Navigating cli-MATE

Station Selectors	
General Info	o Use "Select Daily Station" or "Select Hourly Station" in the top bar to change stations o Select stations by station ID, climate division, or by State/County o Nationwide GIS map selector ▪ Select daily stations by network ▪ GIS map searchable by address, city or zip code ▪ Includes overlay layers including climate divisions, and crop reporting districts ▪ More Info tab includes a station's period of record and available data

Daily-Observed Data	

Daily Data (Daily-Observed Data → Daily)	
Between Two Dates	o Raw historical station data o Plot data or download in a csv file
Degree Days	o Full suite of degree day data, including Heating Degree Days, Cooling Degree Days, Growing Degree Days, Modified Growing Degree Days, Stress Degree Days and Freezing Degree Days. o Customizable to include non-standard degree day bases and start dates. o Tabular data and data plots available
This Date In History	o See all data available for one day or a holiday in a sortable table
Almanac for a Day	o Average and record highs & lows o Daily 1981-2010 NCDC Climate Normals
Threshold Search	o Find all dates a certain temperature, precipitation or snowfall threshold criterion is met for one or two criteria o Gives a chronological list of dates, monthly counts, or a runs of Days meeting the threshold
Multi-Day Extremes	o Find extreme periods of temperature, snowfall and precipitation
Ranking	o Search the ranking of temperature precipitation and snowfall data in ascending or descending order for an individual date.
Keetch-Byram Drought Index (KBDI)	o Get the KDBI for an individual days in a sortable table o Graphs also available

Monthly Data (Daily-Observed Data → Monthly)	
Between Specific Months	o Get monthly station data for multiple variables in a sortable table
Monthly NCDC Normals	o Available in either graph or tabular form
Ranking	o Similar to daily Ranking o Allows user to determine how much missing data is permissible
Thermograph	o See high & low temperature compared to normal values as well as extremes
Frequency Distribution	o Find the frequency certain temperature, precipitation and snowfall amounts occur during certain months or during the calendar, water or snowfall years.

Seasonal Data (Daily-Observed Data → Seasonal)	
Degree Days, Ranking & Thermograph	o These products are also under the Seasonal Category
Freeze Probabilities	o Probabilities of later spring freeze or earlier fall freeze at various temperatures
Seasonal Statistics	o Historical first and last dates of growing, snow and frost seasons in a sortable table o Length of each season

Annual Data (Daily-Observed Data → Annual)	
Summary By Month	o Monthly data sorted by year
Ranking	o Similar to monthly and daily Ranking o Allows user to determine how much missing data is permissible
Annual Data Between Specific Years	o Sortable table of data for calendar, water and snow years o Data plots

Multi-Station Data (Daily Observed Data→Multi-Station)	
Summary	o Summary of Precipitation, Snowfall and Mean Temperature compared to normal for stations in a Climate Division or State
Temperature	o Average of maximum, minimum and mean temperatures for a timeframe, including the highest and lowest maximum for the selected period
Precipitation	o Amount of precipitation and snowfall during a period, including departures from normal and daily maximums
County Data (Daily-Observed Data→County Data)	
General Info	o Data from all stations in a county for one climate variable o Select individual station networks
Hourly-Observed Data	
Hourly Data Lister	o Raw hourly station data for a station's period of record
Wind Rose	o Customizable wind rose plots for any period for a station o Can be filtered by elements such as precipitation and barometric pressure
Daily Averaged Hourly Data	o Average values of temperature, dew point, humidity, pressure, wind, and daily precipitation from the hourly station
METAR-Raw or Decoded	o Data available from 2007-Present o Download up to 1 month of raw or 1 day of decoded data at a time
CRN Data	o Data from sites nationwide o Raw hourly data o Daily & monthly temperature and precipitation summaries
State & Climate Division Data	
General Info	o Based off of the nClimDiv product from NCDC
Snapshot	o Monthly climate division data for each state for a month
Monthly by Year	o All climate division monthly data for a specific variable for the period selected.
Chronological Listing	o Gives temperature and precipitation data and departures from normal
Ranked Listing	o Similar to ranking tool for stations
Estimated Between Two Dates	o Estimates temperature, precipitation and degree days for states in the Midwest only.
Preliminary Average Precip and Temperature	o Available for Midwest states for the previous month
Maps of Data	
MRCC Gridded Data→Specific period	o Similar to the maps found in weekly and monthly reports on the Midwest Climate Watch of NWS COOP data o Plot actual values, departure from mean and percent of mean for a period o Domains include RCC, RFC, NIFC & NWS regions, states, and NWS CWA's
MRCC Gridded Data → Long-Term Average Maps	o Mapped averages of precipitation, temperature and snowfall
Interpolated Station Data	o Selectable by individual station network(s) o Higher resolution than Specific Period Maps, but slower load times
Charts and Graphs	
General Info	o Convenient menu for all cli-MATE products that have charts or graphs available

**For more information or questions about cli-MATE,
please call 765-494-6574 or email mrcc@purdue.edu**

cli-MATE: http://mrcc.purdue.edu/CLIMATE

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