Abstract. An extraordinary amount of GIS and other spatial data relating to the UCSB campus present an opportunity to synthesize, fuse, and integrate the data into a single high resolution virtual model of campus. Once such a data set exists, several opportunities for visualization and research related to the campus will become possible. In this conceptual presentation, I will present my experience with campus data to date, including imagery, vector data, LiDAR, and linked digital data; suggest how a merging of the virtual worlds is possible, and then discuss one active research project that will use the data in the Allosphere to create an immersive virtual campus.

Keith C. Clarke is a research cartographer and professor, with the M.A. and Ph. D. from the University of Michigan, specializing in Analytical Cartography. His most recent research has been on environmental simulation modeling, on modeling urban growth using cellular automata, on terrain mapping and analysis, and on real-time visualization. He is the author of two textbooks in seven editions, and over a hundred and fifty book chapters, journal articles, and papers in the fields of cartography, remote sensing, and geographic information systems. Chair of the National Academy of Sciences Mapping Sciences Committee, Dr. Clarke recently chaired National Research Council studies on the National Map and the National Geospatial Intelligence Agency, and served on the USGS Geography Discipline long term science planning team, for which he received the USGS’s John Wesley Powell Award in 2005.

Sponsored by spatial@ucsb, University of California, Santa Barbara