

## ON STATISTICALLY KÖTHER–TOEPLITZ DUALS

FATİH TEMİZSU AND MIKAIL ET

**Abstract.** In the present paper, we introduce the concept of  $\Delta^m$ –statistical boundedness of real (or complex) numbers sequences by using generalized difference operator  $\Delta^m$  and examine relationships between  $\Delta^m$ –statistical convergence,  $\Delta^m$ –statistical Cauchiness and  $\Delta^m$ –statistical boundedness. In addition to that we compute the Köthe–Toeplitz and generalized Köthe–Toeplitz duals of the set of all  $\Delta^m$ –statistical bounded sequences. Moreover, we come up with the idea of statistical  $\alpha$  and  $\beta$  duals of the sets of sequence which makes us capable of creating statistical equivalents of the notions of normality and perfectness of sequence spaces.  
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