

Figure 33. Cumulative distributions of ΔL showing the effects of increasing receiver height, $R-1$, $f=230, 410, \text{ and } 751$ MHz.

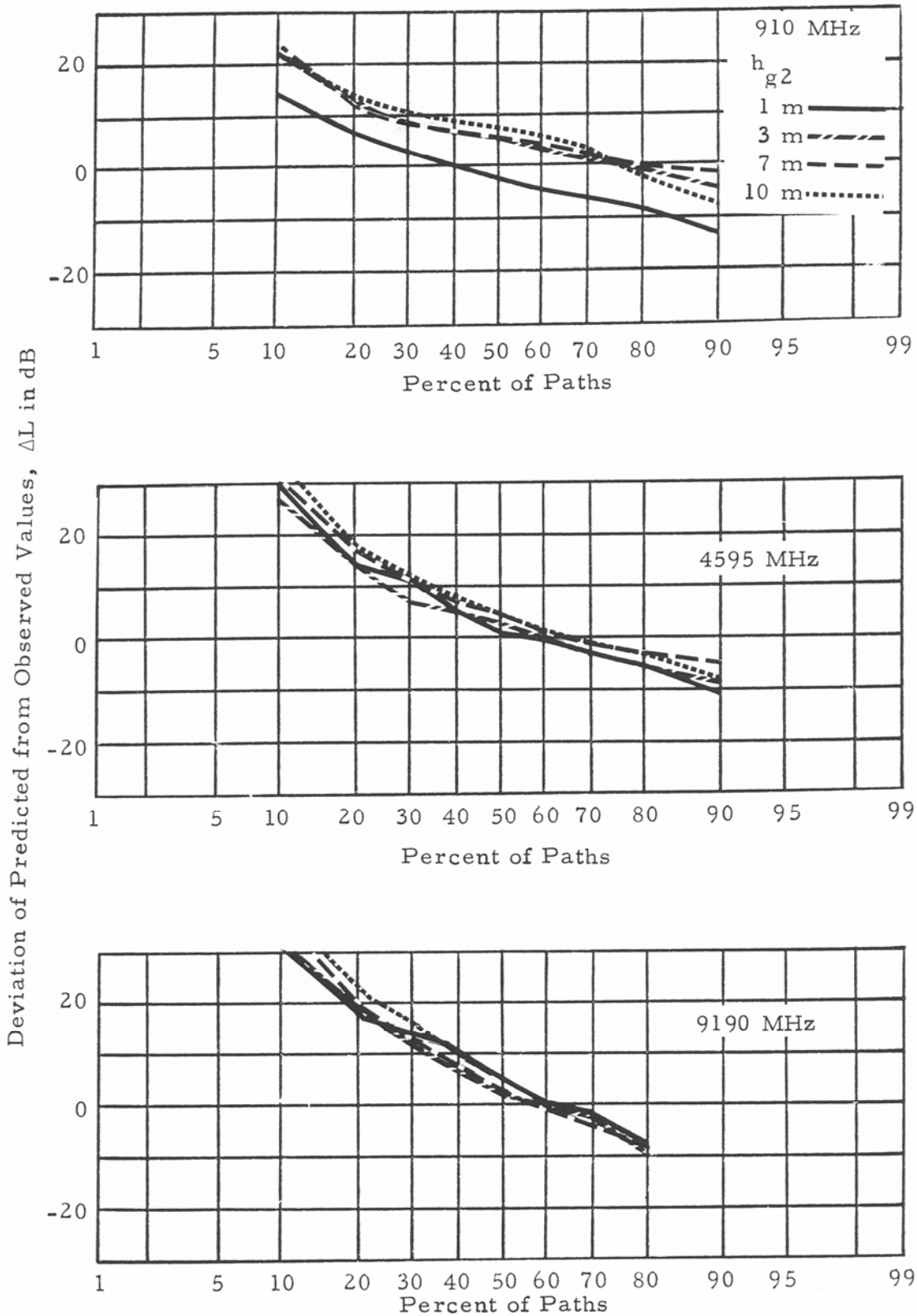


Figure 34. Cumulative distributions of ΔL showing the effects of increasing receiver height, $R-1$, $f=910, 4595, \text{ and } 9190 \text{ MHz}$.

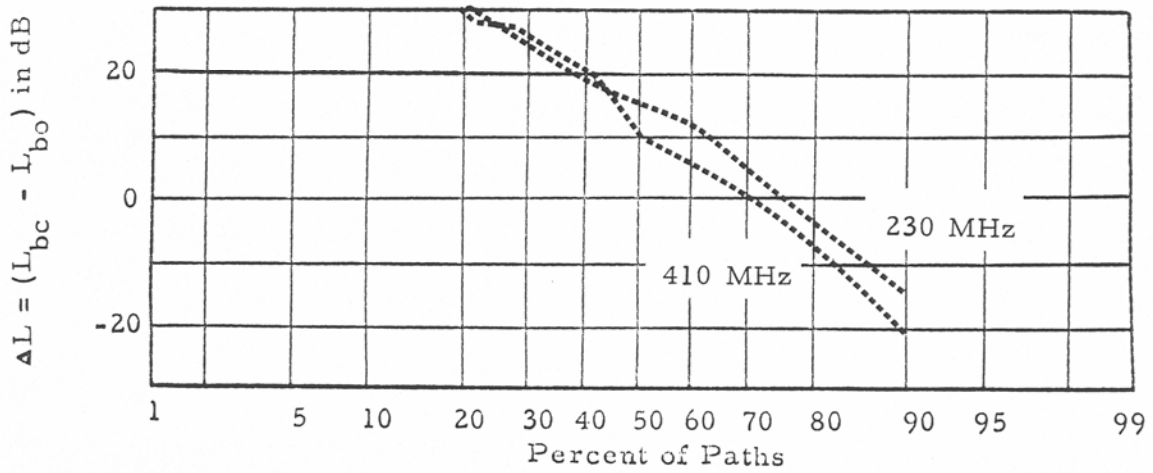
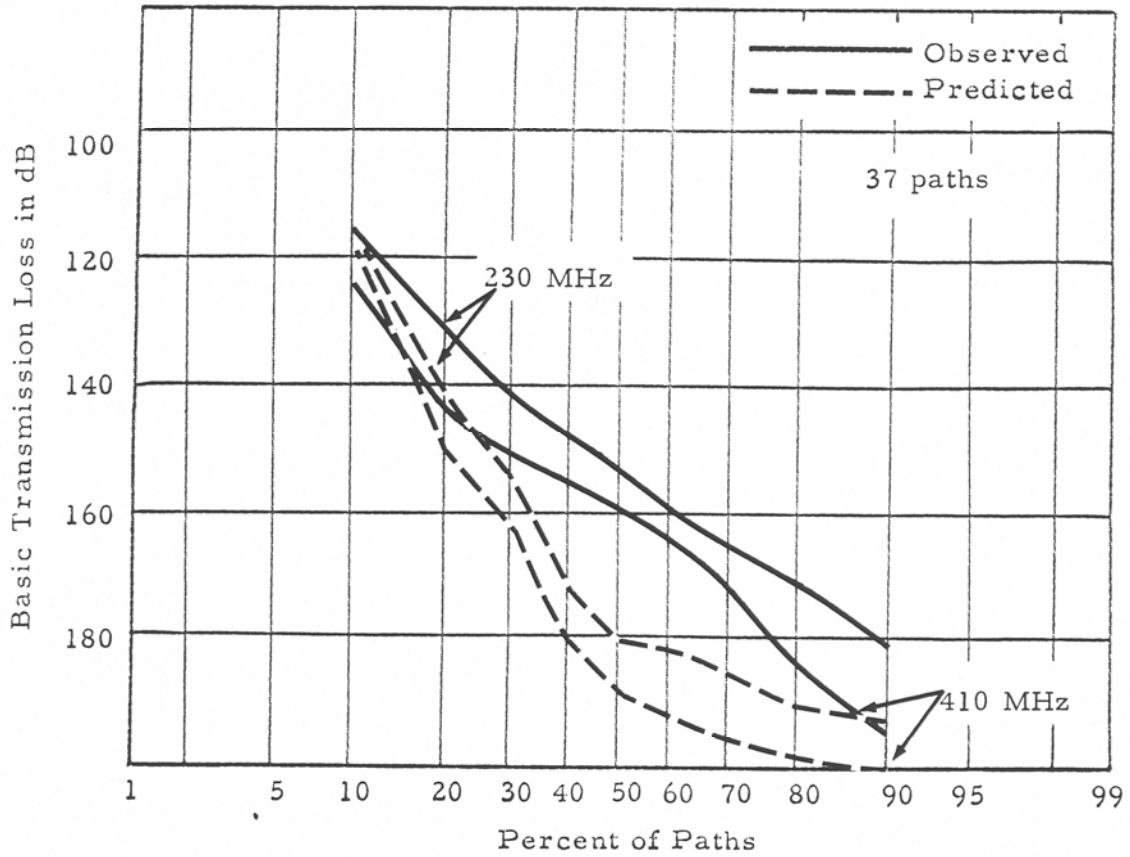


Figure 35. Cumulative distributions of basic transmission loss, observed and predicted, and of ΔL , Fritz Peak, Colo., R-2, $h_{g2}=2$ m, $f=230$ and 410 MHz.

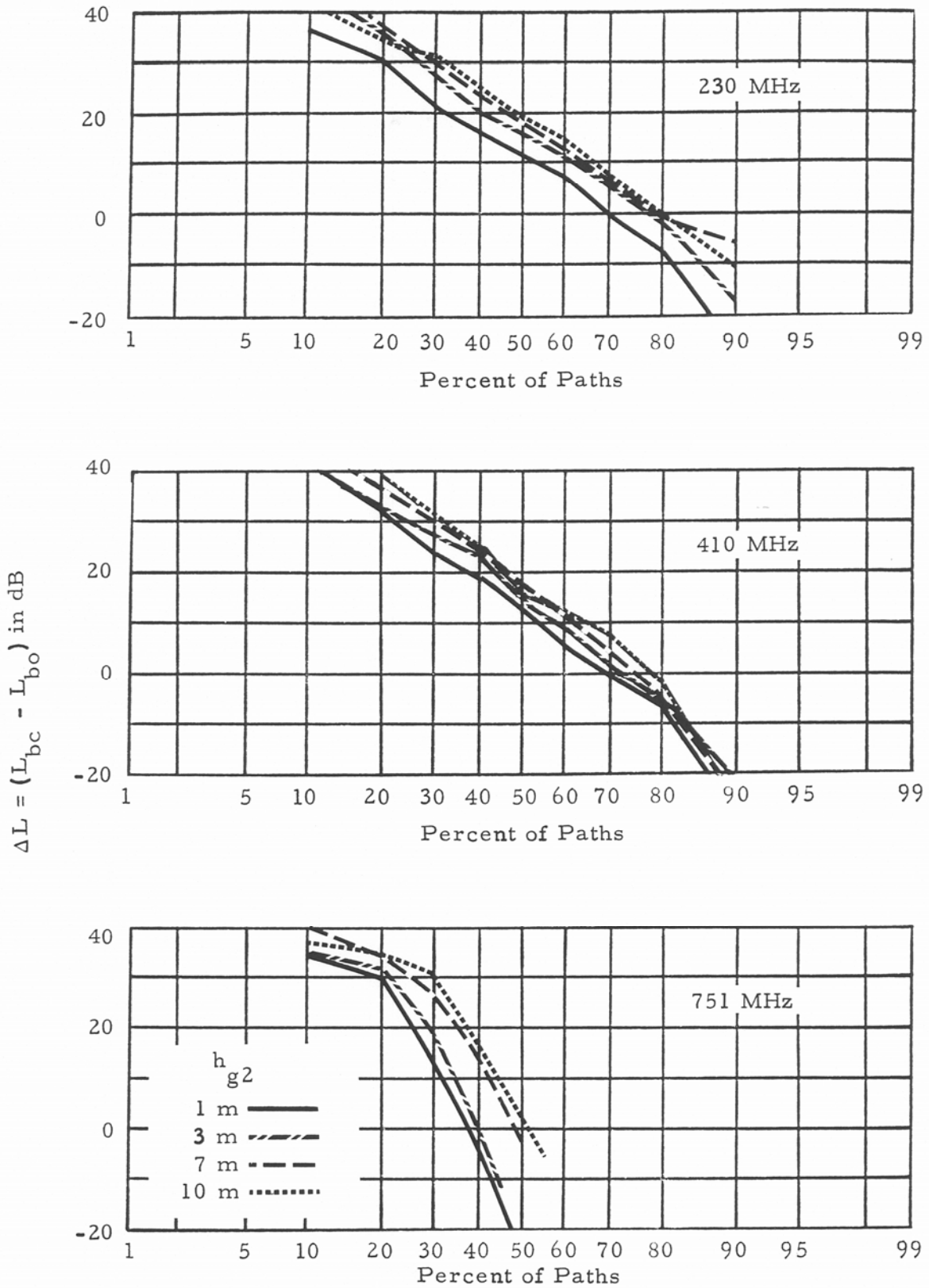


Figure 36. Cumulative distributions of ΔL showing the effects of increasing receiver height, R-2, f-230, 410, and 751 MHz.

heights of 1, 3, 7, and 10 m at frequencies of 230, 410, and 751 MHz. In this area also the deviations become more positive with increasing antenna height. At the higher frequencies no such comparisons could be made because more than half of the measurements were in the noise.

For both the R-1 and the R-2 data an unusually large proportion of the paths are either line-of-sight or one-horizon diffraction paths. The lack of agreement with increasing antenna height and the large predicted losses for the R-2 data suggest that the models for line-of-sight and one-horizon diffraction paths should be re-examined and possibly modified.

3.2 Virginia Paths

The results of measurements made in Virginia have not been completely analyzed. Terrain profiles have been read for 51 of the rather short paths. Of these 30 are line-of-sight paths and 5 are one-horizon paths. No tabulation of parameters is included for the 21 trans-horizon paths, as they would probably not be truly representative of the large number of measurement paths from seven transmitter sites in this area.

The measurements reported here were made with transmitter heights of 11.3 and 15.0 m and receiver heights of 12.1 and 15.0 m. Figures 37, 38, and 39 show cumulative distributions of basic transmission loss observed and predicted and of their differences for the 51 paths for which terrain profiles are available. These figures show good agreement between predicted and observed values, with a tendency to predict too much loss at 76 MHz and not enough at 2180 and 8395 MHz. In this area there is considerable forestation for which no allowance is made in the present prediction model. Such surface clutter would cause much more attenuation at the higher than at the lower frequencies, and

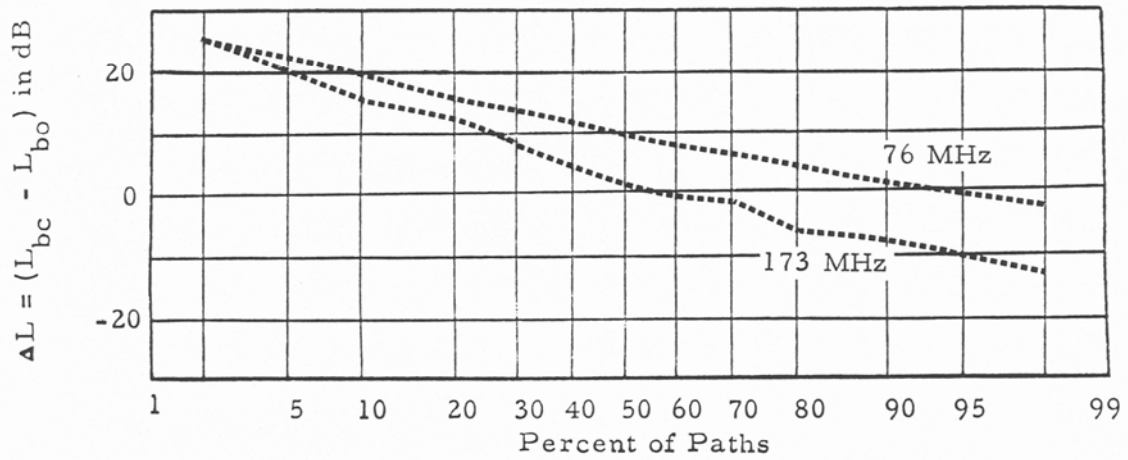
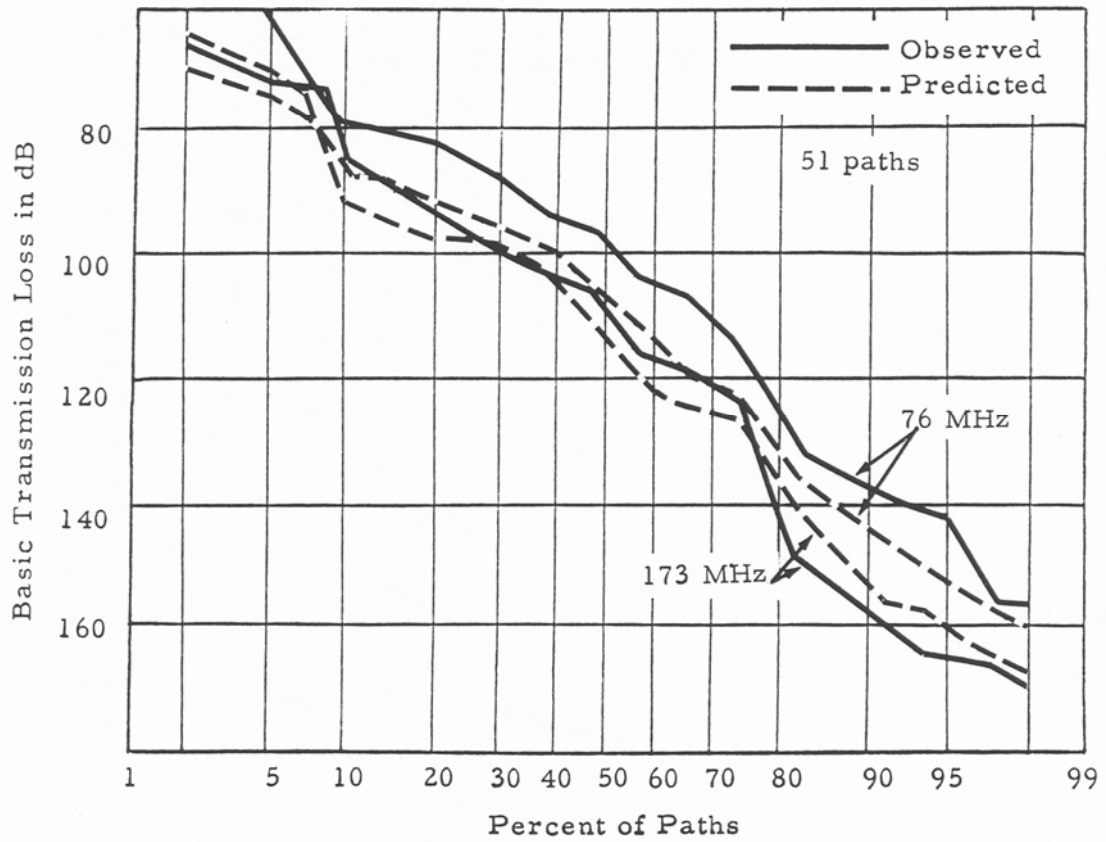


Figure 37. Cumulative distributions of basic transmission loss, observed and predicted, and of ΔL , Virginia, $f=76$ and 173 MHz.

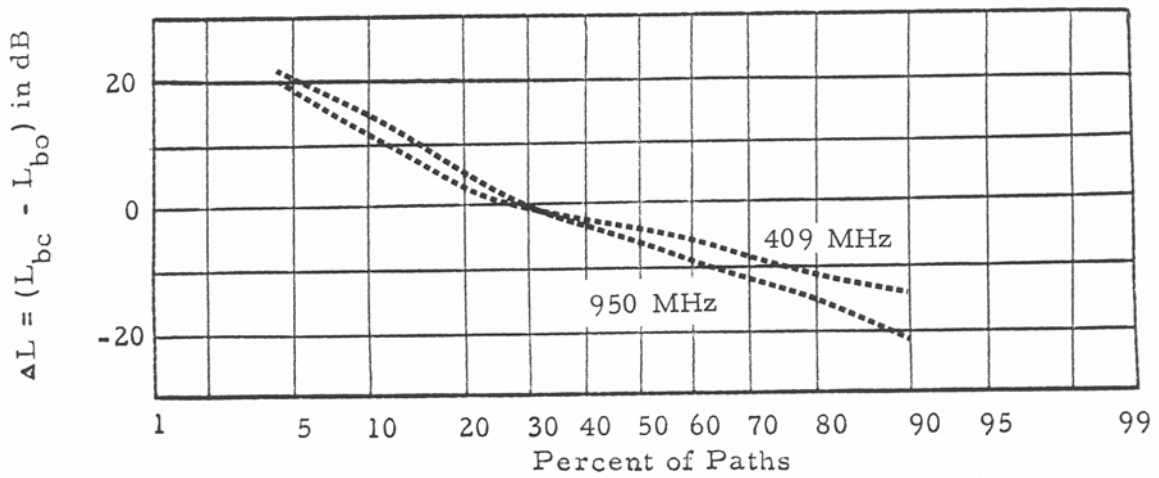
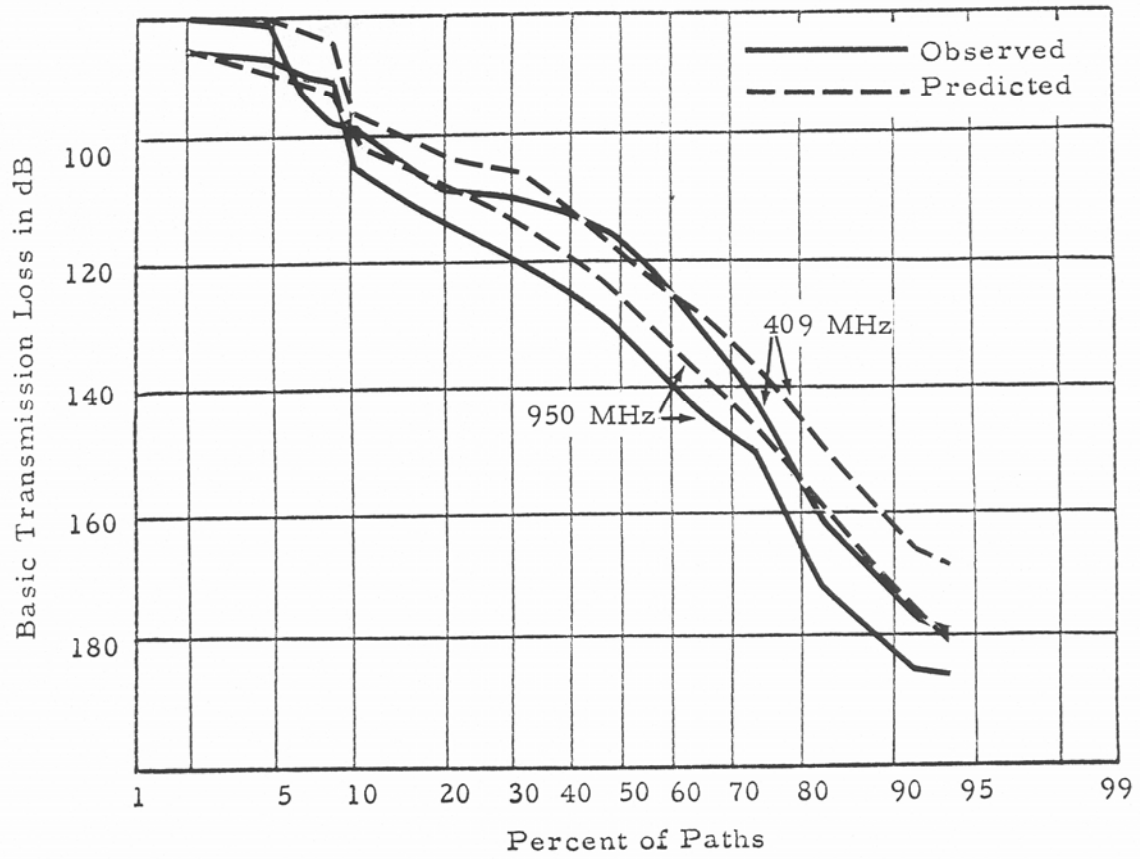


Figure 38. Cumulative distributions of basic transmission loss, observed and predicted, and of ΔL , Virginia, $f=409$ and 950 MHz

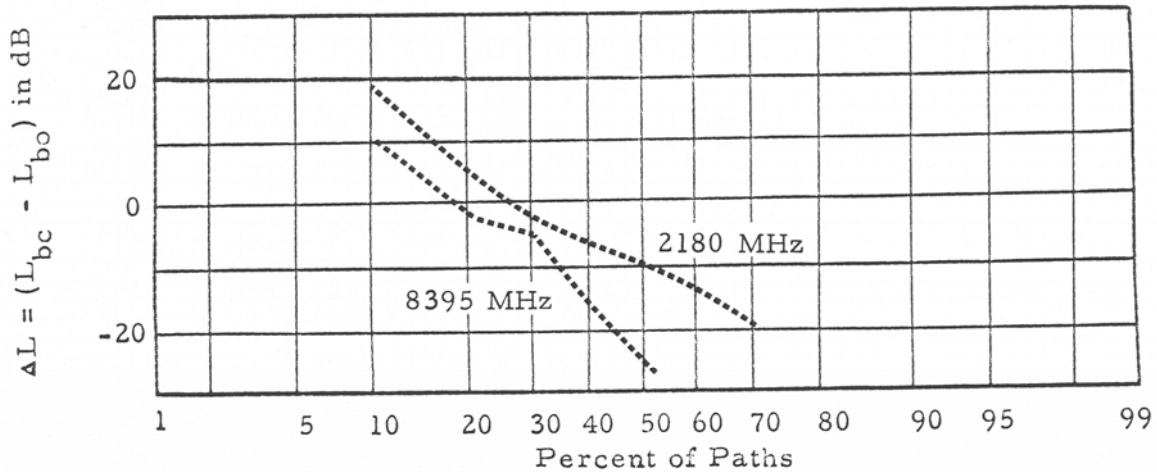
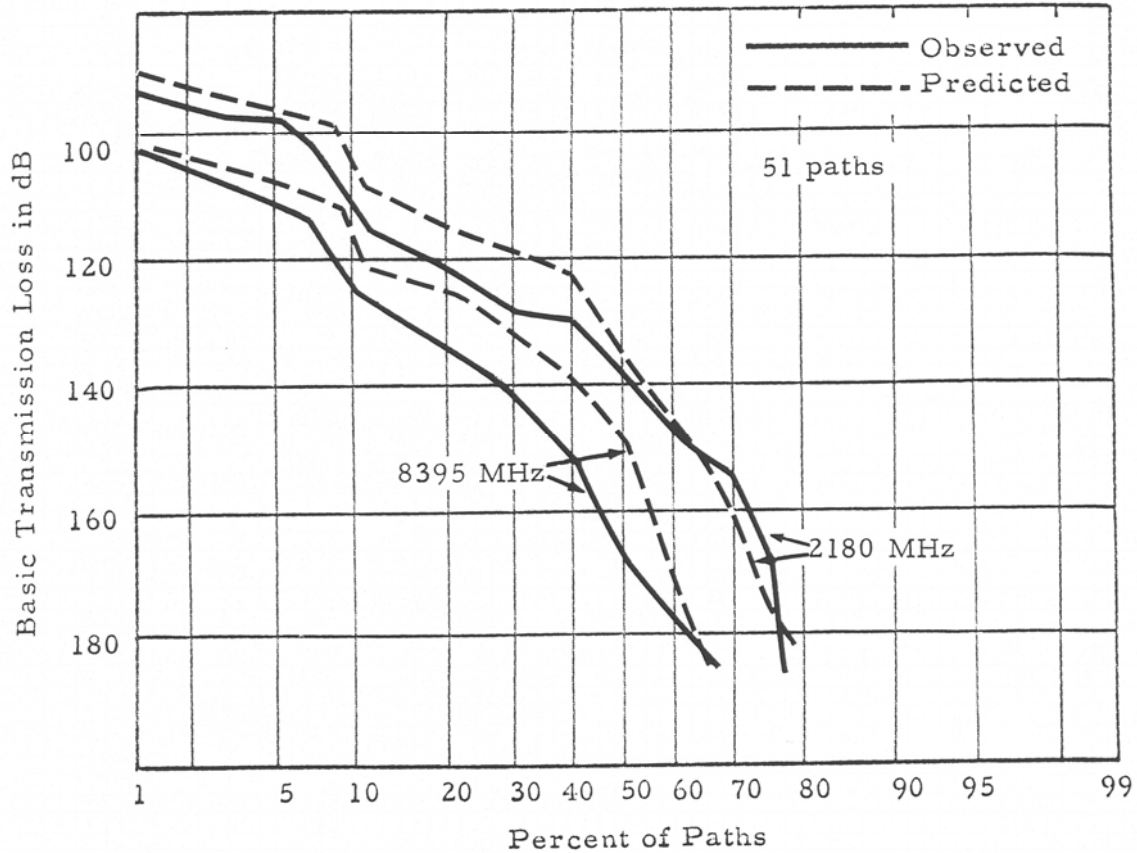


Figure 39. Cumulative distributions of basic transmission loss, observed and predicted, and of ΔL , Virginia, $f=2180$ and 8395 MHz.