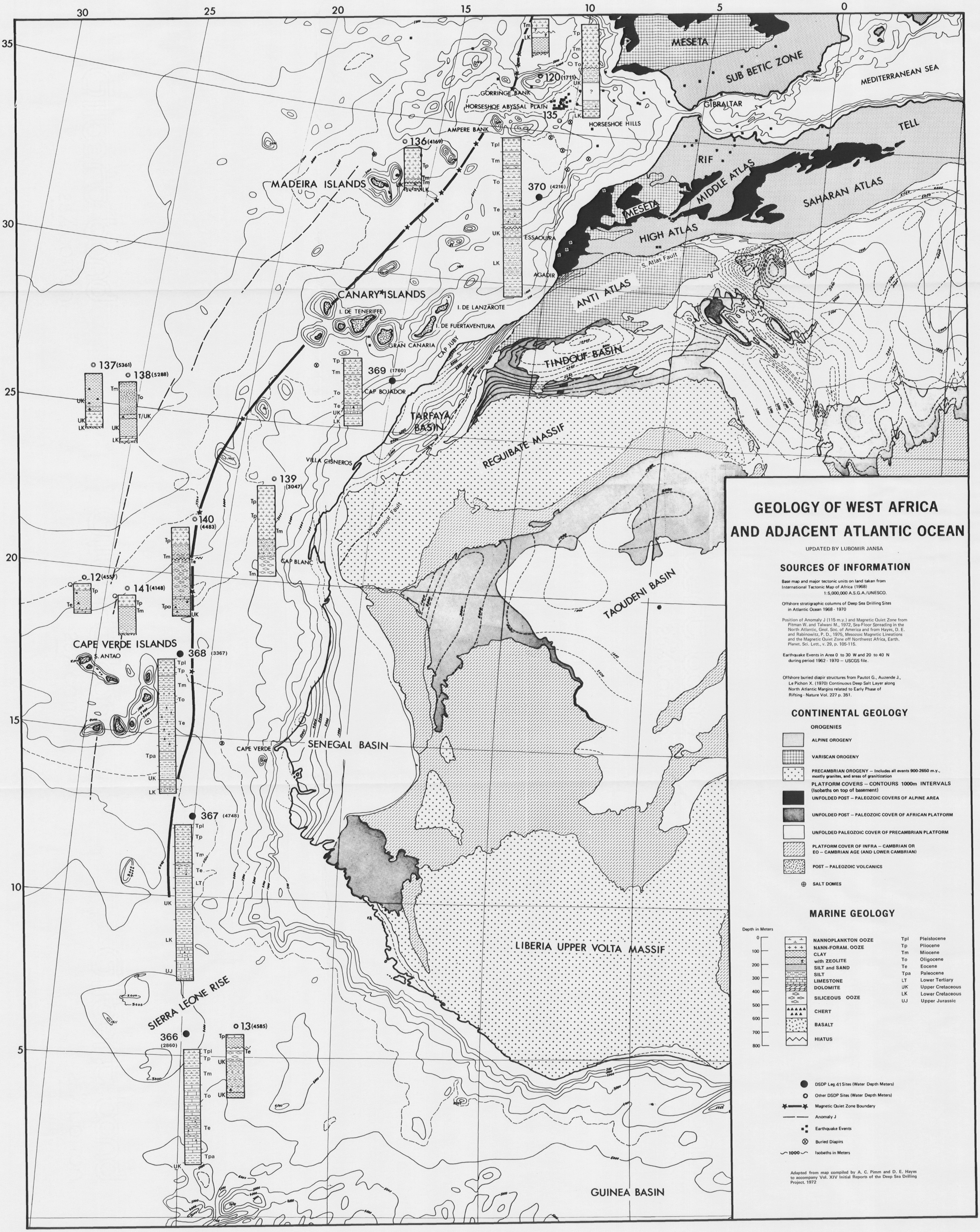
GEOLOGY OF WEST AFRICA
AND ADJACENT ATLANTIC OCEAN
UPDATED BY LUBOMIR JANSA
SOURCES OF INFORMATION
Base map and major tectonic units on land taken from International Tectonic Map of Africa (1968) 1:5,000,000 A.S.G.A./UNESCO.
Offshore stratigraphic columns of Deep Sea Drilling Sites in Atlantic Ocean 1968 - 1970
Position of Anomaly J (115 m.y.) and Magnetic Quiet Zone from Pitman W. and Talwani M., 1972, Sea-Floor Spreading in the North Atlantic, Geol. Soc. of America and from Hayes, D. E. and Rabinowitz, P. D., 1975, Mesozoic Magnetic Lineations and the Magnetic Quiet Zone off Northwest Africa, Earth. Planet. Sci. Lett., v. 29, p. 105-115.
Earthquake Events in Area 0 to 30 W and 20 to 40 N during period 1962 - 1970 — USCGS file.
Offshore buried diapir structures from Pautot G., Auzende J., Le Pichon X. (1970) Continuous Deep Salt Layer along North Atlantic Margins related to Early Phase of Rifting - Nature Vol. 227 p. 351.
CONTINENTAL GEOLOGY
OROGENIES
ALPINE OROGENY
VARISCAN OROGENY
PRECAMBRIAN OROGENY — Includes all events 900-2650 m.y., mostly granites, and areas of granitization
PLATFORM COVERS — CONTOURS 1000m INTERVALS (Isobaths on top of basement)
UNFOLDED POST — PALEOZOIC COVERS OF ALPINE AREA
UNFOLDED POST — PALEOZOIC COVER OF AFRICAN PLATFORM
UNFOLDED PALEOZOIC COVER OF PRECAMBRIAN PLATFORM
PLATFORM COVER OF INFRA — CAMBRIAN OR EO — CAMBRIAN AGE (AND LOWER CAMBRIAN)
POST — PALEOZOIC VOLCANICS
SALT DOMES
MARINE GEOLOGY
Depth in Meters
0
100
200
300
400
500
600
700
800
NANNOPLANKTON OOZE
NANN-FORAM. OOZE
CLAY
with ZEOLITE
SILT and SAND
SILT
LIMESTONE
DOLOMITE
SILICEOUS OOZE
CHERT
BASALT
HIATUS
Tpl Pleistocene
Tp Pliocene
Tm Miocene
To Oligocene
Te Eocene
Tpa Paleocene
LT Lower Tertiary
UK Upper Cretaceous
LK Lower Cretaceous
UJ Upper Jurassic
DSDP Leg 41 Sites (Water Depth Meters)
Other DSDP Sites (Water Depth Meters)
Magnetic Quiet Zone Boundary
Anomaly J
Earthquake Events
Buried Diapirs
1000 Isobaths in Meters
Adapted from map compiled by A. C. Pimm and D. E. Hayes to accompany Vol. XIV Initial Reports of the Deep Sea Drilling Project. 1972
MESETA
SUB BETIC ZONE
MEDITERRANEAN SEA
GIBRALTAR
TELL
RIF
MIDDLE ATLAS
SAHARAN ATLAS
MESETA
HIGH ATLAS
S. Atlas Fault
ANTI ATLAS
AGADIR
ESSAOUIRA
HORSESHOE HILLS
HORSESHOE ABYSSAL PLAIN
GORRINGE BANK
AMPERE BANK
MADEIRA ISLANDS
CANARY ISLANDS
I. DE TENERIFFE
I. DE LANZAROTE
I. DE FUERTAVENTURA
GRAN CANARIA
CAP JUBY
CAP BOJADOR
TINDOUF BASIN
TARFAYA BASIN
REGUIBATE MASSIF
VILLA CISNEROS
Zemmour Fault
CAP BLANC
TAOUDENI BASIN
CAPE VERDE ISLANDS
S. ANTAO
CAPE VERDE
SENEGAL BASIN
LIBERIA UPPER VOLTA MASSIF
SIERRA LEONE RISE
GUINEA BASIN
120 (1711)
135
136 (4169)
370 (4216)
137 (5361)
138 (5288)
369 (1760)
139 (3047)
140 (4483)
12 (4559)
141 (4148)
368 (3367)
367 (4748)
366 (2860)
13 (4585)