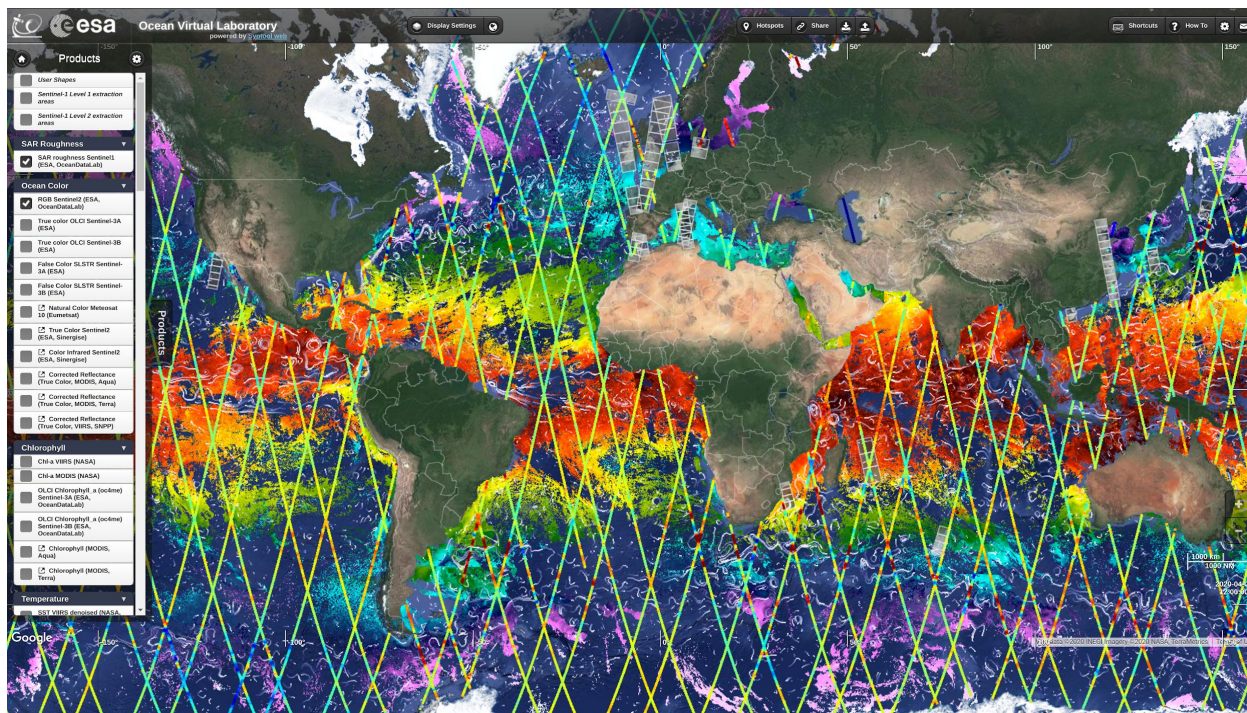


OVL portal tutorial

OceanDataLab team

Brest, 2022/06/14



1 - OVL online portal

- Overview of OVL portal
- Main functionalities / How To
- Shapes: draw / import / export
- Capture and share an interesting case using SEAShot

Tutorial videos can be found on OceanDataLab Youtube channel:

https://youtube.com/playlist?list=PL_Nrq3gZvmM-rrE64qr7QqzQir23kzol1

Access the portal online

You can connect to the OVL portal without any login/password

<https://ovl.oceandatalab.com>

Compatible with all recent web browsers but works better under Google Chrome

Discover the interface : Products selection and disponibility

The screenshot displays the OVL online tool interface. On the left, a sidebar titled "Products" contains a search bar and several categories of data products. A red arrow points from the text "Selected product" to the "SAR roughness Sentinel1 (ESA, OceanDataLab)" option, which is checked. Another red arrow points from the text "Dates when selected products are available within The displayed geographic area" to the date range "2022-06-12 02:46:27 UTC" in the bottom right corner. The main area shows a grayscale satellite image of a coastal region. The bottom of the interface features a timeline with months and years, and a date range selector.

Products

Search...

Annotation

- ☐ User Shapes
- ☐ Sentinel-1 Level 1 extraction areas
- ☐ Sentinel-1 Level 2 extraction areas

SAR Roughness

- ☐ SAR roughness Envisat (ESA, OceanDataLab)
- ☒ SAR roughness Sentinel1 (ESA, OceanDataLab)
- ☐ SAR tropical storm roughness Sentinel-1 (ESA, OceanDataLab)
- ☐ SAR gamma0 IW VV Sentinel1 (ESA, Sinergise)
- ☐ SAR gamma0 EW HH Sentinel1 (ESA, Sinergise)

SAR Doppler

- ☐ Envisat SAR doppler (ESA, OceanDataLab)
- ☐ SAR doppler (ESA)
- ☐ SAR doppler exp
- ☐ SAR doppler demo
- ☐ Sentinel-1 calibrated Doppler centroid anomaly (OceanDataLab/Arresys/Norc...
- ☐ WOC SAR doppler radial velocity (NERSC)

Ocean Color

- ☐ RGB Sentinel2 (ESA, OceanDataLab)
- ☐ True color OLCI Sentinel-3A (ESA)
- ☐ False Color SLSTR Sentinel-3A (ESA)
- ☐ True color OLCI Sentinel-3B

Selected product

Dates when selected products are available within The displayed geographic area

2022-06-12 02:46:27 UTC

Données cartographiques ©2022 Google Im

1-Hour 12-Hour Daily 3-Day Weekly Bi-weekly 2 datasets

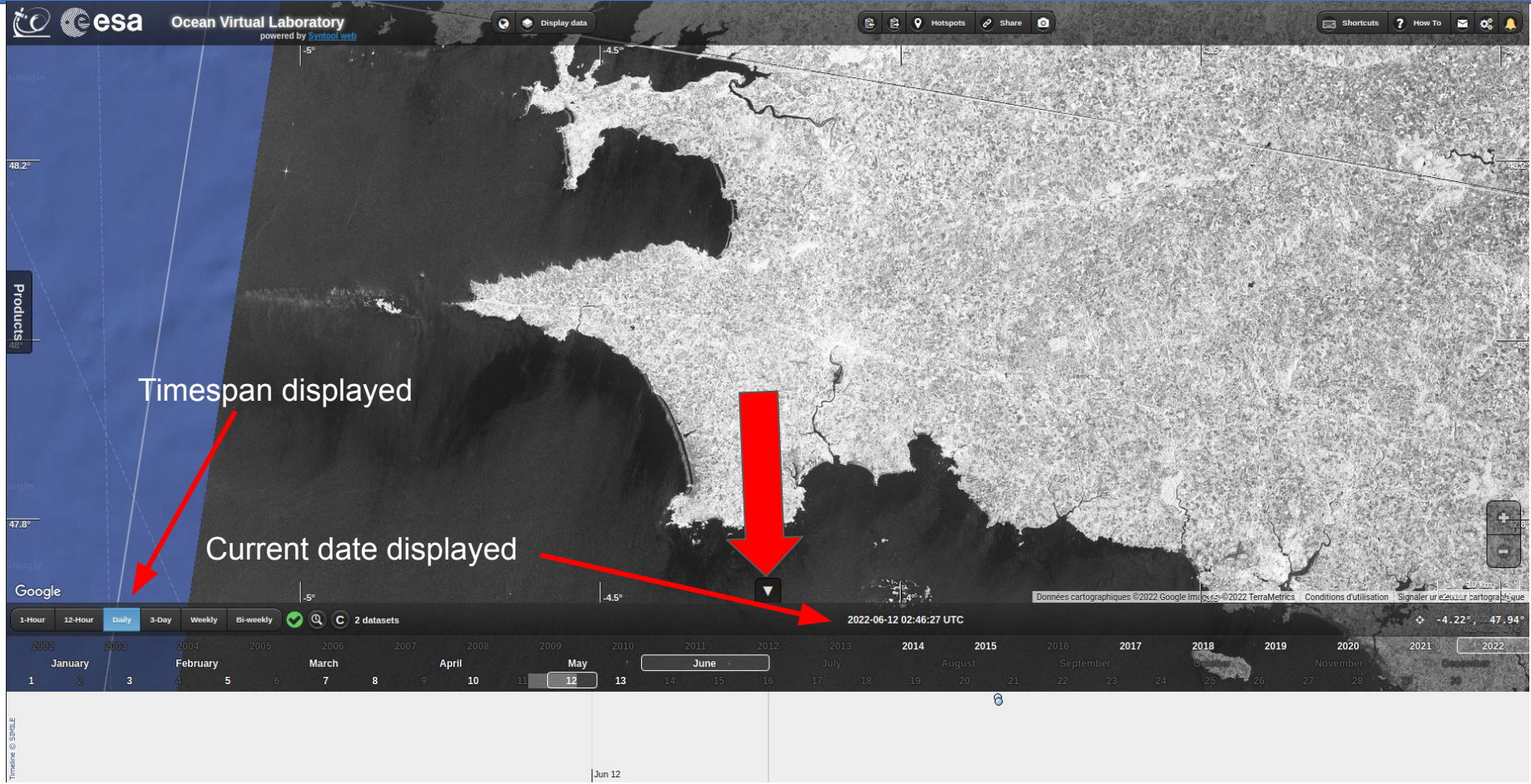
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

January February March April May June July August September October November December

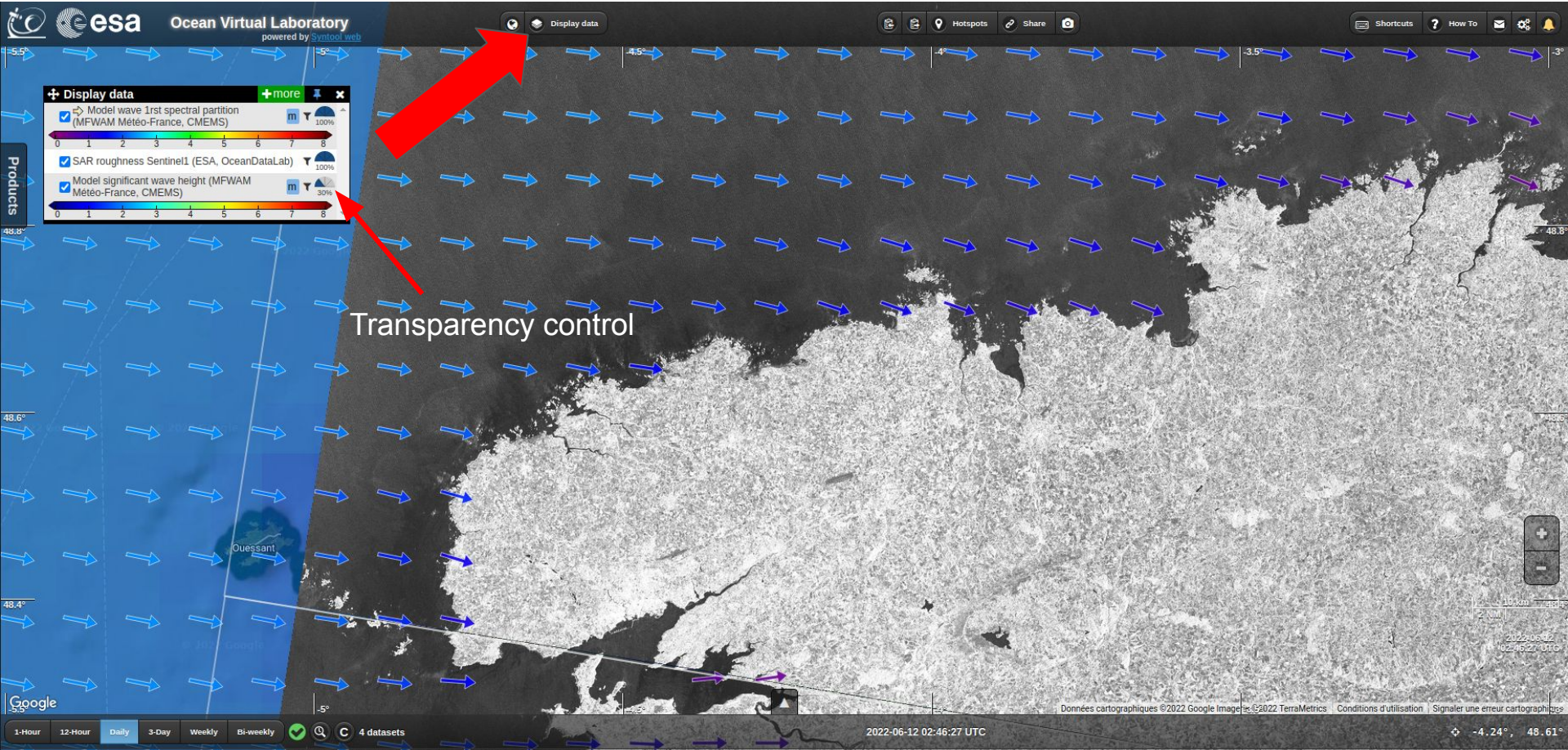
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

OVL online tool

Discover the interface : Timeline and time control

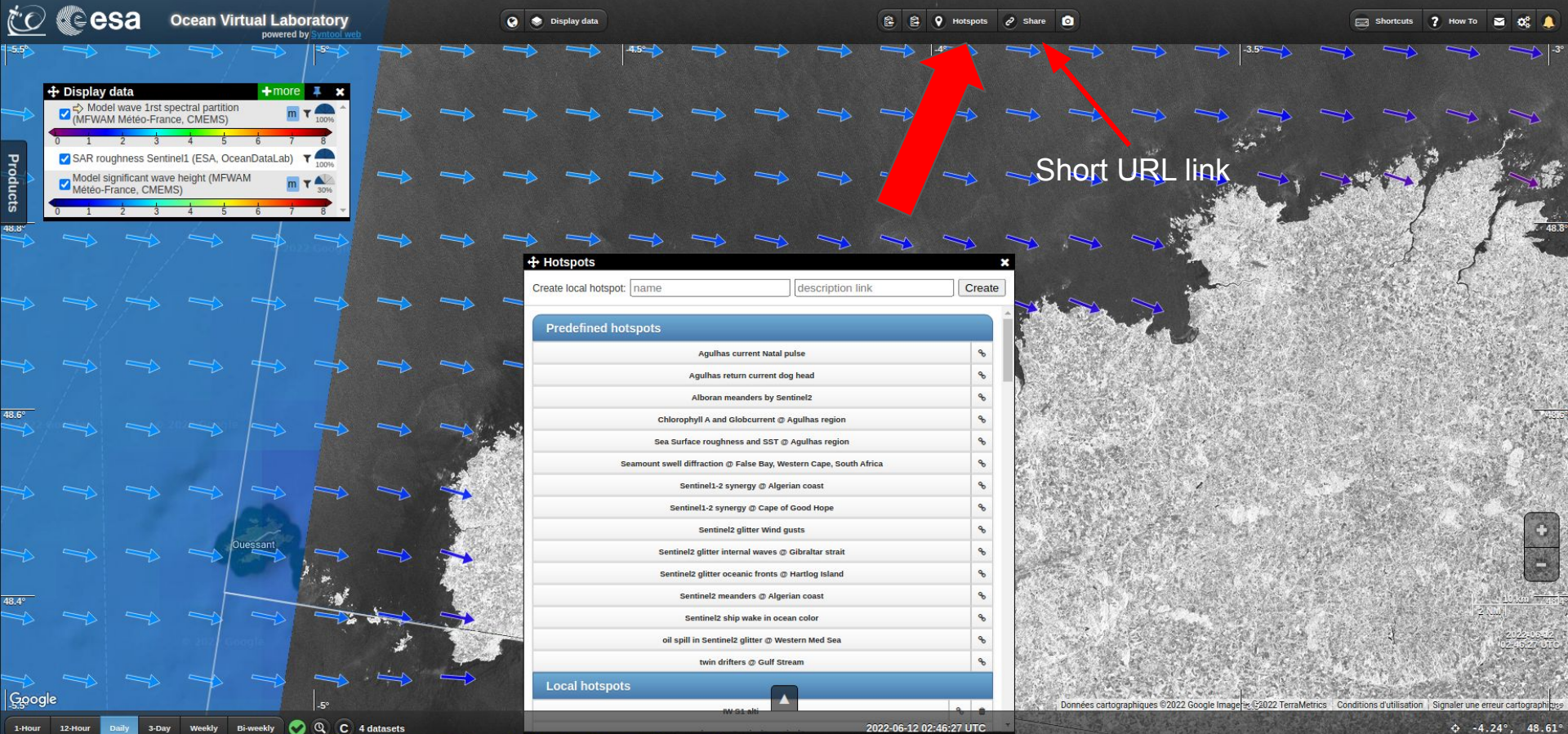


Discover the interface : Transparency and layer order



OVL online tool

Discover the interface : Bookmark and sharing



OVL online tool

Discover the interface : Measuring/Drawing tools

The screenshot displays the Ocean Virtual Laboratory (OVL) online tool interface. The main window shows a grayscale SAR (Synthetic Aperture Radar) image of a coastal area, likely the Gulf of Guinea, with a red arrow pointing to a measurement tool. The tool is a dashed line segment with a red arrow indicating the direction of measurement. The measurement is labeled with the following values:

- 18.92 km
- 10.22 NM
- 77.55° N

The interface includes a sidebar on the left with the following sections:

- Products**
 - Search...
 - Annotation**
 - ☒ User Shapes
 - ☐ Sentinel-1 Level 1 extraction areas
 - ☐ Sentinel-1 Level 2 extraction areas
 - SAR Roughness**
 - ☐ SAR roughness Envisat (ESA, OceanDataLab)
 - ☒ SAR roughness Sentinel1 (ESA, OceanDataLab)
 - ☐ SAR tropical storm roughness Sentinel-1 (ESA, OceanDataLab)
 - ☐ SAR gamma0 IW VV Sentinel1 (ESA, Sinergise)
 - ☐ SAR gamma0 EW HH Sentinel1 (ESA, Sinergise)
 - SAR Doppler**
 - ☐ Envisat SAR doppler (ESA, OceanDataLab)
 - ☐ SAR doppler (ESA)
 - ☐ SAR doppler exp
 - ☐ SAR doppler demo
 - ☐ Sentinel-1 calibrated Doppler centroid anomaly (OceanDataLab/Aresys/Norc...)
 - ☐ WOC SAR doppler radial velocity (NERSC)
 - Ocean Color**
 - ☐ RGB Sentinel2 (ESA, OceanDataLab)
 - ☐ True color OLCI Sentinel-3A (ESA)
 - ☐ False Color SLSTR Sentinel-3A (ESA)
 - ☐ True color OLCI Sentinel-3B

The top of the interface features the ESA logo and the text "Ocean Virtual Laboratory powered by [symtool web](#)". The top right corner contains icons for "Display data", "Hotspots", "Share", and "Shortcuts". The bottom of the interface shows a Google map overlay, a date/time stamp "2022-06-12 02:46:27 UTC", and a status bar with "1-Hour", "12-Hour", "Daily", "3-Day", "Weekly", "Bi-weekly", and "2 datasets".

Press Shift + clic and drag for measuring distance

OVL online tool

Discover the interface : Measuring/Drawing tools

The screenshot displays the Ocean Virtual Laboratory (OVL) online tool interface. The main map area shows a Synthetic Aperture Radar (SAR) image of the ocean, with a coastline visible. The interface includes a left sidebar with product categories, a top navigation bar, and a main map area. Two red arrows point to the 'User Shapes' checkbox and the 'Shortcuts' menu.

Products Sidebar:

- Search...**
- Annotation**
 - ☒ User Shapes
 - ☐ Sentinel-1 Level 1 extraction areas
 - ☐ Sentinel-1 Level 2 extraction areas
- SAR Roughness**
 - ☐ SAR roughness Envisat (ESA, OceanDataLab)
 - ☒ SAR roughness Sentinel1 (ESA, OceanDataLab)
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- Ocean Color**
 - ☐ RGB Sentinel2 (ESA, OceanDataLab)
 - ☐ True color OLCI Sentinel-3A (ESA)
 - ☐ False Color SLSTR Sentinel-3A (ESA)
 - ☐ True color OLCI Sentinel-3B

Map Area:

- Coordinates: -5.5°, -4.5°, -3.5°, -2.5° (Longitude); 48.8° (Latitude)
- Location: Ouessant
- Distance: 18.92 km, 10.22 NM, 77.55° N
- Map controls: Zoom in (+), Zoom out (-), Full screen, etc.

Top Navigation Bar:

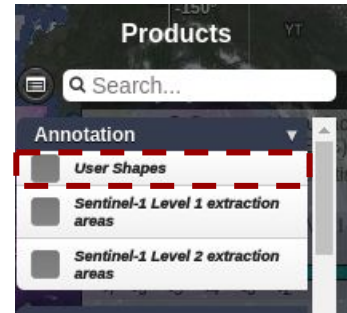
- Display data
- Hotspots
- Share
- Shortcuts
- How To
- Settings
- Notifications

Bottom Bar:

- 1-Hour, 12-Hour, Daily, 3-Day, Weekly, Bi-weekly
- 2 datasets
- 2022-06-12 02:46:27 UTC
- Données cartographiques ©2022 Google Images, ©2022 TerraMetrics
- Conditions d'utilisation | Signaler une erreur cartographique

Drawing capabilities: draw shapes, export, import

- Select “User shapes” in the list of products (in the Annotation group)
- A box with shapes appears on the right, you can choose between point, arrow, polyline, polygon, eddy, mushroom or text
- Select the desired shape and click on the map to draw
TIP: for continuous line drawing, hold down Ctrl (or Cmd on mac)
- You can select a single shape by clicking on it or an ensemble of shapes using Ctrl+A (or Cmd+A on mac), you can edit your selection and export them using the right panel



Look at the Youtube tutorial video for more features: <https://youtu.be/6YPwJCFHBlc>

Discover the interface : to go beyond and analyse specific datasets

Original Data download

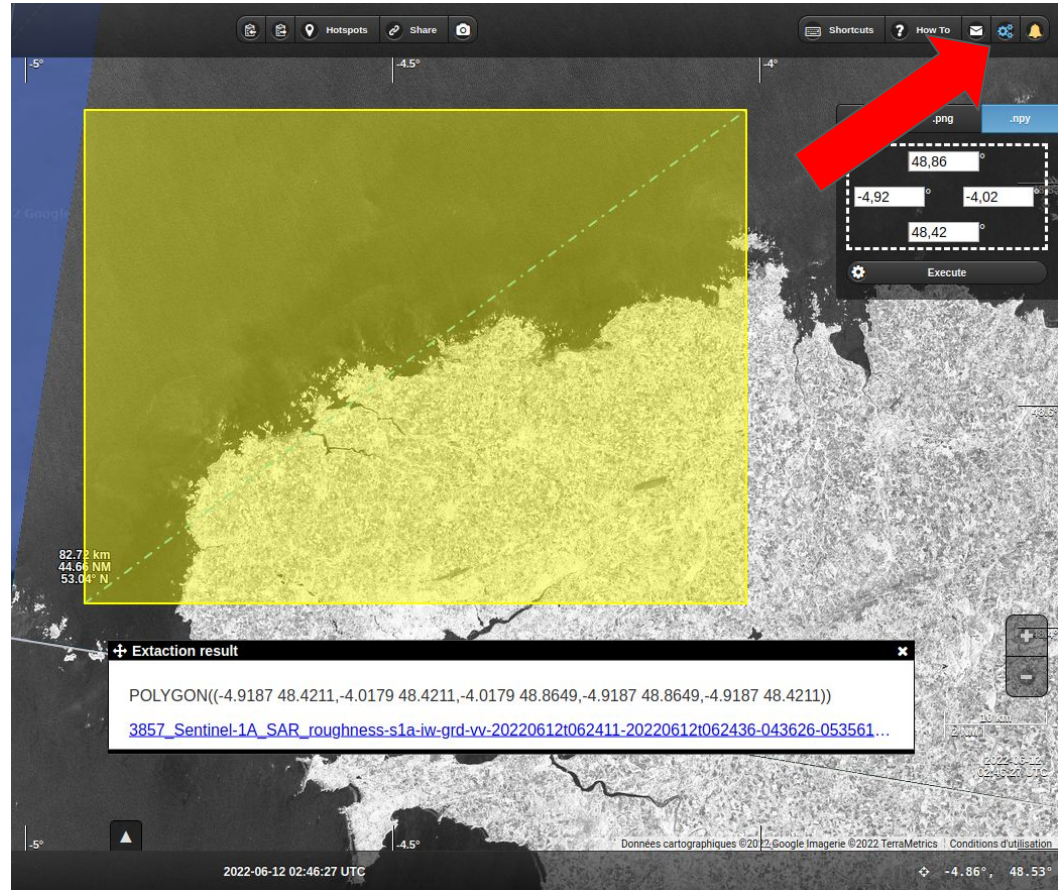
1. Clic on a Product to select it
2. Clic on Get Data link



Discover the interface : to go beyond and analyse specific datasets

Pickle extraction for analysis with Python

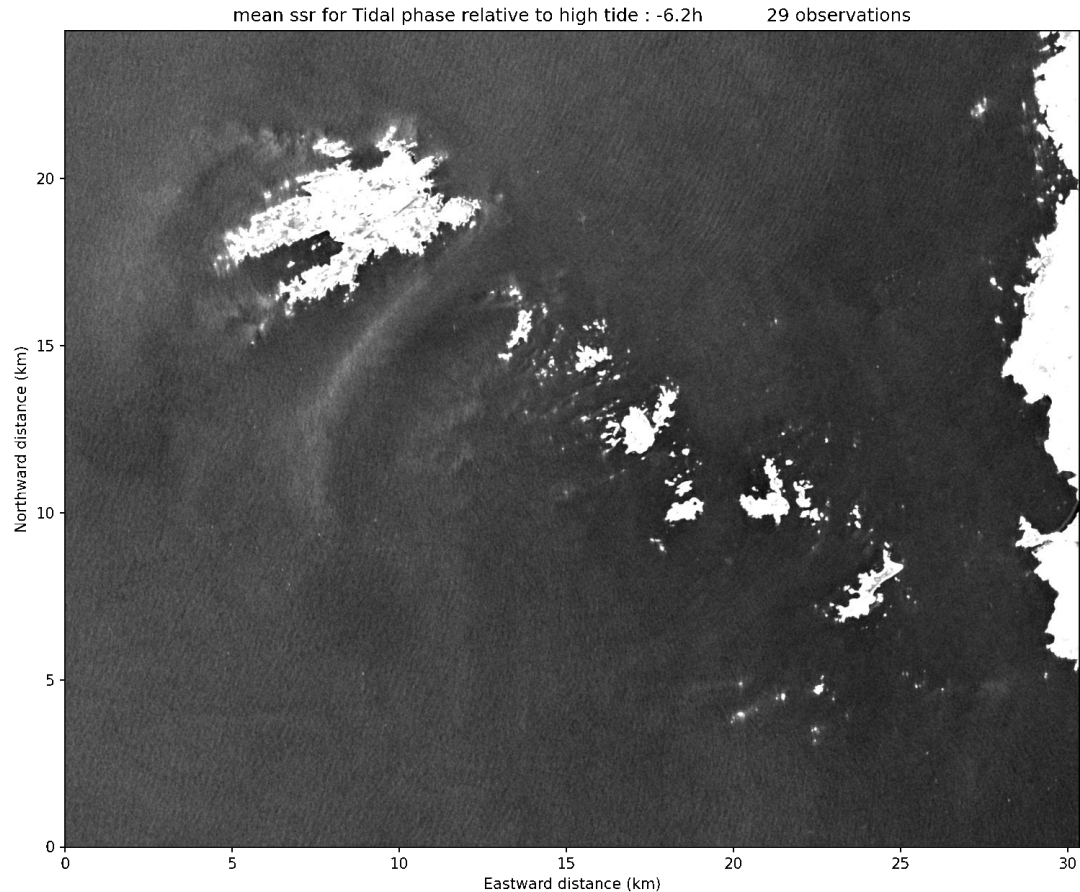
1. Select Sentinel-1 sea surface roughness product
2. Clic on the wheels to show the processing tool Panel
3. Clic on .npy
4. Shift+Click to select an area to extract
5. Clic on Execute



Discover the interface : to go beyond and analyse specific datasets

Simple Python analysis based on .npy extraction

Average value for any 20 min time period relative to the high tide



Contacting us

About the OVL online portal (based on Syntool)

Website: <https://ovl.oceandatalab.com>

By email: syntool@oceandatalab.com

Forum: <https://forum.oceandatalab.com/syntool>

We need you to help improve the tools for the whole community...

Feedback always welcome !

wifi name : invite

Login: oceanix Pass: 8nbqvnfzAzamjmp

Follow us

Website: <https://www.oceandatalab.com>

Youtube: [OceanDataLab](https://www.youtube.com/OceanDataLab)

Twitter: [@oceandatalab](https://twitter.com/oceandatalab)

Linkedin: [OceanDataLab](https://www.linkedin.com/company/OceanDataLab)

