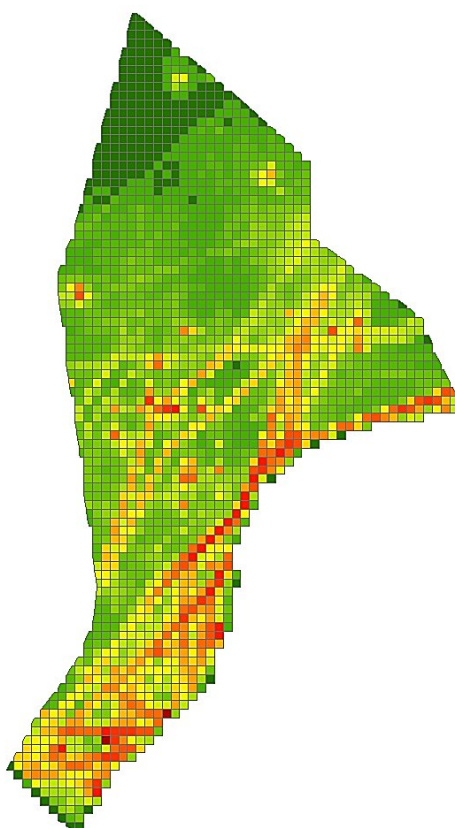


34) Name: allocation to grid cell (national continental shelf), based on number of ships and persons on board

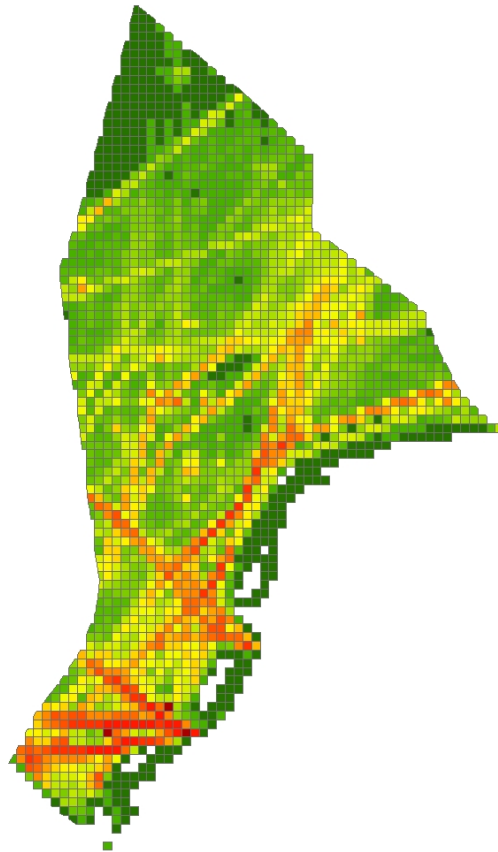
Description

Emissions of alkylphenols to water result from the use of both industrial and non-industrial detergents. Ship cleaning uses industrial detergents, non-industrial detergents are for personal care. In case of industrial detergents, emissions are allocated through the number of ships per year passing a 5*5km grid cell. For non-industrial detergents, the total number of persons on board is the determining factor. MARIN (Marine Research Institute Netherlands) derives both from so-called AIS (Automatic Identification System) data. This is a system used by ships principally for identification of vessels at sea, and compulsory since 2005 for all but the smallest sea going vessels. Several times per minute, a signal is broadcasted containing (among others) information on speed, course and position. In addition, it contains a unique identification number for each ship. All AIS data broadcasted within the national continental shelf are logged by the Dutch Coast Guard and available to MARIN for research.

NB: colors on maps do not compare with each other!



*Example map 34a: Number of ships per 5*5km grid cell (percentage relative to total)*



*Example map 34b: Number of persons per 5*5km grid cell (percentage relative to total)*

Institutes involved

MARIN

Ministry of Infrastructure and the Environment, Directorate General of Waterways and Public Works (I&M/RWS)

Deltares

Institute for Applied Scientific Research (TNO)

Currency of distribution basis data

2007

Background documents

Emissieregistratie (2012)

Emissieschattingen diffuse bronnen, emissies alkylfenolen uit de zeescheepvaart

Tak, van der, C. (2008)

Emissions of coatings and anodes by shipping in the greater North Sea (OSPAR region II),
Based on AIS data

MARIN report no. 22776.620/2