Are Maritime Services building on sand ?

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Our approach aims at describing the limits of current Artificial Intelligence (AI) technologies applied to maritime integrated service. It aims at describing maritime information cycle from its acquisition to its exploitation, as well as the discrepancies between the poor reliability of self-reported data (e.g.AIS contact reports) and its intensive exploitation by stakeholders.

The very first assumption is that maritime AI builds its services mainly on self-reported data (mainly AIS, LRIT), that has to be considered as a non-reliable but unavoidable.
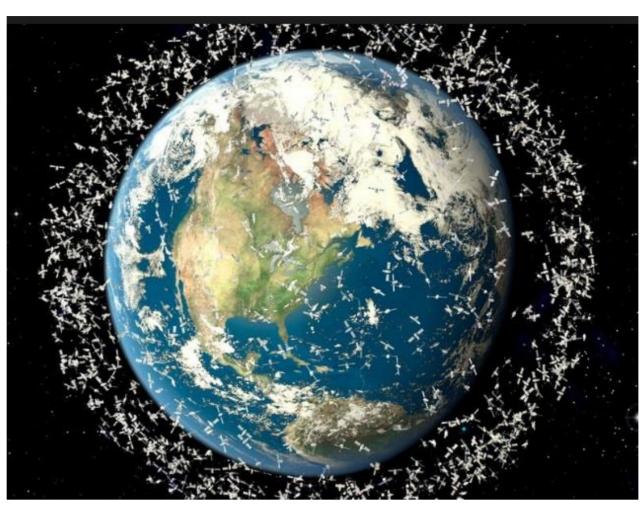
With this first assumption, and taking into consideration the intensive use of self reported data as AIS in AI based systems, we are aiming at demonstrating that:

- Most Maritime AI services are today building on sand (applying the best algorithms on non-reliable data, makes the result not reliable).
- a "non-controled" acquisition of maritime data could endanger the maritime ecosystem.

To build a trustful "Ocean of data", maritime stakeholders have to build it on respectful data acquisition means.

Athanor-Eengineering develops data acquisition solutions for public and private entities that are willing to make maritime data more reliable and environmental friendly to keep oceans safer and space cleaner.

Environment & Data

Facts

The uncontrolled multiplication of « autonomous » data acquisition systems represents a risk to maritime environment.

The current technological innovation relates to the challenge of achieving a persistent long-range surveillance respecting the Oceans.

Innovative radar solutions in light of new waveforms, modern signal processing techniques and learning / cognitive system algorithms seeks to augment detection ranges and information quality reducing significantly use of satellites and environmental footprints on space and oceans.

A non-controlled use of Space could bring a future non-reversible pollution that would limit drastically its use for maritime surveillance.

With the current massive use of AI based surveillance systems, maritime stakeholders have to develop solutions to rise the reliability of the data their systems are using. At least the acquisition processes of data have to be made more resilient.