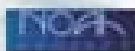




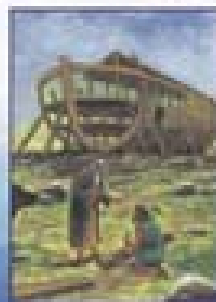
Professor Dr. Petko Dimitrov is the Head of the Department of Marine Geology and Archaeology of the Institute of Oceanology of the Bulgarian Academy of Sciences in Varna, Bulgaria. He has worked for more than 25 years on the recent geological history of the Earth, raw materials and the alternative energy sources of the Black Sea. He has also researched the history and culture of the Black Sea region. He actively participates on international expeditions to the Pacific and Atlantic Oceans and the Mediterranean Sea. He is the author of more than 100 scientific articles and monographs as well as the book "Far Away from Coasts and Fairways." He is a leader of the Bulgarian team of the Bulgarian-American project "Noah" and the "ASSEMBLAGE" project of the 6th Framework Program of the European Union.



Dimitar Dimitrov is an Associate Researcher first degree in the Institute of Oceanology of the Bulgarian Academy of Sciences in Varna. He is working on the problems of computer processing of geological and oceanographic data and graphic design. He is the author of more than 25 scientific articles on marine geology and participates in the international projects "Noah" and "ASSEMBLAGE."



This book is issued under the Black Sea Research Program "NOAH"
<http://www.io-bas.bg/noahproject/index.html>



 **SLAM**

**Petko Dimitrov
 Dimitar Dimitrov**

THE BLACK SEA THE FLOOD



**AND
 THE ANCIENT MYTHS**

The Black Sea, the Flood and the Ancient Myths

Introduction

1. The Black Sea – what do we know about it?

2. Geo-catastrophic events in the Black Sea

3. Hydrogen Sulfide – the Curse of God

4. The Black Sea Coast and Shelf – a Center of Flourishing pre-Flood Civilizations

5. About the names of the Black Sea

6. The Black Sea – a Key to the World Flood

Mystery

7. The Sumerian Epic and the Bible Myths

Conclusion

Chapter 1

**The Black Sea – what
do we know about it?**



Mediterranean region

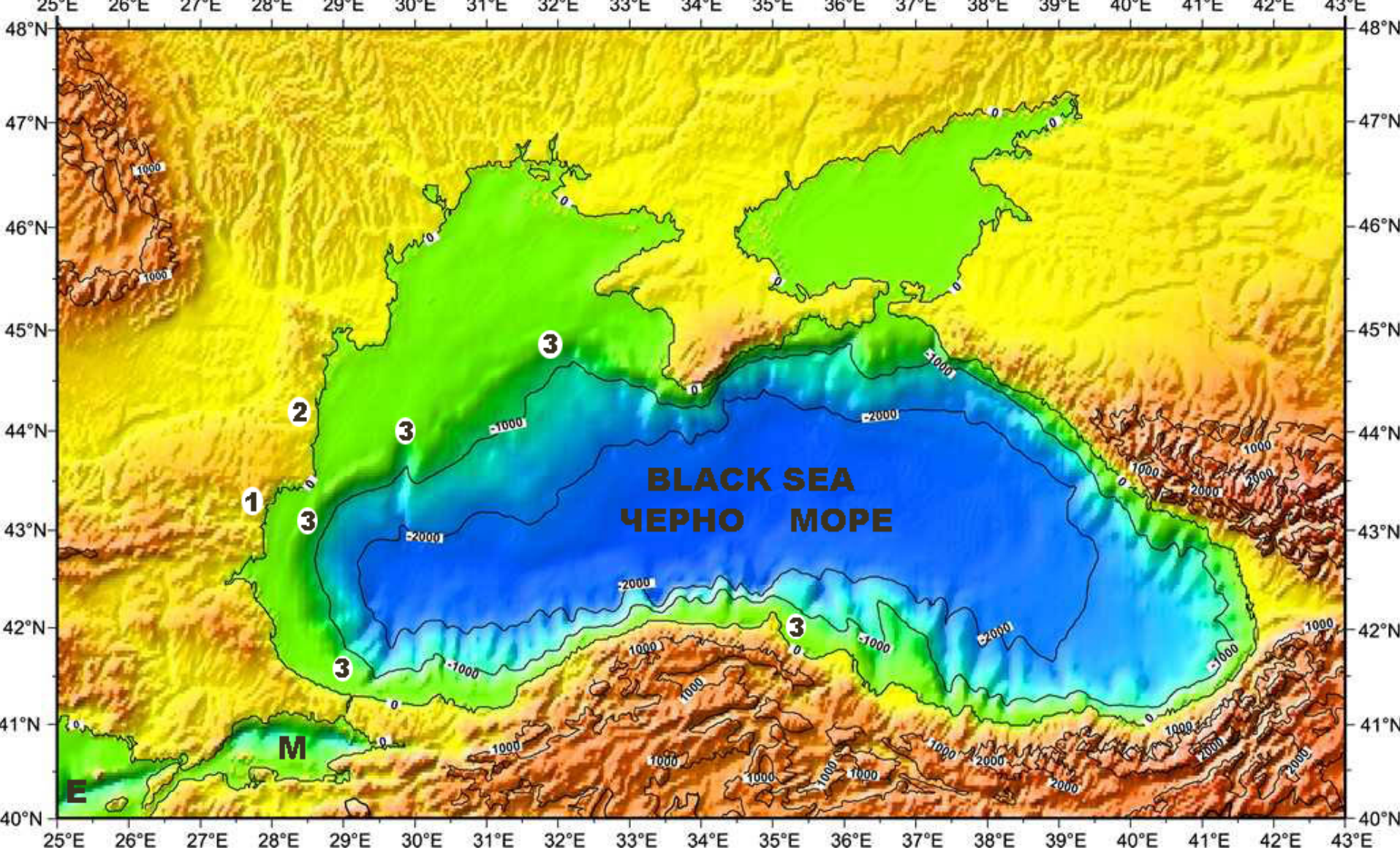


Fig.1. Eastern Mediterranean region

1.The Varna necropolis

2.Durankulak necropolis

3.Possible Neolith settlements in the region of the old shorelines

M – The Marmara Sea

E – The Aegean Sea

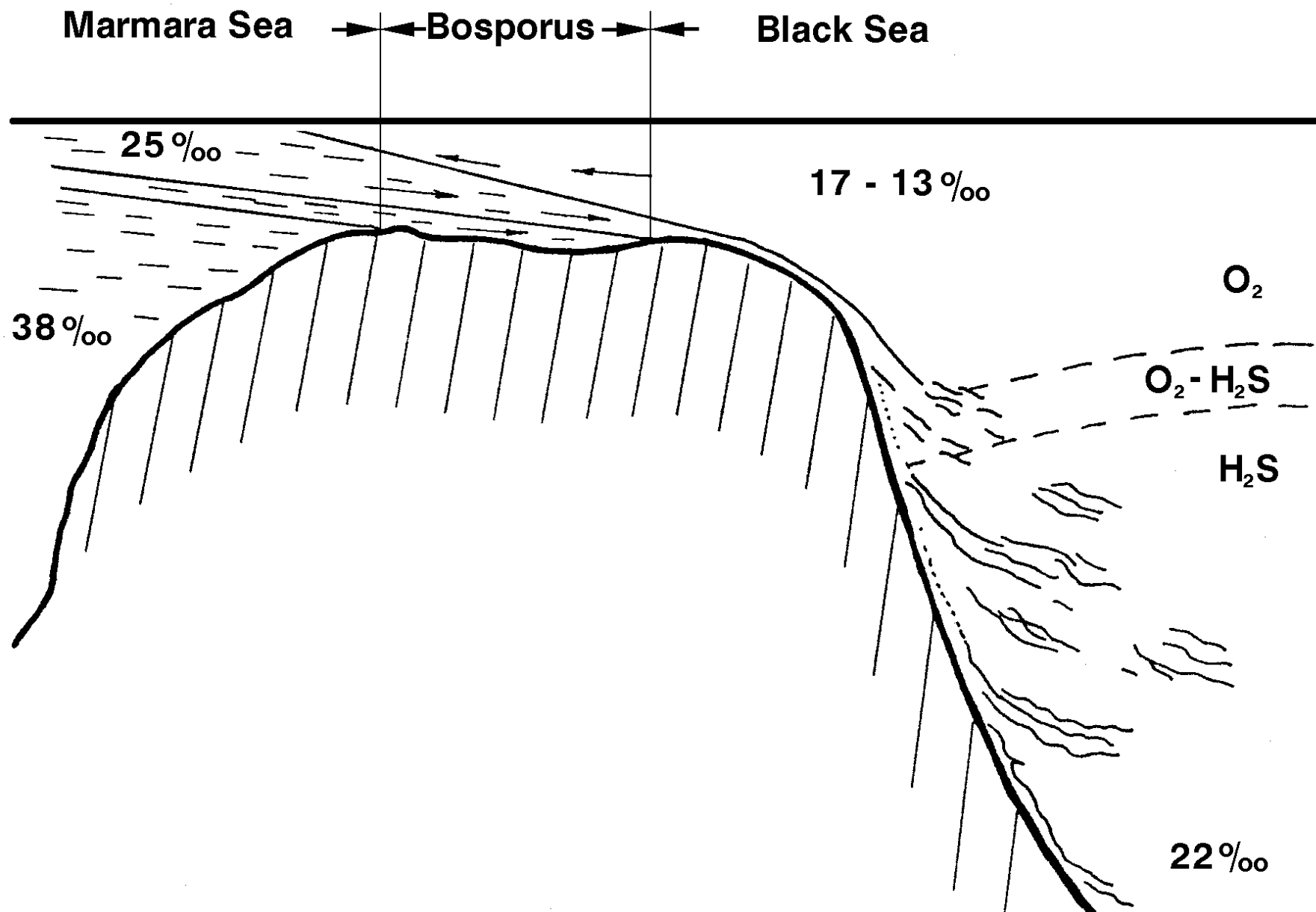


Fig. 2. A principle schema of the water exchange between the Black Sea and the Marmara Sea

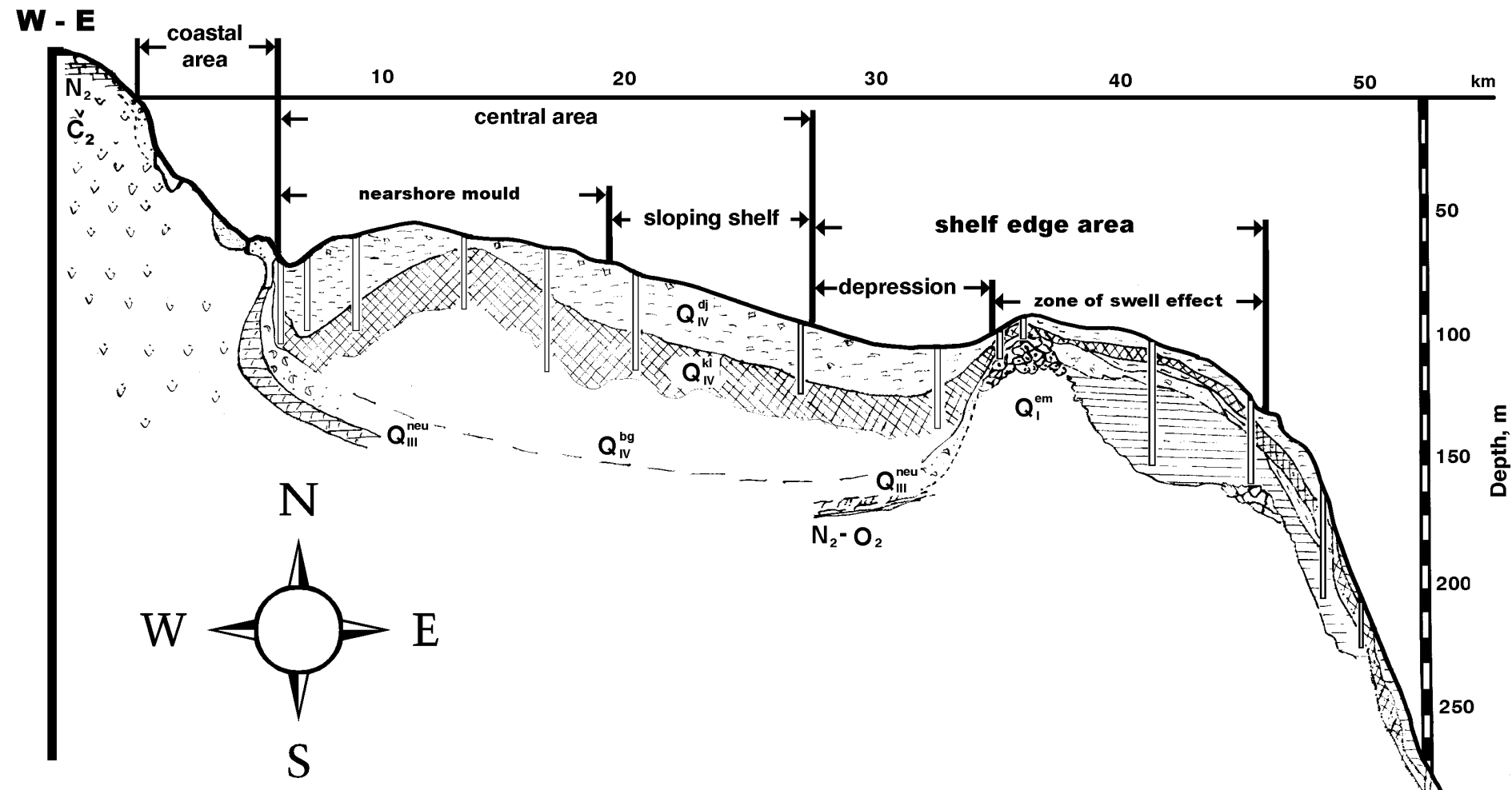


Fig. 3. Schematic geological cross section of the shelf and the major elements of the relief

$Q_I - Q_{IV}$ – quaternary deposits

N_2 – Pliocene

C_2 – Upper Cretaceous volcanogenic-sediment rocks

Fig.4. The Danube Canyon

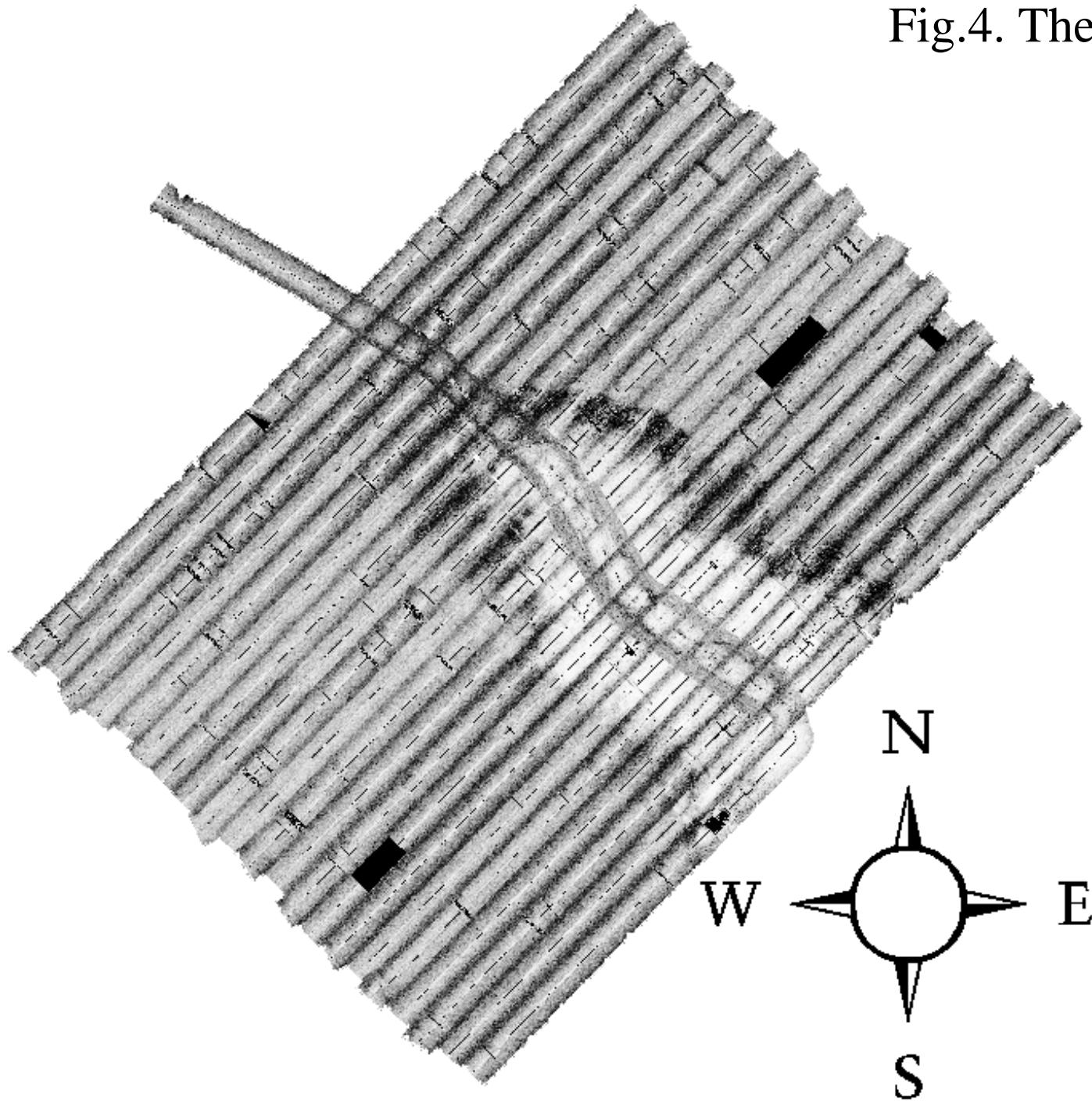




Fig.5. Active slidings in the axes of the underwater valleys (underwater picture)

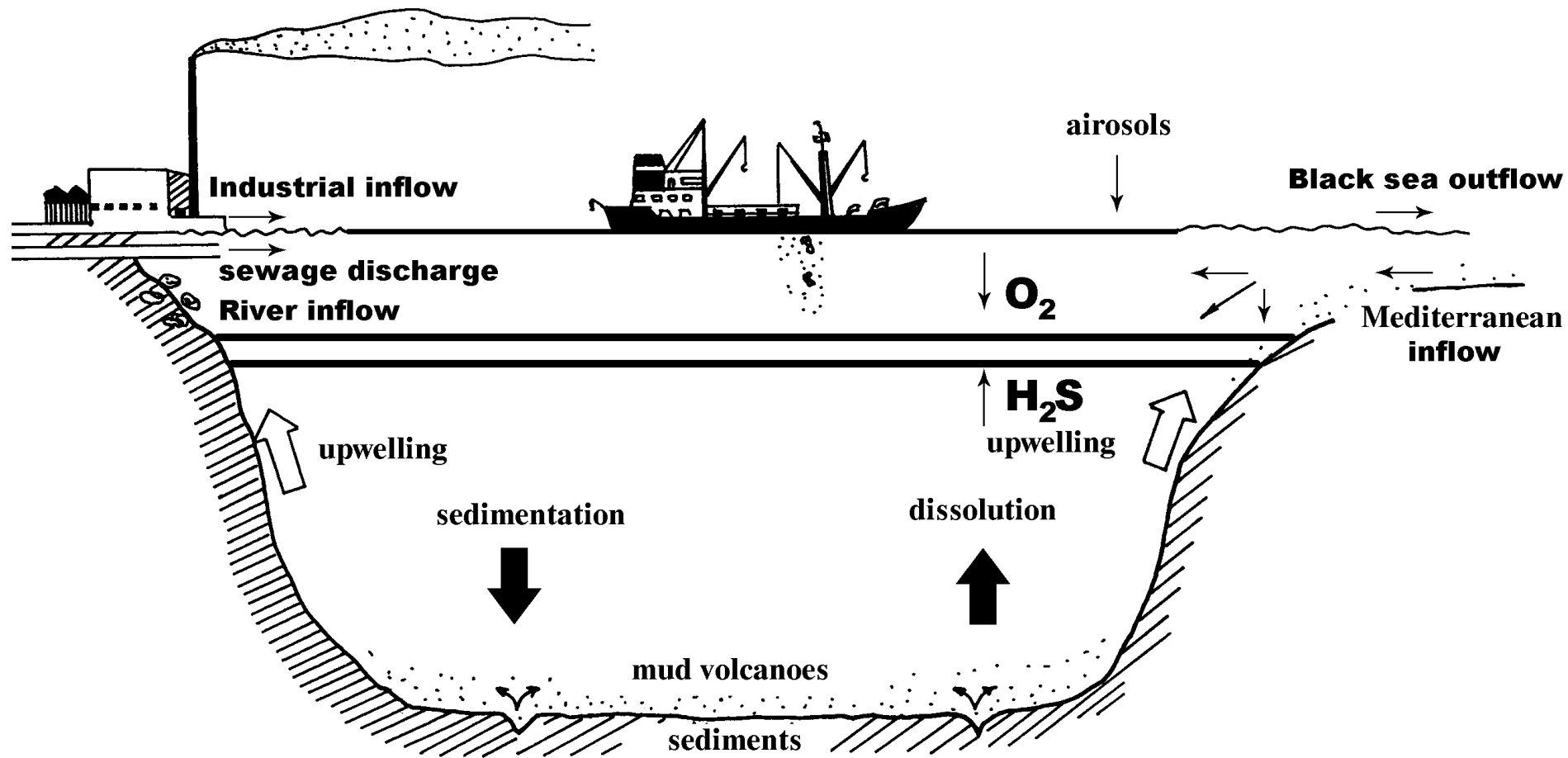


Fig. 6. Natural and anthropogenic factors for the formation of the contemporary Black Sea regime

Chapter 2

Geo-catastrophic events in the Black Sea

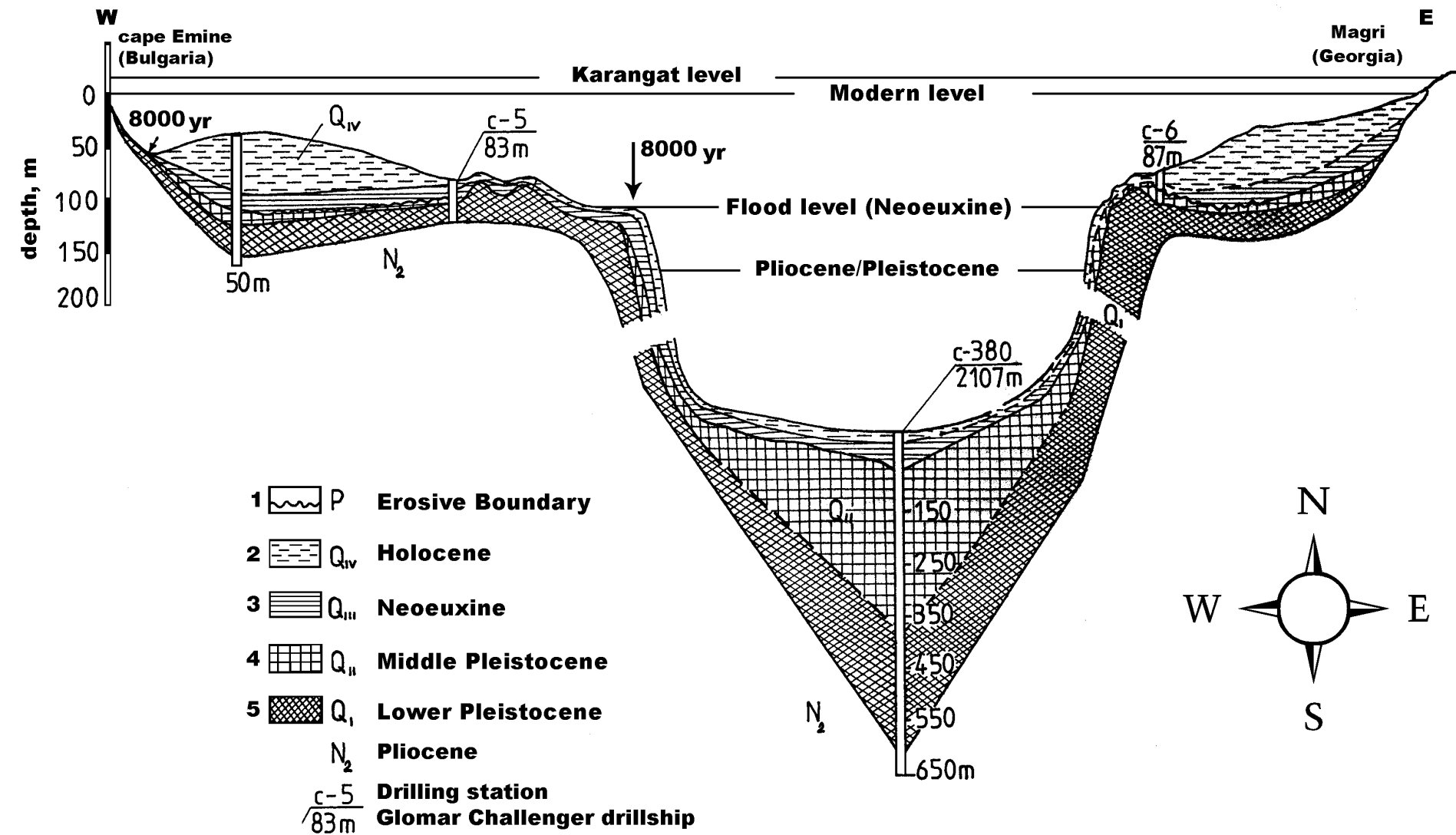
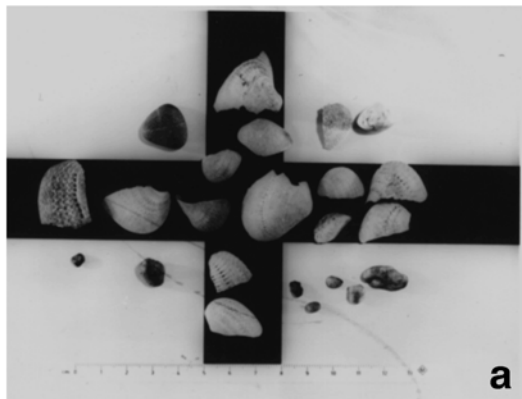


Fig. 7. Schematic geological cross-section and the old shorelines of the Black Sea



a

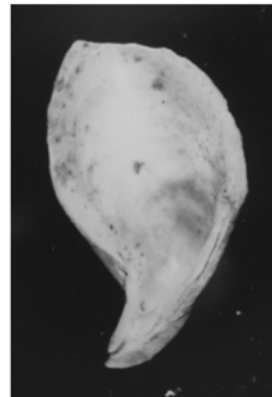
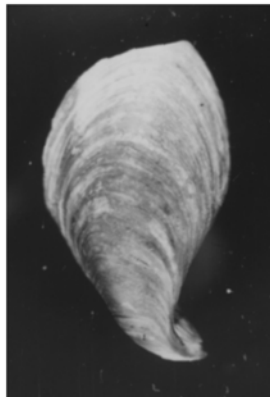


b

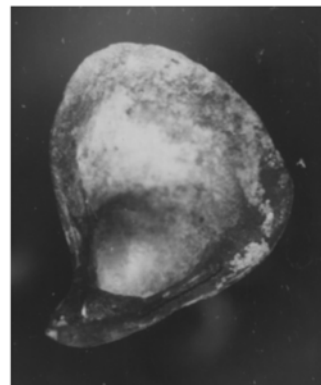
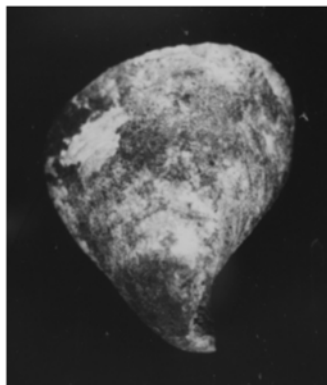


c

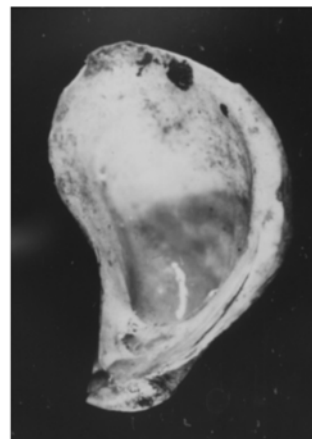
Chaudinian coastal sediments
a - fragments from shells
b - gravel grains with shells
c - gravel grains



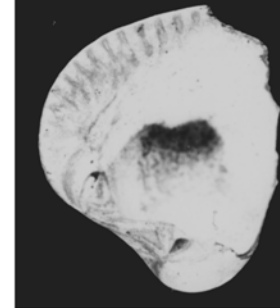
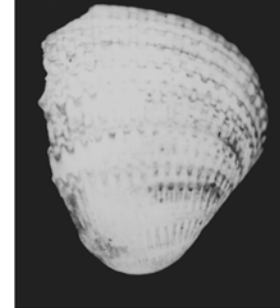
Dreissena rostriformis pontocaspica



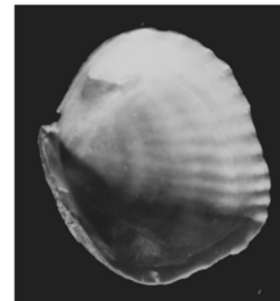
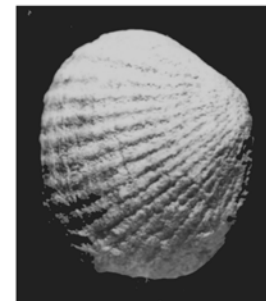
Dreissena rostriformis abchasica



Dreissena rostriformis tschudae



Didacna olla vivent



Didacna tschaudia guriana

Fig. 8. Shore sediments with an Lower Pleistocene age

Fig. 9a. Lower Pleistocene fauna (genus *Dreissena*)

Fig. 9b. Lower Pleistocene fauna (genus *Didacna*)

FRESH WATER SPECIES



Dreissena rostriformis var. distincta



Turricaspia caspia lincta

SALT WATER SPECIES



M. galloprovincialis



All Others

1

2

15000 14000 13000 12000 11000 10000 9000 8000 7000 6000 5000 4000 3000

MOLLUSK AGES - ^{14}C Years BP

Fig. 9c. Fauna species before -1 and after the Flood -2

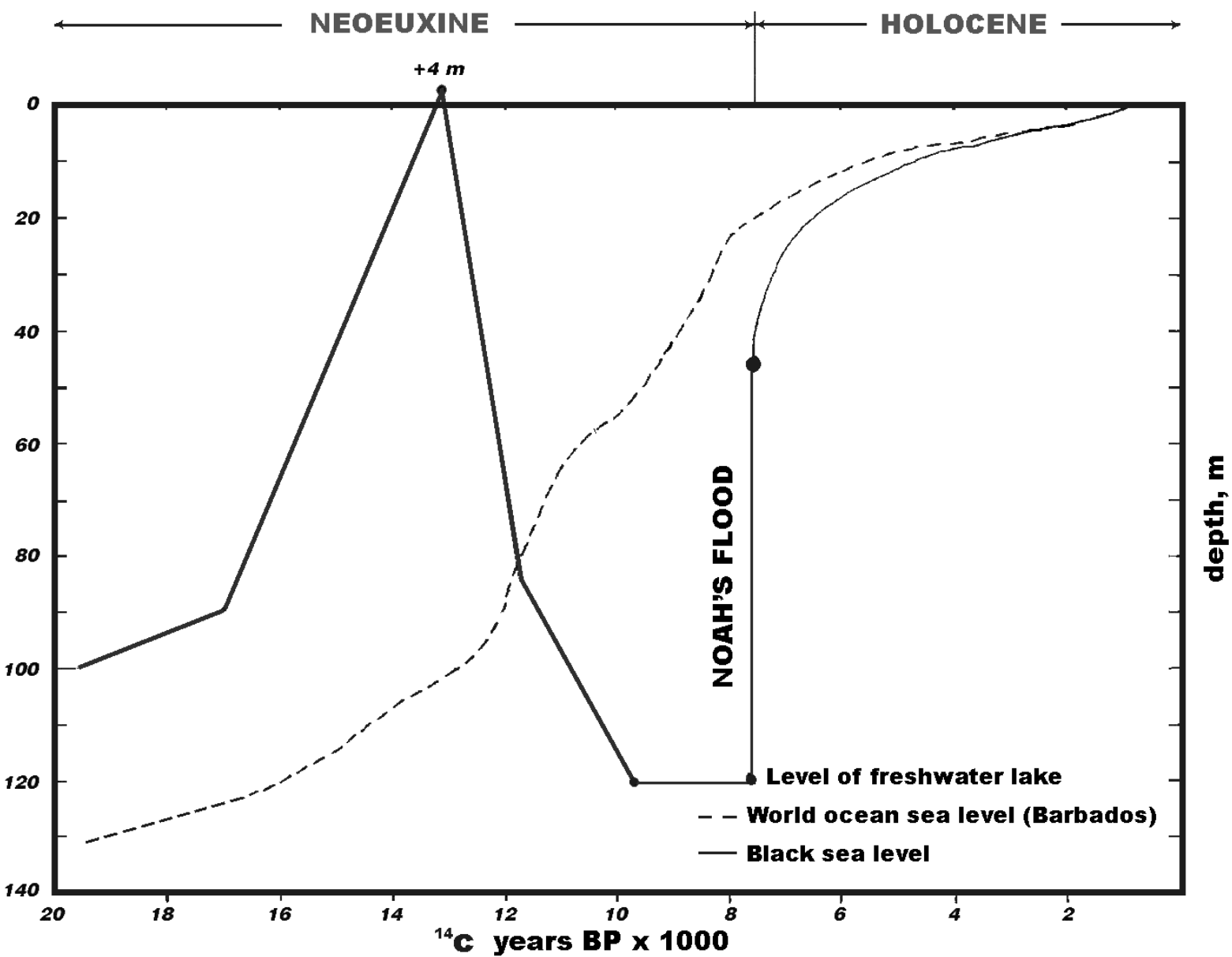


Fig.10. The curve of the changes in the level of the World Ocean and the Black Sea during the last 18,000 years

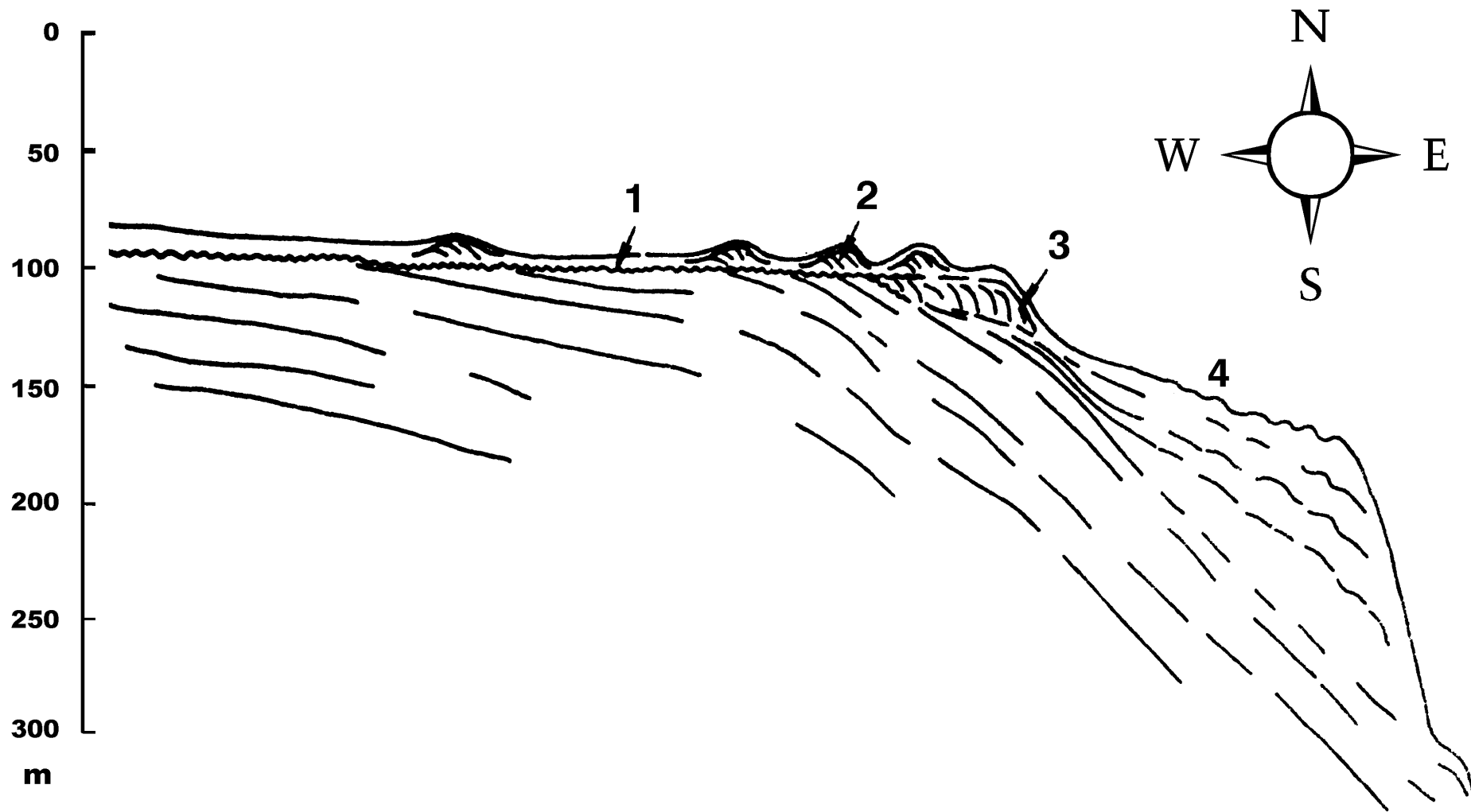


Fig.11a. General schema of the ancient shoreline of the shelf
1 – erosion surface 2 – Neoeuxine bars
3 – Chaudian shore bars 4 – peripheral shelf terrace

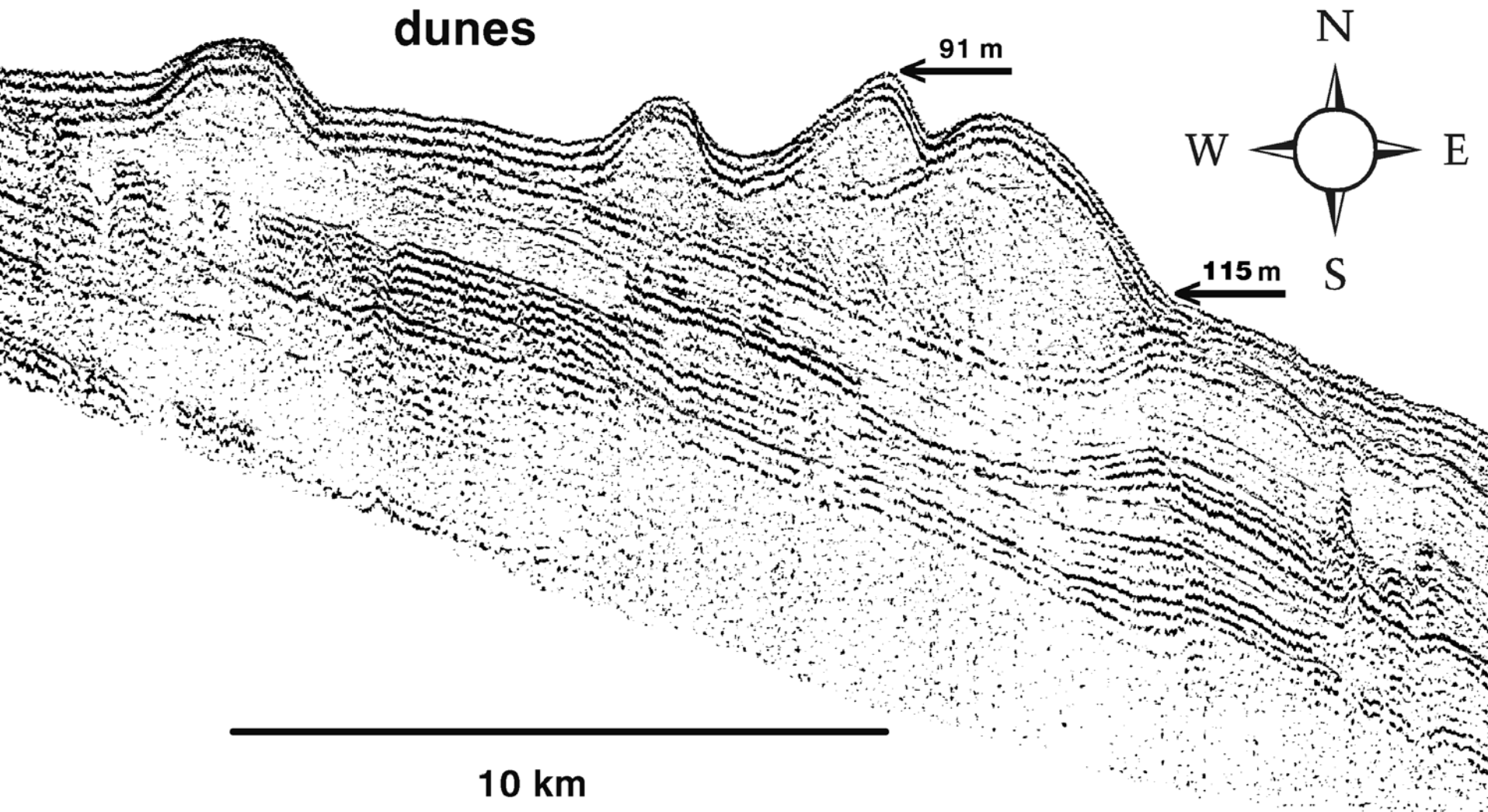


Fig.11b. Fragment of seismic-acoustic record in the region of the old shorelines (profile Emine cape)



Fig.12a. Description of a geological drill on board of Akademik ship

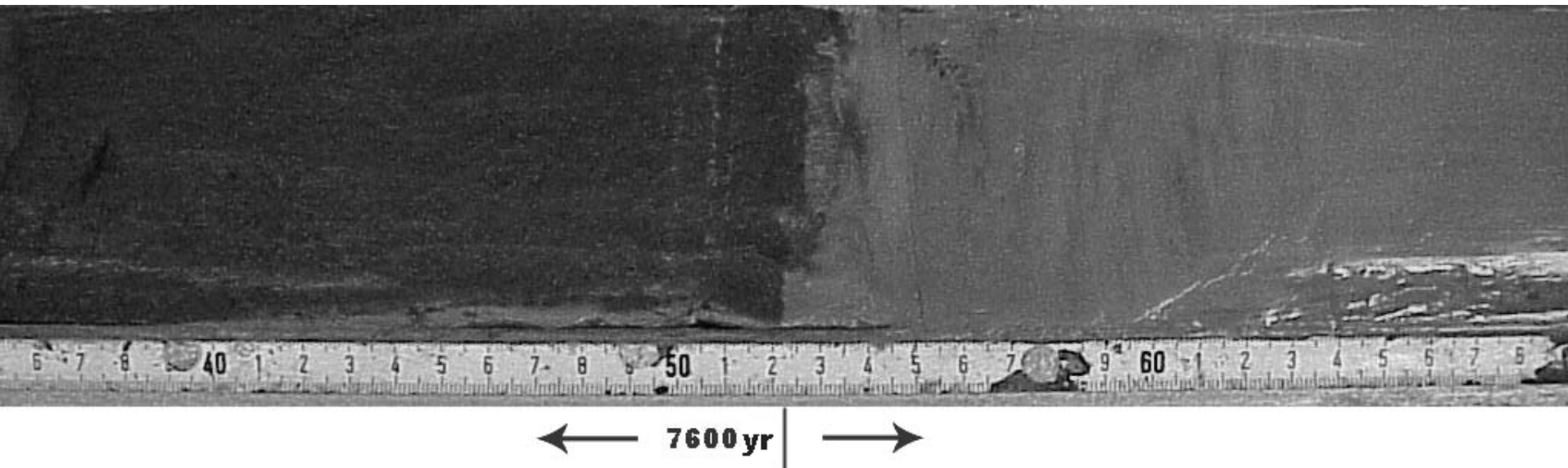


Fig.12b. Geological pipe flies to the bottom...

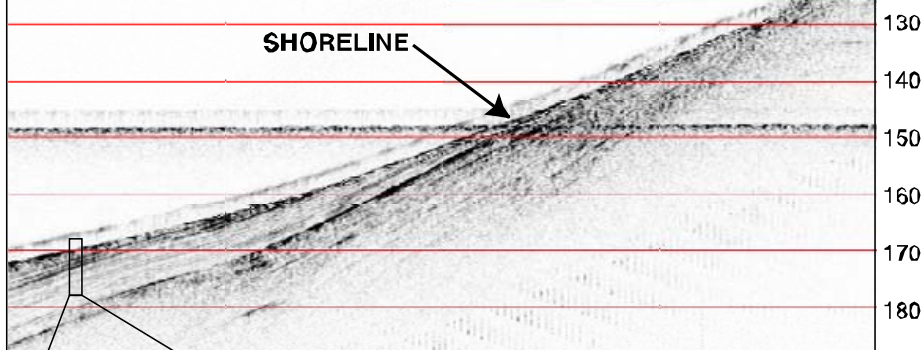


Fig.12c. Sapropel cores

**Fig.12d. Freshwater – sea
sediments boundary
(^{14}C – 7 600 years)**



SHORELINE



Subbottom profile across
Romanian shelf/slope showing
ancient shoreline unconformity



Core from the Romanian
continental slope
showing marine clay overlying
lacustrine clay



Mytilus galloprovincialis
~6800 year old
salt water mollusk



Dreissena rostriformis
~7400 year old
fresh water mollusk

**Fig. 9d. The contrast
boundary of the Flood by
mollusk fauna and lithologic
features**

**Core and subbottom profile
from the continental slope.
The upper shell represents
the Mediterranean species
that invaded the Black Sea
after a catastrophic flooding
event that wiped out pre-
existing fresh water fauna
(lower shell).**

**Mytilus is found in the more
recent marine sediments,
whereas Dreissena is found
in the lake sediments.**

Chapter 3

Hydrogen Sulfide – the Curse of God

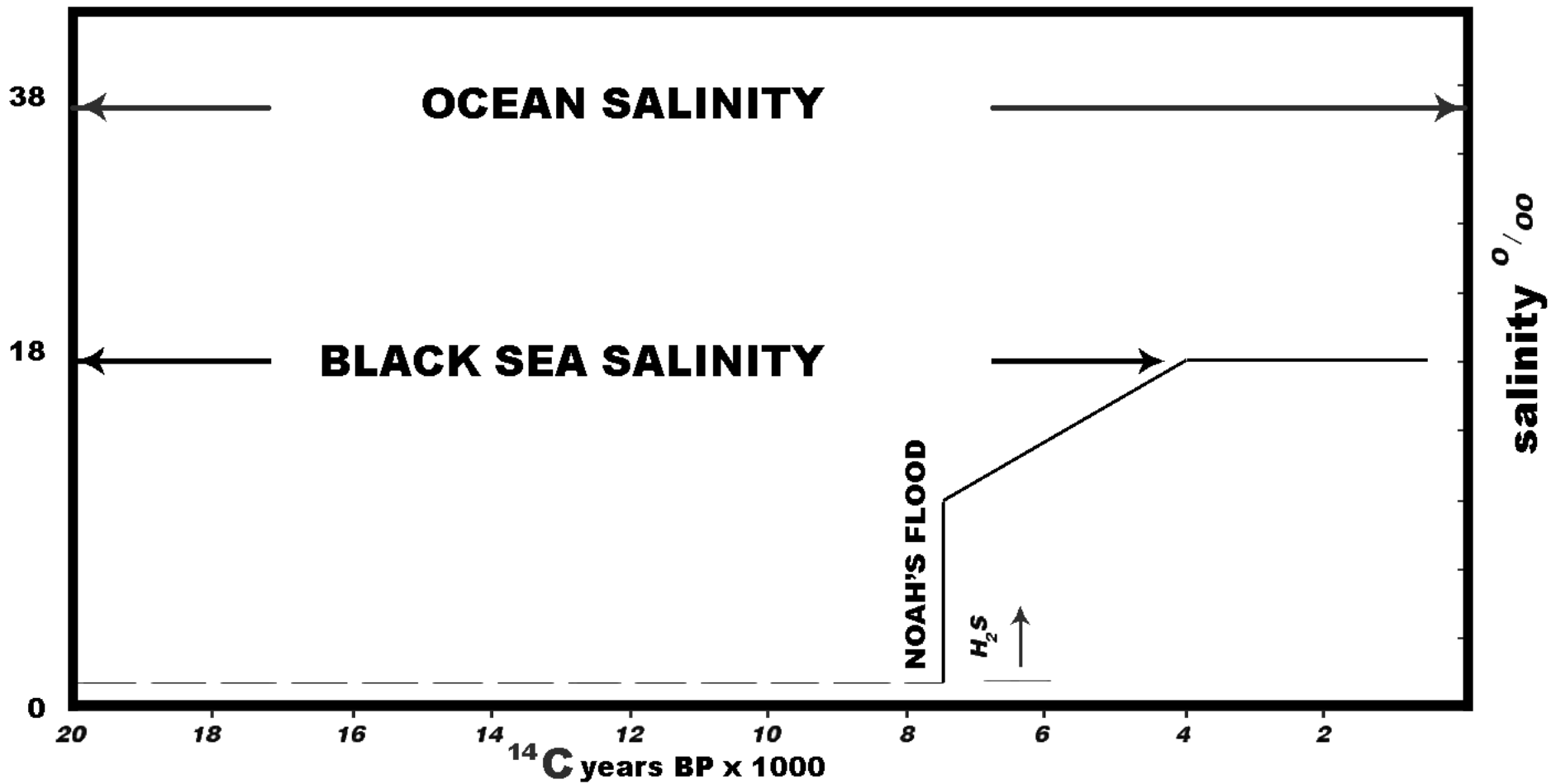


Fig.13. The connection between the catastrophic events (the Flood) and the formation of hydrogen sulfide

Depth, m	H₂S, mg/l
150	0.19
175	0.40
200	0.83
225	1.14
300	2.34
400	4.64
500	5.02
1000	8.48
1500	9.56
2000	9.60

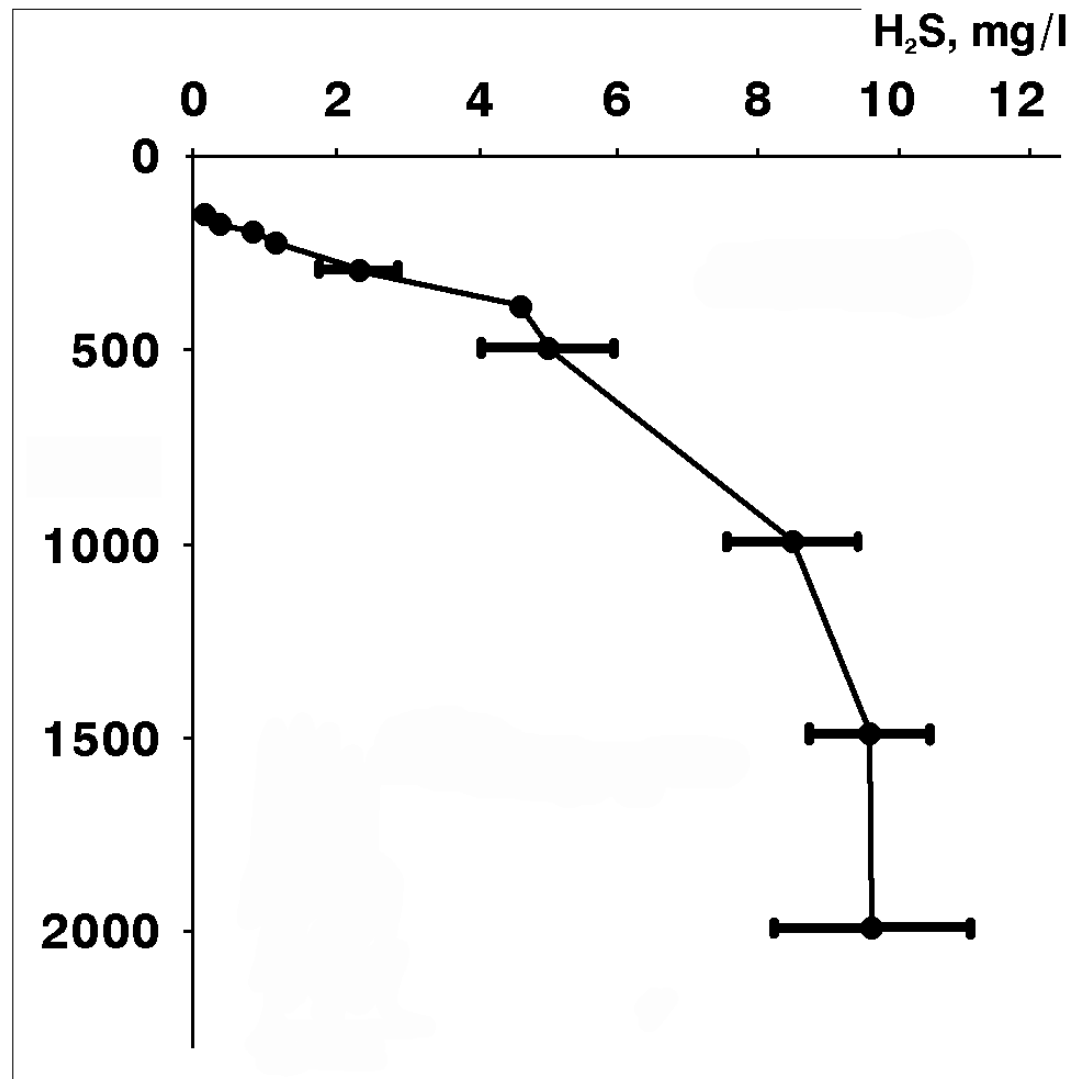


Fig. 23. Average vertical profile of the hydrogen sulfide concentration in the Black Sea (*Eremeev et al, 1999*)

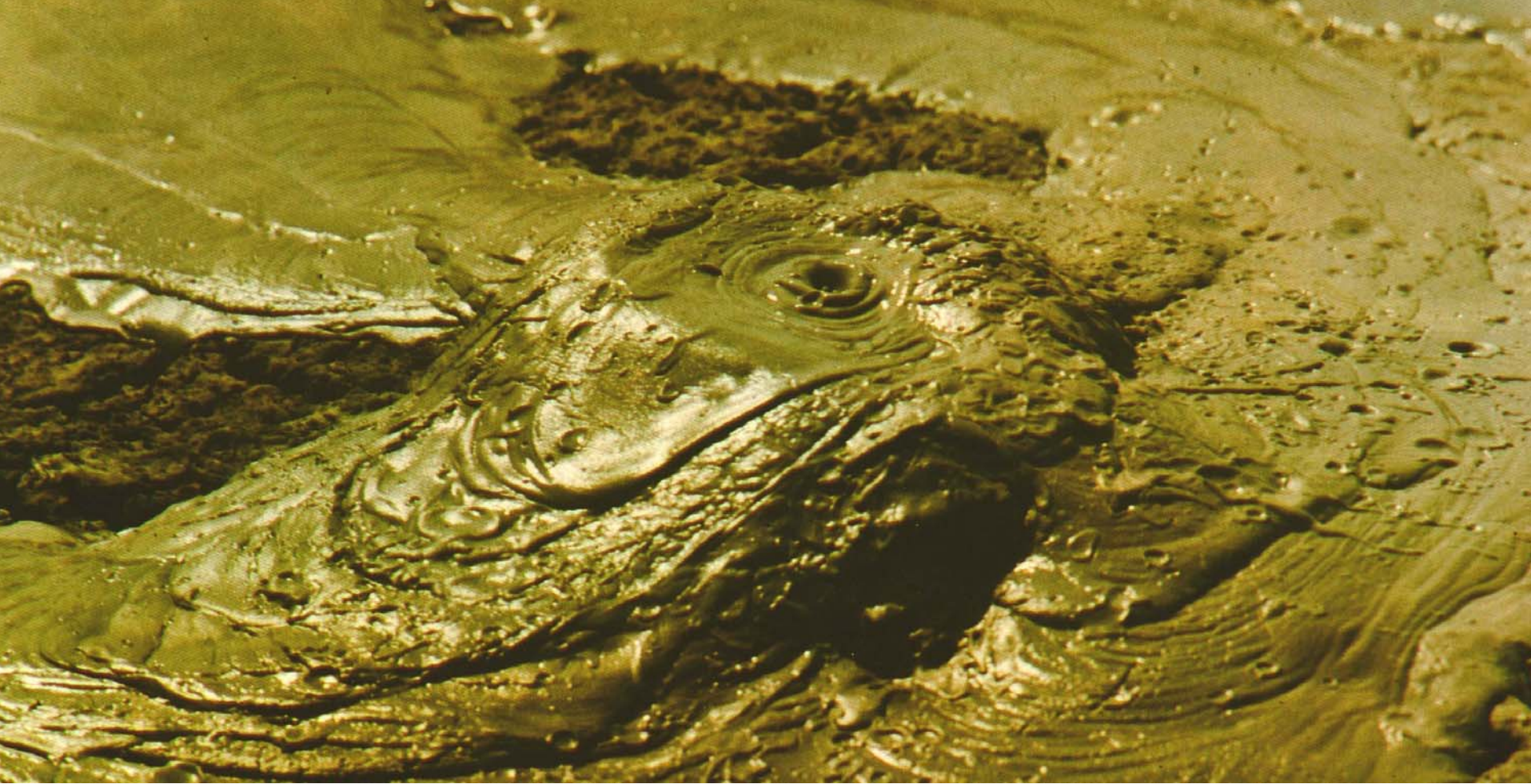
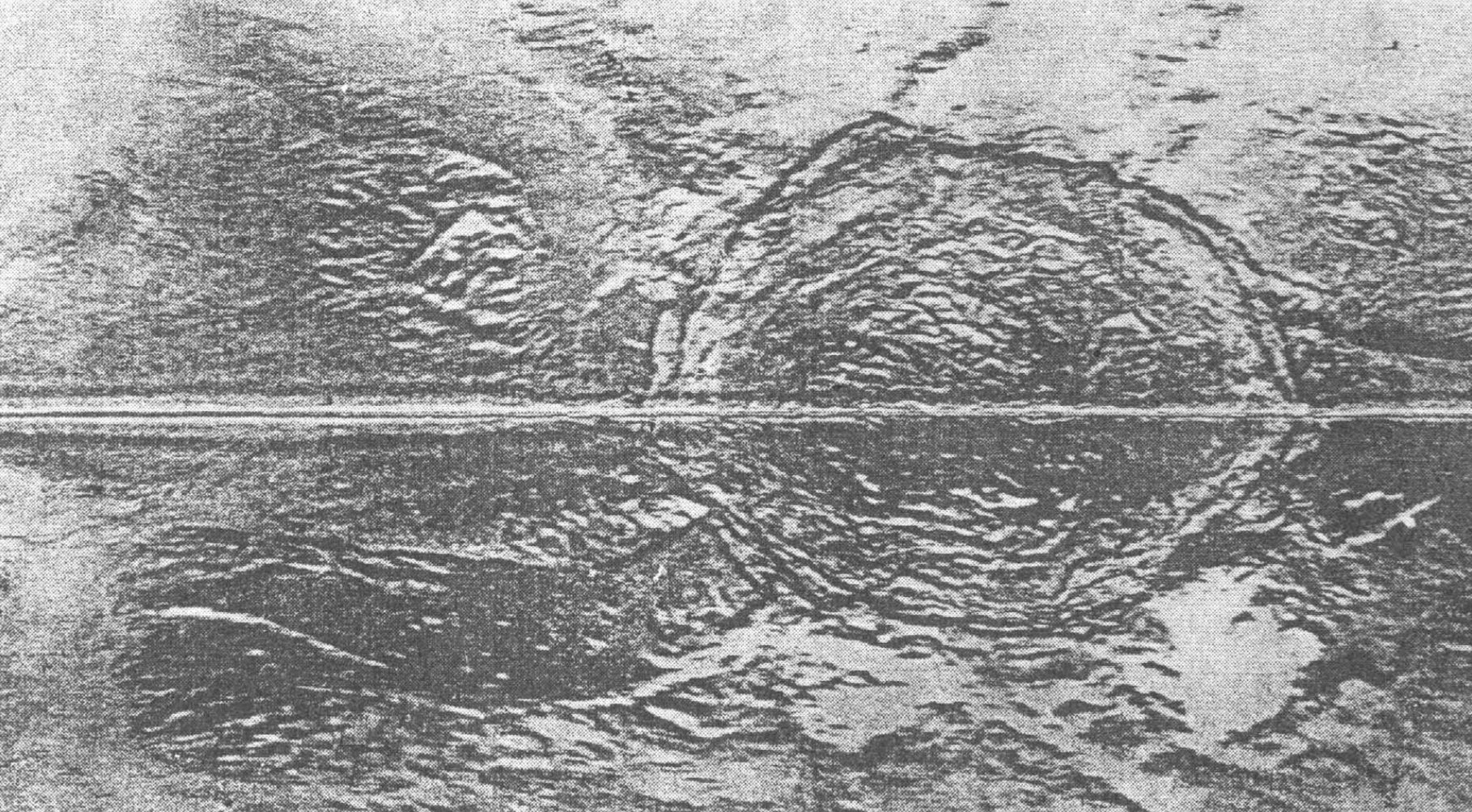
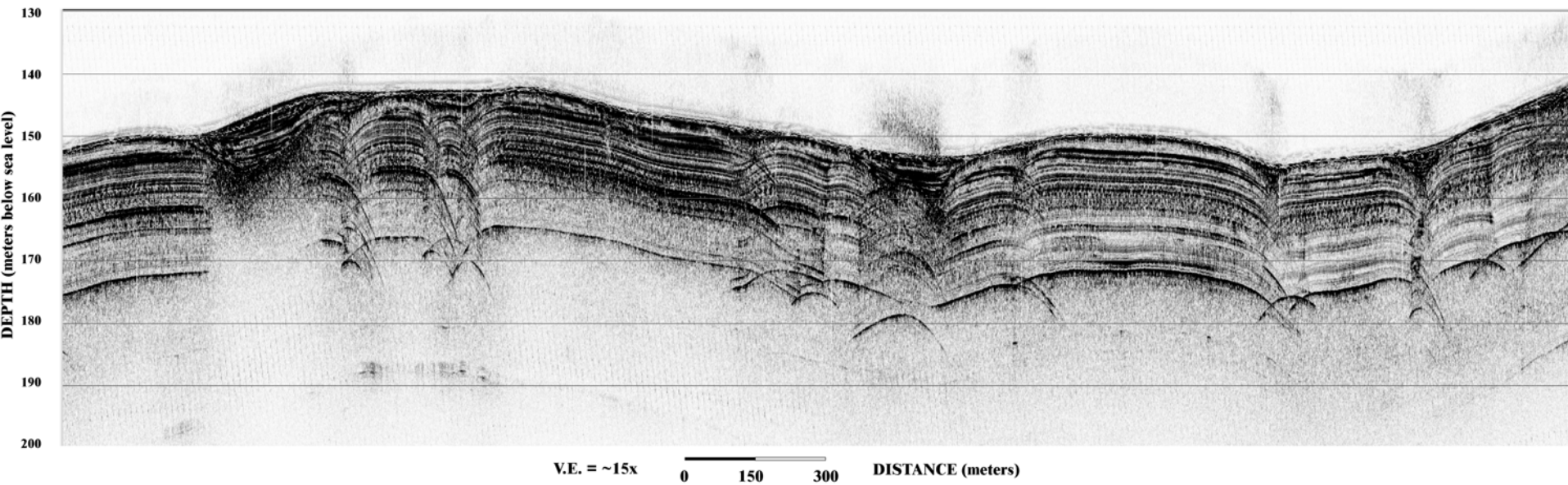


Fig.15a. Mud volcano on the Crimea peninsula



BLACK SEA MUD VOLCANOES
(SIDE SCAN SONAR)

depth 2000m



**Fig.16. Gas fountains on the Black Sea seafloor
(the paleo-valley of the Provadijska River)**

Chapter 4

The Black Sea Coast and
Shelf – a Center of
Flourishing pre-Flood
Civilizations

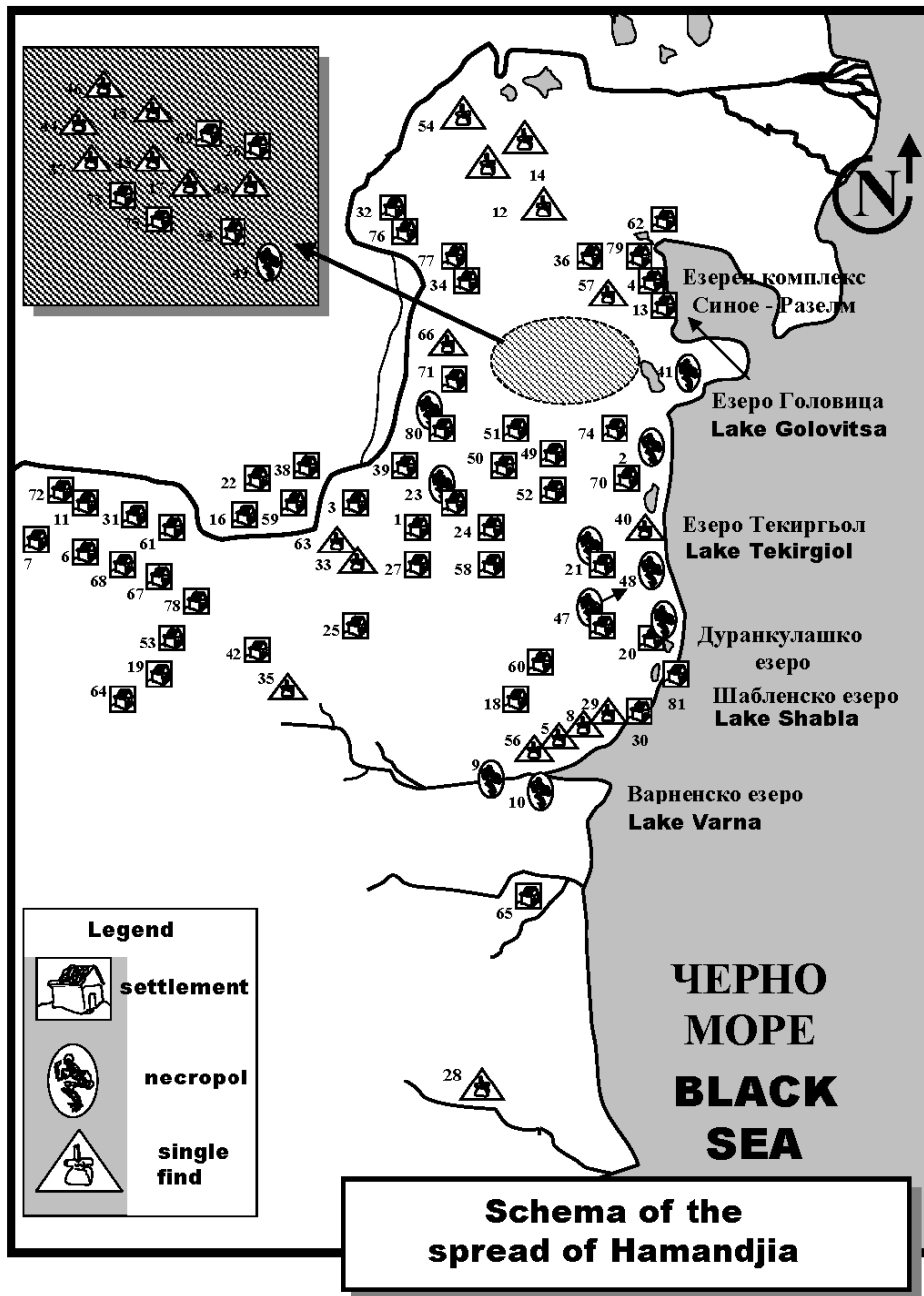


Fig.17. Schema of the spread of Hamandjia culture in Dobroudja (6,000-5,000 BC, T. Dimov et. all, 1992)

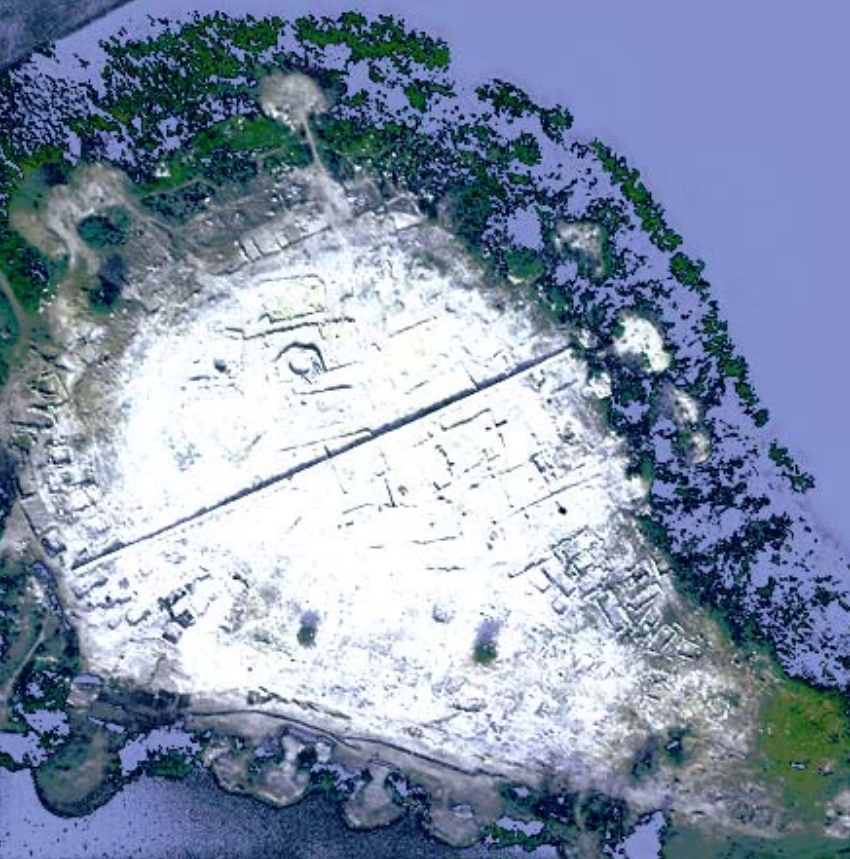


Fig.18a. A settlement hill of the Big island in the Durankulak Lake (aero picture T. Dimov)



Fig.18b. The oldest stone architecture in Europe (5,000 BC, picture T. Dimov)

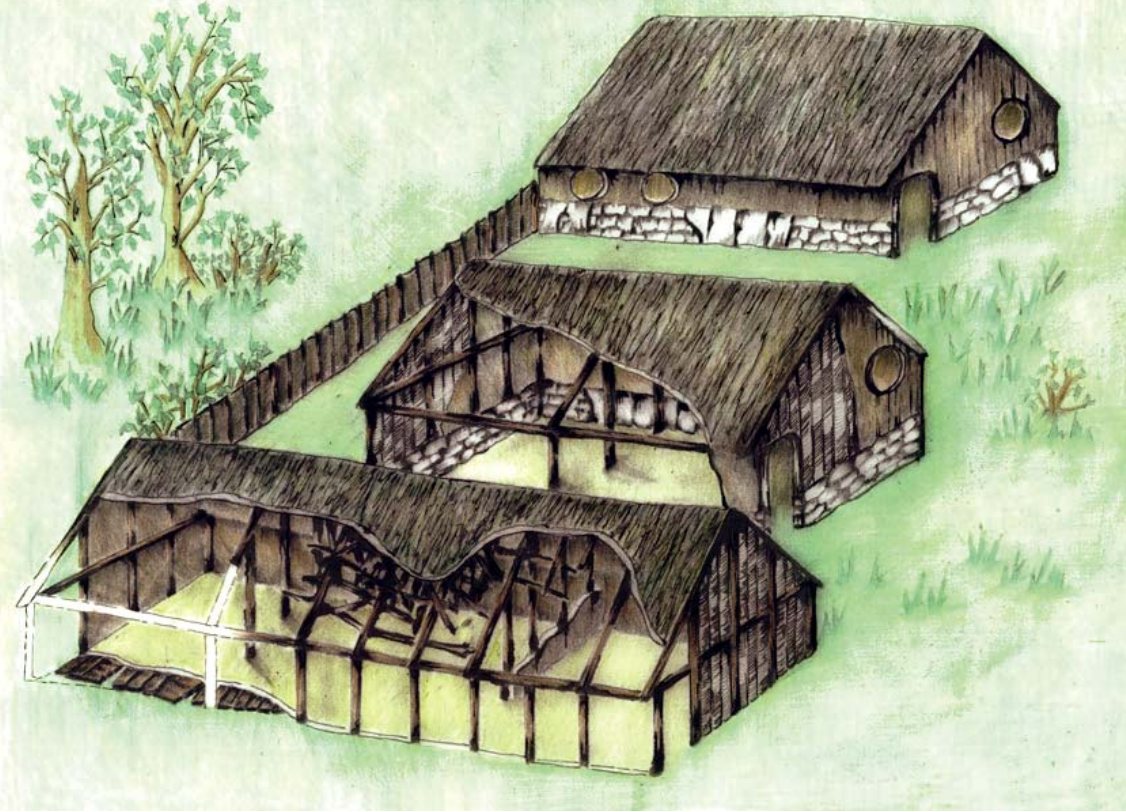


Fig.18c. Graphical reconstruction of lodgings with stone base (5,000 BC, author T. Dimov, artist Ulia Gerova)



Fig.18d. Female idolatry figure of mud (grave N 453, Durankulak necropolis, picture – T. Dimov)



Fig.18e. Antropomorphic mud vessel (Durankulak necropolis, picture – T. Dimov)



Fig.20a.Remains of Neolith settlements in the Black Sea bottom in the region of Synop (underwater picture)

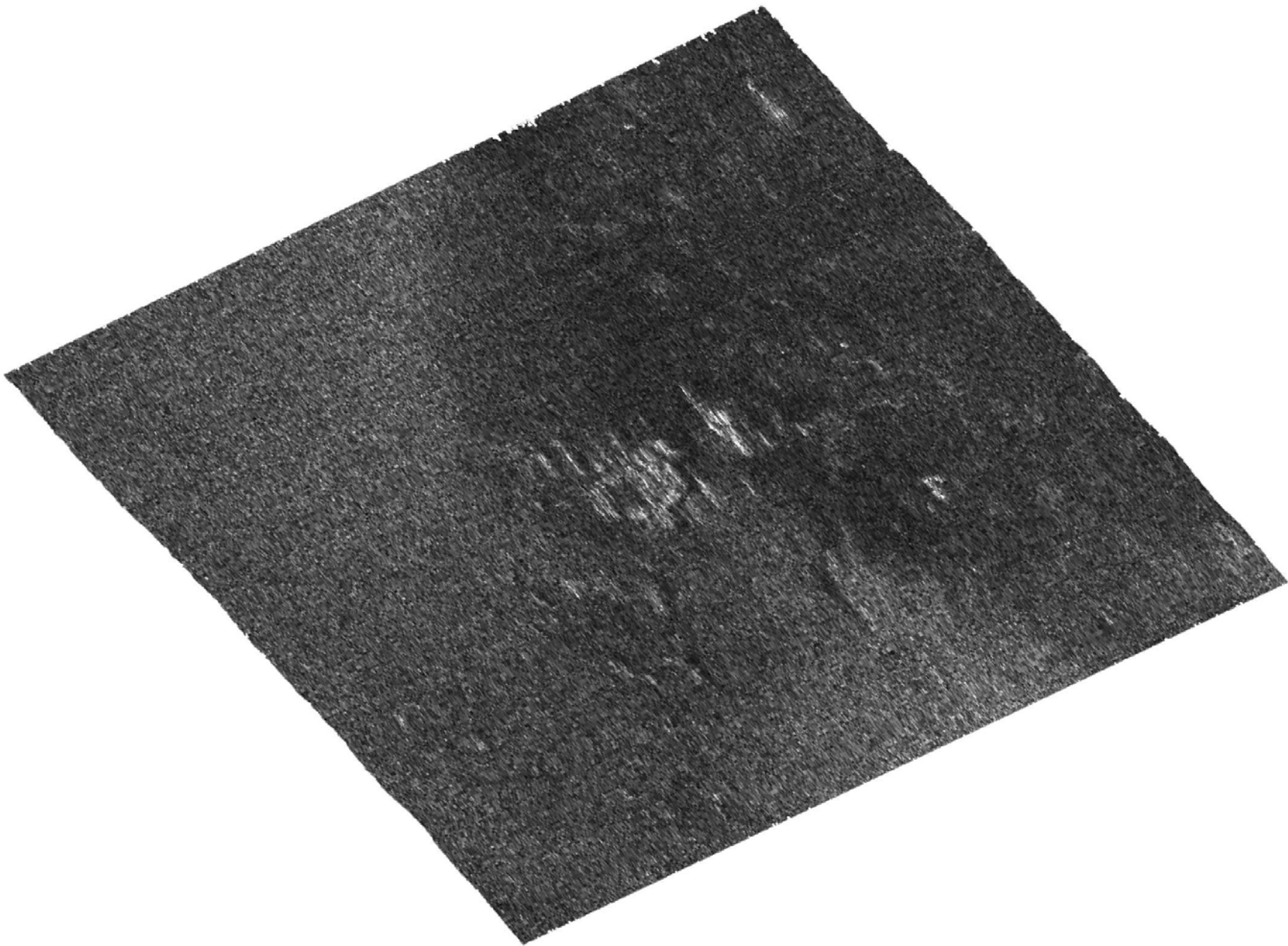


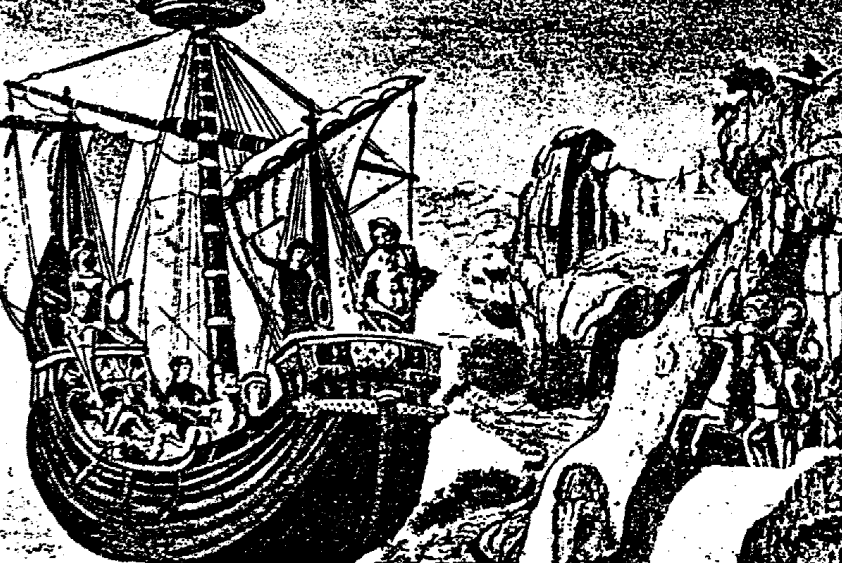
Fig.20b. Possible remains of neolith settlements in the old shorelines – 115 m depth (sonar picture)

Chapter 5

About the names of the Black Sea



Fig.21. The supposed route of Gilgamesh through the “Sea of Death”



**Fig.22. The Argonauts' ship
"Argus" (engraving)**



**Fig.23. A map of the Black Sea
(Albino de Canepa, 1498)**

Chapter 6

The Black Sea – a Key to the World Flood Mystery

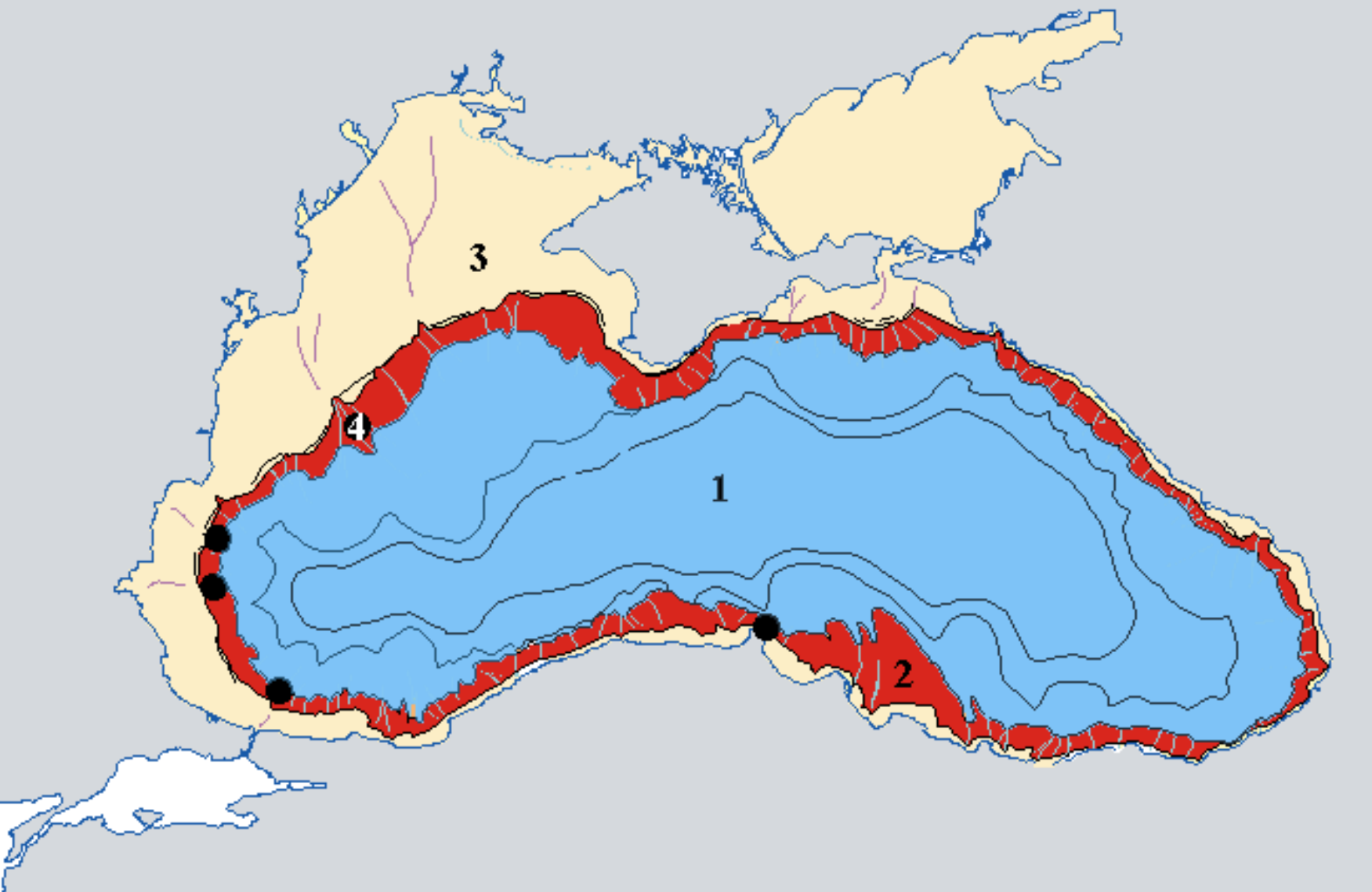


Fig.24. Paleo- geographic schema of the old Black Sea shorelines

- 1. Sea-lake**
- 2. Pre-Flood shorelines of the Black Sea**
- 3. The Black Sea after the Flood**
- 4. Possible settlements before the Flood**

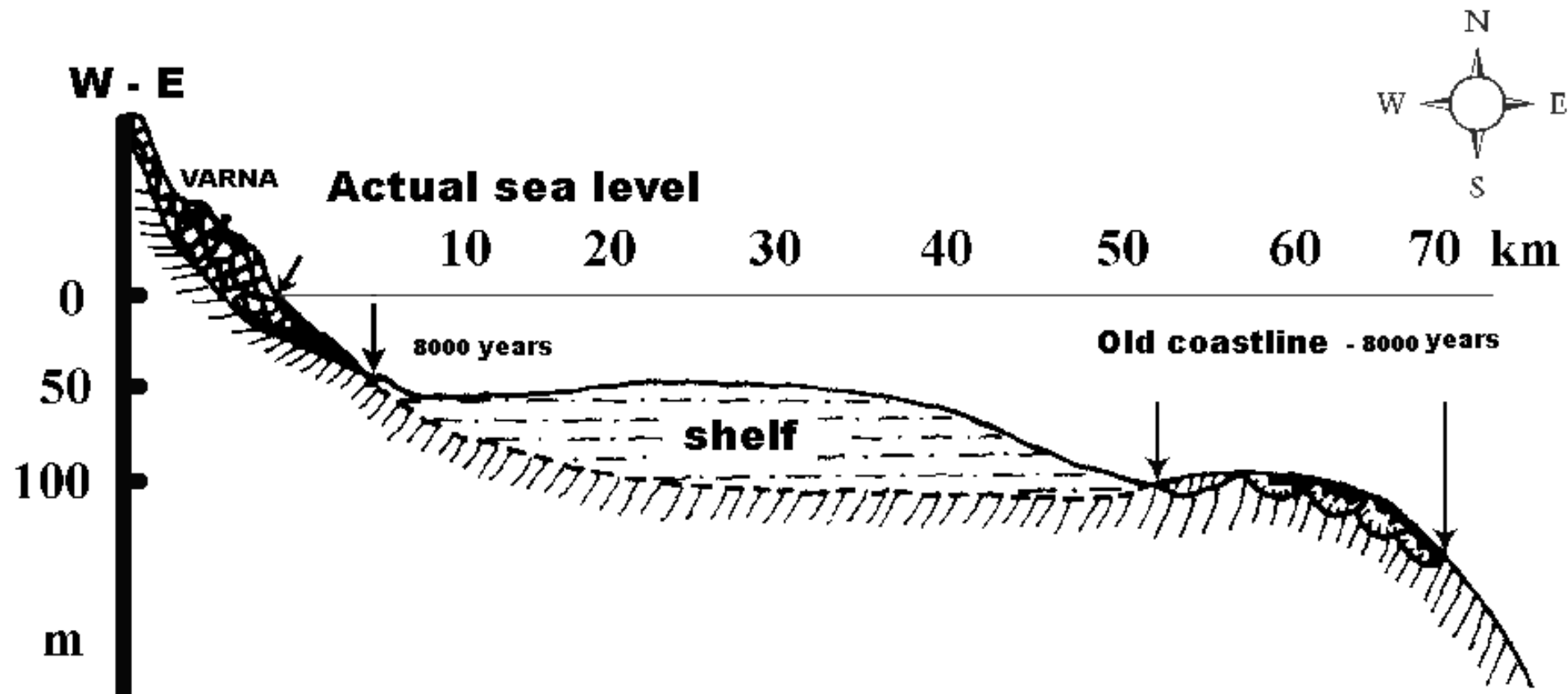


Fig. 25. Profile of the shelf and the course of the catastrophic geological events during the last 8,000 years



Fig.26. If the sea inhabitants could have talked about the Flood....



Fig.27a. “the Noah’s plate” – general view



Fig.27b.Symbols on the back side of the plate

Fig.28. Correlation of the symbols:

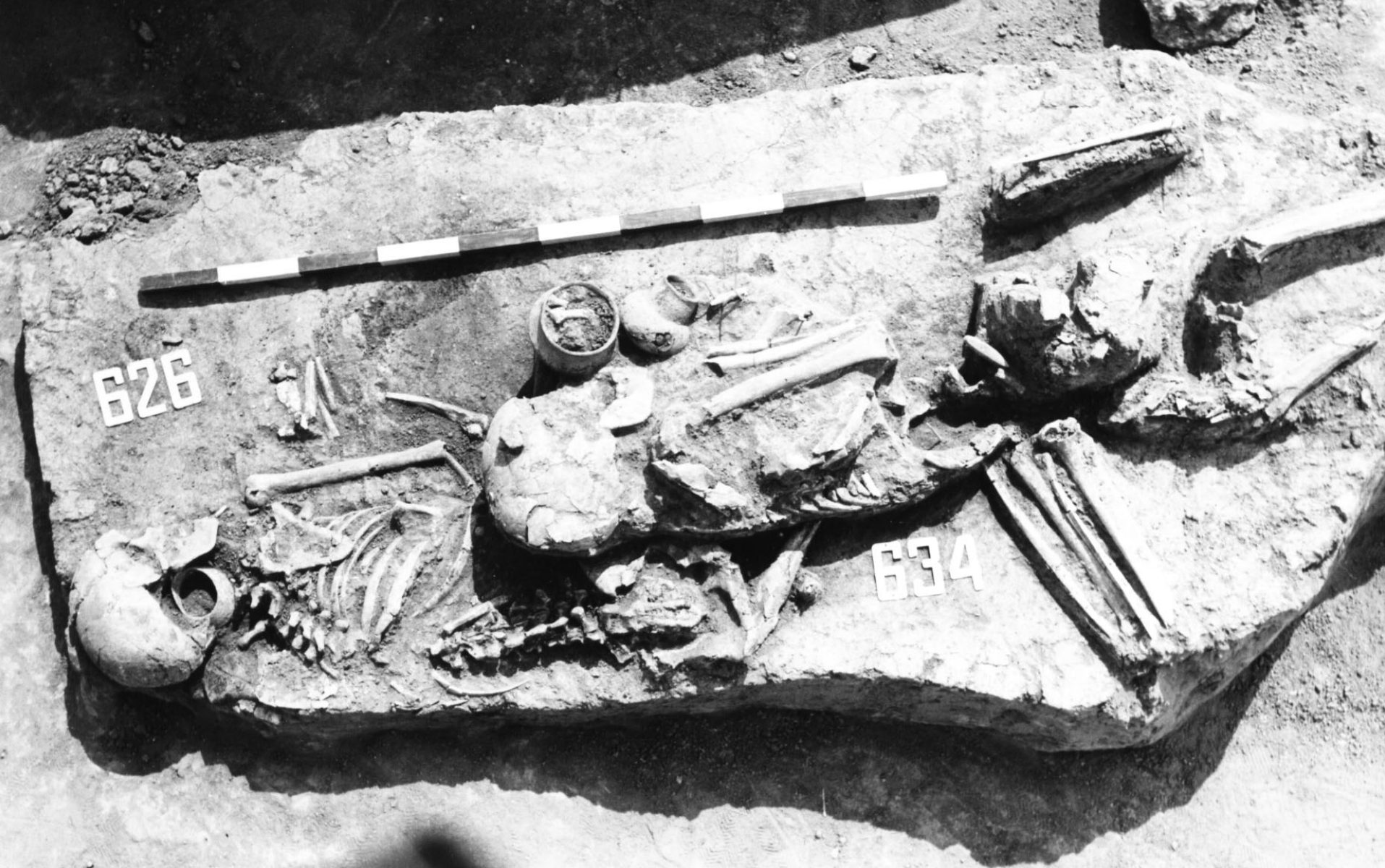
- I – the Noah’s plate**
- II – Karanovo seal**
- III – tablets from Gradeshnitza**
- IV – Magurata inscription**
- V – Sumerian writing**
- VI – Egyptian writing**
- VII – Indian writing**

Comparative analysis of the signs on an underwater archaeological target from Neolith /"Noah's plate"/ and their connection with those of the ancient civilizations.

	I	II	III	IV	V	VI	VII
1	+	+		+	+	+	+
2			2	5	5	5	5
3	Y		4	Y	Y	Y	Y
4	Γ		Γ	Γ	Γ		
5	Σ	Σ			Σ	Σ	
6	I	I	I	I	I	I	I
7	>		>				
8				þ			
9	<	<	<			<	
10				0	0	0	0
11				⊕			
12	X			X	X	X	X
13	H	H					
14	Δ	Δ					
15	⌘	⌘					
16	V	V			V	V	
17	A	A		A	A	A	U
18	X			X			
19	Λ			Λ	Λ	Λ	
20				φ	φ	φ	
21				♀		♀	
22	F					F	
23	7						
24		B				B	B
25	X				X		X
26	T			T	T	T	
27	Σ	Σ					
28	Y						
29	Y						
30	N	N					

VI - III thousand years B.C.

I. "Noah's plate"
 II. Karanovo seal
 III. Gradeshnitsa tablet
 IV. Magura cave
 V. Shoumerian
 VI. Egypt
 VII. India



**Fig.29. Graves N626 and N634 from the ancient Durankulak necropolis
(6,000 – 5,000 BC, T. Dimov)**



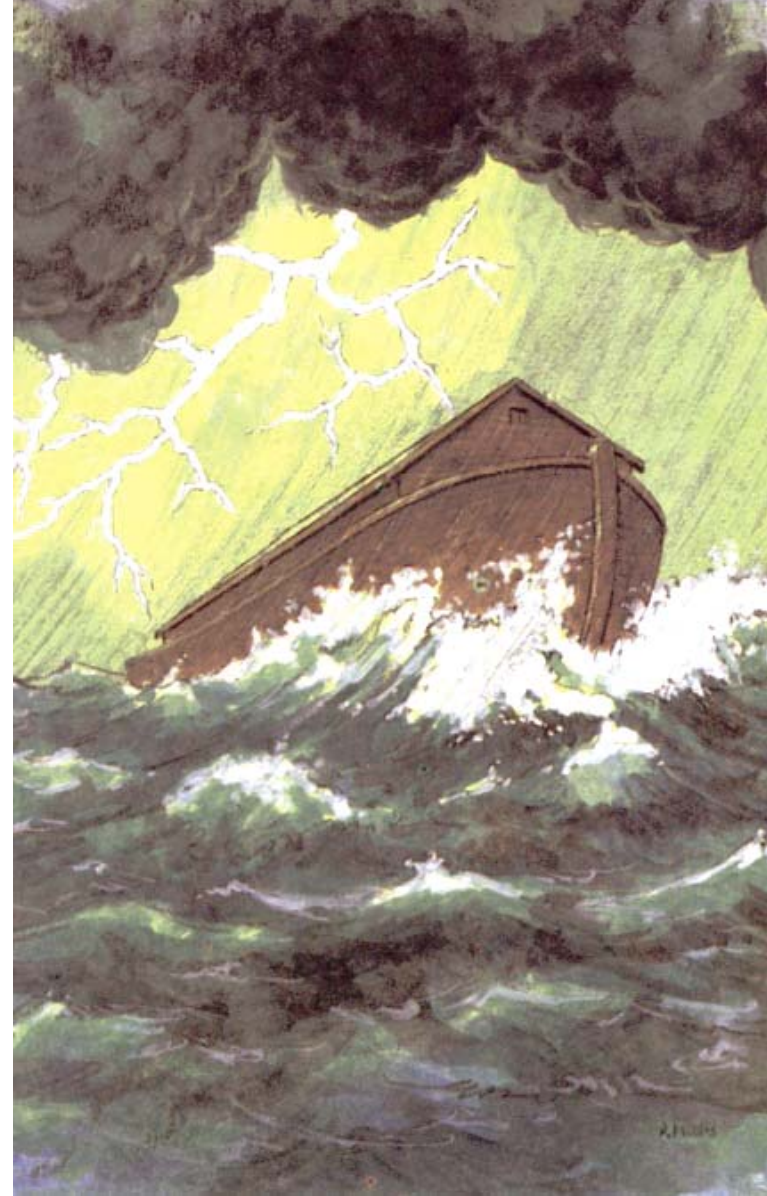
Fig.30. Reconstruction of the Bosphorus sill

Chapter 6

The Sumerian Epic and the Bible Myths



**Fig.35a. “The construction of the ark”
(Richard and Francis Hook)**



**Fig.35b. “The Ark” in the waves of
the Sea of Death (Richard and
Francis Hook)**

Conclusion





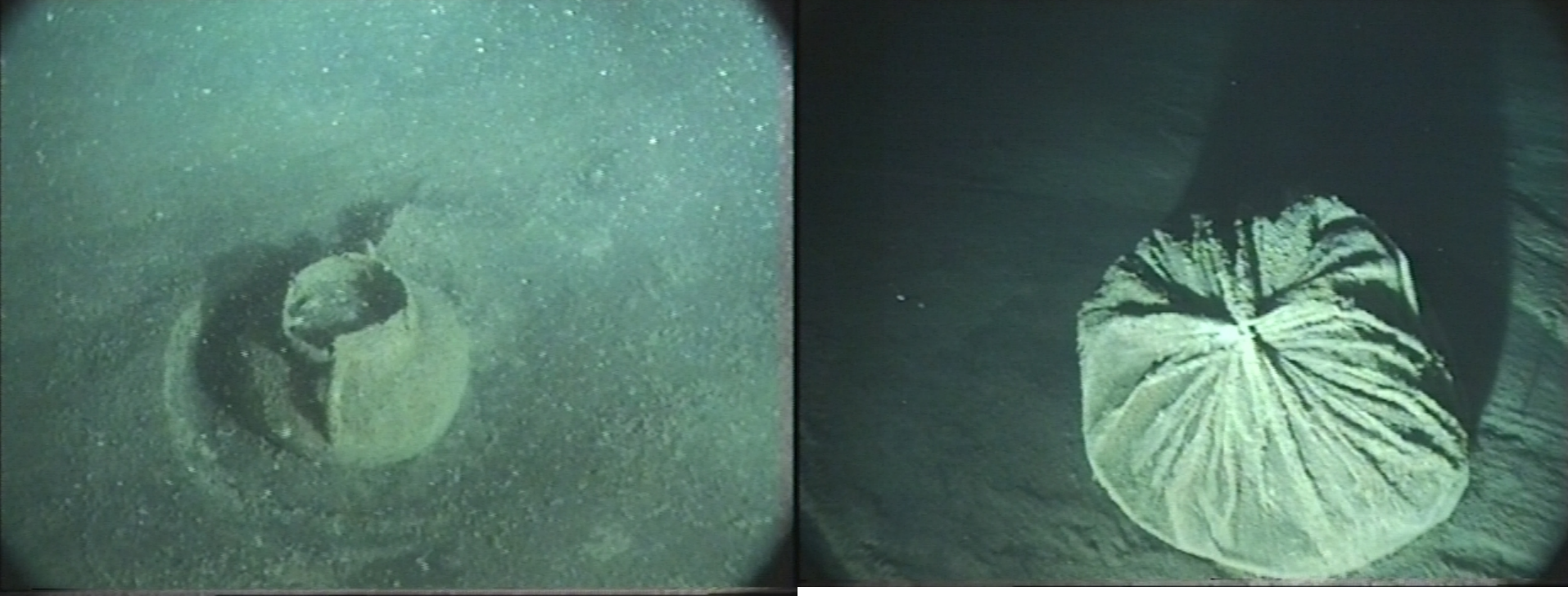


Fig. 36, a,b,c,d – flotsam on the Black Sea bottom



Fig.37. Ancient shipwrecks (XVI century) – underwater picture

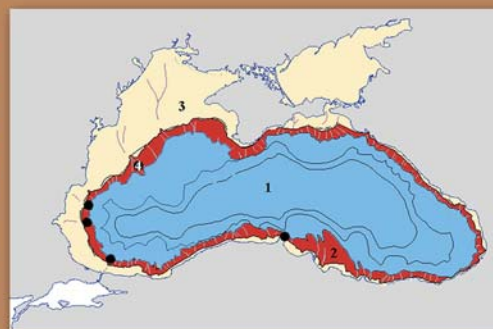


Fig. 38. Amphorae on the Black Sea bottom (shipwreck V-III AD) – underwater picture





Fig. 39. Amphorae on board of the Academic ship – drawn out with the submersible PC-8 (V-III AD)



A Greek Period Shipwreck off Varna, Bulgaria

Dwight F. Coleman
Robert D. Ballard
URI Graduate School of Oceanography
and
Institute for Exploration, Mystic, CT

Fredrik T. Hiebert
University of Pennsylvania
Museum of Archaeology and Anthropology

Petko Dimitrov
Bulgarian Academy of Sciences
Institute of Oceanology

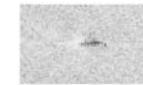


EXPLORE

With support from NOAA's Ocean Exploration Initiative and the National Geographic Society, we explored the Western Black Sea off Bulgaria and Romania for well-preserved ancient shipwrecks and potential sites of prehistoric human occupation on the continental shelf. In 2001, using a side-scan sonar and subbottom profiler, we mapped the undersea geology and collected a number of sediment cores. In 2002, we explored several significant sonar targets using the Bulgarian research submersible *PC-8B*. In addition to the discovery of several well-preserved Ottoman shipwrecks, a shipwreck containing a cargo of amphora from the Hellenistic Period was discovered. A single amphora was collected and the sediment from inside the amphora was analyzed. This shipwreck tells an interesting story of Black Sea trade during the 5th to 3rd centuries BC.



Bulgarian Academy of Sciences
 Research Vessel *Akademik*



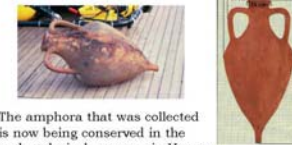
Sonar target of amphora pile collected by *ECHO*, a dual frequency subbottom profiling side scan sonar. The target size is 11m by 6m.



The 3-person submersible *PC-8B*, equipped with a scanning sonar, lights, an underwater video camera, and manipulator, is capable of diving to depths of 250 meters.



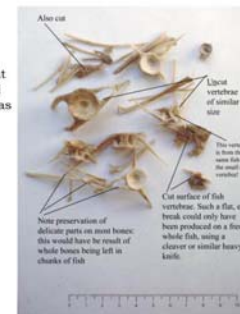
The large, "industrial size" amphora that was recovered from this pile is made of fine buff colored clay with coarse black sand temper, typical of Classical amphora production from Sinop, Turkey (5th-4th c. BC).



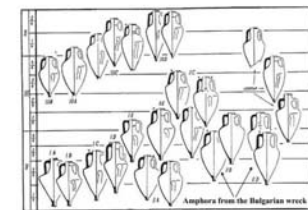
The amphora that was collected is now being conserved in the archaeological museum in Varna.



Video still image of the amphora pile.



River catfish bones that indicate fish that were over 2 meters in length, were found inside the amphora. Cut marks as well as fragile spines preserved in the flesh of fish, indicate that large chunks of fish - most likely salt-fish, were being transported in these large amphora. In addition to fish bones, an olive pit was found inside the amphora.



The typology of amphorae from Sinop, Turkey, includes types which are very similar to that found on this shipwreck. Ceramic petrography of the amphora from the shipwreck includes black sand temper, typical of Sinop amphora production.



A contemporary (4th c. BC) painted amphora from Greece depicts salt fish preparation. Here, two individuals process the fish - removing the low-value parts (heads, tails) leaving "fish steaks" which could be easily transported inside the amphora.



Map of the Black Sea. Middle arrows represent general flow of the Sea's two gyres, which are likely to represent the path of an ancient trade route between northern Turkey and the Crimea peninsula. Ancient mariners could have followed the northward flow of the western gyre from the Sinop region to the Crimea.



In the Sinop museum, several amphorae from Sinop (4th-3rd c. BC) are on display, which are similar to that found off Bulgaria.

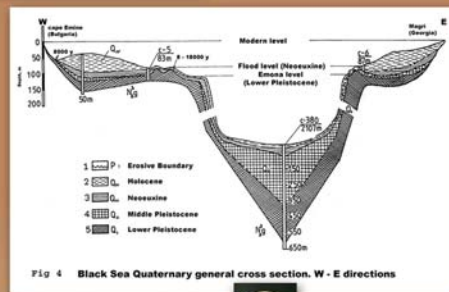


Fig 4 Black Sea Quaternary general cross section, W - E directions

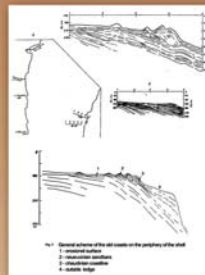
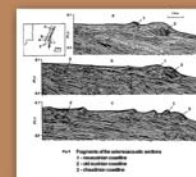


Fig 7 Chaudronian coastal sediments

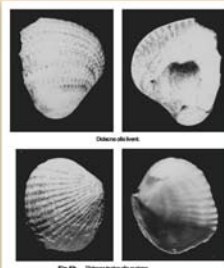
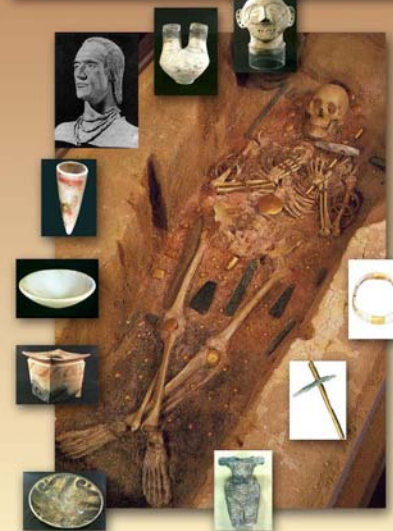


Fig 8 Chaudronian coastal sediments



QUATERNARY COASTLINES IN THE WESTERN BLACK SEA

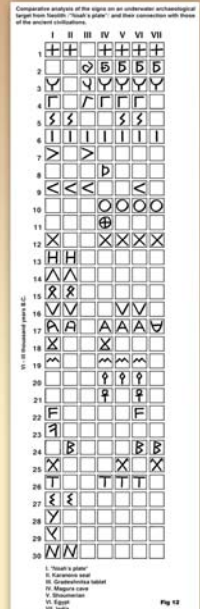
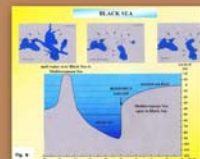


Fig 10

