Offload mechanisms

The method of retrieving data varies with the type of logger. For first-generation loggers, or when using a WIBL in a similar mode, data must be retrieved manually by removing the SD card, copying the files, and uploading them to a secure cloud location. This allows for the data to not only be transmitted, but to also be stored somewhere secure should something happen to any individual SD card or computer on which data is being processed.

Data offload can be conducted either by the participating vessel or by the CSB program managers. This decision can be made based on the skillsets of participants, the available time for managers, and the locations of vessels in relation to the managers. For example, SeaKeepers requests all data be transmitted by the vessel due to individual vessel locations being too far from any branch or headquarters. Exceptions can be made depending on the case, and in some circumstances, mailing the SD card to the program manager may be the best option. For example, if the vessel owner/operator is uncomfortable with the process of downloading files from an SD card, compressing them, and uploading it to a cloud-based storage account, then it may be best for the trusted node or CSB program manager to conduct this step. For guidance on how to share this procedure with volunteers, see this Example data retrieval guide.

When using a next-gen logger, such as the WIBL in “station” mode, volunteers can use the Wi-Fi link to download the data remotely. As of August 2025, the batch-download function is still in development. Until it is made available, data offload can only be performed on one logger at a time.

When using a fully independent next-gen solution such as WIBL in “ap” mode or OFM Mussel Kit loggers, the data offload process should occur automatically. For a WIBL, you will have set up a link to a dropbox or amazon cloud storage account where the data will automatically offload any time the vessel is within range of the Wi-Fi signal to which it is connected (eg. Starlink). OFM Mussel Kit loggers have the same capability and additionally can utilize cellular connection to leverage a constant data stream. OFM handles the full data collection and management pipeline for their loggers. In addition, they have agreed to provide the raw data back to CSB programs via Dropbox (other options are available).

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