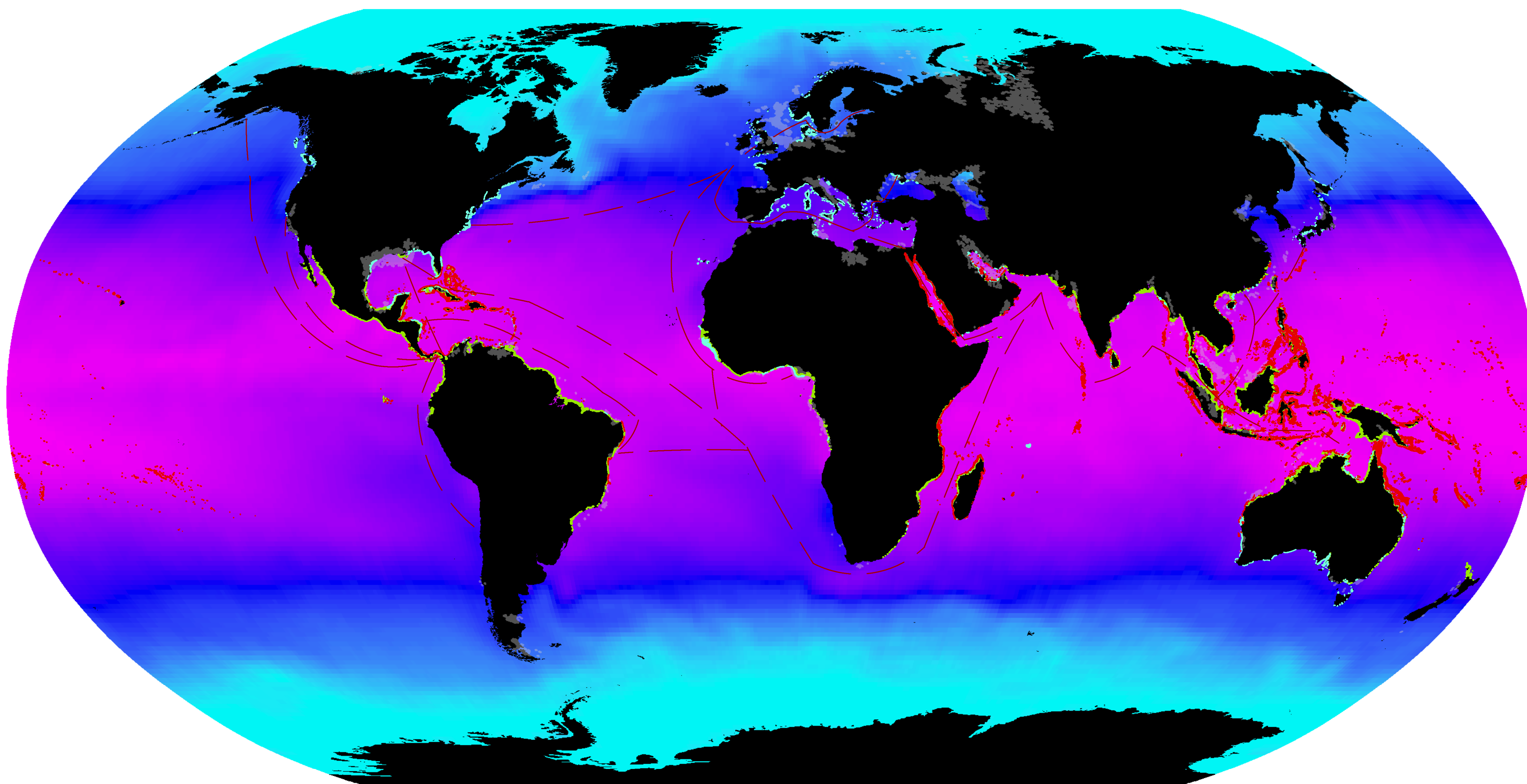










Global Oil Spill Vulnerability Analysis

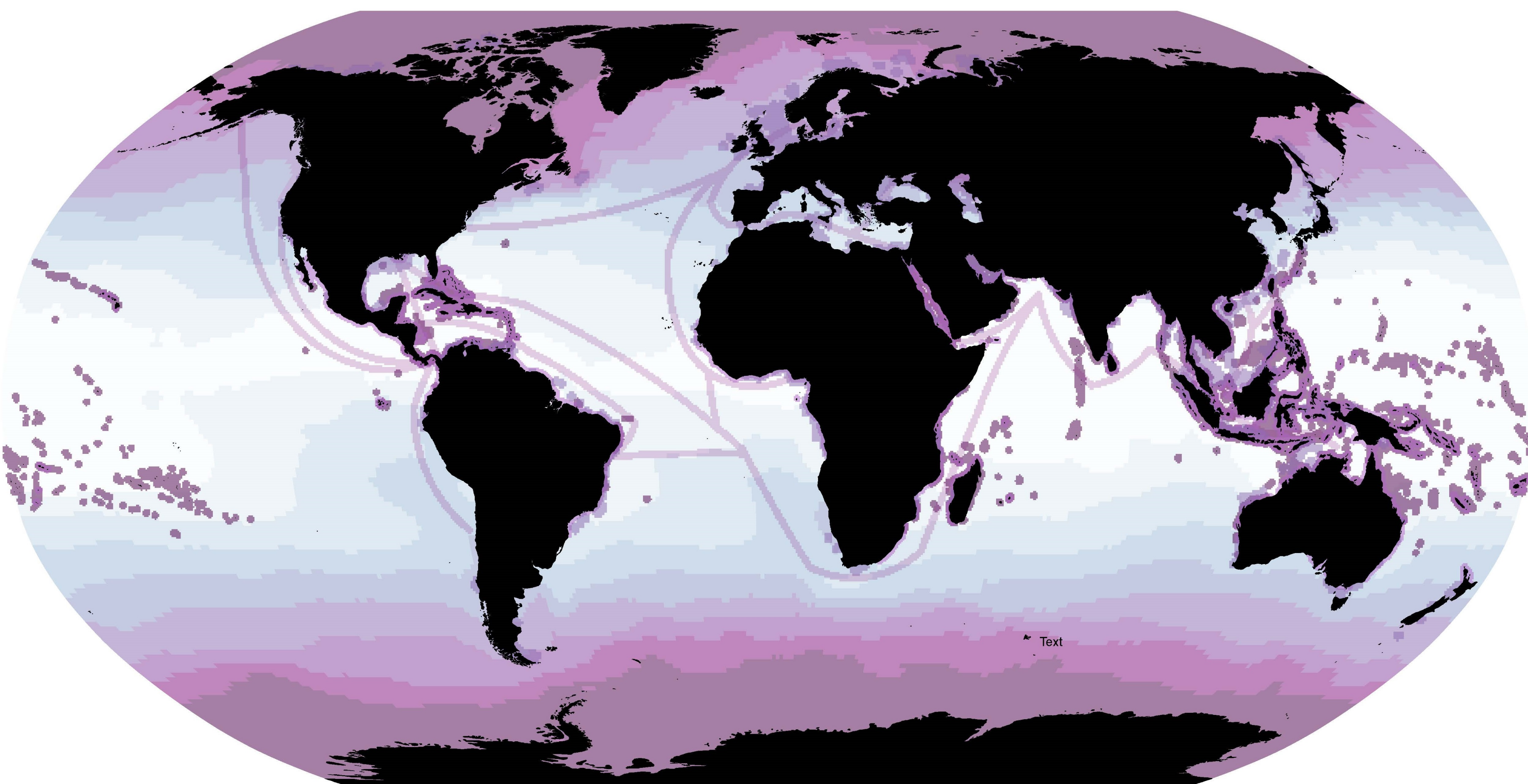


Oil Spill Index Criteria




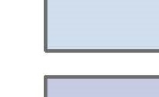
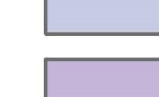




-  Oil Shipping Routes
-  Coral Reefs
-  Seagrasses
-  Mangroves
-  Oil Reserves
-  ne_50m_land

Sea Surface Temperature

- Degrees Celsius
-  High : 31.35
 -  Low : -1.8



Vulnerability Index

-  1
-  2
-  3
-  4
-  5
-  6
-  7
-  8
-  9

Oil spills are a frequent occurrence in the earth's oceans, and can have a devastating environmental and economic effects. Oil spill transportation routes and deposits, water temperature, and sensitive environmental areas are all factors that contribute to an area's chance of being subject to the harms of an oil spill.

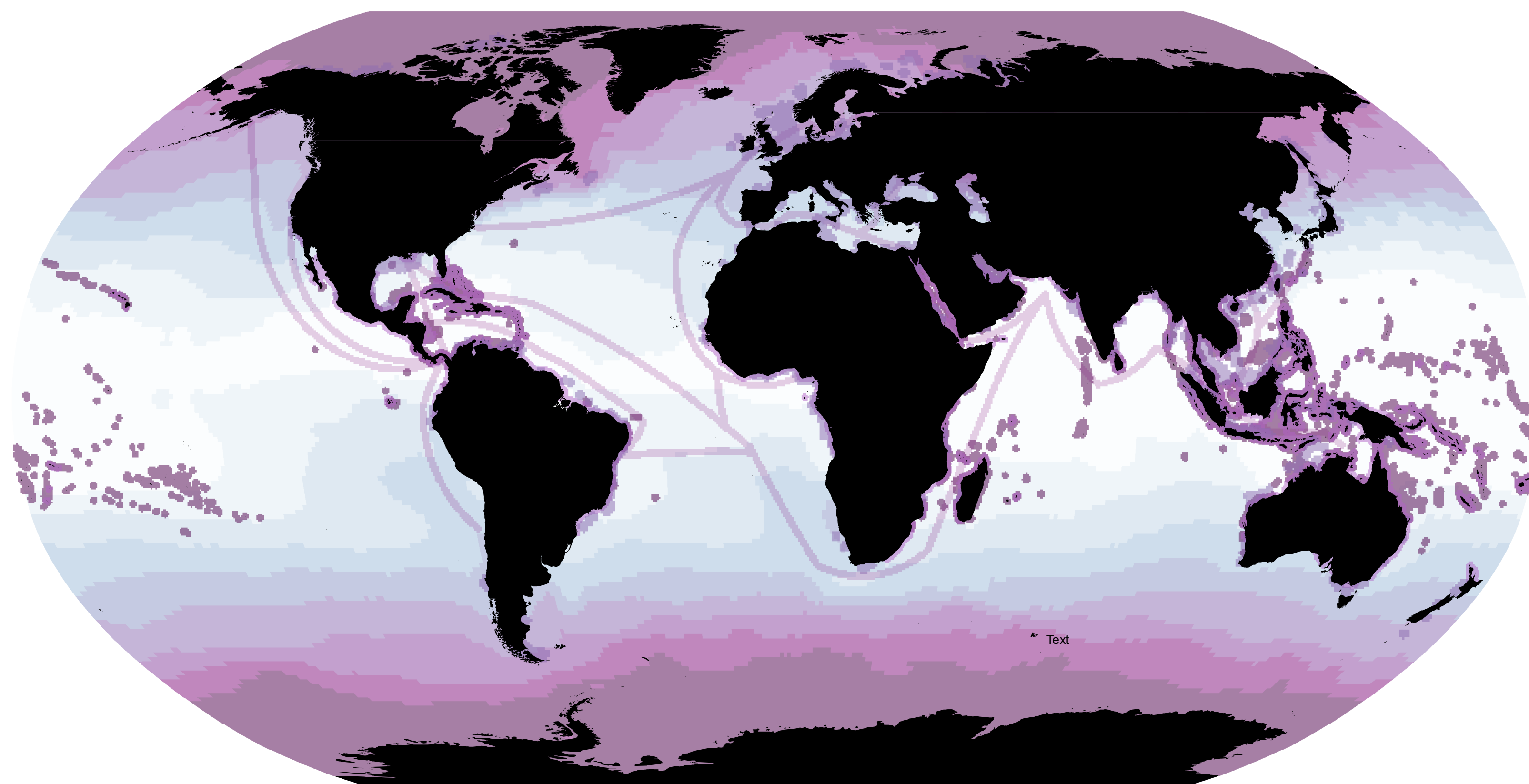
Assuming the accuracy of this model, the areas of highest oil spill vulnerability are largely located along the coastlines of the 6 human inhabited continents. This is due to a combination of sensitive coastal habitats, as well as the location of marine oil spill reserves. Cold water temperatures prevent the attenuation of oil in the ocean, making northern areas particularly at risk from the effects of oil spills.

This project uses environmental and petroleum industry data to determine marine areas that are the most vulnerable to oil spills. The first map demonstrates all of the criteria used in this model. Each criteria was assigned a value from 0-9, based upon an assumed level of oil spill vulnerability risk, with a factor of 9 being the highest risk. An overlay analysis was conducted utilizing these weighted criteria. The results of this analysis are shown at the bottom map.

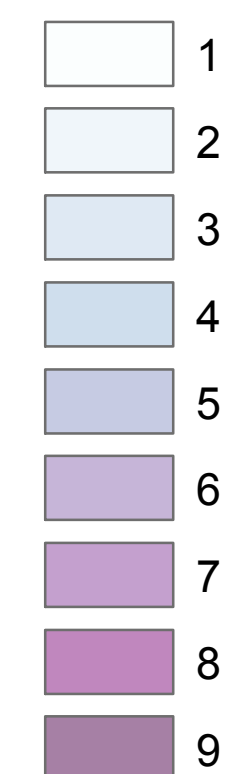
The limited scope of this project makes drawing any conclusions about the results difficult. An in-depth analysis of oil spill vulnerability factors would be necessary to determine which locations are at the most risk from the harms of oil spills.

Global Oil Spill Vulnerability Analysis

II Index Criteria



Vulnerability Index



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