# SSHCZO Metadata Worksheet

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| Data File Name | **SH\_CZMW6.csv** |
| Date Prepared | 2017-12-05 |
| Descriptive Title | CZMW 6 |
| Update Frequency | Annually |
| Abstract | CZMW 6 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 6 are measured every 30 minutes from 2014-04-28 to 2016-10-22 and every 15 minutes 2017-07-12 to present using a HOBO U20-001-01 non-vented pressure transducer.. |
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| Data Value Descriptions | * COL1: label = TmStamp\_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 HOBO U20-001-01 non-vented pressure transducer. Data are manually downloaded monthly using HOBO-Ware Pro software. Sensor depth is calculated in the software by processing with barometric pressure data recorded on a separate HOBO U20-001-01 pressure transducer. Water level below ground determined using the suspended cable length to sensor below ground and taking the difference of the SensorDepth\_m [WL\_BLG\_m = 7.18 - SensorDepth\_m].  Casing type = pvc  TOC above land surface = 0.46 meters  Sensor location down borehole from TOC = 7.64 meters  Sensor location from ground level = 7.18 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.  Data Gaps:  20150219 to 20150307 – no sensor deployed during this time frame  20150520 to 20151027 – failed sensor  20160526 to 20170712 – multiple bad sensors and corrupted data was not recoverable  2019-04-01 – short time for sensor removed during download  2018-08-20 – sensor download and sampling during this time period  2019-07-05 to 2019-10-23 – water level below sensor level  2023-06-09 to 2023-06-14 – water level below sensor level |
| Sites | Shale Hills northing/easting: 147949.3525/ 587190.8312; DMS: 40.665679, -77.901487(NAD\_1983\_StatePlane\_Pennsylvania\_South\_FIPS\_3702); Elevation 310.51 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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