High Resolution Copernicus-based information services at sea for aquaculture

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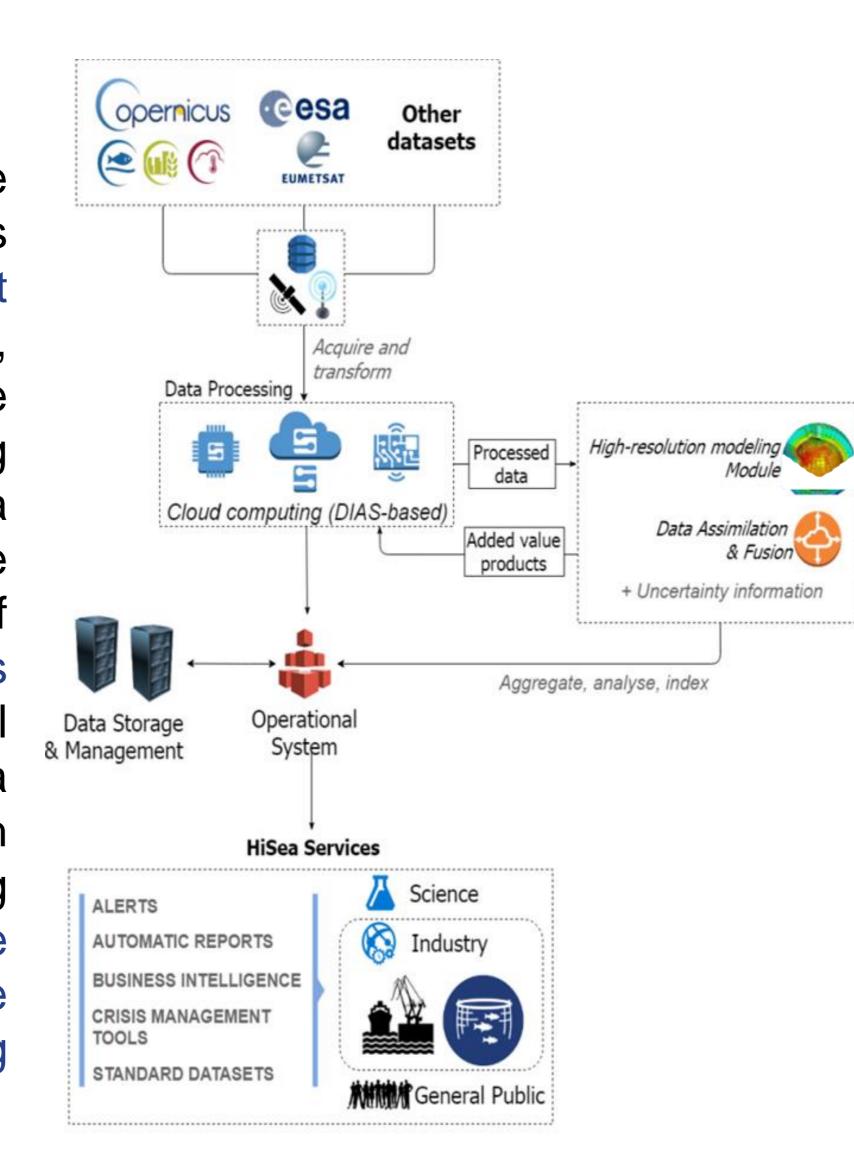
Introduction

Among others, fishery and aquaculture activities are strongly influenced by environmental conditions and therefore can benefit from short-term forecasts of water quality. Short-term environmental fluctuations, including sea water temperature, chlorophyll concentration and turbidity, wind velocity and persistence, and current velocity, combined with long-term climate-related trends, can indeed impact growth rates of cultured animals. The EU funded HiSea project aims at tackling these issues by delivering accurate and reliable information, readily available, easily understandable and with a high resolution to fit seamlessly users' operation, planning and management requirements.



Method

HiSea services integrate Copernicus services products, such as Environment Marine Copernicus Monitoring Service (CMEMS) products, Copernicus Climate Change Service (C3S) and Copernicus Land Monitoring Service (CLMS), local monitoring data and advanced numerical modeling in the service. HiSea platform will make use of Copernicus Data and Information Access Services (DIAS) infrastructure which will facilitate and standardize access to data and cloud processing service. Such information services include among others early warning services, real-time crisis management, key performance information indicators, for planning operations, and a knowledge database.



Expected key benefits for the users:

- ✓ Acquire accurate and reliable information
- ✓ Integration of different data sets
- ✓ Receive daily reports, warnings and alerts
- ✓ Optimisation of farming activities and planning
 - ➤Optimise feeding rate
 - >Improved fishes growth
 - ➤ Schedule the harvesting
 - ➤ Anticipate low water quality events
 - Anticipate crisis management

√ Financial benefits:

- ➤ Reduce feed waste and financial loses
- ➤ Reduce fish disease outbreaks



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