'Auld Lang Syne' or Old Long Ago:
My First Computer Map

One of the advantages of getting old is that one has the opportunity to look back on a wealth of experiences and bore co-workers with wonderful "back-in-the-day" stories. Today, I would like to share with you my introduction to computer mapping which came in the fall/spring of 1979/80.

Synagraphic Mapping System or SYMAP was developed at Harvard Laboratory For Computer Graphics And Spatial Analysis initiated by Howard Fisher. SYMAP was the first significant package for mapping purposes, released by the Harvard Lab in 1967. A general purpose mapping package, maps were created on line printer output with a unique overprint method; the resolution was poor and the maps were generally low quality. It may have been one of the first demonstrations of computers to make maps and certainly sparked interest in the computer – spatial analysis realm.

My introduction to computer mapping occurred at the University of Nebraska at Omaha when I was talked into taking a graduate course taught by Dr. Donald Rundquist, *Computer Cartography and Data Analysis*. This was only a mere 12 years after the SYMAP package was released, but at the time the Harvard Lab was beginning to disintegrate. I learned a great deal including how to punch cards (next page, right diagram) on the keypunch (next page, left diagram). As with any computer program, code arrangement (cards) were crucial and dropping a box of cards and watching them spill into disarranged chaos was cause for panic. I made only very simple maps of Connecticut and Nebraska, as they were time consuming and tedious – each raster cell placed on the map usually required one card, except for the data that was somehow interpolated.

At any rate, I remember thinking at the time that this was quite innovative. At the time, mapping was a pen and ink affair, which meant thrills, spills, and chills. It was not always pretty. I really never got to do much more than what I have shown on the next page, but it was great experience for when I was hired in the summer of 1981 as a cartographer for the Defense Mapping and Aerospace Agency (St. Louis), as we created huge decks of cards for our mapping programs in much a very similar fashion. (Of course some of my 9 years in St. Louis were also interesting and may require another story at some later date).

Typical Keypunch

Typical Data Card for One Line of Code or Data
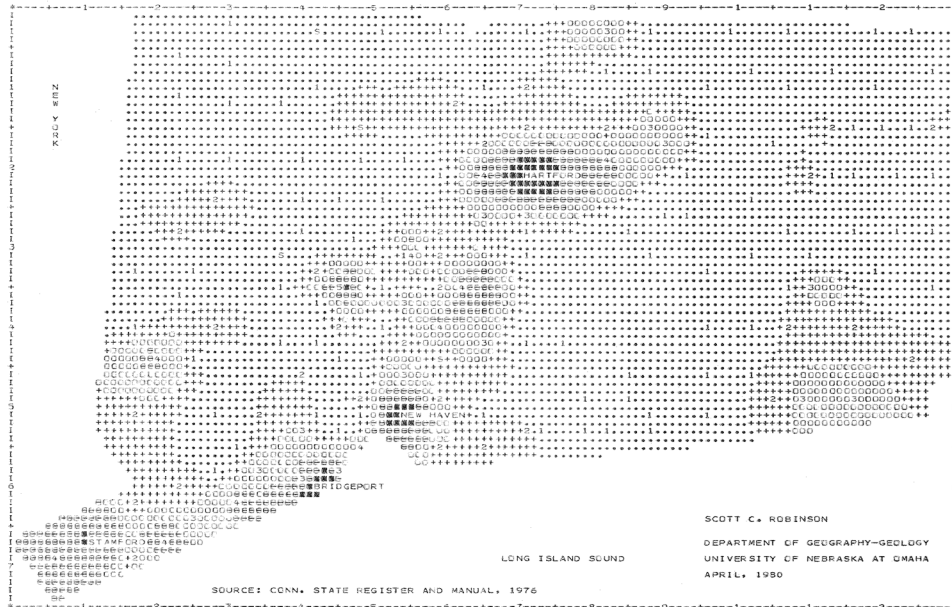
Connecticut Population Map

The population of Connecticut is generally arranged relative to New York City, Boston, and Providence, Rhode Island. The heavier concentration along the southern 'Sound' coastline extends from the Greenwich panhandle in the west to New Haven, than begins to veer slightly in a northeastern track to the state capitol, Hartford. Many of the smaller communities that have sprung up along the east-west I-95 and north-south I-91 are commuter or bedroom suburbs that feed large numbers of workers into the major urban centers for employment. New London (eastern coast of the 'Sound') is another urban center along coastal I-95, which eventually leads into Providence. The northern track from New London through Norwalk along the Thames River follows I-395 which links with I-90 south of Worcester MA which then leads directly west to Boston.

Depending on position and orientation, in Connecticut you are either a Yankee fan or Red Sox fan, but never, ever both.

Hope to see you all in April!

Robinson, Jan 2009