# SSHCZO Metadata Worksheet

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| Data File Name | **SPMS \_Precip\_Level\_0.csv** |
| Date Prepared | 2018-09-26 |
| Descriptive Title | Precipitation, Rain in mm |
| Update Frequency | Continuous – streamed every 10min and integrated to daily data |
| Abstract | QAed precipitation are measured 10min with a Texas Electronics TE525WS tipping bucket. Data are recorded on a Campbell Scientific CR1000 data logger which streams data back to PSU campus and into the SSHCZO database. The tipping buckets installed at the South Planar Mid-Slope pit and the South Planar Mid-Slope alternate pit are considered to be under canopy to capture the through-fall rain. The South Planar Ridge Top tipping bucket is considered to be open canopy. The two mid-slope tipping buckets began recording 2018-09-26 to present. The ridge top tipping bucket began recording 2018-10-02. |
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| Data Value Descriptions | * COL1: label = TmStamp, TimeZone = UTC * COL2: label = SPMS\_AltUnits=mm, TimeSupport= daily, Offset = -10 cm? * COL3: label = Flag\_alt, evaluation column for the data quality * COL4: label = SPMS\_Main, Units=mm, TimeSupport= daily, Offset = -10 cm? * COL5: label = Flag\_main, evaluation column for the data quality * COL6: label = SPRT, Units=mm, TimeSupport= daily, Offset = -10 cm? * COL7: label = Flag\_ridge, evaluation column for the data quality |
| Keywords | Precipitation, rain |
| Methods | Precipitation are measured every 10 minutes (and integrated into daily data) using a Texas Electronics TE 525WS tipping bucket sensor wired to a Campbell Scientific CR1000 data logger. The tipping buckets installed at the South Planar Mid-Slope pit and the South Planar Mid-Slope alternate pit are considered to be under canopy to capture the through-fall rain. The South Planar Ridge Top tipping bucket is considered to be in open canopy.  “NaN” in the evaluation columns stand for missing data;  “Big” in the evaluation columns stand for data larger than real soil moisture;  “Small” in the evaluation columns stand for data smaller than real soil moisture; |
| Sites | Shale Hills:  SPMS – South Planar Mid-Slope   |  |  | | --- | --- | | Latitude | 40.6641 | | Longitude | -77.9063 |   SPMS Alternate Pit – South Planar Mid-Slope Alternate Pit   |  |  | | --- | --- | | Latitude | 40.66416 | | Longitude | -77.90626 |   Shale Hills:  SPRT – South Planar Ridge Top   |  |  | | --- | --- | | Latitude | 40.6639 | | Longitude | -77.9064 | |
| Publications | none |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Financial Support was provided by National Science Foundation Grant EAR – 1331726 (S. Brantley) for the Susquehanna Shale Hills Critical Zone Observatory.  Logistical support and/or data were provided by the NSF-supported Susquehanna Shale Hills Critical Zone Observatory.  Acknowledgement for research in Cole Farm:  This research was conducted on a farm in Shaver's Creek watershed at the intersection of RT 305 and Winchester Road. |
| Data Use Notes | The user of Susquehanna Shale Hills CZO data agrees to provide proper acknowledgment with each usage of the data. Citation of the name(s) of the investigator(s) responsible for the data set, in addition to the generic statement above, constitutes proper acknowledgment. Author(s) (including Susquehanna Shale Hills CZO investigators) of published material that makes use of previously unpublished Susquehanna Shale Hills CZO data agree to provide the Susquehanna Shale Hills CZO data manager with four (4) copies (preferably reprints) of that material for binding as soon as it becomes available. The user of Susquehanna Shale Hills CZO data agrees not to resell or redistribute shared data. The user of these data should be aware that, while efforts have been taken to ensure that these data are of the highest quality, there is no guarantee of perfection for the data contained herein and the possibility of errors exists. These data are defined as either public or private, such that a password may be required for access. |