MARiS: The IAEA's Marine Information System

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The MARiS (MARine Information System) database is an open-access database of radionuclides in the World's oceans that is hosted and maintained by the IAEA (International Atomic Energy Agency). With currently over 173,500 marine radioactivity measurements, representing more than 60 different radionuclides or radionuclide ratios in seawater, biota, seabed sediments, and suspended matter, the database is unique in the context of the marine environment. The MARiS database provides an open-access data resource for scientists, policymakers and the general public that can be used for radiological environmental assessments, spatial and temporal change investigations, contamination event analysis, and can provide data to validate models. The MARiS database is compiled from an IAEA in-house database called GLOMARD (GLObal MArine Radioactivity Database), which is the primary repository for marine radioactivity measurements curated by the Environment Laboratories in the IAEA. Through the MARiS website (maris.iaea.org), data can be queried using various criteria, for example ocean region, matrix, isotope, date or depth.

The IAEA would like to raise awareness in the marine radionuclide community of the MARiS database as an openaccess archival tool for marine radioactivity data. Here, we present an introduction to the MARiS database, the approach to our database governance, and how to search and downloaded data. Additionally, the MARiS database is undergoing a phase of development, thus an overview of these database and website developments are presented.