



Atmospheric Measurements Tower Part II Installation and Testing of Measurement Instruments on the Tower.

The goal of this project is to install instruments on the measurement towers and test them in the field.

Laboratory:	EERL
Number of students:	1 (Semester project)
Section:	GC, SIE, GM, EL, MX, PH, CGC
Status:	Available (Fall 2021)



Description of the project

The first space settlements will be scientific. As a result, it is critical to develop capabilities in establishing scientific outposts on celestial bodies, which may have similarities with some extreme environments on the Earth. One of the key experiments conducted within Asclepios consists in carrying out atmospheric measurements using a tower installed by the analogue astronauts.

A lightweight fiberglass tower has been designed and constructed during two semester projects in spring 2021. Now the tower needs to be tested and instrumented with various measurement devices. The final goal is to have a system ready to be deployed during the Asclepios II analogue mission in Summer 2022. This project will be conducted under the supervision of the [Extreme Environment Research Laboratory \(EERL\)](https://eerl.epfl.ch) in close collaboration with the [Composite Construction Laboratory \(CCLab\)](#). The main objective of this project will be to find practical solutions to install and operate instruments on the tower. The students will test the tower in the field and analyze some of the data collected during the tests.

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