



ECV IN BRIEF

Domain: Ocean
Subdomain: Physical
Scientific Area: Hydrosphere
Products: Sea Surface Salinity



Sea Surface Salinity

Sea surface salinity observations contribute to monitoring the global water cycle (evaporation, precipitation and glacier and river runoff). On large scales, surface salinity can be used to infer long-term changes of the global hydrological cycle. Surface salinity, together with surface temperature, is indicative of the surface expression of ocean frontal features and eddies.

ECV Product¹

PRODUCT	DEFINITION	REQUIREMENTS				
		FREQ.	RESOLUTION	REQUIRED MEASUREMENT UNCERTAINTY	STABILITY	STANDARDS/ REFERENCES
SEA SURFACE SALINITY	Salinity of seawater, at or near the surface - Salinity is unitless, and is expressed with the suffix psu (practical salinity unit, PSS-78).	Hourly to monthly	1-100 km	0.01 psu	0.001 psu	See EOVS Specification Sheet at www.goosocan.org/eov

Data Sources²

- ▶ The Global Temperature and Salinity Profile Programme (GTSP)
https://www.nodc.noaa.gov/GTSP/access_data/index.html
- ▶ Physical Oceanographic Distributed Active Archive Center (PODAAC)
<http://podaac.jpl.nasa.gov/aquarius>
- ▶ Centre Aval de Traitement des Données SMOS (CATDS)
<http://www.catds.fr/>

¹ Current Products and Requirements as in the Implementation Plan 2016 (GCOS-200). GCOS is reviewing and will update the requirements until 2022. More information on: gcos.wmo.int and climatedata.wmo.int.

² This list provides sources for openly accessible data sets with worldwide coverage for which metadata is available. It is curated by the respective GCOS ECV Steward(s). The list does not claim to be complete. Anyone with a suitable dataset who would like it to be added to this list should contact GCOS.



- ▶ Argo gridded In situ product
http://www.argo.ucsd.edu/Gridded_fields.html/Argo/Products/ISAS-T-S-fields/

Sea Surface Salinity Map

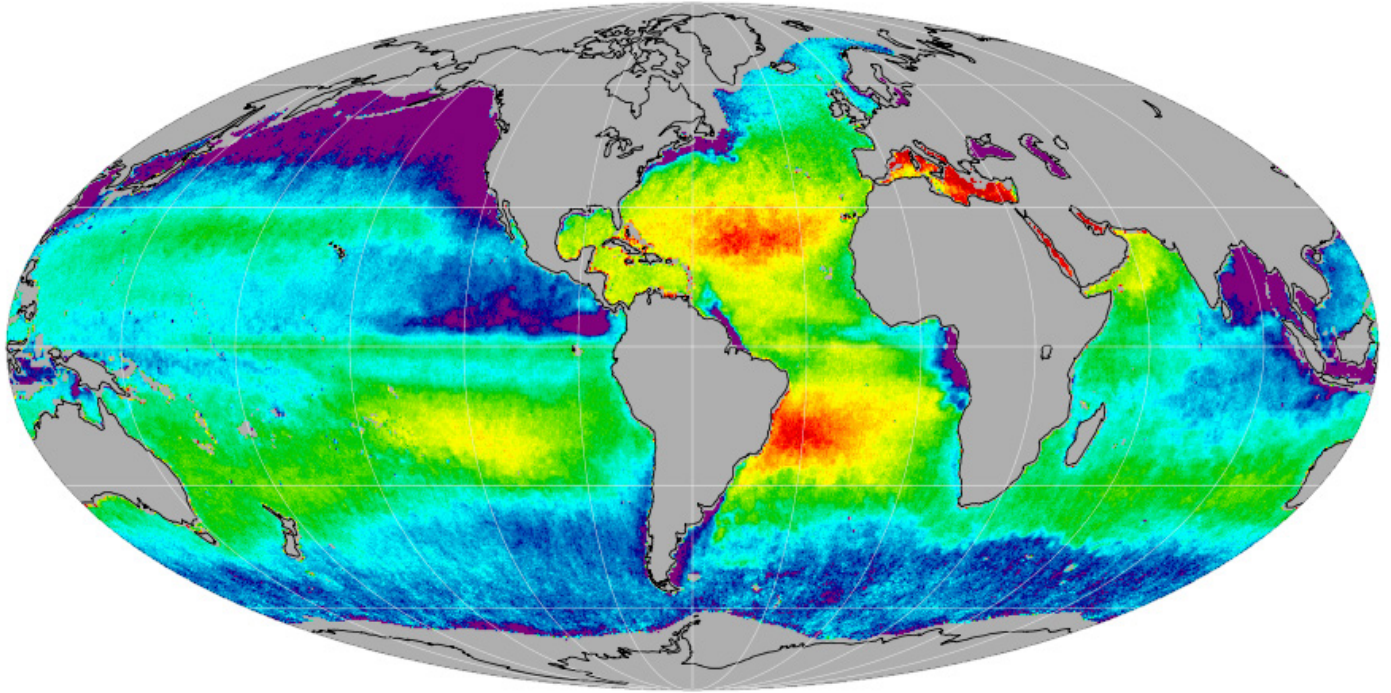


Figure: NASA Aquarius Mission - SMAP Sea Surface Salinity, April 2016.

Source: https://aquarius.umaine.edu/cgi/gal_smmap.htm



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