

## Reviewer Report

**Title:** 0s and 1s in marine molecular research: a regional HPC perspective

**Version:** Original Submission    **Date:** 5/22/2021

**Reviewer name:** Graciela Dias

### Reviewer Comments to Author:

The manuscript presents a description and importance of High-performance computing (HPC) in marine research. The topic is of interest because allows important studies in marine research. The manuscript describes the system architecture and capacity of processing of Zorba facility. I think that the important point of the Zorba facility is concern a accessible communication between users and administrators.

The method is quite standard and is appropriate for the study, especially given that the main focus of the paper is to describe the evolution of IMBBC HPC facility during the 12 past years. Is notable the progress of the facility in the analysis of a wide variety of information.

The conclusions are satisfactory. The solutions applied in hardware (depth/breadth balanced structure, user quotas and temporary storage), software (modularized bioinformatics application maintenance and containerization are very interesting) and training enable that the scientific community can deal with a wide variety of information.

The language is clear and does not require a heavy edition and the statistical methods are not relevant for the present paper.

Minor revisions

In the topic "Computational breakdown of the IMBBC HPC supported research", please fix the order of the figures. It seems to me that is Figure 4 and not Figure 3. In the phrases "As shown in Fig. 3...", "Long computational times (Fig 3A)", "... approaches is the significant storage limitations (Fig 3C)..."

Figure 4 is not clearly labeled, please see the text of 4B and 4C.

## Methods

Are the methods appropriate to the aims of the study, are they well described, and are necessary controls included? Choose an item.

## Conclusions

Are the conclusions adequately supported by the data shown? Choose an item.

## Reporting Standards

Does the manuscript adhere to the journal's guidelines on [minimum standards of reporting?](#) Choose an item.

Choose an item.

### **Statistics**

Are you able to assess all statistics in the manuscript, including the appropriateness of statistical tests used? Choose an item.

### **Quality of Written English**

Please indicate the quality of language in the manuscript: Choose an item.

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