AmeriGEOSS WEEK

Hosted by: INPE

AUGUST 6-10, 2018
INPE - São José Dos Campos, Brasil
www.amerigeoss.org

PROCESSAMENTO DE IMAGENS DE SENSORIAMENTO REMOTO PARA RESPOSTA A DESASTRES

Uso de Imagens e Software Livre do INPE e ESA com Exemplos de Aplicações em Mapeamento para a Resposta à Desastres

Remote Sensing Images Processing for Disasters Response
Use of CBERS-4 and Sentinel images and INPE´s and ESA´s Tools
Collaboration with CEOS WGCapD and Disasters Charter

Laércio Namikawa

laercio.namikawa@inpe.br

Disaster Management Workshop

Divisão de Processamento de Imagens

European Space Agency

Description

The course will present digital image processing techniques for identifying damages and producing maps in support of disaster response, as well as, the use of Sentinel data and ESA tools for Disaster mapping.

TerraView and SPRING, INPE free and open source tools, and ESA toolboxes GEP (Geohazards Exploitation Platform) and SNAP (Sentinel Application Platform) will be used during hands-on activities.

By the end of the course, the participants will be able to:

- Select and obtain appropriate images for disaster applications
- Perform some skills of image processing: registration and geometric correction, image mosaic, enhancement and export

Seguro | https://www.elobservador.com.uy/aumenta-5200-la-cantidad-personas-desplazadas-las-inundaciones-n1082940

EL OBSERVADOR

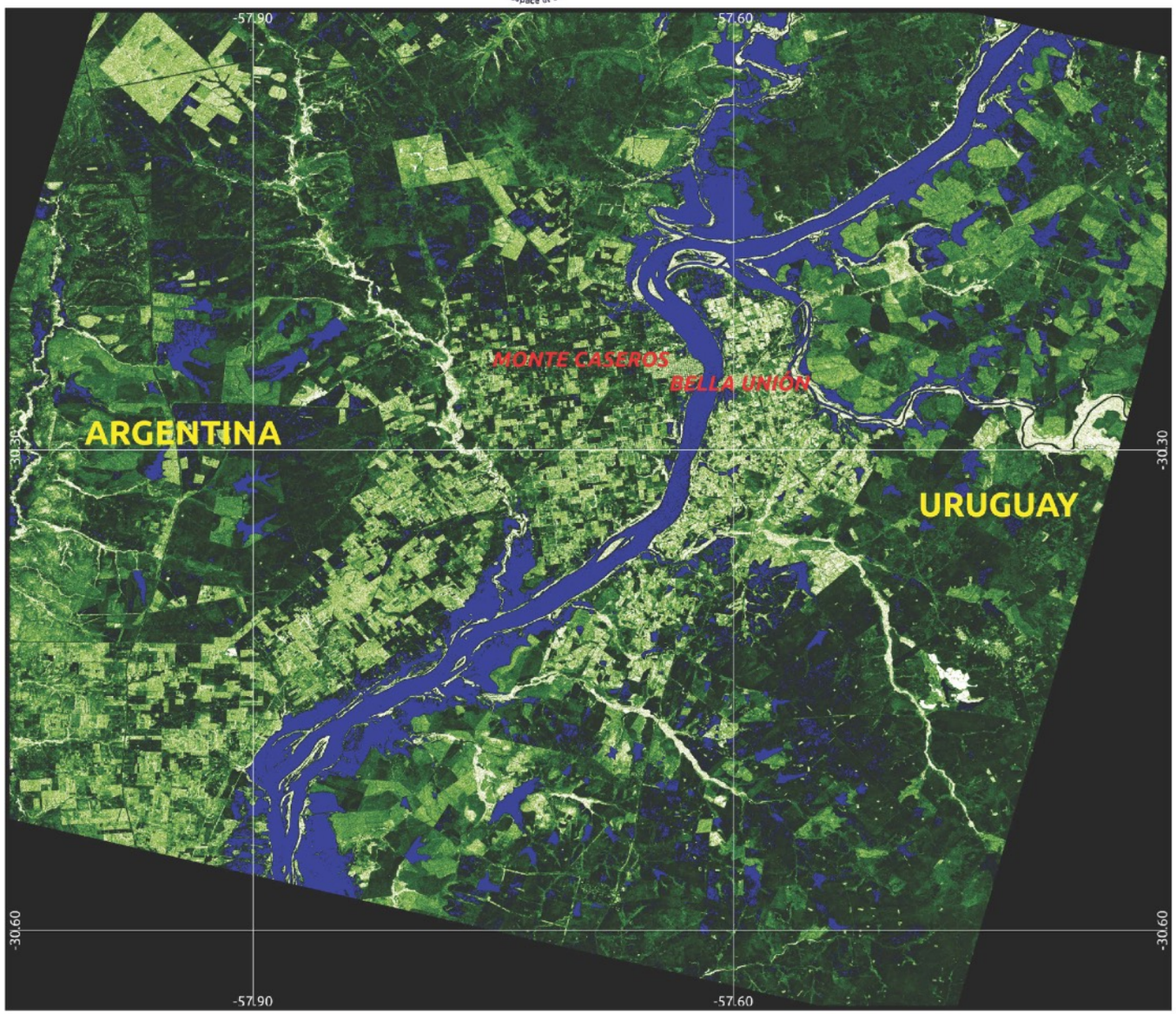
SECCIONES CROMO REFERI AGRO PADRES HOY OTV BLOGS M.

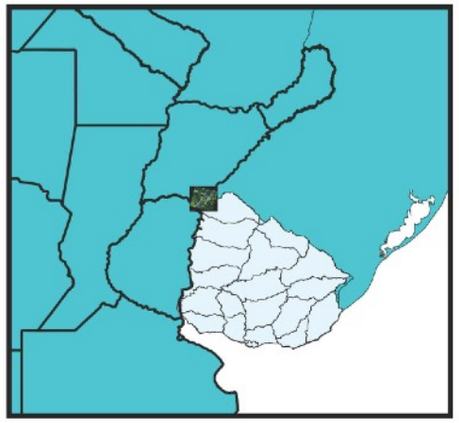
Inundaciones. Archivo

El último relevamiento realizado este sábado por el Sistema Nacional de Emergencia (Sinae), da cuenta que hay 5.208 personas desplazadas de sus viviendas en todo el país, a causa de las inundaciones. De esa cantidad 1.407 son evacuadas y 3.801 son autoevacuadas.

Inundaciones en Uruguay
Flooding in Uruguay

June 8th, 2017
International Charter Call ID 614





Legend
International boundary

Data source

Mission: ALOS 2
SENSOR: SAR
POLARIZATION: HV
Pixel size: 12.5 m
Date of crisis image: June 8th 2017
The satellite data in this map were provided under the International Charter Space and Major Disasters

Description of the event

Heavy rains caused severe flooding in Uruguays' Salto Department, Paysandú Department and Bella Unión city of the Artigas department displacing 3500 people. Uruguay's National Emergency System (SINAE) are visiting affected areas to assess the damage and prepare relief efforts. Many of the displaced people are already receiving food, shelter and medical care. Northern parts of Uruguay have been under a heavy rain warning since 24 May, and authorities expect further rain with flood waters set to continue rising.

Map development

This map was developed on 13-06-2017 by the Argentinean Space Agency (ALi @ CAEARTE - CONAE, Argentina).

This product was generated using digital techniques and requires field verification. There is no precision mapping in this product.

Seguro | https://disasterscharter.org/web/guest/home

Home About Activations News Library

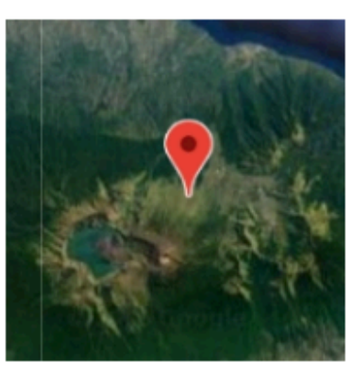
English Login

The International Charter Space and Major Disasters

Providing satellite data to those affected by natural or man-made disasters through registered organisations, for use in monitoring and response activities. Read more

How the Charter Works ▸ How to become a user ▸

Latest Charter Activations



06 AUGUST 2018

Earthquake in Indonesia ▸

24 JULY 2018

Fire in Greece ▸

Recent Information

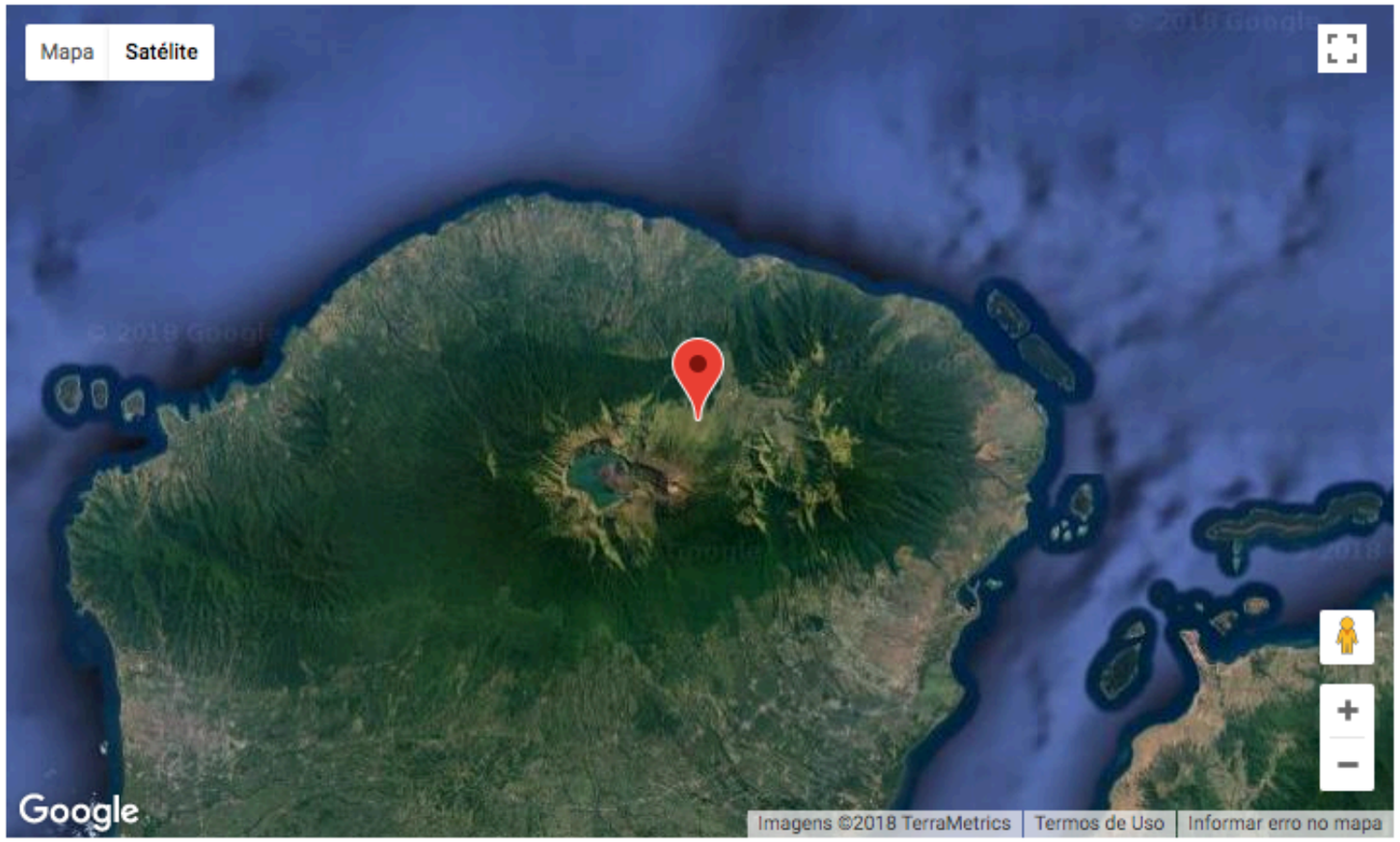
28 JUNE 2018

Welcome to the new Charter Website ▸

06 AUGUST 2018

Earthquake in Indonesia

Browse activations on map



Location of Event:	Indonesia
Date of Charter Activation:	2018-08-06
Time of Charter Activation:	14:06
Time zone of Charter Activation:	UTC+09:00
Charter Requestor:	ADRC on behalf of LAPAN, Indonesia
Activation ID:	580
Project Management:	AIT

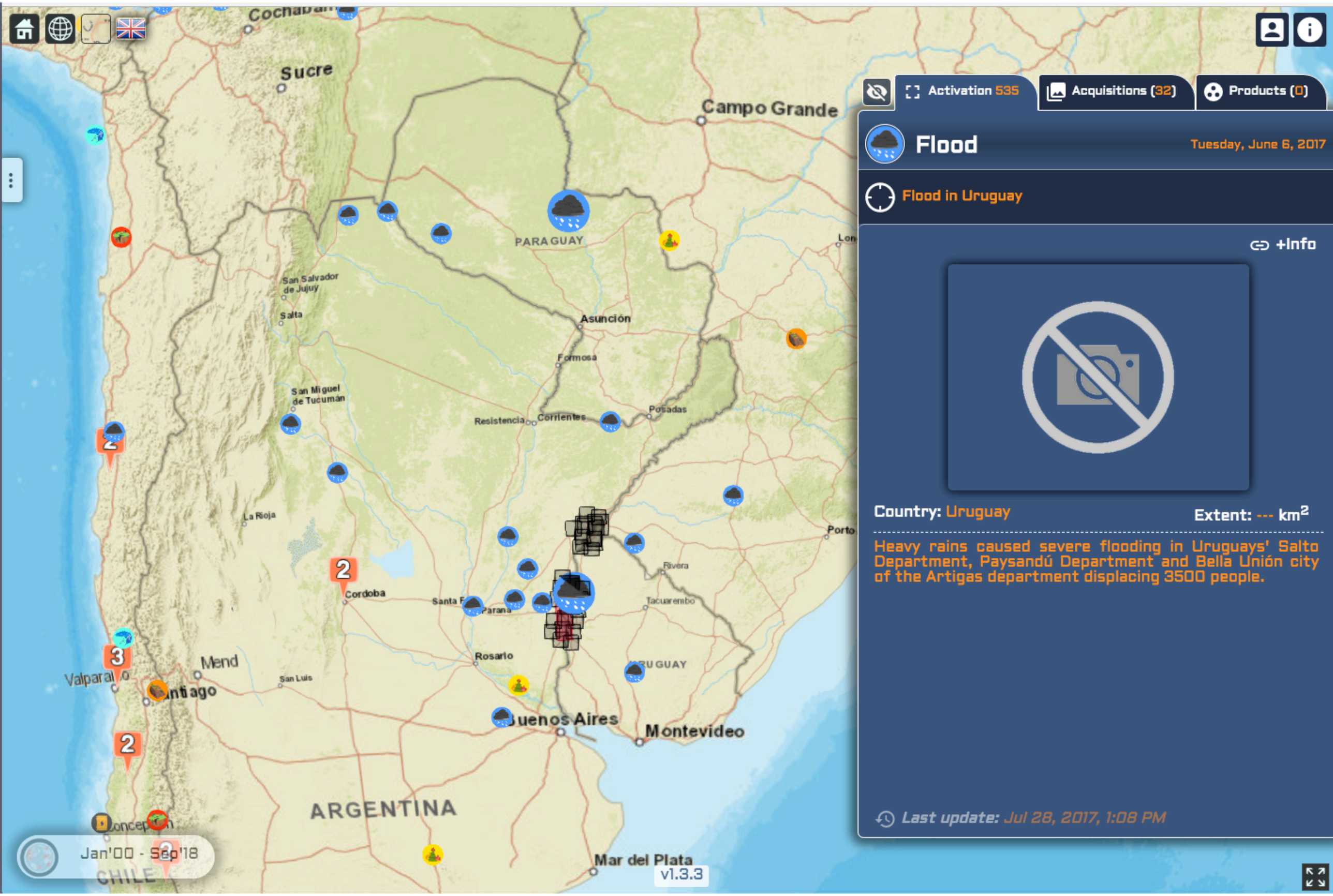
A magnitude 6.9 earthquake has struck the Indonesian island of Lombok. The neighbouring island of Bali was also affected. At least 91 people are reported to have been killed with many more injured.

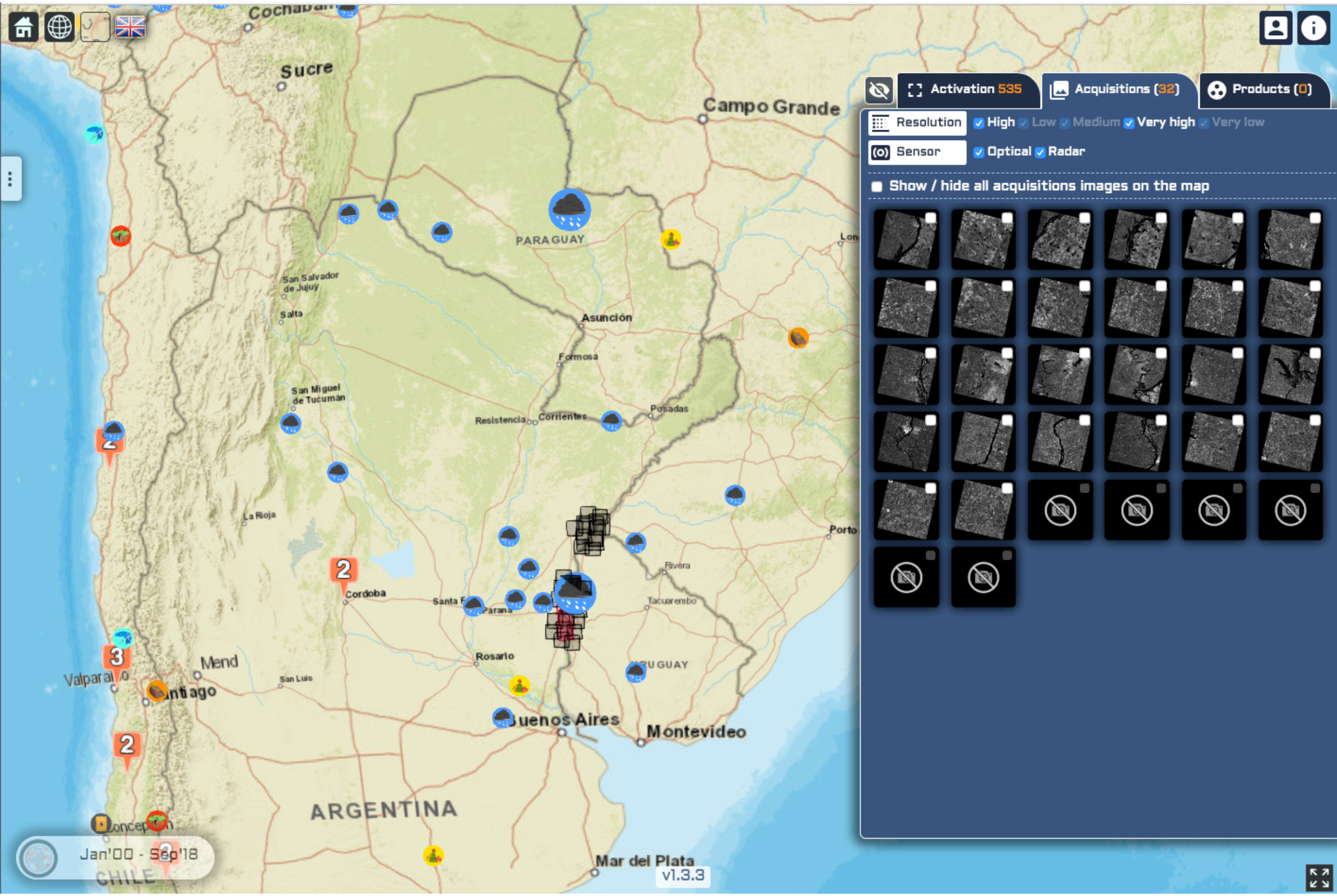
The quake struck at a depth of 30 kilometres triggering tsunami warnings and the evacuation of thousands of people. 130 aftershocks have been recorded since the quake hit. This comes only a week after a smaller earthquake shook the island, killing 16 people.

Rescue officials reported most of the damage hit Lombok's main city of Mataram where thousands of buildings were damaged, causing widespread power cuts. Many tourists headed for the airport which was affected, but still operational. Others fled for the beach where boats evacuated people to safety.

Products

Back to the full activation archive


Activation 535
Acquisitions (32)
Products (0)
Flood
Tuesday, June 6, 2017
Flood in Uruguay
+Info
Country: Uruguay
Extent: --- km2
Heavy rains caused severe flooding in Uruguays' Salto Department, Paysandú Department and Bella Unión city of the Artigas department displacing 3500 people.
Last update: Jul 28, 2017, 1:08 PM
Jan'00 - Sep'18
v1.3.3
Sucre
Campo Grande
PARAGUAY
Asunción
Formosa
Resistencia
Corrientes
Posadas
San Salvador de Jujuy
Salta
San Miguel de Tucumán
La Rioja
Cordoba
Santa Fe
Paraná
Rosario
San Luis
Mend
Valparaíso
Santiago
Buenos Aires
Montevideo
Rivera
Tacuarembo
URUGUAY
ARGENTINA
CHILE
Mar del Plata
Porto
Concepción

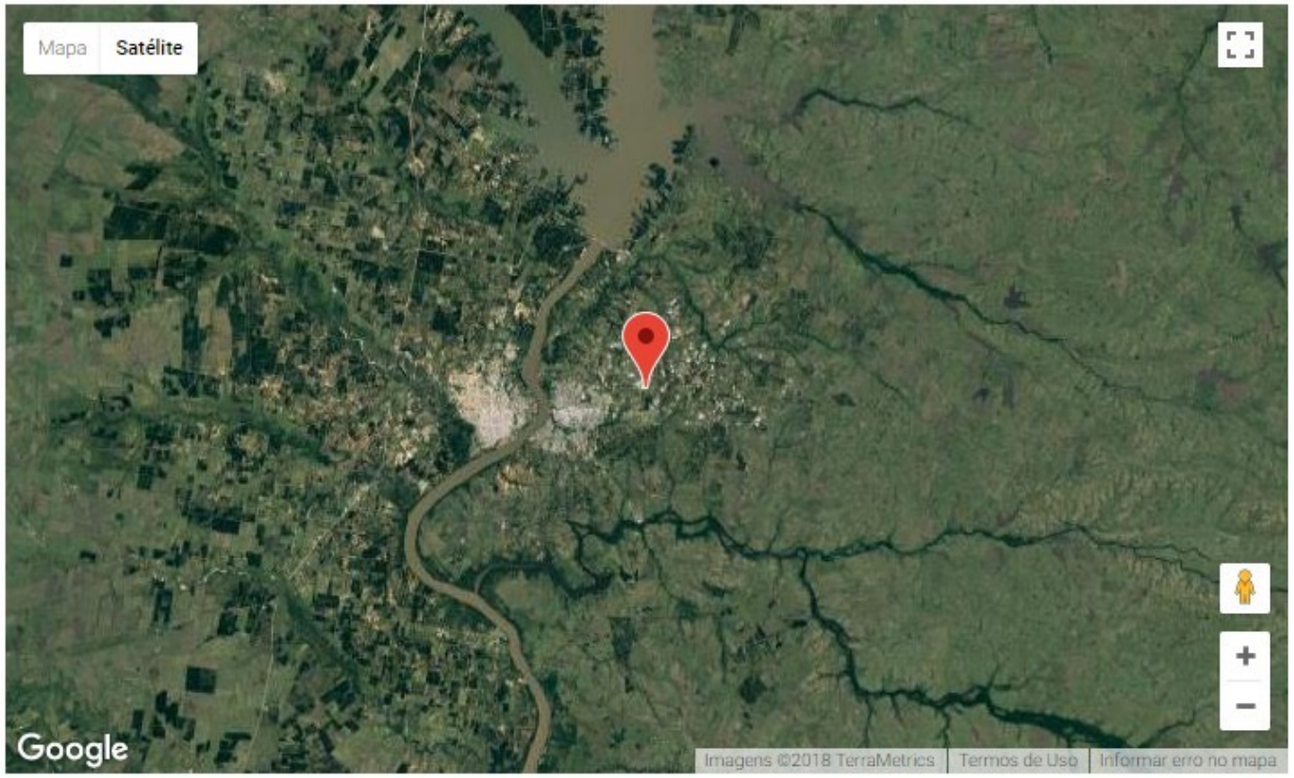

Sucre
Campo Grande
PARAGUAY
San Salvador de Jujuy
Salta
Asunción
Formosa
San Miguel de Tucumán
Resistencia
Corrientes
Posadas
La Rioja
Cordoba
Santa Fe
Parana
Rosario
San Luis
Mend
Valparaiso
Santiago
Concepción
Buenos Aires
Montevideo
Rivera
Tacuarembo
Porto
URUGUAY
ARGENTINA
CHILE
Mar del Plata
Jan'00 - Sep'18
v1.3.3
Activation 535
Acquisitions (32)
Products (0)
Resolution
High
Low
Medium
Very high
Very low
Sensor
Optical
Radar
Show / hide all acquisitions images on the map

Charter activations

06 JUNIO 2017

Inundaciones en Uruguay

Browse activations on map ▸



Ubicación del Evento:	Uruguay
Fecha de Activación de la Carta:	6 June 2017
Time of Charter Activation:	15:17:00
Time zone of Charter Activation:	UTC+03:00
Solicitante de la Carta:	Sistema Nacional de Emergencias - Presidencia de la República
Activation ID:	535
Gestión de Proyecto:	CONAE

Fuertes lluvias han causado severas inundaciones en el Departamento de Salto, en Uruguay, así como en Paysandú y en la ciudad de Bella Unión, en el departamento de Artigas, desplazando a unas 3500 personas.

En Sistema Nacional de Emergencia de Uruguay (SINAE) está revisando las áreas afectadas para estimar los daños y preparar los esfuerzos de socorro. Muchos de los desplazados están ya recibiendo alimentos, cobijo y atenciones médicas.

Products

Inundaciones en Uruguay

Fuente: CartoSat-2
Adquirido: 20/06/2017

Copyright: CartoSat-2 datos © ISRO (2017), todos los derechos reservados

Mapa producido por CONAE

Comparación de las inundaciones en Uruguay

Fuente: RADARSAT-2
Adquirido: Antes del desastre: 22/02/2017
Después de los desastres: 08/06/2017

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Mapa producido por CONAE

Inundación en Salto

Fuente: SPOT-6
Adquirido: 11/06/2017

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Inundaciones en Uruguay

Fuente: SPOT-6
Adquirido: 11/06/2017

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Mapa producido por CONAE

Inundaciones en Paysandu

Fuente: SPOT-6
Adquirido: 11/06/2017

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Inundaciones en Uruguay

Fuente: CartoSat-2
Adquirido: 10/06/2017

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Flooding in Monte Caseros and Bella Unión, Uruguay

Fuente: ALOS-2
Adquirido: 08/06/2017

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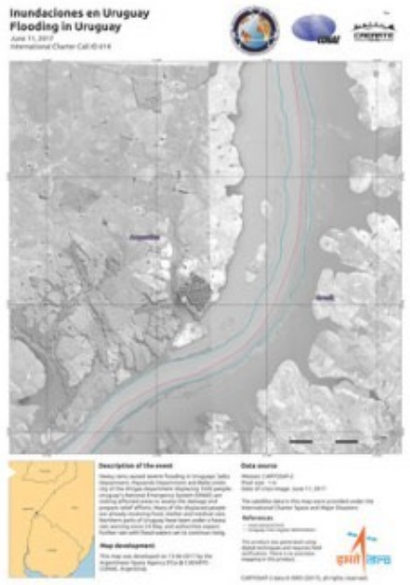
Map produced by CONAE



Inundaciones en el departamento de Salto, departamento de Paysandú y ciudad de Bella Unión

Fuente: CartoSat-2
Adquirido: 11/06/2017

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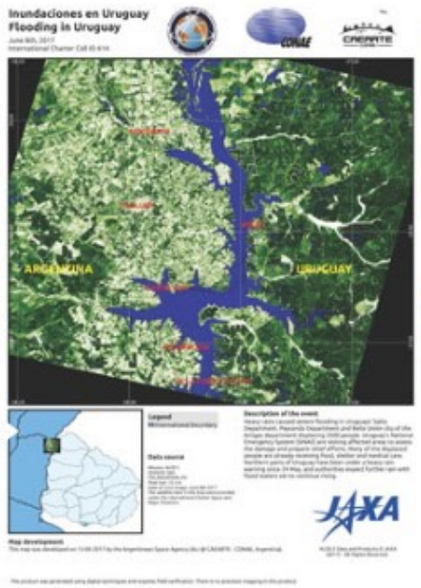
Mapa producido por CONAE



Flooding in Salto Department, Paysandú Department and Bella Unión City, Uruguay

Fuente: ALOS-2
Adquirido: 08/06/2017

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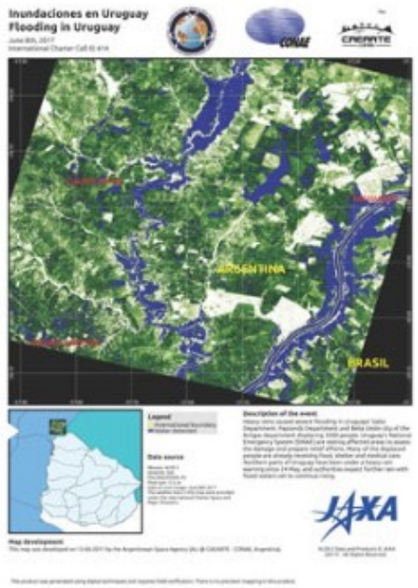
Map produced by CONAE



Flooding in Salto Department, Paysandú Department and Bella Unión City, Uruguay

Fuente: ALOS-2
Adquirido: 08/06/2017

Copyright: ALOS © JAXA (2016) All rights reserved
Map produced by CONAE

Inundaciones en Uruguay

Fuente: SPOT-7
Adquirido: 10/06/2017

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Inundaciones en Uruguay

Fuente: SPOT-7
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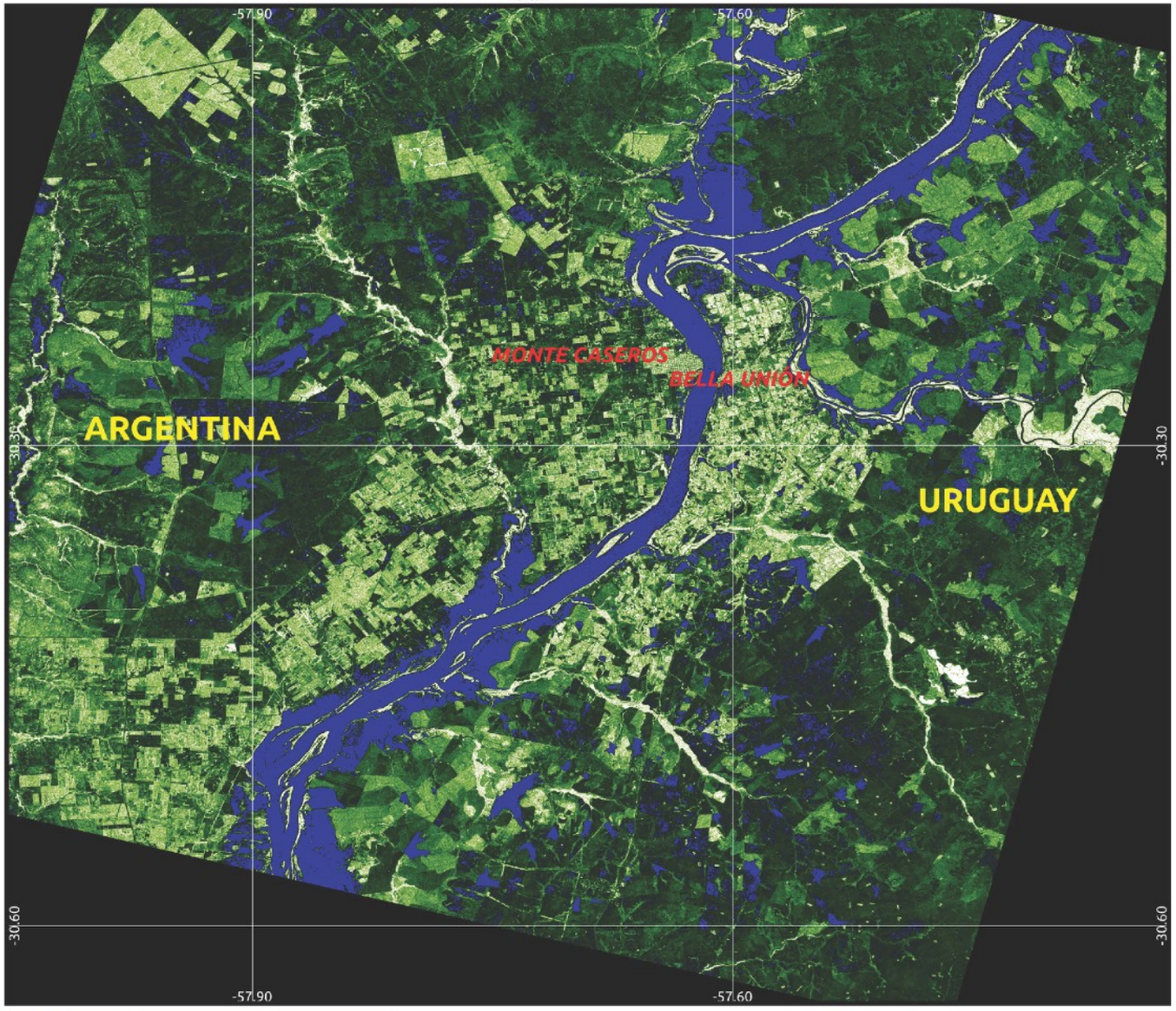
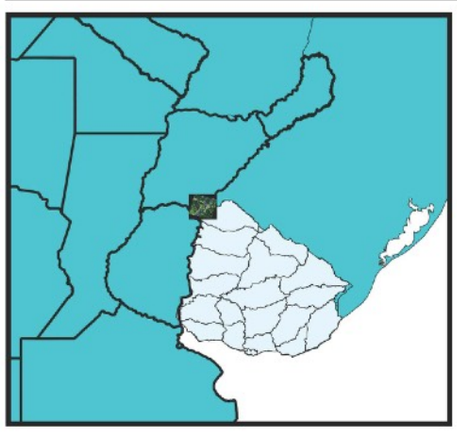
Inundaciones en Uruguay
Flooding in Uruguay

June 8th, 2017
International Charter Call ID 614





Legend
International boundary

Data source

Mission: ALOS 2
SENSOR: SAR
POLARIZATION: HV
Pixel size: 12.5 m
Date of crisis image: June 8th 2017
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8. Visualização Antes/Depois
9. Fatiamento para áreas inundadas
10. Calculo de Área
11. Exportação KML

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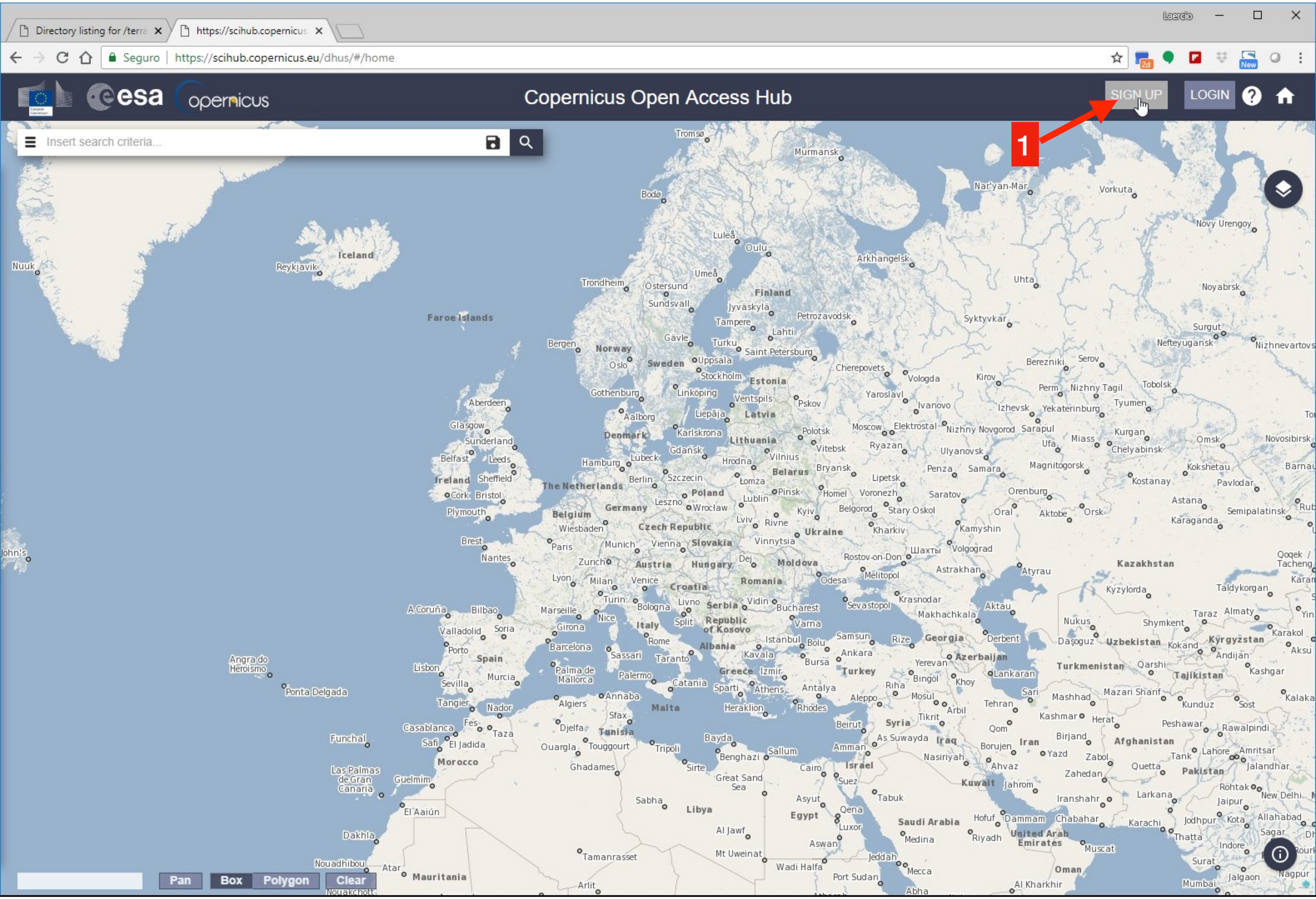

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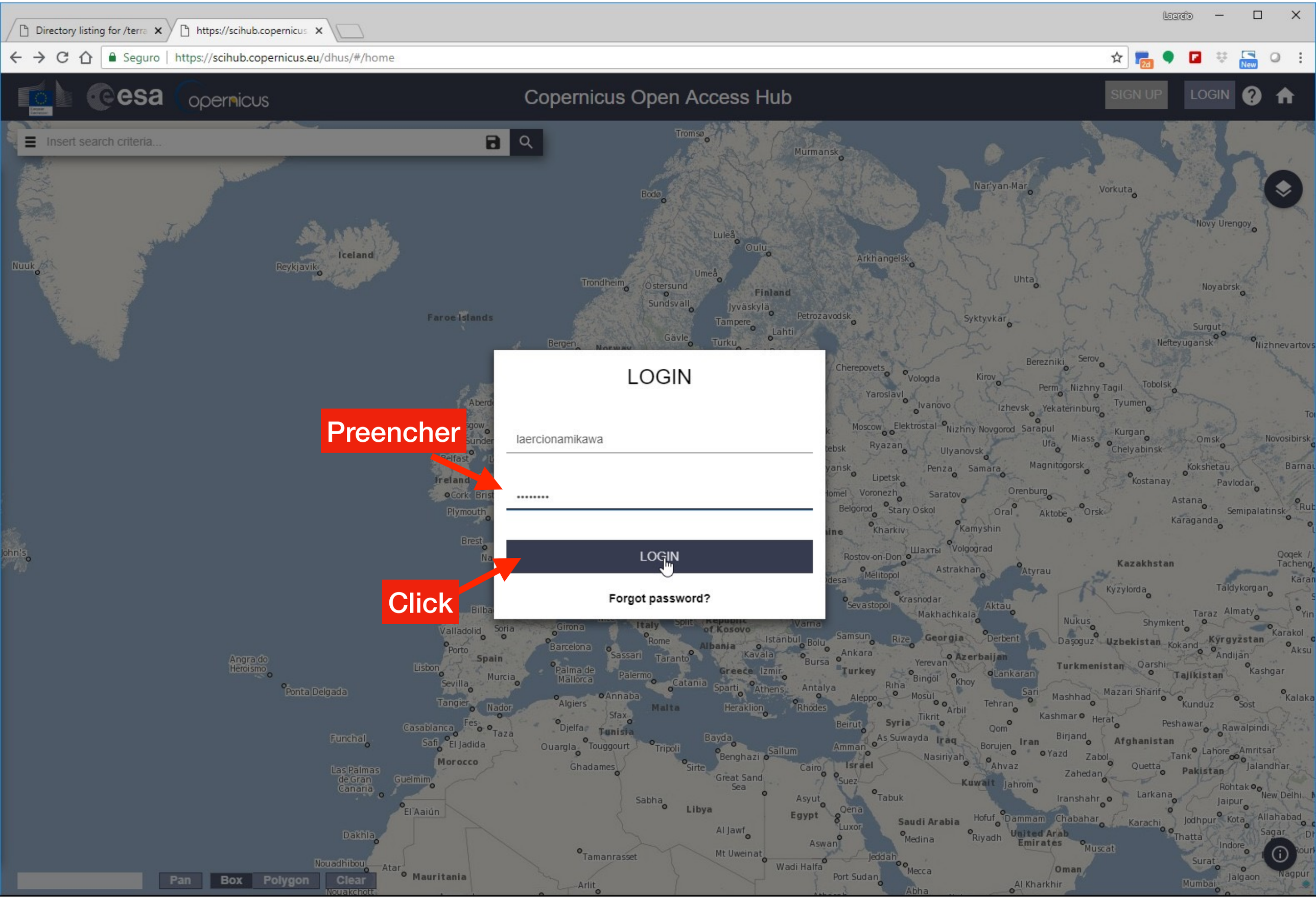
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SIGN UP
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Forgot password?
Preencher
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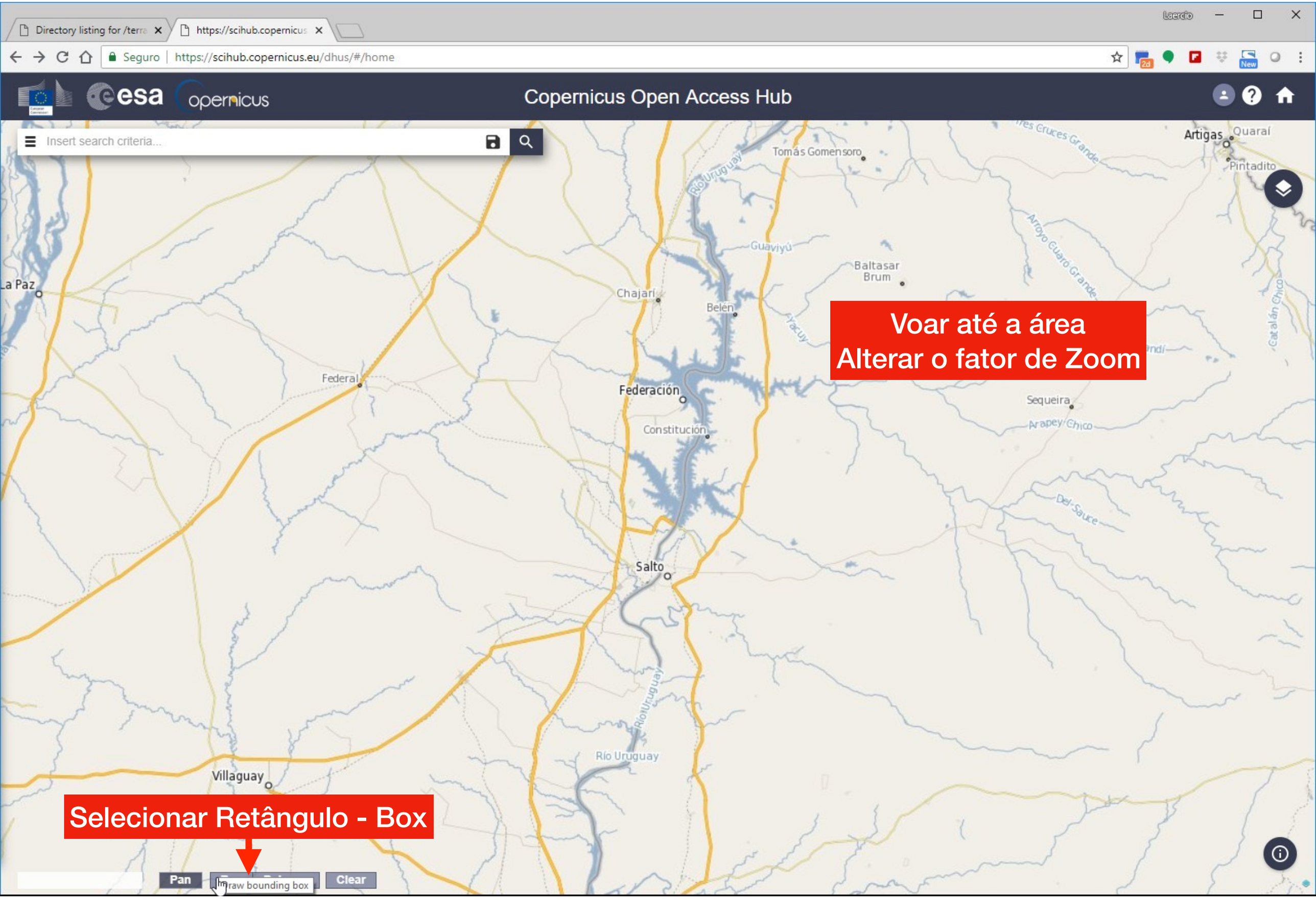
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Voar até a área
Alterar o fator de Zoom
Selecionar Retângulo - Box
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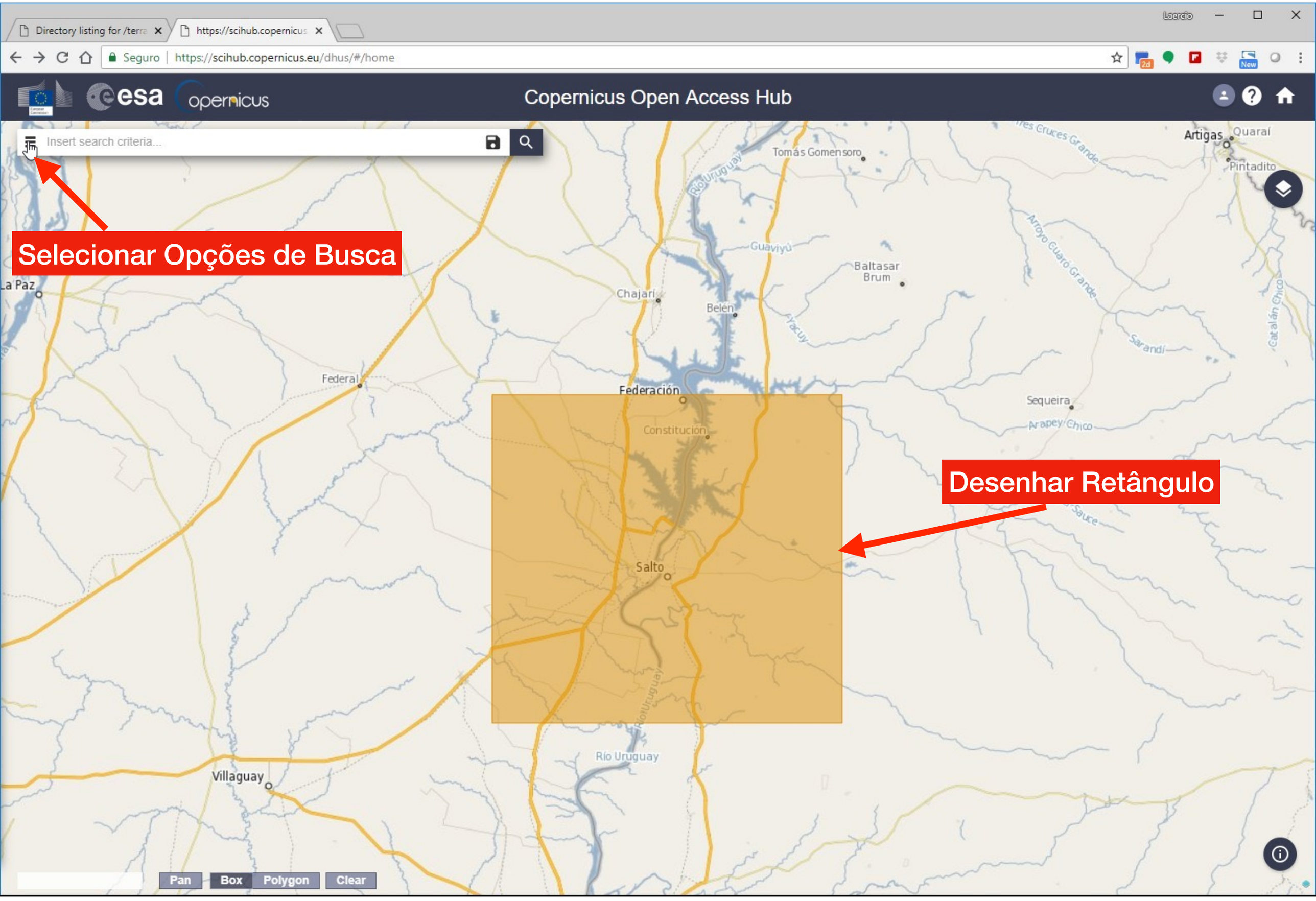
Artigas
Quaraí
Pintadito
Tomás Gomensoro
Río Uruguay
Guaviyú
Baltasar Brum
Chajarí
Belén
La Paz
Federal
Federación
Constitución
Sequeira
Arapey Chico
Del Sauce
Salto
Río Uruguay
Villaguay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Selecionar Opções de Busca
Desenhar Retângulo
La Paz
Chajarí
Belén
Federal
Federación
Constitución
Salto
Villaguay
Tomás Gomensoro
Artigas
Quaraí
Pintadito
Baltasar Brum
Sequeira
Río Uruguay
Pan
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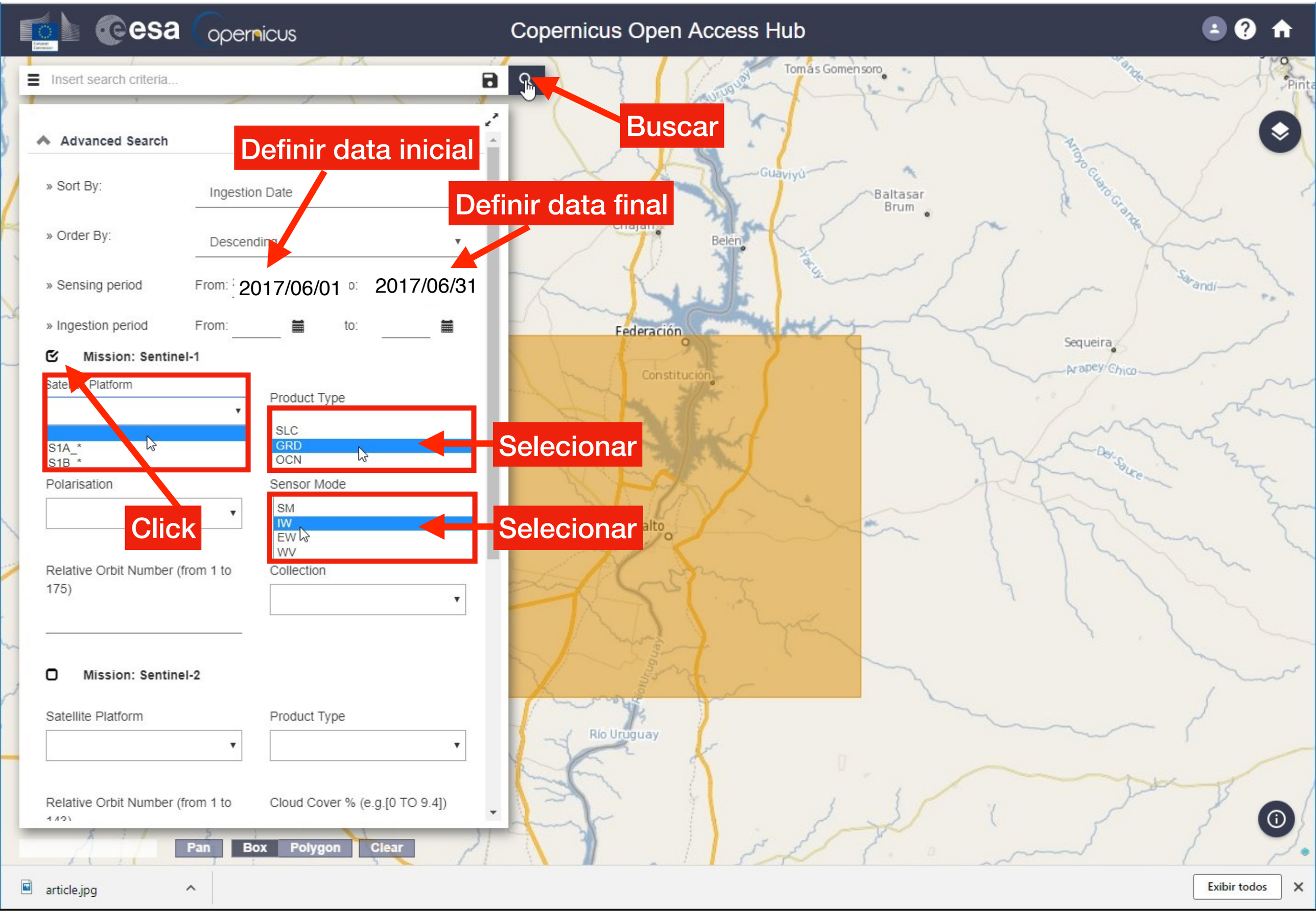
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Advanced Search
Definir data inicial
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» Sort By:
Ingestion Date
» Order By:
Descending
» Sensing period
From: 2017/06/01
to: 2017/06/31
» Ingestion period
From:
to:
Mission: Sentinel-1
Satellite Platform
S1A_*
S1B_*
Product Type
SLC
GRD
OCN
Selecionar
Polarisation
Sensor Mode
SM
IW
EW
WV
Selecionar
Click
Relative Orbit Number (from 1 to 175)
Collection
Mission: Sentinel-2
Satellite Platform
Product Type
Relative Orbit Number (from 1 to
Cloud Cover % (e.g.[0 TO 9.4])
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Tomás Gomensoro
Baltasar Brum
Belén
Federación
Constitución
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Sarandí
Arapey Chico
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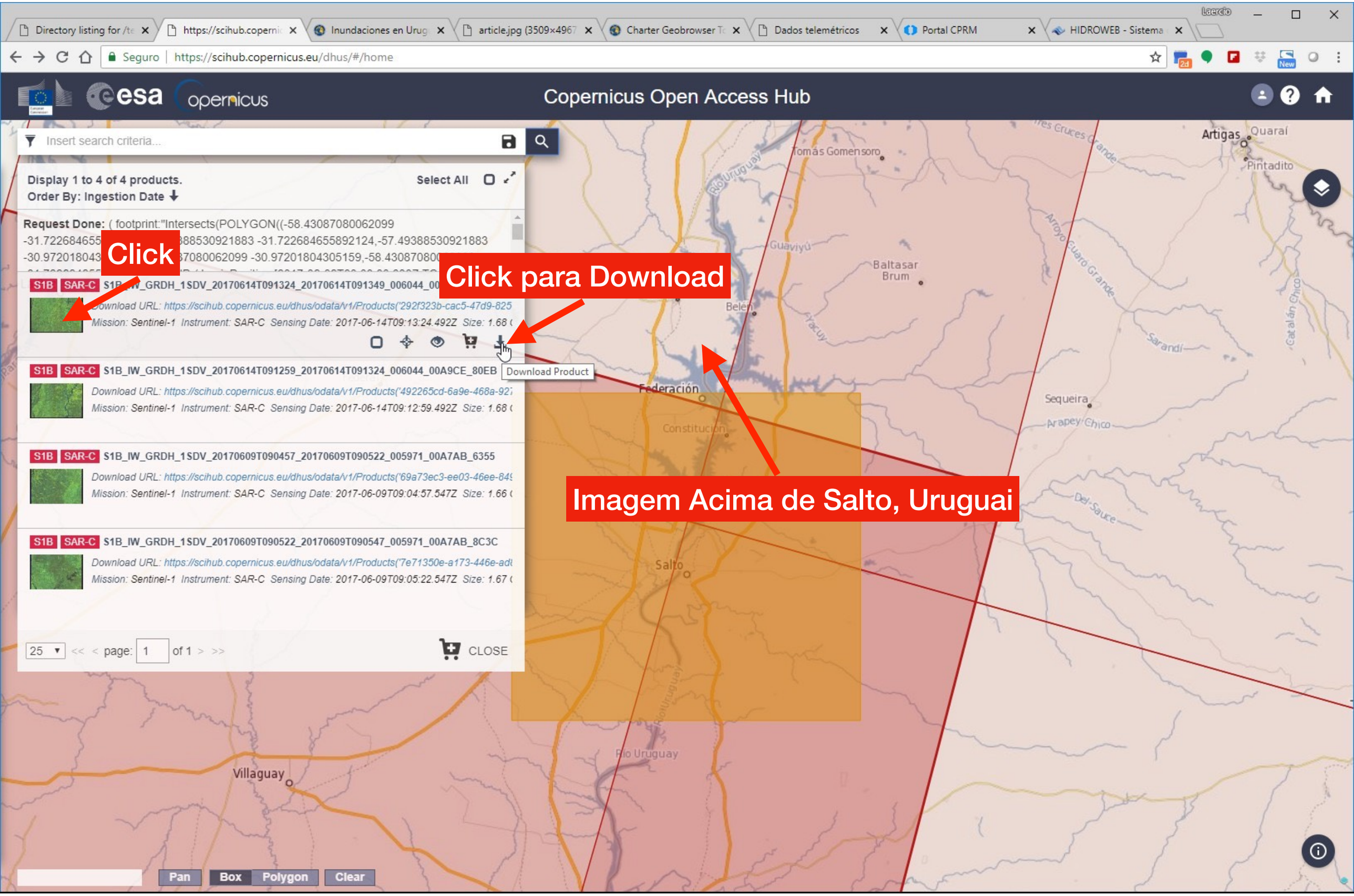
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Display 1 to 4 of 4 products.
Order By: Ingestion Date
Select All
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Click para Download
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25 page: 1 of 1
CLOSE
Imagem Acima de Salto, Uruguai
Artigas
Quaraí
Pintadito
Tomás Gomensoro
Baltasar Brum
Belén
Federación
Constitución
Sequeira
Salto
Villaguay
Pan
Box
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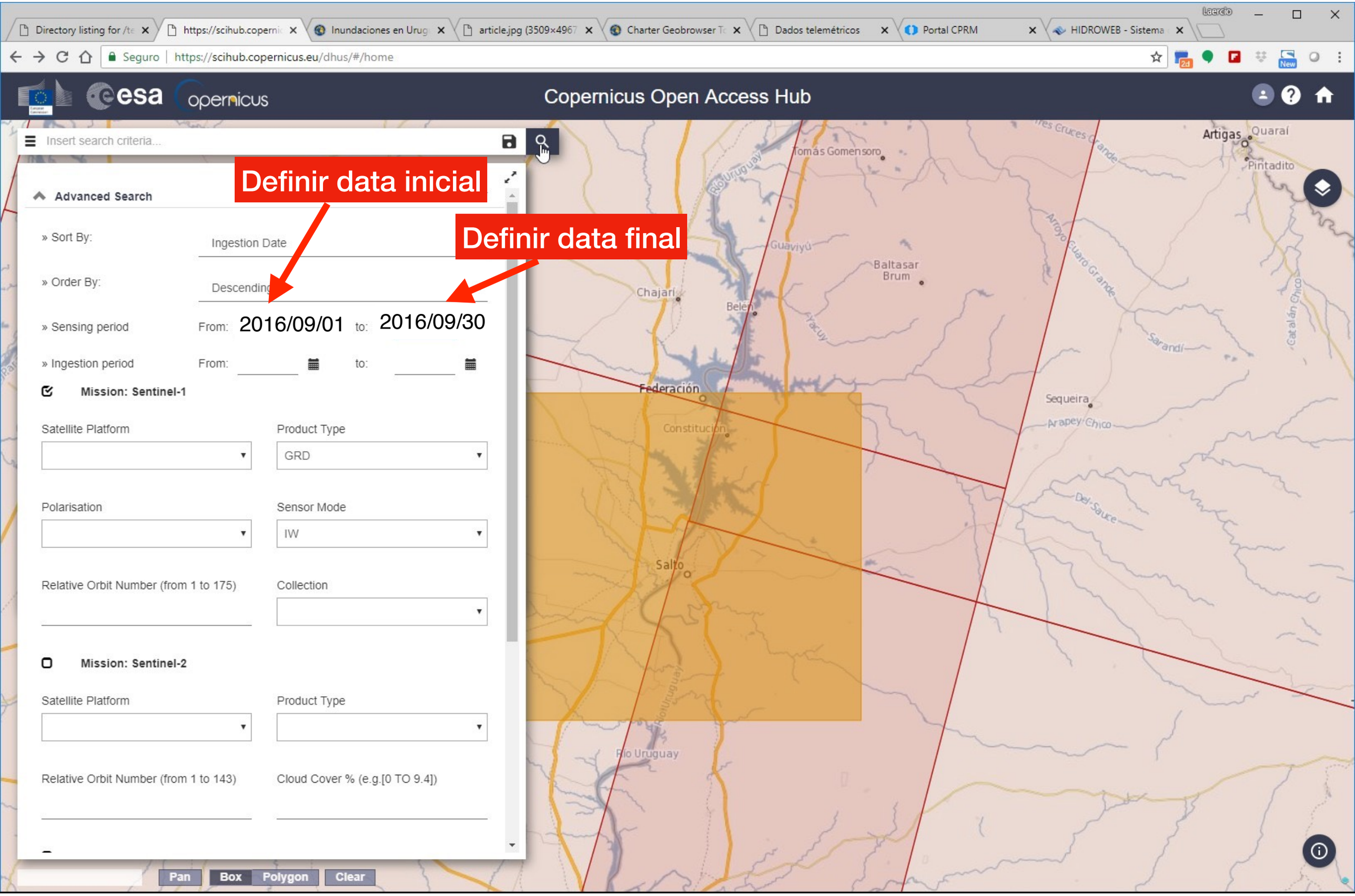
Copernicus Open Access Hub
Insert search criteria...
Definir data inicial
Definir data final
Advanced Search
» Sort By:
Ingestion Date
» Order By:
Descending
» Sensing period
From: 2016/09/01
to: 2016/09/30
» Ingestion period
From:
to:
Mission: Sentinel-1
Satellite Platform
Product Type
GRD
Polarisation
Sensor Mode
IW
Relative Orbit Number (from 1 to 175)
Collection
Mission: Sentinel-2
Satellite Platform
Product Type
Relative Orbit Number (from 1 to 143)
Cloud Cover % (e.g.[0 TO 9.4])
Pan
Box
Polygon
Clear
Artigas
Quaraí
Pintadito
Tomás Gomensoro
Baltasar Brum
Chajarí
Belén
Federación
Constitución
Salto
Sequeira
Rio Uruguay

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Seguro | https://scihub.copernicus.eu/dhus/#/home

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Insert search criteria...

Display 1 to 5 of 5 products.
Order By: Ingestion Date ↓

Select All

Request Done: (footprint:"Intersects(POLYGON((-58.43087080062099 -31.722684655892124,-57.49388530921883 -31.722684655892124,-57.49388530921883 -30.97201804305159,-58.43087080062099 -30.97201804305159,-58.43087080062099

S1B SAR-C S1B_IW_GRDH_1SDV_20160930T090522_20160930T090547_002296_003E21_C543
Download URL: https://scihub.copernicus.eu/dhus/odata/v1/Products('e96a887a-cfa3-45ba-84b
Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2016-09-30T09:05:22.284Z Size: 1.67 (

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Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2016-09-12T09:05:50.870Z Size: 1.7 G

S1A SAR-C S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4
Download URL: https://scihub.copernicus.eu/dhus/odata/v1/Products('03c7cbb6-8975-4574-81(
Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2016-09-05T09:13:47.876Z Size: 1.66 (

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Download URL: https://scihub.copernicus.eu/dhus/odata/v1/Products('ae569083-4b50-468b-a2
Mission: Sentinel-1 Instrument: SAR-C Sensing Date: 2016-09-05T09:14:12.875Z Size: 1.66 (

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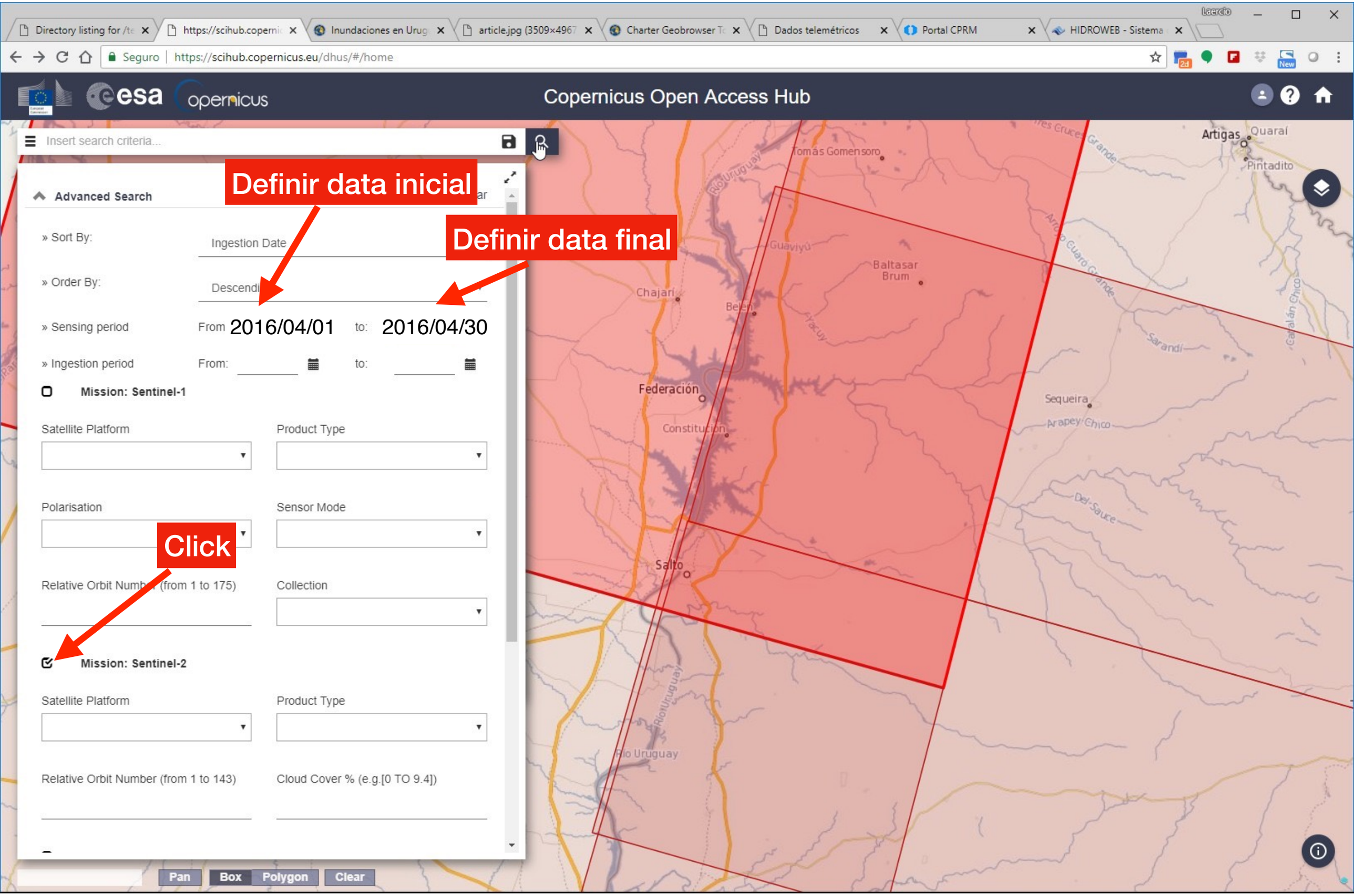
Artigas, Quaraí, Pintadito, Tomás Gomensoro, Baltasar Brum, Chajarí, Belén, Guaviyú, Federación, Constitución, Sequeira, Sarandí, Salto, Villaguay, Río Uruguay, Arapey Chico, Del Sauce, Cuareim Chico, Arroyo Cuaro Grande, Tres Cruces Grande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» Sensing period
From 2016/04/01
to: 2016/04/30
» Ingestion period
From:
to:
Mission: Sentinel-1
Satellite Platform
Product Type
Polarisation
Sensor Mode
Click
Relative Orbit Numb (from 1 to 175)
Collection
Mission: Sentinel-2
Satellite Platform
Product Type
Relative Orbit Number (from 1 to 143)
Cloud Cover % (e.g.[0 TO 9.4])
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Box
Polygon
Clear
Artigas
Quaraí
Pintadito
Tomás Gomensoro
Baltasar Brum
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Request Done: (footprint:"Intersects(POLYGON((-58.20889447587214 -31.462345935933328,-57.539619124870605 -31.462345935933328,-57.539619124870605 -30.72877990523473,-58.20889447587214 -30.72877990523473,-58.20889447587214

S2A MSI **S2A_MSIL1C_20170424T135111_N0204_R024_T21JVF_20170424T135511**
Download URL: https://scihub.copernicus.eu/dhus/odata/v1/Products('8e548a96-1cef-4cee-b
Mission: Sentinel-2 Instrument: MSI Sensing Date: 2017-04-24T13:51:11.026Z Size: 742.5

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Mission: Sentinel-2 Instrument: MSI Sensing Date: 2017-04-04T13:51:11.026Z Size: 727.2

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S2A MSI **S2A_MSIL1C_20170404T135111_N0204_R024_T21JUG_20170404T135511**
Download URL: https://scihub.copernicus.eu/dhus/odata/v1/Products('fddc43a8-2868-4bd9-
Mission: Sentinel-2 Instrument: MSI Sensing Date: 2017-04-04T13:51:11.026Z Size: 735.5

Products per page: 25 << < page: 1 of 1 > >>

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Pan | Box | Polygon | Clear

Bella Unión
Las Piedras
Tomás Gomensoro
Artigas
Guaviyú
Baltasar Brum
Chajari
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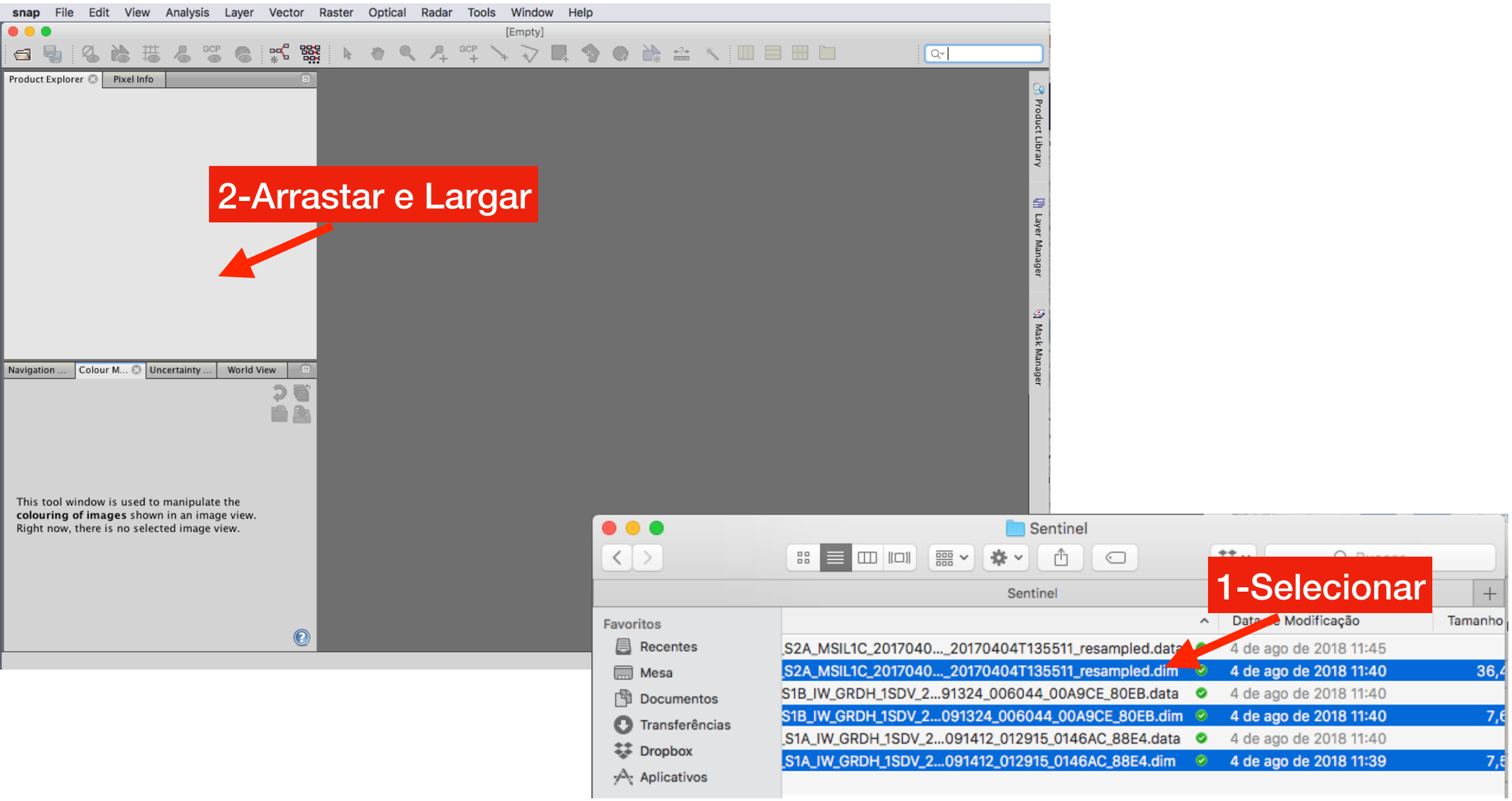
snap File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
[Empty]
Product Explorer
Pixel Info
2-Arrastar e Largar
Navigation ...
Colour M...
Uncertainty ...
World View
This tool window is used to manipulate the colouring of images shown in an image view. Right now, there is no selected image view.
Product Library
Layer Manager
Mask Manager
Sentinel
1-Selecionar
Favoritos
Recentes
Mesa
Documentos
Transferências
Dropbox
Aplicativos
Data e Modificação
Tamanho
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4 de ago de 2018 11:45
_S2A_MSIL1C_2017040..._20170404T135511_resampled.dim
4 de ago de 2018 11:40
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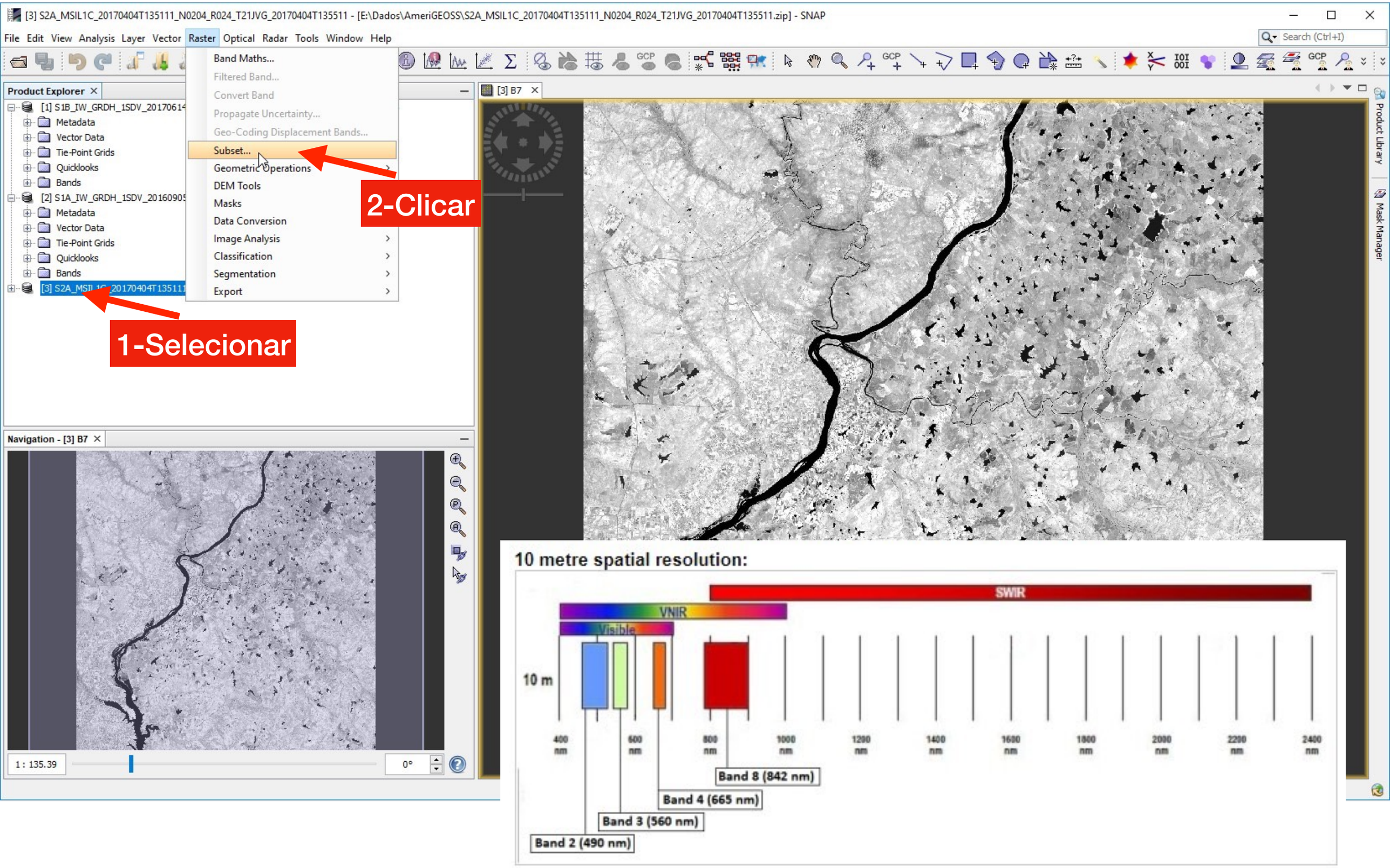
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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Band Maths...
Filtered Band...
Convert Band
Propagate Uncertainty...
Geo-Coding Displacement Bands...
Subset...
Geometric Operations
DEM Tools
Masks
Data Conversion
Image Analysis
Classification
Segmentation
Export
2-Clicar
1-Selecionar
Product Explorer
[1] S1B_IW_GRDH_1SDV_20170614
Metadata
Vector Data
Tie-Point Grids
Quicklooks
Bands
[2] S1A_IW_GRDH_1SDV_20160905
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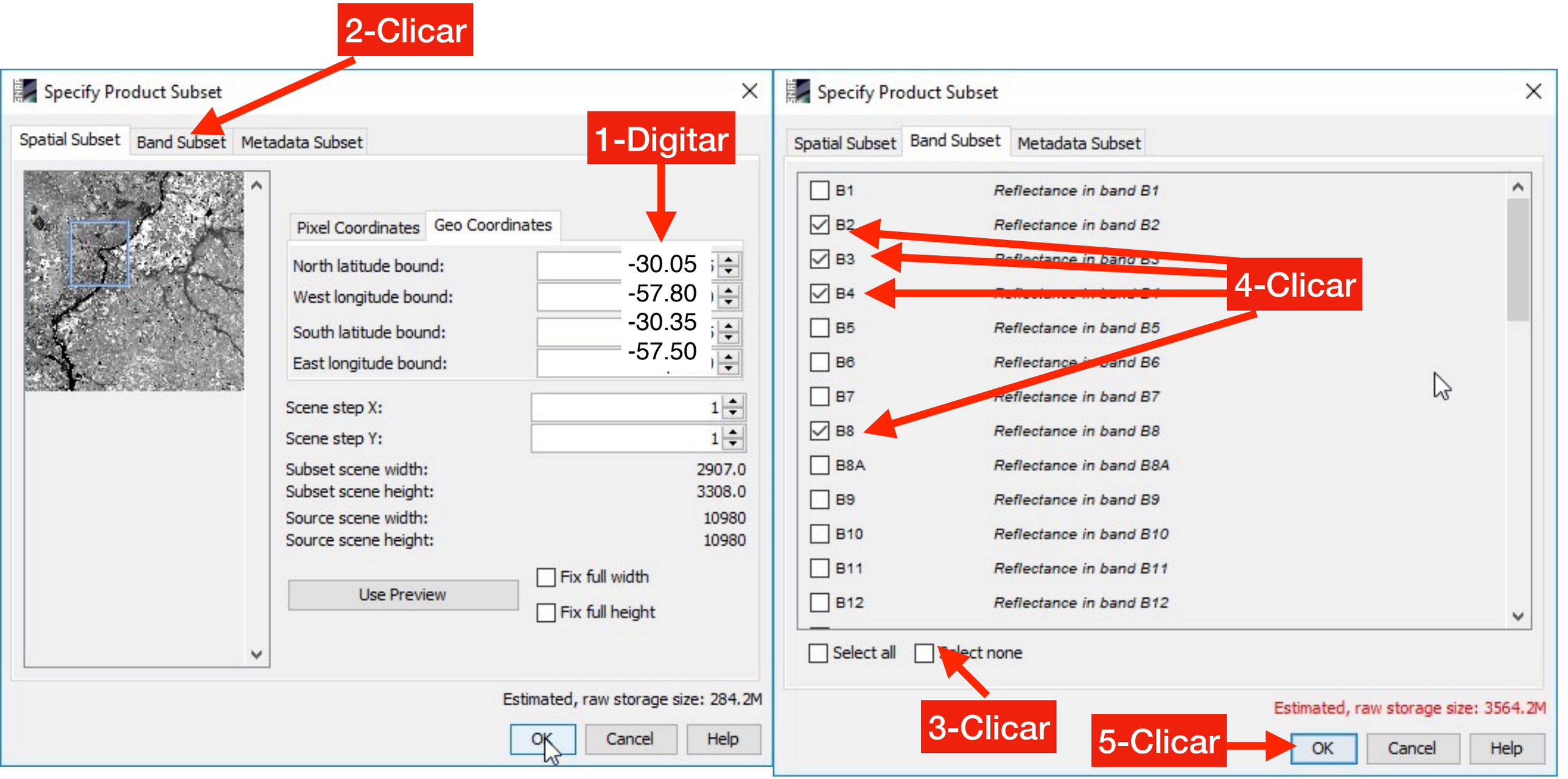
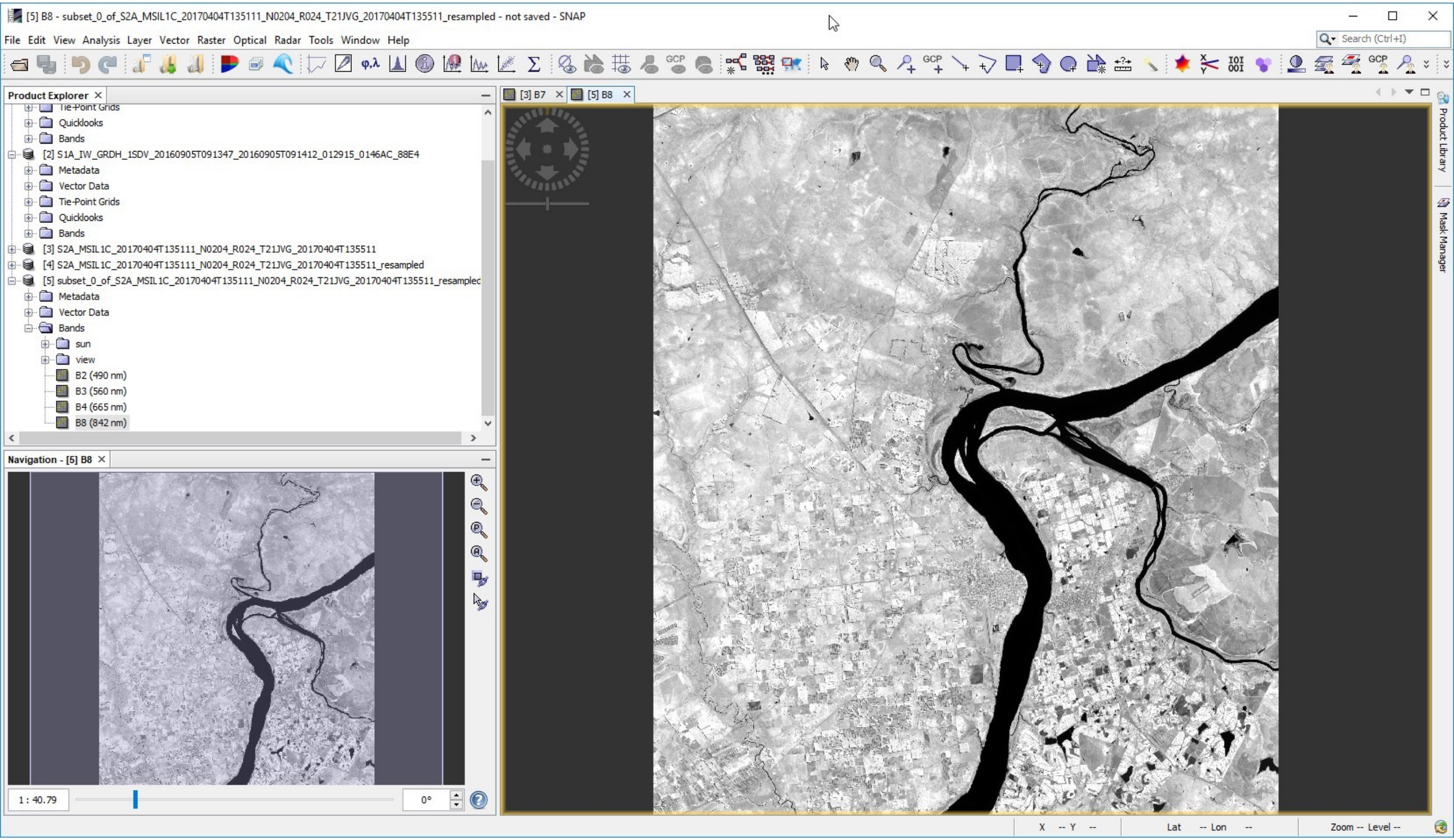
Navigation - [3] B7
1 : 135.39
0°
[3] B7
Product Library
Mask Manager
10 metre spatial resolution:
SWIR
VNIR
Visible
10 m
400 nm
600 nm
800 nm
1000 nm
1200 nm
1400 nm
1600 nm
1800 nm
2000 nm
2200 nm
2400 nm
Band 8 (842 nm)
Band 4 (665 nm)
Band 3 (560 nm)
Band 2 (490 nm)


2-Clicar
1-Digitar
Specify Product Subset
Spatial Subset
Band Subset
Metadata Subset
Pixel Coordinates
Geo Coordinates
North latitude bound: -30.05
West longitude bound: -57.80
South latitude bound: -30.35
East longitude bound: -57.50
Scene step X: 1
Scene step Y: 1
Subset scene width: 2907.0
Subset scene height: 3308.0
Source scene width: 10980
Source scene height: 10980
Use Preview
Fix full width
Fix full height
Estimated, raw storage size: 284.2M
OK
Cancel
Help
Specify Product Subset
Spatial Subset
Band Subset
Metadata Subset
B1 Reflectance in band B1
B2 Reflectance in band B2
B3
B4
B5 Reflectance in band B5
B6
B7 Reflectance in band B7
B8 Reflectance in band B8
B8A Reflectance in band B8A
B9 Reflectance in band B9
B10 Reflectance in band B10
B11 Reflectance in band B11
B12 Reflectance in band B12
4-Clicar
Select all
3-Clicar
Estimated, raw storage size: 3564.2M
5-Clicar
OK
Cancel
Help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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Tie-Point Grids
Quicklooks
Bands
[2] S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4
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Vector Data
Tie-Point Grids
Quicklooks
Bands
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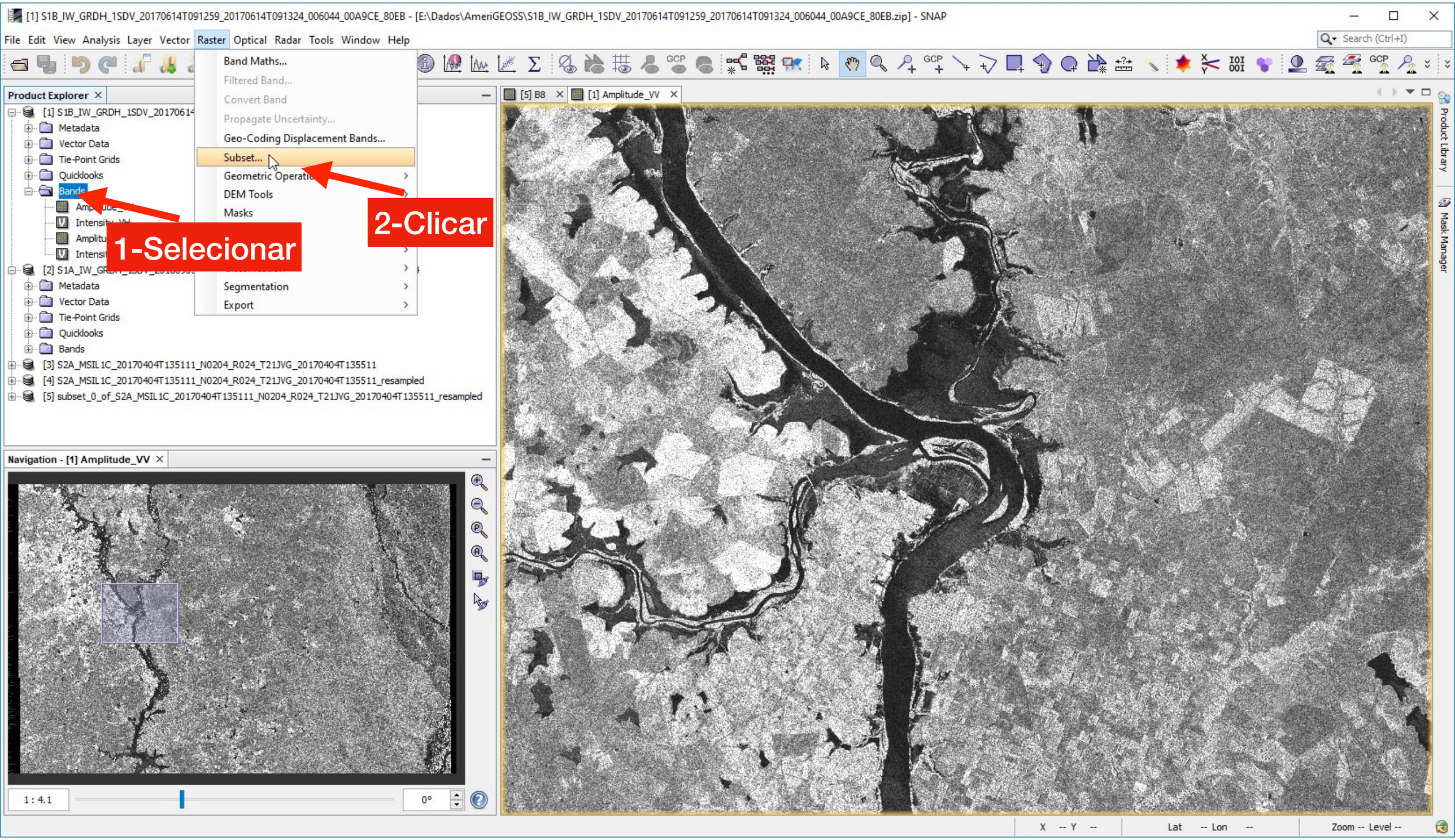
Metadata
Vector Data
Bands
sun
view
B2 (490 nm)
B3 (560 nm)
B4 (665 nm)
B8 (842 nm)
Navigation - [5] B8
1 : 40.79
0°
[3] B7
[5] B8
Product Library
Mask Manager
X -- Y --
Lat -- Lon --
Zoom -- Level --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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Band Maths...
Filtered Band...
Convert Band
Propagate Uncertainty...
Geo-Coding Displacement Bands...
Subset...
Geometric Operati
DEM Tools
Masks
Segmentation
Export
2-Clicar
1-Selecionar
Product Explorer
[1] S1B_IW_GRDH_1SDV_20170614
Metadata
Vector Data
Tie-Point Grids
Quicklooks
Bands
[2] S1A_IW_GR
Metadata
Vector Data
Tie-Point Grids
Quicklooks
Bands
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Navigation - [1] Amplitude_VV
1 : 4.1
0°
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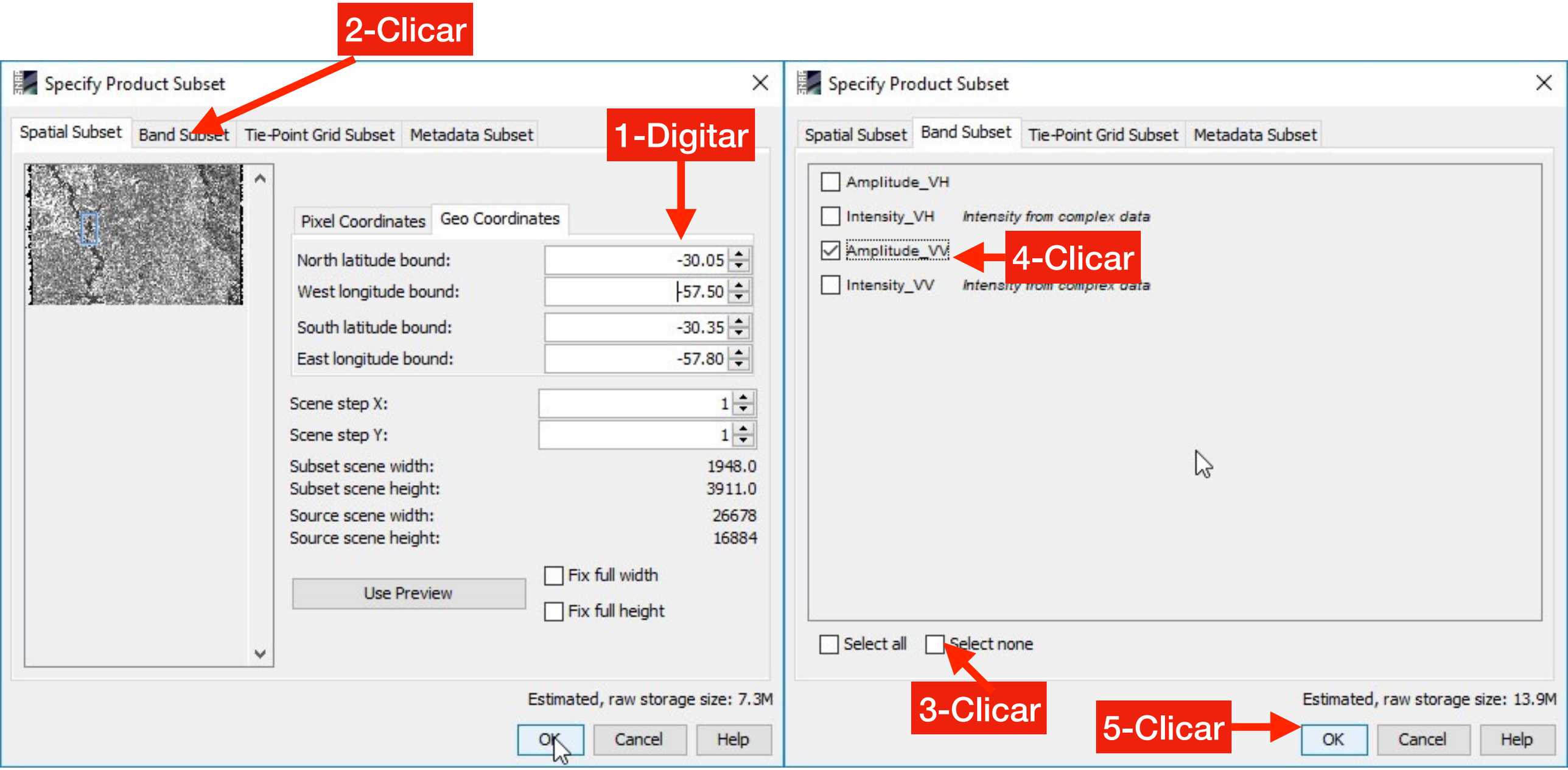
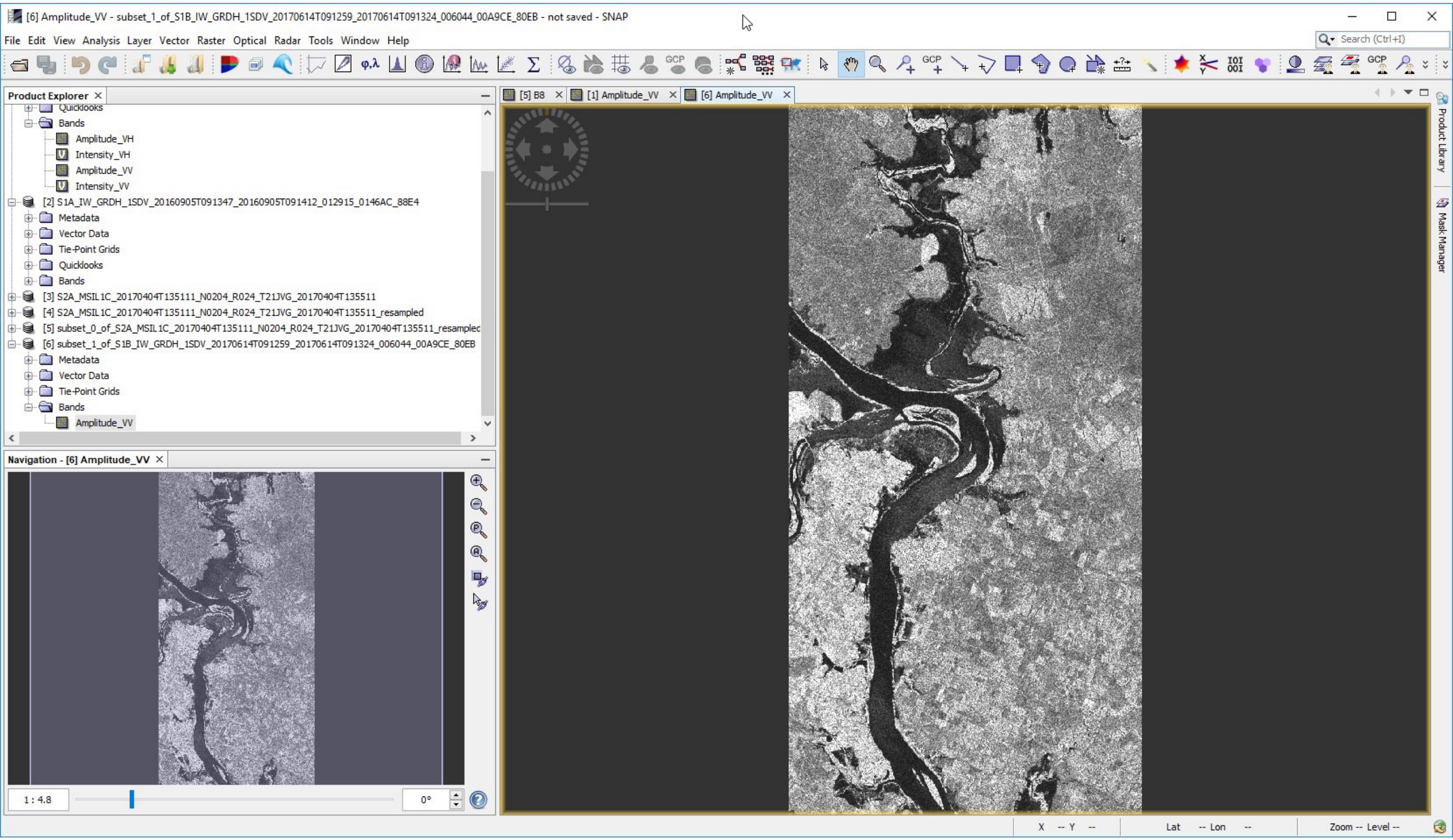
[1] Amplitude_VV
Product Library
Mask Manager
X -- Y --
Lat -- Lon --
Zoom -- Level --


2-Clicar
Specify Product Subset
Spatial Subset
Band Subset
Tie-Point Grid Subset
Metadata Subset
1-Digitar
Pixel Coordinates
Geo Coordinates
North latitude bound: -30.05
West longitude bound: -57.50
South latitude bound: -30.35
East longitude bound: -57.80
Scene step X: 1
Scene step Y: 1
Subset scene width: 1948.0
Subset scene height: 3911.0
Source scene width: 26678
Source scene height: 16884
Use Preview
Fix full width
Fix full height
Estimated, raw storage size: 7.3M
OK
Cancel
Help
Specify Product Subset
Spatial Subset
Band Subset
Tie-Point Grid Subset
Metadata Subset
Amplitude_VH
Intensity_VH
Intensity from complex data
Amplitude_VV
4-Clicar
Intensity_VV
Intensity from complex data
Select all
Select none
3-Clicar
5-Clicar
Estimated, raw storage size: 13.9M
OK
Cancel
Help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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Quicklooks
Bands
Amplitude_VH
Intensity_VH
Amplitude_VV
Intensity_VV
[2] S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4
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Vector Data
Tie-Point Grids
Quicklooks
Bands
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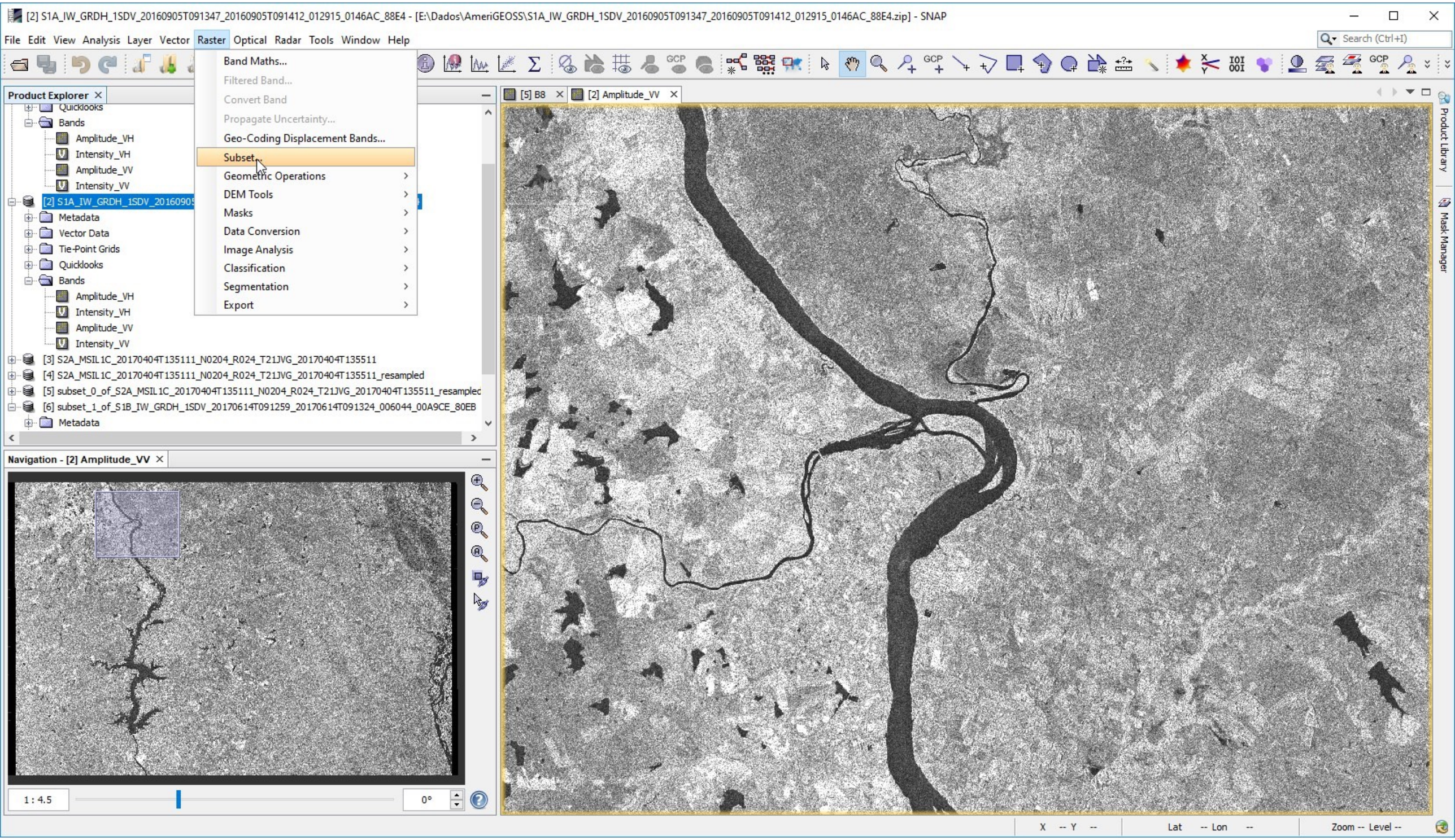
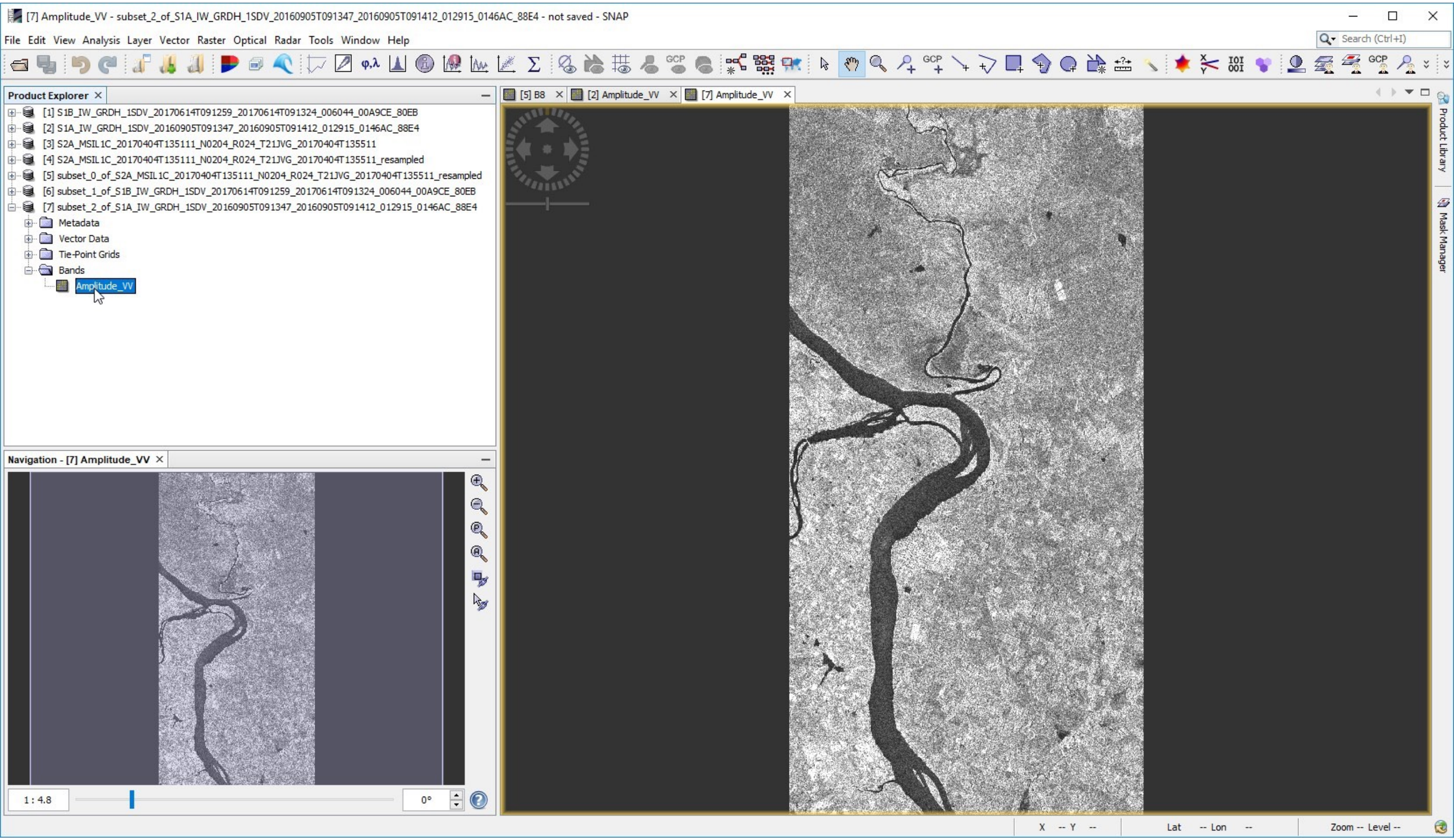
[6] subset_1_of_S1B_IW_GRDH_1SDV_20170614T091259_20170614T091324_006044_00A9CE_80EB
Metadata
Vector Data
Tie-Point Grids
Bands
Amplitude_VV
Navigation - [6] Amplitude_VV
1 : 4.8
0°
[5] B8
[1] Amplitude_VV
[6] Amplitude_VV
Product Library
Mask Manager
X -- Y --
Lat -- Lon --
Zoom -- Level --

S1A_IW_GRDH_1SDV_20160905T

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File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
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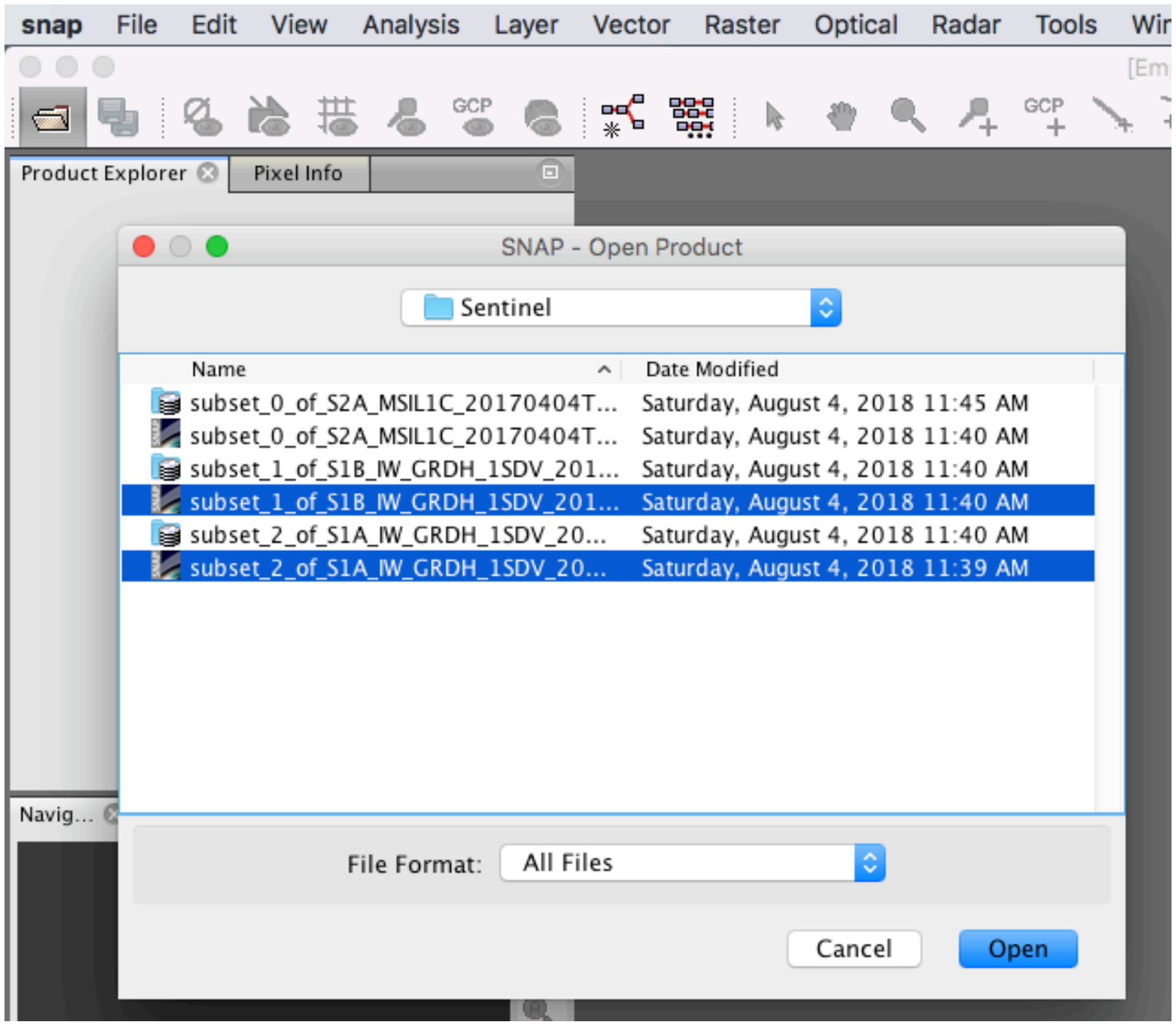
[7] subset_2_of_S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4
Metadata
Vector Data
Tie-Point Grids
Bands
Amplitude_VV
Navigation - [7] Amplitude_VV
1 : 4.8
0°
[5] B8
[2] Amplitude_VV
[7] Amplitude_VV
Product Library
Mask Manager
X -- Y --
Lat -- Lon --
Zoom -- Level --

FLOOD MAPPING

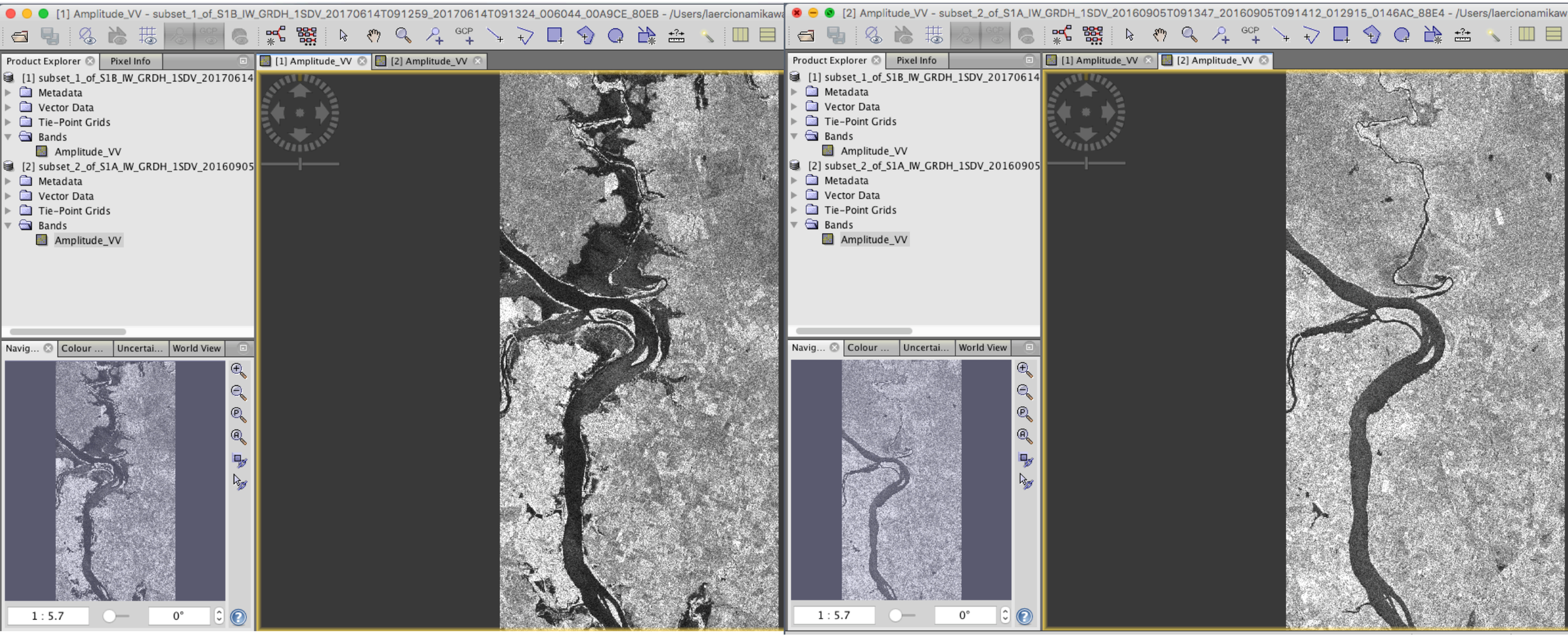
S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4 (not crisis image)

S1B_IW_GRDH_1SDV_20170614T091259_20170614T091324_006044_00A9CE_80EB (crisis image)

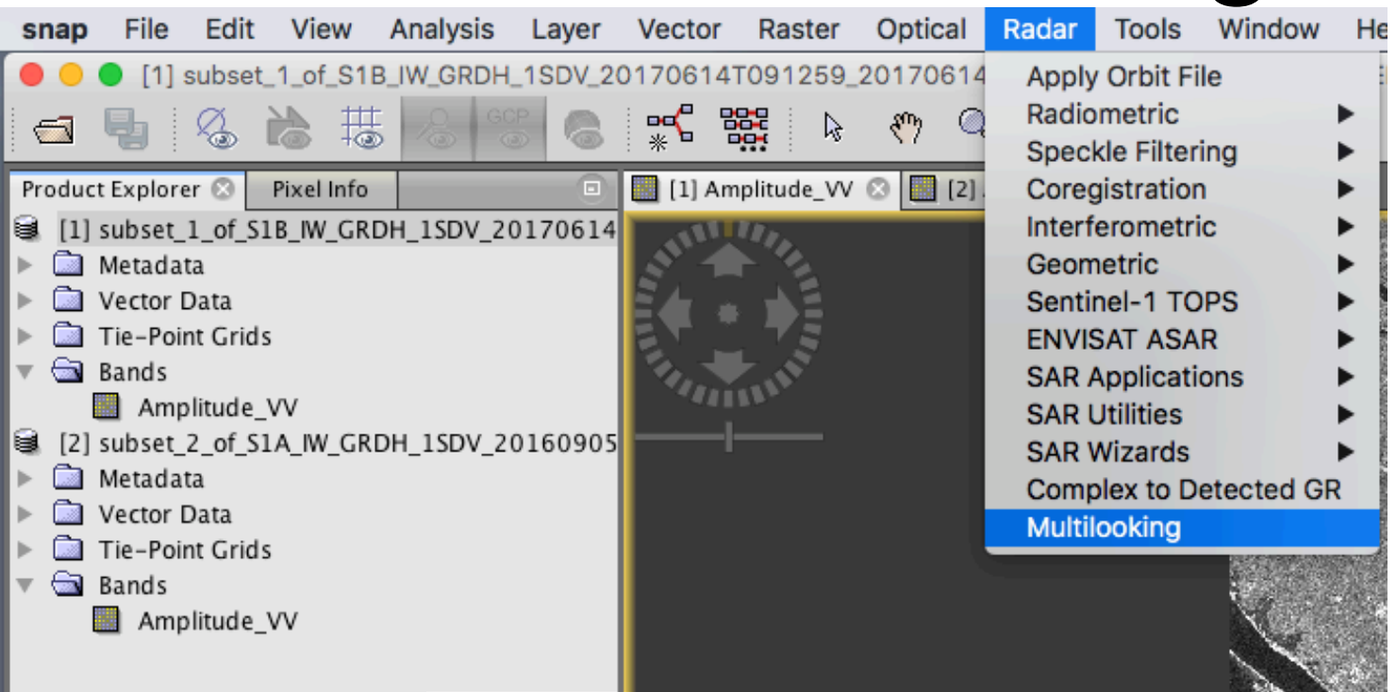
Open the 2 S1 images in SNAP

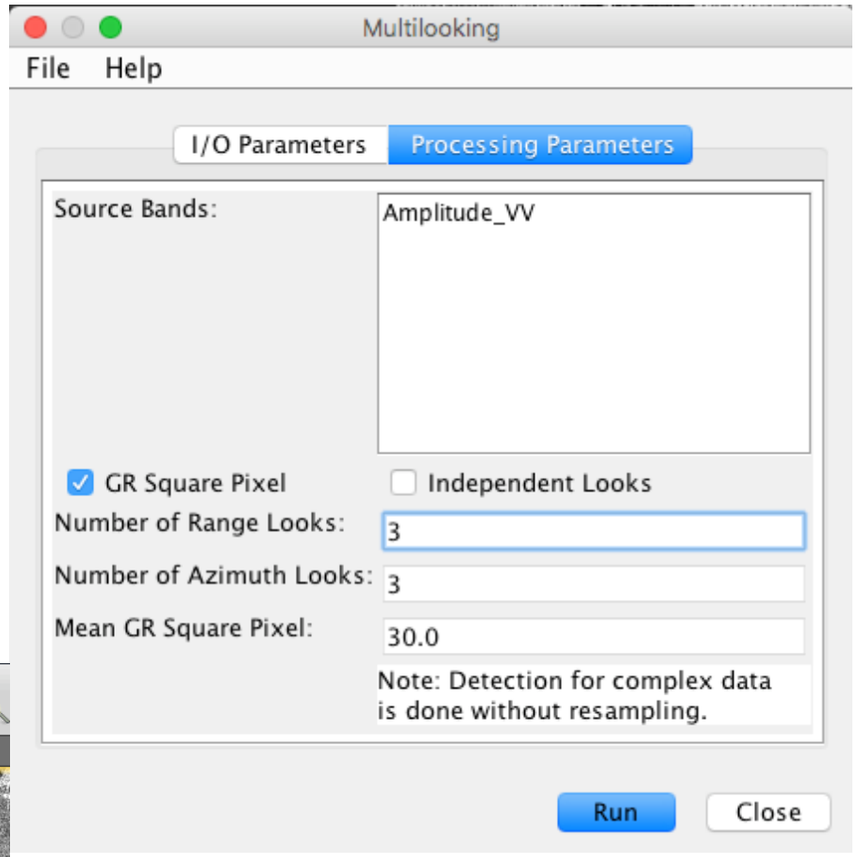


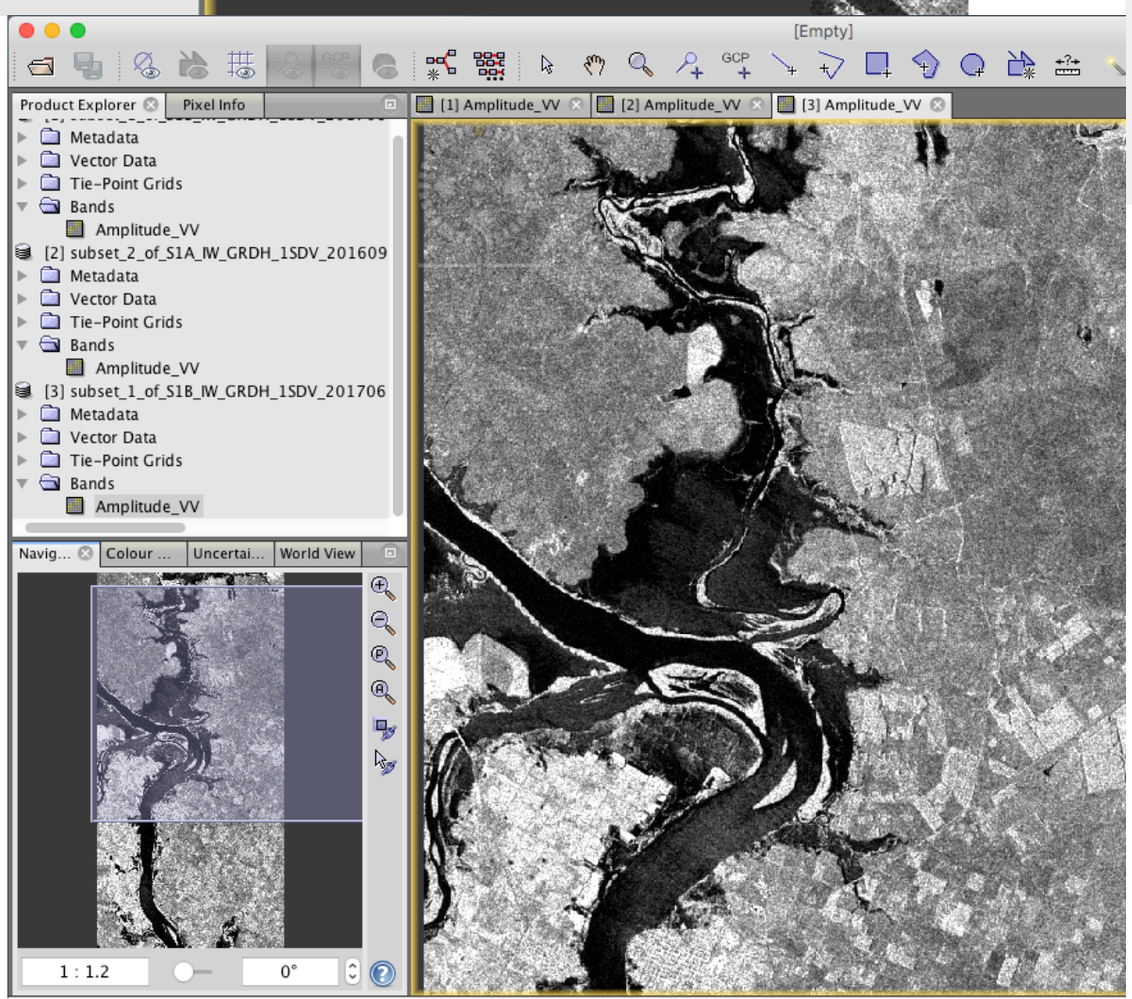
Inspect the images



Multi Look the images by a factor of 3x3

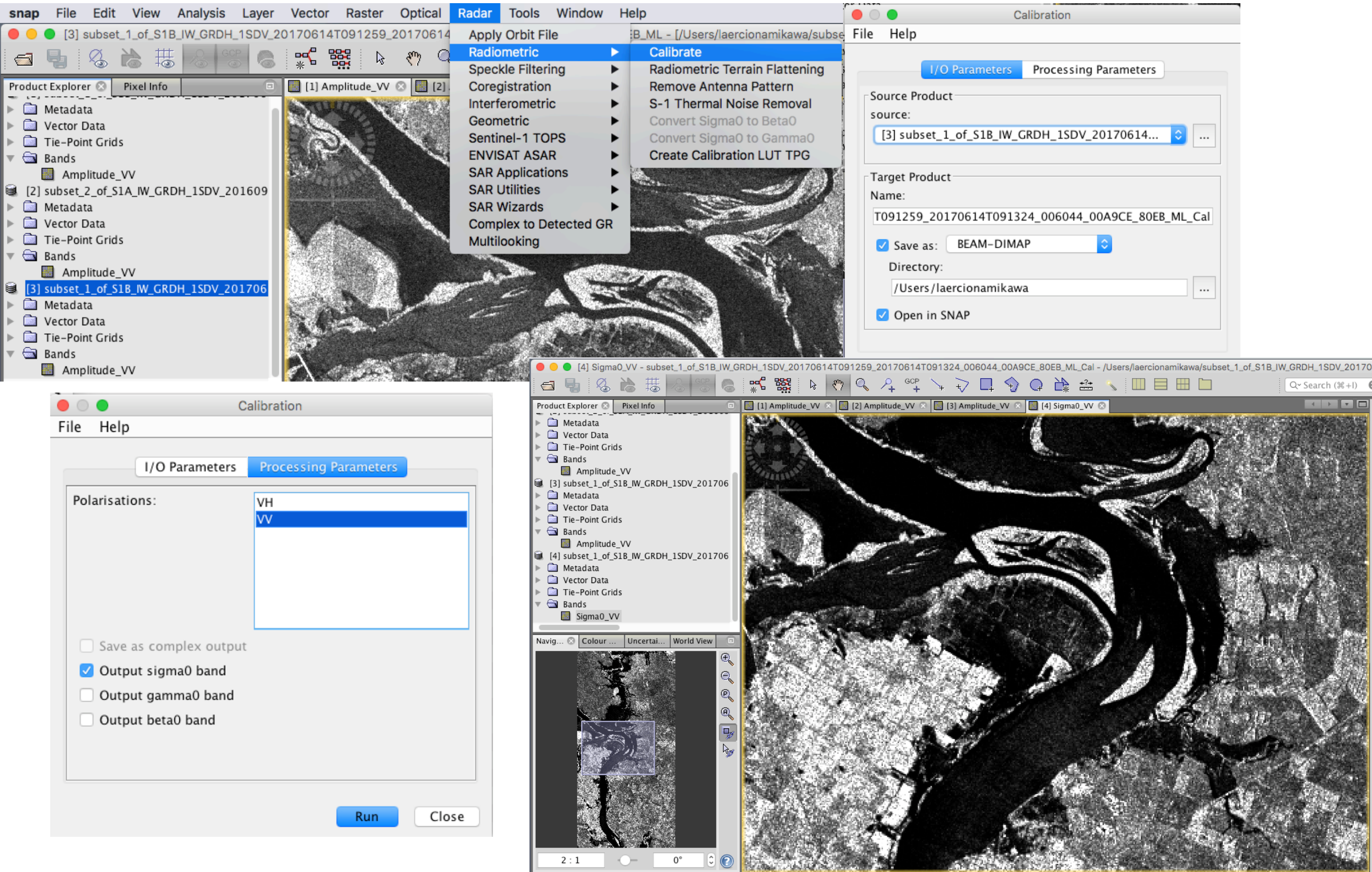




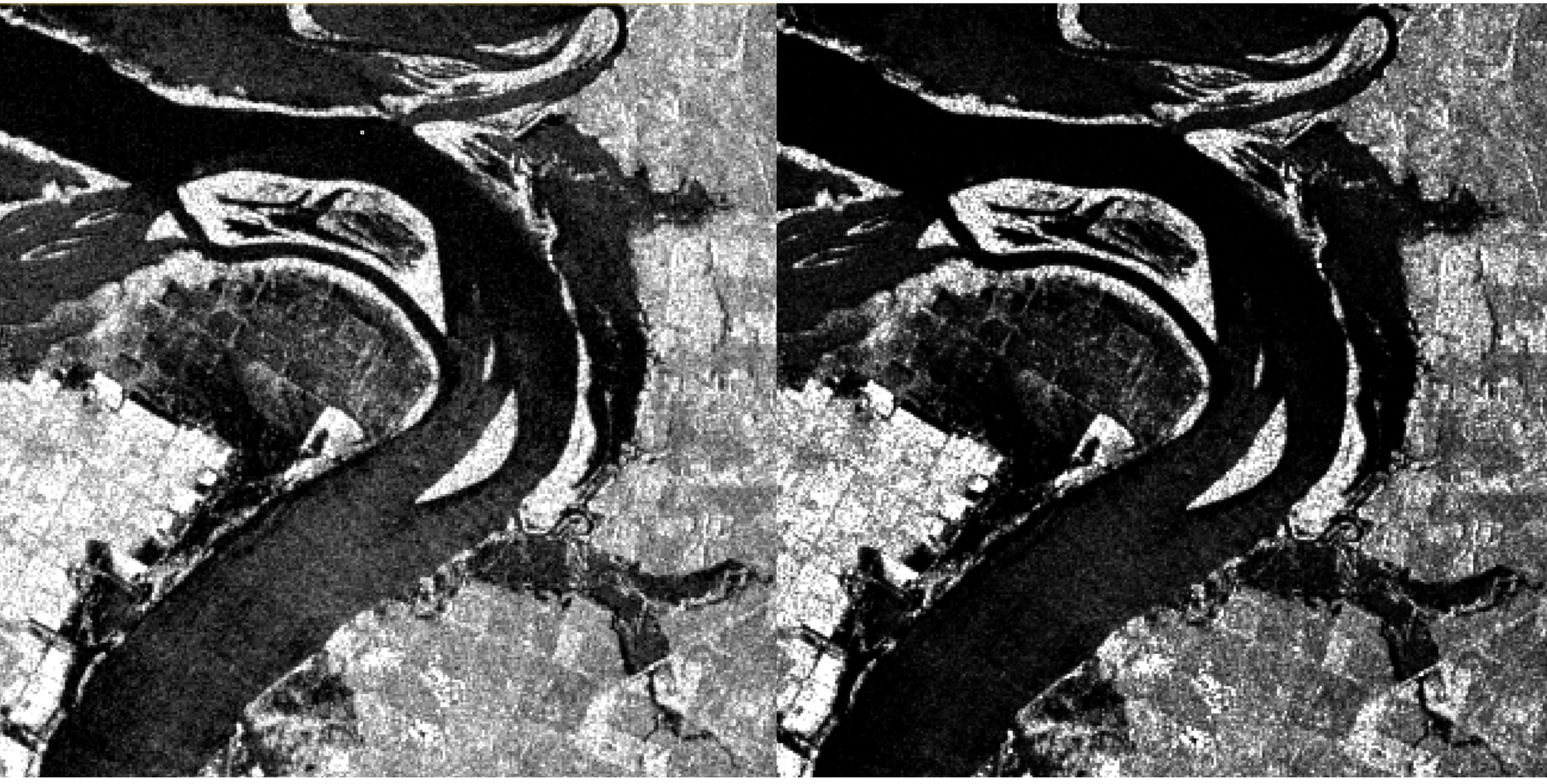


Multi Look the images by a factor of 3x3

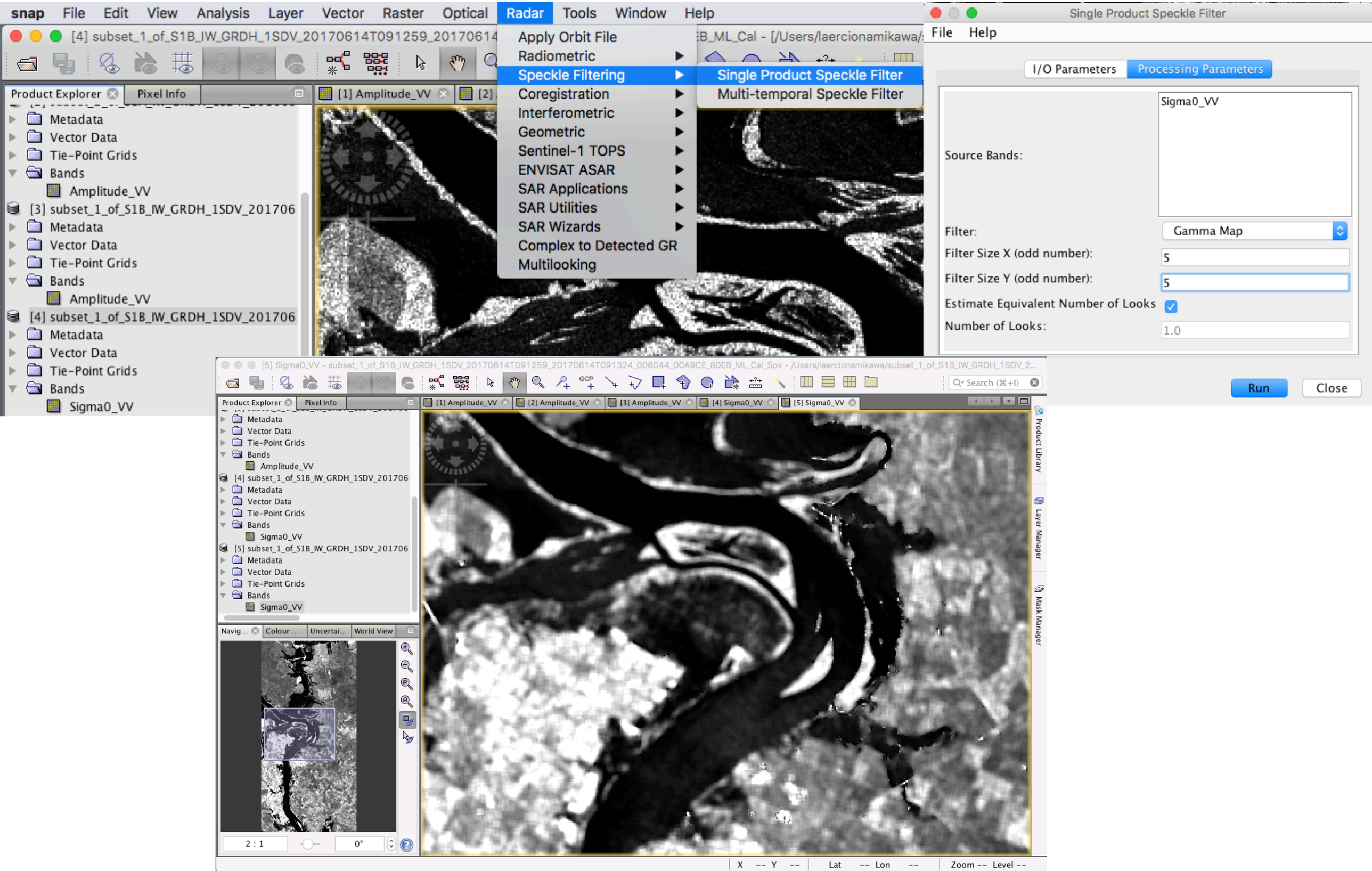
Calibrate images



Calibrate images

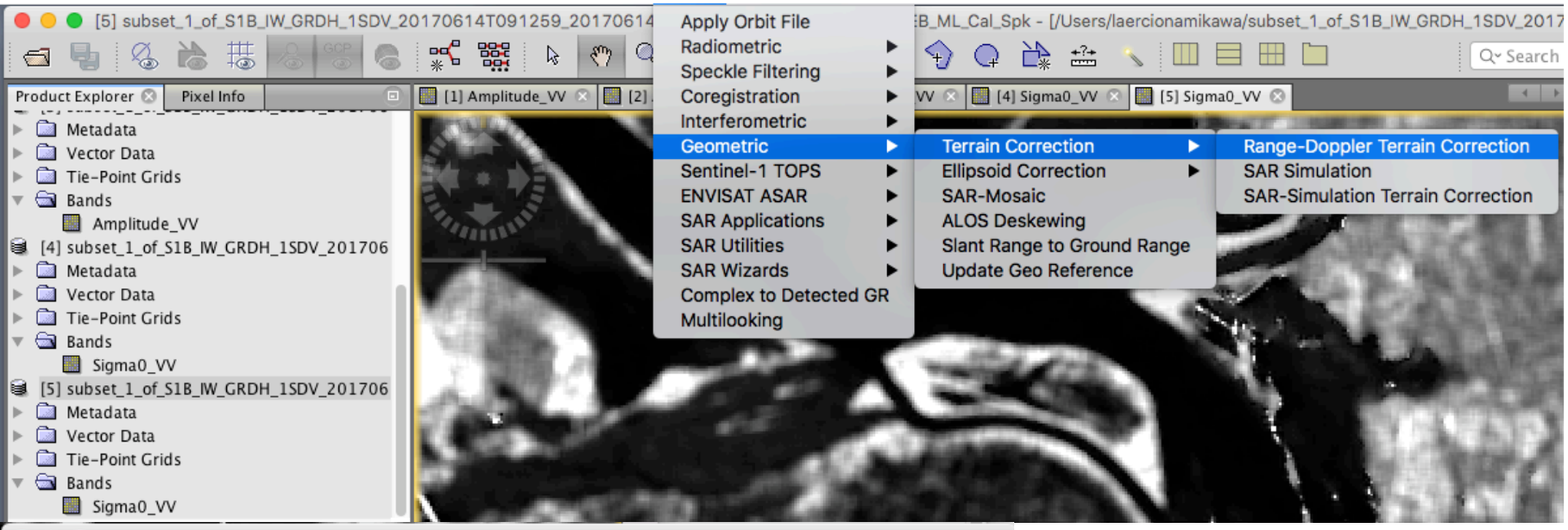


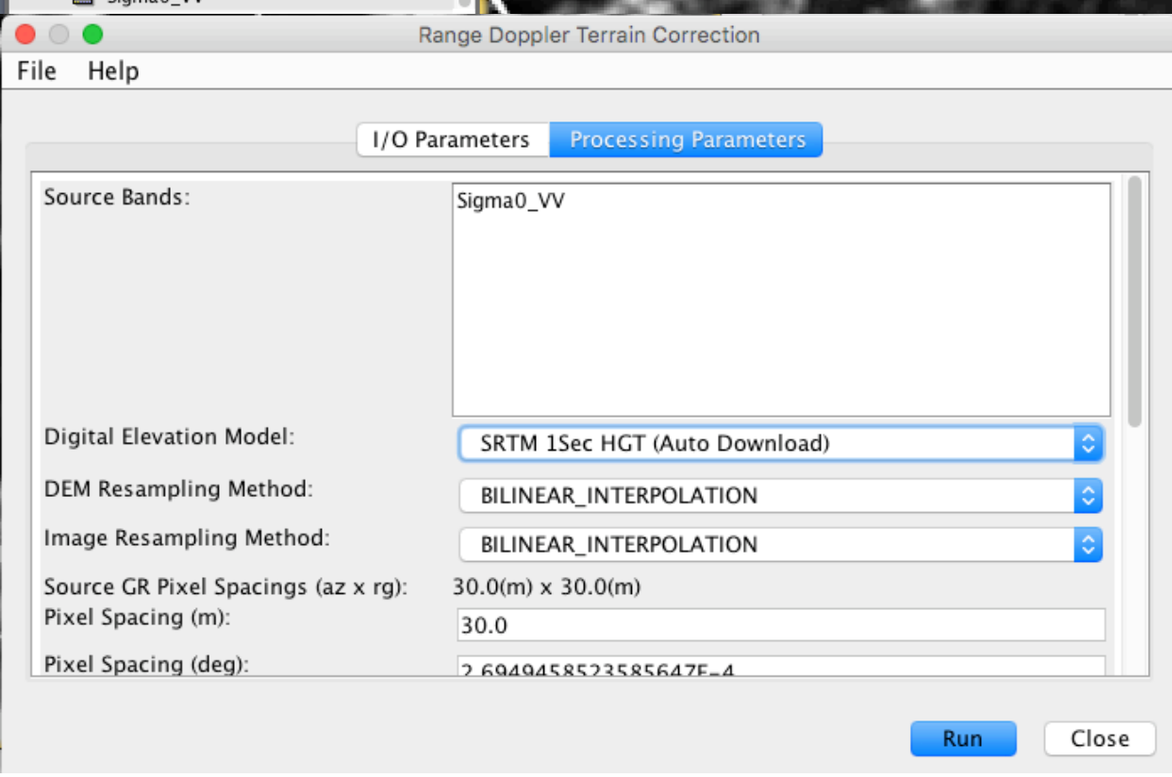
Speckle filtering

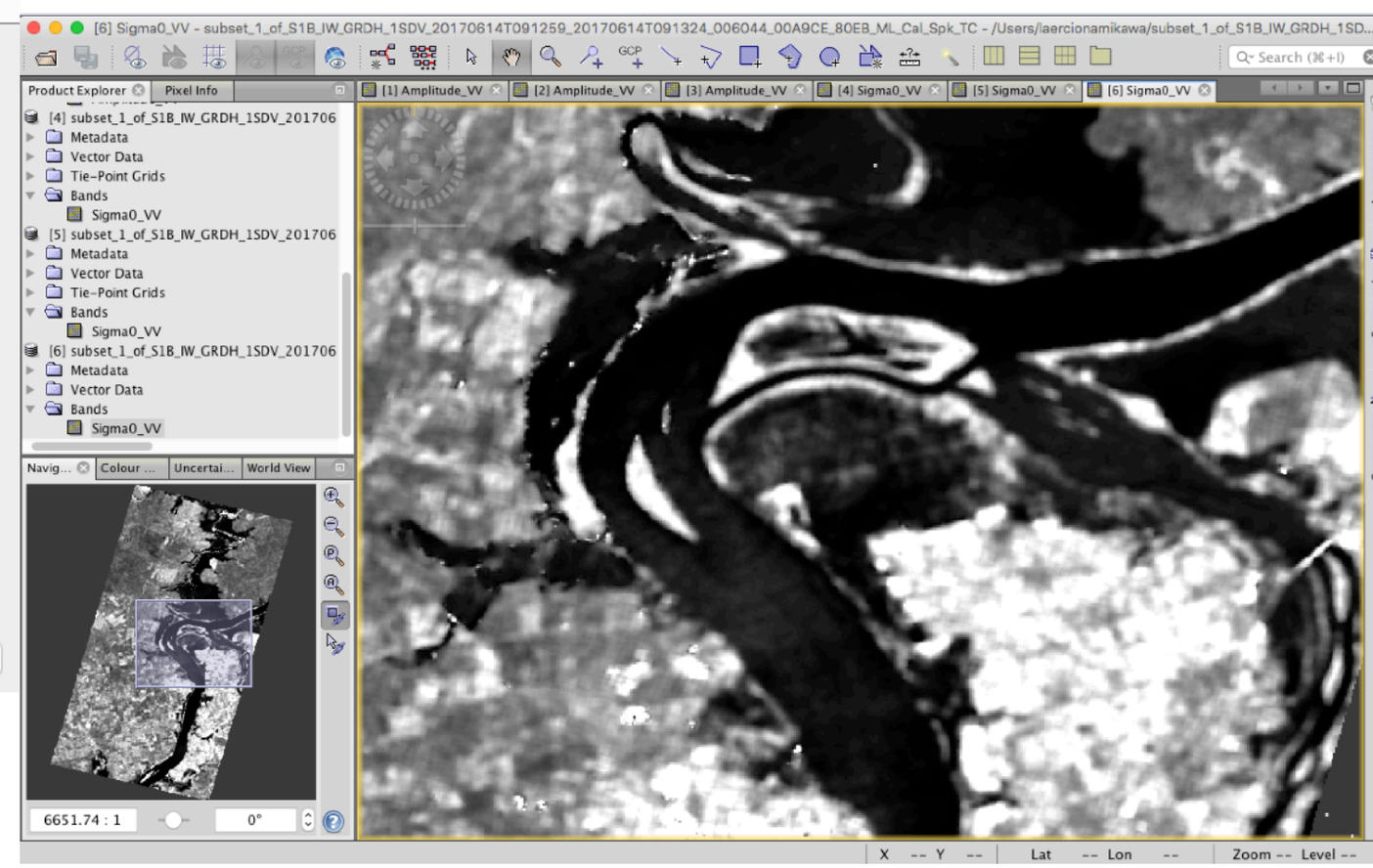


Speckle filtering

Terrain correct the images

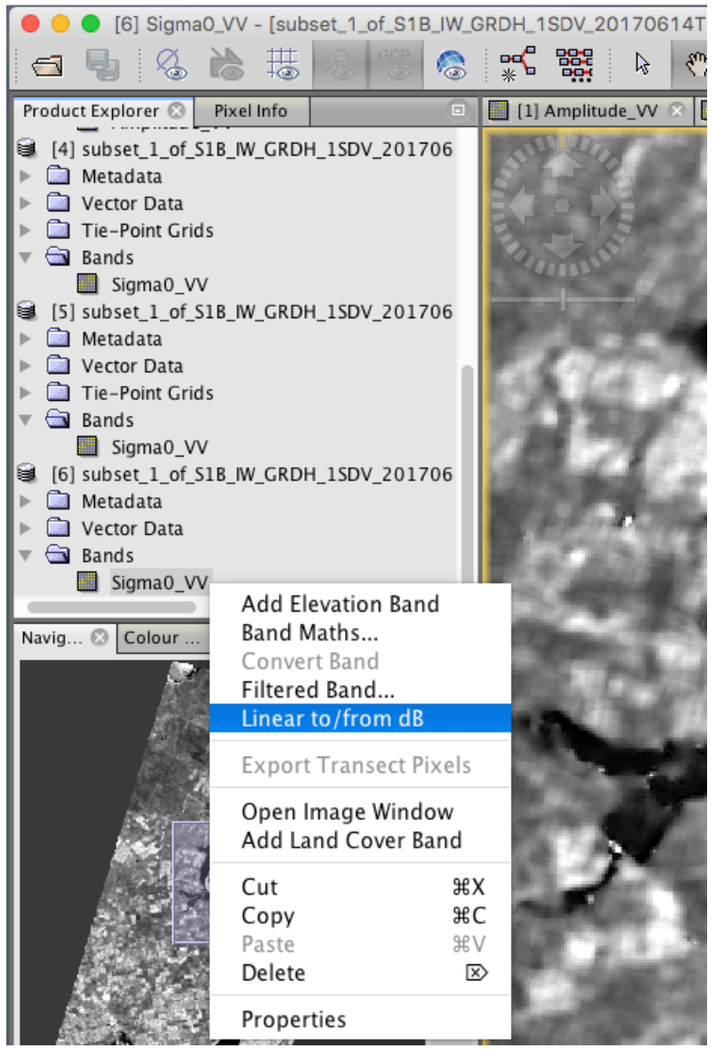


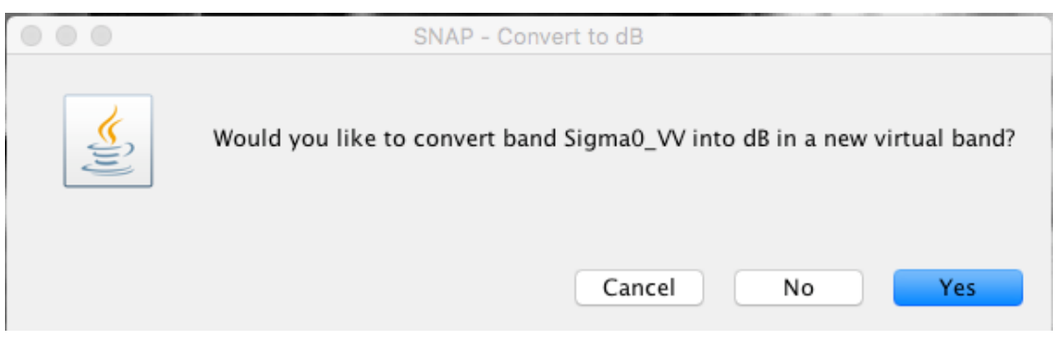


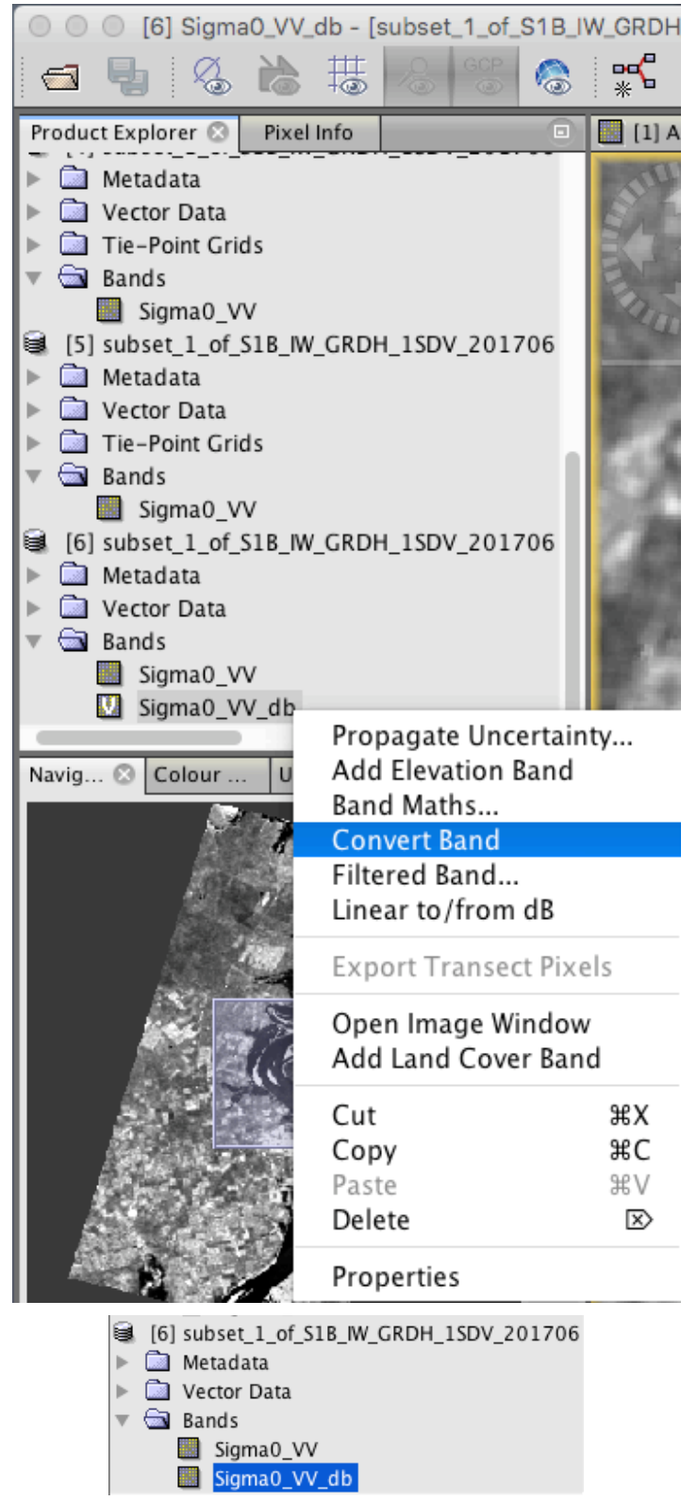


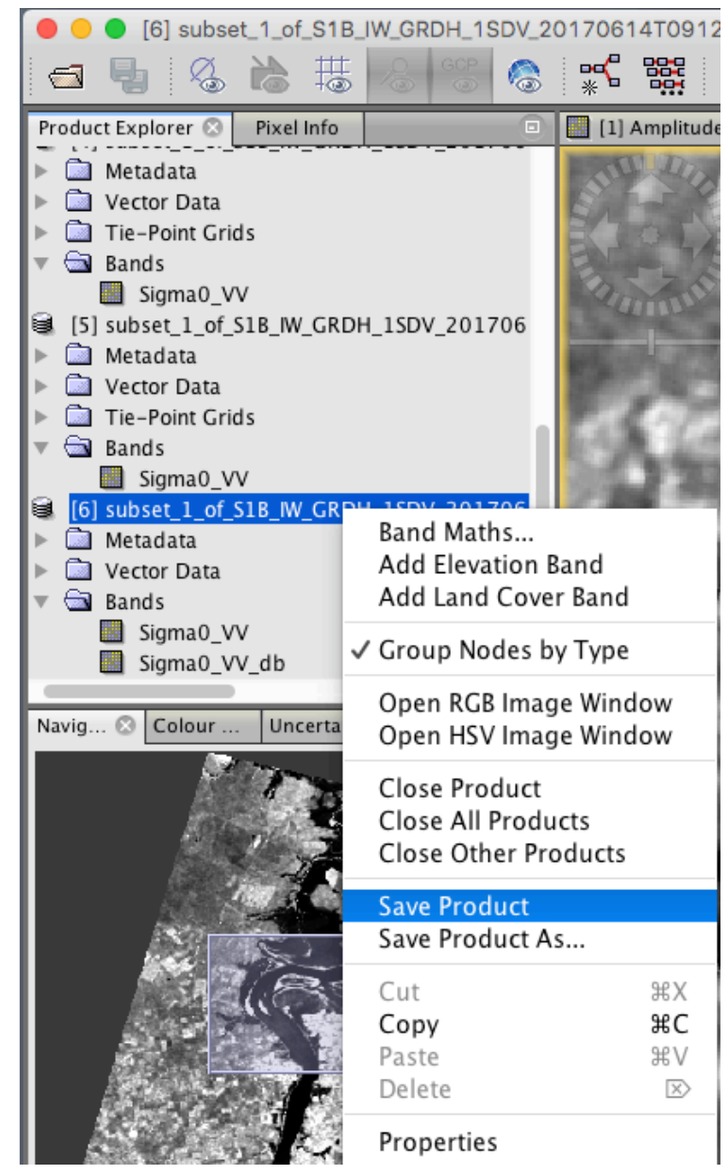
Terrain correct the images

Convert bands to decibel





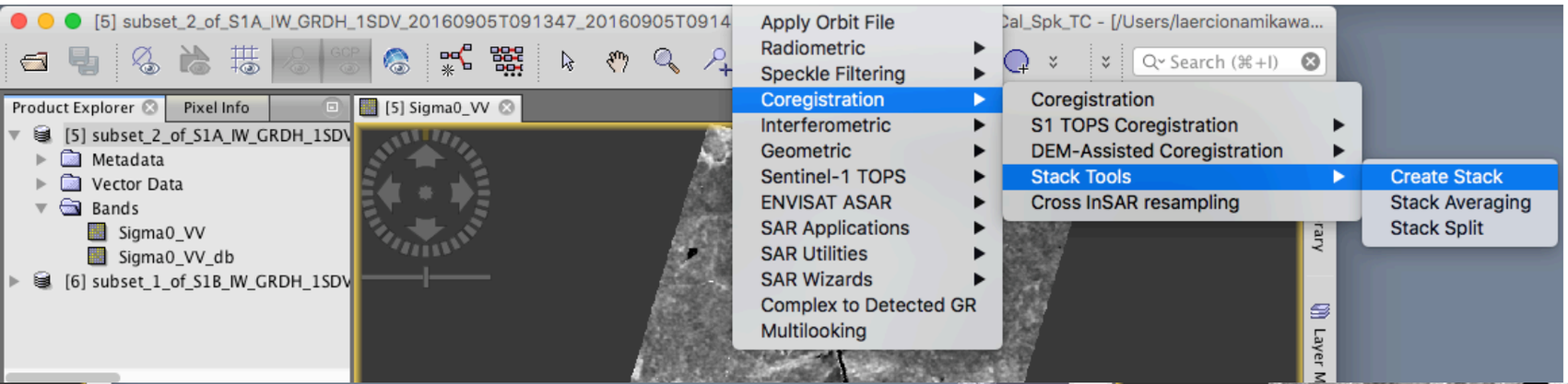


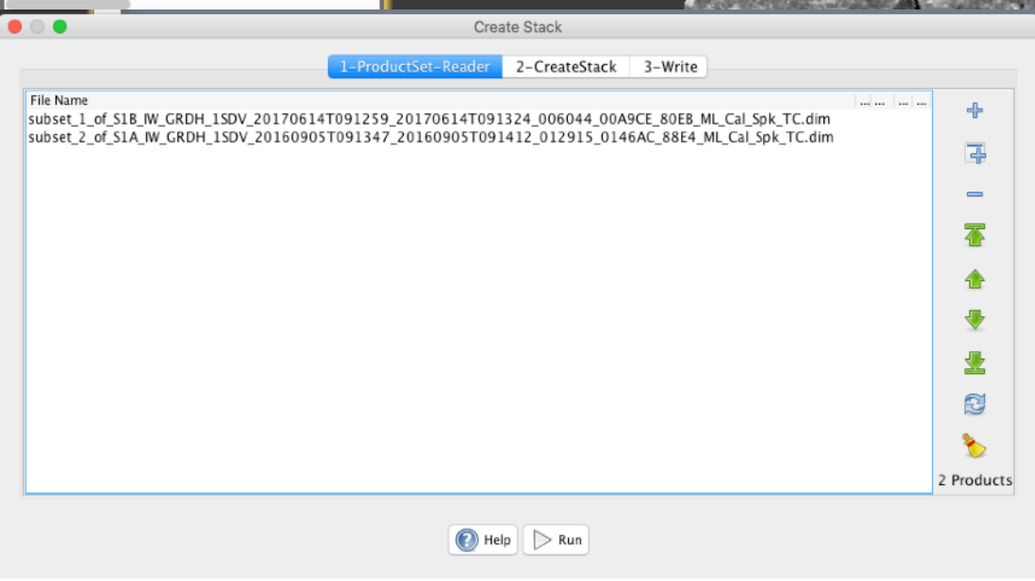


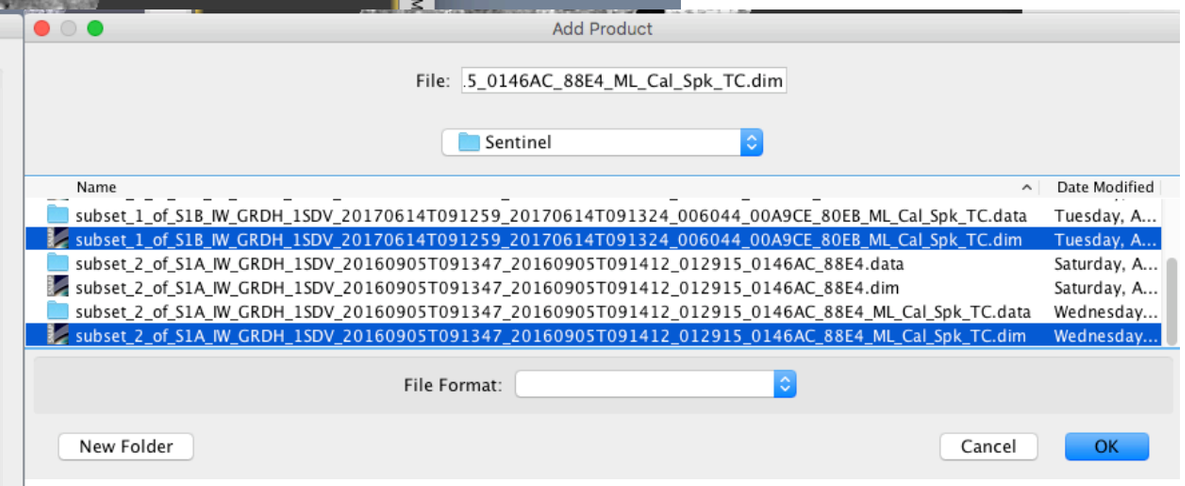
Stack terrain corrected images

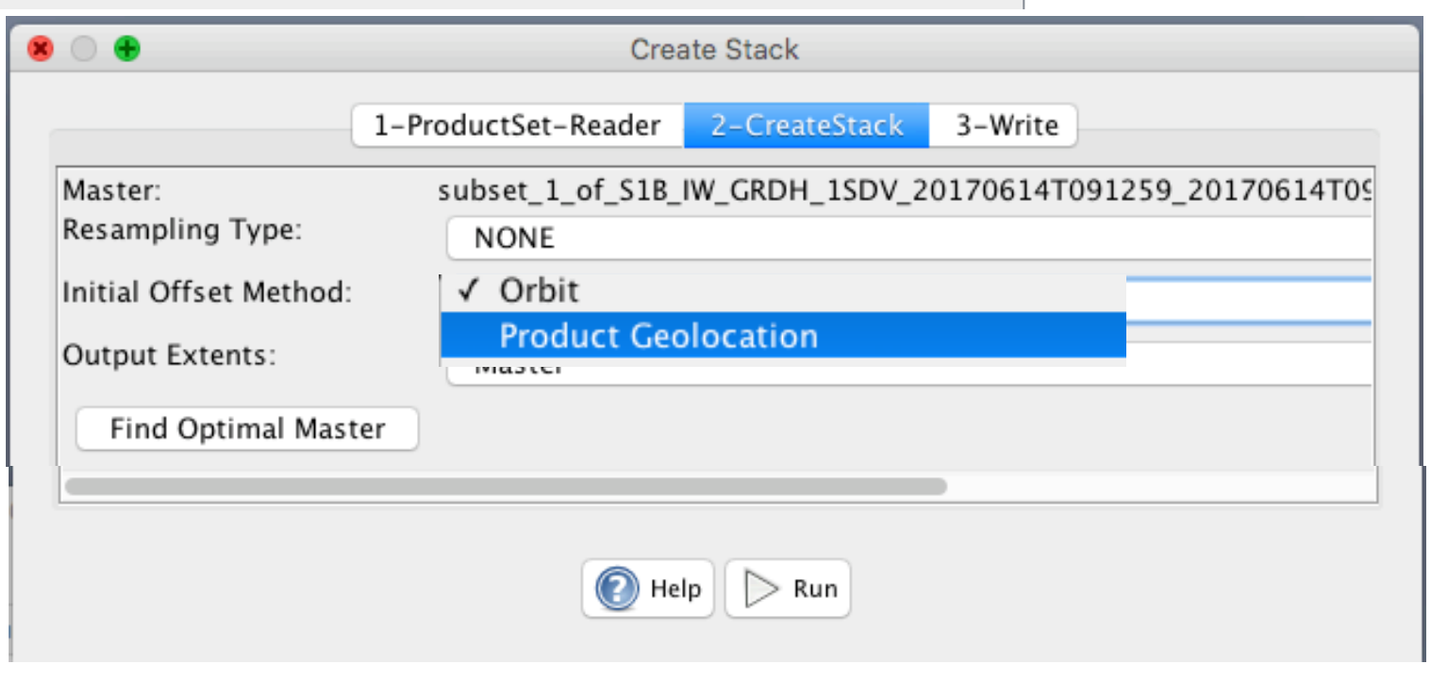
- Repetir todos os passos para a imagem S1A_IW_GRDH_1SDV_20160905T091347_20160905T091412_012915_0146AC_88E4.dim:
  - Multi Look
  - Calibrate
  - Speckle Terrain Correct
  - Convert to decibel

Check the coregistration - Create Stack

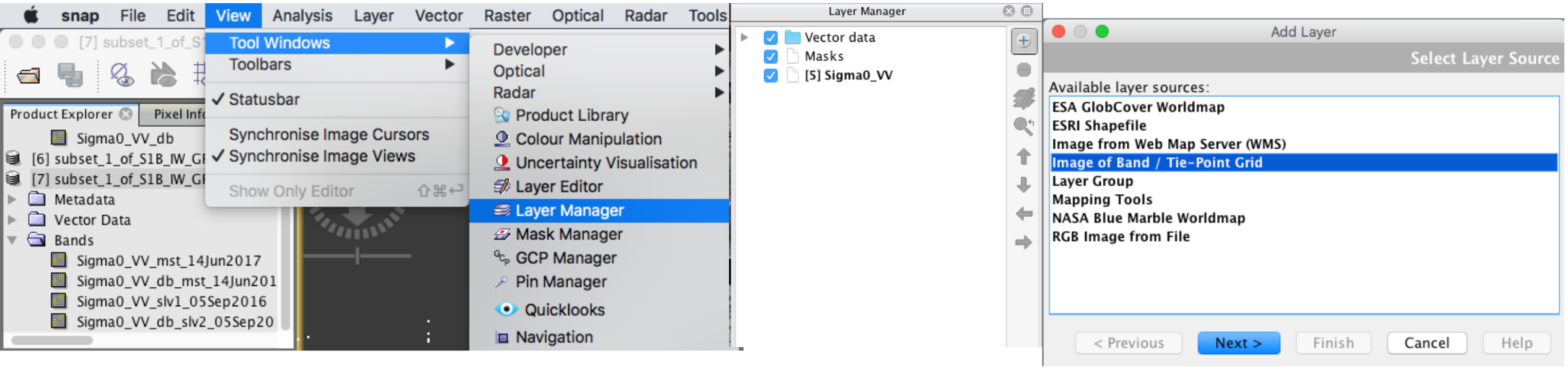


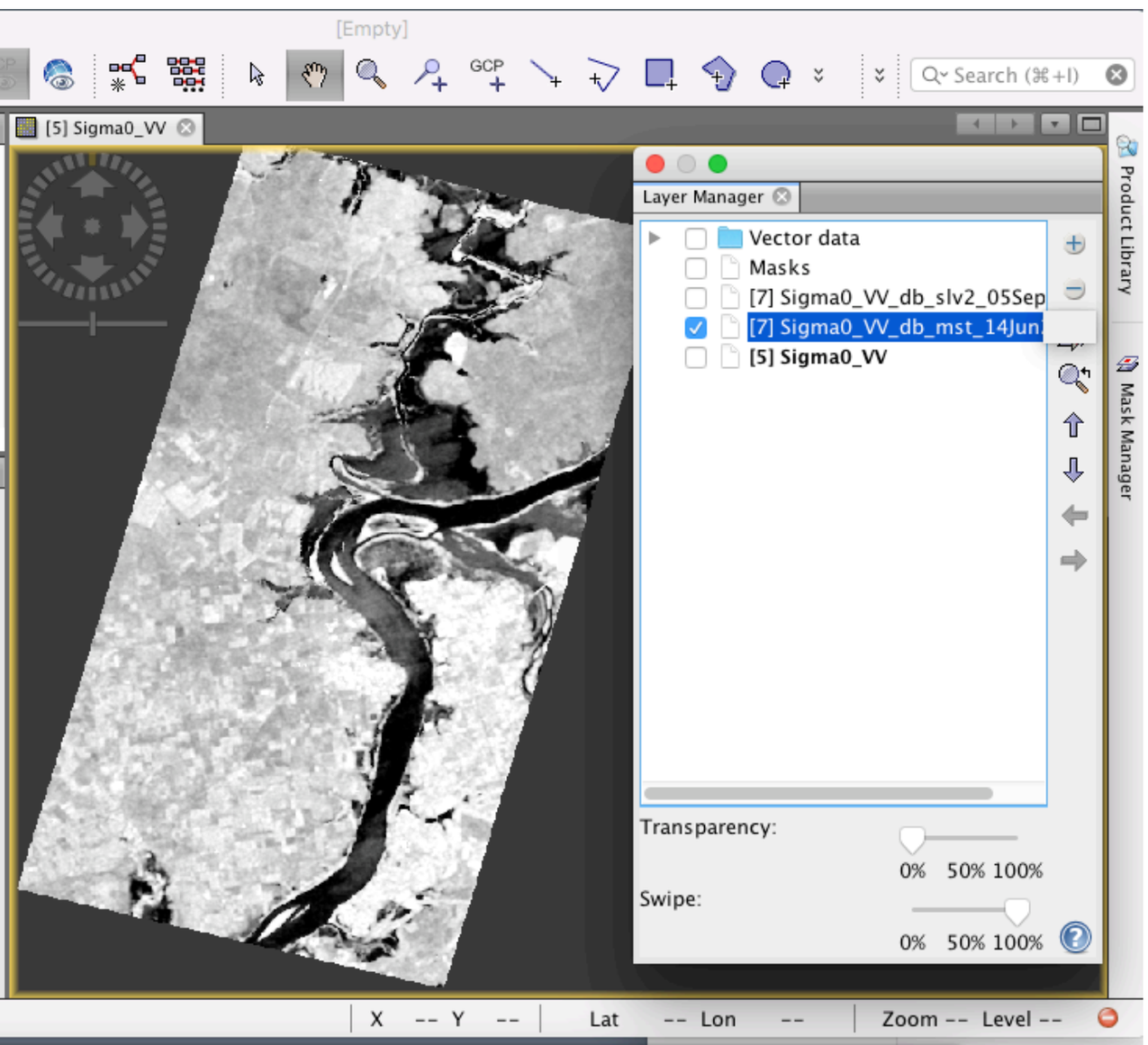


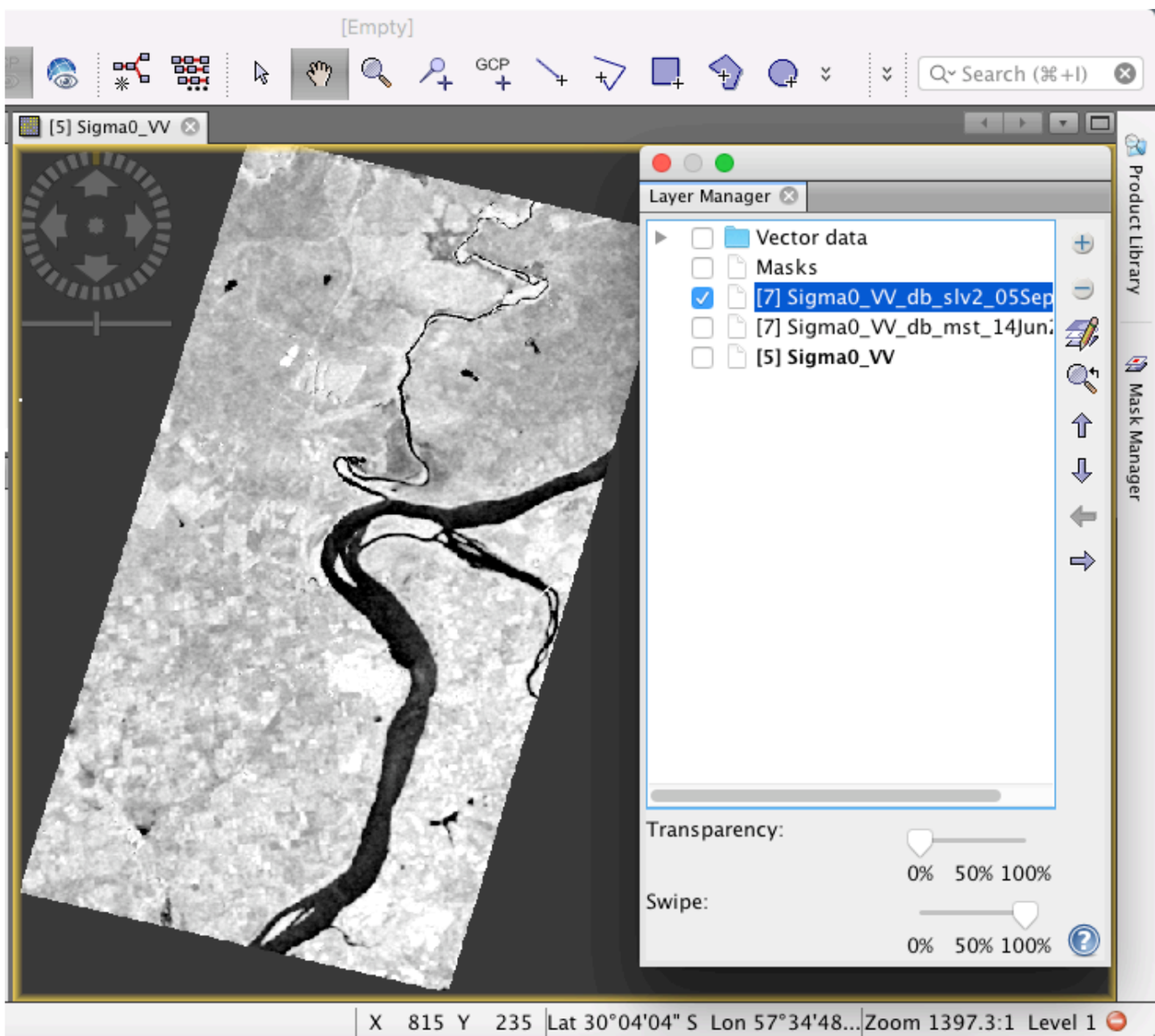




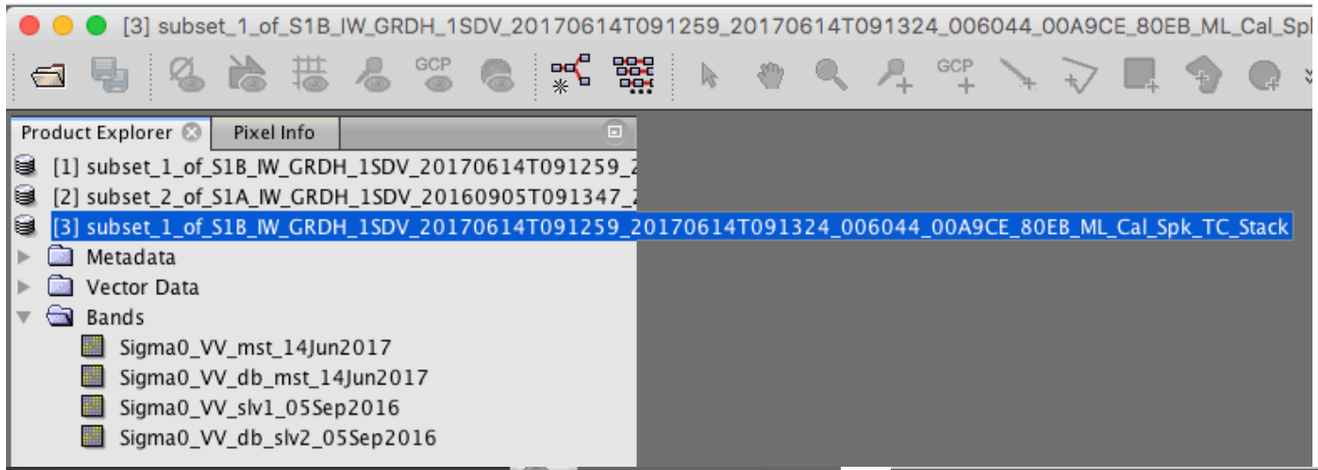
Check the coregistration - Layer manager

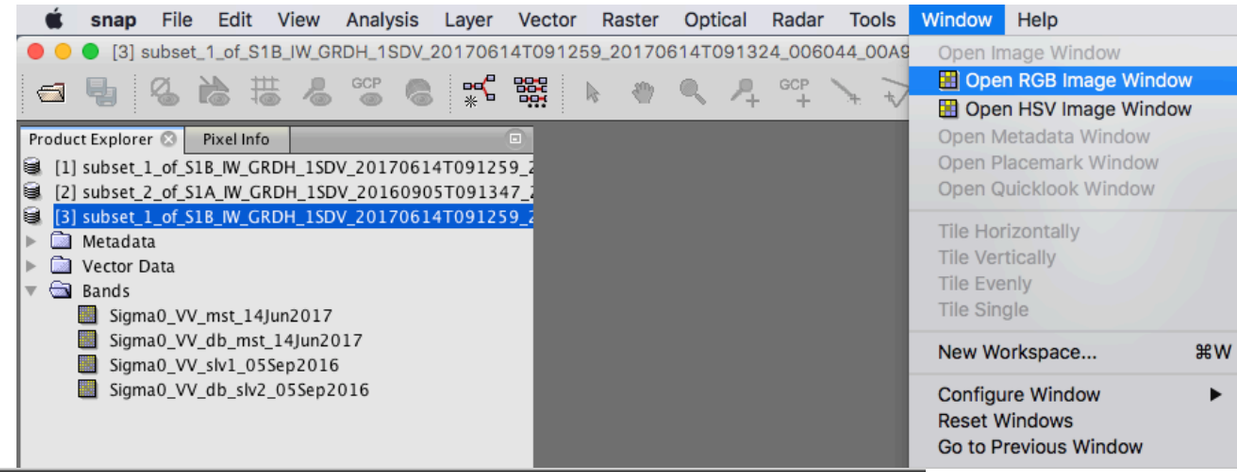


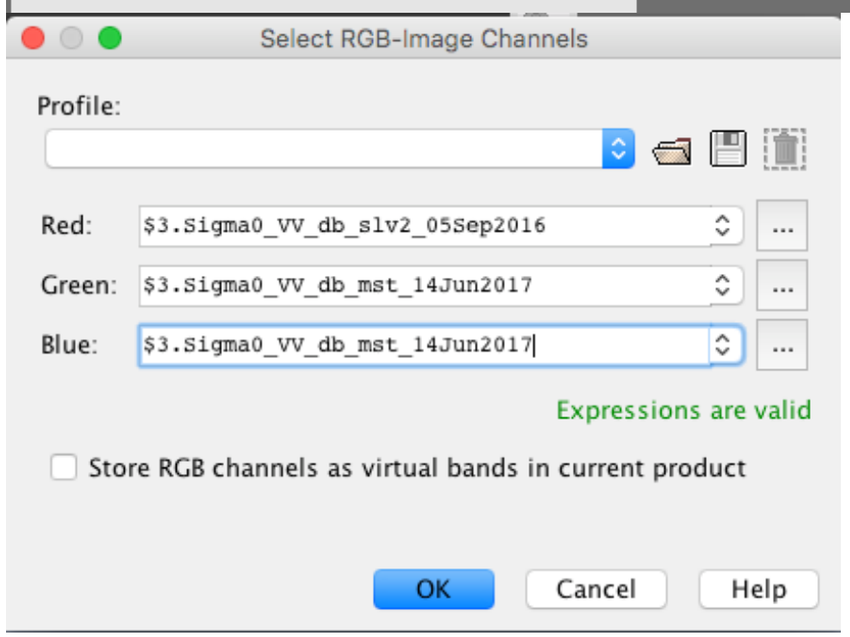


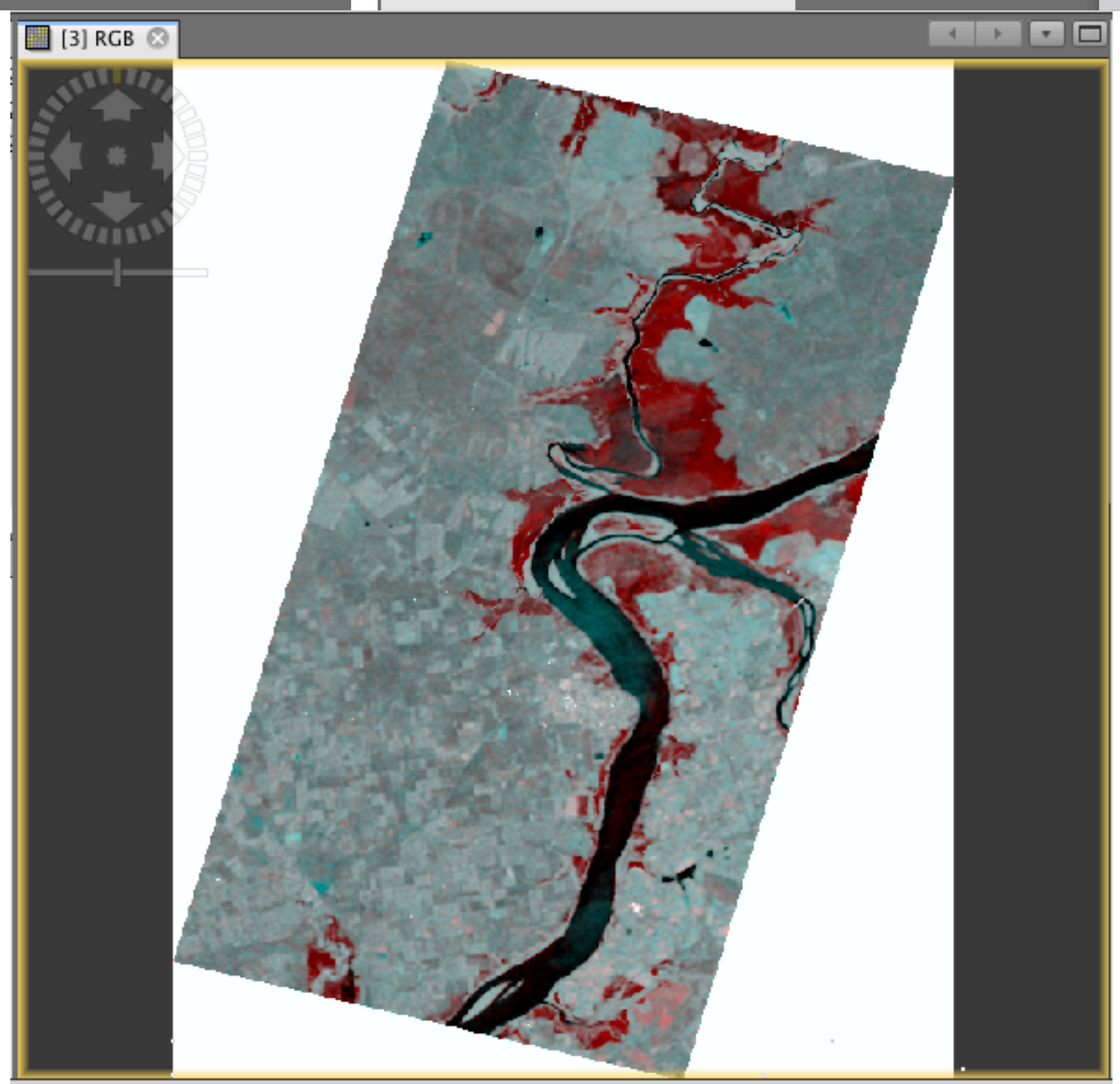


View RGB composite - Flooded in Red

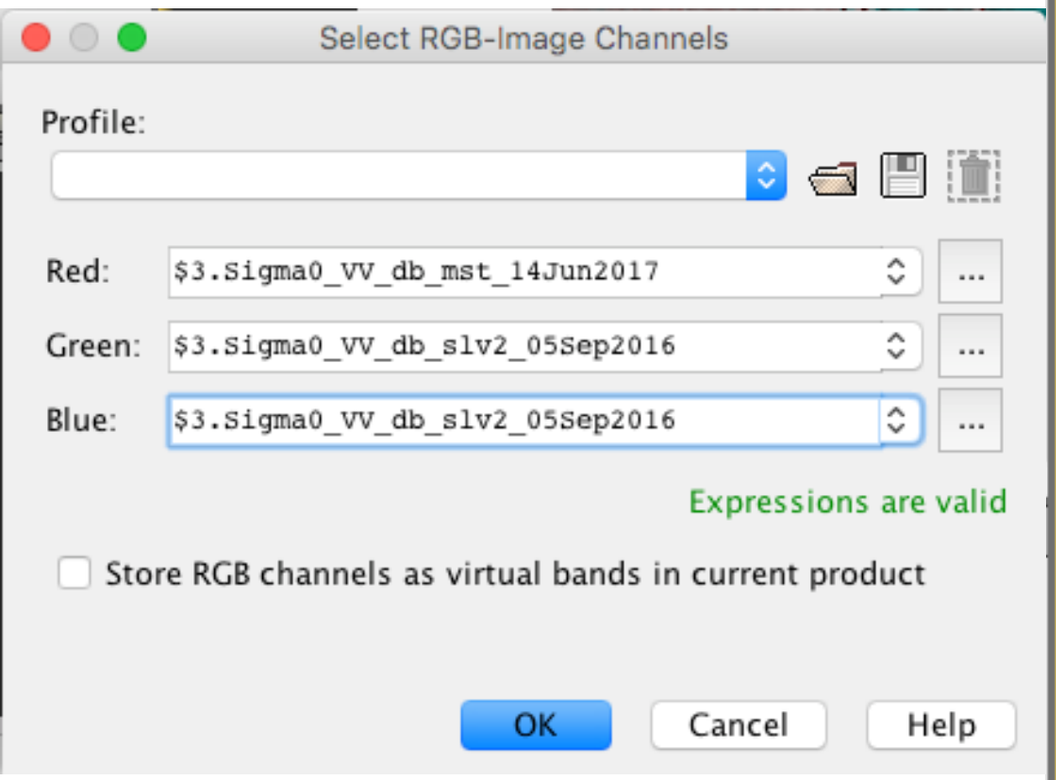


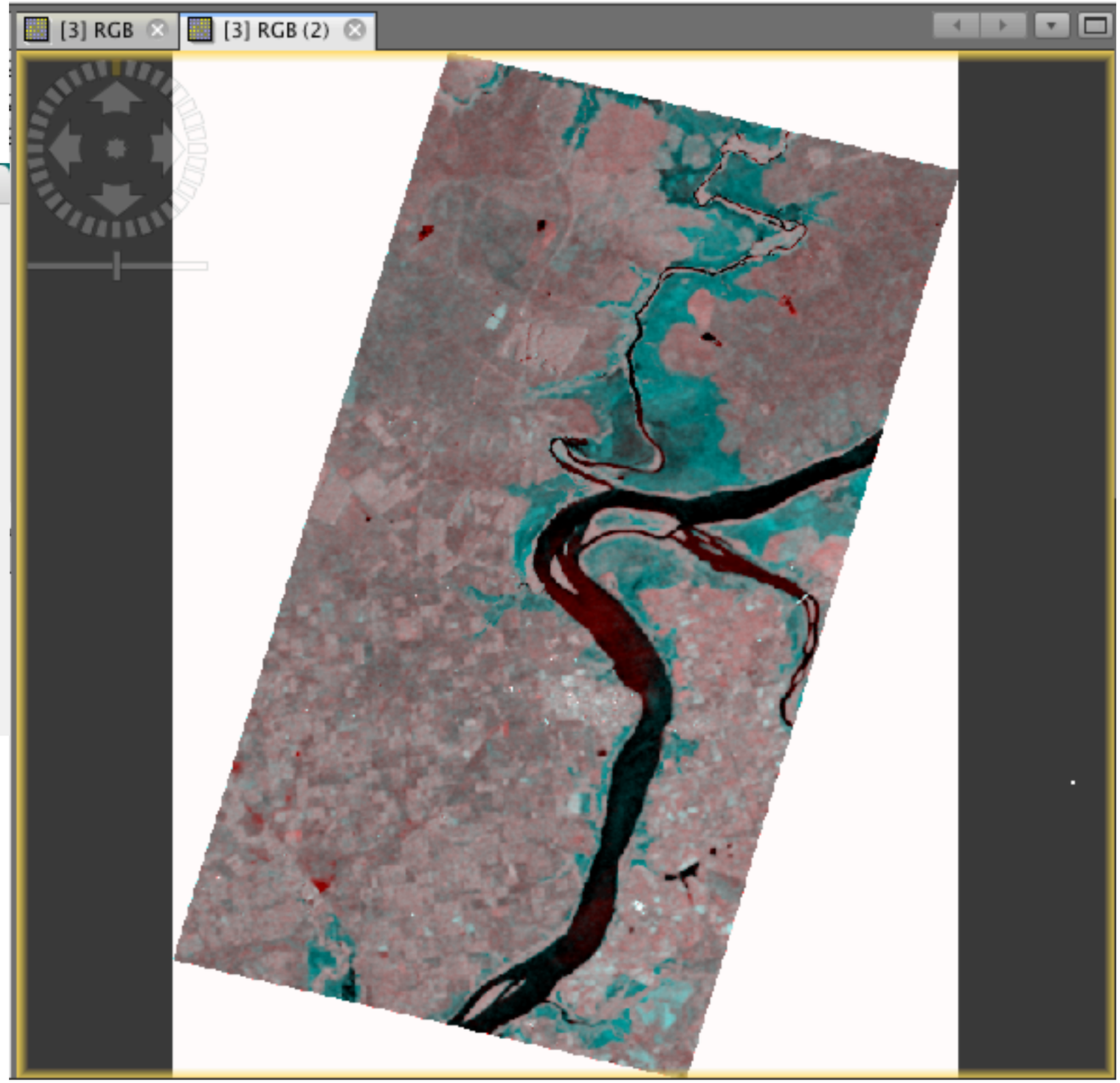




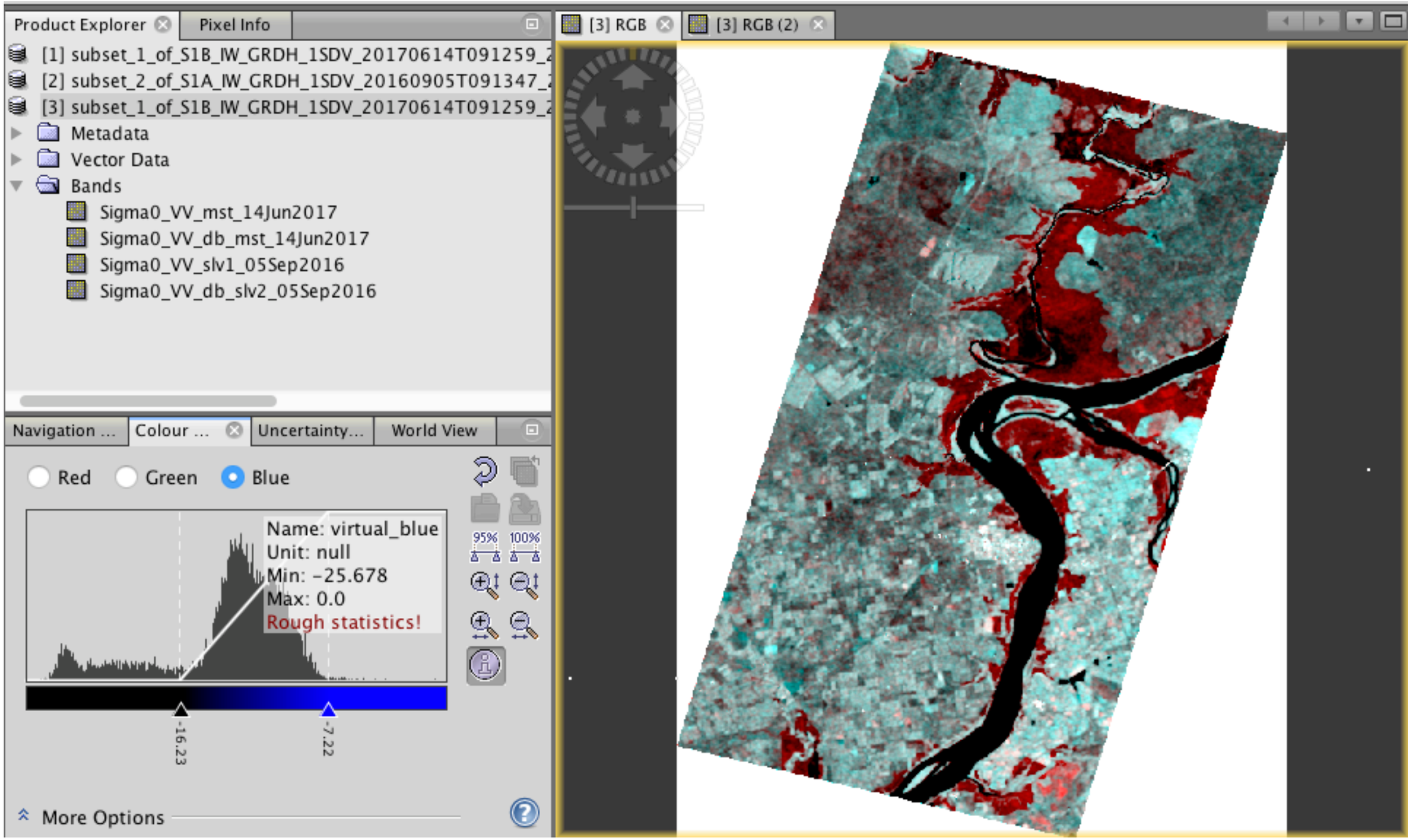


View RGB composite
Flooded in Blue

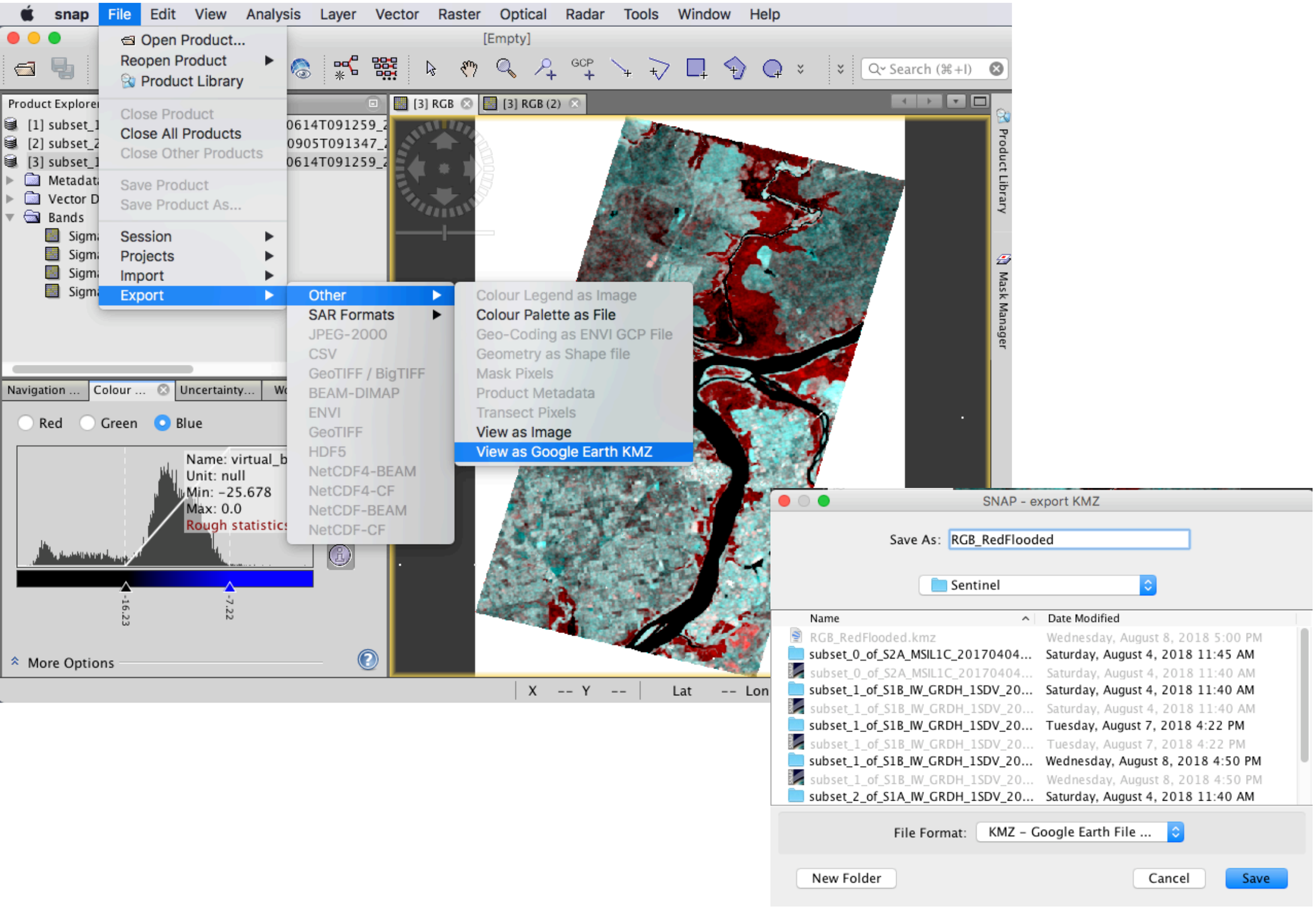




View RGB composite
Stretch the histogram

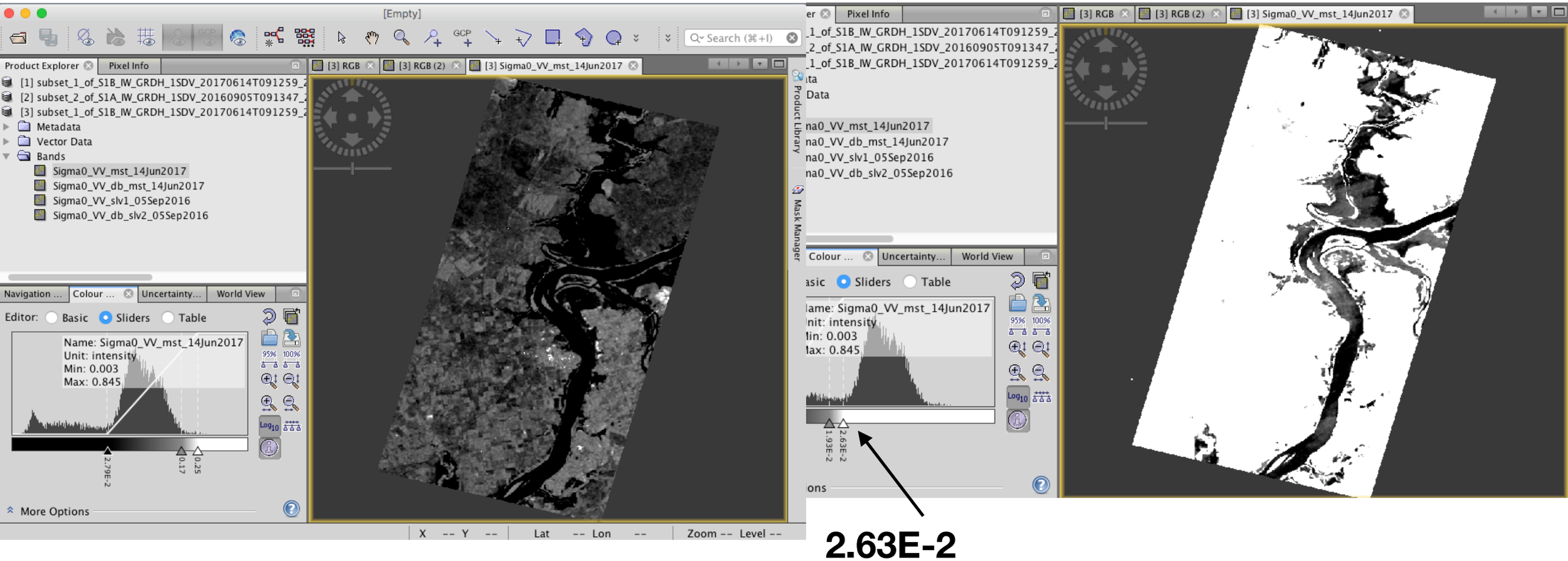


Save the image in Google Earth



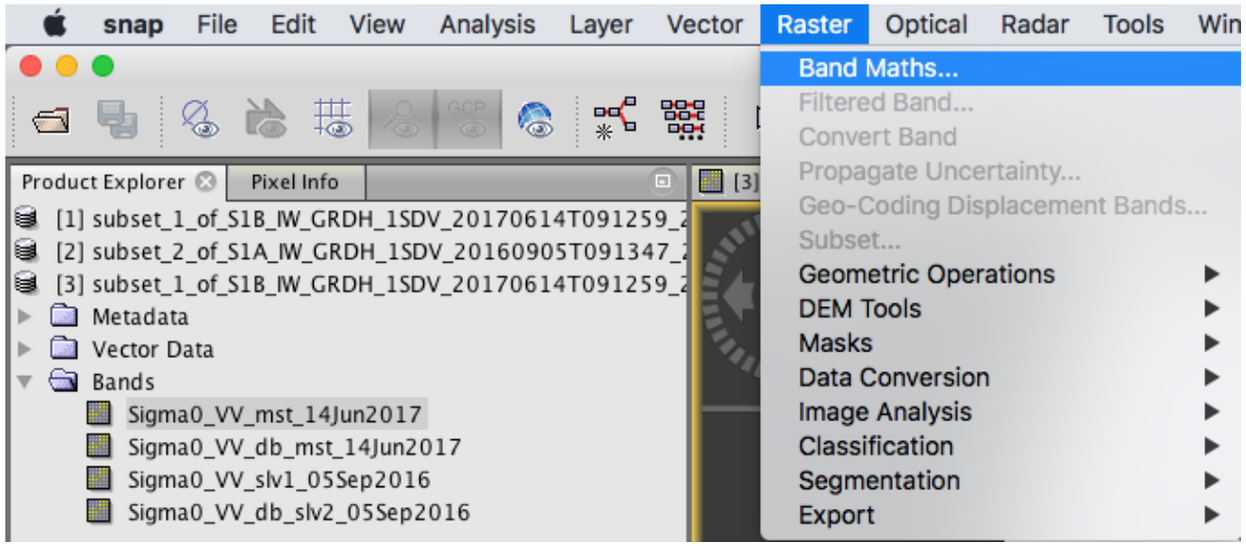
Save the image in Google Earth

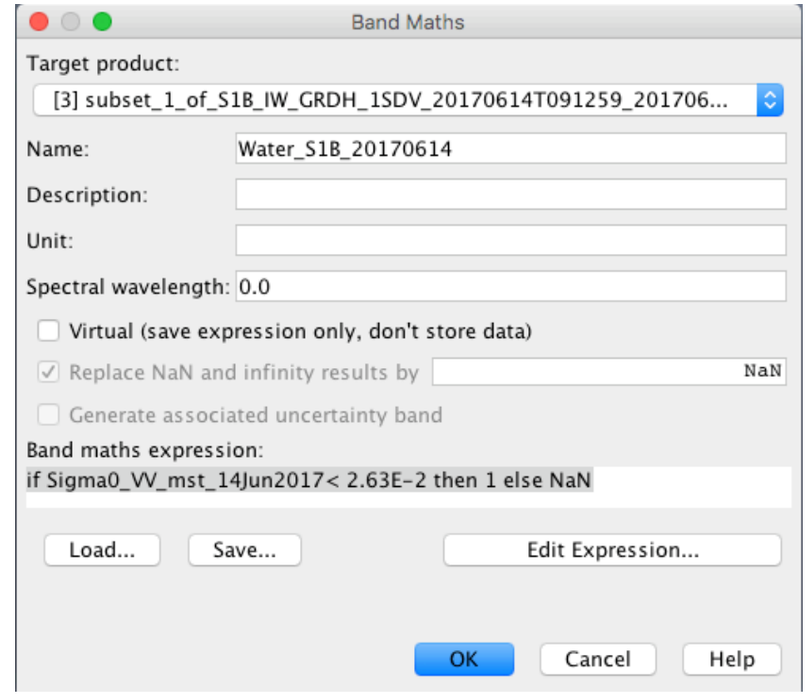
Define threshold



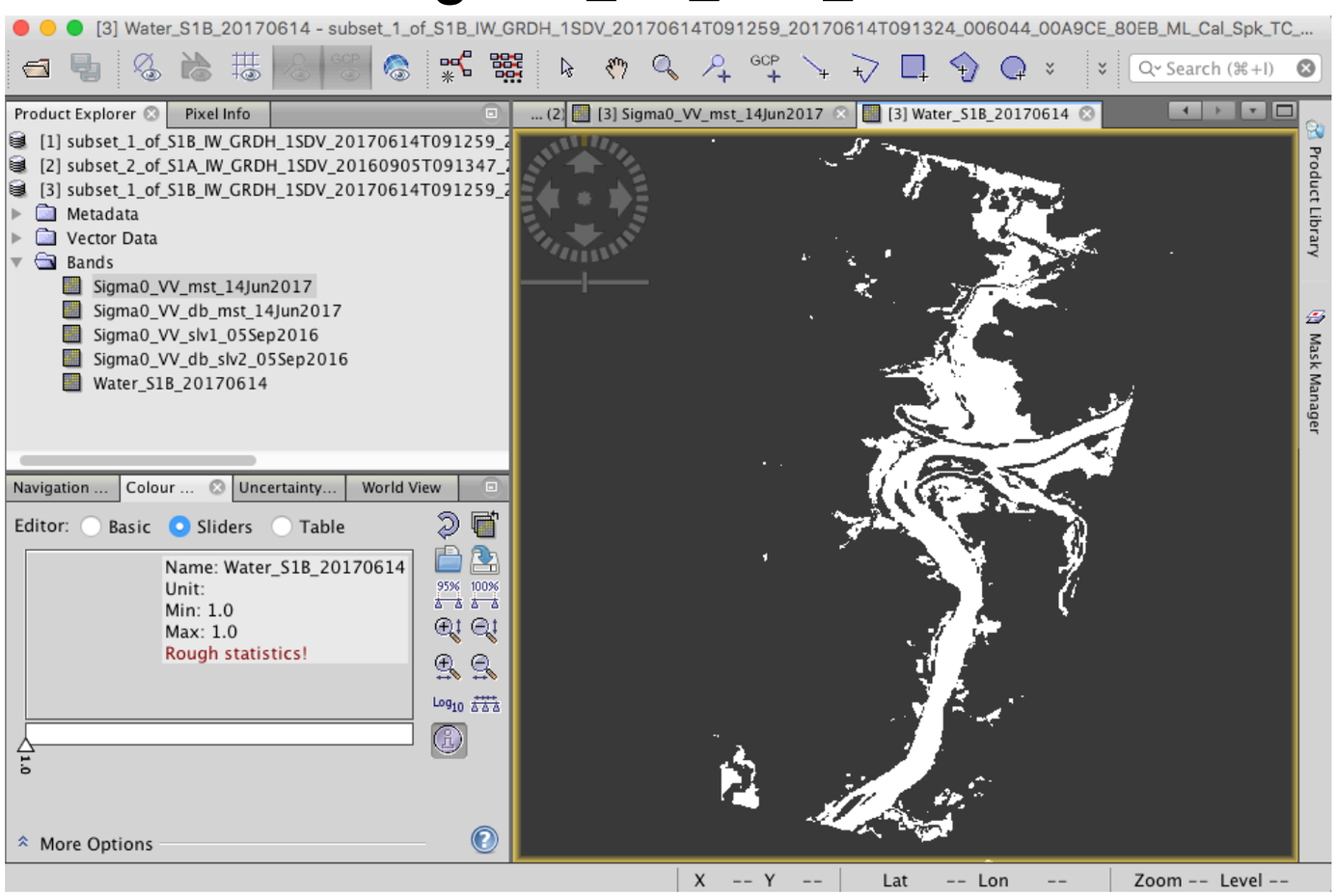
2.63E-2

Define threshold

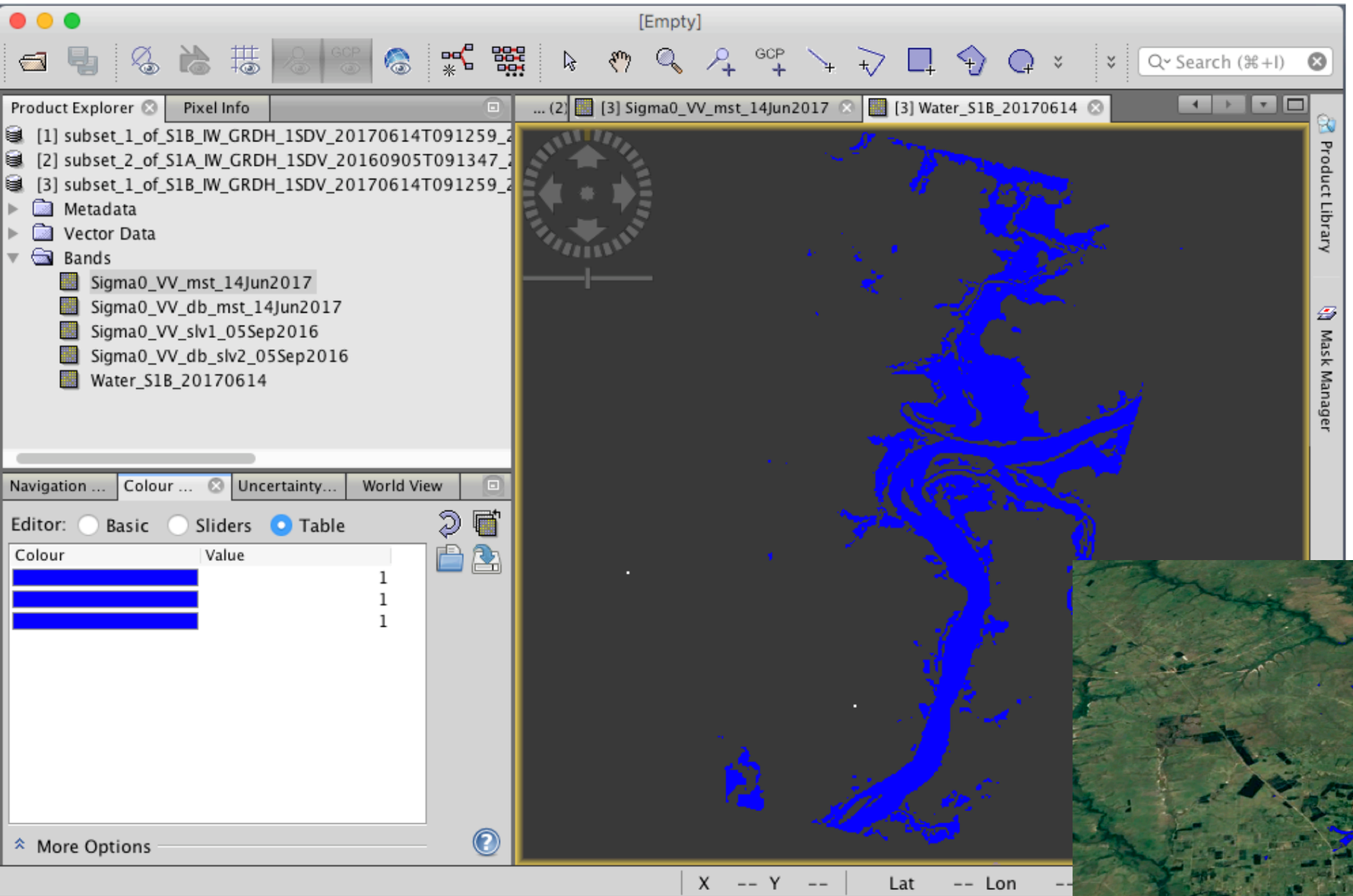


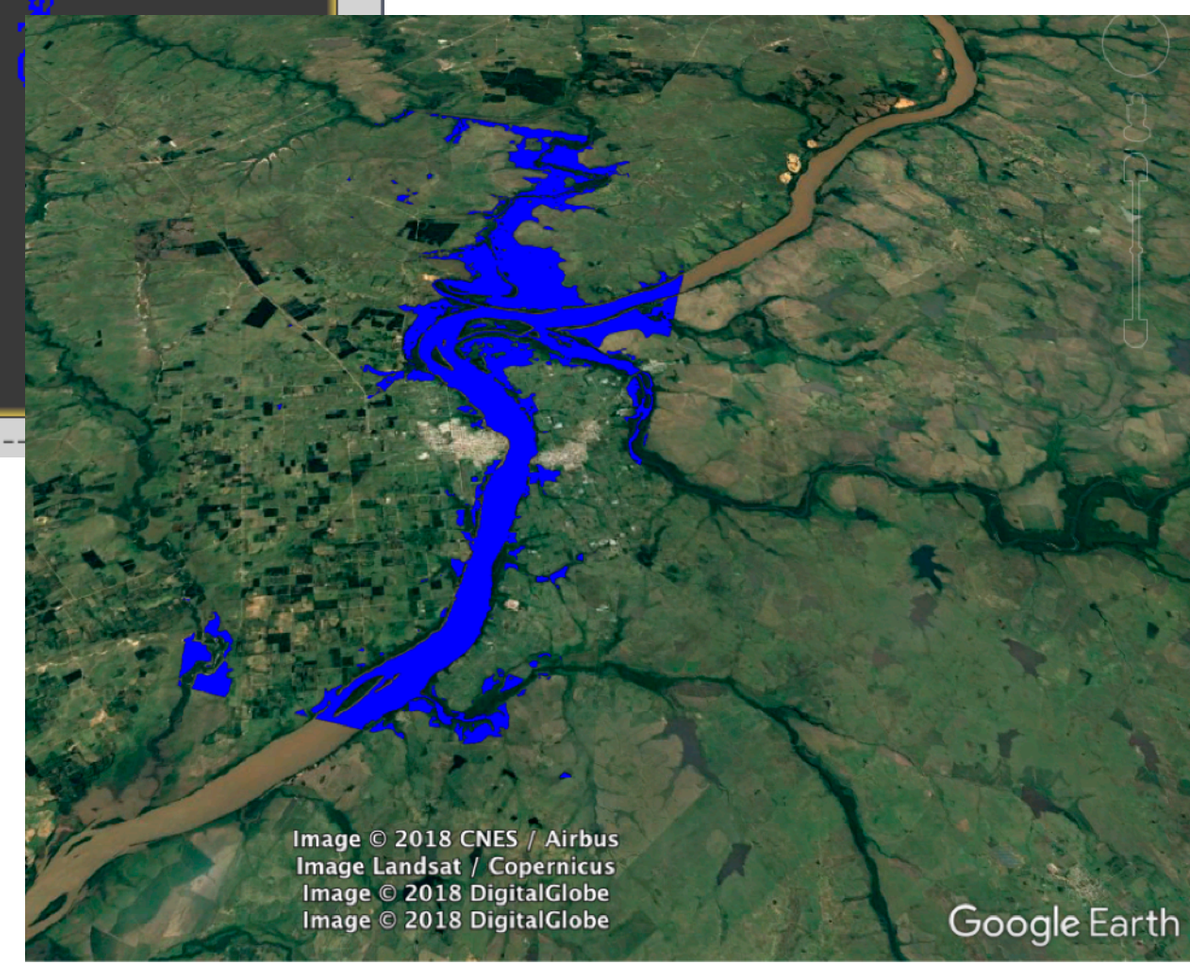


if Sigma0_VV_mst_14Jun2017< 2.63E-2 then 1 else NaN



Colour Manipulation and Kmz






SNAP
esa
seom
scientific exploitation
of operational missions

RUS Copernicus Research and User Support

Hello, Laercio

The RUS Service | The RUS Offer | The RUS Library | The RUS Community | Your RUS service

- What is RUS?
- Who can use RUS?
- How does RUS work?
- Who is behind RUS?

You are here: Home > Your RUS service > Your dashboard

▾ Yo

ice

Chat with Support Desk

Project Name	ID	Date of submission	Status	Actions			Virtual Environment	
Disaster Response	2299	2018-06-26	Open	Follow my project	Get support	Close my service	Access my Virtual Machine(s)	Access my CPU monitoring dashboard
				Cancel my request	Notify a technical incident	Rate my service ★★★★★	Freeze my Virtual Machine(s)	I forgot my password

▾ What is RUS?

The **Research and User Support (RUS)** Service developed and operated by a **consortium** led by CS SI is a response to a call made in 2016 by the European Commission that aims to develop an on-line free-access platform to promote the uptake of **Copernicus** data and support the scaling up of R&D activities.

The RUS Service, open to the public in September 2017, will remain active for an initial period of 3 years, with a possible extension of 2 more years and beyond.

Contact Us | Terms and conditions | Glossary | Acronyms | FAQ

▾ Who can use RUS?

The RUS Service is open to **European citizens** willing to discover and use Copernicus core products and datasets, such as **EU public sector organisations** (e.g. research laboratories, academic institutions) and **EU private sector entities** (e.g. small and medium enterprises) that are willing to perform R&D or teaching activities. Commercial and operational activities cannot be carried out on the basis of the RUS Service.

Considering resource constraints, the RUS service can be offered to each user for a **limited amount and time** and including ICT/Expert/Data resources **compatible with declared uptake objectives and current user demand**.

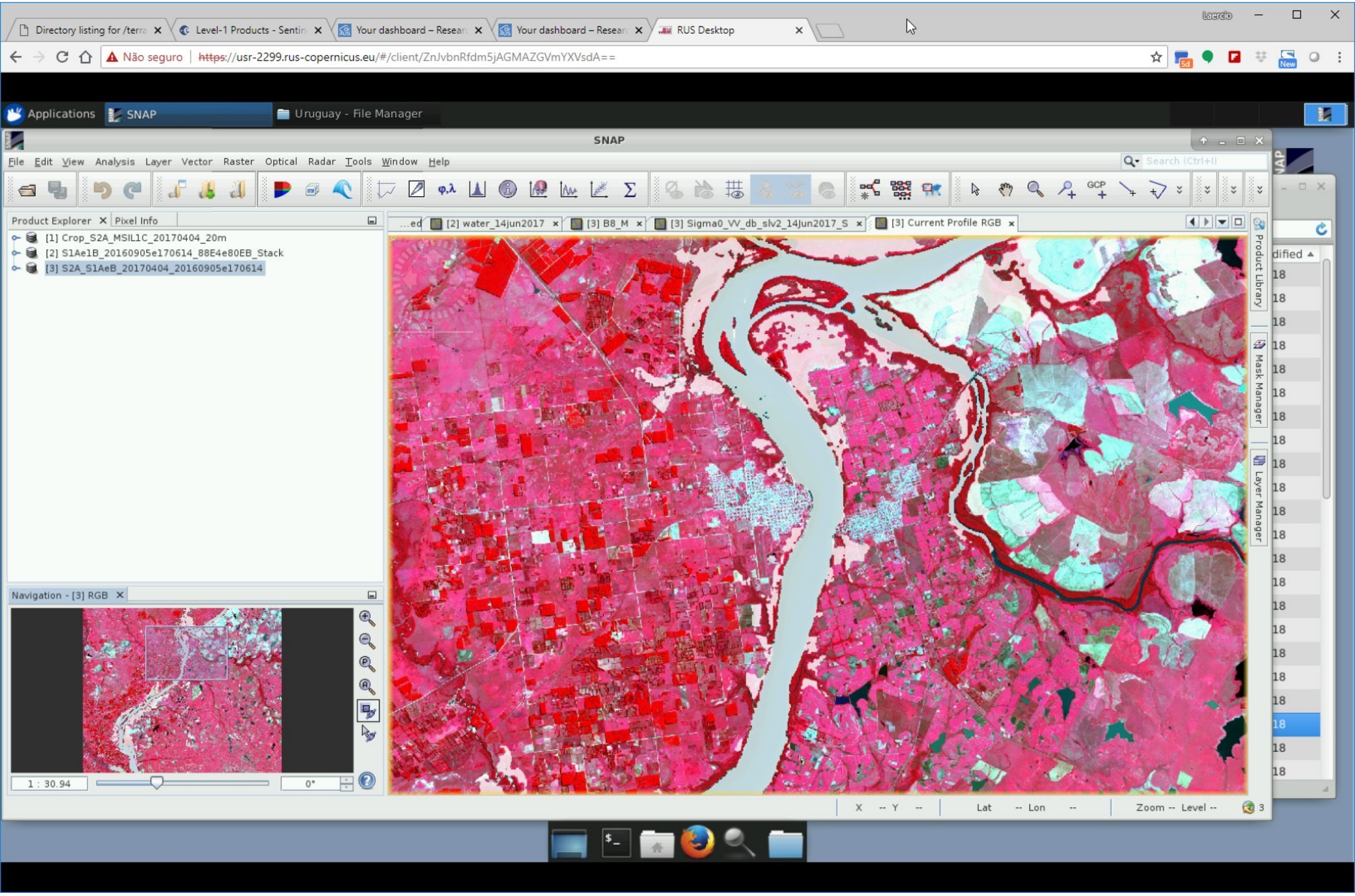
Persons **outside the European Union** willing to access the RUS Service should first liaise with us to check their eligibility. For such requests, the decision to grant them the access to the service will be made on a case-by-case basis.

Yo

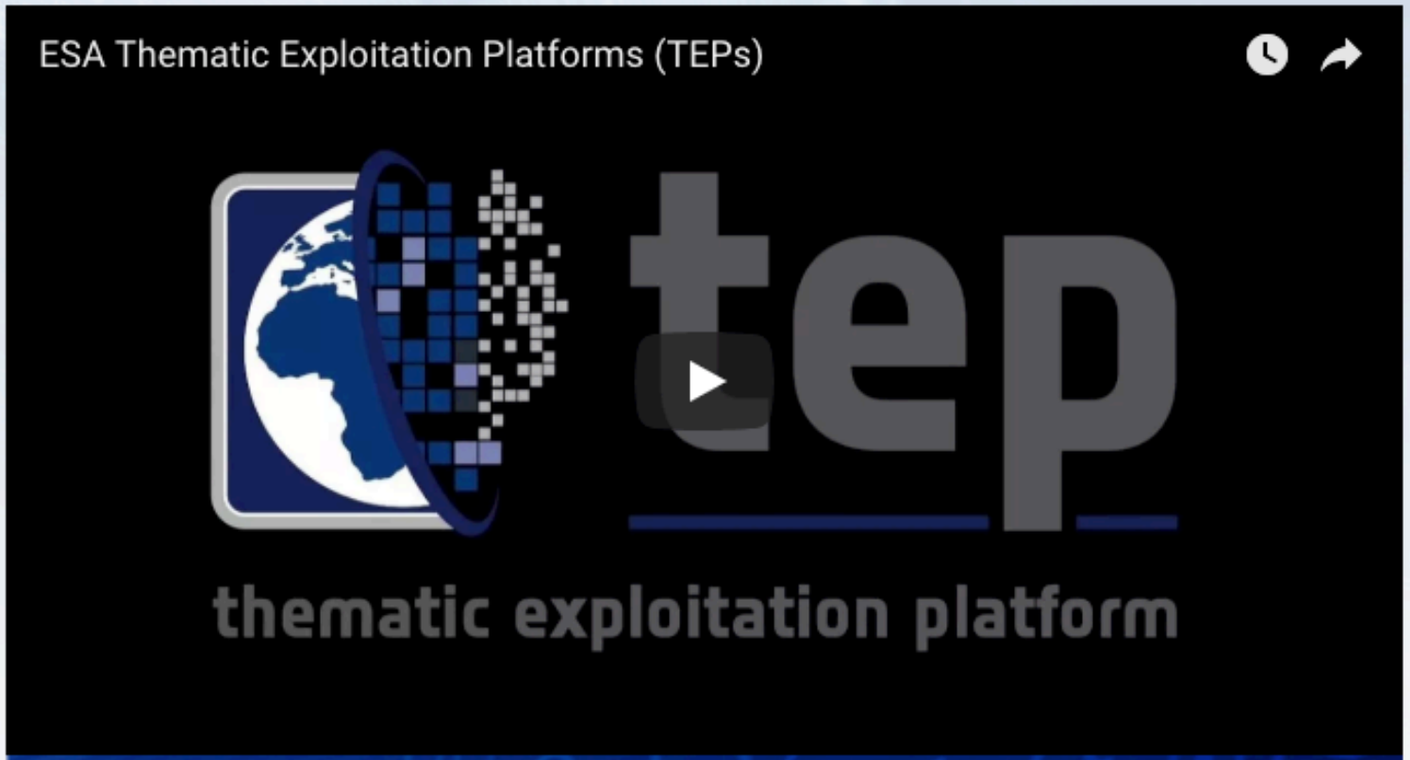
ice

Chat with Support Desk

Project Name	ID	Date of submission	Status	Actions			Virtual Environment	
Disaster Response	2299	2018-06-26	Open	Follow my project	Get support	Close my service	Access my Virtual Machine(s)	Access my CPU monitoring dashboard
				Cancel my request	Notify a technical incident	Rate my service ★★★★★	Freeze my Virtual Machine(s)	I forgot my password


Directory listing for /terra
Level-1 Products - Sentin
Your dashboard – Resear
Your dashboard – Resear
RUS Desktop
Laercio
Não seguro
https://usr-2299.rus-copernicus.eu/#/client/ZnJvbnRfdm5jAGMAZGVmYXVsdA==
Applications
SNAP
Uruguay - File Manager
SNAP
File Edit View Analysis Layer Vector Raster Optical Radar Tools Window Help
Search (Ctrl+I)
Product Explorer
Pixel Info
[1] Crop_S2A_MSIL1C_20170404_20m
[2] S1Ae1B_20160905e170614_88E4e80EB_Stack
[3] S2A_S1AeB_20170404_20160905e170614
[2] water_14jun2017
[3] B8_M
[3] Sigma0_VV_db_slv2_14Jun2017_S
[3] Current Profile RGB
Product Library
Mask Manager
Layer Manager
Navigation - [3] RGB
1 : 30.94
0°
X -- Y --
Lat -- Lon --
Zoom -- Level --
3

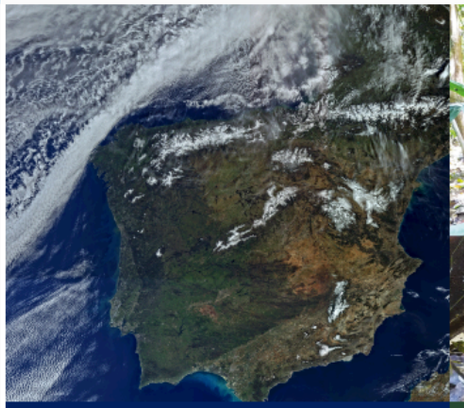
tep
thematic exploitation platform



A shared virtual environment for finding and using Earth Observation data!

→ TEP GEOHAZARDS

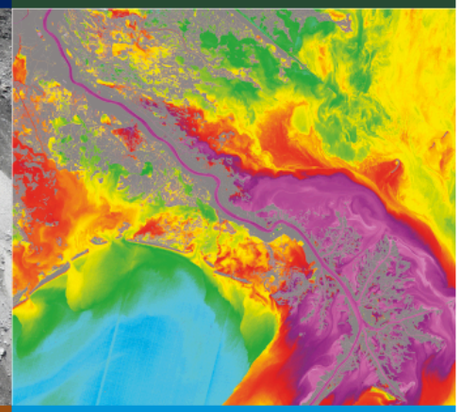
The Geohazards Exploitation Platform enables the exploitation of satellite EO data to support the geohazards community. [Read more]



→ TEP COASTAL

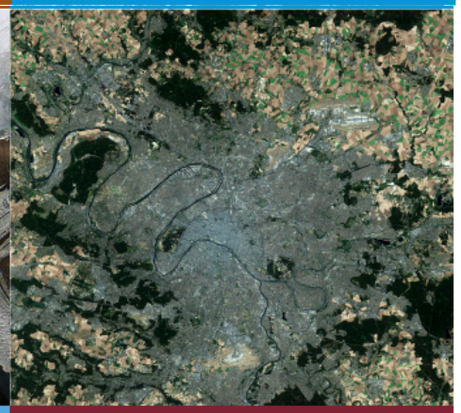
→ TEP FORESTRY

→ TEP GEOHAZARDS



→ TEP HYDROLOGY

→ TEP POLAR



→ TEP URBAN

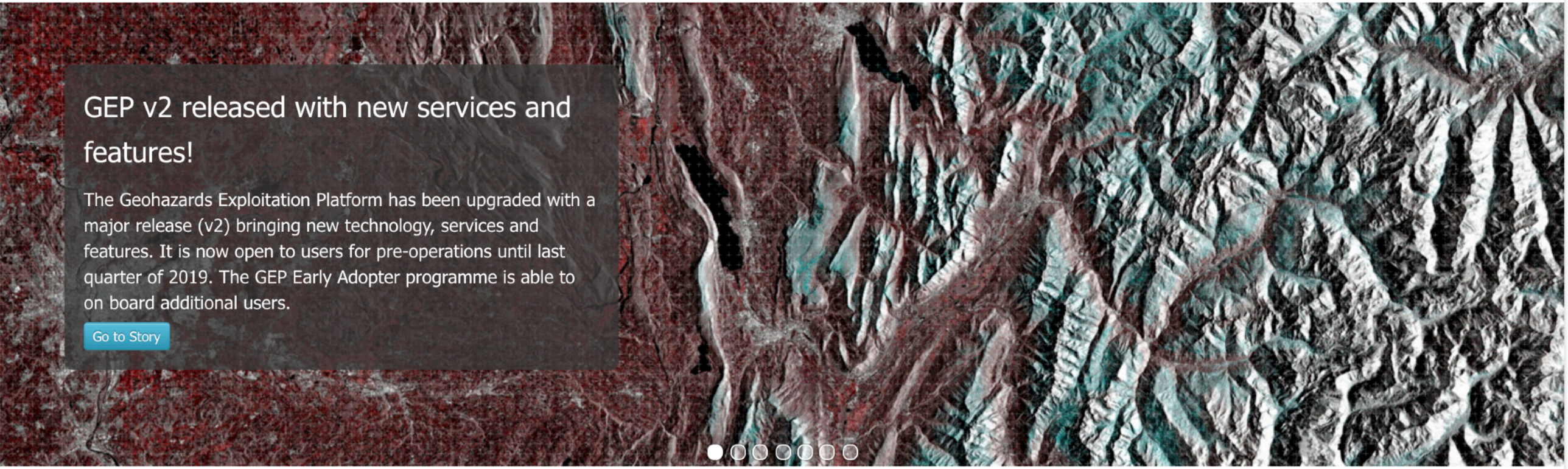
→ TEP FOOD SECURITY

Wouldn't it be nice if ... I didn't spend 50% of my project resources trying to access (EO) data?

Seguro | https://geohazards-tep.eo.esa.int/#!

geohazards
tep

Home | Workspace | Background | Observations & Measurements | Services Catalogue | Community | EO sector Collaboration



GEP v2 released with new services and features!

The Geohazards Exploitation Platform has been upgraded with a major release (v2) bringing new technology, services and features. It is now open to users for pre-operations until last quarter of 2019. The GEP Early Adopter programme is able to on board additional users.

Go to Story

Thematic Apps

Click to find out the existing thematic applications

Communities

The Geohazards platform gather activities from active groups of users

Analytics

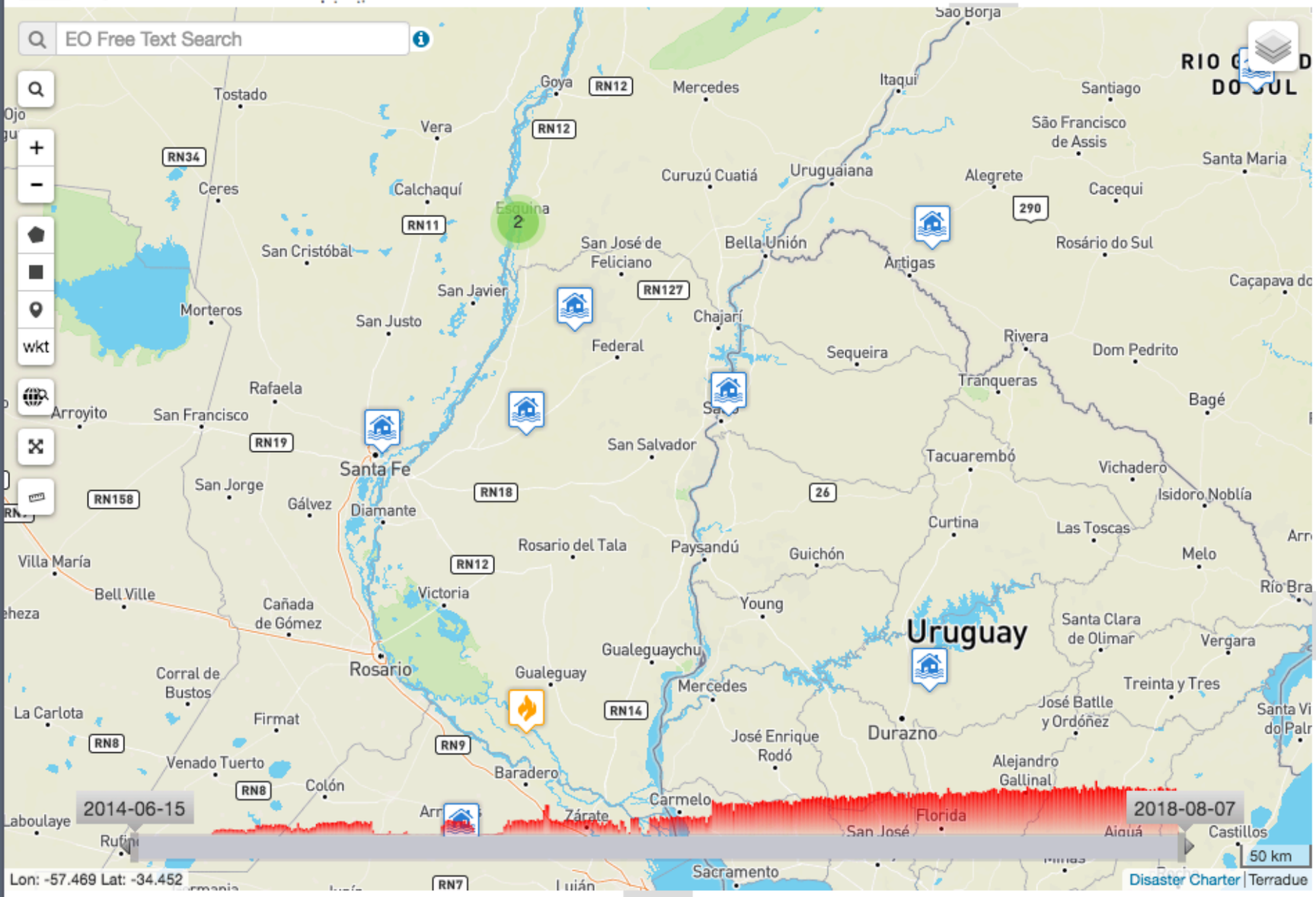
Find out what is your usage of the platform

Seguro | https://geohazards-tep.eo.esa.int/geobrowser/?id=landslide-dm#!&context=EOData%2FSentinel-1

geohazards tep > EO Services for Landslides Analysis:

laercionamikawa | EO Data | Community | Private

EO Free Text Search



Current search result

Result for OpenSearch query over type ... | 1 | 2 | 3 | ... | 53076 | » | Total results 2653772

- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:57:34 GMT
- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:56:19 GMT
- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:55:54 GMT
- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:55:29 GMT
- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:55:04 GMT
- S1A RAW IW_DP L0 141 Tue, 07 Aug 2018 10:54:39 GMT

Features Basket | Data Packages

Total results 0 | sel.all | inv.sel. | Remove all | Save

No results found.

Processing Services

Jobs

Filter jobs

jobs found.

Combi 1.5.1 SPOT7 Argentina 3 hours ago by jolanda.patruno	success
VRSS validation COMBI 1.5.1 3 hours ago by jolanda.patruno	success
RASTER 1.20 TSX 000084524 tar.gz a day ago by jolanda.patruno	failed
RASTER 1.20 TSX 000074463 tar.gz a day ago by jolanda.patruno	failed
RASTER 1.20 TSX 000074347 tar.gz a day ago by jolanda.patruno	failed
RASTER upload ALOS 1.2 a day ago by jolanda.patruno	success
GMTSAR interferometric processor - Lombok 5 days ago by Firman Hadi	success
SNAP Sentinel-1 IW SLC - Insar Lombok Earthquake 5 days ago by Firman Hadi	failed
SNAP Sentinel-1 IW SLC - Semarang 6 days ago by Firman Hadi	success
DIAPASON InSAR Sentinel-1 TOPSAR(IW,EW) - Semarang 6 days ago by Firman Hadi	failed

1 | 2 | 3 | ... | 9 | Next

geohazards tep > EO Services for Volcanoes Monitoring

laercionamikawa | Upload Data | EO Data | EO-based products | Community | Private

EO Free Text Search | spatial

Ribeirão Bonito

Santa Clara

2013-03-09 — 2018-05-31

2 km

Lon: -47.919 Lat: -22.179

Disaster Charter | Terradue

Current search result

Result for OpenSearch query over type ... 1 2 » Total results 67

- Entity ID: LC82180752015355LGN00, Acquisition Date: 21-DEC-15, Path: 218, Row: 75
- Entity ID: LC82180742015355LGN00, Acquisition Date: 21-DEC-15, Path: 218, Row: 74
- Entity ID: LC82180752015339LGN00, Acquisition Date: 05-DEC-15, Path: 218, Row: 75
- Entity ID: LC82180742015339LGN00, Acquisition Date: 05-DEC-15, Path: 218, Row: 74
- LC82180742014256LGN00, 14-Sep-13 02:57:15, Path: 218, Row: 74
- LC82180752014240LGN00, 14-Aug-28 02:57:35, Path: 218, Row: 75
- LC82180742014240LGN00, 14-Aug-28 02:57:11, Path: 218, Row: 74

Features Basket | Data Packages

Total results 1 | sel.all | inv.sel. | Remove all | Save

- S1A RAW IW_DP L0 VH, VV 7 2015-03-23T04:24:55.5034110Z/2015-03-23T04:25:27.9033590Z

Processing Services

DIAPASON InSAR - StripMap(SM)

id: d167dd7e-c1c0-42da-8510-a087032c07fc

publisher: esa-gep-apps-hetzner-c1-volcanmonitoring-app

version: 1.1

DIAPASON is an InSAR tool suite developed by the French Space Agency (CNES) and maintained by ALTAMIRA INFORMATION.This service performs an InSAR workflow on ENVISAT,ERS(RAW and SLC) or Sentinel-1 (SLC) stripmap data, producing interferograms, amplitude and coherence maps. To run this service , specify a master and a slave image of the same mission.

Job title

DIAPASON InSAR - StripMap(SM)

InSAR master *

POLYGON((-28.30078125 62.2513029014569,50.27

InSAR Slave product catalogue entry *

polarization *

VV

Area Of Interest

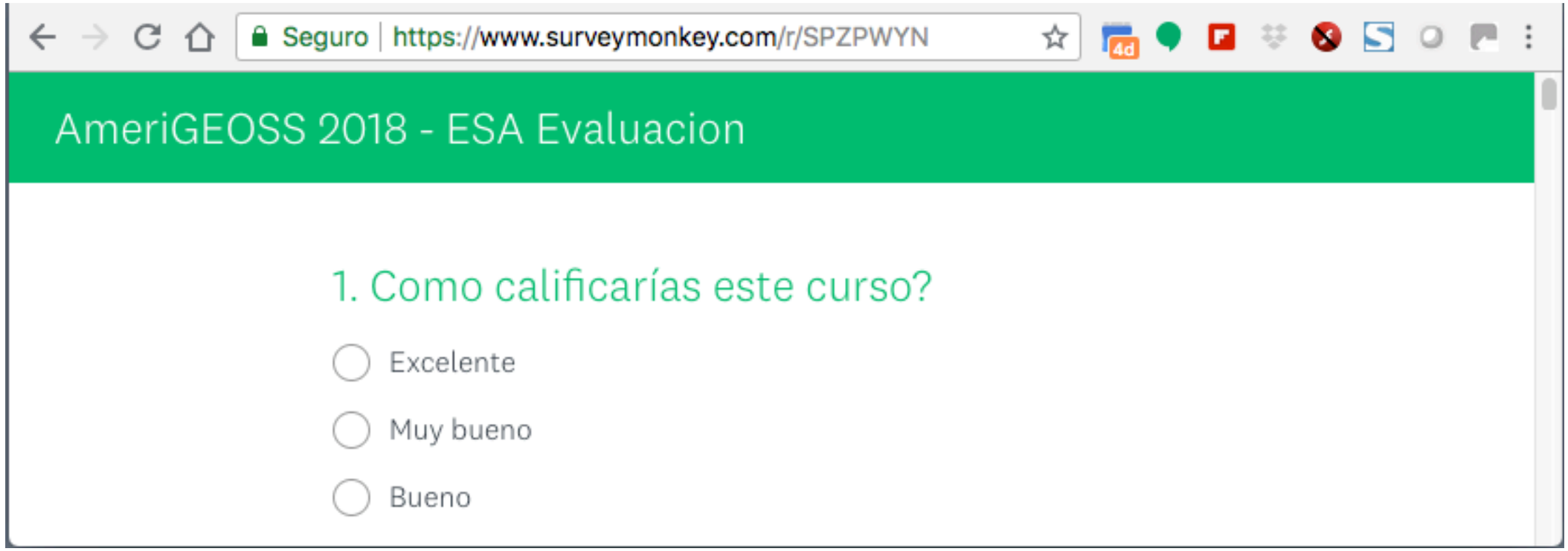
Correlation azimuth window size *

10

Correlation range window size *

10

Correlation azimuth search size *



https://www.surveymonkey.com/r/SPZPWYN

scihub.copernicus.eu/dhus

https://rus-copernicus.eu/

https://tep.eo.esa.int/

https://geohazards-tep.eo.esa.int/