Surface rendering of three dimensional ultrasound images using VTK

Abstract:

This study utilized VTK visualization tool to demonstrate reconstruction of medical image using surface rendering technique. Simulation result shows three dimensional surface rendering of multiple slices ultrasound fetal phantom images in orthogonal view, upper left and upper right for reconstructed coronal and sagittal images and also internal view by changing position. A three dimensional reconstruction using surface rendering via VTK library is accomplished and it is found effective in terms of cost and performance in medical image.