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Title: Some recurrent normal Jacobi operators on real hypersurfaces in complex two-plane Grassmannians

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In this paper, we prove that there are no Hopf hypersurfaces in complex two-plane Grassmannians $G_2(\mathbb{C}^{m+2})$ such that the normal Jacobi operator is generalized $\mathfrak{F}$ -recurrent, where $\mathfrak{F} = \text{span}\{\xi, \xi_1, \xi_2, \xi_3\}$. We also prove that there are no Hopf real hypersurfaces in $G_2(\mathbb{C}^{m+2})$ such that the normal Jacobi operator is $\mathfrak{D}^\perp$ -recurrent and the Hopf principal curvature is invariant along the Reeb flow, where $\mathfrak{D}^\perp = \text{span}\{\xi_1, \xi_2, \xi_3\}$.

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