

In this version 2, the authors have settled the referees' observations that improve the manuscript, although to be published I recommend to produce a new version incorporating minor corrections that are listed below.

Line 18: Given "Gephyrocapsa spp., > 2  $\mu\text{m}$ " actually comprise all the known Gephyrocapsa species coccolith sizes, I recommend to replace it throughout the text by "small Gephyrocapsa species" or similar.

Line 20: Delete comma after (ks)

Line 29: Relax the "all variations" statement using "major" or "main"

Evaluate migrate the section 2 into M&M

Line 235: After concentration add "used as a proxy of phytoplankton"

Line 239: Replace Ph by pH

Figure 2: Add tick marks at the x-axis

Figure 3: Homogenize the minor tick marks

Figure 4: Delete the minor tick marks

Line 312: Indicate what parameters are autocorrelated

Figure 5: Fix the values label to tick marks, as well as, include in parenthesis the % variability explained by each RDA axes

Line 392: A more recent study that Eppley et al., 1969 comparing the two species growth at different nutrient levels is: New Zealand Journal of Marine and Freshwater Research, 1995, Vol. 29: 345-357. Coccolithophores Gephyrocapsa oceanica and Emiliania huxleyi (Prymnesiophyceae = Haptophyceae) in New Zealand's coastal waters: characteristics of blooms and growth in laboratory culture.

Lines 396-398: Elaborate better this sentence as sounds recursive or meaningless

Line 408: The life cycle is not mention in Beaufort et al. 2011 study, but with species-environmental responses most related to shift in assemblage composition

Line 470: The statement seems correspond to Figure 4

Lines 478-479: Delete quotation marks