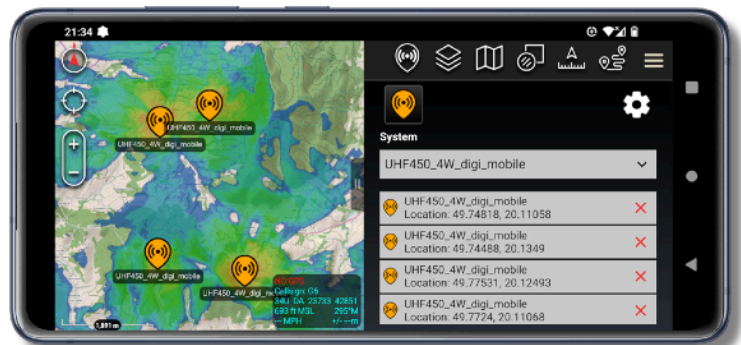


SOOTHSAYER™

A powerful and scalable RF planning server for radio operators *and* engineers.

Accessible

Cross platform interfaces, including ATAK, with system templates for consistent accuracy via an open standards API. Minimal training bill to start planning.



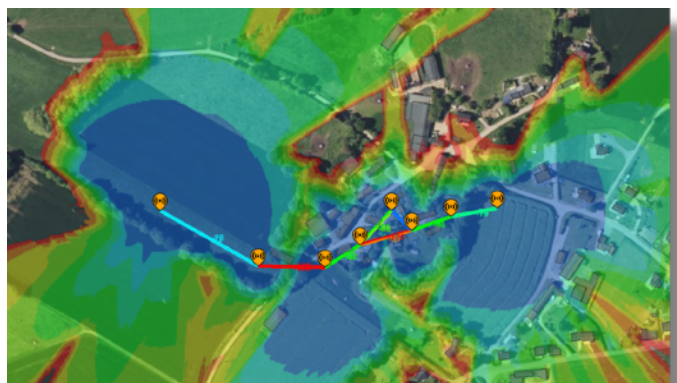
Powerful



GPU accelerated compute capable of serving multiple LAN users concurrently.

- 310 mile radius
- 120,000ft ceiling
- Model 1200 mile networks (Links & coverage)
- Monte Carlo "Best Site Analysis"

Accurate

Supports high resolution LiDAR, fully configurable land-cover data for vegetation, global buildings and custom clutter.



Accurate	<p>Model LiDAR and/or clutter at 1 metre resolution.</p> <p>Define clutter profiles for 18 classes of land cover and user defined materials to simulate seasons, vegetation, and urban developments.</p> <p>Import custom clutter to model obstacles.</p>	
Powerful	<p>With GPU acceleration, model hundreds of nodes across a 1200Mi / 2000km network in one request. Multi-threaded CPU engine for processing thousands of links automatically.</p> 	
Accessible	<p>Use the intuitive web interface from any web browser on your network or run it directly from WinTAK, our Google Earth layer or ATAK plugin.</p>	<ul style="list-style-type: none"> • One server, many clients • Bandwidth efficient API • Edge processing without impacting battery life for EUDs
Secure	<p>Disk encryption at rest Transport encryption Manager and user accounts</p>	<ul style="list-style-type: none"> • AES-XTS 256 disk cipher • TLS 1.3 SSL • SHA2 password hashing
API	<p>Mature developers API, with over 10 years of public testing as CloudRF.com for integration into systems or customer tools with code examples for popular languages and mapping libraries.</p>	<ul style="list-style-type: none"> • Point-to-multipoint • Point-to-Point • Interference • Best Server • Route / Multipoint analysis • Best Site Analysis (GPU)
Interface	<p>Cross platform for tablets, laptops, browsers. CloudRF.com and SOOTHSAYER interfaces are the same to minimise training bill.</p>	<ul style="list-style-type: none"> • 3D web interface • Google Earth interface • ATAK plugin • WinTAK chatbot
Input	<p>Define parameters for the transmitter, feeder, antenna, receiver and local environment. 120,000ft ceiling with a maximum radius of 500km / 310Mi.</p>	<ul style="list-style-type: none"> • Frequency: 2MHz to 90GHz • RF power: 1mW to 1MW • Co-ordinates: DD,DMS,MGRS • Antenna azimuth(s), tilt, gain, front/back • Custom antenna patterns • Tx & Rx gains in dBi
Output	<p>Model uplink and/or downlink for different technologies with custom colour schemas. Define modulation schemes and bit error for digital signals. Export outputs to open GIS formats for third party viewers.</p>	<ul style="list-style-type: none"> • dB, SNR, dBm, RSRP, dBμV • Bit Error Rate & Modulation • Min resolution: 1m/3ft • Profile & Fresnel zone • Area efficiency & % • PNG, KML, KMZ, SHP, GeoTIFF, URL
Models	<p>Empirical and deterministic. Environmental contexts and reliability margin. Line of sight, knife edge and multi-knife edge diffraction (ITM). Supports VHF / UHF / SHF / EHF.</p>	<ul style="list-style-type: none"> • ITM / Longley Rice (VHF / UHF) • ITU-R P.525 (Reference) • ITU-R P.529 (VHF / UHF) • Okumura-Hata (Cellular) • COST231-Hata (Cellular) • Egli (VHF / UHF) • Stanford Interim (Microwave)