Did you know that oceanic islands are considered a window to the understanding of more pristine marine environments? Oceanic islands are known to have a large number and diversity of reef fish. However, due to its isolation and its small areas they are highly sensitive to changes induced by environmental, oceanographic and human actions. In this recent study published in the Journal *Ecography*, Quimbayo and colleagues explored different measures of diversity of reef fish communities. They noted for example, that fish communities on islands with nearby human populations have lower fish biomass, probably due to fishing. Moreover, this study shows the importance of primary productivity for the maintenance of different aspects of biodiversity such as species richness, functional diversity, number of individuals and fish biomass. Finally, this study expands theoretical concepts for marine environments that will be important for the understanding of species diversity patterns.