

**WEB-BASED APPLICATION FOR RAIN ATTENUATION ESTIMATION ON TKSAT-1 SATELLITE LINKS**

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**ABSTRACT**

The present paper aims to introduce a web-based-application for the calculation of rain attenuation statistics in Bolivia. The calculations developed by the tool are valid for slant path links using the Bolivian satellite TKSat-1 and are based on latest versions of Recommendations provided by the ITU-R. A couple of study cases are discussed by using two different sites in Bolivia: one located in a tropical region with high precipitation levels, and other one located in the Bolivian Andean plateau in the western region of the country. The results obtained show the usefulness of the tool and allow to quantitatively study the attenuation effects caused by rain at different frequency bands, as well as their statistical behavior in an average year.

**Keywords:** Satellite Communications, Rain Attenuation, Atmospheric Propagation, TKSat-1 Satellite.

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