# SSHCZO Metadata Worksheet

|  |  |
| --- | --- |
| Data File Name | **GR\_LRRT\_10\_min \_Precip\_Level\_0.csv** |
| Date Prepared | 2018-09-26 |
| Descriptive Title | Precipitation, Rain in mm |
| Update Frequency | Monthly |
| Abstract | Raw (not quality controlled) precipitation data are measured as part of the Ground Hydrological Observation Gear (GroundHOG) sites in the Susquehanna Shale Hills Critical Zone Observatory. Data are recorded on a Campbell Scientific CR1000 data logger. The data are automatically transmitted back to campus into database via cellular telemetry every three hours. The tipping bucket at the LRRT pit is considered to be in open space. Tipping bucket was installed on 2018-09-26.  Data for LRRT pit: 2018-09-26 to present |
| Investigator  Contact Info | Dr. David Eissenstat, Professor of Woody Plants, The Pennsylvania State University, 201 Forest Resources Building, University Park, PA, 16802, 814.863.3371, [dme9@psu.edu](mailto:dme9@psu.edu).  Jon Duncan, Assistant Professor of Watershed Hydrology, The Pennsylvania State University, 306 Forest Resources Building, University Park, PA, 814-865-7553, [jmduncan@psu.edu](mailto:jmduncan@psu.edu).  Qicheng Tang, PhD Student, Soil Science, The Pennsylvania State University, [qut9@psu.edu](mailto:qut9@psu.edu) |
| Data Value Descriptions | * COL1: label = TmStamp, TimeZone=UTC. * COL2: label = Record, data logger sequential system * COL3: label = LRRT\_mm, TimeSupport= 10 min, Units = mm, total amount of rain |
| Keywords | Precipitation, rain |
| Methods | Precipitation are measured every 10 minutes using a Texas Electronics TE 525WS tipping bucket sensor wired to a Campbell Scientific CR1000 data logger. The Leading Ridge Ridge Top tipping bucket is considered to be in open canopy. |
| Sites | Garner Run:  LRRT – Leading Ridge Ridge Top Pit:   |  |  | | --- | --- | | Latitude 40.6940002 |  | | Longitude -77.918602 |  | |
| Publications | none |
| Citation | **Acknowledgement for CZO**:  Financial Support was provided by National Science Foundation Grant EAR – 0725019 (C. Duffy), EAR – 1239285 (S. Brantley), and 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.  For EAR 07-25019 to C.J. Duffy, award dates were 11/1/07 - 10/31/13  For EAR 12-39285 to S.L. Brantley, award dates were 9/1/12 - 8/31/14  For EAR 13-31726 to S.L. Brantley, award dates are 10/1/13 -  9/30/19  **Acknowledgement for research in Shale Hills:**  This research was conducted in Penn State's Stone Valley Forest, which is funded by the Penn State College of Agriculture Sciences, Department of Ecosystem Science and Management and managed by the staff of the Forestlands Management Office.  **Acknowledgement for research in Garner Run:**   This research was conducted in Rothrock State Forest which is funded and managed by the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry.  **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. |