



## **A comparative analysis of DEM generated from SRTM data and digital topographic map A case study of north eastern HAJJAH, YEMEN**

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**Abstract:** Digital Elevation Model (DEM) was generated in the present work from topographic map (1:50,000) and Shuttle Radar Topography Mission (SRTM) image of 90 m resolution. The original SRTM image contained voids that were represented digitally as -32768; such voids were initially filled for obtaining accurate DEM. Shaded relief maps and slope analysis were executed from the derived DEMs. Examination of topographic profiles in the (NE-SW) and (NW-SE) directions from the DEMs was carried out to determine the uniformity of the results. Results indicate high uniformity. Therefore, it can be deduced that DEM derived from SRTM data is approximately equivalent to that obtained from topographic map.

**Keywords:** Yemen, SRTM, DEM, Voids, Topographic Map.