



Getting started with XLSTAT

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Customer Engagement & Enablement



Outline



1. Overview of XLSTAT
2. Data import
3. Data preparation
4. Choosing the appropriate XLSTAT feature
5. Data selection
6. Set up of XLSTAT analyses
7. Customization of XLSTAT reports and charts
8. Exportation of charts and tables
9. QA session



```
replace(/+(?=/g, ""), a = a.split(" "), b = [], c = 0; c < a.length; c++) { 0 == use_array(a[c], b) && b.push(a[c]); } return b; } function liczenia() { for (var a = $("#User_logged").val(), a = replaceAll(" ", " ", a), a = a.replace(/+(?=/g, ""), a = a.split(" "), b = [], c = 0; c < a.length; c++) { 0 == use_array(a[c], b) && push(a[c]); } c = {}; c.words = a.length; c.unique = b.length - 1; return c; } function use_unique(a) { for (var b = [], c = 0; c < a.length; c++) { 0 == use_array(a[c], b) && b.push(a[c]); } return b.length; } function count_array_gen() { var a = 0, b = ($("#User_logged").val(), b = b.replace(/\\r\\n|\\n|\\r/g, " "), b = replaceAll(" ", " ", b), b = b.replace(/+(?=/g, ""); inp_array = b.split(" "); input_sum = inp_array.length; for (var b = [], a = [], c = [], a = 0; a < inp_array.length; a++) { 0 == use_array(inp_array[a], c) && (c.push(inp_array[a]), b.push({word:inp_array[a], use_class:0})), b[b.length - 1].use_class = use_array(b[b.length - 1].word, inp_array); } a = b; input_words = a.length; a.sort(dynamicSort("use_class")); a.reverse(); b = indexOf_keyword(a, " "); -1 < b && a.splice(b, 1); b = indexOf_keyword(a, void 0); -1 < b && a.splice(b, 1); b = indexOf_keyword(a, ""); -1 < b && a.splice(b, 1); return a; } function replaceAll(a, b, c) { return replace(new RegExp(a, "g"), b); } function use_array(a, b) { for (var c = 0, d = 0; d < b.length; d++) { b[d] && c++; } return c; } function czy_juz_array(a, b) { for (var c = 0, c = 0; c < b.length && b[c].word != a; c++) { } return 0; } function indexOf_keyword(a, b) { for (var c = -1, d = 0; d < a.length; d++) { if (a[d] == b) { c = d; break; } } return c; } function dynamicSort(a) { var b = 1; " " == a && (b = -1, a = a.substr(1)); return function(c, d) { return (c[a] < d[a] ? -1 : c[a] > d[a] ? 1 : 0) * b; } } function occurrences(a, b, c) { a += " "; b += " "; if (0 >= b.length) { return a.length + 1; } var d = 0, f = 0; for (c = c ? 1 : b.length; c;) { if (f = a.indexOf(b, f), 0 <= f) { d++, f += c; } else { break; } } return d; } } limit_val = a; a = Math.min(a, 200), a = Math.min(a, parseInt(h().unique)); limit_val = parseInt($("#limit_val").a()); limit_val = a; $("#limit_val").a(a); update_slider(); function limit_val; $("#word-list-out"
```

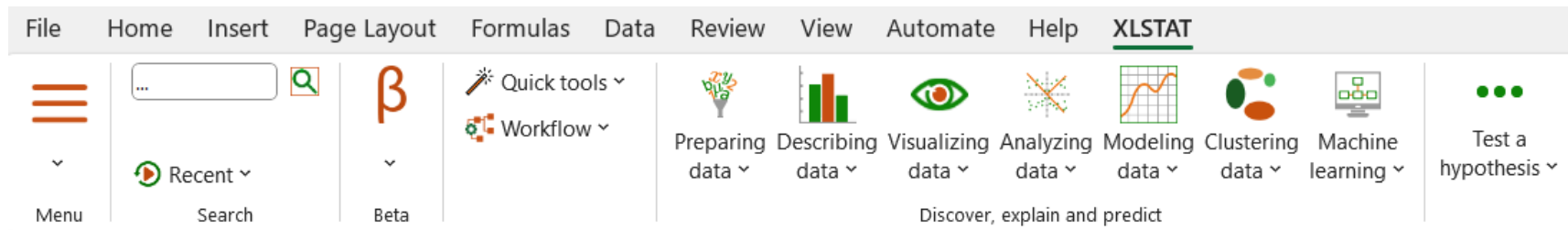
1. Overview of XLSTAT

Excel Add-in since 1993

Fast, efficient and 24/7 support

400+ online tutorials

Compatible with Windows and Mac



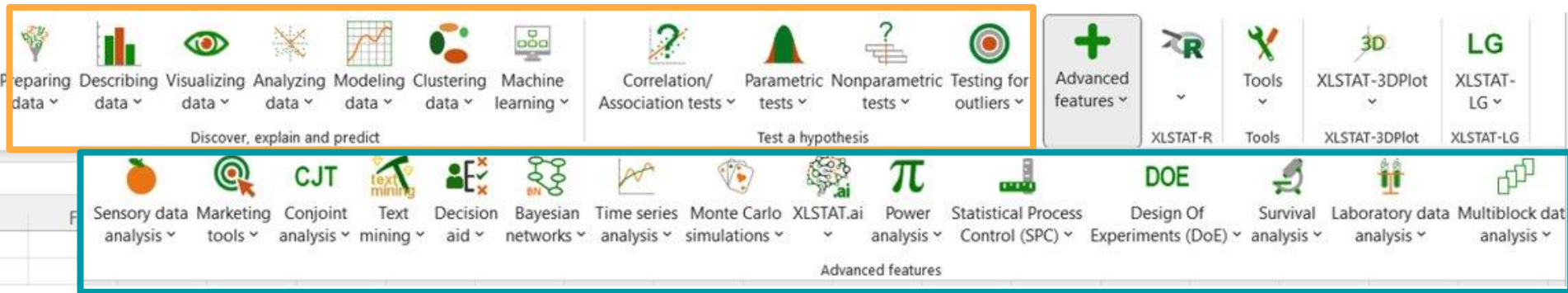
250+ statistical functions

5 Languages

Gateway to R

Solutions for every field

1. Overview of XLSTAT

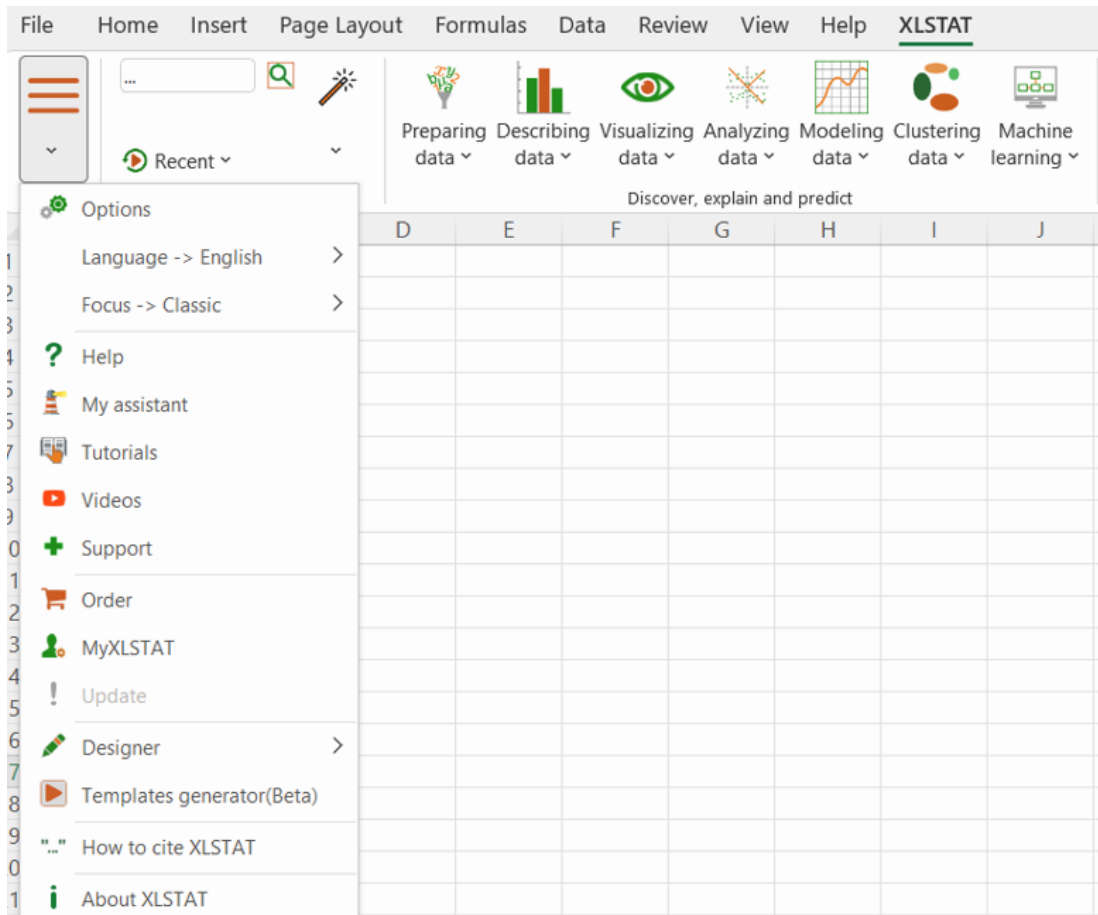


- 120+ essential features:
- Widely used statistical analyses such as ANOVA, PCA, regressions, and contingency tables.

- 100+ Advanced features:
- Field-oriented methods for sensory data analysis, marketing, life sciences and more.

Used by: R&D teams, teachers, consultants, students, and statistics experts

1. Overview of XLSTAT



The XLSTAT Ribbon

- Access to online tutorials
- Access to the Help documentation
- Contact our support team
- Change language settings
- Locate features in the search bar
- Relaunch recently used features
- Customize the ribbon
- Activate your license
- Consult My assistant



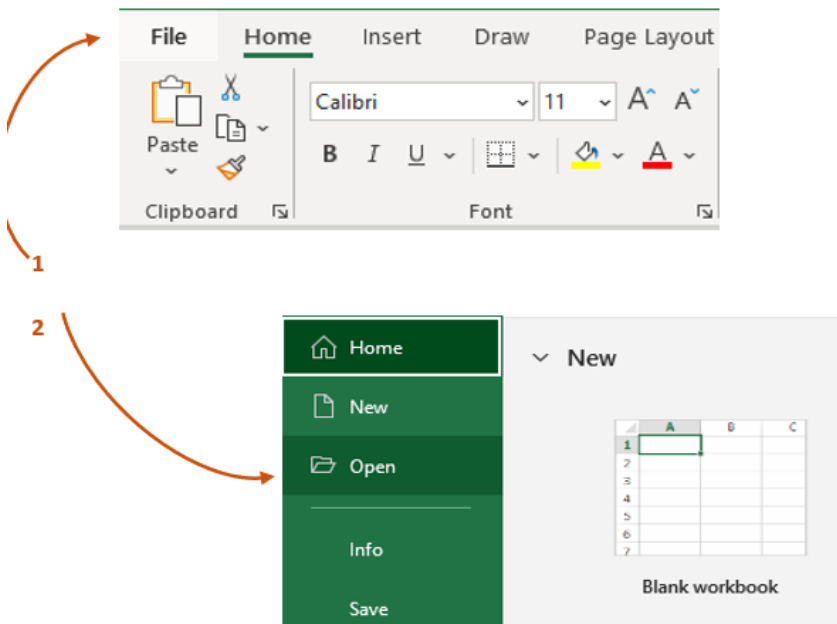
Demo

2. Data import

1

OPEN AN EXCEL FILE

If your dataset is already in an Excel format simply launch Microsoft excel, go to the **File** tab and click on **Open**.

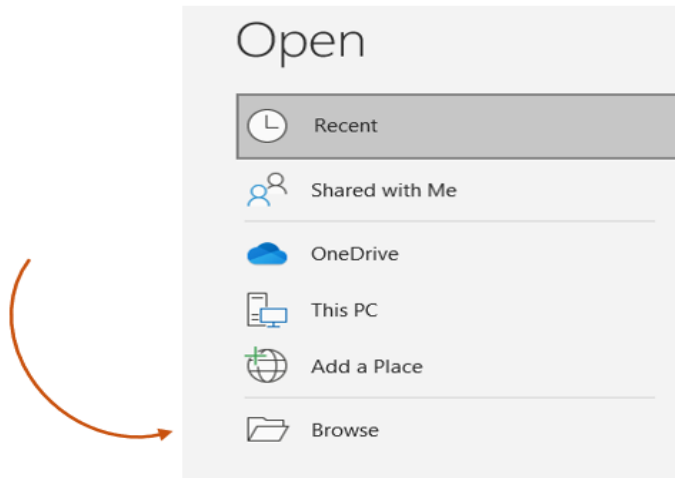


2. Data import

2

OPEN AN EXCEL FILE

Then, **browse** to the location that contains the file.



PREVIOUS

NEXT

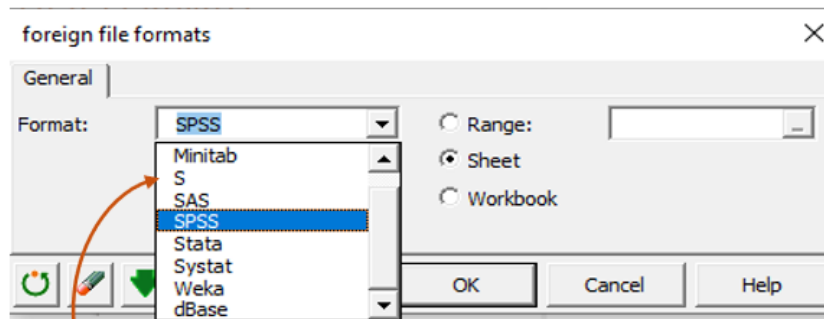
2. Data import

3

IMPORT ANOTHER FORMAT

To import data from other sources, such as SPSS, use the XLSTAT-R engine. Launch the **foreign file formats** function from the **formats** library under the **XLSTAT-R** menu.

Then, choose the format of your file, click OK and browse to it from your computer.



choose the format here and click OK

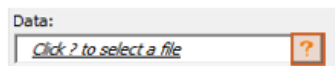
2. Data import

4

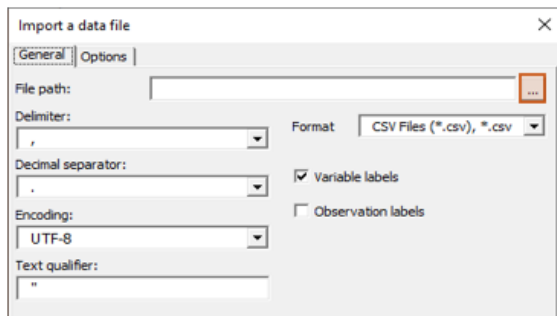
IMPORT LARGE DATA VOLUMES

Choose this import method to **load data files that exceed the standard Excel worksheet size**. This method loads data into the computer's memory rather than the worksheet.

Launch your function from the XLSTAT menu (e.g. PCA) and click on the mouse icon  until the orange paper sheet icon appears . Then click on  to open the importation wizard.



In the **importation wizard**, click on  to import your file. Don't forget to choose the right format and delimiter. You may use the Preview button to preview the imported data. Click OK once you are all set to select your variables and run the analysis.



2. Data import

Exercise 1: import survey.sav file*

Exercise 2: import the DataTXT.txt file*

**XLSTAT_training_files folder > Data import*



Demo

3. Data preparation

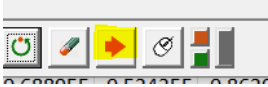
How to structure your data?

OBS	SEPAL LENGTH	SEPAL WIDTH	PETAL LENGTH	PETAL WIDTH	SPECIES
Obs1	50	33	14	2	Setosa
Obs2	64	28	56	22	Virginica
Obs3	65	28	46	15	Versicolor
Obs4	67	31	56	24	Virginica
Obs5	63	28	51	15	Virginica
Obs6	46	34	14	3	Setosa
Obs7	69	31	51	23	Virginica
Obs8	62	22	45	15	Versicolor
Obs9	59	32	48	18	Versicolor
Obs10	46	36	10	2	Setosa

Data format 1: Variables in columns and observations in rows



Data format 2: Variables in rows and columns in rows



OBS	Obs1	Obs2	Obs3	Obs4	Obs5	Obs6	Obs7	Obs8	Obs9	Obs10	
SEPAL LENGTH	50	64	65	67	63	46	69	62	59	46	
SEPAL WIDTH	33	28	28	31	28	34	31	22	32	36	
PETAL LENGTH	14	56	46	56	51	14	51	45	48	10	
PETAL WIDTH	2	22	15	24	15	3	23	15	18	2	
SPECIES	Setosa	Virginica	Versicolor	Virginica	Virginica	Setosa	Virginica	Versicolor	Versicolor	Setosa	

3. Data preparation

Missing data? Make sure XLSTAT recognises them

Then you may remove them or estimate them prior to the analysis

A	B	C	D	E	F	G	H	I	J	K	L	M	N
0,25	0,59	0,41	0,13	0,84	0,42								
0,97	0,92	0,79	0,79	0,35	0,82								
0,12	0,85	0,21	0,97	0,42	0,12								
0,68	0,34	0,29	0,16	0,33	0,65								
0,87	0,25	0,77	0,30	0,52	0,37								
0,89	0,64	0,73	0,04	0,20	0,09								
	0,66	0,17	0,66	0,09	0,83								
0,58	0,54	0,28		0,04	0,20								
0,22	0,43	0,16	0,54	0,35	0,93								
0,79	0,24	0,23	0,63	0,96									
0,76	0,08	0,07	0,89	0,09	0,14								
0,13		0,92	0,31	0,44	0,62								
0,75	0,73	0,71	0,72	0,97	0,47								
0,12	0,72	0,23	0,10		0,07								
0,92	0,02	0,66	0,14	0,62	0,32								
0,26	0,03	0,66	0,22	0,48	0,84								
0,09	0,11	0,87	0,09	0,56									
0,53	0,95	0,09	0,30	0,25	0,39								
0,72	0,79	0,40	0,11	0,97	0,35								
0,60	0,89	0,79	0,58	0,24	0,22								
0,63	0,53	0,04	0,10	0,11	0,94								
0,99	0,02	0,07	0,07	0,45	0,57								
0,45	0,27	0,77	0,84	0,64	0,14								

Missing data

General | Outputs

☒ Quantitative data:

Range:

☒ Remove the observations

☐ Estimate missing data:

Mean

☐ Qualitative data:

☒ Remove the observations

☐ Estimate missing data:

Mode

☐ Range:

☒ Sheet

☐ Workbook

☒ Variable labels

☐ Observation labels:

☐ Observation weights:

OK Cancel Help

Missing data:

☒ Consider empty cells as missing data

☐ Consider also the following values as missing data:

☐ #N/A

☐ N/A

☐ NA

☐ NULL

☐ -

☐ *

Preparing data ▾

Describing data ▾

Visualizing data ▾

Analyzing data ▾

Data sampling

Distribution sampling

Variables transformation

Data anonymization

Missing data

3. Data preparation

Missing data? Remove them or replace them using the Missing data options

A	B	C	D	E	F	G	H	I	J	K	L	M	N
0,09	0,47	0,31	0,71	0,27	0,86								
0,88	0,72	0,18	0,56	0,81	0,31								
0,85	0,19	0,71	0,38	0,72	0,70								
0,25	0,17	0,25	0,23	0,02	0,98								
0,29	0,50	0,73	0,89	0,29	0,83								
0,82	0,59	0,89	0,85	0,03	0,31								
	0,14	0,45	0,30	0,29	0,97								
0,55	0,65	0,73		0,27	0,32								
0,69	0,54	0,15	0,16	0,22	0,18								
0,30	0,91	0,32	0,57	0,52									
0,32	0,67	0,34	0,33	0,92	0,13								
0,61		0,25	0,02	0,77	0,41								
0,62	0,15	0,73	0,50	0,18	0,26								
0,97	0,07	0,84	0,84		0,20								
0,19	0,05	0,91	0,92	0,50	0,30								
0,70	0,42	0,22	0,38	0,94	0,21								
0,99	0,46	0,52	0,09	0,54									
0,27	0,07	0,19	0,32	0,99	0,23								
0,82	0,94	0,86	0,30	0,99	0,42								
0,69	0,94	0,68	0,21	0,07	0,39								
0,70	0,77	0,35	0,99	0,84	0,79								
0,67	0,78	0,30	0,66	0,62	0,91								
0,85	0,52	0,80	0,70	0,65	0,38								

Linear regression

General | Options | Validation | Prediction | **Missing data** | Outputs | Charts

☐ Do not accept missing data

☒ Remove the observations:

☐ Check for each Y separately

☒ Across all Ys

☐ Ignore missing data

☐ Estimate missing data:

☒ Mean or mode

☐ Nearest neighbor

OK Cancel Help



Demo

4. Data selection

1. Using the mouse or the touchpad

Panelist	Product	Taste	Sweetness
1	ProductA	9	5
1	ProductA	7	6
1	ProductA	9,5	2
1	ProductA	8,5	0,5
1	ProductA	7,5	2,5
1	ProductA	9	3
2	ProductA	10	6,5
2	ProductA	9	0
2	ProductA	7,5	5
2	ProductA	10	4,5
2	ProductA	7	5
2	ProductA	10	7
3	ProductA	1	7,5
3	ProductA	4,5	0
3	ProductA	2,5	3
3	ProductA	3	6,5
3	ProductA	3,5	0
3	ProductA	0,5	1

ANOVA

General | Options | Validation | Prediction | Missing data | Outputs | Charts

Data format:

☒ Column ☐ Table

Y / Dependent variables:

Quantitative:

'Data'!\$C:\$D

X / Explanatory variables:

☐ Quantitative:

☒ Qualitative:

'Data'!\$A:\$B

☐ Range:

☒ Sheet

☐ Workbook

☒ Variable labels

☐ Observation labels:

☐ Observation weights:

☐ Regression weights:

OK Cancel Help

4. Data selection

2. Using the list mode

A	B	C	D
Panelist	Product	Taste	Sweetness
1	ProductA	9	5
1	ProductA	7	6
1	ProductA	9,5	2
1	ProductA	8,5	0,5
1	ProductA	7,5	2,5
1	ProductA	9	3
2	ProductA	10	6,5
2	ProductA	9	0
2	ProductA	7,5	5
2	ProductA	10	4,5
2	ProductA	7	5
2	ProductA	10	7
3	ProductA	1	7,5
3	ProductA	4,5	0
3	ProductA	2,5	3
3	ProductA	3	6,5
3	ProductA	3,5	0

ANOVA

General | Options | Validation | Prediction | Missing data | Outputs | Charts

Data format:

☒ Column ☐ Range:

☐ Table ☒ Sheet ☐ Workbook

Y / Dependent variables:

Quantitative:

X / Explanatory variables:

☐ Quantitative:

☒ Qualitative:

Select the variables:

- ☐ Panelist
- ☐ Product
- ☒ Taste
- ☒ Sweetness

OK Cancel Help

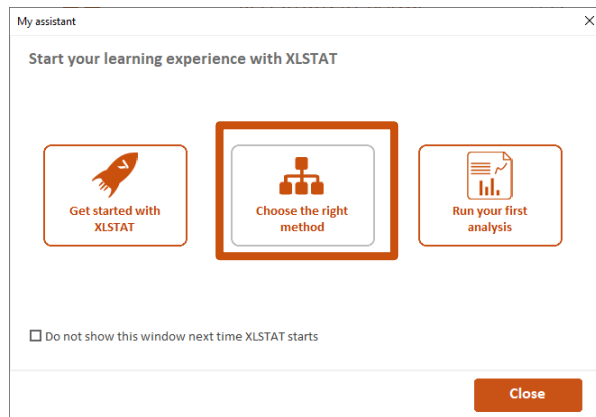
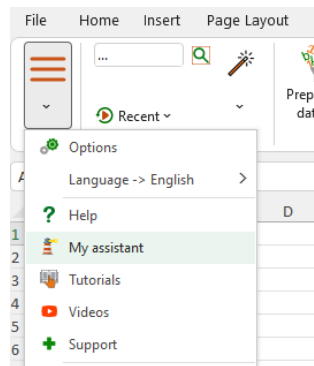


Demo

5. Choosing the right feature

My Assistant

A dynamic learning interface



A series of statistical guides

Tutorials on choosing the right method

Dependent variable	Explanatory variable(s)	Example	Parametric models
One quantitative variable	One qualitative variable (= factor) with two levels	Effect of contamination (yes / no) on the concentration of a trace element in a plant	One-way ANOVA with two levels
	One qualitative variable with k levels	Effect of the site (4 factories) on the concentration of a trace element in a plant	One-way ANOVA
	Several qualitative variables with several levels	Combinatory effects of site (4 factories) and plant species on the concentration of a compound in plant tissue	Multi-way ANOVA (factorial designs)
	One quantitative variable	Effect of temperature on the concentration of a protein	Simple linear regression ; nonlinear models (depends on the shape of the relationship between the dependent / explanatory variable)
	Several quantitative variables	Effect of the concentration of several contaminants on plant biomass	Multiple linear regression ; nonlinear models

5. Choosing the right feature

DESCRIPTIVE STATISTICS GRID

Summarize and visualize data				
		Numerical	Categorical	Both
Tools in XLSTAT	{	Mean, median, variance, kurtosis,...	Mode, frequencies,rel frequencies %...	Box plot with groups
		Histograms	Frequency tables	Scatter plot with groups
		<u>Boxplots</u>	Cross tabulations	
		Correlation tests	Bar charts, Pie charts	

5. Choosing the right feature

EXPLORATORY ANALYSIS GRID

DATA TYPE	EXPLORATION	CLUSTERING
Quantitative variables	Principal Component Analysis	Agglomerative Hierarchical Clustering, k-means, fuzzy k-means, DBSCAN, Univariate clustering, Gaussian Mixture Models,
Contingency table	Correspondence Analysis (CA)	CA + Clustering tool for quantitative variables
Qualitative variables	Multiple Correspondence Analysis (MCA)	DBSCAN, MCA + Clustering tool for quantitative variables
Mix. qualitative & quantitative variables	PCA for mixed data	PCA for mixed data + Clustering tool for quantitative variables
Several datasets	Multiple Factor Analysis (MFA) Generalized Procrustes Analysis (GPA)	MFA or GPA + Clustering tool for quantitative variables

5. Choosing the right feature

STATISTICAL TESTS GRID

Question	Independent / paired samples	Parametric tests	Nonparametric equivalents
Compare 2 means	Independent	Student's t-test on independent samples	Mann-Whitney's test
	Paired	Student's t-test on paired samples	Wilcoxon's test
Compare k means	Independent	ANOVA	Kruskal-Wallis test
	Paired	Repeated measures ANOVA	Friedman's test
Compare 2 variances	Independent	Fisher's test	
Compare k variances	Independent	Levene's test	
Association (qualitative var.)	Independent	Chi-square test	Fisher's exact test
	Paired		Cochran's Q test
Association (quantitative var.)	Independent	Pearson correlation	Spearman correlation



Demo

6. Set up of XLSTAT analyses

1. Select your data

Descriptive statistics

General | Options | Outputs | Charts (1) | Charts (2)

☒ Quantitative data:
Data!\$C:\$D

☐ Qualitative data:

☐ Subsamples:

☒ Variable labels

☐ Standardize weights

OK Cancel Help

2. Choose your outputs

Descriptive statistics

General | Options | Outputs | Charts (1) | Charts (2)

Quantitative data:

- ☒ Nbr. of observations
- ☒ Nbr. of missing values
- ☒ Sum of weights
- ☒ Minimum
- ☒ Maximum
- ☒ Freq. of minimum
- ☒ Freq. of maximum
- ☒ Range
- ☒ 1st Quartile

Qualitative data:

- ☒ Nbr. of observations
- ☒ Nbr. of missing values
- ☒ Sum of weights
- ☒ Nbr. of categories
- ☒ Mode
- ☒ Mode frequency
- ☒ Categories
- ☒ Frequency per category
- ☒ Rel. frequency per category (%)

☒ Display vertically

OK Cancel Help

3. Choose your charts

Descriptive statistics

General | Options | Outputs | Charts (1) | Charts (2)

Chart types

Quantitative data:

- ☒ Box plots
- ☒ Scattergrams
- ☐ Strip plots
- ☐ Stem-and-leaf plots
- ☐ Normal P-P plots
- ☐ Normal Q-Q plots

Means charts:

- ☐ Error bars
- Standard deviation

OK Cancel Help

4. Launch the analysis

Descriptive statistics

General | Options | Outputs | Charts (1) | Charts (2)

Chart types

Quantitative data:

- ☒ Box plots
- ☒ Scattergrams
- ☐ Strip plots
- ☐ Stem-and-leaf plots
- ☐ Normal P-P plots
- ☐ Normal Q-Q plots

Means charts:

- ☐ Error bars
- Standard deviation

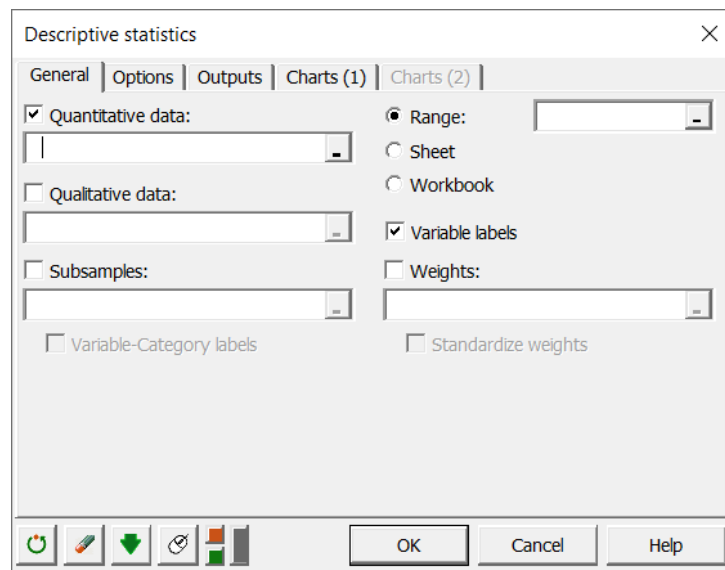
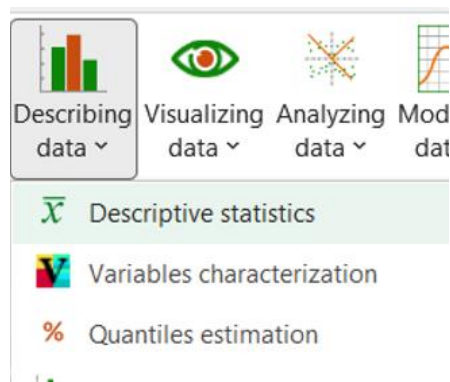
OK Cancel Help

6. Set up of XLSTAT analyses

Example 1: Descriptive Statistics

When we want to:

- describe one or several variables independently
- study the link between 2 variables

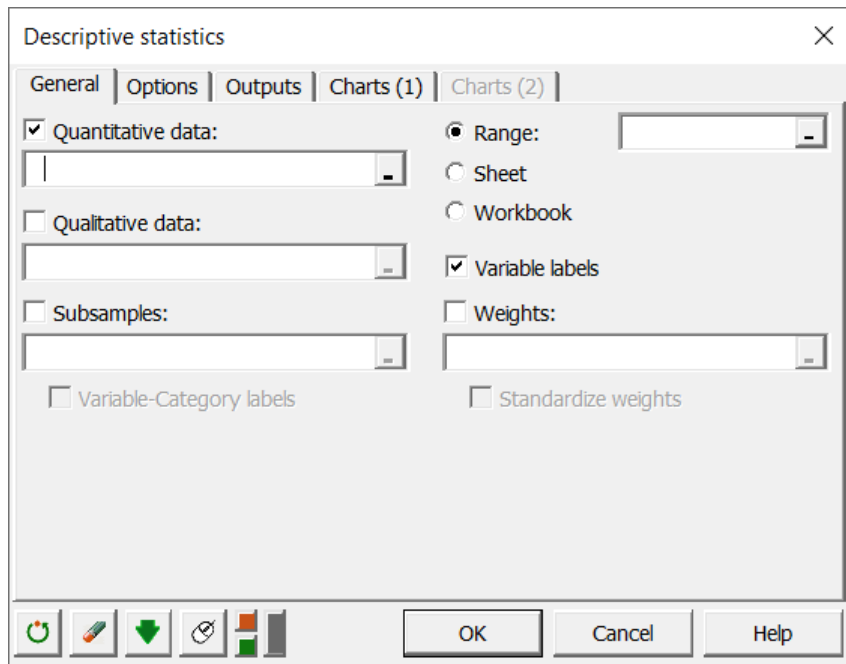


6. Set up of XLSTAT analyses

Example 1: Descriptive Statistics

Some definitions

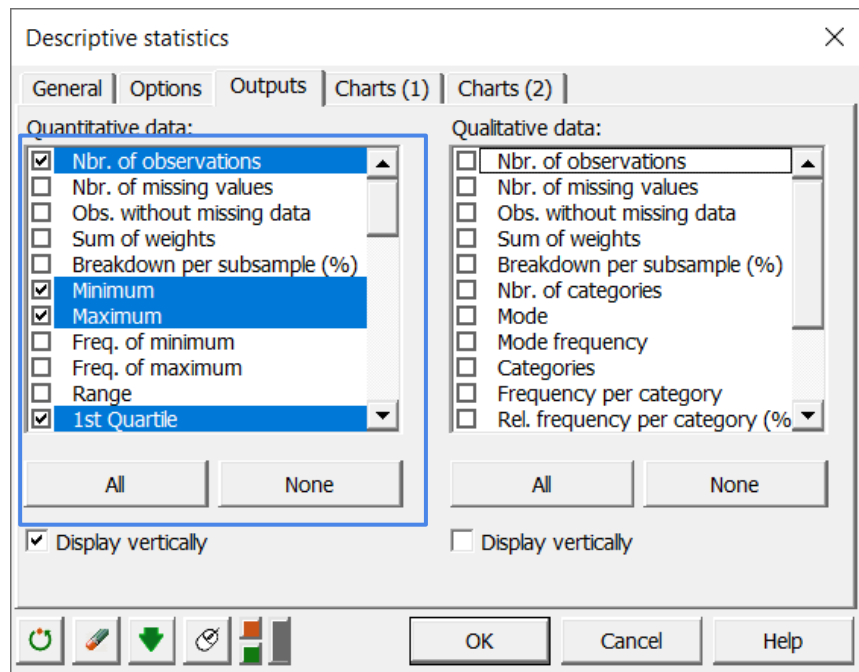
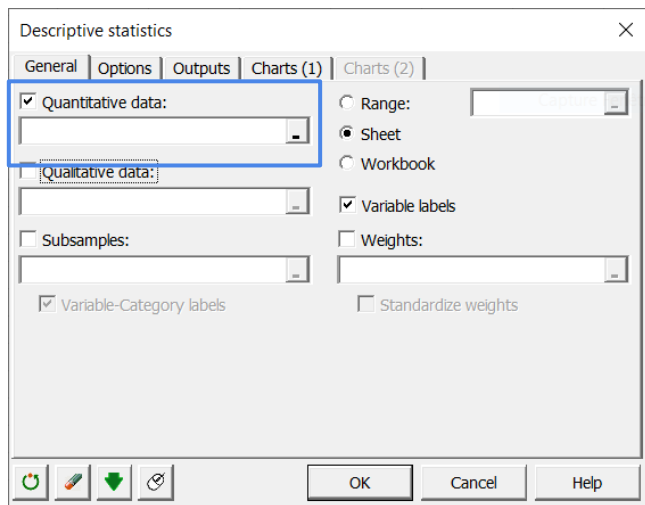
- **Quantitative** variable: a variable that can be quantified.
- **Qualitative** variable: takes categorical values.
- **Subsamples**: subset which divides the population into groups (must be a qualitative variable)



6. Set up of XLSTAT analyses

Example 1: Descriptive Statistics

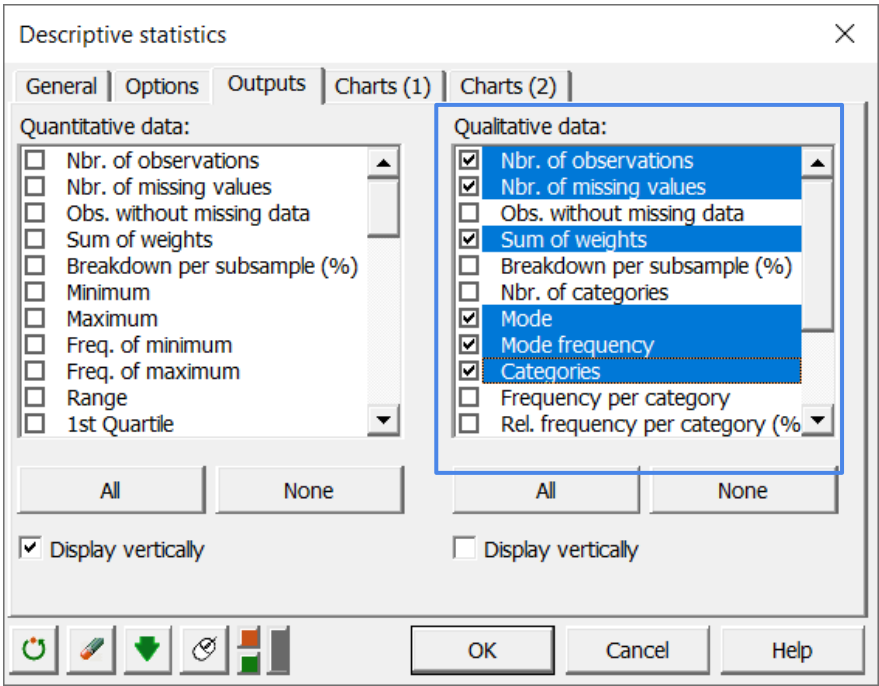
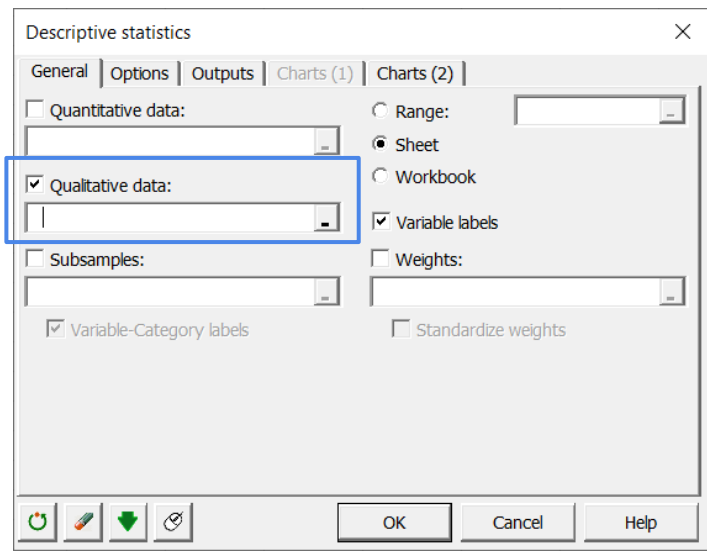
Describing quantitative variables



6. Set up of XLSTAT analyses

Example 1: Descriptive Statistics

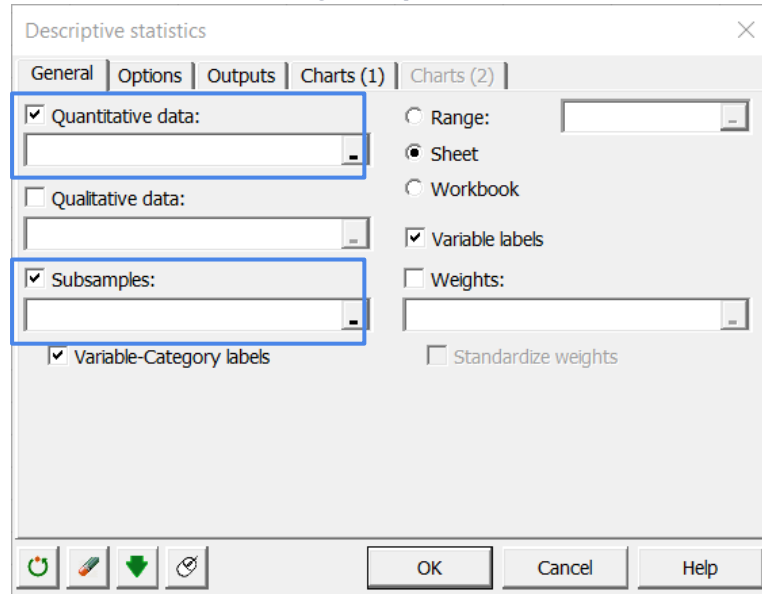
Describing qualitative variables



6. Set up of XLSTAT analyses

Example 1: Descriptive Statistics

Studying the link between a quantitative and a group variable



6. Set up of XLSTAT analyses

Exercise:

- Compute the mean ***Invoice amount*** per ***Origin*** and visualize the variables with a **boxplot**
- Display a barchart of ***Preferred brands*** per ***Gender***

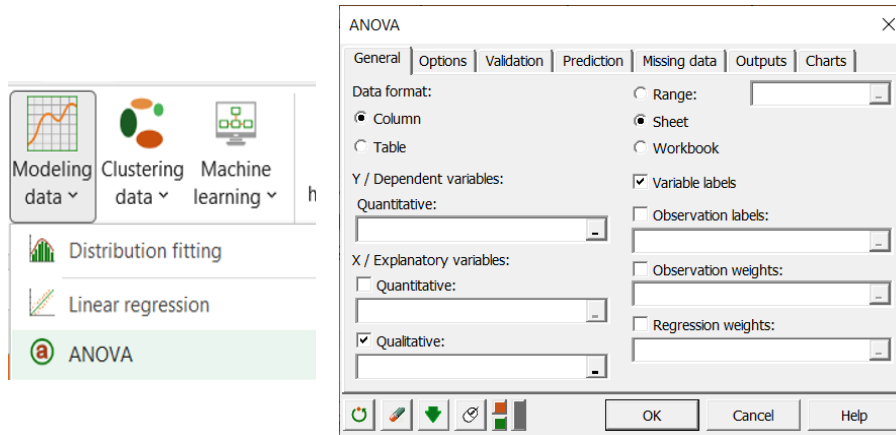
Data file: XLSTAT_Training_files_Analysis > DESC.xls > DESC sheet

6. Set up of XLSTAT analyses

Example 2: Analysis of Variance (ANOVA)

When we want to explain one quantitative variable by one or several qualitative variables called factors.

-> ANOVA helps us to compare means of different groups of observations, which are represented by the categories of the factors.



6. Set up of XLSTAT analyses

Example 2: Analysis of Variance (ANOVA)

Interpretation of a one-way ANOVA

Analysis of variance (Spiciness):					p-value
Source	DF	Sum of squares	Mean squares	F	Pr > F
Model	2,000	16,950	8,475	3,166	0,049
Error	67,000	179,350	2,677		
Corrected	69,000	196,300			
Computed against model $Y = \text{Mean}(Y)$					

H0: $Y = \text{mean}(Y)$
→ $\text{Mean}(S1) = \text{Mean}(S2) = \text{Mean}(S3)$

Ha: At least one mean is different from the others

alpha = 0.05

Decision: p-value < alpha. We are rejecting H0 and accept Ha while taking a risk of 4.9% of being wrong.

Answer: At least one mean is different from another.

6. Set up of XLSTAT analyses

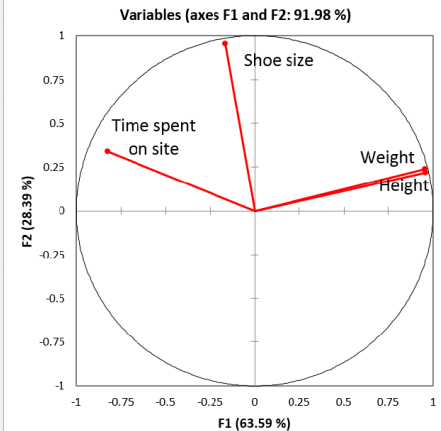
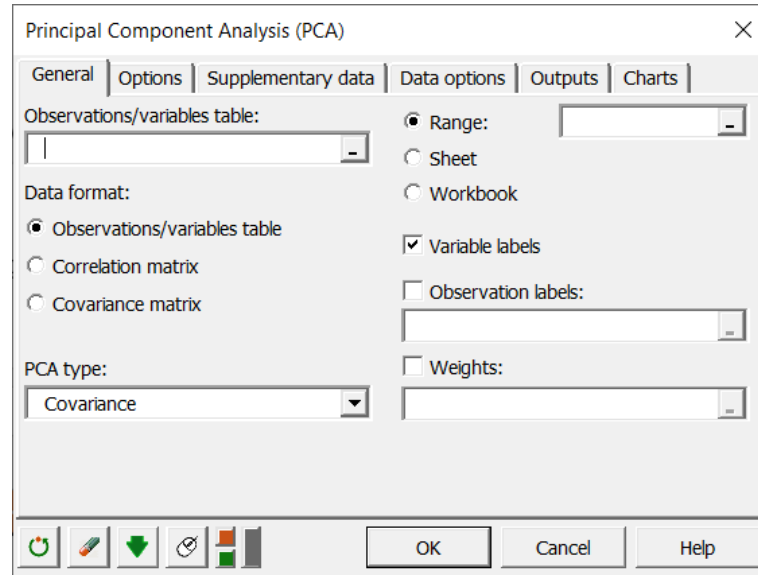
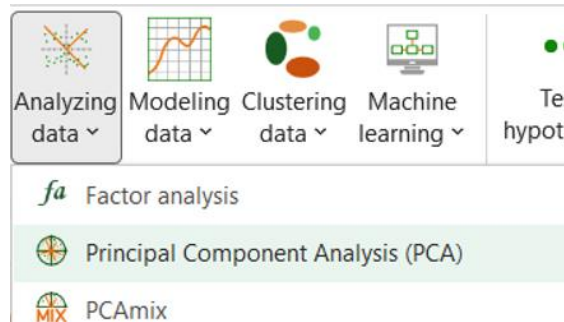
Exercise: Do the *Taste* and *Sweetness* variables significantly change according to the *Product* factor?

Data file: XLSTAT_Training_files_Analysis > ANOVA.xls

6. Set up of XLSTAT analyses

Example 3: Principal Component Analysis

PCA: Summarizes a multivariate data set of quantitative variables in a few plots



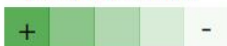
6. Set up of XLSTAT analyses

Example 3: Principal Component Analysis

Initial dataset

C	D	E	F
Height	Shoe size	Weight	Time spent on sit
9	26	50	28
102	40	335	39
13	31	68	29
20	29	81	40
116	33	378	11
22	30	88	44
27	29	105	42
31	28	116	51
4	29	36	18
5	33	40	40
107	32	340	15

Amount of
information



Artificial data set generated by PCA

The information is re-distributed in a way to concentrate most of it on a few dimensions.

F1	F2	F3	F4
-0.799	-1.279	-0.147	0.005
0.980	3.351	0.212	0.004
-0.845	0.046	-0.592	0.023
-1.182	-0.135	0.639	-0.016
2.689	0.981	-0.414	0.020
-1.180	0.217	0.522	-0.008
-0.935	-0.040	0.620	0.012
-1.170	0.065	1.295	0.010
-0.604	-0.829	-1.187	-0.010
-1.556	0.678	-0.297	0.001
2.251	0.850	-0.296	-0.026

6. Set up of XLSTAT analyses

Example 3: Principal Component Analysis

PCA vocabulary:

- **Dimension = Component = Factor = Axis:** synthetic variable generated by PCA. The first dimension F1 carries the biggest part of information. The second one F2 carries a bit less, and so on.
- **Inertia = variability:** quantity of information. In a standard PCA (i.e. based on correlations), total inertia is equal to the number of dimensions.
- **Eigenvalue:** corresponds to the part of inertia carried by one particular dimension.

6. Set up of XLSTAT analyses

Exercise: Explore the links among the clients and the 5 quantitative variables of the CRM data set.

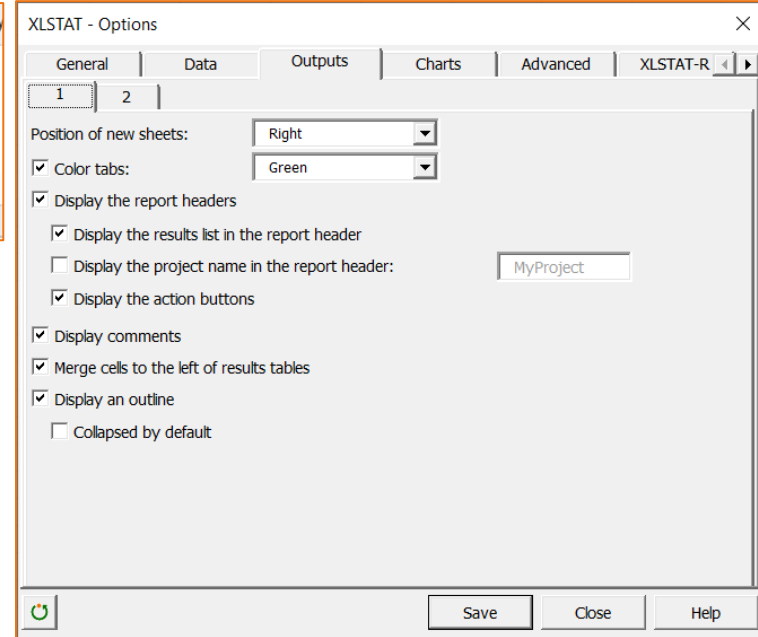
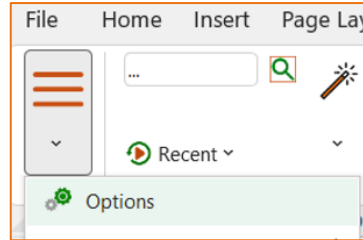
Data file: XLSTAT_Training_files_Analysis > DESC.xls > DESC sheet



Questions?

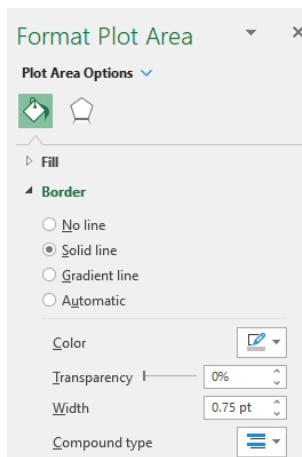
7. Customization of the results sheets

- Select a theme for your tables
- Choose where to display the results
- Instantly color code matrices
- Color your tabs
- Display an outline
- Display comments in the report
- Define the number of decimals
- Display test interpretations



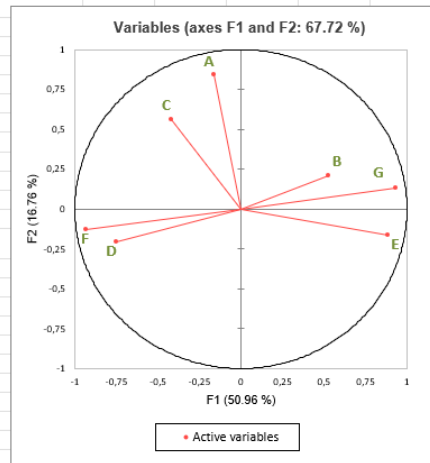
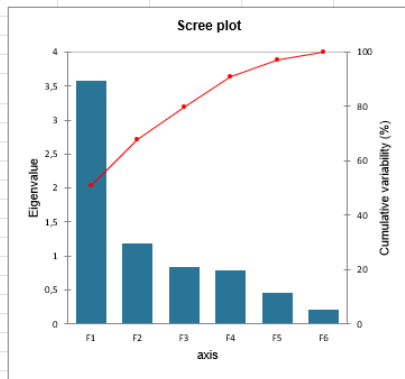
7. Customization of XLSTAT charts

1. Using Excel



Eigenvectors:

	F1	F2	F3	F4
A	-0,085	0,777	-0,458	-0,193
B	0,280	0,195	-0,222	0,896
C	-0,221	0,520	0,745	0,148
D	-0,396	-0,192	0,226	0,309
E	0,468	-0,150	0,047	0,056
F	-0,495	-0,122	-0,257	0,140
G	0,495	0,122	0,257	-0,140



7. Customization of XLSTAT charts

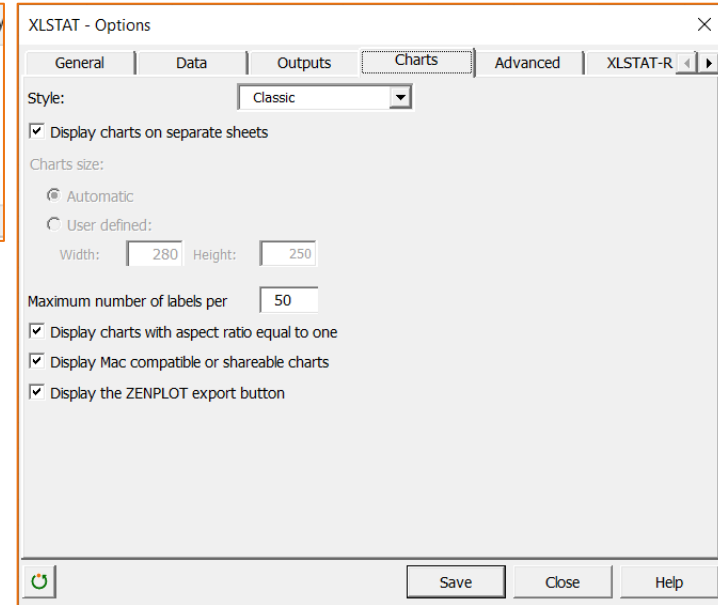
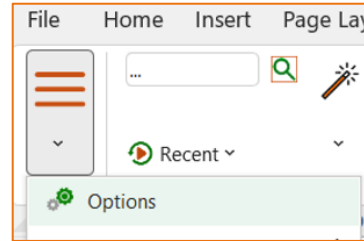
2. Using XLSTAT options dialog box

Select a style for your charts

Display charts on separate sheets

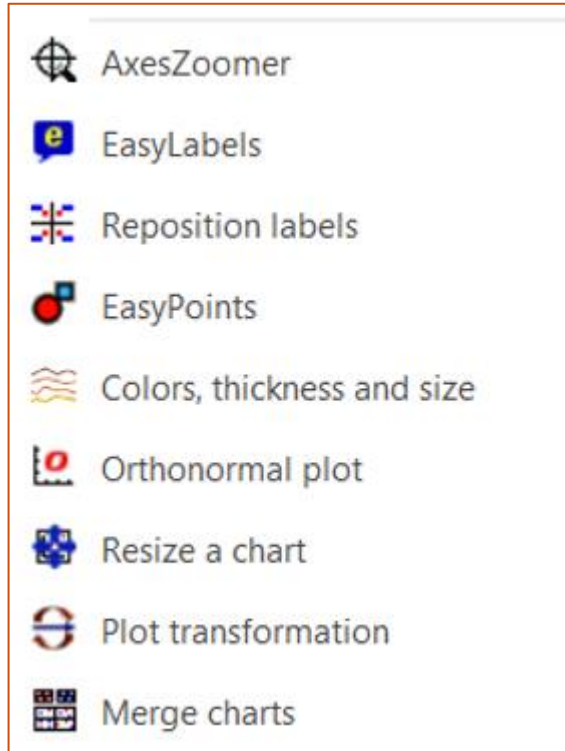
Define the size of the charts

...



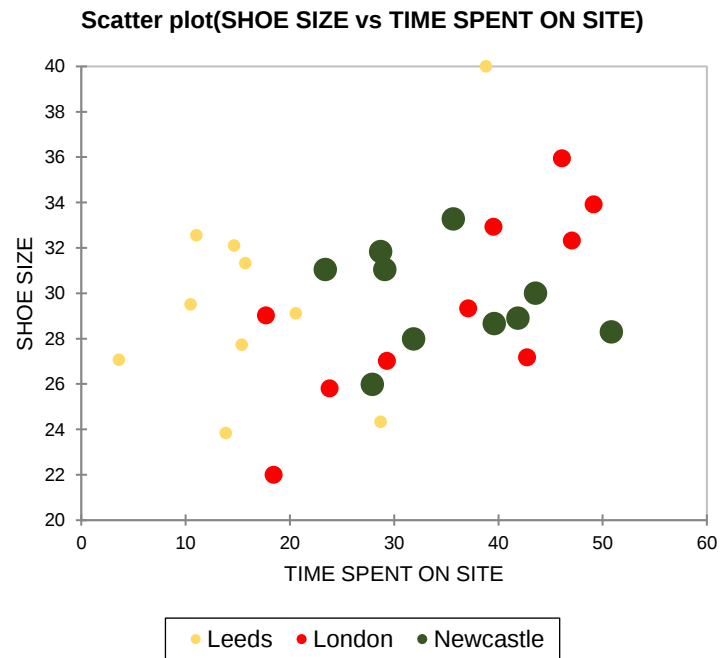
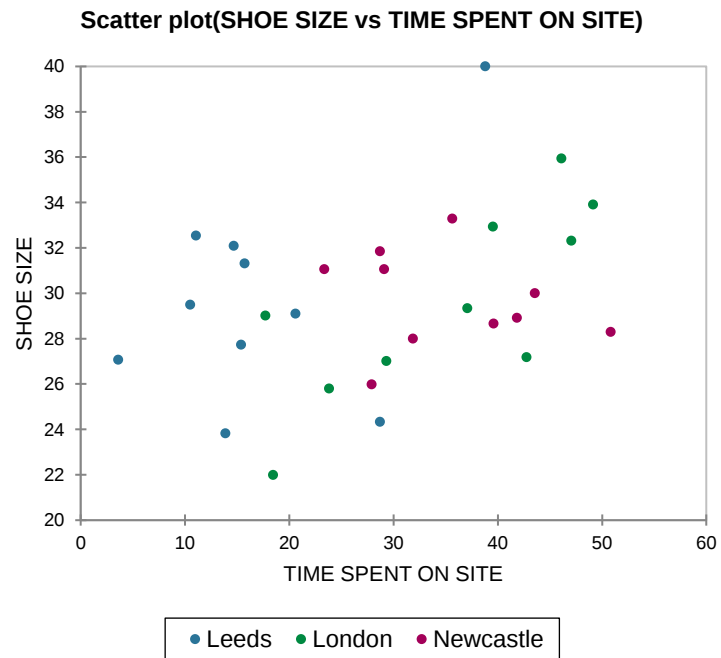
7. Customization of XLSTAT charts

3. Using the XLSTAT visualizing data menu



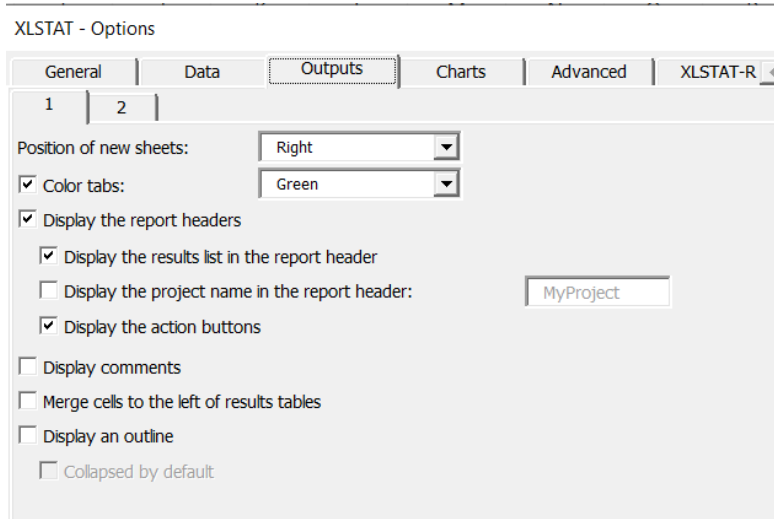
7. Customization of XLSTAT charts

Exercise: customize a scatterplot



8. Exportation of charts and tables

1. Make sure you activate the action buttons



2. Use the Word/PowerPoint buttons to export

	A	B	C	D	E	F
1		XLSTAT 2022.3.1.1338 - Descriptive statistics - Start time				
2		Quantitative data: Workbook = Book1 / Sheet = Normal				
3		   				
4		Descriptive statistics (Quantitative data) ▼				
5						
5						
7		Descriptive statistics (Quantitative data)				

8. Exportation of charts and tables

Exercise: export to Word / PPT

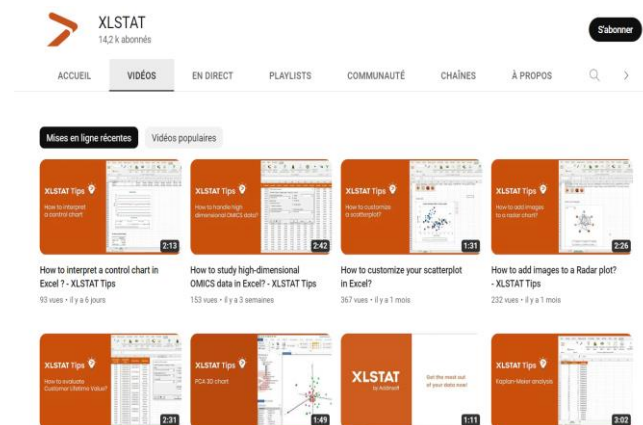
QA Session

Key Resources

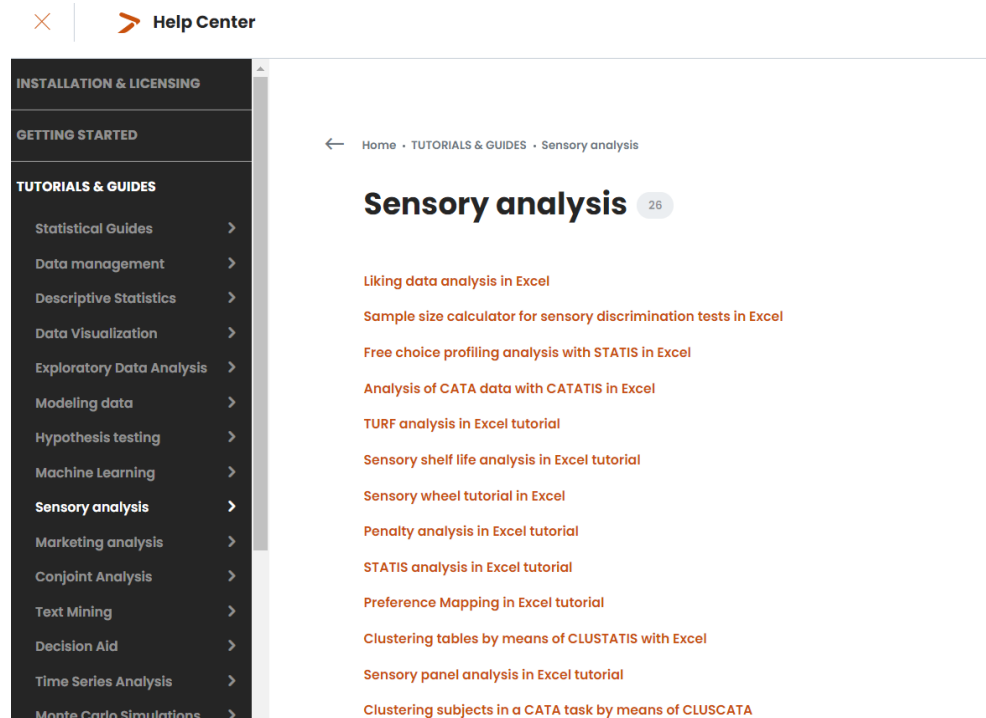
Key resources

Learning material for all levels accessible to all users

- 300+ [tutorials](#)
- In App manual & [My Assistant](#)
- 500+ [videos](#), with new content once per month
- [Webinars](#) once per month
- In App customer support access
- [Lumivero Community](#)



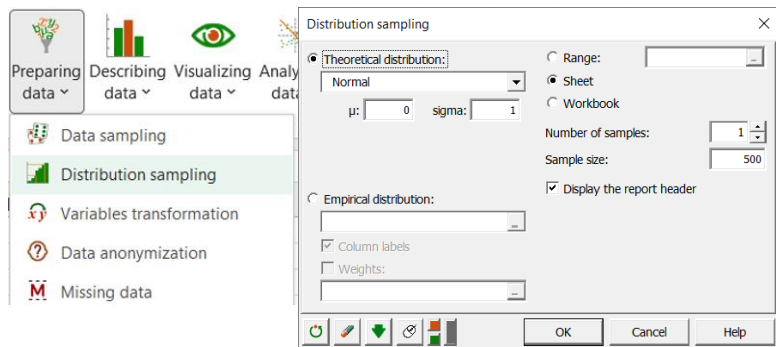
Tutorials for each feature



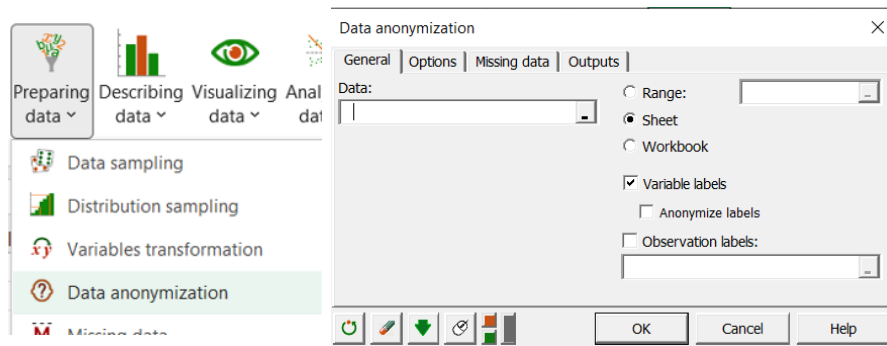
XLSTAT Tips

Annex - XLSTAT Tips

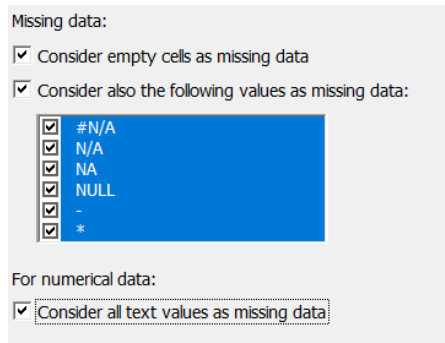
1 Generate random numbers



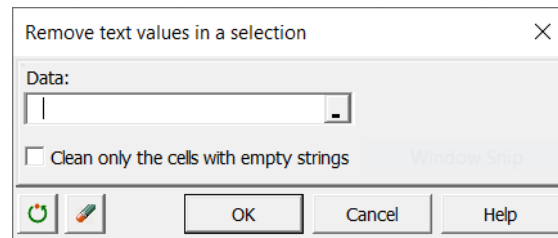
2 Anonymize data



3 Define #NA as missing values



4 Remove text values from quantitative data



Annex - XLSTAT Tips

1 Select data from different sheets

	A	B	C	D	E	F
1		VAR1	VAR2	VAR3	VAR4	
2		0,081	0,989	-0,069	0,644	
3		-0,031	0,443	1,031	-0,531	
4		1,850	0,619	-0,160	0,485	
5		0,930	-0,085	0,040	1,057	
6		1,733	-0,744	-0,212	-1,908	
7		-0,246	0,527	1,738	-0,251	
8		1,154	-1,543	-0,133	1,408	

2 Memorize data selections

XLSTAT - Options

General | **Data** | Outputs

Language: English

Dialog box entries:

- ☒ Memorize during one session
- ☒ Including data selections
- ☒ Memorize from one session to the next
- ☒ Including data selections

3 Using numerical variable labels

	B	C	D	E	F
	01	02	03	04	
	0,081	0,989	-0,069	0,644	
	-0,031	0,443	1,031	-0,531	
	1,850	0,619	-0,160	0,485	
	0,930	-0,085	0,040	1,057	
	1,733	-0,744	-0,212	-1,908	
	-0,246	0,527	1,738	-0,251	
	1,154	-1,543	-0,133	1,408	
	1,618	-0,834	-0,367	2,096	
	0,380	-1,008	1,431	0,304	
	-0,348	-0,785	-0,634	-0,410	

4 Run your analysis on filtered data

XLSTAT - Options

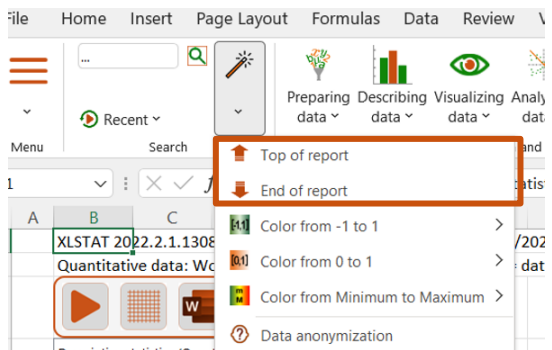
General | **Data** | Outputs

Excel filters:

- ☒ Ask the user
- ☐ Apply filters as they are on the worksheet
- ☐ Ignore filters

Annex - XLSTAT Tips

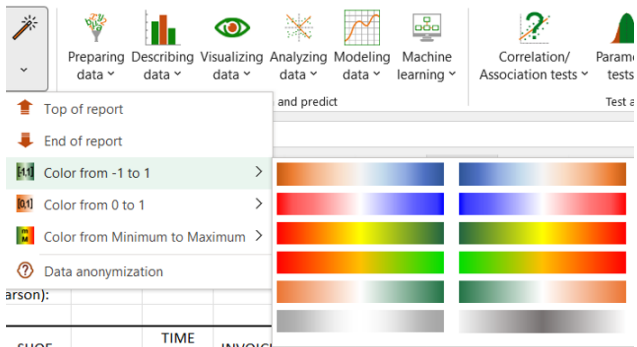
1 Navigate in the results sheet without scrolling



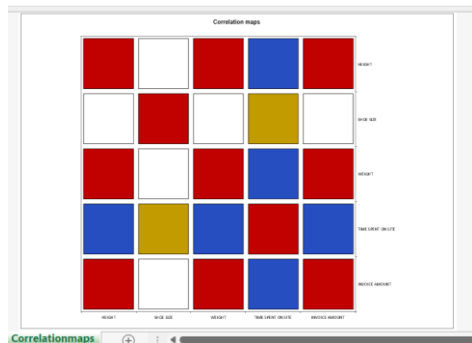
2 Relaunch a previous analysis



3 Instantly color code matrices



4 Display charts on separate sheets

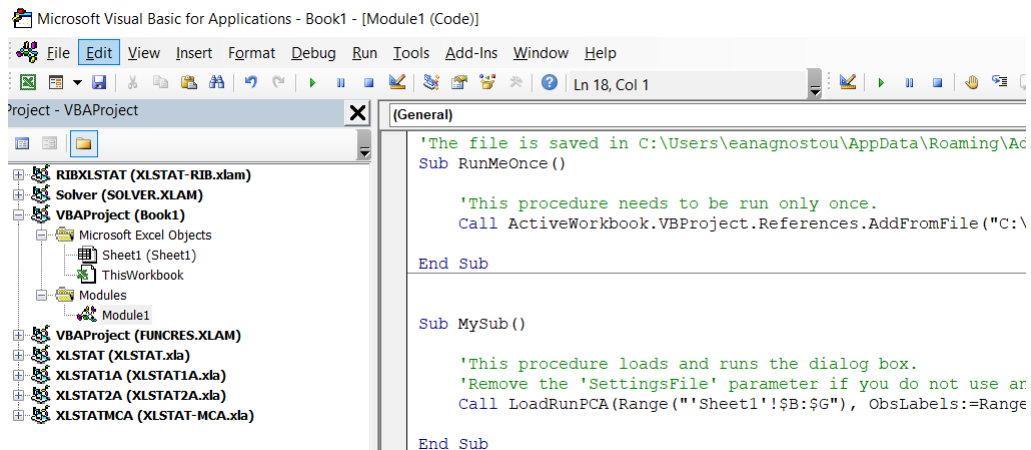


Annex - XLSTAT Tips

1 Use XLSTAT formulas in Excel cells

C2				
	A	B	C	D
	14,206			
	9,476		=XLSTAT_ZScores(A1:A57)	
	12,999			
	13,610			
	9,792			
	10,098			
	14,557			
	9,145			
	13,866			

2 Automate your analysis using VBA



Thank you !

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xlstat-support@lumivero.com

Our Youtube channel

<https://www.youtube.com/@XLSTAT>

XLSTAT alfasoft