

Antenna Design Software

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Why Use Software ?

- λ Widespread use of powerful computers
- λ Use of efficient optimising programs
- λ Try before you cut metal
- λ Better designs than commercial antennas
- λ Free Software !!!!!!!

Software

λ NEC

- NUMERICAL ELECTROMAGNETICS CODE (NEC-2D)
- Powerful -but difficult to use in the raw

λ YAGIU112

- Old optimiser design G8WRB

λ Yagimax, Yagi41, Yaginec, Quick Yagi4

- Similar types of optimisers

λ NF

- Brian Bestley K6STI - Variant NF 6.5 is a stripped-down version of AO 6.5 Antenna Analysis software

NEC

```
GW 1, 11, 0.00000, 1.04676, 0.00000, 0.00000,-1.04676, 0.00000, 0.0063500
GW 2, 11, 0.74869, 0.93064, 0.00000, 0.74869,-0.93064, 0.00000, 0.0063500
GW 3, 11, 1.00184, 0.97297, 0.00000, 1.00184,-0.97297, 0.00000, 0.0063500
GW 4, 11, 2.07972, 0.96063, 0.00000, 2.07972,-0.96063, 0.00000, 0.0063500
GW 5, 11, 3.70691, 0.93755, 0.00000, 3.70691,-0.93755, 0.00000, 0.0063500
GW 6, 11, 5.46822, 0.92528, 0.00000, 5.46822,-0.92528, 0.00000, 0.0063500
GW 7, 11, 7.25749, 0.92068, 0.00000, 7.25749,-0.92068, 0.00000, 0.0063500
GW 8, 11, 8.94062, 0.93678, 0.00000, 8.94062,-0.93678, 0.00000, 0.0063500
GW 9, 11,10.78394, 0.93678, 0.00000,10.78394,-0.93678, 0.00000, 0.0063500
GW 10, 11,12.88483, 0.86688, 0.00000,12.88483,-0.86688, 0.00000, 0.0063500
GW 11, 11,14.83151, 0.91486, 0.00000,14.83151,-0.91486, 0.00000, 0.0063500
GE 0
FR 0 1 0 0 6.98E+01 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
EX 0 2 5 0 1.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
RP 0 120 1 1001 90.00E+00 00.00E+00 3.00E+00 0.00E+00 1.00E+04 0.00E+00
EN
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More Software

λ YGO

– Yagi Genetic Optimiser

- Starts with a number design trees
- Survival of the fittest
- Many solutions
- Takes a long time to run

Matching

