# CZO Metadata Worksheet

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| Data File Name | CZO\_TreeIsotopes.xls |
| Date Prepared | January 7, 2013 |
| Descriptive Title | Natural abundance stable isotopes of oxygen and hydrogen from tree branch samples for 2009 and 2011 |
| Update Frequency | N/A |
| Abstract | Small tree branches were sampled by tree climbing over the course of the season in 2009 and 2011. Samples were sealed in glass vials, frozen, and later the water was extracted from the tissue via cryogenic vacuum distillation. Samples were analyzed at the University of California at Berkeley, Center for Stable Isotope Biogeochemistry by mass spectroscopy, equilibration method. |
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| Data Value Descriptions | |  |  | | --- | --- | | TreeID | unique identification number for each tree | | SampleID | identification number for analytical lab | | Species | tree species name abbreviation, see tab Species Codes for full names | | Elevation | tree location elevation in meters | | Date | date sample was collected (day-month-year) | | treedelta18O | 18-oxygen isotope ratio in permil | | treedeltaD | deuterium isotope ratio in permil | | X-Coordinate | GIS X coordinate in meters in State Plane PA South | | Y-Coordinate | GIS Y coordinate in meters State Plane PA South | |
| Keywords | vegetation, stable isotopes, tree water, oxygen-18, deuterium |
| Methods | Cryogenic vacuum distillation to extract water from plant tissue and mass spectroscopy. (equilibration method). |
| 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 | Manuscript in progress. |
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