

***Interactive comment on “A comprehensive oceanographic dataset of a subpolar, mid-latitude broad fjord: Fortune Bay, Newfoundland, Canada” by Sebastien Donnet et al.***

**Anonymous Referee #1**

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Review of “A comprehensive oceanographic dataset of a subpolar, mid-latitude broad fjord: Fortune Bay, Newfoundland, Canada” by Sebastien Donnet *et al.*

March 31, 2020

**General comments**

This paper presents a new dataset of oceanic physical parameters and atmospheric forcing parameters for Fortune Bay in Newfoundland, Canada. The data comes from oceanographic moorings and land-based stations spread all around the bay and spanning two full years (2015-2017). They form a comprehensive dataset for studying physical oceanographic processes occurring in Fortune Bay, which are also encountered in broad fjords at higher latitudes and are therefore of wider interest. The paper is well written and organized, and the data processing, limitations and quality control well described. The data is easily accessible on the online data repository mentioned in the paper. I therefore recommend its publication in ESSD after addressing the following minor issues.

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### **Specific comments**

1. Line 68: in the caption of Figure 2, legs are mentioned, which are defined later in the text but spread among many sentences. It would be better to define all leg periods in a single sentence in the text before referring to Figure 2.
2. Line 154: Since temperature is measured at the transducer head of the ADCP, its value does not need to be selected during instrument setup. The ES command is only used to select the salinity value.
3. The name of section 3.2 is confusing since this section describes the objectives of the program. Its content should therefore be moved either to the introduction or to the discussion sections, and this section removed.

### **Technical corrections**

1. Line 36: downwelling
2. Line 157: PDBM rather than PDBW in the equation for Sv.
3. Line 187: instrument losses
4. Line 233: current speed accuracy
5. Line 346, Figure 6 caption: replace DD by the day in November 2016 when the profile was taken.