

Coral reefs are some of the most biodiverse regions of the ocean, yet are undergoing unprecedented decline. Marine biologists and ecologists want to monitor the health of reefs but currently do this manually. To help automate monitoring, they need to identify the classes of reef structure, so this ImageCLEF competition encourages vision researchers to develop solutions. The inaugural competition in 2019 showed that some level of automatic classification on this difficult problem can be achieved. The 2020 competition builds on this with the aim of producing practical solutions for reef monitoring.

The images you will work with were captured from marine conservation parks and used to build 3D reconstructions of reefs such as the one shown above. For this competition, you will use training data captured from one part of a park and evaluate it on another part of the same park *and* on imagery captured in a different part of the ocean to explore whether the classifier can be trained centrally and deployed world-wide.

## Tasks

- 1. Label images with the types of benthic substrate using a bounding box.
- 2. Segment and parse each coral reef image into image regions associated with different benthic substrate types.

## Timeline

late Apr Registration closes early May Submission of runs late May Working notes due 22–25 Sep ImageCLEF workshop

Organisers: Jon Chamberlain, Alba García Seco de Herrera, Adrian Clark (University of Essex, UK); Antonio Campello (Wellcome Trust, UK)





