

Hydroinformatics

Assignment 3 Data

Introduction

In this zip file you will find 3 comma delimited text files containing continuous water quality monitoring data for three monitoring locations – one in the Logan River, one in Red Butte Creek, and one in the Provo River. These data files contain raw data as they were recorded in the field on the datalogger at each site. They have not been processed or quality controlled.

Each file has a header that contains metadata describing the data. Header lines are prefixed with a “#” symbol. Following the header records you will find a single row with column names followed by rows of data values. The structure of the data is such that there are three columns that define the date/time at which observations were made with multiple data value columns. Each data value column contains the observed values of an individual Variable (e.g., temperature, dissolved oxygen, etc.).

Within the descriptive header, you will find subsections for “Site Information”, “Variable and Method Information”, and “Source Information”. The “Site Information” and “Source Information” apply to all of the data in the file (e.g., each file contains data for only one site). Each observed Variable (column in the data table) is measured using a particular Method. Each Method is described by a MethodDescription attribute and a MethodLink attribute. The rest of the elements in the “Variable and Method Information” section are attributes of the observed Variable. Each attribute has a name and a value separated by a colon. For example:

VariableCode: BattVolt
(attribute) : (value)

Individual attribute: value pairs are separated by a “|” character. The values of the VariableCode attribute correspond to the column names in the data table. For example, the row in “Variable and Method Information” that describes “VariableCode: BattVolt” corresponds to the “BattVolt” column in the data table.