EEA geospatial data catalogue

Assessment of contamination status using CHASE+ excluding mercury (Hg) and PBDEs, Mar. 2019

This dataset presents the resulting assessment grid (based on the EEA reference grid) with the classification of chemical status of the transitional, coastal and marine waters in the context of the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD). This classification has been performed using the CHASE+ tool, with classifications of the matrices 'water', 'sediment' and 'biota' and indicators of 'biological effects', as well as an integrated classification of chemical status, combining results of all matrices. The chemical status is evaluated in five classes, where NPAhigh and NPAgood are recognised as 'non-problem areas' and PAmoderate, PApoor and PAbad are recognised as 'problem areas'. This is the assessment made excluding concentrations of mercury (Hg) and polybrominated diphenyl ethers (PBDEs)

The overall area of interest used is based on the marine regions and subregions under the Marine Strategy Framework Directive. Additionally, Norwegian (Barent Sea and Norwegian Sea) and Icelandic waters ('Iceland Sea') have been added (see Surrounding seas of Europe). Note that within the North East Atlantic region only the subregions within EEZ boundaries (~200 nm) have been included.

This dataset underpins the findings and cartographic representations published in the report "Contaminants in Europe's Seas" (EEA, 2019): https://www.eea.europa.eu/publications/contaminants-in-europes-seas.

Simple

Identification info

Date (Creation)	2019-03-06
Date (Publication)	2019-03-21
Edition	01.00
Citation identifier	eea_v_3035_20_km_chase-exclhgpbdes_p_2009-2016_v01_r00
Citation identifier	DAT-211-en

Point of contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu	http://www.eea.europa.eu	Point of contact
European Environment Agency		sdi@eea.europa.eu		Custodian

Spatial representation type	Vector

Spatial resolution

Spatial resolution	20 km

Spatial resolution

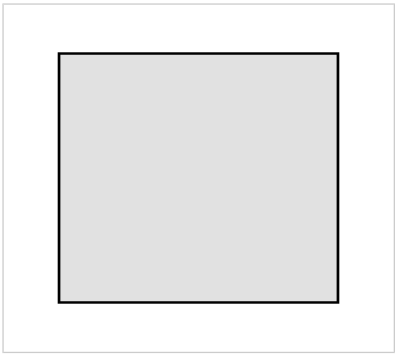
Spatial resolution	100 km

Topic category

- Environment

Extent

84.64	N	22.25	S	92.08	E	-79.06	W



Temporal extent

Time period	2009-01-01 2016-12-31

Extent

Maintenance and update frequency	As needed
GEMET - INSPIRE themes, version 1.0	• Oceanographic geographical features
GEMET	• contamination • marine biota • environmental quality • good chemical status • sea • environmentally dangerous substance • sea water • indicator-based assessment • marine sediment
Continents, countries, sea regions of the world.	• Iceland Sea • Barents Sea • Baltic Sea • English Channel • Adriatic Sea • Celtic Sea • Black Sea • Mediterranean Sea • Kattegat • Bay of Biscay • Norwegian Sea • Aegean Sea • Ionian Sea • North Sea
Spatial scope	• European
EEA Management Plan	• 2018 1.6.2
EEA topics	• Biodiversity: state of habitats and species • Chemicals • Pollution

	• Seas and coasts • Water

Resource constraints

Use constraints	Other restrictions
Other constraints	License CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/). Copyright holder: European Environment Agency (EEA).

Resource constraints

Access constraints	Other restrictions
Other constraints	no limitations to public access

Associated resource

Association Type	Cross reference
Metadata Reference	• Assessment of contamination status using CHASE+, Mar. 2019

Associated resource

Association Type	Cross reference
Metadata Reference	• Assessment of eutrophication status in European seas using HEAT+, May 2019

Language	English

Distribution Information

Distribution format	• SHP
OnLine resource	https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_3035_20_km_chase-exclhgpbdes_p_2009-2016_v01_r00
OnLine resource	Direct download
OnLine resource	https://water.discomap.eea.europa.eu/arcgis/rest/services/Marine/CHASE_contaminants_excluding_HG_PBDEs/MapServer
OnLine resource	https://water.discomap.eea.europa.eu/arcgis/services/Marine/CHASE_contaminants_excluding_HG_PBDEs/MapServer/WMSServer?request=GetCapabilities&service=WMS
OnLine resource	Contaminants in Europes seas INPUT material
OnLine resource	Contaminants in Europes seas RESULTS-material

Data quality info

Hierarchy level	Dataset

Report

Result

Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08

Explanation	See the referenced specification

Resource lineage

Statement	This assessment is based on data on contaminants, monitored in transitional, coastal and marine waters in the context of the WFD and the MSFD. The part of reported data from water, sediment and biota, as well as the information about biological effects, are derived from the DOME data portal of the International Council for the Exploration of the Sea (ICES). Other key data sources are data reported under the European Environment Information and Observation Network (Eionet), EMODnet Chemistry (the Baltic Sea and the Black Sea) and the EMBLAS project (Black Sea). In addition, France and Portugal have made new data sets available. For this analysis, Europe's seas were divided into grid cells of 20 × 20 km2 in coastal waters and 100 × 100 km2 in offshore areas. The CHASE+ methodology is a simple five-step procedure applied in every assessment unit. The five steps are: Step (1): substances/indicators are grouped into four categories (C1: water; C2: sediment; C3: biota, C4: biological effects). Step (2): for each individual substance /indicator, a contaminant ratio (CR = Cstatus/Cthreshold) is calculated. Step (3): for categories C1-3, a contamination score (CS) is calculated. Step (4): each category is subdivided into five status classes with class boundaries: 0.0-0.5 (NPAhigh), 0.5-1.0 (NPAgood), 1.0-5.0 (PAmoderate), 5.0-10.0 (PApoor) and > 10.0 (PAbad). Step (5): category-specific classifications are subsequently combined for each assessment unit into an integrated classification of 'non-problem area' (NPA) or 'problem area' (PA) by using the worst classification — the 'one-out, all-out' principle. Based on the EEA reference grid, two grids have been developed covering the Marine Regions and Sub-regions of Europe. The first grid 100x100 km cell is used in offshore areas (> 20 km from the coastline); the second grid 20x20 km covers the coastal areas (<= 20 km from the coastline). The grid sizes were chosen after an evaluation of data availability versus the need for sufficient detail in the resulting assessment. Each cell in the grids has a unique identification defined from the lower left UTM coordinates. The CHASE+ results are associated to the unique cells in the grids. More information can be found in the report "Contaminants in Europe's seas" and online material on https://www.eea.europa.eu/publications/contaminants-in-europes-seas/.
Hierarchy level	Dataset
Source	• EEA marine assessment grid, Jan. 2017

Reference System Information

Reference System Information

Code	EPSG:3035

Metadata

Metadata identifier	fc018b57-05ba-4692-b96b-809983a3a983
Language	English
Character encoding	UTF8

Contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu		Point of contact

Type of resource

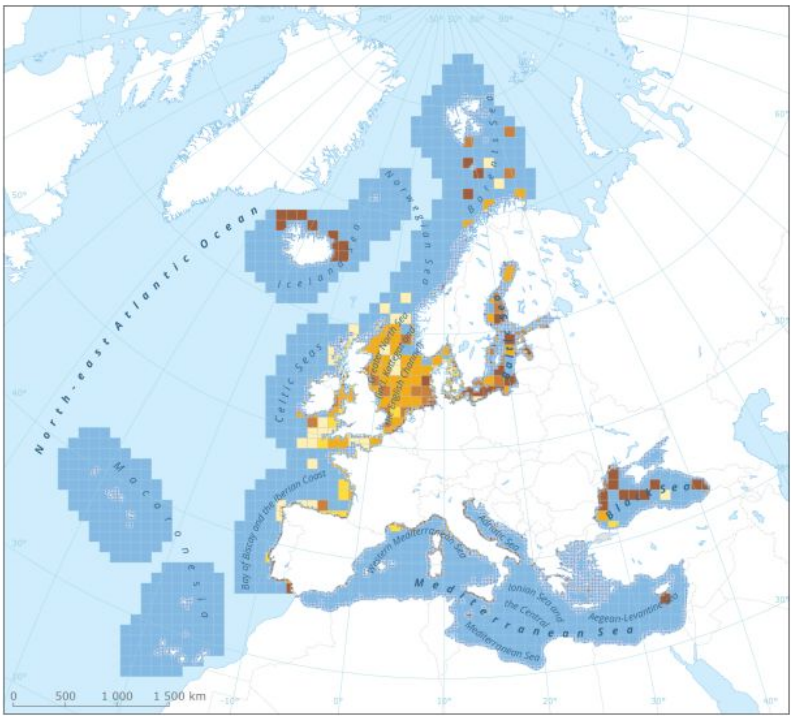
Resource type	Dataset
Metadata linkage	https://sdi.eea.europa.eu/catalogue/srv/api/records/fc018b57-05ba-4692-b96b-809983a3a983?language=all
Date info (Creation)	2019-04-17T08:02:49Z
Date info (Revision)	2025-10-09T11:24:59.178684Z

Metadata standard

Title	ISO 19115/19139

Edition	1.0

Overviews



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