

```

GET
  FILE= '/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files
/datasets/q11_anal_lab.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.
EXAMINE VARIABLES=distance_expectedC1C2distance_HSV distance_LCh distance_CMY
K distance_RGB distance_Lab
  /PLOT BOXPLOT STEMLEAF NPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.

```

## Explore

### Notes

<b>Output Created</b>		<b>21-SEP-2016 17:36:16</b>
<b>Comments</b>		
<b>Input</b>	<b>Data</b>	<b>/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q11_anal_lab.sav</b>
	<b>Active Dataset</b>	<b>DataSet2</b>
	<b>Filter</b>	<b>&lt;none&gt;</b>
	<b>Weight</b>	<b>&lt;none&gt;</b>
	<b>Split File</b>	<b>&lt;none&gt;</b>
	<b>N of Rows in Working Data File</b>	<b>23</b>
<b>Missing Value Handling</b>	<b>Definition of Missing</b>	<b>User-defined missing values for dependent variables are treated as missing.</b>
	<b>Cases Used</b>	<b>Statistics are based on cases with no missing values for any dependent variable or factor used.</b>

### Notes

Syntax		<b>EXAMINE</b> <b>VARIABLES=distance_ex</b> <b>pectedC1C2</b> <b>distance_HSV</b> <b>distance_LCh</b> <b>distance_CMYK</b> <b>distance_RGB</b> <b>distance_Lab</b> <b>/PLOT BOXPLOT</b> <b>STEMLEAF NPLOT</b> <b>/COMPARE GROUPS</b> <b>/STATISTICS</b> <b>DESCRIPTIVES</b> <b>/INTERVAL 95</b> <b>/MISSING LISTWISE</b> <b>/NOTOTAL.</b>
Resources	Processor Time	00:00:03,30
	Elapsed Time	00:00:03,00

[DataSet2] /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q11\_anal\_lab.sav

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
distance_expectedC1C2	23	100,0%	0	0,0%	23	100,0%
distance_HSV	23	100,0%	0	0,0%	23	100,0%
distance_LCh	23	100,0%	0	0,0%	23	100,0%
distance_CMYK	23	100,0%	0	0,0%	23	100,0%
distance_RGB	23	100,0%	0	0,0%	23	100,0%
distance_Lab	23	100,0%	0	0,0%	23	100,0%

### Descriptives

			Statistic	Std. Error
distance_expected C1C2	Mean		.6448	.02910
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.5844 .7051	
	5% Trimmed Mean		.6489	
	Median		.7300	
	Variance		.019	
	Std. Deviation		.13957	
	Minimum		.41	
	Maximum		.81	
	Range		.40	
	Interquartile Range		.27	
	Skewness		-.767	.481
	Kurtosis		-1.292	.935
distance_HSV	Mean		.0587	.01841
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.0205 .0969	
	5% Trimmed Mean		.0486	
	Median		.0300	
	Variance		.008	
	Std. Deviation		.08828	
	Minimum		.00	
	Maximum		.30	
	Range		.30	
	Interquartile Range		.03	
	Skewness		2.191	.481
	Kurtosis		3.806	.935
distance_LCh	Mean		.1374	.02450
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.0866 .1882	
	5% Trimmed Mean		.1289	
	Median		.0500	
	Variance		.014	
	Std. Deviation		.11752	
	Minimum		.05	
	Maximum		.38	
	Range		.33	
	Interquartile Range		.21	
	Skewness		.863	.481
	Kurtosis		-.910	.935
distance_CMYK	Mean		.1304	.00595
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.1181 .1428	
	5% Trimmed Mean		.1340	
	Median		.1400	

### Descriptives

			Statistic	Std. Error
	Variance		,001	
	Std. Deviation		.02852	
	Minimum		.03	
	Maximum		.16	
	Range		.13	
	Interquartile Range		.01	
	Skewness		-2,430	,481
	Kurtosis		6,729	,935
distance_RGB	Mean		.1839	.00831
	95% Confidence Interval for Mean	Lower Bound	.1667	
		Upper Bound	.2011	
	5% Trimmed Mean		.1883	
	Median		.2000	
	Variance		,002	
	Std. Deviation		.03986	
	Minimum		.06	
	Maximum		.23	
	Range		.17	
	Interquartile Range		.02	
	Skewness		-2,534	,481
	Kurtosis		6,261	,935
distance_Lab	Mean		.1443	.00569
	95% Confidence Interval for Mean	Lower Bound	.1326	
		Upper Bound	.1561	
	5% Trimmed Mean		.1473	
	Median		.1500	
	Variance		,001	
	Std. Deviation		.02727	
	Minimum		.05	
	Maximum		.18	
	Range		.13	
	Interquartile Range		.01	
	Skewness		-2,182	,481
	Kurtosis		6,458	,935

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
distance_expectedC1C2	,357	23	,000	,758	23	,000
distance_HSV	,366	23	,000	,620	23	,000
distance_LCh	,326	23	,000	,724	23	,000
distance_CMYK	,320	23	,000	,692	23	,000
distance_RGB	,330	23	,000	,629	23	,000
distance_Lab	,278	23	,000	,742	23	,000

a. Lilliefors Significance Correction

```

NPAR TESTS
  /FRIEDMAN=distance_expectedC1C2distance_HSVdistance_LChdistance_CMYKdistance_RGBdistance_Lab
  /STATISTICS DESCRIPTIVES QUANTILES
  /MISSING LISTWISE.

```

## NPar Tests

### Notes

<b>Output Created</b>		<b>21-SEP-2016 17:36:44</b>
<b>Comments</b>		
<b>Input</b>	<b>Data</b>	<b>/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q11_anal_lab.sav</b>
	<b>Active Dataset</b>	<b>DataSet2</b>
	<b>Filter</b>	<b>&lt;none&gt;</b>
	<b>Weight</b>	<b>&lt;none&gt;</b>
	<b>Split File</b>	<b>&lt;none&gt;</b>
	<b>N of Rows in Working Data File</b>	<b>23</b>
<b>Missing Value Handling</b>	<b>Definition of Missing</b>	<b>User-defined missing values are treated as missing.</b>
	<b>Cases Used</b>	<b>Statistics for all tests are based on cases with no missing data for any variables used.</b>

### Notes

Syntax		NPAR TESTS	
		/FRIEDMAN=distance_e xpectedC1C2 distance_HSV distance_LCh distance_CMYK distance_RGB distance_Lab /STATISTICS DESCRIPTIVES QUARTILES /MISSING LISTWISE.	
Resources	Processor Time	00:00:00,01	
	Elapsed Time	00:00:00,00	
	Number of Cases Allowed <sup>a</sup>	71493	

a. Based on availability of workspace memory.

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentile
						25th
distance_expected C1C2	23	.6448	.13957	.41	.81	.4700
distance_HSV	23	.0587	.08828	.00	.30	.0100
distance_LCh	23	.1374	.11752	.05	.38	.0500
distance_CMYK	23	.1304	.02852	.03	.16	.1300
distance_RGB	23	.1839	.03986	.06	.23	.1800
distance_Lab	23	.1443	.02727	.05	.18	.1400

### Descriptive Statistics

	Percentiles	
	50th (Median)	75th
distance_expected C1C2	.7300	.7400
distance_HSV	.0300	.0400
distance_LCh	.0500	.2600
distance_CMYK	.1400	.1400
distance_RGB	.2000	.2000
distance_Lab	.1500	.1500

## Friedman Test

### Ranks

	Mean Rank
distance_expected C1C2	6,00
distance_HSV	1,46
distance_LCh	2,98
distance_CMYK	2,61
distance_RGB	4,43
distance_Lab	3,52

### Test Statistics<sup>a</sup>

N	23
Chi-Square	81,571
df	5
Asymp. Sig.	,000

a. Friedman Test

```

NPAR TESTS
  /WILCOXON=distance_HSV distance_HSV distance_HSV distance_HSV distance_LCh d
istance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_RGB WITH distanc
e_LCh distance_CMYK distance_RGB distance_Lab distance_CMYK distance_RGB dista
nce_Lab distance_RGB distance_Lab distance_Lab (PAIRED)
  /STATISTICS DESCRIPTIVES QUANTILES
  /MISSING ANALYSIS.

```

## NPar Tests

# Notes

Output Created		21-SEP-2016 17:37:24
Comments		
Input	Data	/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q11_anal_lab.sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	23
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS  /WILCOXON=distance_HSV distance_HSV distance_HSV distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_RGB WITH distance_LCh distance_CMYK distance_RGB distance_Lab distance_CMYK distance_RGB distance_Lab distance_RGB distance_Lab (PAIRED) /STATISTICS DESCRIPTIVES QUANTILES /MISSING ANALYSIS.
Resources	Processor Time	00:00:00,01
	Elapsed Time	00:00:00,00
	Number of Cases Allowed <sup>a</sup>	78643

a. Based on availability of workspace memory.



### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentile
						25th
distance_HSV	23	.0587	.08828	.00	.30	.0100
distance_LCh	23	.1374	.11752	.05	.38	.0500
distance_CMYK	23	.1304	.02852	.03	.16	.1300
distance_RGB	23	.1839	.03986	.06	.23	.1800
distance_Lab	23	.1443	.02727	.05	.18	.1400

### Descriptive Statistics

	Percentiles	
	50th (Median)	75th
distance_HSV	.0300	.0400
distance_LCh	.0500	.2600
distance_CMYK	.1400	.1400
distance_RGB	.2000	.2000
distance_Lab	.1500	.1500

## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
distance_LCh - distance_HSV	Negative Ranks	1 <sup>a</sup>	12,00	12,00
	Positive Ranks	21 <sup>b</sup>	11,48	241,00
	Ties	1 <sup>c</sup>		
	Total	23		
distance_CMYK - distance_HSV	Negative Ranks	3 <sup>d</sup>	19,83	59,50
	Positive Ranks	20 <sup>e</sup>	10,83	216,50
	Ties	0 <sup>f</sup>		
	Total	23		
distance_RGB - distance_HSV	Negative Ranks	3 <sup>g</sup>	9,67	29,00
	Positive Ranks	20 <sup>h</sup>	12,35	247,00
	Ties	0 <sup>i</sup>		
	Total	23		
distance_Lab - distance_HSV	Negative Ranks	3 <sup>j</sup>	14,00	42,00
	Positive Ranks	20 <sup>k</sup>	11,70	234,00
	Ties	0 <sup>l</sup>		
	Total	23		
distance_CMYK - distance_LCh	Negative Ranks	8 <sup>m</sup>	19,50	156,00
	Positive Ranks	15 <sup>n</sup>	8,00	120,00
	Ties	0 <sup>o</sup>		
	Total	23		
distance_RGB - distance_LCh	Negative Ranks	8 <sup>p</sup>	10,25	82,00
	Positive Ranks	15 <sup>q</sup>	12,93	194,00

# Ranks

		N	Mean Rank	Sum of Ranks
	Ties	0 <sup>r</sup>		
	Total	23		
distance_Lab - distance_LCh	Negative Ranks	8 <sup>s</sup>	18,63	149,00
	Positive Ranks	15 <sup>t</sup>	8,47	127,00
	Ties	0 <sup>u</sup>		
	Total	23		
distance_RGB - distance_CMYK	Negative Ranks	1 <sup>v</sup>	1,00	1,00
	Positive Ranks	22 <sup>w</sup>	12,50	275,00
	Ties	0 <sup>x</sup>		
	Total	23		
distance_Lab - distance_CMYK	Negative Ranks	0 <sup>y</sup>	,00	,00
	Positive Ranks	21 <sup>z</sup>	11,00	231,00
	Ties	2 <sup>aa</sup>		
	Total	23		
distance_Lab - distance_RGB	Negative Ranks	22 <sup>ab</sup>	12,41	273,00
	Positive Ranks	1 <sup>ac</sup>	3,00	3,00
	Ties	0 <sup>ad</sup>		
	Total	23		

a. distance\_LCh < distance\_HSV

b. distance\_LCh > distance\_HSV

c. distance\_LCh = distance\_HSV

d. distance\_CMYK < distance\_HSV  
e. distance\_CMYK > distance\_HSV  
f. distance\_CMYK = distance\_HSV  
g. distance\_RGB < distance\_HSV  
h. distance\_RGB > distance\_HSV  
i. distance\_RGB = distance\_HSV  
j. distance\_Lab < distance\_HSV  
k. distance\_Lab > distance\_HSV  
l. distance\_Lab = distance\_HSV  
m. distance\_CMYK < distance\_LCh  
n. distance\_CMYK > distance\_LCh  
o. distance\_CMYK = distance\_LCh  
p. distance\_RGB < distance\_LCh  
q. distance\_RGB > distance\_LCh  
r. distance\_RGB = distance\_LCh  
s. distance\_Lab < distance\_LCh  
t. distance\_Lab > distance\_LCh  
u. distance\_Lab = distance\_LCh  
v. distance\_RGB < distance\_CMYK  
w. distance\_RGB > distance\_CMYK  
x. distance\_RGB = distance\_CMYK  
y. distance\_Lab < distance\_CMYK  
z. distance\_Lab > distance\_CMYK  
aa. distance\_Lab = distance\_CMYK  
ab. distance\_Lab < distance\_RGB  
ac. distance\_Lab > distance\_RGB  
ad. distance\_Lab = distance\_RGB

Test Statistics<sup>a</sup>

	distance_LCh - distance_HSV	distance_CMY K - distance_HSV	distance_RGB - distance_HSV	distance_Lab - distance_HSV	distance_CMY K - distance_LCh
Z	-3,725 <sup>b</sup>	-2,393 <sup>b</sup>	-3,323 <sup>b</sup>	-2,928 <sup>b</sup>	-,549 <sup>c</sup>
Asymp. Sig. (2-tailed)	,000	,017	,001	,003	,583

Test Statistics<sup>a</sup>

	distance_RGB - distance_LCh	distance_Lab - distance_LCh	distance_RGB - distance_CMY K	distance_Lab - distance_CMY K	distance_Lab - distance_RGB
Z	-1,706 <sup>b</sup>	-,336 <sup>c</sup>	-4,235 <sup>b</sup>	-4,289 <sup>b</sup>	-4,167 <sup>c</sup>
Asymp. Sig. (2-tailed)	,088	,737	,000	,000	,000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.