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CS 274B: Spring 2016

Data Set

For my project, I will use PERSIAN-CCS data set which consists of temperature data as well as features related to a particular cloud patch in which a pixel is part. Each pixel, which represents a small geographic area, has 1 temperature feature and 12 features related to its cloud patch. There is also a target y value for that pixel obtained via radar data.

http://chrs.web.uci.edu/research/satellite_precipitation/activities01.html

Graphical Models

In order to predict precipitation, I will use a Markov Model where each x_i is conditioned on each y_i . Each y_i is conditioned on its neighbors. In this way, neighboring pixels will be likely to have similar values.