

Eighth GEBCO Science – presentation abstract

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Poster presentation title: Artifacts in Gridded Bathymetry

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Abstract

Artifacts are “detectable artificial anomalies that are introduced to surface model via system-specific collection or processing techniques” [Maune, 2007]. Artifacts in gridded bathymetry can be defined as any dubious features in the bathymetry surface. Dubious features are those whose existence is questionable according to geologic knowledge of the processes in the area.

It became especially important to notify users to be aware of artifacts in bathymetry since the increase of public interest towards the ocean and release of such exploratory tools as Google Ocean.

Several types of artifacts encountered in the bathymetry of GEBCO_08, Smith & Sandwell, and IBCAO are illustrated and classified into several types. The types of artifacts encountered are classified according to the nature of the source data types, since that is the major factor that characterizes them.

The classification table and the description of the artifacts’ “morphology” are presented. The given illustrations of the artifacts are just the few examples, and users should be aware of existence of unreal features in any bathymetric compilation.