# Article information:

Remote Sensing | Free Full-Text | Integration Data Model of the Bathymetric Monitoring System for Shallow Waterbodies Using UAV and USV Platforms
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# Article summary:

1. This article presents an integration data model of the bathymetric monitoring system for shallow waterbodies using Unmanned Aerial Vehicles (UAV) and Unmanned Surface Vehicles (USV).

2. The model consists of three technology components: a hydroacoustic and optoelectronic data integration component, a radiometric depth determination component based on optoelectronic data, and a coastline extraction component.

3. Multisensor data fusion obtained using Global Navigation Satellite System (GNSS)/Inertial Navigation System (INS), Light Detection And Ranging (LiDAR), Real Time Kinematic (RTK), UAV, and USV will allow to meet the requirements provided for the International Hydrographic Organization (IHO) Special Order.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is well-written and provides a comprehensive overview of the integration data model of the bathymetric monitoring system for shallow waterbodies using Unmanned Aerial Vehicles (UAV) and Unmanned Surface Vehicles (USV). The authors provide detailed information about the three technology components that make up the model, as well as how multisensor data fusion can be used to meet the requirements provided by the International Hydrographic Organization (IHO).

The article is reliable in terms of its content, as it provides evidence to support its claims. The authors cite relevant research papers to back up their assertions, which adds credibility to their work. Additionally, they provide detailed descriptions of each technology component and explain how they can be used together to achieve accurate results.

The article does not appear to have any biases or one-sided reporting. It presents both sides equally and does not promote any particular point of view or agenda. Furthermore, it does not contain any promotional content or partiality towards any particular product or service.

The only potential issue with this article is that it does not explore any counterarguments or possible risks associated with using UAVs and USVs for bathymetric measurements in shallow waterbodies. This could be addressed by including more information about potential risks such as safety concerns or environmental impacts that may arise from using these technologies in such environments.

# Topics for further research:

* Unmanned Aerial Vehicle (UAV) safety
* Unmanned Surface Vehicle (USV) environmental impacts
* Multisensor data fusion risks
* International Hydrographic Organization (IHO) regulations
* Bathymetric monitoring system accuracy
* Shallow waterbodies data collection methods

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