

Stage speed Optical setting Manual view

Exit Caution

Home Exchange Move stage Inspection caution

Inspection Frequency 1M Hz **surface slope**

Boolean surface radius read 2 0 theta+ 2
 ON 100 -83.3333 X- 2 0 16.6667 16.6667
 step 2 1 360 theta- 2
 reject 0/10% X axis(mm) 2 X- 3 0 theta+ 3
 -50 step 3 16.6667 16.6667 X+ 3
 reject edge 2 360 theta- 3
 X axis(mm) X- 0 theta+ X+
 -16.67 step 16.6667 16.6667
 reject edge 3 360 theta-

X-axis Profile theta Position 256.000 Max 7.04 Min -6.44

CSM04 Imaging Scope By Core System

save name

-100 -60 -20 20 60 100

001
09
20
20
09
001

Load data
Save data
Load old type
memo

Fixed scale radius 100

Reload center
X/Y projection
Read position

Repair

signal invert
particle

Filter caution

Span 200.00
Lowcut
Lower Cut Upper Cut
1000 15000
um

Color panel smooth 20
-200.0 -100.0 100.0 200.0

SAVE SCREEN

Stage speed Optical setting Manual view

Exit Caution

Home Exchange Move stage Inspection caution

Inspection Frequency 1M Hz **surface slope**

Boolean surface radius read 2 0 theta+ 2
 ON 100 -83.3333 X- 2 0 16.6667 16.6667
 step 2 1 360 theta- 2
 reject 0/10% X axis(mm) 2 X- 3 0 theta+ 3
 -50 step 3 16.6667 16.6667 X+ 3
 reject edge 2 360 theta- 3
 X axis(mm) X- 0 theta+ X+
 -16.67 step 16.6667 16.6667
 reject edge 3 360 theta-

X-axis Profile theta Position 256.000 Max 7.04 Min -6.44

001
09
20
20
09
001

Load data
Save data
Load old type
memo

Fixed scale radius 100

Reload center
X/Y projection
Read position

Repair

signal invert
particle

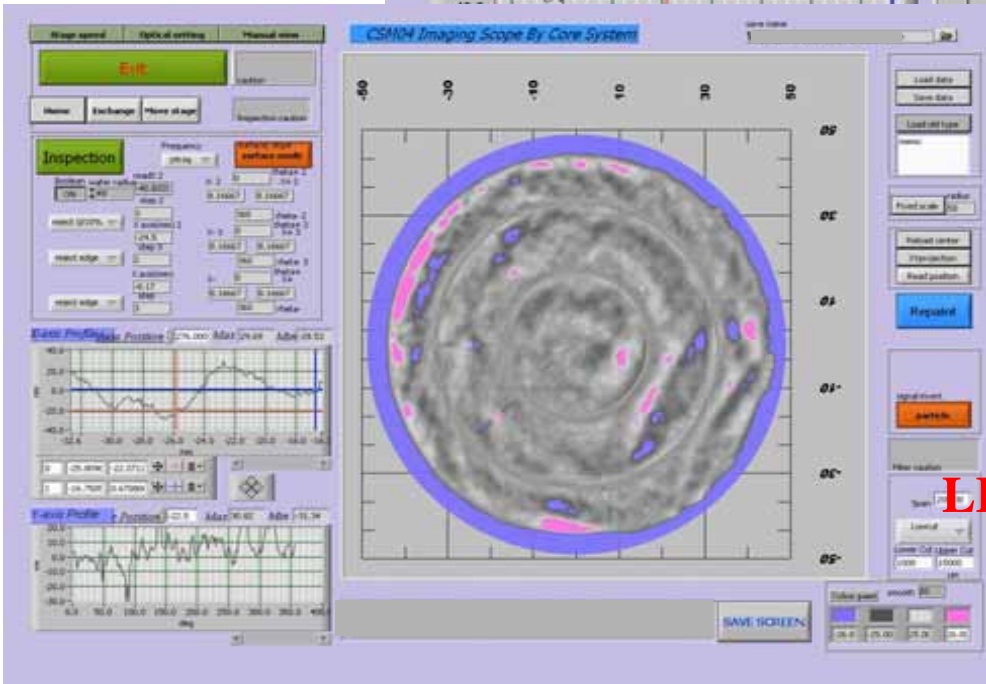
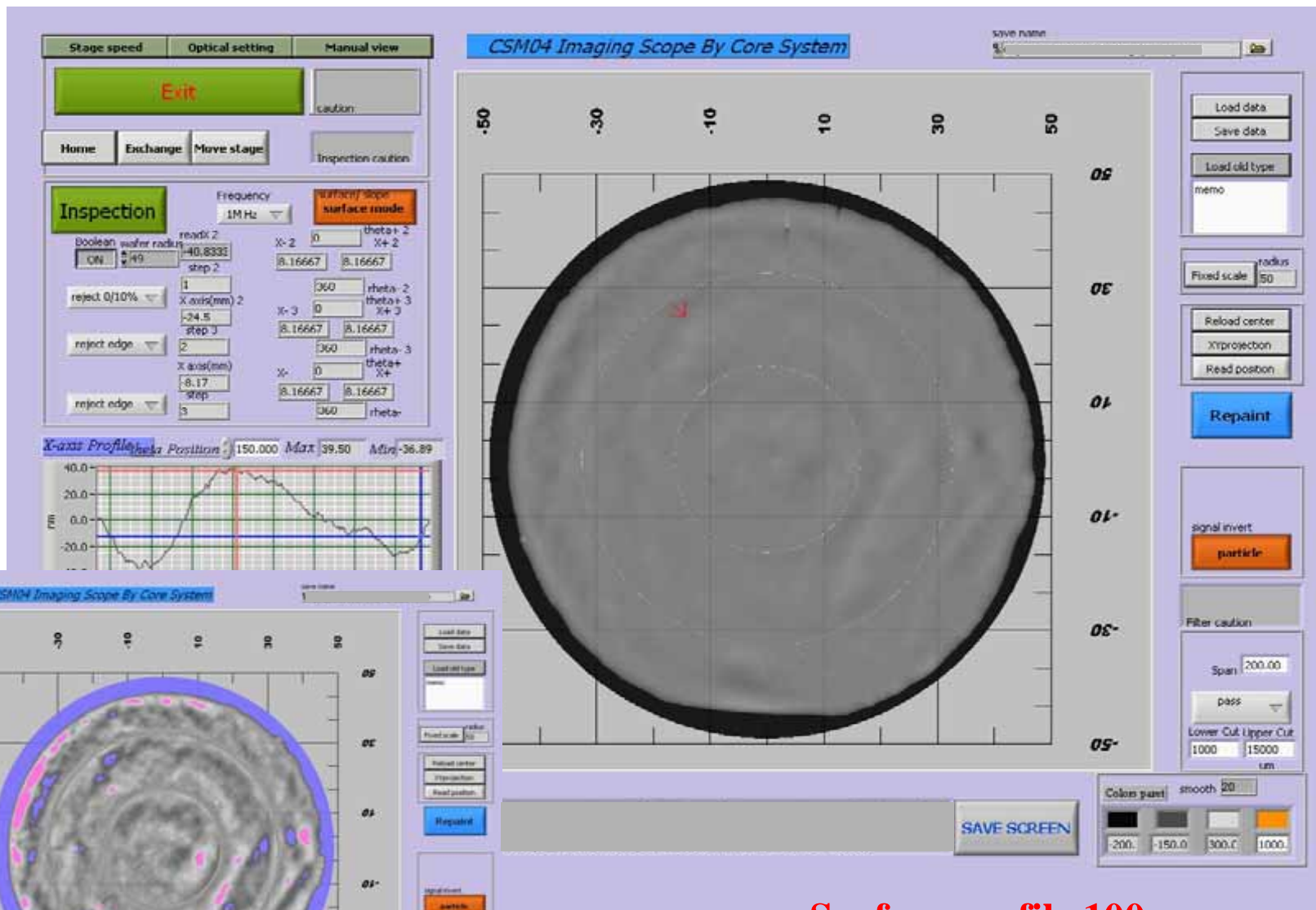
Filter caution

Span 200.00
Lowcut
Lower Cut Upper Cut
1000 15000
um

Color panel smooth 20
-200.0 -100.0 100.0 200.0

SAVE SCREEN

Surface profile 200mm
LFPD 10mm 50nm slice



Surface profile 100mm

LFPD 10mm 50nm slice

Ra test

CSM04 Surface microwaviness(Ra) Measurement

Exit

Clear

multi
2465.0C

SAVE SCREEN

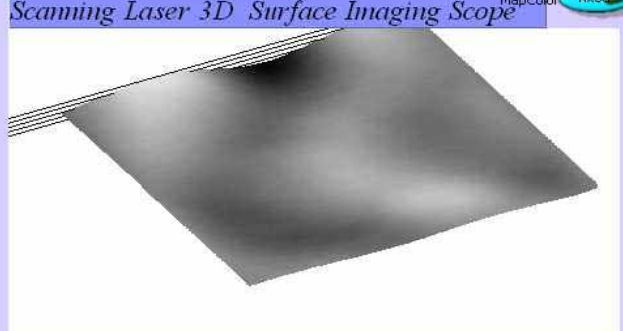
Load Data

Statistical Unit
nanometer

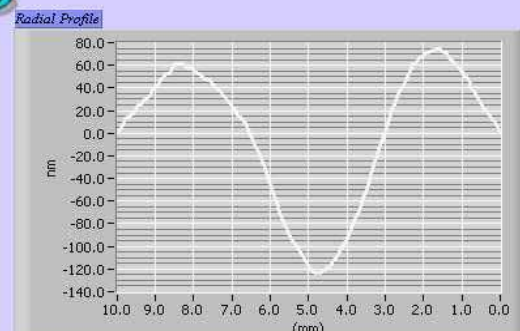
Def. Filter Val.

Default Seg

Scanning Laser 3D Surface Imaging Scope



Radial Profile



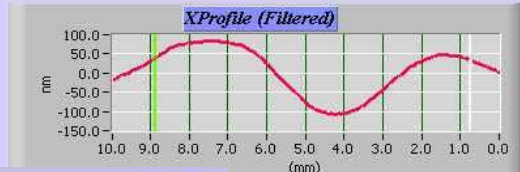
DATA FILE: _____ area size 9.98 * 9.99884 Max Height 97.21 Min Height -117.49

Y-axis Line Number: 24 Y-axis Lineposition: 0.48 limit: 500 **Core system**

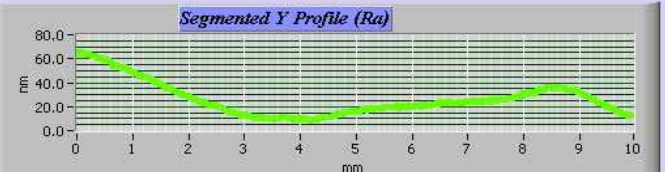
Filter Setting Segment 8.1038%

| | |
|-----------|-----------|
| Average | Std. Dev. |
| 26.2 | 14 |
| Long (mm) | Max. |
| 10 | 65.8 |
| | Min. |
| | 8.8 |

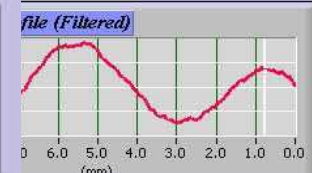
XProfile (Filtered)



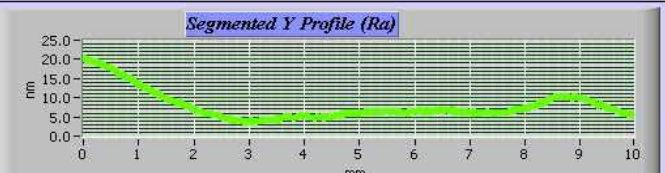
Segmented Y Profile (Ra)



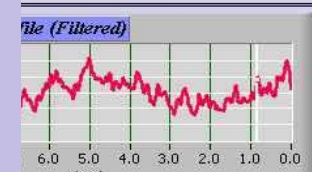
file (Filtered)



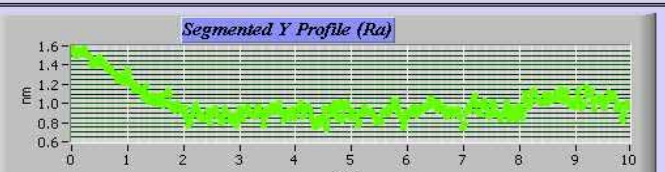
Segmented Y Profile (Ra)



file (Filtered)



Segmented Y Profile (Ra)

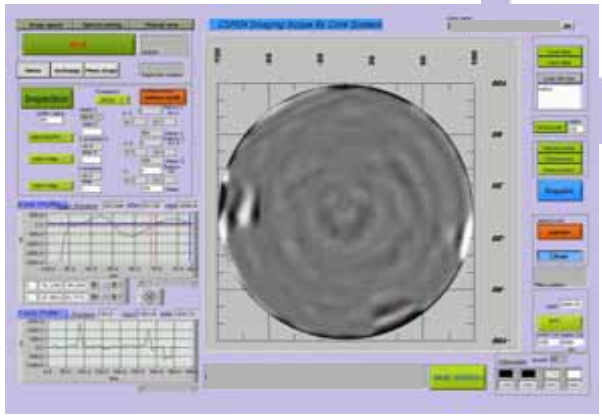
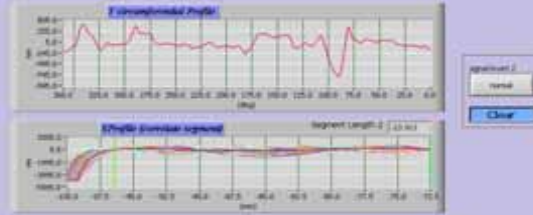
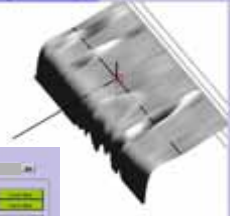
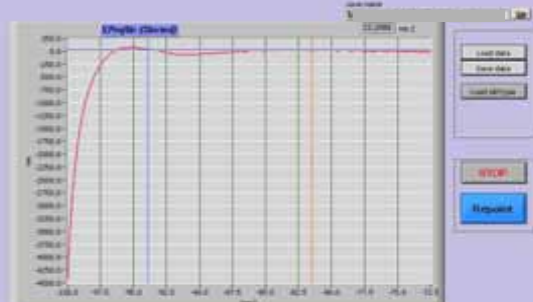
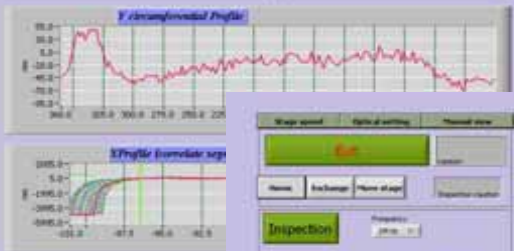
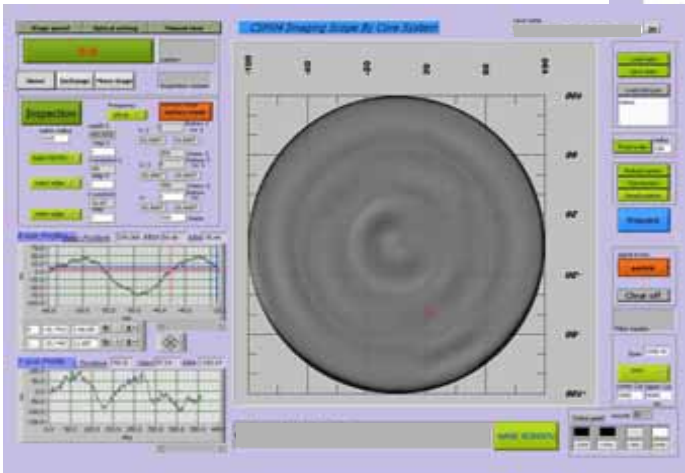
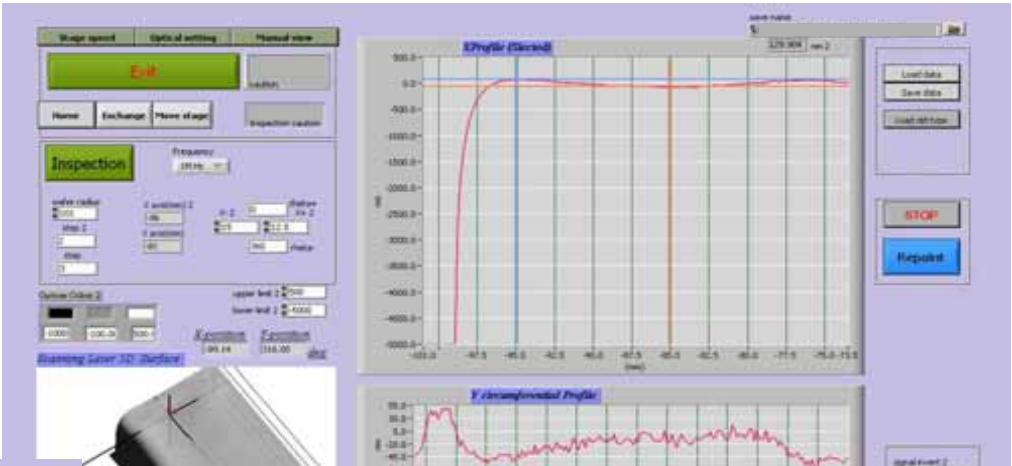


CSM04 Surface microwaviness(Ra) Measurement

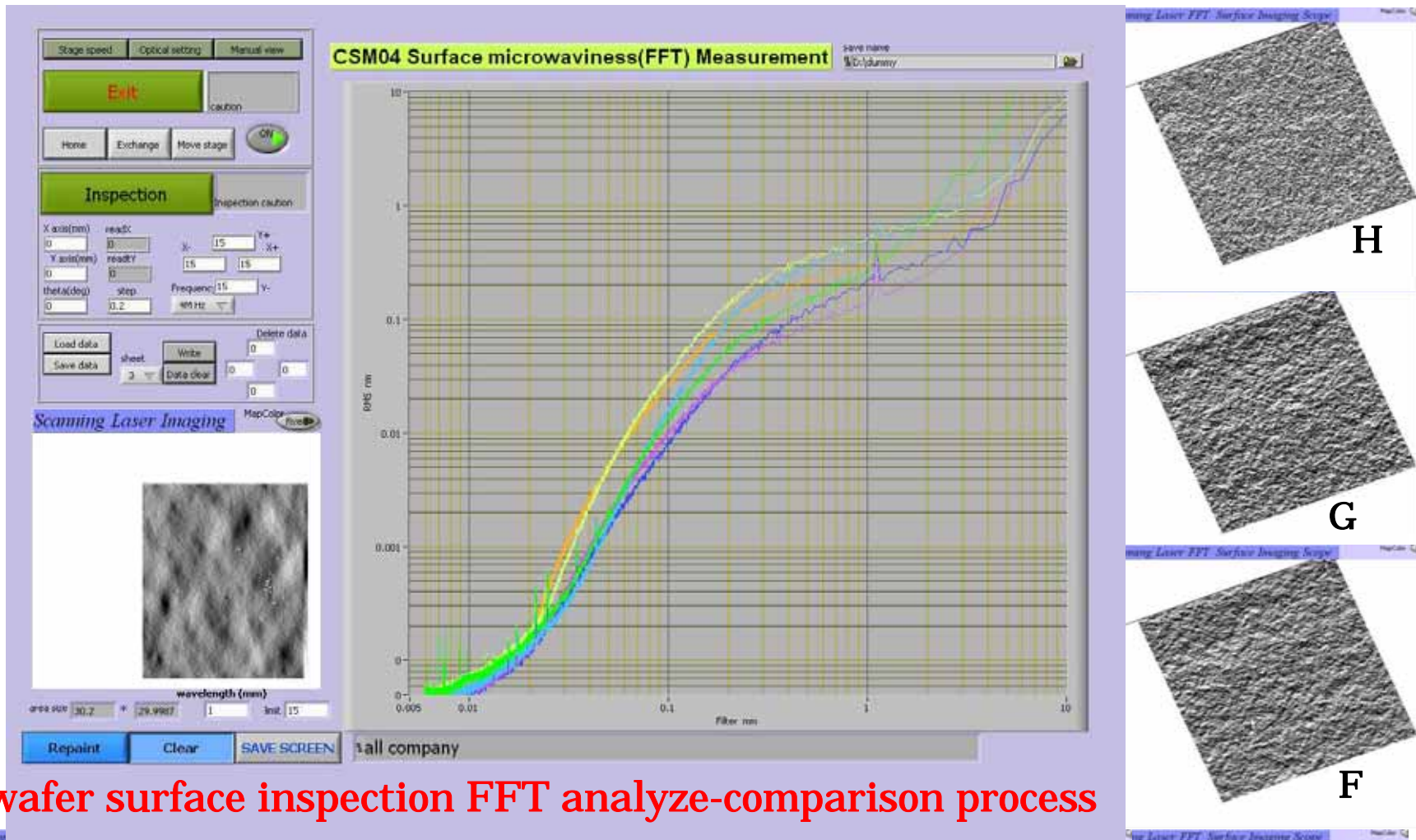
| | | | | |
|-----------|---------|-----------|-------|-------|
| Long (mm) | Average | Std. Dev. | Max. | Min. |
| 10.00 | 2.58 | 0.673 | 4.28 | 0.894 |
| Long (mm) | Average | Std. Dev. | Max. | Min. |
| 10.00 | 1.89 | 0.22 | 1.8 | 0.557 |
| Long (mm) | Average | Std. Dev. | Max. | Min. |
| 10.00 | 0.633 | 0.0676 | 0.892 | 0.428 |

Exit **Clear** **SAVE SCREEN**

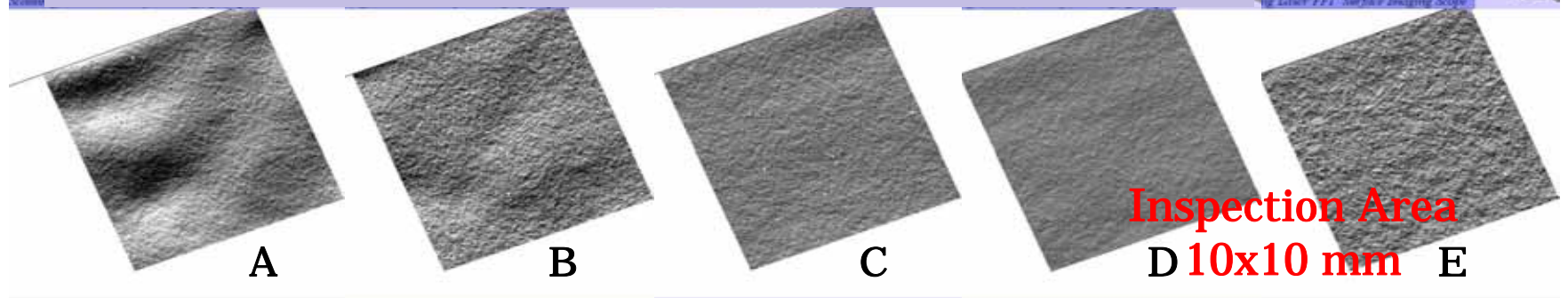
Edge test



MMA SCREEN



Si wafer surface inspection FFT analyze-comparison process



Stage speed Optical setting Manual view

Exit caution

Home Exchange Move stage ON

Inspection Inspection caution

X axis(mm) readX X- 15 Y+
 0 0

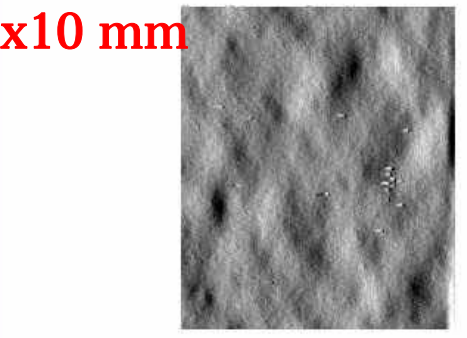
Y axis(mm) readtY 15 15 X+
 0 0

theta(deg) step Frequency: 15 Y-
 0 0.2 4MHz

Load data Delete data
 Save data sheet Write 0
 3 Data clear 0 0

Scanning Laser Imaging MapColor: fixed

**Inspection Area
10x10 mm**

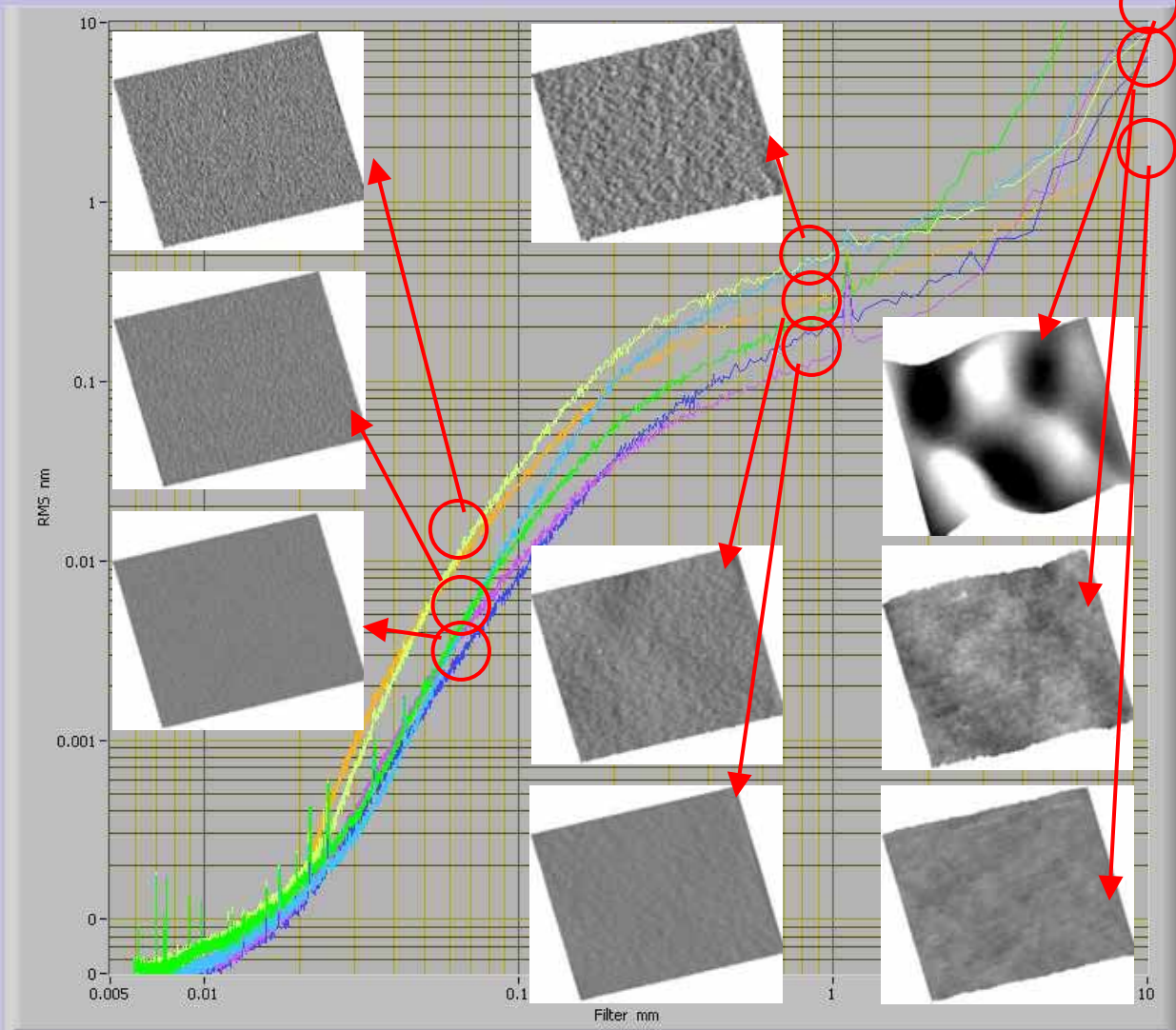


wavelength (mm)
 area size 30.2 * 29.9987 1 limit 15

Repaint Clear **SAVE SCREEN**

CSM04 Surface microwaviness(FFT) Measurement

save name
 D:\dummy



all company

Si wafer surface inspection FFT analyze-comparison process