# CZO Metadata Worksheet

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| Data File Name | **RTH1\_LPM\_precip.dat** |
| Date Prepared | 10/22/2014 |
| Descriptive Title | Susquehanna Shale Hills Critical Zone Observatory RTH2 (Real-Time Hydrology Network) Precipitation Type Data |
| Update Frequency | Monthly |
| Abstract | The Real-Time Hydrology Network provides precipitation type detection by hydrometeor species and precipitation intensity and amount measurement at RTH1 in the Susquehanna Shale Hills Critical Zone Observatory watershed. |
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| Data Value Descriptions | * COL1.label=ValueAttribute, value=TIMESTAMP, UTCOffset=-5, TimeZone=EST, format=MM/dd/yyyy HH:mm * COL2.label=ValueAttribute, value=RecNum * COL3.label=ValueAttribute, value=LPM ID * COL4.label=VariableName, value=Temp\_Interior, Units=deg C, Method=LPM\_Temp, TimeSupport=10, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL5.label=VariableName, value=SYNOP\_4677, Method=LPM\_Type, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL6.label=VariableName, value=SYNOP\_4680, Method=LPM\_Type, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL7.label=VariableName, value=METAR\_4678, Method=LPM\_Type, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL8.label=VariableName, value=Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipInt, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL9.label=VariableName, value=SYNOP\_4677, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL10.label=VariableName, value=SYNOP\_4680, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL11.label=VariableName, value=METAR\_4678, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL12.label=VariableName, value=Total\_Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipInt, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL13.label=VariableName, value=Liquid\_Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipIntLiq, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL14.label=VariableName, value=Solid\_Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipIntSol, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL15.label=VariableName, value=Precip\_Amount, Units=mm, Method=LPM\_Precip, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL16.label=VariableName, value=Visibility\_In\_Precip, Units=m, Method=LPM\_Vis, TimeSupport=5, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL17.label=VariableName, value=Radar\_Reflectivity, Units=dBZ, Method=LPM\_Radar, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL18.label=VariableName, value=Measuring\_Quality, Units=%, Method=LPM\_QC, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL19.label=VariableName, value=Hail\_Diameter, Units=mm, Method=LPM\_Hail, TimeSupport=1, TimeSupportUnits=min, DataType=Max, SiteCode=CZO\_RTH1 * COL20.label=VariableName, value=Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipInt, TimeSupport=10, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL21.label=VariableName, value=Precip\_Intensity, Units=mm/hr, Method=LPM\_PrecipInt, TimeSupport=10, TimeSupportUnits=min, DataType=Max, SiteCode=CZO\_RTH1 * COL22.label=VariableName, value=SYNOP\_4680, Method=LPM\_Type, TimeSupport=10, TimeSupportUnits=min, DataType=Max, SiteCode=CZO\_RTH1 * COL23.label=VariableName, value=SYNOP\_4680\_9, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL24.label=VariableName, value=SYNOP\_4680\_8, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL25.label=VariableName, value=SYNOP\_4680\_7, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL26.label=VariableName, value=SYNOP\_4680\_6, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL27.label=VariableName, value=SYNOP\_4680\_5, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL28.label=VariableName, value=SYNOP\_4680\_4, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL29.label=VariableName, value=SYNOP\_4680\_3, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL30.label=VariableName, value=SYNOP\_4680\_2, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL31.label=VariableName, value=SYNOP\_4680\_1, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 * COL32.label=VariableName, value=SYNOP\_4680\_0, Method=LPM\_Type, TimeSupport=1, TimeSupportUnits=min, DataType=Average, SiteCode=CZO\_RTH1 |
| Keywords | hydrology, precipitation, hydrometeors, hydrometeor species, precipitation type, precipitation intensity, hail diameter, SYNOP, METAR |
| Methods | Precipitation amount, intensity, and type, along with hail diameter and equivalent radar reflectivity factor, are measured with a Thies Clima Laser Precipitation Monitor, <http://www.thiesclima.com/disdrometer.html>. See <http://www.czo.psu.edu/downloads/Metadataworksheets/LPM_SYNOP_METAR_key.pdf> for SYNOP and METAR precipitation type codes. |
| 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. |