

UNDERSEA FEATURE NAME PROPOSAL

(See NOTE overleaf)

Ocean or Sea North Pacific Ocean Name proposed Hotta Seamount

Coordinates : A - of midpoint or summit : Lat. 37-43 N , Long. 145-58 E

_____ kilometres in _____ direction from _____

and/or B - extremities (if linear feature) :

Lat. _____ } to { Lat. _____
Long. _____ } Long. _____

Description (kind of feature) : seamount

Identifying or categorizing characteristics (shape, dimensions, total relief, least depth, steepness, etc.):

The seamount is one of the seamounts in the seamount group on the Northwest Pacific basin. It is a single conical-shaped seamount, well defined by 5000 m contour. The shallowest depth is 2250 m.

Associated features : _____

Chart reference :

Shown with name on chart No. _____

Shown but not named on chart No. Japanese Chart No. 1037

Not shown but within area covered by chart No. _____

Reason for choice of name (if a person, state how associated with the feature to be named) : _____

Dr. Hiroshi Hotta, a graduate of Hokkaido University in geophysics, had been worked for the Japan Marine Science and Technology Center (JAMSTEC) for more than 20 years. Although he was a well-known marine seismologist, he was also a talented marine engineer. He had been responsible for developing the ROV technology capable of 6000 water depth. He was also good at science coordination. He was responsible for the Japan-France collaborative project "STARMER" for the study on the North Fiji Basin, resulting in discovery of the first hydrothermal vent in a backarc basin. He had published a number of professional papers and books. See more details for the attached CV.

Discovery facts :

Date April 2005 by (individuals or ship) The Japanese survey vessel "Shoyo"

By means of (equipment) : Multibeam Echo Sounder SEABEAM2112

Navigation used : GPS

Estimated positional accuracy in nautical miles : 0.054 mile (100 m)

Description of survey (track spacing, line crossing, grid network, etc.) : The seamount was 100% mapped with NW-SE survey lines with track spacing 7 miles. 3.5 miles intervals with N-S lines were also employed for the survey at the summit area.

Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs, etc.) : _____

Geological Survey of Japan has dredge samples (volcanic rock), geomagnetic data and gravity data.

Supporting material : enclose, if possible, a sketch map of the survey area, profiles of the features, etc.,

with reference to prior publication, if any : _____

Submitted by : Japanese Committee on Undersea Feature Names

Date : 5 June 2006

Address : 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan

Concurred in by (if applicable) : _____

Address : _____

National Authority (if any) : Japanese Committee on Undersea Feature Names

Address : 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan

NOTE : This form should be forwarded, when completed :

- a) **If the undersea feature is located in territorial waters :-**
to your "National Authority for Approval of Undersea Feature Names" or, if this does not exist or is not known, either to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission (see addresses below);
- b) **If the undersea feature is located in international waters :-**
to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission, at the following addresses :

International Hydrographic Bureau
4, quai Antoine 1^{er}
B.P. 445
MC 98011 MONACO CEDEX
Principality of MONACO
Fax: +377 93 10 81 40
E-mail: info@ihb.mc

Intergovernmental Oceanographic Commission
UNESCO
Place de Fontenoy
75700 PARIS
FRANCE
Fax: +33 1 45 68 58 12
E-mail : info@unesco.org

Personal history of the late Dr. Hiroshi Hotta

Given name: Hiroshi

Family name: Hotta

1936 Born in Hokkaido, Japan

2002 Deceased

Education:

1959 B.S. in geophysics, Hokkaido University

1961 M.S. in geophysics, Hokkaido University

1969 Ph.D. in geophysics, Hokkaido University

Professional carrier:

1961 Assistant professor, Geophysics Department of Hokkaido University

1970 Research scientist, Institute of Physical and Chemical Research (a.k.a. RIKEN)

1972 Head of Marine Oceanography Division, Japan Marine Science and Technology Center (= JAMSTEC)

1985 Director, Deep Sea Research Department, JAMSTEC

Remarks:

Although Dr. Hotta was originally a marine seismologist, he was a pioneer of seabottom survey using the deep-sea sonar called "Deep-Tow". In Japan Marine Science and Technology Center (JAMSTEC), he had been responsible for developing the ROV/submersible technology capable of 6000 water depth. He was also good at science coordination. During 1986 to 1991, he had been responsible for the Japan-France collaborative project "STARMER" for the study on the North Fiji Basin, resulting in discovery of the first hydrothermal vent in a backarc basin. In 1994, he also initiated a cooperative research project working with the Woods Hole Oceanographic Institution, resulting in so called "MODE '94 cruises" in the Mid-Atlantic Ridge and East Pacific Rise. During the MODE '94 cruises, the Japanese manned submersible *Shinkai 6500* was introduced in the Atlantic Ocean for the first time.

Selected publications:

Cadet, J.-P., Kobayashi, K., Lallemand, S., Jolivet, L., Aubouin, J., Boulegue, J., Dubois, J., Hotta, H., Ishii, T., Konishi, K., Niitsuma, N., and Shimamura, H., 1987, Deep scientific dives in the Japan and Kuril Trenches, *Earth and Planetary Science Letters*, 83, 313-328.

Hotta, H., 1970, A crustal section across the Izu-Bonin arc and trench, *Journal of Physics of the Earth*, 18, 125-141.

Hotta, H., Fujioka, K., and Kobayashi, K., 1994, Recent studies of the deep sea floor by JAMSTEC: from Mid-Ocean ridge to trench and backarc, *MTS Journal (Marine Technology Society)*, 29, 6-14.

Murauchi, S., Den, N., Asano, S., Hotta, H., Yoshii, T., Asauma, T., Hagiwara, K., Ichikawa, K., Sato, T., Ludwig, W.J., Ewing, J.I., Edgar, T., and Houtz, R.E., 1968, Crustal structure of the Philippine Sea, *Journal of Geophysical Research*, 73, 3143-3171.

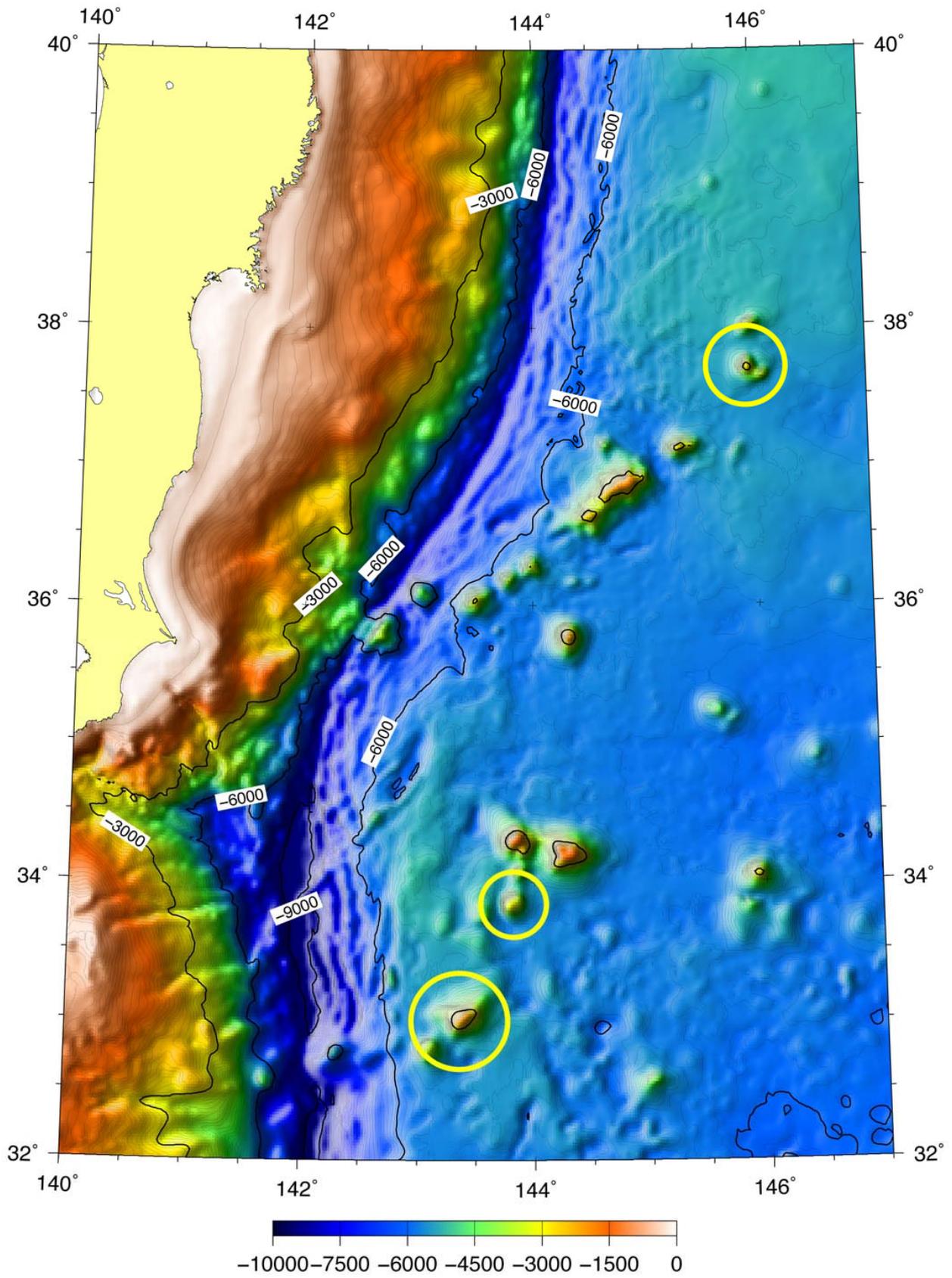


Fig. 1. Index map. The upper is Hotta Smt., the middle is Kazuaki Smt., and the lower is Takahiro Smt.

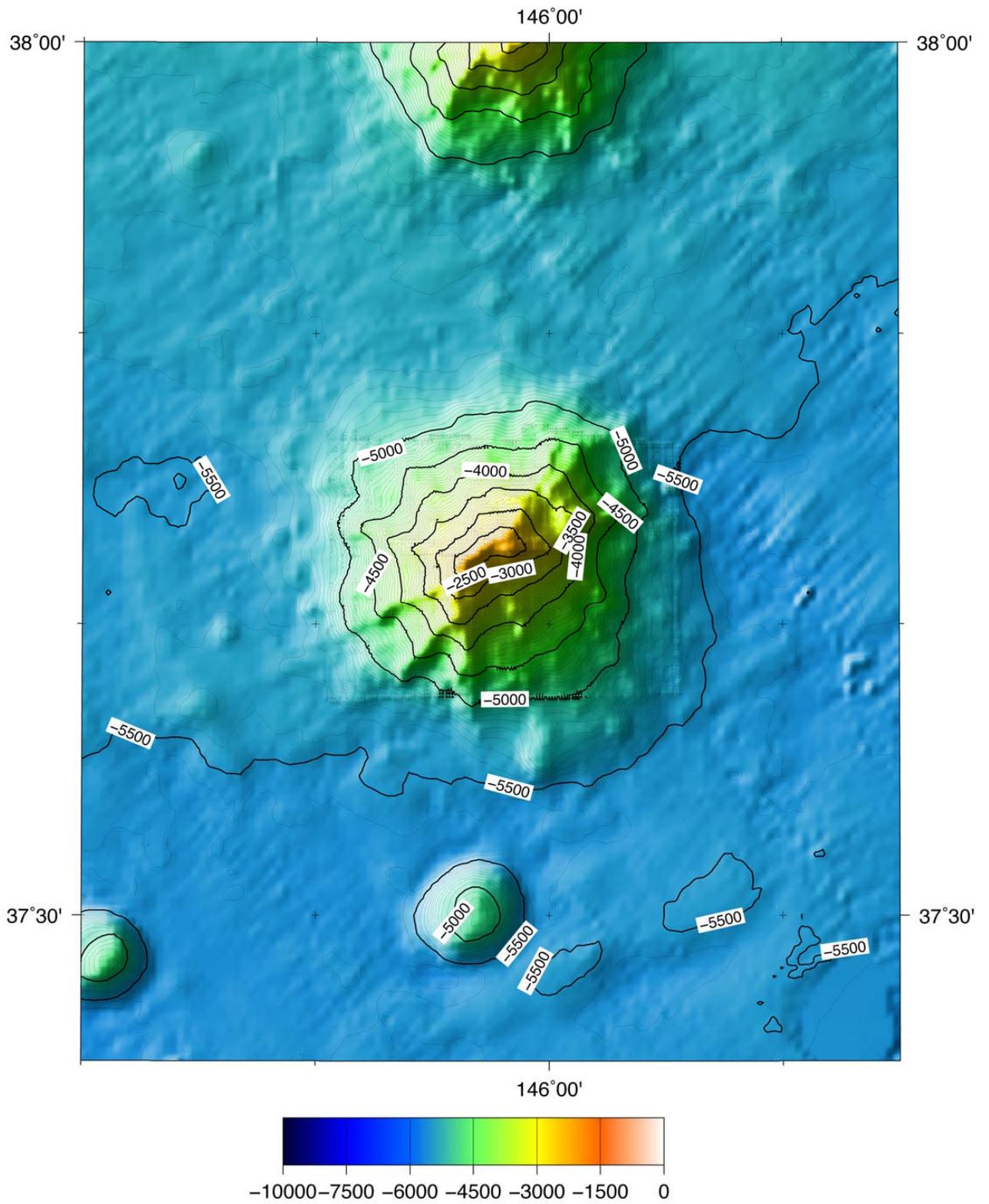


Fig. 2. Color bathymetric map of Hotta Smt. Contours in 100 m.

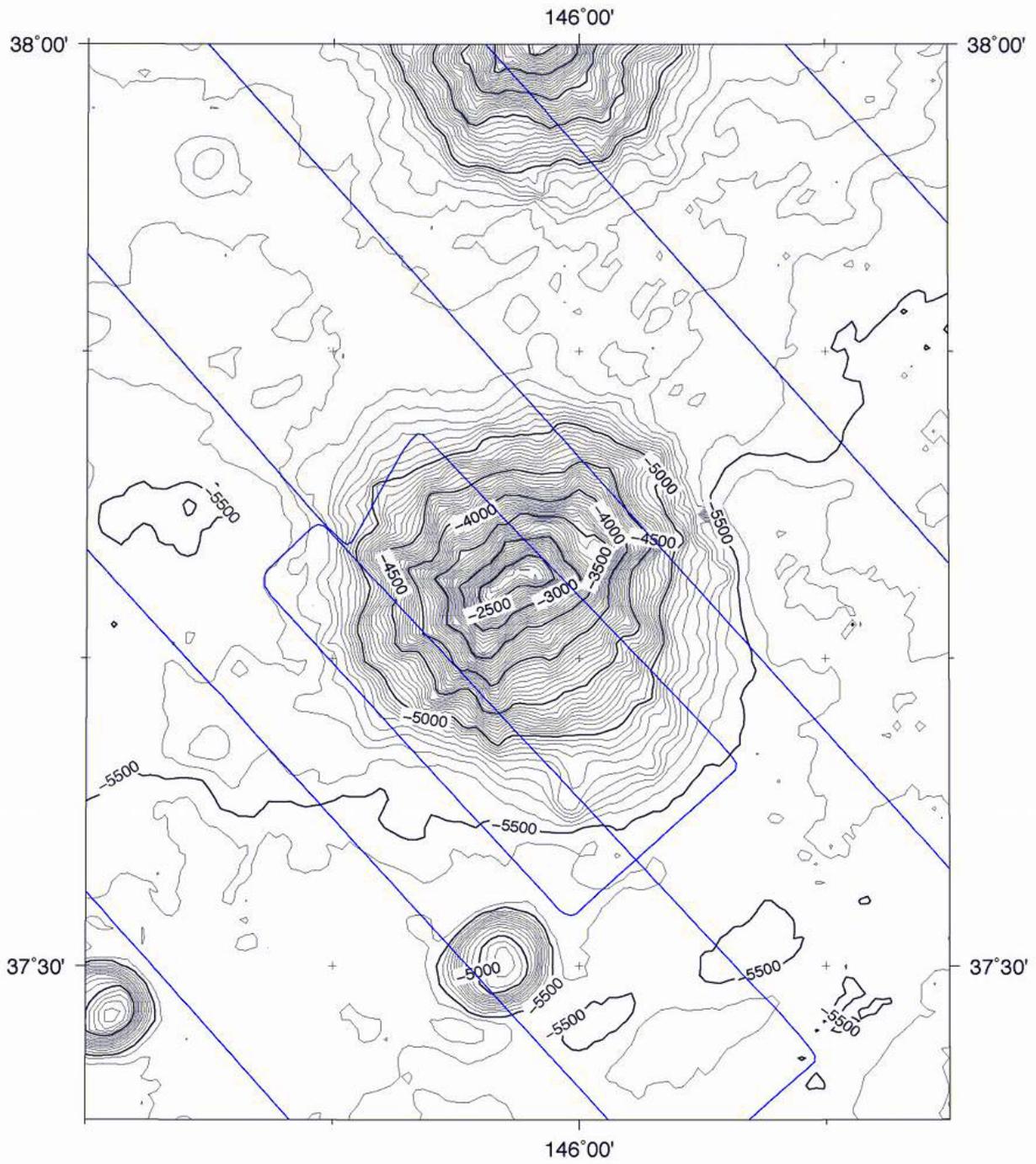


Fig. 3. Bathymetric map of Hotta Smt. Contours in 100 m. Track line is shown in blue.