مقدمة عن برنامج
ERDAS IMAGINE 2014

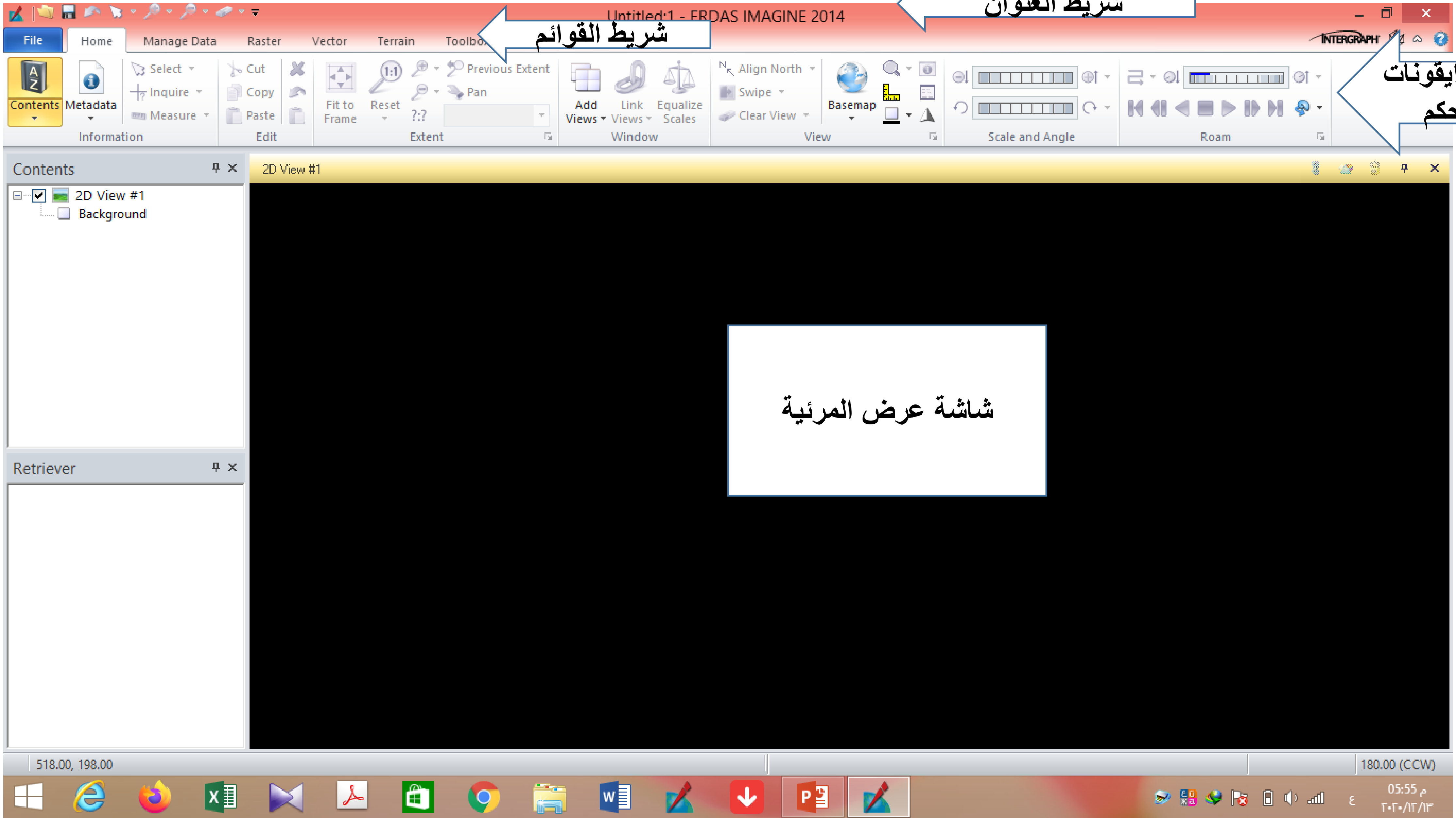
مقرر التحسس النائي العملي (جـ ٢١٠ع)
جامعة البصرة – كلية العلوم – قسم علم الأرض

اعداد

أ. د. علي خالد

م. م. ضحى صالح

الواجهة الرئيسية للبرنامج


Untitled:1 - ERDAS IMAGINE 2014
File
Home
Manage Data
Raster
Vector
Terrain
Toolbo
INTERGRAPH
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
2D View #1
Background
Retriever
2D View #1
518.00, 198.00
180.00 (CCW)
05:55 م
٢٠٢٠/١٢/١٣

شريط العنوان

شريط القوائم

شريط ايقونات التحكم

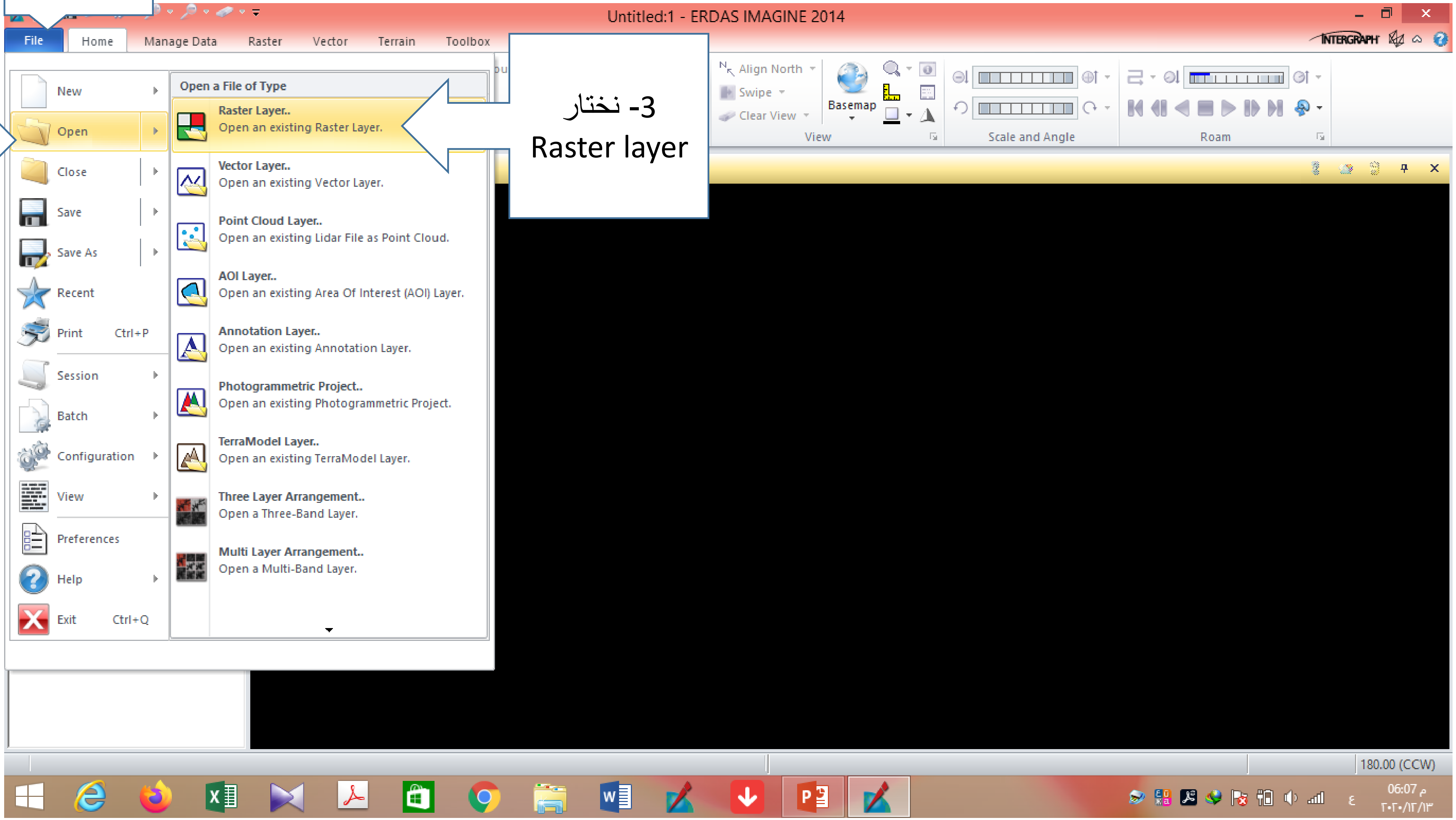
شاشة عرض المرئية

طريقة فتح مرئية فضائية

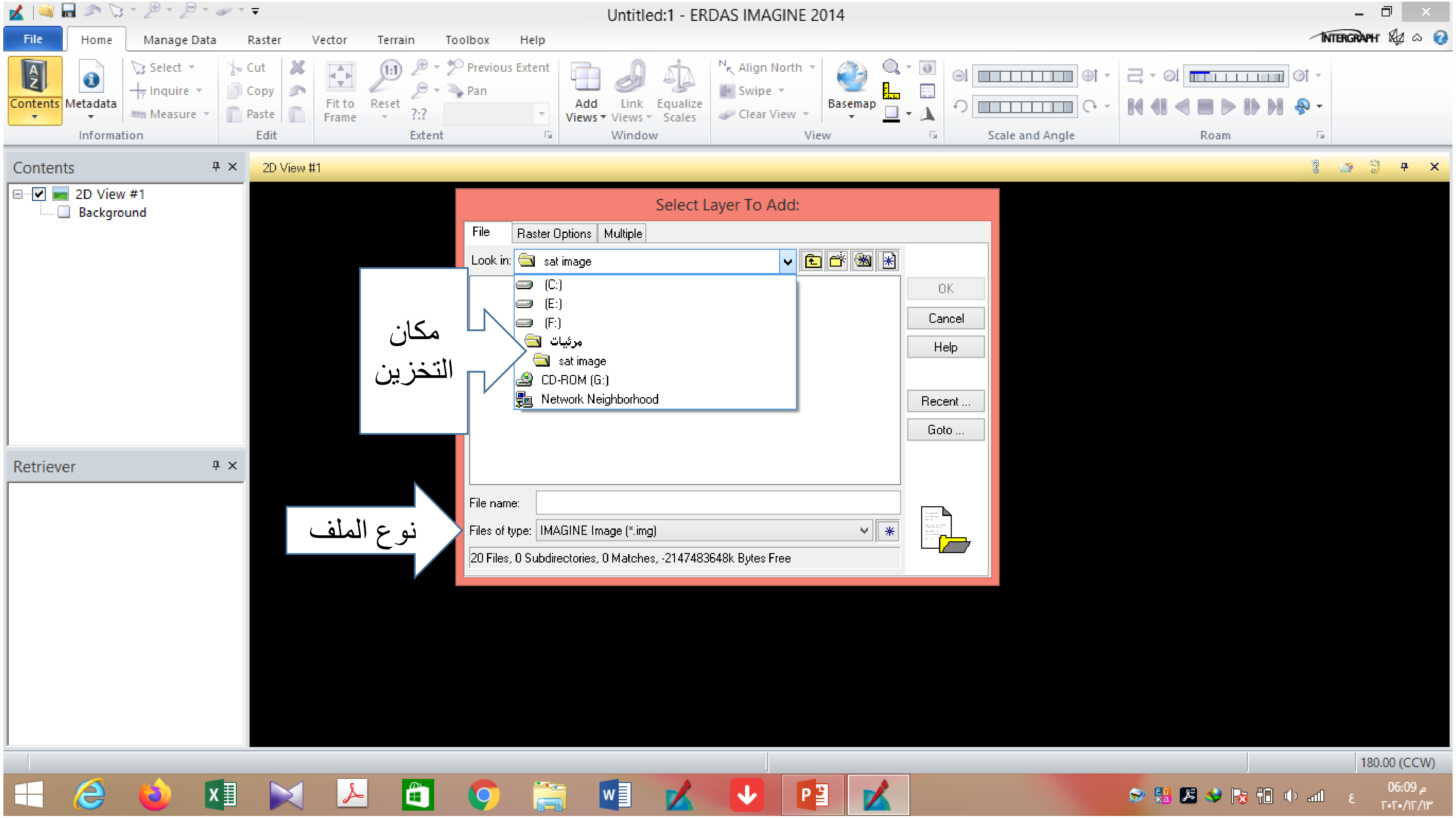
1- نختار File

2-نختار Open

3- نختار Raster layer


Untitled:1 - ERDAS IMAGINE 2014
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
INTERGRAPH
New
Open
Close
Save
Save As
Recent
Print Ctrl+P
Session
Batch
Configuration
View
Preferences
Help
Exit Ctrl+Q
Open a File of Type
Raster Layer..
Open an existing Raster Layer.
Vector Layer..
Open an existing Vector Layer.
Point Cloud Layer..
Open an existing Lidar File as Point Cloud.
AOI Layer..
Open an existing Area Of Interest (AOI) Layer.
Annotation Layer..
Open an existing Annotation Layer.
Photogrammetric Project..
Open an existing Photogrammetric Project.
TerraModel Layer..
Open an existing TerraModel Layer.
Three Layer Arrangement..
Open a Three-Band Layer.
Multi Layer Arrangement..
Open a Multi-Band Layer.
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
180.00 (CCW)
06:07 م
٢٠٢٠/١٢/١٣

4- تظهر نافذة (كما في الصورة) نختار مكان تخزين المرئيات في الحاسبة، كذلك نحدد نوع الملف (الامتداد) الذي غالباً ما يكون JPEG 2000 أو TIFF .


Untitled:1 - ERDAS IMAGINE 2014
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Contents
2D View #1
Background
Retriever
Select Layer To Add:
File
Raster Options
Multiple
OK
Cancel
Help
Recent ...
Goto ...
(C:)
(E:)
(F:)
مرئيات
sat image
CD-ROM (G:)
Network Neighborhood
مكان التخزين
نوع الملف

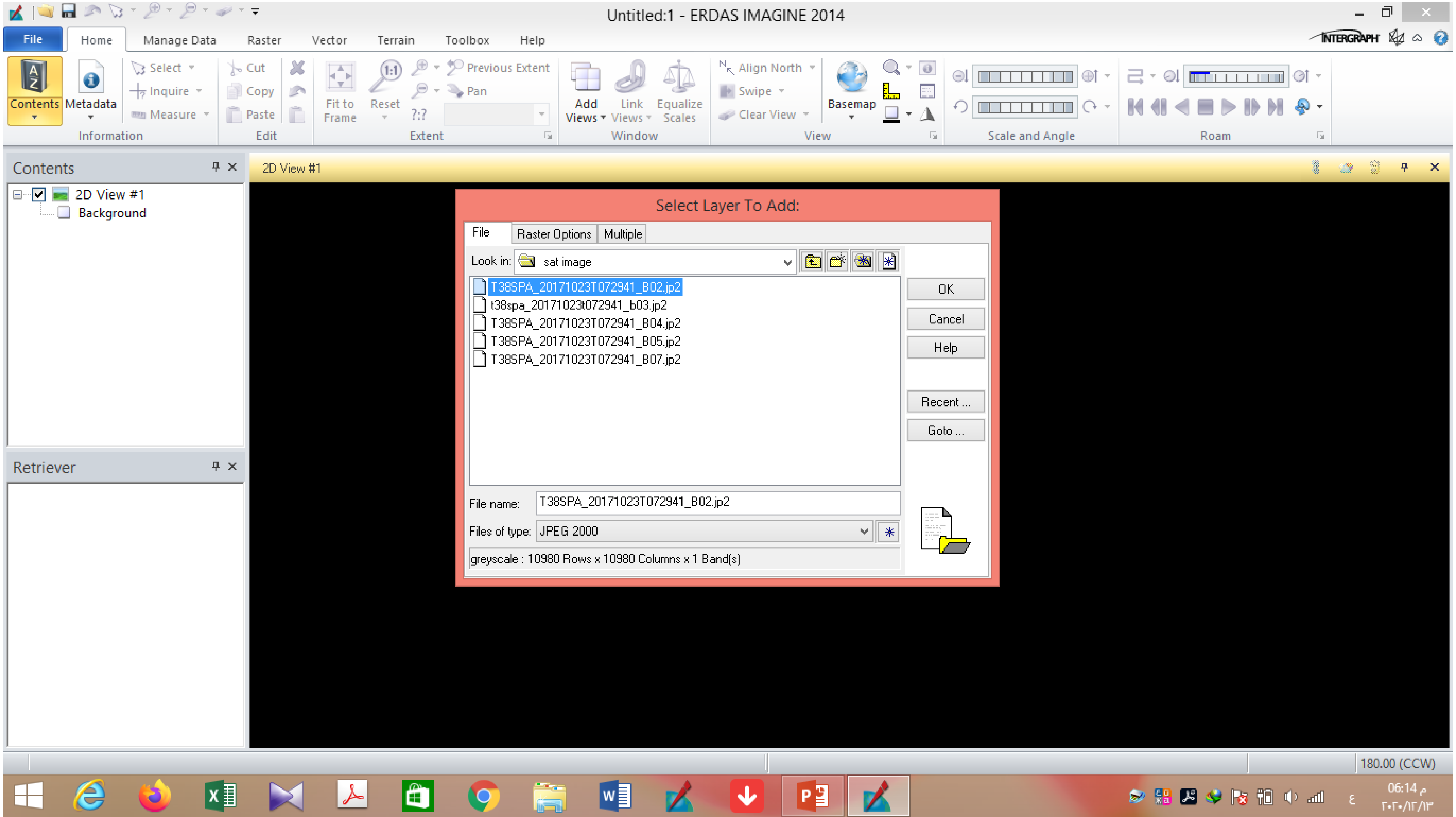
Look in: sat image

File name:

Files of type: IMAGINE Image (*.img)

20 Files, 0 Subdirectories, 0 Matches, -2147483648k Bytes Free

5- بعدها نضغط على OK.


Untitled:1 - ERDAS IMAGINE 2014
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
2D View #1
Background
Retriever
2D View #1
File
Raster Options
Multiple
OK
Cancel
Help
Recent ...
Goto ...
180.00 (CCW)

Select Layer To Add:

Look in: sat image

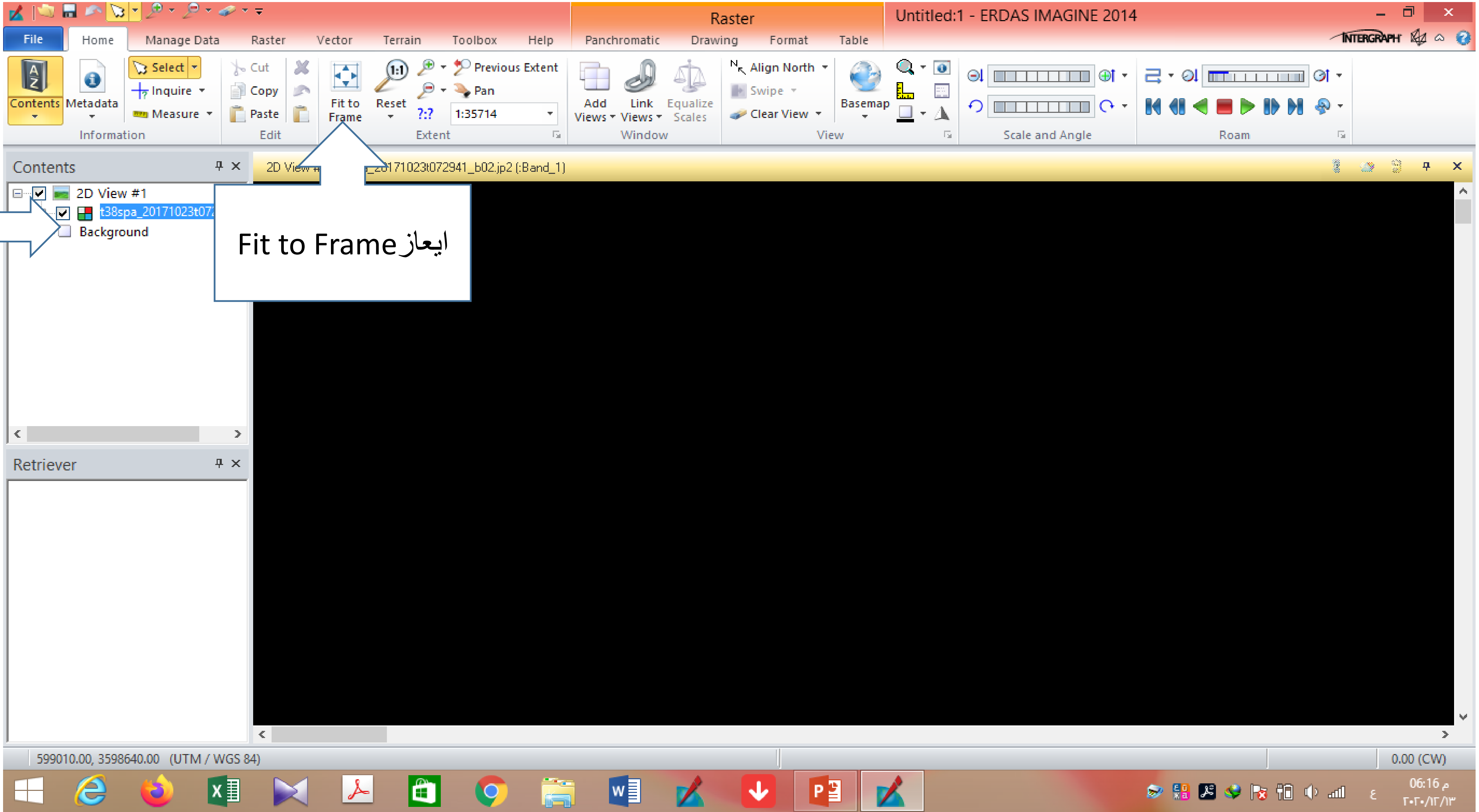
T38SPA_20171023T072941_B02.jp2
t38spa_20171023t072941_b03.jp2
T38SPA_20171023T072941_B04.jp2
T38SPA_20171023T072941_B05.jp2
T38SPA_20171023T072941_B07.jp2

File name: T38SPA_20171023T072941_B02.jp2

Files of type: JPEG 2000

greyscale : 10980 Rows x 10980 Columns x 1 Band(s)

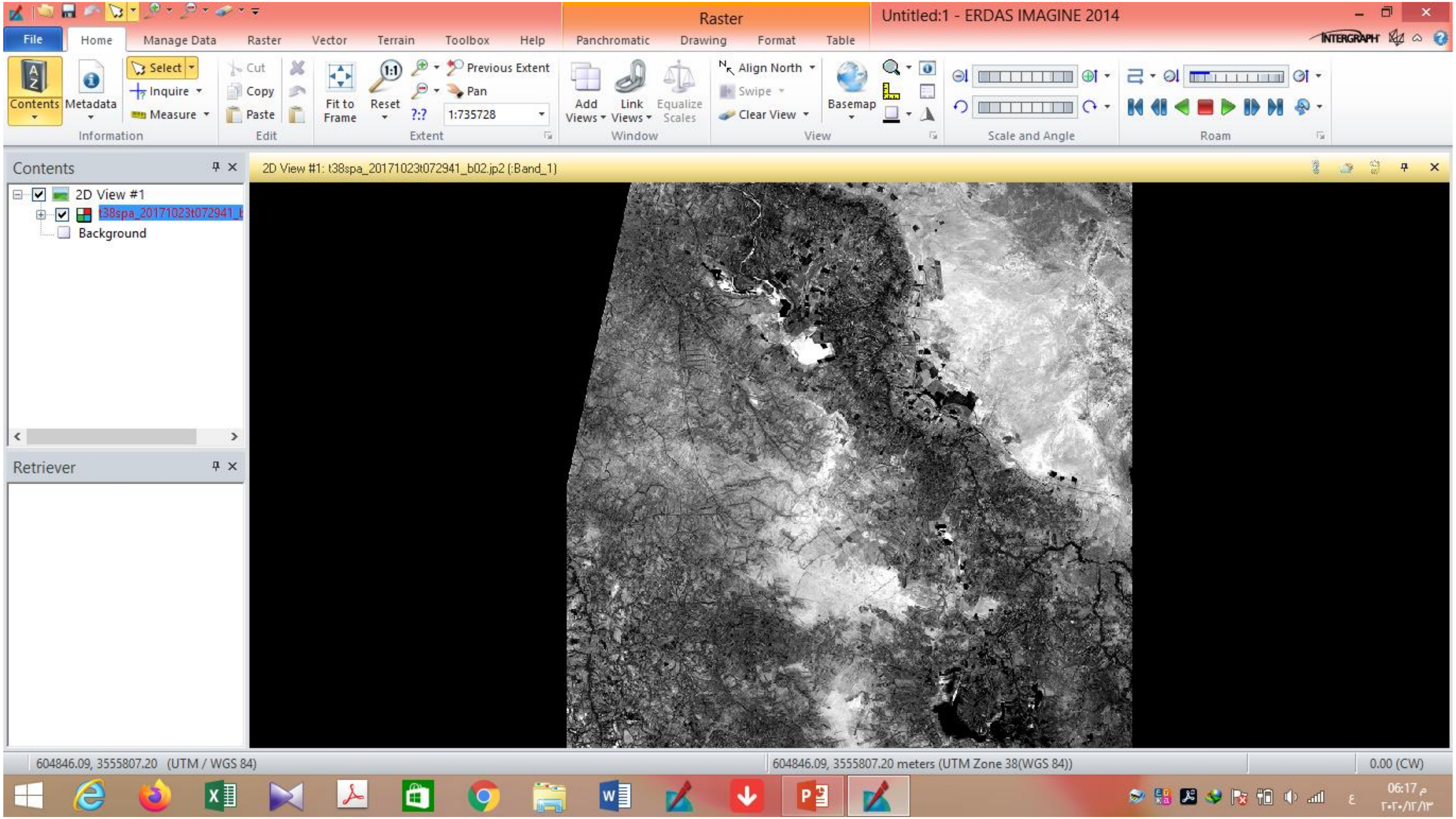
6- ستظهر لنا المرئية في المحتويات ويعرض جزء منها ، ولغرض عرضها بشكل كامل على الشاشة نضغط على ايعاز Fit to Frame


Untitled:1 - ERDAS IMAGINE 2014
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Panchromatic
Drawing
Format
Table
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
1:35714
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
2D View #1
t38spa_20171023t07
Background
Retriever
2D View #1
_20171023t072941_b02.jp2 (:Band_1)
599010.00, 3598640.00 (UTM / WGS 84)
0.00 (CW)
06:16 م
٢٠٢٠/١٢/١٣

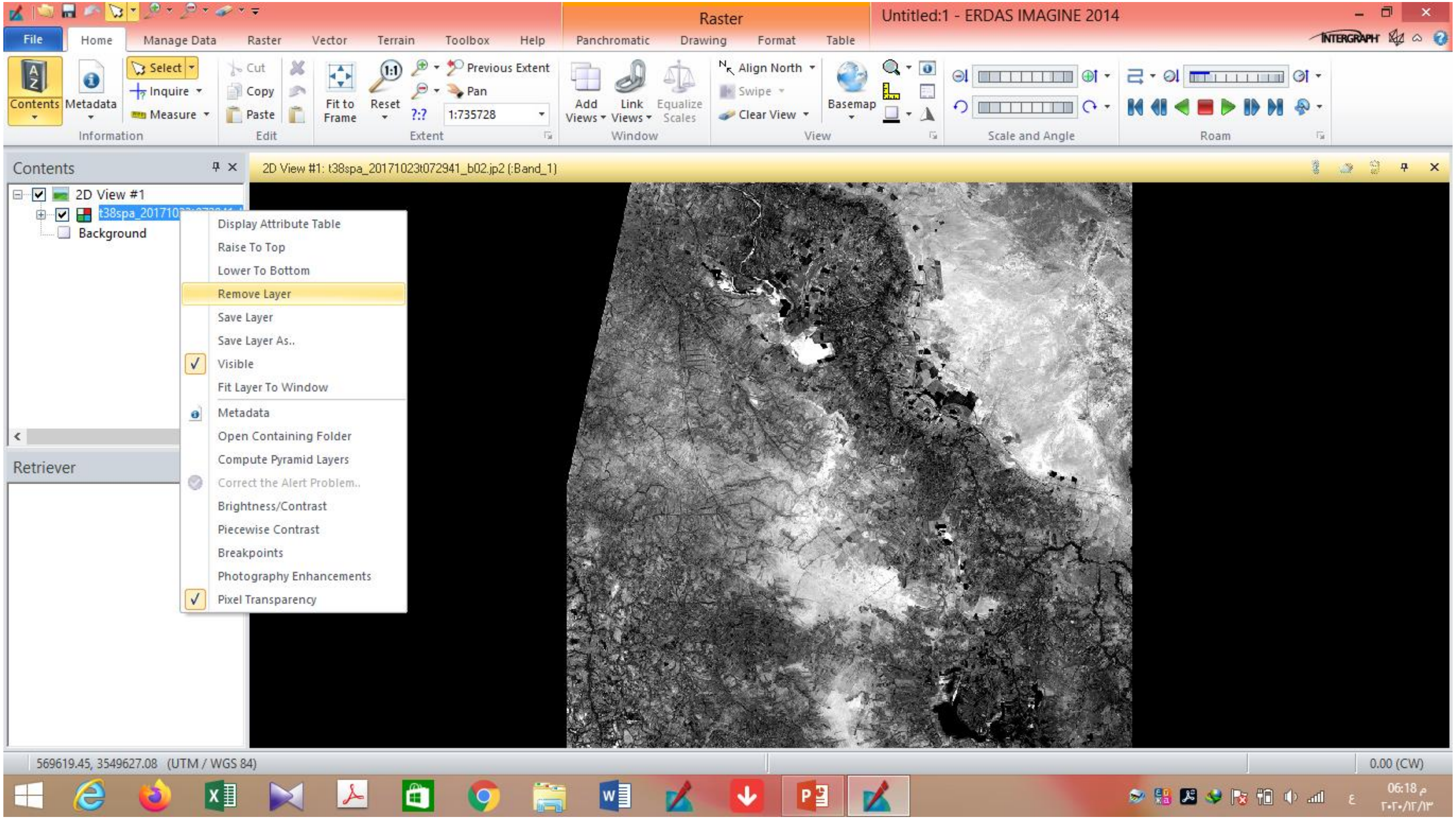
المحتويات

Fit to Frame ايعاز

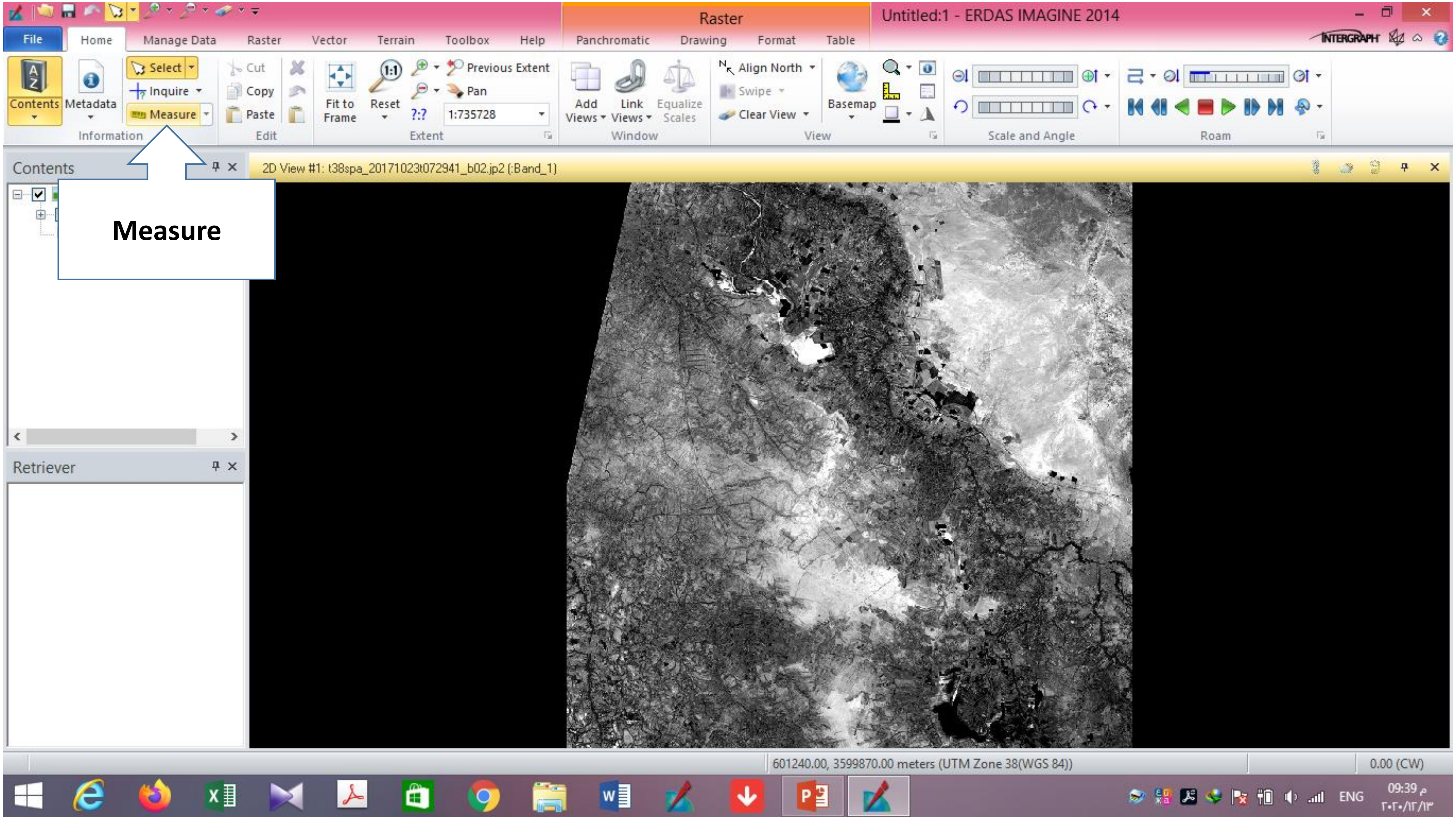
عرض المرئية بشكل كامل


Untitled:1 - ERDAS IMAGINE 2014
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Panchromatic
Drawing
Format
Table
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
1:735728
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
2D View #1
t38spa_20171023t072941_b
Background
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
604846.09, 3555807.20 (UTM / WGS 84)
604846.09, 3555807.20 meters (UTM Zone 38(WGS 84))
0.00 (CW)
06:17 م
٢٠٢٠/١٢/١٣

7- لحذف المرئية من المحتويات ننقر على اسم المرئية بالزر الايمن للفأرة وحينها ستظهر لنا قائمة نختار منها Remove Layer.

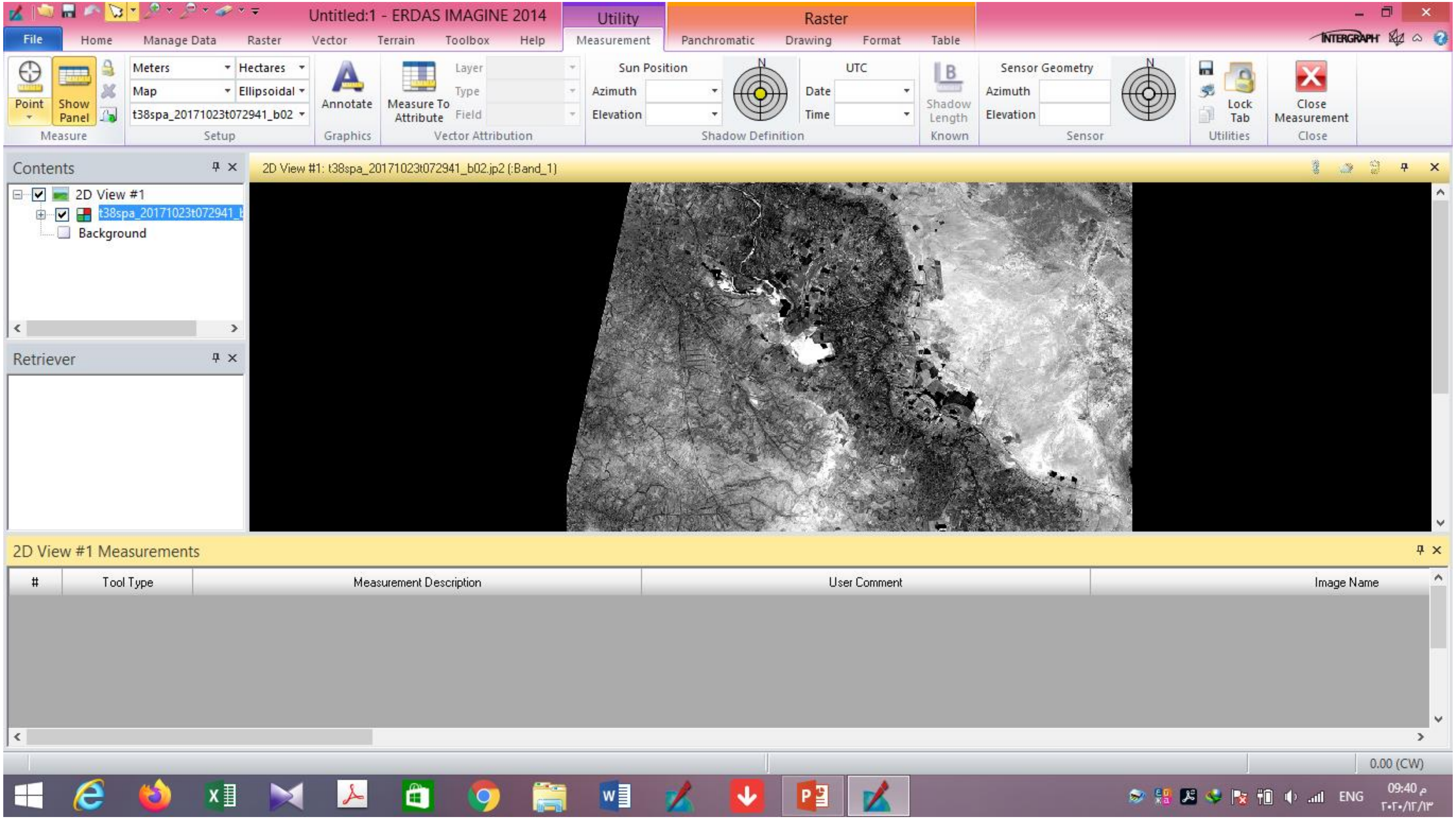

Untitled:1 - ERDAS IMAGINE 2014
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Panchromatic
Drawing
Format
Table
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
1:735728
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
2D View #1
t38spa_20171023t072941
Background
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
Display Attribute Table
Raise To Top
Lower To Bottom
Remove Layer
Save Layer
Save Layer As..
✓ Visible
Fit Layer To Window
Metadata
Open Containing Folder
Compute Pyramid Layers
Correct the Alert Problem..
Brightness/Contrast
Piecewise Contrast
Breakpoints
Photography Enhancements
✓ Pixel Transparency
569619.45, 3549627.08 (UTM / WGS 84)
0.00 (CW)
06:18 م
٢٠٢٠/١٢/١٣

Measure ایعاز


Untitled:1 - ERDAS IMAGINE 2014
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Panchromatic
Drawing
Format
Table
INTERGRAPH
Contents
Metadata
Select
Inquire
Measure
Information
Cut
Copy
Paste
Edit
Fit to Frame
Reset
Previous Extent
Pan
1:735728
Extent
Add Views
Link Views
Equalize Scales
Window
Align North
Swipe
Clear View
Basemap
View
Scale and Angle
Roam
Contents
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
601240.00, 3599870.00 meters (UTM Zone 38(WGS 84))
0.00 (CW)
ENG
09:39 م
٢٠٢٠/١٢/١٣

Measure

عند الضغط على Measure تظهر لنا هذه الشاشة


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
INTERGRAPH
Point
Show Panel
Measure
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
N
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
N
Sensor
Lock Tab
Utilities
Close Measurement
Close
Contents
2D View #1
Background
Retriever
2D View #1 Measurements
#
Tool Type
Measurement Description
User Comment
Image Name
0.00 (CW)
ENG
09:40 م
٢٠٢٠/١٢/١٣

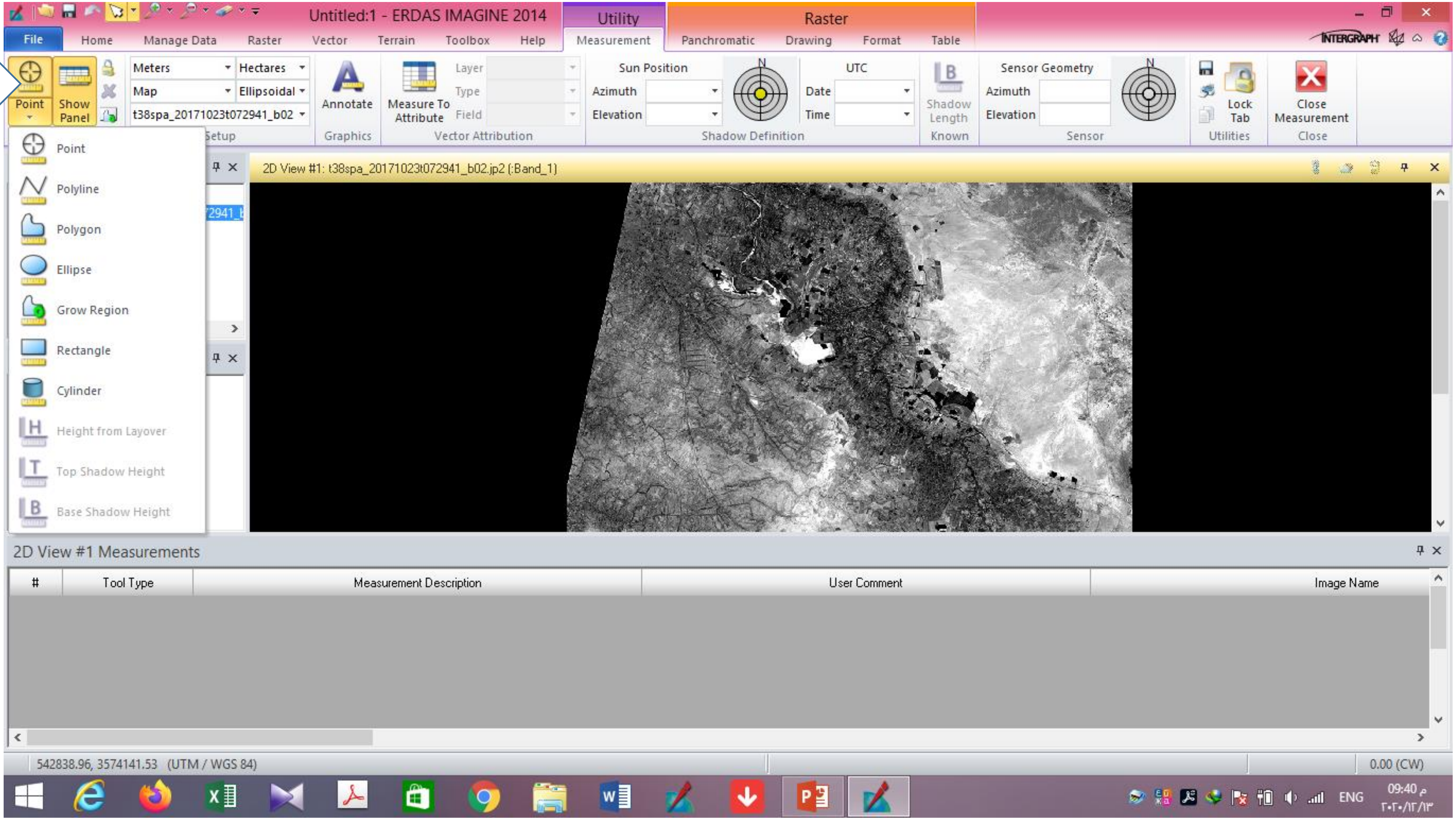
Meters
Hectares
Map
Ellipsoidal
t38spa_20171023t072941_b02

2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)

t38spa_20171023t072941_

نختار منها Point لتظهر لنا مجموعة خيارات

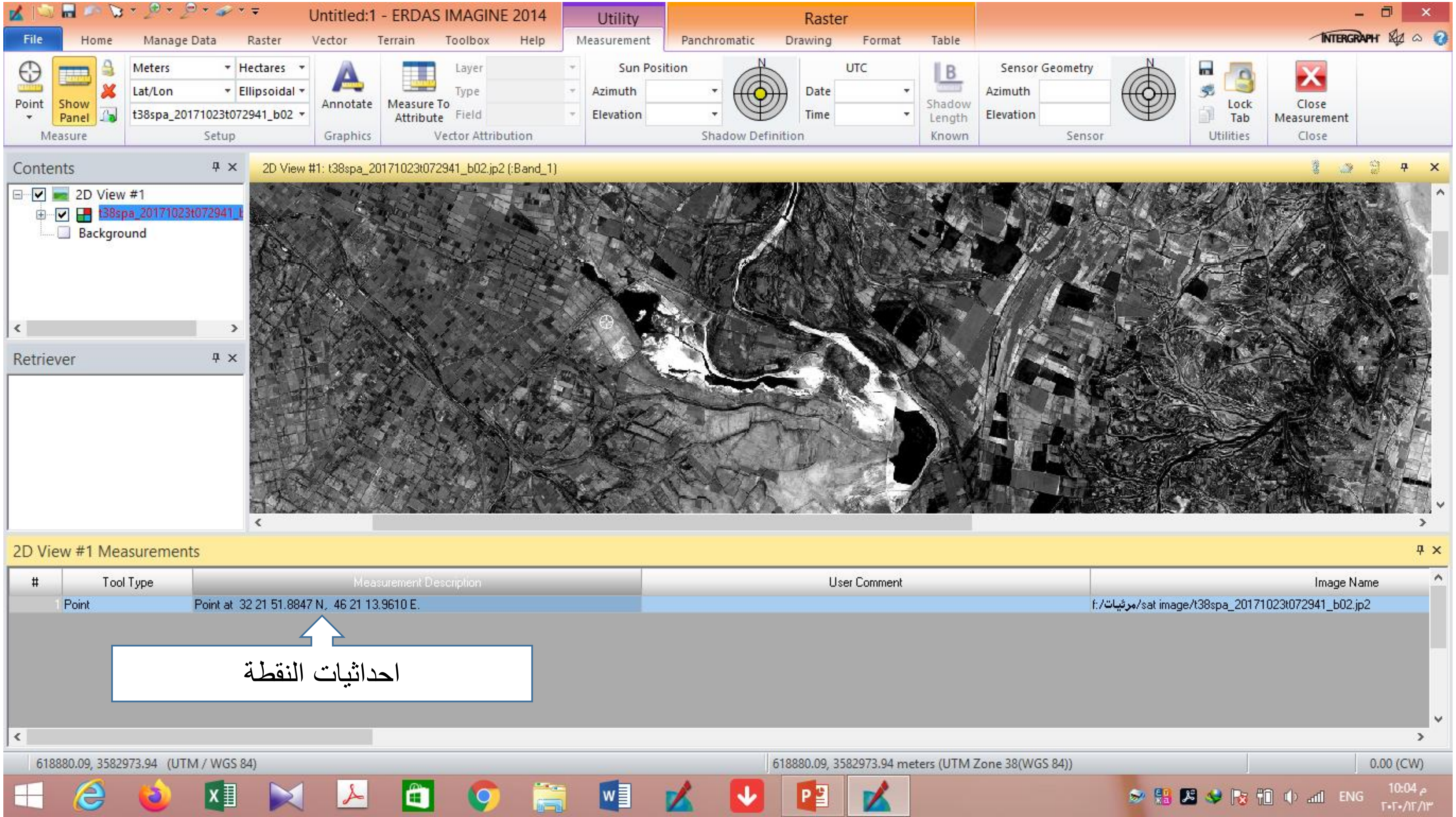
point


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
Point
Show Panel
Meters
Hectares
Map
Ellipsoidal
t38spa_20171023t072941_b02
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Point
Polyline
Polygon
Ellipse
Grow Region
Rectangle
Cylinder
Height from Layover
Top Shadow Height
Base Shadow Height
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
2D View #1 Measurements
0.00 (CW)
ENG
09:40 م
٢٠٢٠/١٢/١٣

#	Tool Type	Measurement Description	User Comment	Image Name

542838.96, 3574141.53 (UTM / WGS 84)

بالضغط على point يتحول شكل مؤشر الماوس الى علامة+ وحين الضغط على اي مكان في المرئية سيحدد تلقائياً احداثيات النقطة


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
Point
Show Panel
Measure
Meters
Hectares
Lat/Lon
Ellipsoidal
t38spa_20171023t072941_b02
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Contents
2D View #1
t38spa_20171023t072941_b
Background
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
2D View #1 Measurements

#	Tool Type	Measurement Description	User Comment	Image Name
1	Point	Point at 32 21 51.8847 N, 46 21 13.9610 E.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2

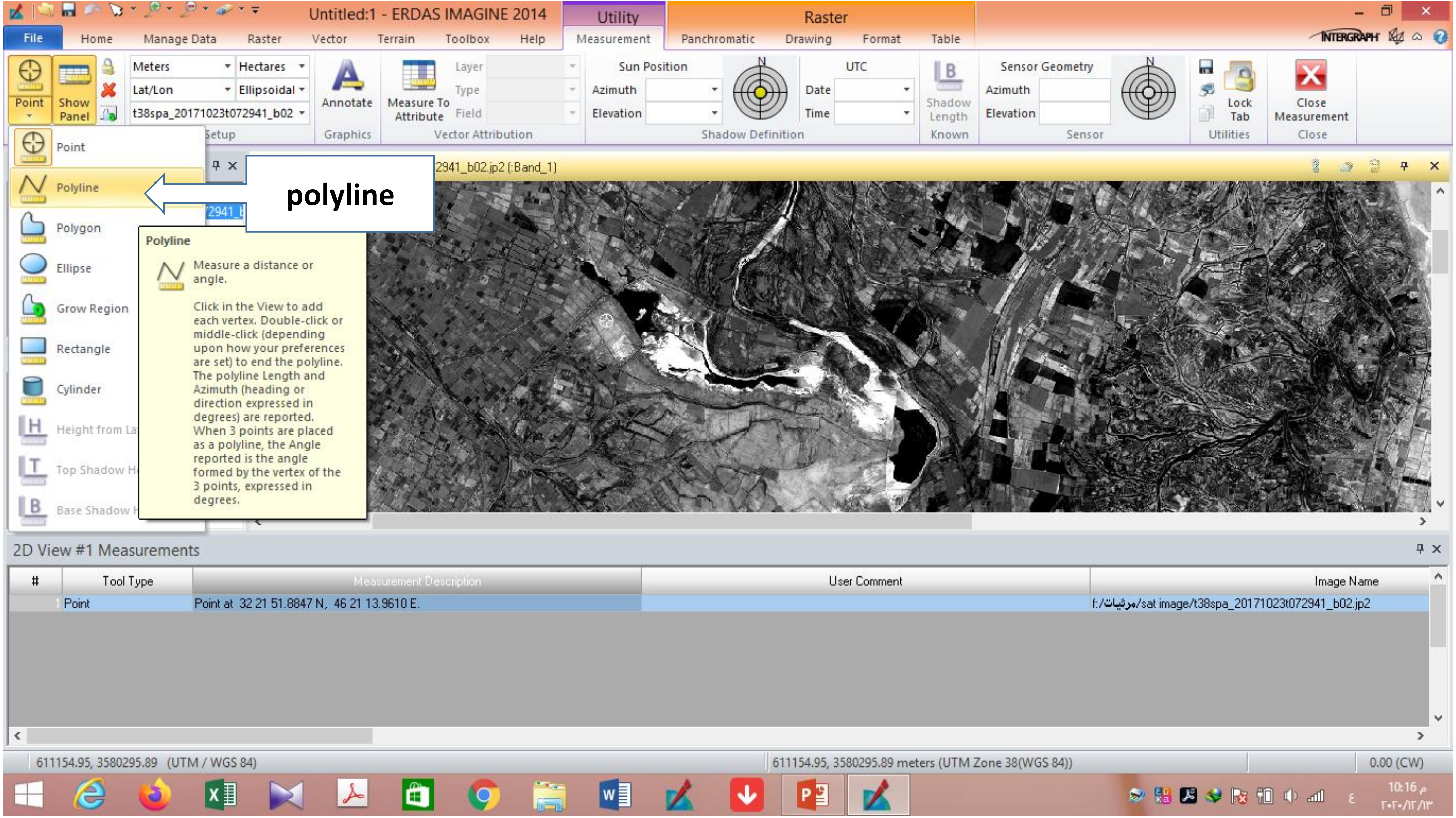
احداثيات النقطة

618880.09, 3582973.94 (UTM / WGS 84)

618880.09, 3582973.94 meters (UTM Zone 38(WGS 84))

0.00 (CW)

عند اختيار polyline ثم نحدد اي خط على المرئية سيقوم البرنامج بتحديد طوله على سطح الأرض


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
Point
Show Panel
Meters
Hectares
Lat/Lon
Ellipsoidal
t38spa_20171023t072941_b02
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Point
Polyline
Polygon
Ellipse
Grow Region
Rectangle
Cylinder
Height from La
Top Shadow H
Base Shadow H
polyline
2941_b02.jp2 (:Band_1)
2D View #1 Measurements

Polyline

Measure a distance or angle.

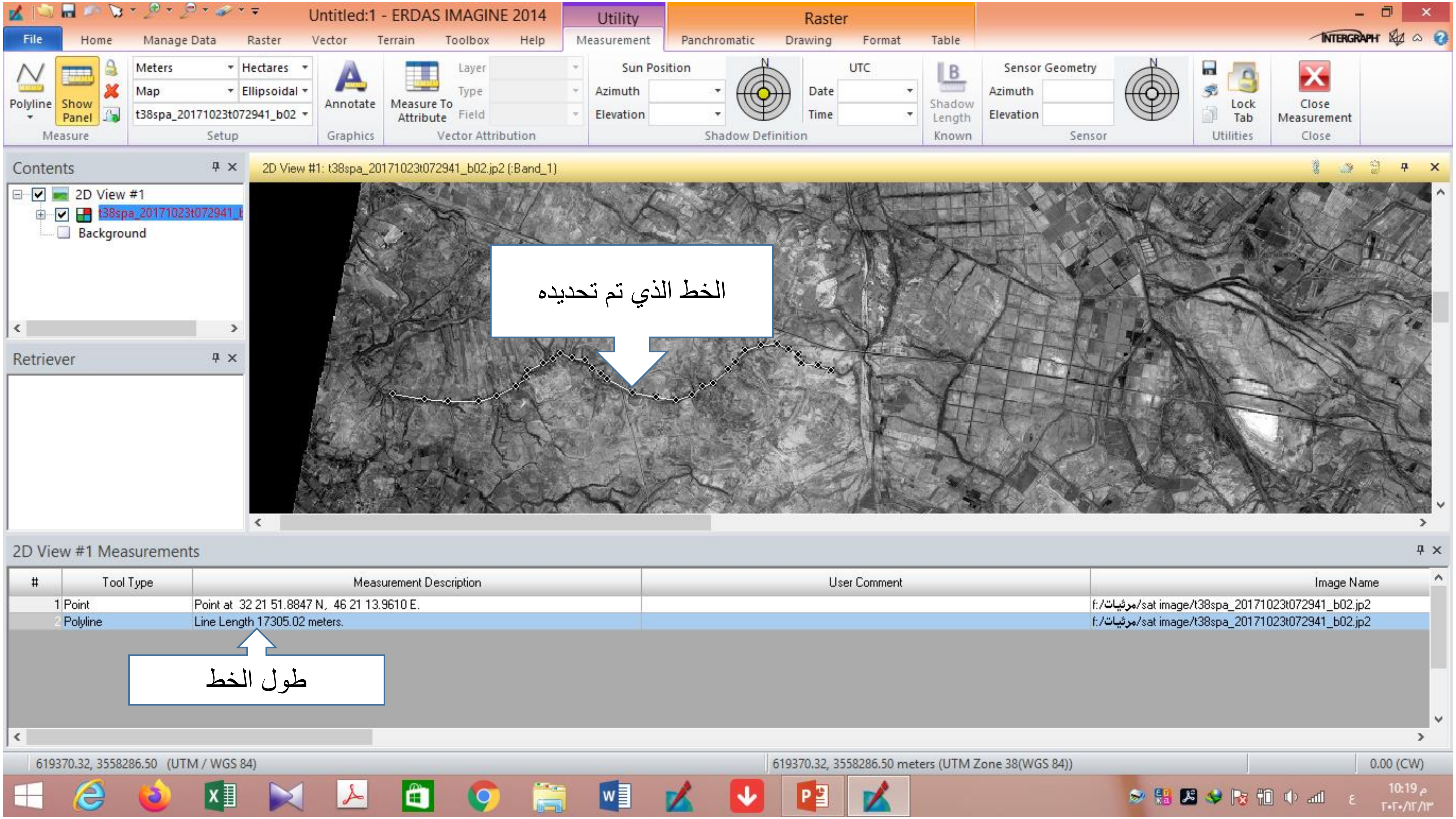
Click in the View to add each vertex. Double-click or middle-click (depending upon how your preferences are set) to end the polyline. The polyline Length and Azimuth (heading or direction expressed in degrees) are reported. When 3 points are placed as a polyline, the Angle reported is the angle formed by the vertex of the 3 points, expressed in degrees.

#	Tool Type	Measurement Description	User Comment	Image Name
1	Point	Point at 32 21 51.8847 N, 46 21 13.9610 E.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2

611154.95, 3580295.89 (UTM / WGS 84)

611154.95, 3580295.89 meters (UTM Zone 38(WGS 84))

0.00 (CW)


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
Polyline
Show Panel
Measure
Meters
Hectares
Map
Ellipsoidal
t38spa_20171023t072941_b02
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Contents
2D View #1
t38spa_20171023t072941_t
Background
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
2D View #1 Measurements

الخط الذي تم تحديده

#	Tool Type	Measurement Description	User Comment	Image Name
1	Point	Point at 32 21 51.8847 N, 46 21 13.9610 E.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2
2	Polyline	Line Length 17305.02 meters.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2

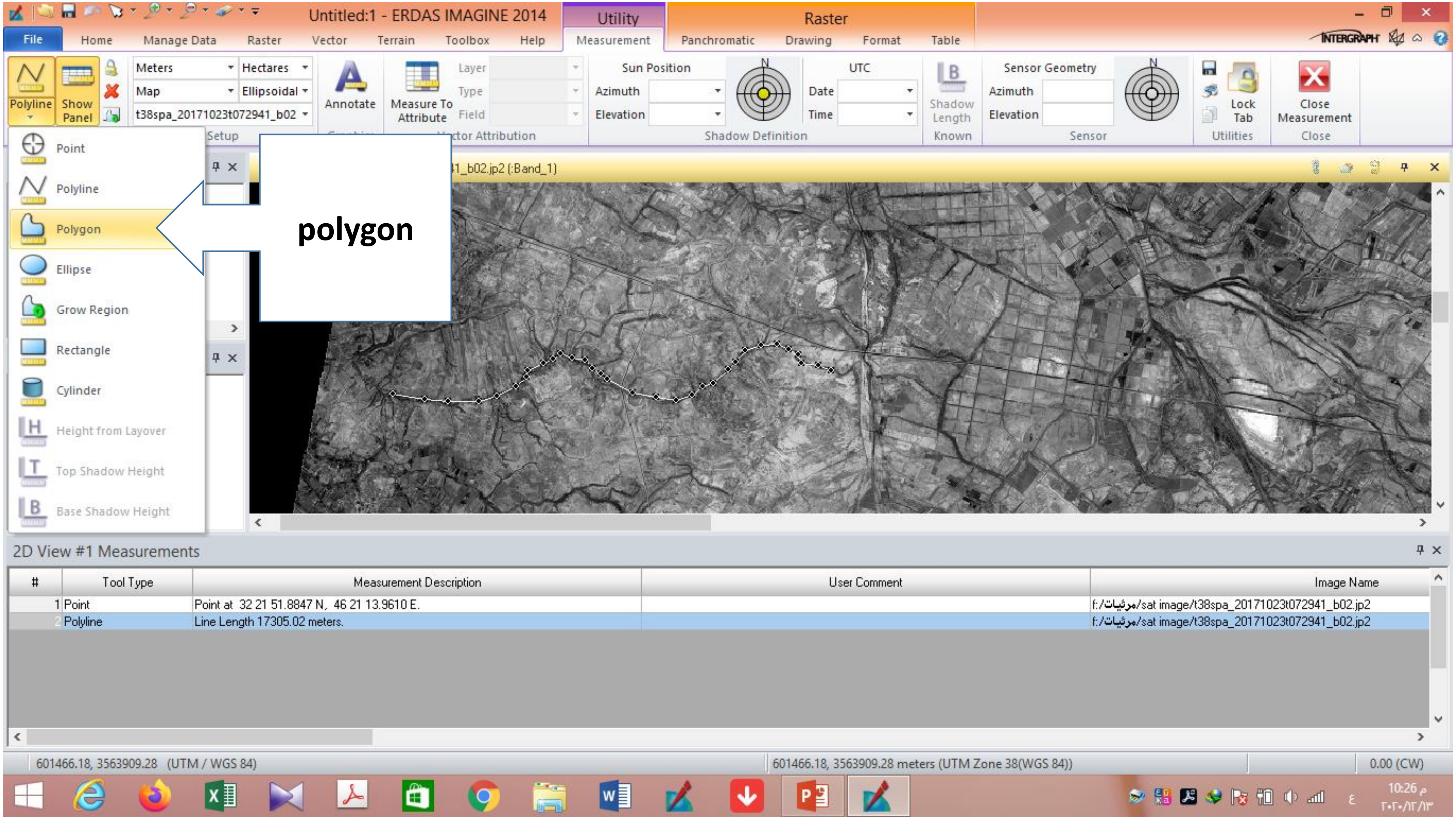
طول الخط

619370.32, 3558286.50 (UTM / WGS 84)

619370.32, 3558286.50 meters (UTM Zone 38(WGS 84))

0.00 (CW)

أماpolygon فتستخد لتحديد محيط ومساحة مظهر ما ظاهرعلى المرئية

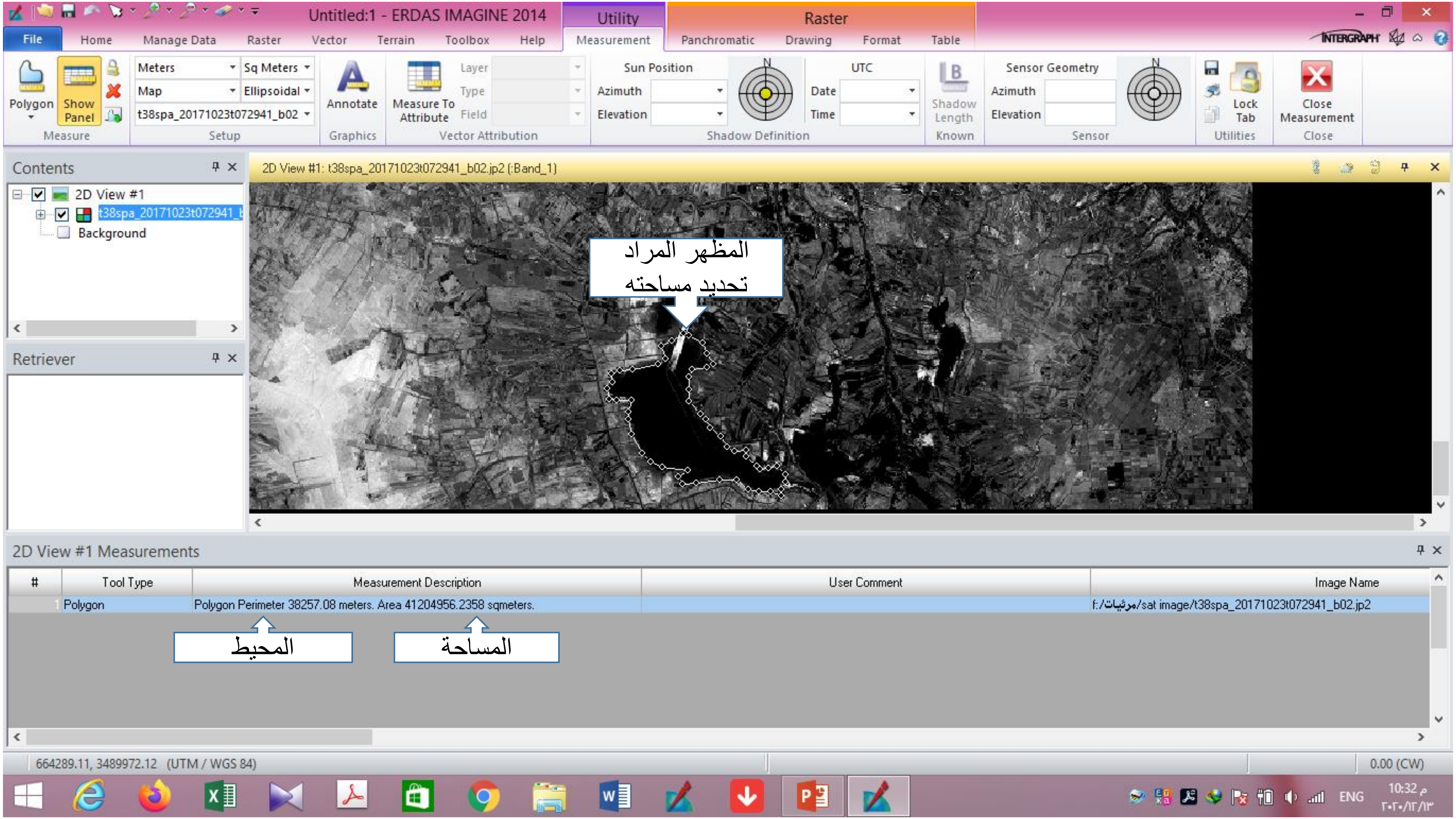

Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
Polyline
Show Panel
Meters
Hectares
Map
Ellipsoidal
t38spa_20171023t072941_b02
Annotate
Measure To Attribute
Layer
Type
Field
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Setup
Vector Attribution
Shadow Definition
Point
Polyline
Polygon
Ellipse
Grow Region
Rectangle
Cylinder
Height from Layover
Top Shadow Height
Base Shadow Height
polygon
1_b02.jp2 (:Band_1)
2D View #1 Measurements

#	Tool Type	Measurement Description	User Comment	Image Name
1	Point	Point at 32 21 51.8847 N, 46 21 13.9610 E.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2
2	Polyline	Line Length 17305.02 meters.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2

601466.18, 3563909.28 (UTM / WGS 84)

601466.18, 3563909.28 meters (UTM Zone 38(WGS 84))

0.00 (CW)


Untitled:1 - ERDAS IMAGINE 2014
Utility
Raster
File
Home
Manage Data
Raster
Vector
Terrain
Toolbox
Help
Measurement
Panchromatic
Drawing
Format
Table
INTERGRAPH
Polygon
Show Panel
Measure
Setup
Annotate
Graphics
Measure To Attribute
Layer
Type
Field
Vector Attribution
Sun Position
Azimuth
Elevation
UTC
Date
Time
Shadow Definition
Shadow Length
Known
Sensor Geometry
Azimuth
Elevation
Sensor
Lock Tab
Utilities
Close Measurement
Close
Contents
2D View #1
t38spa_20171023t072941_b
Background
Retriever
2D View #1: t38spa_20171023t072941_b02.jp2 (:Band_1)
2D View #1 Measurements
ENG
10:32 م
٢٠٢٠/١٢/١٣

Meters | Sq Meters
Map | Ellipsoidal
t38spa_20171023t072941_b02

المظهر المراد
تحديد مساحته

#	Tool Type	Measurement Description	User Comment	Image Name
1	Polygon	Polygon Perimeter 38257.08 meters. Area 41204956.2358 sqmeters.		f:/مرئيات/sat image/t38spa_20171023t072941_b02.jp2

المحيط

المساحة

664289.11, 3489972.12 (UTM / WGS 84)

0.00 (CW)