

```

GET
  FILE= '/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files
/datasets/q2_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 16:40:01</b>
<b>Comments</b>		
<b>Input</b>	<b>Data</b>	<b>/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q2_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>15</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	00:00:03,09	
	Elapsed Time	00:00:03,00	

[DataSet2] /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q2\_anal\_lab.sav

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
distance_expectedC1C2	15	100,0%	0	0,0%	15	100,0%
distance_HSV	15	100,0%	0	0,0%	15	100,0%
distance_LCh	15	100,0%	0	0,0%	15	100,0%
distance_CMYK	15	100,0%	0	0,0%	15	100,0%
distance_RGB	15	100,0%	0	0,0%	15	100,0%
distance_Lab	15	100,0%	0	0,0%	15	100,0%

### Descriptives

			Statistic	Std. Error
distance_expected C1C2	Mean		.5500	.07783
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.3831 .7169	
	5% Trimmed Mean		.5533	
	Median		.5300	
	Variance		.091	
	Std. Deviation		.30143	
	Minimum		.02	
	Maximum		1.02	
	Range		1.00	
	Interquartile Range		.52	
	Skewness		-.185	.580
	Kurtosis		-.749	1.121
distance_HSV	Mean		.2173	.03360
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.1453 .2894	
	5% Trimmed Mean		.2170	
	Median		.2200	
	Variance		.017	
	Std. Deviation		.13014	
	Minimum		.01	
	Maximum		.43	
	Range		.42	
	Interquartile Range		.21	
	Skewness		.097	.580
	Kurtosis		-.888	1.121
distance_LCh	Mean		.1573	.02439
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.1050 .2096	
	5% Trimmed Mean		.1509	
	Median		.1600	
	Variance		.009	
	Std. Deviation		.09445	
	Minimum		.03	
	Maximum		.40	
	Range		.37	
	Interquartile Range		.10	
	Skewness		1.042	.580
	Kurtosis		2.054	1.121
distance_CMYK	Mean		.1060	.01457
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.0748 .1372	
	5% Trimmed Mean		.1050	
	Median		.1200	

### Descriptives

			Statistic	Std. Error
	Variance		,003	
	Std. Deviation		.05642	
	Minimum		.02	
	Maximum		.21	
	Range		.19	
	Interquartile Range		.09	
	Skewness		,034	,580
	Kurtosis		-,784	1,121
distance_RGB	Mean		.1660	.02716
	95% Confidence Interval for Mean	Lower Bound	.1077	
		Upper Bound	.2243	
	5% Trimmed Mean		.1656	
	Median		.1400	
	Variance		,011	
	Std. Deviation		.10521	
	Minimum		.01	
	Maximum		.33	
	Range		.32	
	Interquartile Range		.21	
	Skewness		,158	,580
	Kurtosis		-1,301	1,121
distance_Lab	Mean		.1560	.02169
	95% Confidence Interval for Mean	Lower Bound	.1095	
		Upper Bound	.2025	
	5% Trimmed Mean		.1550	
	Median		.1700	
	Variance		,007	
	Std. Deviation		.08399	
	Minimum		.02	
	Maximum		.31	
	Range		.29	
	Interquartile Range		.10	
	Skewness		,123	,580
	Kurtosis		-,610	1,121

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
distance_expected C1C2	,114	15	,200 <sup>*</sup>	,965	15	,775
distance_HSV	,083	15	,200 <sup>*</sup>	,969	15	,841
distance_LCh	,192	15	,140	,911	15	,141
distance_CMYK	,131	15	,200 <sup>*</sup>	,958	15	,652
distance_RGB	,136	15	,200 <sup>*</sup>	,943	15	,424
distance_Lab	,108	15	,200 <sup>*</sup>	,973	15	,897

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

DATASET ACTIVATE DataSet2.

DATASET CLOSE DataSet1.

NPAR TESTS

/FRIEDMAN=distance\_HSV distance\_LCh distance\_CMYK distance\_RGB distance\_Lab

/STATISTICS DESCRIPTIVES QUANTILES

/MISSING LISTWISE.

## NPar Tests

### Notes

<b>Output Created</b>		<b>21-SEP-2016 16:45:28</b>
<b>Comments</b>		
<b>Input</b>	<b>Data</b>	/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q2_anal_lab.sav
	<b>Active Dataset</b>	DataSet2
	<b>Filter</b>	<none>
	<b>Weight</b>	<none>
	<b>Split File</b>	<none>
	<b>N of Rows in Working Data File</b>	15
<b>Missing Value Handling</b>	<b>Definition of Missing</b>	User-defined missing values are treated as missing.
	<b>Cases Used</b>	Statistics for all tests are based on cases with no missing data for any variables used.

### Notes

Syntax		NPAR TESTS	
		/FRIEDMAN=distance_H SV 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>		78643

a. Based on availability of workspace memory.

### Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentile
						25th
distance_HSV	15	.2173	.13014	.01	.43	.1000
distance_LCh	15	.1573	.09445	.03	.40	.0900
distance_CMYK	15	.1060	.05642	.02	.21	.0500
distance_RGB	15	.1660	.10521	.01	.33	.0700
distance_Lab	15	.1560	.08399	.02	.31	.1000

### Descriptive Statistics

	Percentiles	
	50th (Median)	75th
distance_HSV	.2200	.3100
distance_LCh	.1600	.1900
distance_CMYK	.1200	.1400
distance_RGB	.1400	.2800
distance_Lab	.1700	.2000

## Friedman Test

### Ranks

	Mean Rank
distance_HSV	4,33
distance_LCh	3,10
distance_CMYK	1,67
distance_RGB	2,90
distance_Lab	3,00

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

<b>N</b>	<b>15</b>
<b>Chi-Square</b>	<b>22,041</b>
<b>df</b>	<b>4</b>
<b>Asymp. Sig.</b>	<b>,000</b>

a. Friedman Test

### NPAR TESTS

```

/WILCOXON=distance_HSV distance_HSV distance_HSV distance_HSV distance_LCh d
istance_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

<b>Output Created</b>		<b>21-SEP-2016 16:46:51</b>
<b>Comments</b>		
<b>Input</b>	<b>Data</b>	<b>/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q2_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>15</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 each test are based on all cases with valid data for the variable(s) used in that test.</b>

### Notes

Syntax		NPAR TESTS	
		/WILCOXON=distance_H SV 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 distance_Lab (PAIRED) /STATISTICS DESCRIPTIVES QUARTILES /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	15	.2173	.13014	.01	.43	.1000
distance_LCh	15	.1573	.09445	.03	.40	.0900
distance_CMYK	15	.1060	.05642	.02	.21	.0500
distance_RGB	15	.1660	.10521	.01	.33	.0700
distance_Lab	15	.1560	.08399	.02	.31	.1000

### Descriptive Statistics

	Percentiles	
	50th (Median)	75th
distance_HSV	.2200	.3100
distance_LCh	.1600	.1900
distance_CMYK	.1200	.1400
distance_RGB	.1400	.2800
distance_Lab	.1700	.2000



## Wilcoxon Signed Ranks Test

### Ranks

		N	Mean Rank	Sum of Ranks
distance_LCh - distance_HSV	Negative Ranks	9 <sup>a</sup>	8,44	76,00
	Positive Ranks	5 <sup>b</sup>	5,80	29,00
	Ties	1 <sup>c</sup>		
	Total	15		
distance_CMYK - distance_HSV	Negative Ranks	14 <sup>d</sup>	8,32	116,50
	Positive Ranks	1 <sup>e</sup>	3,50	3,50
	Ties	0 <sup>f</sup>		
	Total	15		
distance_RGB - distance_HSV	Negative Ranks	13 <sup>g</sup>	7,00	91,00
	Positive Ranks	0 <sup>h</sup>	,00	,00
	Ties	2 <sup>i</sup>		
	Total	15		
distance_Lab - distance_HSV	Negative Ranks	12 <sup>j</sup>	7,42	89,00
	Positive Ranks	2 <sup>k</sup>	8,00	16,00
	Ties	1 <sup>l</sup>		
	Total	15		
distance_CMYK - distance_LCh	Negative Ranks	11 <sup>m</sup>	8,64	95,00
	Positive Ranks	4 <sup>n</sup>	6,25	25,00
	Ties	0 <sup>o</sup>		
	Total	15		
distance_RGB - distance_LCh	Negative Ranks	6 <sup>p</sup>	9,58	57,50
	Positive Ranks	9 <sup>q</sup>	6,94	62,50
	Ties	0 <sup>r</sup>		
	Total	15		
distance_Lab - distance_LCh	Negative Ranks	8 <sup>s</sup>	6,00	48,00
	Positive Ranks	5 <sup>t</sup>	8,60	43,00
	Ties	2 <sup>u</sup>		
	Total	15		
distance_RGB - distance_CMYK	Negative Ranks	4 <sup>v</sup>	4,00	16,00
	Positive Ranks	10 <sup>w</sup>	8,90	89,00
	Ties	1 <sup>x</sup>		
	Total	15		
distance_Lab - distance_CMYK	Negative Ranks	0 <sup>y</sup>	,00	,00
	Positive Ranks	14 <sup>z</sup>	7,50	105,00
	Ties	1 <sup>aa</sup>		
	Total	15		
distance_Lab - distance_RGB	Negative Ranks	8 <sup>ab</sup>	8,56	68,50
	Positive Ranks	7 <sup>ac</sup>	7,36	51,50
	Ties	0 <sup>ad</sup>		
	Total	15		

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
<b>Z</b>	-1,475 <sup>b</sup>	-3,214 <sup>b</sup>	-3,187 <sup>b</sup>	-2,296 <sup>b</sup>	-1,990 <sup>b</sup>
<b>Asymp. Sig. (2-tailed)</b>	,140	,001	,001	,022	,047

**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
<b>Z</b>	-,142 <sup>c</sup>	-,175 <sup>b</sup>	-2,304 <sup>c</sup>	-3,303 <sup>c</sup>	-,483 <sup>b</sup>
<b>Asymp. Sig. (2-tailed)</b>	,887	,861	,021	,001	,629

**a. Wilcoxon Signed Ranks Test**

**b. Based on positive ranks.**

**c. Based on negative ranks.**