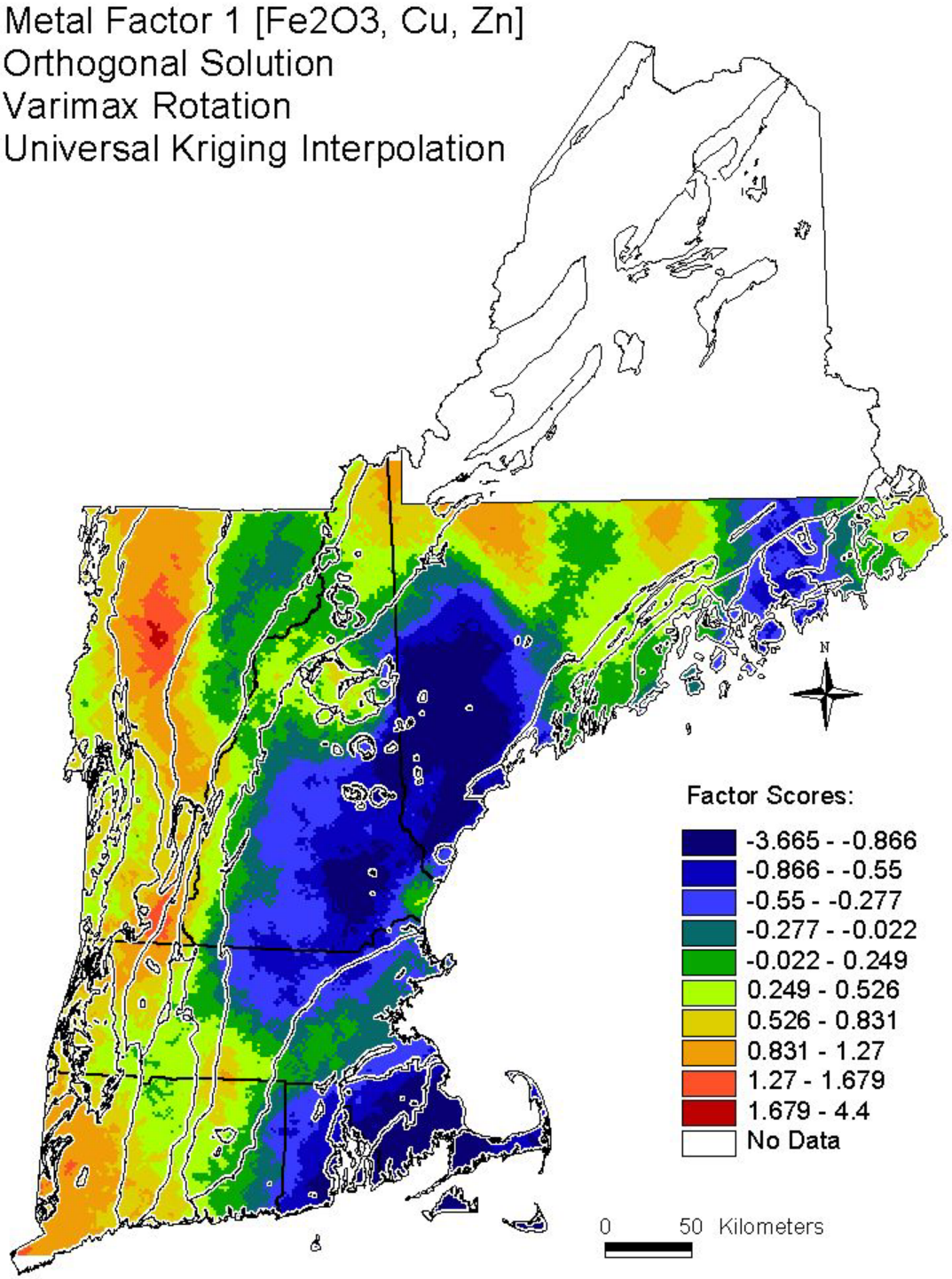
Factor Analyses Figures:
(2 Metal and 3 Major Element factors)

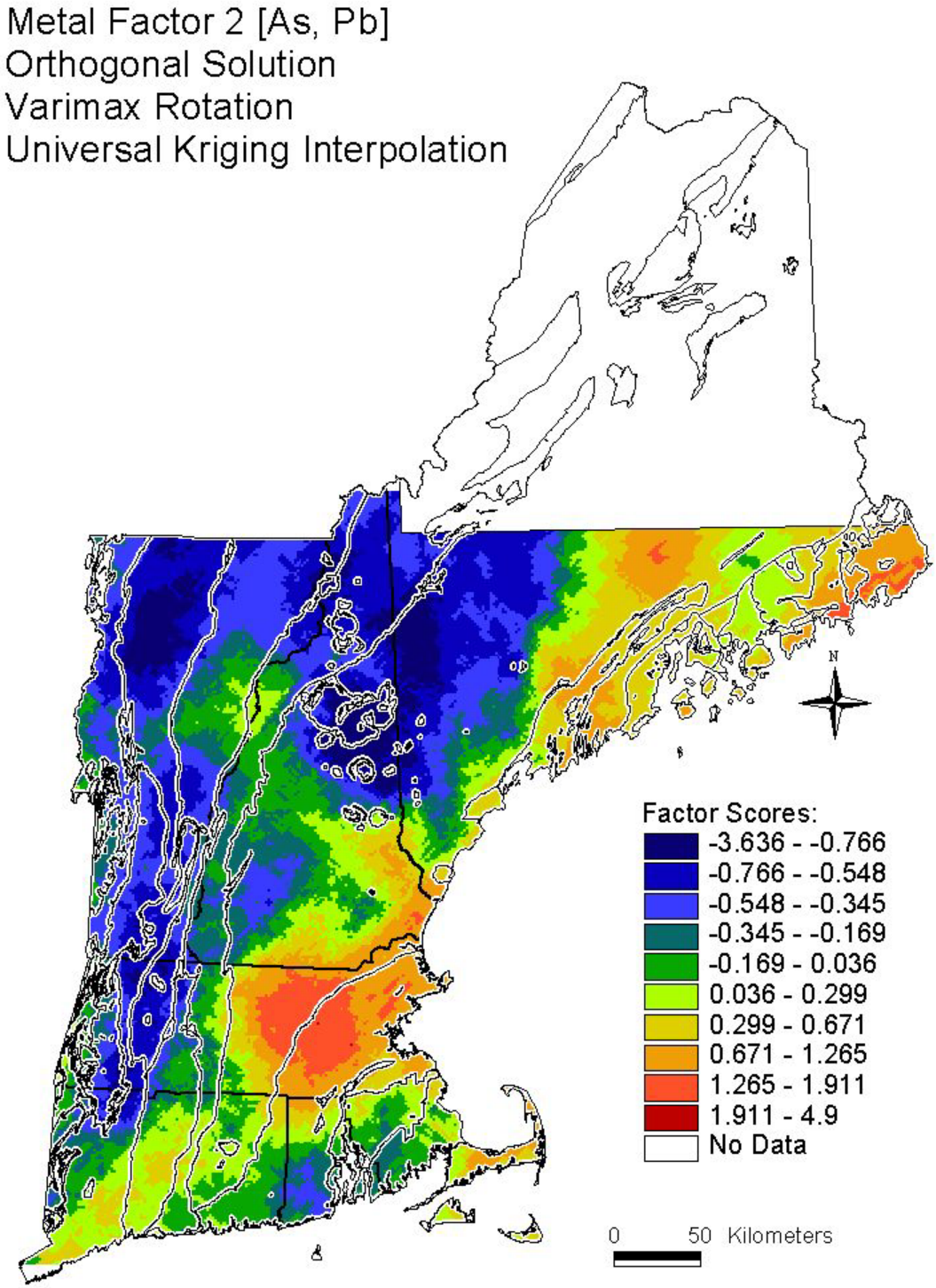
Map Figures:

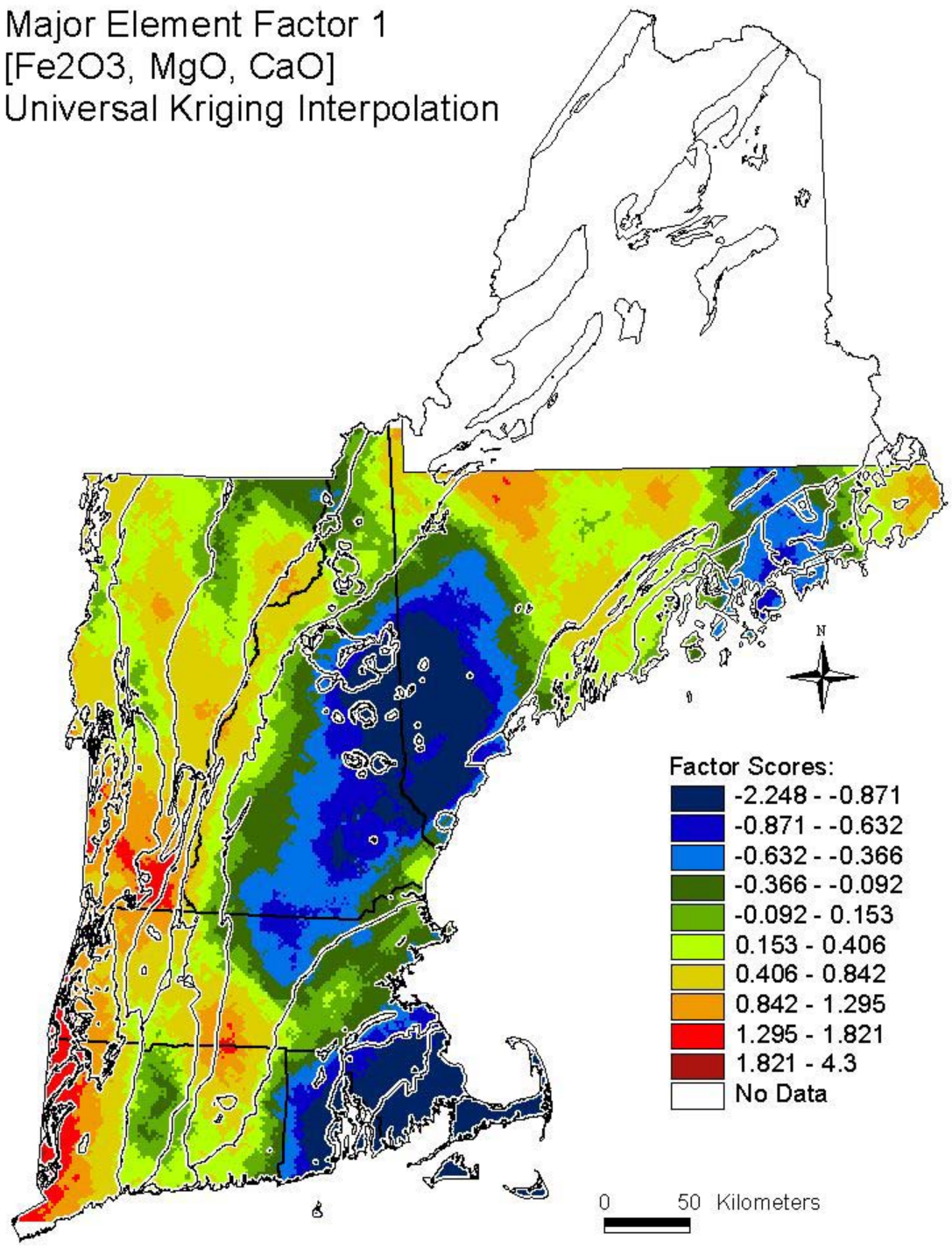
- Universal Kriging Interpolation
  (with geologic province boundary overlay)……..**(p.2-6)**
- Multifractal IDW Interpolation
  (with geologic province boundary overlay)……..…**(p.7-11)**
- Factors by bedrock lithology……..**(p.12-16)**
- Factors by hydrologic basin ……...**(p.17-21)**
- Factors by population density…….**(p.22-26)**

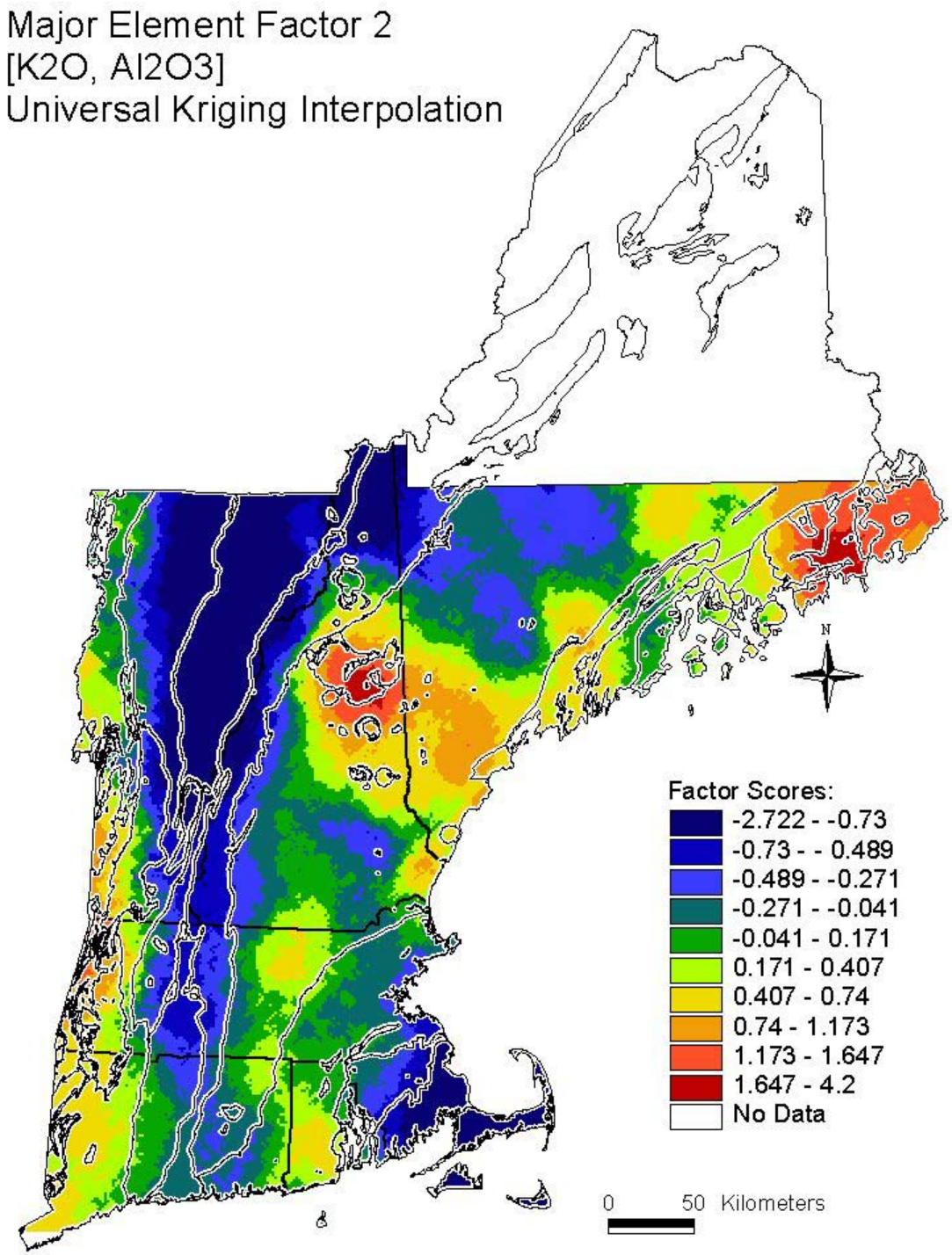
Boxplot Figures:

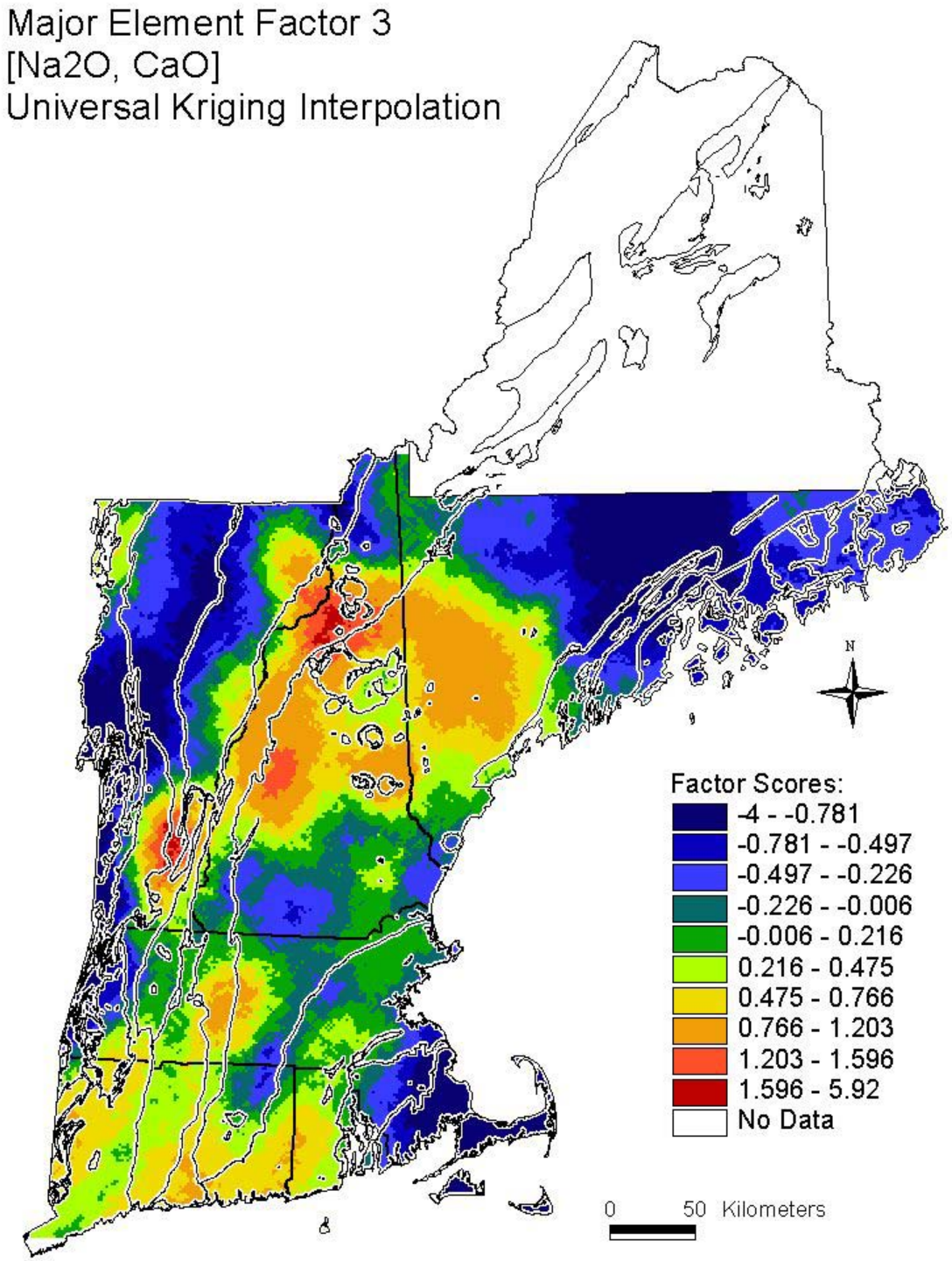
- Boxplots by geologic province…….…….**(p.27-29)**
- Boxplots by bedrock lithology…….……..**(p.30-32)**
- Boxplots by population density…….…….**(p.33-35)**

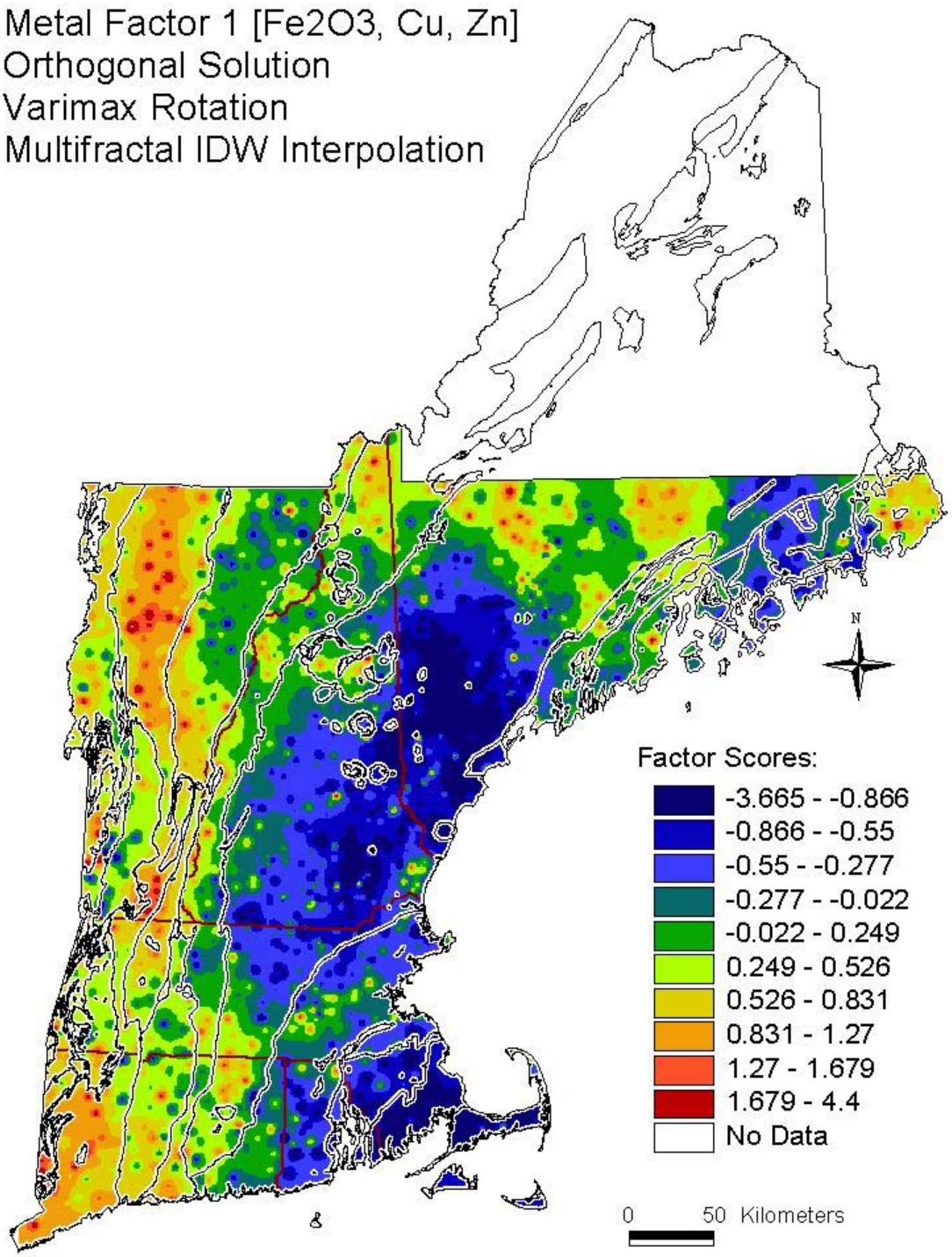

Metal Factor 1 [Fe2O3, Cu, Zn]
Orthogonal Solution
Varimax Rotation
Universal Kriging Interpolation
N
Factor Scores:
-3.665 - -0.866
-0.866 - -0.55
-0.55 - -0.277
-0.277 - -0.022
-0.022 - 0.249
0.249 - 0.526
0.526 - 0.831
0.831 - 1.27
1.27 - 1.679
1.679 - 4.4
No Data
0
50 Kilometers

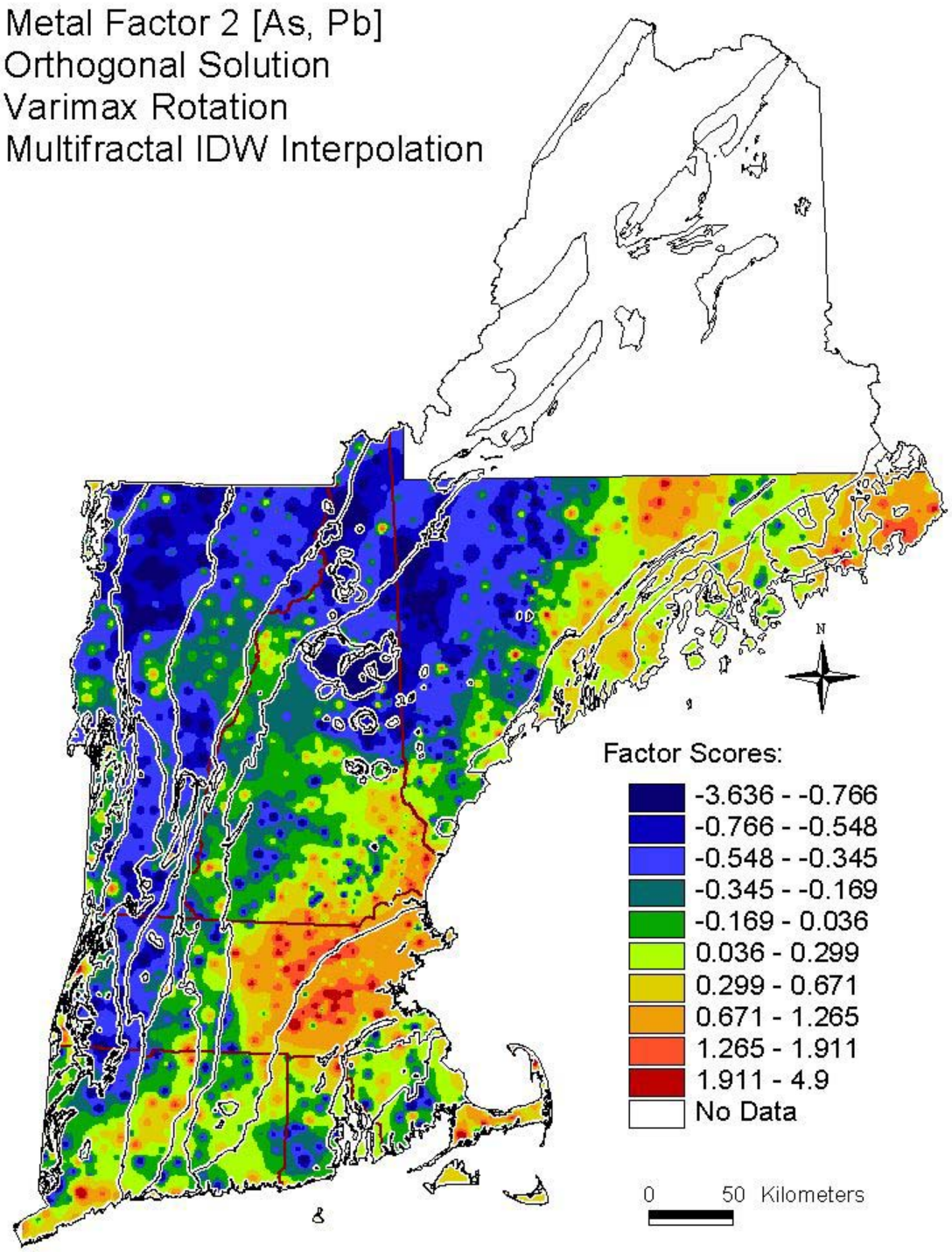

Metal Factor 2 [As, Pb]
Orthogonal Solution
Varimax Rotation
Universal Kriging Interpolation
N
Factor Scores:
-3.636 - -0.766
-0.766 - -0.548
-0.548 - -0.345
-0.345 - -0.169
-0.169 - 0.036
0.036 - 0.299
0.299 - 0.671
0.671 - 1.265
1.265 - 1.911
1.911 - 4.9
No Data
0 50 Kilometers

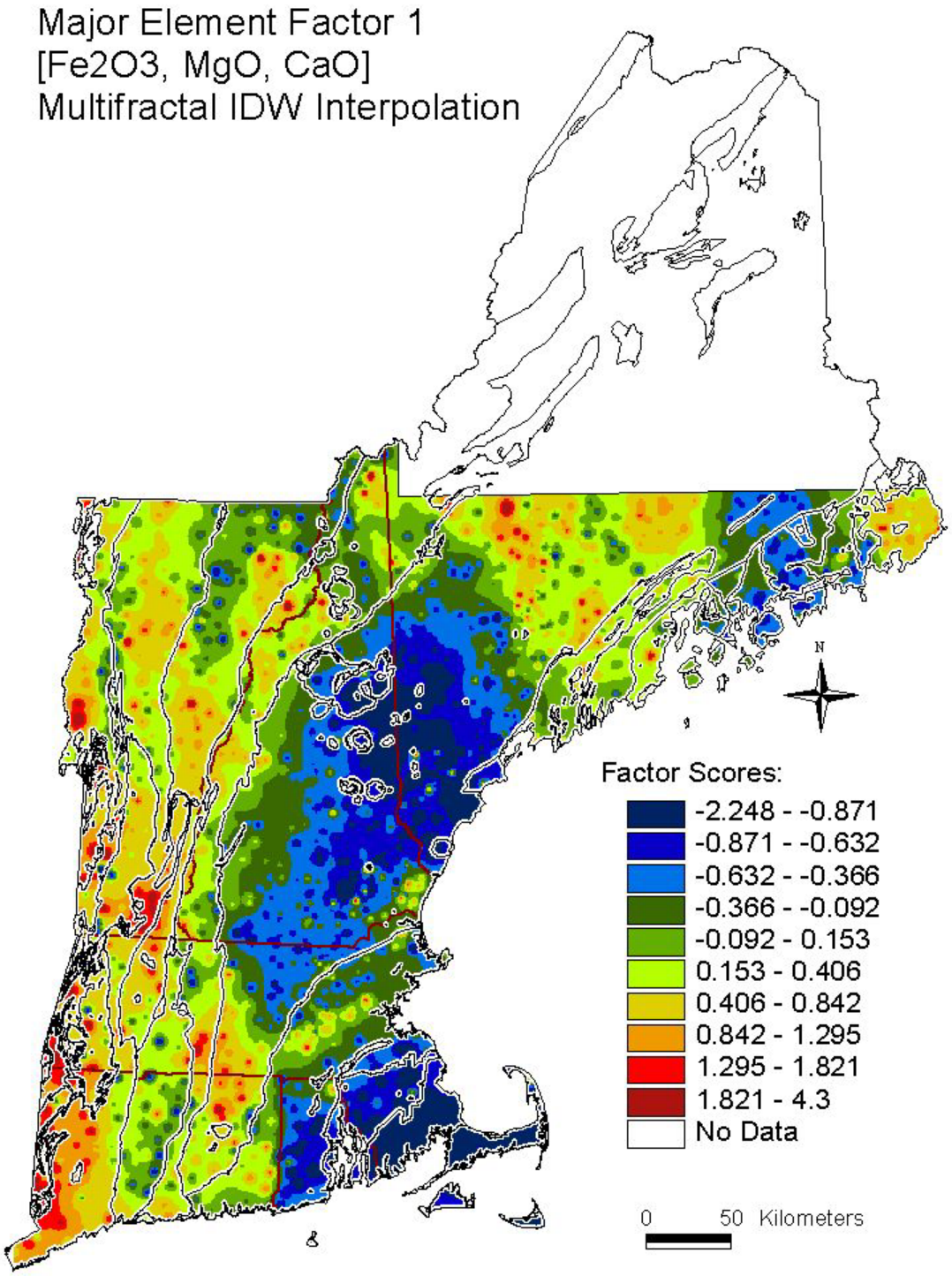

Major Element Factor 1
[Fe2O3, MgO, CaO]
Universal Kriging Interpolation
N
Factor Scores:
-2.248 - -0.871
-0.871 - -0.632
-0.632 - -0.366
-0.366 - -0.092
-0.092 - 0.153
0.153 - 0.406
0.406 - 0.842
0.842 - 1.295
1.295 - 1.821
1.821 - 4.3
No Data
0
50 Kilometers

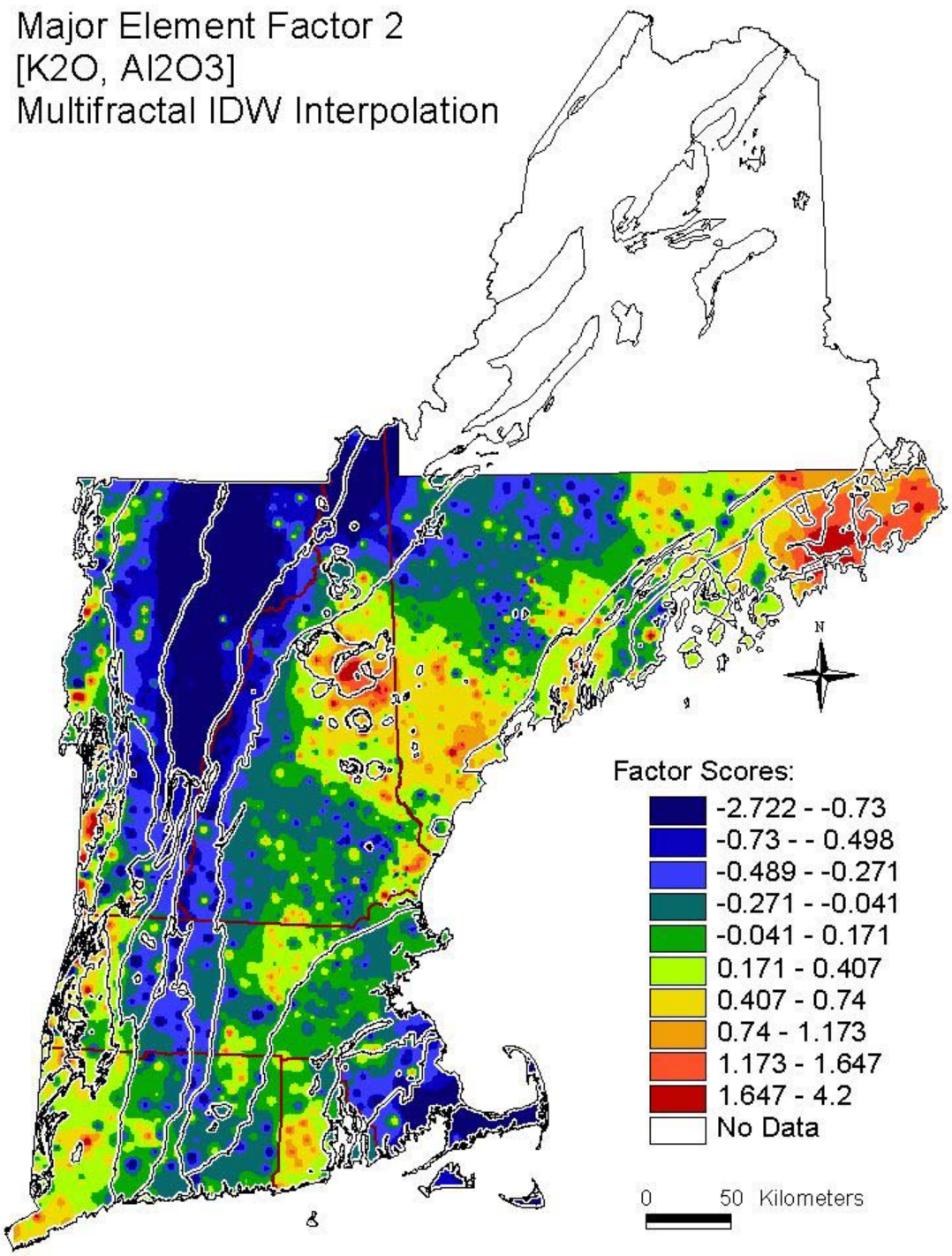

Major Element Factor 2
[K2O, Al2O3]
Universal Kriging Interpolation
N
Factor Scores:
-2.722 - -0.73
-0.73 - - 0.489
-0.489 - -0.271
-0.271 - -0.041
-0.041 - 0.171
0.171 - 0.407
0.407 - 0.74
0.74 - 1.173
1.173 - 1.647
1.647 - 4.2
No Data
0
50 Kilometers

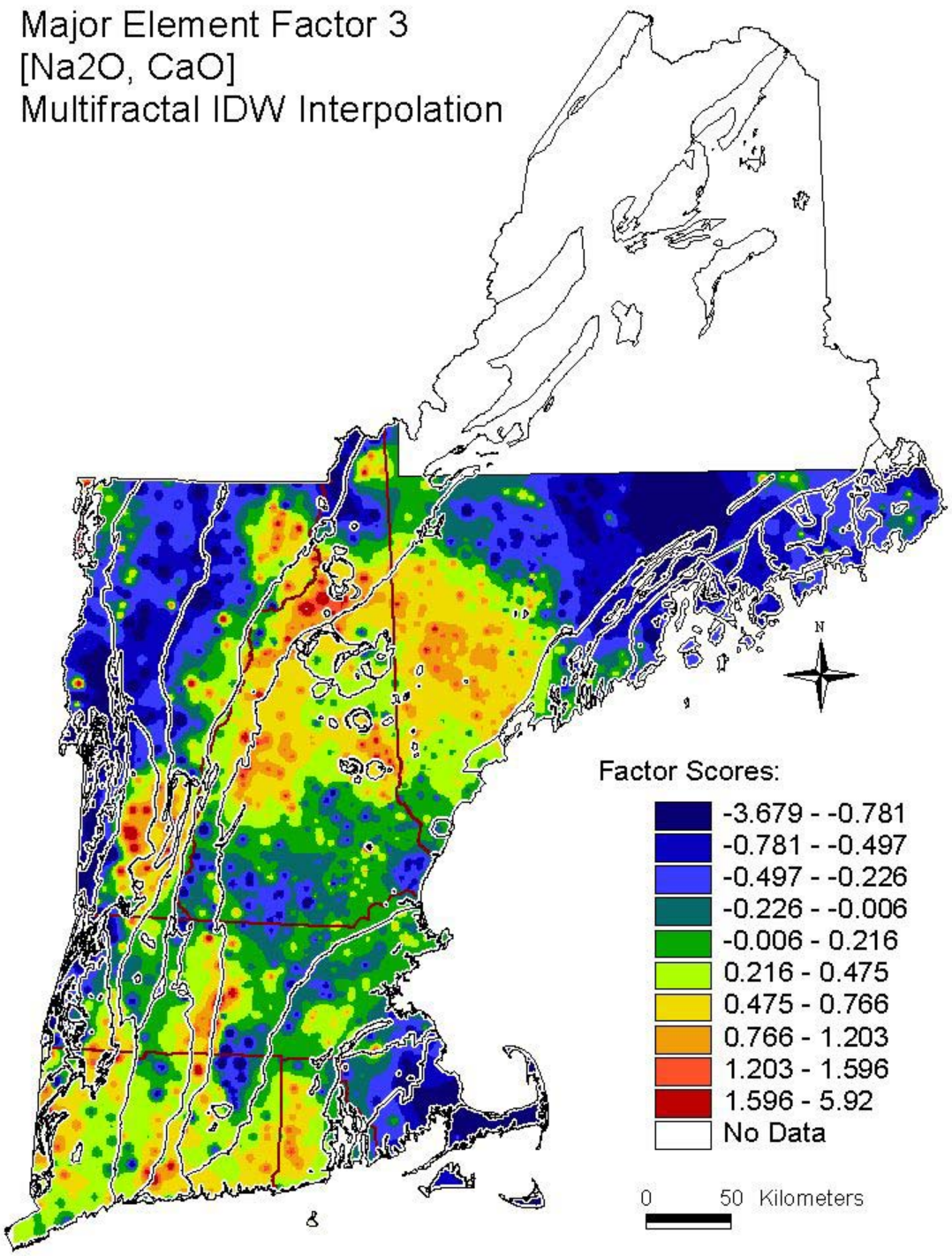

Major Element Factor 3
[Na2O, CaO]
Universal Kriging Interpolation
N
Factor Scores:
-4 - -0.781
-0.781 - -0.497
-0.497 - -0.226
-0.226 - -0.006
-0.006 - 0.216
0.216 - 0.475
0.475 - 0.766
0.766 - 1.203
1.203 - 1.596
1.596 - 5.92
No Data
0
50 Kilometers


Metal Factor 1 [Fe2O3, Cu, Zn]
Orthogonal Solution
Varimax Rotation
Multifractal IDW Interpolation
N
Factor Scores:
-3.665 - -0.866
-0.866 - -0.55
-0.55 - -0.277
-0.277 - -0.022
-0.022 - 0.249
0.249 - 0.526
0.526 - 0.831
0.831 - 1.27
1.27 - 1.679
1.679 - 4.4
No Data
0
50 Kilometers

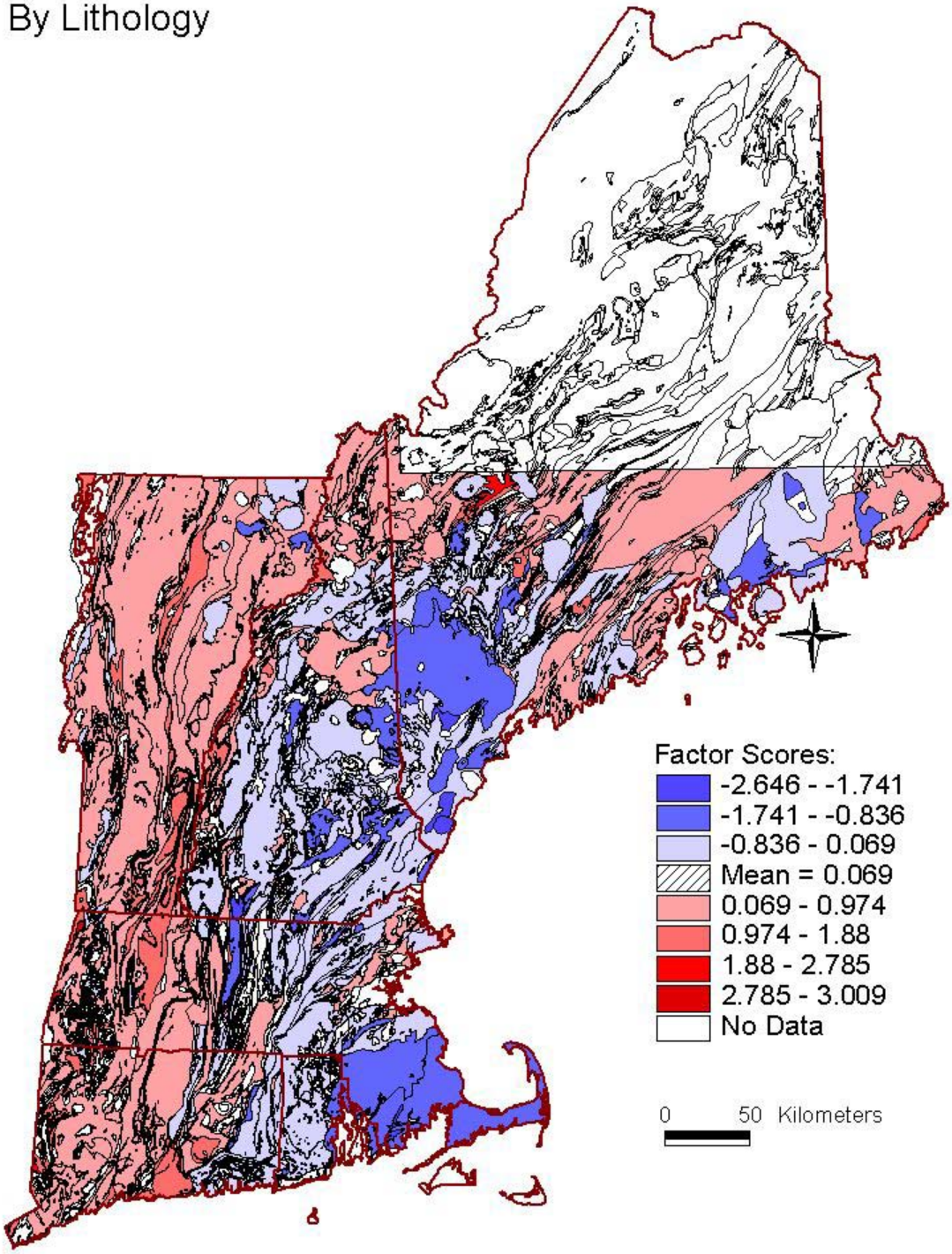

Metal Factor 2 [As, Pb]
Orthogonal Solution
Varimax Rotation
Multifractal IDW Interpolation
N
Factor Scores:
-3.636 - -0.766
-0.766 - -0.548
-0.548 - -0.345
-0.345 - -0.169
-0.169 - 0.036
0.036 - 0.299
0.299 - 0.671
0.671 - 1.265
1.265 - 1.911
1.911 - 4.9
No Data
0 50 Kilometers

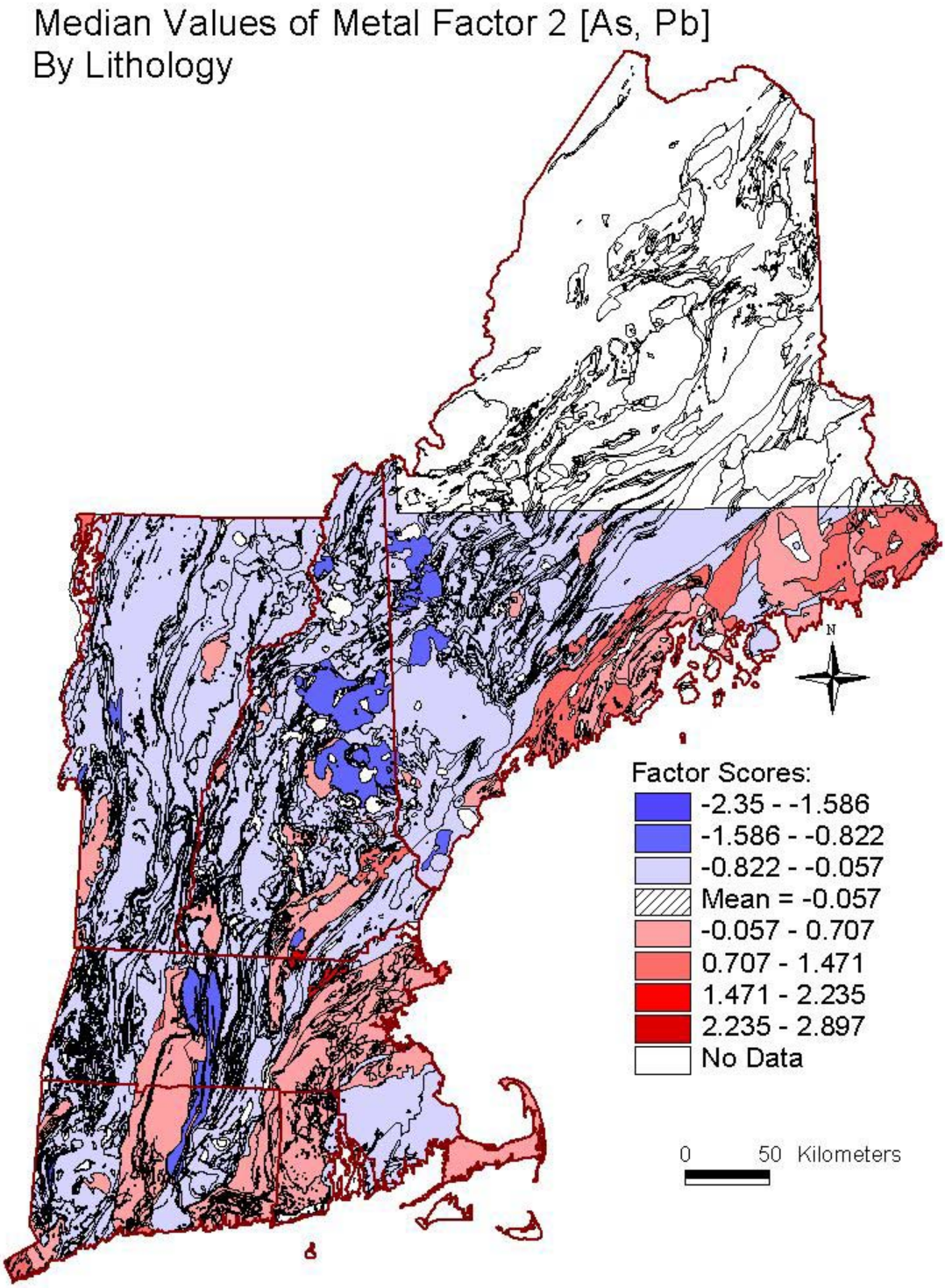

Major Element Factor 1
[Fe2O3, MgO, CaO]
Multifractal IDW Interpolation
N
Factor Scores:
-2.248 - -0.871
-0.871 - -0.632
-0.632 - -0.366
-0.366 - -0.092
-0.092 - 0.153
0.153 - 0.406
0.406 - 0.842
0.842 - 1.295
1.295 - 1.821
1.821 - 4.3
No Data
0 50 Kilometers

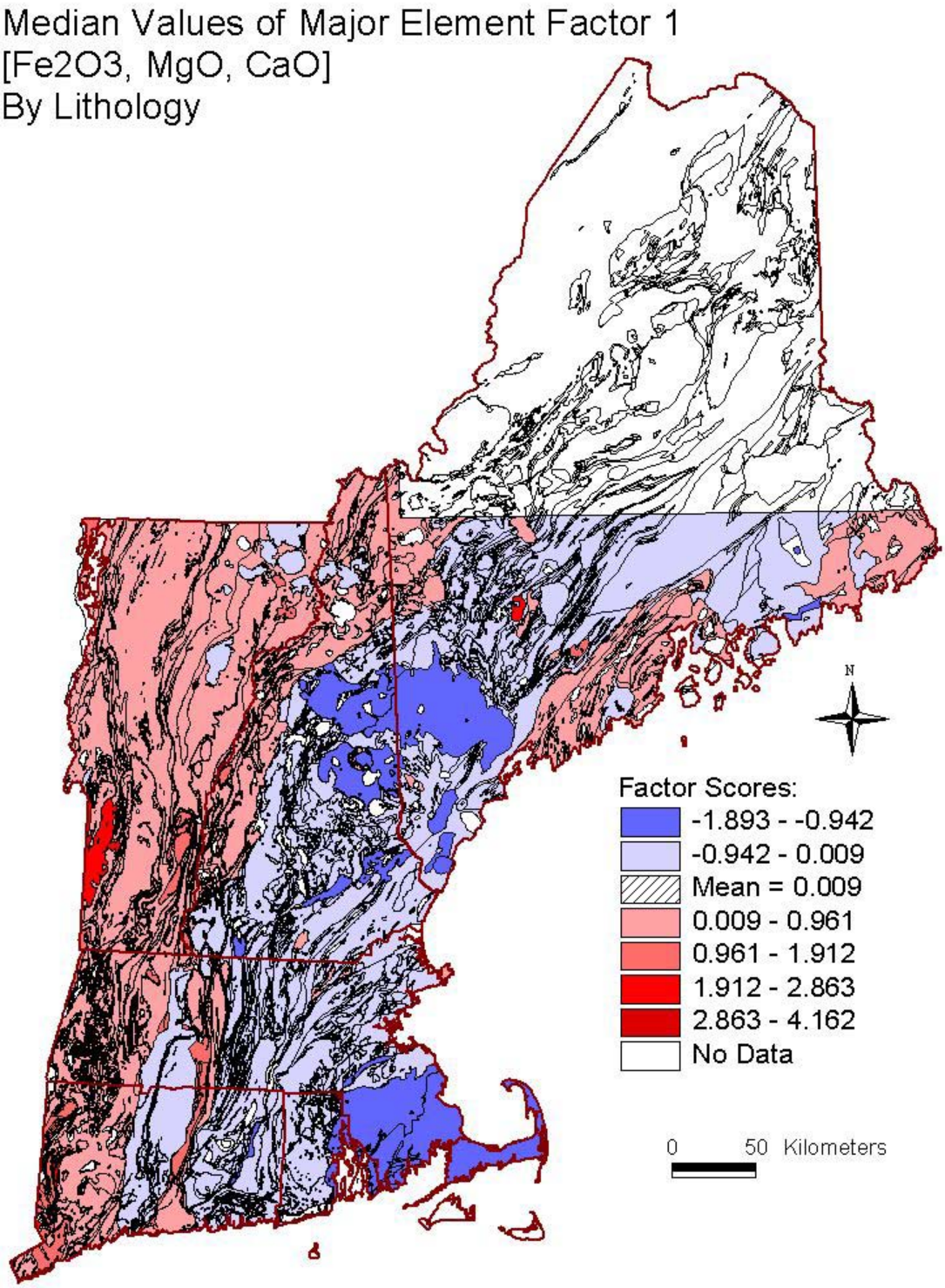

Major Element Factor 2
[K2O, Al2O3]
Multifractal IDW Interpolation
N
Factor Scores:
-2.722 - -0.73
-0.73 - - 0.498
-0.489 - -0.271
-0.271 - -0.041
-0.041 - 0.171
0.171 - 0.407
0.407 - 0.74
0.74 - 1.173
1.173 - 1.647
1.647 - 4.2
No Data
0 50 Kilometers


Major Element Factor 3
[Na2O, CaO]
Multifractal IDW Interpolation
N
Factor Scores:
-3.679 - -0.781
-0.781 - -0.497
-0.497 - -0.226
-0.226 - -0.006
-0.006 - 0.216
0.216 - 0.475
0.475 - 0.766
0.766 - 1.203
1.203 - 1.596
1.596 - 5.92
No Data
0 50 Kilometers

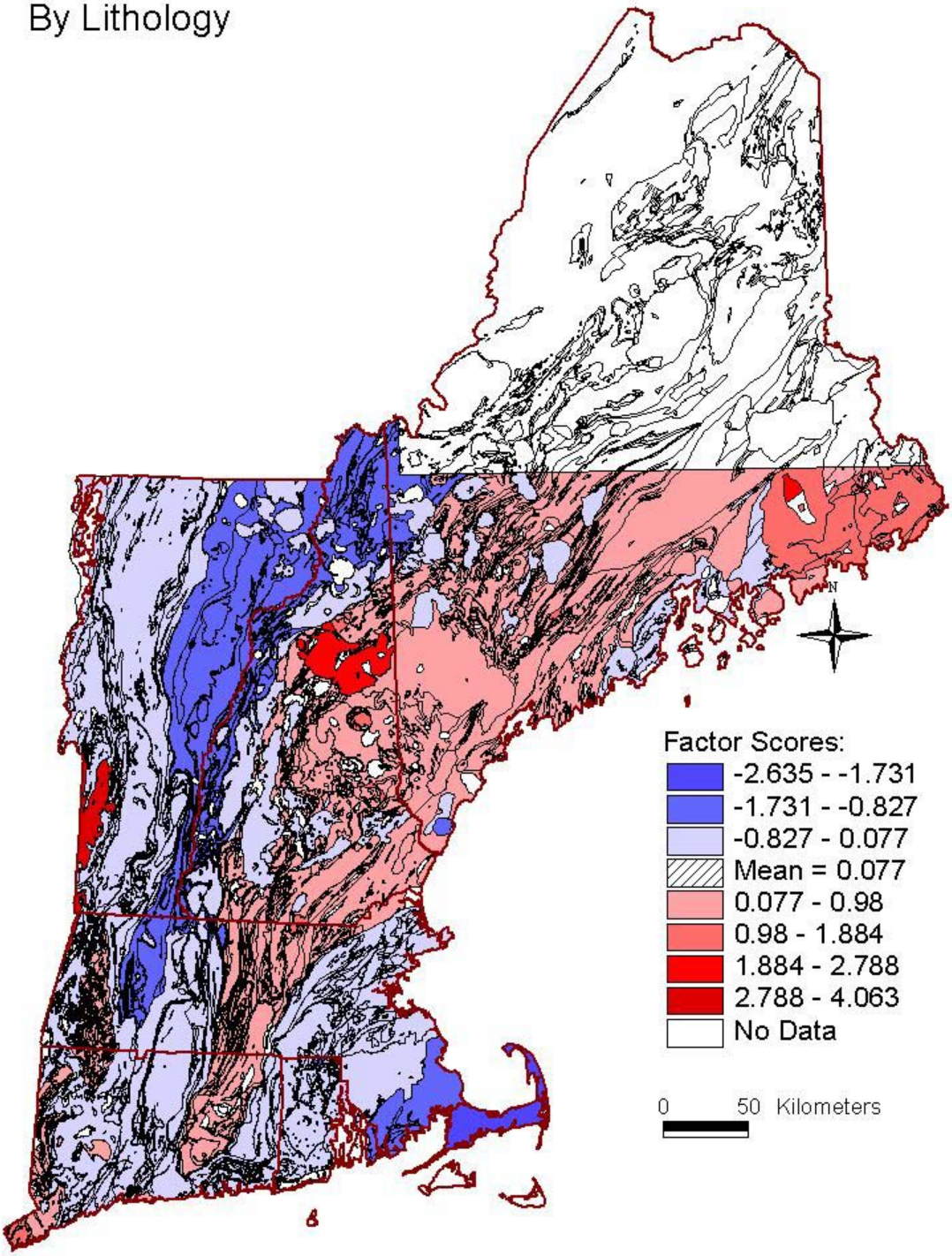
Median Values of Metal Factor 1 [Fe2O3, Cu, Zn]
By Lithology



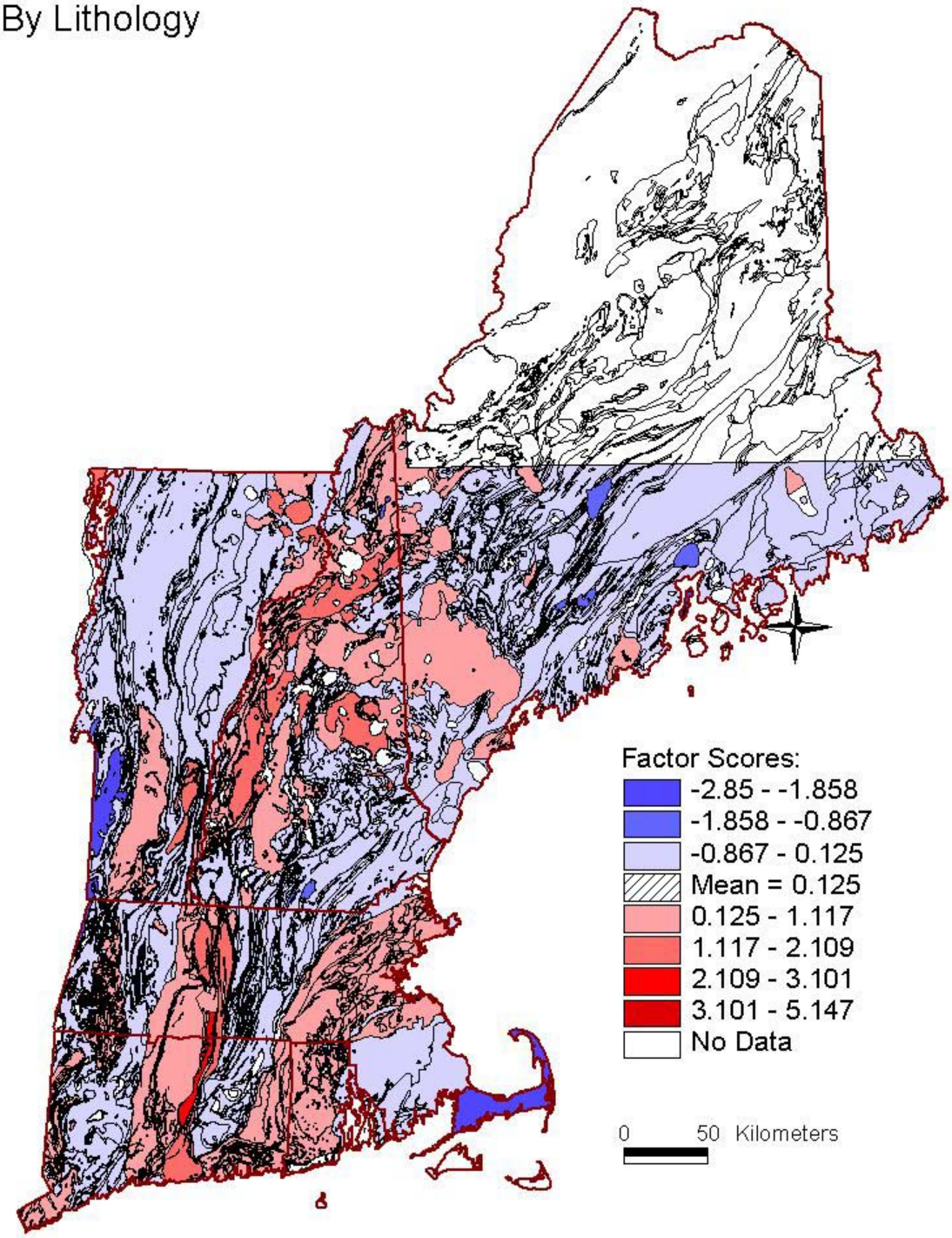

Median Values of Metal Factor 2 [As, Pb]
By Lithology
N
Factor Scores:
-2.35 - -1.586
-1.586 - -0.822
-0.822 - -0.057
Mean = -0.057
-0.057 - 0.707
0.707 - 1.471
1.471 - 2.235
2.235 - 2.897
No Data
0
50 Kilometers

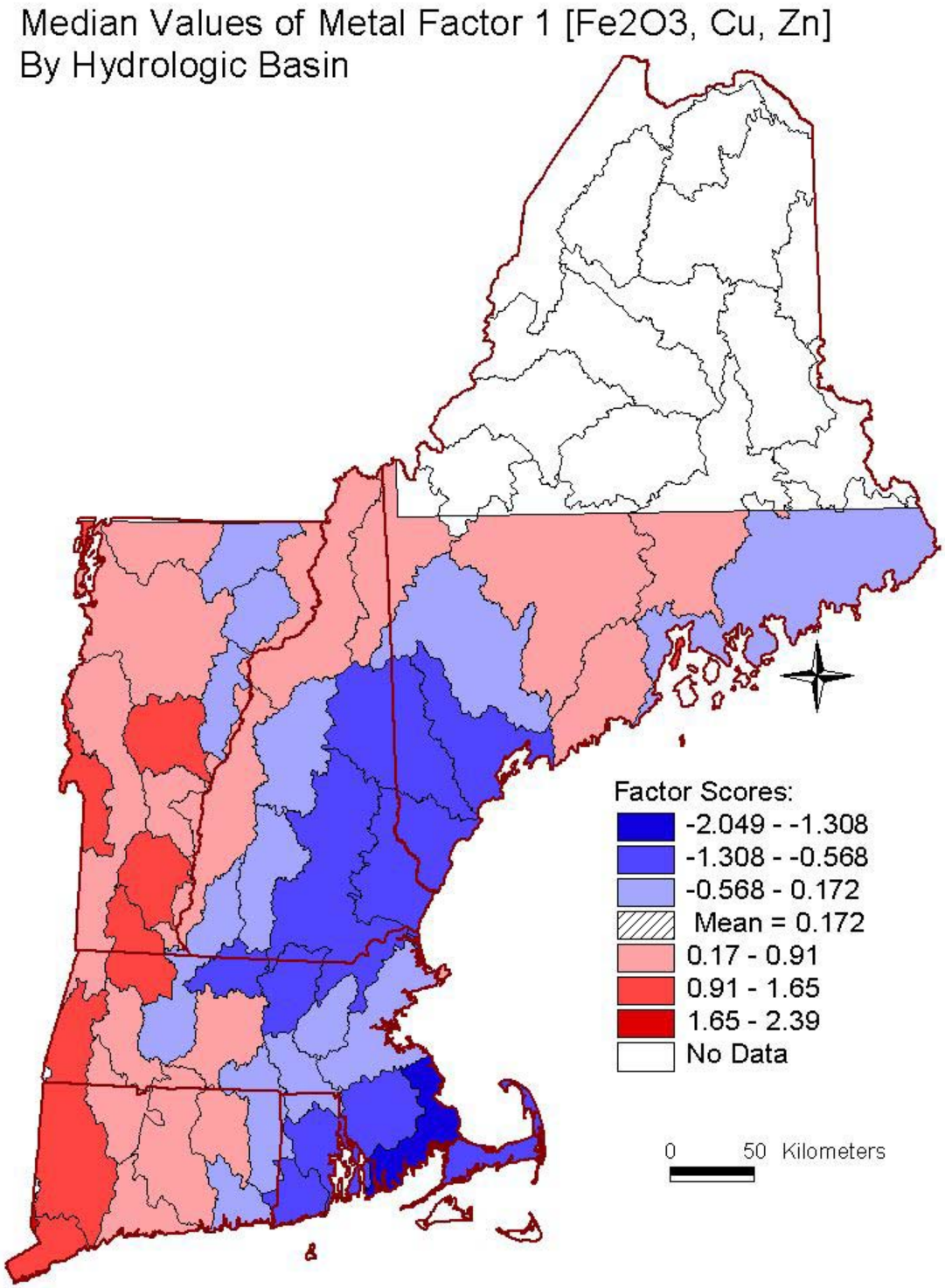

Median Values of Major Element Factor 1
[Fe2O3, MgO, CaO]
By Lithology
N
Factor Scores:
-1.893 - -0.942
-0.942 - 0.009
Mean = 0.009
0.009 - 0.961
0.961 - 1.912
1.912 - 2.863
2.863 - 4.162
No Data
0
50 Kilometers

Median Values of Metal Factor 2 [K2O, Al2O3]
By Lithology

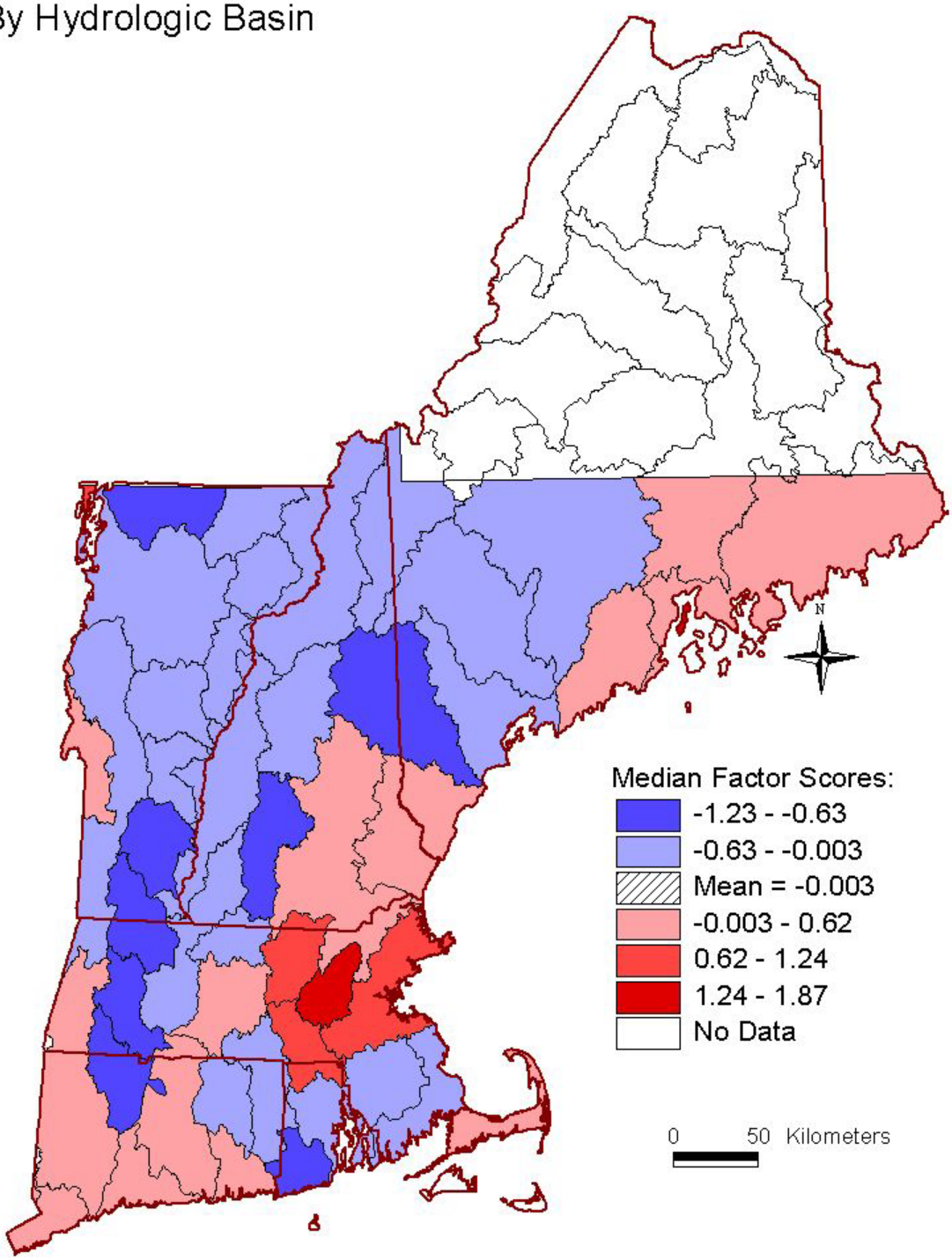


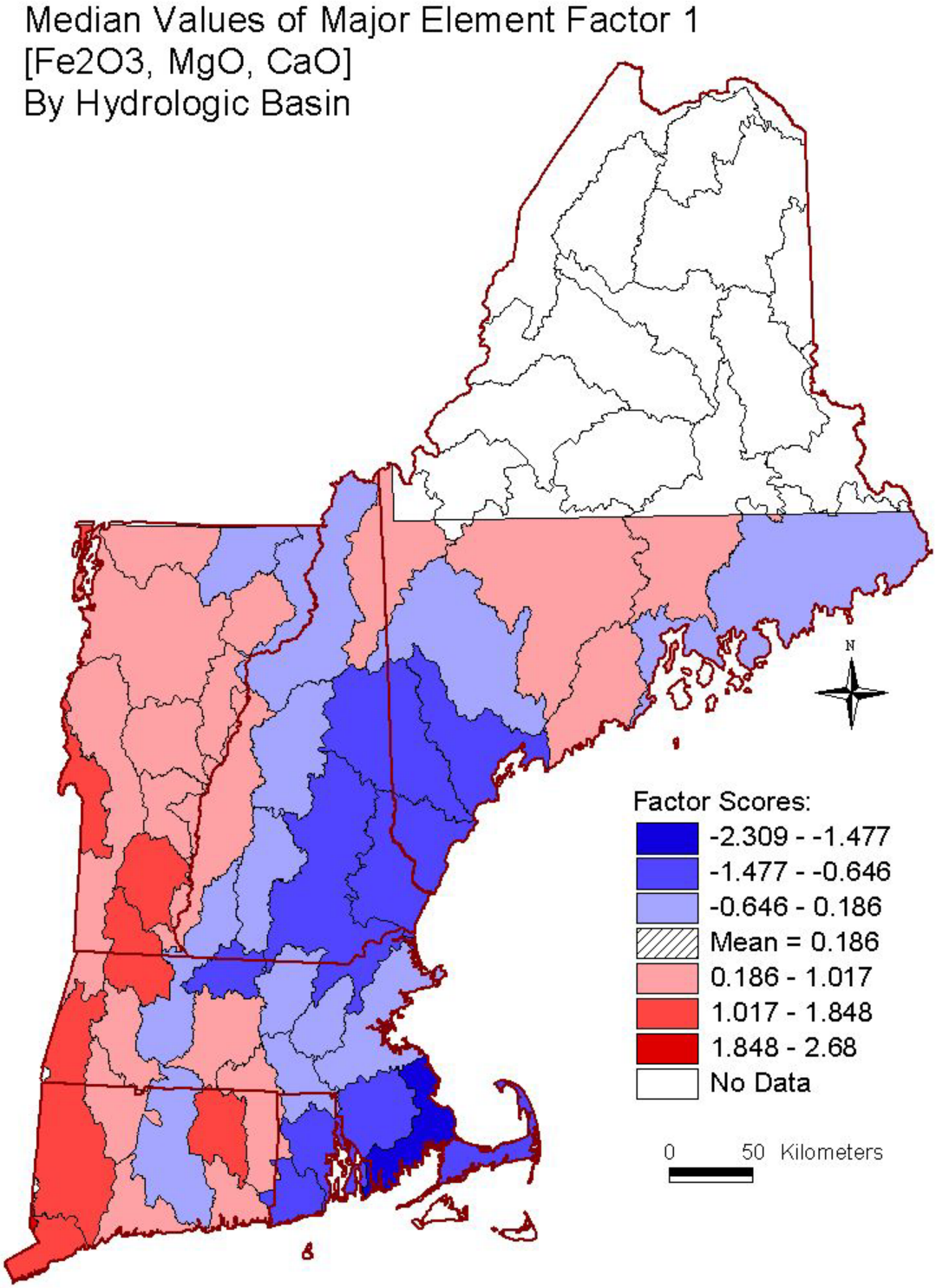
Median Values of Major Element Factor 3 [Na2O, CaO]
By Lithology



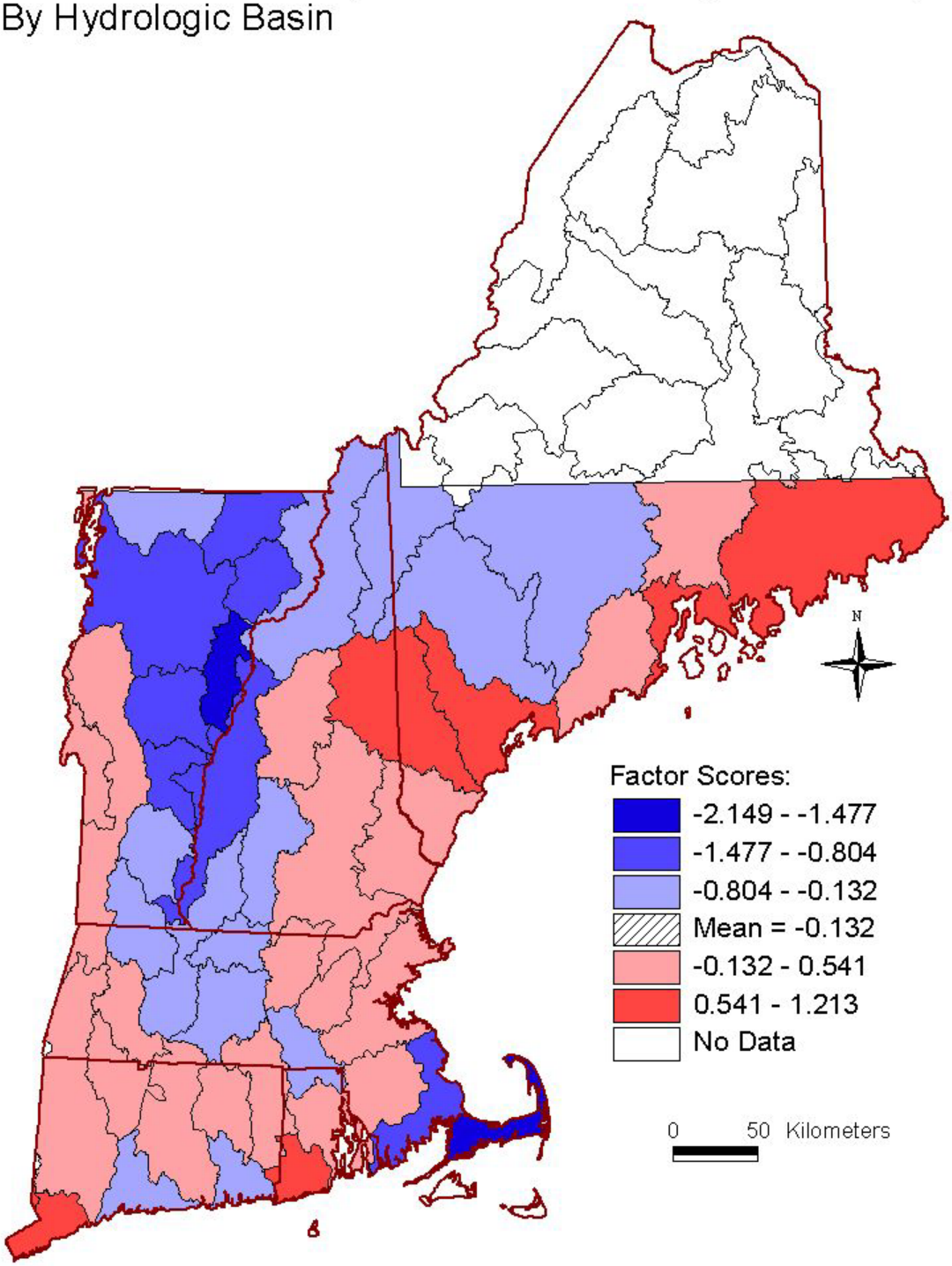

Median Values of Metal Factor 1 [Fe2O3, Cu, Zn]
By Hydrologic Basin
Factor Scores:
-2.049 - -1.308
-1.308 - -0.568
-0.568 - 0.172
Mean = 0.172
0.17 - 0.91
0.91 - 1.65
1.65 - 2.39
No Data
0
50 Kilometers

Median Values of Metal Factor 2 [As, Pb]
By Hydrologic Basin

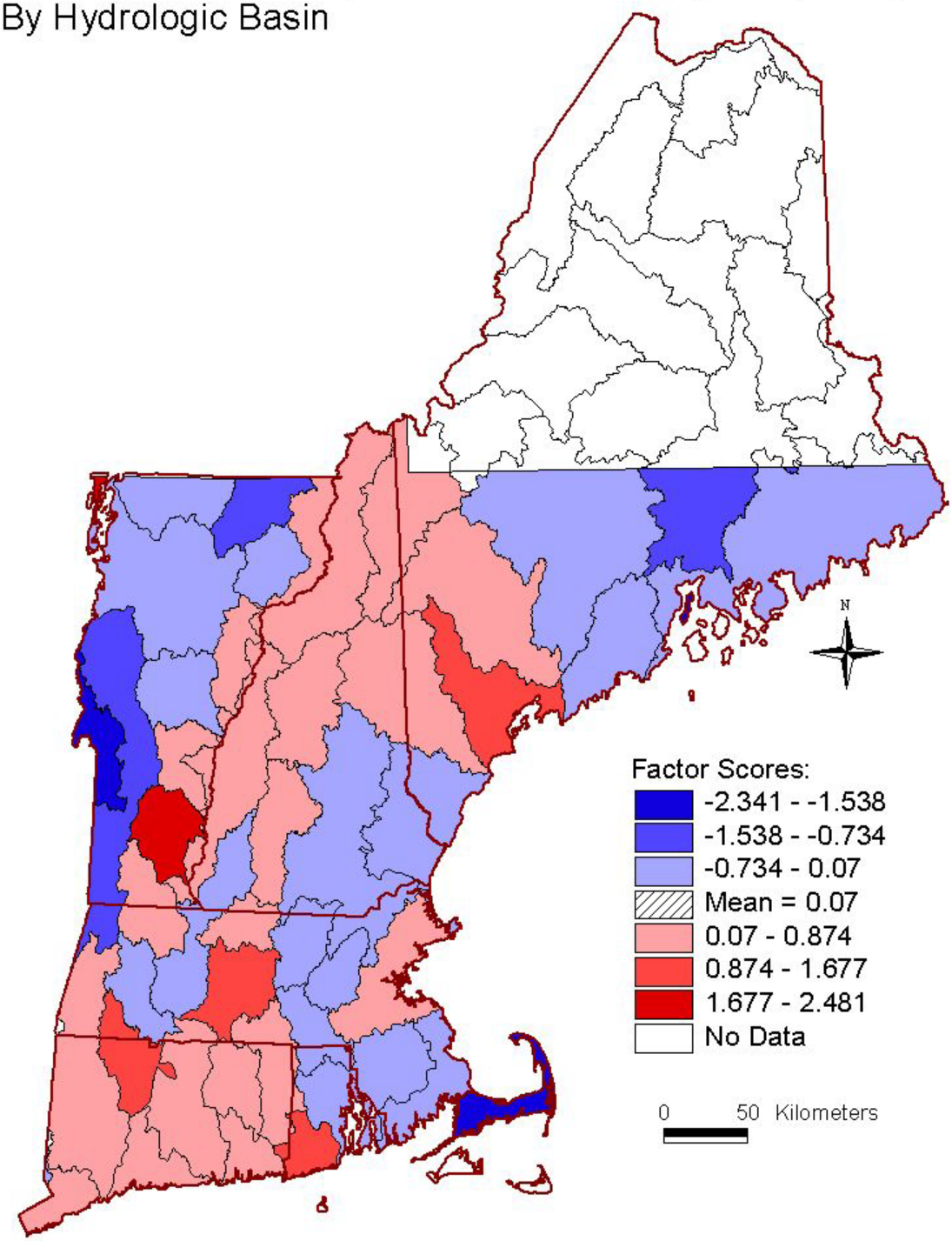



Median Values of Major Element Factor 1
[Fe2O3, MgO, CaO]
By Hydrologic Basin
N
Factor Scores:
-2.309 - -1.477
-1.477 - -0.646
-0.646 - 0.186
Mean = 0.186
0.186 - 1.017
1.017 - 1.848
1.848 - 2.68
No Data
0
50 Kilometers

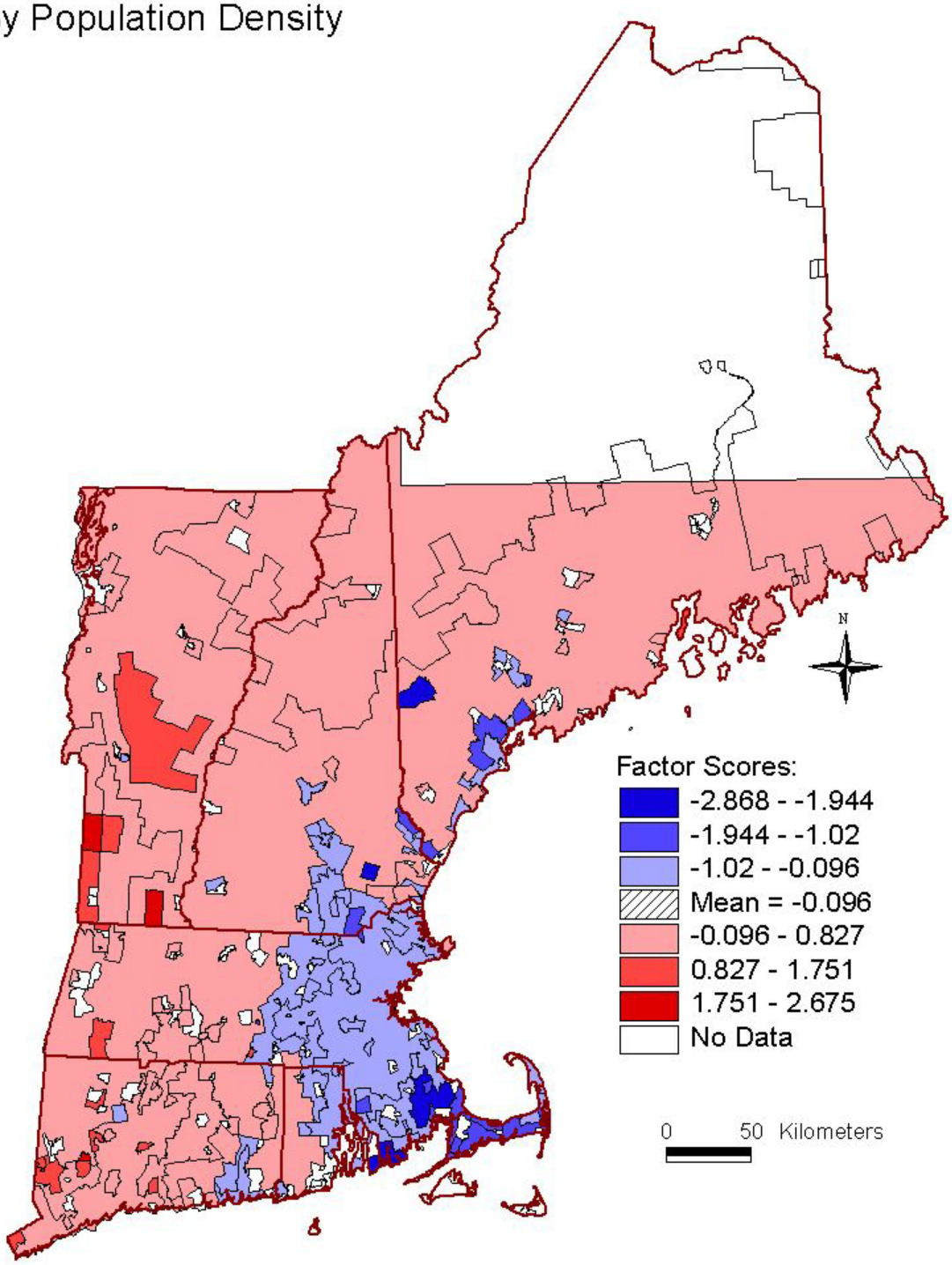
Median Values of Major Element Factor 2 [K2O, Al2O3]
By Hydrologic Basin



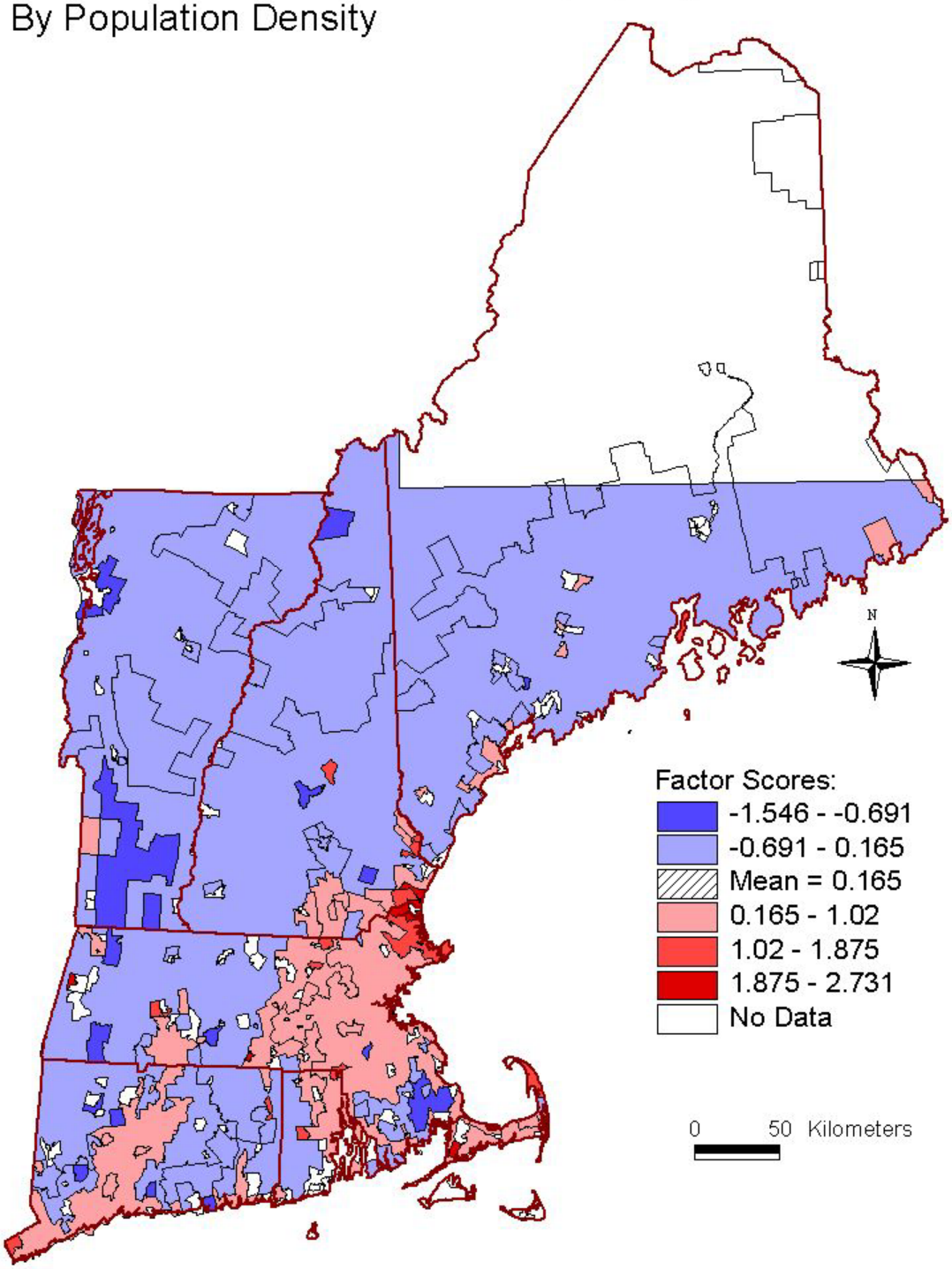
Median Values of Major Element Factor 3 [Na2O, CaO)
By Hydrologic Basin

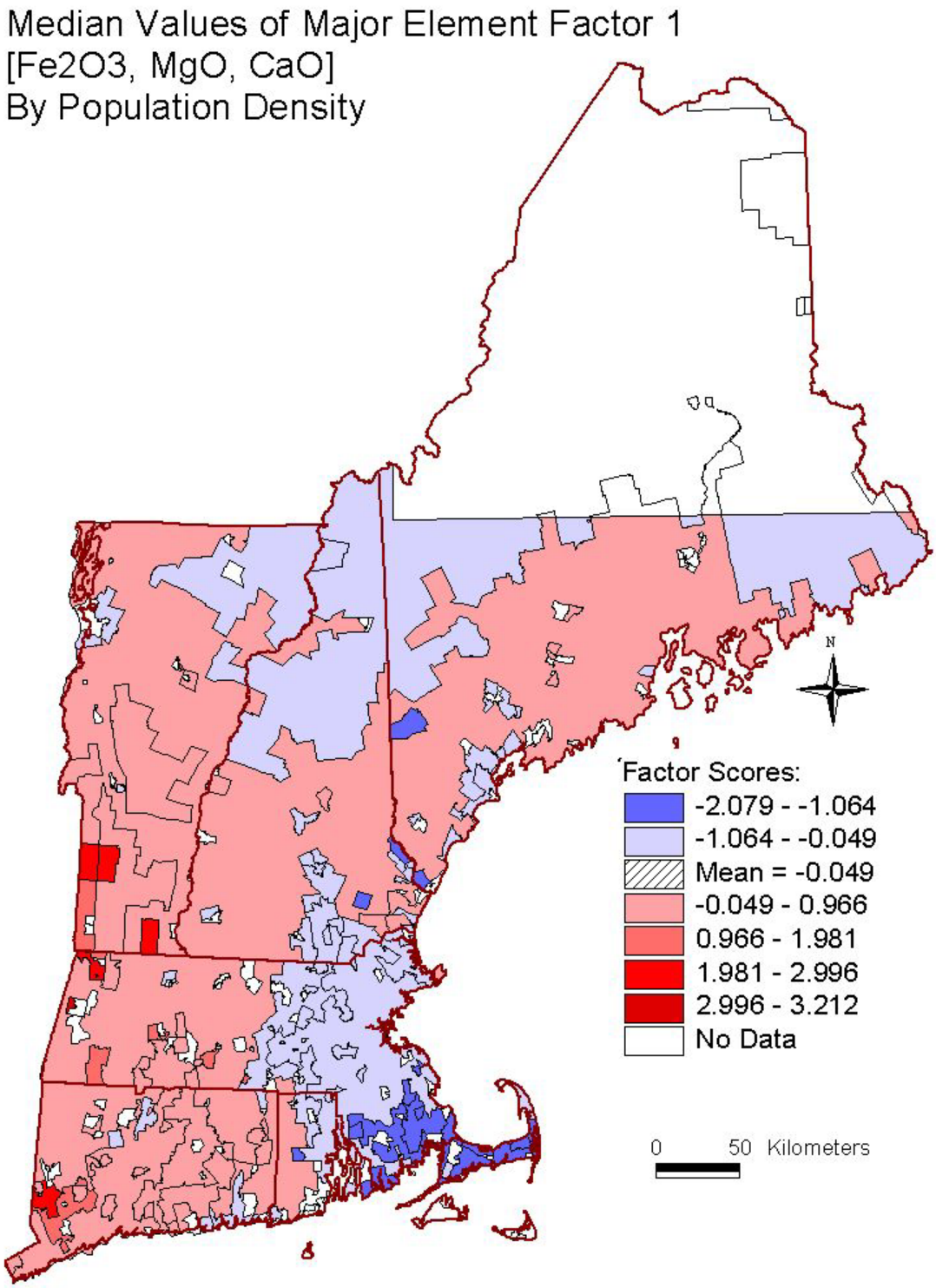


Median Values of Metal Factor 1 [Fe2O3, Cu, Zn]
By Population Density

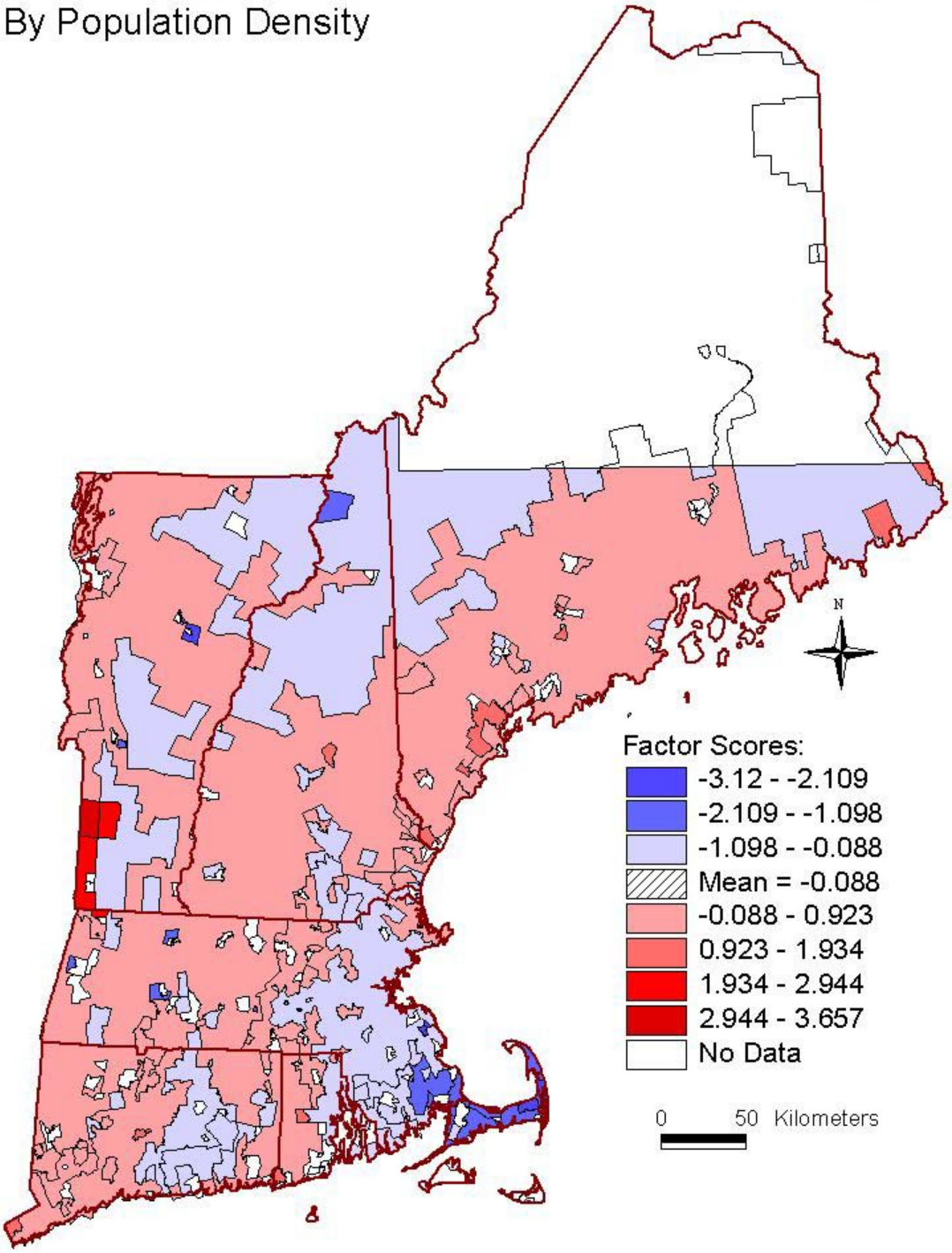


Median Values of Metal Factor 2 [As, Pb]
By Population Density

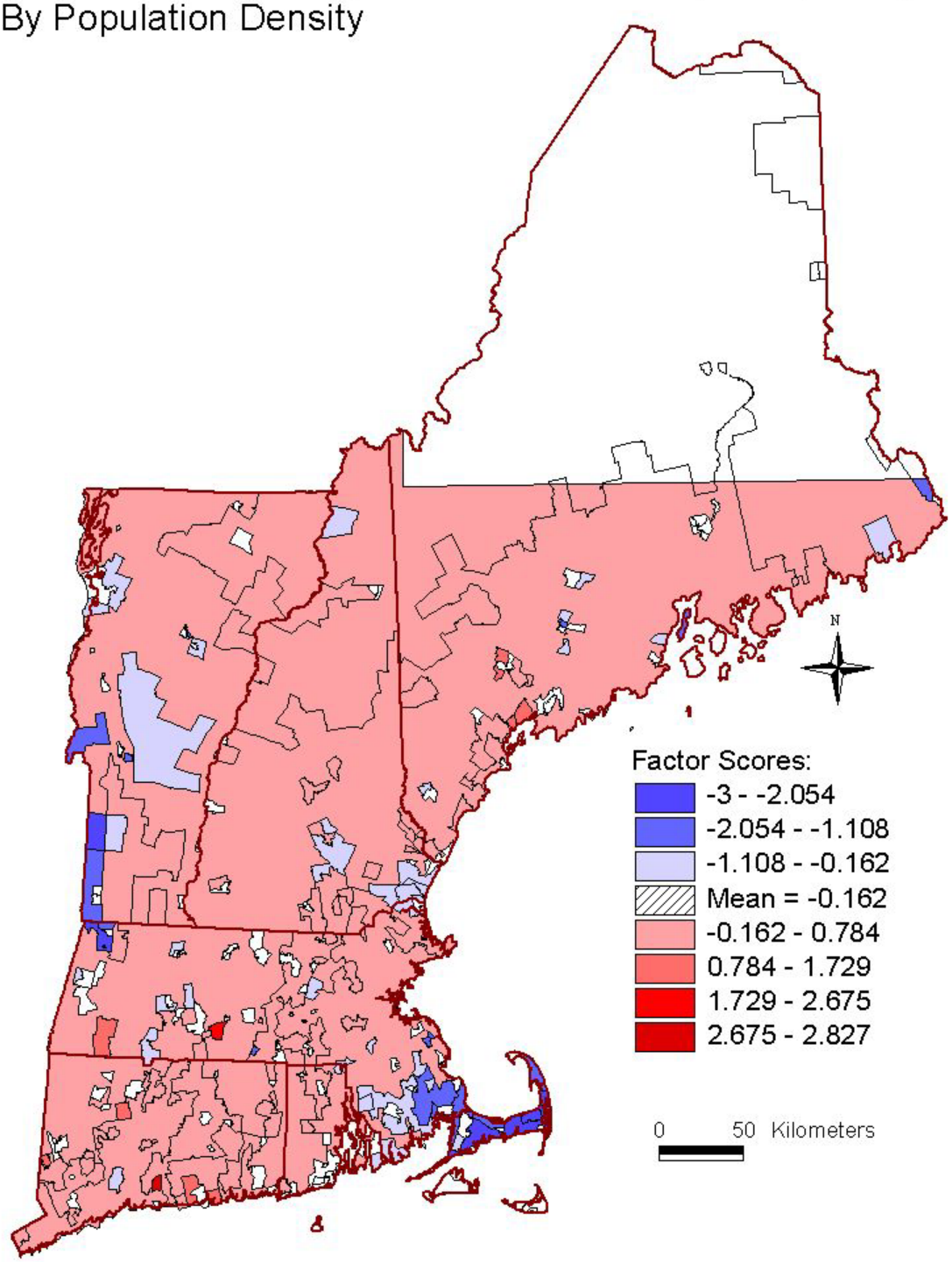



Median Values of Major Element Factor 1
[Fe2O3, MgO, CaO]
By Population Density
N
Factor Scores:
-2.079 - -1.064
-1.064 - -0.049
Mean = -0.049
-0.049 - 0.966
0.966 - 1.981
1.981 - 2.996
2.996 - 3.212
No Data
0
50 Kilometers

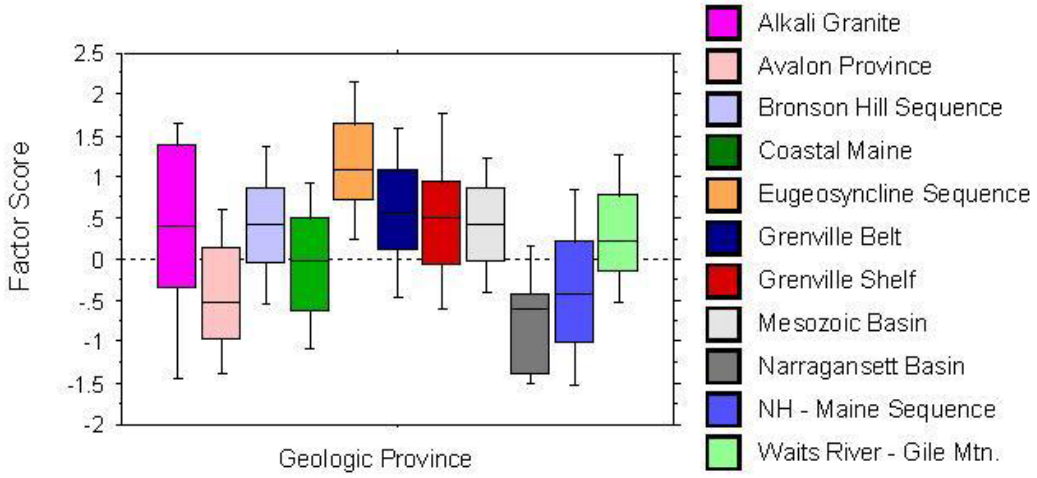
Median Values of Major Element Factor 2 [K2O, Al2O3]
By Population Density



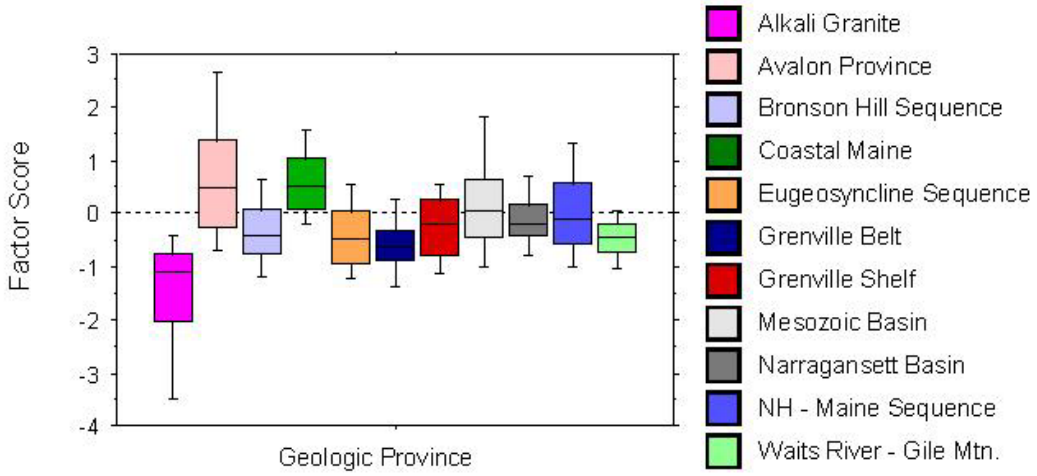
Median Values of Major Element Factor 3 [Na2O, CaO]
By Population Density



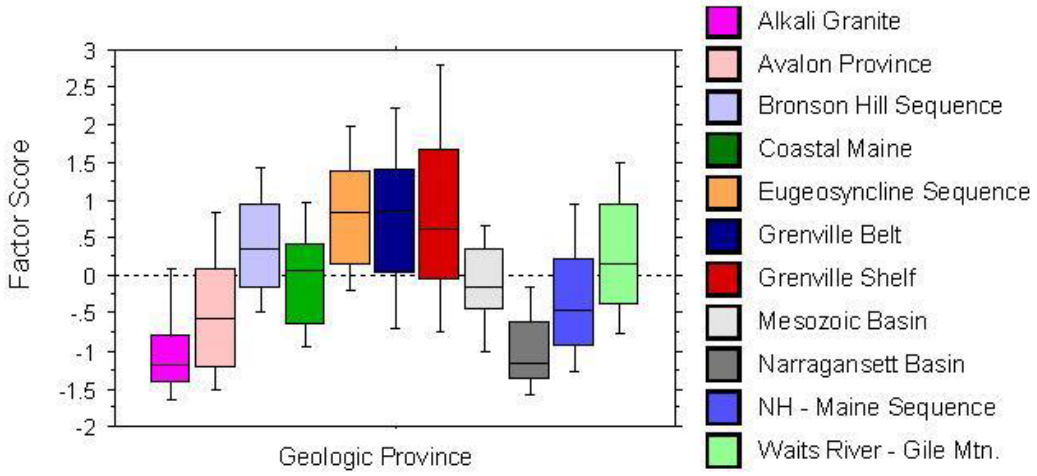
Values of Metal Factor 1 [Fe_2O_3, Cu, Zn], by Geologic Province in New England



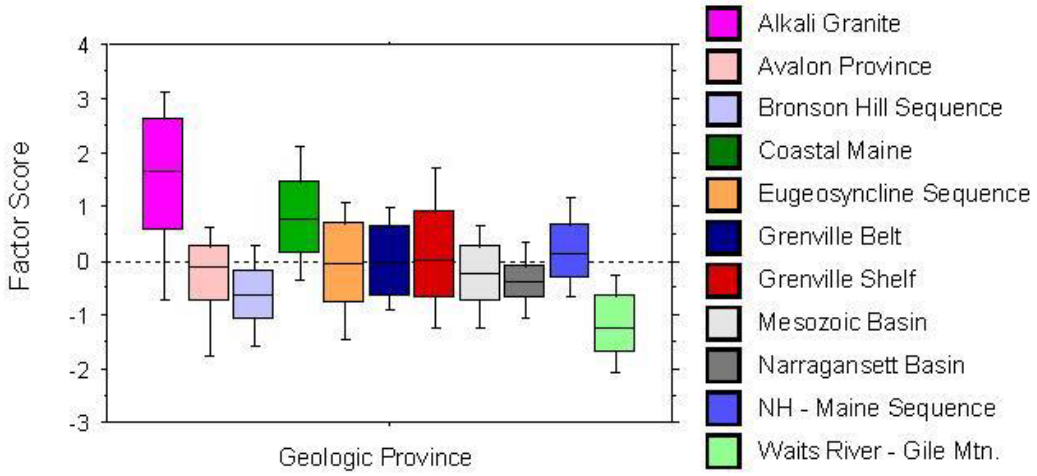
Values of Metal Factor 2 [As, Pb], by Geologic Province in New England

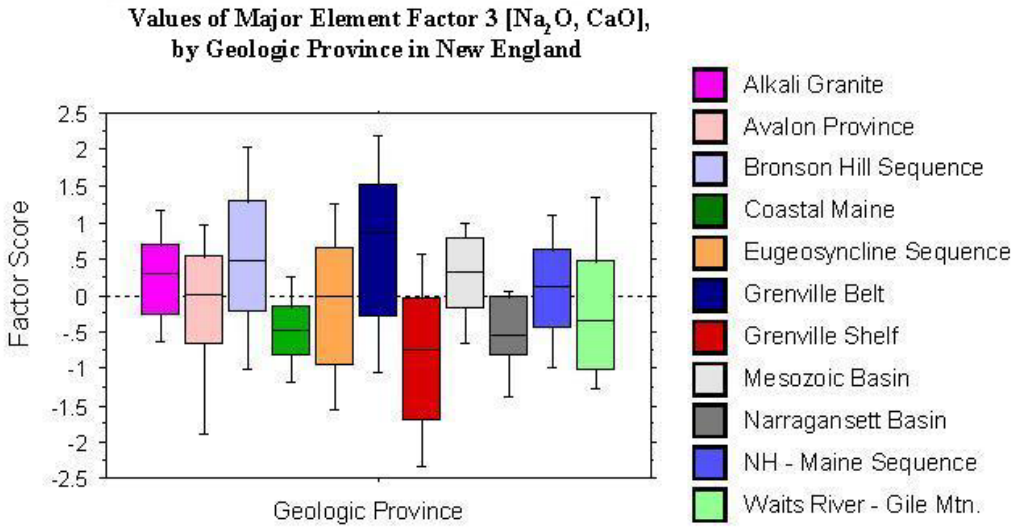


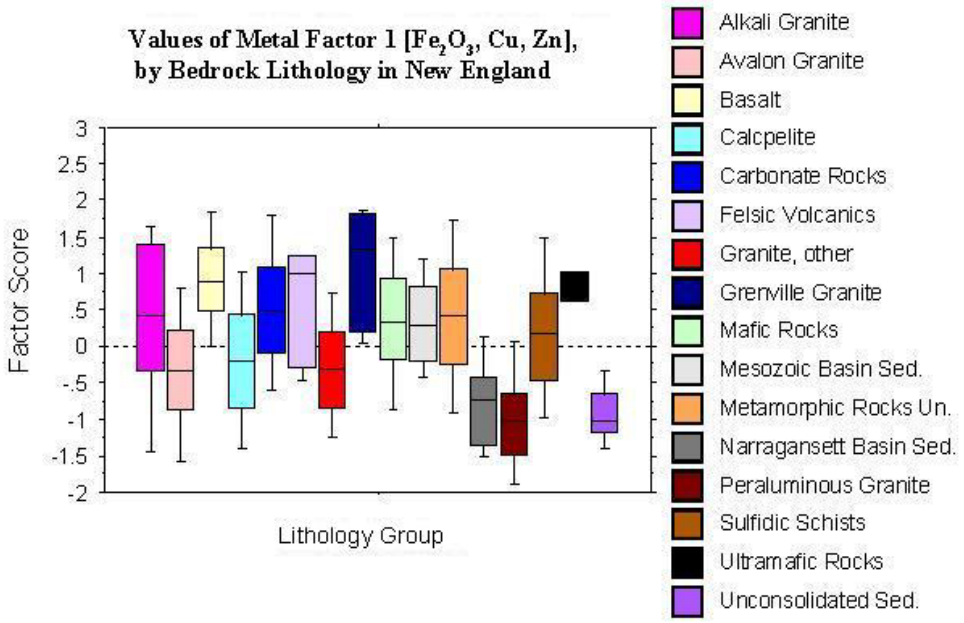
Values of Major Element Factor 1 [Fe_2O_3, MgO, CaO], by Geologic Province in New England

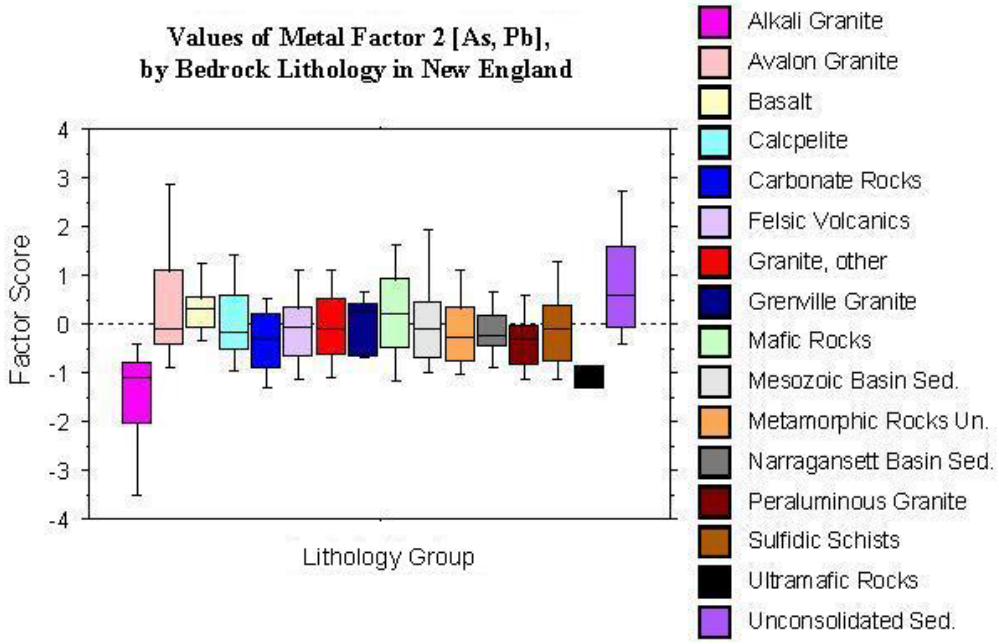


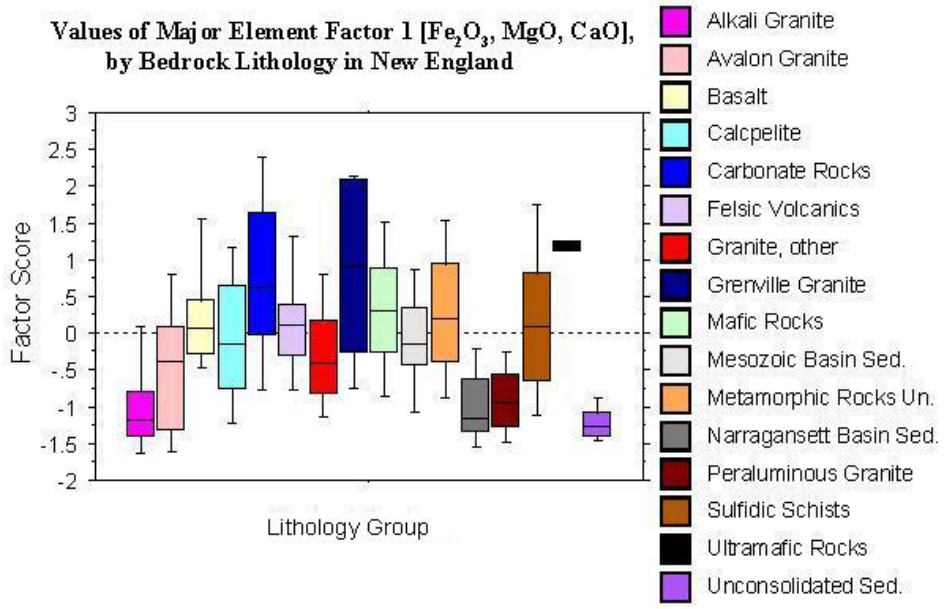
Values of Major Element Factor 2 [K_2O, Al_2O_3], by Geologic Province in New England

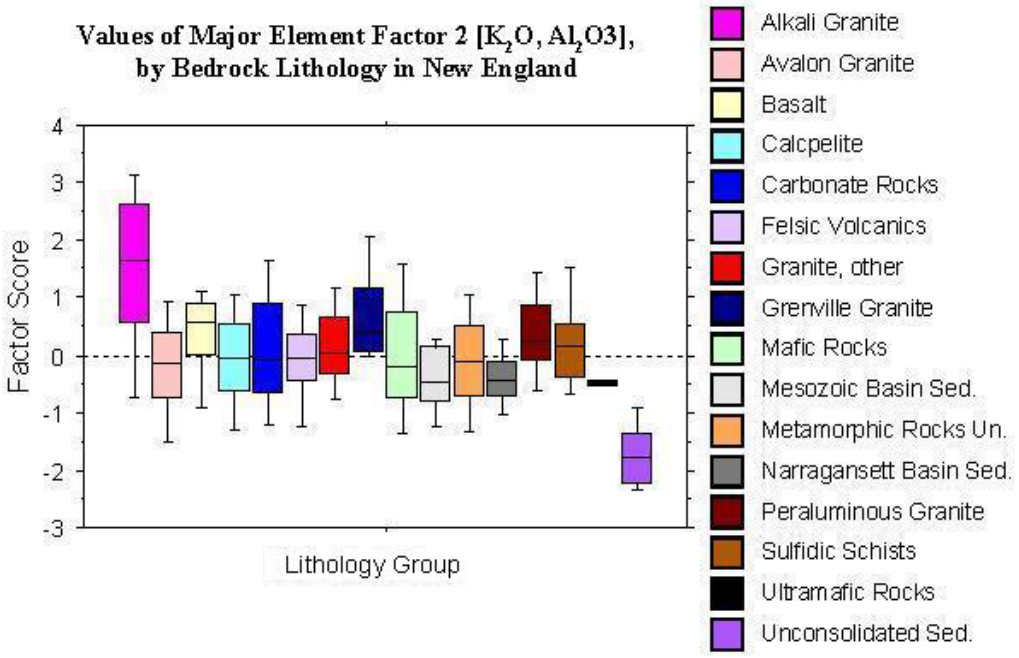


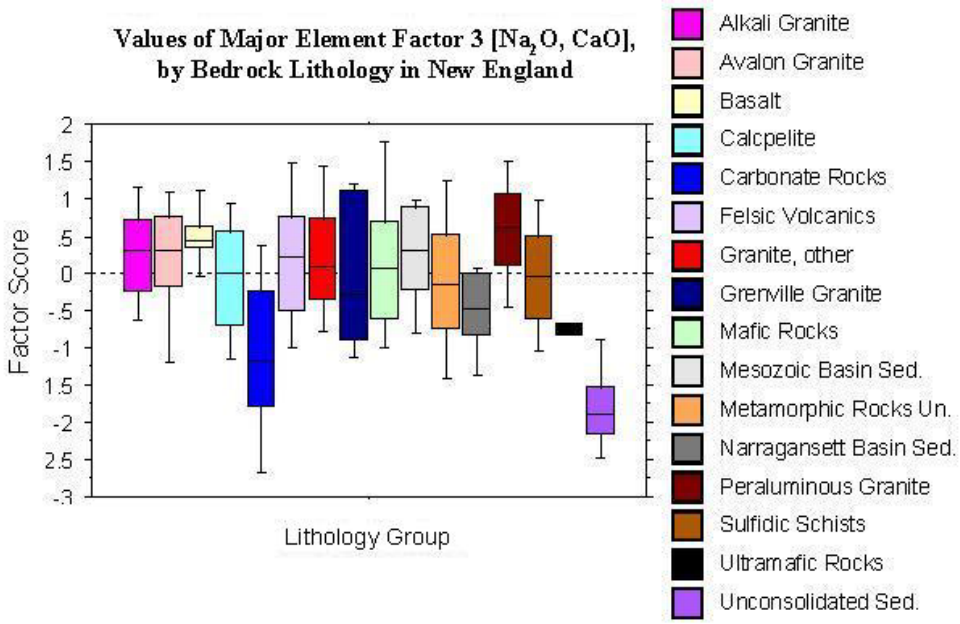

Values of Major Element Factor 3 [Na2O, CaO],
by Geologic Province in New England
Factor Score
2.5
2
1.5
1
.5
0
-.5
-1
-1.5
-2
-2.5
Geologic Province
Alkali Granite
Avalon Province
Bronson Hill Sequence
Coastal Maine
Eugeosyncline Sequence
Grenville Belt
Grenville Shelf
Mesozoic Basin
Narragansett Basin
NH - Maine Sequence
Waits River - Gile Mtn.


Values of Metal Factor 1 [Fe_2O_3, Cu, Zn],
by Bedrock Lithology in New England
Factor Score
3
2.5
2
1.5
1
.5
0
-.5
-1
-1.5
-2
Lithology Group
Alkali Granite
Avalon Granite
Basalt
Calcpelite
Carbonate Rocks
Felsic Volcanics
Granite, other
Grenville Granite
Mafic Rocks
Mesozoic Basin Sed.
Metamorphic Rocks Un.
Narragansett Basin Sed.
Peraluminous Granite
Sulfidic Schists
Ultramafic Rocks
Unconsolidated Sed.

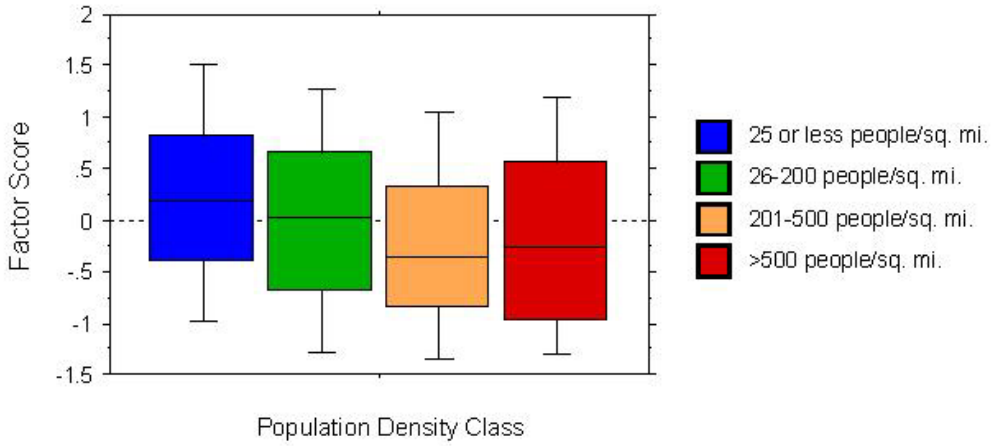

Values of Metal Factor 2 [As, Pb],
by Bedrock Lithology in New England
Factor Score
4
3
2
1
0
-1
-2
-3
-4
Lithology Group
Alkali Granite
Avalon Granite
Basalt
Calcpelite
Carbonate Rocks
Felsic Volcanics
Granite, other
Grenville Granite
Mafic Rocks
Mesozoic Basin Sed.
Metamorphic Rocks Un.
Narragansett Basin Sed.
Peraluminous Granite
Sulfidic Schists
Ultramafic Rocks
Unconsolidated Sed.


Values of Major Element Factor 1 [Fe_2O_3, MgO, CaO], by Bedrock Lithology in New England
Factor Score
3
2.5
2
1.5
1
.5
0
-.5
-1
-1.5
-2
Lithology Group
Alkali Granite
Avalon Granite
Basalt
Calcpelite
Carbonate Rocks
Felsic Volcanics
Granite, other
Grenville Granite
Mafic Rocks
Mesozoic Basin Sed.
Metamorphic Rocks Un.
Narragansett Basin Sed.
Peraluminous Granite
Sulfidic Schists
Ultramafic Rocks
Unconsolidated Sed.

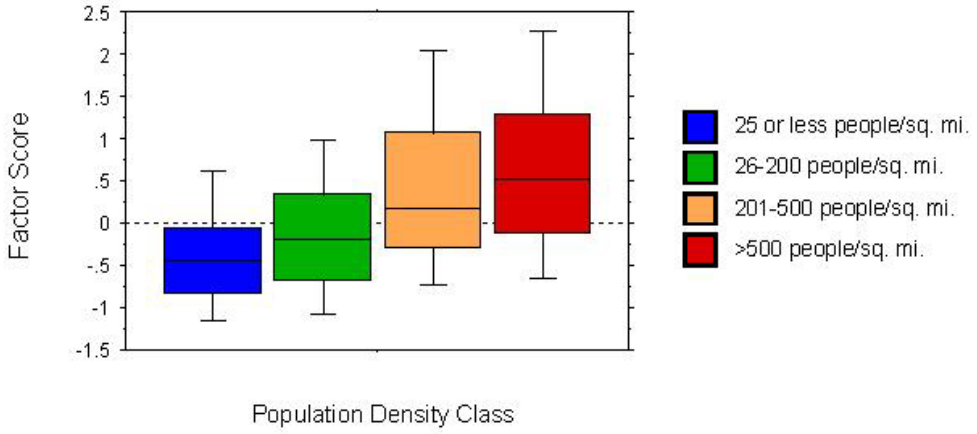

Values of Major Element Factor 2 [K_2O, Al_2O3], by Bedrock Lithology in New England
Factor Score
4
3
2
1
0
-1
-2
-3
Lithology Group
Alkali Granite
Avalon Granite
Basalt
Calcpelite
Carbonate Rocks
Felsic Volcanics
Granite, other
Grenville Granite
Mafic Rocks
Mesozoic Basin Sed.
Metamorphic Rocks Un.
Narragansett Basin Sed.
Peraluminous Granite
Sulfidic Schists
Ultramafic Rocks
Unconsolidated Sed.


Values of Major Element Factor 3 [Na2O, CaO], by Bedrock Lithology in New England
Factor Score
2
1.5
1
.5
0
-.5
-1
1.5
-2
2.5
-3
Lithology Group
Alkali Granite
Avalon Granite
Basalt
Calcpelite
Carbonate Rocks
Felsic Volcanics
Granite, other
Grenville Granite
Mafic Rocks
Mesozoic Basin Sed.
Metamorphic Rocks Un.
Narragansett Basin Sed.
Peraluminous Granite
Sulfidic Schists
Ultramafic Rocks
Unconsolidated Sed.

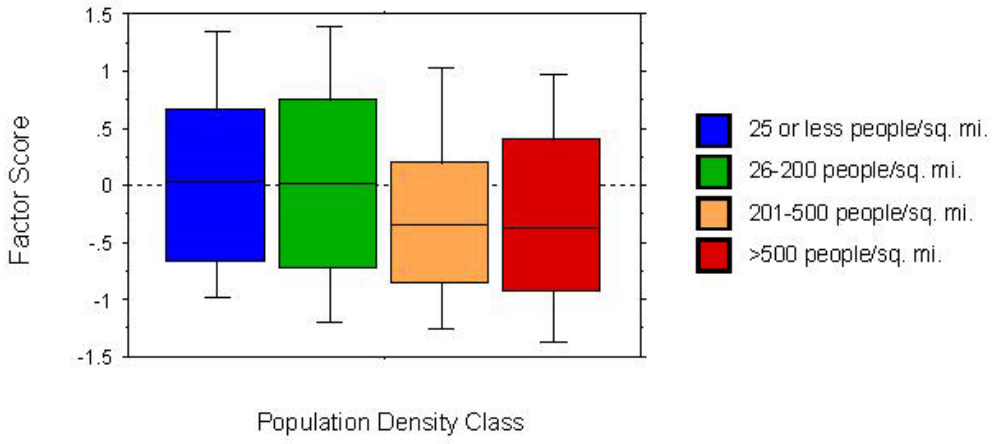
Values of Metal Factor 1 [Fe_2O_3, Cu, Zn], by Population Density in New England



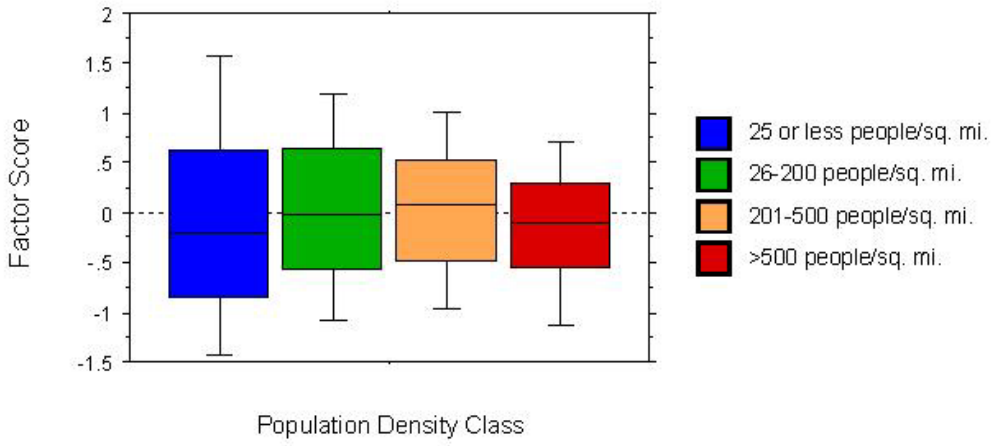
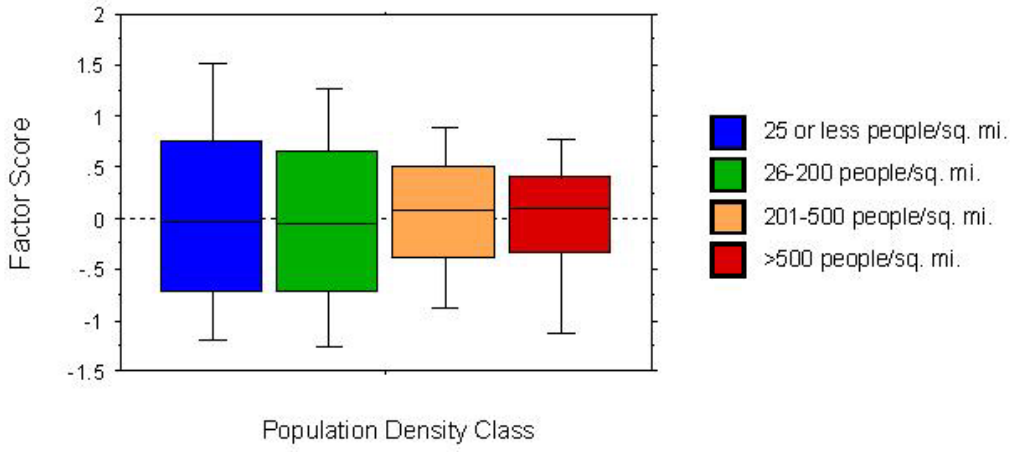
Values of Metal Factor 2 [As, Pb], by Population Density in New England



Values of Major Element Factor 1 [Fe_2O_3, MgO, CaO], by Population Density in New England



Values of Major Element Factor 2 [K_2O, Al_2O_3], by Population Density in New England



Values of Major Element Factor 3 [Na_2O, CaO], by Population Density in New England