This months' software updates for HTZ include updates to the user interface, P2P (MW) and associated propagation model, mobile 4G/5G and interference calculations. All features are listed below. Information about all these updates are available in our Key Features demo. This 17-minute clip provides a step-by-step look at these features and functions and their application.

The latest release of HTZ v.23.2.5 is available for download on the portal.

INTERFACE

MapBox online maps new URL. NB: limited access.

Project reserved memory reduced.

Site properties: Legend bar and profile font size now adjustable.

Top bar resized.

Menu: Map/Filter/Result modification... modify result values according to clutter.

Add .MSI: now supports antenna orientation (Azimuth/Tilt).

NB: tilt is given - negative toward the ground, positive toward the sky.

CARTOGRAPHY

Conversion of USA Lidar (1m) dataset (ongoing) – the release of this data will support the growth and development of smart cities, dynamic spectrum sharing and emerging technologies. On completion, the dataset will provide 70% coverage for the USA.

Poland high-resolution dataset creation and conversion (ongoing)

DSM-DTM heights... and XYZ - Lidar... new option: this feature enables user to modify clutter vegetation from XYZ (codes: 5,8,14) modify clutter vegetation code from delta DSM (or Lidar) - terrain elevation.

New Lidar format (.PTCx), binary version of XYZC (TXT).

Geocoding XYZ (Lidar), option memory: method adapted if insufficient memory is available.

LAZ to TXT conversion (if XYZC - all 0), header added. The header speeds up the import in the geocoding XYZ function (in fast mode / no memory).

Map data converter: Check .IC2/.GEO headers (create a report)

Lidar: new option to create DTM from Lidar data (XYZC) and new dialog box.

New US projection code: NAD_1983_HARN_StatePlane_Alabama_East_FIPS_0101

NB: available in meters and feet. Add 'F' to specify unit in feet, example: SPL_PANF

P2P / PROPAGATION

Import generic ascii MW: to modify MW on map option added.

Tropo links: new Path budget (profile module).

MW parameters / tropo tab

New behavior: if Diversity order = 2 or 4, the Diversity gain will be computed and the path budget margin will be increased according to the Percentage of Time (model dialog box):

Margin = Flat margin - Rain attenuation + Diversity Gain - Squint loss

Tropo diversity gain tables added (for dual and quadruple diversity order). MW links only:

Diversity gain = Diversity gain from tables - Squint loss

Path budget tropo: Orient tropo link antennas added (modifies antenna tilts).

Trop scattering propagation: Tropo button added (to set model parameters to compute tropo propagation only).

Tropo model 617-5 added to Propagation prediction techniques and data required for the design of trans-horizon radio-relay systems.

MOBILE

4G/5G uplink throughput: nb RB UE replaced by UE overhead (percentage).

Menu: Subscriber / Point to point / 4G/5G connectivity report...:

if report all is not checked, parenting is performed. In that case, a Station load report is added at the end of the listing.

Array pattern: new dialog box.

INTERFERENCE CALCULATIONS

TS/RIF: now split into three folders (TSR, TSR/HCM and TSR/ETSI), install required.

Preference dialog box allows user to switch between TSR folders.