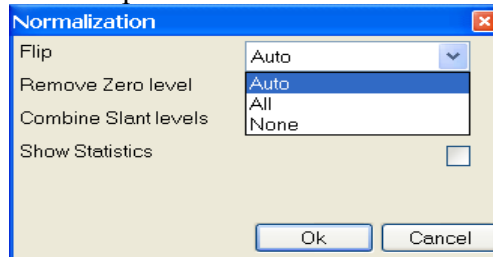


- (+) – new function added
- (~) – functionality changed
- (!) – error fixed

19.09.07 (~) local maximums are showed on force curve during WLC analysis now (green points)

19.09.07 (!) columns that became empty during the local minimums table filtration by histogram weren't removed

19.09.07 (~) names for parameter «Flip» in function Normalize were changed:



19.09.07 (+) buttons for function *Remove active Curve* were added:

Version 2.2.110

19.09.07 (+) new «single click» selection mode was added for curves and sections: the point of pushing the button comes into the first mark, the point of releasing the button comes into the second one

Version 2.2.109

19.09.07 (!) if local minimums were set to be found automatically, program used noise parameter, but it couldn't be changed by user

Version 2.2.108

13.09.07 (~) the speed of calculations in function *WLC analysis* was increased

13.09.07 (~) subimage corresponding to selected row in the local minimums table becomes active

13.09.07 (+) buttons for functions *WLC analysis* , *Normalize force curve* and *Separation curve* were added

Version 2.2.107

13.09.07 (~) when relative scale for Z is used in Fixed scale mode, scale can be displaced regarding zero point now (zero was equal to minimum before)

11.09.07 (!) wrong value of the Boltzmann constant led to wrong results of calculation for persistent length during WLC analysis

11.09.07 (~) outputed values in *WLC analysis* function were changed, field Extension was added:

Subimage	Curve	Fmin,nN	Xmin,nm	Lp,nm	Lc,nm	F0,nN	Extension	dF/dx
1	1	-0.127859	40.3046	0.0965204	56.9009	0	0.708329	-0.0159436
3	1	-0.230453	51.3905	0.159865	61.7928	0	0.831659	-0.0443435
5	1	-0.160016	48.6874	0.201998	61.3555	0	0.793529	-0.0193096
7	1	-0.107953	45.8827	0.390853	55.6516	0	0.824463	-0.0177847
9	1	-0.173031	51.5311	0.196122	63.2627	0	0.814558	-0.0264957
11	1	-0.229688	57.1718	0.122317	71.9583	0	0.794512	-0.0275749
13	1	-0.169969	66.3514	0.283825	78.2818	0	0.847597	-0.026506
15	1	-0.231219	56.8202	0.215543	66.4283	0	0.855361	-0.0480674

11.09.07 (!) there was an error during the reading of IgorPro files

11.09.07 (+) there are some new functions in *Items* menu: *Remove not used* – for removing curves without any local minimums, *Remove selected* - for removing selected by the local minimums histogram curves

Version 2.2.106

11.09.07 (!) there was an error, appeared during installing of the program from CD, the second disk was asked to be inserted

10.09.07 (!) swaping of marks at the local minimums histogram caused disappearance of selected area

10.09.07 (~) rupture force is outputted in nanonewtons now, if such units are available for force (not in nanometers as it was before)

10.09.07 (~) separation curve was plotted only in active axes, other existent units were not available

Version 2.2.105

6.09.07 (!) edges detection for selected areas didn't work

6.09.07 (~) results of edges detection is normalized now using the interval from minimum to maximum for better contrast

6.09.07 (!) there was no annotation for function *Flip*

31.08.07 (!) if the scale is out of range in Fixed Scale mode, it is automatically switching to Autoscaling mode

22.08.07 (+) reading of NanoScope V files format (version 512) was added

Version 2.2.104

24.07.07 (!) performing of threshold operation for 2D images caused an error

24.07.07 (~) *Threshold* operation was done as a plugin, new opportunities of setting values above or below the threshold, setting at minimum, maximum or at thresould value were added

23.07.07 (!) *Crop* function for parametric curves was corrected: both arrays for X and Y are cropped in a right way now

23.07.07 (!) essential verifications were added into *Fit* function

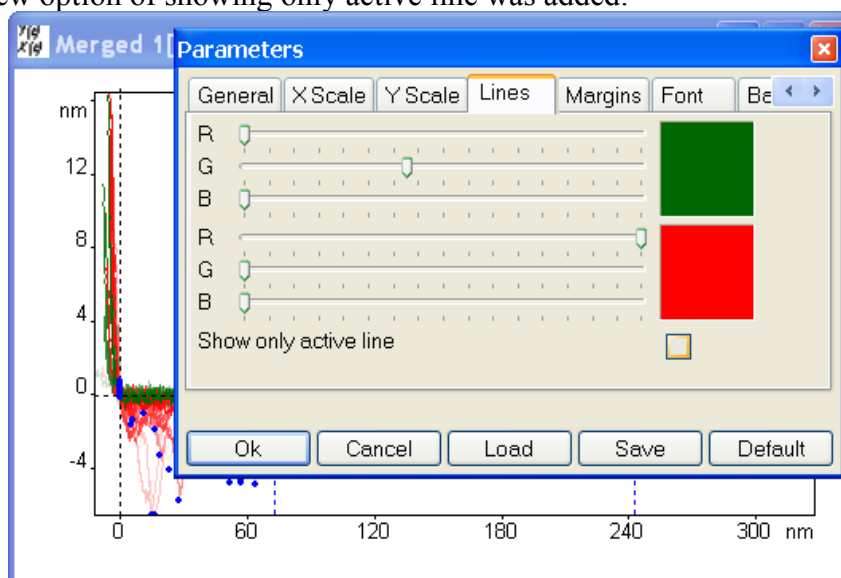
23.07.07 (!) after some modernization of program WLC analysis function became incorrect: manual area selection caused an error, because the way of keeping information about selections had changed

23.07.07 (~) *Remove filtered* function for force curves (Items/Remove filtered) was completed, function isn't active when plugin is open

23.07.07 (!) during creation of local minimums table subimages that didn't contain any minimums were missed, as a result subimage numeration was incorrect

19.07.07 (~) there are changes in selections handling: the areas that weren't shown at the histogram were selected automatically, now they aren't

19.07.07 (+) new option of showing only active line was added:



19.07.07 (!) Undo and Redo functions for parametric curves were corrected

19.07.07 (+) new function *Remove filtered* (Items/Remove filtered) was added for removing filtered by histogram curves

19.07.07 (~) *Duplicate* operation causes copying of all selected areas from curves

19.07.07 (~) selecting the area from section takes place for all subimages now

18.07.07 (~) new opportunity: after selecting an area at local minimums histogram by using marks, values that have miss this interval are deleted from table

18.07.07 (+) new function *Remove Curve* was added for removing trace and retrace subimages corresponding to active one from merged documents

17.07.07 (!) there was an error that occurred in Resolution dialog

16.07.07 (!) there was an error that occurred during the calculations in *WLC analysis* function (array index became out of range)

16.07.07 (!) building of new parametric curve in function *Normalize* caused an error

10.07.07 (+) new menu *Items* was added for local minimums histogram view

10.07.07 (!) local minimums histogram wasn't drawn again after changing of search settings at function *WLC analysis*

10.07.07 (~) algorithm of discarding of unnecessary local minimums at the end of manually selected area was corrected

9.07.07 (+) changes in work with local minimums histogram at *WLC analysis* function: new opportunity of choosing one of columns from the statistics table to be drawn as a histogram was added (only the first one was used before), at the same time rows in the table are being sorted ascending by using this column, after second pushing to this column table will be sorted descending

4.07.07 (+) new opportunity of marks removing from section was added

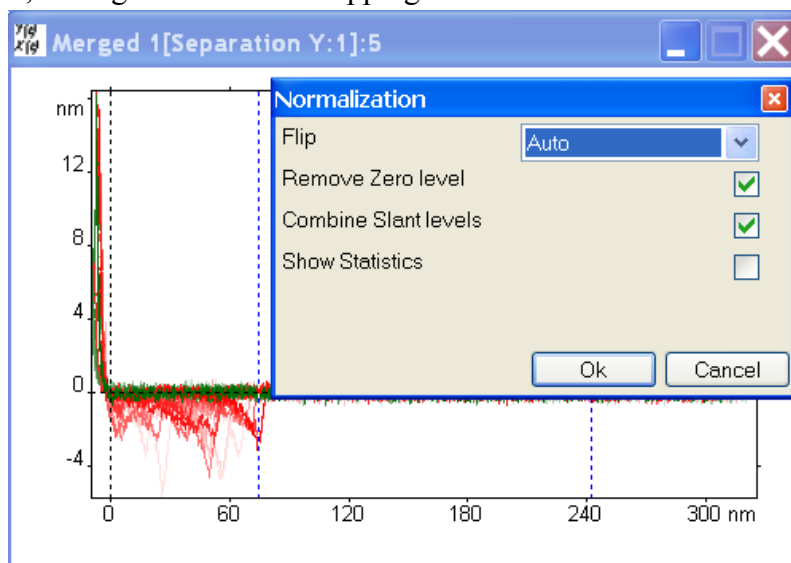
27.06.07 (~) parametric curve is being plotted in any case now during the normalization of force curve

Version 2.2.103

20.06.07 (~) during manual setting of local minimums search area the first minimum is being placed at the left end of area, not at the adhesion peak as it was before

20.06.07 (!) there was an error in way of filling the statistics of local minimums at *WLC analysis* function

20.06.07 (+) new option of manual choosing of conditions for curve to be flipped (Auto/Yes/No) was added, the algorithm of auto flipping was modified:

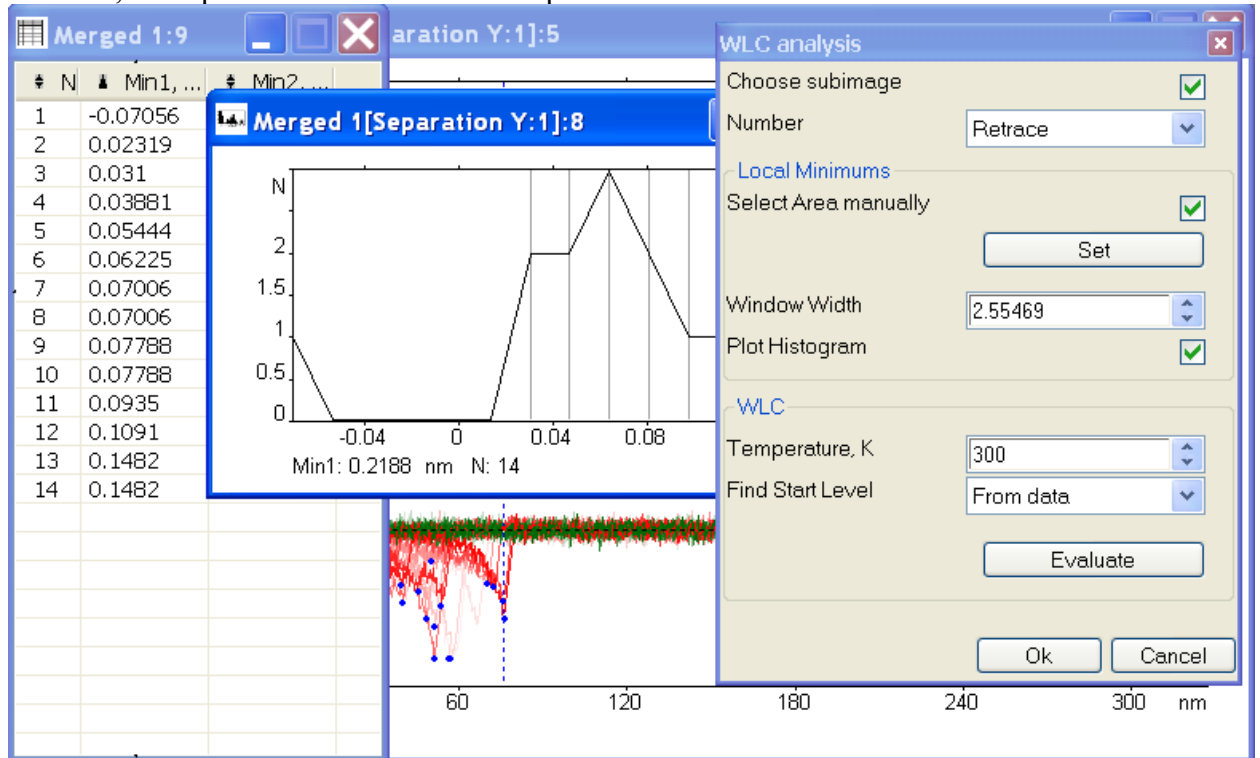


20.06.07 (~) algorithm of setting zero point during the force curve normalization was changed

20.06.07 (!) English interface for global options contained the path to Prussian help PDF file

Version 2.2.101

14.06.07 (+) new opportunity of local minimums histogram plotting was added at WLC analysis function, this option is in a state of development now:



Version 2.2.100

1.06.07 (!) there was an error when type of separation curve has been changed

Version 2.2.99

23.05.07 (~) changes in algorithms at WLC analysis function: local minimums at the end of selected area will be removed automatically if they belong to zero level

Version 2.2.98

18.05.07 (+) new elements were added to the global options interface

18.05.07 (!) there was an error during video recording

18.05.07 (!) Roughness function didn't work because of incorrect handling of newly created by plugin parametric curves

18.05.07 (~) after opening of one file in the documents merging mode it will be called as original one (it was called Merged before)

18.05.07 (!) plotting of parametric curve legend caused an error

17.05.07 (!) if persistent length function didn't compute any results there was no error message, and it caused a bug in program

17.05.07 (!) units for decorations weren't copied in function Roughness

16.05.07 (+) English variants of interfaces for functions Normalize and WLC analysis were added

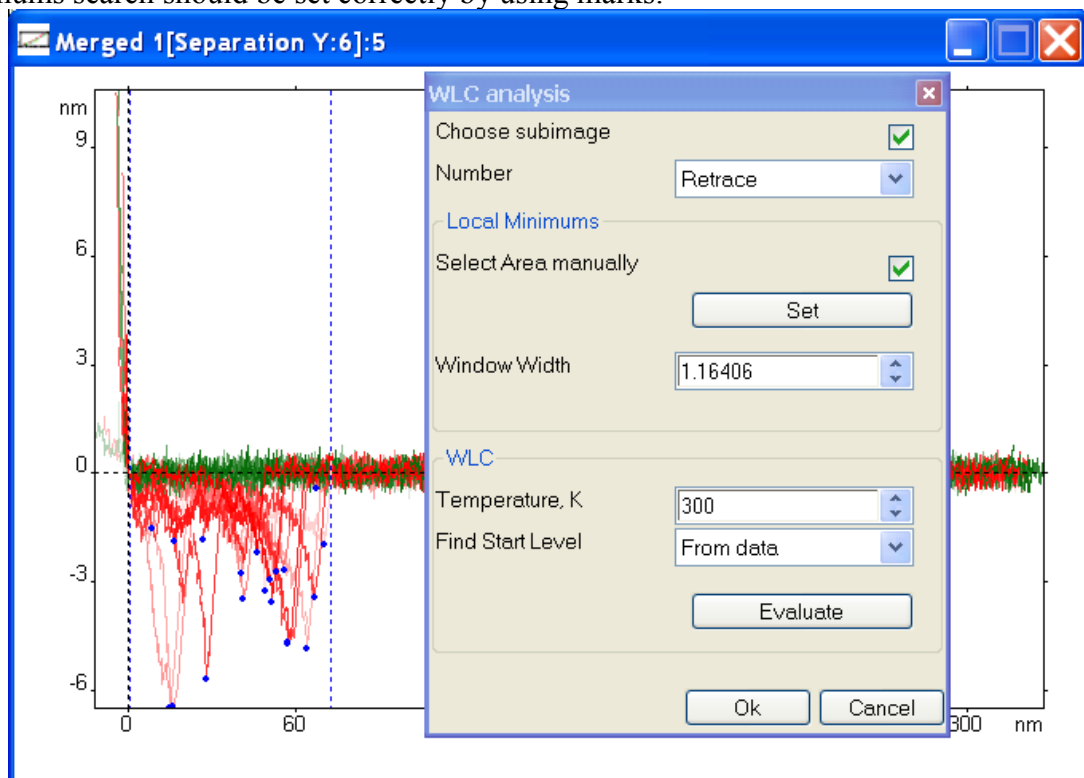
Version 2.2.97

11.05.07 (~) when selection is being changed during the plugin function running, image will be restored to it's initial state

11.05.07 (!) if saved document with parametric curve was opened, then the parametric curve wasn't built

11.05.07 (+) function WLC analysis works with array of curves now, common area of local minimums search can be chosen for all curves

10.05.07 (~) the statistics of slant and zero levels isn't used in WLC analysis function any more, instead of it Normalize function must be called before WLC analysis and then area of local minimums search should be set correctly by using marks:



10.05.07 (!) marks were set incorrectly after execution of function Normalize

Version 2.2.96

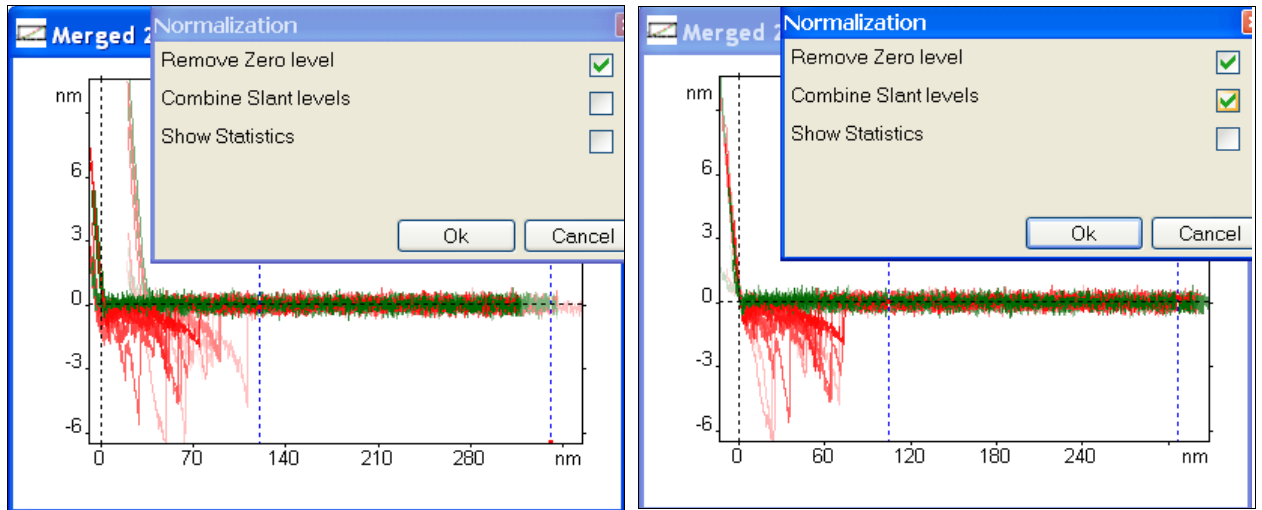
4.05.07 (+) during the merging of documents each subimage is named as file where it was before

2.05.07 (!) X streams of parametric curves have been added to Undo list before plugin function is executed, so image will take it's initial view after pushing Cancel button

2.05.07 (~) opening of .ibw (Igor Pro) files was optimized

2.05.07 (!) decorations of function Normalize were drawn incorrectly

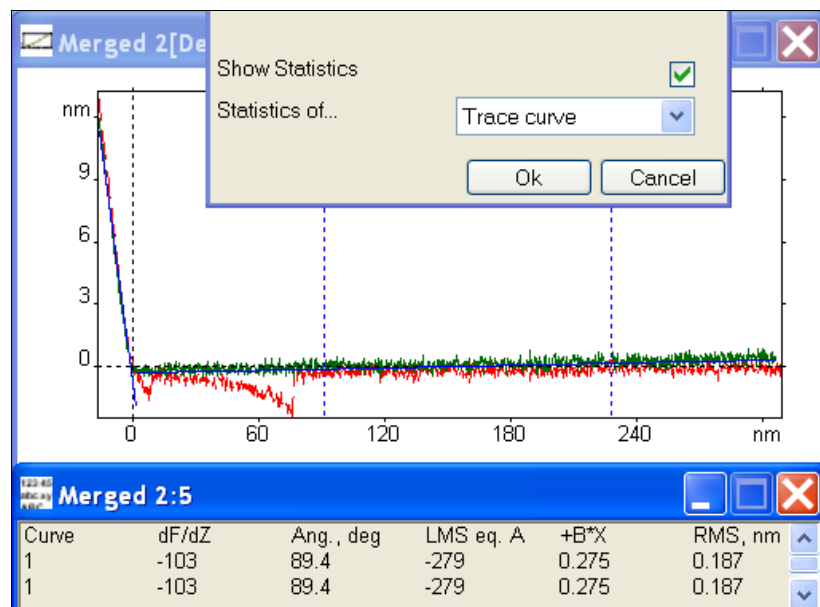
2.05.07 (+) new opportunity of combination of slant areas for all subimages in finction Normalize (all curves are shifted in such a way to join intersection points of zero and slant levels):



2.05.07 (~) setting of zero point is taking place in function Normalize now, not in function Separation curve

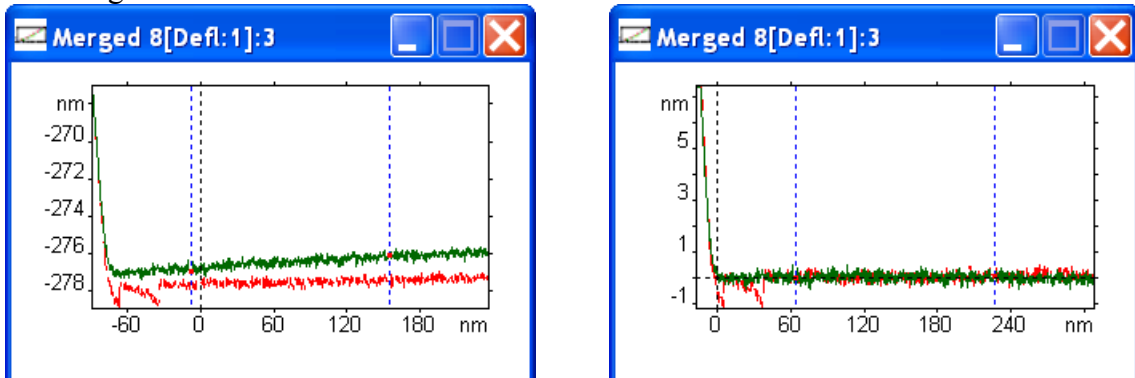
2.05.07 (!) files from MRU couldn't be opened

30.04.07 (+) output of statistics was added to function Normalize, you can choose subimages for analysis (then statistics of slant and zero levels will be found for each selected curve) or special part of curves:



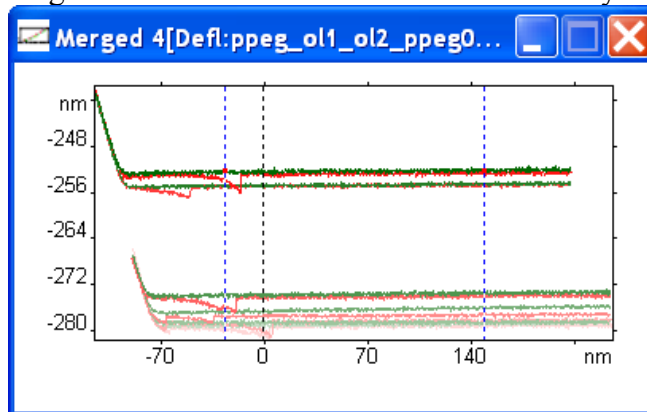
28.04.07 (!) in 3D view the first subimage was used for texture channel, now the active one is used

27.04.07 (+) new opportunity in function Normalize was added: removing of zero level from all curves using selected area:



27.04.07 (~) if selected area is changed during execution of plugin function, the function will be called again

27.04.07 (+) new opportunity of merging files in open dialog (parameter Merge documents), curves from each following file will be drawn with decreased intensity



20.04.07 (~) inconveniences in managing Fly-views were removed: transfer time is set now to 1; if new scene is added, selection will be set to it, transfer time will be taken from the previous one; record can be stopped, interface is refreshed after beginning and at the end of the record

19.04.07 (~) old function of calculating statistics was deleted, all processing takes place in function WLC analysis, zero and slant areas can be chosen manually (from marks) or from noise

19.04.07 (!) there was an error in function Dewarp, when response correction coefficient was negative

11.04.07 (+) autorun of updates was added

Version 2.2.92

9.04.07 (+) On double click scale will be tuned to any active image (before – only to the surface image).

9.04.07 (+) Color scale drawing in Force Volume, added parameter to switch off scale.

Version 2.2.91

9.04.07 (!) Surface images didn't open in compact mode when statistics display is on.

6.04.07 (+) Added scale to the toolbar palette, tooltip extended.

4.04.07 (+) Marks on parametric curve: 2 modes – vertical lines and crossbars.

3.04.07 (!) Not all scale parameters were described in English interface.

3.04.07 (!) Drawing of color scale on stereo images.

Version 2.2.90

03.04.07 (+) Path to the PDF Manual can be changed, if it was not found in the default place (language subdirectory of the installation directory).

Version 2.2.87

28.03.07 (+) Absolute/relative X axis in curves and profile sections.

Version 2.2.86

26.03.07 (~) Fixed scale now is now remembered in the units of the active image.

22.03.07 (+) Selection marks added to the parametric curve.

22.03.07 (~) Plugin parameter windows now are modeless – this enables to work with images, while parameters window remains open.

22.03.07 (+) List representation in the file opening window (Details/Tiles/Icons e.c.) remains for all dialogs.

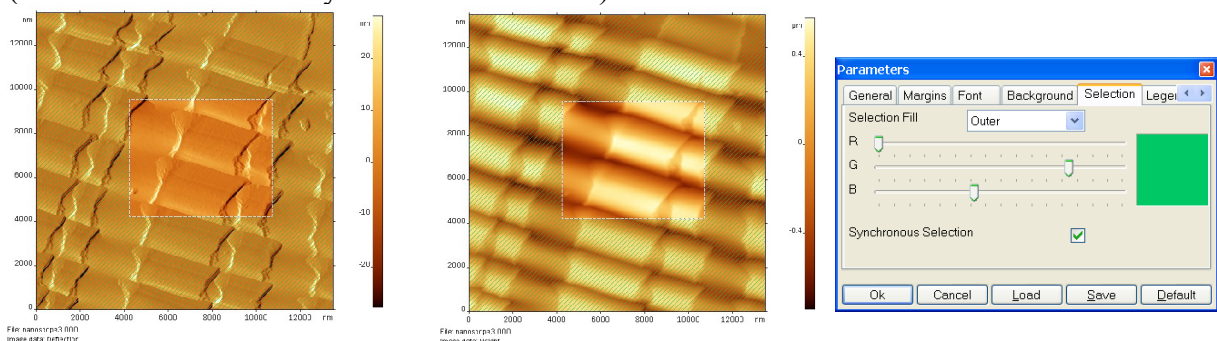
21.03.07 (!) Decorations were drawn improperly on sections, when Y scale units were changing.

21.03.07 (!) Error was raised when trying to move element to the displayed parameters list, when no parameters selected (in dialog View/Display Parameters)

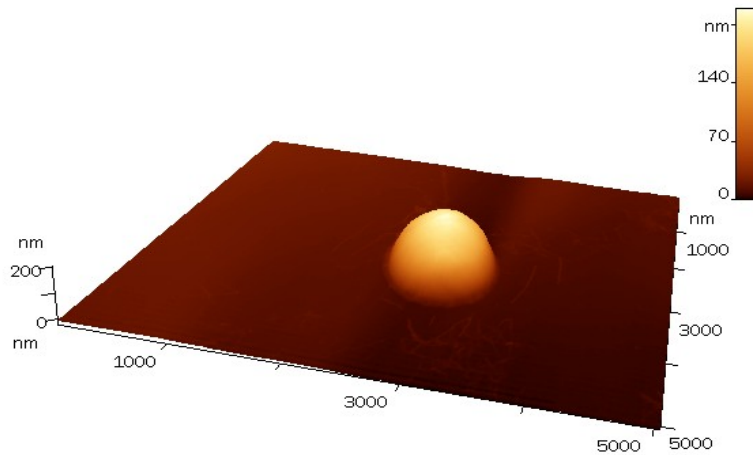
20.03.07 (+) Creation of nN scale for IgorPro files

16.03.07 (!) Functions Copy Text, Add Text did not add text information (statistics and parameters)

16.03.07 (+) Synchronous selection mode - areas are selected simultaneously on all channels of the same document, this option can be turned on in preferences (Preferences/Selection/Synchronous Selection)

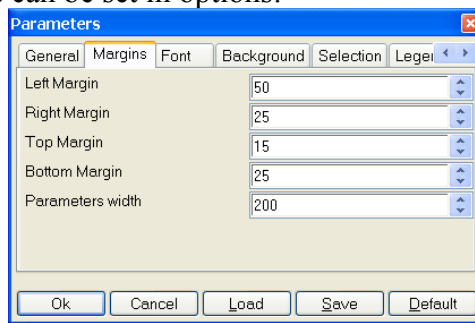


16.03.07 (+) Displaying of the color scale on 3D images.



Version 2.2.84

12.03.07 (+) statistics is shown on the image with units, minimum and maximum values of Z; width of region with statistics can be set in options:

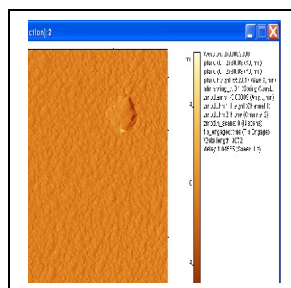


12.03.07 (~) new output format of numbers (exponent is designated by E)

Version 2.2.83

9.03.07 (+) mathematical statistics can be outputted on the image now

9.03.07 (+) selected parameters with their values can be outputted on the image (setting in options):



2.03.07 (+) new function View/Display Parameters for reviewing image parameters list and choosing some of them to be shown on the image:



- 2.03.07 (+) new opportunity of choosing relative or absolute scales for 3D images was added
- 22.02.07 (~) when image can't be exported into gallery, dialog will be shown again
- 22.02.07 (+) line feed can be inserted now into the image description when it is added to the image gallery
- 19.02.07 (+) saving of displaying type in Quick View dialog was added (List/Details/Icons/Tiles)
- 19.02.07 (!) output of frame direction in Quick View was corrected
- 19.02.07 (!) there was the lack of free space in the Quick View names buffer (when number of files became large the dialog returned CANCEL)
-

Version 2.2.82

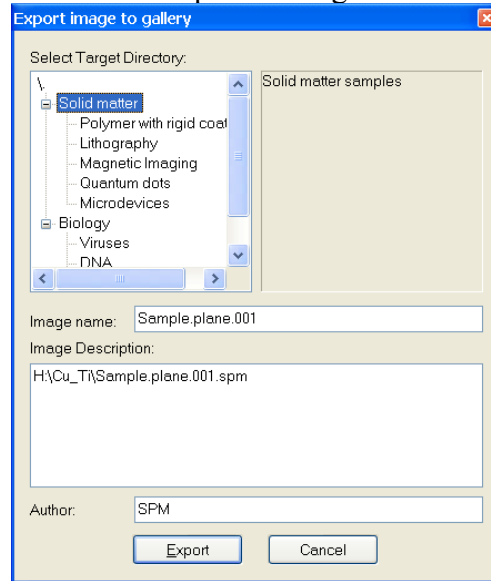
- 9.02.07 (~) During “Separation curve” operation all axes are copied to the separation curve image
- 9.02.07 (+) Gaussian averaging filter (Linear Filters/Gauss)
- 9.02.07 (~) Linear filters (former **Derivative**) (difference, Sobel, Prewitt; Laplace) moved to plugins
- 7.02.07 (~) **Invert** function moved to plugins

Version 2.2.81

- 7.02.07 (~) **Detect Edges** function moved to plugins, added parameters “Threshold” and “Noise level” – earlier they were fixed to 0.6 and 0.3
- 7.02.07 (~) After applying filter, selection and isolines were reset – now they remains.
- 6.02.07 (+) Date is added during image export to the gallery.
- 6.02.07 (+) Selected folder remains highlighted when folders window loses focus

Version 2.2.76

2.02.07 (+) “Author” field added to the description of the exporting image,. Upon export, browser window will be opened with the exported image.



1.02.07 (!) Separate Grains generated an error for images with multiple sub-images

30.01.07 (+) “Export image to gallery” dialog added.

30.01.07 (!) If there was no local maximums found, error was generated during WLC analysis.

29.01.07 (+) Test version of the image export to the online gallery (Online/Export Image to Gallery).

Version 2.2.75

24.01.07 (+) If updates were not found during “Help/Check for updates” command, then a message will appear (earlier nothing appeared)

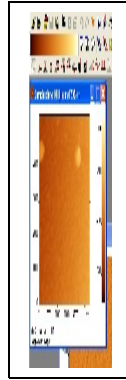
24.01.07 (+) Full version information shown in “About” dialog (before was only two numbers - 2.2 , now three - 2.2.75)

22.01.07 (!) Sometimes WLC data were evaluated and printed twice

22.01.07 (~) WLC analysis data is shown under the image itself to not to overlap it.

22.01.07 (!) Batch Export command was missing from File menu for version without network module.

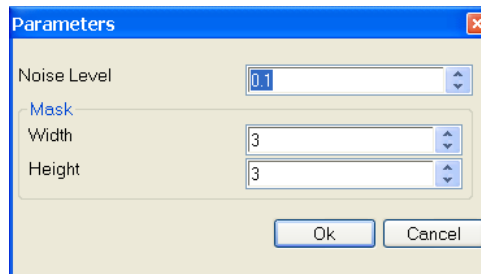
12.01.07 (~) new way of showing scale in Fixed Scale mode: whole scale is drawn; there are 2 lines for fixed scale at the palette toolbar:




12.01.07 (~) Quick View uses Per-line Autoscaling palette with Planefit now

Version 2.2.72

10.01.07 (+) interface for Wiener filter was added:



9.01.07 (+) new function was added: Wiener filter 

9.01.07 (~) names of functions for force curve analysis were corrected

Version 2.2.71

26.12.06 (+) buttons for functions Fourier , Histogram , Select ROI  were added

26.12.06 (!) if there has been no selected area when function Select Region of Interest was called then the whole image was set as region

26.12.06 (!) error that prevented tooltips from appearing was corrected

Version 2.2.70

25.12.06 (~) new opportunity: registration in the Internet or by using E-mail; after deinstallation license will be deactivated automatically

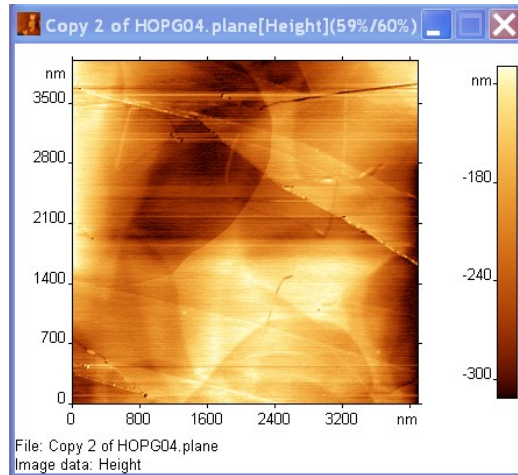
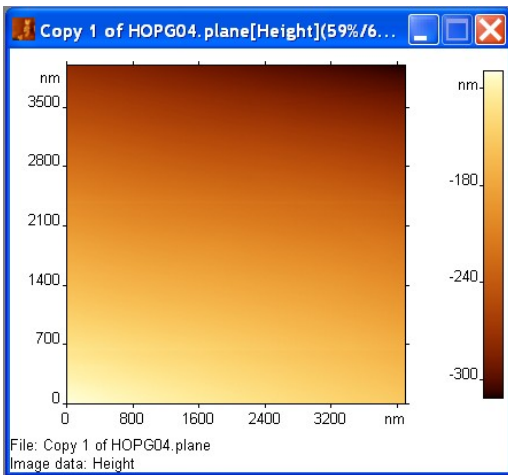
25.12.06 (~) installation of new version of program happens as an update: if the product has been installed before the previous version won't be deinstalled and product code won't change

22.12.06 (+) new opportunity of license activation from the Internet

22.12.06 (+) new palette autoscaling mode: Per-line Autoscaling with Planefit

Autoscaling

Per-line Autoscaling with Planefit



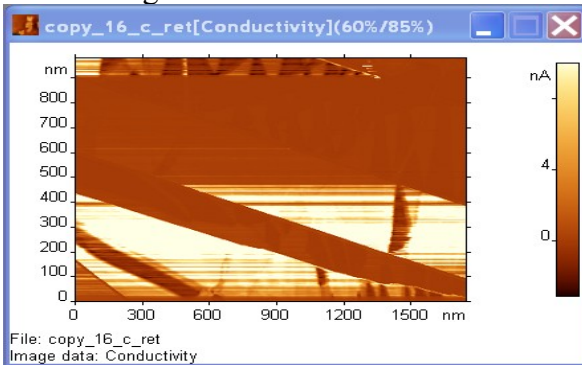
Version 2.2.69

21.12.06 (!) if extensions for known file types were hidden (Windows Explorer, Tools/Folder Options/View/Hide extension for known file types) numbers weren't shown in a title of document

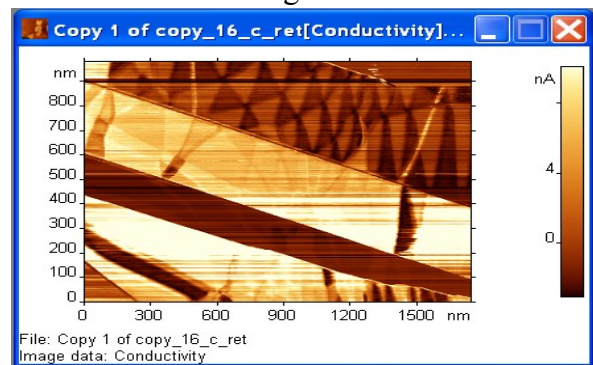
Version 2.2.68

21.12.06 (+) new palette autoscaling mode: Per-line Autoscaling

Autoscaling



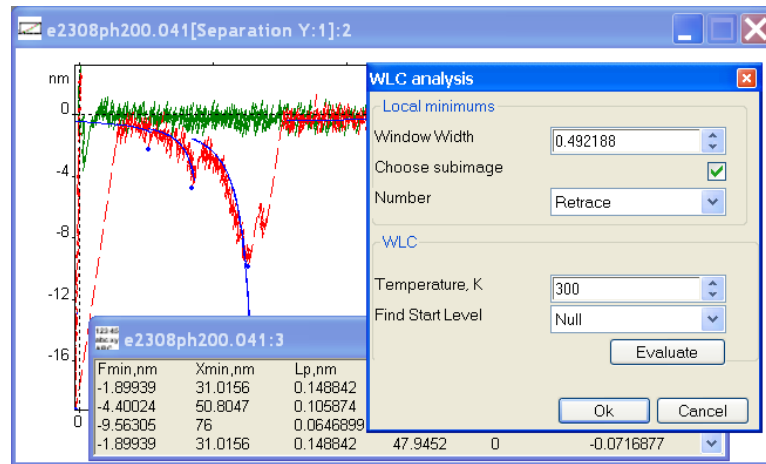
Per-line Autoscaling



21.12.06 (!) when data was copied to clipboard as a text (Edit/Copy data as text) a mistake was appeared for values that are more then 1000

19.12.06 (!) coefficient in Fourier transform was changed: 1/N for linear transform, 1 for inverse transform

18.12.06 (~) function WLC analysis finds local minimums and calculates parameters for WLC model, there are new interface and special window for statistics output:

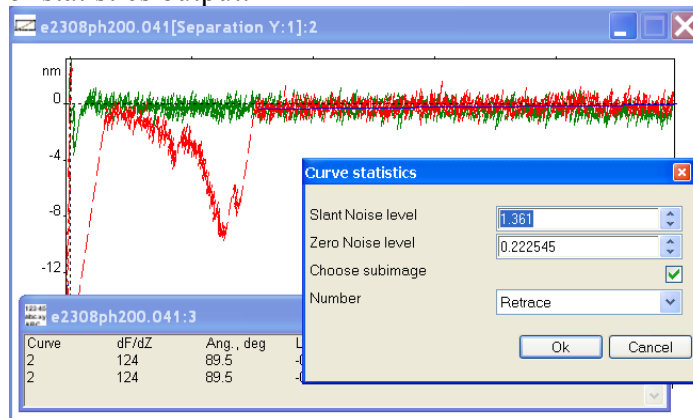


18.12.06 (!) there was wrong step in function Adjust Scale

Version 2.2.67

13.12.06 (+) if some parameter is the same for different functions it will be used in common by these functions (example: noise parameters for force curve analysis)

12.12.06 (~) function Find force curve statistics was made as a plugin, there are new interface and special window for statistics output:



8.12.06 (!) if full-screen mode was chosen at another monitor the picture didn't rehabilitate oneself

Version 2.2.65

7.12.06 (+) annotations for force curve functions were added

7.12.06 (!) if there was no units for Z scale in function Enum Features it caused an error

6.12.06 (!) the interface for Fourier transform didn't load

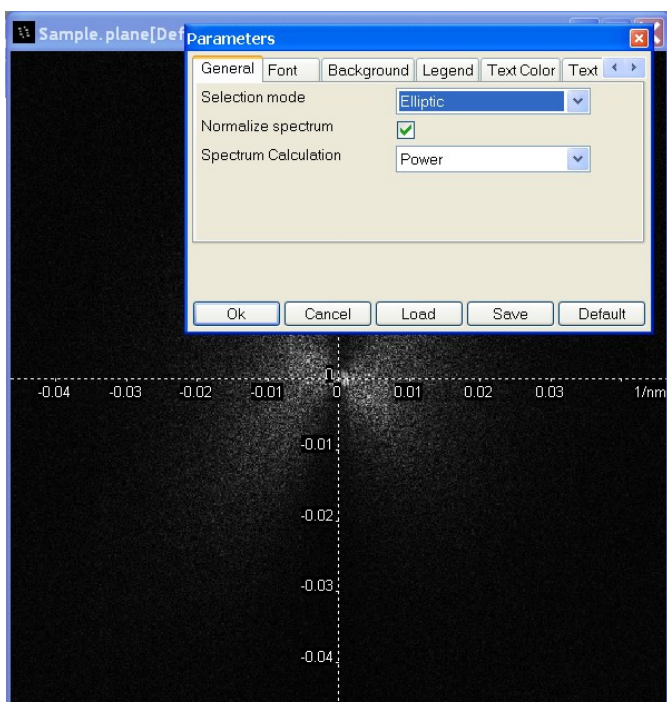
Version 2.2.64

5.12.06 (~) recognition of text files (.dat) was improved: they didn't open because of wrong determination as .pni

5.12.06 (!) algorithm of function Normalize for force curves was corrected

Version 2.2.63

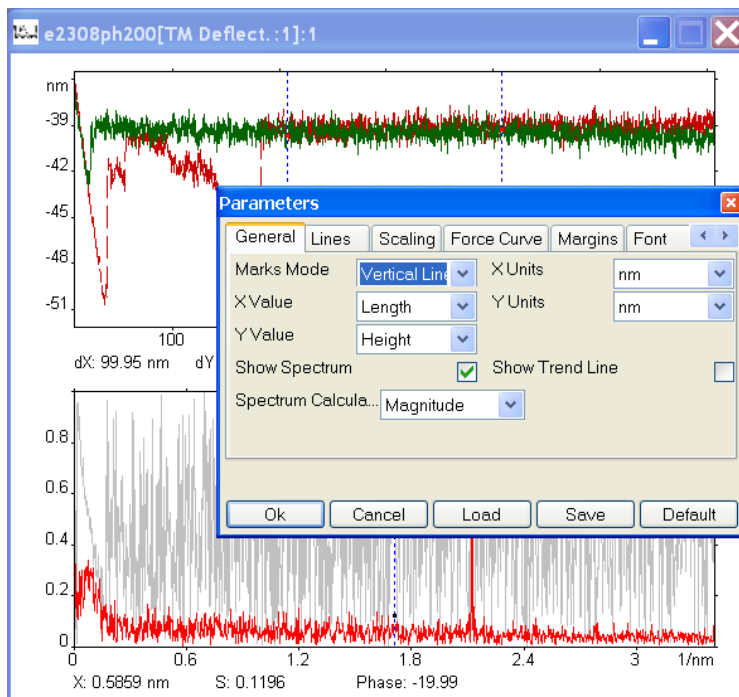
4.12.06 (+) new options for 2D Fourier transform: Spectrum Calculation (Power or Magnitude), Normalize spectrum:



Version 2.2.61

1.12.06 (~) data for MDT files are inverted if Z-scale is negative

1.12.06 (+) new options in Preferences dialog for curves: show spectrum magnitude (only power was showed before), show non-normalized spectrum values:



Version 2.2.60

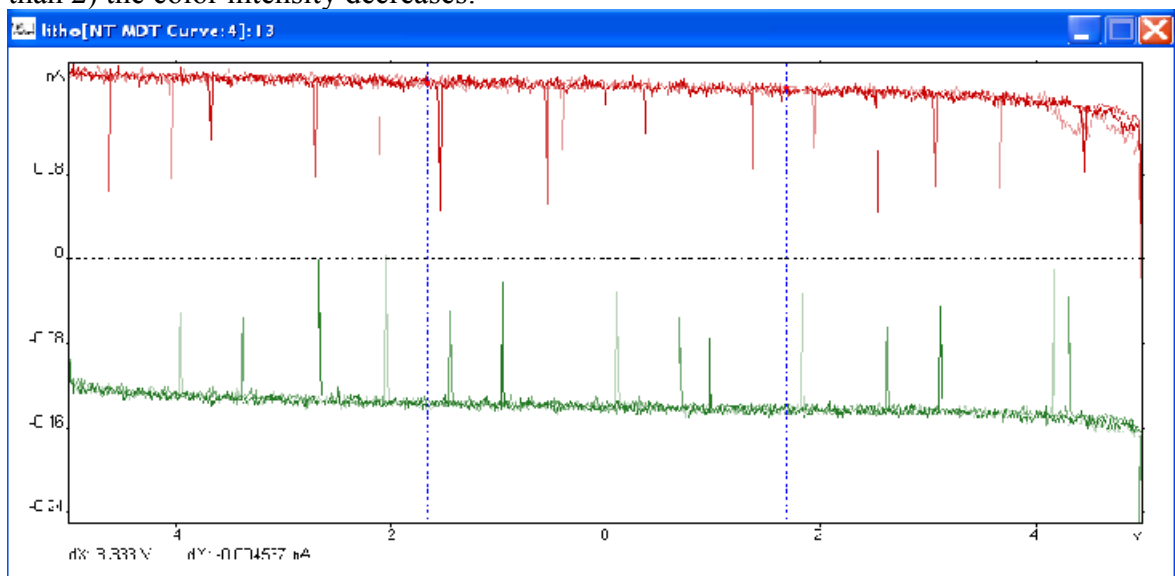
1.12.06 (+) new types of files that can be opened by FemtoScan were added to installer: wip, par, nid, ezd, pni, sur

1.12.06 (+) check-up for program updates on web site was added

Version 2.2.59

30.11.06 (+) new version of MDT format can be read: curves with identifier fhdr.h_what==201

30.11.06 (+) new option: section plotting only for active curve, for big number of curves (more than 2) the color intensity decreases:



30.11.06 (!) error with encoding: some of tooltips at Russian didn't appear

29.11.06 (!) wrong X-data sometimes were used for drawing parametric curve

29.11.06 (!) null level subtraction took place without using proper X-data when finding local minimums for parametric curve

28.11.06 (~) function Roughness analysis for surface sections is made as a plugin

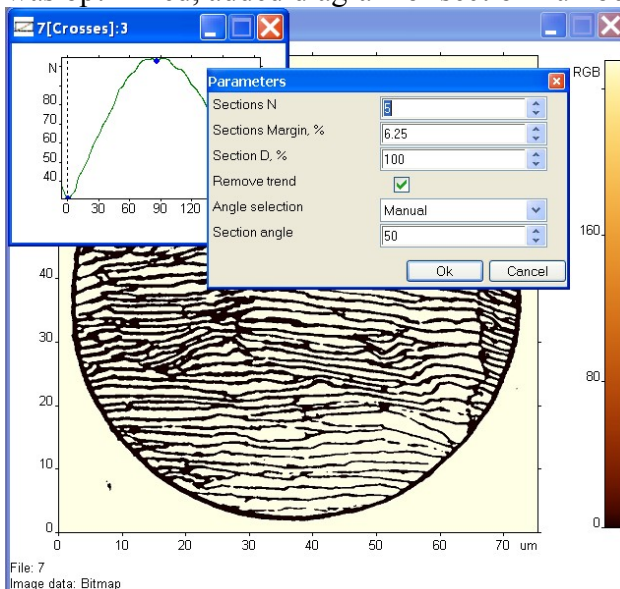
28.11.06 (+) new plugin: Metrological filters

Version 2.2.57

28.11.06 (!) calculation of slant coefficients was corrected for roughness analysis

28.11.06 (+) added manual setting of section angle for Roughness analysis

27.11.06 (~) added options and interface for Roughness analysis of lamellar pearlite, calculation was optimized, added diagram of section number from angle dependence



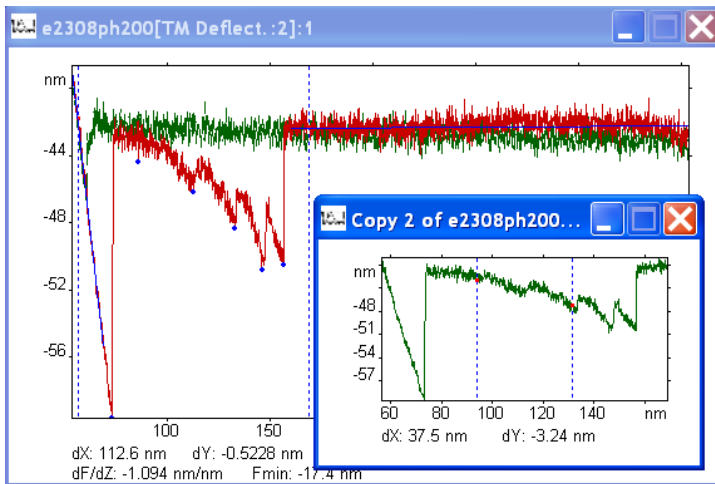
27.11.06 (!) wrong name of scale in menu Parameters for parametric curve (not Z, but X)

24.11.06 (~) searching of roughness direction by minimum of crossings

24.11.06 (!) there appeared unnecessary image in Undo stack when function didn't return any results

24.11.06 (~) rotation sign in function Rotate: positive angle means counterclockwise rotation

24.11.06 (~) function Curve/Duplicate makes a copy only of the active sub image:

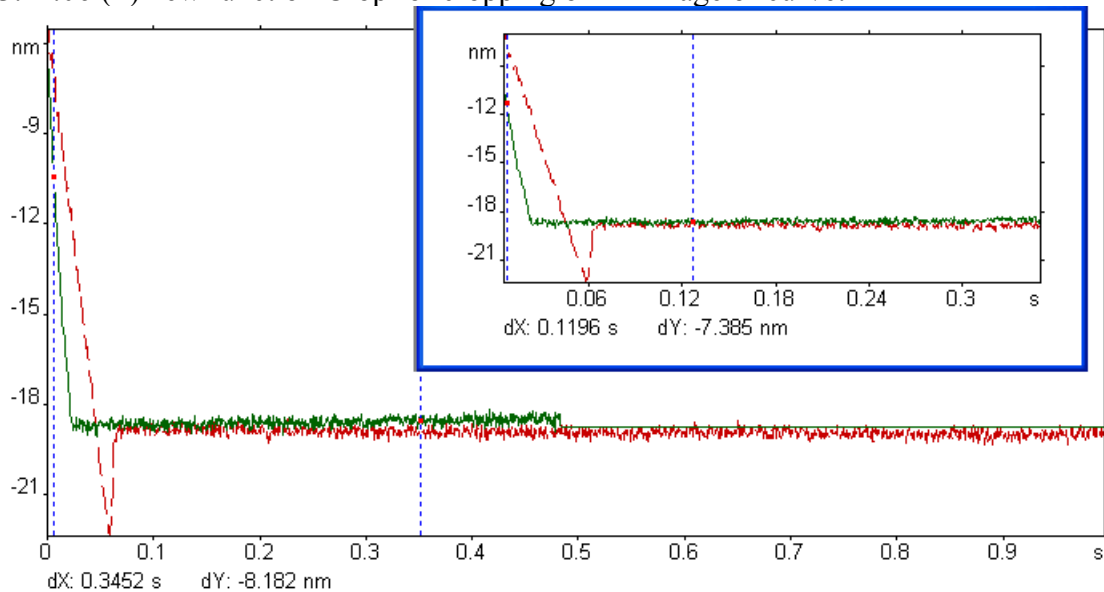


Version 2.2.56

23.11.06 (+) operation of curve cloning (Curve/Duplicate) was added

23.11.06 (!) corrected algorithm of standard deviation searching for parametric curve

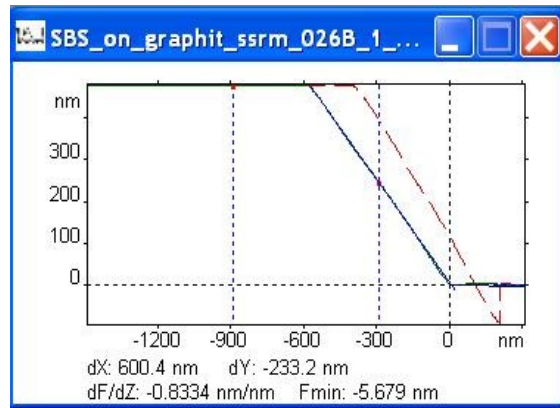
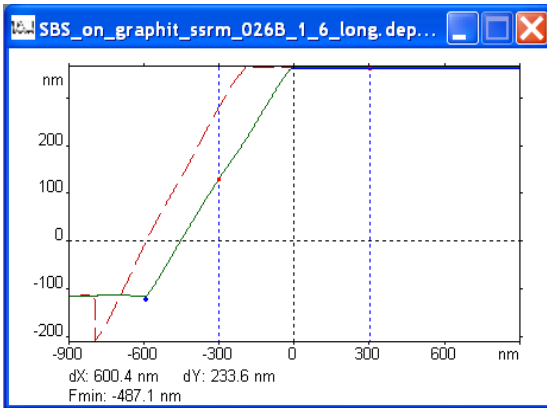
23.11.06 (+) new function Crop for cropping of 2D image or curve:



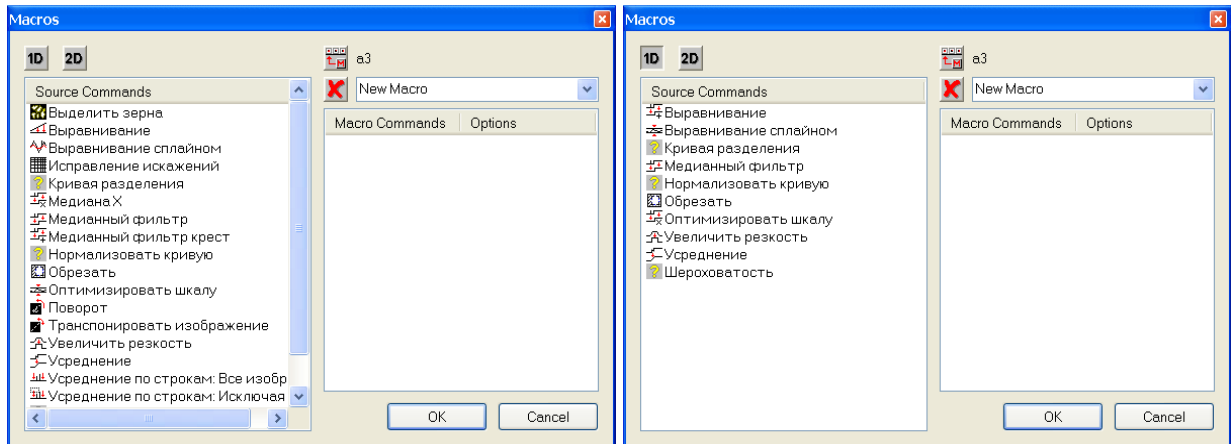
23.11.06 (~) setting focus when executing plugin function is made only for new image

23.11.06 (!) wrong X-data were copied in function Normalize for parametric curve

22.11.06 (+) new function Normalize for parametric curve that sets zero position and mirrors curve when region of contact between cantilever and surface is situated on the left:



21.11.06 (+) 2 new buttons in Macros menu: they choose functions that process 1D or 2D data from the list of source commands:



20.11.06 (!) reading of files with saved lithography mask was corrected

Version 2.2.55

16.11.06 (~) academic version will make a warning after a year of use and stop working after a year and a month

16.11.06 (!) telephone number in English version of licensing agreement was changed

15.11.06 (~) changing options for functions in macros can be made immediately at Macros menu, after that program doesn't ask to set options

15.11.06 (!) error at command File/Revert: unnecessary plugin menu was added

14.11.06 (!) there appeared unnecessary image in Redo stack when Cancel at Macros options was pushed

14.11.06 (~) macros works with new plugins now

14.11.06 (!) local minimums couldn't be found when there is no zero level

14.11.06 (!) if X axis was directed from right to left then value of window width in menu Parameters for curves was negative

Version 2.2.53

14.11.06 (!) old macros were removed incorrectly during saving of new macros list

Version 2.2.52

13.11.06 (!) unnecessary lines appeared at SPM menu

Version 2.2.51

13.11.06 (+) new opportunity: license can be load from file, text in registration dialog was corrected

13.11.06 (+) if function doesn't have any bitmaps it appears in macros list with special one: ?

10.11.06 (+) evaluation license can be obtained for 1 month in order to test a program at first time

10.11.06 (+) format Digital Surf (*.sur) can be read now

9.11.06 (~) new version of macros that use new plugins, but it haven't take right functions yet
Version 2.2.50

9.11.06 (~) new option for parametric curve: Slant noise level

9.11.06 (~) function WLC Analysis can be used only for separation curve

9.11.06 (~) function WLC analysis is moved to plugins

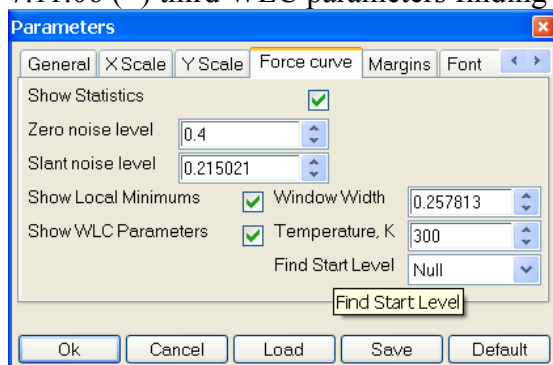
9.11.06 (~) new option for function Separation Curve (plotting separation curve): Slant noise level

8.11.06 (~) function Separation Curve (plotting separation curve) is performed by using plugin

8.11.06 (!) function Adjust Scale couldn't be used for curves

8.11.06 (!) if WLC curves weren't found (weren't showed at force curve) performance of command WLC analysis caused an error

7.11.06 (+) third WLC parameters finding method: without using start level



7.11.06 (~) Russian version of options menu for function Separation Curve (plotting separation curve) was completed

Version 2.2.49

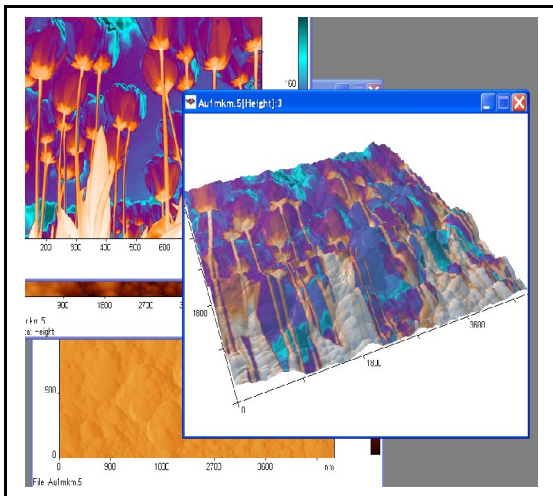
3.11.06 (+) Russian names can be used in combo boxes

30.10.06 (+) new license generation method

30.10.06 (+) new license generation method

Version 2.2.48.

27.10.06 (~) 3D texture overlay from arbitrary document (earlier – only channel from current document):



26.10.06 (+) reading of PNI (Pacific Nanotechnology Instruments) file format

25.10.06 (~) Separation Curve done through Plugins, added interface for selecting algorithm of the slanted p[art search

24.10.06 (+) zero level selection method for WLC curves can be selected between 3 variants: from data, as an approximation parameter, or as a superposition of the rightmost curve's tails

20.10.06 (+) noise level for non-contact part evaluation of the force curve; it can be changed in Parameters dialog

20.10.06 (!) parametric curves were not exportable to the pictures (JPEG and BMP)

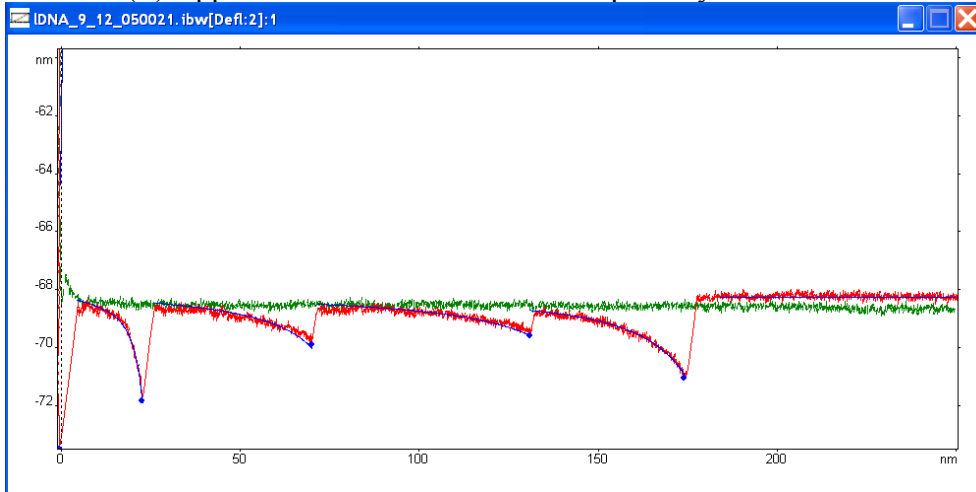
20.10.06 (~) recalculation of the force curve parameters is done in more efficient way

19.10.06 (+) parameter for zero offset of the WLC curve (F0) added

19.10.06 (+) output of the WLC parameters as table (function WLC analysis):

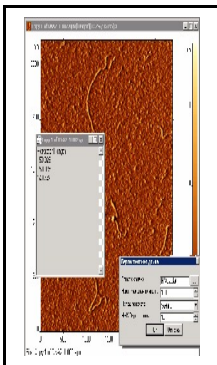
Force,nm	Distance,nm	Persistence length,nm	Contour length,nm
-3.59547	22.7105	0.0862844	27.9662
-1.6489	70.0386	0.0914378	95.7242
-1.35878	130.82	0.137314	174.614
-2.82057	173.835	0.206618	202.223

18.10.06 (+) approximation of the force curve parts by WLC model:



Version 2.2.47.

18.10.06 (+) persistent length calculation:



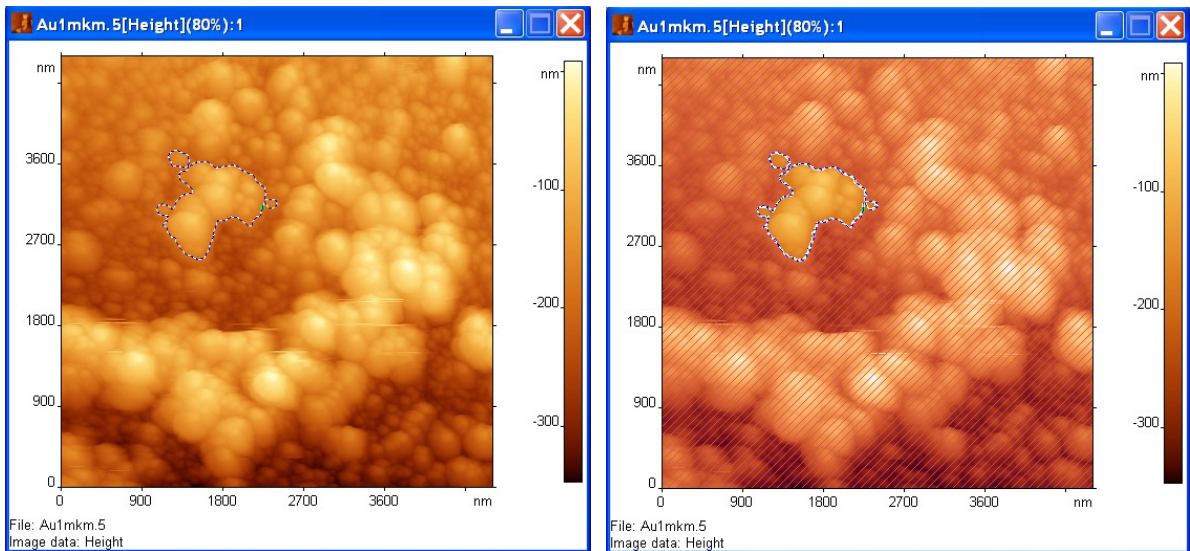
13.10.06 (~) Planefit By Marks removed – now it can be done through Fitting

13.10.06 (~) old persistent length calculation removed, new function development undergoes

12.10.06 (+) local minimums search, window width can be changed in parameters window

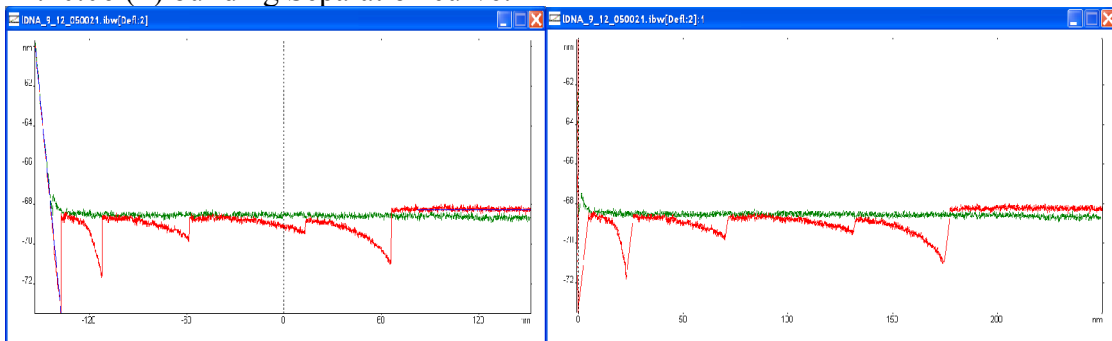
12.10.06 (+) subtraction of selection (selection with Alt button pressed) now gives inverted area, which speeds up work – no need to make a selection and invert it afterwards

12.10.06 (+) conversion of Isoline to Selection:



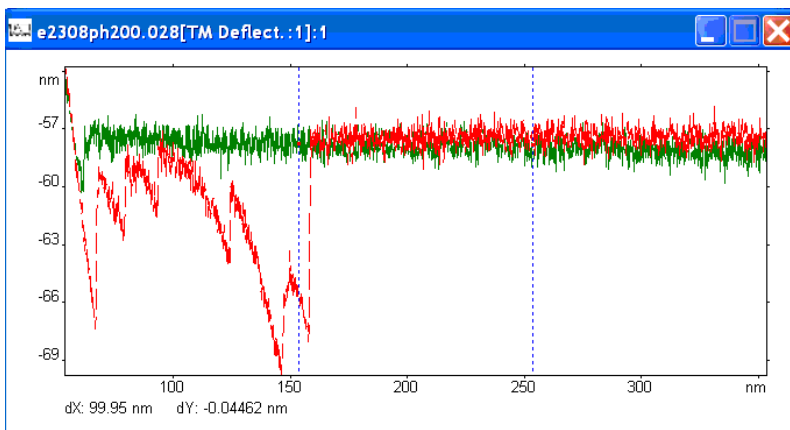
12.10.06 (!) Isoline volume calculation

11.10.06 (+) building Separation curve:



10.10.06 (+) reading TIFF in RGB format

10.10.06 (~) IgorPro file output changed: two different sub-mages for approach and retraction curves:



10.10.06 (~) slanted part of the force curve calculated as a tangent to the 2nd order curve, fitted to the slant.

10.10.06 (!) 8-bit TIFF was displayed upside-down

10.10.06 (+) 8-bit TIFF file format reading

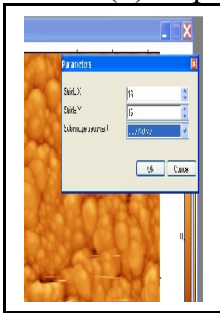
10.10.06 (!) redrawing of the image when Z scale changed

Version 2.2.46.

9.10.06 (+) reading of Nanosurf file format

9.10.06 (!) record of flight over 3D surface fixed

6.10.06 (~) BSpline fitting can be done over separate sub-images or by active sub-image:



Version 2.2.45.

6.10.06 (~)BSpline fitting done through Plugins (fsmbase)

6.10.06 (!) drawing scale for large values (floating point error was appearing)

5.10.06 (~) cursor modes toolbar is positioned on the left side initially

4.10.06 (+) calculation of the force parameters for parametric curve

4.10.06 (+) added option for calculation of average slant over all sub-images

4.10.06 (~) In “Fitting” function added option whether subtract or not constant offset

3.10.06 (!) In “Fitting” function fixed zero offset error, which appeared on repeated operation, if previous fitting required scaling with zero offset

3.10.06 (~) duplicate commands Average and Remove Trend Line removed

Version 2.2.44.

3.10.06 (!) In parametric curves parameters interface buttons were missed

Version 2.2.43.

3.10.06 (~) 2nd order curve subtraction is done through Plugins

3.10.06 (~) average slant and curvature subtraction (Fitting) is done through Plugins: for 2-dimensional case average surface is subtracted

3.10.06 (!) when exiting through menu File/Exit, error message appeared

Version 2.2.42.

28.09.06 (+) “.par” extension (Omicron files) added to the list of opened files

Version 2.2.41.

28.09.06 (+) Omicron file format reading added

27.09.06 (~) contact part of force curve now approximated with 2nd order curve, but not by straight line, as earlier; tangent to this curve in initial point is used for separation curve evaluation

26.09.06 (+) option "Show local minimums" for local minimums display on force curve graph

Version 2.2.40.

21.09.06 (!) step position update in “Find step” function

21.09.06 (~) valleys display on force curve is optional now

20.09.06 (+) “local minimums” function added for force curves

Version 2.2.39.

19.09.06 (~) when full-screen window loses it’s focus, window is not closing, which allows to work on another monitor in multi-display configuration

Version 2.2.38.

18.09.06 (+) full screen display output can be selected in “File/Options”

Version 2.2.37.

15.09.06 (+) “ Rotate” function can rotate on arbitrary angle

15.09.06 (~) rotation angle in “Rotate” function moved to the options

15.09.06 (+) “Absolute Z Scale” is saved automatically

Version 2.2.36.

14.09.06 (!) during Y scan number of columns and rows where interchanged

Version 2.2.35.

13.09.06 (~) function “Normalize Z Scale” for 3D images added (to make real dimensions matching the horizontal axes), vertical axis display optimized

13.09.06 (!) 3D view has inner border around the window, which disappeared on resizing; now it doesn’t appear at all

13.09.06 (+) "um" (alternate microns notation) added to the list of automatically recalculated units

12.09.06 (~) function Separate Grains is done through Plugins

12.09.06 (~) function Rotate is done through Plugins

12.09.06 (~) function Flip is done through Plugins

11.09.06 (~) function Adjust Scale is done through Plugins

11.09.06 (~) for 3D images displaying of legend, marks, curves, profile sections and labels moved to the options dialog (“Decorations” tab); added “Show base” option for shadow

Version 2.2.34.

5.09.06 (+) Automated selection of the installation package language. If system or user language matches to the existing language transform file number (*.mst) in the installation source directory, then this transform will be automatically applied to the installation package.

Version 2.2.33.

5.09.06 (~) Global options setup, including language, has been moved to the “Global Options” dialog, which is called by the command “File/Options...”. Files for all languages are installed.

4.09.06 (~) <Shift> now switches the option of showing plugin’s dialogs: if they turned on by default, it switches them off, and vice versa.

4.09.06 (!) Sections of length 1 generated errors when trend line was turned on.

4.09.06 (~) Scales redraw only in the toolbar and in the active window – all other windows redraw by pressing “Refresh”

4.09.06 (~) Image options saved only by pressing “Ok” in options dialog

4.09.06 (!) If Z scale had negative direction, like in NT-MDT files, this generated an error in 3D files.

Version 2.2.32.

1.09.06 (~) Pictures in setup dialogs replaced.

1.09.06 (+) Option for showing selected area in the Zoom Window (View/Show Zoom window), button for this command.

1.09.06 (+) Tooltips to the buttons “Build 3D”, “Refresh”, “1:1”

Version 2.2.30.

31.08.06 (~) Plugin options will not be shown if <Shift> is pressed.

31.08.06 (!) Cursor blinking when <Shift> or other keys pressed (even if cursor is not over the window, it was changing shape)

Version 2.2.29.

29.08.06 (+) Median filter “Cross”

29.08.06 (+) From “Help” menu pdf-manual can be opened.

Version 2.2.28.

29.08.06 (!) Inner area filling (Features/Fill Inner Areas) – only one corner was filled.

Version 2.2.27.

29.08.06 (~) Intel DLL's upgraded from 5.1 to 5.1.1 (support for the new Intel Core Duo processors)

Version 2.2.26.

28.08.06 (+) Median filter “X”

28.08.06 (!) new line in force curve statistics and trend line statistics

28.08.06 (!) opening of surface data, exported into the text format (it is still not opened by FS, but at least doesn't generate error)

28.08.06 (~) Surface style options (legend, file info, compact mode) moved to the Preferences dialog.

Version 2.2.23.

9.08.06 (!) After clean installation, the main window of FemtoScan did not appear on application start-up. This bug did not appear on installations over previous versions.

27.07.06 (!) Opening files from Explorer by double click.