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WINanalyze V2.2  
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What's new?

- New x-y analysis window: Shows all y over x coordinates at all times
- Additional units available for analysis: Kilometers, miles, and hours
- Frame numbers are now displayed in AVI preview
- Automatic default values (Ncx, Nfx, dx, dy) are now calculated for new calibrations
- Changes in tracking algorithms (set in "Presettings") now apply for the next object set
- Bug fix for exported data: Arbitrary filenames are allowed now
- Bug fix for Player Version regarding Import of external data
- Bug fix for empty (invalid data) windows
- Updated Helpfile

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WINanalyze V2.11  
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What's new?

- Bug fix for shortcuts: CTRL-N, CTRL-V, CTRL-C did not work correctly
- Additional shortcuts F2 (for player next frame) and F3 (for player previous frame)
- Copy to clipboard: Bug fixed which did not copy complete trajectory into clipboard

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WINanalyze V2.10  
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What's new?

- For Windows 2000, XP and Vista, the configurations files Wanalyze.ini and Wanalyze.col are now in the "all users" application data (as suggested by Microsoft and mandatory in Windows Vista). Vista users will find those files in the "ProgramData\Mikromak\WINanlayze" folder.
- Bugfix for DEP (Data Execution Prevention) protection; will now work without problems in Win XP Sp2 and Vista
- Migrated Helpfiles from HLP to CHM for Windows Vista compatibility
- Different INI files for WINanalyze and WINanalyze-Player for separate configurations
- Bug fixed which caused an error report when closing WINanalyze with many overlapping windows still opened

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WINanalyze V2.03  
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What's new?

- Bug-fix in subpixel routine (in rare occasions, this bug caused unnecessary jitter in the trajectory)

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WINanalyze V2.02  
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What's new?

- ObjectModel now displays correctly all property sheets
- AVI document now saves manually changed 'frames per second' rates; will be used next time it is opened

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WINanalyze V2.01  
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What's new?

Several smaller bugfixes over version 2.0:

- BreakOnBadMatch and AdaptTemplate settings did not always work correctly
- fixed
- BreakOnBadMatch now also works if object leaves image borders
- Correctly displays corrupted uncompressed AVIs that have invalid Colors and Size Tags
- Weinberger VRAW meta data now correctly interpreted: recording rate is correct now

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WINanalyze V2.0  
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What's new?

- Greatly improved tracking performance
- Tracking of very large templates (> 64 K) now possible
- Support for WEINBERGER hispeed camera video format VRAW
- Support for new IEEE1394 AVI codecs (like 'Y800')
- New option "always track grayscale" enables color videos to be shown in color but tracked in gray (which is 3 times faster)
- Load/Save of WINanalyze configurations

(At startup, WINanalyze always loads presets from wanalyze.ini; changes made to presets can now be saved to different filenames, and reloaded again at any time into WINanalyze)

- Copy to Clipboard: Analysis data can now be simply copied to the Windows clipboard and pasted to any other application (like e.g. Excel)
- Export Analysis Data: Filenames are scrollable and allow whitespaces
- Export Objects: Filenames are scrollable and allow whitespaces
- All enhanced tracking options (BreakOnBadMatch, AdaptTemplate) are now also available for truecolor videos
- Enhanced ini-Options are now available through the Object Presettings Dialog

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WINanalyze V1.9  
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What's new?

New options for tracking  
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A new option in the Wanalyze.ini file changes the way object points are set and tracked:

AutoSingleStep=0 (default)

- set it to 0 (default) for usual tracking/point setting behaviour
- set it to 1 to enable fast one-object tracking. By using this option, a "Track one frame forward" command is issued within WINanalyze whenever a point is set (i.e. when the mouse button to set an object point is released). By using this, one object can be set and immediately tracked throughout the sequence extremely fast, because the tracking to the next frame is done automatically. Very useful for Manual Tracking, but can also be used with any other tracking algorithm.

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WINanalyze V1.8  
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What's new?

New manual tracking  
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Manual tracking will now use the information of the last two object locations to project the new location.  
For movements that are almost linear, this will result in good tracking results.

The old functionality of manual tracking (just copying the object location to the next frame) is still maintained - if the object location is not altered by the user, it will use the last known position as in earlier versions of WINanalyze.

#### New menu hotkeys

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To enable faster handling of the tracking methods one frame forward or backward, they have been assigned the hotkeys F5 and F6, respectively.

#### Enhanced mouse handling

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When in manual tracking mode, the mouse cursor will be set automatically to the last tracked object position. Therefore, much faster manual setting of object locations is possible.

To further enhance manual tracking handling, by moving or changing the template the object position will always automatically be set into the template's center.

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### WINanalyze V1.7

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#### What's new?

#### New options for tracking

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By using different options in the Wanalyze.ini file, many alterations to the tracking behaviour of WINanalyze can be made.

The options are:

BreakOnBadMatch=1 (default)

- set it to 0 to avoid getting "bad match" popup windows; tracking will continue with the last set point positions

AdaptTemplate=1 (default)

- set it to 0 to disallow automatic template adaptation; WINanalyze will then always use the first set template

ThresholdSSD=45 (default)

- set it lower to be more restrictive in matching, set it higher to allow more alterations of the template (SSD-Tracking)

ThresholdCROSS=0.495 (default)

- set it higher to be more restrictive in matching, set it lower to allow more alterations of the template (CrossCorrelation-Tracking)

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WINanalyze V1.6 and earlier  
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What's new?

AVI Load

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AVI image sequences can now be loaded; a dialog box including a preview of the video allows for certain handling options (half-frame splitting etc.) to be edited before loading into WINanalyze

Stick figure visualizaton

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Stick figure dialog box now contains a check-box option for showing single frame figures or overlapped figures for the whole sequence.

Angle Definition

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Angles can now explicitly be selected by choosing one of the possible eight angles defined by two lines

CON-file export

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The information about connections between all points is now saved in an ASCII text file (extension \*.con). This is needed by our animation converter for 3DStudio Max.

Improved Neural Net approximation

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The interpolation via Neural Nets now shows much better performance (about 8 times faster than in older versions).

Multimedia Tools

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- The 1.4 distribution contains a 3D Studio Max plugin to render animations with WINanalyze trajectory information.  
- Tra2Vrml converts animations based on WINanalyze Trajectories in the VRML 2.0 format.

Tutorial

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The CD package contains many sample sequences with pre-tracked objects in a variety of applications. The tutorial explains in detail how to change the tracking parameters or filters for best results.

#### Precision evaluation

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A simulated calibrated stereo-sequence of a falling ball has been added to evaluate the precision when calculating earth gravity with WINalyze.

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