

MORPHOLOGIE DES ATLANTISCHEN OZEANS GRUNDKARTE DER OZEANISCHEN LOTUNGEN

1: 5,000,000

by

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We have already mentioned in the Hydrographic Review of 15 May, 1938, Vol. XV, N° 1, page 76, the appearance of the 4th fascicle of the first part of Vol. III of the "Scientific Results of the German Expedition of the « Meteor » in the Atlantic". This pamphlet contained a chart to the scale of 1: 5,000,000 prepared by Theodor Stocks as a working chart on the Lambert equivalent azimuthal projection (central equivalent meridian). The total expanse of the Atlantic Ocean would thus be covered in 14 sheets; a second was published in 1939 and two others in 1941.

The first (S II₂) and the last two sheets (S II₁ and S II₃) provide a representation of all of that part of the Atlantic Ocean which extends from approximately the austral polar continent to a line joining Buenos Aires with Capetown⁽¹⁾. The second (S I₂) represents, to the northward of the above-mentioned line, the middle of the South Atlantic up to the Equator.

They are true plotting sheets; the scale adopted suffices, together with the origin of the soundings inscribed, to determine the degree of confidence which may be attributed to them, and to permit the insertion of new soundings of which we may subsequently have knowledge.

Although the use of a projection which maintains the proportion between the surfaces is of undoubted interest, we might note that for a plotting sheet projection, where this operation must be frequently carried out, the plotting of a sounding by its geographical coordinates is neither as easy nor as accurate as on the Mercator projection.

At the same time one can draw on the tracing paper the modification in the depth contours which will result therefrom. These, which are only indicated on the tracing sheet, and not on the chart, retain very well the relative value which may be attributed to them, in so far as the number and density of the soundings have not been appreciably increased.

It should occasion no surprise therefore, if these depth contour lines differ somewhat at times from those which are traced on the sheets A'₁ and A'_{IV} of the same regions of the General Bathymetric Chart of the Oceans (Publication N° 30 of the International Hydrographic Bureau). They show also several soundings of which the International Hydrographic Bureau had no knowledge at the date of their publication; among others, on sheet SII₁ a line of soundings taken by the *Schwabenland* in 1937 and on sheet S I₂ a line by the *Karlsruhe*, sounded in 1935. For the rest however, these lines do not give rise to any very appreciable modifications.

Further the object and consequently the scale (about one half smaller) of the Third Edition of the General Bathymetric Chart of the Oceans are absolutely different. On those we have sought to provide, rather than a plotting sheet, a general representation of the state of our knowledge at a given moment of the topography of the oceans, by bringing out as far as possible the relief, the deeps and the slopes by different tints on the continents and the oceans. These tints make it necessary to decide upon the course of certain depth contour lines, even where the density of the soundings is insufficient to permit tracing any contours, however much lacking in accuracy. Divergences of interpretation need not therefore be surprising. They are often of interest in showing the need for new soundings at these places and to facilitate the establishment of new programs whose execution is greatly to be desired.

P. V.

(1) *The limits of the sheets, not being fixed by either parallel or meridians, cannot be definitely specified.*