**H-Index overview**

H-Index represents the number of H days with a maximum temperature of H or greater. For example, if you had an H-Index of 82 for a given year, then there were 82 days with a maximum air temperature of 82°F, or greater, during that year. The Average H-Index ranges from 84, in Atchison, to 89, in Ashland. 19 of the 23 stations have negative slopes for their trend for the entire dataset of the H-Index. The H-Index doesn’t appear to have any significant geographic pattern for either positively or negatively sloped stations. The magnitude of the trend for the entire data set ranges from –0.018 in Independence to 0.012 in Hortons.

**C-Index overview**

C-index represents the number of C days with temperatures of 32°F-C or less. For example, a C index of 9 for a given year means that there were 9 days with a temperature of 23°F (32°F-9) or less during that year. The average C-Index for each station ranged from 22.6, in Saint Francis, to 16.4 in Columbus. There is a trend of decreasing the average C-Index from west to east and from north to south. 18 of the stations had negative slopes for the entire data set trend of the C-index. Of the stations that had positive slopes, 4 were in southern Kansas. The magnitudes of the slopes ranged from 0.012 in Ashland to –0.036 in Elkhart.

**W-Index overview**

W-index represents W days with W mm of rainfall or more. For example, if you had a W index of 15 for a given year there would be 15 days during that year that received a rainfall of 15mm, or more, of precipitation. The average W-Index ranged from 10.8 in Tribune to 17.8 in Columbus. There is a trend of increasing average W-index from west to east and from north to south. 19 of the 23 stations had positive slopes for the entire data set trend of W-Index. There was no obvious trend for the location of stations with negative slopes. The magnitude of slopes varied from -1.1 in Saint Francis to 1.6 in Winfield over the course of the century.

**D-Index overview**

D-index represents the number of D periods where there were D, or more, days in a row or with precipitation less than 1mm. For example, if you had a D-Index of 9 for a given year there would be 9 periods during that year with periods of little rain for 9 days, or longer, in a row. The average value of the D-Index tended to increase from east to west. Average D Index ranged from 9 in Columbus to 10 in Elkhart. 13 Stations had a positive slope, 5 stations had a slope of 0, and the remain 5 stations had negative slopes for the entire data set trend for the D-Index. 4 of the 5 stations with a negative slope where in Eastern or Central Kansas. The magnitudes of the entire data set trend for the D-index ranged from -0.002 in Ottawa and Manhattan to 0.009 in Tribune. As a note, D-Index occurs disproportionately at the same magnitude of points. All magnitude of D-index falls somewhere in the range of 6 to 14 with most occurring at 9 or 10. As such, I think it will be better to just pick some number of dry days and count their occurrence each year. Using the h index method just leaves out too much information to be useful to calculating dryness.