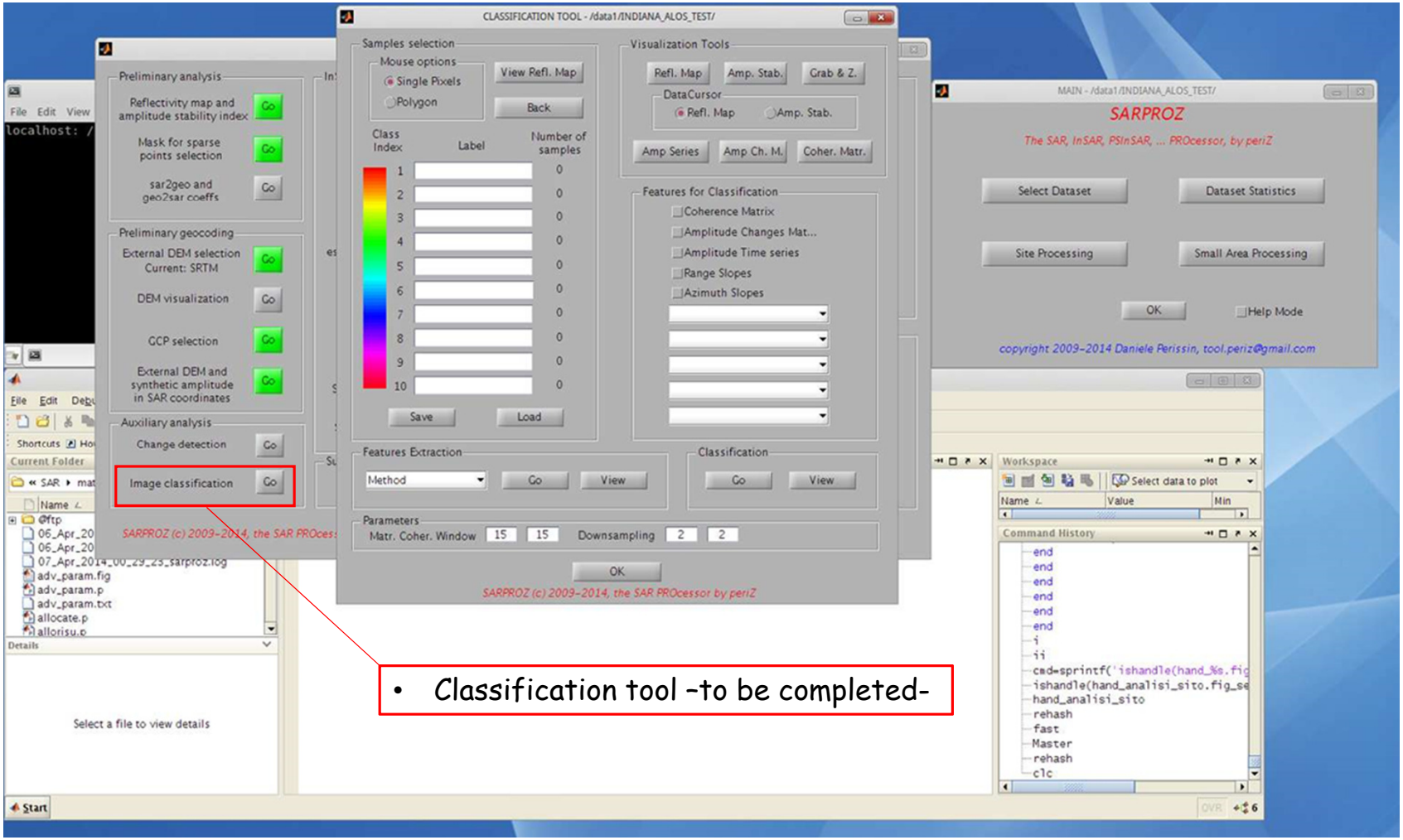
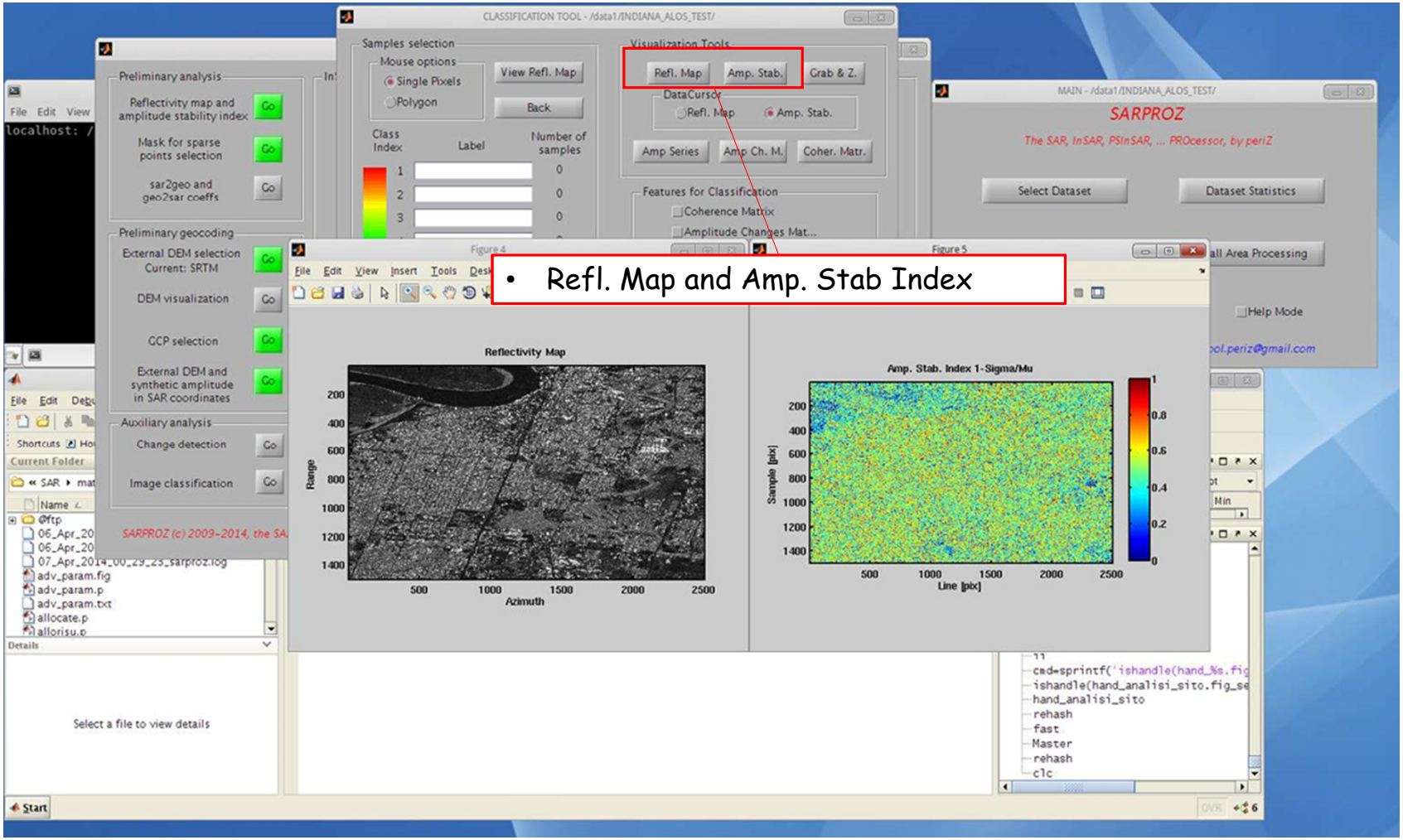
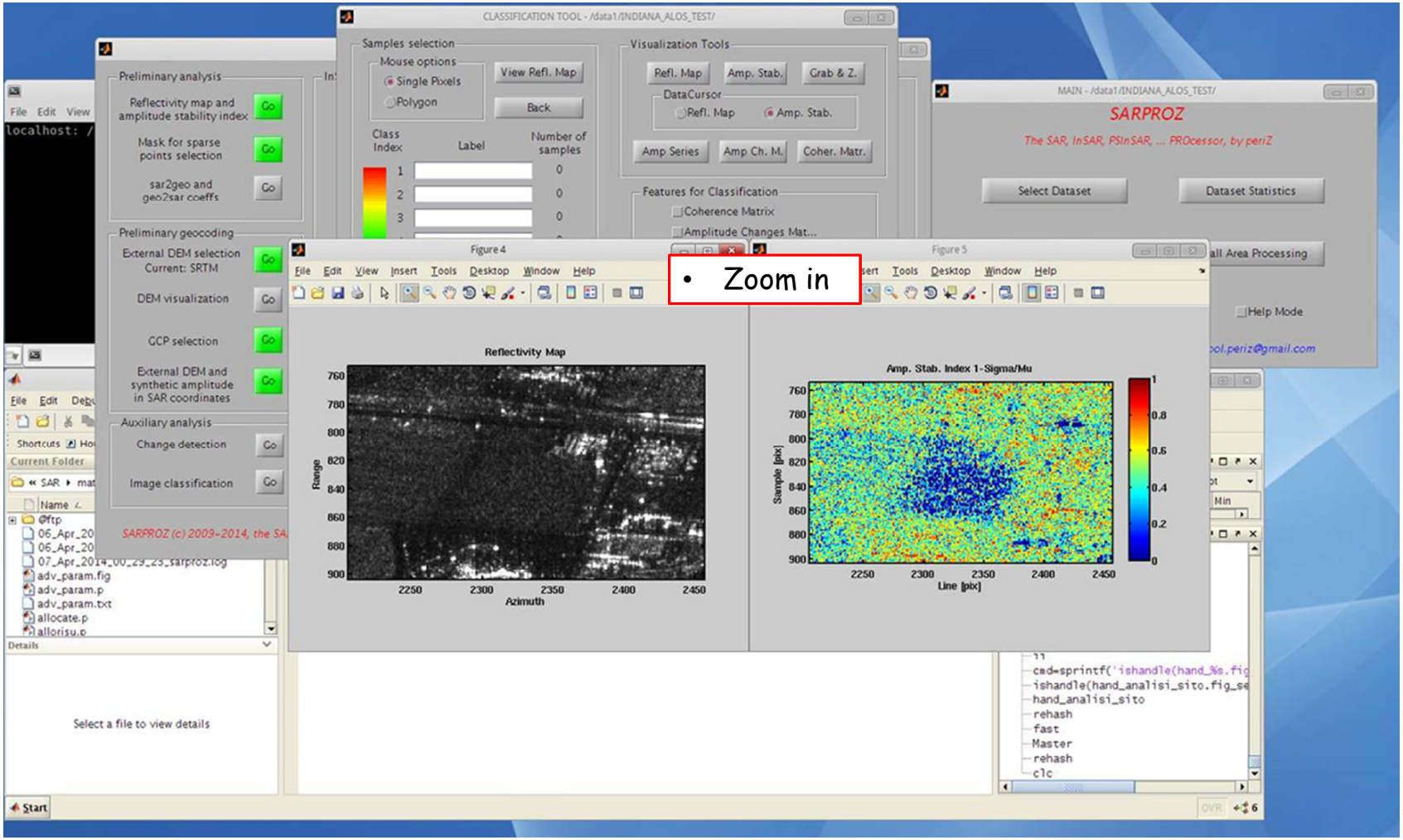
Change Detection in Sarproz



- Classification tool –to be completed-



- Refl. Map and Amp. Stab Index


CLASSIFICATION TOOL - /data1/INDIANA_ALOS_TEST/
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
Back
Class Index
Label
Number of samples
Visualization Tools
Refl. Map
Amp. Stab.
Grab & Z.
DataCursor
Amp Series
Amp Ch. M.
Coher. Matr.
Features for Classification
Coherence Matrix
Amplitude Changes Mat...
Preliminary analysis
Reflectivity map and amplitude stability index
Mask for sparse points selection
sar2geo and geo2sar coeffs
Preliminary geocoding
External DEM selection Current: SRTM
DEM visualization
GCP selection
External DEM and synthetic amplitude in SAR coordinates
Auxiliary analysis
Change detection
Image classification
Go
SARPROZ (c) 2009-2014, the SA
MAIN - /data1/INDIANA_ALOS_TEST/
SARPROZ
The SAR, InSAR, PSInSAR, ... PROcessor, by PeriZ
Select Dataset
Dataset Statistics
all Area Processing
Help Mode
ool.periz@gmail.com
Figure 4
Reflectivity Map
Range
Azimuth
Figure 5
Amp. Stab. Index 1-Sigma/Mu
Sample [pix]
Line [pix]
• Zoom in
Current Folder
Name
@ftp
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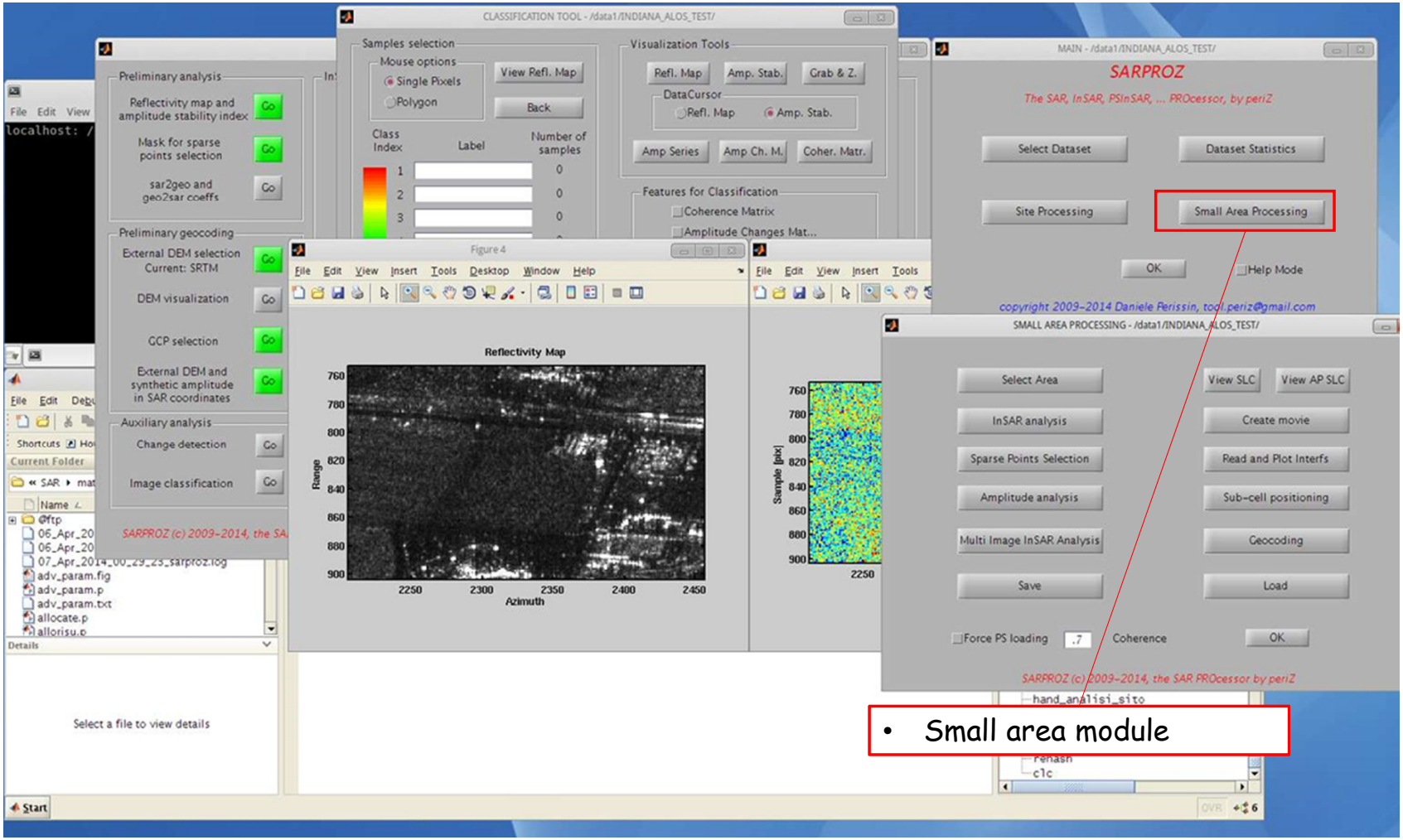
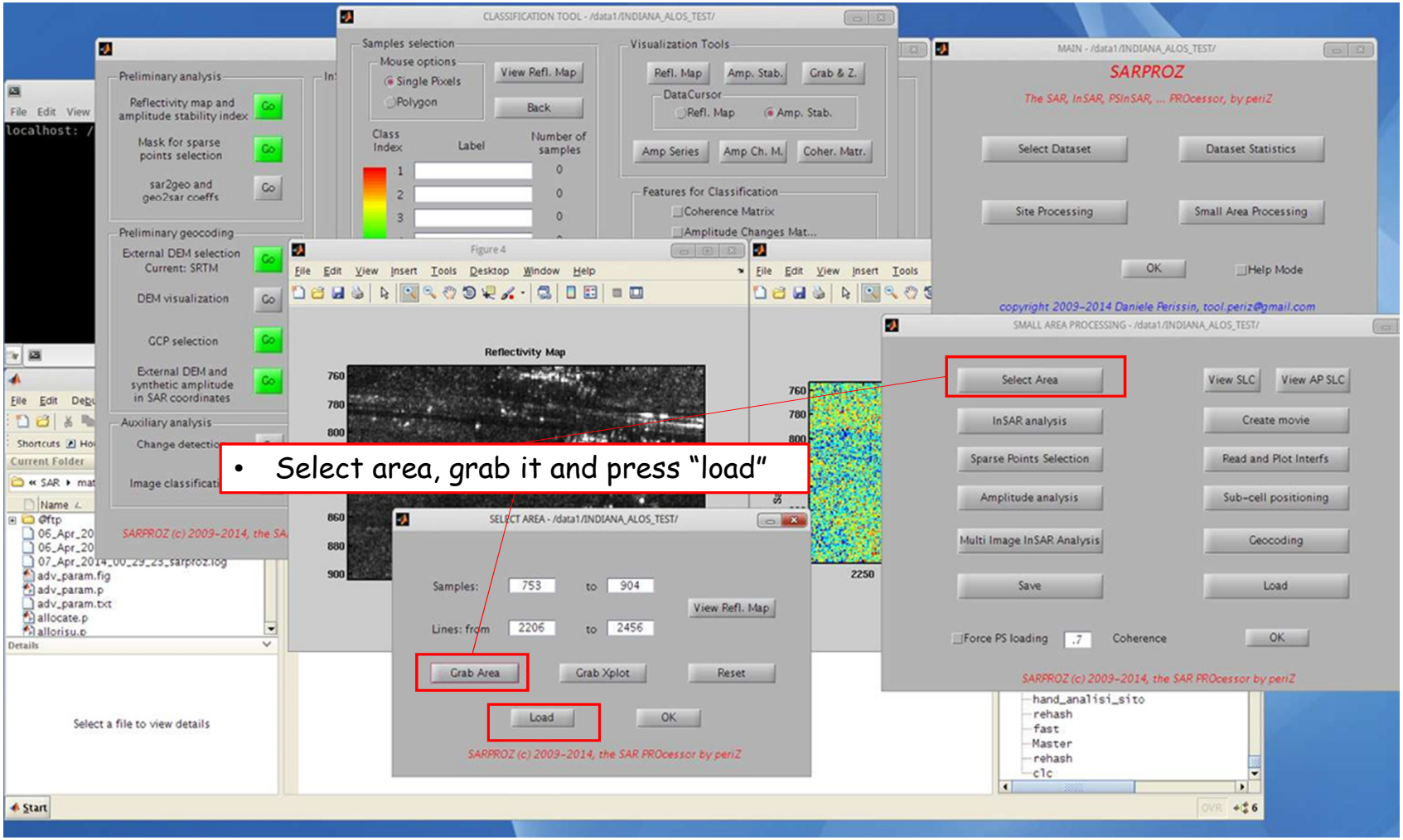
Master
rehash
clc
Start



- Small area module


CLASSIFICATION TOOL - /data1/INDIANA_ALOS_TEST/
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
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Class Index
Label
Number of samples
Visualization Tools
Refl. Map
Amp. Stab.
Grab & Z.
DataCursor
Amp Series
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Mask for sparse points selection
sar2geo and geo2sar coeffs
Preliminary geocoding
External DEM selection Current: SRTM
DEM visualization
GCP selection
External DEM and synthetic amplitude in SAR coordinates
Auxiliary analysis
Go
MAIN - /data1/INDIANA_ALOS_TEST/
SARPROZ
The SAR, InSAR, PSInSAR, ... PROcessor, by periZ
Select Dataset
Dataset Statistics
Site Processing
Small Area Processing
OK
Help Mode
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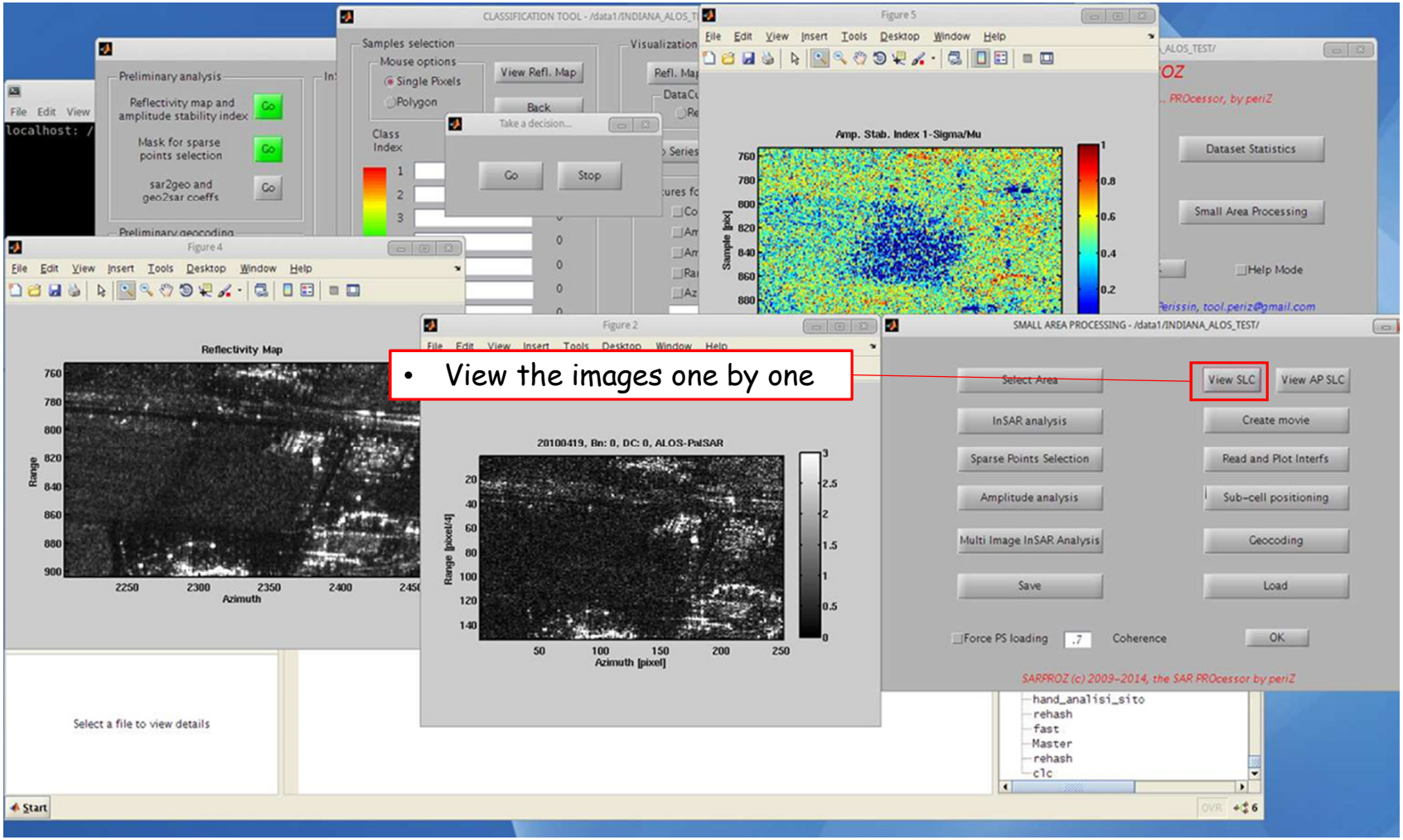
Figure 4
Reflectivity Map
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
.7
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
SELECT AREA - /data1/INDIANA_ALOS_TEST/
Samples: 753 to 904
Lines: from 2206 to 2456
View Refl. Map
Grab Area
Grab Xplot
Reset
Load
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
• Select area, grab it and press "load"


• View the images one by one
Preliminary analysis
Reflectivity map and amplitude stability index
Mask for sparse points selection
sar2geo and geo2sar coeffs
Go
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
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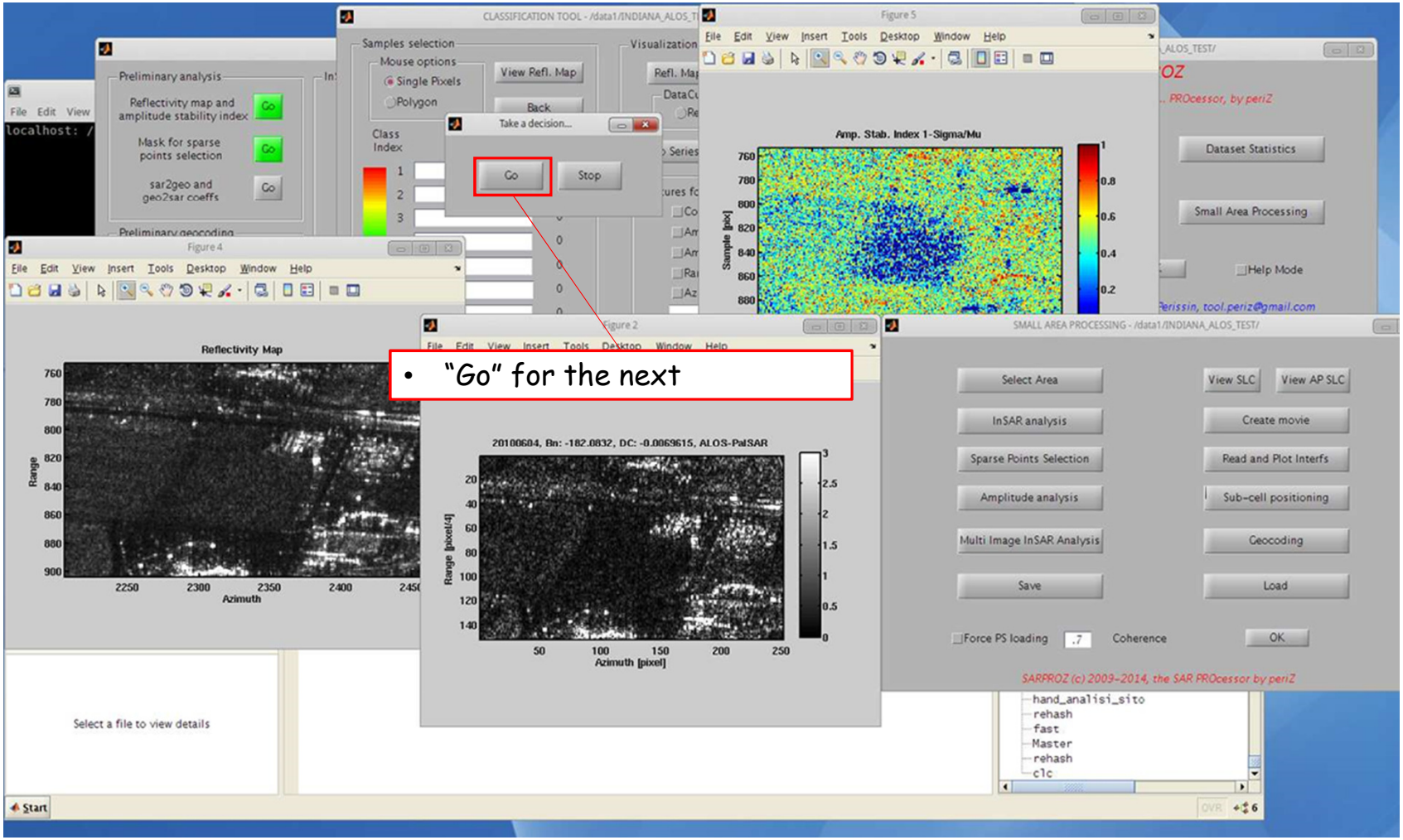
Take a decision...
Go
Stop
Figure 5
Amp. Stab. Index 1-Sigma/Mu
Figure 4
Reflectivity Map
Range
Azimuth
Figure 2
20100419, Bn: 0, DC: 0, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
.7
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Dataset Statistics
Small Area Processing
Help Mode
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start


Preliminary analysis
Reflectivity map and amplitude stability index
Mask for sparse points selection
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
CLASSIFICATION TOOL - /data1/INDIANA_ALOS_T
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
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Take a decision...
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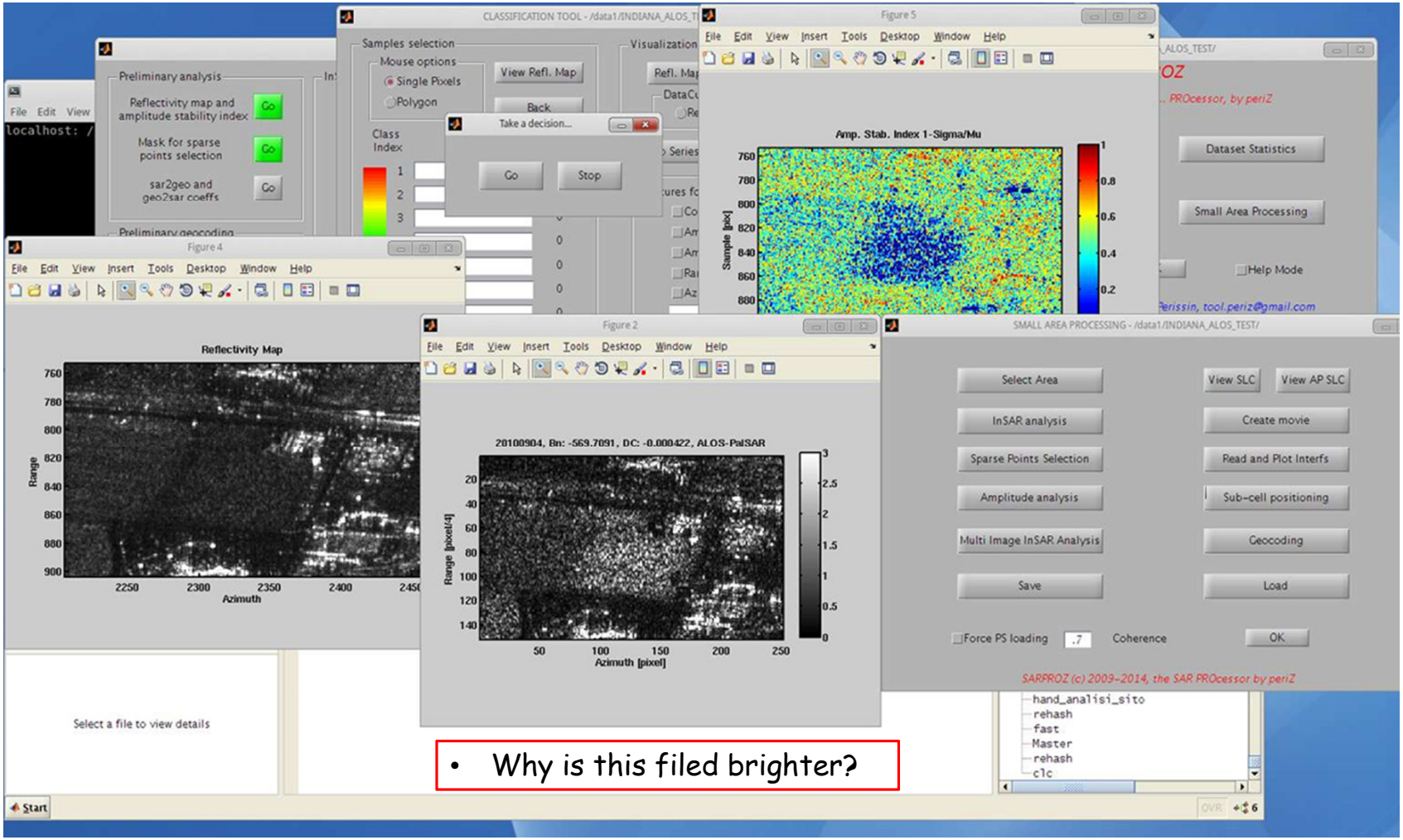
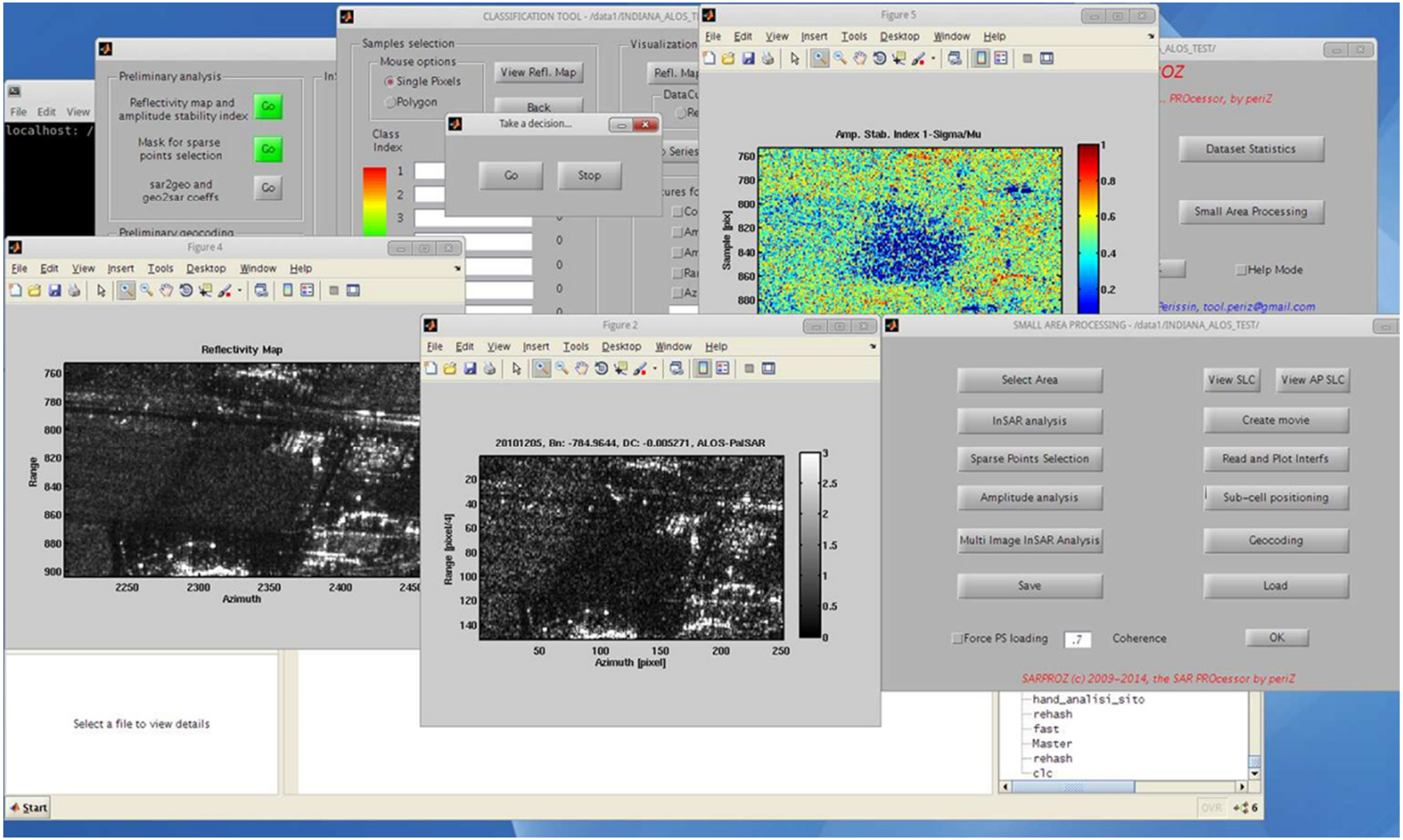
Stop
Figure 5
Amp. Stab. Index 1-Sigma/Mu
Sample [pix]
Figure 4
Reflectivity Map
Range
Azimuth
Figure 2
20100604, Bn: -182.0832, DC: -0.0069615, ALOS-PalSAR
Range [pixel*4]
Azimuth [pixel]
• "Go" for the next
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
.7
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Dataset Statistics
Small Area Processing
Help Mode
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start



- Why is this filed brighter?


Preliminary analysis
Reflectivity map and amplitude stability index
Go
Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
CLASSIFICATION TOOL - /data1/INDIANA_ALOS_T
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
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Take a decision...
Go
Stop
Figure 5
File Edit View Insert Tools Desktop Window Help
Amp. Stab. Index 1-Sigma/Mu
Sample [pix]
Figure 4
File Edit View Insert Tools Desktop Window Help
Reflectivity Map
Range
Azimuth
Figure 2
File Edit View Insert Tools Desktop Window Help
20101205, Bn: -784.9644, DC: -0.005271, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
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SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Dataset Statistics
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hand_analisi_sito
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clc
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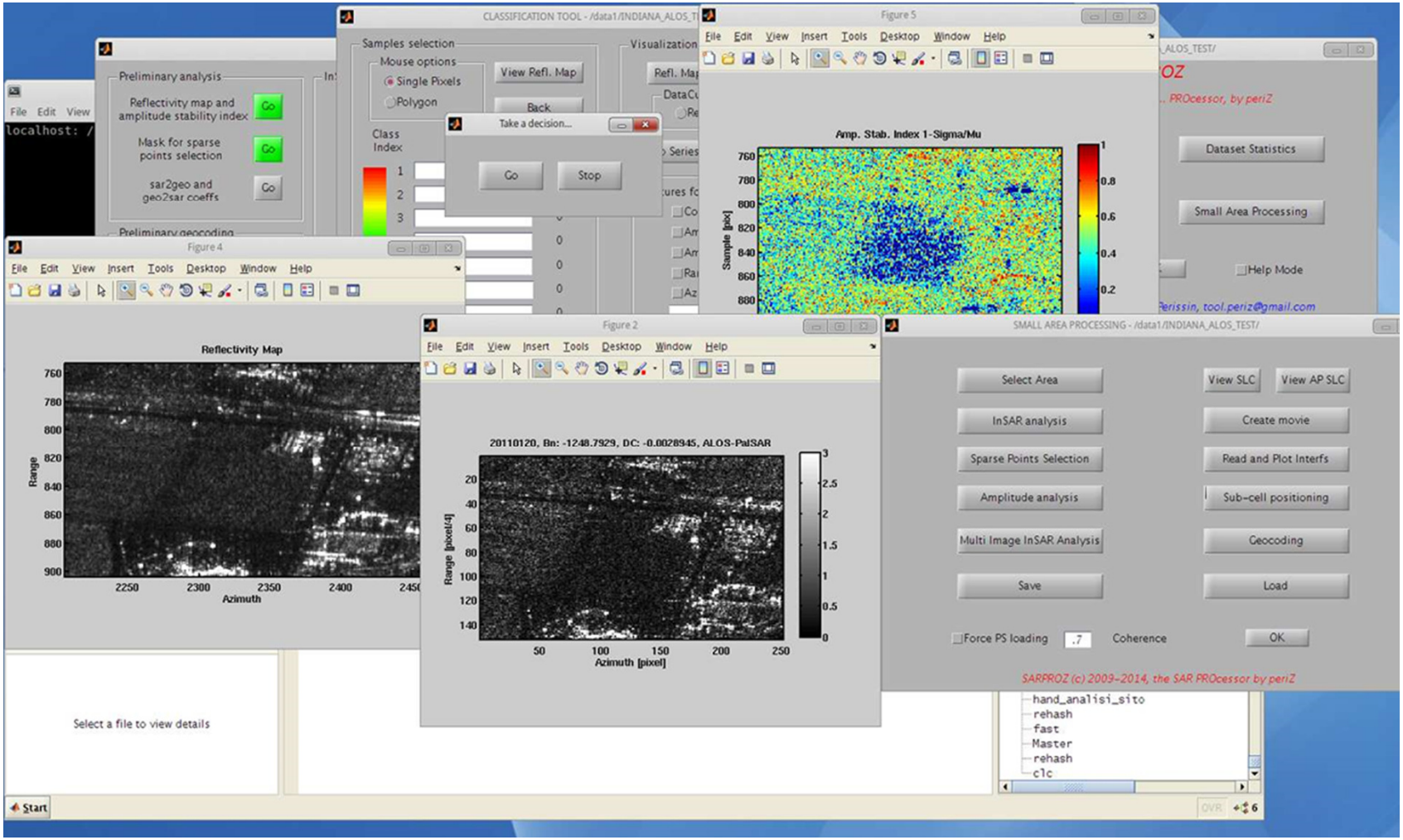
Preliminary analysis
Reflectivity map and amplitude stability index
Go
Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
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File Edit View Insert Tools Desktop Window Help
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Sample [pix]
Figure 2
20110120, Bn: -1248.7929, DC: -0.0028945, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
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Sub-cell positioning
Multi Image InSAR Analysis
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SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Dataset Statistics
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Help Mode
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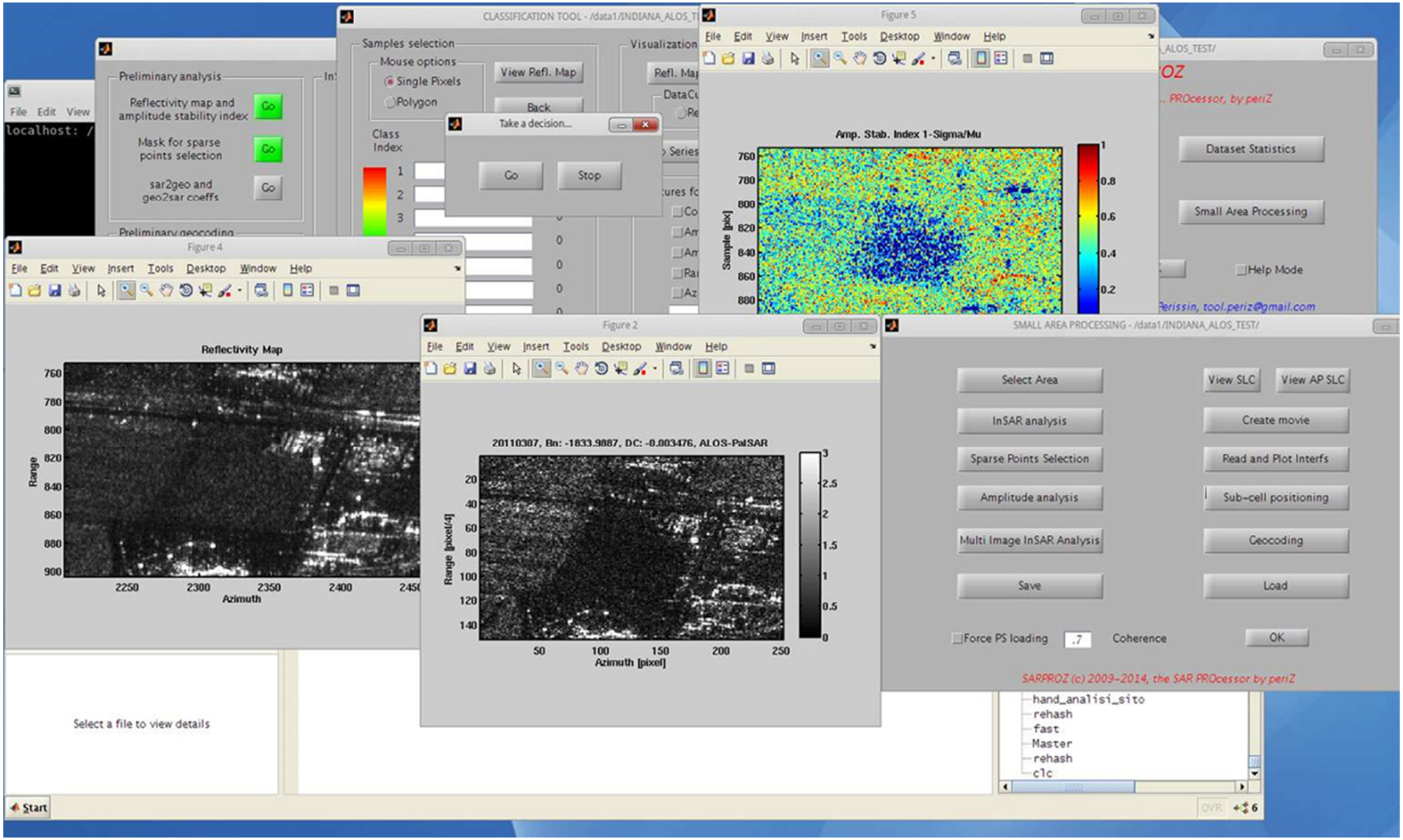
rehash
clc
Start


Preliminary analysis
Reflectivity map and amplitude stability index
Go
Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
Samples selection
Mouse options
Single Pixels
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File Edit View Insert Tools Desktop Window Help
Reflectivity Map
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Figure 5
Amp. Stab. Index 1-Sigma/Mu
Sample [pix]
Figure 2
20110307, Bn: -1833.9887, DC: -0.003476, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
Dataset Statistics
Small Area Processing
Help Mode
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
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Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
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Force PS loading
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Coherence
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Select a file to view details
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rehash
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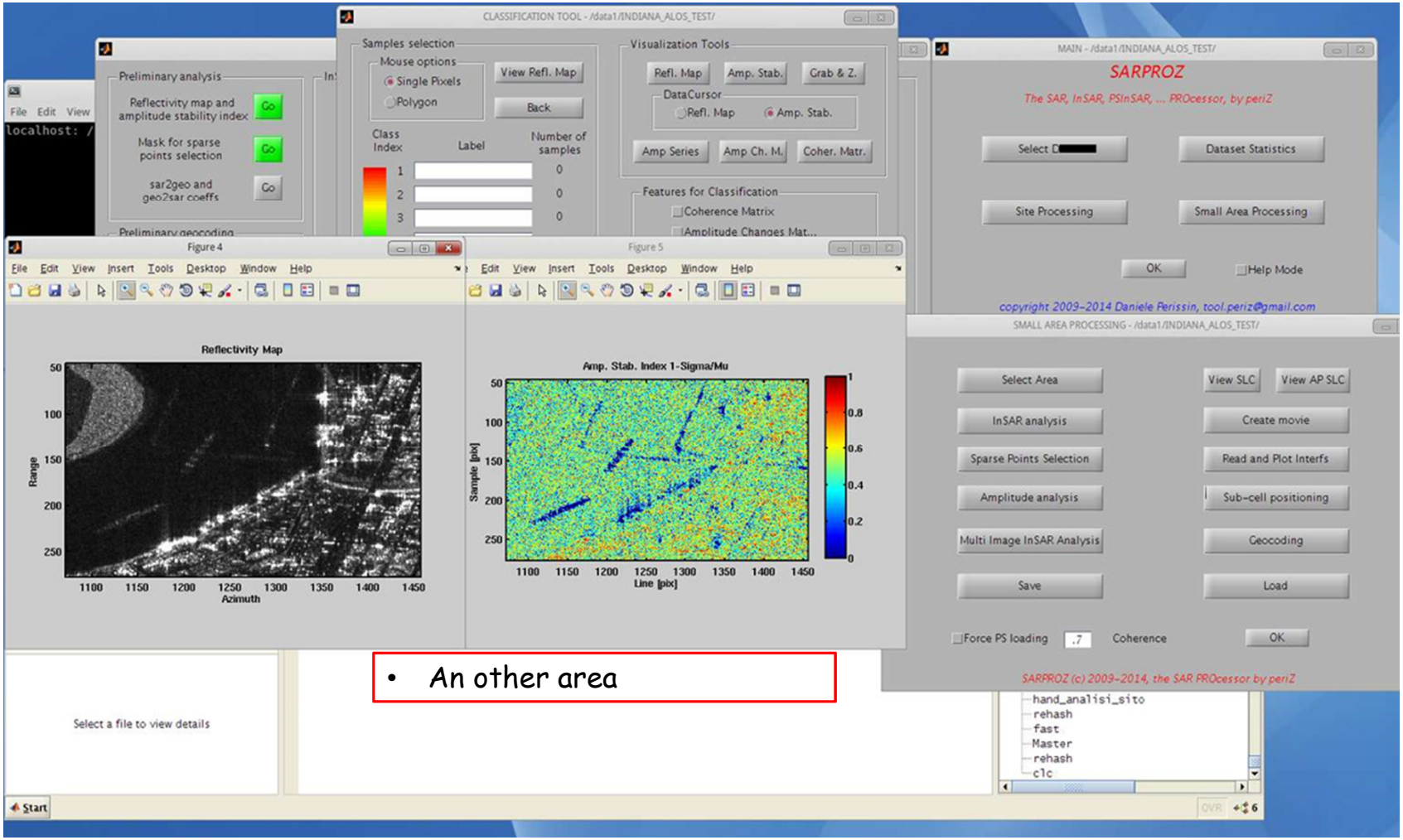
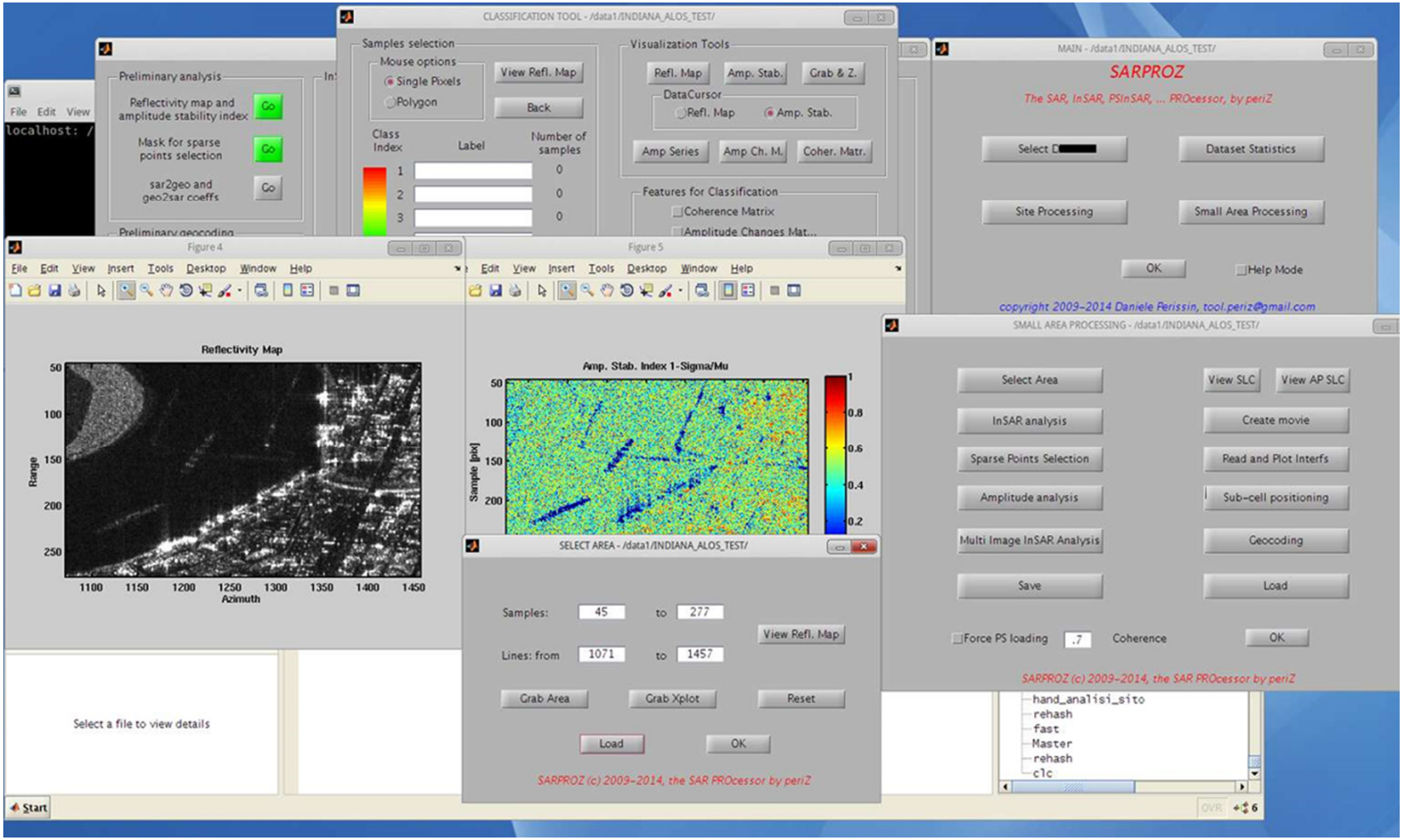


- An other area


CLASSIFICATION TOOL - /data1/INDIANA_ALOS_TEST/
Samples selection
Mouse options
Single Pixels
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Number of samples
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sar2geo and geo2sar coeffs
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MAIN - /data1/INDIANA_ALOS_TEST/
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The SAR, InSAR, PSInSAR, ... PROcessor, by periZ
Select D
Dataset Statistics
Site Processing
Small Area Processing
OK
Help Mode
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Figure 4
Reflectivity Map
Range
Azimuth
Figure 5
Amp. Stab. Index 1-Sigma/Mu
Sample [pix]
SELECT AREA - /data1/INDIANA_ALOS_TEST/
Samples: 45 to 277
Lines: from 1071 to 1457
View Refl. Map
Grab Area
Grab Xplot
Reset
Load
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
SMALL AREA PROCESSING - /data1/INDIANA_ALOS_TEST/
Select Area
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
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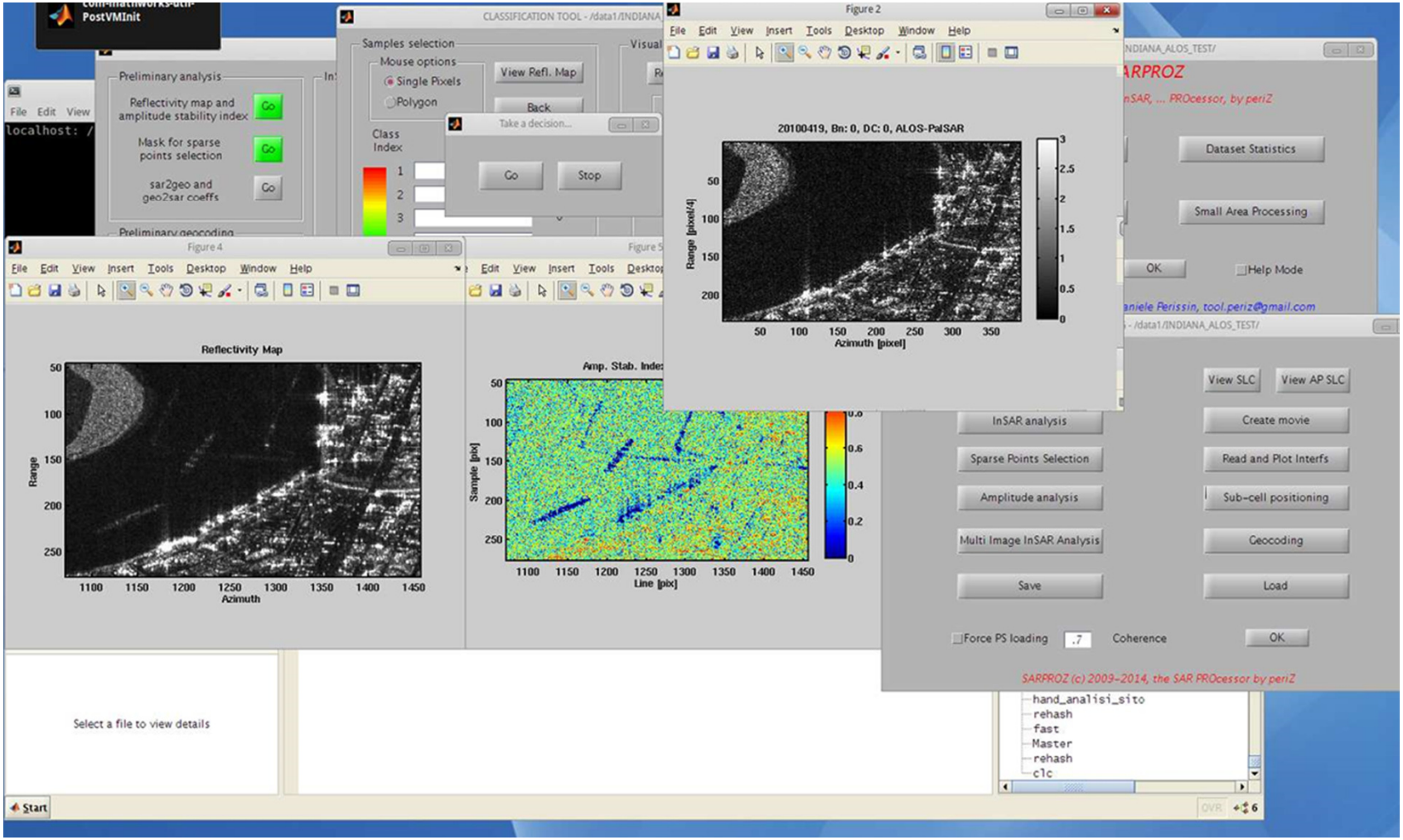
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start


PostVMInit
CLASSIFICATION TOOL - /data1/INDIANA
Samples selection
Mouse options
Single Pixels
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Preliminary geocoding
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20100419, Bn: 0, DC: 0, ALOS-PalSAR
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Azimuth [pixel]
Figure 4
Reflectivity Map
Range
Azimuth
Amp. Stab. Inde
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ARPROZ
Dataset Statistics
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OK
Help Mode
Daniele Perissin, tool.periz@gmail.com
/data1/INDIANA_ALOS_TEST/
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
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Save
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Force PS loading
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Coherence
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SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
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rehash
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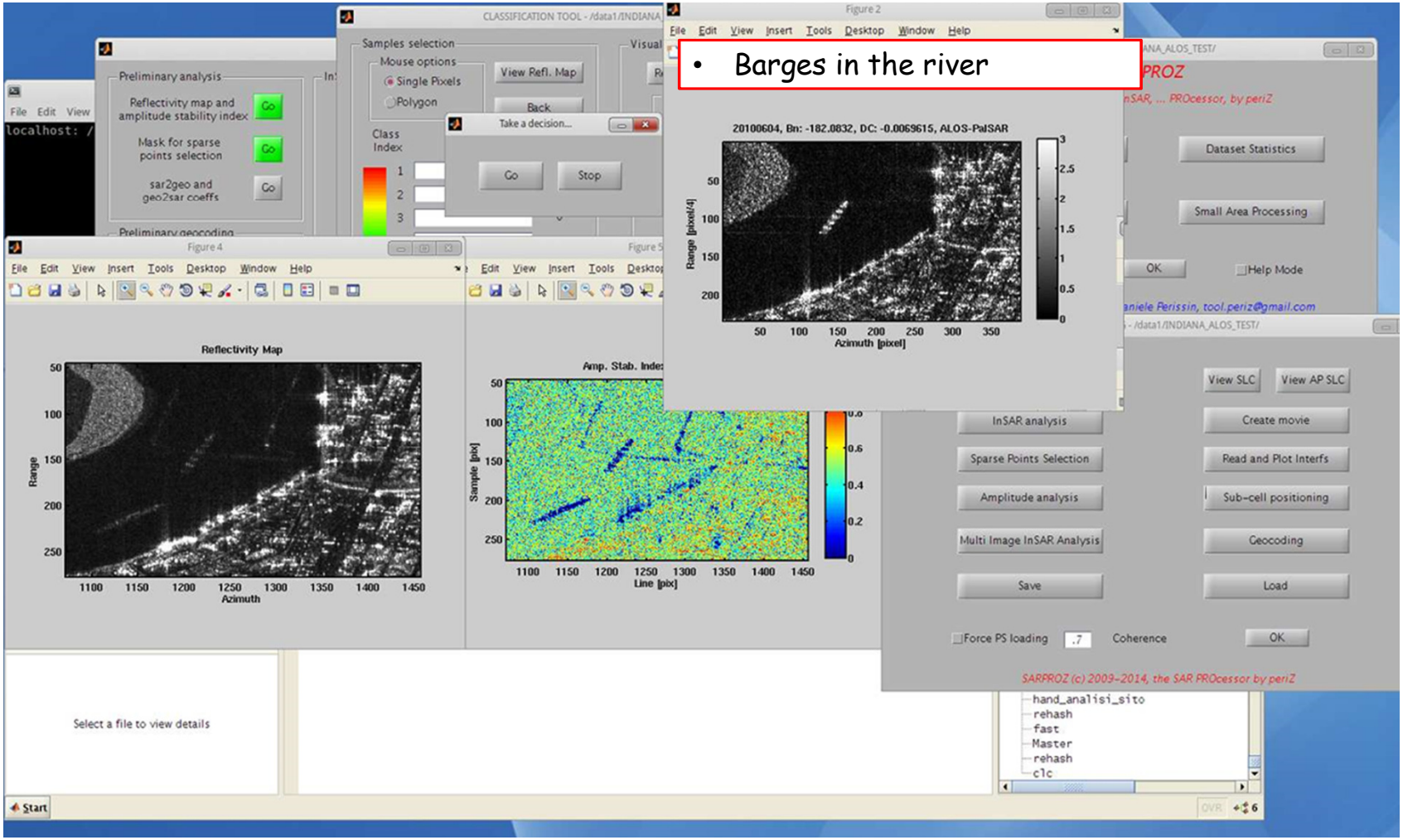
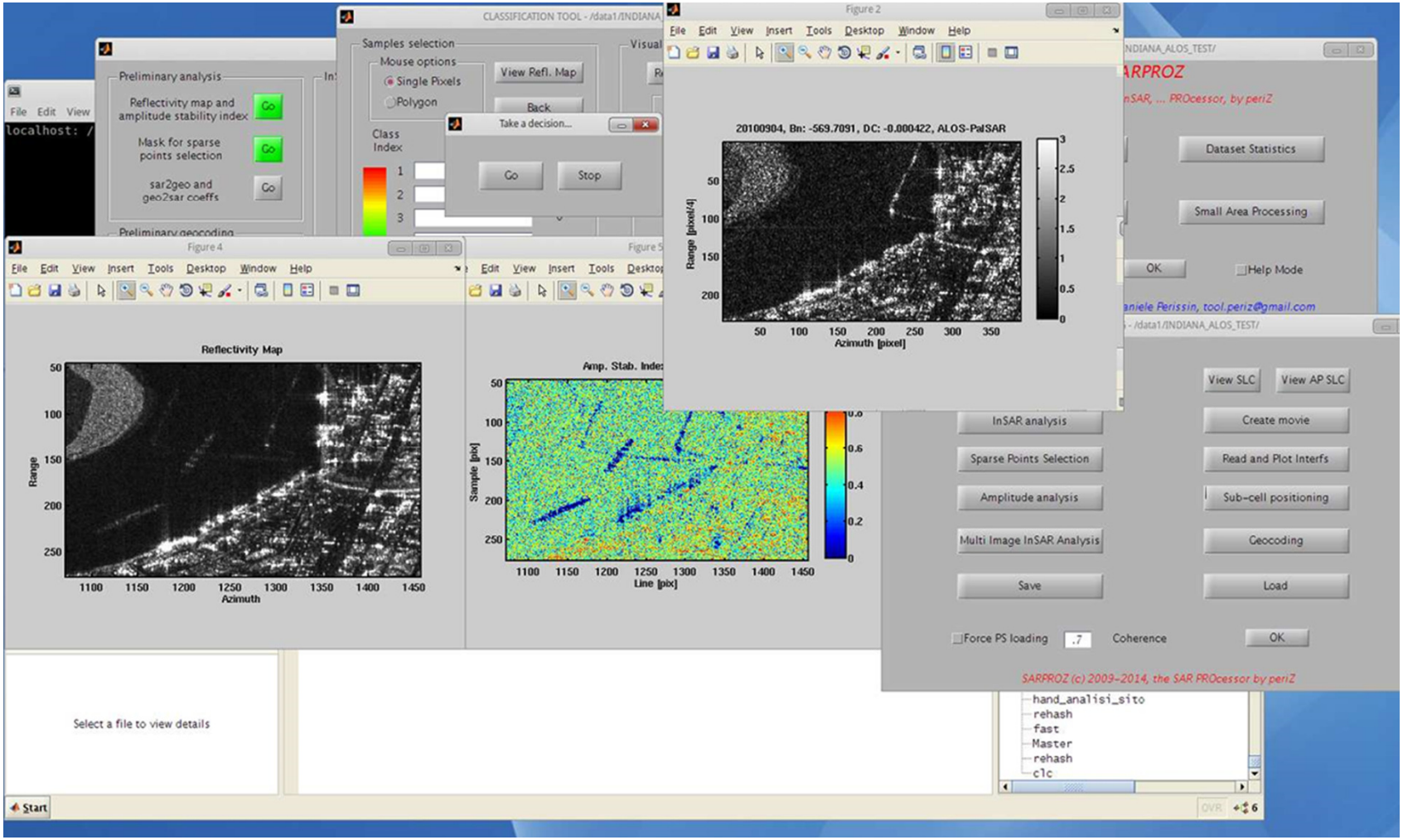
Start

- Barges in the river




Preliminary analysis
Reflectivity map and amplitude stability index
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Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
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Preliminary geocoding
CLASSIFICATION TOOL - /data1/INDIANA
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Stop
Figure 2
20100904, Bn: -569.7091, DC: -0.000422, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
Figure 4
Reflectivity Map
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ARPROZ
Dataset Statistics
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Help Mode
/data1/INDIANA_ALOS_TEST/
InSAR analysis
Sparse Points Selection
Amplitude analysis
Multi Image InSAR Analysis
Save
View SLC
View AP SLC
Create movie
Read and Plot Interfs
Sub-cell positioning
Geocoding
Load
Force PS loading
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Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start

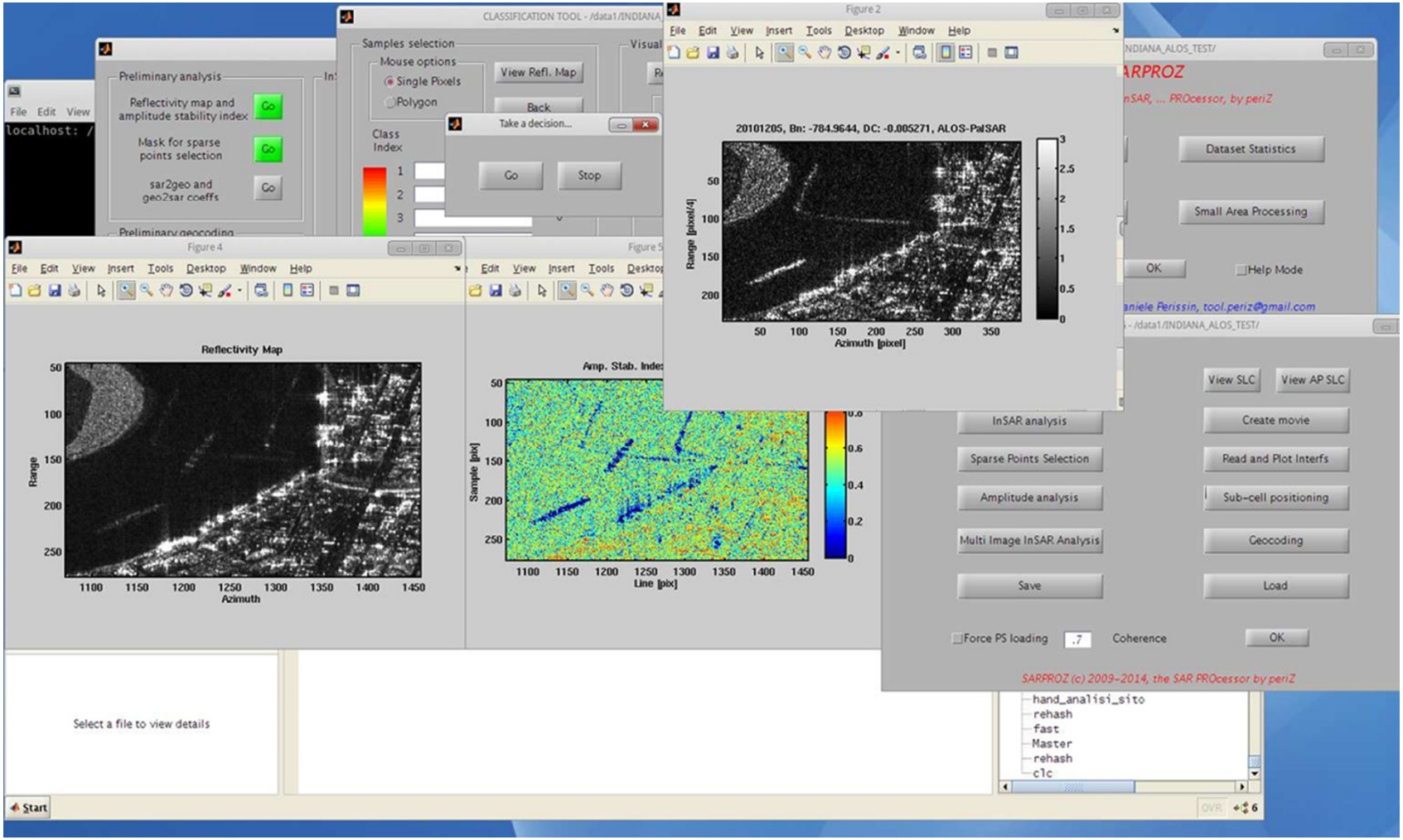
Preliminary analysis
Reflectivity map and amplitude stability index
Go
Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
CLASSIFICATION TOOL - /data1/INDIANA
Samples selection
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Figure 2
20101205, Bn: -784.9644, DC: -0.005271, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
Figure 4
Reflectivity Map
Range
Azimuth
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Dataset Statistics
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/data1/INDIANA_ALOS_TEST/
View SLC
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InSAR analysis
Create movie
Sparse Points Selection
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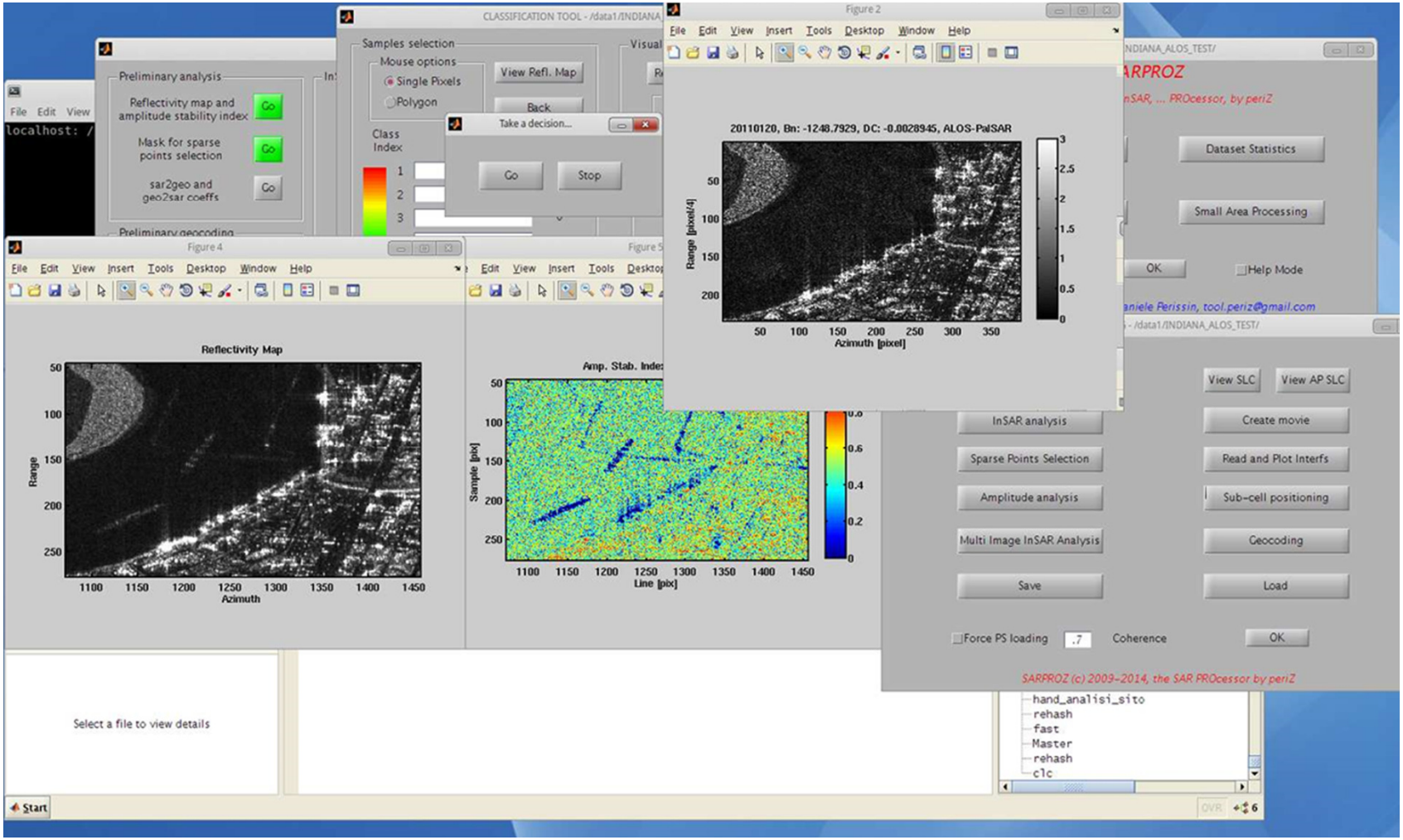
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
.7
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start


Preliminary analysis
Reflectivity map and amplitude stability index
Go
Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
Samples selection
Mouse options
Single Pixels
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Stop
Figure 2
20110120, Bn: -1248.7929, DC: -0.0028945, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
Figure 4
Reflectivity Map
Range
Azimuth
Amp. Stab. Inde
Sample [pix]
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ARPROZ
Dataset Statistics
Small Area Processing
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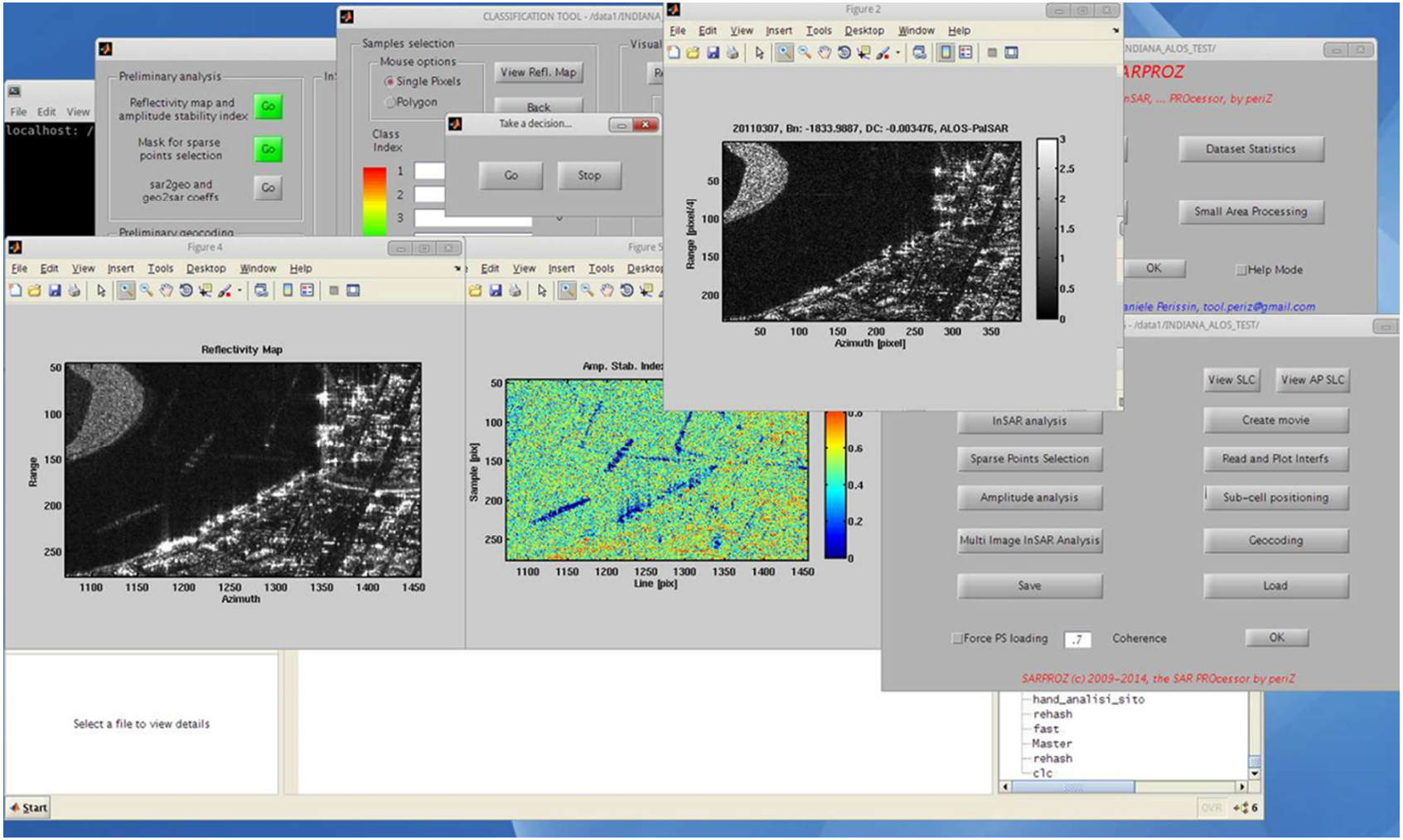
Help Mode
aniele Perissin, tool.periz@gmail.com
/data1/INDIANA_ALOS_TEST/
View SLC
View AP SLC
InSAR analysis
Create movie
Sparse Points Selection
Read and Plot Interfs
Amplitude analysis
Sub-cell positioning
Multi Image InSAR Analysis
Geocoding
Save
Load
Force PS loading
.7
Coherence
OK
SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
rehash
fast
Master
rehash
clc
Start


Preliminary analysis
Reflectivity map and amplitude stability index
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Mask for sparse points selection
Go
sar2geo and geo2sar coeffs
Go
Preliminary geocoding
CLASSIFICATION TOOL - /data1/INDIANA
Samples selection
Mouse options
Single Pixels
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Stop
Figure 2
20110307, Bn: -1833.9887, DC: -0.003476, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
Figure 4
Reflectivity Map
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Azimuth
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Dataset Statistics
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Help Mode
/data1/INDIANA_ALOS_TEST/
InSAR analysis
Sparse Points Selection
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Multi Image InSAR Analysis
Save
View SLC
View AP SLC
Create movie
Read and Plot Interfs
Sub-cell positioning
Geocoding
Load
Force PS loading
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SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
Select a file to view details
hand_analisi_sito
rehash
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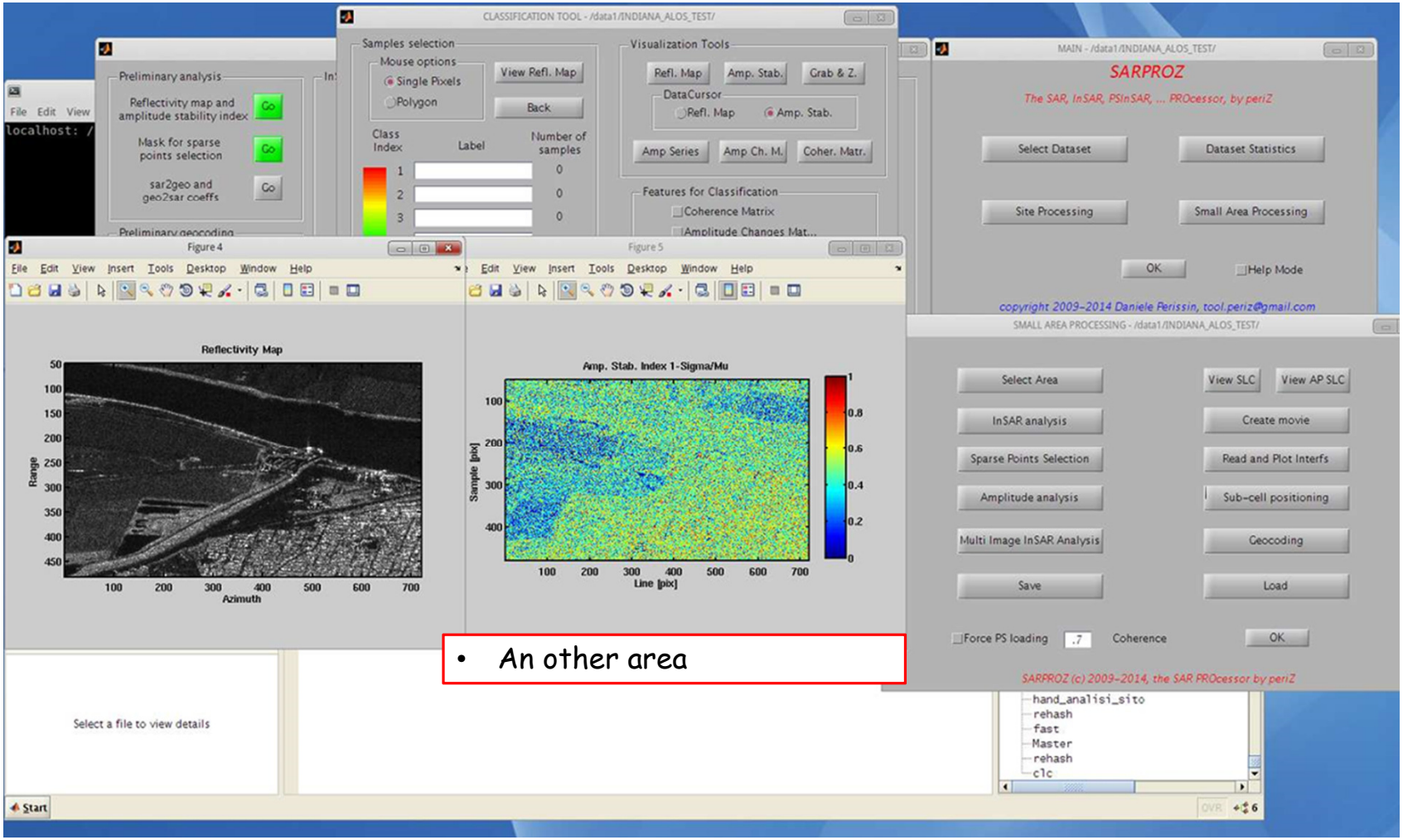
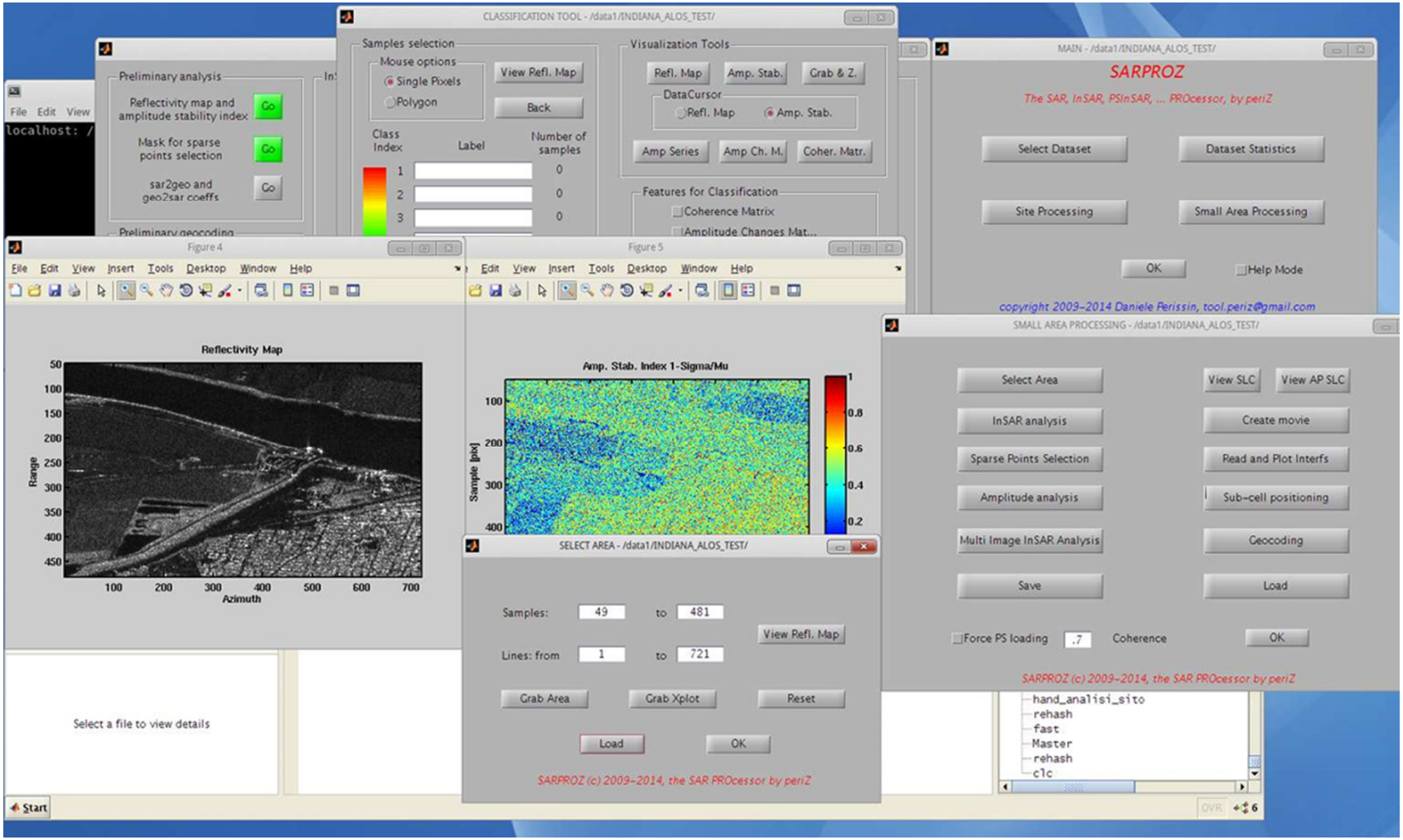
Master
rehash
clc
Start



- An other area


CLASSIFICATION TOOL - /data1/INDIANA_ALOS_TEST/
Samples selection
Mouse options
Single Pixels
Polygon
View Refl. Map
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fast
Master
rehash
clc
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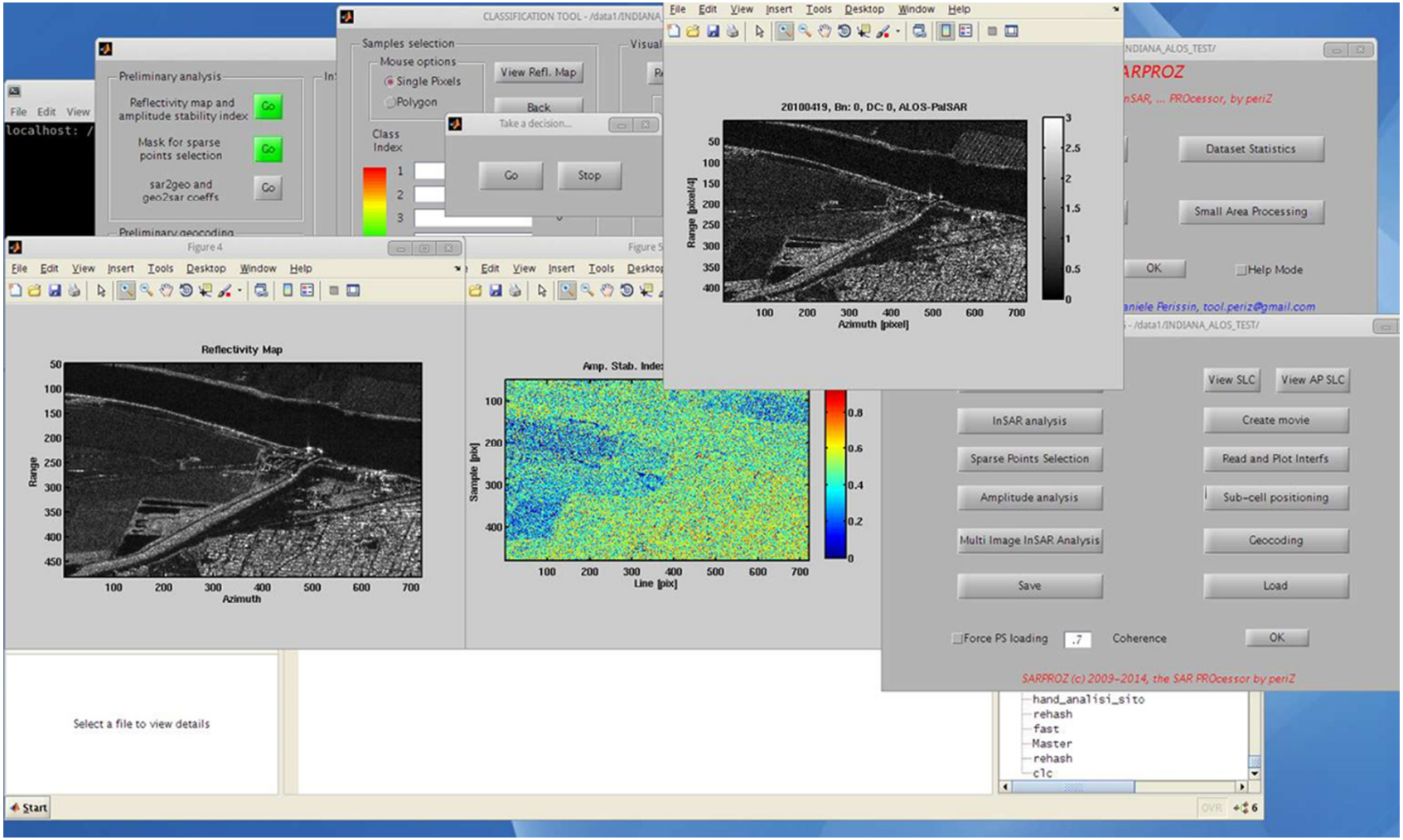
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Line [pix]
20100419, Bn: 0, DC: 0, ALOS-PalSAR
Range [pixel/4]
Azimuth [pixel]
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SARPROZ (c) 2009-2014, the SAR PROcessor by periZ
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hand_analisi_sito
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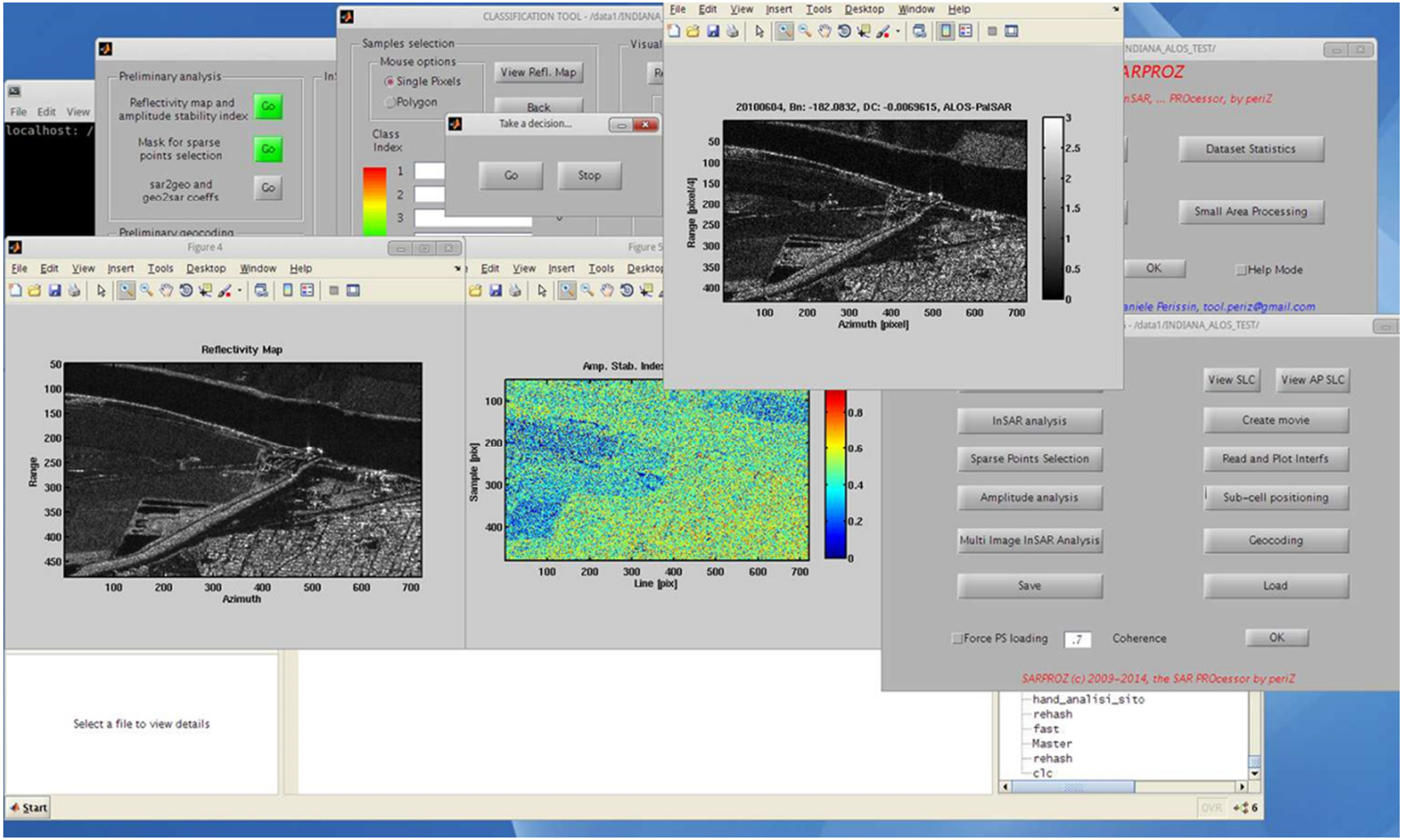
Start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Line [pix]
20100604, Bn: -182.0832, DC: -0.0069615, ALOS-PalSAR
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Azimuth [pixel]
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