

International Atomic Energy Agency input on United Nations Secretary General report on Oceans and the Law of the Sea, within the thematic of “Ocean Observing”.

The IAEA Environment Laboratories in Monaco maintain a repository for observation and monitoring data of the radioactivity in the marine environment. Furthermore, IAEA provides open, online access to the results of measurements of radioactivity in the marine environment conducted over the last 60 years through the Marine Radioactivity Information System (MARIS). Users of this data repository – including scientists conducting marine research and monitoring, journalists, policy makers and interested members of the public – can search and download verified and consistent data on radioactivity levels in seawater, sediment and marine biota sourced from research and monitoring groups across the world. Combining, visualising and reusing existing datasets facilitates contextualisation, and, before embarking on new measurement campaigns, enables additional value to be extracted from publicly funded projects and improves the integrity of research planning, yielding better results.

Furthermore, the IAEA Environment Laboratories in Monaco, through their Ocean Acidification International Coordination Centre, significantly contribute to a collaborative international network that facilitates the merging of regional and national efforts that monitor effects of ocean acidification, the Global Ocean Acidification Observing Network. In complement, the IAEA Environment Laboratories in Monaco apply their expertise on using radiotracers and stable isotopic techniques to assess the role of the oceans in sequestering CO₂ from the atmosphere in both coastal vegetated ecosystems (mangroves, seagrasses and tidal marshes as well as via seaweed farming) and in the open ocean (via the biological pump). This is globally known with the term Blue carbon, and it is recognised as a key player in climate change mitigation and adaptation. In parallel, the IAEA promotes the study of the occurrence and impacts of acidification caused by the enhanced levels of CO₂.

The work of the IAEA through research, collaboration and cooperation with its Member States is instrumental in protecting and restoring such vital ecosystems, highlighting their significance in this context that adds to the myriad of critical benefits they provide.