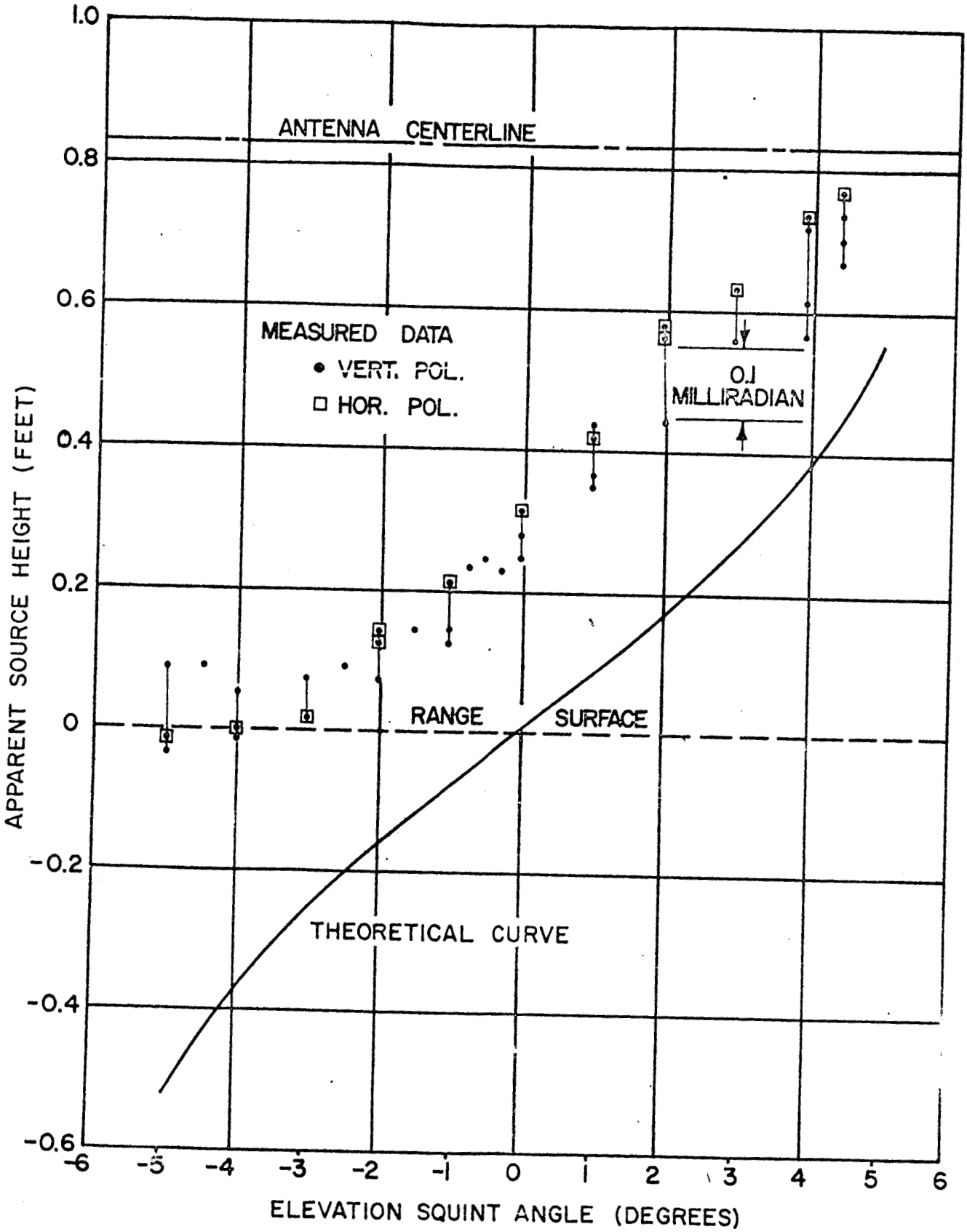
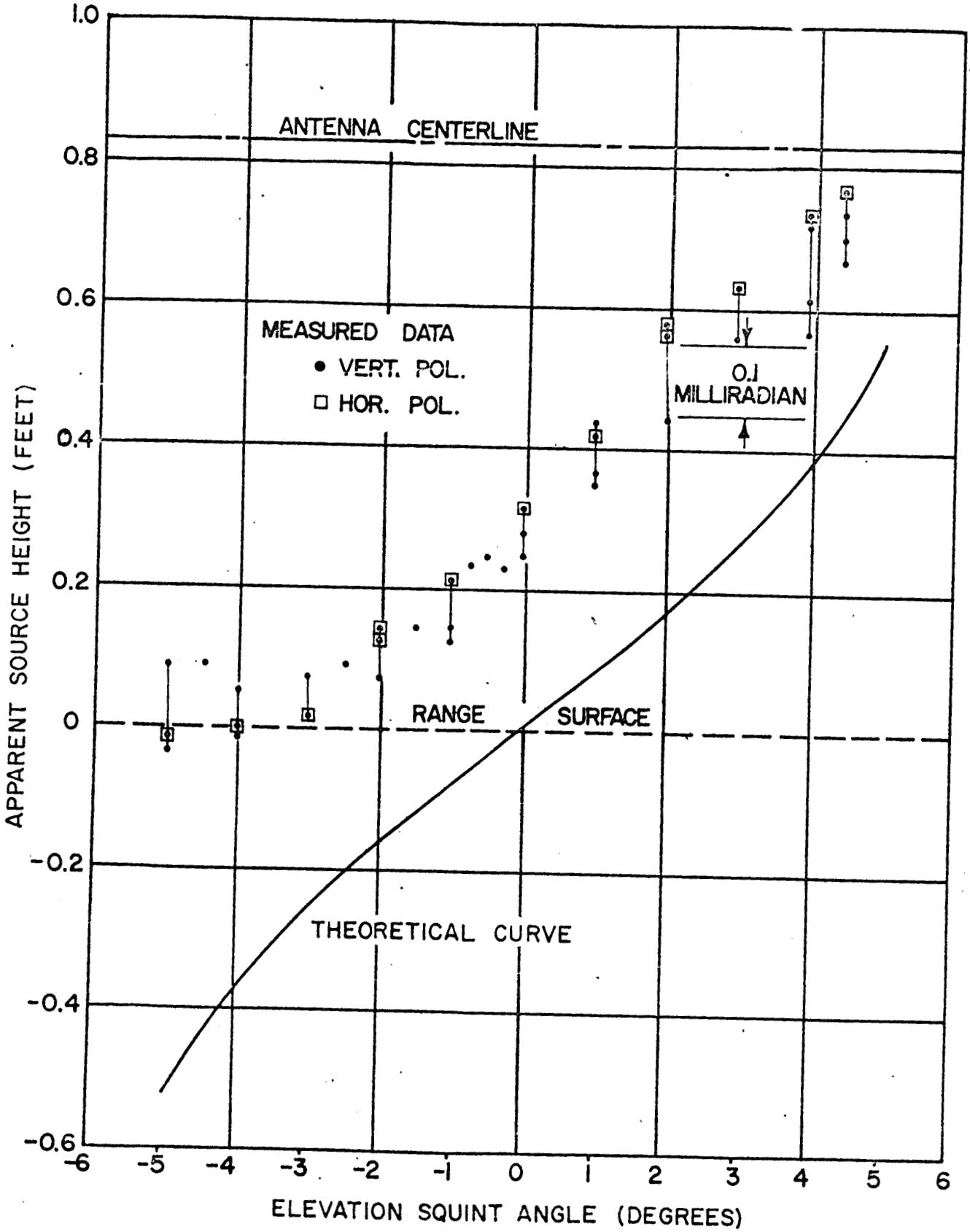


Figure 4.6. Apparent Source Height Versus Elevation Squint Angle -- Ground-Reflection Mode -- X-Band



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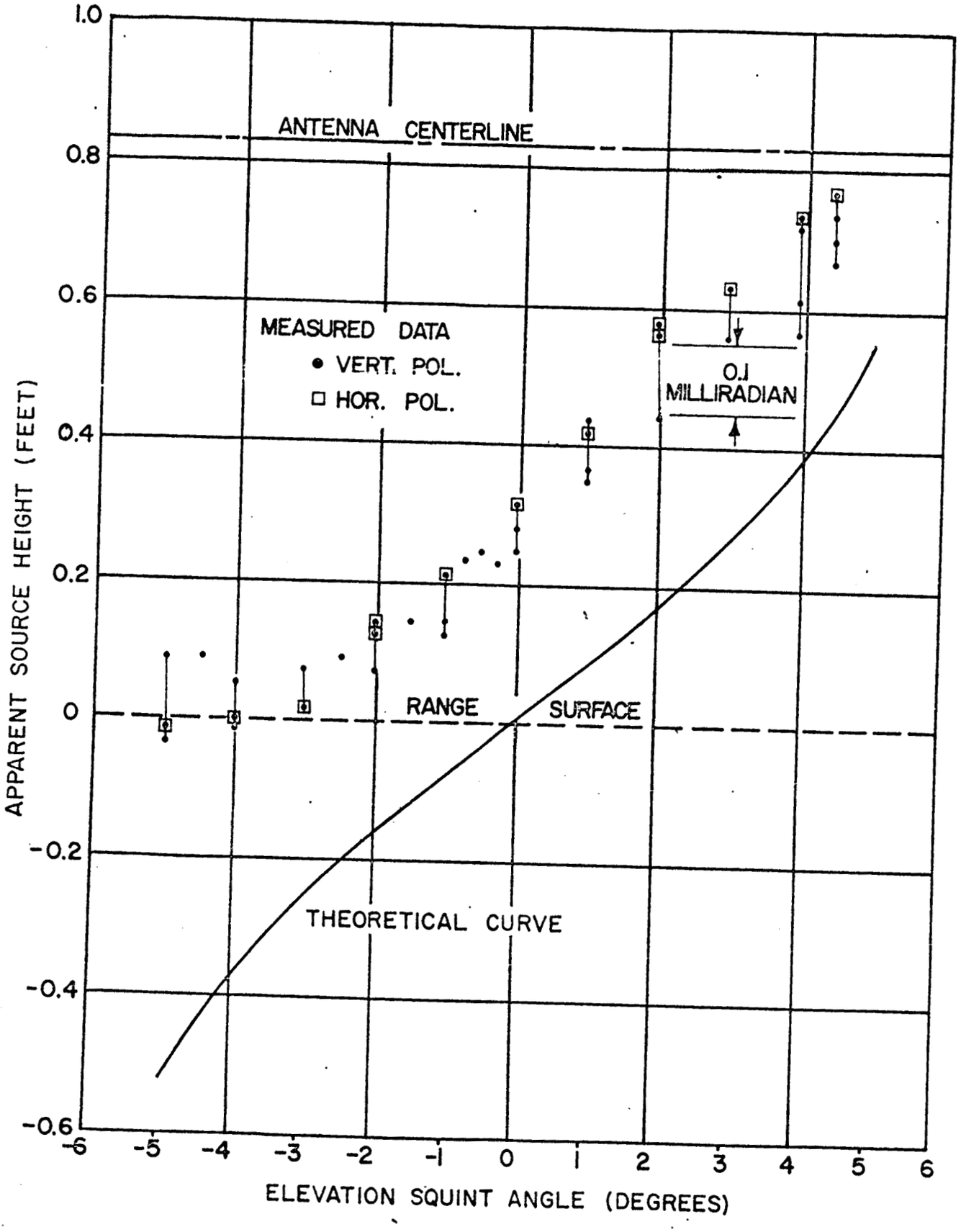

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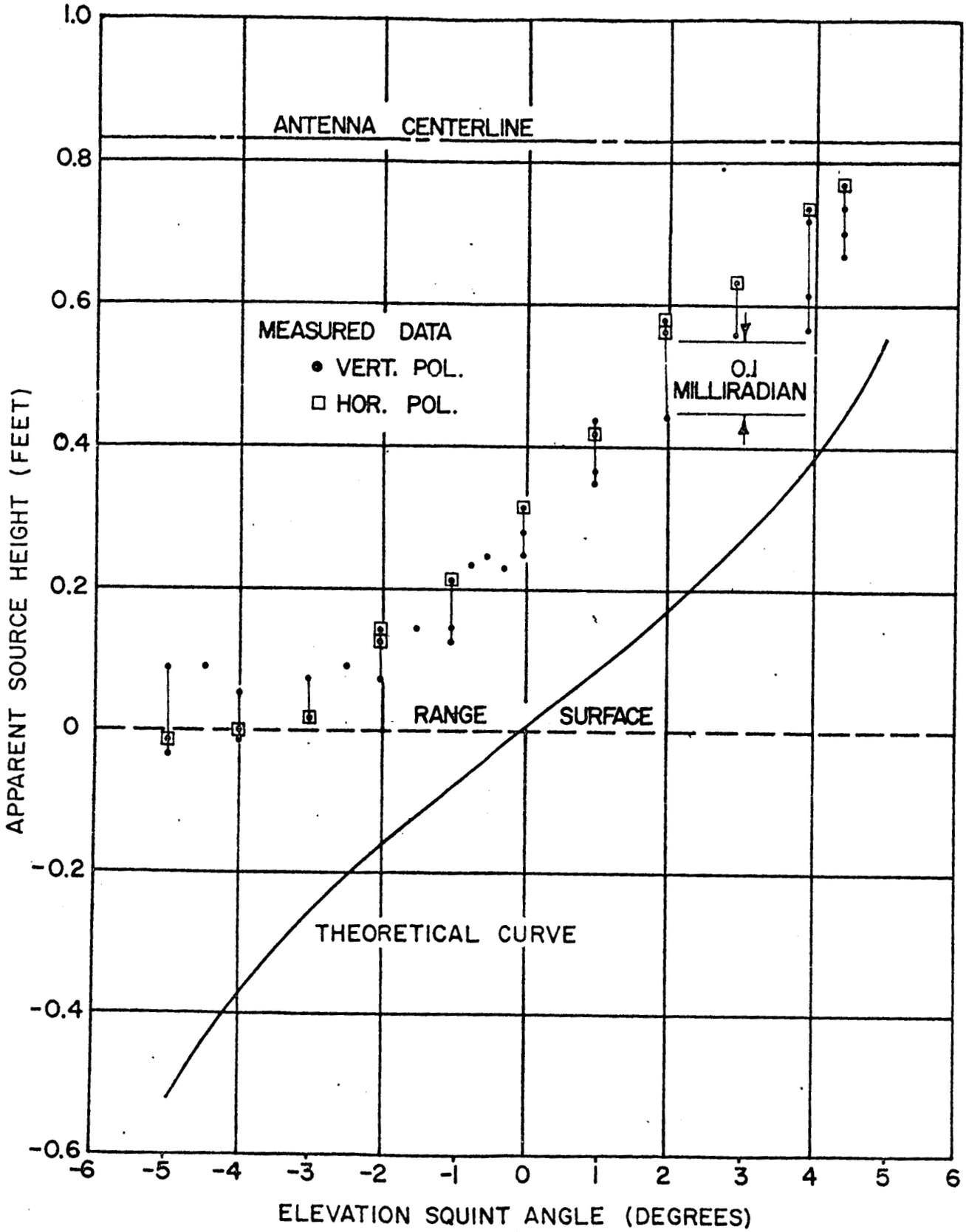

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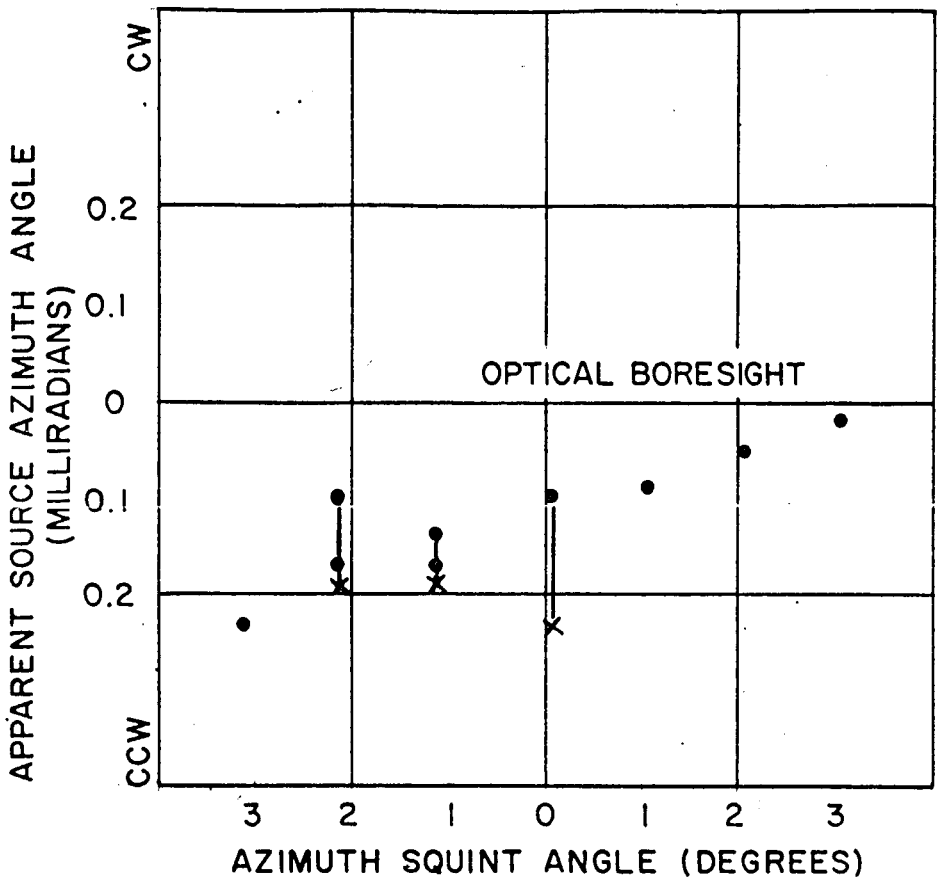


Figure 4.7. Apparent Source Location Versus Azimuth Squint Angle -- Ground-Reflection Mode -- X-Band

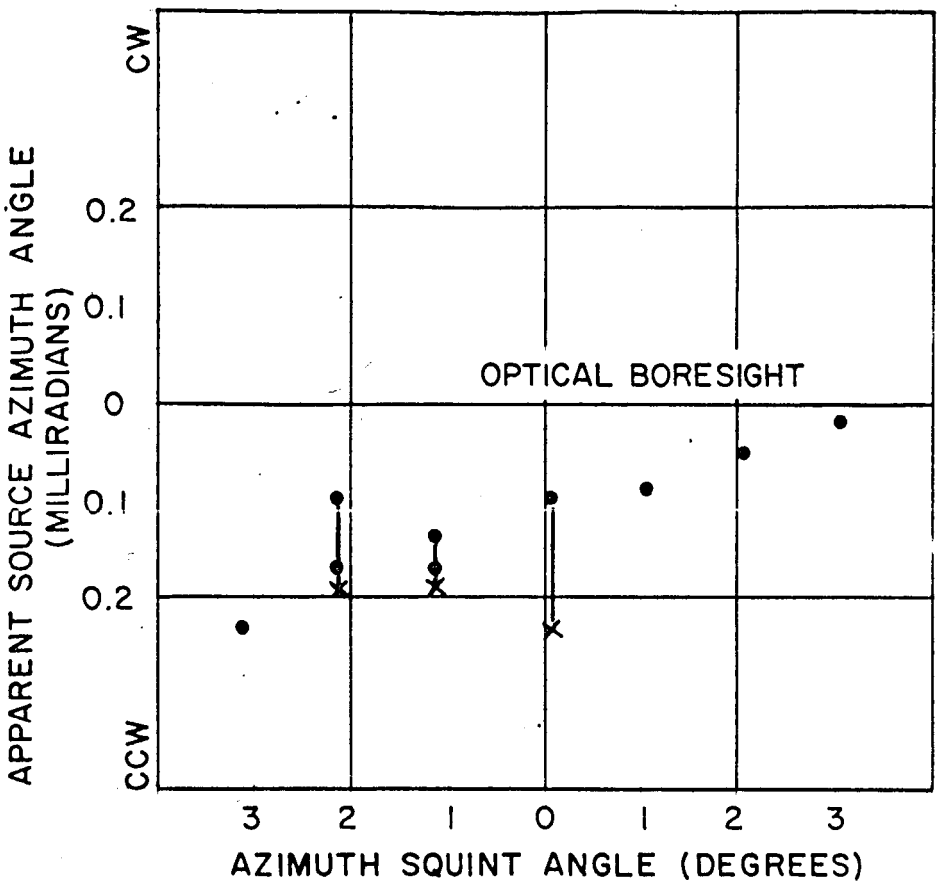
• --- Vertical Polarization

x --- Horizontal Polarization

depends on the focusing of the transmitting antenna. The conclusion which can be drawn from the results shown in Figure 4.7 is that the location of the apparent source of radiation of the transmitting antenna is relatively insensitive to the azimuth squint angle of the transmitting antenna.

4.1.2 Elevated Mode With No Diffraction Fences

A discussion of the aperture-field perturbations which can result from propagation over a smooth reflecting surface in the elevated mode is presented in section A.6. The relatively smooth surface of the MILA range will allow specular reflection of microwave energy, with a reflection coefficient of nearly unity magnitude, for small grazing angles. Suppression of the effects of reflected energy



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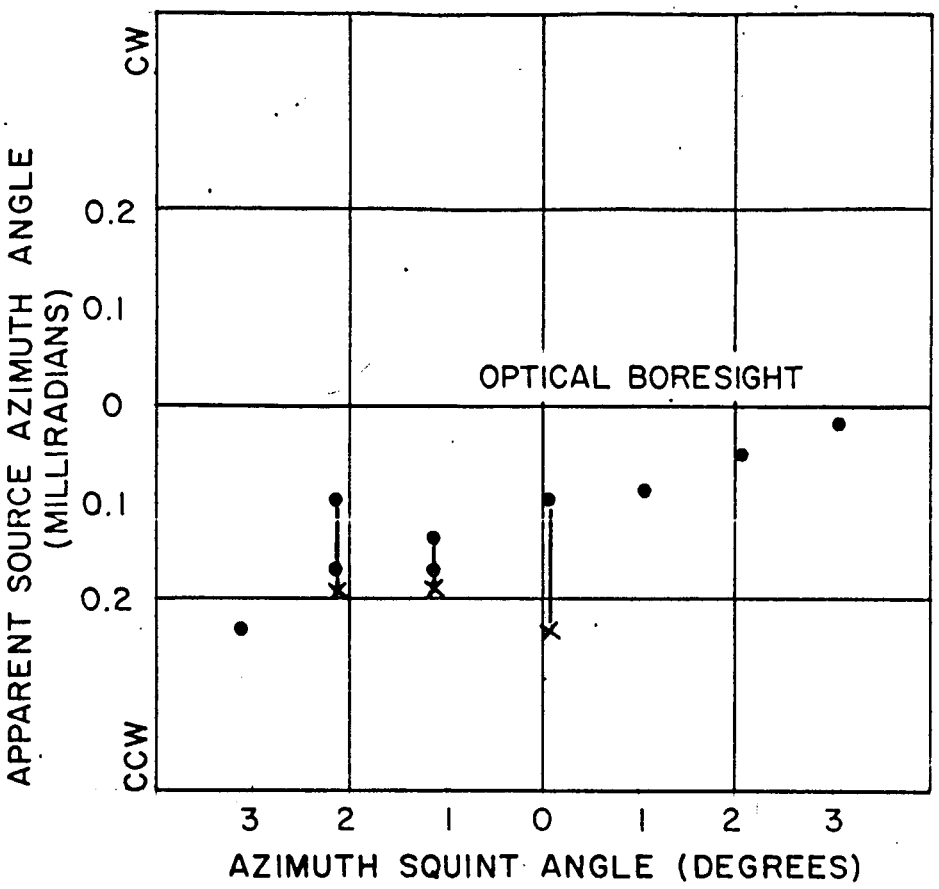

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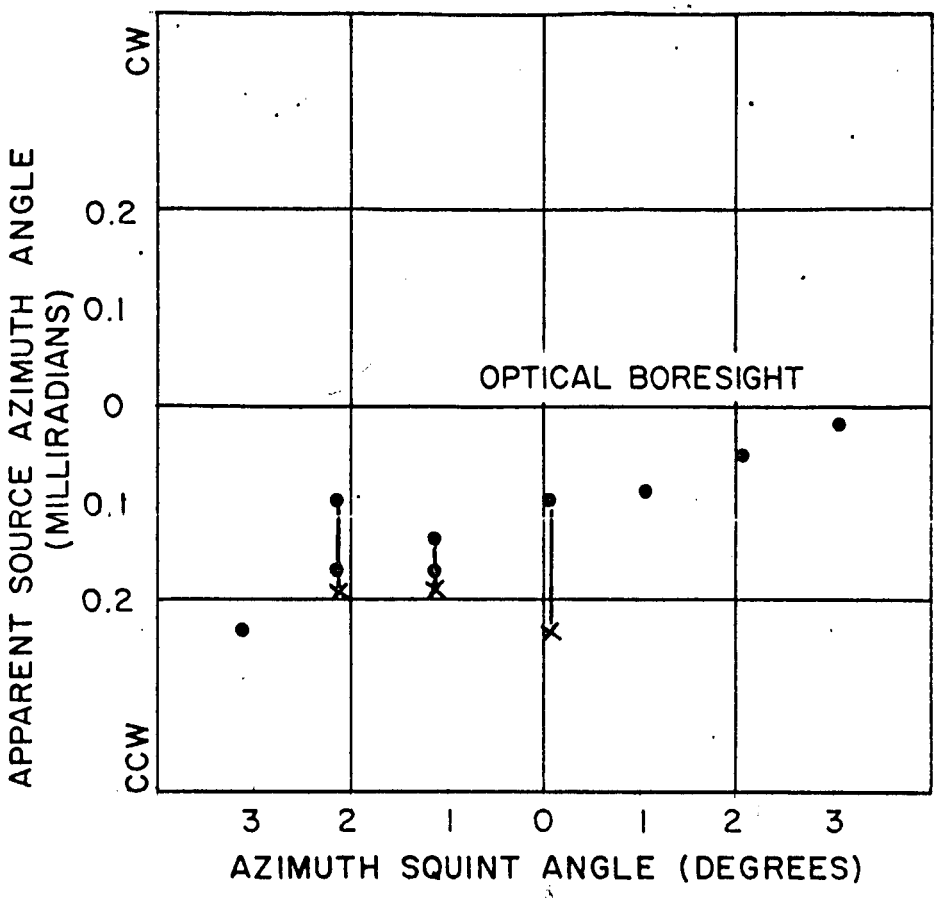

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