

NEW CASIA FUNCTIONS & APPLICATIONS

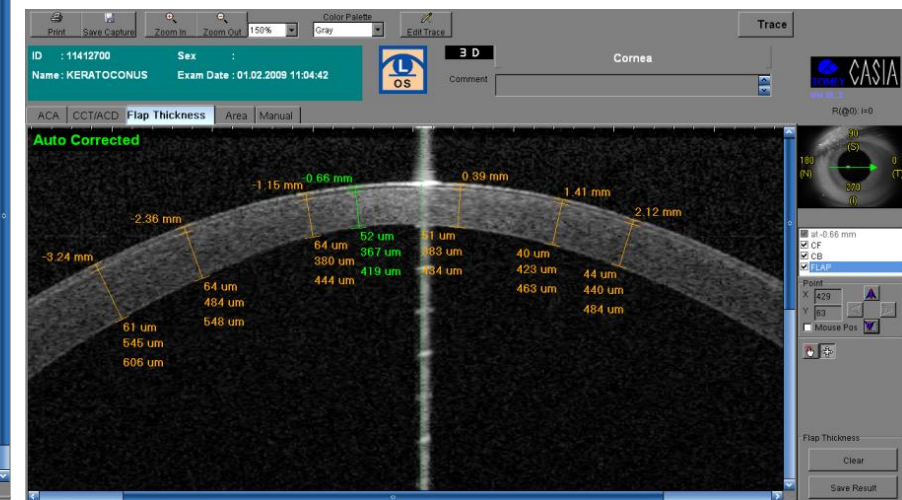
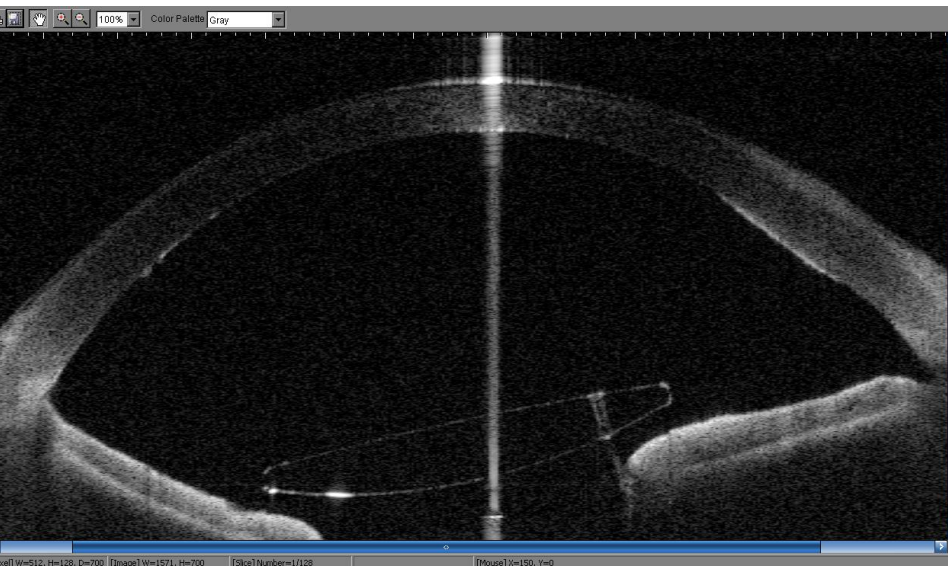
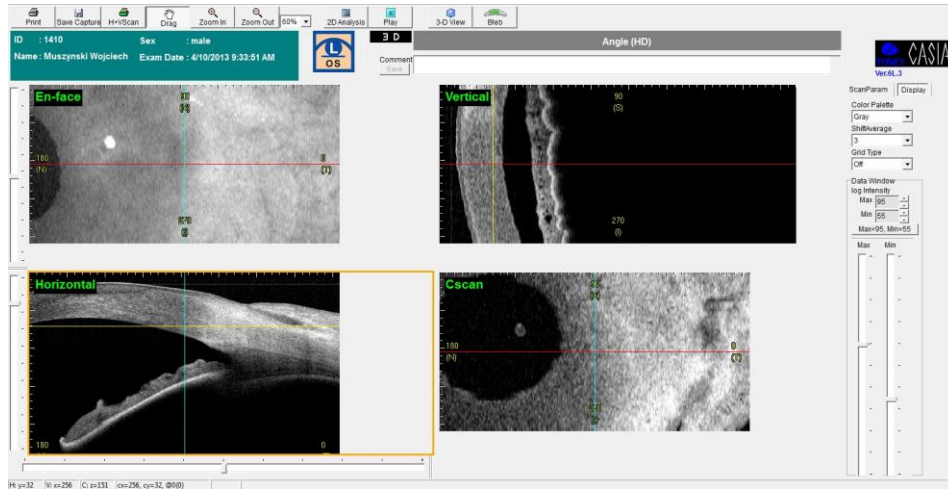
TB-1000 Version 6P

Welcome to the new
wonderful world of CASIA



Surely SS-1000 CASIA makes nice images

Samples



More CASIA images & cases

ID : 501002 Sex : male
Name: Kapcia Tadeusz Exam Date : 2/22/2013 12:41:50 PM

Anterior Segment

ID : 300157 Sex :
Name: Skjold Karl Elise Exam Date : 15.01.2013 23:17:01

Angle Analysis

Manual Corrected

180° (Nasal)				0° (Temporal)					
Parameter	Position	500 um	750 um	ACD[Endo] [mm]	2.674	Parameter	Position	500 um	750 um
ACD	[mm]	0.353	0.591	LV [mm]	10.958	ACD	[mm]	0.304	
ARA	[mm]	0.124	0.269	ACW [mm]	11.773	ARA	[mm]	0.112	
TISA	[mm]	0.123	0.268			TISA	[mm]	0.112	
TIA	[°]	34.9	39.0			TIA	[°]	31.1	

ID : 1410 Sex : male
Name: Muszynski Wojciech .. Exam Date : 4/10/2013 9:33:51 AM

ACA | OCT/ACD | Flap Thickness | Area | Manual

Auto Corrected

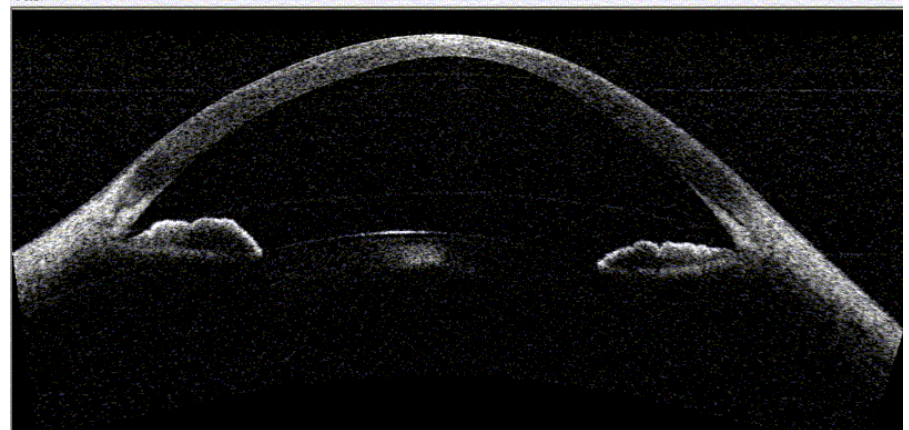
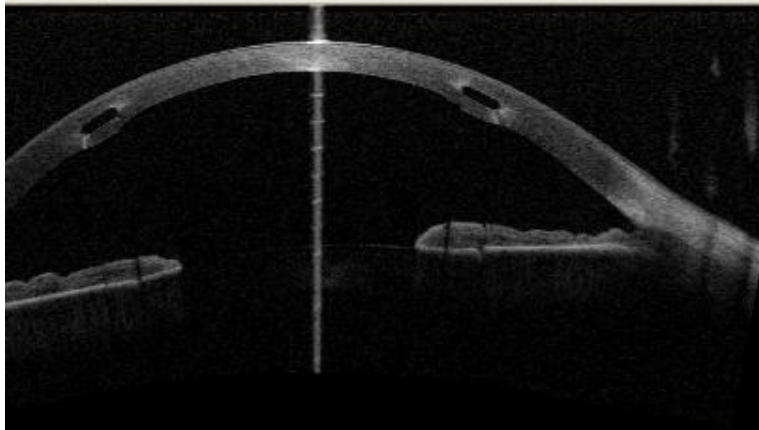
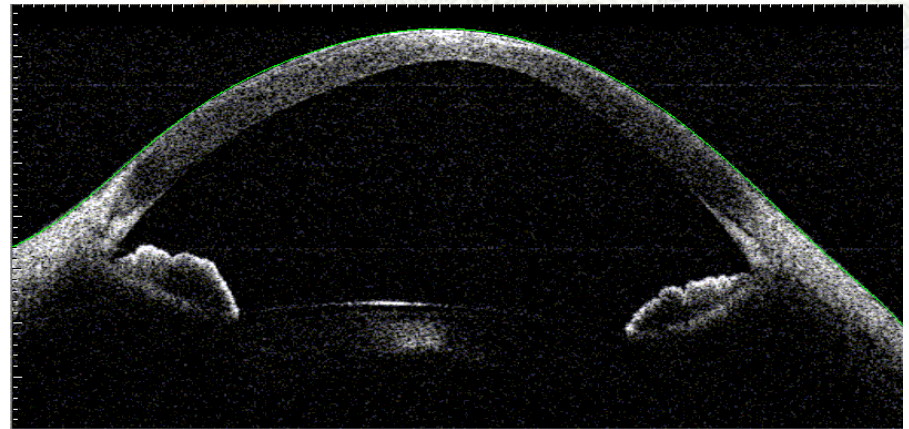
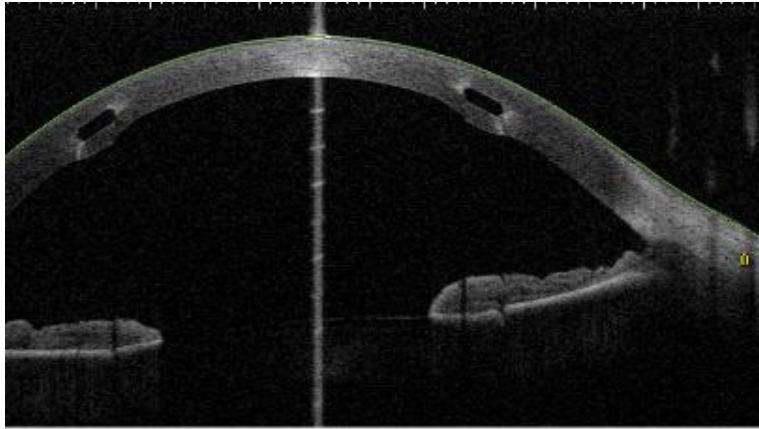
Flap Thickness	Area
1.17 mm	70 um
-0.25 mm	88 um
0.50 mm	504 um
1.28 mm	92 um
2.15 mm	539 um
	558 um
	638 um
	699 um
	764 um
	609 um
	646 um
	689 um
	791 um
	879 um
	946 um
	973 um
	533 um
	353 um
	1479 um
	1326 um

ID : 390608 Sex :
Name: Solidaj Aleksander Exam Date : 2/28/2013 9:24:32 AM

Angle Analysis

Clear
Save Result

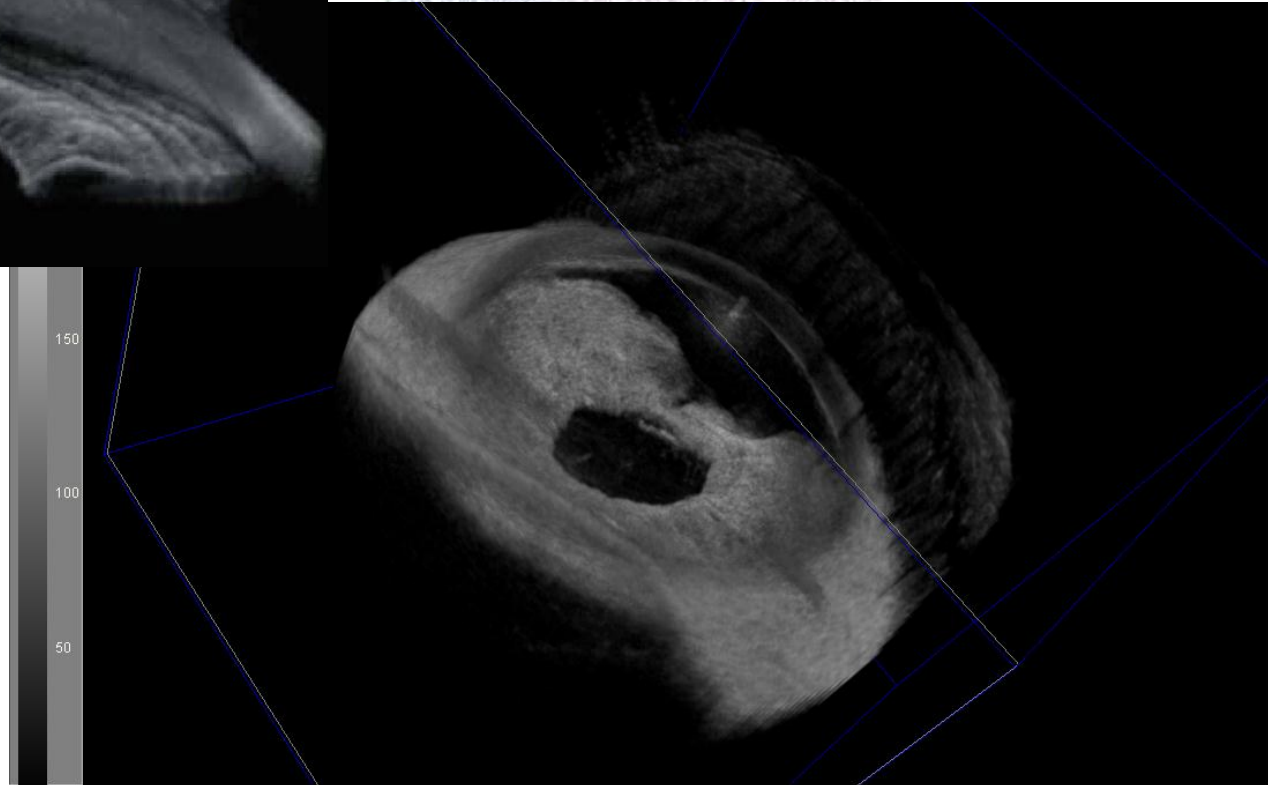
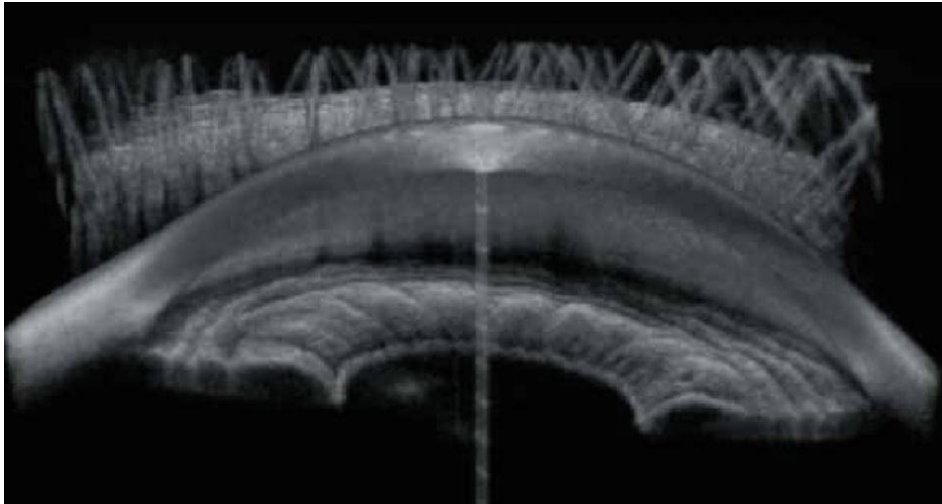
SS-1000 CASIA measurements need a correction



Two samples show, why an individual correction of the cornea is so important.....

CASIA is the only machine with an individual correction, done automatically

SS-1000 CASIA 3D imaging system



TOMEY CASIA Ver. 6L.3

Real measured 3D images of the complete anterior chamber

New Software & New Layout

•Patient Database Overview



The screenshot displays the TOMAY Link - Examination list(SS-1000) software interface. The interface is divided into several sections:

- Patients List (Left):** A table with columns for Patient ID, Last Name, and First Name. The patient SS-1000 is highlighted.
- Examination Details (Right):** A list of examinations for patient SS-1000, showing Exam Date, Regist Date, Machine Name, Machine No, and Operator. Each examination entry includes a thumbnail image of the eye and machine display, and a detailed description of the scan parameters.

Two blue circles highlight specific elements:

- Eye & machine display:** A blue circle highlights the thumbnail image of the eye and machine display for the examination on 14.02.2011 12:18:18.
- Topo Thumbnail:** A blue circle highlights the thumbnail image of the eye and machine display for the examination on 14.02.2011 12:17:13.

Eye & machine display

Topo Thumbnail

New Layout

- IOL calculation
- Multiple Map
- Differential Map
- Custom Print



TOMEY Link - Examination list[SS-1000]

File(F) View(V) Utility(U) Help(H)

Patients

No ID

Local Language

Patient ID	Last Name	First Name
No ID		
04692403		
11412700		

Patient ID SS-1000 Name

14.02.2011

SSOCT 12:22

SSOCT 12:22

SSOCT 12:21

SSOCT 12:20

SSOCT 12:19

SSOCT 12:19

SSOCT

Exam Da

14.02.20

New Layout Functions

- IOL calculation

Casia Topography can now be used for IOL calculation

Layout of IOL calc. new and easier to handle



VA-200 Data Selection

File(F) View(V) Tool(T) Utility(U)

Patient Info Details Records Statistics

ID : SS-1000 Sex
Name : GmbH Tomey Comment

Data Sel. | IOL Cal. | Data List

R (OD) L (OS)

Exam Date: 2013/04/11

AXIAL

KERATO

TOPO

Double K Method

PRE_K	K1:	K2:
POST_K	K1:	K2:
PRE_REF	S:	C: A:
POST_REF	S:	C: A:

SPECULAR

Other Exams

REF	S:	C:	A:
VA_FAR	S:	C:	A:
VA_NEAR	S:	C:	A:

SSOCT 2011.02.14 12:17:47
SS-1000

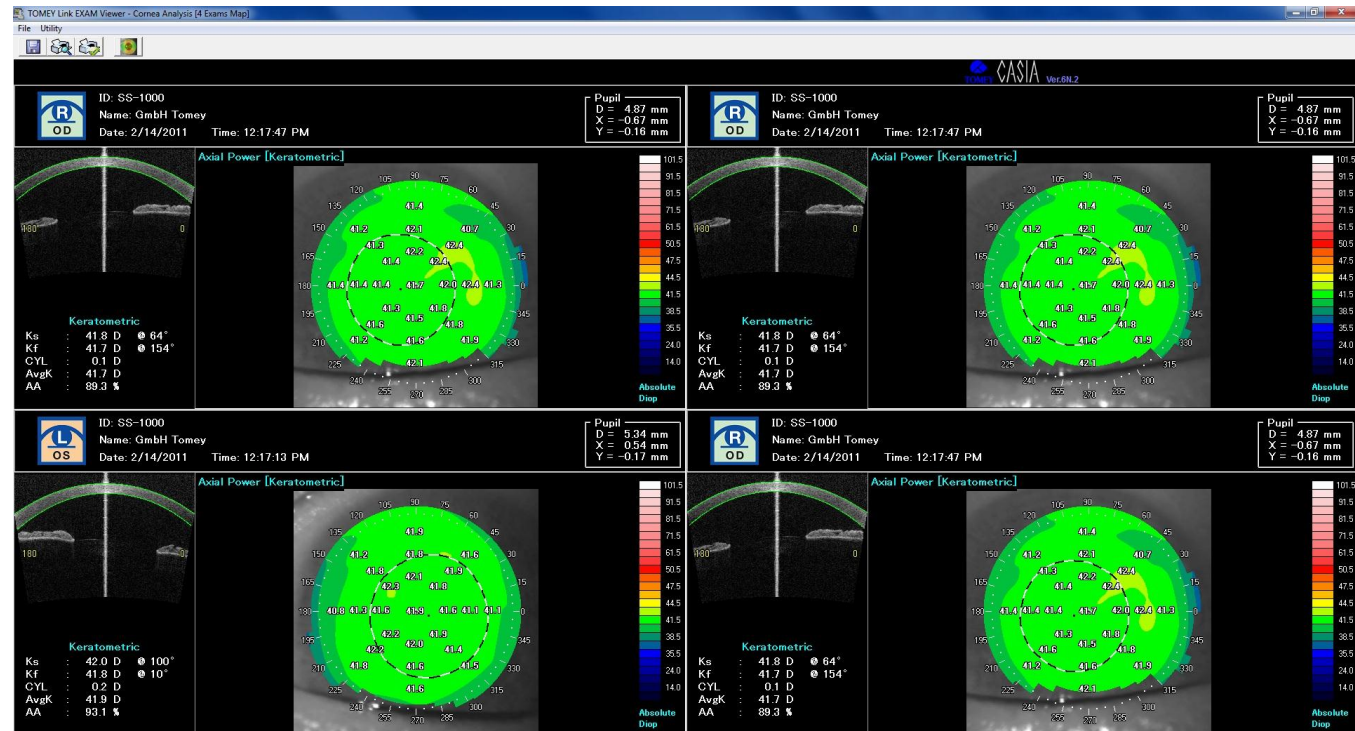
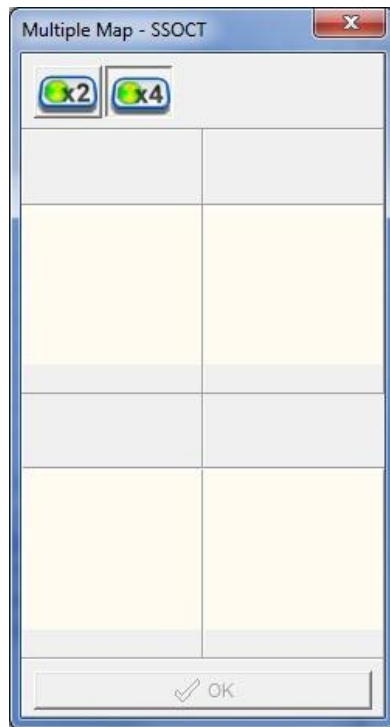
Ks : 41.8D Kt : 41.7D
AvgK : 41.7D

14.02.2011
SSOCT 12:17

Ks: 41.8@04 Kt: 41.7@154
AvgK: 41.7 CVL: 0.1

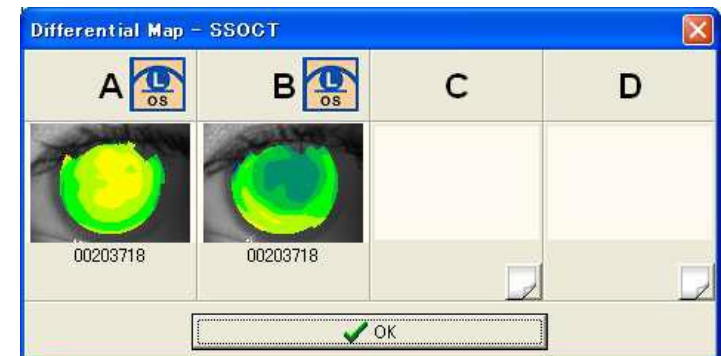
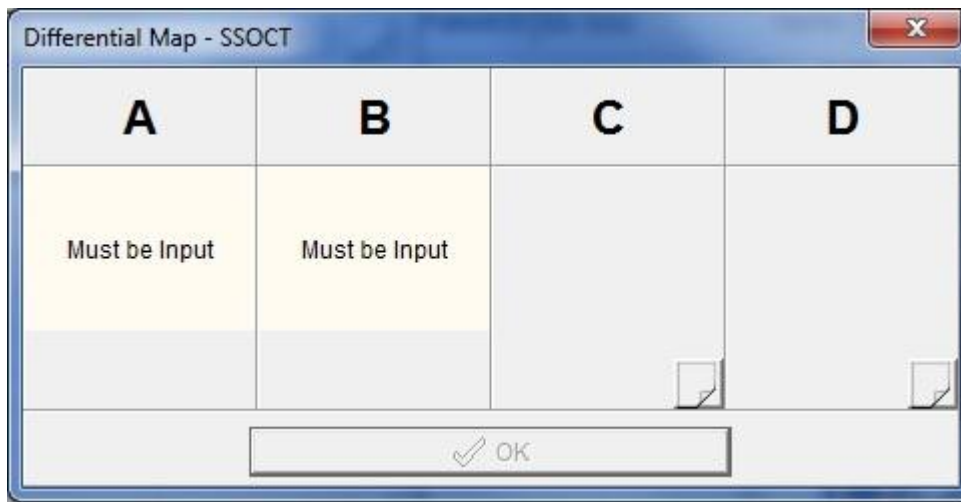
New Layout Functions

- Multiple Map
 - Compare up to four different images with each other
 - R and L eye possible together
 - Individual Settings



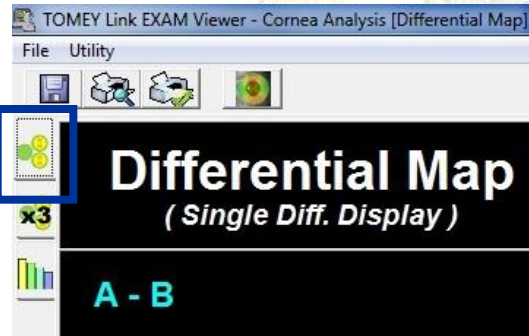
New Layout Functions

- Differential Map
 - Subtract up to four different images
 - R and L eye also possible
 - Very individual settings
 - Three different displays and functions
 - Regression analysis similar to perimeter



New Layout Functions

- Differential Map with three different displays



Differential Map (Single Diff. Display)

ID: SS-1000
Name: GmbH Tomey
ID or Eye[L/R] does not match !!

OS-1000
Name: GmbH Tomey

A - B

A Date: 2/14/2011 Time: 12:17:47 PM Pupil Dia.: 4.87 mm

Keratometric		Real	
Ks	41.8 D	Ks	40.8 D
Ks @	64	Ks @	20
KF	41.7 D	KF	40.7 D
KF @	154	KF @	110
CYL	0.1 D	CYL	0.1 D
AvgK	41.7 D	AvgK	40.7 D
AA	89.3 %	AA	82.9 %

Posterior		Pachymetry	
Ks	-6.0 D	Apex	547 um
Ks @	89	X	0.0 mm
KF	-5.8 D	Y	0.0 mm
KF @	179	Thinnest	541 um
CYL	0.2 D	X	-0.9 mm
AvgK	-5.9 D	Y	-0.4 mm
AA	82.9 %		

B Date: 2/14/2011 Time: 12:17:13 PM Pupil Dia.: 5.34 mm

Keratometric		Real	
Ks	42.0 D	Ks	41.0 D
Ks @	100	Ks @	137
KF	41.8 D	KF	40.9 D
KF @	10	KF @	47
CYL	0.2 D	CYL	0.1 D
AvgK	41.9 D	AvgK	40.9 D
AA	83.1 %	AA	86.7 %

Posterior		Pachymetry	
Ks	-6.0 D	Apex	551 um
Ks @	89	X	0.0 mm
KF	-5.8 D	Y	0.0 mm
KF @	179	Thinnest	542 um
CYL	0.2 D	X	1.5 mm
AvgK	-5.9 D	Y	-0.6 mm
AA	86.7 %		

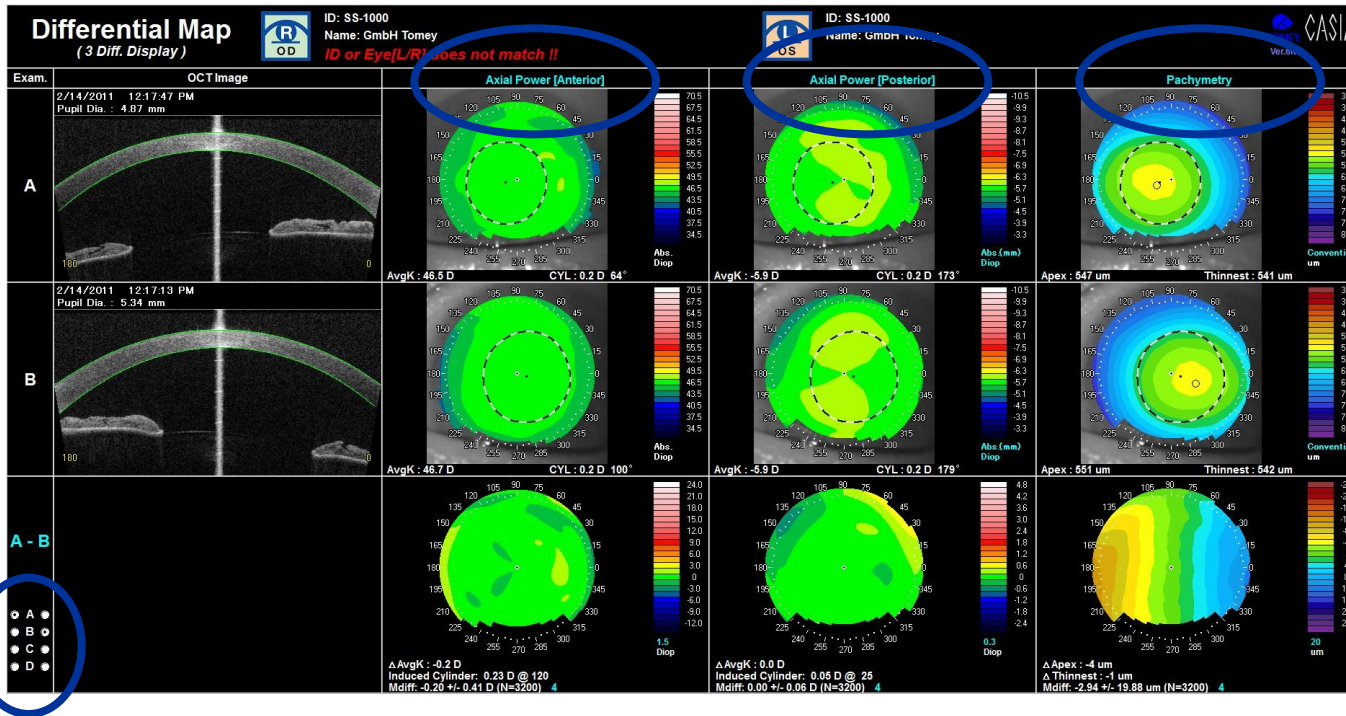
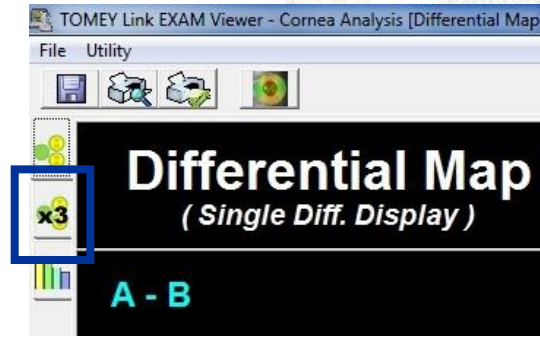
Δ Apex: -4 um
Δ Thinnest: -1 um
Mean difference: -2.94 +/- 19.88 um (N=3200)



New Layout Functions

- Differential Map

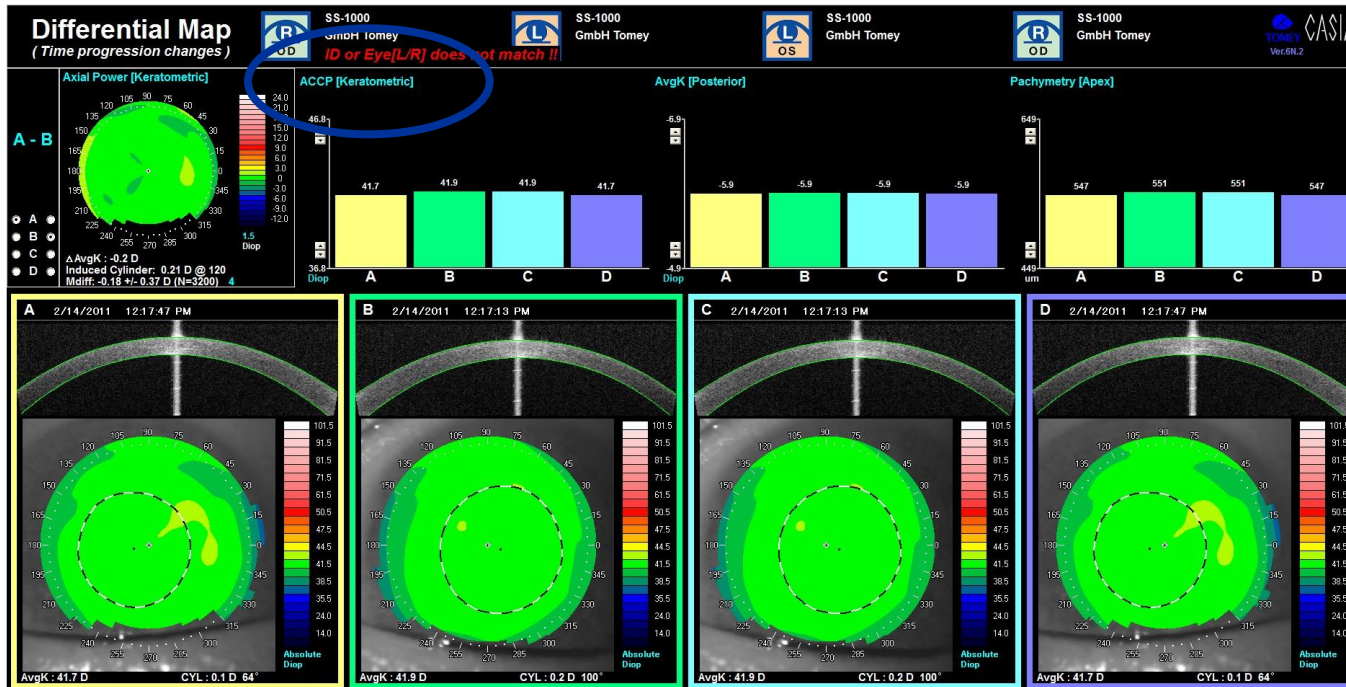
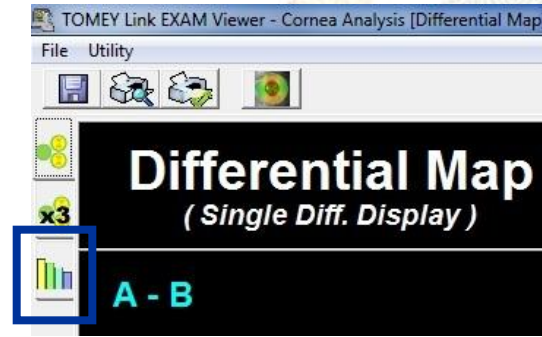
- Individual changes in map displays



New Layout Functions

- Differential Map

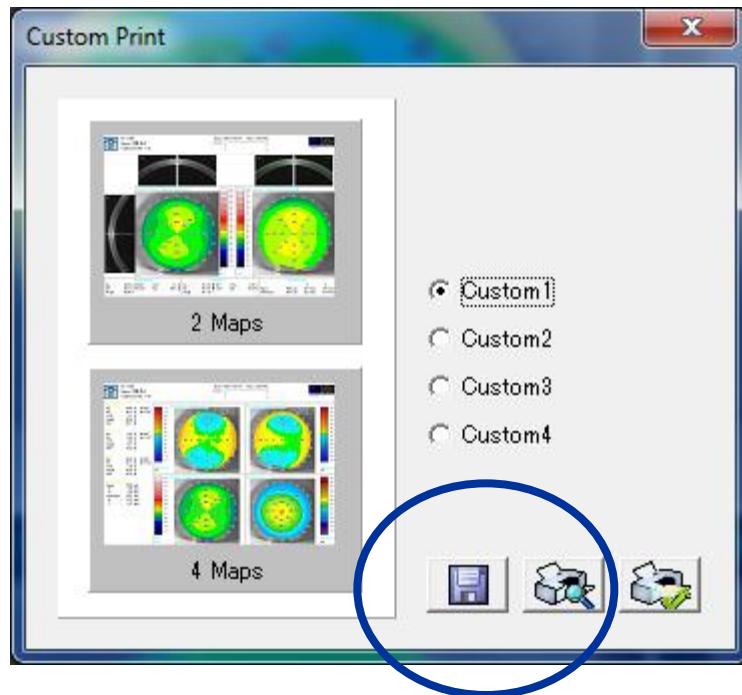
- Regression Analysis in many different settings possible (ACCP, CYL, AA...)



New Layout Functions

- Custom Print

It is possible to store the print out right away as a jpg or bmp file



New Topography Functions

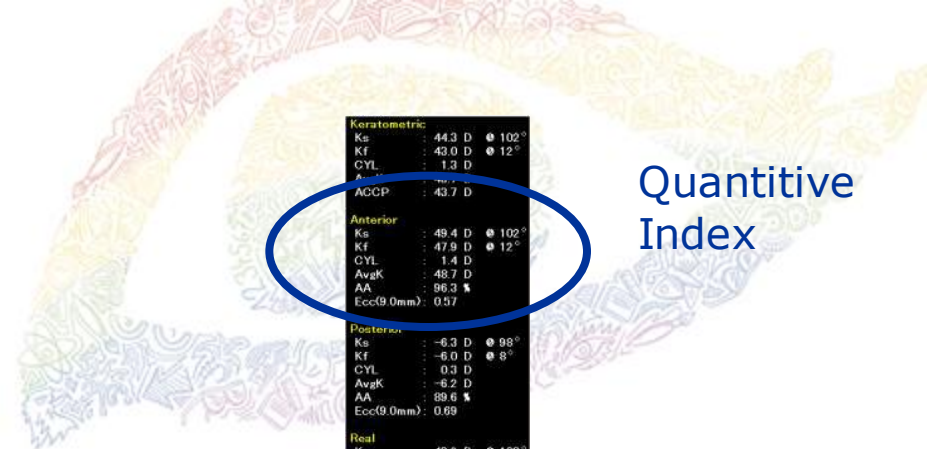
- Anterior Power Map included
- Fourier Map comparison anterior and posterior map
- Ectasia Screening comparison anterior and posterior map
- 2D analysis possible
- Toric IOL positioning sample
- New Setting Functions



New Topography Functions

- Anterior Power Map included

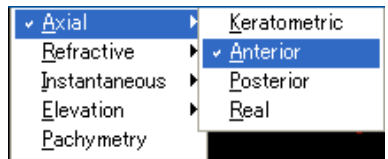
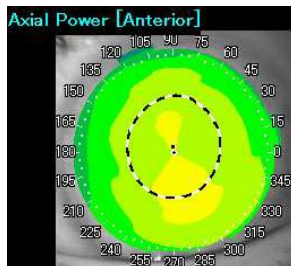
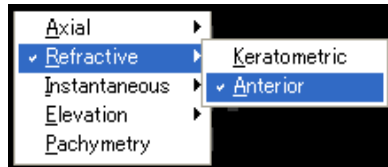
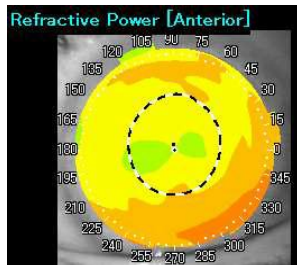
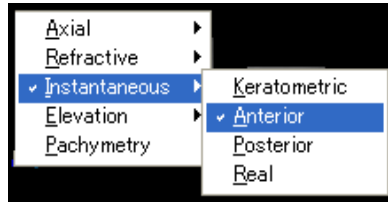
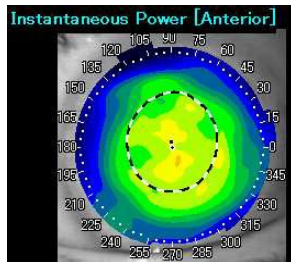
This new function is included in all maps, in the quantitative index as well as in the data table export



Quantitative Index

Keratometric			
Ks	: 44.3 D	102°	
KF	: 43.0 D	12°	
CYL	: 1.3 D		
A	: 43.7 D		
Anterior			
Ks	: 49.4 D	102°	
KF	: 47.9 D	12°	
CYL	: 1.4 D		
AvgK	: 48.7 D		
AA	: 98.3 %		
Ecc(9.0mm)	: 0.37		
Posterior			
Ks	: -6.3 D	98°	
KF	: -6.0 D	8°	
CYL	: 0.3 D		
AvgK	: -6.2 D		
AA	: 89.6 %		
Ecc(9.0mm)	: 0.69		
Real			
Ks	: 43.2 D	103°	
KF	: 42.0 D	13°	
CYL	: 1.2 D		
AvgK	: 42.6 D		
AA	: 89.6 %		
Pachymetry			
Apex	: 520 um		
X	: 0.0 mm		
Y	: 0.0 mm		
Thinnest	: 518 um		
X	: 0.4 mm		
Y	: 0.0 mm		

Maps



Data Tables

Save Data

	Keratometric	Anterior	Posterior	Real
Radius			<input checked="" type="checkbox"/>	
Axial		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Refractive		<input checked="" type="checkbox"/>		
Instantaneous		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Height		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Elevation		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pachymetry				

Save Index

Format: Normal CSV TMS Style

Dimension: mm Diop

Matrix Direction: Radial Angle

Separator: Custom Tab Space

Sample

Angle 0 : 8.14, 8.14, 8.14, 8.14, 8.14, 8.14,
 Angle 1 : 8.14, 8.14, 8.14, 8.14, 8.14, 8.14,
 .
 Angle 0 : 8.14, 8.14, 8.14, 8.14, 8.14, 8.14,

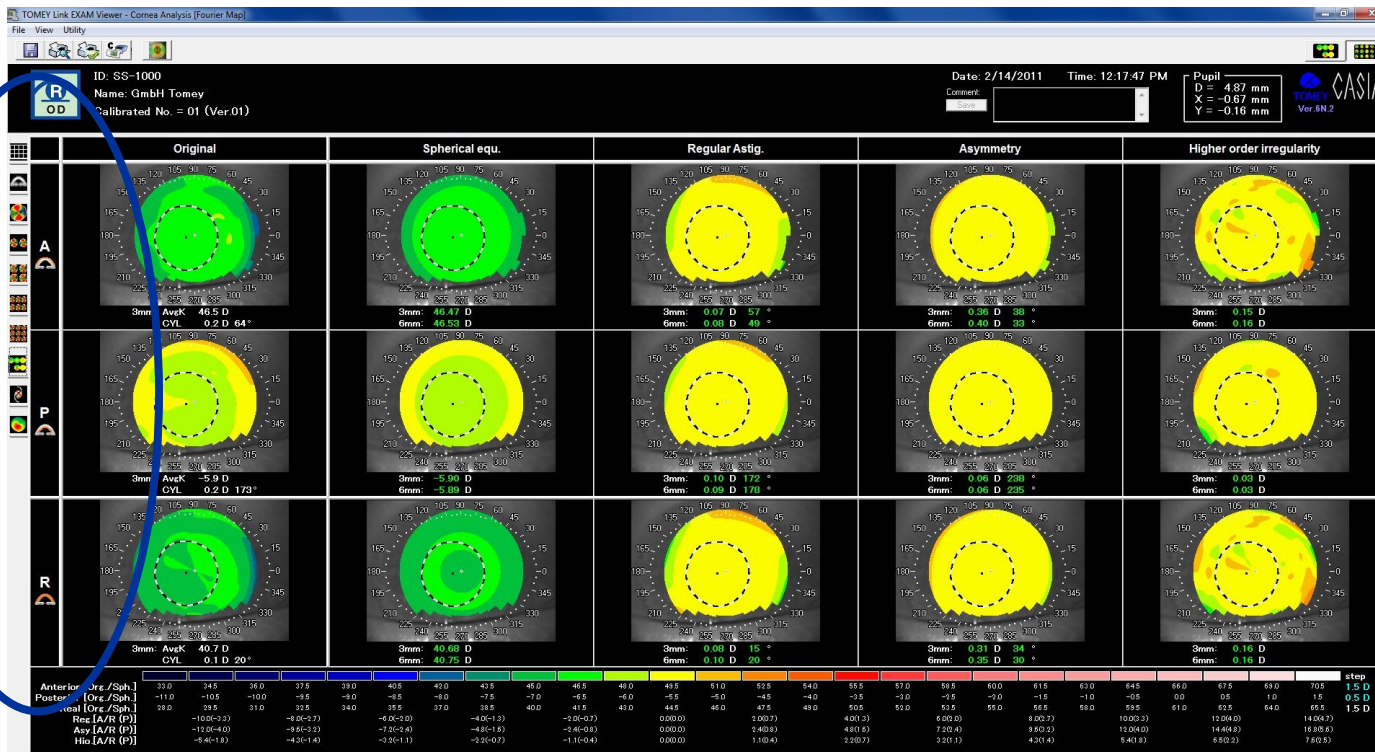
Create Tables

Data Table

New Topography Functions

•Fourier Map comparison anterior and posterior map

Two different display possibilities with comparison of anterior and posterior data



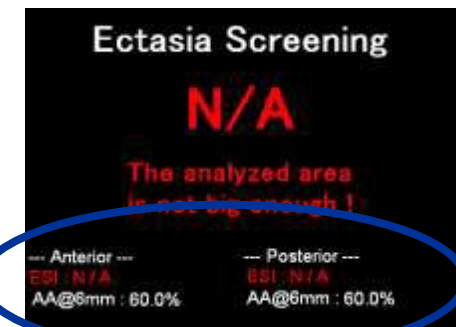
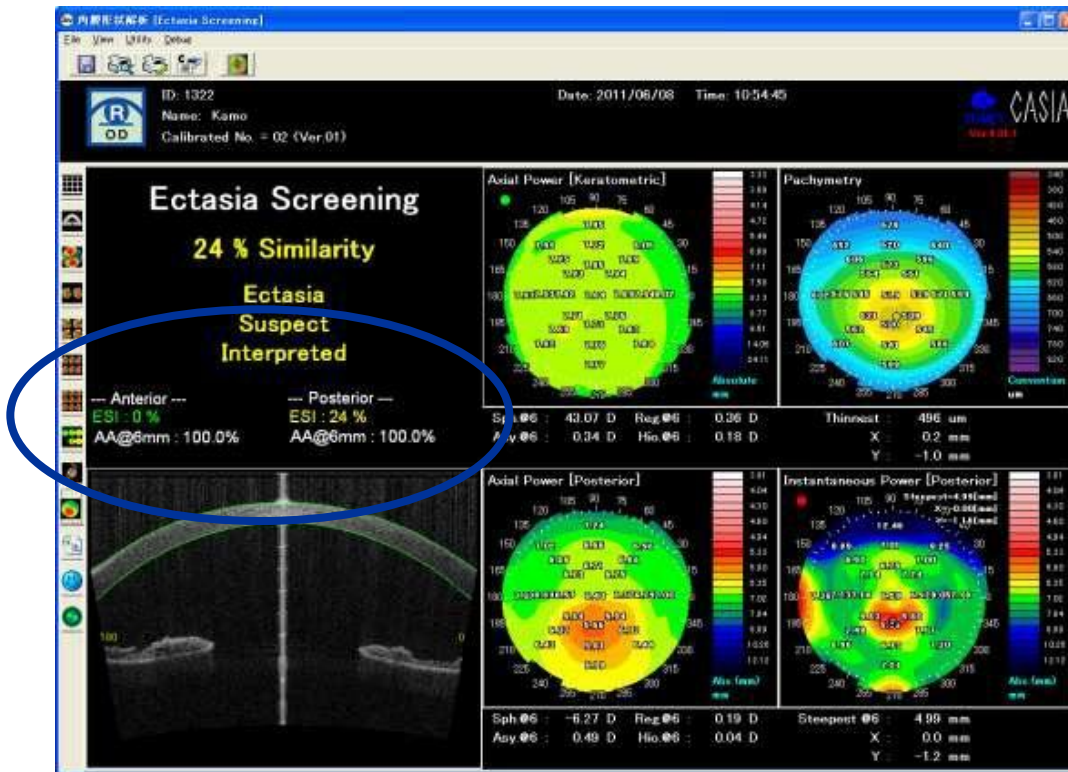
New Topography Functions

- Ectasia Screening comparison anterior and posterior map

ESI: ESI (Ectasia Screening Index) indicates the screening result obtained from the anterior & posterior data.



AA@6mm: Percentage of the area (range) that could be analyzed within $\phi 6$ mm on the anterior and posterior. If the value of AA@6mm is small and the reliability of the anterior data is low, "N/A" is shown for ESI in red.



New Topography Functions

- 2D analysis possible

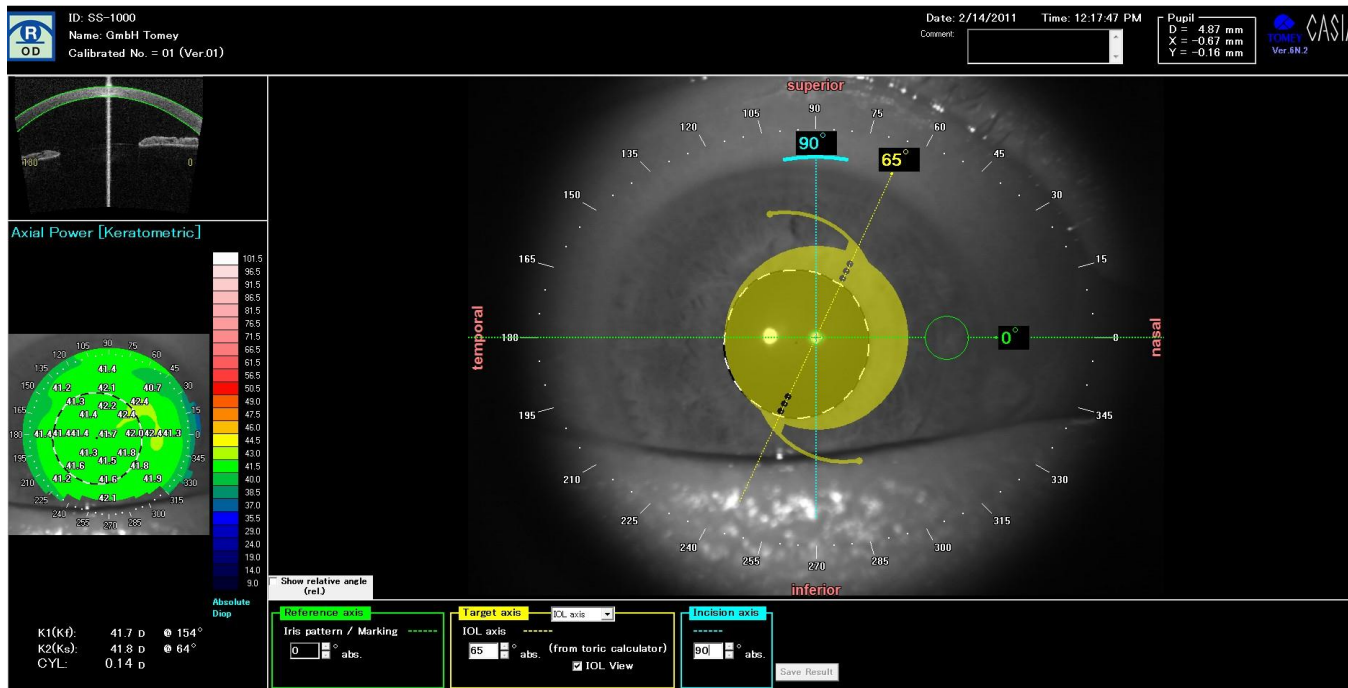
Detailed analysis can be done via 2D analysis function (except angle measurement)



New Topography Functions

- Toric IOL positioning sample

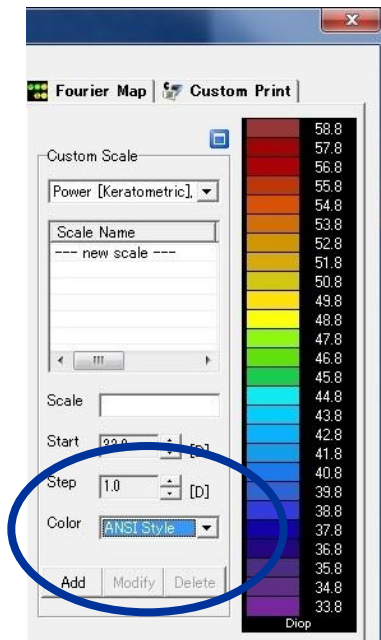
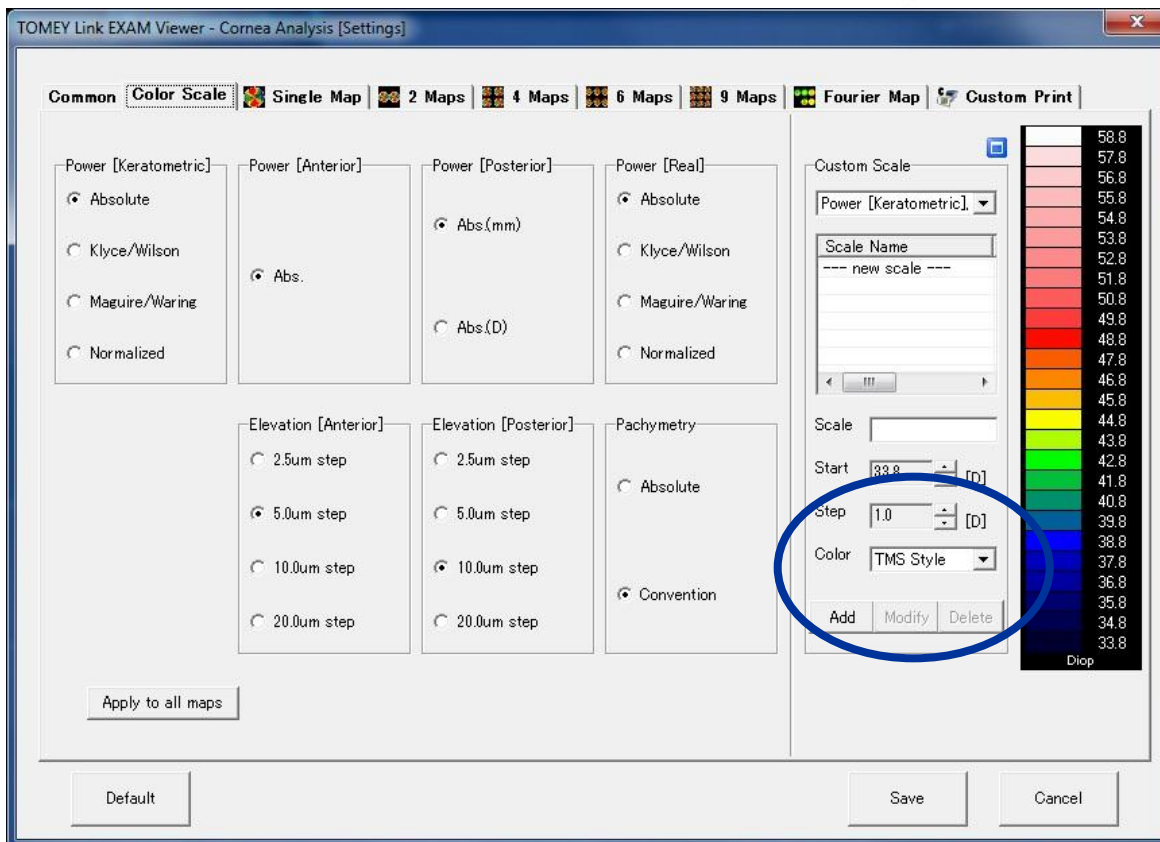
This is a small simulation of a toric IOL, which doctors can use for control



New Topography Functions

- New Settings

Variety of individual settings which are adjusted to the new software version



New Measurement Functions



- New ACA layout and functions
- New CCT/ACD layout and functions
- New System Settings
- Volume Calculation

New Measurement Functions

- New ACA layout and functions

New design including new measurement functions (LV → lens vaulting; ACW → White to White, display of the auxiliary line)



TOMEY Link EXAM Viewer - SSOCT Analysis [ACA]

File(F) Utility(U) | Print | Save Capture | Zoom In | Zoom Out | 90% | Color Palette | Gray | Edit Trace | Trace

ID : 300157 | Sex : | Name: Skjold Karl Elise | Exam Date : 15.01.2013 23:17:01 | OS | Comment | Angle Analysis

ACA | CCT/AOD | Flap Thickness | Area | Manual

Manual Corrected

180° (Nasal)

Parameter	Position	500 um	750 um
AOD	[mm]	0.348	0.573
ARA	[mm ²]	0.120	0.251
TISA	[mm ²]	0.120	0.250
TIA	[°]	35.9	38.3

ACD[Endo.] [mm] 2.675
 LV [mm] 0.483
 ACW [mm] 11.741

0° (Temporal)

Parameter	Position	500 um	750 um
AOD	[mm]	0.434	0.526
ARA	[mm ²]	0.146	0.265
TISA	[mm ²]	0.137	0.256
TIA	[°]	36.3	32.0

Point X: 160, Y: 696 | Mouse Pos | Clear | Save Result

New Measurement Functions

- New CCT/ACD layout and functions

New function for anterior chamber lenses



TOMEY Link EXAM Viewer - SS-OCT Analysis [CCT/ACD]

File(F) Utility(U) | Print | Save Capture | Zoom In | Zoom Out | 90% | Color Palette | Gray | Edit Trace | Trace

ID : 300157 | Sex : | Name: Skjold Kari Elise | Exam Date : 15.01.2013 23:17:01 | OS | 3 D | Angle Analysis | CASIA Ver.6N.2

ACA | CCT/ACD | Flap Thickness | Area | Manual

Manual Corrected

CCT	[um]	547
ACD[Epi.]	[mm]	3.510
ACD[Endo.]	[mm]	2.963

Vault	[um]	280	←
		(0.51CT)	
CLR	[um]	257	
ATA	[mm]	11.696	

Right Panel: Auto Move Cursor, AR1, AR2, Cornea-F, Cornea-B, Lens-F, pIOL-B

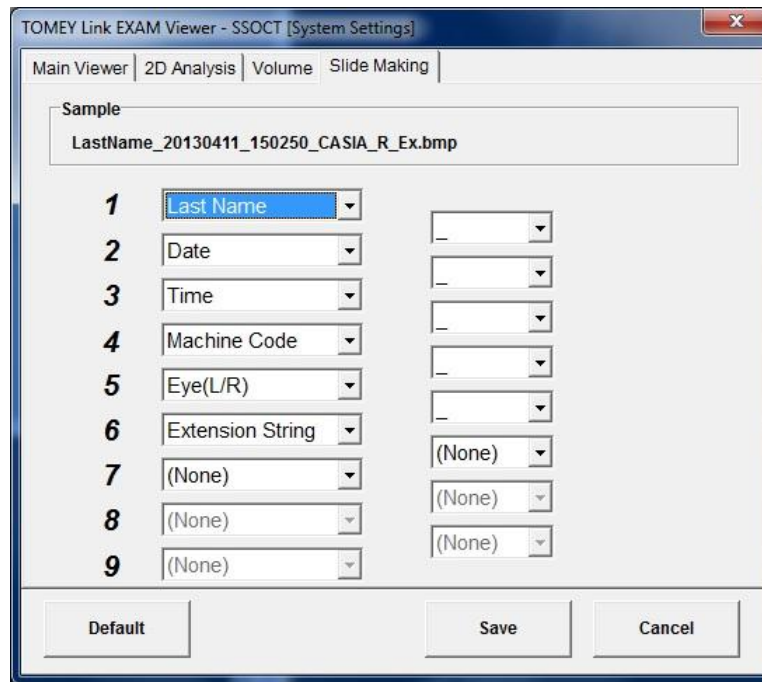
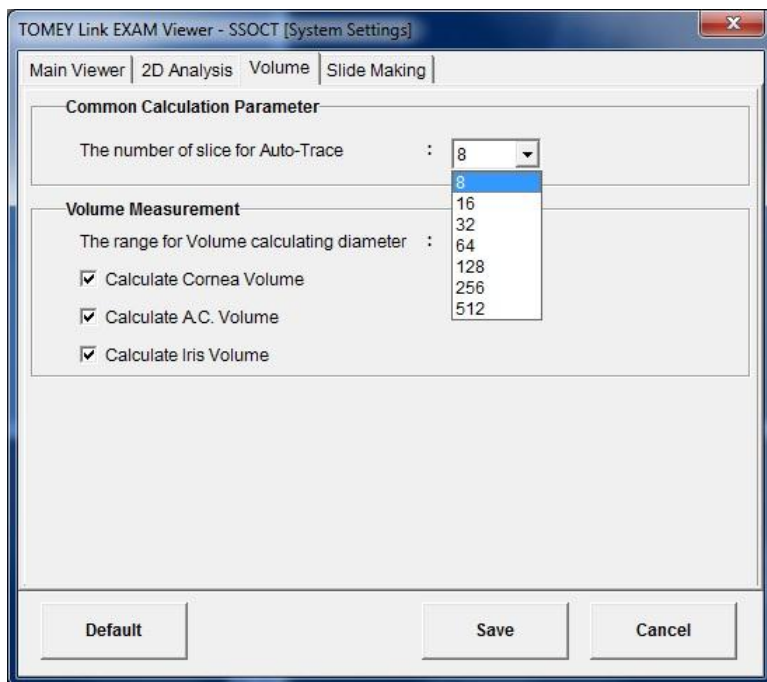
Point: X 755, Y 689, Mouse Pos

CCT/ACD: Clear, Save Result

New Measurement Functions

- New System Settings

Individual Settings for Main Viewer, 2D Analysis, Volume Calculation and Slide Making



New Measurement Functions

- Volume Calculation

Volume Calc. also possible with more than 8 slides to get a more reliable information → especially made for research & glaucom studies



The screenshot displays the CASIA software interface. At the top, it shows patient information: ID: 260176, Name: Jensen Per, Date: 1/16/13, Time: 9:17:23 AM. A 'Pupil' data box indicates D = 4.66 mm, X = 0.27 mm, and Y = -0.00 mm. The main area contains a grid of 20 eye cross-sections, each labeled with a number (e.g., 180, 186, 191, 197, 203, 208, 214, 219, 225, 231, 236, 242, 248, 253, 259, 264). A 'Sector Volume' window is open, displaying a table of volume measurements.

[deg.]	Cornea [mm ³]	A.C. [mm ³]	Iris [mm ³]
Total [0, 360]	121.523	142.628	30.900
[-45, 45]	36.758	32.032	6.833
[45, 135]	23.918	26.017	7.141
[135, 225]	35.406	38.702	8.970
[225, 315]	25.441	45.877	7.956

Below the grid, a 'Parameter' table shows the diameter and volume for the entire eye:

Parameter	Diameter	16mm
Cornea Volume	mm ³	126.063
A.C. Volume	mm ³	115.502
Iris Volume	mm ³	32.236

TB-1000 Version 6P

We hope to satisfy you with all changes, news and updates!

With this update we worked hard on requests from our end-users and their kind support and help with our CASIA machine!

We are convinced, that this is definitely the best anterior OCT on the market and do hope, that you are also convinced now after all these positive information.

Thank you so much for your attention!

Go for the CASIA 😊

