# CZO Metadata Worksheet

|  |  |
| --- | --- |
| Data File Name | Stream Flow Data |
| Record Period | 01/01/2006 to 12/31/2011 |
| Descriptive Title | Susquehanna Shale Hills Critical Zone Observatory Stream Flow Data |
| Update Frequency | Monthly |
| Abstract | A double V-notch weir located at the outlet of the stream Shale Hills Susquehanna Critical Zone Observatory Stream (40.6648488, -77.9072458, elevation of 259.08) was used to monitor stream discharge accurately during high and low flows. Water depths were recorded in one-minute intervals, integrated to 10 minute values and converted to discharge using a rating curve developed by Nutter (1964). |
| Investigator  Contact Info | Dr. Christopher J. Duffy, Professor of Civil & Environmental Engineering, The Pennsylvania State University, 212 Sackett Building, University Park, PA 16802, (814) 863-4384  cxd11@psu.edu |
| Data Value Descriptions | * COL1.label=ValueAttribute, value=TIMESTAMP, UTCOffset=-5, TimeZone=EST, format=MM/dd/yyyy HH:mm * COL2.label=VariableName, value=Discharge, Units=m3/d, Method=Rating\_Curve, SampleType=No Sample, SampleMedium=Surface water, ValueType=Derived Value, TimeSupport=10, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH4 (Qualifier Codes: A = Approved for publication, E = Value has been edited or estimated – see Methods below) |
| Keywords | hydrology, stream flow, water, discharge |
| Methods | Quality controlled stream flow data has been prepared using the (1) the field observation data and (2) model prediction from PIHM v2.0 (Soil: SSURGO, Land Cover: NLCD 2001, Vegetation: PIHMgis, DEM: 3m x3 m spatial resolution, Bed rock: 2 meters of uniform thickness, Precipitation, Temperature, Vapor Pressure, Relative Humidity, Wind Speed and Solar Radiation using NLDAS-2). |
| 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 Author(s) (including Shale Hills Susquehanna CZO investigators) of published material that makes use of previously unpublished Shale Hills Susquehanna CZO data agree to provide the Shale Hills Susquehanna CZO data manager with four (4) copies (preferably reprints) of that material for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. |