ACTA OCEANOGRAPHICA TAIWANICA NO. 30, PP. 77-84, 6 FIGS., MARCH, 1993

COMMENT ON "NAMING OF THE SUBMARINE CANYONS OFF NORTHEASTERN TAIWAN: A NOTE" BY HO-SHING YU (1992)

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ABSTRACT

Based on the bathymetric data colleted in 1992 and 1993, the two prominent valley-like submarine features off the northeastern coast of Taiwan which were named by Yu (1992) "Chilung Canyon" and "Huapinghsu Canyon" should be renamed as "Chilung Valley" and "Mien-Hua Canyon", respectively.

INTRODUCTION

Yu (1992) have named two submarine canyons off northeastern Taiwan the Chilung Canyon and the Huapinghsu Canyon. His criteria for naming these two distinct linear depressions on the shelf and slope were based on published bathymetry not including new findings.

After a scrutiny of the bathymetric data collected in recent years (Song, 1992, 1993), a revision of some of the names proposed by Yu (1992) is necessary. For instance, the naming of "Chilung Canyon" by Yu is not suitable; we suggest that the name "Chilung Valley" seems more proper.

We follow the guidelines for naming or defining submarine features (Bouma, 1990). The "submarine canyon" is "a relative narrow, deep depression with steep sides, the bottom of which generally has a continuous slope, developed characteristically on some continental slopes". In other words, submarine canyon usually commences on the continental shelf, commonly at the mouth of large rivers, cutting to the base of continetal slope and serving as a major conduit of detritus sediment from the continents to the deep basins (Kennett, 1982).

DATA AND RESULTS

The bathymetry off the northeastern coast of Taiwan from 121°40′E, 24°55′N to 122°35′E, 25°40′N has been charted by using the EK-500 and ELAC-4700 echosounders since early 1991 on board the R/V Ocean Researcher I. To date, as much as 90,000 bathymetric data points (employing the DGPS with positioning accuracy within 5 meters) were obtained during nine cruises totally about 2,500 nautical miles long (Fig. 1). These data were examined, edited, and compiled; after that, bathymetrical contour chart annotated by the GRS-67 coordinate in the area was produced numerically (Fig. 2). Until now, only the quality of the chart around the Pengchiahsu Island remains comparatively poor owing to the scarcity of bathymetrical data.

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