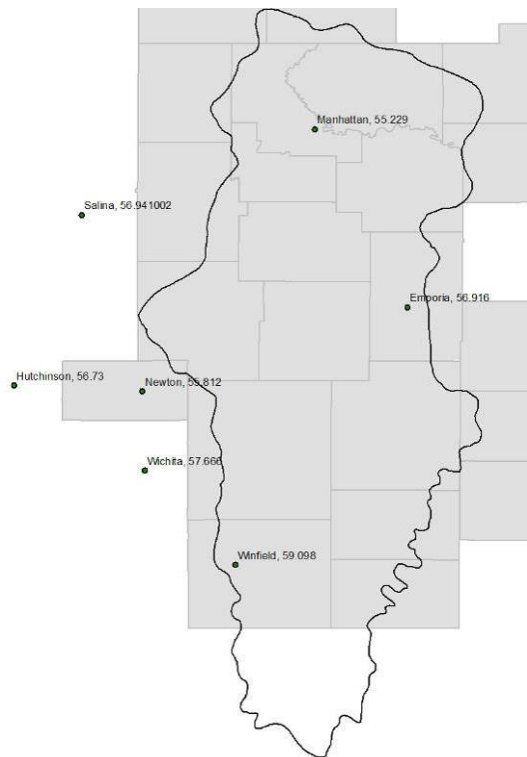


Title: Regional Climate Summary Metadata  
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Date: 7/31/07

Climate data is provided through several online sources, at various levels of detail and completeness. These data are spatially explicit to the point, or weather station, at which they are recorded, but rarely stretched across a landscape to provide a more complete look at regional differences.

As a first attempt to compare differences in climate within the Flint Hills Ecoregion we identified several weather stations in and near the region, at various points along North/South and East/West axis. The temperature from these data were summarized for the period of July 1, 1997 to July 1, 2007, and averaged to provide us a first glimpse at regional temperature trends.

The cities/weather stations of Winfield, Hutchinson, Newton, Manhattan (baseline), Emporia, and Salina were used to create this rough sketch of temperatures on the region.



Unfortunately, the number of suitable climate stations requires that some be outside the actual Flint Hills boundaries. For the purposes of this exercise, we chose several locations to act as surrogates for others until a later time when we may find a more suitable solution.

City	Location in Flint Hills	10 Year Average Temp	Deviation from Baseline
Wichita	Southwest	57.666	+2.437
Winfield	South Central	59.098	+3.869
Hutchinson	West Central (outside FH)	56.730	+1.501
Newton	West Central	55.812	+.583
Manhattan	North Central	55.229	0
Emporia	East Central	56.916	+1.687
Salina	West North / West Central	56.941	+1.712

From these results we see a general increase in temperature as you move south through the region (Winfield at 3.869 degrees warmer than Manhattan). Also, western cities tend to have very slight differences which vary depending on specifically where it is on the N/S continuum. That said, in this example, the N/S has the majority effect on the temperatures in the region.