Reviewer #1

The manuscript is much improved by the changes made. It is concise, logical, and clearly written. Well done! A few minor suggestions and changes:

Title: The title would be more direct as, 'Why is Trichodesmium abundant...' Text:

Line 52: Change 'generally' to 'thought to be'

Lines 59-61: What is limited? I think a word is missing.

Line 65: Change 'condition' to 'nutrient and trace metal concentrations'

Line 69: Please give the island names, so that it is clearer how this study differs from previous work.

Line 88-89: Change 'as summer' to 'summer as'

Line 183: Change 'is known' to 'is thought'

Line 187: Change 'would' to 'could be higher'

Line 194: Please give the incubation time for the tests.

Fig. 3: The horizontal axis labels should be below the graphs

Fig. 6b: Typo in horizontal axis label.

SI:

Line 22: The units and Dabundo reference are missing.

Line 28: If it is significant, please add the stats/P-value.

Fig. S1: Please describe error bars.

Fig. S2: Please add the region this figure shows.

Fig S3: Would this be clearer on a log scale?

Fig. S4: Please label the x-axis.

Fig. S5: Please label or identify area K.

– Reviewer #2

I think the manuscript reads more clearly now and the authors have done a good job of addressing reviewers' comments. I suggest a few minor edits:

line 19: The genus Trichodesmium is recognized as an abundant (add the word "an")

line 43: oligotrophic conditions (add "s")

line 557: conditions (add "s") and phosphate at the nanomolar level (add "the")

section 3.2: Perhaps the authors could report the "r squared" value for all of the correlations you report, not just the one on lines 837-838.