

Earth Syst. Sci. Data Discuss., author comment AC3  
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## Reply on RC3

Oriane Bruyère et al.

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Author comment on "Hydrodynamic and hydrological processes within a variety of coral reef lagoons: field observations during six cyclonic seasons in New Caledonia" by Oriane Bruyère et al., Earth Syst. Sci. Data Discuss.,  
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**Comment #1 of Reviewer #3 (website): An extensive proofreading is needed. citations in text Split figures for easier understanding and better presentation, Section 8?**

**Answer to Comment #1 of Reviewer #3:** Manuscript has been extensively proofread by 2 natives E.S who enhanced the quality of English sentence (~50 % of the sentences rewritten/modified). We also added our two kinds English reviewers in the acknowledgement section. We agree with this comment and we split Figure 1 into 2 separate figures. References to figures are now modified within 3.2 section that describe lagoons morphologies and sampling strategies. We thank Reviewer #3 for pointed out the missing section 8 and we corrected it on line 476, the conclusion refers to the section 8 instead of 9.

**Comment #2 of Reviewer #3 (website): The description of the used instruments should be expanded. This should include manufacturers, instruments, sensors and special settings. e.g. Line 328: which instruments had a burst mode of 10/15 min**

**Answer to Comment #2 of Reviewer #3:** We take into account this comment and we create an extensive table available in Appendice section (Table A1) presenting the main information (type, dates, position, parameters, measurement timing) of all deployments in a given place. We also referenced the table in line 309.

**Comment #3 of Reviewer #3 (website): Same for data processing and show us more of the data e.g. one sample from each lagoon. Are there any (older) other data sets for comparison?**

**Answer to Comment #3 of Reviewer #3:** We decided to expose only few of our observation to give an idea to reader what kind of process we can extract from our dataset. As we mentioned in line 58-63, past research works have been centered into 2 lagoons (Nouméa during the period of 1995-2010 and Ouano around 2013-2015), and these datasets do not overlap with cyclone seasons or major cyclones. To our knowledge there are no others observational strategies targeting cyclonic season during our period of observations (2014-2021).

**Comment #4 of Reviewer #3 (website): Links to data on Ifremer server are difficult/impossible to access for non-French speaker. If possible add an English information text.**

**Answer to Comment #4 of Reviewer #3:** We thank Reviewer #3 for this relevant comment and we have translated the abstract presenting SEASER and SAR data sets in Sextant metadata pages and we added a sentence to help non-French speaker to download or visualize datasets.