Appendix B

4.9 GHz Mask Scenarios

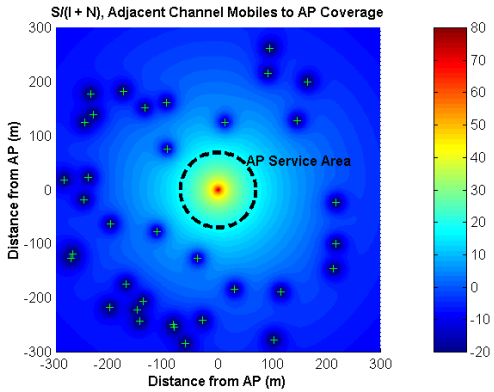
Prepared for NPSTC Petition for Reconsideration
3rd Report & Order, FCC WTB Docket 00-32

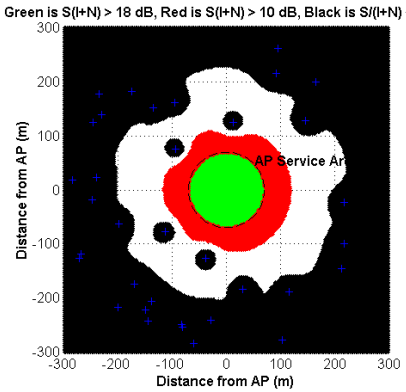
by

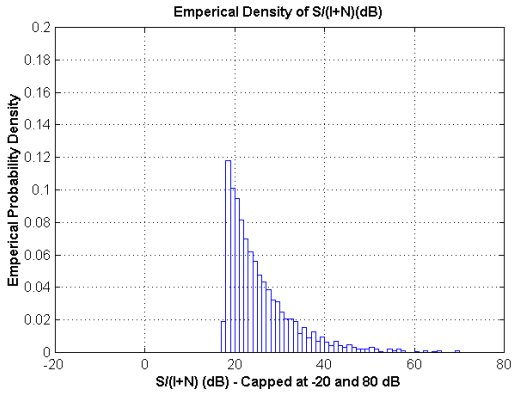
Sean O'Hara

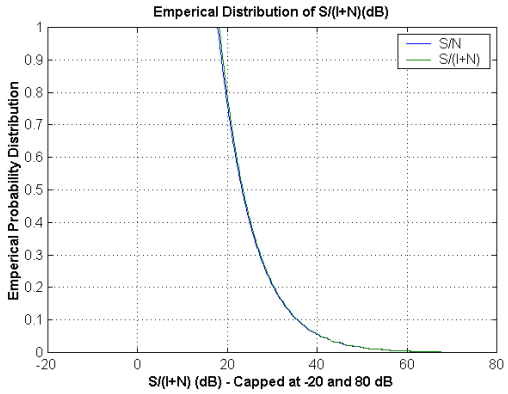
Syracuse Research Corporation

Case I
Adjacent Interferers Outside Service Area









25 dB ACCPR

Parameter values used:

AP ERP (dBm): 33
Mobile ERP (dBm): 26
Number of Mobile Interferers: 35
AP Service Area (m): 70
Domain Area (m): 300
ACCPR: 25 dB
Receiver Noise Floor: -96 dBm
AP Path Loss Exponent: 3.5
Mobile Path Loss Exponent: 3.5

Mean S(I+N) inside AP Service Area: 25.5487
Median S(I+N) inside AP Service Area: 23.2802
98 % of the S(I+N) values in AP Service Area > 18 dB
100 % of the S/N values in AP Service Area > 18 dB

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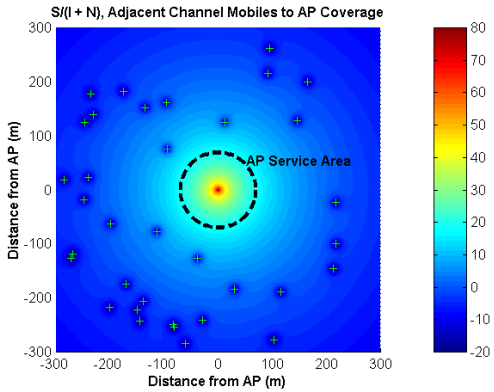
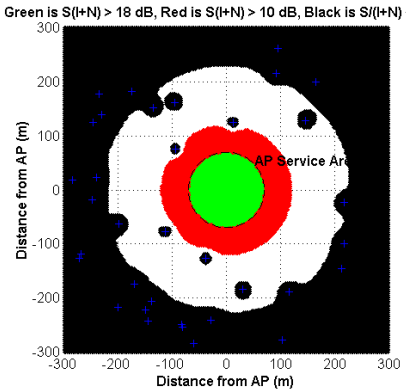
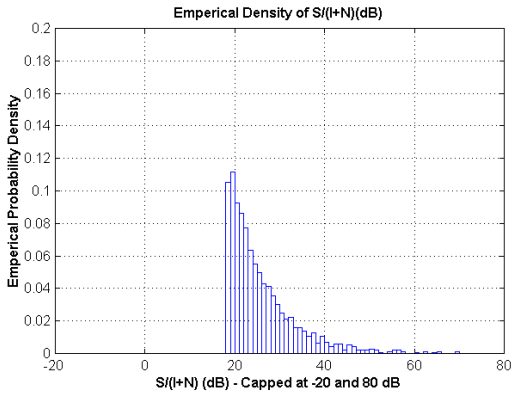
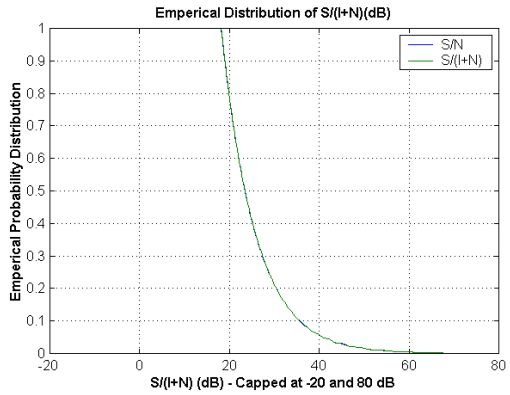
Adjacent Interferers Outside Service Area









35 dB ACCPR

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Mobile Path Loss Exponent: 3.5

Mean S(I+N) inside AP Service Area: 25.7528
Median S(I+N) inside AP Service Area: 23.4333
100 % of the S(I+N) values in AP Service Area > 18 dB
100 % of the S/N values in AP Service Area > 18 dB

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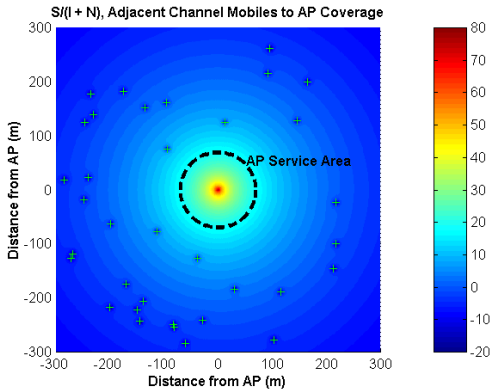
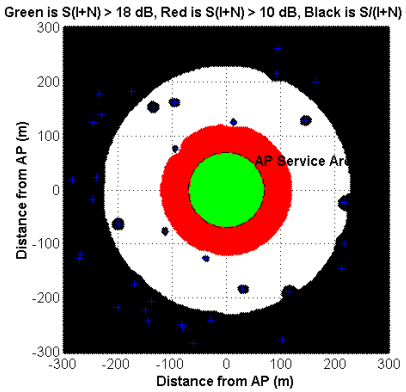
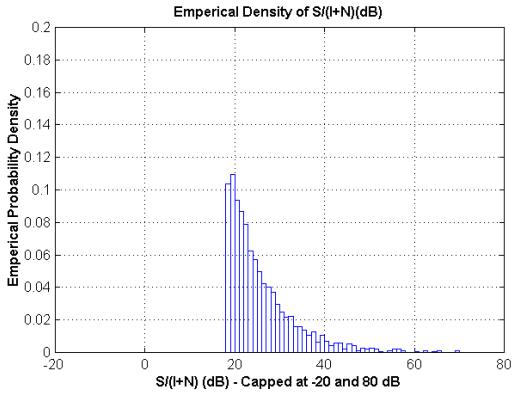
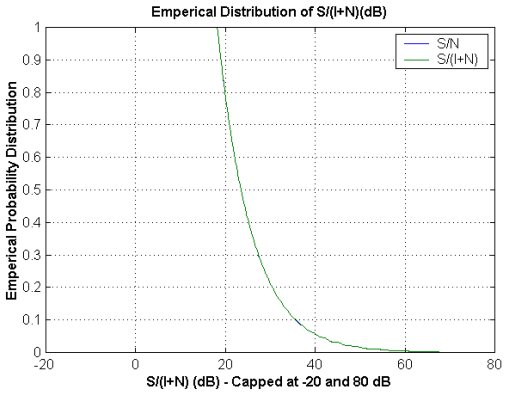
Adjacent Interferers Outside Service Area









45 dB ACCPR

Parameter values used:

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Mean S(I+N) inside AP Service Area: 25.7738
Median S(I+N) inside AP Service Area: 23.4504
100 % of the S(I+N) values in AP Service Area > 18 dB
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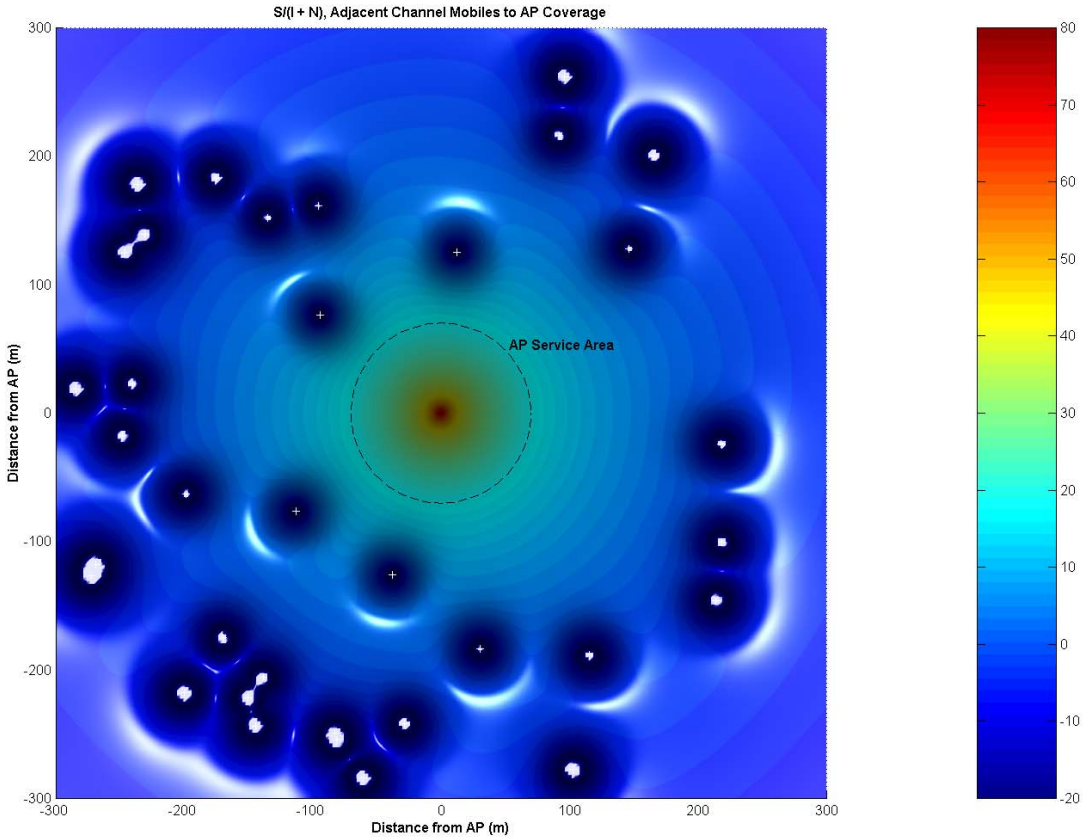

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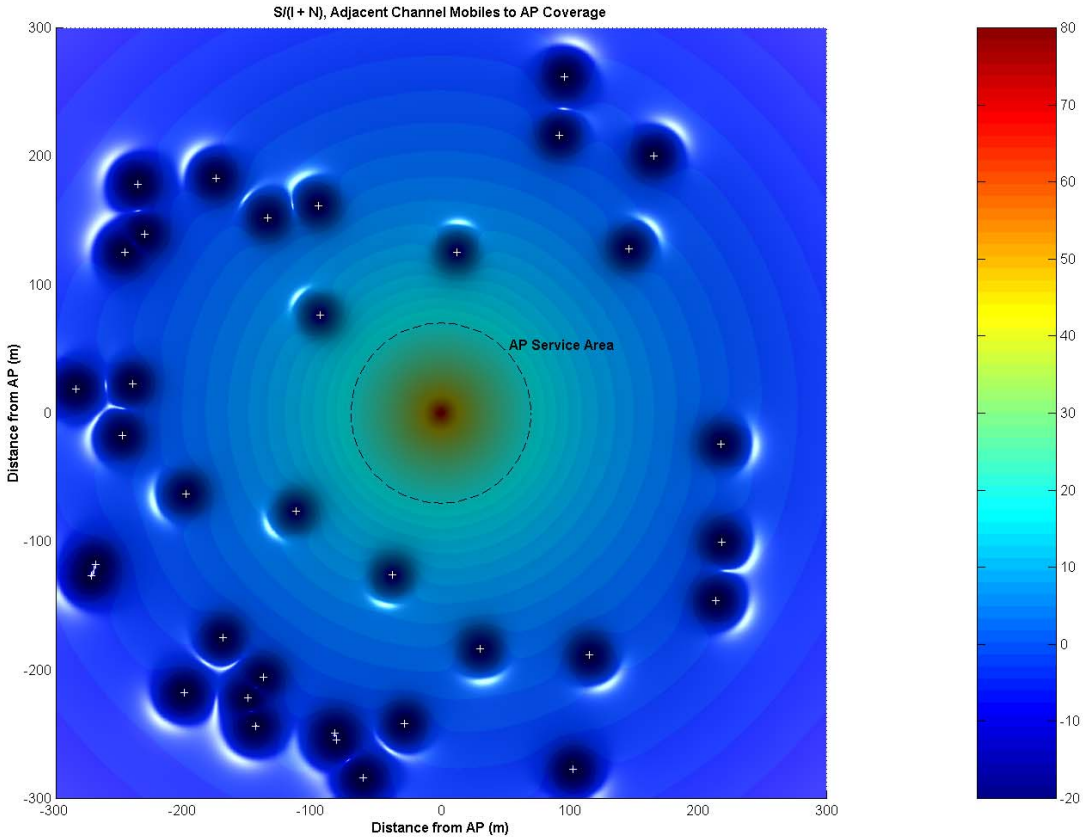

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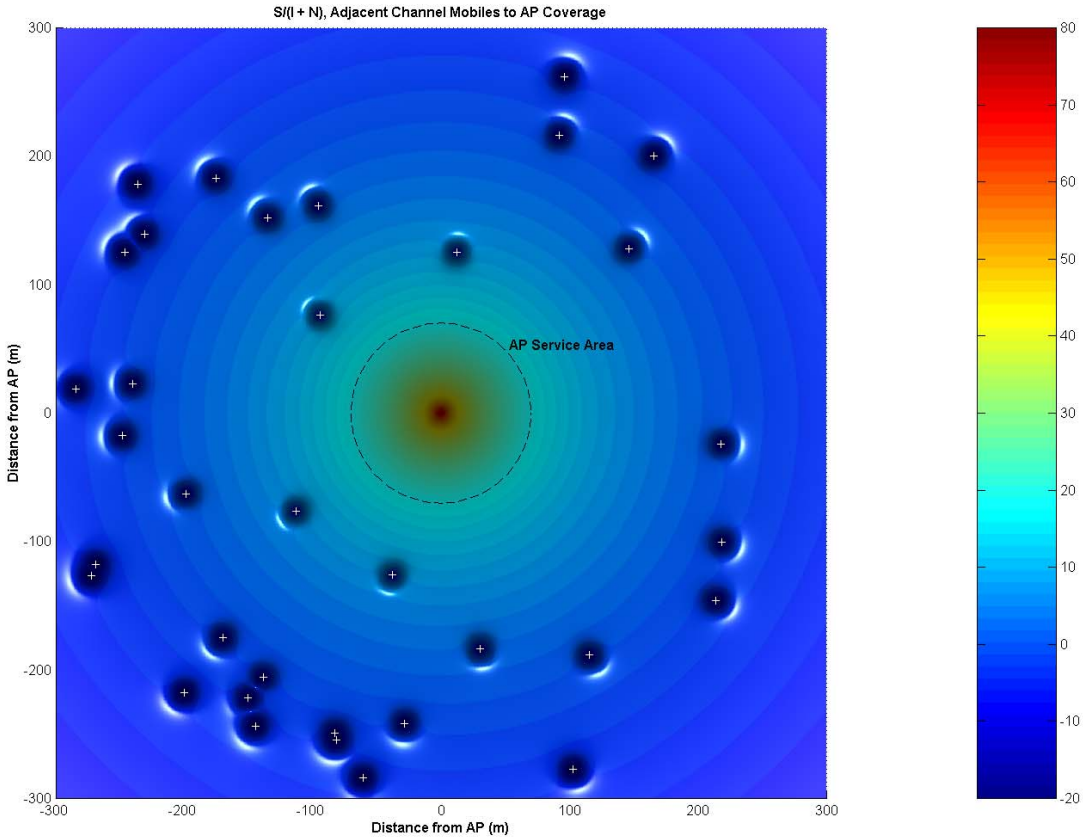

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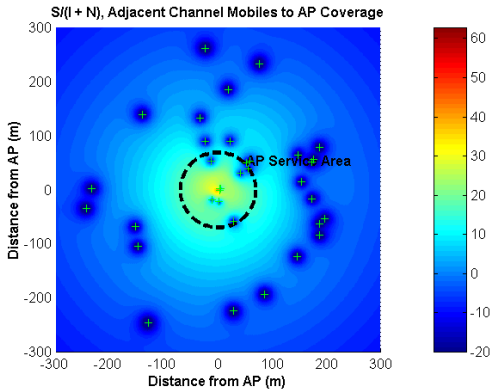
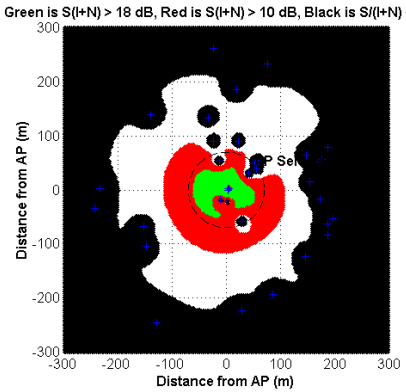
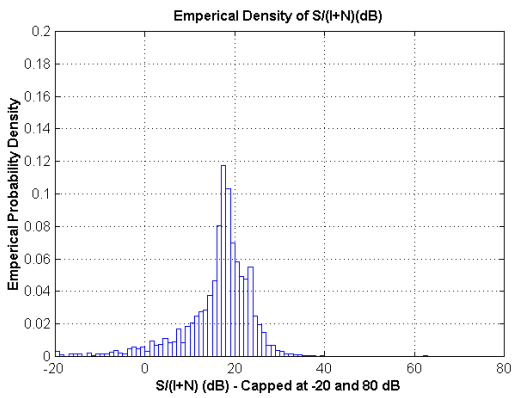
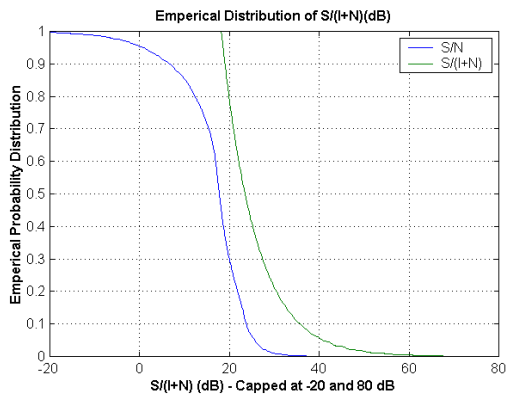
Case II
Adjacent Interferers Everywhere









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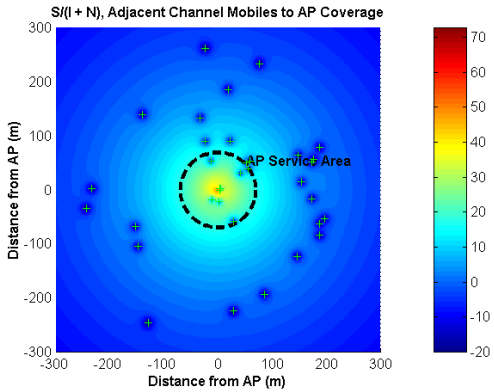
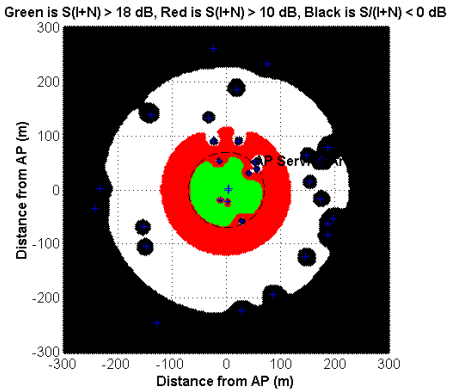
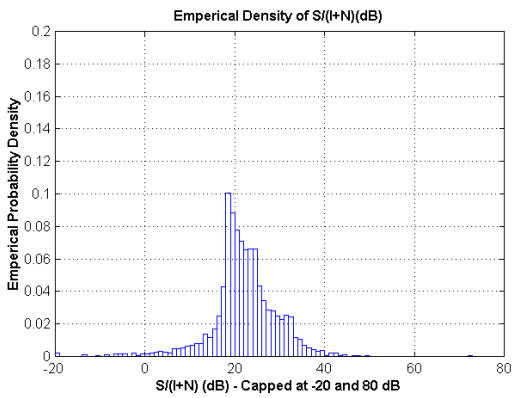
AP Service Area (m): 70
Domain Area (m): 300
ACCPR: 25 dB
Receiver Noise Floor: -96 dBm
AP Path Loss Exponent: 3.5
Mobile Path Loss Exponent: 3.5

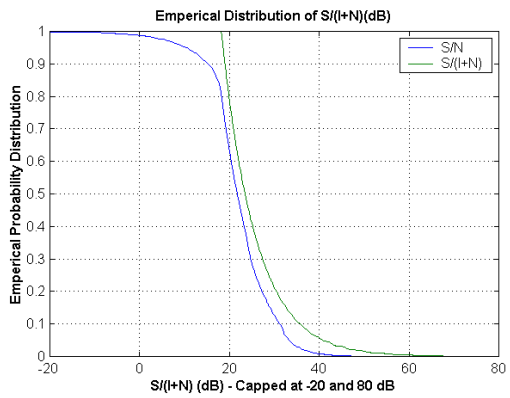
Mean S(I+N) inside AP Service Area: 16.377
Median S(I+N) inside AP Service Area: 17.7435
47 % of the S(I+N) values in AP Service Area > 18 dB
100 % of the S/N values in AP Service Area > 18 dB

Case II
Adjacent Interferers Everywhere









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AP Path Loss Exponent: 3.5
Mobile Path Loss Exponent: 3.5

Mean S(I+N) inside AP Service Area: 22.0757
Median S(I+N) inside AP Service Area: 21.7189
82 % of the S(I+N) values in AP Service Area > 18 dB
100 % of the S/N values in AP Service Area > 18 dB

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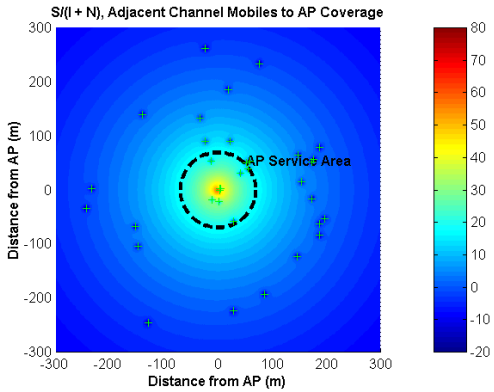

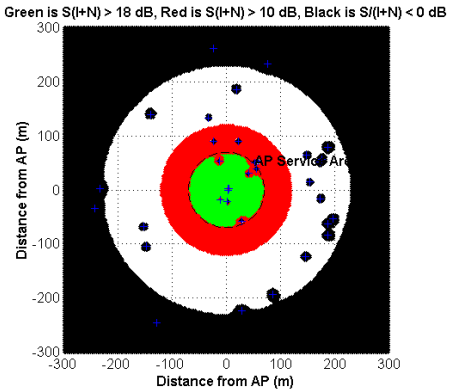

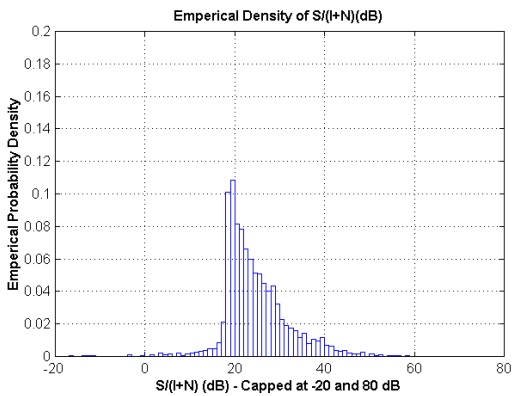

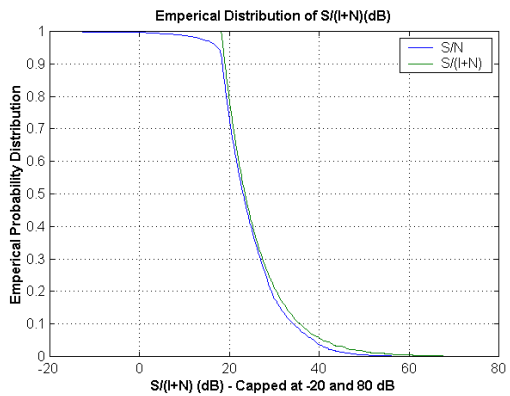

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Mobile Path Loss Exponent: 3.5

Mean S(I+N) inside AP Service Area: 24.5726
Median S(I+N) inside AP Service Area: 23.0011
94 % of the S(I+N) values in AP Service Area > 18 dB
100 % of the S/N values in AP Service Area > 18 dB

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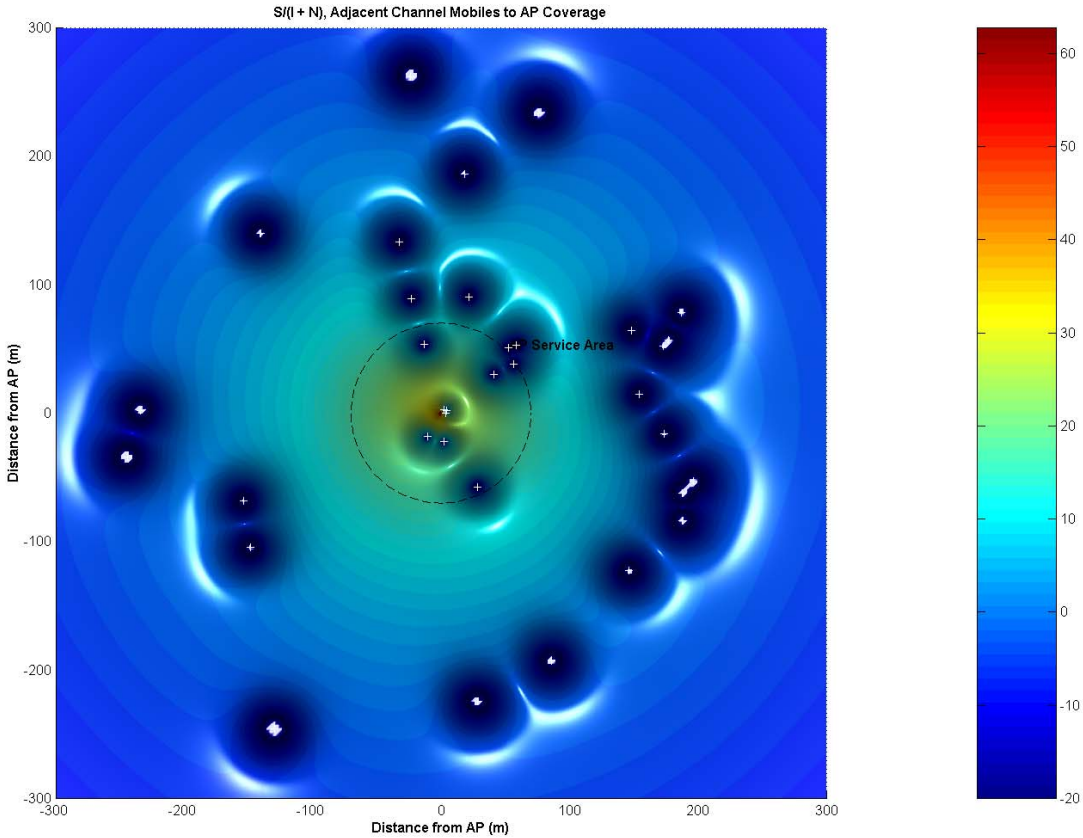
Adjacent Interferers Everywhere



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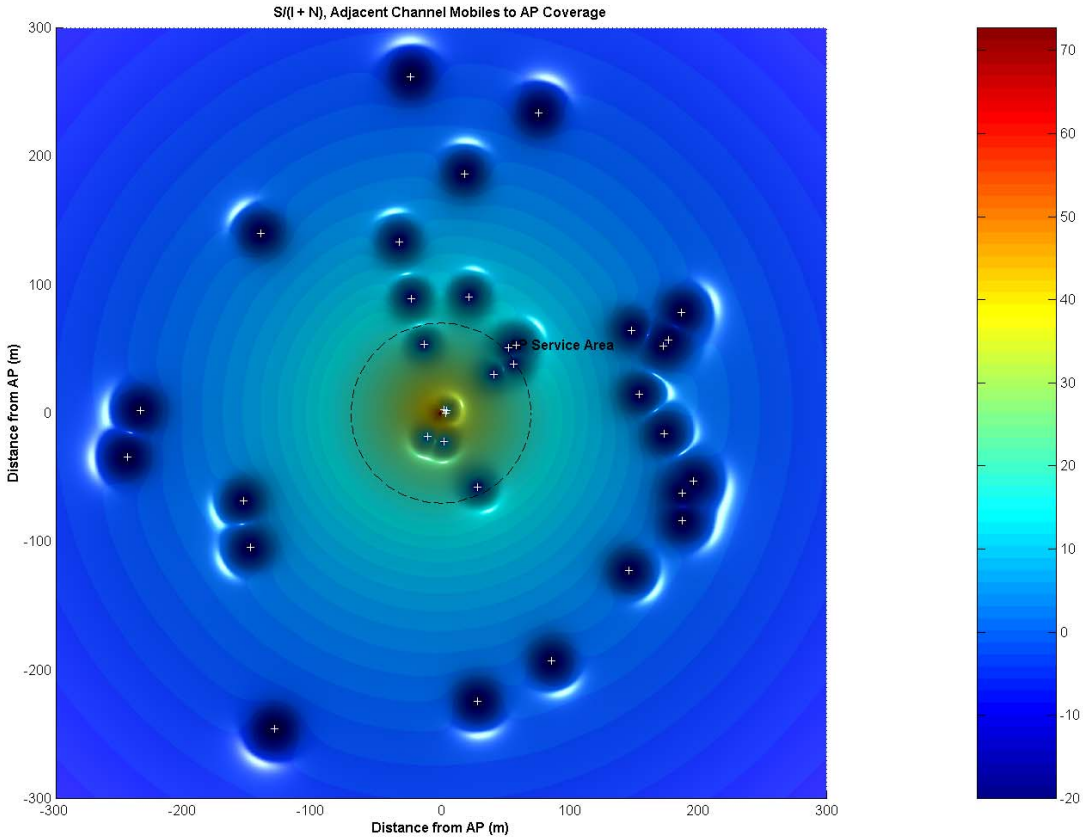

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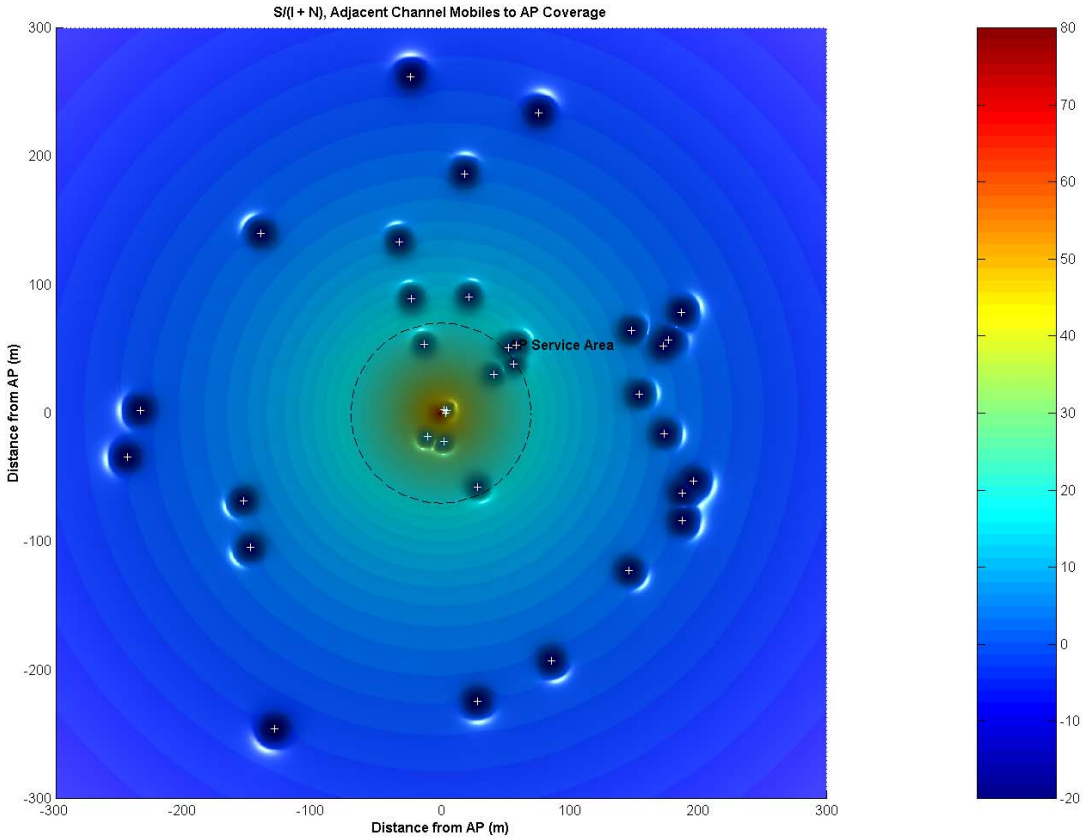

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