



Introduction

PLS\_Toolbox takes its name from the Partial Least Squares (PLS) regression method, which has become the standard calibration method in many regression applications. But PLS\_Toolbox offers so much more. It contains the widest available array of software tools chemical engineers, analytical chemists and other analysis-driven scientists require to fully utilize their data and build predictive models. This includes PLS and PCA of course, but also PCR, MLR, MCR, PARAFAC, N-PLS, PLS-DA, SIMCA, SVM, KNN, CLS, LWR, MPCA, Cluster Analysis and Batch Maturity, plus all the auxiliary tools you need for instrument standardization, data transformation, dynamic modeling, sample selection, trend analysis, correlation spectroscopy and design of experiments.

(Not a MATLAB user? Get all of the chemometrics tools and options of PLS\_Toolbox compiled for you into a stand-alone product, Solo. The only thing you won’t have is the MATLAB command line, which means you won’t have the flexibility to customize. But you may not need it.)

Advantages

* The widest array of tools you'll find – see a partial list on the other side.
* Total freedom to script in your own function and to integrate PLS\_Toolbox with your hardware and software using MATLAB. No other multivariate analysis software package gives this freedom; all others are compiled into proprietary packages.
* Familiar, intuitive GUI interface (for example, watch the video What's New in Version 7.0).
* Works on all platforms (see system requirements below); again, no other multivariate analysis software works on all platforms.
* Works on many older versions of MATLAB (see system requirements at right.)
* Source code provides the option to view and understand the techniques - no more black-box analyses.
* Excellent product support with current Maintenance Agreement (see right).
* The best price/performance ratio in the world, with different pricing schemes for academic and industrial customers, plus options for floating licenses (see link to price list at top.)

Partial List of Tools in PLS\_Toolbox and Solo

## System Requirements

MATLAB® 7.x or higher on all platforms supported by MATLAB, including Windows, MacOS X, Unix and Linux. PLS\_Toolbox does not require any other MATLAB toolboxes.

## Download a demo

Download a [**fully functional 30-day demo**](http://download.eigenvector.com/). We suggest you use our introduction [**EigenGuides**](file:///C%3A%5CUsers%5CMegan%5CDocuments%5CEigenvector%5Csoftware%5Ceigenguide.php) to get started. Feel free to email your questions to **helpdesk@eigenvector.com**.

## Order a copy

When you are ready to order, [**order online.**](http://download.eigenvector.com/) See our[**pricelist**](file:///C%3A%5CUsers%5CMegan%5CDocuments%5CEigenvector%5Cpricelist.php) with price information for all of our products. For information on multi-client servers, site-licenses and OEM options, call us at 509.662.9213 or email **sales@eigenvector.com**.

**Product Support**

Eigenvector Research provides virtually unlimited user support for PLS\_Toolbox owners with current Maintenance Agreements. Send your questions tohelpdesk@eigenvector.com. Questions are almost always answered within 24 hours, and usually much faster during business hours (PST). We also offer extensive documentation in our Documentation Wiki, an FAQ page, and free videos. For more information about those learning tools, see our technical support pagevide "major" updates, with new tools and options, in fall and spring. Minor updates are available for users to download in between major updates. See our Release Notes for details about the types of updates we focus on in support of cutting edge research.

Data Exploration and Pattern Recognition

Principal Components Analysis (PCA)

Parallel Factor Analysis (PARAFAC)

Multiway PCA

Tucker Models

Classification

SIMCA

k-nearest neighbors

PLS Discriminant Analysis

Support Vector Machine Classification

Clustering (HCA)

Linear and Non-Linear Regression

PLS, Principal Components Regression (PCR)

Multiple Linear Regression (MLR)

Classical Least Squares (CLS)

Support Vector Machine Regression

N-way PLS, Locally Weighted Regression

Polynomial PLS

Multivariate Curve Resolution (MCR)

Purity (compare to SIMPLSMA)

CODA\_DW

CompareLCMS

Advanced Customizable Order-Specific Preprocessing

Centering

Scaling

Smoothing

Derivatizing

Transformations

Baselining

Instrument Standardization

Piece-wise Direct

Windowed Piecewise

OSC

Generalized Least Squares Preprocessing

Missing Data Support

SVD

NIPALS

Variable Selection

Genetic algorithms

IPLS

Selectivity

VIP

Other

Advanced Graphical Data Set Editing and Visualization Tools

Design of Experiment (DOE) tools for designing and analyzing experiments

Self-modeling Curve Resolution, Pure Variable Methods

Curve fitting and Distribution fitting and analysis tools