

Heat waves and fisheries management, practical integration of operational oceanography into the management of tunas.

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- Introduction

Current advances on observing and forecasting systems in the Western Mediterranean combined with the research of the biology of tunas, allowed identifying environmental drivers affecting the ecology of these species. These advances provide new environmental variability indicators from EOVs that have been incorporated in the fisheries assessment process of the Bluefin tuna and the Albacore.

- Methods

Monitoring temperature variability and identifying heat waves is one example that provides information for improving the scientific advice to the International Commission of Atlantic tunas (ICCAT). These variables together with other EOVs, allow computing larval abundance and survival indices, and adjusting recruitment models. This information is successfully integrated in the calculation of indices of abundance and fisheries population methods.

- Results

These indices are now integrated to the scientific assessment carried out by ICCAT to establish the total allowable catches of these species. New Web Map Services complement the transference to stakeholders, allowing direct exploration capabilities of environmental variability in the study area.

- Conclusion

New developments in operational oceanography open a new path to improve the scientific advice for fisheries, a specific target of the SDG 14.4. In order to be effective this integration should consider specificities of the different stake holders involve in the process and respond to the practical needs of the fisheries assessment working groups.