# CZO Metadata Worksheet

|  |  |
| --- | --- |
| Data File Name | Precipitation Data Hourly |
| Date Prepared | 08/28/2018 |
| Descriptive Title | Shale Hills CZO Hourly Precipitation Total Data |
| Update Frequency | Monthly |
| Abstract | Quality controlled precipitation data has been prepared using the field observations from the OTT Pluvio weighing rain gauge. Data are compared to NWS and NOAA data at site GHCN, Rock Springs, and Shavers Creek WeatherStem. Ten minute data are compiled into the previous hourly data. The data between 05/01/2006 to 12/31/2007 was revised by 1) comparing with NADP PA42 hourly data, and 2) clearing hourly cumulative OTT measure.  |
| InvestigatorContact Info | **Year 2014-Current**Brandon Forsythe, Assistant Research Professor, brf11@psu.eduDr. Li Li, Associate Professor, Dept. Civil & Environmental Engineering, The Pennsylvania State University, 221A Sackett Building, University Park, PA 16802lili@engr.psu.eduDacheng Xiao, PhD Candidate, Dept. Energy and Mineral Engineering, The Pennsylvania State University, University Park, PA 16802dzx102@psu.edu**Year 2006-2013**Dr. Christopher J. Duffy, Professor, Dept. Civil & Environmental Engineering, The Pennsylvania State University, 212 Sackett Building, University Park, PA 16802cxd11@psu.edu |
| Data Value Descriptions | * COL1: label=Date (m/d/yyyy hh:mm)
* COL2: label=Total Hourly Precipitation Amount (mm)
* COL3: label=Comment (extreme data, data missing, frozen device, etc.)
* COL4: SiteID=database table label for relational database purposes
 |
| Keywords | Shale Hills, CZO, precipitation |
| Methods | * Raw ten minute data was summed to hourly total
* Missing values were replaced by correlating to hourly tipping bucket precipitation total

y = 0.4091x + 0.0572 R2 = 0.59 for 2008; y = 0.4255x + 0.0323 R2 = 0.42 for 2010* Precipitation type determined by ten minute LPM precipitation type data
 |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Logistical support and/or data were provided by the NSF-supported Shale Hills Susquehanna Critical Zone Observatory. |
| Publications | none |
| Data Use Notes | The user of Shale Hills Susquehanna 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 Shale Hills Susquehanna CZO investigators) of published material that makes use of previously unpublished Shale Hills Susquehanna CZO data agree to provide the Shale Hills Susquehanna CZO data manager with four (4) copies (preferably reprints) of that material for binding as soon as it becomes available. The user of Shale Hills Susquehanna 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. |