

Professor Periwinkle, outlined in this report is a plan and recommendation for your database management needs. It is understood that there are considerable data collected and shared amongst your team and other interested parties. It is also understood from our conversations that contributors record the field notes using *Darwin Core*, and your team then converts the file types to *NetCDF* format, as well as produces simulations saved in .csv file type. That being said, other contributors are not required to use this format. It is also estimated from the information you provided that approximately 1.2 Terabytes (TB) of data has been collected in the past and this will continue to grow at approximately 300 gigabytes (GB) per year.

Although this sounds like a lot of data, the price of physical storage of hard drives is ever declining. This means that the purchase of a 5 TB hard drive can be had for less than \$200 CAD. With this amount of storage, and velocity of data collection, it would last researchers more than 10 years. In addition to this physical storage and backup, it will also be important to supplement the data storage with a cloud-based solution for easy transfer between team members and also exterior contributors. **INSERT CLOUD BASED STORAGE PRODUCT HERE**

Based on the information that you provided it is understood that the sharing of data is important. That being said, it will also be important to ensure that those who contributed the work are recognized. It is recommended that a Creative Commons BY license be applied to the data collected and shared. This license ensures that team members and other contributors can still access, modify, and commercialize their work, however, the original creator must be recognized. This license type provides users with complete freedom of the data while also protecting intellectual property.