

# Marine Citizen Science: Current State in Europe and New Technological Developments

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## Abstract

Marine citizen science is emerging with promising opportunities for science, policy and public but there is still no comprehensive overview of the current state in Europe. Based on 127 projects identified for the North Sea area we estimate there might be as much as 500 marine and coastal citizen science projects running in Europe, i.e., one marine citizen science project per ~85 km of coastline, with an exponential growth since 1990. Beach-based projects are more accessible and hence most popular (60% of the projects), and the mean duration of the projects is 18–20 years. Current trends, topics, organizers, aims, and types of programme in terms of participation are presented in this overview. Progress in marine citizen science is specially enabled and promoted through technological developments. Recent technological advances and best practise examples are provided here, untapping the potential of smart mobile apps, do-it-yourself (DIY) technologies, drones, and artificial intelligence (AI) web services.

## Author keywords

AI

big data

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smartphones