



IBCM & MediMap: The Early Beginnings of EMODnet

Webinar - EMODnet
A decade of achievements
connecting marine data to knowledge

Dr. (Prof.) John K. Hall
Marine Geophysicist

Geological Survey of Israel (Retired)
jkh1@012.net.il
No Social Media Encumbrances

INTERNATIONAL BATHYMETRIC CHART OF THE MEDITERRANEAN (IBCM)

Index of bathymetric plotting sheets at scale 1:250 000

Limits of IBCM sheets (scale 1:1M
— 1:2M for Black sea — at lat. 38°)

Limits of areas allocated.

Chairman of the Editorial Board.

4510



Prof. C. Morelli
(Italy)

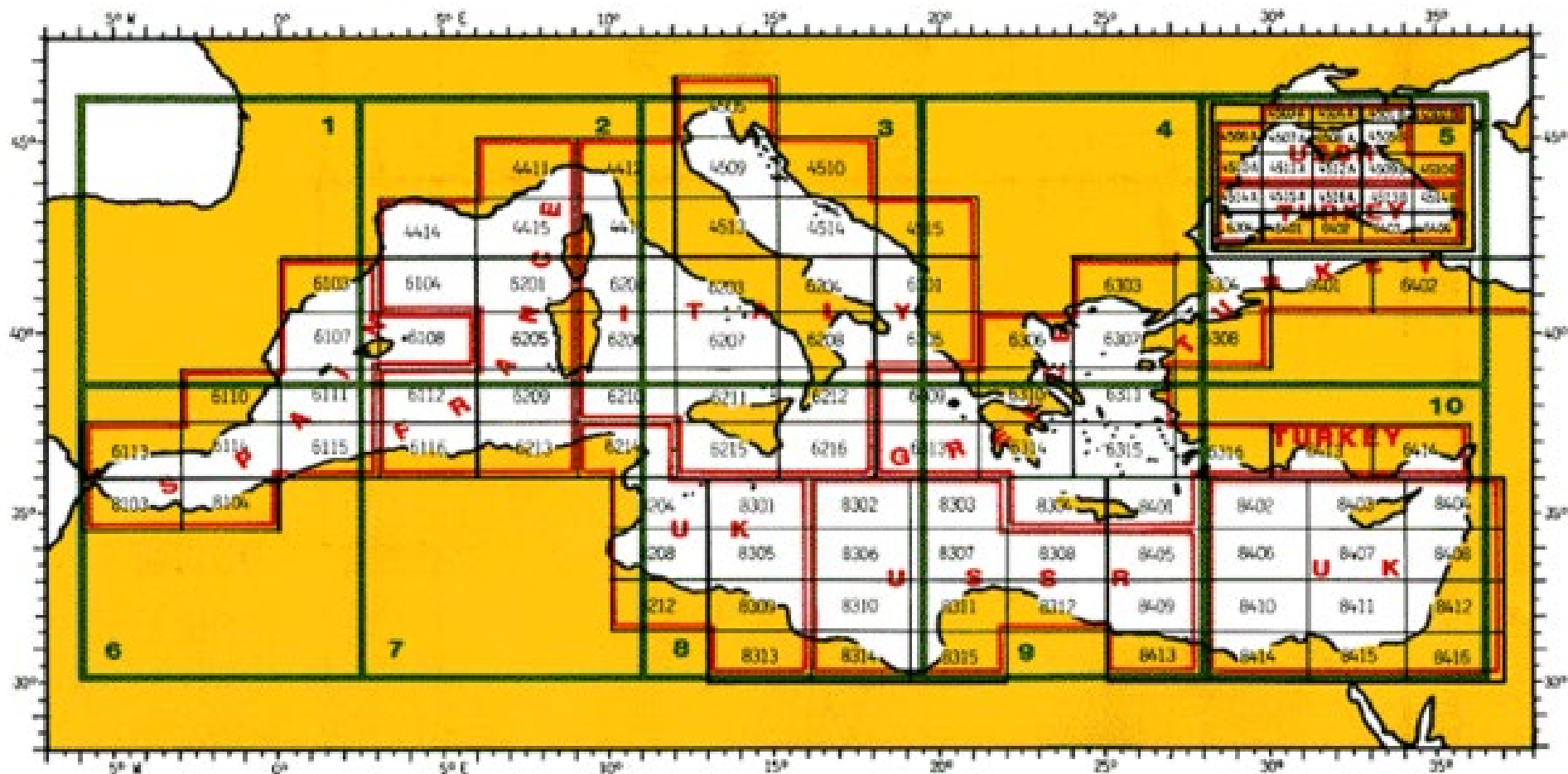
CARTE BATHYMETRIQUE INTERNATIONALE DE LA MEDITERRANEE (CBIM)

Index des minutes de rédaction bathymétriques à l'échelle de 1:250 000

Limites des feuilles de la CBIM (échelle 1:1M
— 1:2M pour la mer Noire — à la lat. 38°).

Limites des zones allouées.

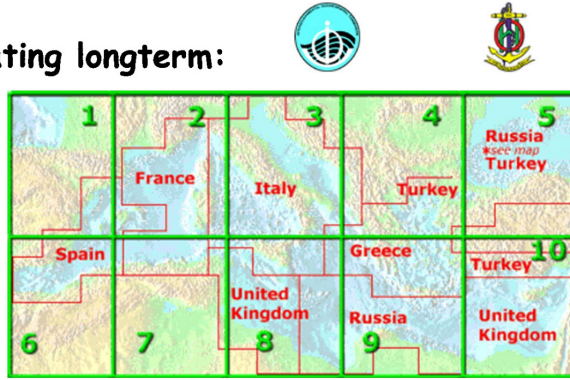
Président du Comité d'édition.



International Bathymetric Chart of the Mediterranean

Countries participating longterm:

- United Kingdom
- Italy
- France
- Germany
- Russia
- Israel
- Greece
- Turkey
- Spain



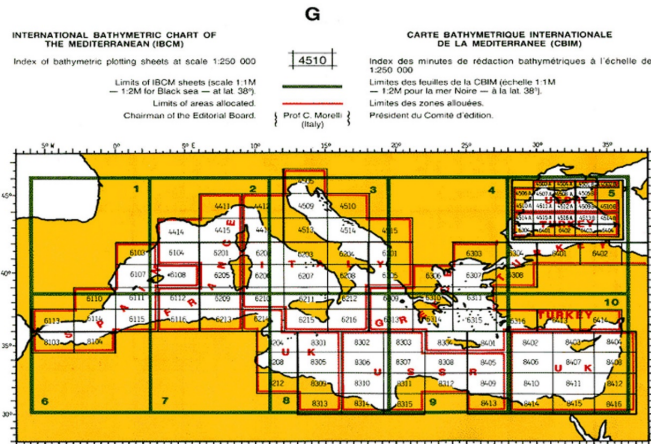
Stakeholding Countries (26)

Mediterranean Sea (22)

- Spain
- France
- Monaco
- Italy
- Slovenia
- Croatia
- Bosnia and Herzegovina
- Montenegro
- Albania
- Greece
- Turkey
- Syria
- Cyprus
- Lebanon
- Israel
- Egypt
- Libya
- Malta
- Tunisia
- Algeria
- Morocco
- Palestinian Authority

Black Sea (5)

- Turkey
- Georgia
- Ukraine
- Romania
- Bulgaria



International Bathymetric Chart of the Mediterranean

Meetings of IBCM (from 1974 on) - CIESM - MBSHC

- France - Pau, Perpignan, Paris (UNESCO)
- Croatia - Dubrovnik and Split
- Malta - Valetta
- Italy - Trieste and Genoa
- Monaco - Monte Carlo (IHB)
- Israel - Jerusalem
- Greece - Athens
- Turkey - Istanbul
- Russia - Leningrad, Kaliningrad (Kronstadt)
- Switzerland - Lucerne
- Spain - Palma de Majorca



Structure

IOC and IHO - CGOM (Consultative Group on Ocean Mapping)

Budget

IOC plus IHB travel, NGDC
Last meeting was in 1999 in Kaliningrad

Hydrographic vs Geophysical/Geological

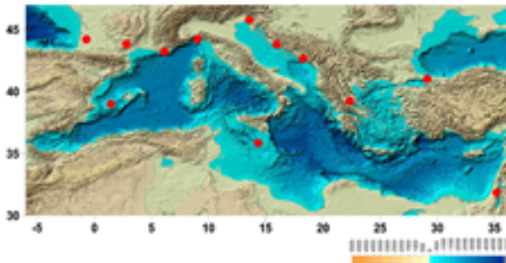
IHB, VHOs, Universities, NGOs, NGDC
Almost all progress based upon personal connections

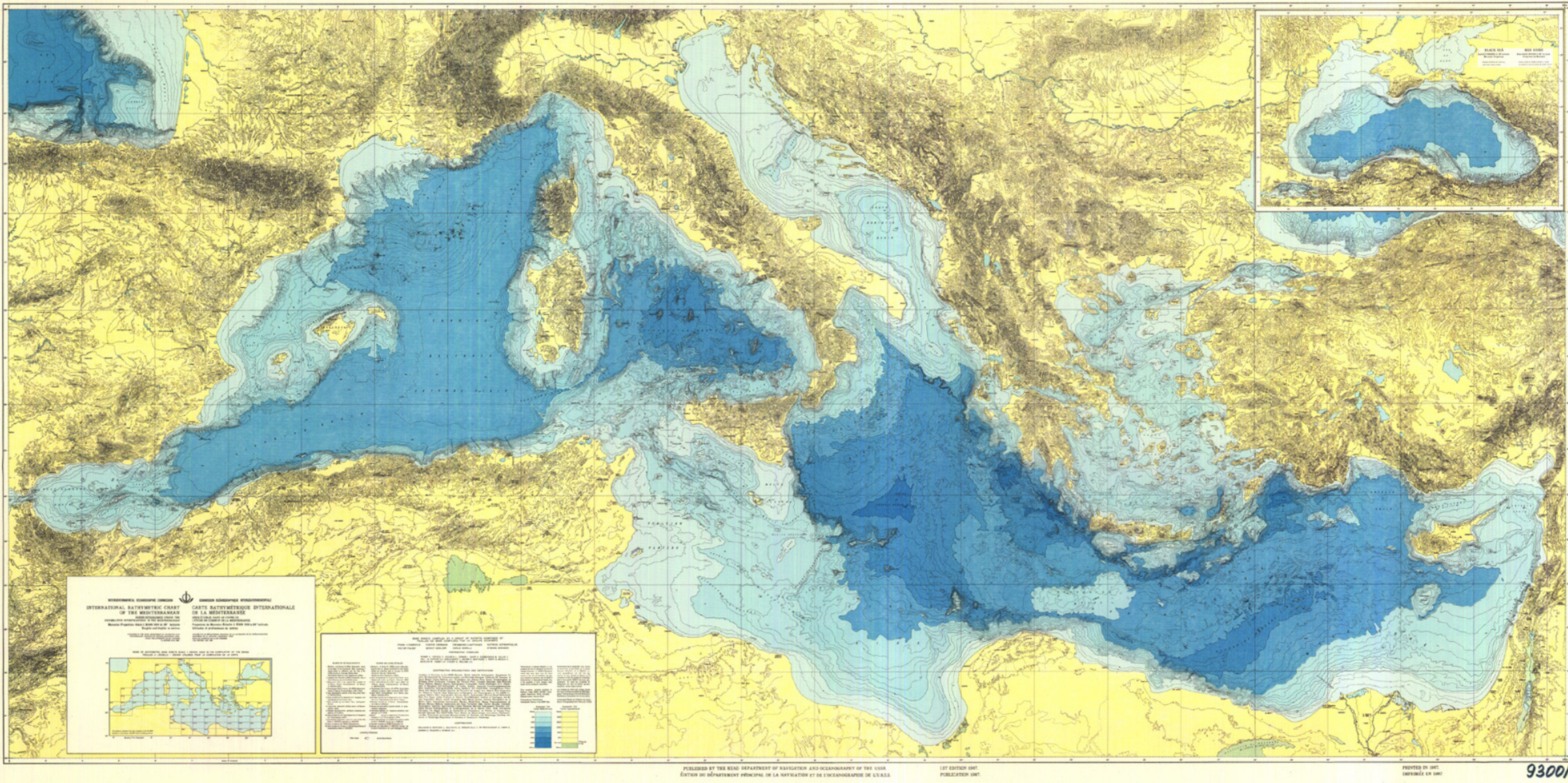
Personalities

Hydrographers, Professors,

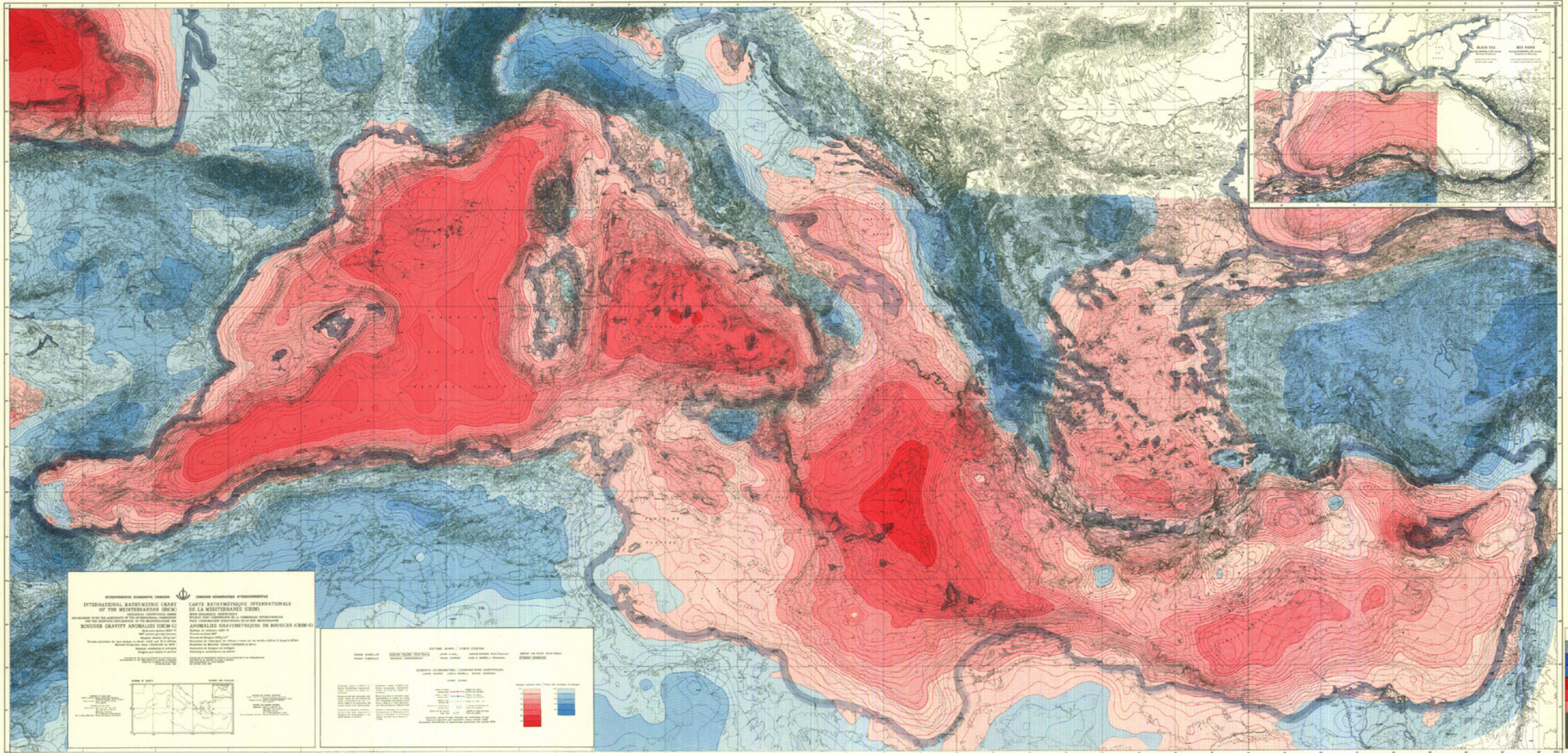
MBSHC and VHOs

Soundings from ENCs

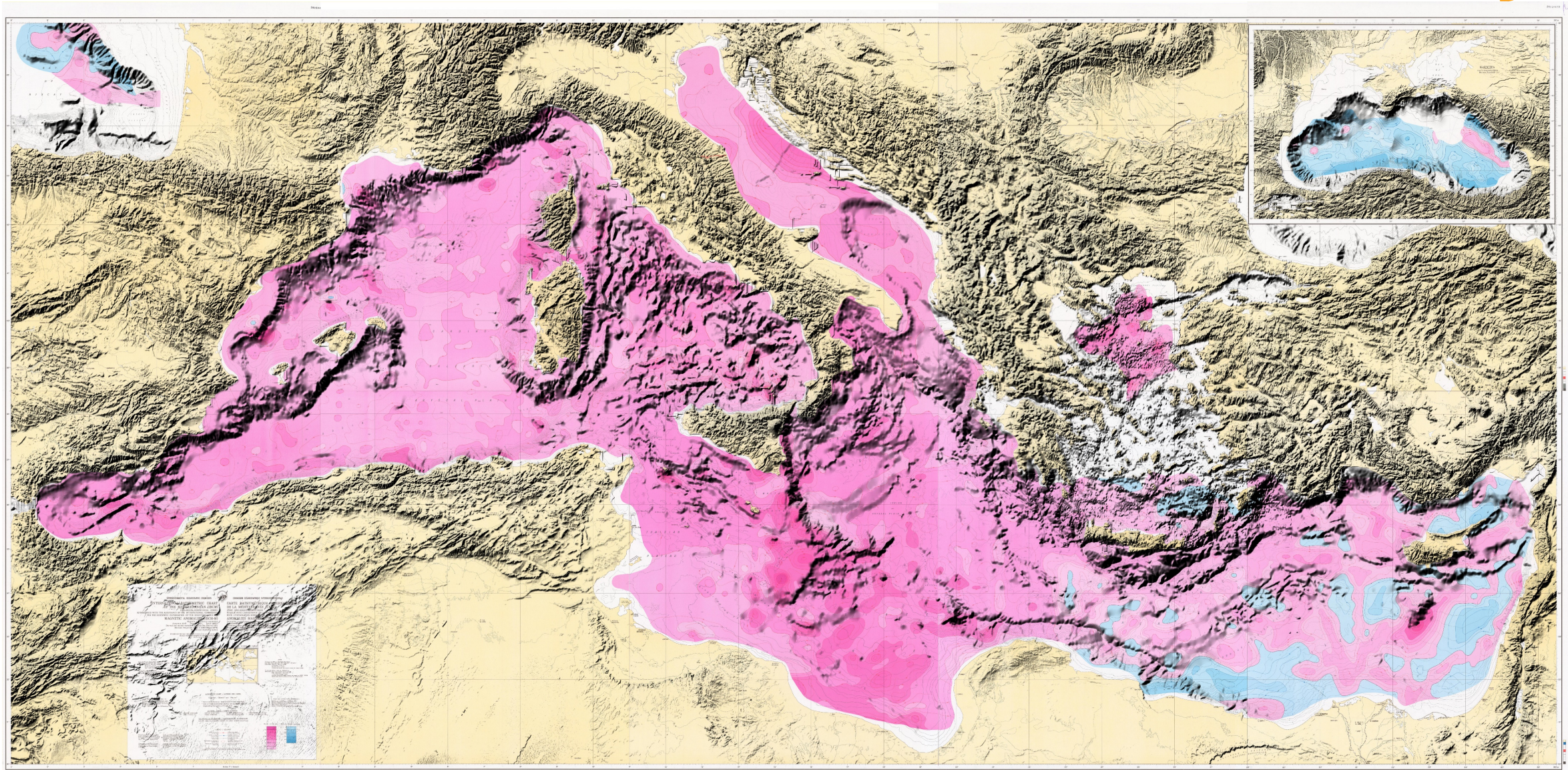




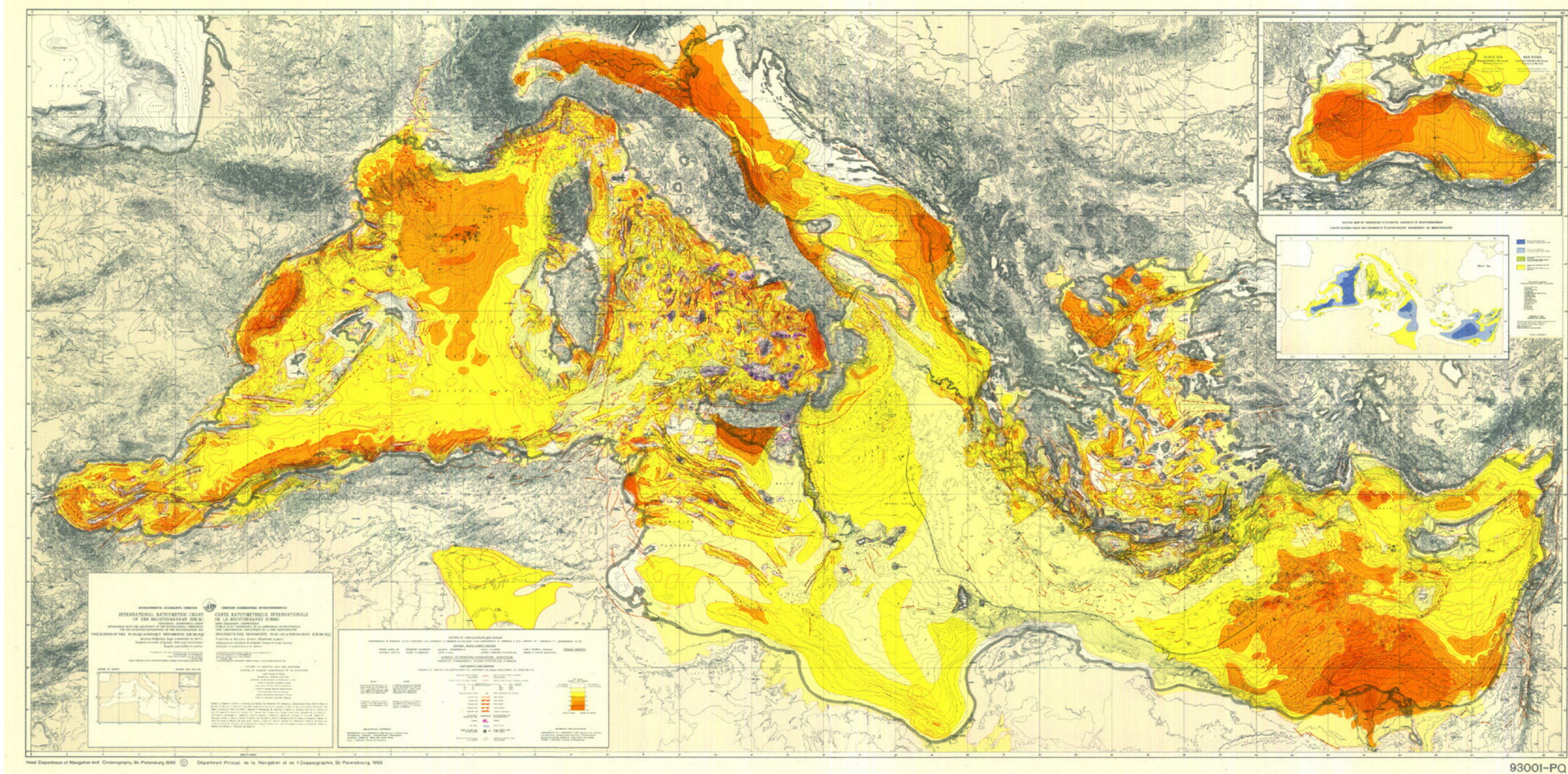
IBCM Bathymetry 1:5 million scale single sheet of the ten 1:1m sheets



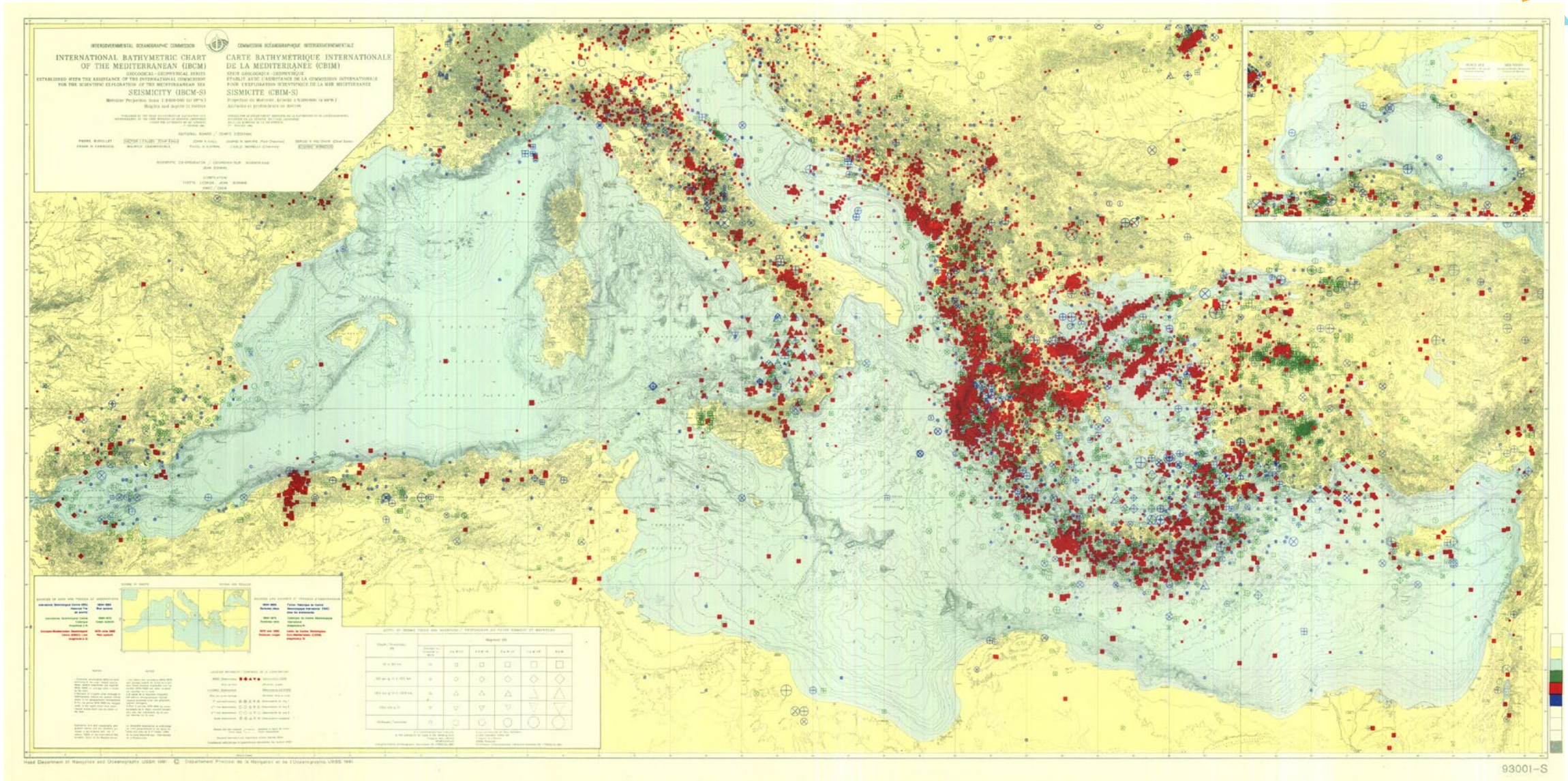
IBCM-G Bouguer Gravity Anomaly 1:5 million scale single sheet of the ten 1:1m sheets



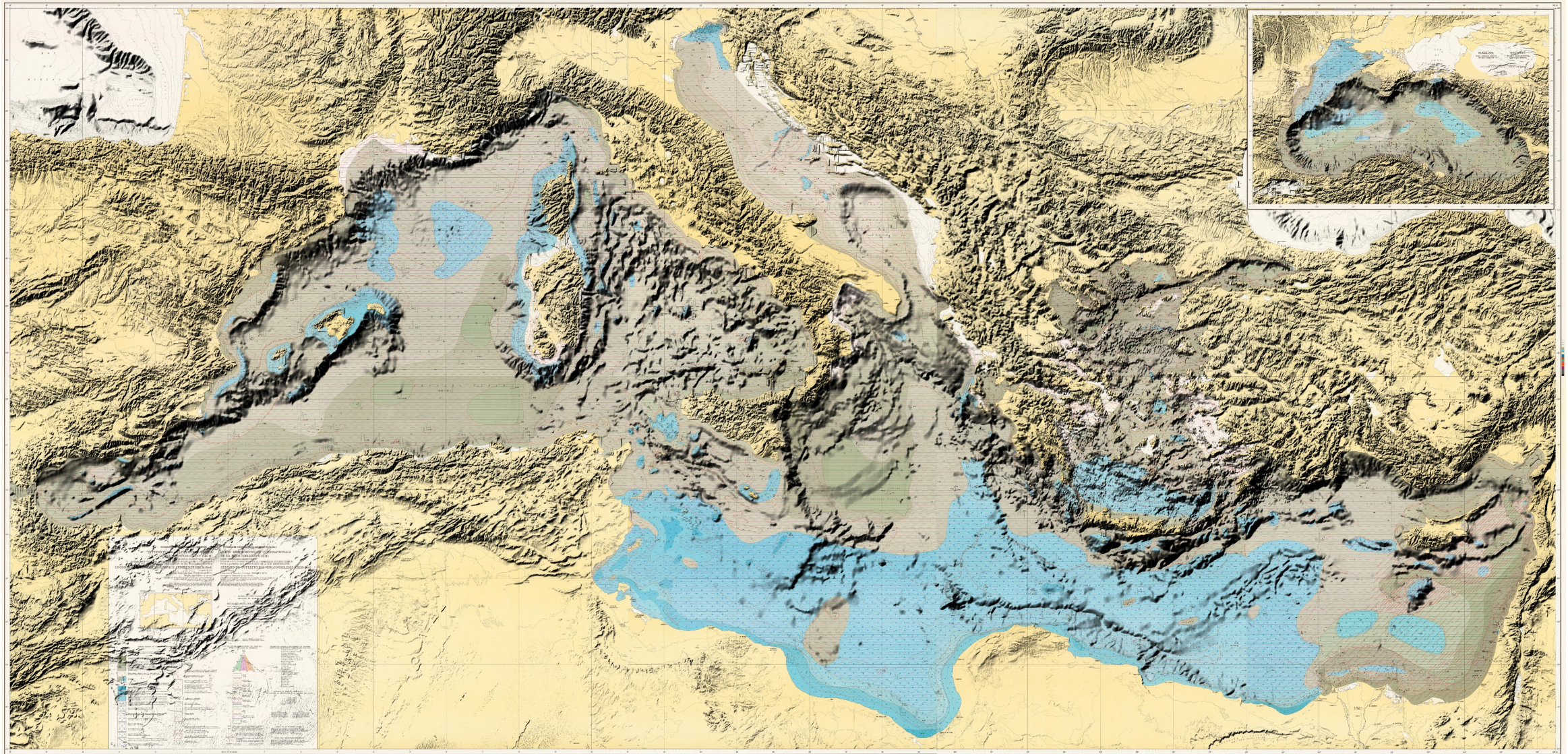
IBCM-M Aeromagnetic Anomalies 1:5 million scale single sheet of the ten 1:1m sheets



IBCM-PQ Plio-Quaternary Isopach 1:5 million single sheet of the ten 1:1m sheets



IBCM-S Earthquake Epicenters (Recomputed) 1:5 million scale single sheet of the ten 1:1m sheets



IBCM-SED Recent Bottom Sediments 1:5 million scale single sheet of the ten 1:1m sheets



International Bathymetric Chart of the Mediterranean (IBCM)

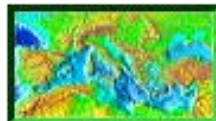


IBCM Products

[Information on ordering copies of IBCM maps](#)

(and digital bathymetric contour data incorporated into the GEBCO Digital Atlas)

IBCM	International Bathymetric Chart of the Mediterranean
IBCM-G	Mediterranean Bouguer Gravity Anomalies
IBCM-S	Seismicity Map of the Mediterranean Region
IBCM-PQ	Plio-Quaternary Sediment Thickness Map
IBCM-Sed	Recent Sedimentation
IBCM-Digital Vector Contours	Digital Coastlines and Bathymetric Contours
IBCM-M	Magnetic Anomalies



[Return to IBCM Home Page](#)

ngdc.noaa.gov/mgg/ibcm/ibcmproducts.html

*Maintained by the National Centers for Environmental Information (NCEI)
and the collated [World Data Service for Geophysics](#)*



MediMap Group



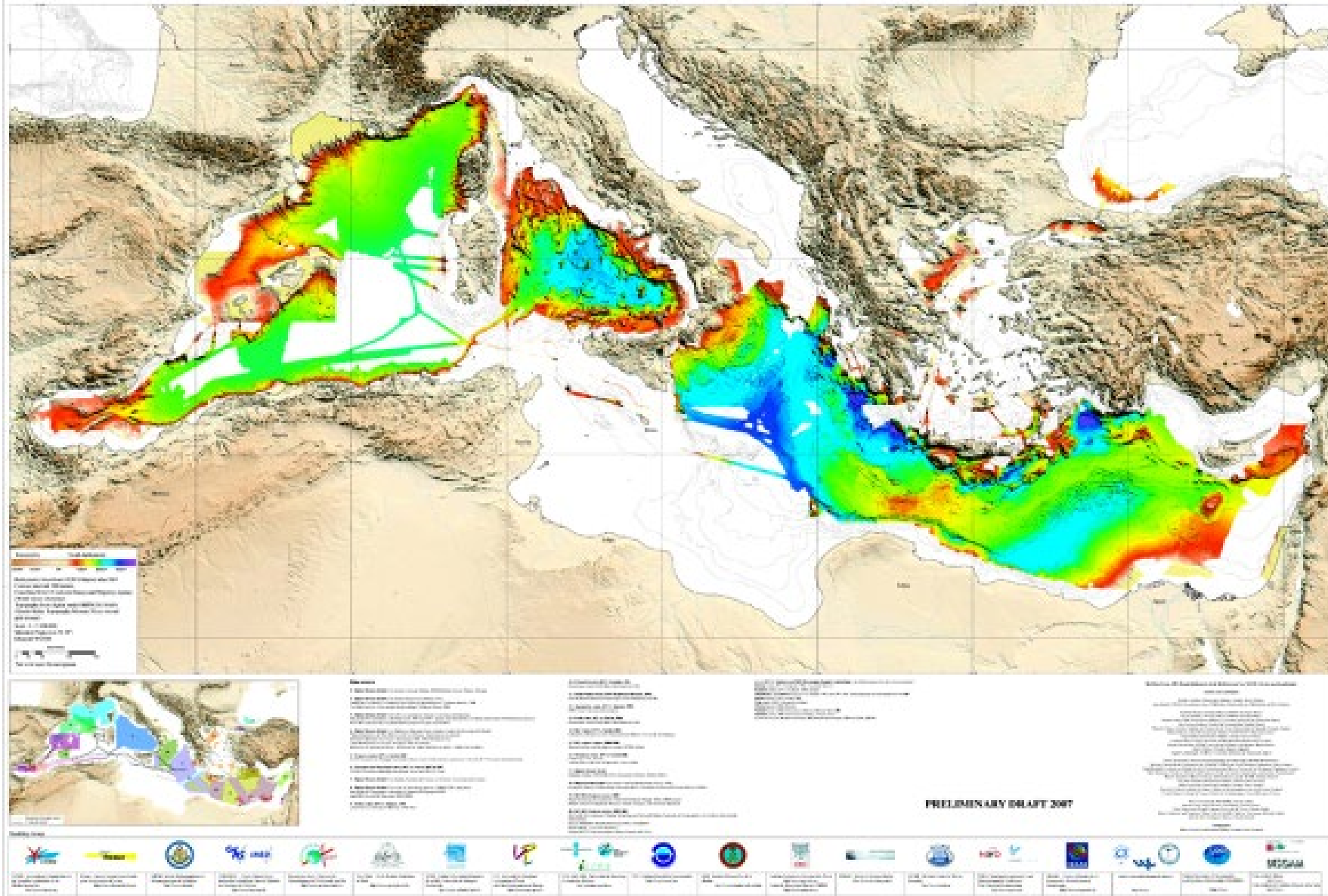
					
CIESM : International Commission for the Scientific Exploration of the Mediterranean Sea http://www.ciesm.org	Ifremer : Institut français de recherche pour l'exploitation de la mer http://www.ifremer.fr/itogon	SHOM : Service Hydrographique et Océanographique de la Marine http://www.siocon.fr	CNRS/INSU : Centre National de la Recherche Scientifique / Institut National des Sciences de l'Univers http://www.ioss.cnrs.fr	Géosciences Azur / Observatoire Océanologique de Villefranche sur Mer http://www.gosazur-omio.fr	Enst (Paris) : Ecole Normale Supérieure de Paris http://www.grologie.enst.fr
					
IUEM : Institut Universitari Europeu de la Mar / Université de Bretagne Occidentale http://www.edu.univ-brest.fr	UP : Université de Perpignan Laboratoire d'Etude des Côtés-Environnements Marins http://www.univ-perp.fr	UB / GRC-GM : Universitat de Barcelona Ciències Marines http://gocmar.gub.cat	IEO : Instituto Español de Oceanografía http://www.ieo.es/ieo	IIMM : Instituto Hidrográfico de la Marina http://www.armada.mil.es/ihm	Instituto Andaluz de Ciencias de la Tierra http://www.iact.csic.es Unidad de Tecnología Marina CMIMA http://www.ctrn.csic.es
				Potential New Members?	
ISMAR : Istituto di Scienze Marine http://www.ismar.cnr.it	HCMR : Hellenic Centre for Marine Research http://www.hcmr.gr	NWO : Nederlandse organisatie voor Wetenschappelijk Onderzoek / Vrije Universiteit Amsterdam http://www.gow.vu.nl	CRAAG : Centre de Recherche en Astrométrie, Astrophysique et Géophysique http://www.craag.edu.br		GSI : Geological Survey of Israel http://www.gsi.gov.il
					IOLR : Israel Oceanographic & Limnological Research Ltd. http://www.ocean.org.il
					MAPI : Survey of Israel http://www.mapi.gov.il

France - 8 organizations - 24 MB ships
 Spain - 4 organizations - 11 MB ships
 Italy - 1 organization - 30 MB ships
 Greece - 1 organization - 5 MB ships
 Netherlands - 1 organization - 41 MB ships
 Algeria - 1 organization -

MB data from N. Z. Cherkis www.researchvessels.org

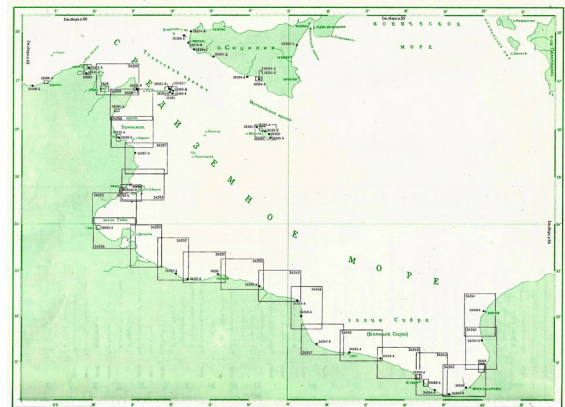
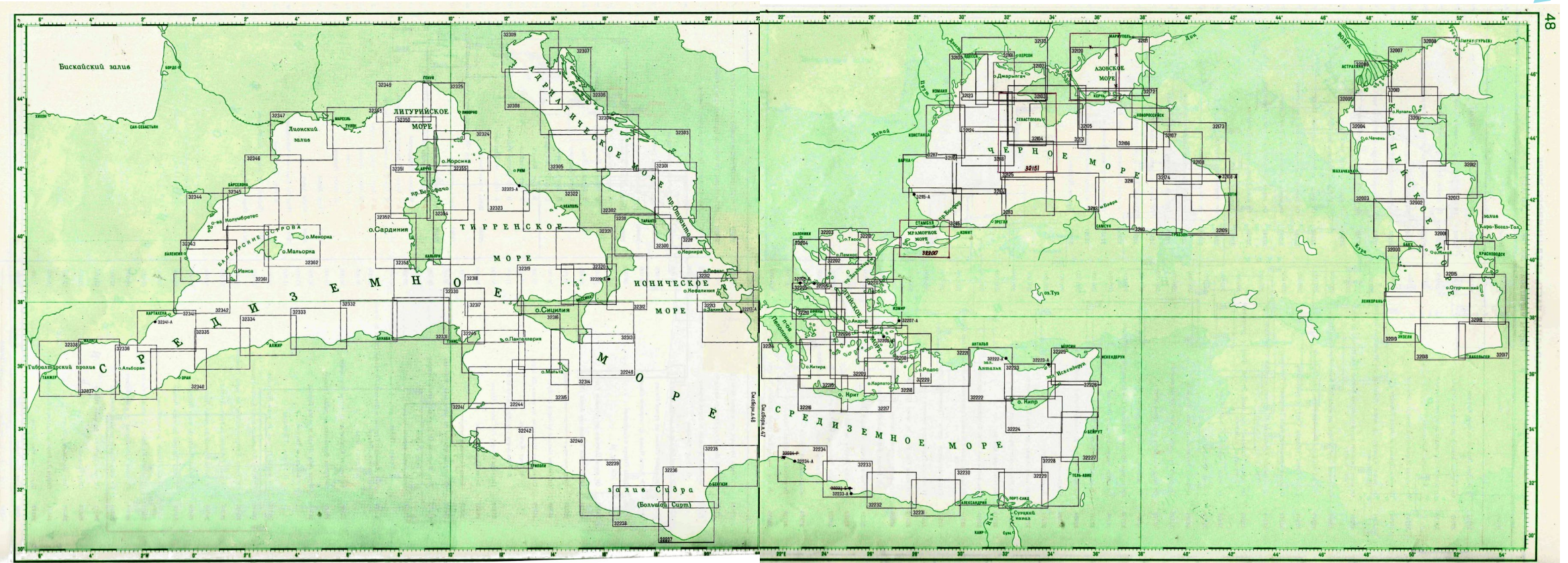


MORPHO-BATHYMETRY OF THE MEDITERRANEAN SEA



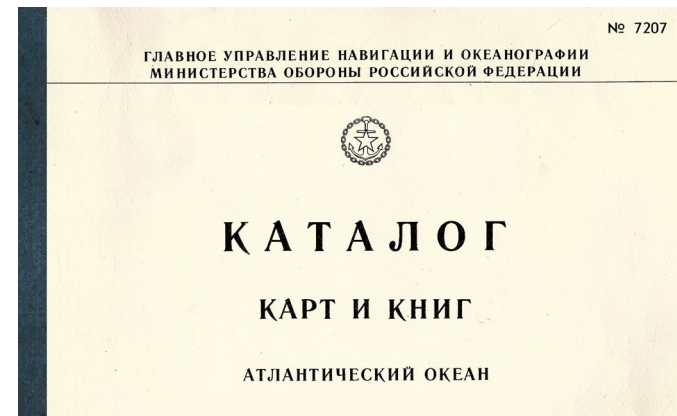
Revision prepared for CIESM-2007 by Benoit Loubrieu, IFREMER

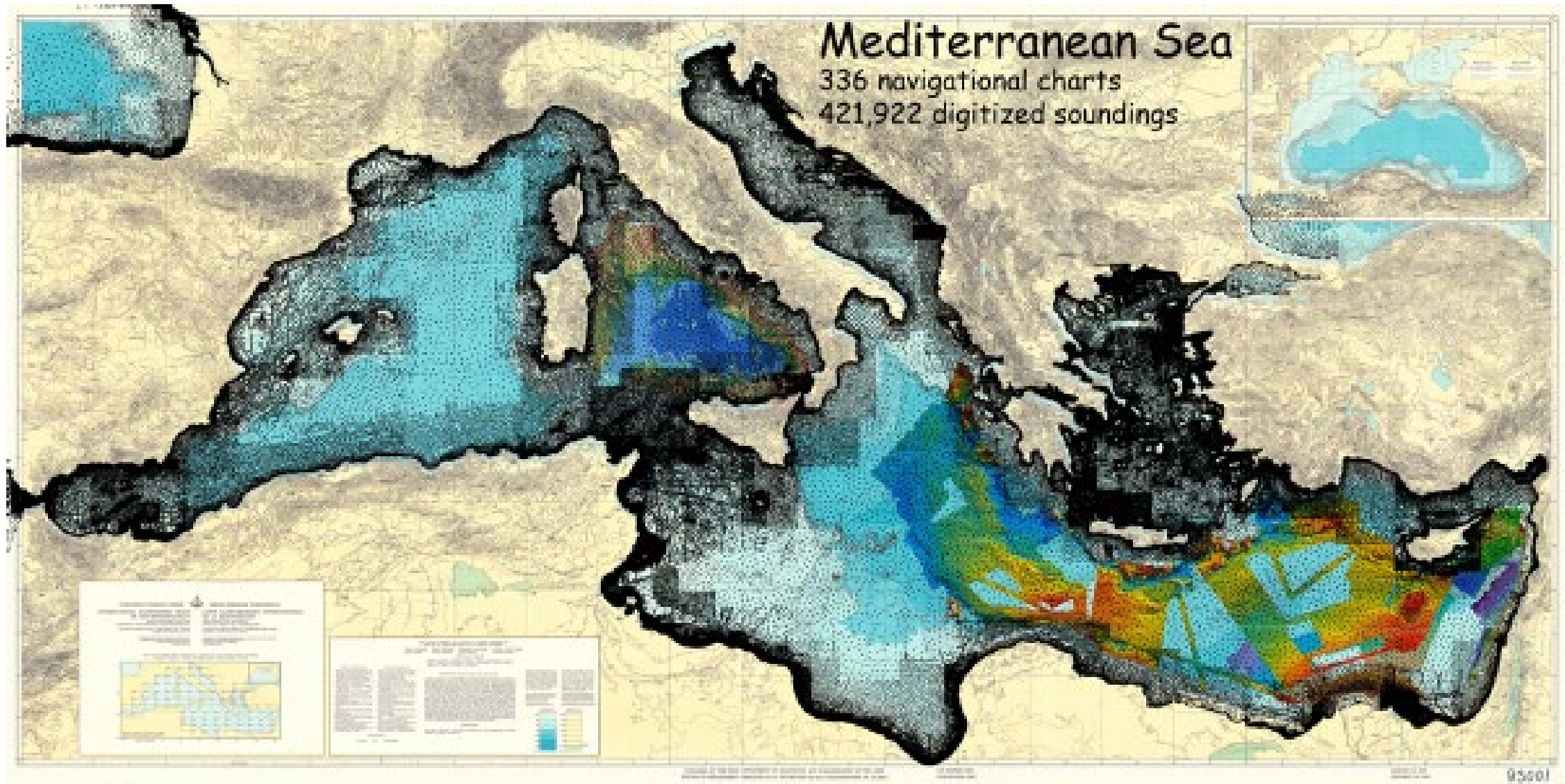
HDNO 1:200,000 Scale Charts Coverage of the Med Black and Caspian Seas

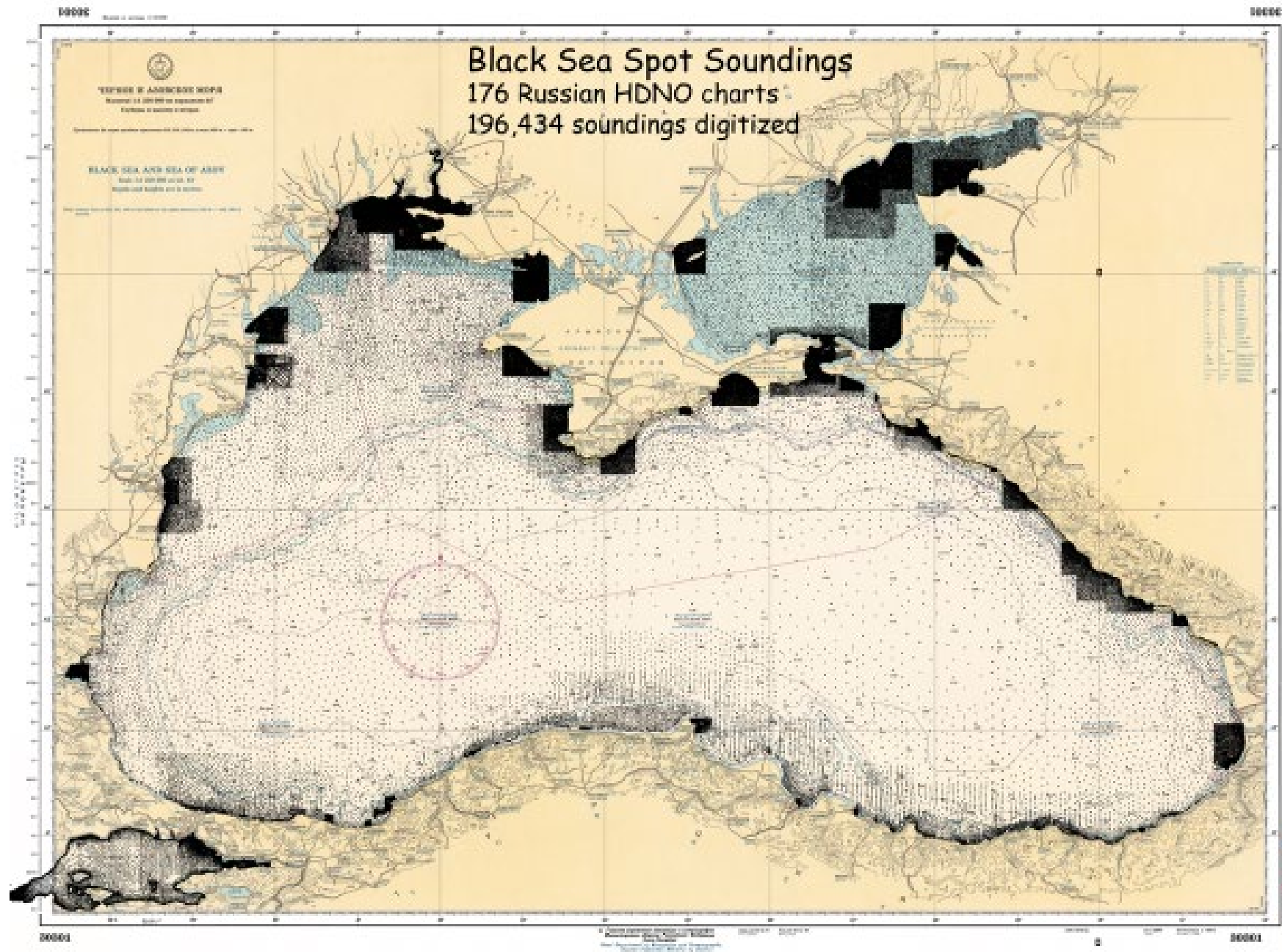


HDNO 100,000 Charts

Note: Depth data off Libya included many from a set of Italian sounding sheets from the 1920s, as well as numerous offset Russian ship's tracks to and from Libya.







Hydrographic Surveys by the UKHD and UKHO

Coast of Syria-Lebanon and Palestine 1860s

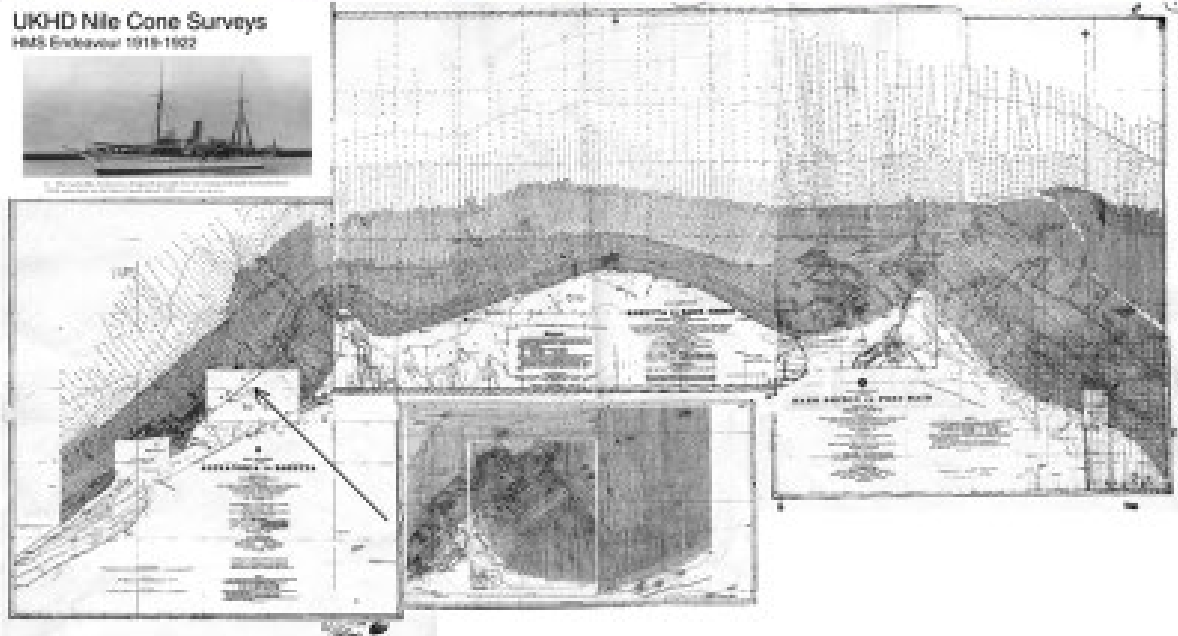
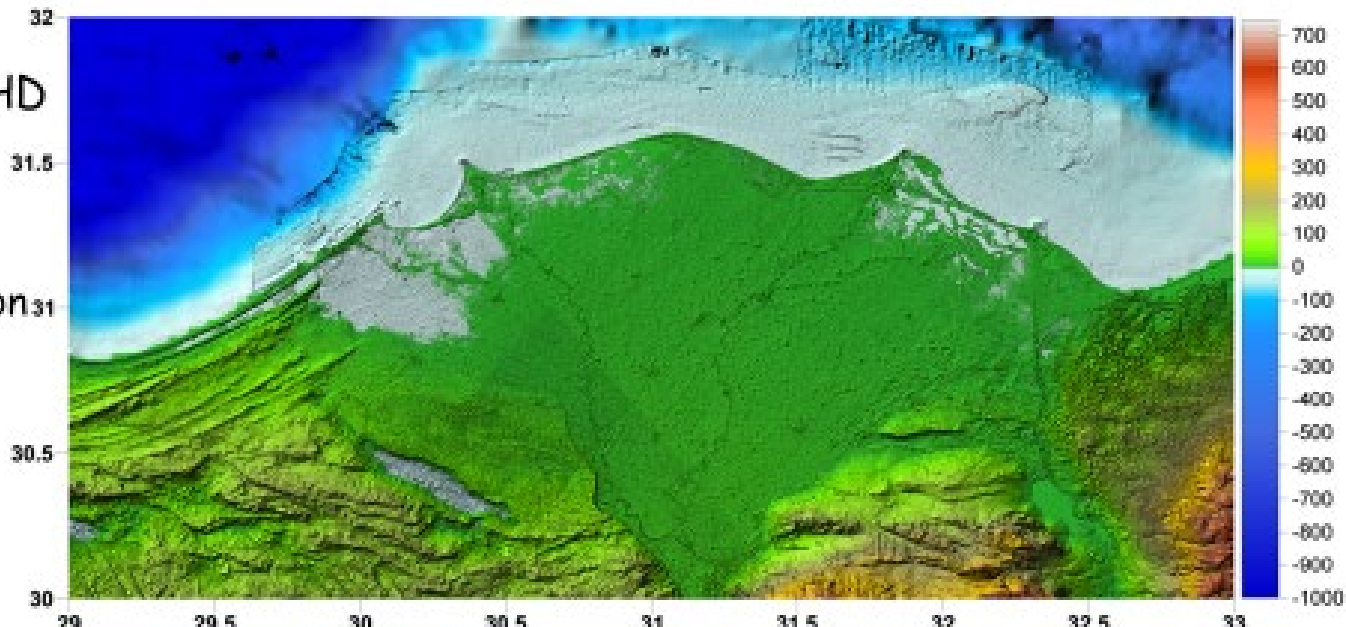
Nile Cone 1919-1922

Mandatory Palestine 1930s

Island of Cyprus 1930s and 1950s

Islands of Malta & Gozo 1950s

Primarily lead-line and sextant navigation, later echo-sounder and finally electronic navigation





UKHD Nile Cone Surveys HMS Endeavour 1919-1922

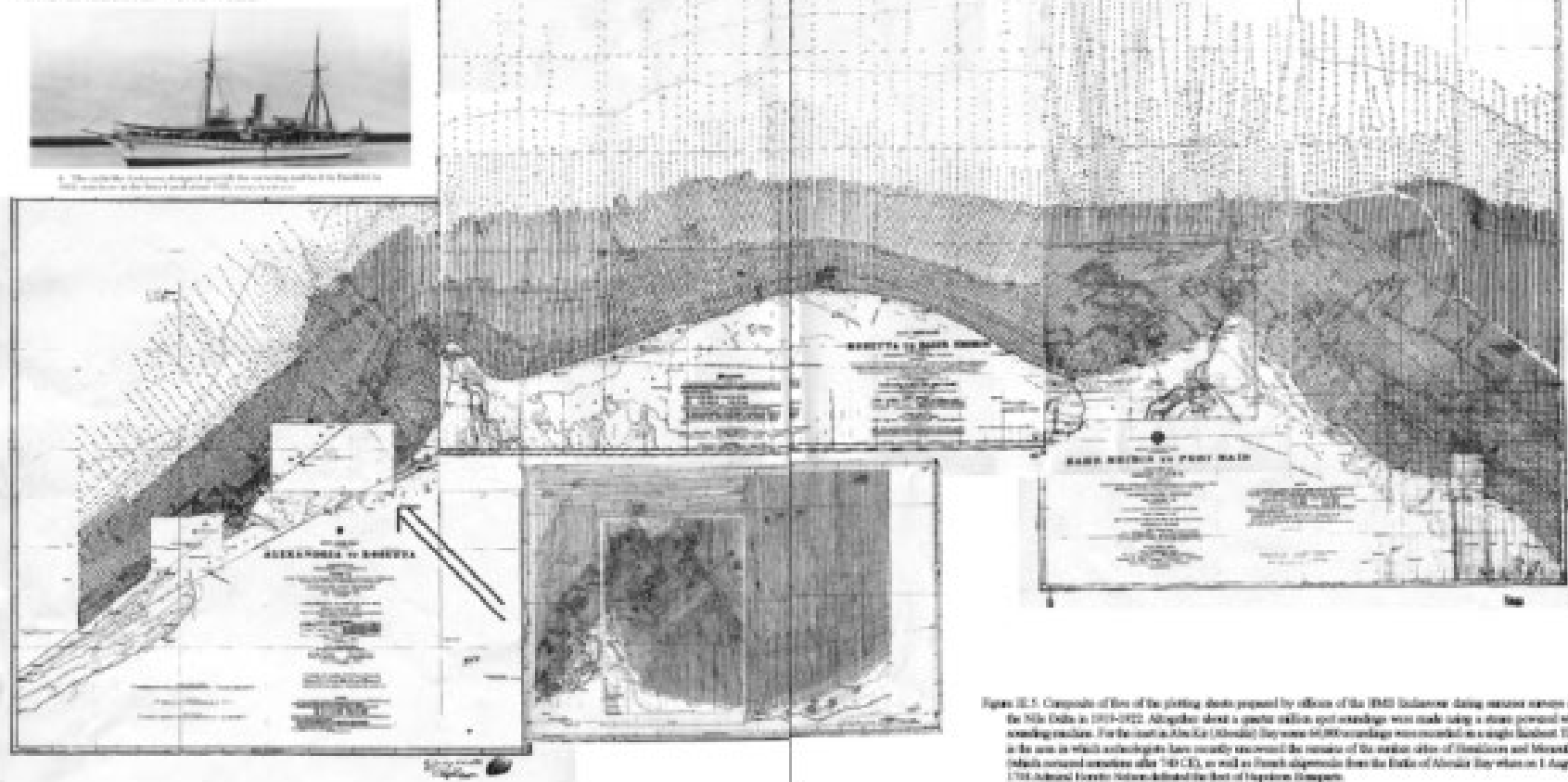
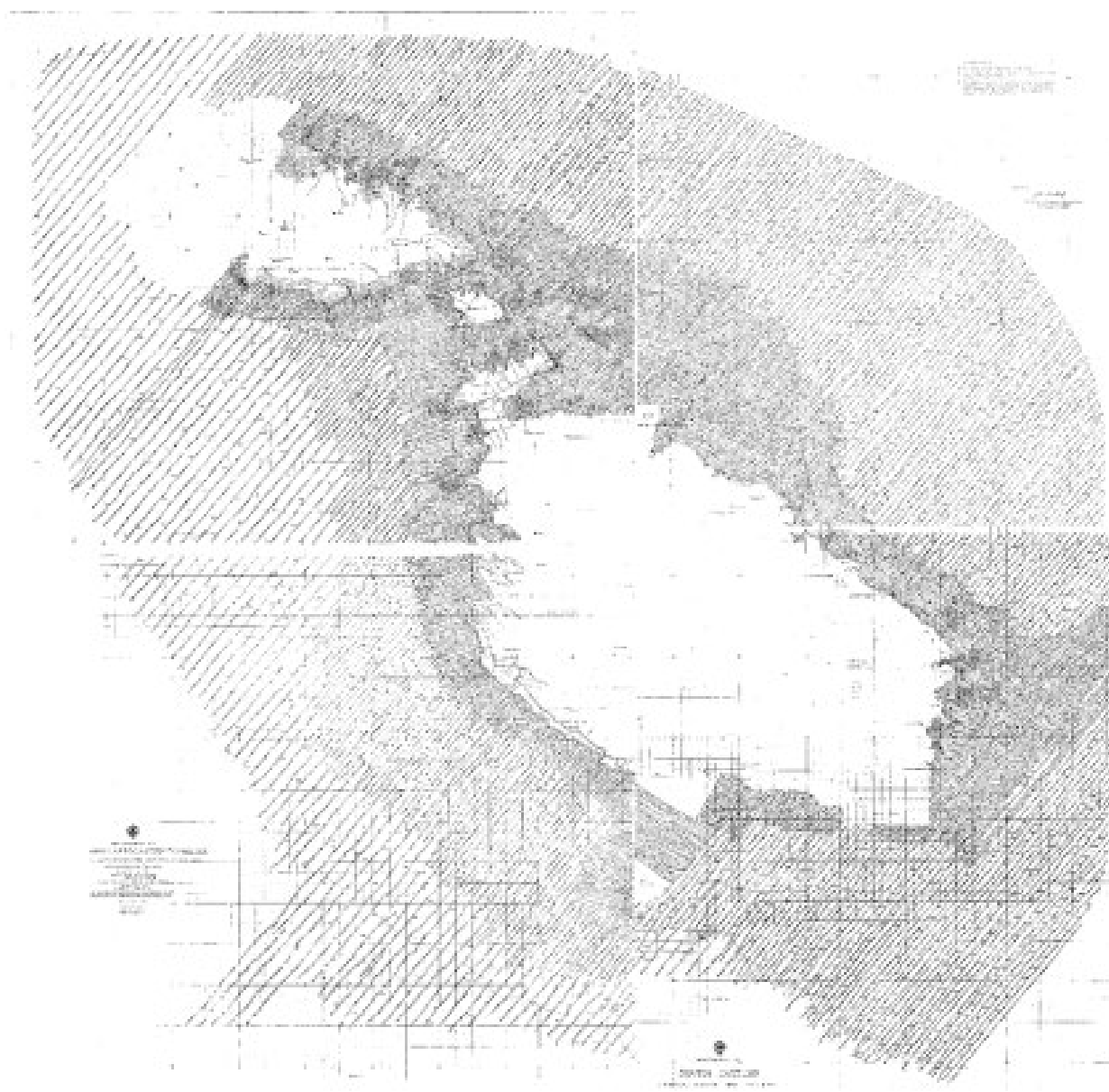


Figure III.5. Composite of five of the plotting sheets prepared by officers of the HMS Endeavour during summer surveys off the Nile Delta in 1919-1922. Altogether about a quarter million spot soundings were made using a steam powered wire sounding machine. For the inset in Abu Kir (Aboukir) Bay some 64,000 soundings were recorded on a single fairsheet. This is the area in which archeologists have recently uncovered the remains of the sunken cities of Herakleion and Menouthis (which occurred sometime after 740 CE), as well as French shipwrecks from the Battle of Aboukir Bay when on 1 August 1798 Admiral Horatio Nelson defeated the fleet of Napoleon Bonaparte.





UKHO surveys around Malta and Gozo

114,396 soundings,

2,967 bottom types





UKHD and UKHO hydrographic surveys around Cyprus in the 1930s and 1950s
183,000 soundings plotted on the 1:500,000 Tactical Piloting Chart

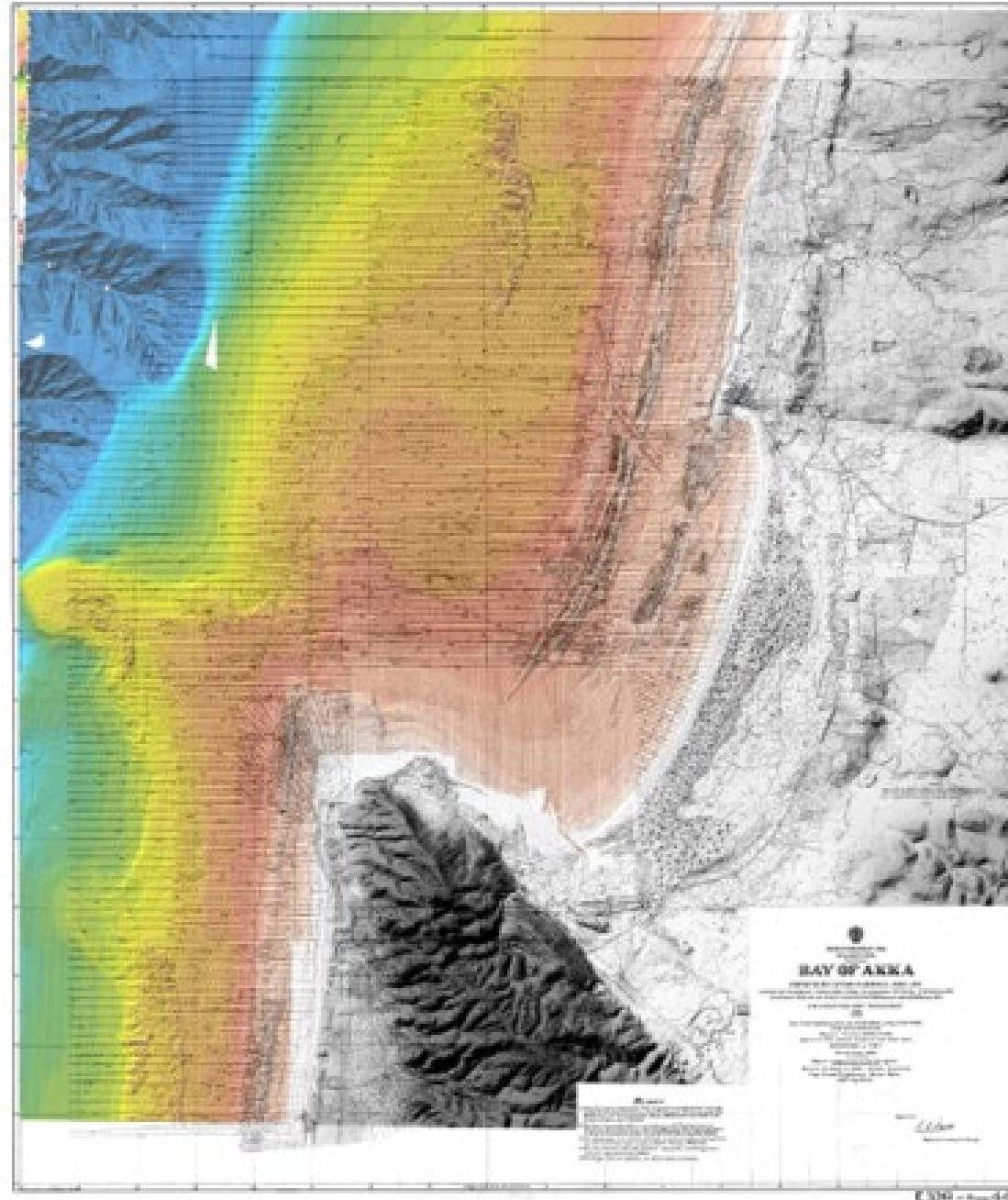
British Admiralty fairsheets for northern Mandatory Palestine (now Israel), Haifa Bay and its approaches.

Surveyed by HMS Endeavour in 1930, using a lead line and sextant positioning.

This area has 52,643 soundings and another 1,397 bottom sediment types for anchor holding estimations.

The sounding density is sufficient to prepare a good bathymetric grid at 0.1' node spacing.

The new multibeam bathymetry on grids of 2 to 10 m underlies the British compilation.





www.emodnet.eu

Your gateway to marine data in Europe

