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Title: A compactness theorem in Finsler geometry

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Let (M, F) be a complete Finsler manifold and P be a minimal and compact submanifold of M . The k -Ricci curvature $\mathbf{Ric}_k(x), x \in M$ is a differential invariant that interpolates between the flag curvature and the Ricci scalar. We prove that if the k -Ricci curvature satisfies the condition $\int_0^\infty \mathbf{Ric}_k(t) > 0$ along any geodesic $\gamma : [0, \infty) \rightarrow M, t \rightarrow \gamma(t)$ emanating orthogonally from P or $\int_{-\infty}^0 \mathbf{Ric}_k(t) > 0$ along any geodesic $\gamma : (-\infty, 0] \rightarrow M, t \rightarrow \gamma(t)$ arriving orthogonally to P , then M is compact.

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