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Suppose we have a commutative semigroup generated by a finite subset of  $\mathbf{Z}^d$  and its saturation. In 2006 we showed the necessary and sufficient conditions for the given semigroup to have a finite number of elements in the difference between the semigroup and its saturation. Also we defined saturation points, minimal saturation points, and fundamental holes and we showed the simultaneous finiteness of holes, nonsaturation points, and minimal saturation points. In this talk we will show our new results and we will show some simulation results on contingency tables. This is joint work with A. Takemura. (Received February 16, 2006)