

APPENDIX D. ERRATA AND SUPPLEMENTARY REMARKS FOR "A WORLD ATLAS OF
ATMOSPHERIC RADIO REFRACTIVITY

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1. In the original analysis of radiosonde data for the Atlas, no lag corrections were used, and linear interpolation was used to obtain the 50- and 100-m points on the soundings.
2. On page 13, 12th line from the bottom of the right-hand column, "western Mediterranean Sea" should be changed to "eastern Mediterranean Sea".
3. Add to Table 1, page 20:
Mediterranean, 4 stations, February 1.2 N-units, August 1.6 N-units, 12 month estimate 1.4 N-units, 12-month rms 0.4
4. In figure A-1, page 32, change station No. 64 in Mexico to No. 63 (Mazatlan).
5. The gradient data in Appendix C are based upon records of radiosonde observations made only once or twice daily. All references to "percent of time" should be interpreted as "percent of the observations".
6. Figures C-1 through C-4 refer to positive gradients, or sub-refractive conditions.
7. In figures C-5 through C-12, "Gradient exceeded" indicates that for the given percentage of the observations the gradients were more positive (or less negative).
8. On page 70, figure C-13, Coral Harbor (64-12 N, 83-22 W) was mistakenly plotted as 9.8 on the original map; it should have been 19.7. This would alter the contour lines in that area.
9. Figure C-41 through C-56 refer to negative gradients, or a decrease of refractivity with height (normal gradients to superrefractive and ducting conditions).
10. In table C-1 on page 92, change the Fort Smith February median to 1019 (instead of 872) and the minimum to 464 (instead of 9).
11. Pages 93-116, figures C-57 through C-78: On all of these figures, the title should read "Cumulative probability distributions of dN/dh for ground based 50-m layer:". Note, however, that figures C-1 through C-56 all refer to 100-m layers.

BIBLIOGRAPHIC DATA SHEET

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| 15. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography of literature survey, mention it here.) The continued expansion of microwave radio links and the resulting congestion have increased the need for better performance estimates. In the evaluation of refractivity effects, the designer may wish to consider the average gradients at specific locations for different seasons, as well as diurnal changes. This report presents graphs showing the cumulative probability distributions of the atmospheric radio refractivity gradients in the ground-based 100-m layer for 87 stations in the Northern Hemisphere. These are based on climatological data from radiosonde observations, and show the average conditions in one month of each season. A limited number of diurnal comparisons are included, as well as information on the climate of each site. | | 13. | |
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