

BOOKS IN REVIEW

THE USE OF ARTIFICIAL SATELLITES FOR GEODESY

Proceedings of the First International Symposium on the Use
of Artificial Satellites for Geodesy
Washington, D. C., 1962

Edited by G. VEIS; North-Holland Publishing Company - Amsterdam, 1963;
424 pages; 347 × 166 mm; illustrations

Many problems involved in the use of artificial satellites for geodesy have been discussed at other meetings and have been the subject of various articles. But this was the first time that scientists had the chance to exchange ideas on a new approach to the old problem of geodesy, the determination of the shape of the earth, and to compare their results with those obtained by classical methods.

The book contains the articles presented during the symposium, as well as the remarks made during the discussions. Therefore the book does not have the consistency of a treatise by an author or group of authors. Nevertheless, at the present time, it is the only document available in the world which brings together the solutions to the various problems arising from the use of satellites in geodesy.

It is divided into eight chapters :

1. Dynamics of Satellite Motion
2. Satellite Tracking
3. Reference Systems and Error Analysis
4. Geometric Methods
5. Numerical Results
6. Comparison with Other Methods
7. Geophysical Implications
8. Closing Summary

It contains a total of 48 articles written by specialists of world renown.

A REGIMENT FOR THE SEA AND OTHER WRITINGS ON NAVIGATION

by E. G. R. TAYLOR

Published for The Hakluyt Society by Cambridge University Press, 1963;
464 pages; illustrations; appendices; 23 × 15 cm

This book deals with four publications of William BOURNE, namely :

- 1) An Almanacke and Prognostication for three yeares... nowe newlye added unto my late Rulles of Navigation, 1571

- 2) A Regiment for the Sea, 1574
- 3) A Regiment for the Sea, 1580
- 4) An Almanacke and Prognostication for x yeares, 1581.

BOURNE could claim to be the first man to write an original work in English on the art and practice of navigation. The need for such a work became imperative in the XVIIth century, for the earliest manuals on navigation were in Spanish. Both Spain and Portugal had perfected their methods of navigation during the Great Age of Discovery and for long tried to keep their secrets from foreigners.

Translations into English of Spanish treatises only partly met the requirements of British seamen and BOURNE was the pioneer in publishing the first manuals of navigation in English.

It is a fine tribute to BOURNE that the "Regiment for the Sea", which constitutes the main section of the present volume, is probably the earliest technical manual written by an Englishman.

SERIAL ATLAS OF THE MARINE ENVIRONMENT

Folio 2

North Atlantic Temperatures at a depth 200 meters

by Elizabeth H. SCHROEDER

Woods Hole Oceanographic Institution

This second Folio of the Atlas presents temperature conditions in the North Atlantic, at a depth of 200 metres. The nine Plates in the Folio are based upon 96 000 subsurface observations, at this depth, in the data collection at Woods Hole Oceanographic Institution. This data collection contains station data copied from publications and obtained by Institution personnel, and bathythermograph data processed by various agencies including the National Oceanographic Data Center, the Naval Research Establishment at Halifax, and the processing section at the Institution.

Miss SCHROEDER's series of Plates illustrates that major North Atlantic currents are represented in the temperature distributions. On the average temperature charts, Plates 1 through 6, the currents coincide with the pronounced horizontal gradients. The currents are shown in Plate 7 by the zones of maximum range and in Plate 8 by the continuity of more than two-degree positive anomalies. The seasonal distribution of data is mapped in Plate 9.

The data used in the Folio are presented in an appendix. Shown in tabular form, for each one-degree quadrangle, are the average, maximum, and minimum temperature at 200 metres, the number of observations which make up each average, and the seasonal distribution of the data.

The Serial Atlas of the Marine Environment answers the compelling need for a marine atlas, specifically prepared as a research tool, by which important oceanographic data can be made generally available and thus contribute their share in fostering interdisciplinary communication.

The Folios are issued in a uniform 16" × 12 1/2" format. All map plates are separately printed on fine translucent paper, and the text and tabular pages are printed on rag paper. Beginning with Folio 2, Serial Atlas Folios will be issued in two forms : bound and loose-leaf.

Folio 3

A Geographic Study of the Clam, " Spisula Polynyma " (Stimpson)

by J. LOCKWOOD CHAMBERLIN & Franklin STEARNS