

CHARACTERISATION OF THE NEW TEACHING AND RESEARCH DRILL SITE OF CHYN IN VAL-DE-TRAVERS

Context and objectives

The CHYN plans to develop a new experimental site in Val-de-Travers for teaching and research purposes. The site will consist of drill holes through cover sediments and limestone rocks and piezometers at a more regional scale. A program of geological and hydrogeological characterization will accompany the development of this site.

Research approach and methodology

The role of the Msc student will be to perform the geological and hydrogeological characterization of the drilling site and surrounding area. This will consist in:

- Geological mapping and characterization of the vicinity of the site
- Collection and synthesis of pre-existing data
- Follow up of the drilling operations
- Core and borehole logging
- Hydraulic testing and hydrogeological characterization of the site
- Geophysical characterization of the test site
- Synthesis of the acquired data and if possible hydrogeological modeling

This work will provide a baseline dataset for the geological and hydrogeological conditions of the site that will be fundamental to plan further teaching and research activities at the test site.

Partners and collaboration

The project will be supervised primarily by Prof. B. Valley (drilling, logging, and characterization), Ph. Renard (well testing and hydrogeological characterization) and G. Preisig (geophysics and hydrogeological modeling), and will involve other CHYN staff to cover all the topics related to the characterization of the test site. This project provides to the Msc student a unique opportunity to apply a broad range of techniques in a brand new research site.

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