

RAYN Release Notes

RAYN Vision System Analytics Software

Product Line: RAYN Vision System
Description: Analytics Software Version 1.4.0
Effective Date: 2025-06-02

About This Release

RAYN Vision System Analytics software v1.4.0 is released with new features, improvements, and bug fixes, including:

- Various UI improvements, including light-dark color themes, plotting engine updates, and new UI elements.
- Magnify option for images in the Masking and Preview windows.
- RGB background and dynamic min-max limits for false color images.
- PlantCV updated to version 4.7.

RAYN Vision System (RVS) Analytics is an open-source application for the processing and analysis of multispectral image cubes from multiple sources, including RVS Cameras in the same network.

For any questions relating to the contents of this release or the behavior of this software, please contact RAYN Growing Systems via the information provided at the bottom of this page.

Compatibility

RAYN Vision System Analytics can be installed on computers running:

- Windows® 10 or 11.
- macOS® 11 (Big Sur) or later.

The software can also be used in conjunction with the RAYN Vision System Camera (RVS-C).

Issues Corrected in v1.4.0

RAYNCAMANA-409	Installer: Mac: Solve problem with vl_convert missing
RAYNCAMANA-408	Play/Stop button are hard to read in Dark mode
RAYNCAMANA-407	Spinbox does not reset to default if "Default" is pressed
RAYNCAMANA-406	Update to the latest plantCV Version
RAYNCAMANA-405	Log files: Change file name to show a sortable date (YMD)
RAYNCAMANA-404	Options dialog: Disable the X top right icon like in the other dialogs
RAYNCAMANA-402	Chart/Image result view: Should scale to fit the current window size
RAYNCAMANA-386	Magnifying glass in Masking & Preview Dialog
RAYNCAMANA-384	Access information from previous analysis runs
RAYNCAMANA-383	Create dynamic min/max limits for false color images
RAYNCAMANA-379	Chart: Add side-view chart options
RAYNCAMANA-369	Chart: rgb image background in false color images
RAYNCAMANA-360	MQTT: Allow advanced settings
RAYNCAMANA-352	Chart: replace plotly with altair/vega-lite
RAYNCAMANA-339	UI: Script Options - Line width: optimize user handling
RAYNCAMANA-57	UI: Style/themes

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Availability

You may obtain this software release via our website, rayn.ag.

Installation Instructions

To install or update RVS Analytics on a compatible computer, you will need to acquire the software from our website, rayn.ag. Follow the instructions below to install or update the software.

1. If the installer has been provided as a zipped archive, unzip the file.
2. Double-click the installer. The RAYN Setup window will appear.
 - a. macOS will block the installer when first opened. Permit the installation by opening **System Settings > Privacy & Security**, scrolling down to **Security**, and selecting **Open**. Select **Open Anyway** in the pop-up window and enter your password.
3. Follow the Setup prompts to begin software installation.
4. Click **Finish** when prompted. The software is now ready to use on your computer.

As installations of RAYN Vision System Analytics Software will not uninstall or overwrite older versions, it is possible to have multiple versions installed. You may uninstall versions as desired.

Resources

For more information about RVS Analytics software, see the *RAYN Vision System Analytics User Manual*. The *RAYN Vision System Camera Setup Guide* and *RAYN Vision System Camera Firmware Release Notes* are also available for the RVS Camera, a compact, multispectral research tool.

User documentation and technical support are available via our website, rayn.ag, or by contacting your RAYN Growing Systems provider.

RVS Analytics is open-source software. Visit our Github page, github.com/rayngrowingsystems/rvs_analytics, to download the latest code and submit feature requests to the repository.

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Release History

v1.3.0

Effective 2025-05-05

- Multiple indices can be used in an analysis.
- Mask overlay can be displayed as an image.
- Images can be cropped for easier ROI configuration.

v1.2.0

Effective 2025-02-19

- More shape parameters and mean reflectance of wavelength bands in results.
- New ellipse and custom polygon shapes for ROIs.
- Exposed ROI object identification modes.
- PlantCV updated to version 4.6.
- Added GLI and EGI indices.
- Option to rotate images.
- macOS compatibility.

v1.0.0

Effective 2024-10-01

- Initial release.