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| TMAX | Monthly Mean Maximum Temperature – Average of daily maximum temperature |
| TMIN | Monthly Mean Minimum Temperature – Average of daily minimum temperature |
| TAVG | Average Monthly Temperature - computed by adding the unrounded monthly mean TMAX (average of the daily maximum temperatures) and TMIN temps (average of the daily minimum temperatures) and dividing by 2; |
| EMXT | Extreme maximum temperature for the month (year) is the highest daily maximum temperature value for specified month (year). |
| EMNT | Extreme minimum temperature for the month (year) is the lowest daily minimum temperature value for specified month (year). |
| DX90 | Number of days with maximum temperature >= 32.2°C/90°F. |
| DX70 | Number of days with maximum temperature >= 21.1°C/70°F. |
| DX32 | Number of days with maximum temperature <= 0°C/32°F. |
| DT32 | Number of days with minimum temperature <= 0°C/32°F. |
| DT00 | Number of days with minimum temperature <= -17.8°C/0°F. |
| HTDD | Heating Degree Days - computed when daily average temperature is less than 18.3°C/65°F. HDD = 18.3° – mean daily temperature to tenths degree Celsius. Each day is summed to produce a monthly total. |
|  | Each monthly degree day total is summed to produce a yearly total. This is a July through June Annual total for Northern Hemisphere stations (Year is for the ending month; June); January-December for Southern Hemisphere stations. |
| CLDD | Cooling Degree Days - computed when daily average temperature is above 18.3°C/65°F. CDD = mean daily temperature -18.3° to tenths degree Celsius. Each day is summed to produce a monthly total. |
|  | Each monthly degree day total is summed to produce a yearly total. This is a January-December Annual total for Northern Hemisphere stations. July-June for Southern Hemisphere stations (Year is for the ending month; June). |
| PRCP | Total Monthly (Annual) precipitation. Precipitation totals are based on daily or multi-day (if daily is missing) precipitation report, in millimeters to tenths. |
| EMXP | Highest daily total of precipitation in the month (year) in tenths of millimeters (Non-Accumulation). The day that EMXP occurred for the month (year) is included as an attribute of this element. |
| DP01 | Number of days with >= 0.01 inch/0.254 millimeter in the month (year). (Non-Accumulation) Note: values originally recorded in inches as 0.01” are stored as 0.3 millimeters in GHCN-Daily; technically this test is for values greater than or equal to 0.3 mm. |
| DP10 | Number of days with >= 0.1 inch/2.54 millimeter in the month (year). (Non-Accumulation) Note: values originally recorded in inches as 0.10” are stored as 2.5 millimeters in GHCN-Daily; technically this test is for values greater than or equal to 2.5 mm. |
| DP1X | Number of days with >= 1.0 inch (25.4mm) precipitation in the month (year). (Non-Accumulation) |
| SNOW | Total Monthly (Annual) Snowfall in millimeters. |
| EMSN | Highest daily snowfall in the month (year) in millimeters. The day EMSN occurred for the month (year) is included as an attribute of this element. |
| DSNW | Number of days with snowfall >= 1 inch (25 mm). Snowfall is provided in mm in GHCN-D so 25 mm is used instead of 25.4 mm. |
| DSND | Number of days with snow depth >= 1 inch (25 mm). Snow depth is provided in mm in GHCN-D so 25 mm is used instead of 25.4 mm. |
| EMSD | Highest daily Snow Depth in the month (year) in millimeters. The day EMSD occurred for the month (year) is included as an attribute of this element. |
| EVAP | Total Monthly Evaporation to tenths of millimeters. Precipitation missing/flagged criteria is used. Use Temperature missing/flagged criteria for the following elements. |
| MNPN | Monthly (Annual) mean minimum temperature of evaporation pan water in hundredths degree Celsius. |
| MXPN | Monthly (Annual) mean maximum temperature of evaporation pan water in hundredths degree Celsius. |
| WDMV | Total monthly (annual) wind movement over evaporation pan in kilometers. Precipitation missing/flagged criteria is used. |
| TSUN | Daily total sunshine (minutes). This element contains historical data only, except for four (4) stations in the U.S. that continue to measure total sunshine (Miami, FL; Buffalo, NY; Pocatello, ID; Grand Rapids, MI). |
| PSUN | Average of the daily percent of possible sunshine. Daily percentages are reported, not computed. For monthly percent of possible, the daily values are averaged using Temperature missing and flagged criteria (no more than 5 missing days in the month, no more than 3 in a row missing). |
| AWND | Monthly (Annual) average wind speed. Average the Daily AWND values in GHCN-D to get monthly and annual averages. (tenths of meters per second). |
| WSFM | Maximum Wind Speed - Fastest mile. Maximum wind speed for the month (year) reported as Fastest Mile. |
| WDFM | Wind Direction for Maximum Wind Speed – Fastest Mile. |
| WSF2 | Maximum Wind Speed - Fastest 2-minute. Maximum wind speed for the month (year) reported as Fastest 2-minute. |
| WDF2 | Wind Direction for Maximum Wind Speed – Fastest 2-minute wind. |
| WSF1 | Maximum Wind Speed – Fastest 1-minute. Maximum wind speed for the month (year) reported as Fastest 1-minute. |
| WDF1 | Wind Direction for Maximum Wind Speed – Fastest 1-minute wind. |
| WSFG | Peak Wind Gust Speed – FG. Maximum wind gust speed for the month (year). Note: It is permissible to have a wind gust speed without a direction. Gust speeds are sometimes measured without a report of direction. |
| WDFG | Wind Direction for Peak Wind Gust Speed. |
| WSF5 | Peak Wind Gust Speed – Fastest 5-second wind. Maximum wind gust speed for the month (year) reported as Fastest 5-second wind. |
| WDF5 | Wind Direction for Peak 5-second Wind Gust Speed. |
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|  | For the following six elements (40-45) yy can equal 01 to 08 indicating up to eight possible combinations of soil cover and depth for any particular month-year. These are listed below. The soil cover and depth are annotated in attributes of each element. Note that the soil cover and depth attributed to an element such as MX03 is specific to a particular month-year. The element MX03 may have attributes of a different soil cover and depth in another month-year. |
|  | Soil cover 1 Grass 2 Fallow 3 Bare ground 4 Brome grass 5 Sod 6 Straw mulch 7 Grass muck 8 Bare muck 0 Unknown Soil Depth Inches (cm) 2 (5) 4 (10) 8 (20) 20 (50) 40 (100) 60 (150) 72 (180) unknown |
| MXyy | Monthly (Annual) mean of daily maximum soil temperature. |
| MNyy | Monthly (Annual) mean of daily minimum soil temperature. |
| HXyy | Highest maximum soil temperature for the month (year). |
| HNyy | Highest minimum soil temperature for the month (year). |
| LXyy | Lowest maximum soil temperature for the month (year). |
| LNyy | Lowest minimum soil temperature for the month (year). |
| HDSD | Heating Degree Day **(This is a season-to-date element.)** |
|  | A running total of monthly HDD through the end of the most recent month. Each month of HTDD is summed to produce a season-to-date total. Season starts in July for Northern Hemisphere stations (Year is for the ending month); starts in January for Southern Hemisphere stations. |
| CDSD | Cooling Degree Day **(This is a season-to-date element.)** |
|  | A running total of monthly CDD through the end of the most recent month. Each month of CLDD is summed to produce a season-to-date total. Season starts in January for Northern Hemisphere stations; starts in July for Southern Hemisphere stations (Year is for the ending month). |
| FZFx (x = 0 through 9) | First/Last Freeze Days **(This is an annual element.)** |
|  | x= 0 First freeze of the year that is less than or equal to 32F (0C). 1 First freeze of the year that is less than or equal to 28F (-2.2C). 2 First freeze of the year that is less than or equal to 24F (-4.4C). 3 First freeze of the year that is less than or equal to 20F (-6.7C). 4 First freeze of the year that is less than or equal to 16F (-8.9C). 5 Last freeze of the year that is less than or equal to 32F (0C). 6 Last freeze of the year that is less than or equal to 28F (-2.2C). 7 Last freeze of the year that is less than or equal to 24F (-4.4C). 8 Last freeze of the year that is less than or equal to 20F (-6.7C). 9 Last freeze of the year that is less than or equal to 16F (-8.9C). |
|  | The YEAR (dividing date) for this element is 1 August (this is consistent with the NCEI 1981-2010 Normals project). This is the only element with a ‘year’ that begins on 1 August. |