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Iterated differences in Gaussian coefficients.

In the Gaussian coefficients $\begin{bmatrix} j+k \\ k \end{bmatrix}_q = \sum_{n=0}^{j+k} p(n; j, k)q^n$, the second differences $p(n+2; j, k) - 2p(n+1; j, k) + p(n; j, k)$ exhibit, for some indexes k , a striking separation between their values at even and odd n . We prove that this property holds for small k and consider possible underlying combinatorial explanations. Confirmation of the full phenomenon is still open. (Received September 11, 2018)