



Source:
The soundings on this map were principally assembled from compilations made since 1949 by the following organizations:
Columbia University, Department of Geological Sciences—Lamont-Doherty Geological Observatory (initiated in 1949 with the support of the Office of Naval Research); includes principally precision depth soundings by research vessels.
Department of Defense, Defense Mapping Agency Hydrographic Center/US Naval Oceanographic Office (originated on 4°-1° Longitude format in 1949). Includes precision and nonprecision soundings of naval and other vessels and all pre-1950 echo soundings.
University of California, Scripps Institution of Oceanography (initiated in 1950 with the support of the Office of Naval Research). Includes principally precision soundings from research vessels.

Contours
Soundings from listed sources were contoured at publication scale using a planimetric sounding hypothesis and bathymetric trends derived from both magnetic anomalies and fracture zone lineations. Vessel tracks are indicated by numerical values in fathoms and the vessel and voyage number are shown at an extremity of each track. Approximate depths of contours in meters can be determined from the conversion table.

Conversion Table	
Fathoms	Meters
200	375
400	740
600	1110
800	1480
1000	1860
1200	2230
1400	2600
1600	2980
1800	3360
2000	3740
2200	4120
2400	4500
2600	4880
2800	5260
3000	5640
3200	6020

BATHYMETRIC AND NODULE ASSESSMENT MAP, 1202N, NORTHEAST EQUATORIAL PACIFIC OCEAN

Contour data assembled, evaluated, and interpreted by Bruce C. Heezen and Marie Tharp assisted by S. Blithe, R. Bodnar, R. Brunk, D. Jicha, H. Jicha, T. Kaul, M. McClellan, and F. Rossetti, Lamont-Doherty Geological Observatory, Department of Geological Sciences, Columbia University, Palisades, NY 10964
Nodule data from the Scripps Institution of Oceanography Sediment Data Bank, compiled by Jane Z. Frazer and Mary B. Fisk, Scripps Institution of Oceanography, University of California, La Jolla, CA 92093

1.86(2) + Nodules present and averaged combined copper and nickel content in weight percent. Total number of analyses averaged shown in parentheses.
+ Nodules present but no reported analyses.
1-1209 Site of photograph showing bottom coverage by ferromanganese nodules, research vessel, and cruise number. Photograph available from Lamont-Doherty Geological Observatory.
Research vessels:
M. R/V Moana Wave, University of Hawaii
O. R/V Oceanographer, National Oceanographic and Atmospheric Agency
V. R/V Vema, Lamont-Doherty Geological Observatory
No nodules reported in samples or in photographs

1202 N	1204 N	1206 N	1208 N	1210 N
1604 N	1604 N	1604 N	1604 N	1604 N
1603 N	1603 N	1603 N	1603 N	1603 N
1602 N	1602 N	1602 N	1602 N	1602 N

INDEX TO 1:1,000,000 SCALE MAPS FOR MINERAL ASSESSMENT