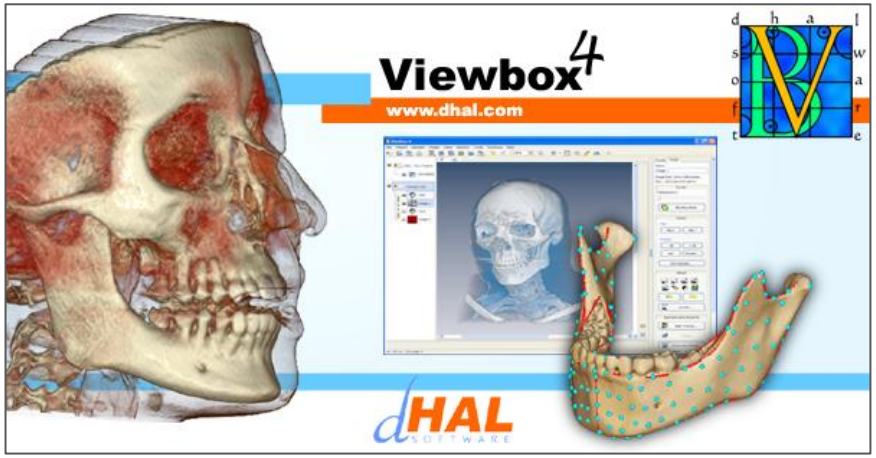
Viewbox 4 Tutorial



How to create a Template

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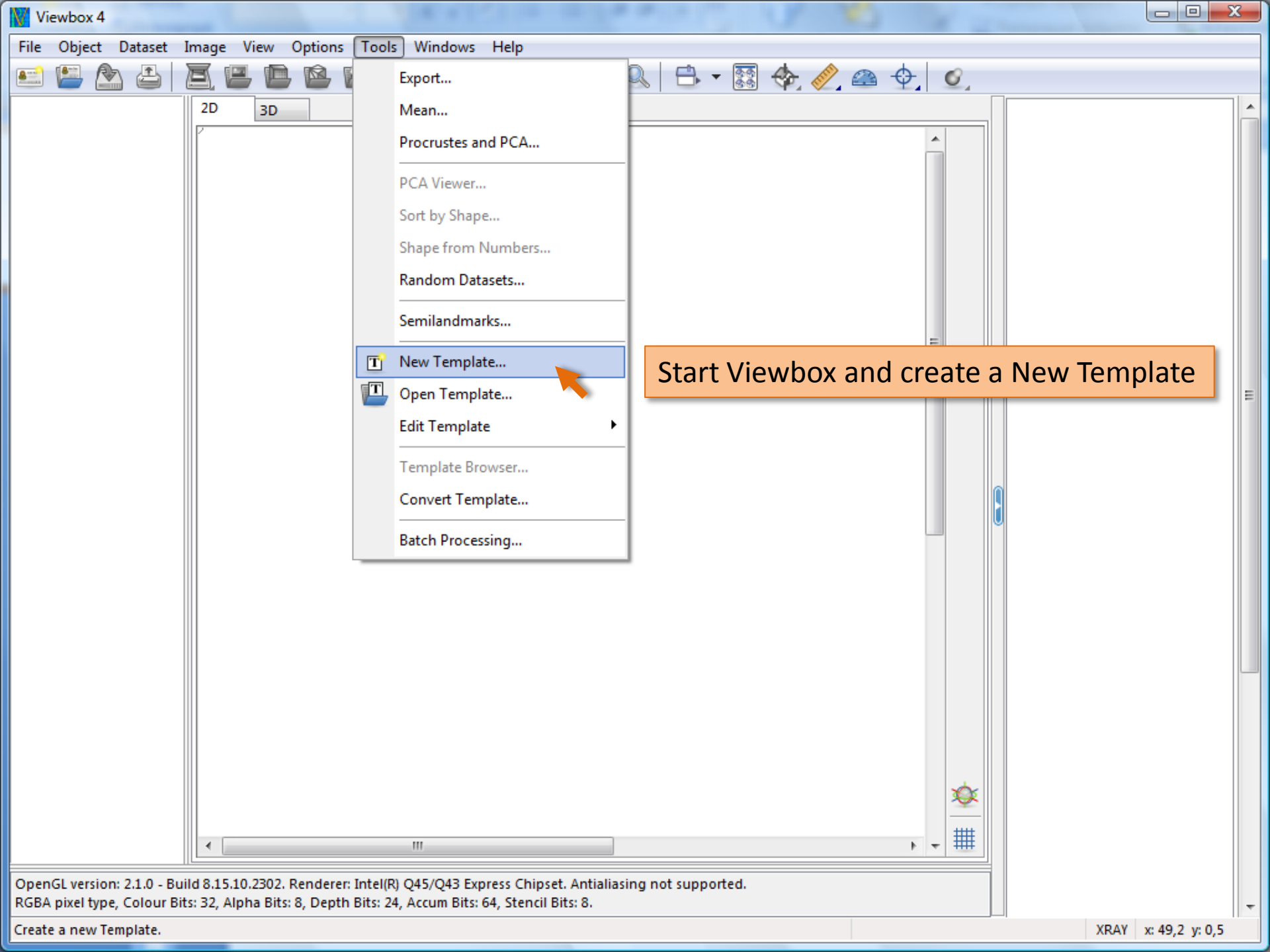
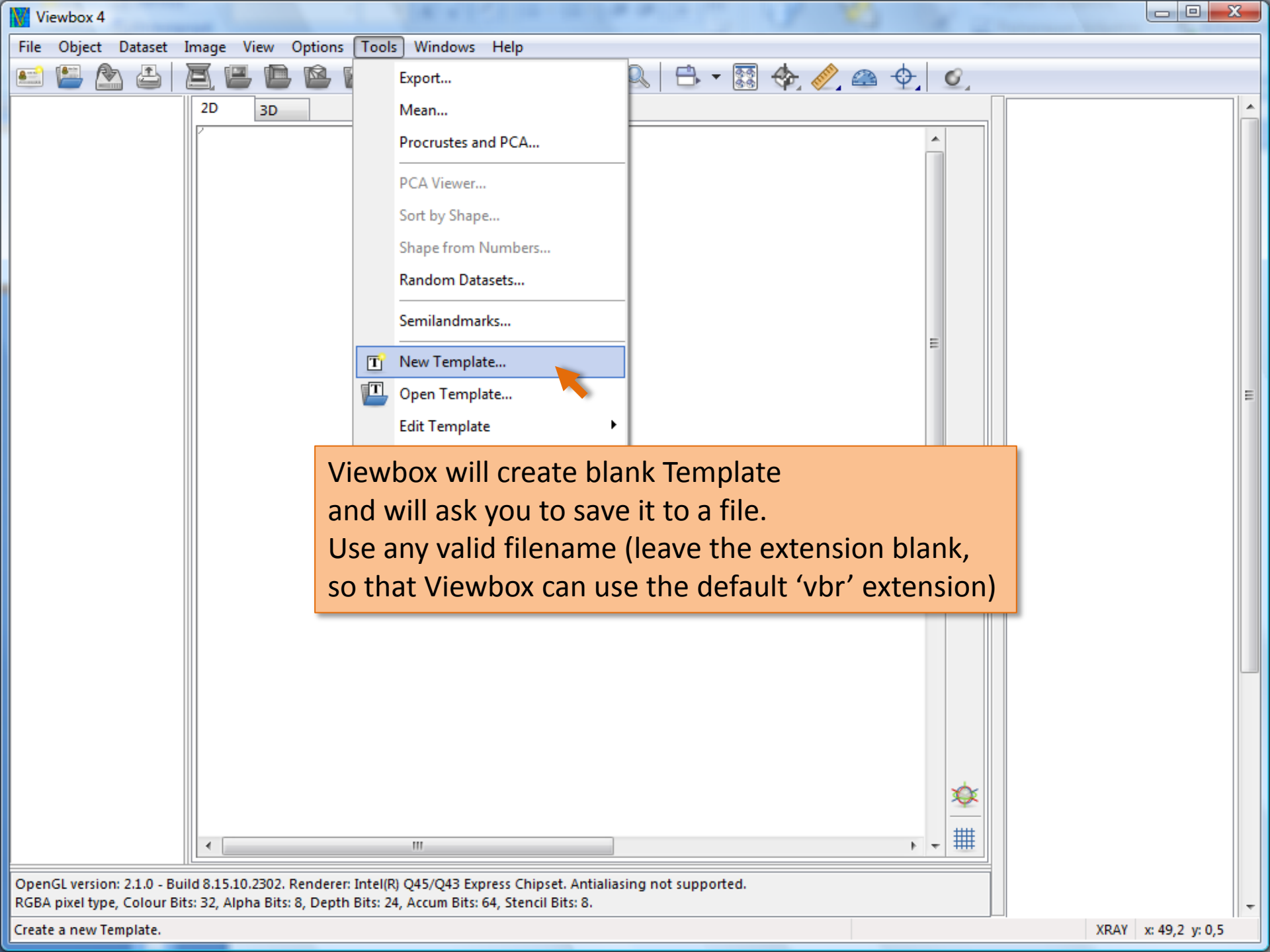
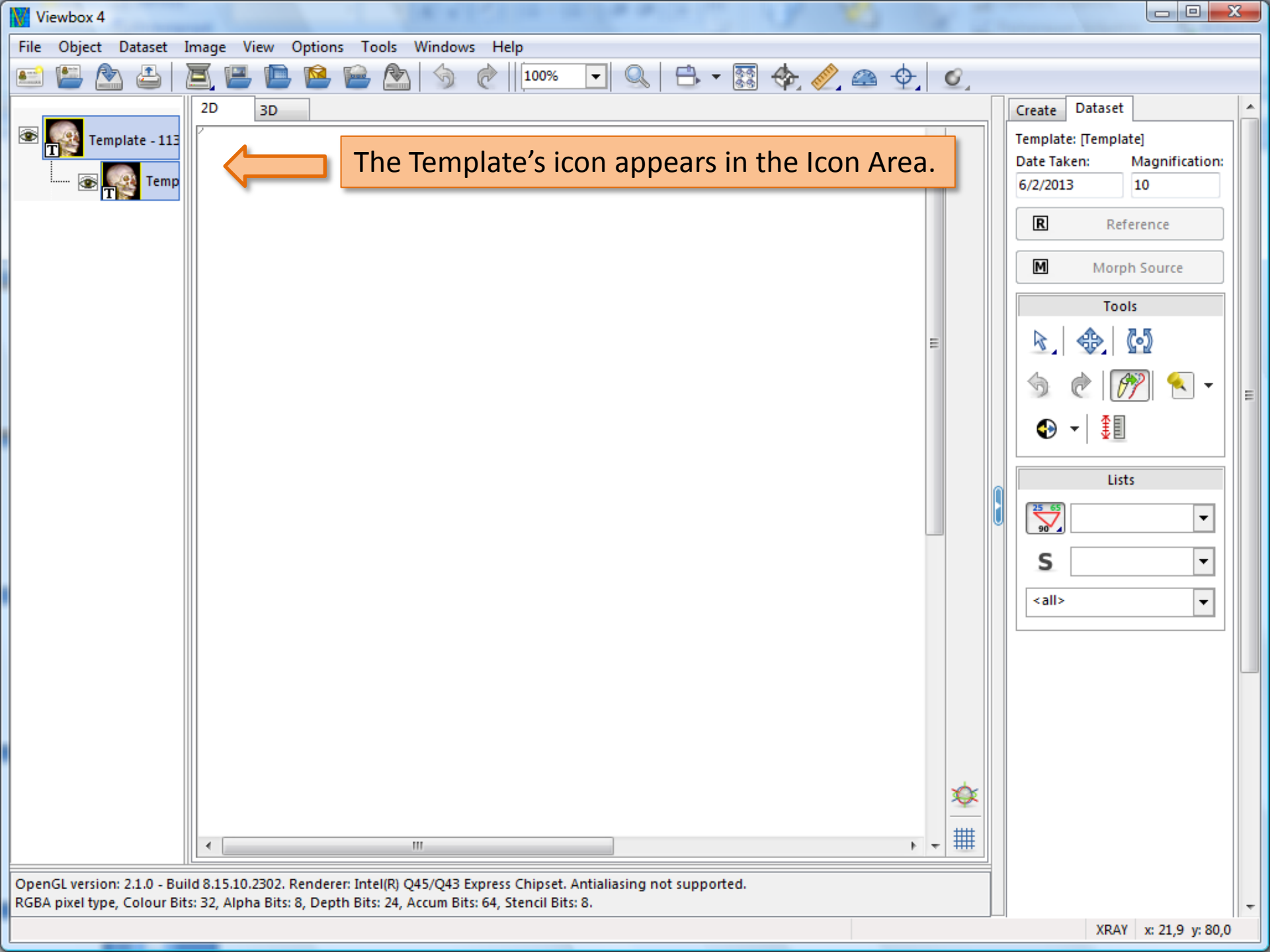
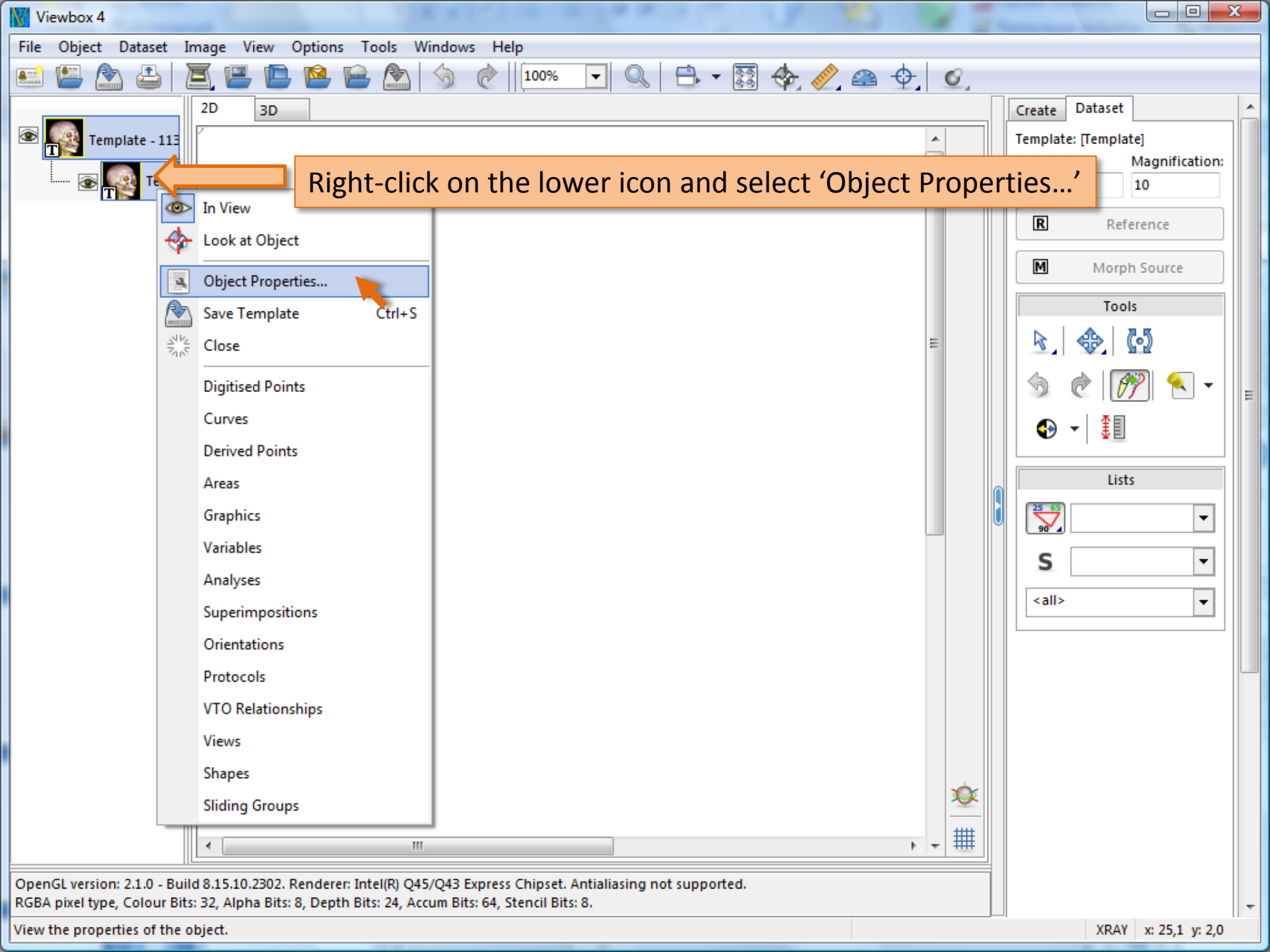
Template tutorial

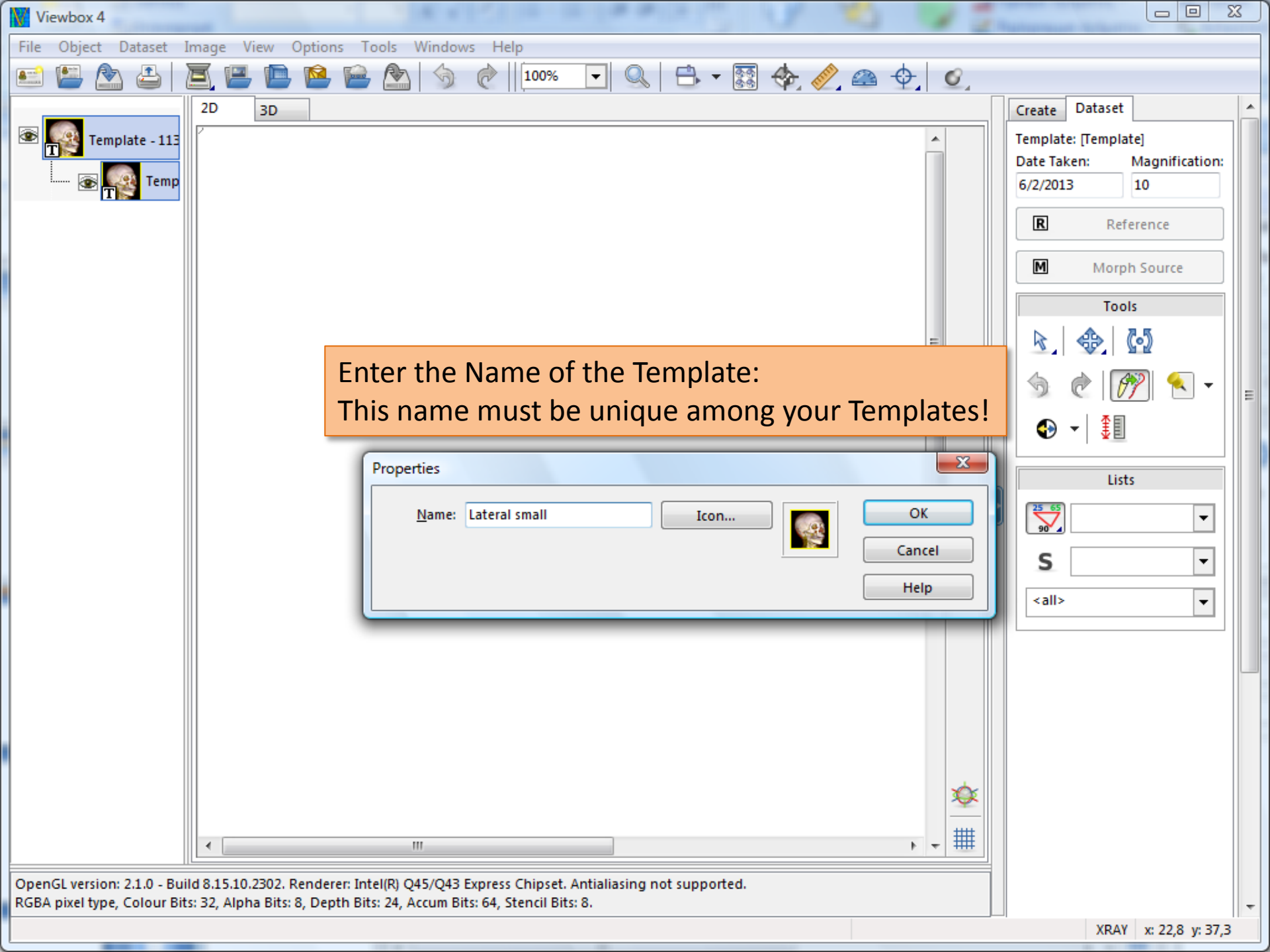
- This tutorial will show you how to create a new Template in Viewbox 4.
- It is a very simple Template, just to show you the basics.
- The Template can be used for digitizing a few points on a lateral cephalogram and for measuring the angle between the long axis of the upper incisor and the palatal plane.

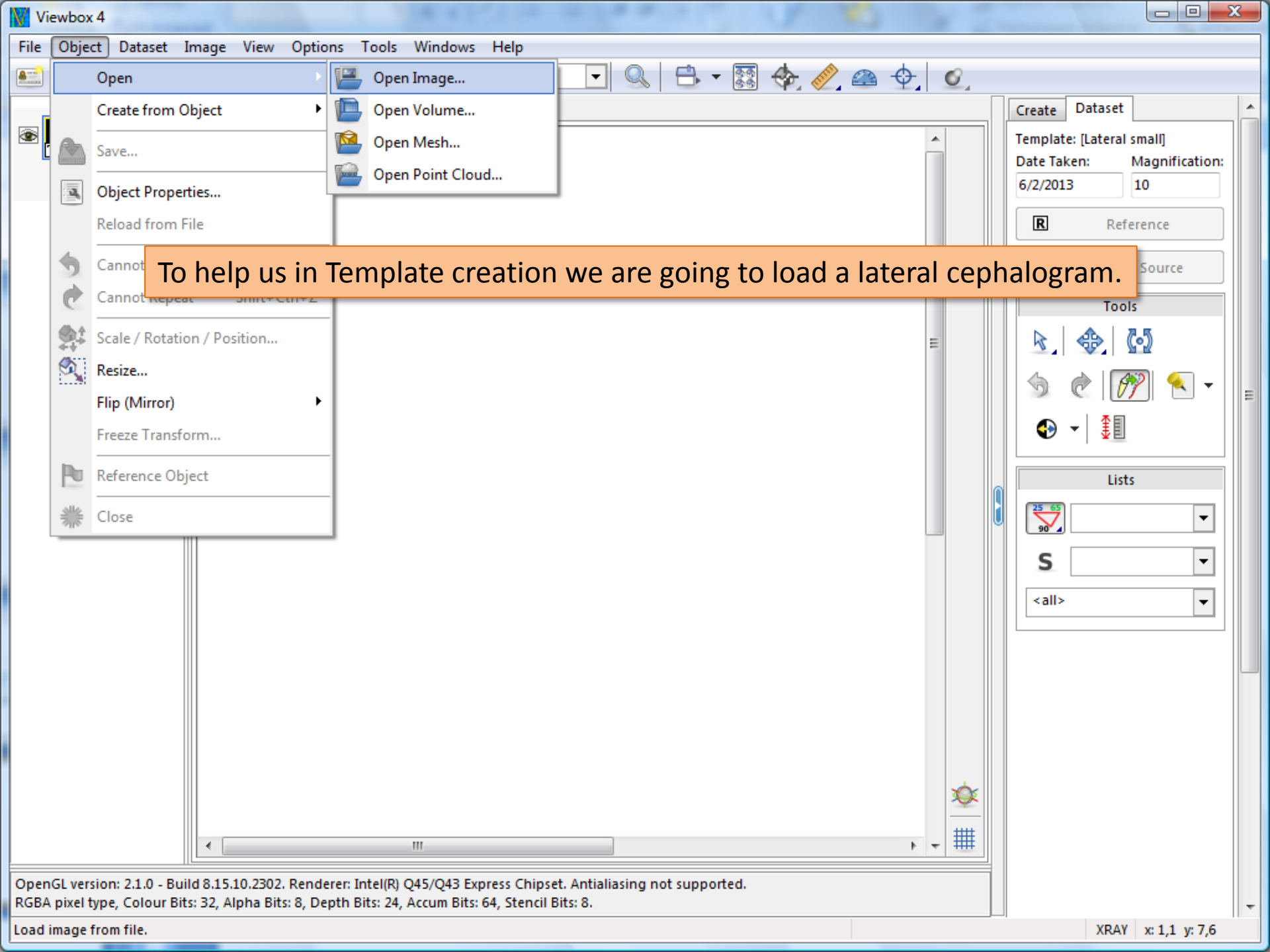

Viewbox 4
File
Object
Dataset
Image
View
Options
Tools
Windows
Help
Export...
Mean...
Procrustes and PCA...
PCA Viewer...
Sort by Shape...
Shape from Numbers...
Random Datasets...
Semilandmarks...
New Template...
Open Template...
Edit Template
Template Browser...
Convert Template...
Batch Processing...
2D
3D
Start Viewbox and create a New Template
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
Create a new Template.
XRAY
x: 49,2 y: 0,5

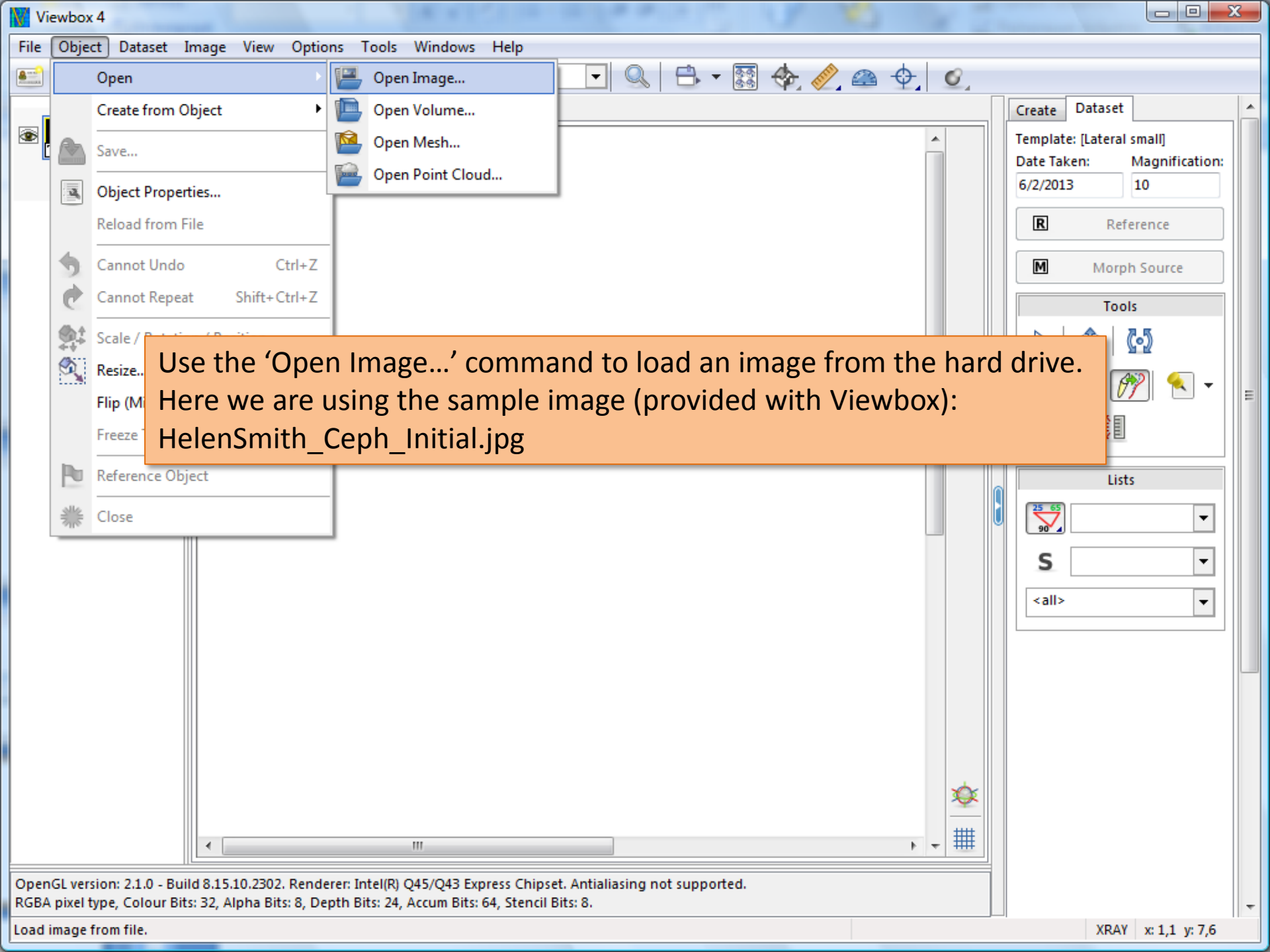

Viewbox 4
File
Object
Dataset
Image
View
Options
Tools
Windows
Help
Export...
Mean...
Procrustes and PCA...
PCA Viewer...
Sort by Shape...
Shape from Numbers...
Random Datasets...
Semilandmarks...
New Template...
Open Template...
Edit Template
2D
3D
Viewbox will create blank Template
and will ask you to save it to a file.
Use any valid filename (leave the extension blank,
so that Viewbox can use the default ‘vbr’ extension)
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
Create a new Template.
XRAY
x: 49,2 y: 0,5

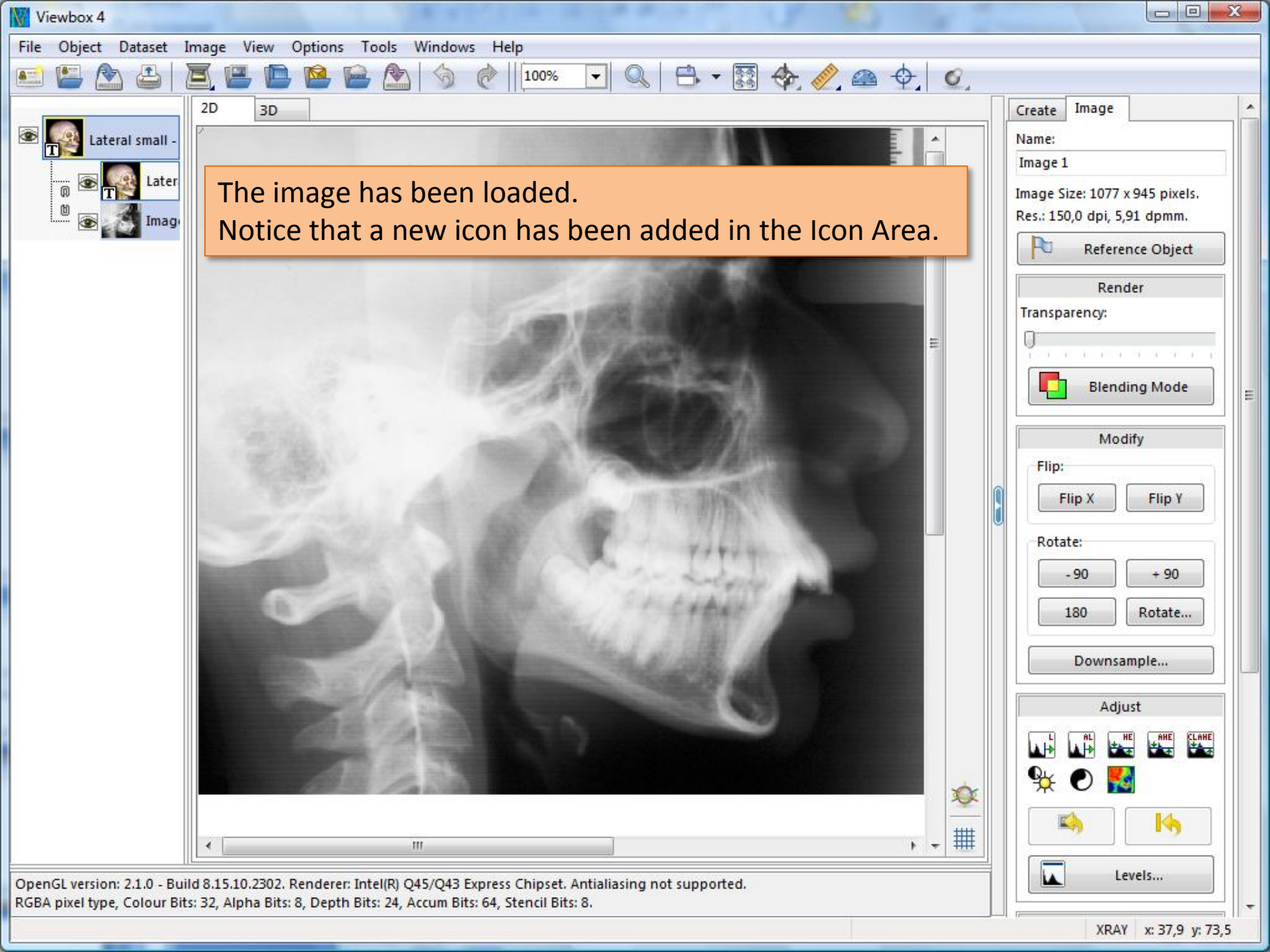

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Template - 113
Temp
The Template's icon appears in the Icon Area.
Create Dataset
Template: [Template]
Date Taken:
Magnification:
6/2/2013
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 21,9 y: 80,0

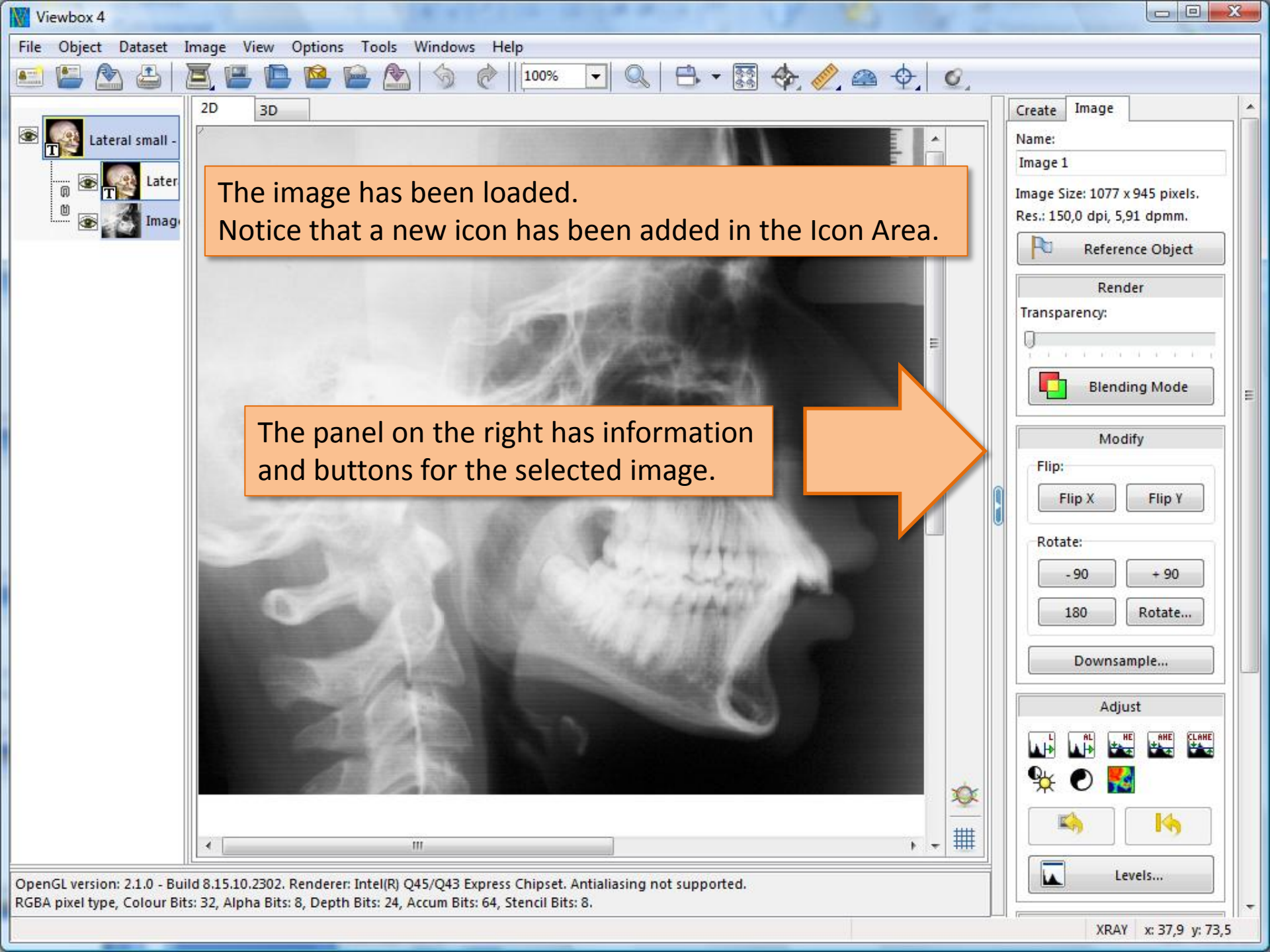

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Template - 113
Right-click on the lower icon and select ‘Object Properties…’
In View
Look at Object
Object Properties...
Save Template Ctrl+S
Close
Digitised Points
Curves
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Create Dataset
Template: [Template]
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
View the properties of the object.
XRAY x: 25,1 y: 2,0

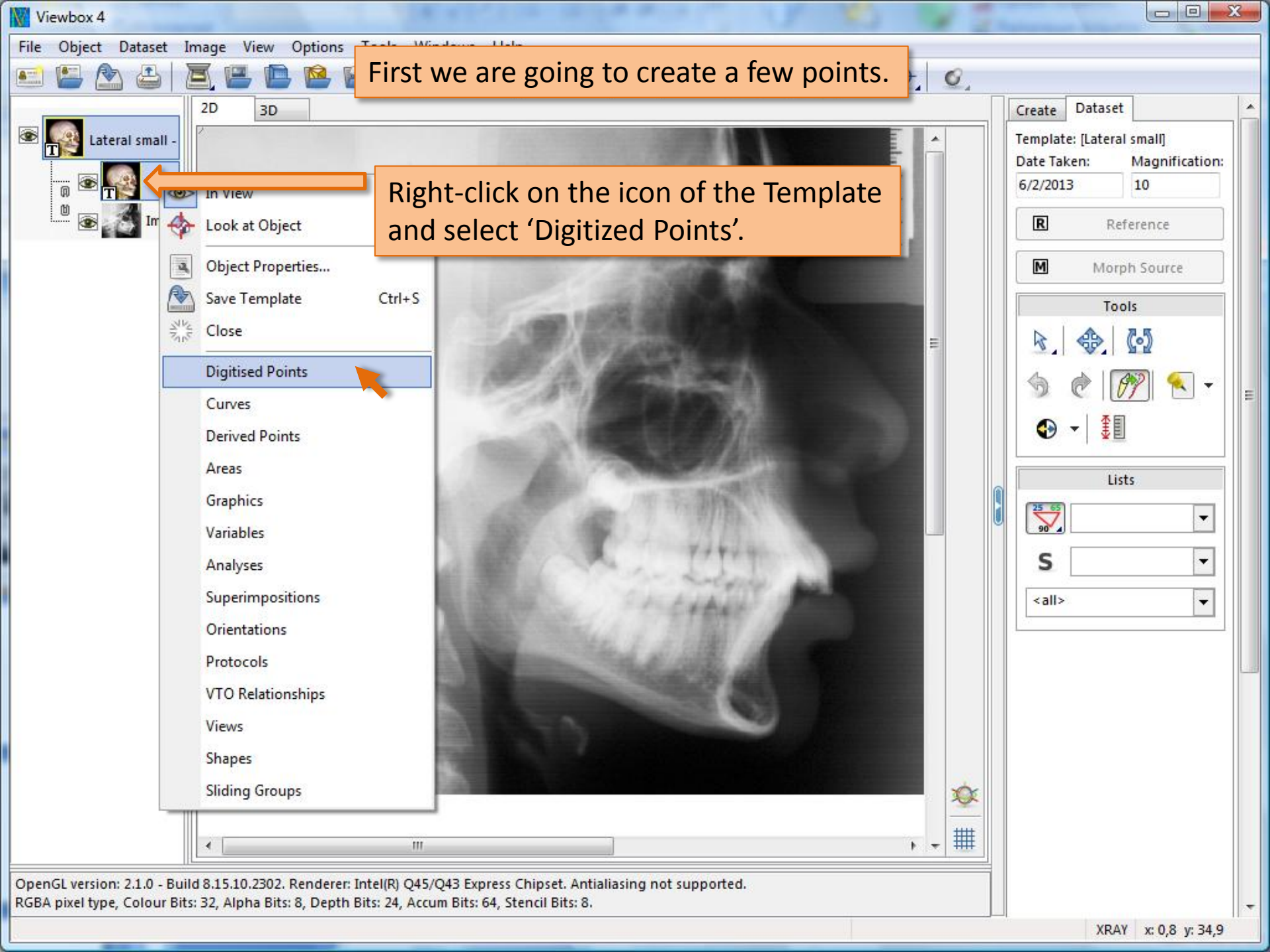

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Template - 113
Temp
Create
Dataset
Template: [Template]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
Enter the Name of the Template:
This name must be unique among your Templates!
Properties
Name:
Lateral small
Icon...
OK
Cancel
Help
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 22,8 y: 37,3

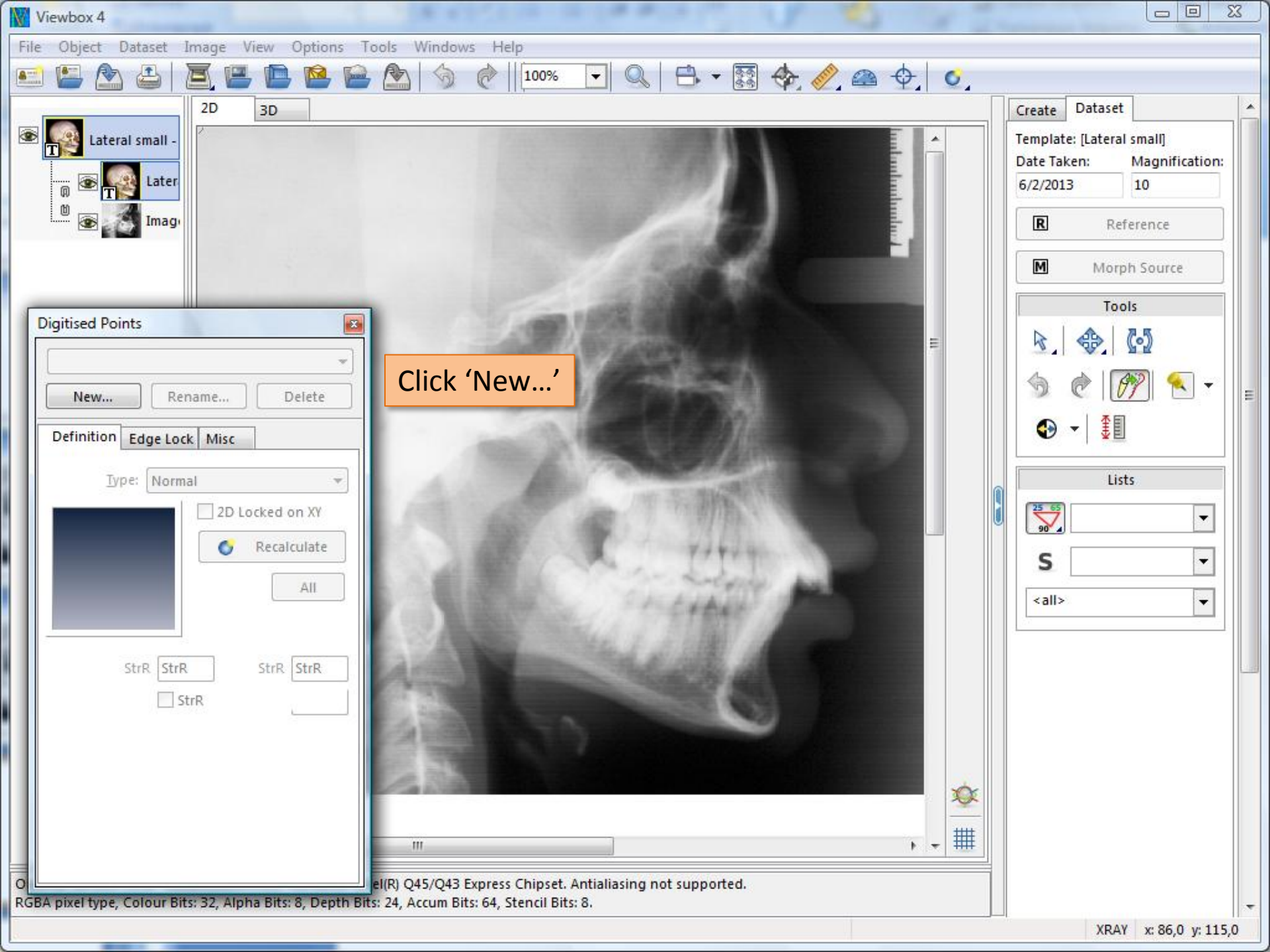

Viewbox 4
File
Object
Dataset
Image
View
Options
Tools
Windows
Help
Open
Create from Object
Save...
Object Properties...
Reload from File
Cannot
Cannot Repeat
Scale / Rotation / Position...
Resize...
Flip (Mirror)
Freeze Transform...
Reference Object
Close
Open Image...
Open Volume...
Open Mesh...
Open Point Cloud...
To help us in Template creation we are going to load a lateral cephalogram.
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
Load image from file.
XRAY
x: 1,1 y: 7,6

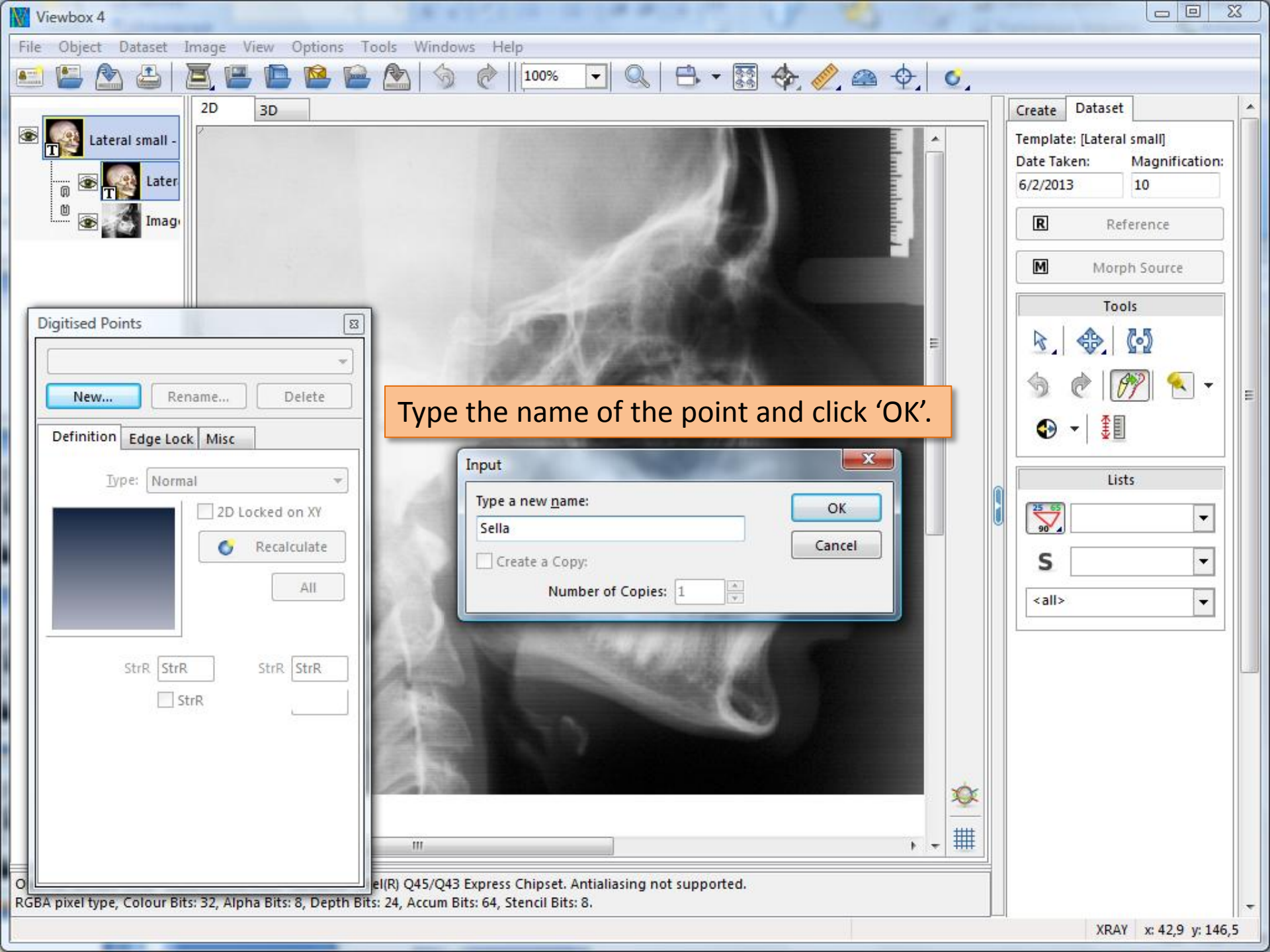

Viewbox 4
File
Object
Dataset
Image
View
Options
Tools
Windows
Help
Open
Create from Object
Save...
Object Properties...
Reload from File
Cannot Undo Ctrl+Z
Cannot Repeat Shift+Ctrl+Z
Resize...
Reference Object
Close
Open Image...
Open Volume...
Open Mesh...
Open Point Cloud...
Use the 'Open Image…' command to load an image from the hard drive. Here we are using the sample image (provided with Viewbox): HelenSmith_Ceph_Initial.jpg
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
Load image from file.
XRAY
x: 1,1 y: 7,6

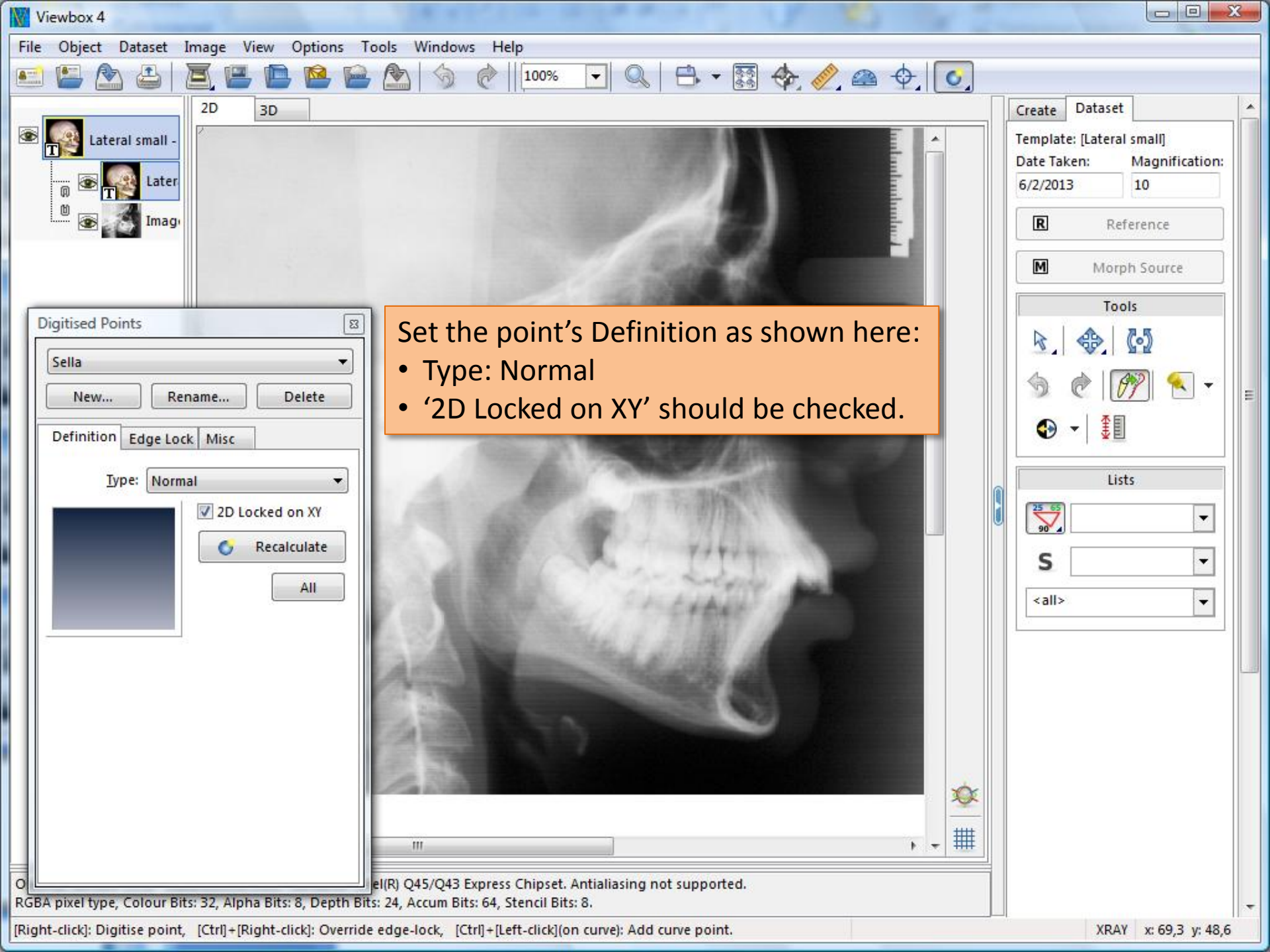

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Imag
The image has been loaded.
Notice that a new icon has been added in the Icon Area.
Create
Image
Name:
Image 1
Image Size: 1077 x 945 pixels.
Res.: 150,0 dpi, 5,91 dpmm.
Reference Object
Render
Transparency:
Blending Mode
Modify
Flip:
Flip X
Flip Y
Rotate:
- 90
+ 90
180
Rotate...
Downsample...
Adjust
Levels...
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 37,9 y: 73,5

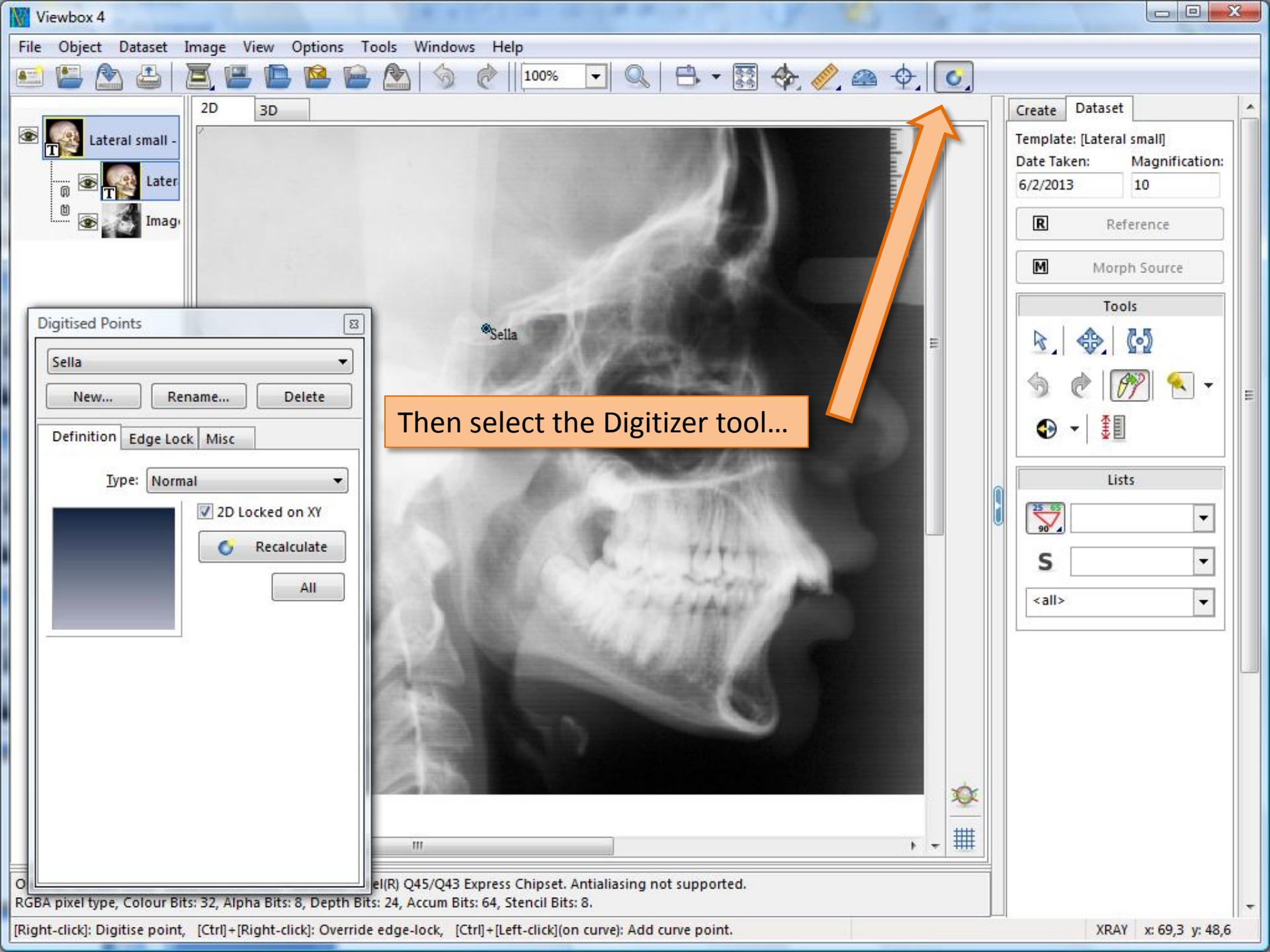

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Imag
The image has been loaded.
Notice that a new icon has been added in the Icon Area.
The panel on the right has information and buttons for the selected image.
Create
Image
Name:
Image 1
Image Size: 1077 x 945 pixels.
Res.: 150,0 dpi, 5,91 dpmm.
Reference Object
Render
Transparency:
Blending Mode
Modify
Flip:
Flip X
Flip Y
Rotate:
- 90
+ 90
180
Rotate...
Downsample...
Adjust
Levels...
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 37,9 y: 73,5

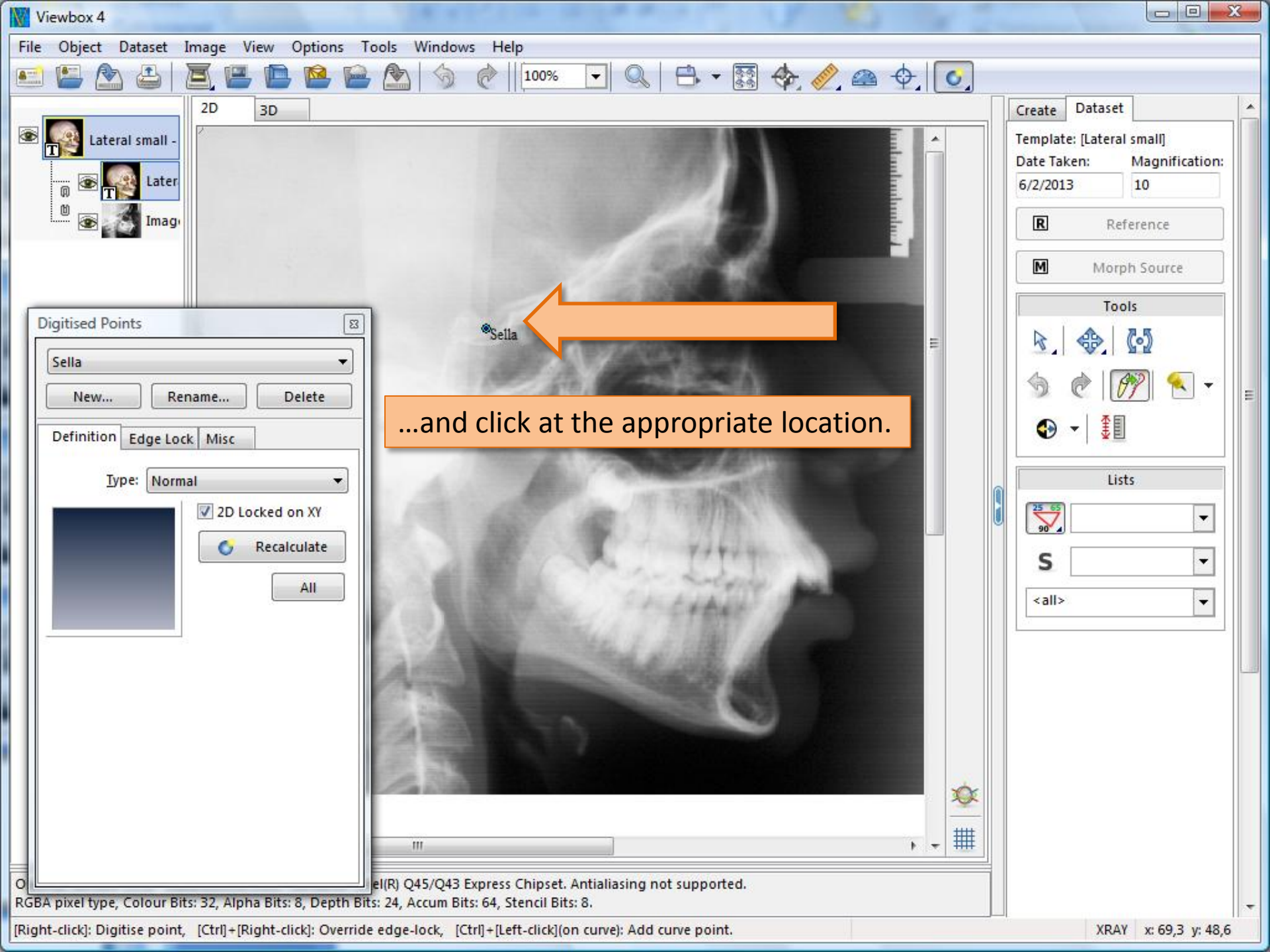

Viewbox 4
File Object Dataset Image View Options
First we are going to create a few points.
Lateral small -
2D 3D
Right-click on the icon of the Template and select ‘Digitized Points’.
In View
Look at Object
Object Properties...
Save Template Ctrl+S
Close
Digitised Points
Curves
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 0,8 y: 34,9

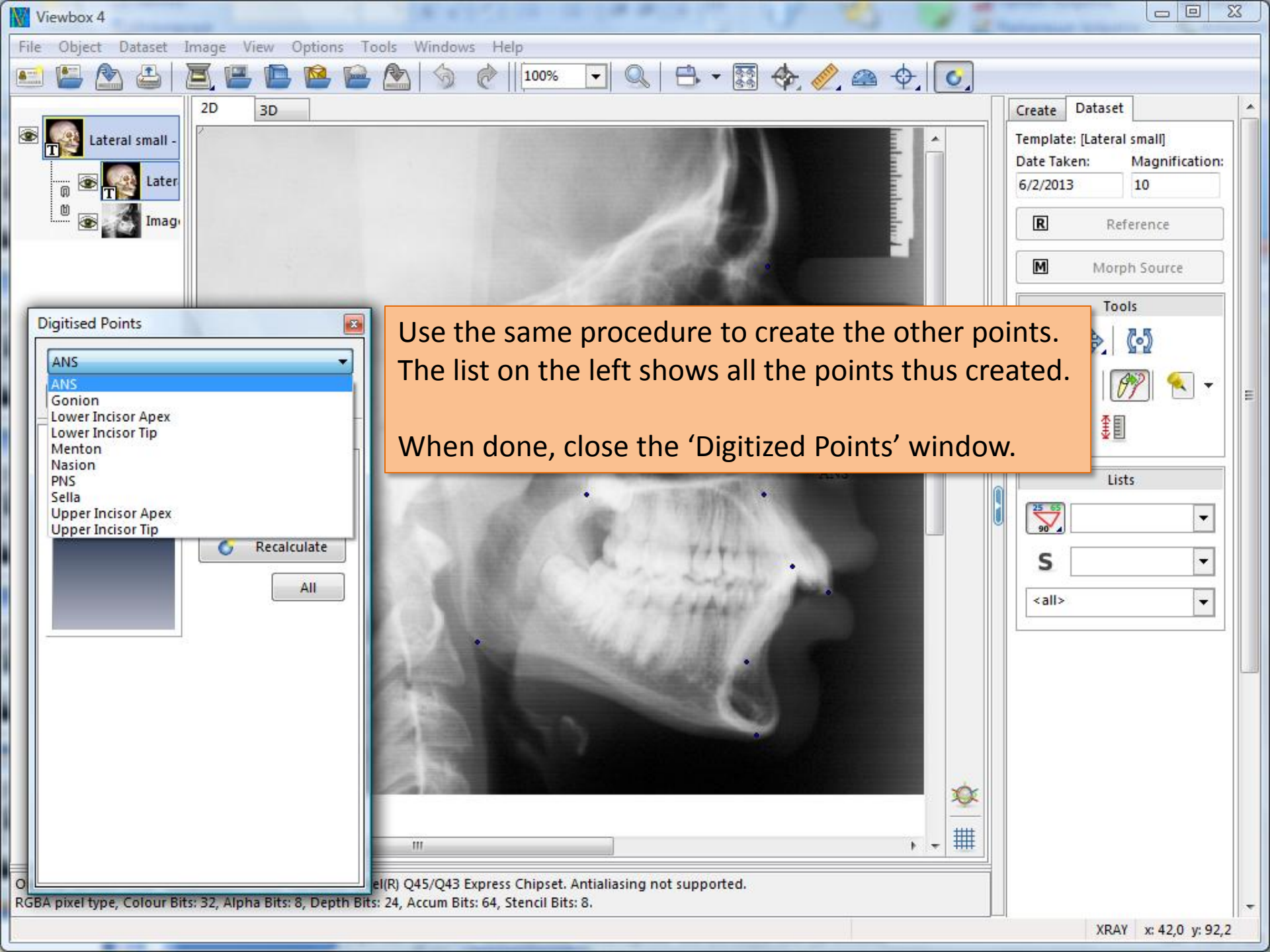

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Imag
Digitised Points
New...
Rename...
Delete
Definition
Edge Lock
Misc
Type:
Normal
2D Locked on XY
Recalculate
All
StrR
StrR
StrR
StrR
StrR
Click ‘New…’
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
el(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 86,0 y: 115,0

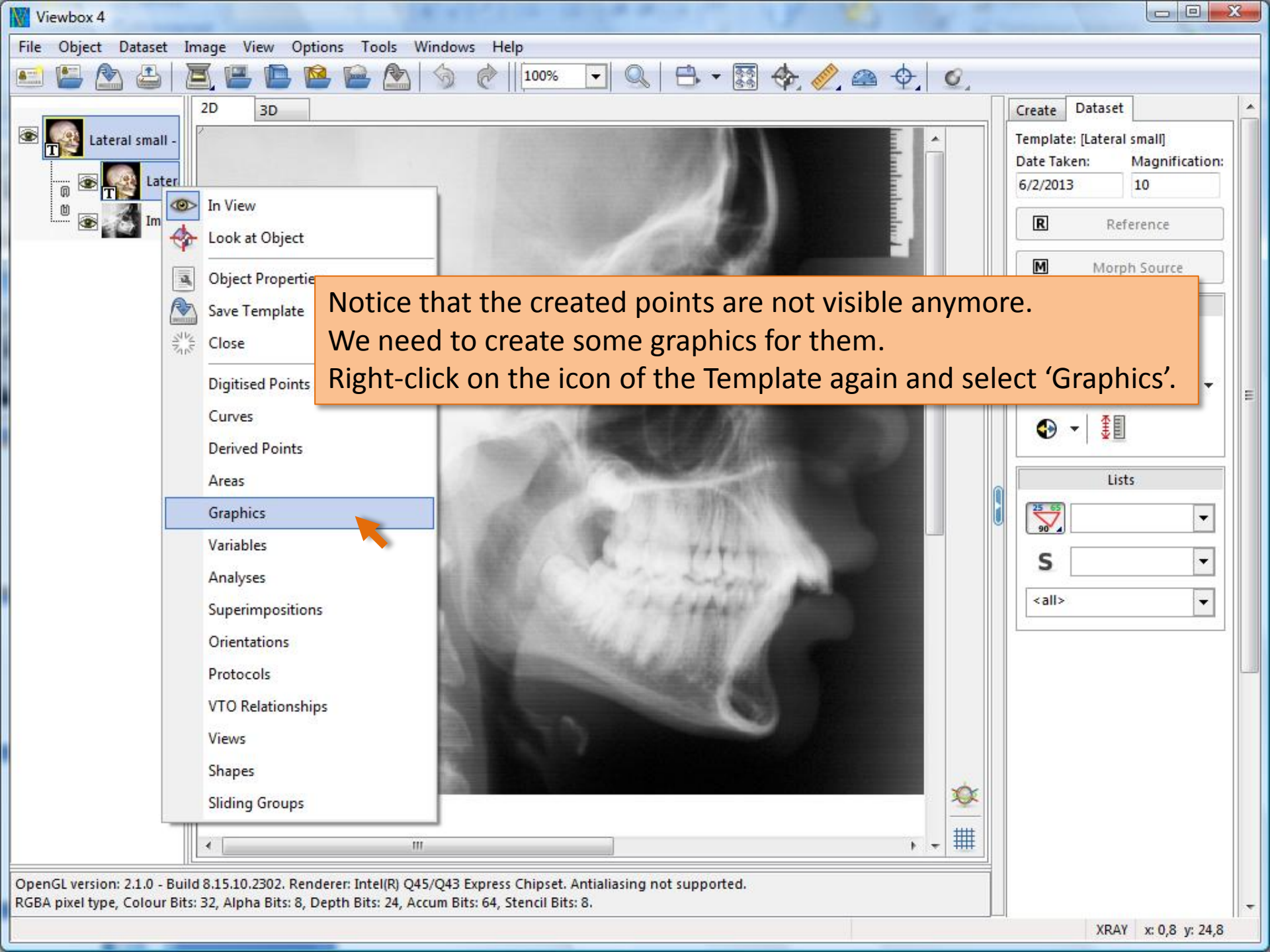

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Digitised Points
New... Rename... Delete
Definition Edge Lock Misc
Type: Normal
2D Locked on XY
Recalculate
All
StrR StrR StrR StrR
Type the name of the point and click ‘OK’.
Input
Type a new name:
Sella
OK
Cancel
Create a Copy:
Number of Copies: 1
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 42,9 y: 146,5

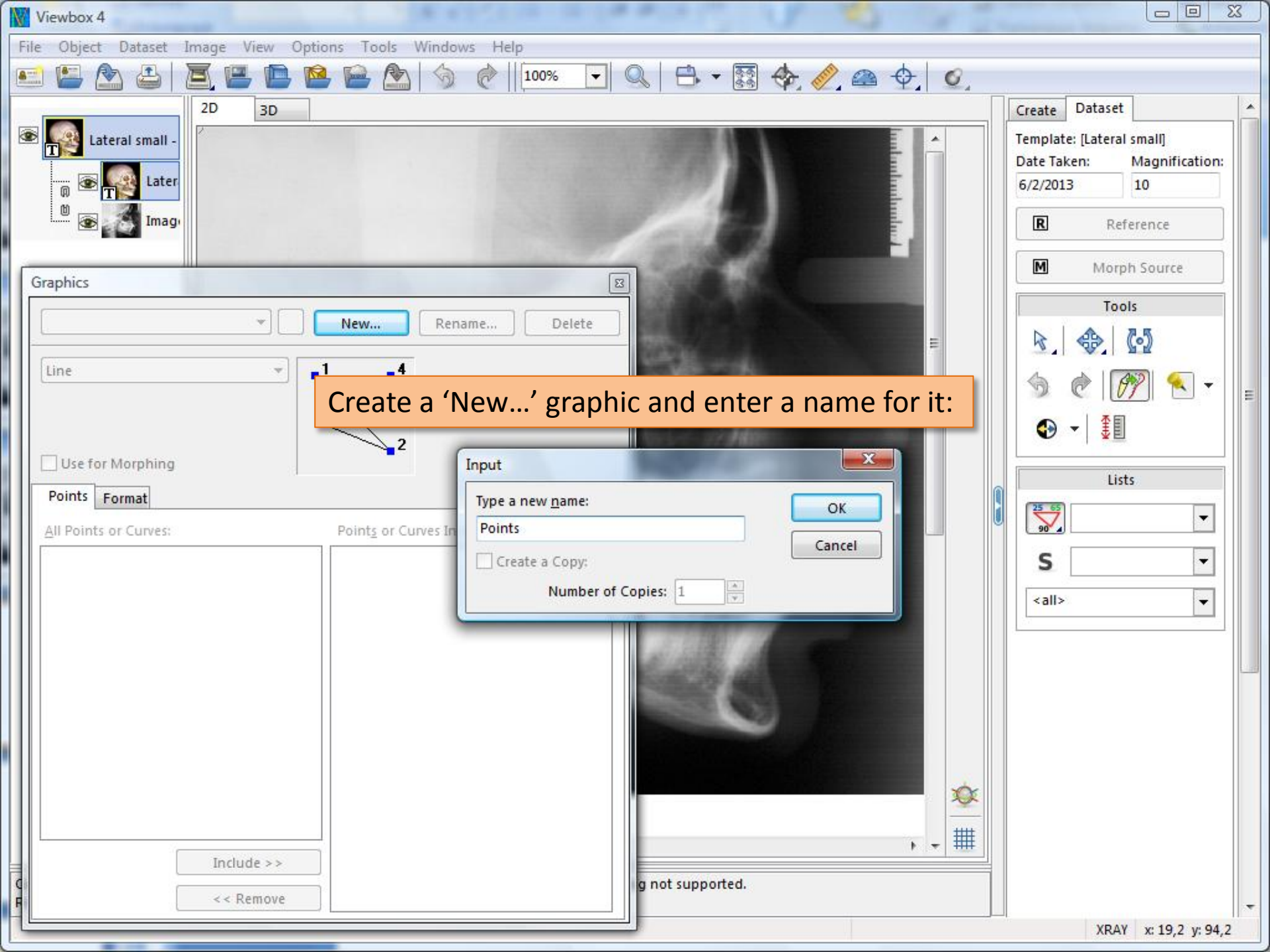

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Digitised Points
Sella
New... Rename... Delete
Definition Edge Lock Misc
Type: Normal
2D Locked on XY
Recalculate
All
Set the point's Definition as shown here:
• Type: Normal
• '2D Locked on XY' should be checked.
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
[Right-click]: Digitise point, [Ctrl]+[Right-click]: Override edge-lock, [Ctrl]+[Left-click](on curve): Add curve point.
XRAY x: 69,3 y: 48,6

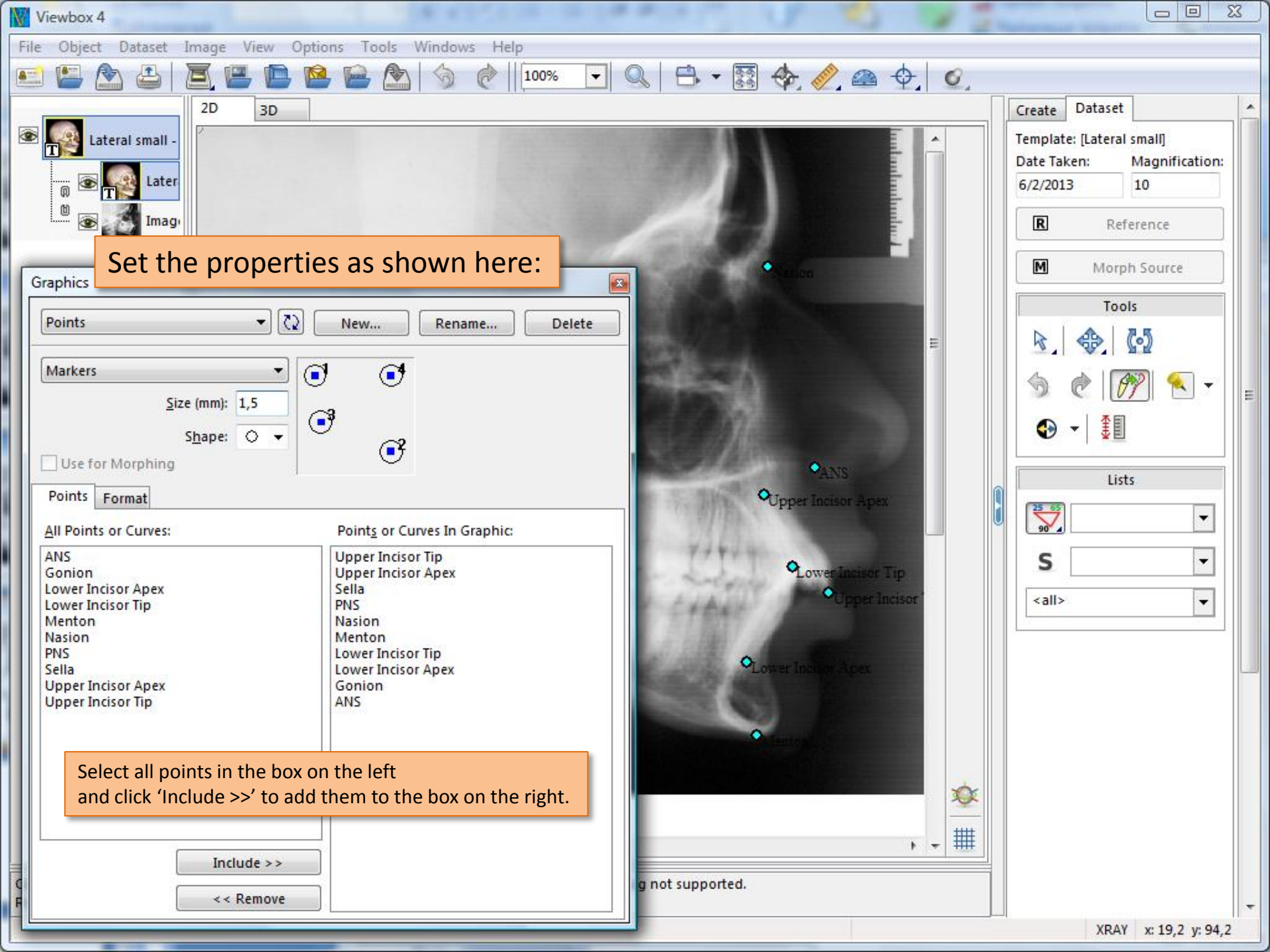

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Later
Imag
Sella
Digitised Points
Sella
New... Rename... Delete
Definition Edge Lock Misc
Type: Normal
2D Locked on XY
Recalculate
All
Then select the Digitizer tool…
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
[Right-click]: Digitise point, [Ctrl]+[Right-click]: Override edge-lock, [Ctrl]+[Left-click](on curve): Add curve point.
XRAY x: 69,3 y: 48,6

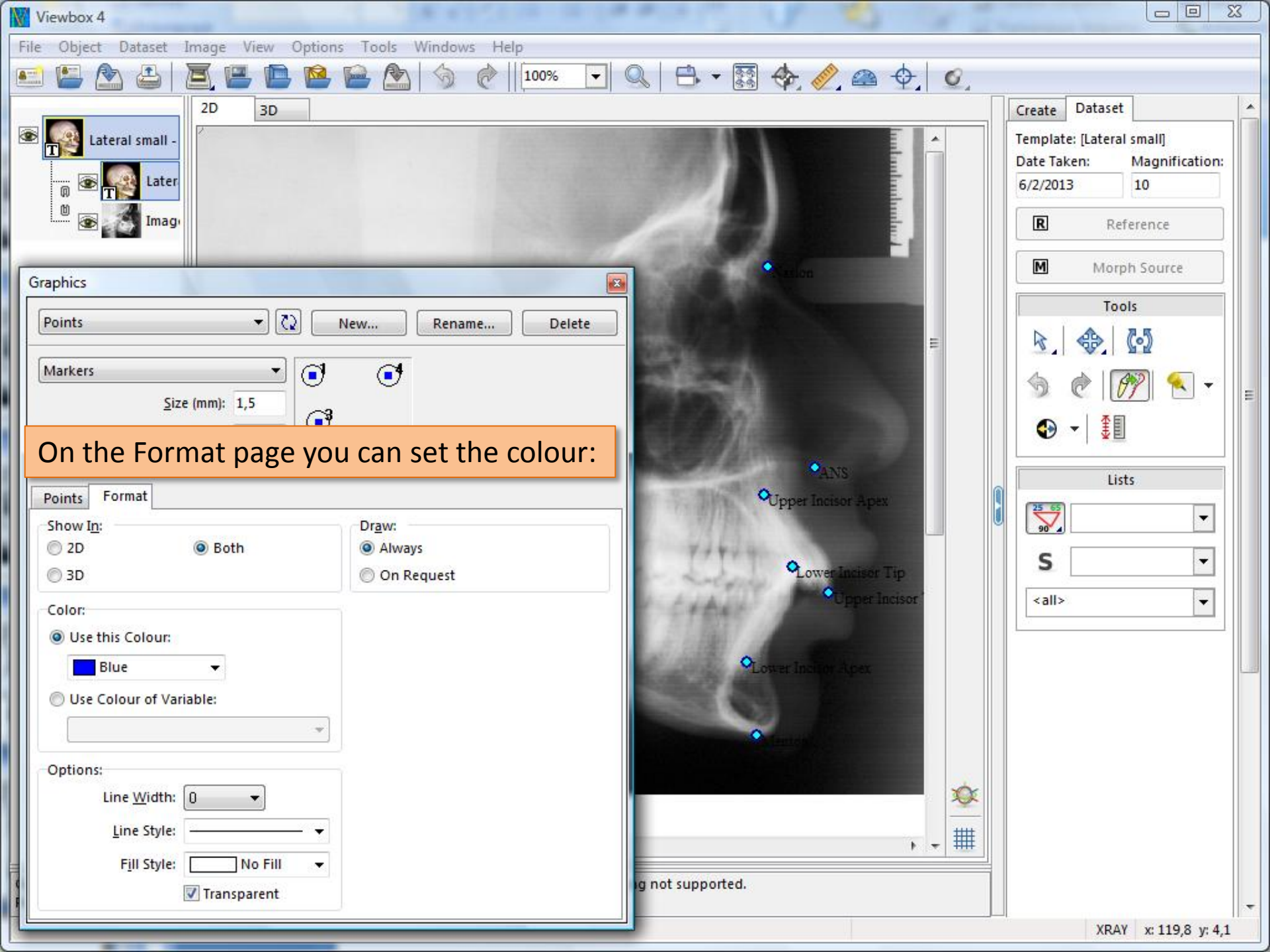

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Later
Imag
Sella
…and click at the appropriate location.
Digitised Points
Sella
New... Rename... Delete
Definition Edge Lock Misc
Type: Normal
2D Locked on XY
Recalculate
All
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
[Right-click]: Digitise point, [Ctrl]+[Right-click]: Override edge-lock, [Ctrl]+[Left-click](on curve): Add curve point.
XRAY x: 69,3 y: 48,6

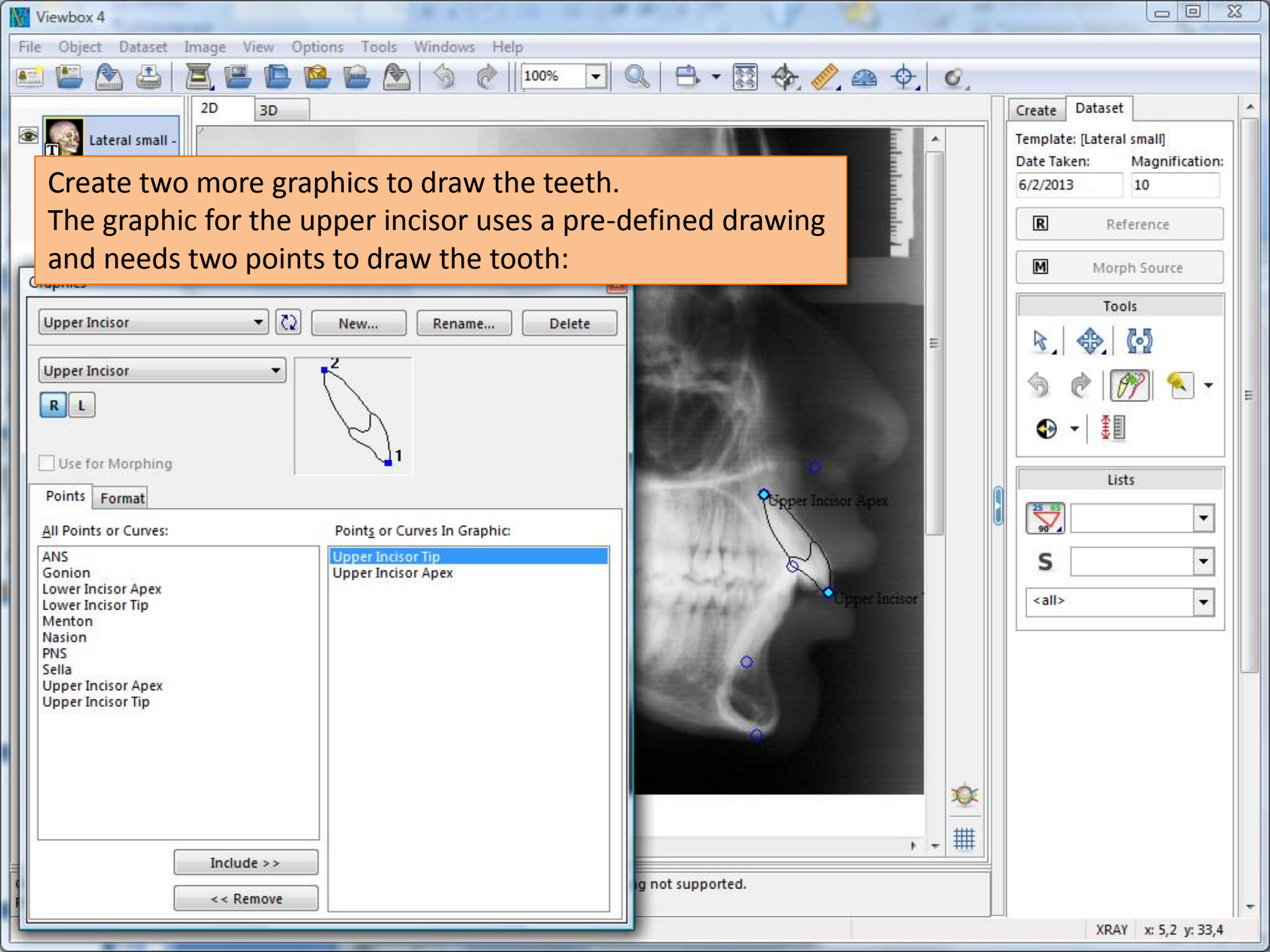

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Imag
Digitised Points
ANS
ANS
Gonion
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor Apex
Upper Incisor Tip
Recalculate
All
Use the same procedure to create the other points.
The list on the left shows all the points thus created.
When done, close the ‘Digitized Points’ window.
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
el(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 42,0 y: 92,2

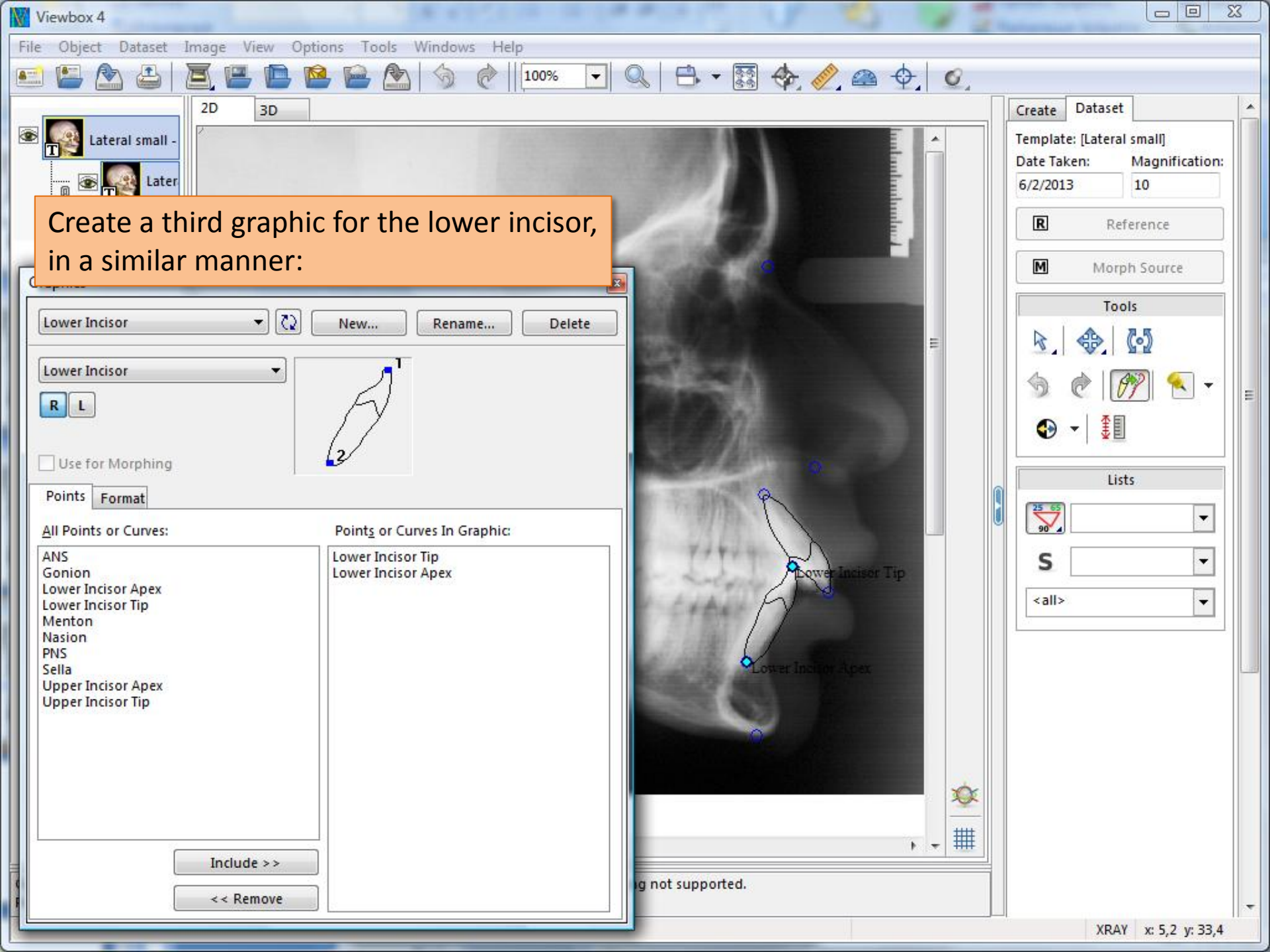

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
In View
Look at Object
Object Properties
Save Template
Close
Digitised Points
Curves
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Notice that the created points are not visible anymore.
We need to create some graphics for them.
Right-click on the icon of the Template again and select 'Graphics'.
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 0,8 y: 24,8

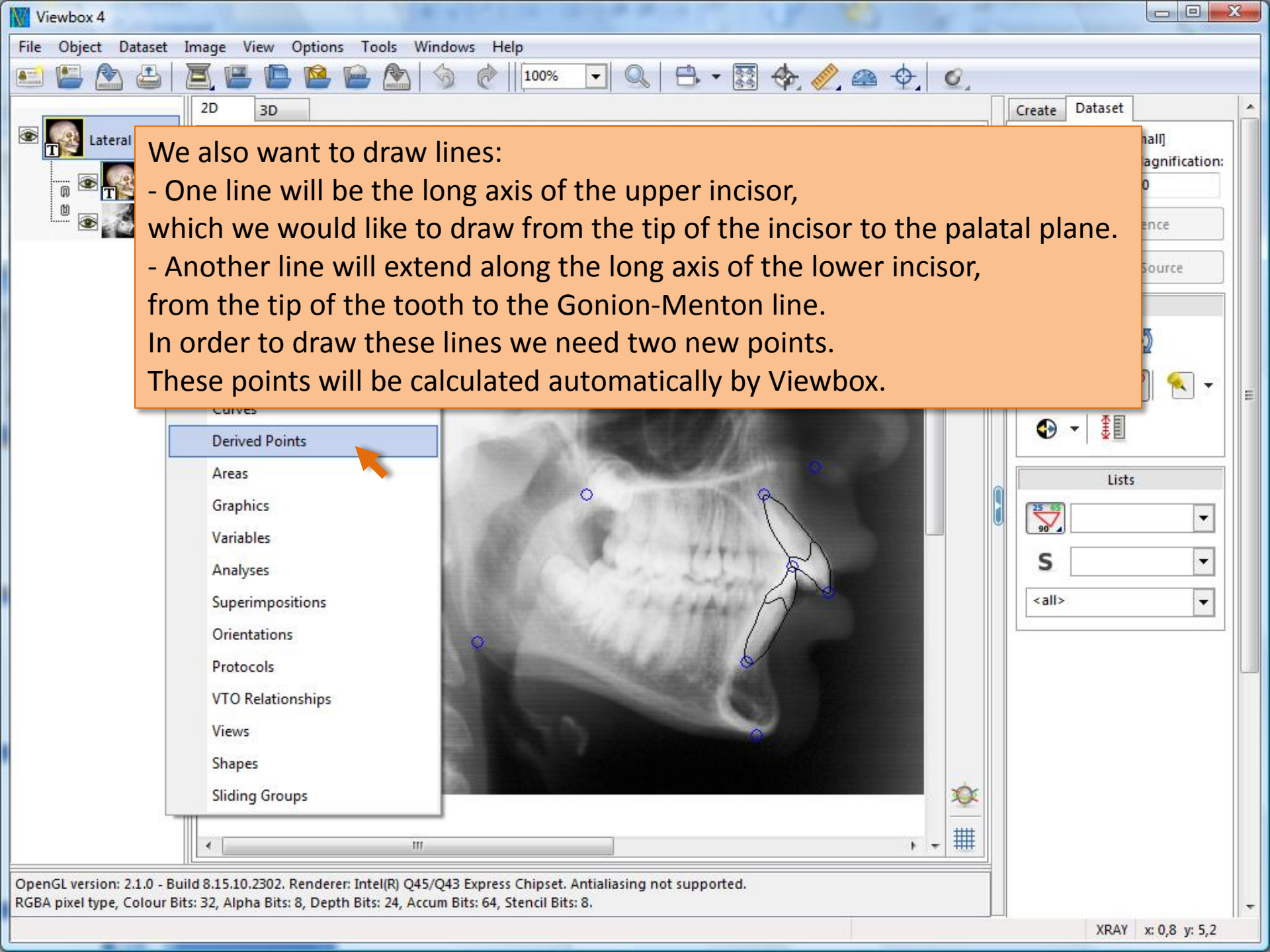

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
Graphics
New...
Rename...
Delete
Line
Use for Morphing
Points
Format
All Points or Curves:
Include >>
<< Remove
Create a new graphic and enter a name for it:
Input
Type a new name:
Points
OK
Cancel
Create a Copy:
Number of Copies:
1
not supported.
XRAY
x: 19,2 y: 94,2

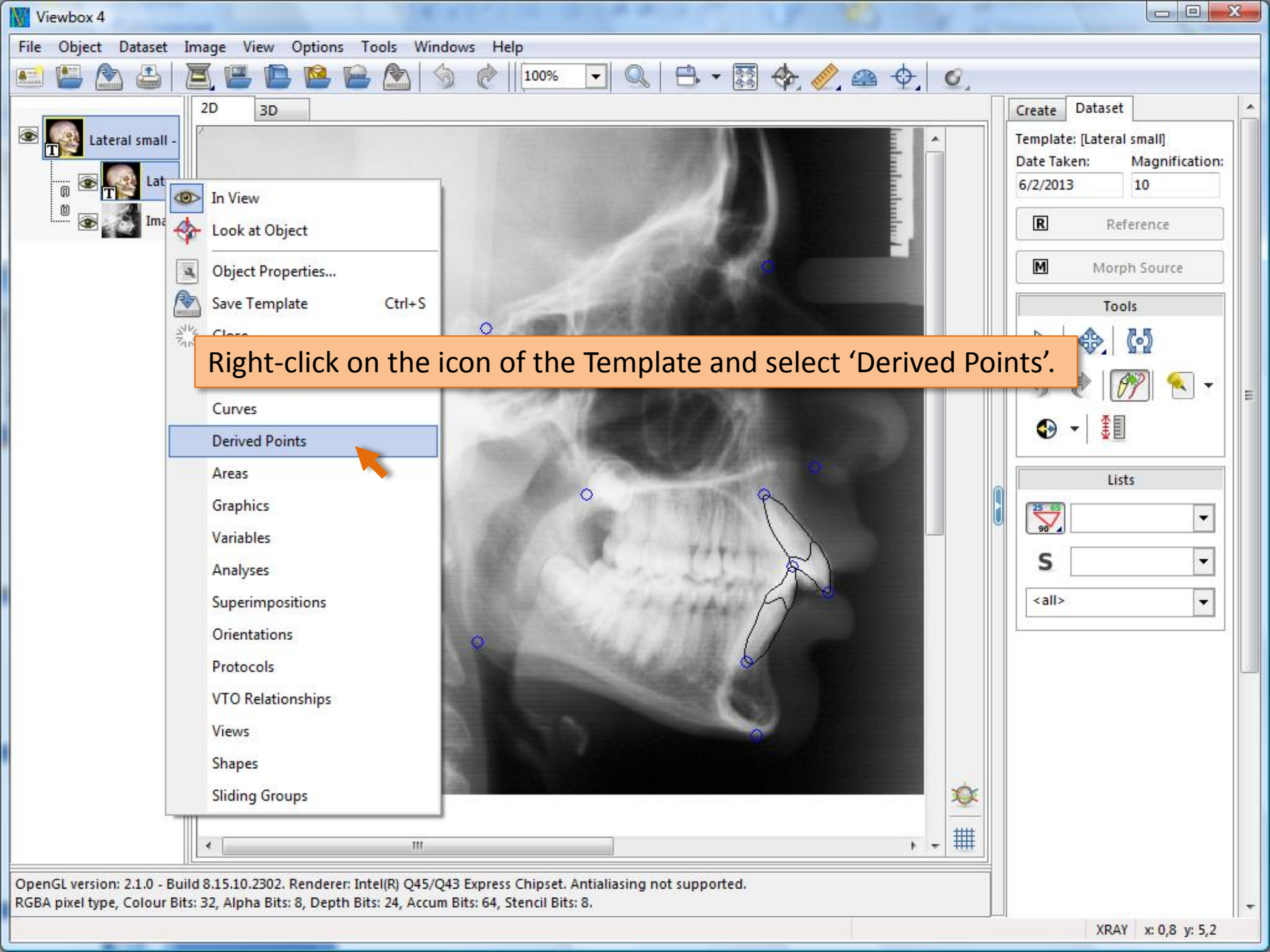

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
Set the properties as shown here:
Graphics
Points
New...
Rename...
Delete
Markers
Size (mm): 1,5
Shape:
Use for Morphing
Points
Format
All Points or Curves:
ANS
Gonion
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor Apex
Upper Incisor Tip
Points or Curves In Graphic:
Upper Incisor Tip
Upper Incisor Apex
Sella
PNS
Nasion
Menton
Lower Incisor Tip
Lower Incisor Apex
Gonion
ANS
Include >>
<< Remove
Select all points in the box on the left
and click 'Include >>' to add them to the box on the right.
ANS
Upper Incisor Apex
Lower Incisor Tip
Upper Incisor
Lower Incisor Apex
not supported.
XRAY
x: 19,2 y: 94,2

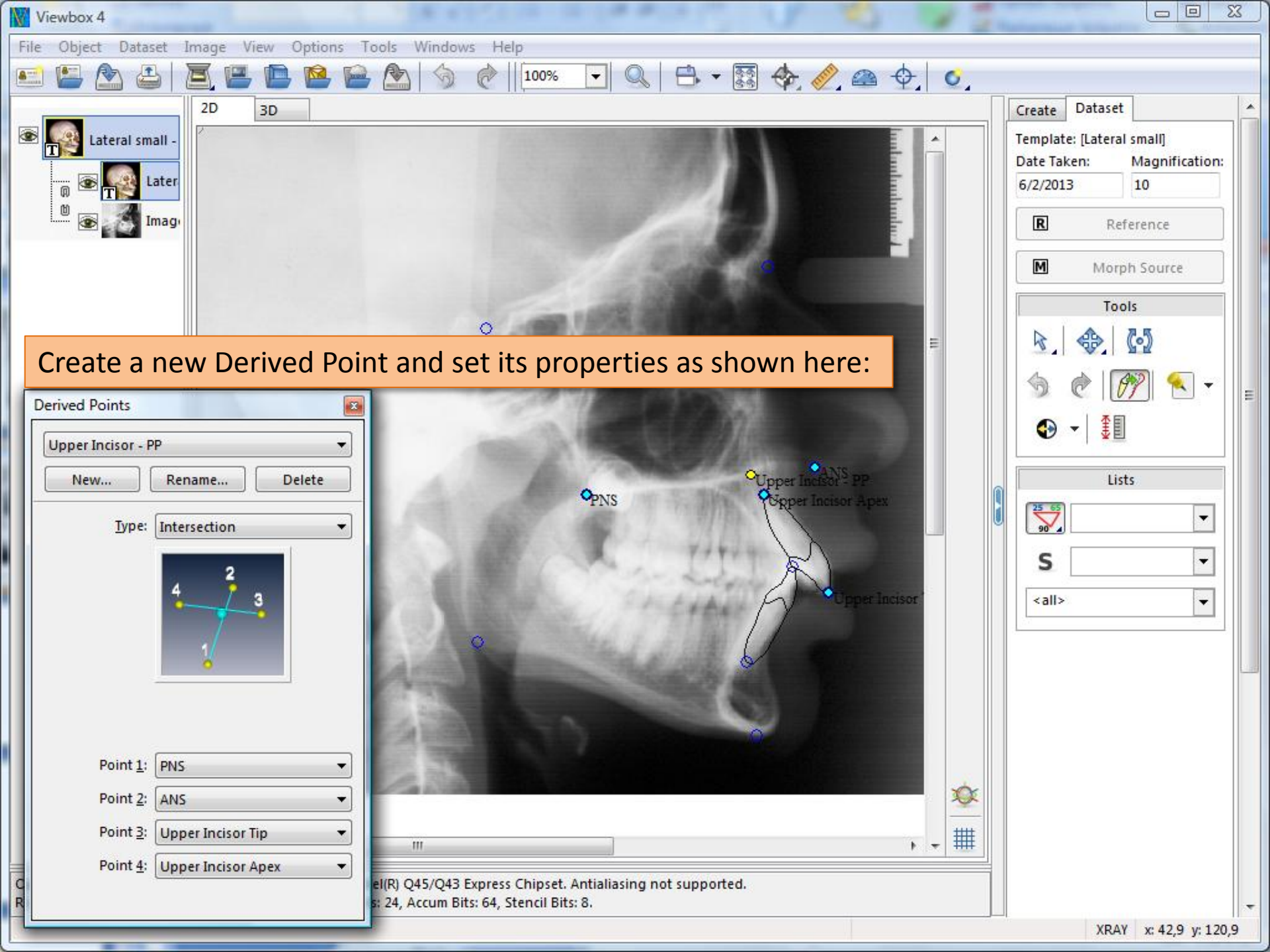

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Graphics
Points
New...
Rename...
Delete
Markers
Size (mm): 1,5
On the Format page you can set the colour:
Points Format
Show In:
2D
Both
3D
Draw:
Always
On Request
Color:
Use this Colour:
Blue
Use Colour of Variable:
Options:
Line Width: 0
Line Style:
Fill Style: No Fill
Transparent
ANS
Upper Incisor Apex
Lower Incisor Tip
Upper Incisor
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
XRAY x: 119,8 y: 4,1

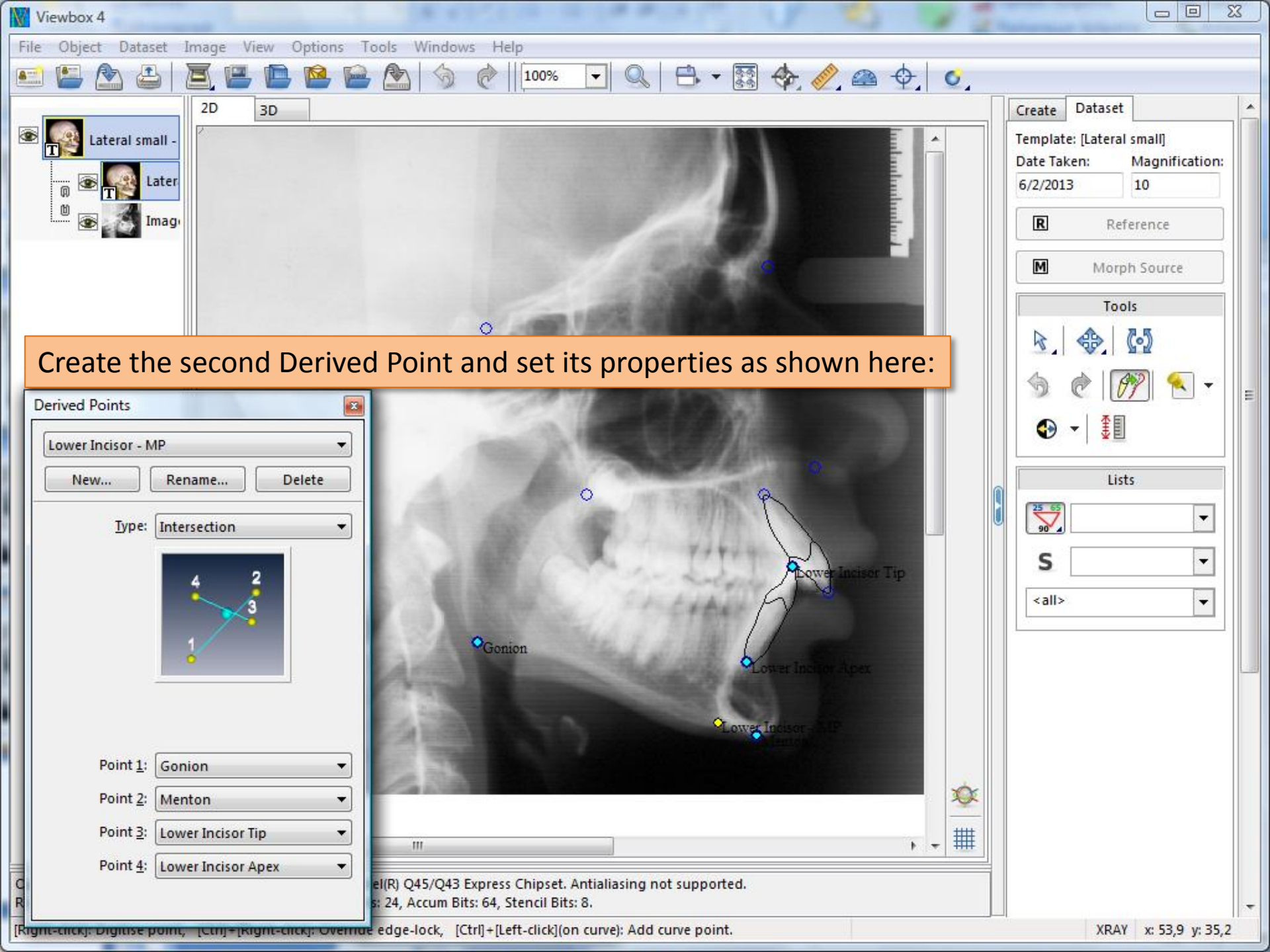

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create two more graphics to draw the teeth.
The graphic for the upper incisor uses a pre-defined drawing and needs two points to draw the tooth:
Upper Incisor
New...
Rename...
Delete
Upper Incisor
R
L
Use for Morphing
Points
Format
All Points or Curves:
ANS
Gonion
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor Apex
Upper Incisor Tip
Points or Curves In Graphic:
Upper Incisor Tip
Upper Incisor Apex
Include >>
<< Remove
Upper Incisor Apex
Upper Incisor
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
not supported.
XRAY
x: 5,2 y: 33,4

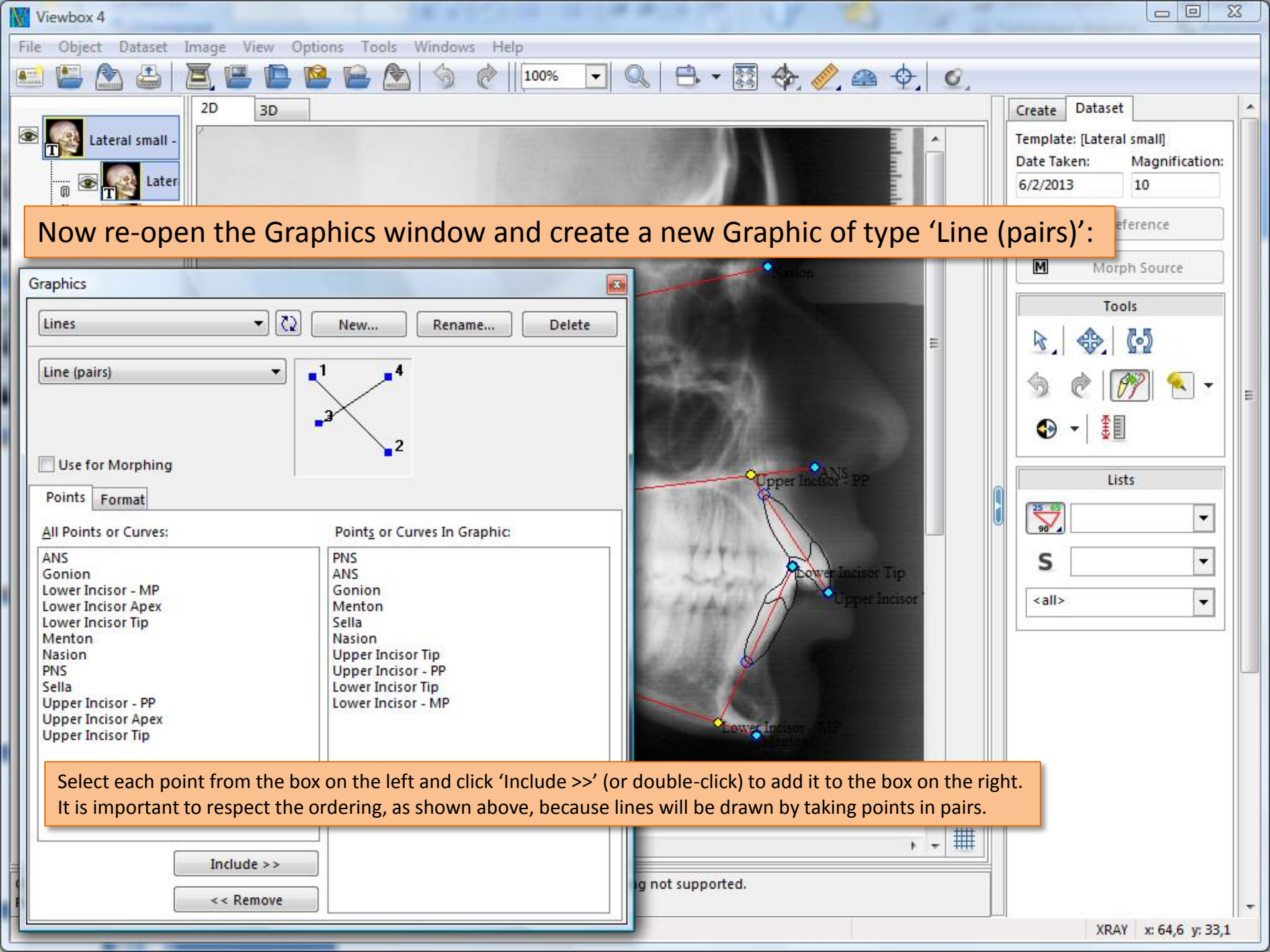

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Later
Create a third graphic for the lower incisor, in a similar manner:
Lower Incisor
New...
Rename...
Delete
Lower Incisor
R L
Use for Morphing
Points Format
All Points or Curves:
ANS
Gonion
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor Apex
Upper Incisor Tip
Points or Curves In Graphic:
Lower Incisor Tip
Lower Incisor Apex
Include >>
<< Remove
Lower Incisor Tip
Lower Incisor Apex
Create Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
not supported.
XRAY x: 5,2 y: 33,4

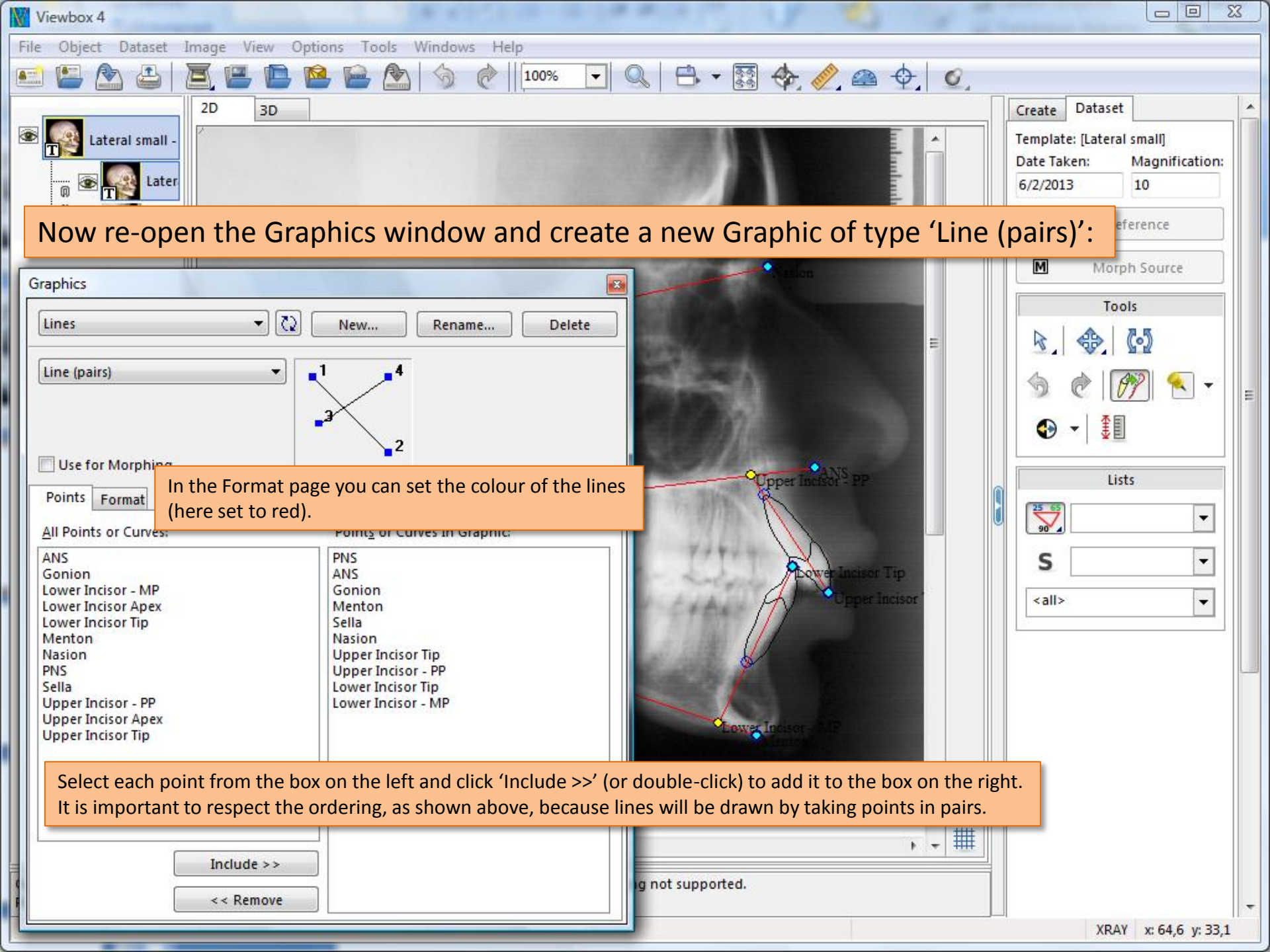

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral
Create Dataset
We also want to draw lines:
- One line will be the long axis of the upper incisor,
which we would like to draw from the tip of the incisor to the palatal plane.
- Another line will extend along the long axis of the lower incisor,
from the tip of the tooth to the Gonion-Menton line.
In order to draw these lines we need two new points.
These points will be calculated automatically by Viewbox.
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 0,8 y: 5,2

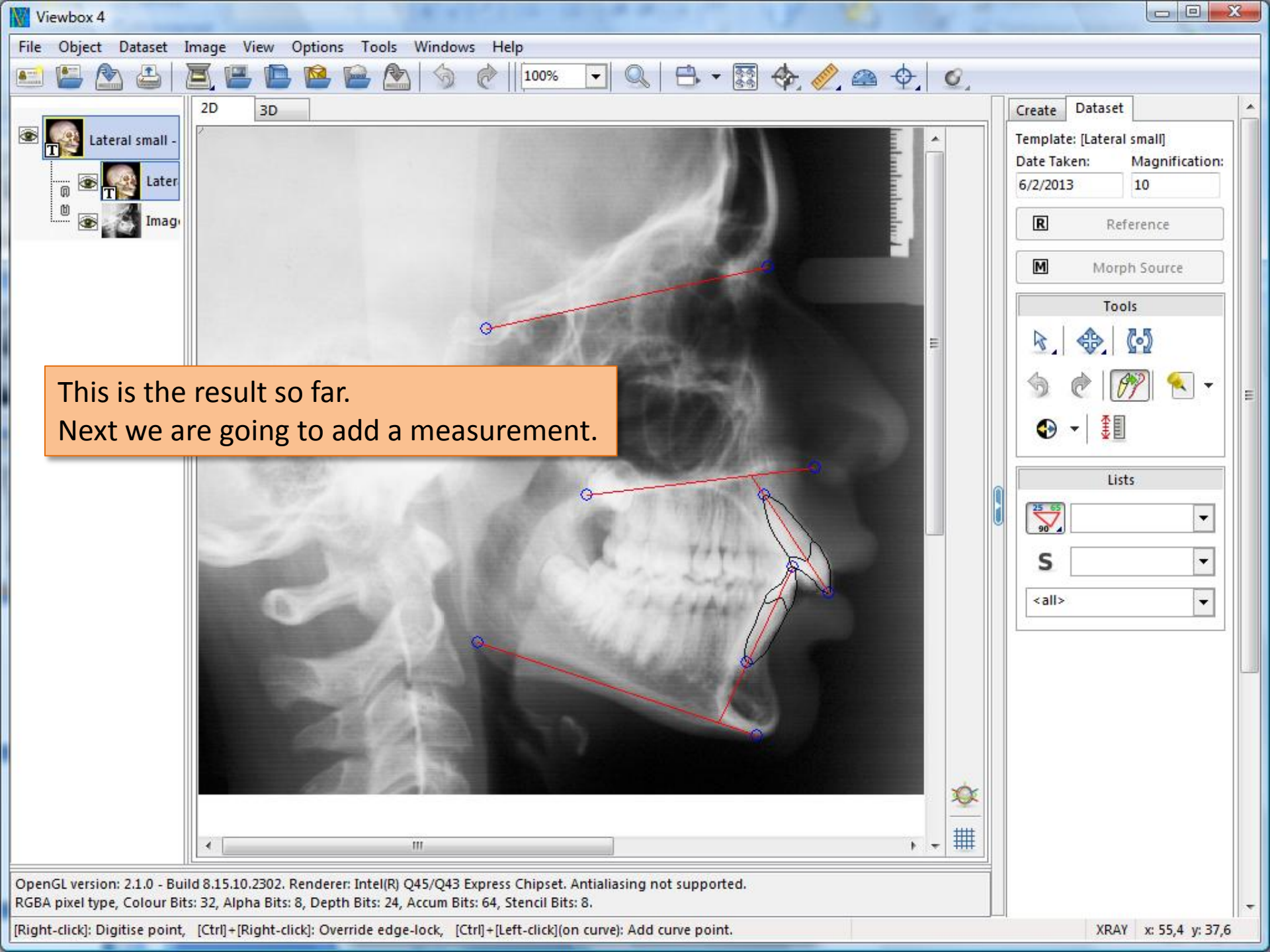

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
In View
Look at Object
Object Properties...
Save Template Ctrl+S
Curves
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Right-click on the icon of the Template and select 'Derived Points'.
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 0,8 y: 5,2

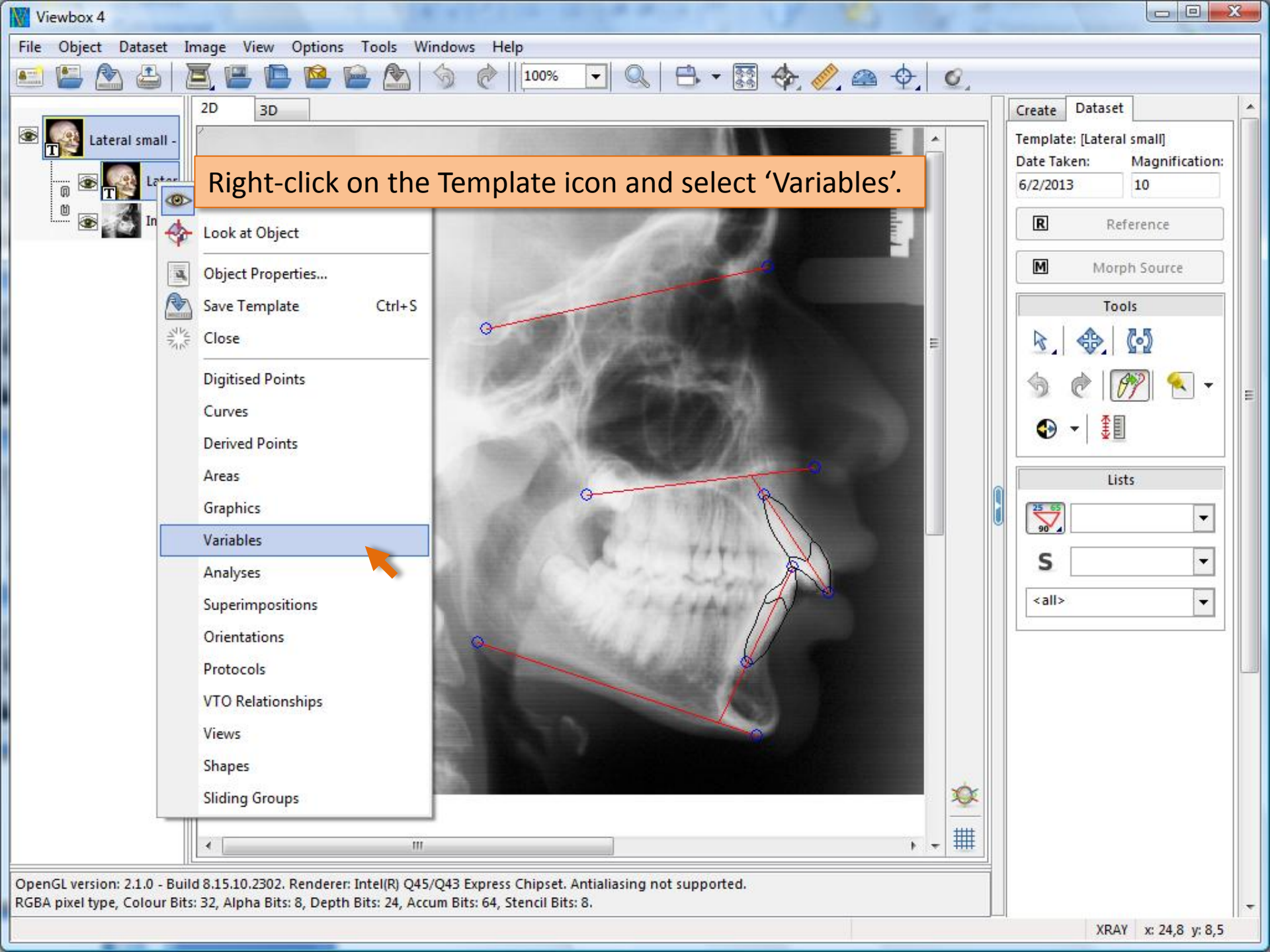

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create a new Derived Point and set its properties as shown here:
Derived Points
Upper Incisor - PP
New...
Rename...
Delete
Type: Intersection
Point 1: PNS
Point 2: ANS
Point 3: Upper Incisor Tip
Point 4: Upper Incisor Apex
PNS
ANS
Upper Incisor - PP
Upper Incisor Apex
Upper Incisor
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
XRAY x: 42,9 y: 120,9

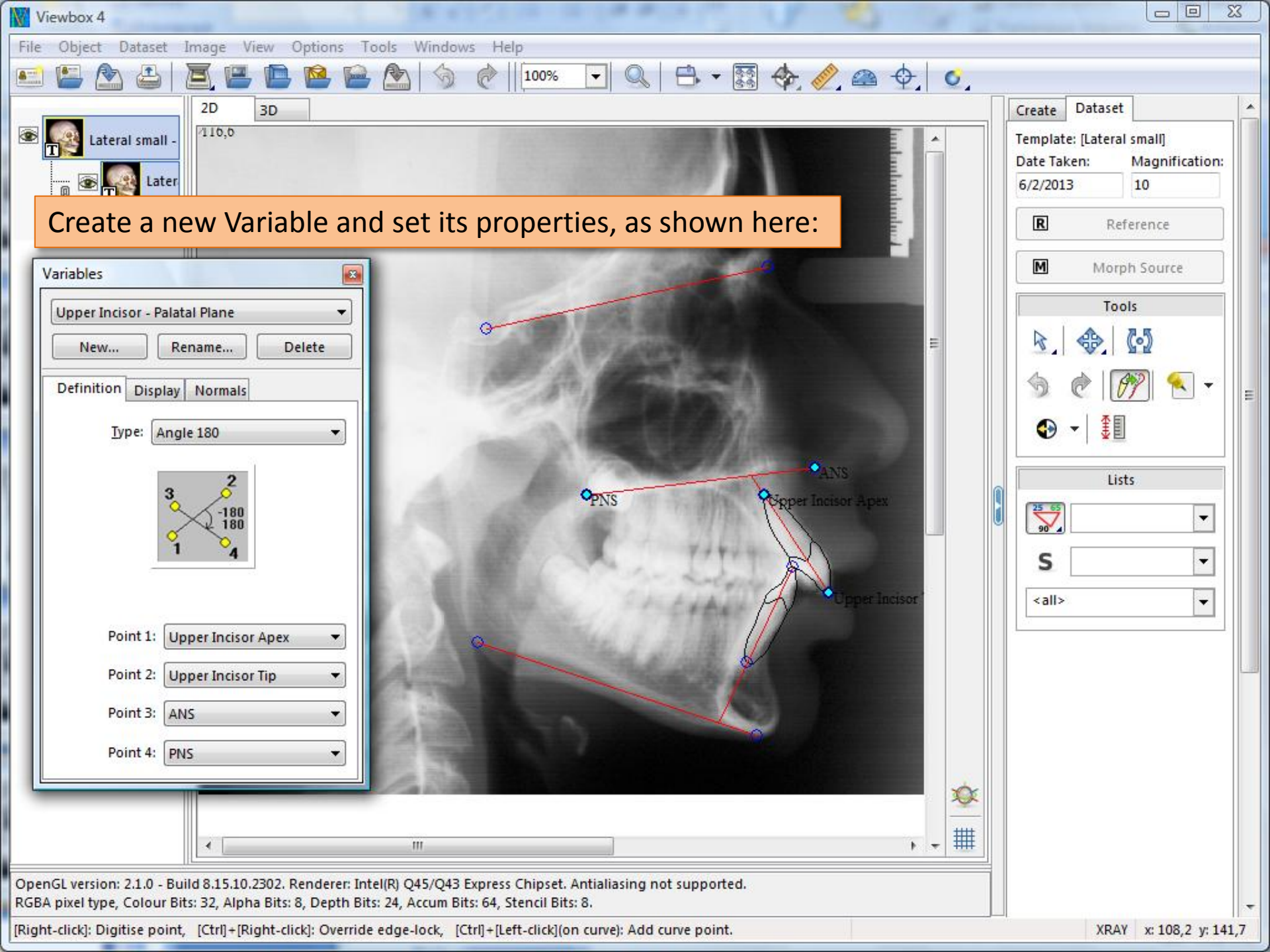

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create the second Derived Point and set its properties as shown here:
Derived Points
Lower Incisor - MP
New...
Rename...
Delete
Type: Intersection
Point 1: Gonion
Point 2: Menton
Point 3: Lower Incisor Tip
Point 4: Lower Incisor Apex
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
Gonion
Lower Incisor Tip
Lower Incisor Apex
[Ctrl]+[Left-click](on curve): Add curve point.
XRAY
x: 53,9 y: 35,2

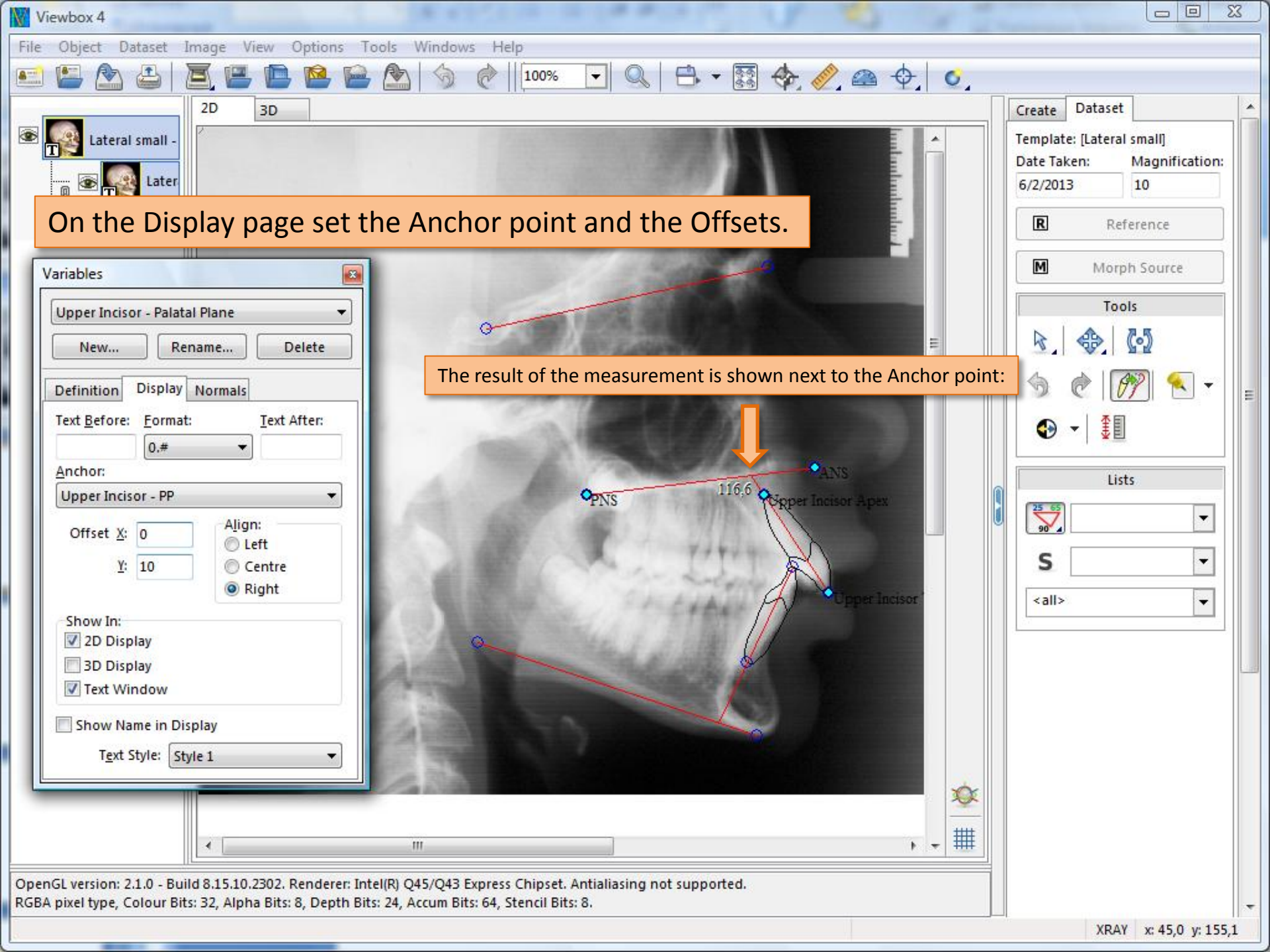

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Morph Source
Tools
Lists
<all>
Now re-open the Graphics window and create a new Graphic of type ‘Line (pairs)’:
Graphics
Lines
New...
Rename...
Delete
Line (pairs)
1
2
3
4
Use for Morphing
Points
Format
All Points or Curves:
ANS
Gonion
Lower Incisor - MP
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor - PP
Upper Incisor Apex
Upper Incisor Tip
Points or Curves In Graphic:
PNS
ANS
Gonion
Menton
Sella
Nasion
Upper Incisor Tip
Upper Incisor - PP
Lower Incisor Tip
Lower Incisor - MP
Include >>
<< Remove
Upper Incisor - PP
Lower Incisor Tip
Upper Incisor
Select each point from the box on the left and click ‘Include >>’ (or double-click) to add it to the box on the right.
It is important to respect the ordering, as shown above, because lines will be drawn by taking points in pairs.
not supported.
XRAY
x: 64,6 y: 33,1

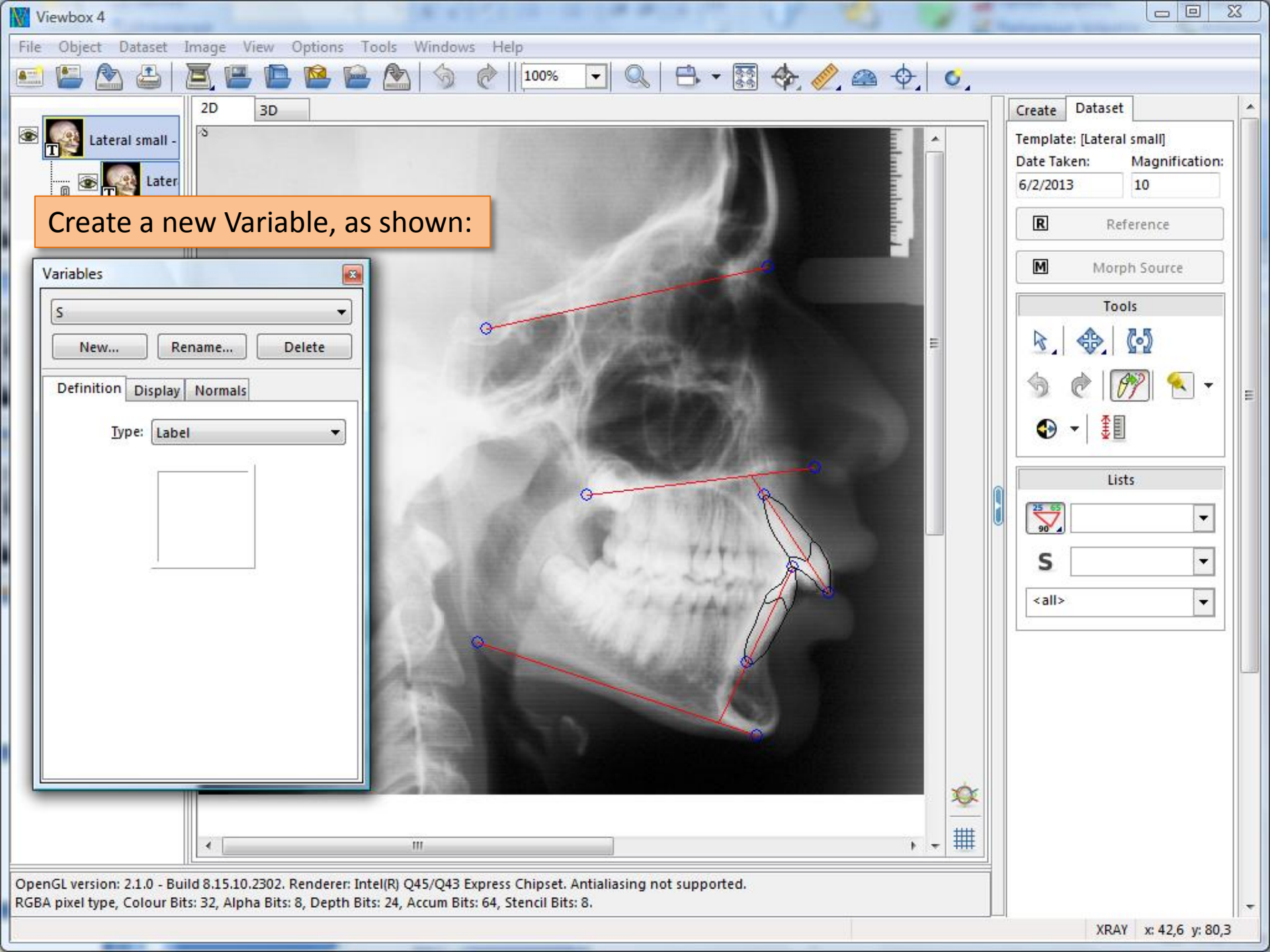

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Morph Source
Tools
Lists
Now re-open the Graphics window and create a new Graphic of type ‘Line (pairs)’:
Graphics
Lines
New...
Rename...
Delete
Line (pairs)
1
2
3
4
Use for Morphing
Points
Format
In the Format page you can set the colour of the lines (here set to red).
All Points or Curves:
ANS
Gonion
Lower Incisor - MP
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor - PP
Upper Incisor Apex
Upper Incisor Tip
Points or Curves in Graphic:
PNS
ANS
Gonion
Menton
Sella
Nasion
Upper Incisor Tip
Upper Incisor - PP
Lower Incisor Tip
Lower Incisor - MP
Include >>
<< Remove
Upper Incisor - PP
Lower Incisor Tip
Upper Incisor
Select each point from the box on the left and click ‘Include >>’ (or double-click) to add it to the box on the right.
It is important to respect the ordering, as shown above, because lines will be drawn by taking points in pairs.
not supported.
XRAY
x: 64,6 y: 33,1

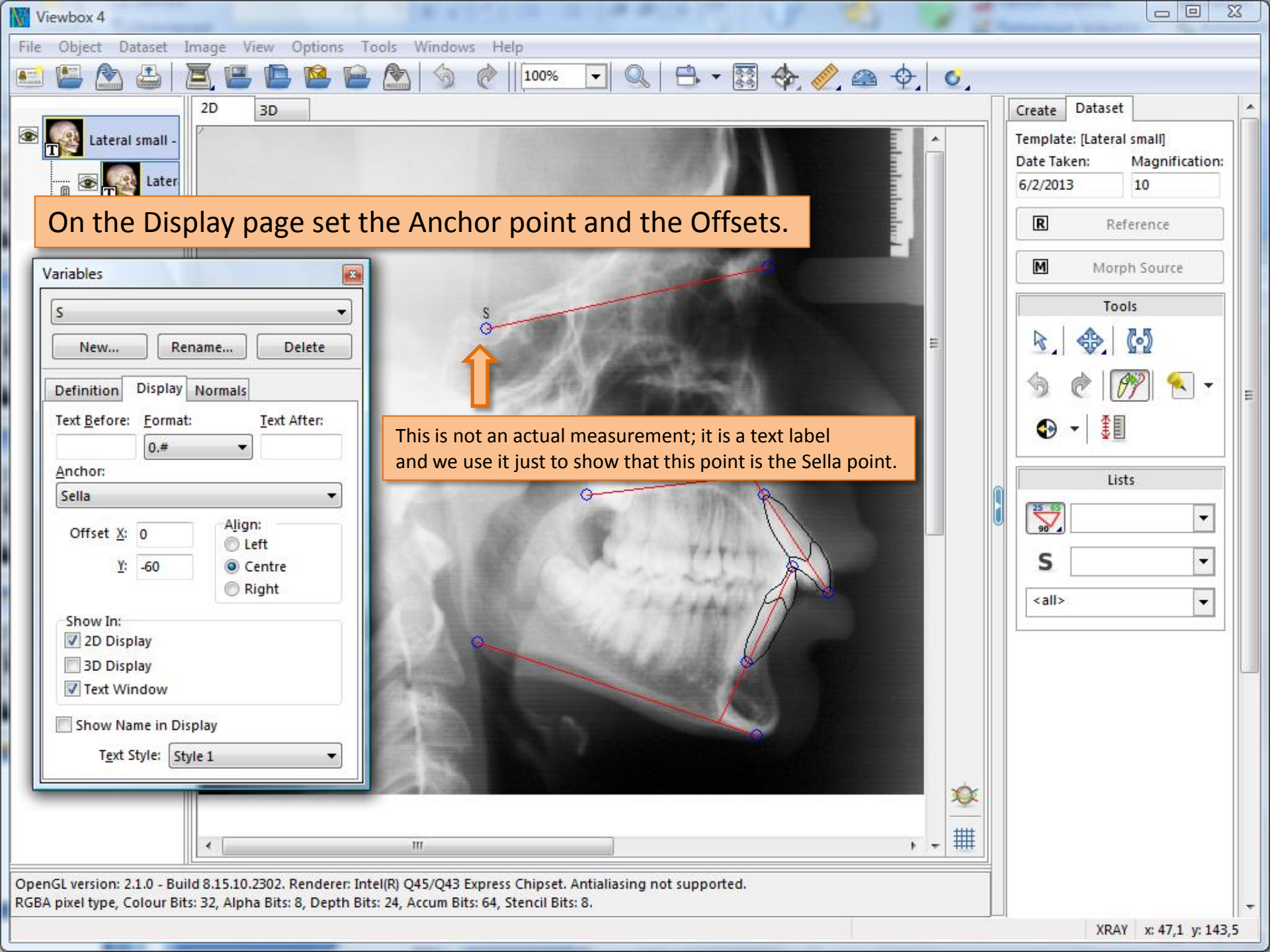

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Later
Imag
This is the result so far.
Next we are going to add a measurement.
Create Dataset
Template: [Lateral small]
Date Taken:
Magnification:
6/2/2013
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
[Right-click]: Digitise point, [Ctrl]+[Right-click]: Override edge-lock, [Ctrl]+[Left-click](on curve): Add curve point.
XRAY
x: 55,4 y: 37,6

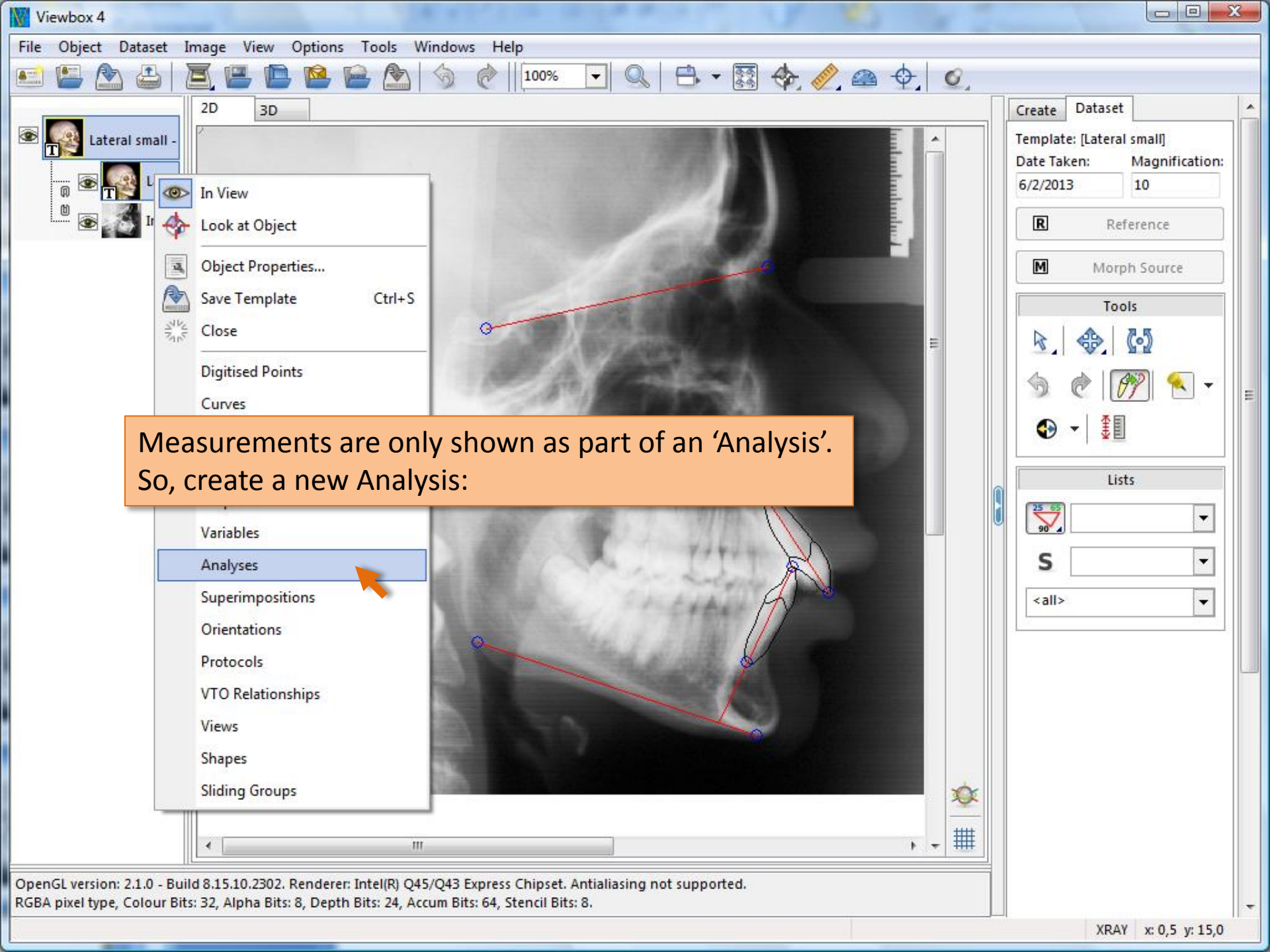

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Right-click on the Template icon and select ‘Variables’.
Look at Object
Object Properties...
Save Template Ctrl+S
Close
Digitised Points
Curves
Derived Points
Areas
Graphics
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 24,8 y: 8,5

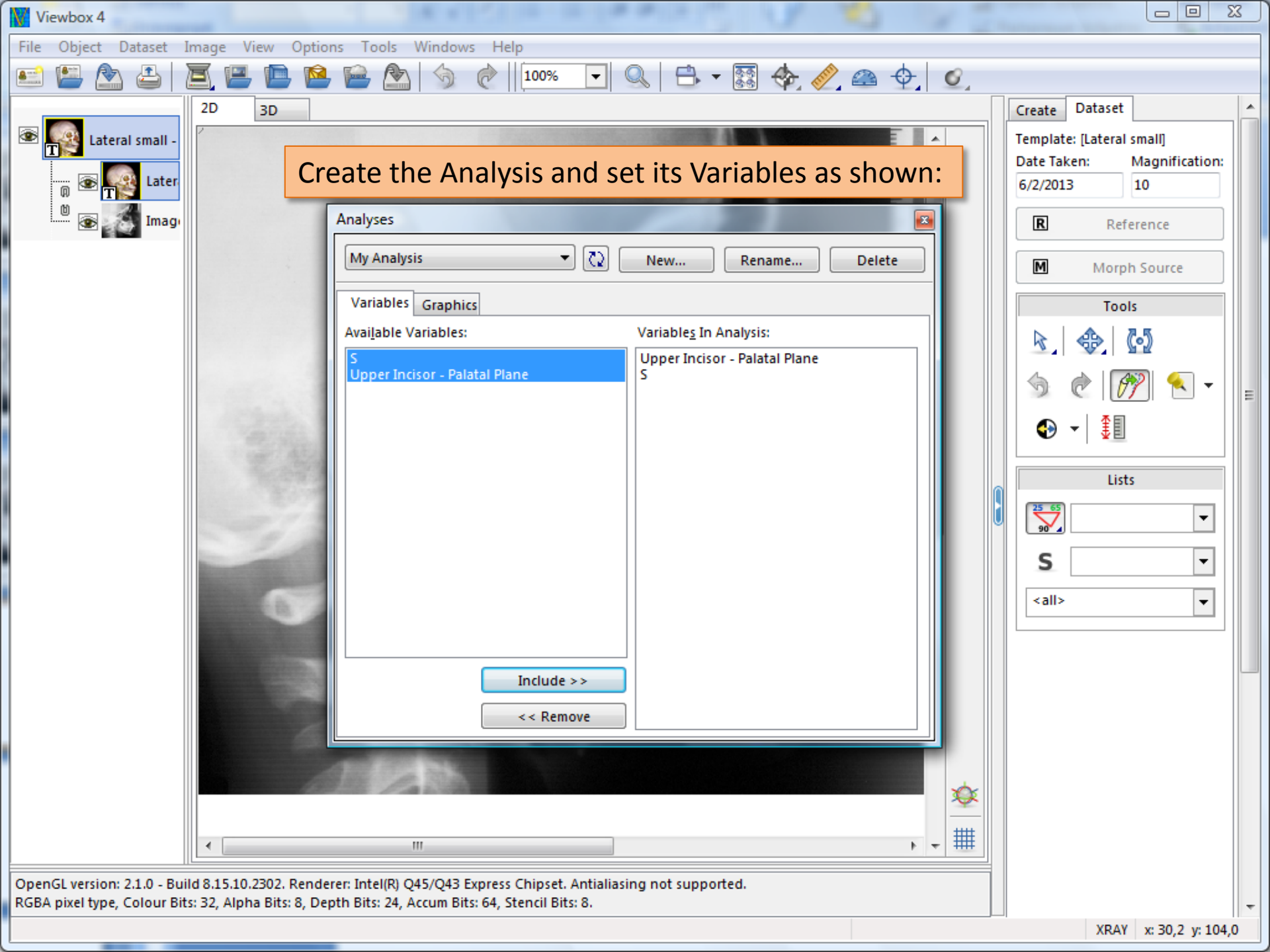

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
Later
Create Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
Create a new Variable and set its properties, as shown here:
Variables
Upper Incisor - Palatal Plane
New... Rename... Delete
Definition Display Normals
Type: Angle 180
3 2 -180 180 1 4
Point 1: Upper Incisor Apex
Point 2: Upper Incisor Tip
Point 3: ANS
Point 4: PNS
ANS
PNS
Upper Incisor Apex
Upper Incisor
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
[Right-click]: Digitise point, [Ctrl]+[Right-click]: Override edge-lock, [Ctrl]+[Left-click](on curve): Add curve point.
XRAY
x: 108,2 y: 141,7

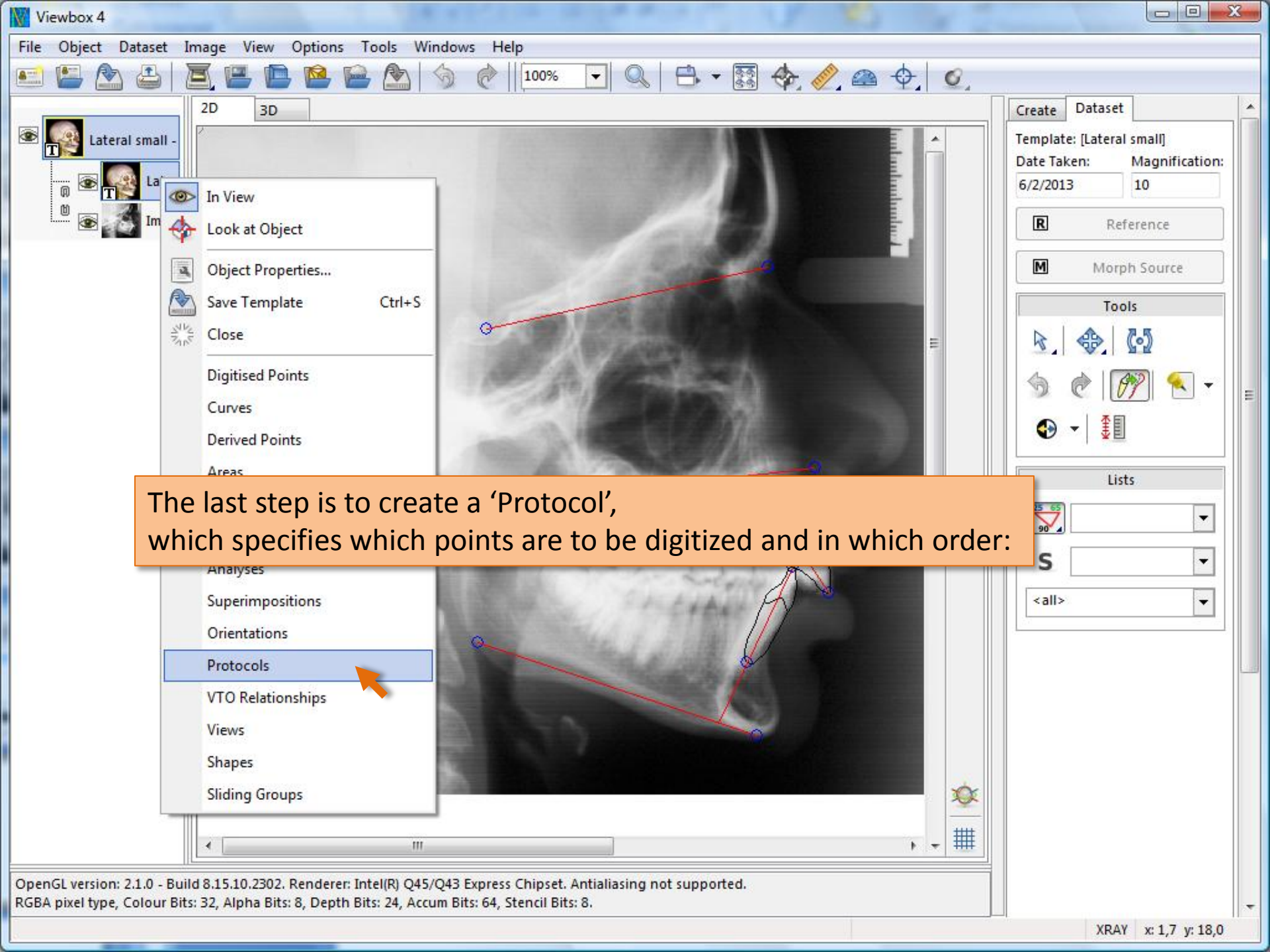

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
On the Display page set the Anchor point and the Offsets.
Variables
Upper Incisor - Palatal Plane
New...
Rename...
Delete
Definition
Display
Normals
Text Before:
Format:
Text After:
0.#
Anchor:
Upper Incisor - PP
Offset X:
0
Y:
10
Align:
Left
Centre
Right
Show In:
2D Display
3D Display
Text Window
Show Name in Display
Text Style:
Style 1
The result of the measurement is shown next to the Anchor point:
ANS
PNS
116.6
Upper Incisor Apex
Upper Incisor
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 45,0 y: 155,1

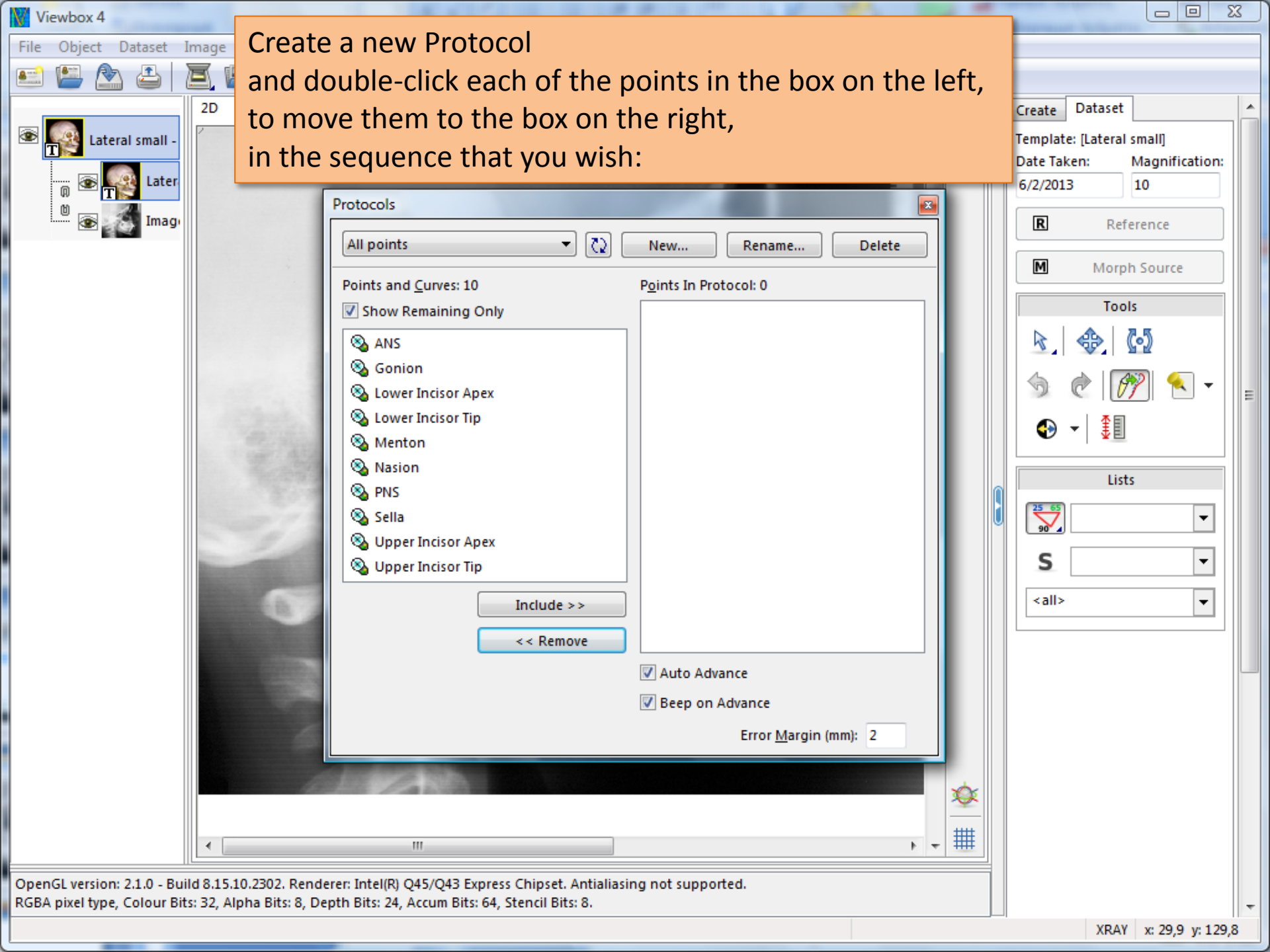

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
Create a new Variable, as shown:
Variables
S
New...
Rename...
Delete
Definition
Display
Normals
Type:
Label
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
S
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 42,6 y: 80,3

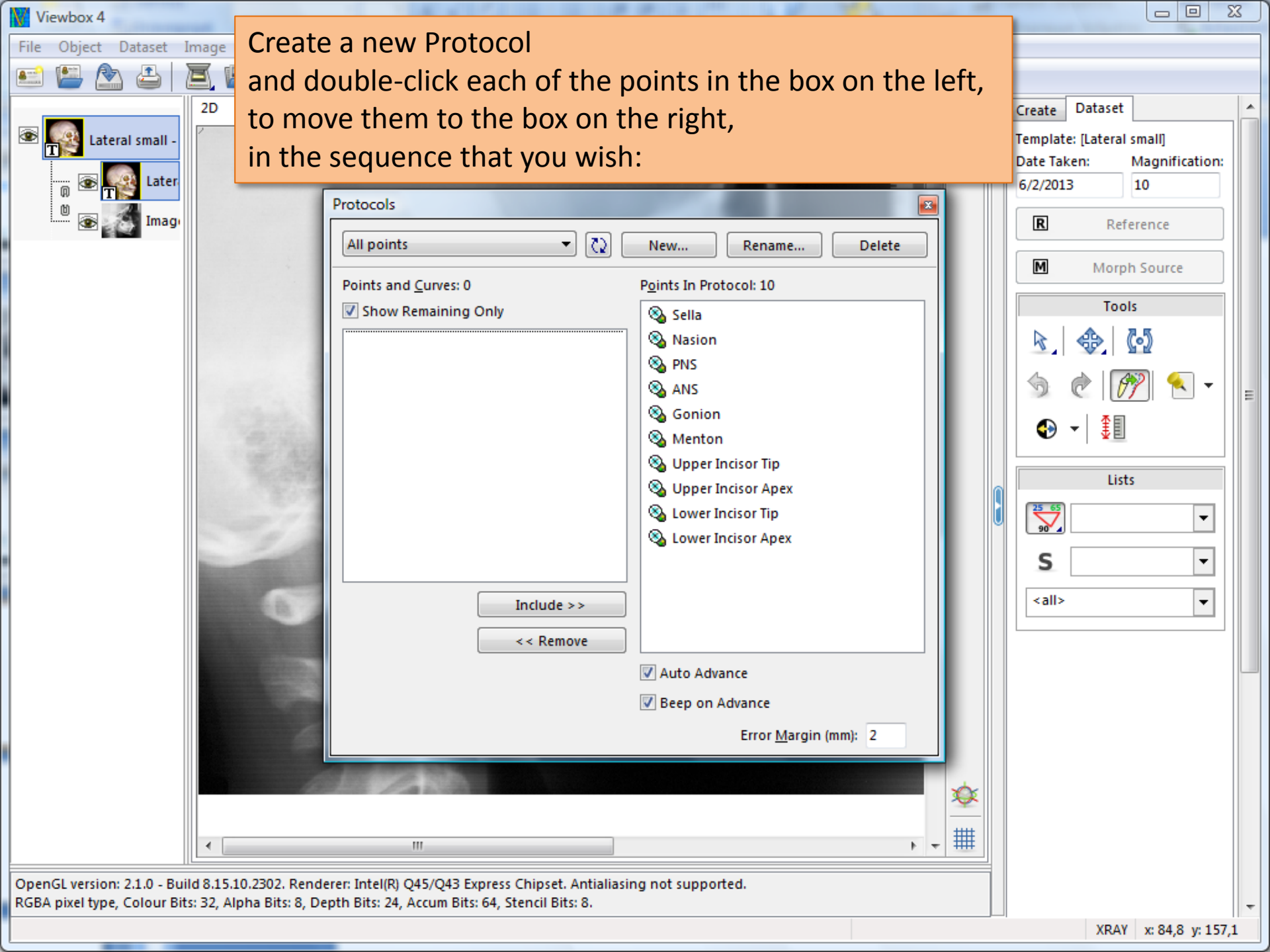

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Later
On the Display page set the Anchor point and the Offsets.
Variables
S
New...
Rename...
Delete
Definition
Display
Normals
Text Before:
Format:
Text After:
0.#
Anchor:
Sella
Offset X:
0
Y:
-60
Align:
Left
Centre
Right
Show In:
2D Display
3D Display
Text Window
Show Name in Display
Text Style:
Style 1
S
This is not an actual measurement; it is a text label
and we use it just to show that this point is the Sella point.
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
S
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 47,1 y: 143,5

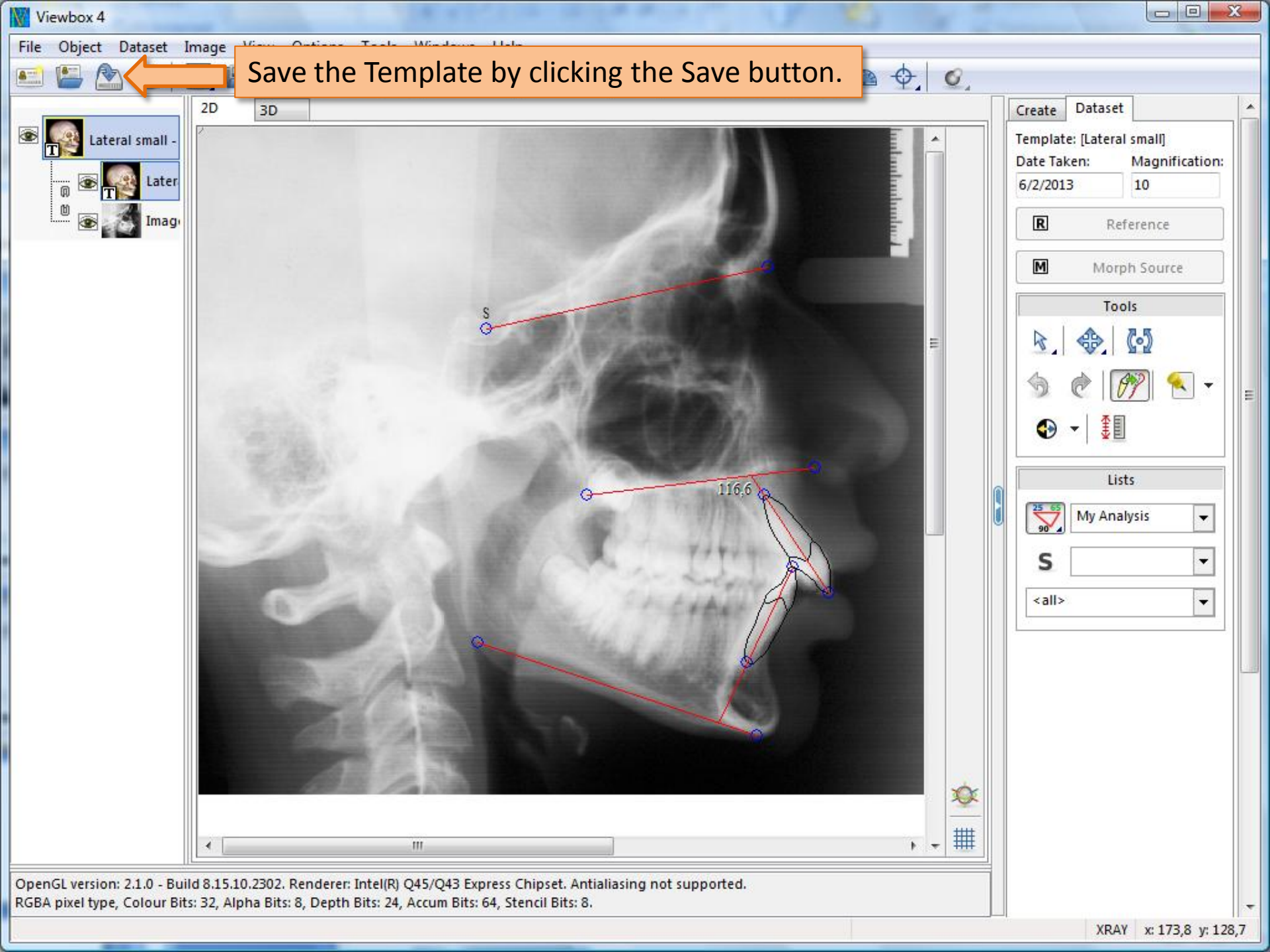

Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
In View
Look at Object
Object Properties...
Save Template Ctrl+S
Close
Digitised Points
Curves
Variables
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Measurements are only shown as part of an 'Analysis'.
So, create a new Analysis:
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 0,5 y: 15,0


Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D
3D
Lateral small -
Create the Analysis and set its Variables as shown:
Analyses
My Analysis
New...
Rename...
Delete
Variables
Graphics
Available Variables:
S
Upper Incisor - Palatal Plane
Variables In Analysis:
Upper Incisor - Palatal Plane
S
Include >>
<< Remove
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 30,2 y: 104,0


Viewbox 4
File Object Dataset Image View Options Tools Windows Help
100%
2D 3D
Lateral small -
In View
Look at Object
Object Properties...
Save Template Ctrl+S
Close
Digitised Points
Curves
Derived Points
Areas
Analyses
Superimpositions
Orientations
Protocols
VTO Relationships
Views
Shapes
Sliding Groups
Create Dataset
Template: [Lateral small]
Date Taken: 6/2/2013
Magnification: 10
Reference
Morph Source
Tools
Lists
<all>
The last step is to create a 'Protocol',
which specifies which points are to be digitized and in which order:
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY x: 1,7 y: 18,0


Viewbox 4
File Object Dataset Image
Create a new Protocol
and double-click each of the points in the box on the left,
to move them to the box on the right,
in the sequence that you wish:
Lateral small -
2D
Protocols
All points
New...
Rename...
Delete
Points and Curves: 10
Show Remaining Only
ANS
Gonion
Lower Incisor Apex
Lower Incisor Tip
Menton
Nasion
PNS
Sella
Upper Incisor Apex
Upper Incisor Tip
Include >>
<< Remove
Points In Protocol: 0
Auto Advance
Beep on Advance
Error Margin (mm): 2
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 29,9 y: 129,8


Create a new Protocol
and double-click each of the points in the box on the left,
to move them to the box on the right,
in the sequence that you wish:
Viewbox 4
File
Object
Dataset
Image
2D
Lateral small -
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
<all>
Protocols
All points
New...
Rename...
Delete
Points and Curves: 0
Show Remaining Only
Include >>
<< Remove
Points In Protocol: 10
Sella
Nasion
PNS
ANS
Gonion
Menton
Upper Incisor Tip
Upper Incisor Apex
Lower Incisor Tip
Lower Incisor Apex
Auto Advance
Beep on Advance
Error Margin (mm):
2
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 84,8 y: 157,1


Viewbox 4
File
Object
Dataset
Image
Save the Template by clicking the Save button.
2D
3D
Lateral small -
Create
Dataset
Template: [Lateral small]
Date Taken:
6/2/2013
Magnification:
10
Reference
Morph Source
Tools
Lists
My Analysis
<all>
S
116.6
OpenGL version: 2.1.0 - Build 8.15.10.2302. Renderer: Intel(R) Q45/Q43 Express Chipset. Antialiasing not supported.
RGBA pixel type, Colour Bits: 32, Alpha Bits: 8, Depth Bits: 24, Accum Bits: 64, Stencil Bits: 8.
XRAY
x: 173,8 y: 128,7

Template tutorial

- The Template is now complete. You can use it to digitize the points and measure the angle of the upper incisor to the palatal plane.

Template tutorial

- The Template is now complete. You can use it to digitize the points and measure the angle of the upper incisor to the palatal plane.
- To use the Template, create a New Patient, then create a New Dataset. Select ‘Lateral small’ as the Template for the Dataset. Use the Digitizer tool to digitize the points.

Template tutorial

- The Template create in this tutorial is a very simple Template. Please read the Help file to learn more about the capabilities of the software. Additional features, not shown here, include:
  - 3D points and measurements
  - 10 types of Digitized Points
  - 16 types of Derived Points
  - 28 types of Graphics
  - 42 types of Variables
  - 6 superimposition types, including Procrustes fit
  - Smooth curves
  - Automatic location of points on curves, based on pre-defined rules
  - Sliding semi-landmarks

Template tutorial: notes

- You can edit the Template at any time and add or remove features. For example you can add more measurements; all Datasets that you have already digitized will use the new Template and show the added measurements.
- However, if you delete Digitized Points from the Template, then previously digitized Datasets will become unusable. Refrain from deleting Digitized Points; if you don't need a point anymore, just remove it from the Protocol and let it be inactive.
- Always keep backup copies of your Template files (Viewbox does this automatically anyway).
- Templates are identified by their name (see Slide #6), which resides inside the Template file. Make sure that the Templates folder does not contain Template files of the same name (not the filename, which is not allowed by Windows to be the same anyway, but the Template name, which is inside the file).