

Spatial Data Analysis in Archaeology

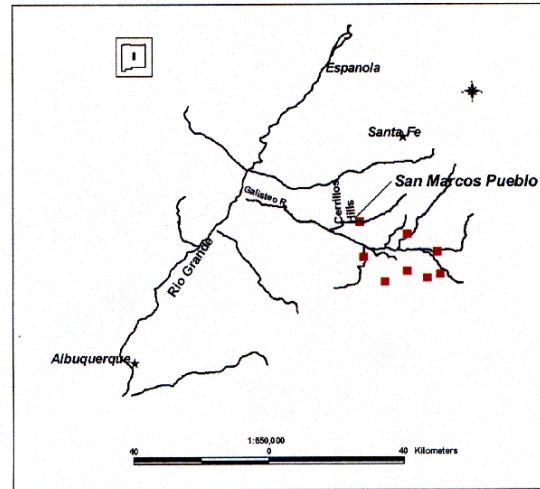
Anthropology 589b

Fraser D. Neiman
4.2.07

University of Virginia
Spring 2007

Problem Set 8: Time on the Surface at San Marcos Pueblo

Ann Ramenofsky at UNM and her students have recently completed a systematic surface collection at San Marcos Pueblo. The resulting data are summarized using the standard glaze-paint ware typology for the late-prehistoric, eastern Pueblo region. Assemblages from the collection units were assigned to larger spatial units -- "middens" -- which are contiguous areas into which trash was tossed from the adjacent room blocks. The glaze-paint ware types are known to be chronologically sensitive. The question we want to address using correspondence analysis and frequency seriation is whether there is evidence of occupational time depth in the surface collections. In other words, can one successfully seriate the midden assemblages, with the resulting order capturing time? In there evidence for sources of variation in addition to time? Is it possible to say anything about change in the number of people living at the Pueblo?



Some background from Ann: San Marcos is one of the large, architecturally complex sites of the prehistoric-historic transition located at the western edge of the Galisteo Basin of north central New Mexico. Room estimates for this pueblo exceed 1500. San Marcos is adjacent to the Cerrillos Hills, a major source of turquoise and lead. Cerrillos Hills turquoise was widely distributed through the Southwest. Lead was the principle flux used in the production of glaze-paint ceramics, and San Marcos was a major production center for these ceramics. A Spanish mission and convento were established at San Marcos in 1638. At least one priest lived at the pueblo until the Pueblo Revolt of 1680. During the Pueblo Revolt, the resident priest, Fray Manuel Tinoco, was killed while he was away from the pueblo and the residents of San Marco permanently abandoned the settlement.

What to Turn In

A short (< 2 page single spaced) description of the problem, the methods you used to address it, and your results. Due date: 04.9.07.