On generalized statistical and ideal convergence of metric-valued sequences

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We consider the notion of generalized density, namely, the natural density of weight g recently introduced in [1] and primarily study some sufficient and almost converse necessary conditions for the generalized statistically convergent sequence under which the subsequence is also generalized statistically convergent. Some results are also obtained in a more general form by using the notion of ideals. The entire investigation is performed in the setting of general metric spaces extending the recent results of [2]. All the results obviously contain the case of real sequences as a special case.

Bibliography

[1] M. Balcerzak, P. Das, M. Filipczak, and J. Swaczyna, Acta Math. Hung., *Generalized kinds of density and the associated ideals* **147** (2015), no. 1, 97–115.

[2] M. Kucukaslan, U. Deger, and O. Dovgoshey, *On the statistical convergence of metric-valued sequences*, Ukr. Math. J. **66** (2014), no. 5, 712–720.