AGU Earth Surface

Supporting Information for

The influence of coral reef spur and groove morphology on wave energy dissipation and wave overtopping under future climate change scenarios

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Contents of this file

Introduction

We determined mean offshore wave conditions near One Tree Reef (OTR) in the southern Great Barrier Reef. Satellite altimeter observations over 30 years (1985–2015) were obtained with RADWave (Smith et al., 2020). A small region (0.6° x 0.4°) representing dense altimeter data tracks was identified on the eastern, exposed side of OTR (Figure S1).

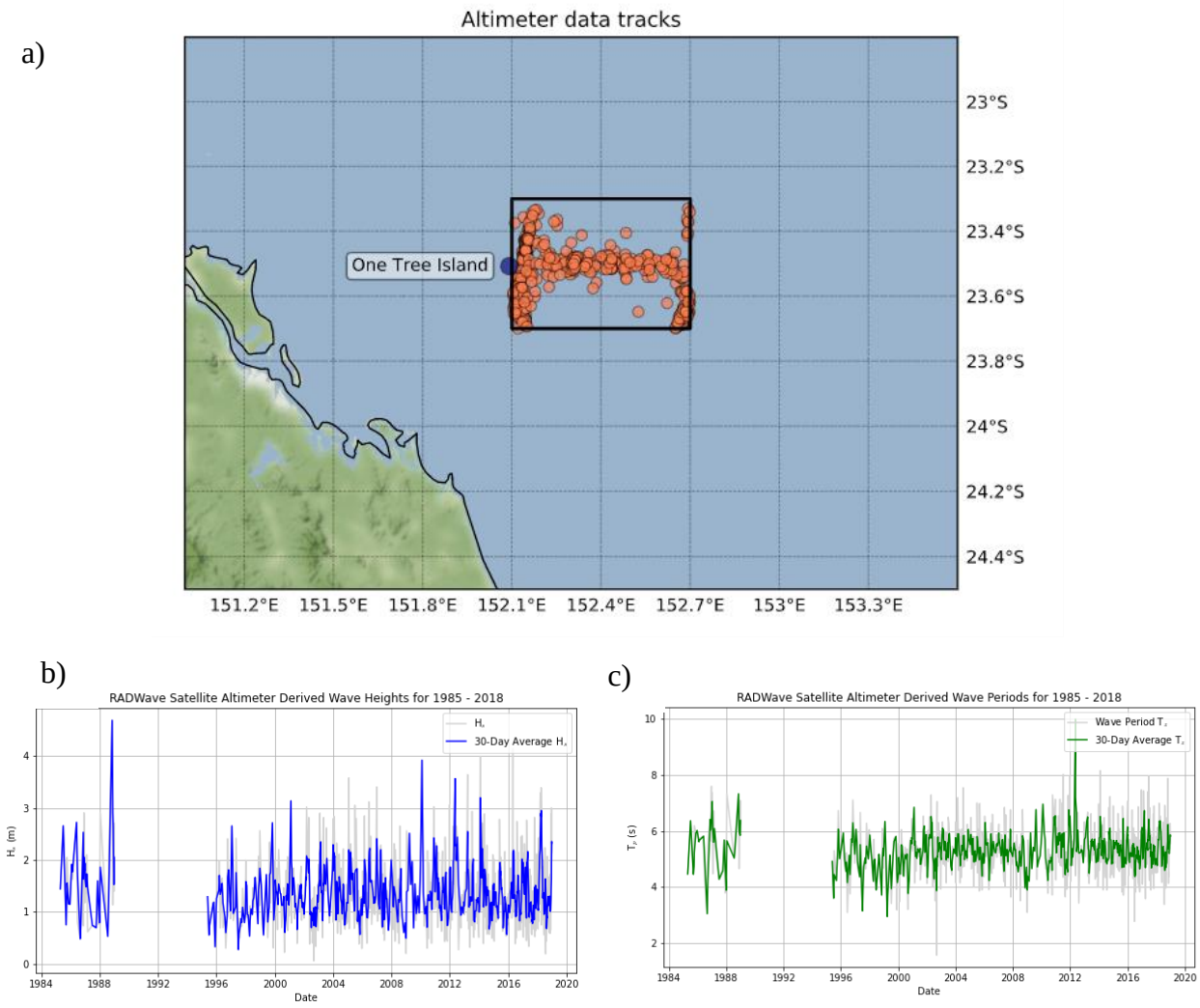

Figure S1. Altimeter data is extracted from the eastern (open ocean) side of OTR. Mean significant wave height across the 33-year study period was 1.34 m with a mean wave period of 5.2 seconds. A maximum wave height of 4.8 m.