MEASURES OF NONCOMPACTNESS IN $\mathcal{N}(p,q)$ SUMMABLE SEQUENCE SPACES

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Abstract. In this paper, we first define the $\mathcal{N}(p,q)$ summable sequence spaces and obtain some basic results related to these spaces. The necessary and sufficient conditions for an infinite matrix $A$ to map these spaces into the spaces $c_0$, $c$ and $\ell_\infty$ is obtained and Hausdorff measure of noncompactness is then used to obtain the necessary and sufficient conditions for the compactness of linear operators defined on these spaces.


Keywords and phrases: Matrix domains, summable sequence spaces, BK spaces, matrix transformations, measures of noncompactness.

REFERENCES


