1030-40-189 **Hamdullah Şevli*** (hsevli@yahoo.com), Department of Mathematics, Faculty of Arts, and Sciences, Yüzüncü Yil University, 65080 Van, Merkez, Turkey. *Absolute summability methods.*

A lower triangular infinite matrix is called a triangle if there are no zeros on the principal diagonal. Denote by $\mathcal{A}_k$ the sequence space defined by $\mathcal{A}_k = \left\{ \{s_n\} \ : \ \sum_{n=1}^{\infty} n^{k-1} \left| a_n \right|^k < \infty \ , \ a_n = s_n - s_{n-1} \right\}$ for $k \geq 1$. A matrix T is said to be a bounded linear operator on $\mathcal{A}_k$, written $T \in B(\mathcal{A}_k)$, if $T : \mathcal{A}_k \to \mathcal{A}_k$. In [G. Das, A tauberian theorem for absolute summability, Proc. Cambridge Philos. Soc. 67 (1970), 321-326], Das defined such a matrix to be absolutely k-th power conservative for $k \geq 1$. In a recent paper [E. Savaş, H. Şevli and B.E. Rhoades, Triangles which are bounded operators on $\mathcal{A}_k$, to appear in Acta Math. Hungar.], the author jointly with Savaş and Rhoades obtained a minimal set of sufficient conditions for a triangle $T \in B(\mathcal{A}_k)$. In this paper we extend this result to double infinite matrices. As special summability methods T we consider weighted mean and double Cesàro, $(C, 1, 1)$, methods. (Received August 02, 2007)