

WABE Subcarrier Interference - Analog vs IBOC Hybrid

WABE, CH 211, 90.1 MHz

Contours = 54 and 60 dBu

BLED19830330AD

Latitude: 33-48-18 N

Longitude: 084-08-40 W

Power: 96.00 kW

AMSL Height: 576.0 m

HAAT= 296 m

Elevation: 470.15 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0040

Dielec Const: 4.0

Refractivity: 315.0

Receiver Ht AG: 5.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 4,130,474

area = 17,507.7 sq. km

Terrain Blockage loss

pop. = 22,771

area = 52.5 sq. km

25 dB WQP SNR

Analog Int. loss

pop. = 154,886

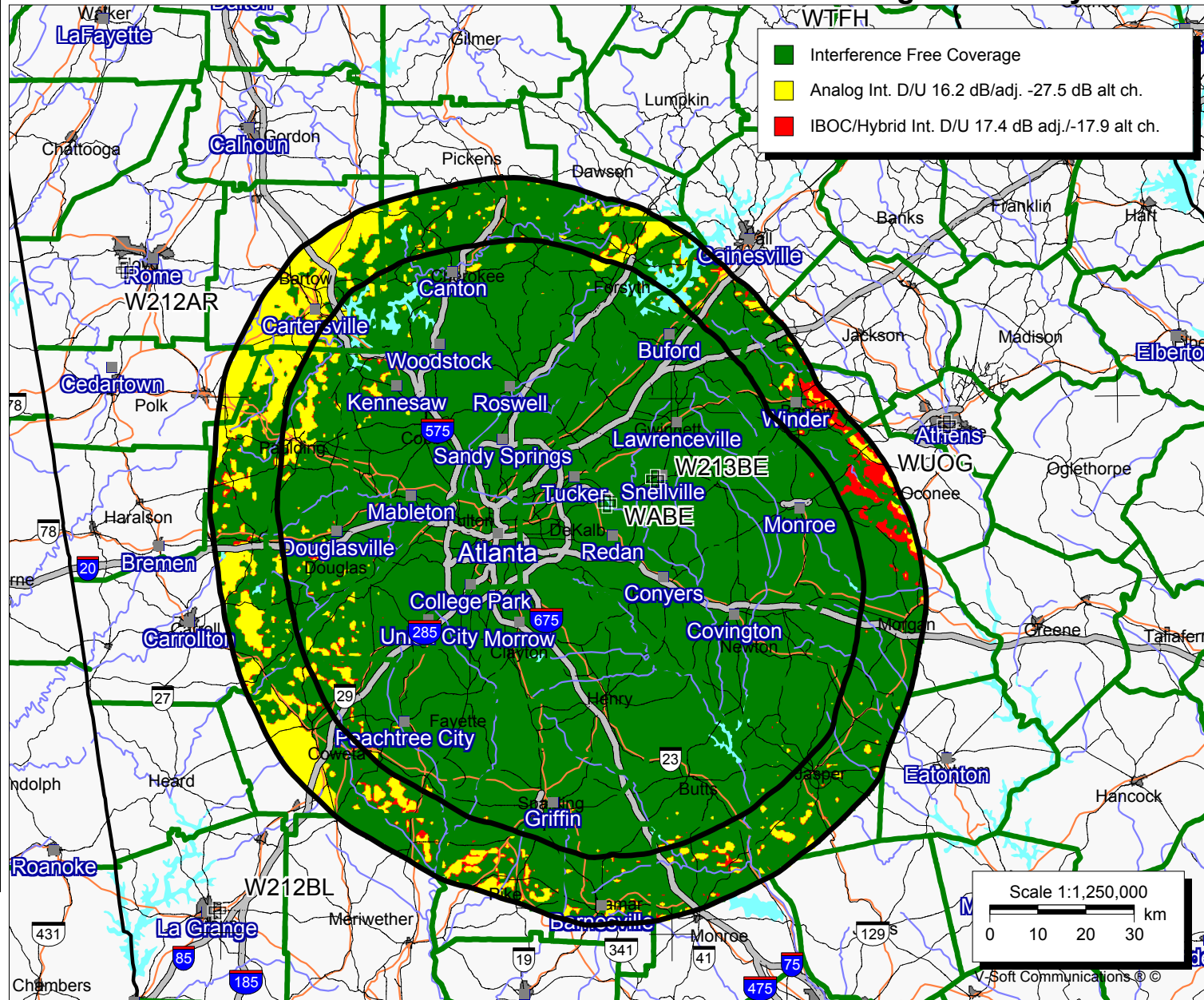
area = 1,894.4 sq. km

Hybrid IBOC Int. loss

pop. = 22,340

area = 346.2 sq. km

Int Free Pop. % = 0.56 %



WLRNFM Subcarrier Interference - Analog vs IBOC Hybrid

WLRNFM, CH 217, 91.3 MHz

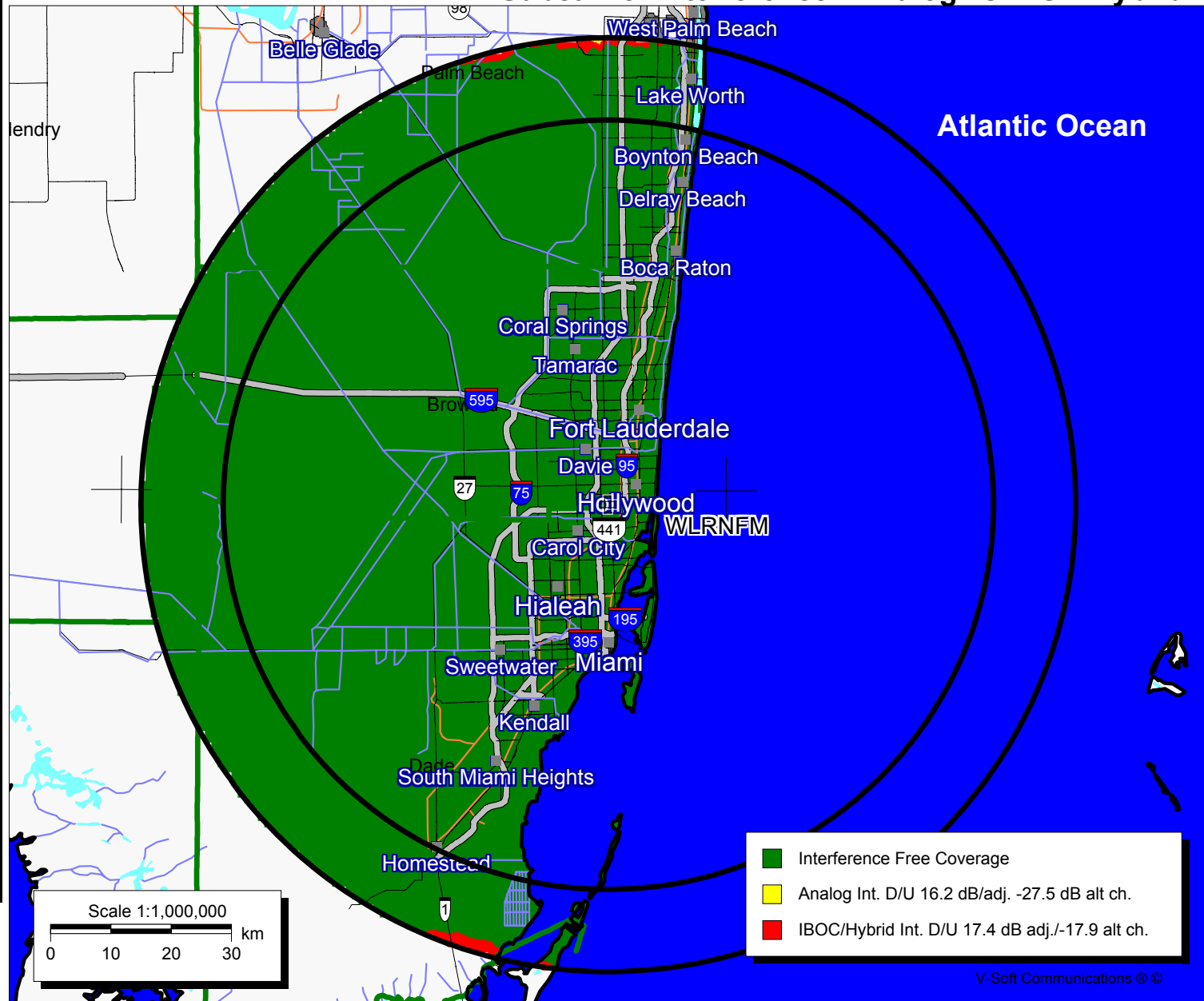
Contours = 60 & 54 dBu
 BLED19850214KP
 Latitude: 25-58-48 N
 Longitude: 080-11-47 W
 Power: 100.00 kW
 AMSL Height: 201.0 m
 HAAT= 285 m
 Elevation: 3.0 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.0080
 Dielec Const: 8.0
 Refractivity: 330.0
 Receiver Ht AG: 5.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 4,590,285
 area = 18,776.8 sq. km
 Terrain Blockage loss
 pop. = 0
 area = 0 sq. km

25 dB WQP SNR

Analog Int. loss
 pop. = 155
 area = 3.3 sq. km
 Hybrid IBOC Int. loss
 pop. = 19,751
 area = 75.5 sq. km
 Int Free Pop. % = 0.43 %



KUOW Subcarrier Interference - Analog vs IBOC Hybrid

KUOW CH 235, 94.9 MHz

Contours = 54 & 60 dBu

BLH19850715KJ

Latitude: 47-36-58 N

Longitude: 122-18-28 W

Power: 100.00 kW

AMSL Height: 262.0 m

HAAT= 224 m

Elevation: 121.27 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0020

Dielec Const: 2.0

Refractivity: 315.0

Receiver Ht AG: 5.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 3,524,585

area = 19,906 sq. km

Terrain Blockage loss

pop. = 24,439

area = 174 sq. km

25 dB WQP SNR

Analog Interference loss

pop. = 137,853

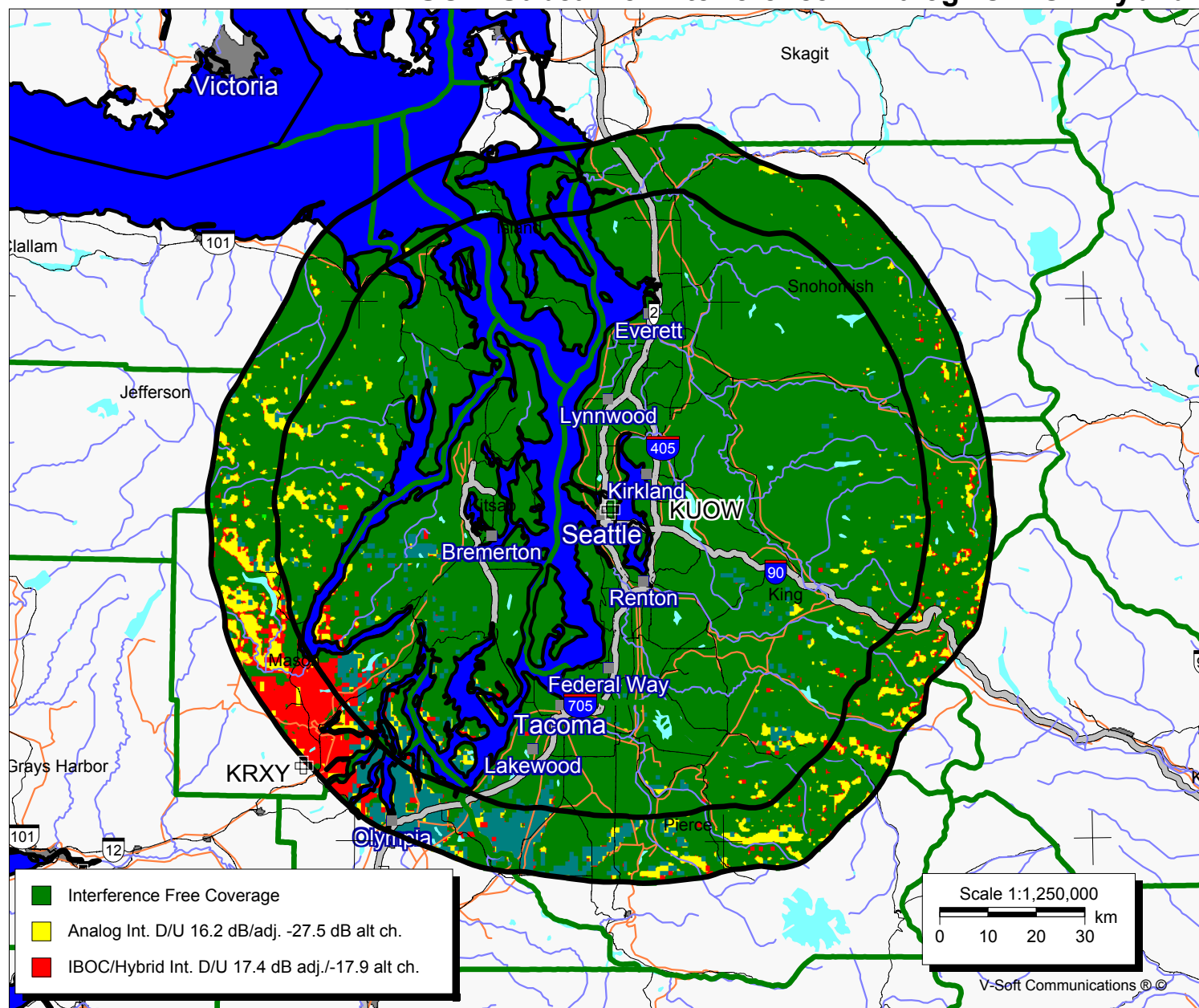
area = 4,440 sq. km

Hybrid IBOC Interference loss

pop. = 27,796

area = 321 sq. km

Int Free Pop Percent = .83%



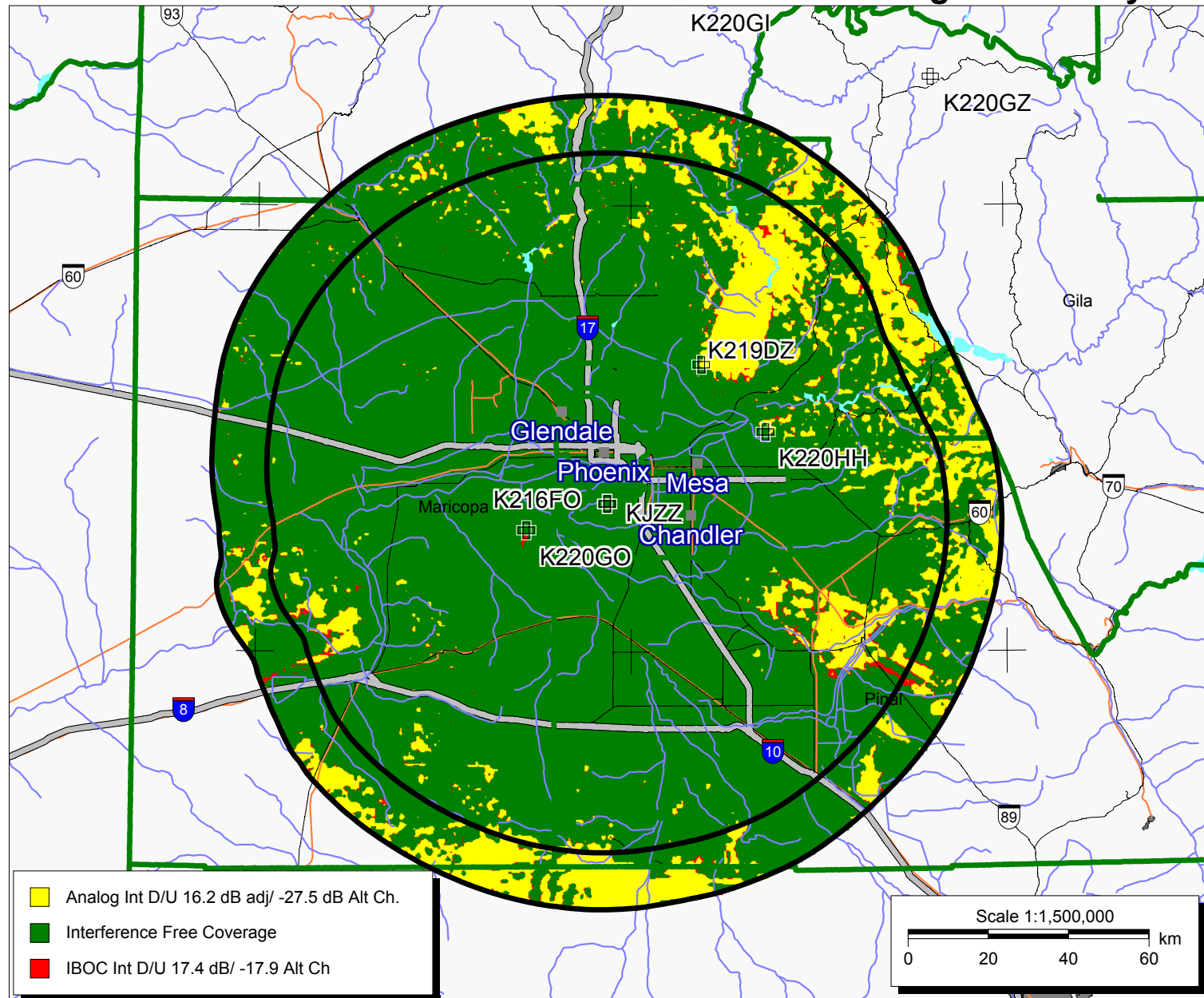
KJZZ Subcarrier-Interference - Analog vs IBOC Hybrid

KJZZ, CH 218, 91.5 MHz

Contours= 60 & 54 dBu
 BLED19890728KA
 Latitude: 33-19-58 N
 Longitude: 112-03-53 W
 Power: 100.00 kW
 AMSL Height: 856.0 m
 HAAT= 490 M
 Elevation: 728.61 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.008
 Dielec Const: 8.0
 Refractivity: 300.0
 Receiver Ht AG: 5.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 3,233,062
 area = 31,305.9 sq. km
 Terrain Blockage loss
 pop. = 1,721
 area = 1,308.2 sq. km
 Analog Int. loss
 25 dB WQP SNR
 pop. = 24,551
 area = 6,742.9 sq. km
 Hybrid IBOC Int. loss
 pop. = 8,597
 area = 258 sq. km
 Int Free Pop. %= 0.26%



KNOWFM CH 216 91.1 MHz

Contours= 60 and 54 dBu

BMLED19940420KA

Latitude: 45-03-44 N

Longitude: 093-08-21 W

Power: 100.00 kW

AMSL Height: 677.0 m

HAAT= 400 m

Elevation: 304.54 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0150

Dielec Const: 15.0

Refractivity: 310.0

Receiver Ht AG: 5.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 3,199,550

area = 27,327.2 sq. km

Terrain Blockage loss

pop. = 9,865

area = 65.1 sq. km

25 dB WQP SNR

Analog Int. loss

pop. = 81,919

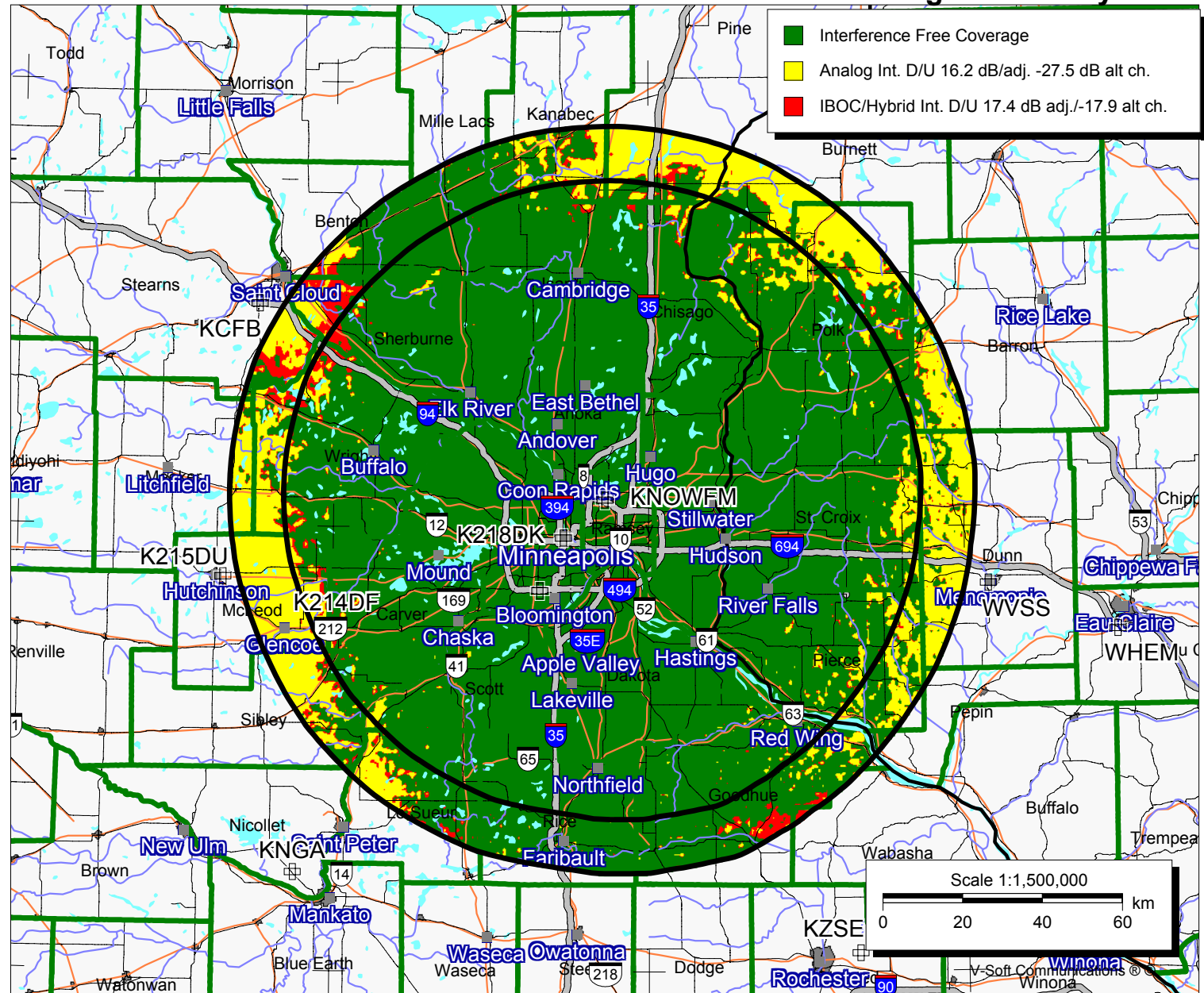
area = 4,408.9 sq. km

Hybrid IBOC Int. loss

pop. = 18,546

area = 829.5 sq. km

Int Free Pop. % = 0.59 %

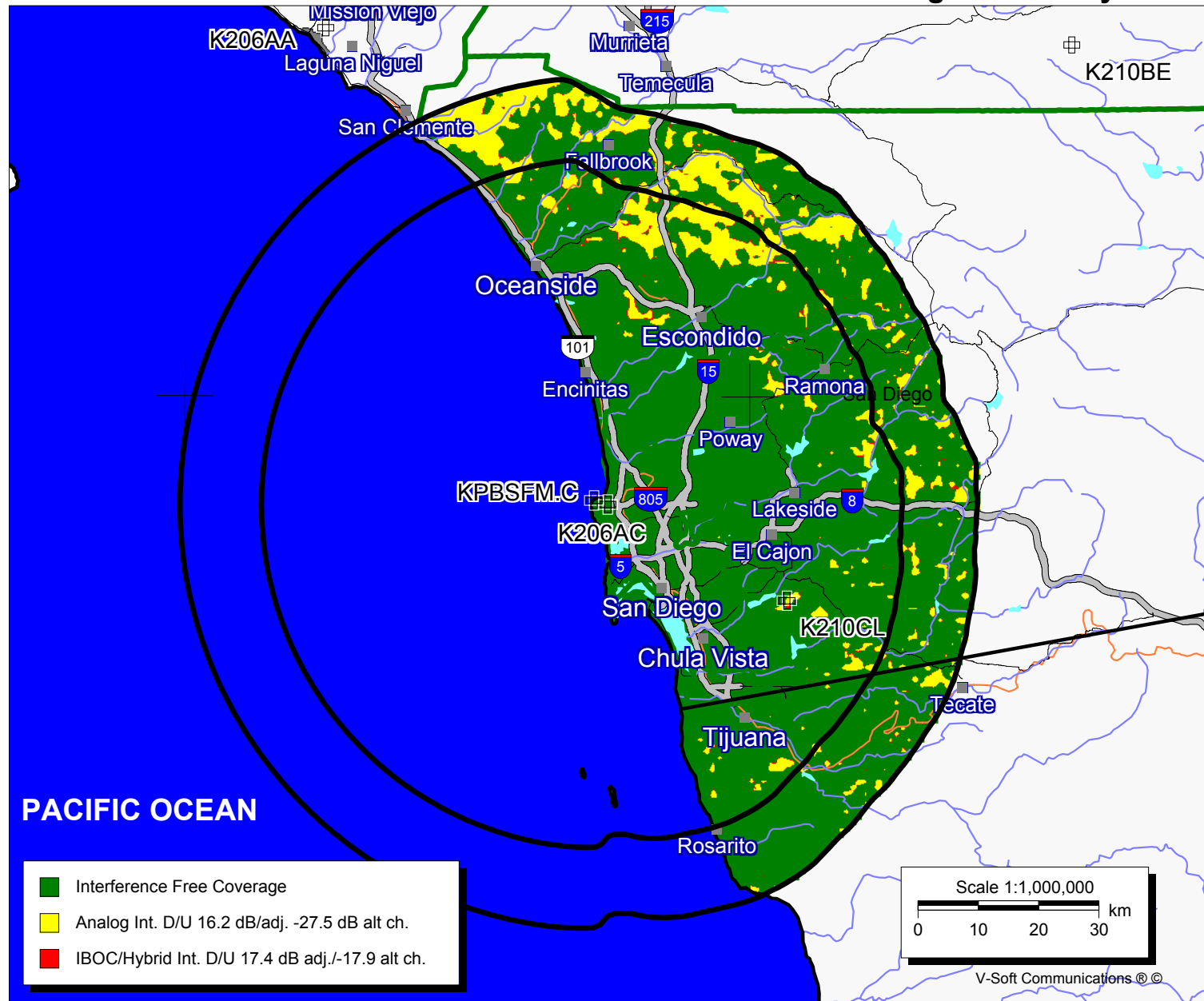
KNOW Subcarrier Interference - Analog vs IBOC Hybrid

Copntours = 60 and 54 dBu
 BPED19970211IA -CP
 Latitude: 32-50-24 N
 Longitude: 117-15-06 W
 Power: 26.00 kW
 AMSL Height: 276.0 m
 HAAT = 206 m
 Elevation: 186.89 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.0150
 Dielec Const: 15.0
 Refractivity: 315.0
 Receiver Ht AG: 5.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

54-dBu Coverage Area:
 pop. = 2,798,794
 area = 14,282.9 sq. km
 Terrain Blockage loss
 pop. = 17,634
 area = 42.0 sq. km

25 dB WQP SNR
 Analog Int. loss
 pop. = 54,857
 area = 3,748.5 sq. km
 Hybrid IBOC Int. loss
 pop. = 16,661
 area = 707.7 sq. km
 Int Free Pop. % = 0.61%

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WDUQ Subcarrier Interference - Analog vs IBOC Hybrid

WDUQ, CH 213, 90.5 MHz

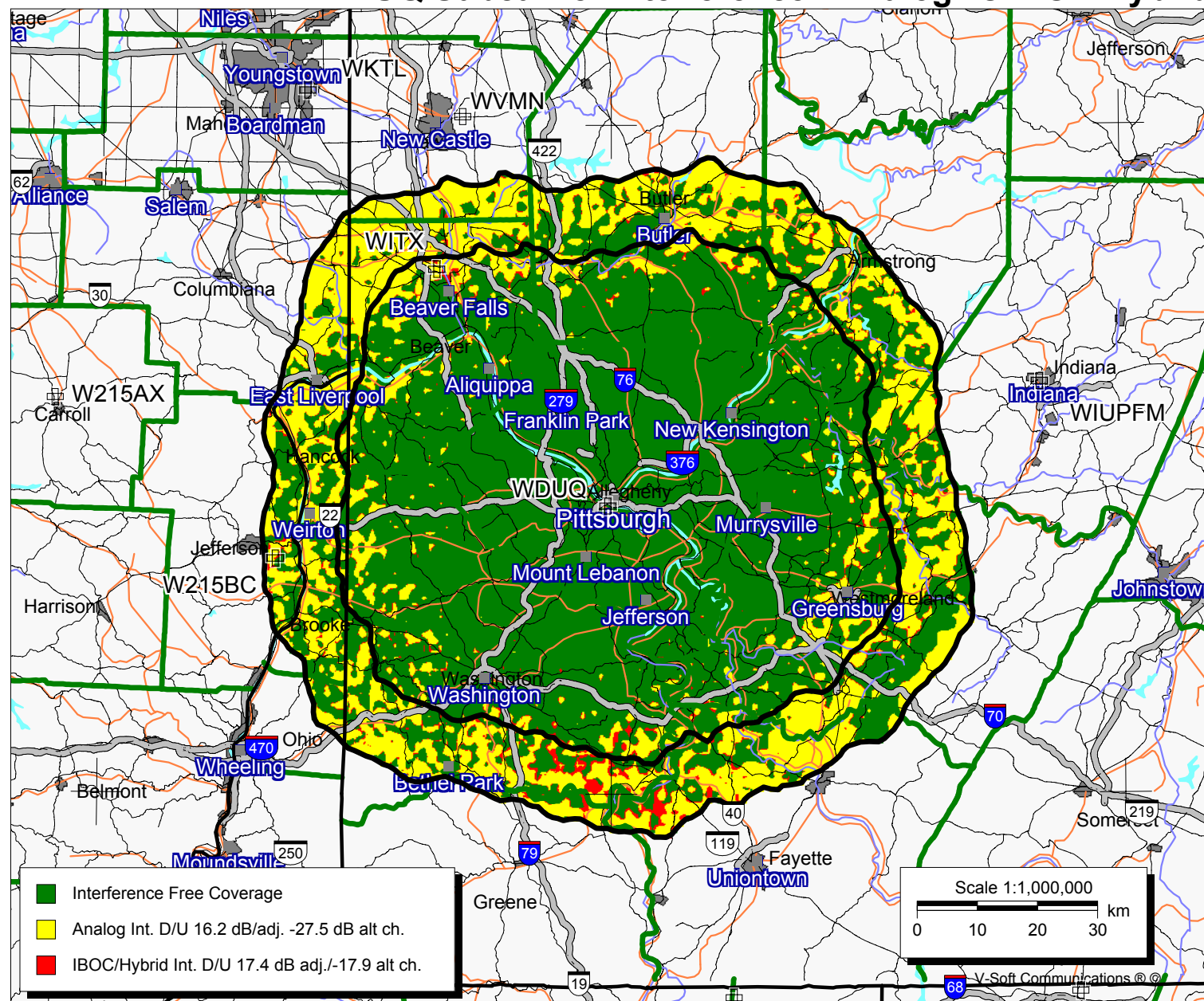
Contours = 54 & 60 dBu
 BLED19960924KC
 Latitude: 40-25-52 N
 Longitude: 080-00-26 W
 Power: 25.00 kW
 AMSL Height: 455.0 m
 HAAT= 146 m
 Elevation: 313.84 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.0020
 Dielec Const: 2.0
 Refractivity: 310.0
 Receiver Ht AG: 5.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 2,394,578
 area = 10,534.3 sq. km
 Terrain Blockage loss
 pop. = 76,069
 area = 29.8 sq. km

25 dB WQP SNR

Analog Int. loss
 pop. = 317,584
 area = 3.259 sq. km
 Hybrid IBOC Int. loss
 pop. = 42,189
 area = 287.7 sq. km
 Int Free Pop. % = 2.03%



WVTF Subcarrier Interference - Analog vs IBOC Hybrid

WVTF, CH206, 89.1 MHz

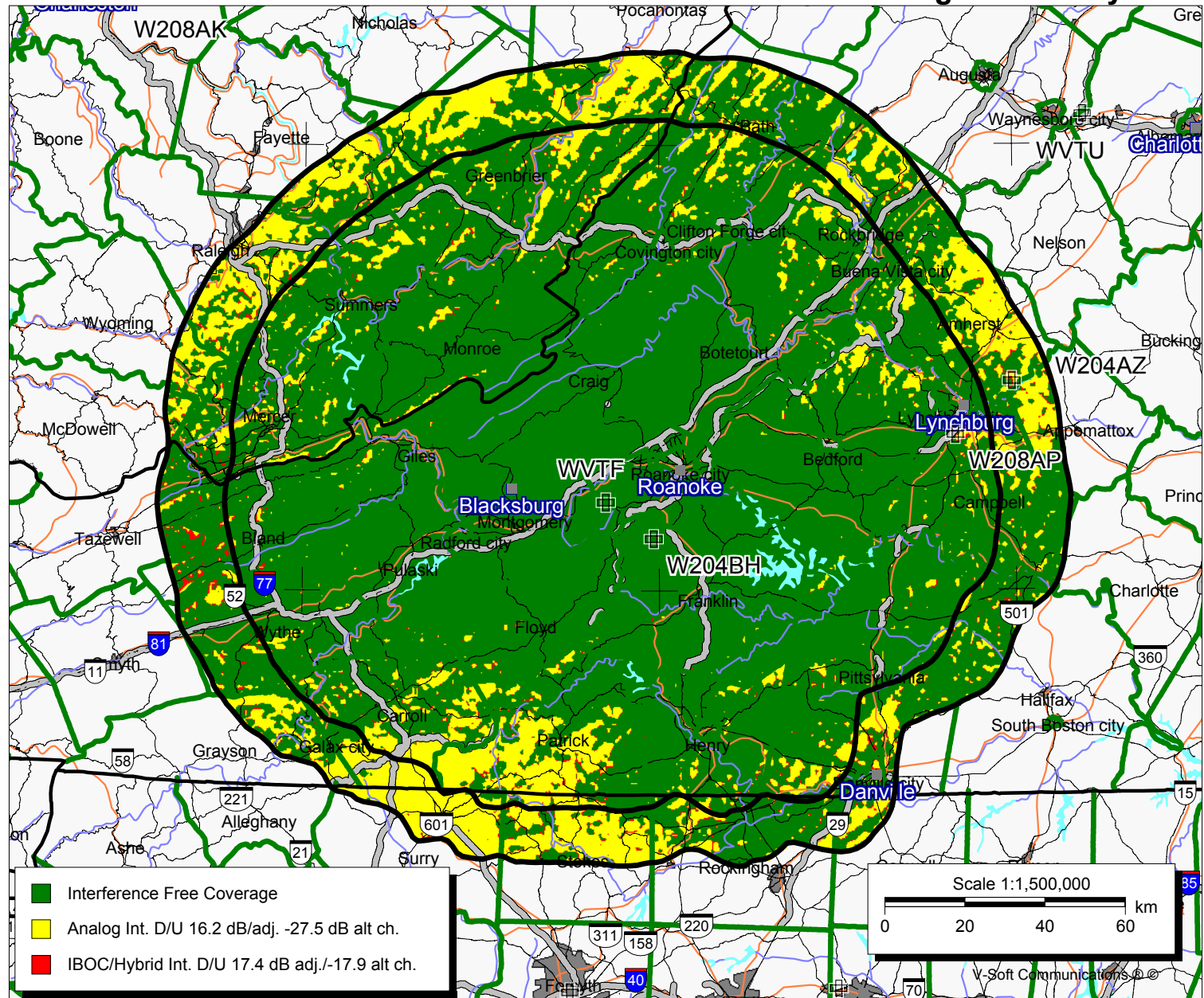
Contours = 60 & 54 dBu
 BLED19931124KC
 Latitude: 37-11-56 N
 Longitude: 080-09-02 W
 Power: 100.00 kW
 AMSL Height: 1187.0 m
 HAAT = 600 m
 Elevation: 1068.38 m
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: Longley/Rice
 Climate: Cont temperate
 Conductivity: 0.0020
 Dielec Const: 2.0
 Refractivity: 312.0
 Receiver Ht AG: 5.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 1,296,791
 area = 35,970.4 sq. km
 Terrain Blockage loss
 pop. = 103,878
 area = 600.9 sq. km

25 dB WQP SNR

Analog Int. loss
 pop. = 233,396
 area = 8,485.2 sq. km
 Hybrid IBOC Int. loss
 pop. = 15,300
 area = 401.5 sq. km
 Int Free Pop. % = 1.44%



KHKE Subcarrier Interference - Analog vs IBOC Hybrid

KHKE CH 208, 89.5 MHz

Contours = 60 & 54 dBu

BLED19971014KH

Latitude: 42-23-55 N

Longitude: 092-19-34 W

Power: 10.00 kW

AMSL Height: 402.0 m

HAAT = 127 m

Elevation: 285.02 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0080

Dielec Const: 15.0

Refractivity: 311.0

Receiver Ht AG: 5.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 209,270

area = 6,813.0 sq. km

Terrain Blockage loss

pop. = 10

area = 0.01 sq. km

25 dB WQP SNR:

Analog Interference loss

pop. = 18,340

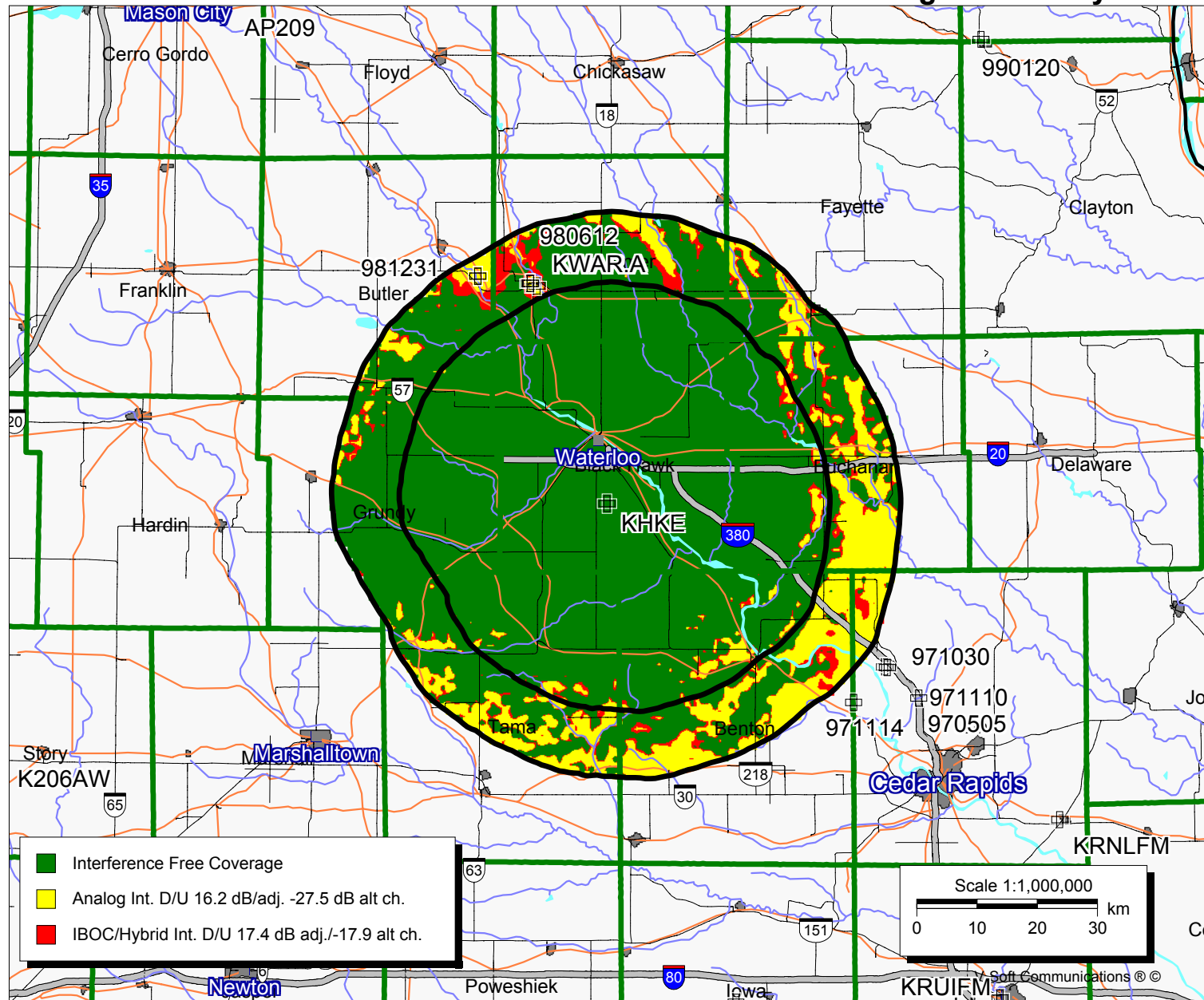
area = 983.7 sq. km

Hybrid IBOC Int. loss

pop. = 13,232

area = 397.5 sq. km

Int. Free pop % = 6.93%



WLRNFM Hybrid Subcarrier Interference with Zip Codes

WLRNFM, CH 217, 91.3 MHz

Contours= 60 & 54 dBu

BLE19850214KP

Latitude: 25-58-48 N

Longitude: 080-11-47 W

Power: 100.00 kW

AMSL Height: 201.0 m

HAAT= 285 m

Elevation: 3.0 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0080

Dielec Const: 8.0

Refractivity: 330.0

Receiver Ht AG: 5.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

54-dBu Coverage Area:

pop. = 4,590,285

area = 18,776.8 sq. km

Terrain Blockage loss

pop. = 0

area = 0 sq. km

25 dB WQP SNR:

Analog Int. loss

pop. = 155

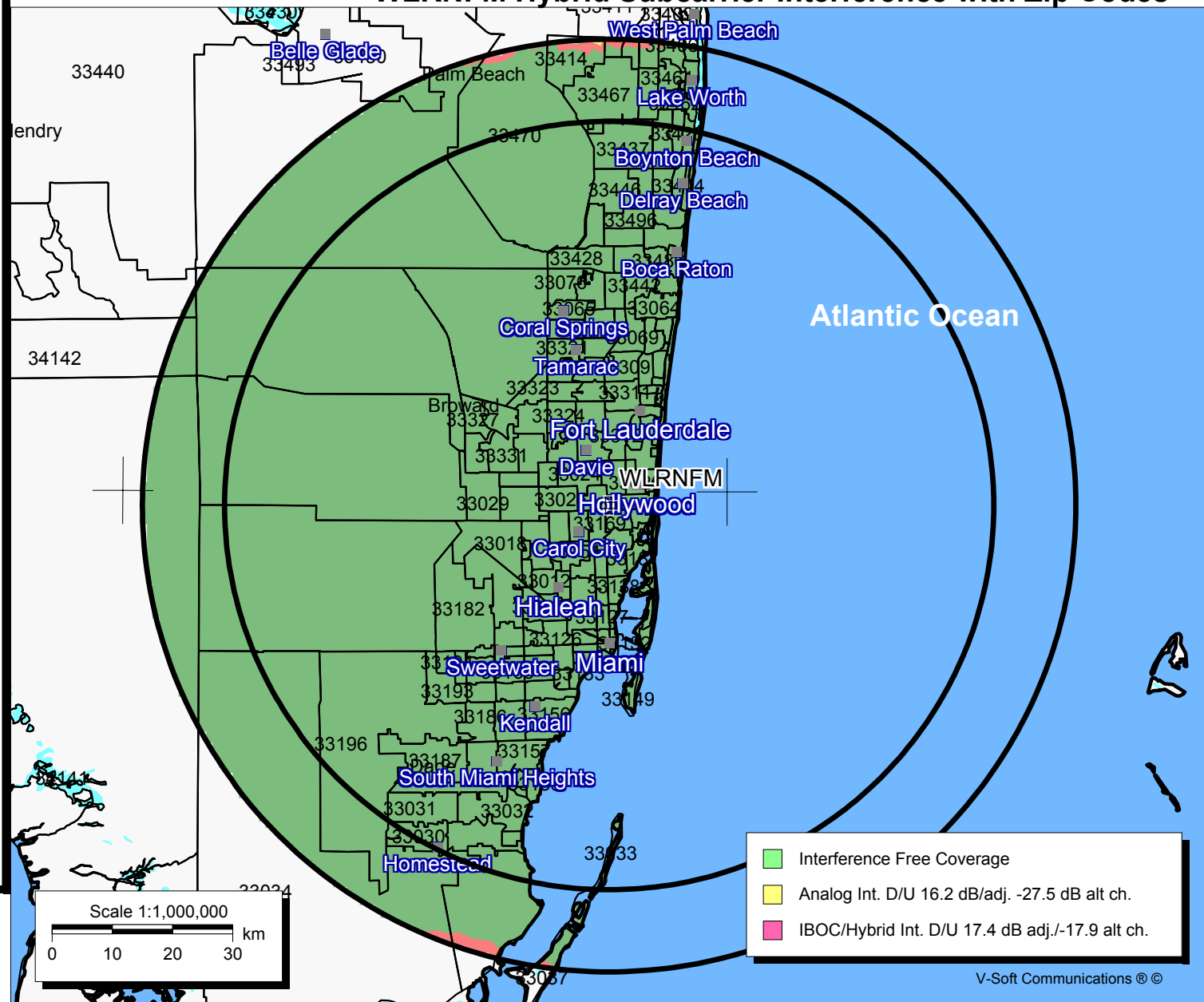
area = 3.3 sq. km

Hybrid IBOC Int. loss

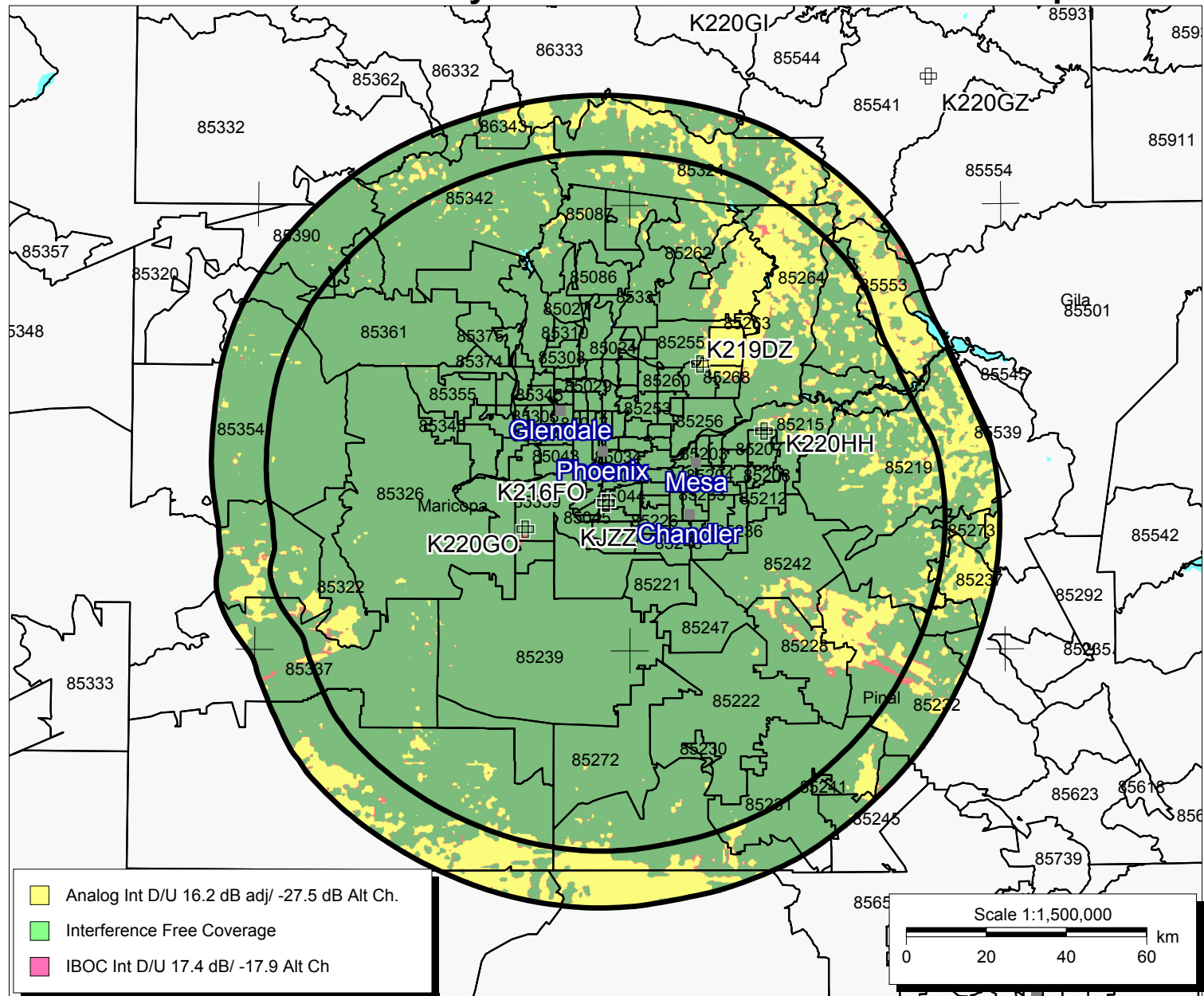
pop. = 19,751

area = 75.5 sq. km

Int Free Pop. % = 0.43 %



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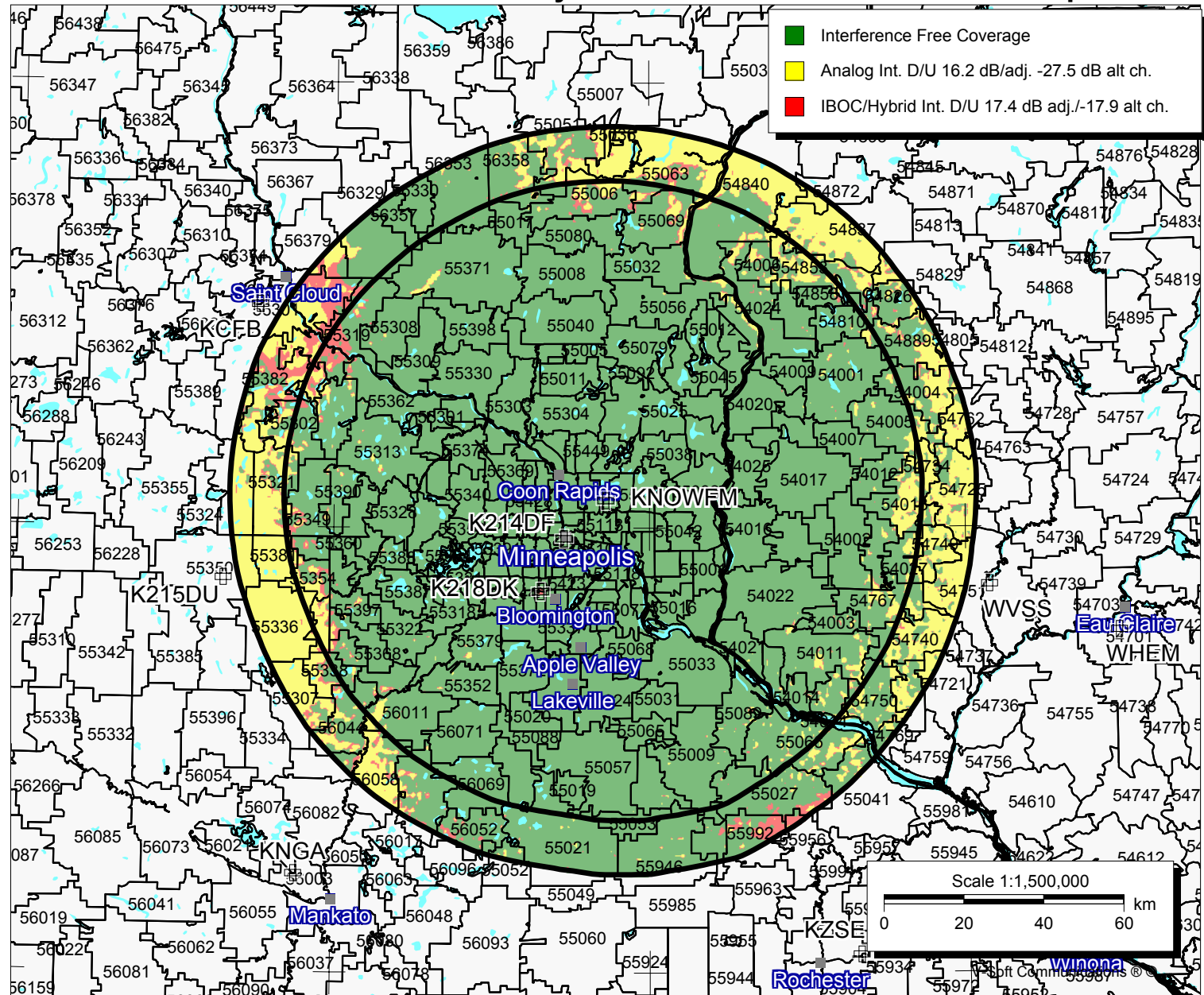
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Climate: Cont temperate
Conductivity: 0.0150
Dielec Const: 15.0
Refractivity: 310.0
Receiver Ht AG: 5.0 m
Receiver Gain: 0 dB
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Int Free Pop. %= 0.59 %

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Hybrid Subcarrier Interference with Zip Codes

KPBSFM CH 208 89.5 MHz

Contours = 60 and 54 dBu
BPED19970211A -CP
Latitude: 32-50-24 N
Longitude: 117-15-06 W
Power: 26.00 kW
AMSL Height: 276.0 m
HAAT = 206 m
Elevation: 186.89 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0150
Dielec Const: 15.0
Refractivity: 315.0
Receiver Ht AG: 5.0 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

54-dBu Coverage Area:
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