

Springer

1st
edition

1960, IV, 108 p.

Printed book

Softcover

Printed book

Softcover

ISBN 978-3-540-02580-1

\$ 109,00

Available

Discount group

Professional Books (2)

Product category

Monograph

Series

Mitteilungen aus dem Max-Planck-Institut für Aeronomie

Physics : Geophysics and Environmental Physics

Becker, W.

Tables of Ordinary and Extraordinary Refractive Indices, Group Refractive Indices and $h'_{o,x}(f)$ -Curves for Standard Ionospheric Layer Models

The N(h)-Working Party, a Group in Commission III of URSI (URSI Information Bulletin No. 112, p. 12) suggested these calculations of ordinary and extraordinary refractive indices n , vertical group refractive indices c/U , and virtual o,x heights $h(f)$, for an Epstein, cosine and parabolic layer model. c is the free space velocity of light. U and U denote vertical ordinary and extraordinary O, X group velocities. The data are intended to facilitate real height (h) computations from observed, $h(f)$ -traces. Especially the $h(f)$ -data are intended also to allow o,x for tests of existing reduction methods. For ionization minimum investigations an additional set of tables is presented. These tables represent the virtual paths $h(f)$ of sounding pulses which penetrate an ionospheric layer of parabolic o,x shape; they can be used together with the abovementioned standard $h(f)$ -curves o,x to give ordinary and extraordinary $h(f)$ -traces for any combination of a lower O, X parabolic layer and an upper Epstein, cosine or parabolic electron density distribution. Ordinary group refractive index tables have already been published by D. H. SHINN [1] and by W. BECKER [2]. Their values of $\cos \theta$, the angle of inclination of the earth's magnetic field, are slightly different from those used here. These tables may be used as additional sets for interpolation purposes. D. H.

Order online at [springer.com/booksellers](https://www.springer.com/booksellers)

Springer Nature Customer Service Center LLC

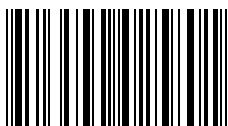
233 Spring Street

New York, NY 10013

USA

T: +1-800-SPRINGER NATURE

(777-4643) or 212-460-1500

customerservice@springernature.com

ISBN 978-3-540-02580-1 / BIC: PHVG / SPRINGER NATURE: SCP32000

Prices and other details are subject to change without notice. All errors and omissions excepted. Americas: Tax will be added where applicable. Canadian residents please add PST, QST or GST. Please add \$5.00 for shipping one book and \$1.00 for each additional book. Outside the US and Canada add \$10.00 for first book, \$5.00 for each additional book. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent.

Part of **SPRINGER NATURE**