

## Development of Solid Earth Simulator GeoFEM ( Volume Visualization for Large Scale Unstructured Grid )

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Parallelization of visualization algorithms is one of the promising strategies for effectively performing visual exploration of the huge data sets arising from the GeoFEM analysis subsystems. In this study, a parallel algorithm is developed to extract from a given volume data, an interval volume, which represents a sub-volume for which the associated scalar value lies within a specified closed interval. Also an extended triangle decimation algorithm is designed to alleviate the spatiotemporal complexity of rendering and transmission of interval volumes while retaining their important geometric features.