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# Introduction

# Background

# Permafrost

# Ground Ice

# Thermokarst

# Alaska Thermokarst Model

# Random Forests

# Data

# Air Temperature

# Precipitation

# Location

# Slope and Aspect

# Methods

# The Original Model

# Software

Model implementation and analysis were done in Python (version 3.7.3). The Conda package manager was used to create the Python environments used. Conda is the package manager used and created for the Anaconda platform. It allows for the creation of isolated python environments that can be shared between systems [1]. The environment file used is included in the Appendix.

The Random Forest regressor in Scikit-learn (version 0.20.3) was used to create the random forest models. This Random Forest implementation has many useful features including providing the feature importance, and ability to provide a decision path. There are also several hyperparameter available to control tree growth. If these parameters are unset their defaults create fully grown trees which can be very large [2].

# Random Forest Models

# Hyper-Parameters

# Comparing Models

# Results

# Discussion

# Future Work

# Conclusion

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# References

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