A LOSSLESS COMPRESSION ALGORITHM BASED ON PREDICTIVE CODING FOR VOLUMETRIC MEDICAL DATASETS (WedAmPO3)

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Abstract :
In this paper, a novel lossless compression method for volumetric medical datasets based on 3D adaptive prediction is presented. While almost all existing methods are based on a three–dimensional wavelet transform, this method, referred to as OLP–3D, evaluates the performance of an algorithm that operates on a least–square prediction basis. This leads to a different method with approximately similar results on compression performance, although with some advantages on computational cost.