

```

DATASET CLOSE DataSet1.
GET
  FILE='/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files
/datasets/q12_anal_lab.sav'.
DATASET NAME DataSet3 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

| | | |
|-------------------------------|---------------------------------------|--|
| Output Created | | 21-SEP-2016 17:38:56 |
| Comments | | |
| Input | Data | /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q12_anal_lab.sav |
| | Active Dataset | DataSet3 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 21 |
| 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. |

Notes

| | | |
|------------------|-----------------------|--|
| Syntax | | EXAMINE VARIABLES=distance_ex pectedC1C2 distance_HSV distance_LCh distance_CMYK distance_RGB distance_Lab /PLOT BOXPLOT STEMLEAF NPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /INTERVAL 95 /MISSING LISTWISE /NOTOTAL. |
| Resources | Processor Time | 00:00:03,31 |
| | Elapsed Time | 00:00:03,00 |

[DataSet3] /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q12_anal_lab.sav

Case Processing Summary

| | Cases | | | | | |
|-----------------------|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| distance_expectedC1C2 | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |
| distance_HSV | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |
| distance_LCh | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |
| distance_CMYK | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |
| distance_RGB | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |
| distance_Lab | 21 | 100,0% | 0 | 0,0% | 21 | 100,0% |

Descriptives

| | | | Statistic | Std. Error |
|---------------------------|----------------------------------|----------------------------|----------------|------------|
| distance_expected C1C2 | Mean | | .4133 | .03287 |
| | 95% Confidence Interval for Mean | Lower Bound Upper Bound | .3448 .4819 | |
| | 5% Trimmed Mean | | .4161 | |
| | Median | | .4200 | |
| | Variance | | .023 | |
| | Std. Deviation | | .15061 | |
| | Minimum | | .12 | |
| | Maximum | | .66 | |
| | Range | | .54 | |
| | Interquartile Range | | .25 | |
| | Skewness | | -.542 | .501 |
| | Kurtosis | | -.579 | .972 |
| distance_HSV | Mean | | .1067 | .02758 |
| | 95% Confidence Interval for Mean | Lower Bound Upper Bound | .0491 .1642 | |
| | 5% Trimmed Mean | | .0979 | |
| | Median | | .0400 | |
| | Variance | | .016 | |
| | Std. Deviation | | .12639 | |
| | Minimum | | .01 | |
| | Maximum | | .36 | |
| | Range | | .35 | |
| | Interquartile Range | | .11 | |
| | Skewness | | 1.440 | .501 |
| | Kurtosis | | .296 | .972 |
| distance_LCh | Mean | | .2343 | .01448 |
| | 95% Confidence Interval for Mean | Lower Bound Upper Bound | .2041 .2645 | |
| | 5% Trimmed Mean | | .2297 | |
| | Median | | .2200 | |
| | Variance | | .004 | |
| | Std. Deviation | | .06638 | |
| | Minimum | | .16 | |
| | Maximum | | .39 | |
| | Range | | .23 | |
| | Interquartile Range | | .08 | |
| | Skewness | | 1.313 | .501 |
| | Kurtosis | | 1.176 | .972 |
| distance_CMYK | Mean | | .1314 | .00865 |
| | 95% Confidence Interval for Mean | Lower Bound Upper Bound | .1134 .1495 | |
| | 5% Trimmed Mean | | .1321 | |
| | Median | | .1400 | |

Descriptives

| | | | Statistic | Std. Error |
|--------------|----------------------------------|-------------|-----------|------------|
| | Variance | | ,002 | |
| | Std. Deviation | | .03966 | |
| | Minimum | | .05 | |
| | Maximum | | .20 | |
| | Range | | .15 | |
| | Interquartile Range | | .05 | |
| | Skewness | | -,436 | ,501 |
| | Kurtosis | | -,277 | ,972 |
| distance_RGB | Mean | | .1510 | .01693 |
| | 95% Confidence Interval for Mean | Lower Bound | .1156 | |
| | | Upper Bound | .1863 | |
| | 5% Trimmed Mean | | .1510 | |
| | Median | | .1400 | |
| | Variance | | ,006 | |
| | Std. Deviation | | .07758 | |
| | Minimum | | .02 | |
| | Maximum | | .28 | |
| | Range | | .26 | |
| | Interquartile Range | | .09 | |
| | Skewness | | ,256 | ,501 |
| | Kurtosis | | -,489 | ,972 |
| distance_Lab | Mean | | .1743 | .01590 |
| | 95% Confidence Interval for Mean | Lower Bound | .1411 | |
| | | Upper Bound | .2074 | |
| | 5% Trimmed Mean | | .1769 | |
| | Median | | .1800 | |
| | Variance | | ,005 | |
| | Std. Deviation | | .07284 | |
| | Minimum | | .02 | |
| | Maximum | | .28 | |
| | Range | | .26 | |
| | Interquartile Range | | .10 | |
| | Skewness | | -,495 | ,501 |
| | Kurtosis | | -,390 | ,972 |

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-----------------------|---------------------------------|----|--------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| distance_expectedC1C2 | ,147 | 21 | ,200 * | ,944 | 21 | ,264 |
| distance_HSV | ,406 | 21 | ,000 | ,622 | 21 | ,000 |
| distance_LCh | ,228 | 21 | ,006 | ,848 | 21 | ,004 |
| distance_CMYK | ,157 | 21 | ,192 | ,957 | 21 | ,461 |
| distance_RGB | ,168 | 21 | ,126 | ,933 | 21 | ,155 |
| distance_Lab | ,137 | 21 | ,200 * | ,954 | 21 | ,401 |

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

a. Lilliefors Significance Correction

NPAR TESTS

```

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

```

NPar Tests

Notes

| | | |
|-------------------------------|---------------------------------------|--|
| Output Created | | 21-SEP-2016 17:39:14 |
| Comments | | |
| Input | Data | /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q12_anal_lab.sav |
| | Active Dataset | DataSet3 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 21 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for all tests are based on cases with no missing data for any variables used. |

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 | 00:00:00,00 | |
| | Elapsed Time | 00:00:00,00 | |
| | Number of Cases Allowed ^a | 71493 | |

a. Based on availability of workspace memory.

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|---------------------------|----|-------|----------------|---------|---------|------------|
| | | | | | | 25th |
| distance_expected C1C2 | 21 | .4133 | .15061 | .12 | .66 | .2850 |
| distance_HSV | 21 | .1067 | .12639 | .01 | .36 | .0400 |
| distance_LCh | 21 | .2343 | .06638 | .16 | .39 | .1800 |
| distance_CMYK | 21 | .1314 | .03966 | .05 | .20 | .1100 |
| distance_RGB | 21 | .1510 | .07758 | .02 | .28 | .1050 |
| distance_Lab | 21 | .1743 | .07284 | .02 | .28 | .1300 |

Descriptive Statistics

| | Percentiles | |
|---------------------------|---------------|-------|
| | 50th (Median) | 75th |
| distance_expected C1C2 | .4200 | .5300 |
| distance_HSV | .0400 | .1450 |
| distance_LCh | .2200 | .2550 |
| distance_CMYK | .1400 | .1600 |
| distance_RGB | .1400 | .1950 |
| distance_Lab | .1800 | .2350 |

Friedman Test

Ranks

| | Mean Rank |
|---------------------------|-----------|
| distance_expected C1C2 | 5,86 |
| distance_HSV | 1,83 |
| distance_LCh | 4,67 |
| distance_CMYK | 2,31 |
| distance_RGB | 2,67 |
| distance_Lab | 3,67 |

Test Statistics^a

| | |
|-------------|--------|
| N | 21 |
| Chi-Square | 71,788 |
| 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_Lab distance_RGB distance_Lab (PAIRED)
  /STATISTICS DESCRIPTIVES QUANTILES
  /MISSING ANALYSIS.

```

NPar Tests

Notes

| | | |
|------------------------|--------------------------------------|--|
| Output Created | | 21-SEP-2016 17:40:23 |
| Comments | | |
| Input | Data | /Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/datasets/q12_anal_lab.sav |
| | Active Dataset | DataSet3 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 21 |
| 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_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 ^a | 78643 |

a. Based on availability of workspace memory.

Descriptive Statistics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentile |
|---------------|----|-------|----------------|---------|---------|------------|
| | | | | | | 25th |
| distance_HSV | 21 | .1067 | .12639 | .01 | .36 | .0400 |
| distance_LCh | 21 | .2343 | .06638 | .16 | .39 | .1800 |
| distance_CMYK | 21 | .1314 | .03966 | .05 | .20 | .1100 |
| distance_RGB | 21 | .1510 | .07758 | .02 | .28 | .1050 |
| distance_Lab | 21 | .1743 | .07284 | .02 | .28 | .1300 |

Descriptive Statistics

| | Percentiles | |
|---------------|---------------|-------|
| | 50th (Median) | 75th |
| distance_HSV | .0400 | .1450 |
| distance_LCh | .2200 | .2550 |
| distance_CMYK | .1400 | .1600 |
| distance_RGB | .1400 | .1950 |
| distance_Lab | .1800 | .2350 |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|------------------------------|----------------|-----------------|-----------|--------------|
| distance_LCh - distance_HSV | Negative Ranks | 3 ^a | 5,33 | 16,00 |
| | Positive Ranks | 18 ^b | 11,94 | 215,00 |
| | Ties | 0 ^c | | |
| | Total | 21 | | |
| distance_CMYK - distance_HSV | Negative Ranks | 5 ^d | 15,10 | 75,50 |
| | Positive Ranks | 16 ^e | 9,72 | 155,50 |
| | Ties | 0 ^f | | |
| | Total | 21 | | |
| distance_RGB - distance_HSV | Negative Ranks | 5 ^g | 7,20 | 36,00 |
| | Positive Ranks | 15 ^h | 11,60 | 174,00 |
| | Ties | 1 ⁱ | | |
| | Total | 21 | | |
| distance_Lab - distance_HSV | Negative Ranks | 4 ^j | 8,50 | 34,00 |
| | Positive Ranks | 17 ^k | 11,59 | 197,00 |
| | Ties | 0 ^l | | |
| | Total | 21 | | |
| distance_CMYK - distance_LCh | Negative Ranks | 20 ^m | 11,50 | 230,00 |
| | Positive Ranks | 1 ⁿ | 1,00 | 1,00 |
| | Ties | 0 ^o | | |
| | Total | 21 | | |
| distance_RGB - distance_LCh | Negative Ranks | 18 ^p | 12,22 | 220,00 |
| | Positive Ranks | 3 ^q | 3,67 | 11,00 |

Ranks

| | | N | Mean Rank | Sum of Ranks |
|---------------------------------|----------------|------------------|-----------|--------------|
| | Ties | 0 ^r | | |
| | Total | 21 | | |
| distance_Lab - distance_LCh | Negative Ranks | 18 ^s | 11,14 | 200,50 |
| | Positive Ranks | 3 ^t | 10,17 | 30,50 |
| | Ties | 0 ^u | | |
| | Total | 21 | | |
| distance_Lab - distance_CMYK | Negative Ranks | 3 ^v | 4,00 | 12,00 |
| | Positive Ranks | 18 ^w | 12,17 | 219,00 |
| | Ties | 0 ^x | | |
| | Total | 21 | | |
| distance_RGB - distance_CMYK | Negative Ranks | 6 ^y | 8,92 | 53,50 |
| | Positive Ranks | 12 ^z | 9,79 | 117,50 |
| | Ties | 3 ^{aa} | | |
| | Total | 21 | | |
| distance_Lab - distance_RGB | Negative Ranks | 1 ^{ab} | 7,00 | 7,00 |
| | Positive Ranks | 16 ^{ac} | 9,13 | 146,00 |
| | Ties | 4 ^{ad} | | |
| | Total | 21 | | |

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_Lab < distance_CMYK
w. distance_Lab > distance_CMYK
x. distance_Lab = distance_CMYK
y. distance_RGB < distance_CMYK
z. distance_RGB > distance_CMYK
aa. distance_RGB = distance_CMYK
ab. distance_Lab < distance_RGB
ac. distance_Lab > distance_RGB
ad. distance_Lab = distance_RGB

Test Statistics^a

| | distance_LCh - distance_HSV | distance_CMY K - distance_HSV | distance_RGB - distance_HSV | distance_Lab - distance_HSV | distance_CMY K - distance_LCh |
|-------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|--------------------------------|-------------------------------------|
| Z | -3,461 ^b | -1,394 ^b | -2,582 ^b | -2,835 ^b | -3,988 ^c |
| Asymp. Sig. (2-tailed) | ,001 | ,163 | ,010 | ,005 | ,000 |

Test Statistics^a

| | distance_RGB - distance_LCh | distance_Lab - distance_LCh | distance_Lab - distance_CMY K | distance_RGB - distance_CMY K | distance_Lab - distance_RGB |
|-------------------------------|-----------------------------------|--------------------------------|-------------------------------------|--|--------------------------------|
| Z | -3,640 ^c | -2,963 ^c | -3,608 ^b | -1,402 ^b | -3,333 ^b |
| Asymp. Sig. (2-tailed) | ,000 | ,003 | ,000 | ,161 | ,001 |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.