# SSHCZO Metadata Worksheet

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| Data File Name | **p\_ss1\_169.csv** |
| Date Prepared | 2025-02-18 |
| Descriptive Title | **Piezometer stream side site 1 at 169 cm (p\_ss1\_169)** |
| Update Frequency | Monthly |
| Abstract | **p\_ss1\_169** was hand augered Nov 12 to a depth of 218 cm. A 1 inch pvc casing is used with the bottom 10 cm screened.  Groundwater level data and water temperature for **p\_ss1\_169** are measured every 15 minutes from 2024-11-12 to present using a VanEssen micro-diver non-vented pressure transducer. Raw data are processed with a VanEssen barometric pressure sensor. These data are then corrected to manual measurements made with a well tape. Data are QA’ed and processed using VanEssen software and R. |
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| Data Value Descriptions | * COL1: label = TmStamp\_UTC; units = UTC * COL2: label = WaterTemp\_C; Units = degC * COL3: label = WL\_BLG\_m; water level below ground; Units = meters |
| Keywords | Groundwater Depth, Groundwater Temperatures, Hydrology |
| Methods | Groundwater level measurements are currently set to be recorded every 15 minutes on a VanEssen non-vented pressure transducer. Data are manually downloaded monthly using VanEssen Diver Officer software. Sensor depth is calculated in the software by processing with barometric pressure data recorded on a separate VanEssen pressure transducer. Water level below ground determined using the suspended cable length to sensor below ground and taking the difference of the SensorDepth\_m.  Casing type = pvc  TOC above land surface = 0.54 meters  Sensor location down borehole from TOC = 2.17 meters  Sensor location from ground level = 1.63 meters  Quality control:  Data were checked by analyzing and graphing data in R package and comparing to precipitation and manual water level measurements using a Solinist electric tape. WL\_BLG\_m data are adjusted for sensor drift by comparison of the manual measurements. Bad, missing, or erroneous data values were removed or marked with -9999 which could be caused during data downloads and/or malfunctioning sensors.  The water level/water table appears to be perched and actual water level is minimal. Due to this, numerous values are marked -9999 for the sensor being out of water.  Data Gaps: |
| Sites | Shale Hills northing/easting: |
| Publications | none |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Logistical support and/or data were provided by the NSF-supported Susquehanna Shale Hills Critical Zone Observatory. |
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