SBMT

Searching for Data

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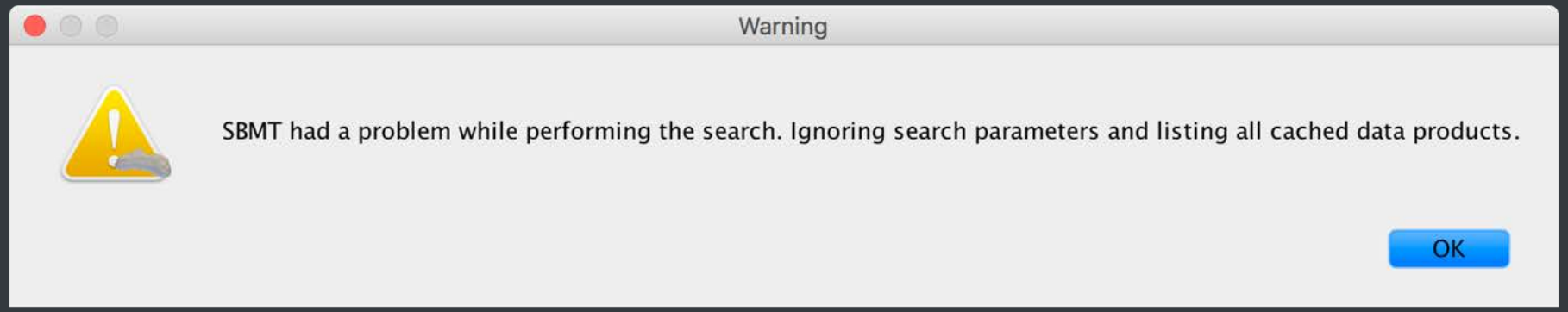
A note about internet connectivity

- Users must be connected to the internet to search for data or access data from the SBMT server. If a user attempts to search for data while not connected to the internet, then data cached locally will be displayed after the following warning is shown.



This SBMT tutorial explains how to:

- Search for and visualize images.
- Search for and visualize spectral data.
- Search for and visualize altimetry data.

This SBMT tutorial explains how to:

- Search for and visualize images.
- Search for and visualize spectral data.
- Search for and visualize altimetry data.

Searching for images

- Go to the images tab.
- For several bodies, the name of this tab will be specific to the mission that studied the body (e.g., MSI for Eros, FC for Dawn, AMICA for Itokawa).

- For other bodies, such as Phobos, the tab is called “Imaging Data”.

Searching for images (cont.)

- You can search for images based on a variety of constraints, which vary depending on the mission.
- Examples include: acquisition time, camera filter, the presence/absence of limbs in the image, distance from spacecraft to the body, image resolution, incidence, emission, and phase angles, and filename.
- You can also search within a region of interest.

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

MSI | NIS | NLR | Lineament | Structures | Custom Data

Pointing: SPC Derived

Start Date: 2000-Jan-12 00:00:00

End Date: 2001-Feb-13 00:00:0(

Filter 1 (550 nm) Filter 2 (450 nm)

Filter 3 (760 nm) Filter 4 (950 nm)

Filter 5 (900 nm) Filter 6 (1000 nm)

Filter 7 (1050 nm)

Limb: with or without

S/C Distance from 0 to 1000 km

Resolution from 0 to 50 mpp

Incidence from 0 to 180 deg

Emission from 0 to 180 deg

Phase from 0 to 180 deg

Search by Filename

Search | Select Region | Clear Region

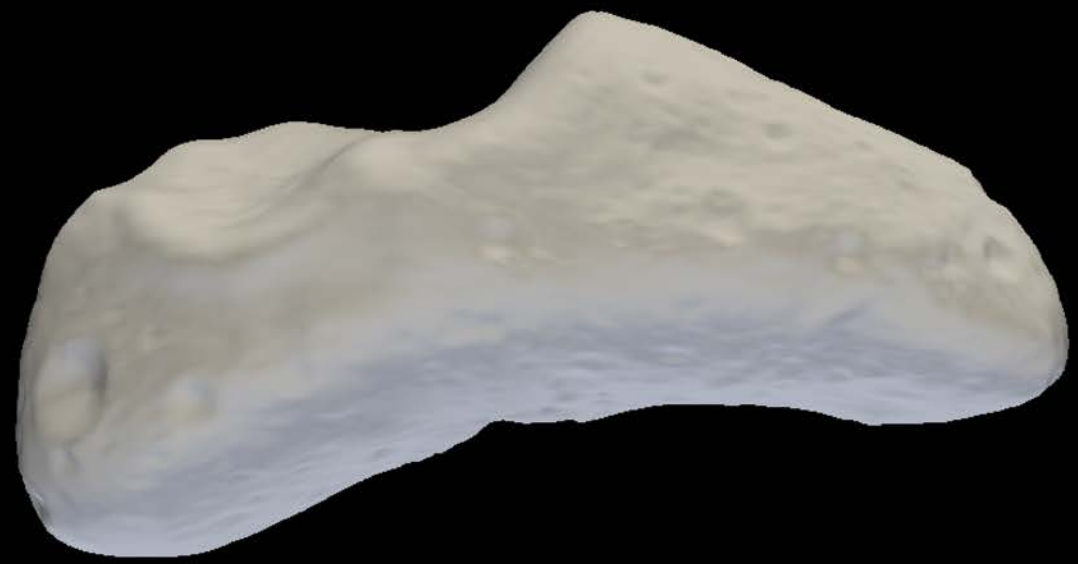
0 images matched

Map Show Frus Bndr ... ...

Number Boundaries: 10 < >

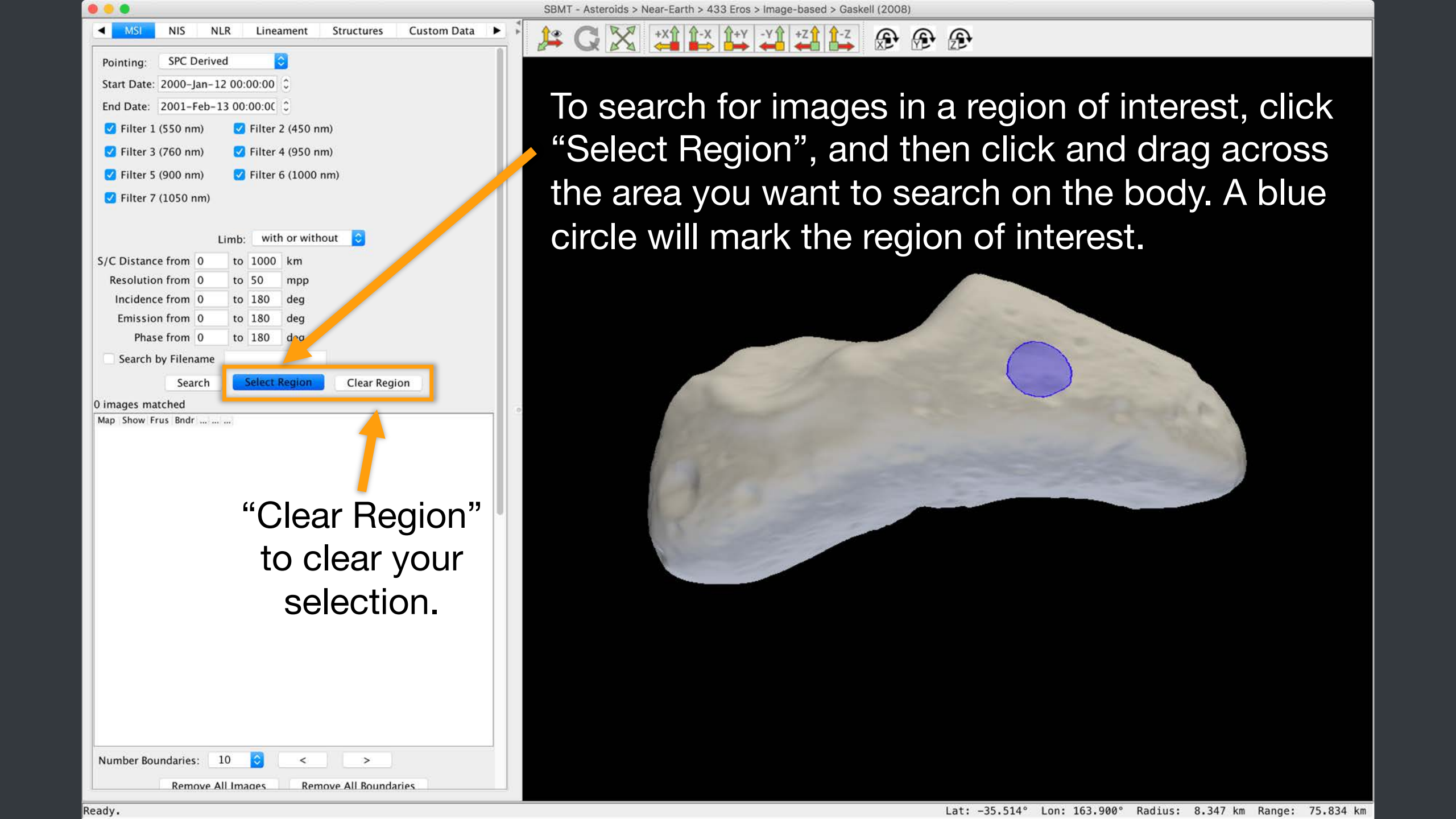
Remove All Images | Remove All Boundaries

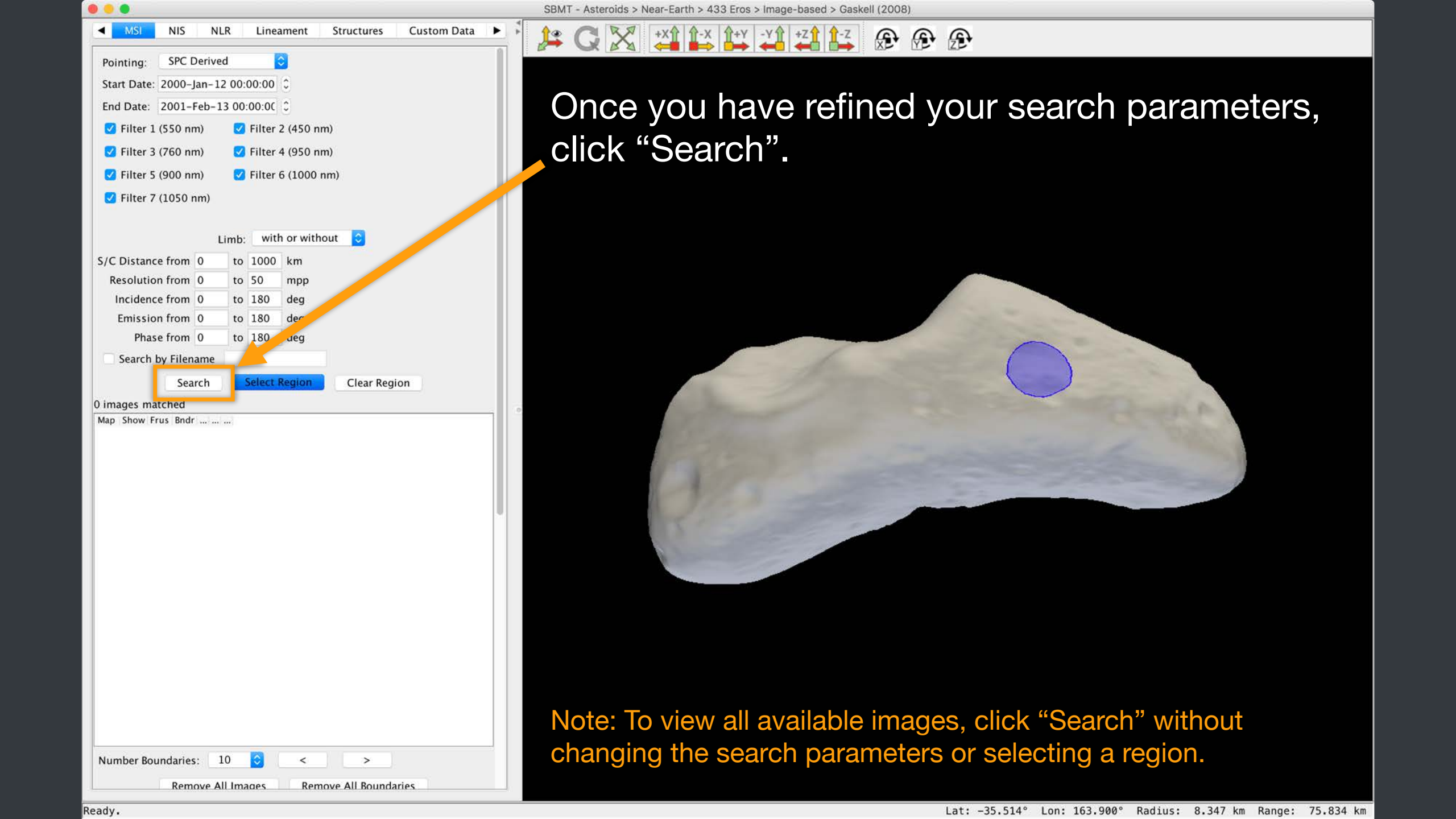
Here are the parameters that can be used to refine image searches.



A note about search criteria: Each pixel in an image has an associated emission, incidence, and phase angle. An image will be included in the search results if at least one of its pixel meets the search criteria. For example, an image with incidence angles from 0.2° to 55° would be included in the results for a search for images with incidence angles between 0° and 1°.

Range: 75.834 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing:
SPC Derived
Start Date:
2000-Jan-12 00:00:00
End Date:
2001-Feb-13 00:00:0
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb:
with or without
S/C Distance from 0 to 1000 km
Resolution from 0 to 50 mpp
Incidence from 0 to 180 deg
Emission from 0 to 180 deg
Phase from 0 to 180 deg
Search by Filename
Search
Select Region
Clear Region
0 images matched
Map Show Frus Bndr
Number Boundaries:
10
Remove All Images
Remove All Boundaries
To search for images in a region of interest, click “Select Region”, and then click and drag across the area you want to search on the body. A blue circle will mark the region of interest.
“Clear Region” to clear your selection.
Ready.
Lat: -35.514° Lon: 163.900° Radius: 8.347 km Range: 75.834 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing:
SPC Derived
Start Date:
2000-Jan-12 00:00:00
End Date:
2001-Feb-13 00:00:0(
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb:
with or without
S/C Distance from 0 to 1000 km
Resolution from 0 to 50 mpp
Incidence from 0 to 180 deg
Emission from 0 to 180 deg
Phase from 0 to 180 deg
Search by Filename
Search
Select Region
Clear Region
0 images matched
Map Show Frus Bndr
Number Boundaries: 10
Remove All Images
Remove All Boundaries
Once you have refined your search parameters, click “Search”.
Note: To view all available images, click “Search” without changing the search parameters or selecting a region.
Ready.
Lat: -35.514° Lon: 163.900° Radius: 8.347 km Range: 75.834 km

SBMT - Planets and Satellites > Mars System > Phobos > Image-based > Ernst et al. (in progress)

Phobos | Imaging Data | MOLA | Structures

Pointing: SPC Derived

Start Date: 1976-Jul-24 00:00:00

End Date: 2016-Sep-01 00:00:0

- Phobos
- Phobos 2
- Viking Orbiter 1
- Viking Orbiter 2
- MEX
- MRO
- MGS

Limb: with or without

S/C Distance from 0 to 1200 km

Resolution from 0 to 300 mpp

Incidence from 0 to 180 deg

Emission from 0 to 180 deg

Phase from 0 to 180 deg

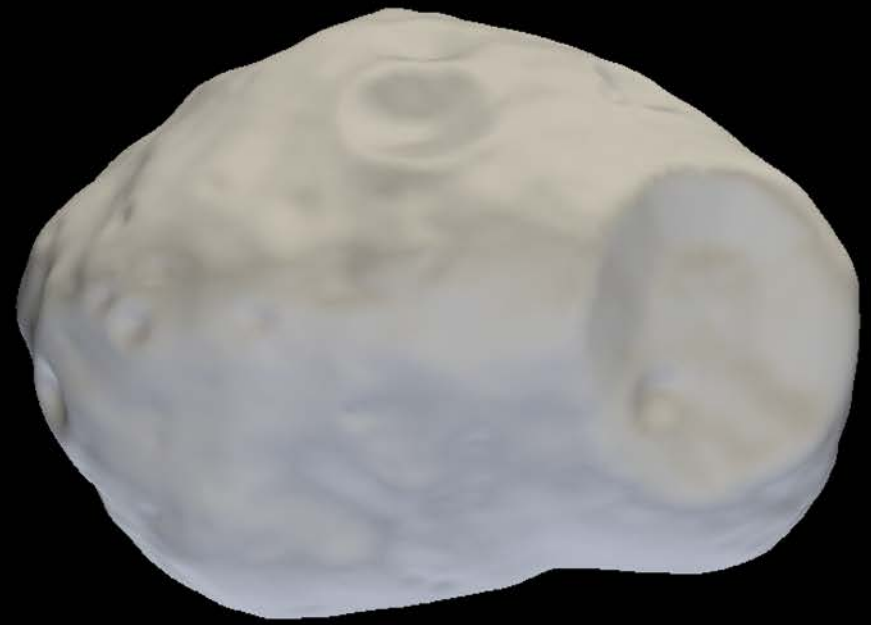
Search by Filename

Search | Select Region | Clear Region

0 images matched

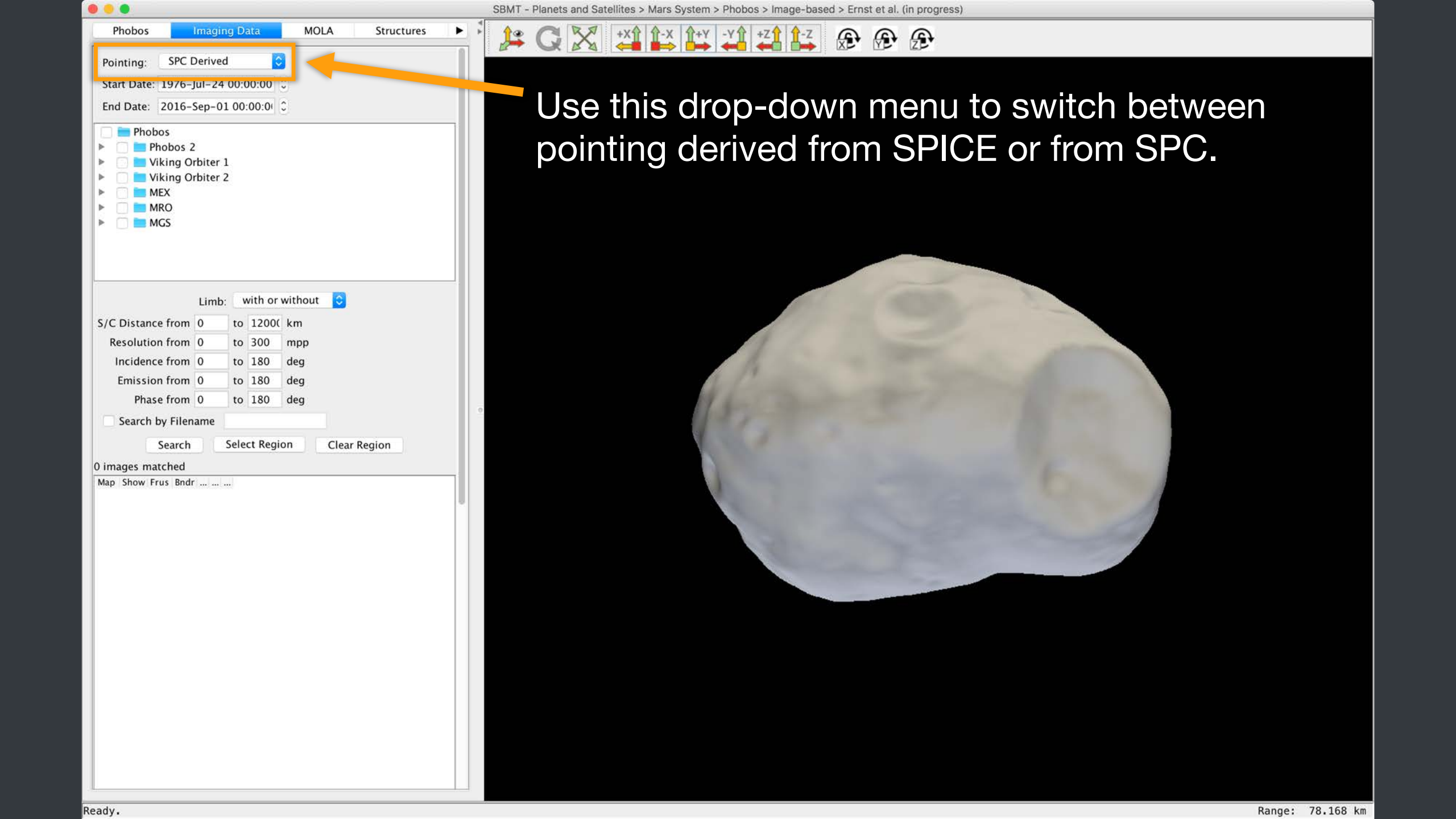
Map | Show | Frus | Bndr | ... | ... | ...

For bodies with multiple imaging datasets, use the hierarchical folders to restrict your search to data from specific missions or instruments.



Ready.

Range: 78.168 km


SBMT - Planets and Satellites > Mars System > Phobos > Image-based > Ernst et al. (in progress)
Phobos
Imaging Data
MOLA
Structures
Pointing:
SPC Derived
Start Date:
1976-Jul-24 00:00:00
End Date:
2016-Sep-01 00:00:0
Phobos
Phobos 2
Viking Orbiter 1
Viking Orbiter 2
MEX
MRO
MGS
Limb:
with or without
S/C Distance from
0
to
1200
km
Resolution from
0
to
300
mpp
Incidence from
0
to
180
deg
Emission from
0
to
180
deg
Phase from
0
to
180
deg
Search by Filename
Search
Select Region
Clear Region
0 images matched
Map
Show
Frus
Bndr
+X
-X
+Y
-Y
+Z
-Z
Use this drop-down menu to switch between pointing derived from SPICE or from SPC.
Ready.
Range: 78.168 km

Visualizing search results

- Images that match your search parameters are listed as search results in control panel.
- You can choose to map images onto the body, show or hide images, visualize the camera frustum, or show only the boundary of the images.

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

433 Eros | MSI | NIS | NLR | Lineament | Structures | Custom Data

Pointing: SPC Derived

Start Date: 2000-Jan-12 00:00:00

End Date: 2001-Feb-13 00:00:0(

Filter 1 (550 nm) Filter 2 (450 nm)

Filter 3 (760 nm) Filter 4 (950 nm)

Filter 5 (900 nm) Filter 6 (1000 nm)

Filter 7 (1050 nm)

Limb: without only

S/C Distance from 0 to 1000 km

Resolution from 10 to 20 mpp

Incidence from 89 to 91 deg

Emission from 0 to 2 deg

Phase from 80 to 100 deg

Search by Filename

Search | Select Region | Clear Region

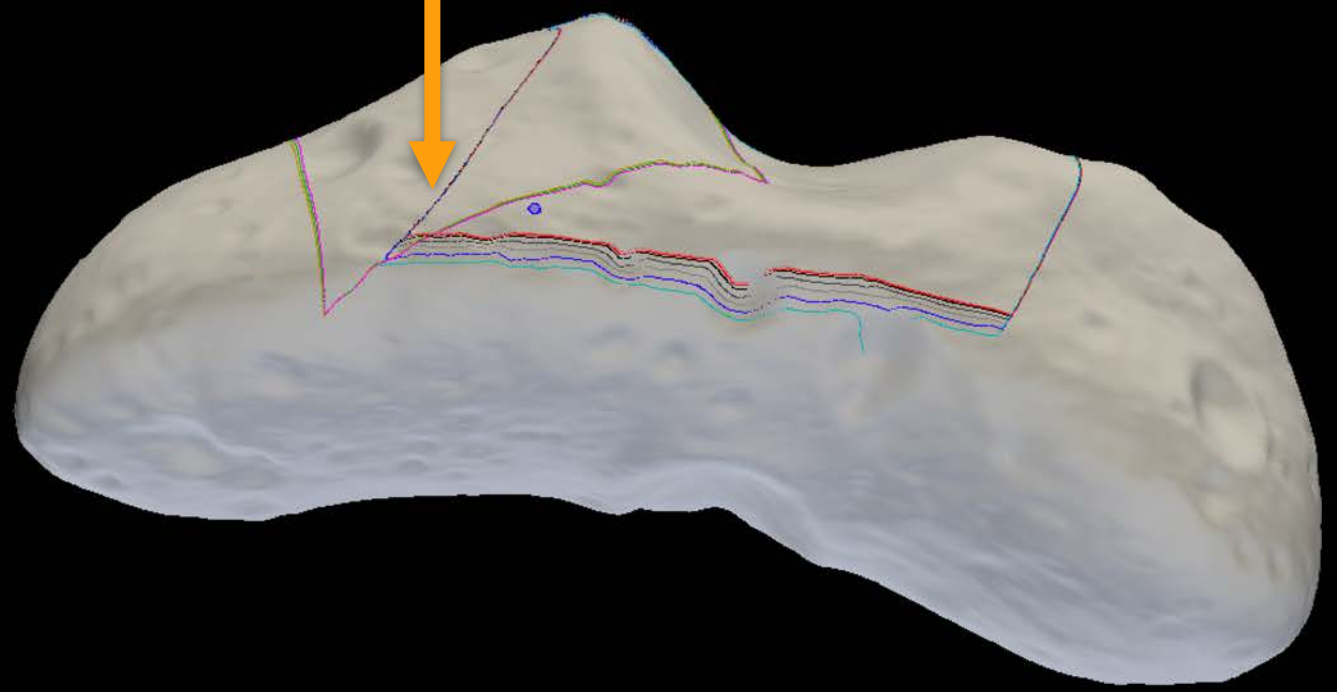
125 images matched

Map	Show	Frus	Bndr	Id	Filename	Date
			✓	1	M0128261406F1_2P_CIF_DBL.FIT	2000-Mar-12 08:53:00.2
			✓	2	M0128261408F2_2P_CIF_DBL.FIT	2000-Mar-12 08:53:02.2
			✓	3	M0128261410F3_2P_CIF_DBL.FIT	2000-Mar-12 08:53:04.2
			✓	4	M0128261412F4_2P_CIF_DBL.FIT	2000-Mar-12 08:53:06.2
			✓	5	M0128261414F5_2P_CIF_DBL.FIT	2000-Mar-12 08:53:08.2
			✓	6	M0128261416F6_2P_CIF_DBL.FIT	2000-Mar-12 08:53:10.1
			✓	7	M0128261418F7_2P_CIF_DBL.FIT	2000-Mar-12 08:53:12.0
			✓	8	M0129985007F4_2P_IOF_DBL.FIT	2000-Apr-01 07:39:40.6
				9	M0129985047F4_2P_IOF_DBL.FIT	2000-Apr-01 07:40:20.6
				10		41:00.6
				11		41:40.5
				12		42:20.6
				13		43:00.5
				14		43:40.5
				15		44:20.5
				16	M0129985327F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:00.5
				17	M0129985367F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:40.5
				18	M0129985407F4_2P_IOF_DBL.FIT	2000-Apr-01 07:46:20.5
				19	M0129985447F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:00.5
				20	M0129985487F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:40.5
				21	M0129985527F4_2P_IOF_DBL.FIT	2000-Apr-01 07:48:20.5
				22	M0129985567F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:00.5
				23	M0129985607F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:40.5
				24	M0129985647F4_2P_IOF_DBL.FIT	2000-Apr-01 07:50:20.5
				25	M0129985687F4_2P_IOF_DBL.FIT	2000-Apr-01 07:51:00.5

Search results appear here.

Number Boundaries: 10 < >

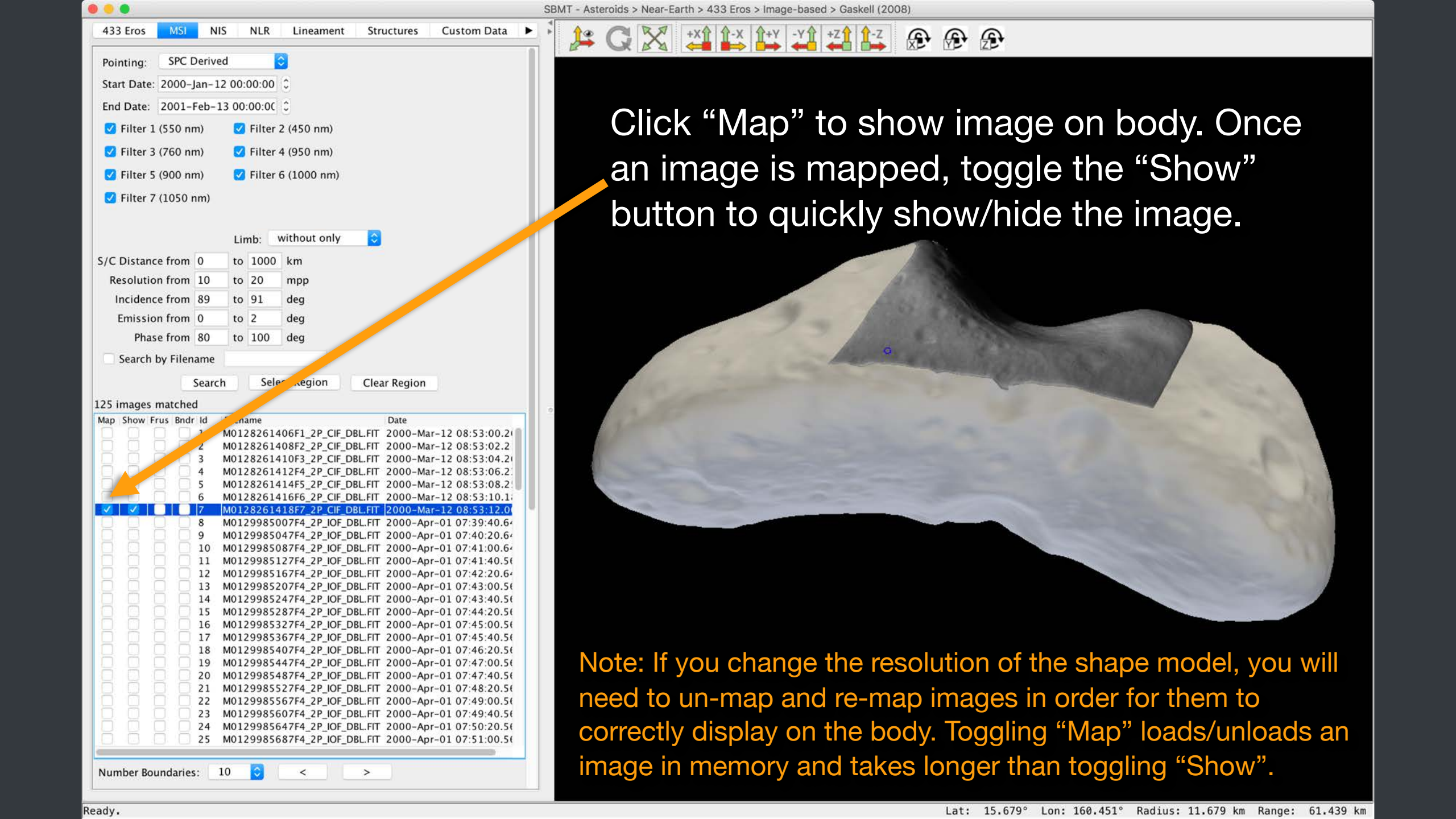
Image boundaries are outlined on the body.

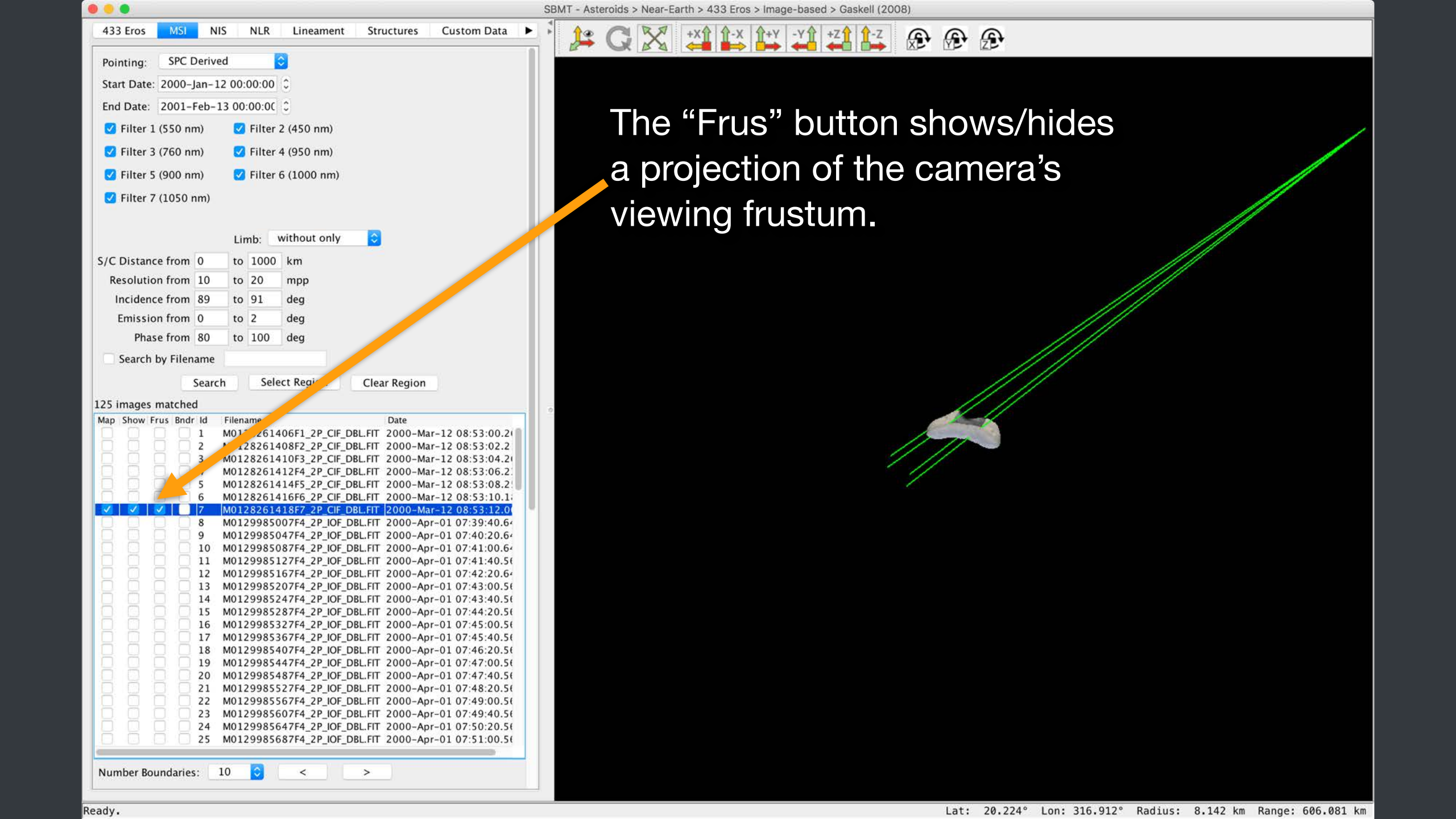


Note: By default, the boundaries of the first 10 images are shown. You can see boundaries of additional images by toggling them on/off using the “Bndr” checkbox next to the filename, changing the setting in the “number boundaries” drop-down box below the search results, or clicking these arrows.

Ready.

Range: 61.439 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing: SPC Derived
Start Date: 2000-Jan-12 00:00:00
End Date: 2001-Feb-13 00:00:0
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb: without only
S/C Distance from 0 to 1000 km
Resolution from 10 to 20 mpp
Incidence from 89 to 91 deg
Emission from 0 to 2 deg
Phase from 80 to 100 deg
Search by Filename
Search
Clear Region
125 images matched
Map Show Frus Bndr Id Filename Date
M0128261418F7_2P_CIF_DBL.FIT 2000-Mar-12 08:53:12.0
Number Boundaries: 10
Click “Map” to show image on body. Once an image is mapped, toggle the “Show” button to quickly show/hide the image.
Note: If you change the resolution of the shape model, you will need to un-map and re-map images in order for them to correctly display on the body. Toggling “Map” loads/unloads an image in memory and takes longer than toggling “Show”.
Ready.
Lat: 15.679° Lon: 160.451° Radius: 11.679 km Range: 61.439 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing: SPC Derived
Start Date: 2000-Jan-12 00:00:00
End Date: 2001-Feb-13 00:00:0
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb: without only
S/C Distance from 0 to 1000 km
Resolution from 10 to 20 mpp
Incidence from 89 to 91 deg
Emission from 0 to 2 deg
Phase from 80 to 100 deg
Search by Filename
Search
Clear Region
125 images matched
Map Show Frus Bndr Id Filename Date
1 M0128261406F1_2P_CIF_DBL.FIT 2000-Mar-12 08:53:00.2
2 M0128261408F2_2P_CIF_DBL.FIT 2000-Mar-12 08:53:02.2
3 M0128261410F3_2P_CIF_DBL.FIT 2000-Mar-12 08:53:04.2
M0128261412F4_2P_CIF_DBL.FIT 2000-Mar-12 08:53:06.2
5 M0128261414F5_2P_CIF_DBL.FIT 2000-Mar-12 08:53:08.2
6 M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
7 M0128261418F7_2P_CIF_DBL.FIT 2000-Mar-12 08:53:12.0
8 M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.64
9 M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.64
10 M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.64
11 M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.56
12 M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.64
13 M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.56
14 M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.56
15 M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.56
16 M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.56
17 M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.56
18 M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.56
19 M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.56
20 M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.56
21 M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20.56
22 M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:00.56
23 M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:40.56
24 M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01 07:50:20.56
25 M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-01 07:51:00.56
Number Boundaries: 10
<
>
+X
-X
+Y
-Y
+Z
-Z
The “Frus” button shows/hides a projection of the camera’s viewing frustum.
Ready.
Lat: 20.224° Lon: 316.912° Radius: 8.142 km Range: 606.081 km

433 Eros | MSI | NIS | NLR | Lineament | Structures | Custom Data

Pointing: SPC Derived

Start Date: 2000-Jan-12 00:00:00

End Date: 2001-Feb-13 00:00:0(

- [x] Filter 1 (550 nm)
- [x] Filter 2 (450 nm)
- [x] Filter 3 (760 nm)
- [x] Filter 4 (950 nm)
- [x] Filter 5 (900 nm)
- [x] Filter 6 (1000 nm)
- [x] Filter 7 (1050 nm)

Limb: without only

S/C Distance from 0 to 1000 km

Resolution from 10 to 20 mpp

Incidence from 89 to 91 deg

Emission from 0 to 2 deg

Phase from 80 to 100 deg

Search by Filename

Search | Select Region | Clear Region

125 images matched

Map	Show	Frus	Bndr	Id	Filename	Date
				1	M0128261406F1_2P_CIF_DBL.FIT	2000-Mar-12 08:53:00.2(
				2	M0128261408F2_2P_CIF_DBL.FIT	2000-Mar-12 08:53:02.2
				3	M0128261410F3_2P_CIF_DBL.FIT	2000-Mar-12 08:53:04.2(
				4	M0128261412F4_2P_CIF_DBL.FIT	2000-Mar-12 08:53:06.2
				5	M0128261414F5_2P_CIF_DBL.FIT	2000-Mar-12 08:53:08.2
				6	M0128261416F6_2P_CIF_DBL.FIT	2000-Mar-12 08:53:10.1
☑	☑			7	M0128261418F7_2P_CIF_DBL.FIT	2000-Mar-12 08:53:12.0(
				8	M0129985007F4_2P_IOF_DBL.FIT	2000-Apr-01 07:39:40.6
				9	M0129985047F4_2P_IOF_DBL.FIT	2000-Apr-01 07:40:20.6
				10	M0129985087F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:00.6
				11	M0129985127F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:40.5
				12	M0129985167F4_2P_IOF_DBL.FIT	2000-Apr-01 07:42:20.6
				13	M0129985207F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:00.5
				14	M0129985247F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:40.5
				15	M0129985287F4_2P_IOF_DBL.FIT	2000-Apr-01 07:44:20.5
				16	M0129985327F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:00.5
				17	M0129985367F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:40.5
				18	M0129985407F4_2P_IOF_DBL.FIT	2000-Apr-01 07:46:20.5
				19	M0129985447F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:00.5
				20	M0129985487F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:40.5
				21	M0129985527F4_2P_IOF_DBL.FIT	2000-Apr-01 07:48:20.5
				22	M0129985567F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:00.5
				23	M0129985607F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:40.5
				24	M0129985647F4_2P_IOF_DBL.FIT	2000-Apr-01 07:50:20.5
				25	M0129985687F4_2P_IOF_DBL.FIT	2000-Apr-01 07:51:00.5

Number Boundaries: 10 < >

Right-clicking on a mapped image (or the filename of a mapped image in the search results) opens a menu with several options.

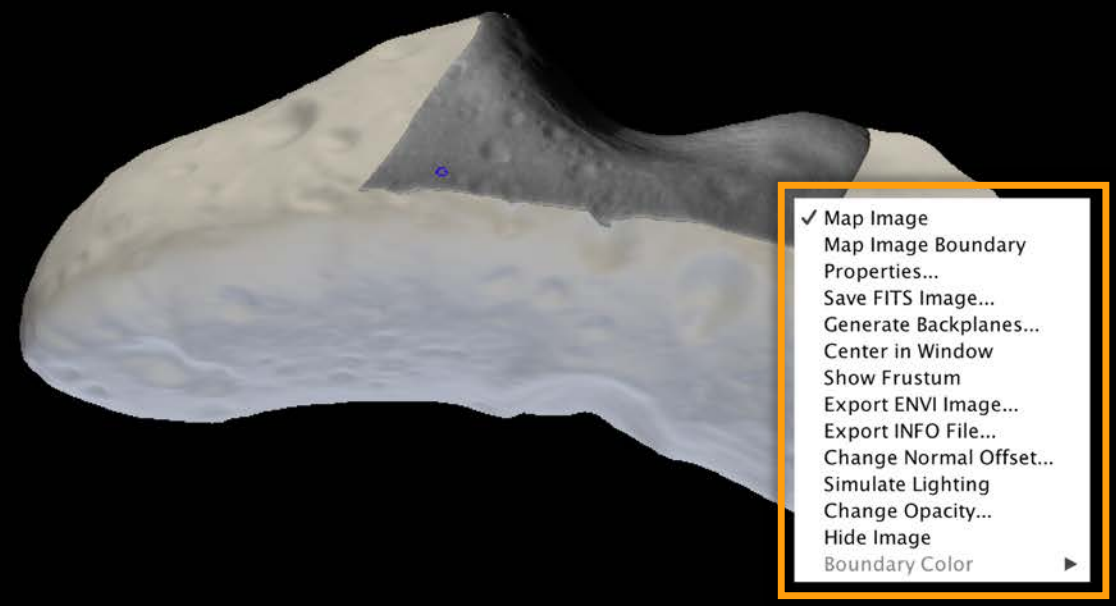
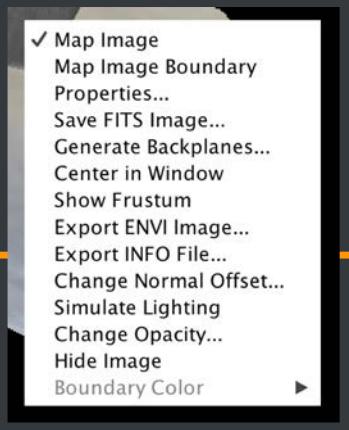


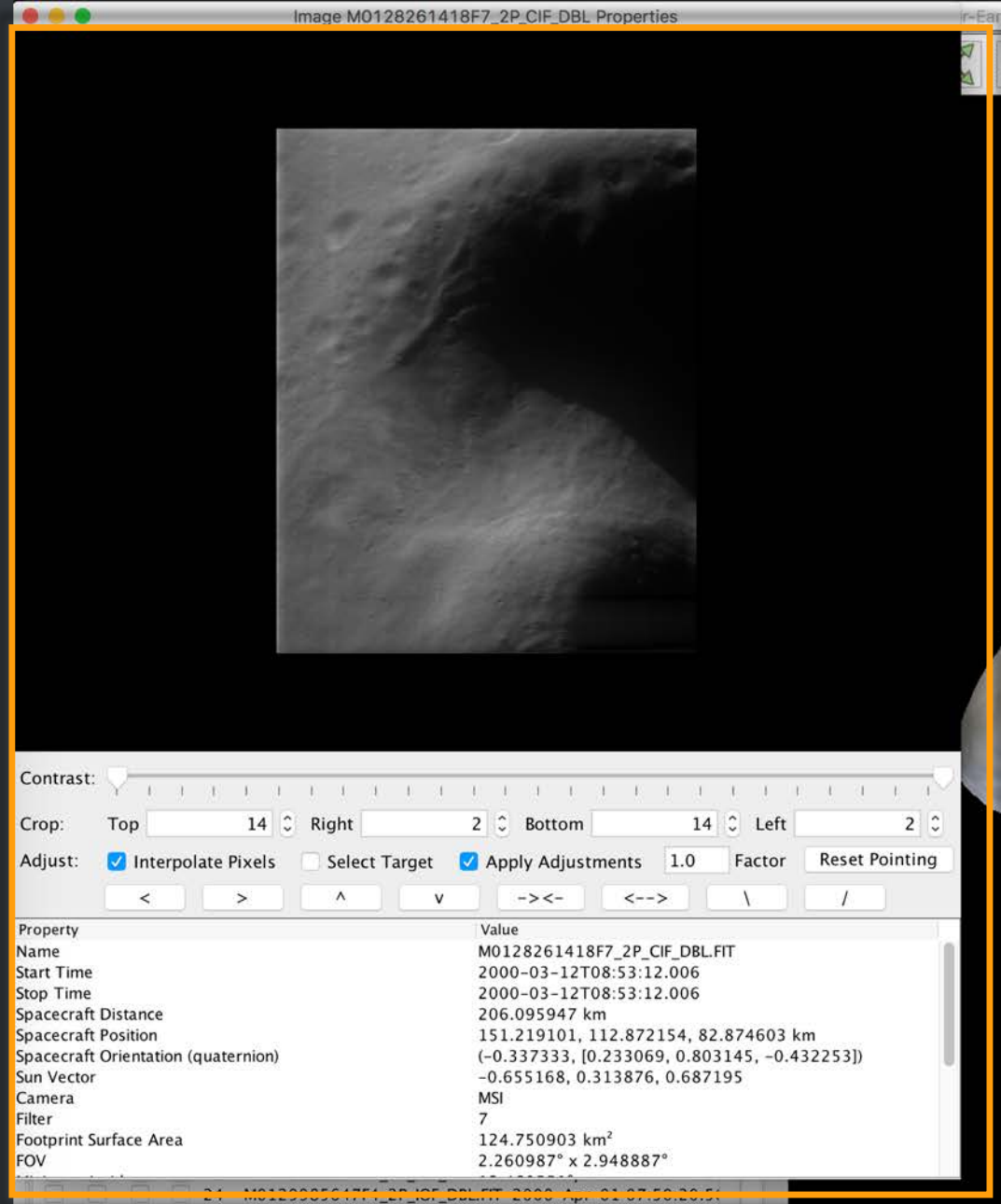
Image M0128261418F7_2P_CIF_DBL, Pixel Coordinate = (66.6, 74.1), Raw Value = 0.0477938

Range: 75.922 km

Description of menu options



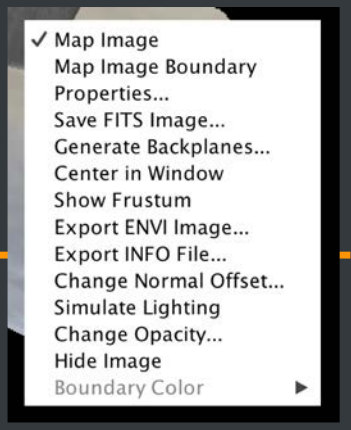
- Map image: toggles the image on/off.
- Map image boundary: toggles the boundary on/off.
- Properties: displays image properties (see next slide).
- Save FITS image: opens a dialog for the user to save the FITS image to a folder of their choice. (If you plan to manipulate the file and bring it back into the Tool, users should also download the INFO file for that image using “Export INFO file”.)



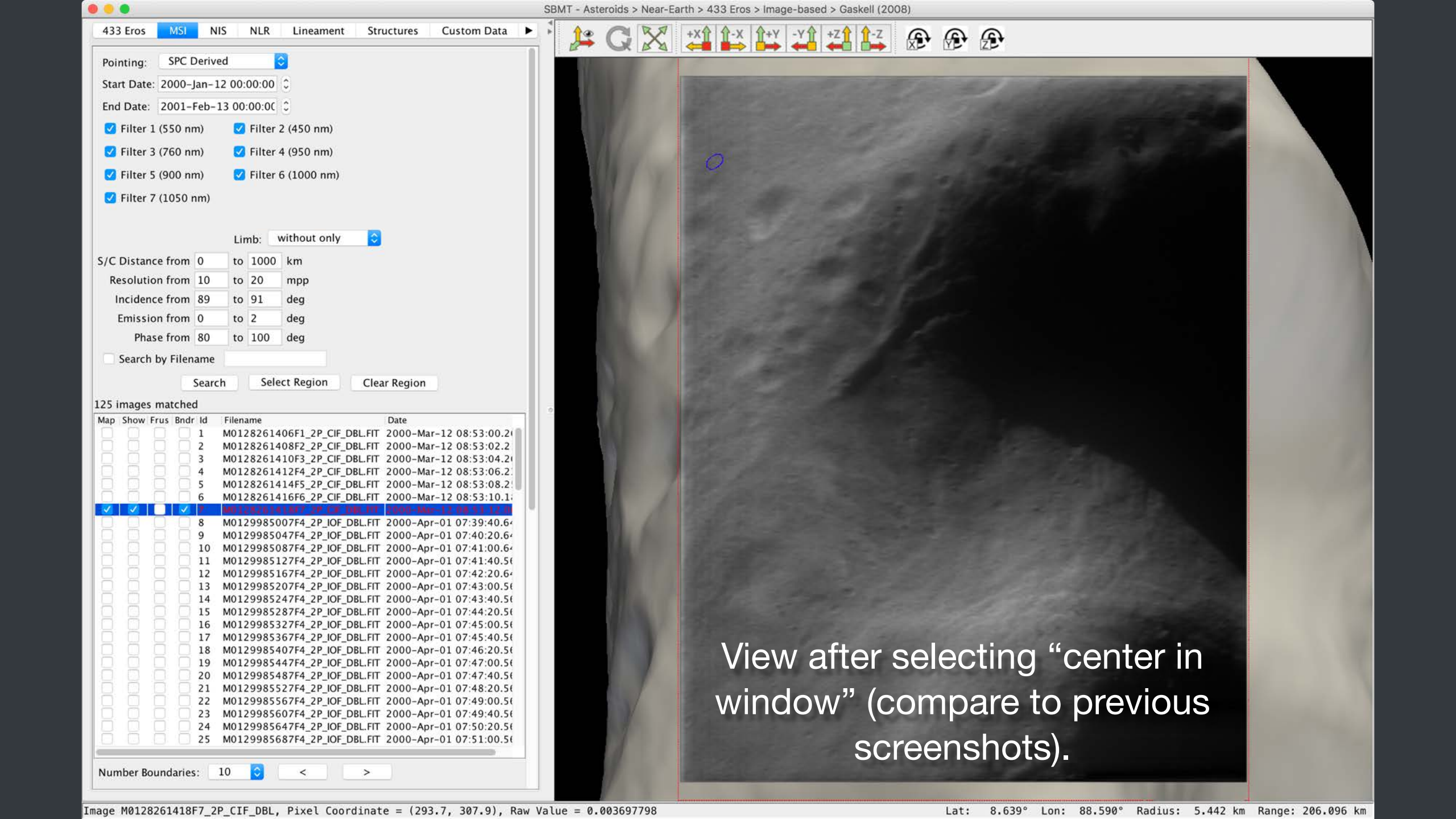
The properties window shows the original image. It allows users to adjust image contrast (stretch), crop the image, and adjust other aspects of how the image is displayed. You can reposition the image if it does not align properly by clicking the buttons. The bottom of the properties panel lists additional useful information about the image.

These changes are immediately applied to the image in the properties panel and on the shape model.

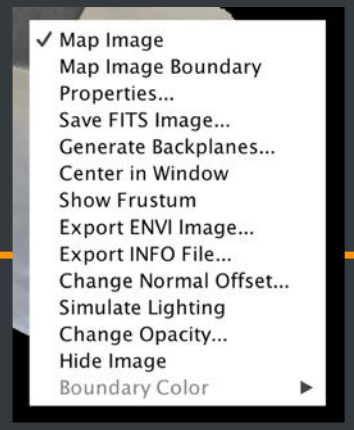
Description of menu options



- Generate backplanes: opens a dialog for the user to save image backplanes to their computer (currently output as a DDR.IMG file with a PDS3 label).
- Center in window: centers selected image in rendering panel (reorients shape model to mimic how the spacecraft viewed the body).
- Show frustum: shows/hides projection of camera frustum (equivalent to toggling the “Frus” button in the image list).

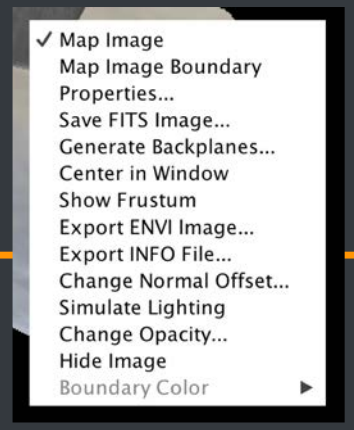

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing: SPC Derived
Start Date: 2000-Jan-12 00:00:00
End Date: 2001-Feb-13 00:00:0(
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb: without only
S/C Distance from 0 to 1000 km
Resolution from 10 to 20 mpp
Incidence from 89 to 91 deg
Emission from 0 to 2 deg
Phase from 80 to 100 deg
Search by Filename
Search
Select Region
Clear Region
125 images matched
Map Show Frus Bndr Id Filename Date
1 M0128261406F1_2P_CIF_DBL.FIT 2000-Mar-12 08:53:00.2(
2 M0128261408F2_2P_CIF_DBL.FIT 2000-Mar-12 08:53:02.2
3 M0128261410F3_2P_CIF_DBL.FIT 2000-Mar-12 08:53:04.2(
4 M0128261412F4_2P_CIF_DBL.FIT 2000-Mar-12 08:53:06.2
5 M0128261414F5_2P_CIF_DBL.FIT 2000-Mar-12 08:53:08.2
6 M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
8 M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.64
9 M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.64
10 M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.64
11 M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.56
12 M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.64
13 M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.56
14 M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.56
15 M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.56
16 M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.56
17 M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.56
18 M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.56
19 M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.56
20 M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.56
21 M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20.56
22 M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:00.56
23 M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:40.56
24 M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01 07:50:20.56
25 M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-01 07:51:00.56
Number Boundaries: 10
<
>
+X
-X
+Y
-Y
+Z
-Z
View after selecting “center in window” (compare to previous screenshots).
Image M0128261418F7_2P_CIF_DBL, Pixel Coordinate = (293.7, 307.9), Raw Value = 0.003697798
Lat: 8.639° Lon: 88.590° Radius: 5.442 km Range: 206.096 km

Description of menu options

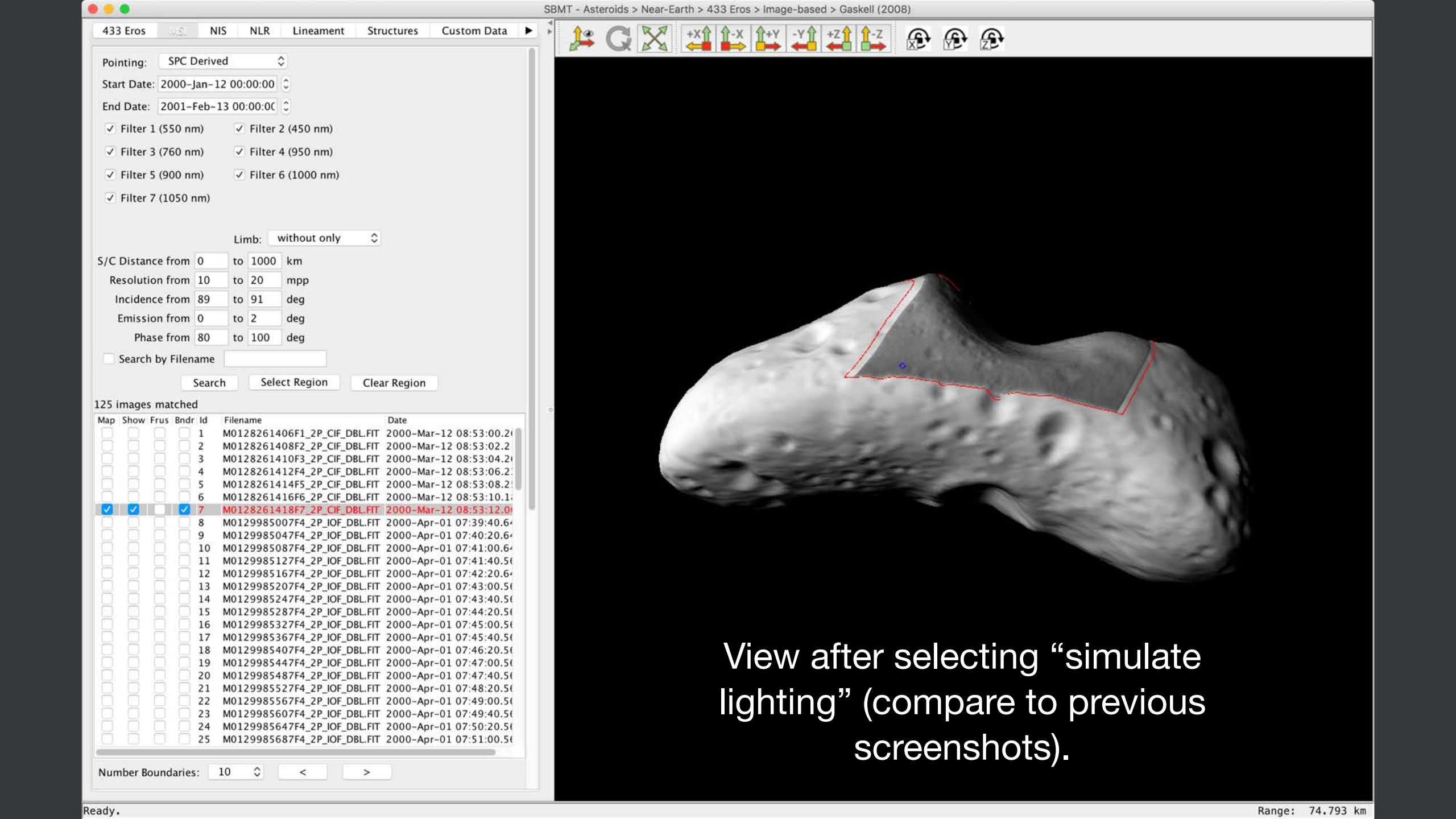


- Export ENVI image: opens a dialog for a user to export the image in an ENVI-compatible format.
- Export INFO file: opens a dialog for the user to export image pointing information as an INFO file.
- Change normal offset: opens a dialog for the user to change the normal offset (can improve display of overlapping images).

Description of menu options

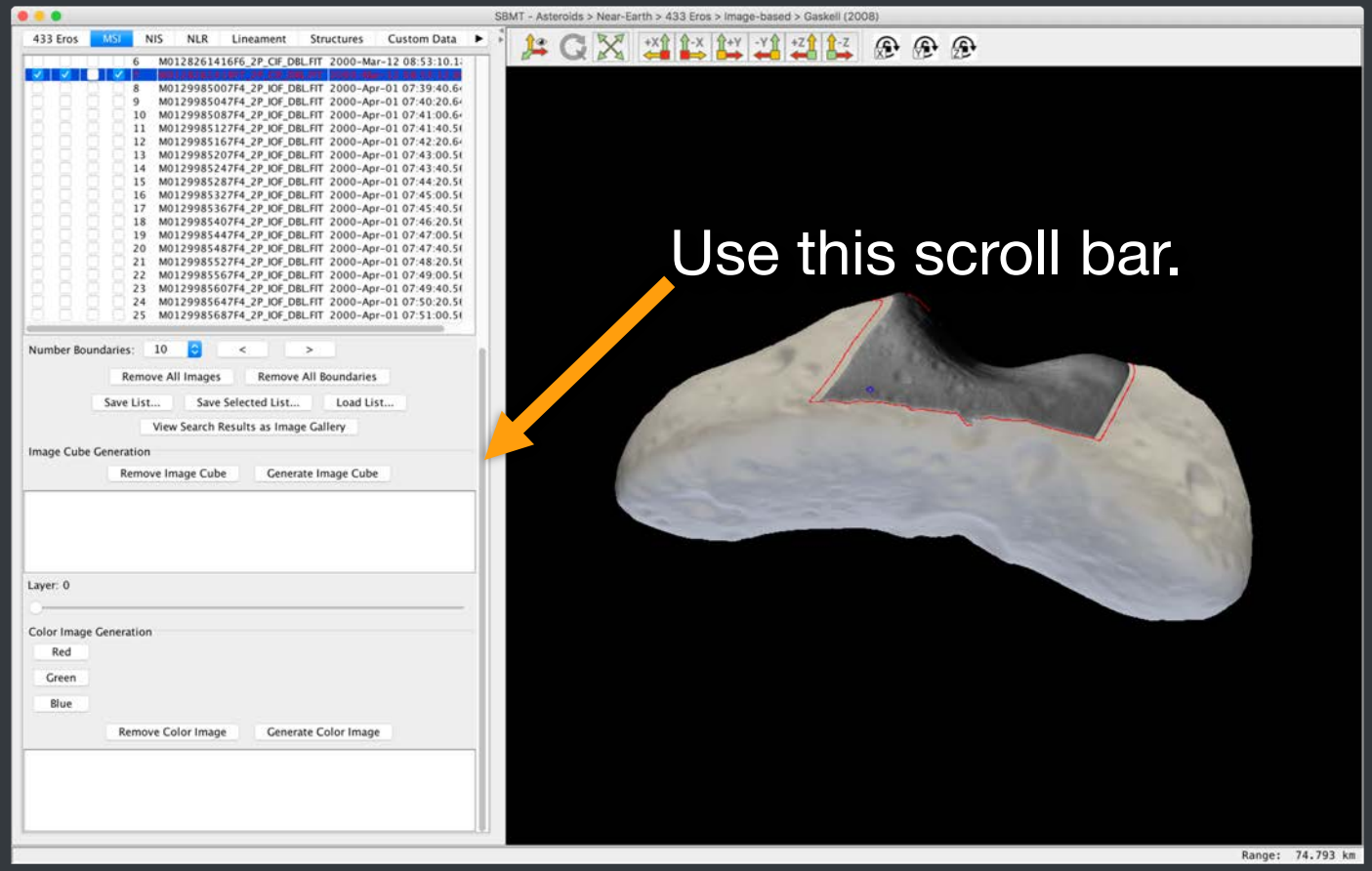


- Simulate lighting: makes shape model lighting approximate lighting at the time of image acquisition.
- Change opacity: change the opacity of the image so that you can see things beneath it.
- Hide image: hides/unhides the image.
- Boundary color: if image boundary is mapped, allows the user to change the color of the boundary.


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Pointing: SPC Derived
Start Date: 2000-Jan-12 00:00:00
End Date: 2001-Feb-13 00:00:0
Filter 1 (550 nm)
Filter 2 (450 nm)
Filter 3 (760 nm)
Filter 4 (950 nm)
Filter 5 (900 nm)
Filter 6 (1000 nm)
Filter 7 (1050 nm)
Limb: without only
S/C Distance from 0 to 1000 km
Resolution from 10 to 20 mpp
Incidence from 89 to 91 deg
Emission from 0 to 2 deg
Phase from 80 to 100 deg
Search by Filename
Search
Select Region
Clear Region
125 images matched
Map Show Frus Bndr Id Filename Date
1 M0128261406F1_2P_CIF_DBL.FIT 2000-Mar-12 08:53:00.2
2 M0128261408F2_2P_CIF_DBL.FIT 2000-Mar-12 08:53:02.2
3 M0128261410F3_2P_CIF_DBL.FIT 2000-Mar-12 08:53:04.2
4 M0128261412F4_2P_CIF_DBL.FIT 2000-Mar-12 08:53:06.2
5 M0128261414F5_2P_CIF_DBL.FIT 2000-Mar-12 08:53:08.2
6 M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
7 M0128261418F7_2P_CIF_DBL.FIT 2000-Mar-12 08:53:12.0
8 M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.64
9 M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.64
10 M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.64
11 M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.56
12 M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.64
13 M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.56
14 M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.56
15 M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.56
16 M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.56
17 M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.56
18 M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.56
19 M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.56
20 M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.56
21 M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20.56
22 M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:00.56
23 M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:40.56
24 M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01 07:50:20.56
25 M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-01 07:51:00.56
Number Boundaries: 10
<
>
+X
-X
+Y
-Y
+Z
-Z
View after selecting “simulate lighting” (compare to previous screenshots).
Ready.
Range: 74.793 km

Other image display options

- Scroll down in the control panel to see other options.



SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

433 Eros | MSI | NIS | NLR | Lineament | Structures | Custom Data

6	M0128261416F6_2P_CIF_DBL.FIT	2000-Mar-12 08:53:10.1
7	M0128261641F7_2P_CIF_DBL.FIT	2000-Mar-12 08:53:12.0
8	M0129985007F4_2P_IOF_DBL.FIT	2000-Apr-01 07:39:40.6
9	M0129985047F4_2P_IOF_DBL.FIT	2000-Apr-01 07:40:20.6
10	M0129985087F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:00.6
11	M0129985127F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:40.5
12	M0129985167F4_2P_IOF_DBL.FIT	2000-Apr-01 07:42:20.6
13	M0129985207F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:00.5
14	M0129985247F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:40.5
15	M0129985287F4_2P_IOF_DBL.FIT	2000-Apr-01 07:44:20.5
16	M0129985327F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:00.5
17	M0129985367F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:40.5
18	M0129985407F4_2P_IOF_DBL.FIT	2000-Apr-01 07:46:20.5
19	M0129985447F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:00.5
20	M0129985487F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:40.5
21	M0129985527F4_2P_IOF_DBL.FIT	2000-Apr-01 07:48:20.5
22	M0129985567F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:00.5
23	M0129985607F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:40.5
24	M0129985647F4_2P_IOF_DBL.FIT	2000-Apr-01 07:50:20.5
25	M0129985687F4_2P_IOF_DBL.FIT	2000-Apr-01 07:51:00.5

Number Boundaries: 10 < >

Remove All Images | Remove All Boundaries

Save List... | Save Selected List... | Load List...

View Search Results as Image Gallery

Image Cube Generation

Remove Image Cube | Generate Image Cube

Layer: 0

Color Image Generation

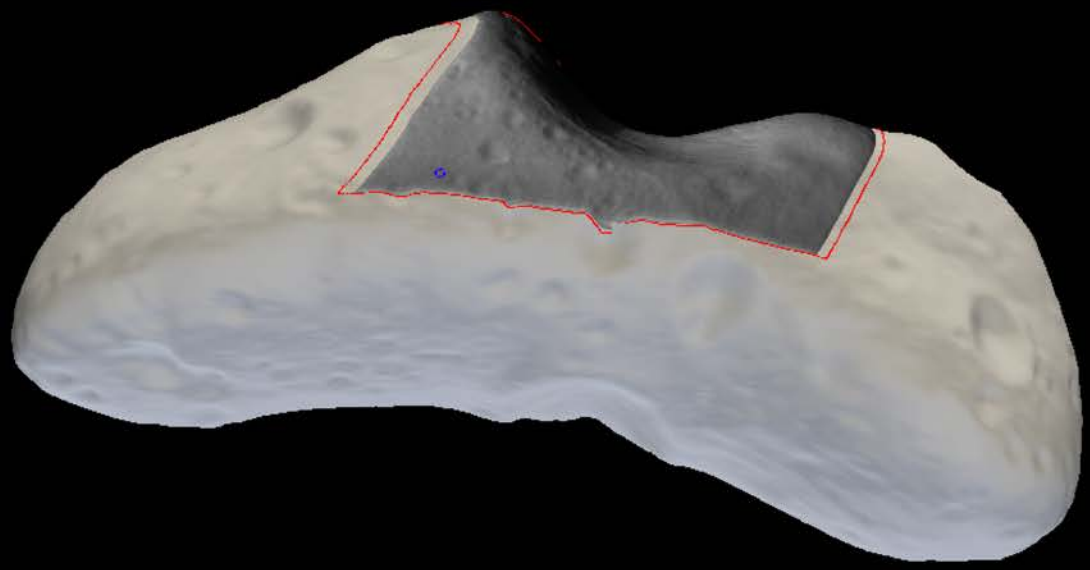
Red

Green

Blue

Remove Color Image | Generate Color Image

These options change the boundaries and images that one sees on the shape but do not change the list of search results.



Range: 74.793 km

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

433 Eros | MSI | NIS | NLR | Lineament | Structures | Custom Data

6	M0128261416F6_2P_CIF_DBL.FIT	2000-Mar-12 08:53:10.1
7	M0128261641F7_2P_CIF_DBL.FIT	2000-Mar-12 08:53:12.0
8	M0129985007F4_2P_IOF_DBL.FIT	2000-Apr-01 07:39:40.6
9	M0129985047F4_2P_IOF_DBL.FIT	2000-Apr-01 07:40:20.6
10	M0129985087F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:00.6
11	M0129985127F4_2P_IOF_DBL.FIT	2000-Apr-01 07:41:40.5
12	M0129985167F4_2P_IOF_DBL.FIT	2000-Apr-01 07:42:20.6
13	M0129985207F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:00.5
14	M0129985247F4_2P_IOF_DBL.FIT	2000-Apr-01 07:43:40.5
15	M0129985287F4_2P_IOF_DBL.FIT	2000-Apr-01 07:44:20.5
16	M0129985327F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:00.5
17	M0129985367F4_2P_IOF_DBL.FIT	2000-Apr-01 07:45:40.5
18	M0129985407F4_2P_IOF_DBL.FIT	2000-Apr-01 07:46:20.5
19	M0129985447F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:00.5
20	M0129985487F4_2P_IOF_DBL.FIT	2000-Apr-01 07:47:40.5
21	M0129985527F4_2P_IOF_DBL.FIT	2000-Apr-01 07:48:20.5
22	M0129985567F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:00.5
23	M0129985607F4_2P_IOF_DBL.FIT	2000-Apr-01 07:49:40.5
24	M0129985647F4_2P_IOF_DBL.FIT	2000-Apr-01 07:50:20.5
25	M0129985687F4_2P_IOF_DBL.FIT	2000-Apr-01 07:51:00.5

Number Boundaries: 10 < >

Remove All Images | Remove All Boundaries

Save List... | Save Selected List... | Load List...

View Search Results as Image Gallery

Image Cube Generation

Remove Image Cube | Generate Image Cube

Layer: 0

Color Image Generation

Red

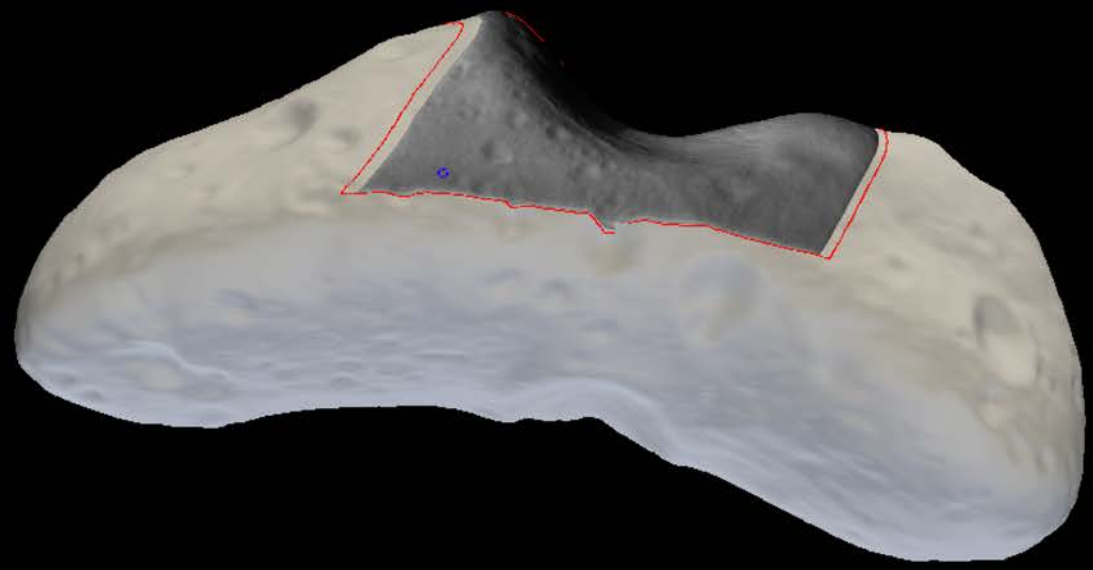
Green

Blue

Remove Color Image | Generate Color Image

+X -X +Y -Y +Z -Z

These options allow users to save the entire list of images returned by the search, save a list of selected images only, or load in a list of images found by a previous search.



Range: 74.793 km

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

433 Eros | MSI | NIS | NLR | Lineament | Structures | Custom Data

				6	M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
✓	✓		✓	7	[redacted]
				8	M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.6
				9	M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.6
				10	M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.6
				11	M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.5
				12	M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.6
				13	M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.5
				14	M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.5
				15	M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.5
				16	M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.5
				17	M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.5
				18	M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.5
				19	M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.5
				20	M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.5
				21	M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20.5
				22	M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:00.5
				23	M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:40.5
				24	M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01 07:50:20.5
				25	M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-01 07:51:00.

Number Boundaries: 10 < >

Remove All Images | Remove All Boundaries

Save List... | Save Selected List... | Load List

View Search Results as Image Gallery

Image Cube Generation

Remove Image Cube | Generate Image Cube

Layer: 0

Color Image Generation

Red

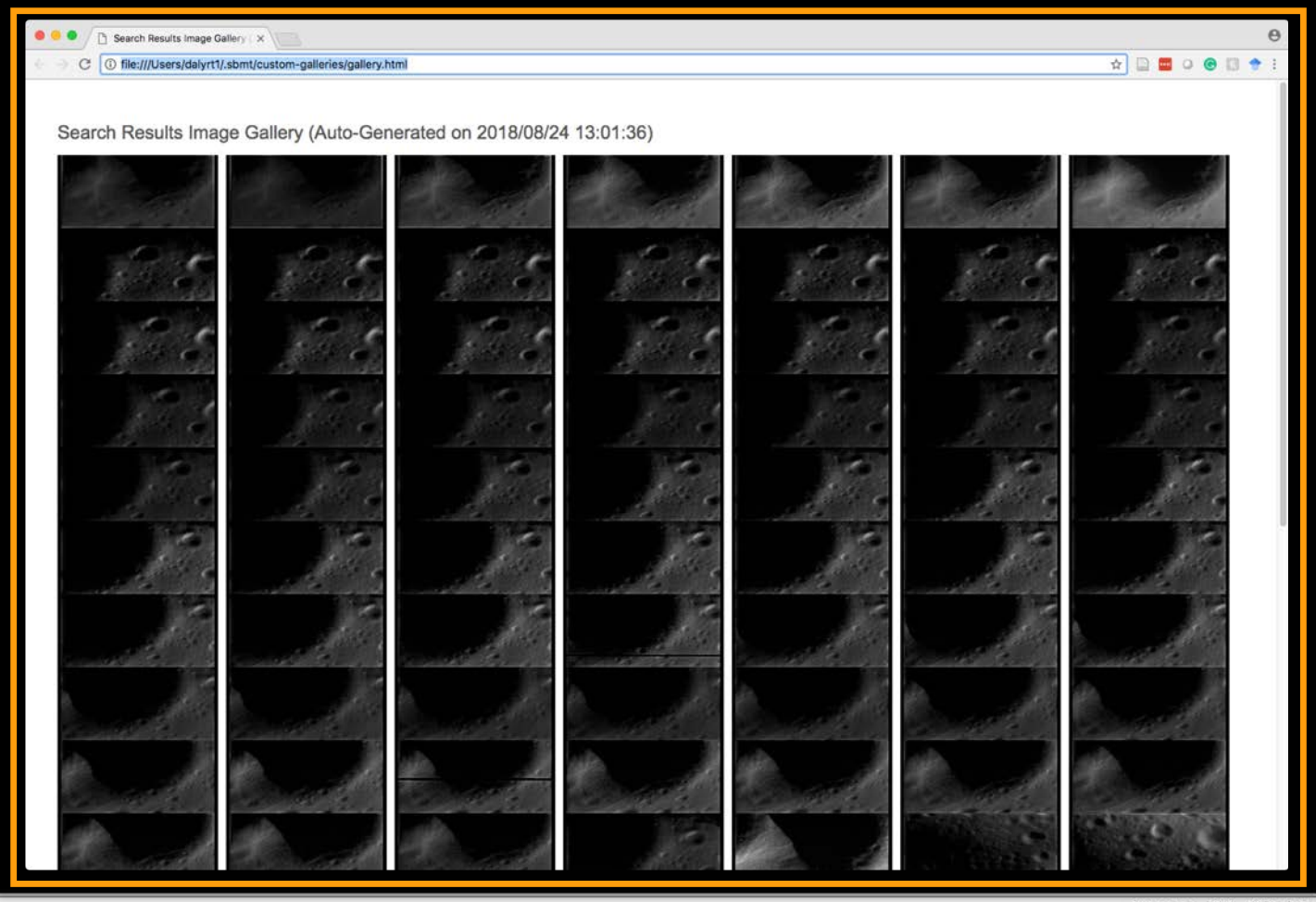
Green

Blue

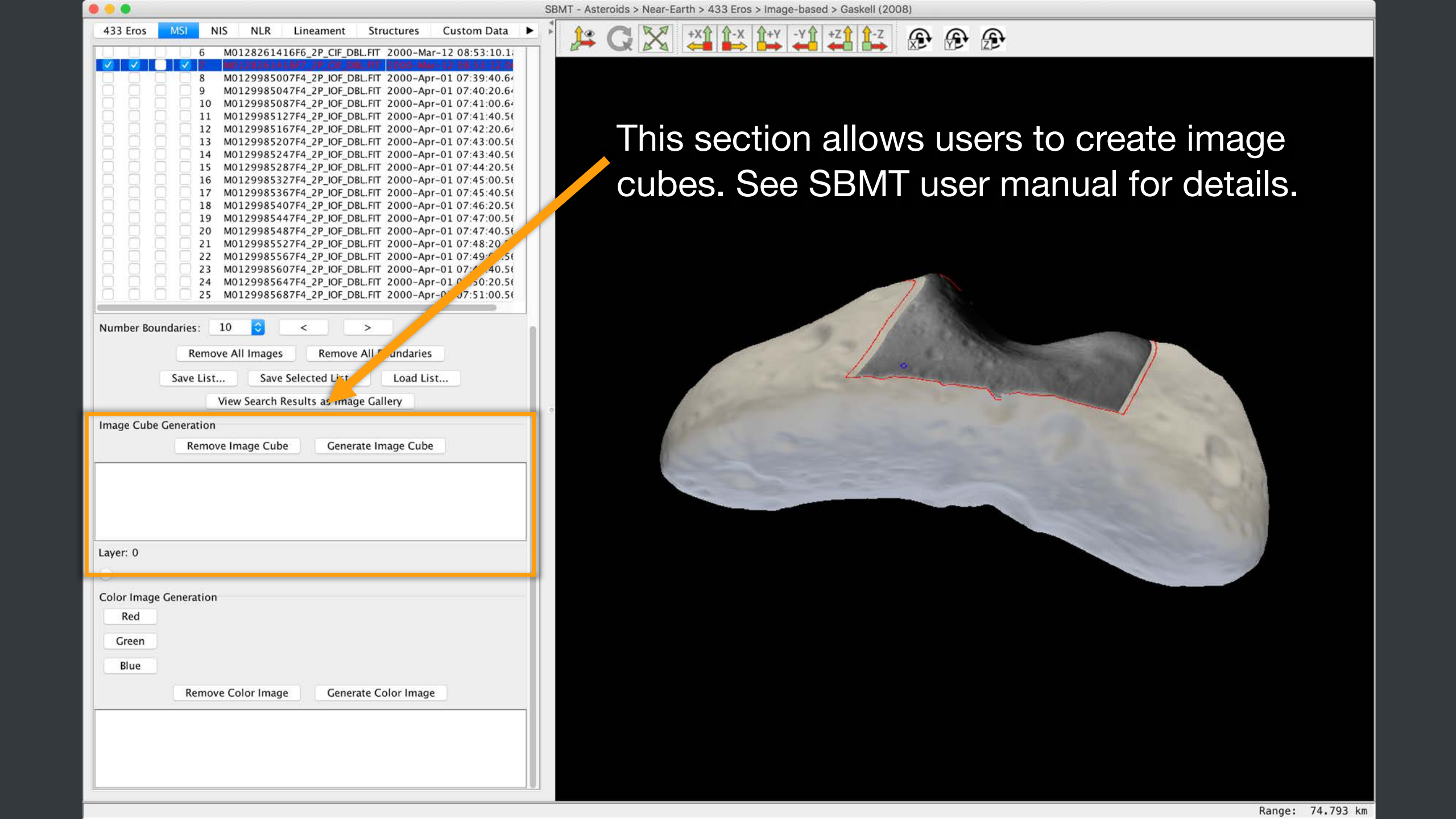
Remove Color Image | Generate Color Image

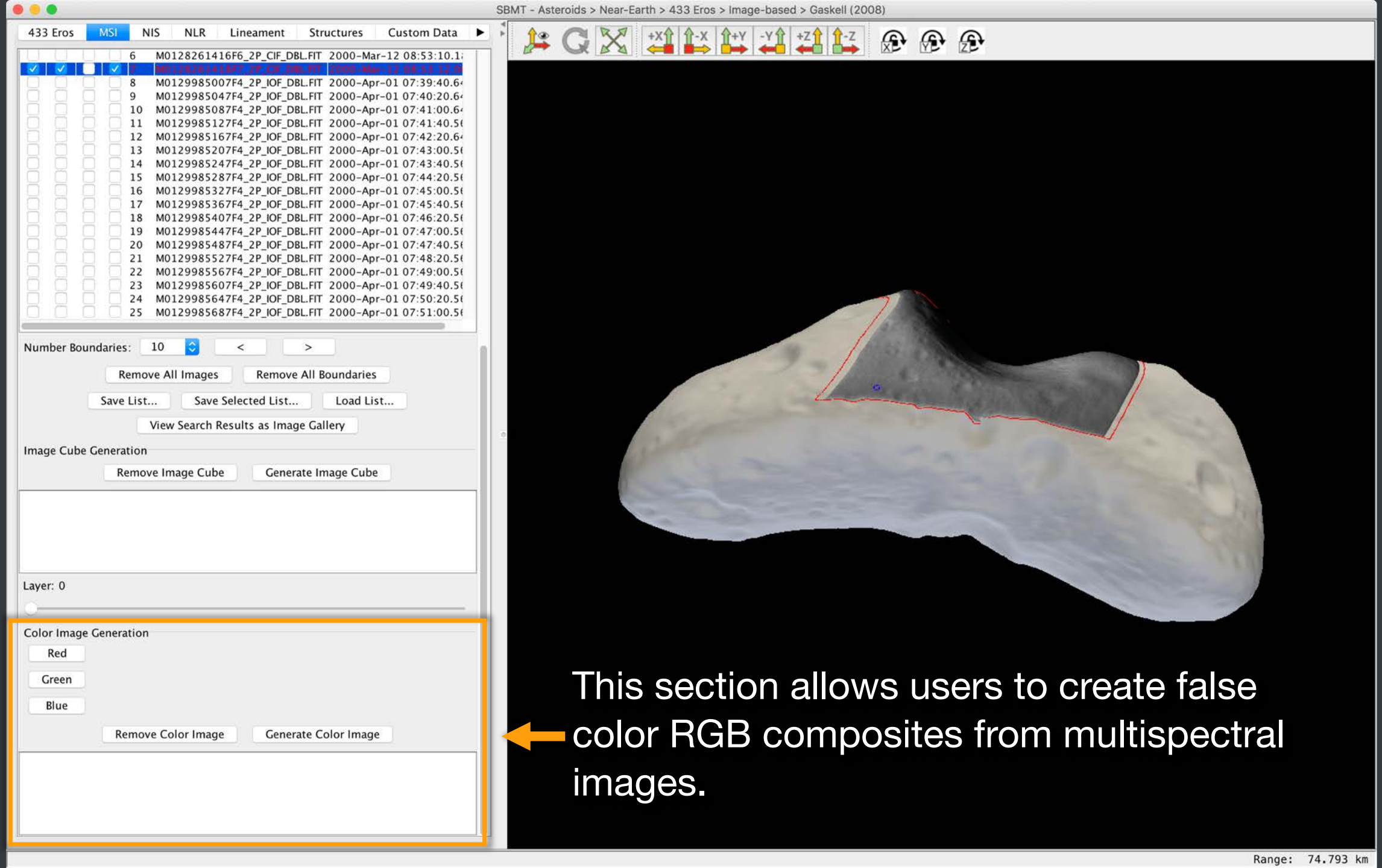
+X -X +Y -Y +Z -Z

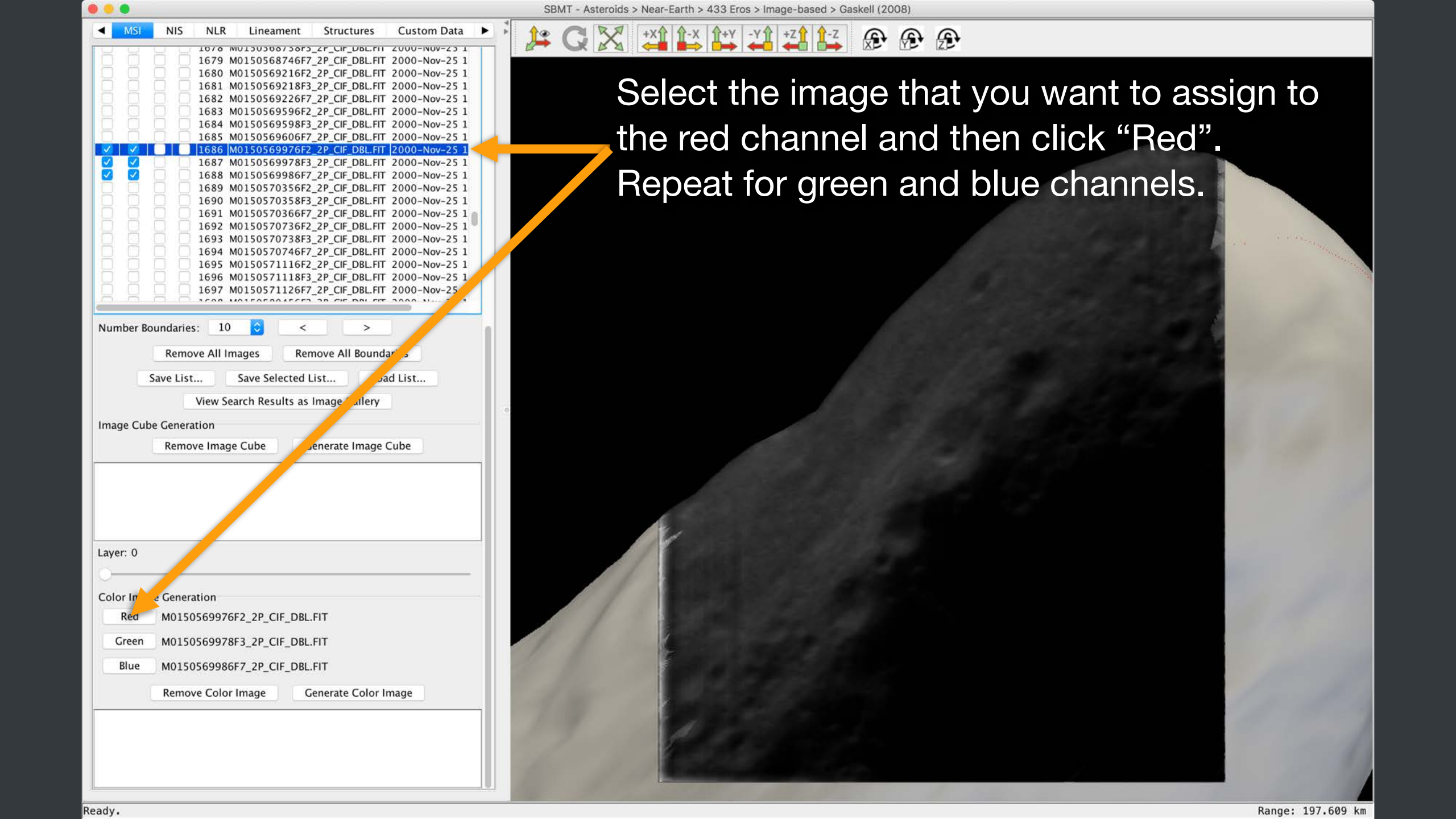
This button shows all of the search results as an preview gallery in the user's default internet browser.

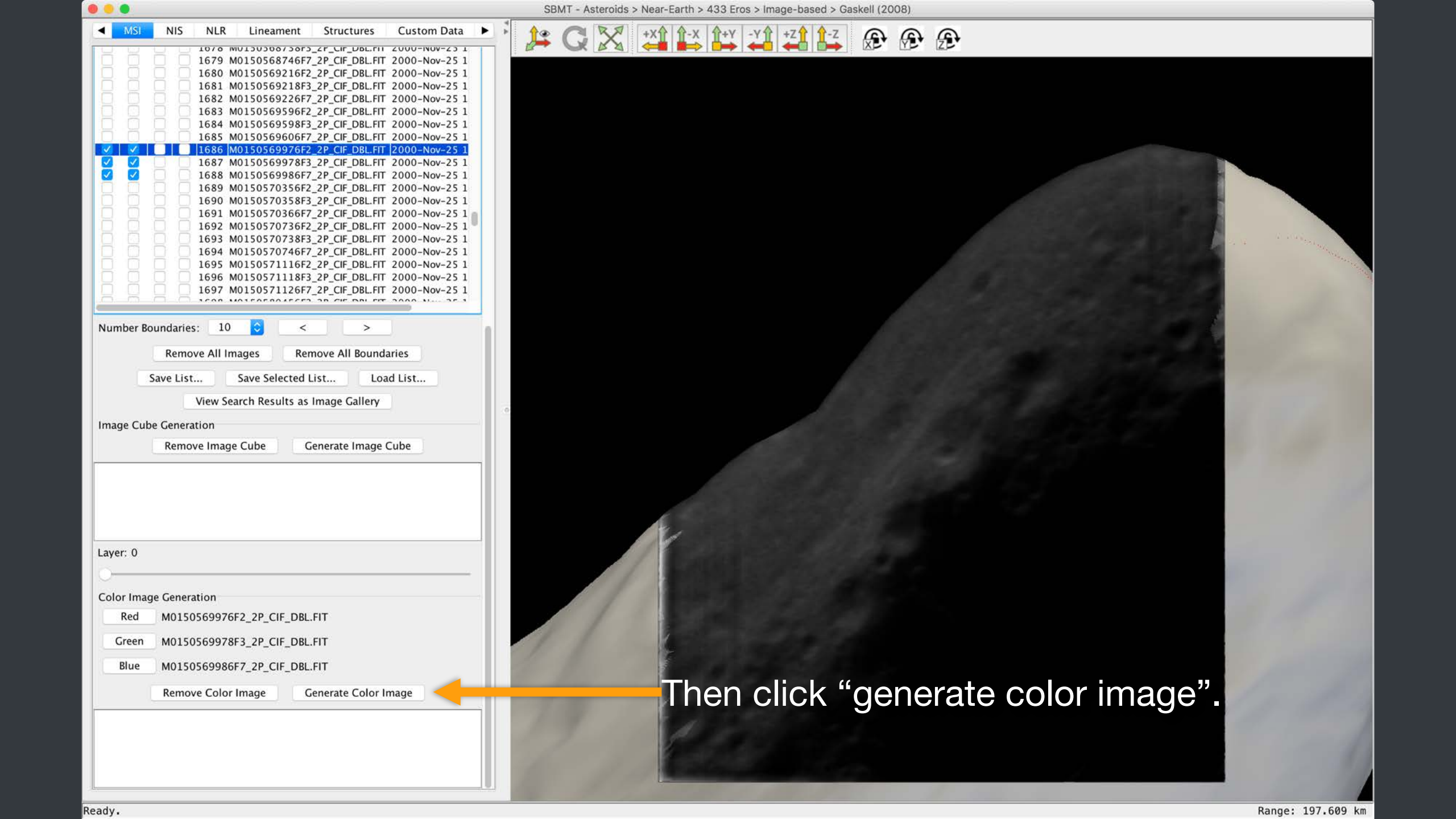


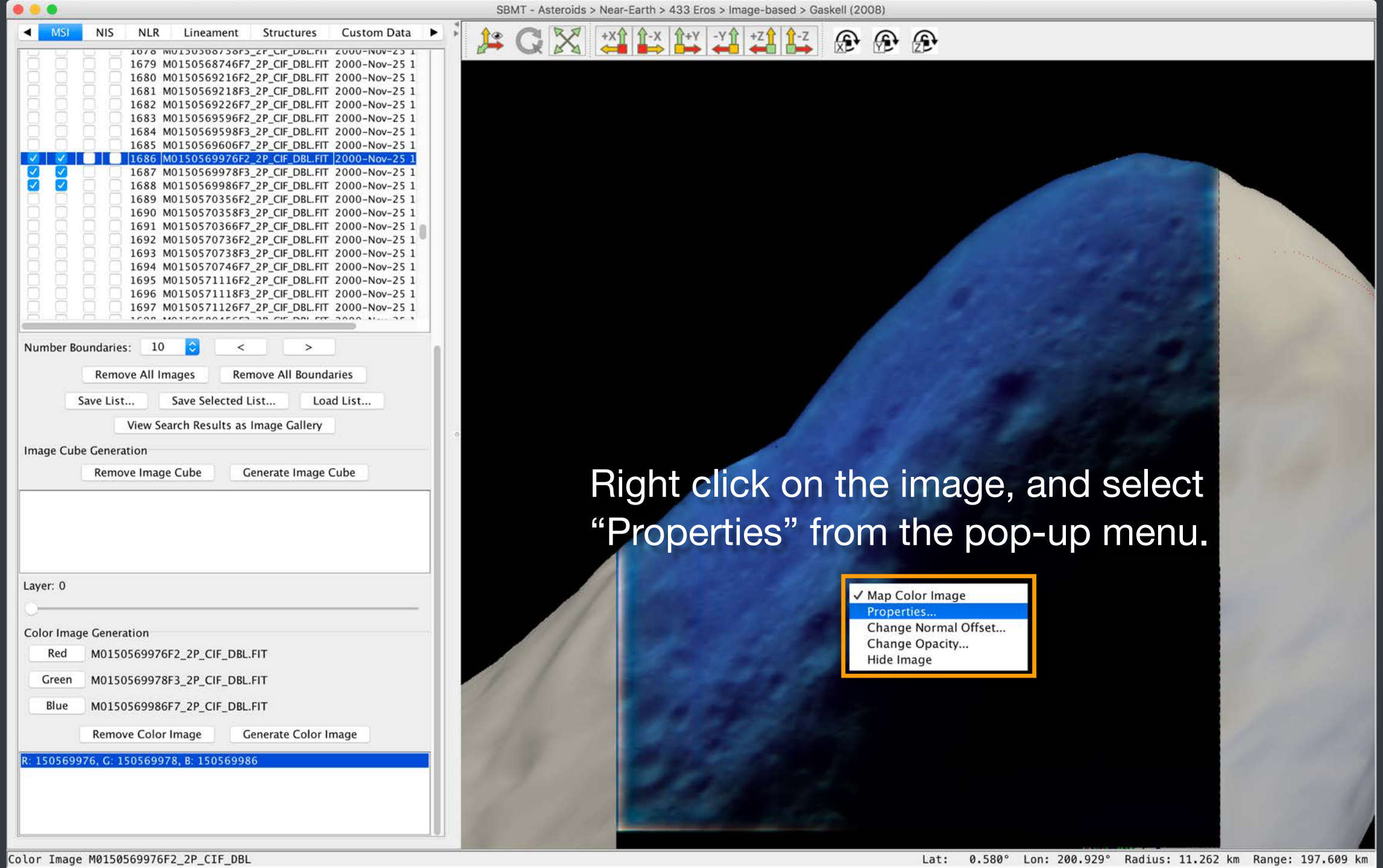
Range: 74.793 km

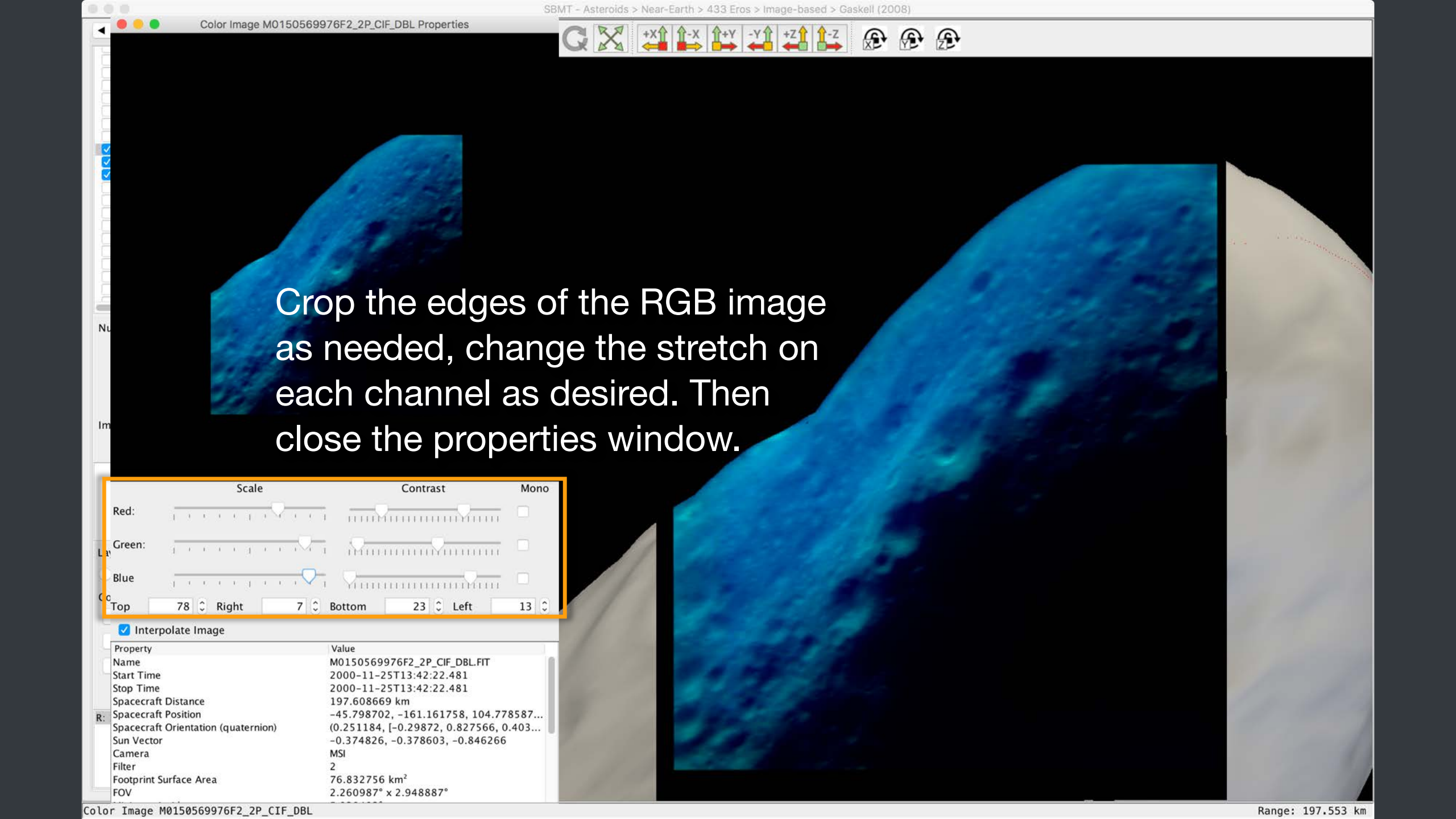

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
6 M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
8 M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.6
9 M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.6
10 M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.6
11 M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.5
12 M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.6
13 M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.5
14 M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.5
15 M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.5
16 M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.5
17 M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.5
18 M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.5
19 M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.5
20 M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.5
21 M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20
22 M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49
23 M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:
24 M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01
25 M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-
Number Boundaries: 10
<
>
Remove All Images
Remove All
Save List...
Save Selected
Load List...
View Search Results as Image Gallery
Image Cube Generation
Remove Image Cube
Generate Image Cube
Layer: 0
Color Image Generation
Red
Green
Blue
Remove Color Image
Generate Color Image
+X
-X
+Y
-Y
+Z
-Z
This section allows users to create image cubes. See SBMT user manual for details.
Range: 74.793 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
6 M0128261416F6_2P_CIF_DBL.FIT 2000-Mar-12 08:53:10.1
8 M0129985007F4_2P_IOF_DBL.FIT 2000-Apr-01 07:39:40.6
9 M0129985047F4_2P_IOF_DBL.FIT 2000-Apr-01 07:40:20.6
10 M0129985087F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:00.6
11 M0129985127F4_2P_IOF_DBL.FIT 2000-Apr-01 07:41:40.5
12 M0129985167F4_2P_IOF_DBL.FIT 2000-Apr-01 07:42:20.6
13 M0129985207F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:00.5
14 M0129985247F4_2P_IOF_DBL.FIT 2000-Apr-01 07:43:40.5
15 M0129985287F4_2P_IOF_DBL.FIT 2000-Apr-01 07:44:20.5
16 M0129985327F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:00.5
17 M0129985367F4_2P_IOF_DBL.FIT 2000-Apr-01 07:45:40.5
18 M0129985407F4_2P_IOF_DBL.FIT 2000-Apr-01 07:46:20.5
19 M0129985447F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:00.5
20 M0129985487F4_2P_IOF_DBL.FIT 2000-Apr-01 07:47:40.5
21 M0129985527F4_2P_IOF_DBL.FIT 2000-Apr-01 07:48:20.5
22 M0129985567F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:00.5
23 M0129985607F4_2P_IOF_DBL.FIT 2000-Apr-01 07:49:40.5
24 M0129985647F4_2P_IOF_DBL.FIT 2000-Apr-01 07:50:20.5
25 M0129985687F4_2P_IOF_DBL.FIT 2000-Apr-01 07:51:00.5
Number Boundaries: 10
Remove All Images
Remove All Boundaries
Save List...
Save Selected List...
Load List...
View Search Results as Image Gallery
Image Cube Generation
Remove Image Cube
Generate Image Cube
Layer: 0
Color Image Generation
Red
Green
Blue
Remove Color Image
Generate Color Image
This section allows users to create false color RGB composites from multispectral images.
Range: 74.793 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
1679 M0150568746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1680 M0150569216F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1681 M0150569218F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1682 M0150569226F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1683 M0150569596F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1684 M0150569598F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1685 M0150569606F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1686 M0150569976F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1687 M0150569978F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1688 M0150569986F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1689 M0150570356F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1690 M0150570358F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1691 M0150570366F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1692 M0150570736F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1693 M0150570738F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1694 M0150570746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1695 M0150571116F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1696 M0150571118F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1697 M0150571126F7_2P_CIF_DBL.FIT 2000-Nov-25
Number Boundaries: 10
Remove All Images
Save List...
Save Selected List...
View Search Results as Image
Image Cube Generation
Remove Image Cube
Layer: 0
Red M0150569976F2_2P_CIF_DBL.FIT
Green M0150569978F3_2P_CIF_DBL.FIT
Blue M0150569986F7_2P_CIF_DBL.FIT
Remove Color Image
Generate Color Image
Select the image that you want to assign to the red channel and then click “Red”.
Repeat for green and blue channels.
Ready.
Range: 197.609 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
1679 M0150568746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1680 M0150569216F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1681 M0150569218F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1682 M0150569226F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1683 M0150569596F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1684 M0150569598F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1685 M0150569606F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1686 M0150569976F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1687 M0150569978F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1688 M0150569986F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1689 M0150570356F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1690 M0150570358F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1691 M0150570366F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1692 M0150570736F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1693 M0150570738F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1694 M0150570746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1695 M0150571116F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1696 M0150571118F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1697 M0150571126F7_2P_CIF_DBL.FIT 2000-Nov-25 1
Number Boundaries: 10
<
>
Remove All Images
Remove All Boundaries
Save List...
Save Selected List...
Load List...
View Search Results as Image Gallery
Image Cube Generation
Remove Image Cube
Generate Image Cube
Layer: 0
Color Image Generation
Red M0150569976F2_2P_CIF_DBL.FIT
Green M0150569978F3_2P_CIF_DBL.FIT
Blue M0150569986F7_2P_CIF_DBL.FIT
Remove Color Image
Generate Color Image
Then click “generate color image”.
Ready.
Range: 197.609 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
1679 M0150568746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1680 M0150569216F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1681 M0150569218F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1682 M0150569226F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1683 M0150569596F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1684 M0150569598F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1685 M0150569606F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1686 M0150569976F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1687 M0150569978F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1688 M0150569986F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1689 M0150570356F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1690 M0150570358F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1691 M0150570366F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1692 M0150570736F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1693 M0150570738F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1694 M0150570746F7_2P_CIF_DBL.FIT 2000-Nov-25 1
1695 M0150571116F2_2P_CIF_DBL.FIT 2000-Nov-25 1
1696 M0150571118F3_2P_CIF_DBL.FIT 2000-Nov-25 1
1697 M0150571126F7_2P_CIF_DBL.FIT 2000-Nov-25 1
Number Boundaries: 10
Remove All Images
Remove All Boundaries
Save List...
Save Selected List...
Load List...
View Search Results as Image Gallery
Image Cube Generation
Remove Image Cube
Generate Image Cube
Layer: 0
Color Image Generation
Red M0150569976F2_2P_CIF_DBL.FIT
Green M0150569978F3_2P_CIF_DBL.FIT
Blue M0150569986F7_2P_CIF_DBL.FIT
Remove Color Image
Generate Color Image
R: 150569976, G: 150569978, B: 150569986
Right click on the image, and select
“Properties” from the pop-up menu.
Map Color Image
Properties...
Change Normal Offset...
Change Opacity...
Hide Image
Color Image M0150569976F2_2P_CIF_DBL
Lat: 0.580° Lon: 200.929° Radius: 11.262 km Range: 197.609 km

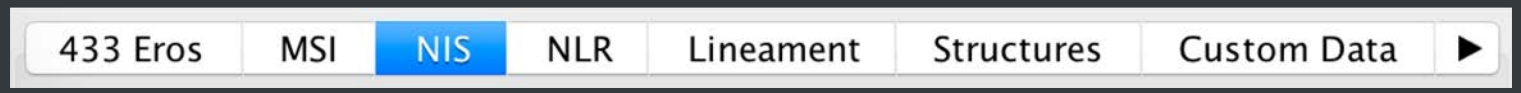

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
Color Image M0150569976F2_2P_CIF_DBL Properties
+X
-X
+Y
-Y
+Z
-Z
Crop the edges of the RGB image as needed, change the stretch on each channel as desired. Then close the properties window.
Scale
Contrast
Mono
Red:
Green:
Blue
Top 78
Right 7
Bottom 23
Left 13
Interpolate Image
Property
Value
Name
M0150569976F2_2P_CIF_DBL.FIT
Start Time
2000-11-25T13:42:22.481
Stop Time
2000-11-25T13:42:22.481
Spacecraft Distance
197.608669 km
Spacecraft Position
-45.798702, -161.161758, 104.778587...
Spacecraft Orientation (quaternion)
(0.251184, [-0.29872, 0.827566, 0.403...
Sun Vector
-0.374826, -0.378603, -0.846266
Camera
MSI
Filter
2
Footprint Surface Area
76.832756 km²
FOV
2.260987° x 2.948887°
Color Image M0150569976F2_2P_CIF_DBL
Range: 197.553 km

This SBMT tutorial explains how to:

- Search for and visualize images.
- Search for and visualize spectral data.
- Search for and visualize altimetry data.

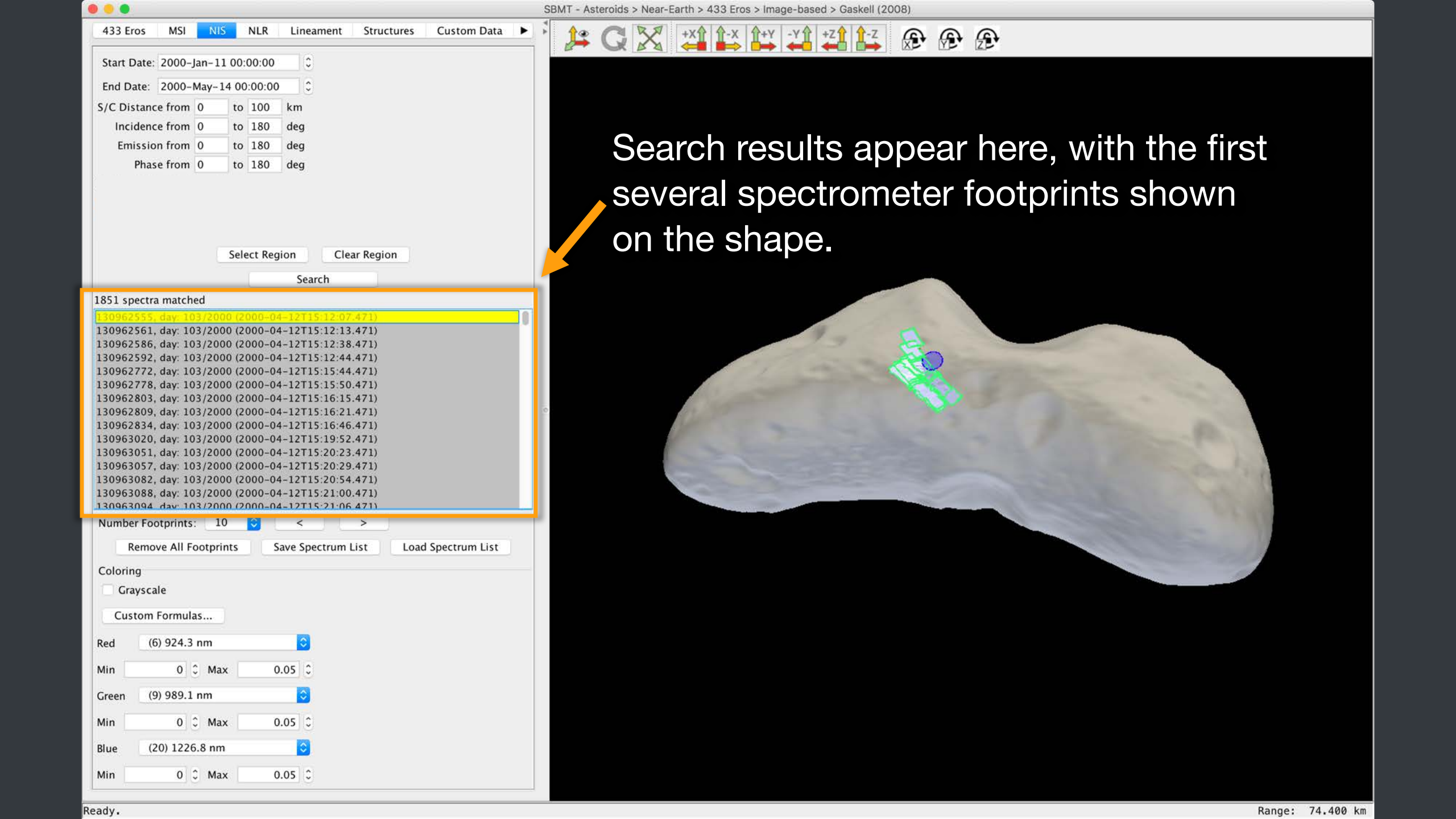
Searching for spectra

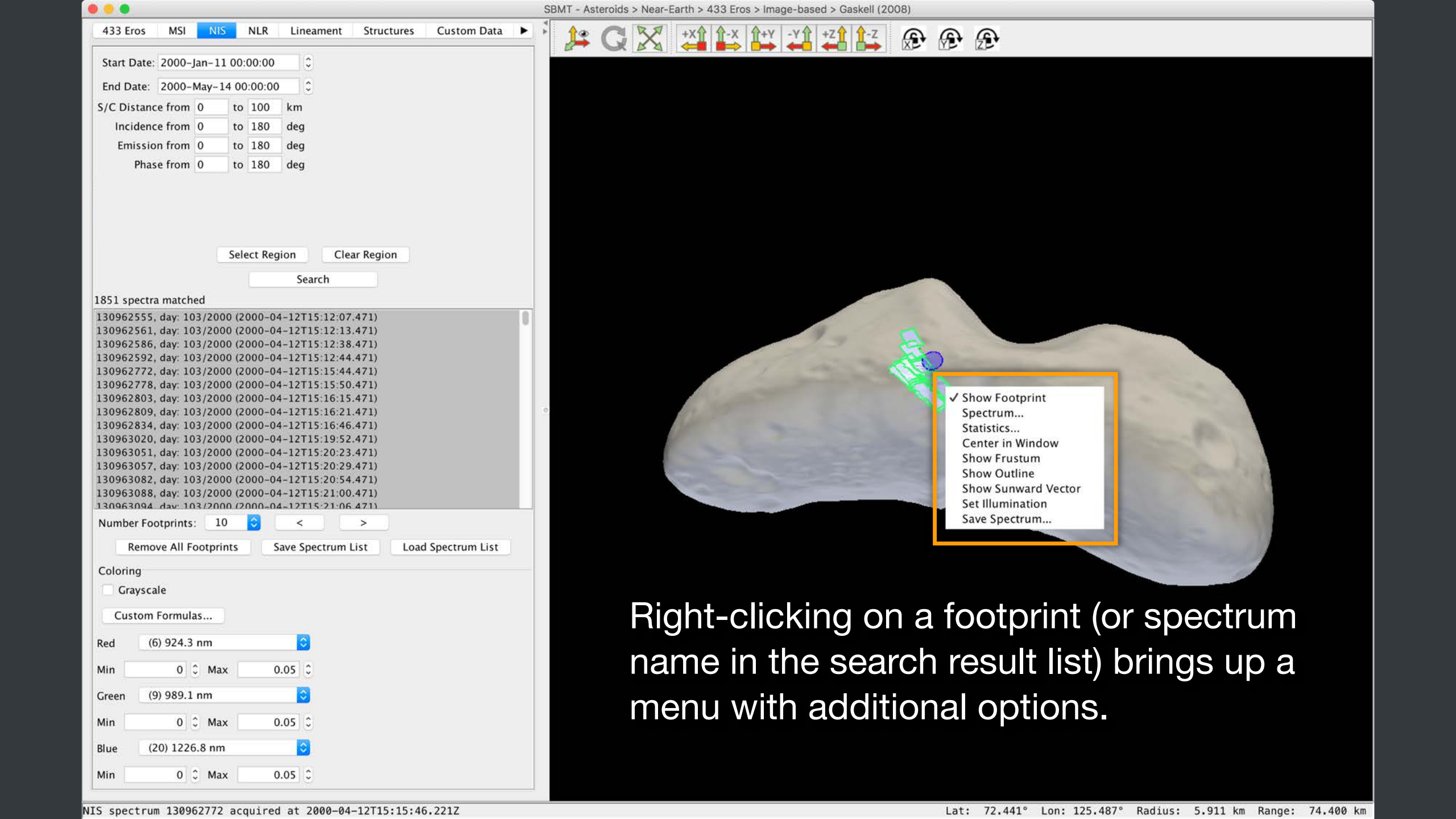
- Go to the tab that contains spectral data.
- For several bodies, the name of this tab will be specific to the mission that studied the body (e.g., NIS for Eros).



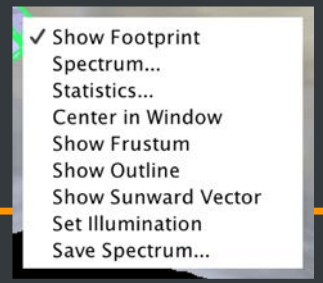
Searching for spectra (cont.)

- Many of the search parameters are similar to the ones used to search for images.
- Buttons beneath the search results lists allow users to remove spectral footprints or save/load lists of spectra, similar to the buttons below the list of image search results.
- These similar features will not be re-described here.


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Start Date: 2000-Jan-11 00:00:00
End Date: 2000-May-14 00:00:00
S/C Distance from 0 to 100 km
Incidence from 0 to 180 deg
Emission from 0 to 180 deg
Phase from 0 to 180 deg
Select Region
Clear Region
Search
1851 spectra matched
130962555, day: 103/2000 (2000-04-12T15:12:07.471)
130962561, day: 103/2000 (2000-04-12T15:12:13.471)
130962586, day: 103/2000 (2000-04-12T15:12:38.471)
130962592, day: 103/2000 (2000-04-12T15:12:44.471)
130962772, day: 103/2000 (2000-04-12T15:15:44.471)
130962778, day: 103/2000 (2000-04-12T15:15:50.471)
130962803, day: 103/2000 (2000-04-12T15:16:15.471)
130962809, day: 103/2000 (2000-04-12T15:16:21.471)
130962834, day: 103/2000 (2000-04-12T15:16:46.471)
130963020, day: 103/2000 (2000-04-12T15:19:52.471)
130963051, day: 103/2000 (2000-04-12T15:20:23.471)
130963057, day: 103/2000 (2000-04-12T15:20:29.471)
130963082, day: 103/2000 (2000-04-12T15:20:54.471)
130963088, day: 103/2000 (2000-04-12T15:21:00.471)
Number Footprints: 10
Remove All Footprints
Save Spectrum List
Load Spectrum List
Coloring
Grayscale
Custom Formulas...
Red (6) 924.3 nm
Min 0 Max 0.05
Green (9) 989.1 nm
Min 0 Max 0.05
Blue (20) 1226.8 nm
Min 0 Max 0.05
Search results appear here, with the first several spectrometer footprints shown on the shape.
Ready.
Range: 74.400 km

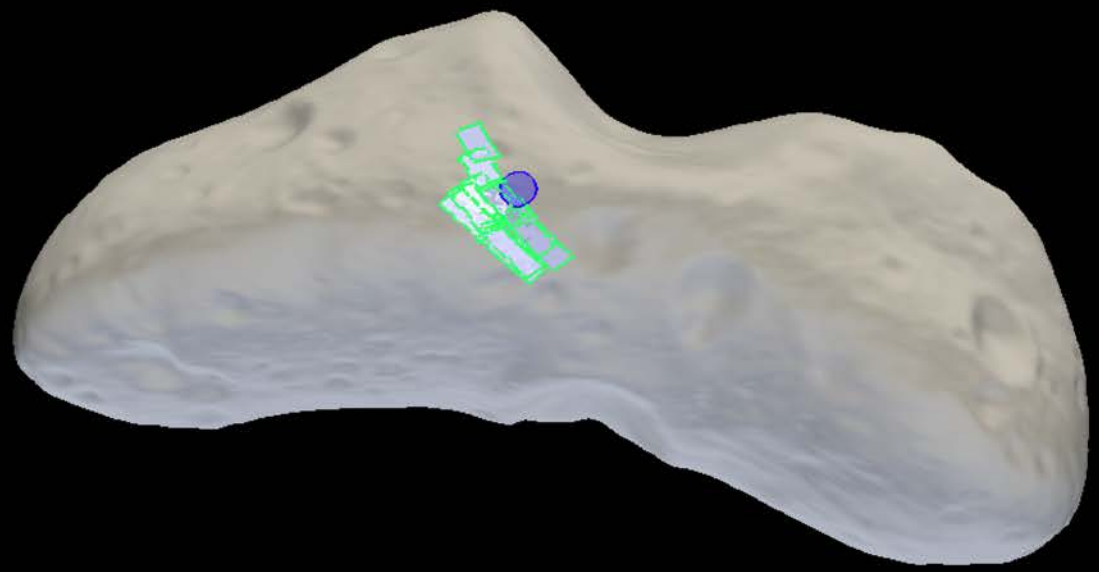

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
433 Eros
MSI
NIS
NLR
Lineament
Structures
Custom Data
Start Date: 2000-Jan-11 00:00:00
End Date: 2000-May-14 00:00:00
S/C Distance from 0 to 100 km
Incidence from 0 to 180 deg
Emission from 0 to 180 deg
Phase from 0 to 180 deg
Select Region
Clear Region
Search
1851 spectra matched
130962555, day: 103/2000 (2000-04-12T15:12:07.471)
130962561, day: 103/2000 (2000-04-12T15:12:13.471)
130962586, day: 103/2000 (2000-04-12T15:12:38.471)
130962592, day: 103/2000 (2000-04-12T15:12:44.471)
130962772, day: 103/2000 (2000-04-12T15:15:44.471)
130962778, day: 103/2000 (2000-04-12T15:15:50.471)
130962803, day: 103/2000 (2000-04-12T15:16:15.471)
130962809, day: 103/2000 (2000-04-12T15:16:21.471)
130962834, day: 103/2000 (2000-04-12T15:16:46.471)
130963020, day: 103/2000 (2000-04-12T15:19:52.471)
130963051, day: 103/2000 (2000-04-12T15:20:23.471)
130963057, day: 103/2000 (2000-04-12T15:20:29.471)
130963082, day: 103/2000 (2000-04-12T15:20:54.471)
130963088, day: 103/2000 (2000-04-12T15:21:00.471)
Number Footprints: 10
Remove All Footprints
Save Spectrum List
Load Spectrum List
Coloring
Grayscale
Custom Formulas...
Red (6) 924.3 nm
Min 0 Max 0.05
Green (9) 989.1 nm
Min 0 Max 0.05
Blue (20) 1226.8 nm
Min 0 Max 0.05
Show Footprint
Spectrum...
Statistics...
Center in Window
Show Frustum
Show Outline
Show Sunward Vector
Set Illumination
Save Spectrum...
Right-clicking on a footprint (or spectrum name in the search result list) brings up a menu with additional options.
NIS spectrum 130962772 acquired at 2000-04-12T15:15:46.221Z
Lat: 72.441° Lon: 125.487° Radius: 5.911 km Range: 74.400 km

Description of menu options



- Show footprint: shows/hides spectrometer footprint.
- Spectrum: opens a window that shows the spectrum (see next slide).
- Statistics: opens a window that shows statistics for incidence angle, emergence angle, relative irradiance, phase angle, and reconstructed BRDF across shape model facets (see upcoming slide).

The window that opens when a user clicks “Spectrum...” from the menu.



NIS Spectrum Properties

NIS Calibrated Spectrum

Reflectance

Wavelength (nm)

NIS Spectrum

Property	Value
Name	N0130962772
Date	2000-04-12T15:15:46.221Z
Day of Year	103
MET	130962772
Duration	5.0 seconds
Polygon Type	Full (all vertices on shape)
Minimum Incidence	53.120815°
Maximum Incidence	66.185875°

130963082, day: 103/2000 (2000-04-12T15:20:54.471)
130963088, day: 103/2000 (2000-04-12T15:21:00.471)

Number Footprints: 10 < >

Remove All Footprints | Save Spectrum List | Load Spectrum List

Coloring

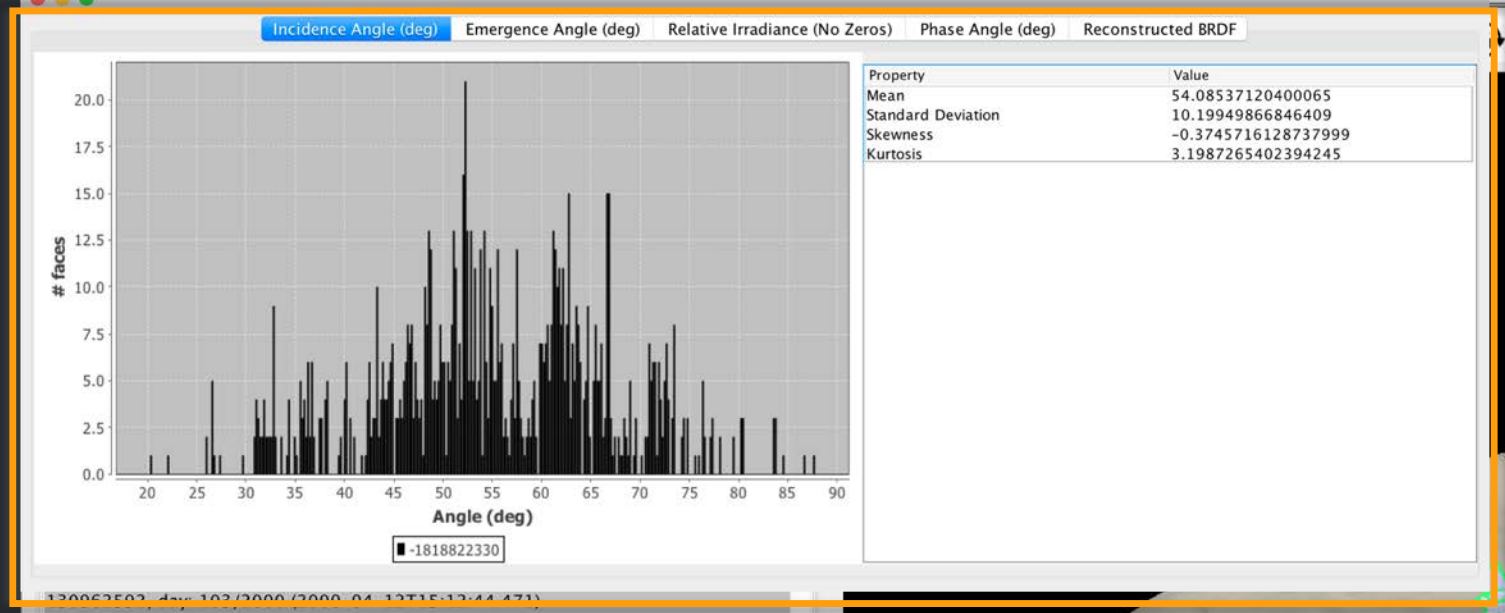
Grayscale

Custom Formulas...

Red (6) 924.3 nm
Min 0 Max 0.05
Green (9) 989.1 nm
Min 0 Max 0.05
Blue (20) 1226.8 nm
Min 0 Max 0.05

NIS spectrum 130962772 acquired at 2000-04-12T15:15:46.221Z

Lat: 42.871° Lon: 50.059° Radius: 6.285 km Range: 74.397 km



130962772, day: 103/2000 (2000-04-12T15:15:44.471)
130962778, day: 103/2000 (2000-04-12T15:15:50.471)
130962803, day: 103/2000 (2000-04-12T15:16:15.471)
130962809, day: 103/2000 (2000-04-12T15:16:21.471)
130962834, day: 103/2000 (2000-04-12T15:16:46.471)
130963020, day: 103/2000 (2000-04-12T15:19:52.471)
130963051, day: 103/2000 (2000-04-12T15:20:23.471)
130963057, day: 103/2000 (2000-04-12T15:20:29.471)
130963082, day: 103/2000 (2000-04-12T15:20:54.471)
130963088, day: 103/2000 (2000-04-12T15:21:00.471)

Number Footprints: 10 < >

Remove All Footprints | Save Spectrum List | Load Spectrum List

Coloring

Grayscale

Custom Formulas...

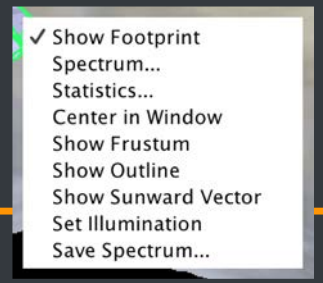
Red (6) 924.3 nm
Min 0 Max 0.05
Green (9) 989.1 nm
Min 0 Max 0.05
Blue (20) 1226.8 nm
Min 0 Max 0.05

NIS spectrum 130962772 acquired at 2000-04-12T15:15:46.221Z

Lat: 42.871° Lon: 50.059° Radius: 6.285 km Range: 74.397 km

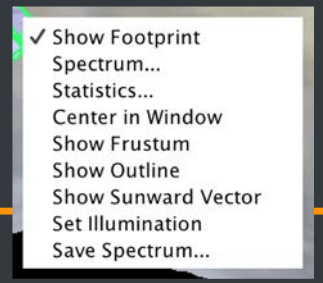
The window that opens when a user clicks “Statistics...” from the menu.

Description of menu options

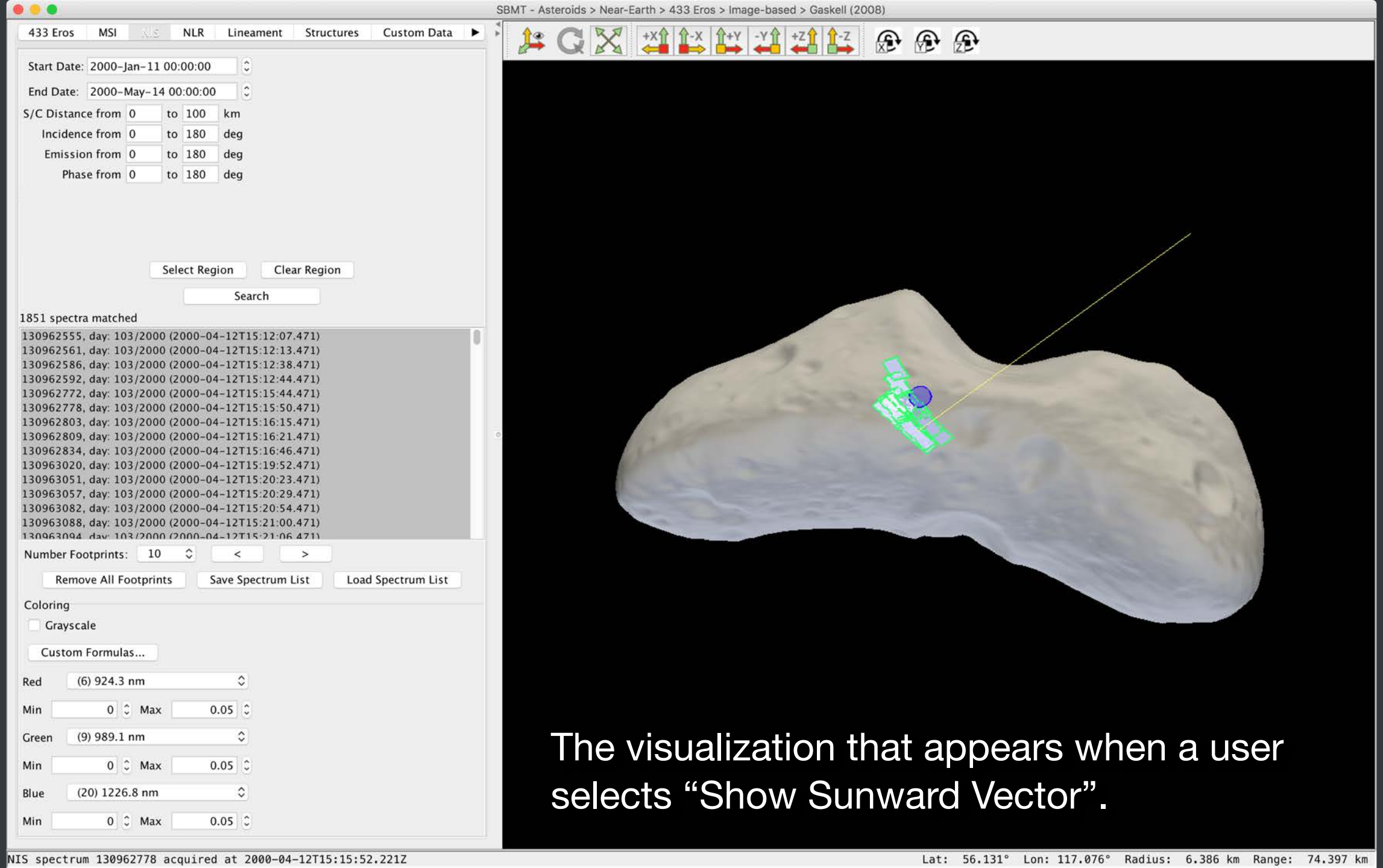


- Center in window: centers spectrometer footprint in viewing panel (similar to image search pop-up menu).
- Show frustum: shows projection of spectrometer frustum (similar to image search pop-up menu).
- Show outline: shows/hides outline of spectrometer footprint (similar to boundaries in image search).

Description of menu options



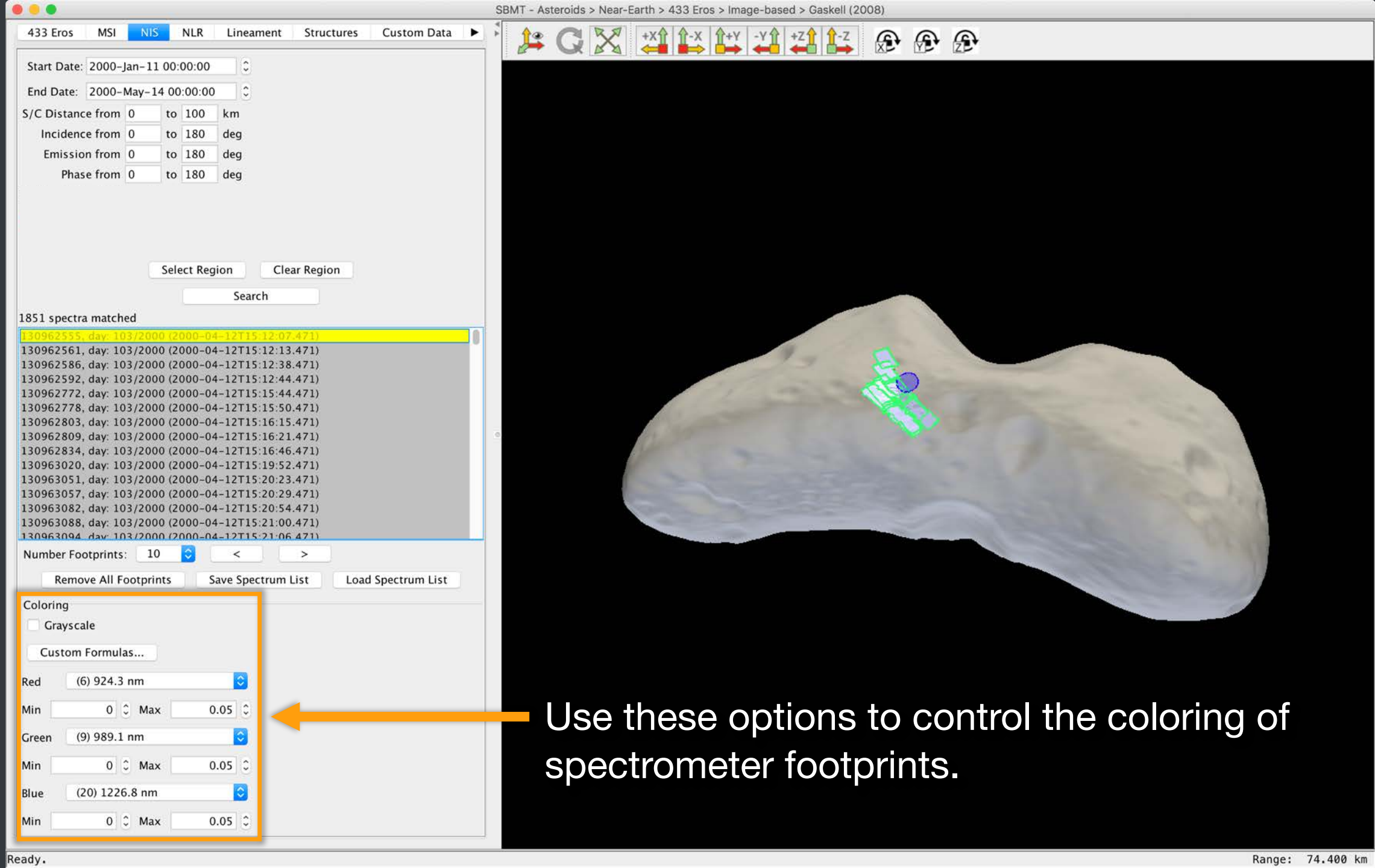
- Show sunward vector: show/hide a vector that shows the direction to the sun.
- Set illumination: illuminates the shape model to approximate the illumination present on the body at the time of data acquisition.
- Save spectrum: opens a dialog that allows users to save the selected spectrum as a txt file.



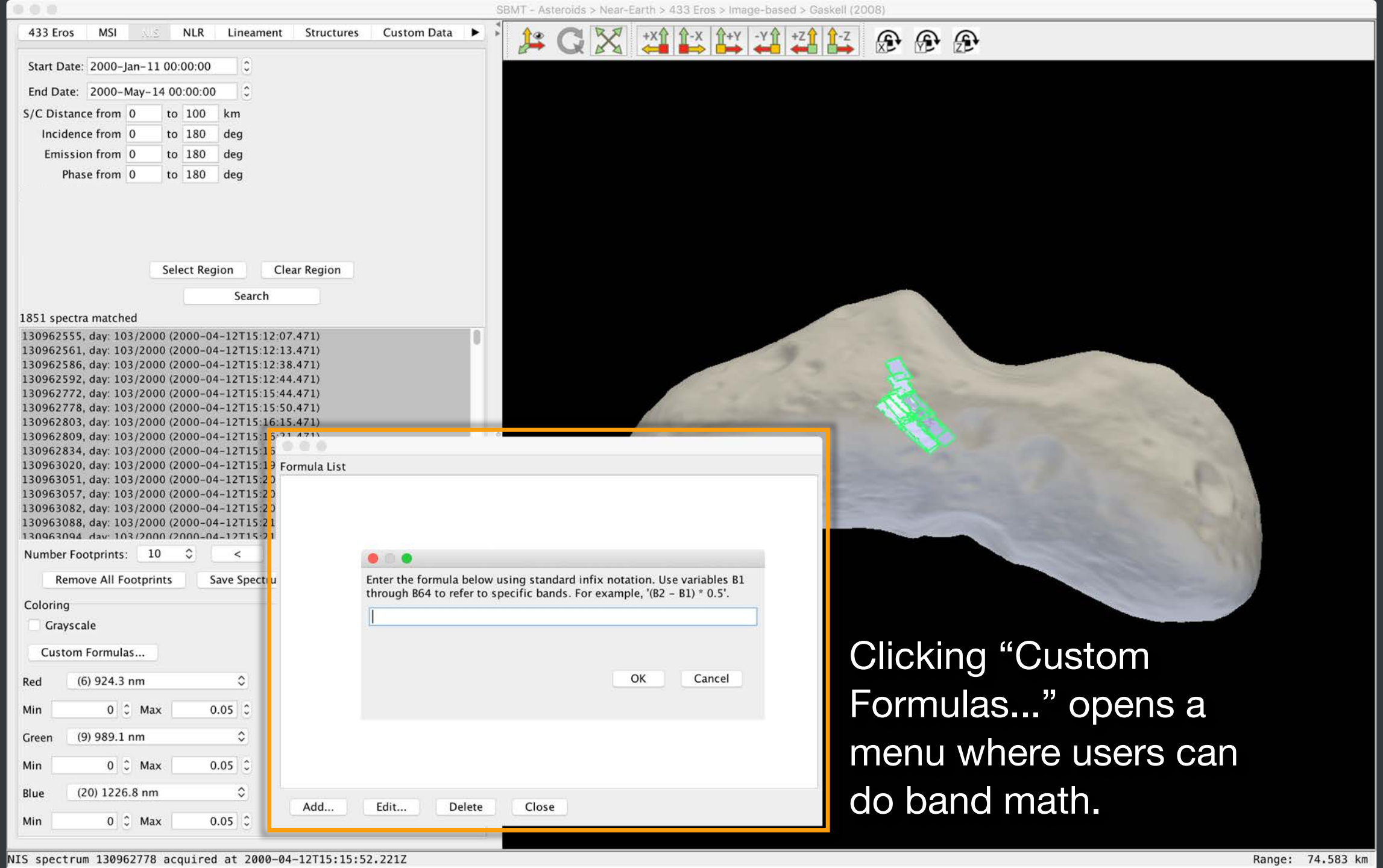
The visualization that appears when a user selects “Show Sunward Vector”.

Footprint coloring

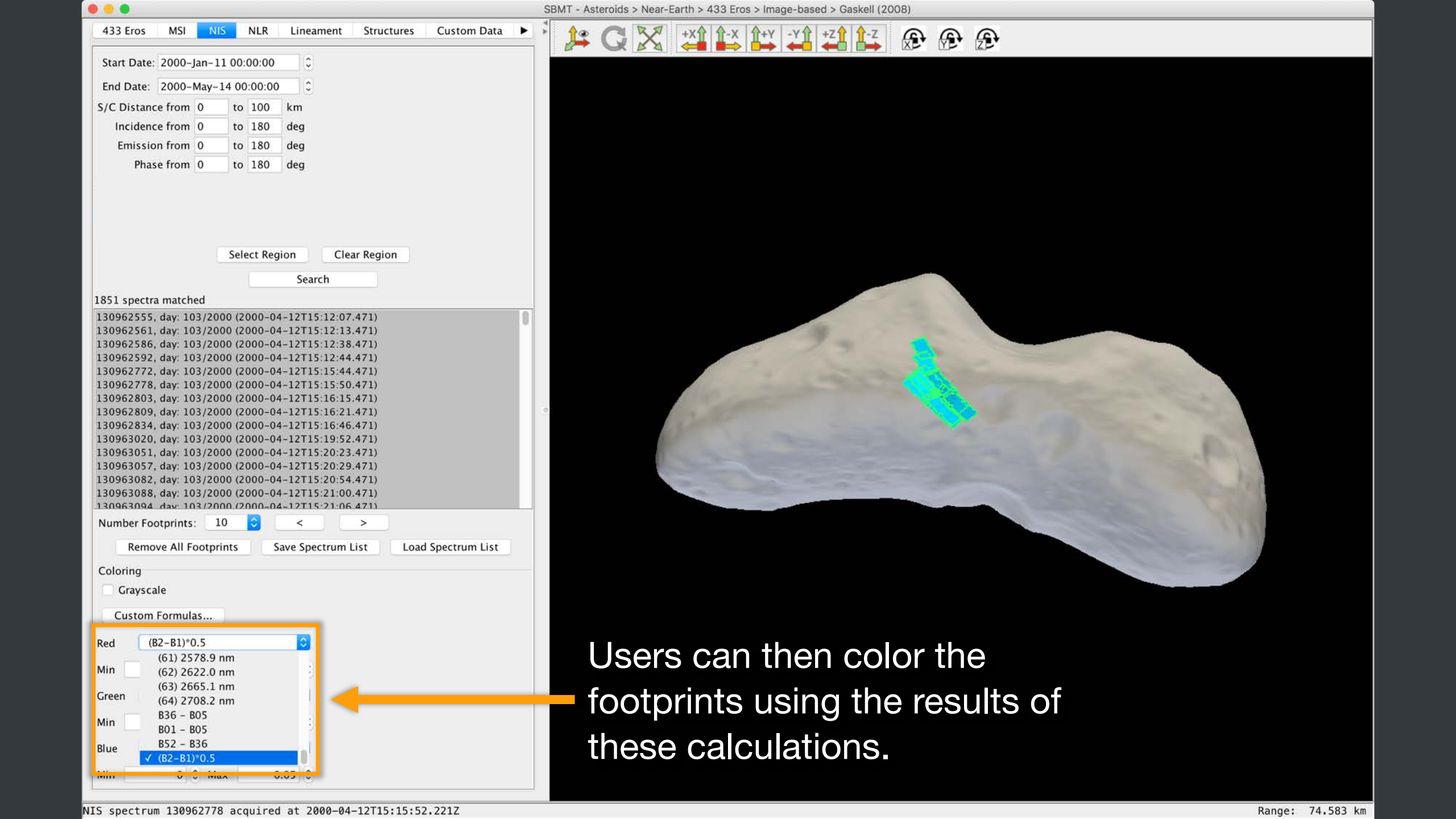
- Users can choose to color the spectrometer footprints using grayscale or RBG options.
- Users can also define custom formulas that use the results of simple band math calculations to color the spectrometer footprints.



Use these options to control the coloring of spectrometer footprints.



Clicking “Custom Formulas...” opens a menu where users can do band math.



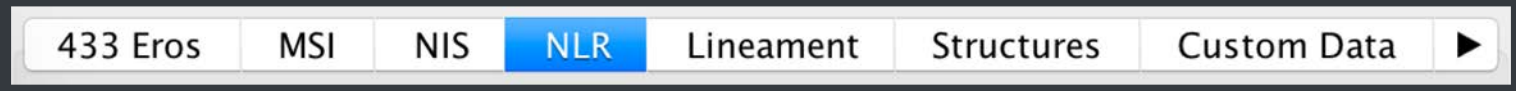
Users can then color the footprints using the results of these calculations.

This SBMT tutorial explains how to:

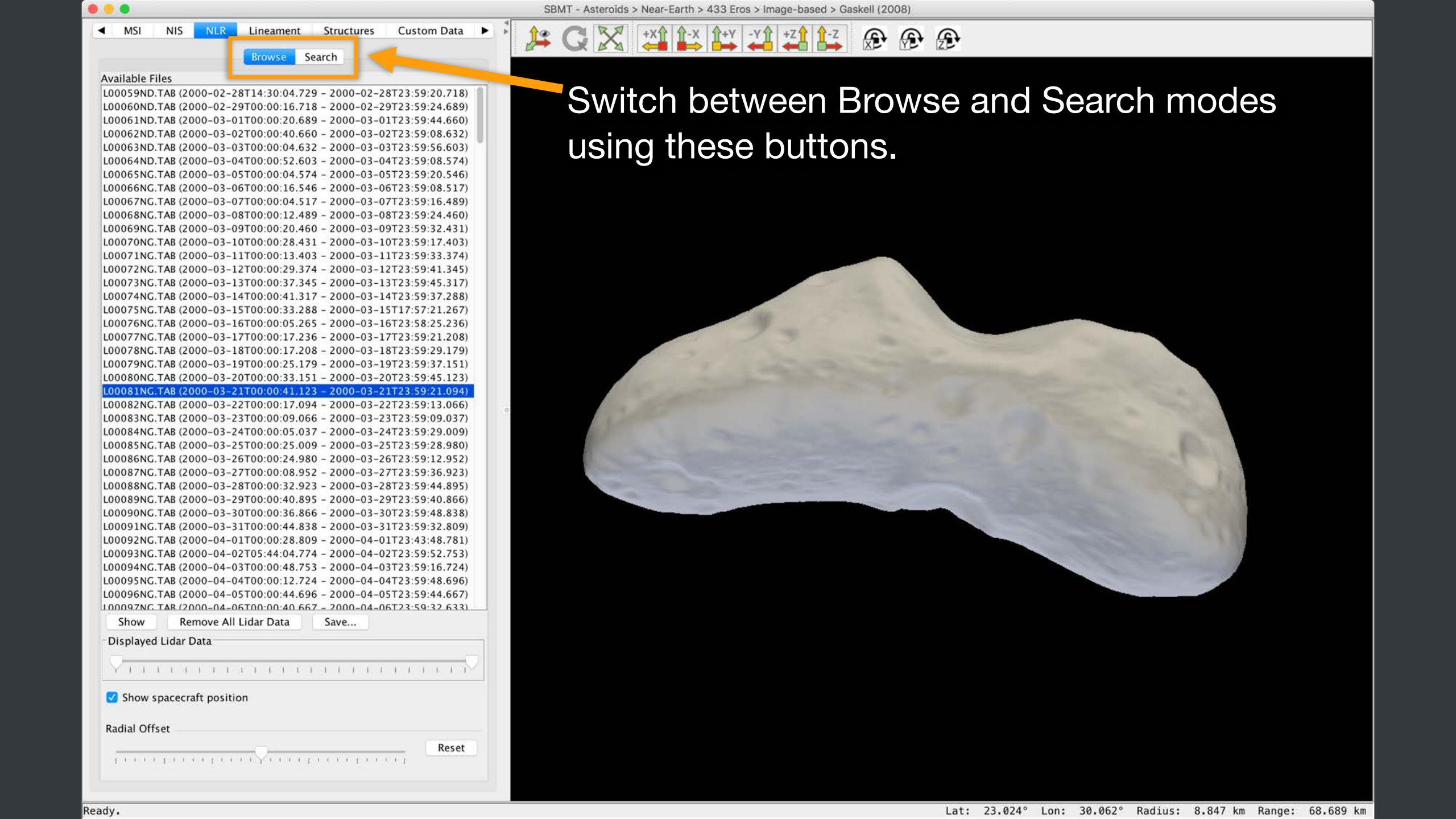
- Search for and visualize images.
- Search for and visualize spectral data.
- Search for and visualize altimetry data.

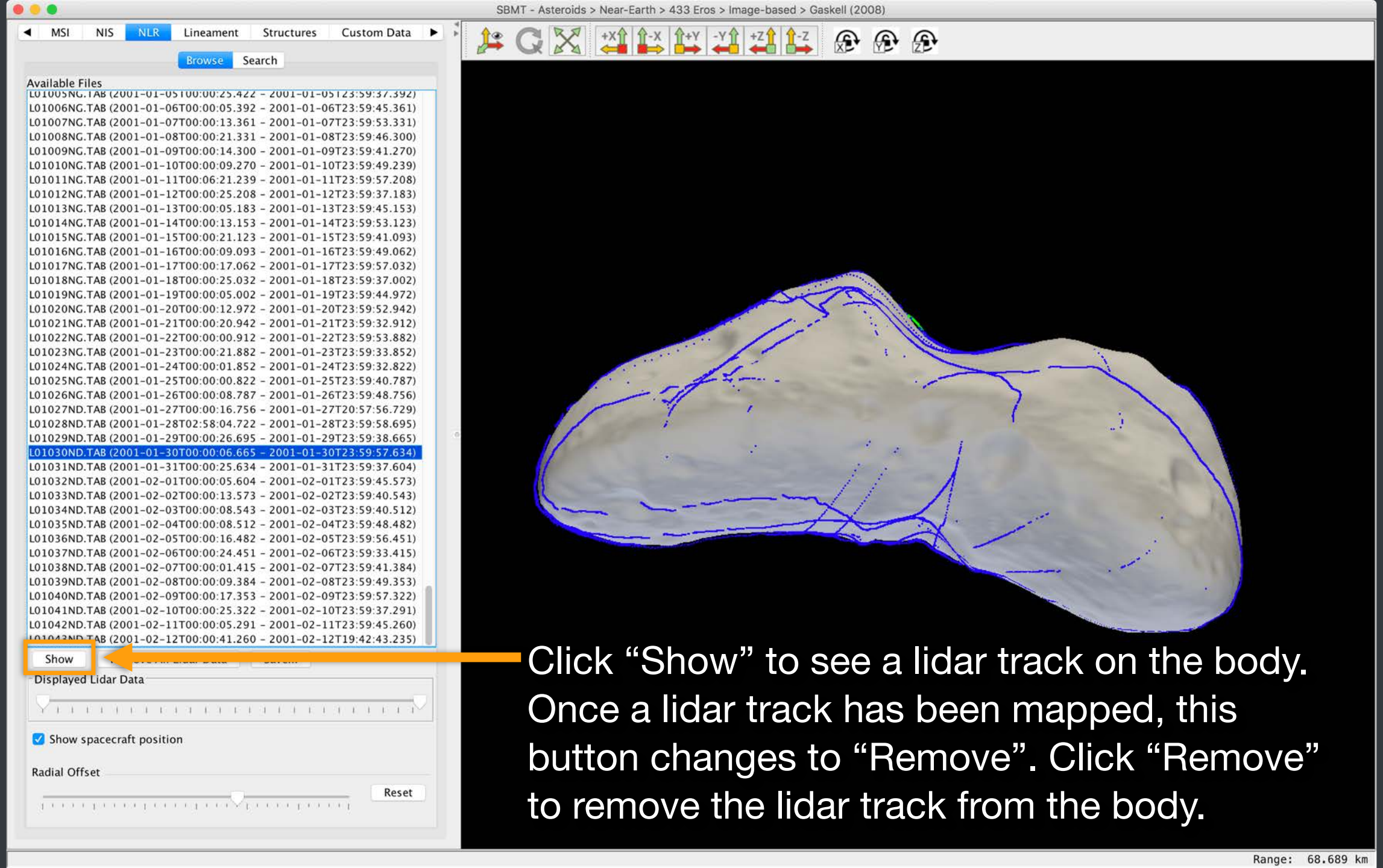
Searching for altimetry data

- Go to the altimetry data tab.
- The name of this tab will be specific to the mission that studied the body (e.g., NLR for Eros, LIDAR for Itokawa, MOLA for Phobos).

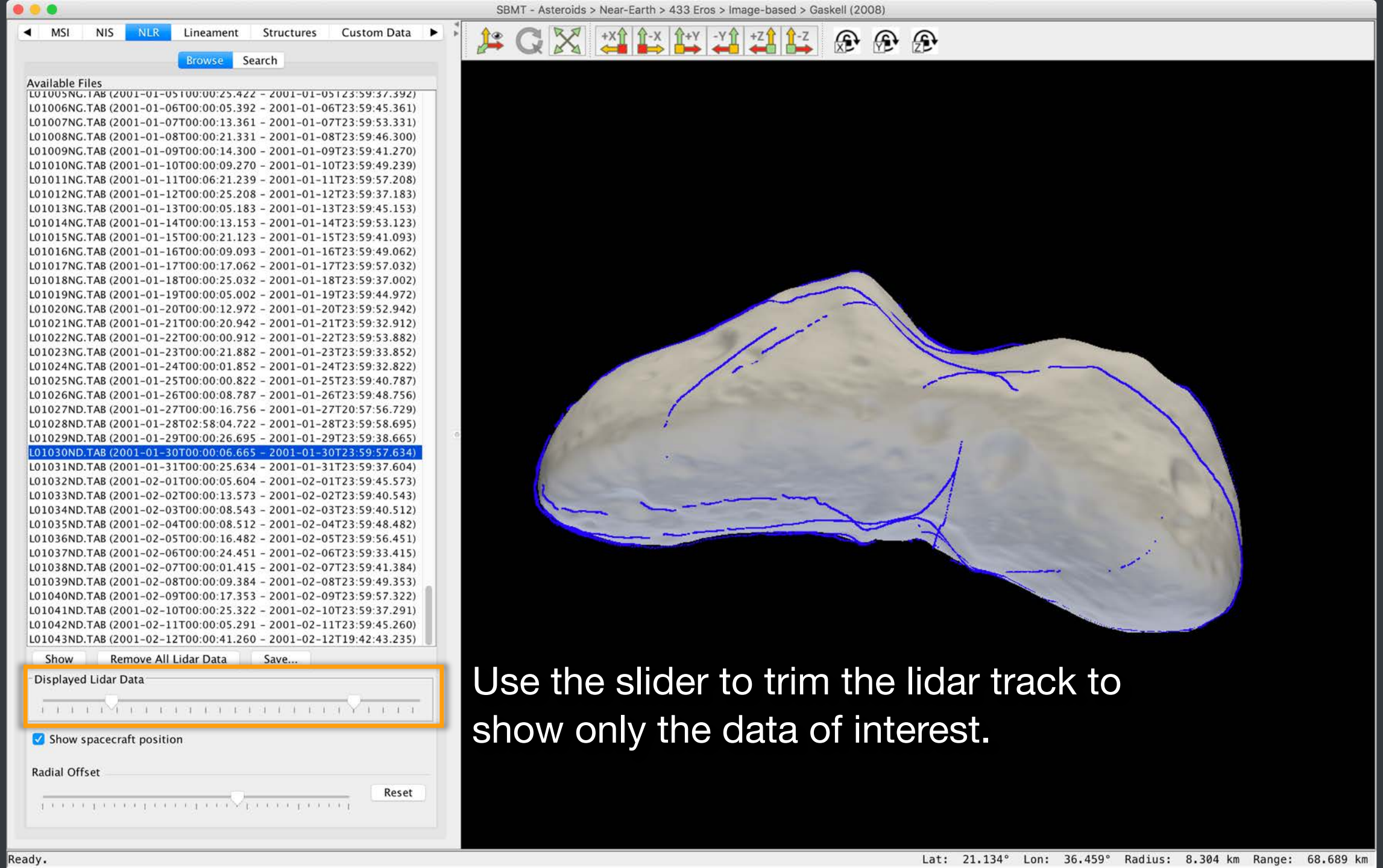


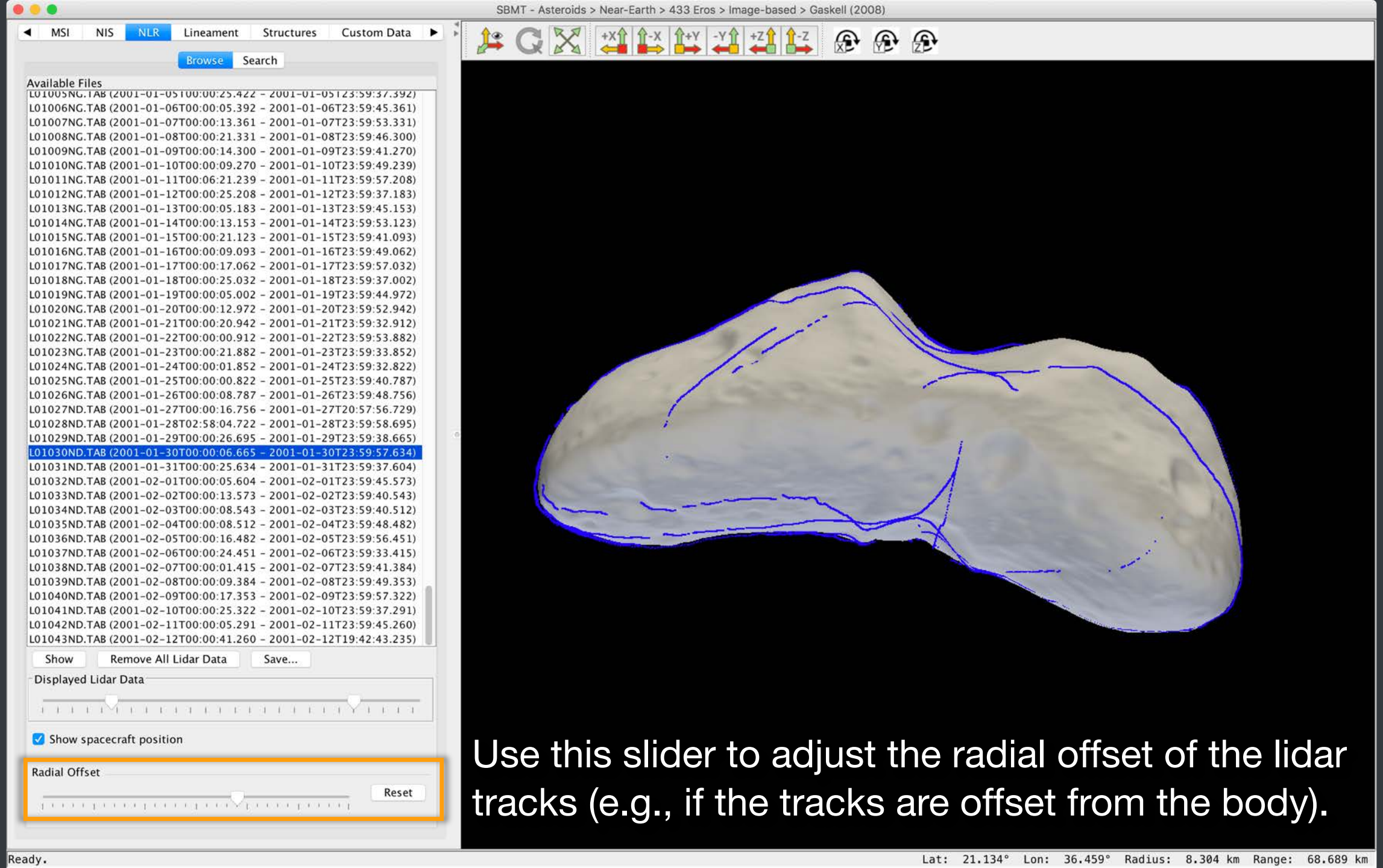
- Users can choose to browse available altimetry data or search for data in a particular region.

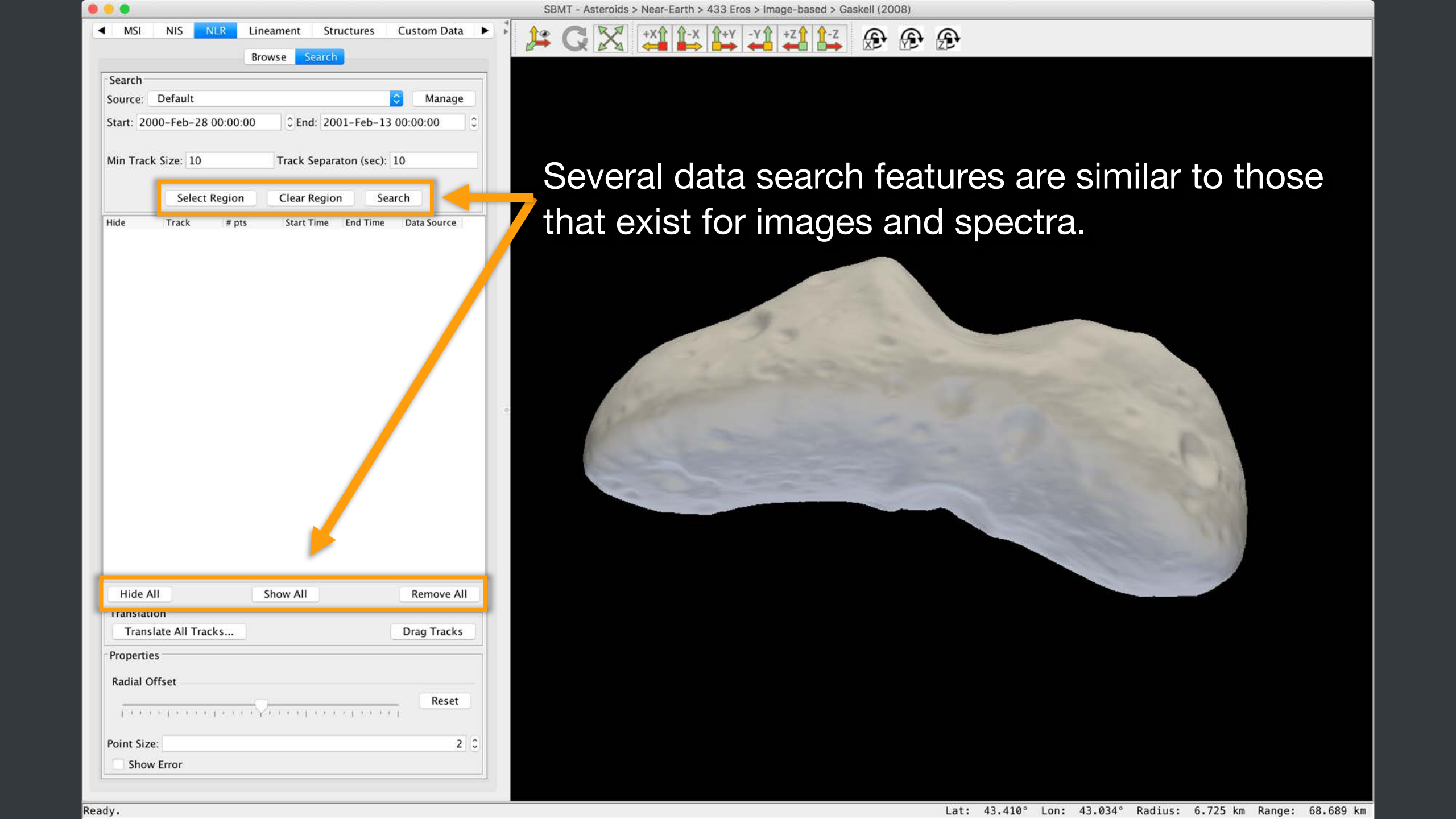

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Switch between Browse and Search modes using these buttons.
Available Files
L00059ND.TAB (2000-02-28T14:30:04.729 - 2000-02-28T23:59:20.718)
L00060ND.TAB (2000-02-29T00:00:16.718 - 2000-02-29T23:59:24.689)
L00061ND.TAB (2000-03-01T00:00:20.689 - 2000-03-01T23:59:44.660)
L00062ND.TAB (2000-03-02T00:00:40.660 - 2000-03-02T23:59:08.632)
L00063ND.TAB (2000-03-03T00:00:04.632 - 2000-03-03T23:59:56.603)
L00064ND.TAB (2000-03-04T00:00:52.603 - 2000-03-04T23:59:08.574)
L00065NG.TAB (2000-03-05T00:00:04.574 - 2000-03-05T23:59:20.546)
L00066NG.TAB (2000-03-06T00:00:16.546 - 2000-03-06T23:59:08.517)
L00067NG.TAB (2000-03-07T00:00:04.517 - 2000-03-07T23:59:16.489)
L00068NG.TAB (2000-03-08T00:00:12.489 - 2000-03-08T23:59:24.460)
L00069NG.TAB (2000-03-09T00:00:20.460 - 2000-03-09T23:59:32.431)
L00070NG.TAB (2000-03-10T00:00:28.431 - 2000-03-10T23:59:17.403)
L00071NG.TAB (2000-03-11T00:00:13.403 - 2000-03-11T23:59:33.374)
L00072NG.TAB (2000-03-12T00:00:29.374 - 2000-03-12T23:59:41.345)
L00073NG.TAB (2000-03-13T00:00:37.345 - 2000-03-13T23:59:45.317)
L00074NG.TAB (2000-03-14T00:00:41.317 - 2000-03-14T23:59:37.288)
L00075NG.TAB (2000-03-15T00:00:33.288 - 2000-03-15T17:57:21.267)
L00076NG.TAB (2000-03-16T00:00:05.265 - 2000-03-16T23:58:25.236)
L00077NG.TAB (2000-03-17T00:00:17.236 - 2000-03-17T23:59:21.208)
L00078NG.TAB (2000-03-18T00:00:17.208 - 2000-03-18T23:59:29.179)
L00079NG.TAB (2000-03-19T00:00:25.179 - 2000-03-19T23:59:37.151)
L00080NG.TAB (2000-03-20T00:00:33.151 - 2000-03-20T23:59:45.123)
L00081NG.TAB (2000-03-21T00:00:41.123 - 2000-03-21T23:59:21.094)
L00082NG.TAB (2000-03-22T00:00:17.094 - 2000-03-22T23:59:13.066)
L00083NG.TAB (2000-03-23T00:00:09.066 - 2000-03-23T23:59:09.037)
L00084NG.TAB (2000-03-24T00:00:05.037 - 2000-03-24T23:59:29.009)
L00085NG.TAB (2000-03-25T00:00:25.009 - 2000-03-25T23:59:28.980)
L00086NG.TAB (2000-03-26T00:00:24.980 - 2000-03-26T23:59:12.952)
L00087NG.TAB (2000-03-27T00:00:08.952 - 2000-03-27T23:59:36.923)
L00088NG.TAB (2000-03-28T00:00:32.923 - 2000-03-28T23:59:44.895)
L00089NG.TAB (2000-03-29T00:00:40.895 - 2000-03-29T23:59:40.866)
L00090NG.TAB (2000-03-30T00:00:36.866 - 2000-03-30T23:59:48.838)
L00091NG.TAB (2000-03-31T00:00:44.838 - 2000-03-31T23:59:32.809)
L00092NG.TAB (2000-04-01T00:00:28.809 - 2000-04-01T23:43:48.781)
L00093NG.TAB (2000-04-02T05:44:04.774 - 2000-04-02T23:59:52.753)
L00094NG.TAB (2000-04-03T00:00:48.753 - 2000-04-03T23:59:16.724)
L00095NG.TAB (2000-04-04T00:00:12.724 - 2000-04-04T23:59:48.696)
L00096NG.TAB (2000-04-05T00:00:44.696 - 2000-04-05T23:59:44.667)
Show
Remove All Lidar Data
Save...
Displayed Lidar Data
Show spacecraft position
Radial Offset
Reset
Ready.
Lat: 23.024° Lon: 30.062° Radius: 8.847 km Range: 68.689 km

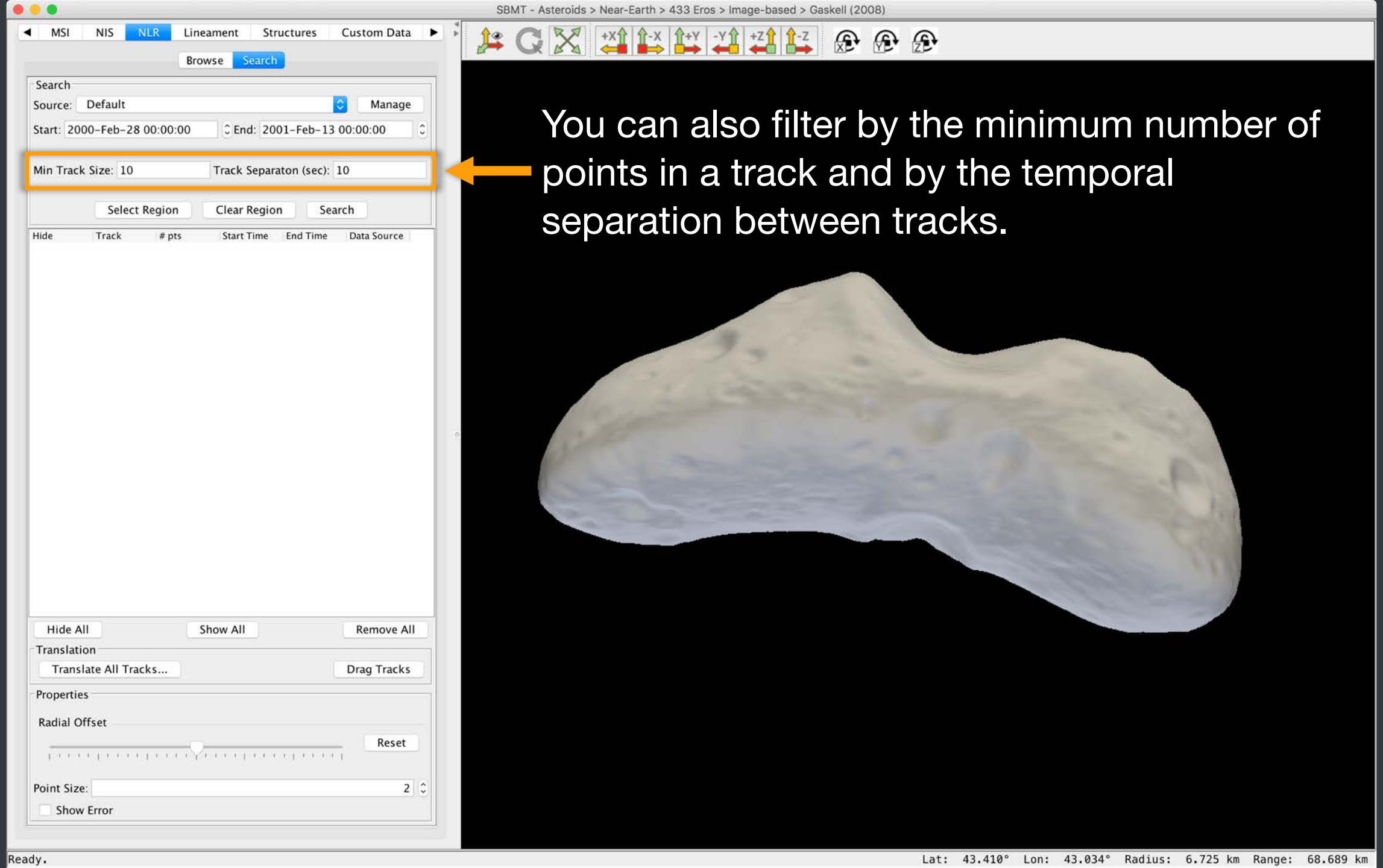


Click “Show” to see a lidar track on the body. Once a lidar track has been mapped, this button changes to “Remove”. Click “Remove” to remove the lidar track from the body.


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Available Files
L01006NG.TAB (2001-01-06T00:00:05.392 - 2001-01-06T23:59:45.361)
L01007NG.TAB (2001-01-07T00:00:13.361 - 2001-01-07T23:59:53.331)
L01008NG.TAB (2001-01-08T00:00:21.331 - 2001-01-08T23:59:46.300)
L01009NG.TAB (2001-01-09T00:00:14.300 - 2001-01-09T23:59:41.270)
L01010NG.TAB (2001-01-10T00:00:09.270 - 2001-01-10T23:59:49.239)
L01011NG.TAB (2001-01-11T00:06:21.239 - 2001-01-11T23:59:57.208)
L01012NG.TAB (2001-01-12T00:00:25.208 - 2001-01-12T23:59:37.183)
L01013NG.TAB (2001-01-13T00:00:05.183 - 2001-01-13T23:59:45.153)
L01014NG.TAB (2001-01-14T00:00:13.153 - 2001-01-14T23:59:53.123)
L01015NG.TAB (2001-01-15T00:00:21.123 - 2001-01-15T23:59:41.093)
L01016NG.TAB (2001-01-16T00:00:09.093 - 2001-01-16T23:59:49.062)
L01017NG.TAB (2001-01-17T00:00:17.062 - 2001-01-17T23:59:57.032)
L01018NG.TAB (2001-01-18T00:00:25.032 - 2001-01-18T23:59:37.002)
L01019NG.TAB (2001-01-19T00:00:05.002 - 2001-01-19T23:59:44.972)
L01020NG.TAB (2001-01-20T00:00:12.972 - 2001-01-20T23:59:52.942)
L01021NG.TAB (2001-01-21T00:00:20.942 - 2001-01-21T23:59:32.912)
L01022NG.TAB (2001-01-22T00:00:00.912 - 2001-01-22T23:59:53.882)
L01023NG.TAB (2001-01-23T00:00:21.882 - 2001-01-23T23:59:33.852)
L01024NG.TAB (2001-01-24T00:00:01.852 - 2001-01-24T23:59:32.822)
L01025NG.TAB (2001-01-25T00:00:00.822 - 2001-01-25T23:59:40.787)
L01026NG.TAB (2001-01-26T00:00:08.787 - 2001-01-26T23:59:48.756)
L01027ND.TAB (2001-01-27T00:00:16.756 - 2001-01-27T20:57:56.729)
L01028ND.TAB (2001-01-28T02:58:04.722 - 2001-01-28T23:59:58.695)
L01029ND.TAB (2001-01-29T00:00:26.695 - 2001-01-29T23:59:38.665)
L01030ND.TAB (2001-01-30T00:00:06.665 - 2001-01-30T23:59:57.634)
L01031ND.TAB (2001-01-31T00:00:25.634 - 2001-01-31T23:59:37.604)
L01032ND.TAB (2001-02-01T00:00:05.604 - 2001-02-01T23:59:45.573)
L01033ND.TAB (2001-02-02T00:00:13.573 - 2001-02-02T23:59:40.543)
L01034ND.TAB (2001-02-03T00:00:08.543 - 2001-02-03T23:59:40.512)
L01035ND.TAB (2001-02-04T00:00:08.512 - 2001-02-04T23:59:48.482)
L01036ND.TAB (2001-02-05T00:00:16.482 - 2001-02-05T23:59:56.451)
L01037ND.TAB (2001-02-06T00:00:24.451 - 2001-02-06T23:59:33.415)
L01038ND.TAB (2001-02-07T00:00:01.415 - 2001-02-07T23:59:41.384)
L01039ND.TAB (2001-02-08T00:00:09.384 - 2001-02-08T23:59:49.353)
L01040ND.TAB (2001-02-09T00:00:17.353 - 2001-02-09T23:59:57.322)
L01041ND.TAB (2001-02-10T00:00:25.322 - 2001-02-10T23:59:37.291)
L01042ND.TAB (2001-02-11T00:00:05.291 - 2001-02-11T23:59:45.260)
L01043ND.TAB (2001-02-12T00:00:41.260 - 2001-02-12T19:42:43.235)
Show
Remove All Lidar Data
Save...
Displayed Lidar Data
Show spacecraft position
Radial Offset
Reset
Use the slider to trim the lidar track to show only the data of interest.
Ready.
Lat: 21.134° Lon: 36.459° Radius: 8.304 km Range: 68.689 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Available Files
L01006NG.TAB (2001-01-06T00:00:05.392 - 2001-01-06T23:59:45.361)
L01007NG.TAB (2001-01-07T00:00:13.361 - 2001-01-07T23:59:53.331)
L01008NG.TAB (2001-01-08T00:00:21.331 - 2001-01-08T23:59:46.300)
L01009NG.TAB (2001-01-09T00:00:14.300 - 2001-01-09T23:59:41.270)
L01010NG.TAB (2001-01-10T00:00:09.270 - 2001-01-10T23:59:49.239)
L01011NG.TAB (2001-01-11T00:06:21.239 - 2001-01-11T23:59:57.208)
L01012NG.TAB (2001-01-12T00:00:25.208 - 2001-01-12T23:59:37.183)
L01013NG.TAB (2001-01-13T00:00:05.183 - 2001-01-13T23:59:45.153)
L01014NG.TAB (2001-01-14T00:00:13.153 - 2001-01-14T23:59:53.123)
L01015NG.TAB (2001-01-15T00:00:21.123 - 2001-01-15T23:59:41.093)
L01016NG.TAB (2001-01-16T00:00:09.093 - 2001-01-16T23:59:49.062)
L01017NG.TAB (2001-01-17T00:00:17.062 - 2001-01-17T23:59:57.032)
L01018NG.TAB (2001-01-18T00:00:25.032 - 2001-01-18T23:59:37.002)
L01019NG.TAB (2001-01-19T00:00:05.002 - 2001-01-19T23:59:44.972)
L01020NG.TAB (2001-01-20T00:00:12.972 - 2001-01-20T23:59:52.942)
L01021NG.TAB (2001-01-21T00:00:20.942 - 2001-01-21T23:59:32.912)
L01022NG.TAB (2001-01-22T00:00:00.912 - 2001-01-22T23:59:53.882)
L01023NG.TAB (2001-01-23T00:00:21.882 - 2001-01-23T23:59:33.852)
L01024NG.TAB (2001-01-24T00:00:01.852 - 2001-01-24T23:59:32.822)
L01025NG.TAB (2001-01-25T00:00:00.822 - 2001-01-25T23:59:40.787)
L01026NG.TAB (2001-01-26T00:00:08.787 - 2001-01-26T23:59:48.756)
L01027ND.TAB (2001-01-27T00:00:16.756 - 2001-01-27T20:57:56.729)
L01028ND.TAB (2001-01-28T02:58:04.722 - 2001-01-28T23:59:58.695)
L01029ND.TAB (2001-01-29T00:00:26.695 - 2001-01-29T23:59:38.665)
L01030ND.TAB (2001-01-30T00:00:06.665 - 2001-01-30T23:59:57.634)
L01031ND.TAB (2001-01-31T00:00:25.634 - 2001-01-31T23:59:37.604)
L01032ND.TAB (2001-02-01T00:00:05.604 - 2001-02-01T23:59:45.573)
L01033ND.TAB (2001-02-02T00:00:13.573 - 2001-02-02T23:59:40.543)
L01034ND.TAB (2001-02-03T00:00:08.543 - 2001-02-03T23:59:40.512)
L01035ND.TAB (2001-02-04T00:00:08.512 - 2001-02-04T23:59:48.482)
L01036ND.TAB (2001-02-05T00:00:16.482 - 2001-02-05T23:59:56.451)
L01037ND.TAB (2001-02-06T00:00:24.451 - 2001-02-06T23:59:33.415)
L01038ND.TAB (2001-02-07T00:00:01.415 - 2001-02-07T23:59:41.384)
L01039ND.TAB (2001-02-08T00:00:09.384 - 2001-02-08T23:59:49.353)
L01040ND.TAB (2001-02-09T00:00:17.353 - 2001-02-09T23:59:57.322)
L01041ND.TAB (2001-02-10T00:00:25.322 - 2001-02-10T23:59:37.291)
L01042ND.TAB (2001-02-11T00:00:05.291 - 2001-02-11T23:59:45.260)
L01043ND.TAB (2001-02-12T00:00:41.260 - 2001-02-12T19:42:43.235)
Show
Remove All Lidar Data
Save...
Displayed Lidar Data
Show spacecraft position
Radial Offset
Reset
+X
-X
+Y
-Y
+Z
-Z
Use this slider to adjust the radial offset of the lidar tracks (e.g., if the tracks are offset from the body).
Ready.
Lat: 21.134° Lon: 36.459° Radius: 8.304 km Range: 68.689 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Search
Source: Default
Manage
Start: 2000-Feb-28 00:00:00
End: 2001-Feb-13 00:00:00
Min Track Size: 10
Track Separaton (sec): 10
Select Region
Clear Region
Search
Hide
Track
pts
Start Time
End Time
Data Source
Hide All
Show All
Remove All
Translation
Translate All Tracks...
Drag Tracks
Properties
Radial Offset
Reset
Point Size: 2
Show Error
Several data search features are similar to those that exist for images and spectra.
Ready.
Lat: 43.410° Lon: 43.034° Radius: 6.725 km Range: 68.689 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Search
Source: Default
Manage
Start: 2000-Feb-28 00:00:00
End: 2001-Feb-13 00:00:00
Min Track Size: 10
Track Separaton (sec): 10
Select Region
Clear Region
Search
Hide
Track
pts
Start Time
End Time
Data Source
Hide All
Show All
Remove All
Translation
Translate All Tracks...
Drag Tracks
Properties
Radial Offset
Reset
Point Size: 2
Show Error
You can also filter by the minimum number of points in a track and by the temporal separation between tracks.
Ready.
Lat: 43.410° Lon: 43.034° Radius: 6.725 km Range: 68.689 km

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

MSI | NIS | NLR | Lineament | Structures | Custom Data

Browse | Search

Search

Source: Default | Manage

Start: 2000-Feb-28 00:00:00 End: 2001-Feb-13 00:00:00

Min Track Size: 10 Track Separaton (sec): 10

Select Region | Clear Region | Search

Hide	Track	# pts	Start Time	End Time
	Trk 0	17	2000-03-11T09:50:26.891000	2000-03-11T09:
	Trk 1	13	2000-03-11T09:53:56.891000	2000-03-11T09:
	Trk 2	35	2000-03-11T09:54:54.891000	2000-03-11T09:
	Trk 3	42	2000-03-11T09:57:37.891000	2000-03-11T09:
	Trk 4	105	2000-03-11T09:58:52.891000	2000-03-11T10:
	Trk 5	101	2000-03-11T10:02:22.891000	2000-03-11T10:
	Trk 6	76	2000-03-11T10:05:44.891000	2000-03-11T10:
	Trk 7	12	2000-03-19T06:37:30.672000	2000-03-19T06:
	Trk 8	12	2000-03-20T04:25:25.646000	2000-03-20T04:
	Trk 9	39	2000-03-20T09:33:47.640000	2000-03-20T09:
	Trk 10	65	2000-03-20T09:35:30.640000	2000-03-20T09:
	Trk 11	15	2000-03-20T09:42:07.640000	2000-03-20T09:
	Trk 12	32	2000-03-20T09:43:07.639000	2000-03-20T09:
	Trk 13	12	2000-03-20T09:44:06.639000	2000-03-20T09:
	Trk 14	18	2000-03-30T07:09:45.358000	2000-03-30T07:
	Trk 15	57	2000-04-06T01:11:54.166000	2000-04-06T01:
	Trk 16	57	2000-04-06T01:43:47.165000	2000-04-06T01:
	Trk 17	82	2000-04-06T02:24:57.164000	2000-04-06T02:
	Trk 18	17	2000-04-06T03:24:57.163000	2000-04-06T03:
	Trk 19	24	2000-04-06T04:33:55.162000	2000-04-06T04:
	Trk 20	34	2000-04-06T06:07:49.160000	2000-04-06T06:
	Trk 21	26	2000-04-06T06:28:18.159000	2000-04-06T06:
	Trk 22	46	2000-04-06T06:37:24.159000	2000-04-06T06:
	Trk 23	196	2000-04-06T06:54:37.159000	2000-04-06T06:
	Trk 24	198	2000-04-06T12:18:10.153000	2000-04-06T12:
	Trk 25	132	2000-04-06T12:22:01.152000	2000-04-06T12:
	Trk 26	33	2000-04-07T04:44:21.127000	2000-04-07T04:

Hide All | Show All | Remove All

Translation

Translate All Tracks... | Drag Tracks

Properties

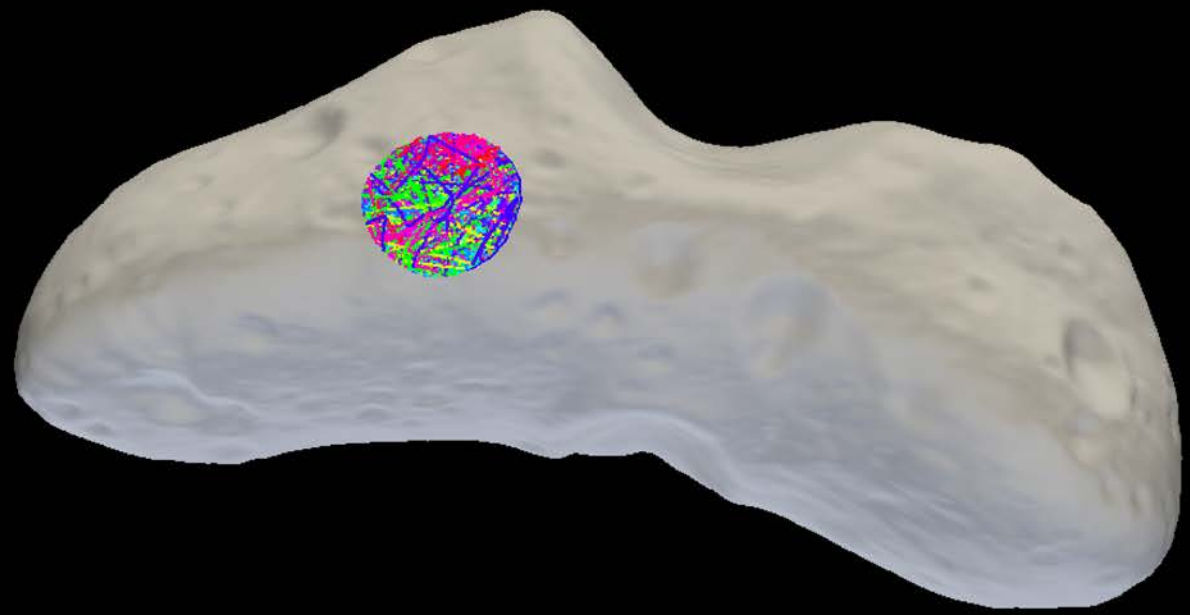
Radial Offset

Reset

Point Size: 2

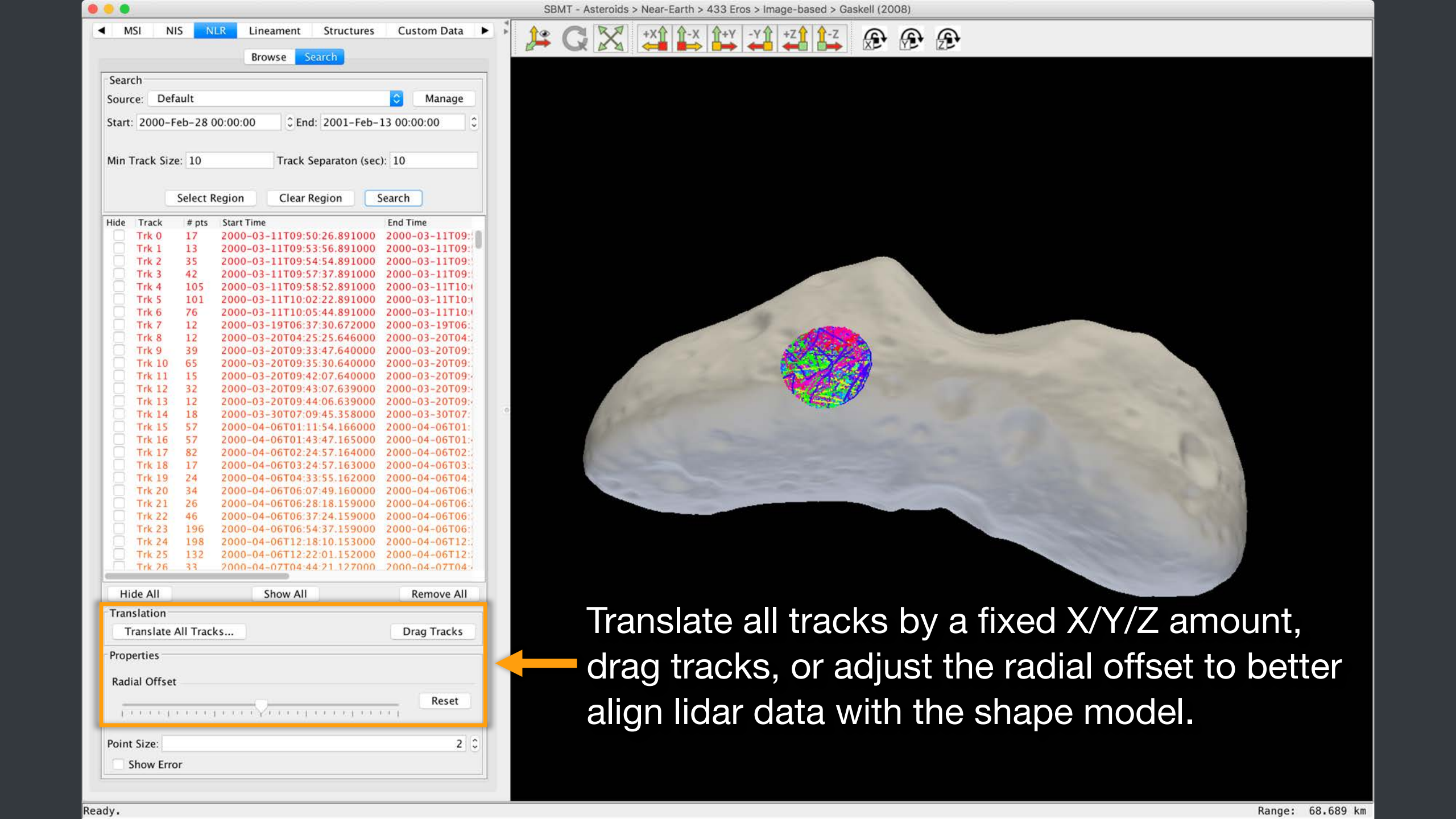
Show Error

When a user searches by region, all of the lidar tracks that fall within that region appear in the region and in the search results list.



Ready.

Range: 68.689 km


SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
NLR
Lineament
Structures
Custom Data
Browse
Search
Search
Source: Default
Manage
Start: 2000-Feb-28 00:00:00
End: 2001-Feb-13 00:00:00
Min Track Size: 10
Track Separaton (sec): 10
Select Region
Clear Region
Search
Hide
Track
pts
Start Time
End Time
Trk 0 17 2000-03-11T09:50:26.891000
Trk 1 13 2000-03-11T09:53:56.891000
Trk 2 35 2000-03-11T09:54:54.891000
Trk 3 42 2000-03-11T09:57:37.891000
Trk 4 105 2000-03-11T09:58:52.891000
Trk 5 101 2000-03-11T10:02:22.891000
Trk 6 76 2000-03-11T10:05:44.891000
Trk 7 12 2000-03-19T06:37:30.672000
Trk 8 12 2000-03-20T04:25:25.646000
Trk 9 39 2000-03-20T09:33:47.640000
Trk 10 65 2000-03-20T09:35:30.640000
Trk 11 15 2000-03-20T09:42:07.640000
Trk 12 32 2000-03-20T09:43:07.639000
Trk 13 12 2000-03-20T09:44:06.639000
Trk 14 18 2000-03-30T07:09:45.358000
Trk 15 57 2000-04-06T01:11:54.166000
Trk 16 57 2000-04-06T01:43:47.165000
Trk 17 82 2000-04-06T02:24:57.164000
Trk 18 17 2000-04-06T03:24:57.163000
Trk 19 24 2000-04-06T04:33:55.162000
Trk 20 34 2000-04-06T06:07:49.160000
Trk 21 26 2000-04-06T06:28:18.159000
Trk 22 46 2000-04-06T06:37:24.159000
Trk 23 196 2000-04-06T06:54:37.159000
Trk 24 198 2000-04-06T12:18:10.153000
Trk 25 132 2000-04-06T12:22:01.152000
Hide All
Show All
Remove All
Translation
Translate All Tracks...
Drag Tracks
Properties
Radial Offset
Reset
Point Size: 2
Show Error
+X
-X
+Y
-Y
+Z
-Z
Translate all tracks by a fixed X/Y/Z amount, drag tracks, or adjust the radial offset to better align lidar data with the shape model.
Ready.
Range: 68.689 km

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)

MSI | NIS | NLR | Lineament | Structures | Custom Data

Browse | Search

Search

Source: Default | Manage

Start: 2000-Feb-28 00:00:00 End: 2001-Feb-13 00:00:00

Min Track Size: 10 Track Separaton (sec): 10

Select Region | Clear Region | Search

Hide	Track	# pts	Start Time	End Time
	Trk 0	17	2000-03-11T09:50:26.891000	2000-03-11T09:
	Trk 1	13	2000-03-11T09:53:56.891000	2000-03-11T09:
	Trk 2	35	2000-03-11T09:54:54.891000	2000-03-11T09:
	Trk 3	42	2000-03-11T09:57:37.891000	2000-03-11T09:
	Trk 4	105	2000-03-11T09:58:52.891000	2000-03-11T10:
	Trk 5	101	2000-03-11T10:02:22.891000	2000-03-11T10:
	Trk 6	76	2000-03-11T10:05:44.891000	2000-03-11T10:
	Trk 7	12	2000-03-19T06:37:30.672000	2000-03-19T06:
	Trk 8	12	2000-03-20T04:25:25.646000	2000-03-20T04:
	Trk 9	39	2000-03-20T09:33:47.640000	2000-03-20T09:
	Trk 10	65	2000-03-20T09:35:30.640000	2000-03-20T09:
	Trk 11	15	2000-03-20T09:42:07.640000	2000-03-20T09:
	Trk 12	32	2000-03-20T09:43:07.639000	2000-03-20T09:
	Trk 13	12	2000-03-20T09:44:06.639000	2000-03-20T09:
	Trk 14	18	2000-03-30T07:09:45.358000	2000-03-30T07:
	Trk 15	57	2000-04-06T01:11:54.166000	2000-04-06T01:
	Trk 16	57	2000-04-06T01:43:47.165000	2000-04-06T01:
	Trk 17	82	2000-04-06T02:24:57.164000	2000-04-06T02:
	Trk 18	17	2000-04-06T03:24:57.163000	2000-04-06T03:
	Trk 19	24	2000-04-06T04:33:55.162000	2000-04-06T04:
	Trk 20	34	2000-04-06T06:07:49.160000	2000-04-06T06:
	Trk 21	26	2000-04-06T06:28:18.159000	2000-04-06T06:
	Trk 22	46	2000-04-06T06:37:24.159000	2000-04-06T06:
	Trk 23	196	2000-04-06T06:54:37.159000	2000-04-06T06:
	Trk 24	198	2000-04-06T12:18:10.153000	2000-04-06T12:
	Trk 25	132	2000-04-06T12:22:01.152000	2000-04-06T12:
	Trk 26	33	2000-04-07T04:44:21.127000	2000-04-07T04:

Hide All | Show All | Remove All

Translation

Translate All Tracks... | Drag Tracks

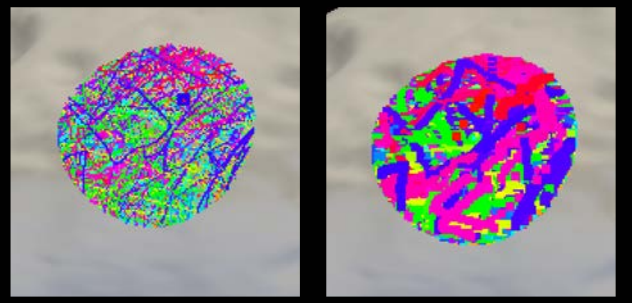
Properties

Radial Offset

Reset

Point Size: 2

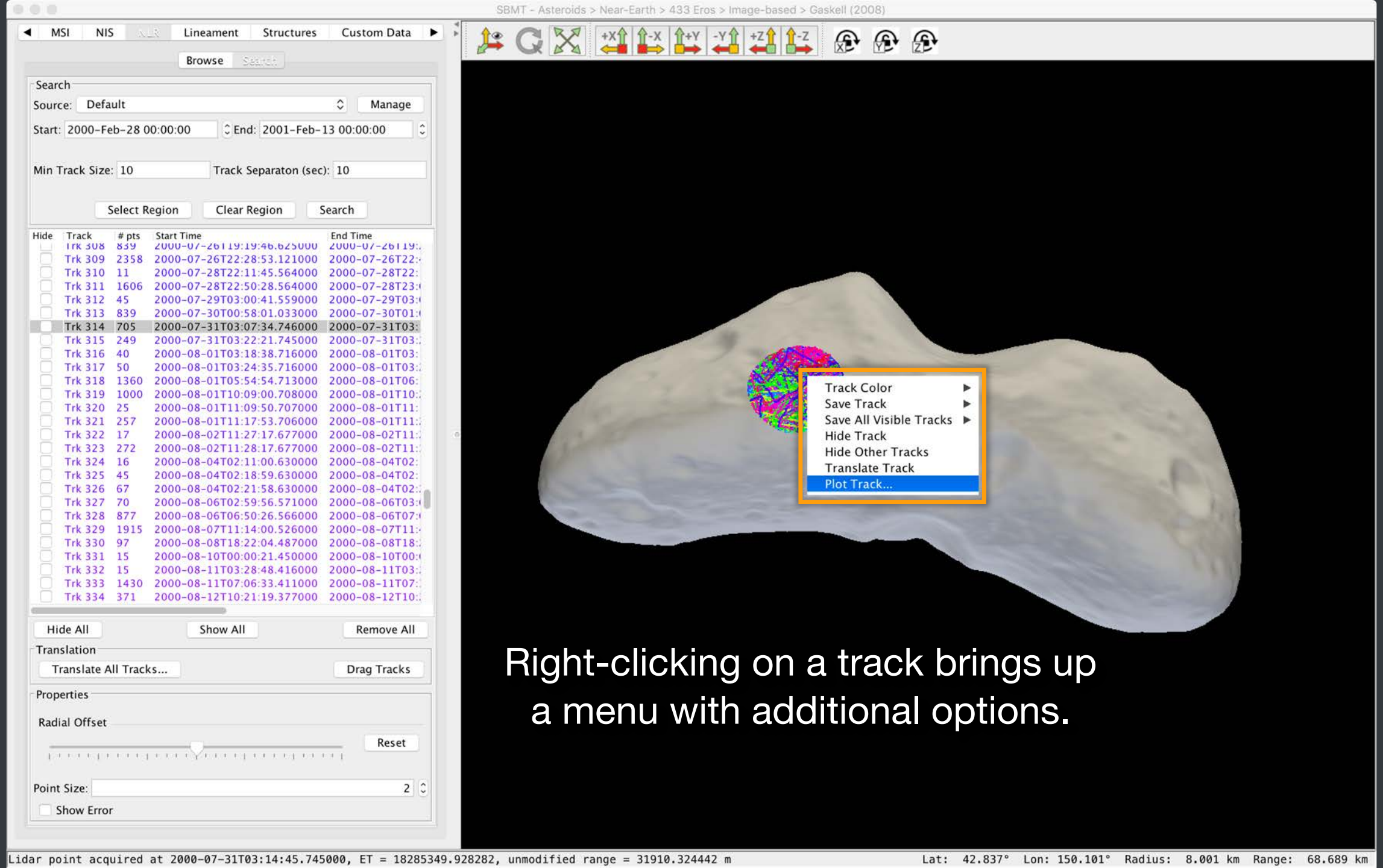
Show Error



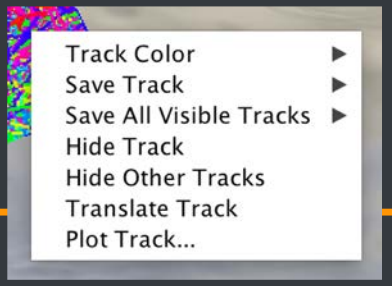
Change the sizes of the points used to mark the lidar tracks.

Ready.

Range: 68.689 km

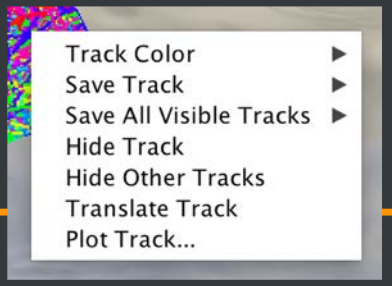

SBMT - Asteroids > Near-Earth > 433 Eros > Image-based > Gaskell (2008)
MSI
NIS
Lineament
Structures
Custom Data
Browse
Search
Source: Default
Manage
Start: 2000-Feb-28 00:00:00
End: 2001-Feb-13 00:00:00
Min Track Size: 10
Track Separaton (sec): 10
Select Region
Clear Region
Search
Hide
Track
pts
Start Time
End Time
Trk 309 2358 2000-07-26T22:28:53.121000
Trk 310 11 2000-07-28T22:11:45.564000
Trk 311 1606 2000-07-28T22:50:28.564000
Trk 312 45 2000-07-29T03:00:41.559000
Trk 313 839 2000-07-30T00:58:01.033000
Trk 314 705 2000-07-31T03:07:34.746000
Trk 315 249 2000-07-31T03:22:21.745000
Trk 316 40 2000-08-01T03:18:38.716000
Trk 317 50 2000-08-01T03:24:35.716000
Trk 318 1360 2000-08-01T05:54:54.713000
Trk 319 1000 2000-08-01T10:09:00.708000
Trk 320 25 2000-08-01T11:09:50.707000
Trk 321 257 2000-08-01T11:17:53.706000
Trk 322 17 2000-08-02T11:27:17.677000
Trk 323 272 2000-08-02T11:28:17.677000
Trk 324 16 2000-08-04T02:11:00.630000
Trk 325 45 2000-08-04T02:18:59.630000
Trk 326 67 2000-08-04T02:21:58.630000
Trk 327 70 2000-08-06T02:59:56.571000
Trk 328 877 2000-08-06T06:50:26.566000
Trk 329 1915 2000-08-07T11:14:00.526000
Trk 330 97 2000-08-08T18:22:04.487000
Trk 331 15 2000-08-10T00:00:21.450000
Trk 332 15 2000-08-11T03:28:48.416000
Trk 333 1430 2000-08-11T07:06:33.411000
Trk 334 371 2000-08-12T10:21:19.377000
Hide All
Show All
Remove All
Translation
Translate All Tracks...
Drag Tracks
Properties
Radial Offset
Reset
Point Size: 2
Show Error
Track Color
Save Track
Save All Visible Tracks
Hide Track
Hide Other Tracks
Translate Track
Plot Track...
Right-clicking on a track brings up a menu with additional options.
Lidar point acquired at 2000-07-31T03:14:45.745000, ET = 18285349.928282, unmodified range = 31910.324442 m
Lat: 42.837° Lon: 150.101° Radius: 8.001 km Range: 68.689 km

Description of menu options



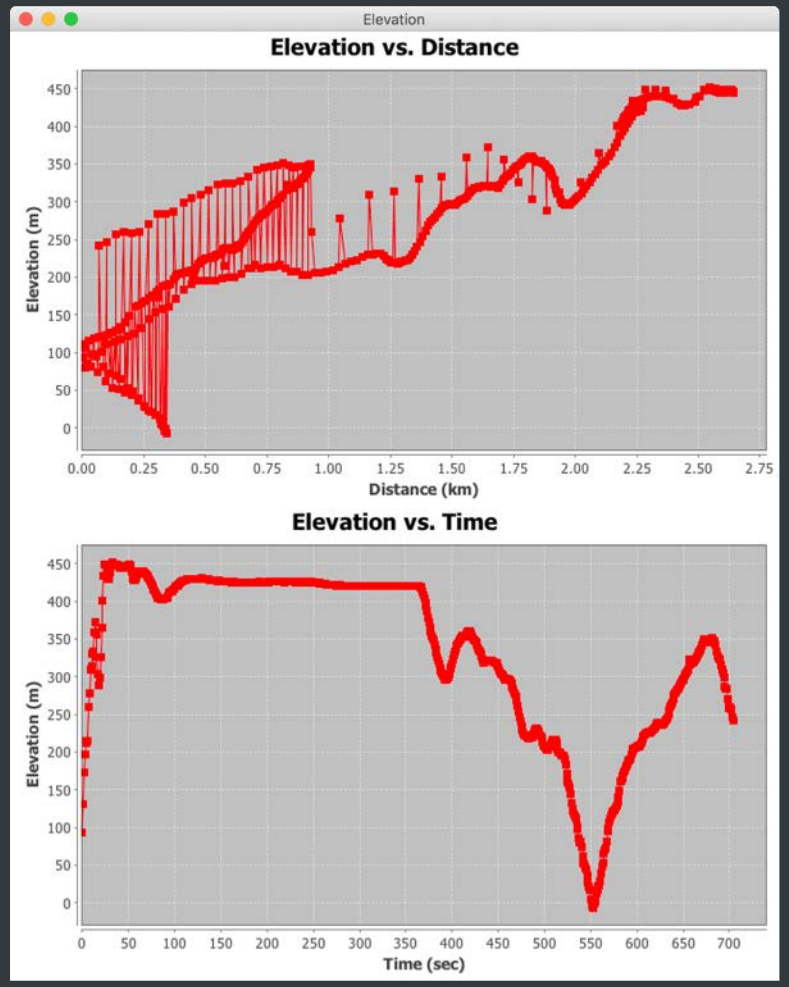
- Track color: change the color of the selected track.
- Save track: brings up a dialog that allows users to save the selected track (in either its unmodified state or with offsets or translations the user may have applied).
- Save all visible tracks: allows users to save all visible tracks to a single file or to a directory (in either the tracks' unmodified states or with offsets or translations the user may have applied).

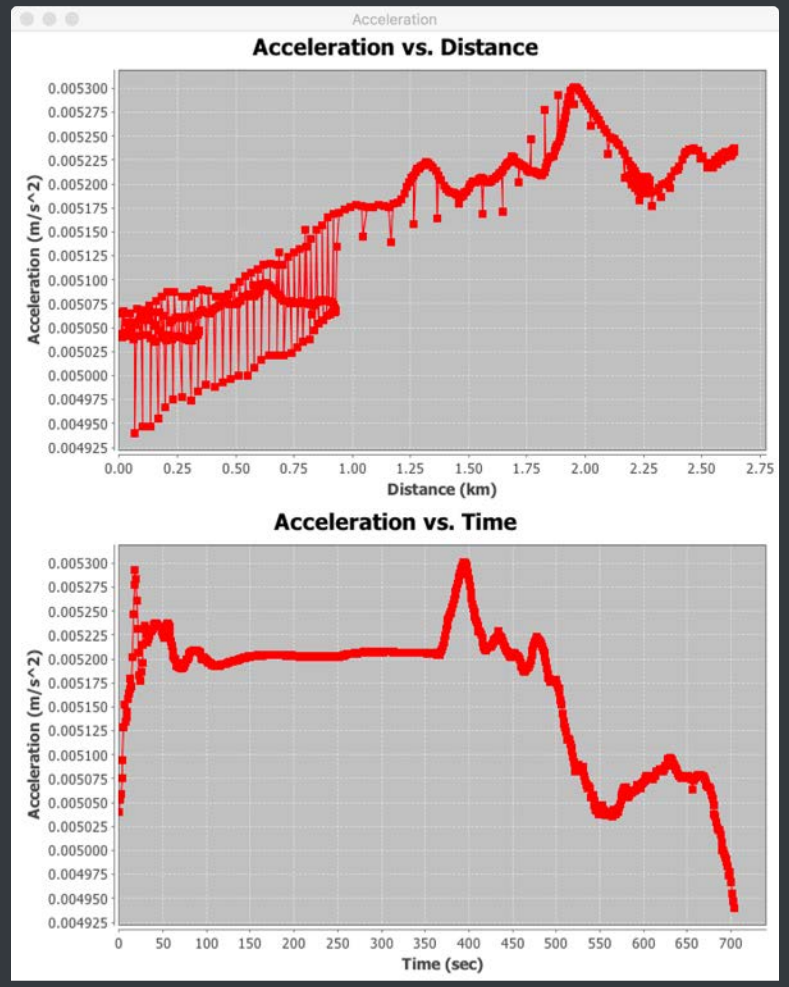
Description of menu options

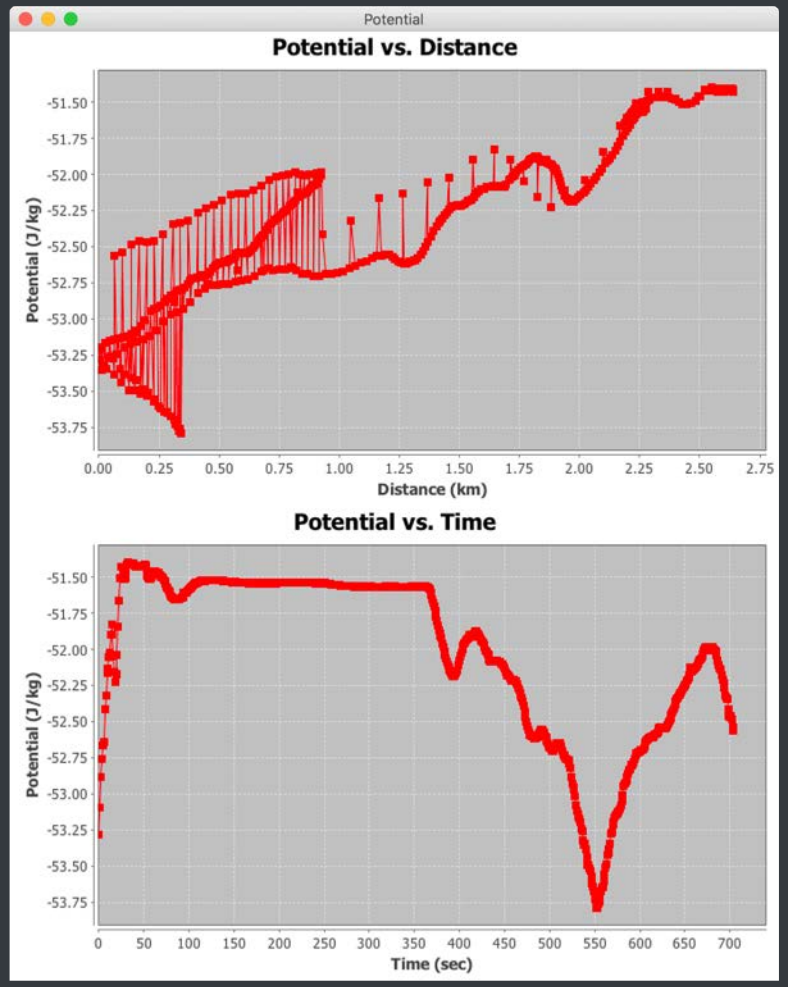


- Hide track: hides the current track.
- Hide other tracks: hides all tracks but the current one.
- Translate track: allows user to specify an X, Y, or Z-direction translation of the track.
- Plot track: creates and displays several useful graphs (see next slide).

Graphs made by “Plot Track”







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