

ABSTRACT

This study presents an in-depth knowledge on how the L.O.S. Model is developed and how the Model's algorithm defines the coverage area for respective Antenna. This Model demonstrates as an interactive tool and the ability to evaluate the coverage in real-time in this study to assist interactive network planning. The L.O.S. tool can compute viewshed, which defines areas observable from a particular perspective, and analyze visibility. This feature is very valuable in landscape analysis, scenic evaluation, and visual impact assessments. This data assists in decision-making processes such as choosing surveillance coverage and analysing the impact of new constructions on the surrounding environment.

The L.O.S. tool surpasses the buffer tool in applications that require flexibility in parameters, fast processing. This paper delves into depth of how coverage analysis can be made realistically with L.O.S. tool. The L.O.S. tool is great for geographical analysis, revealing the real life situations within a specified area. Its versatility and application, a must-have tool for decision-making and spatial planning. Continued study and development of the L.O.S. tool has the potential to significantly advance our understanding of visibility analysis and help informed decision-making across a wide variety of disciplines.