

GEBCO – Seabed 2030 – Objectives – Grid Resolutions

(Source: Seabed 2030 – SCUFN Member Kevin Mackay, SCUFN-36, Nov. 2023, Action SCUFN36/03.4/04 refers)

DEPTH RANGE	GRID CELL SIZE	% OF WORLD OCEAN FLOOR
0–1500 m	100 × 100 m	13.7
1500–3000 m	200 × 200 m	11
3000–5750 m	400 × 400 m	72.6
5750–11000 m	800 × 800 m	2.7

Minor Feature and Horizontal Strategy

(Source: SCUFN Members Yasuhiko Ohara (SCUFN Vice-Chair) and Kevin Mackay (SCUFN Member), Doc. SCUFN35.2-03.4A refers, November 2022).

“Minimum dimension

The size of undersea features that are named has always been dependent of the mapping technology. At the time SCUFN was established (at that time, the committee was called SCGN), in 1975, single beam sounding systems were the ‘standard’ equipment used and features were identified, defined and named based on a few ship tracks. This meant that only significantly large features, usually greater than 10 kilometres across were mapped and named. Also, there were often assumptions on the form of the feature resulting in the assignment of Generic Terms that do not comply with the criteria set in this cookbook.

By 2000, multibeam sounders were commonly used on research vessels and smaller features less than 10 square kilometres were being routinely mapped in detail and named. Shipborne multibeam sounders used for offshore surveys typically have a resolution of 10 to 50 m depending on water depth and currently feature architecture on the scale of about 500 m is used to define Generic Terms. With multibeam sounding systems now being used on autonomous underwater vehicles (AUVs) the mapping resolution is better than 1 metre and features of a few 10s in size of meters are being defined.

SCUFN does not have any minimum size for features to be named. However as with terrestrial features, undersea features generally less than a few hundred metres across are usually not named except in special case that are usually based on historical and/or scientific significance. In these special circumstances, the proposer of the name of a minor undersea feature would need to describe the reason for proposing a minor feature in a proposal”.