

## GIS based visualization of groundwater levels and its significance

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(Received 28 October 2006; in final form 11 December 2006)

**Abstract:** The emergence of Remote Sensing and GIS technologies has substantially eased the problems of groundwater targeting in hard rock aquifer systems. Proper utilization of these can provide more vital information in managing such scarce resource. In this context, a new technique of GIS based visualisation of groundwater levels of different periods (1985- 1990 -1995) was attempted for a part of Western Ghats hill–plain region of Tamil Nadu and various groundwater features viz: ridges, valleys, domes and basins were interpreted. The integration of such groundwater features of different periods and their analysis with structural features provided some newer information on geosystem processes and their interface dynamics with hydrosystems, from which, certain strategies were suggested for better groundwater management in hard rock areas.

**Keywords:** GIS visualization of water levels, Active Tectonics, Groundwater Management