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DePaul University, 2320 N.Kenmore Avenue, Chicago, IL 60614-3250. *The Maximal Inequality and  
the Ergodic Theorem for Discrete Hausdorff Means*. Preliminary report.

The classical maximal inequality and the ergodic theorem for the space  $L_p$  was extended to the class of Cesaro means of order  $a$  of the iterates of a measure preserving transformation on a probability space by R.Irmisch and Y.Deriennic under the condition that  $ap > 1$  and for  $a$  between 0 and 1. It is shown that the result is valid for a wider class of discrete Hausdorff means which are generated by an absolutely continuous probability measure on the unit interval whose density satisfies an integrability condition that reduces to that of the Cesaro means of order  $a$  when the probability measure is a Beta density with parameters  $(1, a)$ . (Received September 22, 2009)