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From Data to Action: Supporting Coral Reef Conservation in the Pacific

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The digital revolution is reshaping marine science by enabling unprecedented access to data efficiently and cost-effectively. These advancements can be transformative for coral reef conservation, fostering a stronger connection between science and policy to safeguard habitats and support the communities that depend on these ecosystems. However, coral reef monitoring programs are still sparse and fragmented, which makes it challenging to support data-informed decision-making.

In this presentation, we highlight the role of digital platforms and automated frameworks in monitoring coral reefs. In our talk, we present the ReefCloud platform, which combines machine learning for analysing seafloor images with predictive statistical models to assess changes in reef habitat condition.

The program empowers communities through actionable insights for effective and management of coral reefs by establishing a strong community of practice to collect data, knowledge sharing and modern analytical solutions. We demonstrate how ReefCloud implements these principles to enable a more effective coral reef conservation.

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