
# CODING DEPTH IMAGES WITH PIECEWISE LINEAR FUNCTIONS FOR MULTI−VIEW SYNTHESIS (MonAmOR10)

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**Abstract :**

An efficient way to transmit multi−view images is to send the texture image together with a corresponding depth−map. The depth−map specifies the distance between each pixel and the camera. With this information, arbitrary views can be generated at the decoder. This technique requires a compression technique for the depth−maps. Ordinary image compression algorithms like JPEG provide low quality, since the ringing artifacts along edges generate clouds of pixels in 3D space. For this reason, we propose a new algorithm for the coding of depth maps that uses piecewise linear functions to approximate the depth information. This algorithm shows no degradation along discontinuities and it provides a high compression factor with bit−rates as low as 0.05 bit/pixel.

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