Comment on essd-2022-176
Anonymous Referee #3

Referee comment on "Hydrodynamic and hydrological processes within a variety of coral reef lagoons: Field observations during 6 cyclonic seasons in New Caledonia" by Oriane Bruyère et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-176-RC3, 2022

The paper describes the measurement and data collection of different hydrodynamic parameters in different coral reef lagoons of New Caledonia. Collected during 6 tropical cyclone seasons, the data offers to improve our understanding of coral reefs in face of climate change.

I think the paper can be published after a rework of the current version. Especially the data part is quite short compared to rest of the paper.

- An extensive proofreading is needed.
  - citations in text
  - Split figures for easier understanding and better presentation
  - Section 8?
- 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
- 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?
- Links to data on Ifremer server are difficult/impossible to access for non-French speaker. If possible add an English information text.