SCUFN20-05C

GEBCO SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN)
20th Meeting, Monaco, 9-12 July 2007

Yasuhiko Ohara's responses to SCUFN action items listed in "Annex B to SCUFN Letter 1/2007"

June 8, 2006

5.1. Look for additional multibeam bathymetric and magnetic data to further define the proposed Saimei Seamount (or Guyot), and to determine whether is part of the Jimmu Guyot.

Answer: This item relates with the Emperor Seamount Chain's issue, initiated by Russian proposals at SCUFN 18th, i.e., Makshyuta and Erdman Seamounts. To the best of our knowledge (at least of the Japanese scientist and hydrographers), there are no multi-beam data (and magnetic data) to cover the entire Emperor Seamount Chain; only limited data by US scientists are exists (e.g., Smoot, 1982). Furthermore, these seamounts mapped by US are all named and appeared in GEBCO gazetteer. Since there are no additional new multi-beam data for the area, it is not appropriate for the SCUFN to deal with the Emperor Seamount Chain names at this stage. It would be better to postpone any discussions until new multi-beam data are available.

List of the published work on multi-beam bathymetry of the Emperor Seamount Chain:

Mammerickx, J., 1985, A deep-sea thermohaline flow path in the northwest Pacific, Marine Geology, 65, 1-19.

Smoot, N. C., 1982, Guyots of the Mid-Emperor Chain mapped with multibeam sonar, Marine Geology, 47, 153-163.

Smoot, N.C., 1985, Guyot and seamount morphology and tectonics of the Hawaiian-Emperor elbow by multi-beam sonar, Marine Geology, 64, 203-215.

Smoot, N.C., 1983, Ninigi and Godaigo seamounts: twin of the Emperor Chain by multi-beam sonar, Tectonophysics, 98, T1-T5.

Smoot, N.C., 1991, North Pacific guyots, Technical Note, US Naval Oceanographic Office, TN01-91, pp X.

5.2. Request that JCUFN submit an alternative name for "Japanese Guyots".

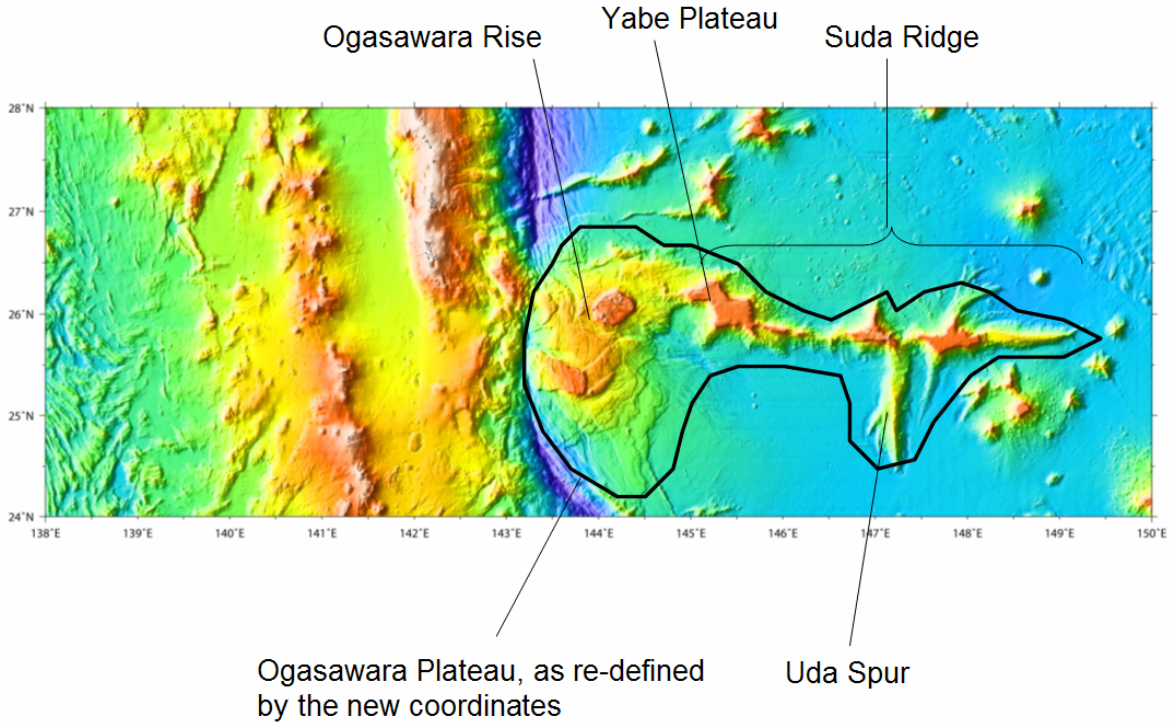
Answer: Sorry, the action is still pending.

5.3. Provide historical information about the "Ogasawara Plateau" and polygonal coordinates defining the "Ogasawara Rise" to the secretary.

Answer: The figure shows the current situation for the naming of the concerned area in terms of SCUFN and gazetteer. JCUFN are willing to accept these names (i.e., Ogasawara Plateau, and Ogasawara Rise sensu stricto, Suda Ridge sensu stricto, Yabe Plateau sensu sricto and Uda Spur sensu stricto). However, the position of the Ogasawara Plateau (current position in the gazetteer is 26-05N, 145-20E) should be re-defined by the following new coordinates to describe the larger feature encompassing four individual names (i.e., Ogasawara Rise sensu stricto, Suda Ridge sensu stricto, Yabe Plateau sensu sricto and Uda Spur sensu stricto):

26°00’N, 143°45’E
24°55’N, 144°17’E
24°58’N, 147°12’E
25°45’N, 148°38’E

The basis for this comes from our thorough investigation of the scientific literatures (see attached excel file). The name “Ogasawara Plateau” was first appeared in 1952 in Hydrographic Bulletin (in Japanese), clearly precedent to the name “Michelson Ridge”. Following this 1952 article, since late 70’s, the name “Ogasawara Plateau” has widely been used by the scientists (not only by the Japanese scientists but also by the US and other countries’ scientists) to describe the entire feature.



5.4. Ask the proposer of “Suruga Seamount” how the least depth of 40 m was determined.

Answer: It was determined with a fishfinder installed on R/V Hakuho during the 1996 survey.

Appendix. B-6 Japanese translation

Answer: We have completed it and here submit the English/Japanese version of the 3rd edition of B-6.

During the translation work, we have found some, but significant flaws in B-6. Below, we describe these one by one:

(1) In page 2-5 of B-6, it reads that “1. Generic terms should be selected from the following list of definitions to reflect ….”. Following this, let’s check the “UNDESEA FEATURE TERMS AND DEFINITIONS” section starting from page 2-22. Although we understand that this section is supposed to list “the definition of undersea feature generic name”, while in fact it is not so.

(2) The basis for the above comes from the following lists of the “terms”:

Abyssal Hills
Continental Margin
Continental Rise
Median Valley
Mid-Oceanic Ridge

We consider that these are not generic names, rather, these are general terminology describing tectonic features. For example, if “Mid-Oceanic Ridge” is a generic name, for example, we should call “Atlantic Mid-Oceanic Ridge”, in stead of “Mid-Atlantic Ridge”. This gives us an impression that this section is not “the list of generic names”, but just a “general dictionary of seafloor morphology”.

(3) Further, along with these lists of terms, references are also listed. However, there seems no clear criterion for employing these lists. That is, some references are taken as these are describing and defining the term (e.g., Heezen and Laughton, 1963, see Abyssal Plain), while others are taken as these are just listing the term (e.g., Shor, 1959, see Pinnacle).

(4) There is another minor problem. In “SEAMOUNTS”, page 2-31, “Emperor Seamounts” is listed as one of the examples. However, “Emperor Seamounts” is not a registered name is the SCUFN Gazetteer. The correct registered name is “Emperor Seamount Chain”. We should be very careful to list the names.

End of the file.