Cruise Information EW9510
Woodlark Basin

This was an ODP site survey (prior to leg 180) the characterize the rift-to-spreading transition in the Woodlark Basin

Chief Scientist: Brian Taylor
Data Originating Institution: University of Hawaii
Funding Agency: NSF - OCE (Diebold at LDEO was PI)

Cruise Details

Platform: R/V Maurice Ewing
Beginning date: 29 September, 1995
Ending date: 14 October, 1995
Start Port: Kaoshiung, Taiwan
End Port: Honiara, Solomon Islands

Publications

Goodliffe. A.M., B. Taylor, and G.D. Karner , Correlations between seismic, logging, and core data at ODP Leg 180 sites in the western Woodlark Basin. In B. Taylor, P. Huchon, and A. Klaus, (Eds.), *Proc. ODP, Sci. Results, 180,* 2001.

Floyd, J.S., J.C. Mutter, A.M. Goodliffe, and B. Taylor, Evidence for fault weakness and fluid flow within an active low-angle normal fault, *Nature, 411*, 779-783, 2001.

Zelt, B.C., B. Taylor, and A.M. Goodliffe. 3-D crustal velocity structure at the rift tip in the western Woodlark Basin, *Geophys. Res. Lett., 28 (15)*, 3015-3018, 2001.

Goodliffe, A.M., B. Taylor, and F. Martinez, Data report: Marine geophysical surveys of the Woodlark Basin region. In B. Taylor, P. Huchon, A. Klaus, et al., *Proc. ODP, Init. Repts., 180*, 1-20 [CD-ROM]. Available from: Ocean Drilling Program, Texas A&M University, College Station, TX 77845-9547, U.S.A, 1999.

Taylor, B., A. M. Goodliffe, and F. Martinez, How continents break up: Insights from Papua New Guinea, *J. Geophys. Res., 104,* 7497-7512, 1999.

Plus various leg 180 related papers.

Seismic Acquisition Parameters

Source Volume	8460 cu in
Source Number	20 (1366) (10 air guns alternating for 1367 on)
Source Type	Bolt 1500 airguns
Source pressure	2000 psi
Navigation type	P-code GPS

Shot interval	50 m (1366), 30 m (all other lines)
Antenna to source	87.4 m
Source depth	8 m
Streamer depth	8 m
Recording system	Syntrak
Number of channels	196 (1366-1372A)/148(1372B-end of survey)
Channel Length	25
Source to near channel	37.9 m

Seismic Processing Sequence
Processing system: ProMAX at University of Hawaii
Read SEG-D tape
Anti-alias filter and resample from 2 ms to 4 ms
Load Geometry (12.5 m bins), straight line geometry
Trace kills
True amplitude recovery
Spike and noise burst edit
Bandpass filter
Spiking/predictive decon
Velocity analysis
NMO
Top and bottom mutes
Stack