WormLab® software

Release Notes

Version 2026.1.1 (March 2026)

NEW FEATURES AND ENHANCEMENTS

Train your own custom detectors using animal-pose estimation tools

The new Train workflow enables you to create and refine AI detectors that use computer vision to identify and track objects in videos using animal-pose estimation tools.

- Train custom object detectors specific to your unique research needs with species-agnostic, user-friendly tools.
- Maintain object identity over time, even when animals overlap, or exhibit complex motion or occlusion.
- Your custom detectors can be used alongside the WormLab worm-tracking engine, enabling you to track multiple organisms or objects simultaneously and conduct more complex experiments, even multi-species detection and tracking.

New Analysis Tool: Object Colocalization

Detect interactions or events between different tracked objects.

- Measure spatial and temporal overlap between any detected object types.
- Identify biologically meaningful events based on object proximity. For example, detect egg-laying events by identifying when a worm overlaps with the start of a new egg track.
- Colocalization results integrate with existing analysis, filtering, and visualization tools, making it easier to extract behavioral events from complex datasets.

New data acquisition tool: Segmented recording with user-defined intervals

Ideal for long experiments where continuous recording is unnecessary or where periodic sampling is preferred.

- Automatically capture recordings in repeating segments, separated by defined time intervals.
- Ideal for long experiments where continuous recording is unnecessary or where periodic sampling is preferred.
- With segmented recording, you define the segment duration, the interval between recording segments, and the total experiment duration.

ISSUES RESOLVED

Fixed an occasional stability issue that occurred when displaying swimming analysis results.

Running multiple instances of WormLab simultaneously is now prevented to improve system stability.

Resolved discrepancies between *Direction Analysis* export files and table values.

Fixed an issue in which *Angle Range* restriction in *Direction Analysis* affected plots but not tables.

Added improved feedback when connection to the QLM license server times out, enabling extended wait times.

Corrected label-property reporting for circle and rectangle annotations.

Added a prompt to use the legacy DLC server if QLM activation fails.

Fixed an issue where *Track Summary by Label* could include portions of tracks outside the labeled region.

Mouse pointer coordinates are now displayed in the status bar.

Resolved a rare dataset corruption issue that occurred when deleting individual worms after tracking.

Fixed a rare crash that occurred during *Moving Average* and *Smoothed Speed* analyses.