# CZO Metadata Worksheet

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| Data File Name | Root Observations 2017-2018 |
| Record Period | 05/02/2017 to 12/12/2018 |
| Descriptive Title | Susquehanna Shale Hills Critical Zone Observatory Root Observations Data |
| Update Frequency | Yearly |
| Abstract | 150 minirhizotron tubes distributed throughout the Susquehanna Shale Hills Critical Zone Observatory were used to observe first order root dynamics. Root observations were taken on a biweekly basis. Roots were tracked through Rootfly version 2.0.2 (Wells and Birchfield, Clemson University, SC, USA). |
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| Data Value Descriptions | * COL1.label=Site, value=General, format= character * COL2.label= Tube, value=General, format= numeric * COL3.label= Window, value=Depth in the soil, Method = Rootfly© * COL4.label=ID, value= tracked root, unit = individual root, Method = Rootfly© * COL5.label=Appeared.ses, value= survey in which root first appeared, units = survey number, Method = Rootfly© * COL6.label=Died.ses, value= survey in which root died or disappeared, units = survey number, Method = Rootfly© * COL7.label=Appeared.date, value= Date, units = (mm/dd/yyyy), Method = Rootfly© * COL8.label=Died.date, value= Date, units = (mm/dd/yyyy), Method = Rootfly© * COL9.label= Diameter, value=root diameter, format= numeric, Method = Rootfly© * COL10.label= Topo, value=Topographic location, format= character |
| Keywords | Plant ecology, fine root dynamics, fine root production, fine root lifespan, fine root mortality |
| Methods | Images were taken with Bartz digital camera with ICAP version 7.0 (Bartz Technology Corp., Carpinteria, CA, USA) in minirhizotron tubes. All images were then processed with Rootfly version 2.0.2 (Wells and Birchfield, Clemson University, SC, USA). Each data point represents one root that was tracked through time. |
| 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. |