To extract "right" information from a huge marine biodiversity information pool

*Hosono Takashi¹, Hideaki Saito¹, Seiji Tsuboi¹

1. Global Oceanographic Data Center (GODAC), Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Recently many international programs for marine biodiversity observation in global scale have been lunched. The programs often publish their monitoring results from their own database. Information in the global databases is re-integrated by the third-party group, and produce highly impact outputs. For example, most articles on marine biodiversity published in Nature 2016-2017, are based on meta analysis using data extracted from multi databases. Progress in information technology is expected to accelerate information generation on marine biodiversity, and enhance data-driven science using the generated information in marine ecology. However, the increased information sources can require complicated and large-scaled data procession for information integration, and consequently, increase the risk of generating duplicated data. These two issues are conventionally solved by the effort of each researcher. However considering exponentially increasing information, new information integration techniques specialized for biodiversity information will become a key element to maximize data-driven science in marine ecology. In this presentation, we will discuss what type of information techniques we should develop to extract all "right" information from huge available resources, without requiring complicated data procession.

Keywords: marine biodiversity, database, data-driven science