UNITED STATES

MAGNETIC MAP

CALIFORNIA

NOS 1307N-18M

TOLO BANK

Bodega Valley

Vizcaino Canyon

VIZCAINO KNOLL

Noyo Canyon

Navarro Canyon

Arena Canyon

Bodega Canyon

Cordell Bank

DRAKES BAY

MAGNETICS

MAGNETIC LEGEND

CONTOUR INTERVAL 50 GAMMAS

Positive Values

Zero Reference

Negative Values

MAGNETICS

The total magnetic field intensity was measured along ship tracklines using a Varian proton-precession magnetometer. The magnetometer sensor was towed far enough behind the ship so that the effect of the ship's magnetic field is considered negligible and correction is within line-sharing accuracy.

Residual magnetic field data were derived using as reference the IGRF-1965 (IDEAS Technical Report C & G-38, Fabiano and Peddie, 1969) endorsed by the World Magnetic Survey Board, IAGA, on October 28, 1968. In practice, reference field values were computed at 50-mile points of each track-line segment and linearly interpolated elsewhere. The reference field was recycled for the actual date of each track-line segment. The entire survey was not reduced in a single IGRF epoch, but an average epoch of 1970.42 may be assumed. A - 100 gamma bias was removed from the IGRF throughout. This bias was used by A.E. Theberge in an earlier map published by NOAA in NOS DD-12, A.E. Theberge's East Pacific Magnetic Anomaly Map of SURVEYOR 1970 Data was shaded above the - 100 gamma contour to depict anomaly highs. Removal of the - 100 gamma bias and a change of color tints to zero accomplishes the same effect on this map. Contouring was done on hand plots of data along ship's track. Heavy reliance was placed upon the original work of A.E. Theberge in the final compilation of this data.

Tidal and current errors were not corrected for diurnal or disturbance variations in the magnetic field. Data acquired during disturbed intervals were deleted. The criterion for disturbance was an occurrence of a K-index five or greater on the magnetogram from the NOAA geomagnetic observatory at Tucson, Arizona. Values at trackline crossings were generally within 20 gammas of each other.

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NATIONAL OCEAN SURVEY
1974

Trackline of geophysical survey

LOCATION DIAGRAM

1307N-12

1307N-18

1307N-11

TRANSVERSE MERCATOR PROJECTION

Scale 1:250,000

NOS 1307N-18M

PT REYES TO TOLO BANK

PRICE $2.00