# CZO Metadata Worksheet

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| Data File Name | Soil Gas Concentration Data |
| Date Prepared | 4/10/2014 |
| Descriptive Title | Shale Hills CZO Soil Gas Concentration and Flux Data (Level 0) |
| Update Frequency | Monthly (sporadic) |
| Abstract | The soil CO2 and N2O concentrations and various soil properties for the planar slope and swale sampling locations in the Susquehanna Shale Hills Critical Zone Observatory watershed.  |
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| Data Value Descriptions | 2008 – 2010:* COL1: label=Sample Label.
* COL2: label=Sample Location.
* COL3: label=Local time of day, Time Zone=EST.
* COL4: label=Date.
* COL5: label=Julian day.
* COL6: label=Soil depth (m).
* COL7: label=Order # (for injection of samples into the LICOR 7000 for analysis).
* COL8: label=CO2 concentration (ppm).
* COL9: label=Soil porosity.
* COL10: label= Soil VWC (m3/m3).
* COL11: label=Air Temperature (°C).
* COL12: label=Soil Temperature (°C).
* COL13: label=Elevation (m).

2013:* COL1: label=Site Name
* COL2: label=Date
* COL3: label=Depth (cm)
* COL4: label=CO2 concentration (ppm)
* COL5: label= N2O concentration (ppm)
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| Keywords | CO2 Concentration, Soil CO2, N2O Concentration, Soil N2O, CO2 Flux |
| Methods | 2008 – 2010:* CO2 concentration data were measured using a LICORE 7000.
* Soil VWC was measured with a time domain reflectometer.
* Air temperatures were obtained from the RTHnet website.
* Soil temperature were measured using a ST09 Supco soil temperature probe
* Gas sampler elevations were measured using a Garmin GPSmap 76CSx GPS.

2013:* Soil gas measured in situ using a Model 1412 Infrared Photoacoustic Spectroscopy (PAS) gas analyzer powered by a model EU1000i portable electric Honda generator. All gas flux sampling took place between 09:00 and 13:00 hours – the time of lowest diurnal temperature variability.
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| 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 |
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