ADVANCED SPECTRUM SOFTWARE

New features highlight
HTZ Communications / HTZ Warfare
V. 23.1.3 / 23.1.4

30 YEARS OF EXPERIENCE

March 2021

www.atdi-group.com

HTZ Communications & HTZ Warfare

23/02/2021 V23.1.3

= New MIMO settings: Now the antenna gain set in the station parameters must be the Nominal gain + the MIMO gain (for RSRP, RSRQ and SNIR calculations).

25/02/2021 V23.1.4

Smart antenna discrimination option is renamed "Smart antenna rejection“

1 - 4G/5G stations
New MIMO settings: Now the antenna gain must be Nominal gain + MIMO gain in station parameters for RSRP, RSRQ and SNIR calculation
Smart antenna: Smart antenna discrimination option renamed "Smart antenna rejection"
2 - Array antenna
Station parameters / Pattern: mode 2D pattern option Array element pattern (array model)... added
build an antenna pattern from number of arrays (from single element) and beams.
G(theta) = GE(theta) + GA(theta)
with G= pattern gain, GE=element gain, GA=Array factor
= Antenna array beamforming: new option in "Preferences" (2D array antenna phase (lambda/2)) if ON modify pattern according to the array factor.
Note: for spacing between elements = one half of the signal wavelength
3 - Multiport antenna
= Click station / option / Multiport antenna (H/V): if the station is linked, create a multiport antenna from initial pattern
If beamforming antenna and Beam step H or V > 0, antenna is built according to the step(s)
= Station parameters / Pattern: mode 2D pattern option Multiport/Multibeam antenna from links (H/V)... added
4 - New Antios .EXE (not changed but seems was not correctly added in the install

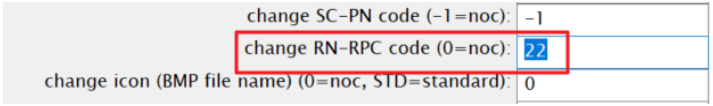
Demo video is available: https://drive.google.com/file/d/1oETGsI6x_EEzfIF4XVscbauRLBfv0BUa/view?usp=sharing

HTZ Communications & HTZ Warfare

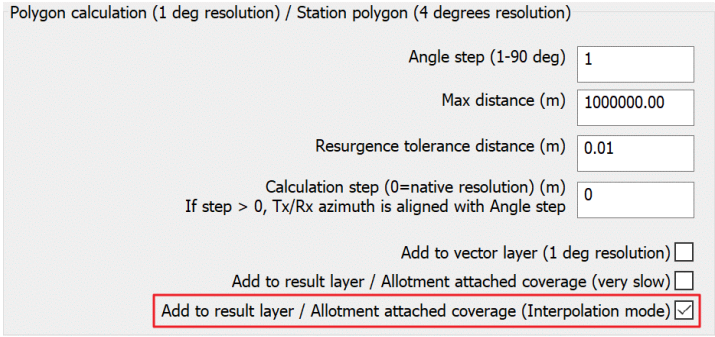
- New Broadcast features (Coordination):

OBJECT/Change general parameters…

The "change RN-RPC code" option has been added. It will change the "RN-RPC" parameter of each activated station (Site tab). This code is made of 2 digits: the first one is corresponding to the RN configuration and the second one to the RPC configuration (GE06 agreement).
That option will now also update all the allotment parameters according to the associated RN-RPC configuration.



SPECTRUM/Threshold limited polygon calculation…
STATION POPUP MENU/COORDINATION/
Threshold limited polygon calculation…
The "Add to result layer / Allotment attached coverage (Interpolation mode)" option bas been added. If checked, the coverage attached to the allotment will be interpolated between the rays already computed. It is less accurate than the "Add to result layer / Allotment attached coverage (very slow)" option but that requires more computing time.



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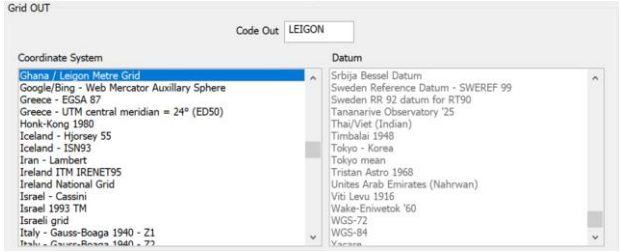
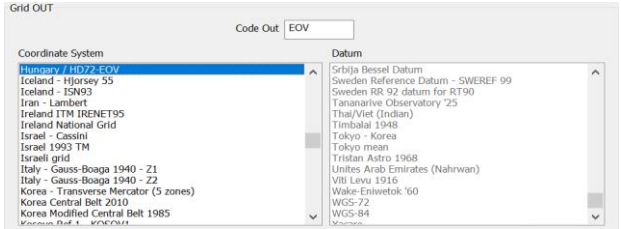
- New projection systems and Geoportals added:

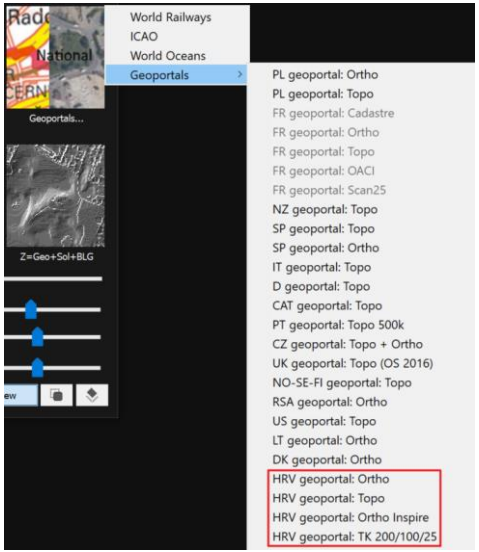
TOOLS/Cartographic conversion…
The "Ghana / Legion Metre Grid" projection system has been added (LEIGON grid code).



The "Hungary / HD72-EOV" projection system and datum (Hungarian Datum 1972) have been added (EOV grid code).



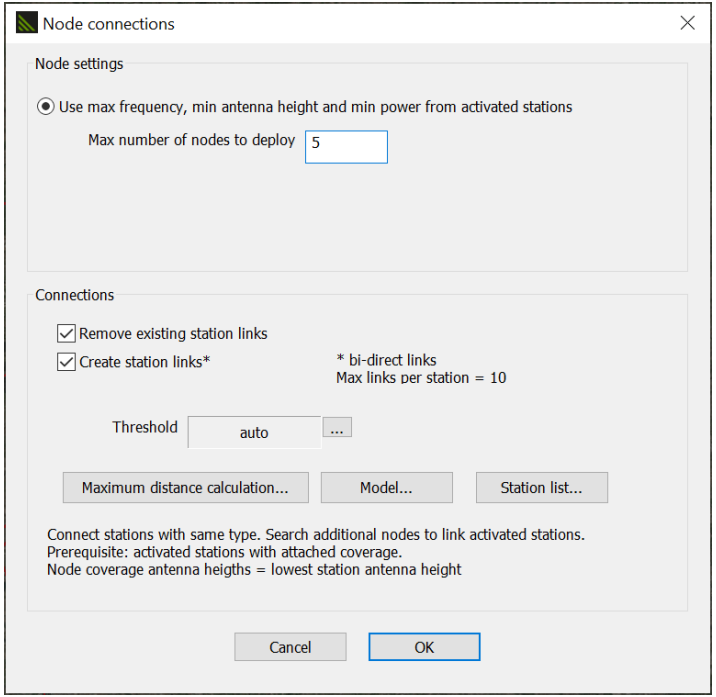
Additional Map layer (<F4>)
The following Croatian geoportals have been added: Ortho Inspire and TK 200/100/25. TK200 is considered from zoom levels 1 to 11, TK100 from zoom levels 12 to 15 and TK25 from zoom levels 16 to 21.



HTZ Warfare V.23.1.3

Polygon tools / Search nodes... (WARFARE ONLY): This function computes all the connections between activated stations (field strength - directional antenna), groups stations by clusters and find best node locations (limited to max nodes - able to connect all existing clusters). Nodes are deployed inside polygons. Activated stations on the map must have an attached coverage.
.TRX, station antenna height loaded in this function.

NEW automation action code: 1025
Import Station on map from SQL database linked, run Polygon tools / Search nodes and export results to a CSV file (vector polygons needed to deploy nodes)
CSV format: From Tx #;Callsign;Longitude;Latitude;To Rx #;Callsign;Longitude;Latitude <CR>
if the file NODES.TRX is located in Exchange Folder, Nodes to deploy will take parameters from NODES.TRX



Thank You

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