

UNDERSEA FEATURE NAME PROPOSAL

(See NOTE overleaf)

Ocean or Sea MAR DE GRAU Name proposed PERU TRENCH

Coordinates : A - of midpoint or summit : Lat. $10^{\circ} 40' 30.84''$ S , Long. $079^{\circ} 51' 01.60''$ W

659,10 kilometres in NW direction from Lat. $07^{\circ} 41' 04.25''$ S to Lat. $12^{\circ} 52' 07.05''$ S

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

Lat. $07^{\circ} 41' 04.25''$ S } to { Lat. $12^{\circ} 52' 07.05''$ S
Long. $081^{\circ} 22' 05.6''$ W } to { Long. $078^{\circ} 24' 02.8''$ W

Description (kind of feature) : extended and parallel to the coast

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

The Peruvian continental margin is the extension of the continent under the waters of the Pacific Ocean. Morphologically the margin is formed by the Continental Platform, from 0 to 200 m over the mean sea level (MSNM), the continental slope, from 200 to 2000 MSNM and the internal wall of the oceanic trenches, which go beyond the contour depth of 4000 MSNM. These trenches materialize the limit between the Nazca Plate (bottom of the Pacific Ocean) and the South American Plate, where is located our country. In this active margin, the first plate mentioned slides in a leaning way and towards the East under the second, in a process called "subduction" (?). The subduction, which takes place here since more than hundreds of thousands years is the responsible of the development of the Andes cordillera and the big earthquakes damaging our country.

The Ridge of Nazca is an undersea mountain chain extended towards SW-NE, belonging to the Nazca Plate and which is in front of the Ica Department. It is a bigger geological structure whose axis intercepts the trenches line in the latitude 15° S. The high bottoms generated by the entering in subduction of such a ridge allow to distinguish two oceanic trenches (*Peru Trench and Peru-Chile Trench*) from the mentioned latitude: a) One towards NNW till the border of peru and b) the other towards South in the zone called deflection of Arica, extending then towards the Chilean margin.

Chart reference :

It is charted, with its name, in the chart n°: PERU HIDRONAV 000.

It is charted, without name, in the chart n°: General Bathymetric Chart of the Oceans (GEBCO) N° 5.11.

Reason for choice of name (if a person, state how associated with the feature to be named) : Trench which is located, in its whole extension, in the Peruvian Sea.

Discovery facts :

Date 1947 - 1958 by (individuals or ship) RL Fisher, L. Schwigger

By means of (equipment) : dredges.

Presented by: Dr. E. Schwigger Date: 1958 v "El Litoral Peruano"....