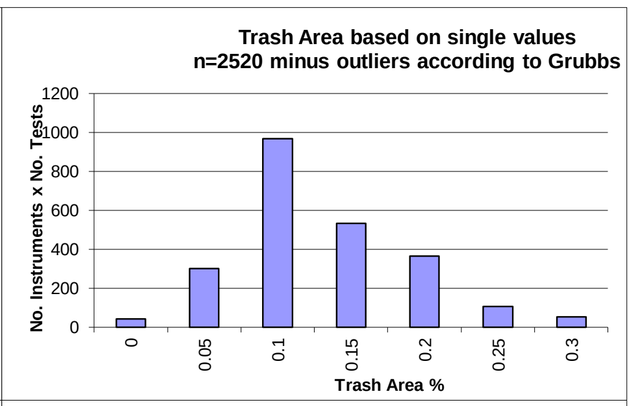
(Only results from instruments/days/single tests that are not regarded as outliers according to Grubbs' method)
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Trash Area

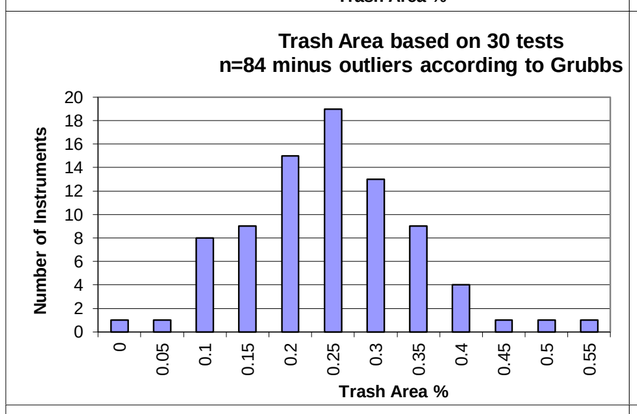
Cotton 1

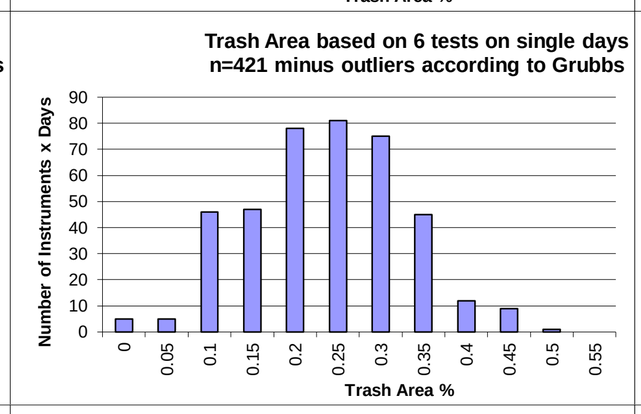


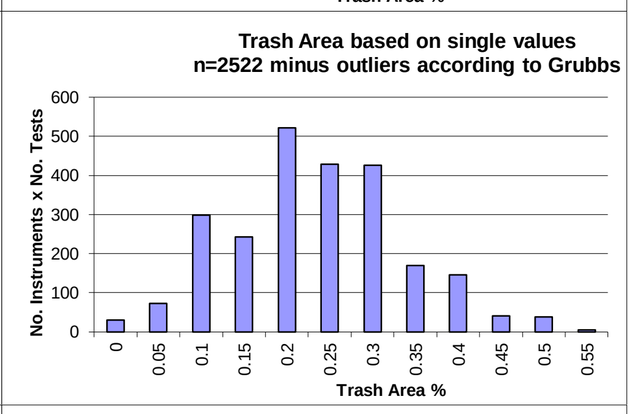




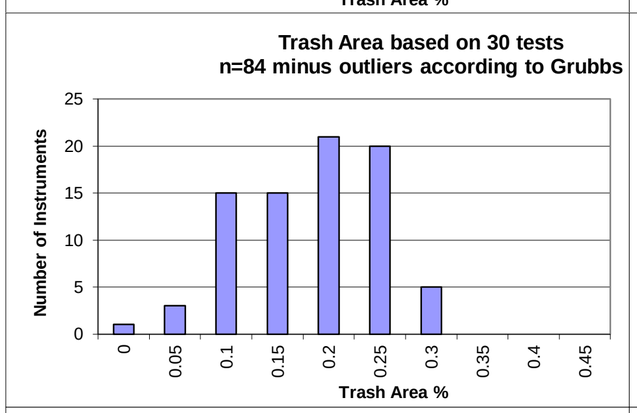
Cotton 2

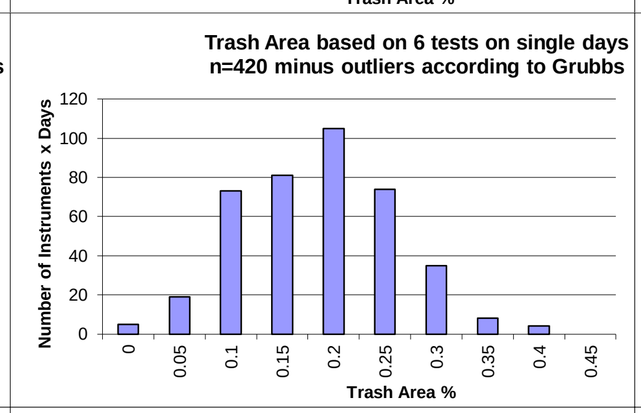


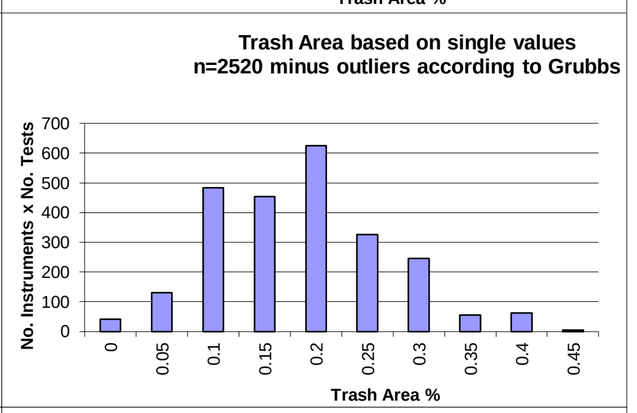




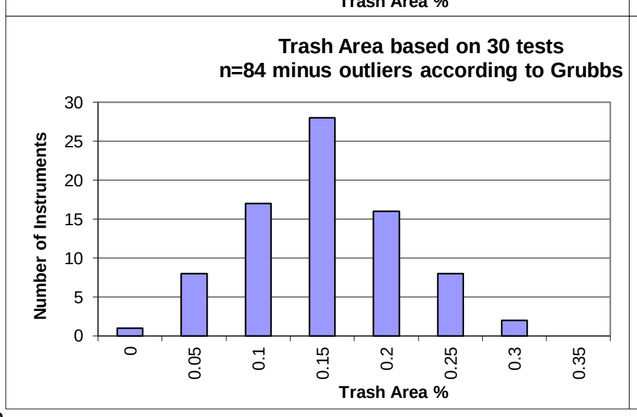
Cotton 3

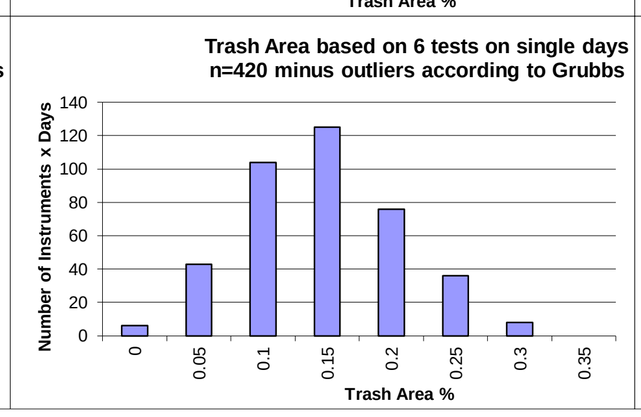


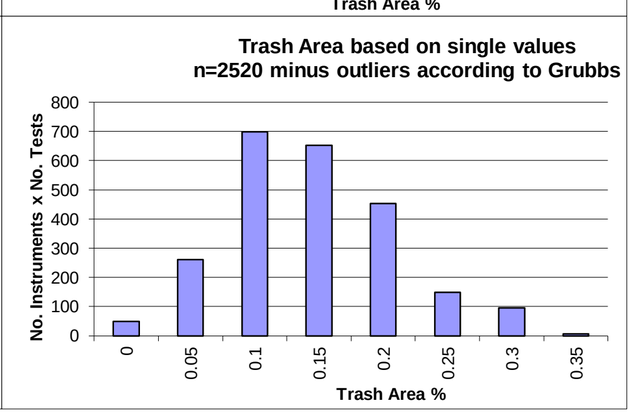




Cotton 4







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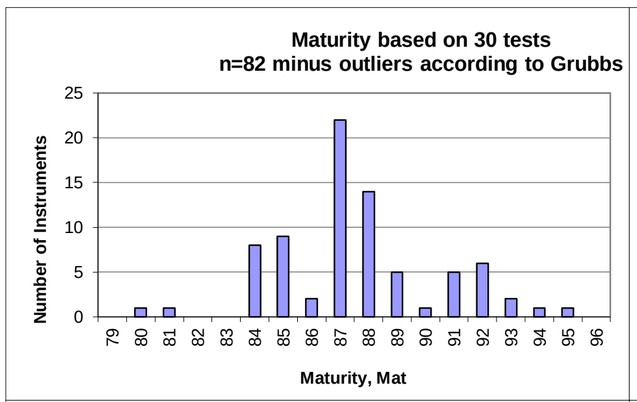
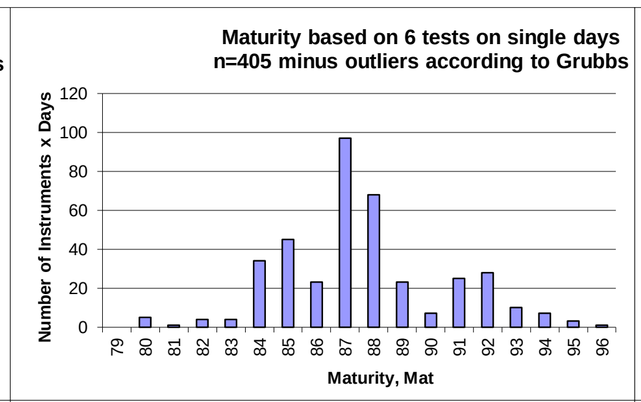
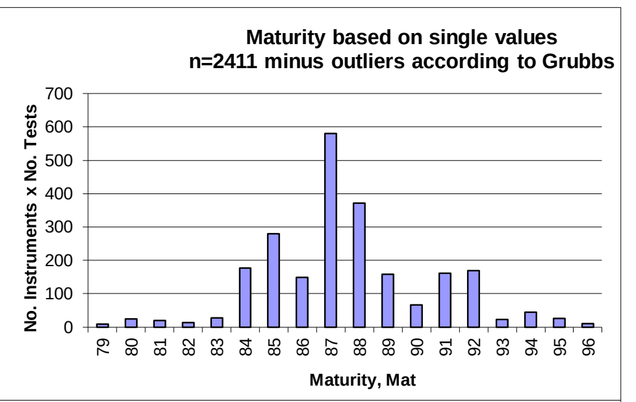
(classes are defined as > lower limit and <= upper limit)

Test Result Distributions
Maturity

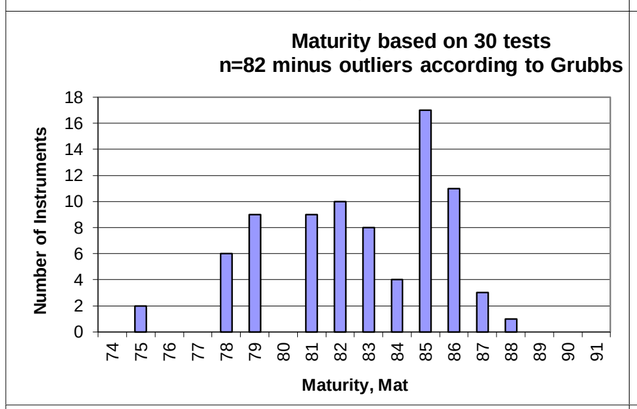
Cotton 1

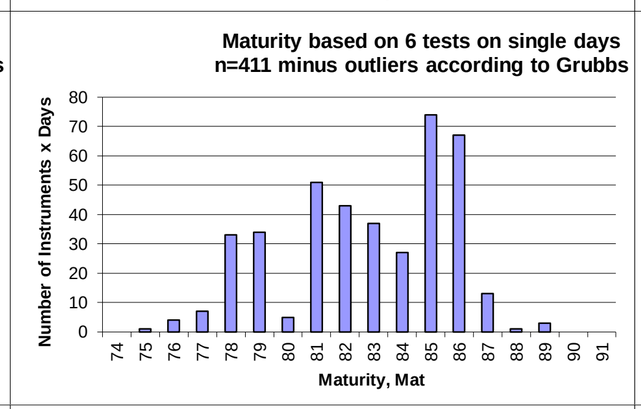


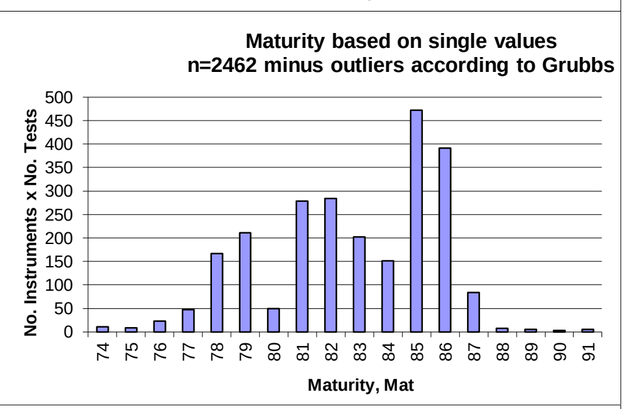




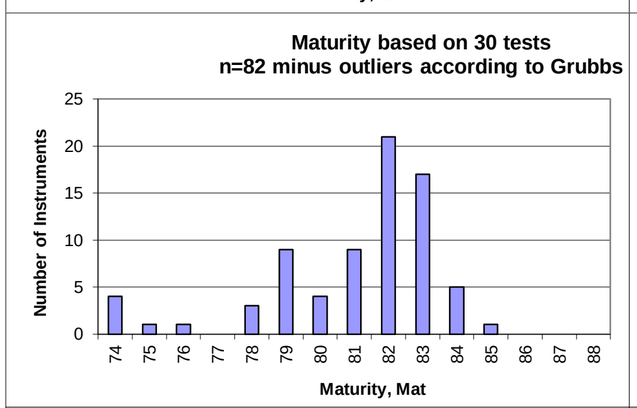
Cotton 2

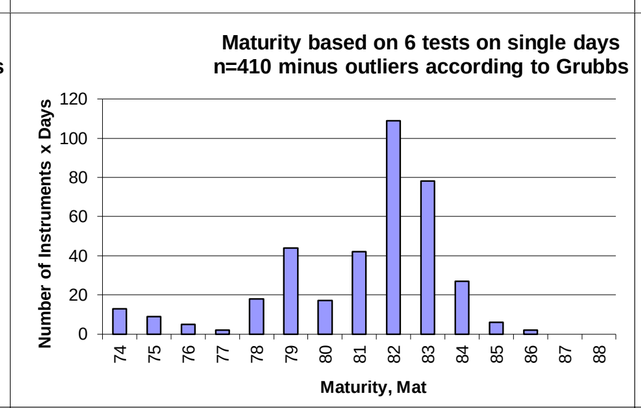


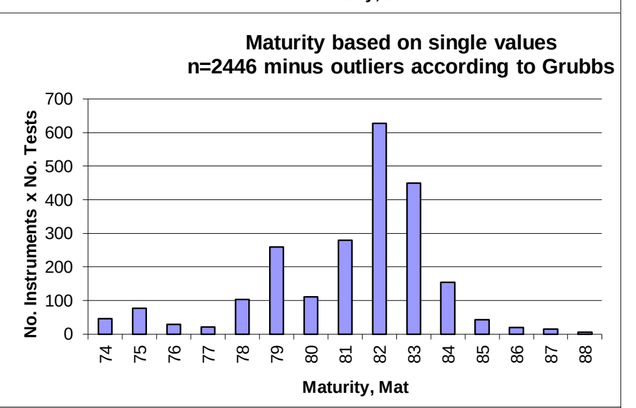




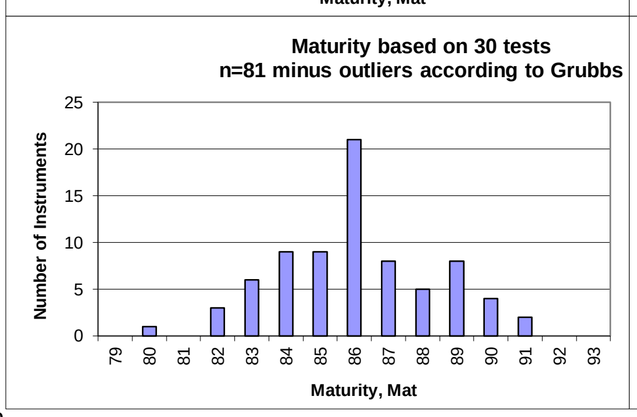
Cotton 3

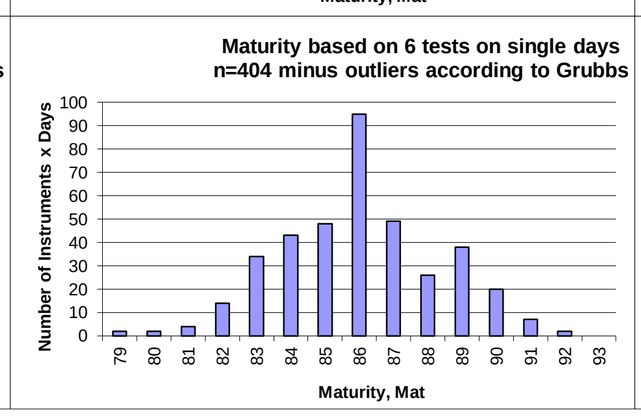


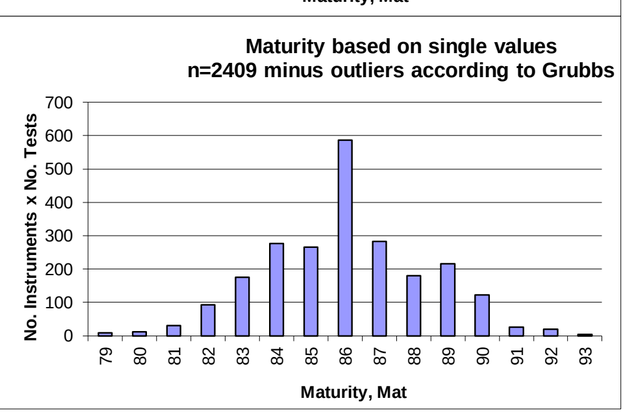




Cotton 4







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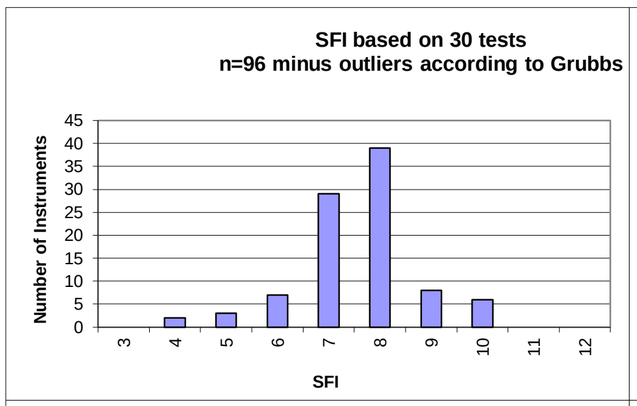
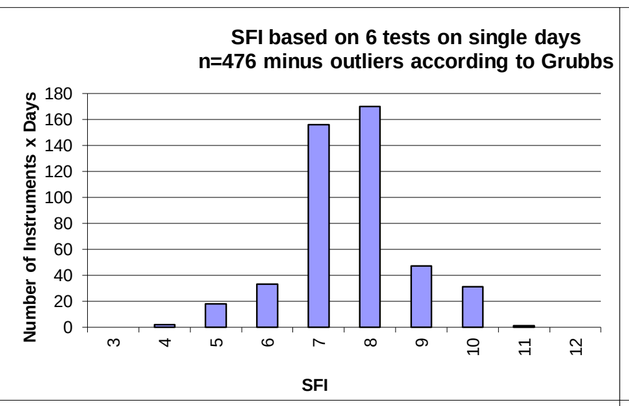
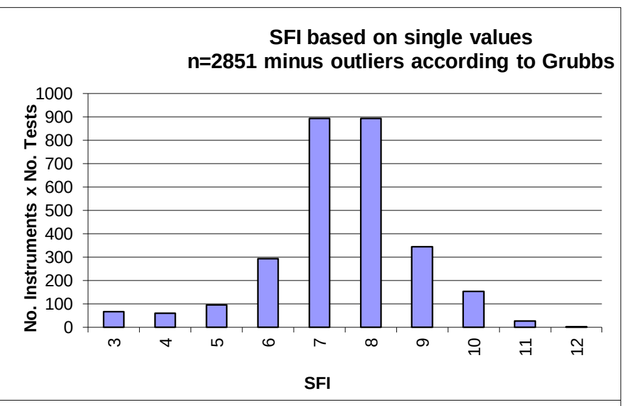
Test Result Distributions
SFI

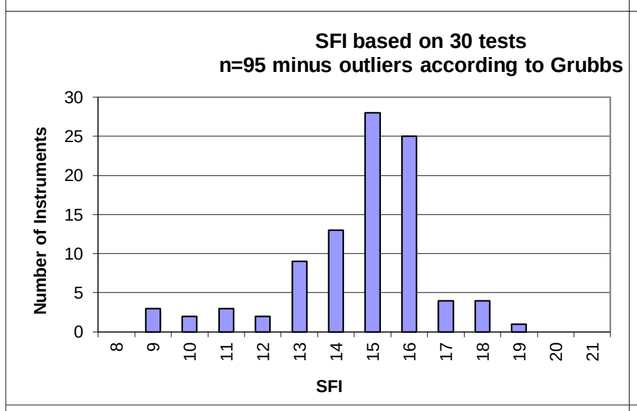
Cotton 1

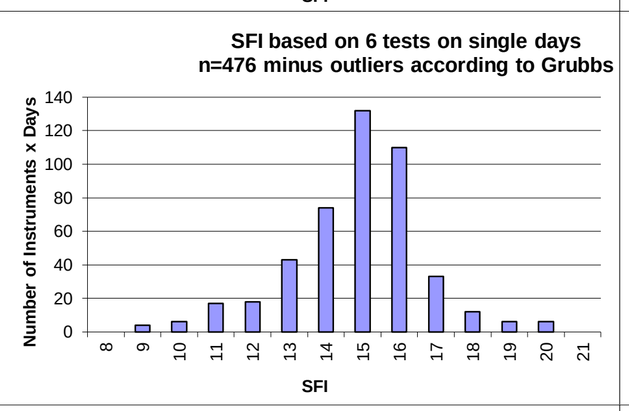


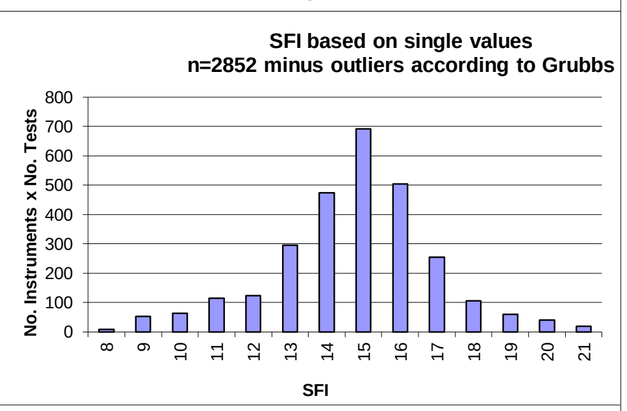




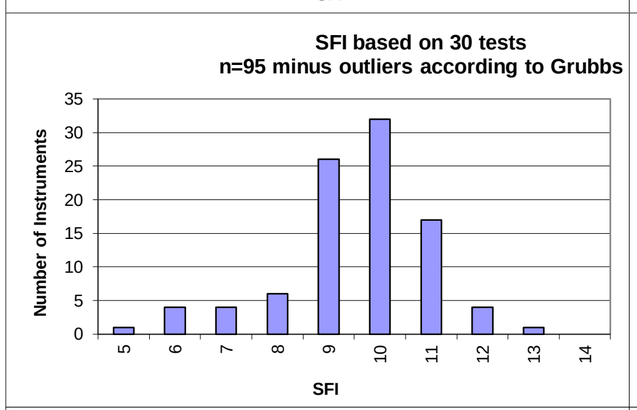
Cotton 2

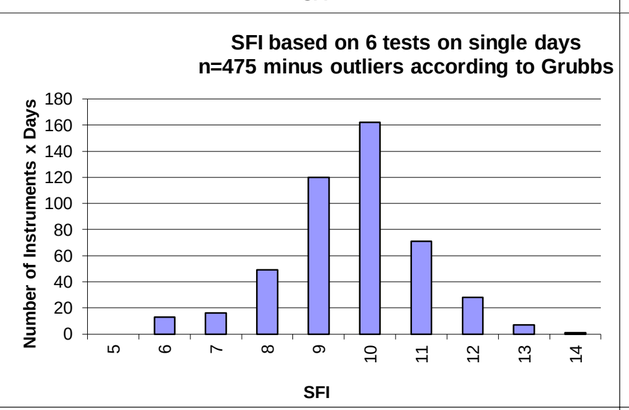


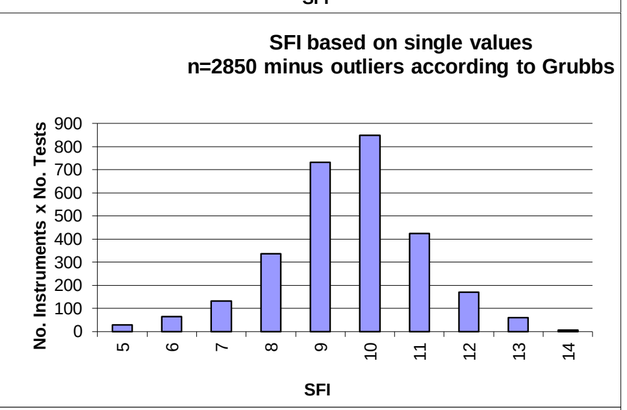




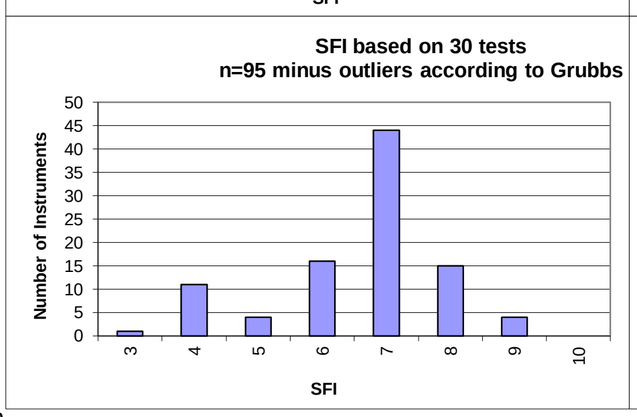
Cotton 3

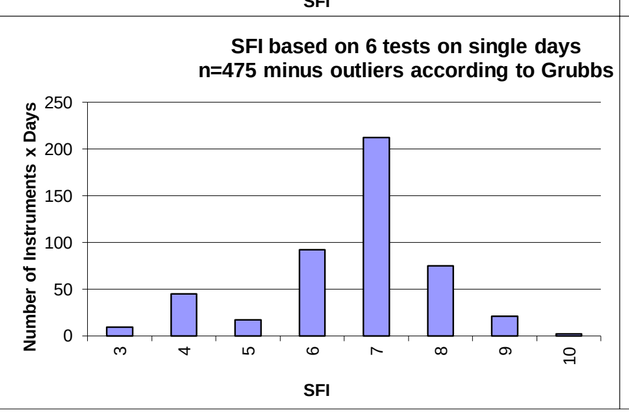


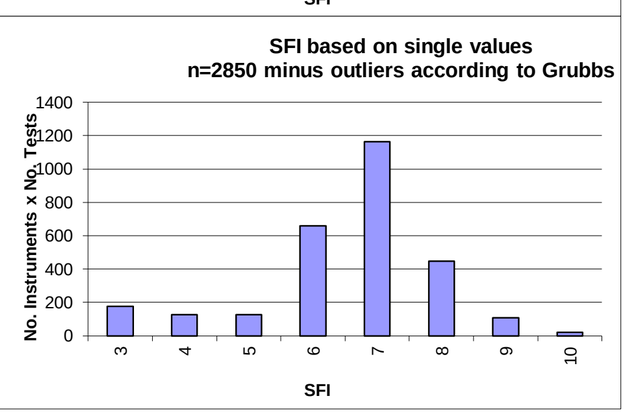




Cotton 4







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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)

International Cotton Advisory Committee

CSITC
Global - Round Trial 2013 - 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*

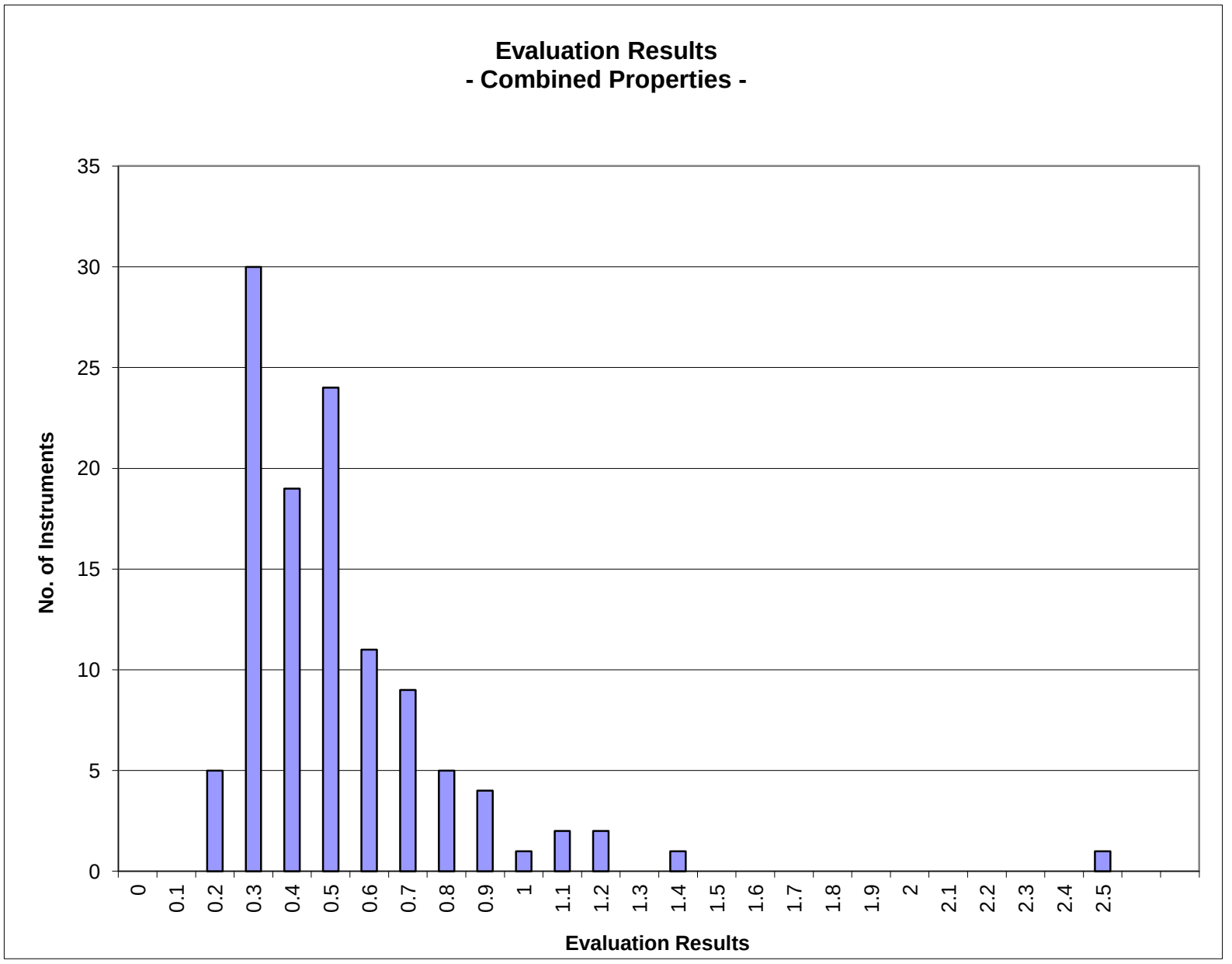
Instrument Evaluation

- Graph of Combined Properties -

According to ICAC CSITC Task Force Recommendations

Global - Round Trial 2013 - 1

		Evaluation Combined Prop.
Statistics	Average	0.52
	Median	0.47
	Best Instrument	0.21
	Worst Instrument	2.46



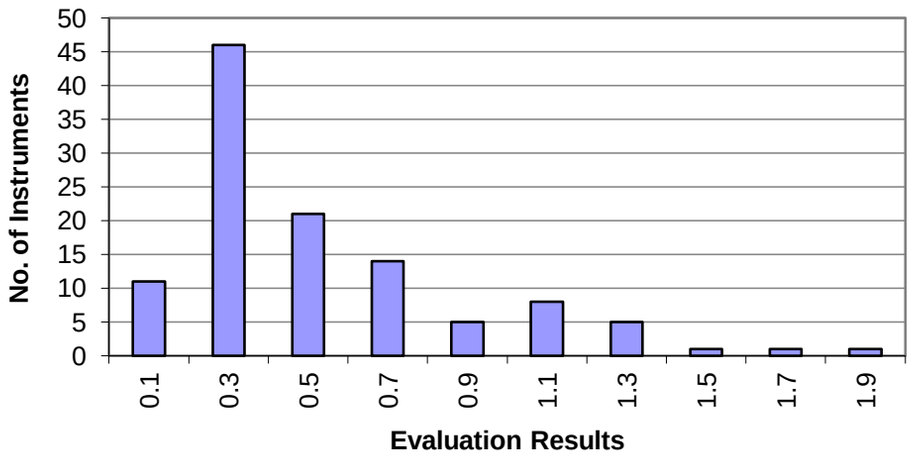
x-Axis shows midpoints of classes

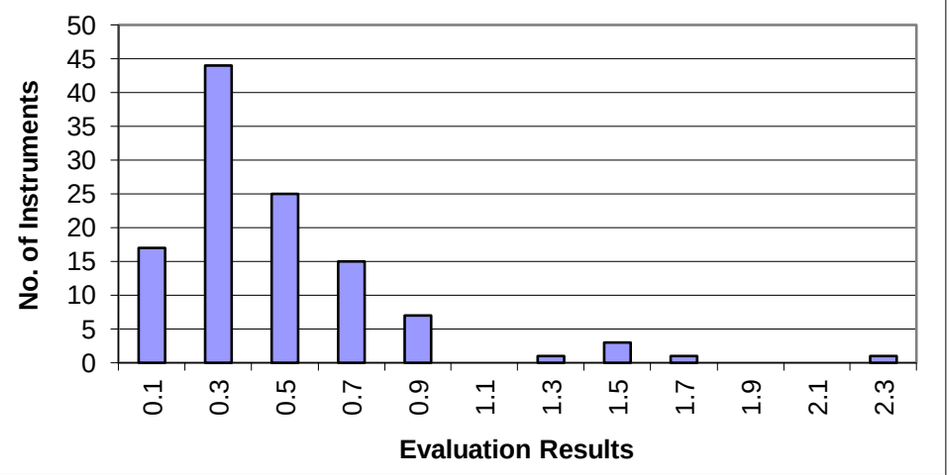
The evaluation results are entered based on the unrounded values

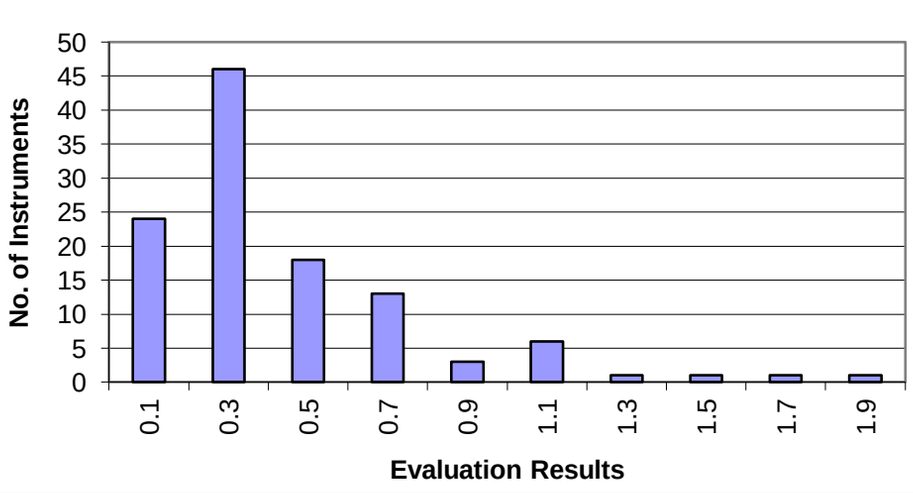
(classes are defined as > lower limit and <= upper limit)

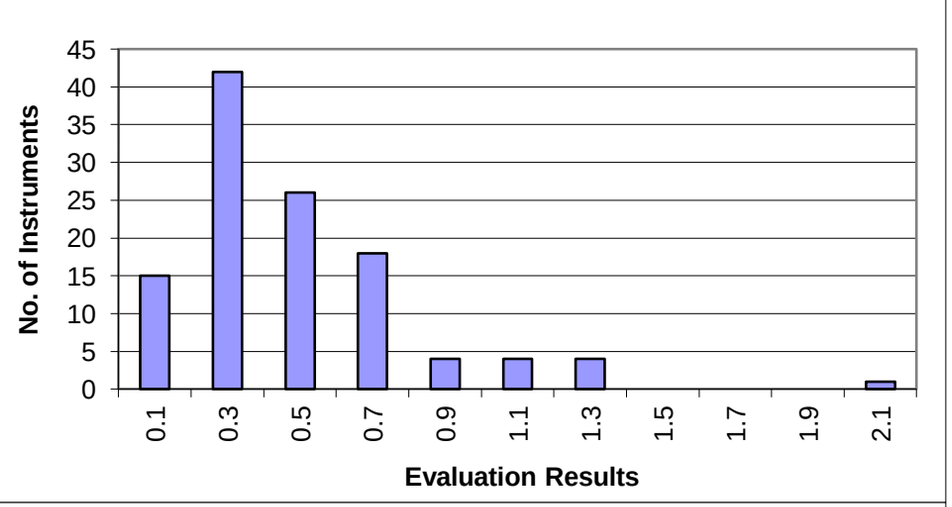
Instrument Evaluation
- Graph of Single Properties -
According to ICAC CSITC Task Force Recommendations
Global - Round Trial 2013 - 1

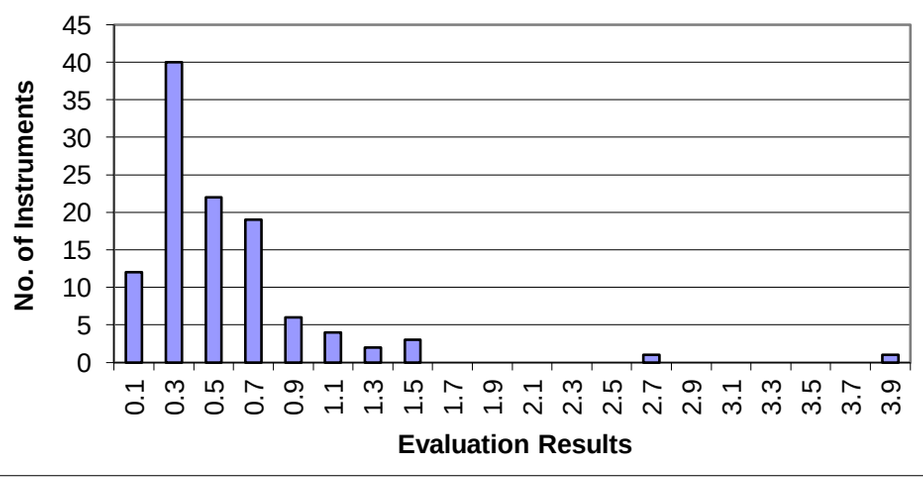
		Evaluation Micronaire	Evaluation Strength	Evaluation Length	Evaluation Uniformity	Evaluation Color Rd	Evaluation Color +b
Statistics	Average	0.54	0.47	0.45	0.49	0.56	0.62
	Median	0.40	0.39	0.35	0.40	0.41	0.49
	Best Instr.	0.06	0.06	0.02	0.08	0.04	0.05
	Worst Instr.	1.89	2.34	1.92	2.11	3.94	6.70

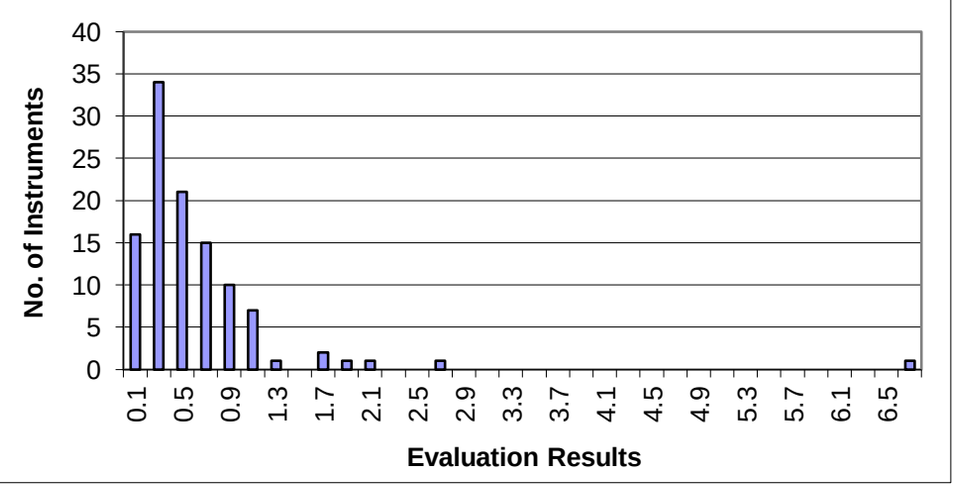












x-Axis shows midpoints of classes
The evaluation results are entered based on the unrounded values

International Cotton Advisory Committee

CSITC
Global - Round Trial 2013 - 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

System Provided by:
Generation 10 Limited

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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	98.0	94.7	96.3	98.5	88.2	95.5
Completely within limits	94.7	87.7	89.5	95.6	76.4	89.1
% of Instruments ≥75% within limits	97.3	94.7	96.5	99.1	86.4	95.5
% of Instruments ≥50% within limits	100.0	97.4	99.1	99.1	92.7	98.2

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL131-001-01	100	100	100	100	100	100
GL131-001-02	100	100	100	100	100	100
GL131-002-01	100	100	100	100	100	100
GL131-003-02	100	100	100	100	100	100
GL131-004-01	100	100	100	100	100	100
GL131-004-02	100	100	100	100	100	100
GL131-004-04	100	100	100	100	100	100
GL131-005-01	100	75	100	100	100	100
GL131-007-01	100	100	100	100	100	100
GL131-007-02	100	100	100	100	100	100
GL131-007-03	100	100	100	100	100	100
GL131-008-01	100	100	25	75		
GL131-010-01	100	25	100	100	100	100
GL131-011-01	100	100	100	100	100	100
GL131-012-12	100	100	100	100	100	100
GL131-013-01	100	100	75	100	100	100
GL131-014-01	100	100	100	100	50	100
GL131-017-01	100	100	100	100	100	100
GL131-018-01	50	100	75	100	50	75
GL131-019-01	100	100	100	100	100	100
GL131-020-12	100	100	100	100	100	100
GL131-020-20	100	100	100	100	100	100
GL131-023-01	100	100	100	100	75	100
GL131-024-02	100	100	100	100	100	100
GL131-024-03	100	100	100	100	100	100
GL131-024-04	100	100	100	100	100	100
GL131-024-06	100	100	100	100	100	100
GL131-025-04		75	100	100		
GL131-026-01	100	75	100	100	100	100
GL131-028-01	100	100	100	100	100	100
GL131-029-01	100	75	100	100	100	100
GL131-029-03	100	100	100	100	100	100
GL131-030-01	100	100	100	100	100	100
GL131-031-15	100	100	100	100	100	100
GL131-031-24	100	100	100	100	100	100
GL131-032-01	100	100	100	100	100	100
GL131-033-01	75	100	100	100	100	100
GL131-034-01	100	100	100	100	50	100
GL131-034-02	100	100	100	100	75	100

GL131-035-01	100	100	75	100	50	100
GL131-036-01	100	100	100	100	100	100
GL131-037-01	100	100	75	100	100	100
GL131-037-02	100	100	50	100	100	100
GL131-037-03	100	100	50	100	100	100
GL131-037-04	100	0	75	100	25	100
GL131-038-01	100	100	100	100	75	100
GL131-040-01	100	100	100	100	100	100
GL131-041-01	100	100	100	100		
GL131-041-02	100	100	100	100	100	100
GL131-042-01	75	100	100	100	25	75
GL131-043-04	100	75	75	100	0	25
GL131-044-06	100	100	100	100	75	100
GL131-044-07	100	100	100	100	100	100
GL131-045-01	100	100	100	100	100	100
GL131-046-01	100	100	100	100	75	100
GL131-047-24	100	100	100	100	100	100
GL131-047-25	100	100	100	100	100	100
GL131-048-01	100	100	100	100	100	100
GL131-048-02	100	100	100	100	100	100
GL131-049-01	100	100	100	25	100	100
GL131-049-03	100	50	100	100	100	100
GL131-051-01	100	100	100	75	100	100
GL131-054-01	100	100	100	100	0	50
GL131-055-01	100	100	100	100	100	100
GL131-055-02	100	100	75	100	100	100
GL131-056-01	100	75	100	100	100	100
GL131-056-02	100	100	100	100	100	100
GL131-056-03	100	100	100	100	100	100
GL131-059-14	100	100	100	100	100	75
GL131-060-11	100	100	100	100	50	100
GL131-060-22	100	100	100	100	50	100
GL131-061-01	100	100	100	100	100	100
GL131-061-02	100	100	100	100	100	100
GL131-061-03	100	100	100	100	100	100
GL131-061-04	100	100	100	100	100	100
GL131-062-01	100	100	75	100	100	50
GL131-064-01	100	75	100	100	100	75
GL131-064-03	100	50	100	100	75	100
GL131-065-01	100	100	100	100	100	100
GL131-065-02	100	100	100	100	100	100
GL131-065-03	100	100	100	100	100	100
GL131-065-04	100	100	100	100	100	100
GL131-067-01	100	100	100	75	100	100
GL131-068-01	100	100	100	100	100	100
GL131-069-01	100	100	100	100	100	100
GL131-069-04	100	100	100	100	100	100
GL131-070-01	100	100	100	100	100	100
GL131-070-02	100	100	100	100	100	100
GL131-071-01	50	100	100	100	25	75
GL131-072-01	100	50	50	75	0	0
GL131-074-01	100	100	100	100	100	100
GL131-075-01	100	100	100	100	75	100
GL131-075-02	100	100	100	100	100	100
GL131-076-01	100	100	100	100	100	100
GL131-078-01	100	100	100	100	75	100
GL131-079-01	100	100	100	100	100	100
GL131-081-01	100	100	100	100	100	100
GL131-082-02	100	100	100	100	75	100
GL131-082-04	100	25	100	100	50	100

GL131-082-07	100	100	100	100	100	100
GL131-083-01	100	100	100	100	75	100
GL131-084-02	75	100	100	100	25	75
GL131-084-06	50	100	100	100	25	75
GL131-085-01	100	100	100	100	100	50
GL131-086-01	100	75	100	100		
GL131-088-01	100	100	100	100	100	100
GL131-089-01	100	100	100	100	100	100
GL131-090-01	100	100	100	100	100	100
GL131-091-03	100	100	100	100	100	100
GL131-092-01	100	100	100	100	100	100
GL131-093-01	100	100	100	100	75	100
GL131-094-03	100	100	100	100	100	100
GL131-095-47	100	100	100	100	100	100
GL131-095-48	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	97.1	89.4	93.4	95.3	84.7	94.8
% of Instruments 100% within limits	61.9	21.9	34.2	41.2	31.8	71.8
% of Instruments ≥95% within limits	86.7	53.5	71.9	78.1	50.0	85.5
% of Instruments ≥75% within limits	98.2	87.7	91.2	96.5	76.4	92.7
% of Instruments ≥65% within limits	100.0	93.0	97.4	99.1	84.5	95.5
% of Instruments ≥50% within limits	100.0	94.7	99.1	99.1	90.0	96.4

Percentage of Results Within Limits						
Instrument	**Micronaire**	**Strength**	**Length**	**Uniformity**	**Color Rd**	**Color +b**
GL131-001-01	100	98	99	100	97	100
GL131-001-02	100	100	100	98	97	100
GL131-002-01	100	97	100	100	100	100
GL131-003-02	97	93	98	100	98	100
GL131-004-01	100	96	98	91	64	98
GL131-004-02	100	93	97	100	100	100
GL131-004-04	100	98	99	100	93	100
GL131-005-01	100	78	100	100	87	100
GL131-007-01	100	100	100	100	100	100
GL131-007-02	100	100	100	100	100	100
GL131-007-03	100	100	100	99	100	100
GL131-008-01	98	93	23	71		
GL131-010-01	100	37	98	98	78	98
GL131-011-01	100	93	96	96	100	100
GL131-012-12	100	99	97	98	98	100
GL131-013-01	99	82	78	97	68	100
GL131-014-01	98	94	100	100	57	100
GL131-017-01	100	98	100	99	93	100
GL131-018-01	80	41	80	90	51	90
GL131-019-01	100	95	96	96	100	100
GL131-020-12	100	100	100	100	100	100
GL131-020-20	100	100	100	100	99	100
GL131-023-01	86	82	88	97	78	80
GL131-024-02	100	100	100	100	100	100
GL131-024-03	100	100	100	100	100	100
GL131-024-04	99	100	100	100	100	100
GL131-024-06	100	98	100	100	100	100
GL131-025-04		41	80	73		
GL131-026-01	100	74	81	98	100	100
GL131-028-01	100	86	98	97	89	100
GL131-029-01	100	78	98	100	100	100
GL131-029-03	100	88	98	94	89	100
GL131-030-01	99	94	100	100	100	100
GL131-031-15	100	97	99	99	100	100
GL131-031-24	100	88	85	100	99	99
GL131-032-01	100	100	100	100	100	100

GL131-033-01	94	96	90	98	87	93
GL131-034-01	100	95	97	100	48	100
GL131-034-02	96	89	99	98	63	100
GL131-035-01	83	90	73	92	39	100
GL131-036-01	97	86	99	100	93	100
GL131-037-01	91	80	72	88	92	100
GL131-037-02	98	94	73	98	76	100
GL131-037-03	96	84	58	89	94	99
GL131-037-04	96	18	79	88	44	94
GL131-038-01	95	96	98	99	65	100
GL131-040-01	100	96	98	96	100	100
GL131-041-01	100	90	84	100		
GL131-041-02	98	93	94	86	90	100
GL131-042-01	77	100	100	100	38	75
GL131-043-04	99	73	72	83	5	29
GL131-044-06	100	94	100	98	65	100
GL131-044-07	100	98	98	100	97	100
GL131-045-01	100	98	100	98	100	96
GL131-046-01	97	68	92	96	87	100
GL131-047-24	99	96	100	100	100	100
GL131-047-25	100	99	100	100	98	100
GL131-048-01	100	94	99	99	100	100
GL131-048-02	100	97	99	99	100	100
GL131-049-01	99	99	91	38	86	91
GL131-049-03	100	58	97	84	98	100
GL131-051-01	100	91	98	78	96	100
GL131-054-01	100	98	93	97	11	50
GL131-055-01	98	98	76	90	98	100
GL131-055-02	99	81	67	75	94	95
GL131-056-01	97	75	93	97	98	100
GL131-056-02	100	78	98	100	99	99
GL131-056-03	100	98	100	100	99	100
GL131-059-14	97	94	94	88	83	81
GL131-060-11	100	95	100	100	58	100
GL131-060-22	100	82	100	98	49	100
GL131-061-01	100	100	100	100	99	100
GL131-061-02	99	100	100	100	100	100
GL131-061-03	100	100	100	100	99	100
GL131-061-04	100	100	100	100	100	100
GL131-062-01	88	98	96	99	100	49
GL131-064-01	83	73	92	96	83	73
GL131-064-03	100	45	78	86	66	100
GL131-065-01	100	98	98	100	100	100
GL131-065-02	100	98	98	85	100	100
GL131-065-03	100	100	99	98	100	100
GL131-065-04	100	98	98	100	100	100
GL131-067-01	100	99	91	79	86	95
GL131-068-01	100	88	99	98	73	95
GL131-069-01	99	100	99	100	100	100
GL131-069-04	98	94	95	95	75	98
GL131-070-01	100	100	100	100	100	100
GL131-070-02	100	100	100	100	100	100
GL131-071-01	68	85	100	95	45	69
GL131-072-01	100	53	54	73	0	0
GL131-074-01	99	96	99	100	66	98
GL131-075-01	100	99	90	97	72	100
GL131-075-02	100	98	98	99	89	98
GL131-076-01	100	97	97	99	89	100
GL131-078-01	100	100	100	100	80	100
GL131-079-01	100	97	98	98	99	100

GL131-081-01	83	90	94	97	83	100
GL131-082-02	89	91	95	98	68	99
GL131-082-04	95	37	95	96	63	100
GL131-082-07	100	99	98	100	99	100
GL131-083-01	100	74	73	77	69	100
GL131-084-02	86	87	100	94	41	77
GL131-084-06	68	85	100	95	45	69
GL131-085-01	78	93	100	98	98	48
GL131-086-01	85	65	71	84		
GL131-088-01	100	100	100	100	94	98
GL131-089-01	100	99	96	99	94	99
GL131-090-01	100	85	98	96	87	100
GL131-091-03	99	92	98	94	100	100
GL131-092-01	100	96	92	100	83	100
GL131-093-01	95	100	99	100	84	100
GL131-094-03	100	100	100	100	98	100
GL131-095-47	100	100	100	100	100	100
GL131-095-48	100	100	100	100	100	100