

DIGITAL SUPPLEMENT F[†]

Maps and figures for **conditional (non-zero count)** power analyses and significance tests.

Maps depict results in BOEM Atlantic OCS lease blocks.

The user should keep in mind that the spatial distribution of information in maps is dependent on the input data used. There are a variety of reasons that some datasets may not be reflected in these maps: some datasets existed but were not available to us, others were excluded because they were not of a consistent high scientific quality, and others may not yet been collected or made available at the time of this analysis. These maps are intended as a demonstration of the methods described in OCS Study BOEM 2012-101.

SECTION I. Summary Statistic Maps Calculated for All Species [Pages 3-42]

Summary statistics (number of occurrences and average, maximum, and minimum hotspot and coldspot power) were calculated across all species in all seasons combined and for each season.

Figures F1-F7. All Seasons Combined [Pages 3-10]

Number of occurrences summed over all species in all seasons

Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance

Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

Figures F8-F14. Spring [Pages 11-18]

Number of occurrences summed over all species in spring

Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance

Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

Figures F15-F21. Summer [Pages 19-26]

Number of occurrences summed over all species in summer

Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance

Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

Figures F22-F28. Fall [Pages 27-34]

Number of occurrences summed over all species in fall

Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance

Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

Figures F29-F35. Winter [Pages 35-42]

Number of occurrences summed over all species in winter

Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance

Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

[†]A digital file supporting OCS Study BOEM 2012-101 / NOAA Technical Memorandum NOS NCCOS 158

Citation for main document:

Kinlan, B.P., E.F. Zipkin, A.F. O'Connell, and C. Caldow. 2012. Statistical analyses to support guidelines for marine avian sampling: final report. U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs, Herndon, VA. OCS Study BOEM 2012-101. NOAA Technical Memorandum NOS NCCOS 158. xiv+77 pp.

SECTION II. Species-specific Power Analysis Maps and Figures [Pages 43-286]

Results of the non-zero conditional model are presented as a set of 6 figures for each included species in each season. Within each season, species are presented in the same order as in Table 4 of the main document, except that only species for which maps were created (“Maps created?” = “Yes” in 3rd column of Table 4) are included.

Figures F36-F101. Spring power analysis maps and figures (11 species x 6 figures per species). [Pp.43-109]

Figures F102-F143. Summer power analysis maps and figures (7 species x 6 figs. per species). [Pp.110-152]

Figures F144-F215. Fall power analysis maps and figures (12 species x 6 figs. per species). [Pp.153-225]

Figures F216-F275. Winter power analysis maps and figures (10 species x 6 figs. per species). [Pp.226-286]

1st Figure for each Species: Map of number of occurrences of this species in this season in BOEM Atlantic OCS lease blocks.

2nd Figure for each Species: Map of the mean non-zero count in for this species in this season in BOEM Atlantic OCS lease blocks.

3rd Figure for each Species: Power vs. sample size curves for 3x hotspot and 1/3x coldspot detection for this species, given the selected model fit and reference mean.

4th Figure for each Species: Map of power to detect 3x hotspots of non-zero abundance.

5th Figure for each Species: Map of power to detect 1/3x coldspots of non-zero abundance.

6th Figure for each Species: Combined map of hotspot (red) and coldspot (blue) significance test p-values, based on one-sample, one-tailed (hotspot) Monte Carlo significance tests of the mean non-zero count in each lease block compared to the reference mean. Darker shading indicates greater statistical significance. Lease blocks that did not approach statistical significance ($p > 0.2$) are shown in grey, with the intensity of the shading proportional to the average of 3x hotspot and 1/3x coldspot power values for that cell. That is, the darkest grey shading indicates lease blocks not identified as significant hotspots or coldspots, and for which we can be confident in that result because there was relatively high power to detect a hotspot or coldspot, had it existed. In contrast, light grey shading indicates lease blocks not identified as significant hotspots or coldspots, but for which there was little or no power to detect a hotspot or coldspot, had it existed. The darkest blue lease blocks can therefore be regarded as the most significant coldspots, the darkest red lease blocks as the most significant hotspots, and the darkest grey blocks as places most likely to be neither hotspots nor coldspots. Blank (white) polygons indicate lease blocks in which no presences of this species were observed. Hotspot (coldspot) significance does not consider whether high (low) abundances persisted across years or occurred in the same year; if inter-annual persistence is of concern, the temporal distribution of the data should be examined. P-values are not corrected for the large number of simultaneous tests performed (two tests per lease block in which the species occurred), so many of the lighter red and blue lease blocks are likely false positives. The most significant values (darkest red and blue) are more reliable, but will still contain some false positives. Similarly, the lightest grey cells have the highest chance of being false negatives, whereas the darkest grey cells have the lowest chance of being false negatives.

DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

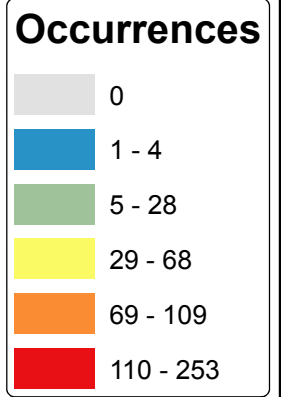
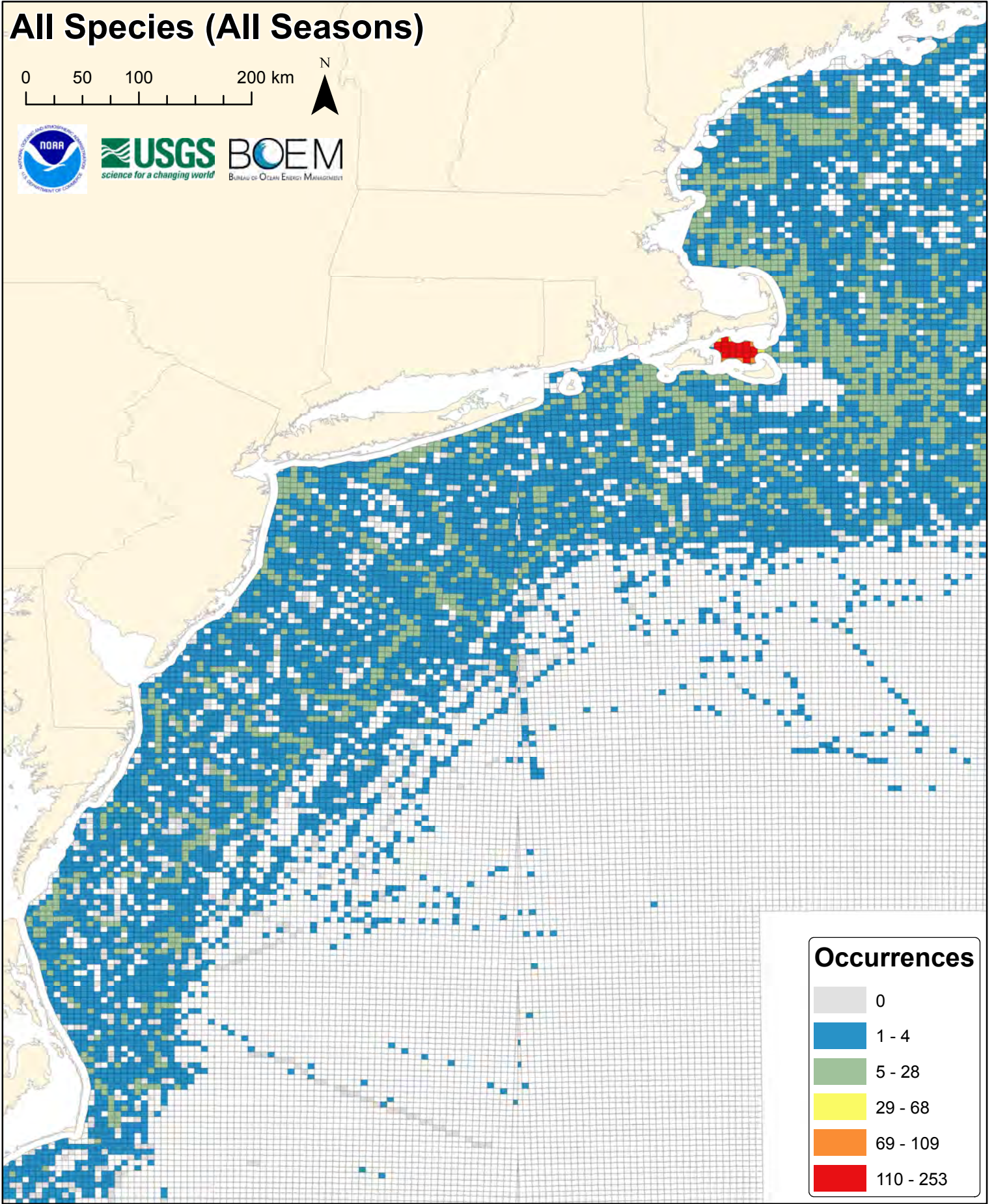
SECTION I. Summary Statistic Maps Calculated for All Species

Figures F1-F7. All Seasons Combined

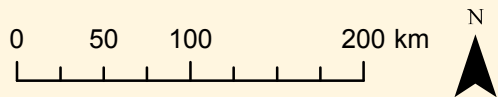
- Number of occurrences summed over all species in all seasons
- Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance
- Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

All Species (All Seasons)

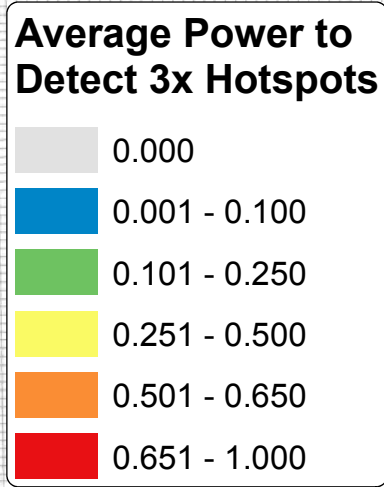
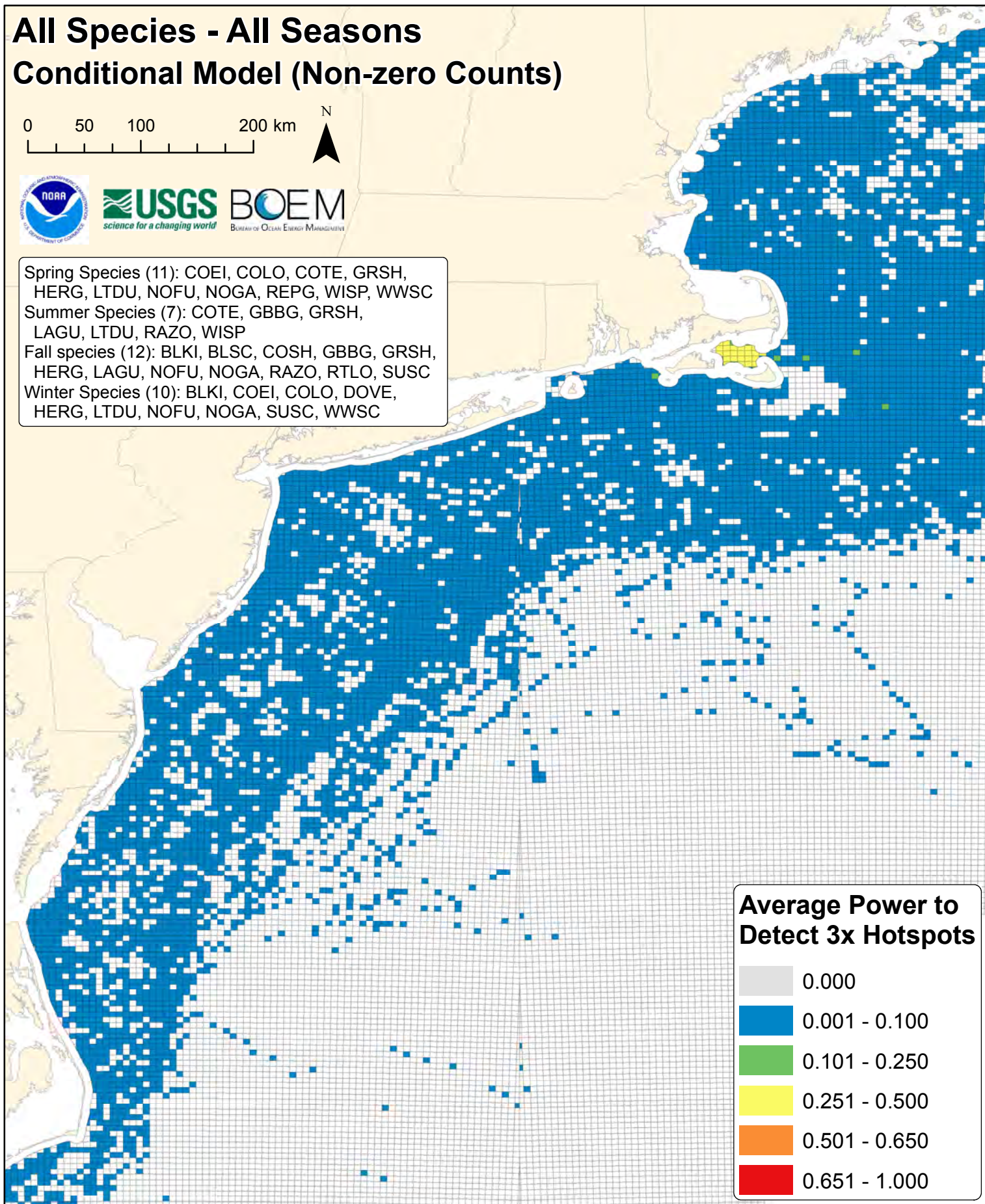
0 50 100 200 km



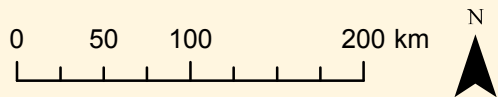
All Species - All Seasons Conditional Model (Non-zero Counts)



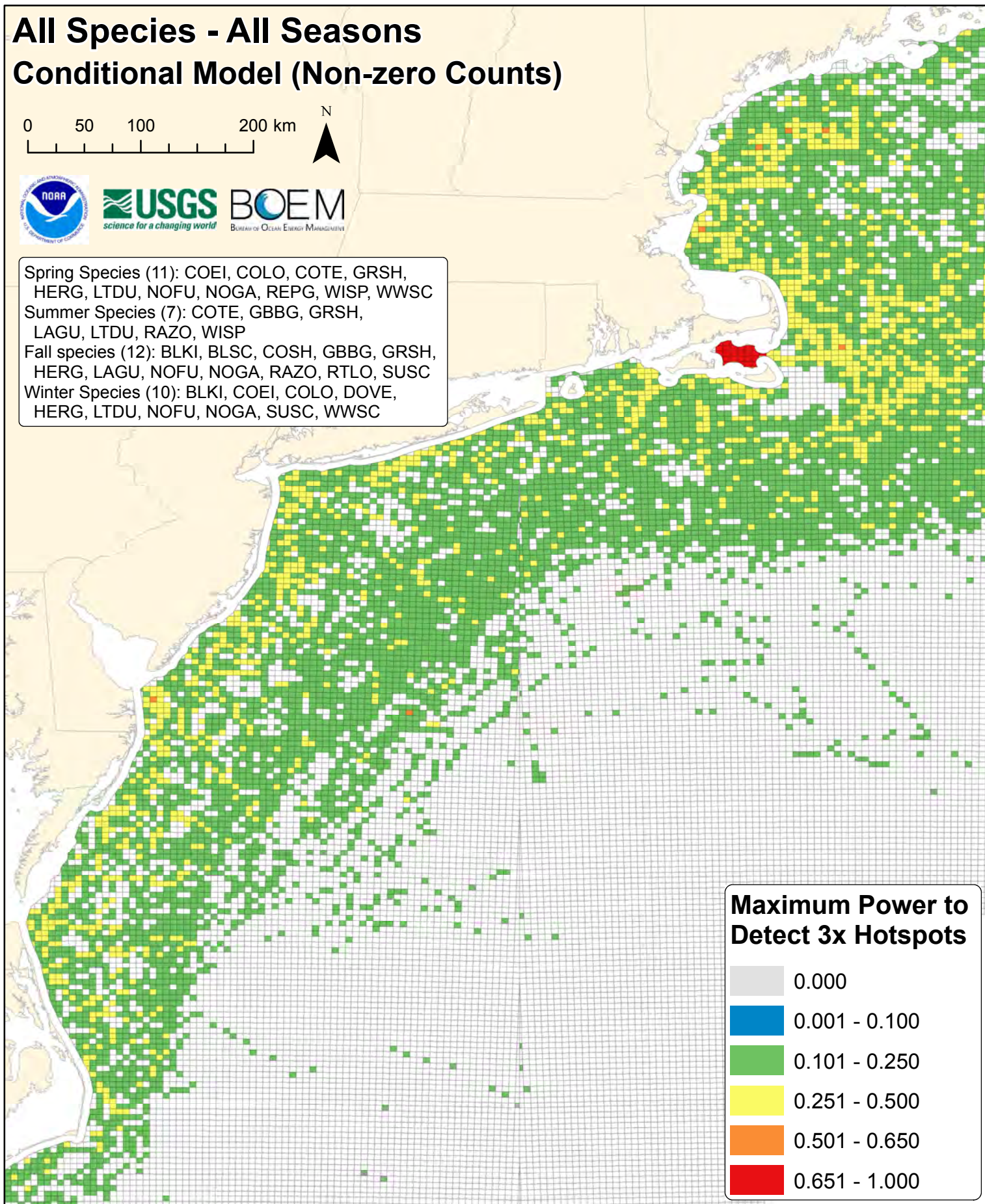
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP
Fall species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC
Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC



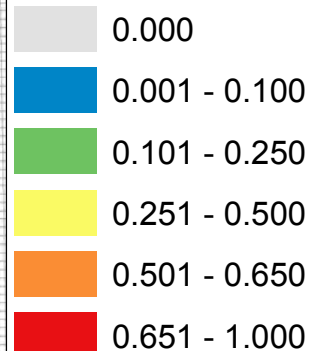
All Species - All Seasons Conditional Model (Non-zero Counts)



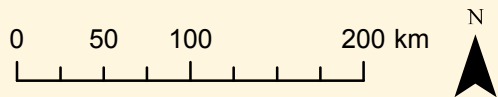
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC
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Maximum Power to Detect 3x Hotspots

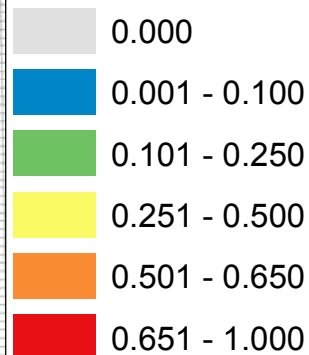


All Species - All Seasons Conditional Model (Non-zero Counts)

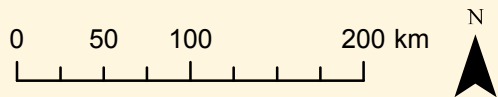


Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC
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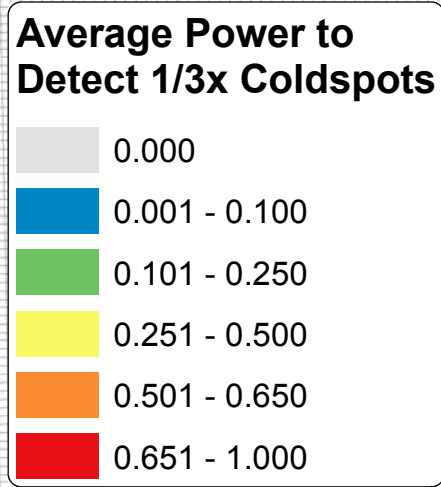
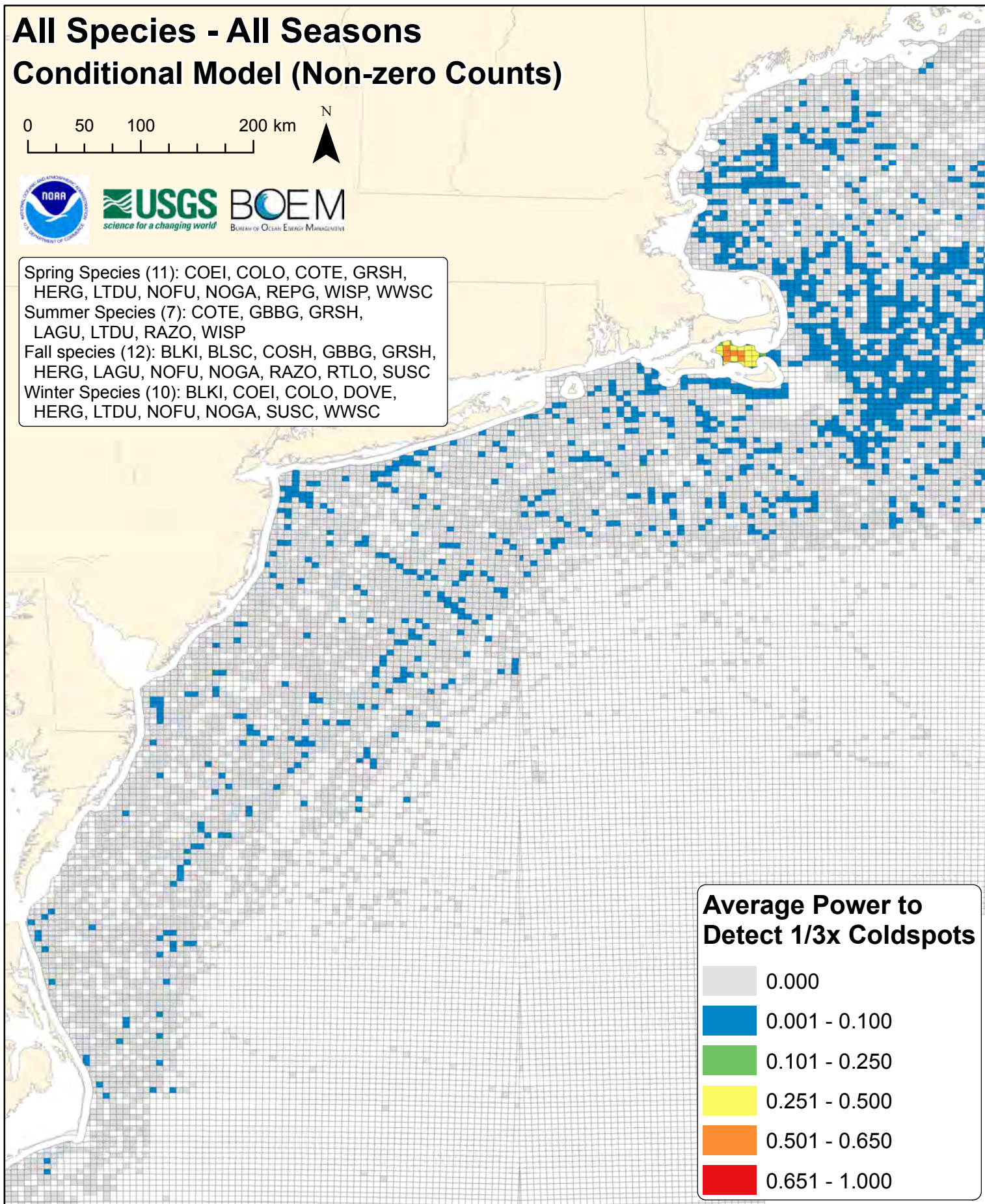
Minimum Power to Detect 3x Hotspots



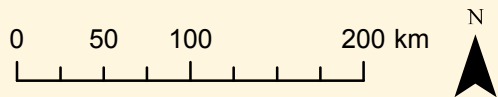
All Species - All Seasons Conditional Model (Non-zero Counts)



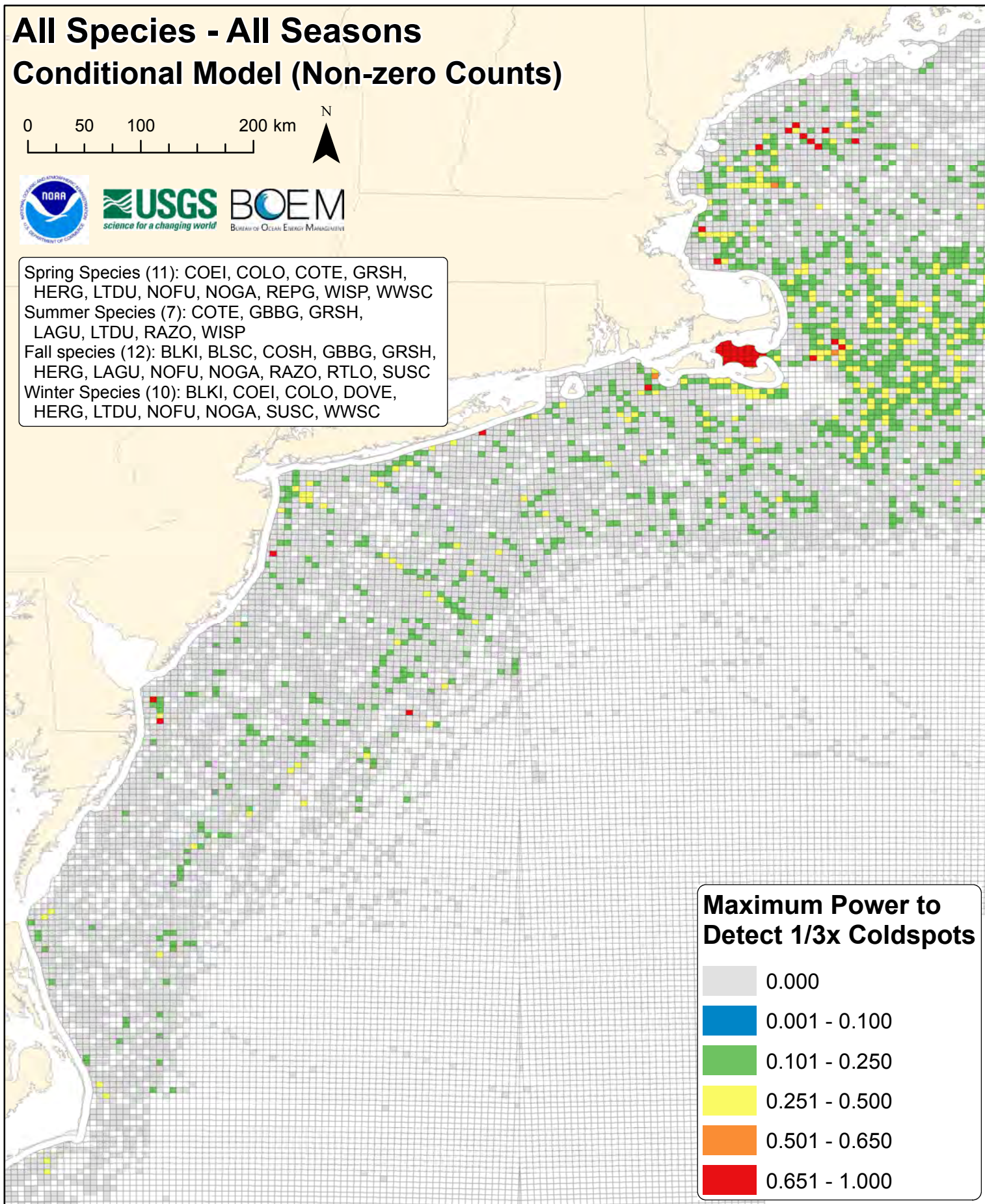
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP
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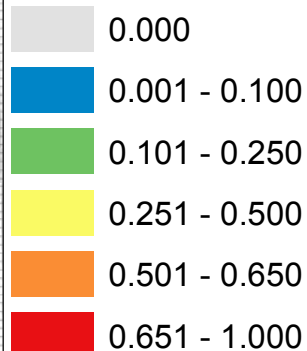
All Species - All Seasons Conditional Model (Non-zero Counts)



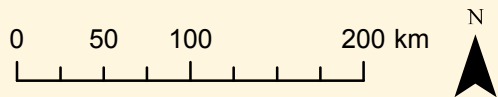
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Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC



Maximum Power to Detect 1/3x Coldspots

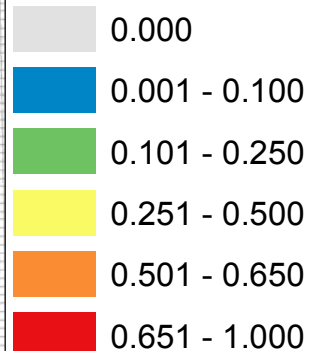


All Species - All Seasons Conditional Model (Non-zero Counts)



Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP
Fall species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC
Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC

Minimum Power to Detect 1/3x Coldspots



DIGITAL SUPPLEMENT F

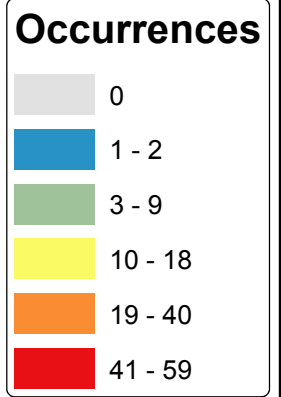
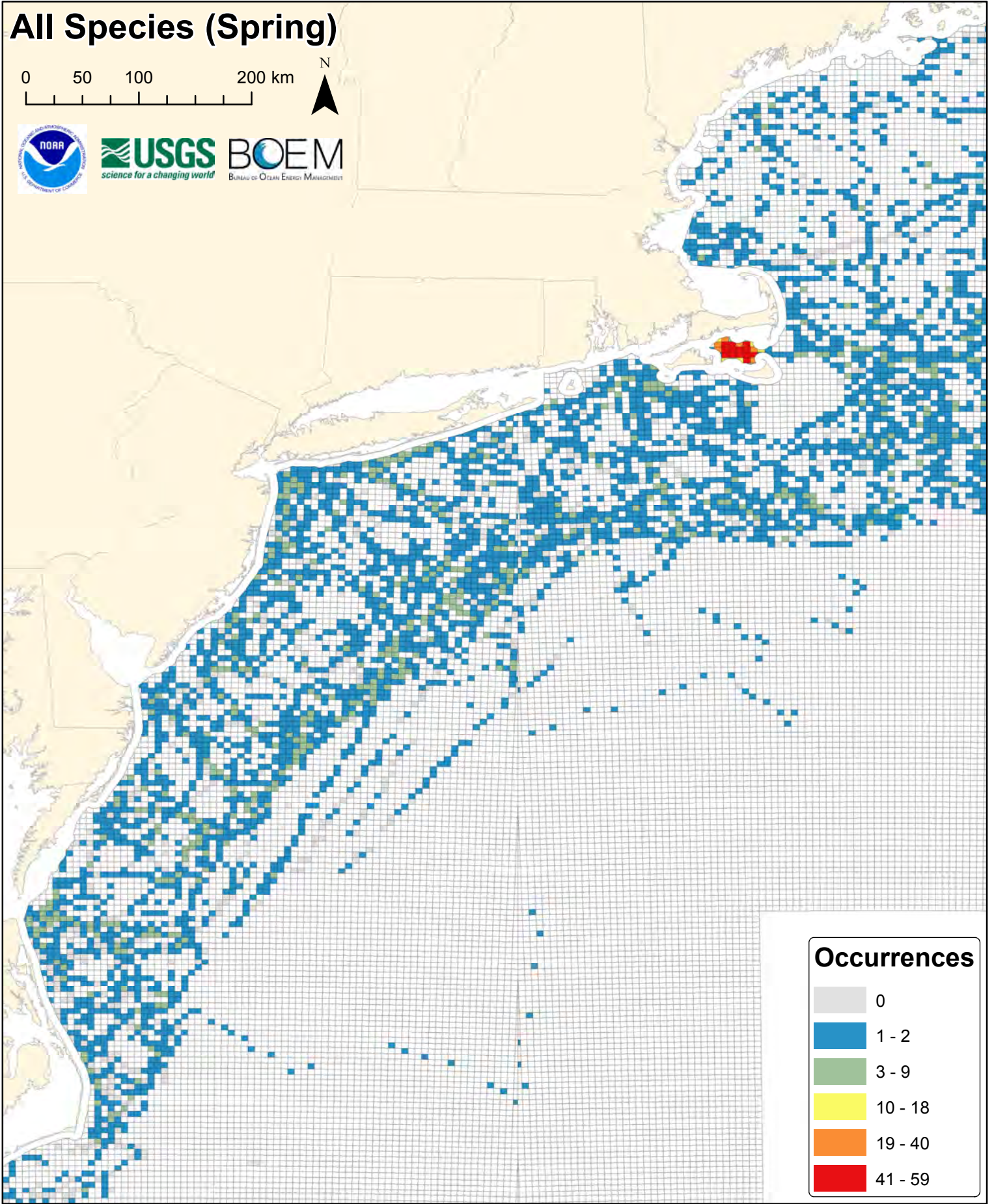
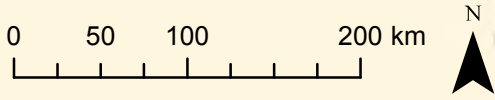
Conditional (Non-Zero Count) Model Results

SECTION I. Summary Statistic Maps Calculated for All Species

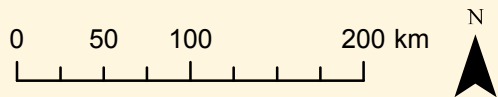
Figures F8-F14. Spring

- Number of occurrences summed over all species in spring
- Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance
- Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

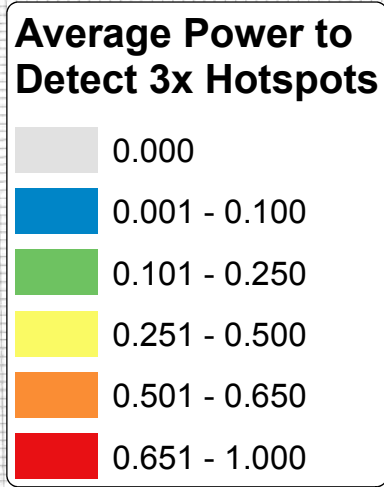
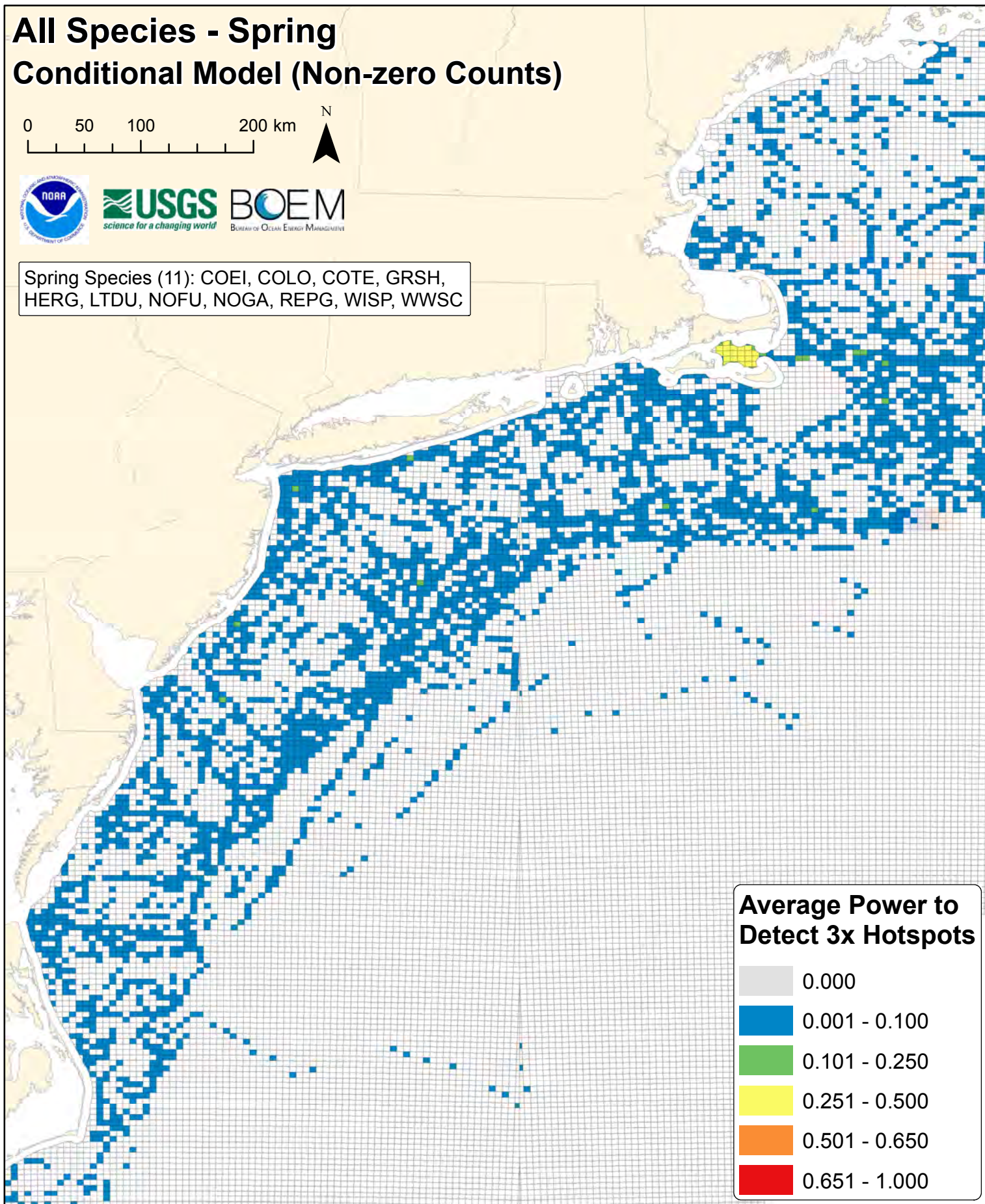
All Species (Spring)



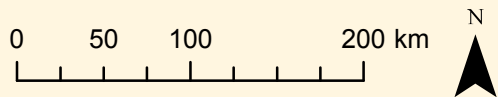
All Species - Spring Conditional Model (Non-zero Counts)



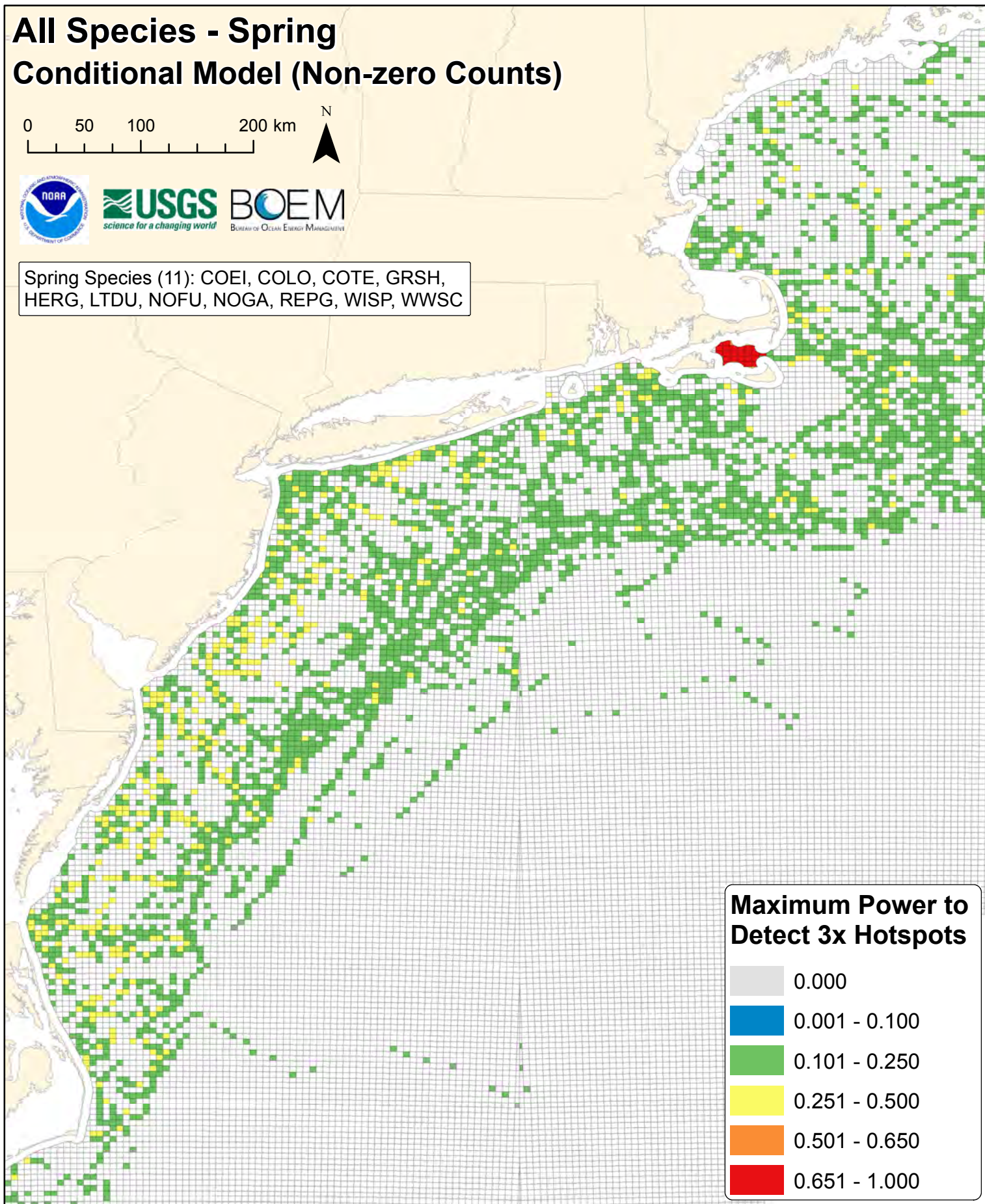
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC



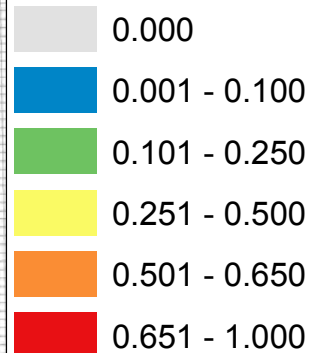
All Species - Spring Conditional Model (Non-zero Counts)



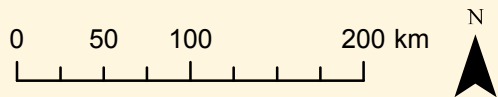
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC



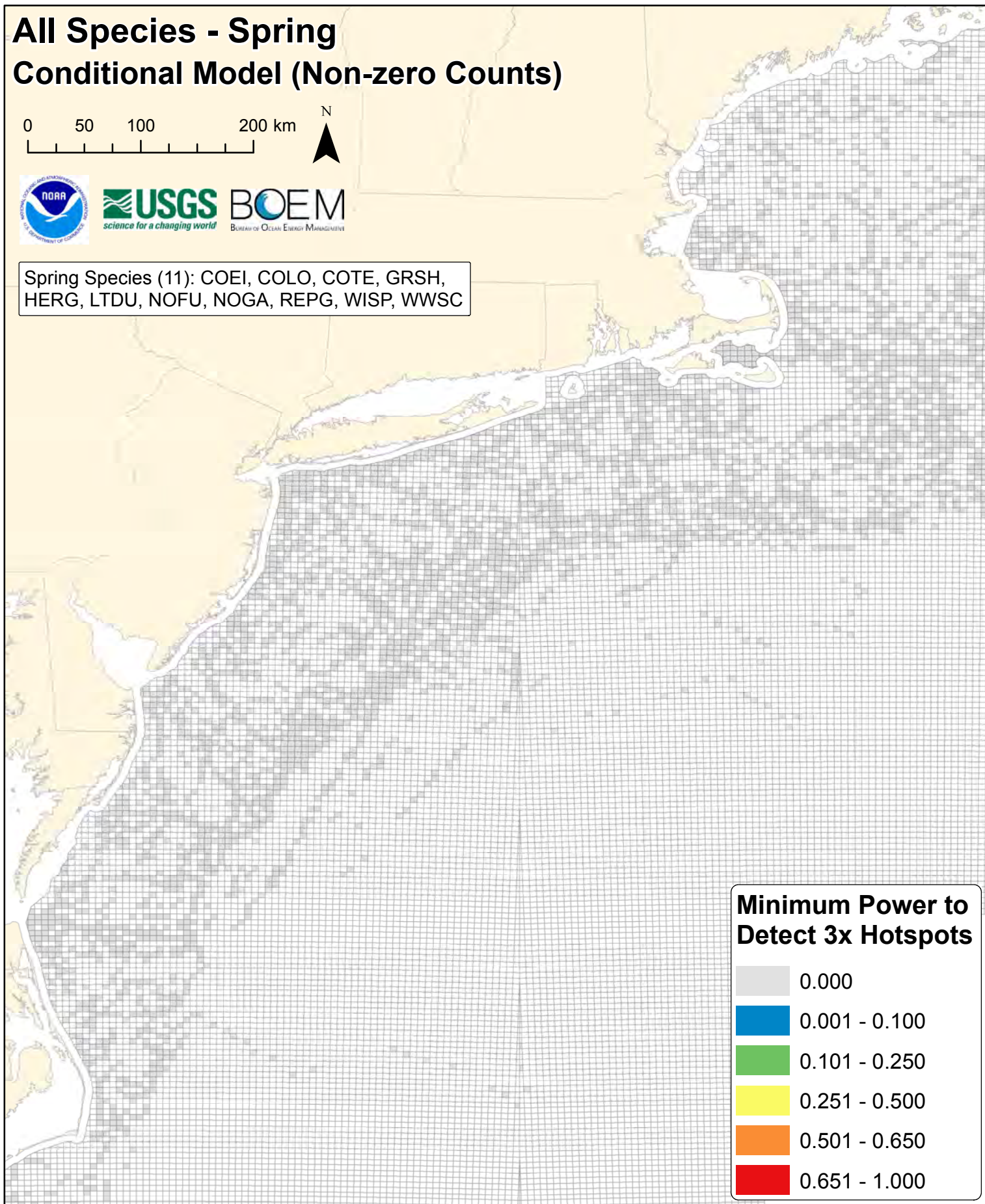
Maximum Power to Detect 3x Hotspots



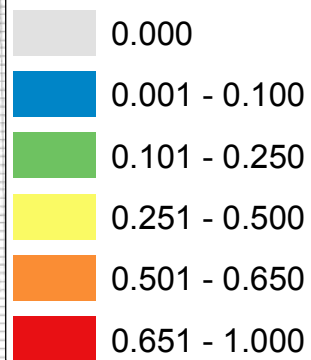
All Species - Spring Conditional Model (Non-zero Counts)



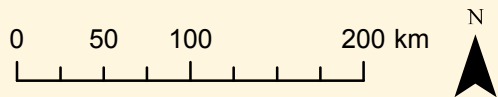
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC



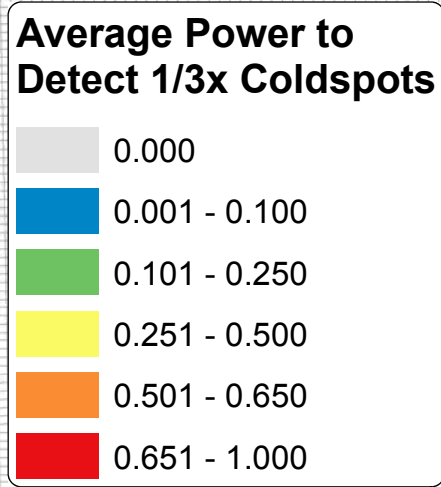
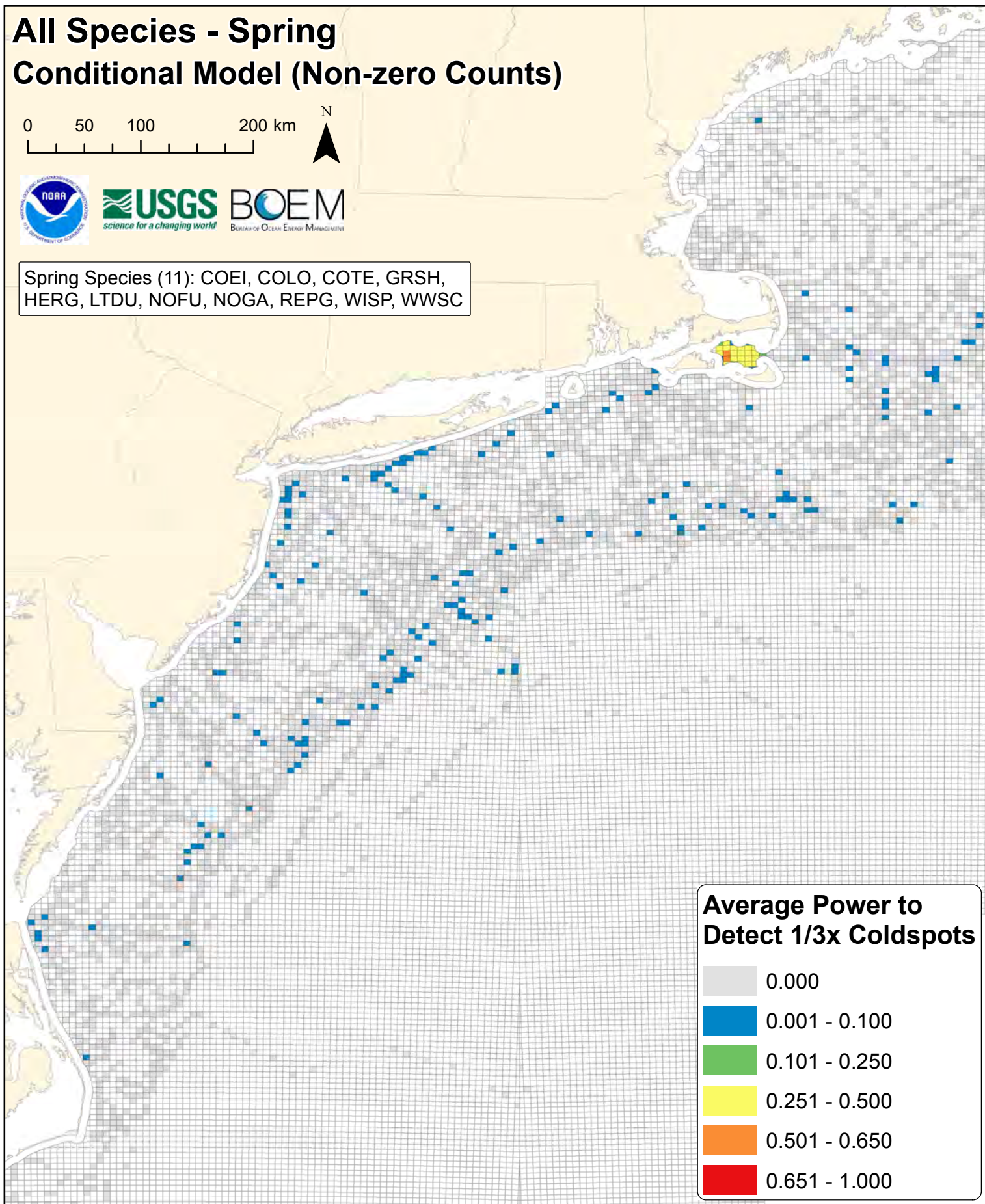
Minimum Power to Detect 3x Hotspots



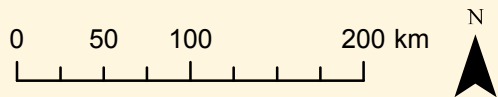
All Species - Spring Conditional Model (Non-zero Counts)



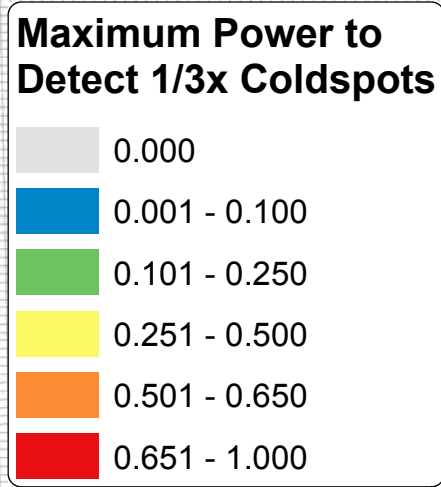
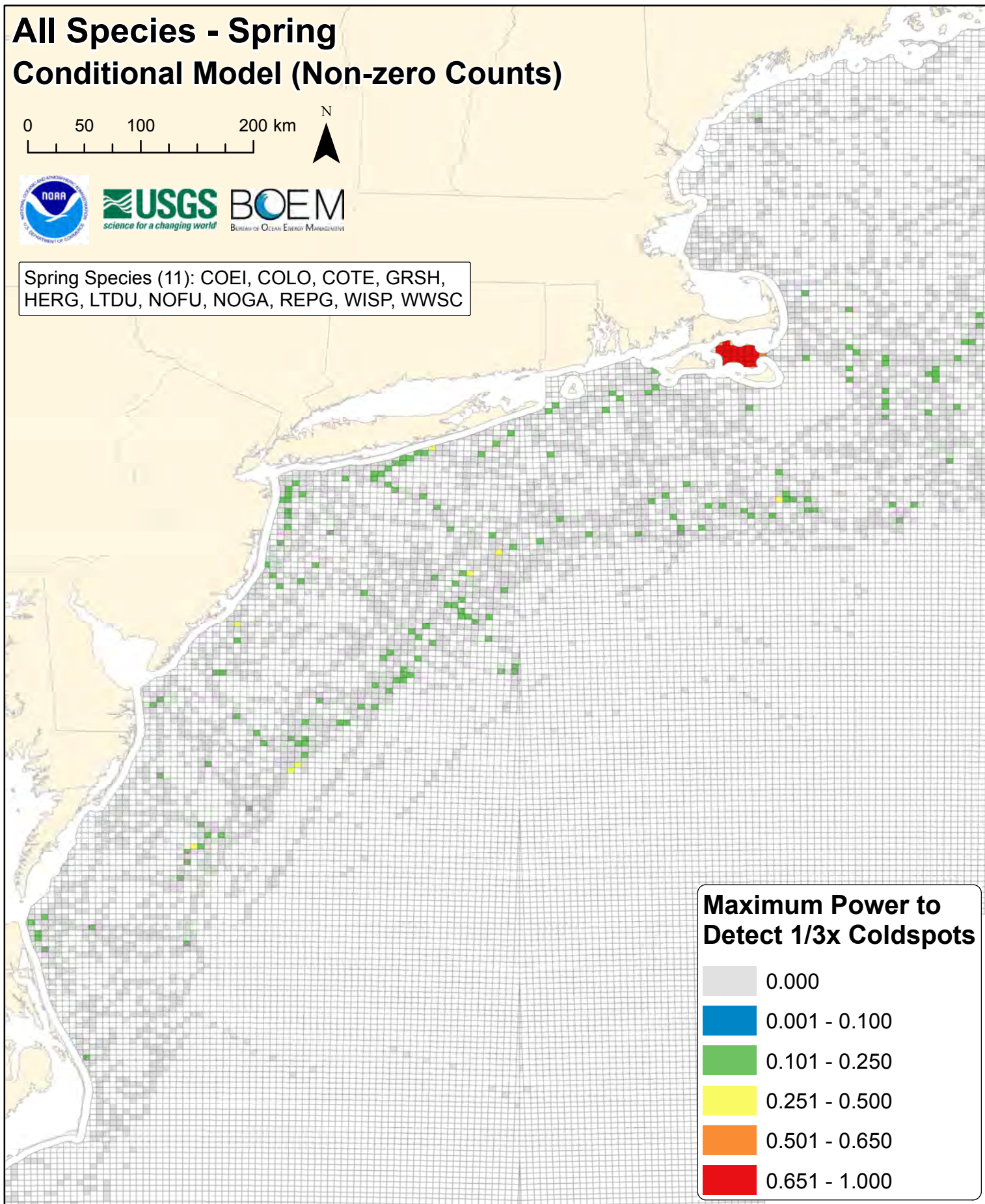
Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC



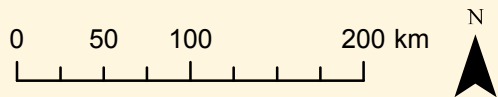
All Species - Spring Conditional Model (Non-zero Counts)



Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC

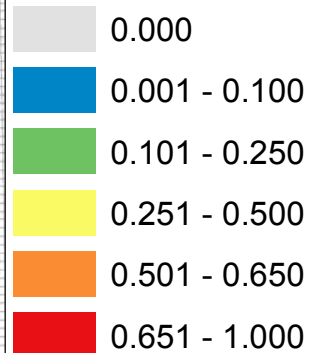


All Species - Spring Conditional Model (Non-zero Counts)



Spring Species (11): COEI, COLO, COTE, GRSH, HERG, LTDU, NOFU, NOGA, REPG, WISP, WWSC

Minimum Power to Detect 1/3x Coldspots



DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

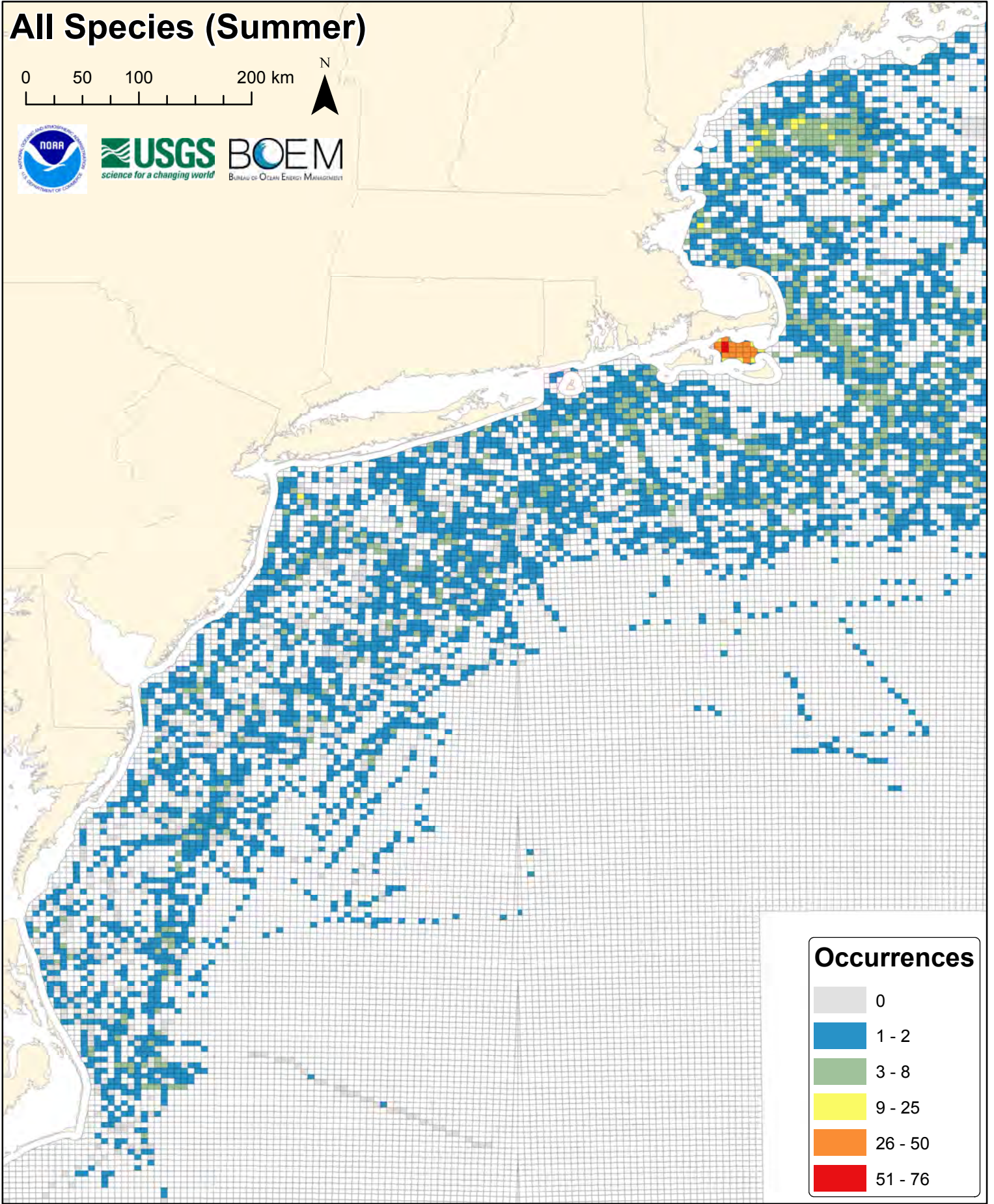
SECTION I. Summary Statistic Maps Calculated for All Species

Figures F15-F21. Summer

- Number of occurrences summed over all species in summer
- Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance
- Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

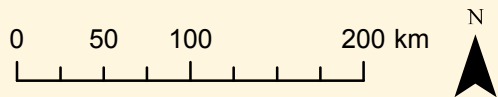
All Species (Summer)

0 50 100 200 km

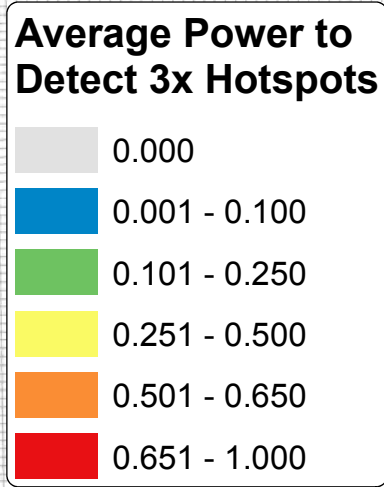
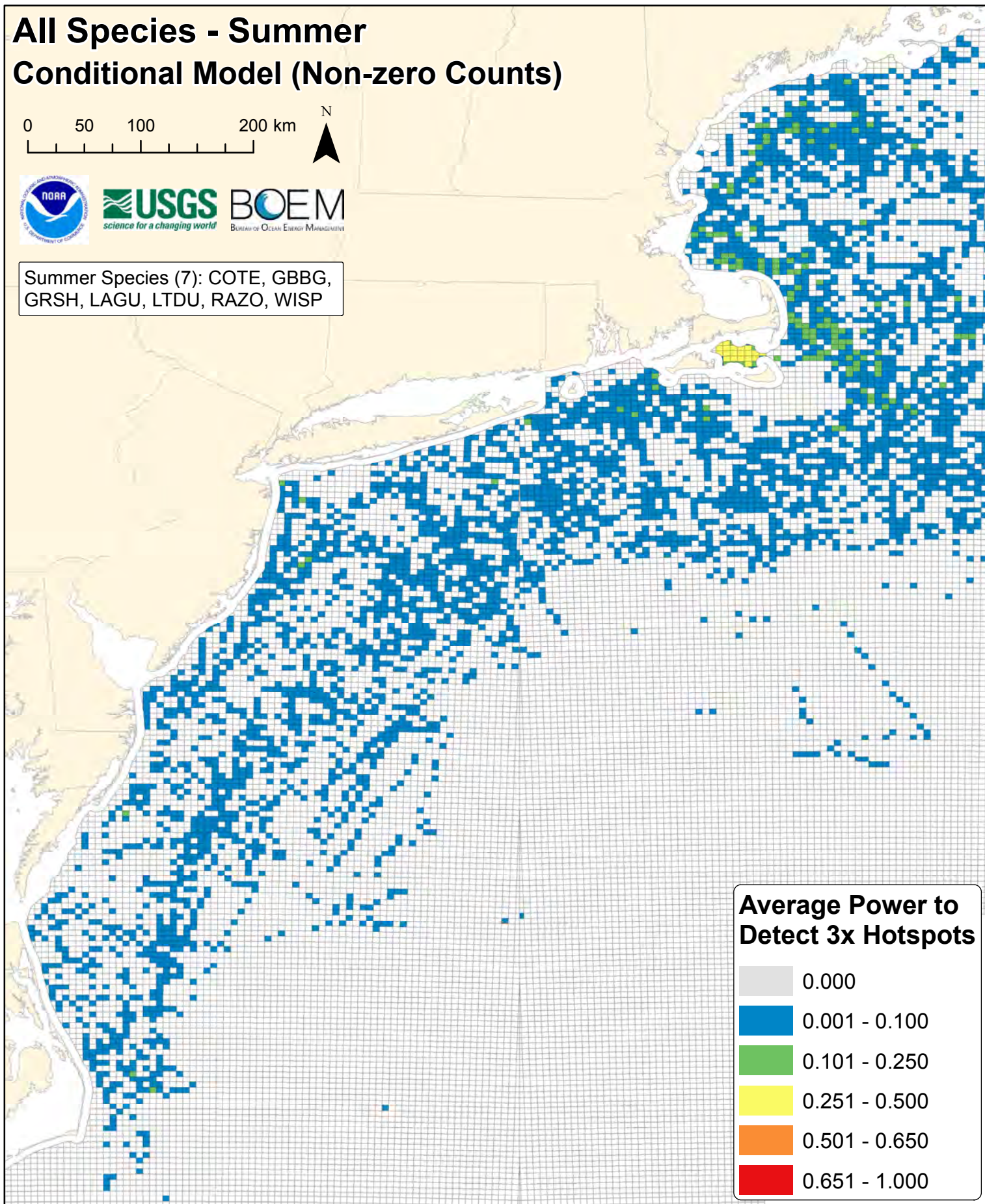


Occurrences	
0	Grey
1 - 2	Blue
3 - 8	Green
9 - 25	Yellow
26 - 50	Orange
51 - 76	Red

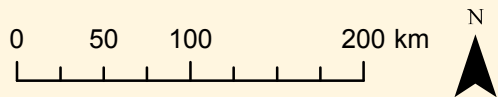
All Species - Summer Conditional Model (Non-zero Counts)



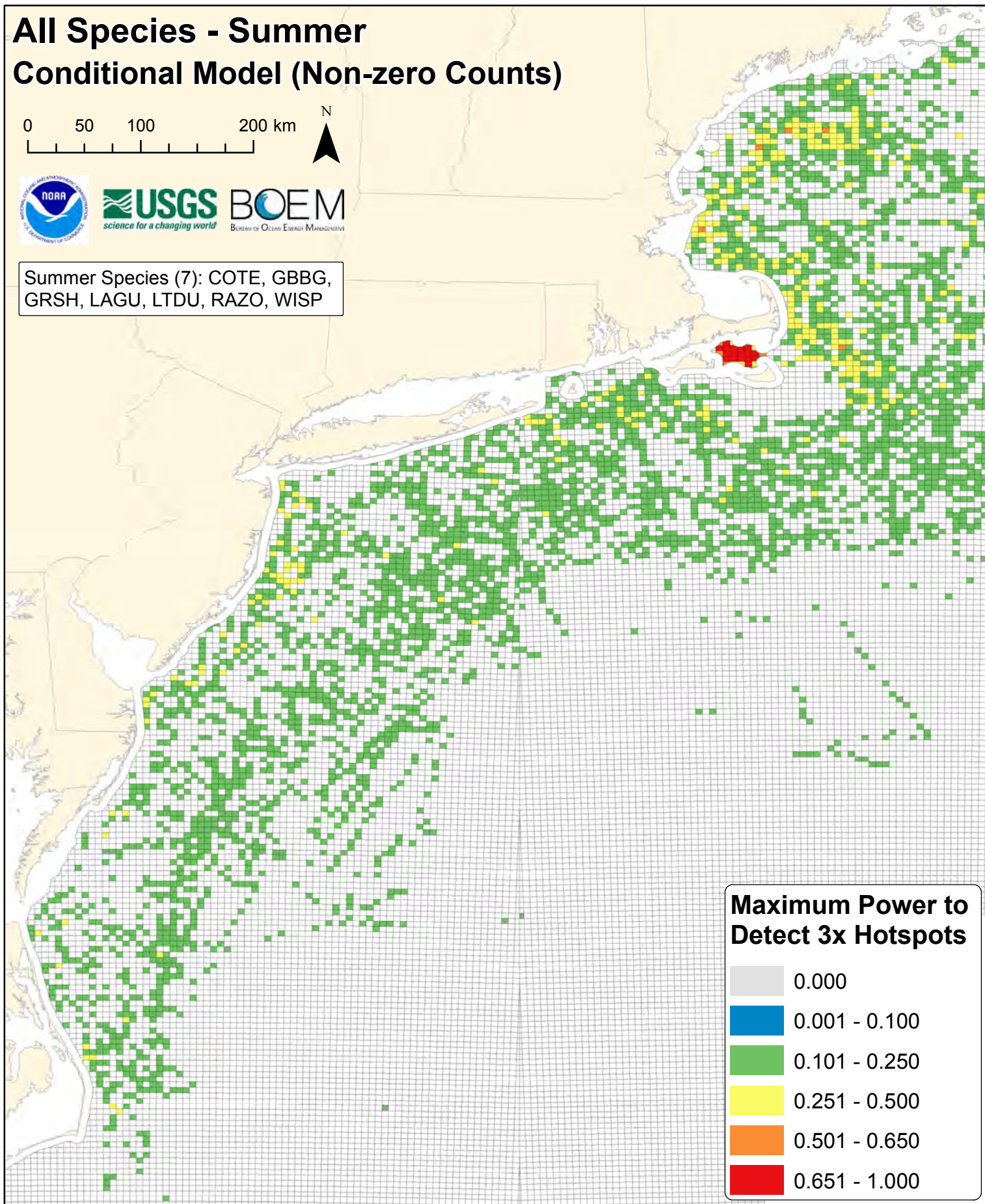
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP



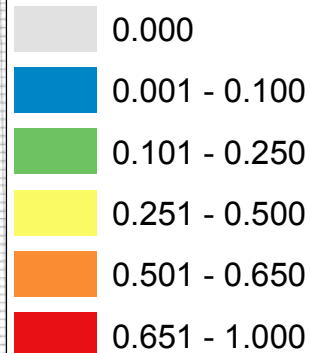
All Species - Summer Conditional Model (Non-zero Counts)



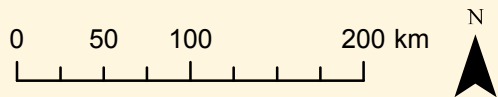
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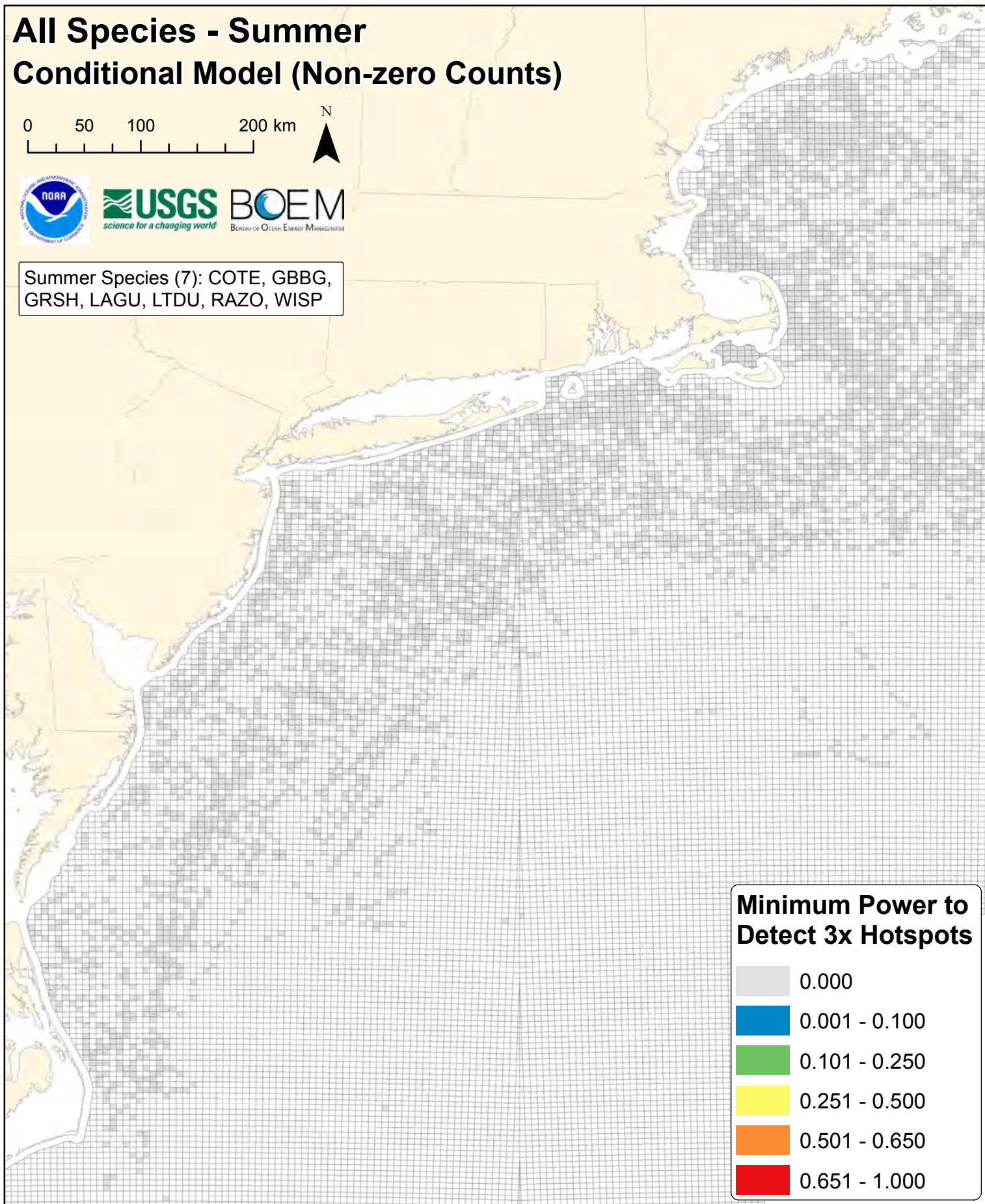
Maximum Power to Detect 3x Hotspots



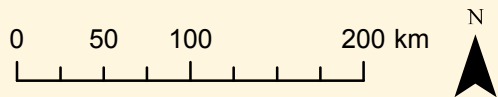
All Species - Summer Conditional Model (Non-zero Counts)



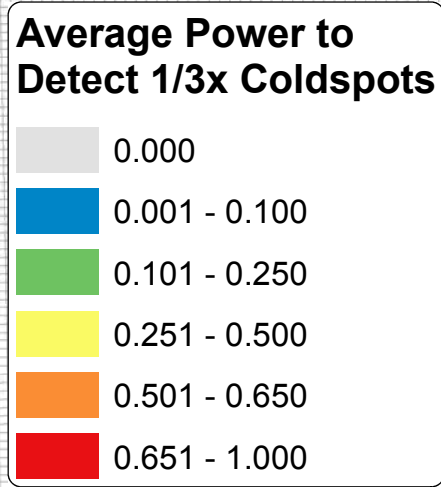
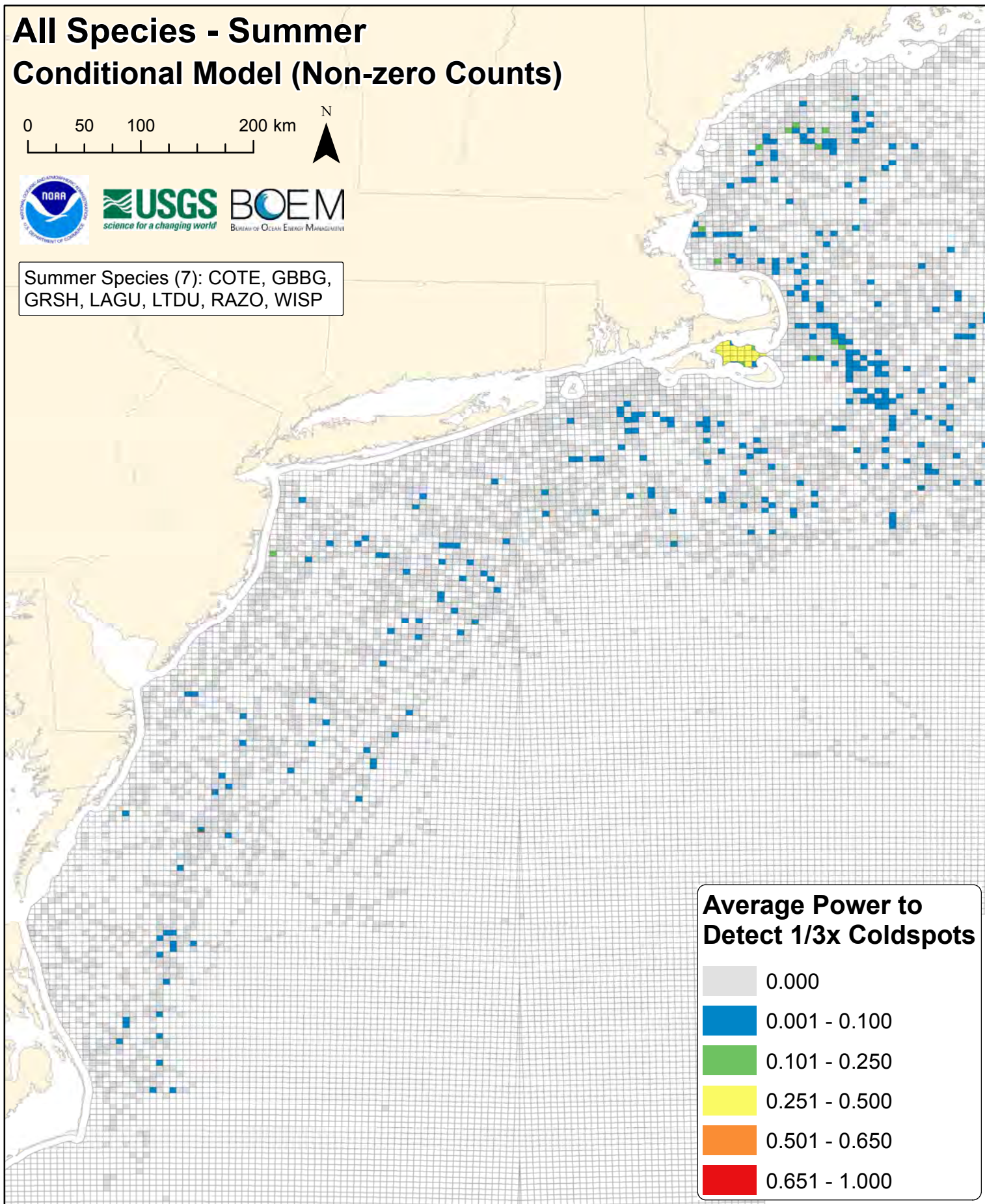
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP



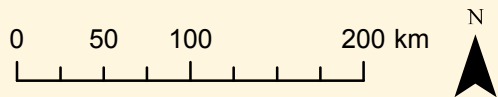
All Species - Summer Conditional Model (Non-zero Counts)



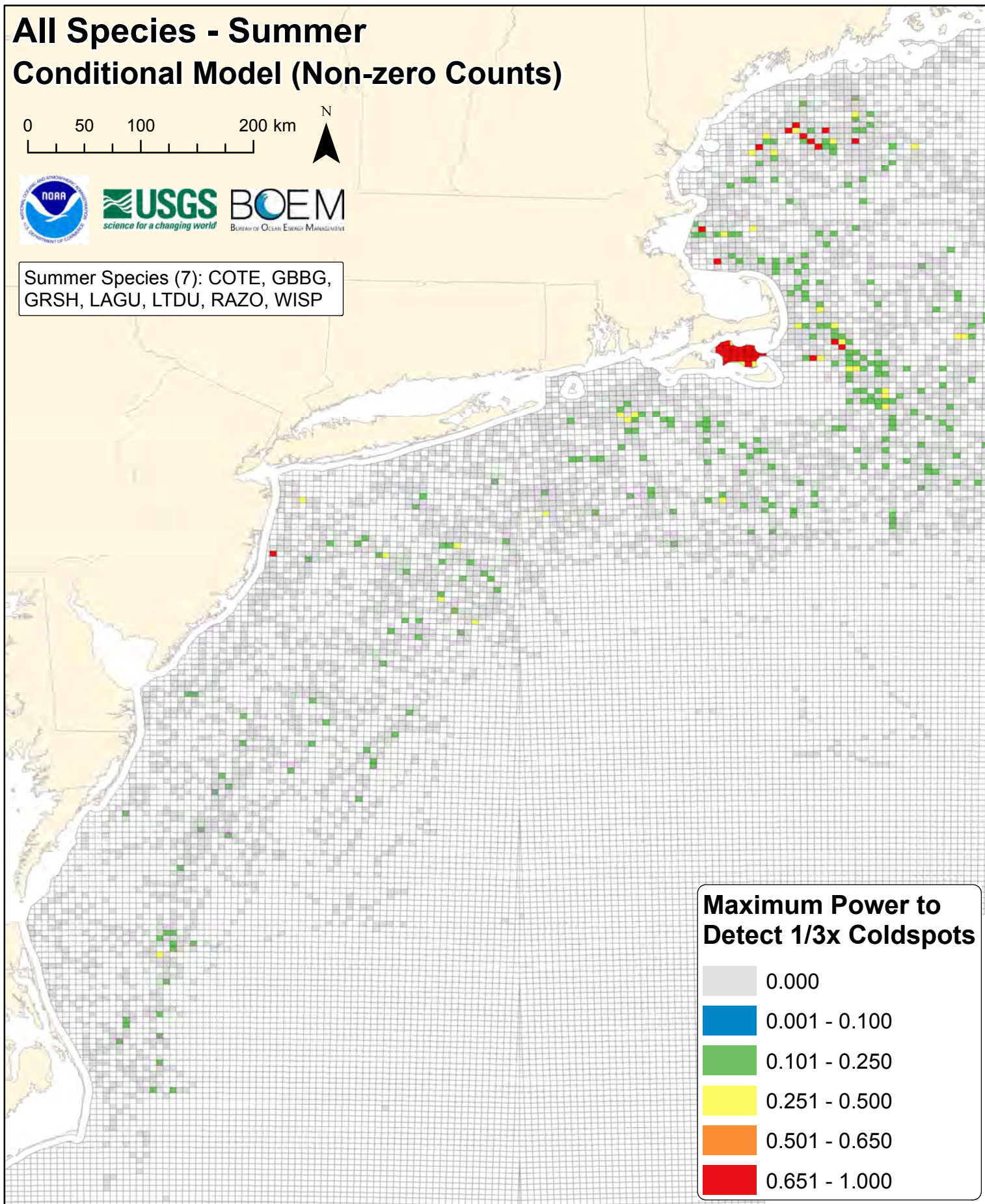
Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP



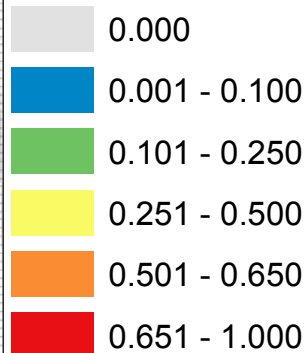
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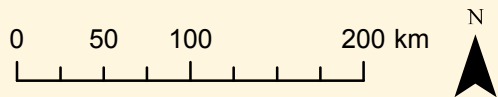
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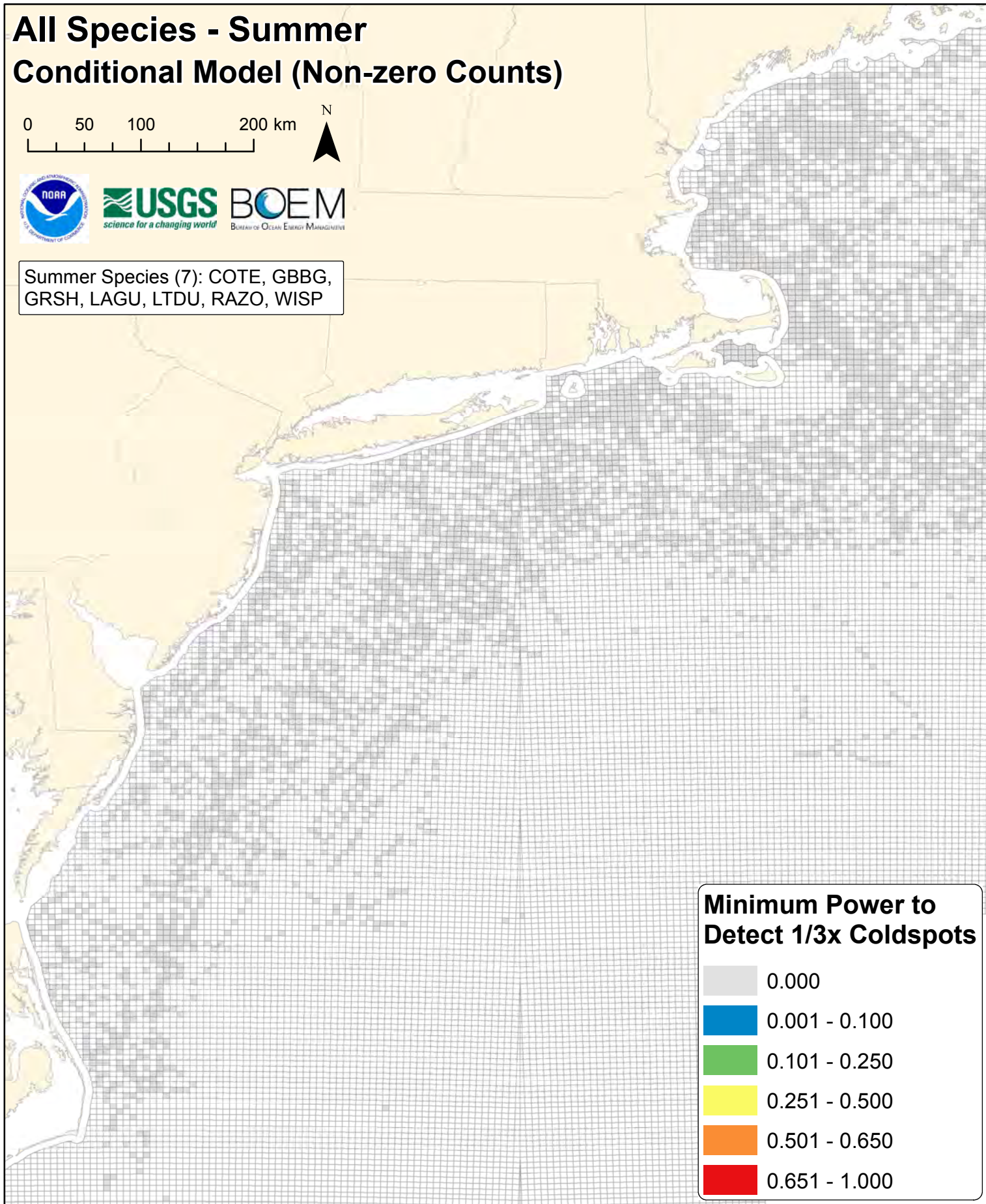
Maximum Power to Detect 1/3x Coldspots



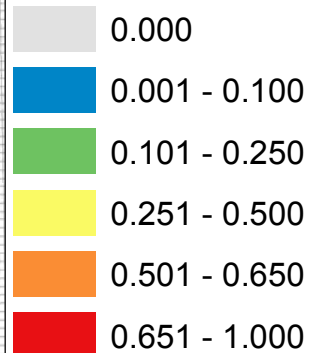
All Species - Summer Conditional Model (Non-zero Counts)



Summer Species (7): COTE, GBBG, GRSH, LAGU, LTDU, RAZO, WISP



Minimum Power to Detect 1/3x Coldspots



DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

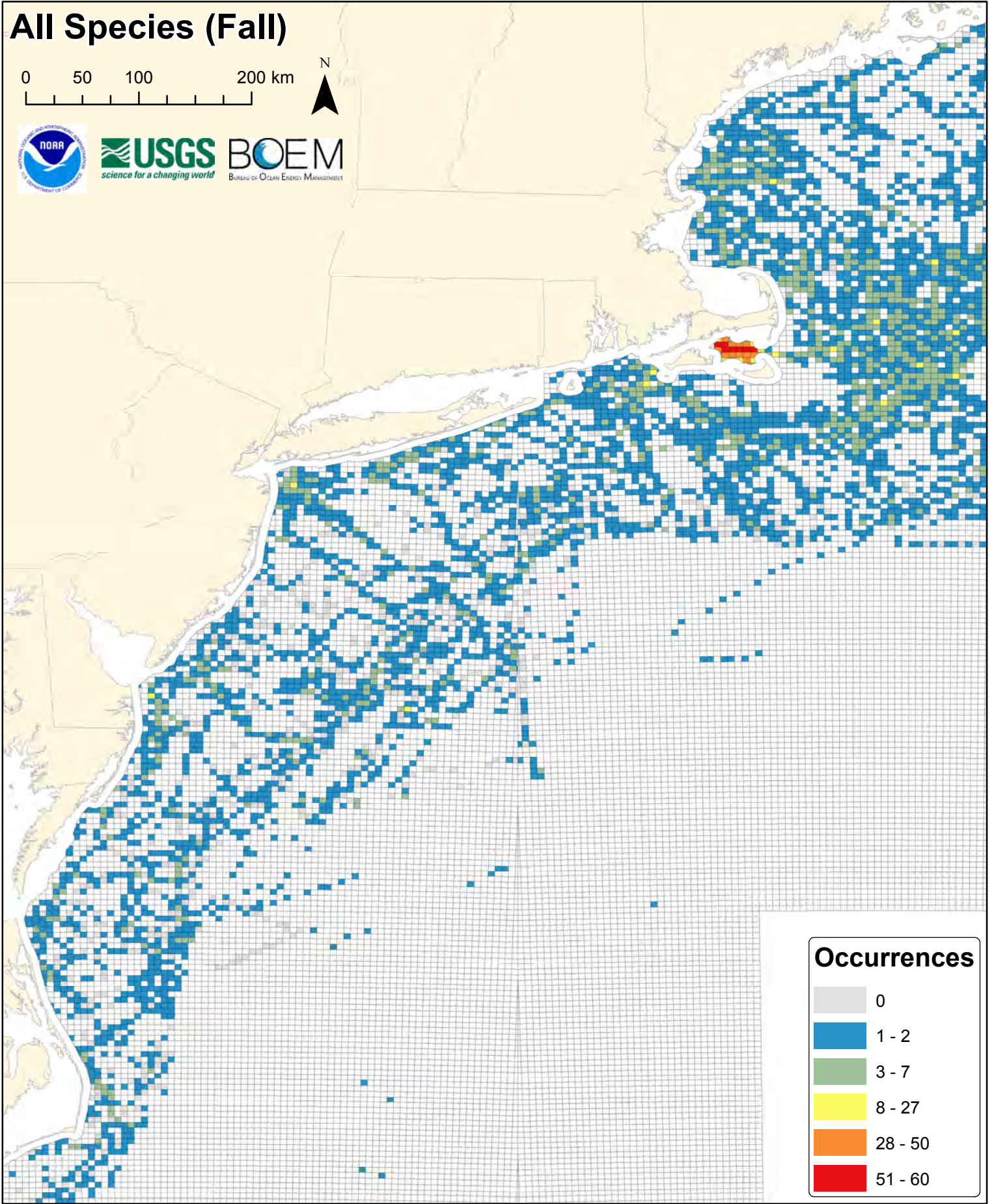
SECTION I. Summary Statistic Maps Calculated for All Species

Figures F22-F28. Fall

- Number of occurrences summed over all species in fall
- Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance
- Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

All Species (Fall)

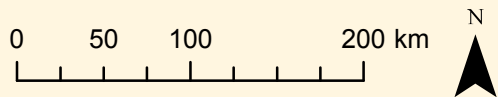
0 50 100 200 km



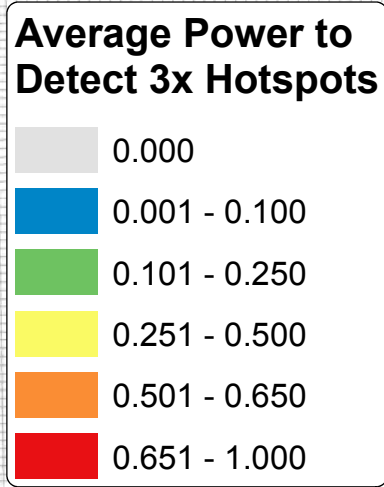
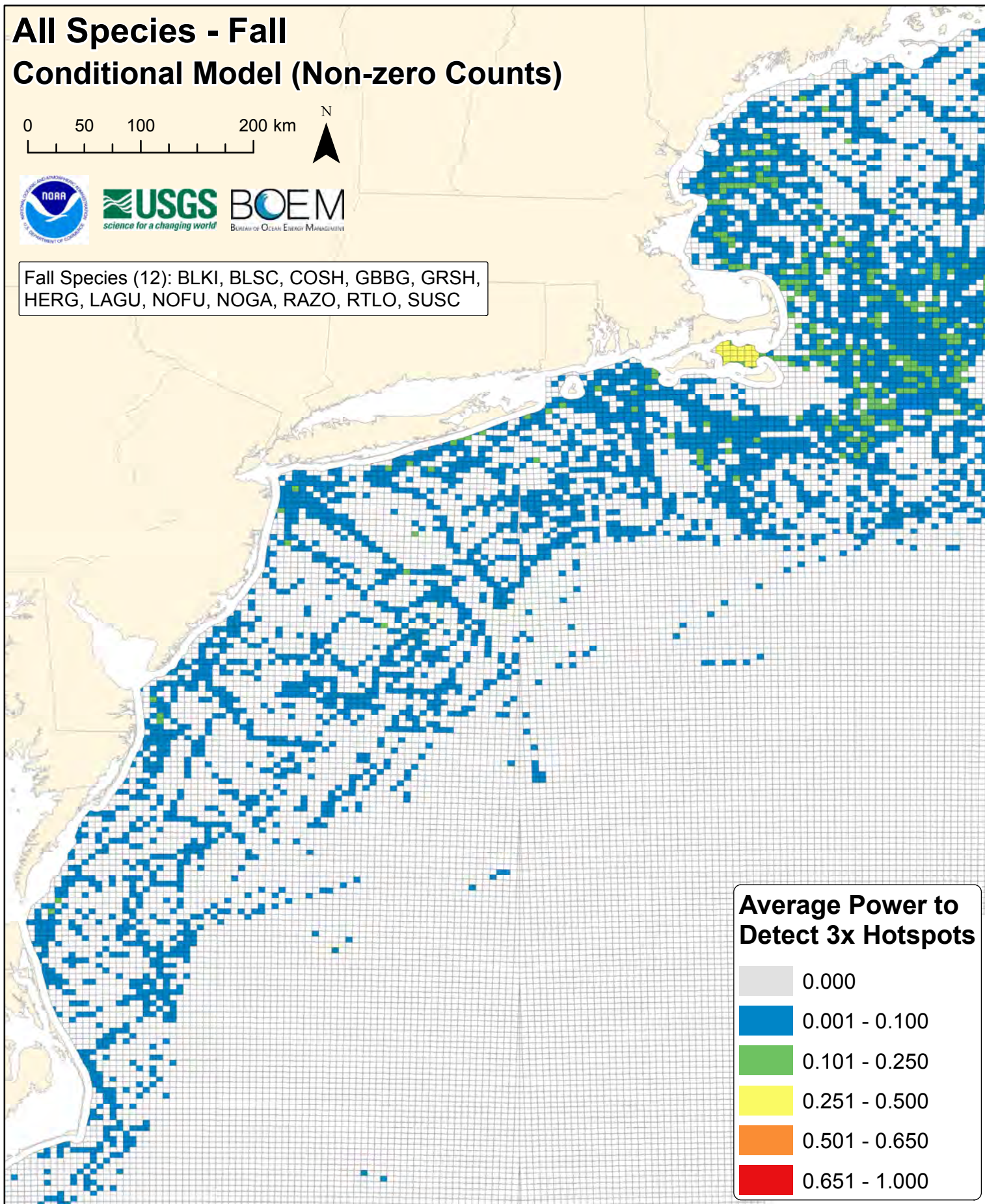
Occurrences

0
1 - 2
3 - 7
8 - 27
28 - 50
51 - 60

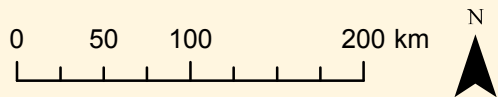
All Species - Fall Conditional Model (Non-zero Counts)



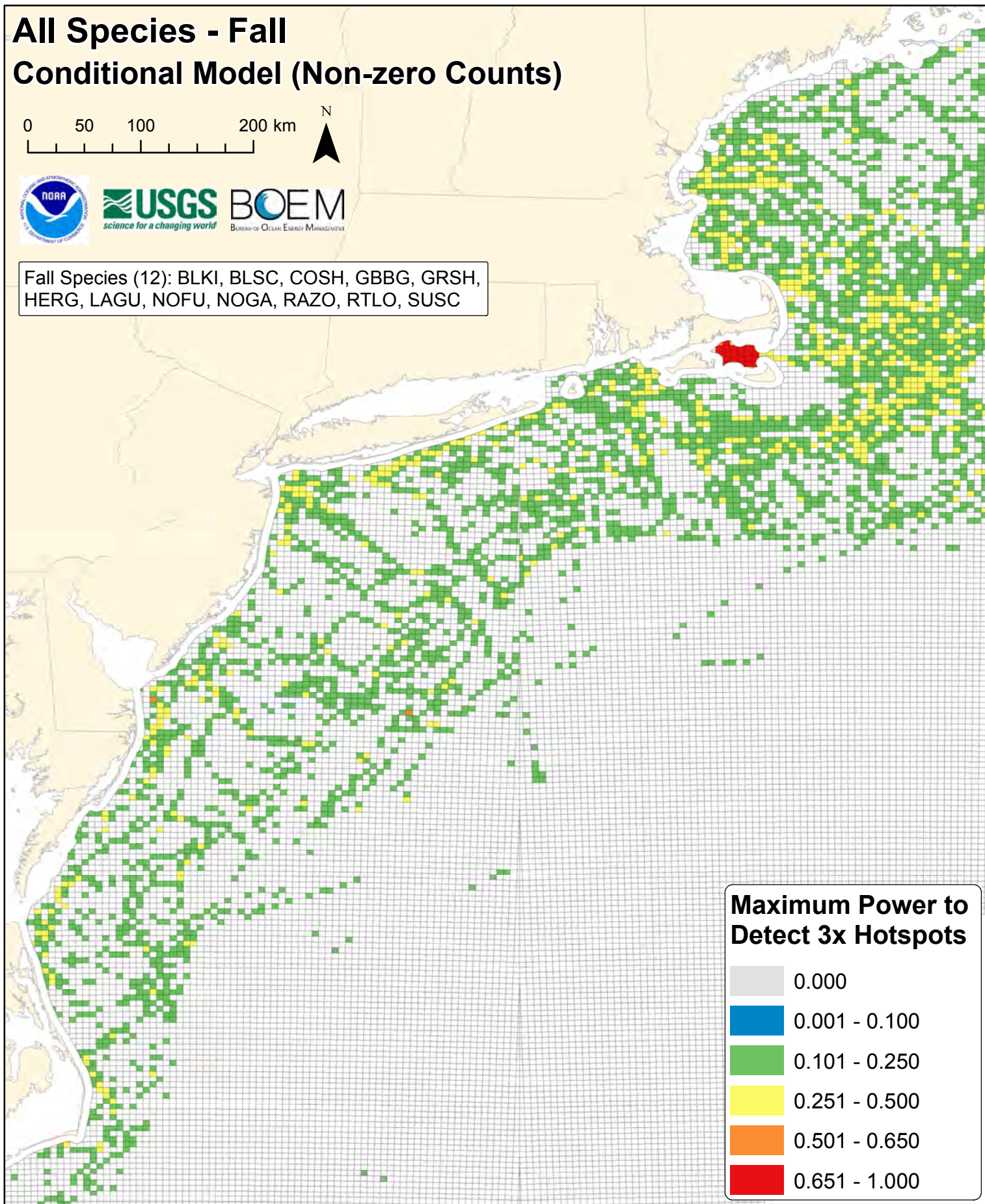
Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC



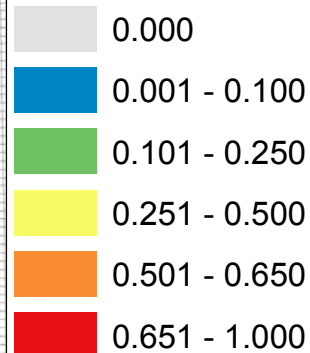
All Species - Fall Conditional Model (Non-zero Counts)



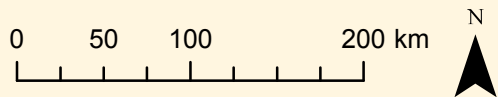
Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC



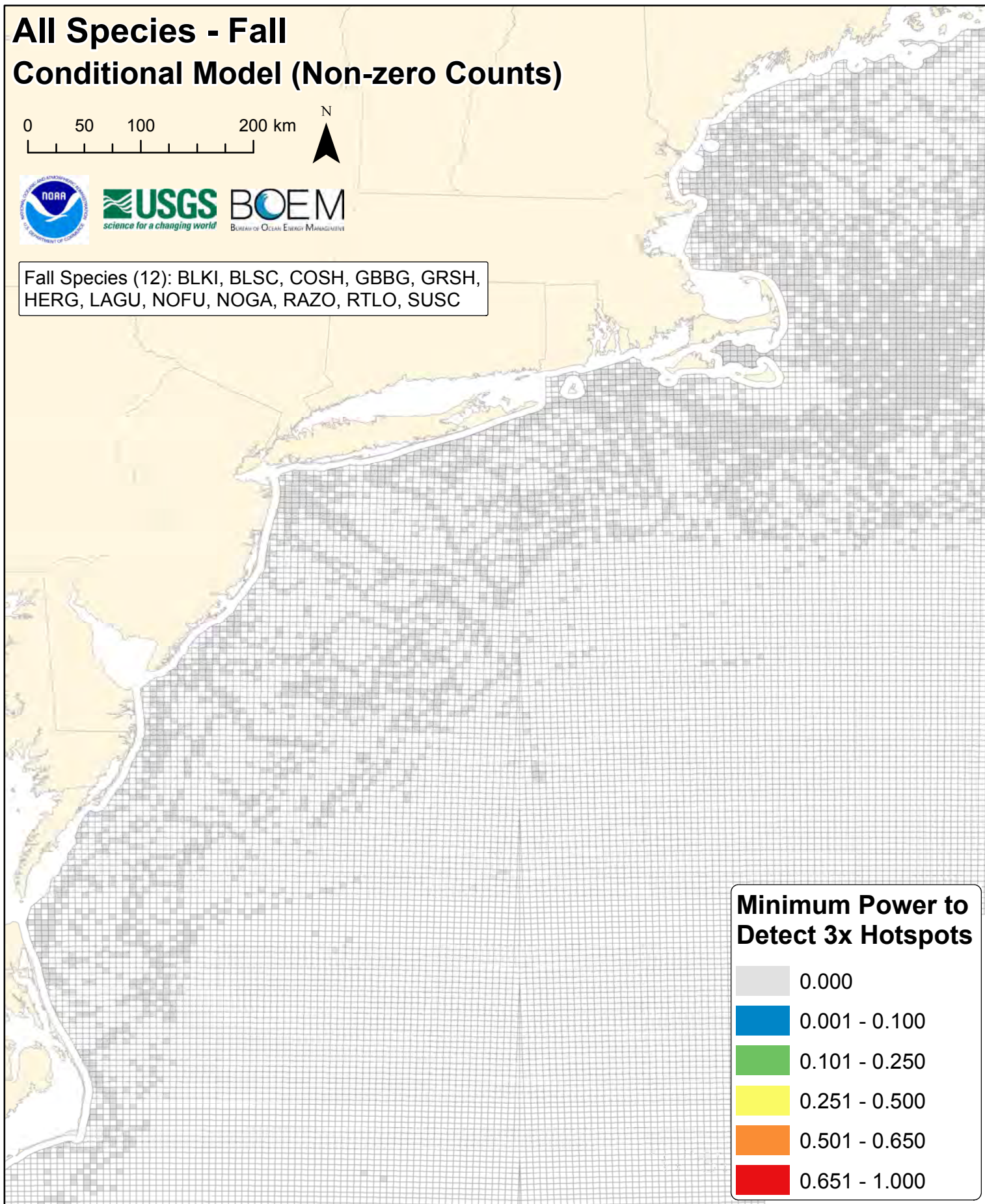
Maximum Power to Detect 3x Hotspots



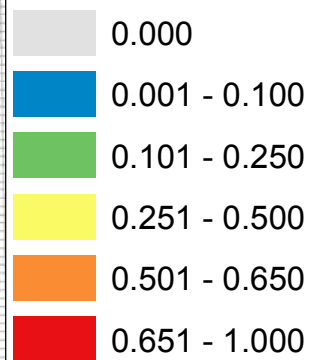
All Species - Fall Conditional Model (Non-zero Counts)



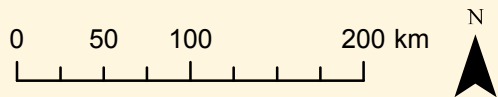
Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC



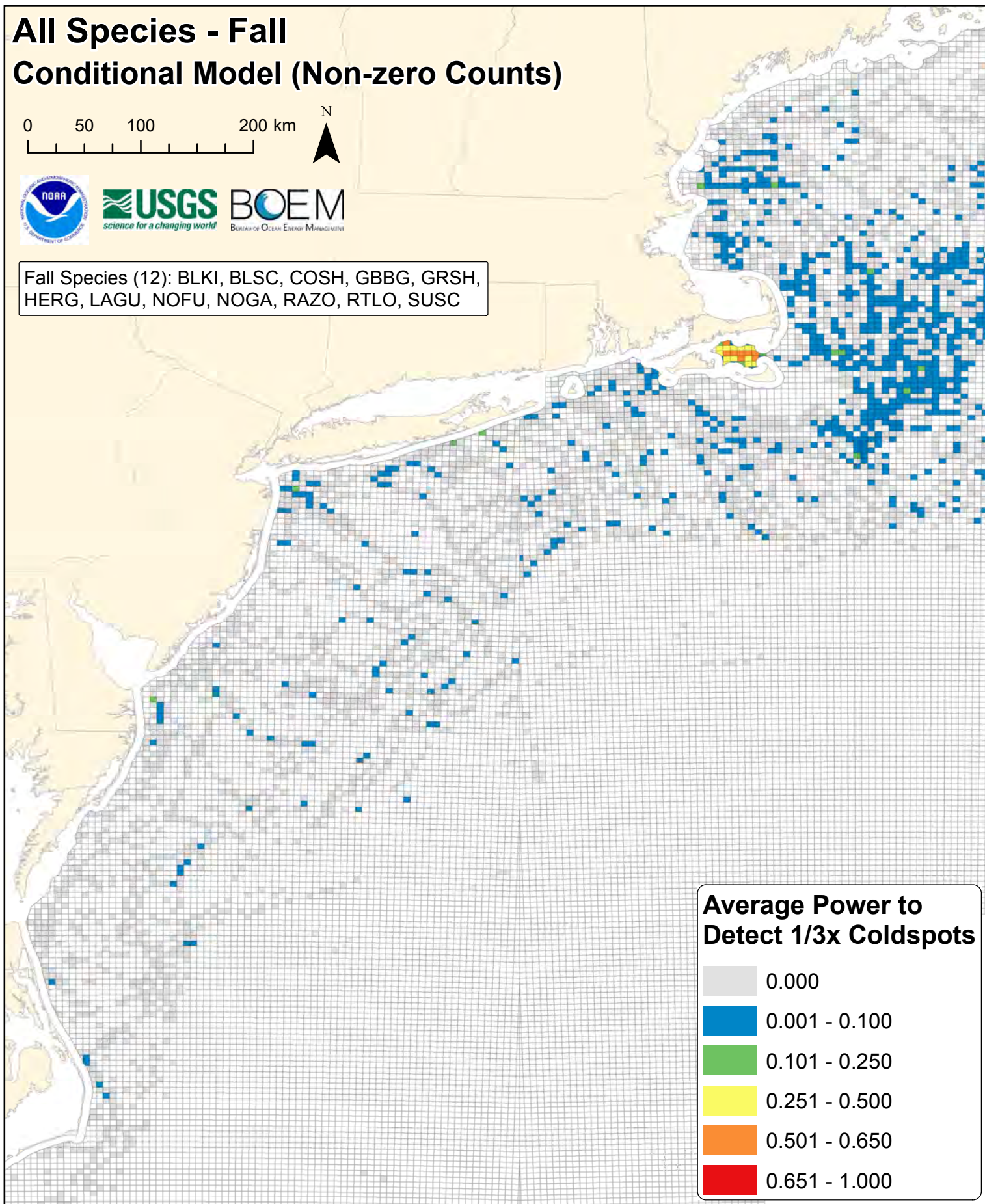
Minimum Power to Detect 3x Hotspots



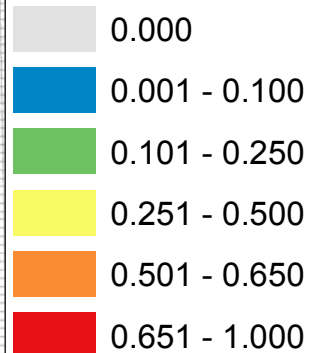
All Species - Fall Conditional Model (Non-zero Counts)



Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC

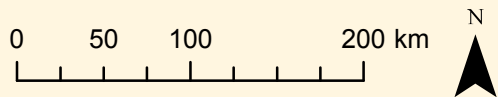


Average Power to Detect 1/3x Coldspots

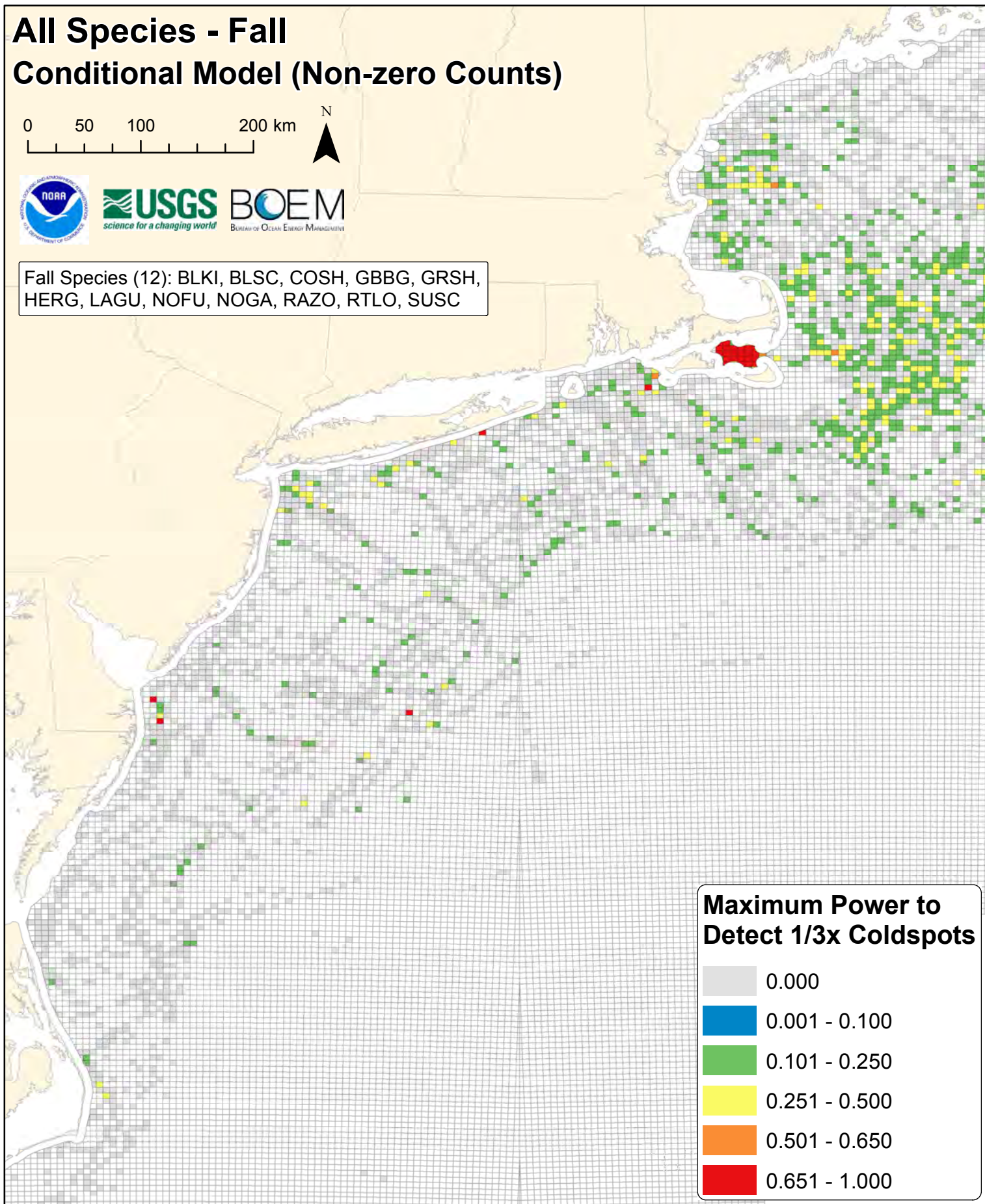


All Species - Fall

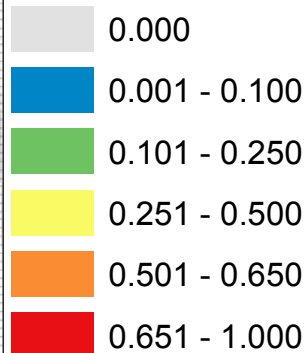
Conditional Model (Non-zero Counts)



Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC

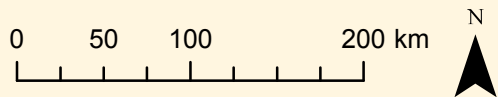


Maximum Power to Detect 1/3x Coldspots

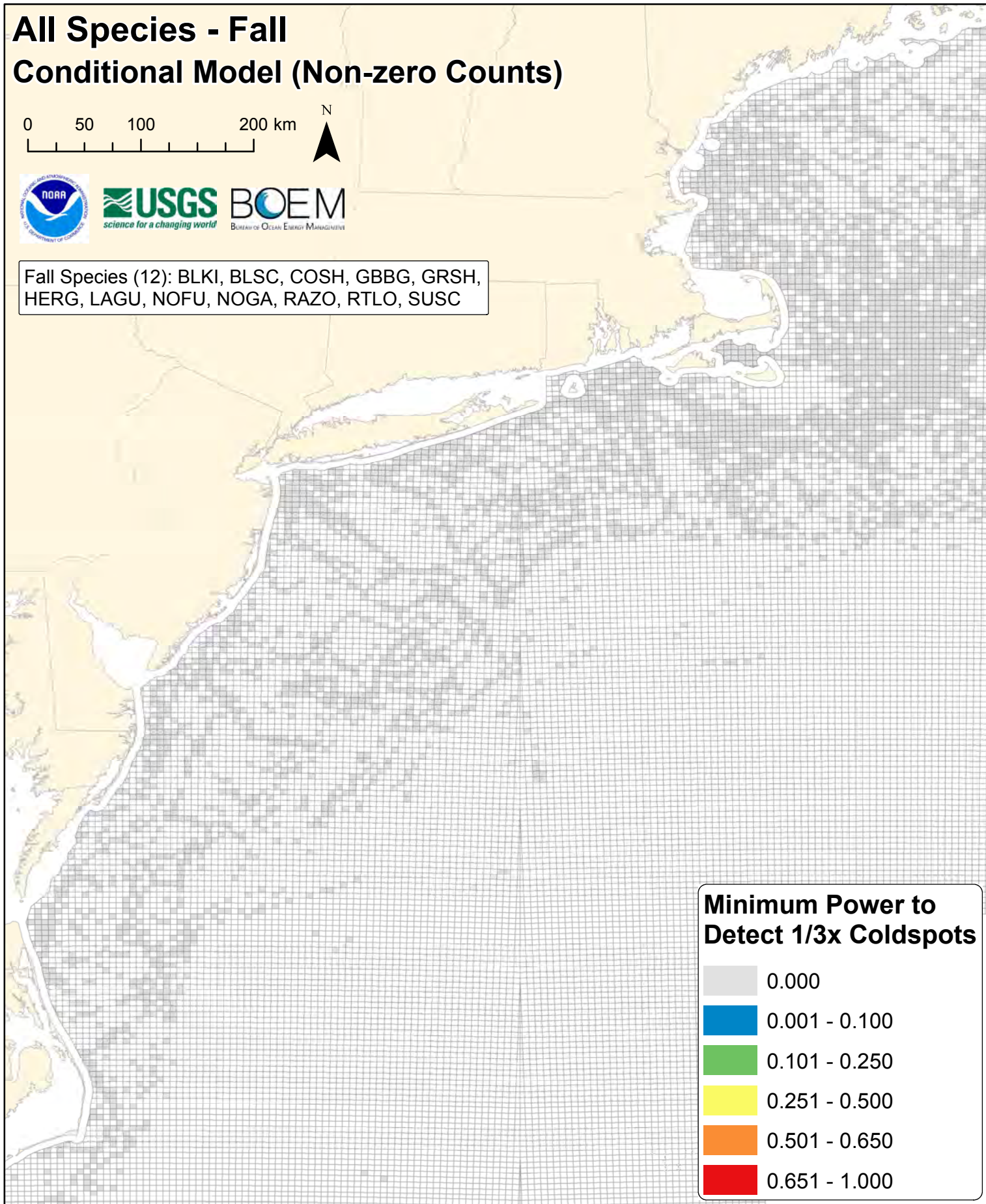


All Species - Fall

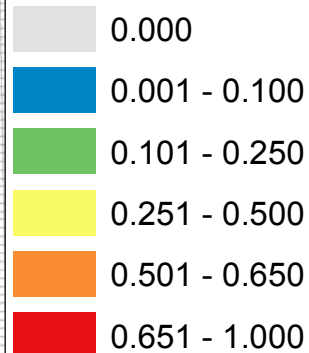
Conditional Model (Non-zero Counts)



Fall Species (12): BLKI, BLSC, COSH, GBBG, GRSH, HERG, LAGU, NOFU, NOGA, RAZO, RTLO, SUSC



Minimum Power to Detect 1/3x Coldspots



DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

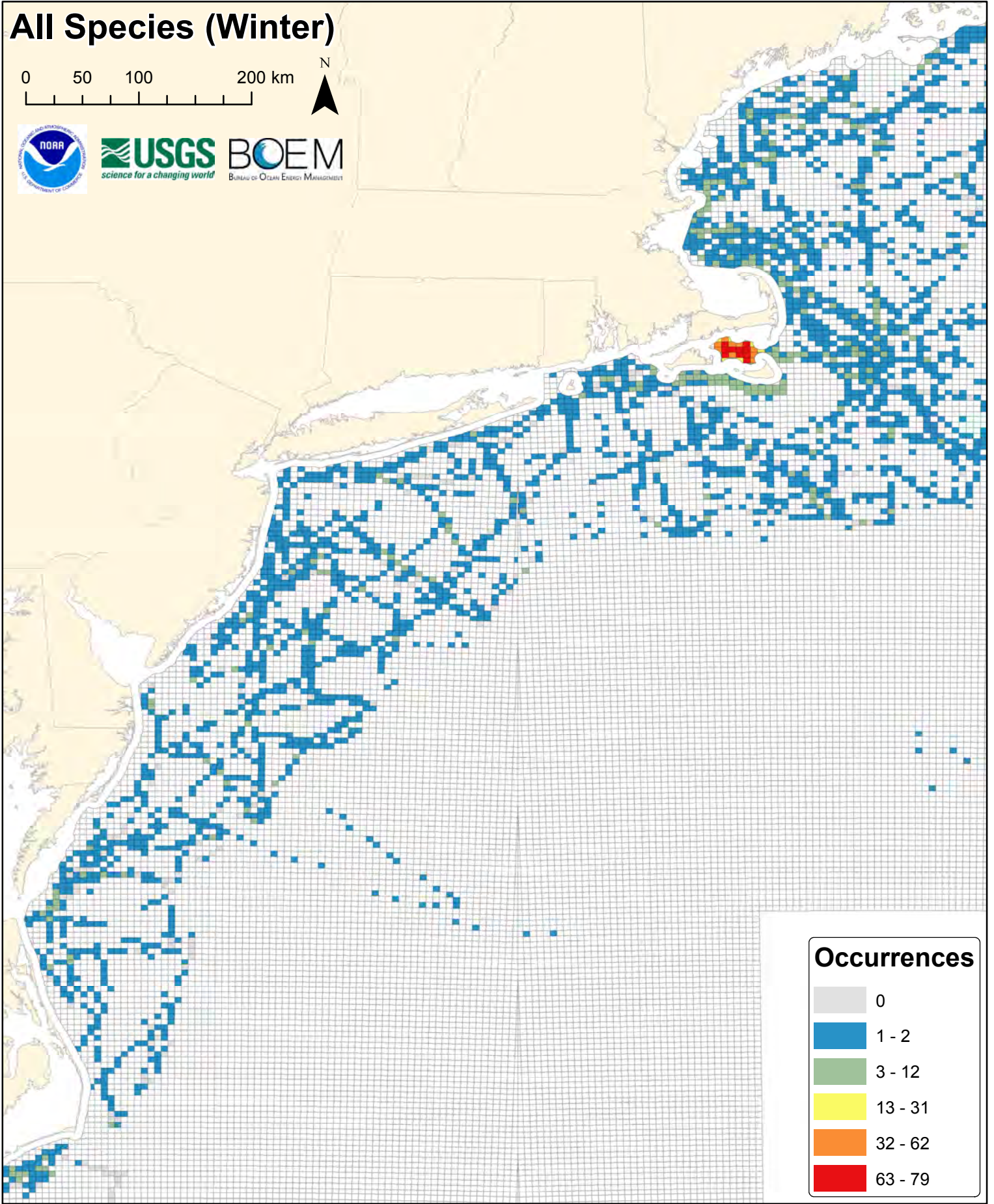
SECTION I. Summary Statistic Maps Calculated for All Species

Figures F29-F35. Winter

- Number of occurrences summed over all species in winter
- Average, maximum, and minimum power to detect 3x hotspots of non-zero abundance
- Average, maximum, and minimum power to detect 1/3x coldspots of non-zero abundance

All Species (Winter)

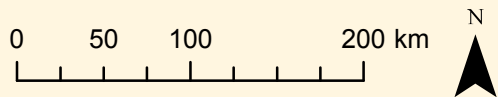
0 50 100 200 km



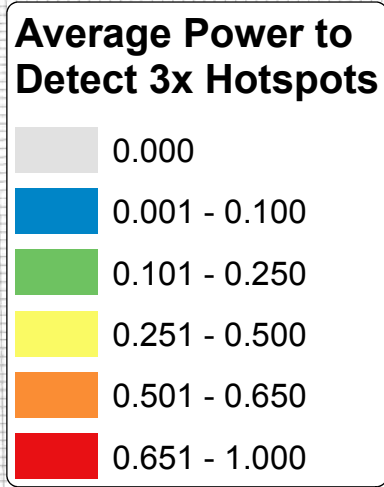
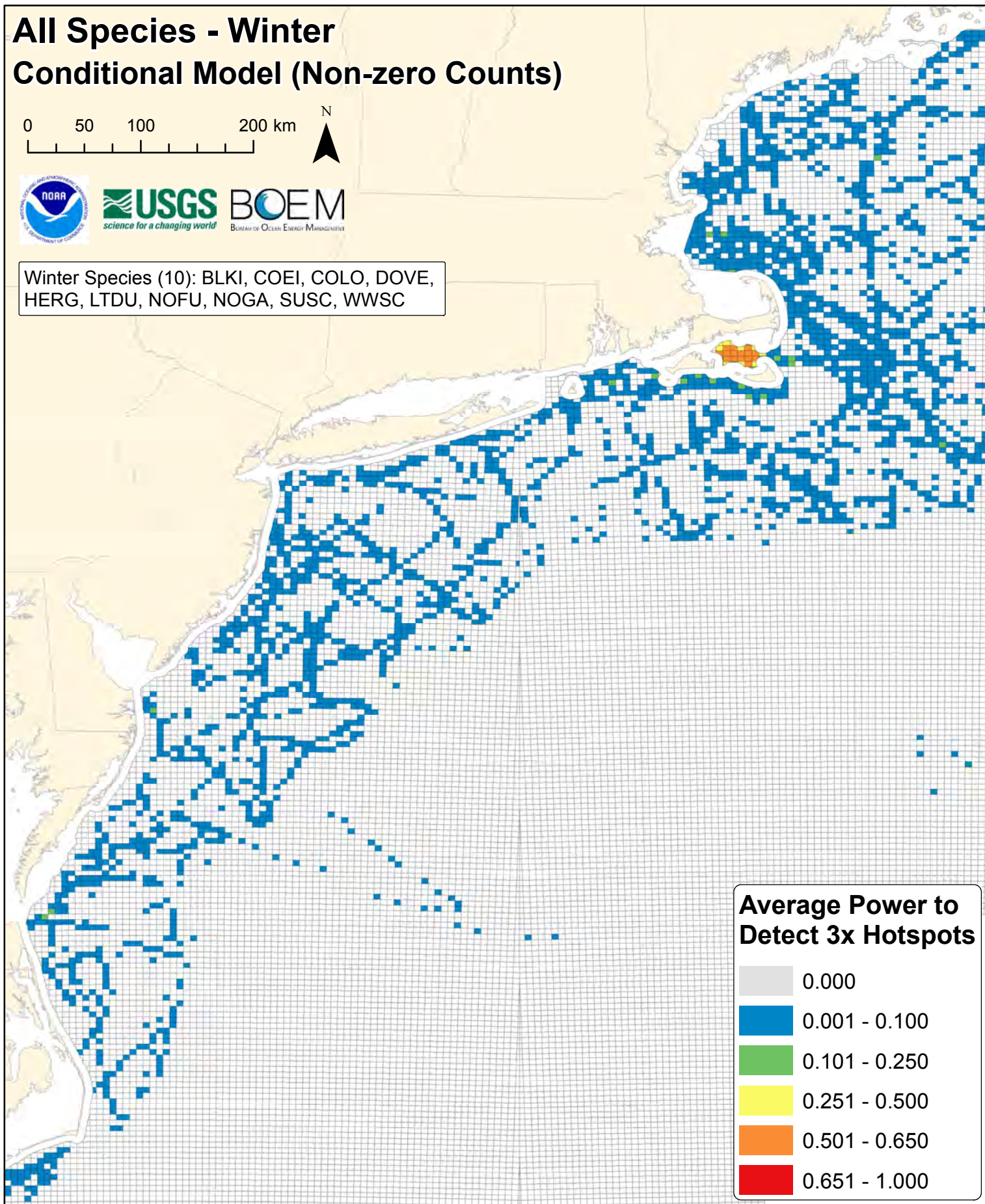
Occurrences

0
1 - 2
3 - 12
13 - 31
32 - 62
63 - 79

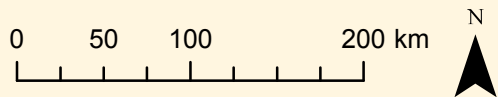
All Species - Winter Conditional Model (Non-zero Counts)



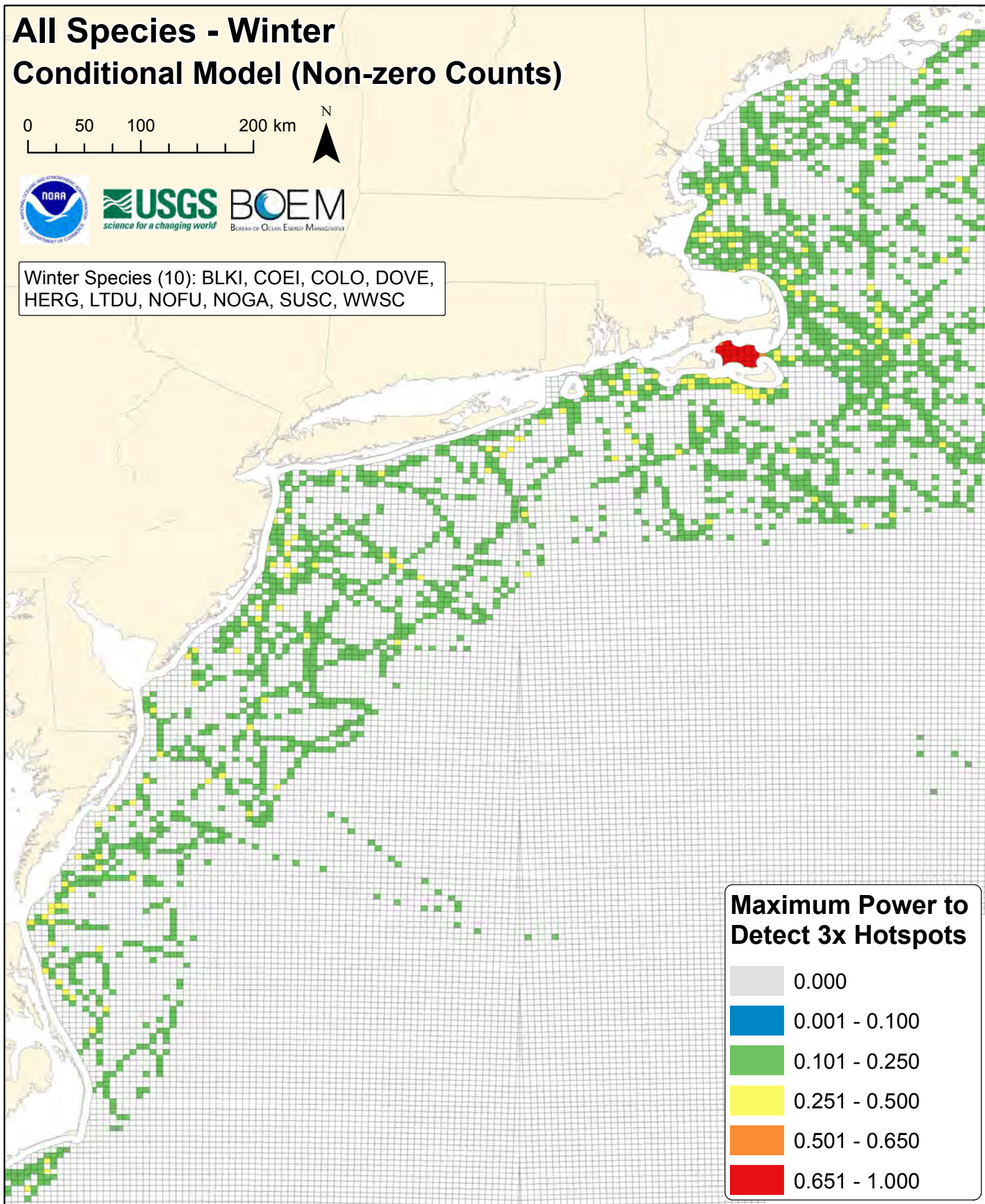
Winter Species (10): BLKI, COEI, COLO, DOVE,
HERG, LTDU, NOFU, NOGA, SUSC, WWSC



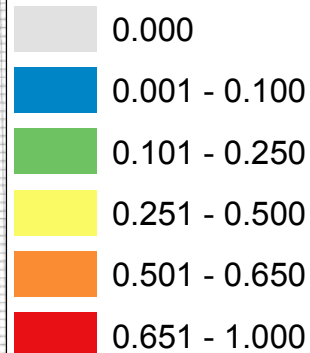
All Species - Winter Conditional Model (Non-zero Counts)



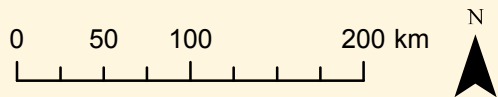
Winter Species (10): BLKI, COEI, COLO, DOVE,
HERG, LTDU, NOFU, NOGA, SUSC, WWSC



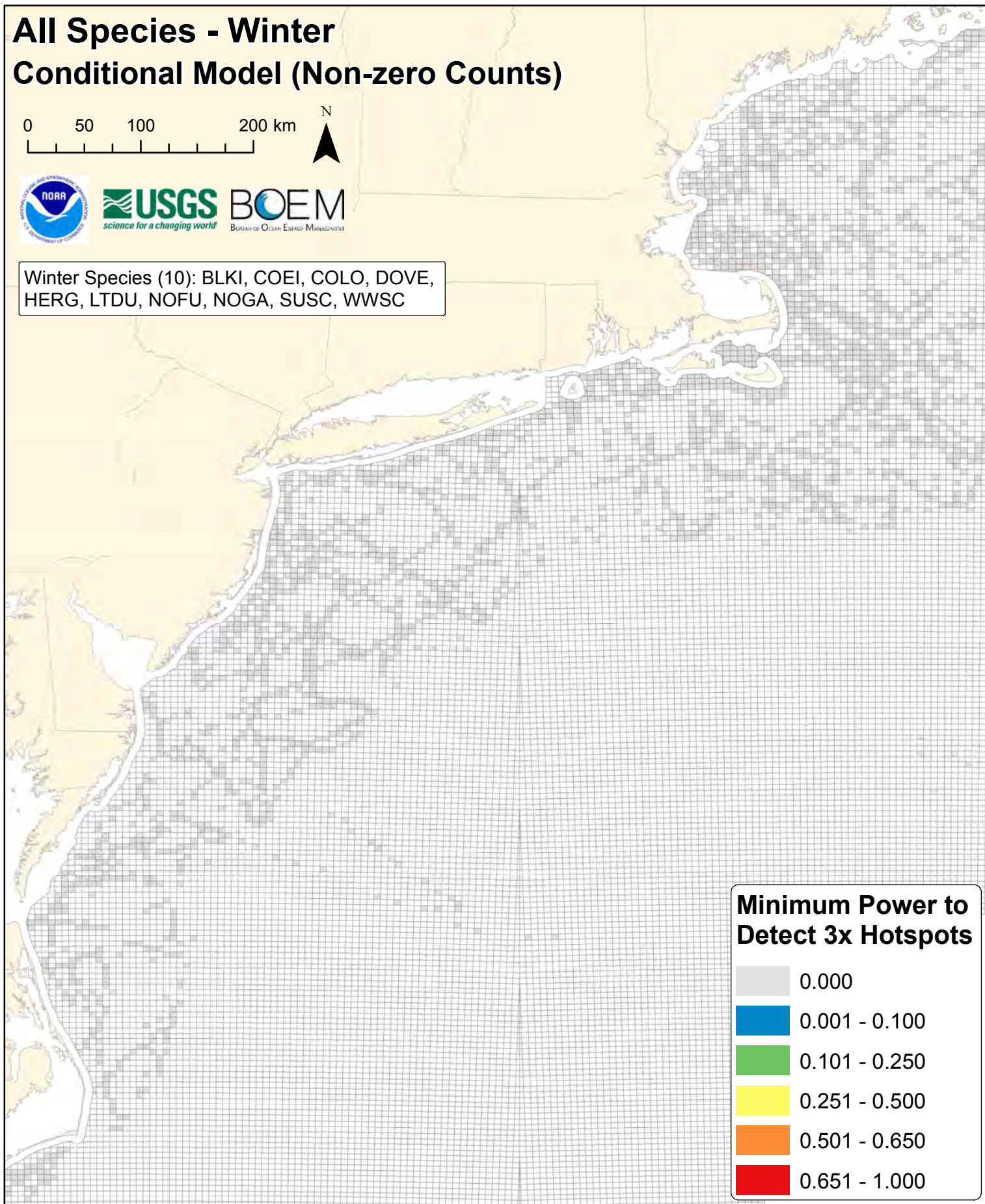
Maximum Power to Detect 3x Hotspots



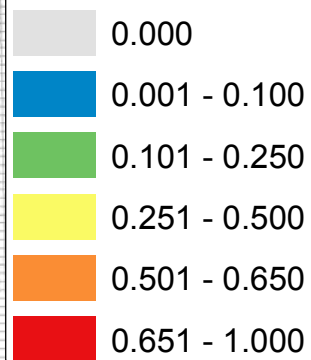
All Species - Winter Conditional Model (Non-zero Counts)



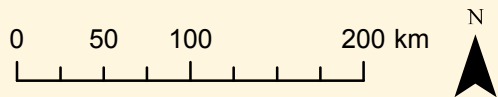
Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC



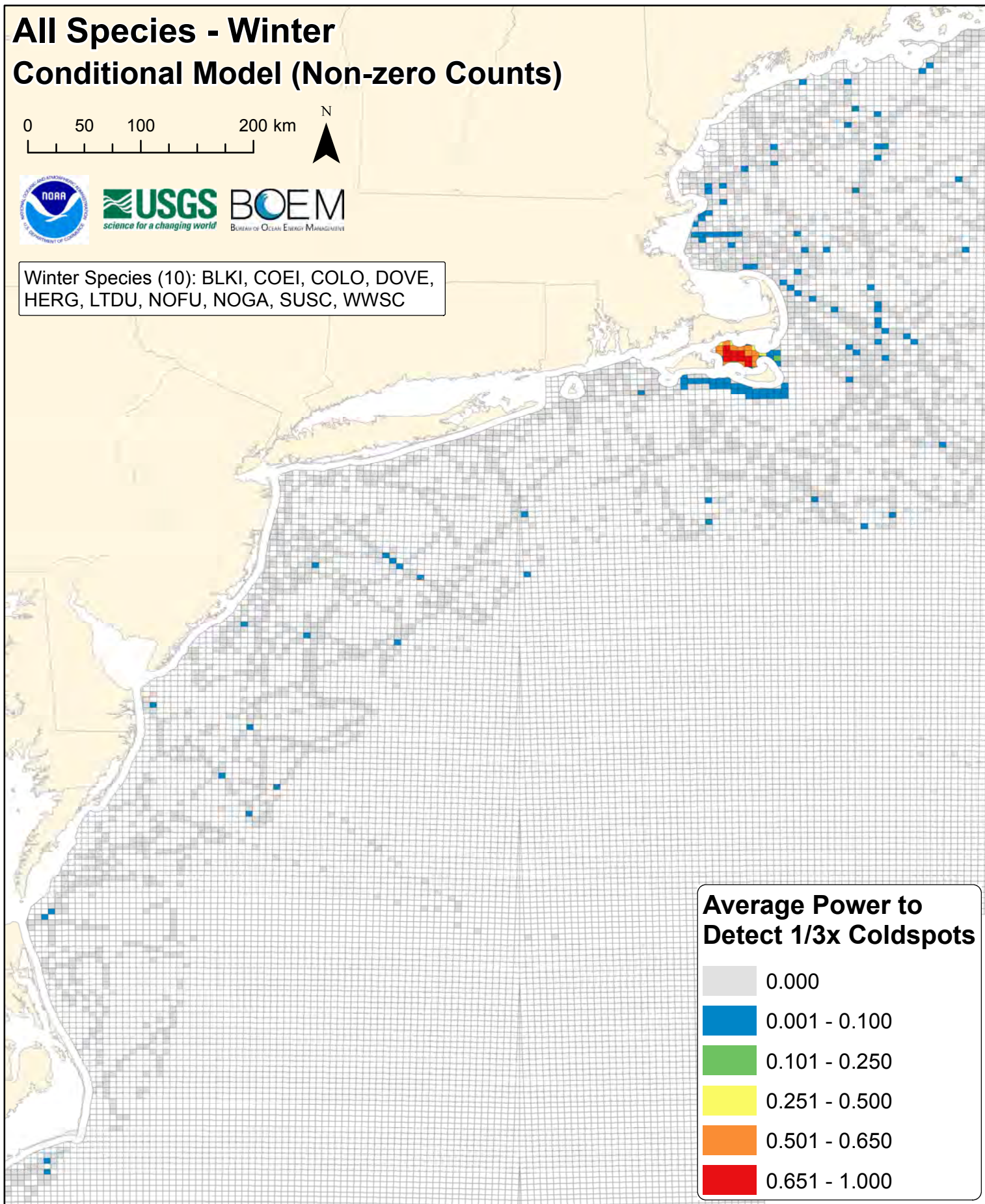
Minimum Power to Detect 3x Hotspots



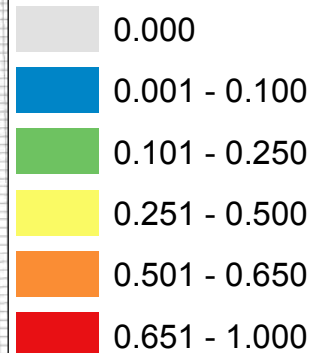
All Species - Winter Conditional Model (Non-zero Counts)



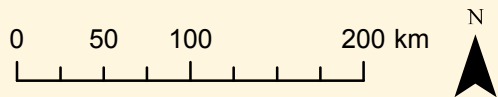
Winter Species (10): BLKI, COEI, COLO, DOVE,
HERG, LTDU, NOFU, NOGA, SUSC, WWSC



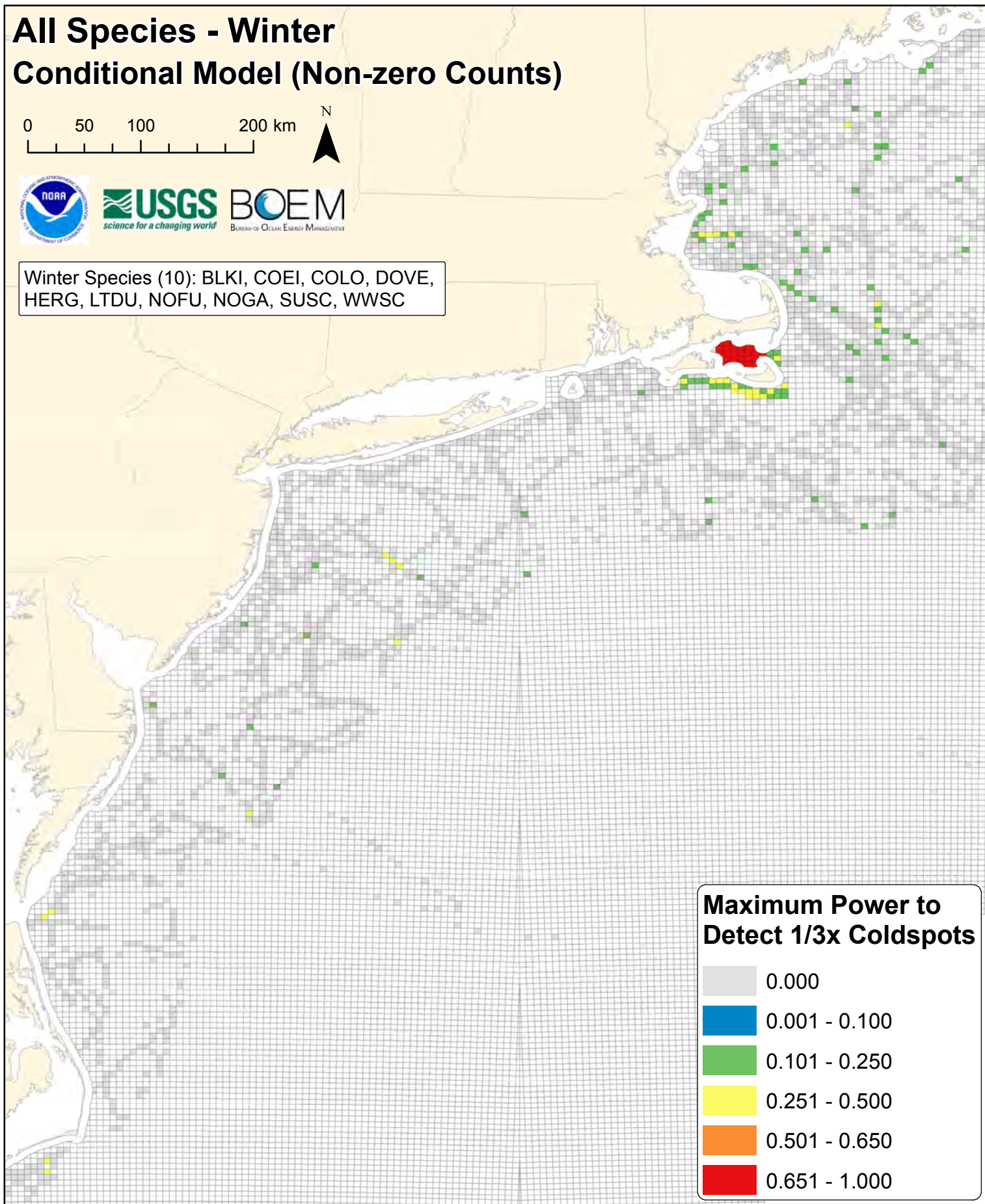
Average Power to Detect 1/3x Coldspots



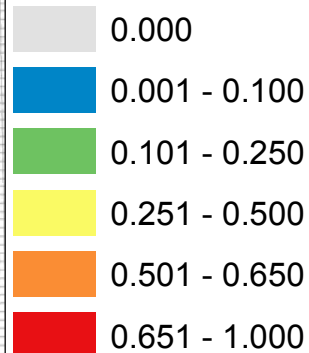
All Species - Winter Conditional Model (Non-zero Counts)



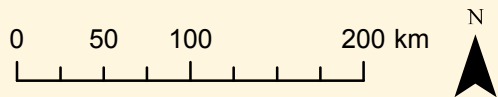
Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC



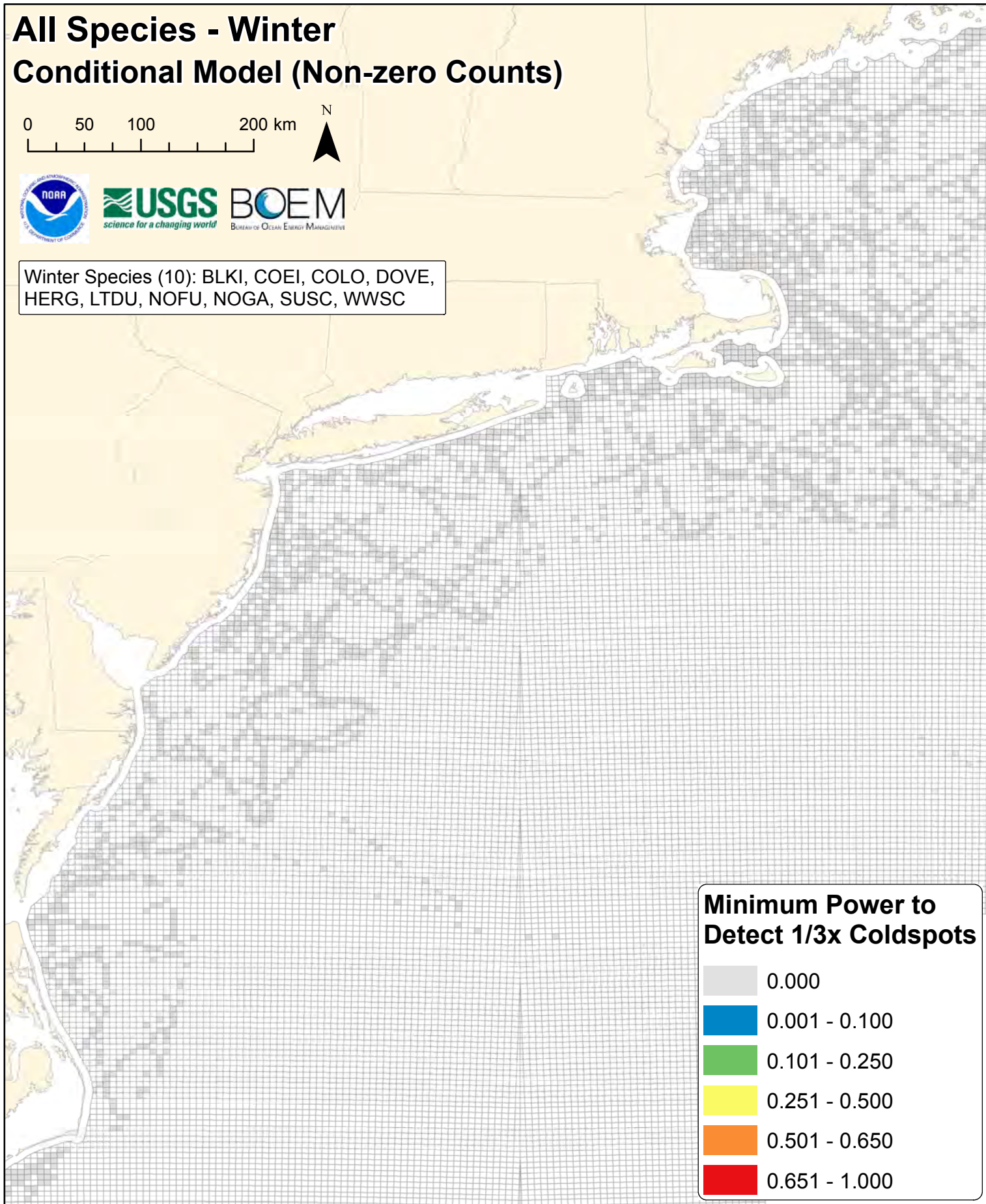
Maximum Power to Detect 1/3x Coldspots



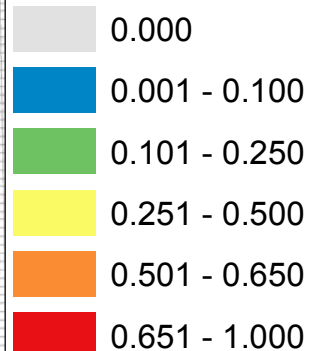
All Species - Winter Conditional Model (Non-zero Counts)



Winter Species (10): BLKI, COEI, COLO, DOVE, HERG, LTDU, NOFU, NOGA, SUSC, WWSC



Minimum Power to Detect 1/3x Coldspots



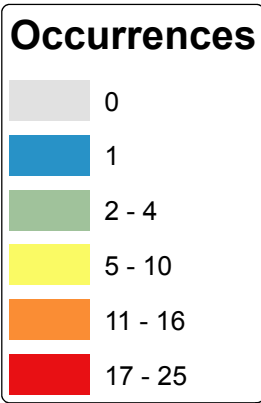
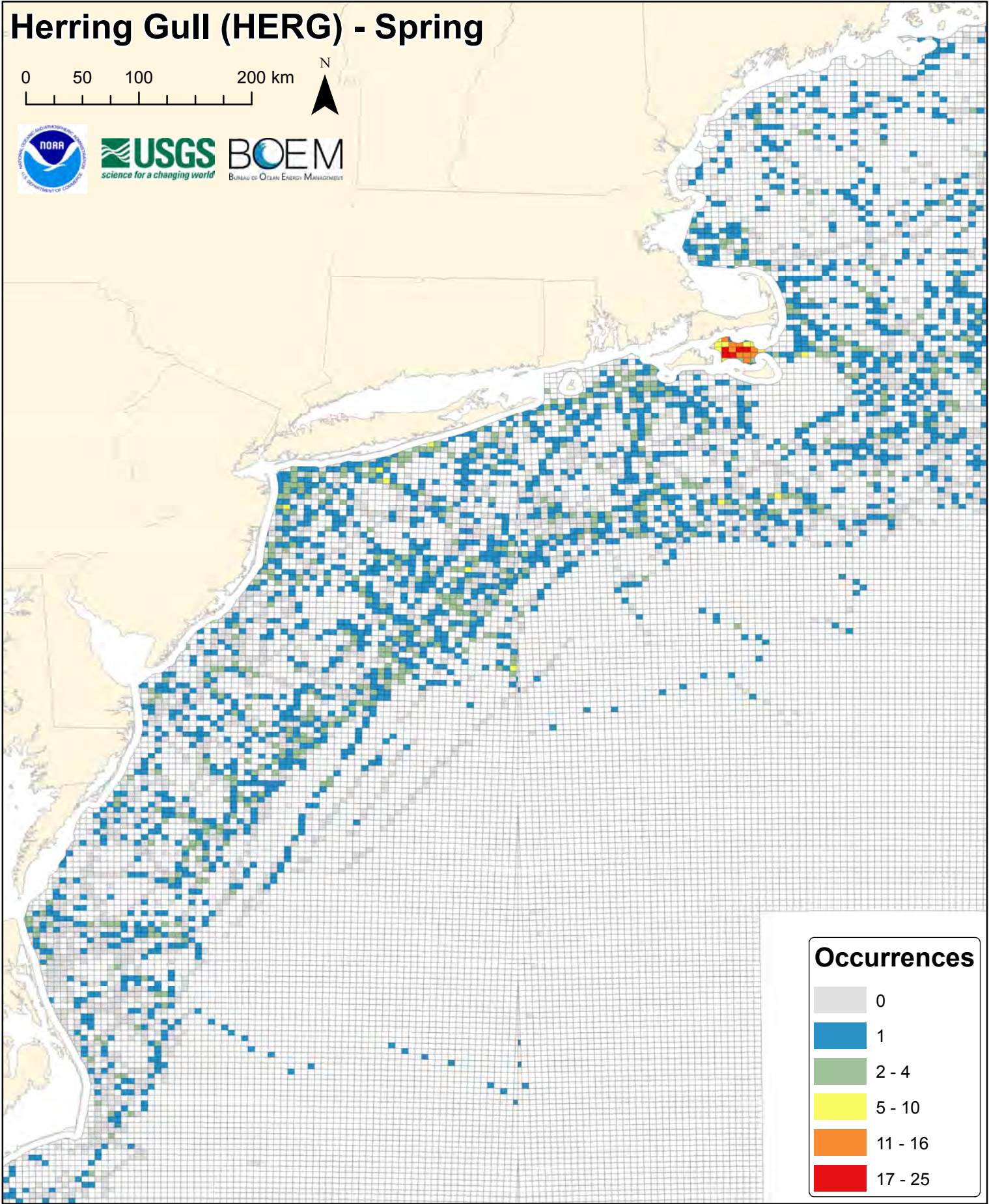
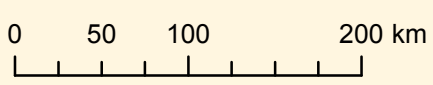
DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

SECTION II. Species-specific Power Analysis Maps and Figures

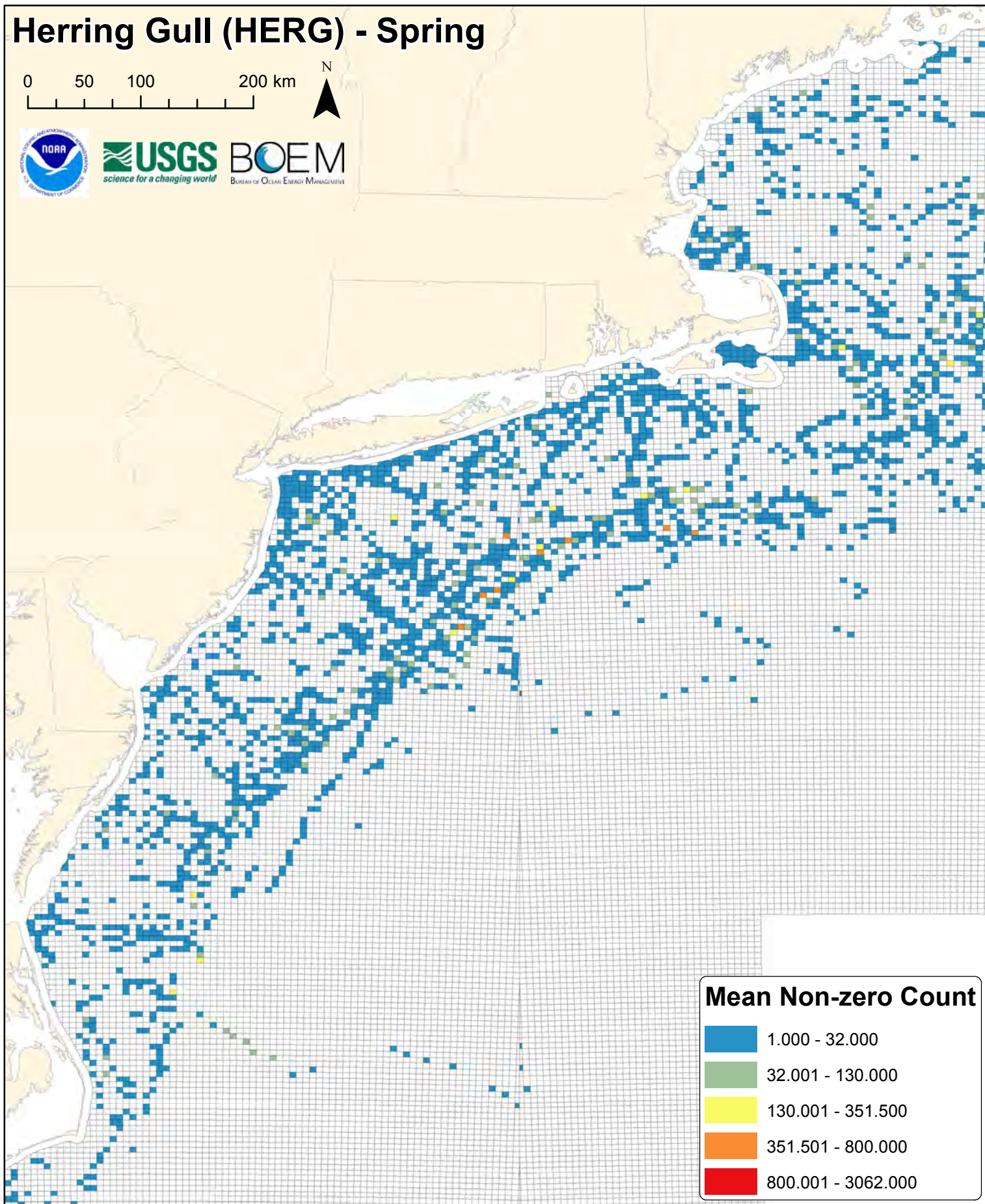
Figures F36-F101. Spring power analysis maps and figures (11 species x 6 figures per species).

Herring Gull (HERG) - Spring



Herring Gull (HERG) - Spring

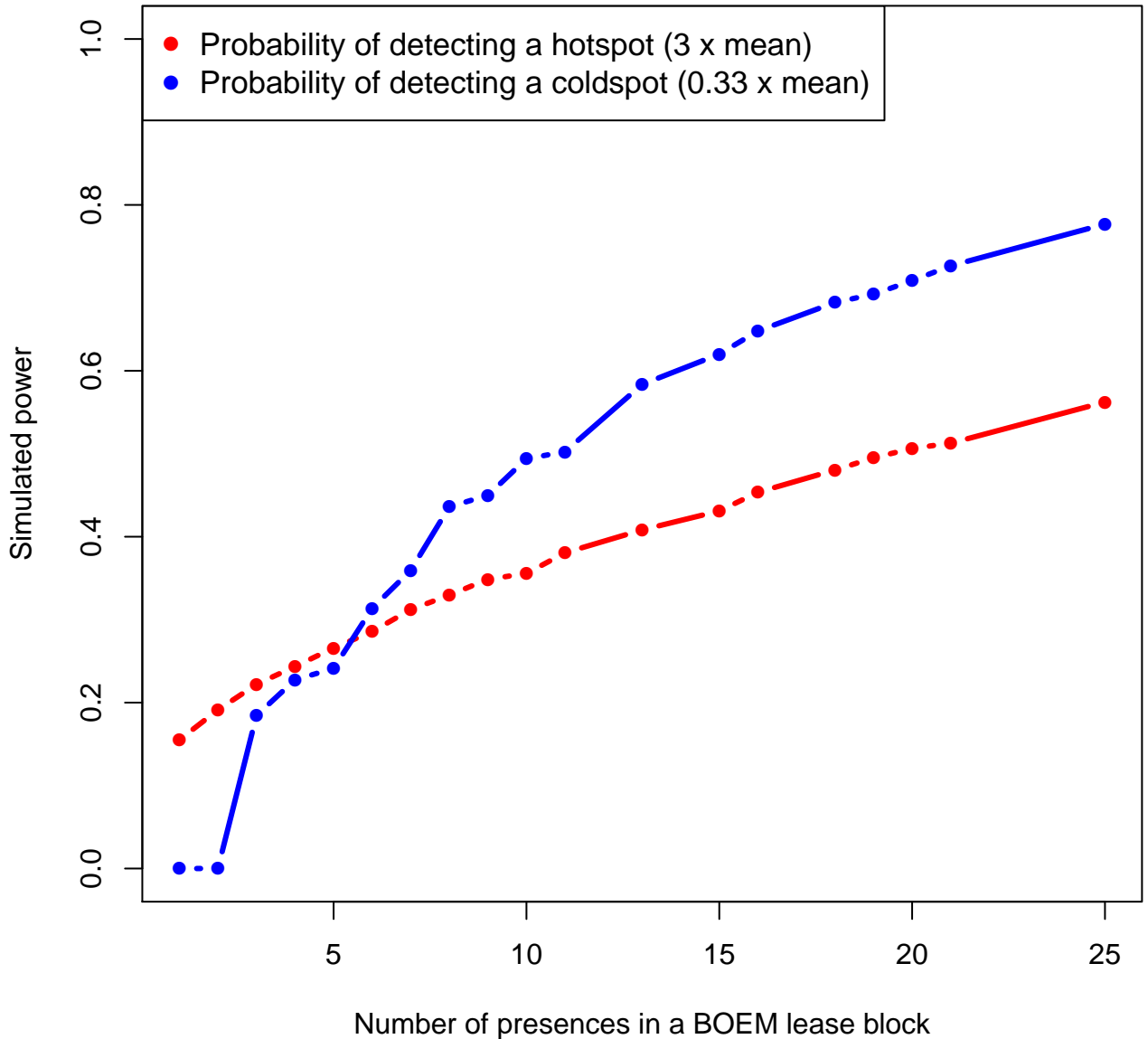
0 50 100 200 km



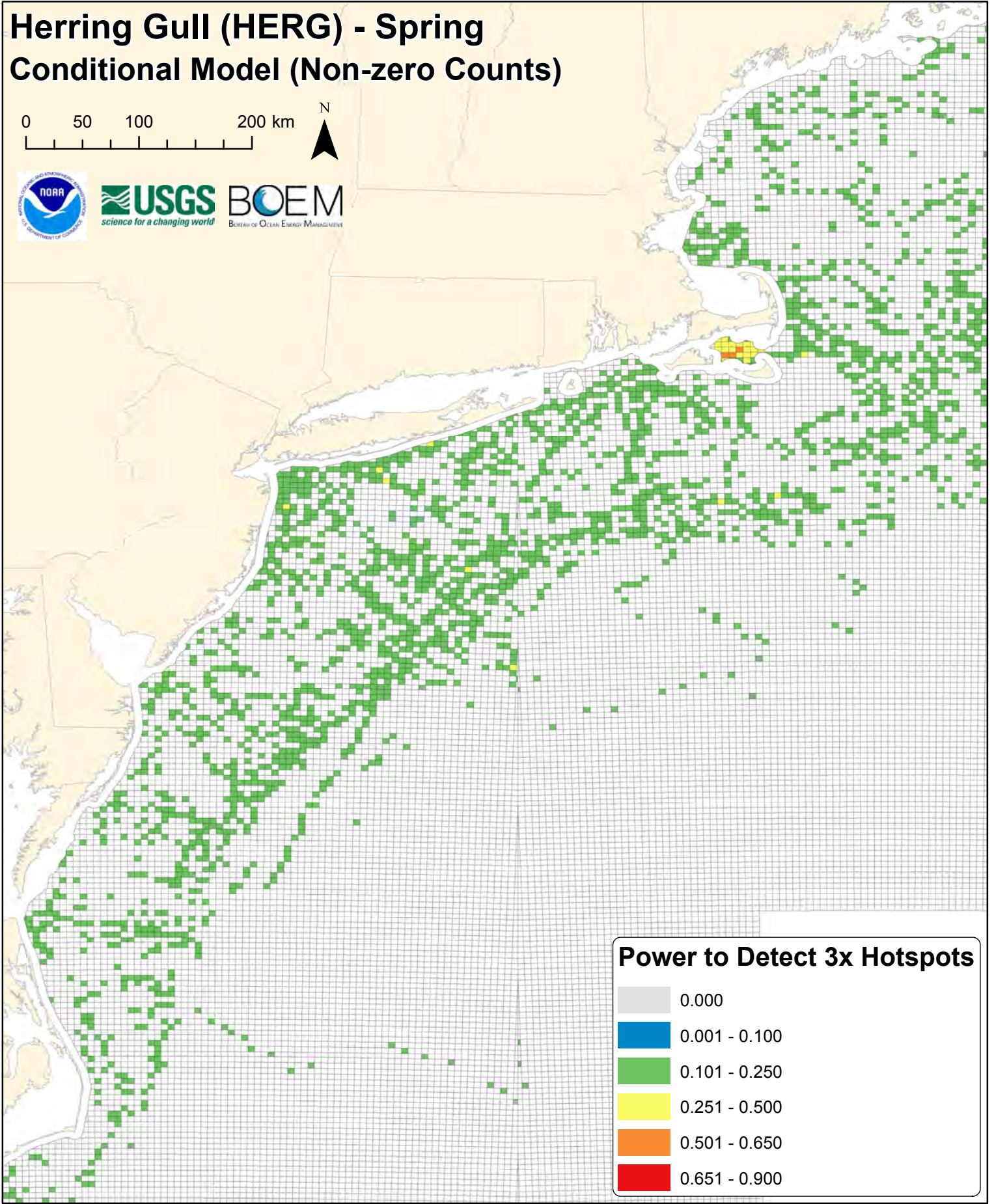
Mean Non-zero Count

Blue	1.000 - 32.000
Green	32.001 - 130.000
Yellow	130.001 - 351.500
Orange	351.501 - 800.000
Red	800.001 - 3062.000

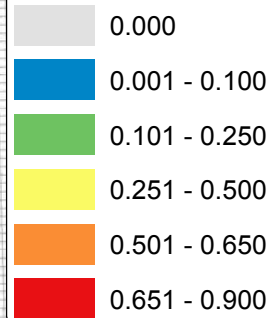
herg



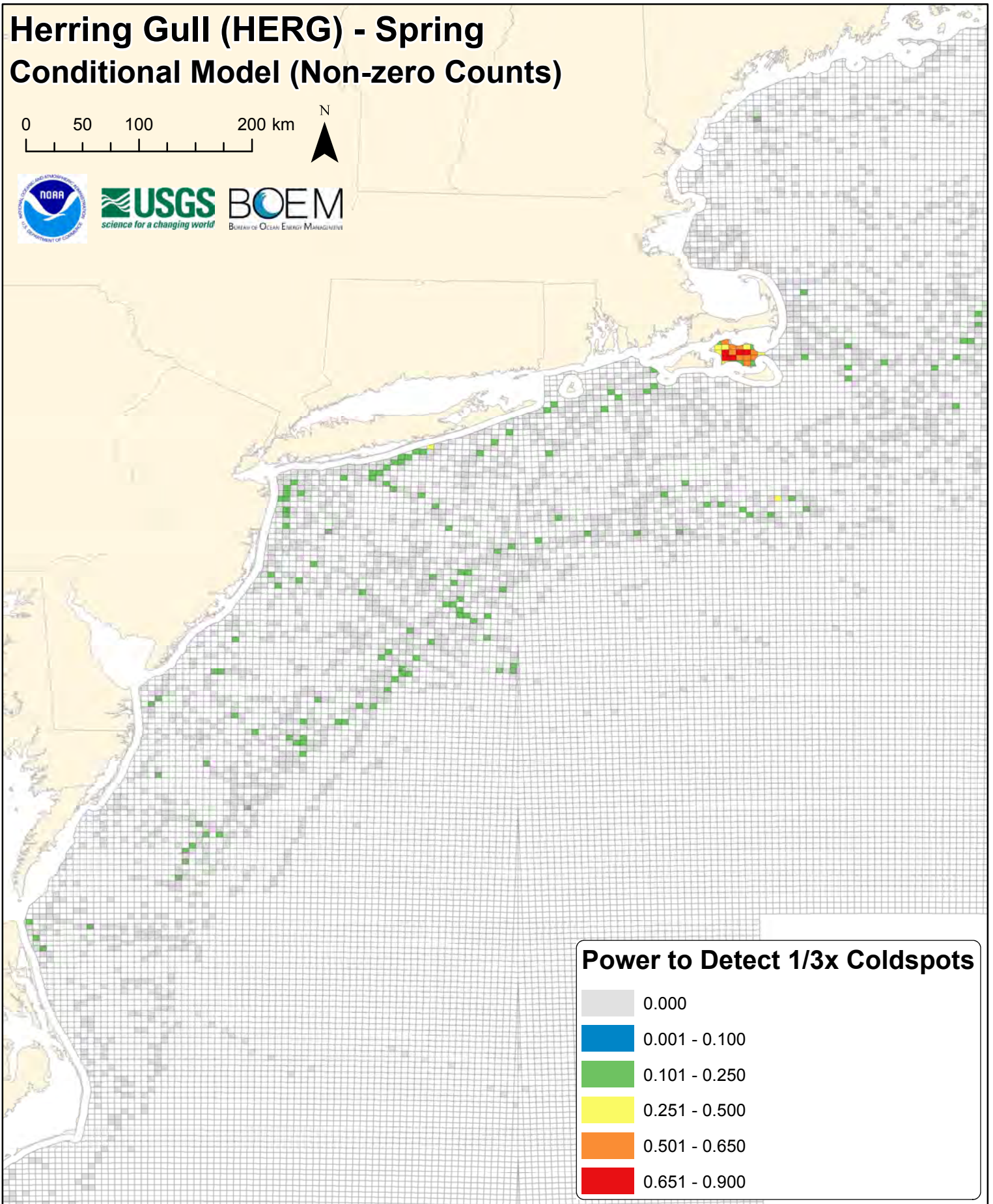
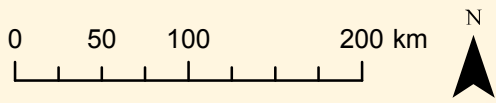
Herring Gull (HERG) - Spring Conditional Model (Non-zero Counts)



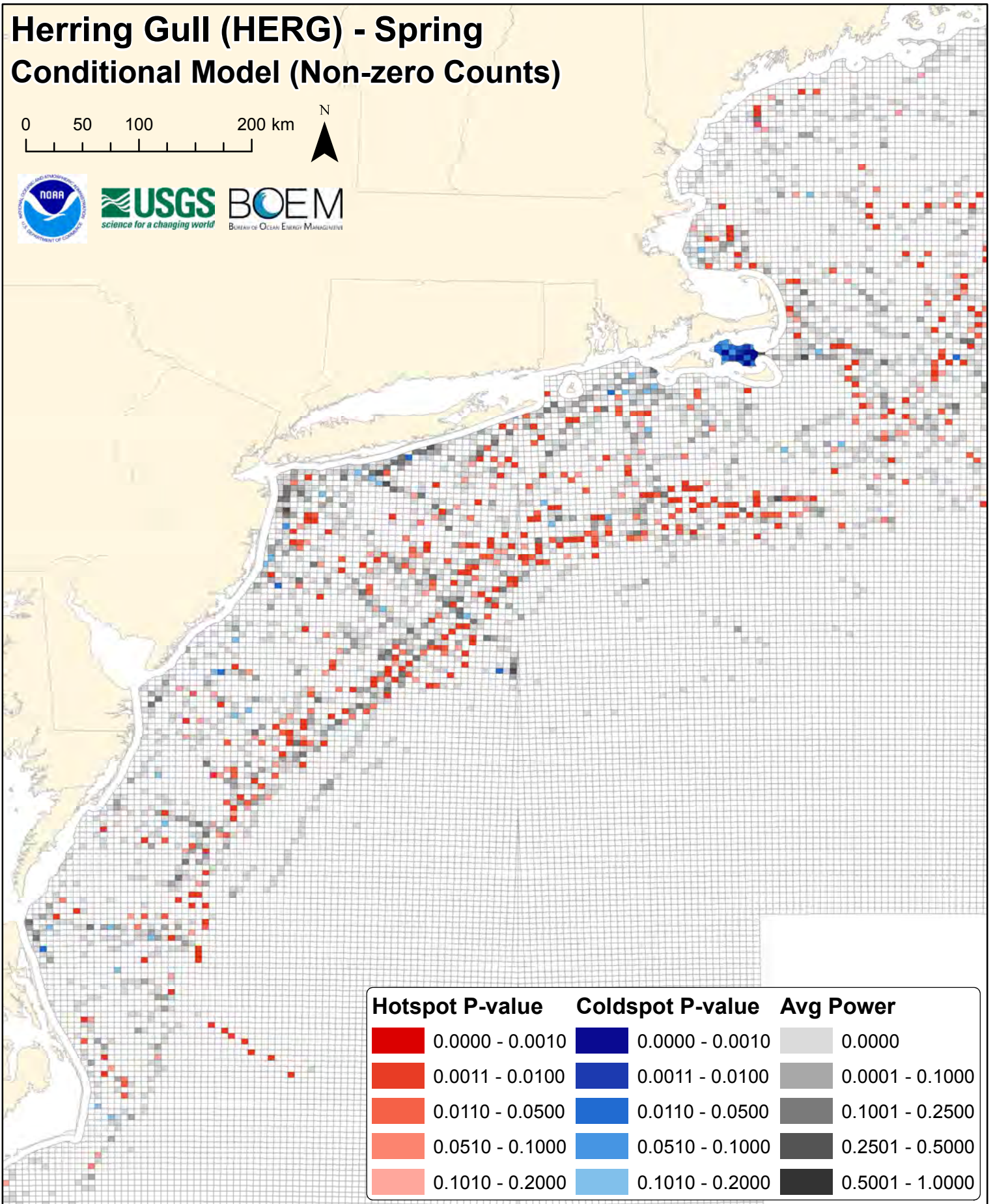
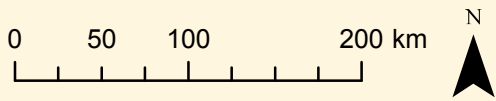
Power to Detect 3x Hotspots


















Herring Gull (HERG) - Spring Conditional Model (Non-zero Counts)



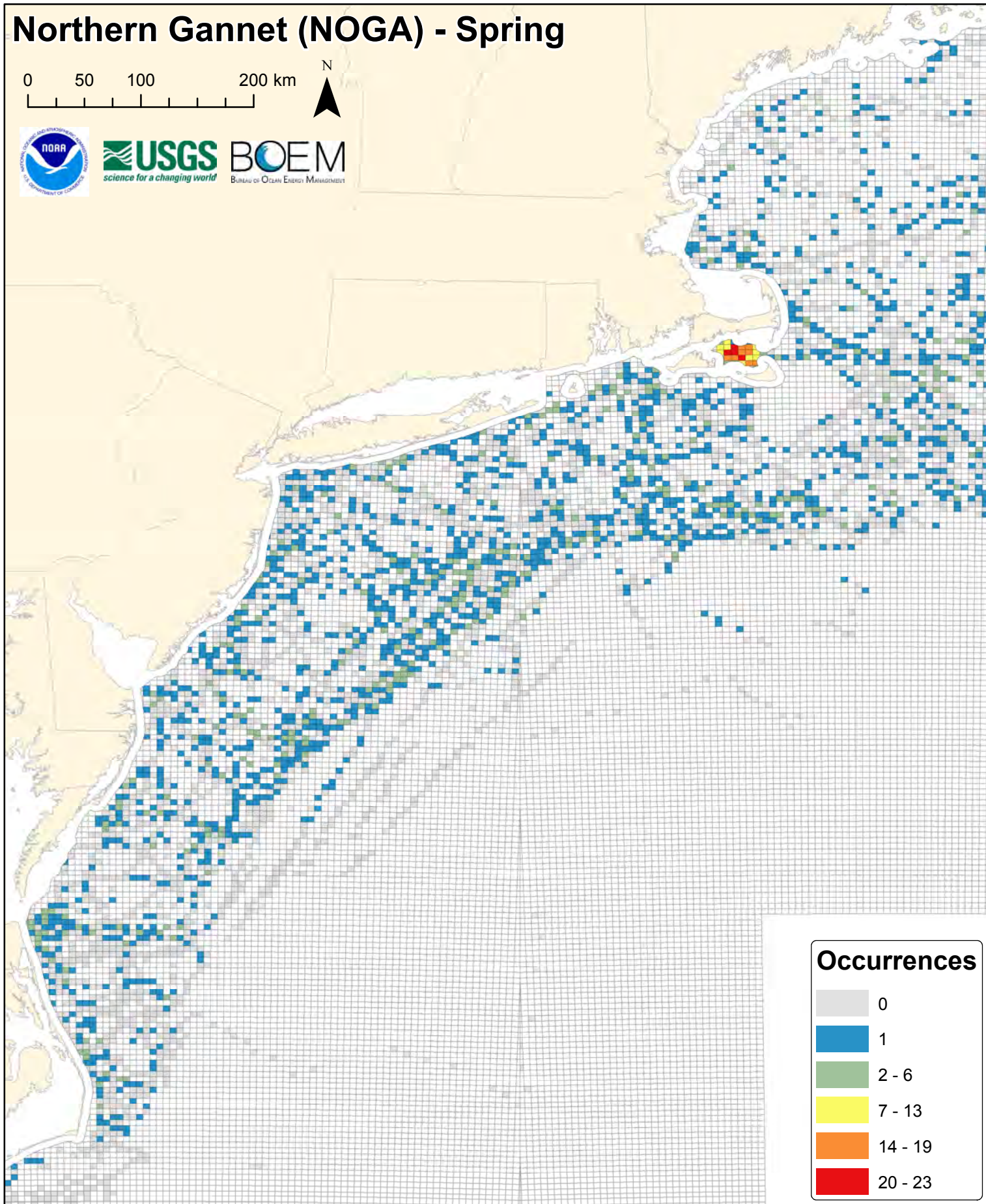
Herring Gull (HERG) - Spring Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Northern Gannet (NOGA) - Spring

0 50 100 200 km

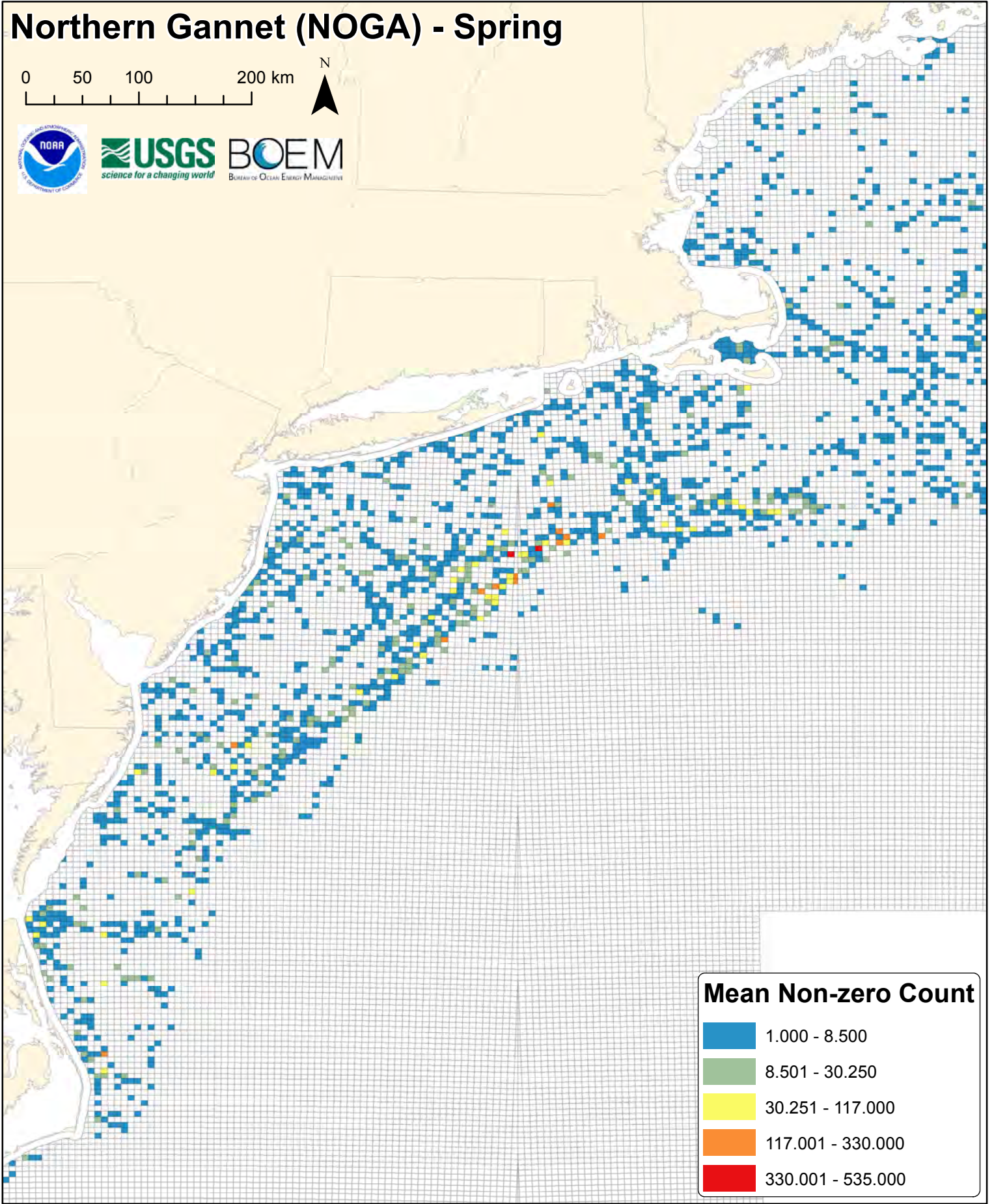


Occurrences

Grey	0
Blue	1
Green	2 - 6
Yellow	7 - 13
Orange	14 - 19
Red	20 - 23

Northern Gannet (NOGA) - Spring

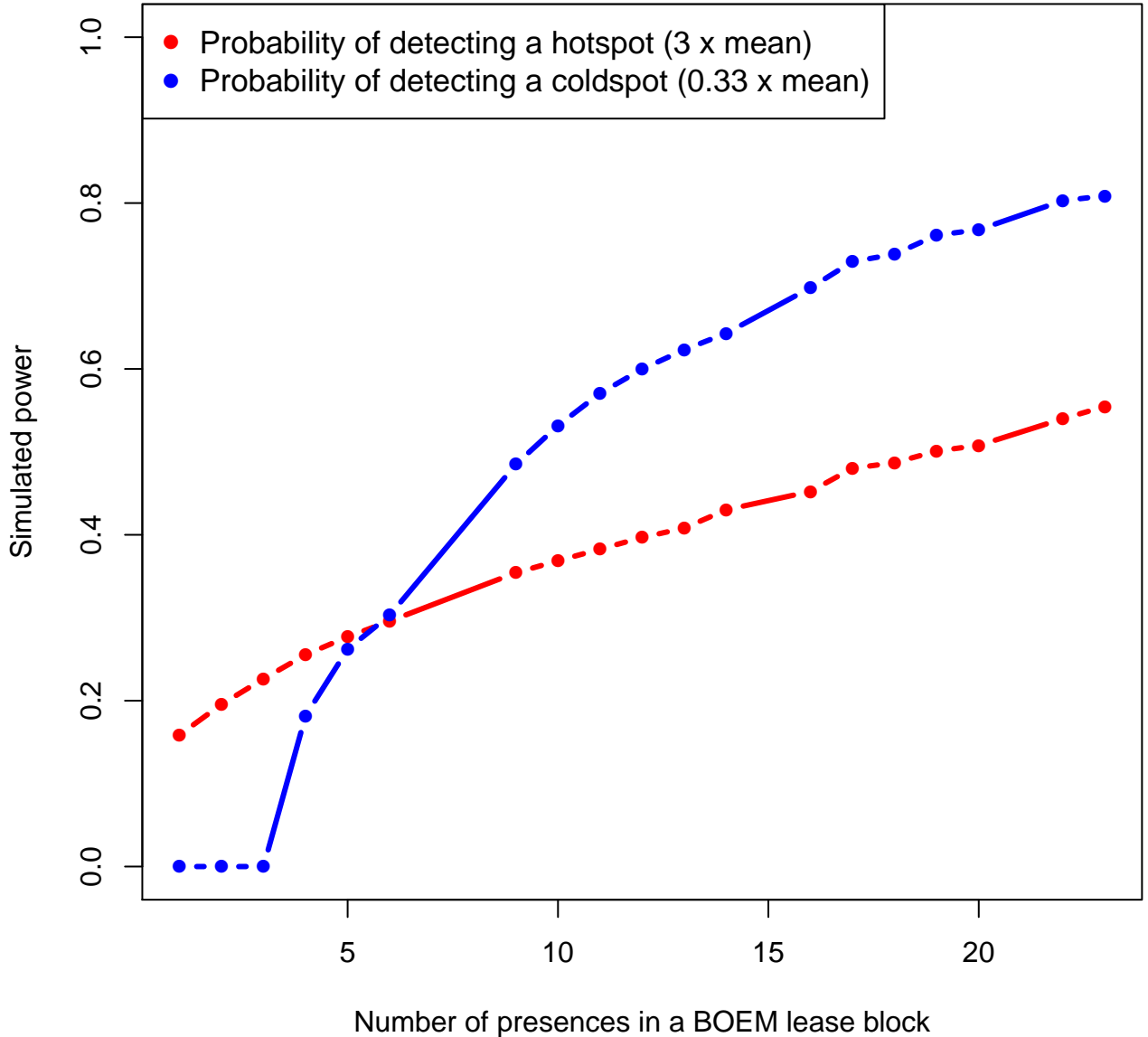
0 50 100 200 km



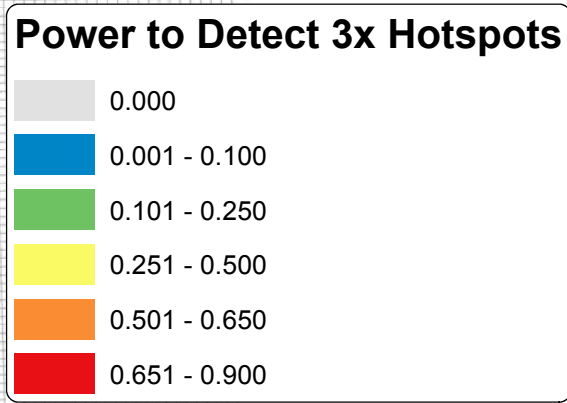
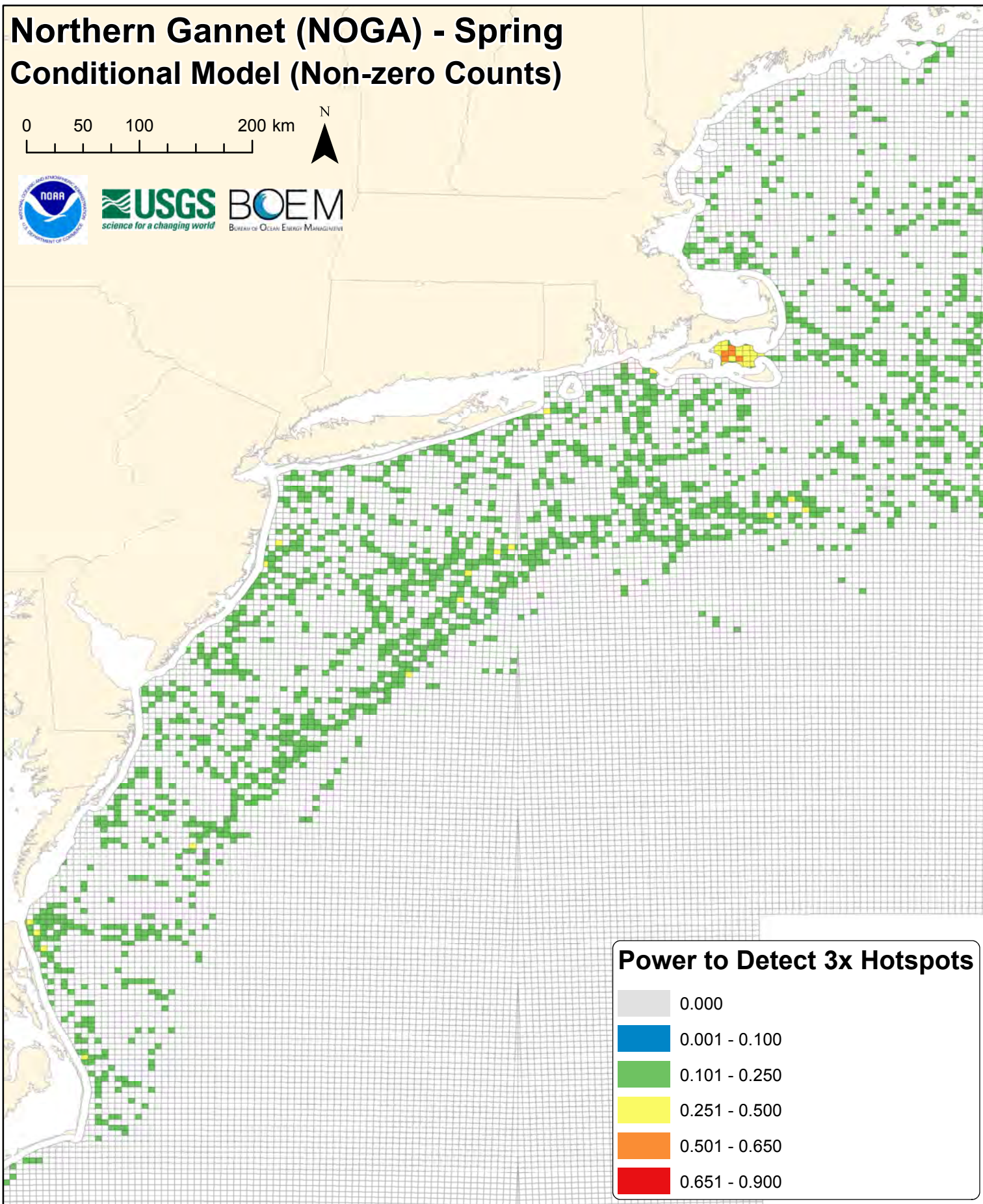
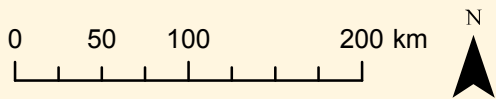
Mean Non-zero Count

- 1.000 - 8.500
- 8.501 - 30.250
- 30.251 - 117.000
- 117.001 - 330.000
- 330.001 - 535.000

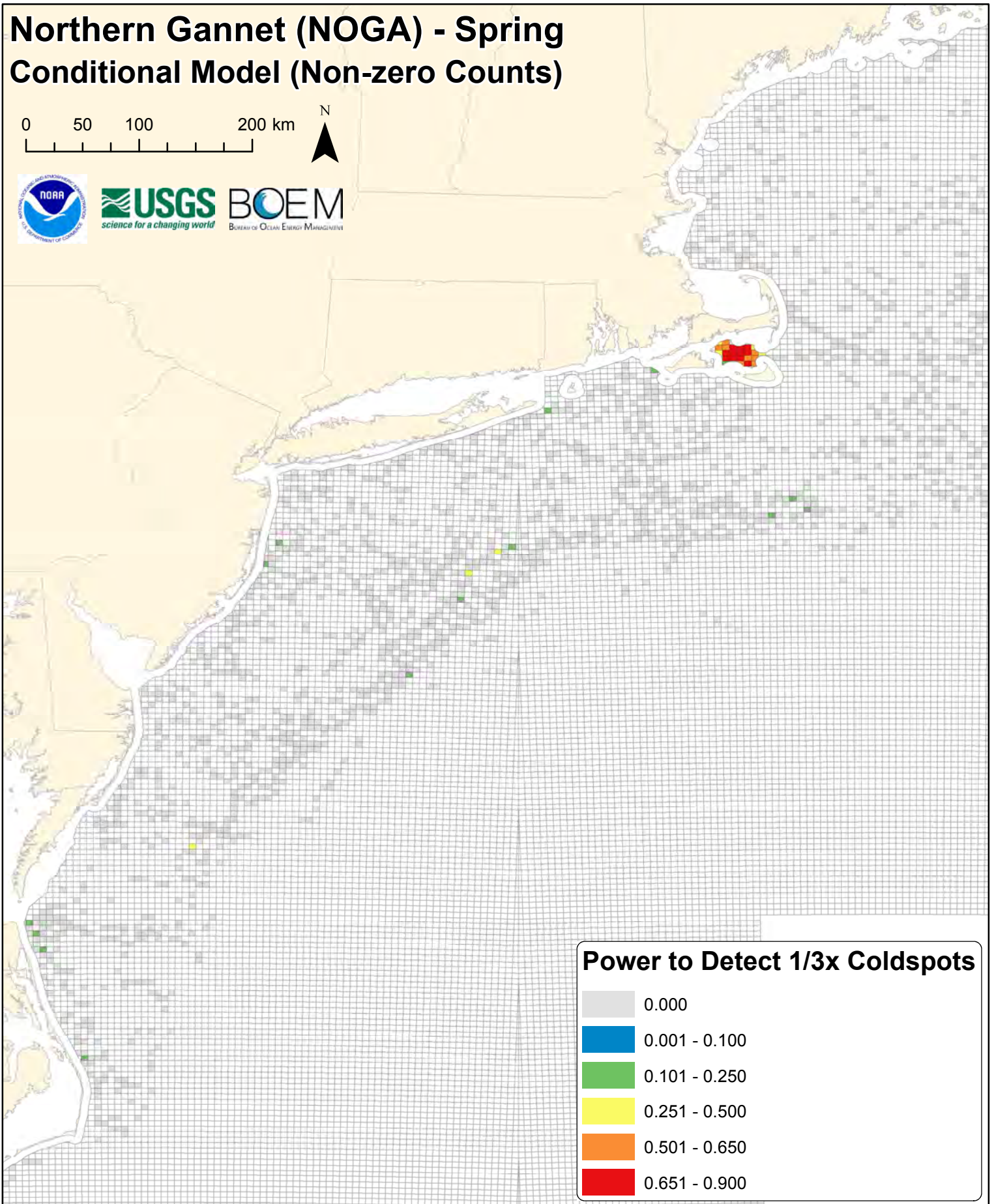
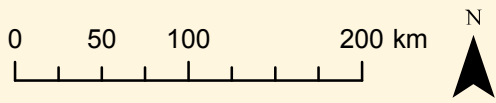
noga



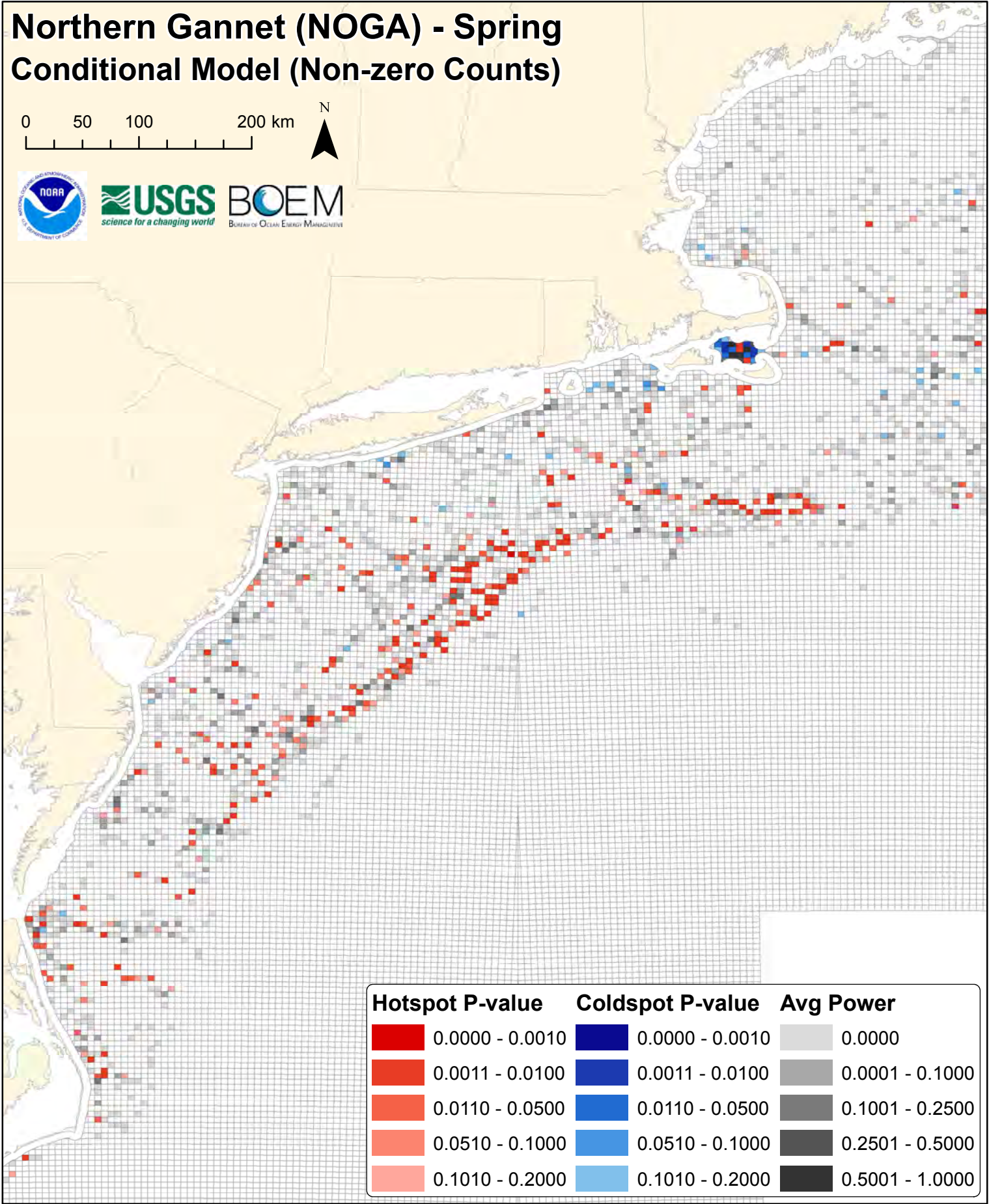
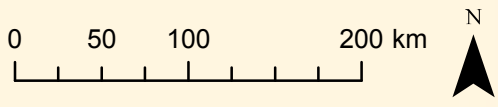
Northern Gannet (NOGA) - Spring Conditional Model (Non-zero Counts)


















Northern Gannet (NOGA) - Spring Conditional Model (Non-zero Counts)



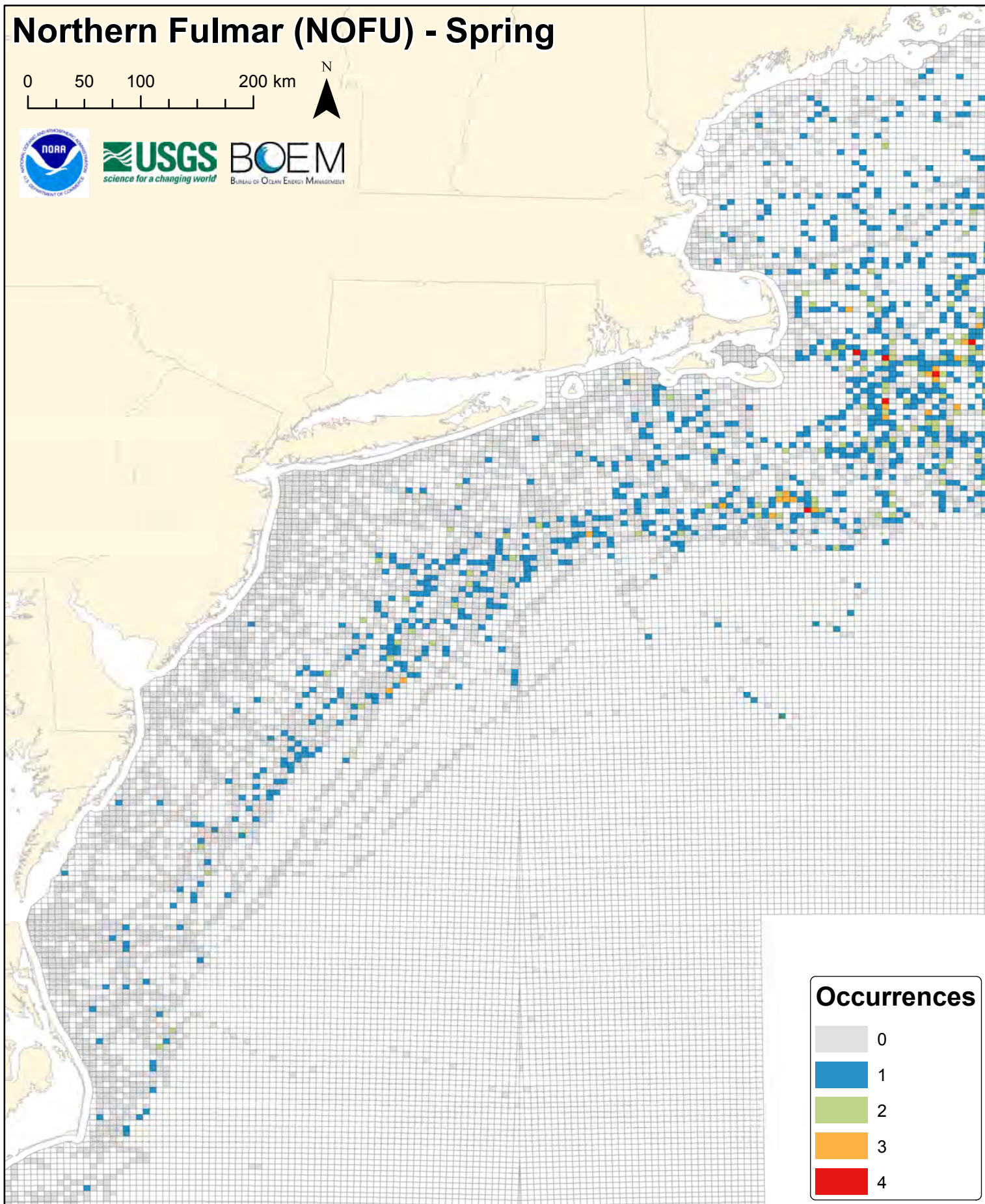
Northern Gannet (NOGA) - Spring Conditional Model (Non-zero Counts)



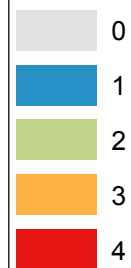
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Northern Fulmar (NOFU) - Spring

0 50 100 200 km

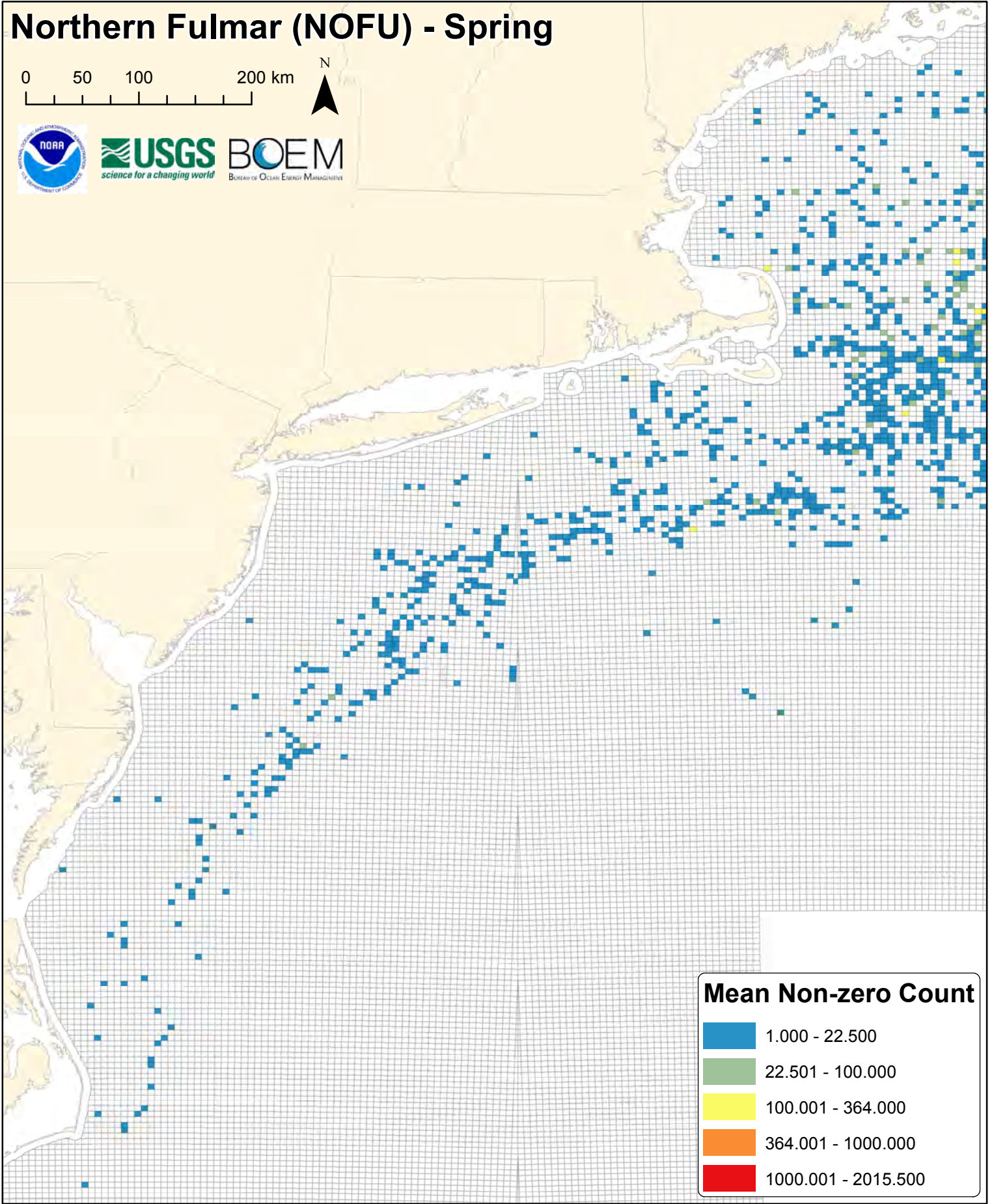


Occurrences



Northern Fulmar (NOFU) - Spring

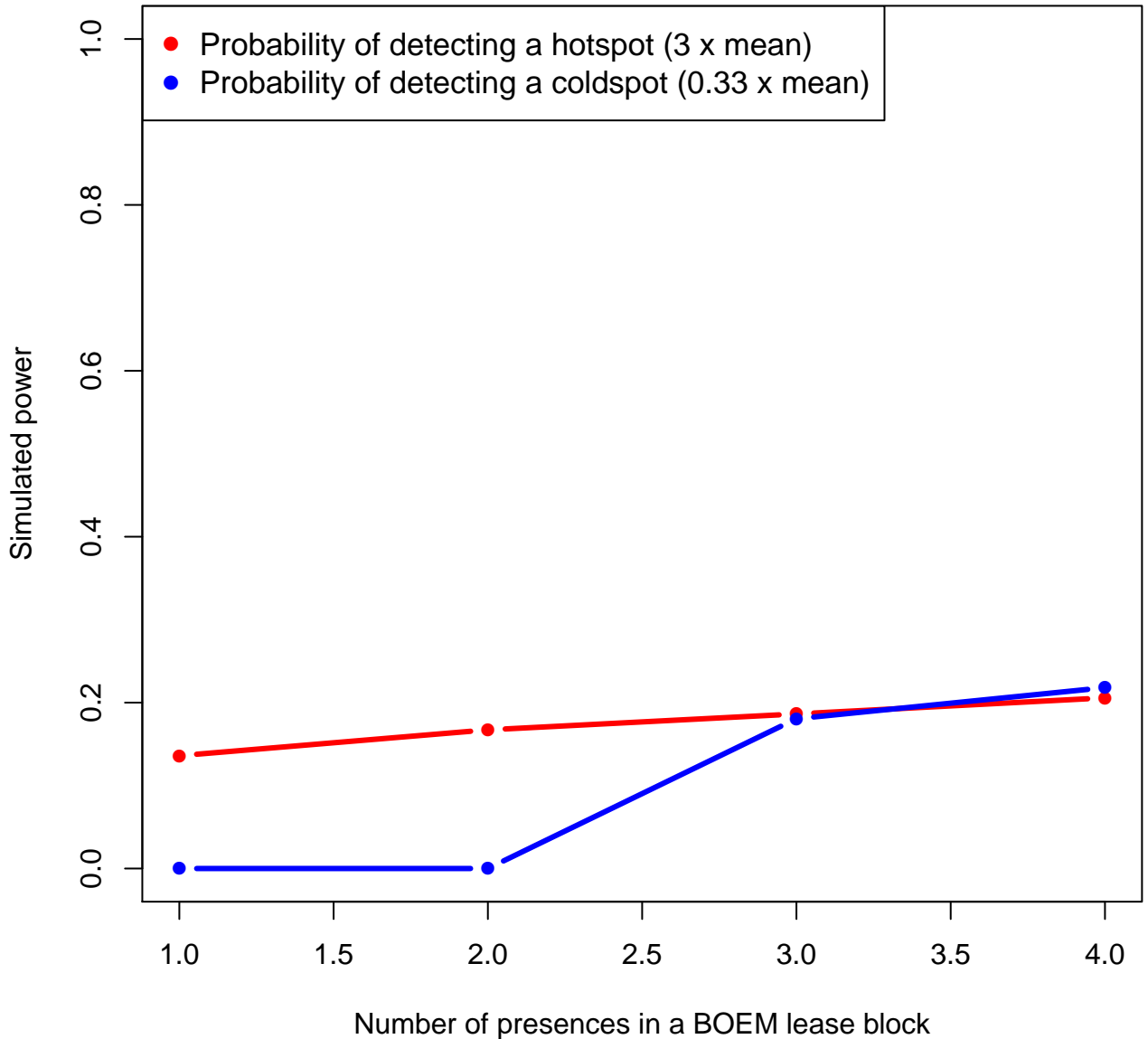
0 50 100 200 km



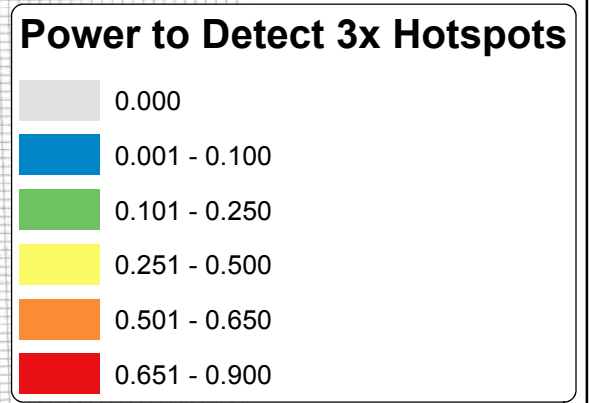
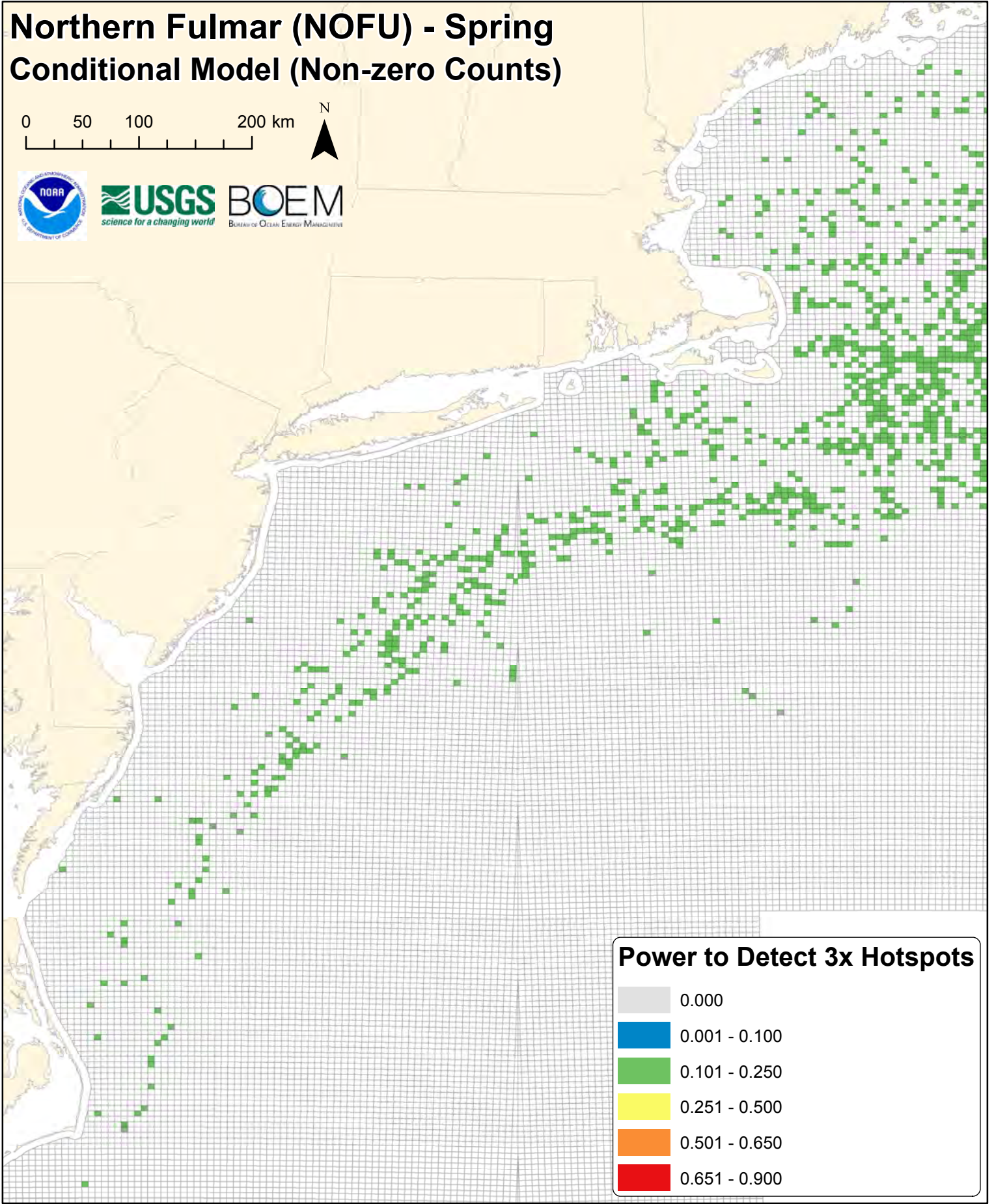
Mean Non-zero Count

- 1.000 - 22.500
- 22.501 - 100.000
- 100.001 - 364.000
- 364.001 - 1000.000
- 1000.001 - 2015.500

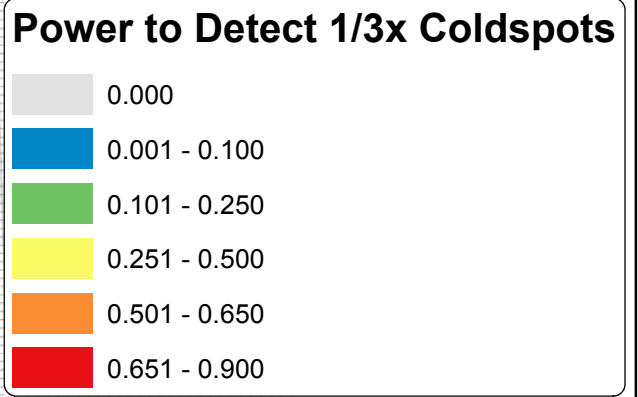
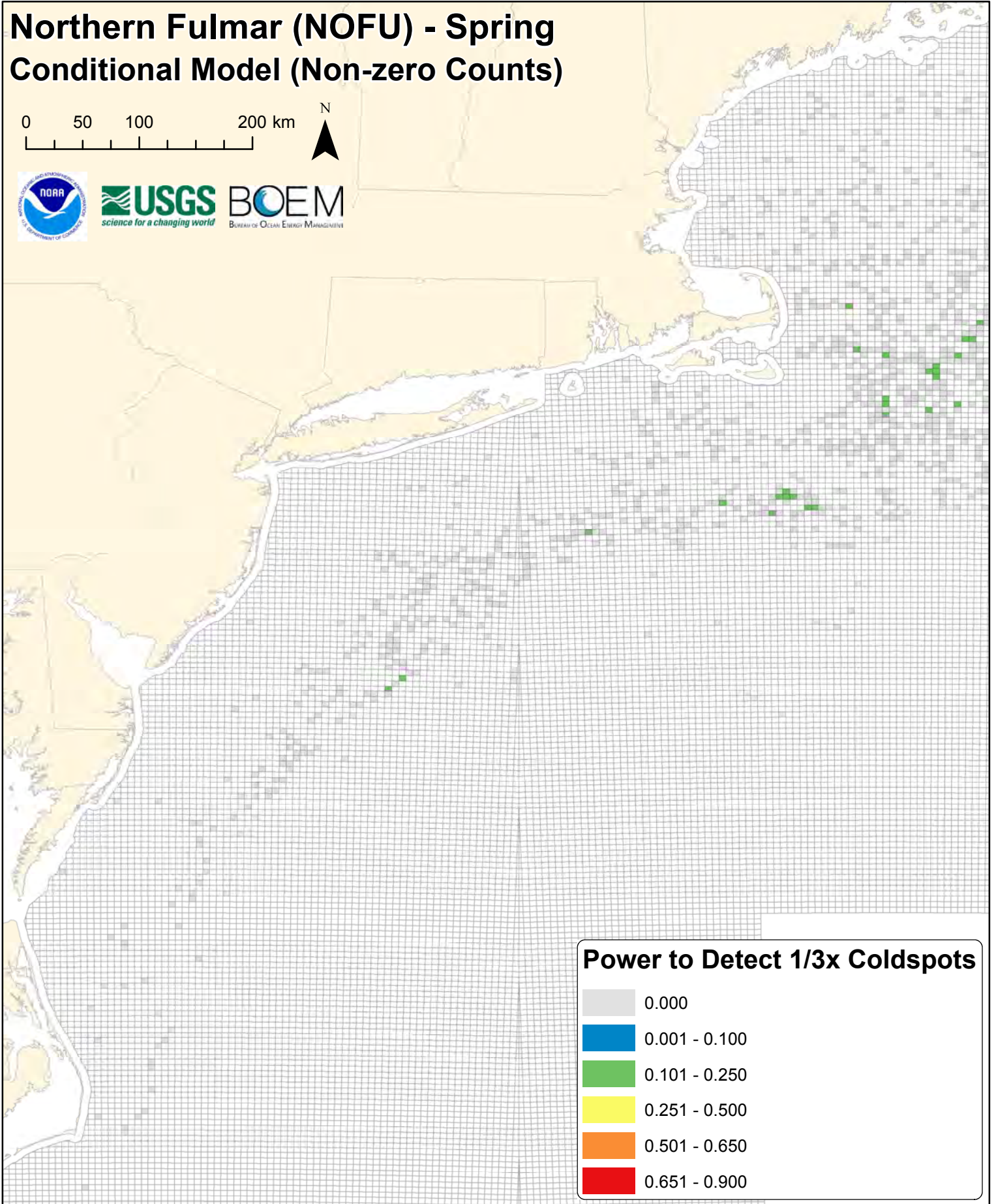
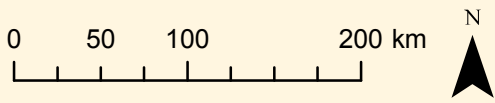
nofu



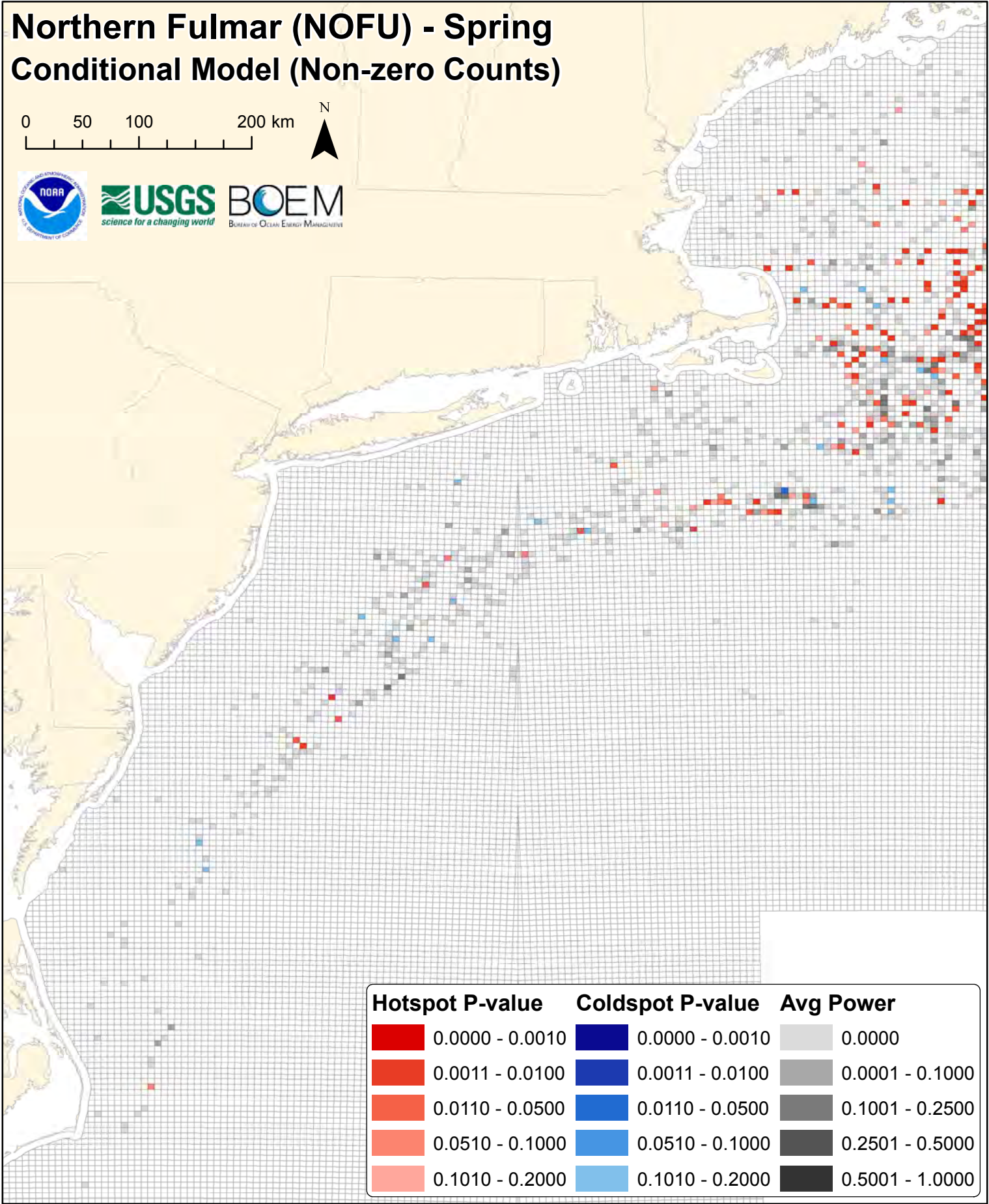
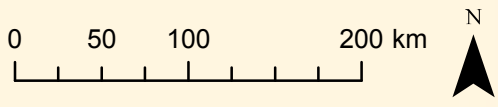
Northern Fulmar (NOFU) - Spring Conditional Model (Non-zero Counts)


















Northern Fulmar (NOFU) - Spring Conditional Model (Non-zero Counts)

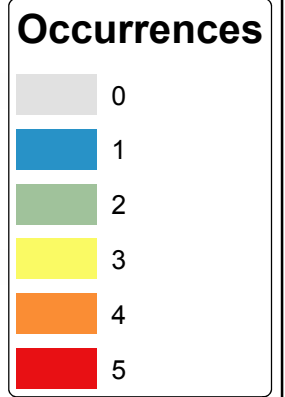
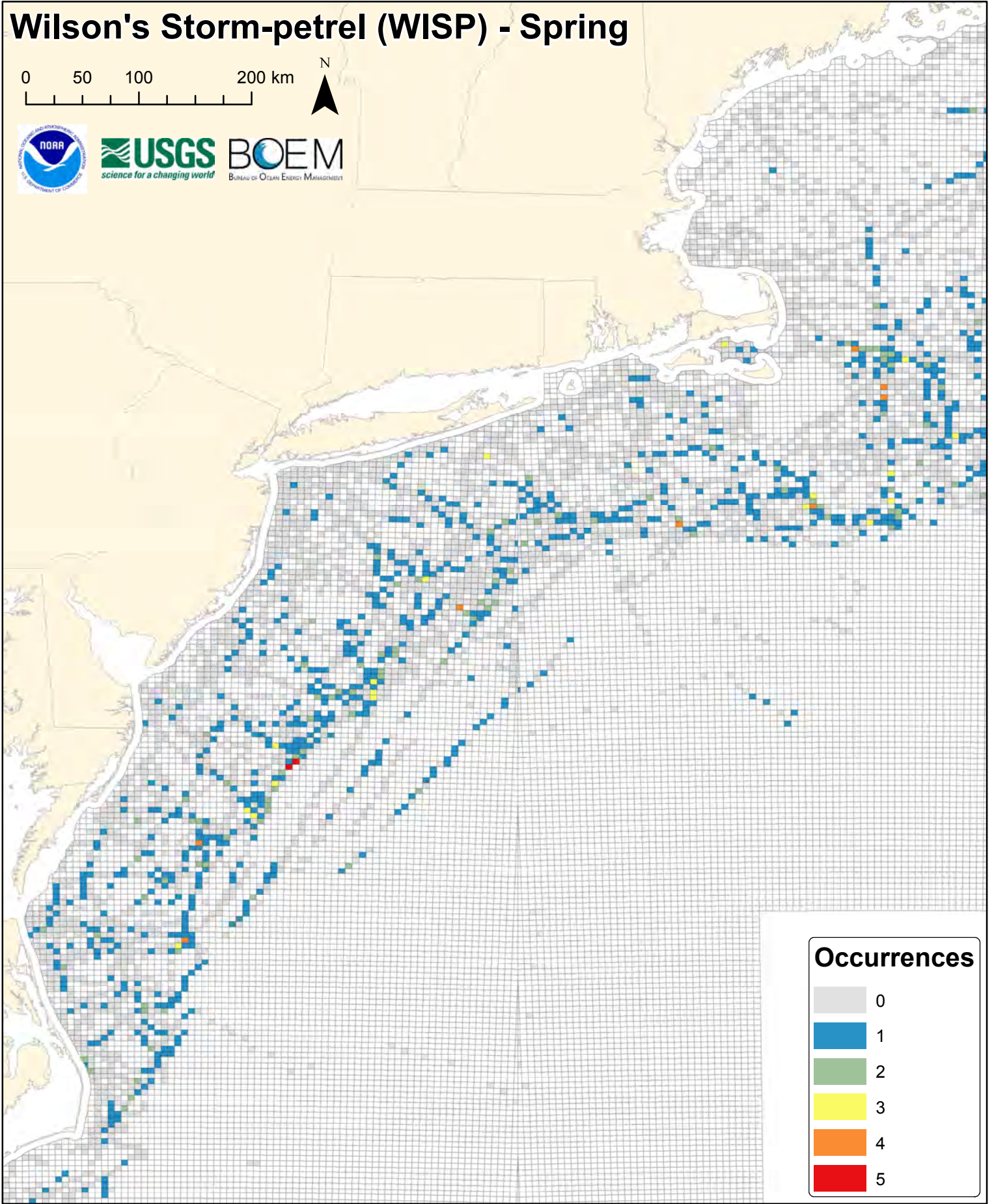
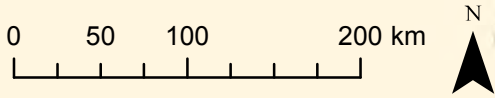


Northern Fulmar (NOFU) - Spring Conditional Model (Non-zero Counts)



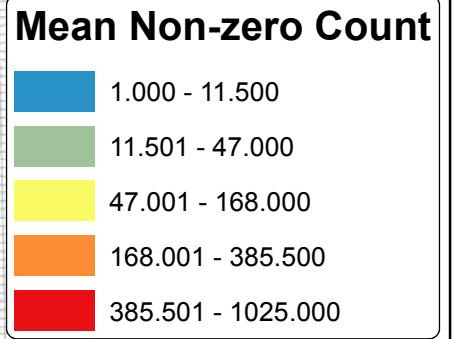
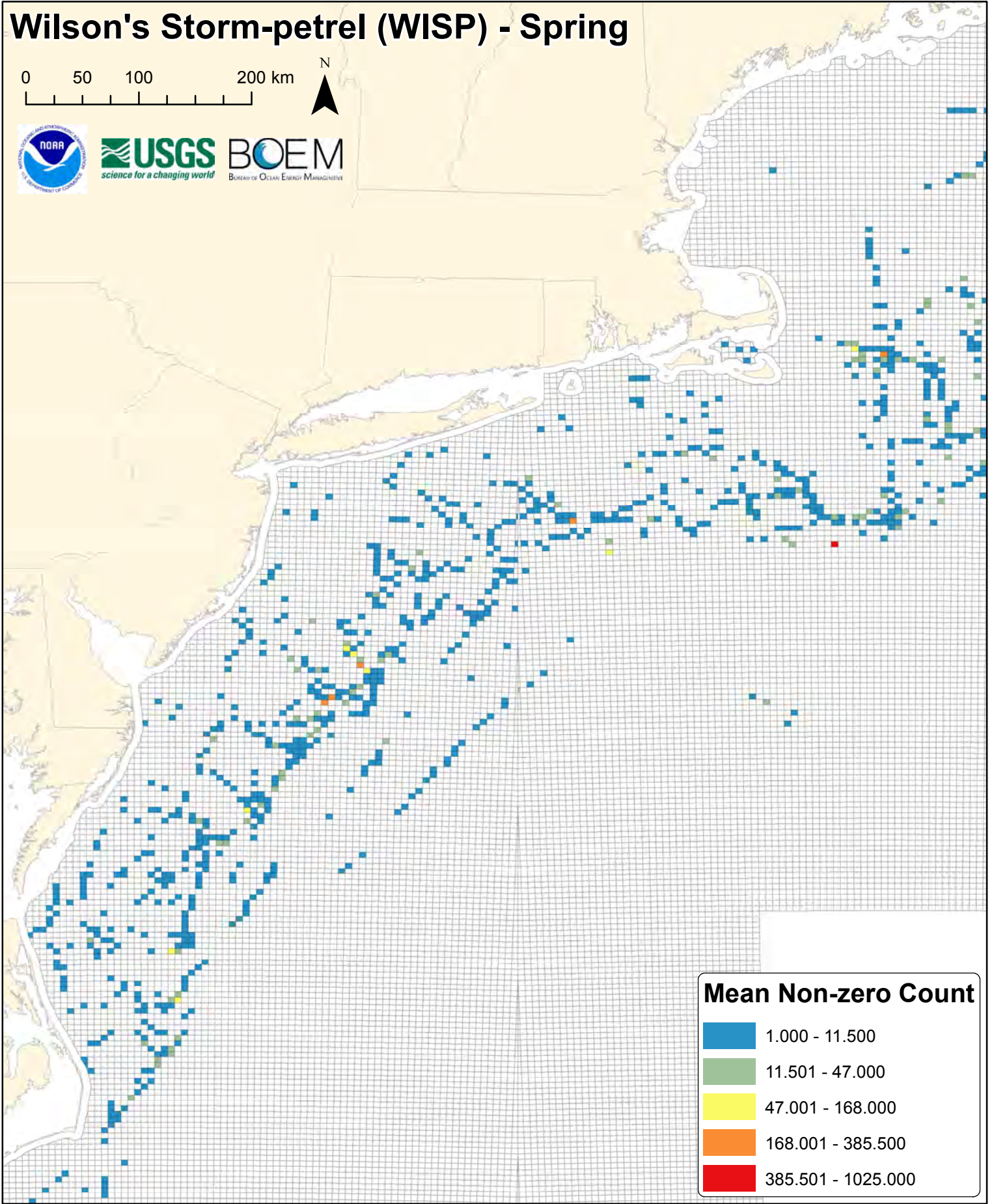
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Wilson's Storm-petrel (WISP) - Spring

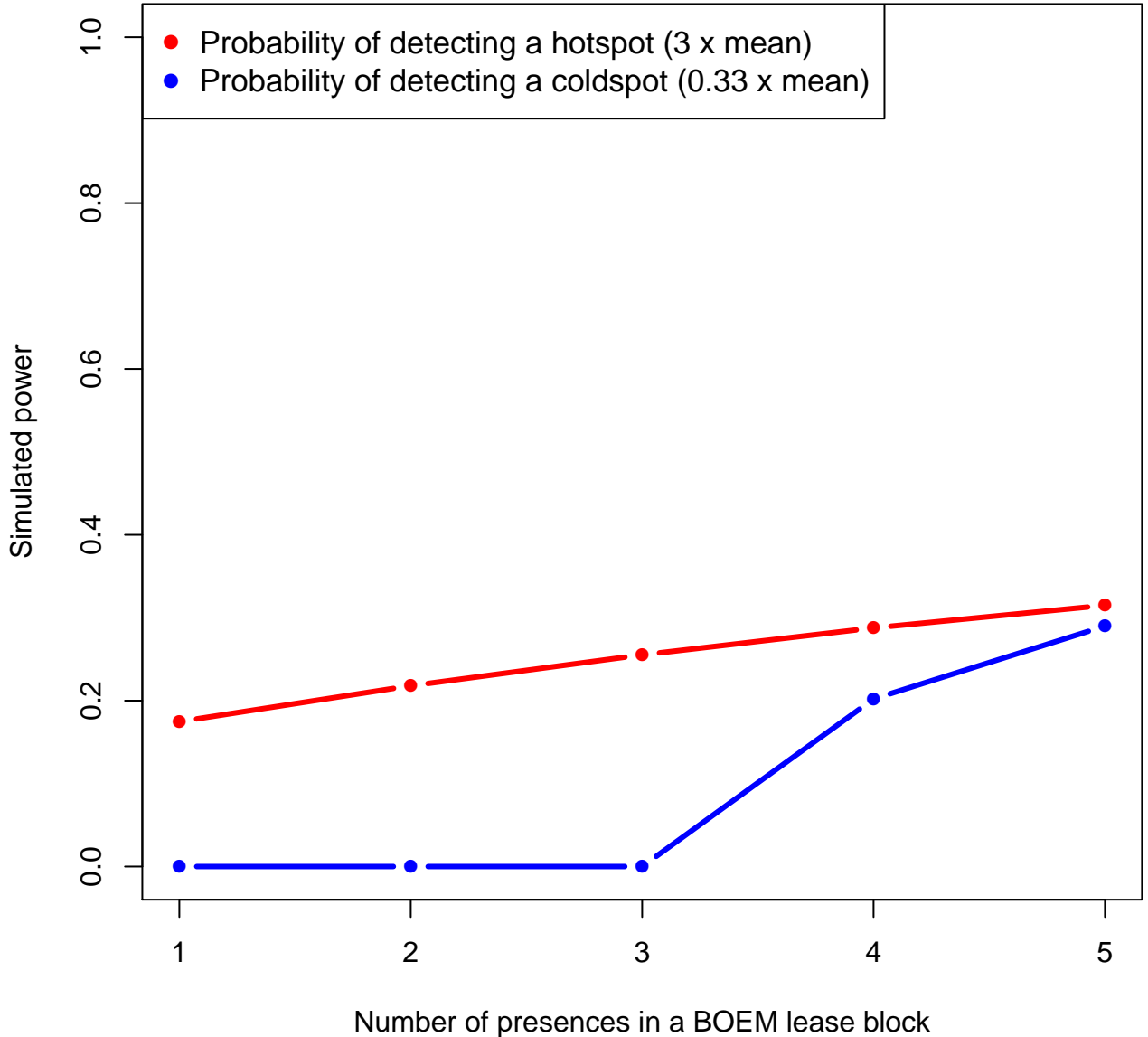


Wilson's Storm-petrel (WISP) - Spring

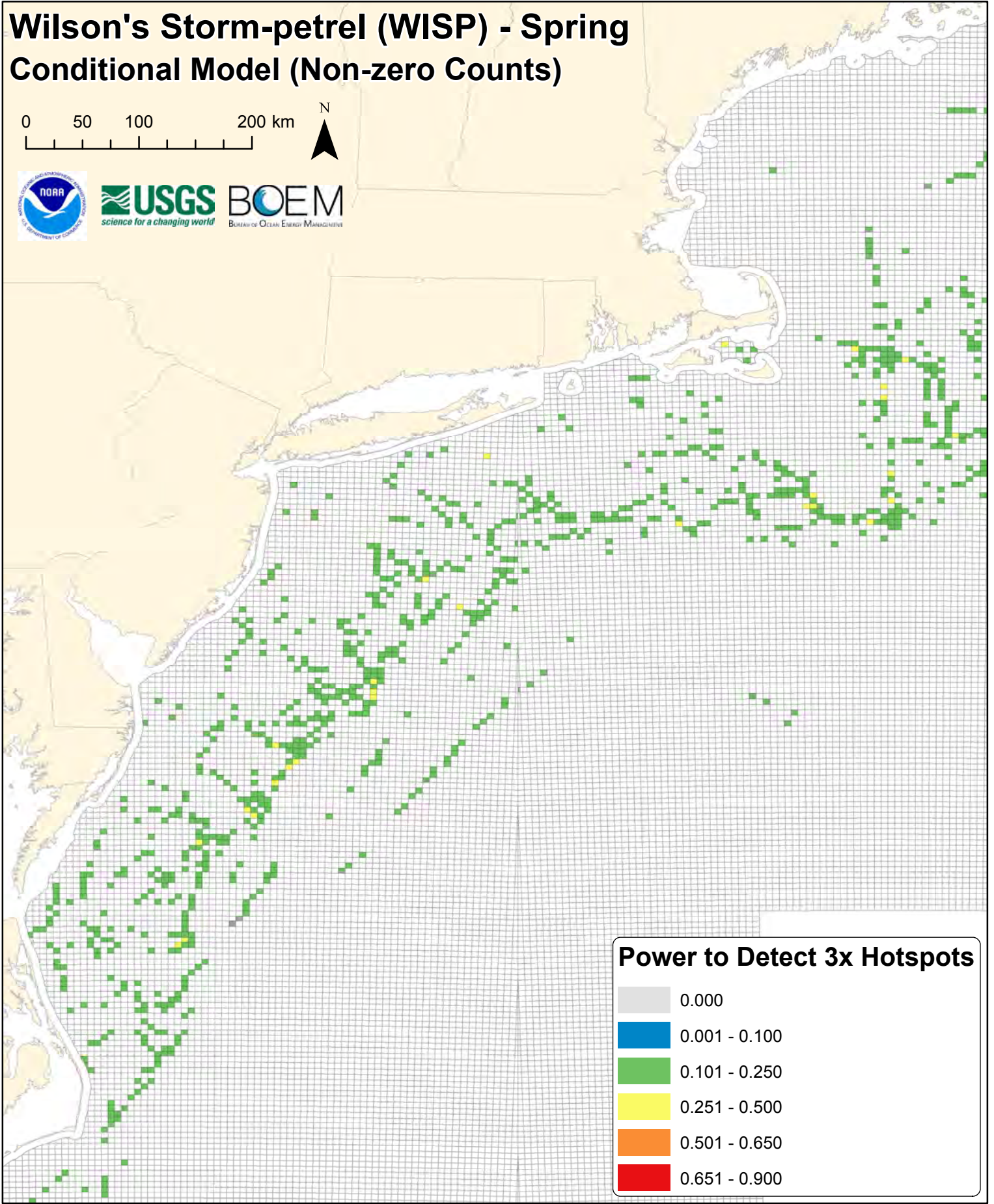
0 50 100 200 km



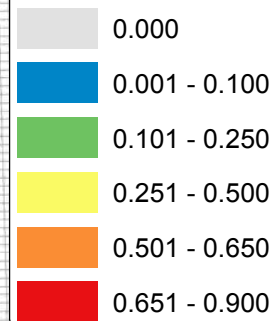
wisp



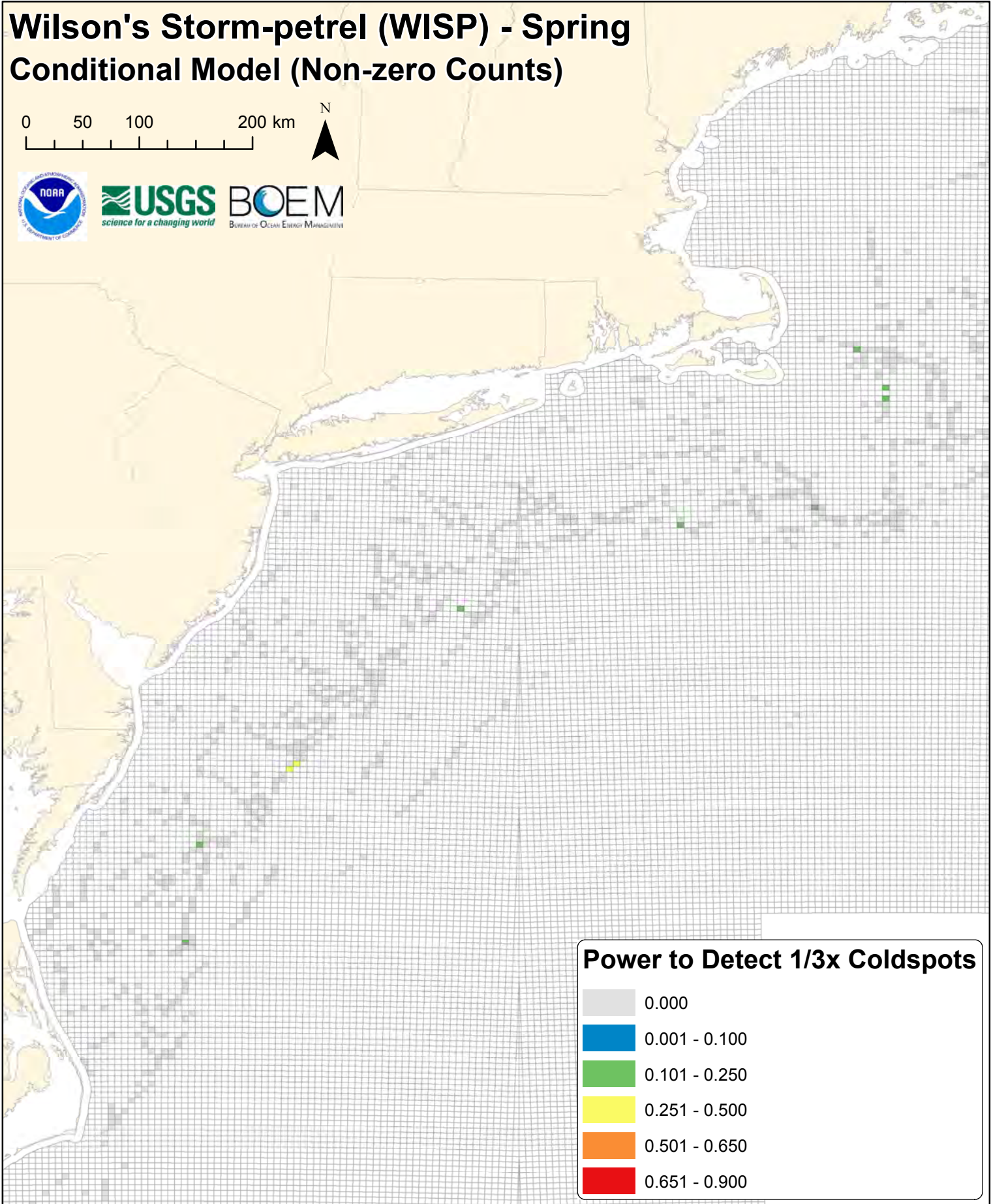
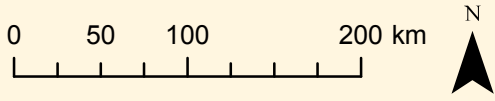
Wilson's Storm-petrel (WISP) - Spring Conditional Model (Non-zero Counts)



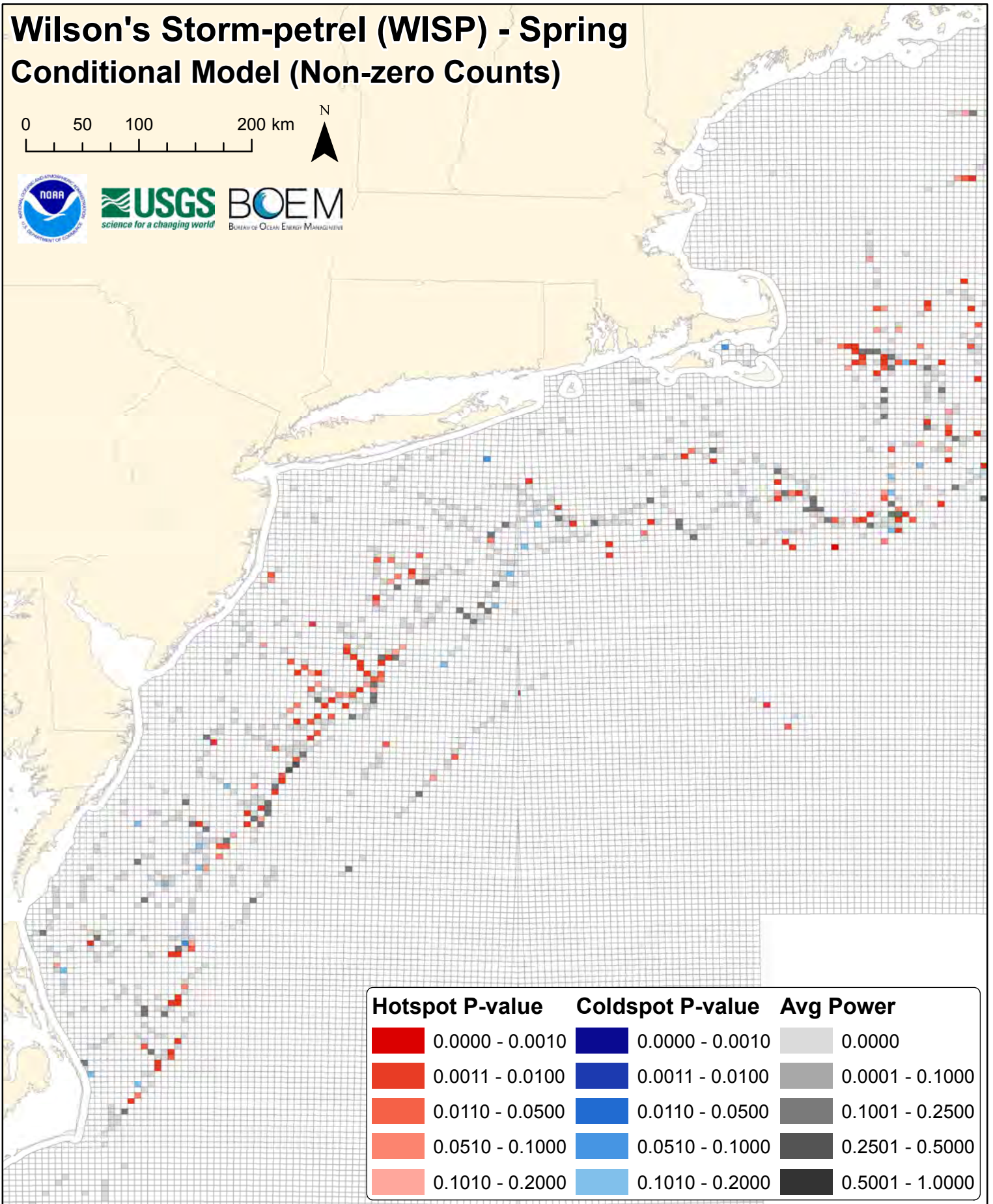
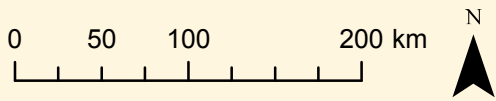
Power to Detect 3x Hotspots



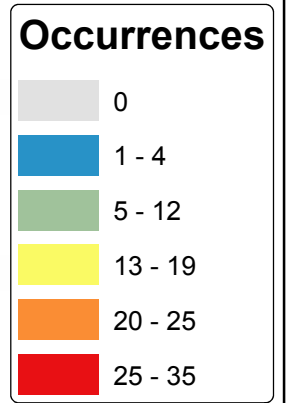
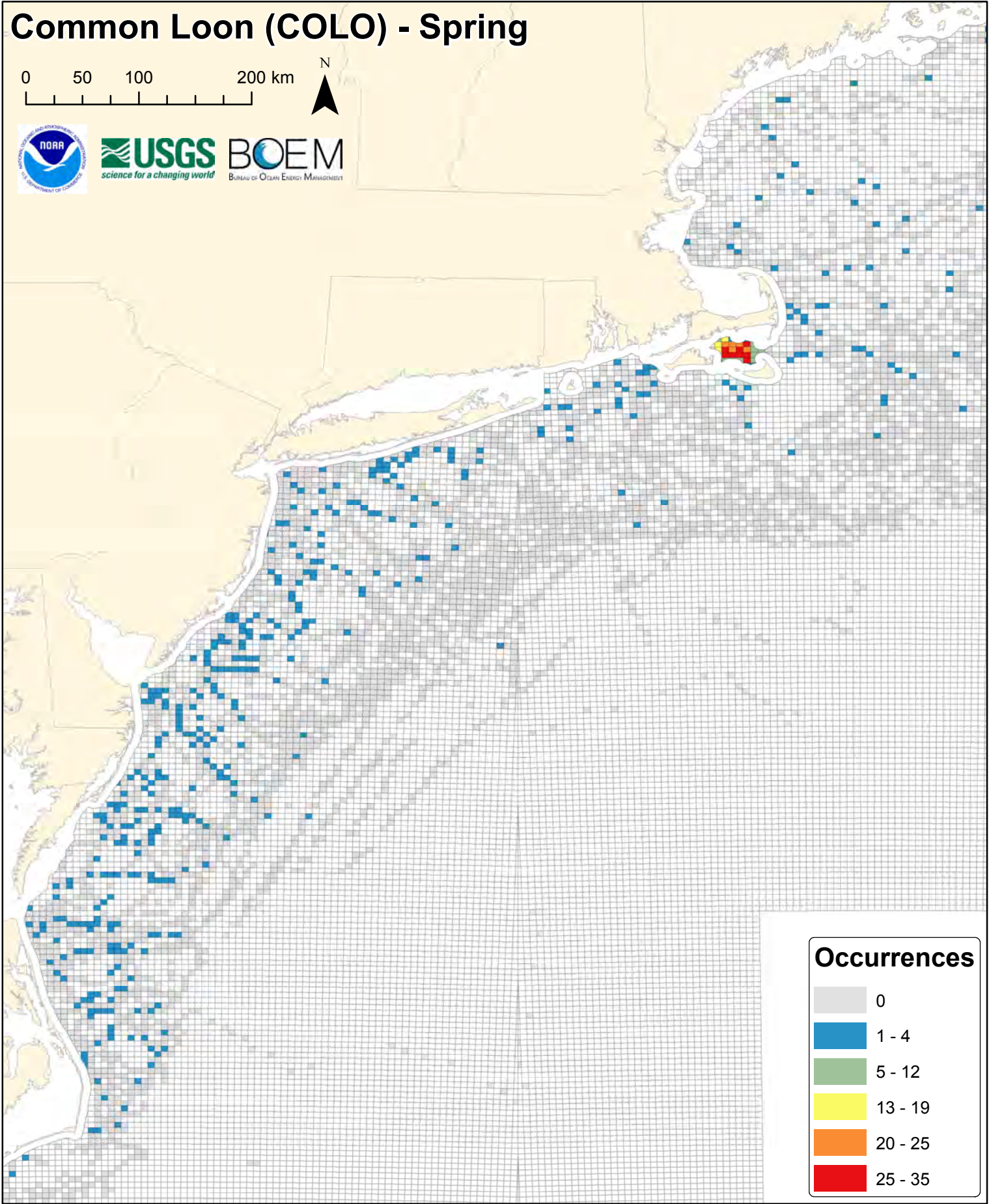
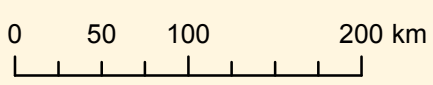
Wilson's Storm-petrel (WISP) - Spring Conditional Model (Non-zero Counts)



Wilson's Storm-petrel (WISP) - Spring Conditional Model (Non-zero Counts)

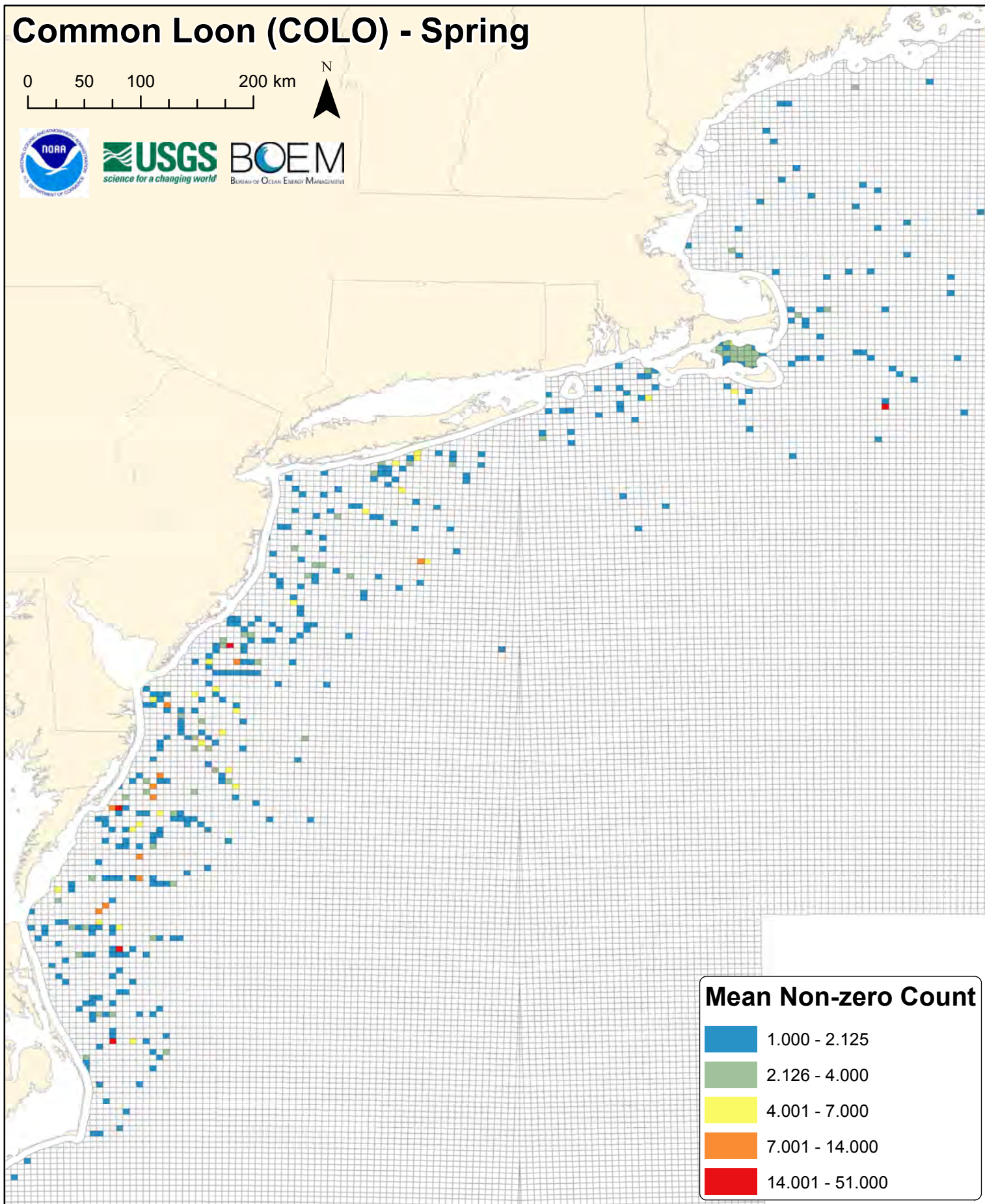


Common Loon (COLO) - Spring



Common Loon (COLO) - Spring

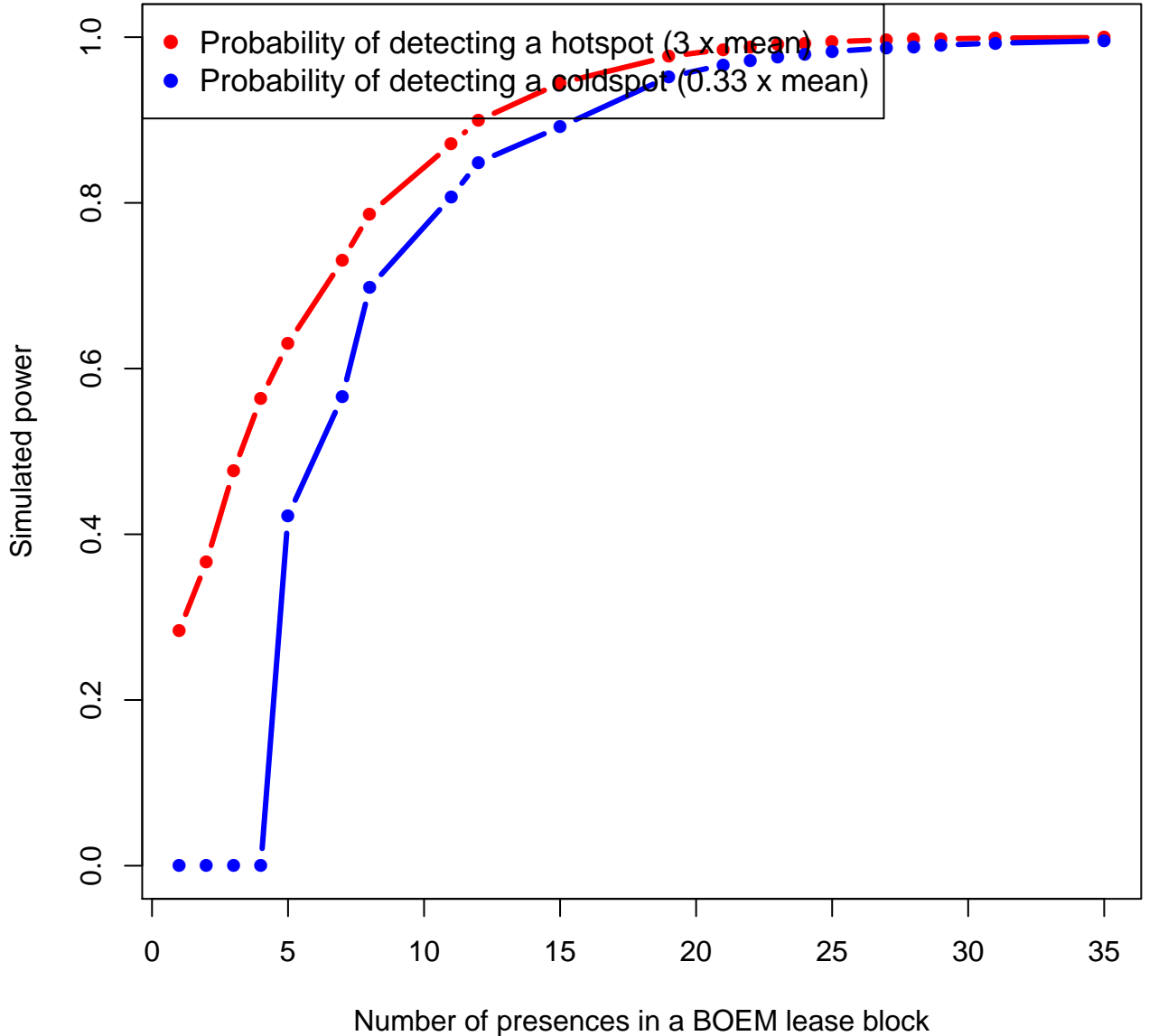
0 50 100 200 km



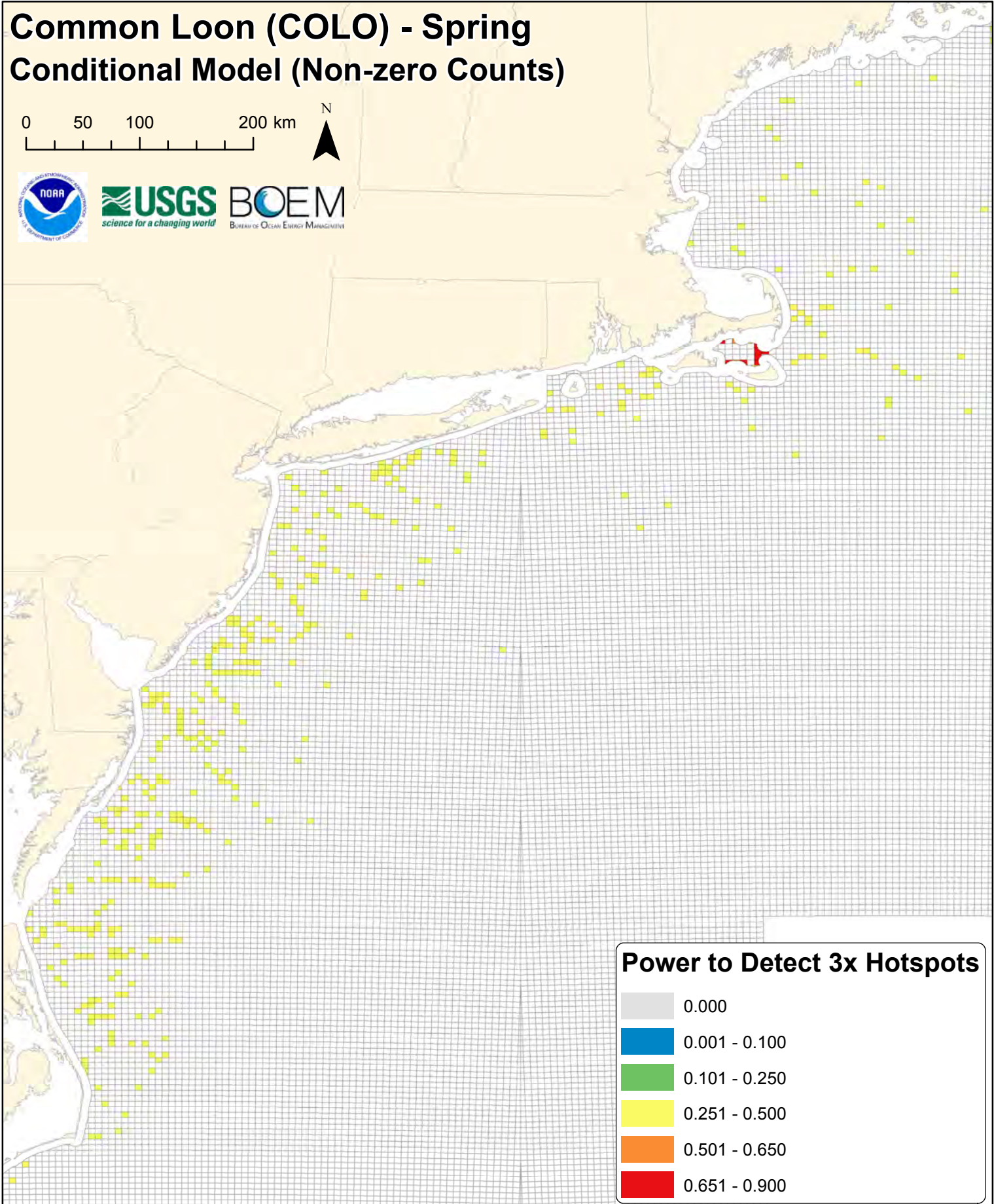
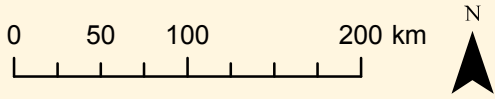
Mean Non-zero Count

- 1.000 - 2.125
- 2.126 - 4.000
- 4.001 - 7.000
- 7.001 - 14.000
- 14.001 - 51.000

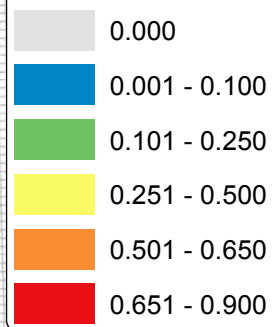
colo



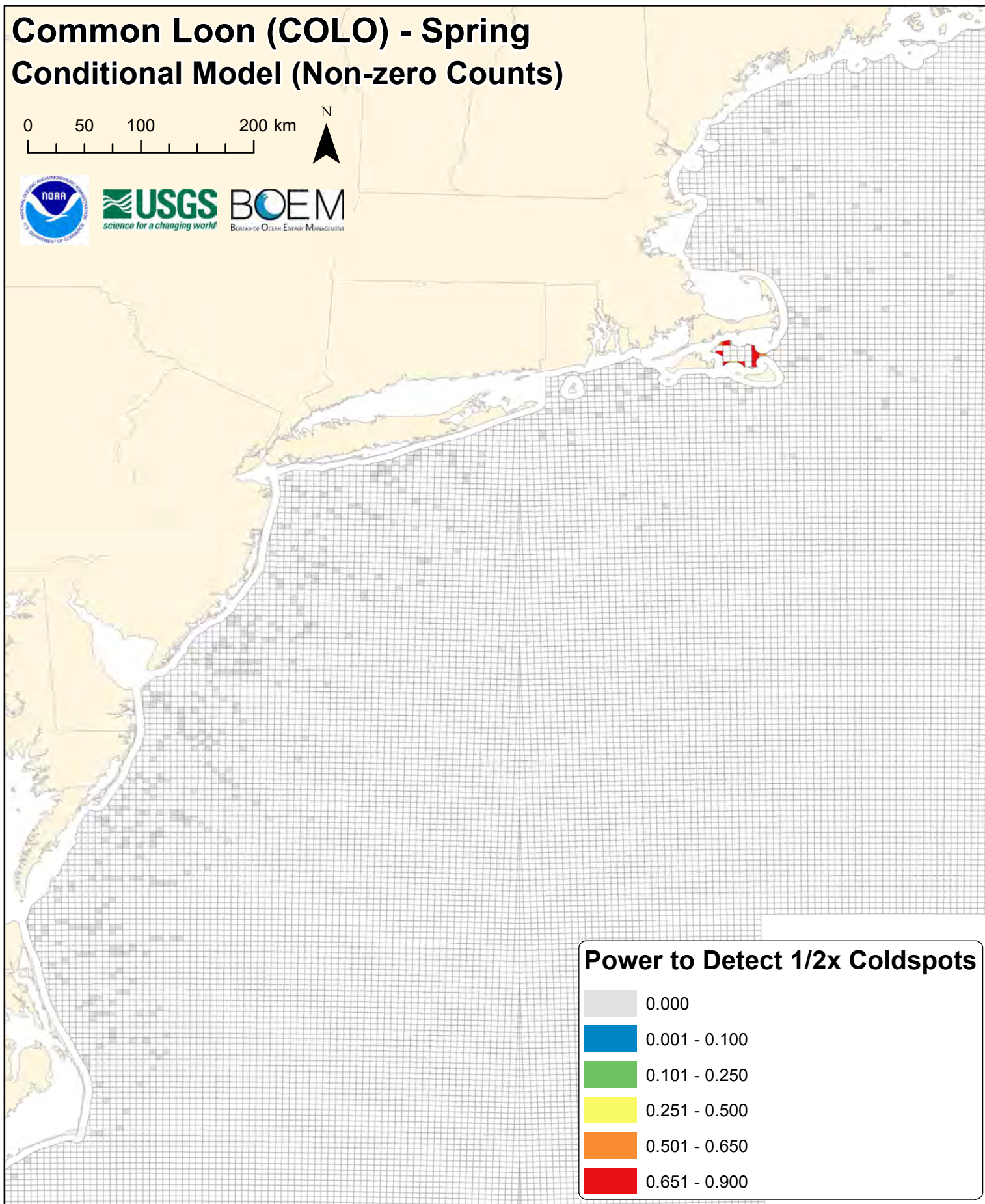
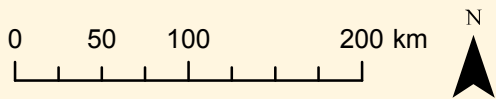
Common Loon (COLO) - Spring Conditional Model (Non-zero Counts)



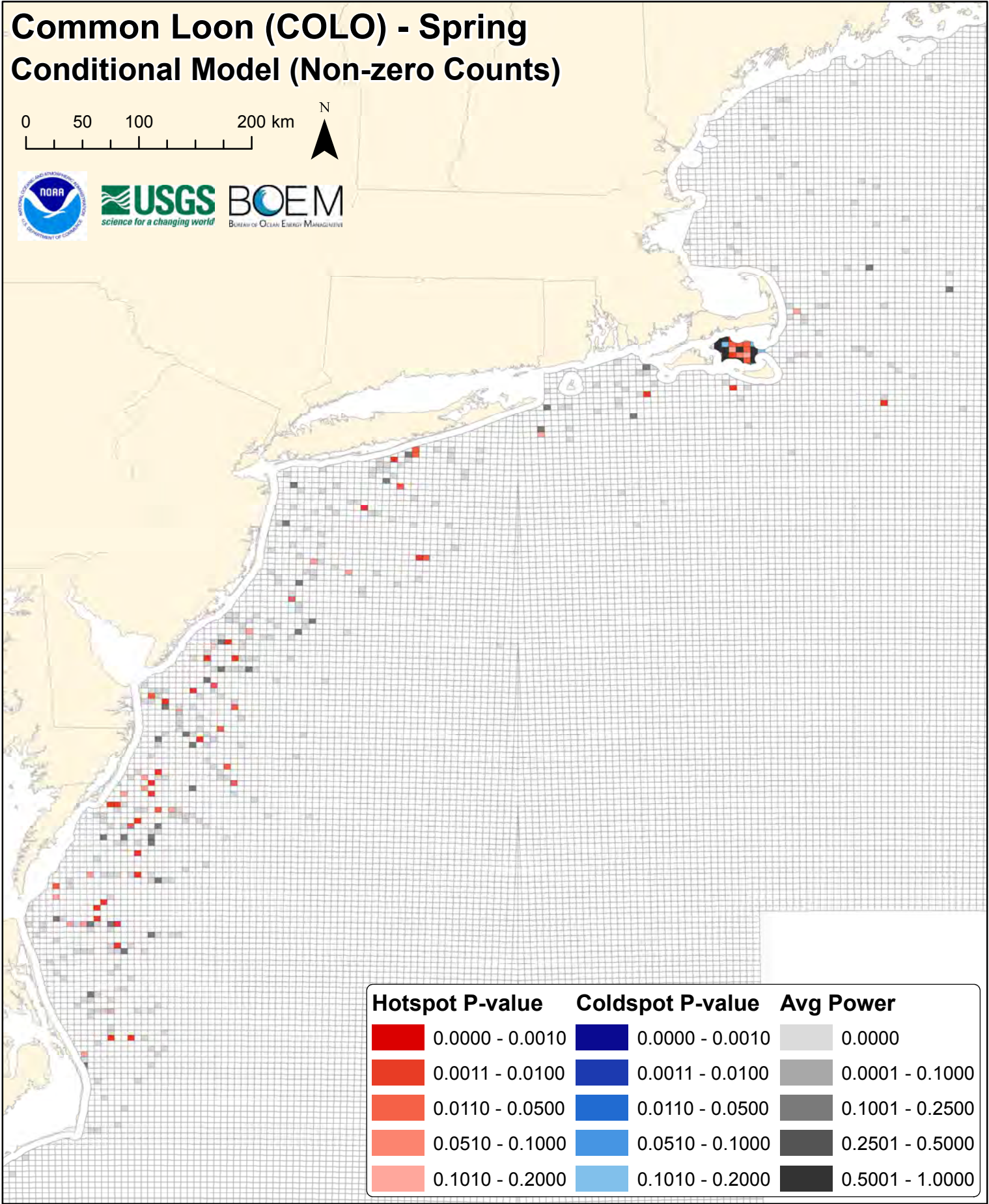
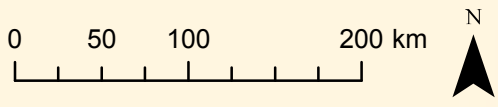
Power to Detect 3x Hotspots


















Common Loon (COLO) - Spring Conditional Model (Non-zero Counts)

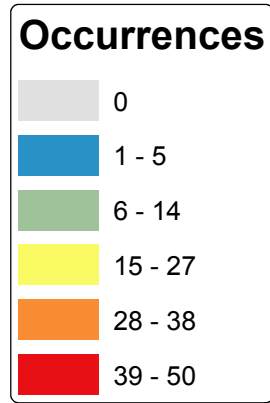
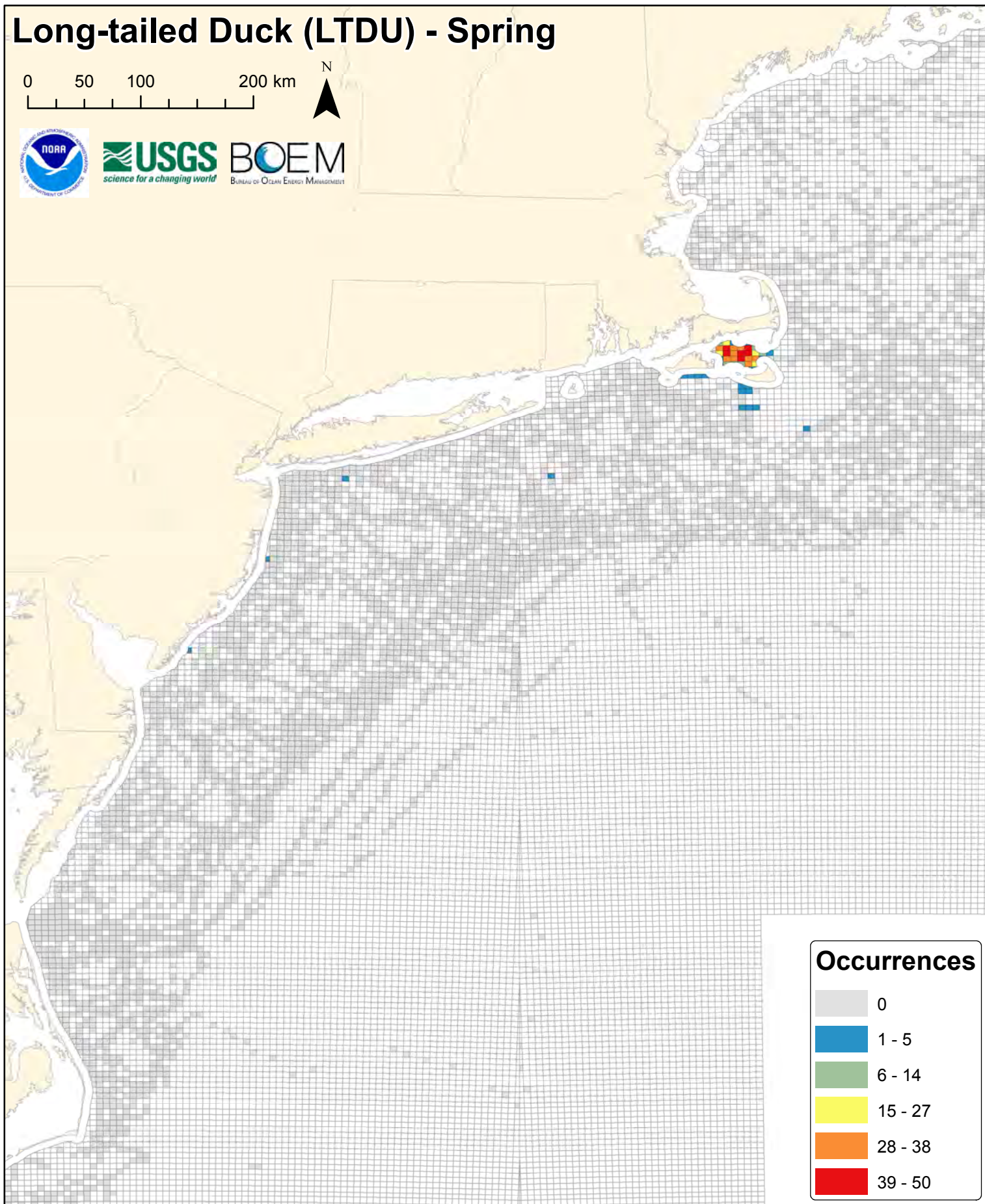
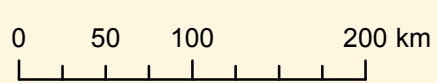


Common Loon (COLO) - Spring Conditional Model (Non-zero Counts)



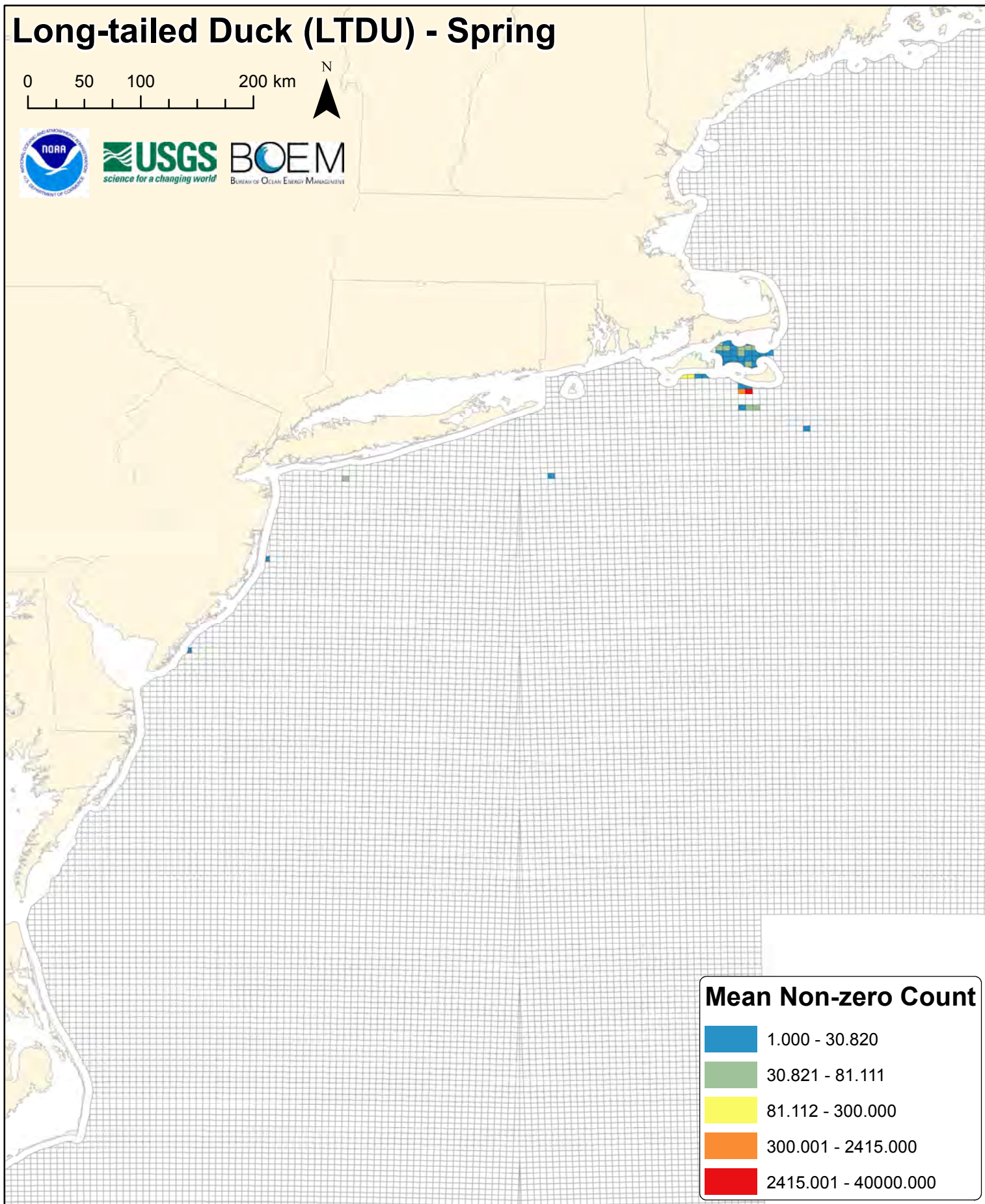
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Long-tailed Duck (LTDU) - Spring



Long-tailed Duck (LTDU) - Spring

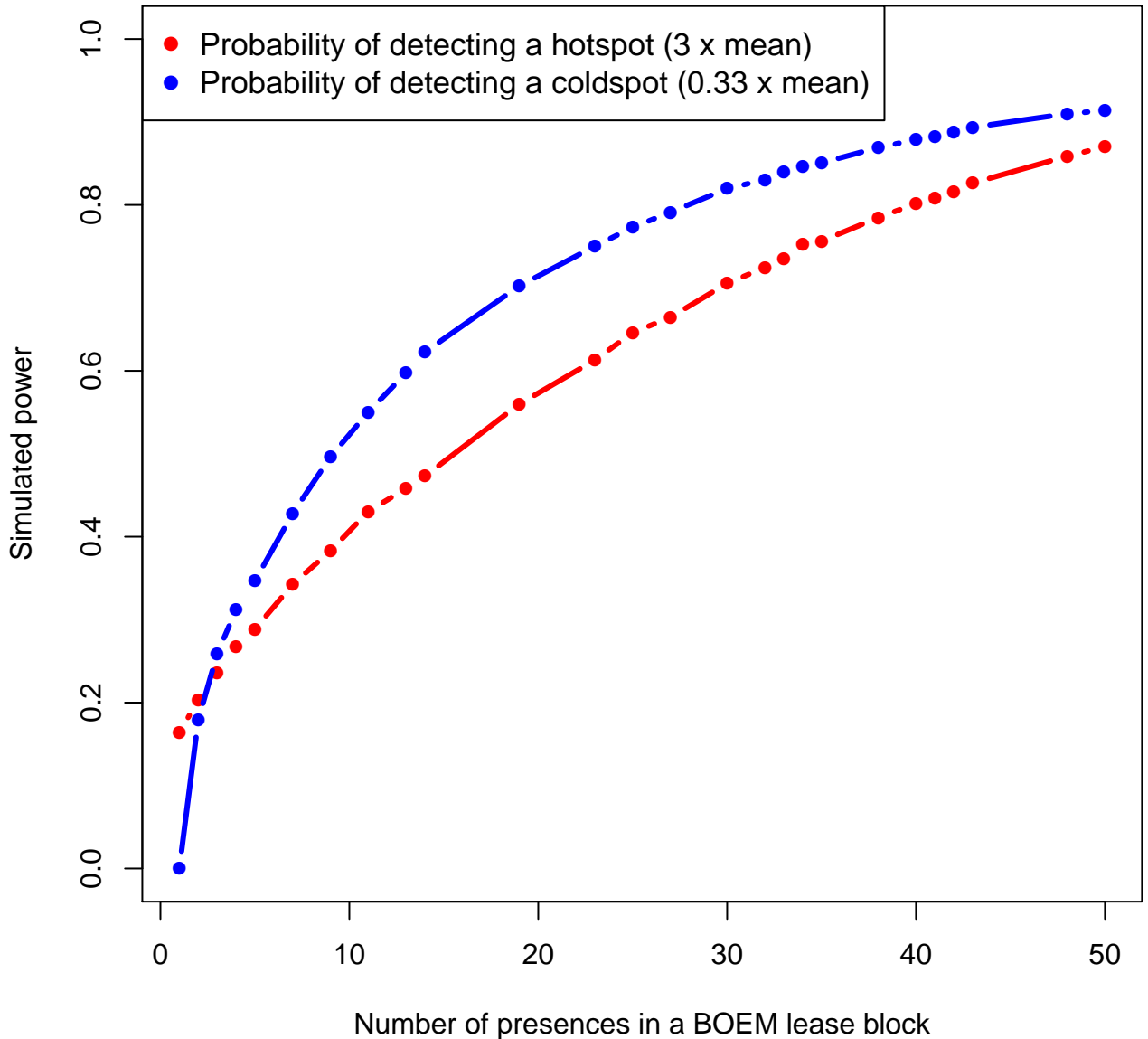
0 50 100 200 km



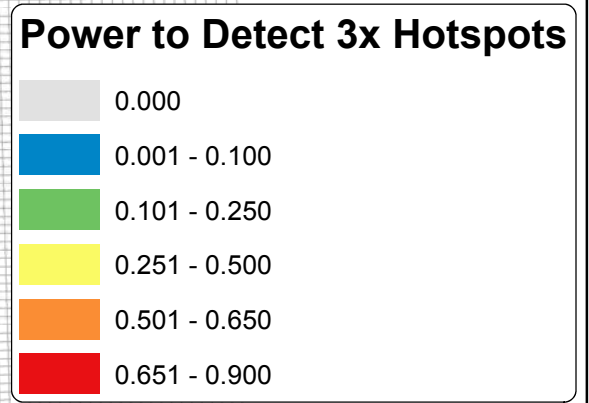
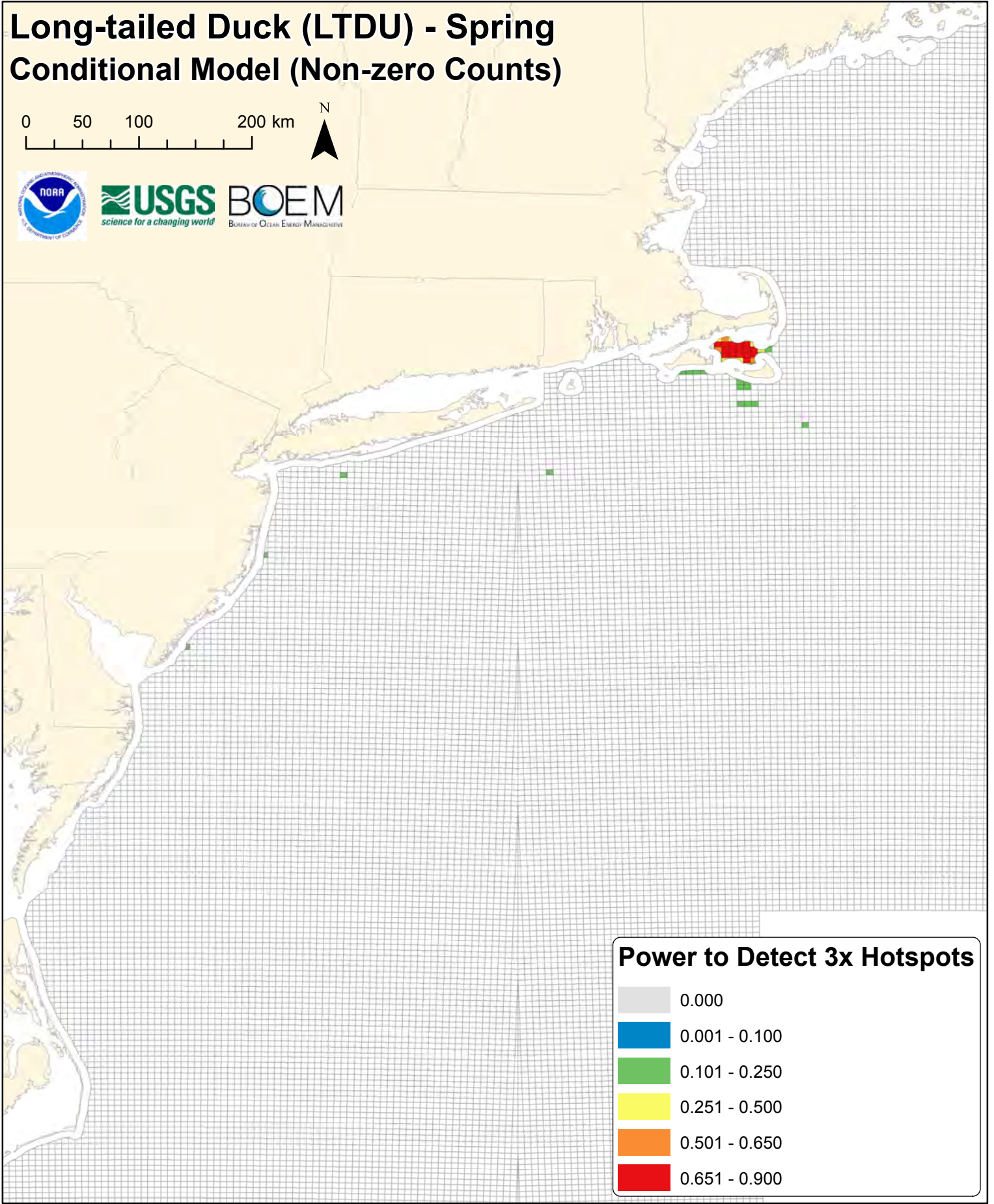
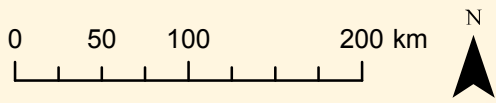
Mean Non-zero Count

- 1.000 - 30.820
- 30.821 - 81.111
- 81.112 - 300.000
- 300.001 - 2415.000
- 2415.001 - 40000.000

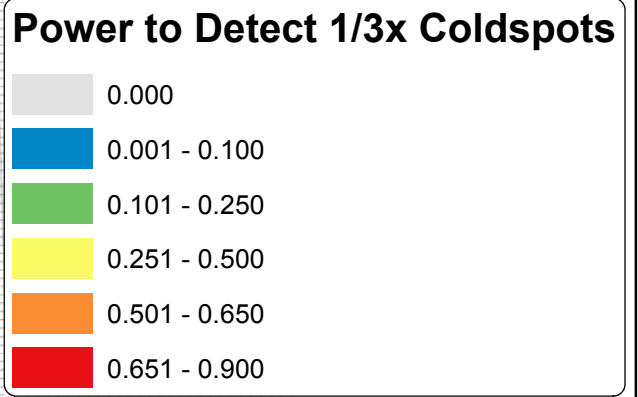
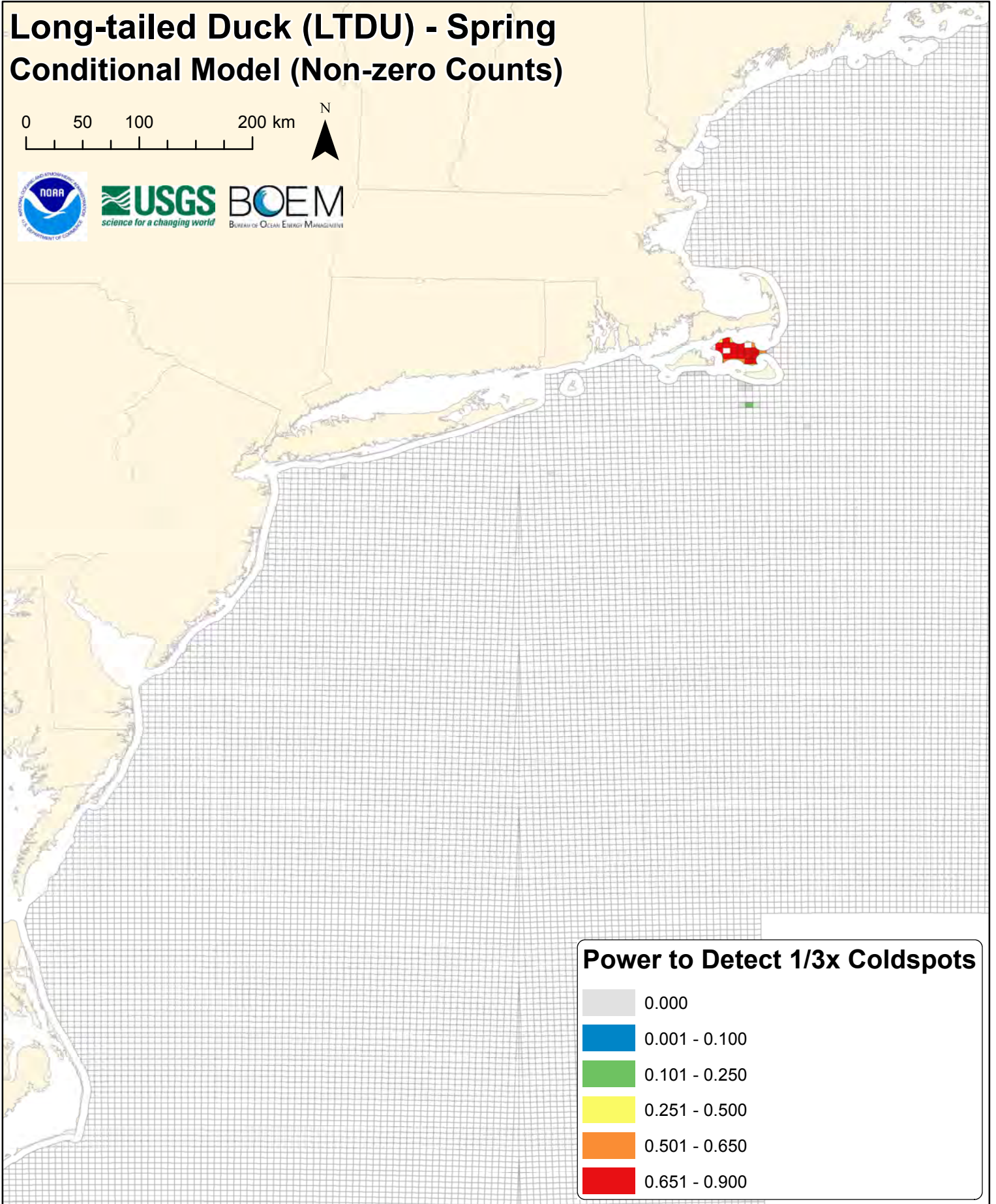
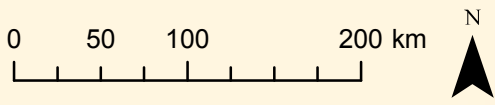
Itdu



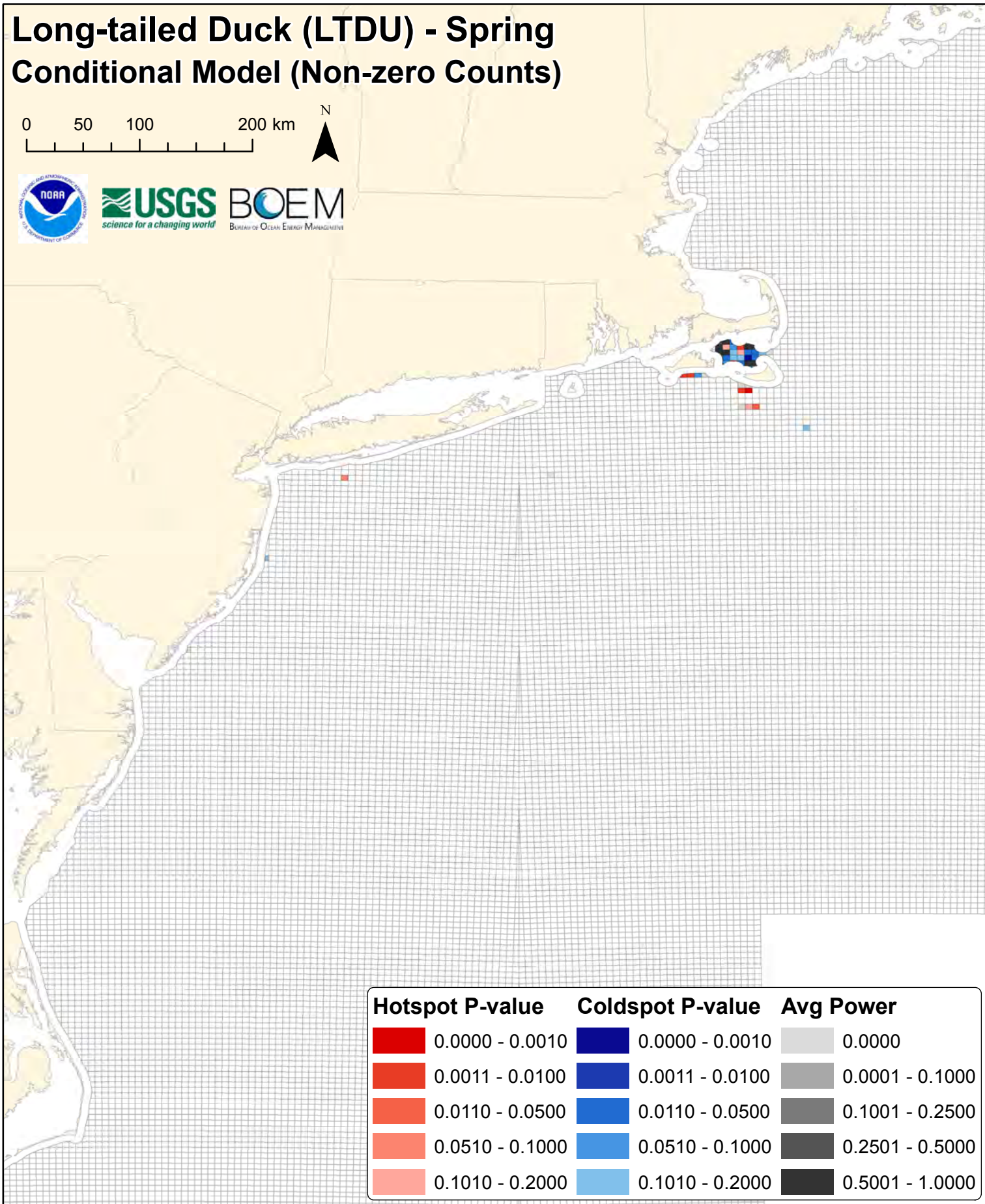
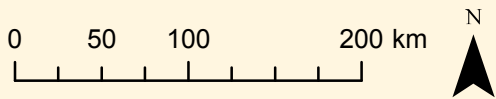
Long-tailed Duck (LTDU) - Spring Conditional Model (Non-zero Counts)



Long-tailed Duck (LTDU) - Spring Conditional Model (Non-zero Counts)

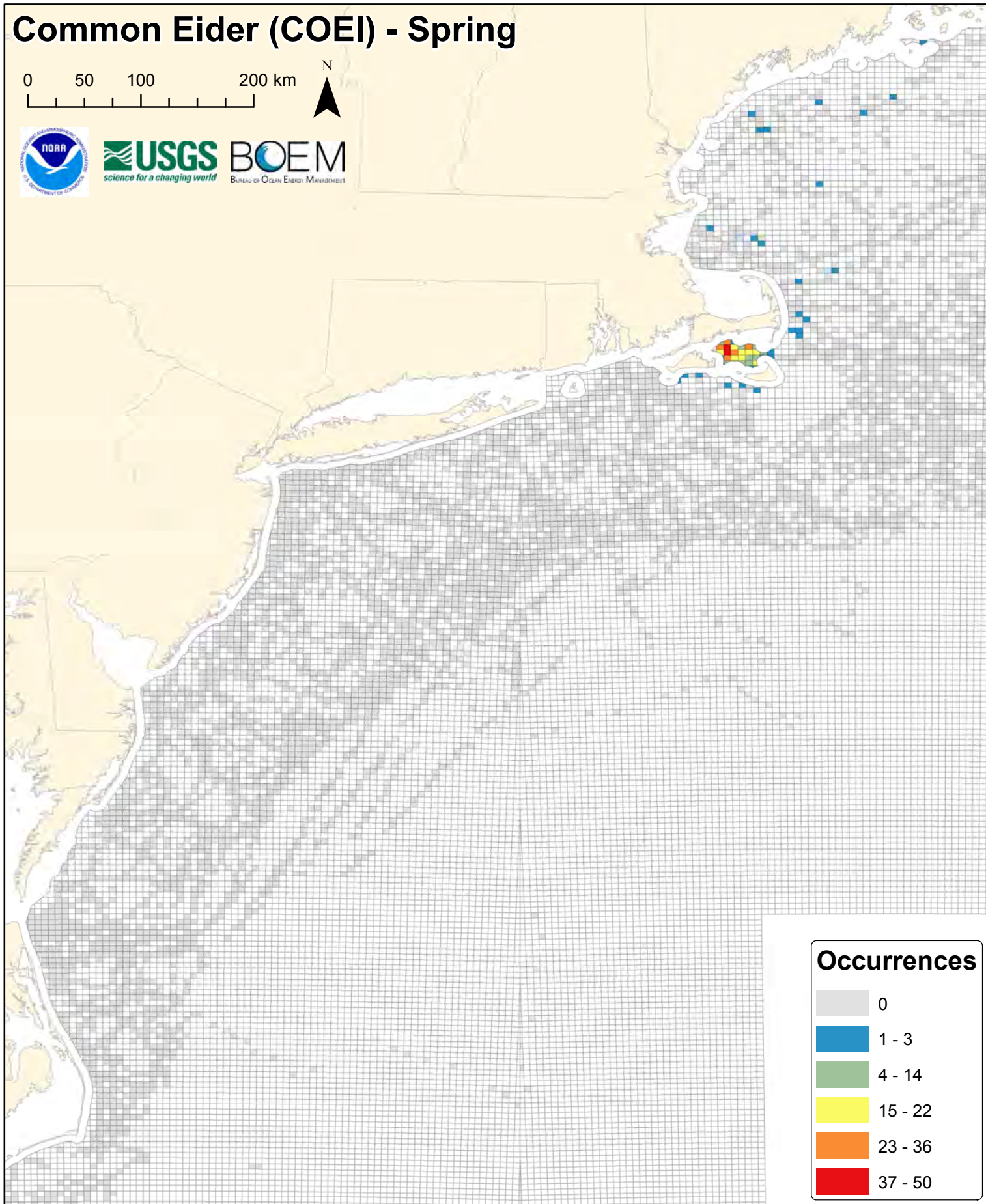


Long-tailed Duck (LTDU) - Spring Conditional Model (Non-zero Counts)



Common Eider (COEI) - Spring

0 50 100 200 km

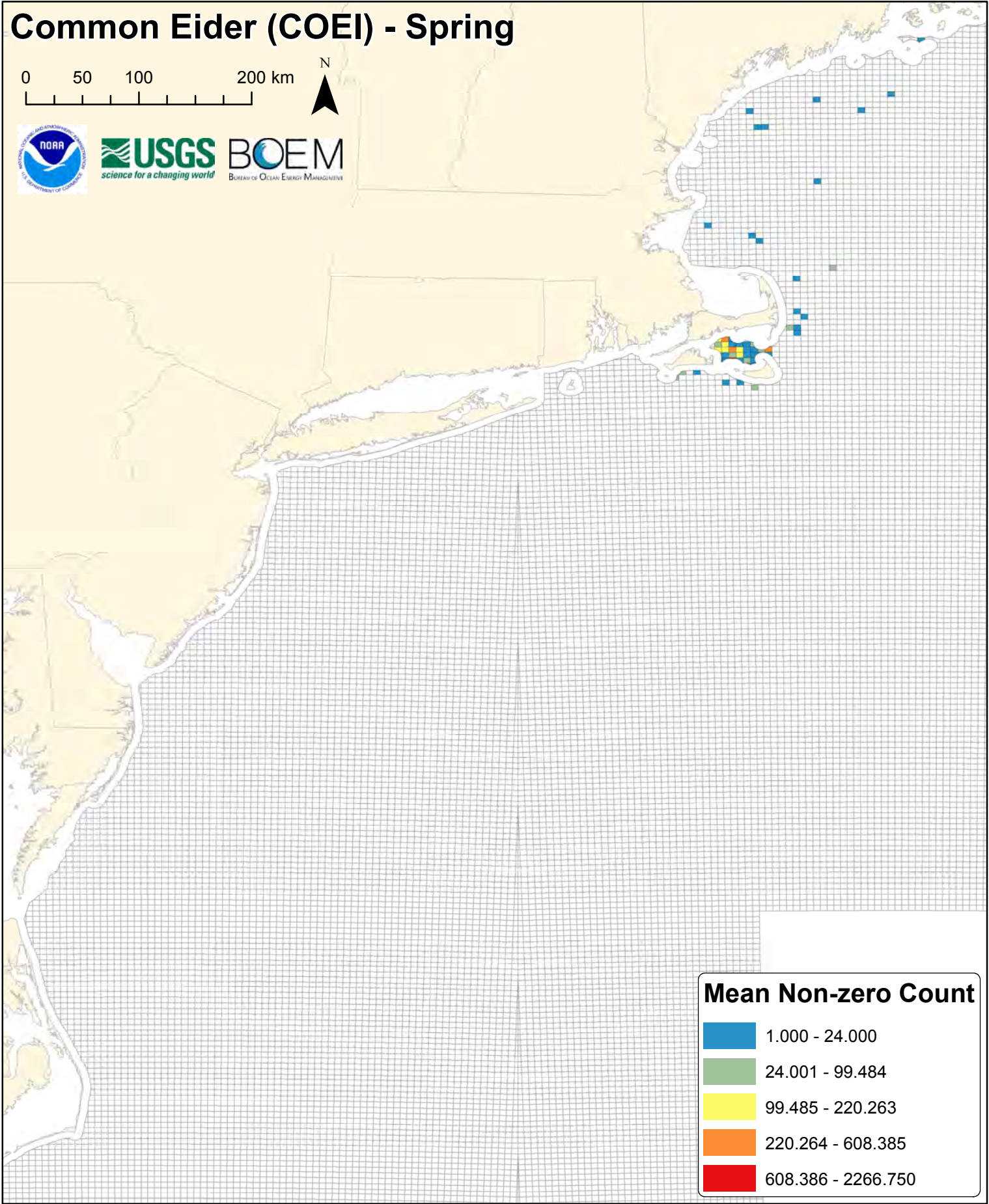


Occurrences

0
1 - 3
4 - 14
15 - 22
23 - 36
37 - 50

Common Eider (COEI) - Spring

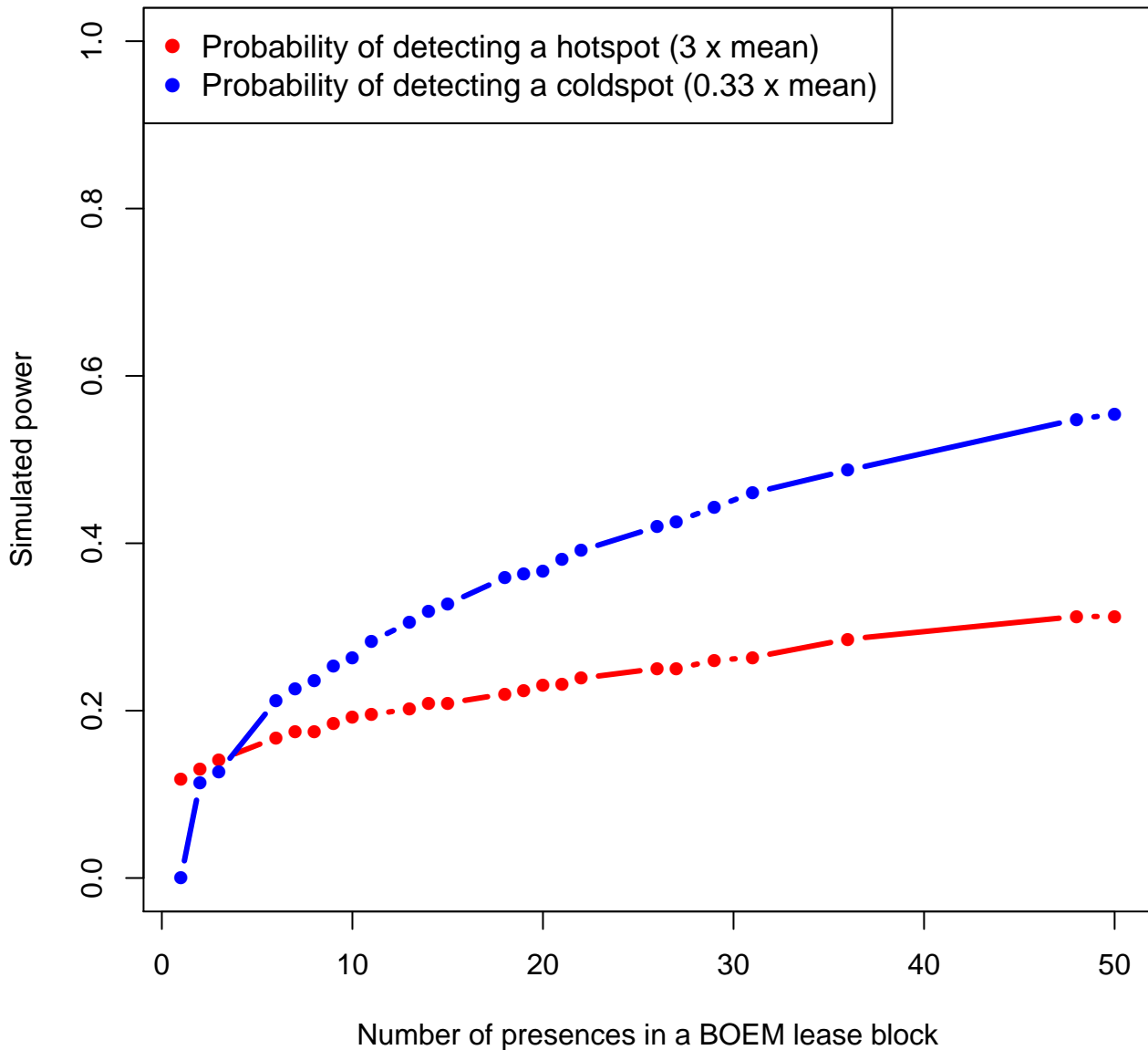
0 50 100 200 km



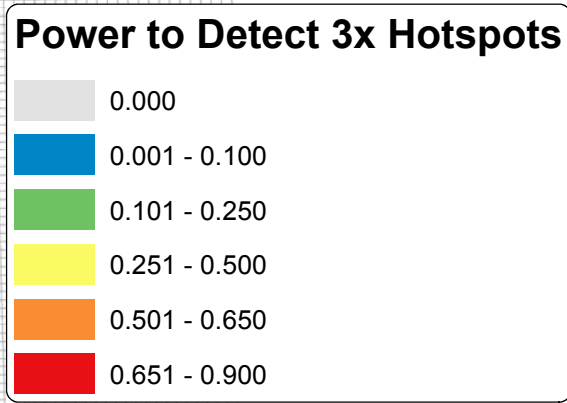
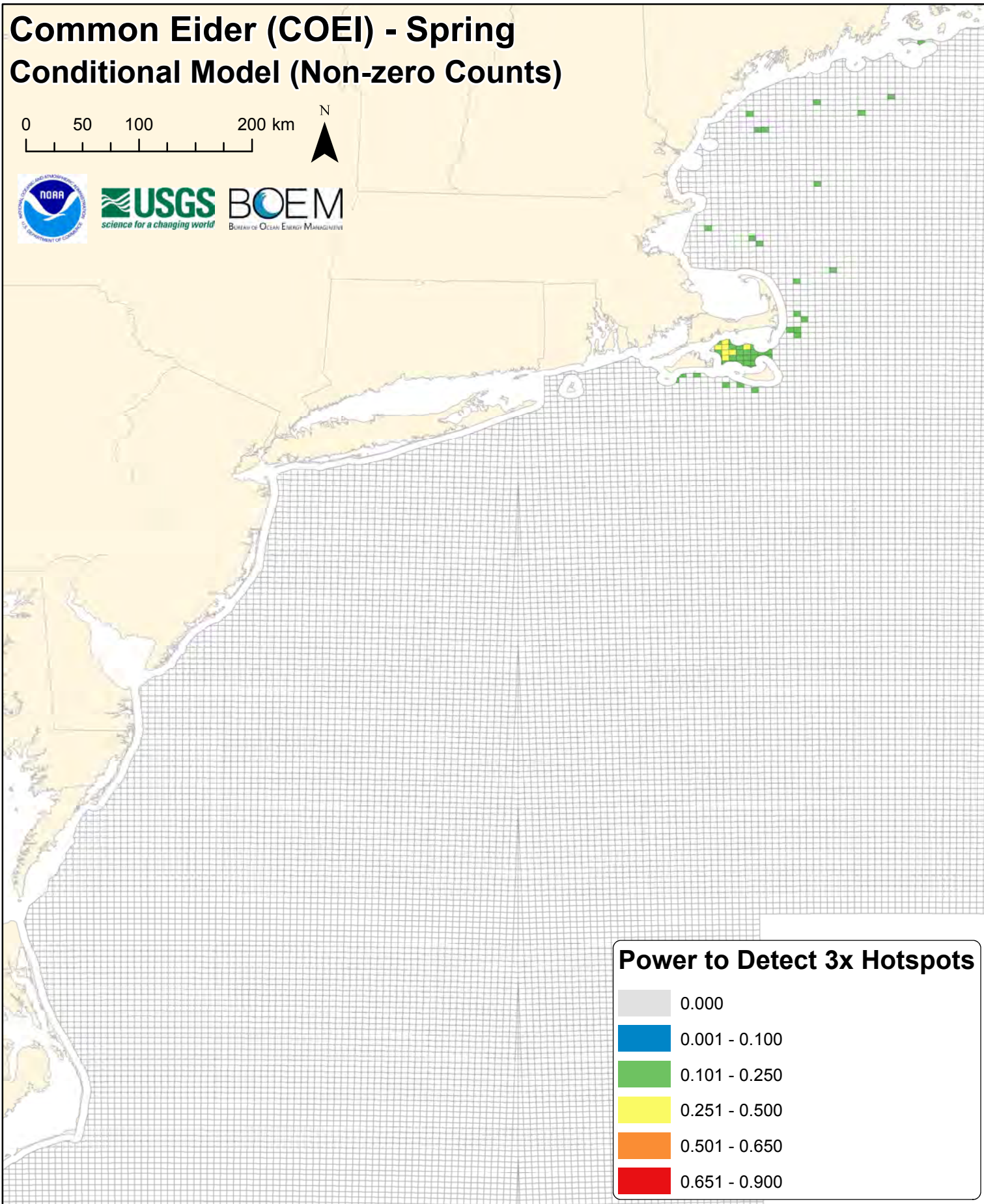
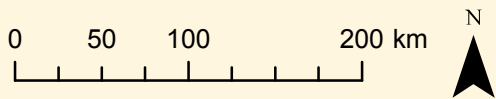
Mean Non-zero Count

- 1.000 - 24.000
- 24.001 - 99.484
- 99.485 - 220.263
- 220.264 - 608.385
- 608.386 - 2266.750

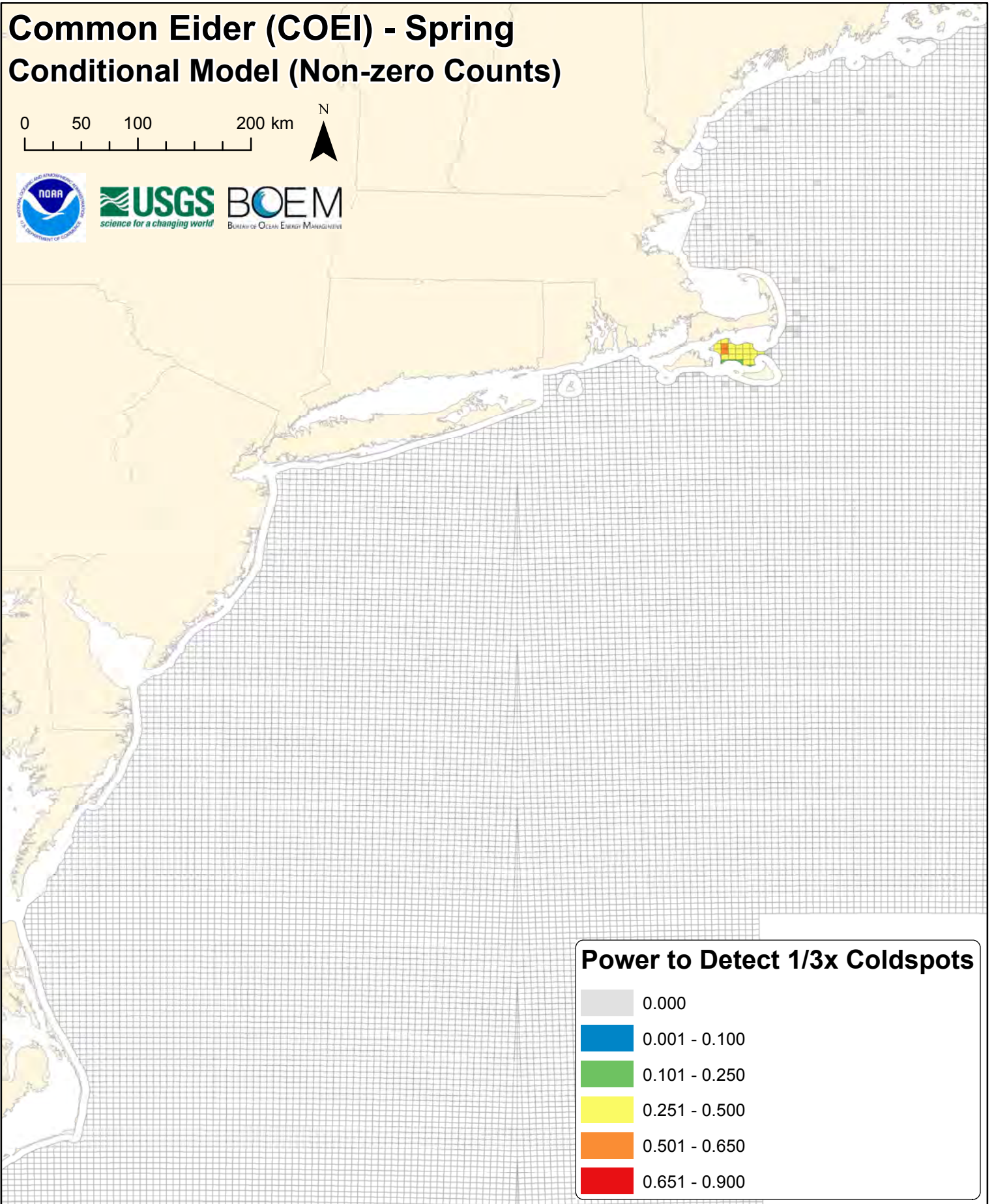
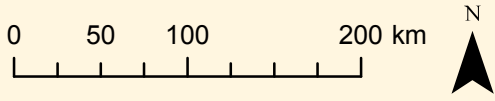
coei



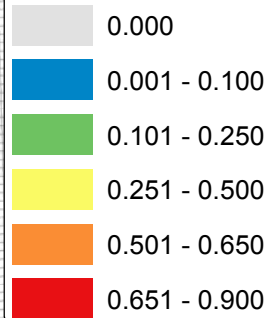
Common Eider (COEI) - Spring Conditional Model (Non-zero Counts)



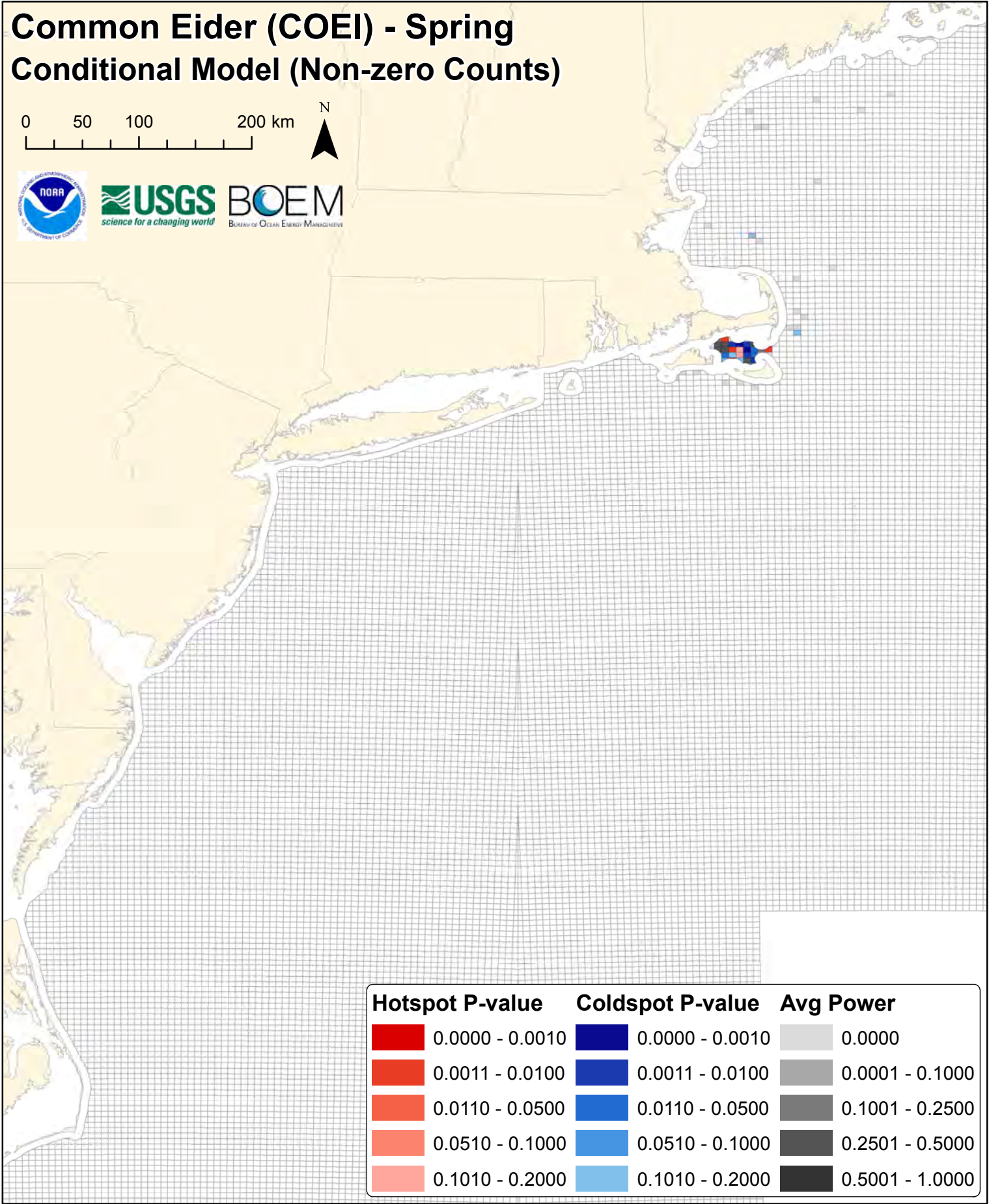
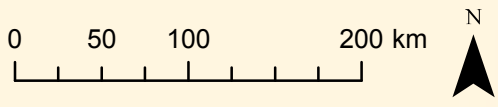
Common Eider (COEI) - Spring Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots

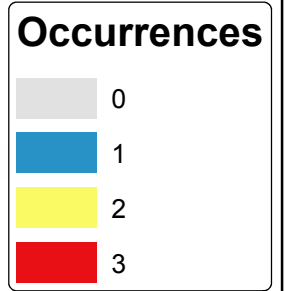
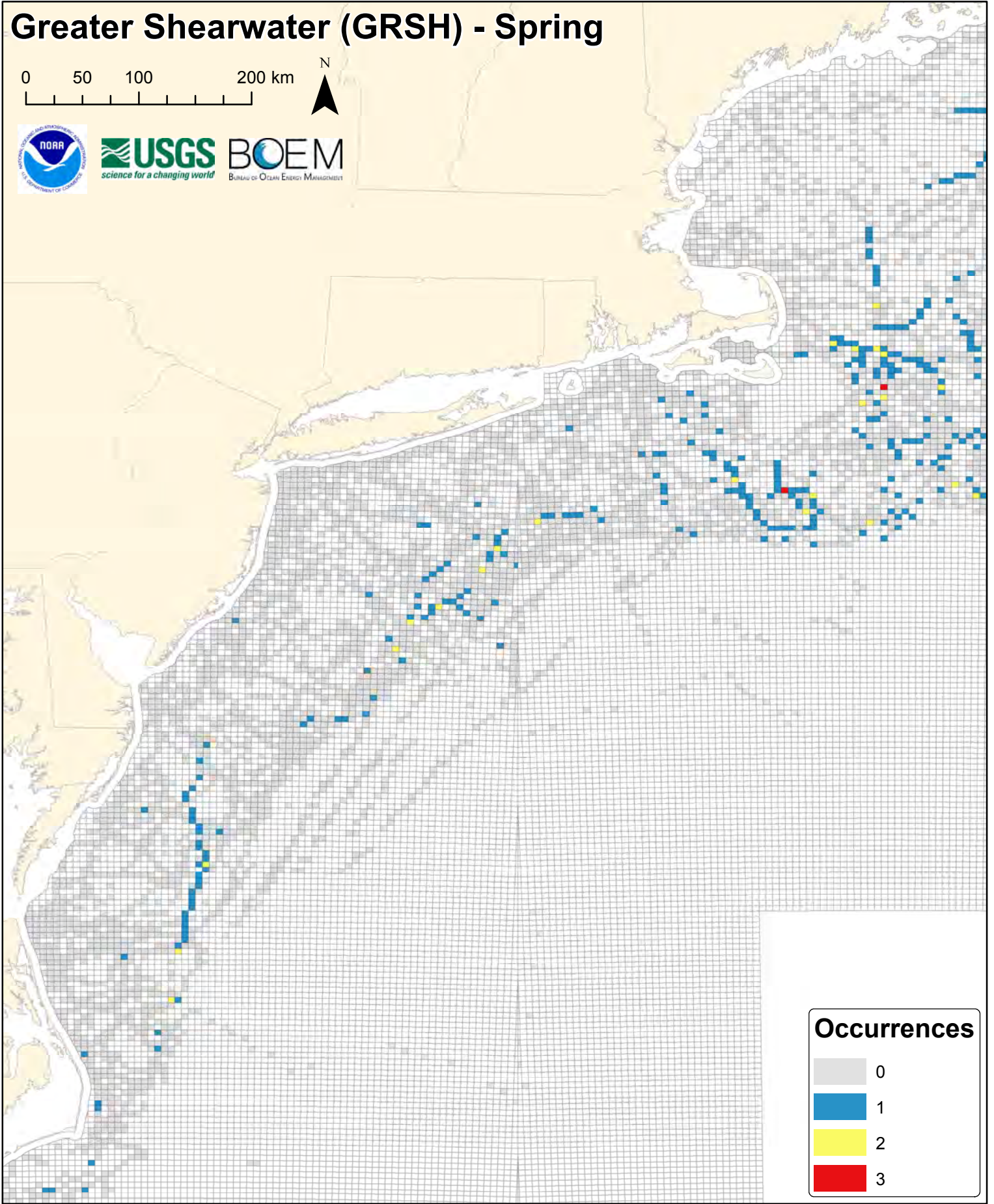
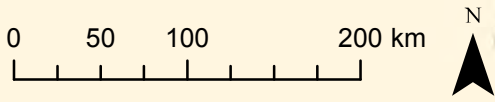


Common Eider (COEI) - Spring Conditional Model (Non-zero Counts)



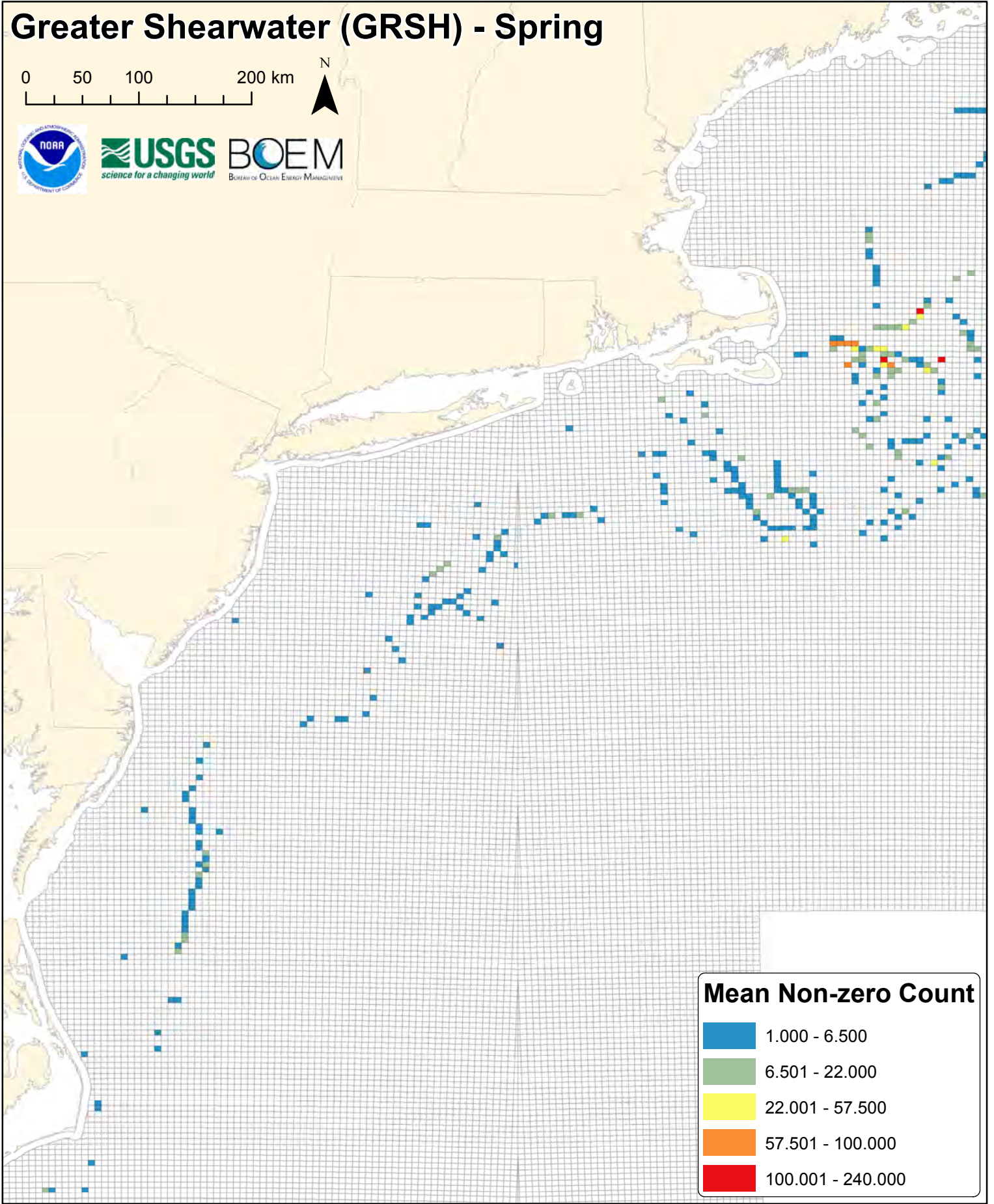
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Greater Shearwater (GRSH) - Spring



Greater Shearwater (GRSH) - Spring

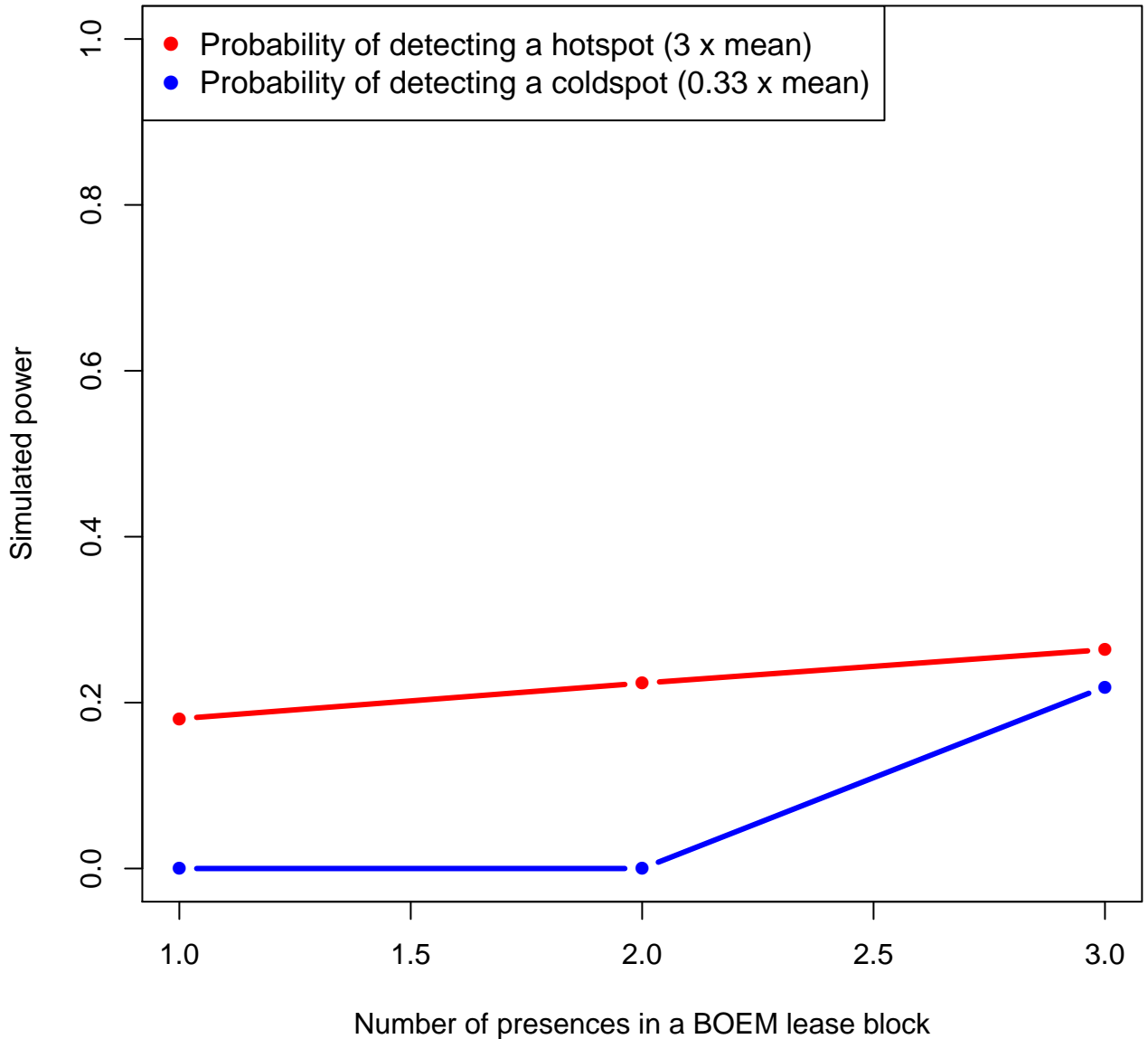
0 50 100 200 km



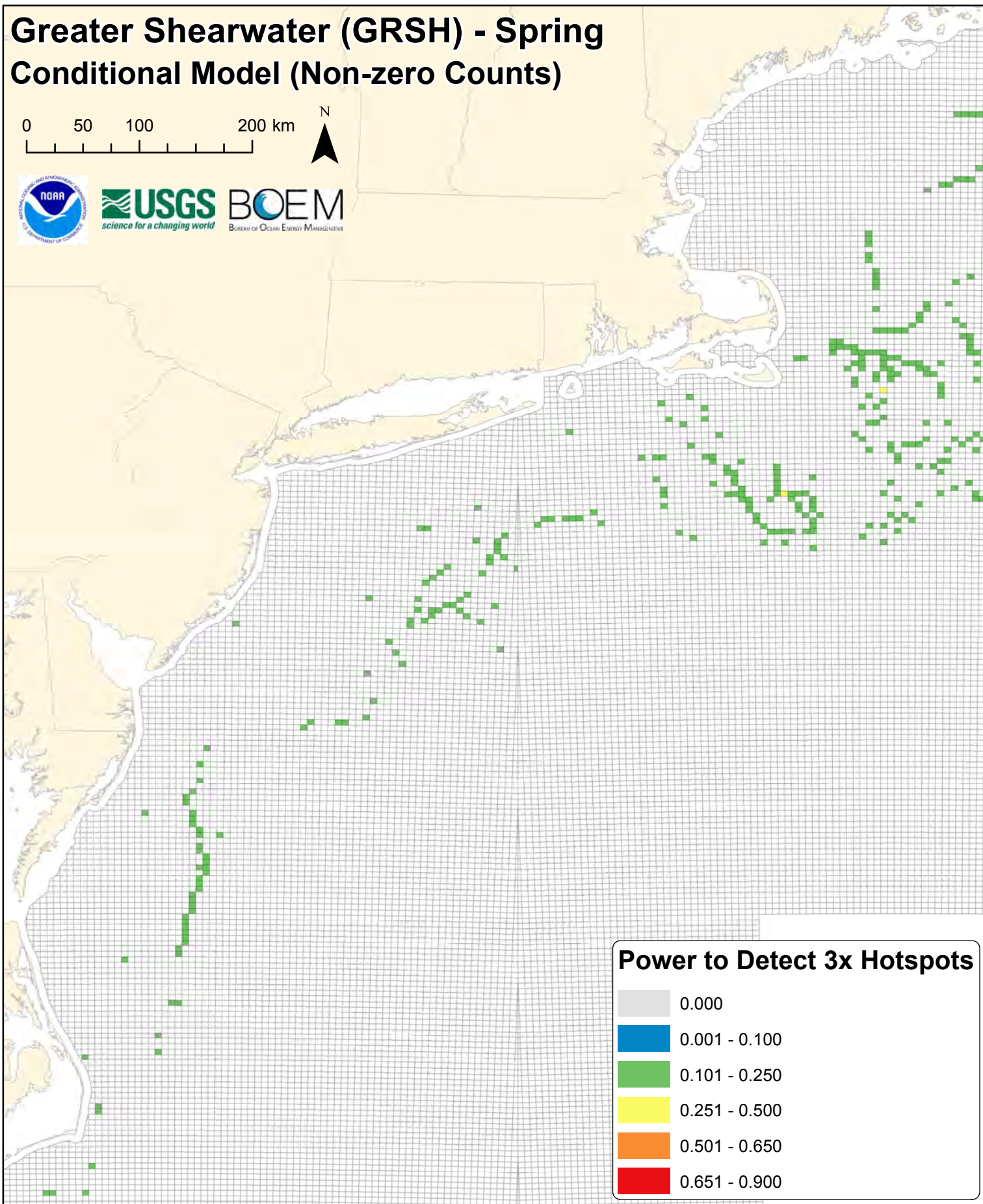
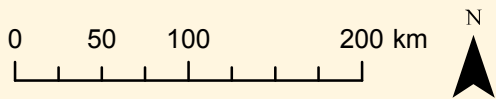
Mean Non-zero Count

- 1.000 - 6.500
- 6.501 - 22.000
- 22.001 - 57.500
- 57.501 - 100.000
- 100.001 - 240.000

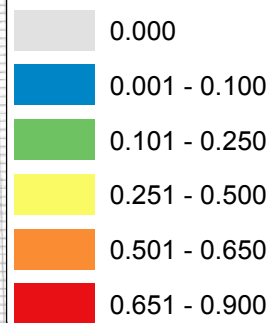
grsh



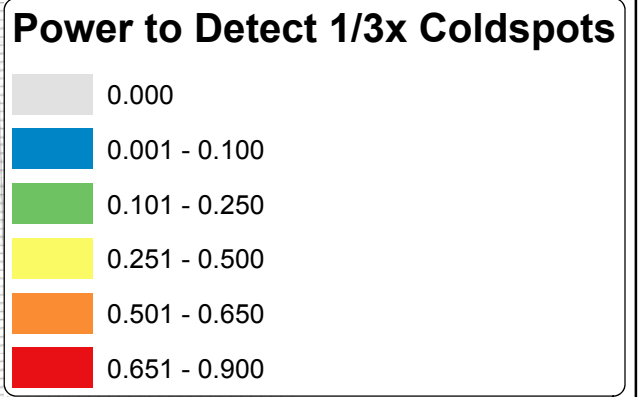
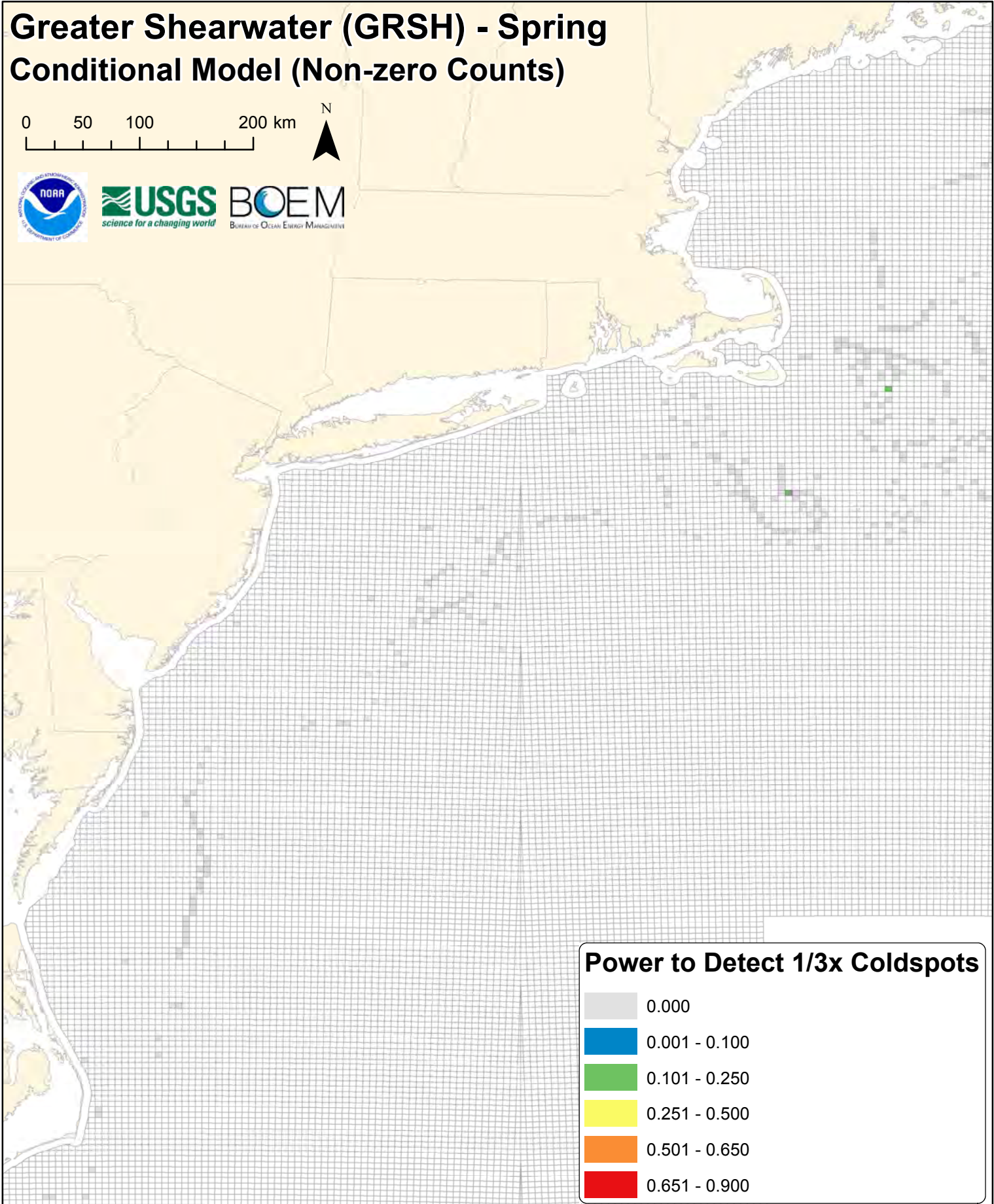
Greater Shearwater (GRSH) - Spring Conditional Model (Non-zero Counts)



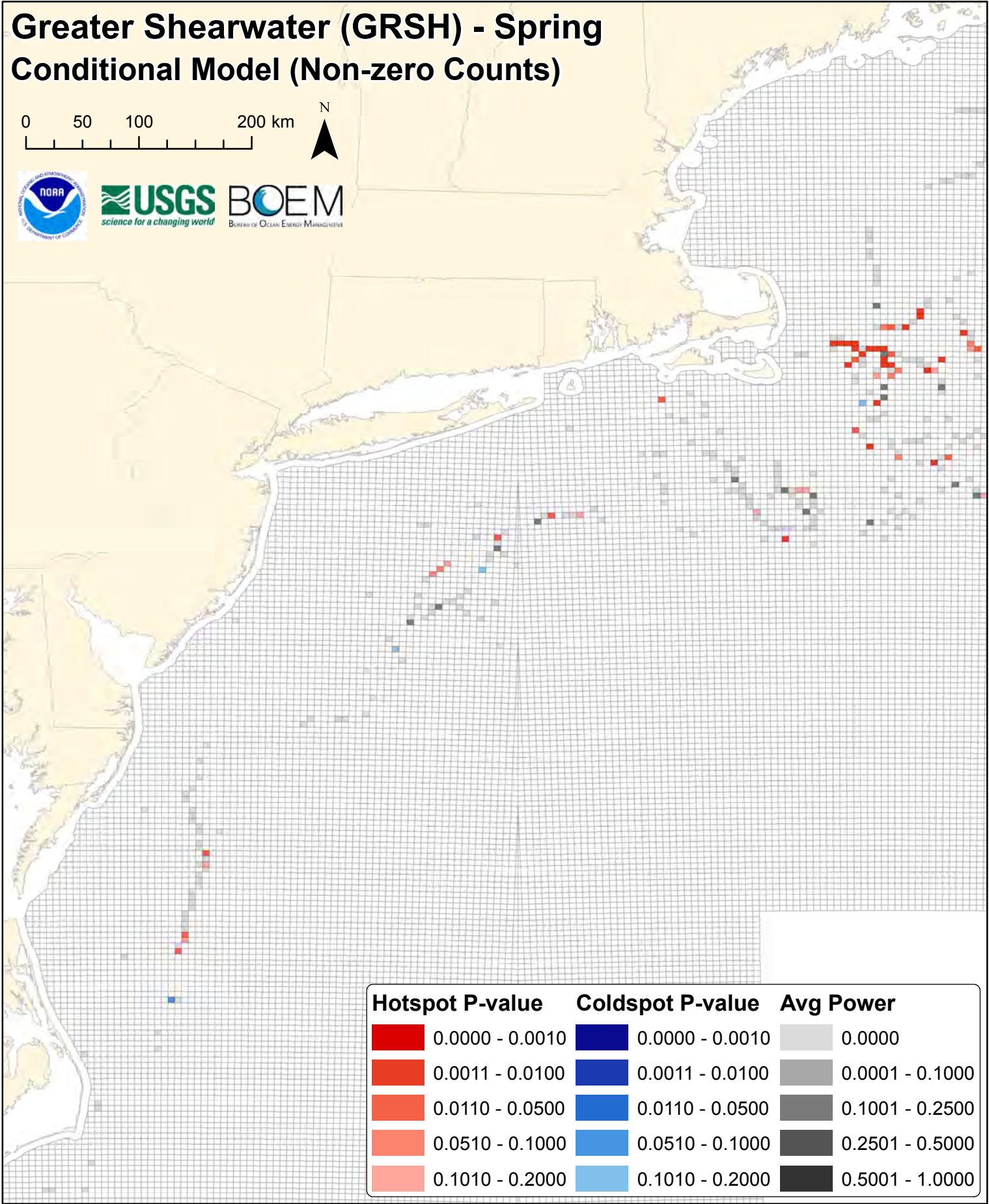
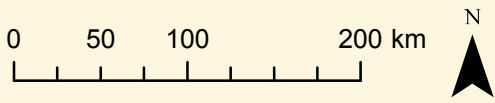
Power to Detect 3x Hotspots


















Greater Shearwater (GRSH) - Spring Conditional Model (Non-zero Counts)



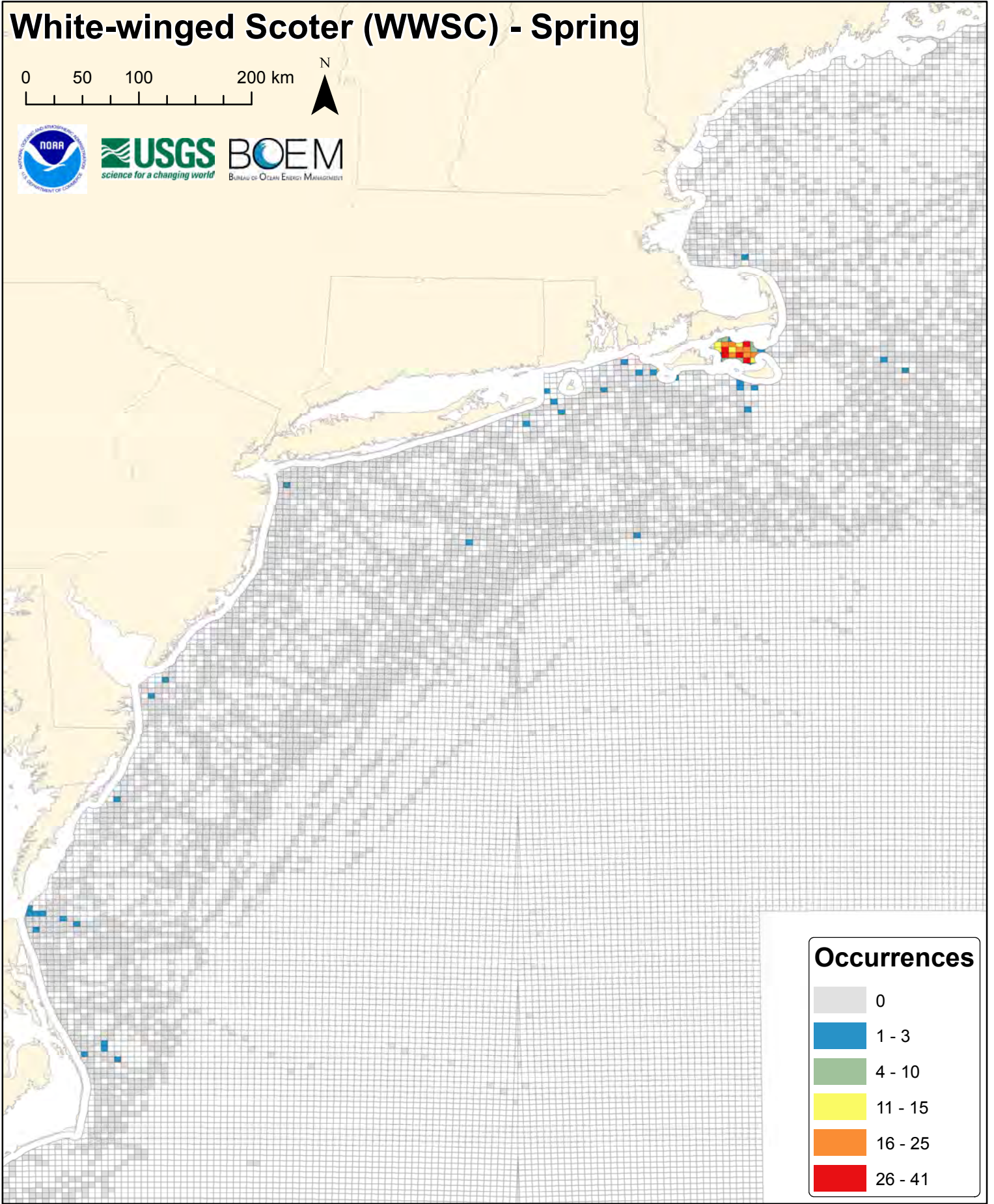
Greater Shearwater (GRSH) - Spring Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

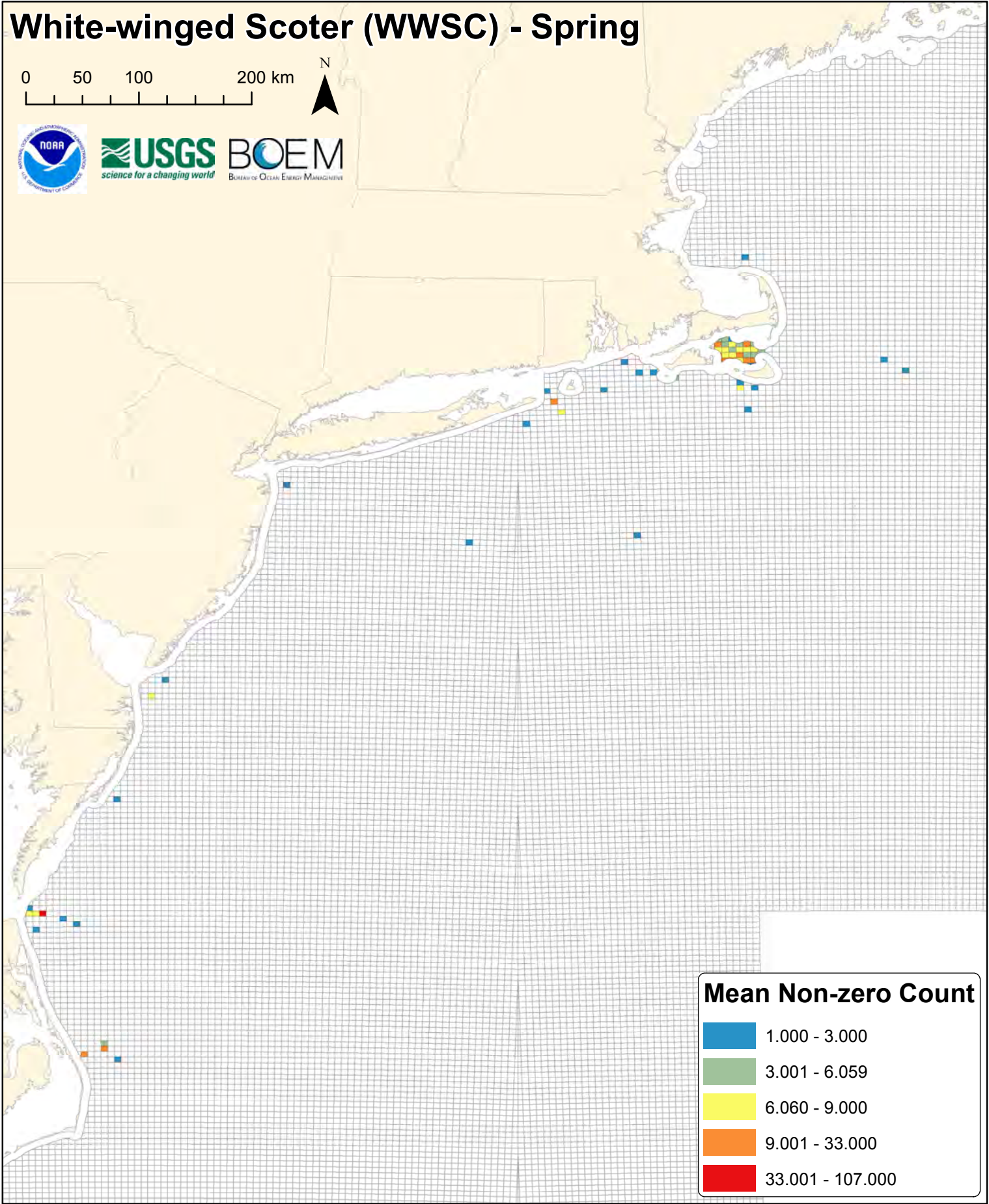
White-winged Scoter (WWSC) - Spring

0 50 100 200 km



White-winged Scoter (WWSC) - Spring

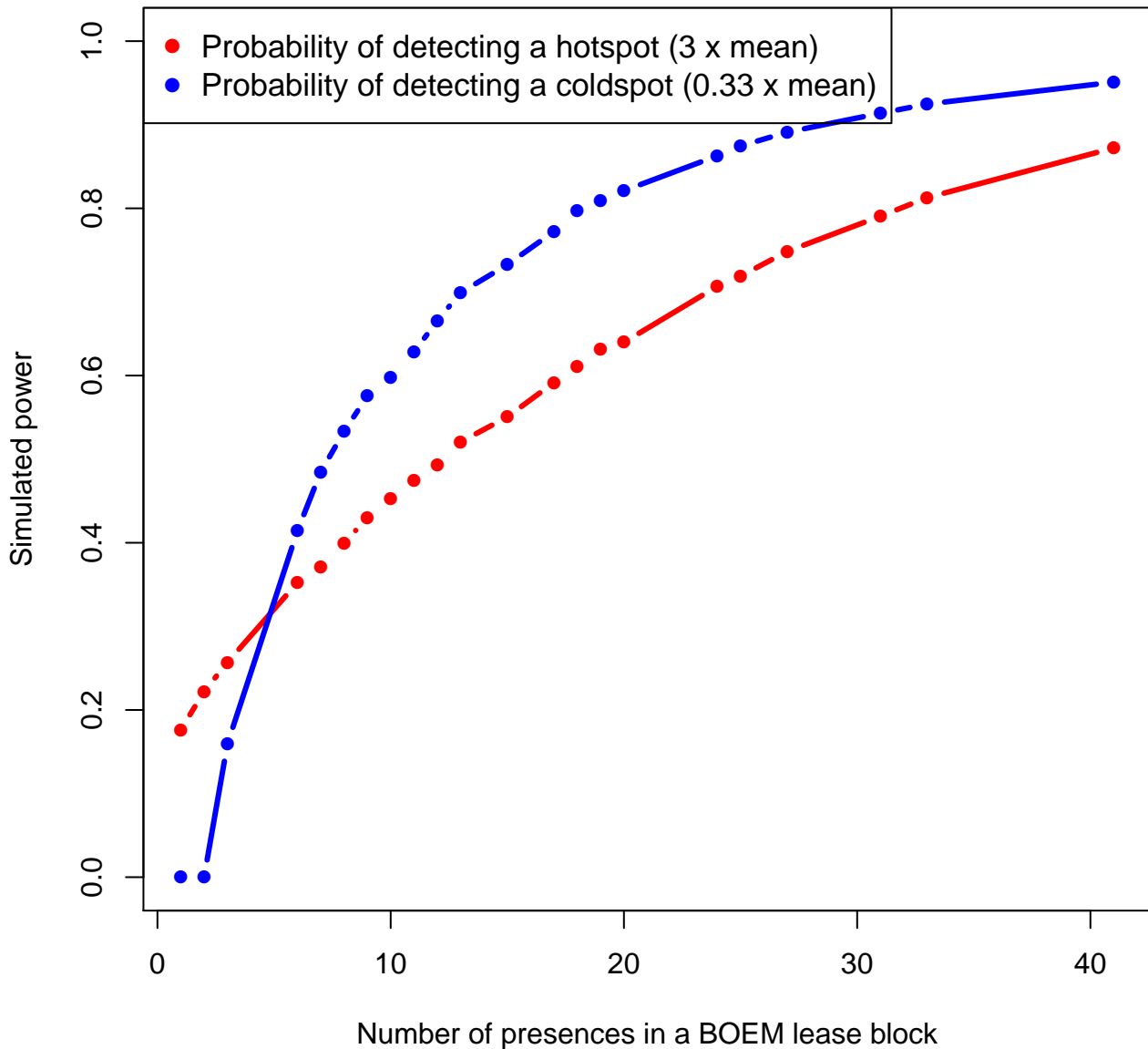
0 50 100 200 km



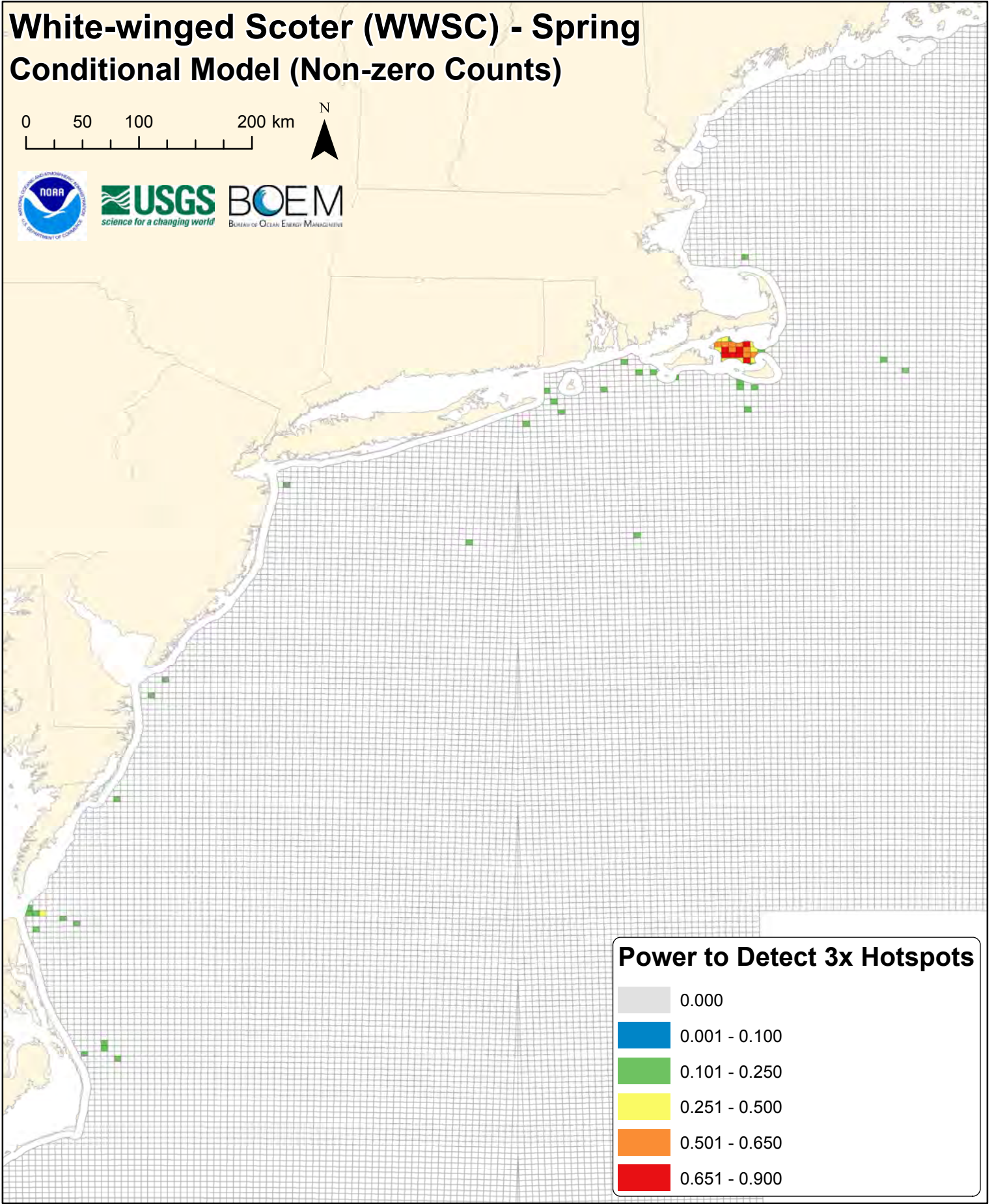
Mean Non-zero Count

- 1.000 - 3.000
- 3.001 - 6.059
- 6.060 - 9.000
- 9.001 - 33.000
- 33.001 - 107.000

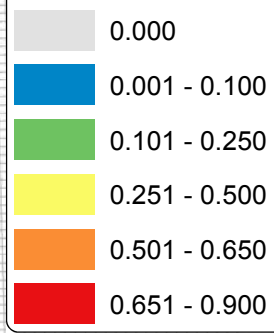
WWSC



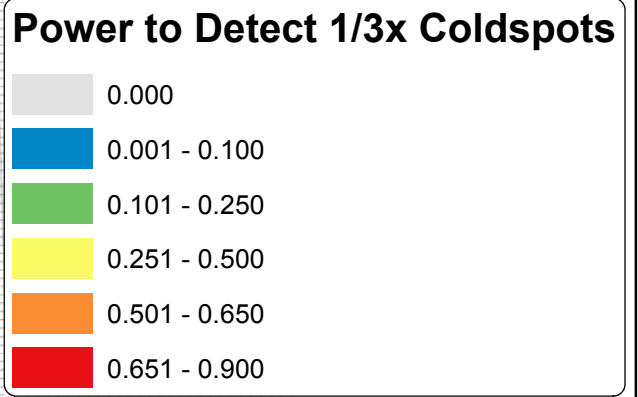
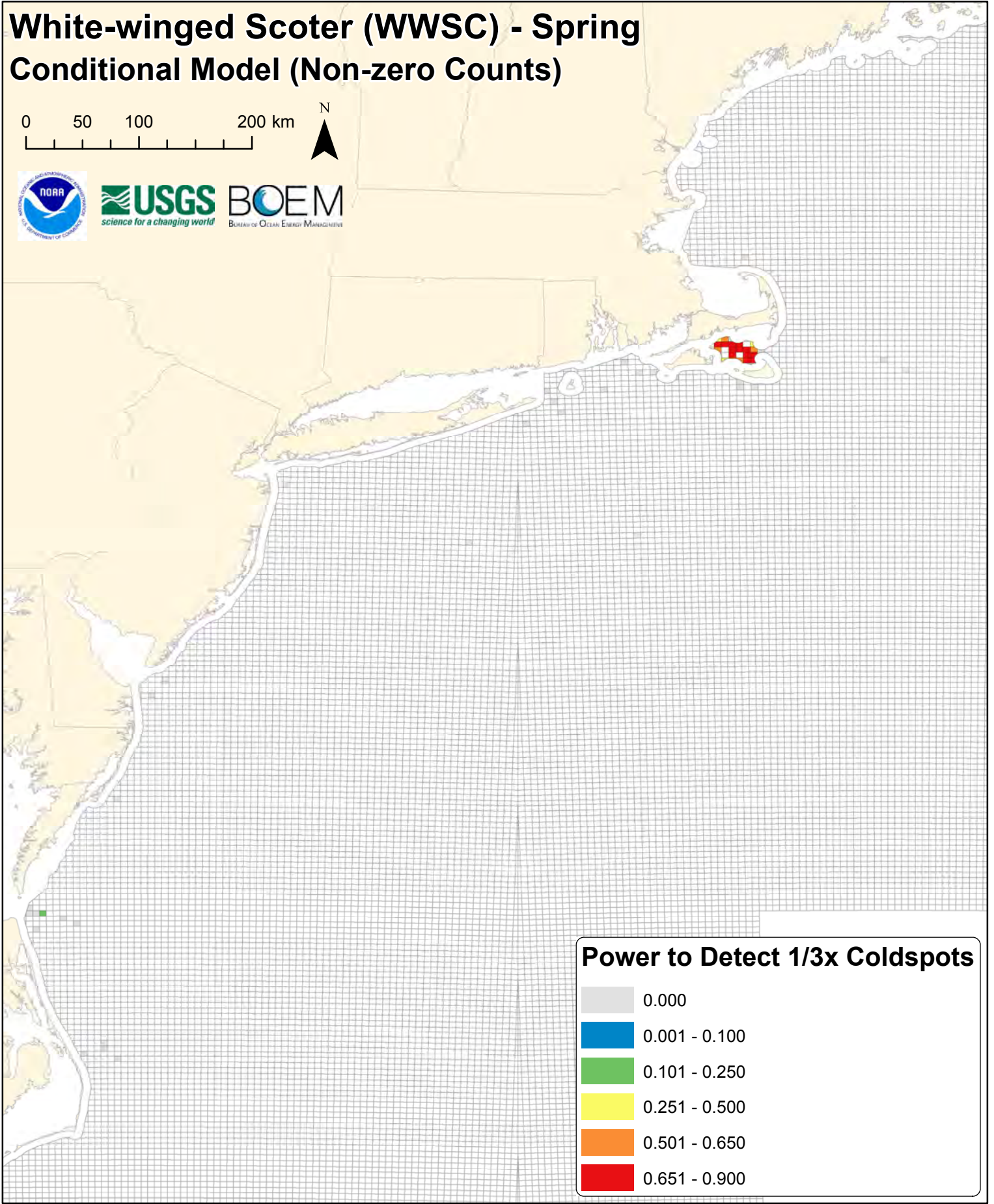
White-winged Scoter (WWSC) - Spring Conditional Model (Non-zero Counts)



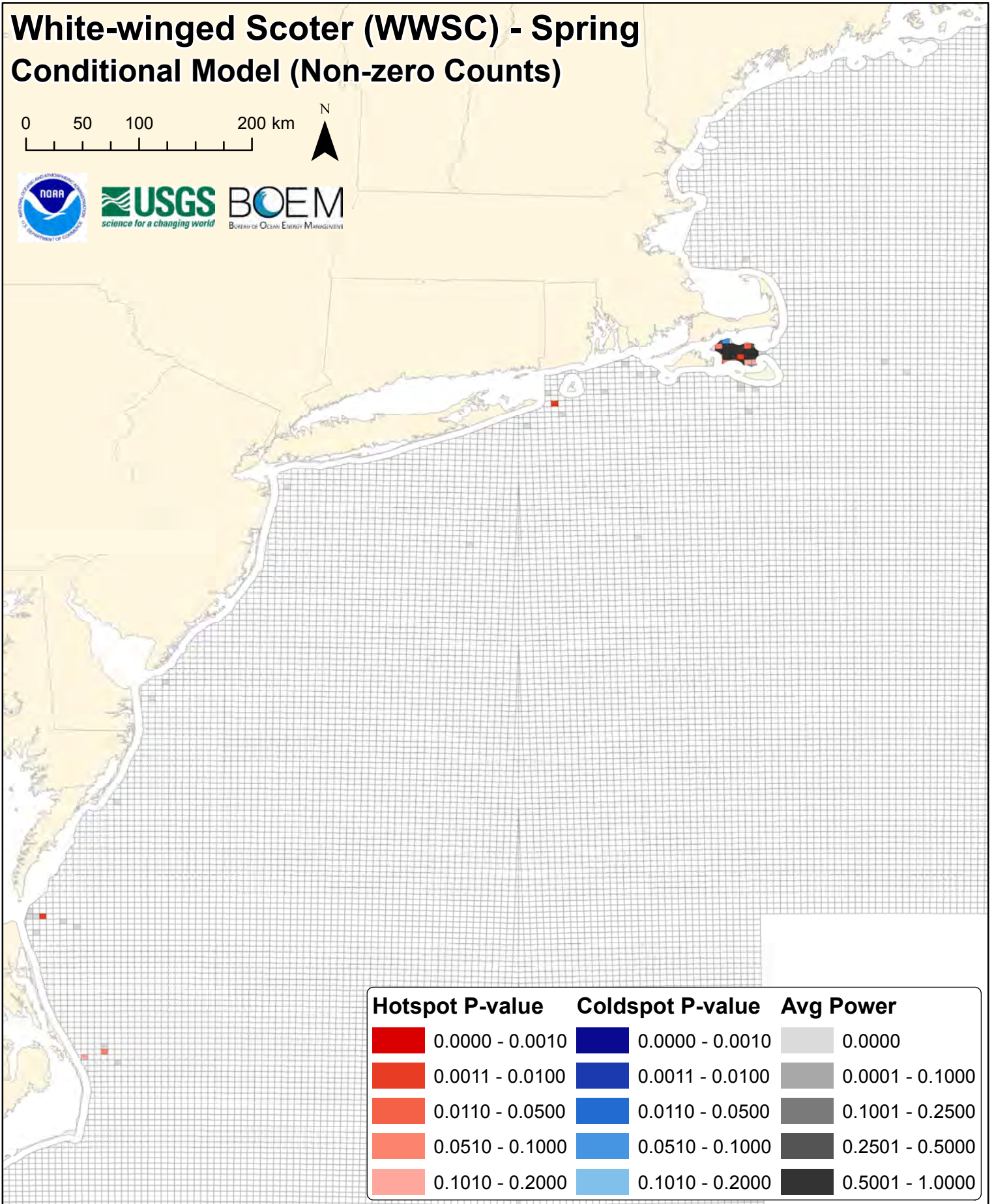
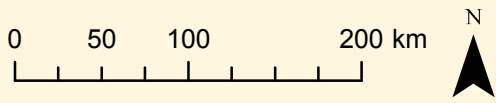
Power to Detect 3x Hotspots


















White-winged Scoter (WWSC) - Spring Conditional Model (Non-zero Counts)



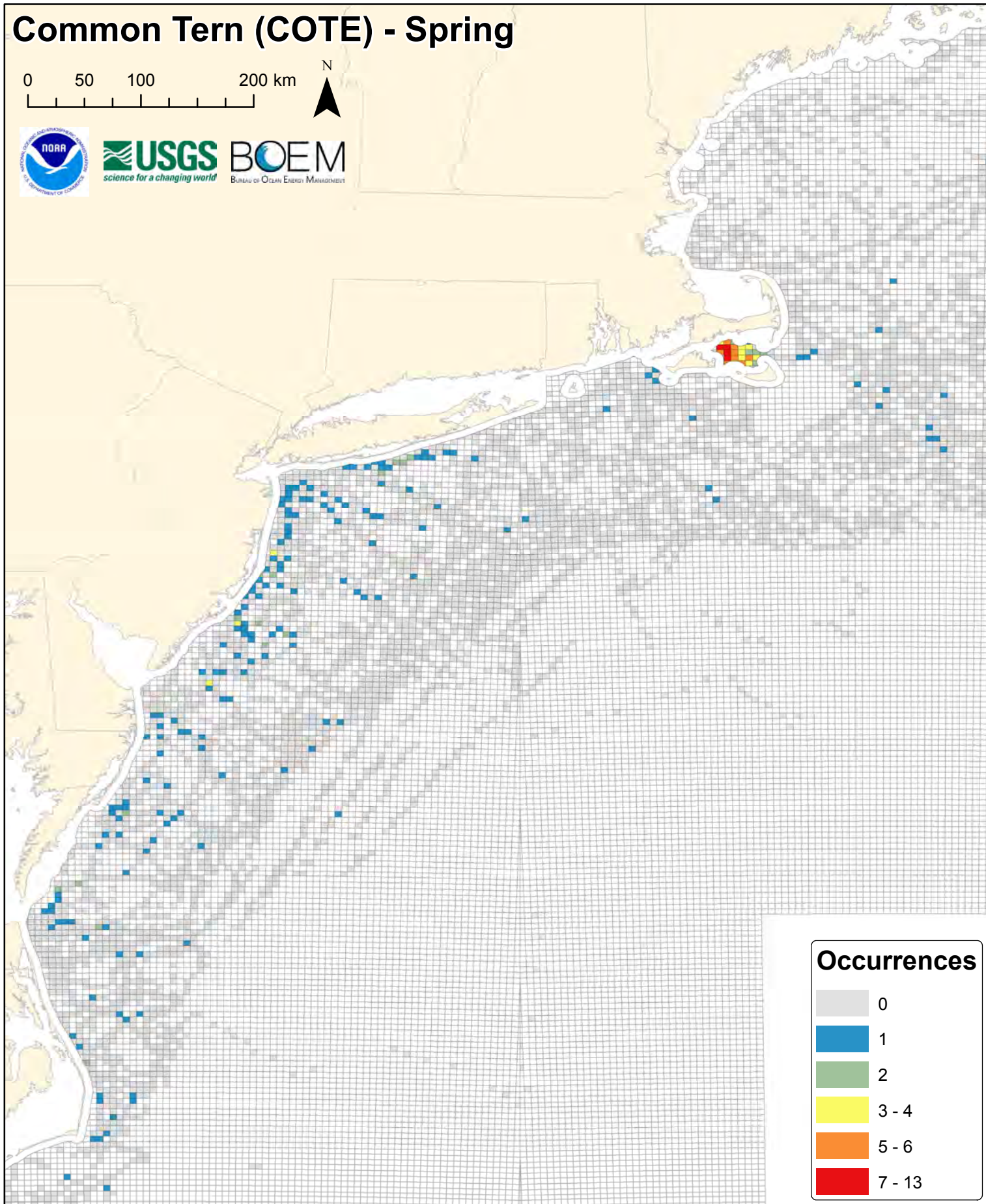
White-winged Scoter (WWSC) - Spring Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Common Tern (COTE) - Spring

0 50 100 200 km

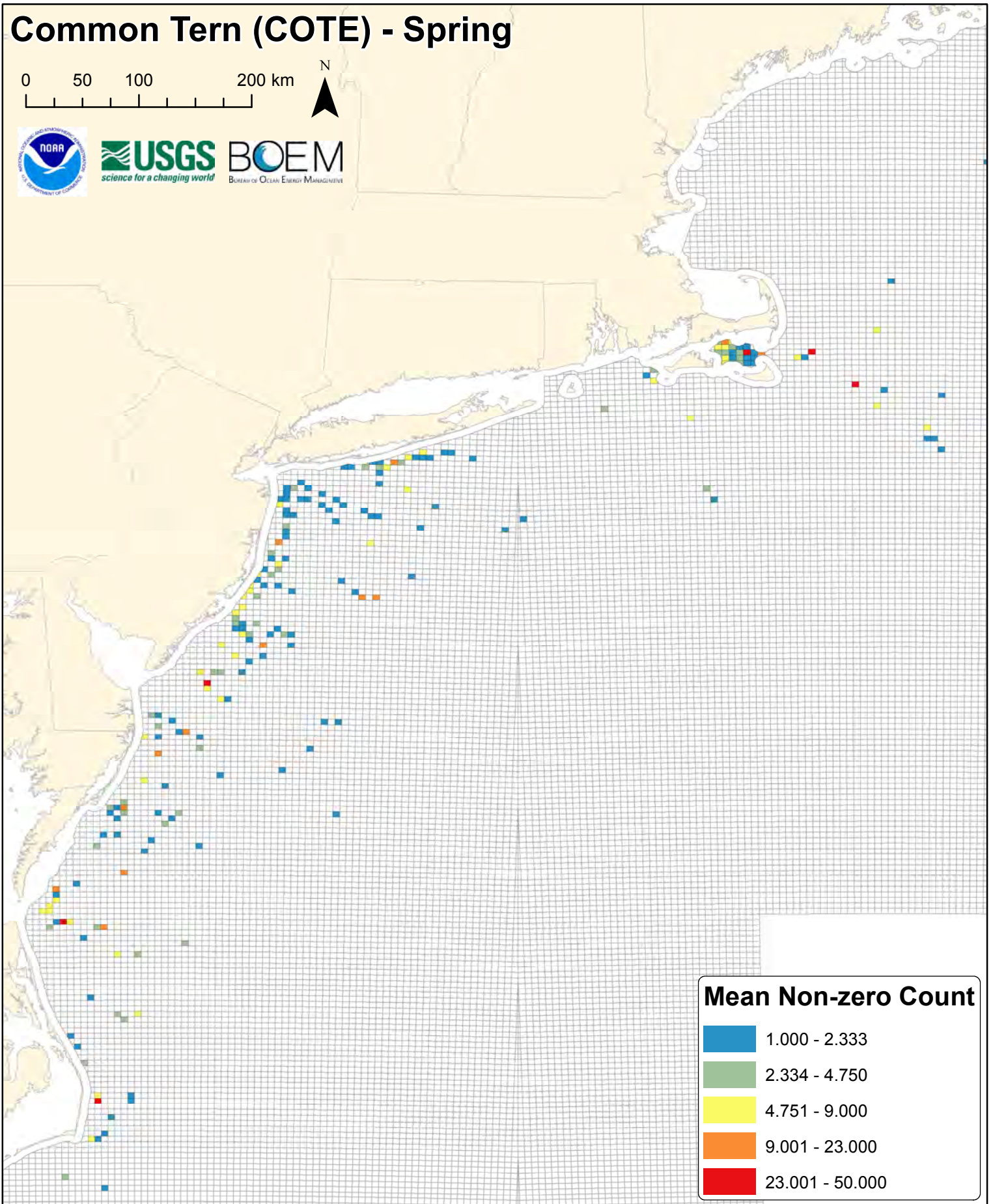


Occurrences

Grey square	0
Blue square	1
Green square	2
Yellow square	3 - 4
Orange square	5 - 6
Red square	7 - 13

Common Tern (COTE) - Spring

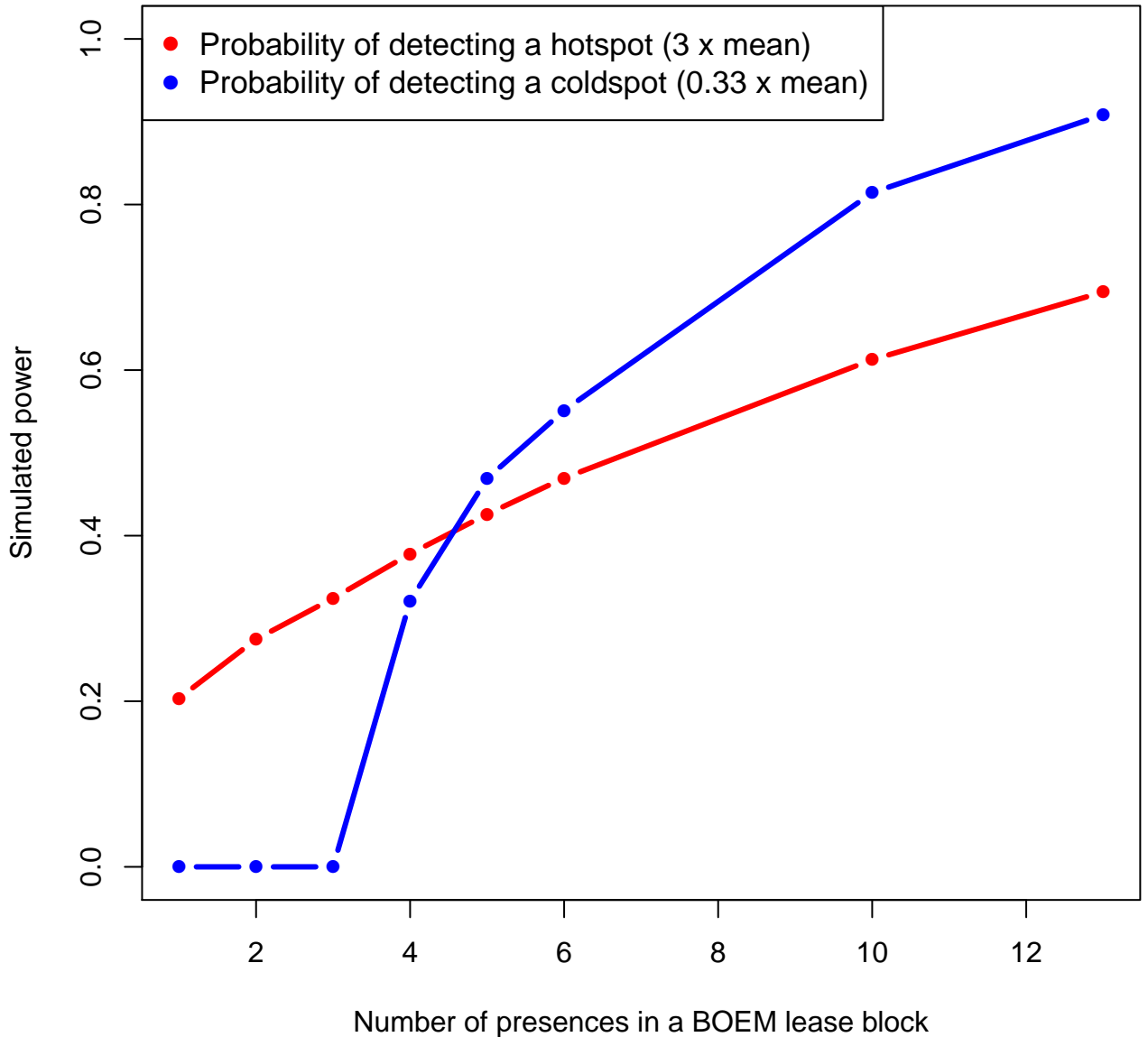
0 50 100 200 km



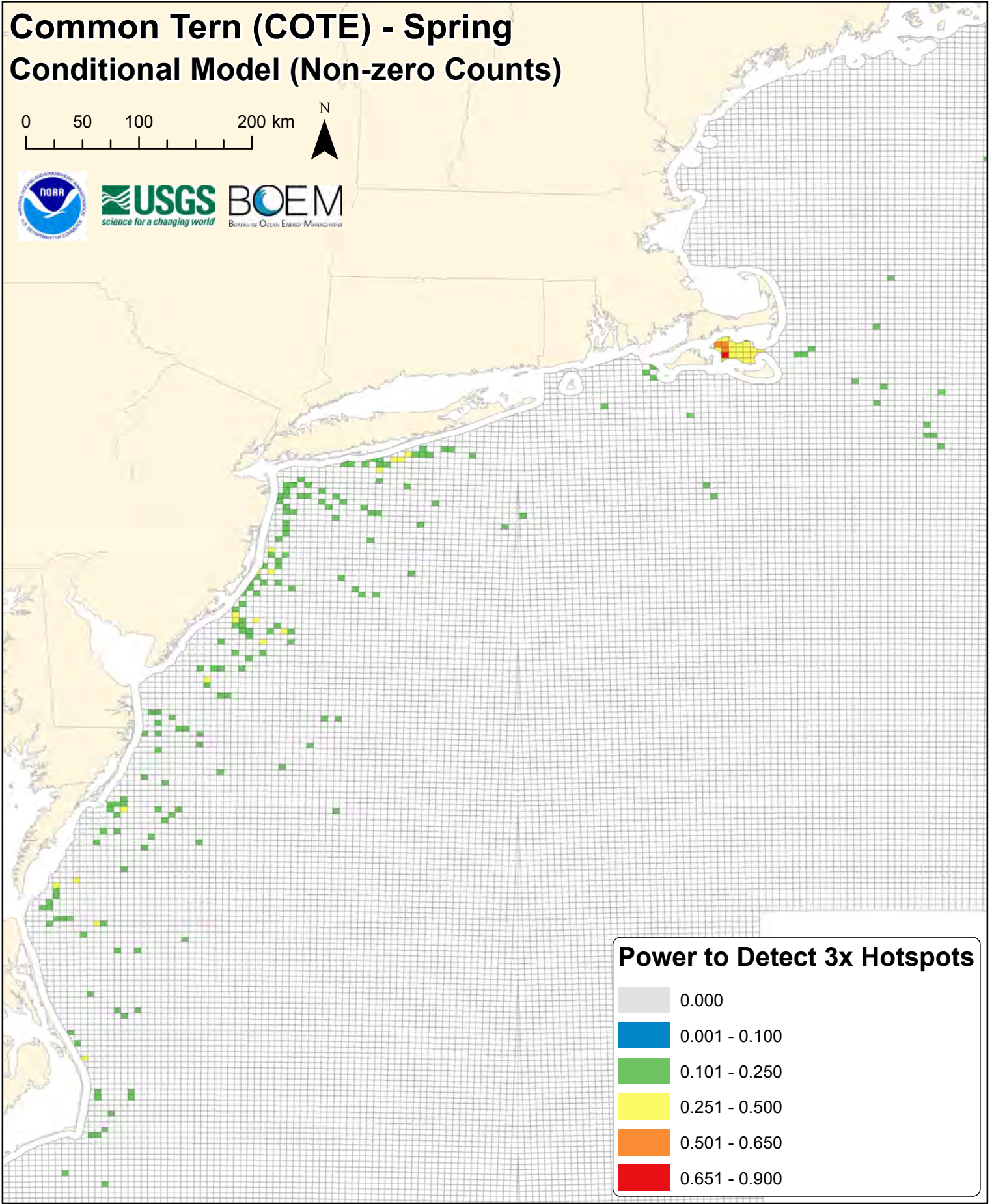
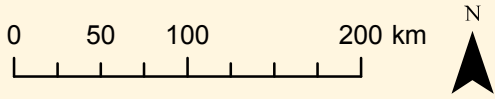
Mean Non-zero Count

- 1.000 - 2.333
- 2.334 - 4.750
- 4.751 - 9.000
- 9.001 - 23.000
- 23.001 - 50.000

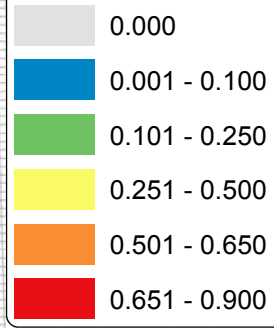
cote



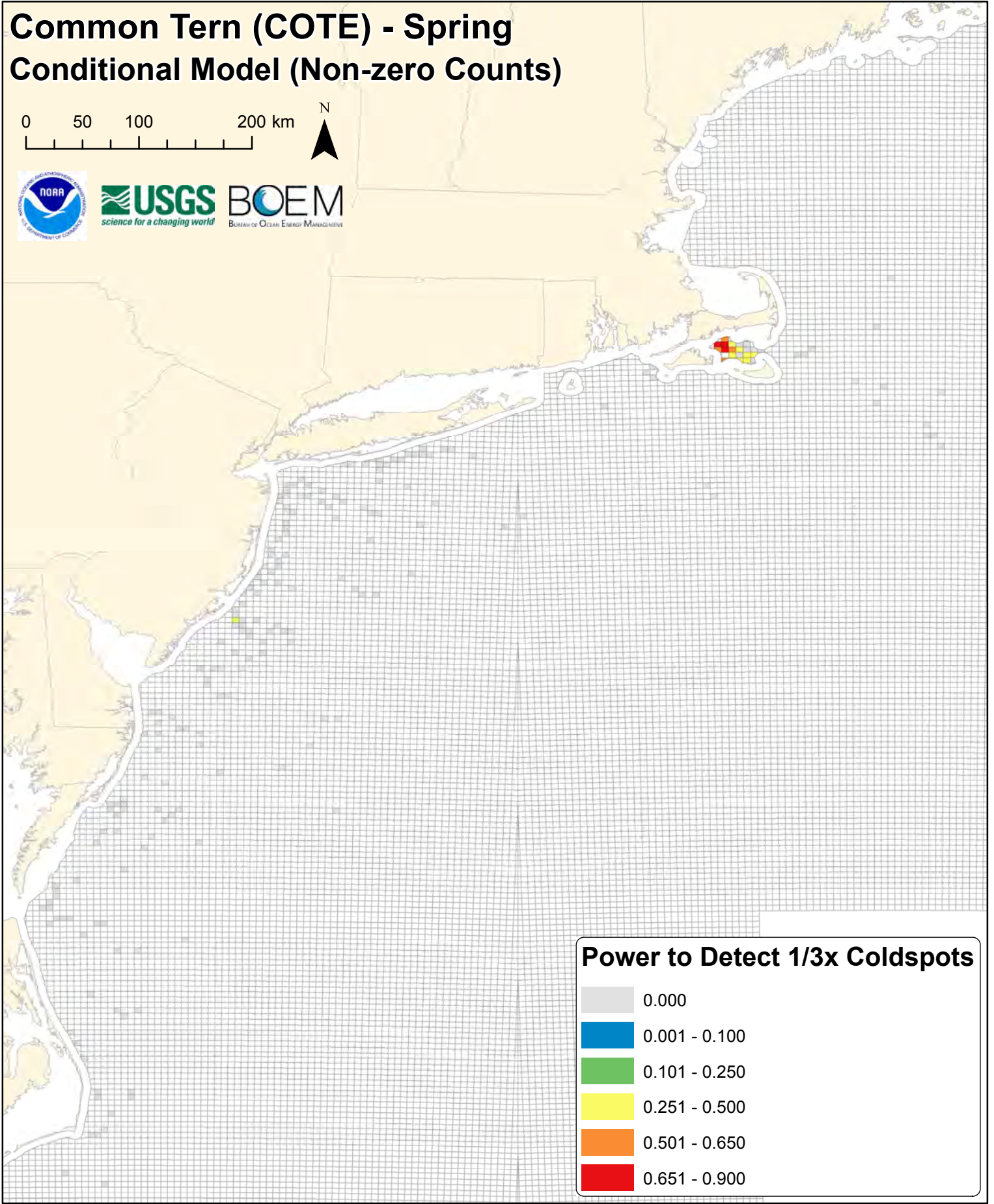
Common Tern (COTE) - Spring Conditional Model (Non-zero Counts)



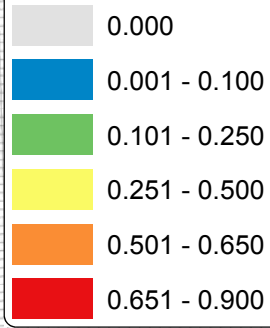
Power to Detect 3x Hotspots



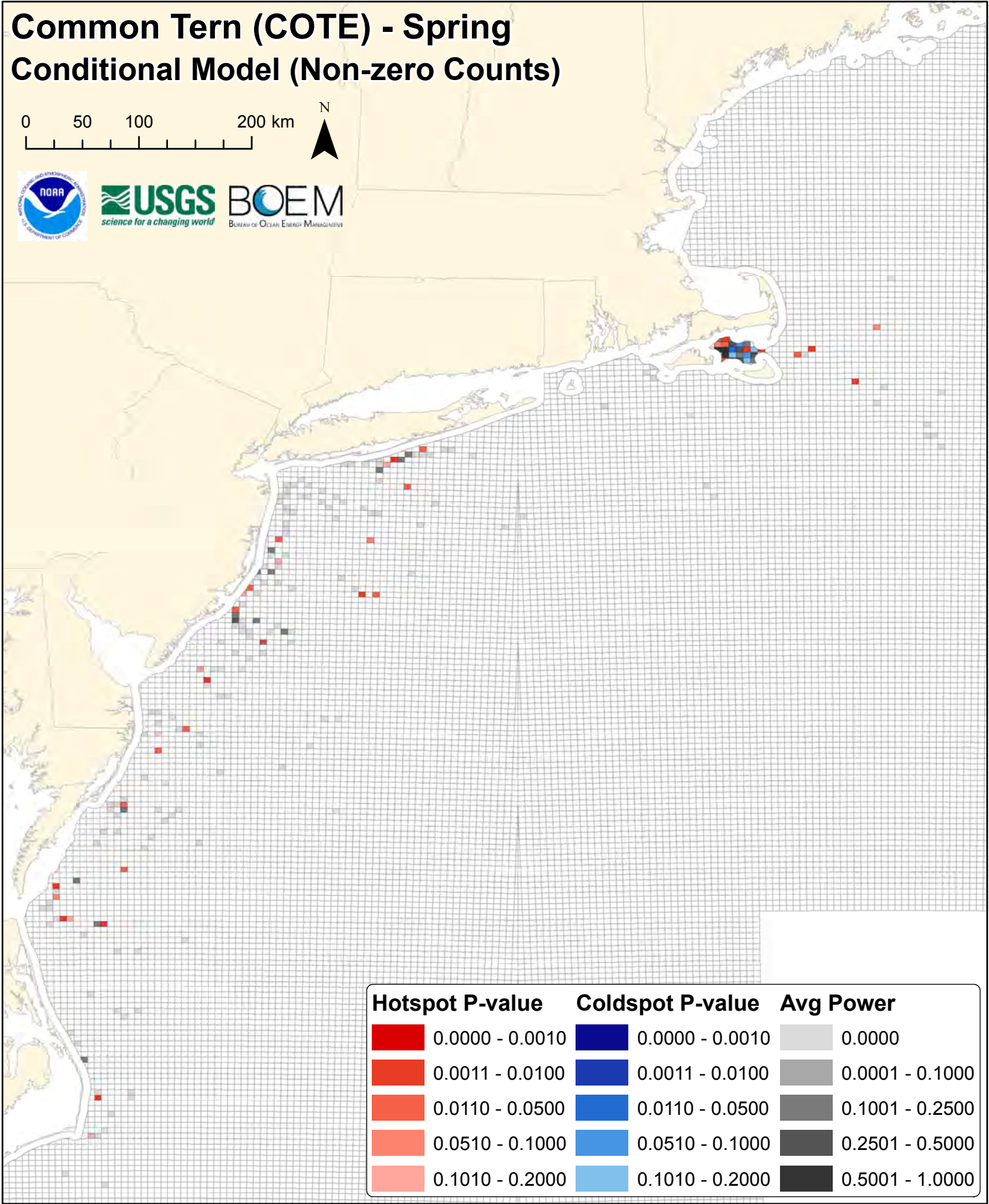
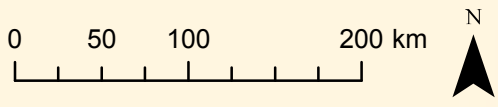
Common Tern (COTE) - Spring Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots

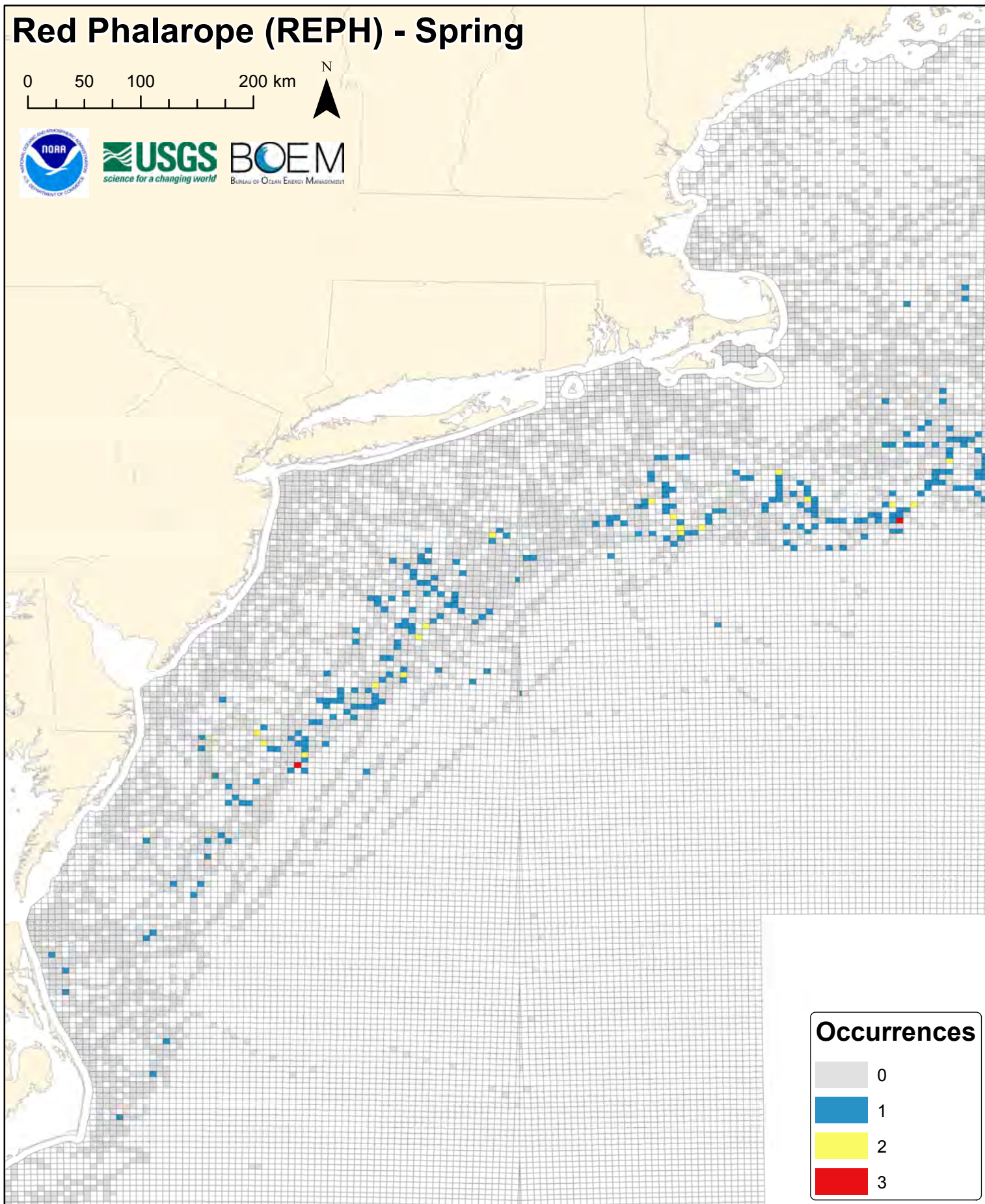
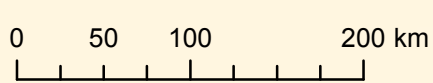


Common Tern (COTE) - Spring Conditional Model (Non-zero Counts)

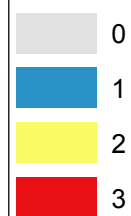


Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

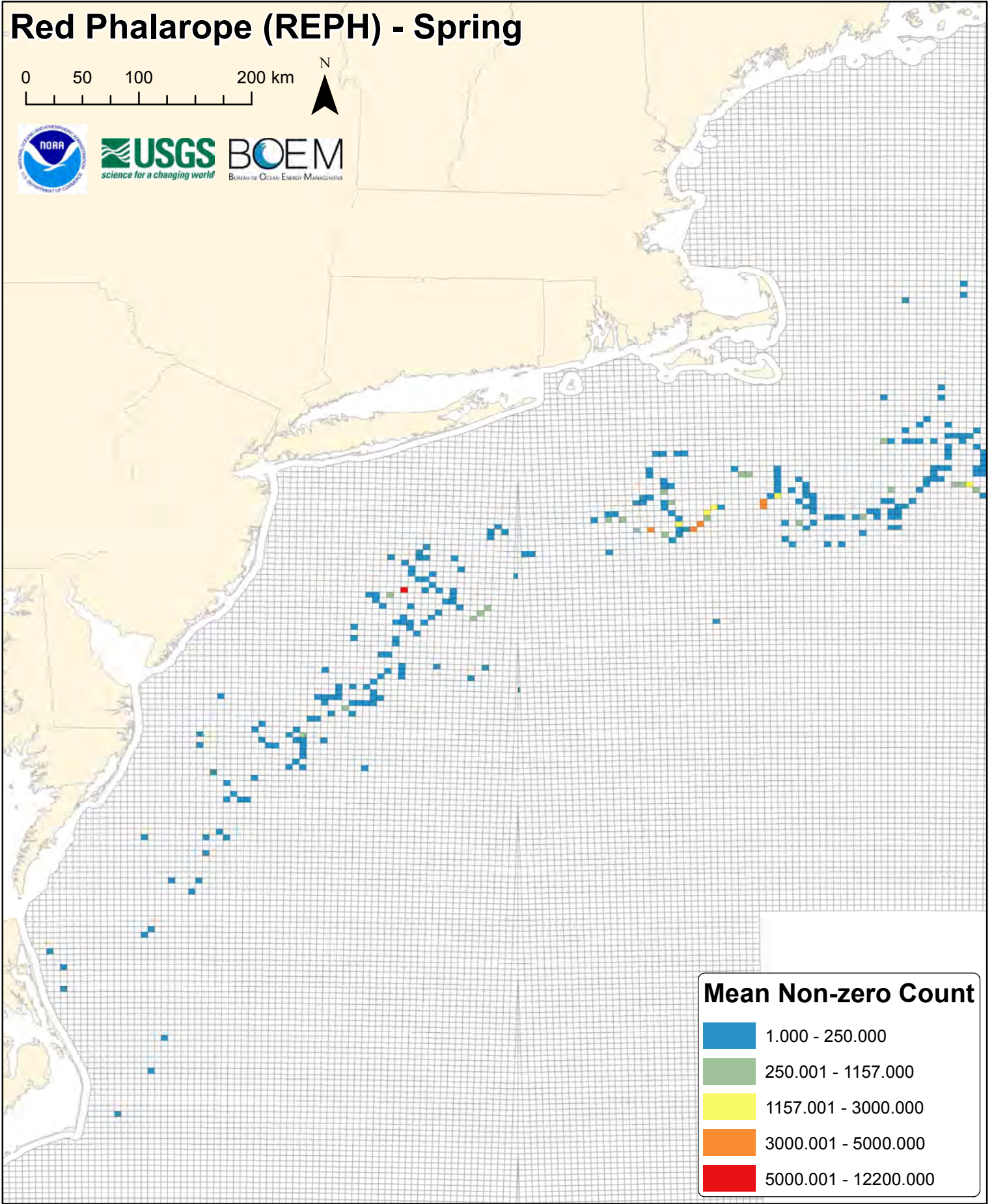
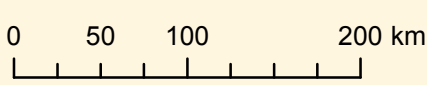
Red Phalarope (REPH) - Spring








Occurrences



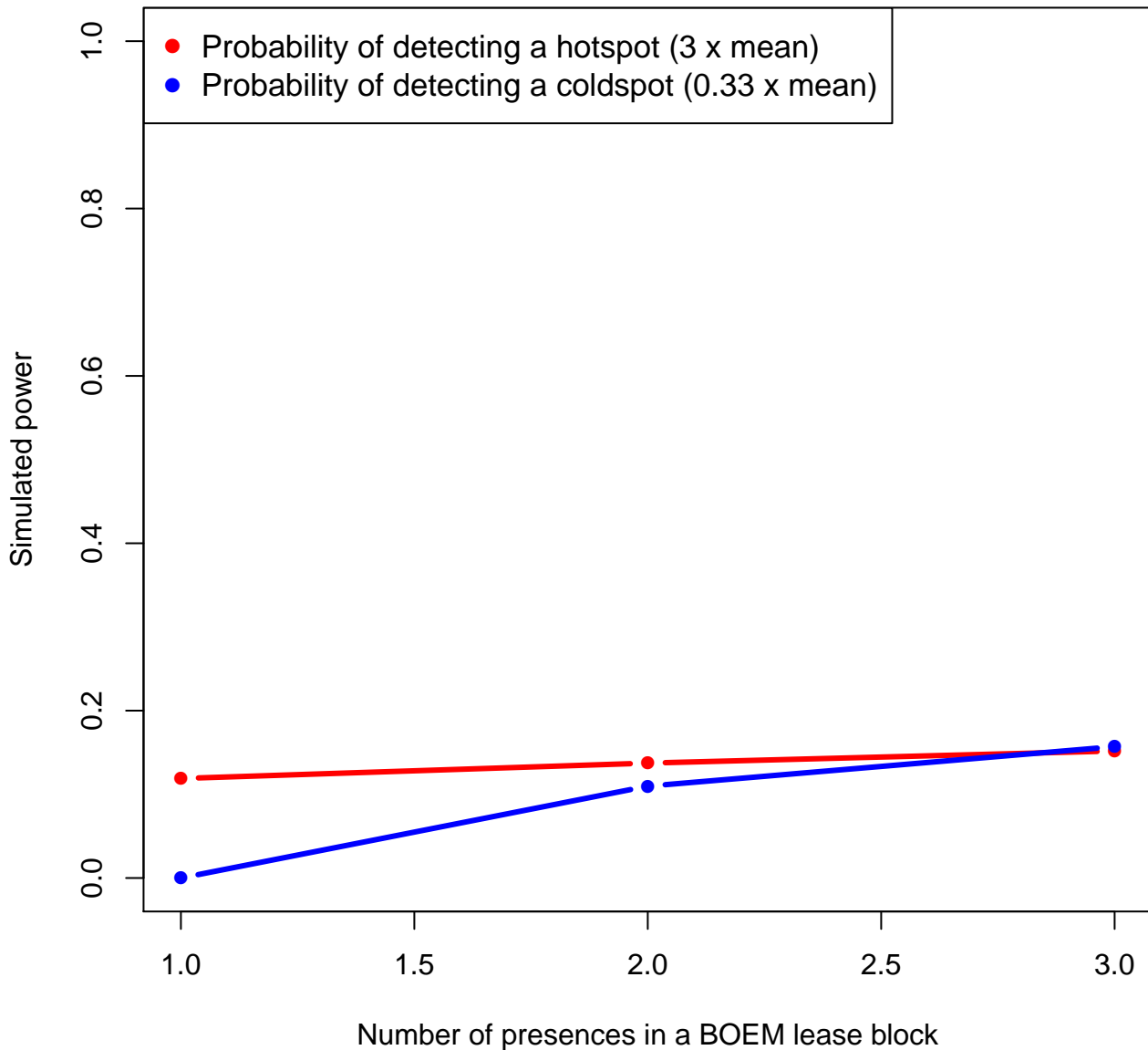
Red Phalarope (REPH) - Spring



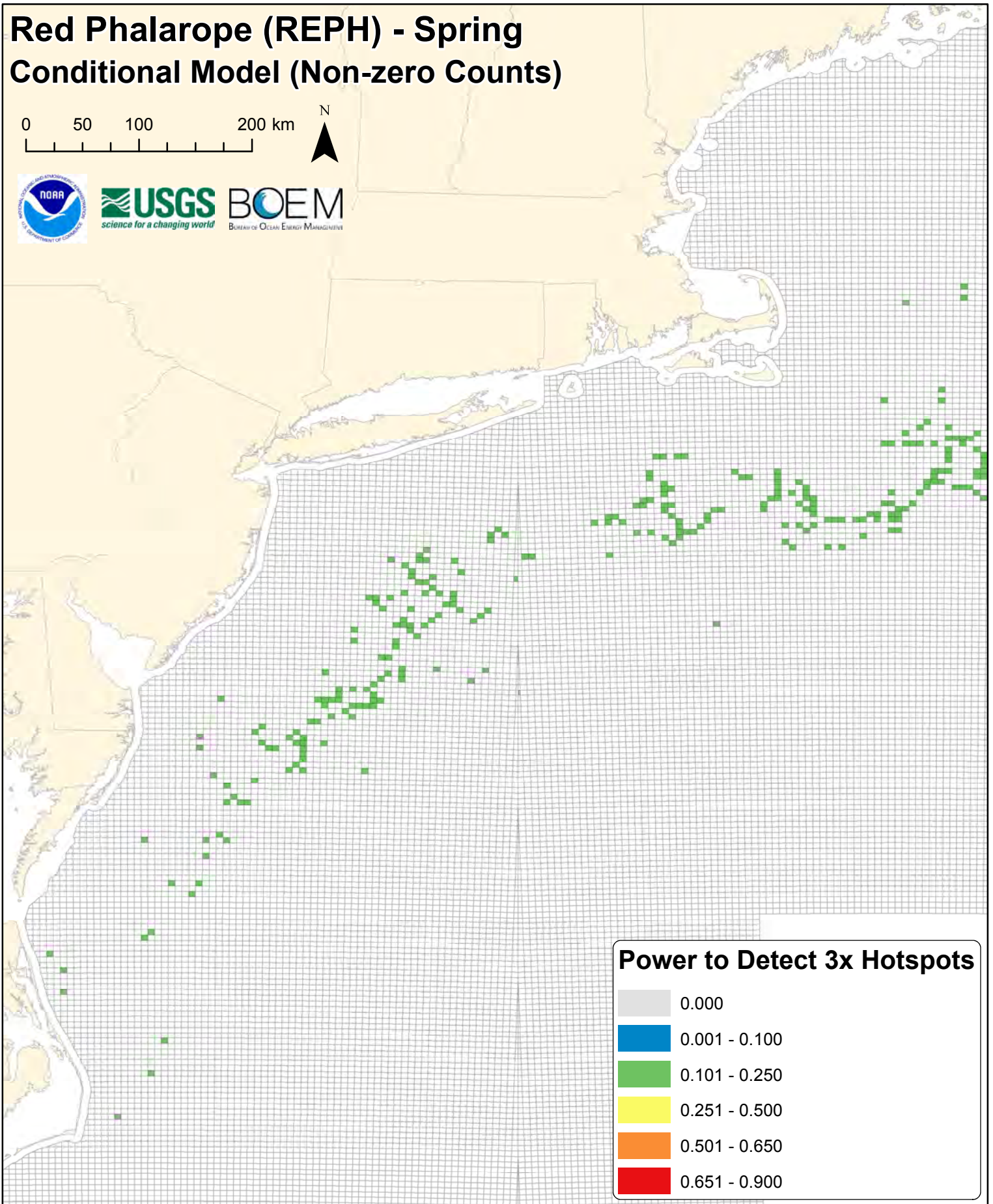
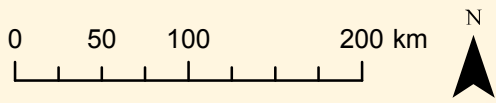
Mean Non-zero Count

	1.000 - 250.000
	250.001 - 1157.000
	1157.001 - 3000.000
	3000.001 - 5000.000
	5000.001 - 12200.000

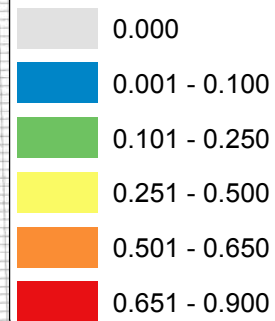
reph



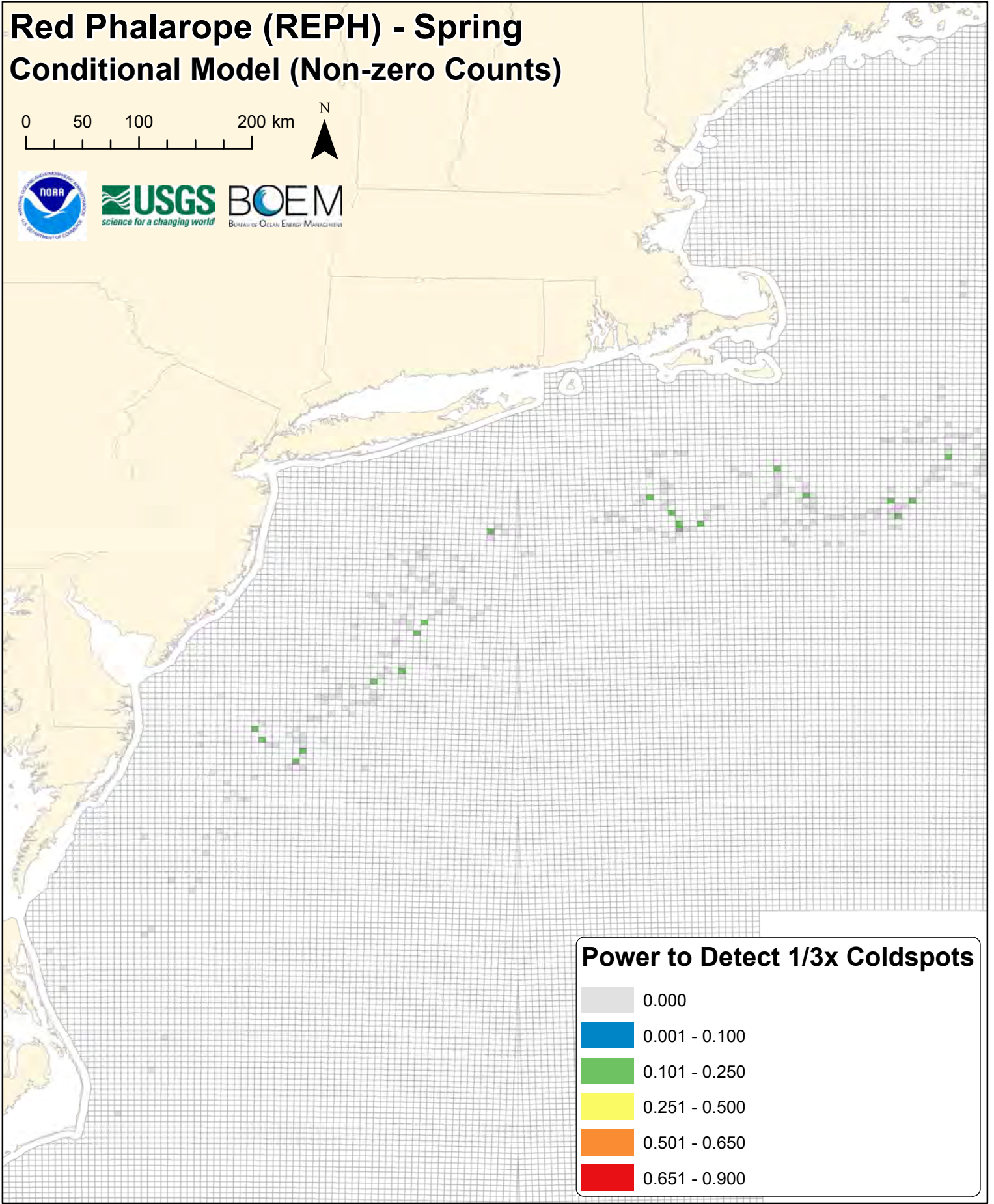
Red Phalarope (REPH) - Spring Conditional Model (Non-zero Counts)



Power to Detect 3x Hotspots



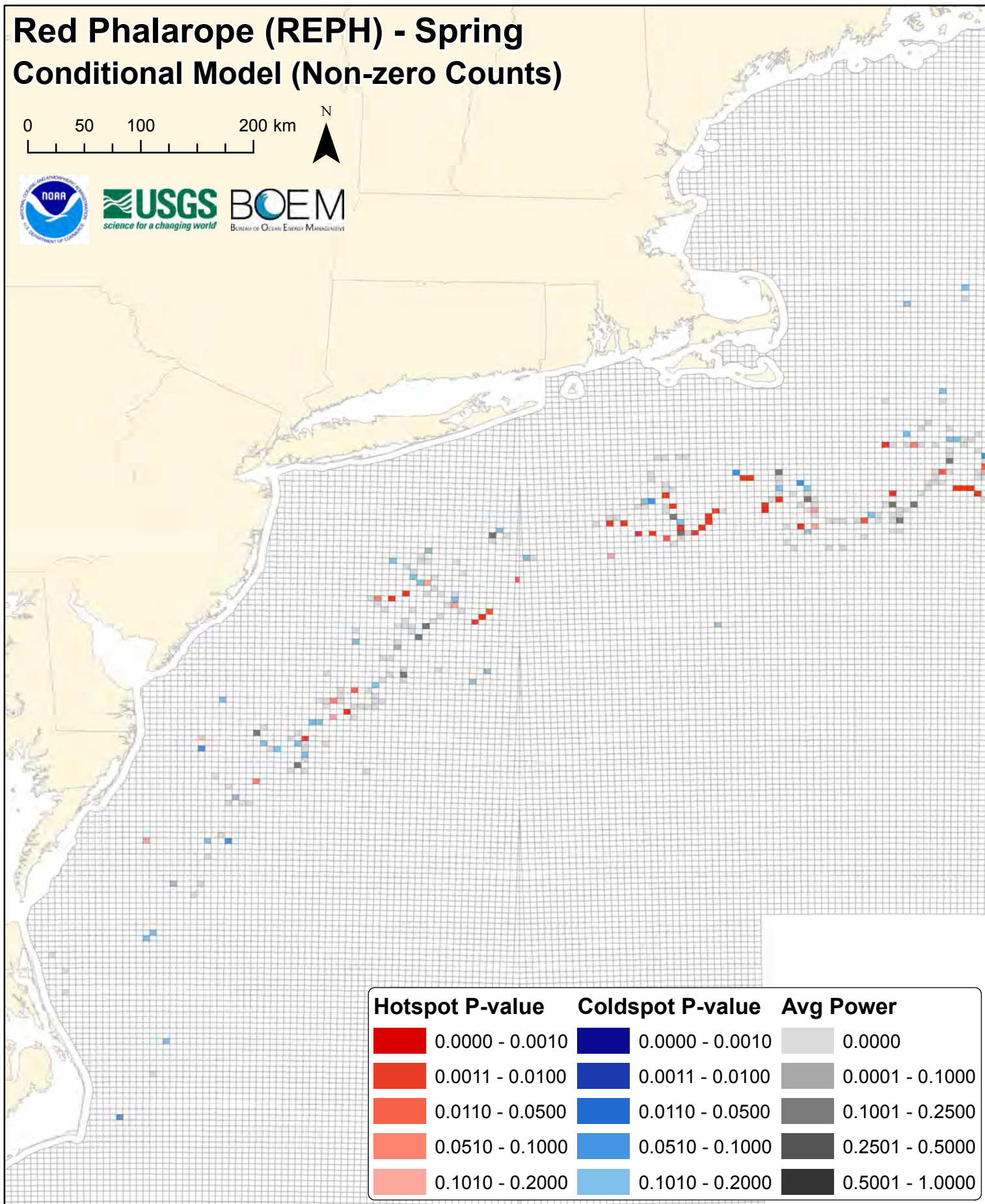
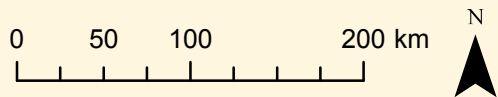
Red Phalarope (REPH) - Spring Conditional Model (Non-zero Counts)



Power to Detect 1/3x Coldspots

- 0.000
- 0.001 - 0.100
- 0.101 - 0.250
- 0.251 - 0.500
- 0.501 - 0.650
- 0.651 - 0.900

Red Phalarope (REPH) - Spring Conditional Model (Non-zero Counts)



DIGITAL SUPPLEMENT F

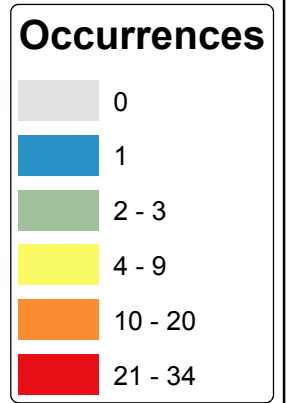
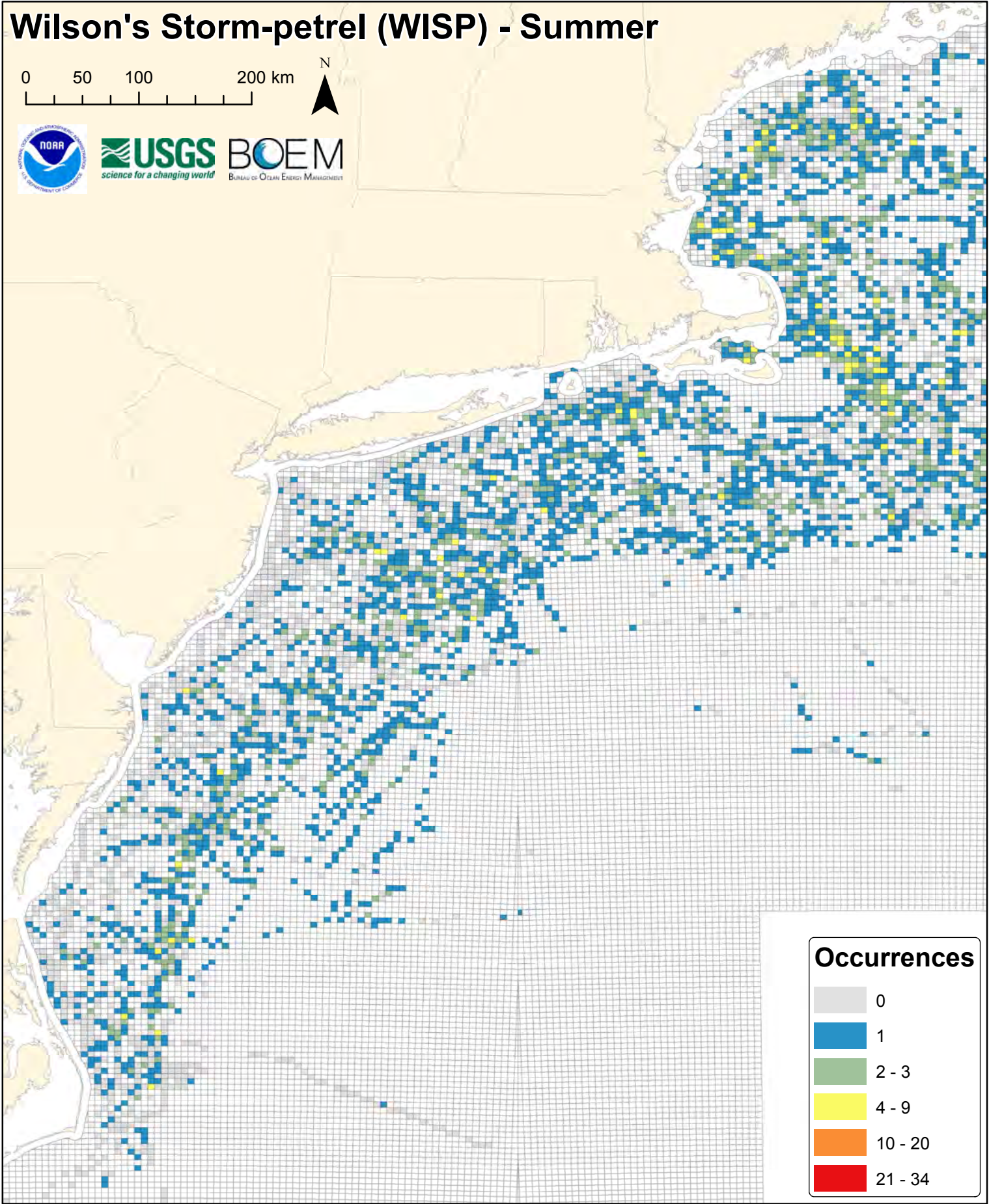
Conditional (Non-Zero Count) Model Results

SECTION II. Species-specific Power Analysis Maps and Figures

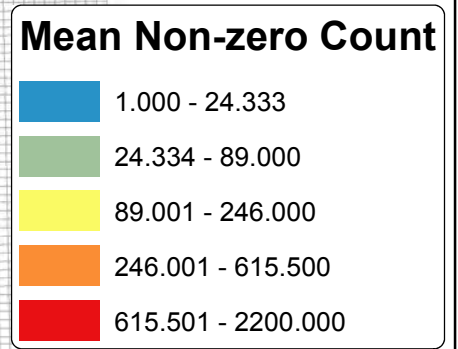
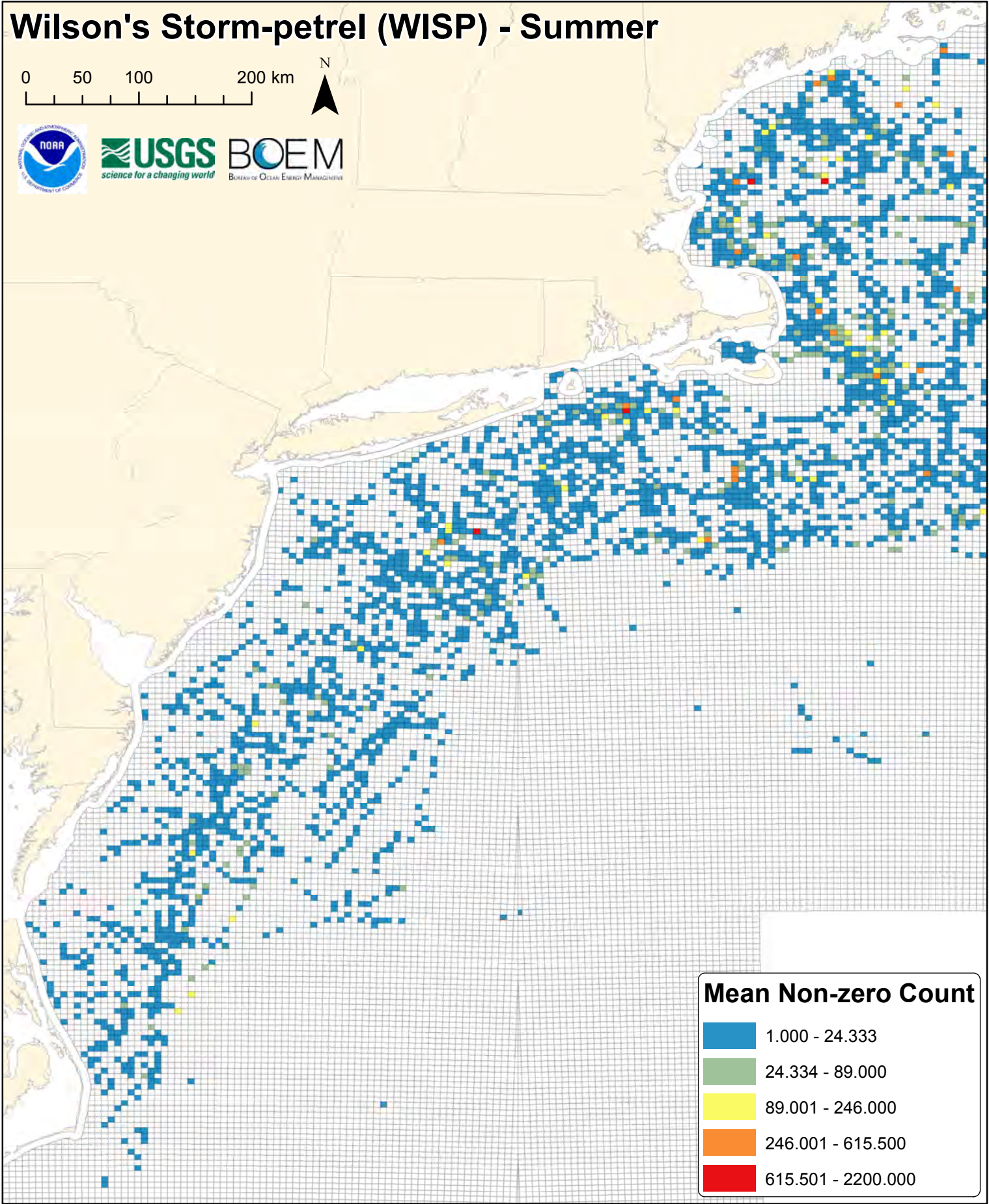
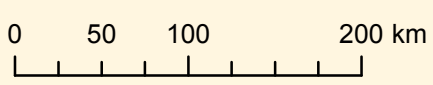
Figures F102-F143. Summer power analysis maps and figures (7 species x 6 figures per species).

Wilson's Storm-petrel (WISP) - Summer

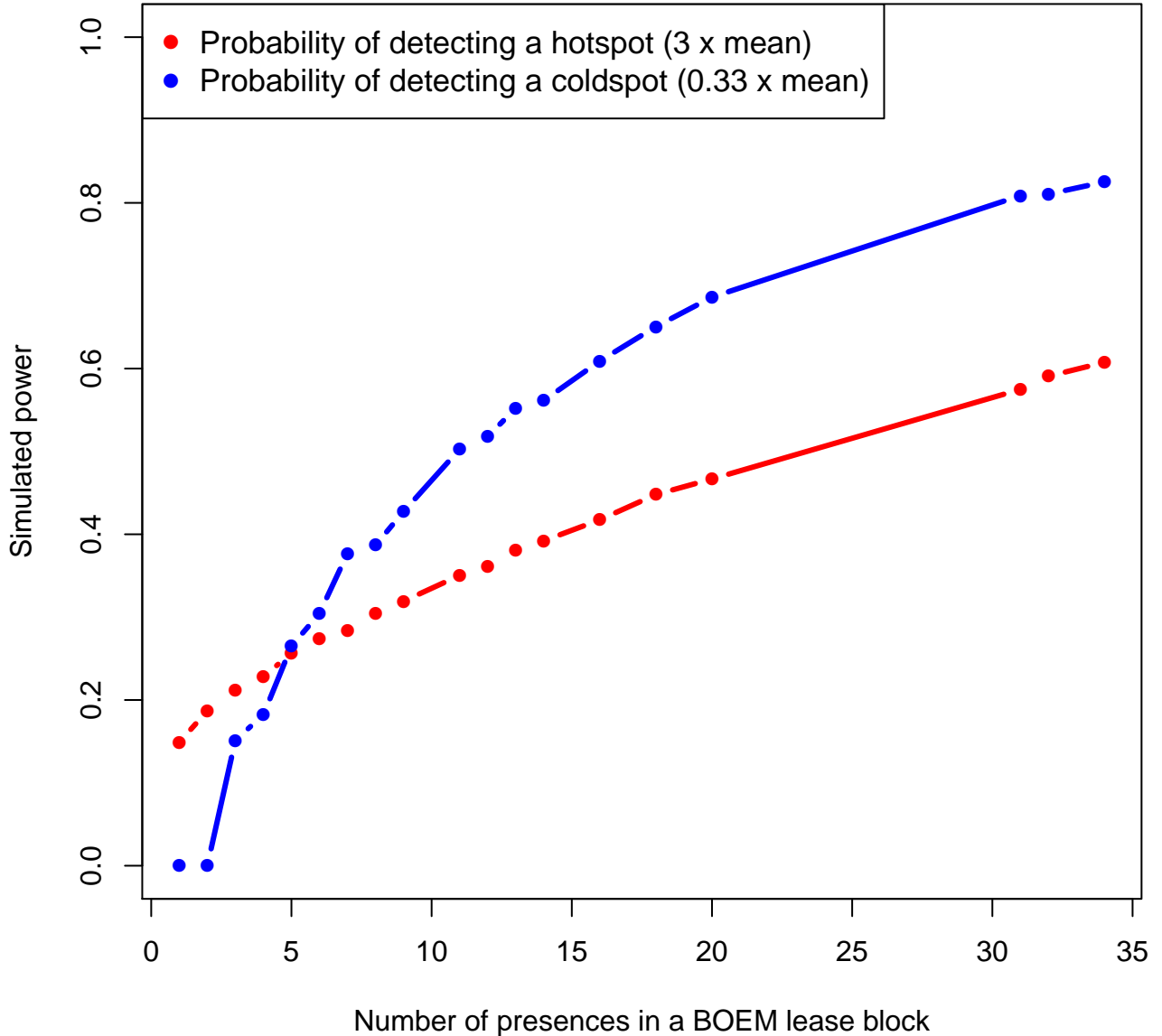
0 50 100 200 km



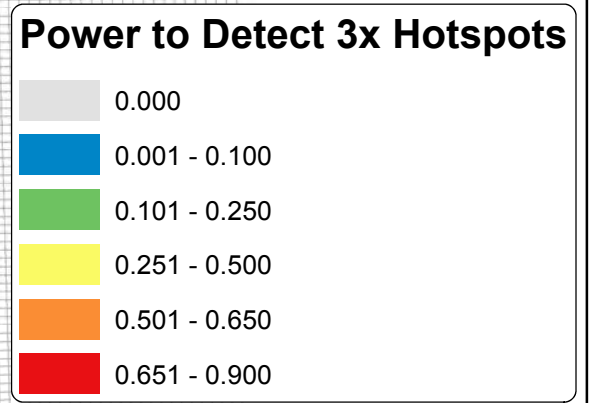
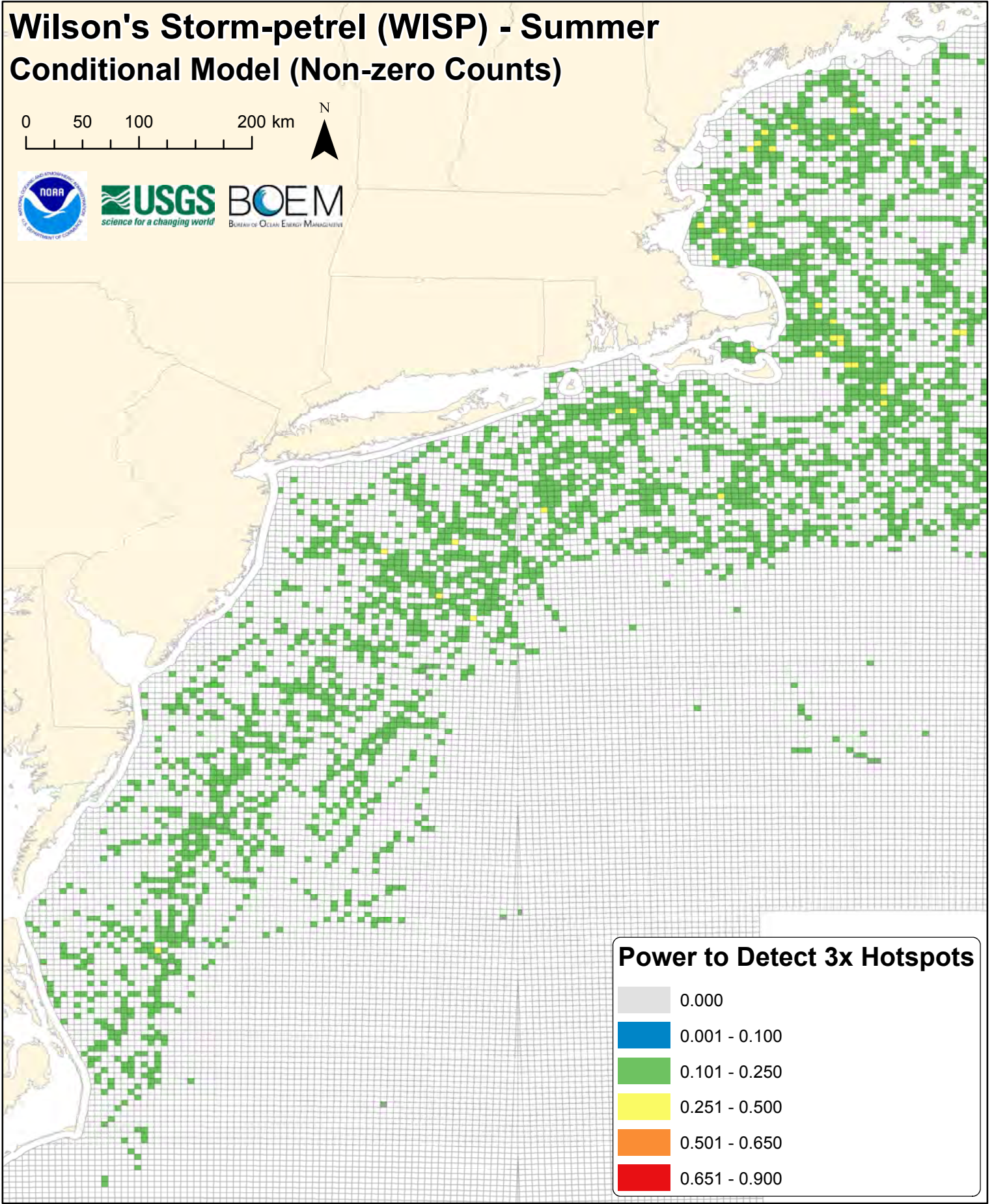
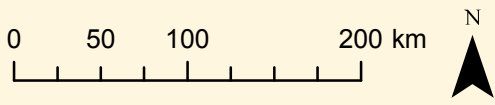
Wilson's Storm-petrel (WISP) - Summer



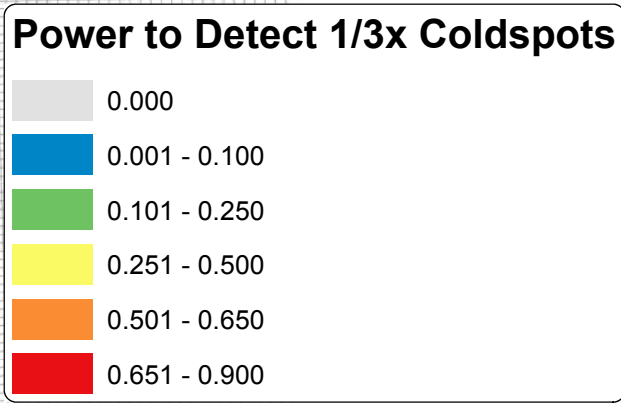
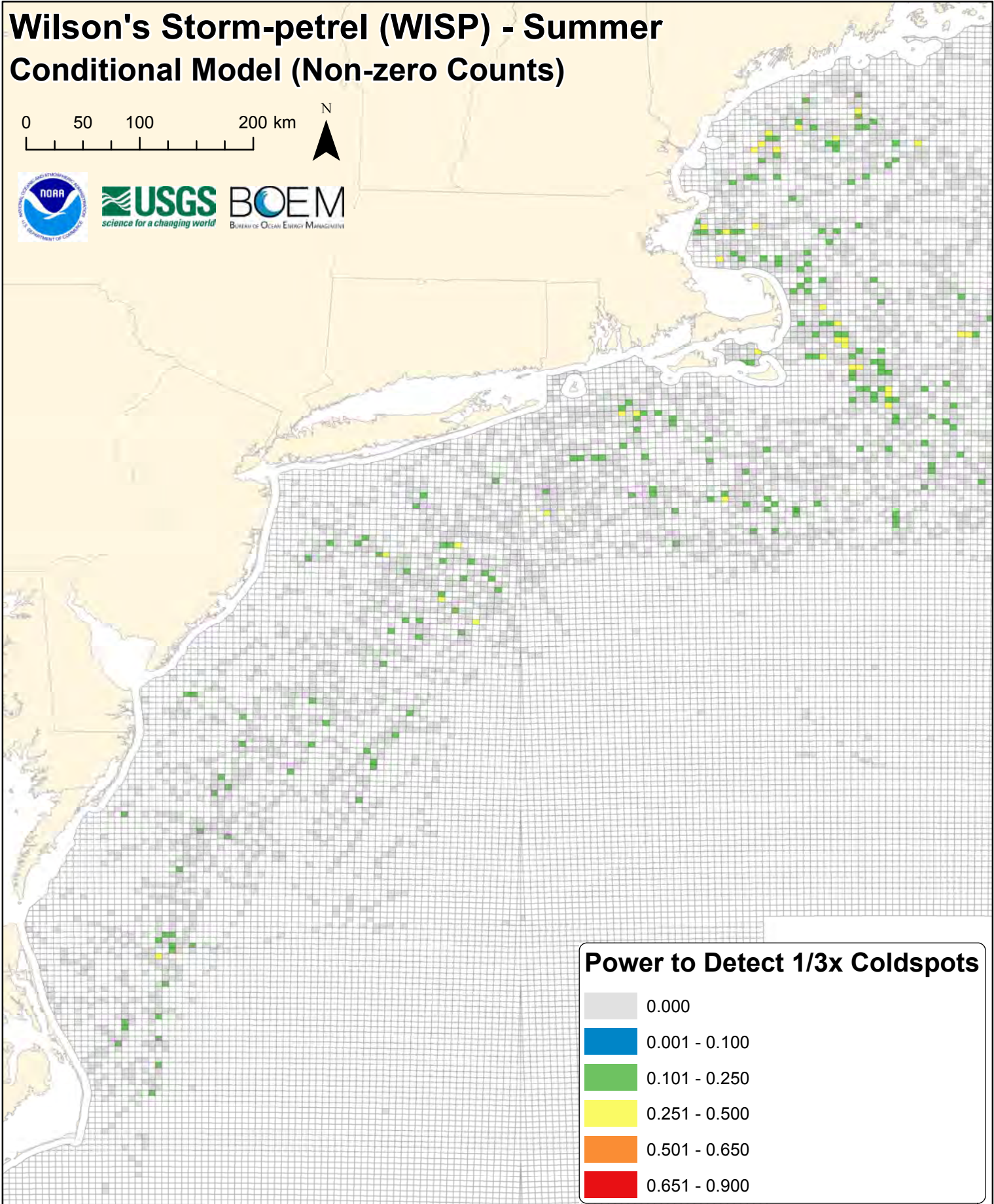
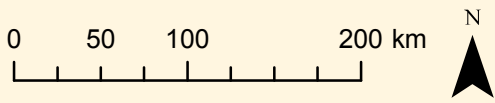
wisp



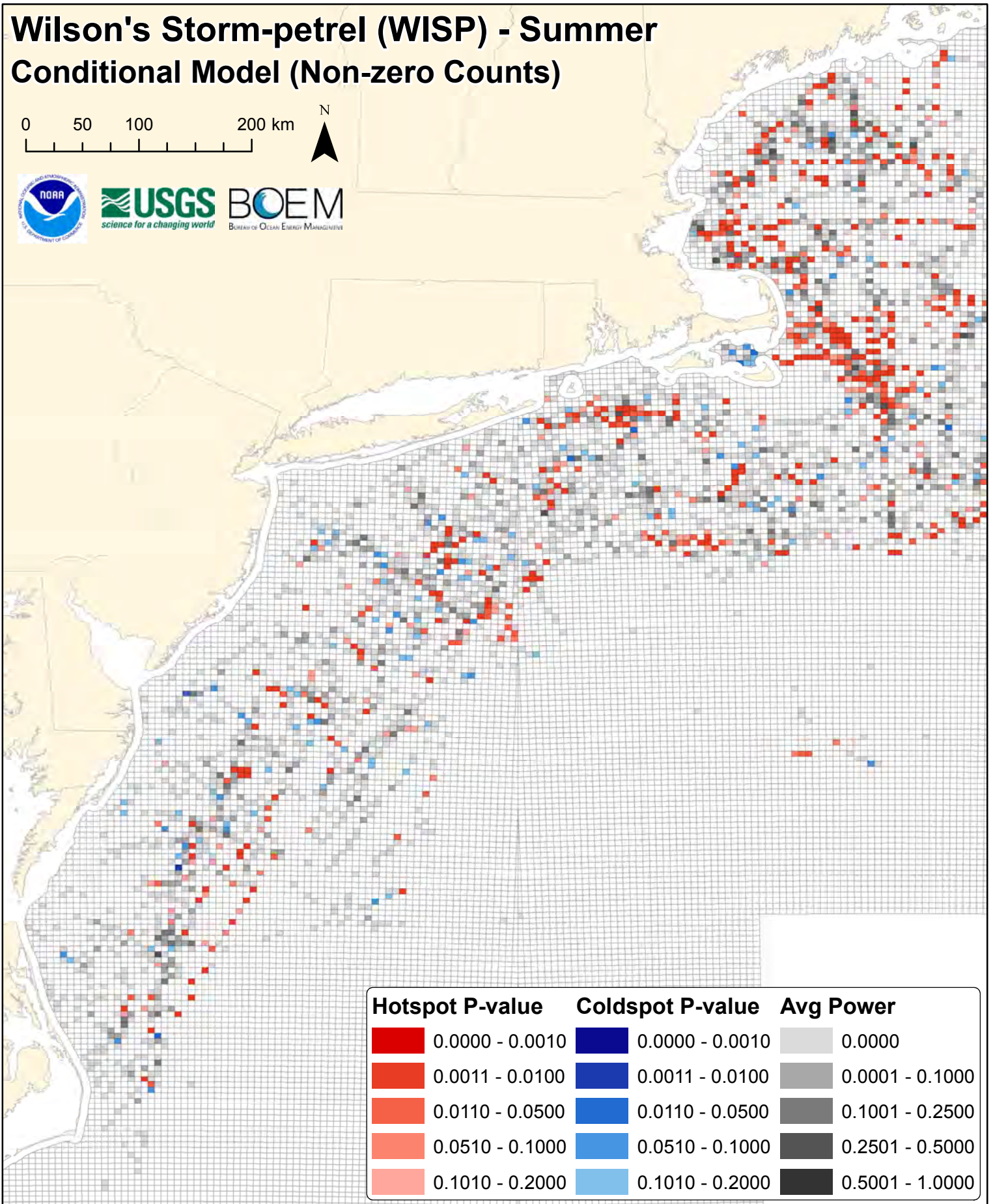
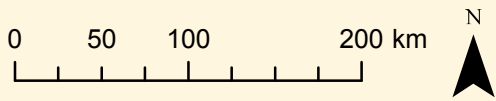
Wilson's Storm-petrel (WISP) - Summer Conditional Model (Non-zero Counts)


















Wilson's Storm-petrel (WISP) - Summer Conditional Model (Non-zero Counts)



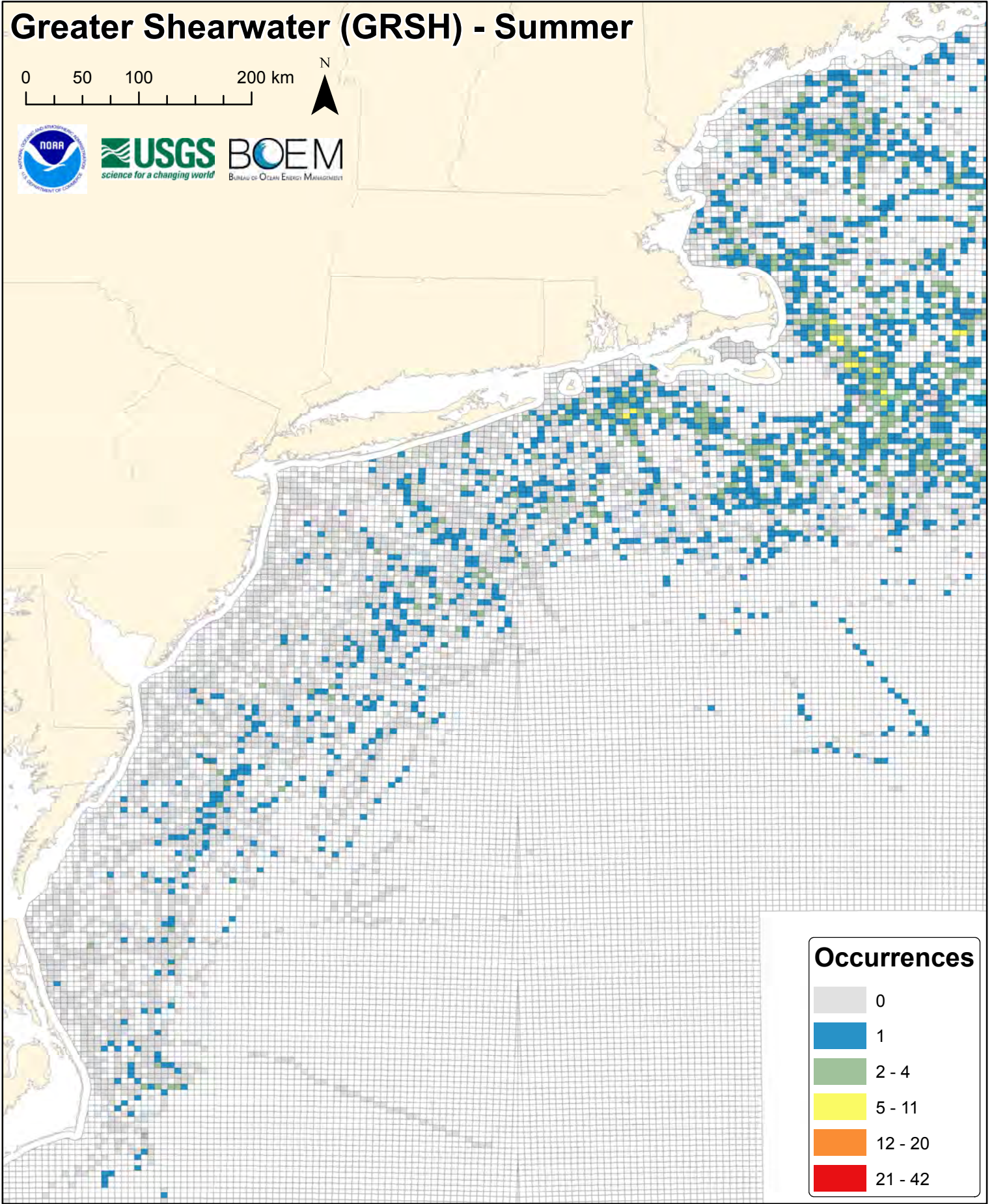
Wilson's Storm-petrel (WISP) - Summer Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Greater Shearwater (GRSH) - Summer

0 50 100 200 km

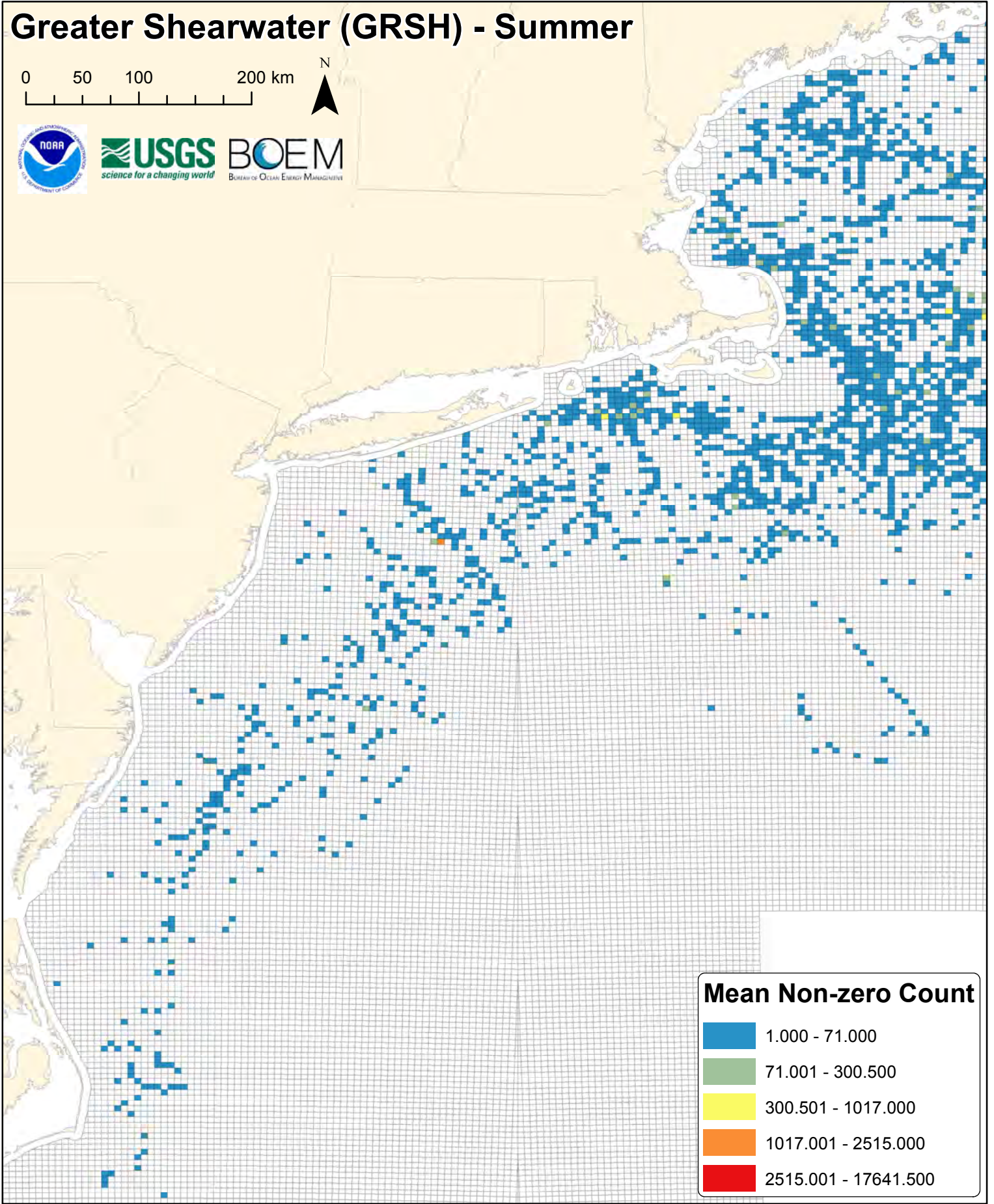


Occurrences






Grey	0
Blue	1
Green	2 - 4
Yellow	5 - 11
Orange	12 - 20
Red	21 - 42

Greater Shearwater (GRSH) - Summer

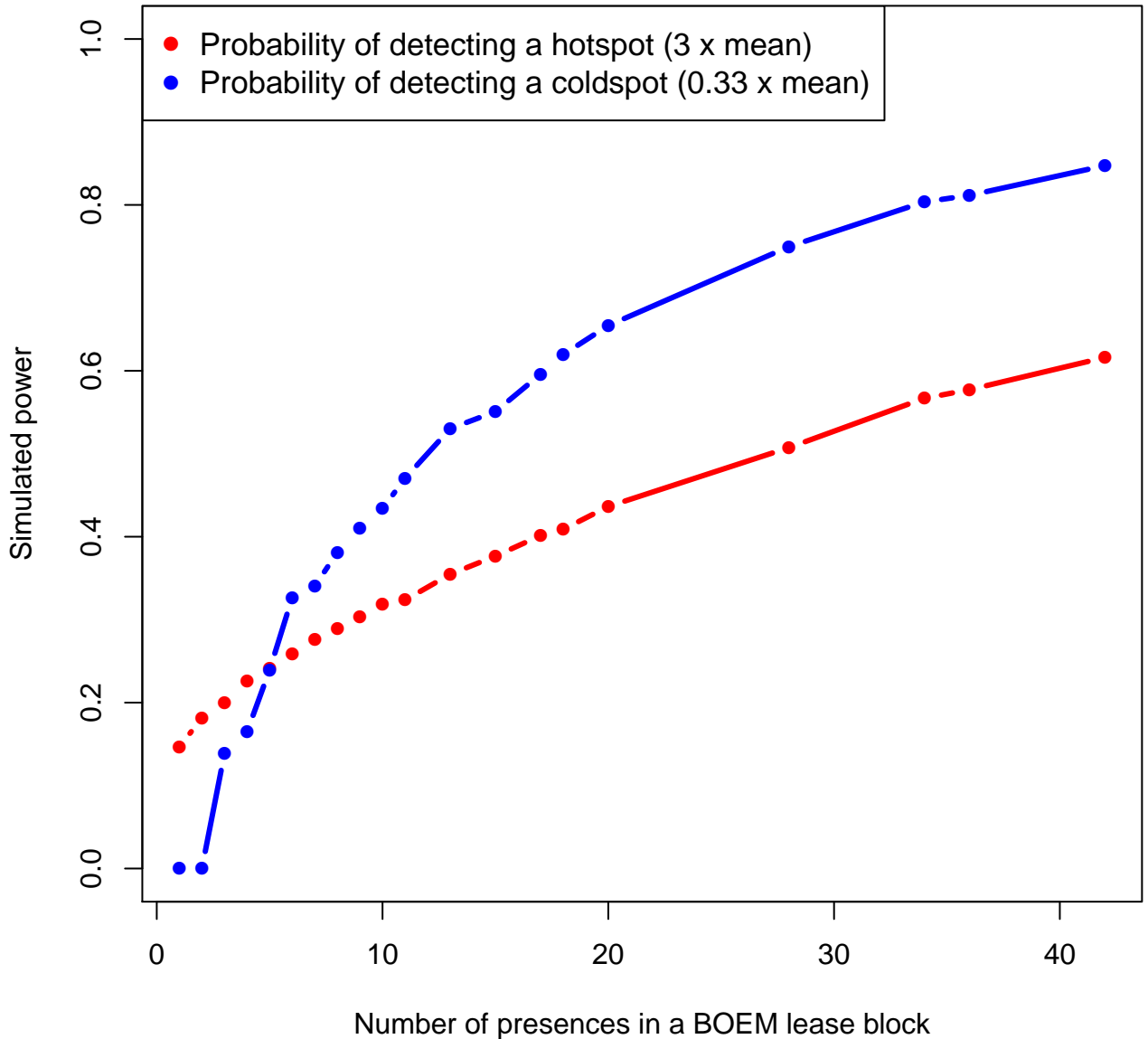
0 50 100 200 km



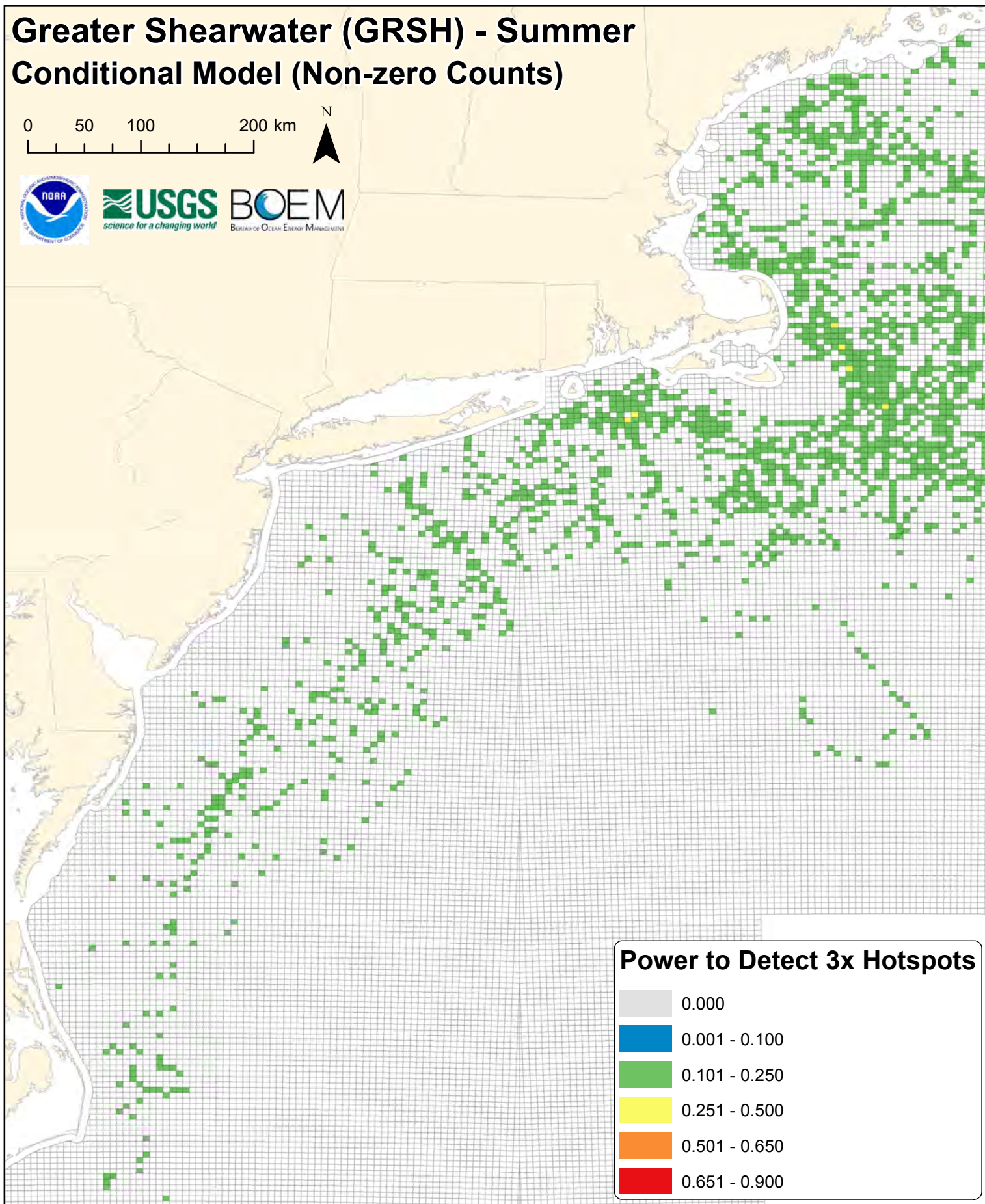
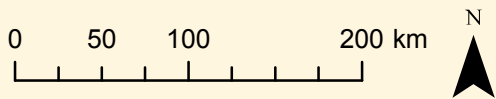
Mean Non-zero Count

	1.000 - 71.000
	71.001 - 300.500
	300.501 - 1017.000
	1017.001 - 2515.000
	2515.001 - 17641.500

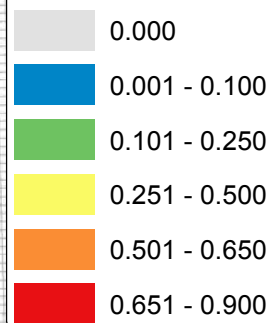
grsh



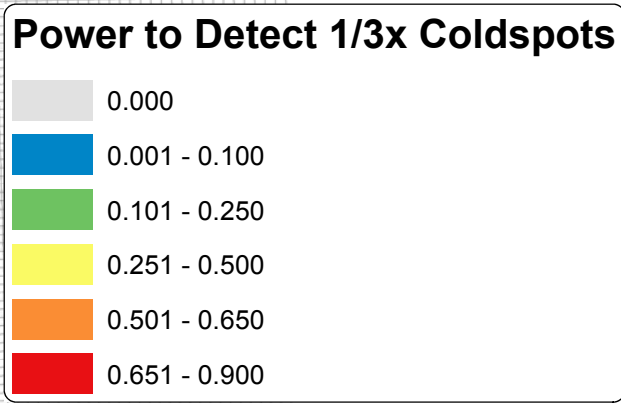
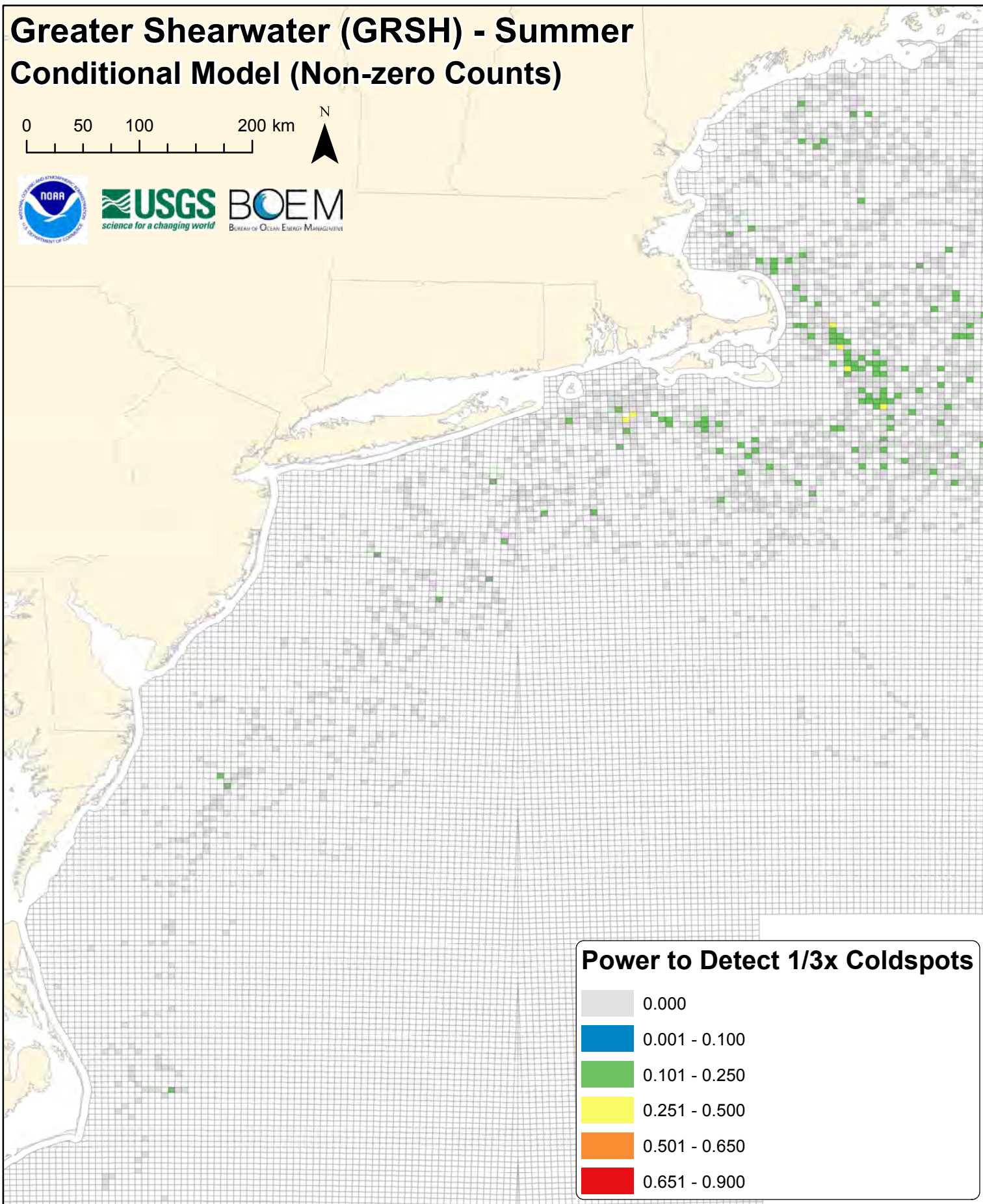
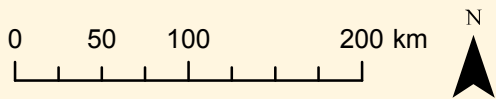
Greater Shearwater (GRSH) - Summer Conditional Model (Non-zero Counts)



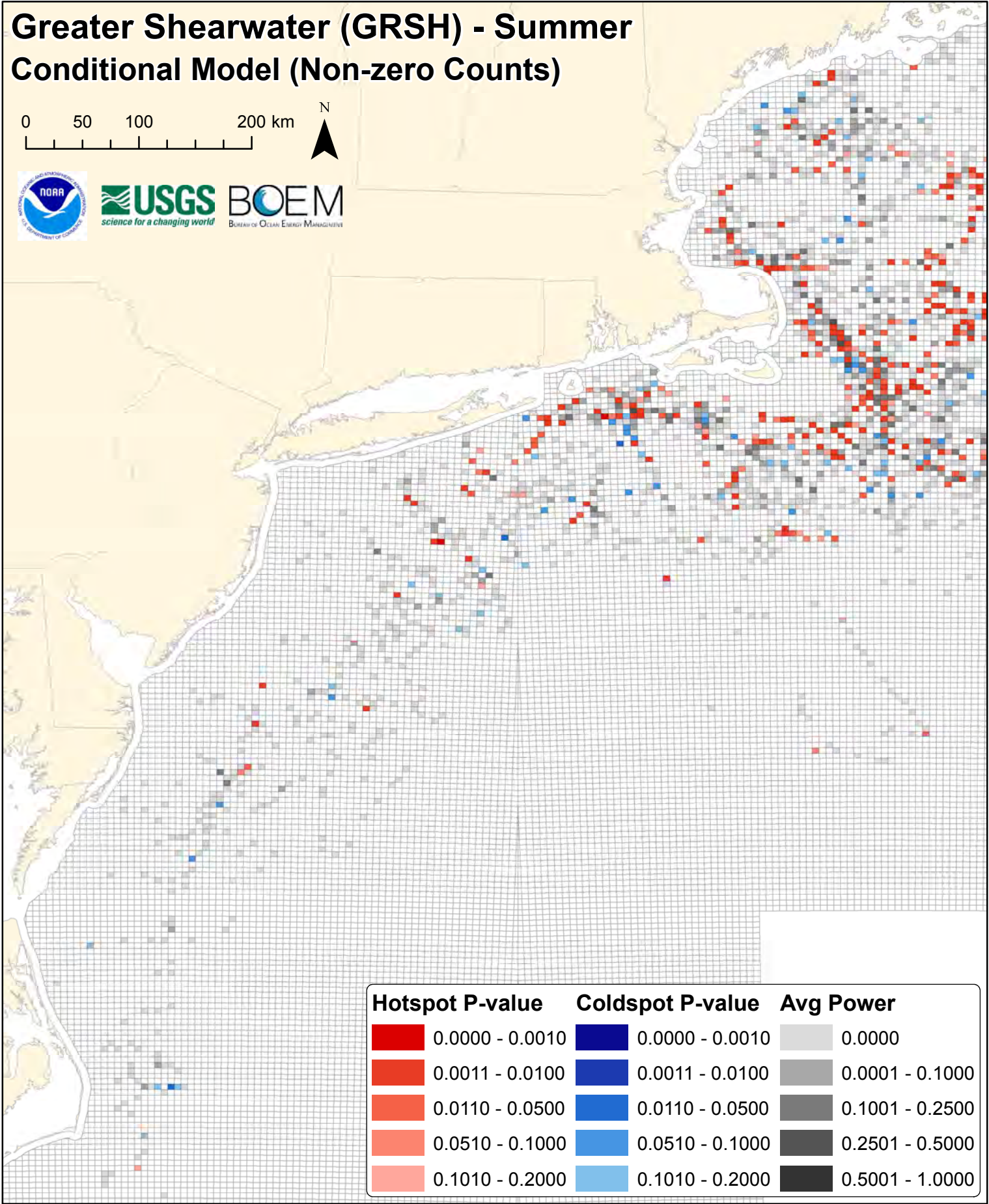
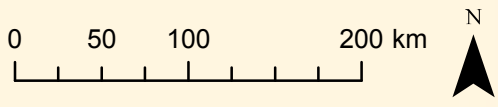
Power to Detect 3x Hotspots


















Greater Shearwater (GRSH) - Summer Conditional Model (Non-zero Counts)



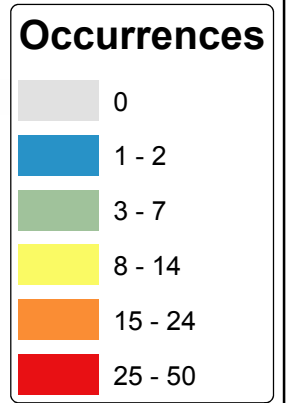
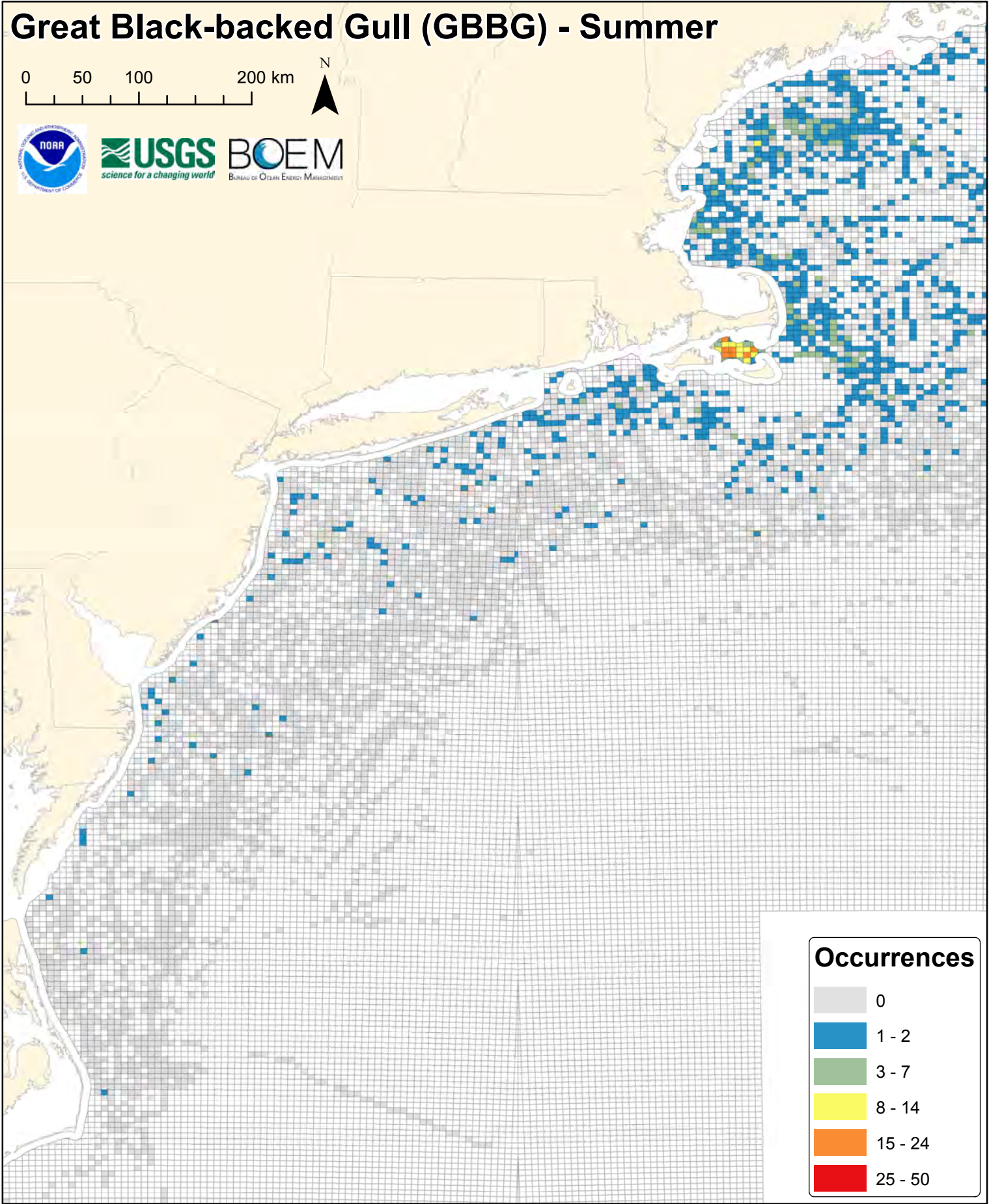
Greater Shearwater (GRSH) - Summer Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

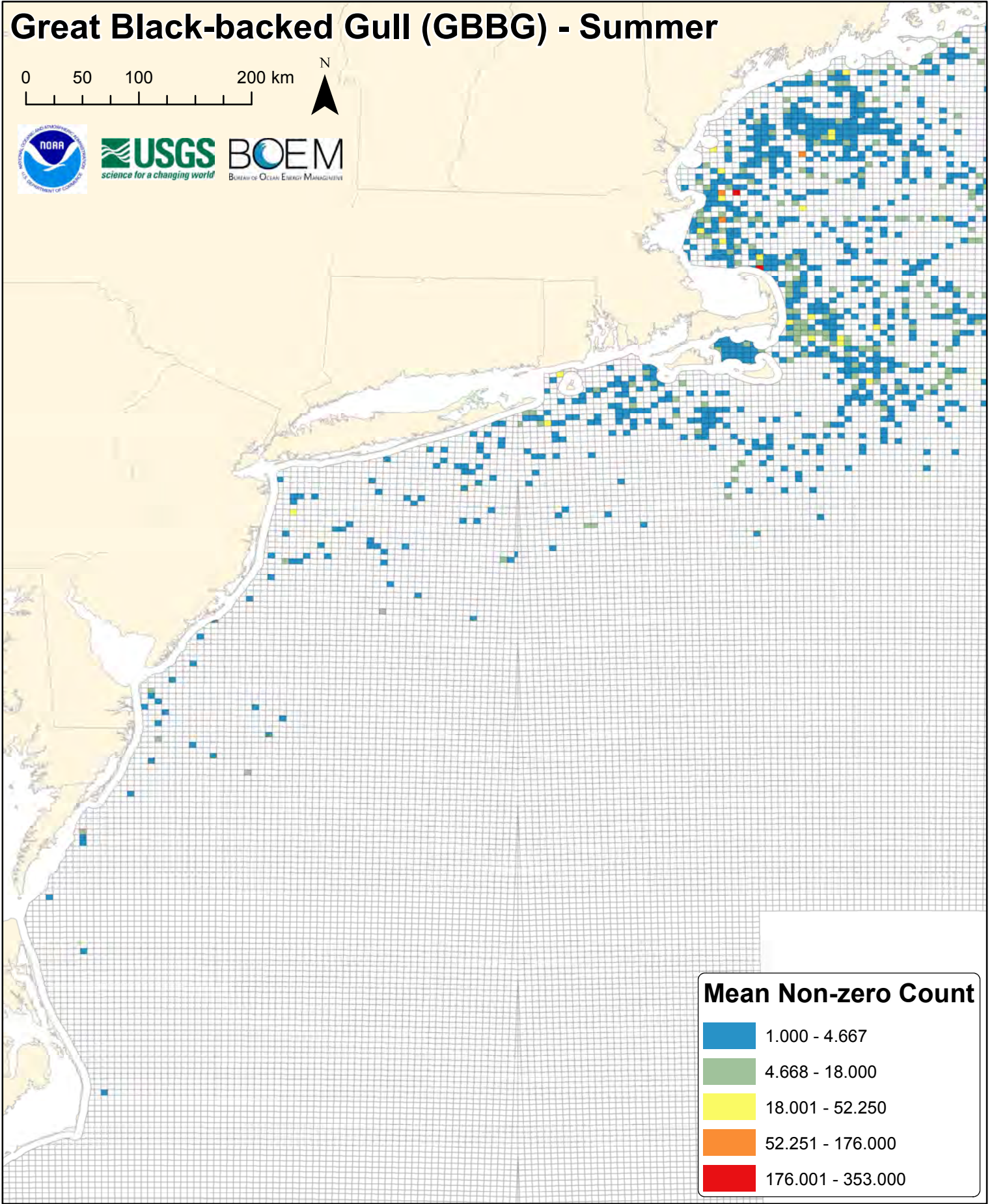
Great Black-backed Gull (GBBG) - Summer

0 50 100 200 km



Great Black-backed Gull (GBBG) - Summer

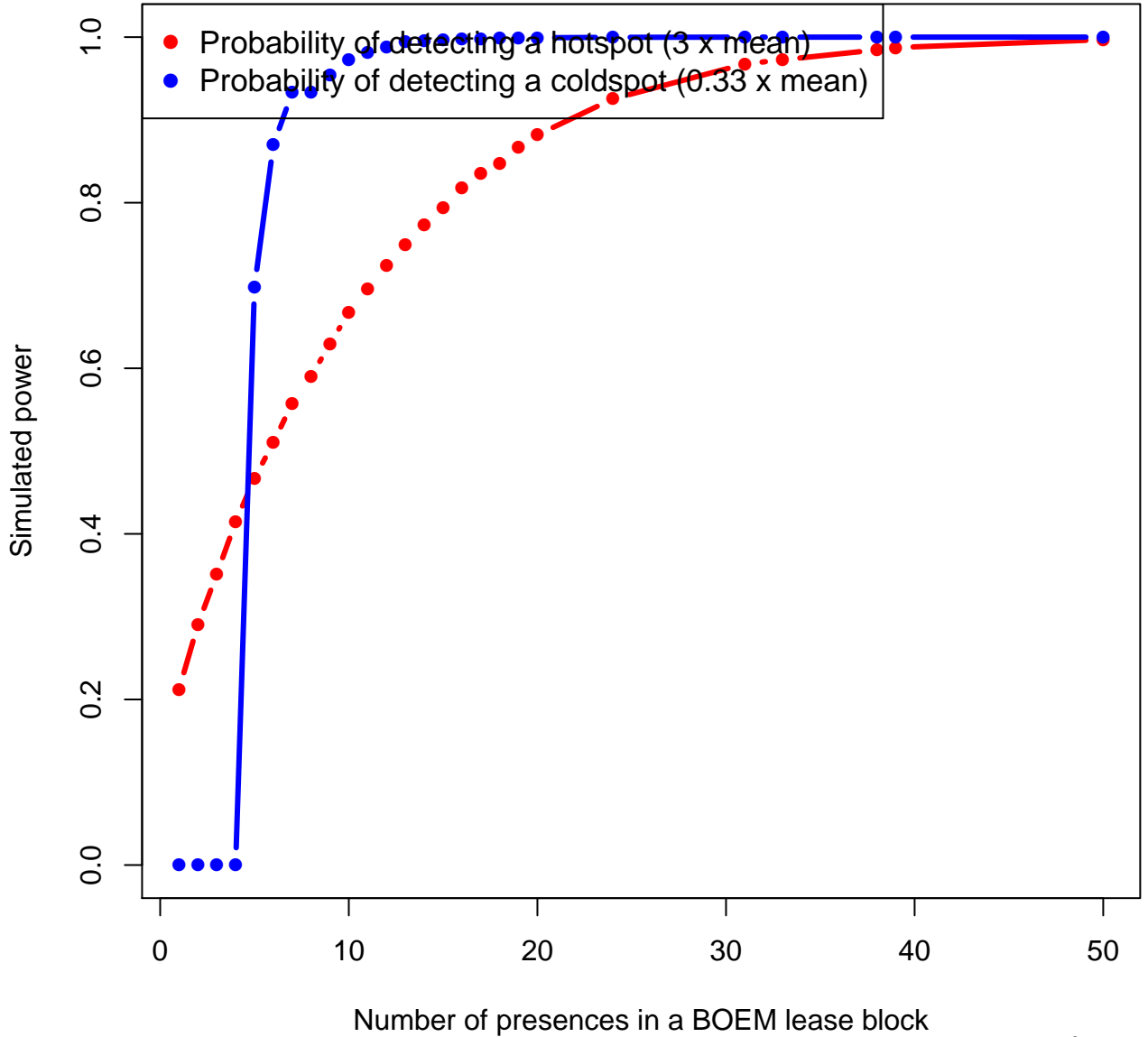
0 50 100 200 km



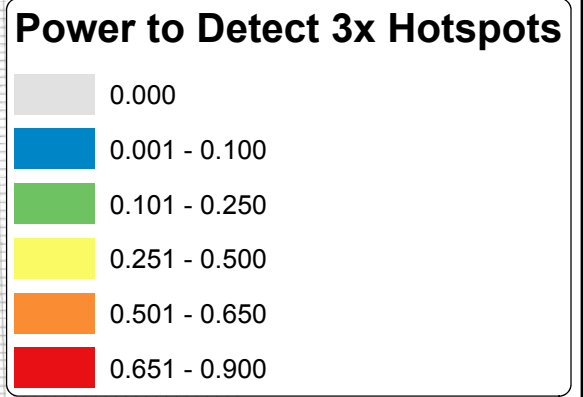
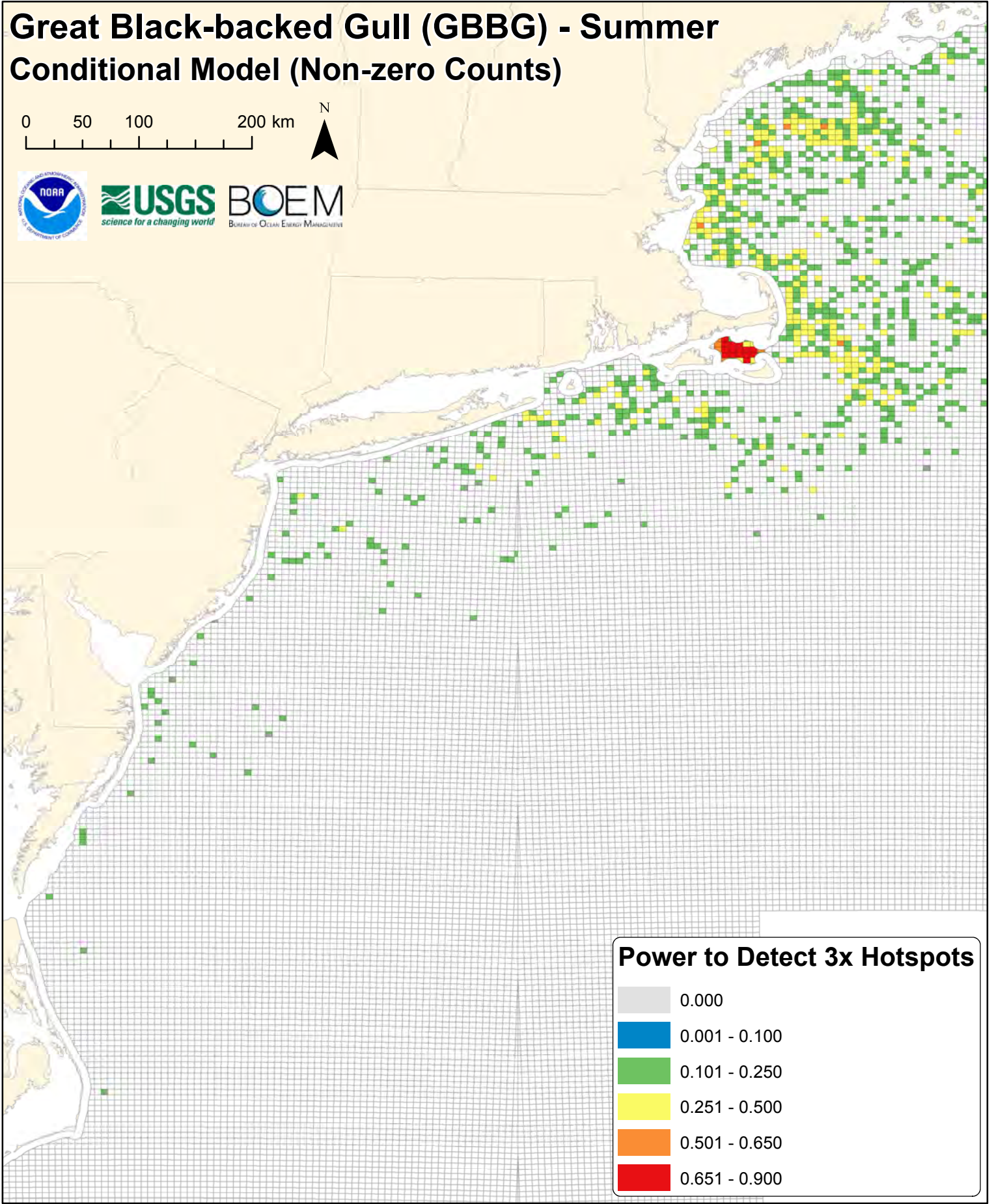
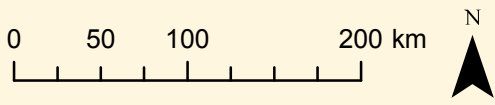
Mean Non-zero Count

- 1.000 - 4.667
- 4.668 - 18.000
- 18.001 - 52.250
- 52.251 - 176.000
- 176.001 - 353.000

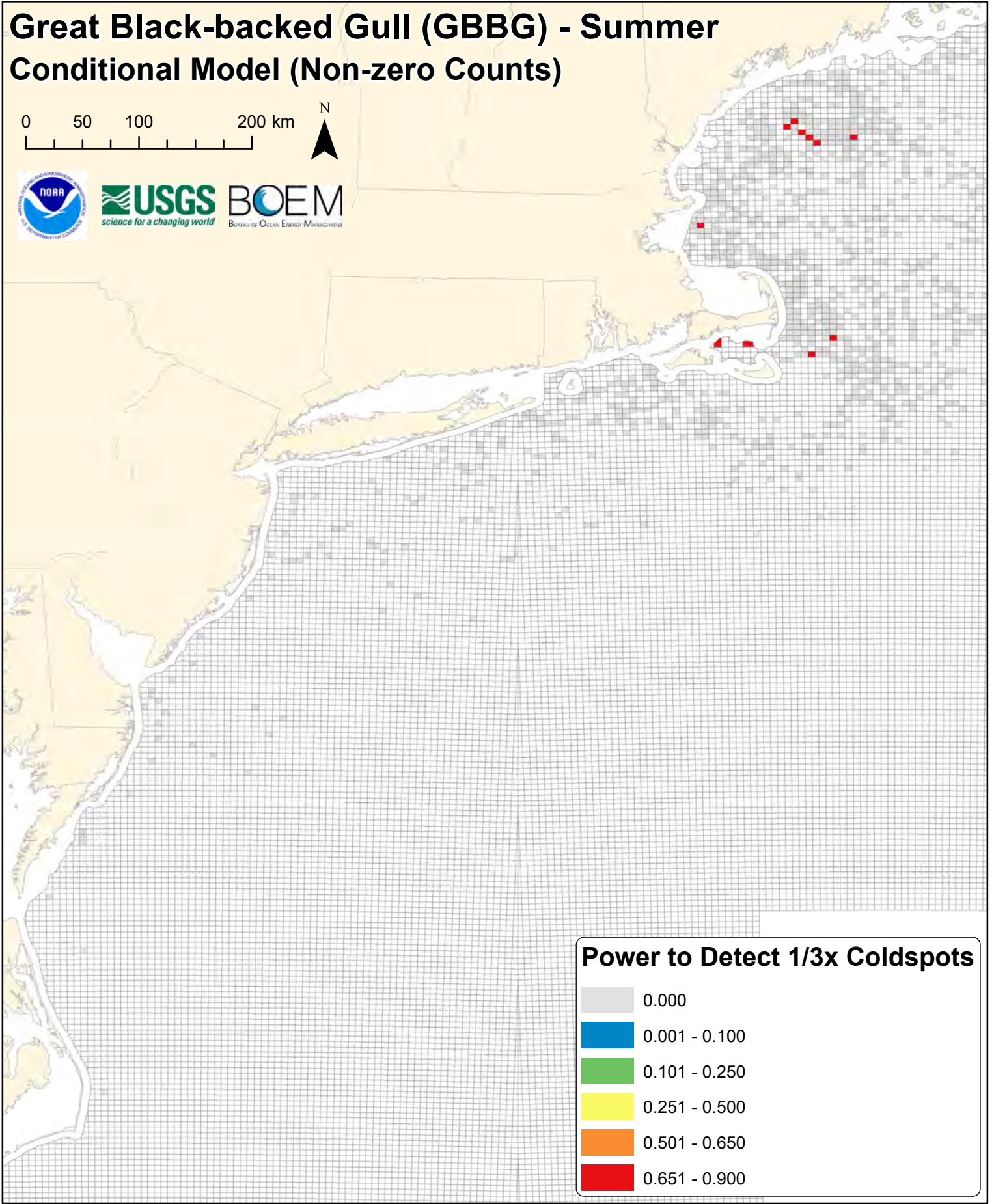
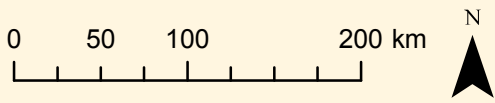
gbbg



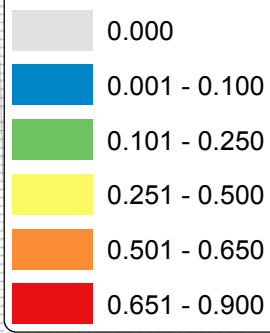
Great Black-backed Gull (GBBG) - Summer Conditional Model (Non-zero Counts)



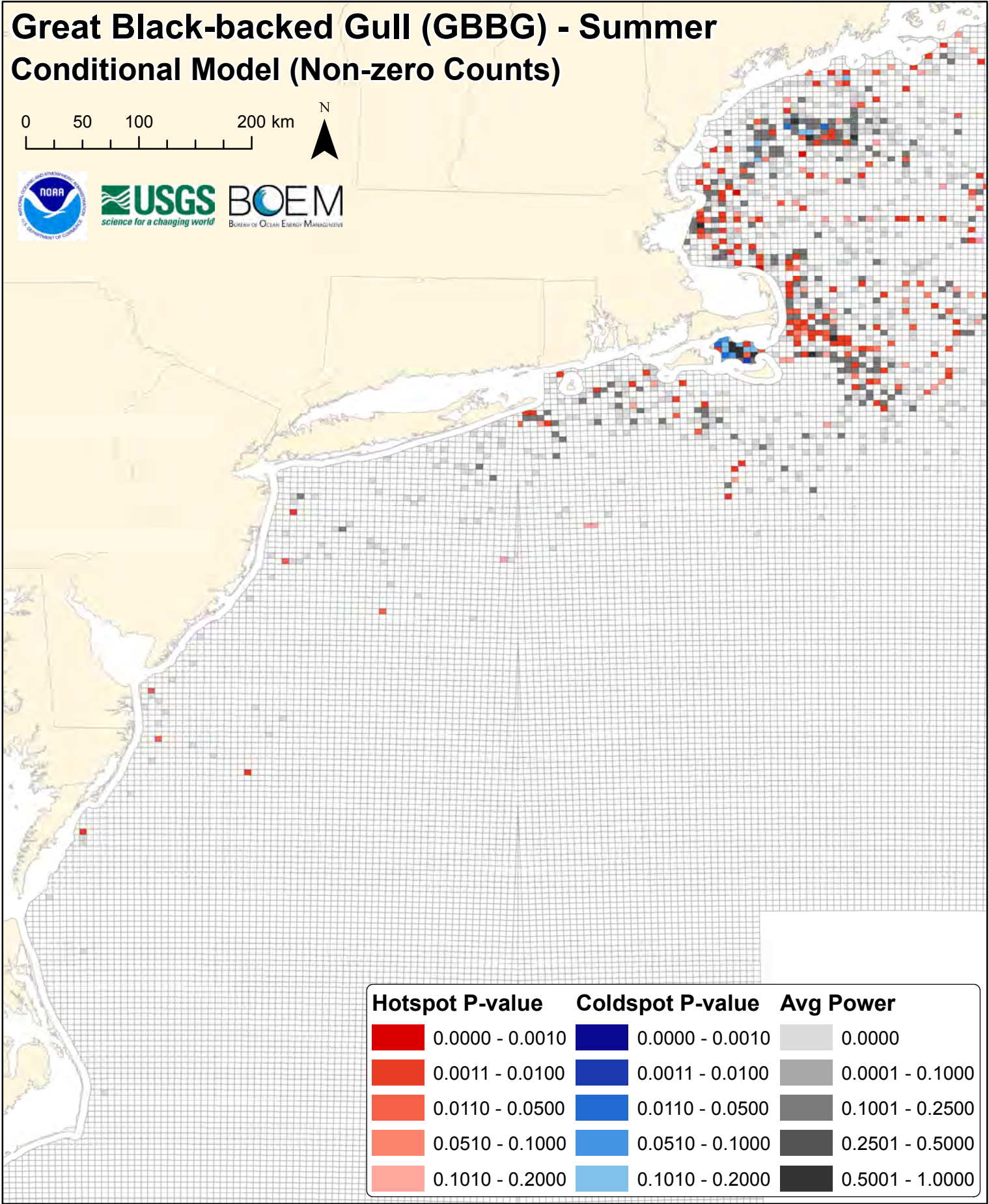
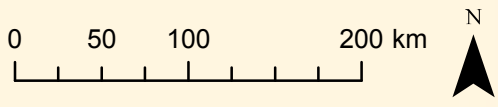
Great Black-backed Gull (GBBG) - Summer Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots

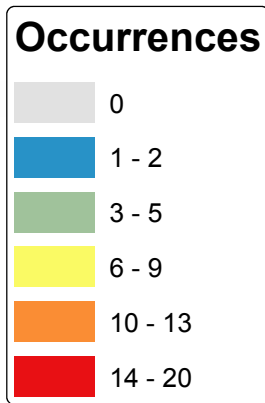
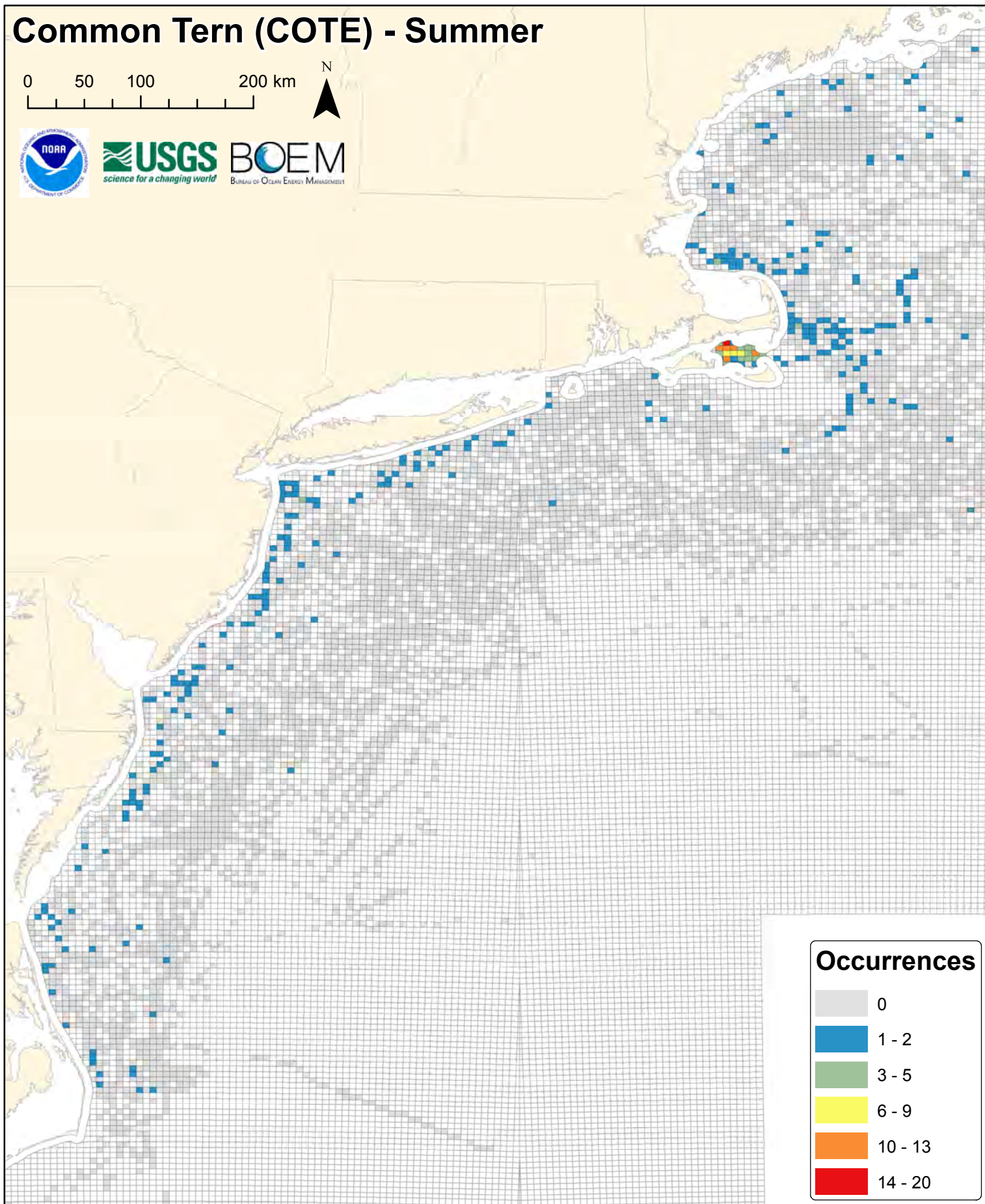
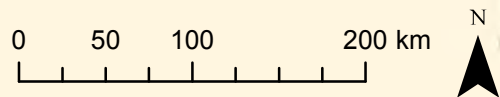


Great Black-backed Gull (GBBG) - Summer Conditional Model (Non-zero Counts)



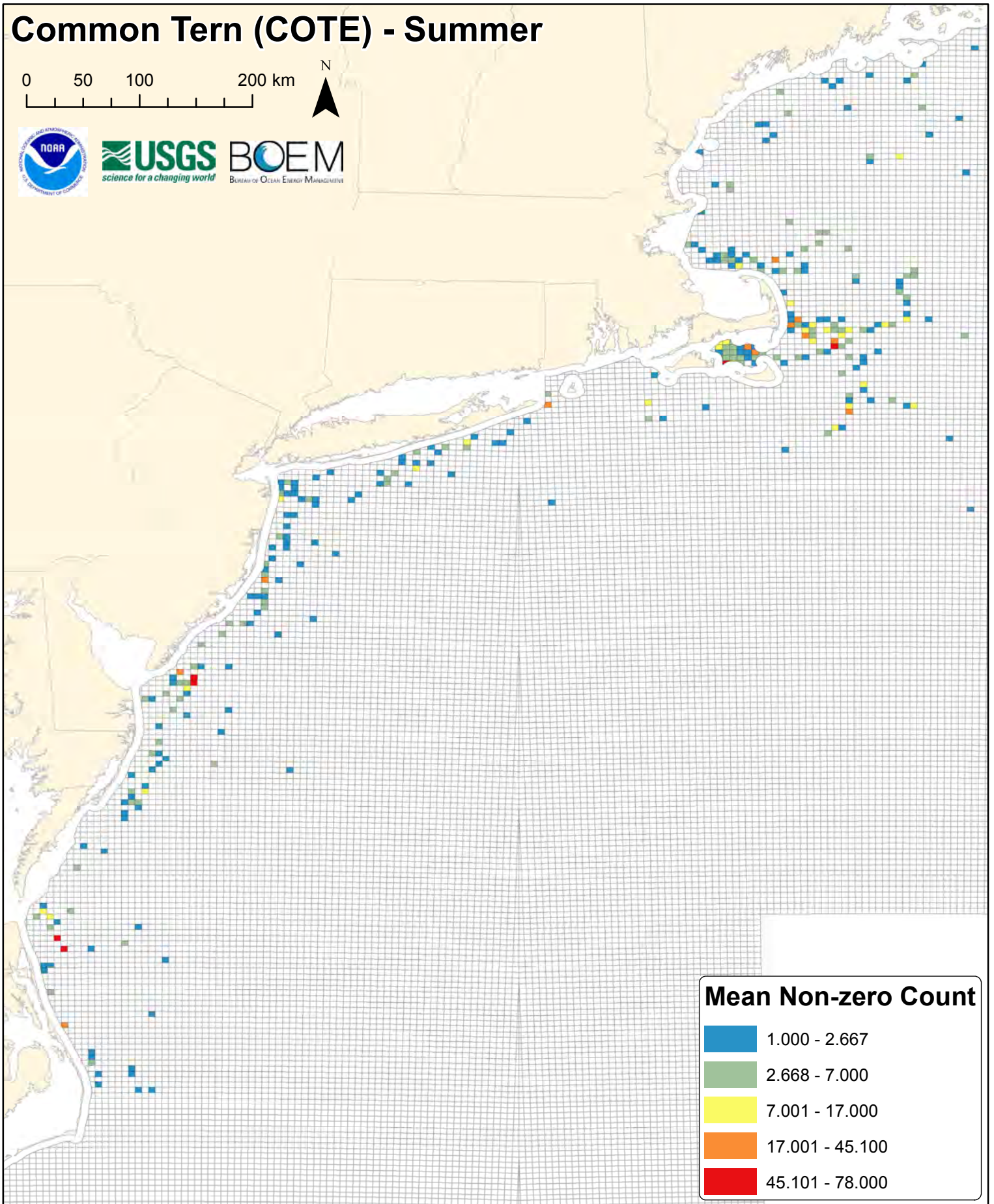
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Common Tern (COTE) - Summer



Common Tern (COTE) - Summer

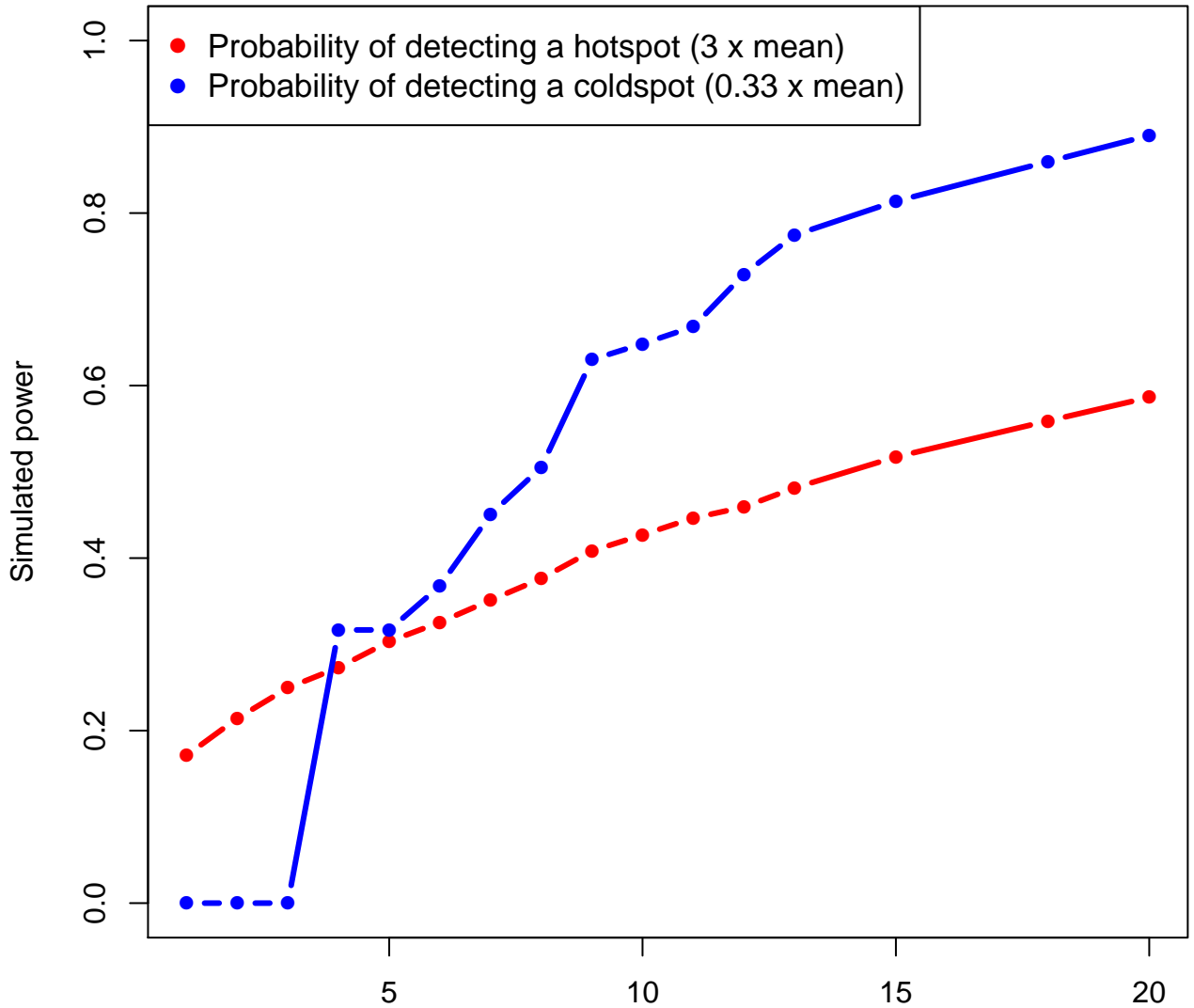
0 50 100 200 km



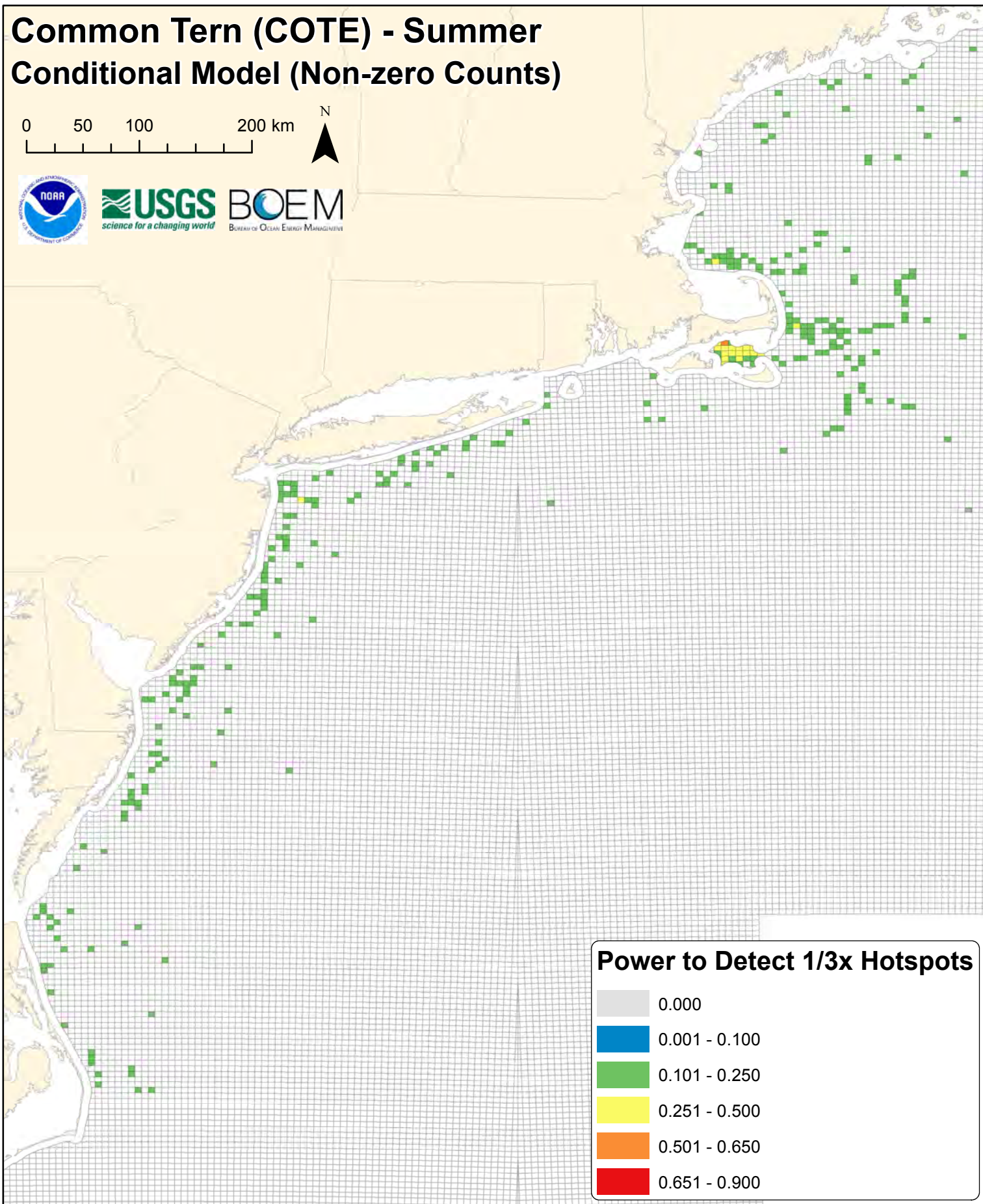
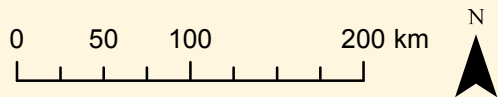
Mean Non-zero Count

- 1.000 - 2.667
- 2.668 - 7.000
- 7.001 - 17.000
- 17.001 - 45.100
- 45.101 - 78.000

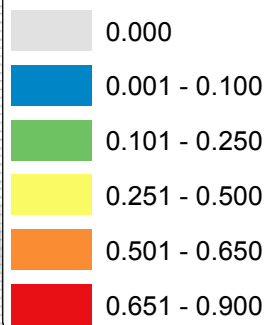
cote



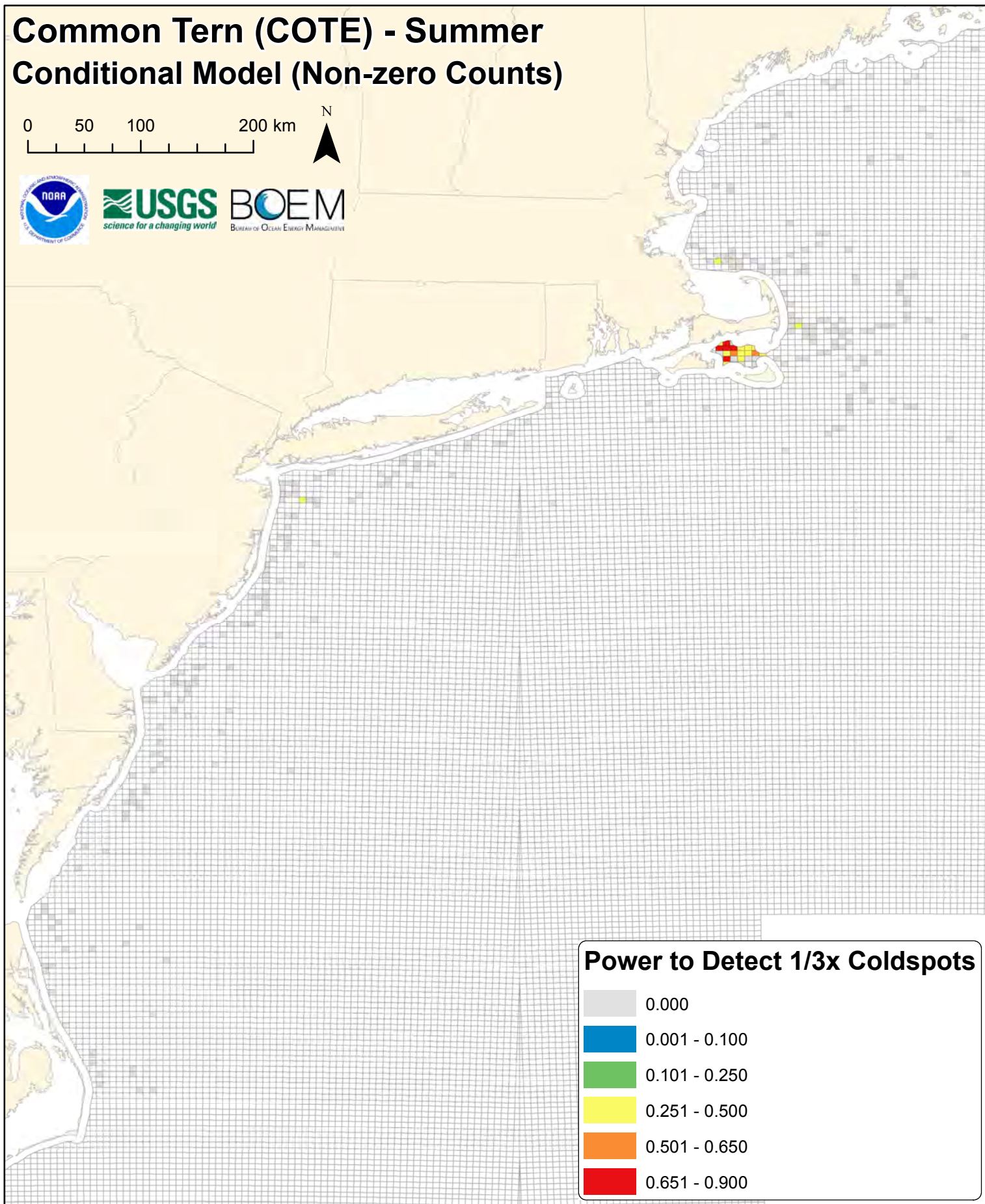
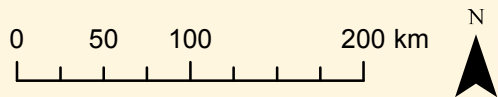
Common Tern (COTE) - Summer Conditional Model (Non-zero Counts)



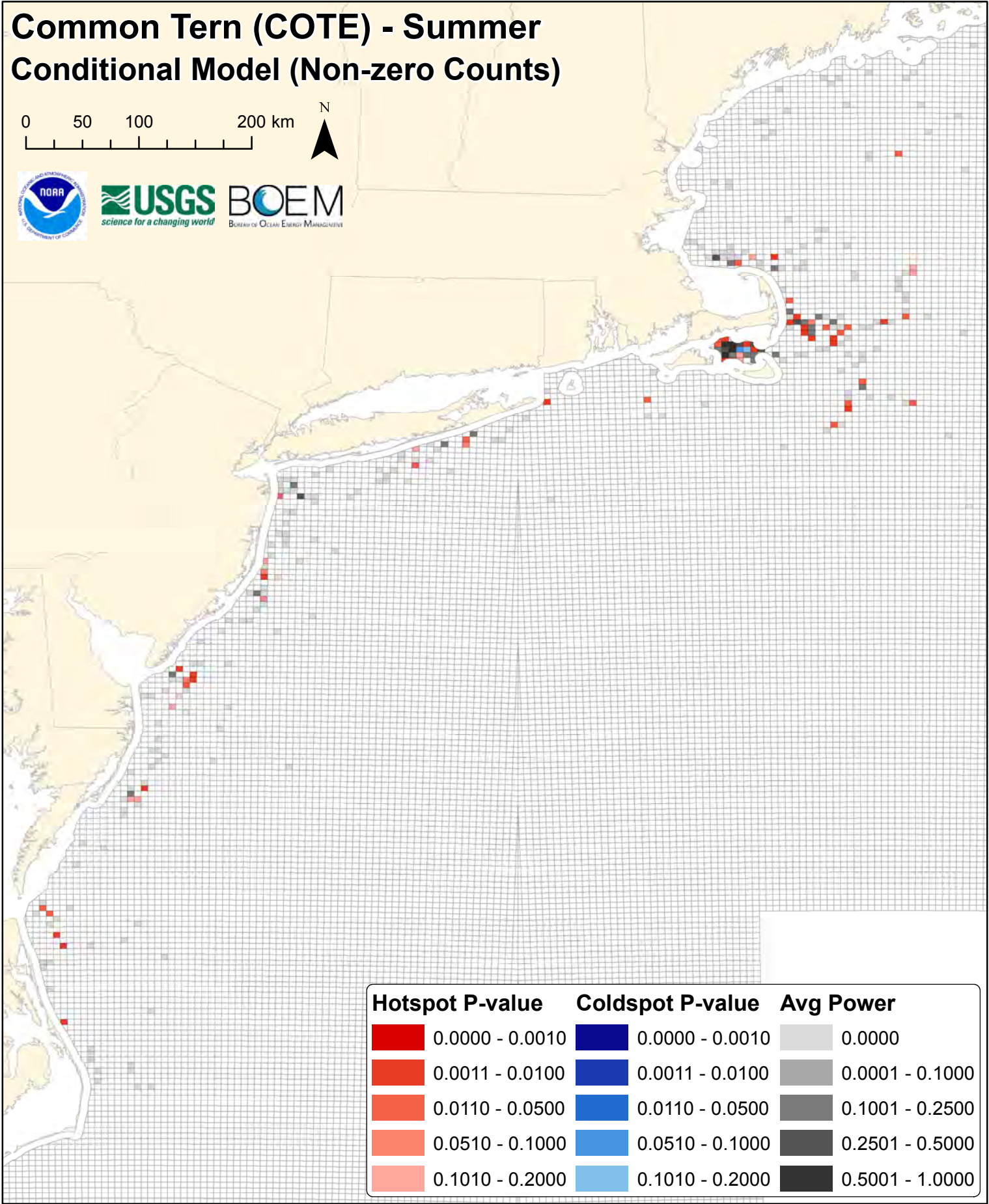
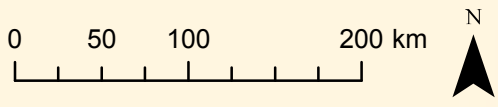
Power to Detect 1/3x Hotspots


















Common Tern (COTE) - Summer Conditional Model (Non-zero Counts)

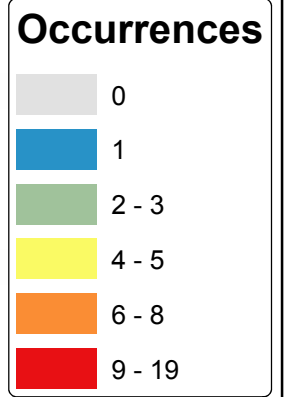
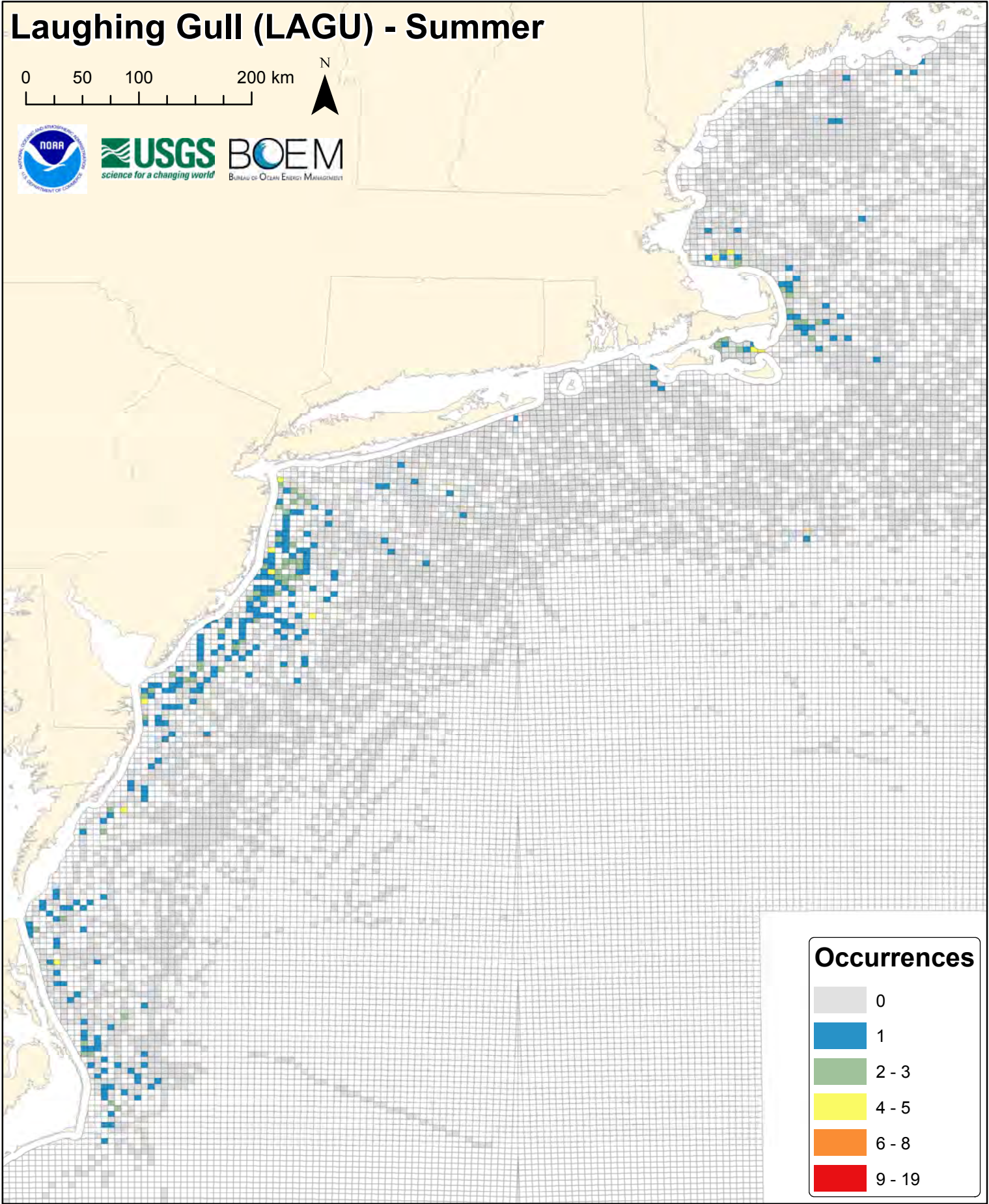
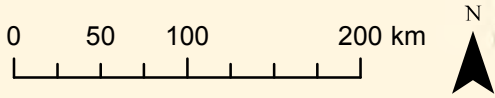


Common Tern (COTE) - Summer Conditional Model (Non-zero Counts)



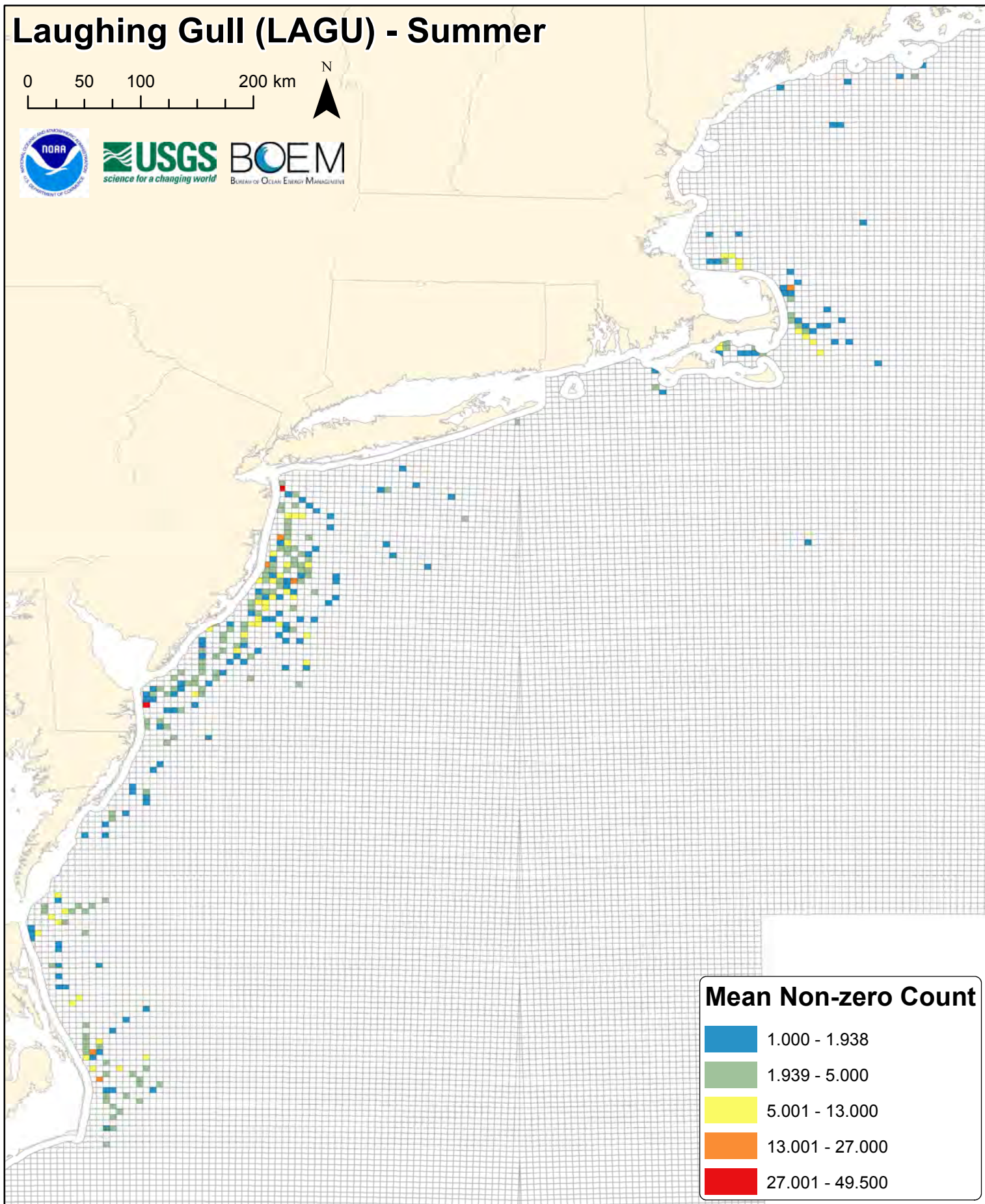
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Laughing Gull (LAGU) - Summer



Laughing Gull (LAGU) - Summer

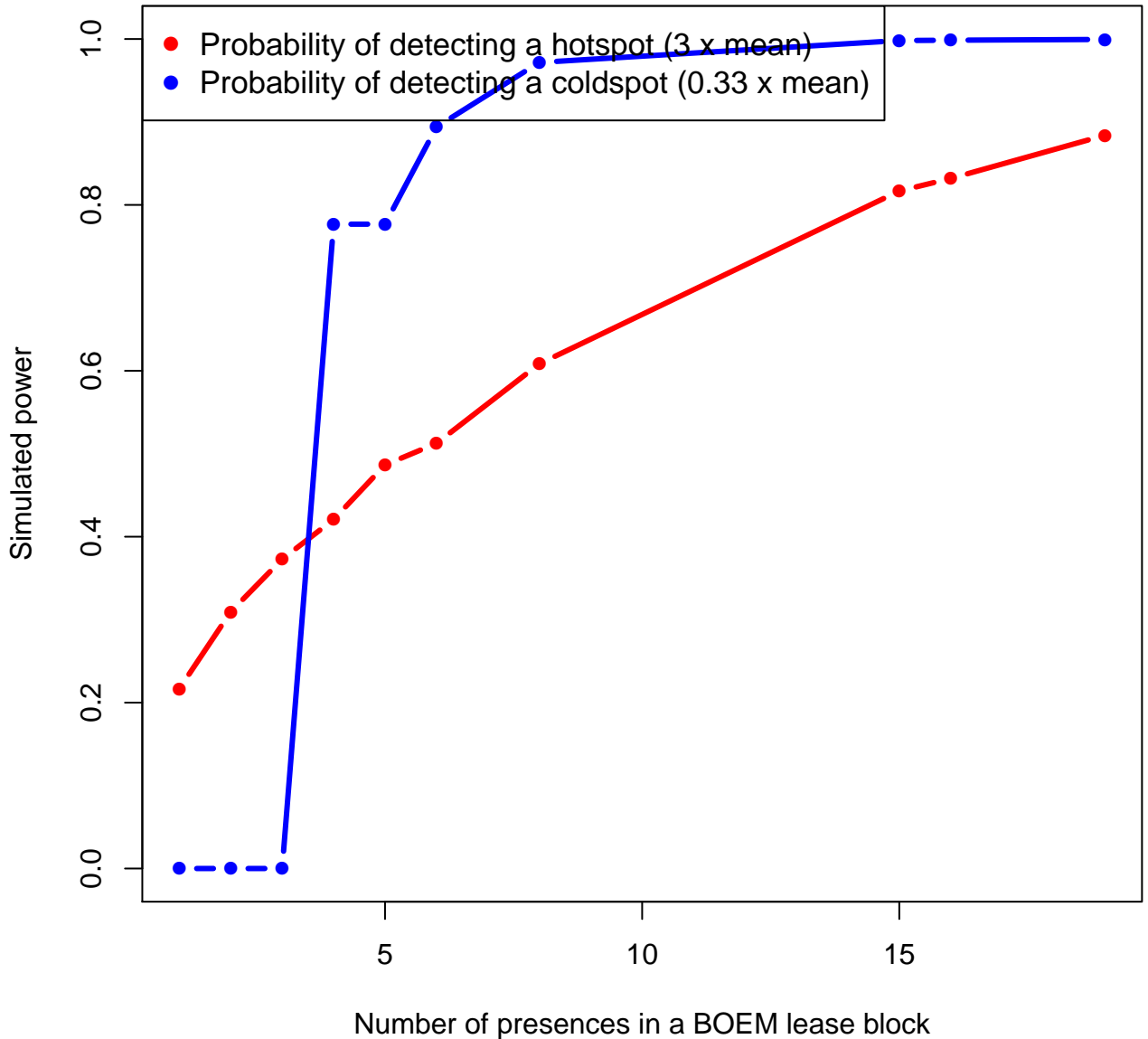
0 50 100 200 km



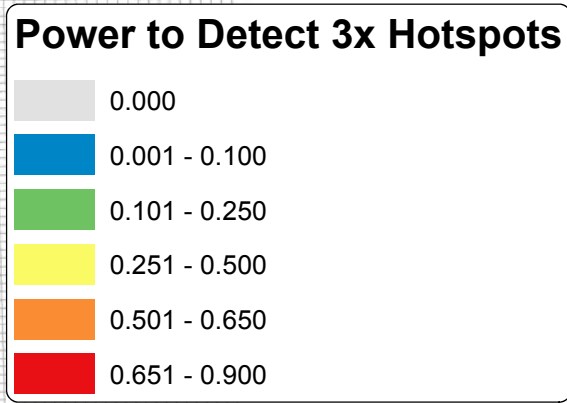
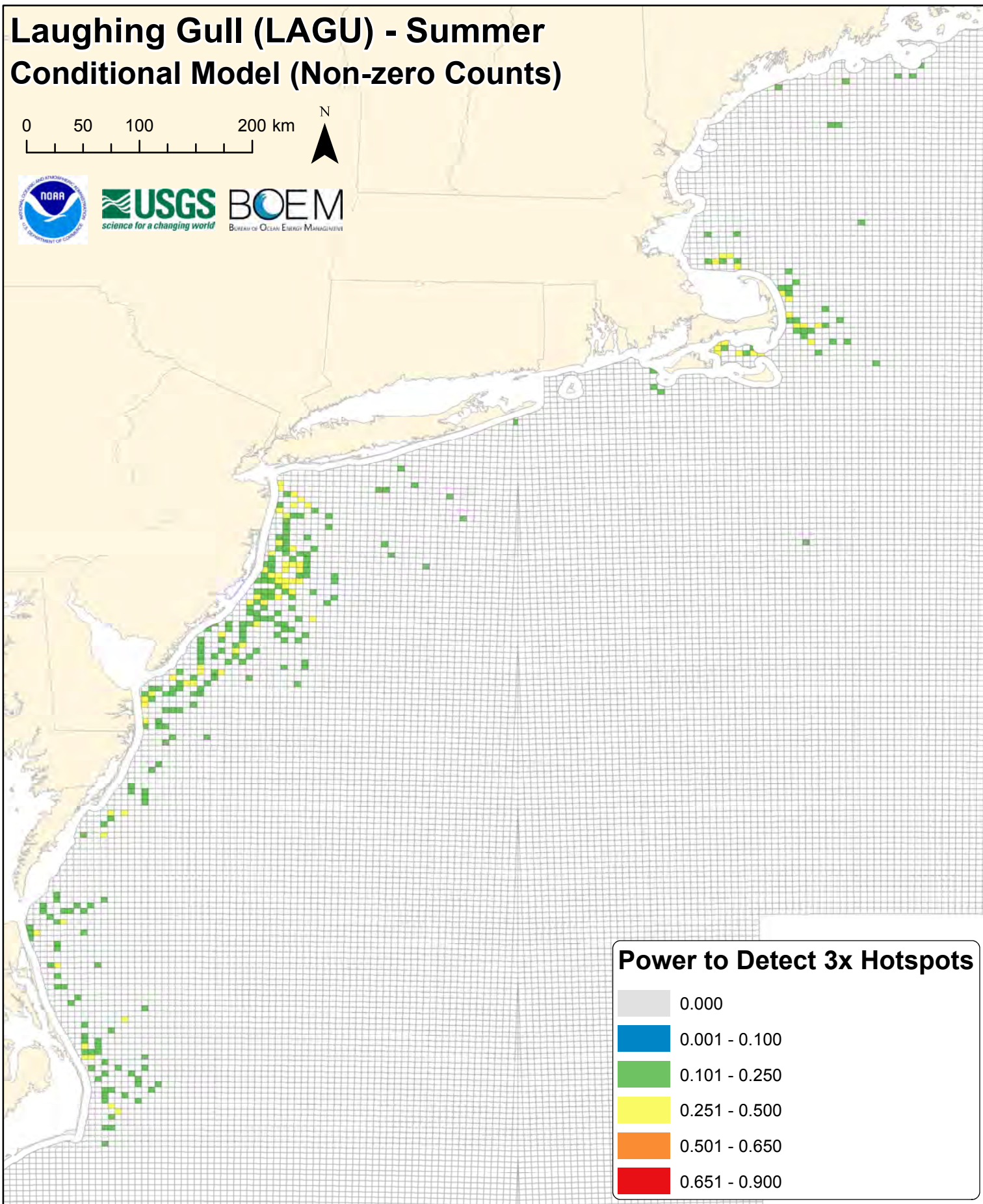
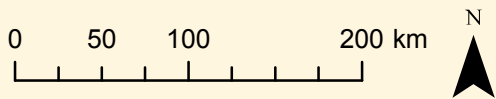
Mean Non-zero Count

- 1.000 - 1.938
- 1.939 - 5.000
- 5.001 - 13.000
- 13.001 - 27.000
- 27.001 - 49.500

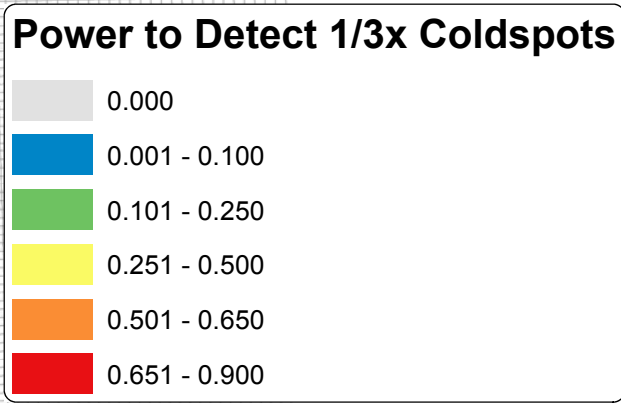
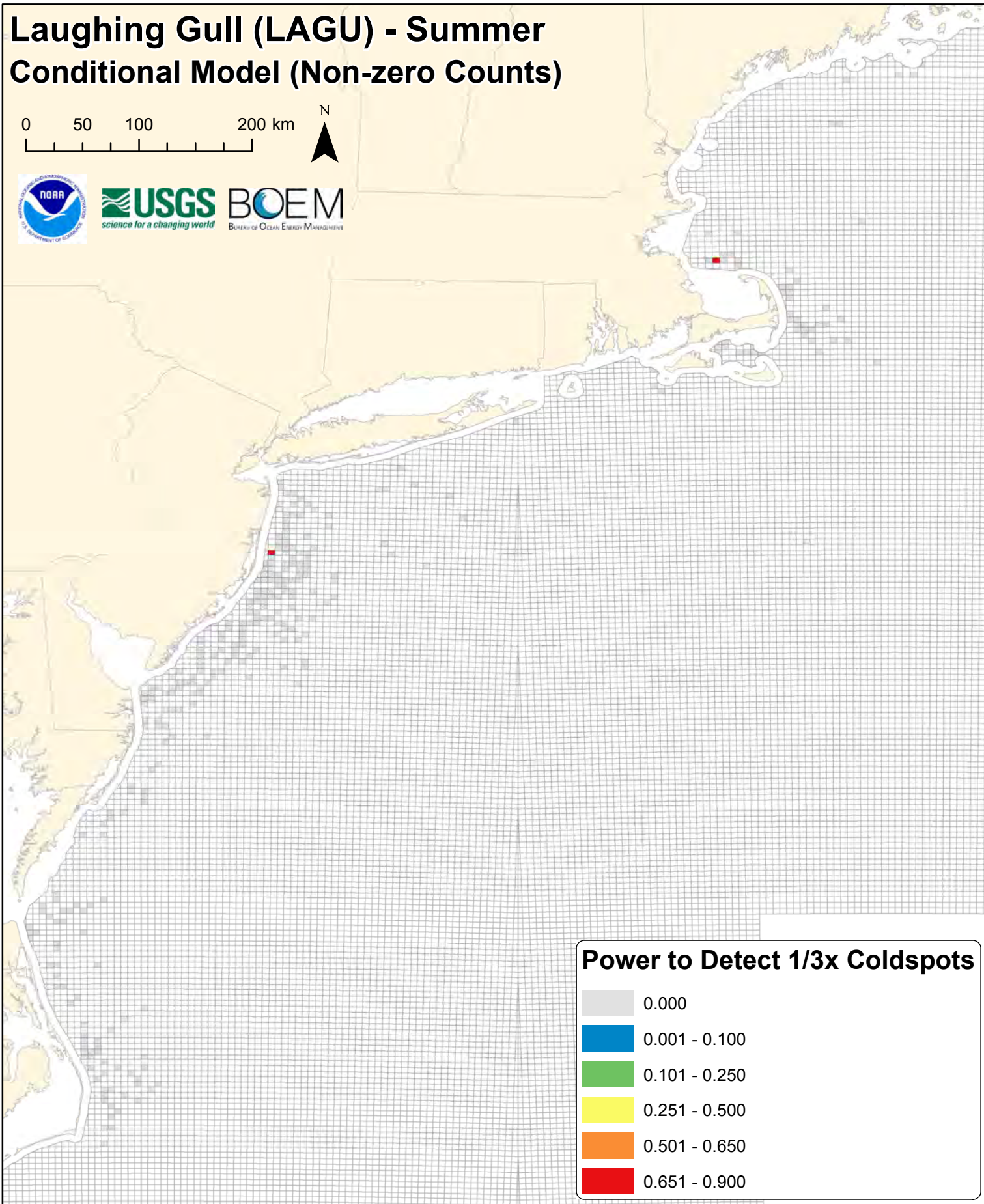
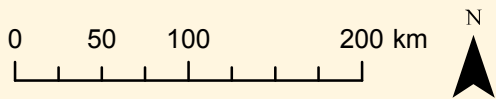
lagu



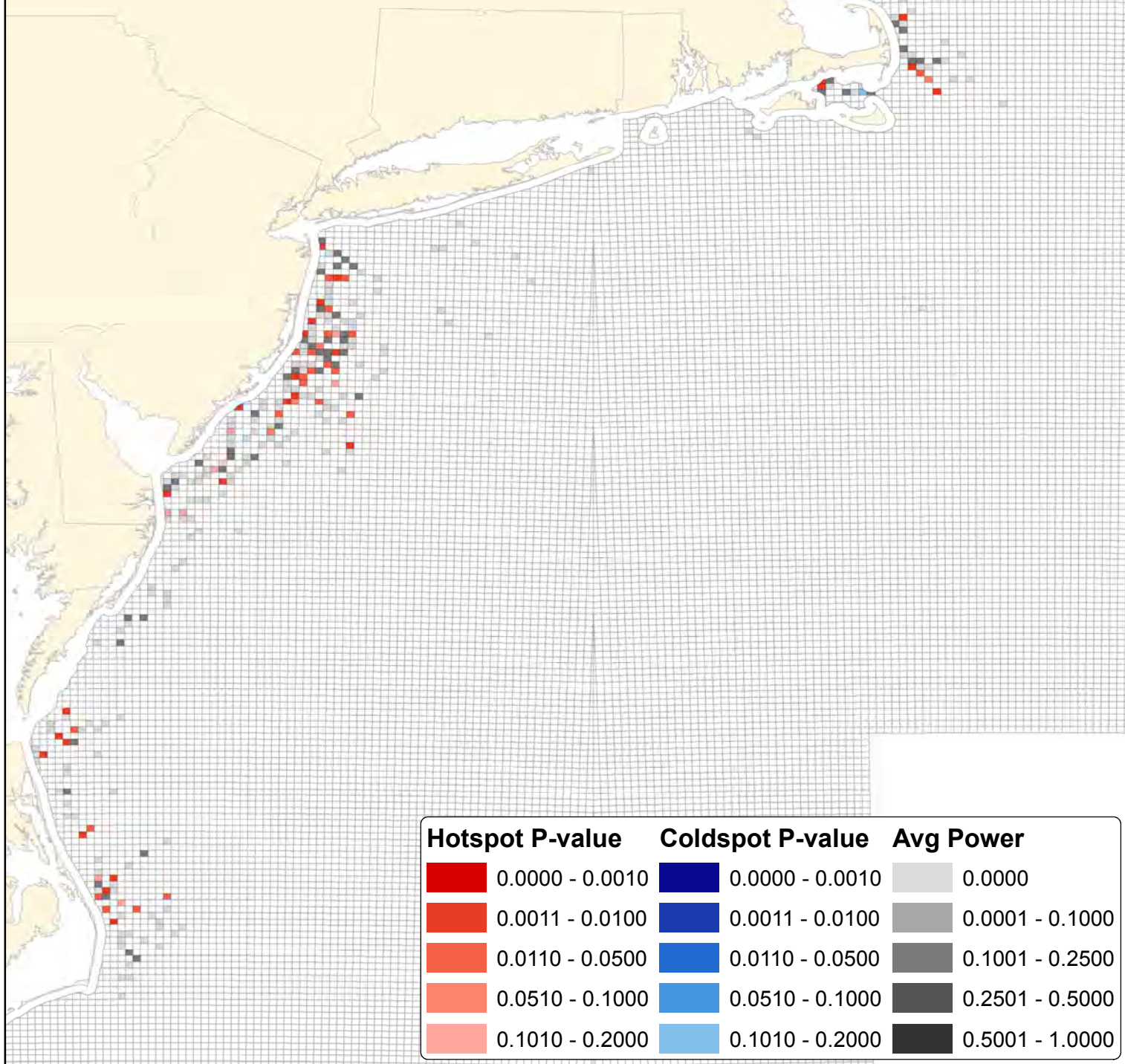
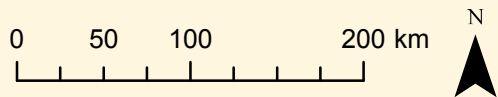
Laughing Gull (LAGU) - Summer Conditional Model (Non-zero Counts)


















Laughing Gull (LAGU) - Summer Conditional Model (Non-zero Counts)

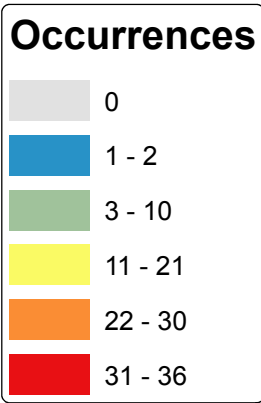
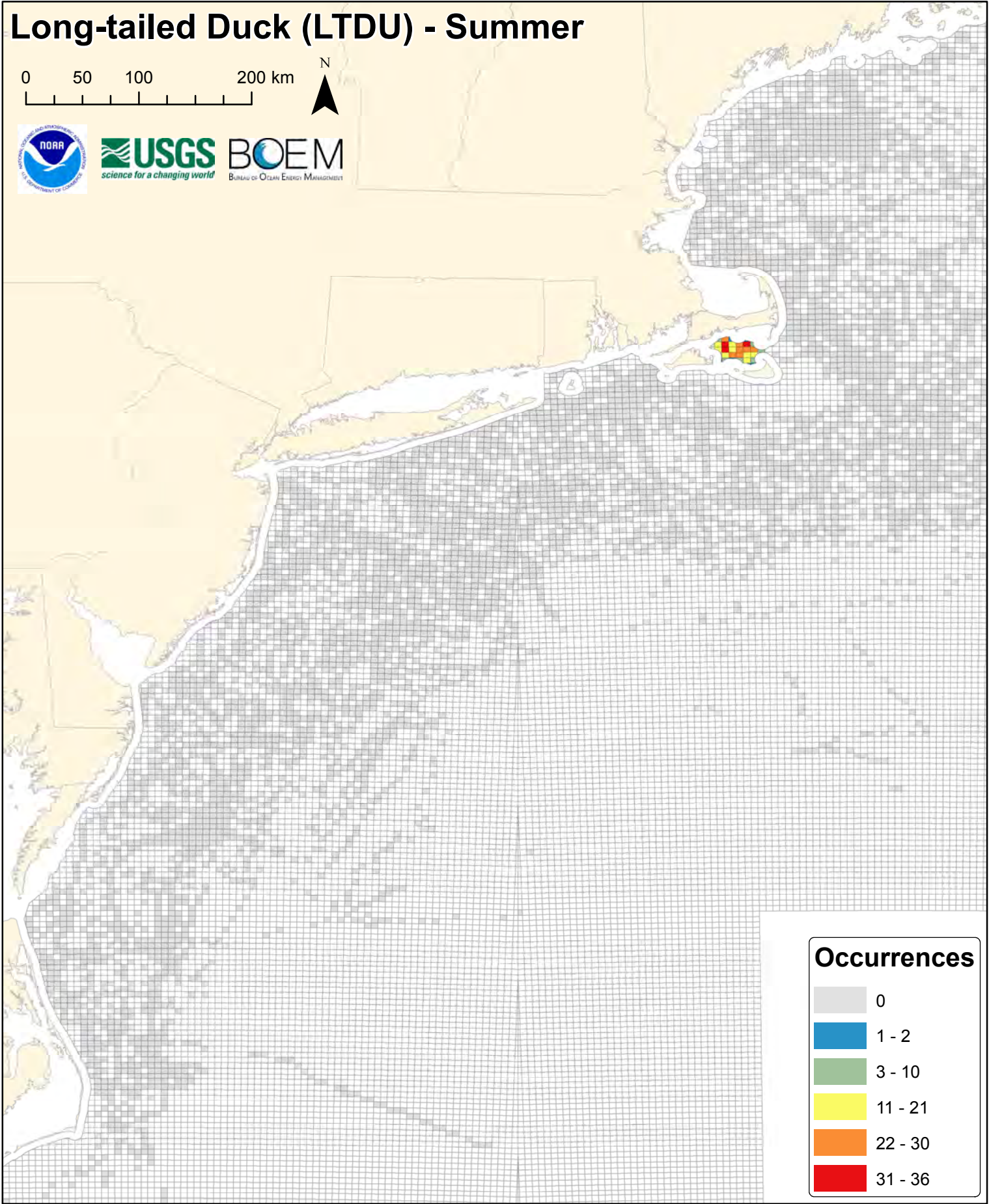
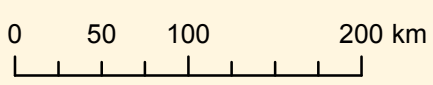


Laughing Gull (LAGU) - Summer Conditional Model (Non-zero Counts)



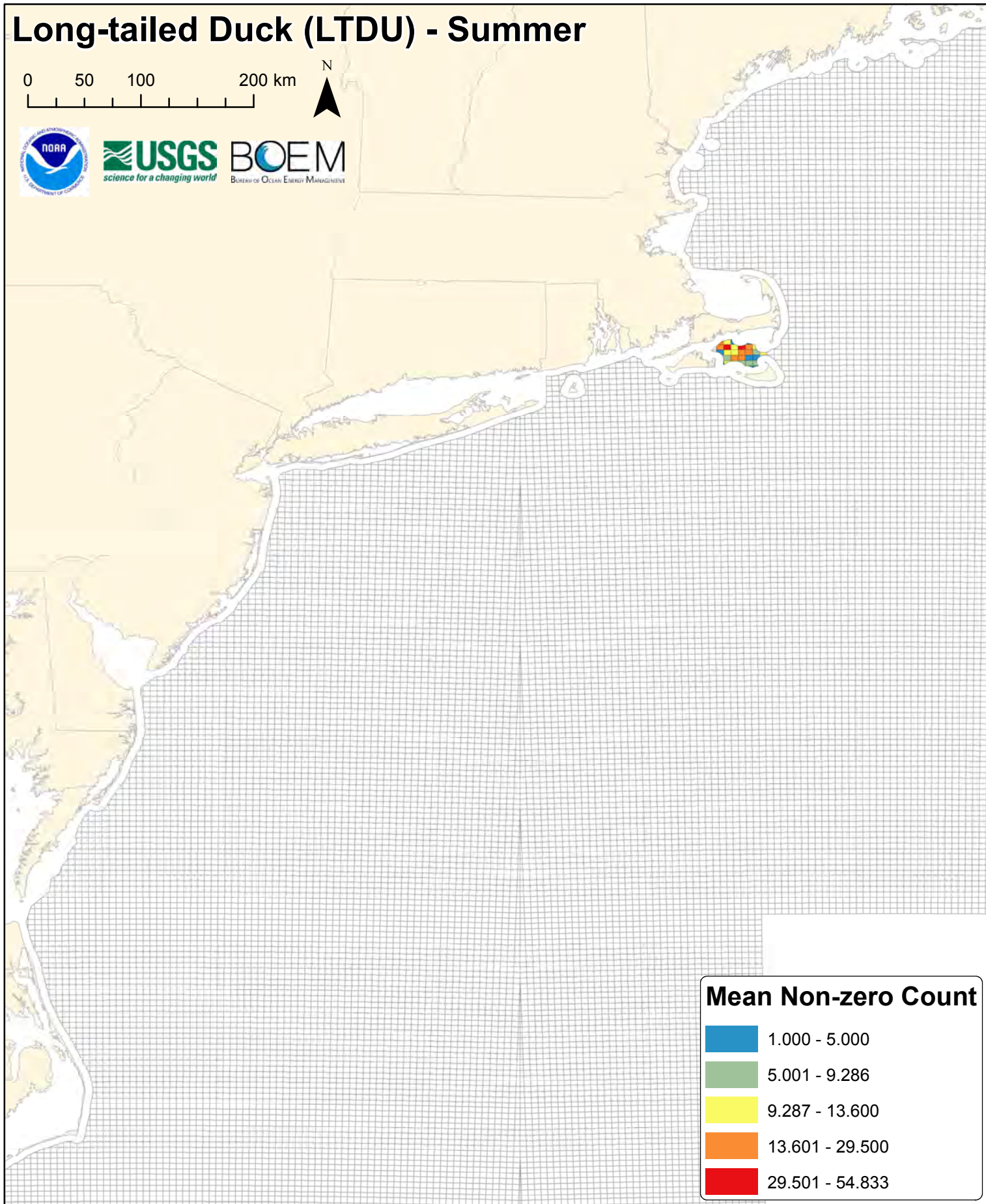
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Long-tailed Duck (LTDU) - Summer



Long-tailed Duck (LTDU) - Summer

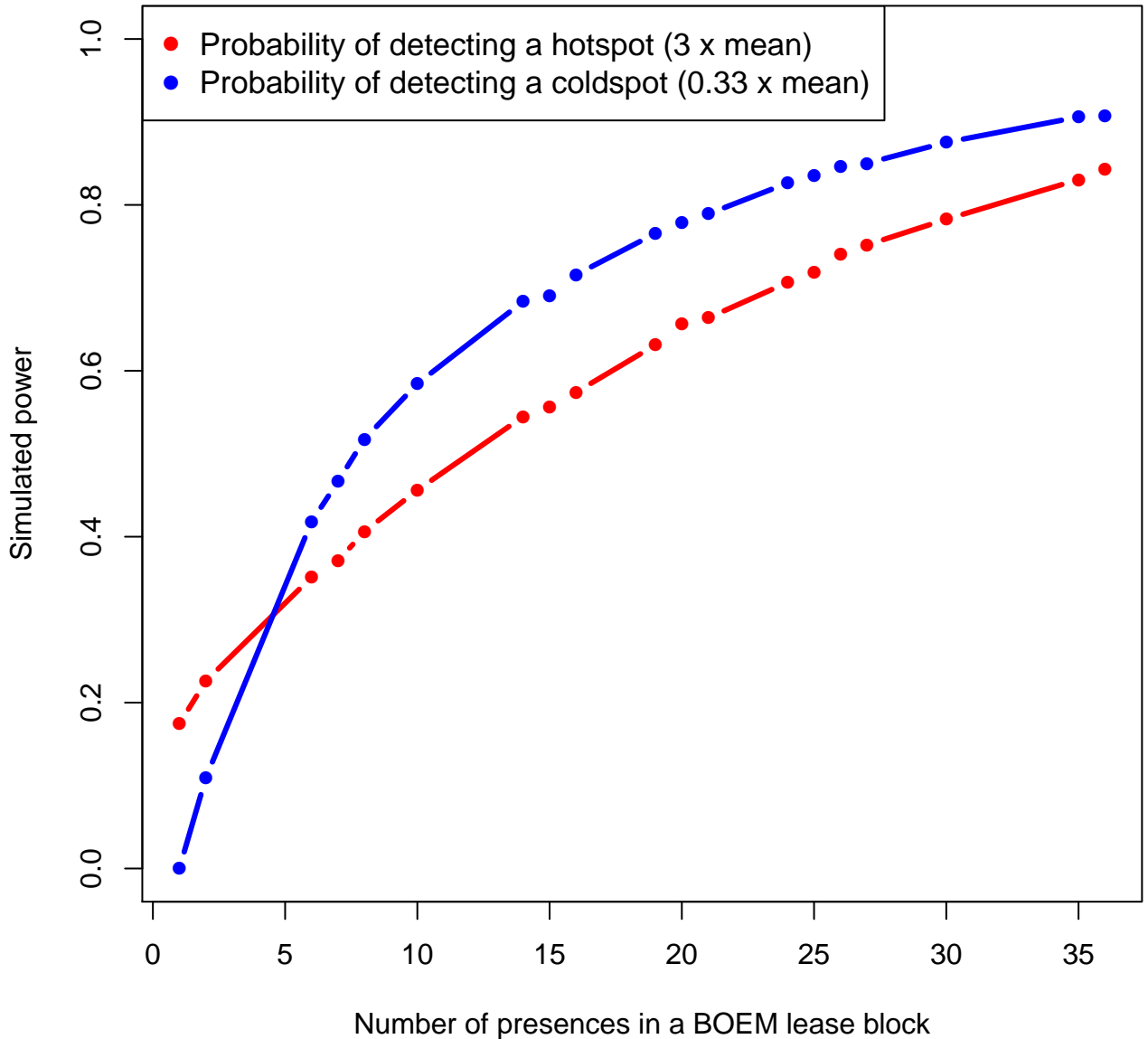
0 50 100 200 km



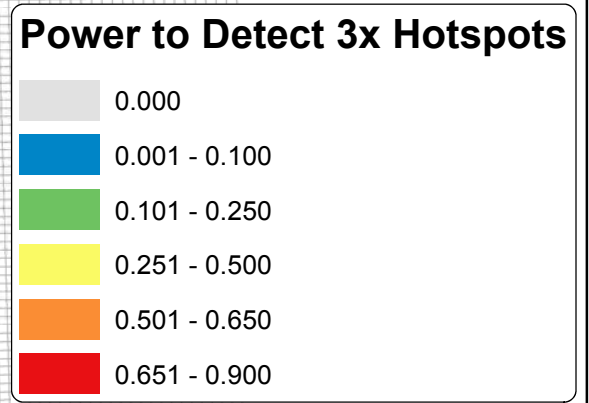
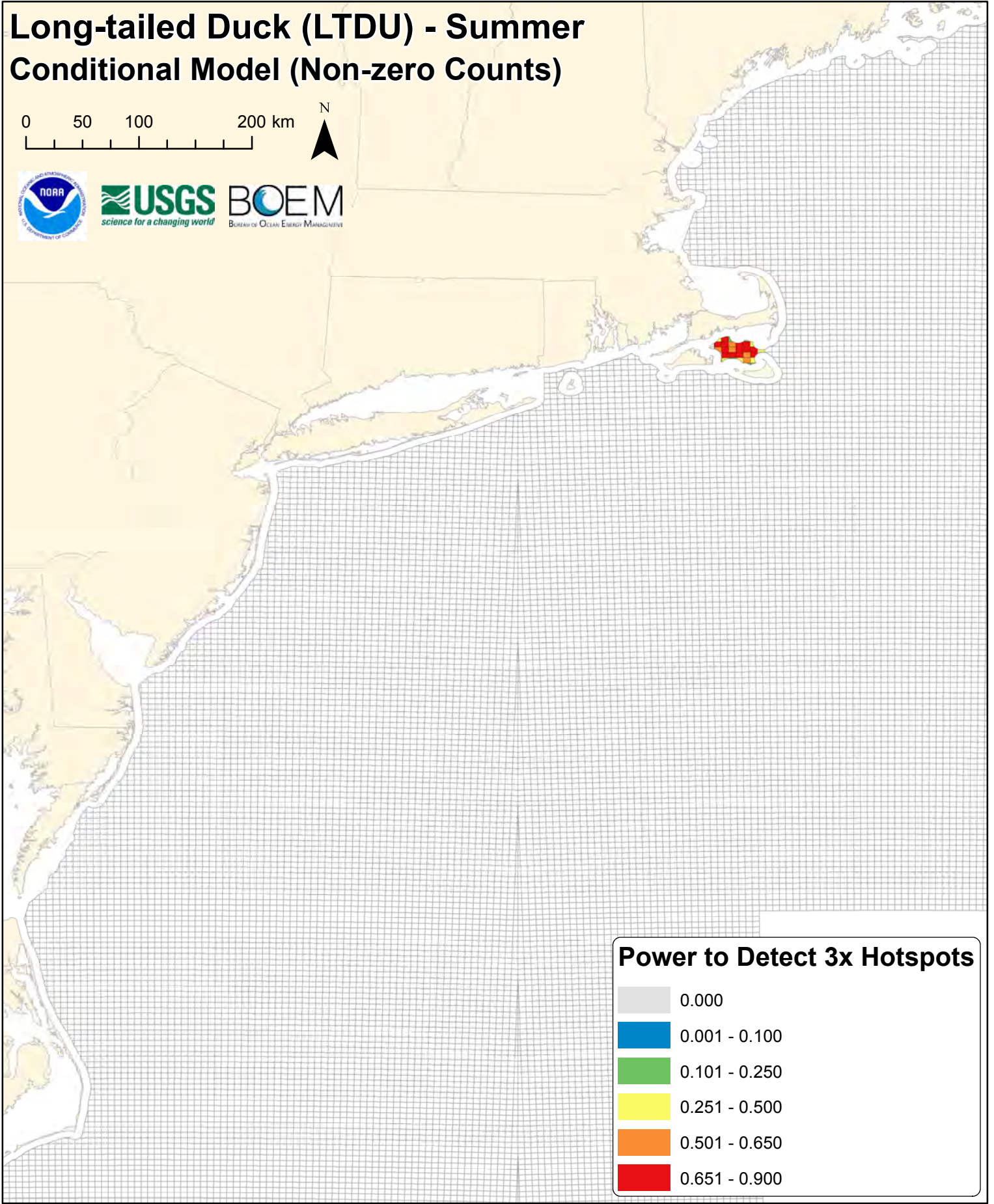
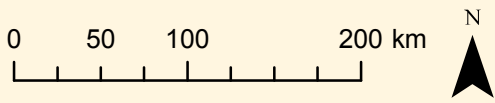
Mean Non-zero Count

- 1.000 - 5.000
- 5.001 - 9.286
- 9.287 - 13.600
- 13.601 - 29.500
- 29.501 - 54.833

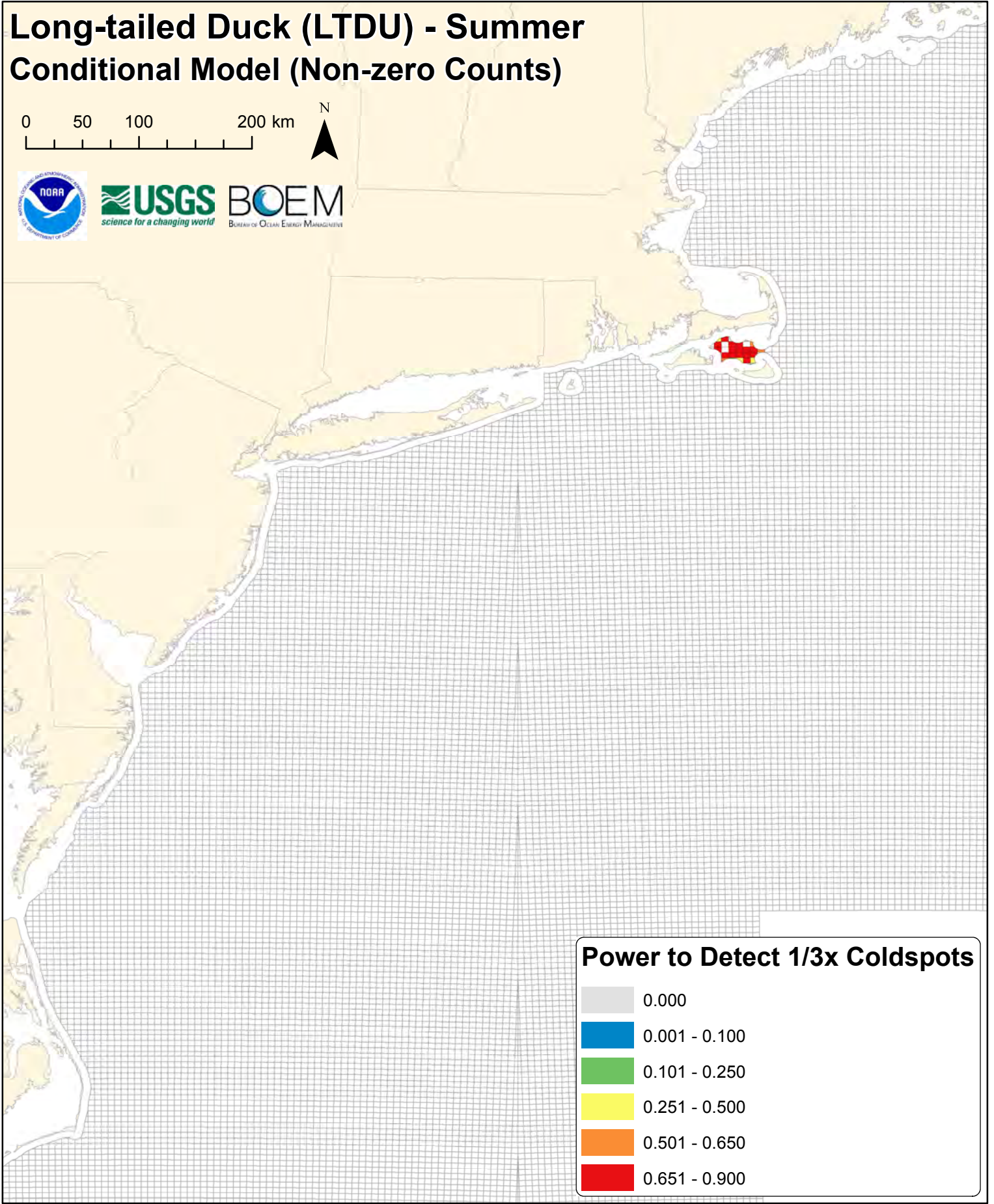
Itdu



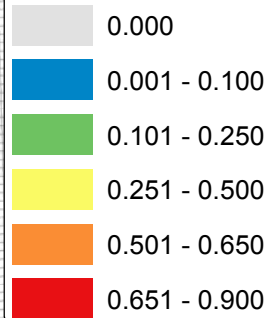
Long-tailed Duck (LTDU) - Summer Conditional Model (Non-zero Counts)



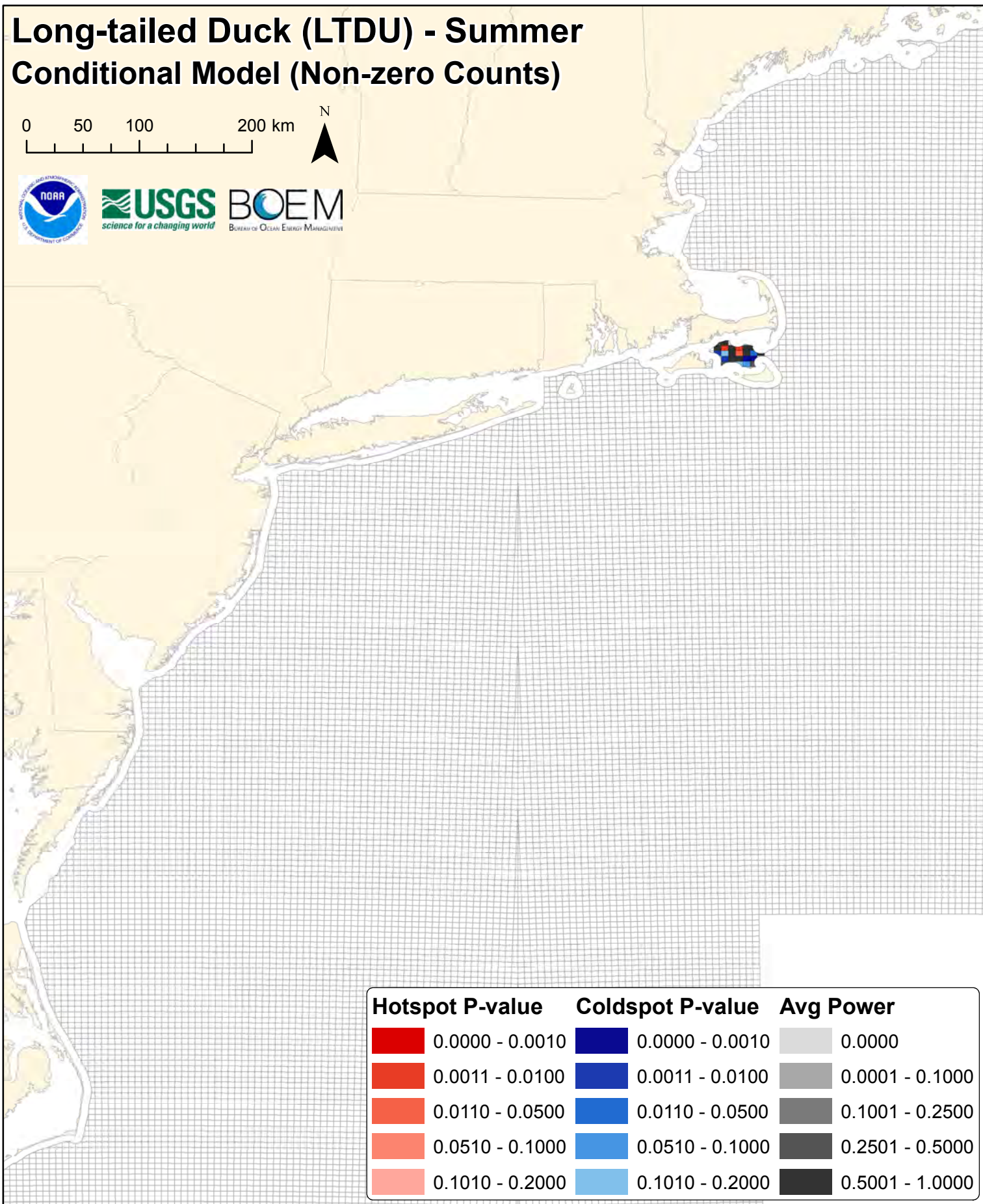
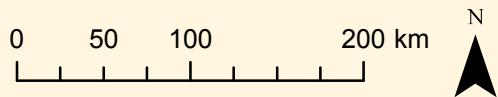
Long-tailed Duck (LTDU) - Summer Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots

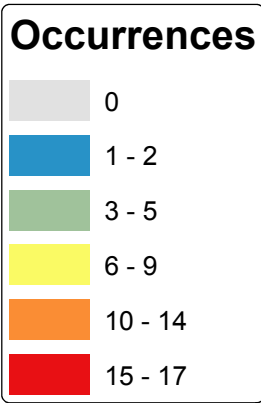
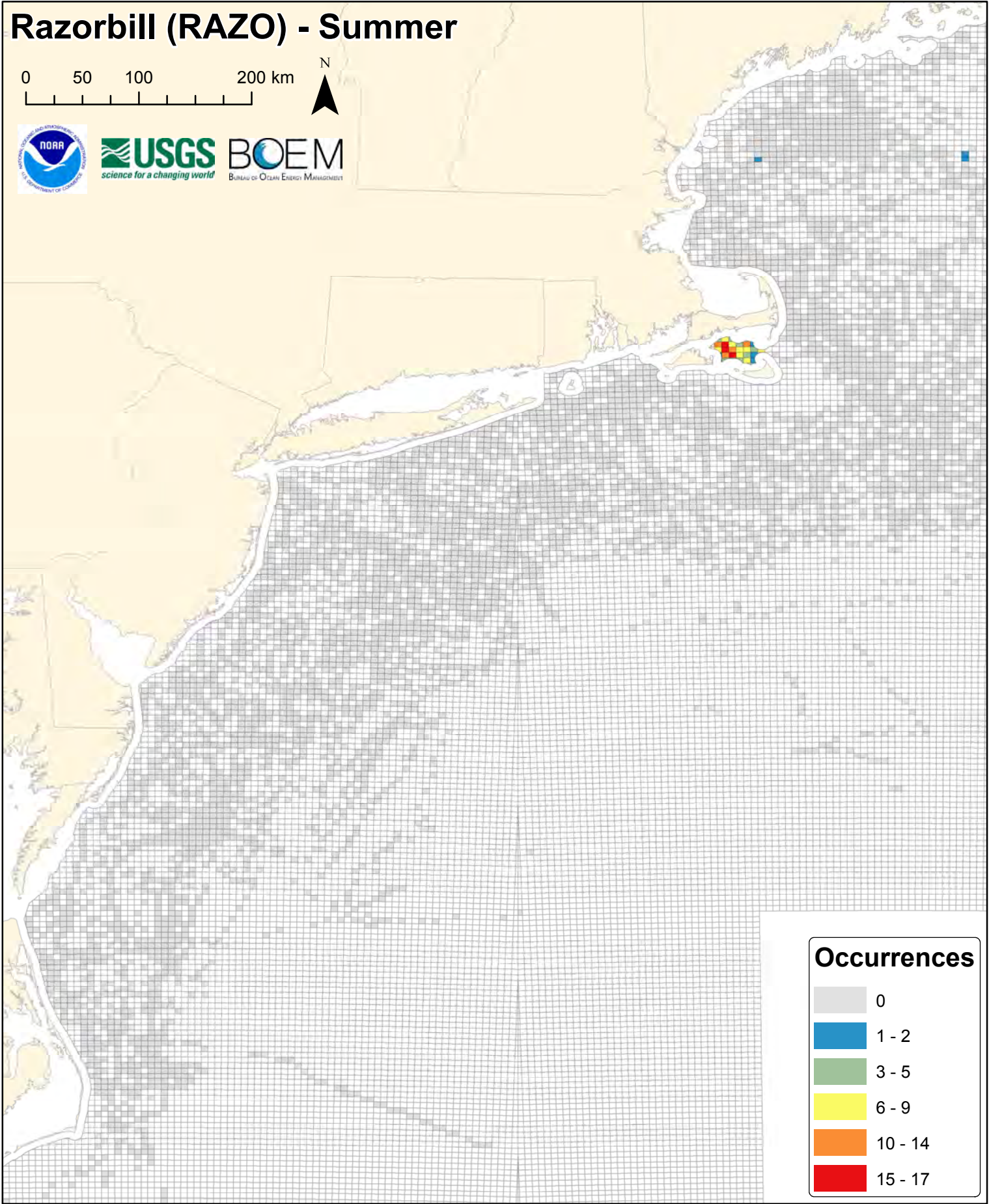
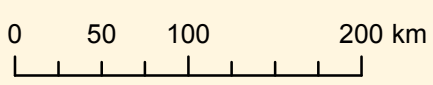


Long-tailed Duck (LTDU) - Summer Conditional Model (Non-zero Counts)



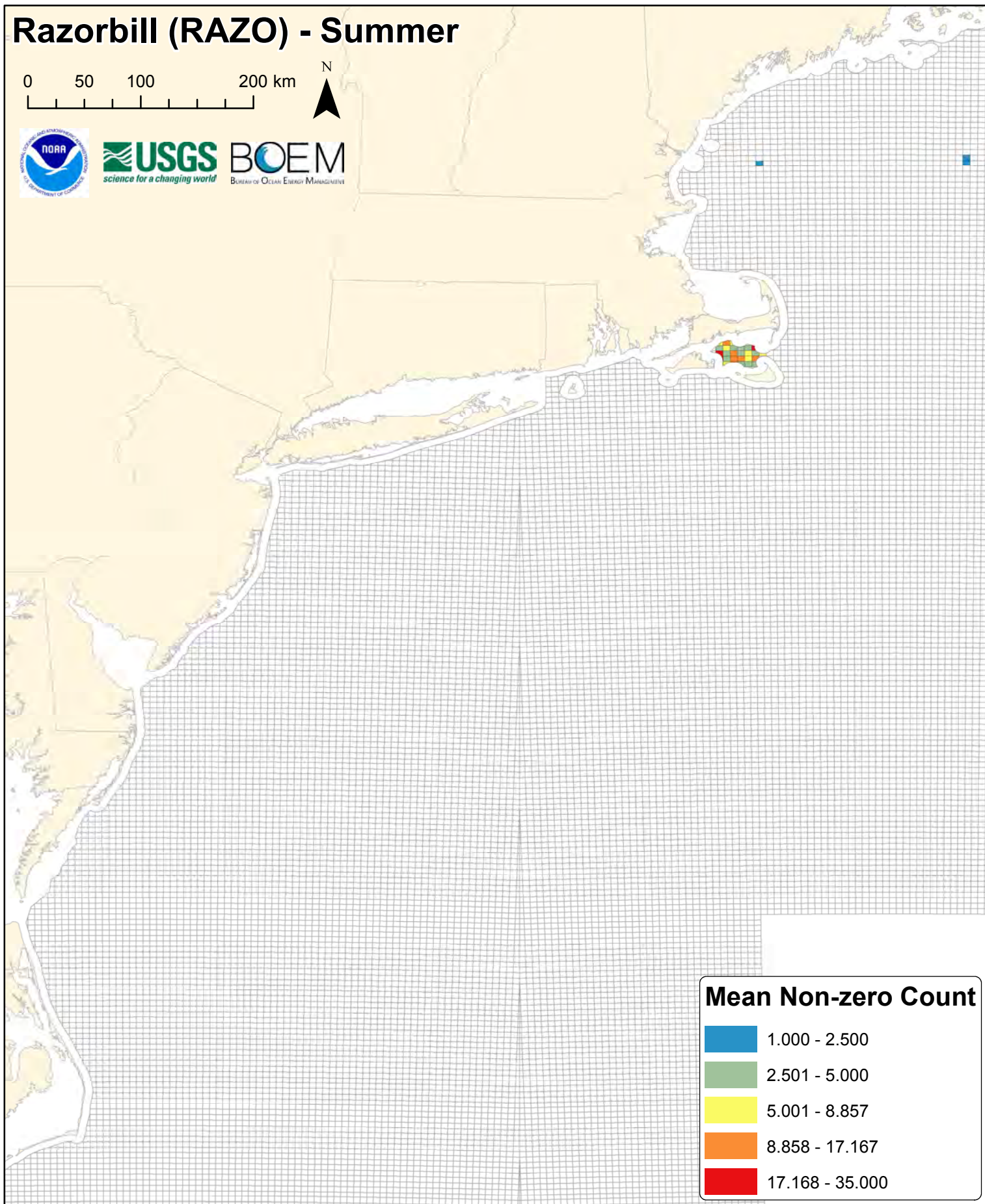
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Razorbill (RAZO) - Summer

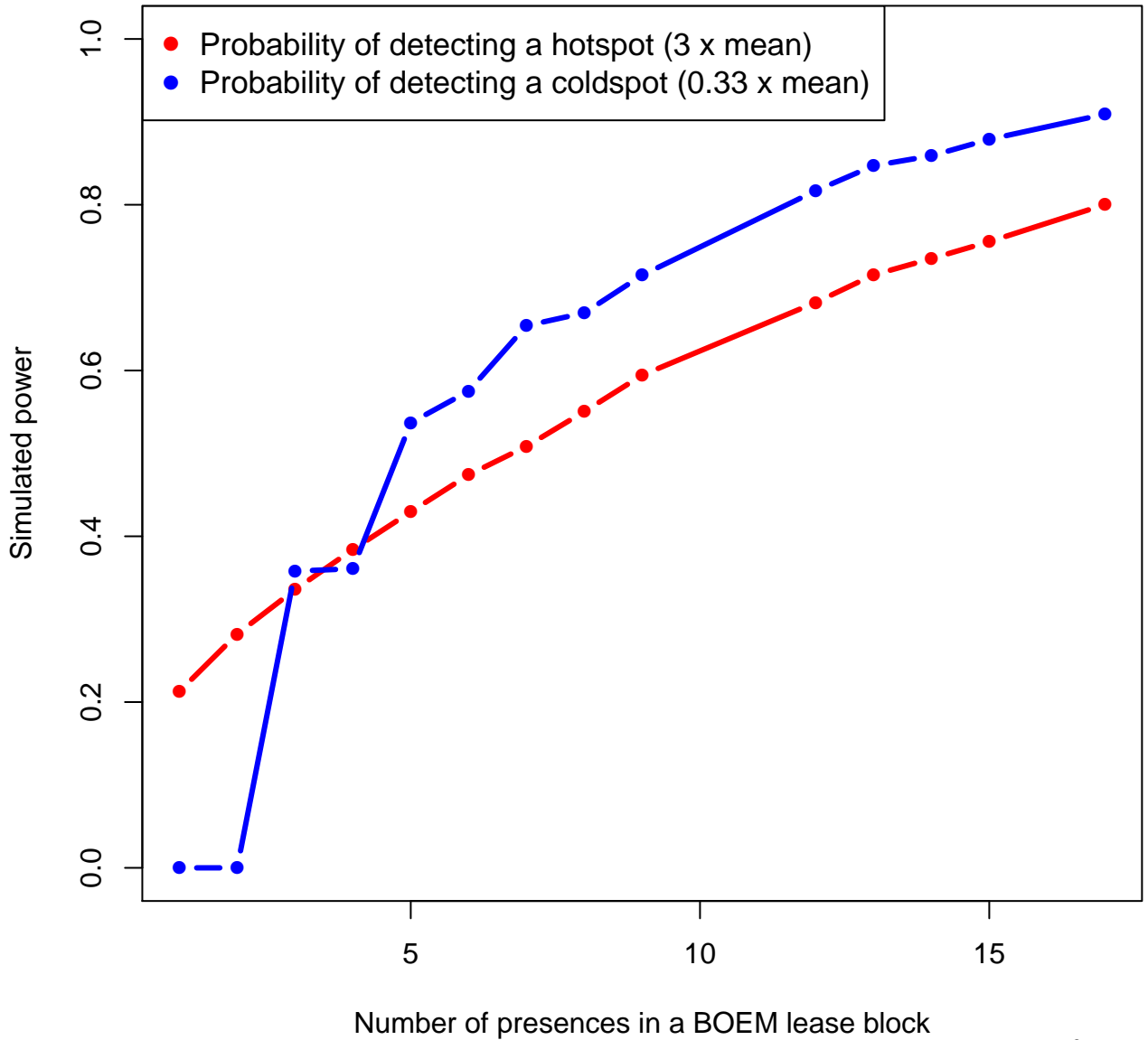


Razorbill (RAZO) - Summer

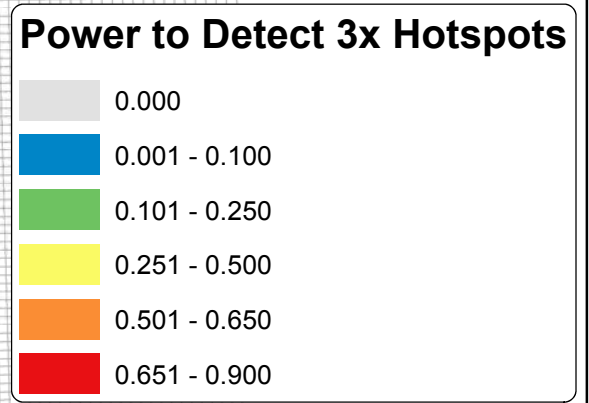
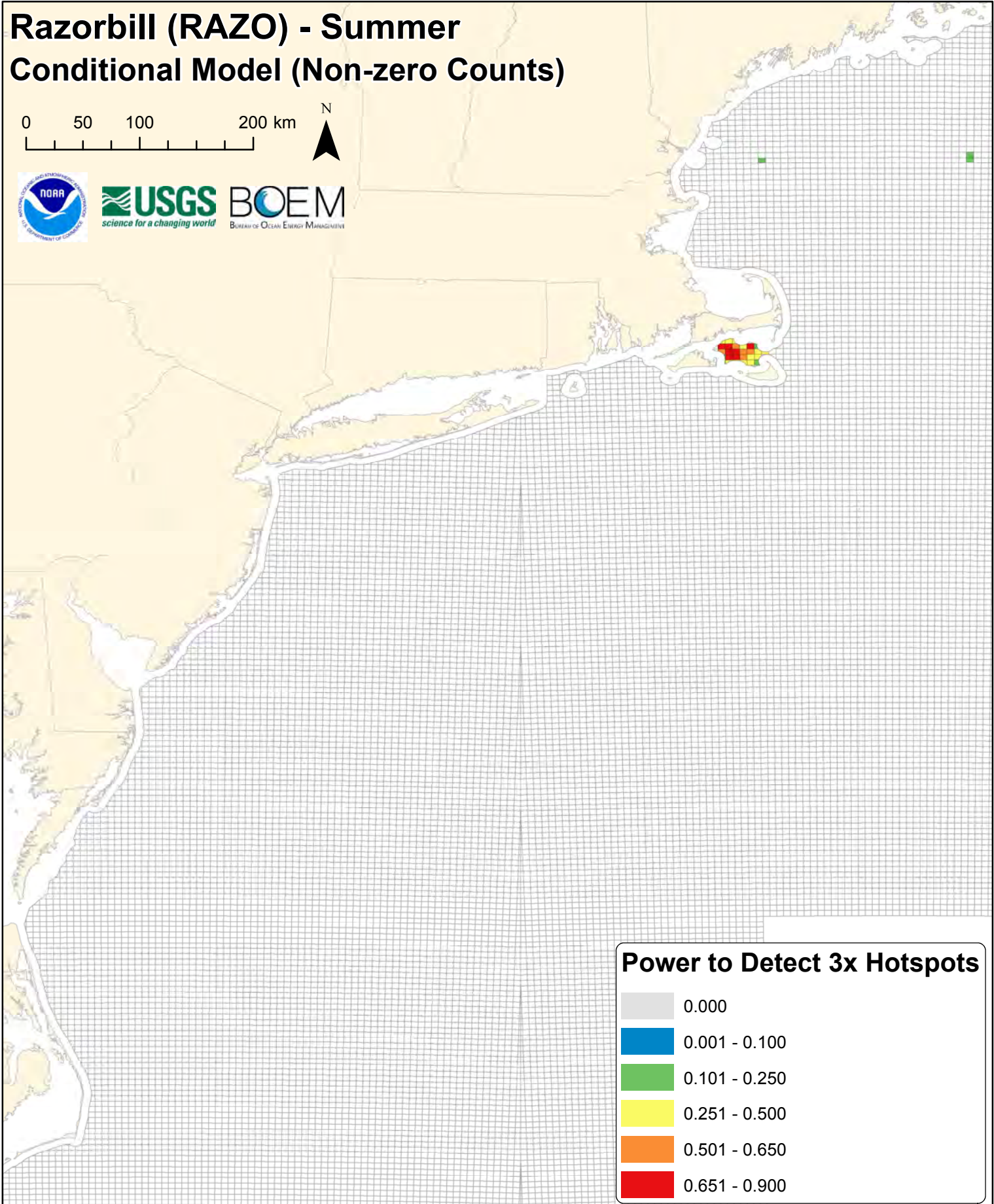
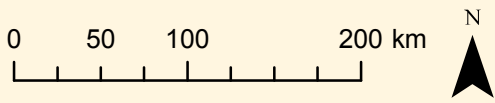
0 50 100 200 km



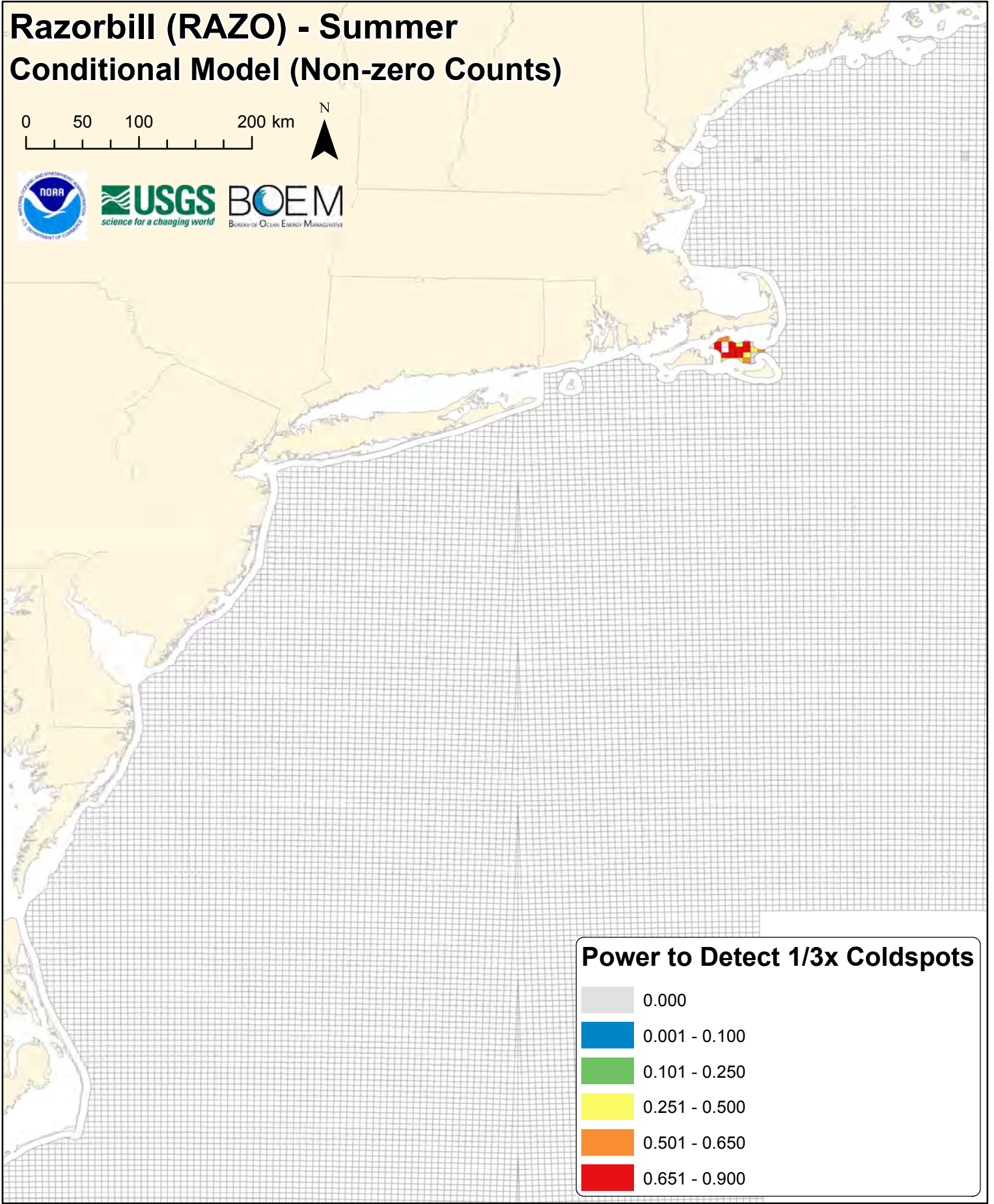
razo



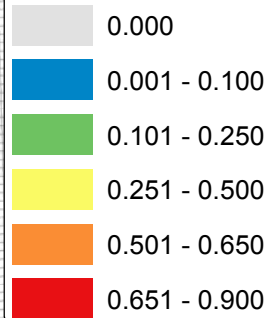
Razorbill (RAZO) - Summer Conditional Model (Non-zero Counts)



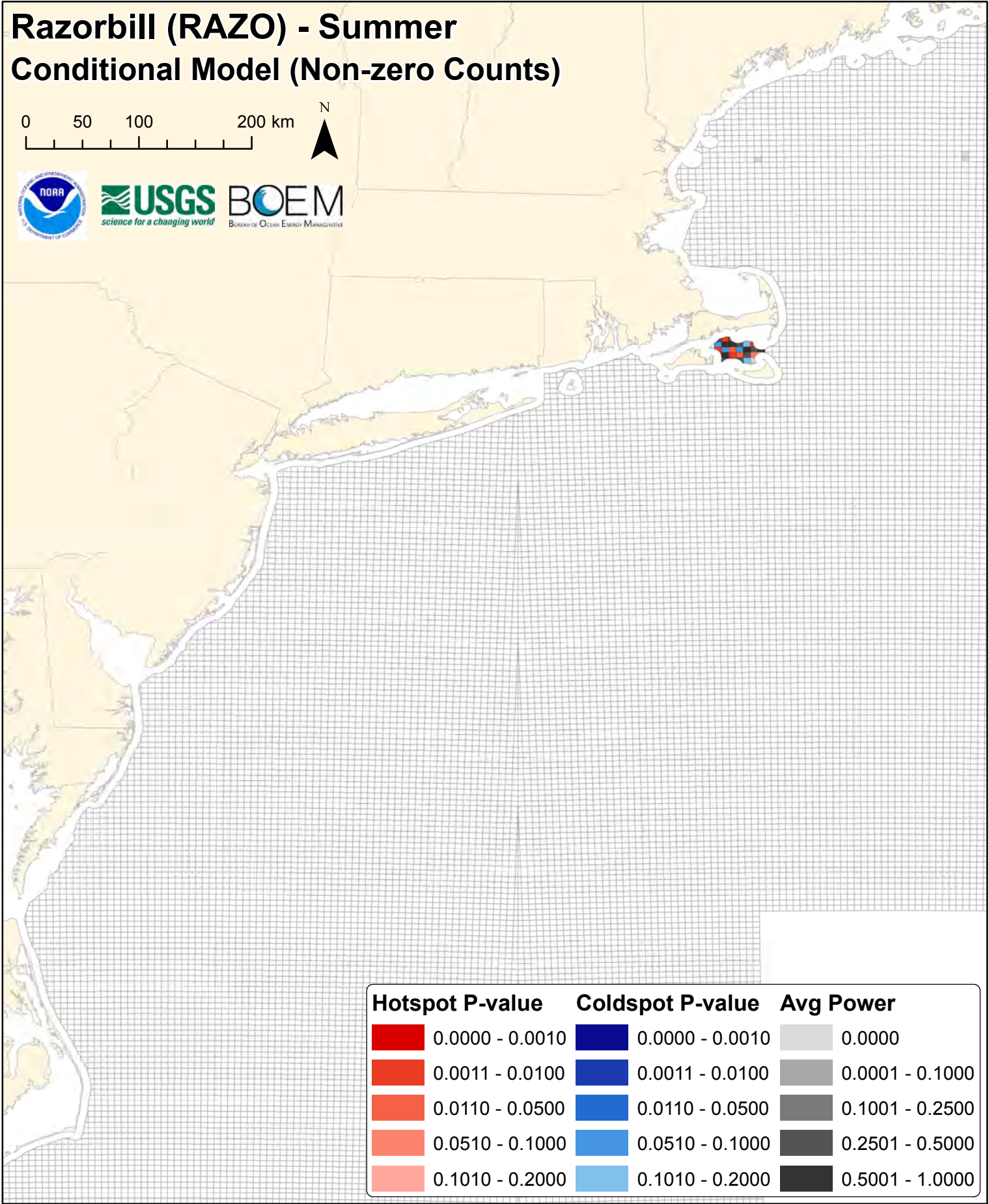
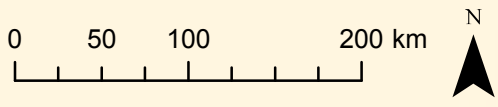
Razorbill (RAZO) - Summer Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots



Razorbill (RAZO) - Summer Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

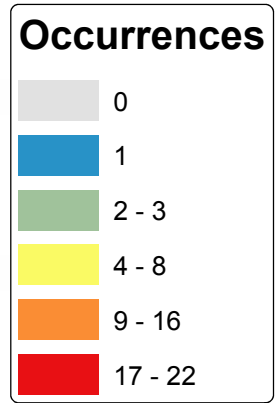
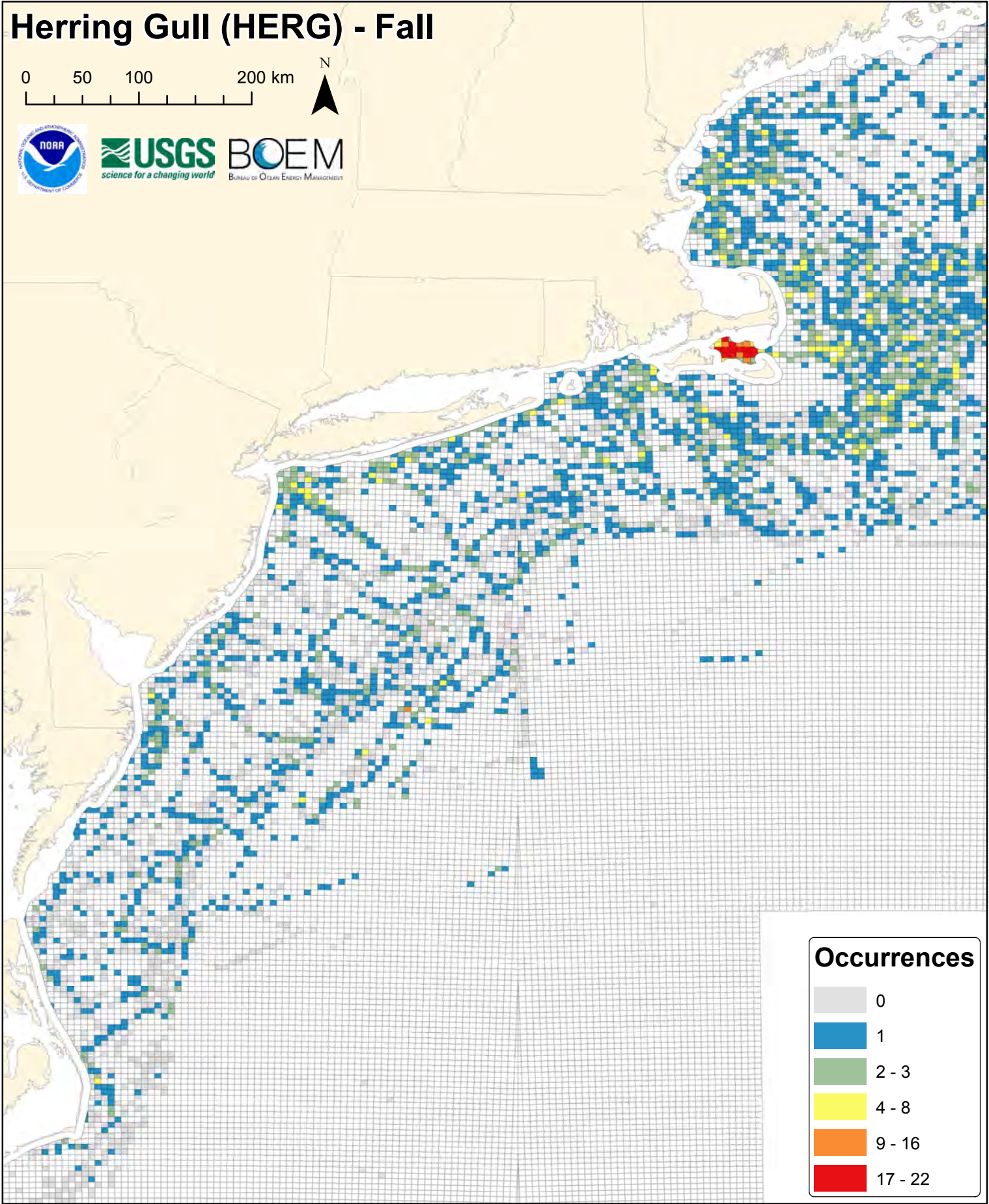
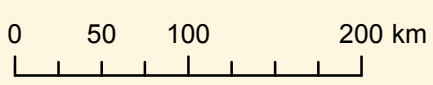
DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

SECTION II. Species-specific Power Analysis Maps and Figures

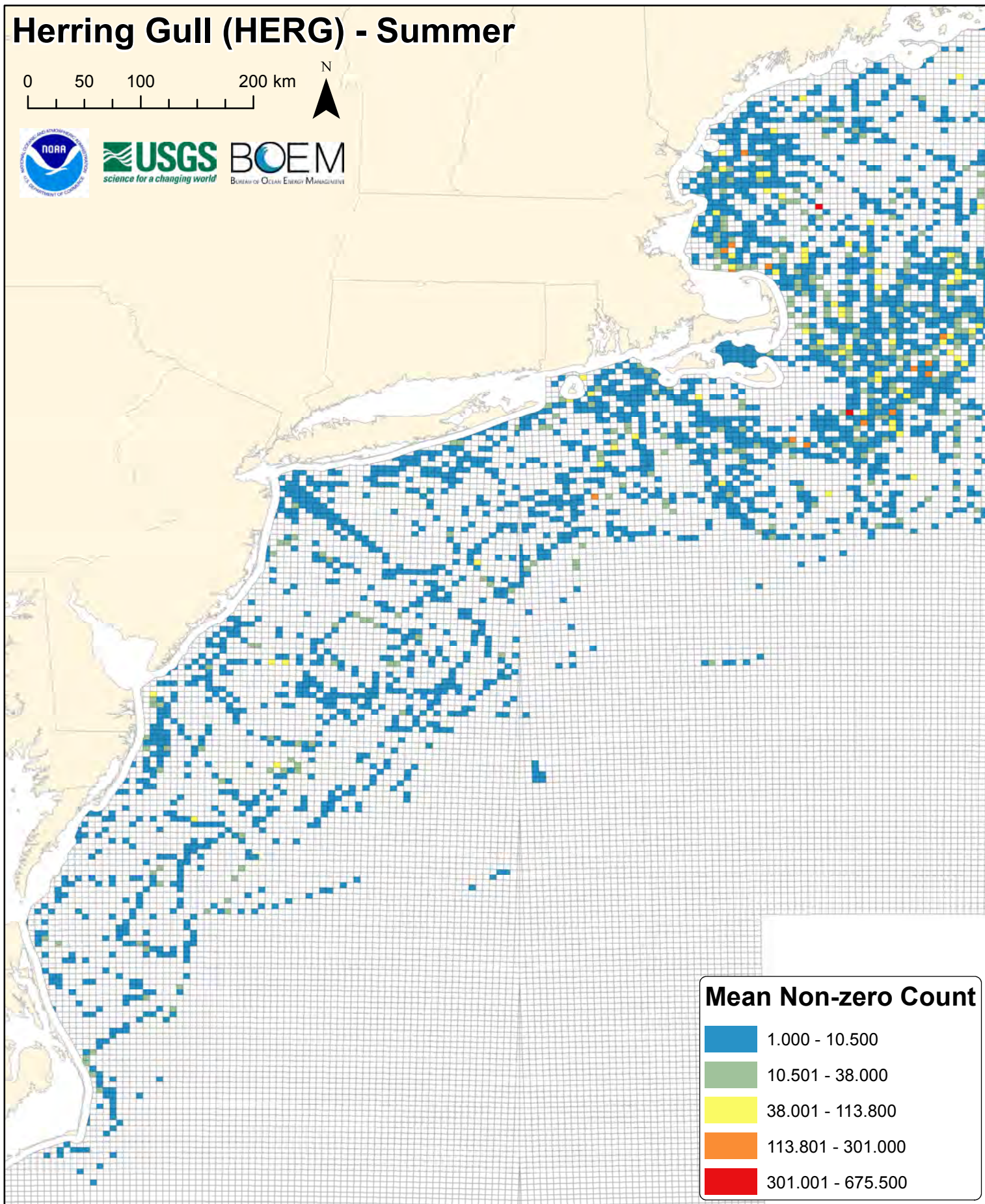
Figures F144-F215. Fall power analysis maps and figures (12 species x 6 figures per species).

Herring Gull (HERG) - Fall



Herring Gull (HERG) - Summer

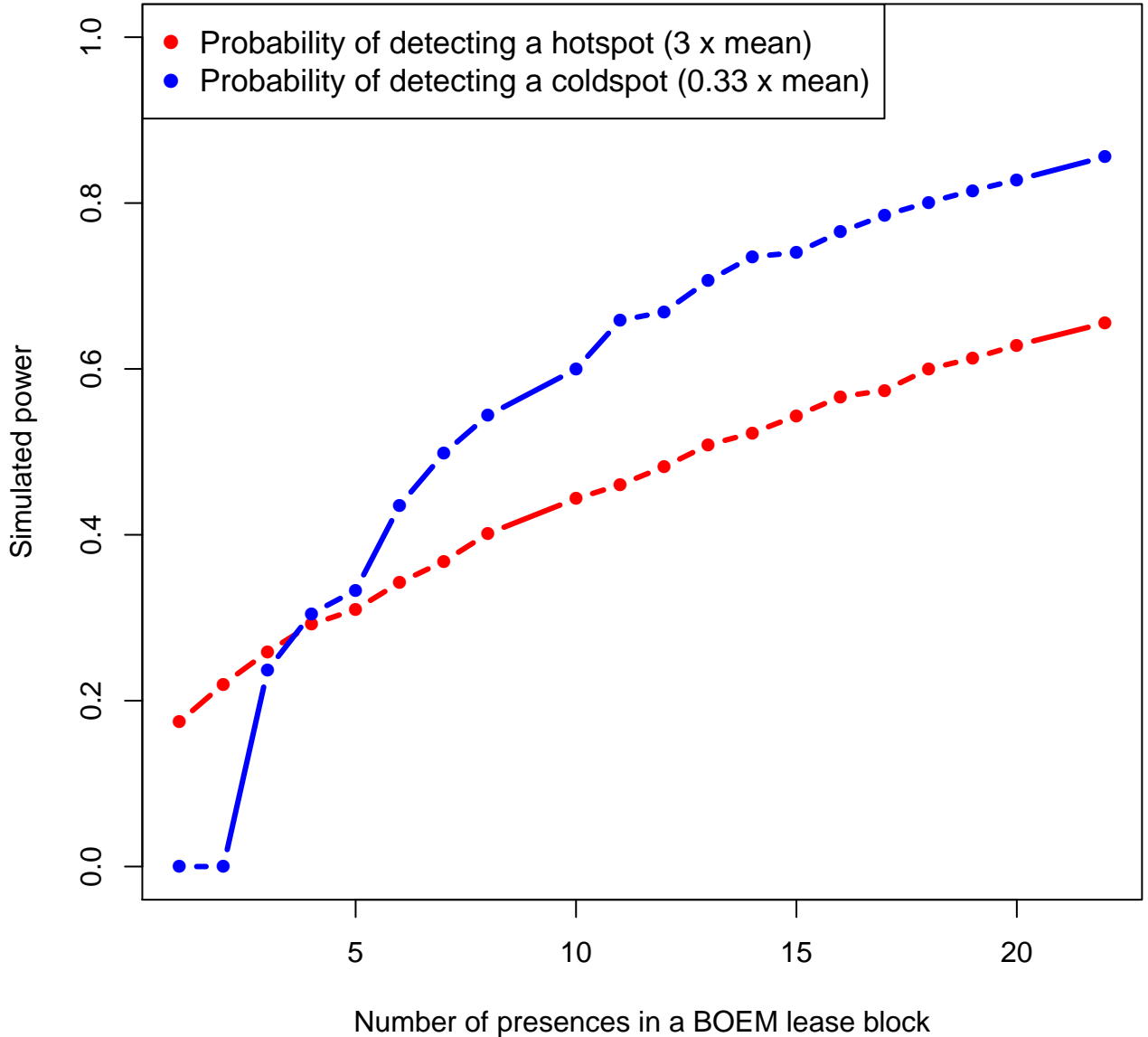
0 50 100 200 km



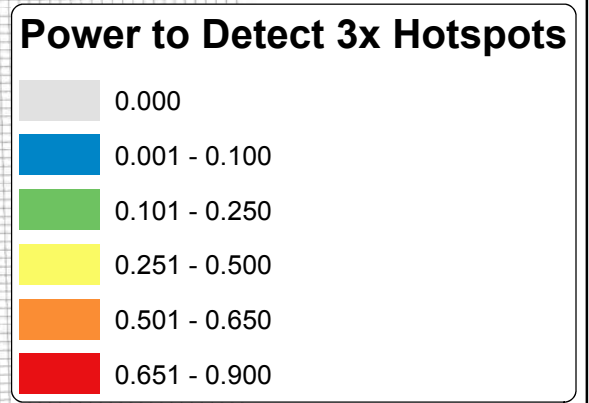
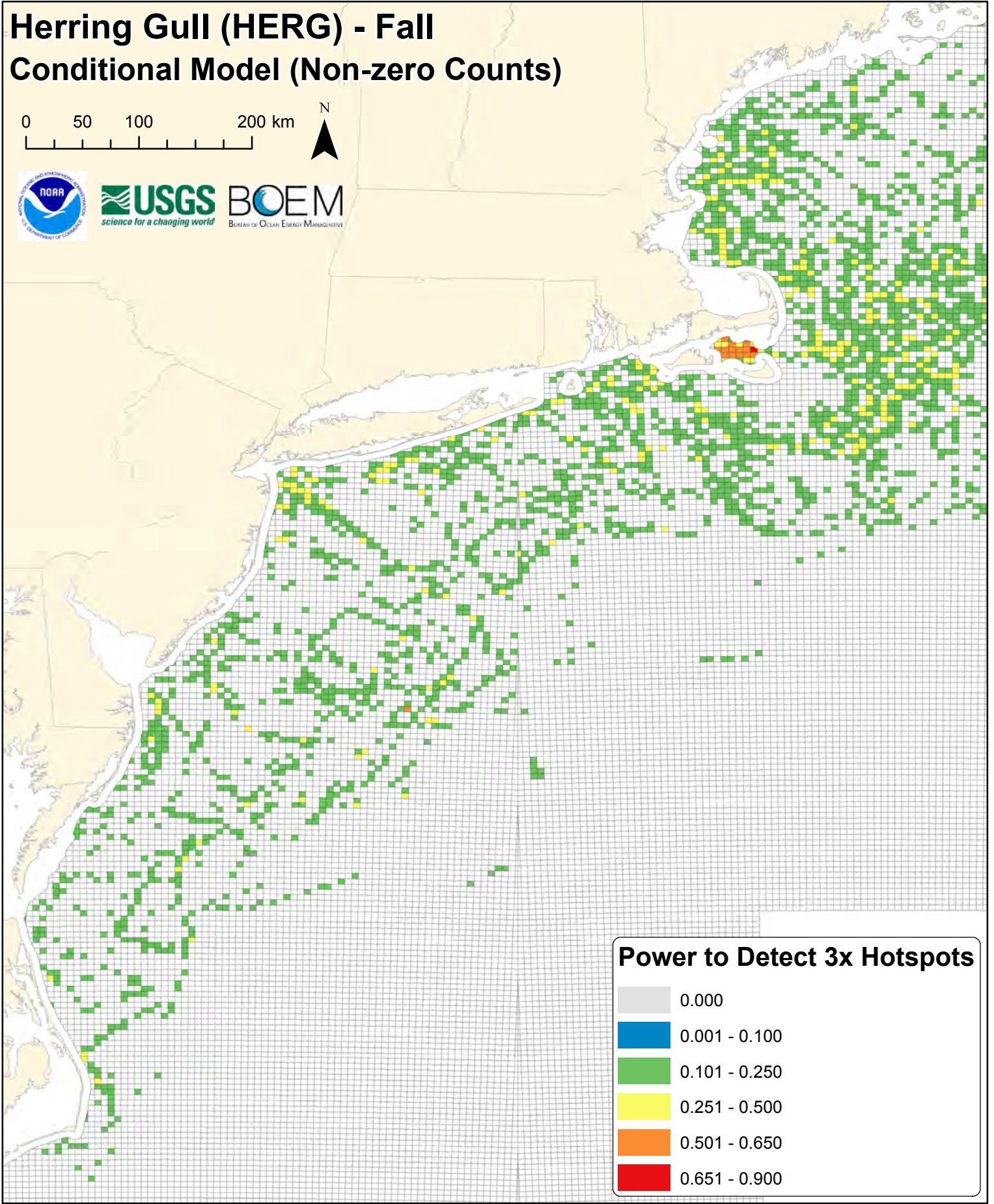
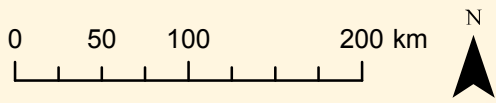
Mean Non-zero Count

- 1.000 - 10.500
- 10.501 - 38.000
- 38.001 - 113.800
- 113.801 - 301.000
- 301.001 - 675.500

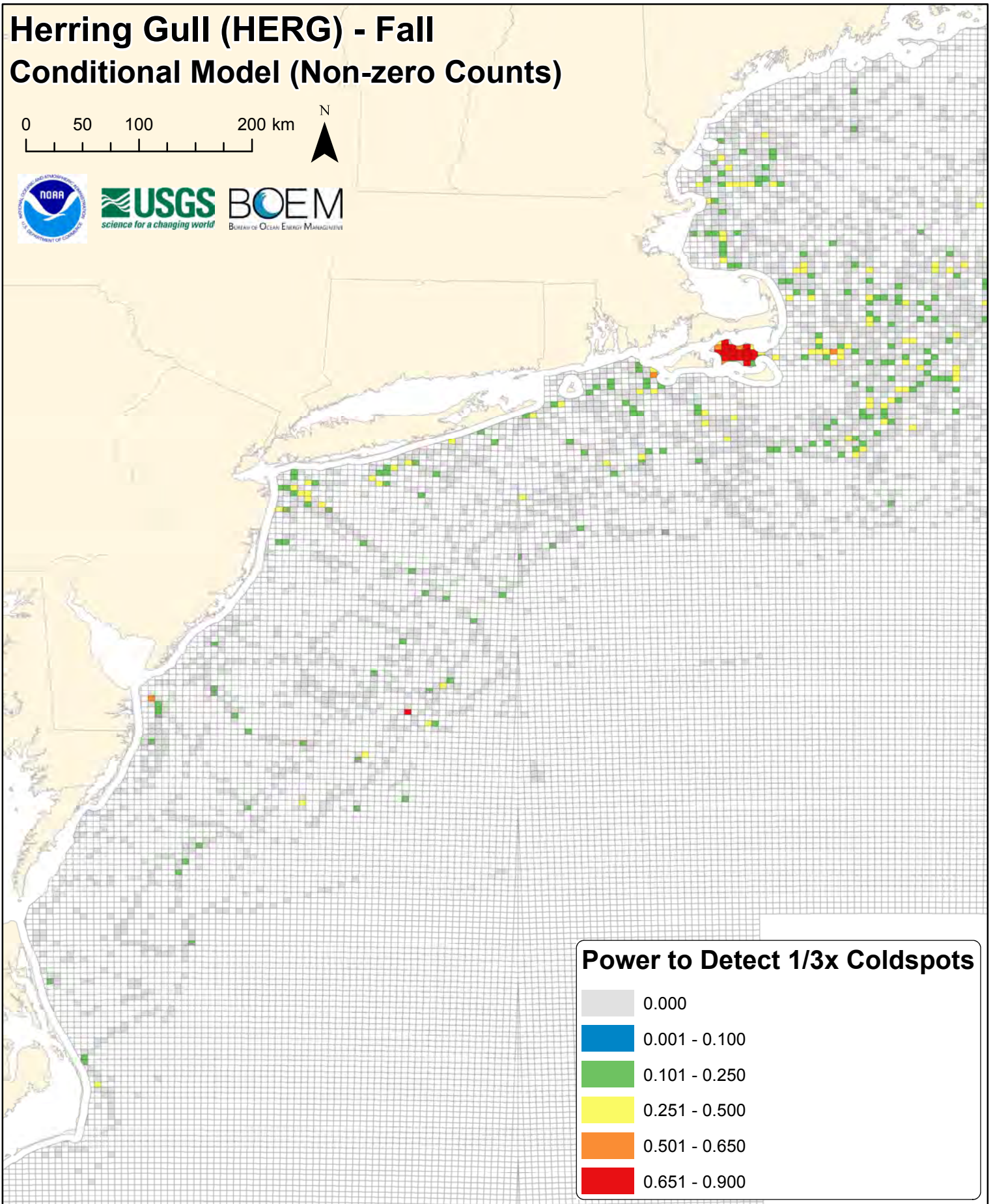
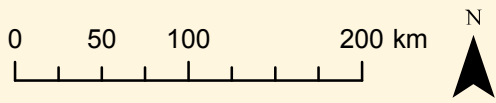
herg



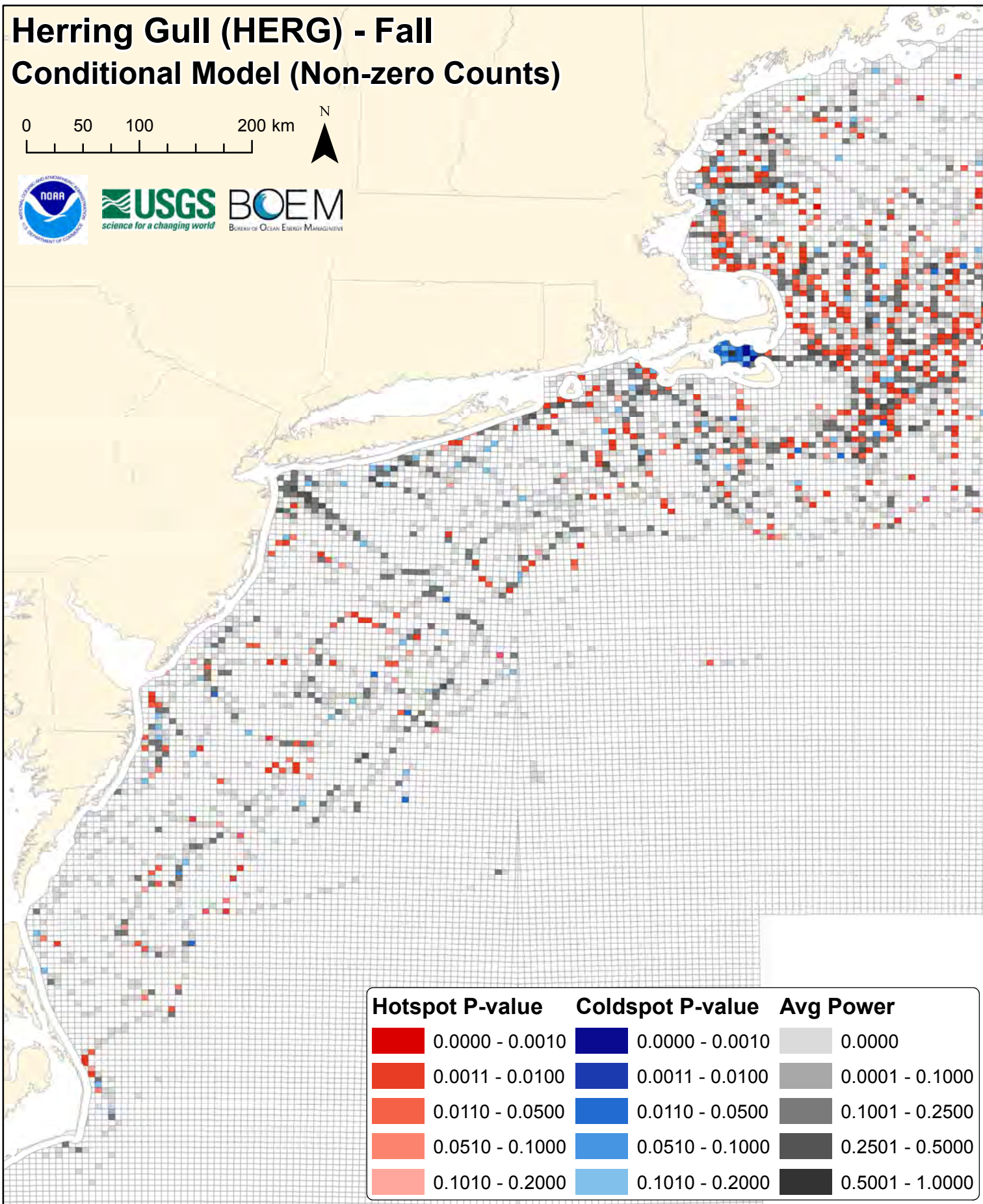
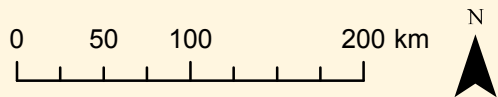
Herring Gull (HERG) - Fall Conditional Model (Non-zero Counts)


















Herring Gull (HERG) - Fall Conditional Model (Non-zero Counts)



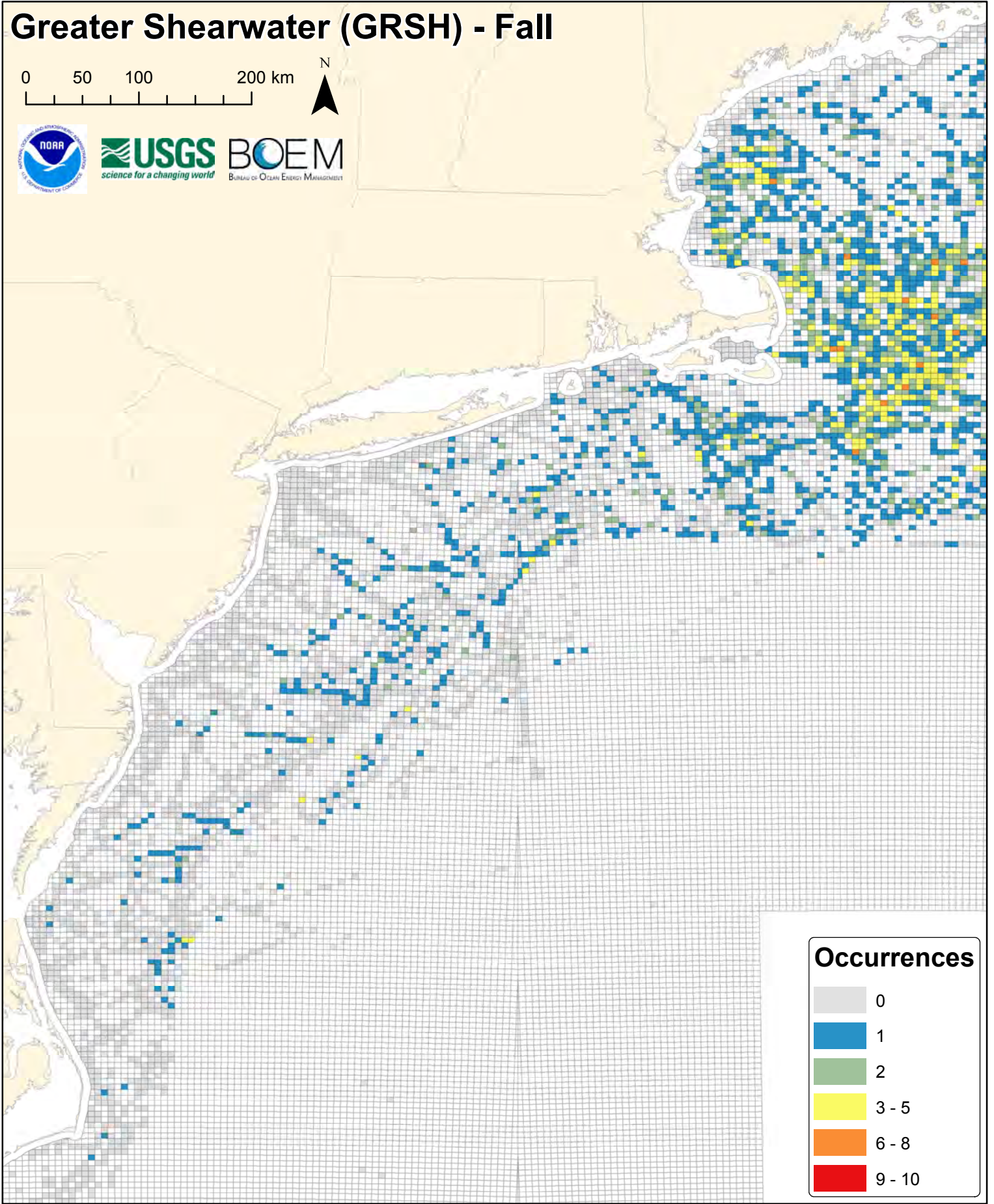
Herring Gull (HERG) - Fall Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Greater Shearwater (GRSH) - Fall

0 50 100 200 km

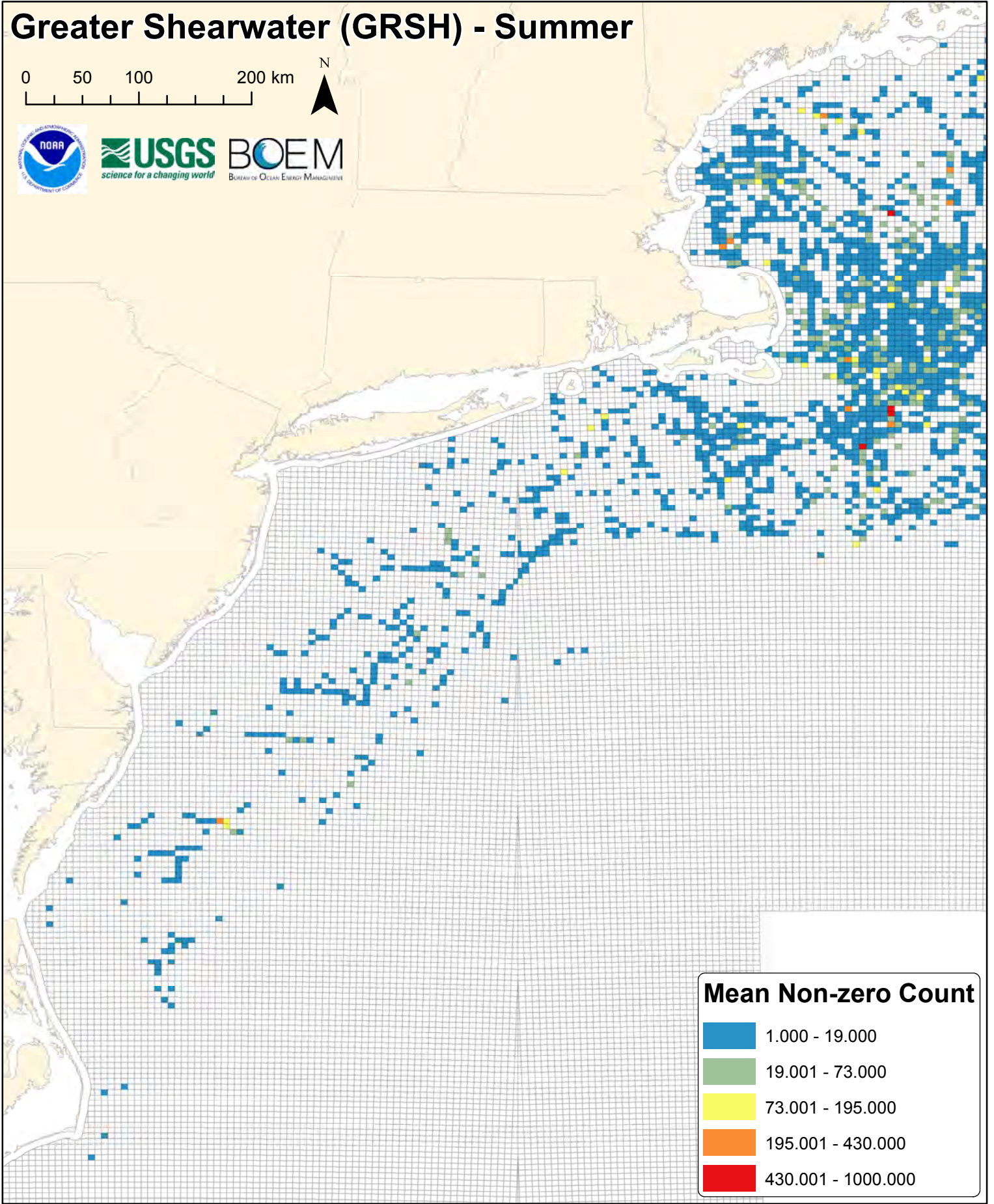


Occurrences






0
1
2
3 - 5
6 - 8
9 - 10

Greater Shearwater (GRSH) - Summer

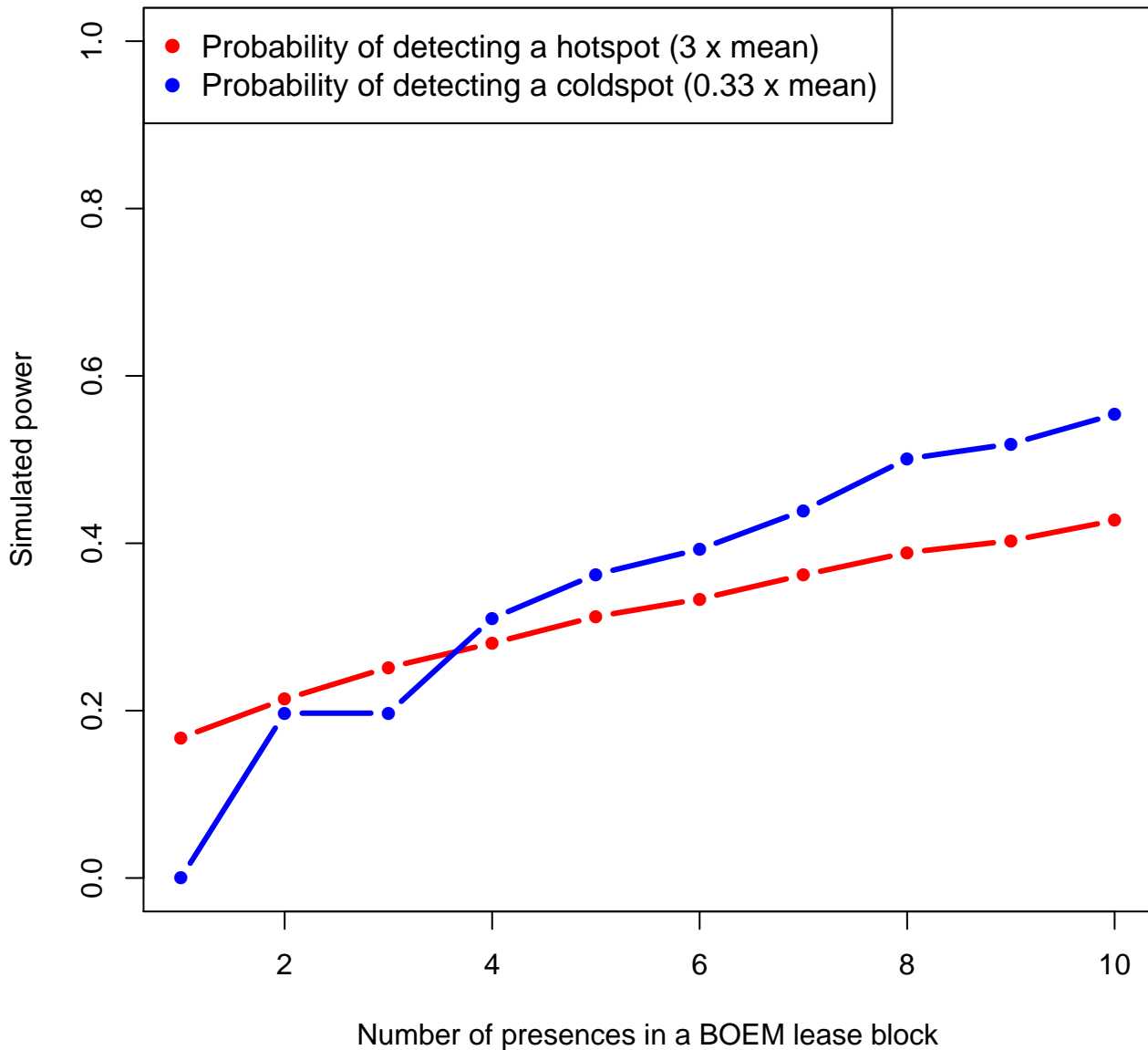
0 50 100 200 km



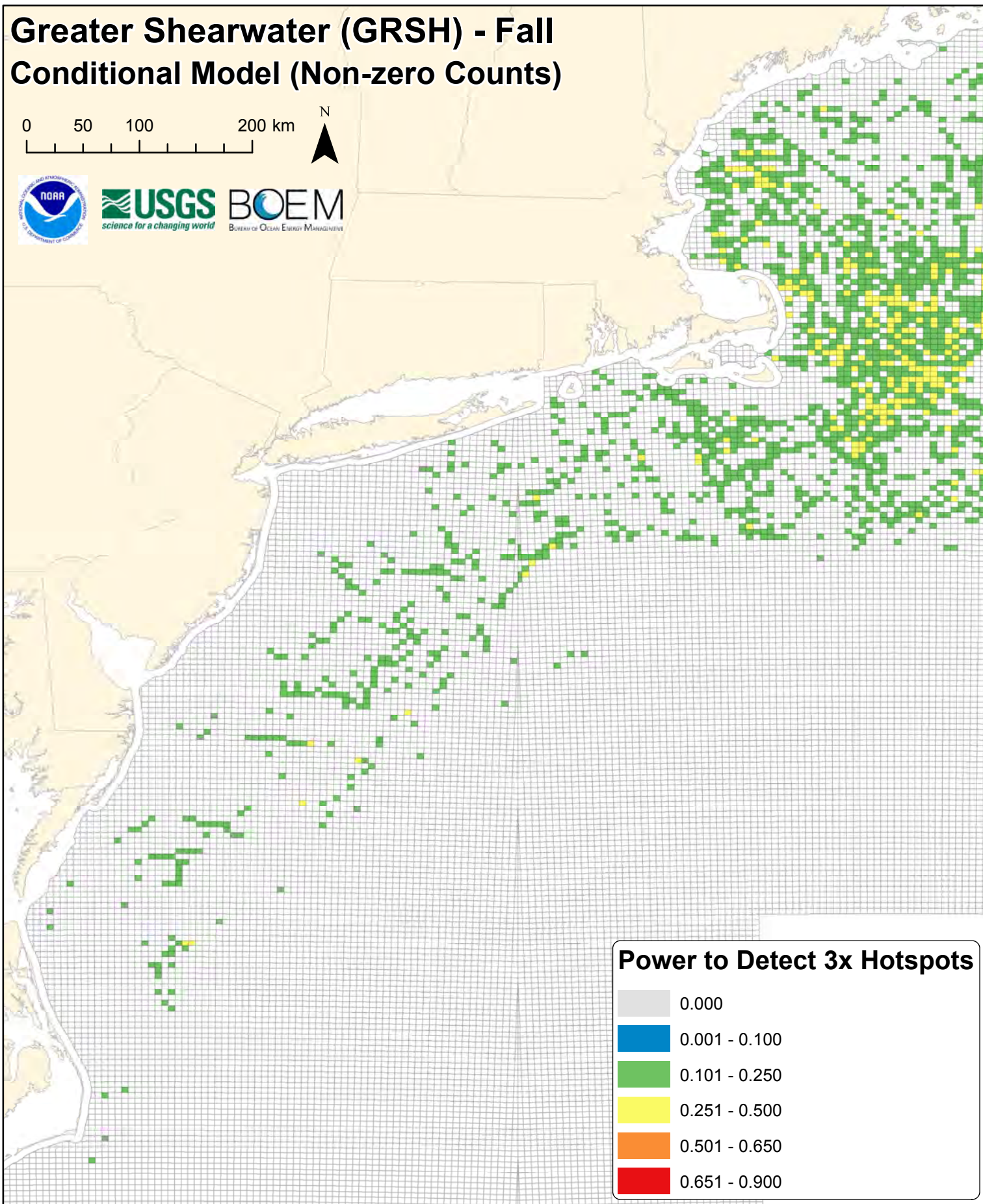
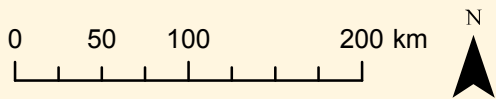
Mean Non-zero Count

	1.000 - 19.000
	19.001 - 73.000
	73.001 - 195.000
	195.001 - 430.000
	430.001 - 1000.000

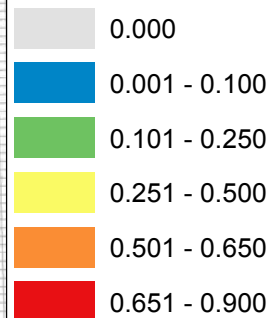
grsh



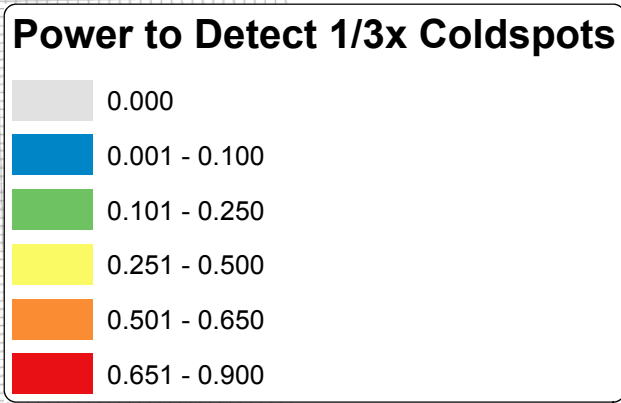
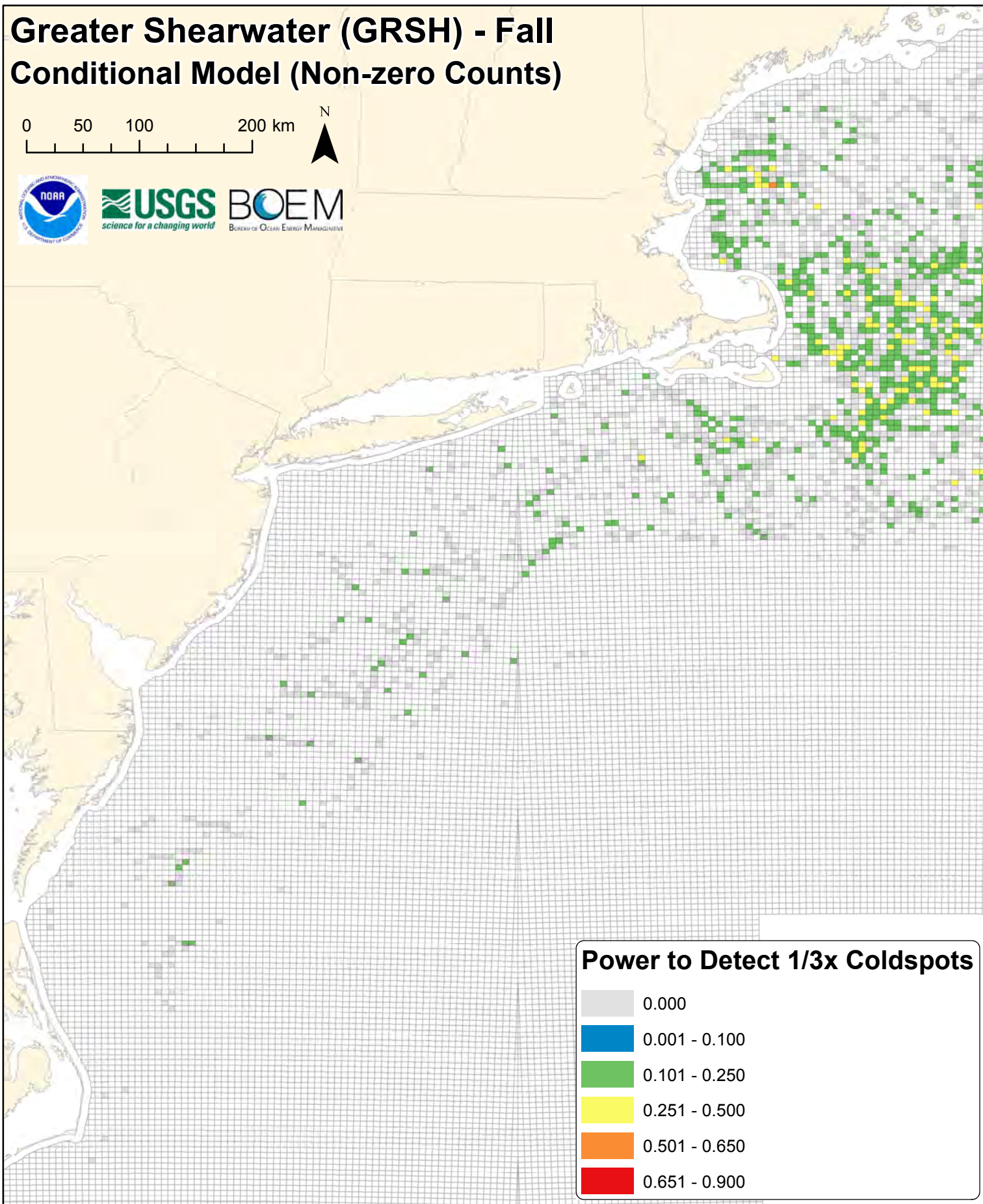
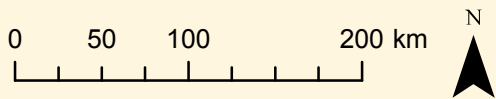
Greater Shearwater (GRSH) - Fall Conditional Model (Non-zero Counts)



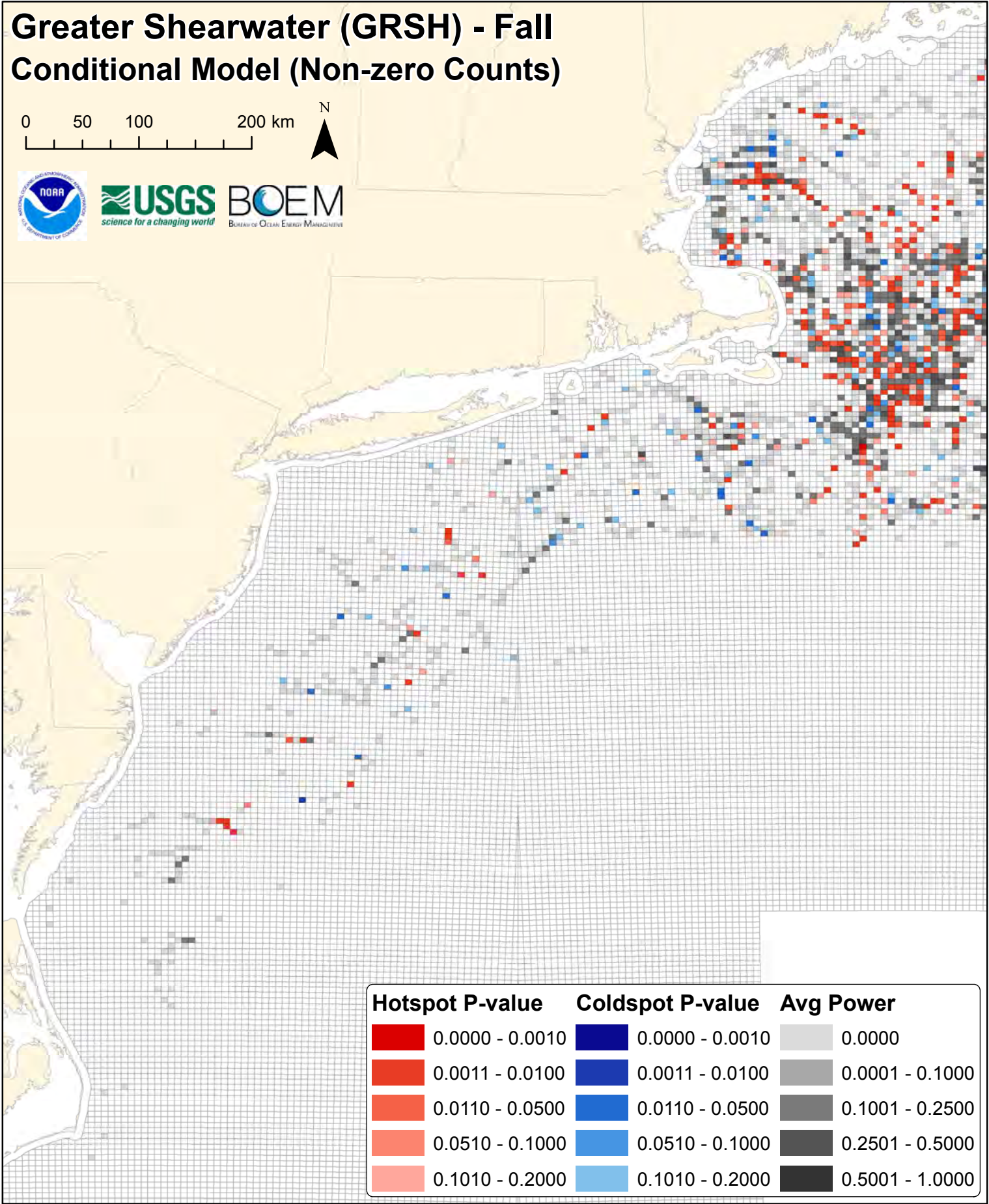
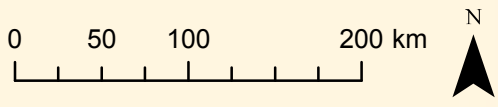
Power to Detect 3x Hotspots


















Greater Shearwater (GRSH) - Fall Conditional Model (Non-zero Counts)



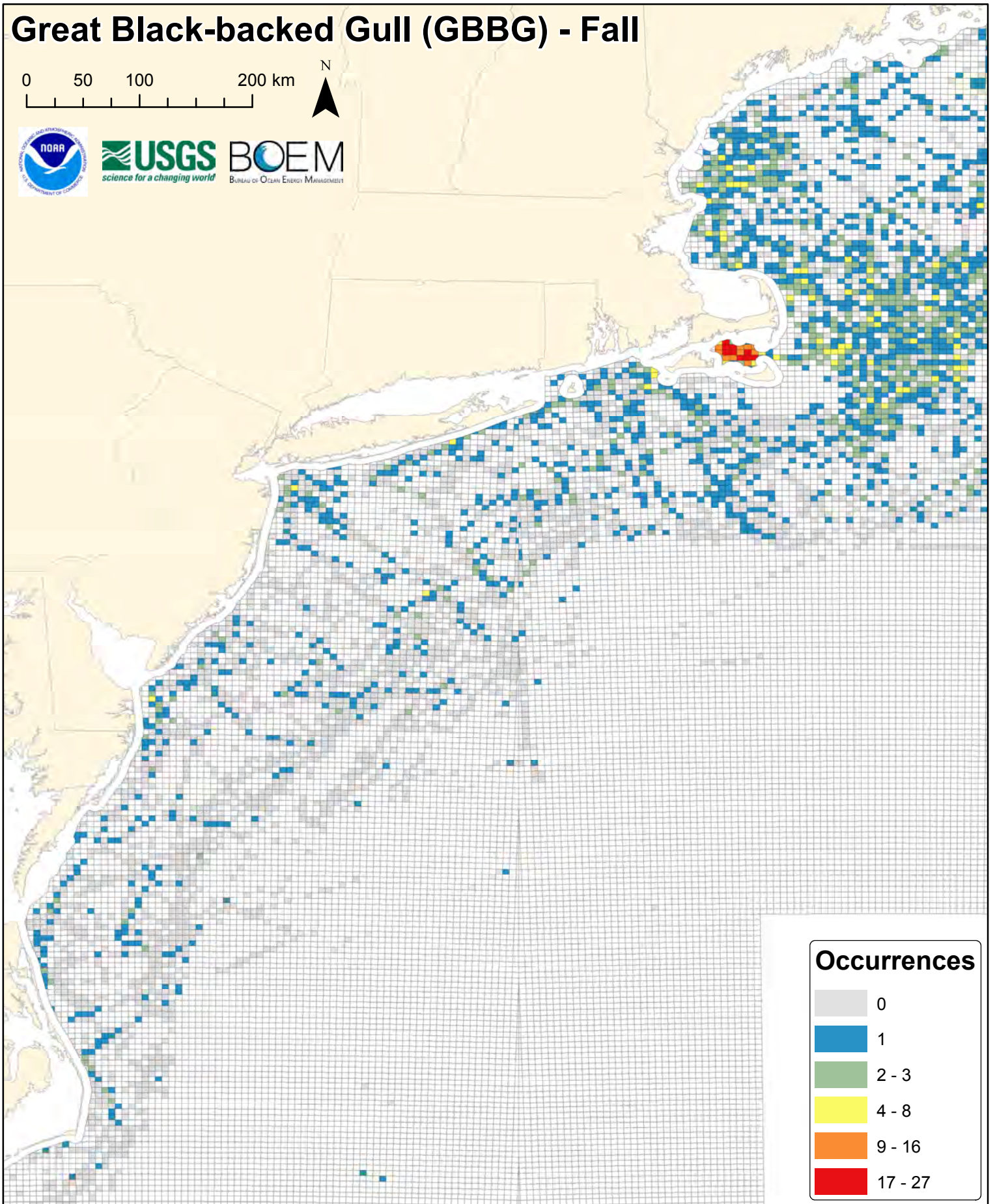
Greater Shearwater (GRSH) - Fall Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

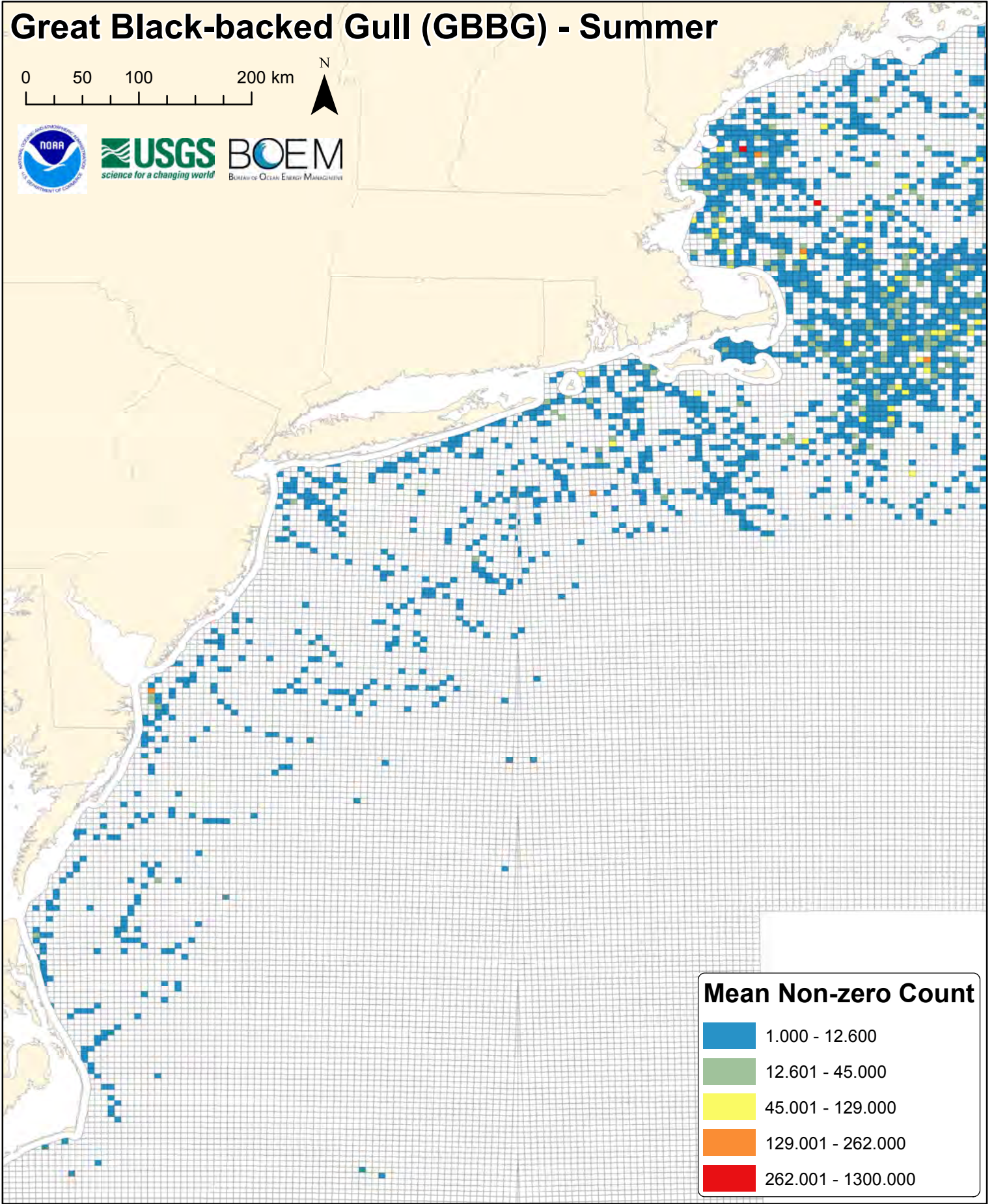
Great Black-backed Gull (GBBG) - Fall

0 50 100 200 km



Great Black-backed Gull (GBBG) - Summer

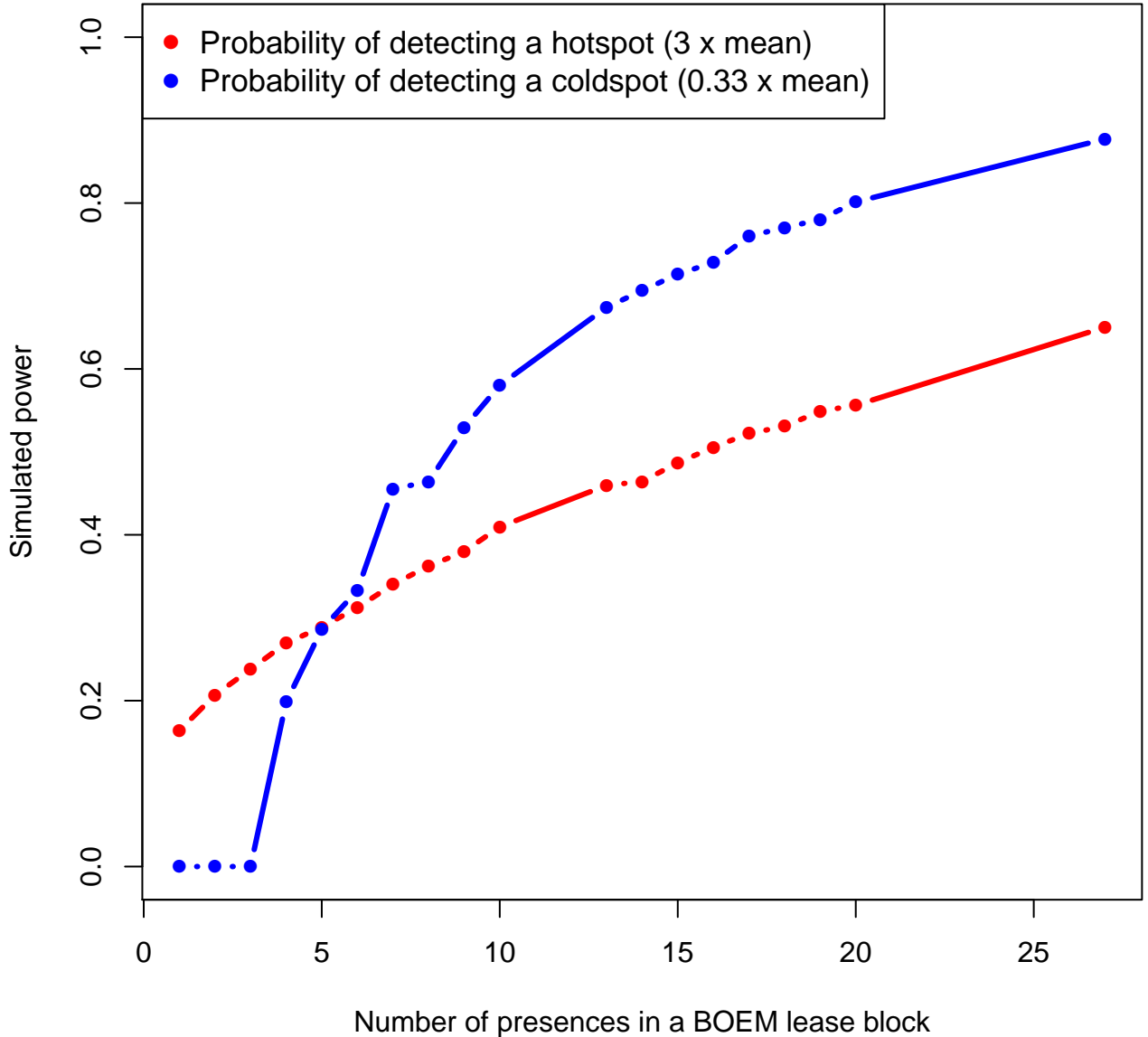
0 50 100 200 km



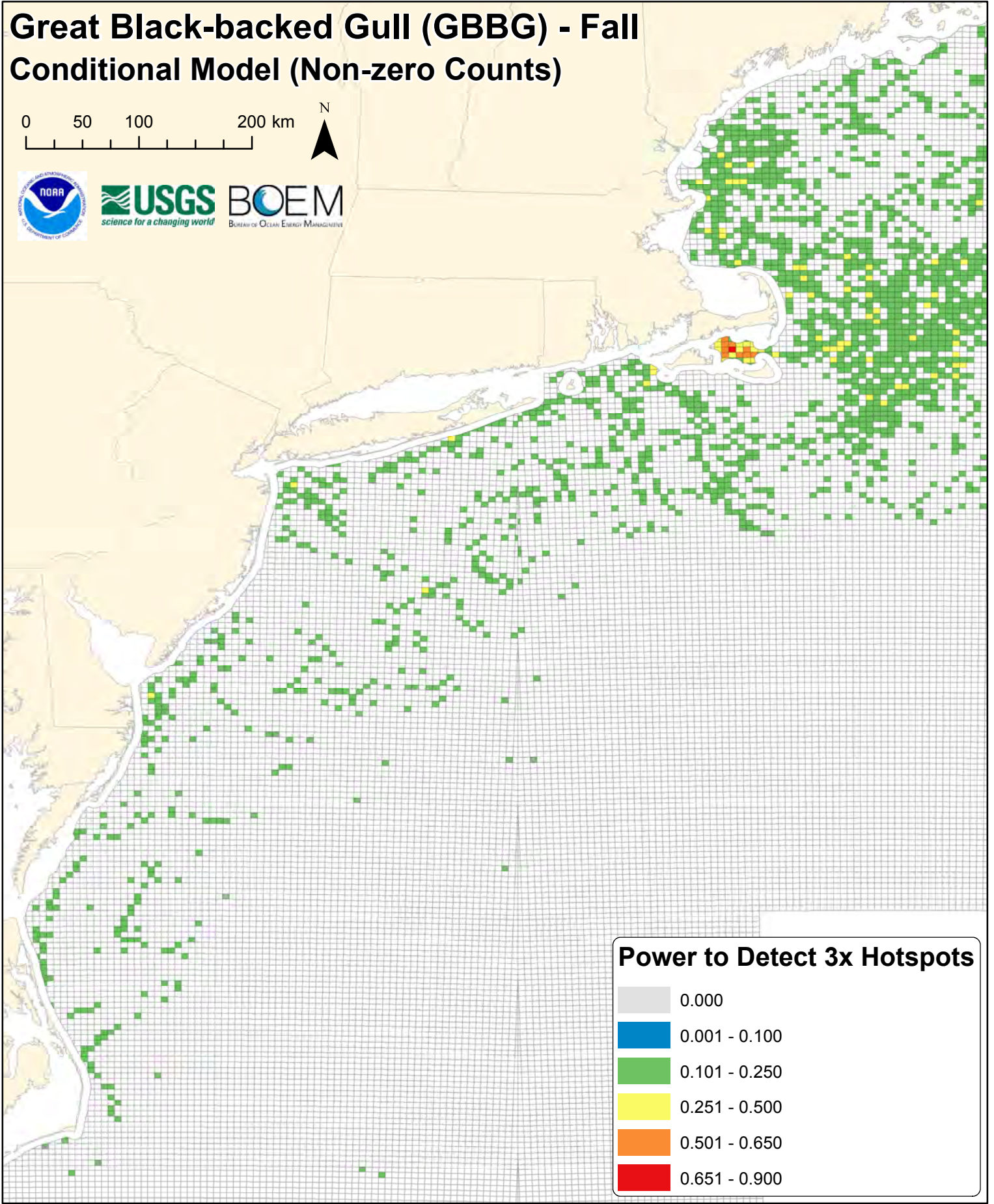
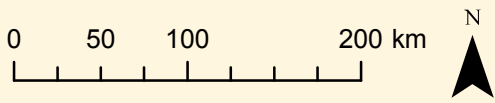
Mean Non-zero Count

Blue	1.000 - 12.600
Green	12.601 - 45.000
Yellow	45.001 - 129.000
Orange	129.001 - 262.000
Red	262.001 - 1300.000

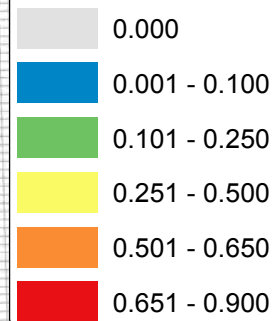
gbbg



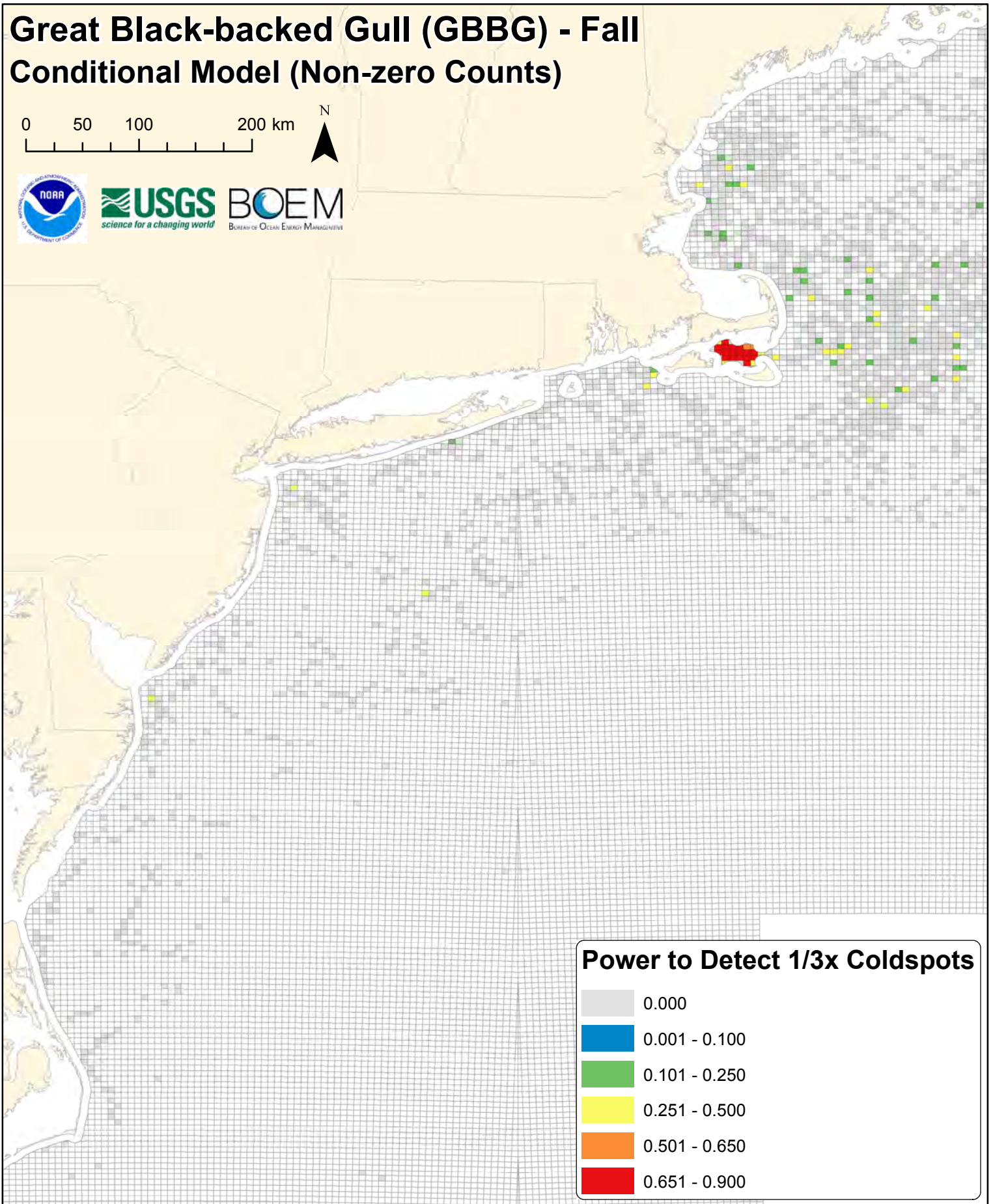
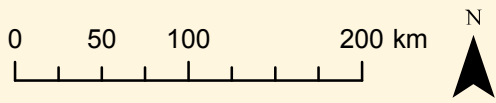
Great Black-backed Gull (GBBG) - Fall Conditional Model (Non-zero Counts)



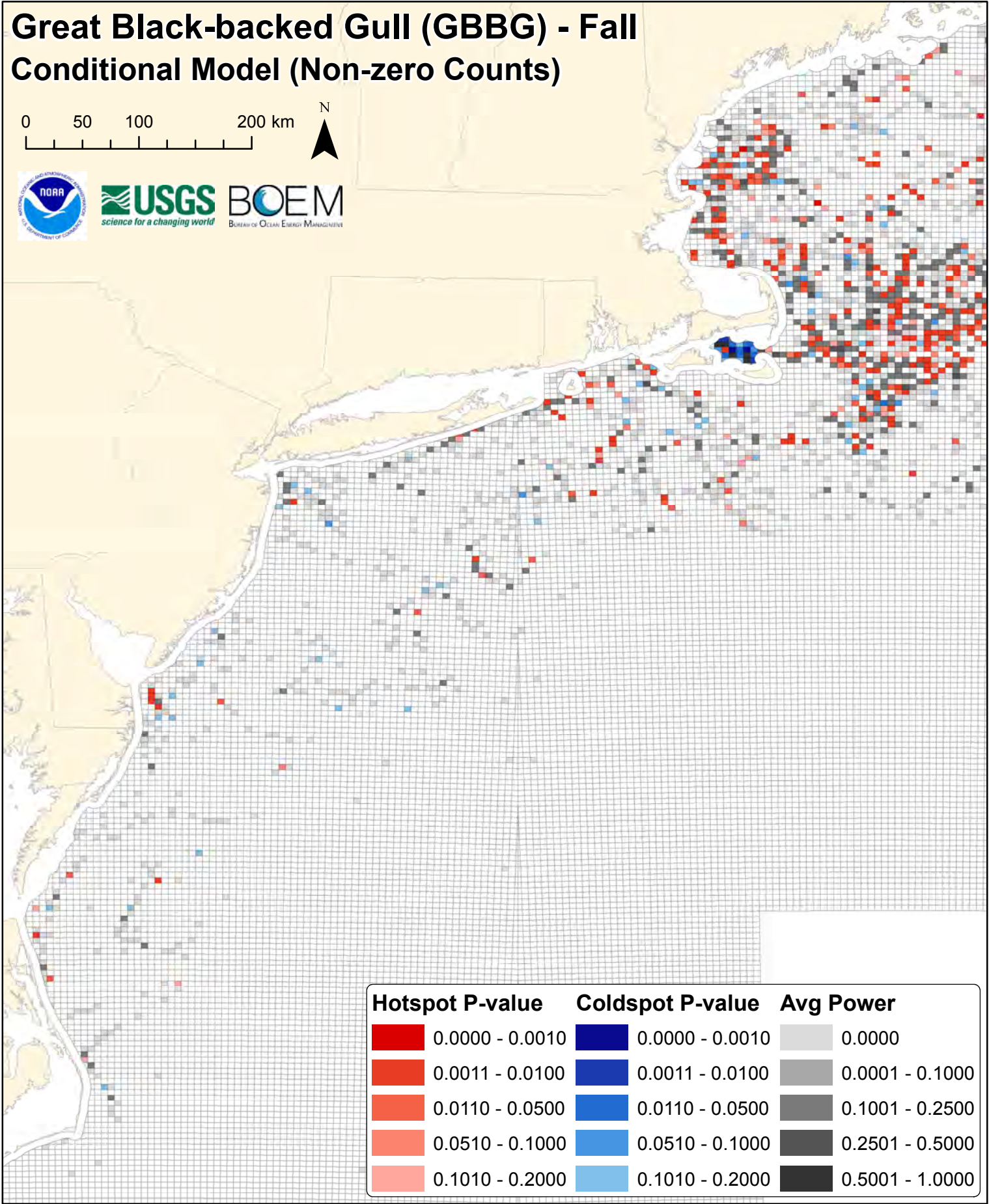
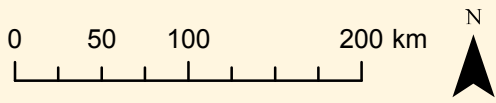
Power to Detect 3x Hotspots


















Great Black-backed Gull (GBBG) - Fall Conditional Model (Non-zero Counts)



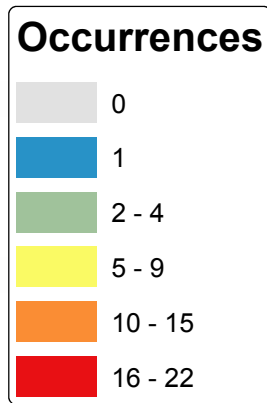
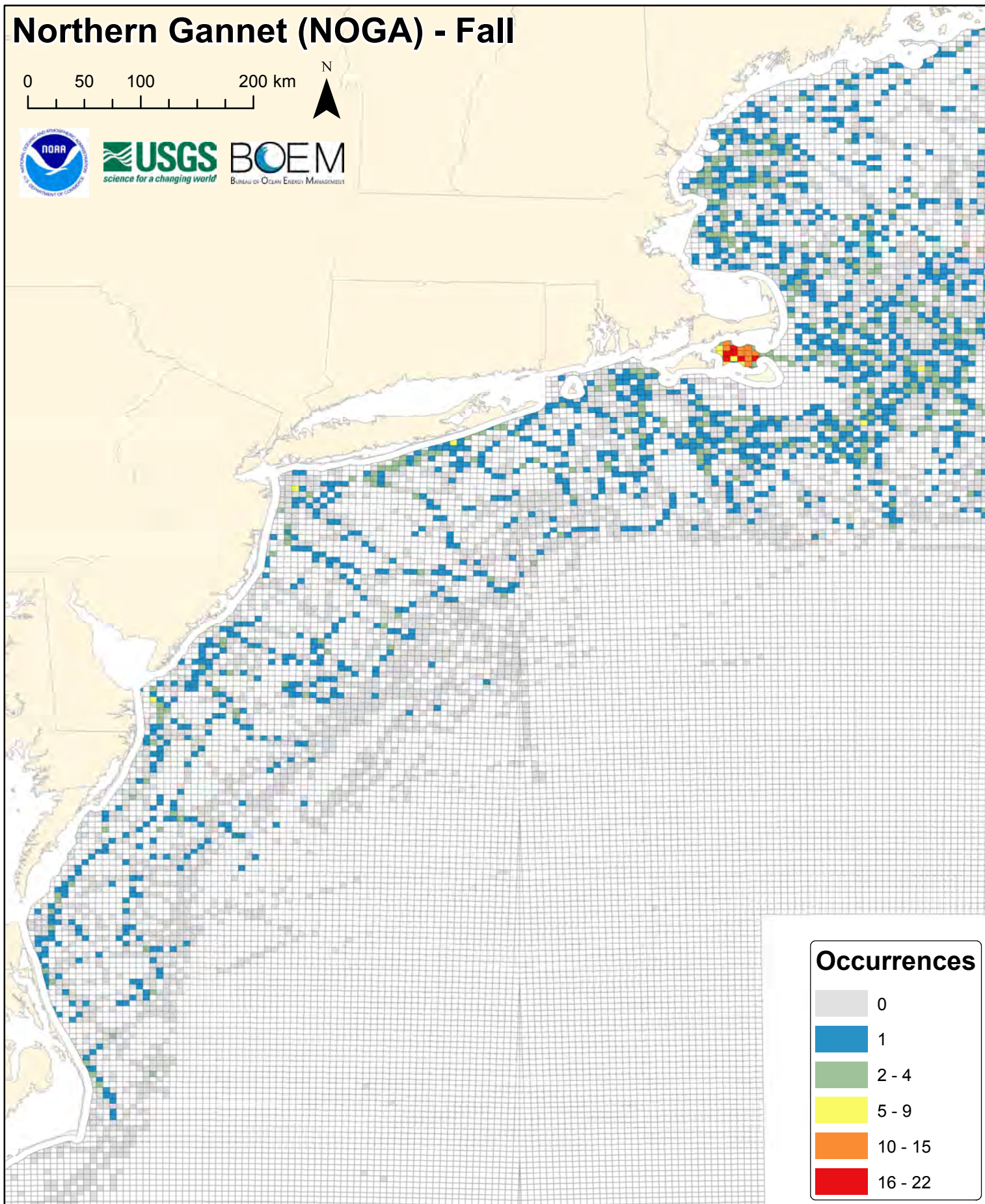
Great Black-backed Gull (GBBG) - Fall Conditional Model (Non-zero Counts)



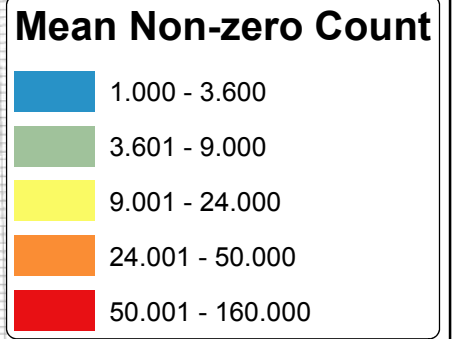
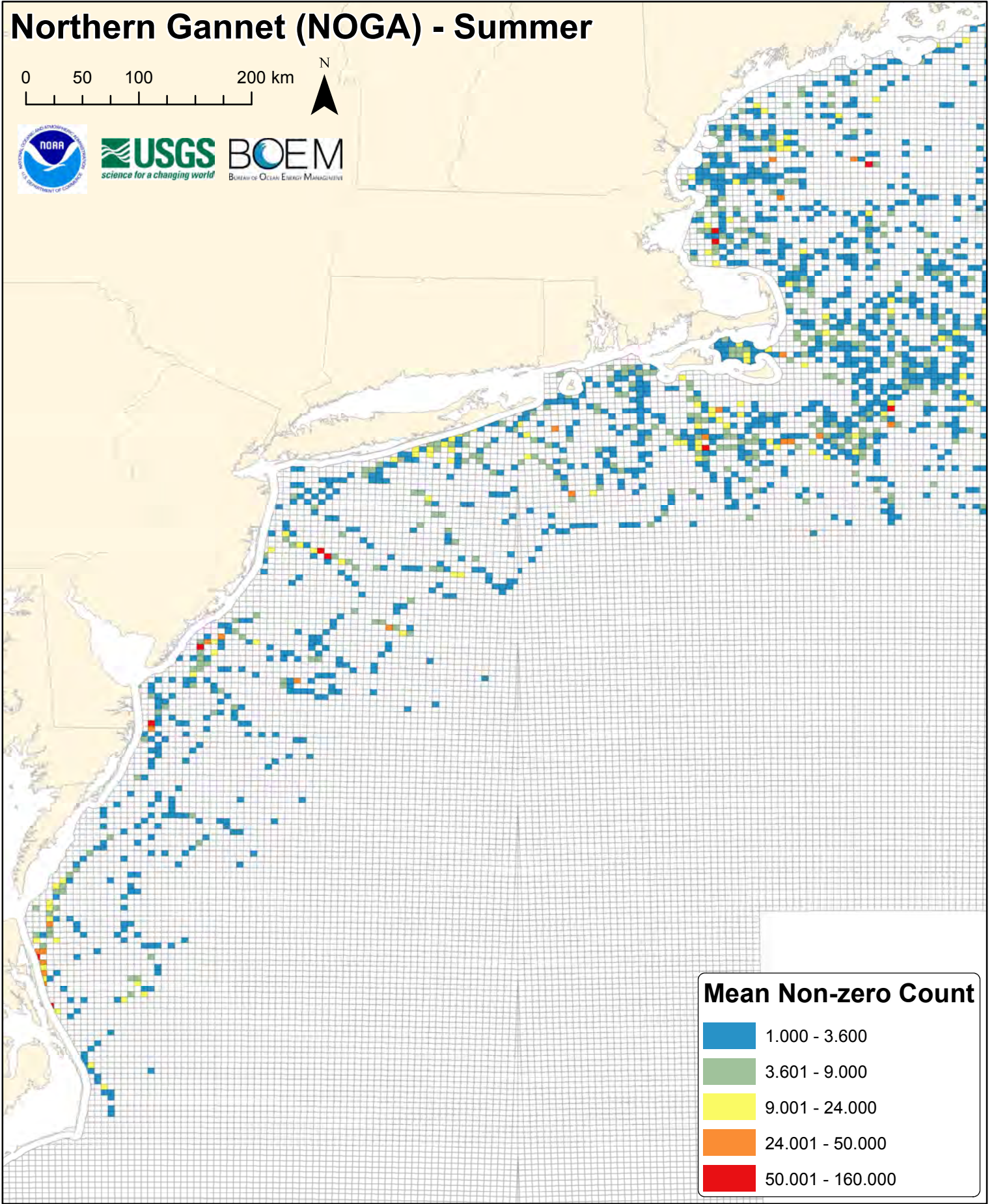
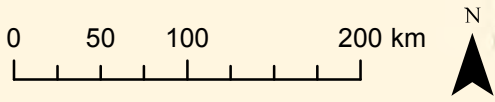
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Northern Gannet (NOGA) - Fall

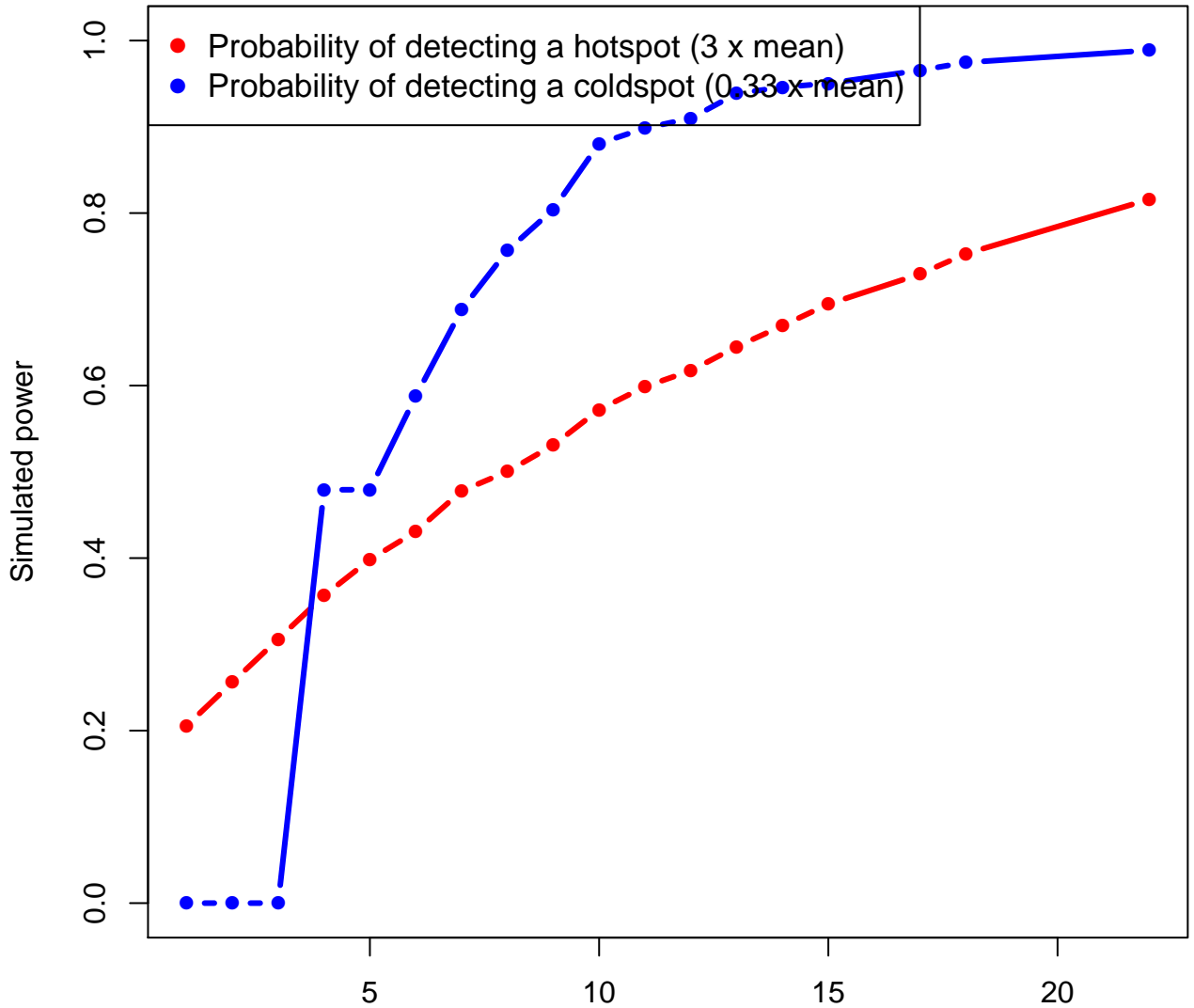
0 50 100 200 km



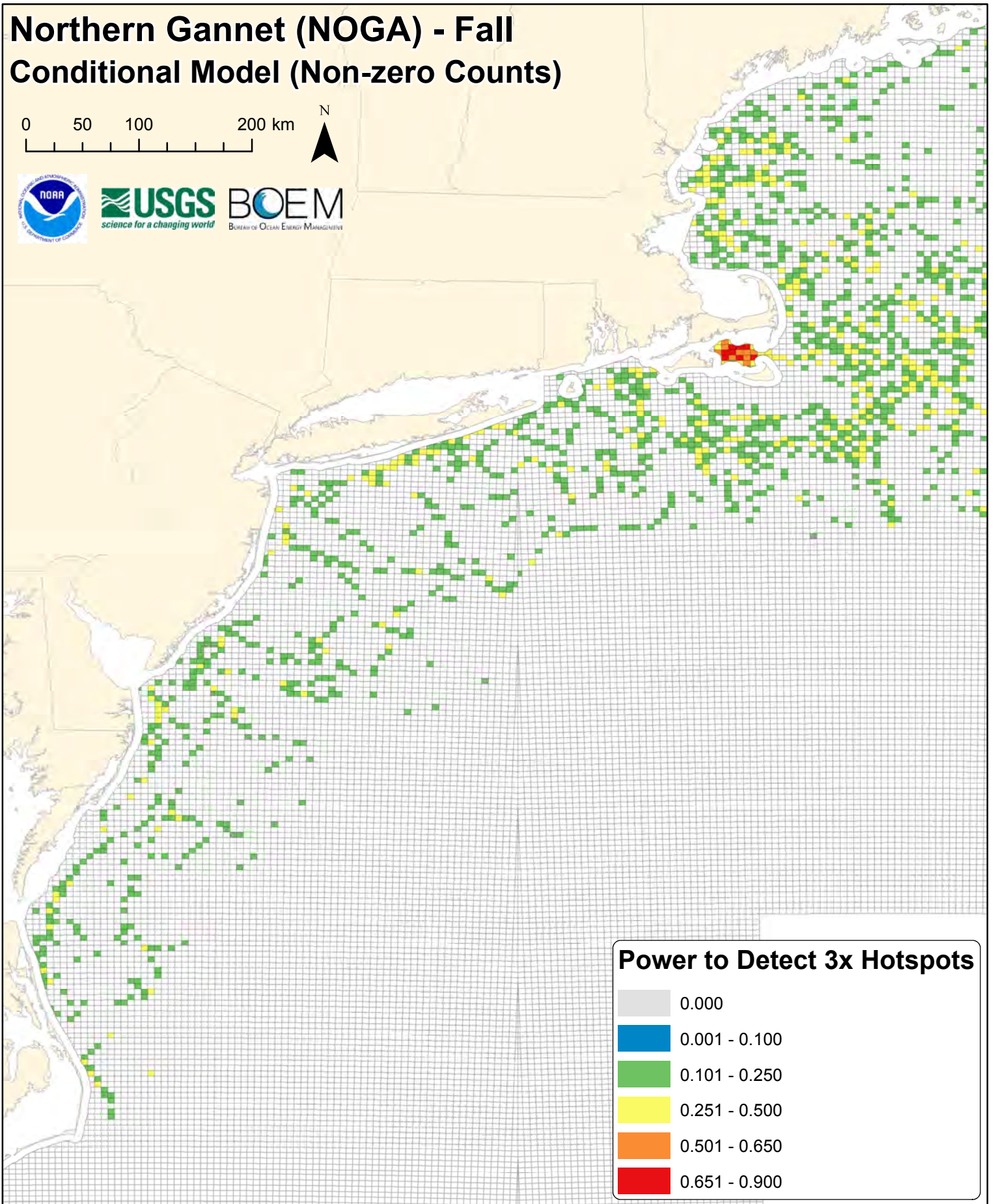
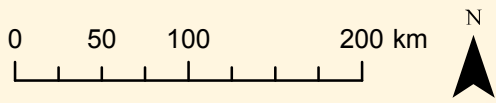
Northern Gannet (NOGA) - Summer



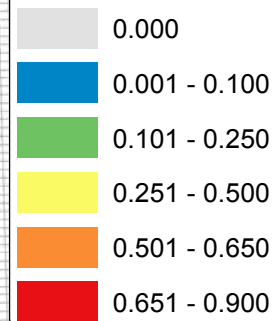
noga



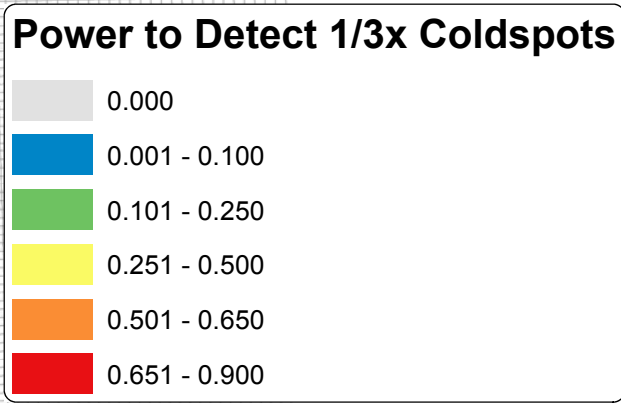
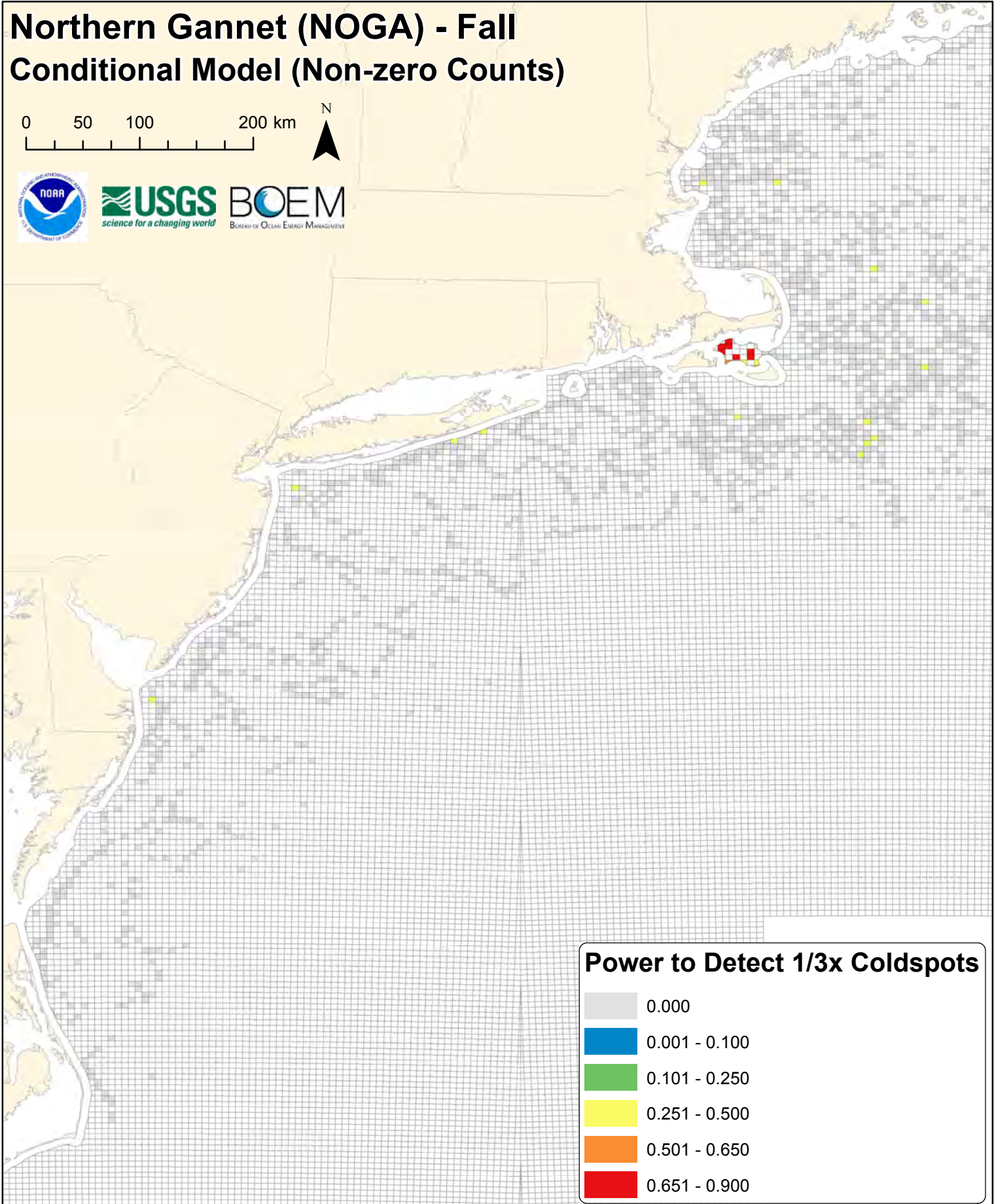
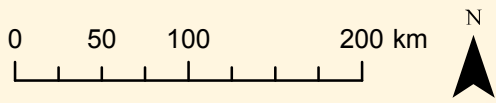
Northern Gannet (NOGA) - Fall Conditional Model (Non-zero Counts)



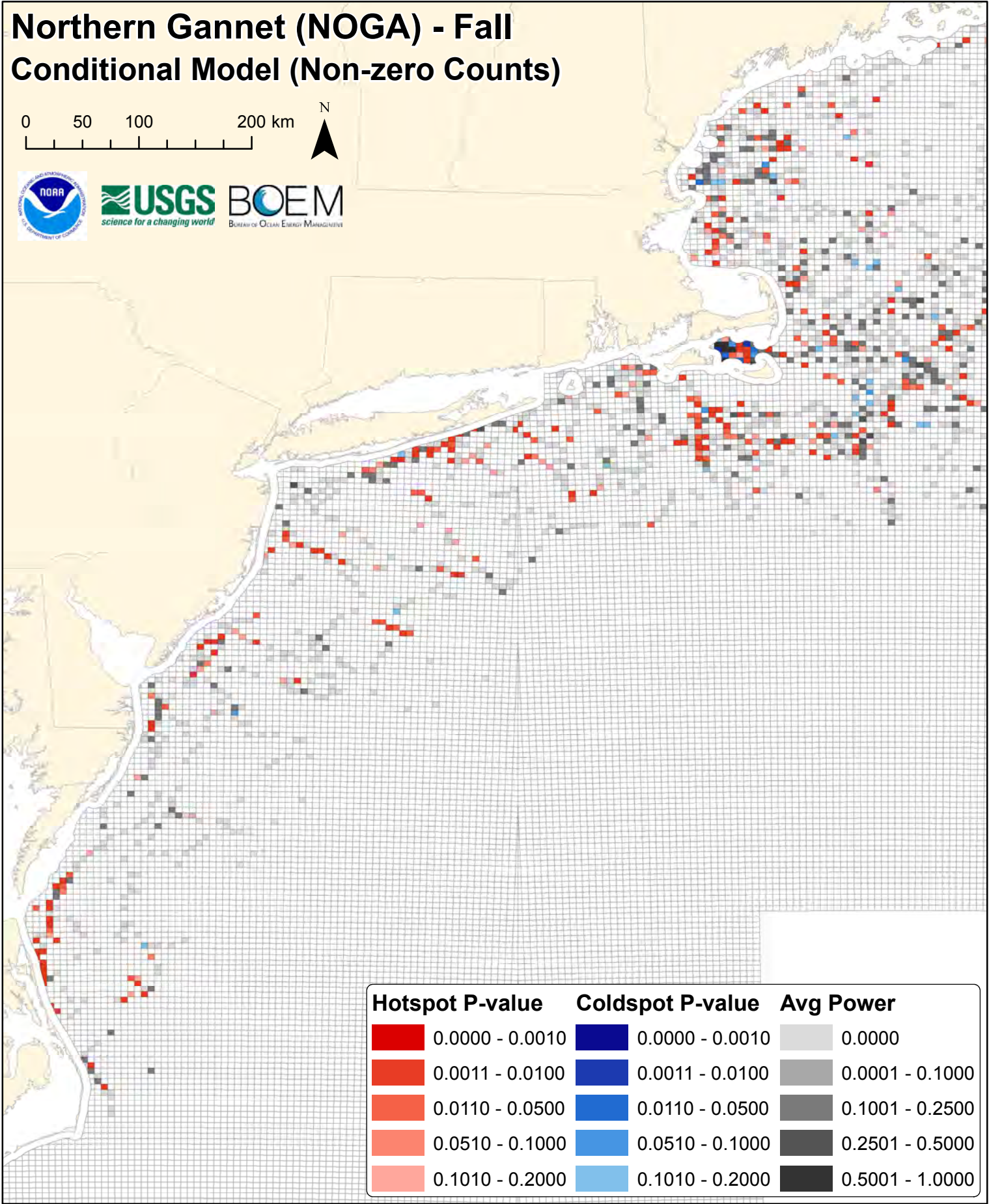
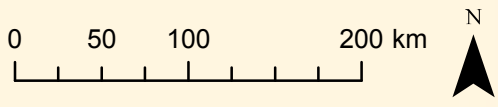
Power to Detect 3x Hotspots


















Northern Gannet (NOGA) - Fall Conditional Model (Non-zero Counts)

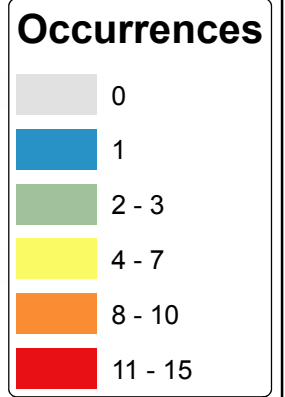
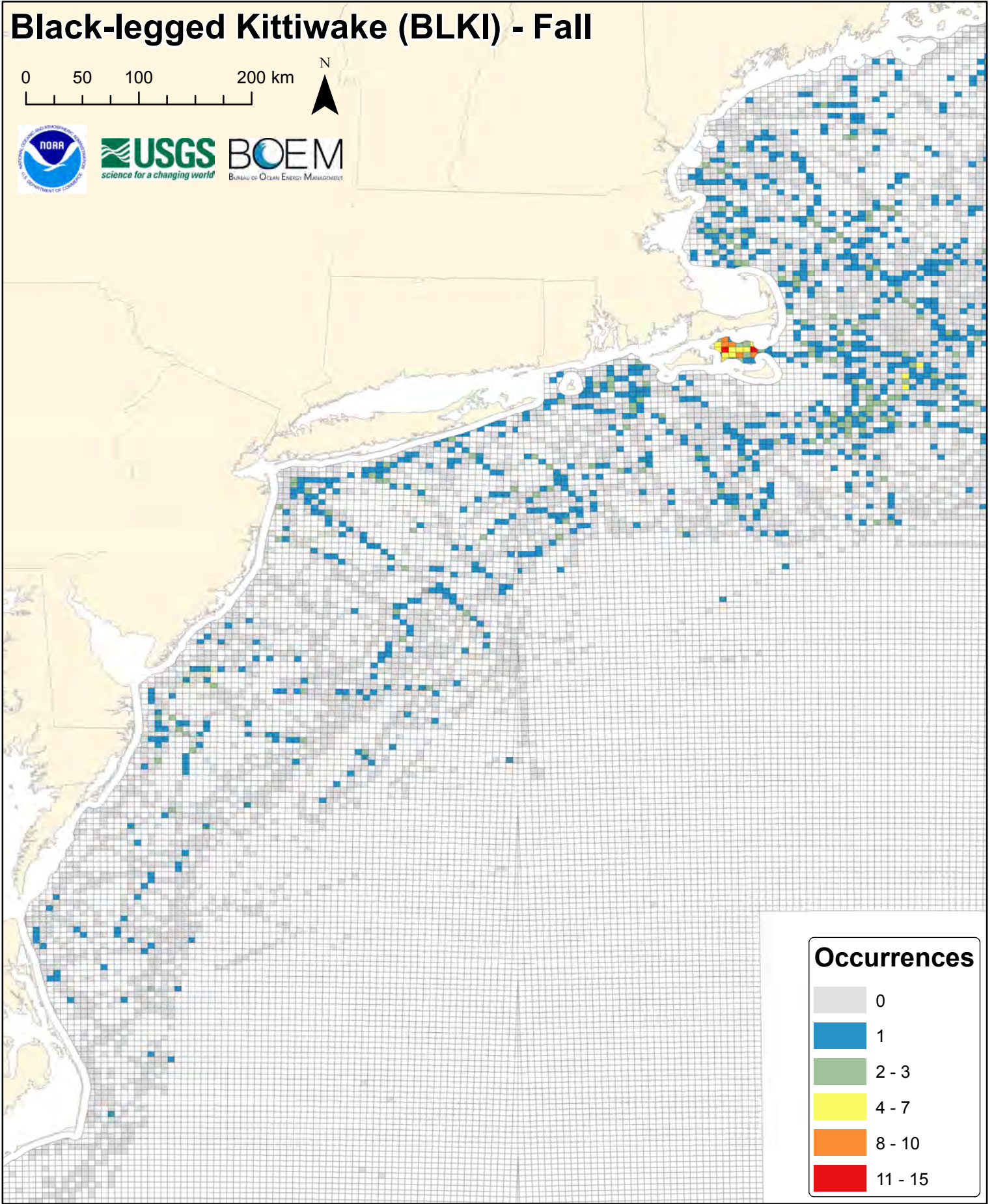
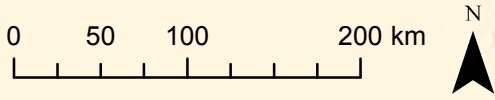


Northern Gannet (NOGA) - Fall Conditional Model (Non-zero Counts)



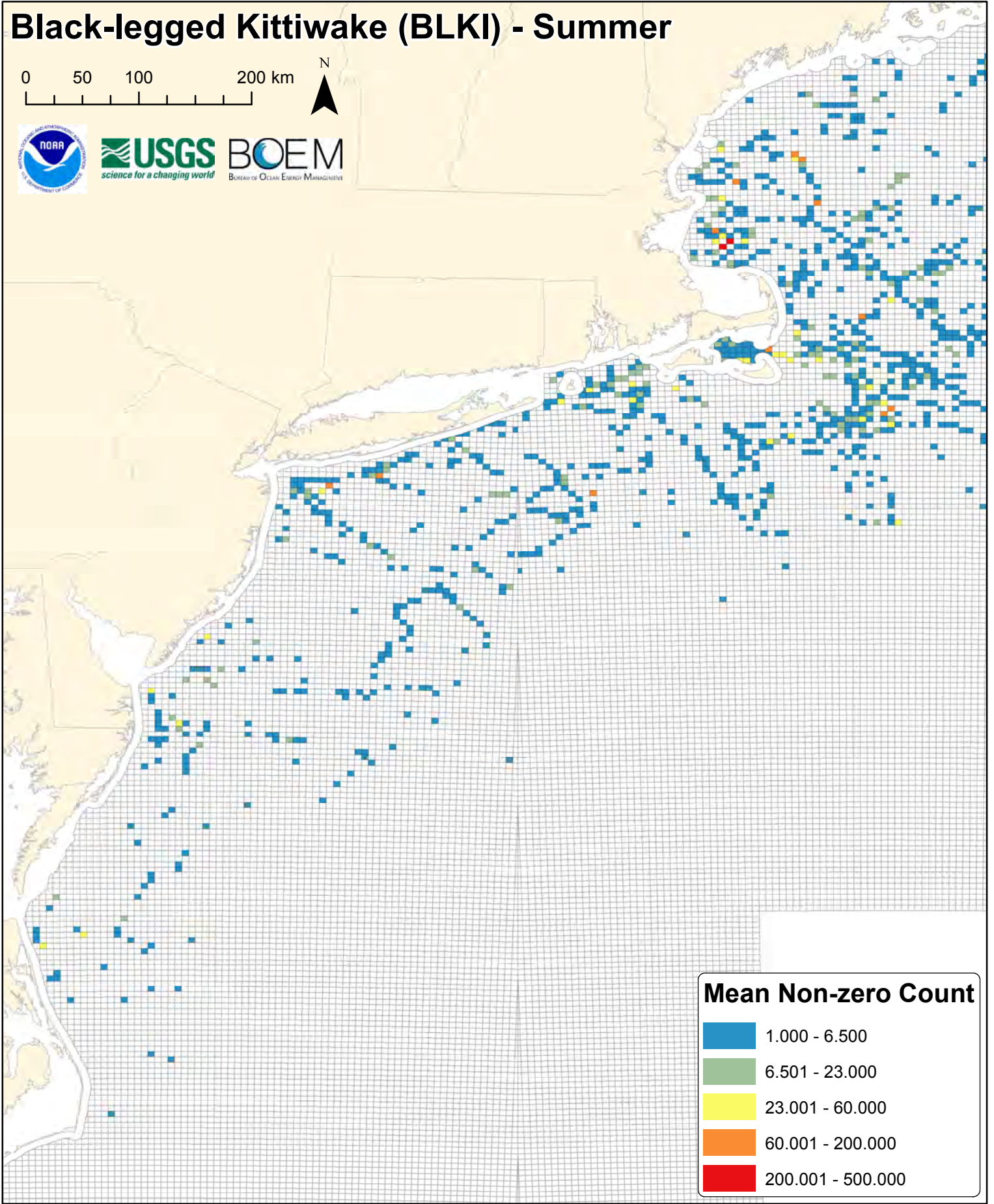
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Black-legged Kittiwake (BLKI) - Fall



Black-legged Kittiwake (BLKI) - Summer

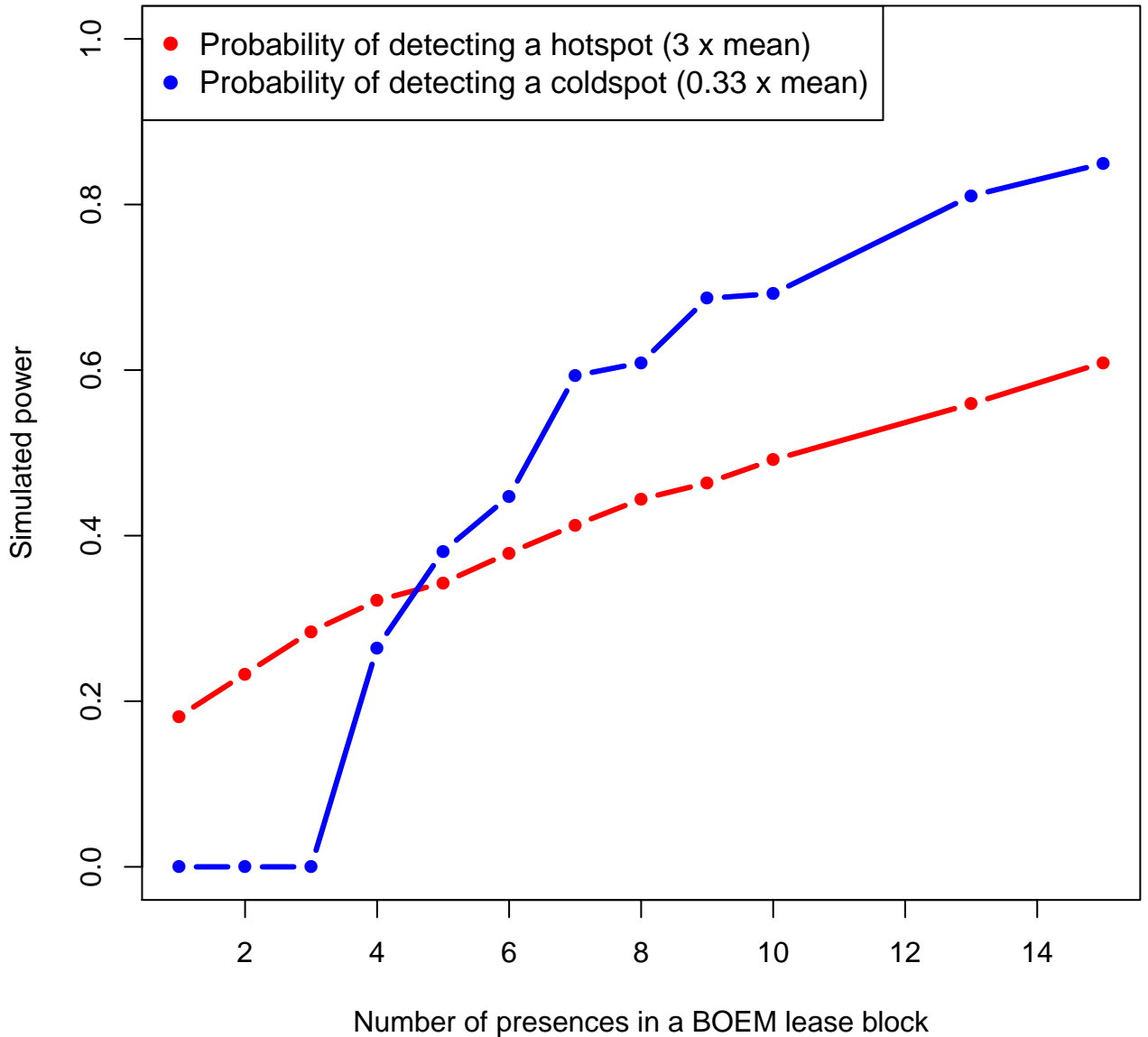
0 50 100 200 km



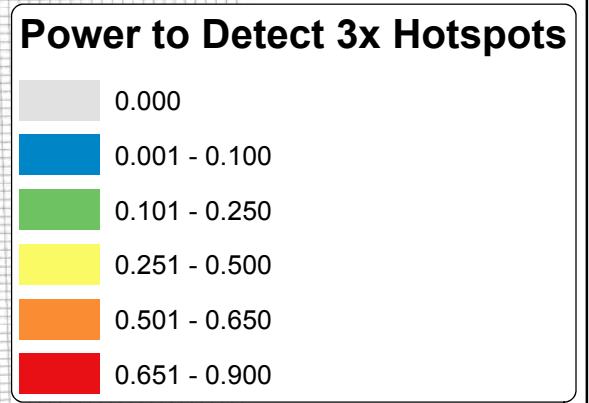
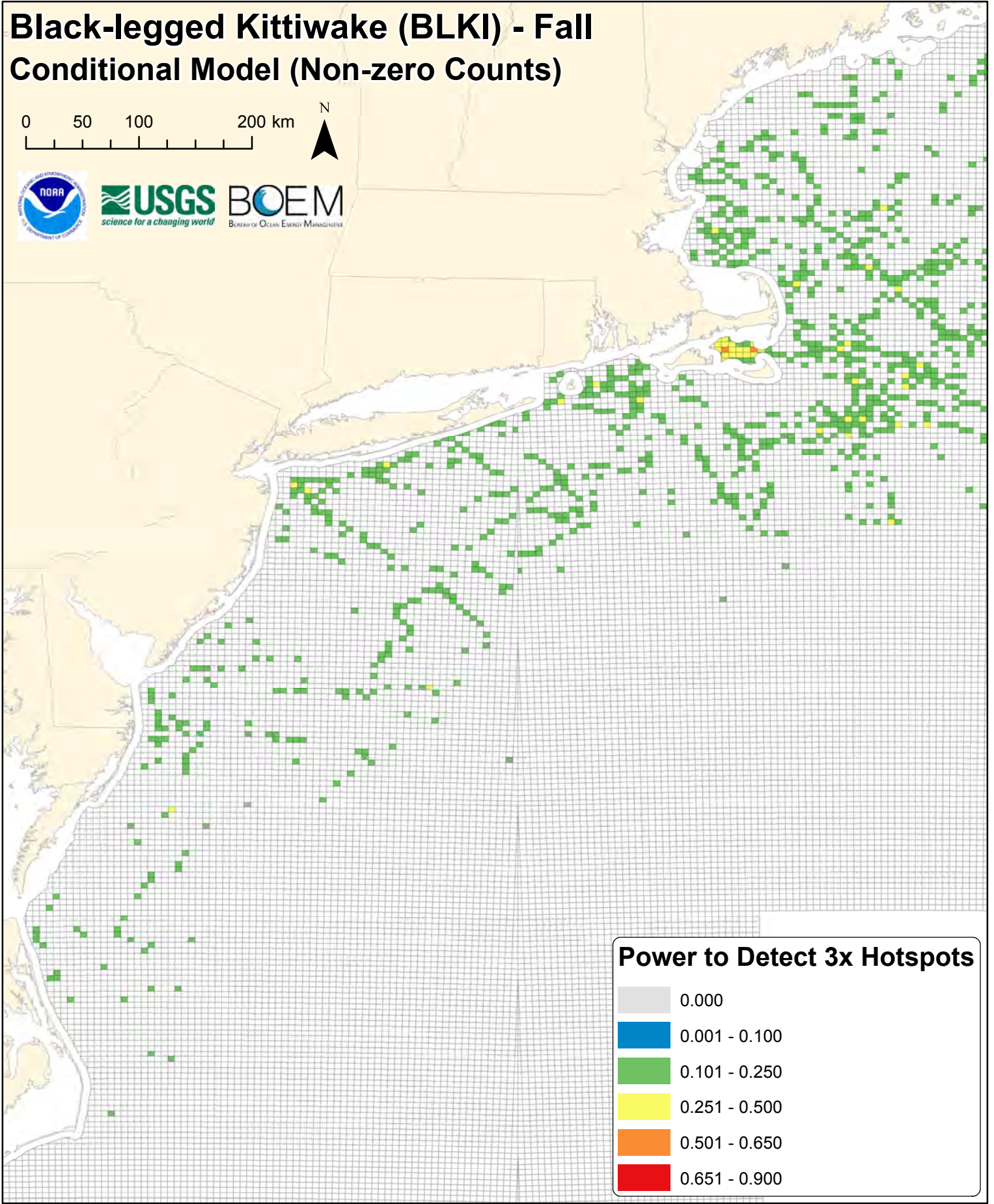
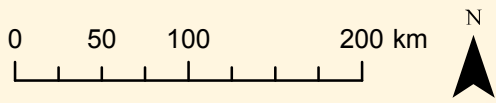
Mean Non-zero Count

- 1.000 - 6.500
- 6.501 - 23.000
- 23.001 - 60.000
- 60.001 - 200.000
- 200.001 - 500.000

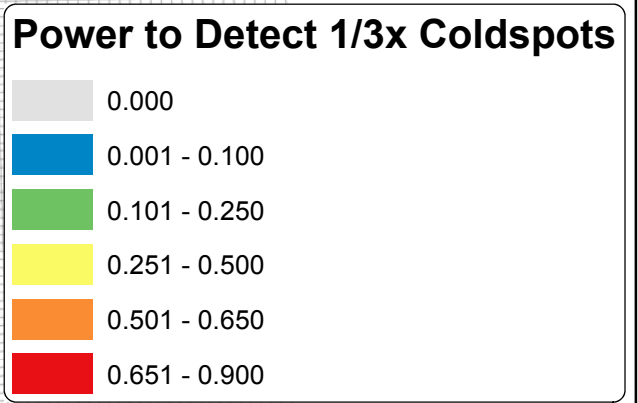
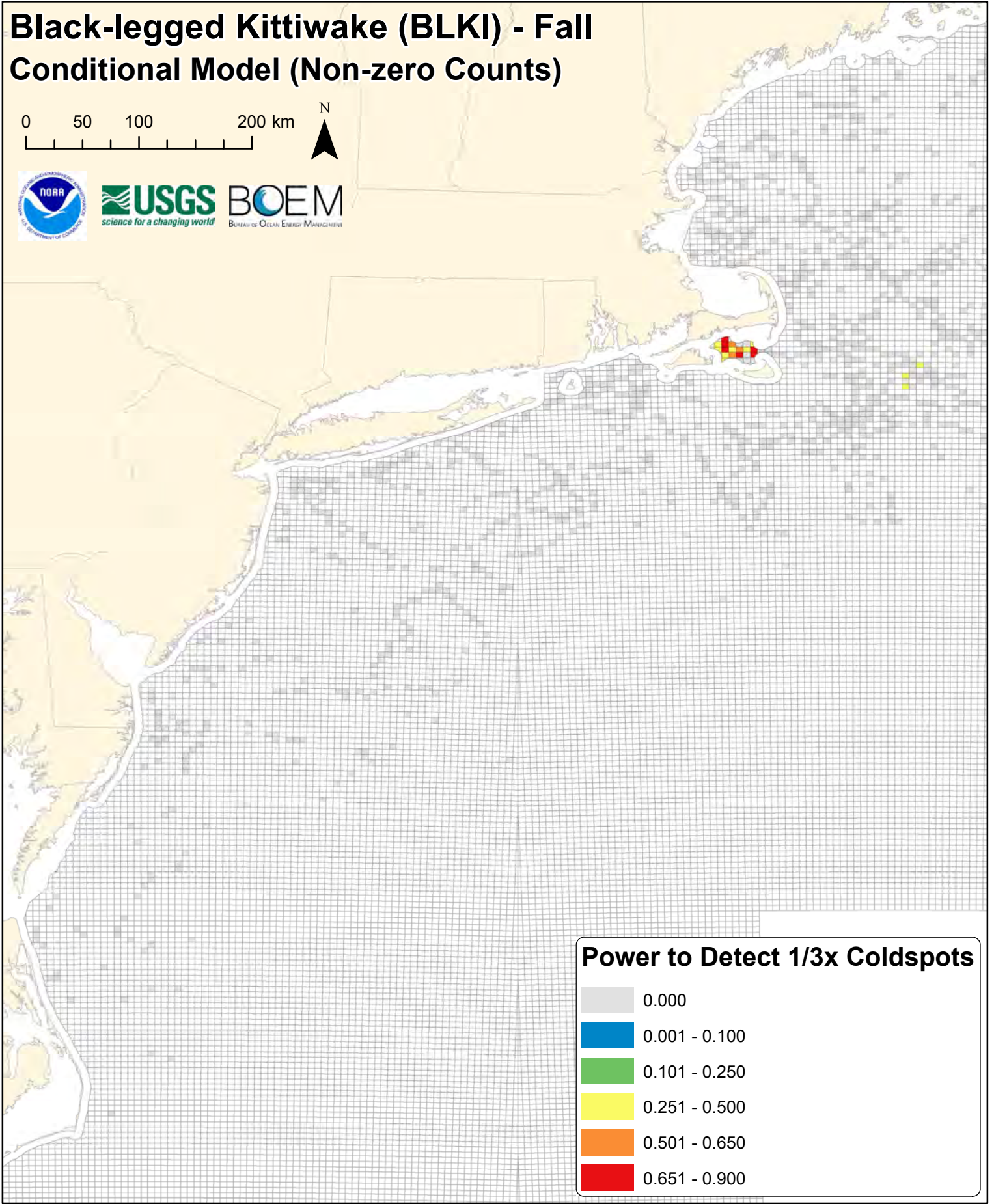
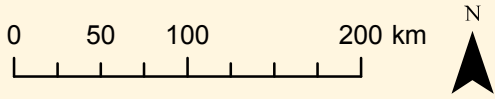
blki



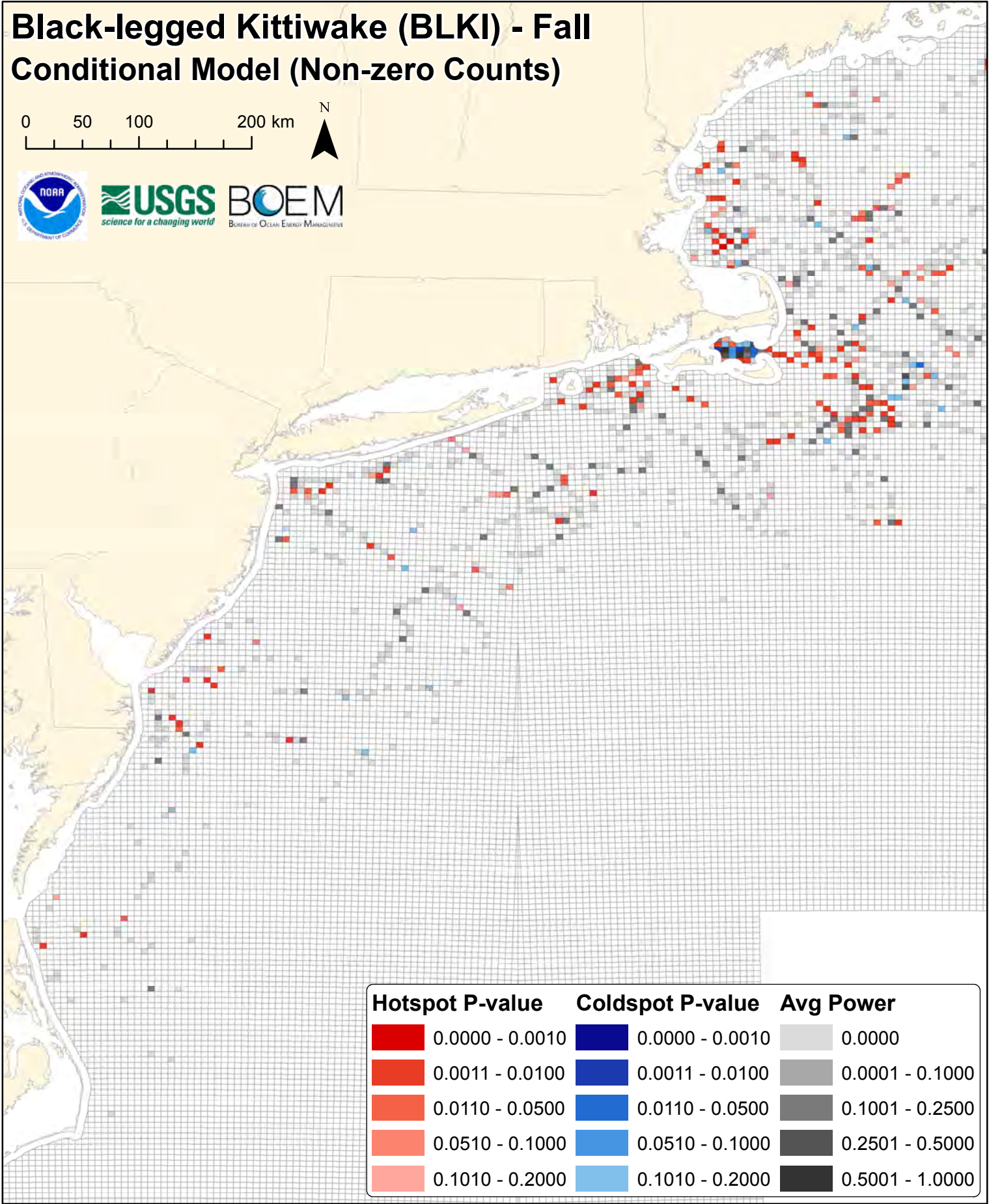
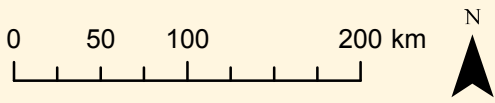
Black-legged Kittiwake (BLKI) - Fall Conditional Model (Non-zero Counts)


















Black-legged Kittiwake (BLKI) - Fall Conditional Model (Non-zero Counts)

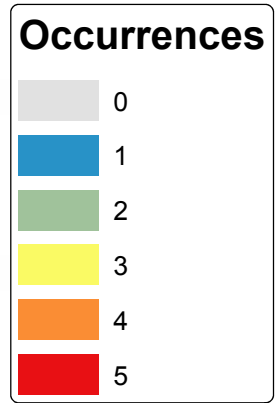
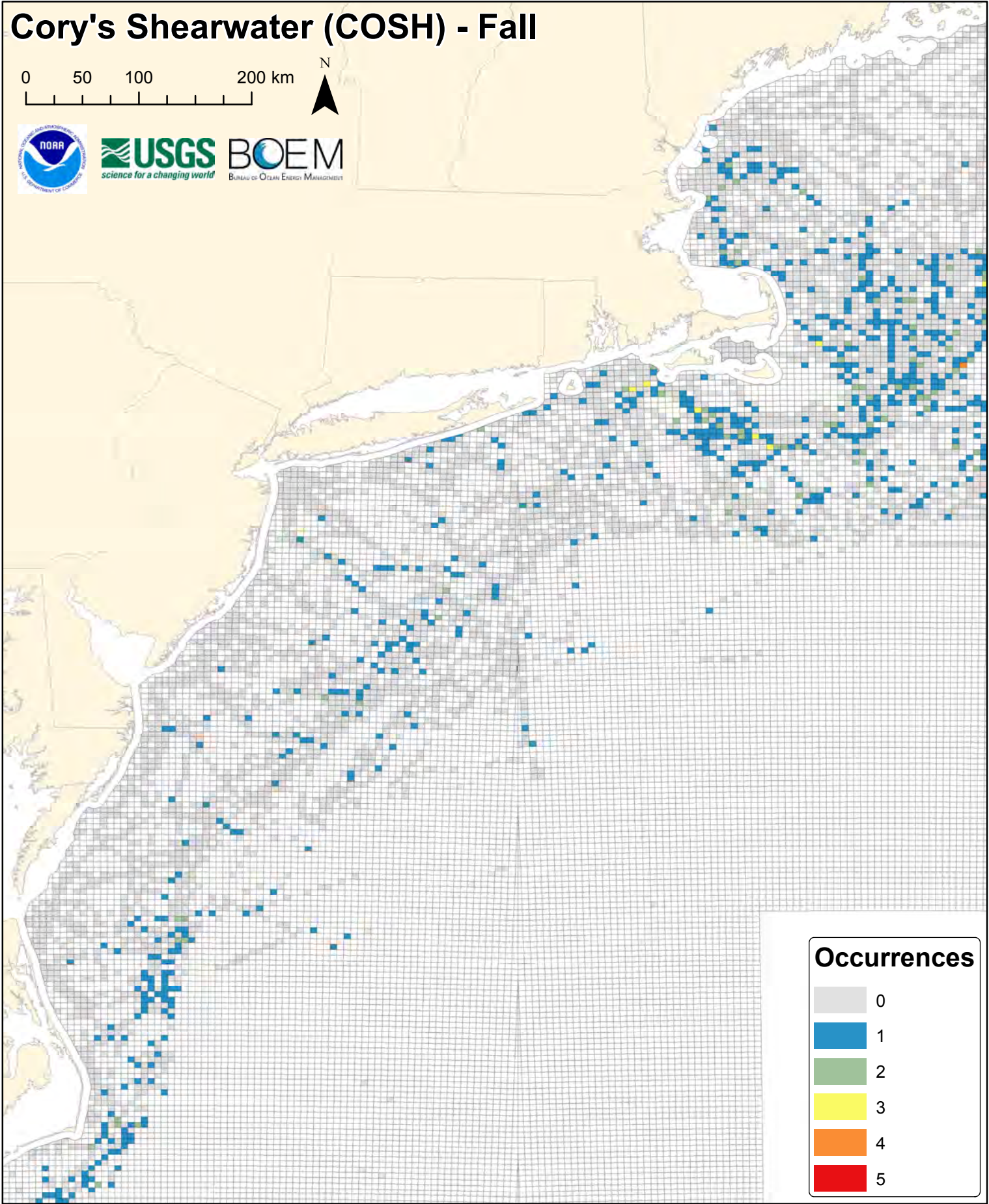
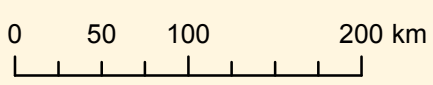


Black-legged Kittiwake (BLKI) - Fall Conditional Model (Non-zero Counts)

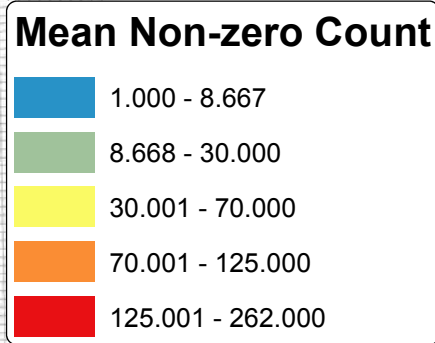
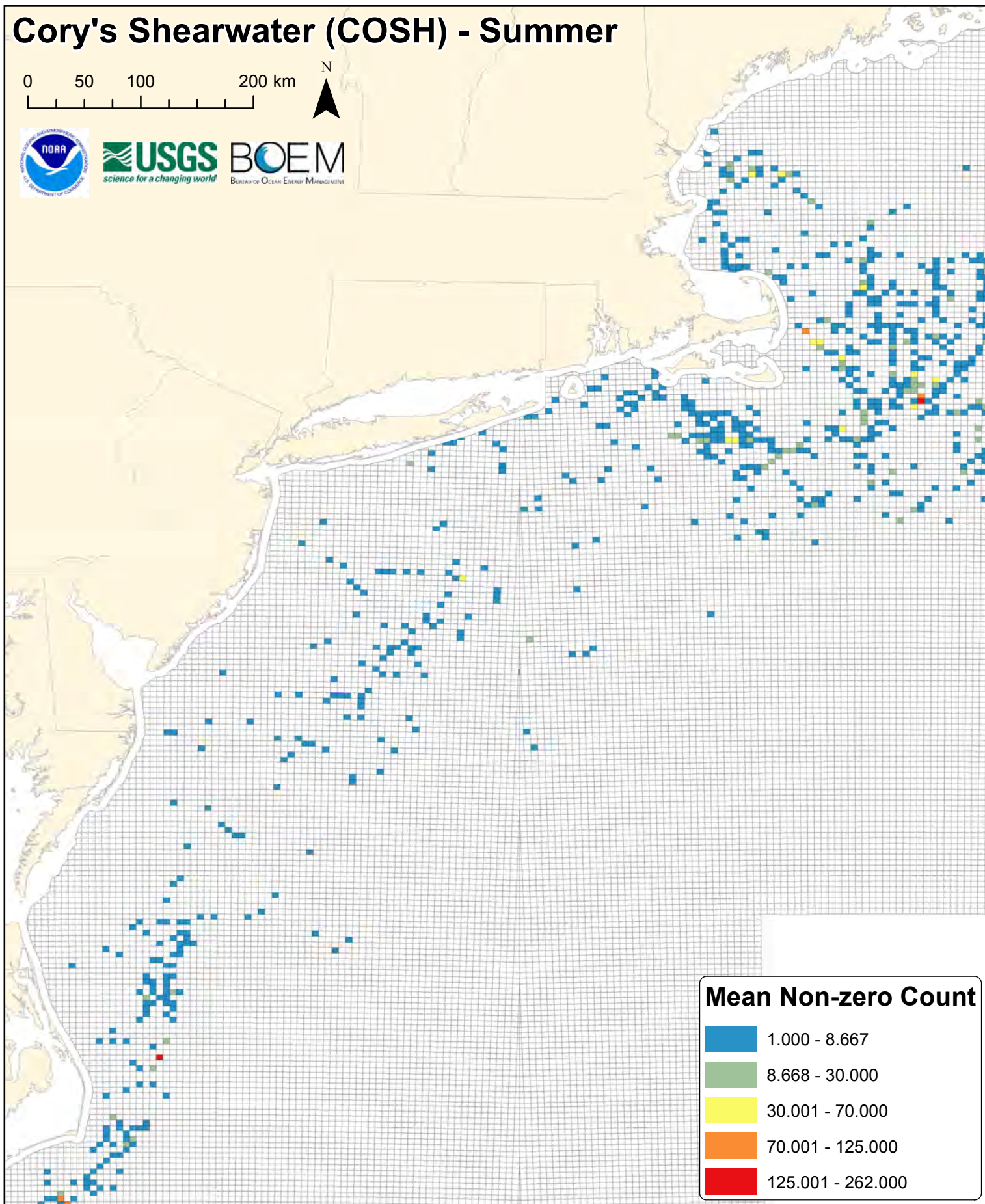
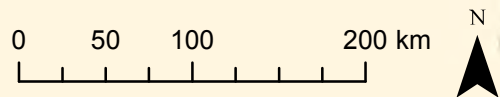


Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

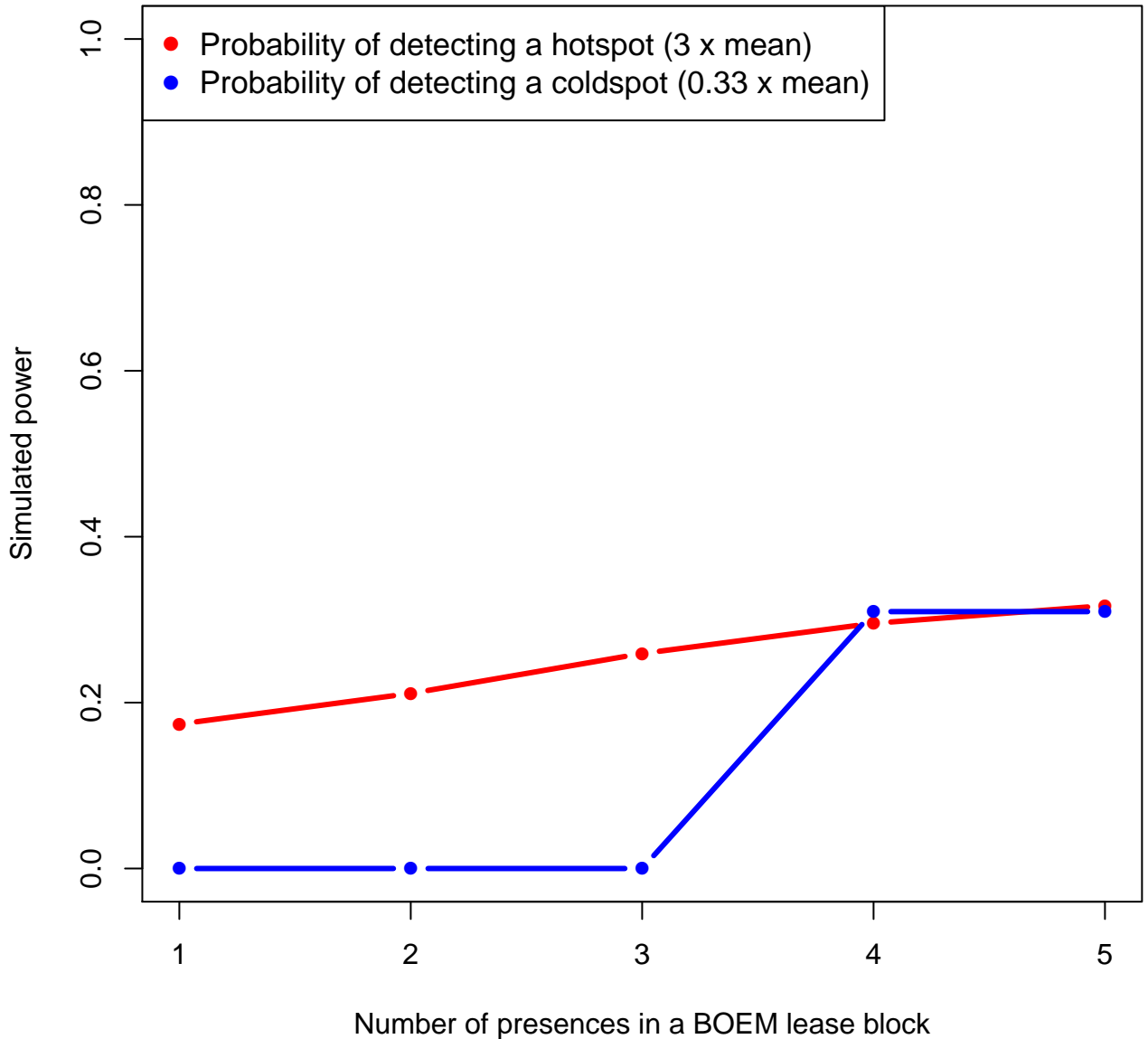
Cory's Shearwater (COSH) - Fall



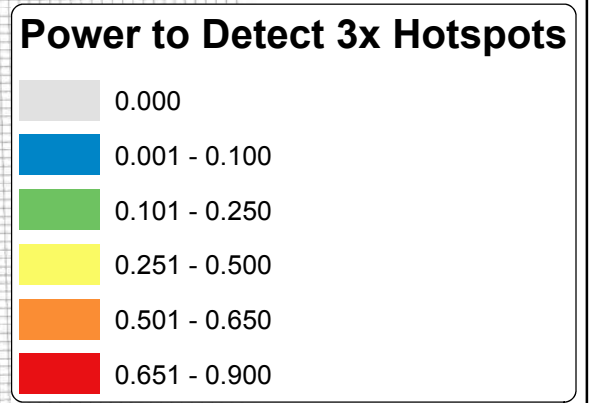
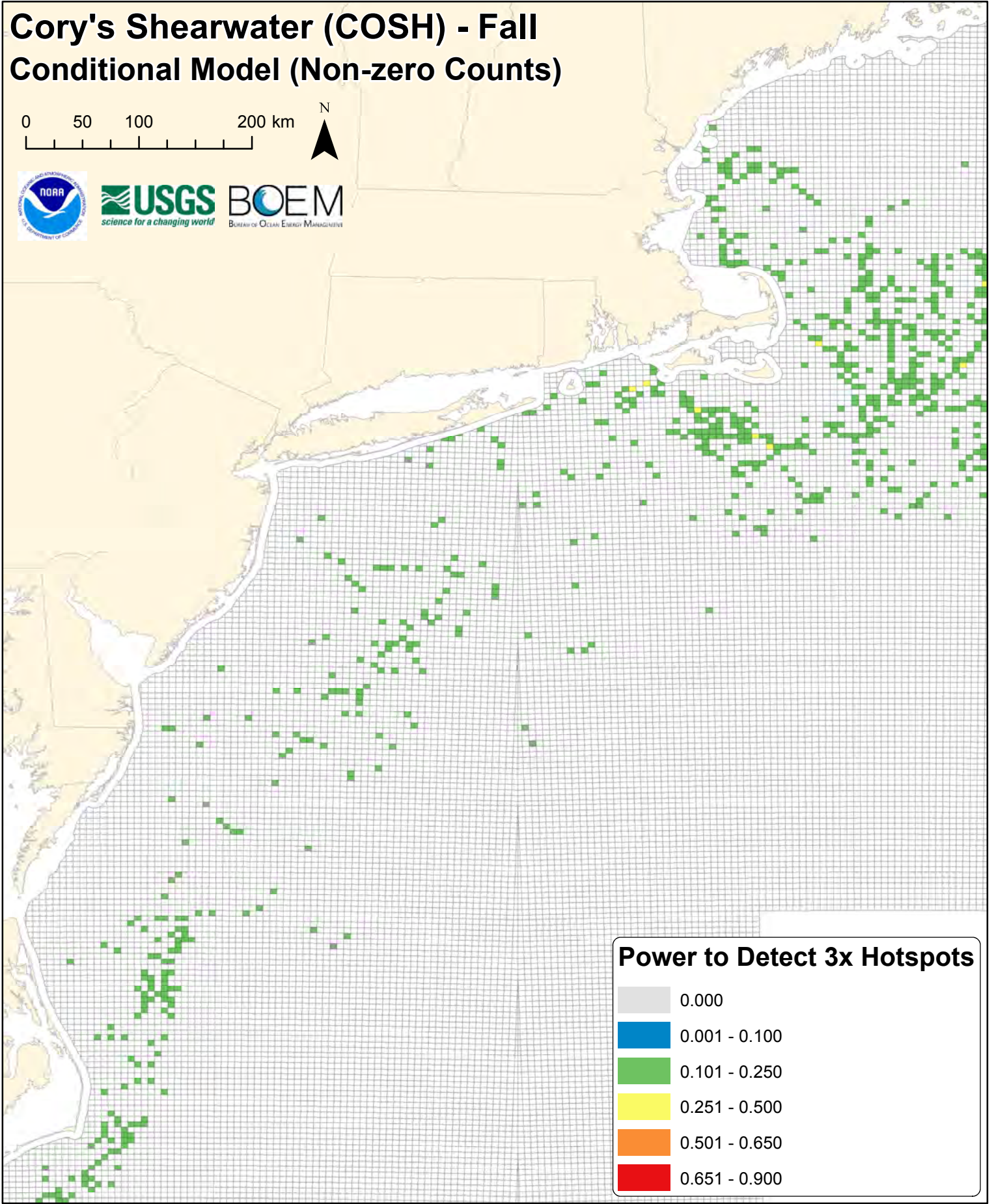
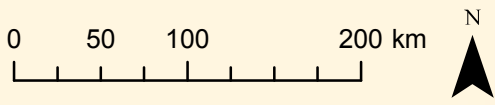
Cory's Shearwater (COSH) - Summer



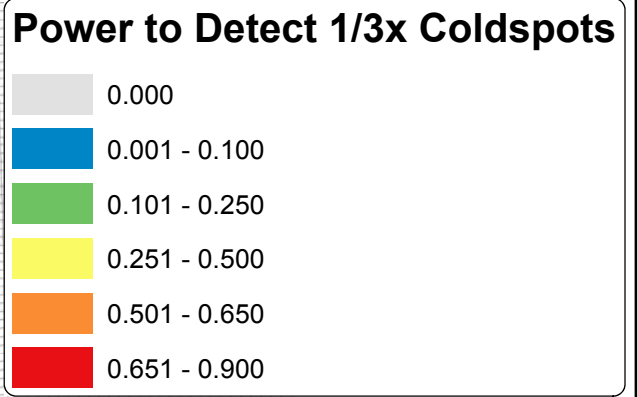
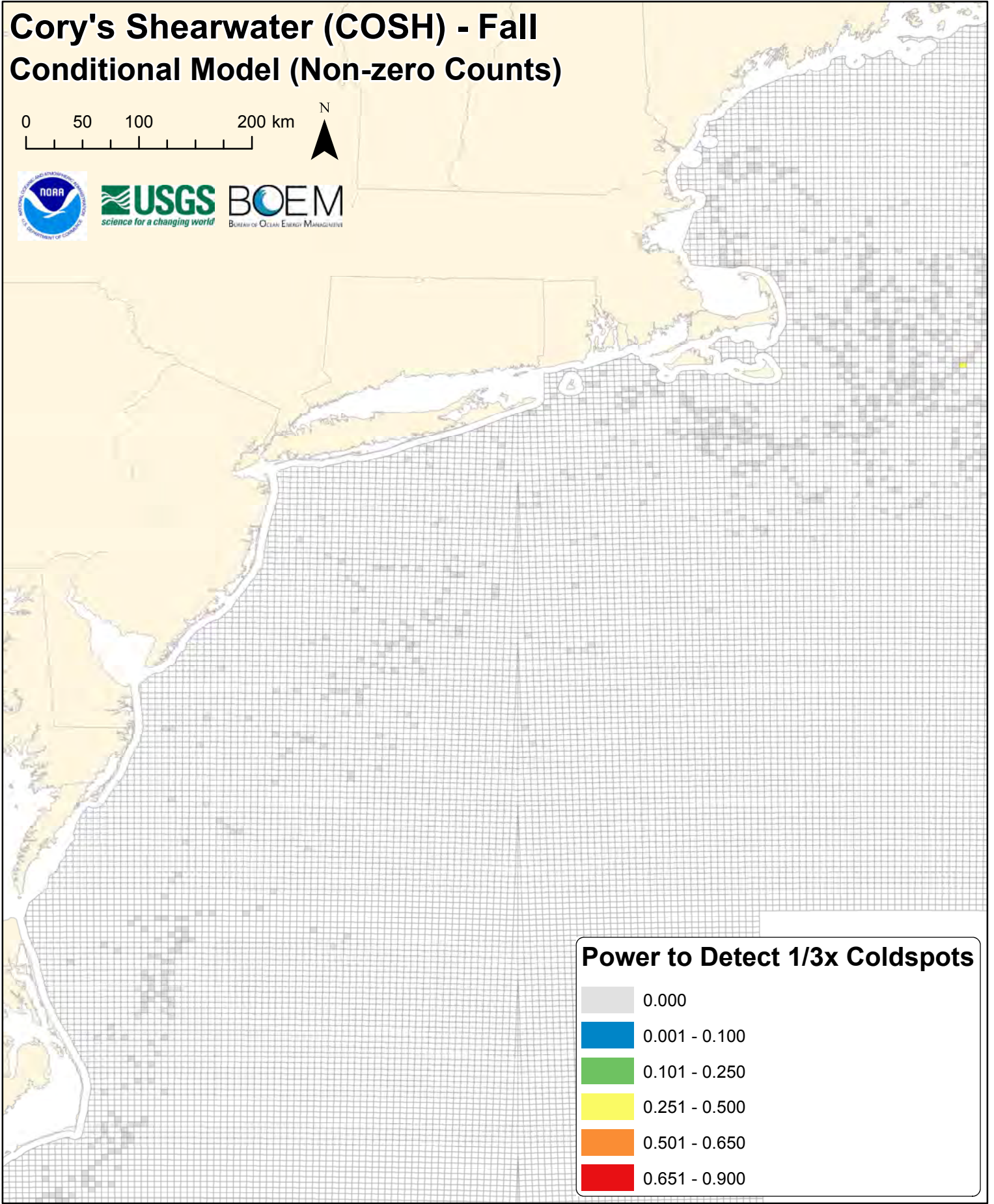
cosh



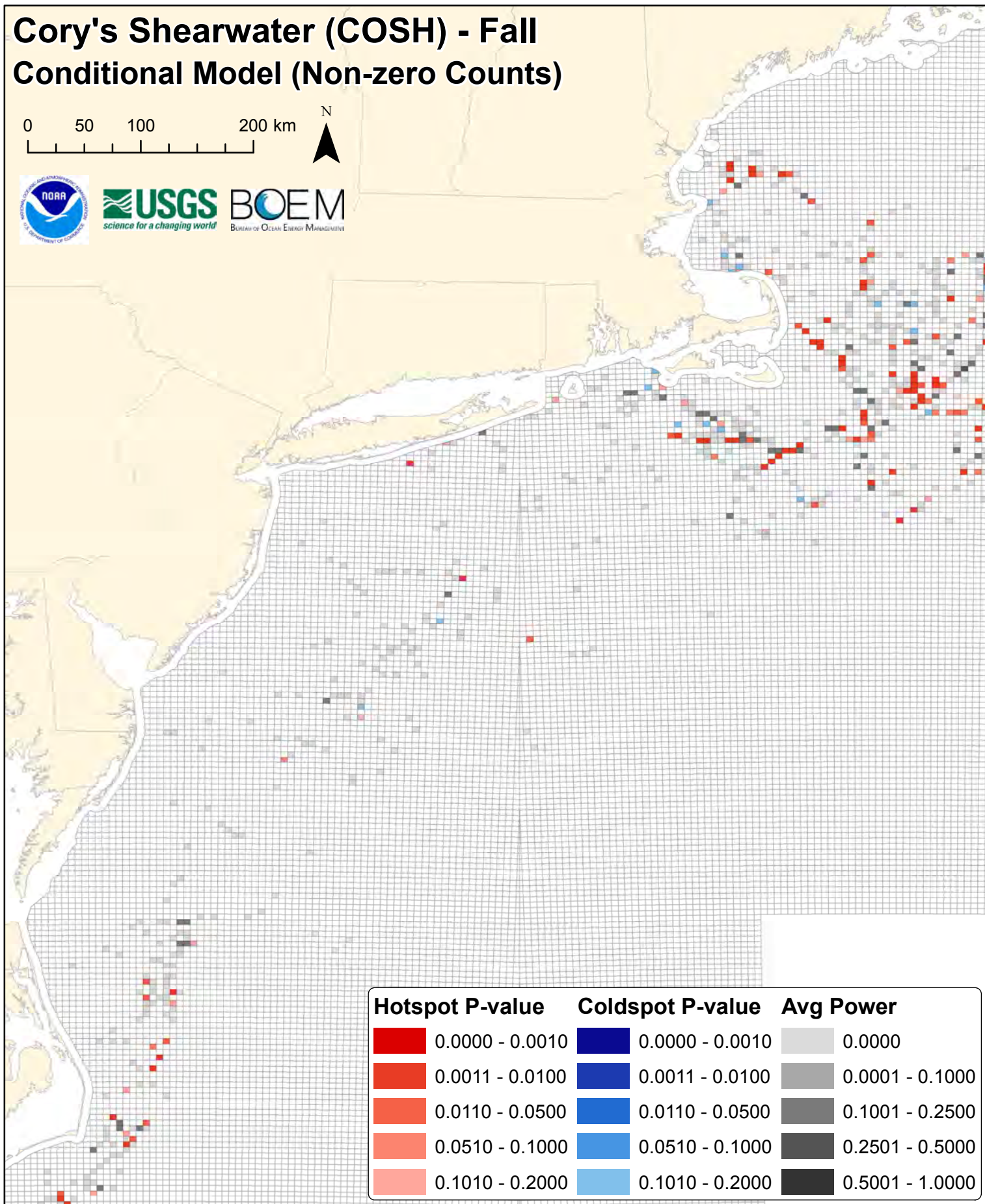
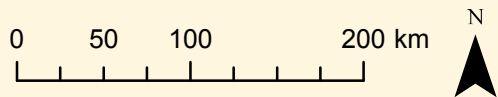
Cory's Shearwater (COSH) - Fall Conditional Model (Non-zero Counts)



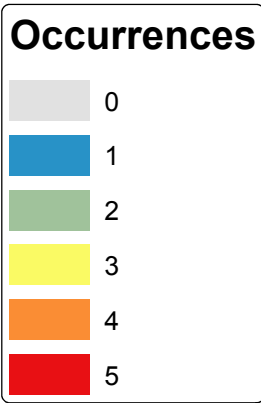
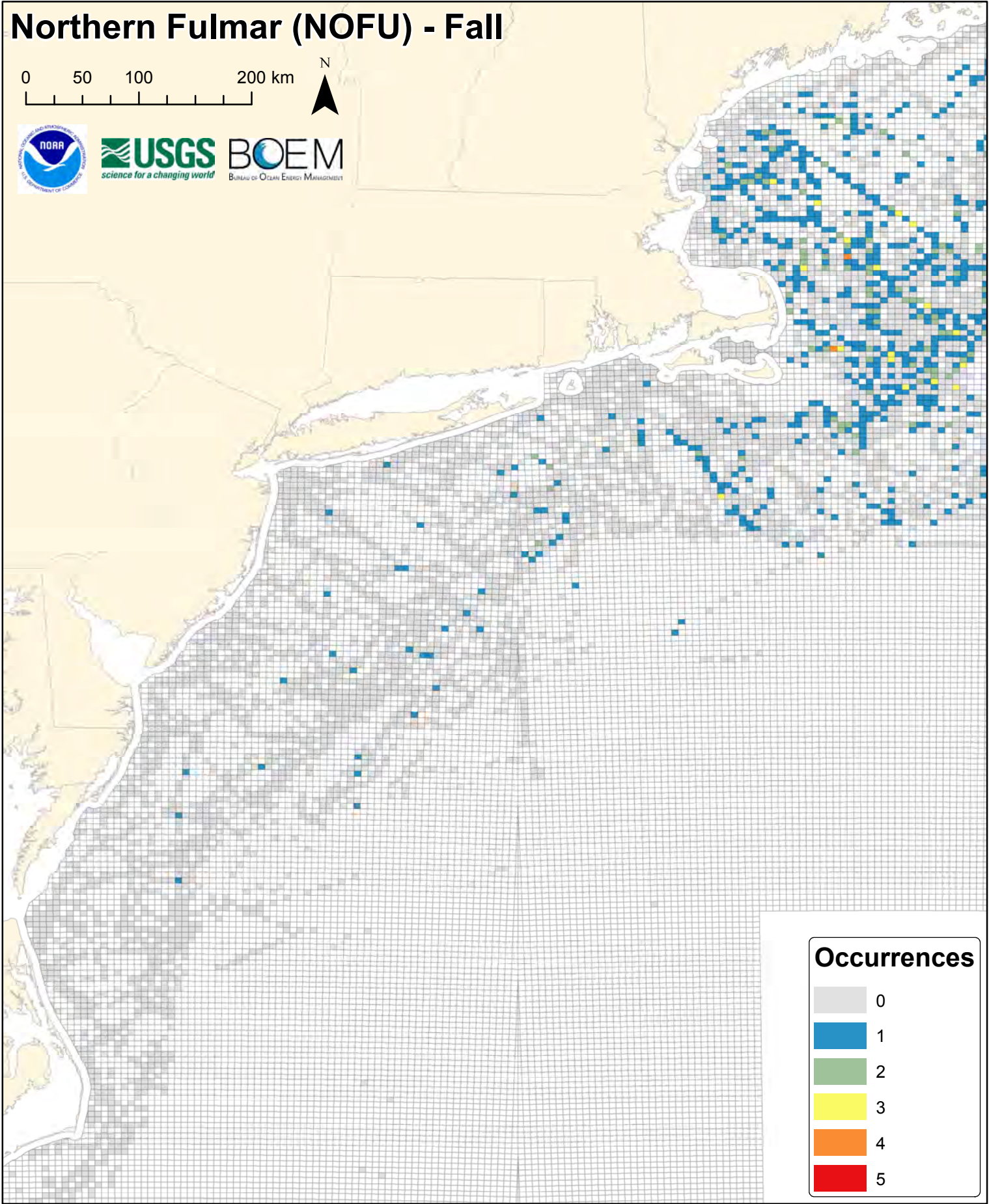
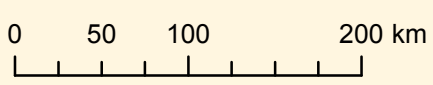
Cory's Shearwater (COSH) - Fall Conditional Model (Non-zero Counts)



Cory's Shearwater (COSH) - Fall Conditional Model (Non-zero Counts)

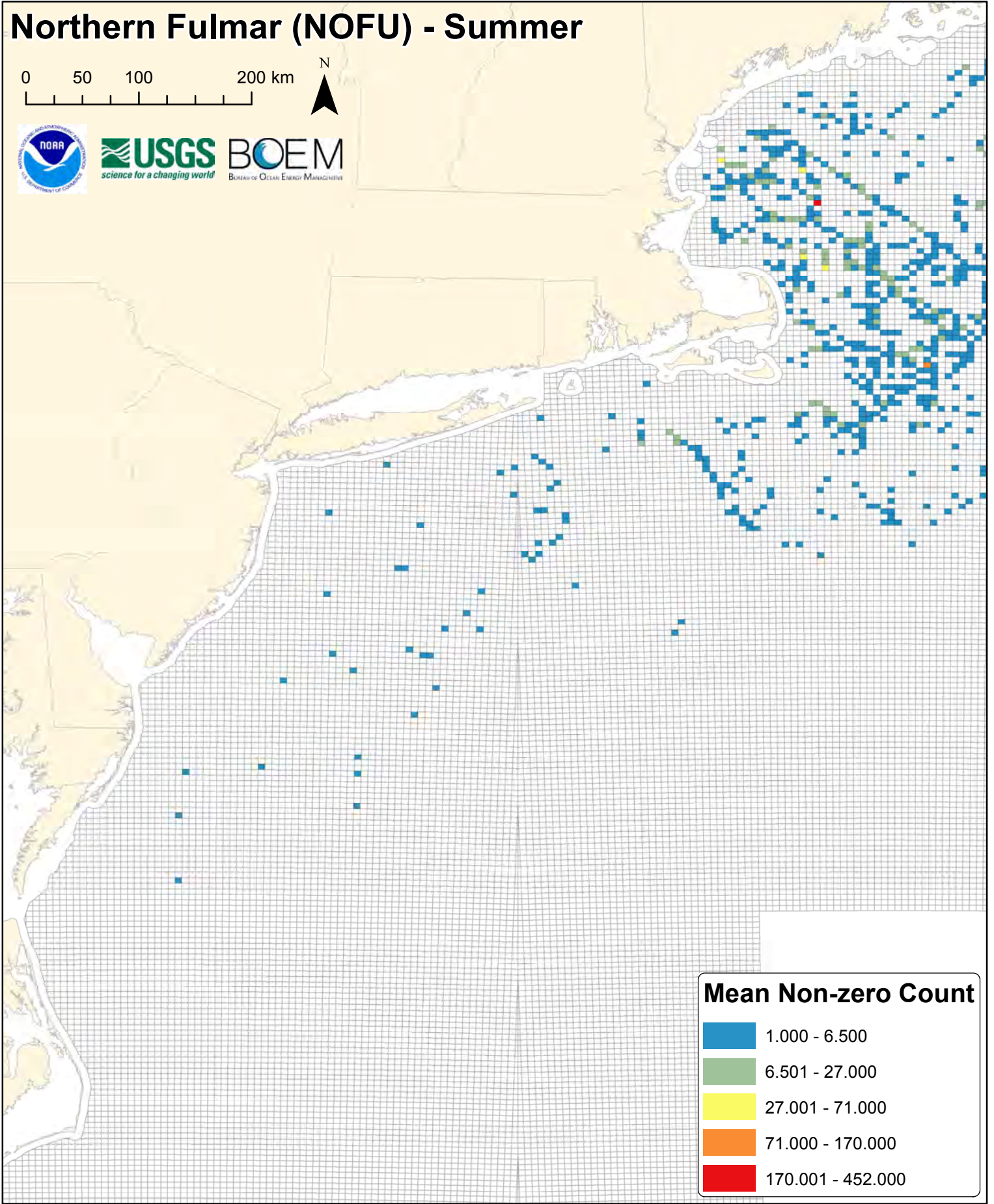


Northern Fulmar (NOFU) - Fall



Northern Fulmar (NOFU) - Summer

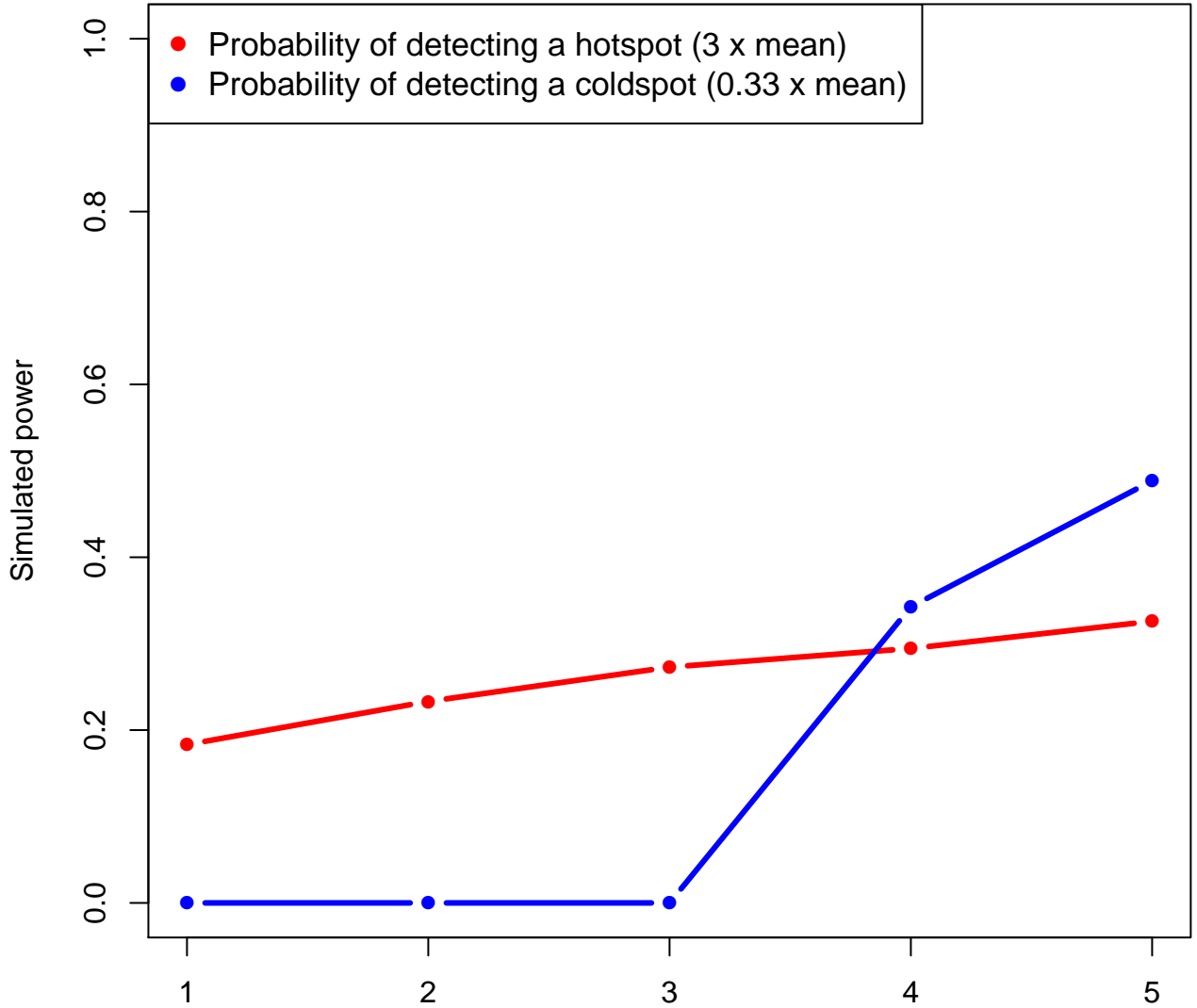
0 50 100 200 km



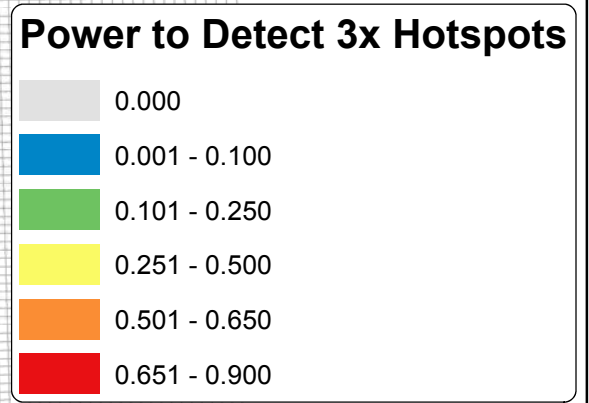
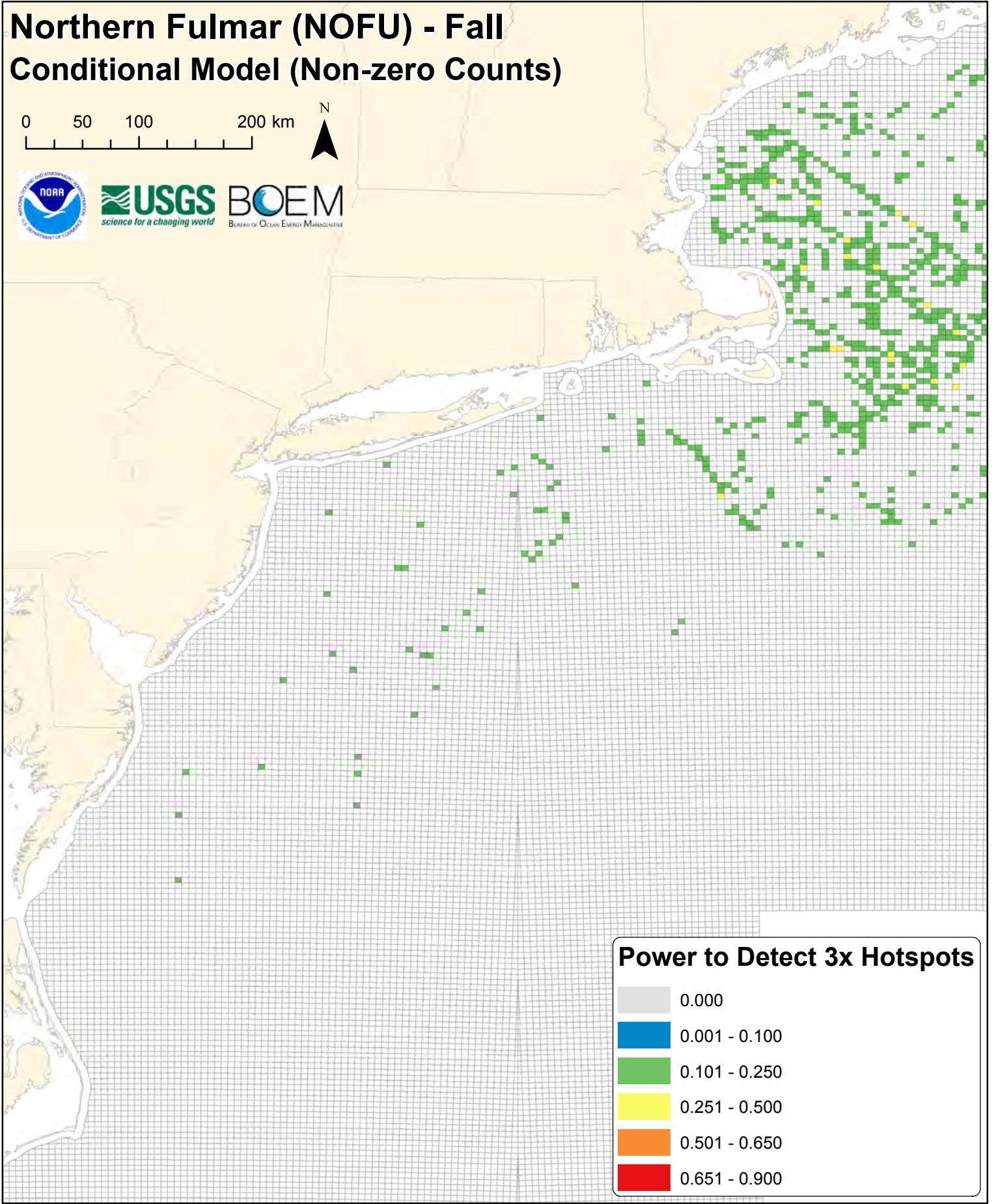
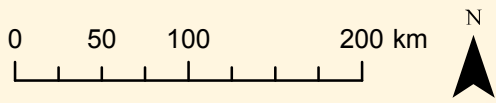
Mean Non-zero Count

- 1.000 - 6.500
- 6.501 - 27.000
- 27.001 - 71.000
- 71.000 - 170.000
- 170.001 - 452.000

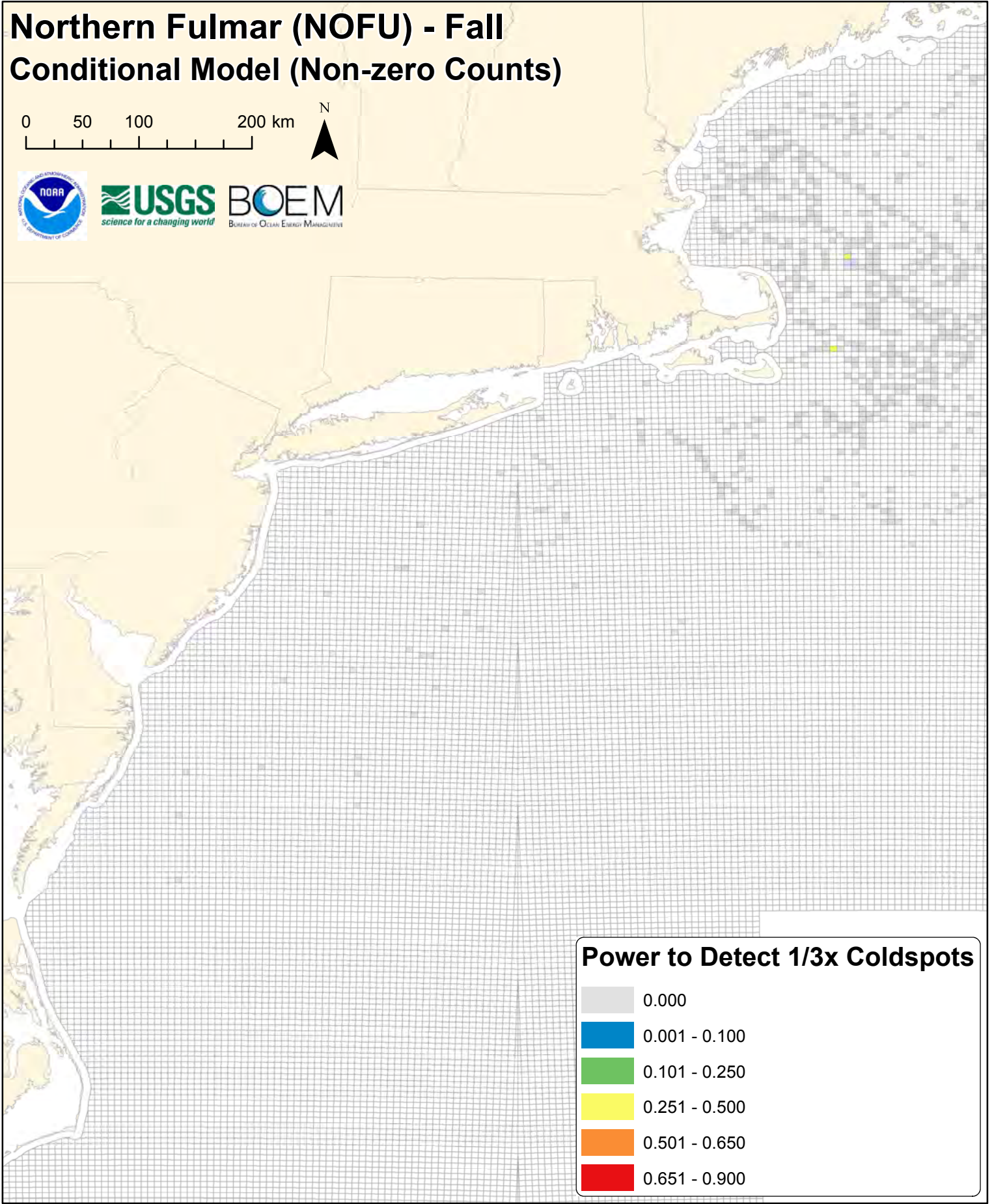
nofu



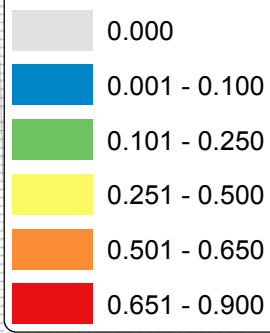
Northern Fulmar (NOFU) - Fall Conditional Model (Non-zero Counts)



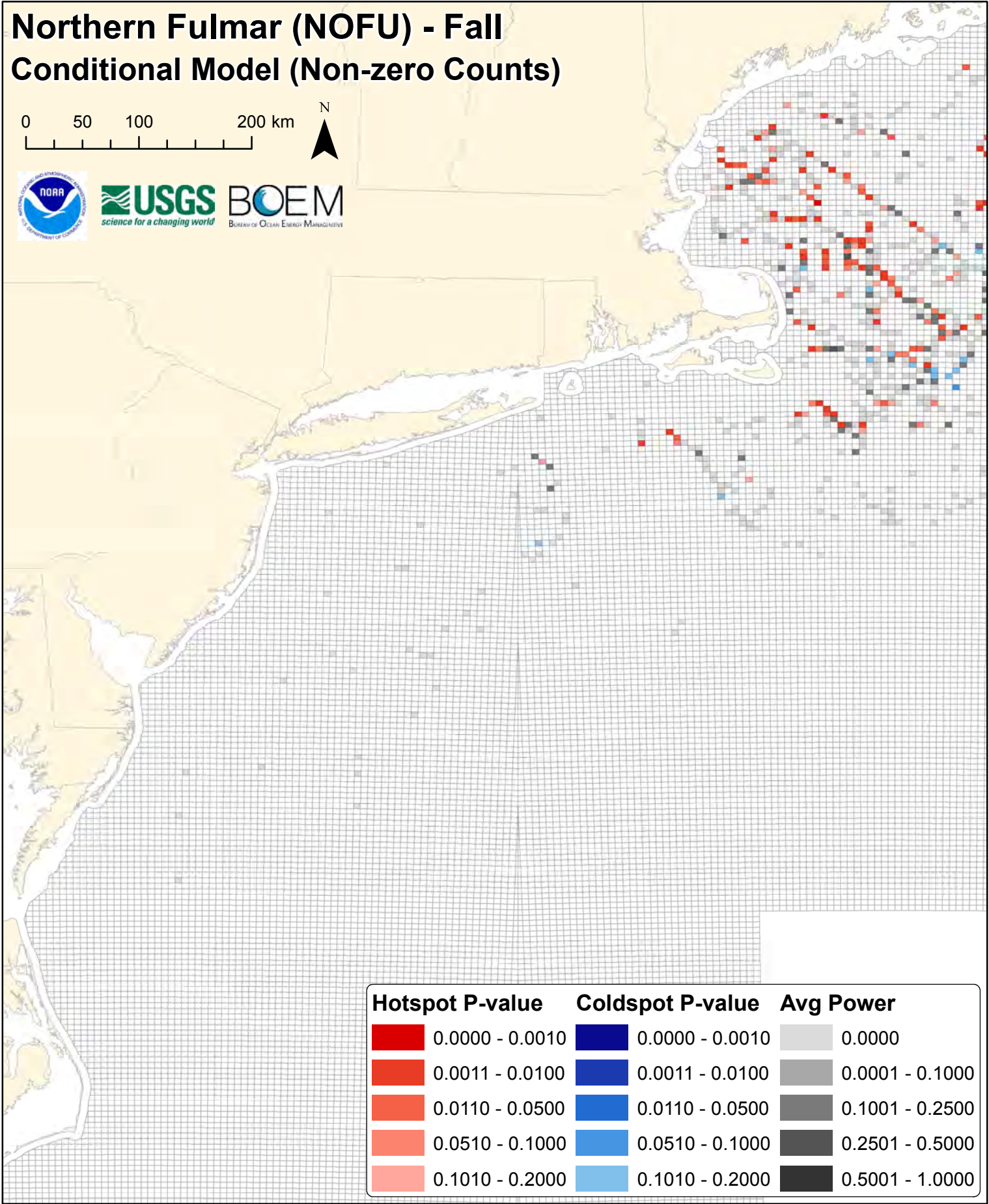
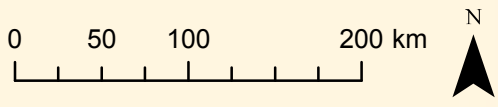
Northern Fulmar (NOFU) - Fall Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots

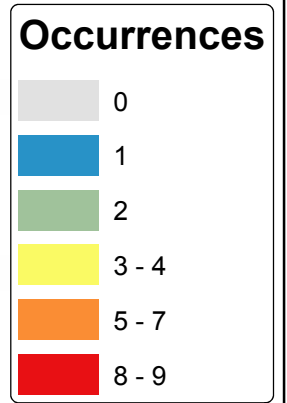
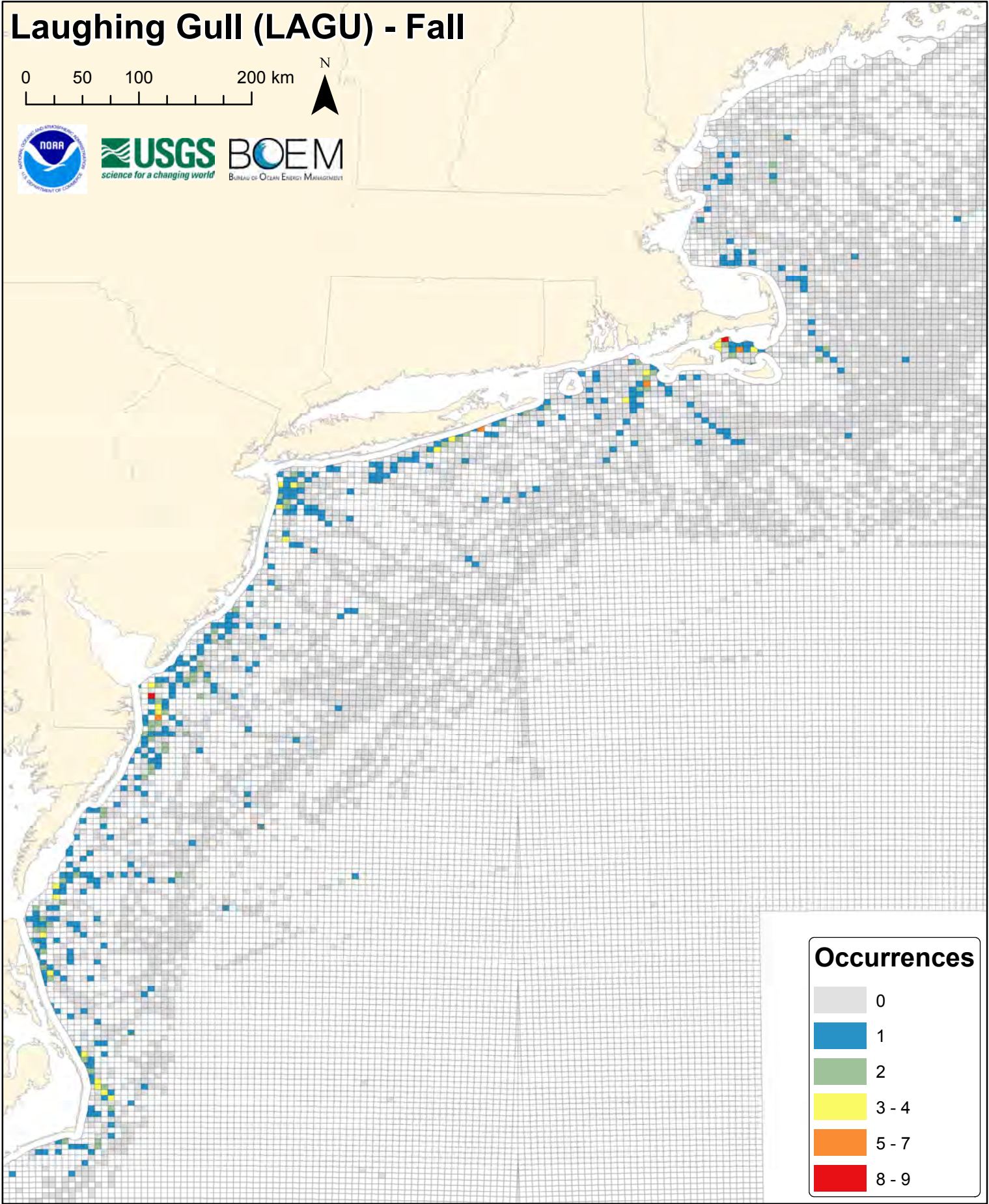
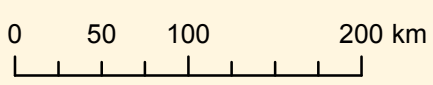


Northern Fulmar (NOFU) - Fall Conditional Model (Non-zero Counts)



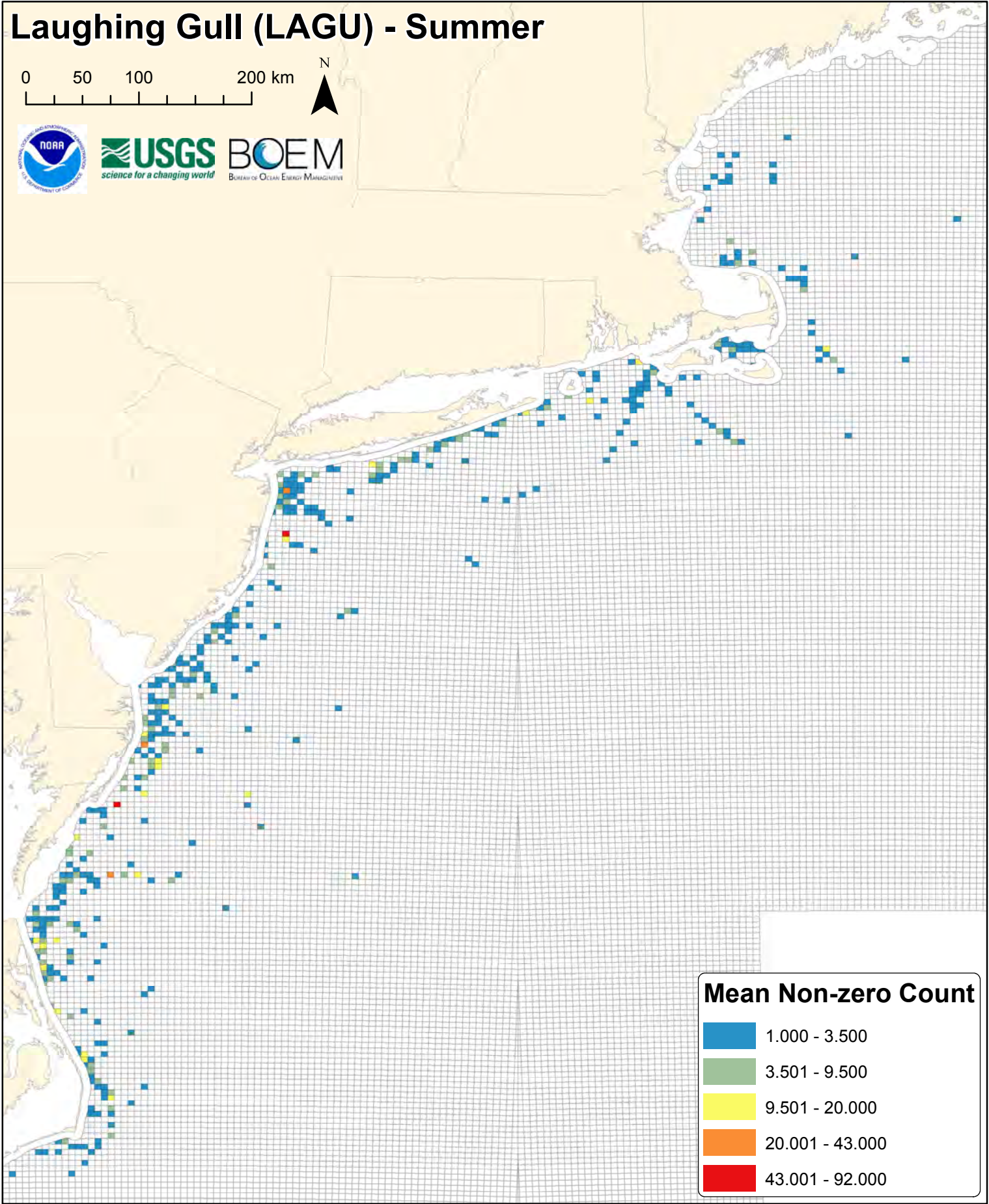
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Laughing Gull (LAGU) - Fall



Laughing Gull (LAGU) - Summer

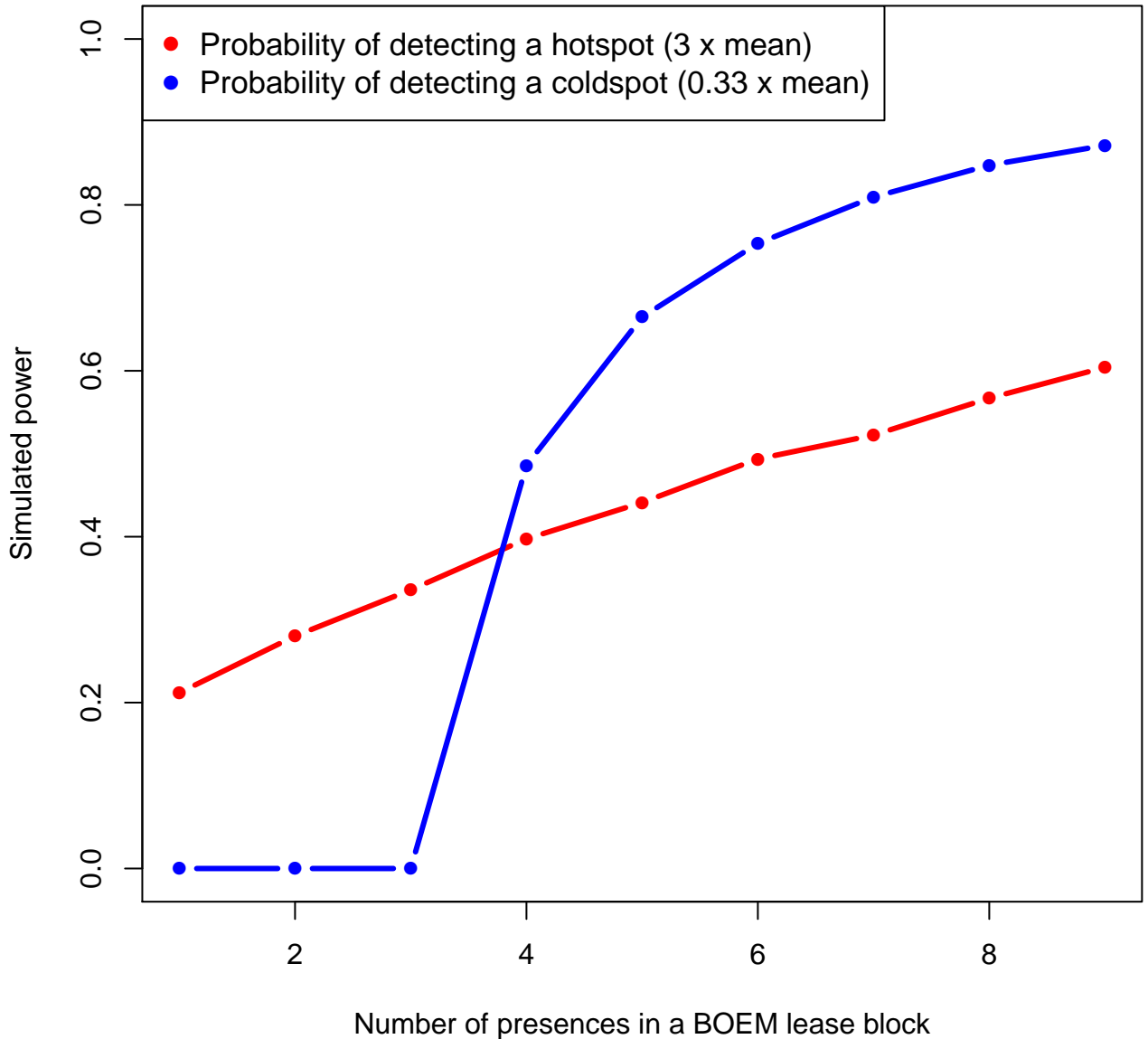
0 50 100 200 km



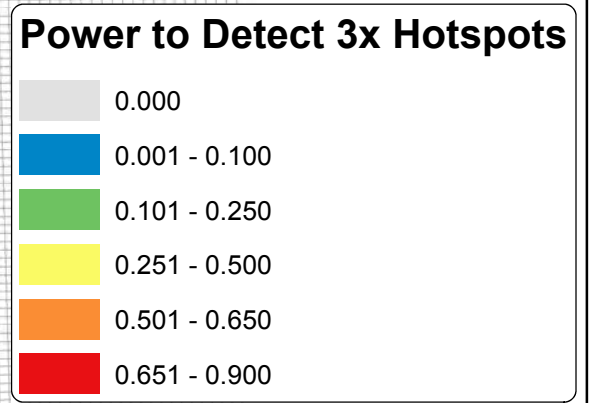
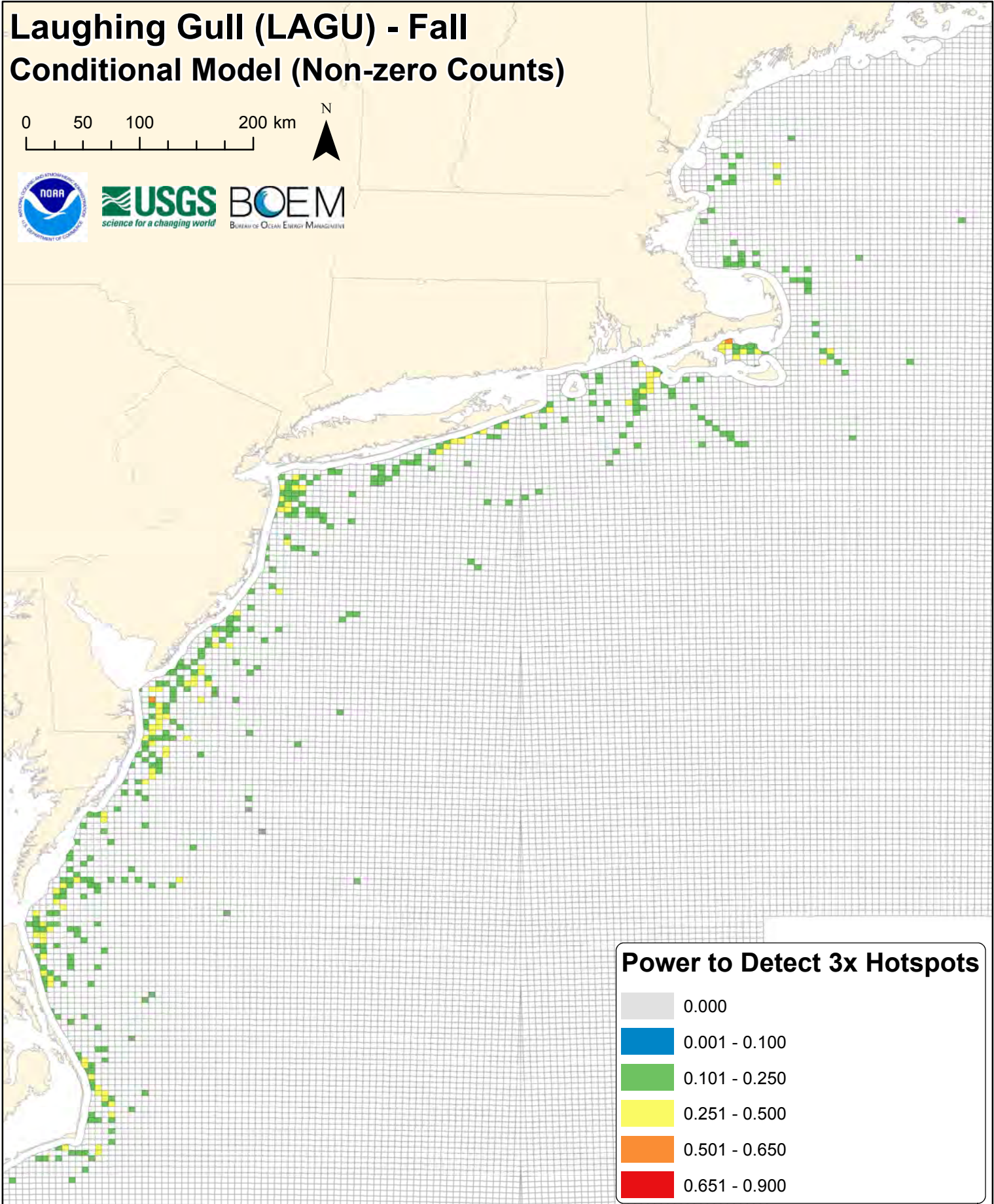
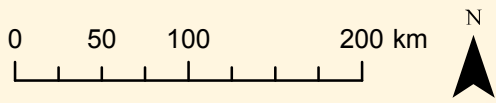
Mean Non-zero Count

- 1.000 - 3.500
- 3.501 - 9.500
- 9.501 - 20.000
- 20.001 - 43.000
- 43.001 - 92.000

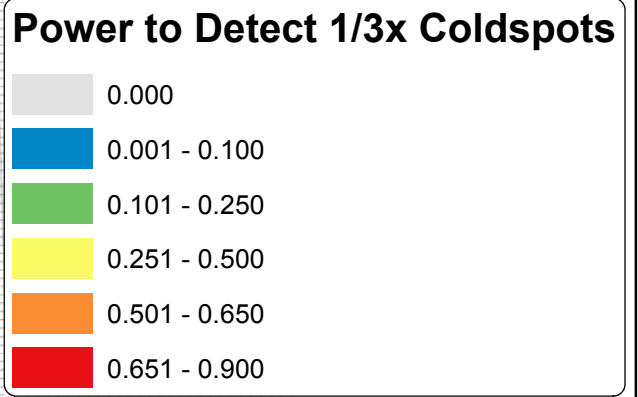
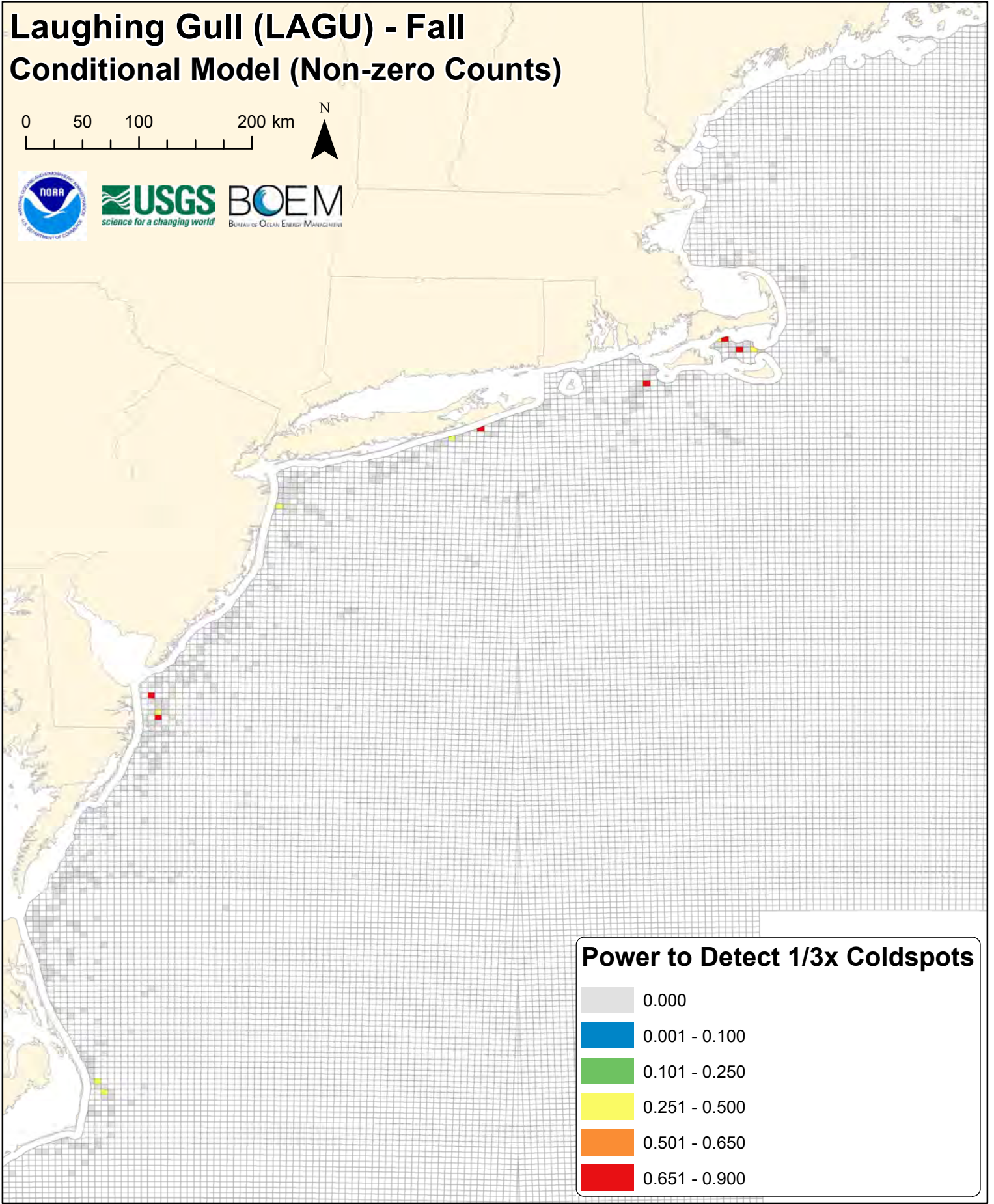
lagu



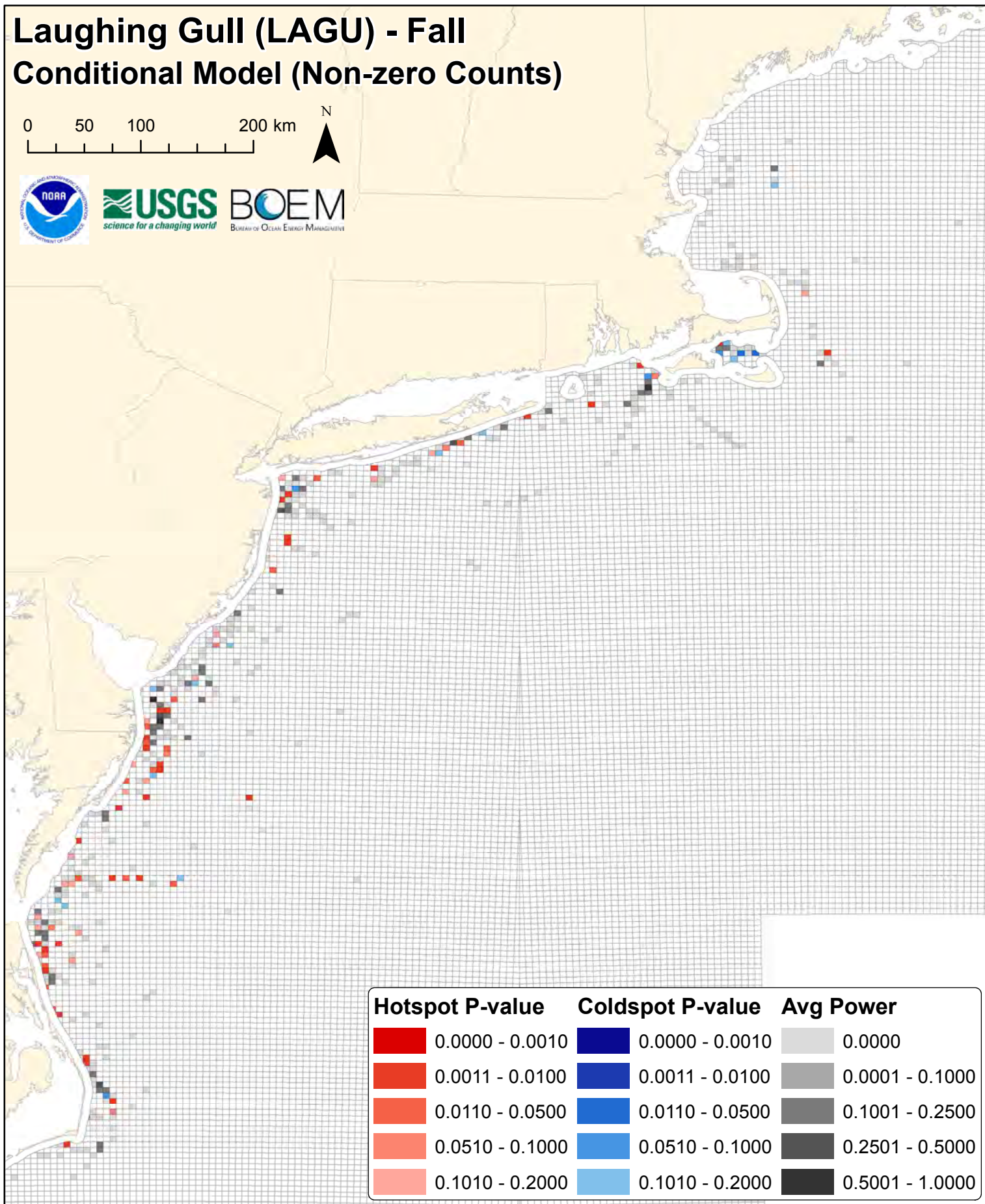
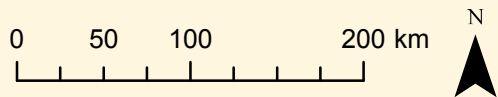
Laughing Gull (LAGU) - Fall Conditional Model (Non-zero Counts)


















Laughing Gull (LAGU) - Fall Conditional Model (Non-zero Counts)

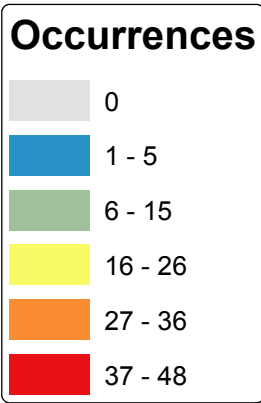
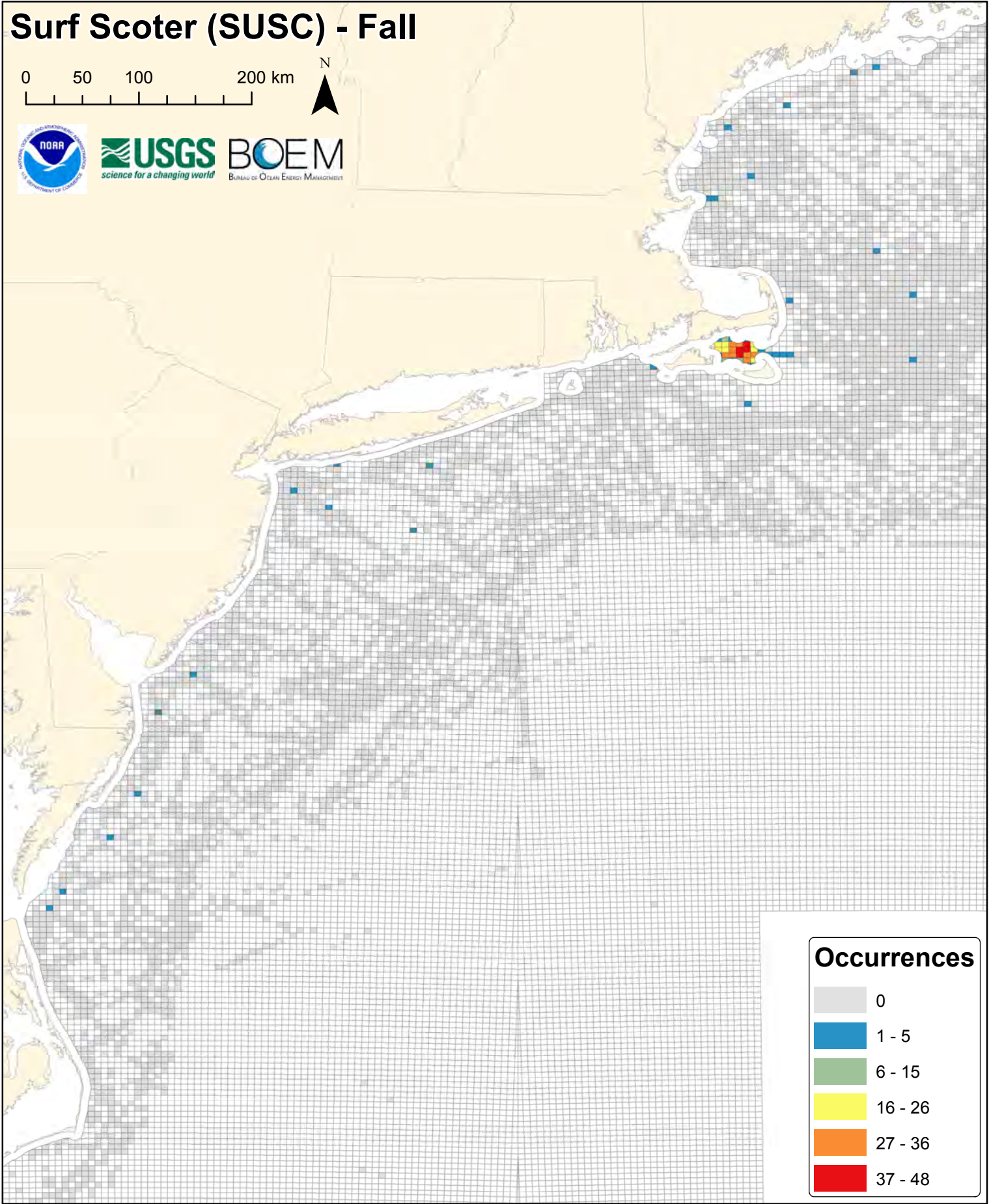
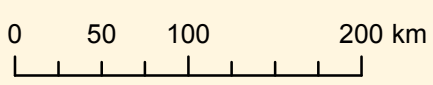


Laughing Gull (LAGU) - Fall Conditional Model (Non-zero Counts)

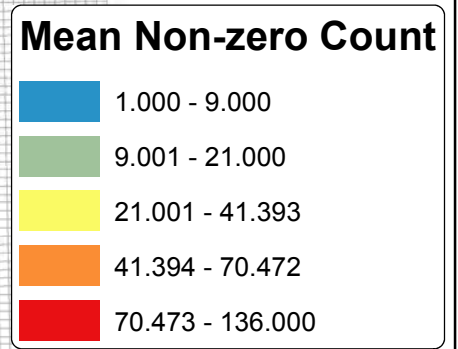
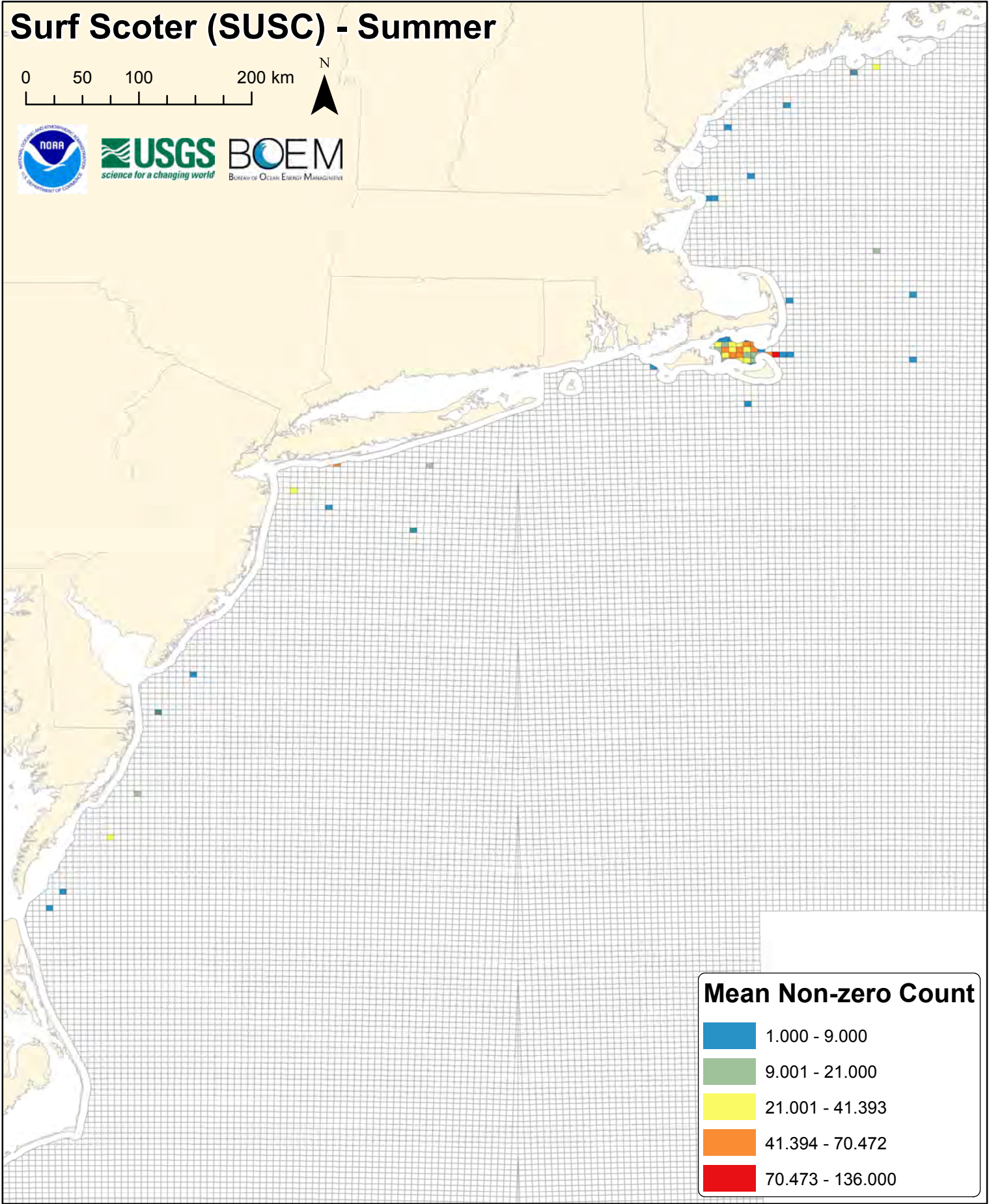
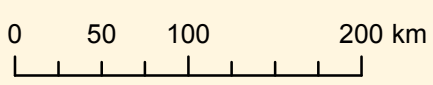


Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

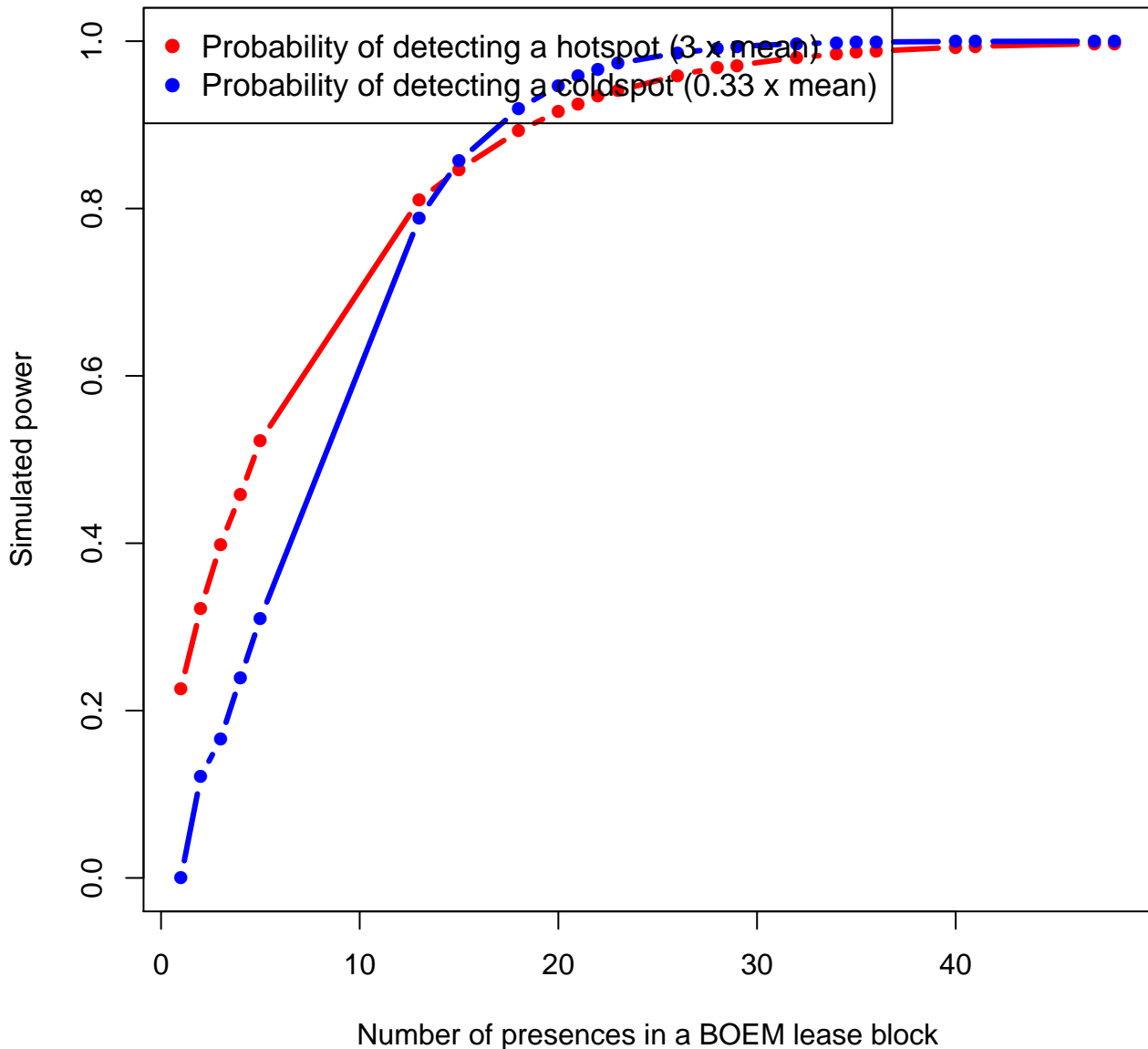
Surf Scoter (SUSC) - Fall



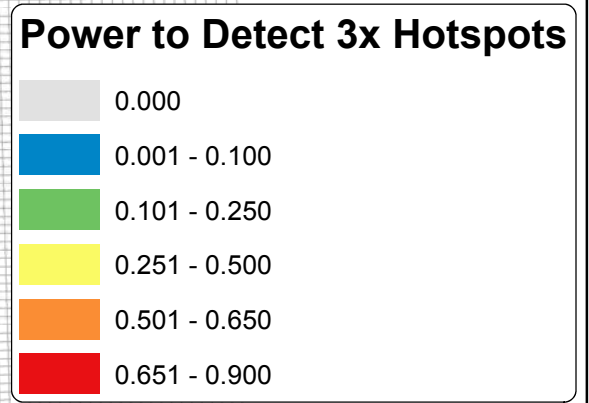
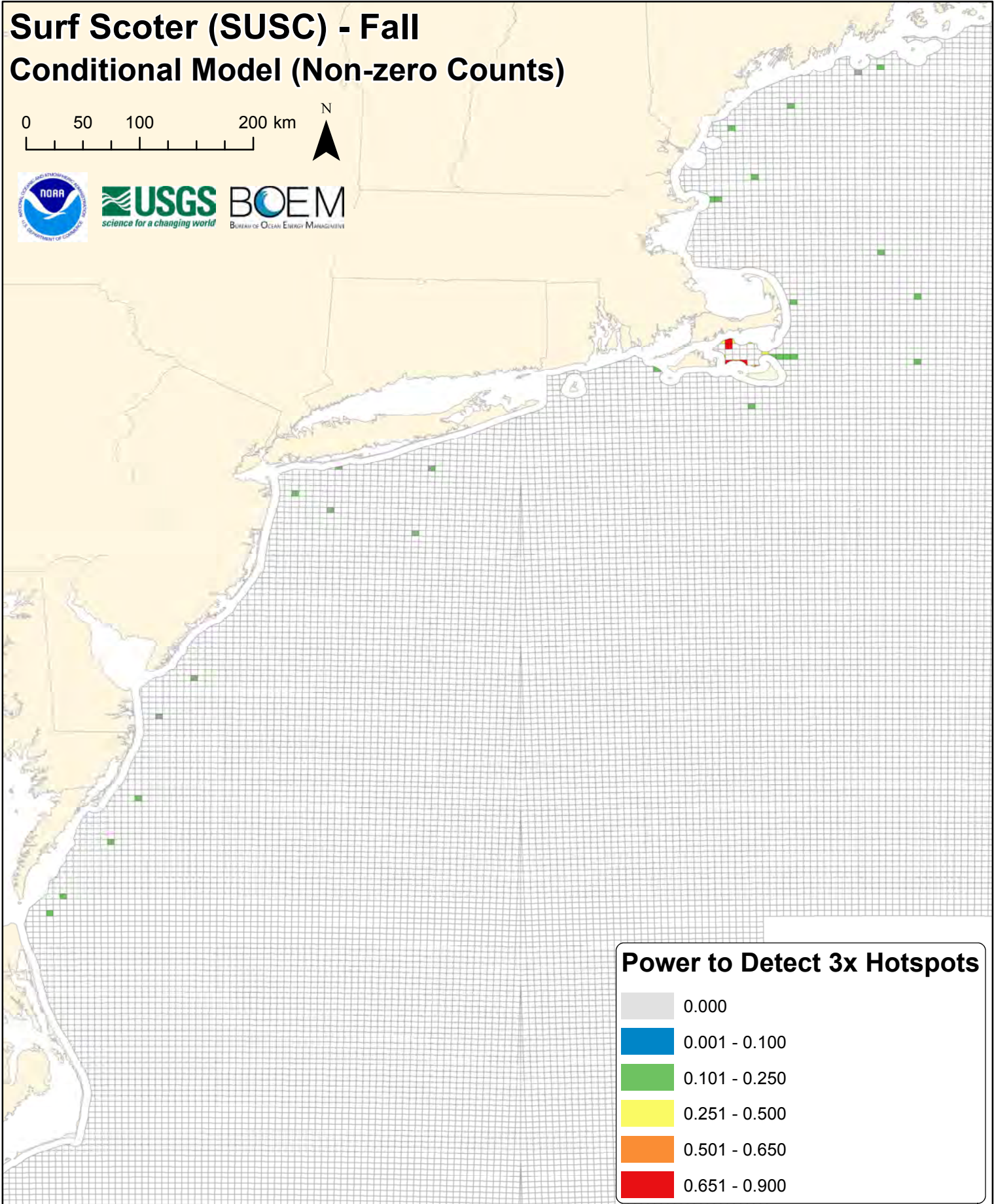
Surf Scoter (SUSC) - Summer



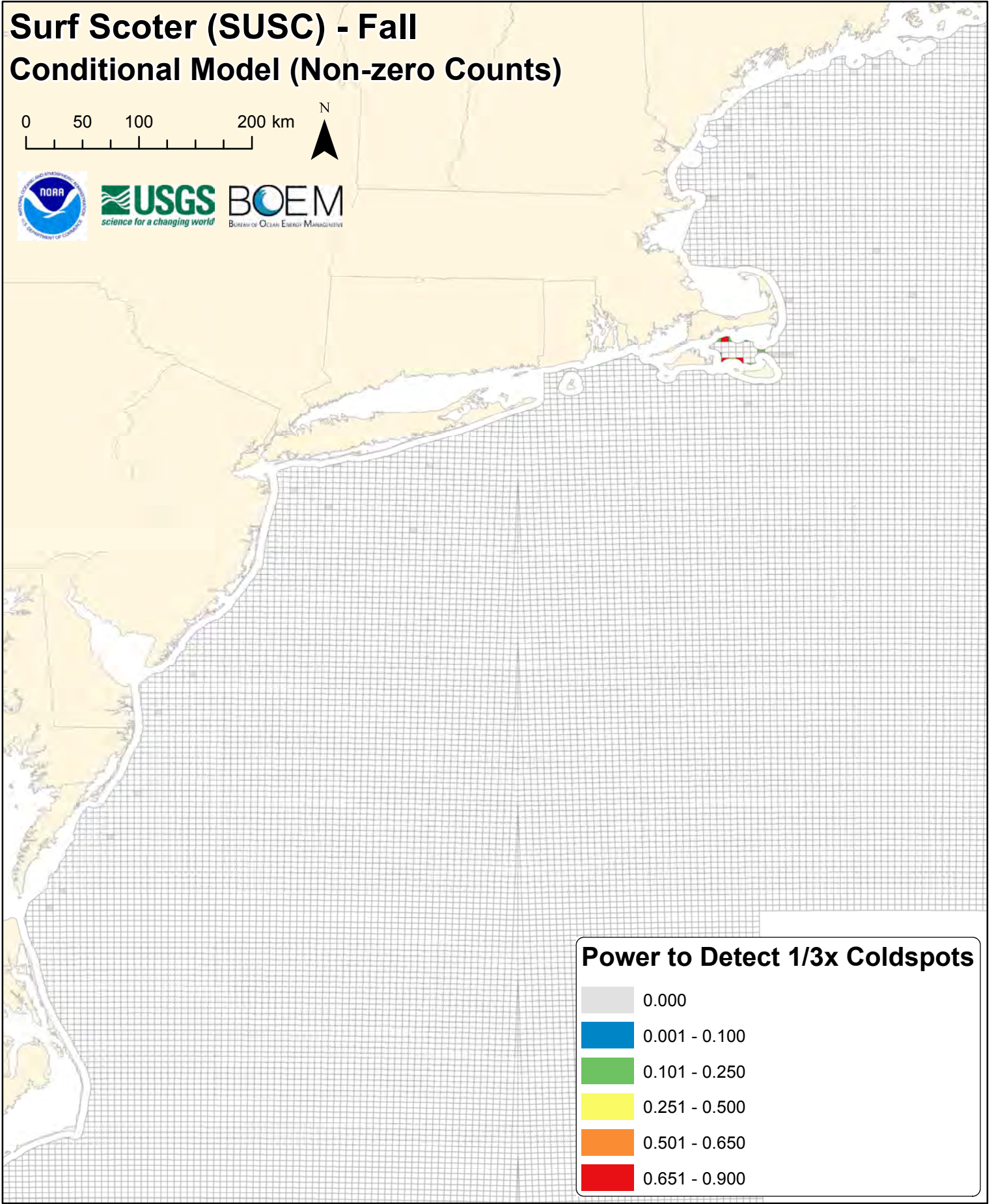
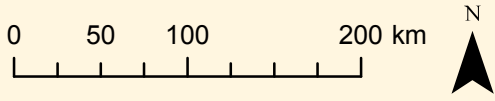
SUSC



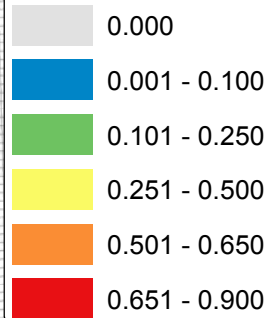
Surf Scoter (SUSC) - Fall Conditional Model (Non-zero Counts)



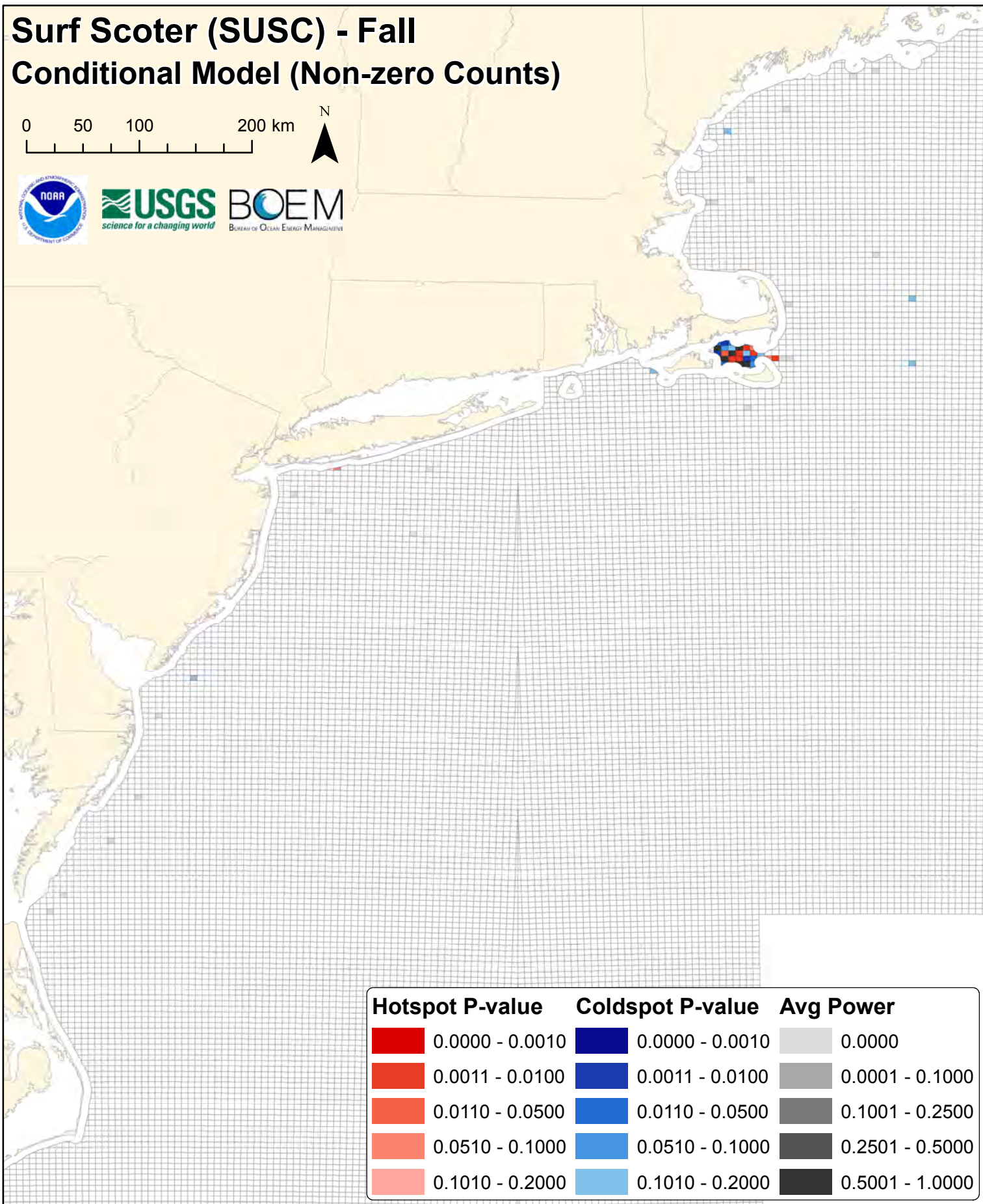
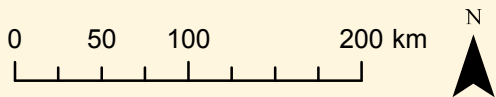
Surf Scoter (SUSC) - Fall Conditional Model (Non-zero Counts)



Power to Detect 1/3x Coldspots

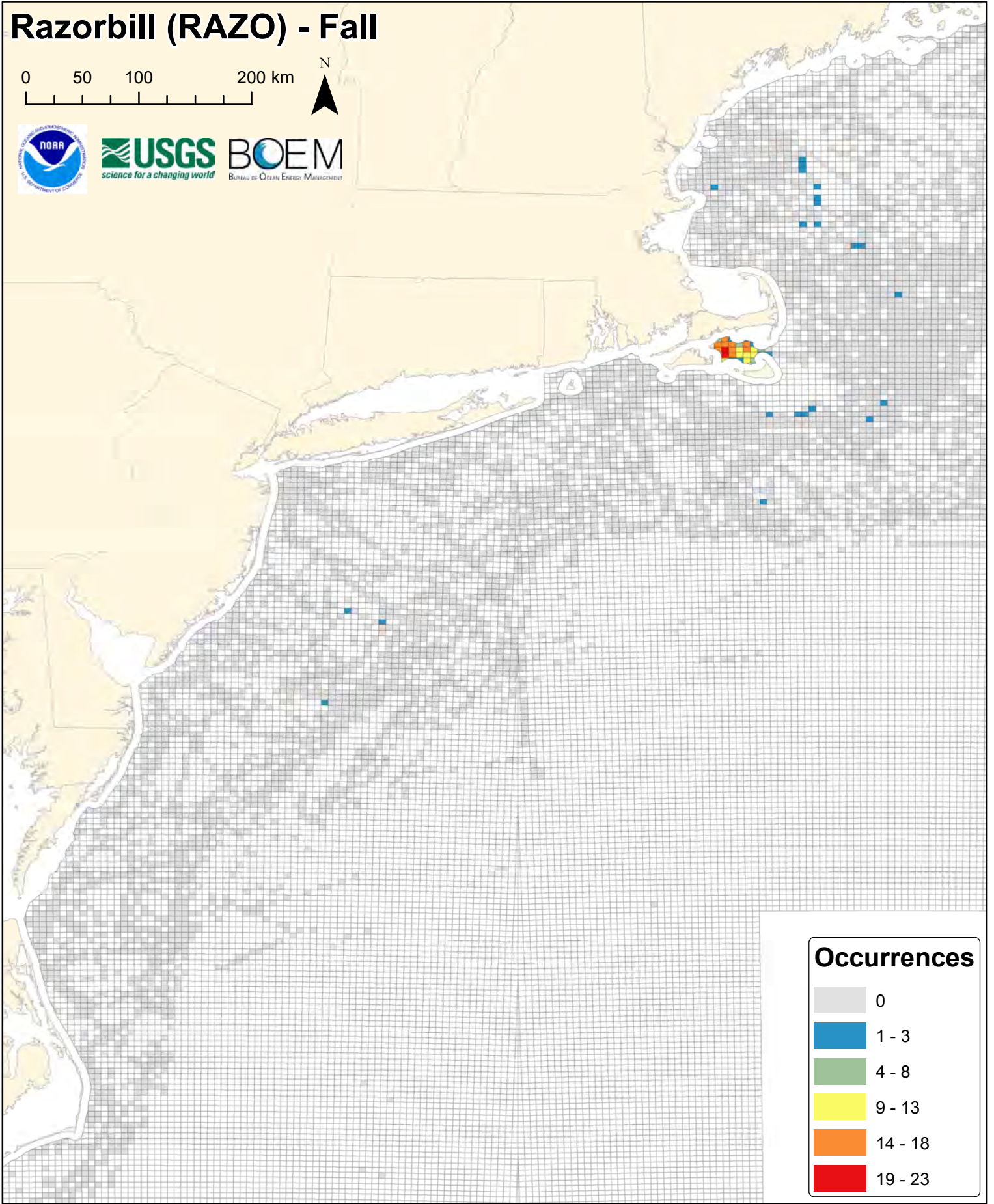


Surf Scoter (SUSC) - Fall Conditional Model (Non-zero Counts)

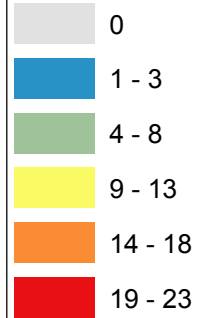


Razorbill (RAZO) - Fall

0 50 100 200 km

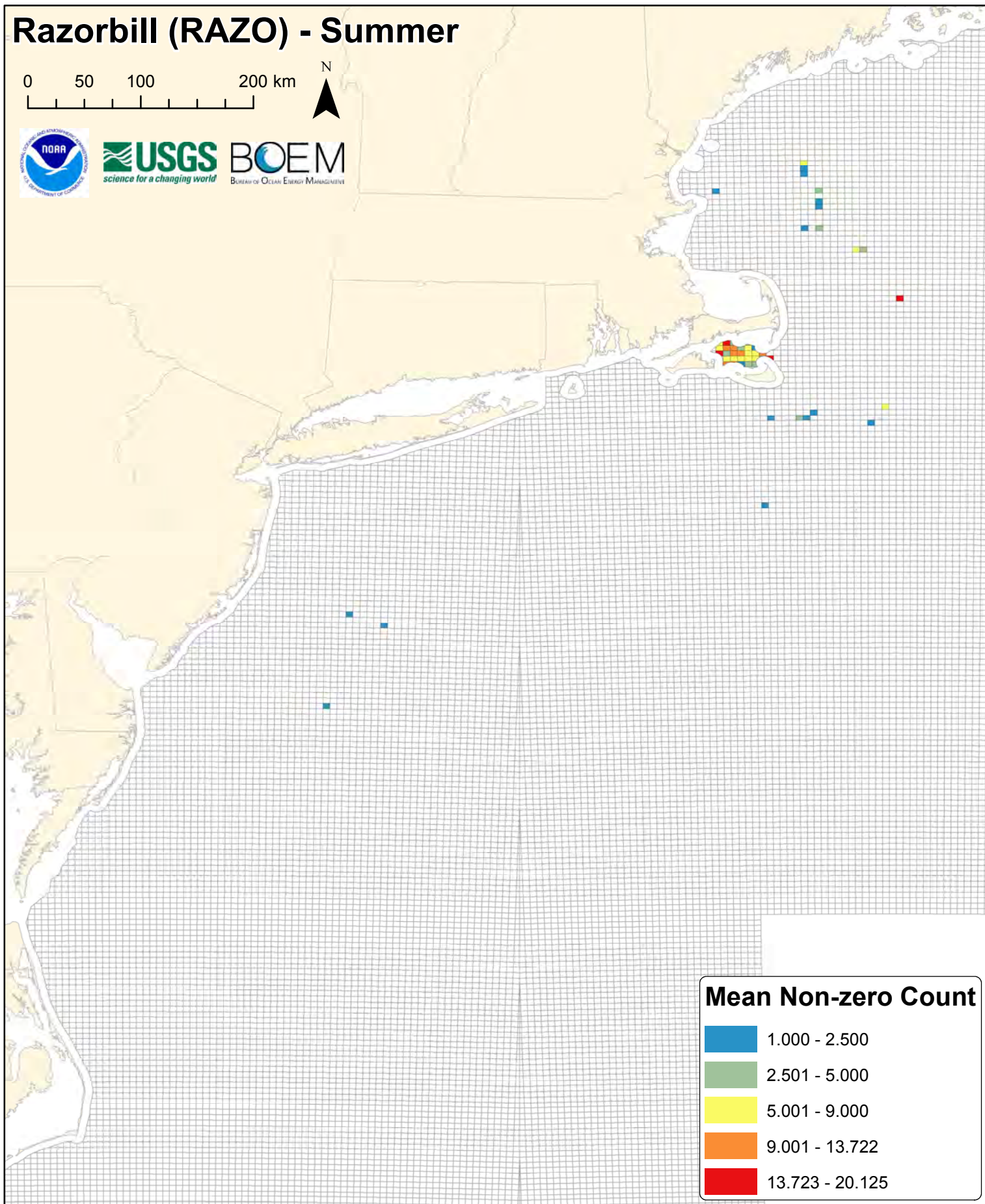


Occurrences



Razorbill (RAZO) - Summer

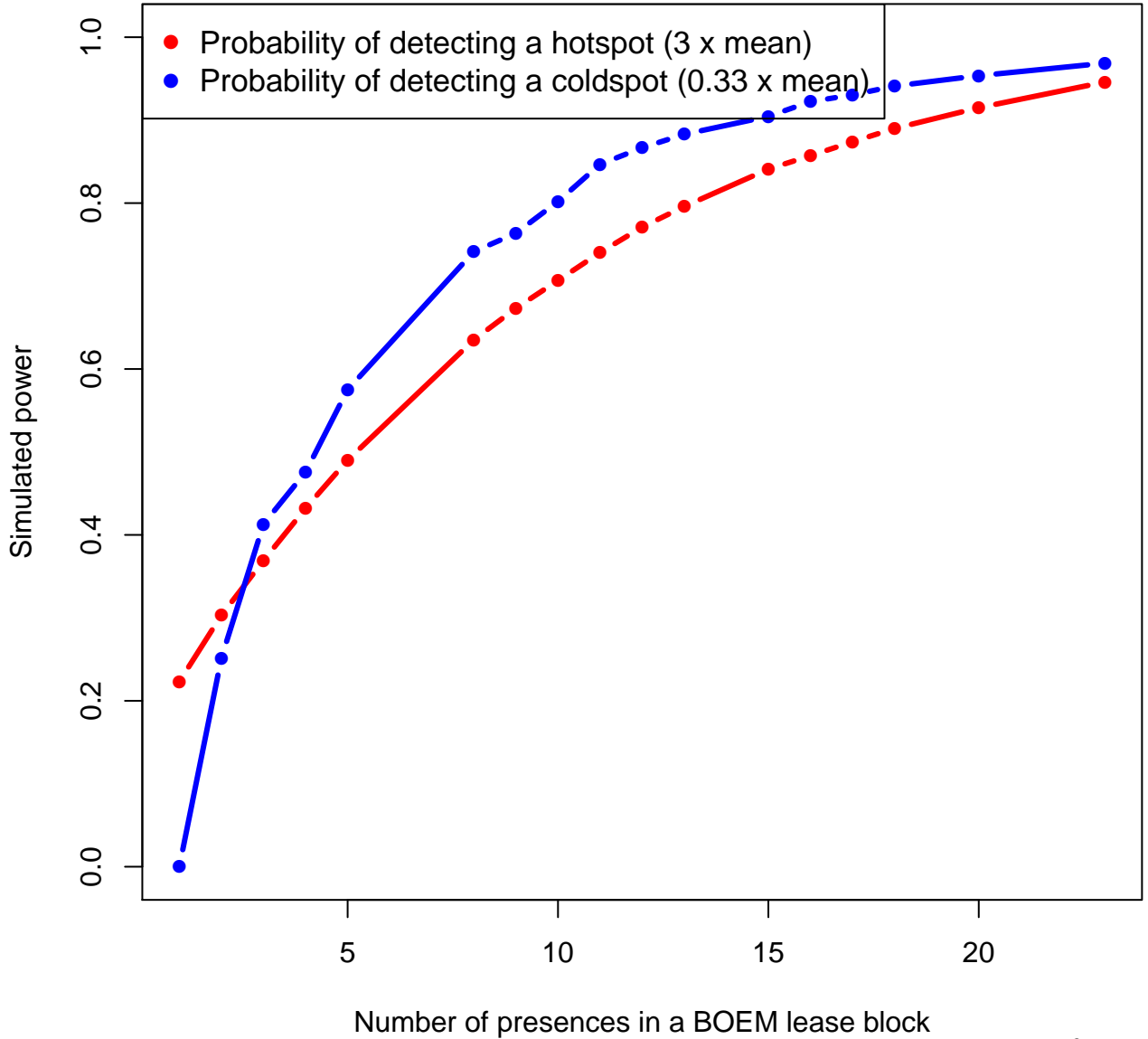
0 50 100 200 km



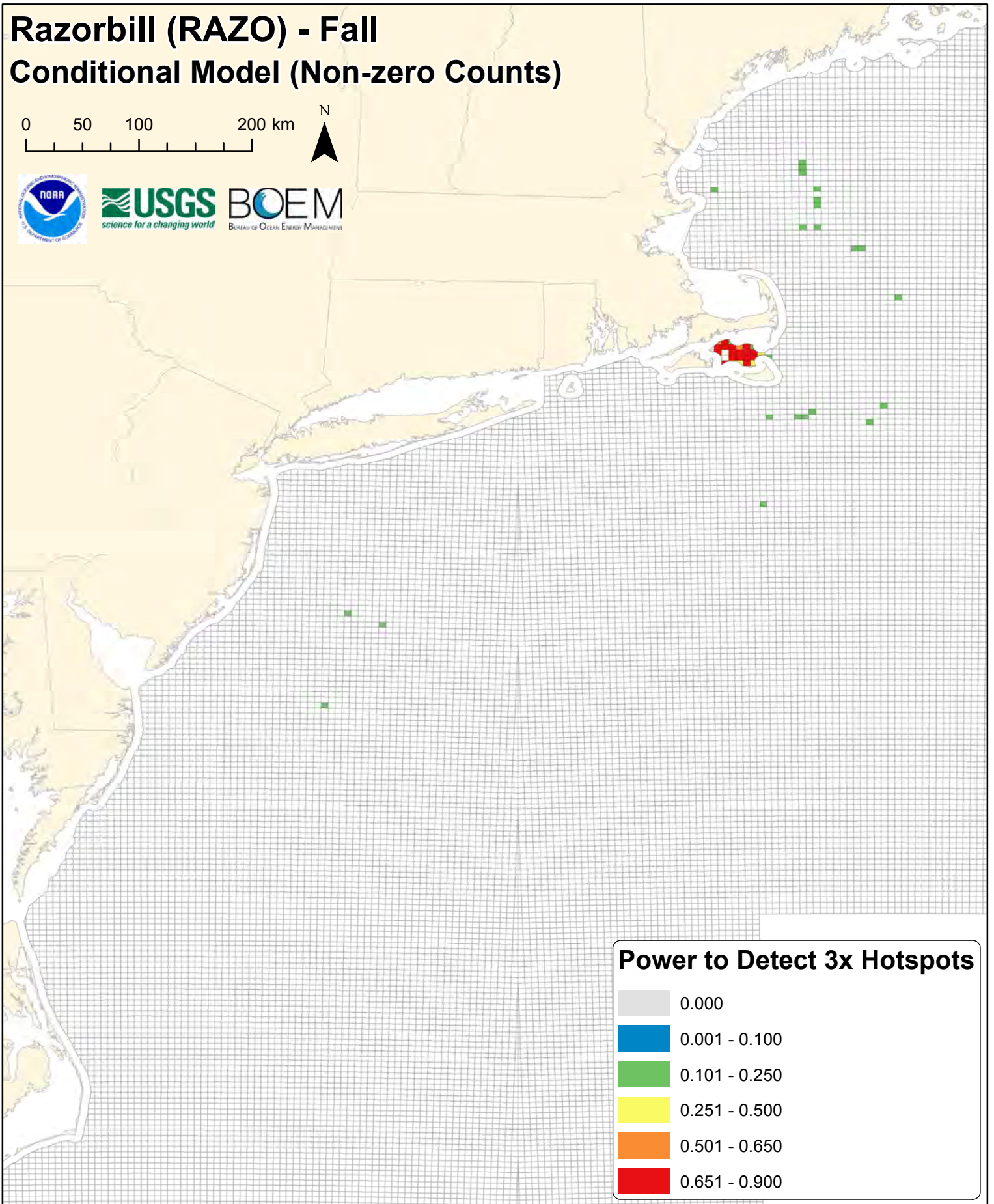
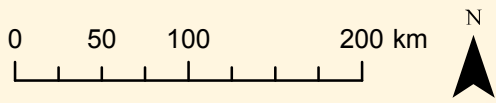
Mean Non-zero Count

- 1.000 - 2.500
- 2.501 - 5.000
- 5.001 - 9.000
- 9.001 - 13.722
- 13.723 - 20.125

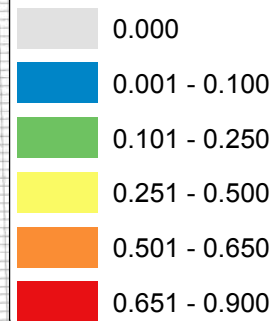
razo



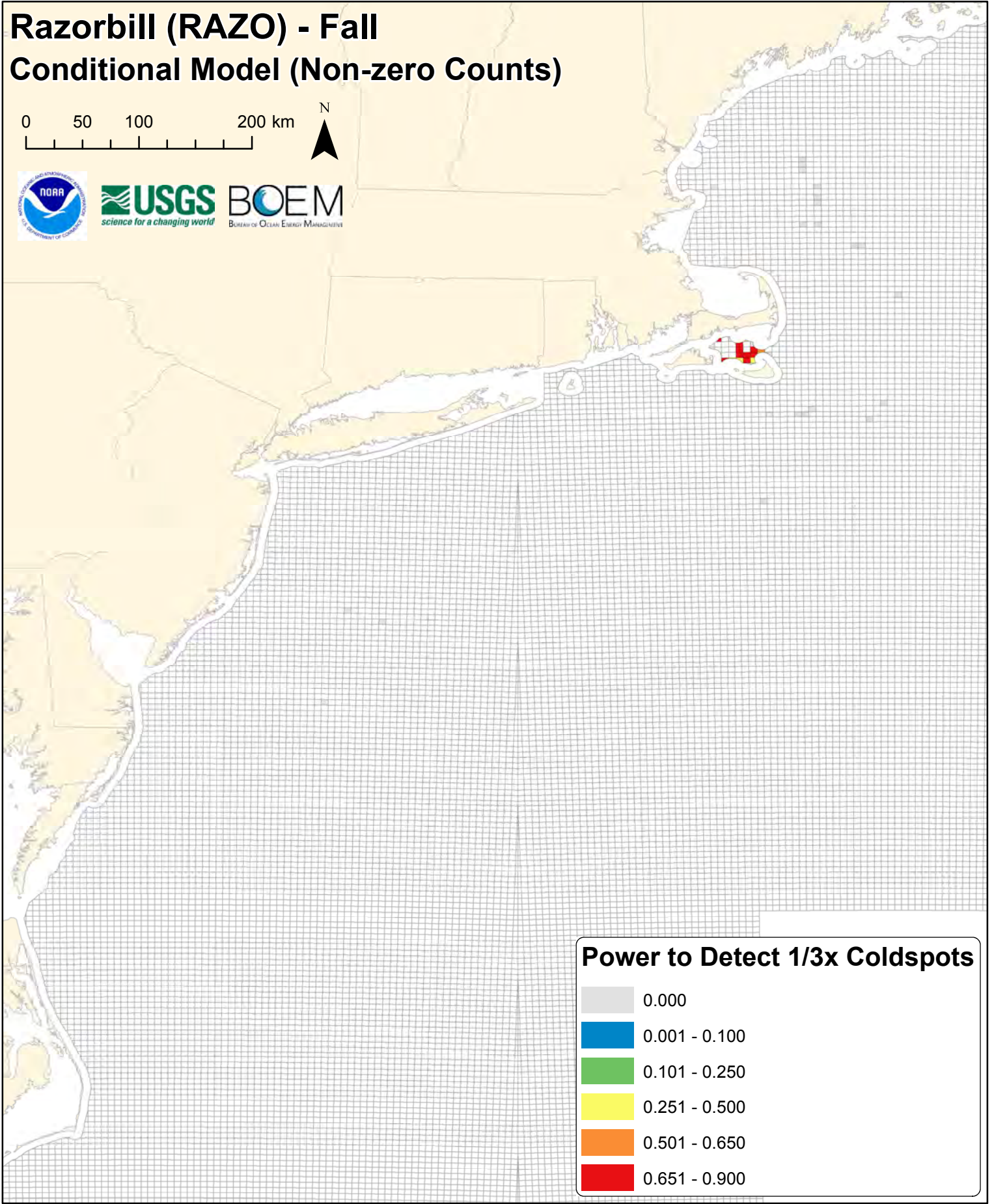
Razorbill (RAZO) - Fall Conditional Model (Non-zero Counts)



Power to Detect 3x Hotspots



Razorbill (RAZO) - Fall Conditional Model (Non-zero Counts)

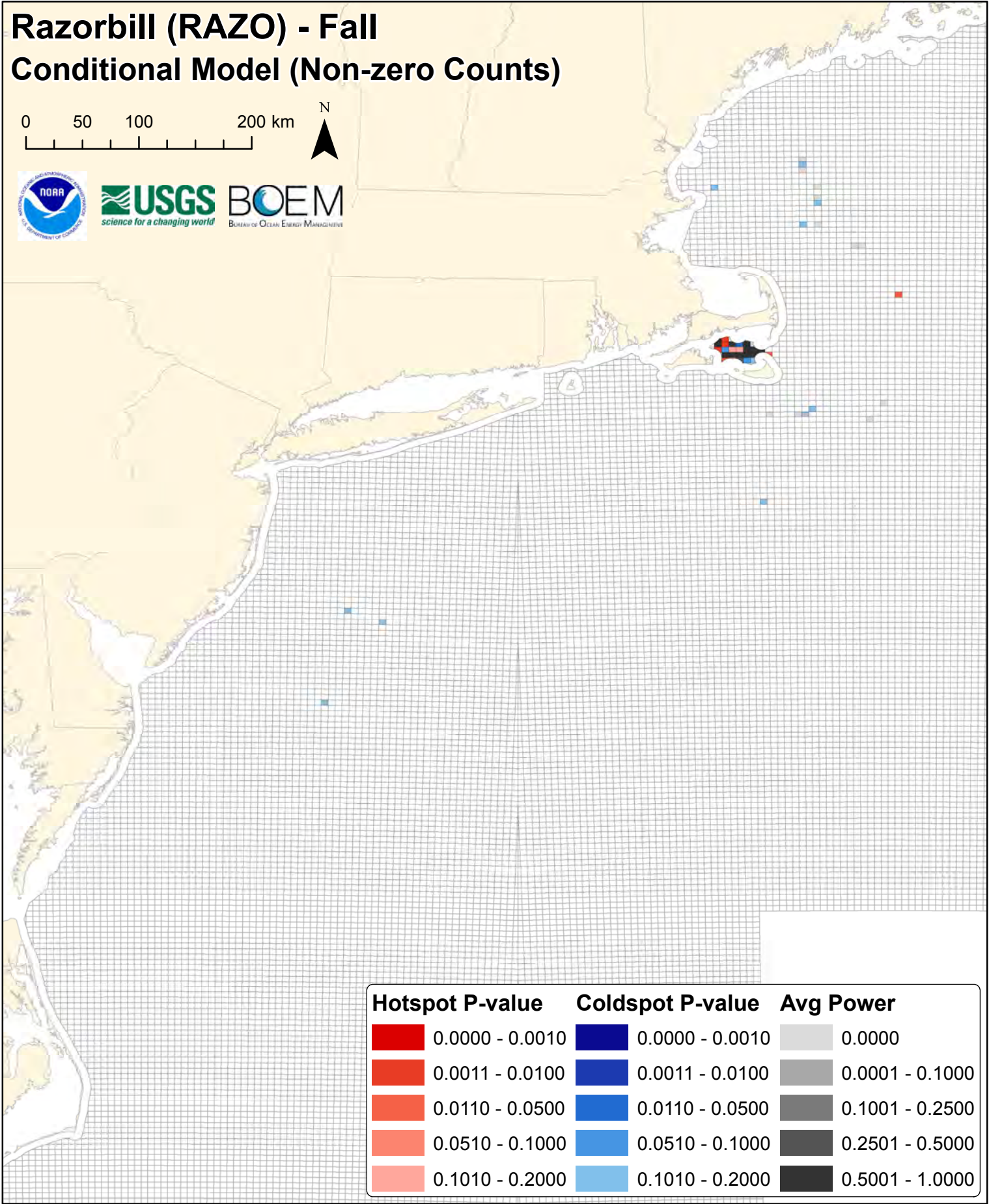
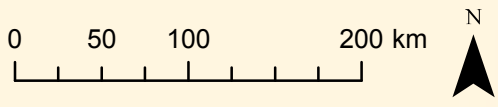

















Power to Detect 1/3x Coldspots

- 0.000
- 0.001 - 0.100
- 0.101 - 0.250
- 0.251 - 0.500
- 0.501 - 0.650
- 0.651 - 0.900

Razorbill (RAZO) - Fall

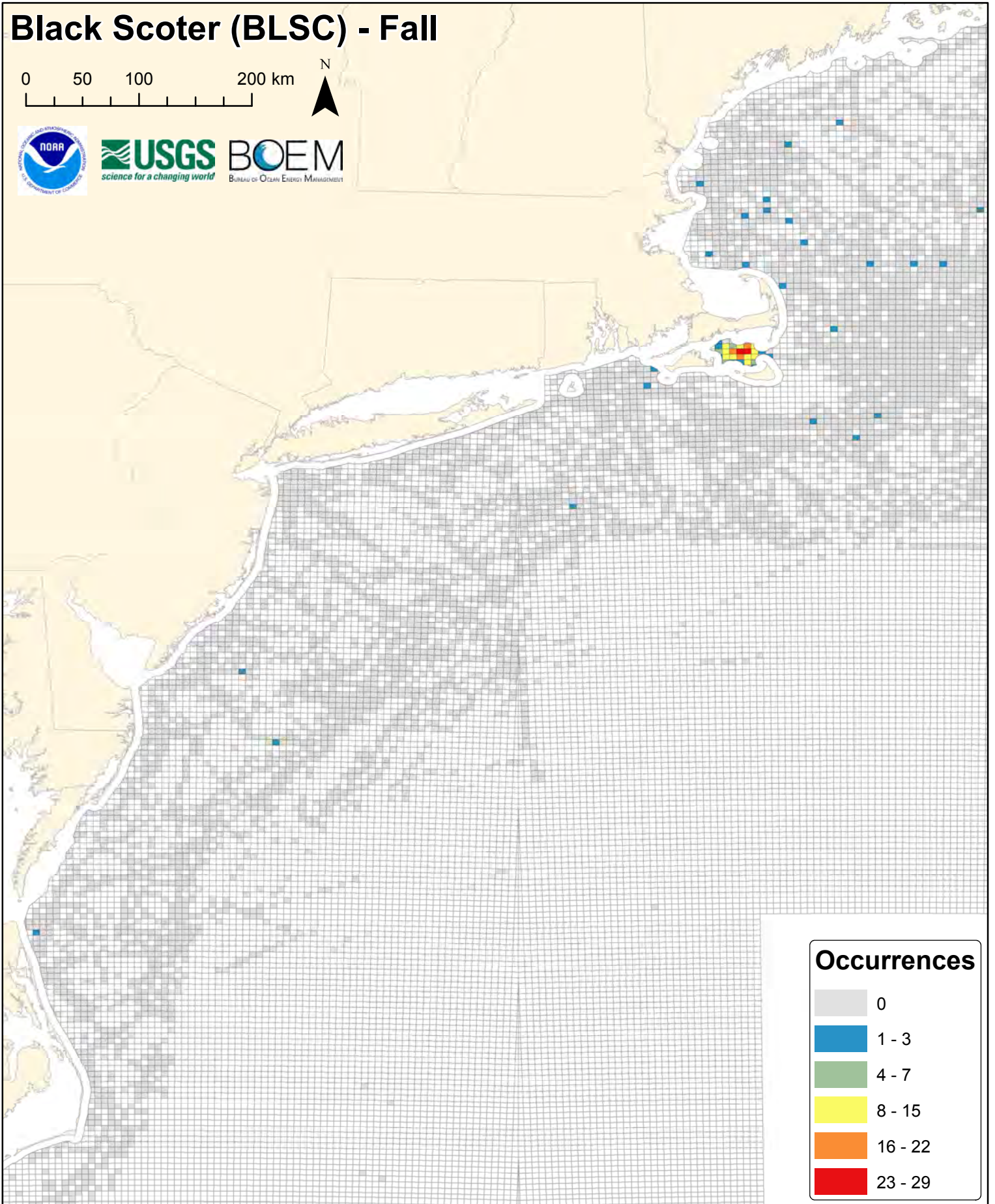
Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Black Scoter (BLSC) - Fall

0 50 100 200 km

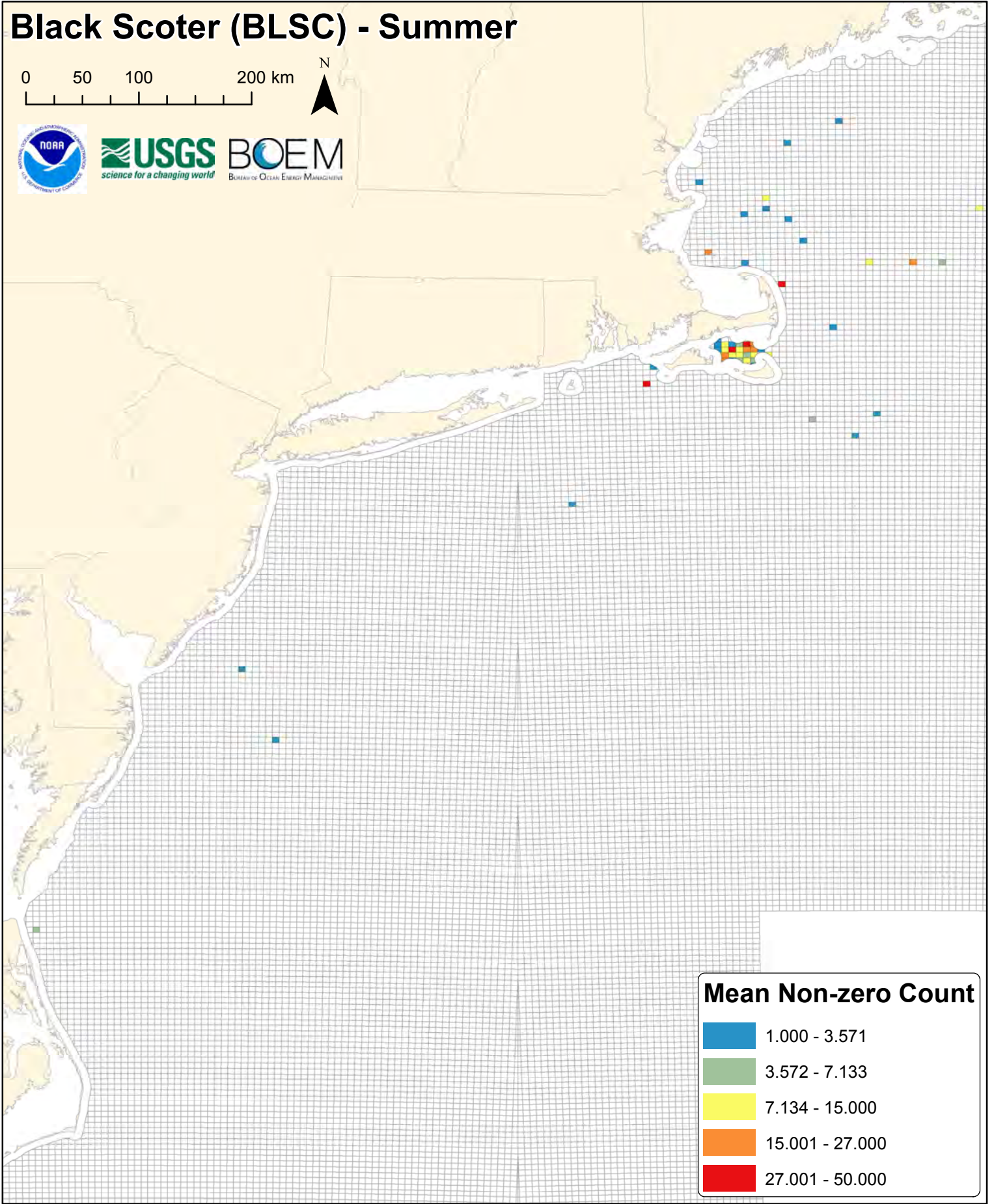


Occurrences

0
1 - 3
4 - 7
8 - 15
16 - 22
23 - 29

Black Scoter (BLSC) - Summer

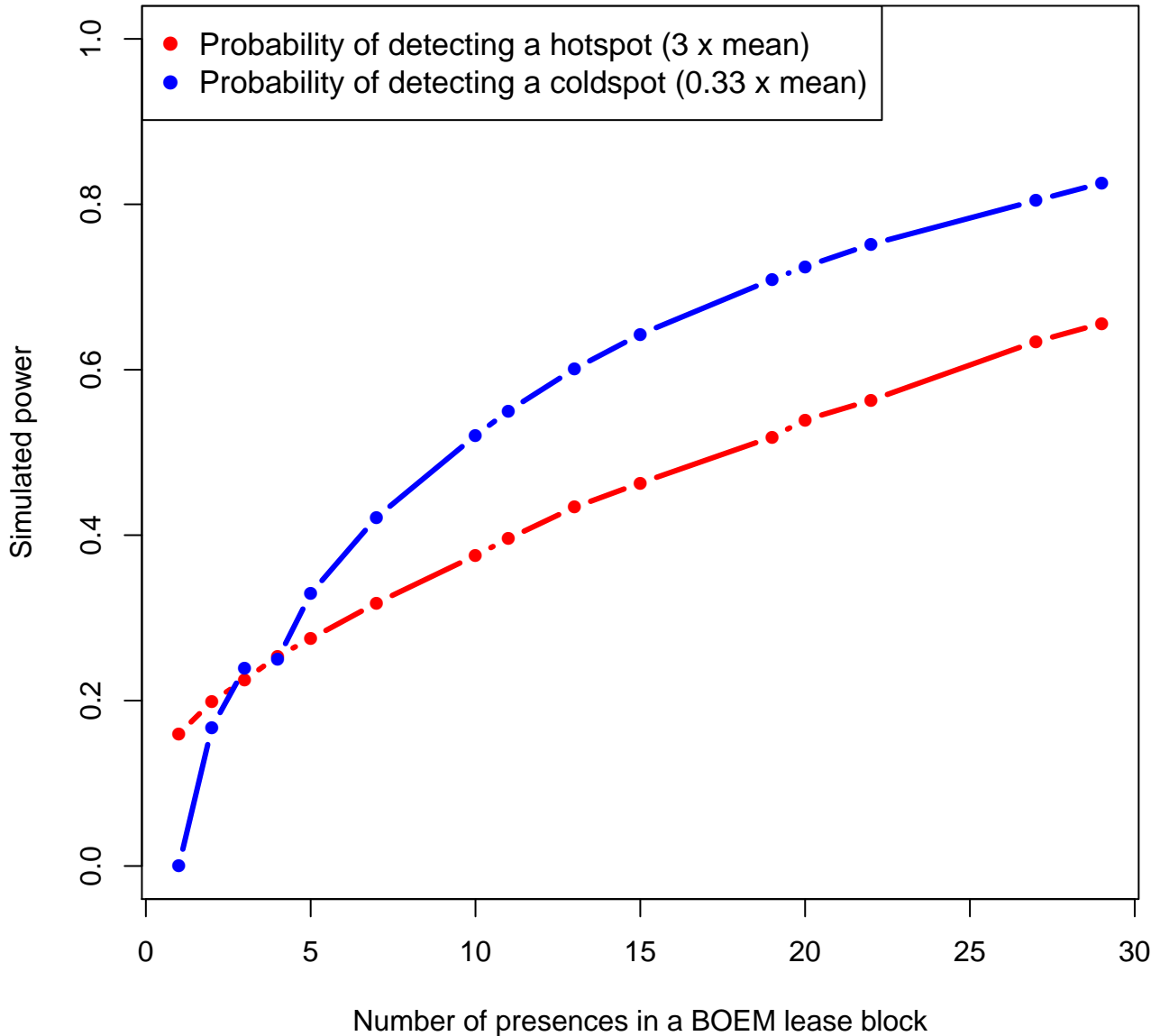
0 50 100 200 km



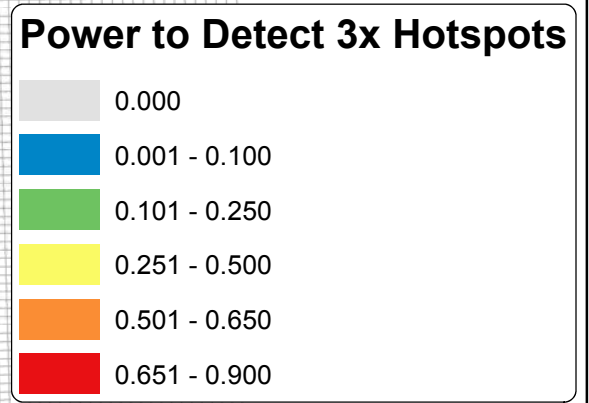
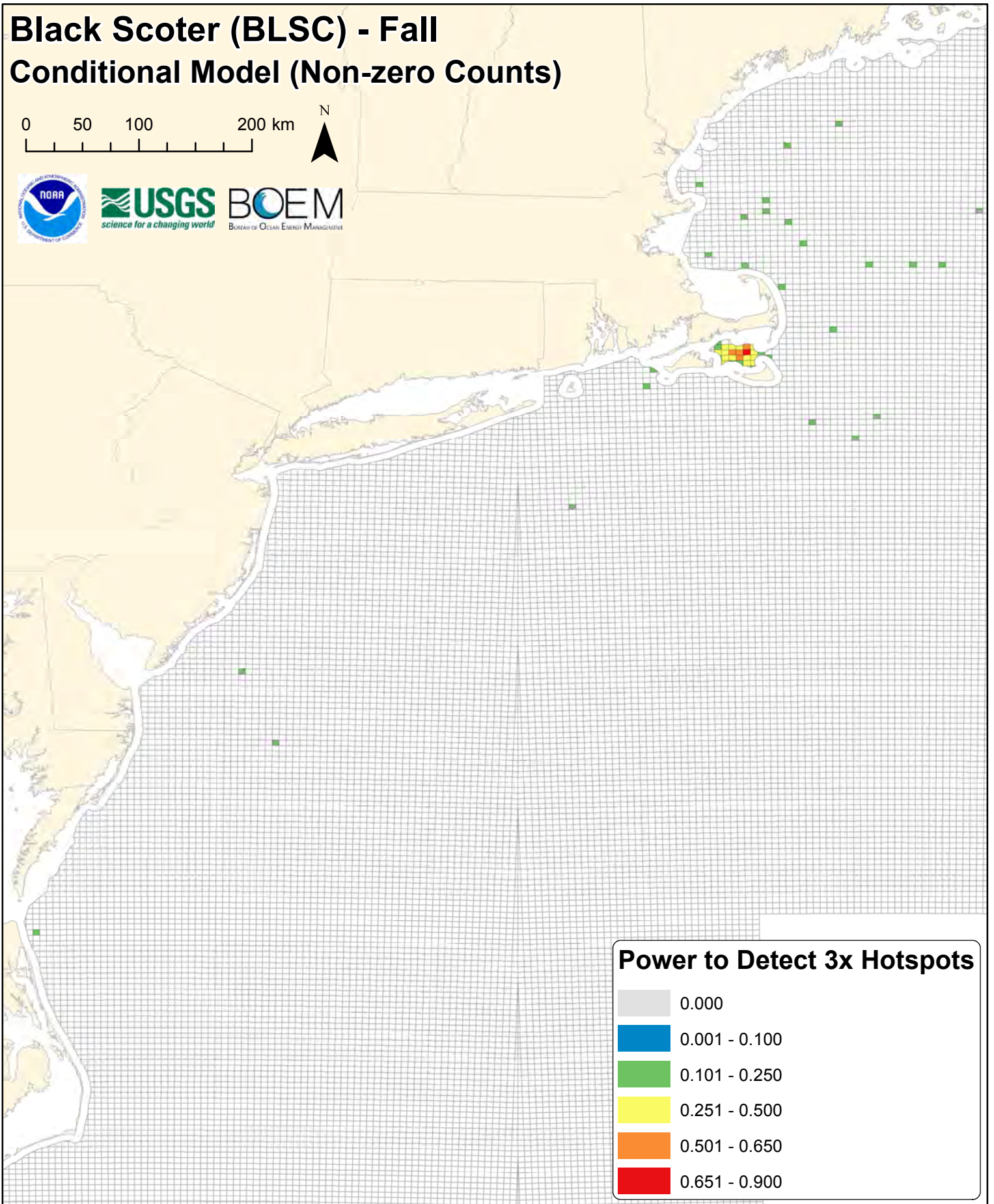
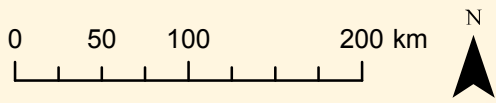
Mean Non-zero Count

- 1.000 - 3.571
- 3.572 - 7.133
- 7.134 - 15.000
- 15.001 - 27.000
- 27.001 - 50.000

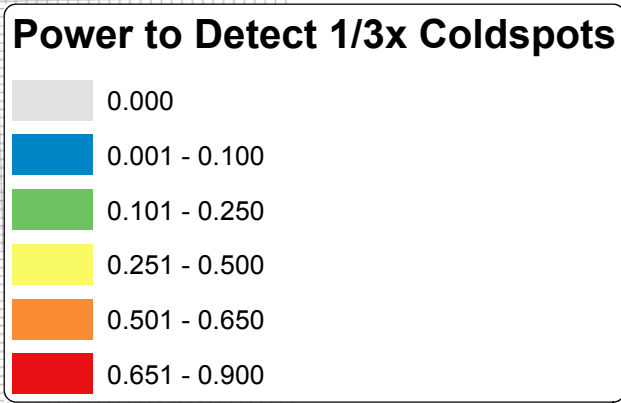
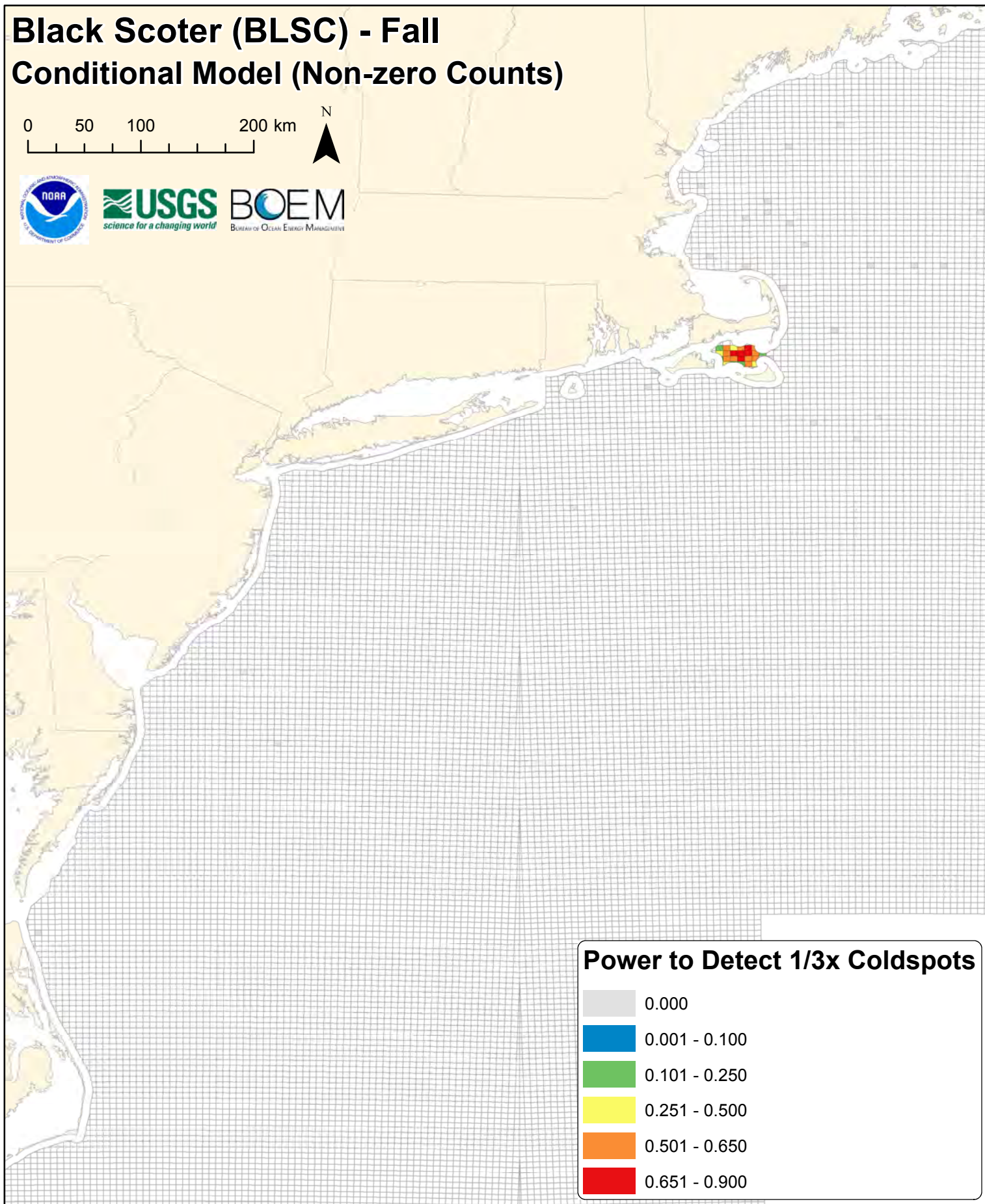
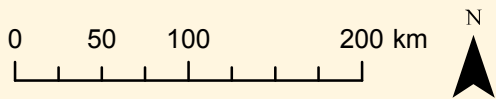
blsc



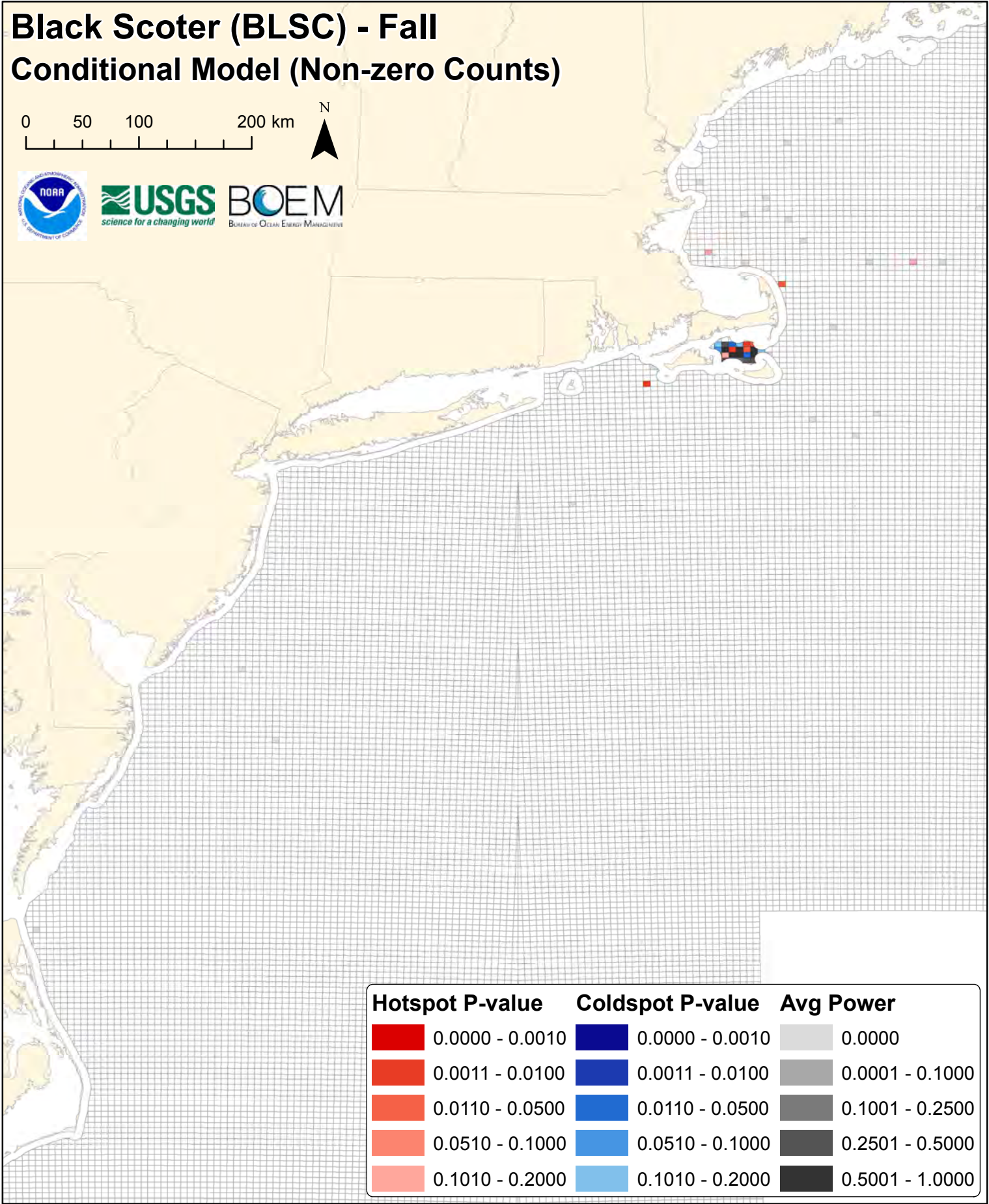
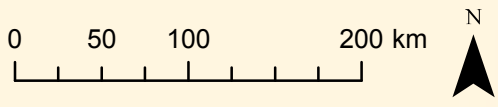
Black Scoter (BLSC) - Fall Conditional Model (Non-zero Counts)


















Black Scoter (BLSC) - Fall Conditional Model (Non-zero Counts)

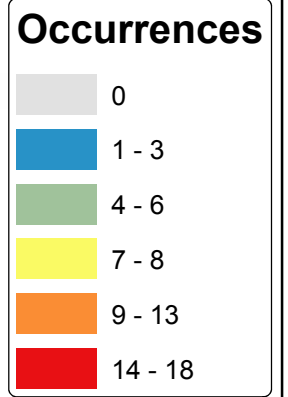
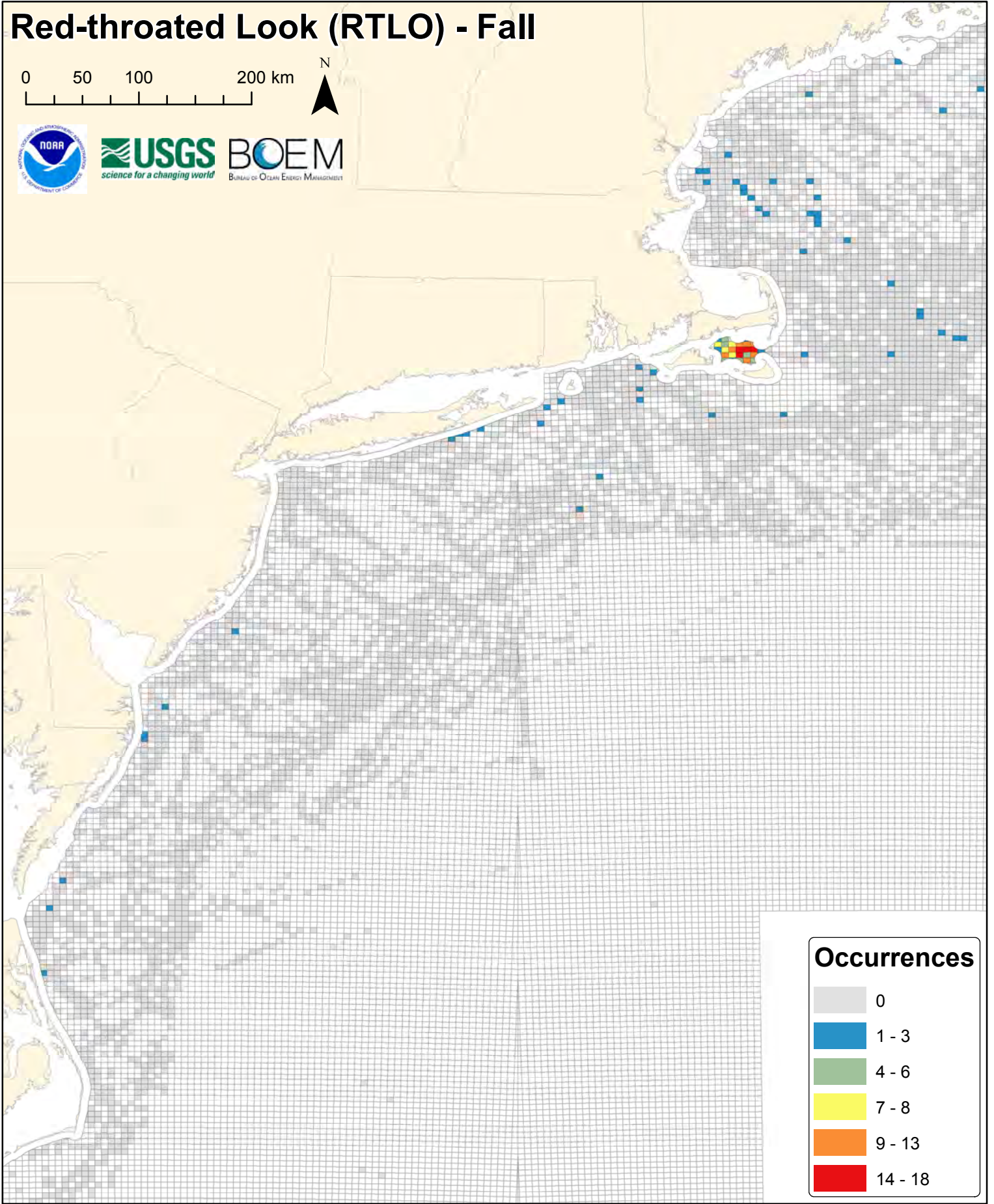
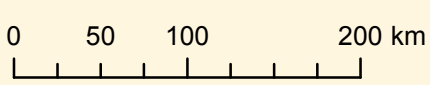


Black Scoter (BLSC) - Fall Conditional Model (Non-zero Counts)



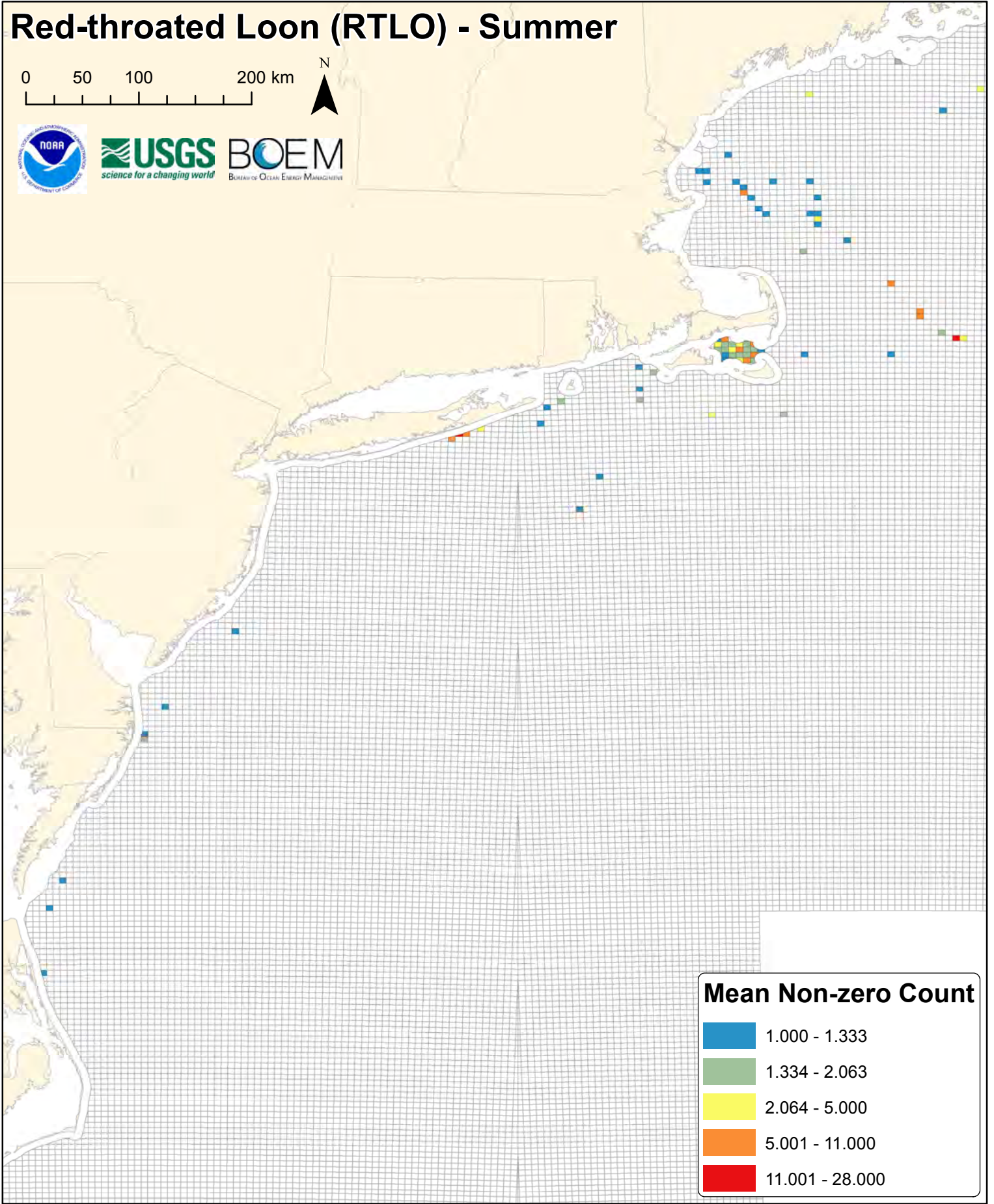
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Red-throated Look (RTLO) - Fall



Red-throated Loon (RTLO) - Summer

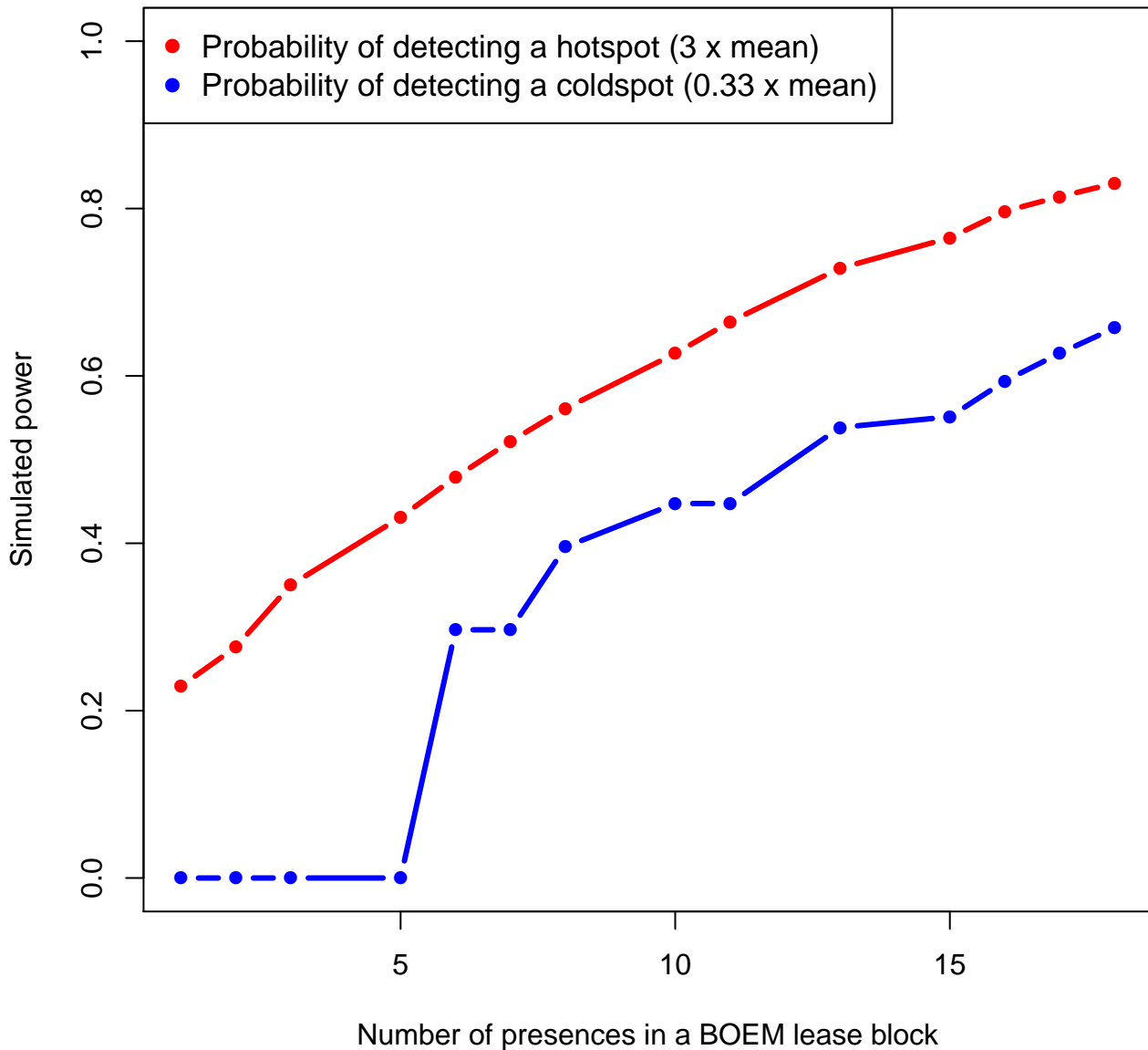
0 50 100 200 km



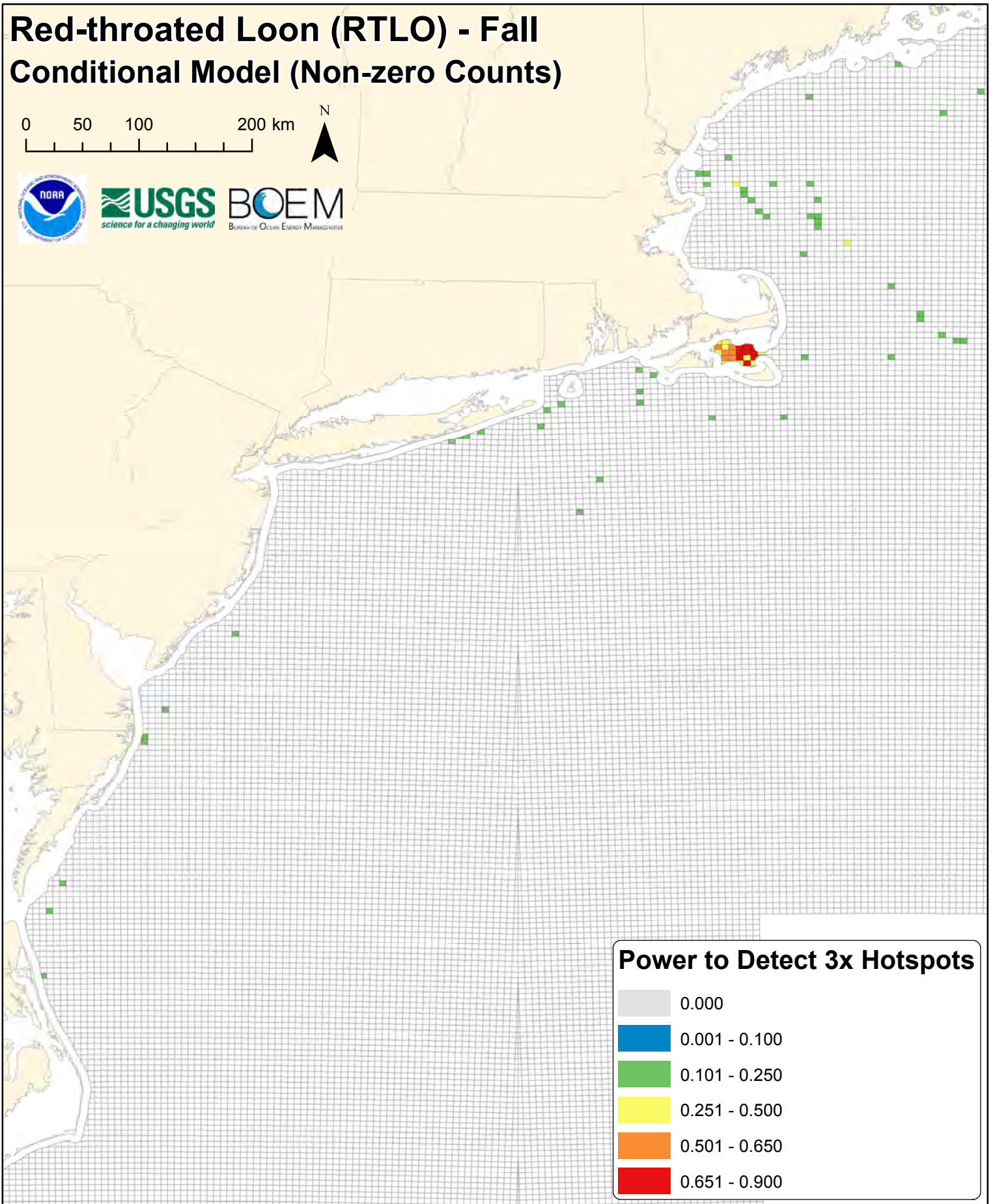
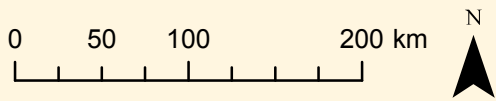
Mean Non-zero Count

- 1.000 - 1.333
- 1.334 - 2.063
- 2.064 - 5.000
- 5.001 - 11.000
- 11.001 - 28.000

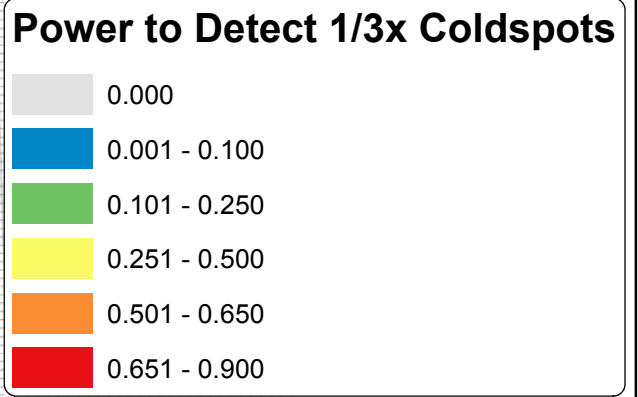
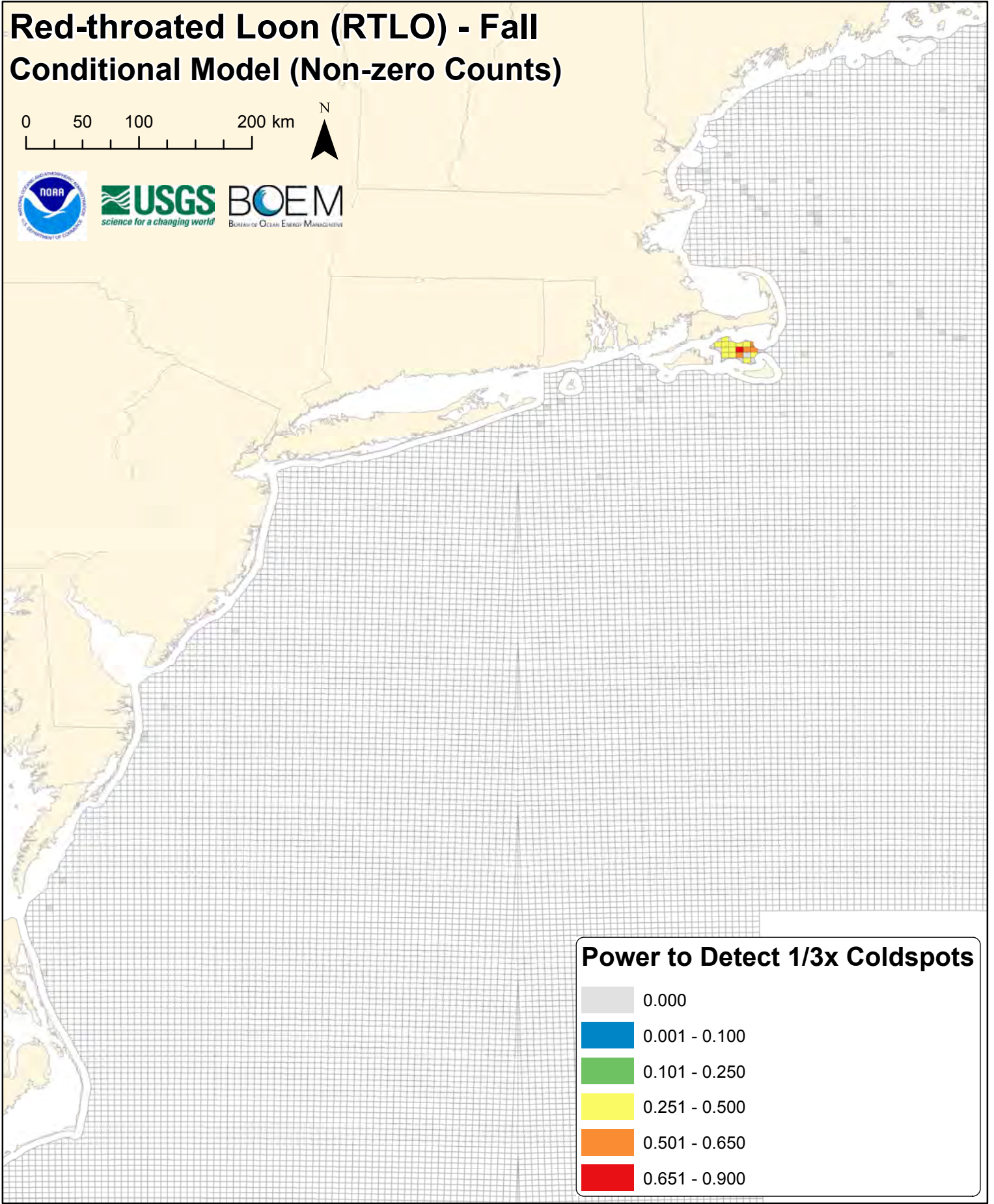
rtlo



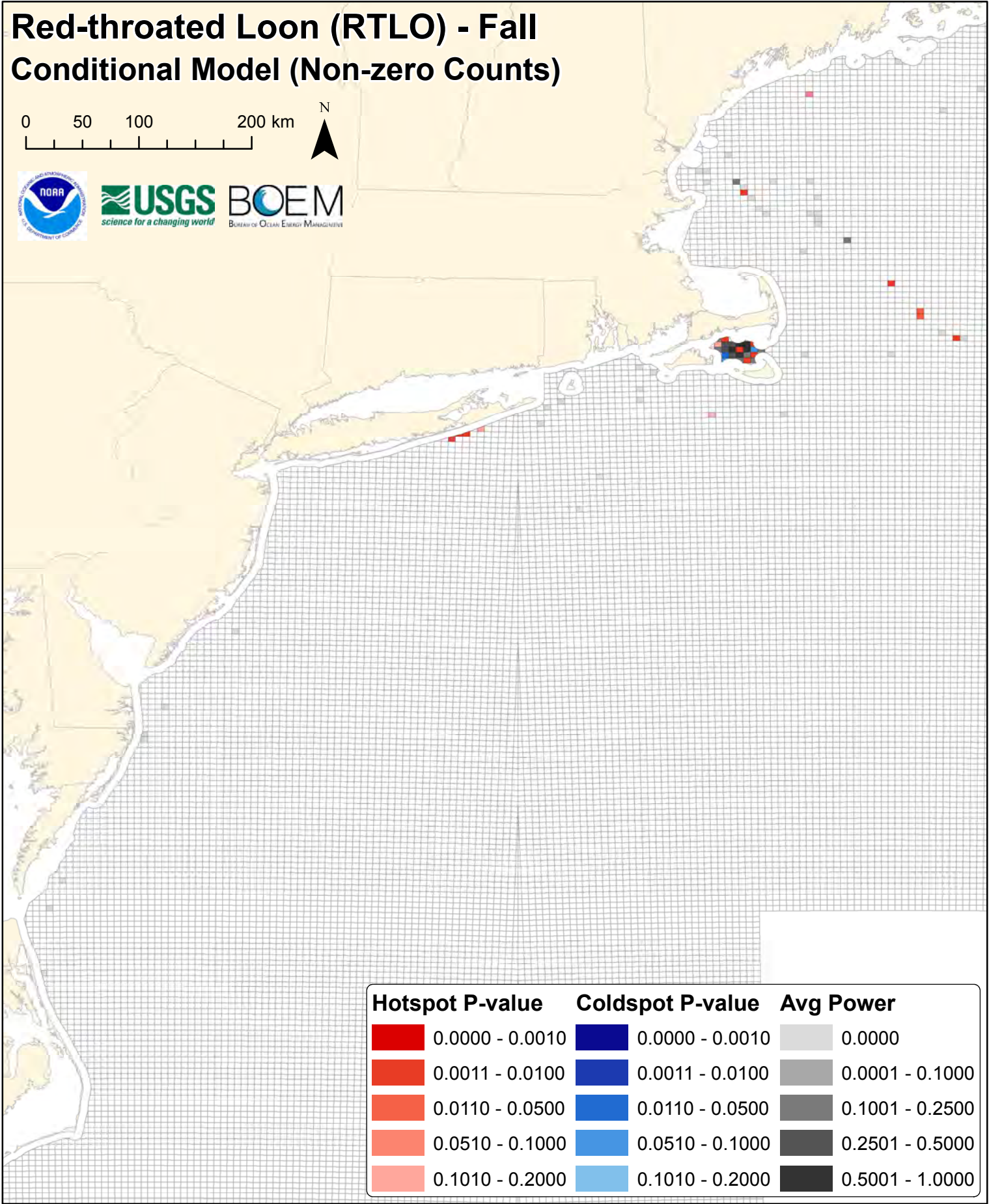
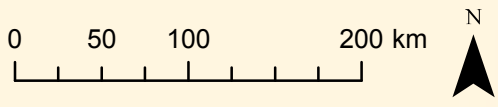
Red-throated Loon (RTLO) - Fall Conditional Model (Non-zero Counts)


















Red-throated Loon (RTLO) - Fall Conditional Model (Non-zero Counts)



Red-throated Loon (RTLO) - Fall Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

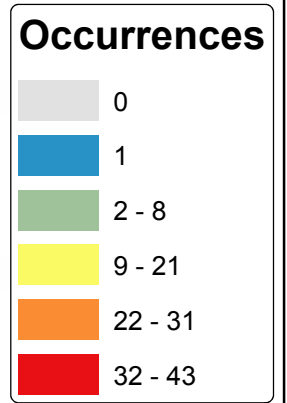
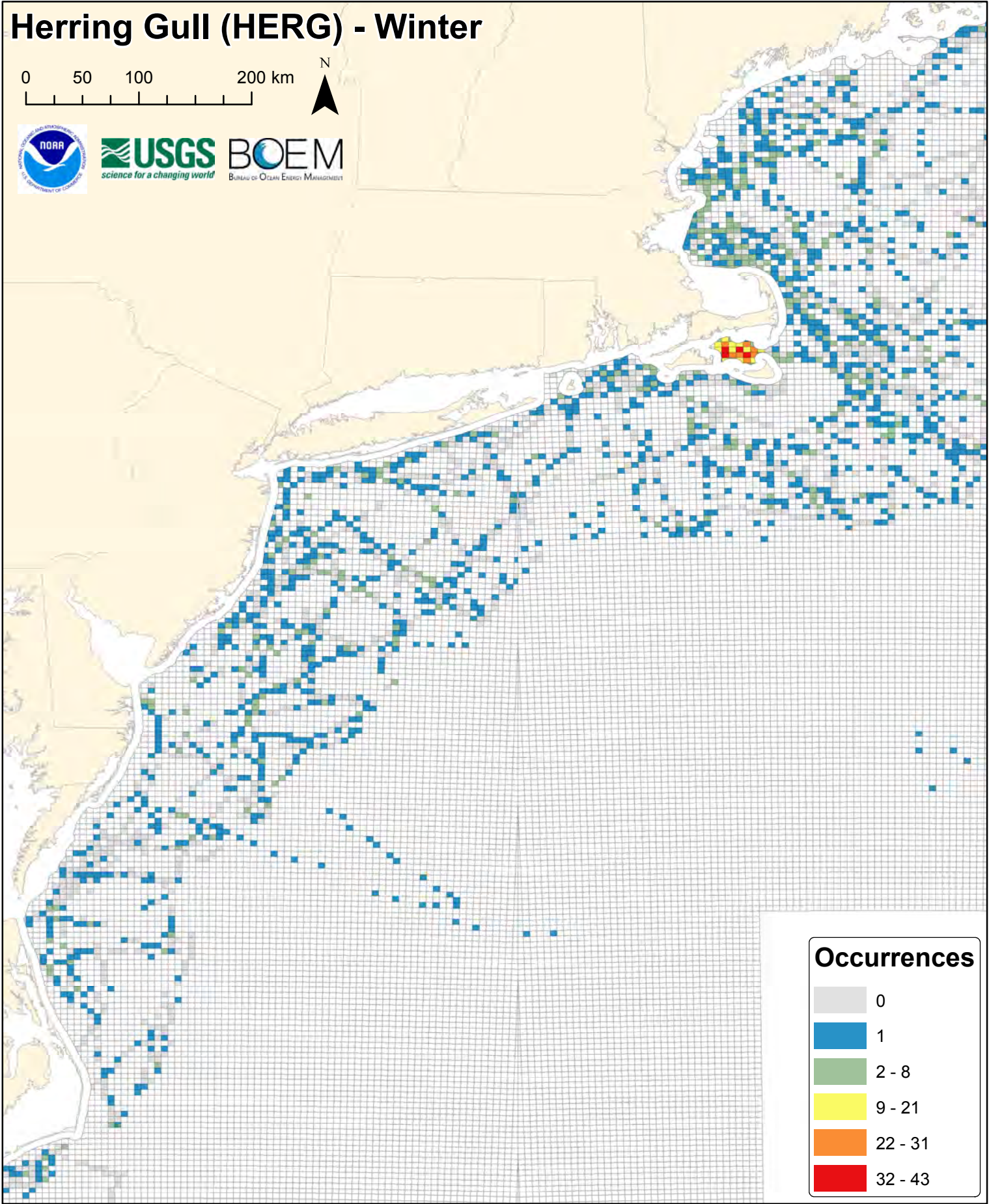
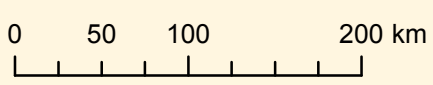
DIGITAL SUPPLEMENT F

Conditional (Non-Zero Count) Model Results

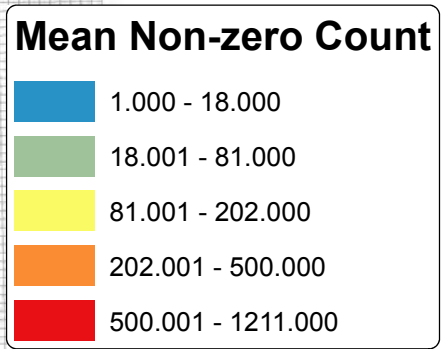
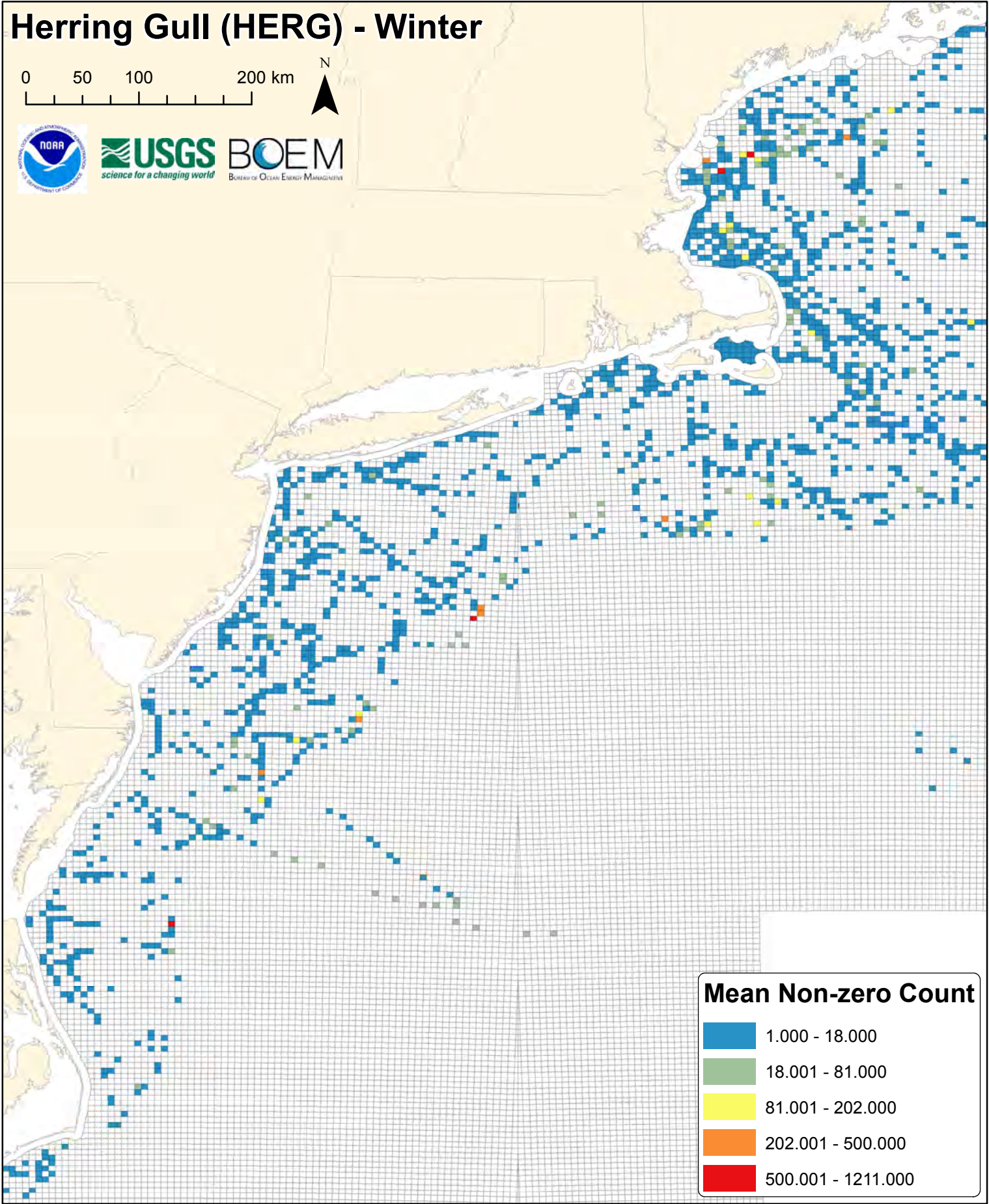
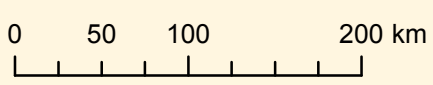
SECTION II. Species-specific Power Analysis Maps and Figures

Figures F216-F275. Winter power analysis maps and figures (10 species x 6 figures per species).

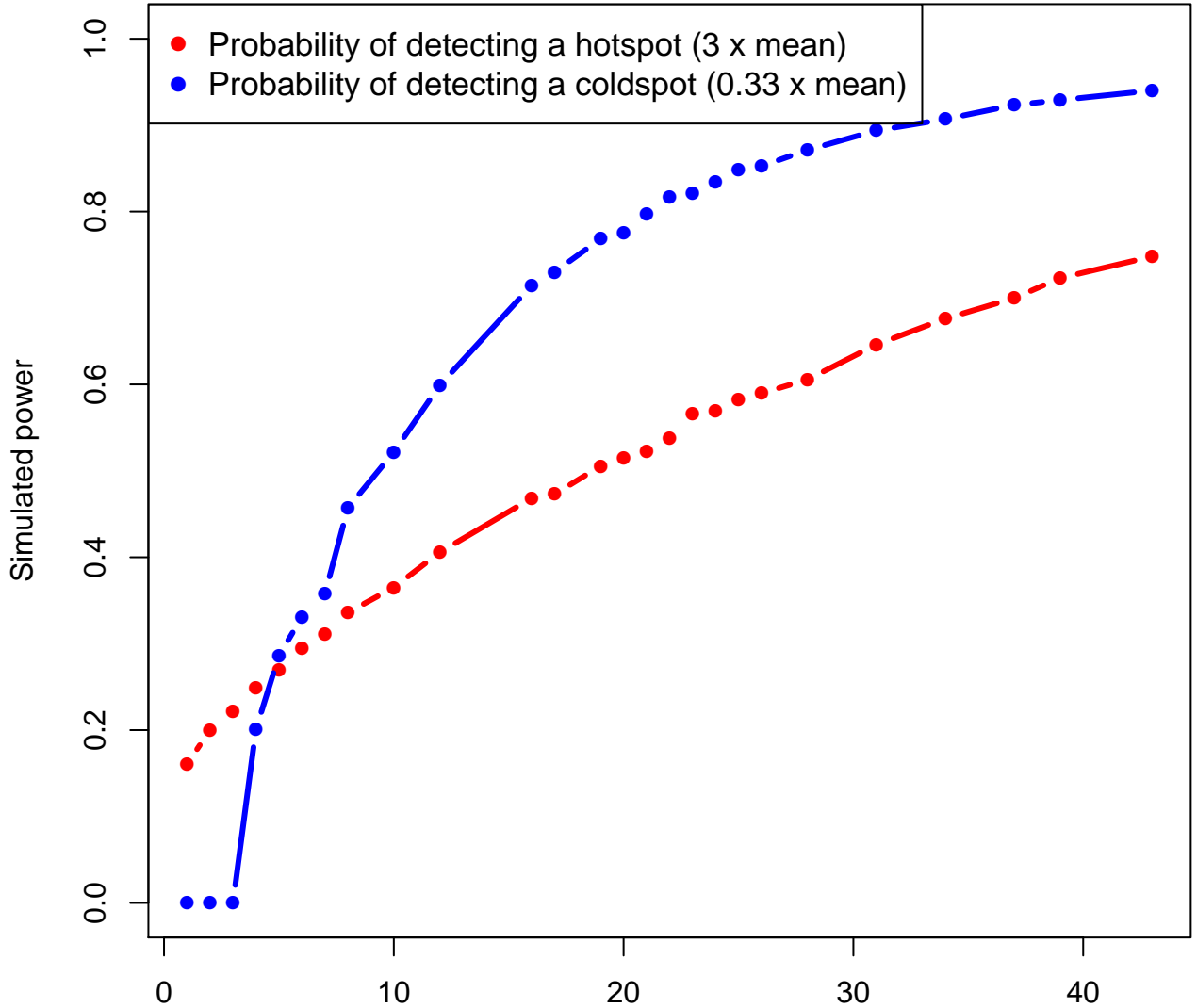
Herring Gull (HERG) - Winter



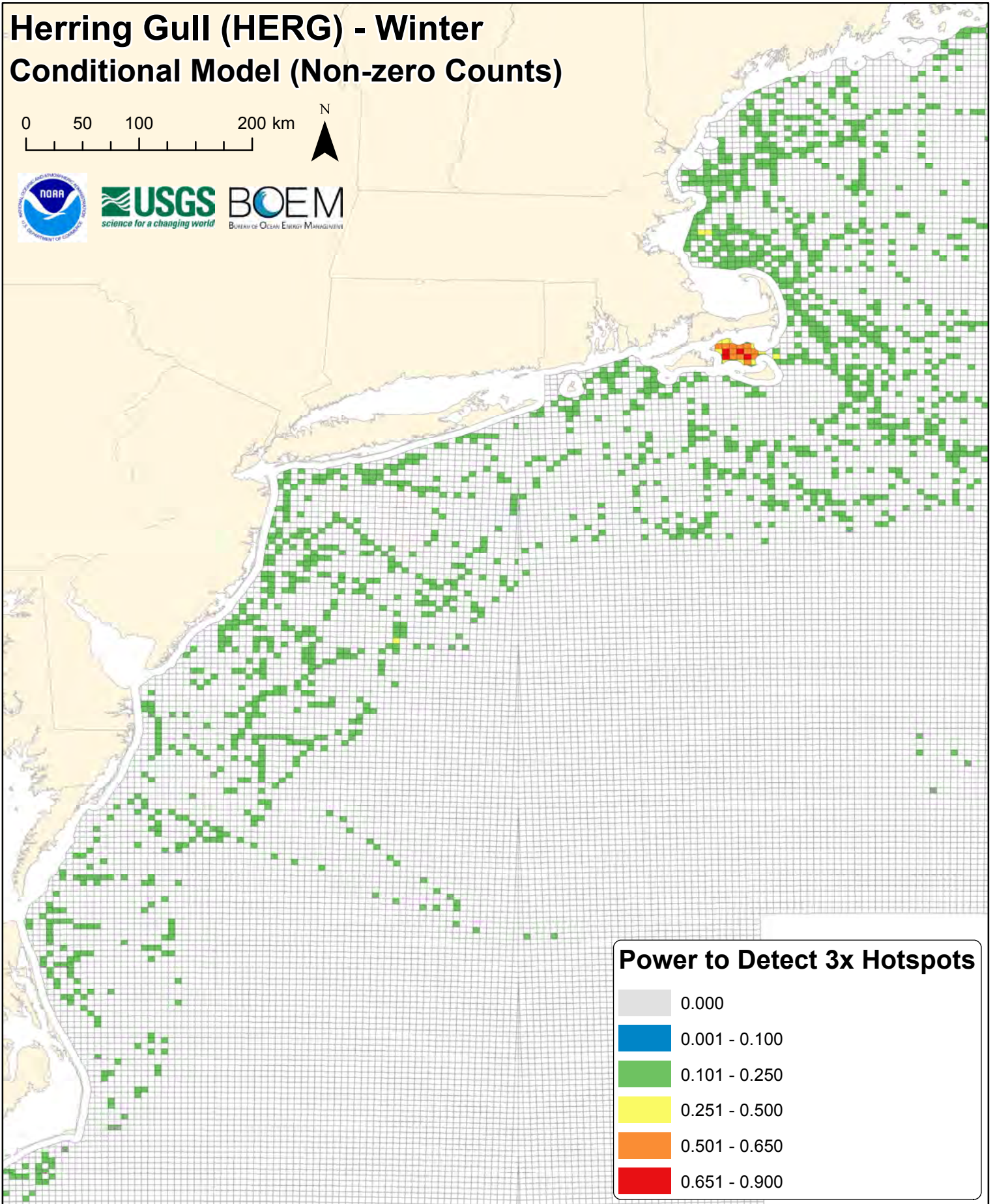
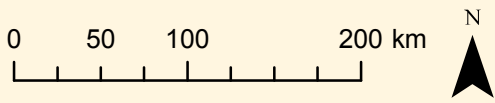
Herring Gull (HERG) - Winter



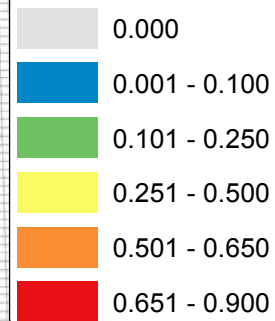
herg



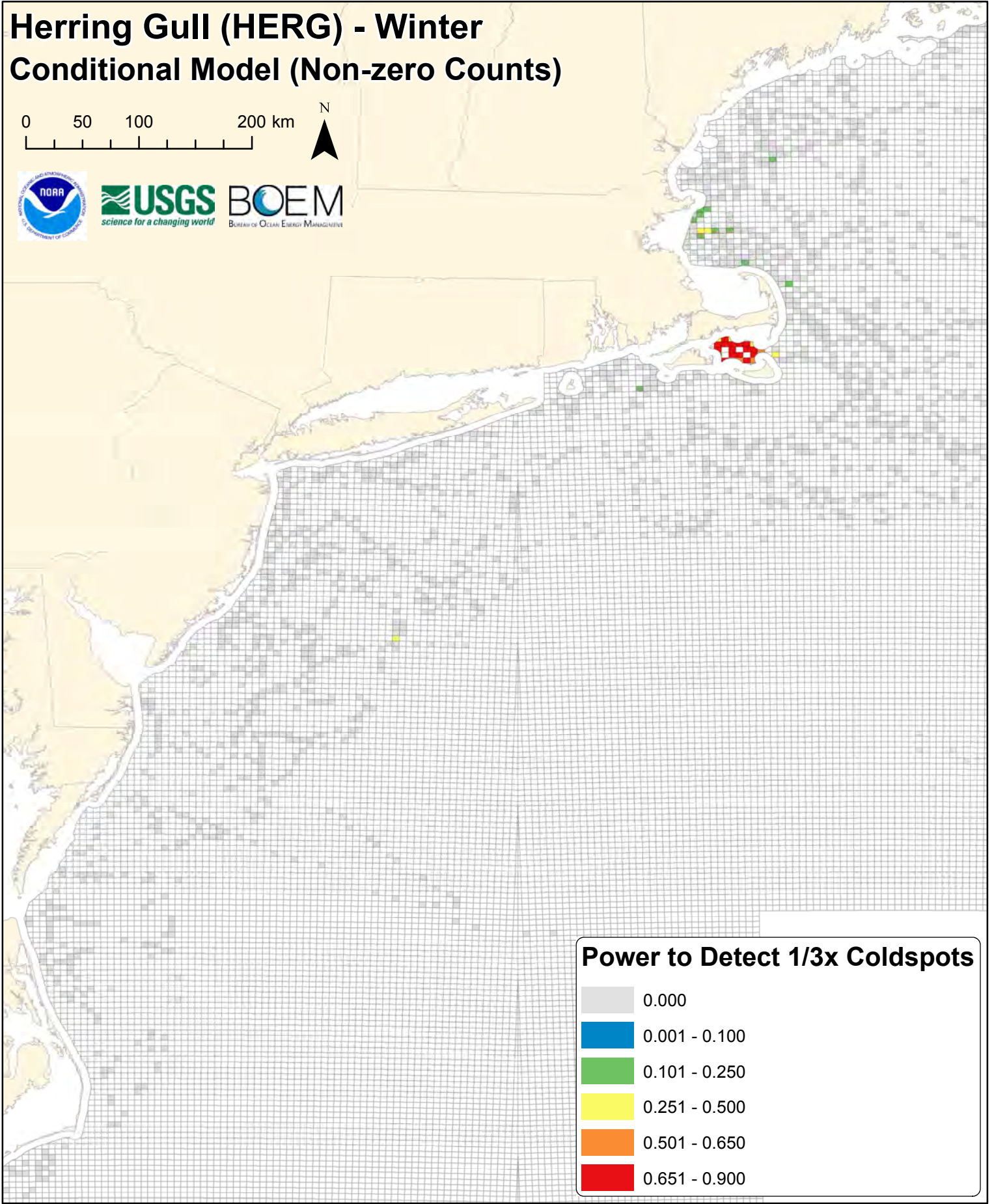
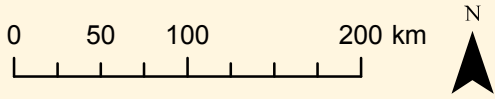
Herring Gull (HERG) - Winter Conditional Model (Non-zero Counts)



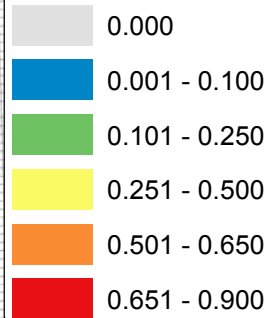
Power to Detect 3x Hotspots



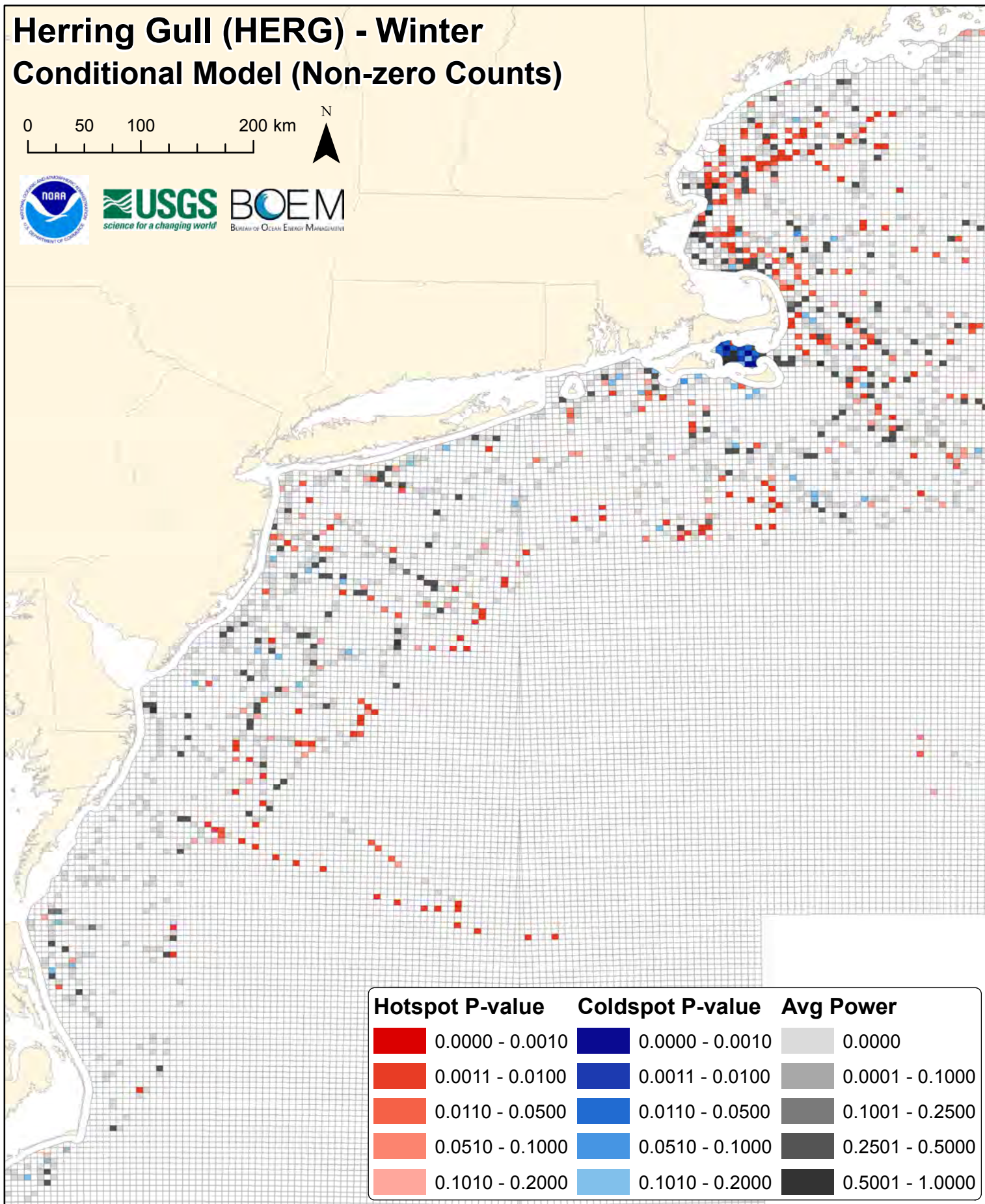
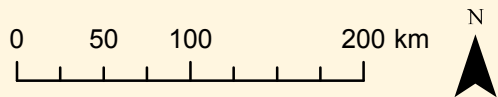
Herring Gull (HERG) - Winter Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots



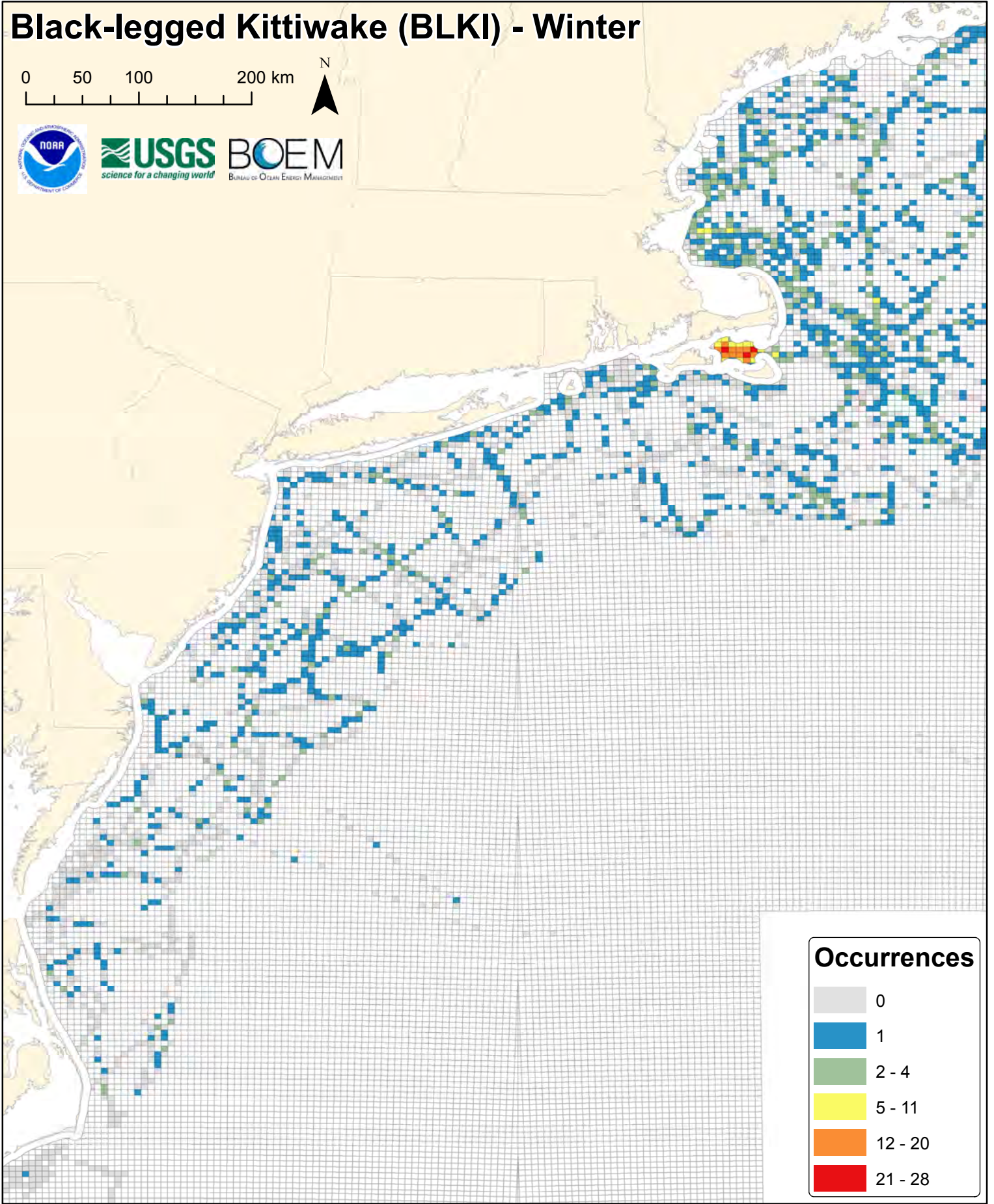
Herring Gull (HERG) - Winter Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Black-legged Kittiwake (BLKI) - Winter

0 50 100 200 km

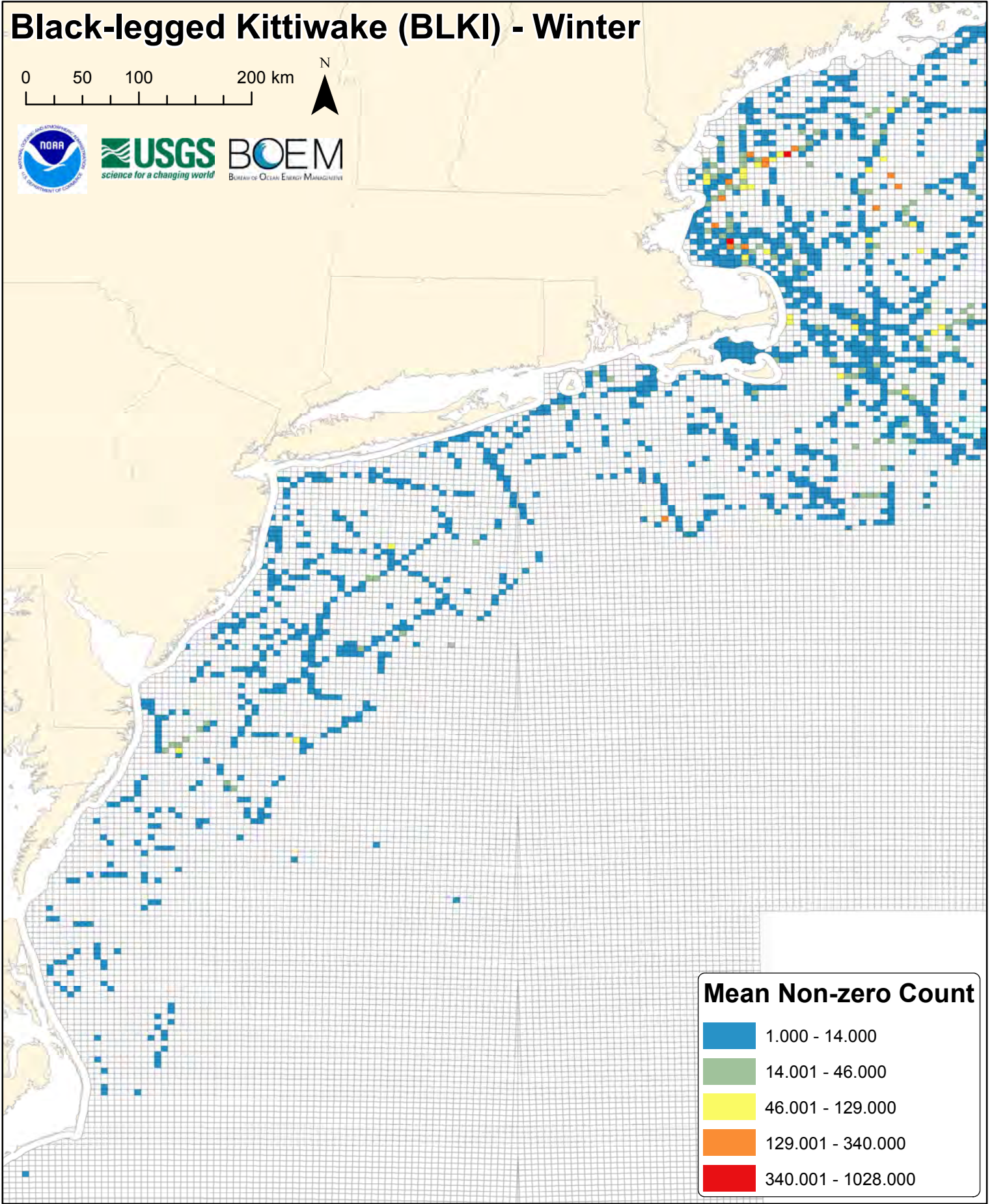


Occurrences

0
1
2 - 4
5 - 11
12 - 20
21 - 28

Black-legged Kittiwake (BLKI) - Winter

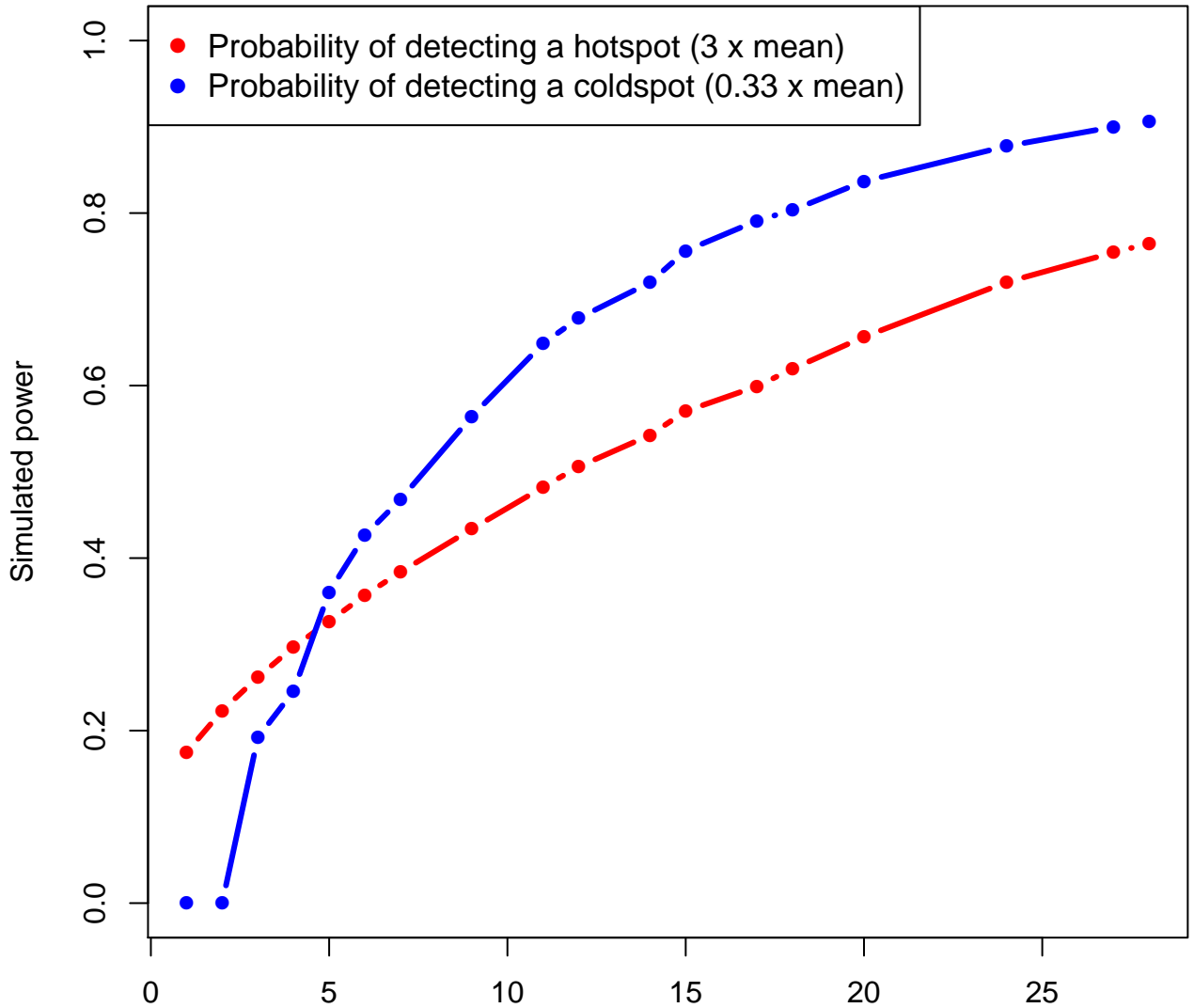
0 50 100 200 km



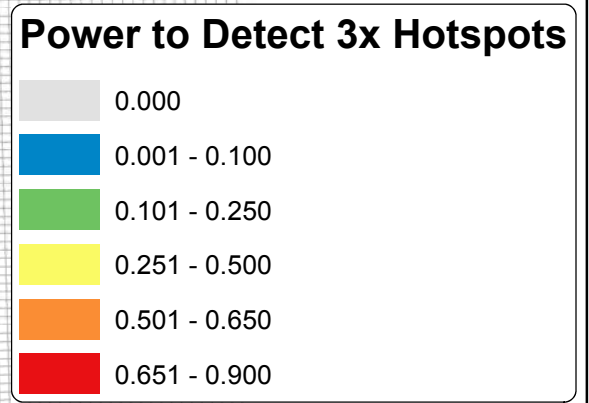
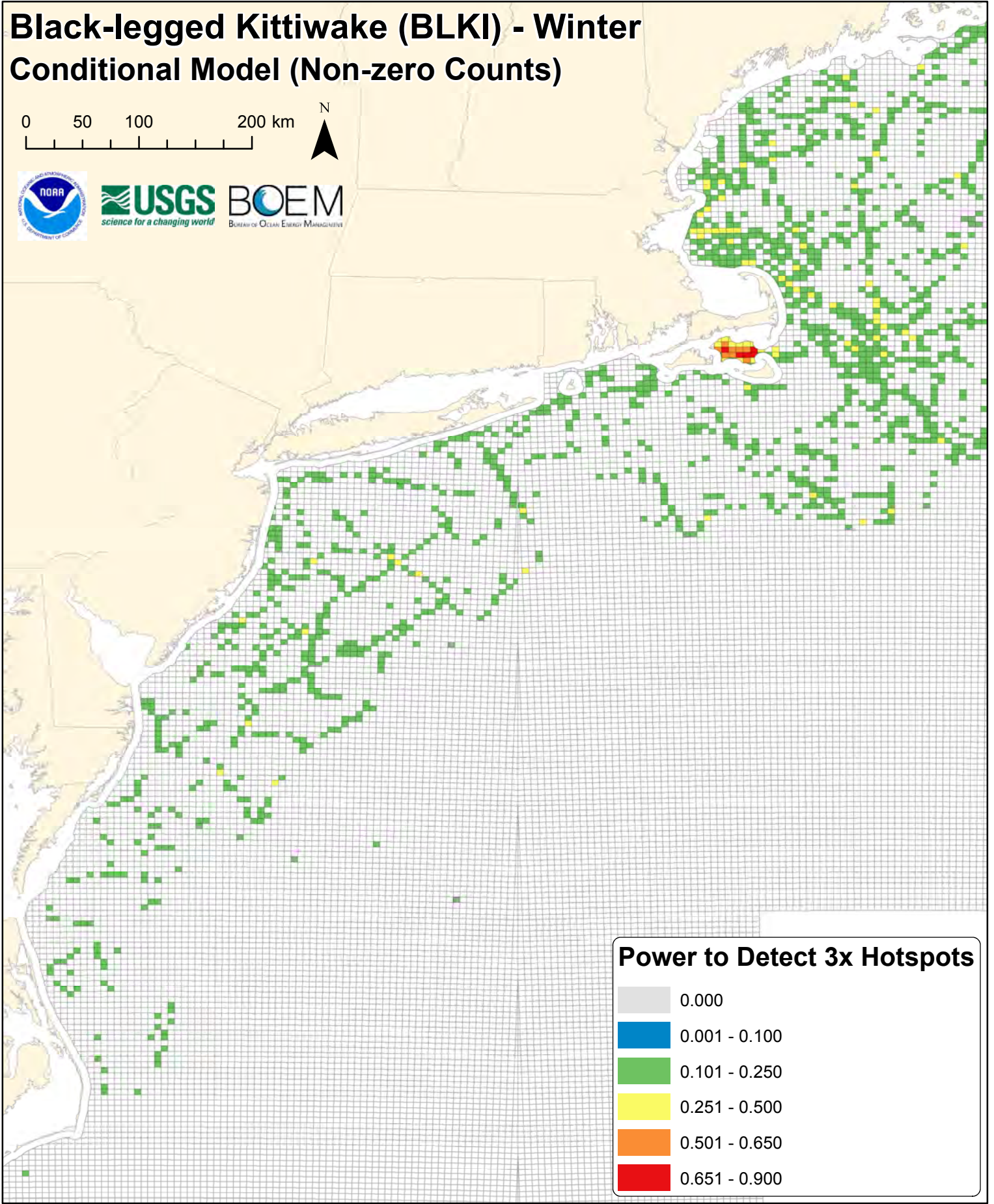
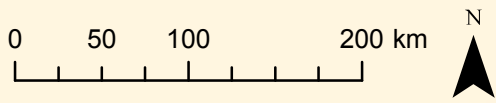
Mean Non-zero Count

- 1.000 - 14.000
- 14.001 - 46.000
- 46.001 - 129.000
- 129.001 - 340.000
- 340.001 - 1028.000

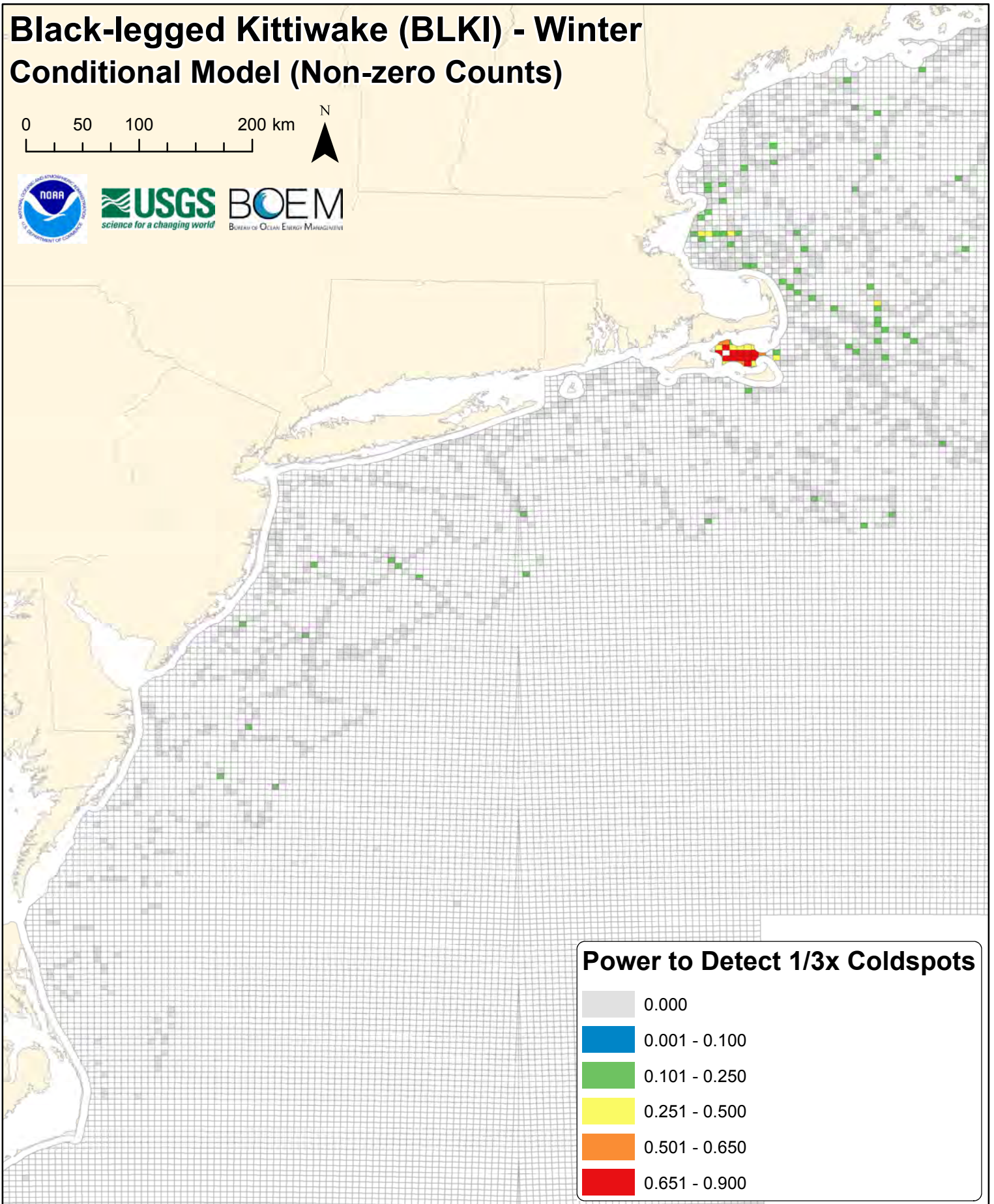
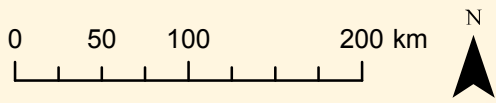
blki



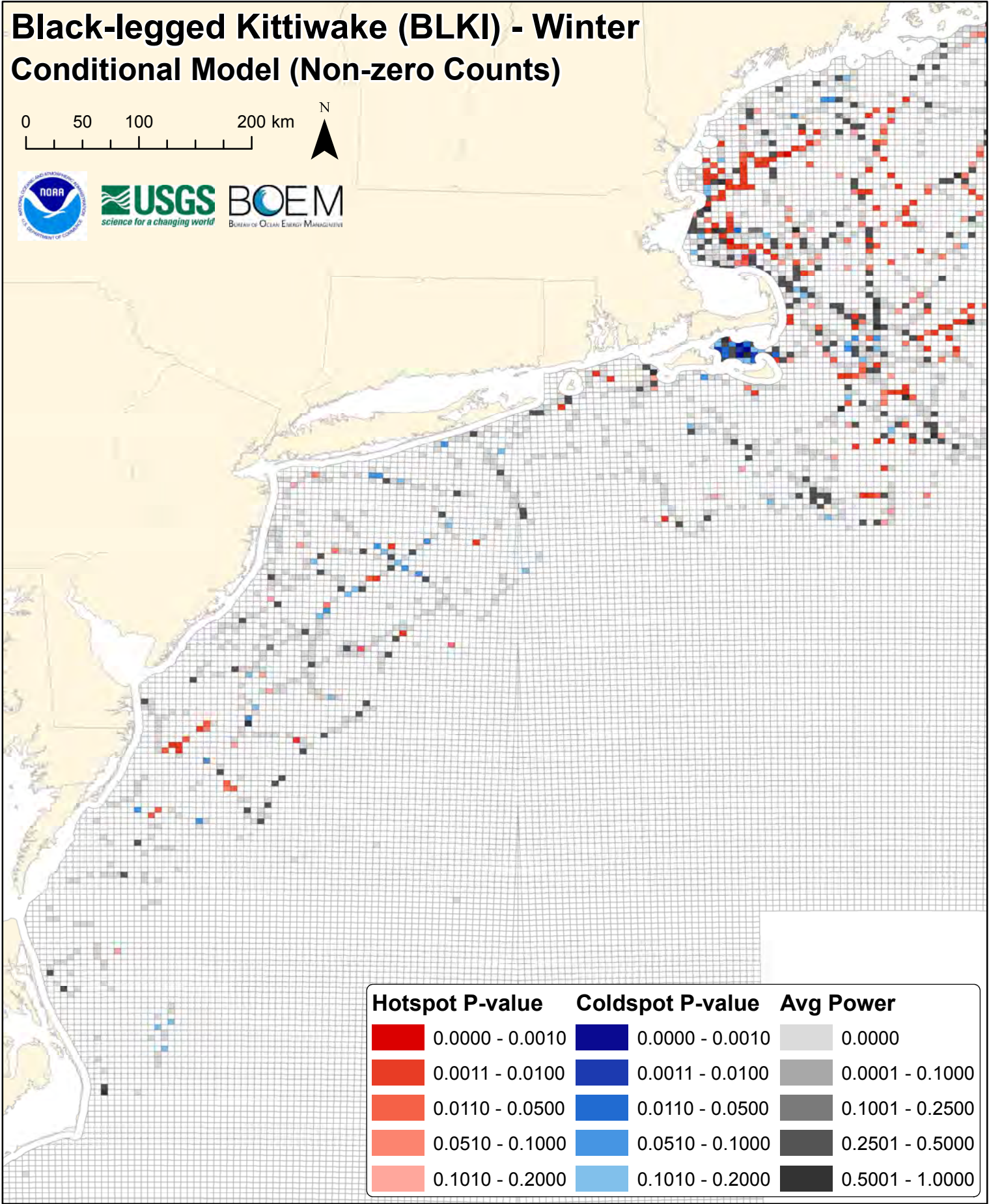
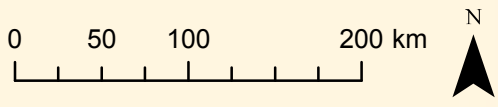
Black-legged Kittiwake (BLKI) - Winter Conditional Model (Non-zero Counts)


















Black-legged Kittiwake (BLKI) - Winter Conditional Model (Non-zero Counts)

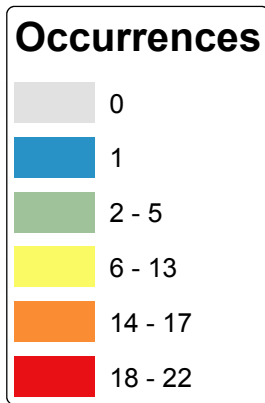
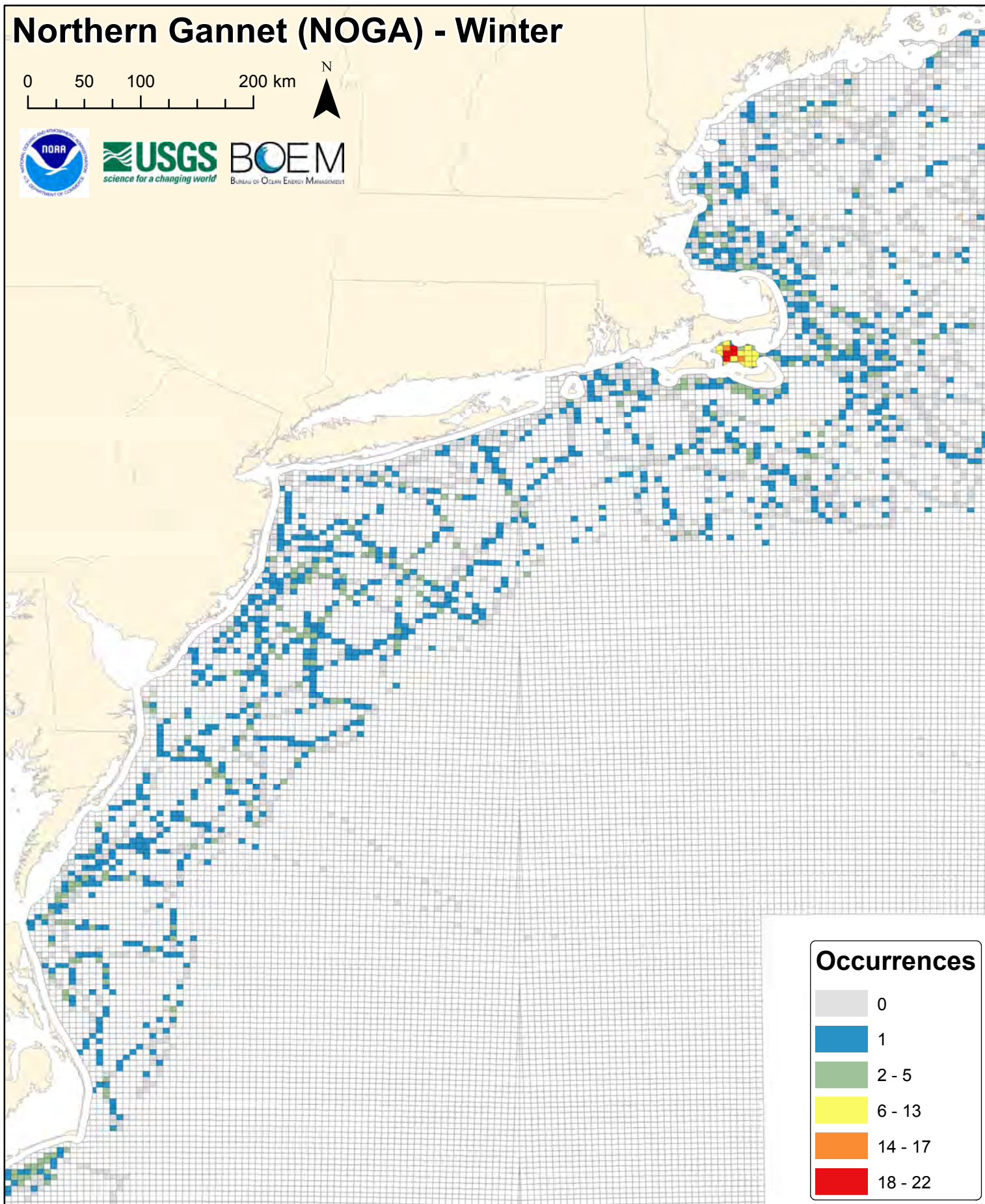
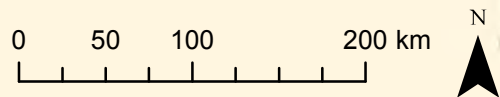


Black-legged Kittiwake (BLKI) - Winter Conditional Model (Non-zero Counts)



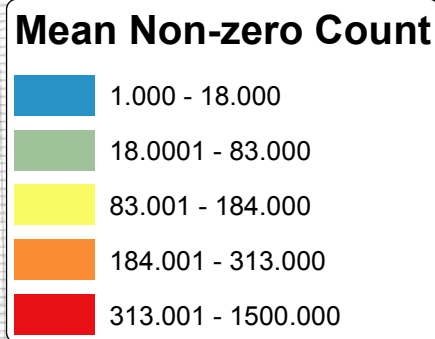
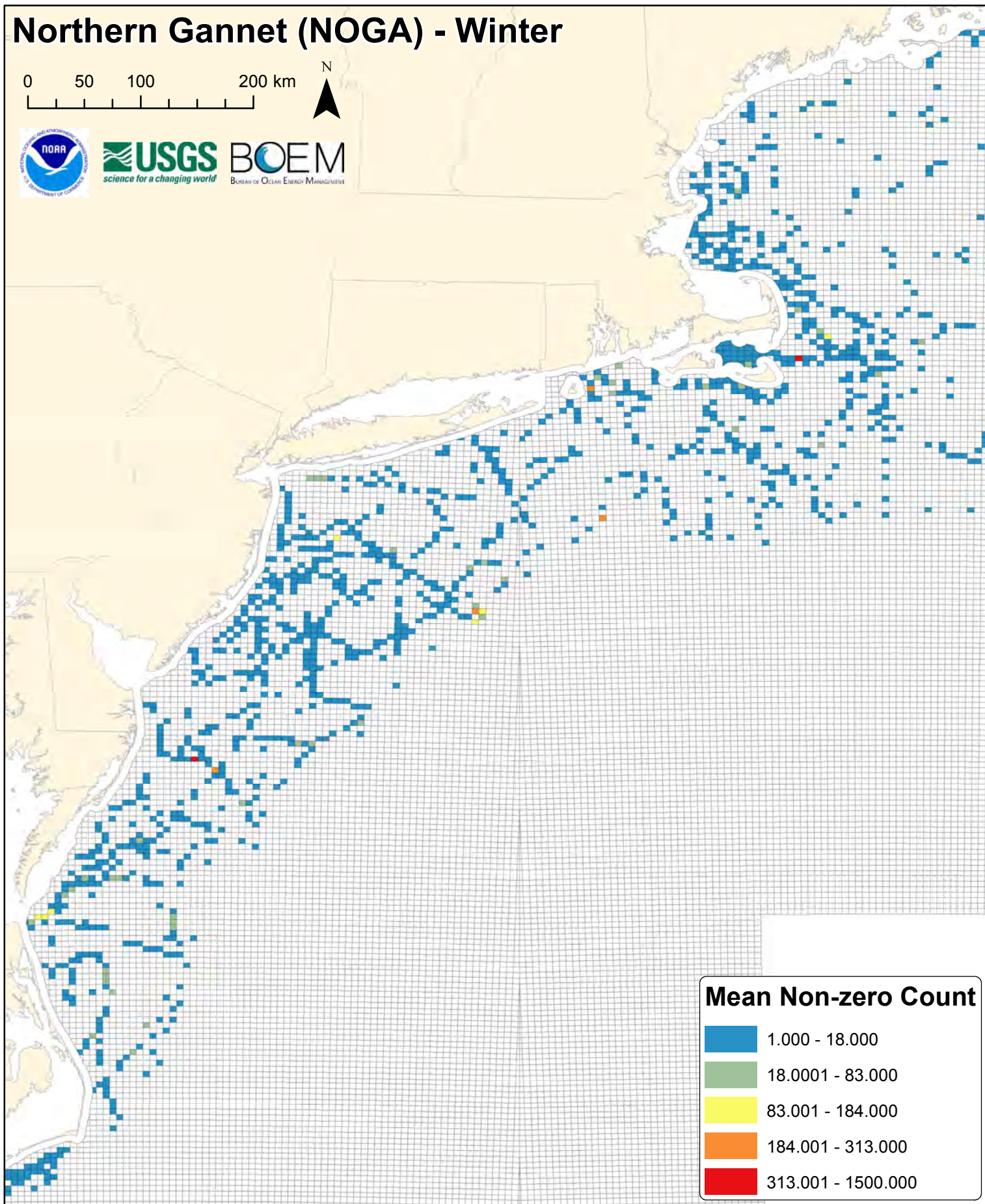
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Northern Gannet (NOGA) - Winter

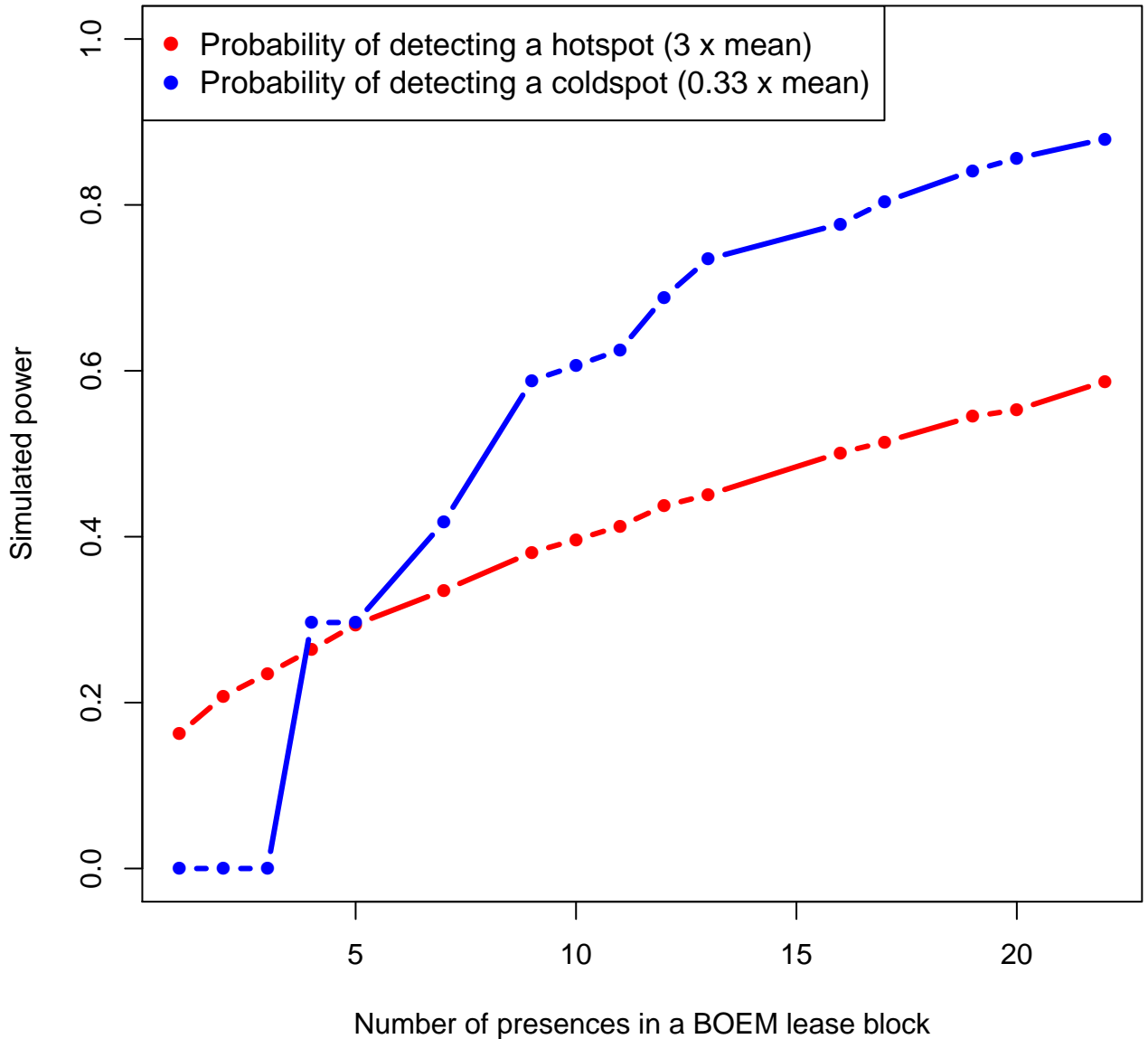


Northern Gannet (NOGA) - Winter

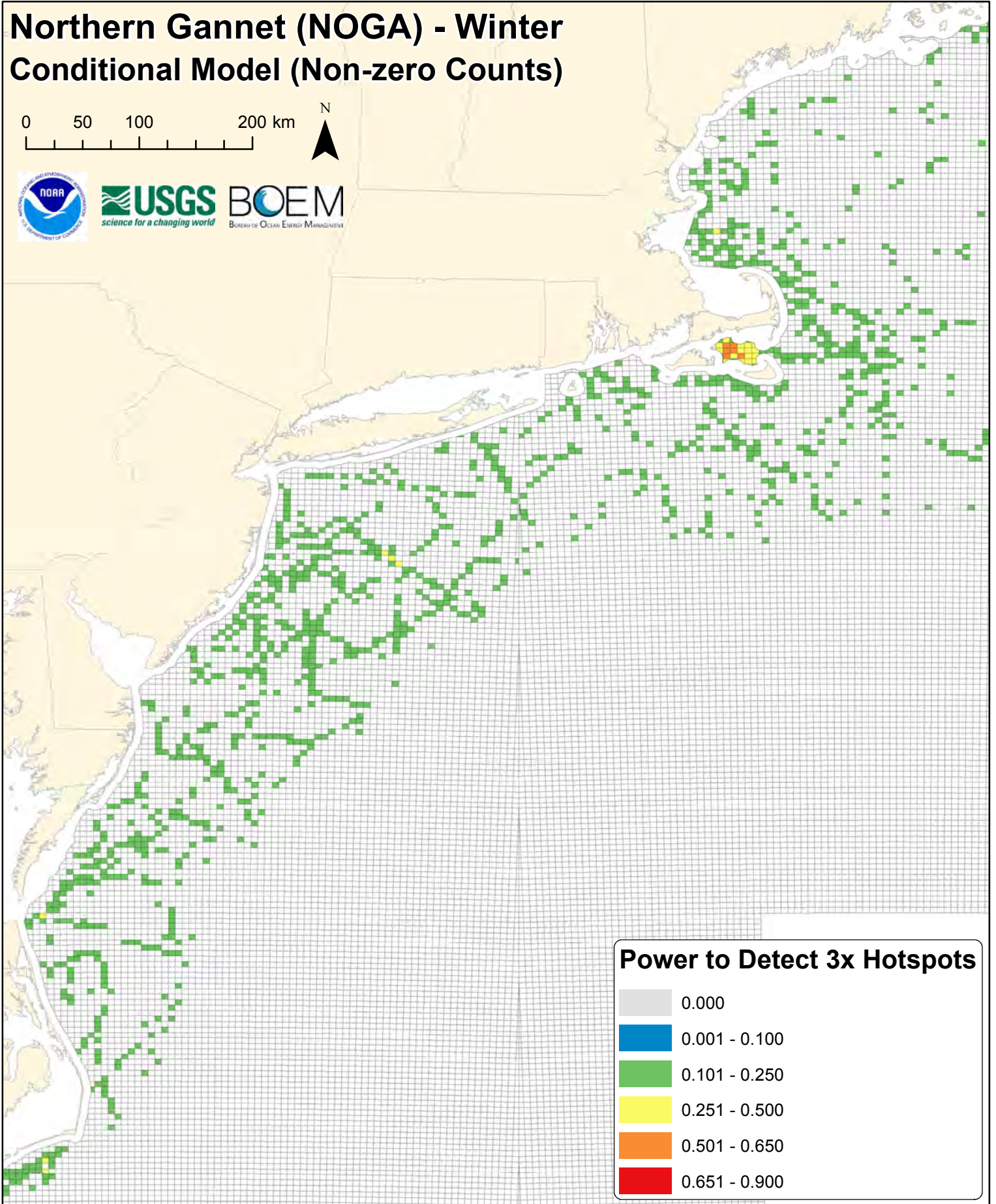
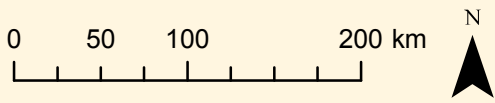
0 50 100 200 km



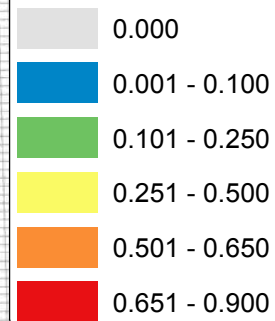
noga



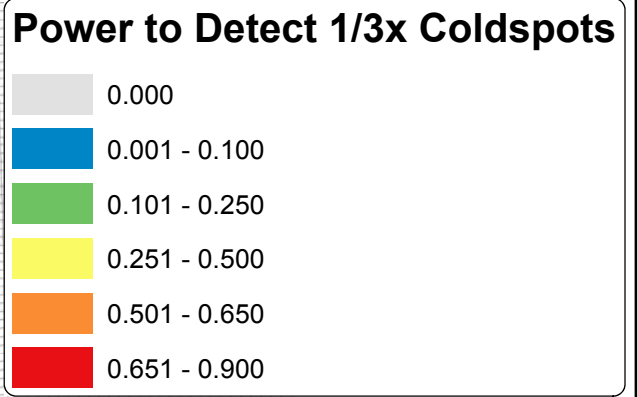
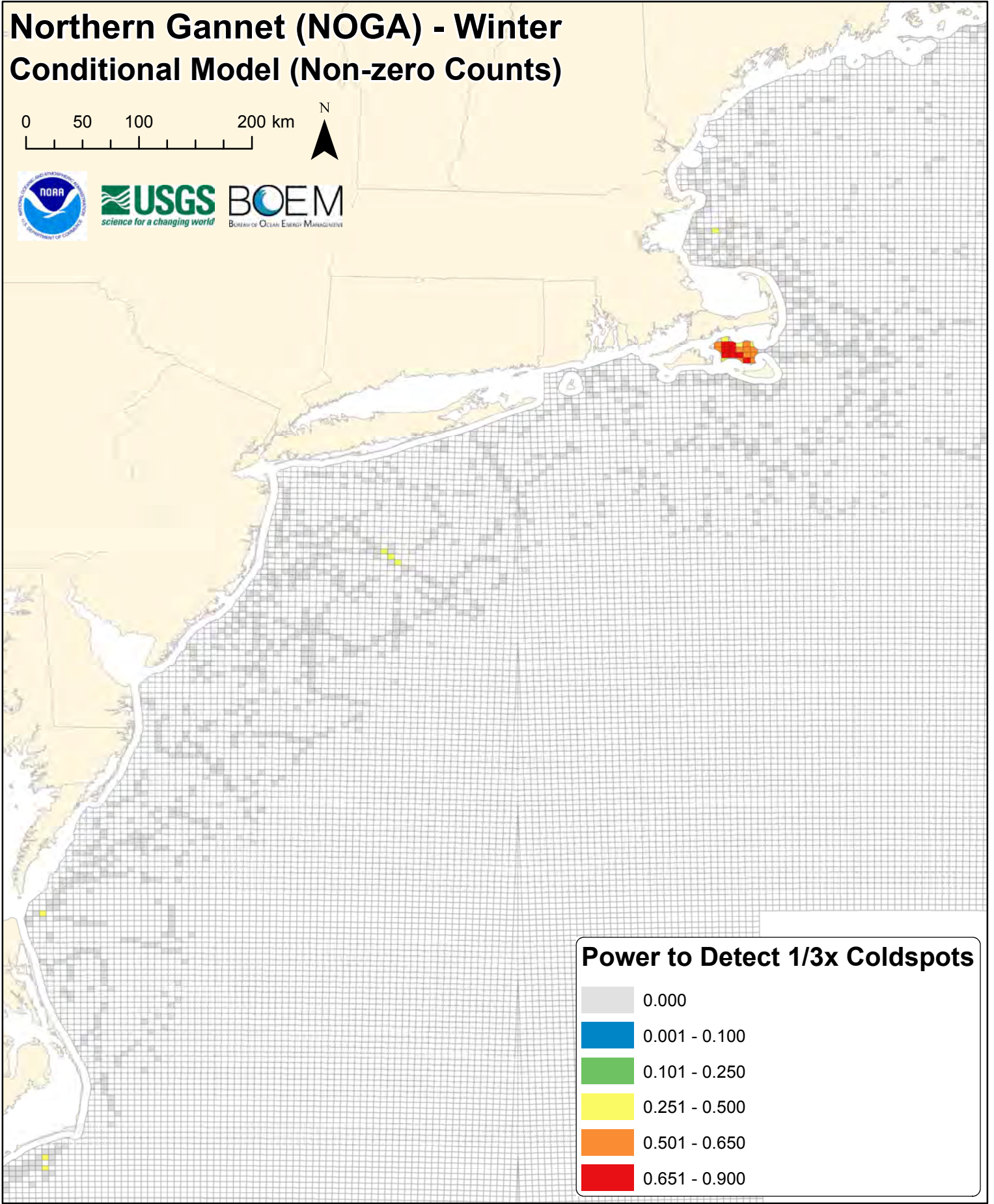
Northern Gannet (NOGA) - Winter Conditional Model (Non-zero Counts)



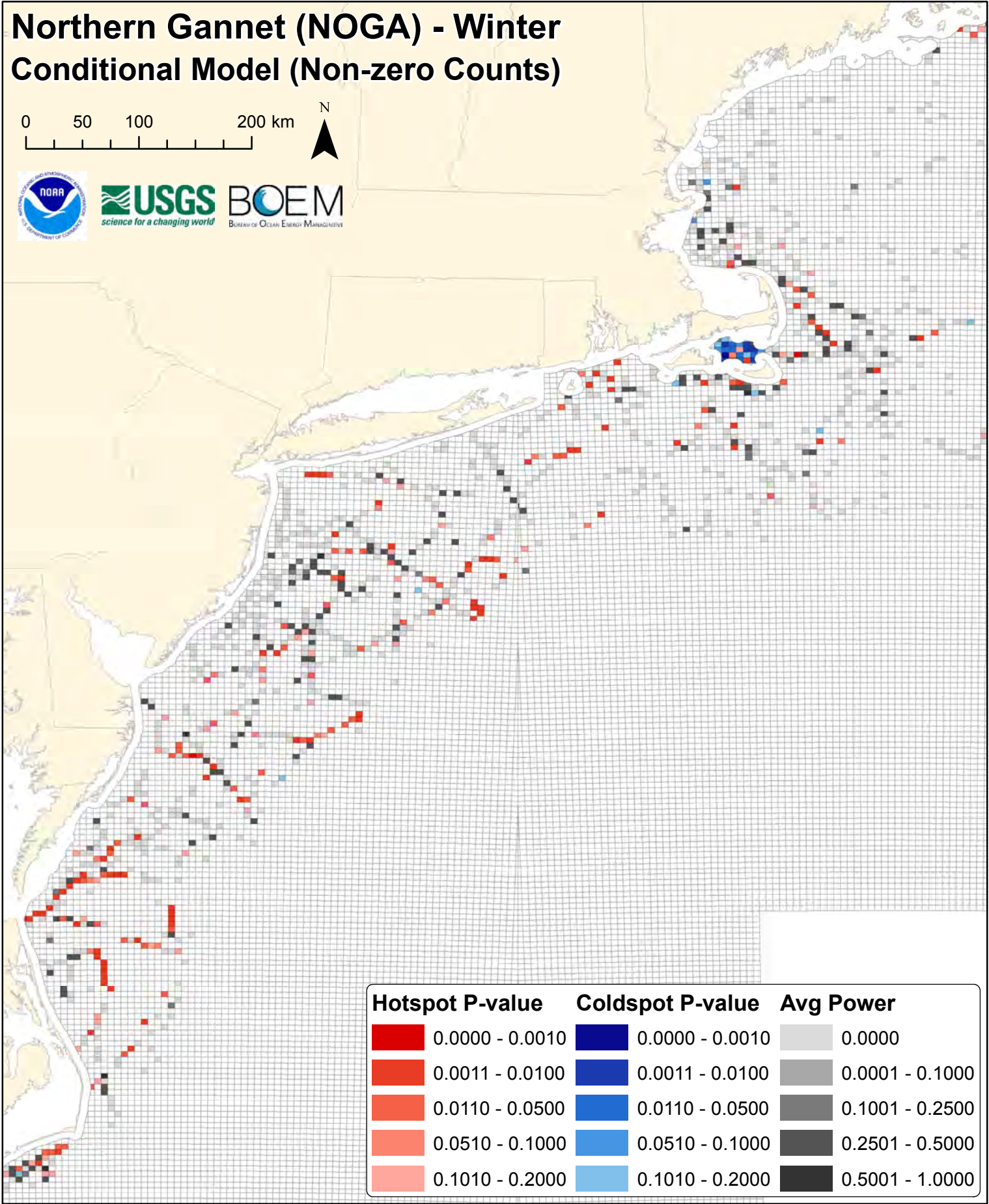
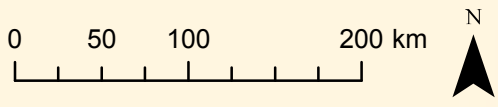
Power to Detect 3x Hotspots


















Northern Gannet (NOGA) - Winter Conditional Model (Non-zero Counts)

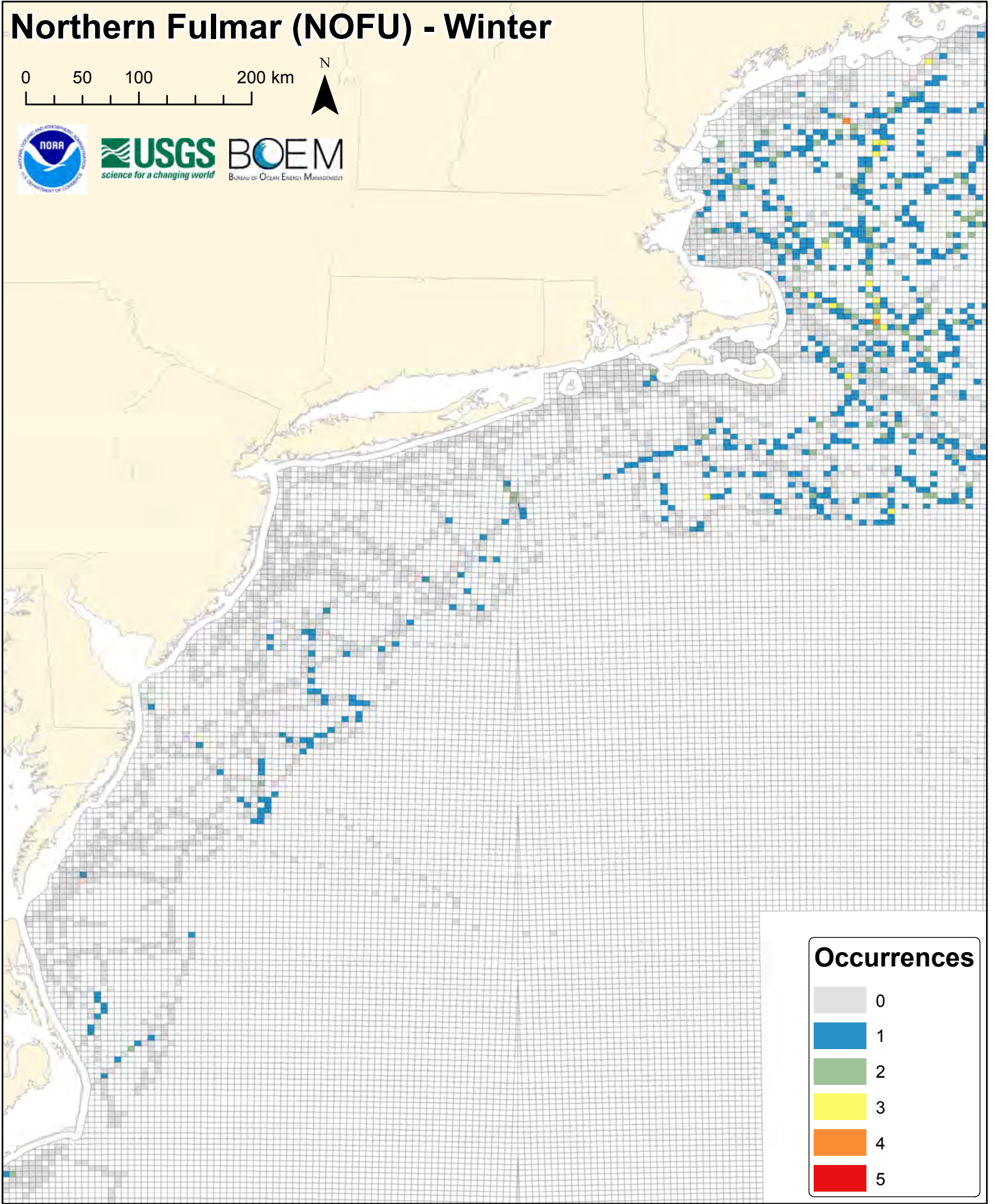
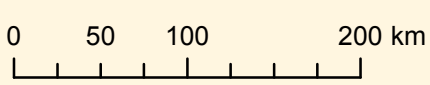


Northern Gannet (NOGA) - Winter Conditional Model (Non-zero Counts)

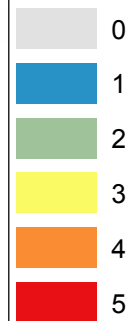


Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Northern Fulmar (NOFU) - Winter

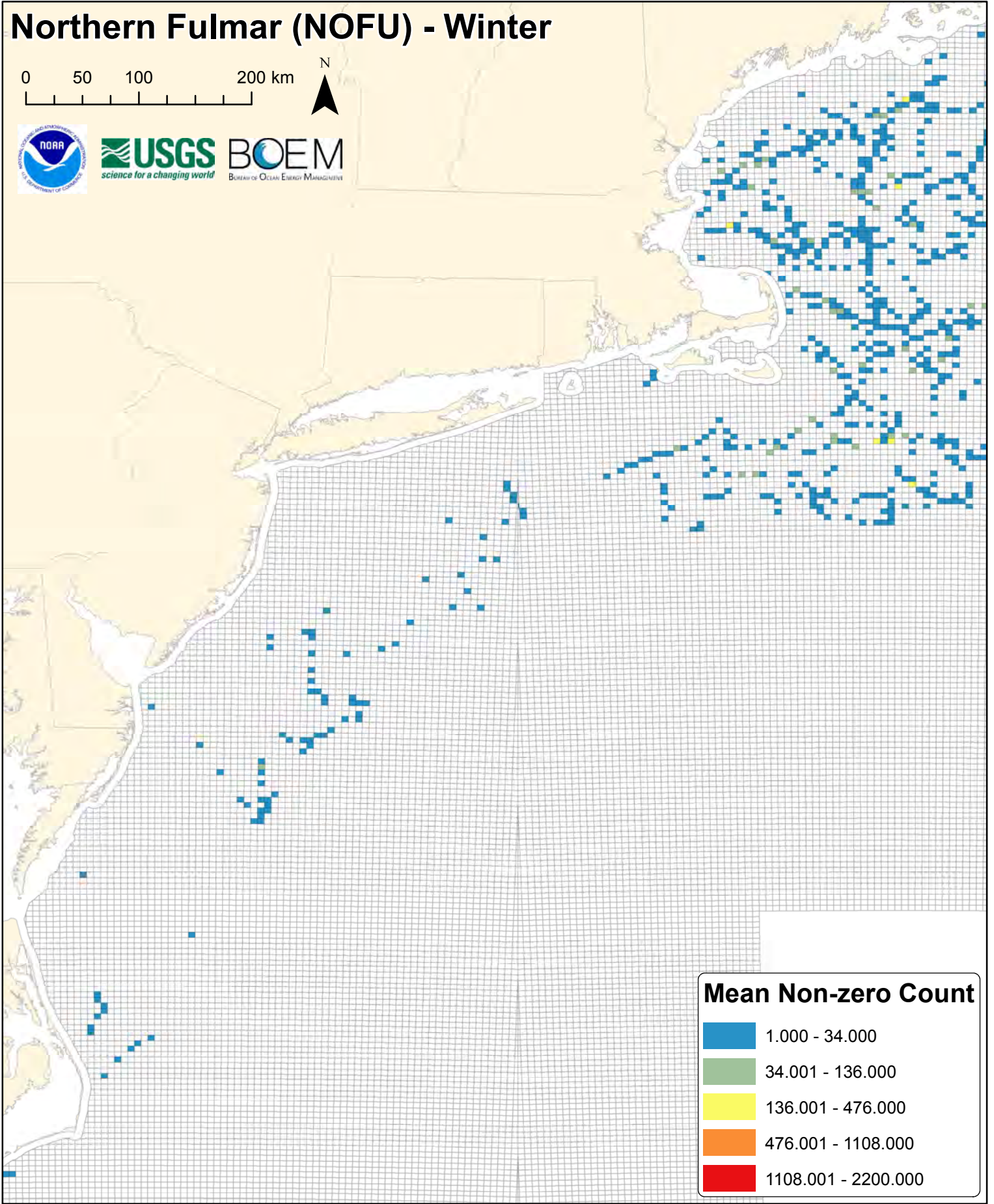


Occurrences

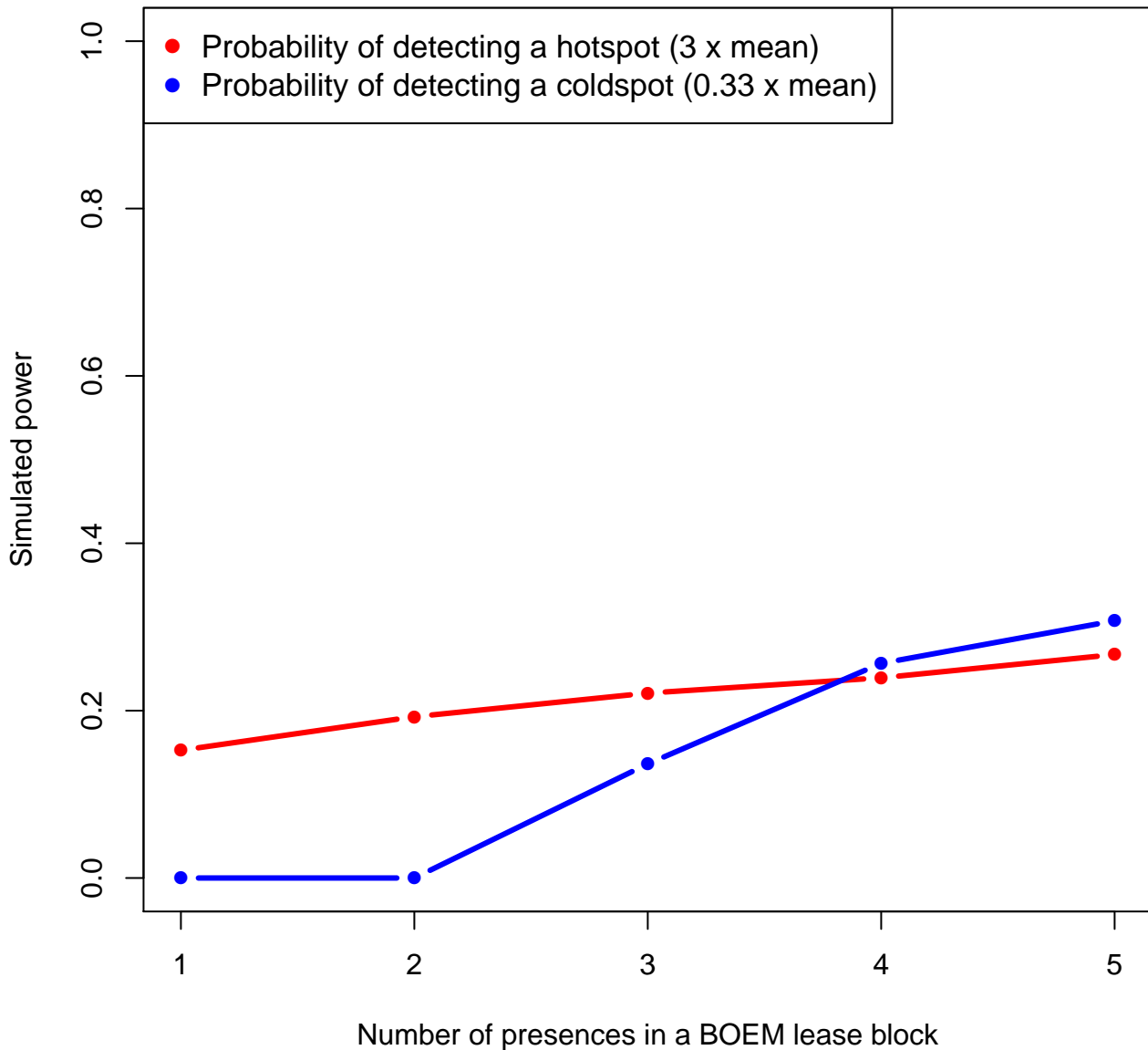


Northern Fulmar (NOFU) - Winter

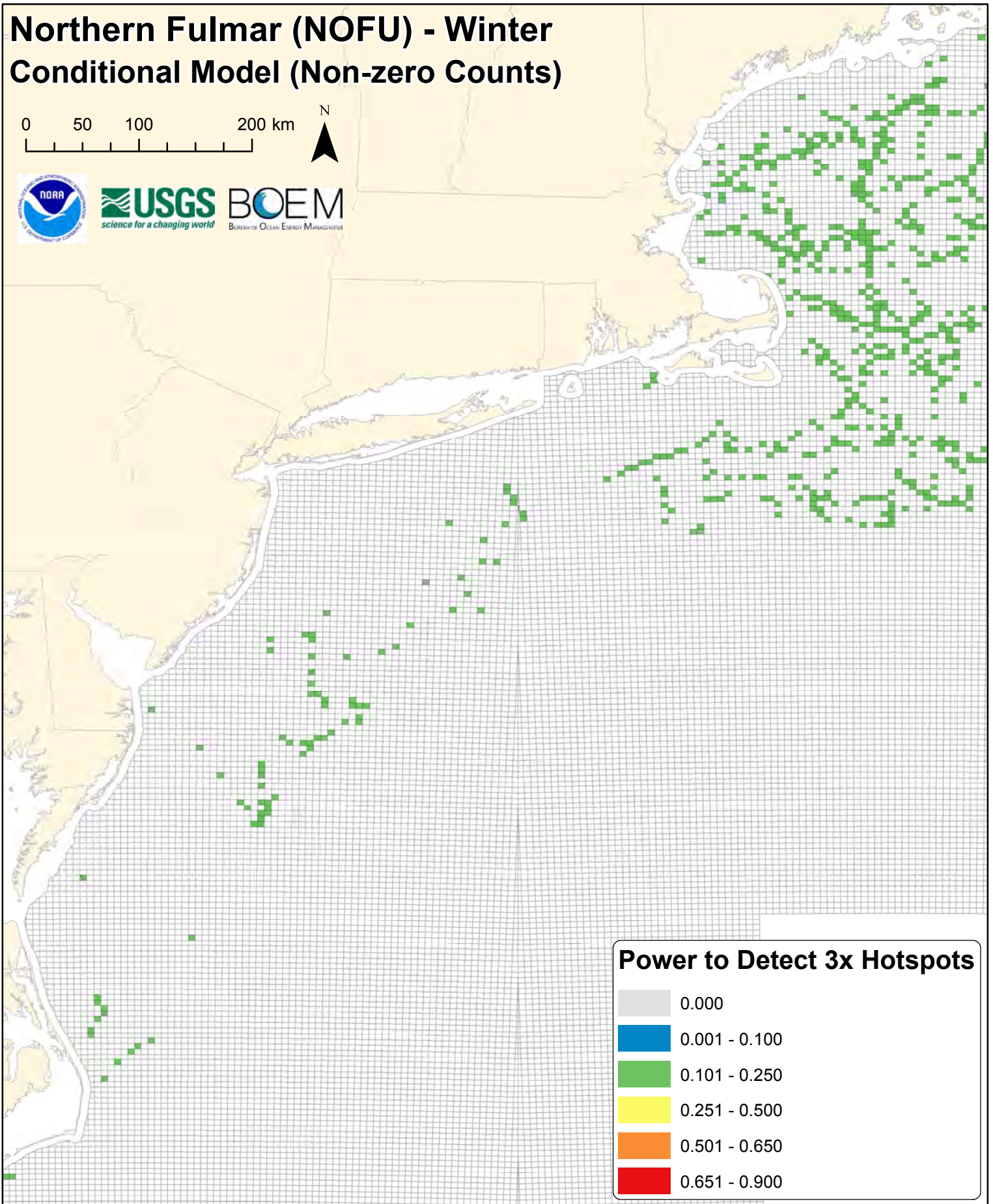
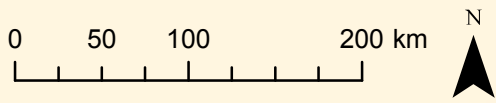
0 50 100 200 km



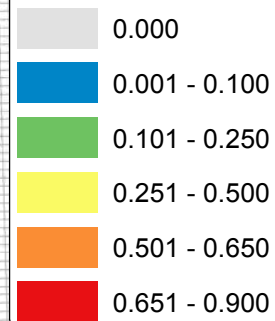
nofu



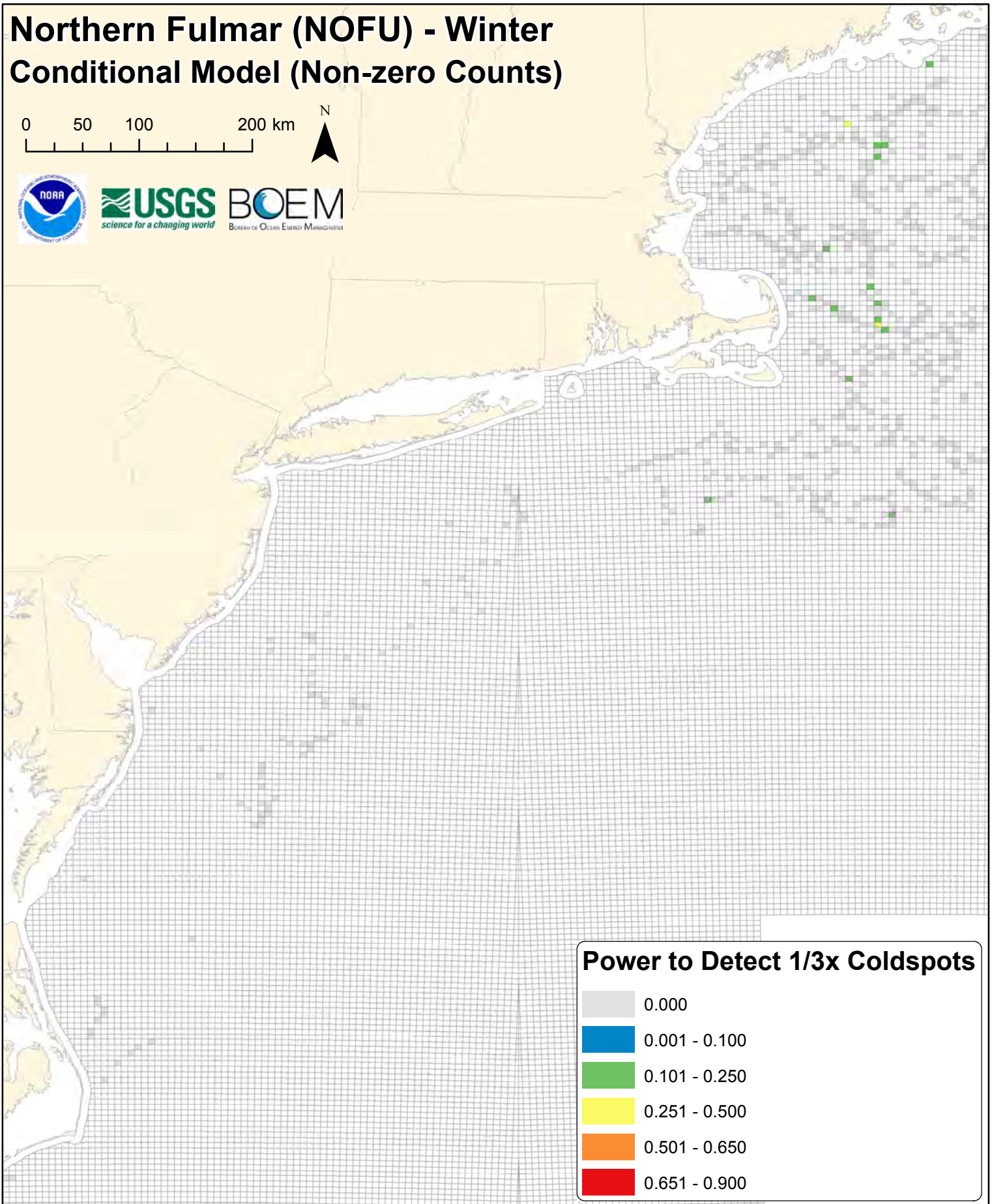
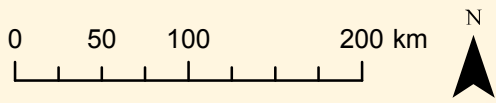
Northern Fulmar (NOFU) - Winter Conditional Model (Non-zero Counts)



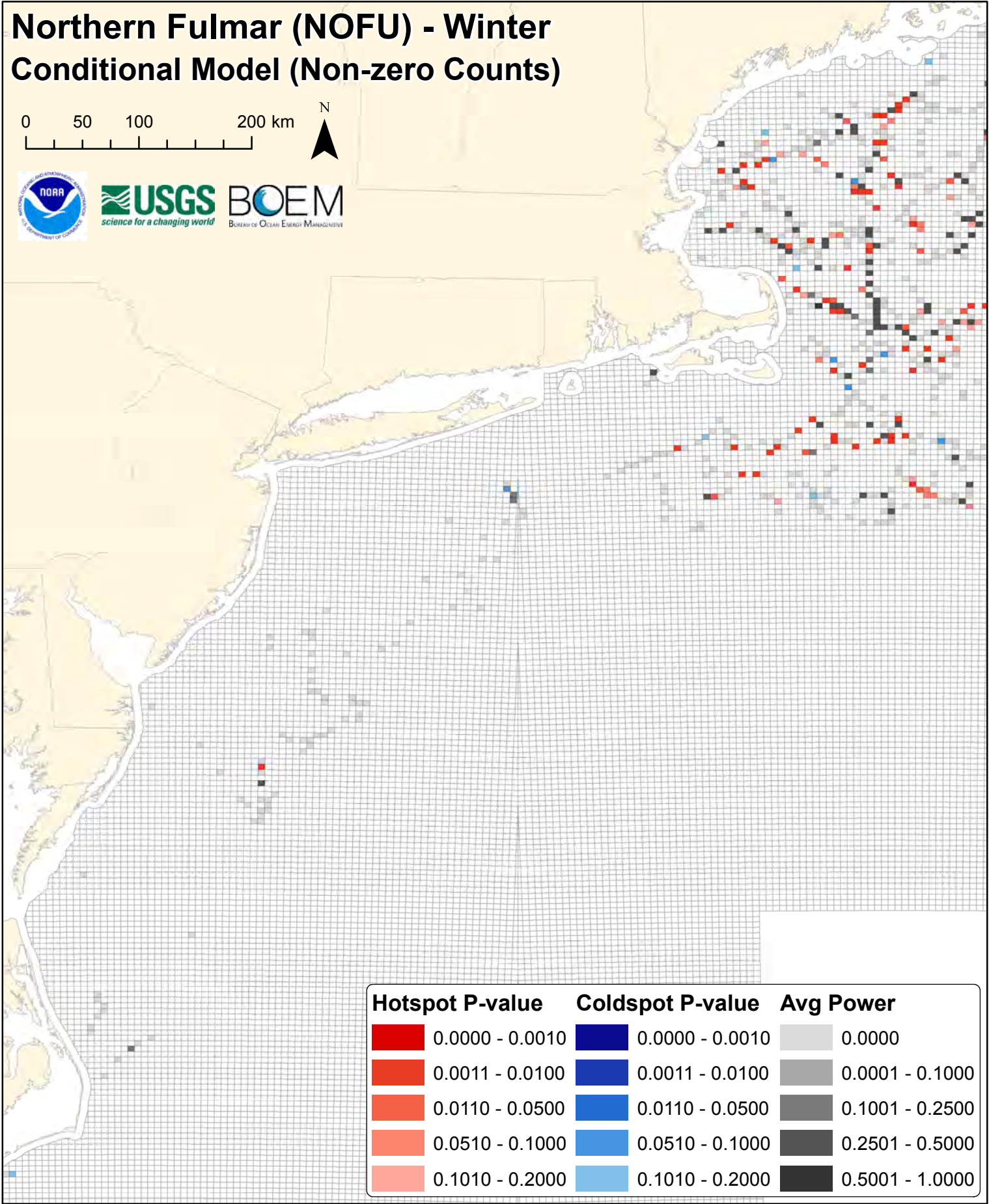
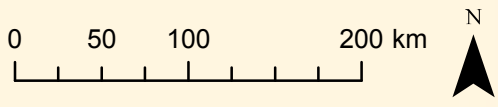
Power to Detect 3x Hotspots


















Northern Fulmar (NOFU) - Winter Conditional Model (Non-zero Counts)



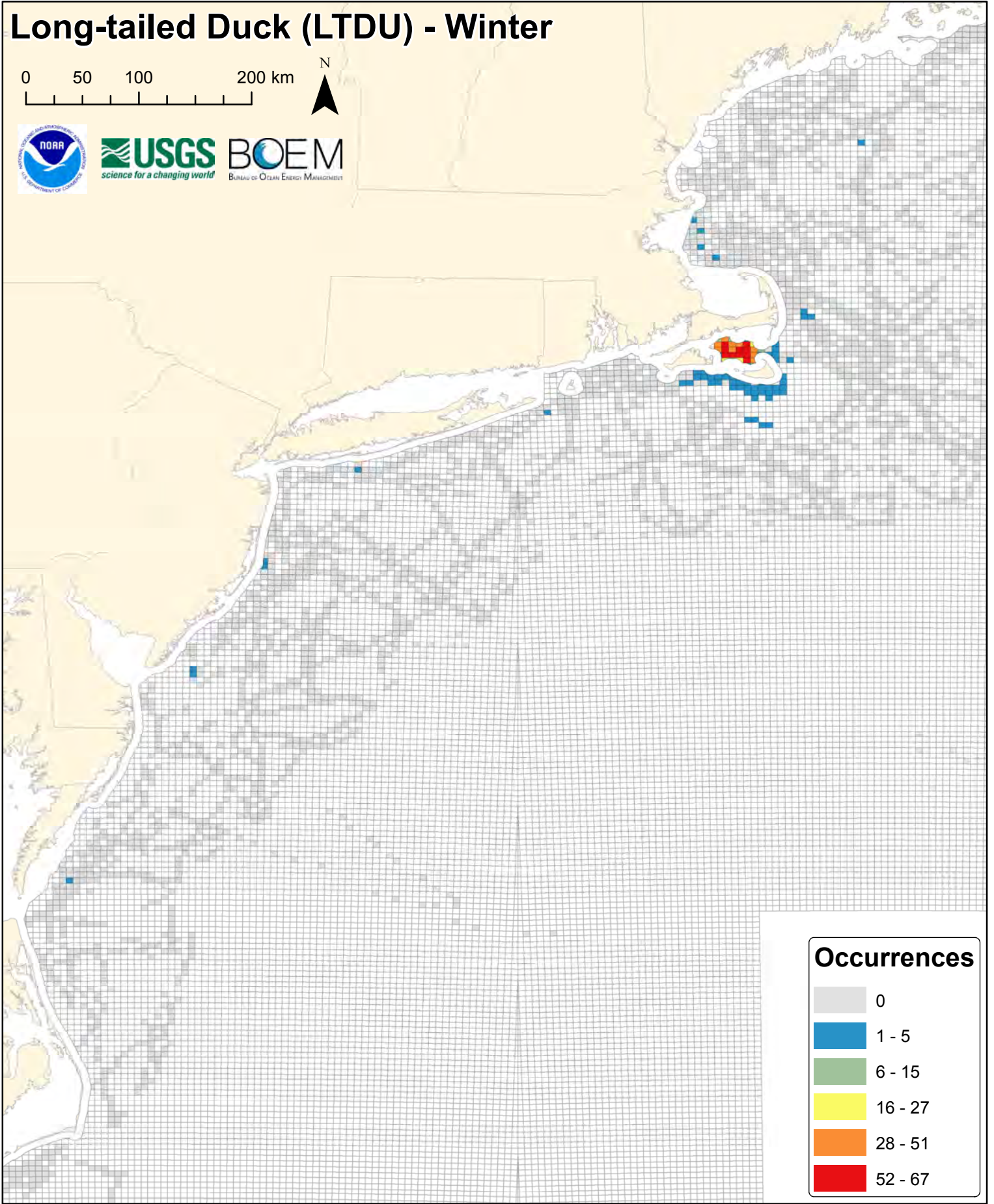
Northern Fulmar (NOFU) - Winter Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Long-tailed Duck (LTDU) - Winter

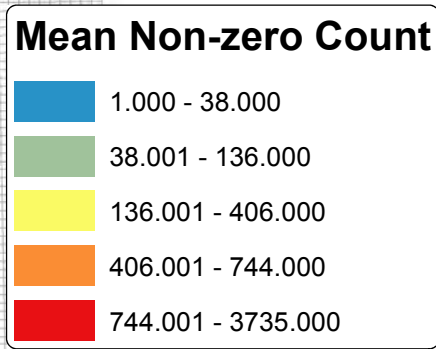
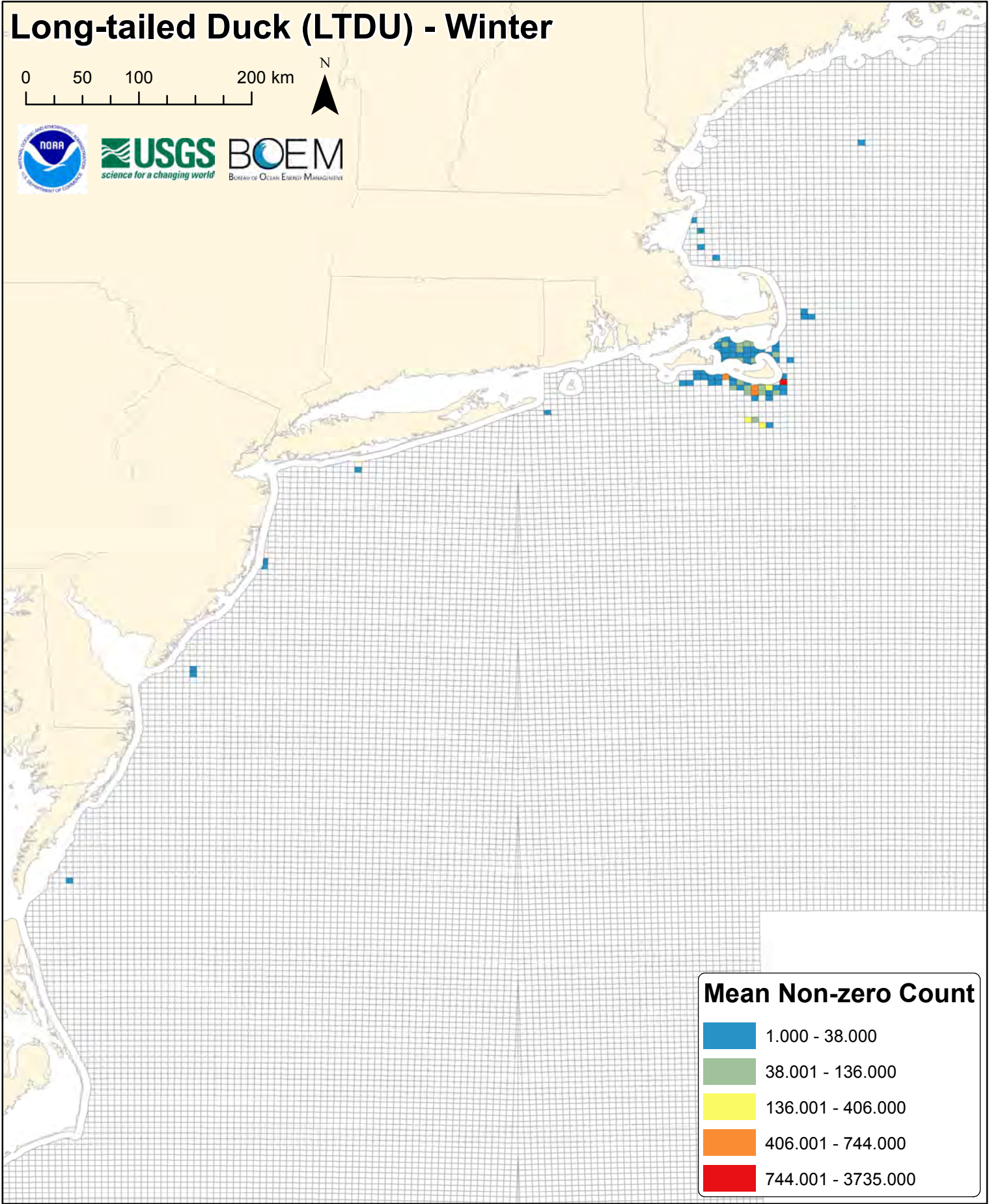
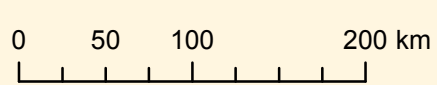
0 50 100 200 km



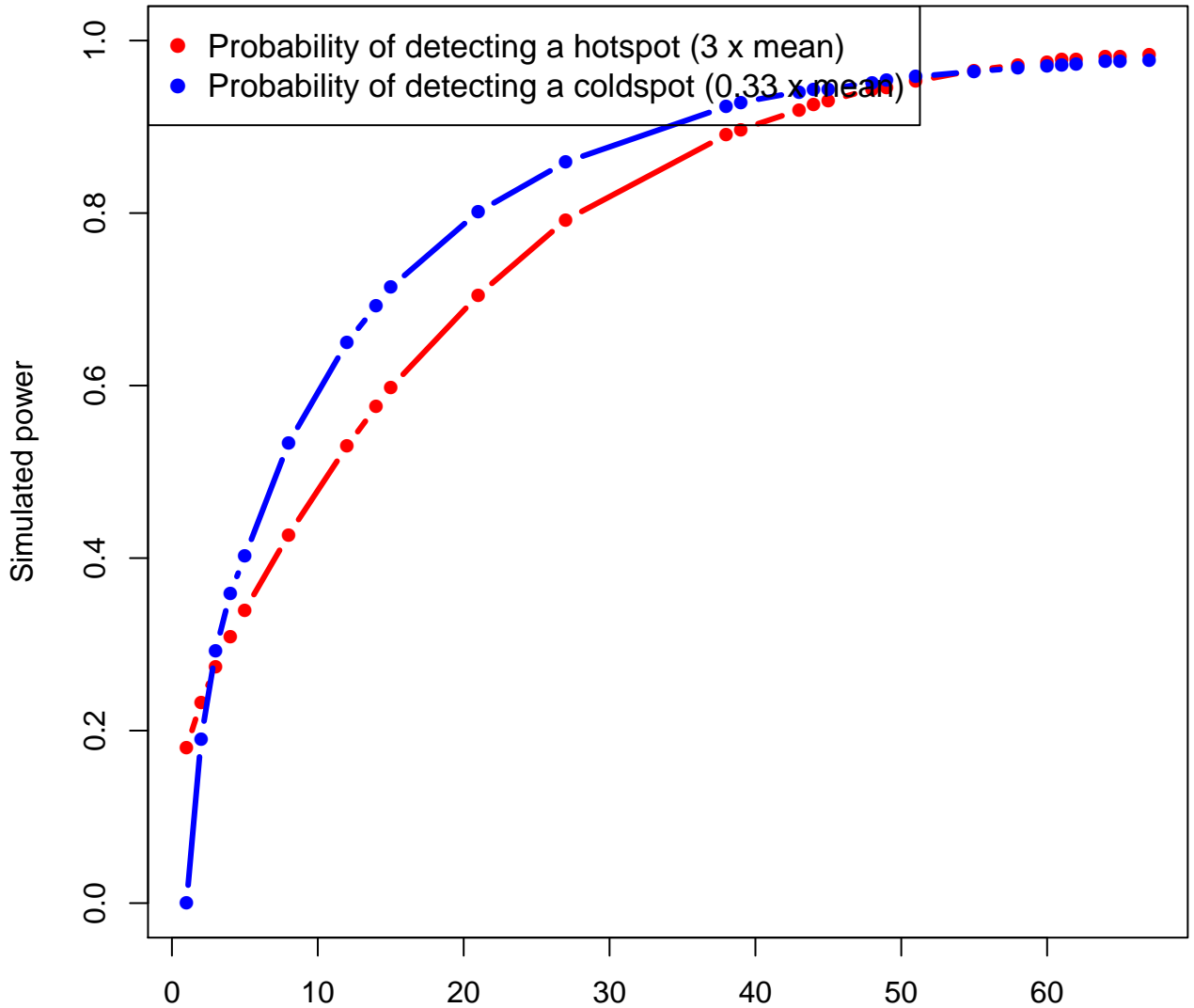
Occurrences

0
1 - 5
6 - 15
16 - 27
28 - 51
52 - 67

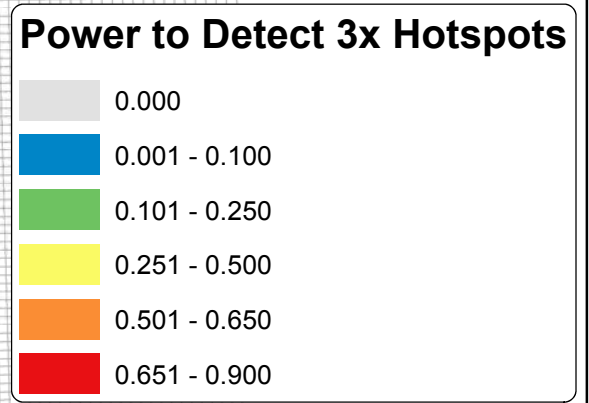
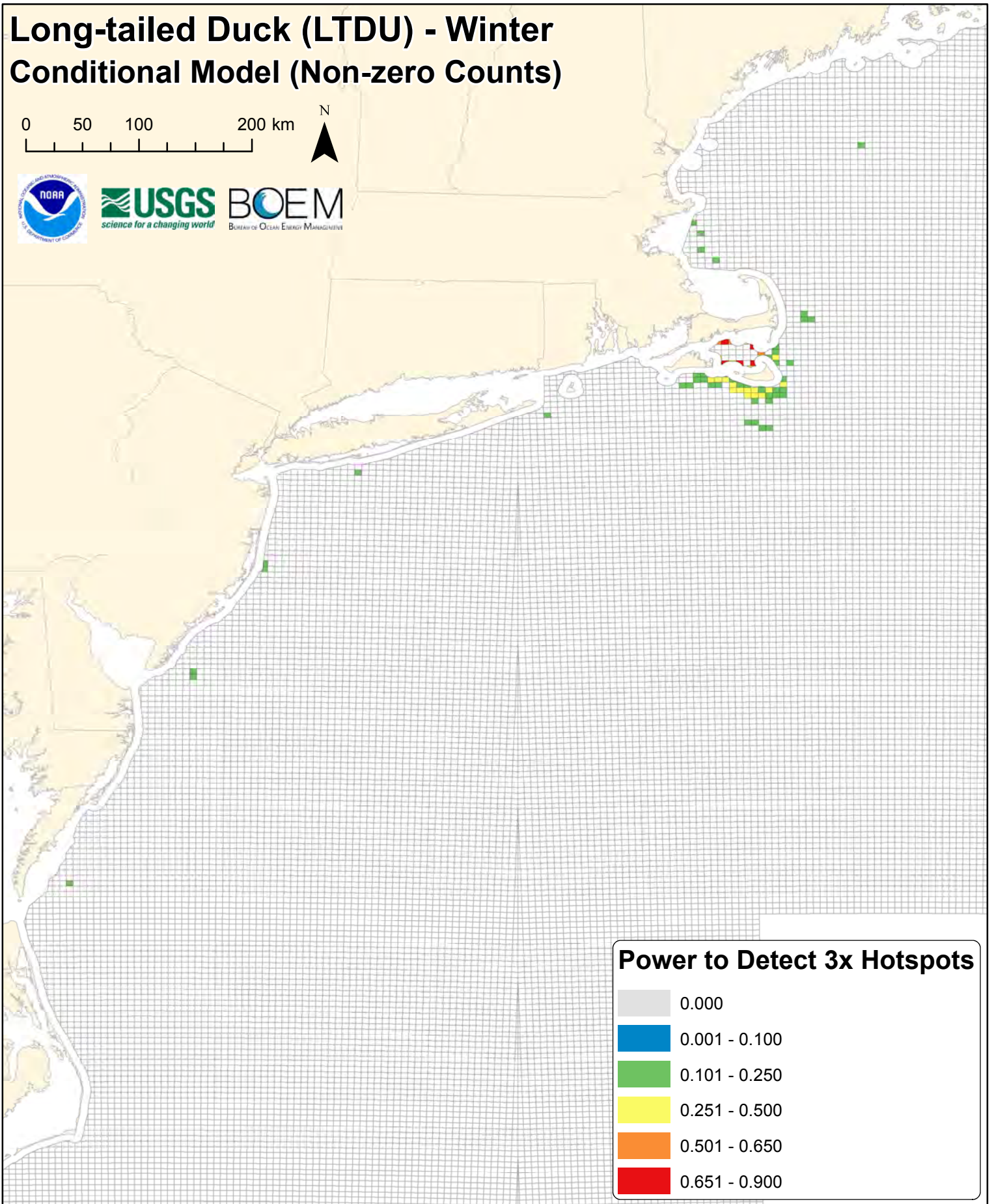
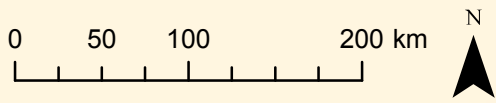
Long-tailed Duck (LTDU) - Winter



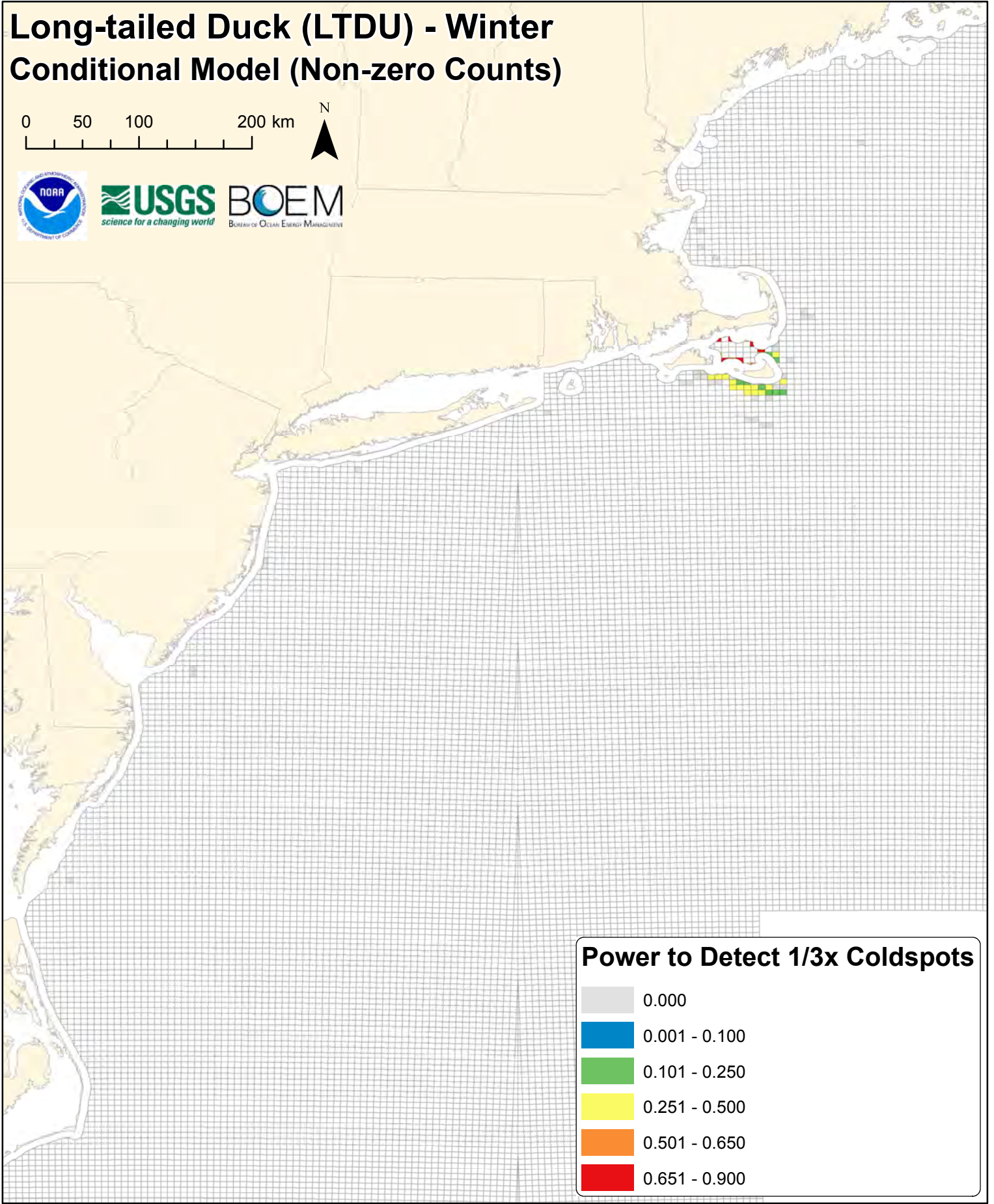
ltdu



Long-tailed Duck (LTDU) - Winter Conditional Model (Non-zero Counts)



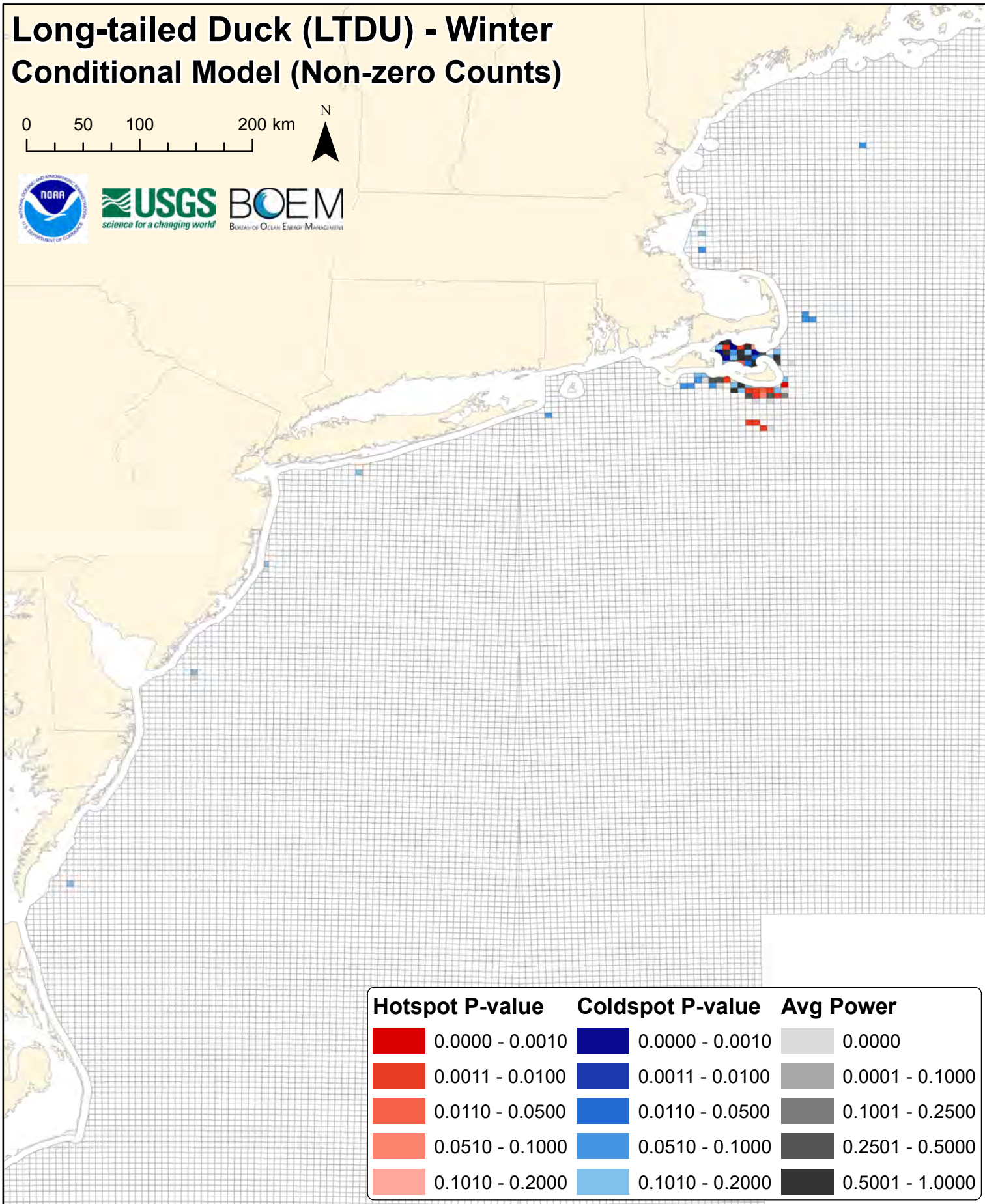
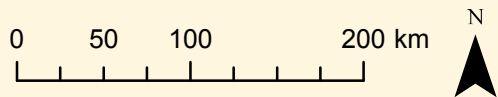
Long-tailed Duck (LTDU) - Winter Conditional Model (Non-zero Counts)



Power to Detect 1/3x Coldspots

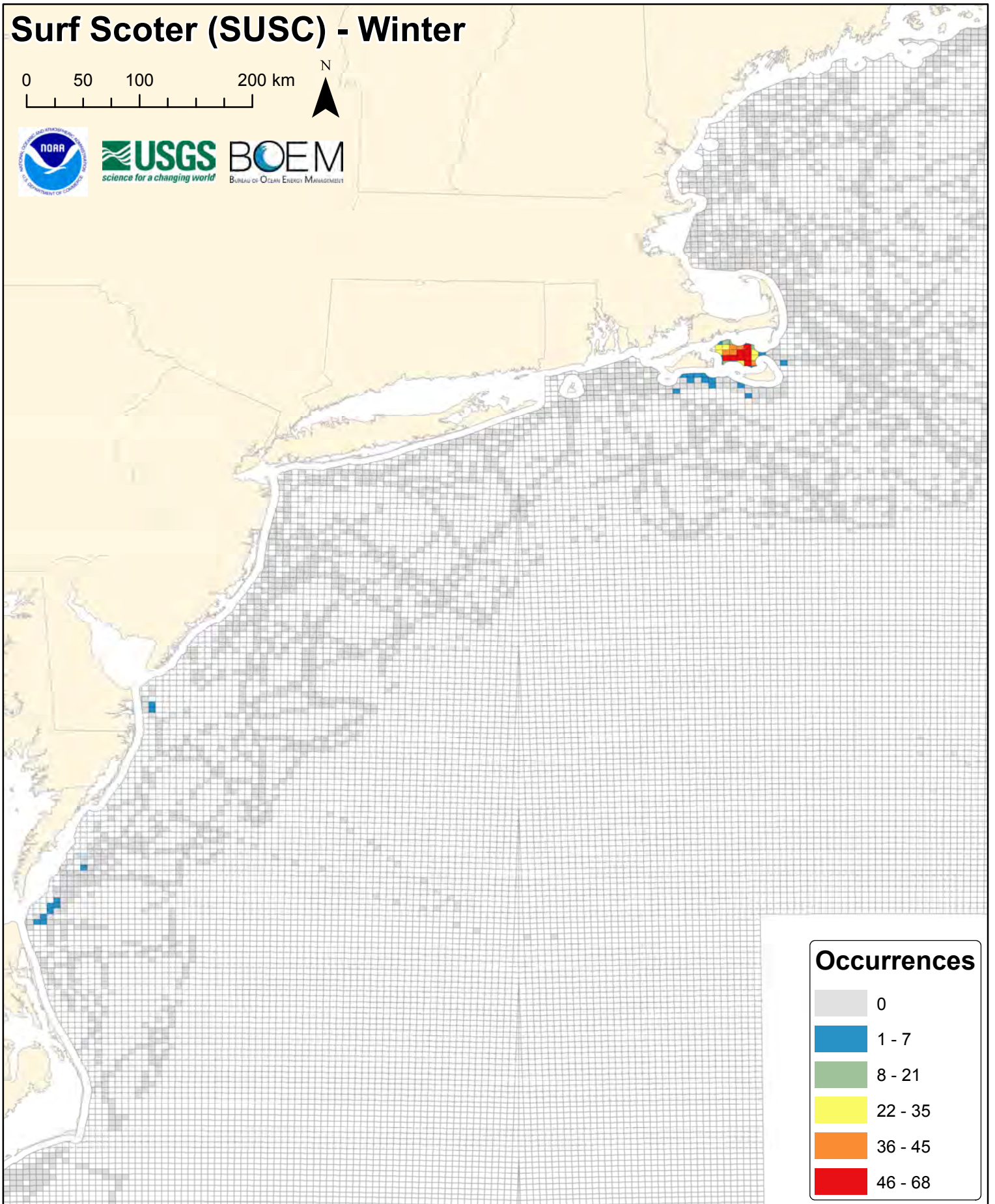
0.000
0.001 - 0.100
0.101 - 0.250
0.251 - 0.500
0.501 - 0.650
0.651 - 0.900

Long-tailed Duck (LTDU) - Winter Conditional Model (Non-zero Counts)

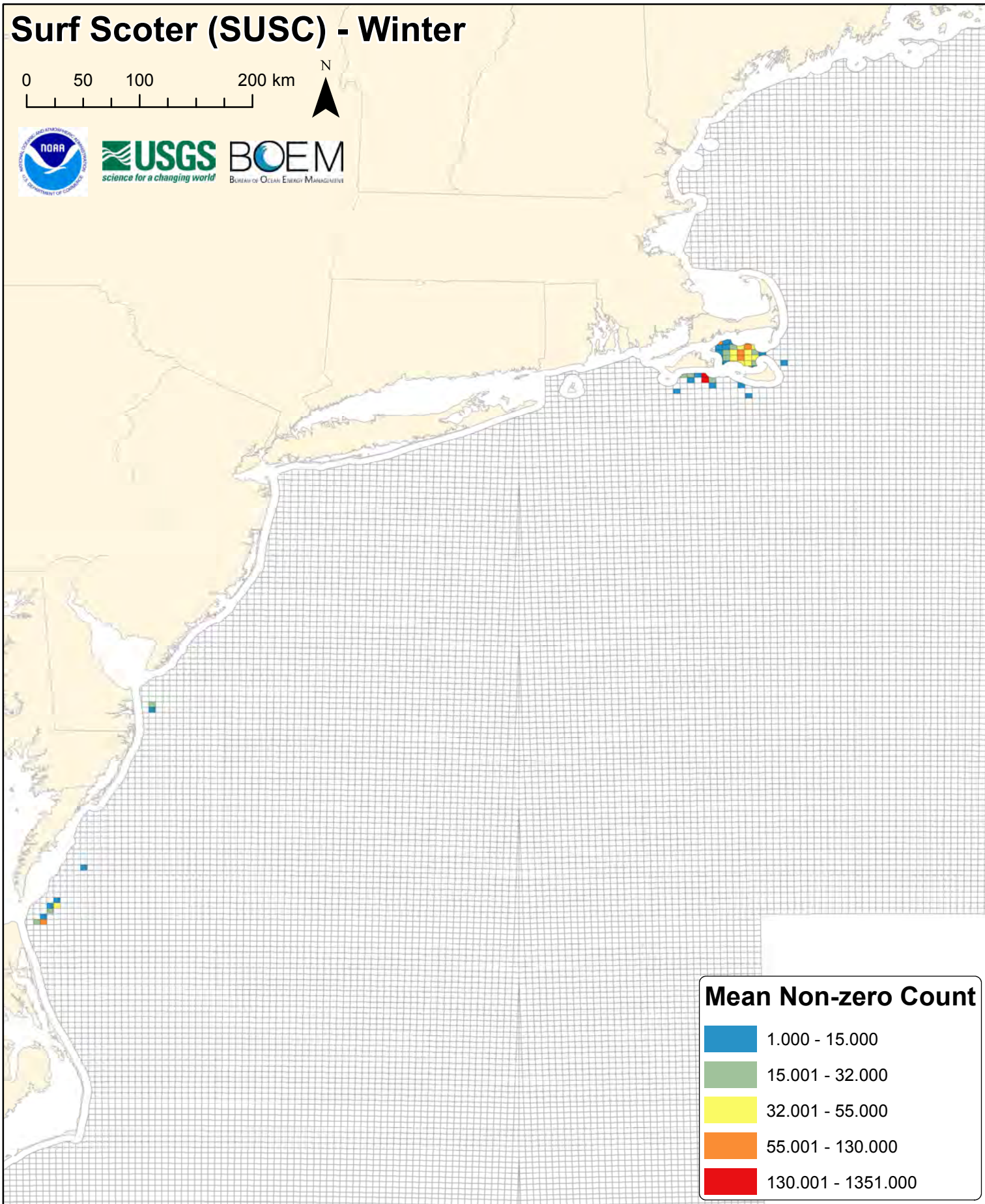
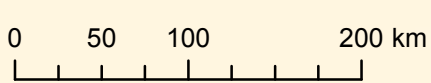


Surf Scoter (SUSC) - Winter

0 50 100 200 km



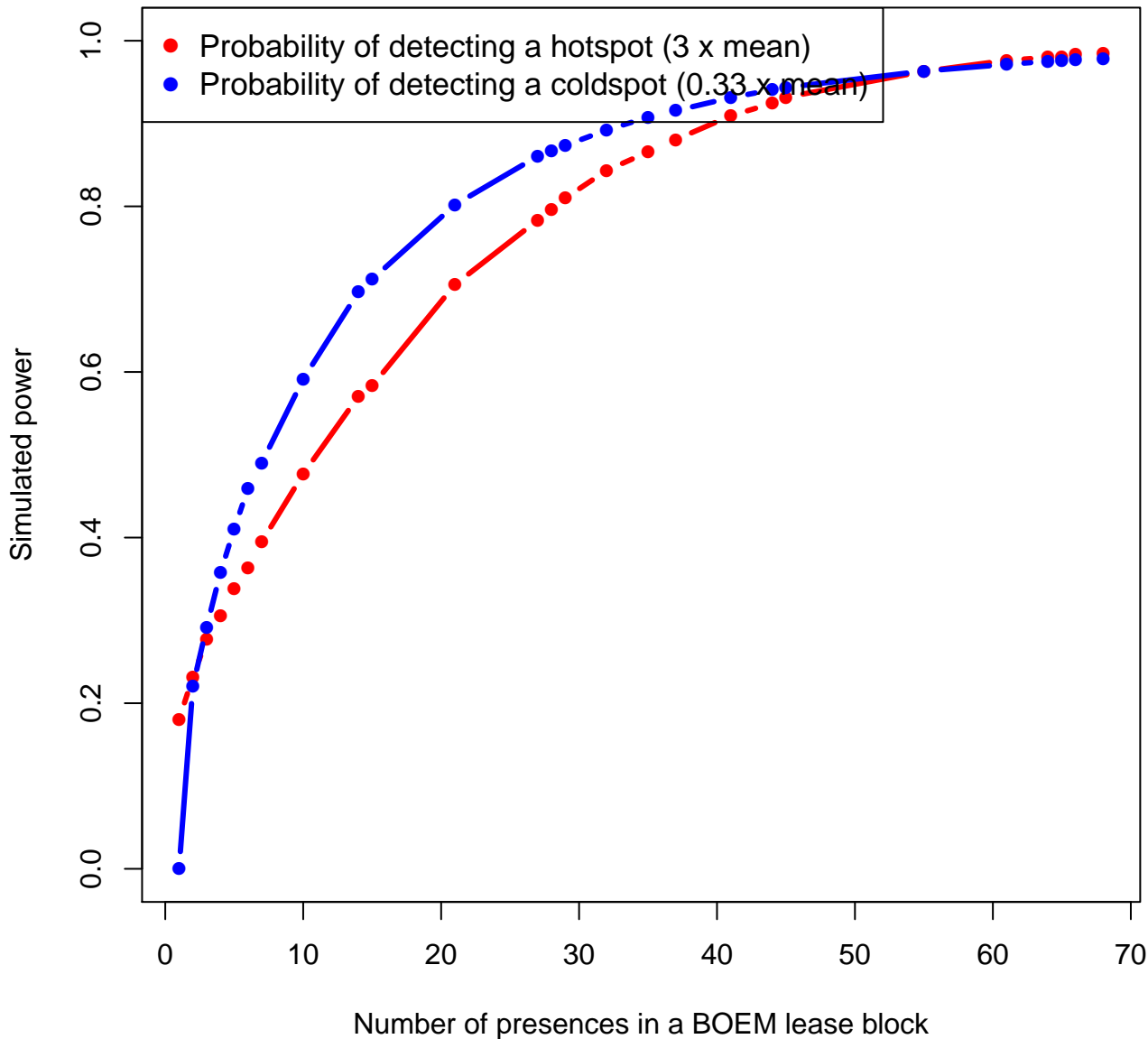
Surf Scoter (SUSC) - Winter



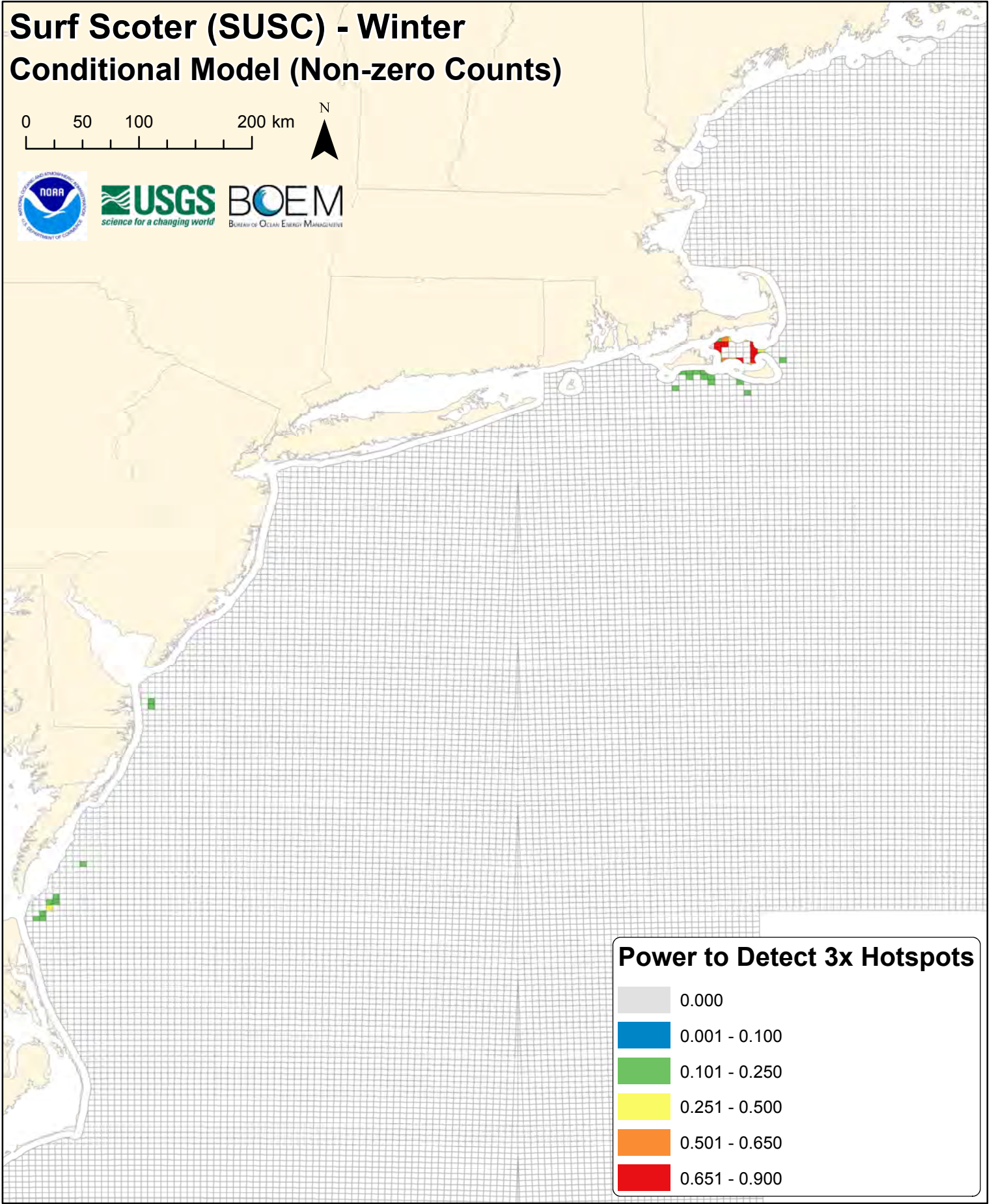
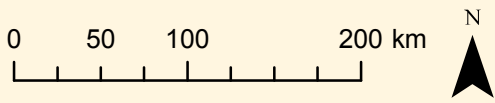
Mean Non-zero Count

Blue	1.000 - 15.000
Green	15.001 - 32.000
Yellow	32.001 - 55.000
Orange	55.001 - 130.000
Red	130.001 - 1351.000

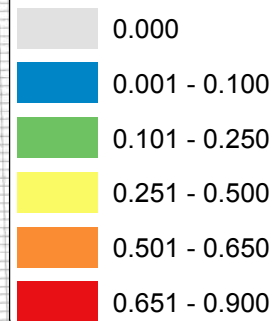
SUSC



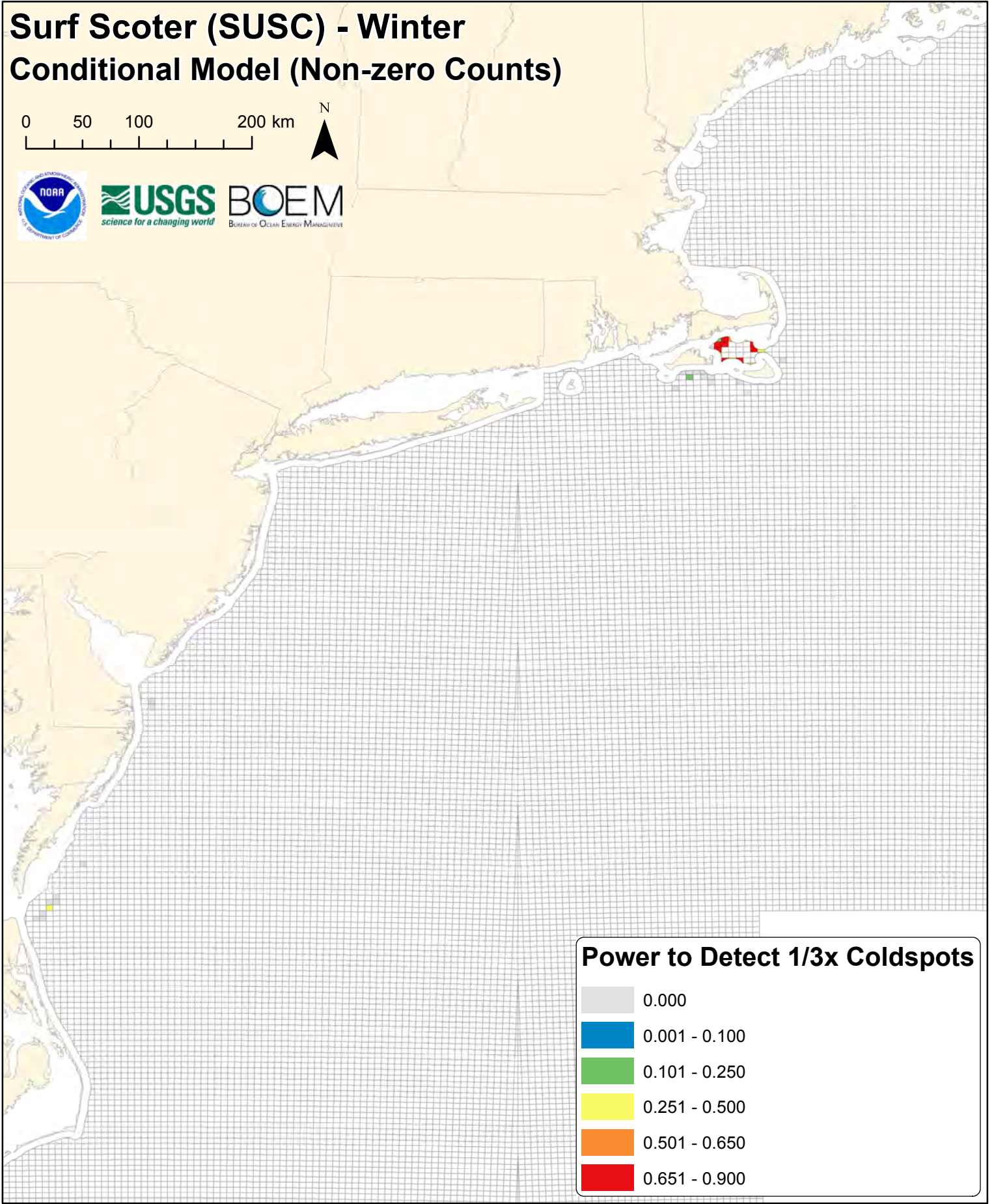
Surf Scoter (SUSC) - Winter Conditional Model (Non-zero Counts)



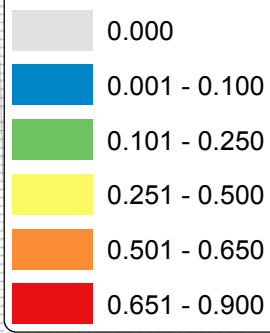
Power to Detect 3x Hotspots



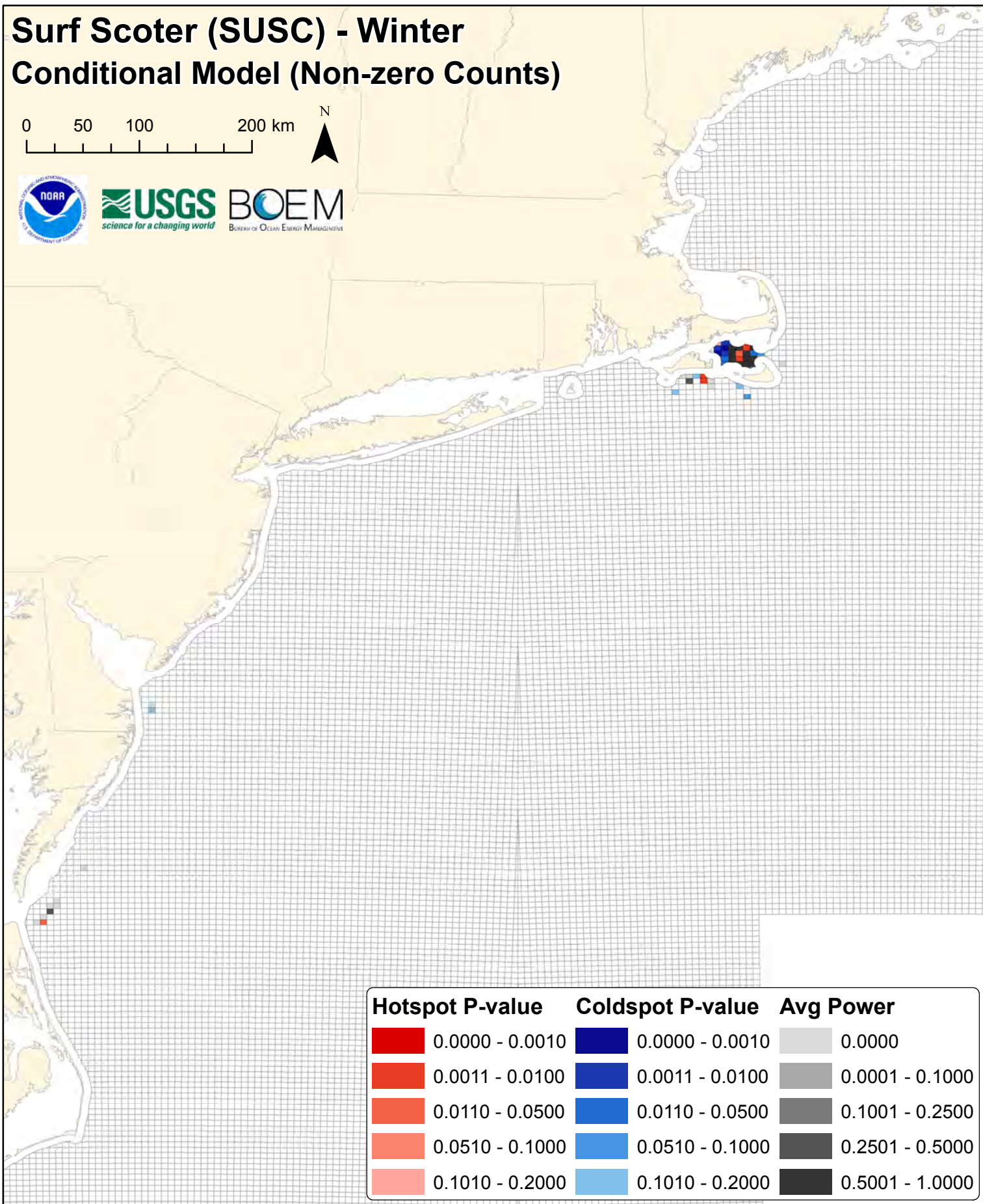
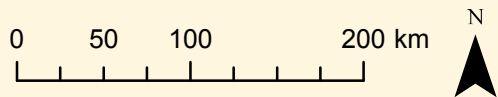
Surf Scoter (SUSC) - Winter Conditional Model (Non-zero Counts)


















Power to Detect 1/3x Coldspots



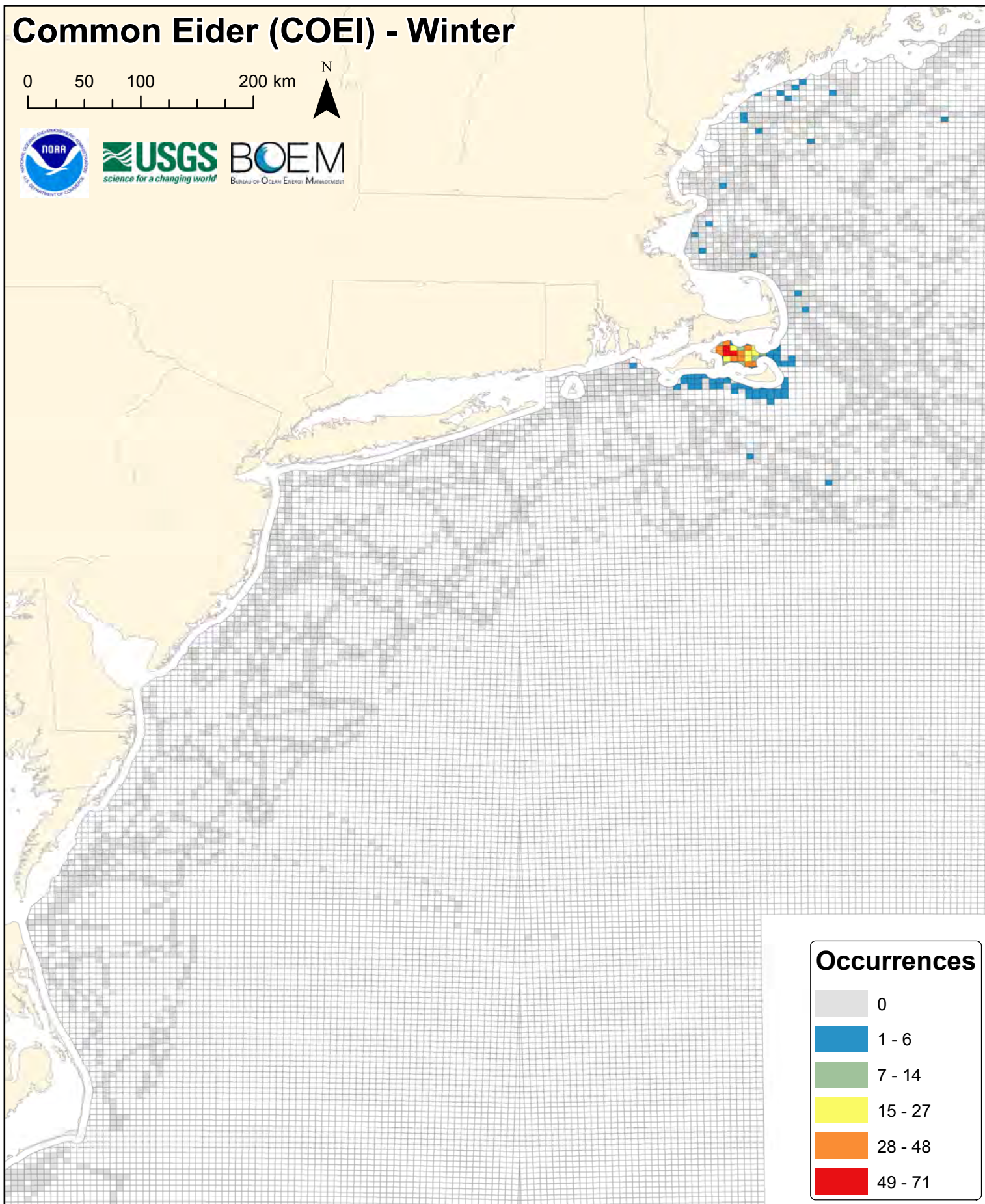
Surf Scoter (SUSC) - Winter Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Common Eider (COEI) - Winter

0 50 100 200 km

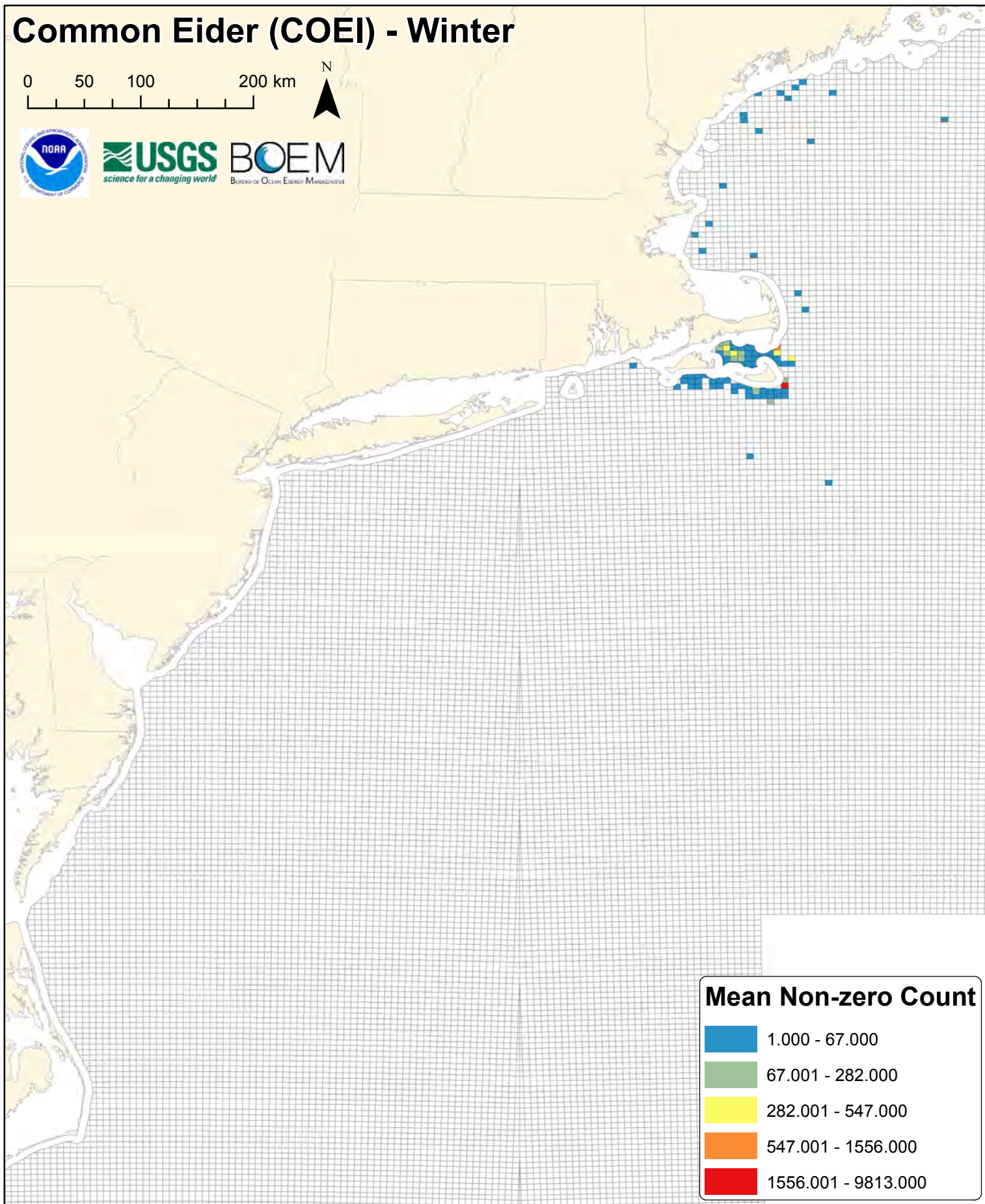


Occurrences

0
1 - 6
7 - 14
15 - 27
28 - 48
49 - 71

Common Eider (COEI) - Winter

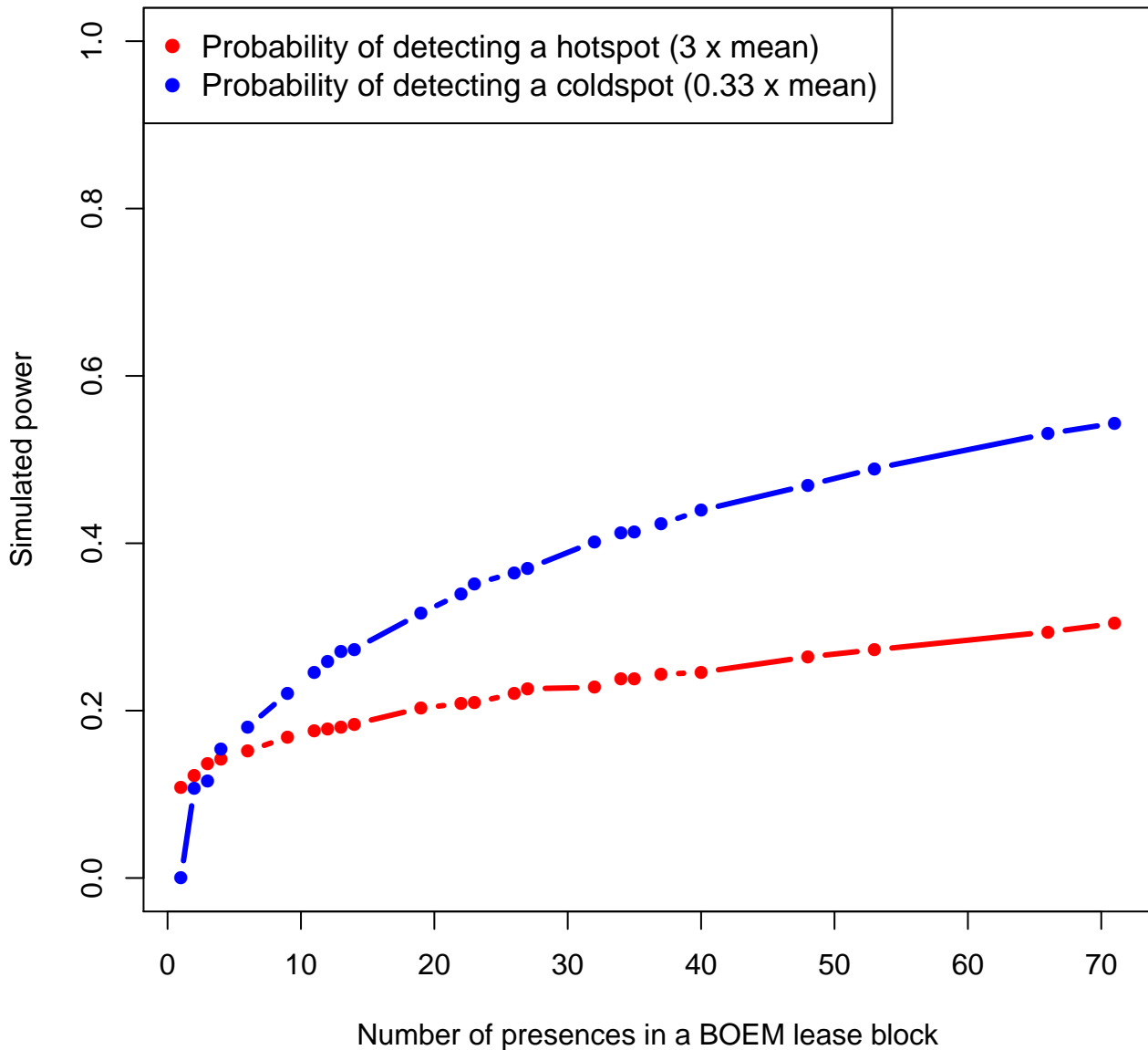
0 50 100 200 km



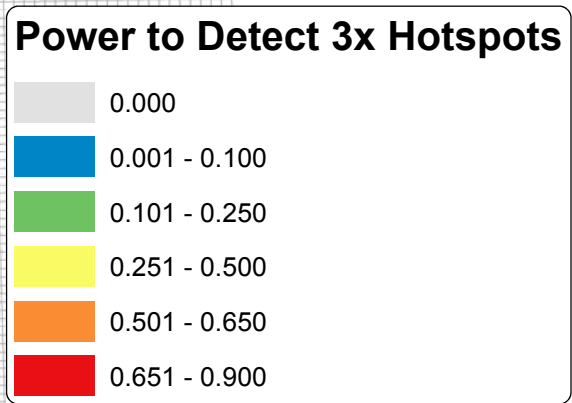
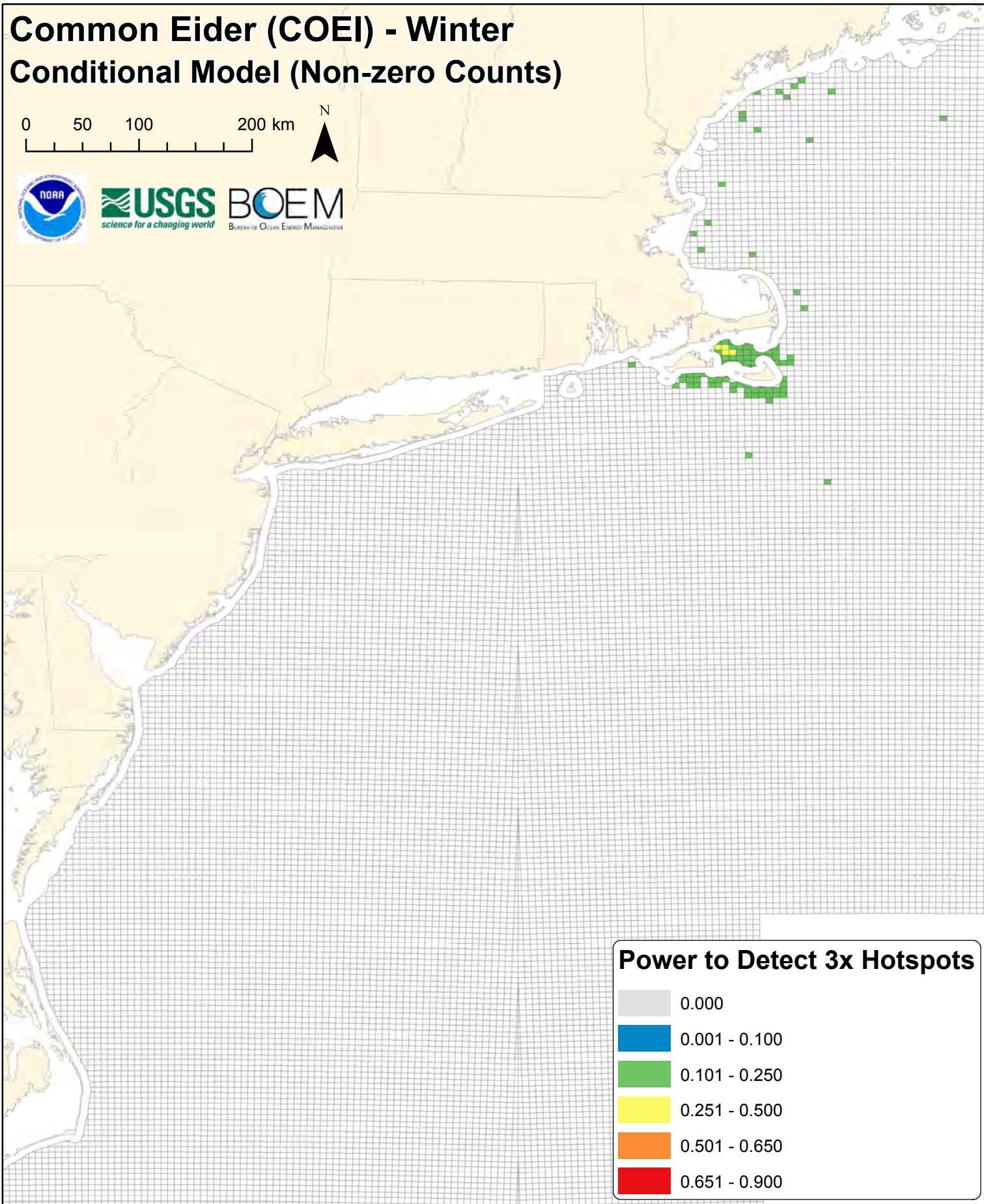
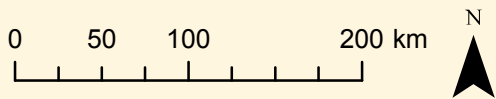
Mean Non-zero Count

- 1.000 - 67.000
- 67.001 - 282.000
- 282.001 - 547.000
- 547.001 - 1556.000
- 1556.001 - 9813.000

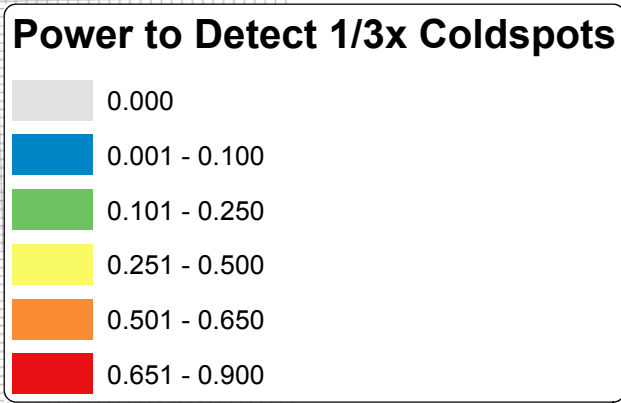
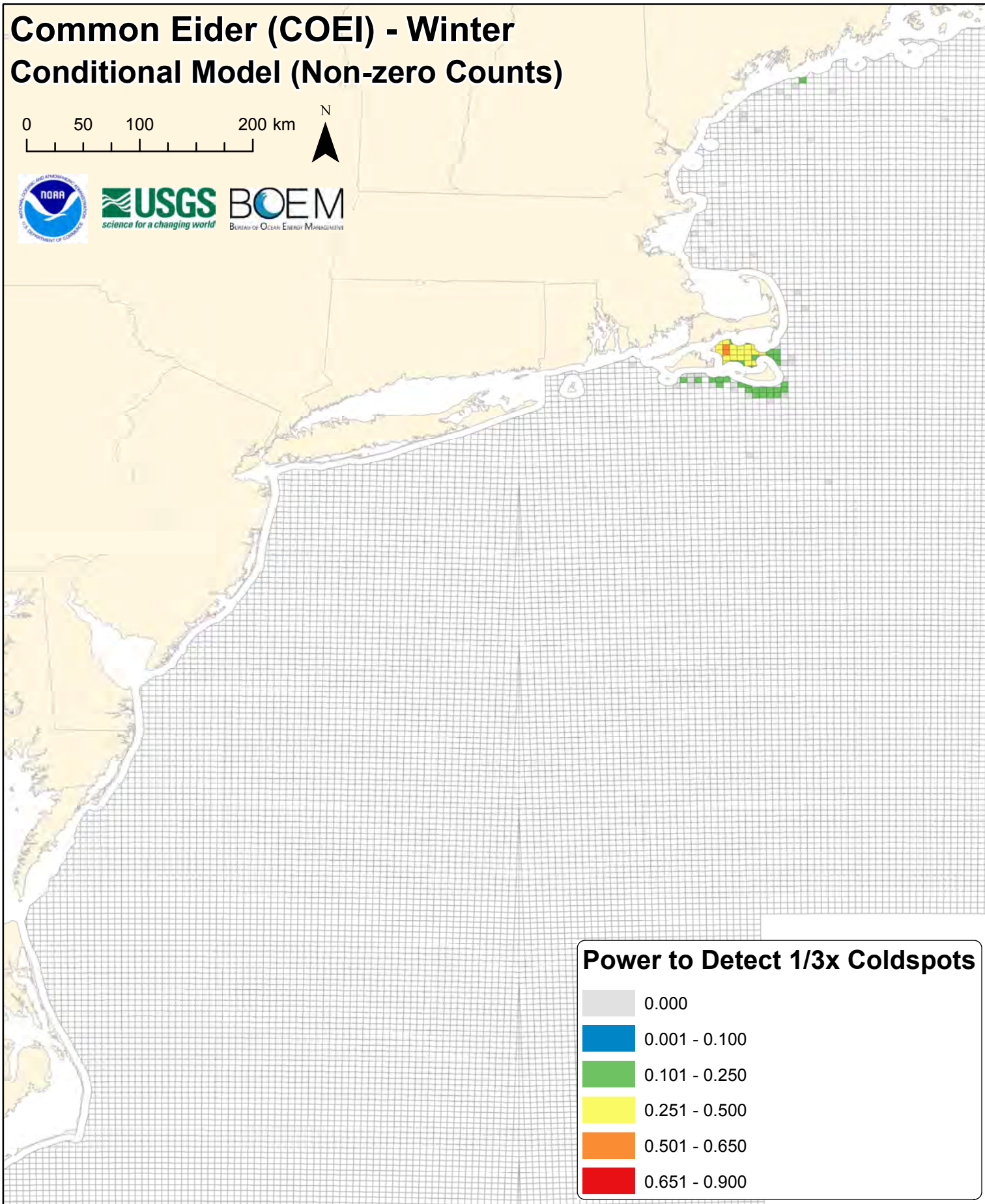
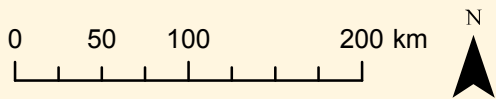
coei



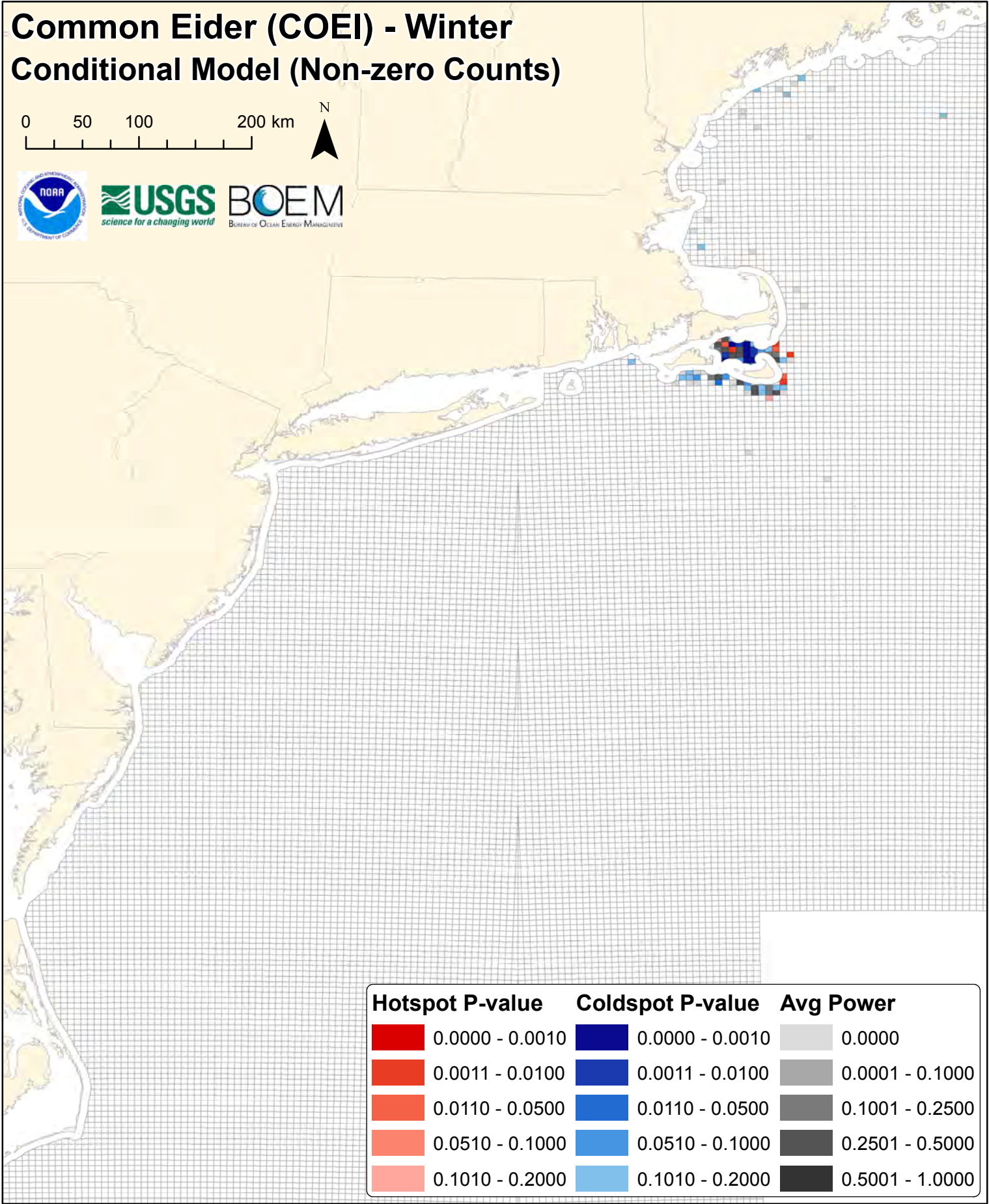
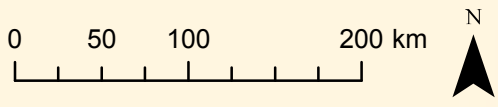
Common Eider (COEI) - Winter Conditional Model (Non-zero Counts)


















Common Eider (COEI) - Winter Conditional Model (Non-zero Counts)

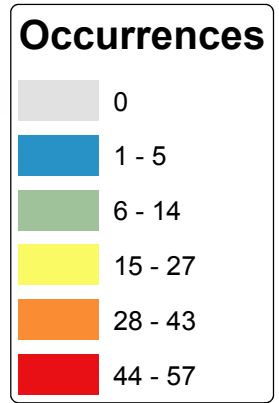
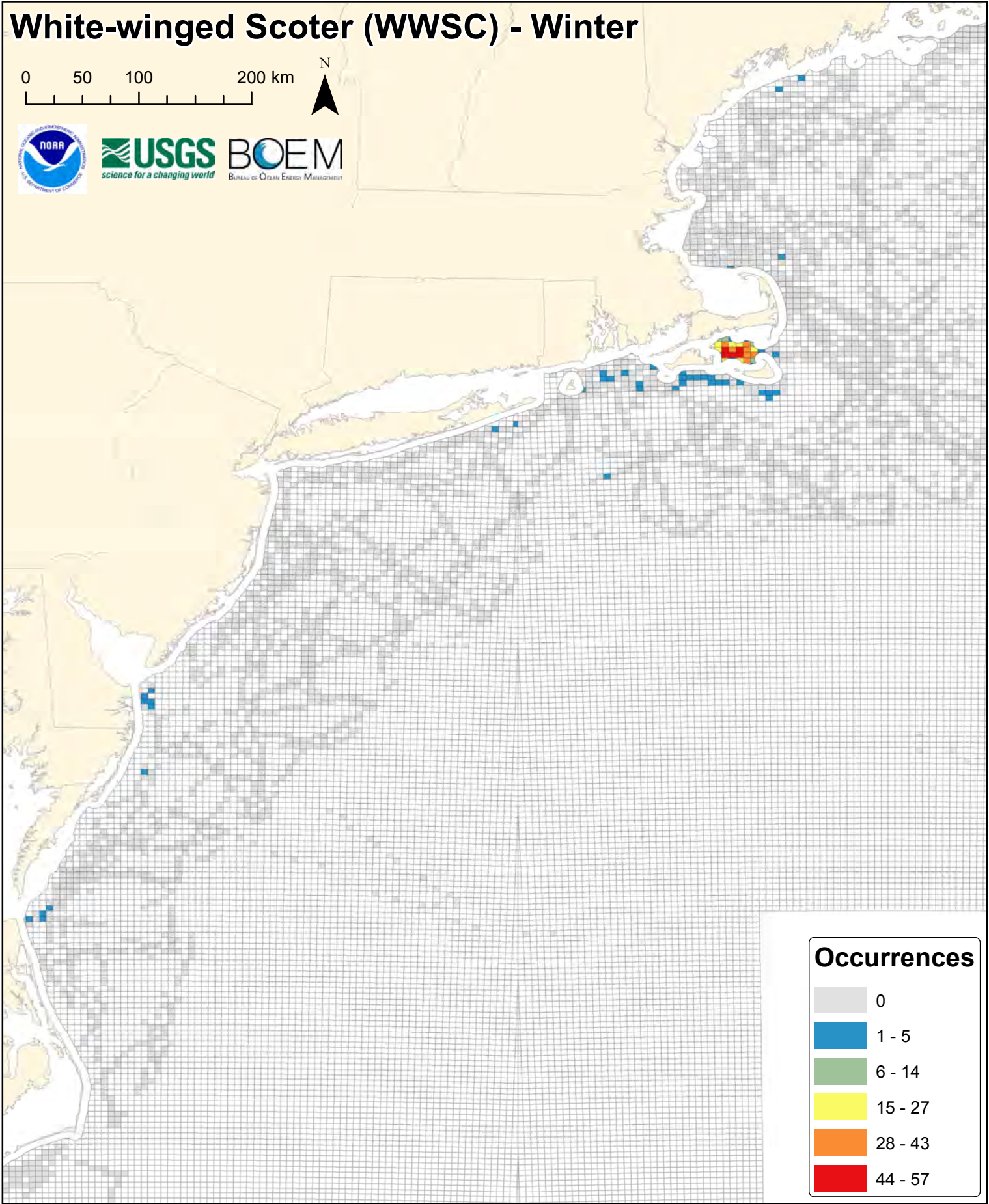
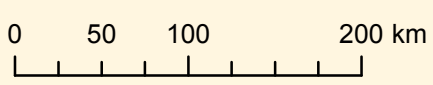


Common Eider (COEI) - Winter Conditional Model (Non-zero Counts)



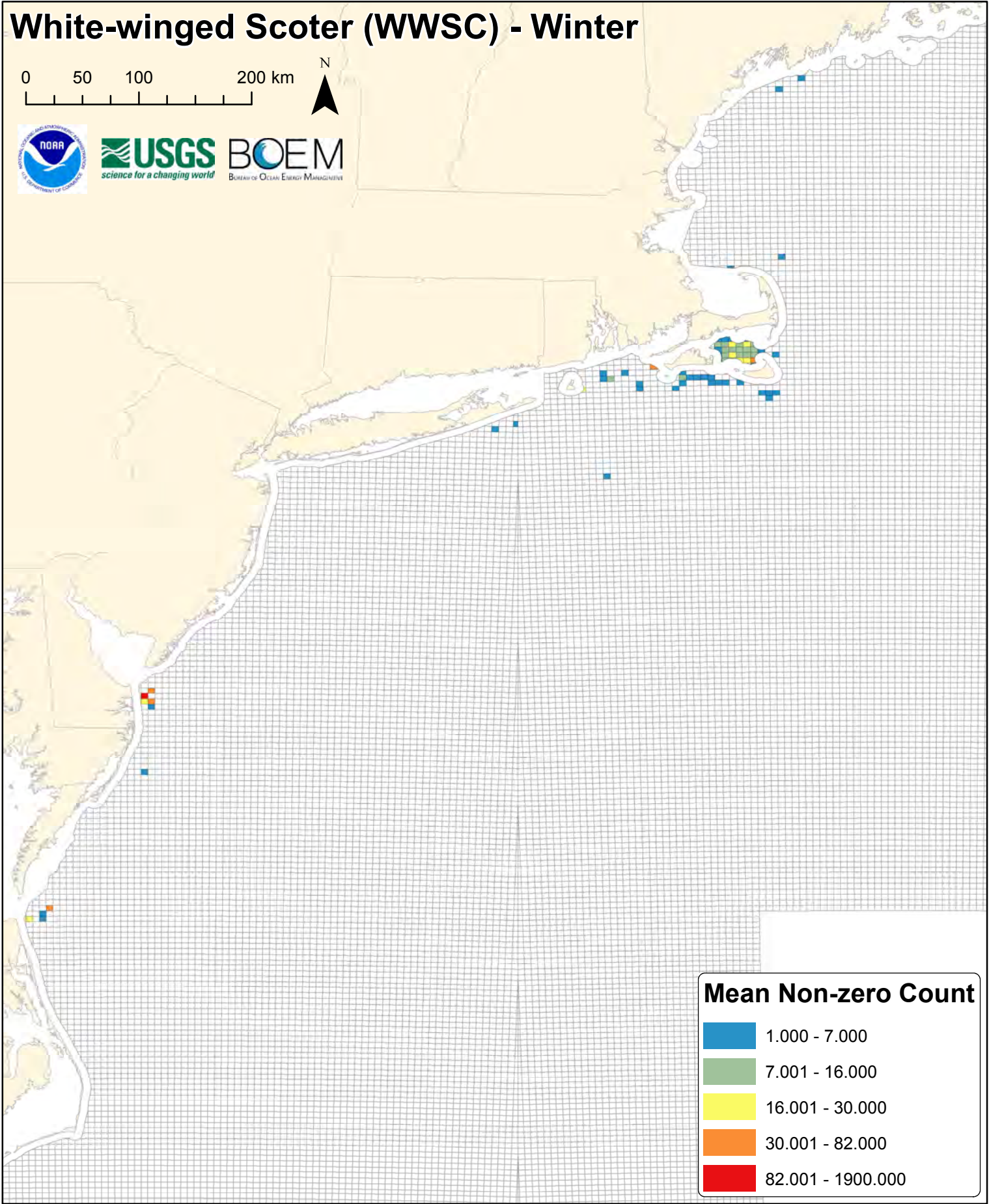
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

White-winged Scoter (WWSC) - Winter

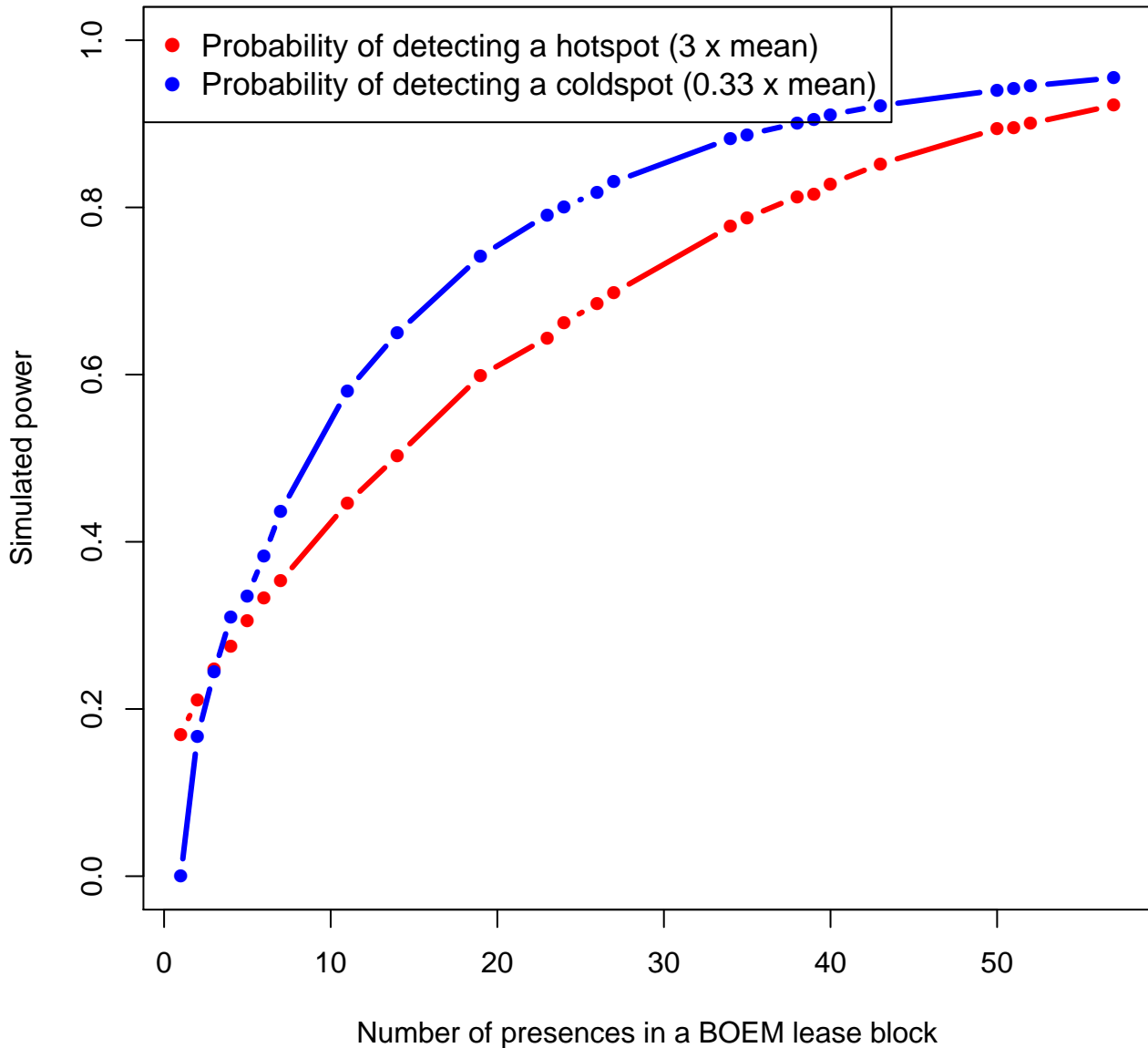


White-winged Scoter (WWSC) - Winter

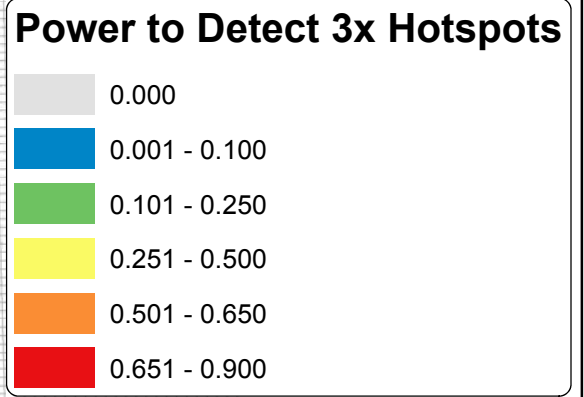
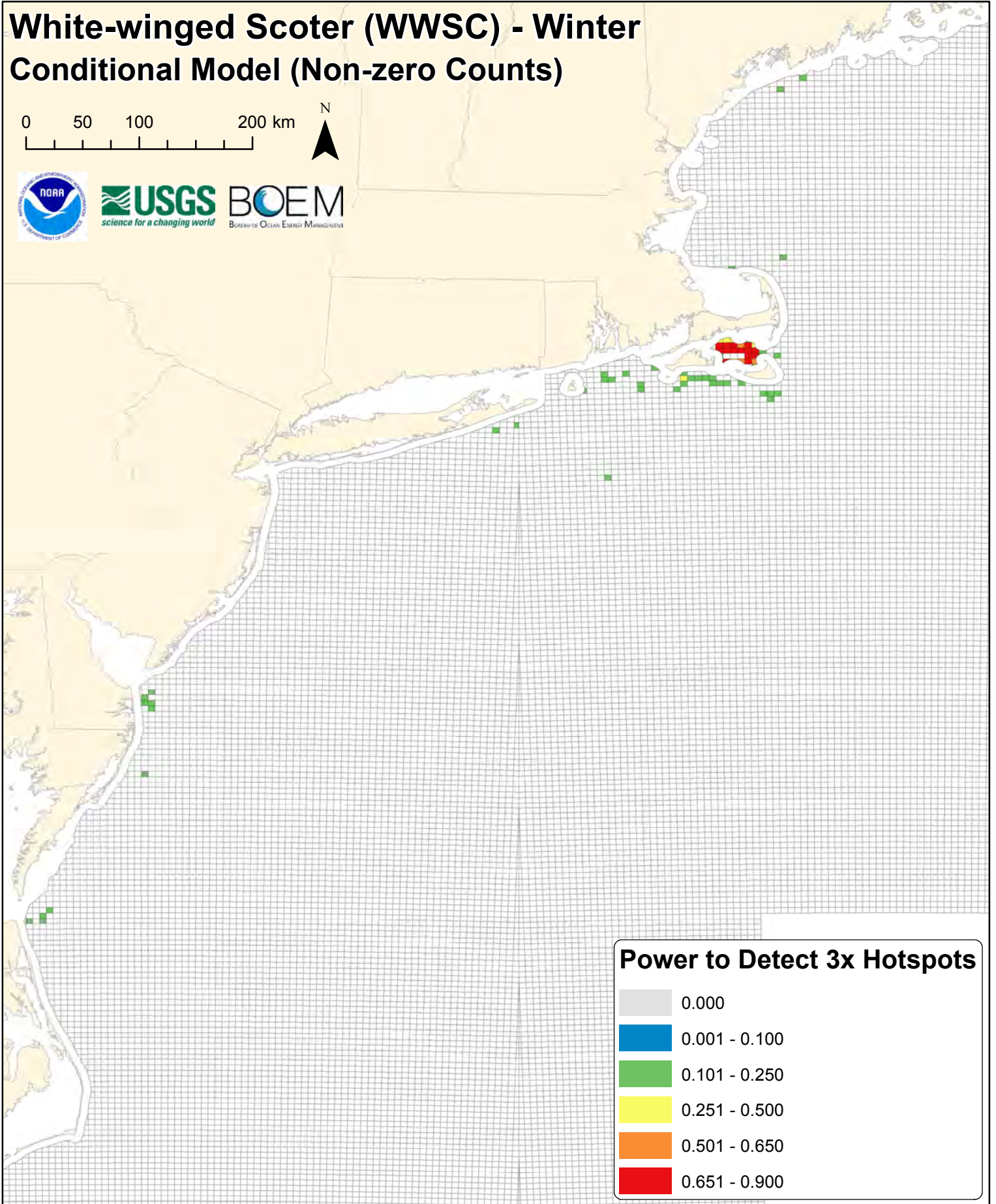
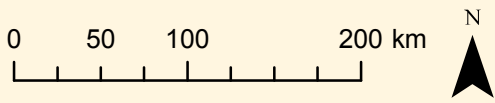
0 50 100 200 km



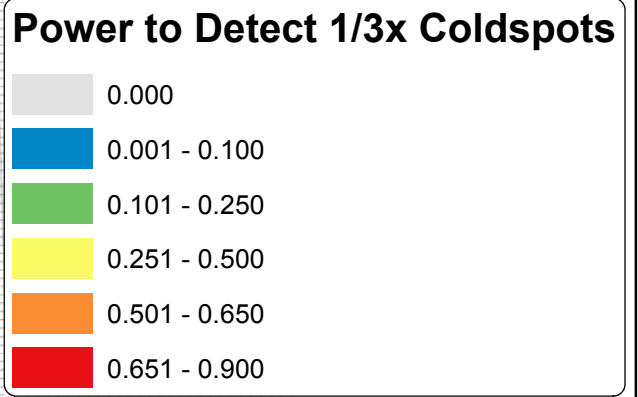
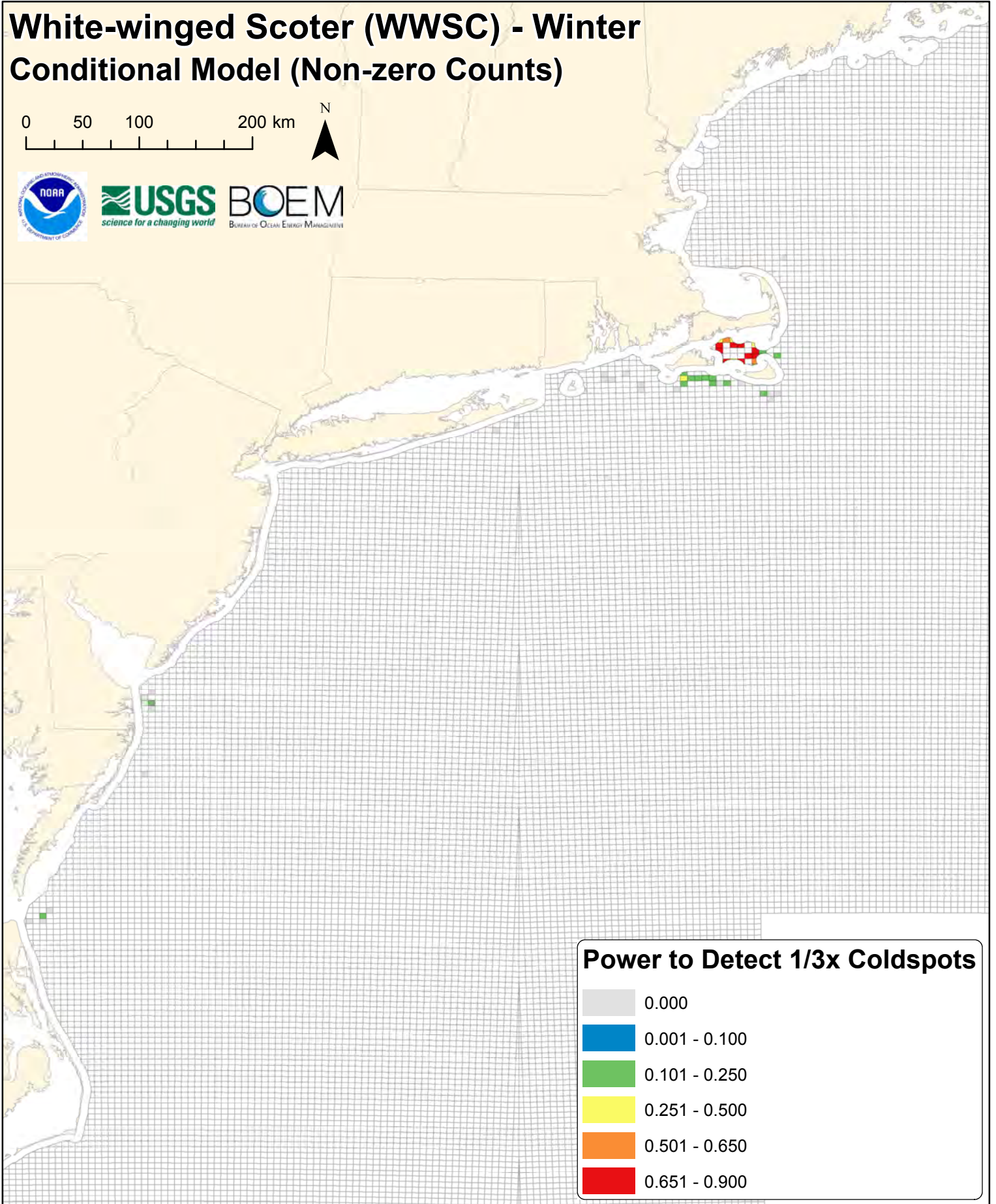
WWSC



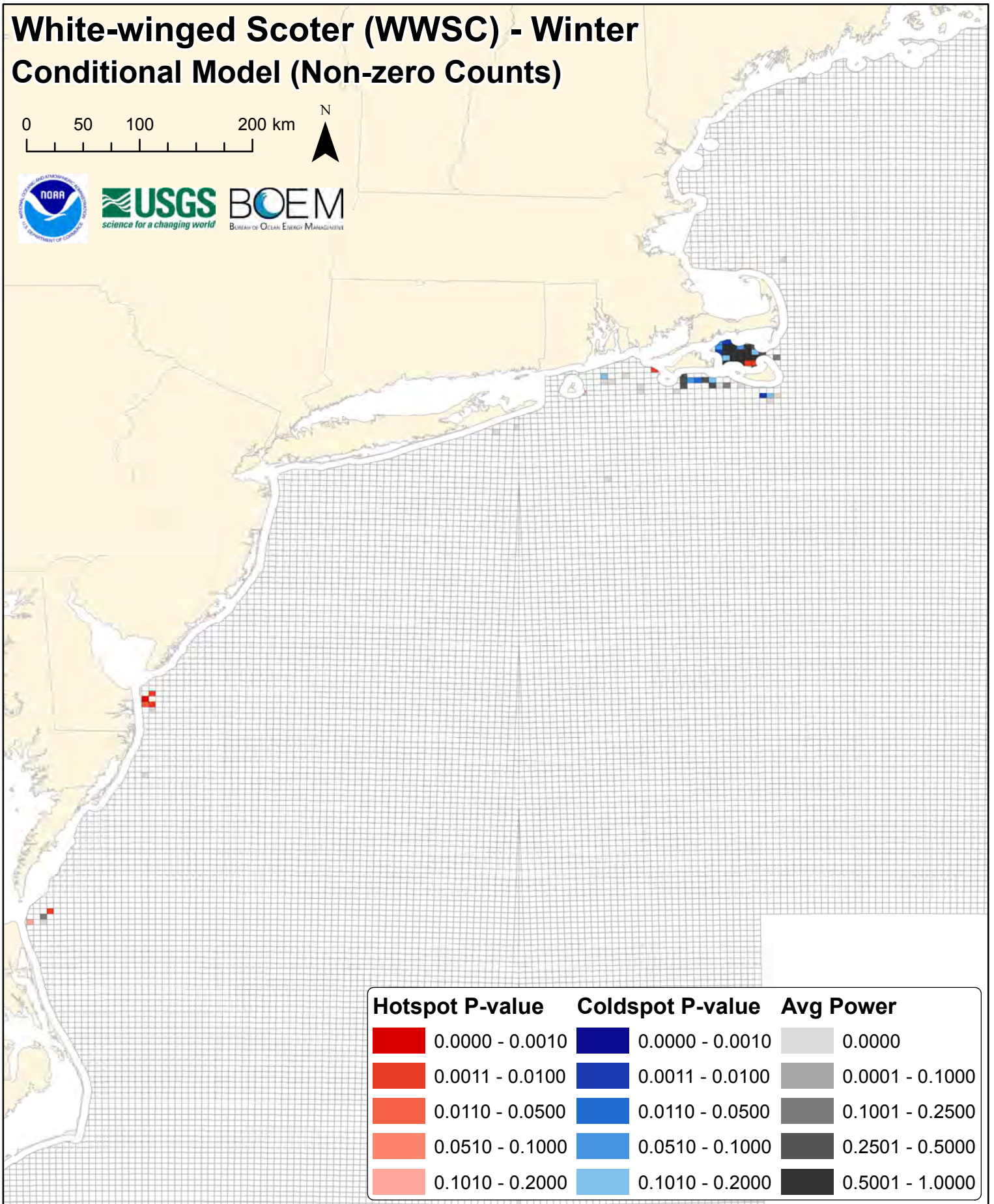
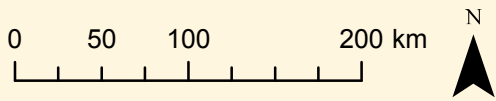
White-winged Scoter (WWSC) - Winter Conditional Model (Non-zero Counts)



White-winged Scoter (WWSC) - Winter Conditional Model (Non-zero Counts)

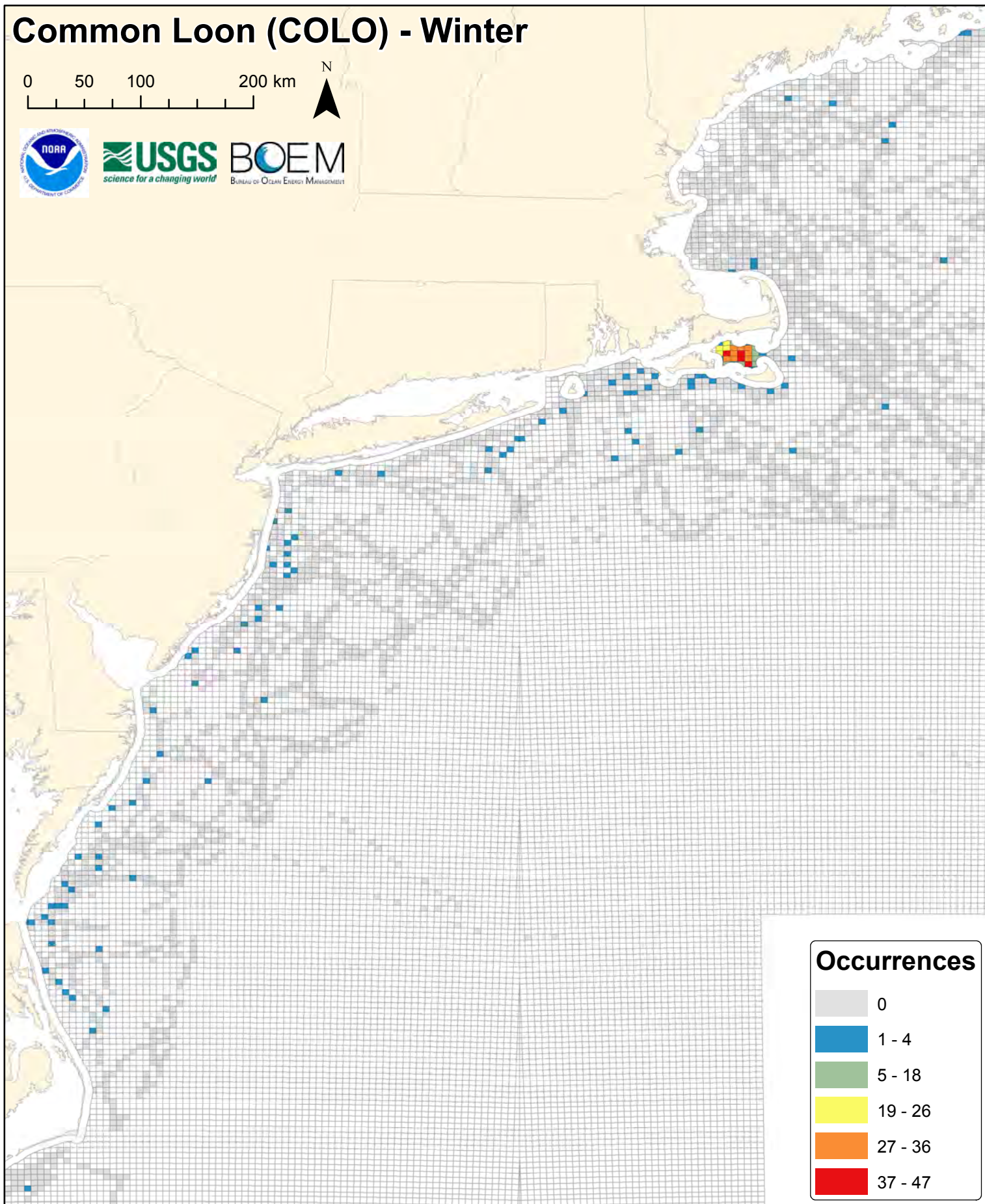


White-winged Scoter (WWSC) - Winter Conditional Model (Non-zero Counts)

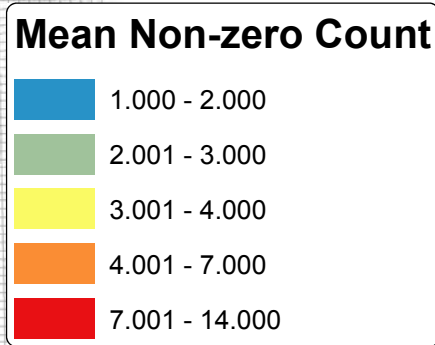
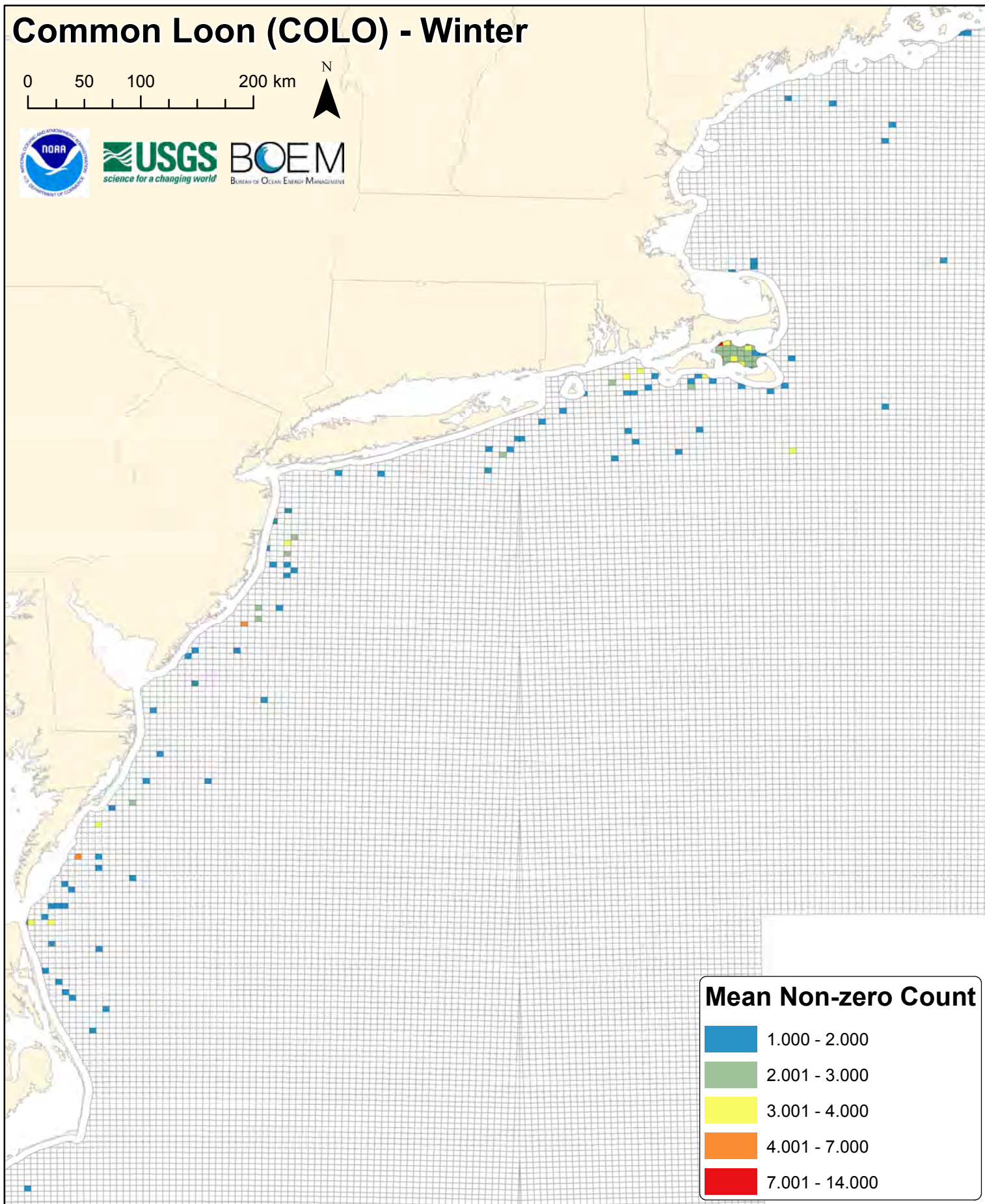
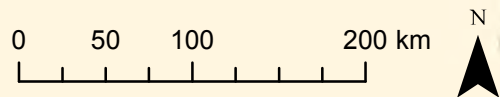


Common Loon (COLO) - Winter

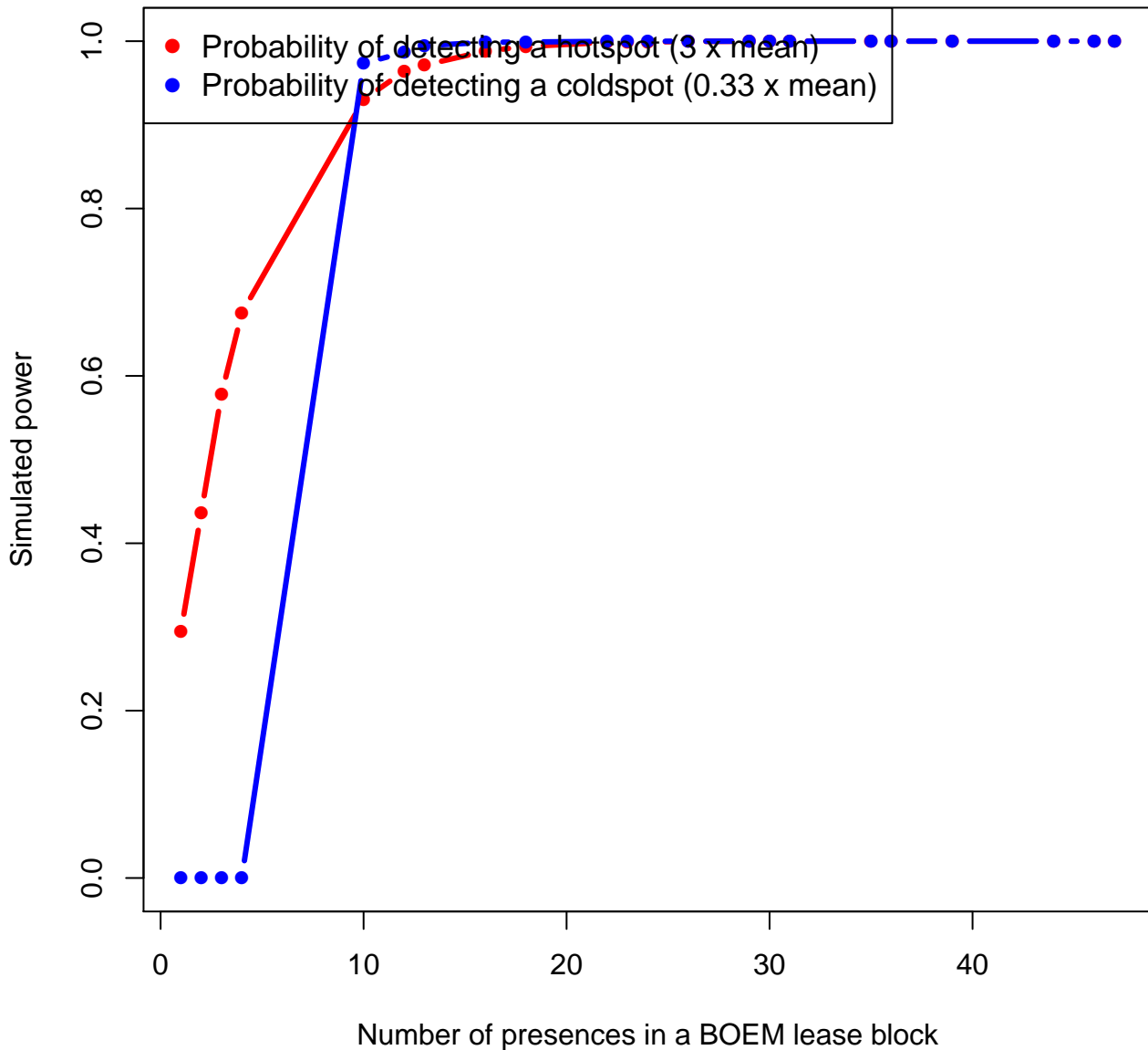
0 50 100 200 km



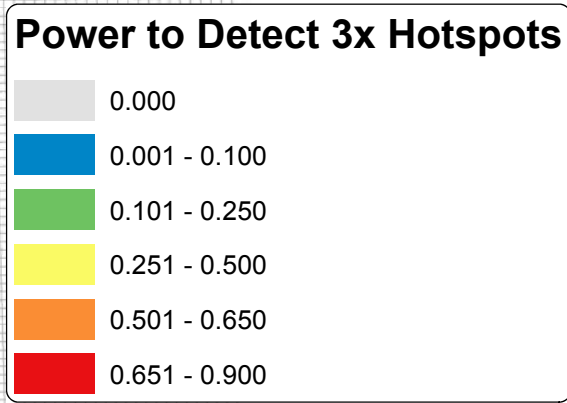
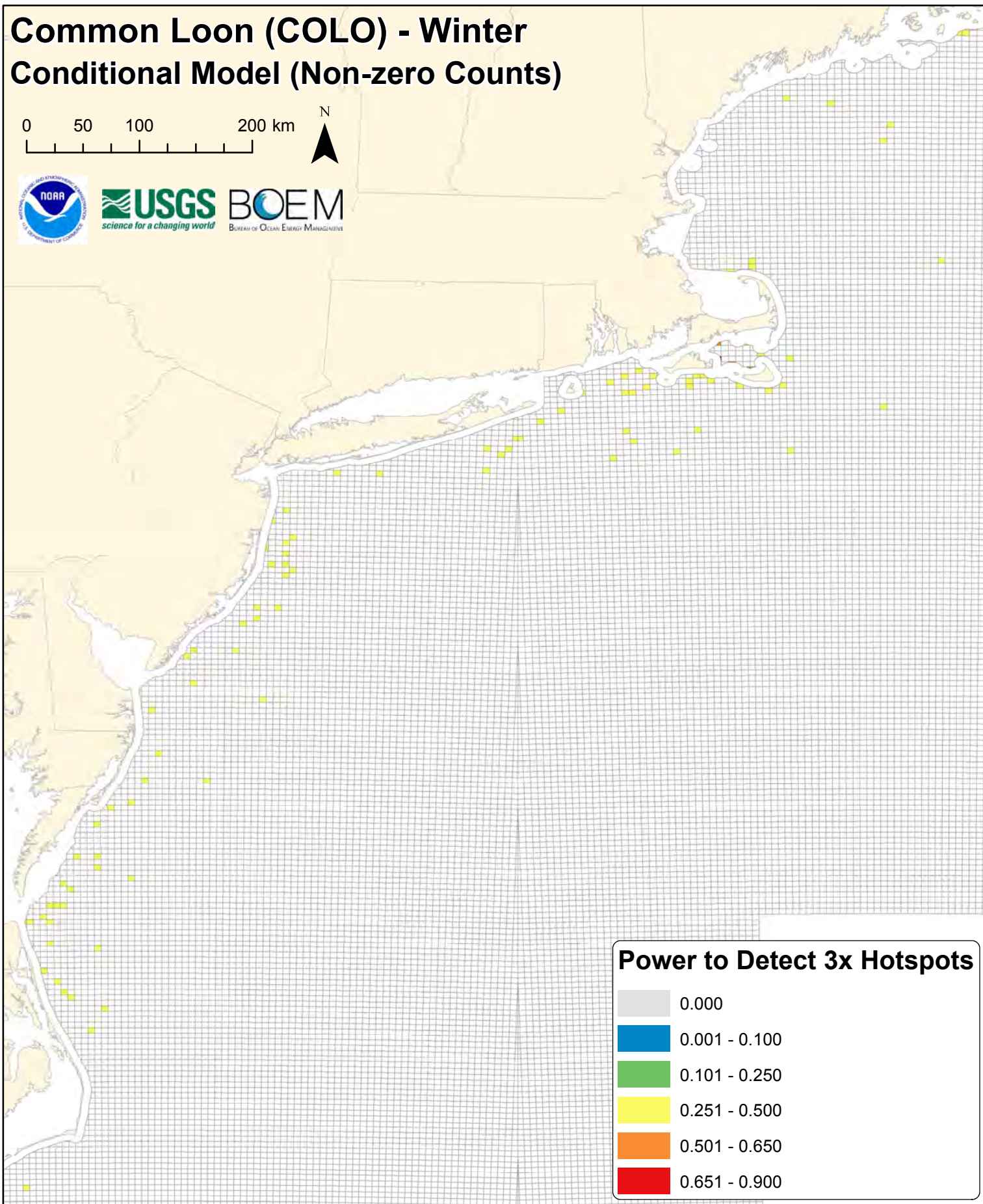
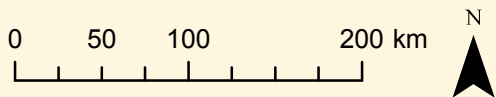
Common Loon (COLO) - Winter



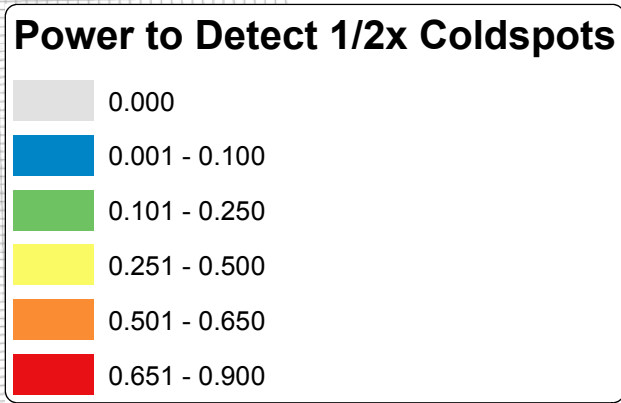
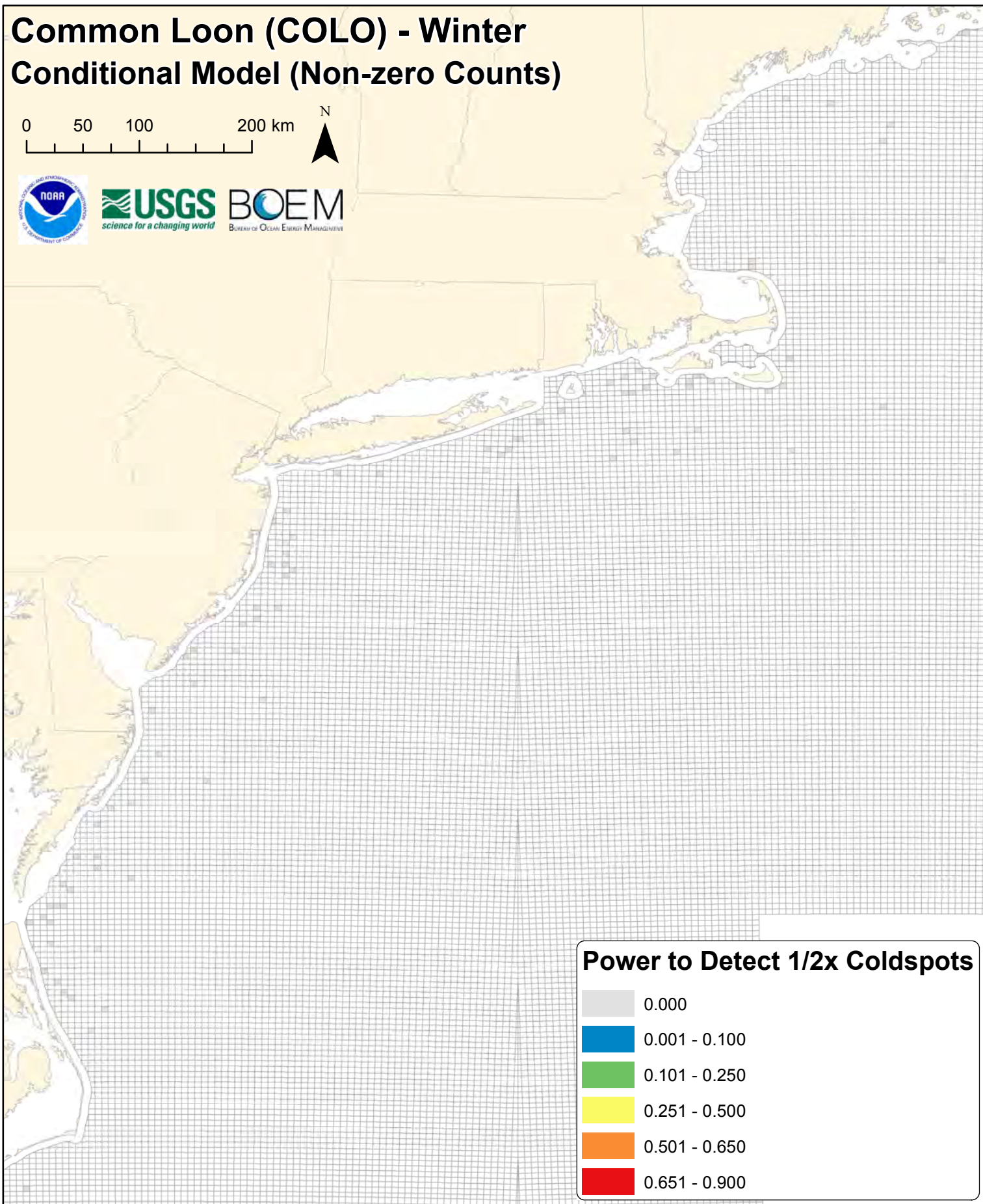
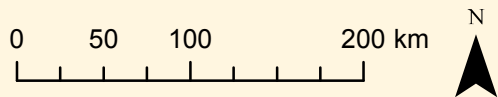
colo



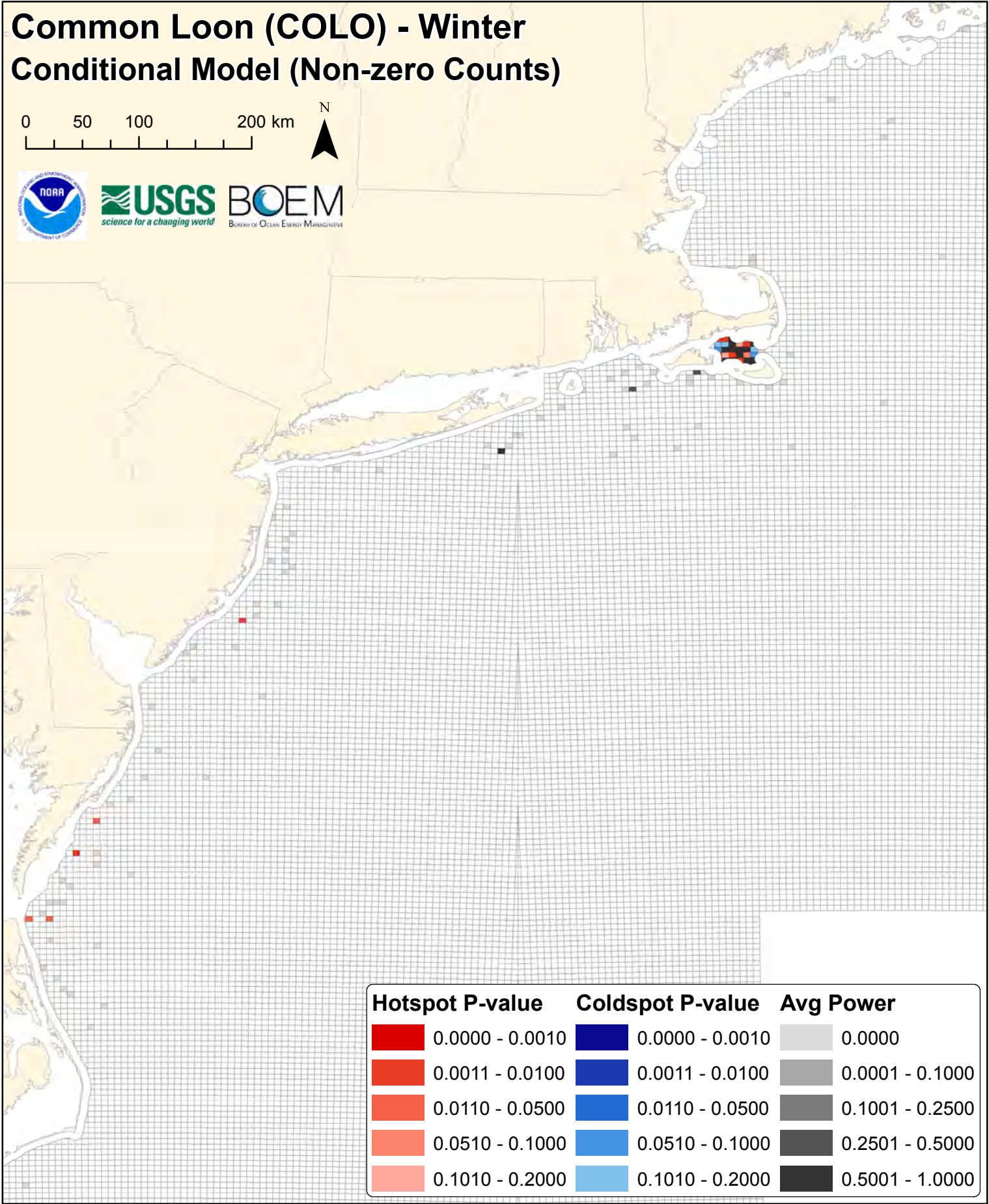
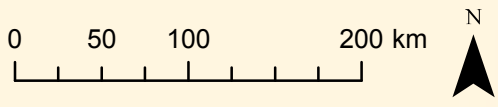
Common Loon (COLO) - Winter Conditional Model (Non-zero Counts)


















Common Loon (COLO) - Winter Conditional Model (Non-zero Counts)

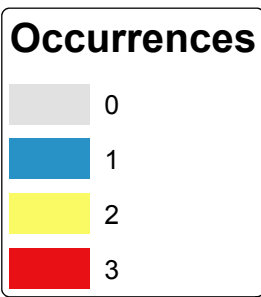
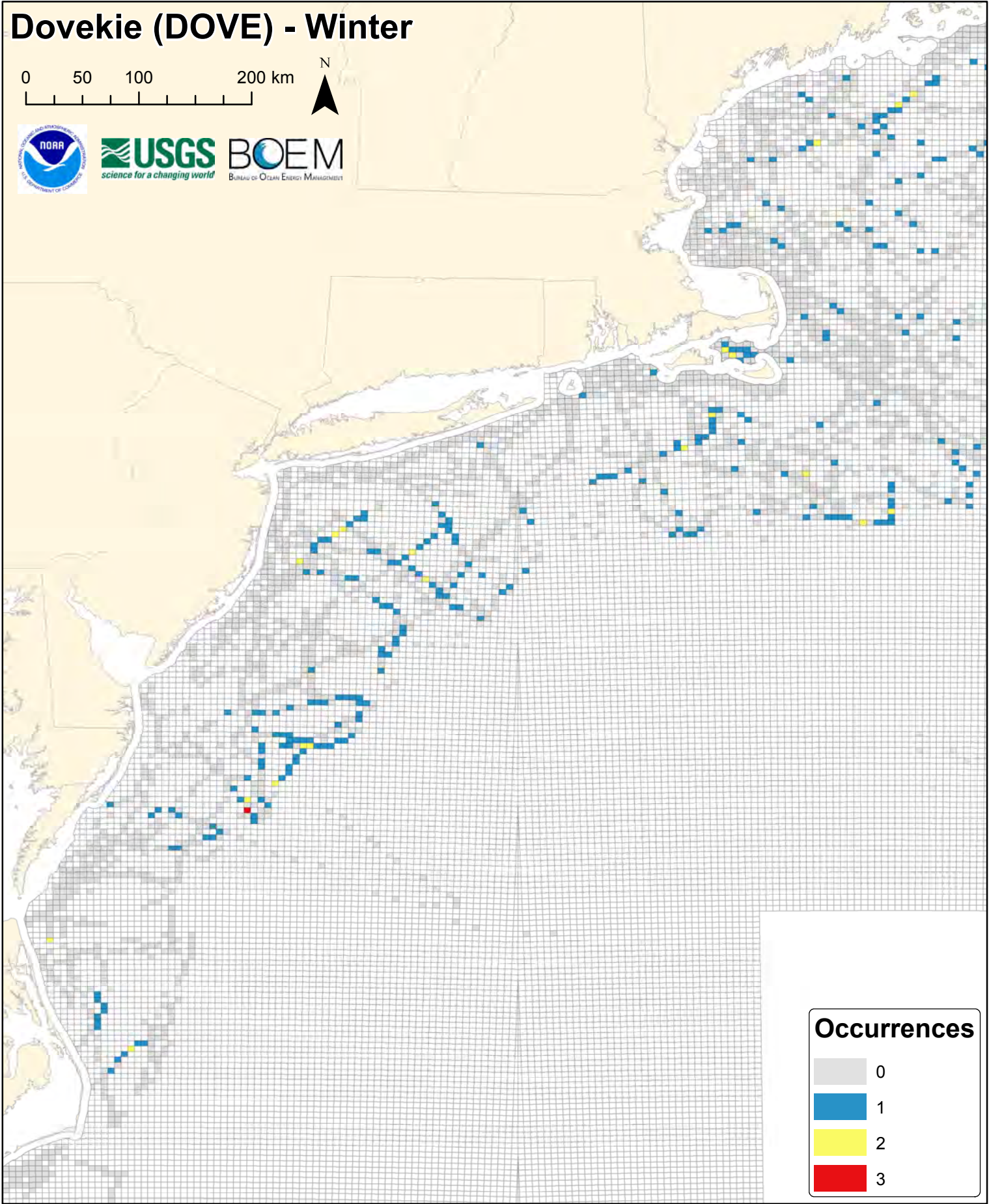
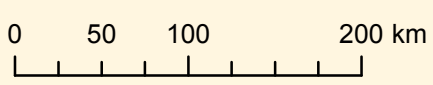


Common Loon (COLO) - Winter Conditional Model (Non-zero Counts)



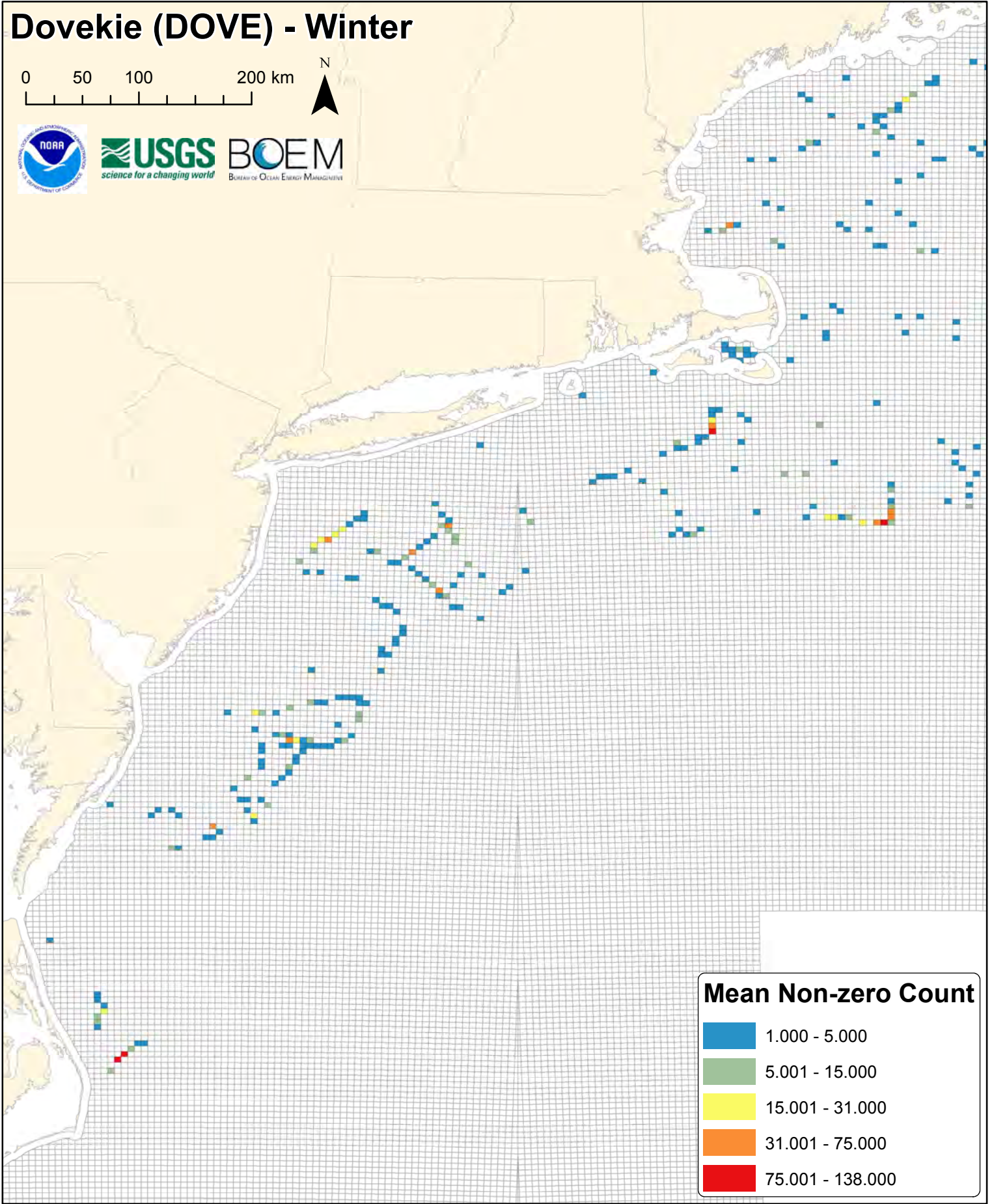
Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000

Dovekie (DOVE) - Winter



Dovekie (DOVE) - Winter

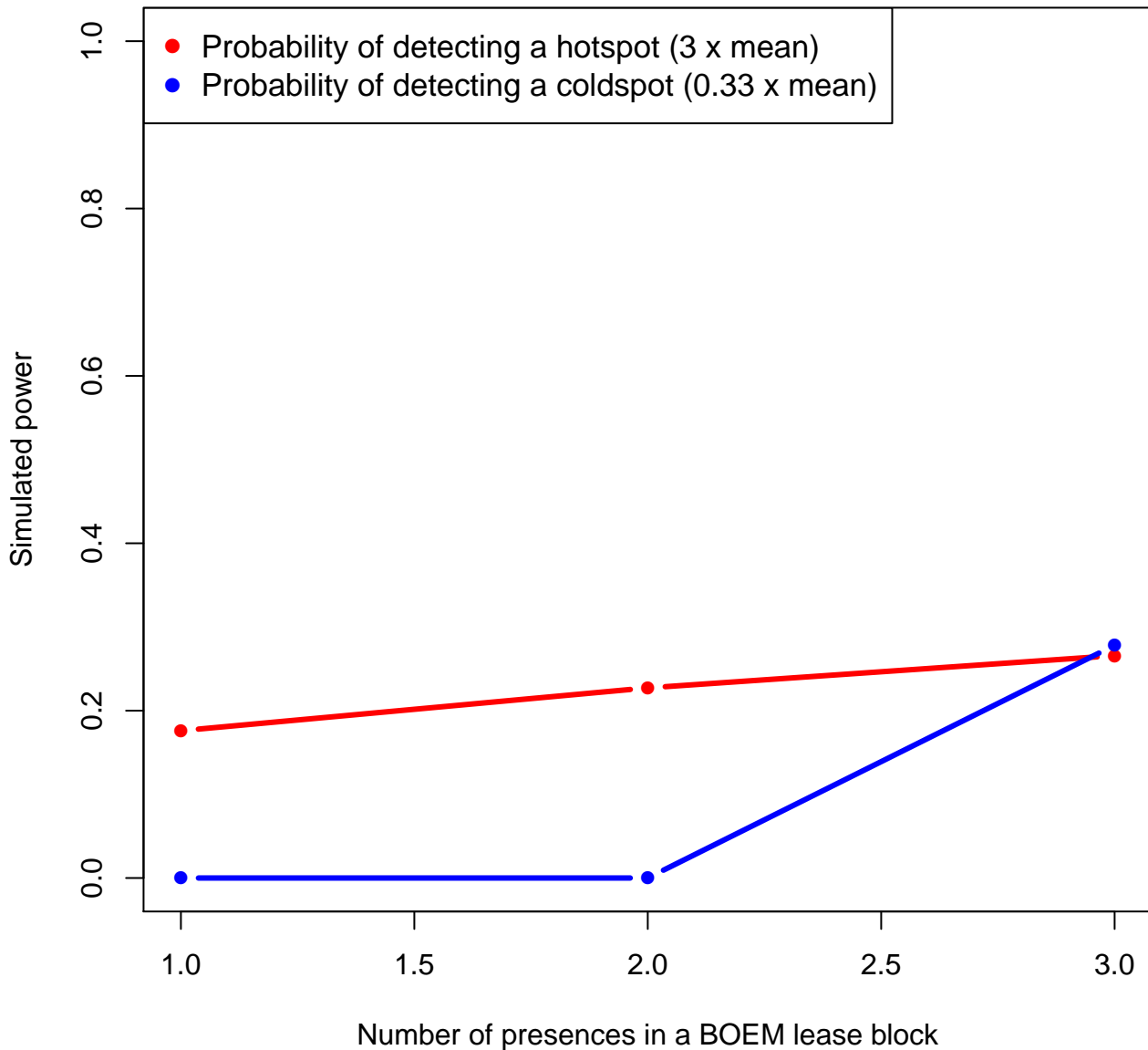
0 50 100 200 km



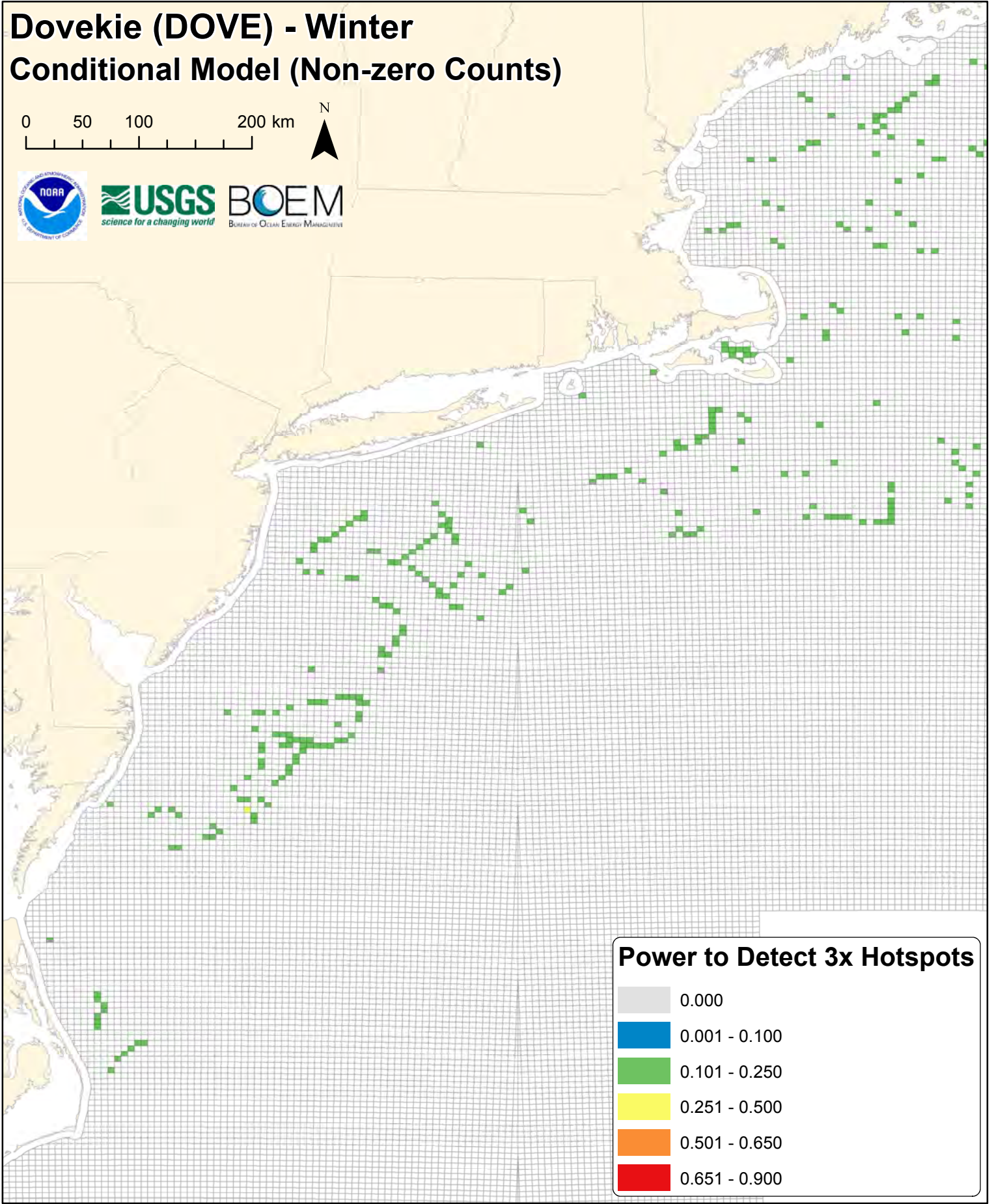
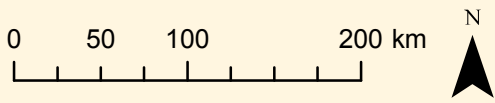
Mean Non-zero Count

- 1.000 - 5.000
- 5.001 - 15.000
- 15.001 - 31.000
- 31.001 - 75.000
- 75.001 - 138.000

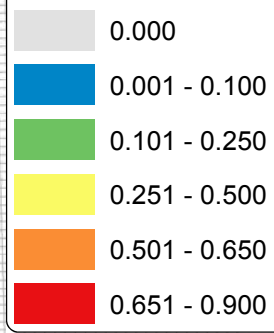
dove



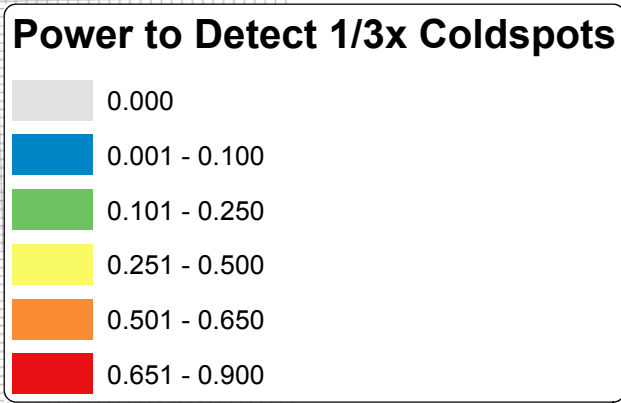
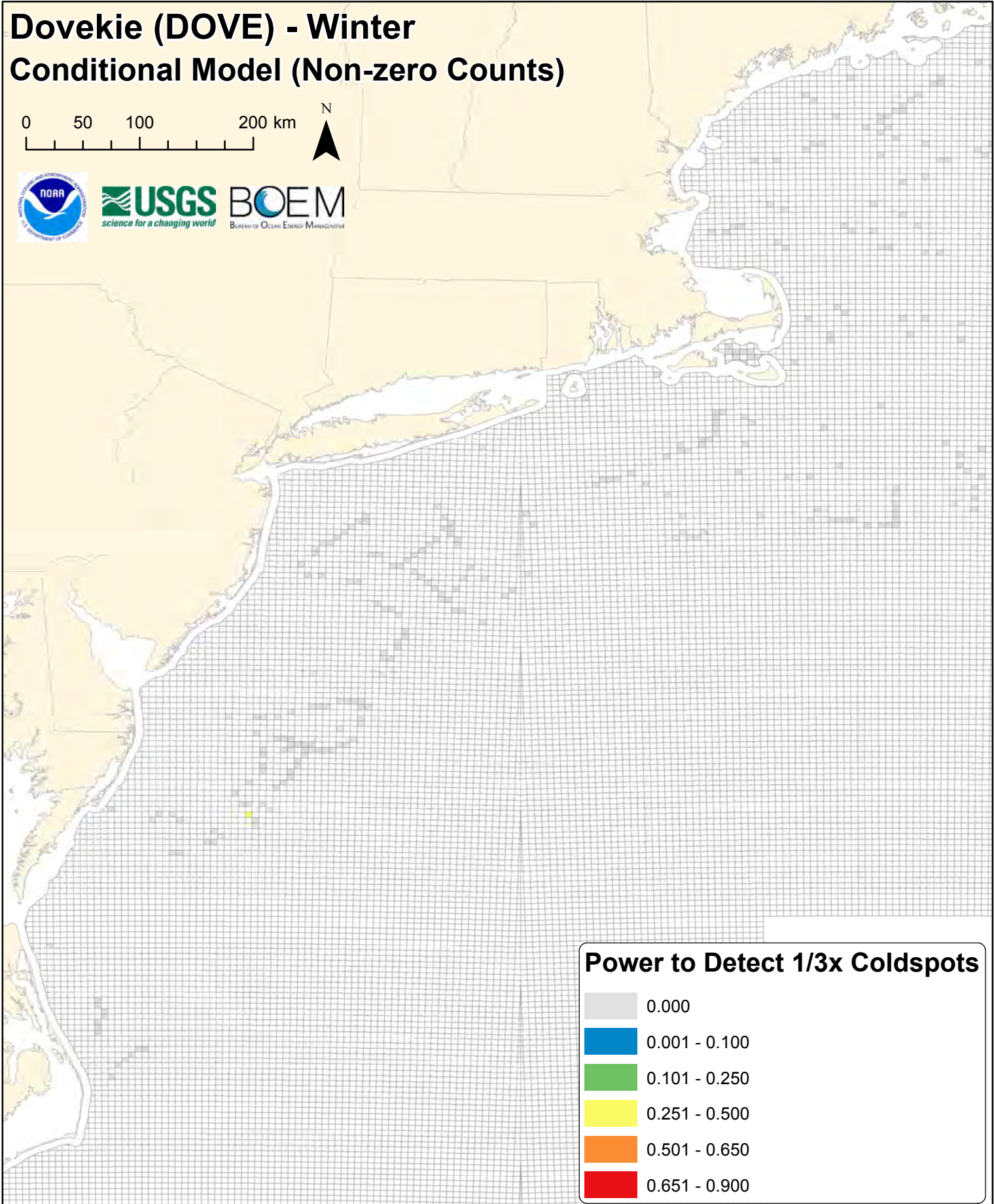
Dovekie (DOVE) - Winter Conditional Model (Non-zero Counts)



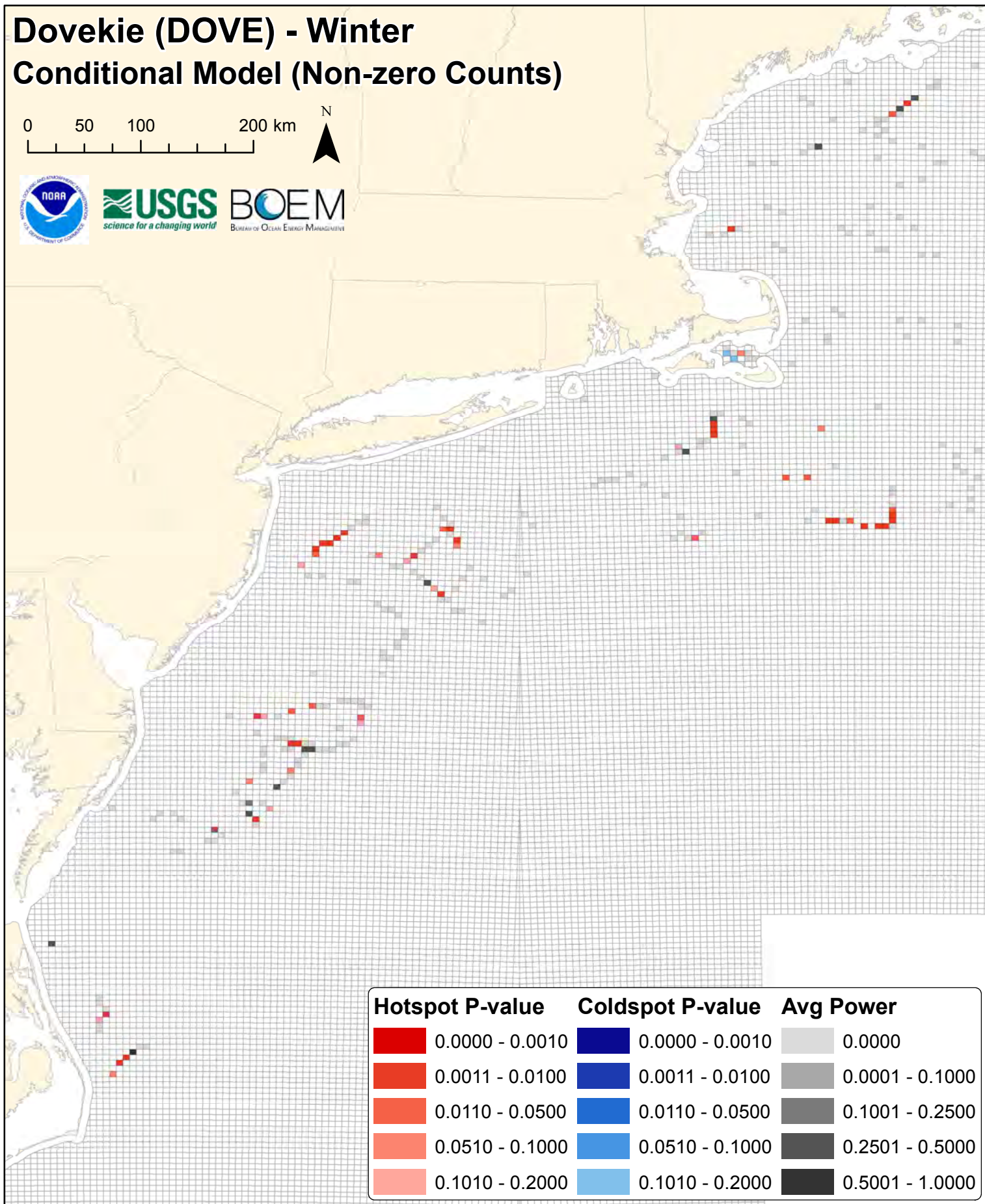
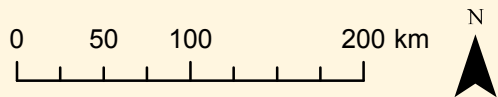
Power to Detect 3x Hotspots


















Dovekie (DOVE) - Winter Conditional Model (Non-zero Counts)



Dovekie (DOVE) - Winter Conditional Model (Non-zero Counts)



Hotspot P-value	Coldspot P-value	Avg Power
 0.0000 - 0.0010	 0.0000 - 0.0010	 0.0000
 0.0011 - 0.0100	 0.0011 - 0.0100	 0.0001 - 0.1000
 0.0110 - 0.0500	 0.0110 - 0.0500	 0.1001 - 0.2500
 0.0510 - 0.1000	 0.0510 - 0.1000	 0.2501 - 0.5000
 0.1010 - 0.2000	 0.1010 - 0.2000	 0.5001 - 1.0000