

Navigating cli-MATE vs xmACIS



* *Italicized items in red are unique to cli-MATE*

Station Selectors	
General Info	<ul style="list-style-type: none"> ○ Use “Select Daily Station” or “Select Hourly Station” in the top bar to change stations ○ Select stations by station ID, climate division, or by State/County ○ Nationwide GIS map selector <ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ○ Raw historical station data ○ Plot data or download in a csv file
Degree Days	<ul style="list-style-type: none"> ○ 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. ○ Customizable to include non-standard degree day bases and start dates. ○ Tabular data and data plots available
This Date In History	<ul style="list-style-type: none"> ○ See all data available for one day or a holiday in a sortable table
Almanac for a Day	<ul style="list-style-type: none"> ○ Average and record highs & lows ○ Daily 1981-2010 NCDC Climate Normals
Threshold Search	<ul style="list-style-type: none"> ○ Find all dates a certain temperature, precipitation or snowfall threshold criterion is met for one or two criteria ○ Gives a chronological list of dates, monthly counts, or a runs of Days meeting the threshold
Multi-Day Extremes	<ul style="list-style-type: none"> ○ Find extreme periods of temperature, snowfall and precipitation
Ranking	<ul style="list-style-type: none"> ○ Search the ranking of temperature precipitation and snowfall data in ascending or descending order for an individual date.
Keetch-Byram Drought Index (KBDI)	<ul style="list-style-type: none"> ○ Get the KBDI for an individual days in a sortable table ○ Graphs also available
Monthly Data (Daily-Observed Data → Monthly)	
Between Specific Months	<ul style="list-style-type: none"> ○ Get monthly station data for multiple variables in a sortable table
Monthly NCDC Normals	<ul style="list-style-type: none"> ○ Available in either graph or tabular form
Ranking	<ul style="list-style-type: none"> ○ Similar to daily Ranking ○ Allows user to determine how much missing data is permissible
Thermograph	<ul style="list-style-type: none"> ○ See high & low temperature compared to normal values as well as extremes
Frequency Distribution	<ul style="list-style-type: none"> ○ 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	<ul style="list-style-type: none"> ○ These products are also under the Seasonal Category
Freeze Probabilities	<ul style="list-style-type: none"> ○ Probabilities of later spring freeze or earlier fall freeze at various temperatures
Seasonal Statistics	<ul style="list-style-type: none"> ○ Historical first and last dates of growing, snow and frost seasons in a sortable table ○ Length of each season
Annual Data (Daily-Observed Data → Annual)	
Summary By Month	<ul style="list-style-type: none"> ○ Monthly data sorted by year
Ranking	<ul style="list-style-type: none"> ○ Similar to monthly and daily Ranking ○ Allows user to determine how much missing data is permissible
Annual Data Between Specific Years	<ul style="list-style-type: none"> ○ Sortable table of data for calendar, water and snow years ○ Data plots

Multi-Station Data (Daily Observed Data→Multi-Station)	
Summary	<ul style="list-style-type: none"> ○ Summary of Precipitation, Snowfall and Mean Temperature compared to normal for stations in a Climate Division or State
Temperature	<ul style="list-style-type: none"> ○ Average of maximum, minimum and mean temperatures for a timeframe, including the highest and lowest maximum for the selected period
Precipitation	<ul style="list-style-type: none"> ○ Amount of precipitation and snowfall during a period, including departures from normal and daily maximums
County Data (Daily-Observed Data→County Data)	
General Info	<ul style="list-style-type: none"> ○ Data from all stations in a county for one climate variable ○ Select individual station networks
Hourly-Observed Data	
Hourly Data Lister	<ul style="list-style-type: none"> ○ Raw hourly station data for a station's period of record
Wind Rose	<ul style="list-style-type: none"> ○ Customizable wind rose plots for any period for a station ○ Can be filtered by elements such as precipitation and barometric pressure
Daily Averaged Hourly Data	<ul style="list-style-type: none"> ○ Average values of temperature, dew point, humidity, pressure, wind, and daily precipitation from the hourly station
METAR-Raw or Decoded	<ul style="list-style-type: none"> ○ Data available from 2007-Present ○ Download up to 1 month of raw or 1 day of decoded data at a time
CRN Data	<ul style="list-style-type: none"> ○ Data from sites nationwide ○ Raw hourly data ○ Daily & monthly temperature and precipitation summaries
State & Climate Division Data	
General Info	<ul style="list-style-type: none"> ○ Based off of the nClimDiv product from NCDC
Snapshot	<ul style="list-style-type: none"> ○ Monthly climate division data for each state for a month
Monthly by Year	<ul style="list-style-type: none"> ○ All climate division monthly data for a specific variable for the period selected.
Chronological Listing	<ul style="list-style-type: none"> ○ Gives temperature and precipitation data and departures from normal
Ranked Listing	<ul style="list-style-type: none"> ○ Similar to ranking tool for stations
Estimated Between Two Dates	<ul style="list-style-type: none"> ○ Estimates temperature, precipitation and degree days for states in the Midwest only.
Preliminary Average Precip and Temperature	<ul style="list-style-type: none"> ○ Available for Midwest states for the previous month
Maps of Data	
MRCC Gridded Data→Specific period	<ul style="list-style-type: none"> ○ Similar to the maps found in weekly and monthly reports on the Midwest Climate Watch of NWS COOP data ○ Plot actual values, departure from mean and percent of mean for a period ○ Domains include RCC, RFC, NIFC & NWS regions, states, and NWS CWA's
MRCC Gridded Data → Long-Term Average Maps	<ul style="list-style-type: none"> ○ Mapped averages of precipitation, temperature and snowfall
Interpolated Station Data	<ul style="list-style-type: none"> ○ Selectable by individual station network(s) ○ Higher resolution than Specific Period Maps, but slower load times
Charts and Graphs	
General Info	<ul style="list-style-type: none"> ○ Convenient menu for all cli-MATE products that have charts or graphs available

For more information or questions about cli-MATE, please call 217-244-8226 or email mrcc@isws.illinois.edu

cli-MATE: <http://mrcc.isws.illinois.edu/CLIMATE/>

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