



Risk of collision with whales in Europe Seas, Jun. 2020

The raster dataset represents the risk of collision of whales with vessels in Europe Seas.

The most vulnerable species from ship strikes are cetaceans and turtles, since they go to the surface to breathe. On the other hand, their migration routes can overlap with shipping lanes. The collisions can produce the death or injury of the animals, and are an important threat for the conservation of these species.

The dataset has been prepared in the context of the development of the first European Maritime Transport Environmental Report (EMSA-EEA report, 2021: <https://www.eea.europa.eu/publications/maritime-transport>).

Simple

Identification info

| Date (Creation) | 2019-11-01 | | | | | | | | | | | | | | | |
|-----------------------------|---|-------------------------|---|-------------------------|---------|------|-----------------------------|--|-------------------|---|------------------|-----------------------------|--|-------------------|---|-----------|
| Date (Publication) | 2020-06-16 | | | | | | | | | | | | | | | |
| Edition | 01.00 | | | | | | | | | | | | | | | |
| Citation identifier | eea_r_3035_1_km_risk-collision_p_2019_v01_r00 | | | | | | | | | | | | | | | |
| Citation identifier | DAT-252-en | | | | | | | | | | | | | | | |
| Point of contact | <table border="1"><thead><tr><th>Organisation</th><th>Individual</th><th>Electronic mail address</th><th>Website</th><th>Role</th></tr></thead><tbody><tr><td>European Environment Agency</td><td></td><td>sdi@eea.europa.eu</td><td>http://www.eea.europa.eu</td><td>Point of contact</td></tr><tr><td>European Environment Agency</td><td></td><td>sdi@eea.europa.eu</td><td>http://www.eea.europa.eu</td><td>Custodian</td></tr></tbody></table> | 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 | http://www.eea.europa.eu | Custodian |
| 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 | http://www.eea.europa.eu | Custodian | | | | | | | | | | | | |
| Spatial representation type | Grid | | | | | | | | | | | | | | | |

Spatial resolution

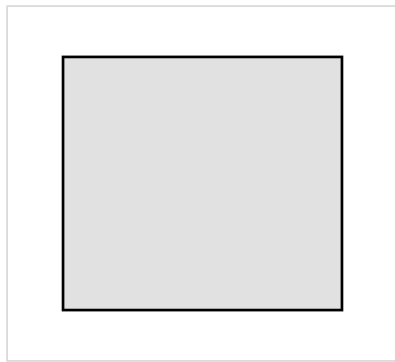
| | |
|--------------------|---------|
| Spatial resolution | 0.5 deg |
|--------------------|---------|

Spatial resolution

| | |
|--------------------|------|
| Spatial resolution | 1 km |
|--------------------|------|

| | |
|----------------|--|
| Topic category | <ul style="list-style-type: none">EnvironmentOceans |
|----------------|--|

Extent



Temporal extent

| | |
|---|--|
| Time period | 2019-10-01 2019-10-31 |
| Extent | |
| Maintenance and update frequency | As needed |
| GEMET - INSPIRE themes, version 1.0 | <ul style="list-style-type: none"> • Species distribution |
| GEMET | <ul style="list-style-type: none"> • marine ecosystem • risk • environment • ship • whale • marine environment • sea • ocean • aquatic environment • environmental quality • marine biology |
| Continents, countries, sea regions of the world. | <ul style="list-style-type: none"> • Bay of Biscay • Northeast Atlantic Ocean (40W) • Iceland Sea • Kattegat • English Channel • Norwegian Sea • North Sea • Adriatic Sea • Celtic Sea • Barents Sea • Baltic Sea • Mediterranean Sea • Ionian Sea • Black Sea |
| Spatial scope | <ul style="list-style-type: none"> • European |
| EEA Management Plan | <ul style="list-style-type: none"> • 2021 1.2.5 |

| | |
|------------|--|
| EEA topics | <ul style="list-style-type: none"> • Biodiversity • Seas and coasts • Nature protection and restoration • Transport and mobility |
|------------|--|

Resource constraints

| | |
|--------------------|---|
| Access constraints | Other restrictions |
| Other constraints | no limitations to public access |

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). |
| Language | English |

Distribution Information

| | |
|---------------------|---|
| Distribution format | <ul style="list-style-type: none"> • GeoTIFF |
| OnLine resource | https://sdi.eea.europa.eu/webdav/datastore/public/eea_r_3035_1_km_risk-collision_p_2019_v01_r00/Risk_of_WhaleShip_collision_ShippingLnTransformed.tif |
| OnLine resource | Direct download |
| OnLine resource | https://water.discomap.eea.europa.eu/arcgis/rest/services/Marine/Risk_of_collision_with_whales/MapServer |
| OnLine resource | https://water.discomap.eea.europa.eu/arcgis/services/Marine/Risk_of_collision_with_whales/MapServer/WMServer?request=GetCapabilities&service=WMS |
| OnLine resource | European Maritime Transport Environmental Report 2021 |

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 | The risk of collision with whales was created using the EMODnet Human Activities Vessel Density Map 2017, considering all ships, and taking the year average value, together with expert reviewed whale distribution models from AQUAMAPS, version 10/2019 (https://www.aquamaps.org/) for whales that are regarded as having a risk of colliding with ships. Regarding the EMODnet vessel density raster, values over 100 were truncated to 100 to remove high value cells due to ships idling in ports or anchoring sites with their AIS transponders turned on. Distribution model values for blue whale, sei whale, humpback whale, sperm whale, fin whale and northern right whale were summed per 0.5-degree c-squares. The northern right whale model only describes the range of the western population of this species, since the eastern population is probably almost extinct. Thus, the northern right whale model only partly |
|-----------|--|

overlaps with the EEA area on interest. Lastly, the summed distribution models were multiplied with the truncated EMODnet vessel density data, which were log transformed (ln+1).

| | |
|-----------------|---|
| Hierarchy level | Dataset |
| Source | <ul style="list-style-type: none">• Probability of whales occurrence in Europe Seas, Jun. 2020• https://www.emodnet-humanactivities.eu/search-results.php?dataname=Vessel+Density+• Europe's Seas - version 1, Dec. 2018 |

Reference System Information

Reference System Information

| | |
|------|---------------------------|
| Code | EPSG:3035 |
|------|---------------------------|

Metadata

| Metadata identifier | 22ad5ddf-967d-4ce7-9933-f7ac89e0b638 | | | | | | | | |
|-----------------------------|---|-------------------------|------------------|-------------------------|--------------|-----------------------------|--|-------------------|------------------|
| Language | English | | | | | | | | |
| Character encoding | UTF8 | | | | | | | | |
| Contact | <table border="1"><thead><tr><th>Organisation</th><th>Individual</th><th>Electronic mail address</th><th>Website Role</th></tr></thead><tbody><tr><td>European Environment Agency</td><td></td><td>sdi@eea.europa.eu</td><td>Point of contact</td></tr></tbody></table> | Organisation | Individual | Electronic mail address | Website Role | European Environment Agency | | sdi@eea.europa.eu | Point of 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/22ad5ddf-967d-4ce7-9933-f7ac89e0b638 |
| Date info (Creation) | 2020-06-17T12:20:06Z |
| Date info (Revision) | 2025-10-09T10:40:45.752647Z |

Metadata standard

| | |
|---------|-----------------|
| Title | ISO 19115/19139 |
| Edition | 1.0 |

Overviews



Provided by

