

Supplementary Material

Kriging – Spatial distribution of potentially toxic elements (PTEs)

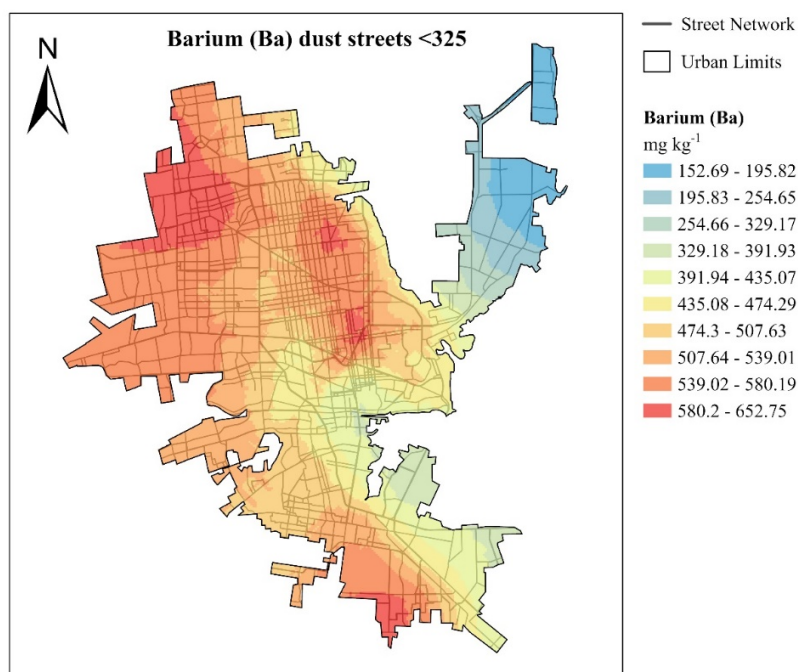


Figure S1. Spatial distribution of Ba in Hermosillo.

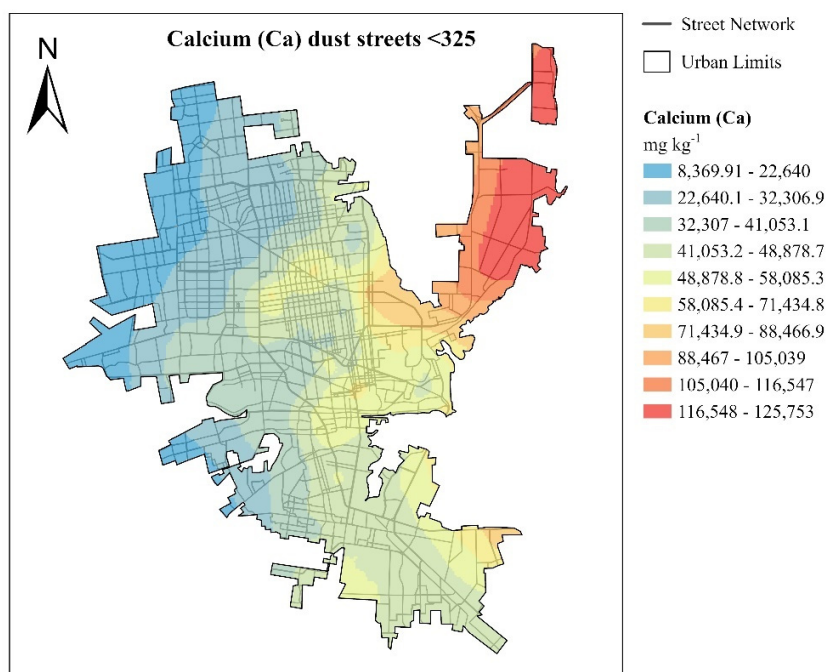


Figure S2. Spatial distribution of Ca in Hermosillo.

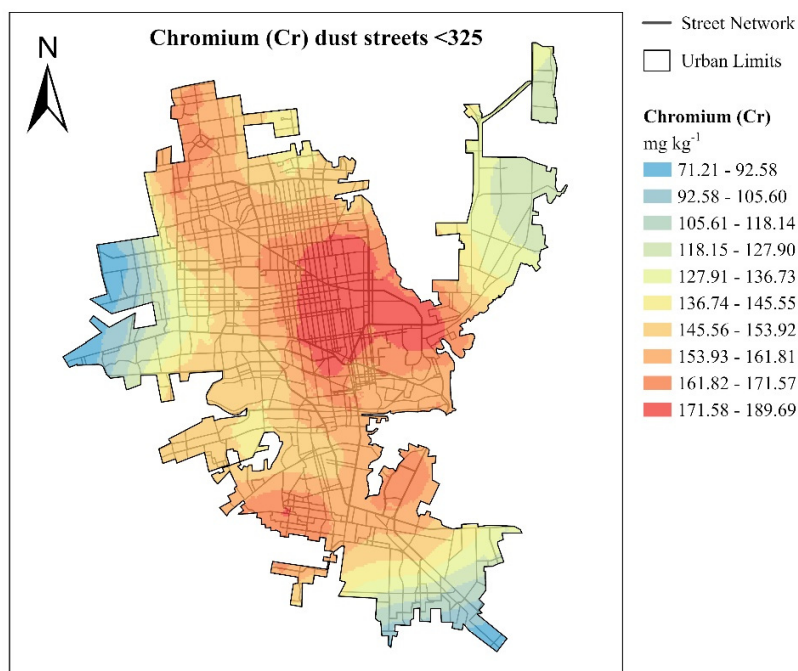


Figure S3. Spatial distribution of Cr in Hermosillo.

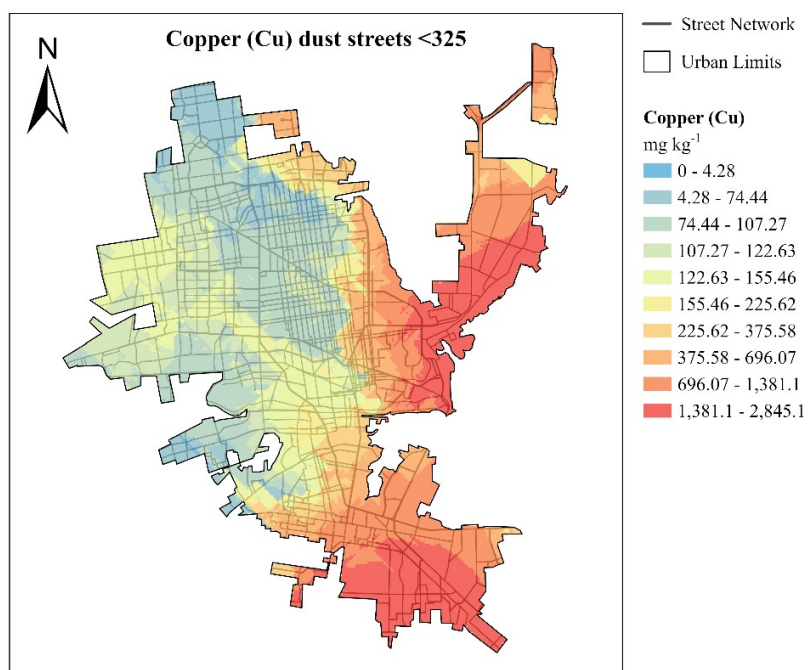


Figure S4. Spatial distribution of Cu in Hermosillo.

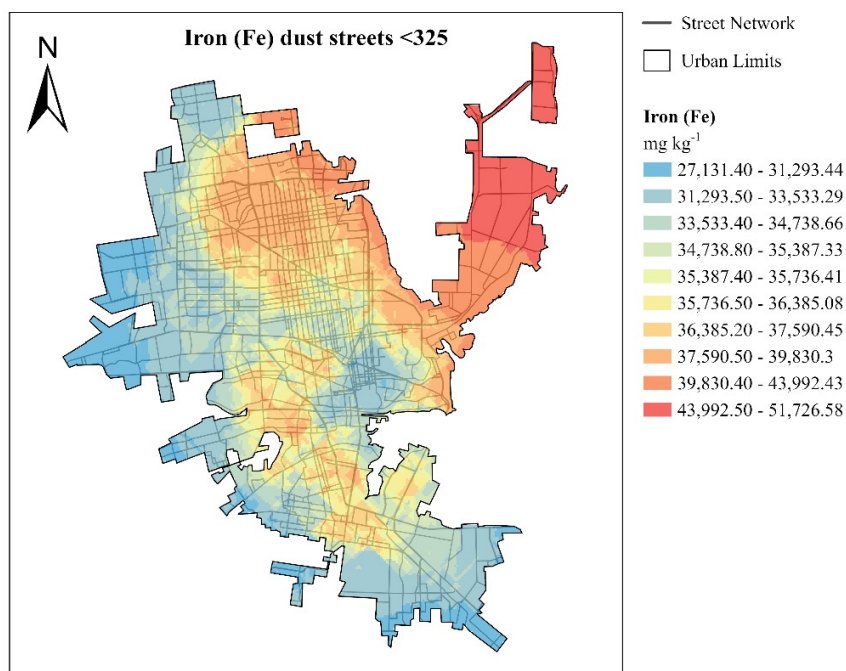


Figure S5. Spatial distribution of Fe in Hermosillo.

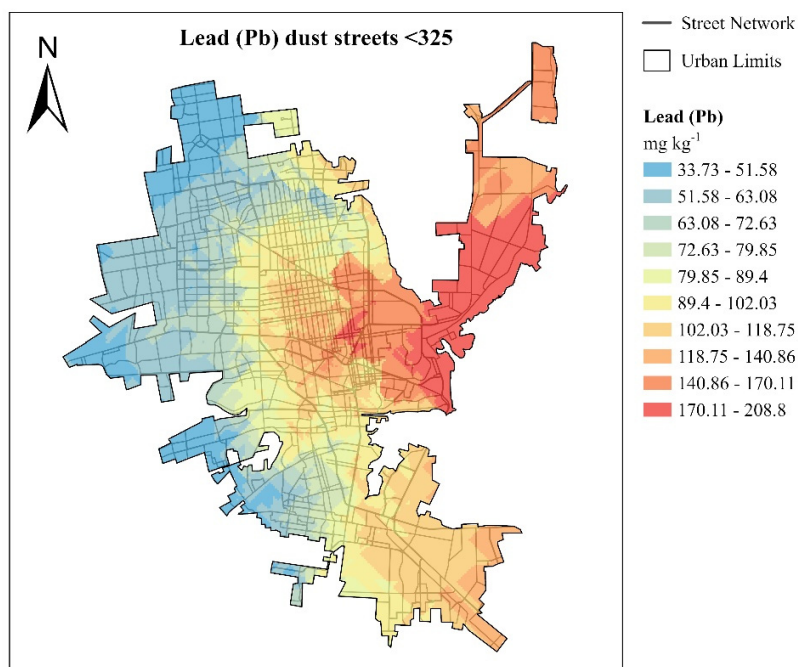


Figure S6. Spatial distribution of Pb in Hermosillo.

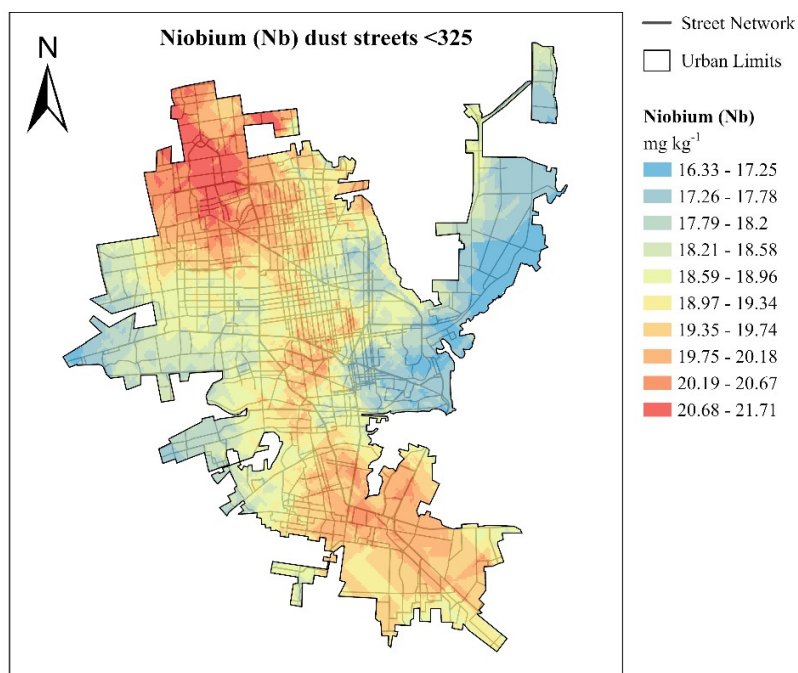


Figure S7. Spatial distribution of Nb in Hermosillo.

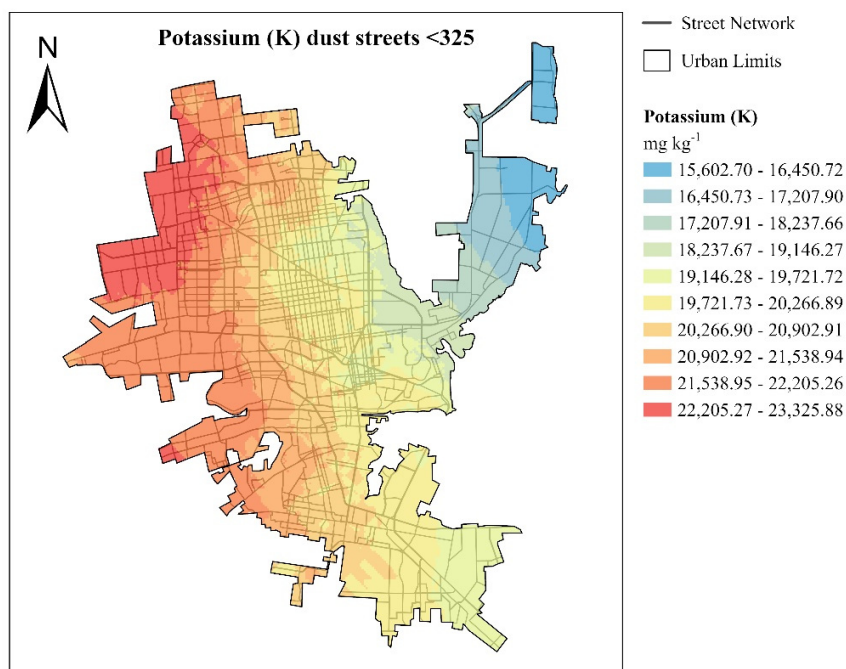


Figure S8. Spatial distribution of K in Hermosillo.

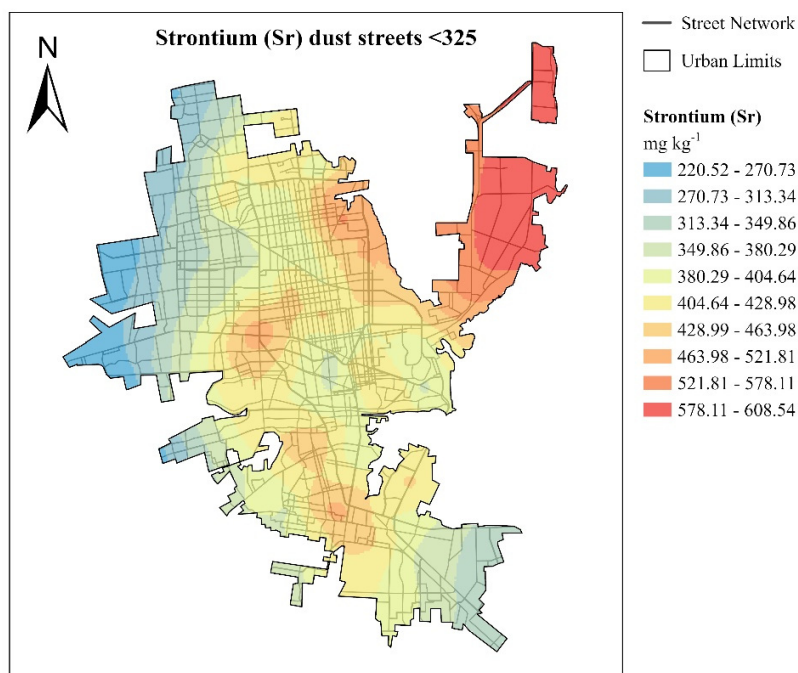


Figure S9. Spatial distribution of Sr in Hermosillo.

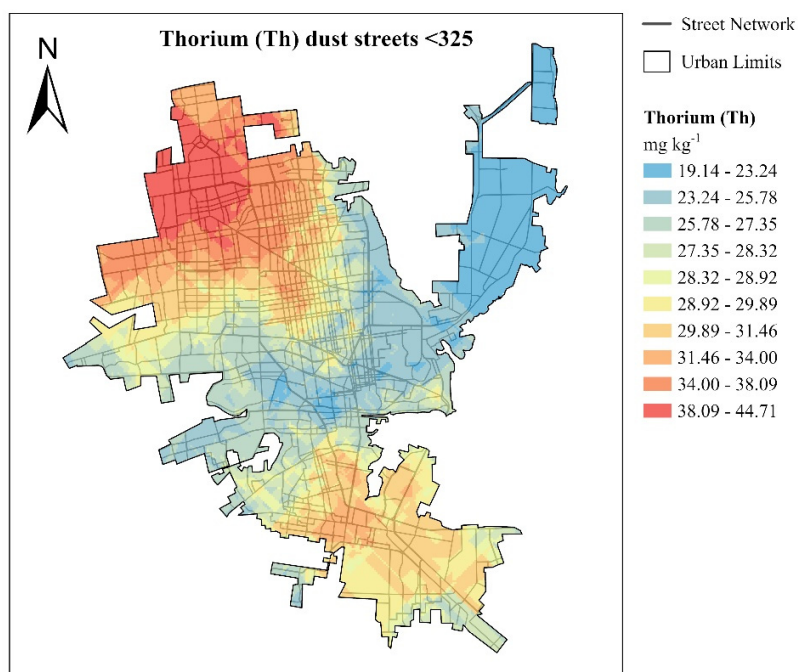


Figure S10. Spatial distribution of Th in Hermosillo.

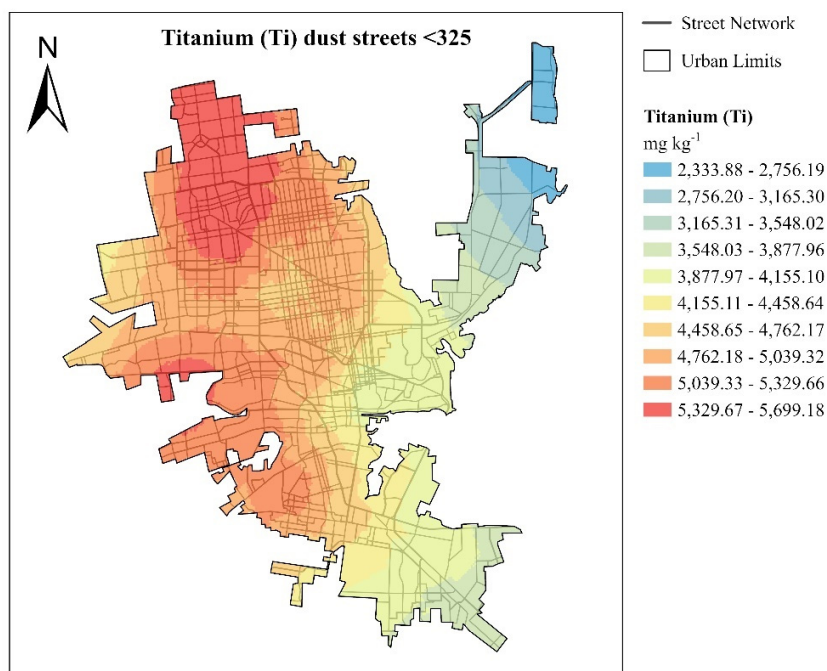


Figure S11. Spatial distribution of Ti in Hermosillo.

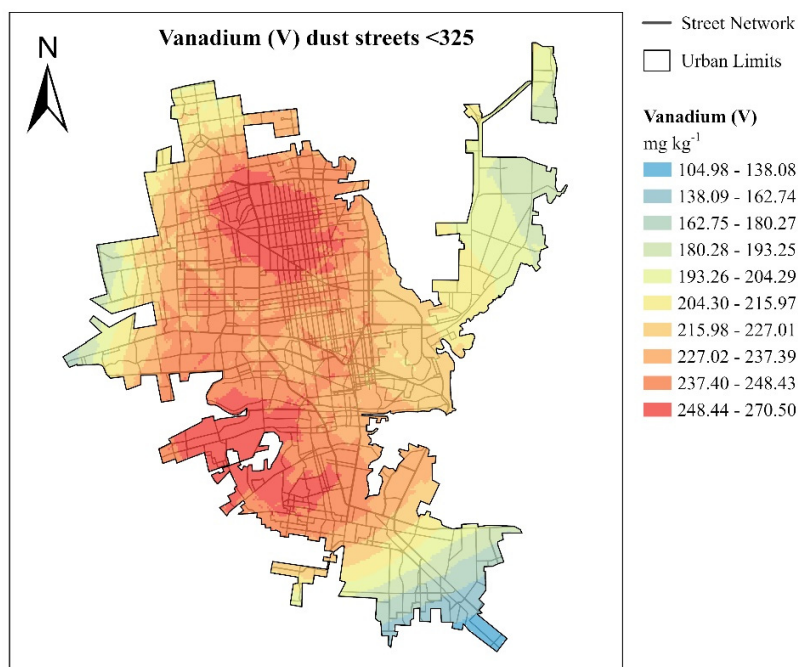


Figure S12. Spatial distribution of V in Hermosillo.

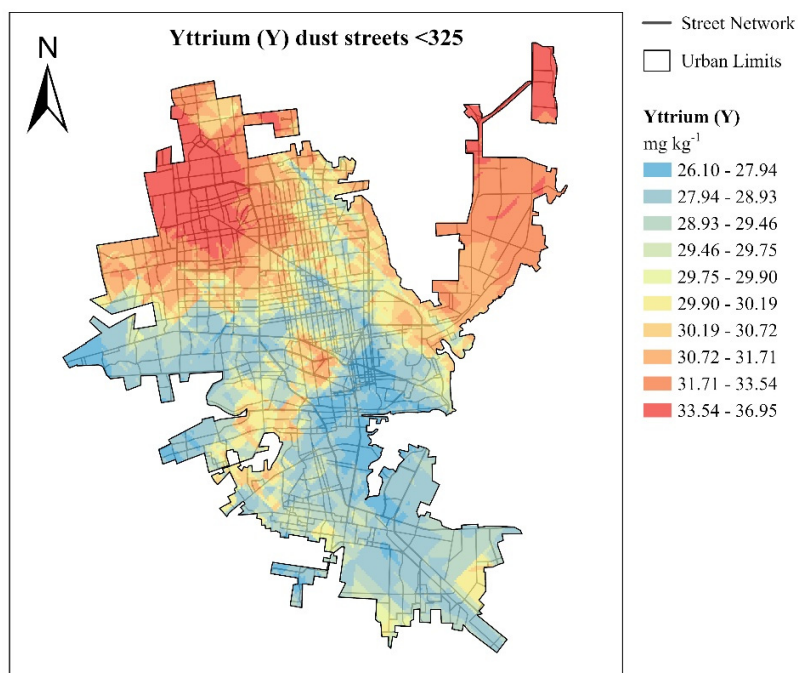


Figure S13. Spatial distribution of Y in Hermosillo.

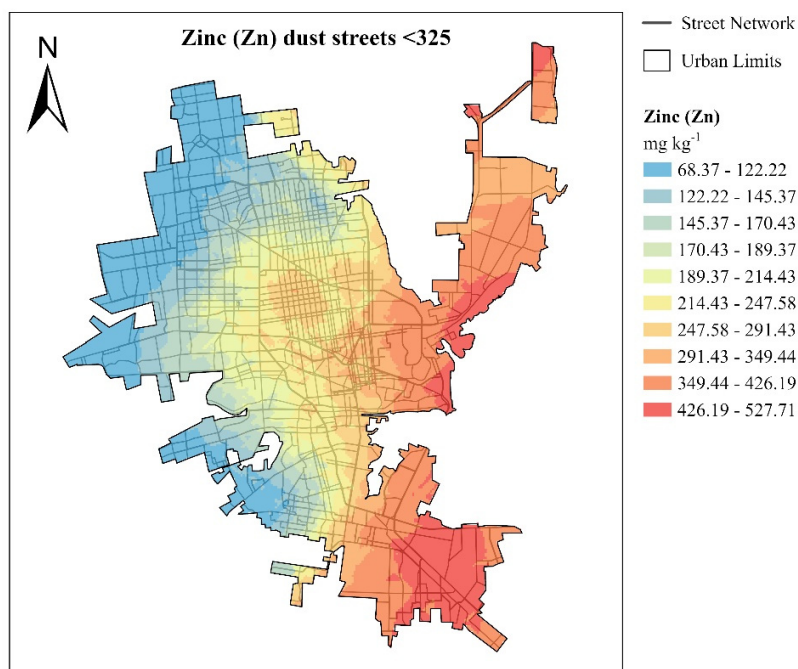


Figure S14. Spatial distribution of Zn in Hermosillo.

Hot Spot of different analysis.

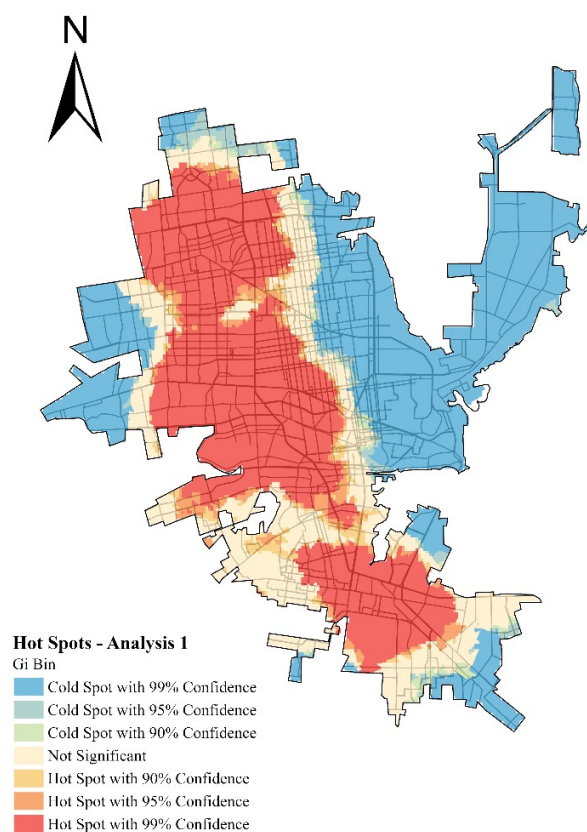


Figure S15. Hot spot analysis of analysis 1 in Hermosillo.

Table S1. percentage of area for cold and hot spots in analysis 1.

Gi Bin	Significance	Analysis 1	
-3	Cold Spot - 99% Confidence	37.3	%
-2	Cold Spot - 95% Confidence	1.9	%
-1	Cold Spot - 90% Confidence	0.6	%
0	Not Significant	13.9	%
1	Hot Spot - 90% Confidence	1.5	%
2	Hot Spot - 95% Confidence	4.5	%
3	Hot Spot - 99% Confidence	40.3	%
		100.0	%

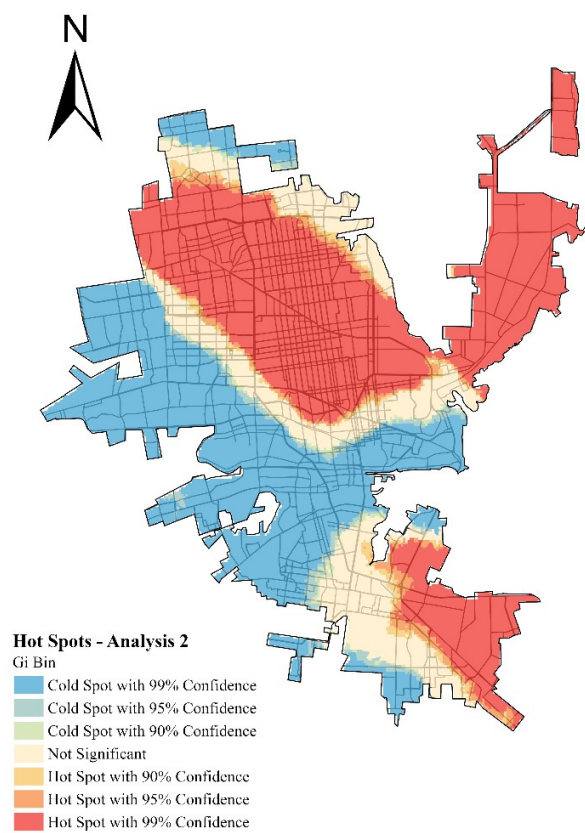


Figure S16. Hot spot analysis of analysis 2 in Hermosillo.

Table S2. percentage of area for cold and hot spots in analysis 2.

Gi Bin	Significance	Analysis 2	
-3	Cold Spot - 99% Confidence	27.5	%
-2	Cold Spot - 95% Confidence	3.5	%
-1	Cold Spot - 90% Confidence	1.8	%
0	Not Significant	18.8	%
1	Hot Spot - 90% Confidence	1.7	%
2	Hot Spot - 95% Confidence	3.5	%
3	Hot Spot - 99% Confidence	43.2	%
		100.0	%

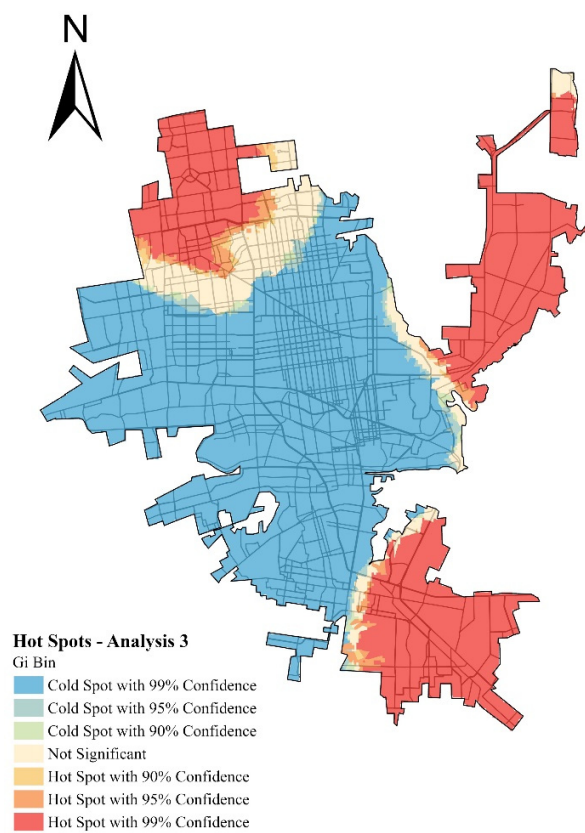


Figure S17. Hot spot analysis of analysis 3 in Hermosillo.

Table S3. percentage of area for cold and hot spots in analysis 3.

Gi_Bin	Significance	Analysis 3	
-3	Cold Spot - 99% Confidence	67.3	%
-2	Cold Spot - 95% Confidence	1.1	%
-1	Cold Spot - 90% Confidence	0.5	%
0	Not Significant	4.5	%
1	Hot Spot - 90% Confidence	0.1	%
2	Hot Spot - 95% Confidence	0.3	%
3	Hot Spot - 99% Confidence	26.1	%
		100.0	%

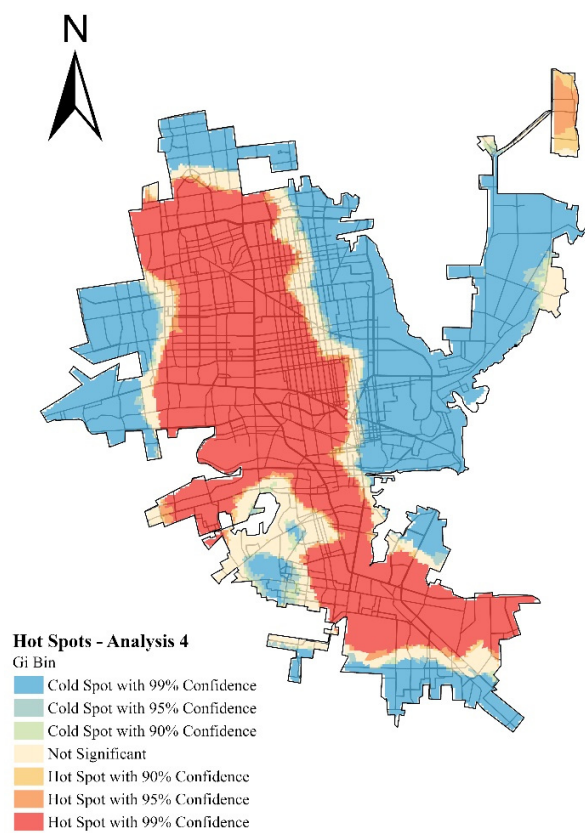


Figure S18. Hot spot analysis of analysis 4 in Hermosillo.

Table S4. percentage of area for cold and hot spots in analysis 4.

Gi Bin	Significance	Analysis 4	
-3	Cold Spot - 99% Confidence	38.2	%
-2	Cold Spot - 95% Confidence	1.9	%
-1	Cold Spot - 90% Confidence	1.0	%
0	Not Significant	12.0	%
1	Hot Spot - 90% Confidence	1.6	%
2	Hot Spot - 95% Confidence	2.1	%
3	Hot Spot - 99% Confidence	43.2	%
		100.0	%

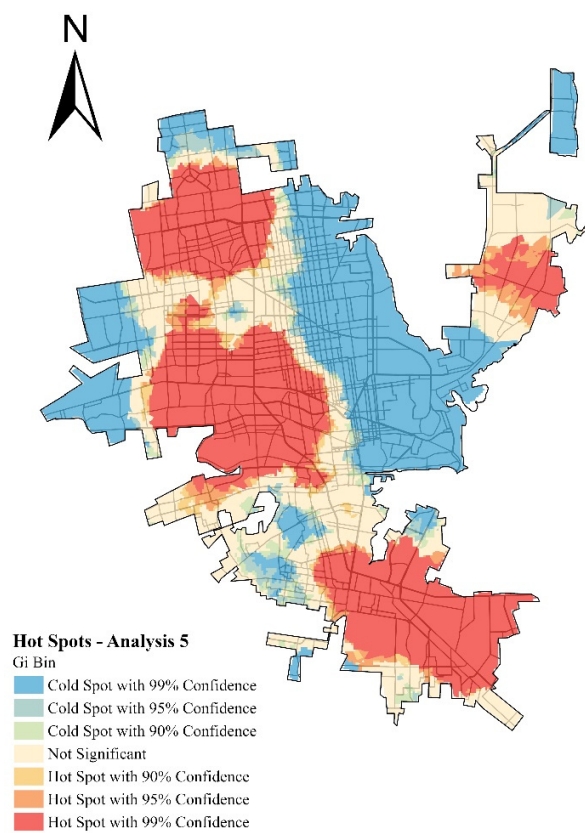


Figure S19. Hot spot analysis of analysis 5 in Hermosillo.

Table S5. percentage of area for cold and hot spots in analysis 5.

Gi Bin	Significance	Analysis 5	
-3	Cold Spot - 99% Confidence	31.3	%
-2	Cold Spot - 95% Confidence	2.8	%
-1	Cold Spot - 90% Confidence	1.6	%
0	Not Significant	21.4	%
1	Hot Spot - 90% Confidence	2.4	%
2	Hot Spot - 95% Confidence	4.2	%
3	Hot Spot - 99% Confidence	36.3	%
		100.0	%

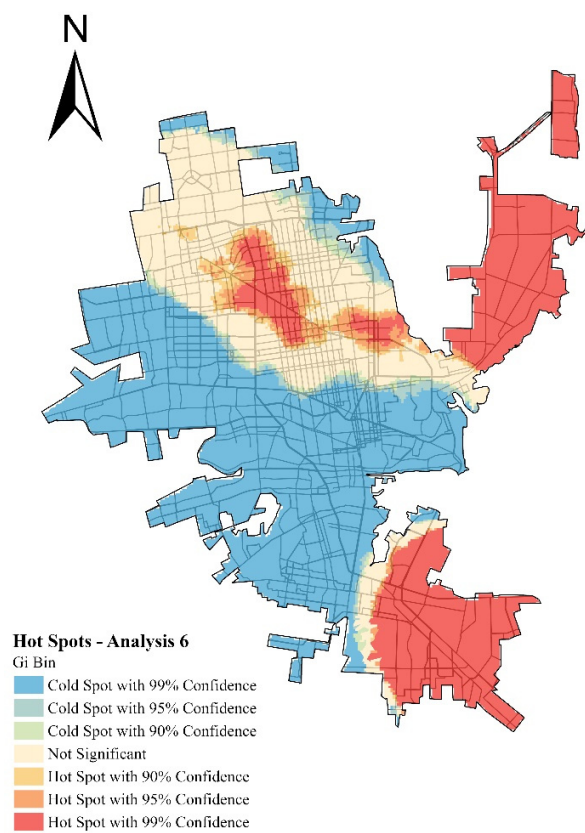


Figure S20. Hot spot analysis of analysis 6 in Hermosillo.

Table S6. percentage of area for cold and hot spots in analysis 6.

Gi Bin	Significance	Analysis 6	
-3	Cold Spot - 99% Confidence	52.7	%
-2	Cold Spot - 95% Confidence	3.4	%
-1	Cold Spot - 90% Confidence	1.5	%
0	Not Significant	15.0	%
1	Hot Spot - 90% Confidence	1.4	%
2	Hot Spot - 95% Confidence	2.1	%
3	Hot Spot - 99% Confidence	23.9	%
		100.0	%

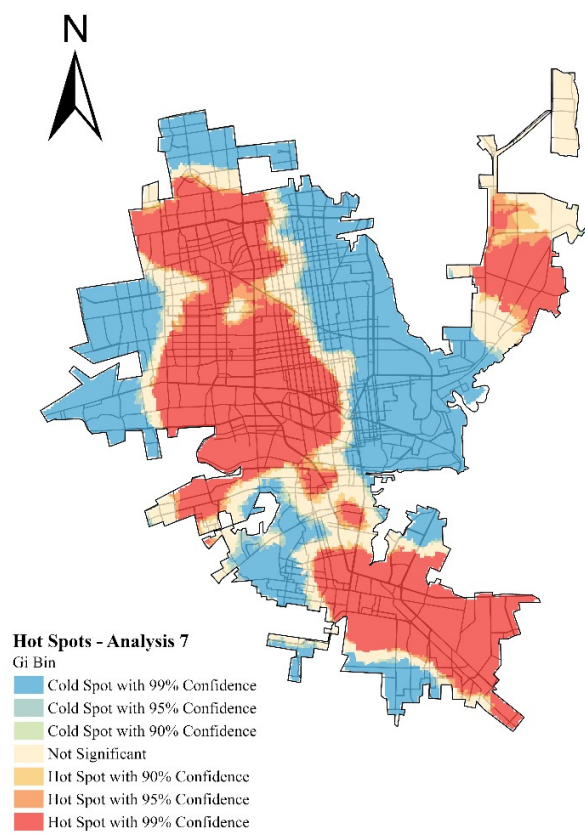


Figure S21. Hot spot analysis of analysis 7 in Hermosillo.

Table S7. percentage of area for cold and hot spots in analysis 7.

Gi Bin	Significance	Analysis 7	
-3	Cold Spot - 99% Confidence	33.7	%
-2	Cold Spot - 95% Confidence	2.2	%
-1	Cold Spot - 90% Confidence	1.3	%
0	Not Significant	17.5	%
1	Hot Spot - 90% Confidence	2.1	%
2	Hot Spot - 95% Confidence	3.3	%
3	Hot Spot - 99% Confidence	40.0	%
		100.0	%

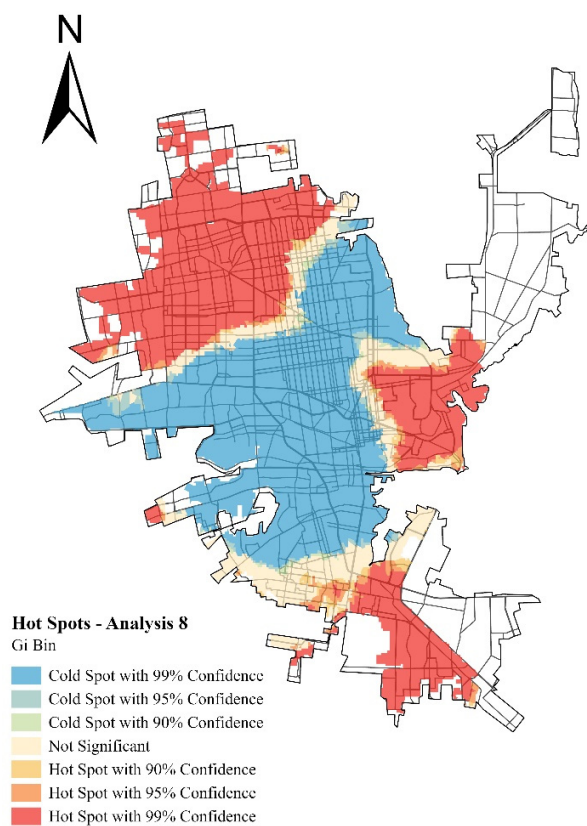


Figure S22. Hot spot analysis of analysis 8 in Hermosillo.

Table S8. percentage of area for cold and hot spots in analysis 8.

Gi Bin	Significance	Analysis 8	
-3	Cold Spot - 99% Confidence	31.2	%
-2	Cold Spot - 95% Confidence	3.3	%
-1	Cold Spot - 90% Confidence	1.9	%
0	Not Significant	19.8	%
1	Hot Spot - 90% Confidence	2.0	%
2	Hot Spot - 95% Confidence	4.5	%
3	Hot Spot - 99% Confidence	37.2	%
		100.0	%

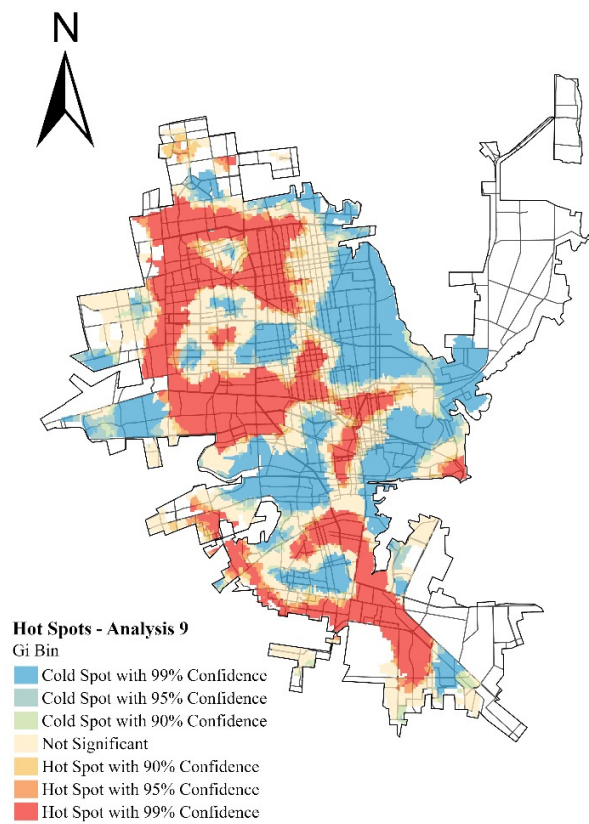


Figure S23. Hot spot analysis of analysis 9 in Hermosillo.

Table S9. percentage of area for cold and hot spots in analysis 9.

Gi Bin	Significance	Analysis 9	
-3	Cold Spot - 99% Confidence	31.9	%
-2	Cold Spot - 95% Confidence	4.1	%
-1	Cold Spot - 90% Confidence	1.8	%
0	Not Significant	21.8	%
1	Hot Spot - 90% Confidence	2.3	%
2	Hot Spot - 95% Confidence	3.9	%
3	Hot Spot - 99% Confidence	34.3	%
		100.0	%

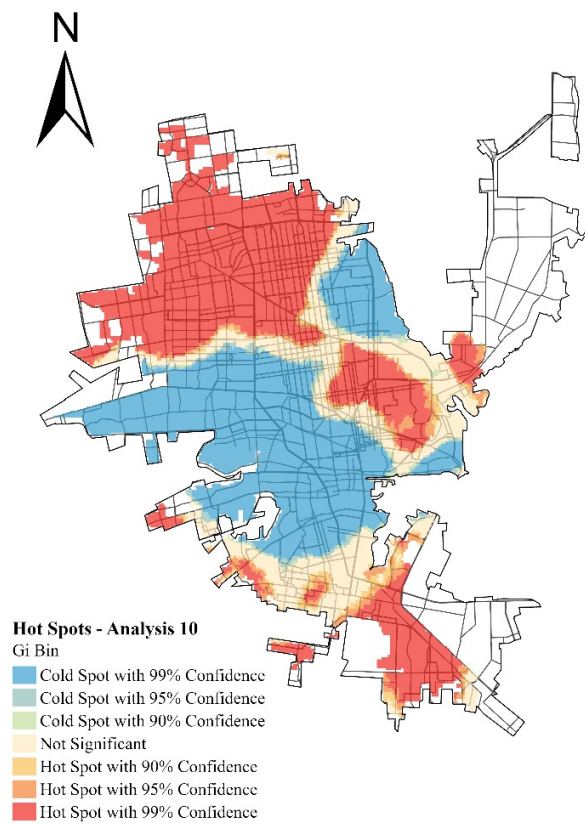


Figure S24. Hot spot analysis of analysis 10 in Hermosillo.

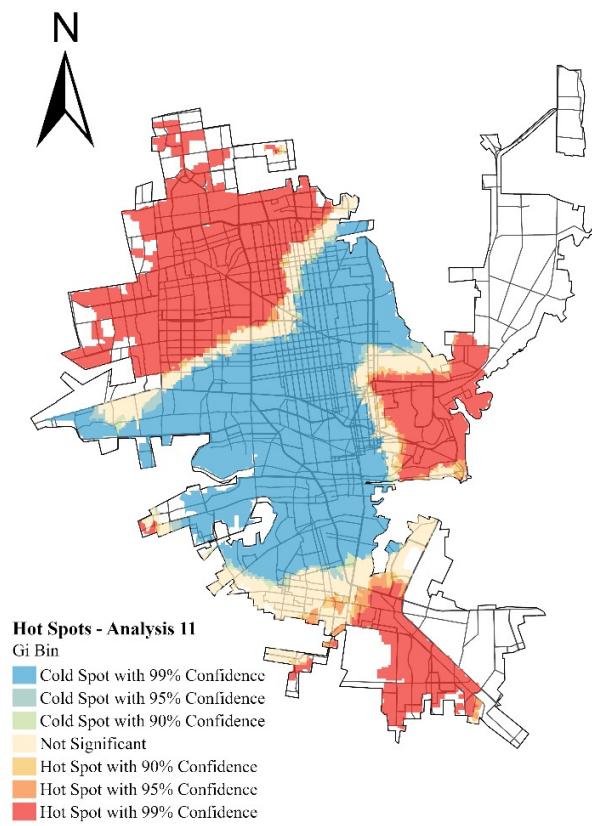


Figure S25. Hot spot analysis of analysis 11 in Hermosillo.

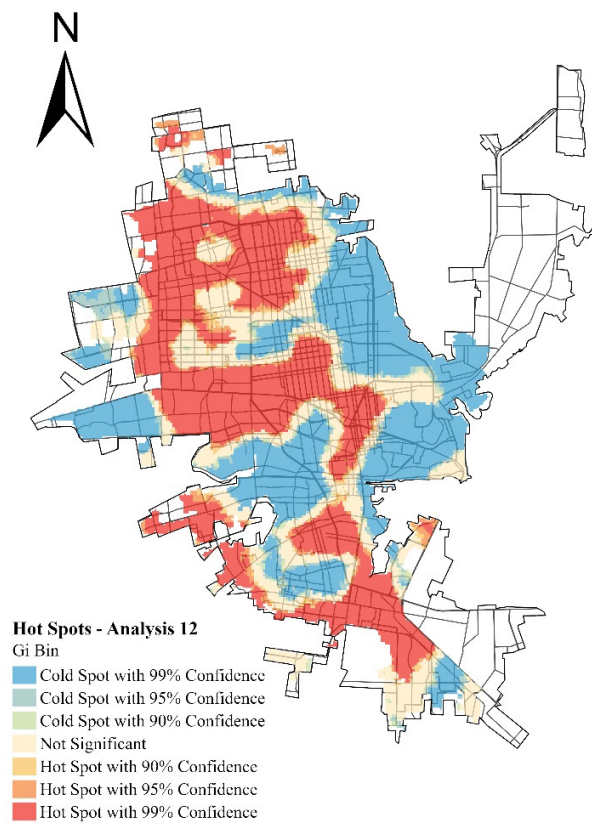


Figure S26. Hot spot analysis of analysis 12 in Hermosillo.

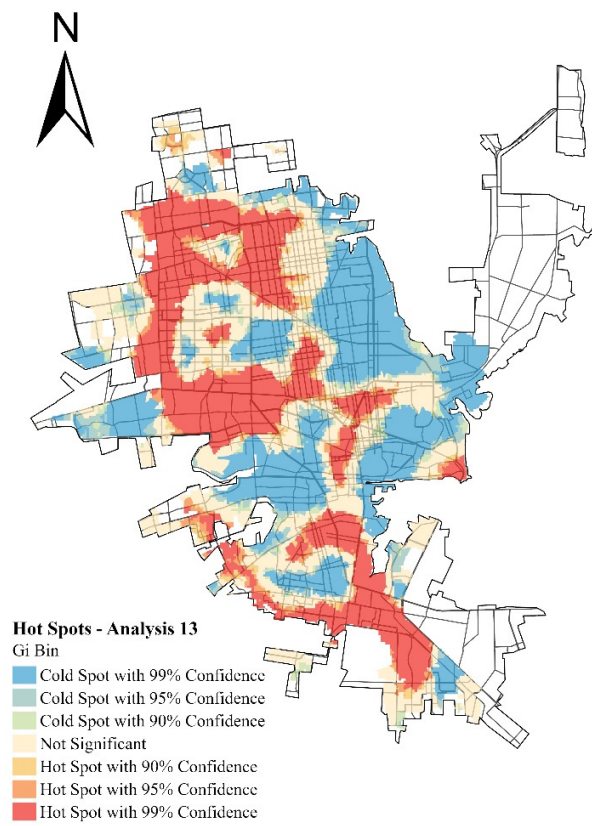


Figure S27. Hot spot analysis of analysis 13 in Hermosillo.

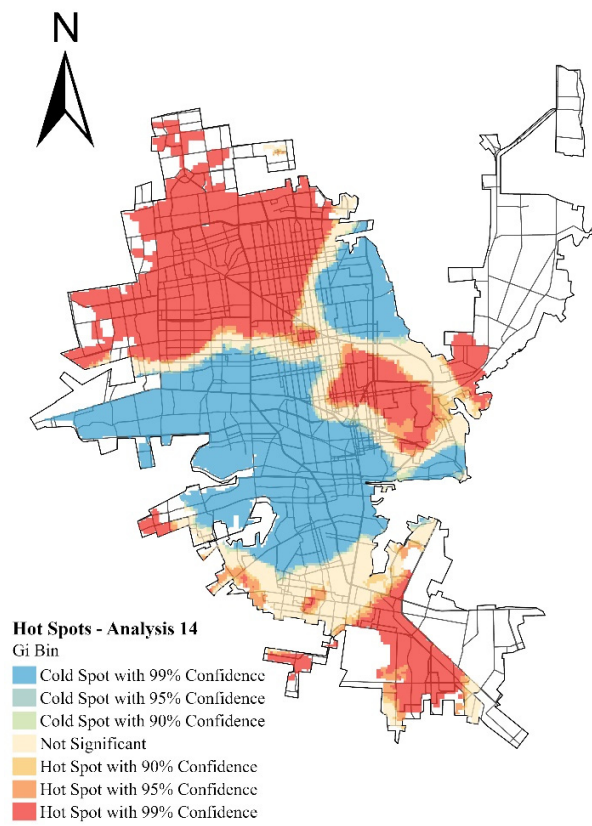


Figure S28. Hot spot analysis of analysis 14 in Hermosillo.

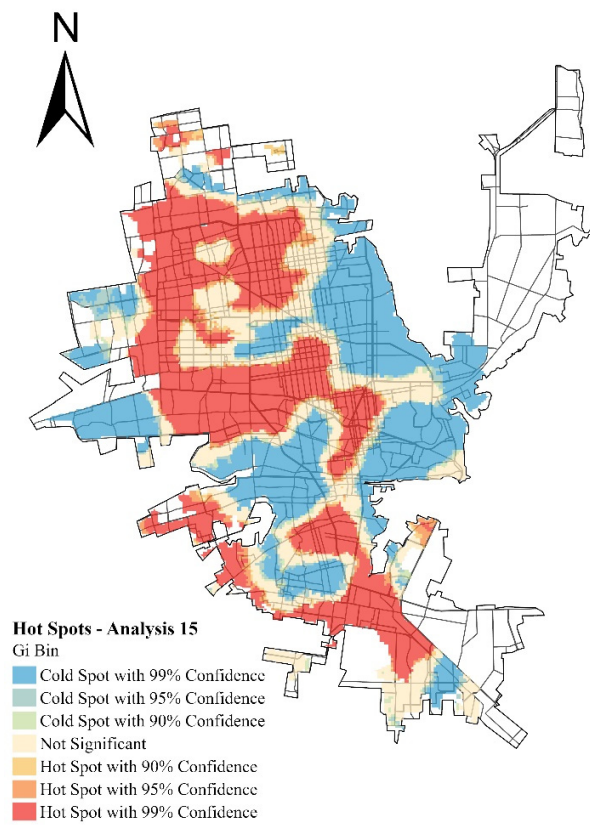


Figure S29. Hot spot analysis of analysis 15 in Hermosillo.