# Plan Overview

*A Data Management Plan created using UCT DMP*

**Title:** Copy of Sea ice thickness distribution in the Atlantic sector of the Antarctic Marginal Ice Zone from ICESat-2 and CryoSat-2: Seasonal analysis and validation in the Eastern Weddell Sea.

**Creator:** Magata Mangatane

**Affiliation:** University of Cape Town

**Template:** UCT Student Generic DMP

**Project abstract:**

This study aims to support existing Southern Ocean sea ice studies by analyzing the seasonal sea ice thickness conditions of the MIZ of the Atlantic sector in the Southern Ocean. The study will include the validation of remotely sensed data from two satellite missions. The remotely sensed data will be compared with in-situ data gathered during several South African research campaigns into the Eastern Weddell sea aboard the SA Agulhas II.

**ID:** 3955

**Last modified:** 29-12-2022

**Grant number / URL:** MND210618612917

**Copyright information:**

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customise it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

# Copy of Sea ice thickness distribution in the Atlantic sector of the Antarctic Marginal Ice Zone from ICESat-2 and CryoSat-2: Seasonal analysis and validation in the Eastern Weddell Sea. - Student Outline DMP

## 1. General guidelines

**PURPOSE OF THIS TEMPLATE - The purpose of the Outline DMP is to indicate your initial plans for how your data will be collected, shared and stored, and to give you a chance to think about these data-focused aspects of the research process. As your begin doing your research, your data process may change, and it is perfectly acceptable to change your data management plan to accommodate the changes in your research process. Indicate below that you understand the purpose of completing this Outline DMP template.**

- I understand the Outline DMP template is a projection of my anticipated data management planning requirements and should be updated as my project develops.

## 2. Authors and supervisors

**PROJECT NAME - Replicate the title of your project, dissertation or thesis exactly as it appears in your proposal document.**

Sea ice thickness distribution in the Atlantic sector of the Antarctic Marginal Ice Zone from ICESat-2 and CryoSat-2: Seasonal analysis and validation in the Eastern Weddell Sea.

**PERSONAL DETAILS - Indicate the name(s) and student number(s) of the student(s) who will be involved in this project, dissertation or thesis.**

Mr Magata Jesaya Mangatane
Student number: MNGMAG002

**SUPERVISOR(S) DETAILS - Indicate who will supervise this project, dissertation or thesis. If you do not yet have a supervisor, leave this section blank.**

Prof. Marcello Vichi

## 3. Data Collection/Generation

**COLLECTION OF ORIGINAL DATA - Indicate whether or not you intend to gather/produce original data for your study, and provide a brief description of the kind of data you think you will collect. If you are unsure at this time, indicate what you think you are most likely to collect. If you are not intending to gather or collect your own data, declare that here.**

- I d not intend to collect original data.

**USE OF EXISTING DATA - Indicate if you intend to re-use existing data, either from online searches or from datasets provided by your supervisor, lab, or funder. If you are not intending to re-use existing data, declare that here.**

- I intend to reuse existing data in my study (described below).

I intend to re-use in situ sea ice thickness data collected by my supervisor and previous students in the Atlantic sector of the Antarctic Marginal Ice Zone. I also intend on using satellite data freely available from NASA and ESA websites.

**DATA SHARING - Indicate whether or not you are intending to publish your research data. If you are, indicate where you are intending to publish your data and under what licensing conditions, such as Creative Commons. If you are not intending to publish your data, provide reasons and reference the appropriate ethical considerations, commercial applications/patenting ambition, or data re-use agreements that prevent you from publishing your data.**

- I intend to share my data (details below).

I will share my research data except where prohibited by the providers.

## 4. Data Storage

**ANTICIPATED DATASET SIZE - Indicate the estimated size of your completed dataset, and indicate whether or not you will need to access additional data storage facilities. If such storage is not provided by your unit or department, you may need to factor in the cost of purchasing additional storage space.**

- Between 20GB and 100GB

I will not need access to additional data storage facilities.

**DATA BACKUPS - Indicate how you plan to ensure your data is secure and retrievable in case of errors or hardware failure. Describe what procedures you will put in place to back-up copies of your data and where they will be stored.**

- I intend to backup my data using a service provided by UCT (UCT GoogleDrive, UCT OneDrive, Netstorage, ZivaHub etc.).

I currently use UCT OneDrive to backup my data and research documents which is linked to my laptop.

## 5. Data Centre(s)/Repositories

**DATA CENTRES/REPOSITORIES - Once your project, dissertation or thesis is complete, it is advisable to curate and archive your completed dataset with an established data centre or repository. Note that you should archive your data even if you are not intending to publish it. Check with your supervisor or funder if you are required to deposit your data in a specific repository, or declare that you will deposit the data in ZivaHub (see the Guidance section).**

- At the end of my study, I will deposit my data on ZivaHub.

**METADATA - Metadata is descriptive information that others will need to make sense of your dataset. Metadata includes things like study descriptions or abstracts, study instruments (sample collection schedules, codebooks for variables, survey instruments, etc.), subject codes, and keywords. Indicate what metadata will accompany your curated dataset.**

The date of collection, coordinates of the study region and data points, the collection method, the data distributors, and any warnings about the data.

## 6. Budget

**BUDGET - Indicate any costs specifically relating to the management and curation of your data, such as purchasing additional storage space, digitisation of physical media, data storage or curation charges, and data audits. Most student research will be able to make use of free options provided by UCT and will not have to budget for data costs.**

- I anticipate data management costs, and I will budget for these accordingly