



**biotechne<sup>®</sup>**

# SCOUT 2.2.1 BETA OVERVIEW

# IMPROVEMENTS IMPLEMENTED IN SCOUT 2.2.1 BETA

## Major updates:

### Data visualization:

1. General improvement of Data Visualization module
2. 1-D scatter plot now a violin plot
3. General enumeration table shows all (positive/negative) paired combinations of peak tags

### Peak tagging:

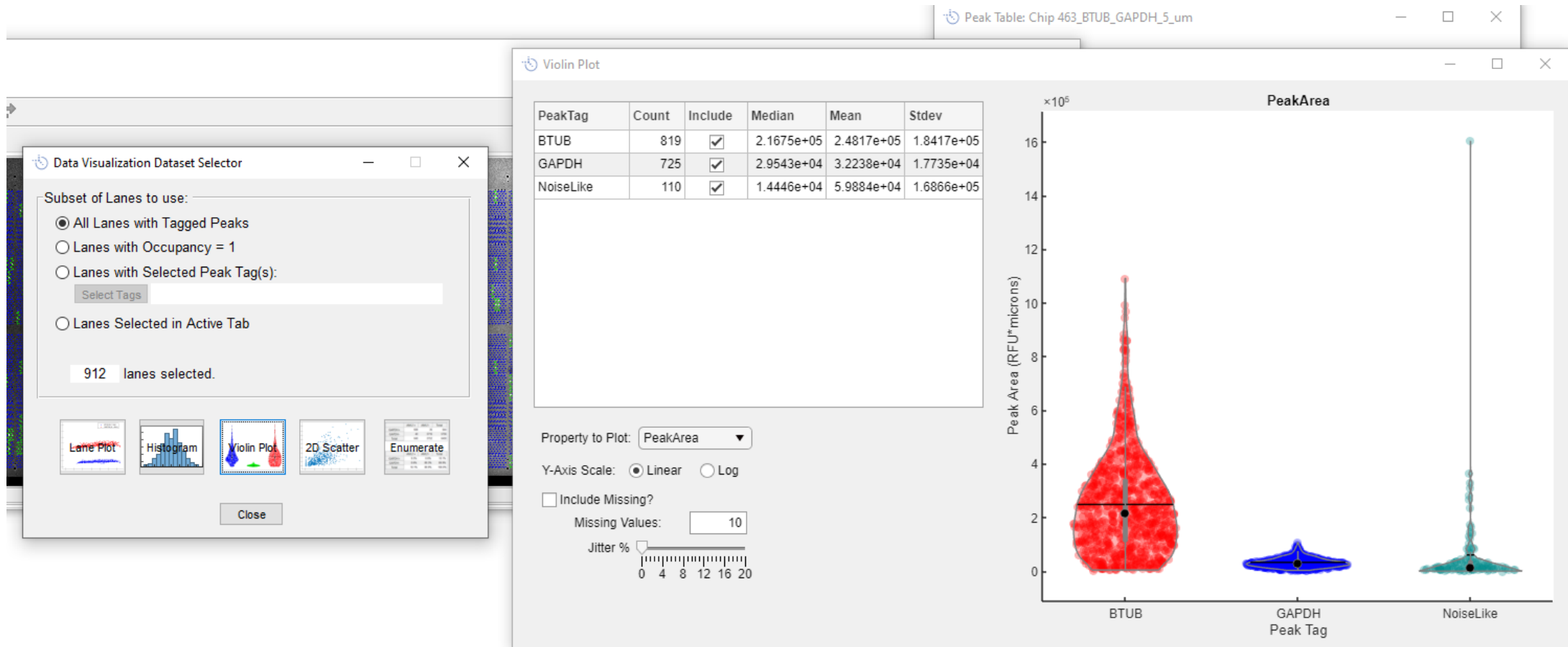
1. Lanes with only "Noiselike" peaks are automatically labeled as empty (blue outline) on the lane image
2. Automatic updating between lane image and peak table
3. Undo / redo selection operations

## Other updates:

- Auto registration is faster and works for more images
- Selected state available in exported CSV
- Image classification works better with a wider range of protein spot sizes, brightness, and lane width
- Simplified/fixed peak number, scan number export columns in exported CSV
- New large file format supports zcp files sizes >2 GB (needed for large number of tabs or high resolution images)
- Prevents excessively large log files
- After Autotag has been run once, newly found peaks (e.g., peaks detected after settings are adjusted) will automatically be tagged with the most appropriate existing tag
- Conduct a Scout chip analysis using an analysis protocol file which specifies images to use and analysis settings

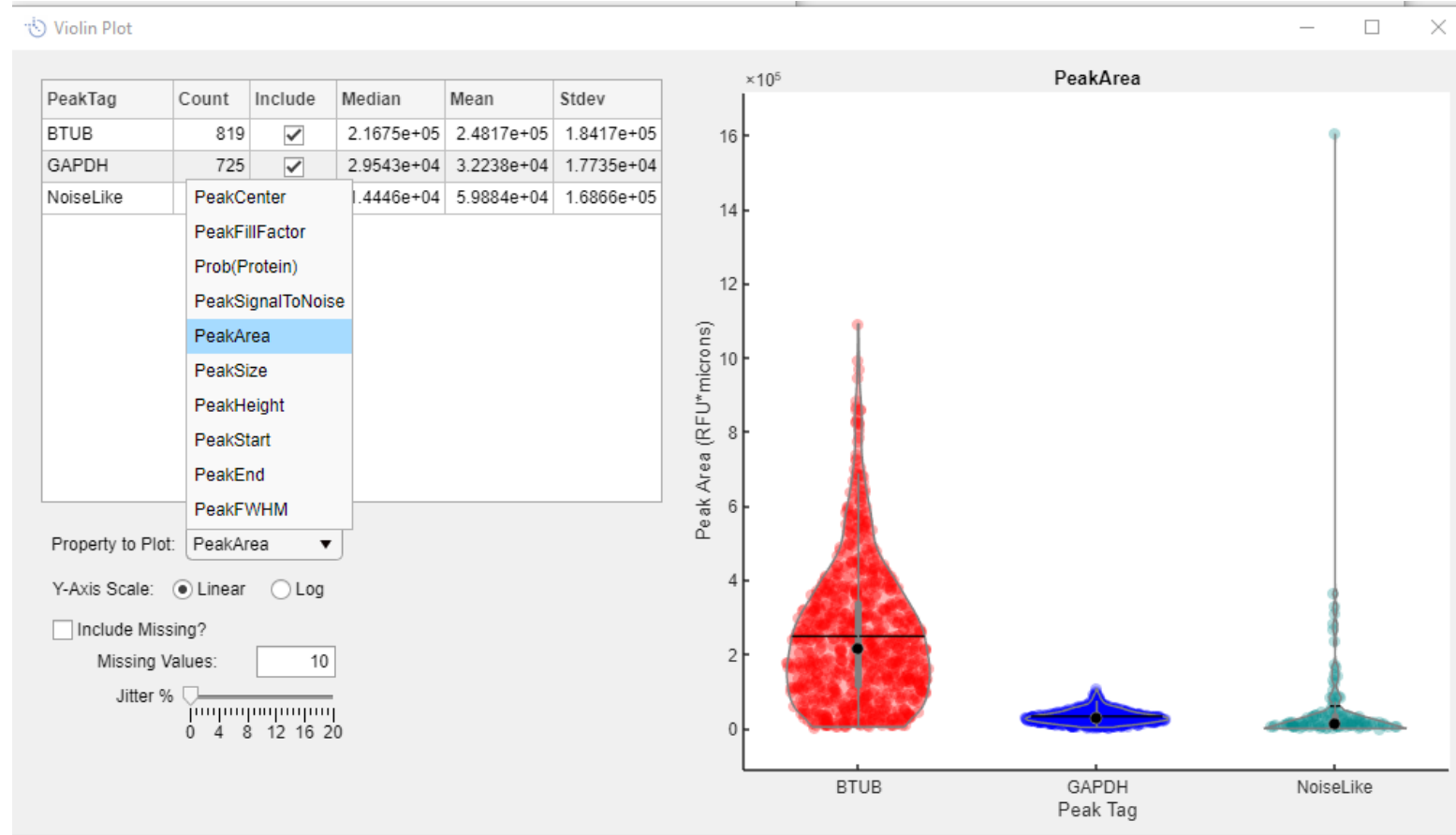
# 1D SCATTERPLOT = VIOLIN PLOT WITH MORE FLEXIBILITY

- Can easily toggle on and off different peak tags in visualization
- Gives count of target-positive cells for each target



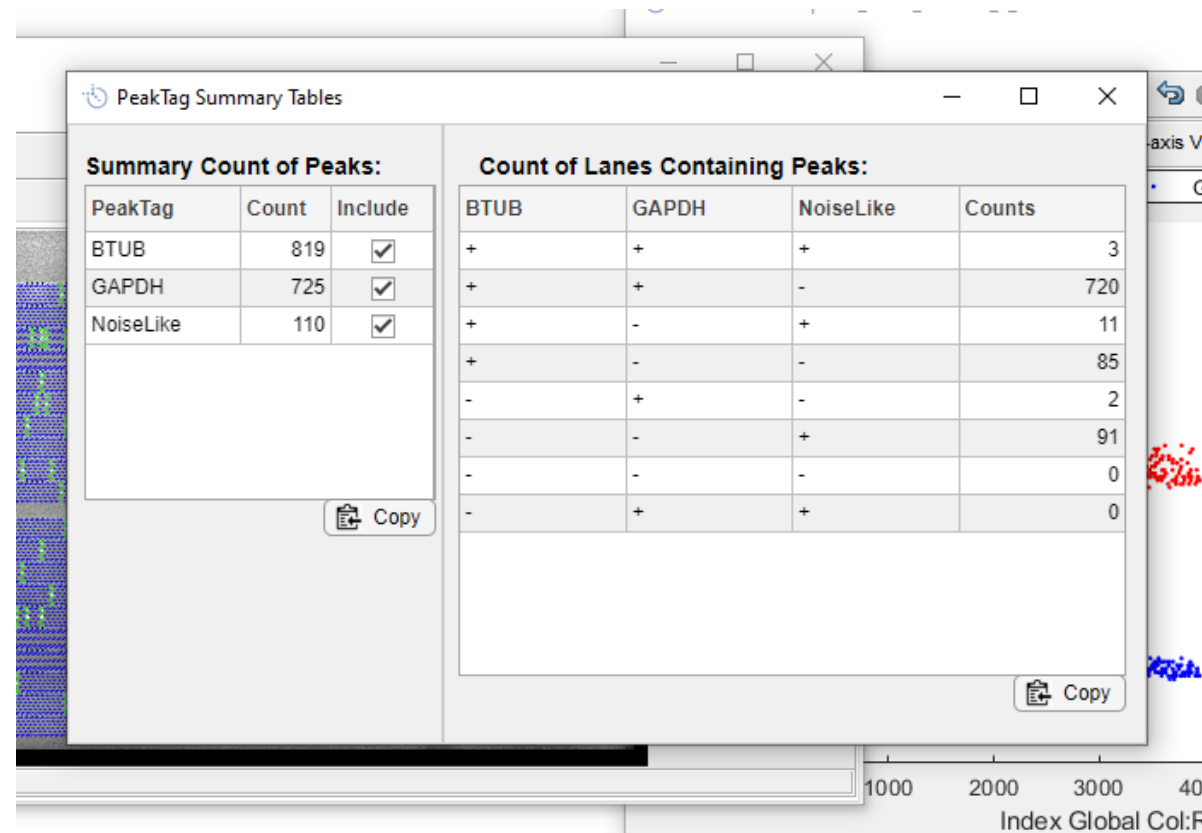
# 1D SCATTERPLOT = VIOLIN PLOT WITH MORE FLEXIBILITY

- Able to adjust what you would like to plot on y-axis



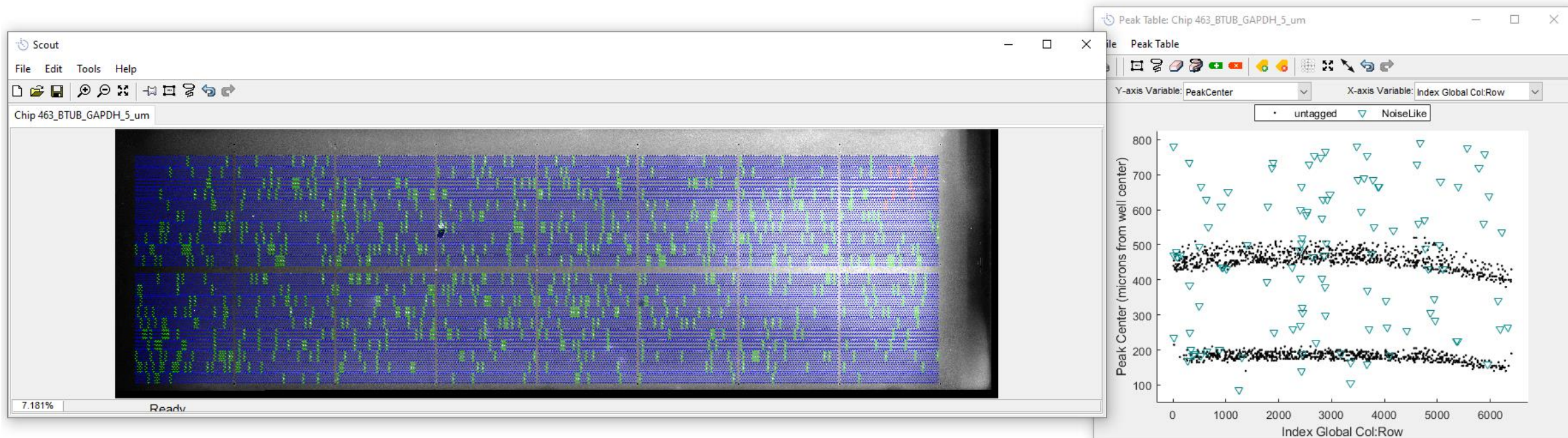
# NEW ENUMERATION TABLE HAS MORE USER CONTROL AND FLEXIBILITY

- Now shows all (positive/negative) paired combinations of peak tags
- Simplifies analysis to determine cell populations that are positive for various target combinations



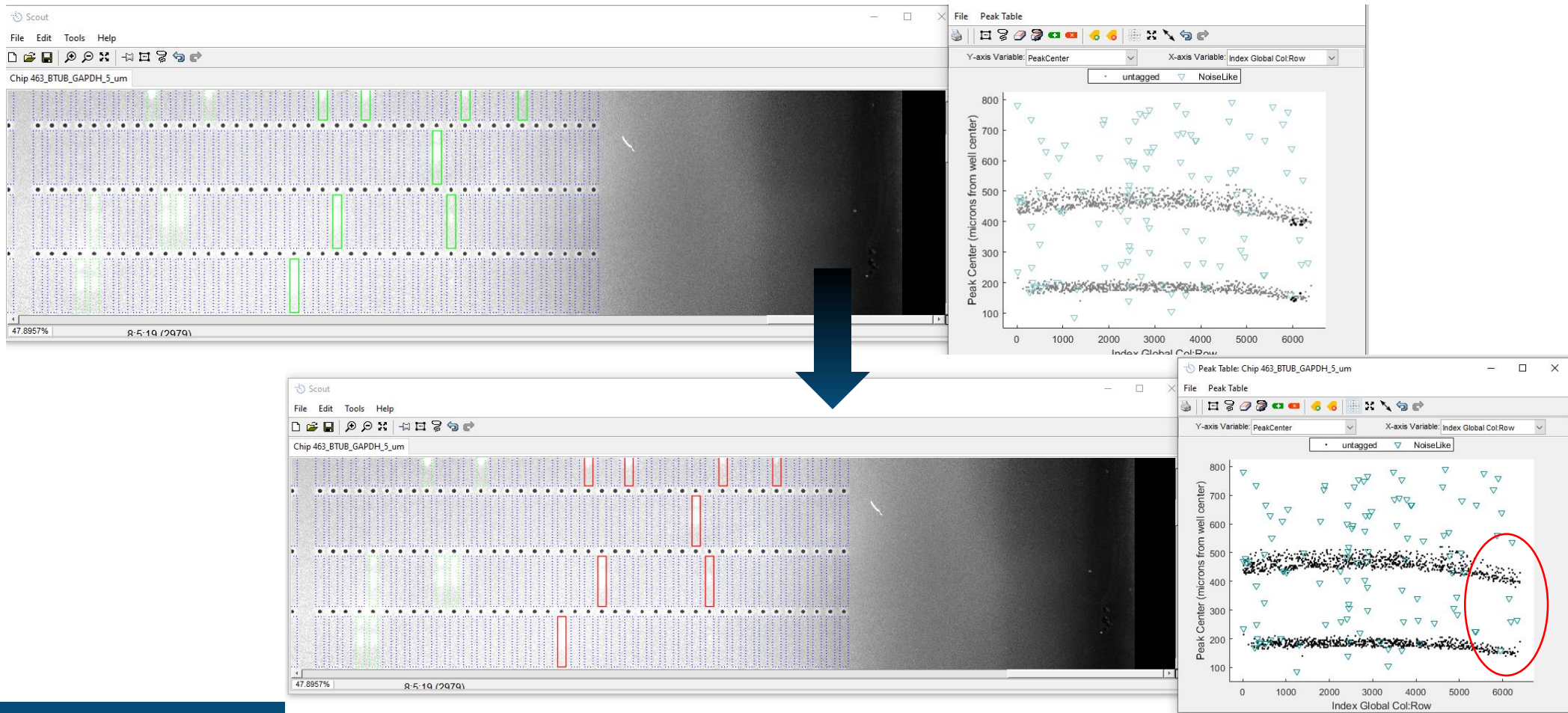
# AUTODETECTED “NOISELIKE” LANES SHOW UP AS BLUE (EMPTY) ON IMAGE

- Provides more confidence in data quality from the outset



# AUTOMATIC UPDATING BETWEEN LANE VIEW AND PEAK TABLE

- After inspecting chip image, can select false-positive lanes that autoselect as containing a peak & reject
- Will be automatically marked as rejected and removed from peak table



# UNDO BUTTON FOR PEAK SELECTION

- Useful if doing complicated peak selection operations or manual peak selection in the image



# IMPROVED DATA VISUALIZATION MODULE

- More intuitive UI
- Ability to select lanes from the analysis results

