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	authors	<ul style="list-style-type: none">Yu, Y.Jiang, Y.Zhang, M.	authors	<ul style="list-style-type: none">Yize YuYan JiangMengping Zhang	DUPLICATES	982
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	abstract		abstract	In this paper, a high order free-stream preserving finite difference weighted essentially non-oscillatory (WENO) scheme is developed for the ideal magnetohydrodynamic (MHD) equations on curvilinear meshes. Under the constrained transport framework, magnetic potential evolved by a Hamilton-Jacobi (H-J) equation is introduced to control the divergence error. In this work, we use the alternative formulation of WENO scheme [10] for the nonlinear hyperbolic conservation law, and design a novel method to solve the magnetic potential. Theoretical derivation and numerical results show that the scheme can preserve free-stream solutions of MHD equations, and reduce error more effectively than the standard finite difference WENO schemes for such problems.		
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