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A Strengthening of the Erdős-Szekeres Theorem.

The Erdős–Szekeres Theorem states that any edge-coloring of the ordered complete graph on $rs + 1$ vertices with red and blue must contain a red ordered path with r edges or a blue ordered path with s edges. However, not all edges of K_{rs+1} are necessary for this result. We find the unique minimal ordered graph on $rs + 1$ vertices with this coloring property and show that any ordered graph with this property must contain our minimal example as a subgraph. (Received February 16, 2021)