SBMT

Mapping Structures

JOHNS HOPKINS
APPLIED PHYSICS LABORATORY

This SBMT tutorial explains how to:

- Draw paths, polygons, circles, ellipses, and points on shape models
- Add names and labels to structures
- Save and load structures files
- Change display properties of structures

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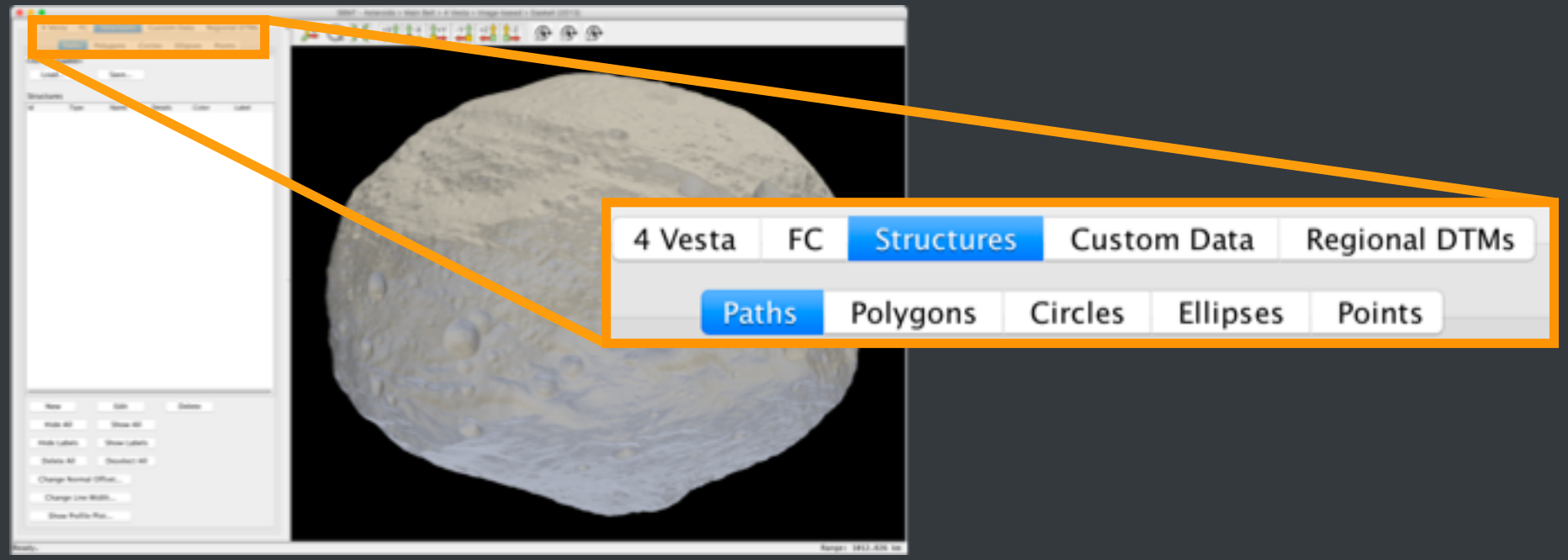
- Save and load structures files
- Change display properties of structures

The structures panel

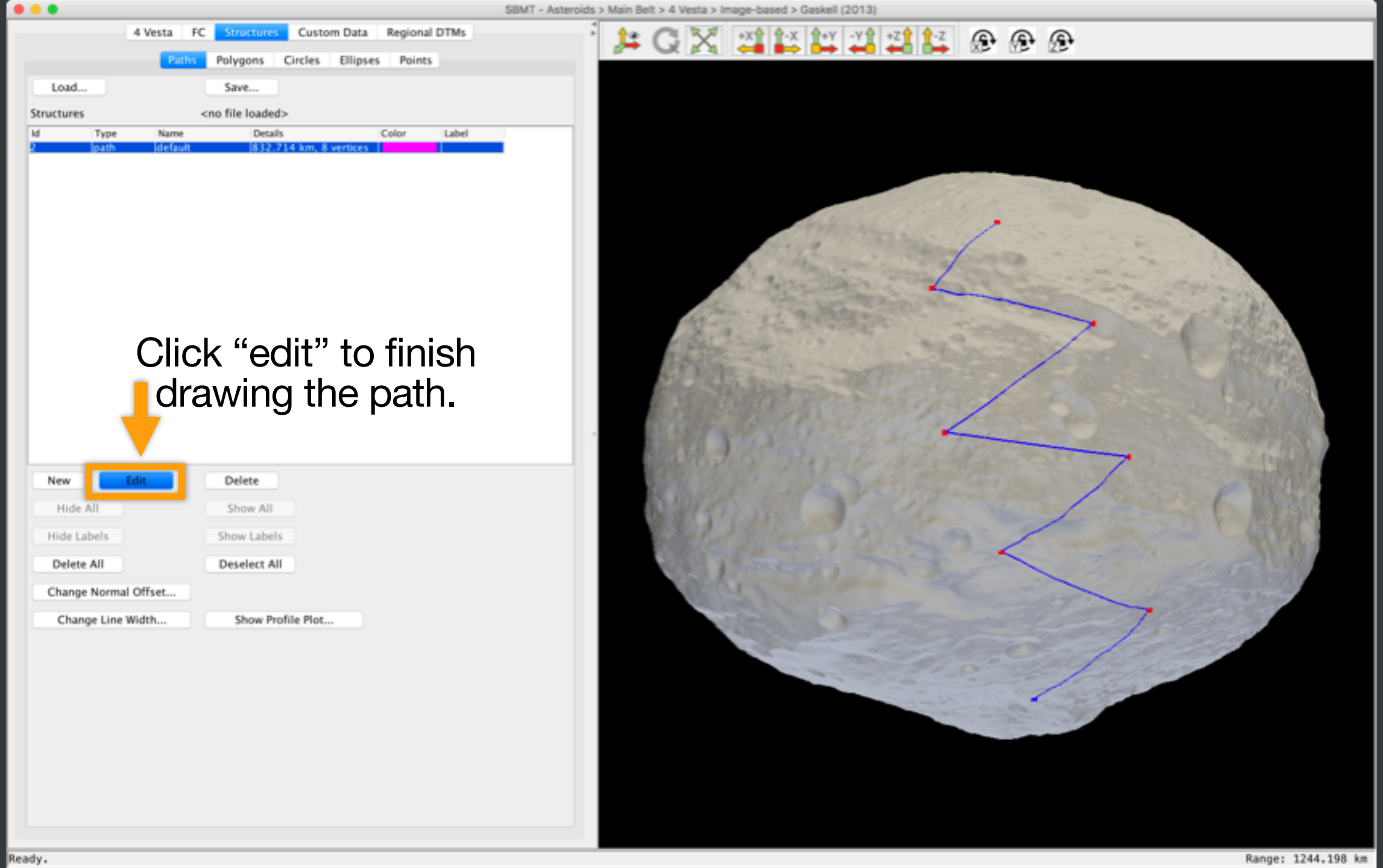
- Located in the control panel
- Contains five tabs, one for each type of structure

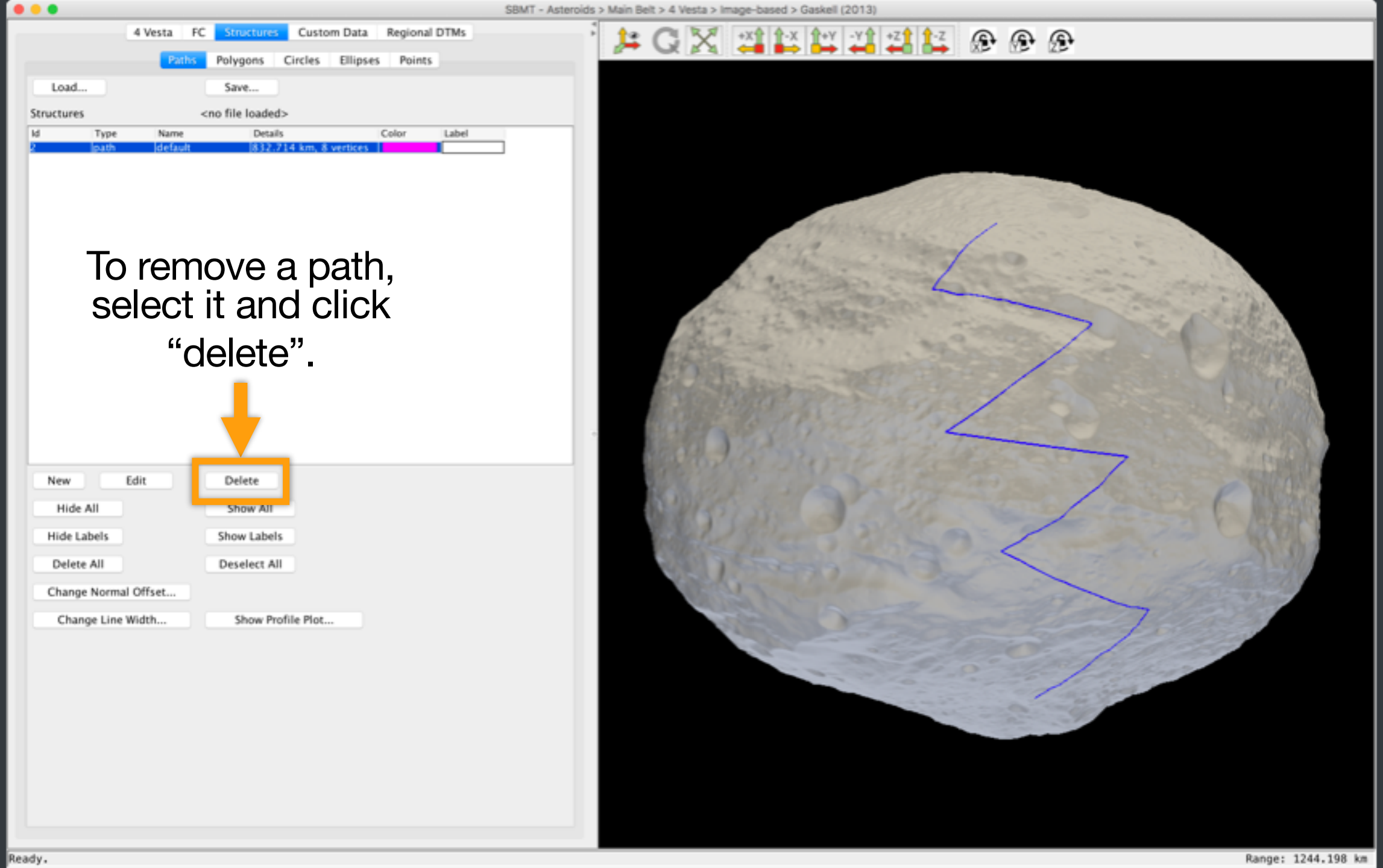


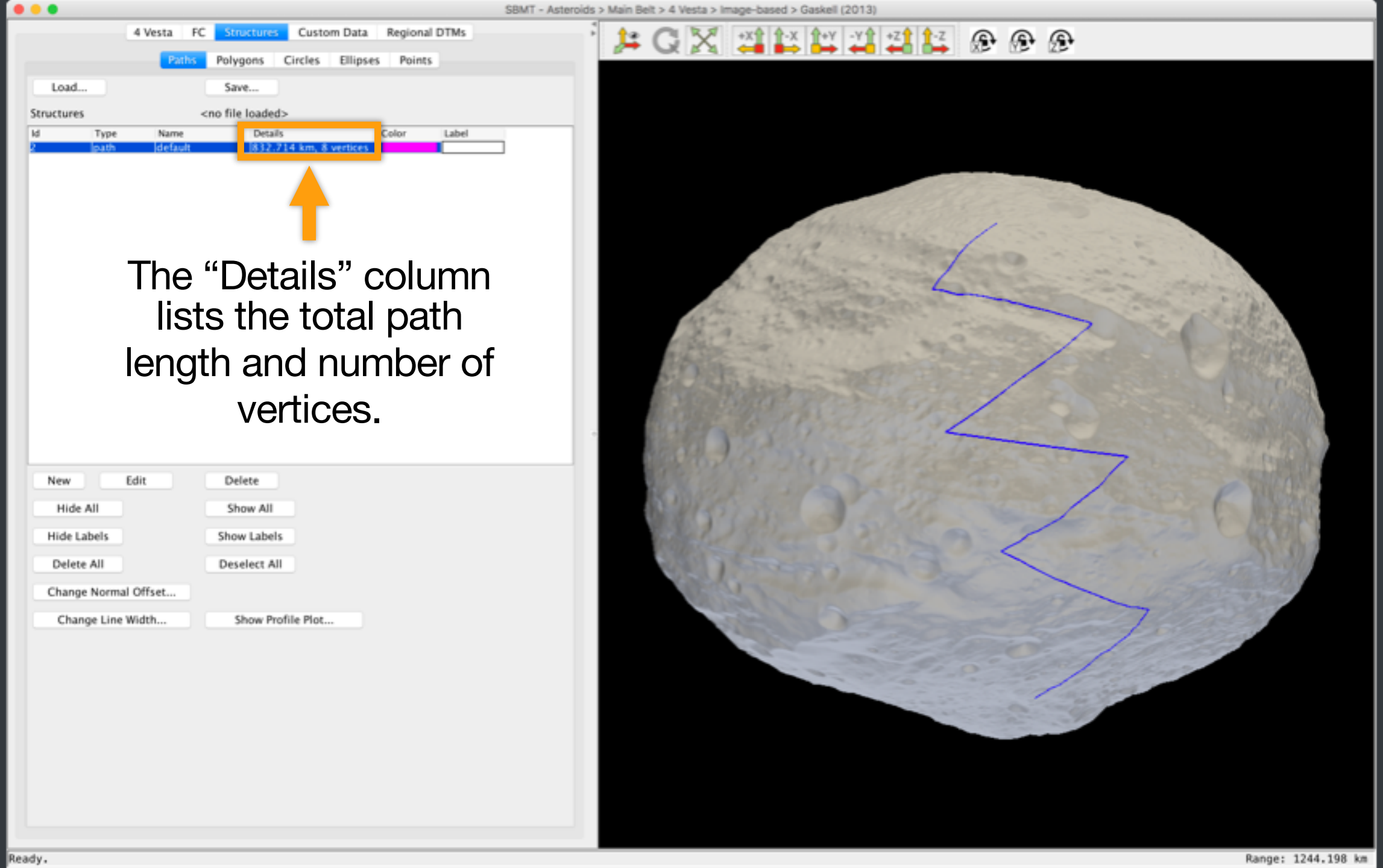
Drawing paths

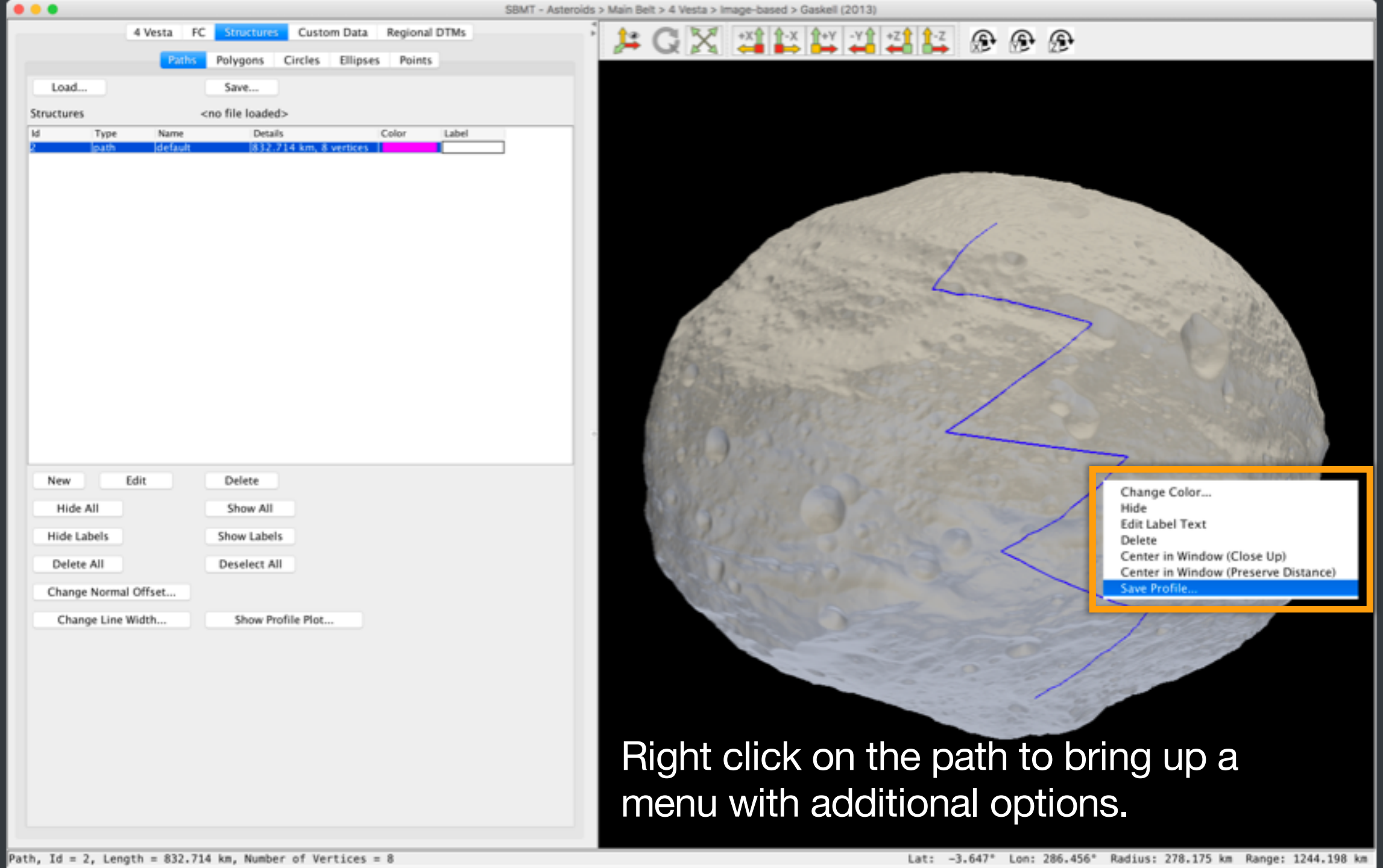
- Switch to Structures tab and click on “Paths”.
- Press “New” to begin drawing a path.
- Click on the shape model to specify the vertices of the path.
- Press “Edit” when finished drawing the path.

Note: Clicking “New” puts the SBMT into “edit” mode: the shape model is frozen in the rendering panel. Rotate, zoom, and pan functions do not work in “edit” mode. Once “edit” is unselected, the SBMT returns to normal navigation.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
2
path
default
832.714 km, 8 vertices
Click “edit” to finish drawing the path.
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Show Profile Plot...
Ready.
Range: 1244.198 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
2
path
default
832.714 km, 8 vertices
To remove a path, select it and click "delete".
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Show Profile Plot...
Ready.
Range: 1244.198 km

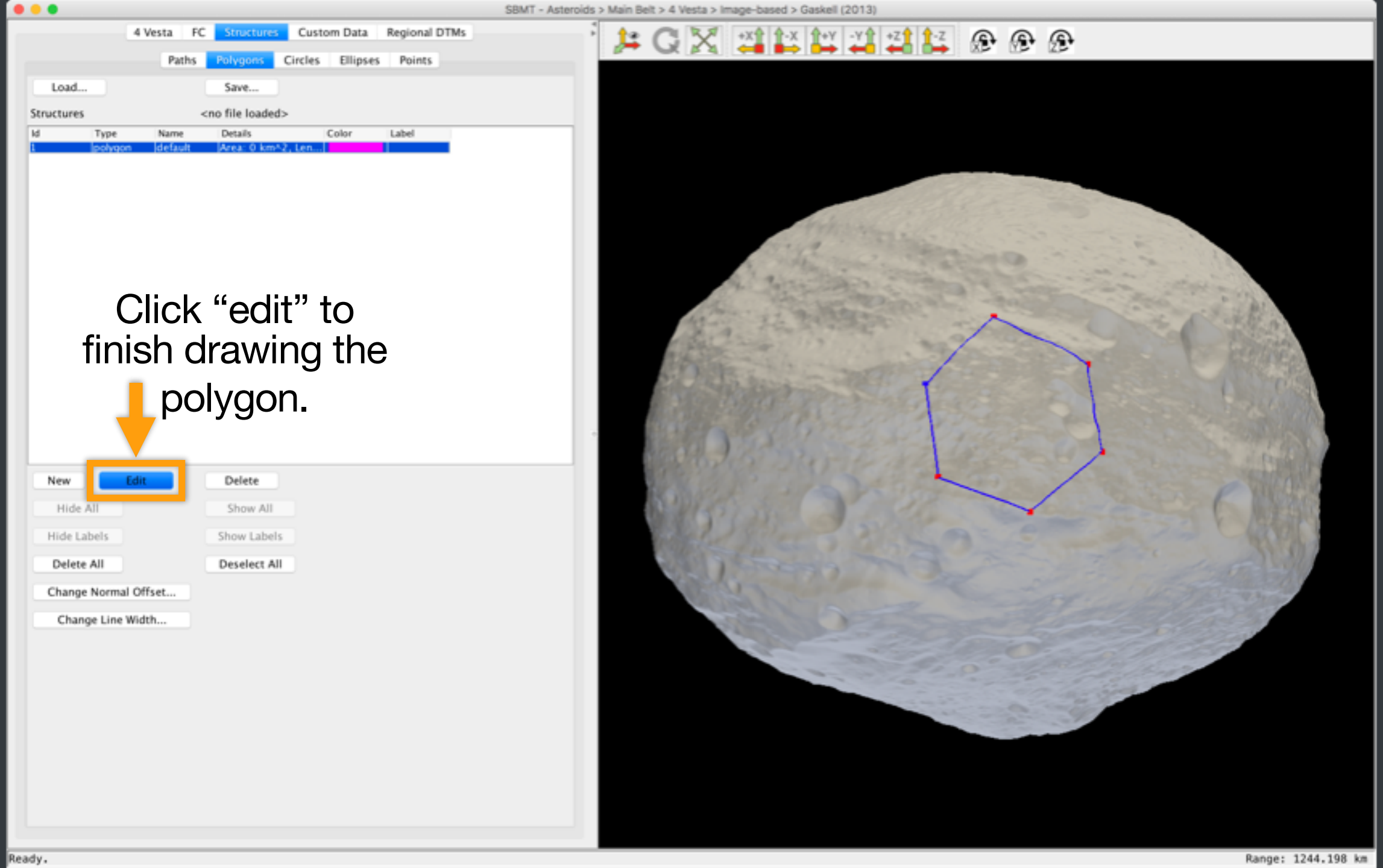

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
2
path
default
832.714 km, 8 vertices
The “Details” column lists the total path length and number of vertices.
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Show Profile Plot...
Ready.
Range: 1244.198 km

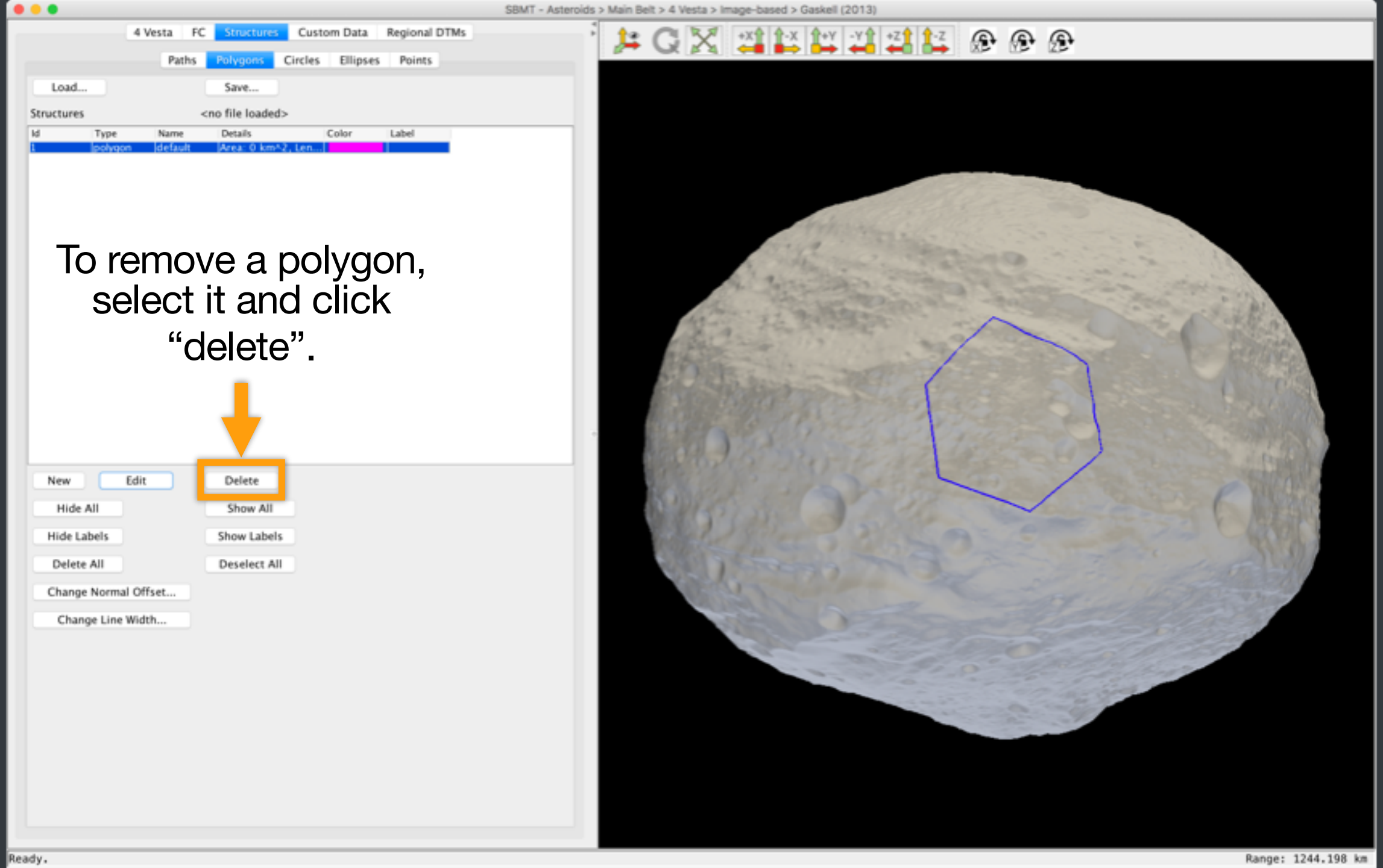

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
2
path
default
832.714 km, 8 vertices
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Show Profile Plot...
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save Profile...
Right click on the path to bring up a menu with additional options.
Path, Id = 2, Length = 832.714 km, Number of Vertices = 8
Lat: -3.647° Lon: 286.456° Radius: 278.175 km Range: 1244.198 km

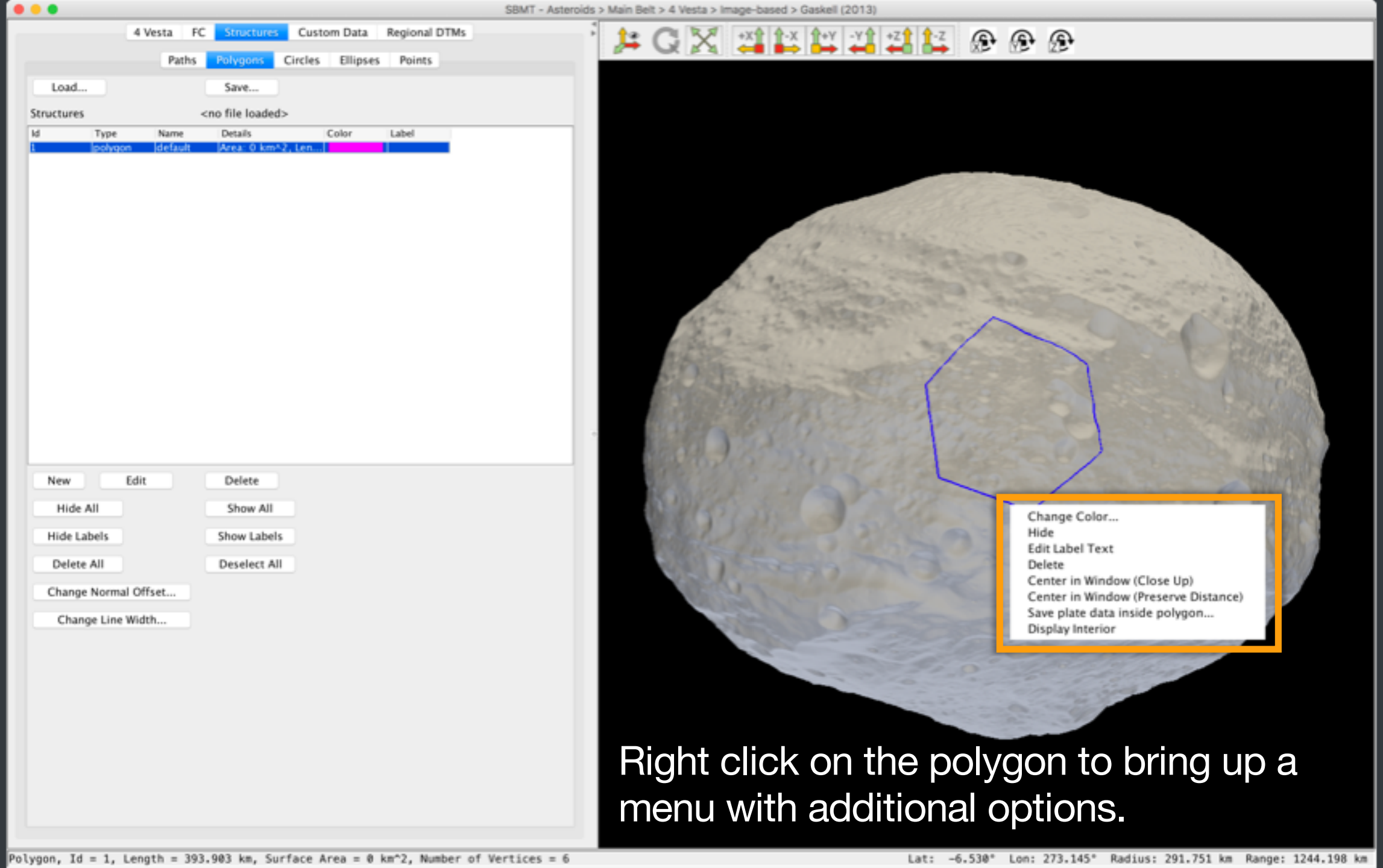
Drawing polygons

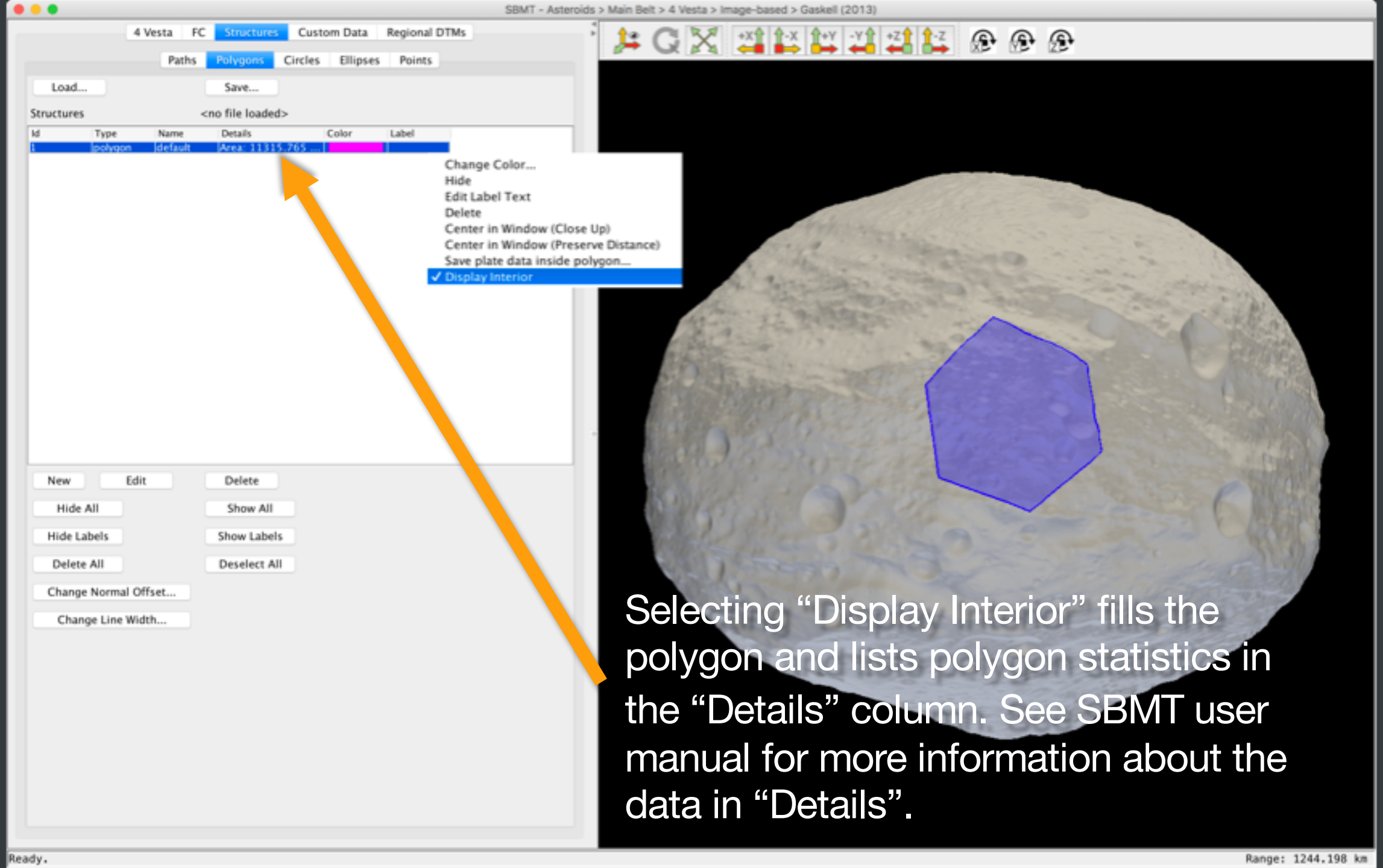
- Switch to Structures tab and click on “Polygons”.
- Press “New” to begin drawing a polygon.
- Click on the shape model to specify the vertices of the polygon.
- Press “Edit” when finished drawing the polygon.

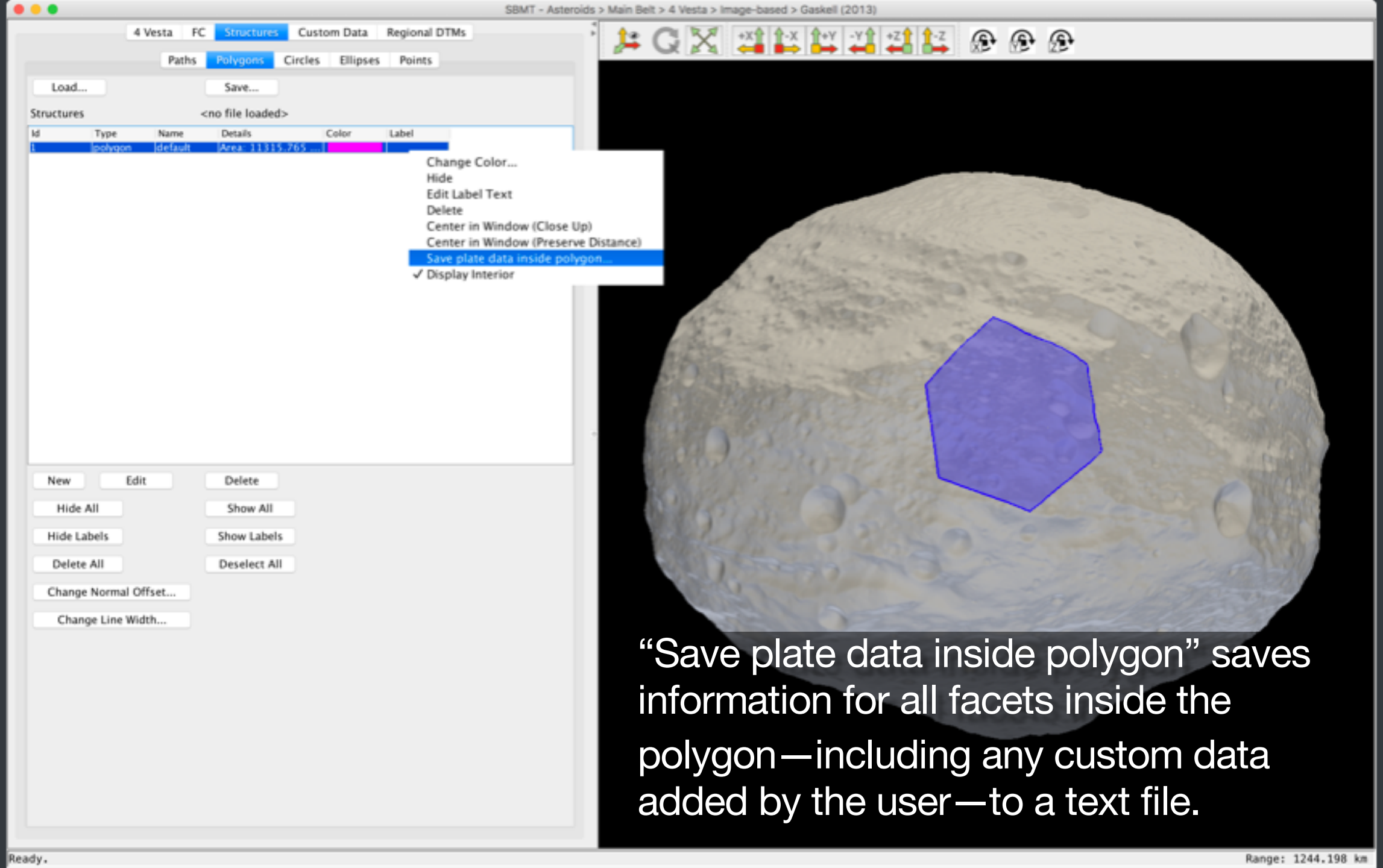
Note: Clicking “New” puts the SBMT into “edit” mode: the shape model is frozen in the rendering panel. Rotate, zoom, and pan functions do not work in “edit” mode. Once “edit” is unselected, the SBMT returns to normal navigation.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
polygon
default
Area: 0 km^2, Len...
Click “edit” to finish drawing the polygon.
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Ready.
Range: 1244.198 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
polygon
default
Area: 0 km^2, Len...
To remove a polygon, select it and click "delete".
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Ready.
Range: 1244.198 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
1
polygon
default
Area: 0 km^2, Len...
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
Display Interior
Right click on the polygon to bring up a menu with additional options.
Polygon, Id = 1, Length = 393.903 km, Surface Area = 0 km^2, Number of Vertices = 6
Lat: -6.530° Lon: 273.145° Radius: 291.751 km Range: 1244.198 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
<no file loaded>
Id
Type
Name
Details
Color
Label
polygon
default
Area: 11315.765 ...
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
Display Interior
New
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Selecting “Display Interior” fills the polygon and lists polygon statistics in the “Details” column. See SBMT user manual for more information about the data in “Details”.
Ready.
Range: 1244.198 km

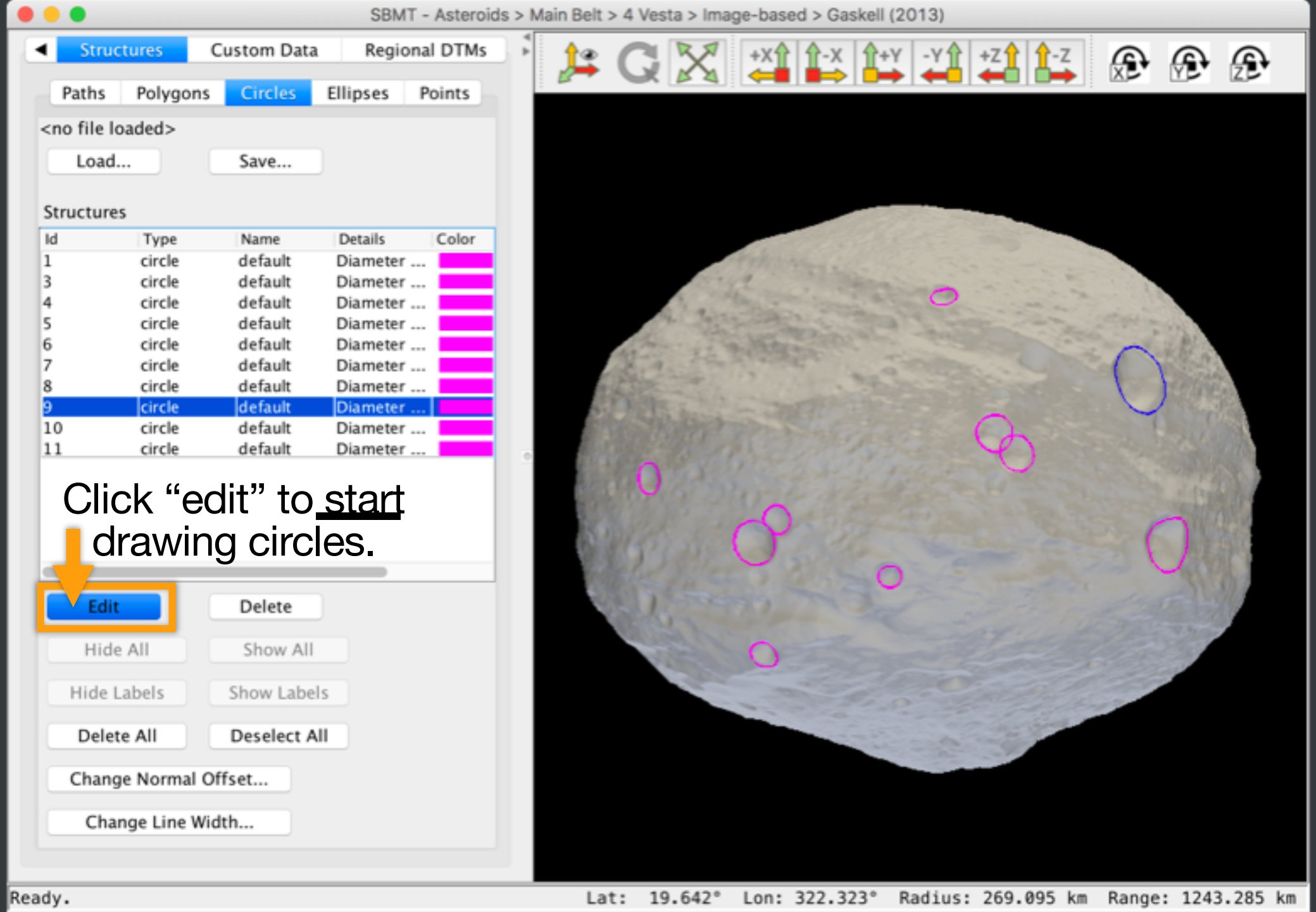


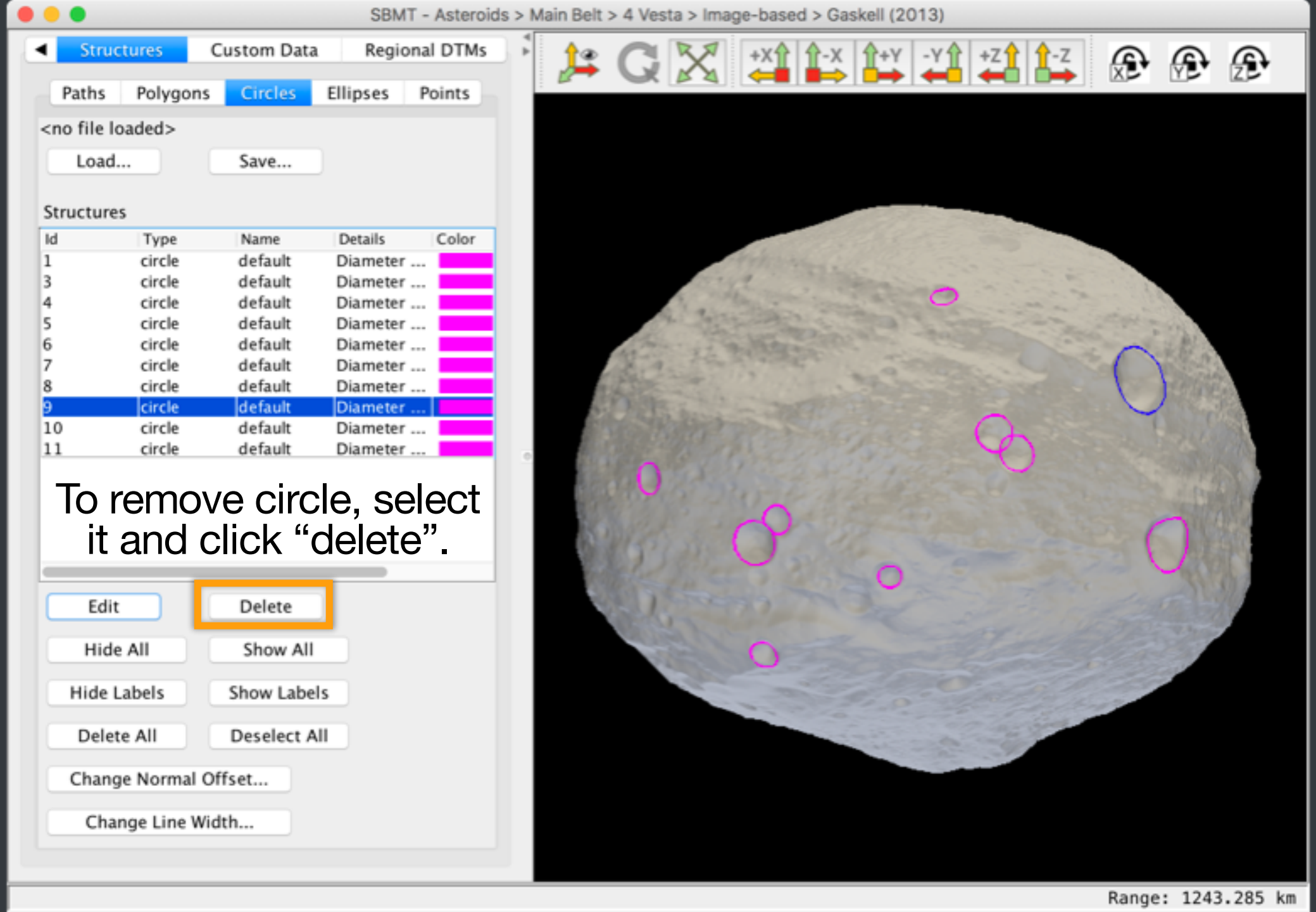
“Save plate data inside polygon” saves information for all facets inside the polygon—including any custom data added by the user—to a text file.

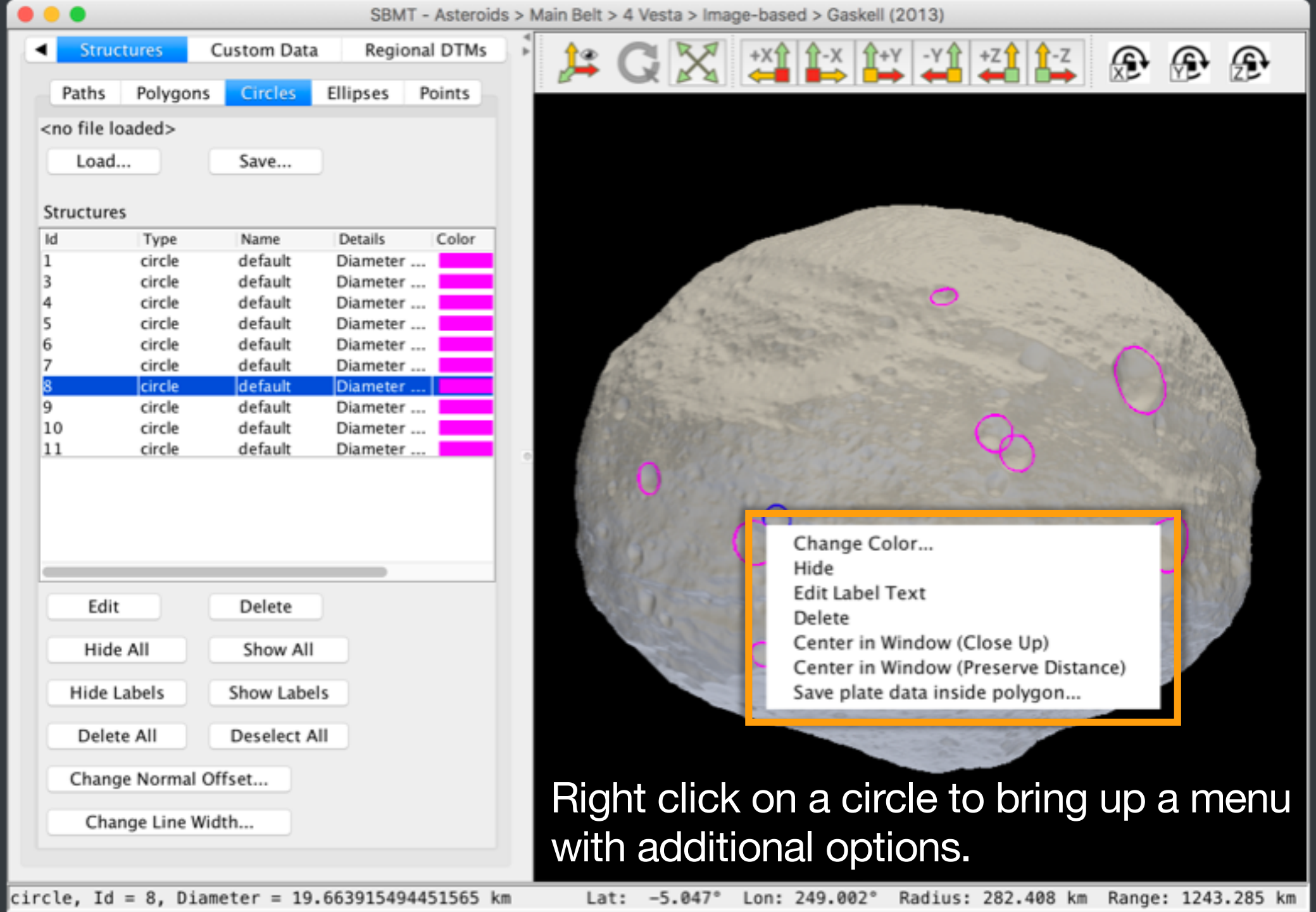
Drawing circles

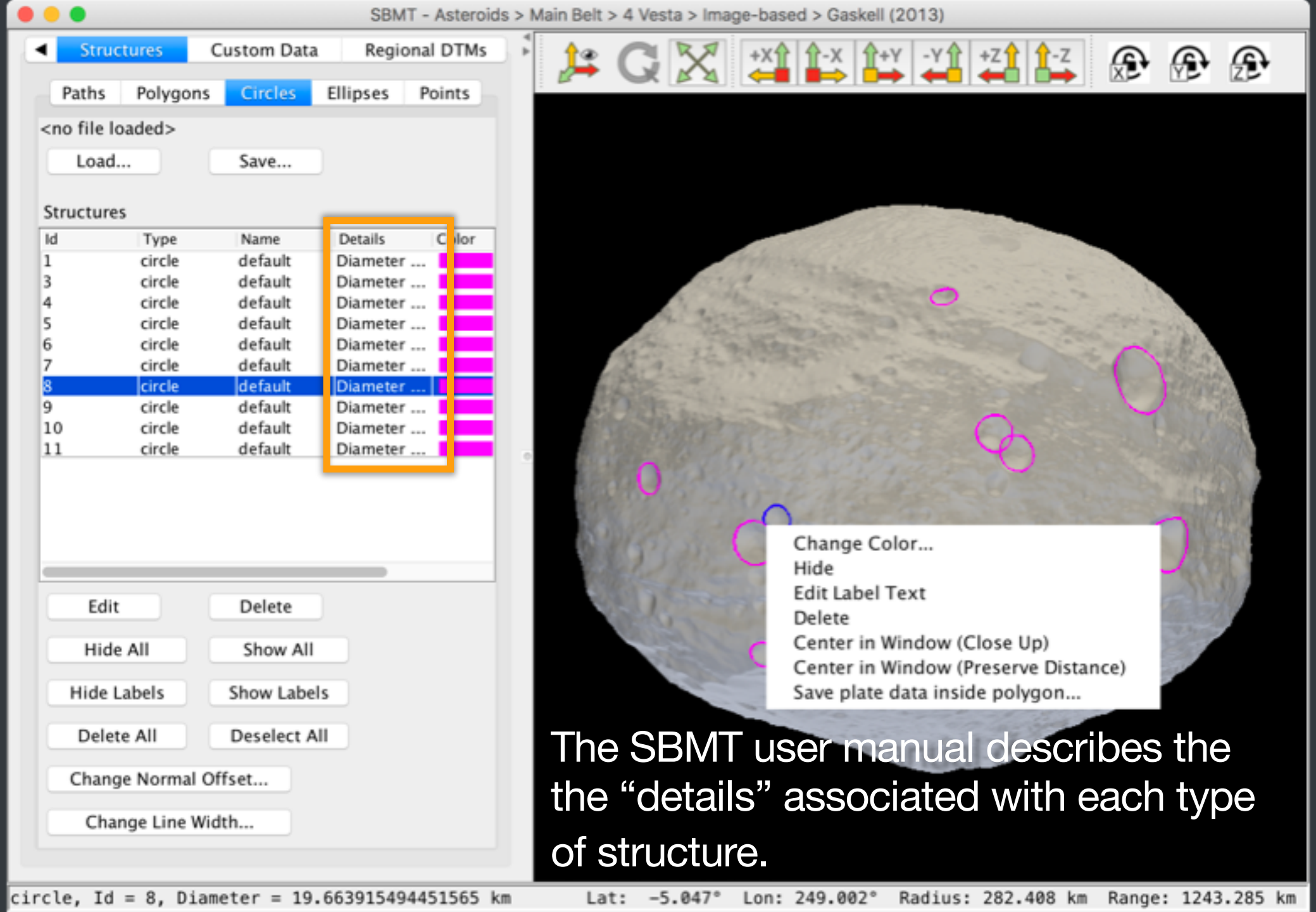
Note: The shape model is frozen when in ”edit” mode. Rotate, zoom, and pan functions do not work. Once “edit” is unselected, the SBMT returns to normal navigation.

- Switch to Structures tab and click on “Circles”.
- Press “Edit” to begin drawing a circle.
- Click 3 points to define a circle. After clicking the third one, a circle appears passes through those points.
- Click another 3 locations to draw a second circle, etc.
- Press “Edit” when finished drawing circles.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 circle default Diameter ...
3 circle default Diameter ...
4 circle default Diameter ...
5 circle default Diameter ...
6 circle default Diameter ...
7 circle default Diameter ...
8 circle default Diameter ...
9 circle default Diameter ...
10 circle default Diameter ...
11 circle default Diameter ...
Click “edit” to start drawing circles.
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
Ready.
Lat: 19.642° Lon: 322.323° Radius: 269.095 km Range: 1243.285 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 circle default Diameter ...
3 circle default Diameter ...
4 circle default Diameter ...
5 circle default Diameter ...
6 circle default Diameter ...
7 circle default Diameter ...
8 circle default Diameter ...
9 circle default Diameter ...
10 circle default Diameter ...
11 circle default Diameter ...
To remove circle, select it and click “delete”.
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
Range: 1243.285 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 circle default Diameter ...
3 circle default Diameter ...
4 circle default Diameter ...
5 circle default Diameter ...
6 circle default Diameter ...
7 circle default Diameter ...
8 circle default Diameter ...
9 circle default Diameter ...
10 circle default Diameter ...
11 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X -X +Y -Y +Z -Z
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
Right click on a circle to bring up a menu with additional options.
circle, Id = 8, Diameter = 19.663915494451565 km
Lat: -5.047° Lon: 249.002° Radius: 282.408 km Range: 1243.285 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 circle default Diameter ...
3 circle default Diameter ...
4 circle default Diameter ...
5 circle default Diameter ...
6 circle default Diameter ...
7 circle default Diameter ...
8 circle default Diameter ...
9 circle default Diameter ...
10 circle default Diameter ...
11 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X -X +Y -Y +Z -Z
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
The SBMT user manual describes the the “details” associated with each type of structure.
circle, Id = 8, Diameter = 19.663915494451565 km
Lat: -5.047° Lon: 249.002° Radius: 282.408 km Range: 1243.285 km

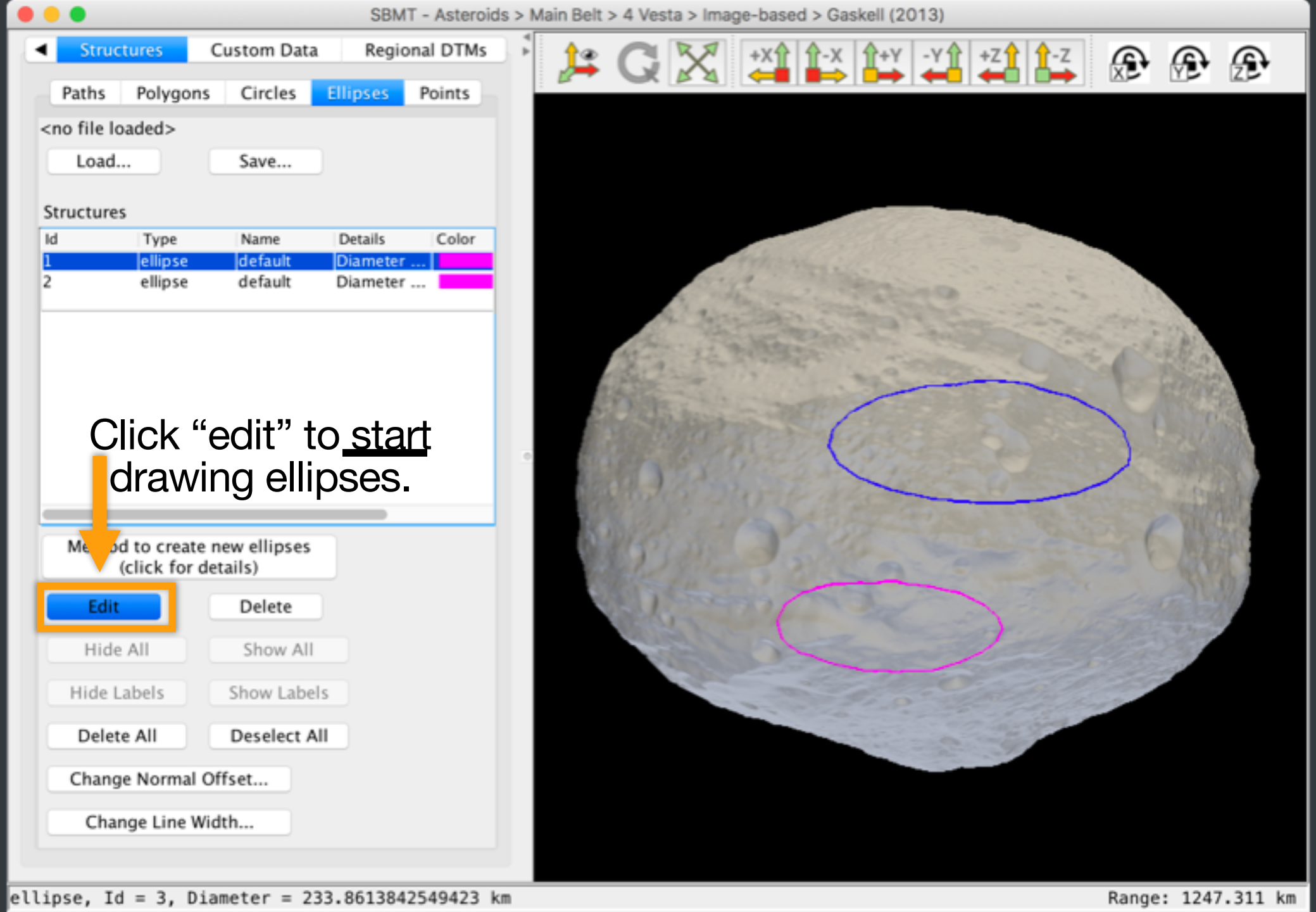
Change size and position of circles

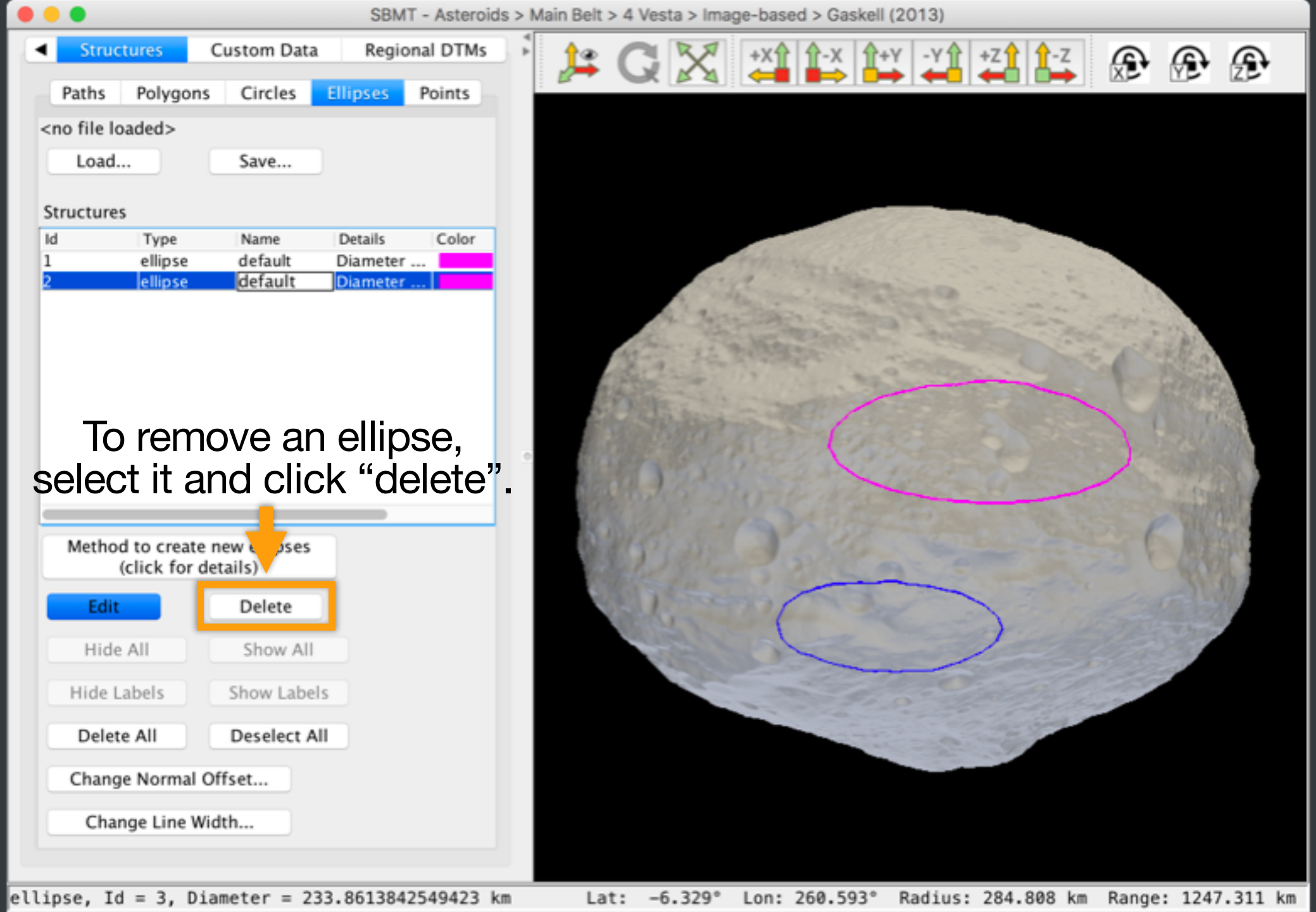
- Click “Edit” to enter editing mode.
- Position the cursor over a circle. The cursor will change to a hand shape.
- To move a circle: left-click on the circle and drag the circle to the desired location.
- To change a circle’s size: left-click on the circle, hold down the shift or control key, and drag the boundary.

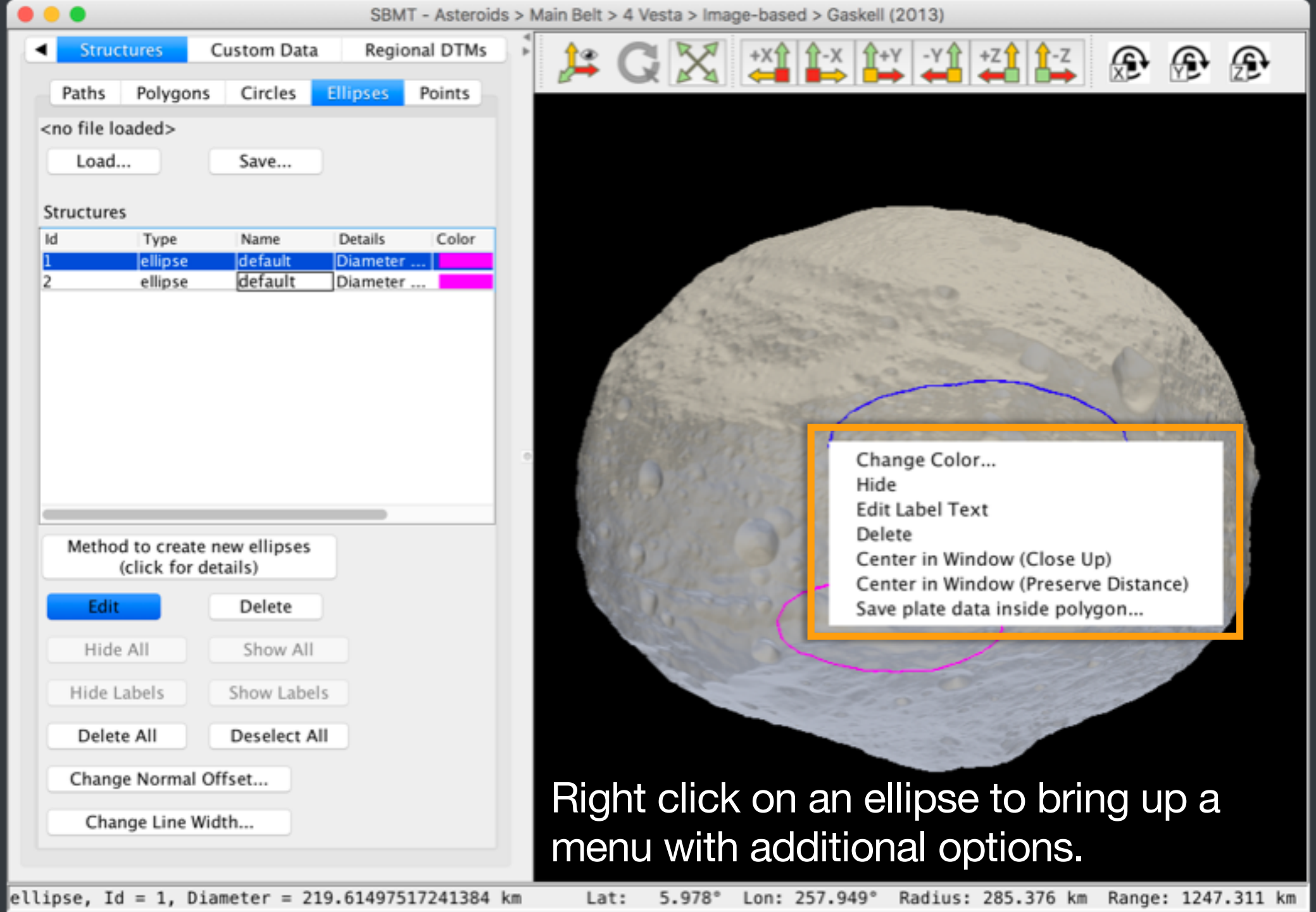
Drawing ellipses

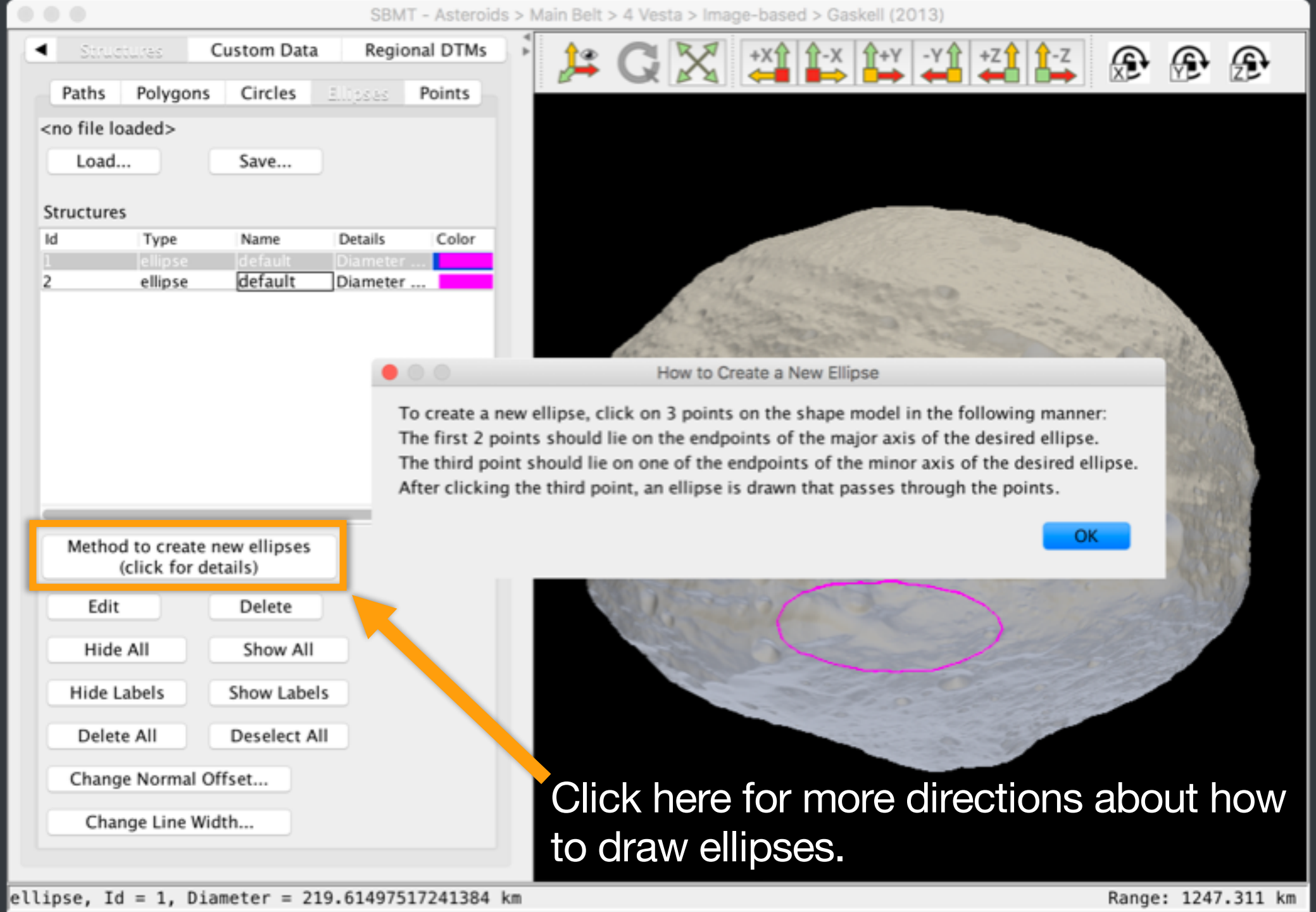
Note: The shape model is frozen when in ”edit” mode. Rotate, zoom, and pan functions do not work. Once “edit” is unselected, the SBMT returns to normal navigation.

- Switch to Structures tab and click on “Ellipses”.
- Press “Edit” to begin drawing a circle.
- Click 3 times: two points along the semi-major axis and a third to set the semi-minor axis.
- Click another 3 points to draw a second ellipse, etc.
- Press “Edit” again when finished drawing ellipses.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id
Type
Name
Details
Color
1
ellipse
default
Diameter ...
2
ellipse
default
Diameter ...
Click “edit” to start drawing ellipses.
Method to create new ellipses (click for details)
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
ellipse, Id = 3, Diameter = 233.8613842549423 km
Range: 1247.311 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id
Type
Name
Details
Color
1
ellipse
default
Diameter ...
2
ellipse
default
Diameter ...
To remove an ellipse, select it and click “delete”.
Method to create new ellipses (click for details)
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
ellipse, Id = 3, Diameter = 233.8613842549423 km
Lat: -6.329°
Lon: 260.593°
Radius: 284.808 km
Range: 1247.311 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id
Type
Name
Details
Color
1
ellipse
default
Diameter ...
2
ellipse
default
Diameter ...
Method to create new ellipses (click for details)
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
Right click on an ellipse to bring up a menu with additional options.
ellipse, Id = 1, Diameter = 219.61497517241384 km
Lat: 5.978°
Lon: 257.949°
Radius: 285.376 km
Range: 1247.311 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id
Type
Name
Details
Color
1
ellipse
default
Diameter ...
2
ellipse
default
Diameter ...
Method to create new ellipses (click for details)
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
How to Create a New Ellipse
To create a new ellipse, click on 3 points on the shape model in the following manner:
The first 2 points should lie on the endpoints of the major axis of the desired ellipse.
The third point should lie on one of the endpoints of the minor axis of the desired ellipse.
After clicking the third point, an ellipse is drawn that passes through the points.
OK
Click here for more directions about how to draw ellipses.
ellipse, Id = 1, Diameter = 219.61497517241384 km
Range: 1247.311 km

Change ellipse properties (part 1)

- Click “Edit” to enter editing mode.
- Position the cursor over an ellipse. The cursor will change into a hand shape.
- To move an ellipse: left-click on the ellipse and drag it to the desired location.
- To change an ellipse’s size: left-click on the ellipse, hold down shift or control, and drag the boundary.

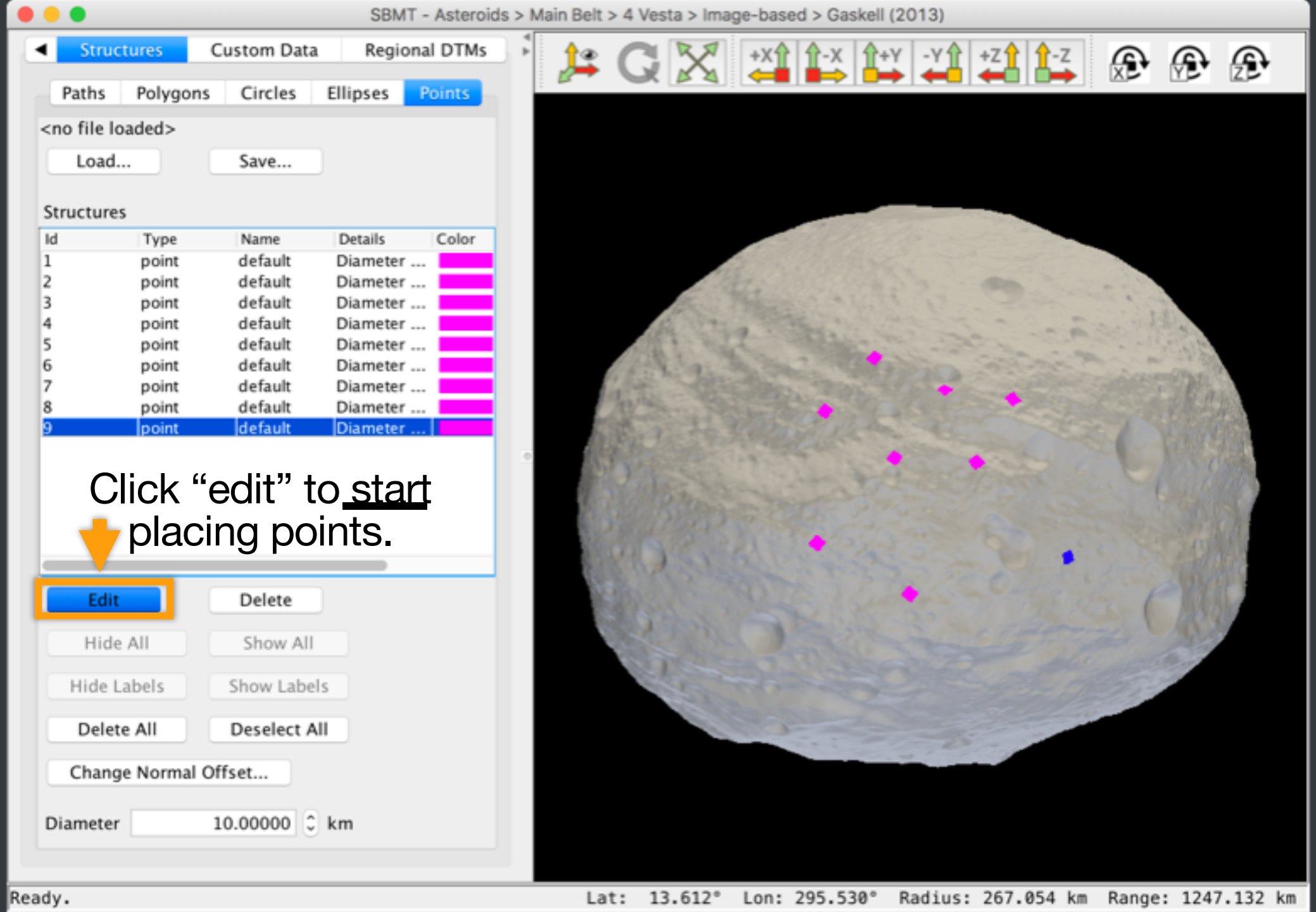
Change ellipse properties (part 2)

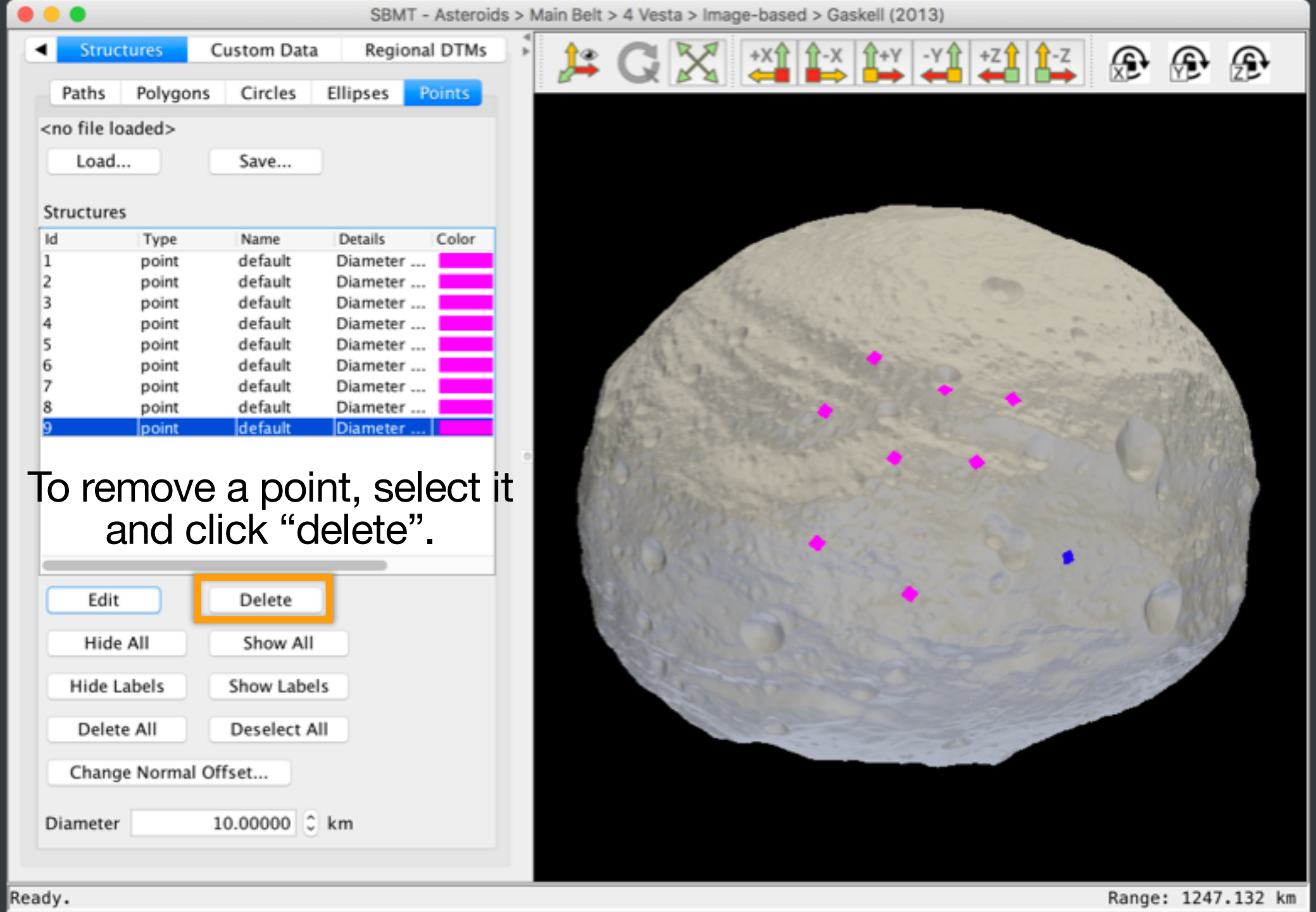
- To change the flattening of an ellipse (ratio of semi-major to semi-minor axes): hold down the “z” or “/” keys, left-click on the ellipse, and drag the ellipse boundary.
- To change an ellipse’s size: hold down the shift button, left-click on the ellipse, and drag the boundary.

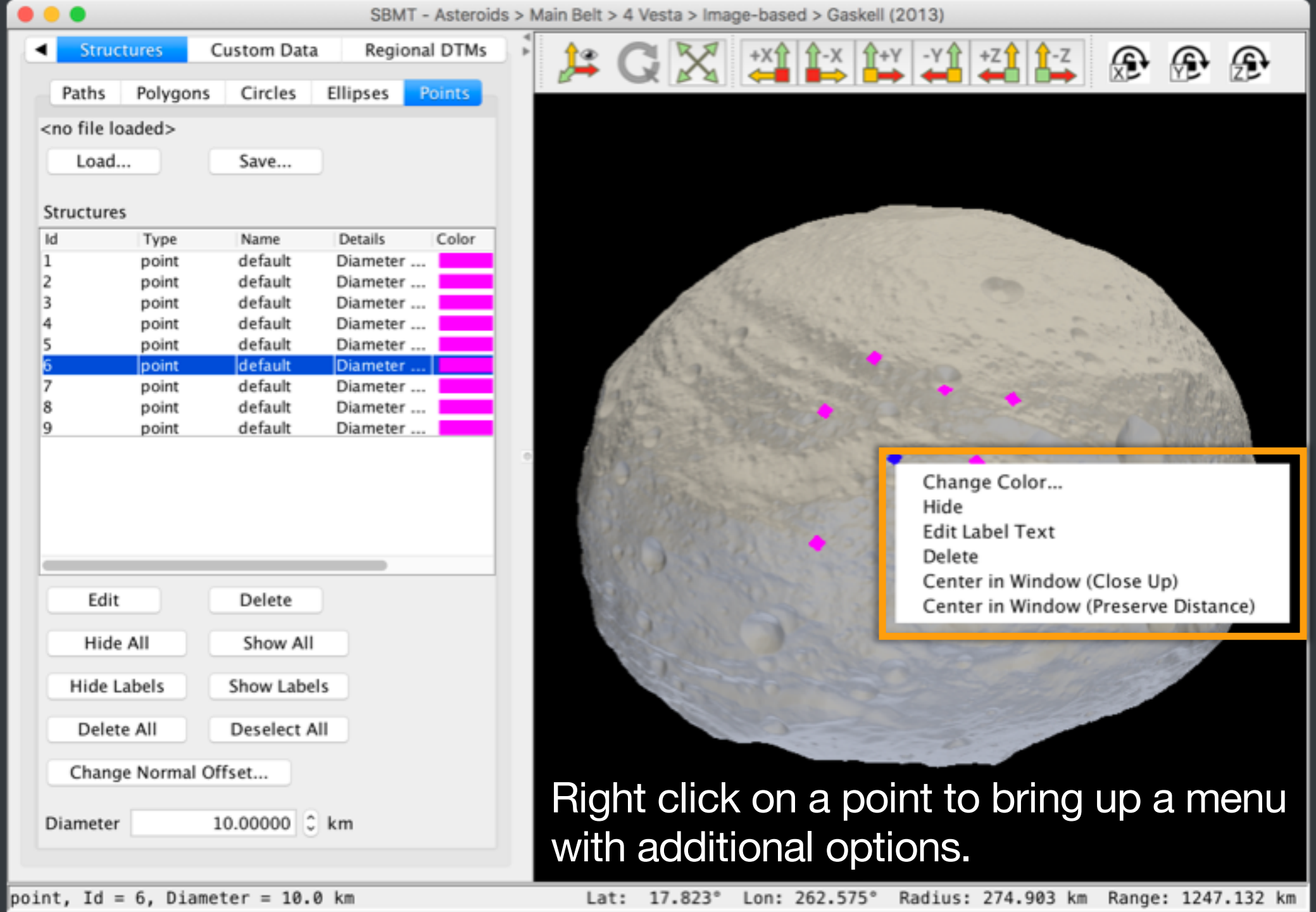
Drawing points

Note: The shape model is frozen when in ”edit” mode. Rotate, zoom, and pan functions do not work. Once “edit” is unselected, the SBMT returns to normal navigation.

- Switch to Structures tab and click on “Points”.
- Press “Edit” to begin drawing points.
- Each time you left-click on the shape model, a point appears at that location.
- Press “Edit” again when finished drawing points.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 point default Diameter ...
2 point default Diameter ...
3 point default Diameter ...
4 point default Diameter ...
5 point default Diameter ...
6 point default Diameter ...
7 point default Diameter ...
8 point default Diameter ...
9 point default Diameter ...
Click “edit” to start placing points.
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Diameter 10.00000 km
+X -X +Y -Y +Z -Z
Ready.
Lat: 13.612° Lon: 295.530° Radius: 267.054 km Range: 1247.132 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 point default Diameter ...
2 point default Diameter ...
3 point default Diameter ...
4 point default Diameter ...
5 point default Diameter ...
6 point default Diameter ...
7 point default Diameter ...
8 point default Diameter ...
9 point default Diameter ...
To remove a point, select it and click “delete”.
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Diameter 10.00000 km
+X -X +Y -Y +Z -Z
Ready.
Range: 1247.132 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id Type Name Details Color
1 point default Diameter ...
2 point default Diameter ...
3 point default Diameter ...
4 point default Diameter ...
5 point default Diameter ...
6 point default Diameter ...
7 point default Diameter ...
8 point default Diameter ...
9 point default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Diameter
10.00000
km
+X
-X
+Y
-Y
+Z
-Z
Change Color...
Hide
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Right click on a point to bring up a menu with additional options.
point, Id = 6, Diameter = 10.0 km
Lat: 17.823° Lon: 262.575° Radius: 274.903 km Range: 1247.132 km

This SBMT tutorial explains how to:

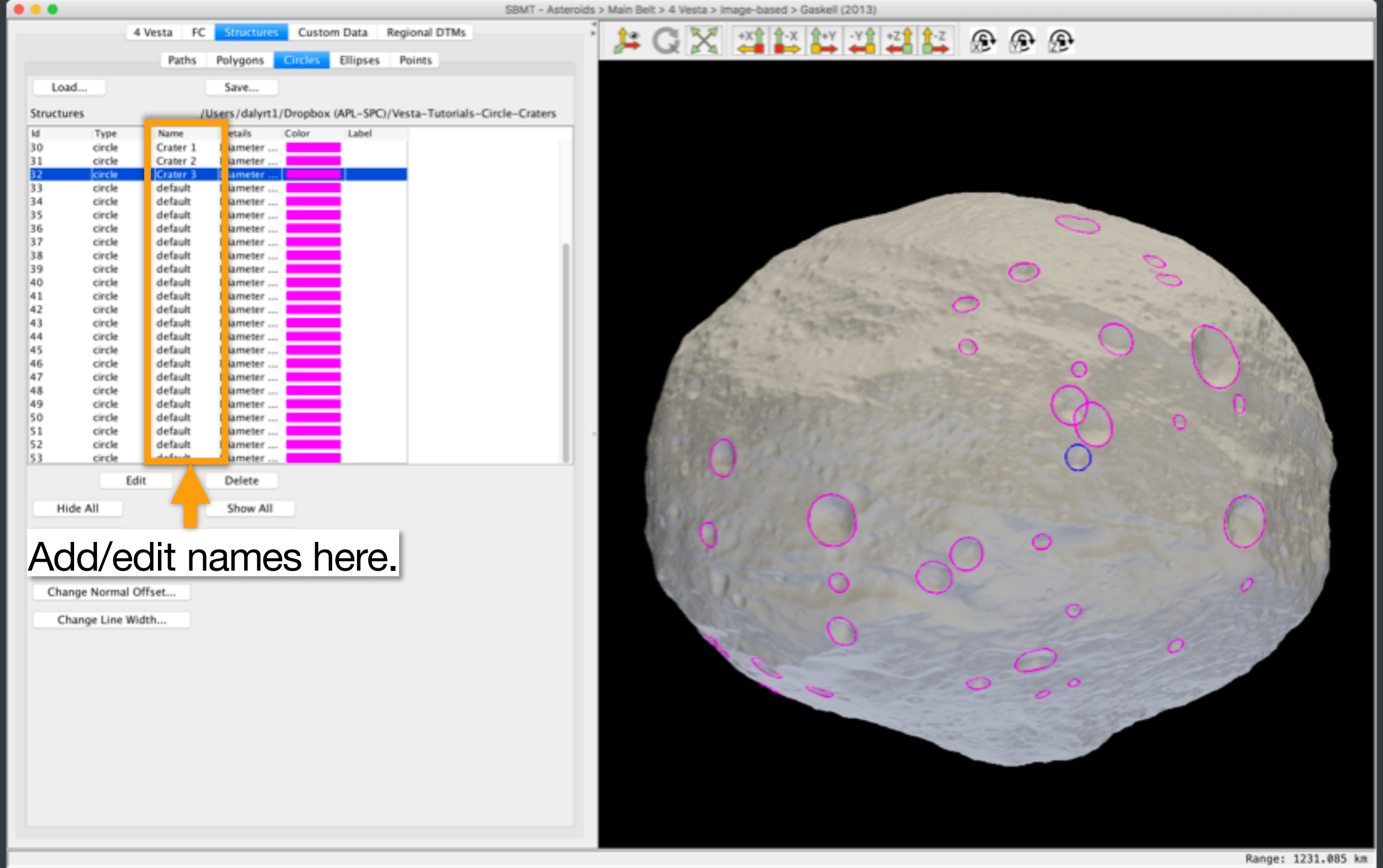
- Draw paths, polygons, circles, ellipses, and points on shape models
- Add names and labels to structures
- Save and load structures files
- Change display properties of structures

Names and labels overview

- Names and labels work the same for all five types of structures.
- Users can add, edit, or delete the name of a structure.
- Users can add, edit, delete, and hide labels.

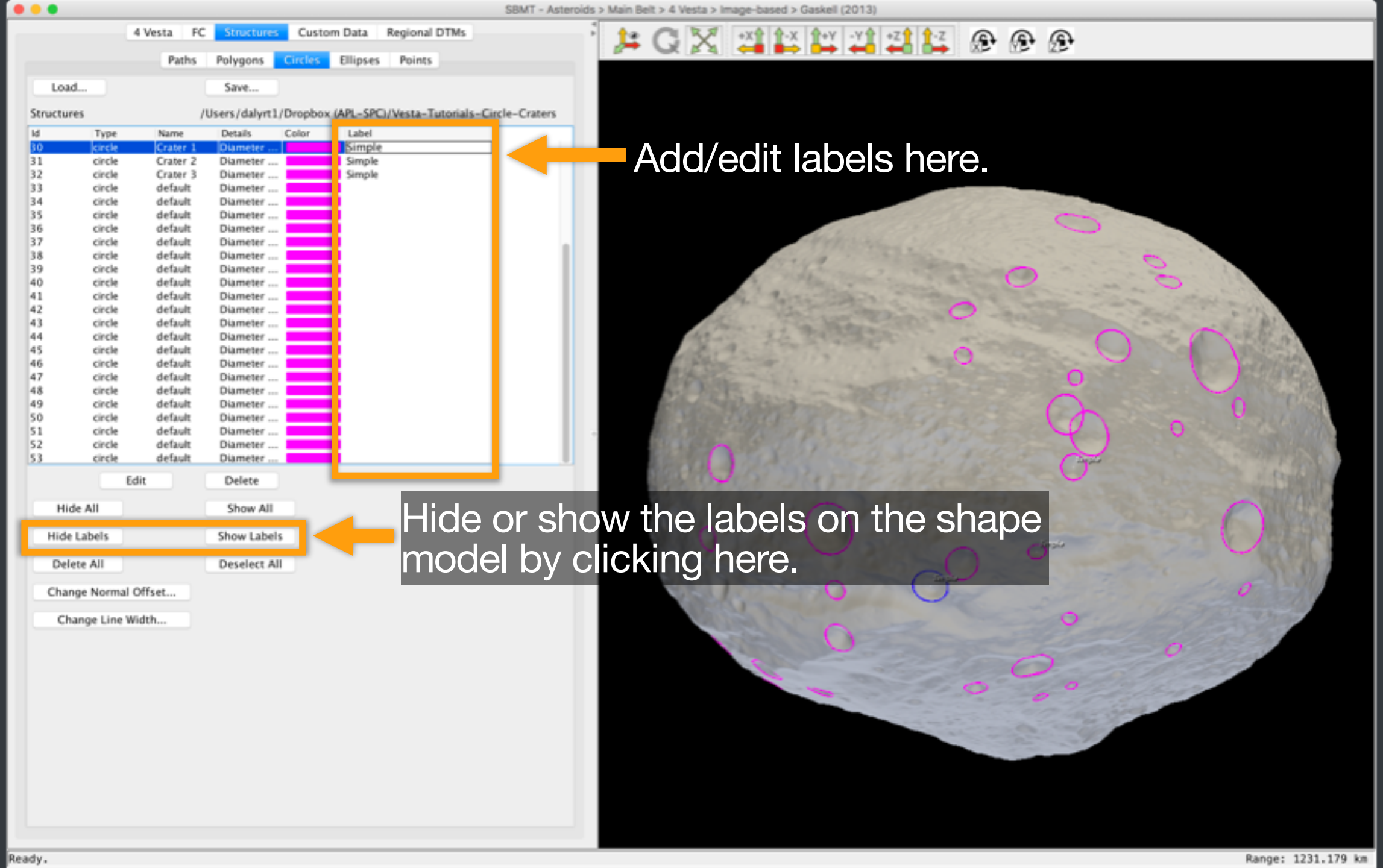
Adding and editing names

- Expand the control panel, if needed, to see the “name” column of the structures panel.
- Double click the name cell next to the structure you wish to name.
- Type in the desired name (e.g., the name of a crater).
- To edit or delete the name, double click the name cell once more.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
/Users/dalyrt1/Dropbox (APL-SPC)/Vesta-Tutorials-Circle-Craters
Id
Type
Name
Color
Label
30 circle Crater 1
31 circle Crater 2
32 circle Crater 3
33 circle default
34 circle default
35 circle default
36 circle default
37 circle default
38 circle default
39 circle default
40 circle default
41 circle default
42 circle default
43 circle default
44 circle default
45 circle default
46 circle default
47 circle default
48 circle default
49 circle default
50 circle default
51 circle default
52 circle default
53 circle default
Edit
Delete
Hide All
Show All
Add/edit names here.
Change Normal Offset...
Change Line Width...
Range: 1231.085 km

Adding and editing labels

- Expand the control panel, if needed, to see the “label” column of the structures panel.
- Double click the label cell next to the structure you wish to annotate.
- Type the label (e.g., description of a crater).
- Edit the text at will.


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
Load...
Save...
Structures
/Users/dalyrt1/Dropbox (APL-SPC)/Vesta-Tutorials-Circle-Craters
Id
Type
Name
Details
Color
Label
30 circle Crater 1 Diameter ... Simple
31 circle Crater 2 Diameter ... Simple
32 circle Crater 3 Diameter ... Simple
33 circle default Diameter ...
34 circle default Diameter ...
35 circle default Diameter ...
36 circle default Diameter ...
37 circle default Diameter ...
38 circle default Diameter ...
39 circle default Diameter ...
40 circle default Diameter ...
41 circle default Diameter ...
42 circle default Diameter ...
43 circle default Diameter ...
44 circle default Diameter ...
45 circle default Diameter ...
46 circle default Diameter ...
47 circle default Diameter ...
48 circle default Diameter ...
49 circle default Diameter ...
50 circle default Diameter ...
51 circle default Diameter ...
52 circle default Diameter ...
53 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X
-X
+Y
-Y
+Z
-Z
Add/edit labels here.
Hide or show the labels on the shape model by clicking here.
Ready.
Range: 1231.179 km

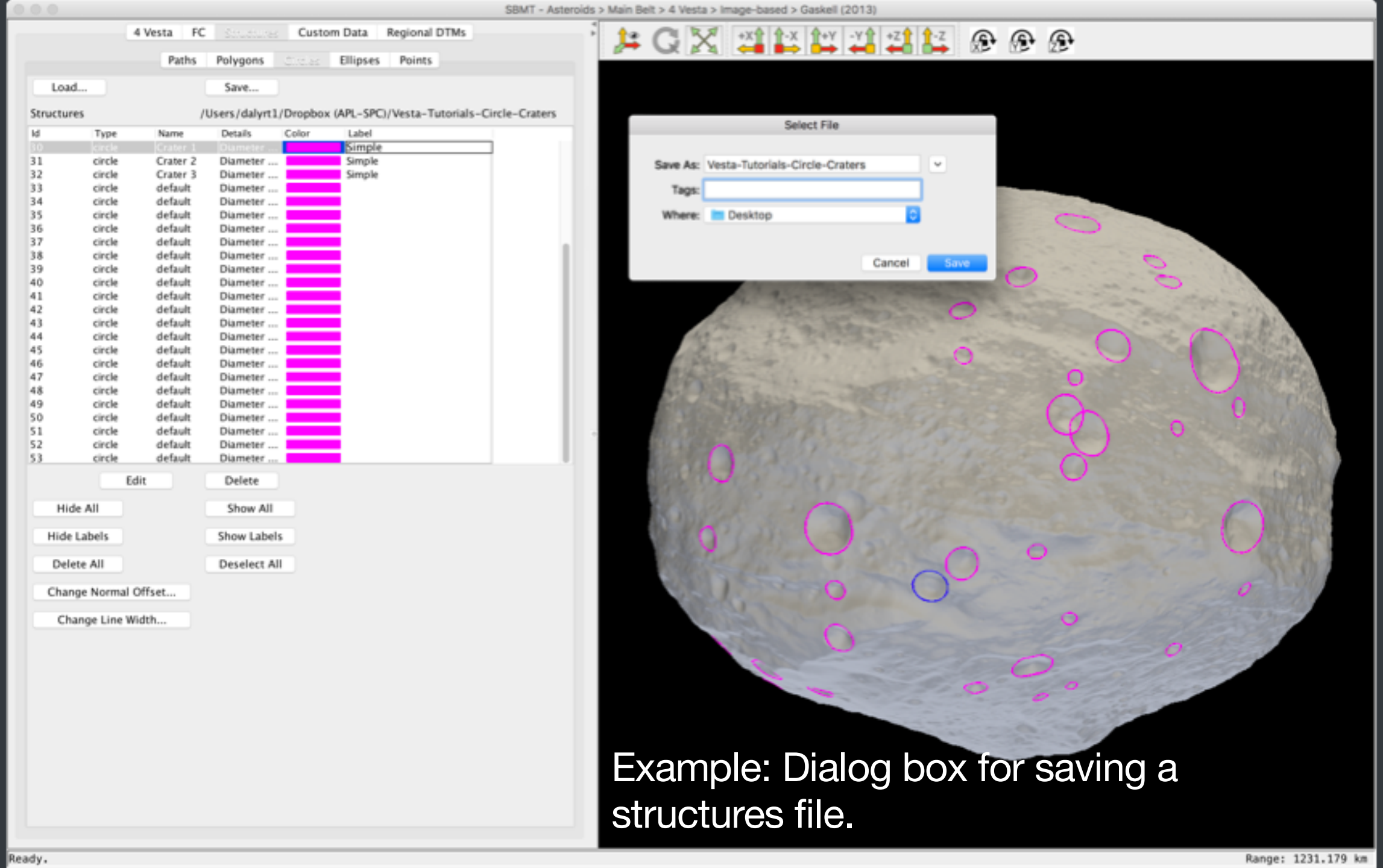
This SBMT tutorial explains how to:

- Draw paths, polygons, circles, ellipses, and points on shape models
- Add names and labels to structures
- Save and load structures files
- Change display properties of structures

Saving a structures file

- Click “Save” near the top of the structures tab. A new window will open.
- Choose the directory where you want to save the file.
- Give the file a useful name.
- Click “Save”. The window will close.

Note: You must save each type of structure separately. Paths and polygons are saved as XML files. Circles, ellipses, and points are saved as tab-separated text files. See the SBMT User Manual at http://sbmt.jhuapl.edu/docs/Manual.pdf for additional information about the saved structures files.



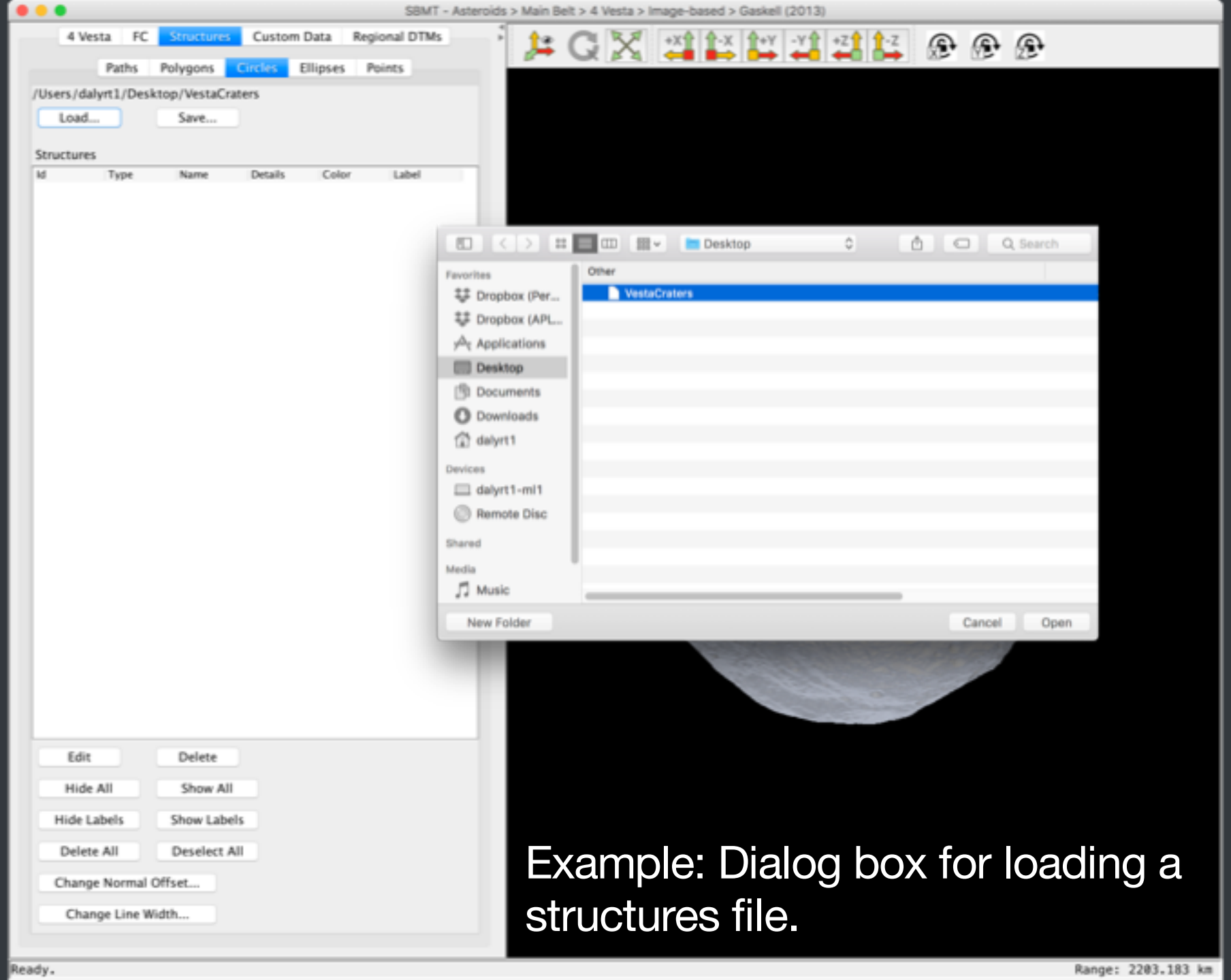
Example: Dialog box for saving a structures file.

Loading a structures file

- Select the appropriate object from the “Body” menu.
- Select the appropriate type of structure from the “Structures” tab.
- Click “Load” near the top of the structures tab.
- Navigate to the saved structure file.
- Click “Open”. The structures will appear on the body.

Loading a structures file (cont.)

- If a user edits an exported structures file in Excel (e.g., to select a subset of the data), the SBMT may give an error that says “There was an error reading the file” when the file is re-imported because of invisible characters added by Microsoft.
- The file should load once these invisible characters are removed.



Example: Dialog box for loading a structures file.

This SBMT tutorial explains how to:

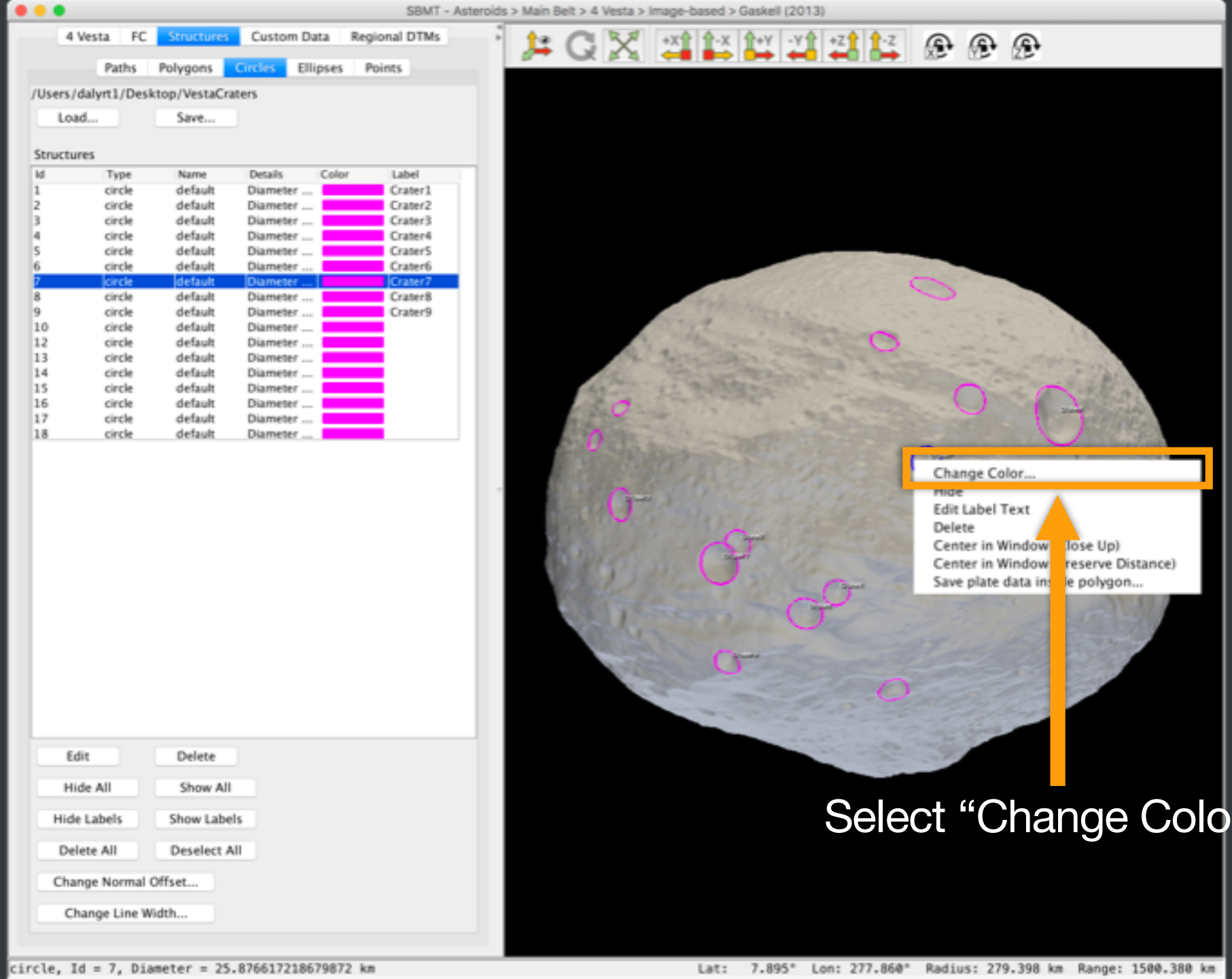
- Draw paths, polygons, circles, ellipses, and points on shape models
- Add names and labels to structures
- Save and load structures files
- Change display properties of structures

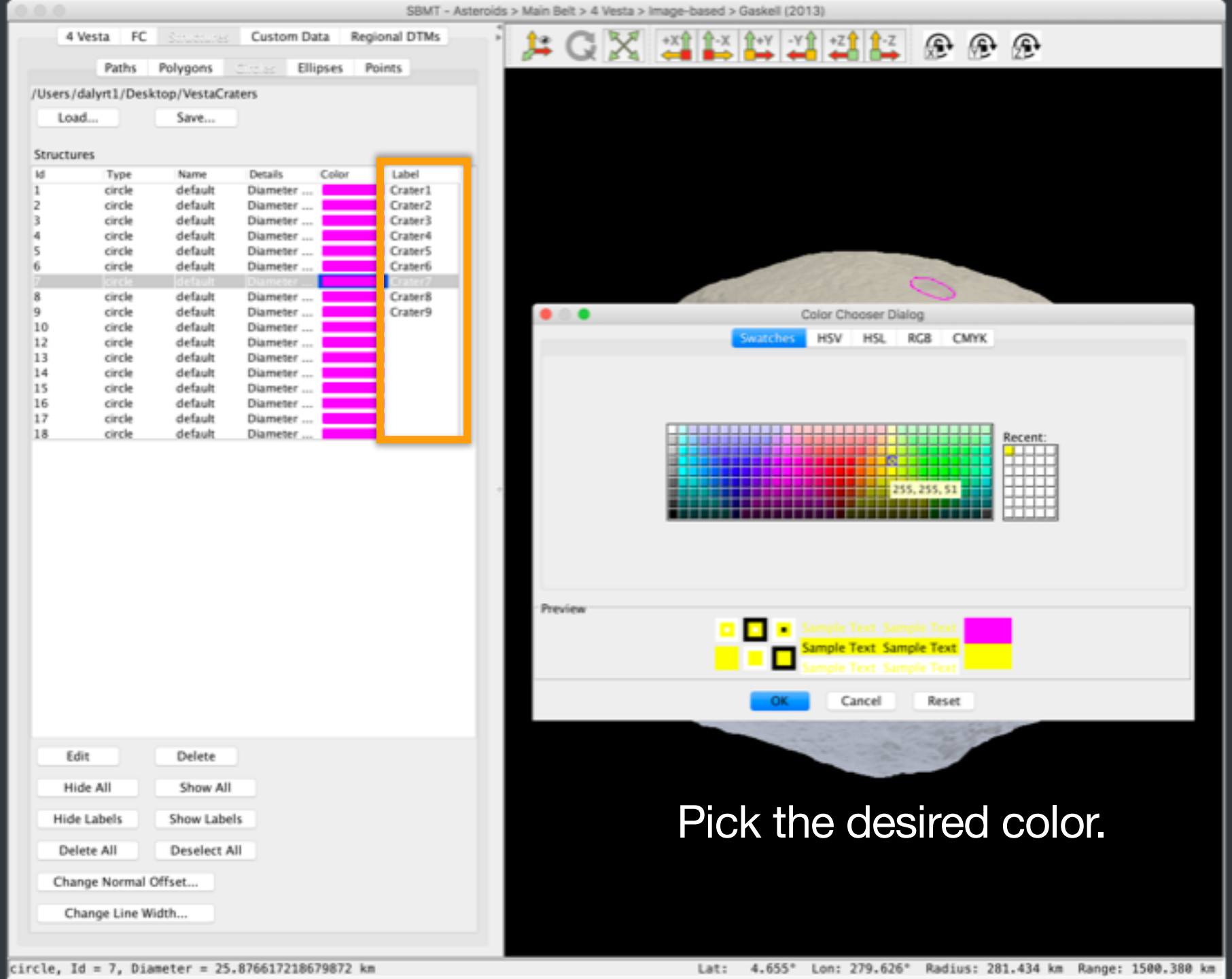
Changing display properties

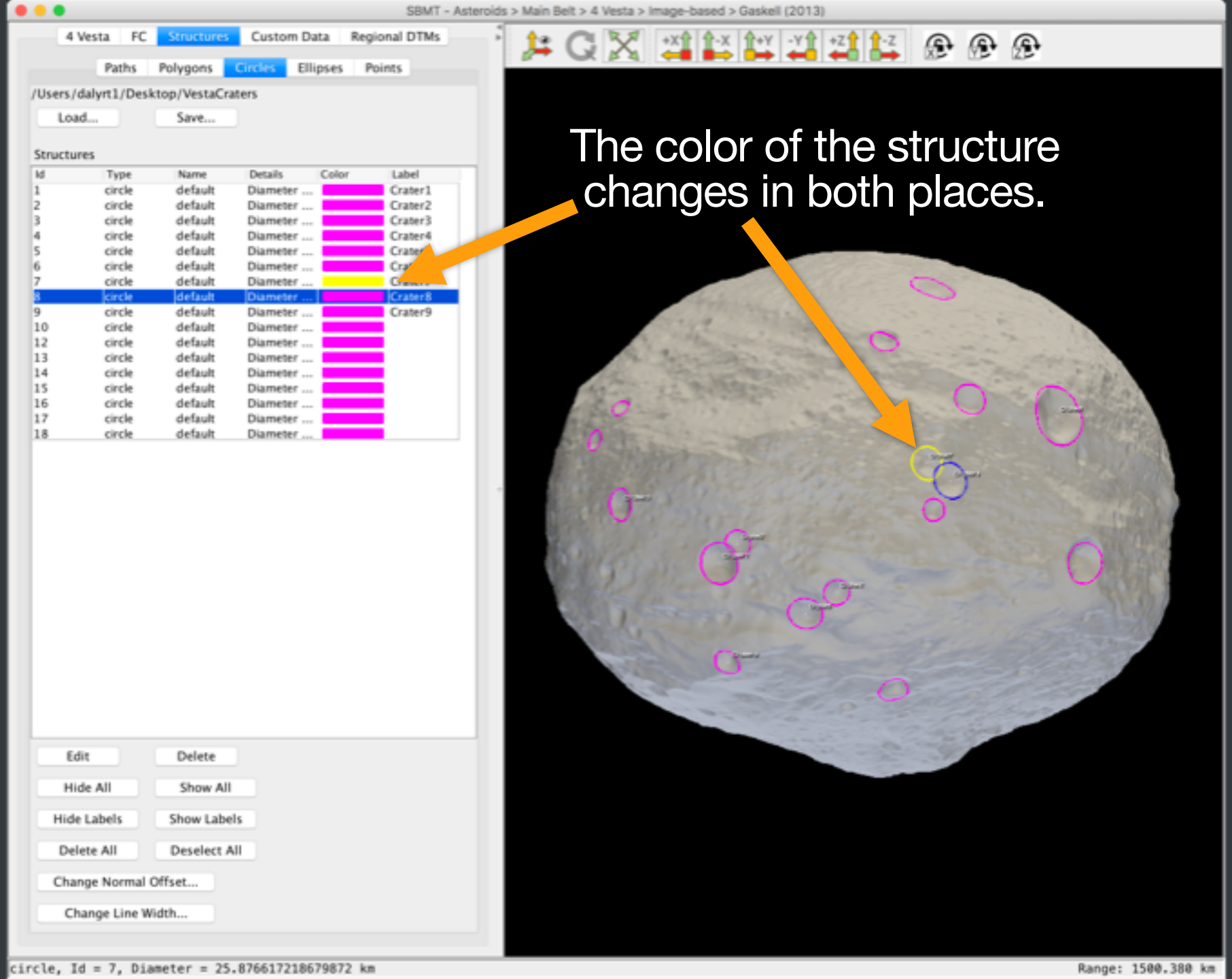
- Users can change the following for structures:
  - Color
  - Line width (for paths, polygons, circles, and ellipses)
  - Point diameter (for points only)

Changing structure color

- Right click on the structure whose color you wish to change.
- Click “change color” from the pop-up menu.
- Choose a color from the Color Choose Dialog.
- Click “OK”.
- Individual structures can be given their own colors.

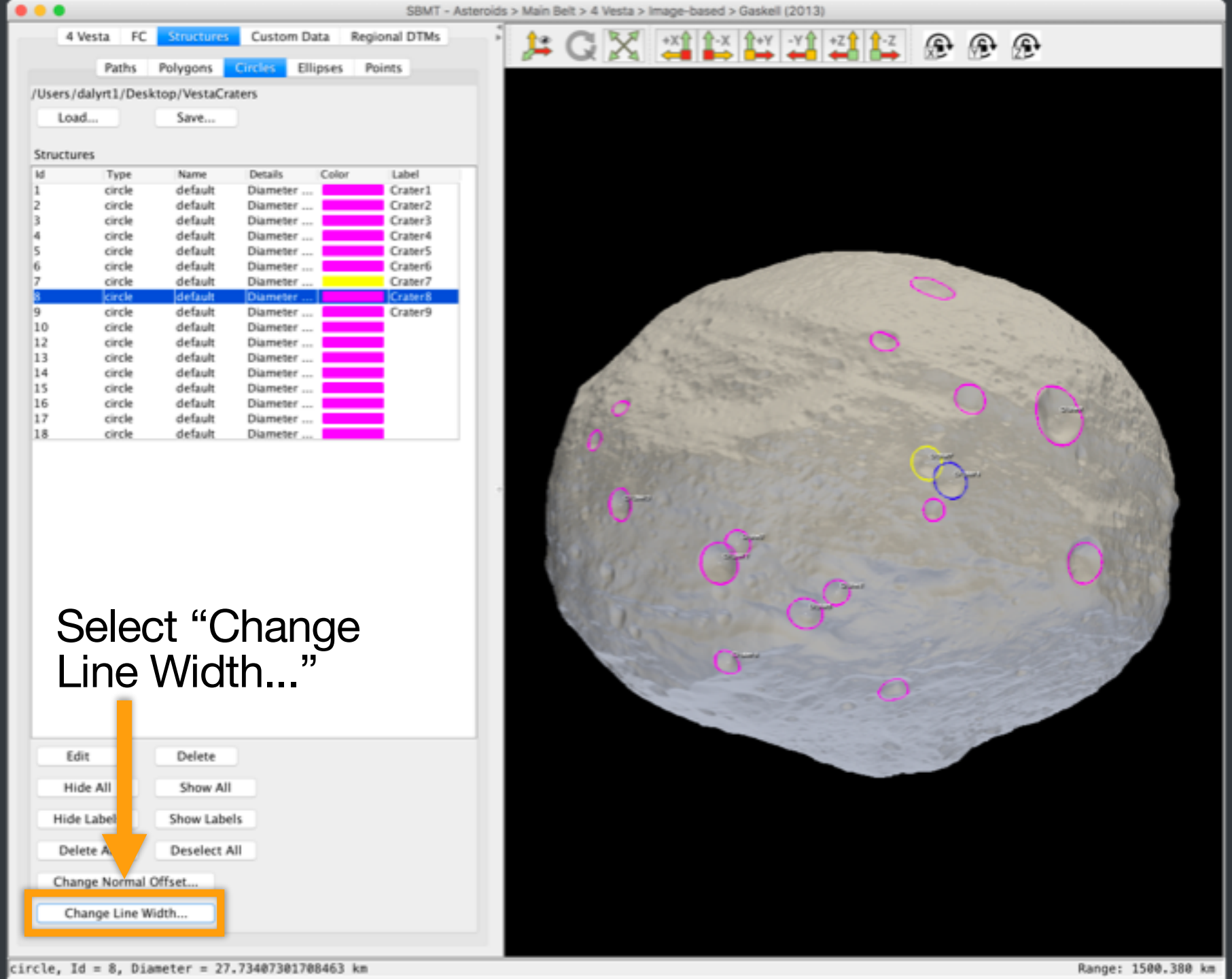

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ... Crater5
6 circle default Diameter ... Crater6
7 circle default Diameter ... Crater7
8 circle default Diameter ... Crater8
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
17 circle default Diameter ...
18 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Change Color...
Edit Label Text
Delete
Center in Window (Close Up)
Center in Window (Preserve Distance)
Save plate data inside polygon...
Select “Change Color”
circle, Id = 7, Diameter = 25.876617218679872 km
Lat: 7.895° Lon: 277.860° Radius: 279.398 km Range: 1500.380 km

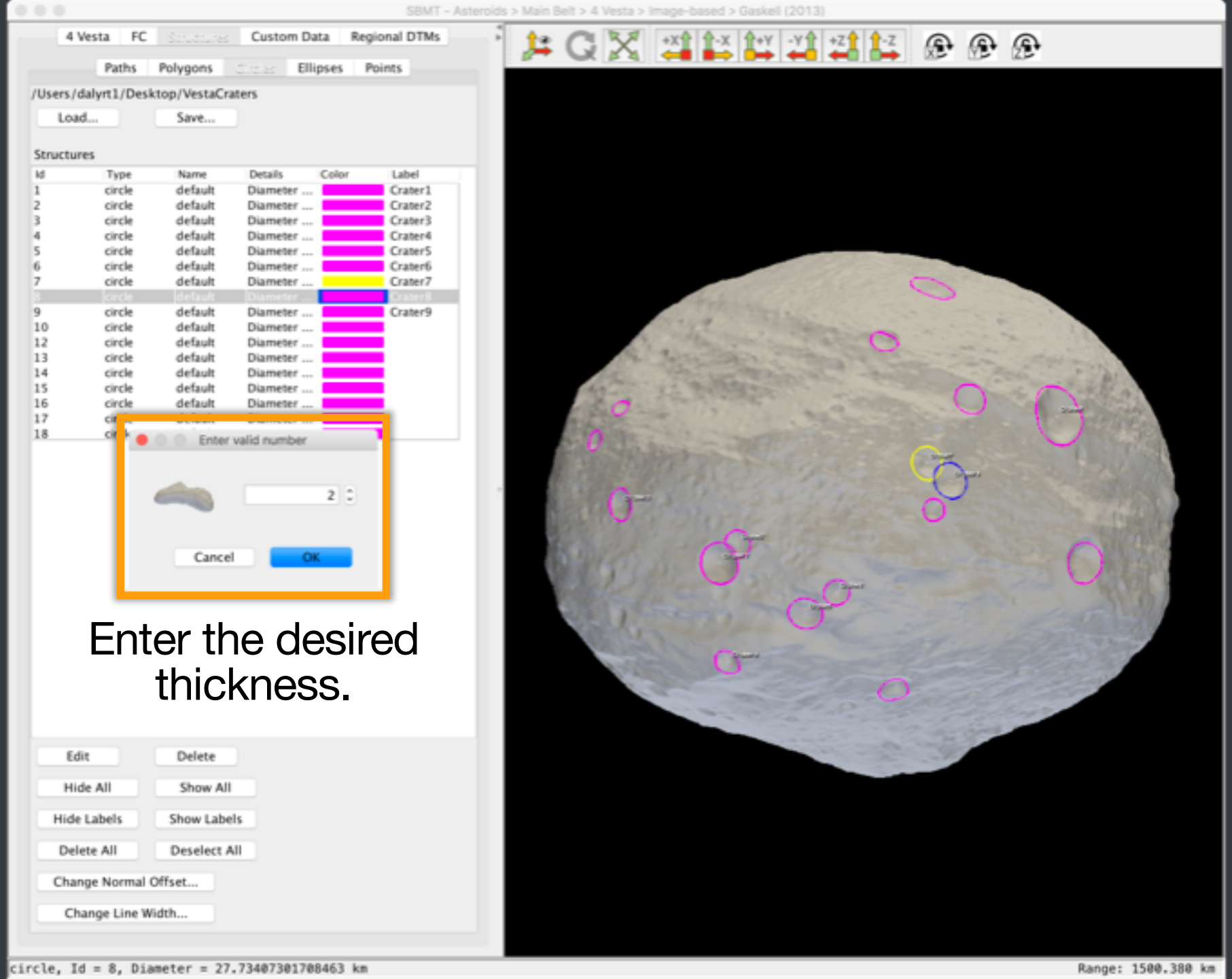

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Custom Data
Regional DTMs
Paths
Polygons
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ... Crater5
6 circle default Diameter ... Crater6
7 circle default Diameter ... Crater7
8 circle default Diameter ... Crater8
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
17 circle default Diameter ...
18 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
Color Chooser Dialog
Swatches
HSV
HSL
RGB
CMYK
Recent:
255, 255, 51
Preview
Sample Text Sample Text
Sample Text Sample Text
Sample Text Sample Text
OK
Cancel
Reset
Pick the desired color.
circle, Id = 7, Diameter = 25.876617218679872 km
Lat: 4.655° Lon: 279.626° Radius: 281.434 km Range: 1500.380 km

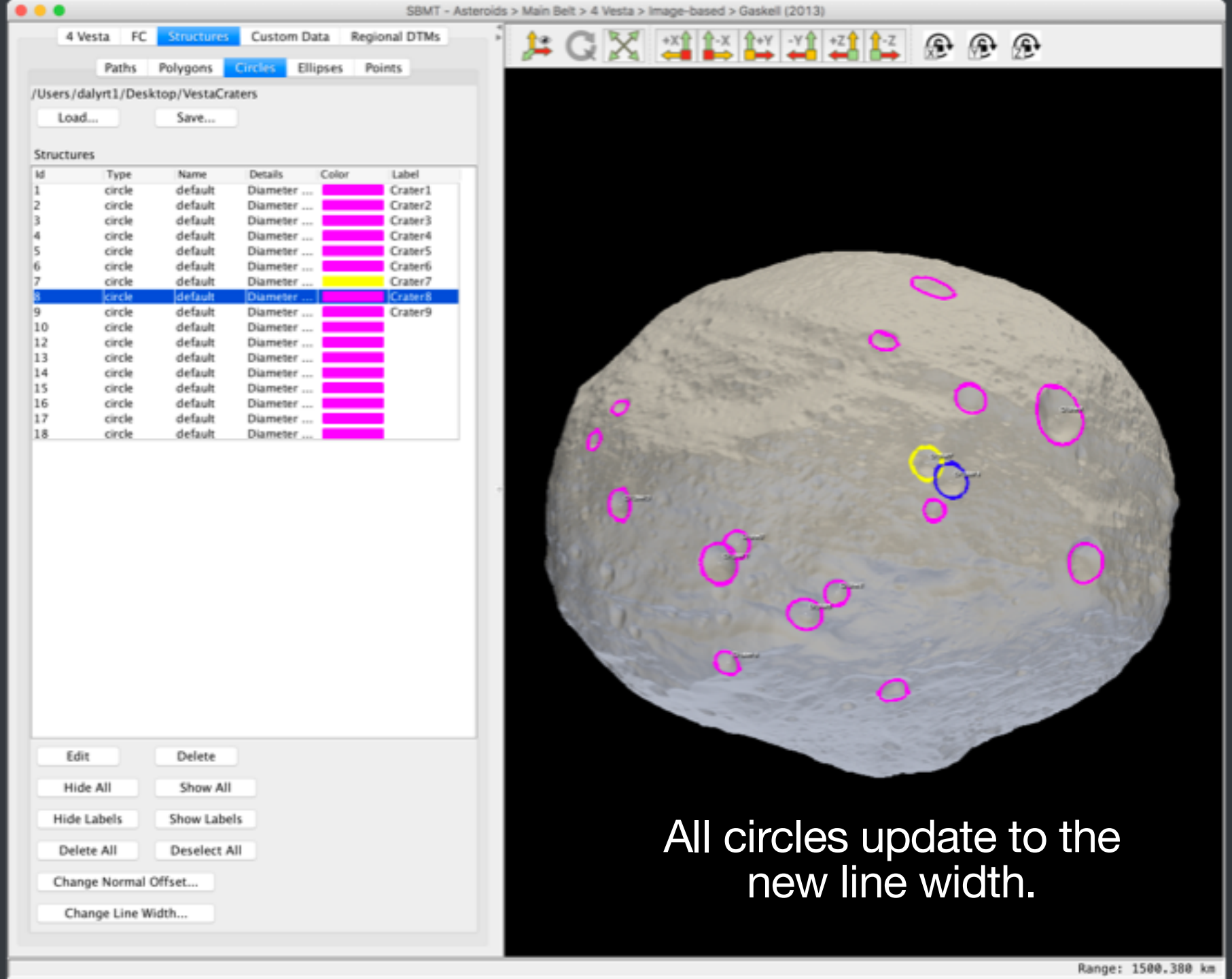

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ...
6 circle default Diameter ...
7 circle default Diameter ...
8 circle default Diameter ... Crater8
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
17 circle default Diameter ...
18 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X -X +Y -Y +Z -Z
The color of the structure changes in both places.
circle, Id = 7, Diameter = 25.876617218679872 km
Range: 1500.380 km

Changing line width

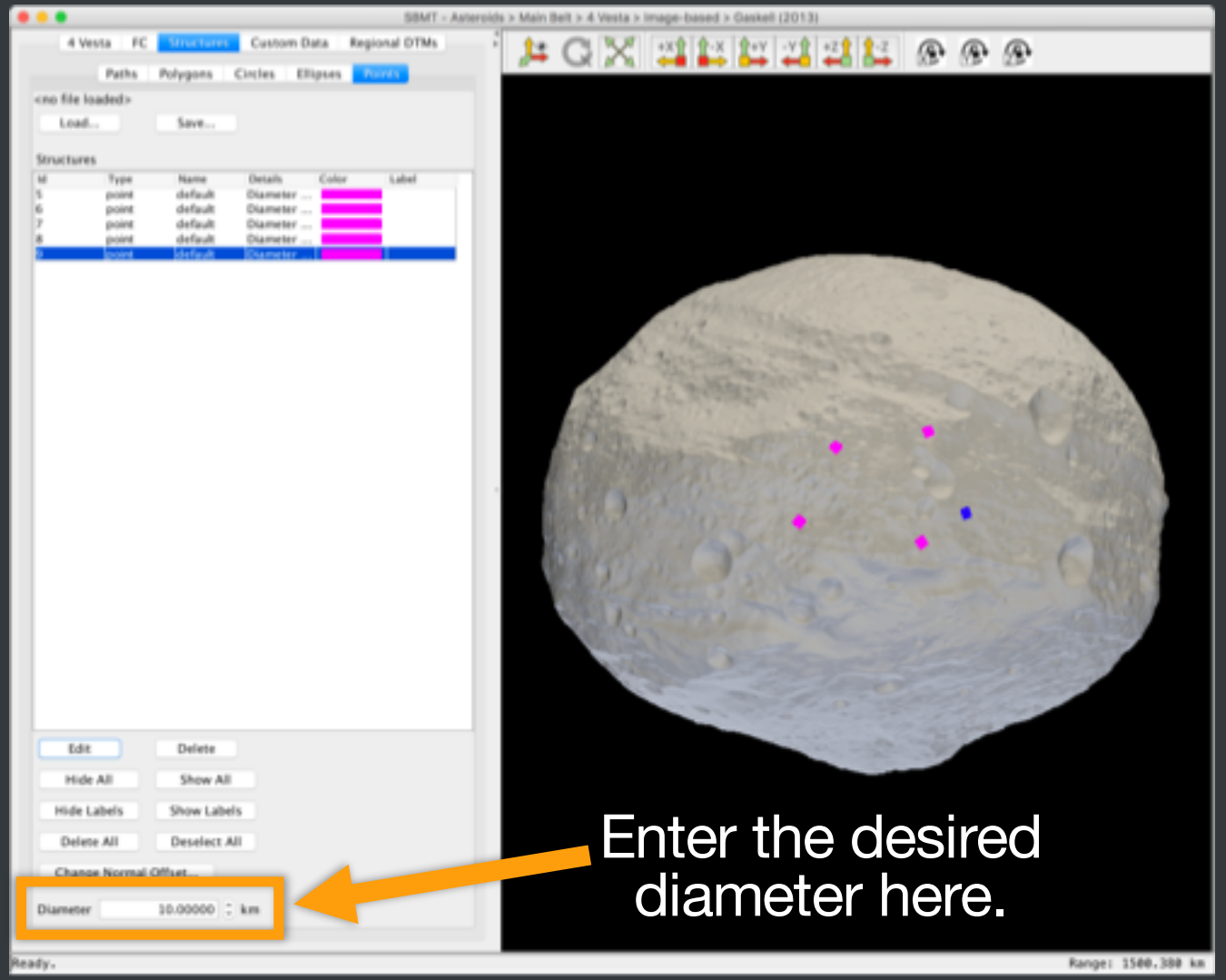
- Click “Change Line Width”.
- Enter the desired line width.
- Click “OK”.
- The line widths of the displayed structures should update. The change affects only one type of structure (e.g., circles if you click “Change Line Width” from the circles tab).

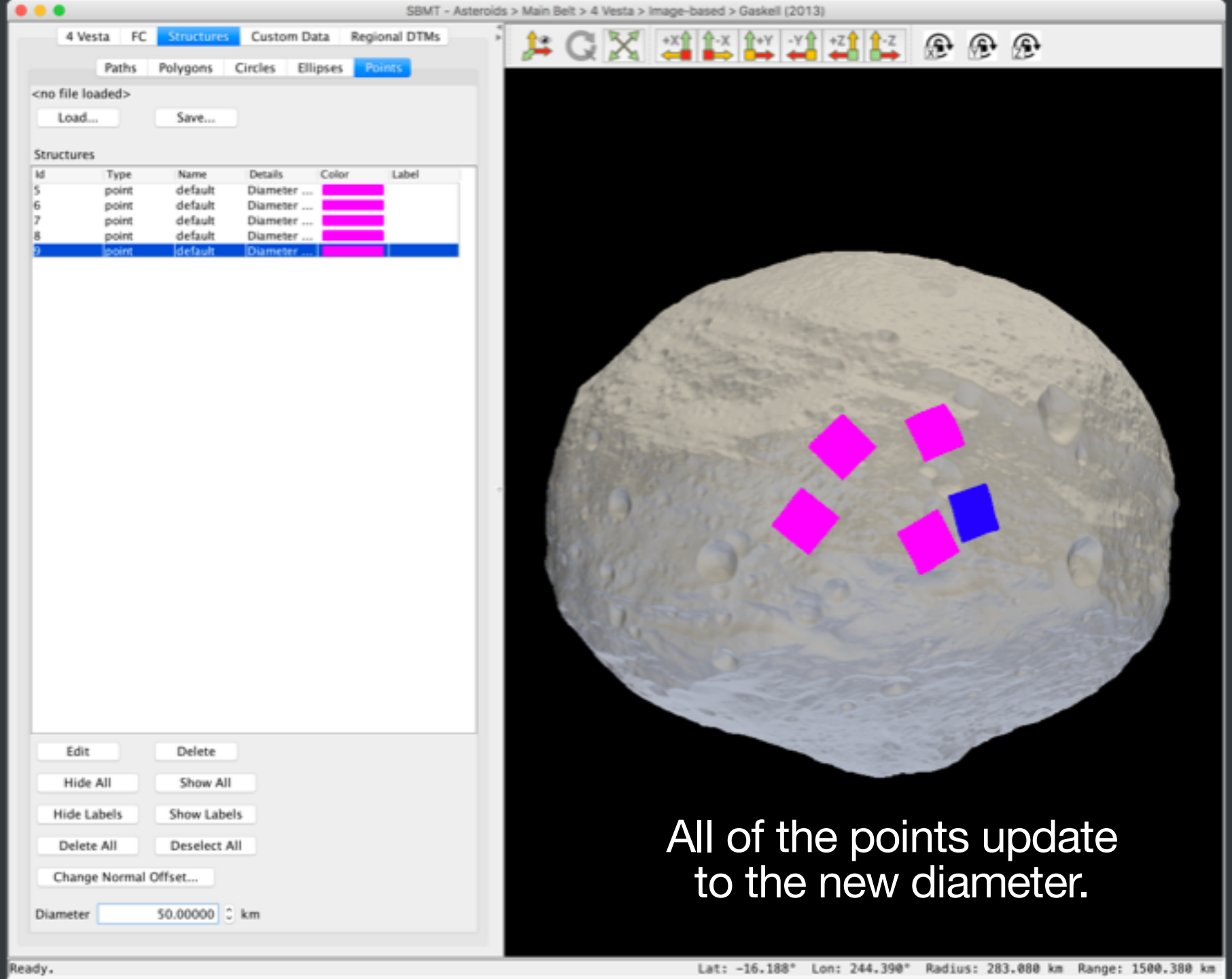

SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ... Crater5
6 circle default Diameter ... Crater6
7 circle default Diameter ... Crater7
8 circle default Diameter ... Crater8
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
17 circle default Diameter ...
18 circle default Diameter ...
Select “Change Line Width...”
Edit
Delete
Hide All
Show All
Hide Label
Show Labels
Delete A
Deselect All
Change Normal Offset...
Change Line Width...
circle, Id = 8, Diameter = 27.73407301708463 km
Range: 1500.380 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Custom Data
Regional DTMs
Paths
Polygons
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ... Crater5
6 circle default Diameter ... Crater6
7 circle default Diameter ... Crater7
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
Enter valid number
2
Cancel
OK
Enter the desired thickness.
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X -X +Y -Y +Z -Z
circle, Id = 8, Diameter = 27.73407301708463 km
Range: 1500.380 km


SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
/Users/dalyrt1/Desktop/VestaCraters
Load...
Save...
Structures
Id Type Name Details Color Label
1 circle default Diameter ... Crater1
2 circle default Diameter ... Crater2
3 circle default Diameter ... Crater3
4 circle default Diameter ... Crater4
5 circle default Diameter ... Crater5
6 circle default Diameter ... Crater6
7 circle default Diameter ... Crater7
8 circle default Diameter ... Crater8
9 circle default Diameter ... Crater9
10 circle default Diameter ...
12 circle default Diameter ...
13 circle default Diameter ...
14 circle default Diameter ...
15 circle default Diameter ...
16 circle default Diameter ...
17 circle default Diameter ...
18 circle default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Change Line Width...
+X -X +Y -Y +Z -Z
All circles update to the new line width.
Range: 1500.380 km

Changing point diameter




SBMT - Asteroids > Main Belt > 4 Vesta > Image-based > Gaskell (2013)
4 Vesta
FC
Structures
Custom Data
Regional DTMs
Paths
Polygons
Circles
Ellipses
Points
<no file loaded>
Load...
Save...
Structures
Id
Type
Name
Details
Color
Label
5 point default Diameter ...
6 point default Diameter ...
7 point default Diameter ...
8 point default Diameter ...
9 point default Diameter ...
Edit
Delete
Hide All
Show All
Hide Labels
Show Labels
Delete All
Deselect All
Change Normal Offset...
Diameter
50.00000
km
All of the points update
to the new diameter.
Ready.
Lat: -16.188°
Lon: 244.390°
Radius: 283.080 km
Range: 1500.380 km

SBMT

For more information, visit sbmt.jhuapl.edu.

JOHNS HOPKINS
APPLIED PHYSICS LABORATORY