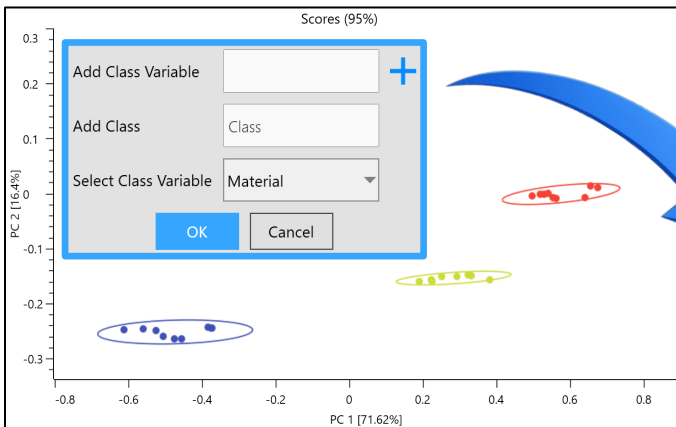


Seamless VEKTOR VAULT connectivity to VEKTOR DIREKTOR. Import data, preprocessing templates or models that are stored on the server.

Class Variables Automatically Map to the Data Table



Class Variables

Select Class Variable Material

4

<input checked="" type="checkbox"/> All	Class Name	Colour	<input type="checkbox"/> Remove	Count
<input checked="" type="checkbox"/>	Cellulose		<input type="checkbox"/>	18
<input checked="" type="checkbox"/>	Lactose		<input type="checkbox"/>	9
<input checked="" type="checkbox"/>	Stearic Acid		<input type="checkbox"/>	9
<input checked="" type="checkbox"/>	Talc		<input type="checkbox"/>	9

Read-Only Data Import

Properties[45x134] [READ ONLY]

Data Ranges

- Object Range
- X-Variable Range
- Y-Variable Range

Proprietary data formats are now imported as read-only, reinforcing VEKTOR DIREKTOR's focus on data integrity and security. Data must be cloned before modification, ensuring the original version remains unchanged.

New Range Trash Behaviour

Properties[45x134]

Data Ranges

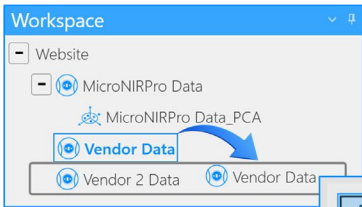
- Object Range
 - ALL
 - Cellulose
 - Talc
 - Stearic Acid
 - Stearate
 - Lactose
- X-Variable Range
 - ALL
 - TimeStamp
 - Spectra
 - Temperature(C)
 - Integration Time
 - Serial Number
- Y-Variable Range

Stearate

Name	Integration Time	
Range	128	
Unit	Millisecond (ms)	
Type	Undefined	

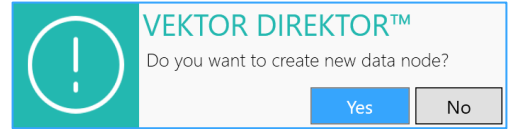
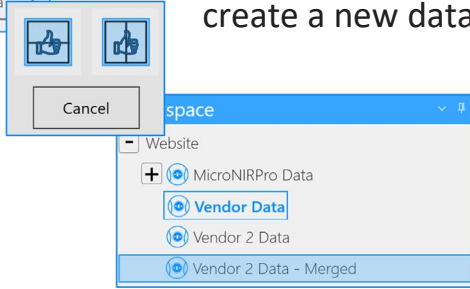
Only dragged ranges are deleted instead of all ticked ranges.

New Data Merge Functionality



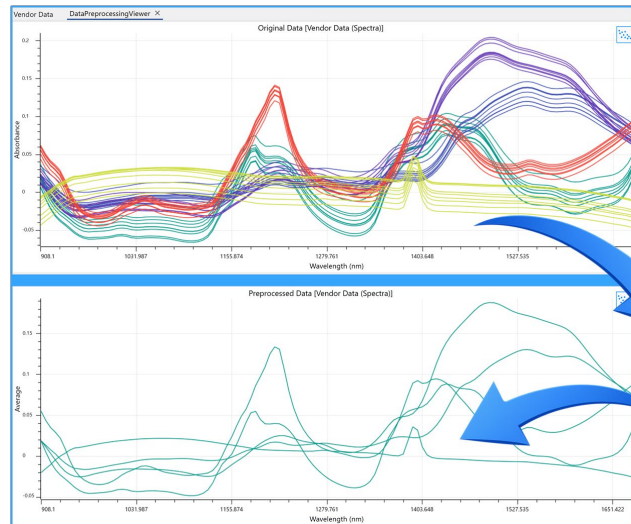
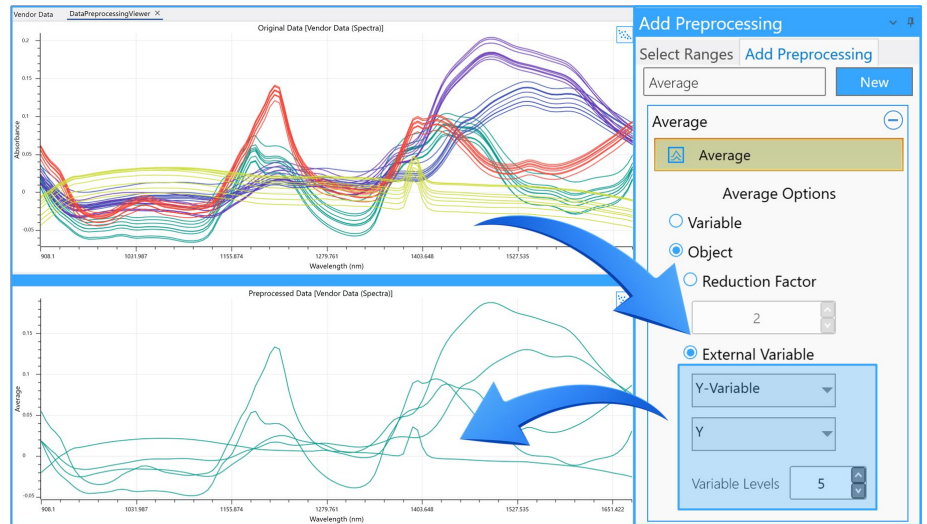
When read-only data is merged into a single table, the data integrity is maintained.

When adjustable data is merged, you have the option to create a new data node.

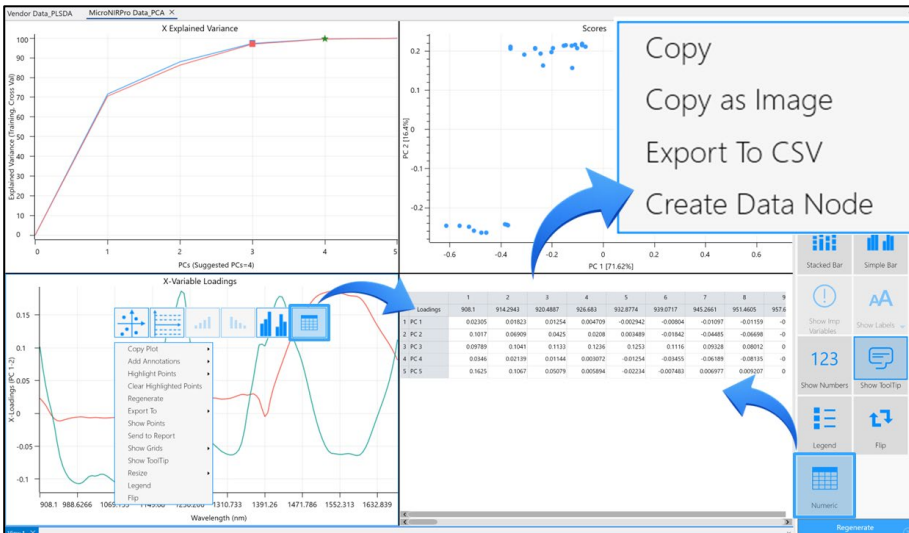


Updated AVERAGE Preprocessing

Use stored "Y" or "Class" variables to average data based on an external variable.

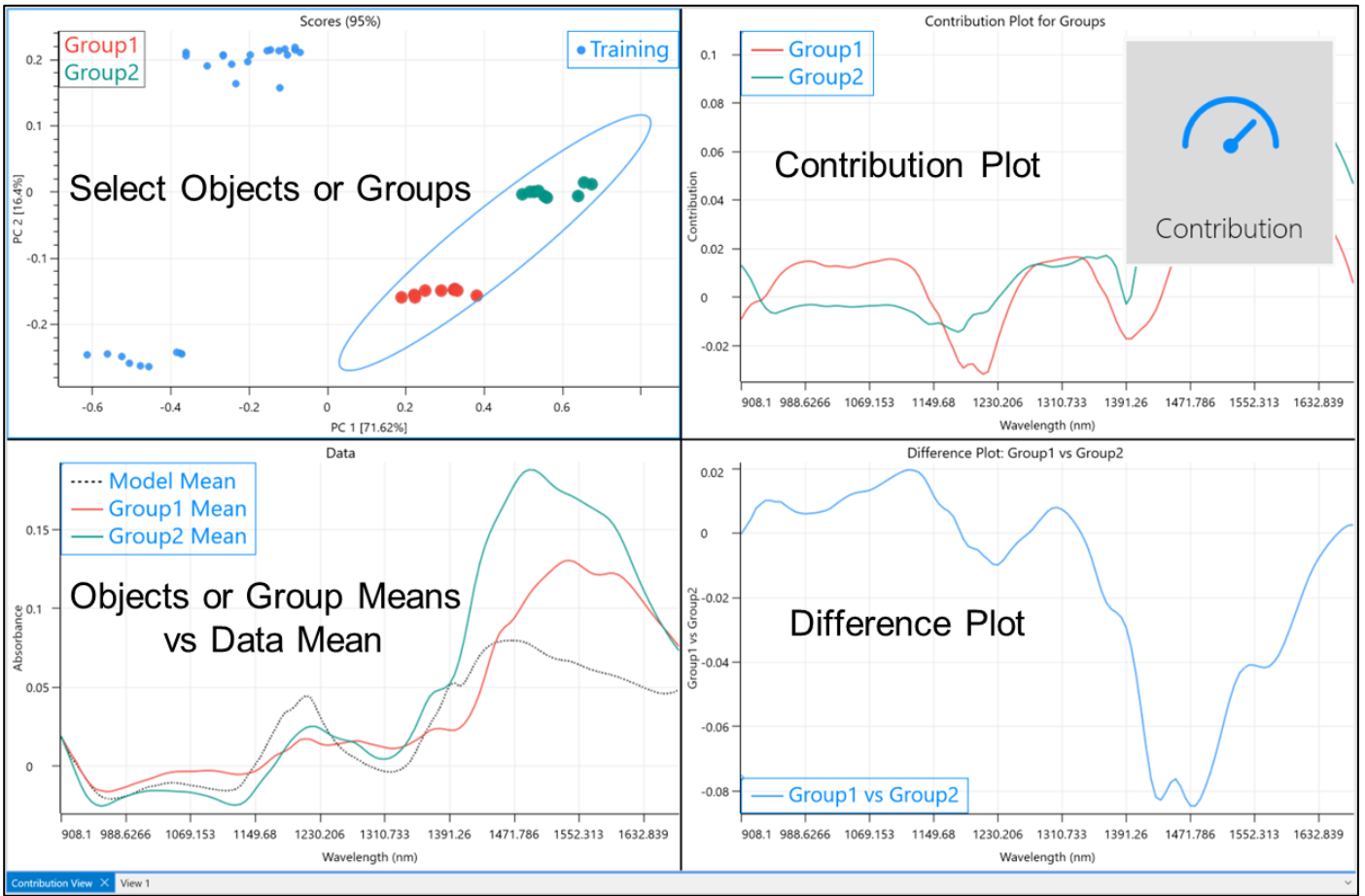


Export Numerical Data from All Plots



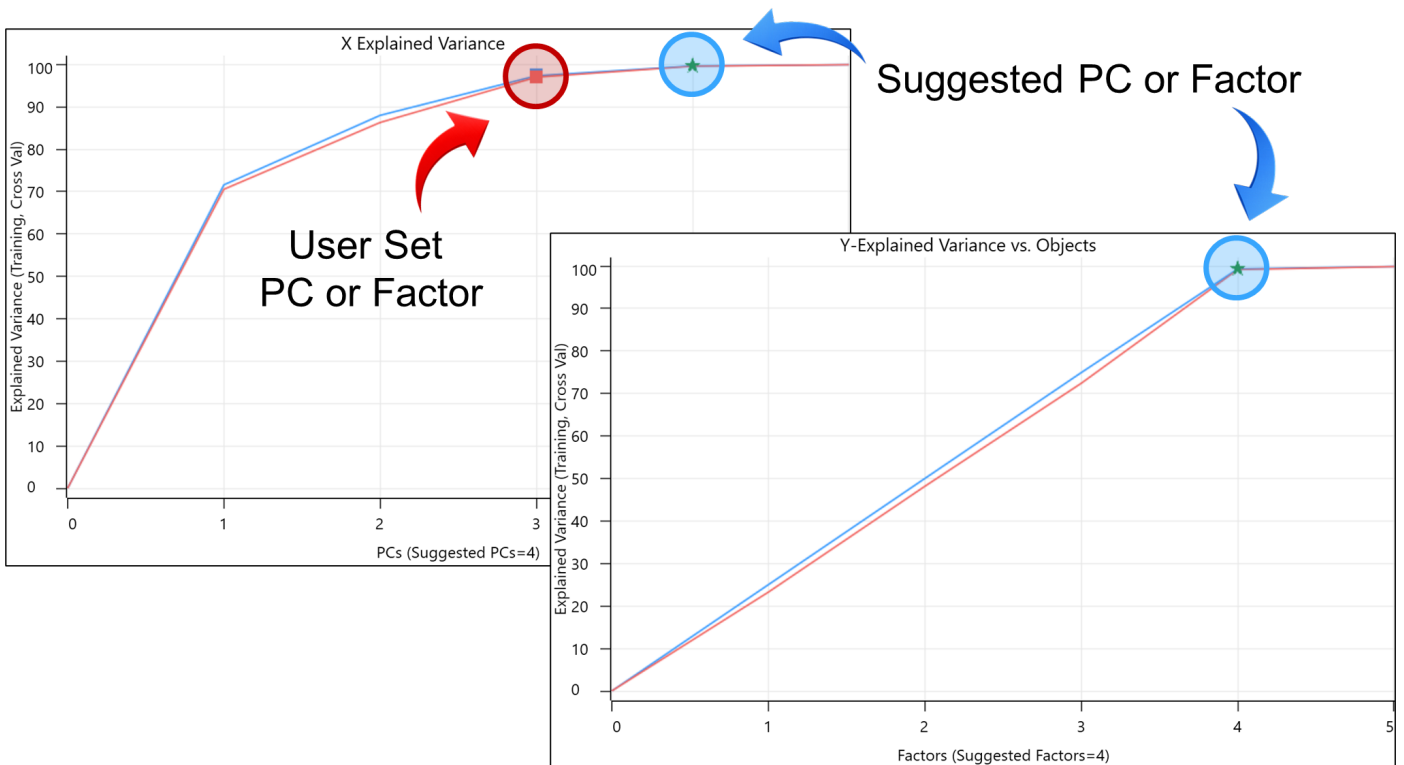
Easily convert any plot to a numerical view for export. A dedicated button allows switching between numerical and graphical views.

Expanded Contribution Plot

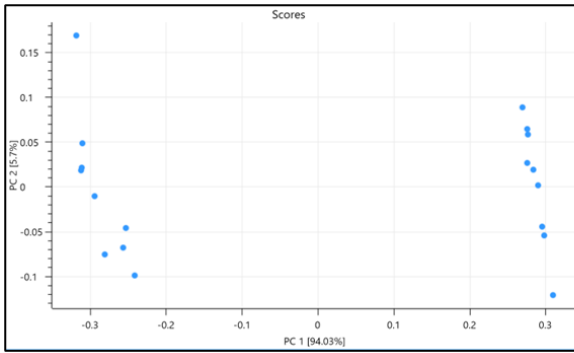


Graphically reveal which variables matter and what to ignore.

Suggested Principal Components & Factors



Automatic Sample Selection



Plot Options Scores Options

Class Variables

Sample Selection

Manual

Automatic

Number of Training Objects to Select

10

Number of Components/Factors to use

2

Select

Training Set	
1	RP140009_1_01062018
3	RP140009_3_01062018
4	SP150573_1_01062018
5	SP150573_2_01062018
6	SP150573_3_01062018

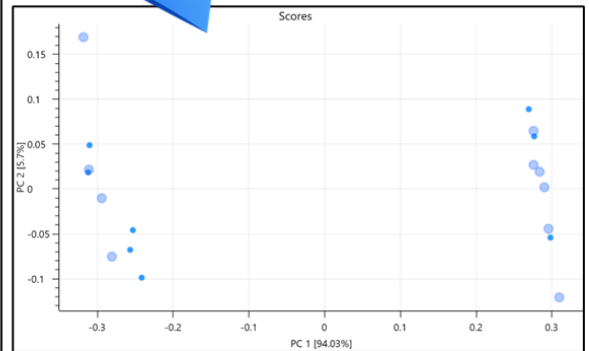
Reverse

Test Set

Save to Data Table

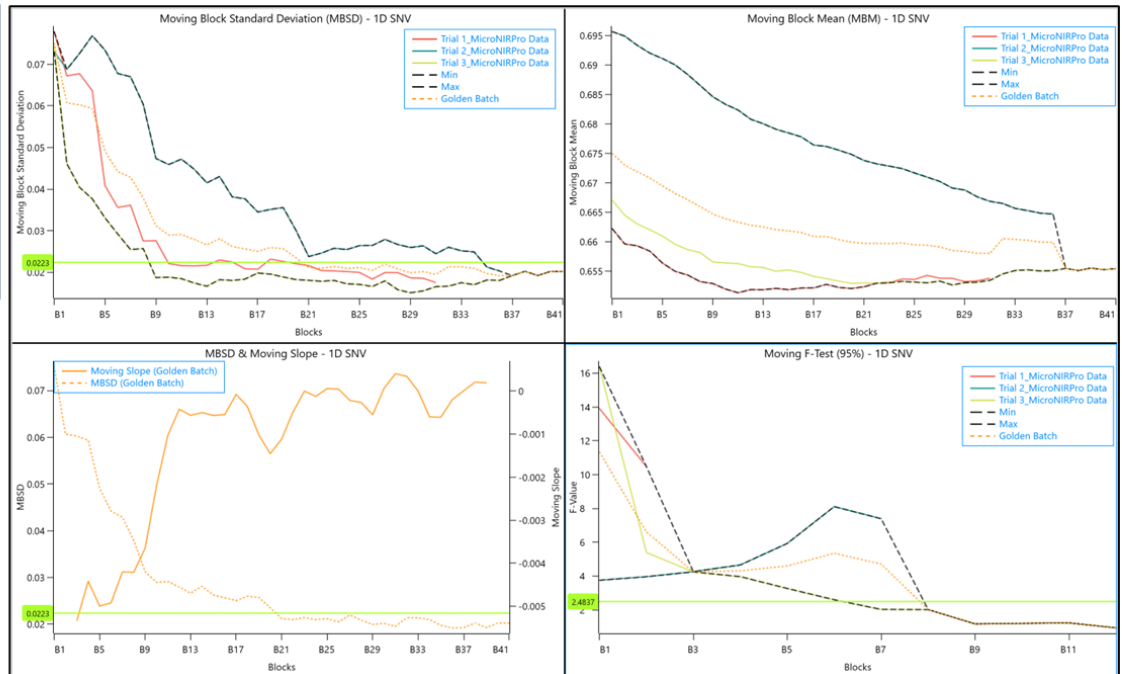
Regenerate

Our new algorithm automatically selects a random but equally weighted selection of objects.



Define which components or factors to use and how many objects to select.

Moving Block Methods



See how your process really behaves.

Moving Block Analysis reveals the magnitude, scale, significance, and dynamics of process variability – enabling confident threshold setting for robust real-time PAT monitoring in ProaXesS.

KomPYLeR Plugin

KomPYLeR: Python Method Builder

KomPYLeR_Model

Import Python Script Define Inputs and Outputs Assign Plots

Method Name: Principal Component Regression

Add Icon Image: C:\Users\supsj\Downloads\Image Feb 2, 2026, 09_58_09 AM.png [Browse]

Import Python Script: C:\Users\supsj\OneDrive - KAX Group\Documents\KAXG\Testing\VEKTOR DIREKTOR\Market Candidate\KomPYLeR\Principal Component Regression.py [Browse]

```
import numpy as np
# This script requires the scikit-learn library for PCA and Linear Regression.
from sklearn.decomposition import PCA
from sklearn.linear_model import LinearRegression

# Assuming script_base.py is available in the Python path
from script_base import ScriptBase

# Performs Principal Component Regression (PCR).
# This analysis script models a response matrix (Y) from a predictor
# matrix (X) by first performing PCA on X and then regressing Y against
# the resulting principal component scores.
class Script(ScriptBase):
    def get_script_info(self):
        return {
            'display_name': 'Principal Component Regression (PCR)',
            'script_type': 'analysis',
            'input_matrices': [
                {
                    'display_name': 'Predictor Matrix (X)',
                    'internal_name': 'x_matrix',
                    'type': 'numeric',
                    'hint': 'The matrix of independent variables (e.g., spectra).'
                }
            ],
        }
```

KomPYLeR

Norris Gap

PCR

[Compile Method] [Close]

Custom Analytics. Native Experience. GMP-Ready.

Bring your own Python preprocessing and analysis methods seamlessly into VEKTOR DIREKTOR. QA-approved through VEKTOR VAULT, and ready for regulated environments.

Analysis (PCR)

Python_Model

Drag Data Here Preprocessing Python Options

Predictor Matrix (X) [Exp1ert 1]

Object Range: ALL

Variable Range: Spectra

Response Matrix (Y) [Quality Batch Cone]

Object Range: ALL

Variable Range: ALL

Univariate Methods

Exploratory Methods

PCA

Multivariate Regression

MLR PLSR

SVMR XGBOOST

PCR

Multivariate Classification

Original Data

Absorbance

Wavelength (nm)

Preprocessed Data

Norris Gap

Wavelength (nm)

Add Preprocessing

Select Ranges Add Preprocessing

PCR

Derivative Order: 2

Gap Size (g): 5

Segment Size (s): 5

Apply to Unselected Region

Region Marker

Interactive

Tabular

Update Register Save

Show Preprocessed Data

Create Data Create Python...