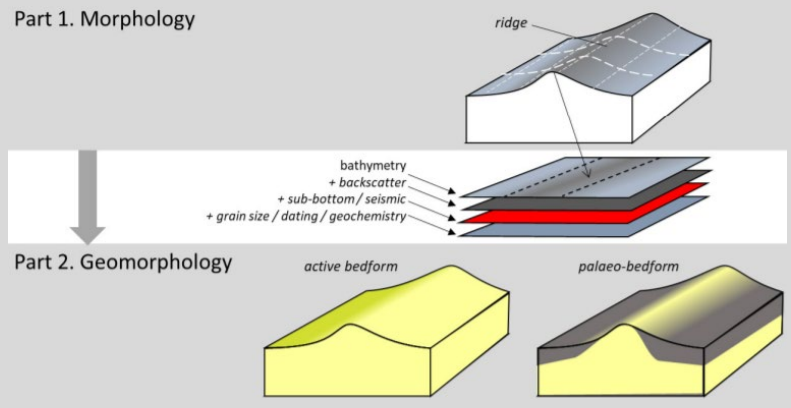# Progression of a two-part seabed geomorphology classification scheme workshop:

Part 2 (geomorphology)

When: Wednesday 6th July 2022 (3 hours)

Where: Valetta, Malta (as part of the International Conference on Seafloor Landforms, Processes and Evolution)

Facilitators: Rachel Nanson, Riccardo Arosio, Dayton Dove

Agenda (*draft*):

(1) Genesis of the two-part mapping scheme (15 minutes)
(2) Part 1: Morphology overview (15 minutes)
(3) Part 2: Geomorphology draft scheme introduction (15 minutes)
(4) Breakout sessions: (15 minutes for each setting X 3)
     Participants break into sub-environment systems (and move between 3 specialty settings of their choice: Glacial, Fluid flow, Bedrock volcanic/continental-scale, Marine, Coastal, Fluvial, Biogenic, Mass Movement) to discuss a draft geomorphic framework for each system
     a.   Environment 1 (e.g. Glacial: 15 minutes)
     b.   Environment 2 (e.g. Fluid flow: 15 minutes)
     c.   Environment 3 (e.g. Coastal: 15 minutes)
(5) High level summary from setting facilitators (X 8) (60 minutes)
(6) Workshop summary discussion points and reflections from attendees (30 minutes)

Detail: The 2019 GeoHab meeting hosted a well-attended seafloor geomorphology mapping workshop, where speakers presented a range of seafloor morphology mapping tools and schemes (report here). One of these schemes (subsequently published) was "A two-part seabed geomorphology classification scheme, Part 1: Morphology Feature Glossary", which is designed to support a consistent and standardised approach to classifying the seafloor morphology (i.e. from bathymetry datasets). The list of terms and definitions for the scheme were modified primarily from the International Hydrographic Organization guide for undersea feature names.

We now invite interested geomorphologists to help guide the final stages in the development Part 2: Geomorphology, to build on the geomorphic settings outlined in Dove et al (2016) initial report. Interpretations of seafloor geomorphology necessarily draw on subsurface data and context to interpret formative processes. There are a wealth of existing geomorphology classification schemes that represent the suite of systems that are either preserved or actively developing on the seafloor. We will present a draft framework for these systems, and invite participants to provide their input and feedback.

Workshop product: TBC Workshop report and / or a special issue (Marine Geology?) on the application of this approach to examples of all geomorphic settings.

To register for the workshop please email Rachel.nanson@ga.gov.au