

```

DATASET ACTIVATE DataSet1.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=famenum error_mm seq_number MISS
ING=LISTWISE
  REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: famenum=col(source(s), name("famenum"))
  DATA: error_mm=col(source(s), name("error_mm"))
  DATA: seq_number=col(source(s), name("seq_number"), unit.category())
  GUIDE: axis(dim(1), label("famenum"))
  GUIDE: axis(dim(2), label("error_mm"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("seq_number"))
  GUIDE: text.title(label("Multiple Line of error_mm by famenum by seq_number"
))
  ELEMENT: line(position(famenum*error_mm), color.interior(seq_number), missin
g.wings())
END GPL.

```

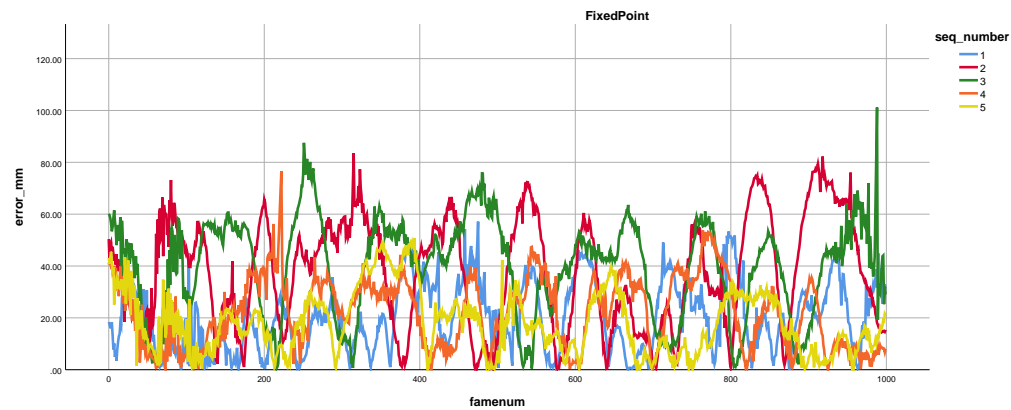
GGraph

Notes

Output Created		29-MAR-2021 15:44:56
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Fixed Point.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=famenum error_mm seq_number MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: famenum=col (source(s), name ("famenum")) DATA: error_mm=col (source(s), name ("error_mm")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) GUIDE: axis(dim(1), label ("famenum")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: legend(aesthetic (aesthetic.color.interior), label("seq_number")) GUIDE: text.title(label ("Multiple Line of error_mm by famenum by seq_number")) ELEMENT: line(position (famenum*error_mm), color.interior (seq_number), missing. wings()) END GPL. </pre>	
Resources	Processor Time	00:00:02,50
	Elapsed Time	00:00:00,96



Notes

Output Created		29-MAR-2021 15:47:19
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Marke r.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum MEAN(error_mm)[name=" MEAN_error_mm"] seq_number MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: framenum=col (source(s), name ("framenum")) DATA: MEAN_error_mm=col (source(s), name ("MEAN_error_mm")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) GUIDE: axis(dim(1), label ("framenum")) GUIDE: axis(dim(2), label ("Mean error_mm")) GUIDE: legend(aesthetic (aesthetic.color.interior), label("seq_number")) GUIDE: text.title(label ("Multiple Line Mean of error_mm by framenum by seq_number")) ELEMENT: line(position (framenum*MEAN_error_ mm), color.interior (seq_number), missing. wings()) END GPL. </pre>				
Resources	<table> <tr> <td>Processor Time</td> <td>00:00:01,77</td> </tr> <tr> <td>Elapsed Time</td> <td>00:00:00,54</td> </tr> </table>	Processor Time	00:00:01,77	Elapsed Time	00:00:00,54
Processor Time	00:00:01,77				
Elapsed Time	00:00:00,54				

* Chart Builder.

GGRAPH

```
/GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MIS
```

```

SING=LISTWISE
REPORTMISSING=NO
/GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
SOURCE: s=userSource(id("graphdataset"))
DATA: framenum=col(source(s), name("framenum"))
DATA: error_mm=col(source(s), name("error_mm"))
DATA: seq_number=col(source(s), name("seq_number"), unit.category())
GUIDE: axis(dim(1), label("framenum"))
GUIDE: axis(dim(2), label("error_mm"))
GUIDE: legend(aesthetic(aesthetic.color.interior), label("seq_number"))
GUIDE: text.title(label("Multiple Line of error_mm by framenum by seq_number
"))
ELEMENT: line(position(framenum*error_mm), color.interior(seq_number), missi
ng.wings())
END GPL.

```

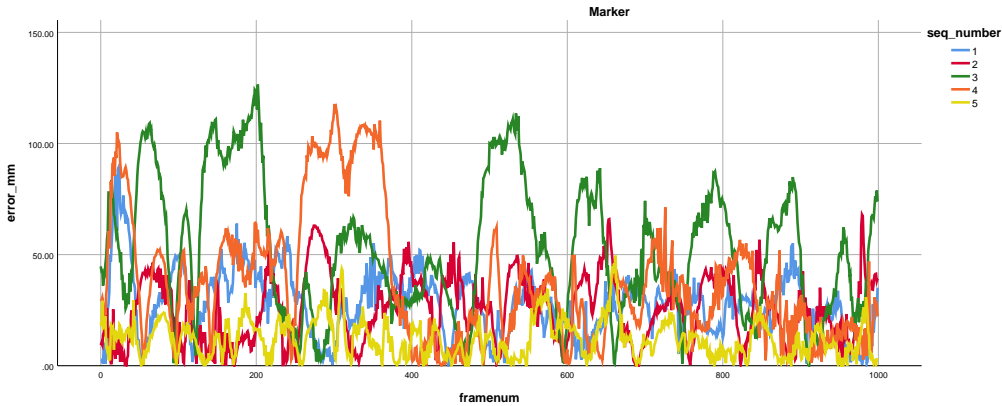
GGraph

Notes

Output Created		29-MAR-2021 15:48:29
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Marke r.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: framenum=col (source(s), name ("framenum")) DATA: error_mm=col (source(s), name ("error_mm")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) GUIDE: axis(dim(1), label ("framenum")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: legend(aesthetic (aesthetic.color.interior), label("seq_number")) GUIDE: text.title(label ("Multiple Line of error_mm by framenum by seq_number")) ELEMENT: line(position (framenum*error_mm), color.interior (seq_number), missing. wings()) END GPL. </pre>	
Resources	Processor Time	00:00:00,77
	Elapsed Time	00:00:00,32



```

DATASET ACTIVATE DataSet4.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MIS
SING=LISTWISE
  REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: framenum=col(source(s), name("framenum"))
  DATA: error_mm=col(source(s), name("error_mm"))
  DATA: seq_number=col(source(s), name("seq_number"), unit.category())
  GUIDE: axis(dim(1), label("framenum"))
  GUIDE: axis(dim(2), label("error_mm"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("seq_number"))
  GUIDE: text.title(label("Multiple Line of error_mm by framenum by seq_number
"))
  ELEMENT: line(position(framenum*error_mm), color.interior(seq_number), missi
ng.wings())
END GPL.

```

GGraph

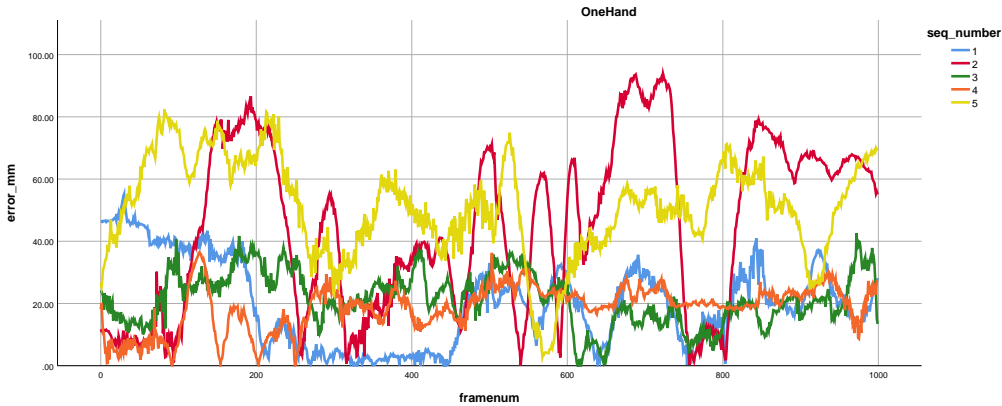
Notes

Output Created		29-MAR-2021 15:51:43
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\OneH and.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: framenum=col (source(s), name ("framenum")) DATA: error_mm=col (source(s), name ("error_mm")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) GUIDE: axis(dim(1), label ("framenum")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: legend(aesthetic (aesthetic.color.interior), label("seq_number")) GUIDE: text.title(label ("Multiple Line of error_mm by framenum by seq_number")) ELEMENT: line(position (framenum*error_mm), color.interior (seq_number), missing. wings()) END GPL. </pre>				
Resources	<table> <tr> <td>Processor Time</td><td>00:00:00,98</td></tr> <tr> <td>Elapsed Time</td><td>00:00:00,49</td></tr> </table>	Processor Time	00:00:00,98	Elapsed Time	00:00:00,49
Processor Time	00:00:00,98				
Elapsed Time	00:00:00,49				

[DataSet4] C:\Data\SubmittedPapers\DennisPaper\PilotData\OneHand.sav



```

DATASET ACTIVATE DataSet5.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MIS
SING=LISTWISE
  REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: framenum=col(source(s), name("framenum"))
  DATA: error_mm=col(source(s), name("error_mm"))
  DATA: seq_number=col(source(s), name("seq_number"), unit.category())
  GUIDE: axis(dim(1), label("framenum"))
  GUIDE: axis(dim(2), label("error_mm"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("seq_number"))
  GUIDE: text.title(label("Multiple Line of error_mm by framenum by seq_number
"))
  ELEMENT: line(position(framenum*error_mm), color.interior(seq_number), missi
ng.wings())
END GPL.

```

GGraph

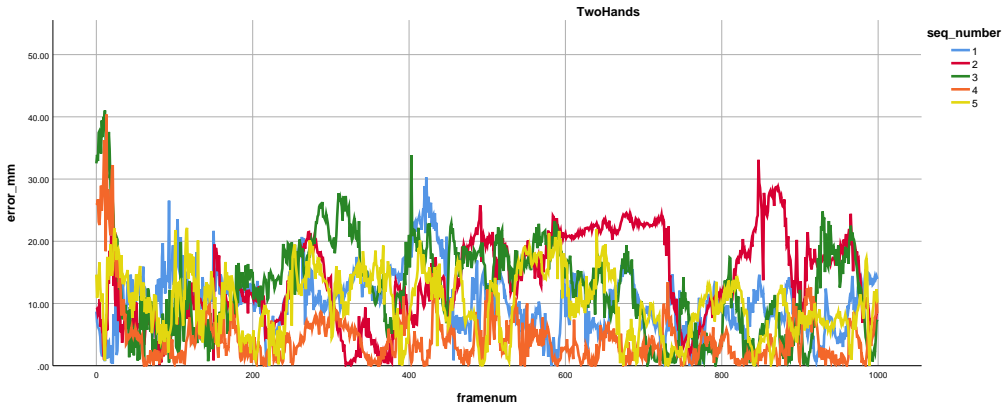
Notes

Output Created		29-MAR-2021 15:53:09
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\TwoH and.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=framenum error_mm seq_number MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: framenum=col (source(s), name ("framenum")) DATA: error_mm=col (source(s), name ("error_mm")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) GUIDE: axis(dim(1), label ("framenum")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: legend(aesthetic (aesthetic.color.interior), label("seq_number")) GUIDE: text.title(label ("Multiple Line of error_mm by framenum by seq_number")) ELEMENT: line(position (framenum*error_mm), color.interior (seq_number), missing. wings()) END GPL. </pre>		
Resources	<table> <tr> <td>Processor Time</td> <td>00:00:00,30</td> </tr> </table>	Processor Time	00:00:00,30
Processor Time	00:00:00,30		
	<table> <tr> <td>Elapsed Time</td> <td>00:00:00,17</td> </tr> </table>	Elapsed Time	00:00:00,17
Elapsed Time	00:00:00,17		

[DataSet5] C:\Data\SubmittedPapers\DennisPaper\PilotData\TwoHand.sav



```

DATASET ACTIVATE DataSet1.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LIST
WISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: seq_number=col(source(s), name("seq_number"), unit.category())
  DATA: error_mm=col(source(s), name("error_mm"))
  DATA: id=col(source(s), name("$CASENUM"), unit.category())
  GUIDE: axis(dim(1), label("seq_number"))
  GUIDE: axis(dim(2), label("error_mm"))
  GUIDE: text.title(label("Simple Boxplot of error_mm by seq_number"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: schema(position(bin.quantile.letter*seq_number*error_mm), label(id
))
END GPL.

```

GGraph

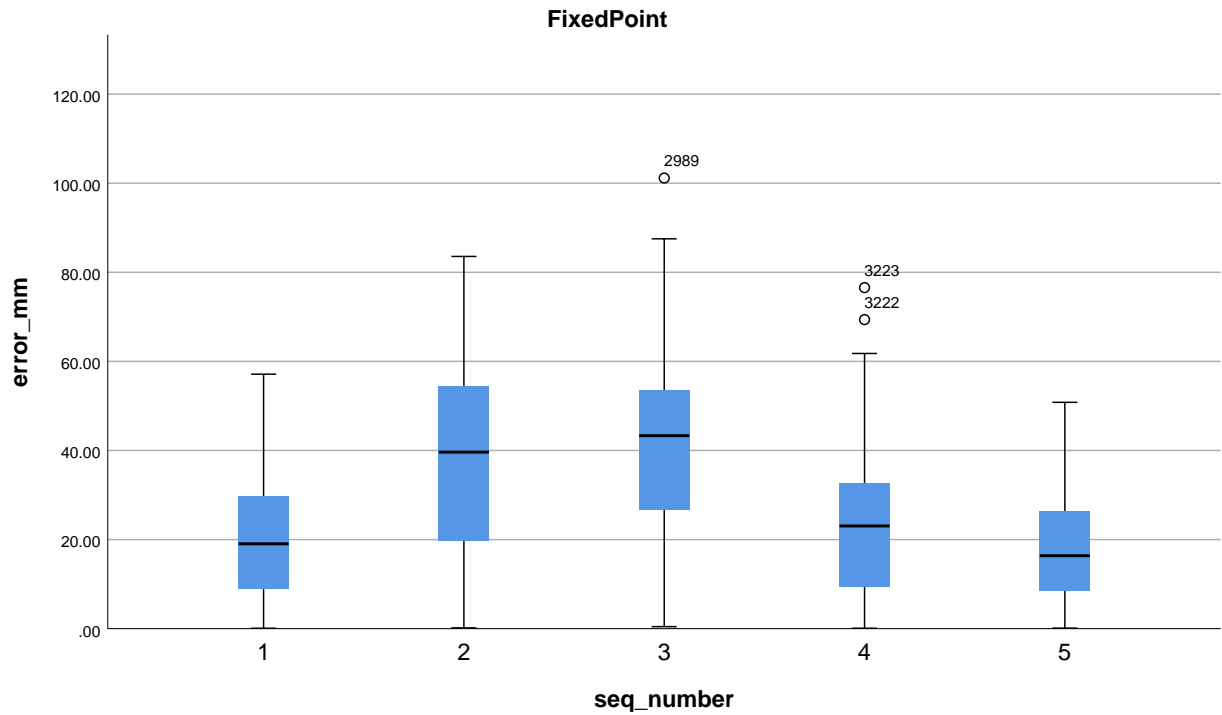
Notes

Output Created		29-MAR-2021 15:55:13
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Fixed Point.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) DATA: error_mm=col (source(s), name ("error_mm")) DATA: id=col(source(s), name("\$CASENUM"), unit. category()) GUIDE: axis(dim(1), label ("seq_number")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: text.title(label ("Simple Boxplot of error_mm by seq_number")) SCALE: linear(dim(2), include(0)) ELEMENT: schema (position(bin.quantile.letter (seq_number*error_mm)), label(id)) END GPL. </pre>	
Resources	Processor Time	00:00:00,77
	Elapsed Time	00:00:00,45

[DataSet1] C:\Data\SubmittedPapers\DennisPaper\PilotData\FixedPoint.sav



```

EXAMINE VARIABLES=error_mm BY seq_number
  /PLOT BOXPLOT NPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.

```

Explore

Notes

Output Created		29-MAR-2021 15:56:06
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Fixed Point.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=error_mm BY seq_number /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:03,37
	Elapsed Time	00:00:01,72

FixedPoint

Case Processing Summary

		Valid		Cases Missing		Total	
	seq_number	N	Percent	N	Percent	N	Percent
error_mm	1	1000	100.0%	0	0.0%	1000	100.0%
	2	1000	100.0%	0	0.0%	1000	100.0%
	3	1000	100.0%	0	0.0%	1000	100.0%
	4	1000	100.0%	0	0.0%	1000	100.0%
	5	1000	100.0%	0	0.0%	1000	100.0%

Descriptives

		seq_number	Statistic		Std. Error
error_mm	1	Mean		20.1168	.41055
		95% Confidence Interval for Mean	Lower Bound	19.3112	
			Upper Bound	20.9225	
		5% Trimmed Mean		19.6992	
		Median		19.0503	
		Variance		168.549	
		Std. Deviation		12.98265	
		Minimum		.09	
		Maximum		57.14	
		Range		57.04	
		Interquartile Range		20.81	
		Skewness		.362	.077
		Kurtosis		-.752	.155
	2	Mean		37.6751	.66173
		95% Confidence Interval for Mean	Lower Bound	36.3766	
			Upper Bound	38.9737	
		5% Trimmed Mean		37.6275	
		Median		39.6305	
		Variance		437.886	
		Std. Deviation		20.92572	
		Minimum		.18	
		Maximum		83.56	
		Range		83.38	
		Interquartile Range		34.83	
		Skewness		-.043	.077

Descriptives

seq_number		Statistic	Std. Error
3	Kurtosis	-1.114	.155
	Mean	39.7536	.58305
	95% Confidence Interval for Mean	Lower Bound	38.6095
		Upper Bound	40.8978
	5% Trimmed Mean	39.9454	
	Median	43.3260	
	Variance	339.952	
	Std. Deviation	18.43778	
	Minimum	.45	
	Maximum	101.16	
	Range	100.71	
	Interquartile Range	26.94	
	Skewness	-.353	.077
	Kurtosis	-.595	.155
4	Mean	22.3166	.42286
	95% Confidence Interval for Mean	Lower Bound	21.4868
		Upper Bound	23.1465
	5% Trimmed Mean	22.0059	
	Median	23.0621	
	Variance	178.814	
	Std. Deviation	13.37214	
	Minimum	.10	
	Maximum	76.56	
	Range	76.46	
	Interquartile Range	23.17	
	Skewness	.187	.077
	Kurtosis	-.680	.155
5	Mean	18.0630	.37646
	95% Confidence Interval for Mean	Lower Bound	17.3242
		Upper Bound	18.8017
	5% Trimmed Mean	17.5127	
	Median	16.3767	
	Variance	141.724	
	Std. Deviation	11.90480	
	Minimum	.12	

Descriptives

seq_number		Statistic	Std. Error
	Maximum	50.81	
	Range	50.69	
	Interquartile Range	17.92	
	Skewness	.547	.077
	Kurtosis	-.442	.155

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	seq_number	Statistic	df	Sig.	Statistic	df	Sig.
error_mm	1	.062	1000	.000	.965	1000	.000
	2	.068	1000	.000	.964	1000	.000
	3	.095	1000	.000	.961	1000	.000
	4	.086	1000	.000	.963	1000	.000
	5	.078	1000	.000	.958	1000	.000

a. Lilliefors Significance Correction

*Nonparametric Tests: Independent Samples.

NPTESTS

/INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

FixedPoint

Notes

Output Created		29-MAR-2021 15:58:02
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\PilotData\Fixed Point.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Syntax		NPTESTS /INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00,83
	Elapsed Time	00:00:00,47

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of error_mm is the same across categories of seq_number.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

* Chart Builder.

GGRAPH

```

/GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LIST
WISE REPORTMISSING=NO
/GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
SOURCE: s=userSource(id("graphdataset"))
DATA: seq_number=col(source(s), name("seq_number"), unit.category())
DATA: error_mm=col(source(s), name("error_mm"))
DATA: id=col(source(s), name("$CASENUM"), unit.category())
GUIDE: axis(dim(1), label("seq_number"))
GUIDE: axis(dim(2), label("error_mm"))
GUIDE: text.title(label("Simple Boxplot of error_mm by seq_number"))
SCALE: linear(dim(2), include(0))
ELEMENT: schema(position(bin.quantile.letter*seq_number*error_mm), label(id
))
END GPL.

```

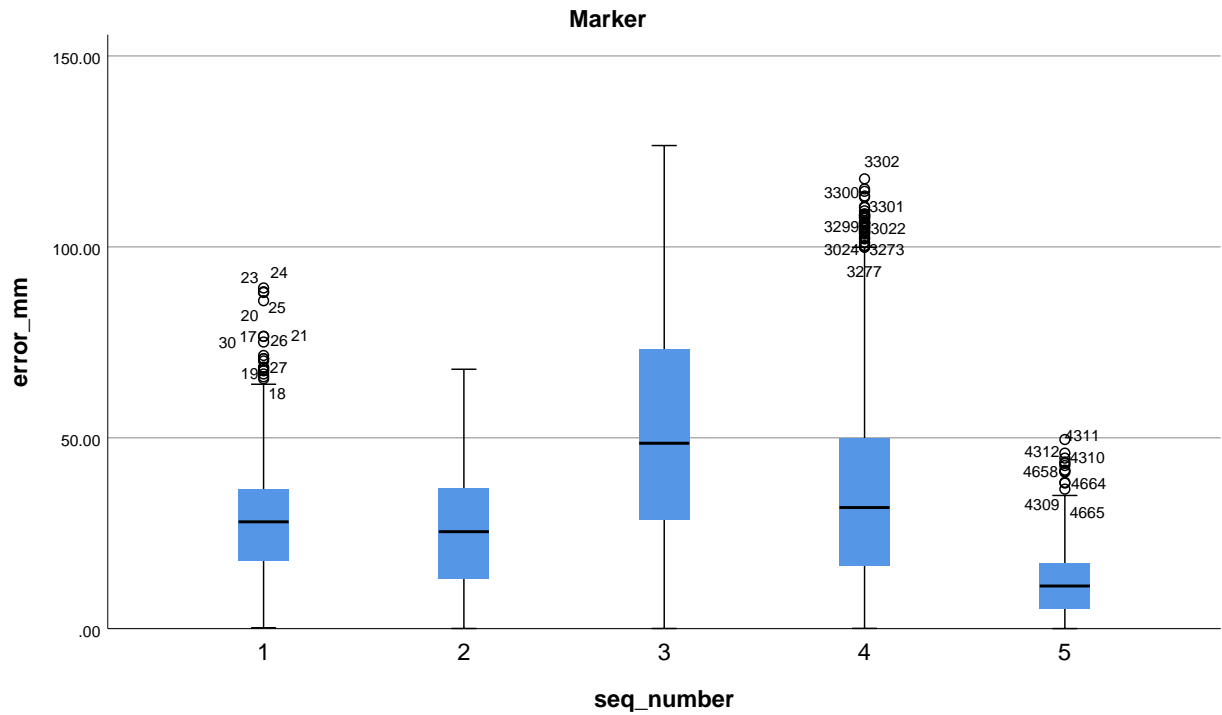
GGraph

Notes

Output Created		29-MAR-2021 16:00:39
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Marke r.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) DATA: error_mm=col (source(s), name ("error_mm")) DATA: id=col(source(s), name("\$CASENUM"), unit. category()) GUIDE: axis(dim(1), label ("seq_number")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: text.title(label ("Simple Boxplot of error_mm by seq_number")) SCALE: linear(dim(2), include(0)) ELEMENT: schema (position(bin.quantile.letter (seq_number*error_mm)), label(id)) END GPL. </pre>				
Resources	<table> <tr> <td data-bbox="358 1411 673 1449">Processor Time</td><td data-bbox="673 1411 997 1449">00:00:00,55</td></tr> <tr> <td data-bbox="358 1449 673 1491">Elapsed Time</td><td data-bbox="673 1449 997 1491">00:00:00,44</td></tr> </table>	Processor Time	00:00:00,55	Elapsed Time	00:00:00,44
Processor Time	00:00:00,55				
Elapsed Time	00:00:00,44				



```

EXAMINE VARIABLES=error_mm BY seq_number
/PLOT BOXPLOT NPLOT
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

```

Explore

Notes

Output Created		29-MAR-2021 16:01:27
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\Marke r.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=error_mm BY seq_number /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:02,08
	Elapsed Time	00:00:01,73

Marker

Case Processing Summary

		Valid		Cases Missing		Total	
	seq_number	N	Percent	N	Percent	N	Percent
error_mm	1	1000	100.0%	0	0.0%	1000	100.0%
	2	1000	100.0%	0	0.0%	1000	100.0%
	3	1000	100.0%	0	0.0%	1000	100.0%
	4	1000	100.0%	0	0.0%	1000	100.0%
	5	1000	100.0%	0	0.0%	1000	100.0%

Descriptives

		seq_number	Statistic		Std. Error
error_mm	1	Mean		28.0038	.45892
		95% Confidence Interval for Mean	Lower Bound	27.1033	
			Upper Bound	28.9044	
		5% Trimmed Mean		27.5409	
		Median		27.9788	
		Variance		210.607	
		Std. Deviation		14.51231	
		Minimum		.24	
		Maximum		89.23	
		Range		88.99	
		Interquartile Range		18.70	
		Skewness		.492	.077
		Kurtosis		.891	.155
	2	Mean		25.4099	.46781
		95% Confidence Interval for Mean	Lower Bound	24.4919	
			Upper Bound	26.3279	
		5% Trimmed Mean		24.9923	
		Median		25.4035	
		Variance		218.848	
		Std. Deviation		14.79353	
		Minimum		.05	
		Maximum		67.94	
		Range		67.89	
		Interquartile Range		23.67	
		Skewness		.249	.077

Descriptives

seq_number		Statistic	Std. Error
3	Kurtosis	-.587	.155
	Mean	52.1544	.93625
	95% Confidence Interval for Mean	Lower Bound	50.3171
		Upper Bound	53.9916
	5% Trimmed Mean	51.5335	
	Median	48.5598	
	Variance	876.572	
	Std. Deviation	29.60696	
	Minimum	.05	
	Maximum	126.53	
	Range	126.48	
	Interquartile Range	44.65	
	Skewness	.353	.077
	Kurtosis	-.778	.155
4	Mean	37.7096	.89391
	95% Confidence Interval for Mean	Lower Bound	35.9555
		Upper Bound	39.4638
	5% Trimmed Mean	35.9131	
	Median	31.7203	
	Variance	799.073	
	Std. Deviation	28.26787	
	Minimum	.08	
	Maximum	117.81	
	Range	117.74	
	Interquartile Range	33.36	
	Skewness	1.002	.077
	Kurtosis	.287	.155
5	Mean	12.0981	.26282
	95% Confidence Interval for Mean	Lower Bound	11.5823
		Upper Bound	12.6138
	5% Trimmed Mean	11.5773	
	Median	11.1784	
	Variance	69.072	
	Std. Deviation	8.31098	
	Minimum	.02	

Descriptives

seq_number		Statistic	Std. Error
	Maximum	49.54	
	Range	49.52	
	Interquartile Range	11.89	
	Skewness	.879	.077
	Kurtosis	1.088	.155

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	seq_number	Statistic	df	Sig.	Statistic	df	Sig.
error_mm	1	.028	1000	.065	.978	1000	.000
	2	.059	1000	.000	.977	1000	.000
	3	.065	1000	.000	.968	1000	.000
	4	.098	1000	.000	.901	1000	.000
	5	.073	1000	.000	.946	1000	.000

a. Lilliefors Significance Correction

*Nonparametric Tests: Independent Samples.

NPTESTS

/INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

Marker

Notes

Output Created		29-MAR-2021 16:02:37
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\PilotData\Marker.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Syntax		NPTESTS /INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00,37
	Elapsed Time	00:00:00,33

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of error_mm is the same across categories of seq_number.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

* Chart Builder.

GGRAPH

```

/GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LIST
WISE REPORTMISSING=NO
/GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
SOURCE: s=userSource(id("graphdataset"))
DATA: seq_number=col(source(s), name("seq_number"), unit.category())
DATA: error_mm=col(source(s), name("error_mm"))
DATA: id=col(source(s), name("$CASENUM"), unit.category())
GUIDE: axis(dim(1), label("seq_number"))
GUIDE: axis(dim(2), label("error_mm"))
GUIDE: text.title(label("Simple Boxplot of error_mm by seq_number"))
SCALE: linear(dim(2), include(0))
ELEMENT: schema(position(bin.quantile.letter*seq_number*error_mm), label(id
))
END GPL.

```

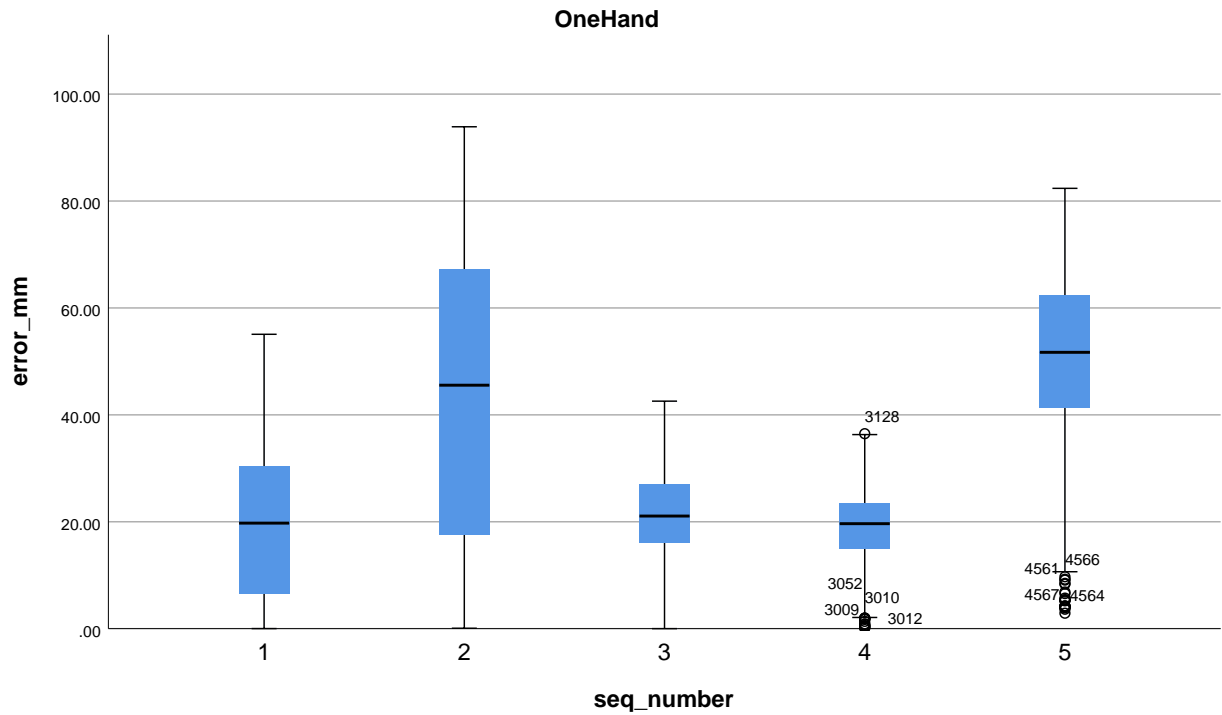
GGraph

Notes

Output Created		29-MAR-2021 16:03:25
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\OneH and.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) DATA: error_mm=col (source(s), name ("error_mm")) DATA: id=col(source(s), name("\$CASENUM"), unit. category()) GUIDE: axis(dim(1), label ("seq_number")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: text.title(label ("Simple Boxplot of error_mm by seq_number")) SCALE: linear(dim(2), include(0)) ELEMENT: schema (position(bin.quantile.letter (seq_number*error_mm)), label(id)) END GPL. </pre>				
Resources	<table> <tr> <td data-bbox="358 1411 673 1449">Processor Time</td><td data-bbox="673 1411 997 1449">00:00:00,44</td></tr> <tr> <td data-bbox="358 1449 673 1491">Elapsed Time</td><td data-bbox="673 1449 997 1491">00:00:00,32</td></tr> </table>	Processor Time	00:00:00,44	Elapsed Time	00:00:00,32
Processor Time	00:00:00,44				
Elapsed Time	00:00:00,32				



```

EXAMINE VARIABLES=pos_error BY seq_number
/PLOT BOXPLOT NPLOT
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

```

Explore

Notes

Output Created		29-MAR-2021 16:04:07
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\OneH and.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=pos_error BY seq_number /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:02,06
	Elapsed Time	00:00:01,79

OneHand

Case Processing Summary

		Valid		Cases Missing		Total	
	seq_number	N	Percent	N	Percent	N	Percent
pos_error	1	1000	100.0%	0	0.0%	1000	100.0%
	2	1000	100.0%	0	0.0%	1000	100.0%
	3	1000	100.0%	0	0.0%	1000	100.0%
	4	1000	100.0%	0	0.0%	1000	100.0%
	5	1000	100.0%	0	0.0%	1000	100.0%

Descriptives

		seq_number	Statistic		Std. Error
pos_error	1	Mean		.02023155	.000437381
		95% Confidence Interval for Mean	Lower Bound	.01937326	
			Upper Bound	.02108984	
		5% Trimmed Mean		.01980528	
		Median		.01974753	
		Variance		.000	
		Std. Deviation		.013831208	
		Minimum		.000015	
		Maximum		.055072	
		Range		.055057	
		Interquartile Range		.023795	
		Skewness		.274	.077
		Kurtosis		-.980	.155
	2	Mean		.04452890	.000851956
		95% Confidence Interval for Mean	Lower Bound	.04285707	
			Upper Bound	.04620073	
		5% Trimmed Mean		.04426627	
		Median		.04554429	
		Variance		.001	
		Std. Deviation		.026941200	
		Minimum		.000081	
		Maximum		.093891	
		Range		.093810	
		Interquartile Range		.049695	
		Skewness		-.021	.077

Descriptives

seq_number		Statistic	Std. Error
3	Kurtosis	-1.318	.155
	Mean	.02153194	.000261484
	95% Confidence Interval for Mean	Lower Bound	.02101882
		Upper Bound	.02204506
	5% Trimmed Mean	.02162649	
	Median	.02106640	
	Variance	.000	
	Std. Deviation	.008268840	
	Minimum	.000006	
	Maximum	.042561	
	Range	.042555	
	Interquartile Range	.011023	
	Skewness	-.055	.077
	Kurtosis	-.428	.155
4	Mean	.01870866	.000224869
	95% Confidence Interval for Mean	Lower Bound	.01826739
		Upper Bound	.01914993
	5% Trimmed Mean	.01890004	
	Median	.01964182	
	Variance	.000	
	Std. Deviation	.007110995	
	Minimum	.000147	
	Maximum	.036476	
	Range	.036329	
	Interquartile Range	.008585	
	Skewness	-.562	.077
	Kurtosis	-.049	.155
5	Mean	.05082912	.000493713
	95% Confidence Interval for Mean	Lower Bound	.04986028
		Upper Bound	.05179795
	5% Trimmed Mean	.05141702	
	Median	.05169586	
	Variance	.000	
	Std. Deviation	.015612566	
	Minimum	.002893	

Descriptives

seq_number		Statistic	Std. Error
	Maximum	.082372	
	Range	.079479	
	Interquartile Range	.021011	
	Skewness	-.496	.077
	Kurtosis	.293	.155

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	seq_number	Statistic	df	Sig.	Statistic	df	Sig.
pos_error	1	.091	1000	.000	.950	1000	.000
	2	.105	1000	.000	.937	1000	.000
	3	.036	1000	.005	.992	1000	.000
	4	.120	1000	.000	.961	1000	.000
	5	.037	1000	.003	.979	1000	.000

a. Lilliefors Significance Correction

*Nonparametric Tests: Independent Samples.

NPTESTS

/INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

OneHand

Notes

Output Created		29-MAR-2021 16:05:09
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\PilotData\OneHand.sav
	Active Dataset	DataSet4
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Syntax		NPTESTS /INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00,25
	Elapsed Time	00:00:00,21

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of error_mm is the same across categories of seq_number.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

* Chart Builder.

GGRAPH

```

/GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LIST
WISE REPORTMISSING=NO
/GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
SOURCE: s=userSource(id("graphdataset"))
DATA: seq_number=col(source(s), name("seq_number"), unit.category())
DATA: error_mm=col(source(s), name("error_mm"))
DATA: id=col(source(s), name("$CASENUM"), unit.category())
GUIDE: axis(dim(1), label("seq_number"))
GUIDE: axis(dim(2), label("error_mm"))
GUIDE: text.title(label("Simple Boxplot of error_mm by seq_number"))
SCALE: linear(dim(2), include(0))
ELEMENT: schema(position(bin.quantile.letter*seq_number*error_mm), label(id
))
END GPL.

```

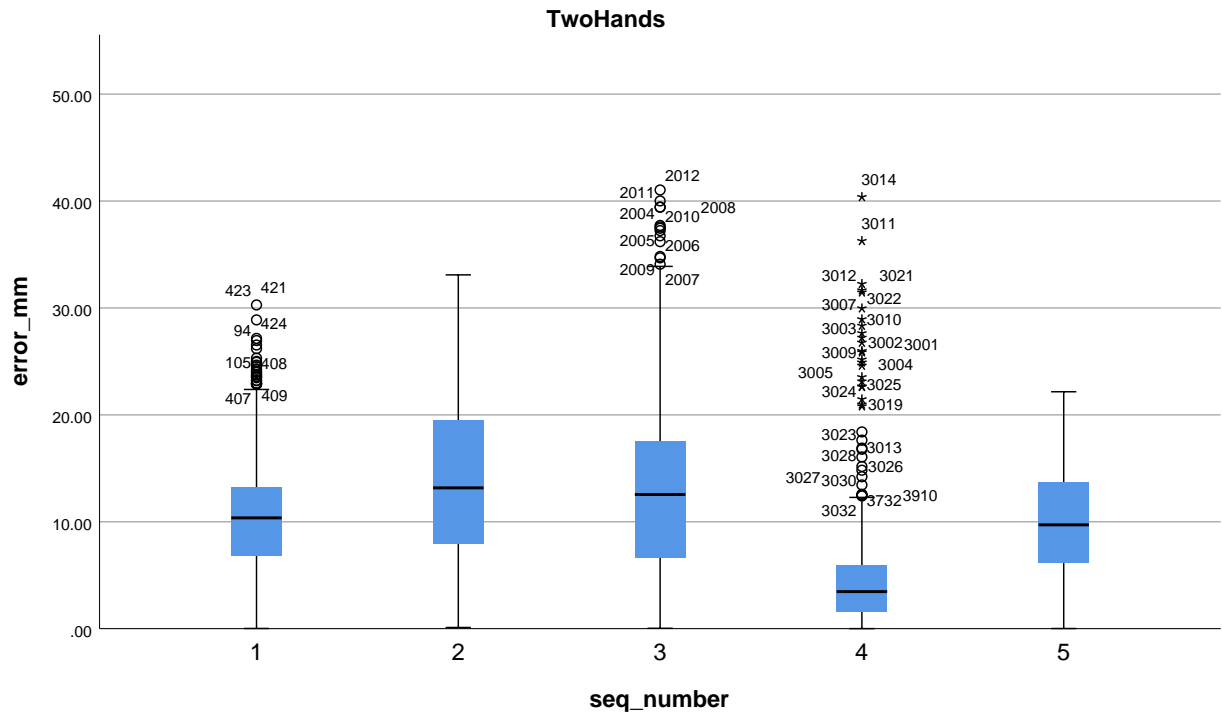
GGraph

Notes

Output Created		29-MAR-2021 16:05:45
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\TwoH and.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000

Notes

Syntax	<pre> GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=seq_number error_mm MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: seq_number=col (source(s), name ("seq_number"), unit. category()) DATA: error_mm=col (source(s), name ("error_mm")) DATA: id=col(source(s), name("\$CASENUM"), unit. category()) GUIDE: axis(dim(1), label ("seq_number")) GUIDE: axis(dim(2), label ("error_mm")) GUIDE: text.title(label ("Simple Boxplot of error_mm by seq_number")) SCALE: linear(dim(2), include(0)) ELEMENT: schema (position(bin.quantile.letter (seq_number*error_mm)), label(id)) END GPL. </pre>	
Resources	Processor Time	00:00:00,42
	Elapsed Time	00:00:00,28



```

EXAMINE VARIABLES=error_mm BY seq_number
/PLOT BOXPLOT NPLOT
/COMPARE GROUPS
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

```

Explore

Notes

Output Created		29-MAR-2021 16:06:24
Comments		
Input	Data	C: \Data\SubmittedPapers\De nnisPaper\PilotData\TwoH and.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=error_mm BY seq_number /PLOT BOXPLOT NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:02,05
	Elapsed Time	00:00:01,78

TwoHands

Case Processing Summary

		Valid		Cases Missing		Total	
	seq_number	N	Percent	N	Percent	N	Percent
error_mm	1	1000	100.0%	0	0.0%	1000	100.0%
	2	1000	100.0%	0	0.0%	1000	100.0%
	3	1000	100.0%	0	0.0%	1000	100.0%
	4	1000	100.0%	0	0.0%	1000	100.0%
	5	1000	100.0%	0	0.0%	1000	100.0%

Descriptives

		seq_number	Statistic		Std. Error
error_mm	1	Mean		10.3645	.15651
		95% Confidence Interval for Mean	Lower Bound	10.0573	
			Upper Bound	10.6716	
		5% Trimmed Mean		10.1817	
		Median		10.3619	
		Variance		24.495	
		Std. Deviation		4.94923	
		Minimum		.02	
		Maximum		30.28	
		Range		30.26	
		Interquartile Range		6.41	
		Skewness		.528	.077
		Kurtosis		.754	.155
	2	Mean		13.6855	.21874
		95% Confidence Interval for Mean	Lower Bound	13.2562	
			Upper Bound	14.1147	
		5% Trimmed Mean		13.6862	
		Median		13.1695	
		Variance		47.845	
		Std. Deviation		6.91701	
		Minimum		.11	
		Maximum		33.09	
		Range		32.98	
		Interquartile Range		11.56	
		Skewness		.022	.077

Descriptives

seq_number		Statistic	Std. Error
3	Kurtosis	-.971	.155
	Mean	12.4482	.23598
	95% Confidence Interval for Mean	Lower Bound	11.9851
		Upper Bound	12.9112
	5% Trimmed Mean	12.1474	
	Median	12.5471	
	Variance	55.687	
	Std. Deviation	7.46234	
	Minimum	.04	
	Maximum	41.03	
	Range	41.00	
	Interquartile Range	10.95	
	Skewness	.482	.077
	Kurtosis	.448	.155
4	Mean	4.4616	.14571
	95% Confidence Interval for Mean	Lower Bound	4.1756
		Upper Bound	4.7475
	5% Trimmed Mean	3.8682	
	Median	3.4662	
	Variance	21.231	
	Std. Deviation	4.60776	
	Minimum	.00	
	Maximum	40.37	
	Range	40.37	
	Interquartile Range	4.31	
	Skewness	3.261	.077
	Kurtosis	15.369	.155
5	Mean	9.9044	.15980
	95% Confidence Interval for Mean	Lower Bound	9.5908
		Upper Bound	10.2180
	5% Trimmed Mean	9.8858	
	Median	9.7138	
	Variance	25.535	
	Std. Deviation	5.05324	
	Minimum	.01	

Descriptives

seq_number		Statistic	Std. Error
	Maximum	22.16	
	Range	22.15	
	Interquartile Range	7.56	
	Skewness	.035	.077
	Kurtosis	-.786	.155

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	seq_number	Statistic	df	Sig.	Statistic	df	Sig.
error_mm	1	.041	1000	.000	.979	1000	.000
	2	.070	1000	.000	.974	1000	.000
	3	.048	1000	.000	.968	1000	.000
	4	.167	1000	.000	.709	1000	.000
	5	.039	1000	.001	.985	1000	.000

a. Lilliefors Significance Correction

*Nonparametric Tests: Independent Samples.

NPTESTS

/INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

TwoHands

Notes

Output Created		29-MAR-2021 16:07:15
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\PilotData\TwoHand.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5000
Syntax		NPTESTS /INDEPENDENT TEST (error_mm) GROUP (seq_number) KRUSKAL_WALLIS (COMPARE=PAIRWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00,31
	Elapsed Time	00:00:00,27

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of error_mm is the same across categories of seq_number.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.