



SCUFN27-06B

UNIVERSITY of NEW HAMPSHIRE

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GEBCO Subcommittee on Undersea Feature Names
International Hydrographic Bureau
4B, Quai Antoine 1er
B.P. 445
MC 98011 MONACO CEDEX
Principality of MONACO

Dear Subcommittee Chair and Members,

This is a proposal to change the *generic* term of 3 undersea feature names in the Arctic Ocean.

We propose that the name of Northwind *Abyssal Plain*, Chukchi *Abyssal Plain* and Mendeleev *Abyssal Plain*, as listed in the GEBCO Gazetteer be revised to Northwind *Plain*, Chukchi *Plain*, and Mendeleev *Plain*, respectively. These features are relatively flat perched plains lying at subsea elevations well above the depths of the adjacent, and appropriately named, Canada Abyssal Plain.

IHO Publication B-6, Standardization of Undersea Feature Names defines “Abyssal Plain” as “An extensive, flat or gently sloping region, usually found at depths greater than 4000m. This definition is consistent with the classical definition of abyssal plains provided by Heezen and Laughton¹ as “an area of the ocean basin floor in which the ocean bottom is flat and the slope is less than 1:1000.” Heezen and Laughton further distinguish abyssal plains from “...local perched plains [that] are interrupted by areas of more irregular relief...”

In the Canada Basin region, the Canada Abyssal Plain depth is remarkably uniform at about 3800 m. On the other hand, the depths of the feature we propose be renamed Northwind Plain, are approximately 2100 m; the depths of the proposed Chukchi Plain are about 2200 m, and the depths of the proposed Mendeleev Plain are about 3300 m. Profiles across these features from the shelf to the abyssal plain are shown in figures 1 and 2.

Although the *generic* term *Plain* is not one of the terms listed in B-6, it is a widely used term and is used officially in the United States undersea feature gazetteer. Its application in these cases off the northern coast of Alaska would therefore be consistent with common practice and would better describe the features in question.

We note that the feature north of Russia presently named Wrangell Abyssal Plain is similarly mischaracterized by the *abyssal plain* designation although we leave a recommendation on that name to others.

¹Hill, M.N., The Sea, Volume 3, Chapter 14, 1963, John Wiley and Sons, New York

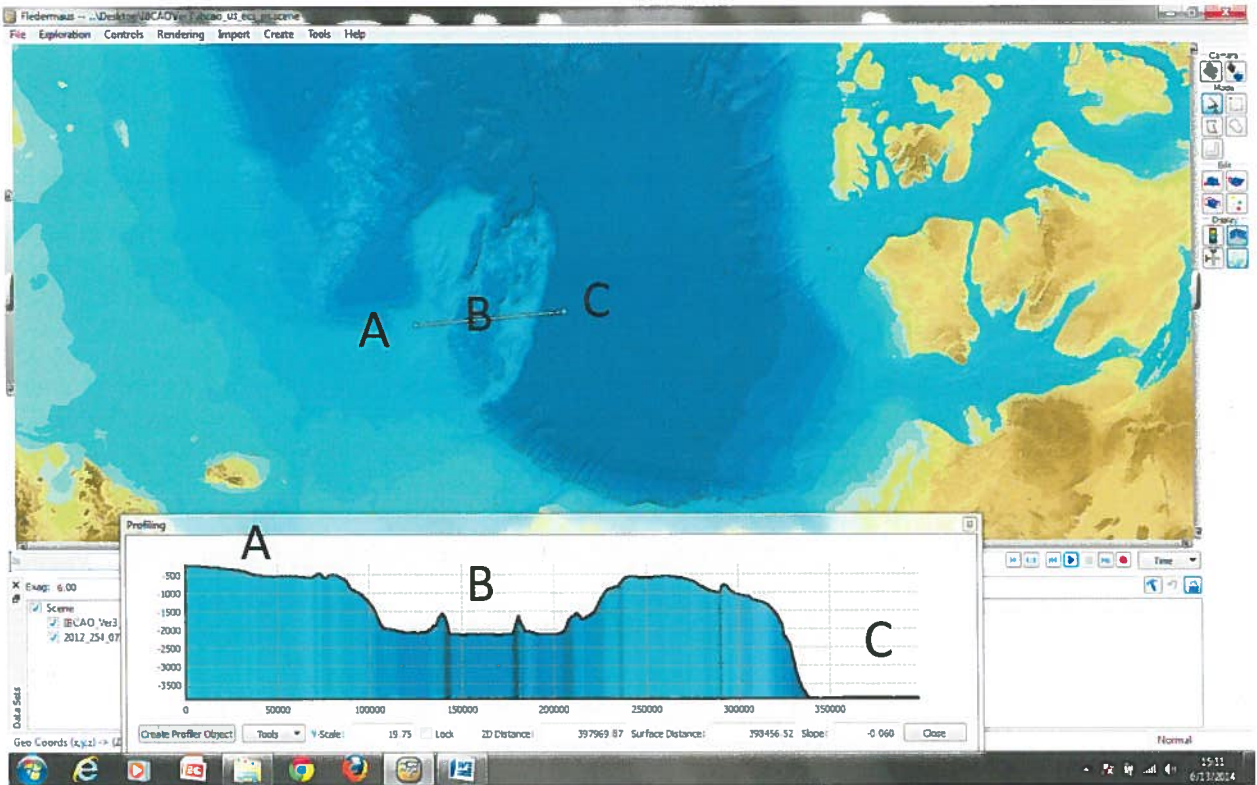


Figure 1. Profile from Chukchi Plateau shelf (A) across Northwind Plain (B) to Canada Abyssal Plain (C). Profile generated by Fledermaus software displaying IBCAO 3.0

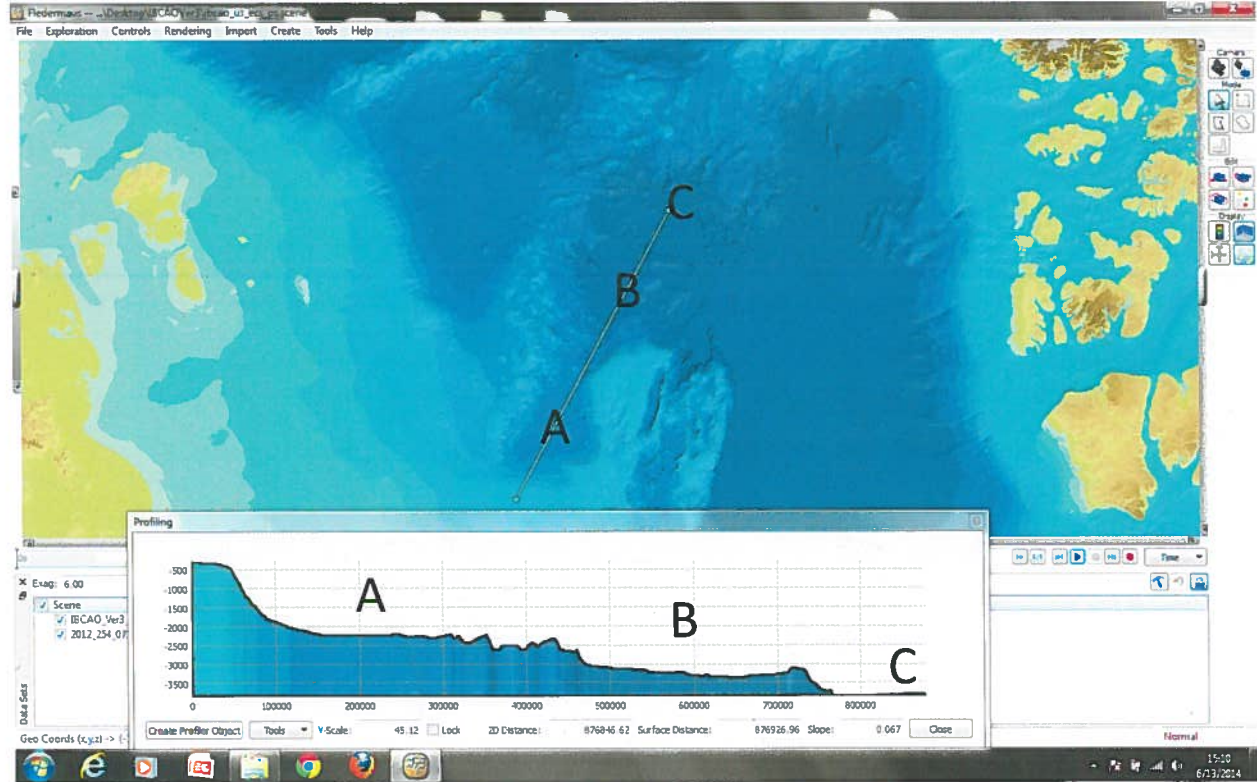
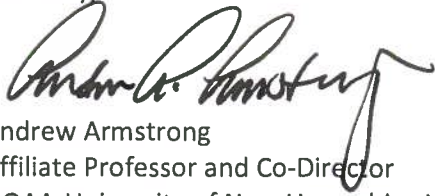


Figure 2. Profile from shelf across Chukchi Plain (A) and Mendeleev Plain (B) to abyssal plain depth in Nautilus Basin region of Canada Abyssal Plain (C). Profile generated by Fledermaus software displaying IBCAO 3.0

We greatly appreciate the consideration of this request by the Subcommittee on Undersea Feature Names.

Sincerely,



Andrew Armstrong
Affiliate Professor and Co-Director
NOAA-University of New Hampshire Joint Hydrographic Center

and also on behalf of:

Larry Mayer
Professor and Director
Center for Coastal and Ocean Mapping
Co-Director
NOAA-University of New Hampshire Joint Hydrographic Center

Martin Jakobsson
Professor of Marine Geology and Geophysics
Head of Department
Department of Geological Sciences
Stockholm University