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COMPLETE f-MOMENT CONVERGENCE OF MOVING AVERAGE PROCESSES AND ITS APPLICATION TO NONPARAMETRIC REGRESSION MODELS*

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Abstract. In this paper, we establish a general result on complete f-moment convergence of the moving average process based on widely orthant dependent random variables, which generalizes some results in the literature. In addition, an application of complete consistency to nonparametric regression models is provided. Finally, we provide a numerical simulation to verify the validity of our theoretical results.

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Key words and phrases: complete f-moment convergence, widely orthant dependent random variables, nonparametric regression models, complete consistency.

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