# SSHCZO Metadata Worksheet

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| Data File Name | **SH\_CZMW7.csv** |
| Date Prepared | 2017-12-05 |
| Descriptive Title | CZMW 7 |
| Update Frequency | Quarterly |
| Abstract | CZMW 7 was drilled in 2012 using a rotary air. The well is cased to 8 meters with 5 cm diameter pvc and slotted for the bottom 1 meter. Groundwater level data and water temperature for CZMW 7 are measured every 15 minutes 2017-02-08 to present using a HOBO U20-001-01 non-vented pressure transducer.  |
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| Data Value Descriptions | * COL1: label = TmStamp\_UTC; Units = Time Zone = UTC
* COL2: label = WaterTemp\_C; Units = degC
* COL3: label = WL\_BLG\_m; Units = meters; adjusted water level below ground
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| Keywords | Groundwater Depth, Groundwater Temperatures, Hydrology |
| Methods | Groundwater level measurements are recorded every 15 minutes on a HOBO U20-001-01 non-vented pressure transducer. Data are manually downloaded monthly using HOBO-Ware Pro software. Sensor depth are calculated in the software by processing with barometric pressure data recorded on a separate HOBO U20-001-01 pressure transducer. Manual field measurements are made using a Solinist electric tape to measure water level below ground. These manual measurements are used to apply a prorated correction between visits to create the final water level below ground (WL\_BLG\_m).TOC above land surface = 0.68 metersSensor location down borehole from TOC = 7.79 metersSensor location from ground level = 7.11 metersCasing type = pvcQuality Control:Data were checked by graphing data in R package and comparing to precipitation and manual water level measurements using a Solinist electric tape. Bad, missing, or erroneous data values were removed or marked with -9999 which could be caused during data downloads and/or malfunctioning sensors. Data gaps:2017-03-05 to 2017-03-07 : sensor maintenance2017-07-12 to 2017-08-16 : sensor battery went bad2019-09-14 to 2019-10-27: sensor failed and replaced; data removed for this period2021-12-20 to 2022-02-21: sensor failed and replaced; data removed for this periodThe water table below land surface is obtained by subtracting the head pressure and above ground casing length from the sensor depth.  |
| Sites | Shale Hills South Ridge Top: northing/easting: 147771.92/ 587065.53.5336; DMS: 40.66408, -77.90297(NAD\_1983\_StatePlane\_Pennsylvania\_South\_FIPS\_3702); Elev: 300.6 meters |
| 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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