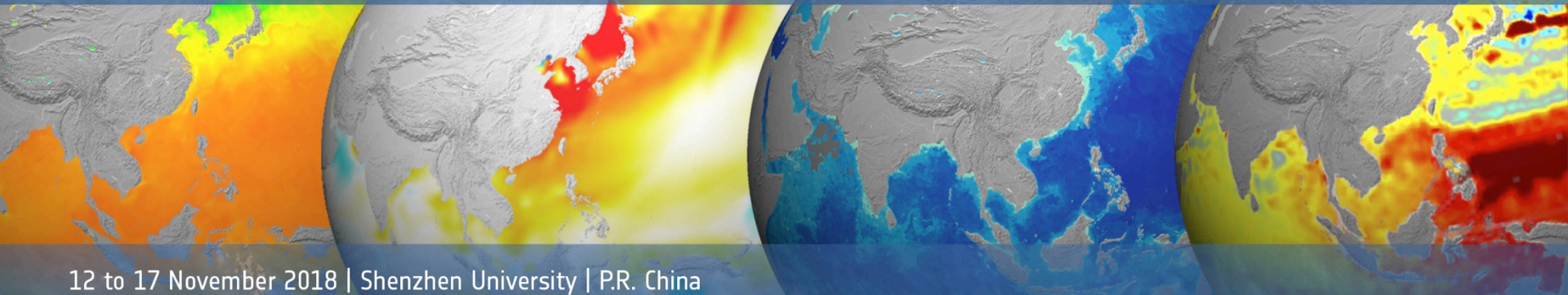
ESA–MOST China Dragon 4 Cooperation

# → ADVANCED TRAINING COURSE IN OCEAN AND COASTAL REMOTE SENSING



12 to 17 November 2018 | Shenzhen University | P.R. China

# Sea Surface Salinity from S3 OLCI

Hosted by

Xiaobin Yin(殷晓斌, yinxiaobin@piesat.cn) PIESAT, China

# OLCI Band characteristics

| Band | λ centre (nm) | Width (nm) | Function |
|---|---|---|---|
| Oa01 | 400 | 15 | Aerosol correction, improved water constituent retrieval |
| Oa02 | 412.5 | 10 | Yellow substance and detrital pigments (turbidity) |
| Oa03 | 442.5 | 10 | Chlorophyll absorption maximum, biogeochemistry, vegetation |
| Oa04 | 490 | 10 | High Chlorophyll, |
| Oa05 | 510 | 10 | Chlorophyll, sediment, turbidity, red tide |
| Oa06 | 560 | 10 | Chlorophyll reference (Chlorophyll minimum) |
| Oa07 | 620 | 10 | Sediment loading |
| Oa08 | 665 | 10 | Chlorophyll (2nd Chlorophyll absorption maximum), sediment, yellow substance/vegetation |
| Oa09 | 673.75 | 7.5 | For improved fluorescence retrieval and to better account for smile together with the bands 665 and 680 nm |
| Oa10 | 681.25 | 7.5 | Chlorophyll fluorescence peak, red edge |

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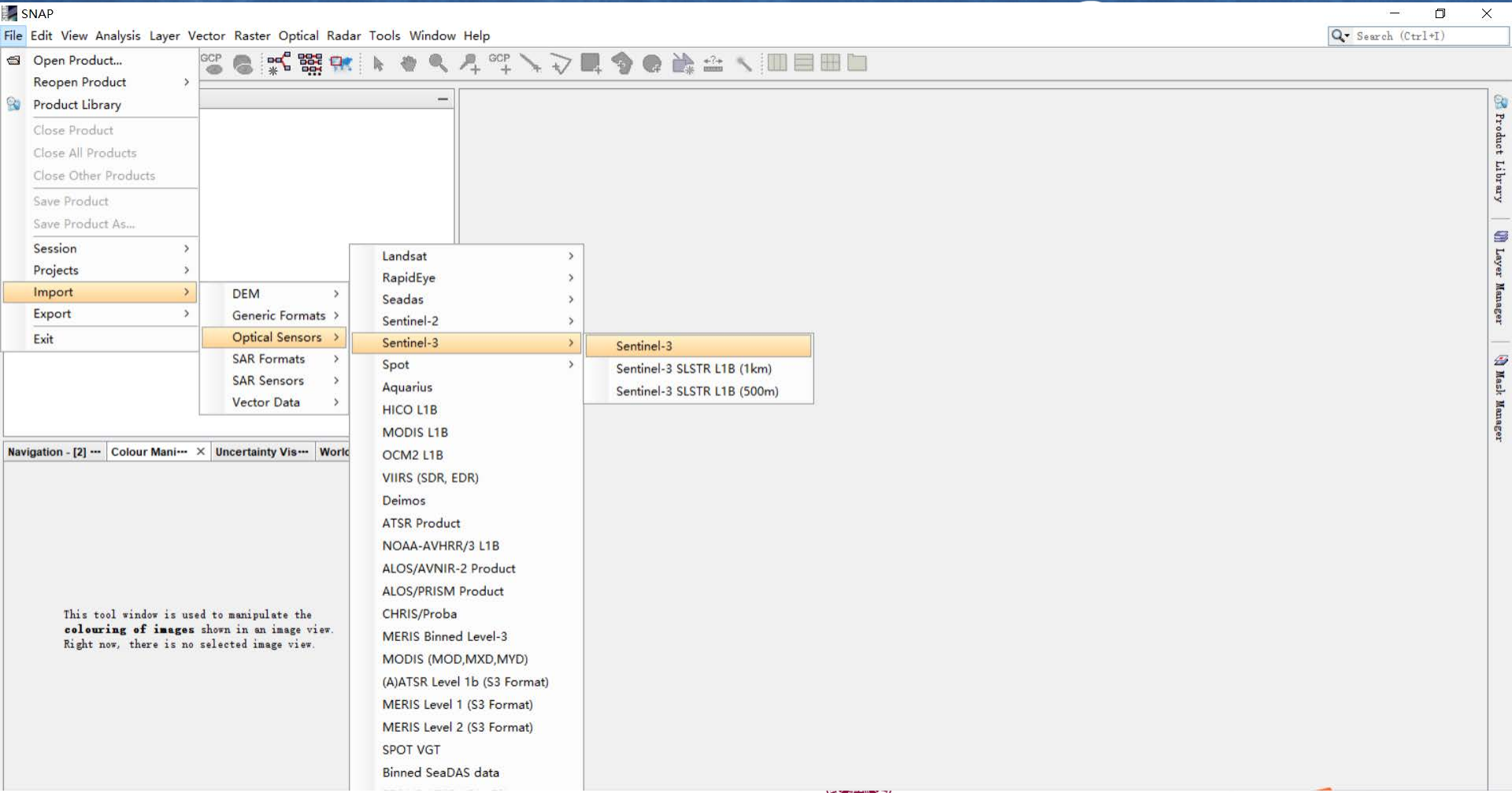
SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Open Product...
Reopen Product
Product Library
Close Product
Close All Products
Close Other Products
Save Product
Save Product As...
Session
Projects
Import
Export
Exit
DEM
Generic Formats
Optical Sensors
SAR Formats
SAR Sensors
Vector Data
Landsat
RapidEye
Seadas
Sentinel-2
Sentinel-3
Spot
Aquarius
HICO L1B
MODIS L1B
OCM2 L1B
VIIRS (SDR, EDR)
Deimos
ATSR Product
NOAA-AVHRR/3 L1B
ALOS/AVNIR-2 Product
ALOS/PRISM Product
CHRIS/Proba
MERIS Binned Level-3
MODIS (MOD,MXD,MYD)
(A)ATSR Level 1b (S3 Format)
MERIS Level 1 (S3 Format)
MERIS Level 2 (S3 Format)
SPOT VGT
Binned SeaDAS data
Sentinel-3
Sentinel-3 SLSTR L1B (1km)
Sentinel-3 SLSTR L1B (500m)
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Uncertainty Vis...
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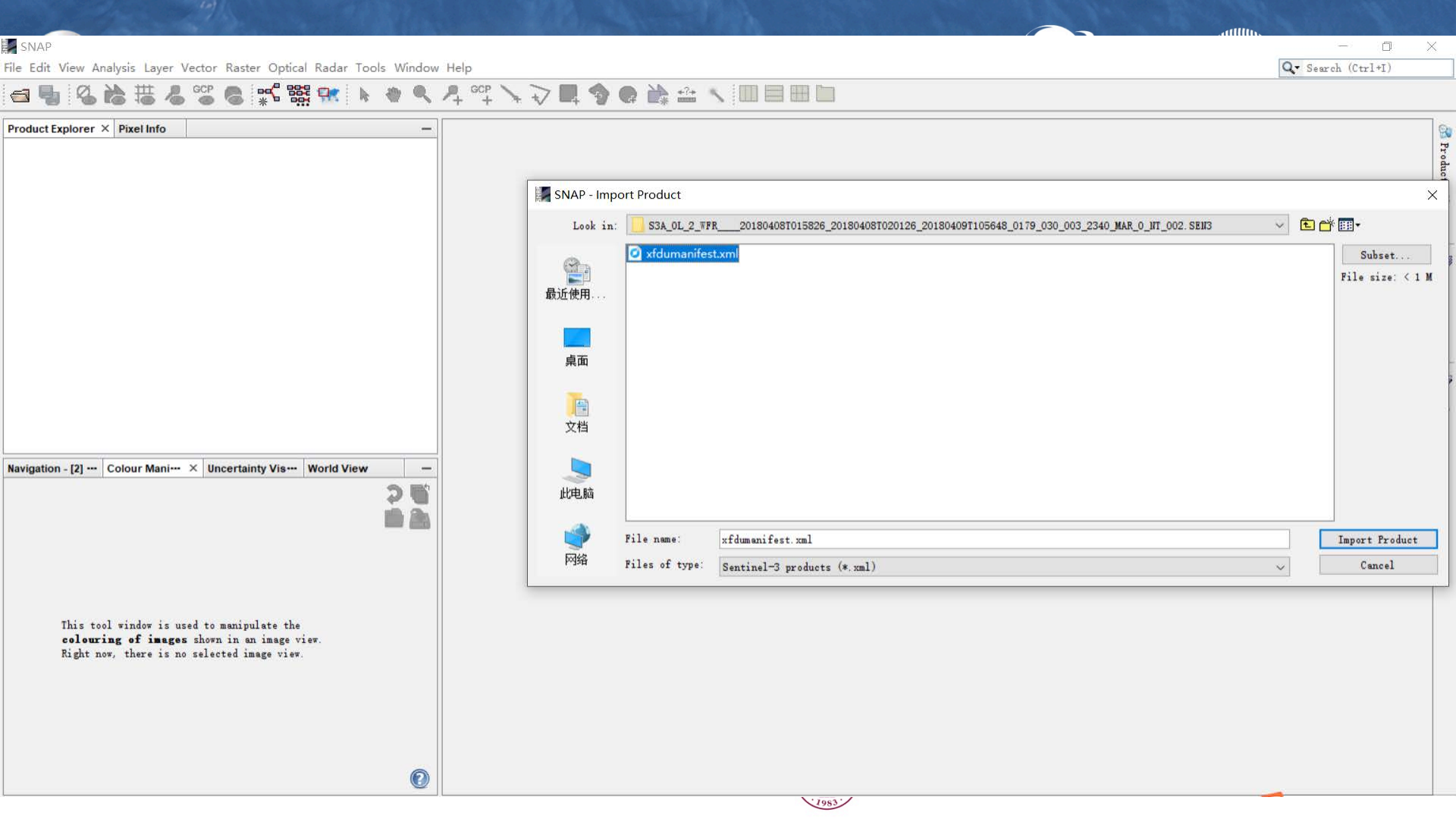
Product Library
Layer Manager
Mask Manager


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
Navigation - [2]
Colour Mani...
Uncertainty Vis...
World View
This tool window is used to manipulate the
colouring of images shown in an image view.
Right now, there is no selected image view.
SNAP - Import Product
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xfdumanifest.xml
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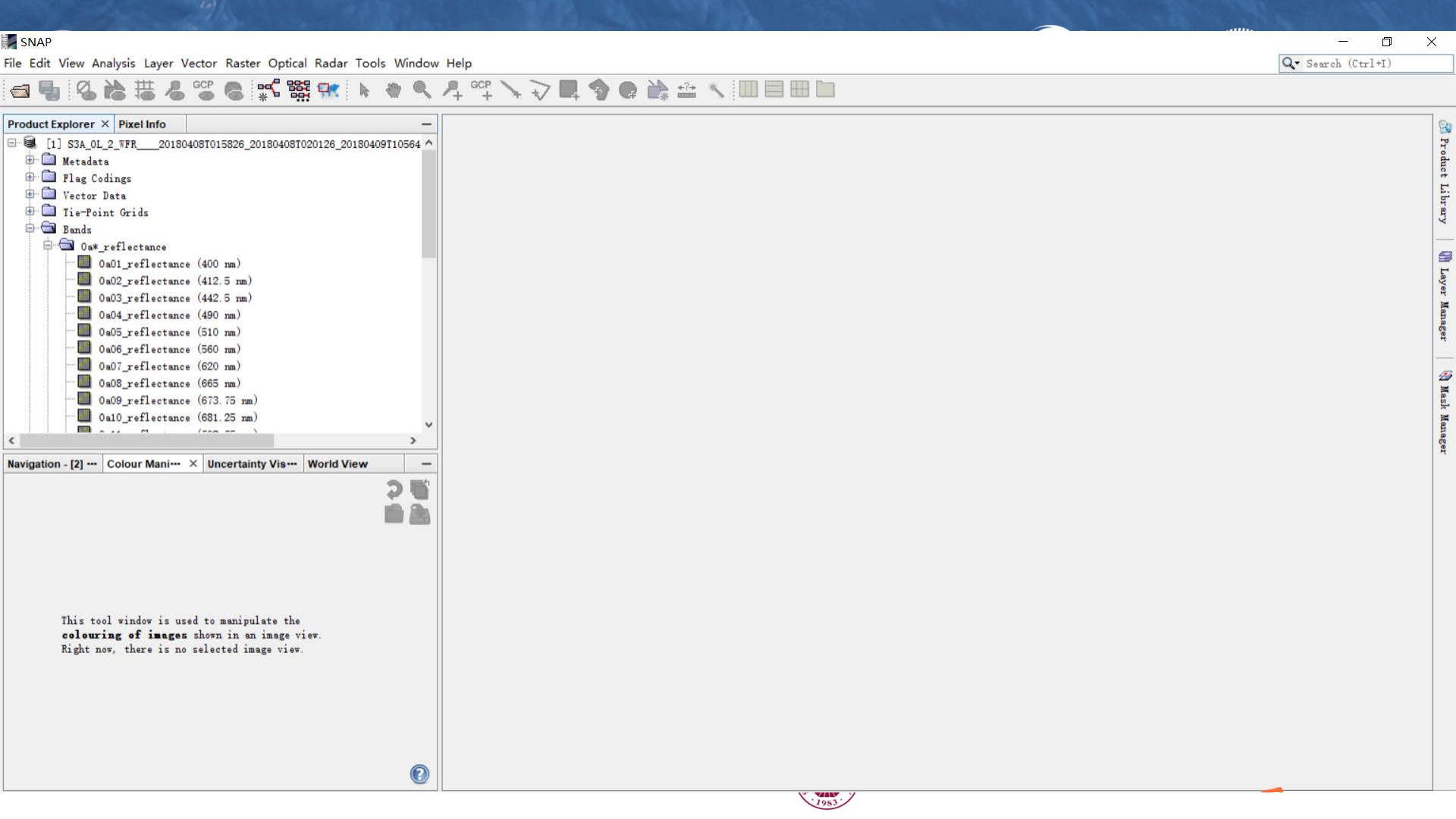
网络
File name:
xfdumanifest.xml
Files of type:
Sentinel-3 products (*.xml)
Import Product
Cancel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Product Explorer
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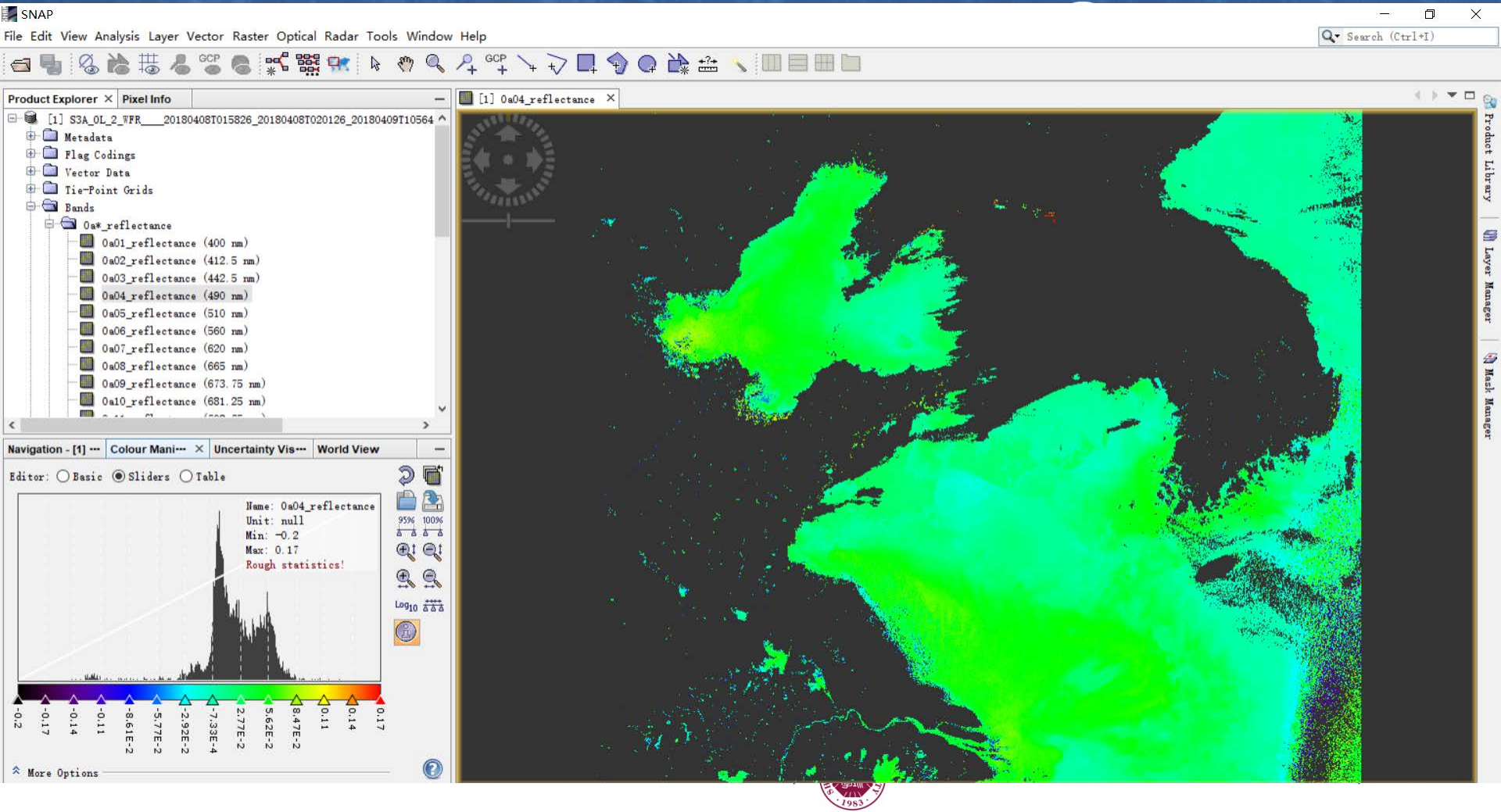
Flag Codings
Vector Data
Tie-Point Grids
Bands
Oa*_reflectance
Oa01_reflectance (400 nm)
Oa02_reflectance (412.5 nm)
Oa03_reflectance (442.5 nm)
Oa04_reflectance (490 nm)
Oa05_reflectance (510 nm)
Oa06_reflectance (560 nm)
Oa07_reflectance (620 nm)
Oa08_reflectance (665 nm)
Oa09_reflectance (673.75 nm)
Oa10_reflectance (681.25 nm)
Navigation - [2]
Colour Mani
Uncertainty Vis
World View
This tool window is used to manipulate the
colouring of images shown in an image view.
Right now, there is no selected image view.
Product Library
Layer Manager
Mask Manager


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] S3A_OL_2_WFR____20180408T015826_20180408T020126_20180409T10564
Metadata
Flag Codings
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Tie-Point Grids
Bands
Oa*_reflectance
Oa01_reflectance (400 nm)
Oa02_reflectance (412.5 nm)
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Oa07_reflectance (620 nm)
Oa08_reflectance (665 nm)
Oa09_reflectance (673.75 nm)
Oa10_reflectance (681.25 nm)
Navigation - [1]
Colour Mani
Uncertainty Vis
World View
Editor: Basic Sliders Table
Name: Oa04_reflectance
Unit: null
Min: -0.2
Max: 0.17
Rough statistics!
95%
100%
Log10
-0.2
-0.17
-0.14
-0.11
-8.61E-2
-5.77E-2
-2.92E-2
-7.33E-4
2.77E-2
5.62E-2
8.47E-2
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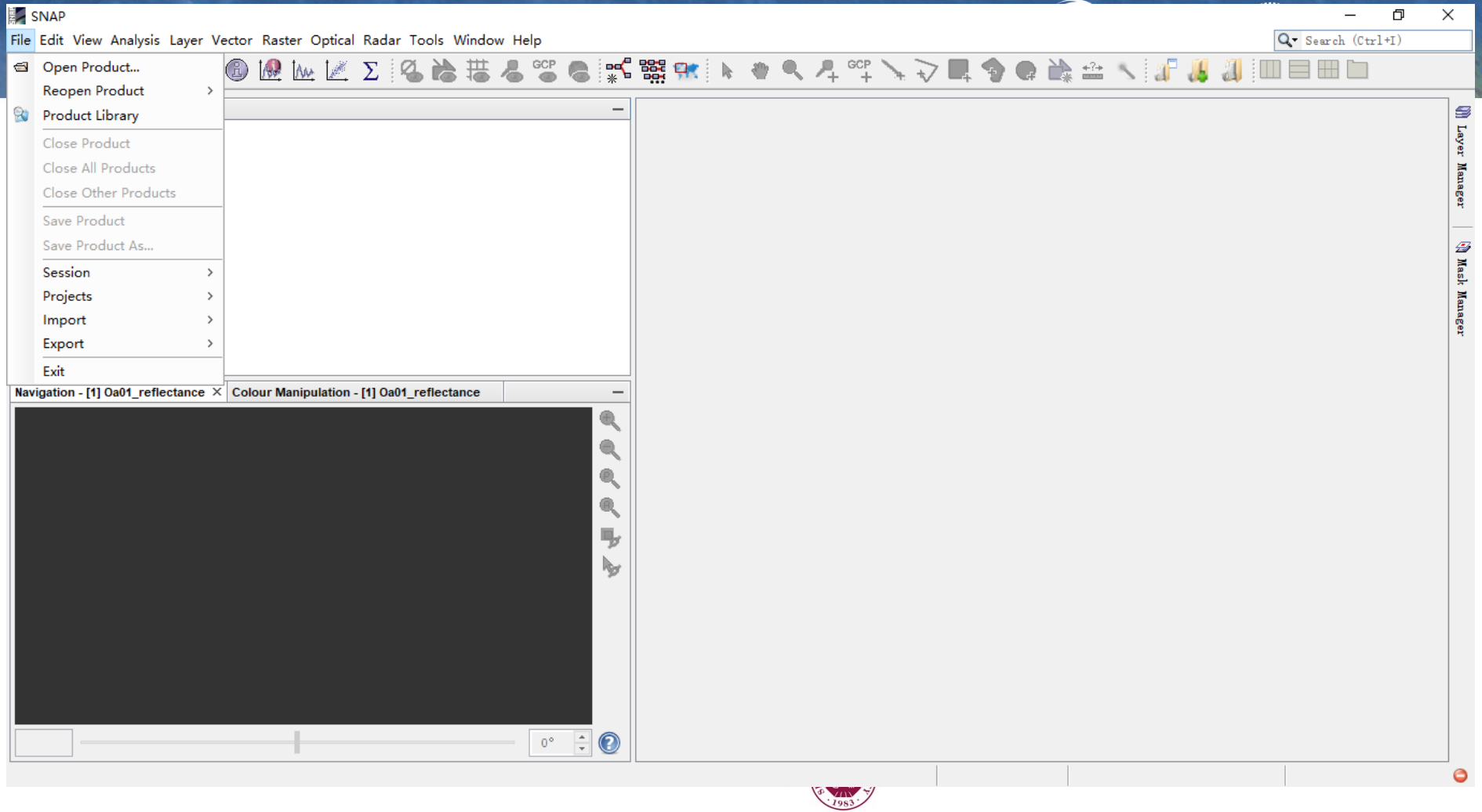
0.14
0.17
More Options
[1] Oa04_reflectance
Product Library
Layer Manager
Mask Manager


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Open Product...
Reopen Product
Product Library
Close Product
Close All Products
Close Other Products
Save Product
Save Product As...
Session
Projects
Import
Export
Exit
Navigation - [1] Oa01_reflectance
Colour Manipulation - [1] Oa01_reflectance
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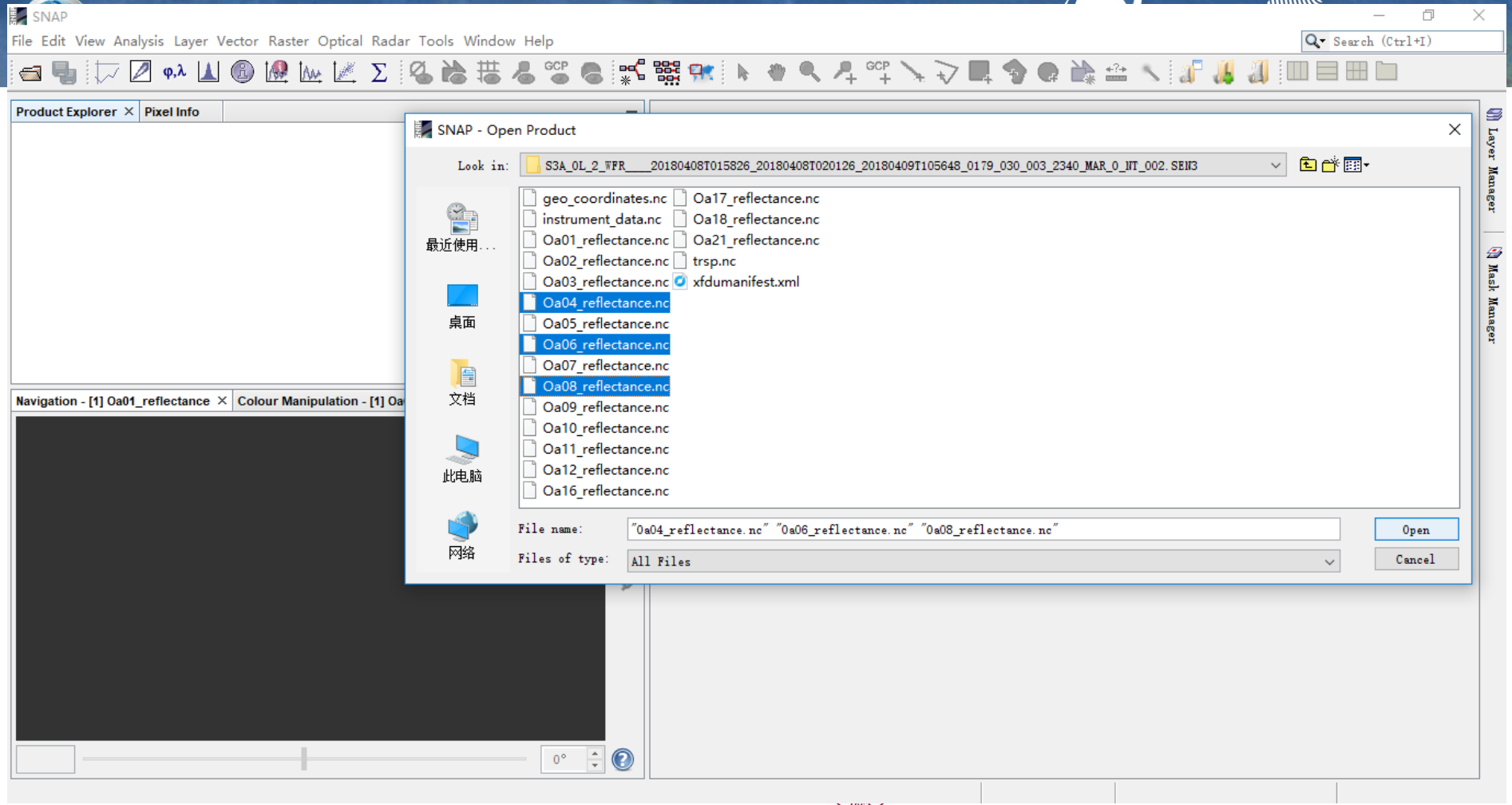
Layer Manager
Mask Manager


SNAP
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Navigation - [1] Oa01_reflectance
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SNAP - Open Product
Look in:
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最近使用...
桌面
文档
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网络
geo_coordinates.nc
instrument_data.nc
Oa01_reflectance.nc
Oa02_reflectance.nc
Oa03_reflectance.nc
Oa04_reflectance.nc
Oa05_reflectance.nc
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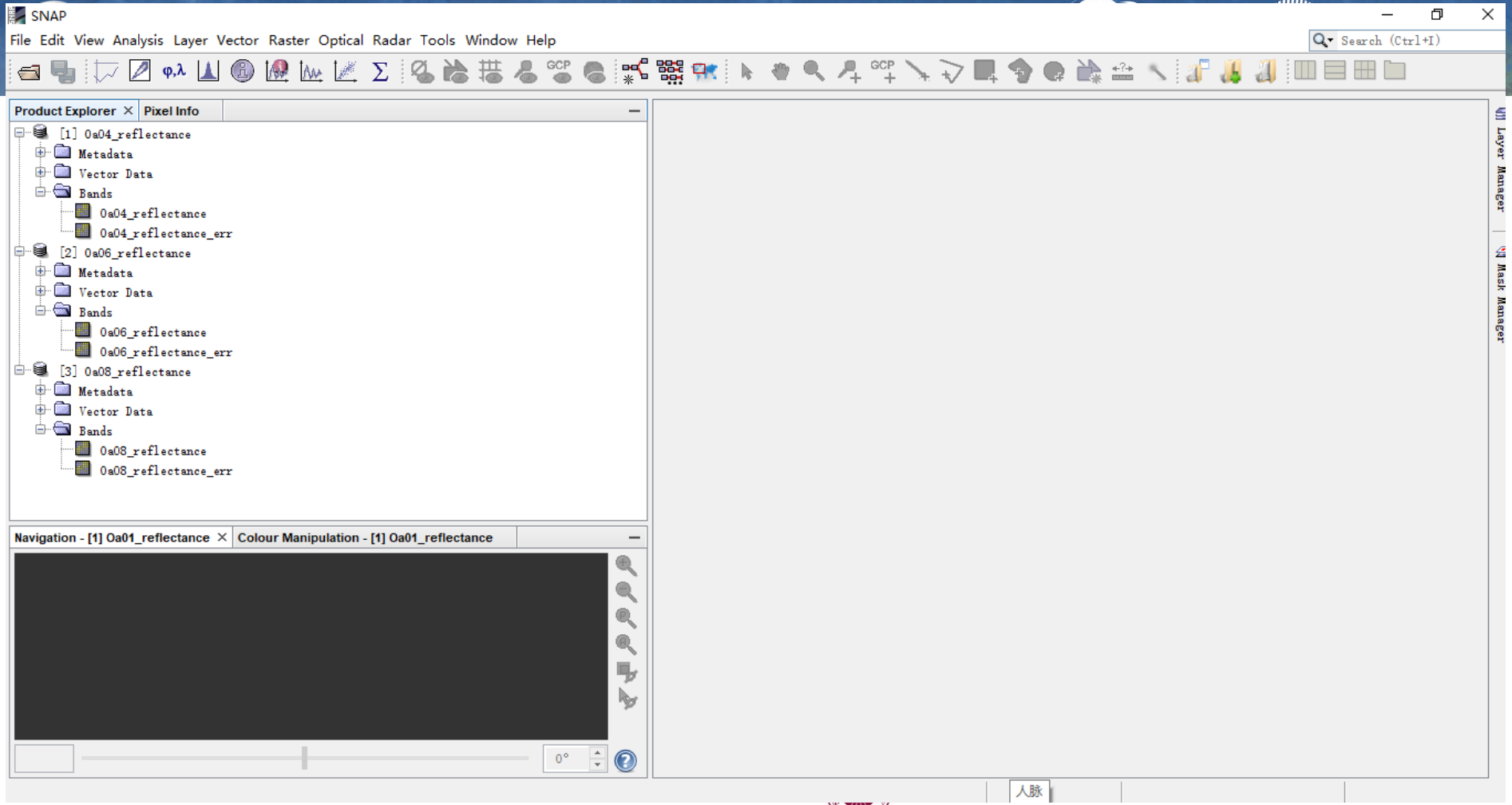
Oa10_reflectance.nc
Oa11_reflectance.nc
Oa12_reflectance.nc
Oa16_reflectance.nc
Oa17_reflectance.nc
Oa18_reflectance.nc
Oa21_reflectance.nc
trsp.nc
xfdumanifest.xml
File name: "Oa04_reflectance.nc" "Oa06_reflectance.nc" "Oa08_reflectance.nc"
Files of type: All Files
Open
Cancel
Layer Manager
Mask Manager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Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
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0a04_reflectance
0a04_reflectance_err
[2] 0a06_reflectance
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[3] 0a08_reflectance
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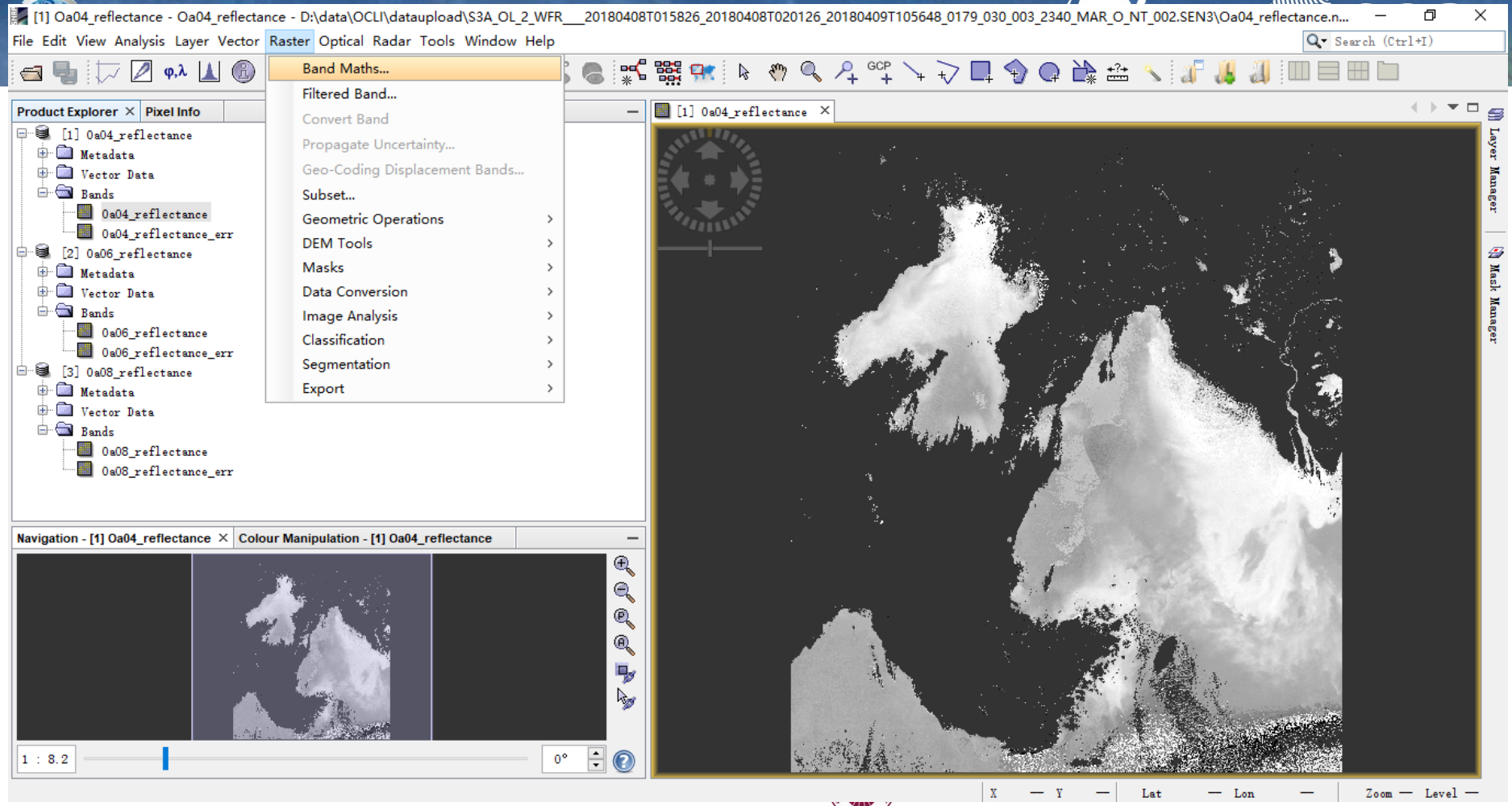
[1] Oa04_reflectance - Oa04_reflectance - D:\data\OCLI\dataupload\S3A_OL_2_WFR___20180408T015826_20180408T020126_20180409T105648_0179_030_003_2340_MAR_O_NT_002.SEN3\Oa04_reflectance.n...
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Band Maths...
Filtered Band...
Convert Band
Propagate Uncertainty...
Geo-Coding Displacement Bands...
Subset...
Geometric Operations
DEM Tools
Masks
Data Conversion
Image Analysis
Classification
Segmentation
Export
Product Explorer
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Oa04_reflectance_err
[2] Oa06_reflectance
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Vector Data
Bands
Oa06_reflectance
Oa06_reflectance_err
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Navigation - [1] Oa04_reflectance
Colour Manipulation - [1] Oa04_reflectance
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Layer Manager
Mask Manager
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Y
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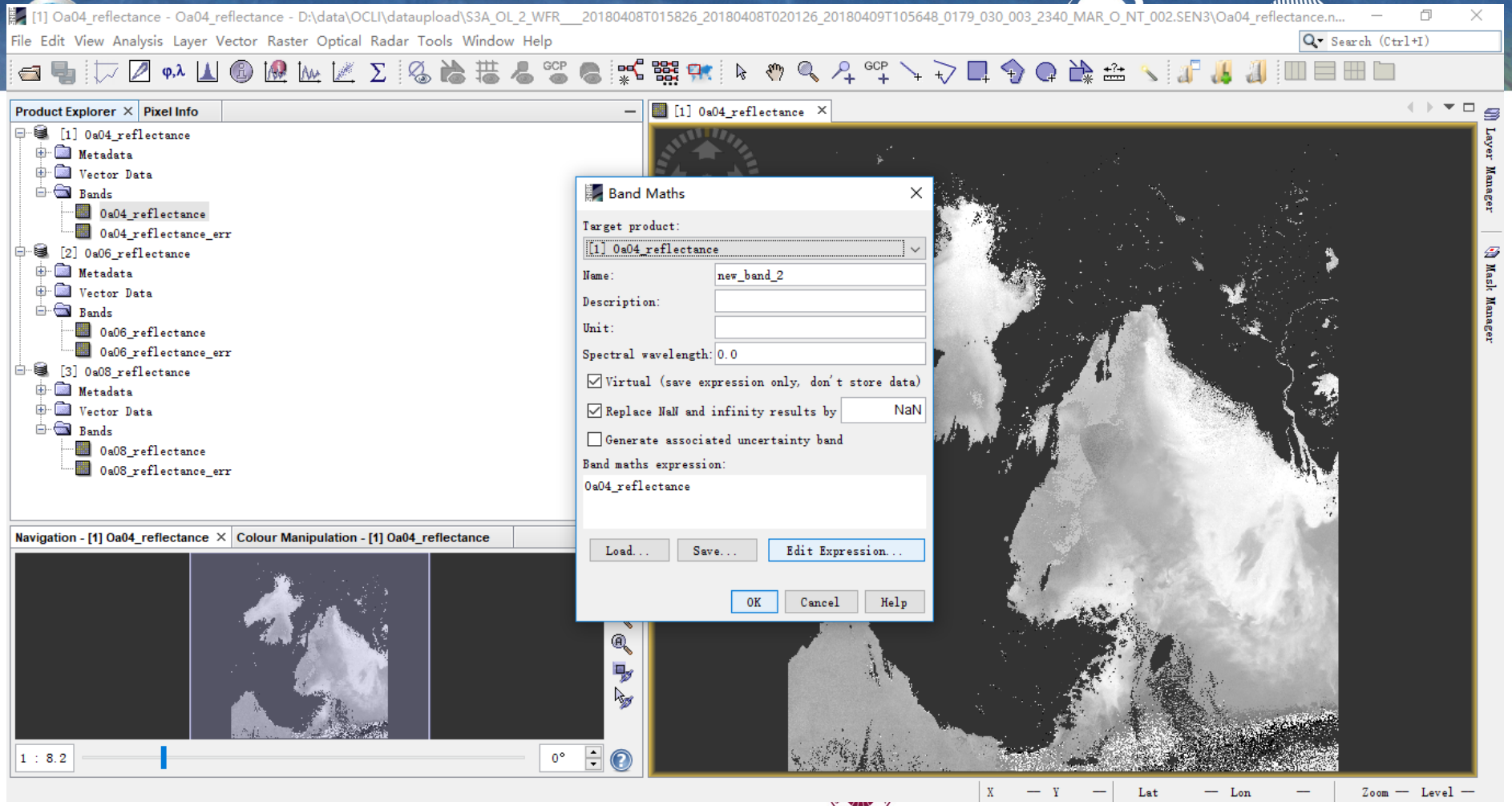
Zoom Level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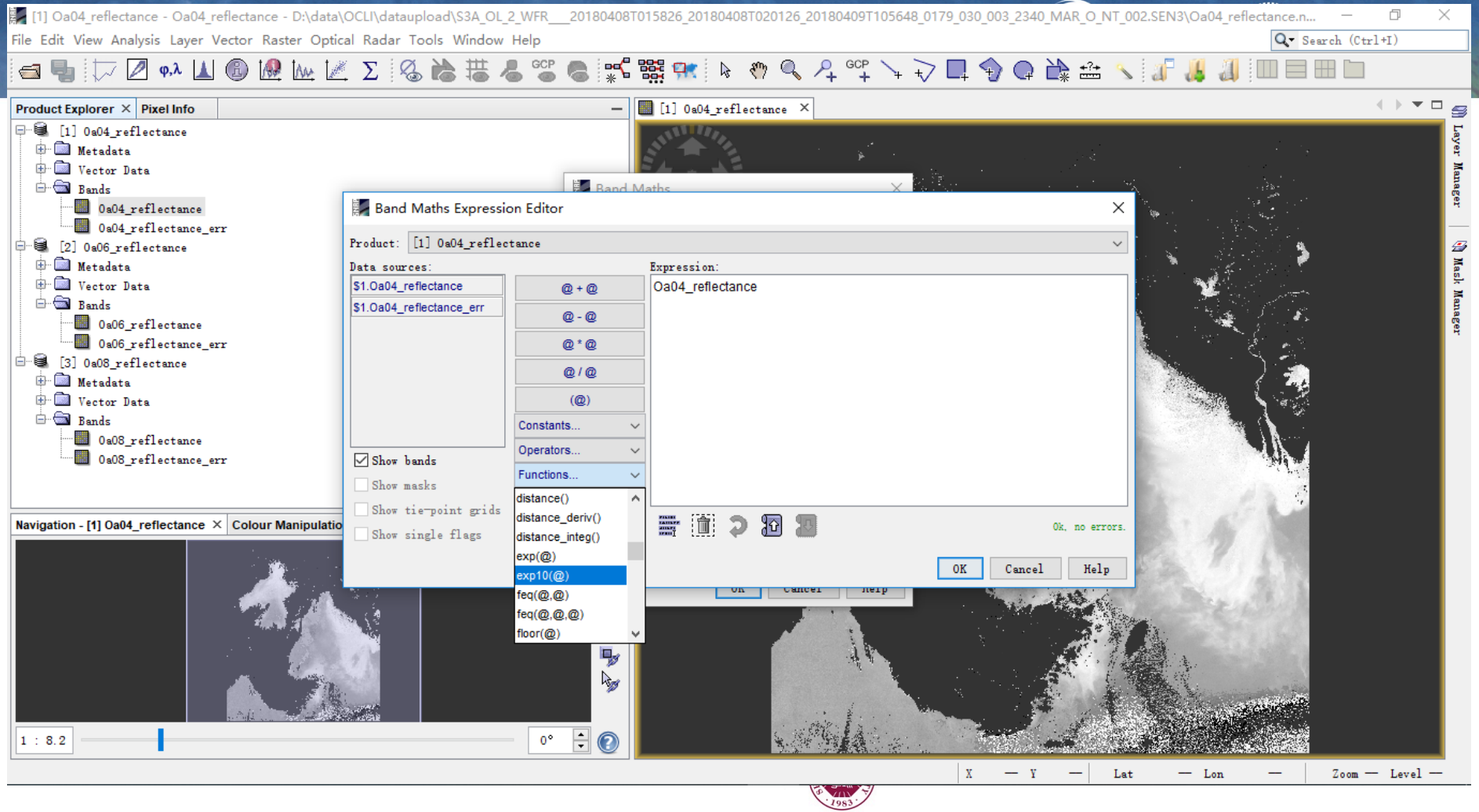
Navigation - [1] Oa04_reflectance
Colour Manipulation - [1] Oa04_reflectance
1 : 8.2
0°
[1] Oa04_reflectance
Band Maths
Target product:
[1] Oa04_reflectance
Name:
new_band_2
Description:
Unit:
Spectral wavelength:
0.0
Virtual (save expression only, don't store data)
Replace NaN and infinity results by
NaN
Generate associated uncertainty band
Band maths expression:
Oa04_reflectance
Load...
Save...
Edit Expression...
OK
Cancel
Help
Layer Manager
Mask Manager
X
Y
Lat
Lon
Zoom Level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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
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Product Explorer
Pixel Info
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Oa08_reflectance_err
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Band Maths Expression Editor
Product: [1] Oa04_reflectance
Data sources:
$1.Oa04_reflectance
$1.Oa04_reflectance_err
@ + @
@ - @
@ * @
@ / @
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Constants...
Operators...
Functions...
Show bands
Show masks
Show tie-point grids
Show single flags
distance()
distance_deriv()
distance_integ()
exp(@)
exp10(@)
feq(@,@)
feq(@,@,@)
floor(@)
Expression:
Oa04_reflectance
Ok, no errors.
OK
Cancel
Help
Navigation - [1] Oa04_reflectance
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Layer Manager
Mask Manager
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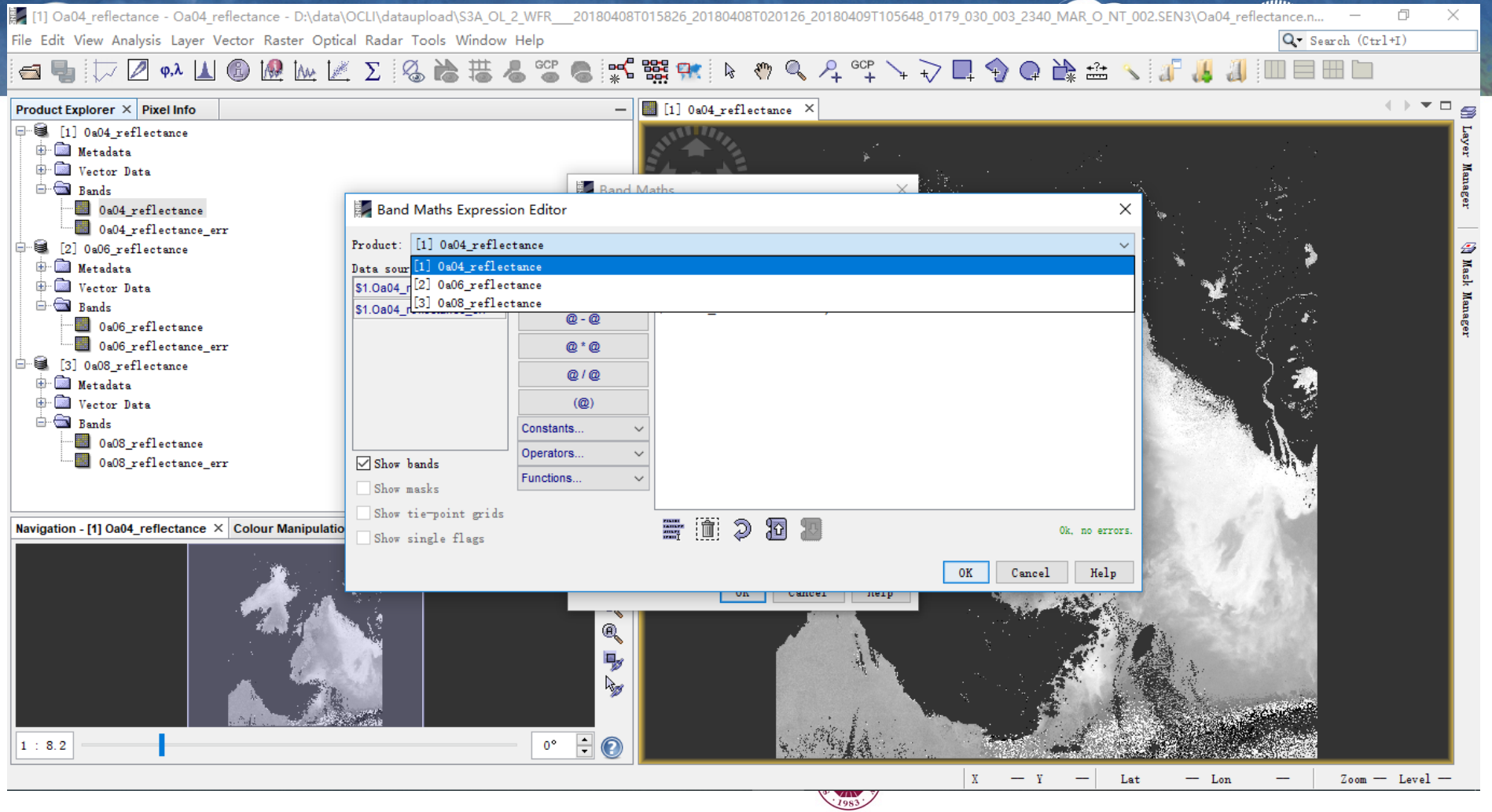
Lat — Lon —
Zoom — Level —


[1] Oa04_reflectance - Oa04_reflectance - D:\data\OCLI\dataupload\S3A_OL_2_WFR___20180408T015826_20180408T020126_20180409T105648_0179_030_003_2340_MAR_O_NT_002.SEN3\Oa04_reflectance.n...
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Product Explorer
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Band Maths Expression Editor
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[2] Oa06_reflectance
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Functions...
Show bands
Show masks
Show tie-point grids
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OK
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Navigation - [1] Oa04_reflectance
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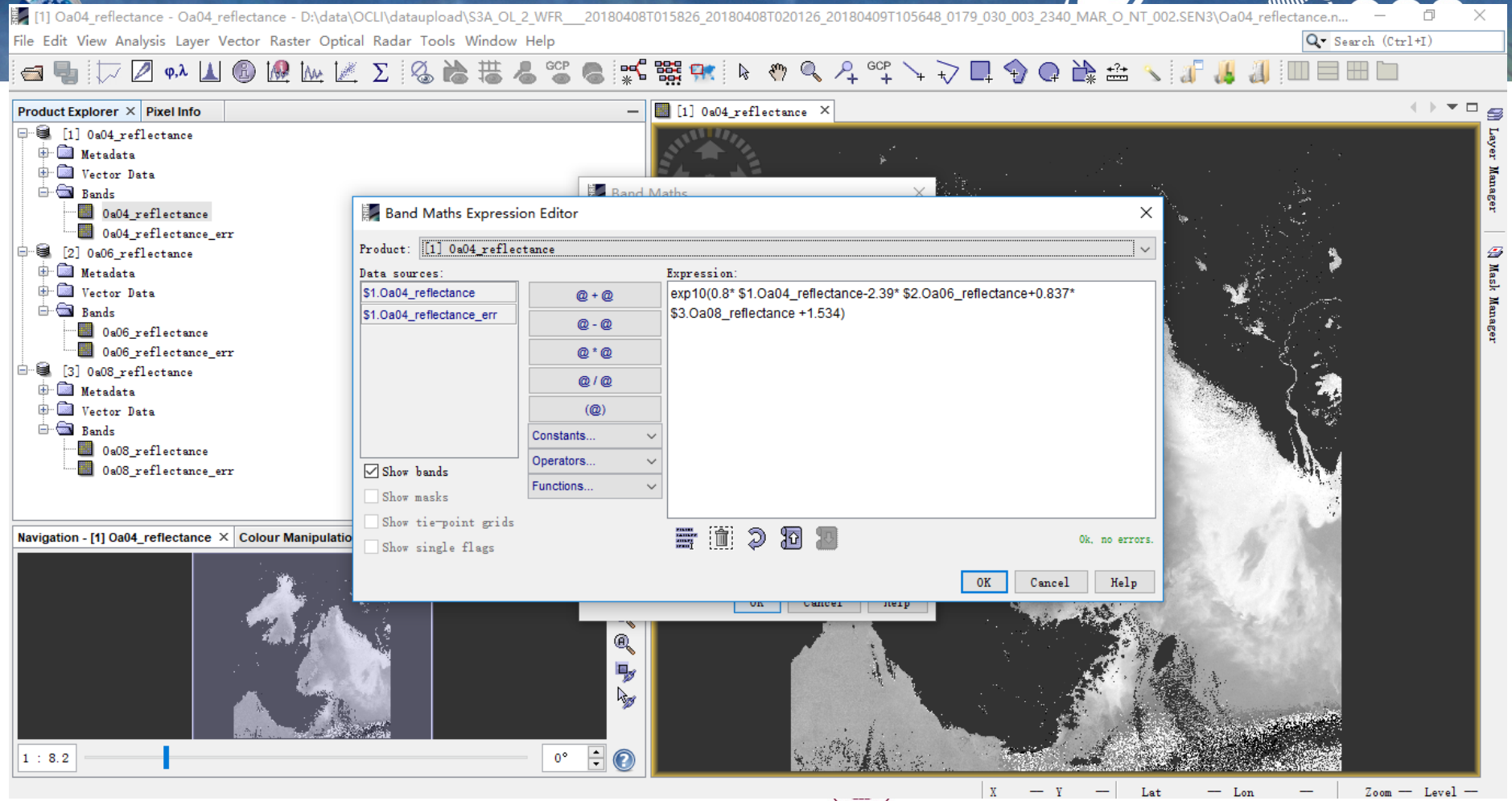
Zoom Level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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
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Product Explorer
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[1] Oa04_reflectance
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Bands
Oa04_reflectance
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[2] Oa06_reflectance
Metadata
Vector Data
Bands
Oa06_reflectance
Oa06_reflectance_err
[3] Oa08_reflectance
Metadata
Vector Data
Bands
Oa08_reflectance
Oa08_reflectance_err
Band Maths Expression Editor
Product: [1] Oa04_reflectance
Data sources:
$1.Oa04_reflectance
$1.Oa04_reflectance_err
@ + @
@ - @
@ * @
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Constants...
Operators...
Functions...
Show bands
Show masks
Show tie-point grids
Show single flags
Expression:
exp10(0.8* $1.Oa04_reflectance-2.39* $2.Oa06_reflectance+0.837*
$3.Oa08_reflectance +1.534)
Ok, no errors.
OK
Cancel
Help
Navigation - [1] Oa04_reflectance
Colour Manipulatio
1 : 8.2
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Layer Manager
Mask Manager
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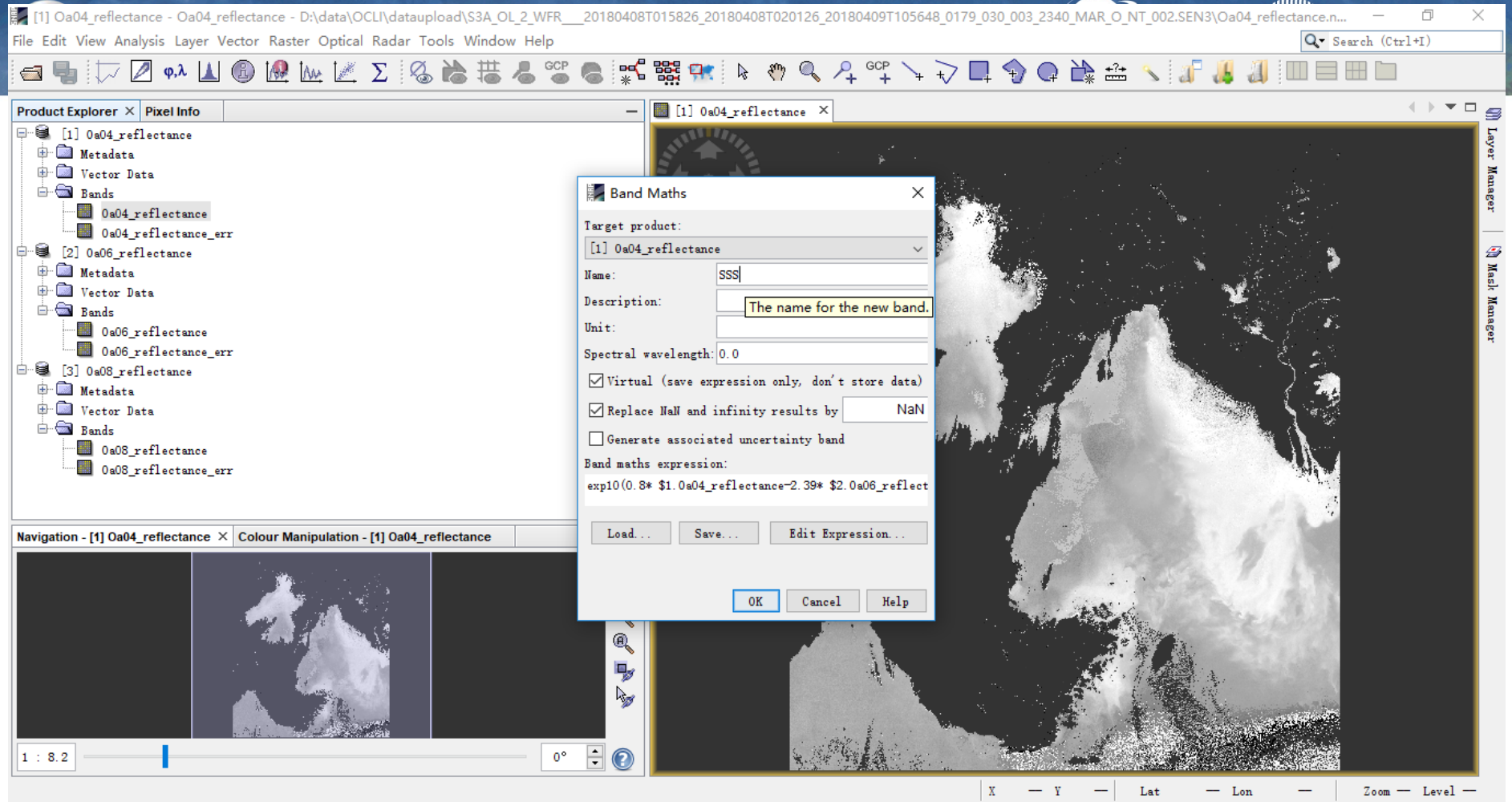
Lat — Lon —
Zoom — Level —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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] Oa04_reflectance
Metadata
Vector Data
Bands
Oa04_reflectance
Oa04_reflectance_err
[2] Oa06_reflectance
Metadata
Vector Data
Bands
Oa06_reflectance
Oa06_reflectance_err
[3] Oa08_reflectance
Metadata
Vector Data
Bands
Oa08_reflectance
Oa08_reflectance_err
Band Maths
Target product:
[1] Oa04_reflectance
Name:
SSS
Description:
The name for the new band.
Unit:
Spectral wavelength:
0.0
Virtual (save expression only, don't store data)
Replace NaN and infinity results by
NaN
Generate associated uncertainty band
Band maths expression:
exp10(0.8* $1.0a04_reflectance-2.39* $2.0a06_reflect
Load...
Save...
Edit Expression...
OK
Cancel
Help
Navigation - [1] Oa04_reflectance
Colour Manipulation - [1] Oa04_reflectance
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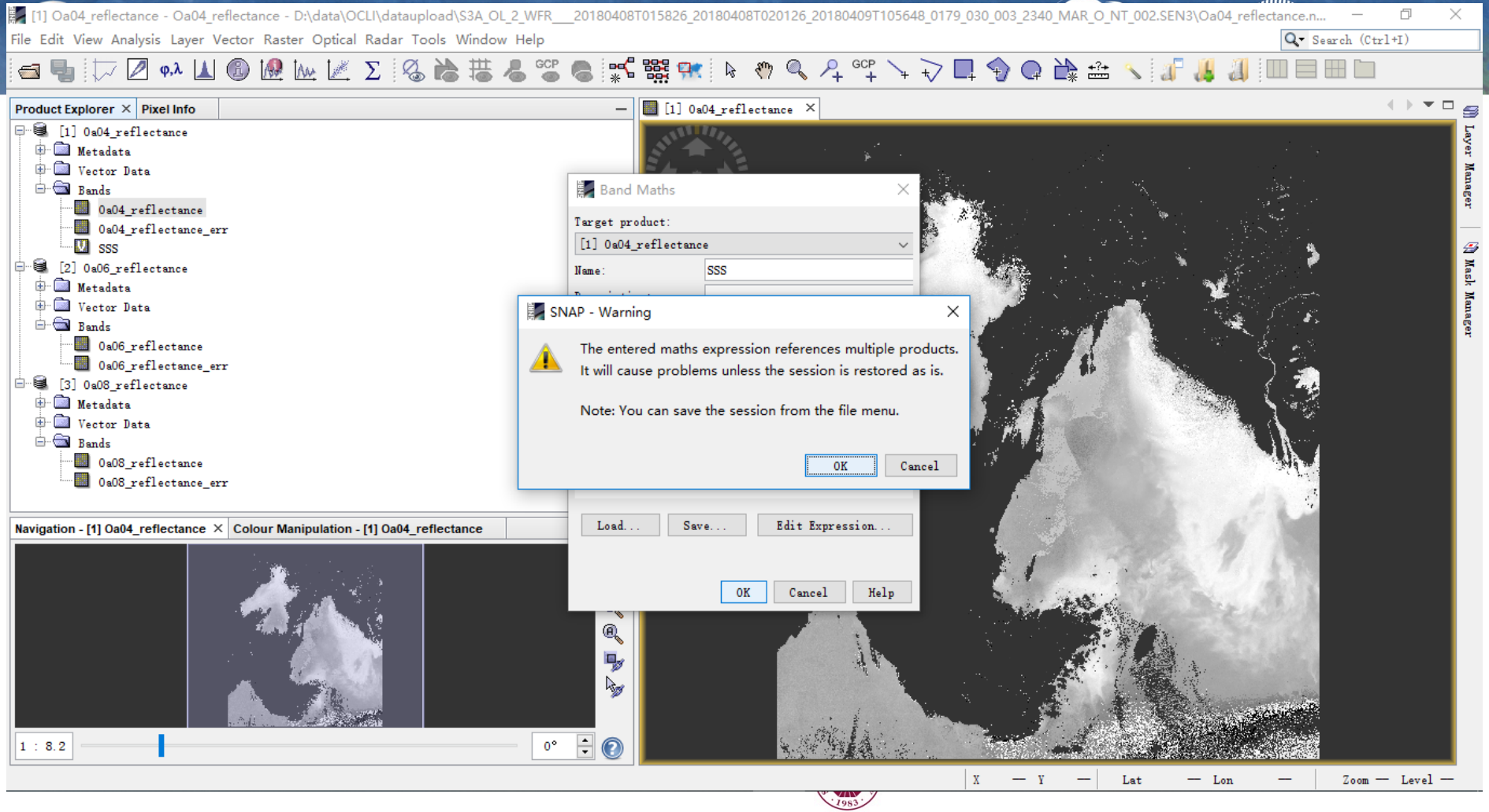
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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
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Product Explorer
Pixel Info
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Oa06_reflectance_err
[3] Oa08_reflectance
Metadata
Vector Data
Bands
Oa08_reflectance
Oa08_reflectance_err
Band Maths
Target product:
[1] Oa04_reflectance
Name:
SSS
Load...
Save...
Edit Expression...
OK
Cancel
Help
SNAP - Warning
The entered maths expression references multiple products.
It will cause problems unless the session is restored as is.
Note: You can save the session from the file menu.
OK
Cancel
[1] Oa04_reflectance
Navigation - [1] Oa04_reflectance
Colour Manipulation - [1] Oa04_reflectance
1 : 8.2
0°
Layer Manager
Mask Manager
X
Y
Lat
Lon
Zoom Level

[1] SSS - Oa04_reflectance - D:\data\OCLI\dataupload\S3A_OL_2_WFR___20180408T015826_20180408T020126_20180409T105648_0179_030_003_2340_MAR_O_NT_002.SEN3\Oa04_reflectance.nc - SNAP

File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help

Search (Ctrl+I)

Product Explorer | Pixel Info

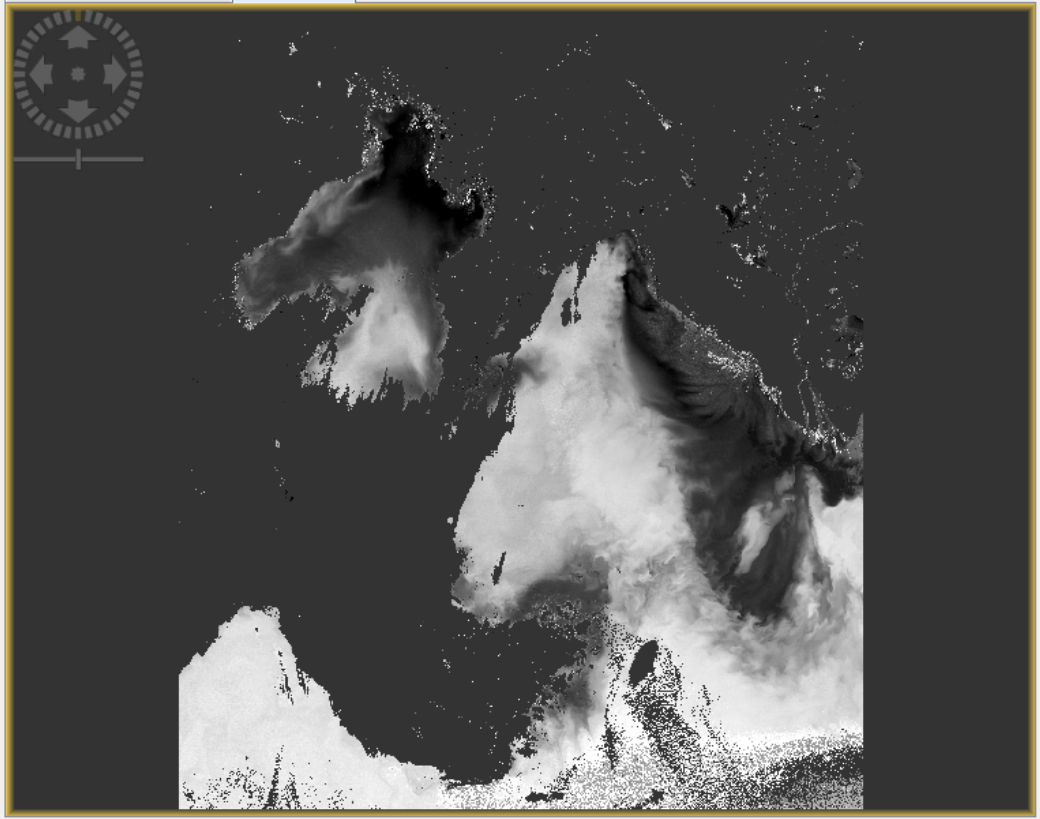
- [1] Oa04_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa04_reflectance
    - Oa04_reflectance_err
    - SSS
- [2] Oa06_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa06_reflectance
    - Oa06_reflectance_err
- [3] Oa08_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa08_reflectance
    - Oa08_reflectance_err

Navigation - [1] SSS | Colour Manipulation - [1] SSS

1 : 8.2

0°

[1] Oa04_reflectance | [1] SSS



Layer Manager

Mask Manager

X — Y — Lat — Lon — Zoom — Level —

SNAP

File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help

Search (Ctrl+I)

Product Explorer | Pixel Info

- [1] 0a04_reflectance
  - Metadata
  - Vector Data
  - Bands
    - 0a04_reflectance
    - 0a04_reflectance_err
    - SSS
- [2] 0a06_reflectance
  - Metadata
  - Vector Data
  - Bands
    - 0a06_reflectance
    - 0a06_reflectance_err
- [3] 0a08_reflectance
  - Metadata
  - Vector Data
  - Bands
    - 0a08_reflectance
    - 0a08_reflectance_err

Navigation - [1] SSS | Colour Manipulation - [1] SSS

Editor: Basic Sliders Table

Name: SSS
Unit:
Min: 23.363
Max: 50.36
Rough statistics!

24.79 29.85 34.91

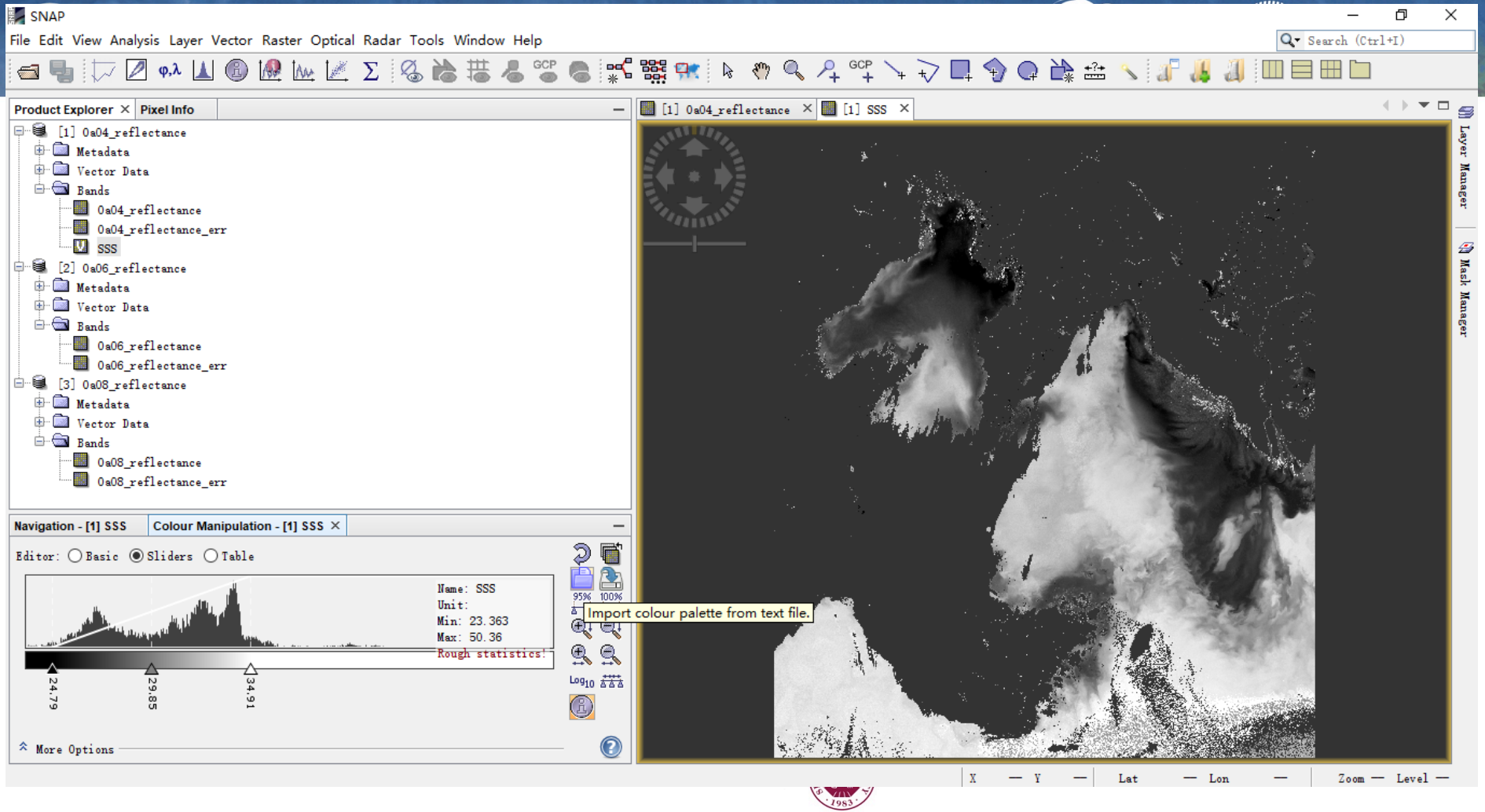
95% 100%

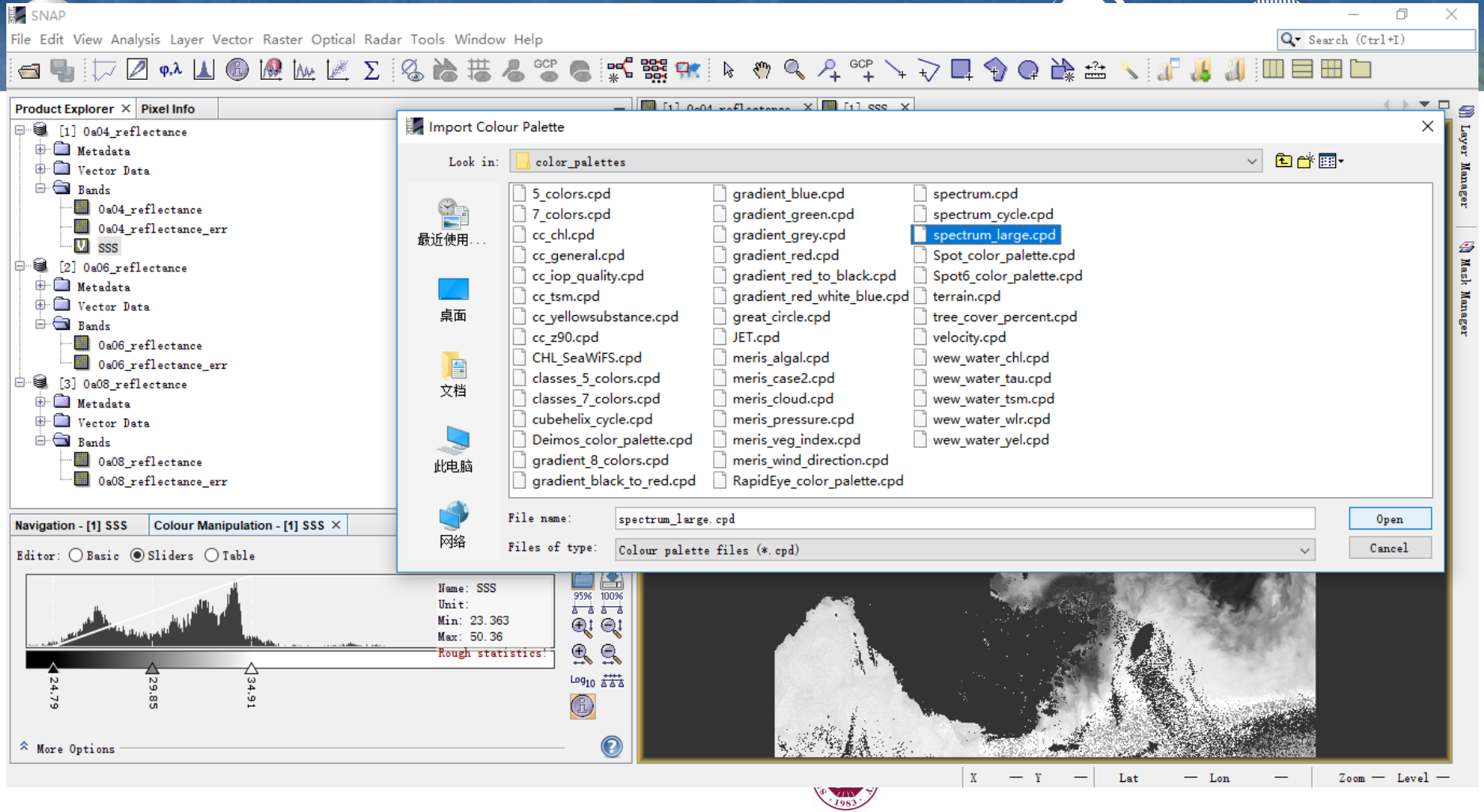
More Options

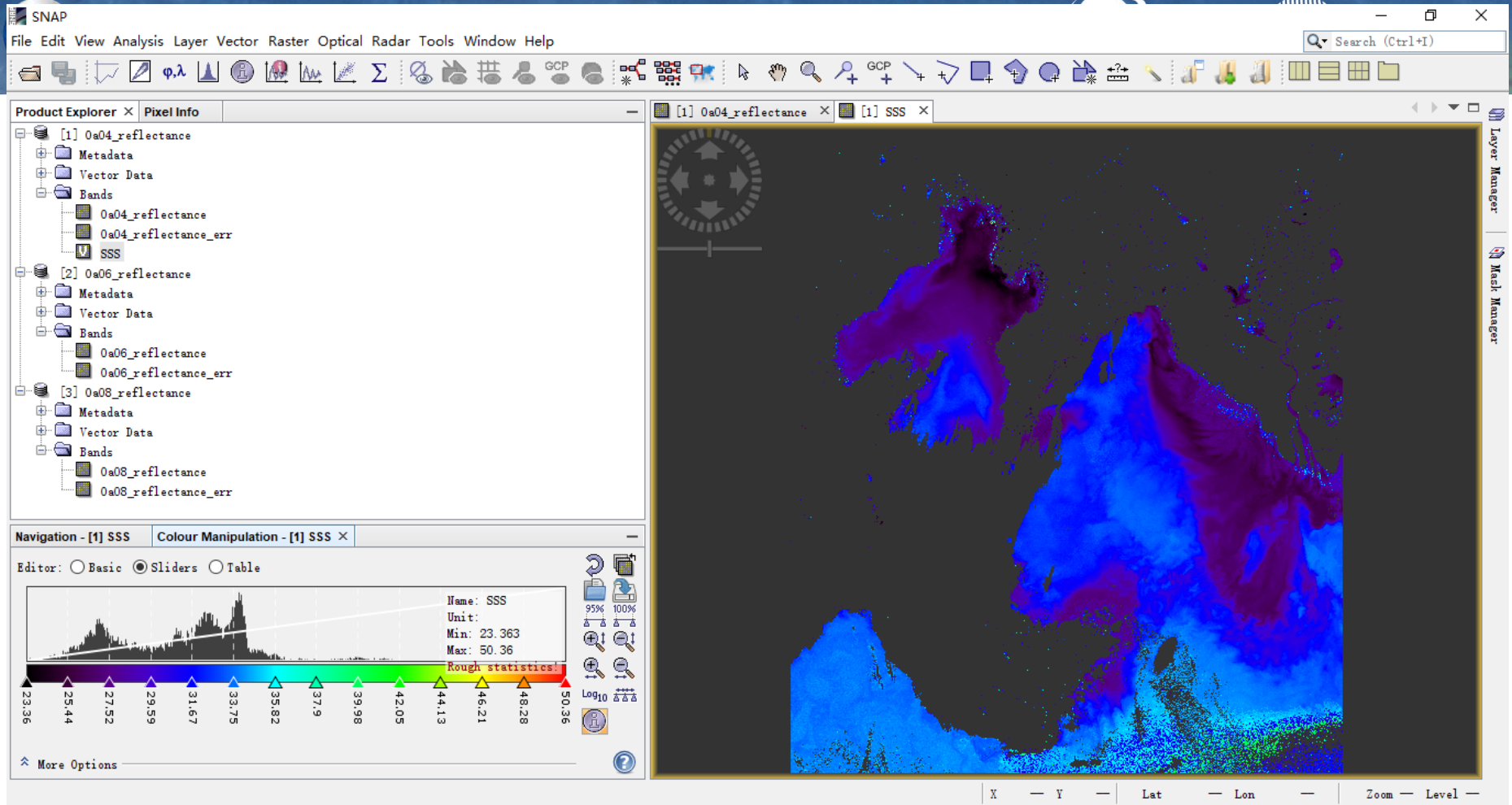
[1] 0a04_reflectance | [1] SSS

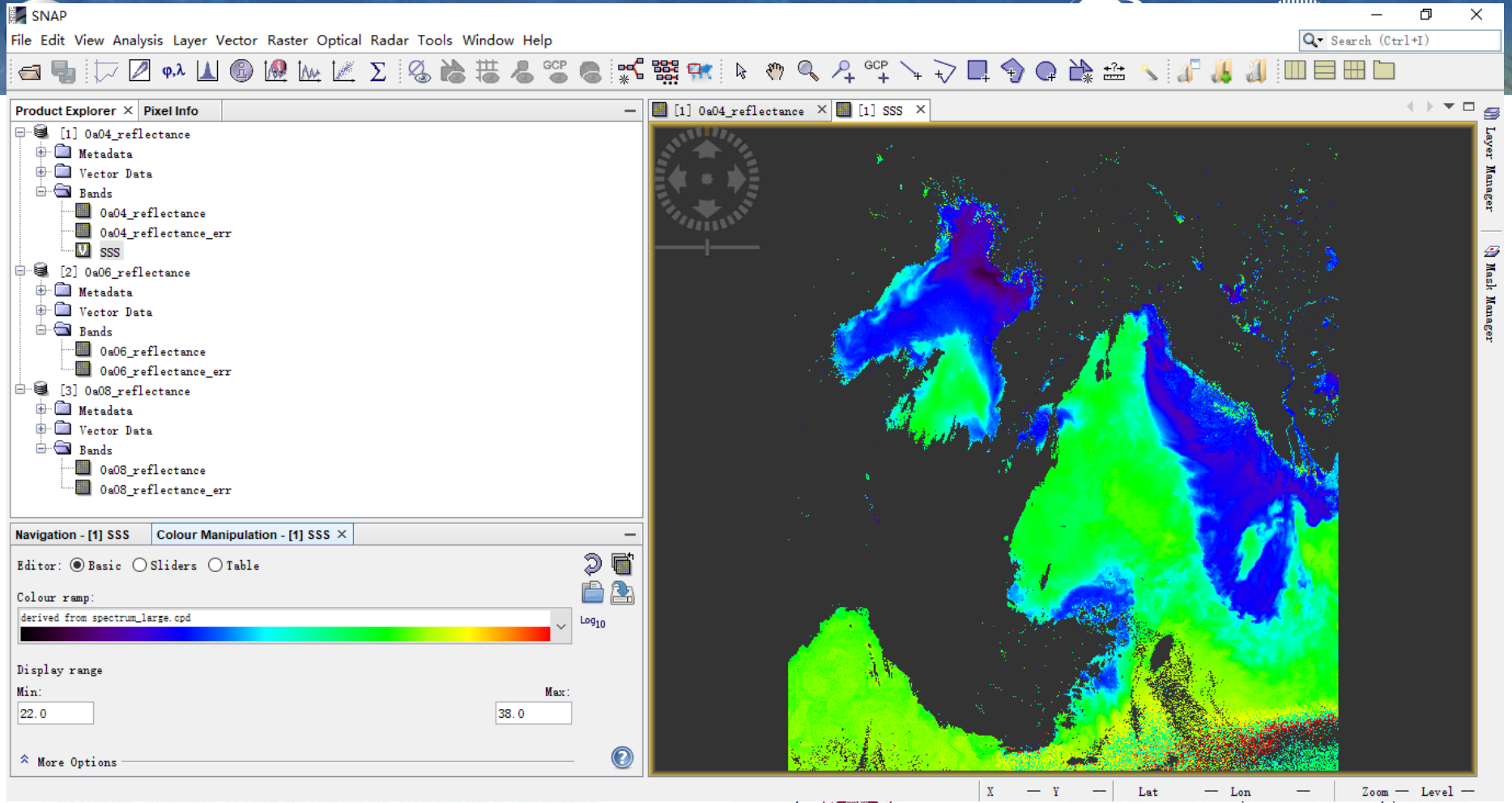
Layer Manager | Mask Manager

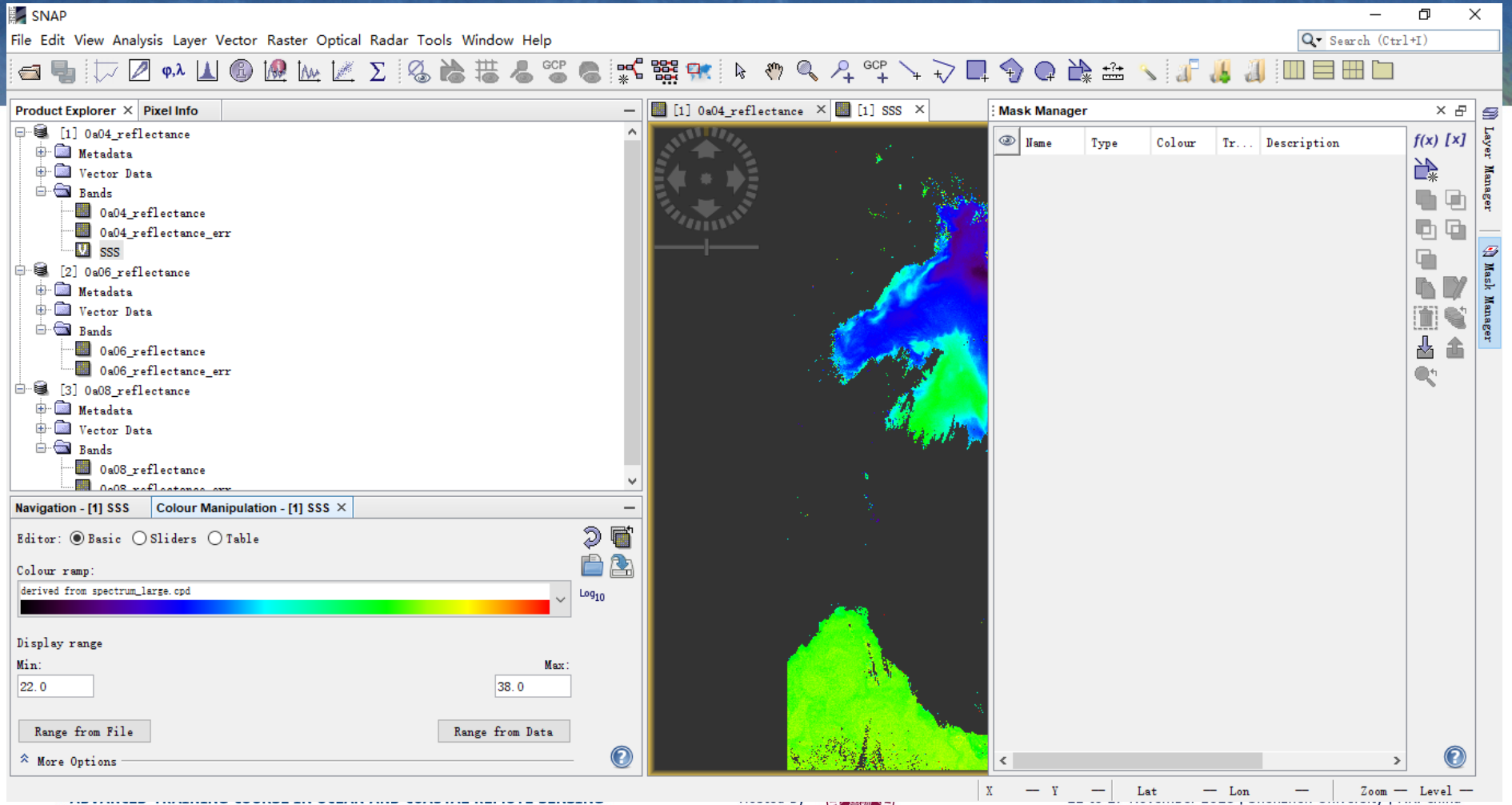
X — Y — Lat — Lon — Zoom — Level —

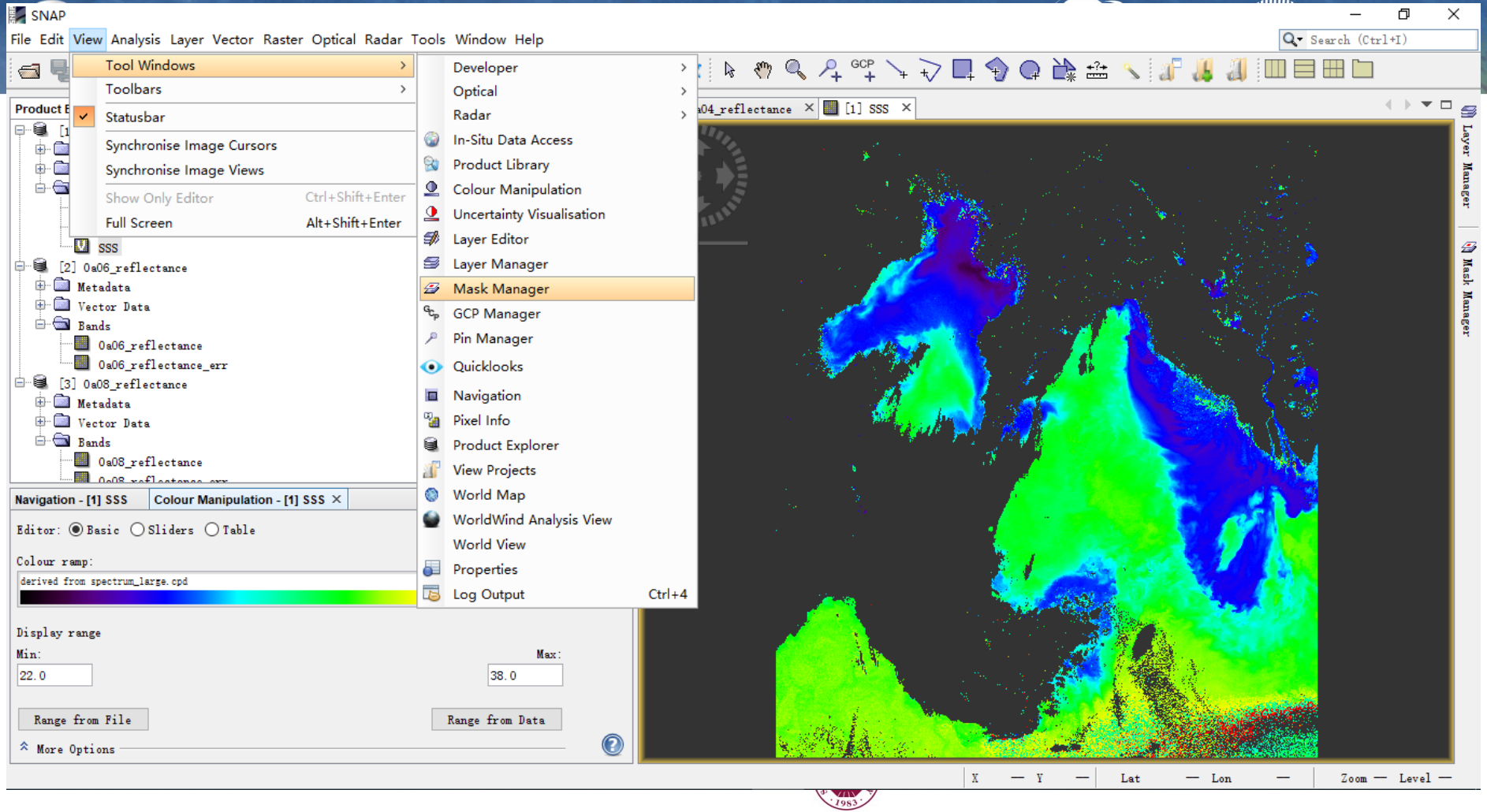

SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Name: SSS
Unit:
Min: 23.363
Max: 50.36
Rough statistics!
24.79
29.85
34.91
95%
100%
Log10
Import colour palette from text file.
More Options
[1] 0a04_reflectance
[1] SSS
Layer Manager
Mask Manager
X
Y
Lat
Lon
Zoom
Level


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
Import Colour Palette
Look in: color_palettes
5_colors.cpd
7_colors.cpd
cc_chl.cpd
cc_general.cpd
cc_iop_quality.cpd
cc_tsm.cpd
cc_yellowsubstance.cpd
cc_z90.cpd
CHL_SeaWiFS.cpd
classes_5_colors.cpd
classes_7_colors.cpd
cubehelix_cycle.cpd
Deimos_color_palette.cpd
gradient_8_colors.cpd
gradient_black_to_red.cpd
gradient_blue.cpd
gradient_green.cpd
gradient_grey.cpd
gradient_red.cpd
gradient_red_to_black.cpd
gradient_red_white_blue.cpd
great_circle.cpd
JET.cpd
meris_algal.cpd
meris_case2.cpd
meris_cloud.cpd
meris_pressure.cpd
meris_veg_index.cpd
meris_wind_direction.cpd
RapidEye_color_palette.cpd
spectrum.cpd
spectrum_cycle.cpd
spectrum_large.cpd
Spot_color_palette.cpd
Spot6_color_palette.cpd
terrain.cpd
tree_cover_percent.cpd
velocity.cpd
wew_water_chl.cpd
wew_water_tau.cpd
wew_water_tsm.cpd
wew_water_wlr.cpd
wew_water_yel.cpd
最近使用...
桌面
文档
此电脑
网络
File name: spectrum_large.cpd
Files of type: Colour palette files (*.cpd)
Open
Cancel
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Name: SSS
Unit:
Min: 23.363
Max: 50.36
Rough statistics!
24.79
29.85
34.91
More Options
Layer Manager
Mask Manager
X — Y —
Lat — Lon —
Zoom — Level —


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Name: SSS
Unit:
Min: 23.363
Max: 50.36
Rough statistics!
23.36 25.44 27.52 29.59 31.67 33.75 35.82 37.9 39.98 42.05 44.13 46.21 48.28 50.36
95% 100%
Log10
More Options
[1] 0a04_reflectance
[1] SSS
Layer Manager
Mask Manager
X — Y —
Lat — Lon —
Zoom — Level —


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Colour ramp:
derived from spectrum_large.cpd
Log10
Display range
Min:
22.0
Max:
38.0
More Options
[1] 0a04_reflectance
[1] SSS
Layer Manager
Mask Manager
X — Y —
Lat — Lon —
Zoom — Level —


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Colour ramp:
derived from spectrum_large.cpd
Log10
Display range
Min:
22.0
Max:
38.0
Range from File
Range from Data
More Options
[1] 0a04_reflectance
[1] SSS
Mask Manager
Name
Type
Colour
Tr...
Description
f(x) [x]
Layer Manager
Mask Manager
X
Y
Lat
Lon
Zoom
Level


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Tool Windows
Toolbars
Statusbar
Synchronise Image Cursors
Synchronise Image Views
Show Only Editor Ctrl+Shift+Enter
Full Screen Alt+Shift+Enter
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Uncertainty Visualisation
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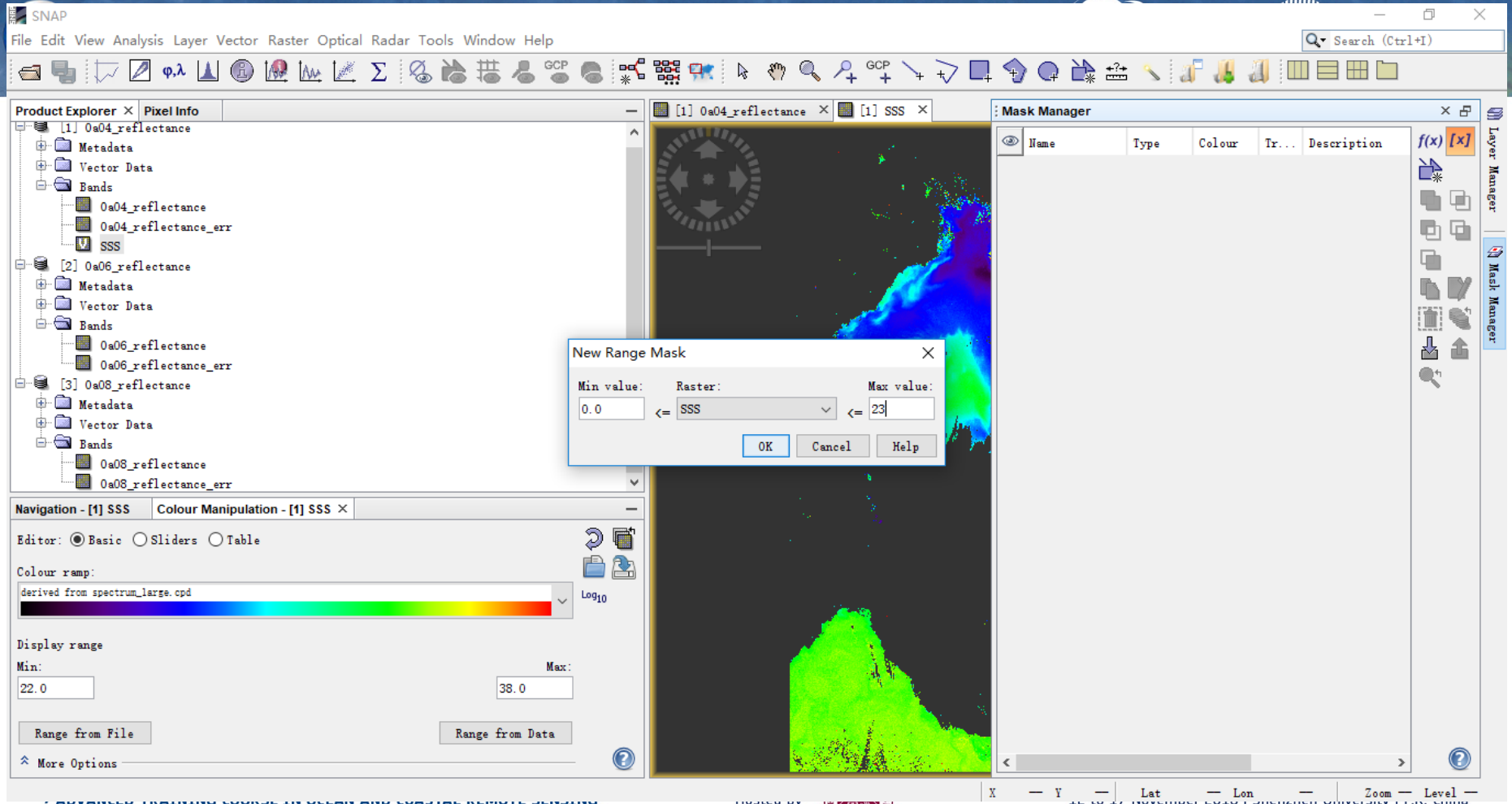
World View
Properties
Log Output Ctrl+4
[1] SSS
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Colour ramp:
derived from spectrum_large.cpd
Display range
Min: 22.0
Max: 38.0
Range from File
Range from Data
More Options
Layer Manager
Mask Manager
X Y Lat Lon Zoom Level


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
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Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
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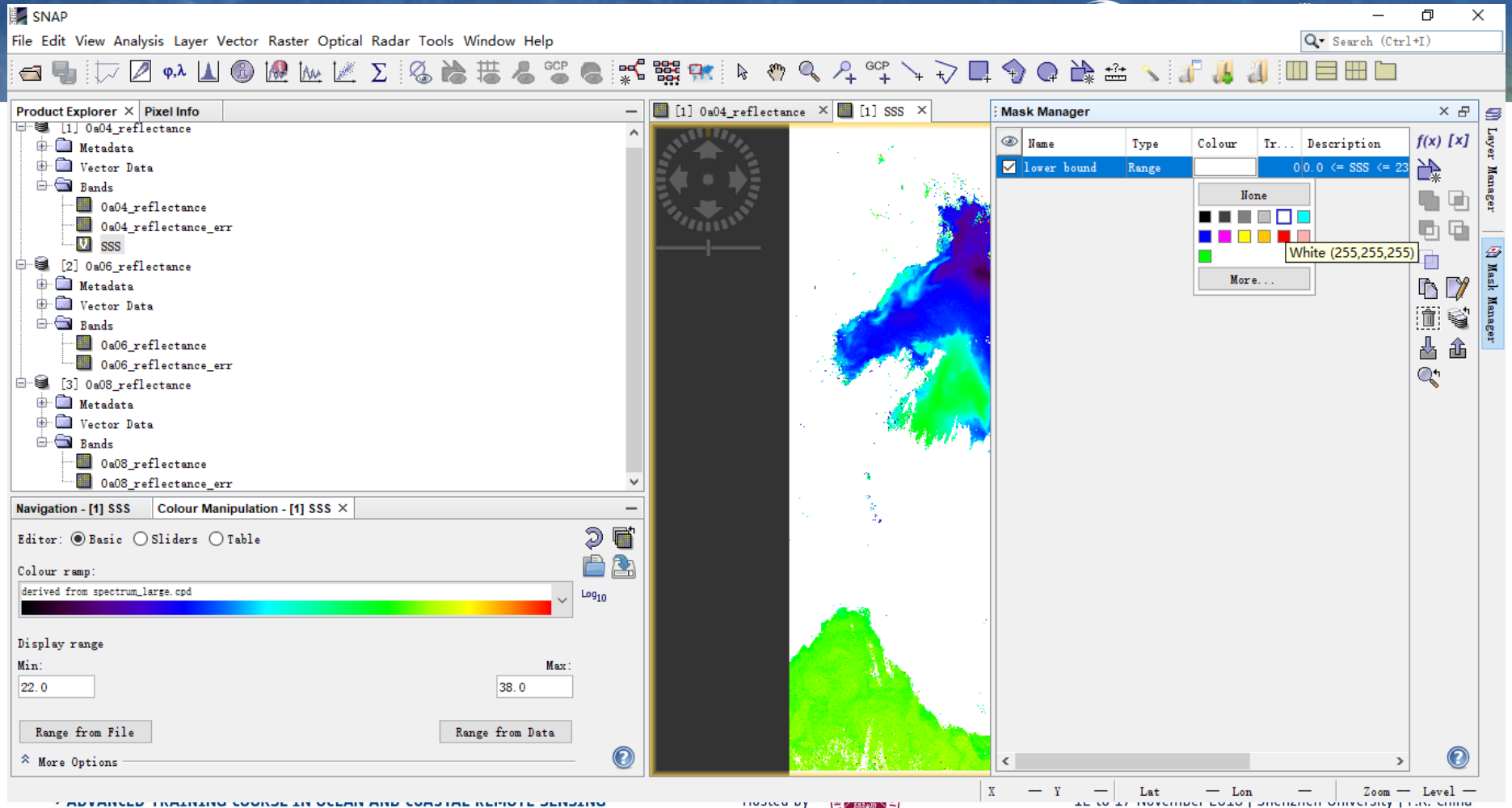
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
[1] 0a04_reflectance
[1] SSS
New Range Mask
Min value:
0.0
<=
Raster:
SSS
<=
Max value:
23
OK
Cancel
Help
Mask Manager
Name
Type
Colour
Tr...
Description
Layer Manager
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Colour ramp:
derived from spectrum_large.cpd
Log10
Display range
Min:
22.0
Max:
38.0
Range from File
Range from Data
More Options
X
Y
Lat
Lon
Zoom
Level


SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
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Product Explorer
Pixel Info
[1] 0a04_reflectance
Metadata
Vector Data
Bands
0a04_reflectance
0a04_reflectance_err
SSS
[2] 0a06_reflectance
Metadata
Vector Data
Bands
0a06_reflectance
0a06_reflectance_err
[3] 0a08_reflectance
Metadata
Vector Data
Bands
0a08_reflectance
0a08_reflectance_err
Navigation - [1] SSS
Colour Manipulation - [1] SSS
Editor: Basic Sliders Table
Colour ramp:
derived from spectrum_large.cpd
Log10
Display range
Min:
22.0
Max:
38.0
Range from File
Range from Data
More Options
[1] 0a04_reflectance
[1] SSS
Mask Manager
Name
Type
Colour
Tr...
Description
lower bound
Range
0
0.0 <= SSS <= 23
None
White (255,255,255)
More...
f(x) [x]
Layer Manager
Mask Manager
X
Y
Lat
Lon
Zoom
Level

[1] upper bound - [Oa04_reflectance] - [D:\data\OCLI\dataupload\S3A_OL_2_WFR___20180408T015826_20180408T020126_20180409T105648_0179_030_003_2340_MAR_O_NT_002.SEN3\Oa04_reflectance.nc] ...

File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help

Product Explorer | Pixel Info

- [1] Oa04_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa04_reflectance
    - Oa04_reflectance_err
    - SSS
- [2] Oa06_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa06_reflectance
    - Oa06_reflectance_err
- [3] Oa08_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa08_reflectance
    - Oa08_reflectance_err

Navigation - [1] SSS | Colour Manipulation - [1] SSS

Editor: Basic Sliders Table

Colour ramp:

derived from spectrum_large.cpd

$Log_{10}$

Display range

Min: 22.0

Max: 38.0

Range from File | Range from Data

More Options

[1] Oa04_reflectance | [1] SSS

Mask Manager

| Name | Type | Colour | Tr... | Description |
|---|---|---|---|---|
| lower bound | Range | | 0 | 0.0 <= SSS <= 23 |
| upper bound | Range | | 0 | 35.0 <= SSS <= 4 |

f(x) [x]

Layer Manager | Mask Manager

X — Y — Lat — Lon — Zoom — Level —

[1] SSS - [Oa04_reflectance] - [D:\data\OCLI\dataupload\S3A_OL_2_WFR___20180408T015826_20180408T020126_20180409T105648_0179_030_003_2340_MAR_O_NT_002.SEN3\Oa04_reflectance.nc] - SNAP

File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help

Search (Ctrl+I)

Product Explorer | Pixel Info

- [1] Oa04_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa04_reflectance
    - Oa04_reflectance_err
    - SSS
- [2] Oa06_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa06_reflectance
    - Oa06_reflectance_err
- [3] Oa08_reflectance
  - Metadata
  - Vector Data
  - Bands
    - Oa08_reflectance
    - Oa08_reflectance_err

Navigation - [1] SSS | Colour Manipulation - [1] SSS

Editor: Basic Sliders Table

Colour ramp:

derived from spectrum_large.cpd

$Log_{10}$

Display range

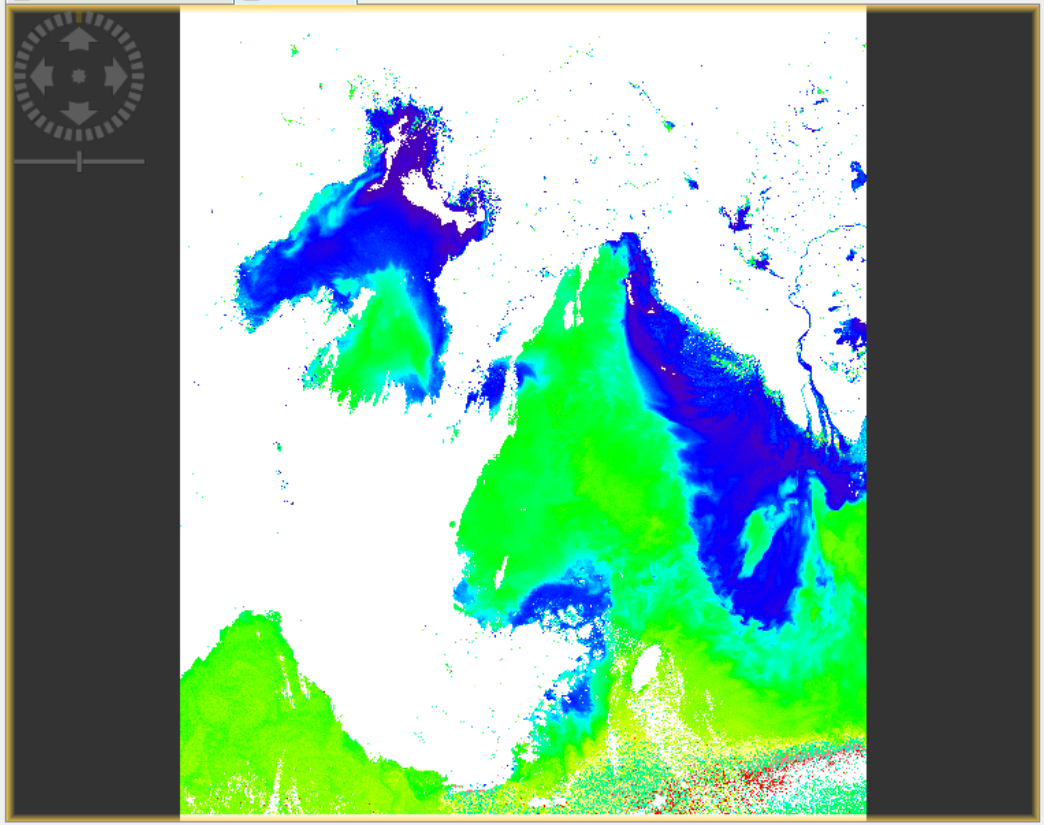
Min: 22.0

Max: 38.0

Range from File | Range from Data

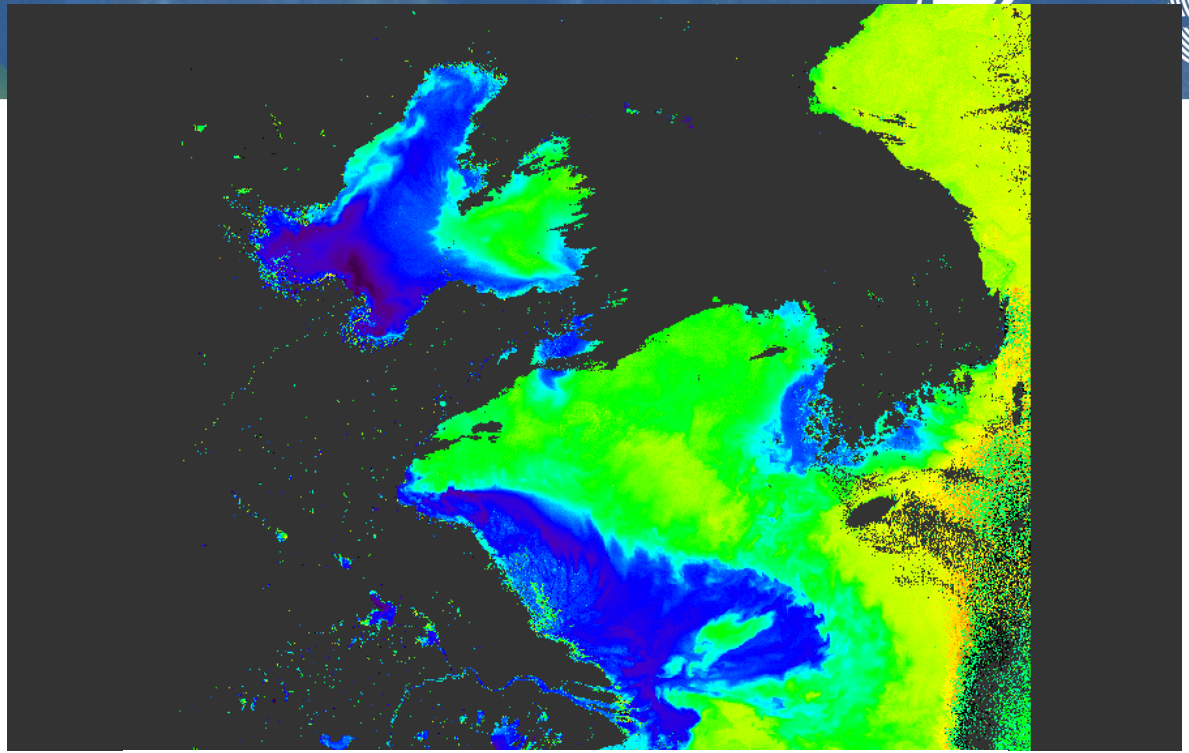
More Options

[1] Oa04_reflectance | [1] SSS



Layer Manager | Mask Manager

X — Y — | Lat — Lon — | Zoom — Level —




# OCLI mapped SSS on 8th April, 2018

# Thanks for your attention !