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From fishermen' to scientific tools: Progress on the recovery and standardized processing of echosounder buoys data

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Summary

The introduction of FADs in conjunctions with the satellite linked echo-sounder buoys was one of the most significant innovation introduced in the industrial tropical tuna purse seine fishery. These buoys provide information on the accurate geo-location of the floating object and estimation of fish biomass aggregated underneath the FAD along its trajectory, which increases the efficiency of the fishing operations. The collaborative work among the fishing industry, buoys suppliers and research institutions allow gathering unique information on buoy tracks and acoustic records which turn the echo-sounder buoys into valuable observation platforms for scientific purposes. This information is contributing to the knowledge about buoy use, FAD dynamics and the behavior and ecology of tuna and non-tuna species associated with floating objects. In addition, alternative indicators of tuna biomass and fishing effort can be derived, which could help to assess natural variations on target species abundance and improved scientific advice for stock assessment. This work presents the progress so far in the collection and processing of buoy derived data in the frame of EU RECOLAPE project, which have enabled to go beyond the current RFMOs FAD data requirements.