



# 100 YEARS OF GEBCO BATHYMETRIC CHARTS

GEBCO Bathymetric Science Day 5 October 2015  
Anthony Pharaoh (International Hydrographic Bureau, Monaco)



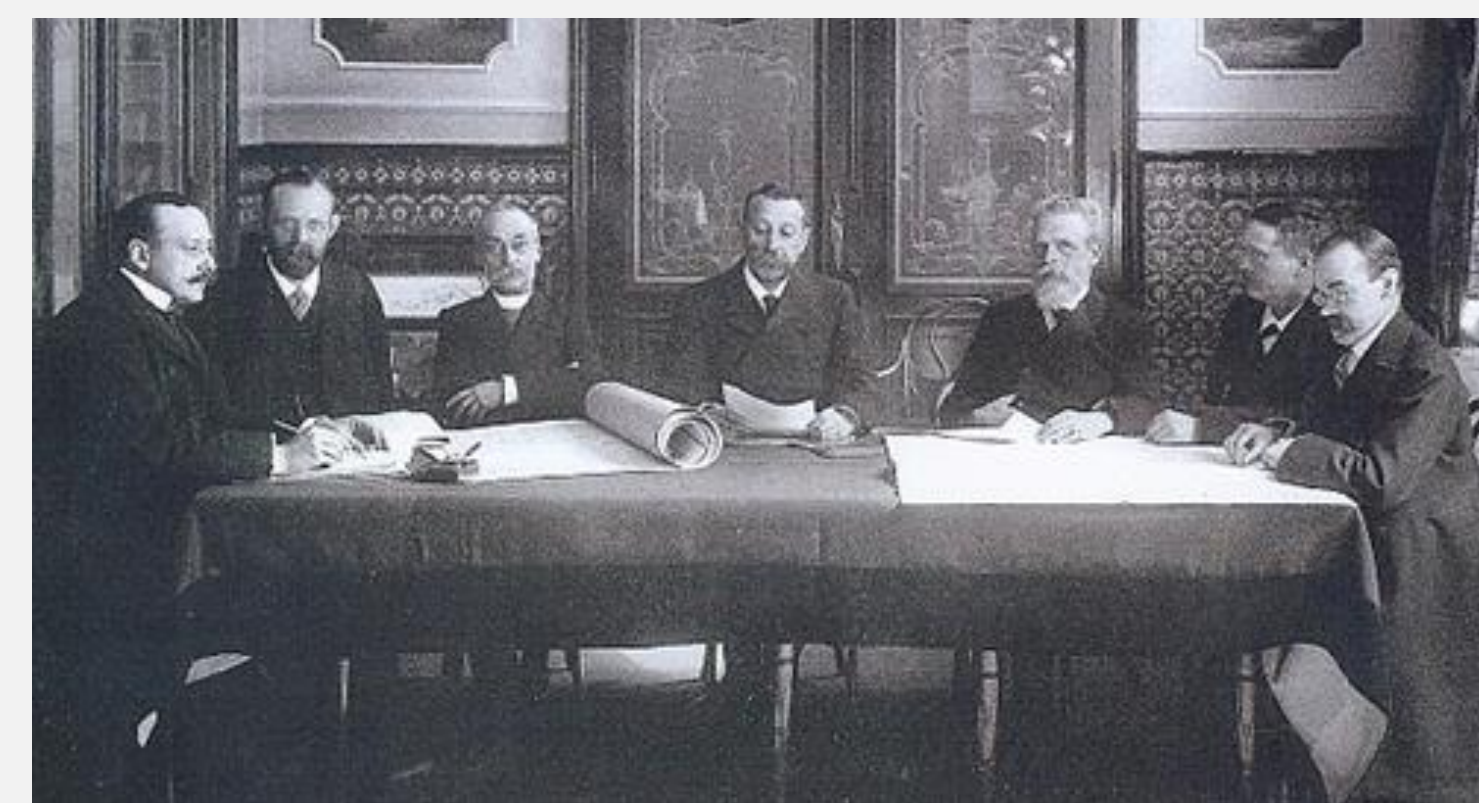
## Introduction

Following a proposal to the 7th International Geographic Congress (Berlin 1899), for the development of an international agreement on nomenclature and terminology for sub-oceanic features, the Congress nominated and tasked a Commission with the preparation of a series of bathymetric ocean charts. Eight leading scientists of the day were appointed to the Commission, which set about producing the first edition of the GEBCO chart series.

Since that important first step, the Principality of Monaco has played an important role in supporting the GEBCO project. In the spring of 1903, work started on assembling the data required to produce the first charts. The hydrographic services of all the maritime nations were invited to provide any data that they had in the form of charts or lists. Significant contributions were made by the British Admiralty, the Ministry of the Imperial Navy of Berlin, the Coast and Geodetic Survey of the United States, the French Hydrographic Service and various undersea cable laying companies.

On the 11th of January 1904, Prince Albert 1st presented drafts of the entire set of the GEBCO first edition charts to a session of the *Académie des sciences de Paris*. They were well received and widely commented on in both the French press and abroad. Later that year, the charts were presented to the 8th International Geographical Congress held in Washington, D.C.

Following the death of Prince Albert in 1922, the Government of Monaco invited the International Hydrographic Bureau (IHB) to take over the production of the GEBCO charts. Since that time, the IHB has maintained a repository of the five successive series in its archives and in 2015, it undertook to digitally scan these charts. A snapshot of the scanned GEBCO charts is presented here.



Commission tasked with producing the first GEBCO chart series.  
Prince Albert I at table centre.

## Conclusion

When presenting the 1st Edition to the 8th International Geographical Congress held in Washington, D.C., Professor Thoulet's prophetic words (copied below) reflect the spirit of this great enterprise:

*"The work is finished. In the name of His Serene Highness Prince Albert I of Monaco, I have the honour and, I dare say, the pride to submit this before the Congress. Here then is everything which is known today about the relief of the ocean floor.*

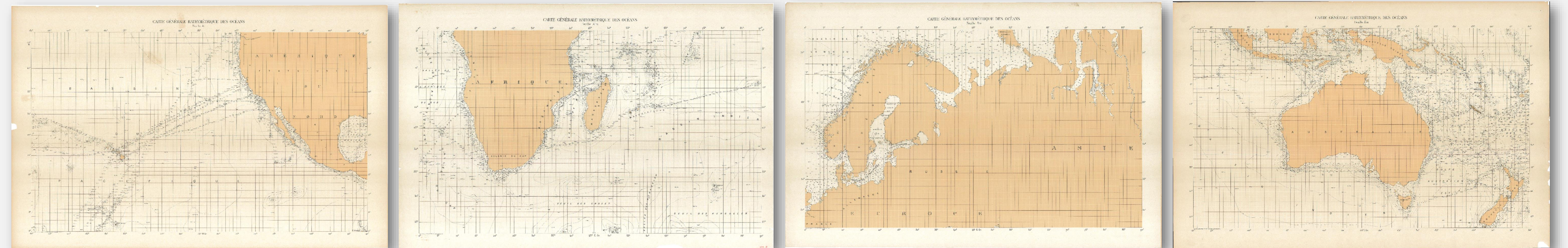
*For many years to come, mariners, telegraphists, engineers, oceanographers and scientists will continue their soundings, for now we must proceed to fill in the details; no point of any sea on the globe will escape our investigations. The incessant and untiring efforts of succeeding generations are the glory of mankind. In one century - in ten centuries - this is the chart our great-great-nephews will be using, perfected but not changed."*

More about GEBCO – (<http://www.gebco.net>)

### 1st Edition (1903)

Work on the first edition began in June 1903. A team of seven draftsmen under the direction of Lieutenant Ch. Sauerwein made rapid progress and the series was completed within 7 months.

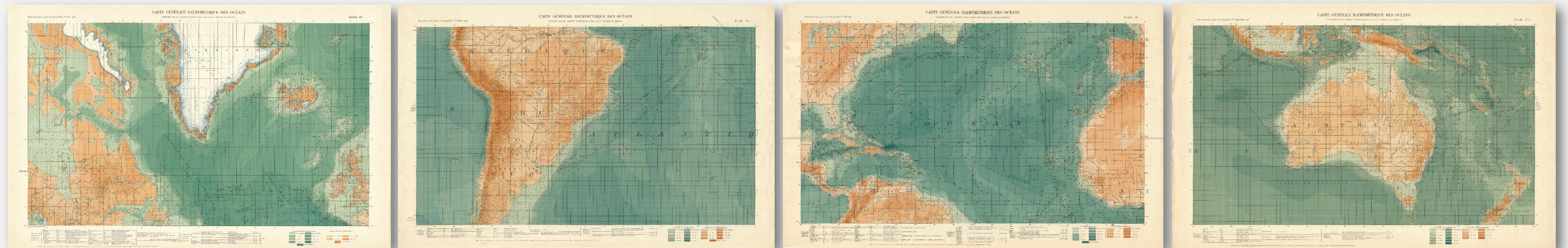
The lithoprinted charts were presented to the Paris Académie of Sciences in January 1904, and later in that year to the 8th International Geographical Congress held in Washington, D.C.



### 2nd Edition (1912 to 1930)

The first sheets were published in 1912 however the last sheet did not appear until 1930, due to the outbreak of World War I.

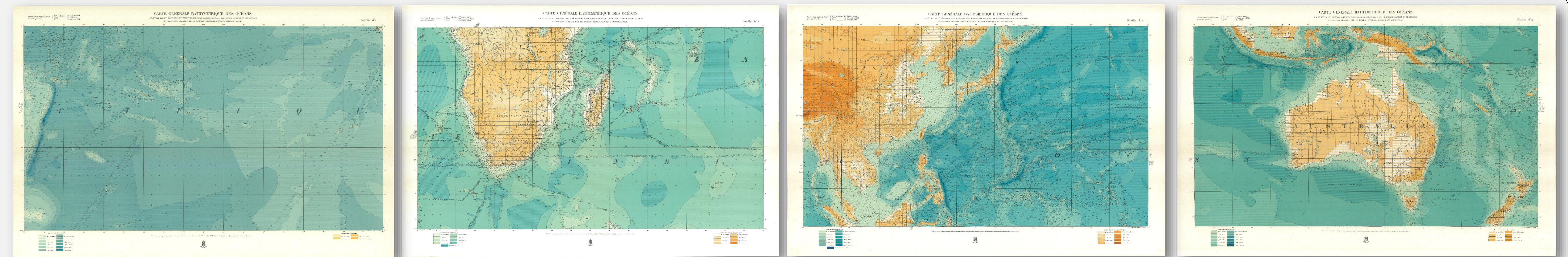
The cartographic style remained similar to that of the first edition but the number of soundings increased from 18000 to 30000. More place names were shown and contours were included on the land areas.



### 3rd Edition (1932 to 1966)

Following the death of Prince Albert in 1922, his scientific team was disbanded and the Government of Monaco invited the International Hydrographic Bureau (IHB) to take over the production of the GEBCO charts.

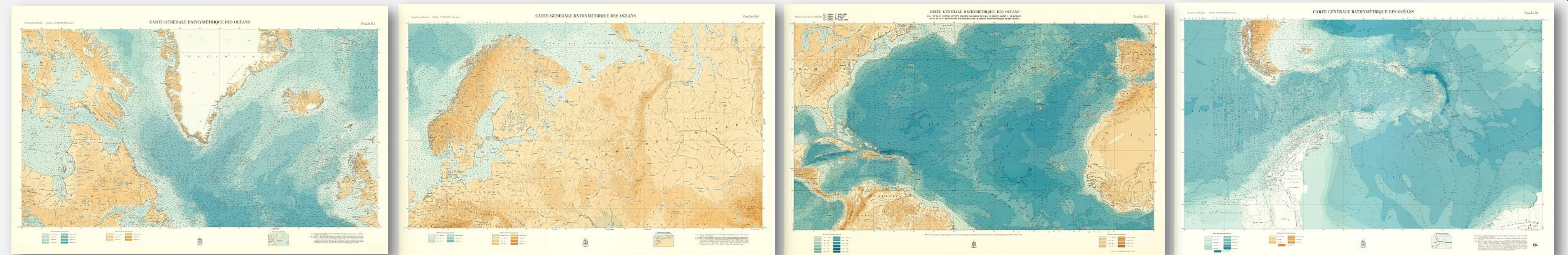
Work commenced on the 3rd edition in 1932, but its progress was very slow. Production was spread over a period of 34 years and only 21 sheets were actually published.



### 4th Edition (1958 to 1973)

The fourth edition was started in 1958 before the third edition had actually been completed. Following the publication of two sheets in 1958 and 1961, an agreement was made between the IHB and the French Institut géographique national (IGN) regarding the production of the additional sheets.

IGN took over the responsibility for the publication and sales of the GEBCO maps and the IHB would act as the coordinator for the whole activity.



### 5th Edition (1972 to 1984)

Production of the 5th series was supervised by a joint Intergovernmental Oceanographic Commission (IOC) / IHO GEBCO Guiding Committee. It comprised five nominated members from each organization.

An important innovation of the fifth edition was the inclusion of sounding control on the face of each sheet. Discrete soundings appear as grey dots and echo-sounding tracks as grey lines in the background.

