



The dissemination of the SSALTO/DUACS Sea Level Anomalies, Absolute Dynamic Topographies Height and geostrophic velocities and Gridded Wave products is divided between the [Copernicus Marine Environment Monitoring Service \(CMEMS\)](#), the [Copernicus Climate Change Service \(C3S\)](#) and [AVISO+](#).

You will find hereafter the list of products with their dissemination and the useful links to the different services:

0/ CMEMS, C3S and AVISO+ **useful links**

1/ **Experimental Along-track and Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time

2/ **Along-track Sea Level Anomalies and Absolute Dynamic Topography** in Near-Real-Time and in Delayed-time

3/ **Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Near-Real-Time

4/ **Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time **allsat** series

5/ **Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time **twosat** series

6/ **Along-track Sea Level Anomalies and Gridded Sea Level Anomalies for Mozambique** products in Near-real-time

7/ **Gridded Sea Level Anomalies Averages and Climatologies** in Delayed-time

8/ **Along-track and Gridded Wave** Products in Near-real-time

9/ **Along-track and Gridded Wind** Products in Near-real-time



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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**

0/ CMEMS, C3S and AVISO+ useful links

CMEMS links



All the CMEMS links are listed hereafter:

- [Online catalogue](#) of all the CMEMS products
- [Registration](#) to get access to CMEMS products
- [CMEMS Service commitments and Licence](#)
- For questions regarding those products, please connect on: <https://marine.copernicus.eu/contact>

C3S Links

All the C3S links are listed hereafter:



- [Online catalogue](#) of all the C3S products
- [Registration](#) to get access to C3S products
- [C3S Service License Agreement and Privacy Statement](#)
- For questions regarding those products, please connect on: <https://confluence.ecmwf.int//display/CKB/>

Aviso+ Links

All the AVISO+ links are listed hereafter:



- [Online Catalogue](#) of all the AVISO+ products
- [Registration](#) to get access to AVISO+ products
- [AVISO+ License Agreement](#)
- For questions regarding those products, please contact aviso@altimetry.fr



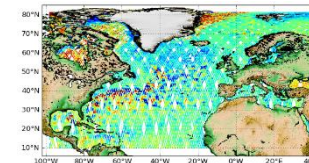
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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**

Created by AVISO+ Januaray 2022 Version 3.6

1/ **Experimental Along-track and Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time. Several products of Sea level heights and currents are disseminated. They are computed with experimental techniques:



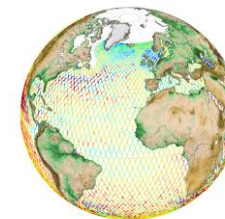
<p style="text-align: center;">AVISO+ product name</p>	<p style="text-align: center;">AVISO+ dissemination</p> 	<p style="text-align: center;">CMEMS dissemination</p> 
<p>Experimental Along-track SLA-H DT 5Hz North Atlantic and Agulhas current</p>	<p style="text-align: center;">See product page</p>	<p style="text-align: center;">SEALEVEL_ATL_PHY_HR_L3_MY_008* on http://marine.copernicus.eu/services-portfolio/access-to-products/</p>
<p>Experimental Gridded SLA-H DT with Dynamic Interpolation Gulf Stream and Udinstev</p>		<p style="text-align: center;">No</p>
<p>Experimental Gridded SLA-UV DT with Dynamic Interpolation Gulf Stream and Udinstev</p>		
<p>Experimental Gridded ADT-H DT with Dynamic Interpolation Gulf Stream and Udinstev</p>		
<p>Experimental Gridded ADT-UV DT with Dynamic Interpolation Gulf Stream and Udinstev</p>		
<p>Experimental Gridded SLA-H DT with Multiscale Interpolation Global</p>		
<p>Experimental Gridded SLA-UV DT with Multiscale Interpolation Global</p>		
<p>Experimental Gridded ADT-H DT with Multiscale Interpolation Global</p>		
<p>Experimental Gridded ADT-UV DT with Multiscale Interpolation Global</p>		
<p>Experimental Gridded SLA-H DT combining altimetry and drifters Gulf of Mexico</p>		
<p>Experimental Gridded SLA-UV DT combining altimetry and drifters Gulf of Mexico</p>		
<p>Experimental Gridded ADT-UV DT combining altimetry and SST Global</p>		



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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**



2/ **Along-track Sea Level Anomalies and Absolute Dynamic Topography** in Near-Real-Time and in Delayed-time (NRT-SLA-H, NRT-ADT-H, DT-SLA-H and DT-ADT-H) for regions Arctic, Black Sea, European Seas, Mediterranean Sea, Global coverage, with the CMEMS services FTP/DGF/WMS (no Subsetter).

➤ In Near Real-Time

AVISO+ product name	AVISO+ dissemination 	CMEMS dissemination 
Along-track SLA-H NRT Global area	<i>No</i>	SEALEVEL_GLO_PHY_L3_NRT_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Along-track ADT-H NRT Global area		SEALEVEL_EUR_PHY_L3_NRT_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Along-track SLA-H NRT Mediterranean		
Along-track ADT-H NRT Mediterranean		
Along-track SLA-H NRT Black Sea		
Along-track SLA-H NRT Europe		
Along-track SLA-H NRT Arctic		Replaced by the global product
Along-track SLA-H NRT Mozambique	<i>See product page</i>	<i>No</i>

➤ In Delayed-Time (REP for REPROCESSING)

Along-track SLA-H DT Global area	<i>No</i>	SEALEVEL_GLO_PHY_L3_MY_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Along-track ADT-H DT Global area		SEALEVEL_EUR_PHY_L3_MY_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Along-track SLA-H DT Mediterranean		
Along-track ADT-H DT Mediterranean		
Along-track SLA-H DT Black Sea		

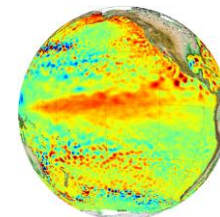


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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**

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3/ **Gridded-Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Near-Real-Time (NRT-MSLA-H, NRT-MSLA-UV, NRT-MADT-H, NRT-MADT-UV) for regions Black Sea, Mediterranean Sea, Global with the CMEMS services FTP/DGF/Subsetter/WMS.

AVISO+ product name	AVISO+ dissemination 	CMEMS dissemination 
Gridded SLA-H NRT Global area	<i>No (only viewable with LAS, note that Mediterranean and Black Seas are viewable via the Europe product))</i>	SEALEVEL_GLO_PHY_L4_NRT_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded SLA-UV NRT Global area		
Gridded ADT-H NRT Global area		
Gridded ADT-UV NRT Global area		
Gridded SLA-H NRT Mediterranean		SEALEVEL_EUR_PHY_L4_NRT_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded SLA-UV NRT Mediterranean		
Gridded ADT-H NRT Mediterranean		
Gridded ADT-UV NRT Mediterranean		
Gridded SLA-H NRT Black Sea		
Gridded SLA-UV NRT Black Sea		
Gridded SLA-H NRT Mozambique	See product page	No
Gridded SLA-UV NRT Mozambique		
Gridded SLA NOISE NRT	No	SEALEVEL_GLO_NOISE_L4_NRT_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/



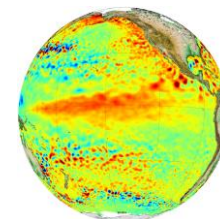
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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**

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4/ **Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time **allsat** series (DT-MSLA-H, DT-MSLA-UV, DT-MADT-H, DT-MADT-UV) for regions Black Sea, Mediterranean Sea, Global with the CMEMS services FTP/DGF/Subsetter/WMS.



The “**allsat**” series means that the Gridded maps have been computed with all the satellites available at a given time. Thus the series are of the best quality but not homogeneous over the time period.

AVISO+ product name	AVISO+ dissemination 	CMEMS dissemination (*) 
Gridded SLA-H DT Global area allsat	<i>No (only viewable with LAS)</i>	SEALEVEL_GLO_PHY_L4_MY_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded SLA-UV DT Global area allsat		
Gridded ADT-H DT Global area allsat		
Gridded ADT-UV DT Global area allsat		
Gridded SLA-H DT Mediterranean allsat		
Gridded SLA-UV DT Mediterranean allsat		SEALEVEL_EUR_PHY_L4_MY_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded ADT-H DT Mediterranean allsat		
Gridded ADT-UV DT Mediterranean allsat		
Gridded SLA-H DT Black Sea allsat		
Gridded SLA-UV DT Black Sea allsat		
Gridded SLA NOISE DT	No	SEALEVEL_GLO_NOISE_L4_REP_OBSERVATIONS_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/

(*) Some other products may be disseminated by CMEMS in addition to those identified here



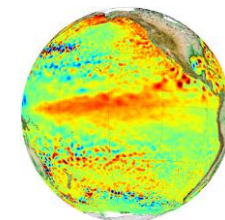
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Transition **AVISO+** to **CMEMS** and **AVISO+** to **C3S**

Created by AVISO+ January 2022 Version 3.6

5/ **Gridded Sea Level Anomalies and Absolute Dynamic Topography heights and currents** in Delayed-time **twosat** series (DT-MSLA-H, DT-MSLA-UV, DT-MADT-H, DT-MADT-UV) for regions Black Sea, Mediterranean Sea, Global with the C3S service.



The “**twosat**” series means that the Gridded maps have been computed with two satellites at most. Thus the series are homogeneous over the time period thanks to a stable sampling.

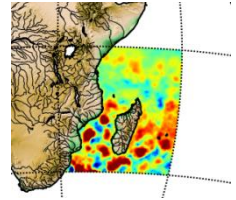
AVISO+ product name	C3S dissemination  Climate Change Service climate.copernicus.eu	CMEMS dissemination 
Gridded SLA-H DT Global area twosat	Sea level daily gridded data for the global ocean from 1993 to present	SEALEVEL_GLO_PHY_CLIMATE_L4_MY_008_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded SLA-UV DT Global area twosat		
Gridded ADT-H DT Global area twosat		
Gridded ADT-UV DT Global area twosat		
Gridded SLA-H DT Mediterranean twosat	Sea level daily gridded data for the Mediterranean Sea from 1993 to present	Not yet
Gridded SLA-UV DT Mediterranean twosat		
Gridded ADT-H DT Mediterranean twosat		
Gridded ADT-UV DT Mediterranean twosat		
Gridded SLA-H DT Black Sea twosat	Sea level daily gridded data for the Black Sea from 1993 to present	
Gridded SLA-UV DT Black Sea twosat		




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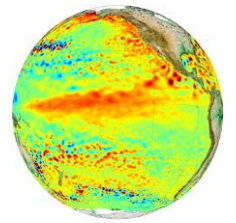
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6/ Along-track Sea Level Anomalies and Gridded Sea Level Anomalies for Mozambique products



AVISO+ product name	AVISO+ dissemination 
Along-track SLA-H NRT Mozambique	See product page
Gridded SLA-H NRT Mozambique	
Gridded SLA-UV NRT Mozambique	

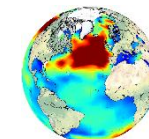
7/ Gridded Sea Level Anomalies Averages and Climatologies in Delayed-time.







AVISO+ product name	AVISO+ dissemination 
Gridded SLA-H, SLA-UV, ADT-H, ADT-UV Means and Climatologies Global	See product page
Gridded EKE Means and Climatologies Global	
Gridded SLA-H, SLA-UV, ADT-H, ADT-UV Means and Climatologies Europe	See product page
Gridded EKE Means and Climatologies Europe	

8/ Along-track and Gridded Wave products in near-real-time.

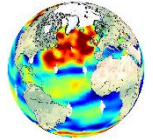
you will find below a description of the Wave products at different levels and their dissemination



Product name (was not necessarily distributed by AVISO+)	AVISO+ dissemination 	CMEMS dissemination 
Along-track Wave products (altimetry, L2 SWH included in S/O/I/GDR) Missions: T/P, J1, J2, J3, AL	Yes see product page	No
Along-track Wave CFOSAT products NRT (SWIM, L1A, L1B, L2, L2P (Nadir)) Mission: CFOSAT	Yes see product page	No
Along-track Wave products NRT (altimetry, L2P) Missions: Copernicus S3A & B	Yes see product page	No
Along-track Wave products NRT (altimetry, L3) Missions: J3, AL, C2, Copernicus S3A & B, CFOSAT	No	WAVE_GLO_WAV_L3_SWH_NRT_OBSERVATIONS_014_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Along-track Wave products NRT (spectral, L3) Missions: Copernicus S1A & B	No	WAVE_GLO_WAV_L3_SPC_NRT_OBSERVATIONS_014_* on http://marine.copernicus.eu/services-portfolio/access-to-products/
Gridded Wave products NRT (altimetry, L4) Multi-mission product	Reprocessed data for period 2009-2019 see table below and product page	WAVE_GLO_WAV_L4_SWH_NRT_OBSERVATIONS_014_* on http://marine.copernicus.eu/services-portfolio/access-to-products/ see below a description of the differences between the AVISO+ and the CMEMS products
Other Multi-Year altimetry and spectral products available on CMEMS	No	Please refer to WAVE products on http://marine.copernicus.eu/services-portfolio/access-to-products/

Differences between CMEMS and AVISO+ L4 Wave products		
Input data	IGDR for available satellites (J1, EN, J2, J3, AL and S3A) Cross-calibration of wave histograms using Jason2 as a reference. 2-day averaging of wave measurements by 1°x1° boxes	CMEMS L3 NRT data for AL, J3, S3A, S3B, C2 (WAVE_GLO_WAV_L3_SWH_NRT_OBSERVATIONS_014_*) L3 benefit from a state-of-the-art editing. They are cross-calibrated using Jason-3 as a reference and calibrated on a buoy network. They also benefit from a denoising processing (see Quality Information Document).
Processing	<ul style="list-style-type: none"> Smoothed and extrapolated by a Loess filter of 16° x 8° (<i>gaps due to missing data are filled, signal is strongly smoothed</i>). Extrapolation is limited to 8°x4°, in order to avoid artificially filling areas without data. A reduced bathymetry mask is applied: each point more than 2° from the sea is forced to default value. If more than 30% of the points have default values, no map will be generated. Reprocessing with an extrapolation of the grid from 2013/09/14 New CF-compliant format see Product page see Reprocessing page 	Two types of wave gridded fields (details in the Product User Manual): <ul style="list-style-type: none"> VAVH_DAILY_MEAN: provides raw daily statistics derived from satellite measurements <ul style="list-style-type: none"> 1-day averaging of wave measurements by 2°x2° boxes. No interpolation or smoothing. Only measurements of the day (from 00UTC to 23:59 UTC) are used. If no measurements are available in a grid cell, the value is set to NaN. A bathymetry and a dynamic ice masks are applied. Cells are masked when more than a third of the cell is land and ice concentration is higher than 50%. Additional variables are computed from the available daily L3 measurements: VAVH_DAILY_STD, VAVH_DAILY_MAX and VAVH_DAILY_NBR, respectively the standard deviation, the maximum value and the number of available measurements. VAVH_INST: provides an estimate of the instantaneous wave field each day at 12UTC with no empty cells <ul style="list-style-type: none"> 1.5-day weighted average of wave measurements by 2°x2° boxes to give more weight to measurements close to 12UTC. Interpolation to fill boxes without measurements. No smoothing. A bathymetry and a dynamic ice masks are applied. Cells are masked when more than a third of the cell is land and ice concentration is higher than 50%. Additional parameters are available on the same grid: VAVH_INST_NBR and VAVH_INST_SCORE.
Temporal coverage	2009/09–2019/12	2019/07 - ongoing

9/ Along-track and Gridded Wind products in near-real-time.



<p>AVISO+ product name</p>	<p>AVISO+ dissemination</p> 	<p>CMEMS dissemination</p> 
<p>Along-track Wind products (altimetry, L2 wind included in S/O/I/GDR) Missions: T/P, J1, J2, J3, AL</p>	<p>Yes see product page</p>	<p>No</p>
<p>Along-track Wind CFOSAT products NRT (SCAT, L1B, L2A, NRT) Mission: CFOSAT</p>	<p>Yes see product page</p>	<p>No</p>
<p>Gridded Wind products NRT (altimetry, L4) Multi mission product</p>	<p>Reprocessed products with the following changes:</p> <ul style="list-style-type: none"> • The time series begins on Sept 2013 • Addition of S3A mission (with cross-calibration of SWH) from mid 2016. • Reprocessing with an extrapolation of the grid • New CF-compliant format • see Product page • see Reprocessing page • <i>temporal coverage: 2013/09–2019/12</i> 	<p>No</p>



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