

## Tobii Pro Lab Release Notes

### Release notes 1.118 2019-06-19

#### IMPORTANT NOTICE!

Glasses projects created or opened in this version of Tobii Pro Lab will not be possible to open in older versions than 1.111.

Screen based projects using web stimulus will not be possible to open in older versions than 1.118.

Other projects created or opened in this version of Tobii Pro Lab will not be possible to open in older versions than 1.108.

Always back up your project files before updating!

#### New:

- Web stimulus is now available for Screen based projects. Recordings are made using an inbuilt browser based on Chromium. Each individual web stimuli will launch the URL specified in the properties panel.
- Web navigation Times of Interest will allow you to aggregate data from all recordings for all URL changes.
- Screenshots are captured for each visited URL.
- Gaze on a fixed element will automatically be placed on the right place in the visualization and give correct data for metrics and export.
- AOI Click count metrics is added for all stimuli types.
- Manual mapping is now enabled for Screenbased projects for easy way of adding snapshots such as screenshots or a schematic picture of the web page and map gaze points as attention.
- Visual feedback to indicate clicks (blue circle) are shown in recordings with web stimulus or screen recording on the timeline.
- Calibration and Validation process has been updated with Precision RMS value, for new recordings, as well as showing average data loss (%).

Note: The recommended operating system for Tobii Pro Lab is Windows 10 Pro. Version 1.116 and later will not run on Windows 8. This release will run on Windows 8.1. From this release in June 2019, we will stop testing and developing specifically for Windows 7. Although Tobii Pro Lab may still continue to work on this platform, it is only a matter of time until some functionality will stop working as expected.

### Release notes 1.116 2019-05-29

#### IMPORTANT NOTICE!

Glasses projects created or opened in this version of Tobii Pro Lab will not be possible to open in older versions than 1.116.

Other projects created or opened in this version of Tobii Pro Lab will not be possible to open in older versions than 1.108.

This version contains an update of the Microsoft .NET framework. This may result in a longer update process and might require a restart of your computer. Please make sure your work is saved.

Always backup your project files before updating!

#### New:

- Saccade metrics are now enabled in the Metrics Export. These allow you to analyze the amplitude, velocity and direction of saccades. Saccade metrics can either be general to the interval or specific.
- Example:
  - When general, you will get the average peak velocity of the saccade.
  - When specific, you will get the duration of the interval until the start of the saccade leading into an area of interest.
- To make it easier to validate the calibration results we have now added an automatic validation step to the existing calibration procedure. It starts seamlessly after calibration and will give you more predictive calibration results. It will be turned on by default and the calibration validation values will not be identical to the calibration values. To turn off the validation, click the Calibration element under the Design tab and switch off validation in the properties panel.
- Manual mapping performance in Glasses recordings has been improved, resulting in shorter delays between placing a fixation on the snapshot until Lab moves to the next fixation.
- For screen recordings, Tobii Pro Lab is now showing where the participant clicked during playback in Replay.

Note: The recommended operating system for Tobii Pro Lab is Windows 10 Pro. Version 1.116 will not run on Windows 8. If you are running Windows 8 you should upgrade to Windows 8.1 or 10 Pro. From June 2019, we will stop testing and developing specifically for Windows 7. Although Tobii Pro Lab may still continue to work on this platform, it is a matter of time until some functionality will stop working as expected.

## Release notes 1.111 2019-03-13

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.108. Always backup your project files before updating!

### New

- With the new External Presenter project type you can have another software, in this version E-Prime, present the stimuli and record the gazedata with Tobii Pro Lab. The recordings can be processed in Pro Lab using the normal analysis tools.
- The data export can now be saved in the Tobii Pro Lab Output (.ploff) format. This is a text-based format intended for other software. Its main features are being version-numbered, rich in meta-data, and no unnecessary repetition in the data to keep file sizes down.

## Release notes 1.110 2019-02-27

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.108. Always backup your project files before updating!

### New

- You can now change the name of recordings in Project Overview, either by pressing F2 or right click and select Rename Recording in context menu.
- The Calibration target transitions have been updated. Transition between the calibration points are now faster and their speed is non-linear.
- Performance enhancements in Metrics Export reduce the processing time considerably. This will be most noticeable in large projects.
- A button for skipping to the next stimulus is added to the moderator screen. You can still skip to the next stimulus with F10.
- A number of small UI updates have been made to improve the workflow when working with Group and Screen Recording elements.
- Fixed an issue when migrating projects from Pro Lab versions older than 1.89 to more recent versions.

## Release notes 1.108 2019-01-30

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.108. Always backup your project files before updating!

### New

- In this version you can use repetition and randomization in your experiment by adding the new Group element. Add stimuli to a group and specify what action you want the group to have. Depending on selected action the number of repetitions or type of randomization can also be set. You can choose to show all elements inside a group or pick samples. By placing groups within other groups you can combine different actions to build a more complex experiment structure.
- Please keep in mind that when editing a copy of a stimulus the changes will be applied to the original as well. This is not a new behavior and it was introduced to speed up the workflow when using a stimulus in multiple places. Groups does not have this behavior and editing a copy does not affect the original.
- You can also create and assign variables to individual stimuli and groups. The variables will show up as columns in the Interval based metrics export. This is a great way of indicating what experimental condition a particular stimulus was part of.
- With the Screen Recording stimulus introduced in this version you can record what is shown on the presentation screen. To get the best experience a dual screen setup is recommended.

Note that when you save frames as media to create Times of Interests, or create TOI with frame, you must add your AOIs on the media and not on the recording video.

- The calculation of eye movements included in Times of Interests has been changed. Previously short fragments of fixations (less than half a sampling interval) in the beginning or end of a Time of Interest interval were discarded. In Pro Lab 1.108 these fragments will be included. This could in rare cases affect data that relies on eye movements filtered by a Time of Interest, such as fixation and AOI based metrics. Detailed information can be found in Appendix H in the user manual.
- For recordings with gaps eye movement calculation has been improved. Starting with Pro Lab 1.108 we take the sampling frequency into account when evaluating if a gap caused by missing sensor data should be bridged to create a single eye movement or split into smaller ones. This was done to avoid incorrect classification near the gaps. Gaps can occur in glasses recordings with pauses, glasses recordings longer than ~50 minutes or screen based recordings where eye tracker connectivity problems occurred.

## Release notes 1.102 2018-11-07

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.102

### New

- Support for Tobii Pro Nano - the smallest and lightest research-grade eye tracker from Tobii Pro. Supports Win 10 (recommended), Win 8, and Win 7.
- The user interface of the Data export tab has been redesigned to ease selection. The result: fewer boxes to check and a new expandable section that details your exported data. We have also added a setting for the precision of Recording time stamps (milliseconds/microseconds). The contents of the exported data remain unchanged, though some columns have new names.

## Release notes 1.98 2018-09-26

### New

- You can now add offset to the start and stop events of a Custom Time of Interest. You use it to create a Time of Interest based on a time period before or after a single event. You can also focus on a specific time period between two events by adding offset to the start and stop events.
- Information about a Time of Interest interval is now displayed when you hover the mouse cursor over a Time of Interest interval in the recording visualization

## Release notes 1.95 2018-08-23

### New

- You can now add multiple start and stop events to Custom Times of Interest. This makes it possible to include data from different events in the same Custom Time of Interest.
- With the new VR 360 project type, you can now record and analyze eye tracking data for 360-degree images and videos in VR. (Tobii Pro VR Integration headset required)

## Release notes 1.92 2018-07-04

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.89

### New

- Visualize Time of Interest interval coverage when replaying a recording. This makes it easier to see when a Time of Interest is active and what data will be included in the analysis.
- Fixed a bug in fixation filters that applied to the "Moving Average" noise reduction component. This bug affected analysis results when using a custom I-VT Fixation Filter with Moving Average noise reduction and was introduced in 1.86
- Updated layout of the Design module to make it easier to work with and switch between timelines. A Timeline selector is now visible in the tools panel on the right-hand side.

### Privacy update:

We recognize that privacy is an important issue for our research customers and therefore we want to be transparent regarding what kind of information that is shared with us. The collected usage data is used to improve product features but the application does not store or collect any recording or project data. Please have a look at our Privacy Policy ( <https://www.tobii.com/group/privacy-policy/> ) to learn more.

## Release notes 1.89 2018-05-23

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.89

### New

- Panels for editing participant information and Participant variables are now available in the Project overview for all project types
- It is now possible to edit participant name and delete participants. If you delete a participant all recordings made with that participant will also be deleted.
- Added Glance metrics, Total duration, Average duration, Minimum duration and Maximum duration. Glance in Tobii Pro lab includes all data from the end of the last fixation outside the AOI to the end of the last fixation inside the AOI
- Reduced memory consumption when processing large volumes of eye tracking data

## Release notes 1.86 2018-04-11

IMPORTANT NOTICE! Projects created or opened in this version of Tobii Pro Lab cannot be opened in older versions than 1.86

### New

- You can now export data in a UTF-8 encoded tab-separated (.tsv) file.
- Metrics by AOI are now exported for all TOI types.
- Participant variables are now shown in the metrics export.
- A new collection of metrics, interval-based metrics, is now available to better support quantitative researchers working with trials.
- Interval-based metrics are exported in a UTF-8 encoded tab-separated (.tsv) file fully compatible with R and SPSS.
- Reduced memory consumption and shorter loading times. Most noticeable in replay and Data and Metric export.

## Release notes 1.83 2018-03-07

### New

- The User Manual and the Learn and Support sections of the Tobii Pro website can now be accessed from the Help and Learn section in the main menu or from the top menu.
- Now supports up to 45 minutes recording length performed at 1200Hz.
- Added possibility to show the AOI Tag names on the AOIs. You can select to show or hide them.

## Release notes 1.79 2018-01-17

### New

- Added possibility to add participant variables to your data. It can be used to filter the data when generating visualizations, calculating eye tracking metrics and compare the behaviour of different participant groups. Variable values are also included in the data export files for further statistical processing.
- Added possibility to choose Scene camera resolution for recordings. This will use less internal resources and can be useful on low end PCs. It will also reduce the file size on long recordings.
- **IMPORTANT NOTICE!** Glasses 2 projects created or opened in this version will not be possible to open in older versions than 1.70 of Tobii Pro Lab.

## Release notes 1.76 2017-11-22

### New

- Added possibility to add tags to AOIs (both to static and to dynamic AOIs). It is now possible to aggregate data from AOIs across stimuli and recordings in Metrics and Data export. You can also create groups of related tags.
- Added possibility to show stimuli in moderator tool for screen based projects. The live view is optional and by default off in order to save internal resources on low end PCs.
- Updated tool for creating new participants and selecting existing participants
- Selection panel added to Show/Hide panels in Project Overview.

## Release notes 1.73 2017-10-11

### New

- Added possibility to show Gaze trail when replaying recordings. It is possible to adjust size (start and maximum) of fixation indicator as well as the duration they should be shown.
- Added "Tobii GSR filter" for GSR data in the Replay tab.
- Added detection and visualization of SCR (Skin Conductance Response) and ER-SCR (Event Related Skin Conductance Response) to the GSR data chart.
- Added GSR related Metrics; GSR average, ER-SCR amplitude and SCR count.
- Added SCR events in data export.
- Added possibility to Record sound in scene camera projects. Scene camera card in Record module now contain the option to "Use audio". This will make it possible to select any of the connected audio devices to include sound in the recording.

## Release notes 1.70 2017-08-30

**IMPORTANT NOTICE!** Glasses 2 projects created or opened in this version will not be possible to open in older version than 1.70 of Tobii Pro Lab

### New

- Added possibility to view and export calibration results from Project overview page. Both as an image and actual values in Excel format
- Added support for dynamic AOIs for Scene camera and Glasses 2 experiments, allowing eye tracking Metrics to be calculated for videos
- Added possibility to use a frame from recording as background for TOI and AOI analysis of Screen-based projects
- Added metric for First Fixation Duration.
- Updated calculation of the Visit Duration metrics in combination with TOI. Duration now includes time from TOI start to start of first fixation, provided that the previous fixation was in the same AOI. Same principle applies for TOI end and following fixation. If the fixation prior to TOI start/end is not in the same AOI calculation is the same as before.
- Fixed an issue Eye tracker is not identified properly after reconnecting

## Release notes 1.67 2017-07-25

### New

- Added support for visualising GSR raw data in the Replay tab
- Added possibility to create Scene Camera projects - record, analyse and export metrics and data
- Added possibility to import own videos as calibration stimuli
- Added metric for Time to First Event

## Release notes 1.64 2017-06-08

### New

- Added support for dynamic Stimuli in the AOI tool for screen based experiments, allowing eye tracking Metrics to be calculated for videos
- Added possibility to control the eye tracker calibration procedure from the moderator tool
- Added a filmstrip preview in the timeline in Replay to allow for quicker navigation to specific parts of the Recording
- Increased visibility of scroll bars in the whole application
- Improved performance of opening the Replay, Data Export and Metrics tabs in Projects with many Snapshots
- Fixed an issue where if coding data was imported twice from the same Project, Snapshot mapped data would not be imported
- Fixed an issue where Images that had rotation meta data in them were not rotated in the Snapshot mapping view in Replay
- Fixed an issue where Images that had rotation meta data in them could get incorrect AOI hit detection

## Release notes 1.61 2017-04-26

### New

- Added support for recording Shimmer GSR+ data for screen based Projects
- Added more detailed eye tracker calibration results, including estimated accuracy and precision
- Improved handling of eye trackers that were rebooted or disconnected while Tobii Pro Lab was running
- It is now possible to set if an experiment should use eye tracking or not in the experiment design

## Release notes 1.58 2017-03-23

### New

- Added Experiment design and Stimuli presentation for images and videos
- Added possibility to calibrate and record eye tracking data for Tobii Pro's whole range of eye trackers
- Added possibility to send TTL Events through the parallel port with millisecond precision on Stimulus onset
- Added possibility to record TTL Events sent to the Tobii Pro TX300 or Spectrum eye trackers
- Added a moderator tool that allows you to monitor the experiment during recording
- The video quality of the video export has been somewhat improved
- Fixed an issue that could cause crashes in the Visualizations tab
- Fixed a problem that would cause the Visualizations and Data Export tabs to be very slow in Projects with many Images
- Fixed a problem that would cause Replay to use a lot of RAM
- Fixed a crash that could occur when the computer had no sound device enabled
- Fixed an issue that prevented scrolling using a mouse wheel in the list of AOIs in the AOI tool

**IMPORTANT:** The way that relative duration heatmaps are calculated has been changed in this release. In previous versions, the heatmap for each Recording was calculated as relative to the Recording duration. It is now calculated as relative to the total fixation duration in that Recording within the given TOI. Please refer to the Tobii Pro Lab manual for more details.

## Release notes 1.55 2017-01-31

### New

- Greatly improved performance of working with gaze data everywhere in the application
- Improved Project Overview with access to Custom Event Types and Snapshots
- Improved the styling of the Gaze Data charts in Replay in order to visualize the data more precisely
- Improved memory consumption for Data Export in Projects with a lot of Snapshots
- Recordings in Project Overview and Analyze menu are now sorted by date, with the latest Recording first
- Fixed a problem where the Recording and Interval selection in visualizations would be lost when switching tabs
- Fixed a problem where Real-World Mapping could hang on certain computers
- Stability improvements

## Release notes 1.49 2016-11-10

- Tobii Pro Glasses Analyzer is now an Edition in Tobii Pro Lab!
- The speed of Real-World Mapping has been improved by up to 50 % for quad core computers and up to 10 % on dual core computers
- Stability improvements

## Release notes 1.46 2016-09-27

IMPORTANT NOTICE: Projects opened in this version of the software are not possible to work with in older versions. Backup your data before updating!

- The possibility to select data for export has been expanded, and it is now also possible to select data based on Areas of Interest and Event Types in Metrics, and on Times of Interest and Areas of Interest in Data Export.
- Sync events Recorded with the Tobii Pro Glasses 2 will show up as Events in the Analyzer, and can be used for custom TOIs.
- Added millisecond precision to the Recording start time in Data Export.
- Added the possibility to add Events that do not have a keyboard shortcut.
- Usability and stability improvements.

## Release notes 1.44 2016-08-17

- IMPORTANT NOTICE: Projects opened in this version of the software are not possible to work with in older versions. Backup your data before updating!
- To be able to export subsets of data, it is now possible to select data based on Recordings and Times of Interest in Metrics, and on Recordings in Data Export.
- Stability improvements.

## Release notes 1.41 2016-07-13

IMPORTANT NOTICE: Projects opened in this version of the software are not possible to work with in older versions. Backup your data before updating!

- Added Metrics for Events, to make it possible to analyze Event occurrences.
- Added Standard Deviation (N-1) and Variance to all Metrics.
- Improved usability by adding previews of Start and End point, as well as Snapshot, in the Time of Interest lists.
- Improved usability by making it possible to edit Custom Times of Interest in the Visualization tab.
- Added new columns in data export; Date of export, Recording resolution, Recording Fixation filter and Gaze event duration.
- Real World Mapping algorithm improvements.
- Stability and performance improvements.

## Release notes 1.36 2016-05-02

- Real World Mapping algorithm and stability improvements
- General stability improvements

## Release notes 1.34 2016-04-13

IMPORTANT NOTICE: Projects opened in this version of the software are not possible to work with in older versions. Backup your data

- before updating!
- Made it possible to segment data by creating custom Times of Interest.
- To be able to find interesting parts of Recordings, it is now possible to view logged Live Events created in Tobii Pro Glasses Controller.
- Improved usability by introducing a new quick access menu.
- Made it possible to resume Real-World Mapping by storing all queued automatic mapping tasks when closing the program.
- To be able to work more efficiently with large projects, performance improvements have been done.
- Stability improvements.

## Release notes 1.29 2016-01-27

- Added support for recordings done with Tobii Pro Glasses 2 sampling in 100Hz.
- Added the possibility to play videos from 1/16x to 4x real-time speed in Replay.
- Added the possibility to filter events in Events list.
- Bug fixes.

## Release notes 1.27 2015-12-22

- Improved Real-World Mapping feature.
- Bug fixes

## Release notes 1.25 2015-11-19

- Introducing the Real-World Mapping feature, which enables automatic gaze mapping.
- Added the possibility to zoom and pan in Replay.
- Zoom on timeline in Analyzer more easily by using a zoom-slider.
- Gaze position in 3D coordinates is now available in data export in Analyzer.
- Time format in Metrics (NOT in data export) is changed from hh.mm.ssss to seconds (ss.ss).

## Release notes 1.22 2015-10-07

- Added the possibility to turn off individual data series in the gaze data charts.
- Down sampled data now has a different look in the gaze data charts.
- Added horizontal ruler when hovering gaze data charts.
- Improved styling of data visualizations in Replay.
- Added loading indicators when opening a Project or a Replay tab.
- Added the possibility to delete a segment of manually mapped points.
- Stability improvements.



## Release notes 1.18 2015-08-12

IMPORTANT NOTICE: This release includes significant changes to how the Tobii I-VT fixation filter works on Snapshots. Please read the details at the end of the release notes carefully before starting to use this version!

- Tobii Pro Glasses Analyzer now fully supports Windows 10.
- The way Tobii I-VT (Fixation) calculates velocity on Snapshots has been changed.
- The old Tobii I-VT (Fixation) and Tobii I-VT filter presets have been renamed Tobii I-VT (Fixation) (old) and Tobii I-VT (old) and are only available in Projects created in version 1.16 or earlier.
- Added the "Tobii I-VT (Attention)" preset to available Fixation Filters. This preset has the Velocity Threshold set to 100 deg/s and will thus classify most VOR and Smooth Pursuit movements as Fixations. This preset may be used to reduce the time spent mapping gaze to
- Snapshots in studies where Fixation Metrics such as Count or Duration are not important.
- Added the possibility to create your own fixation filter settings based on the Tobii I-VT filter and apply them everywhere in the software.
- Added the possibility to create Raw filters with Median or Average Smoothing turned on.
- Added new visualization of eye movement types on the Timeline in Replay.
- Added new Snapshot coverage summary on the Timeline in Replay.
- Added the possibility to delete Snapshots.
- Added the possibility to rename Snapshots.
- Added separate Metrics to Metrics Export where zeros are included in the calculation of averages.
- Stability improvements.

## Release notes 1.16 2015-06-30

- Added Gyroscope and Accelerometer columns to Data Export
- Greatly improved performance for Snapshot mapping, especially in long Recordings
- Added notification when initiating a Video Export
- Improved usability of zoom range in Replay
- Made Timeline selection more obvious in UI
- Fixed a problem where the Replay speed and volume would reset when navigating away from the tab
- Renamed the "Tobii I-VT" preset to "Tobii I-VT (Fixation)" to make it more clear that it only classifies fixations.
- Turned on 3 point Median smoothing of the data in the "Tobii I-VT (Fixation)" preset.
- Usability improvements for Video Export
- Stability improvements

## Release notes 1.12 2015-05-20

- It is now possible to export video clips with gaze overlay from your Recordings in Replay.
- Stability improvements

## Release notes 1.8 2015-03-25

- Added Gaze Plot to Visualizations tool
- Added new Dark UI theme and made it default
- It is now possible to zoom in the Snapshot mapping tool
- Trying to open a new Project in an older, incompatible version of Tobii Glasses Controller is no longer possible

## Release notes 1.7 2015-03-06

- Added the possibility to select Raw data instead of Tobii I-VT in Heatmaps, Metrics Export and Data Export
- Set Tobii I-VT as default setting in Heatmaps, Metrics Export and Data Export
- Improved memory usage in Metrics and Data Export
- Improved memory usage when replaying Recordings with a lot of segments
- Stability improvements

## Release notes 1.6 2015-02-26

NOTE: For this update, the application will not restart automatically after updating.

- Improved performance in Projects with a lot of Recordings.
- It is now possible to run Tobii Glasses Controller and Tobii Glasses Analysis Software at the same time.
- Fixed a problem that in some cases made it impossible to activate a License key offline.
- Fixed a problem that made the software crash when double clicking the date column in the Project Dashboard.
- Fixed a problem where the Heatmap would not render if additional data was mapped to another Snapshot while the Heatmap tab was open.
- Timestamps in Event list in Replay are now correctly rounded and matches the numbers in Data Export.
- BetaMode now allows you to switch to the new Dark UI theme.

## Release notes 1.5 2015-02-12

- Added Interval Start and Duration Metrics.
- The Heatmap tool is now able to handle extremely high resolution Snapshots.
- Fixed a crash that could occur when navigating to a Heatmap tab after deleting all mapped data for the Snapshot.
- UI Improvements.
- Stability improvements

## Release notes 1.4 2015-01-29

- Many UI improvements.
- Added AOI Visit Count and Visit Duration Metrics to the Metrics Export.
- Gaze Samples % is now available in Import Recording Dialog and Dashboard Recording list. NOTE: Recordings imported in older versions will incorrectly say 0% Gaze Samples.
- Updating from this version to higher versions will show an indicator while updating.
- Fixed a problem where it was impossible to import Recordings on certain localized versions of Windows.
- Fixed a problem where mapping a lot of data to Snapshots could make the software unusably slow.
- The time it takes to open a Heatmap tab is no longer dependent on the number of Recordings in the Project.
- Added documentation to installation.
- Stability improvements.