Appendix D-2

Area of Influence and HYSPLIT Graphics for VISTAS and Nearby Class I Areas

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Brigantine Wilderness Area

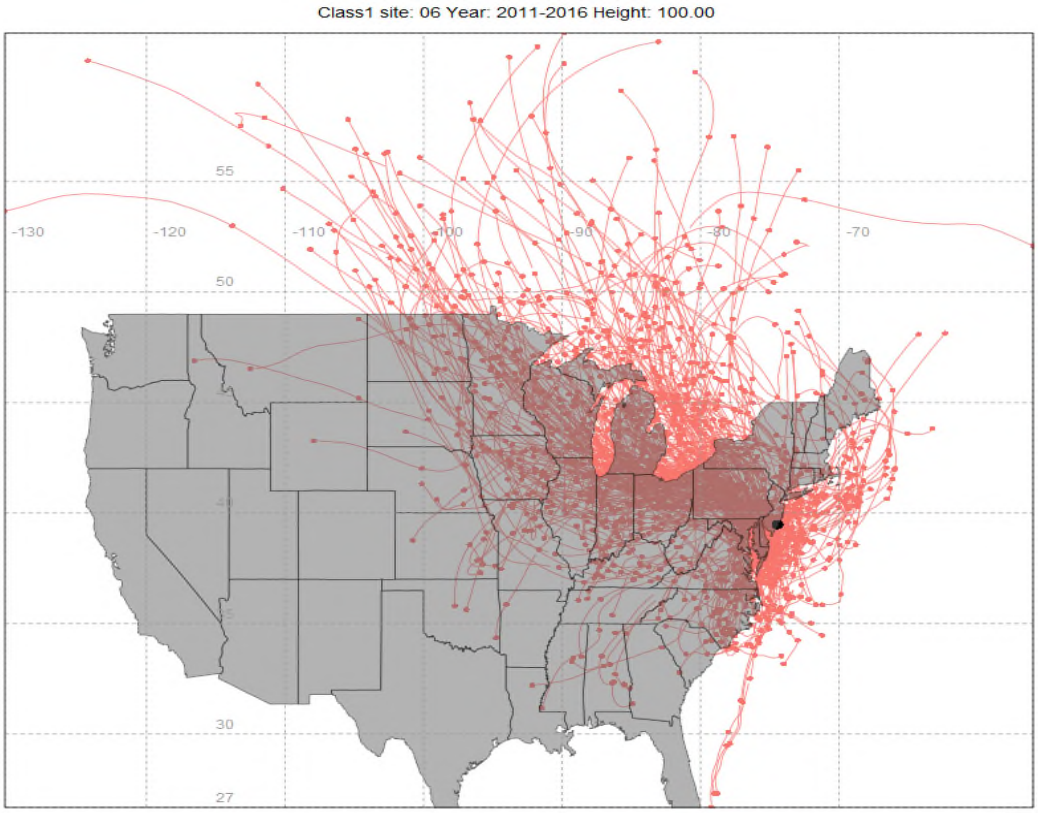


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Brigantine Wilderness Area

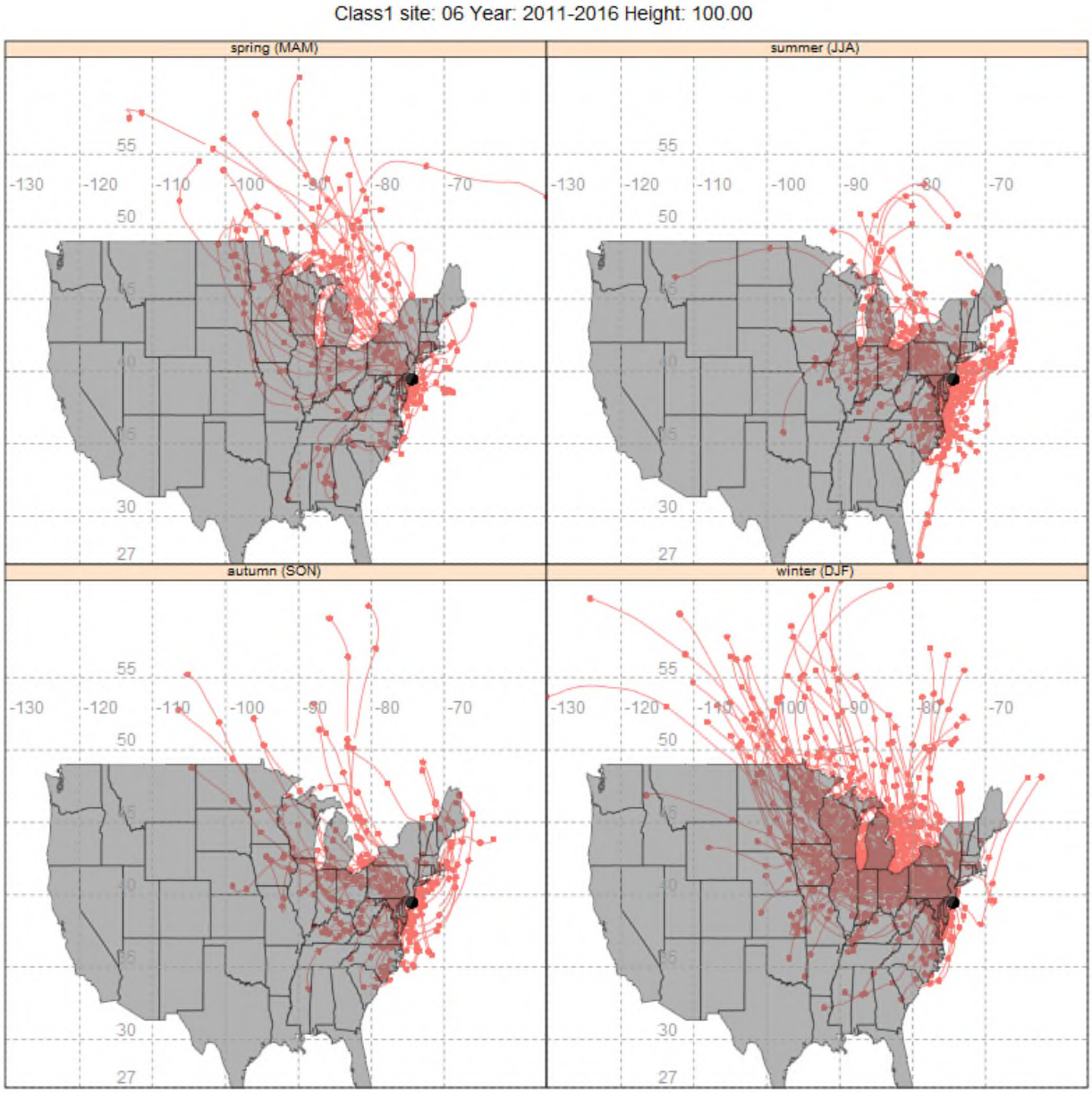


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Brigantine Wilderness Area

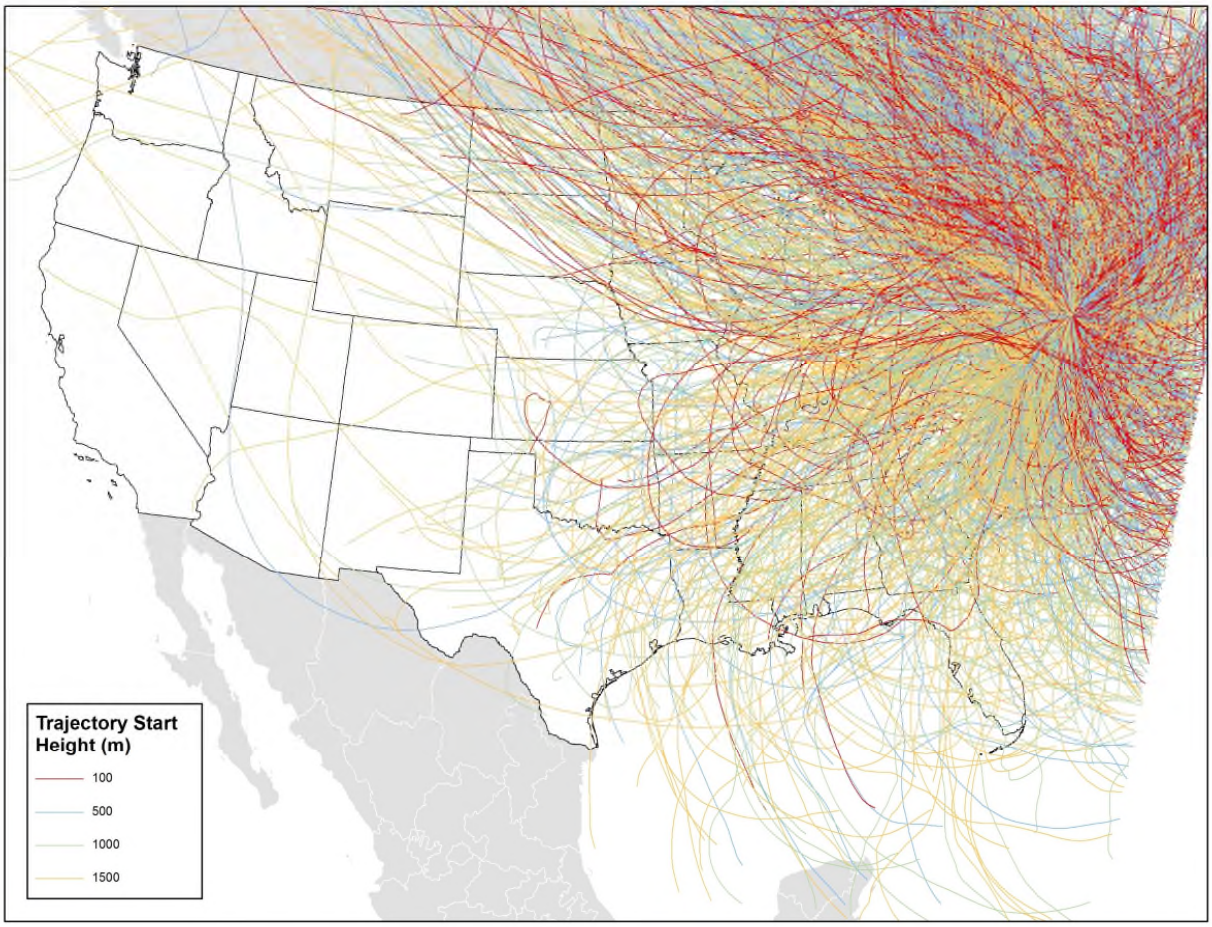


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Brigantine Wilderness Area

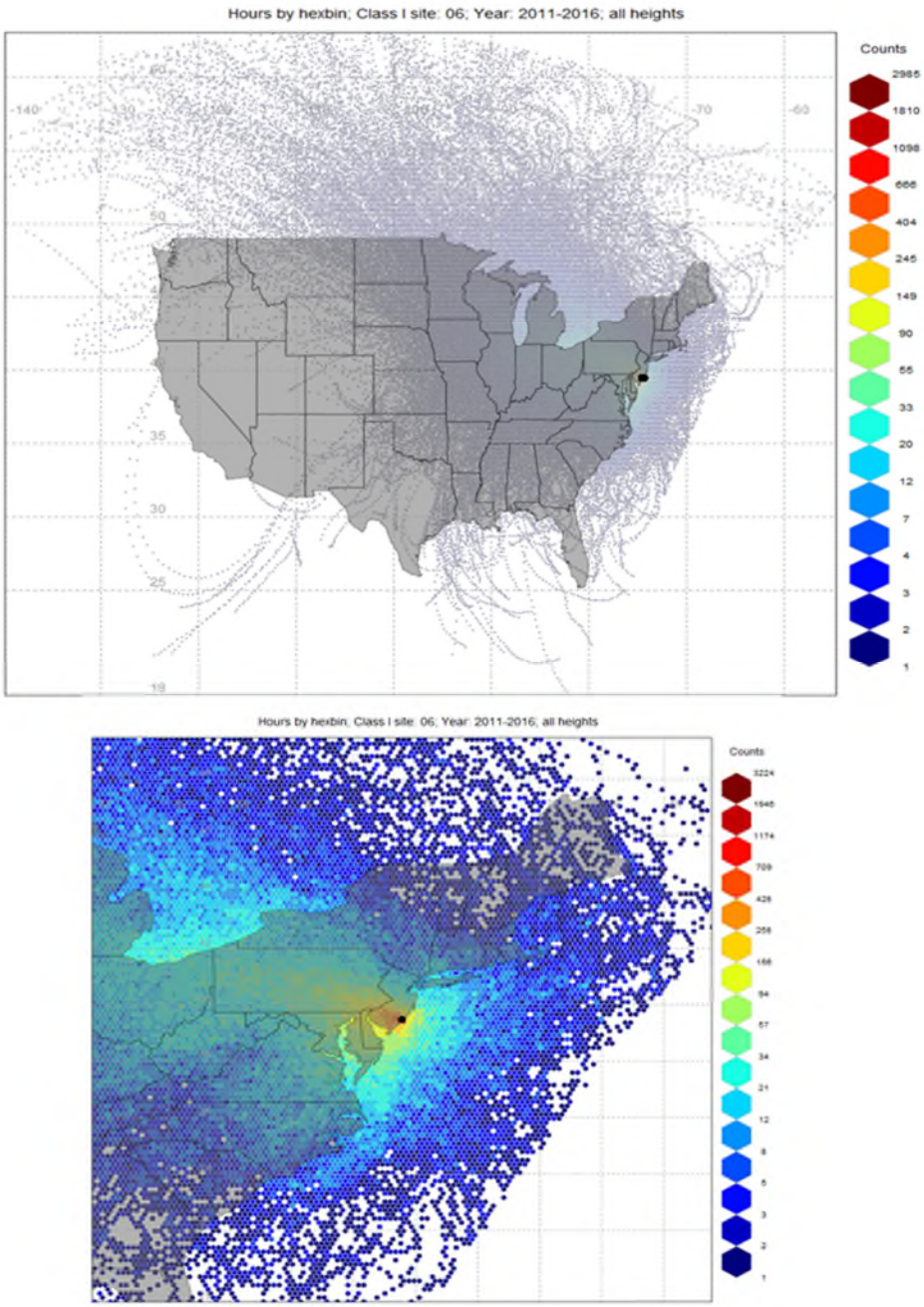


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

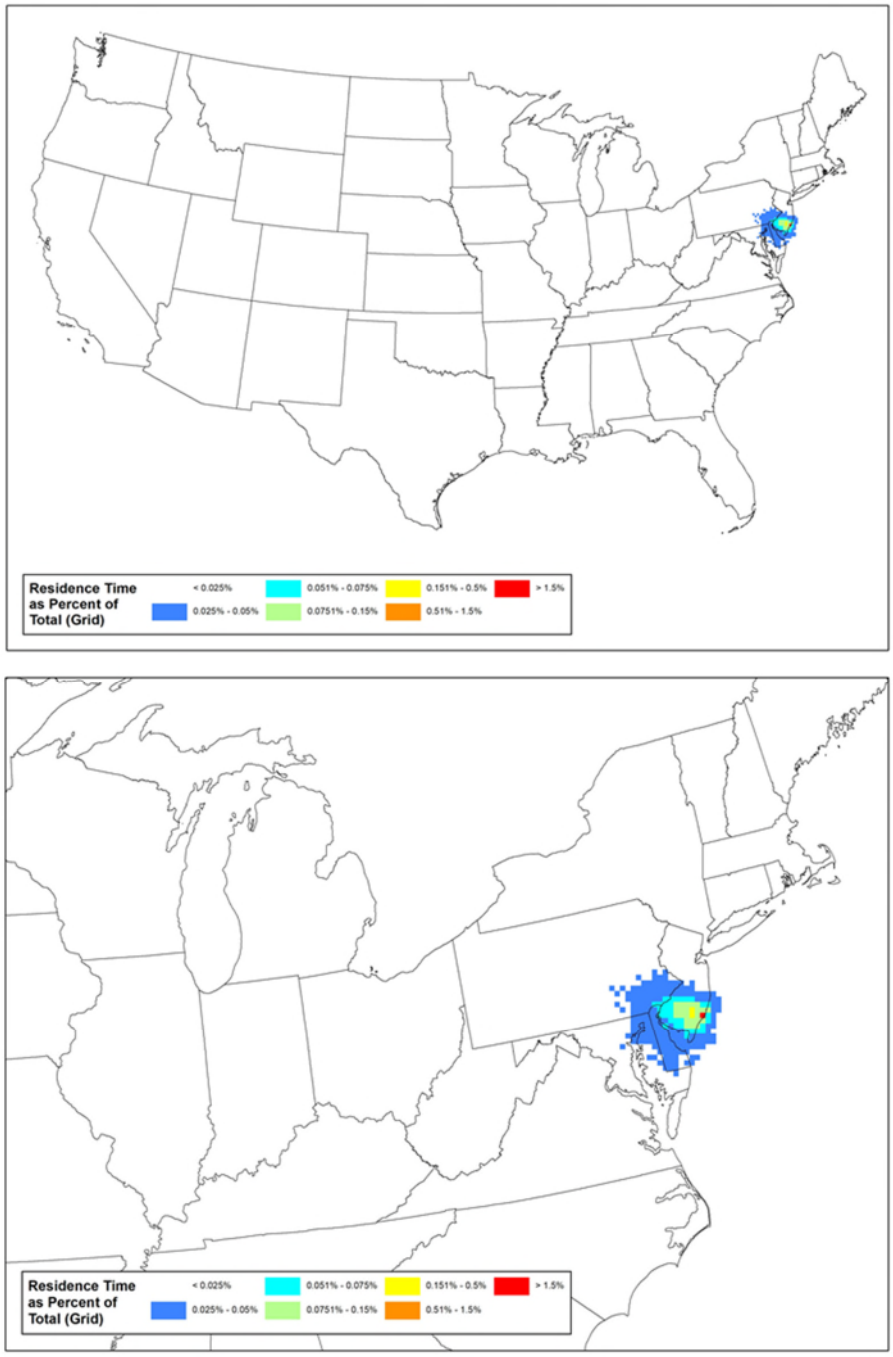


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

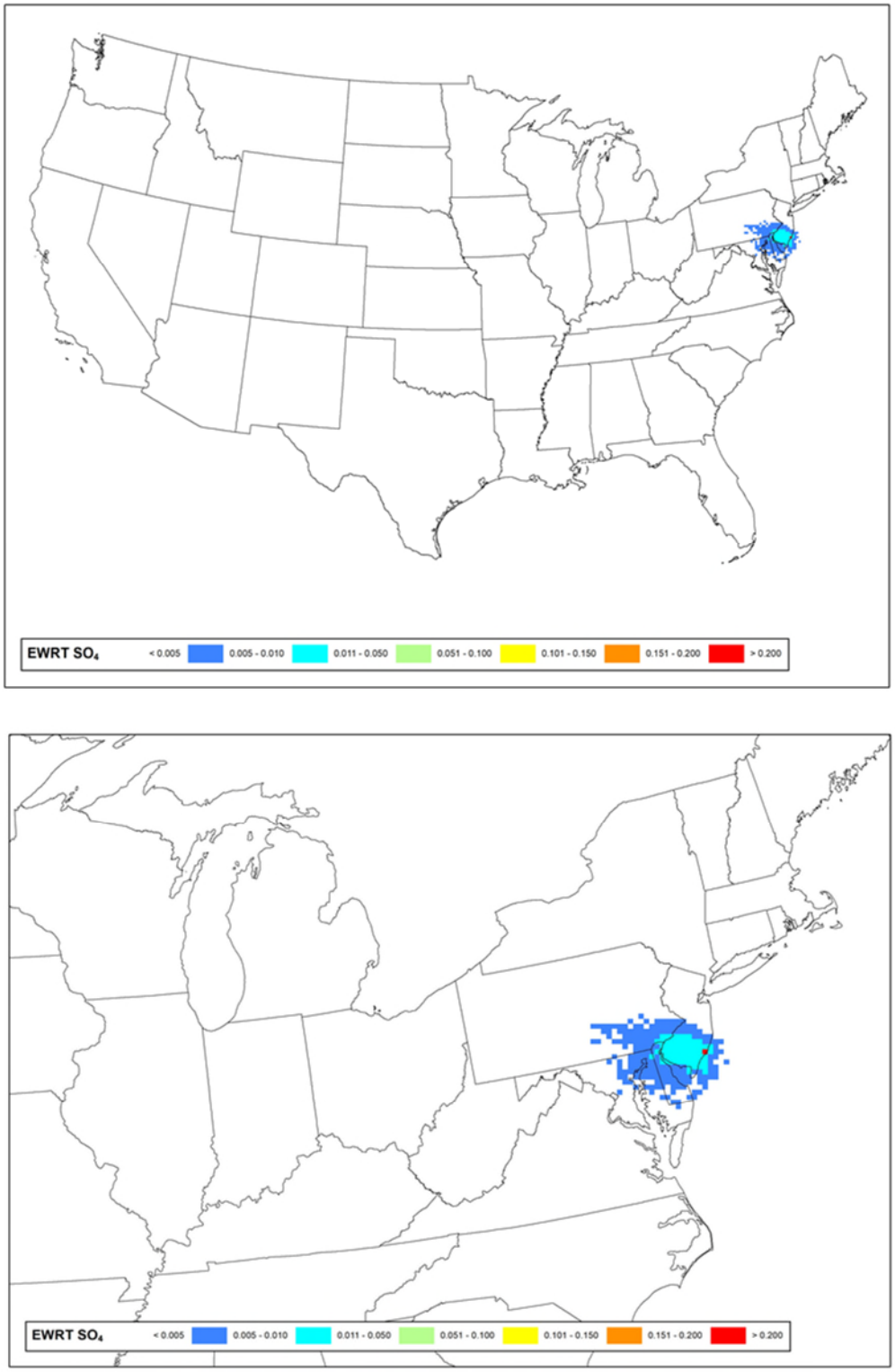


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area - Full View (top) and Class I Zoom (bottom)

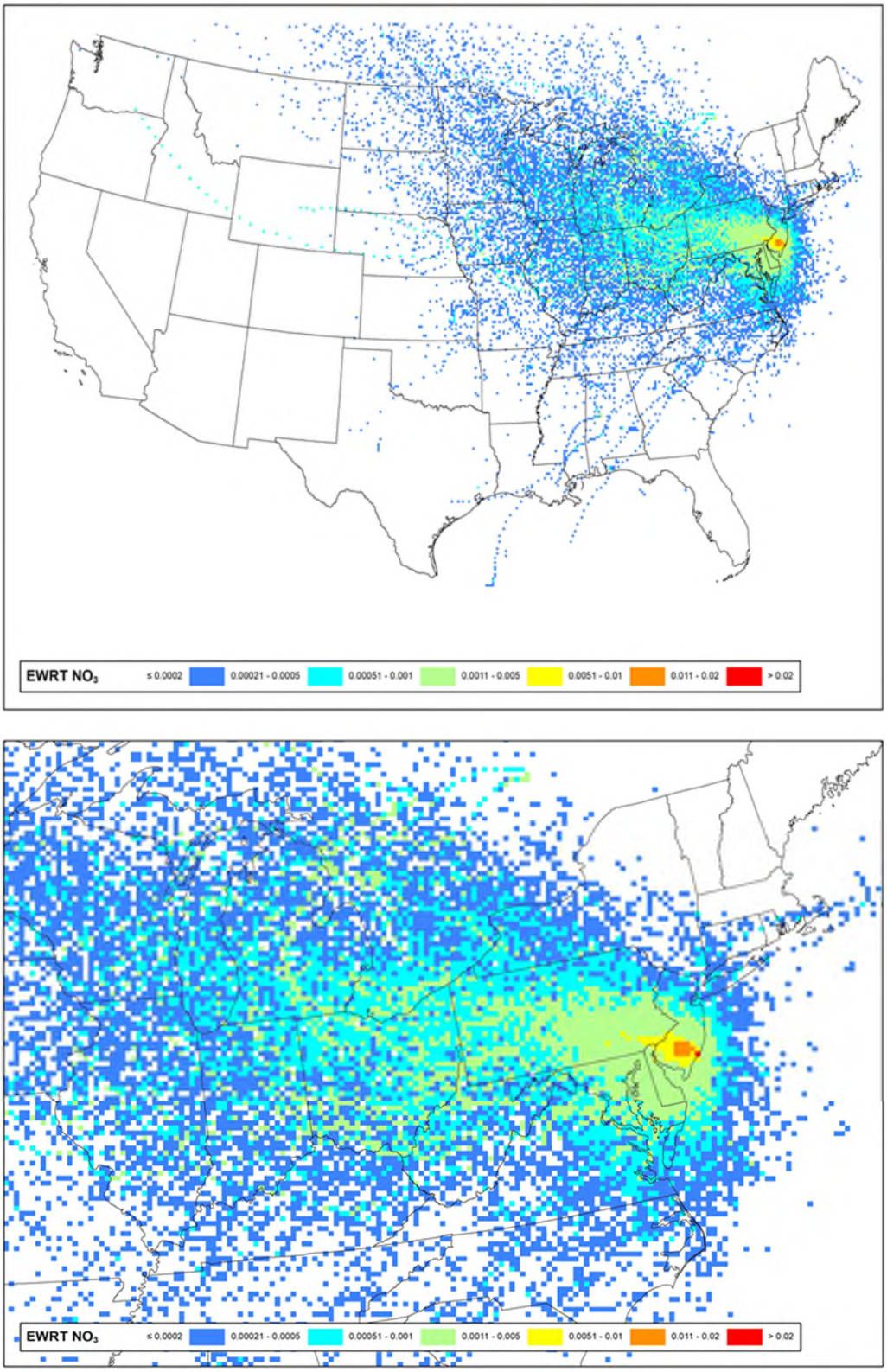


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Brigantine Wilderness Area - Full View (top) and Class I Zoom (bottom)

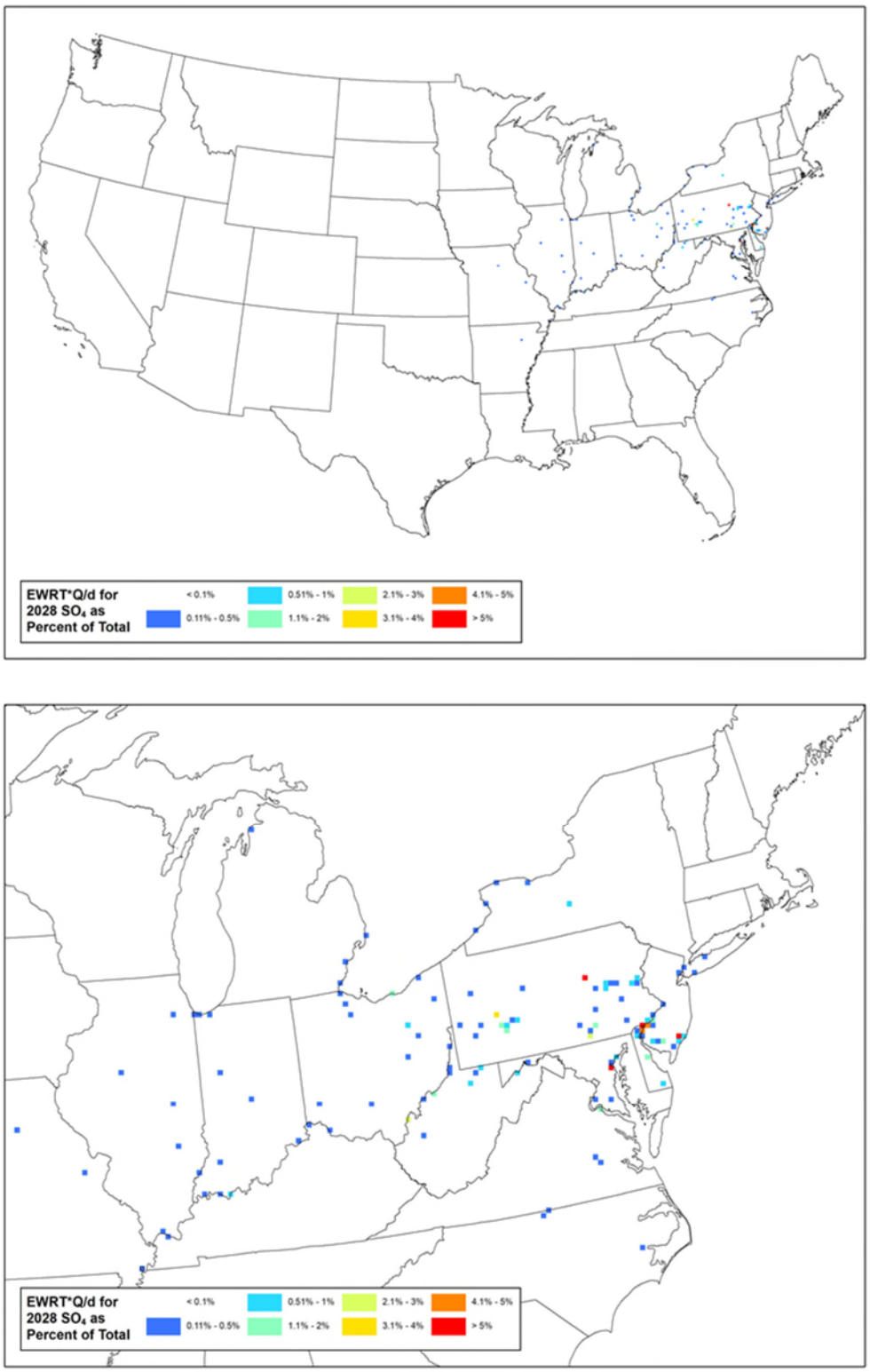


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

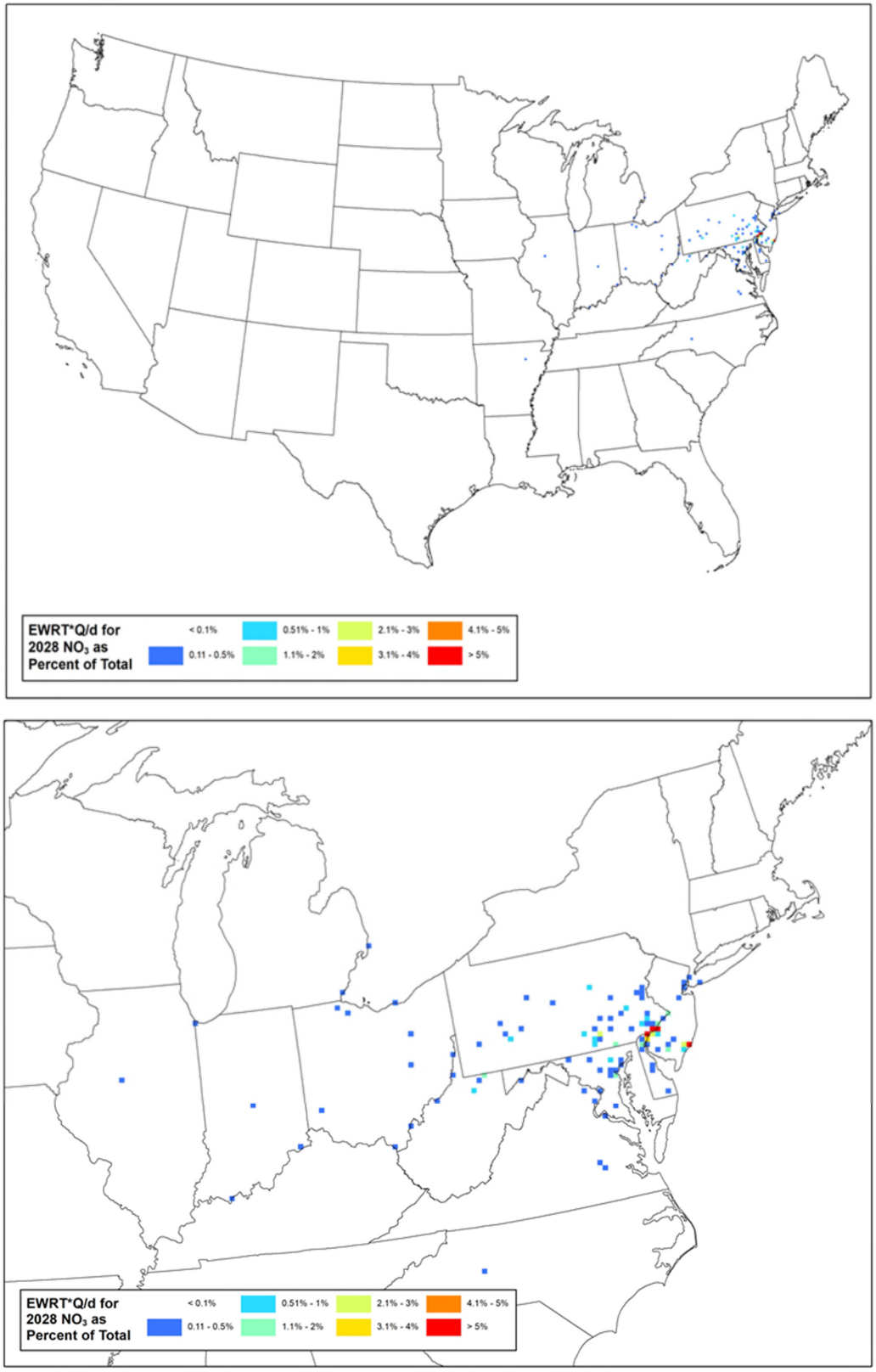


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

Breton Wilderness Area

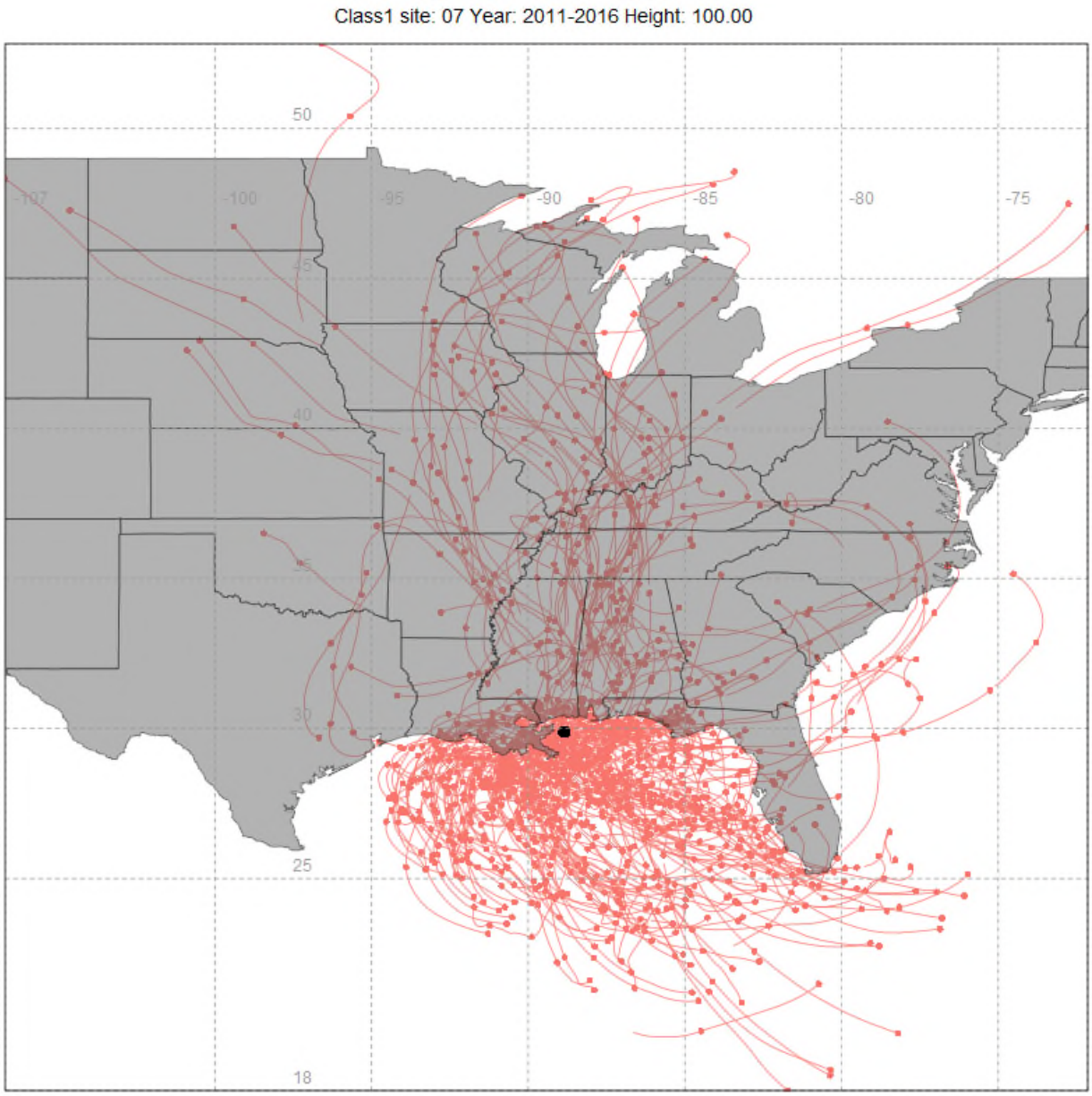


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Breton Wilderness Area

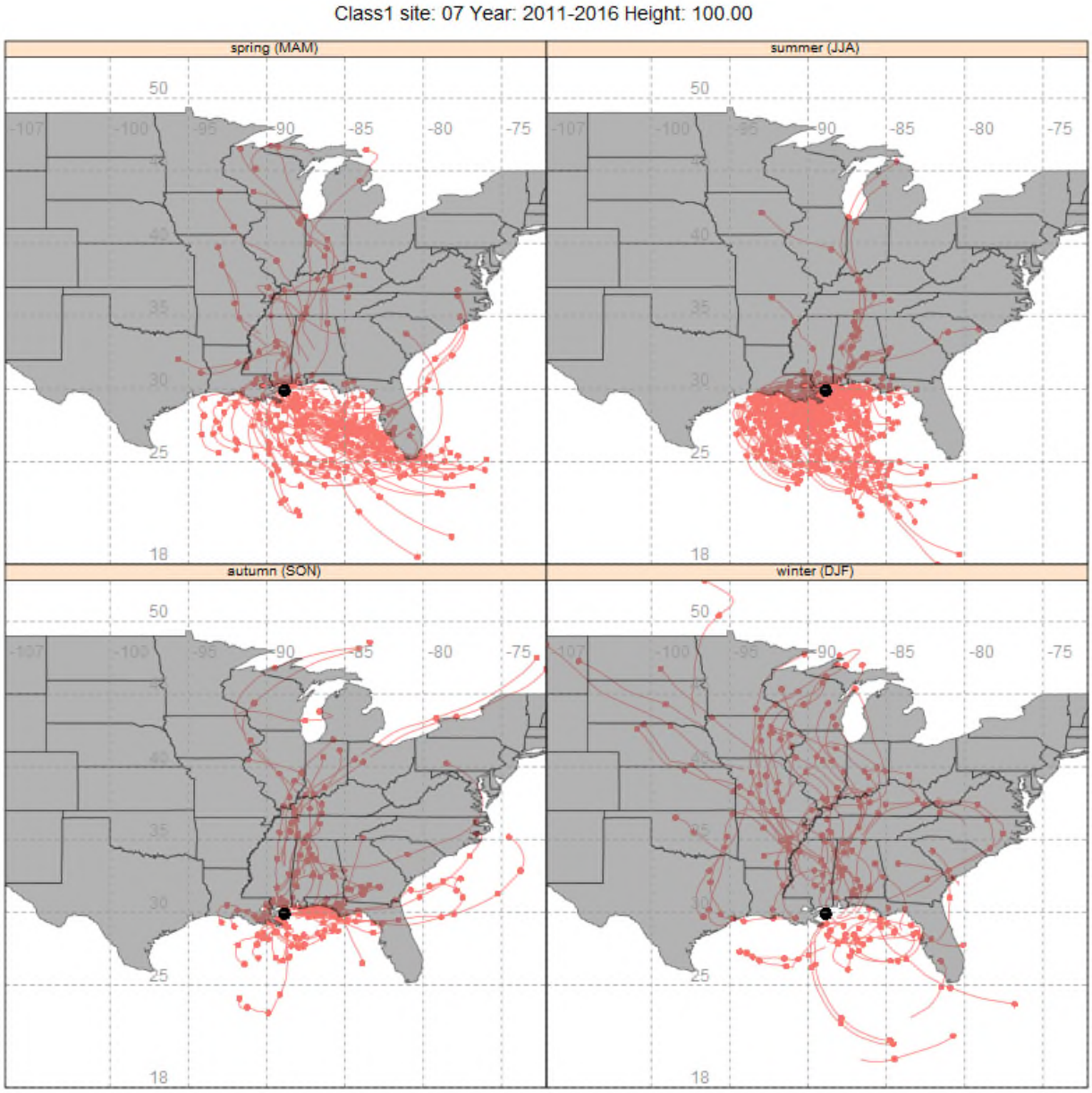


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Breton Wilderness Area

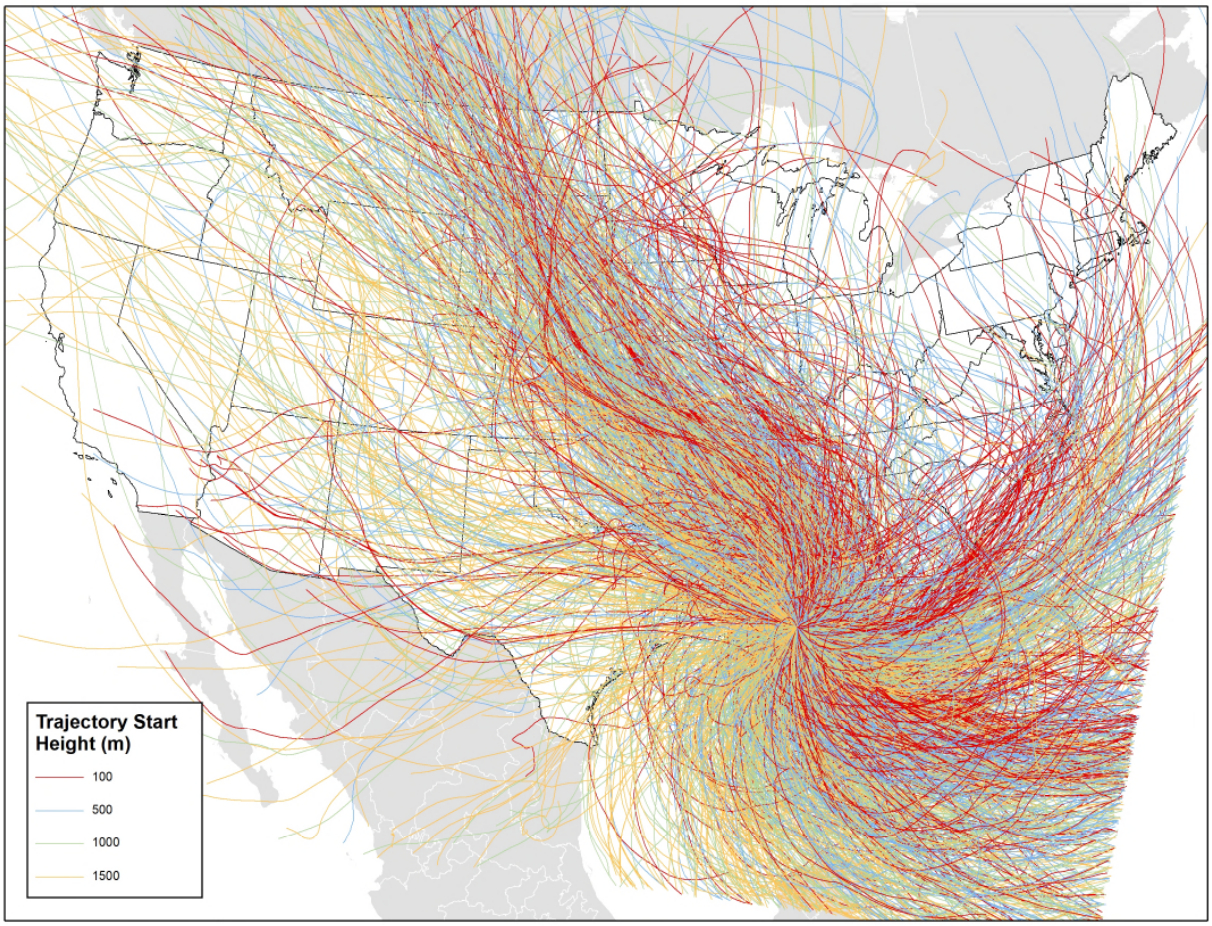
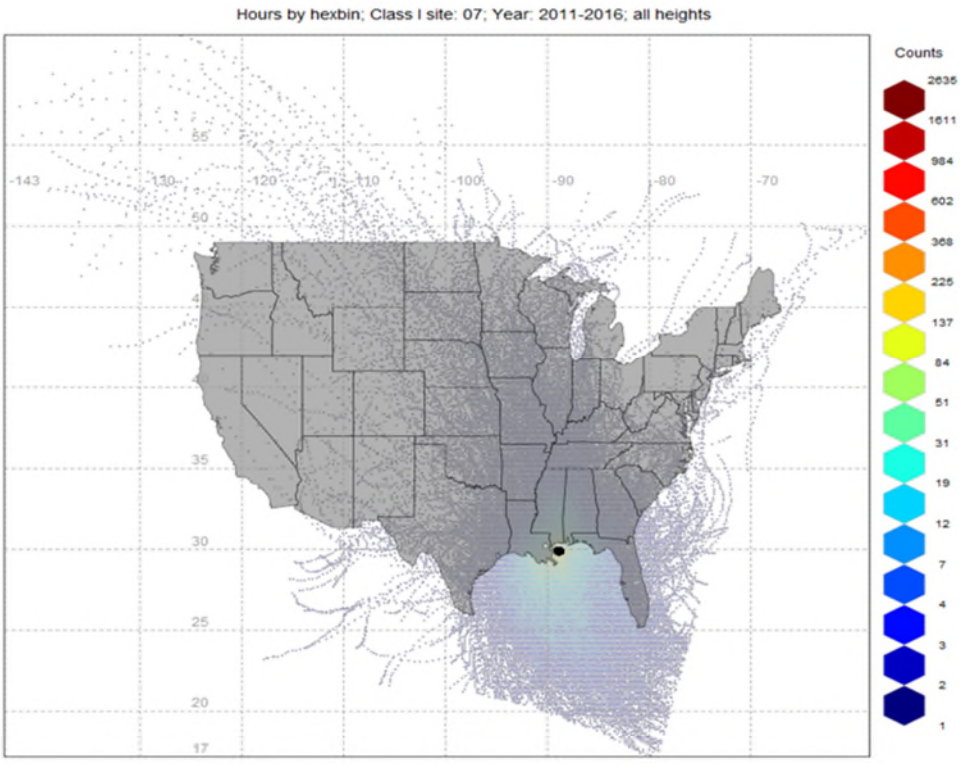


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Breton Wilderness Area



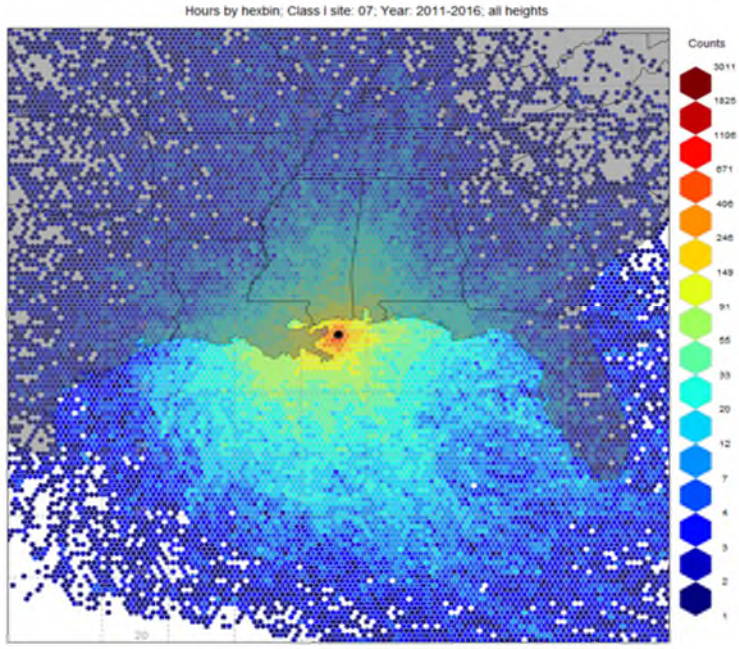
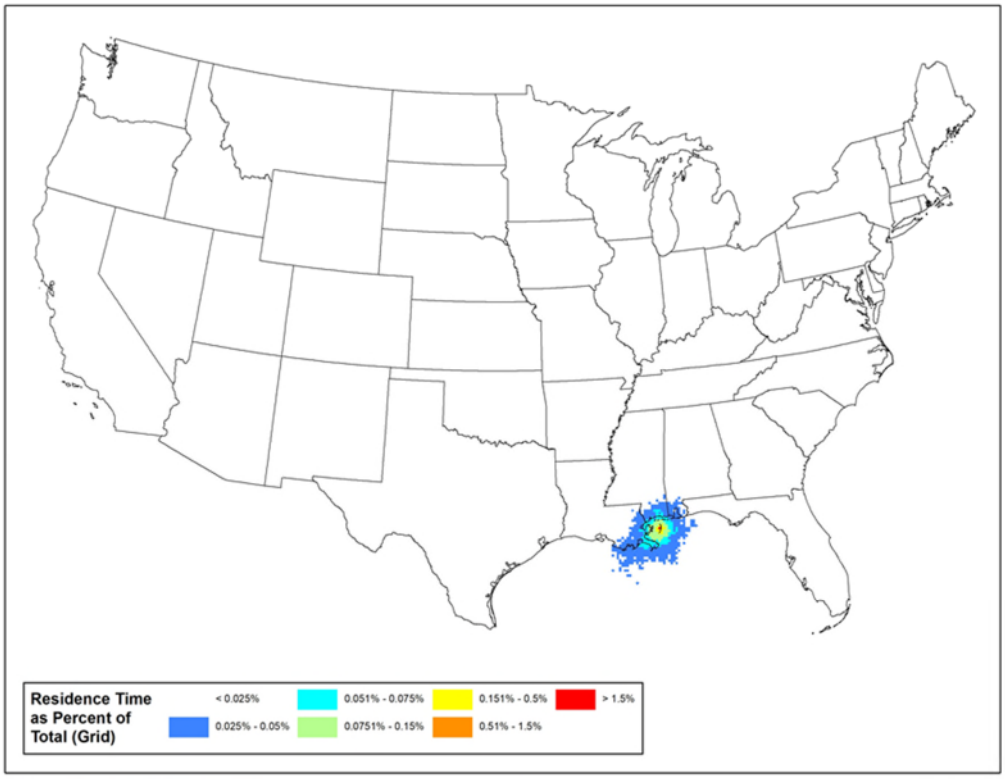


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)



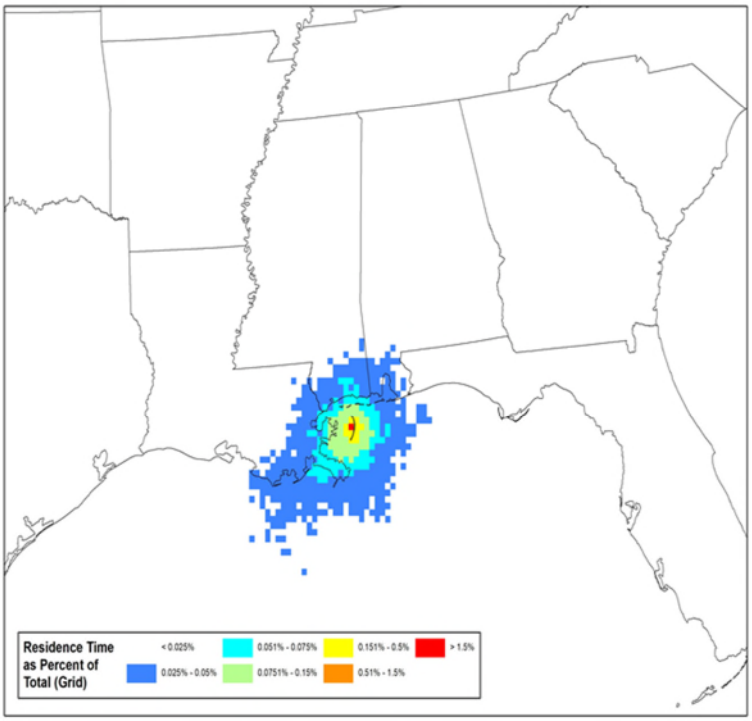
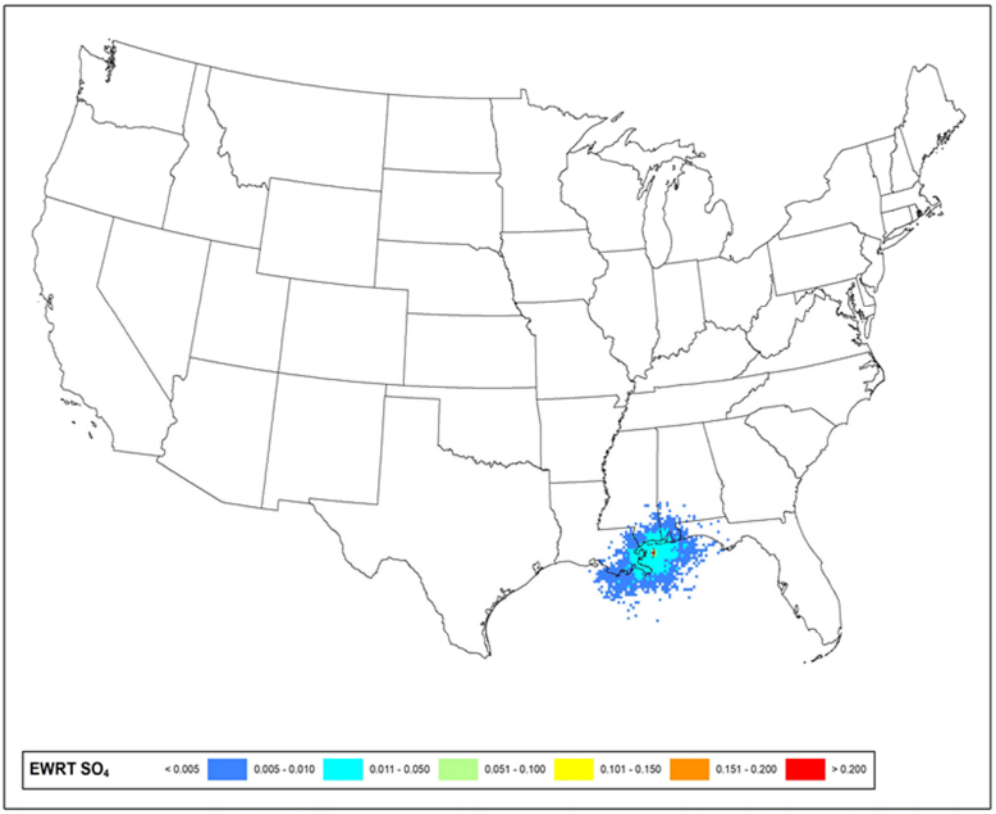


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)



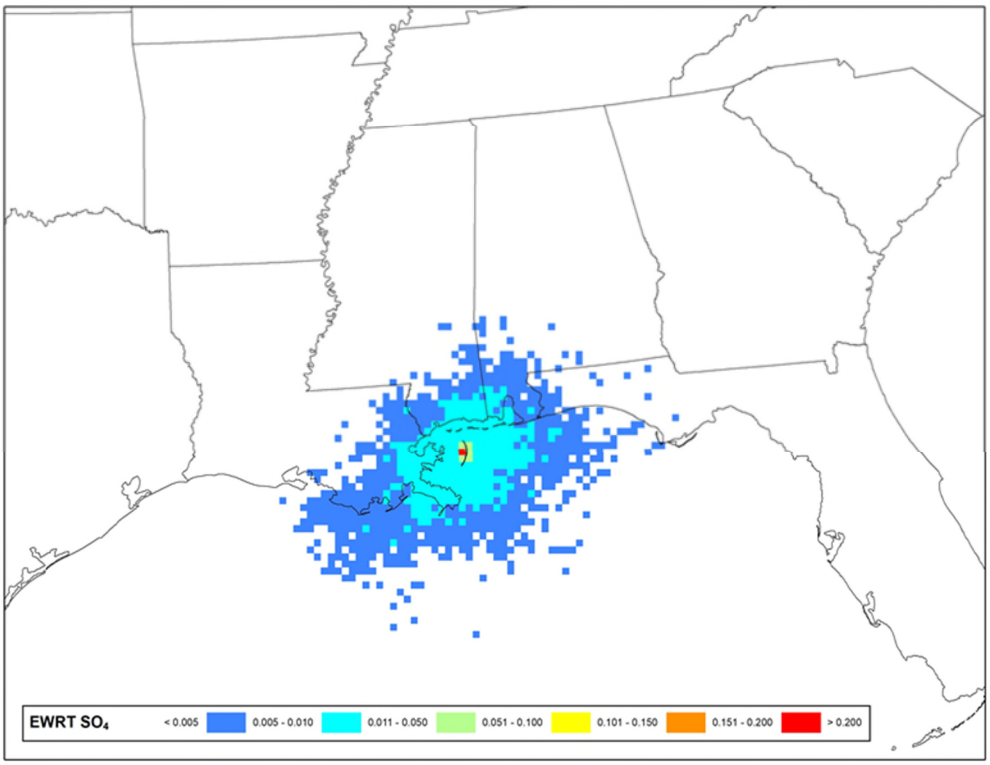
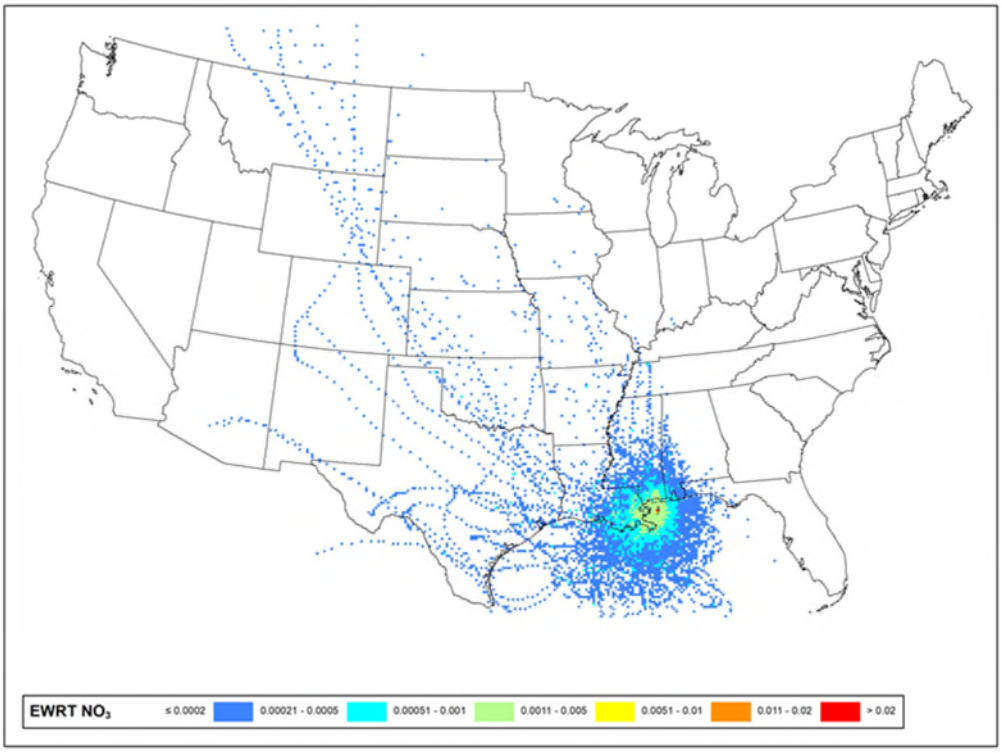


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area - Full View (top) and Class I Zoom (bottom)



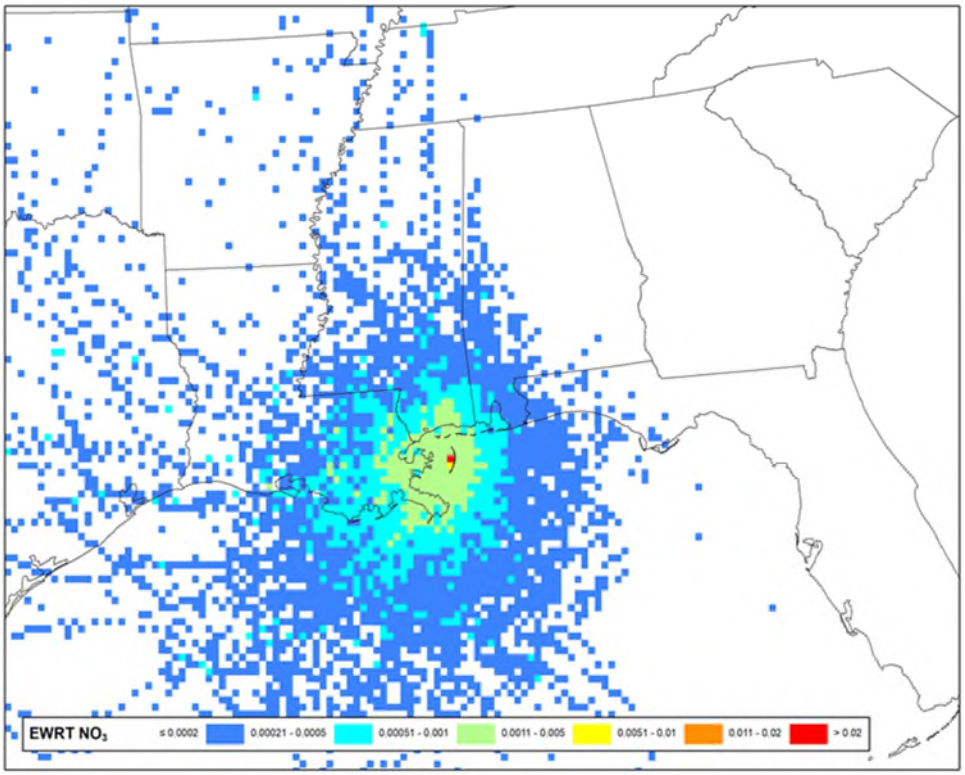
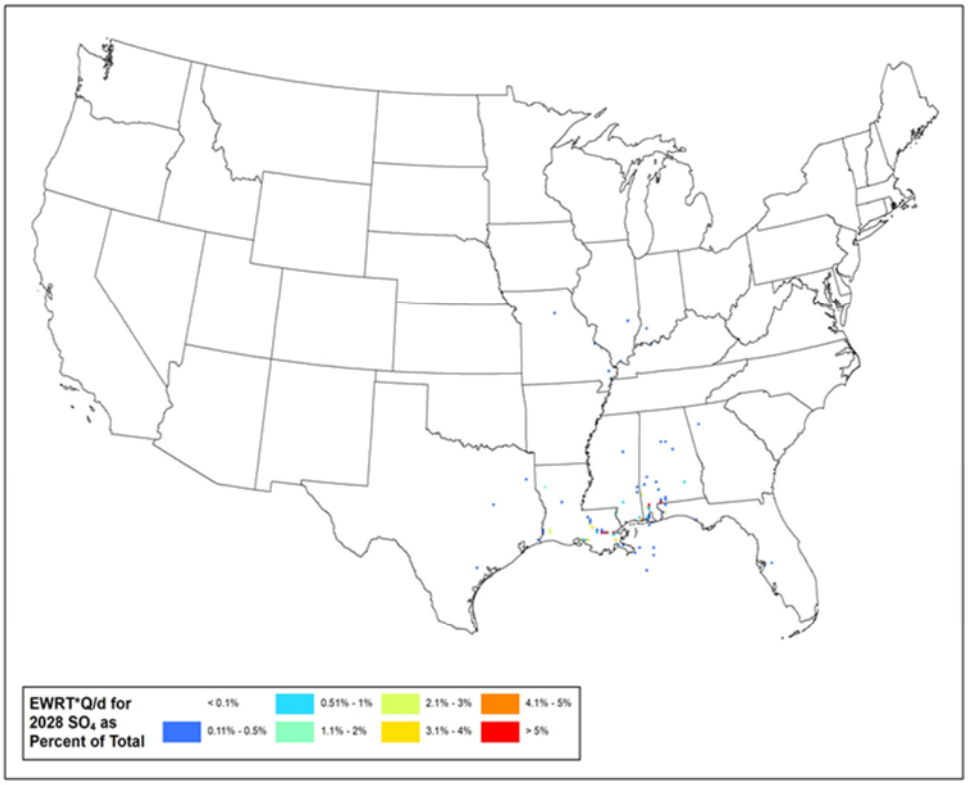


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Breton Wilderness Area - Full View (top) and Class I Zoom (bottom)



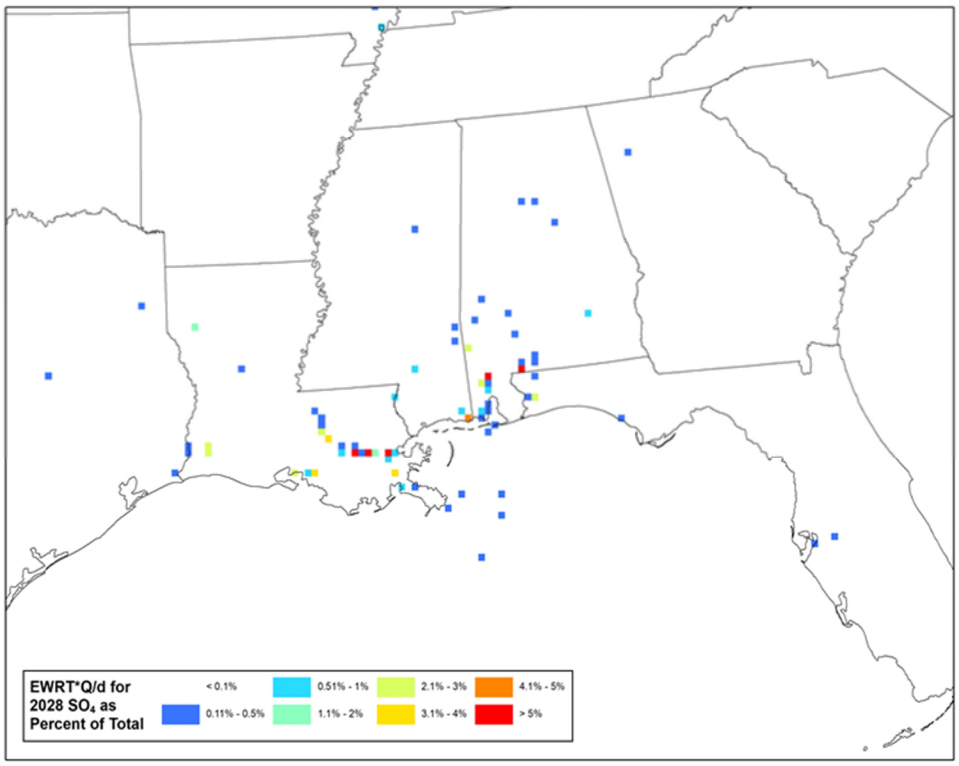


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

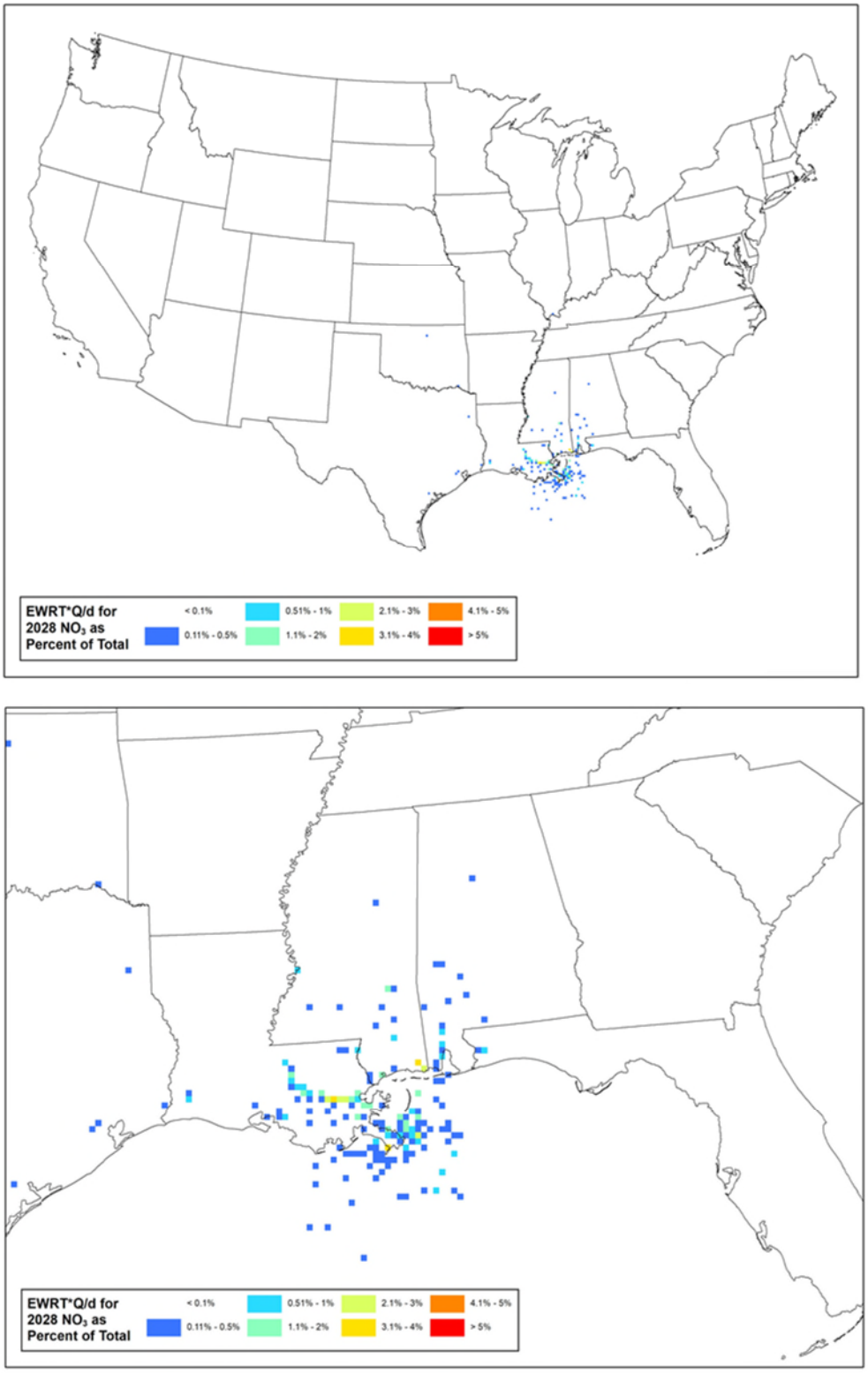


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

Caney Creek Wilderness Area

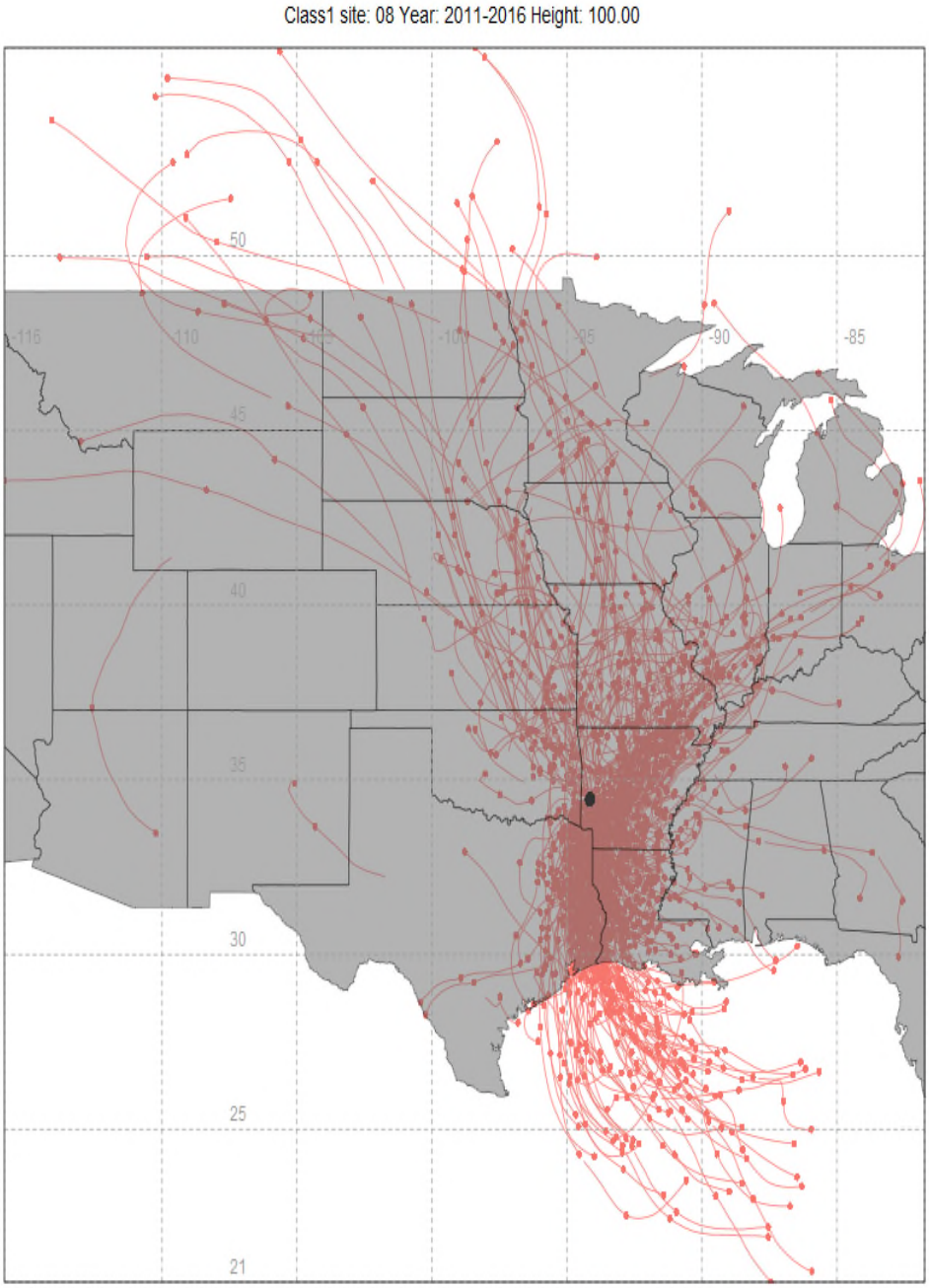


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Caney Creek Wilderness Area

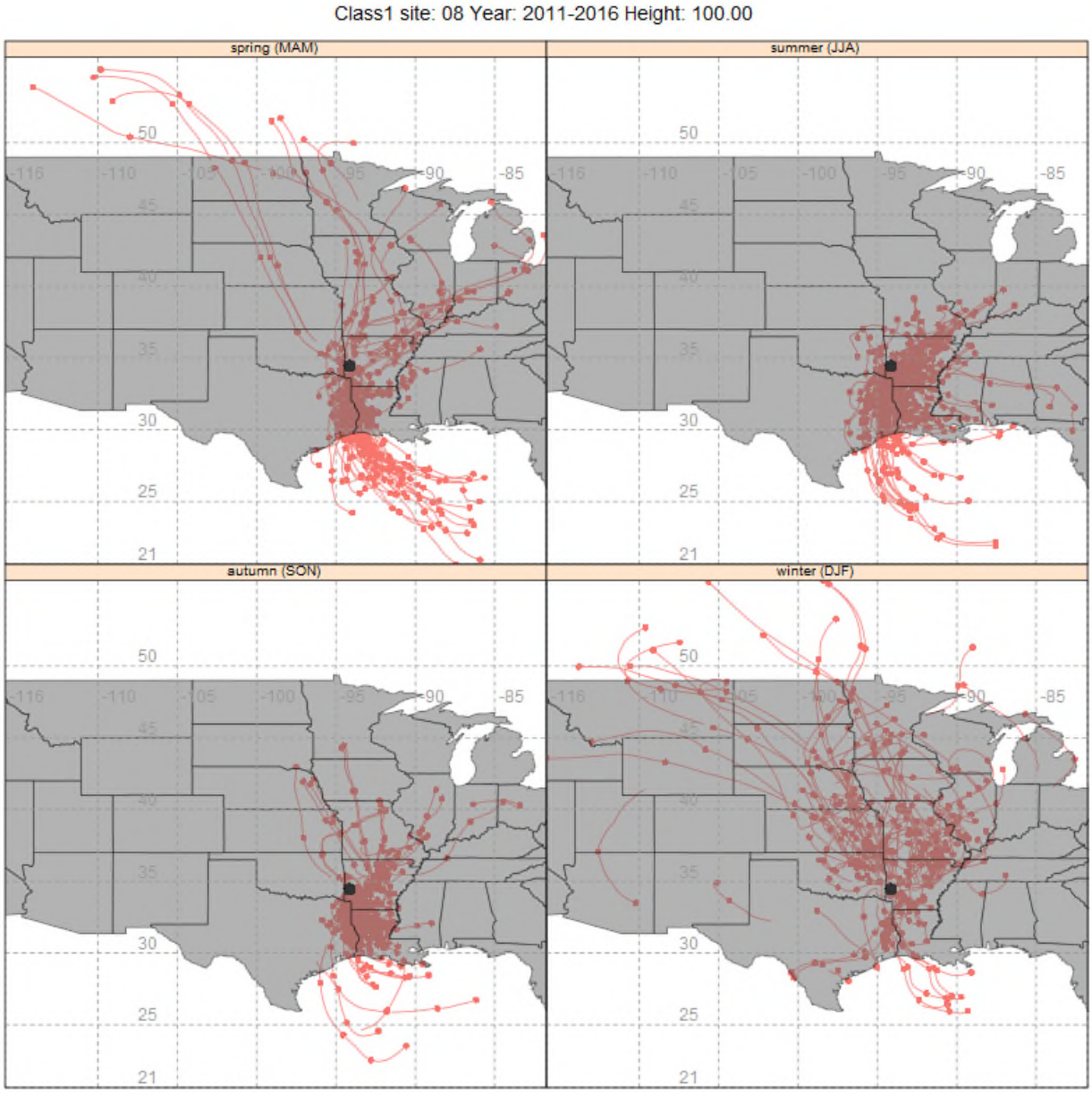


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Caney Creek Wilderness Area

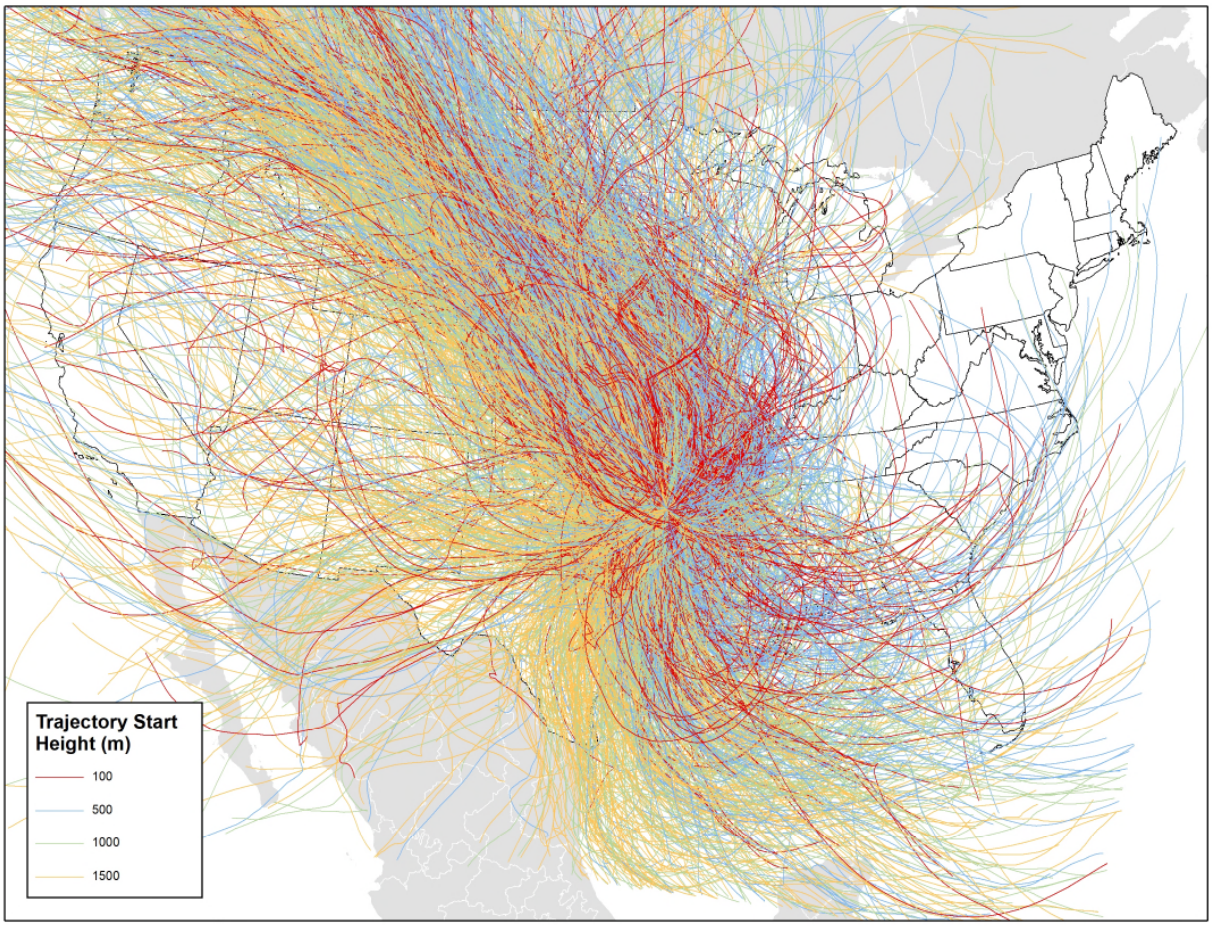
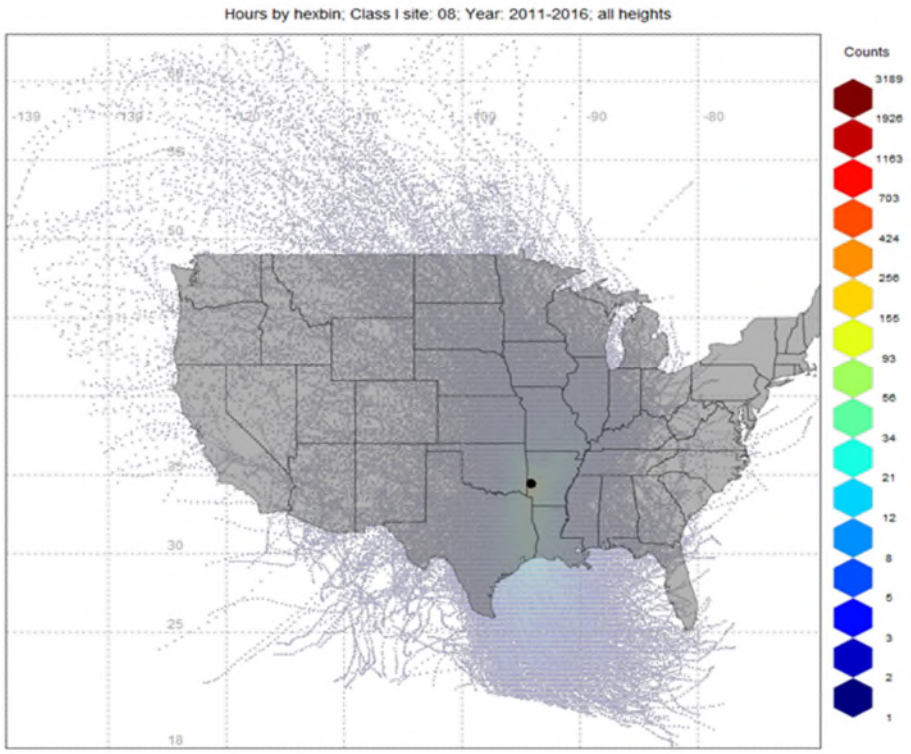


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Caney Creek Wilderness Area



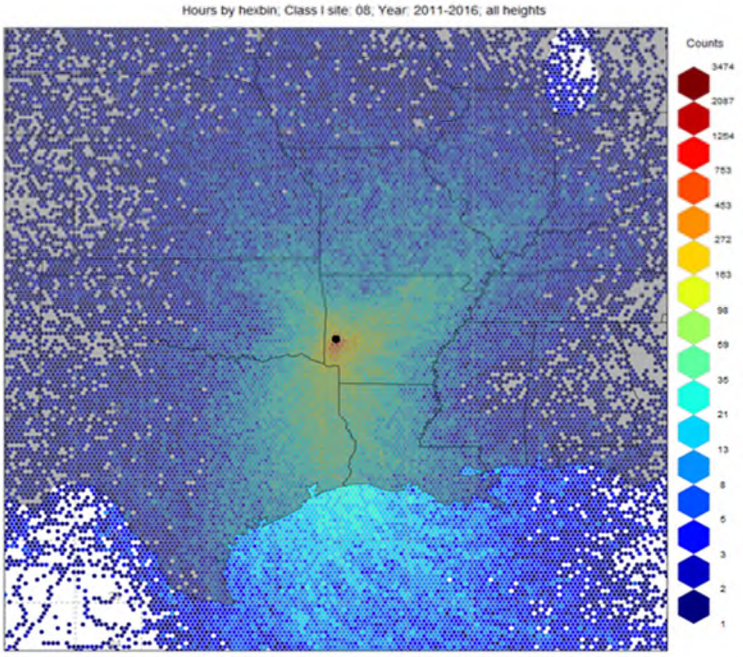


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

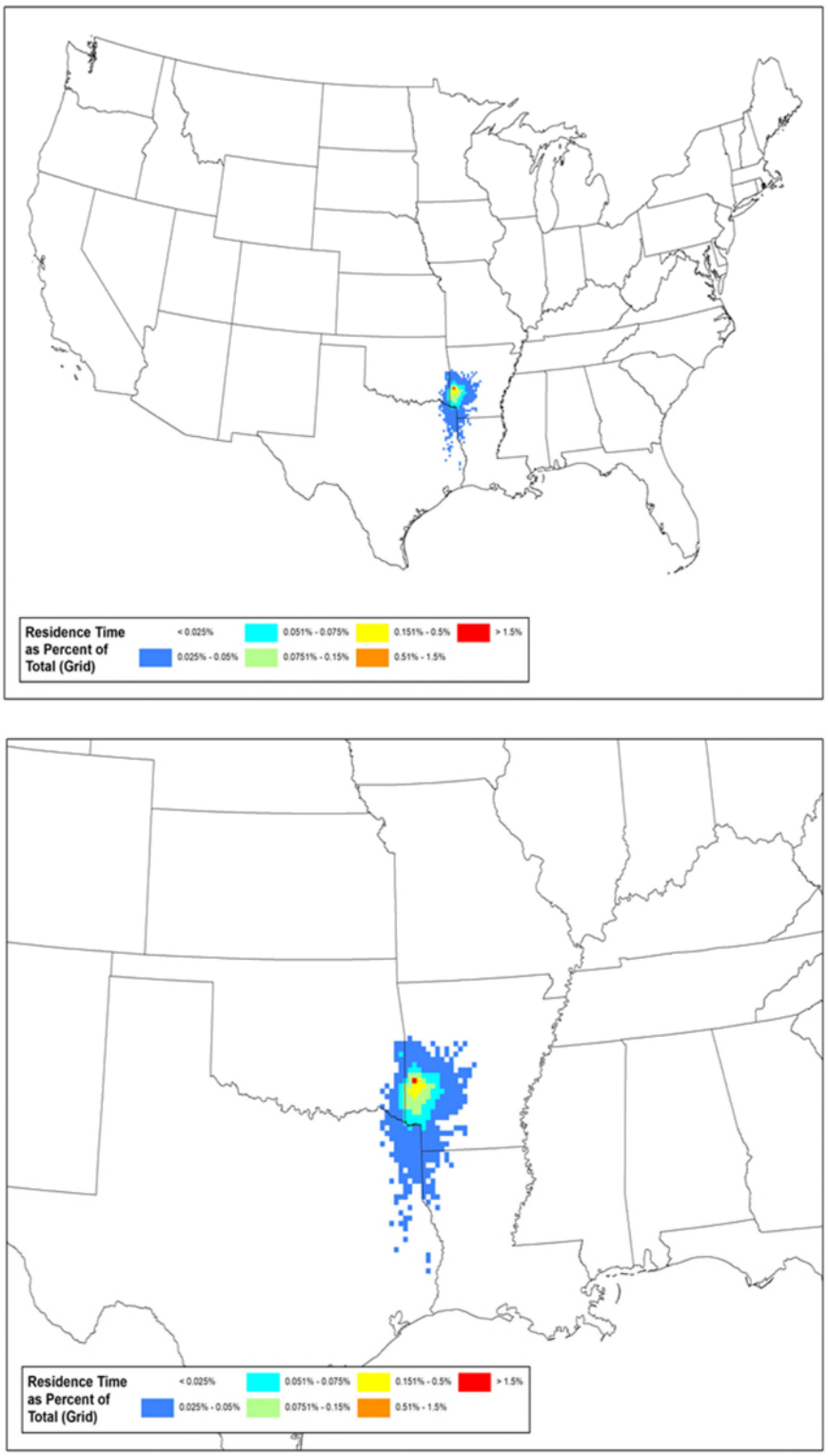


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

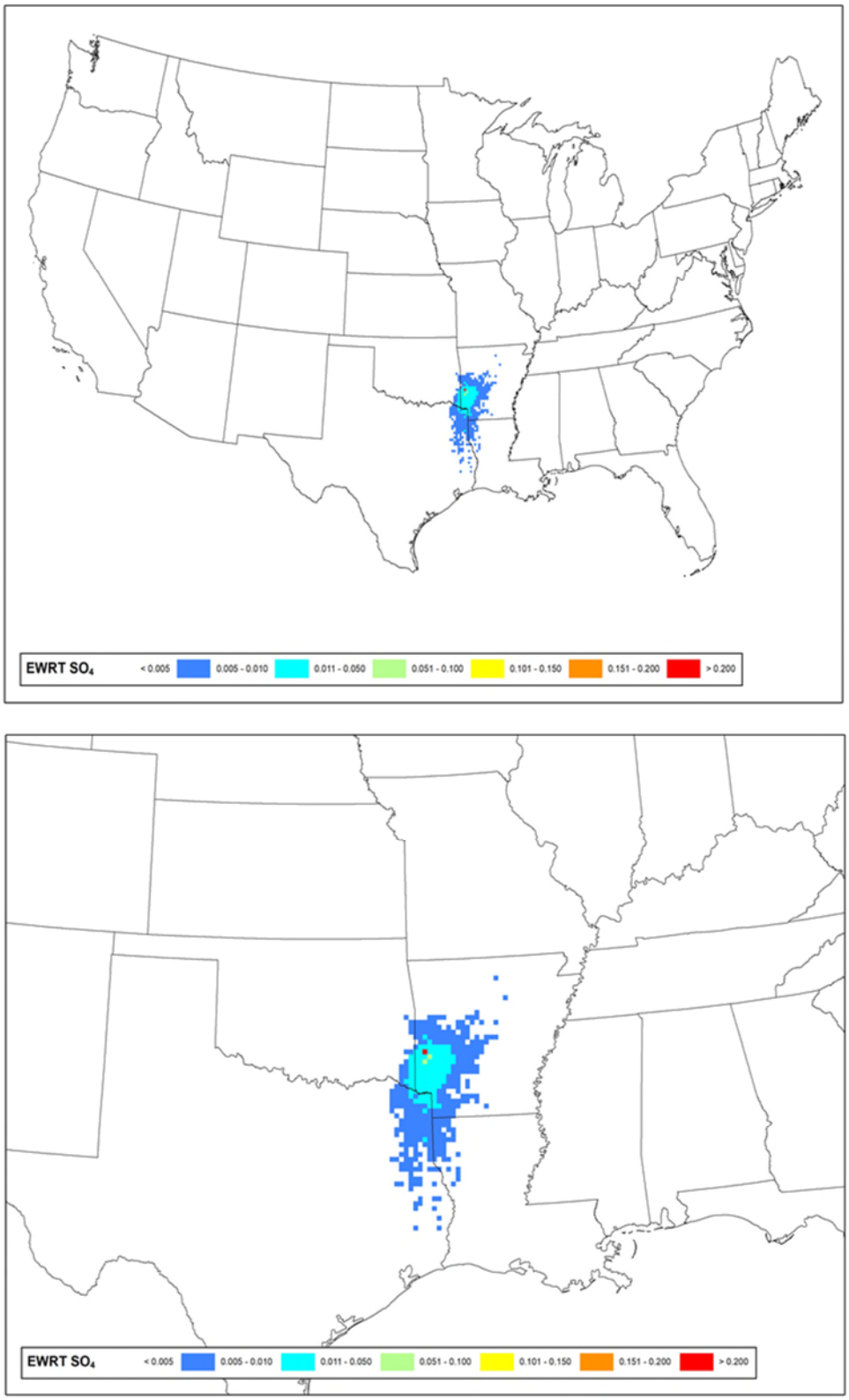


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

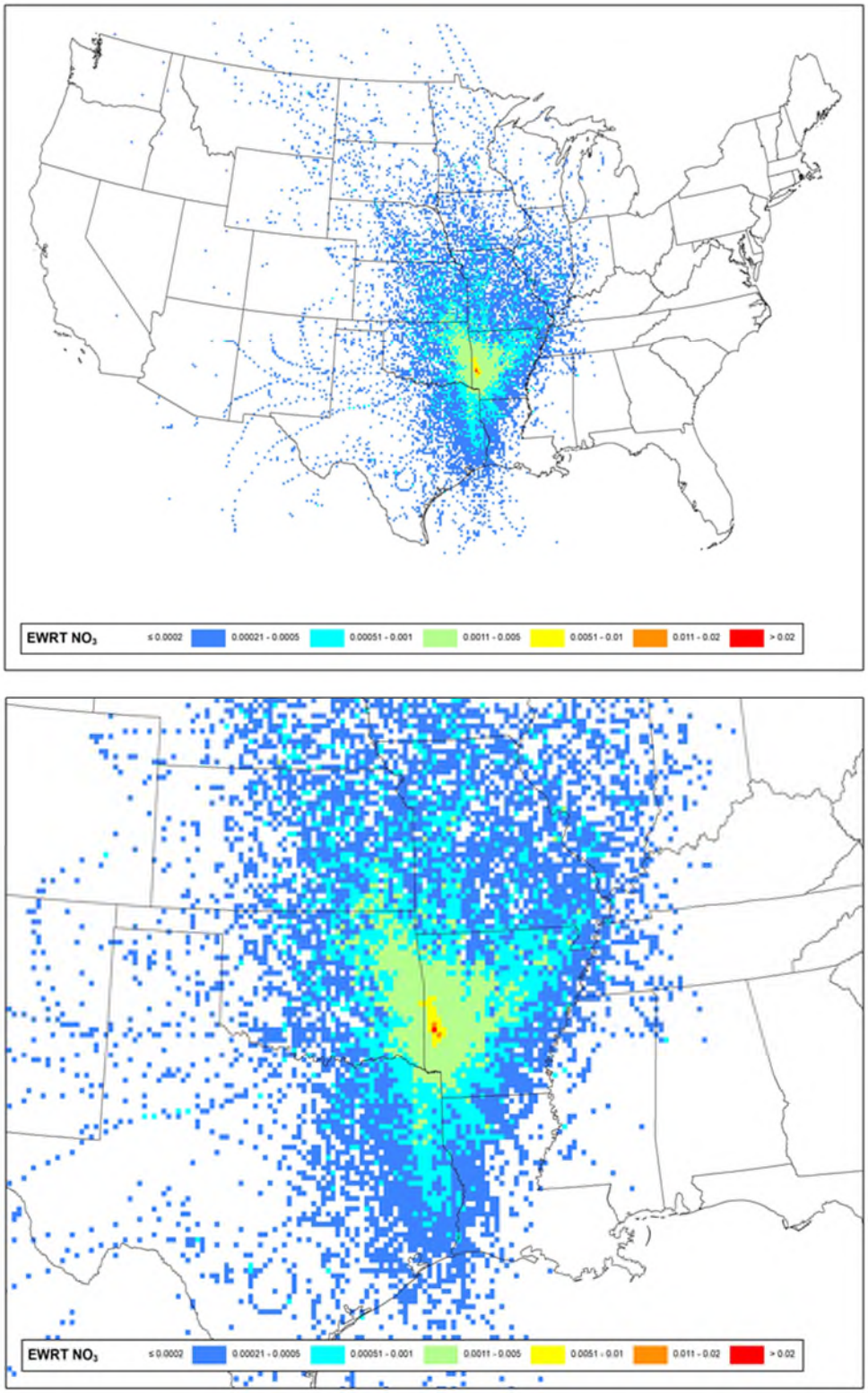


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Caney Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

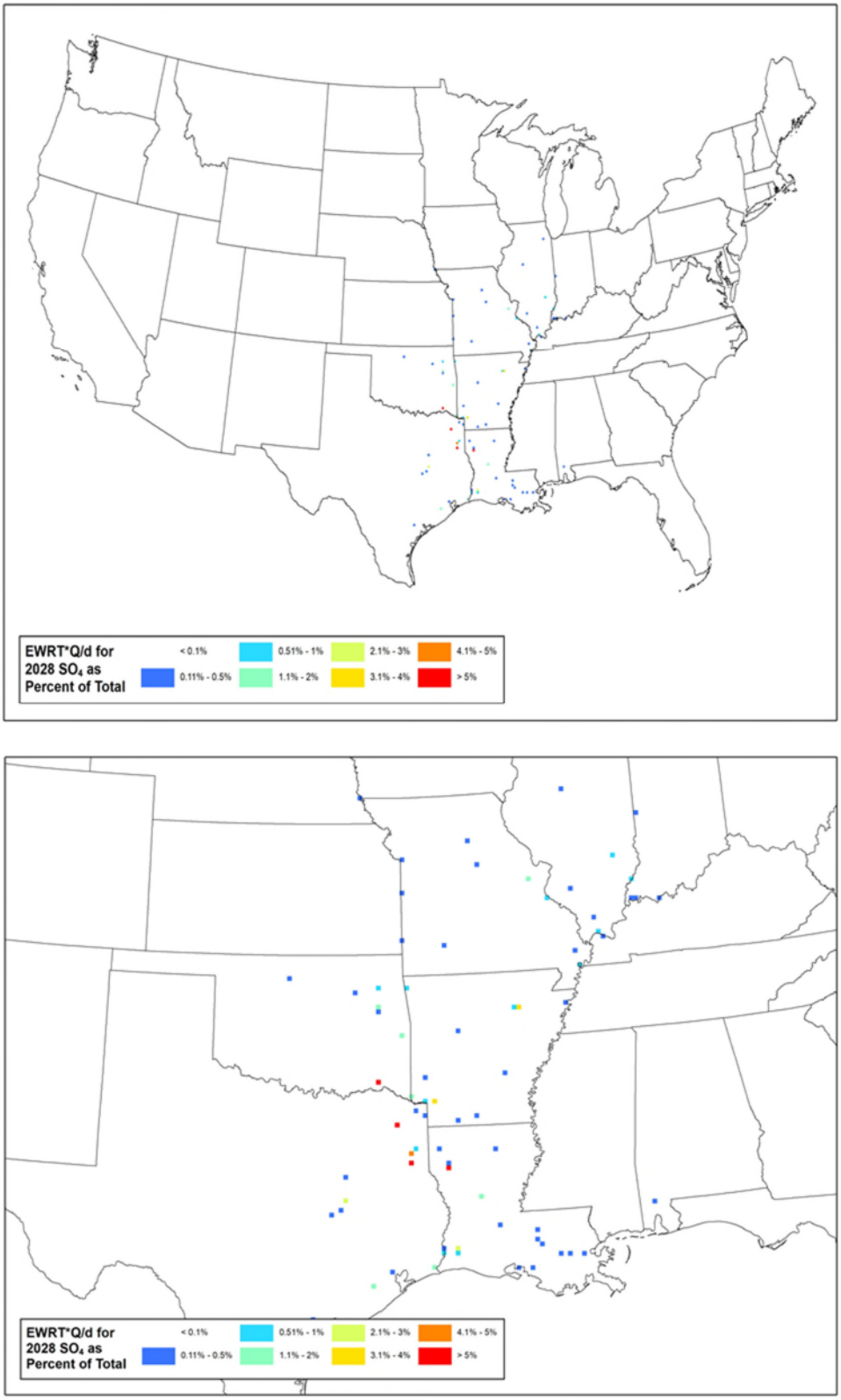


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

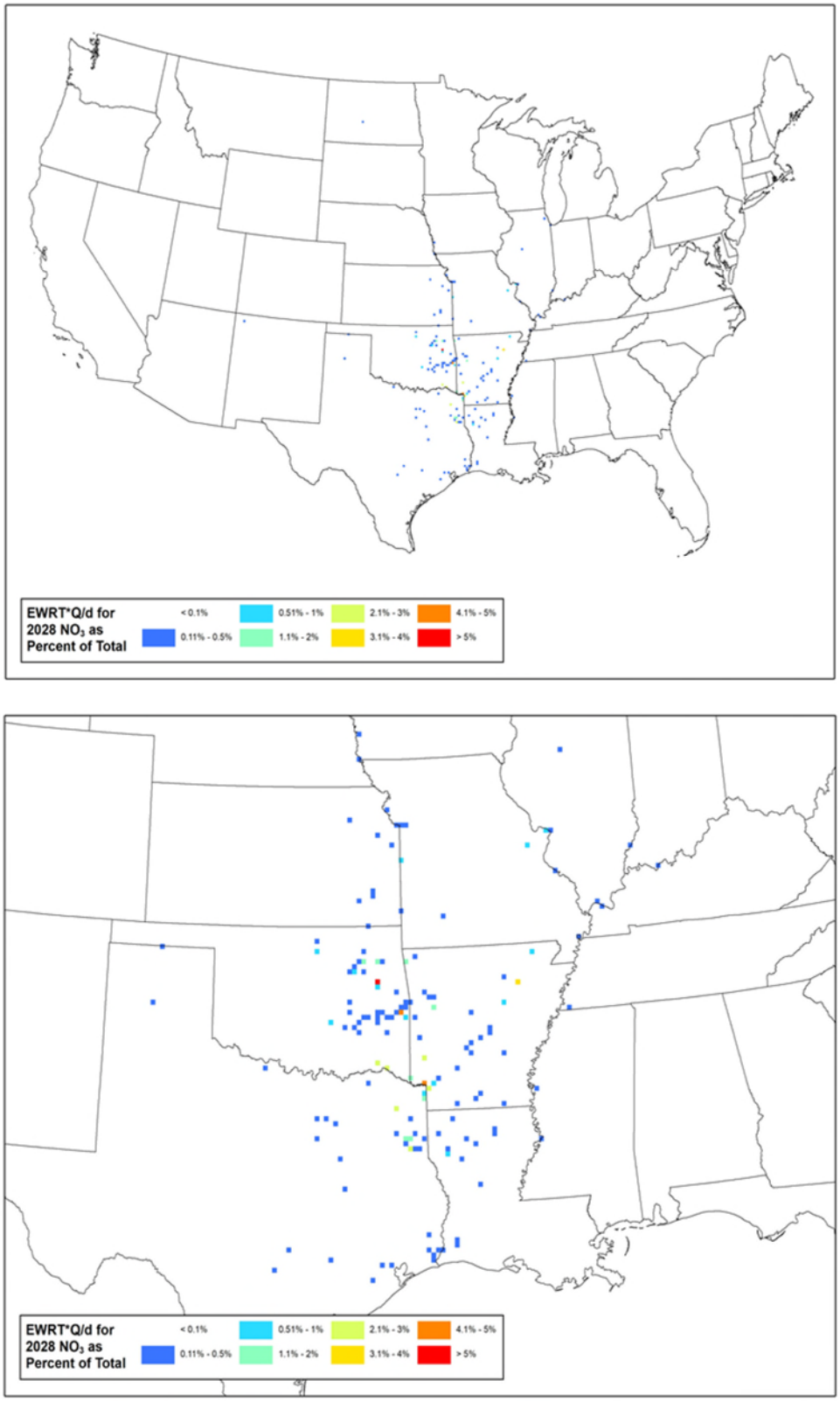


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

Chassahowitza Wilderness Area

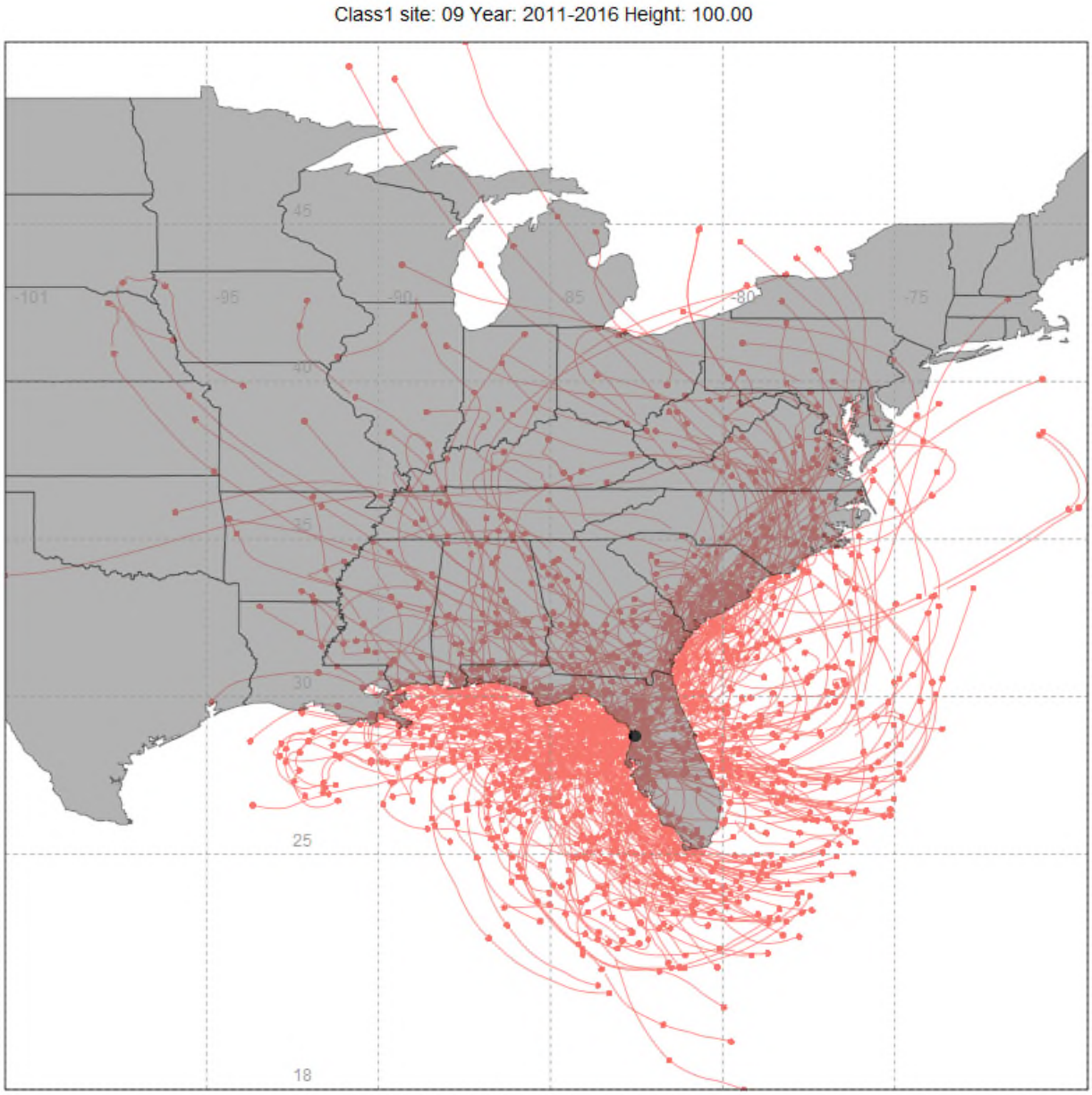


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Chassahowitza Wilderness Area

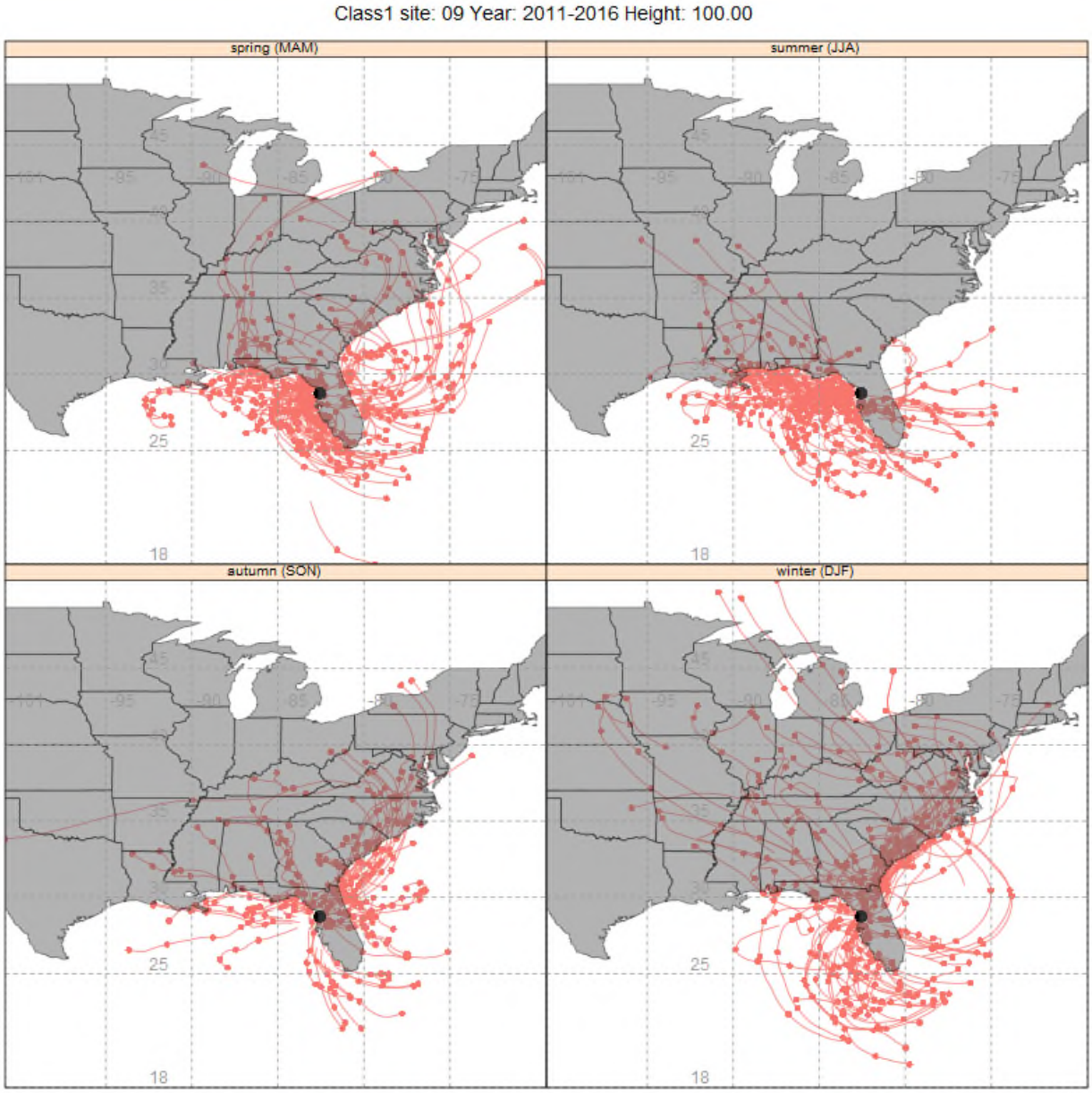


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Chassahowitza Wilderness Area

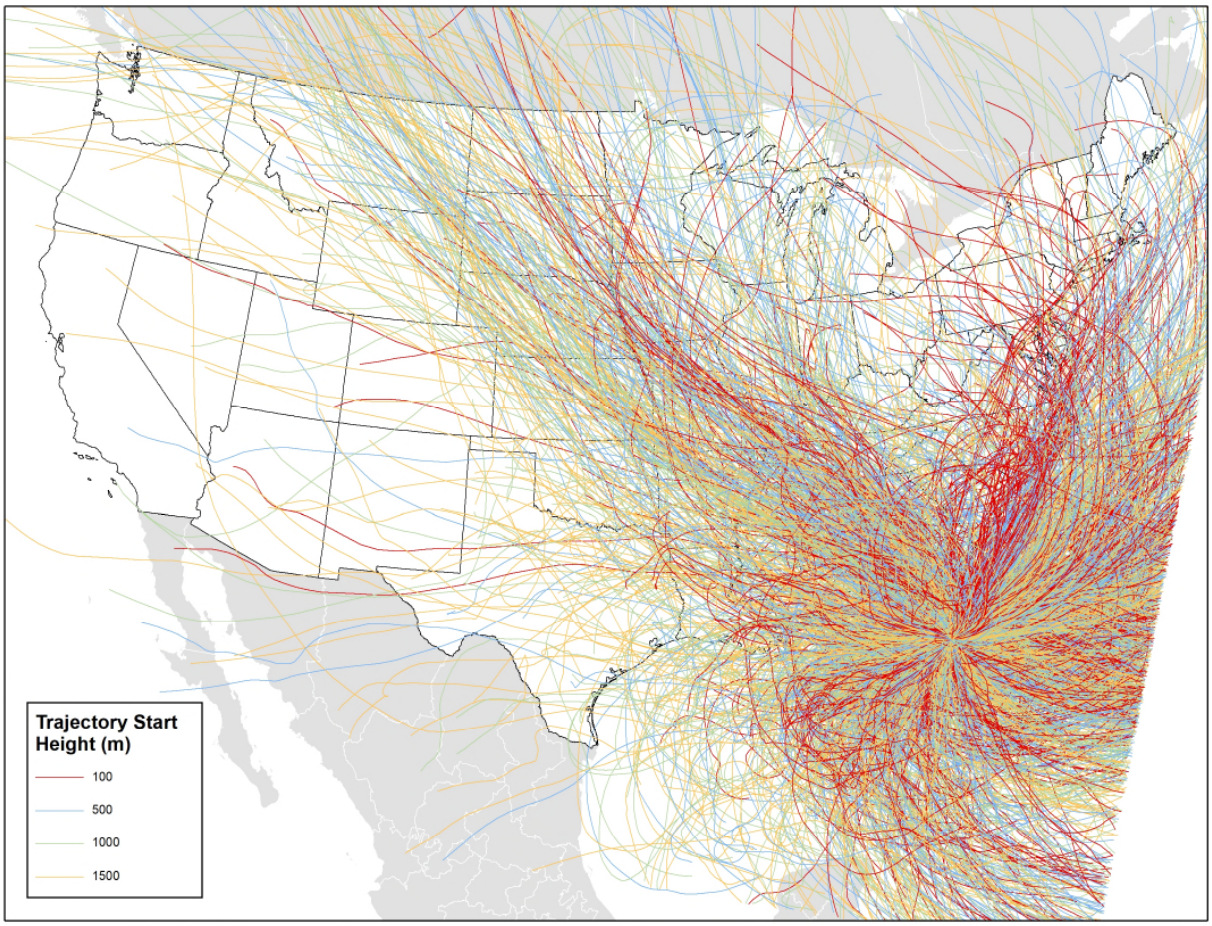
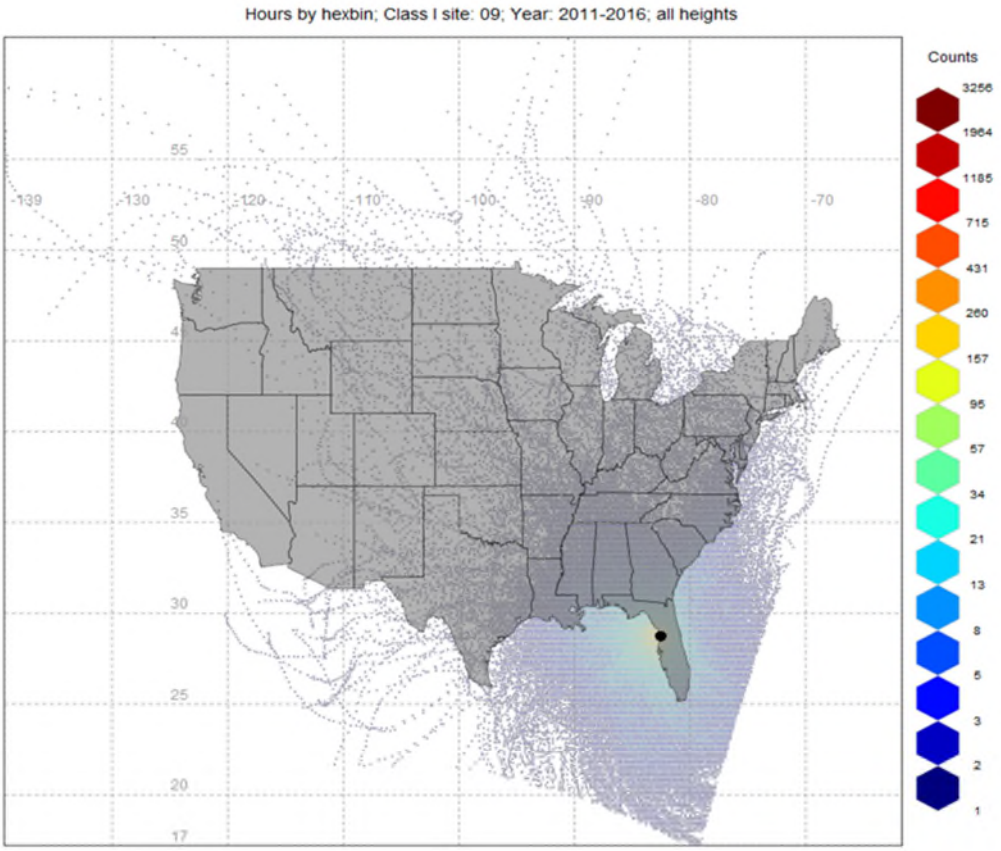


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Chassahowitza Wilderness Area



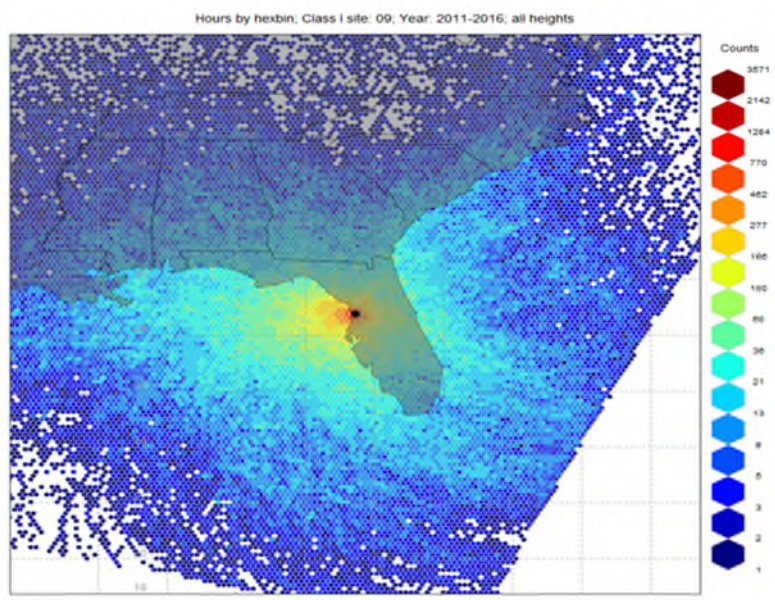


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

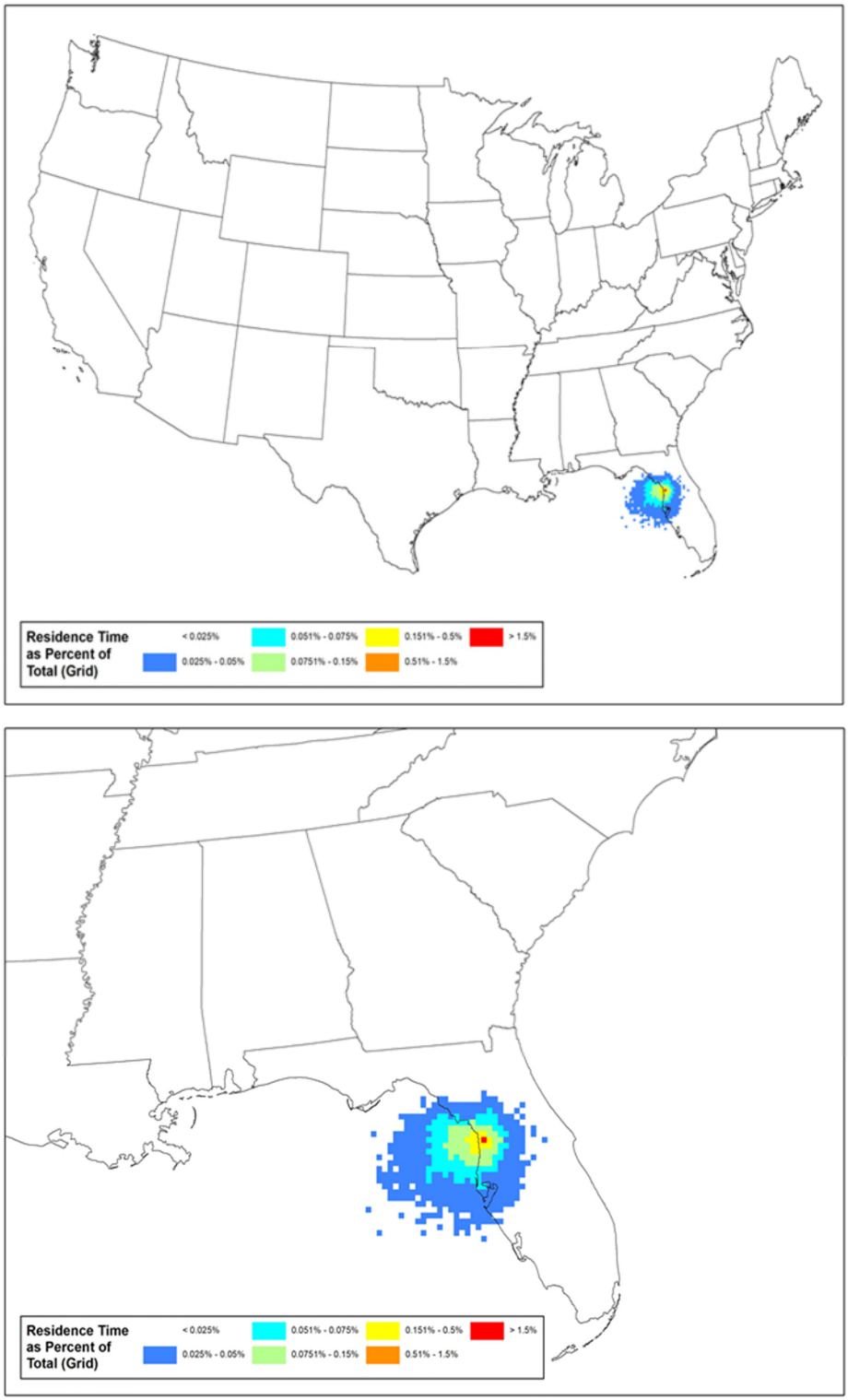
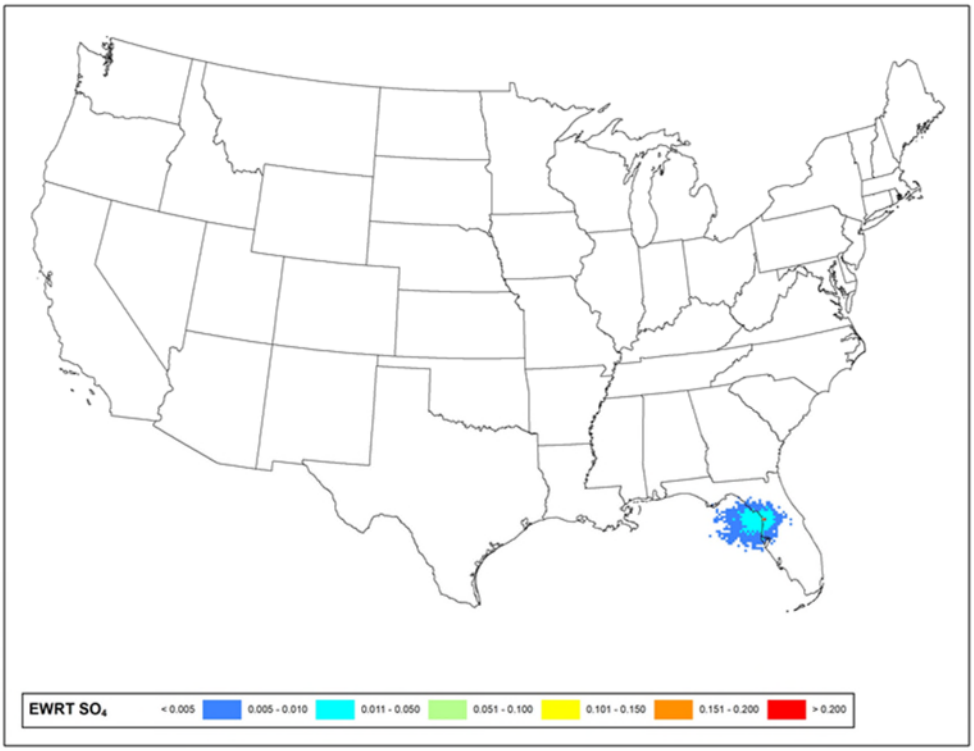


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)



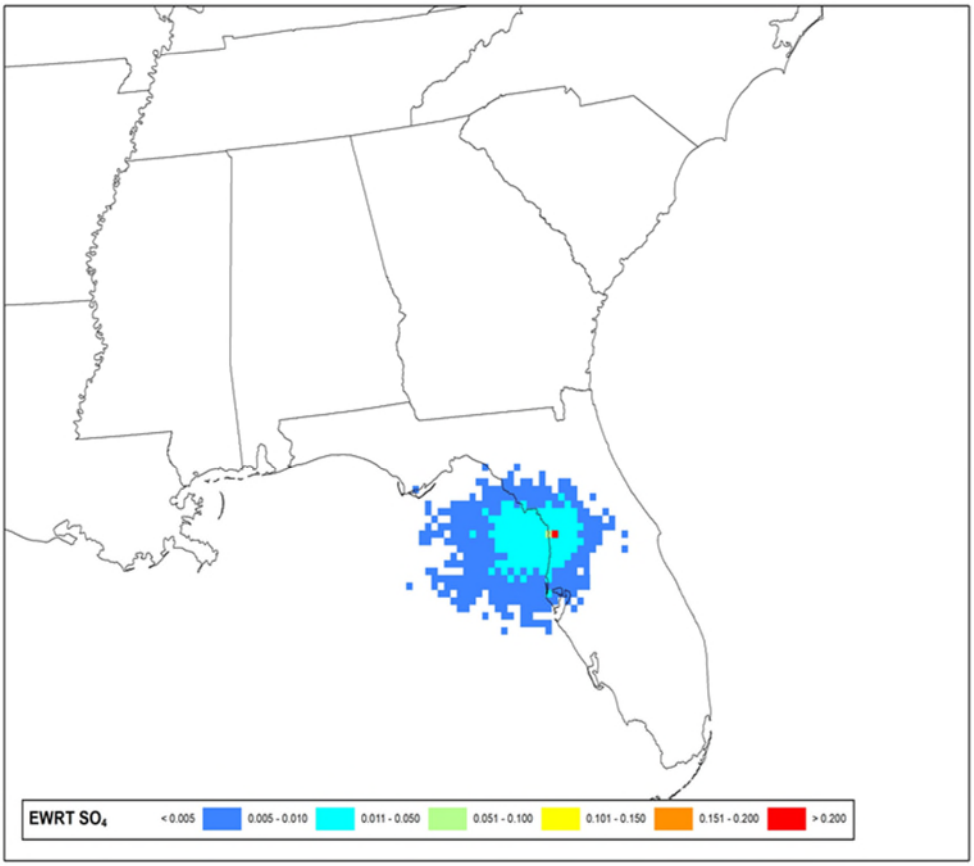


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area - Full View (top) and Class I Zoom (bottom)

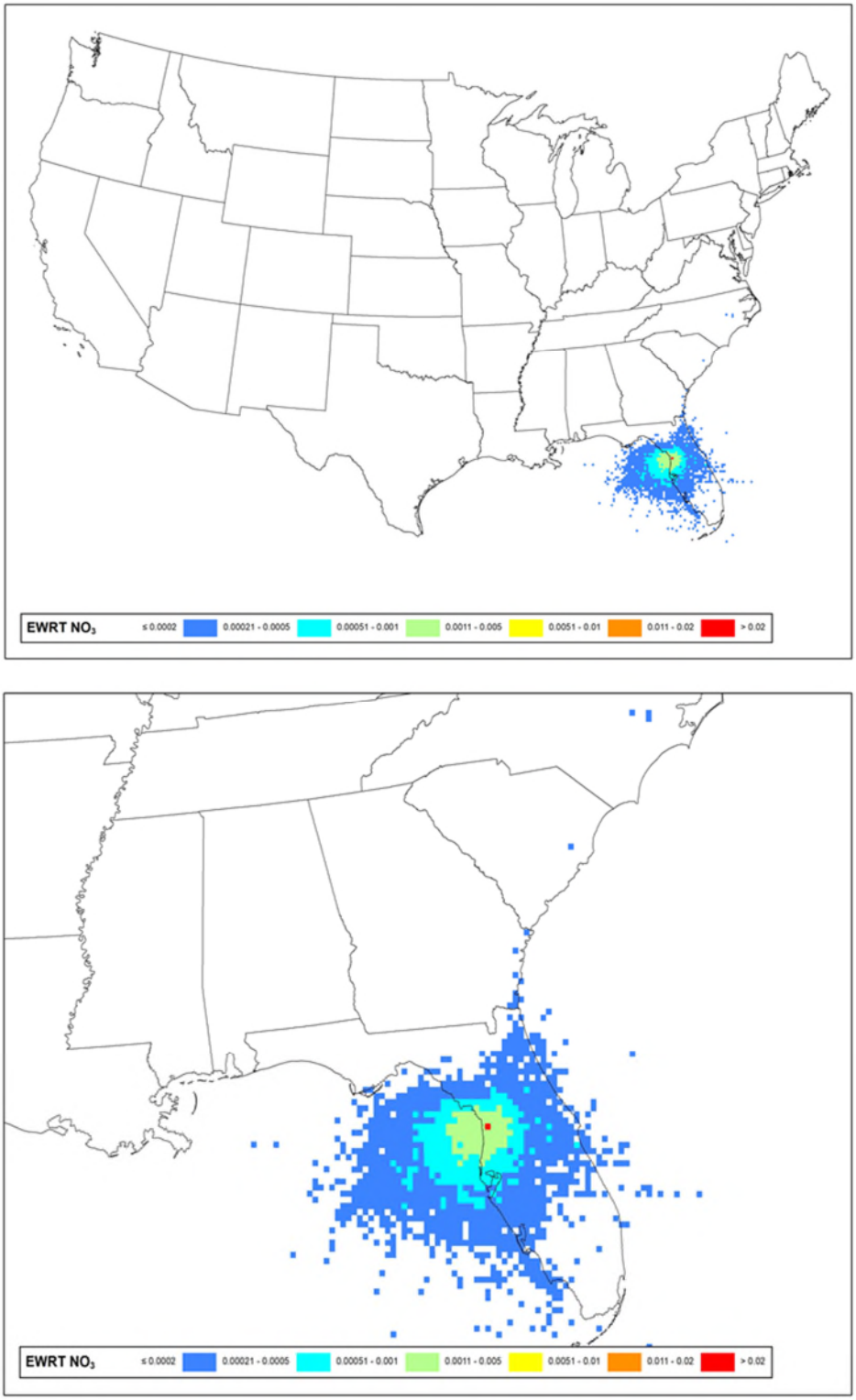


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Chassahowitza Wilderness Area - Full View (top) and Class I Zoom (bottom)

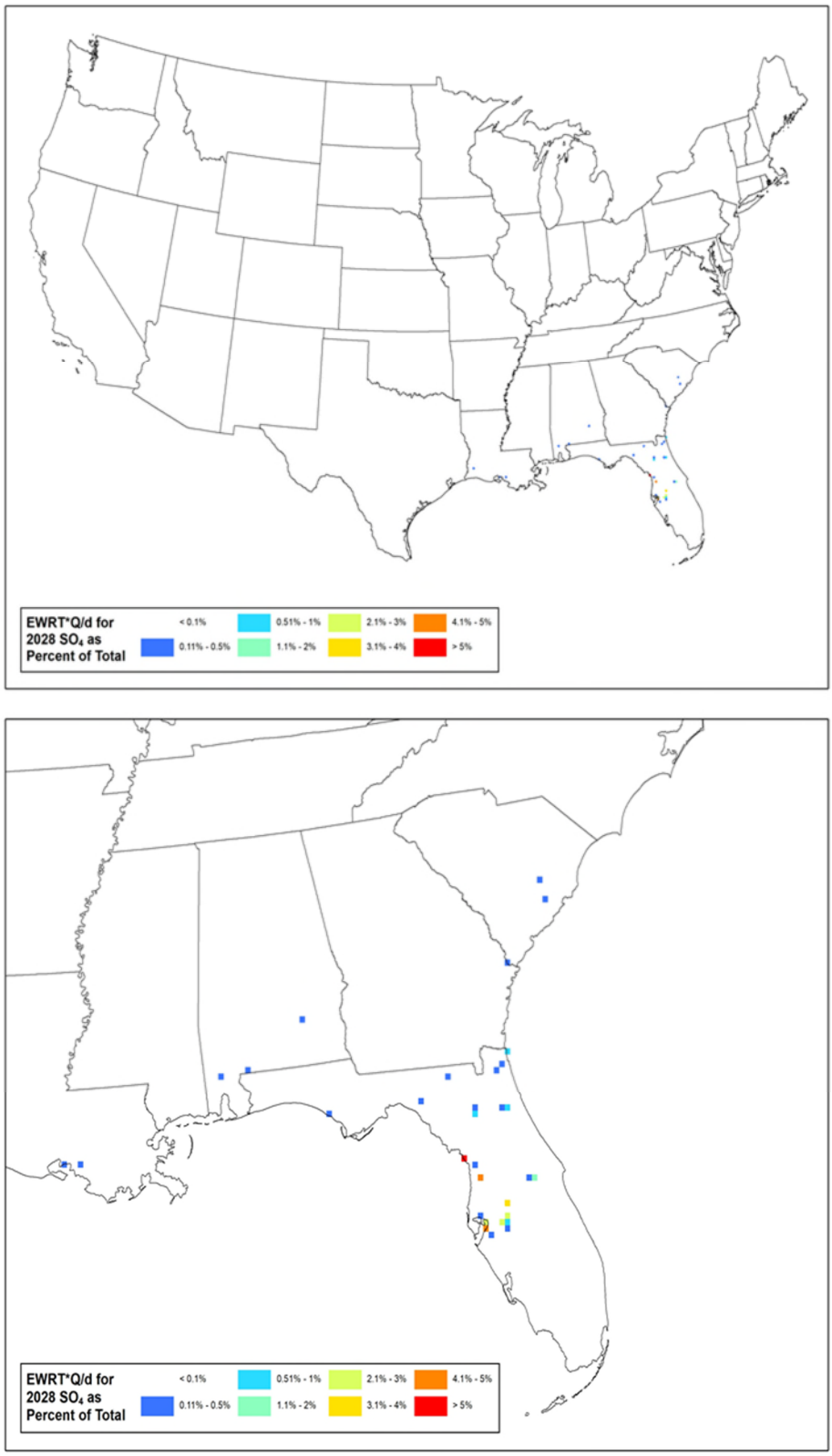
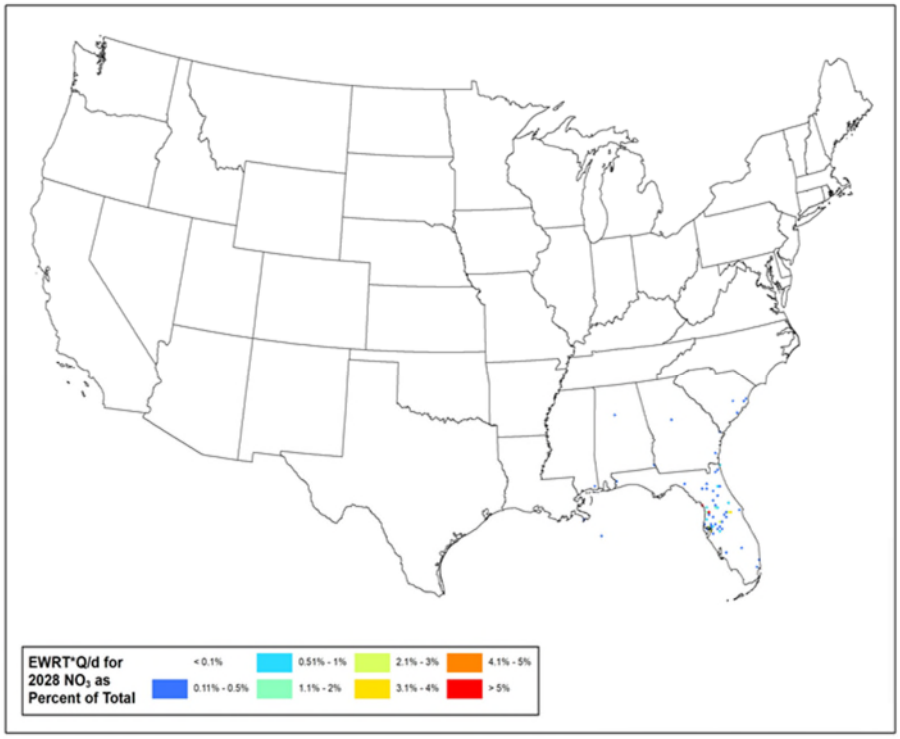


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)



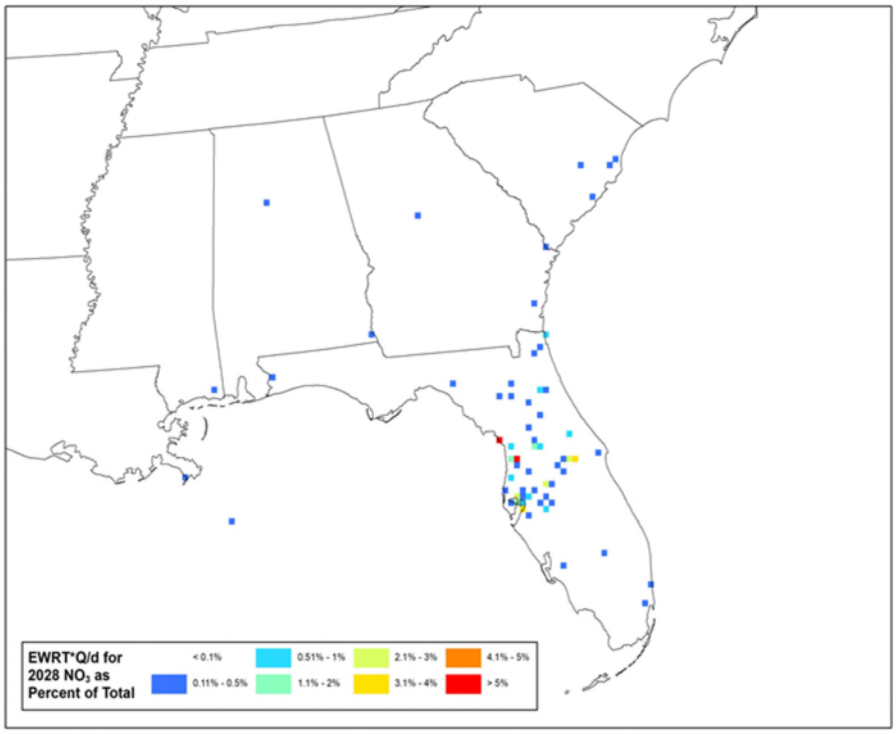


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

Cohutta Wilderness Area

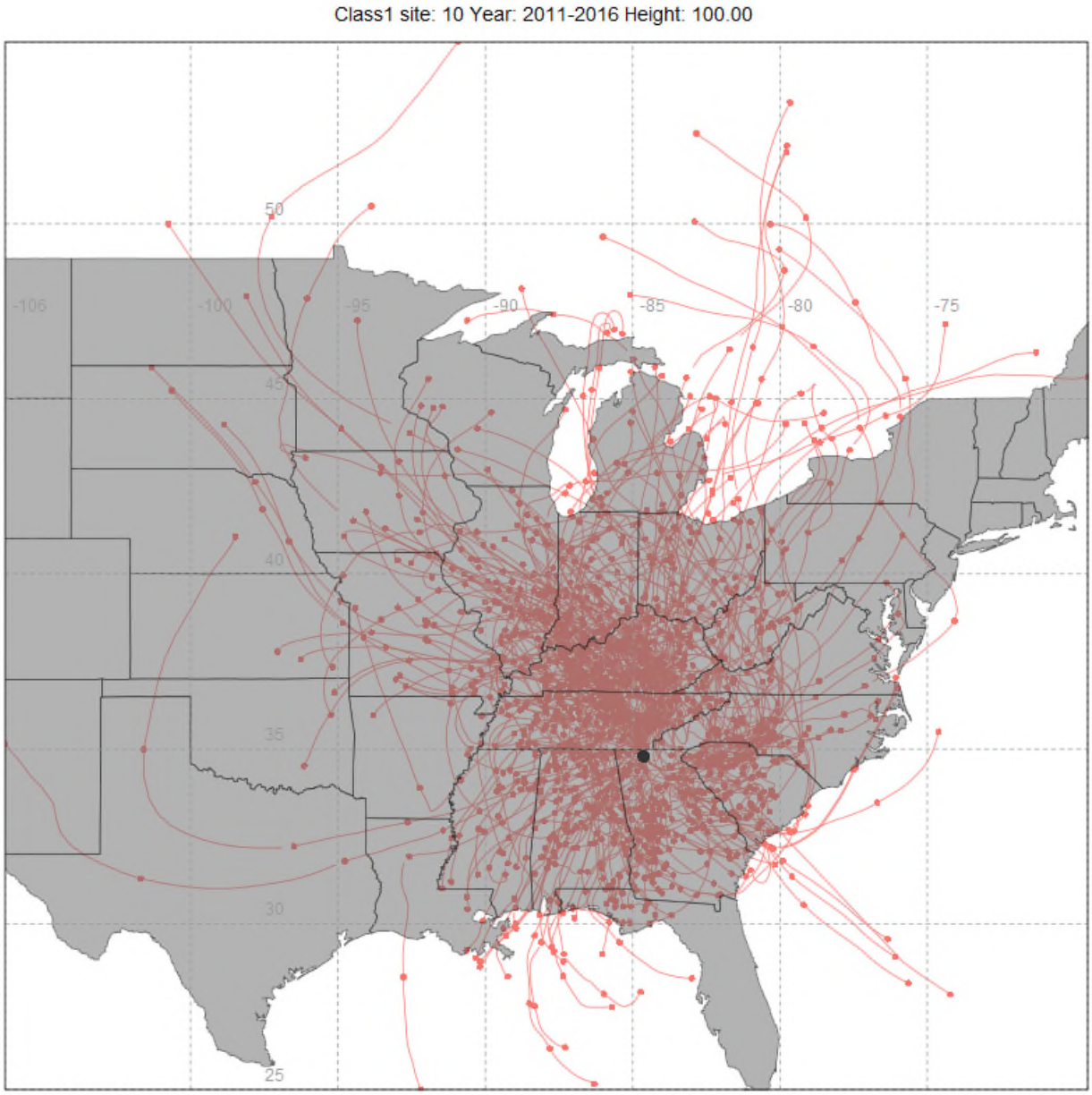


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Cohutta Wilderness Area

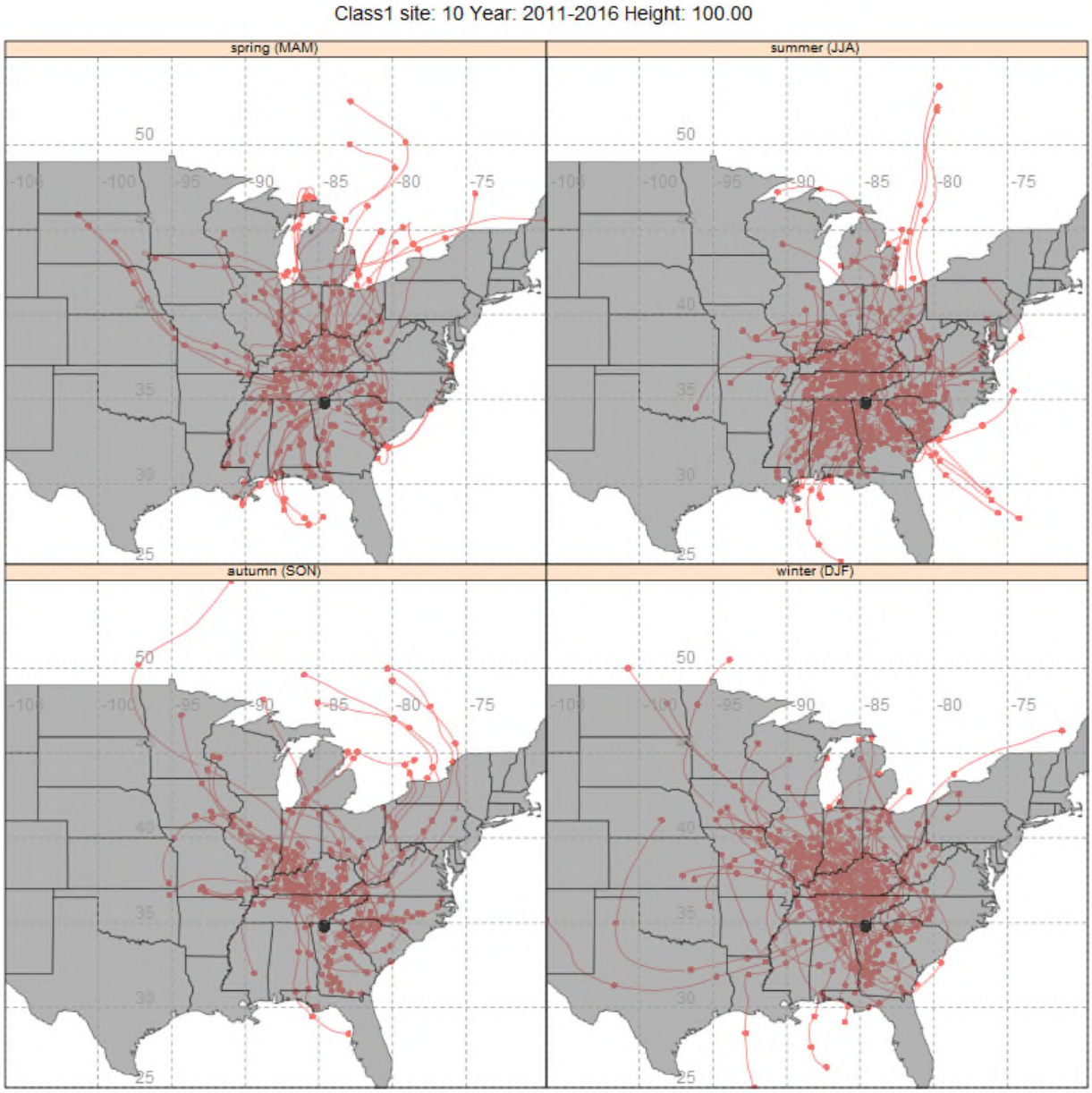


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Cohutta Wilderness Area

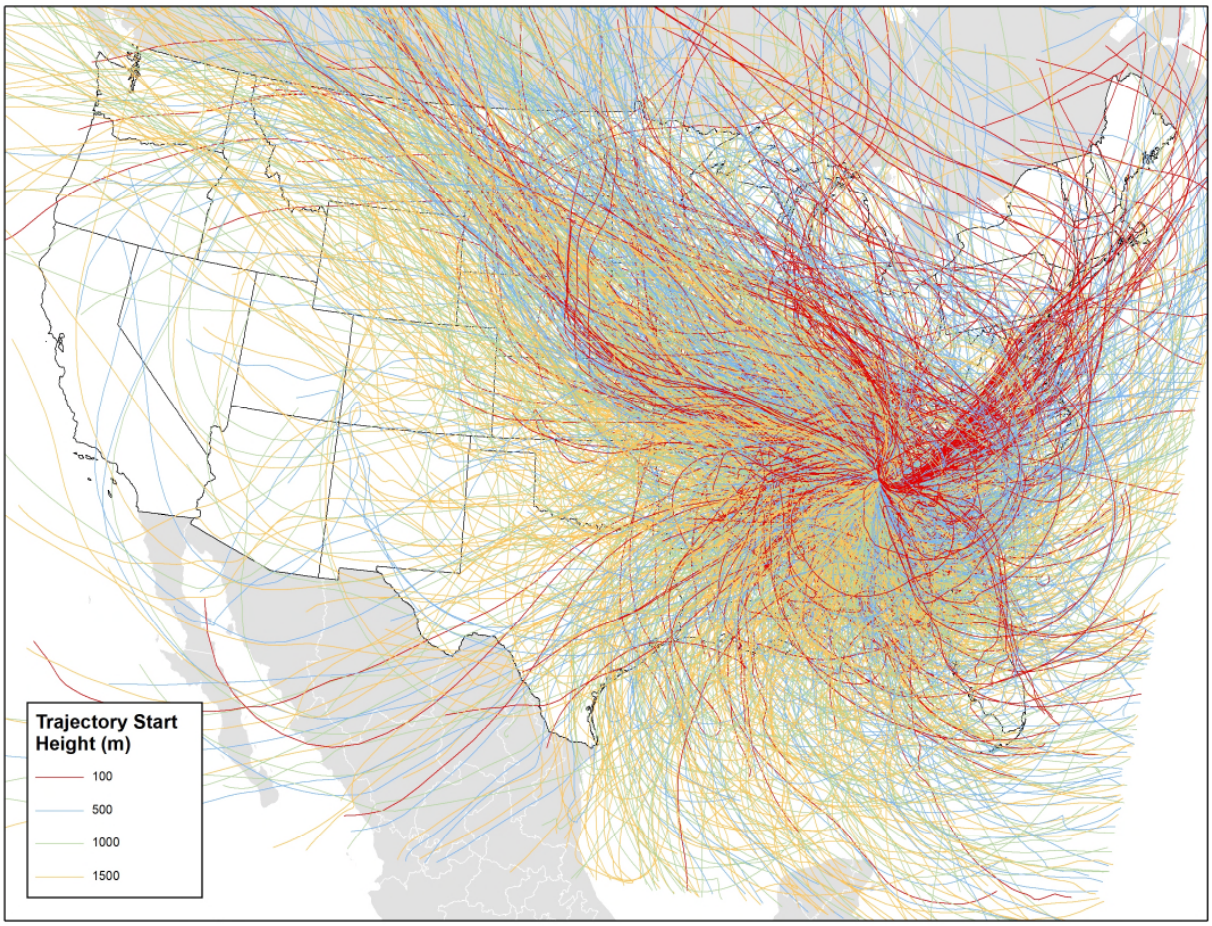
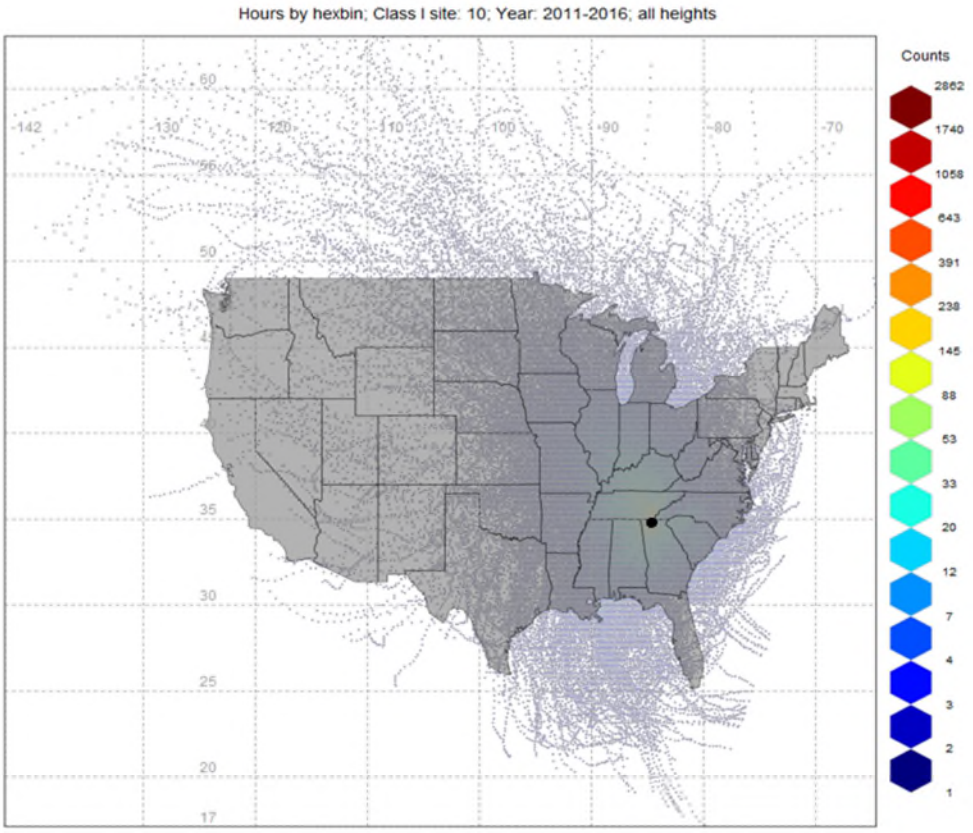


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Cohutta Wilderness Area



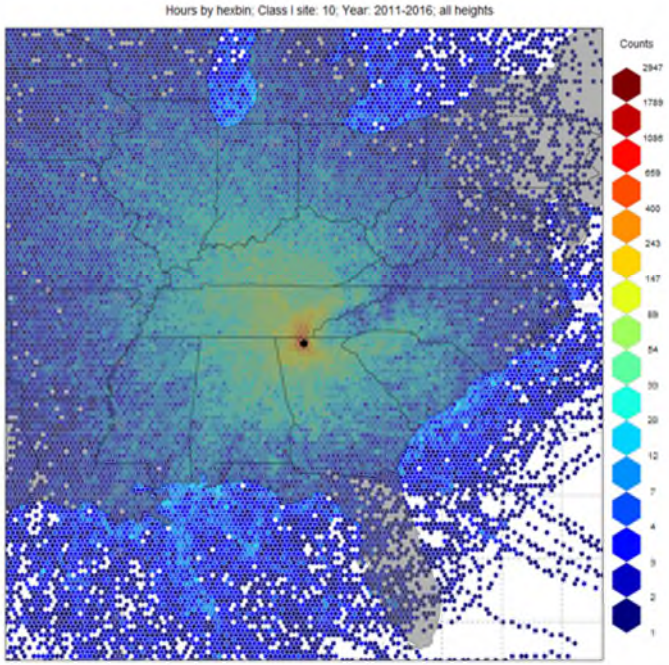


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

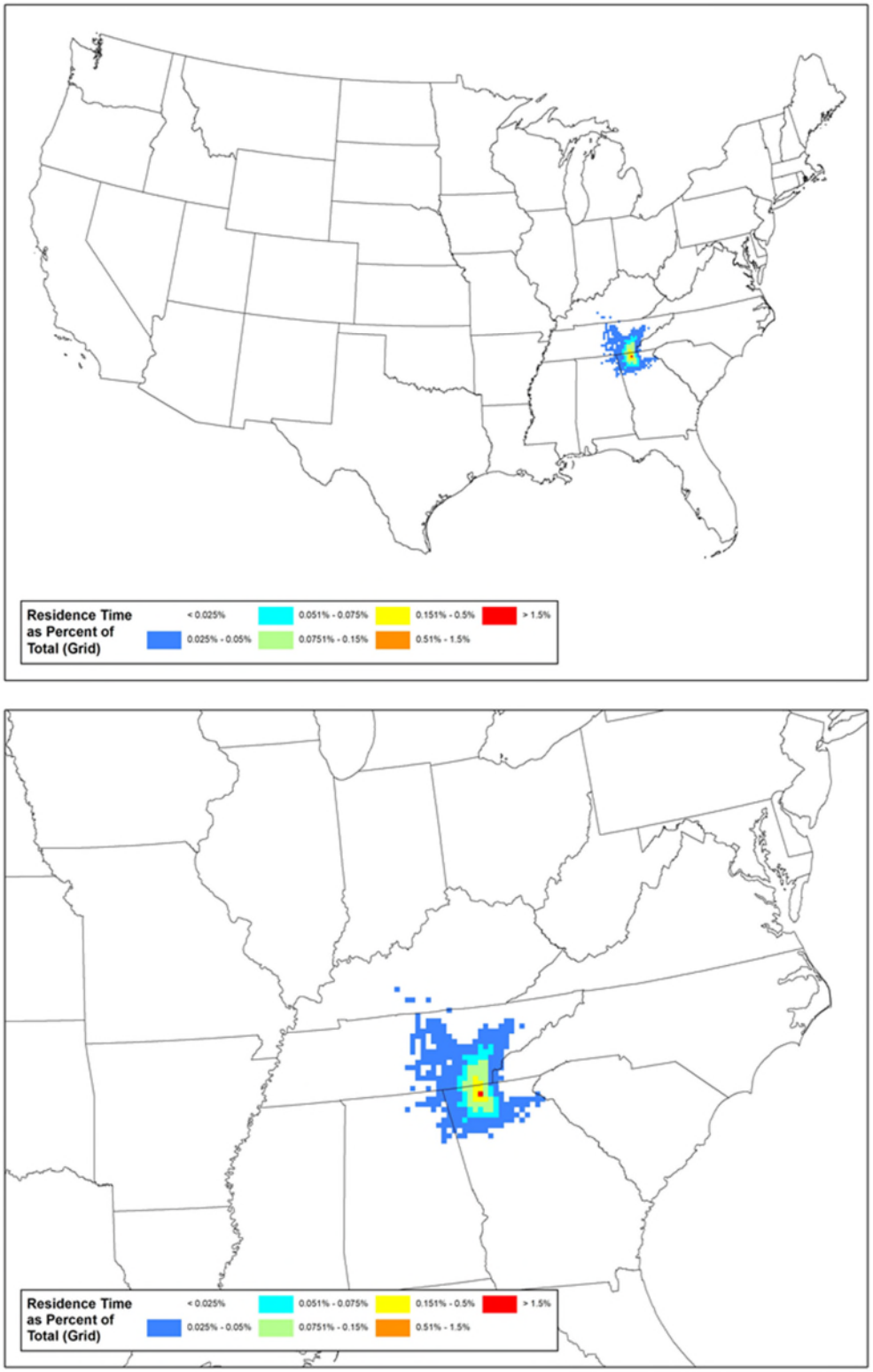


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

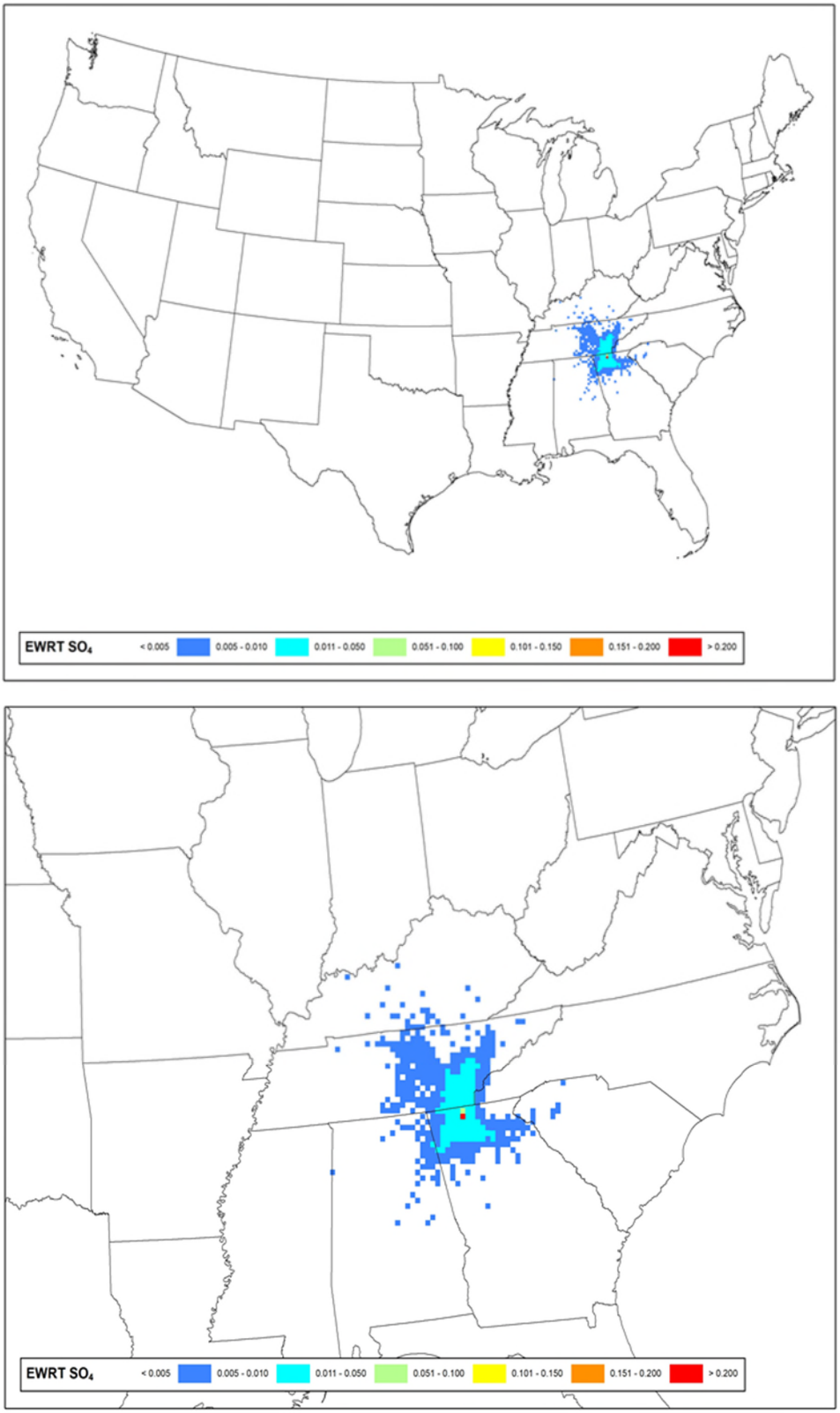


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area - Full View (top) and Class I Zoom (bottom)

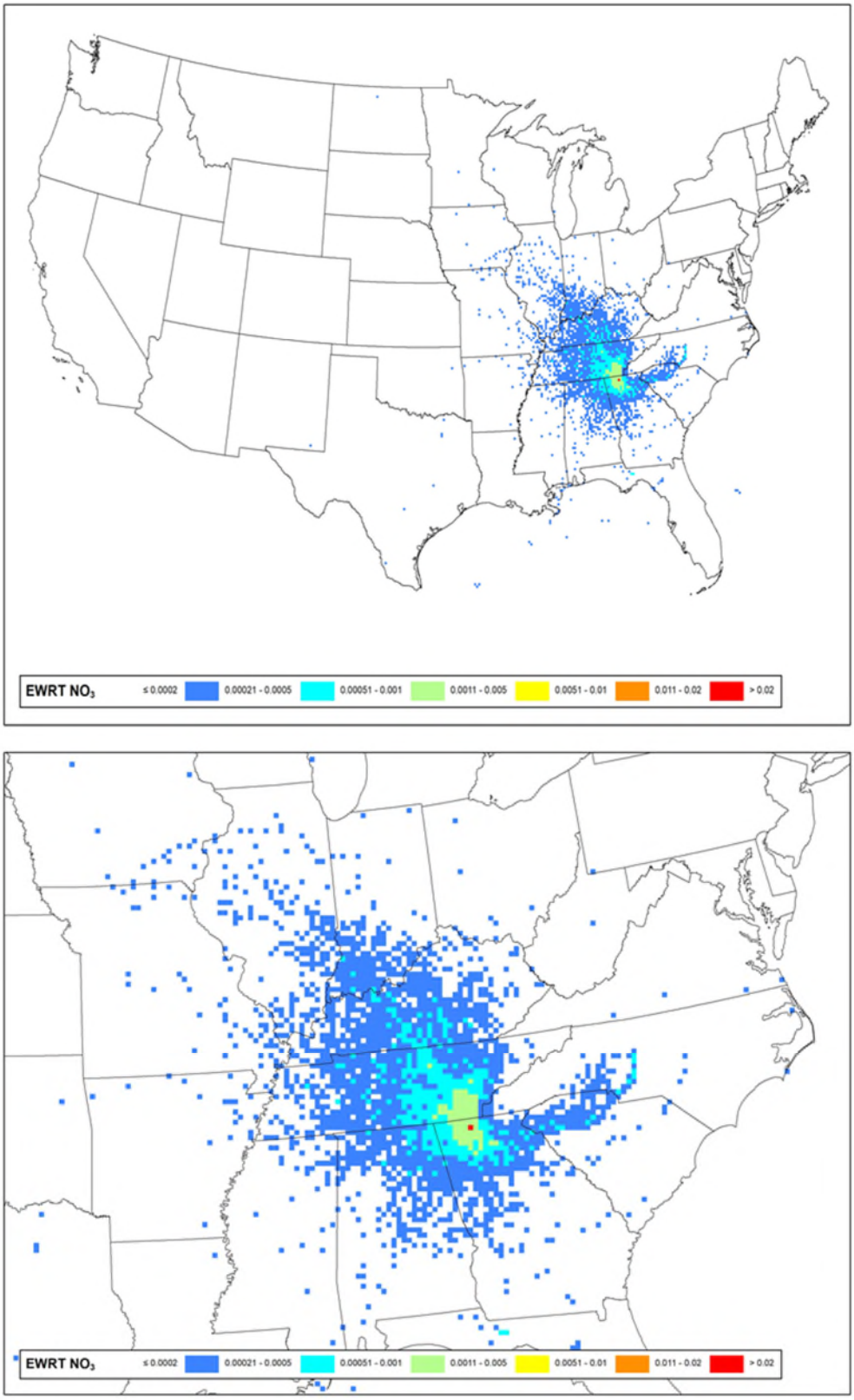


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Cohutta Wilderness Area - Full View (top) and Class I Zoom (bottom)

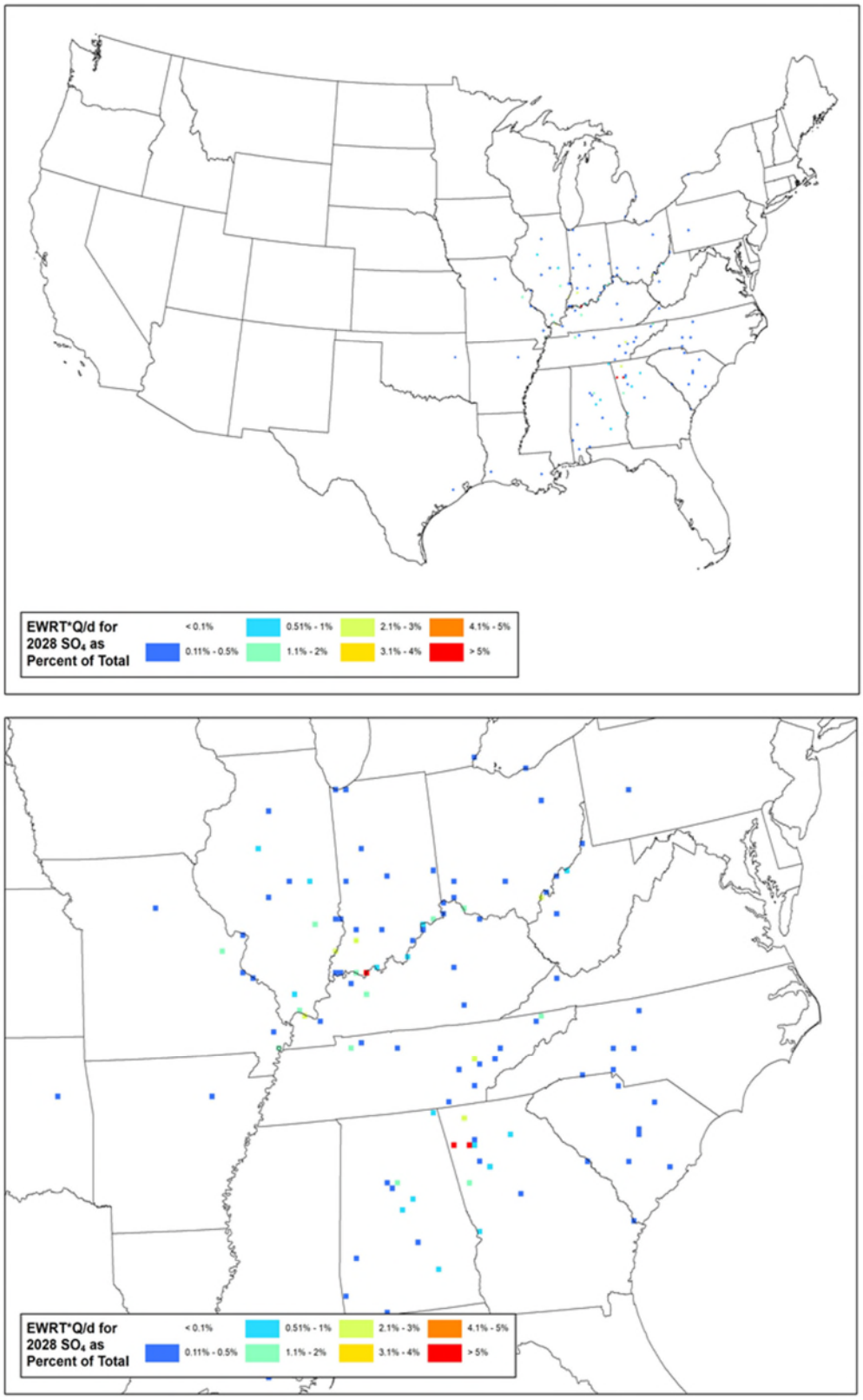
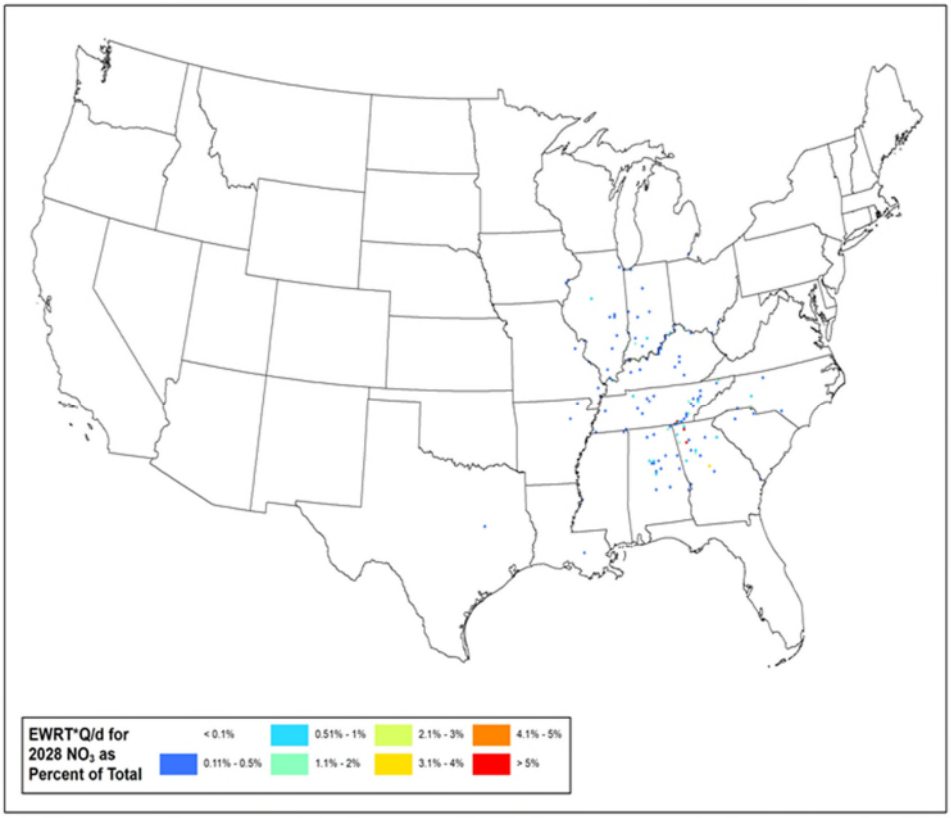


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)



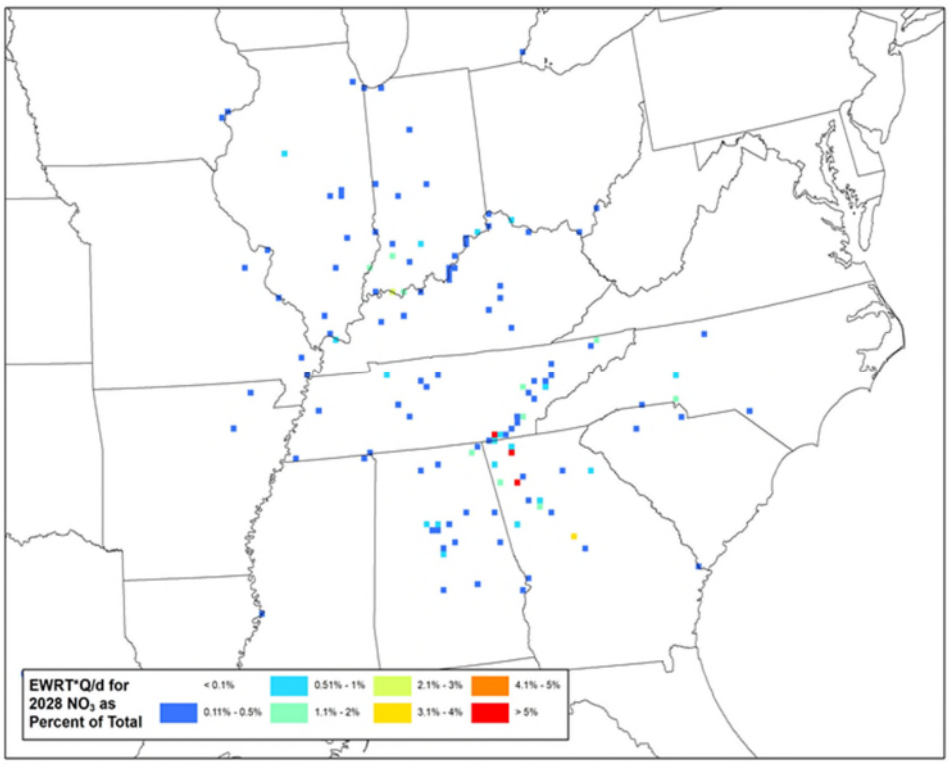


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

Dolly Sods Wilderness Area

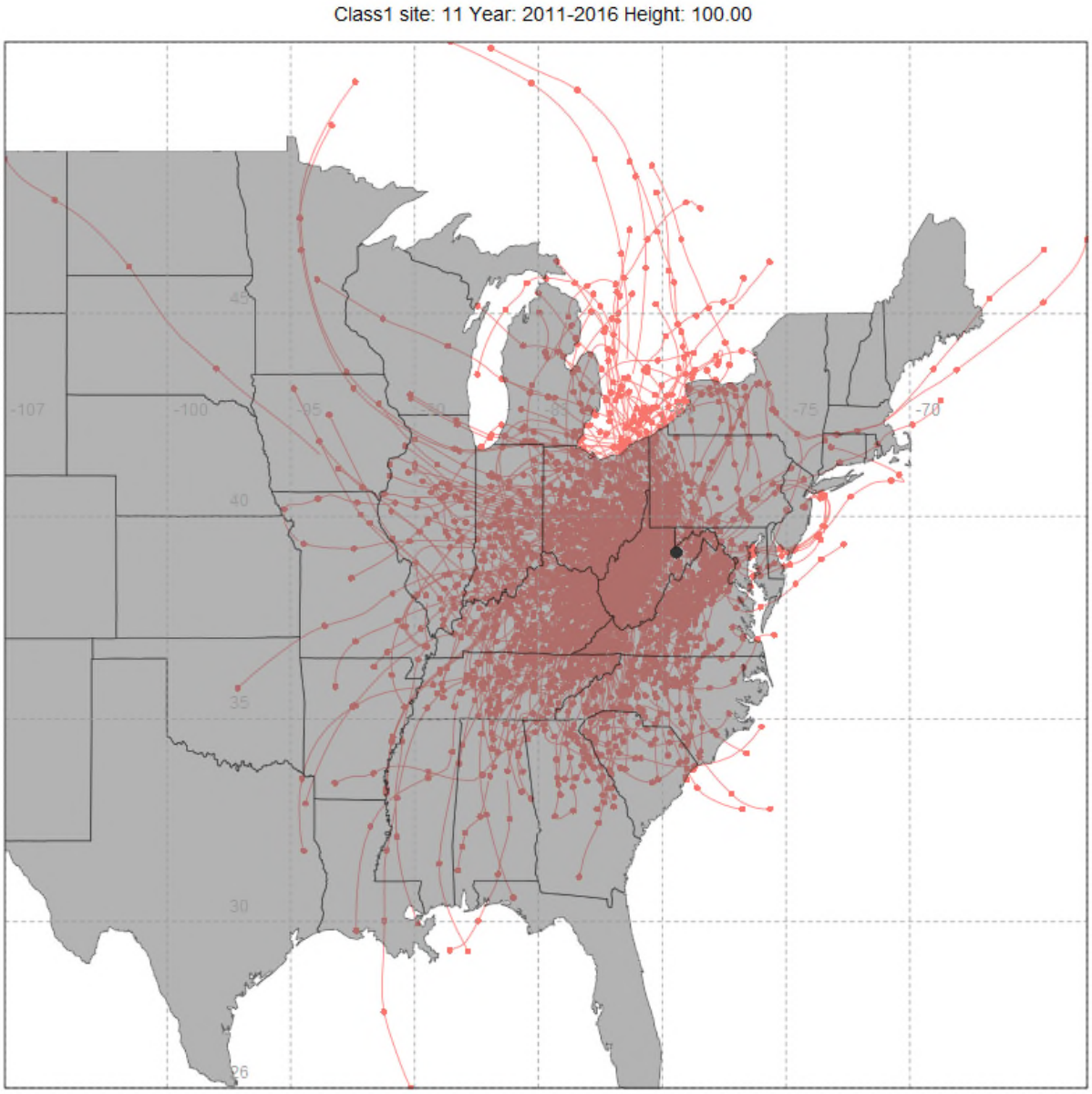


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Dolly Sods Wilderness Area

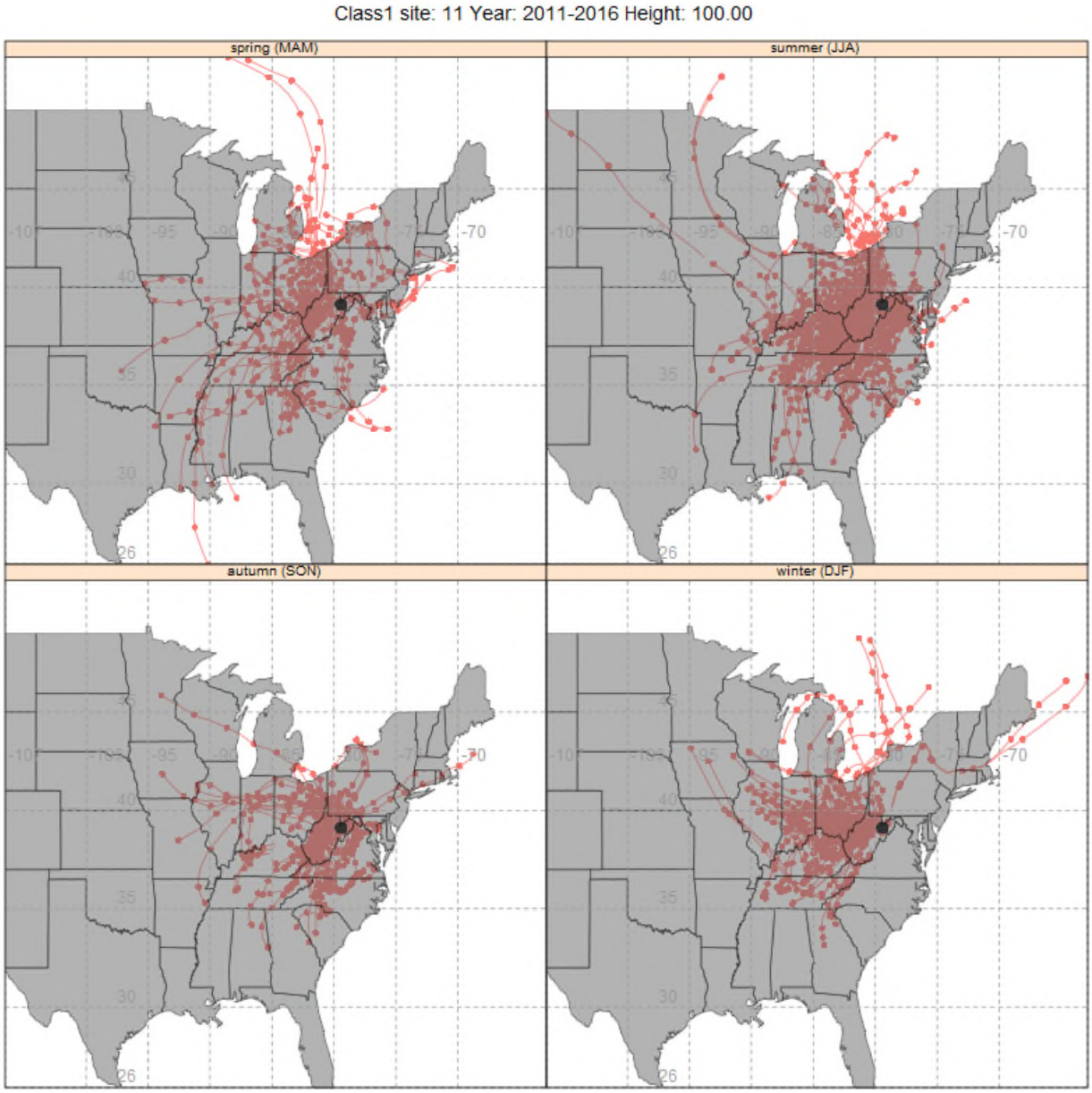


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Dolly Sods Wilderness Area

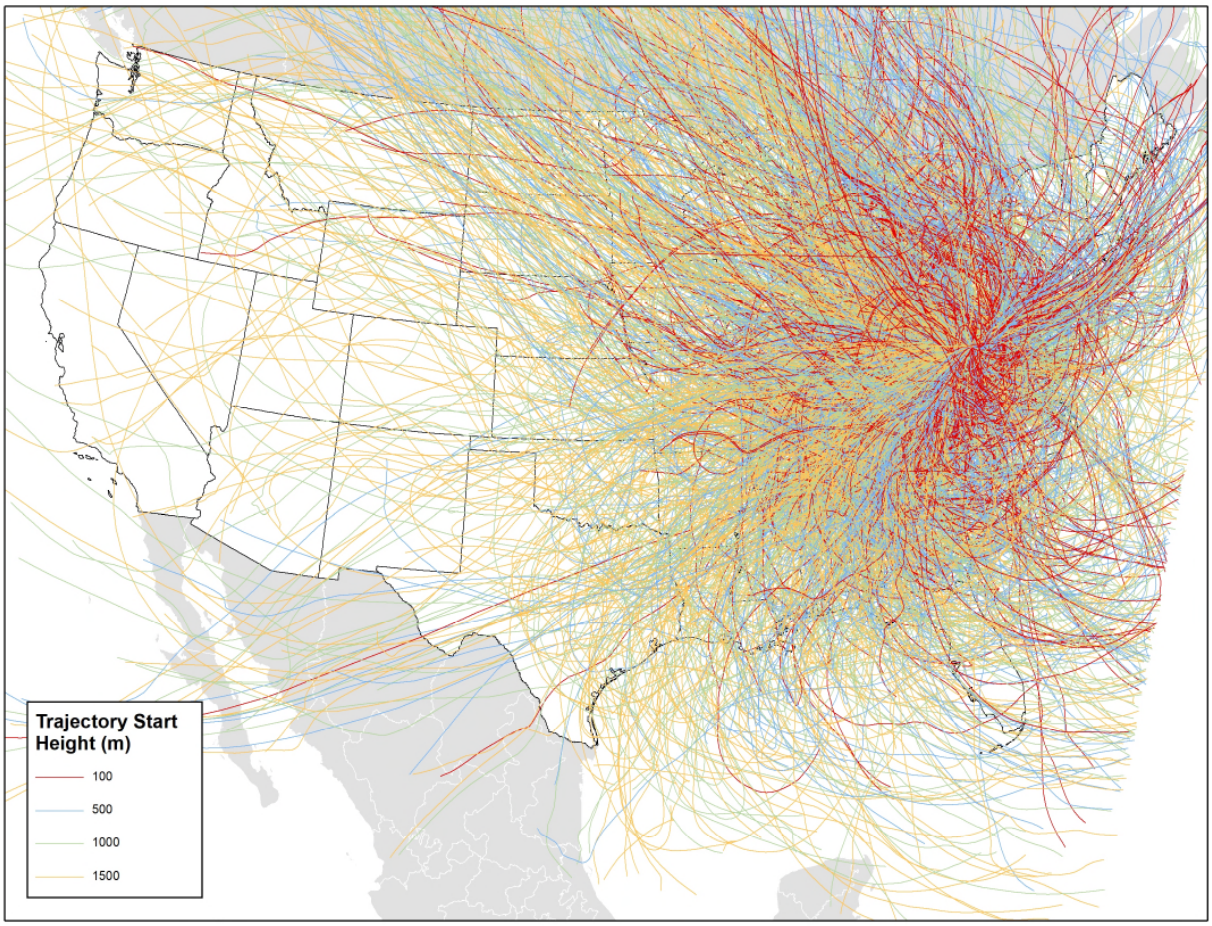


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Dolly Sods Wilderness Area

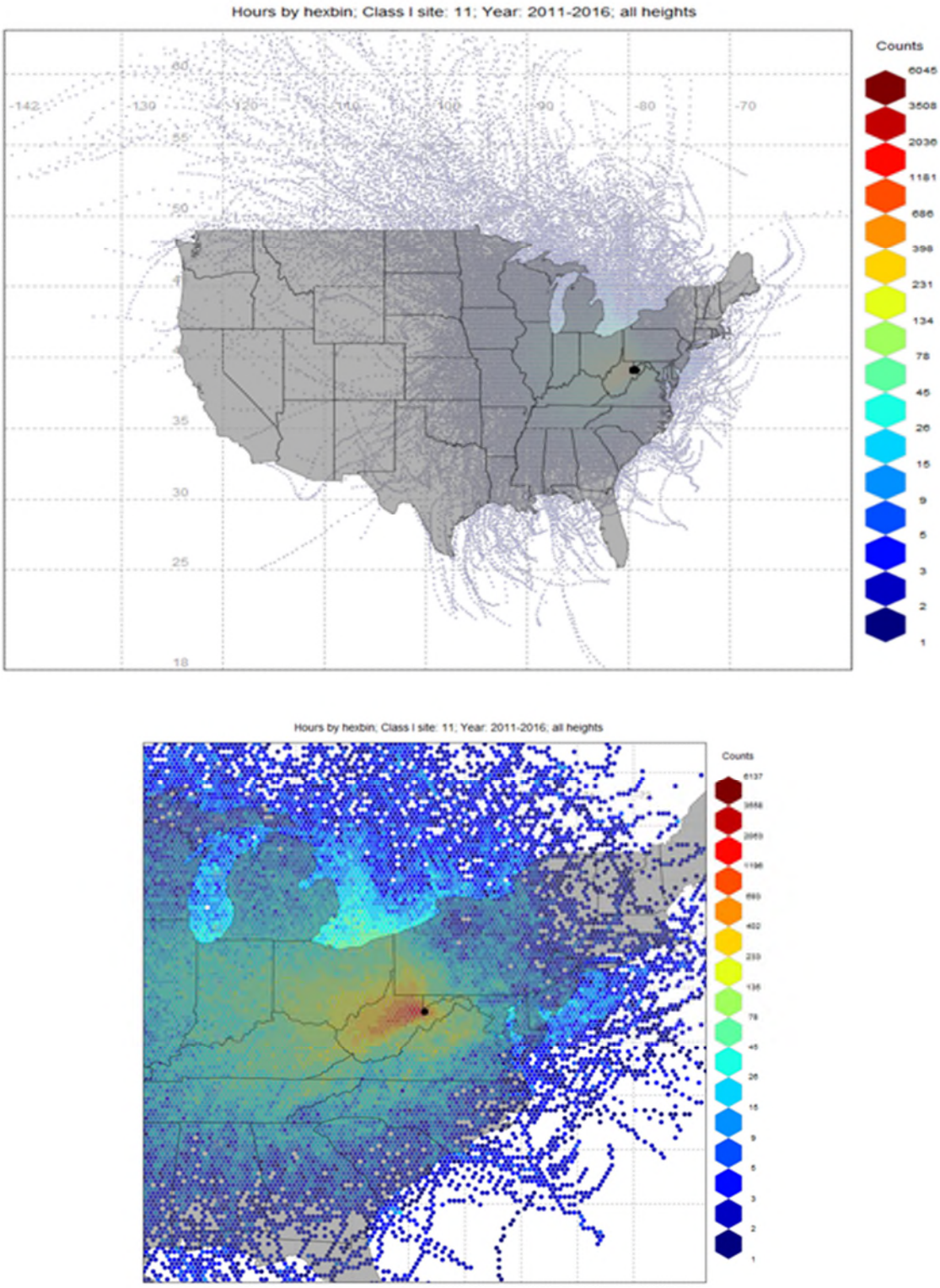


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

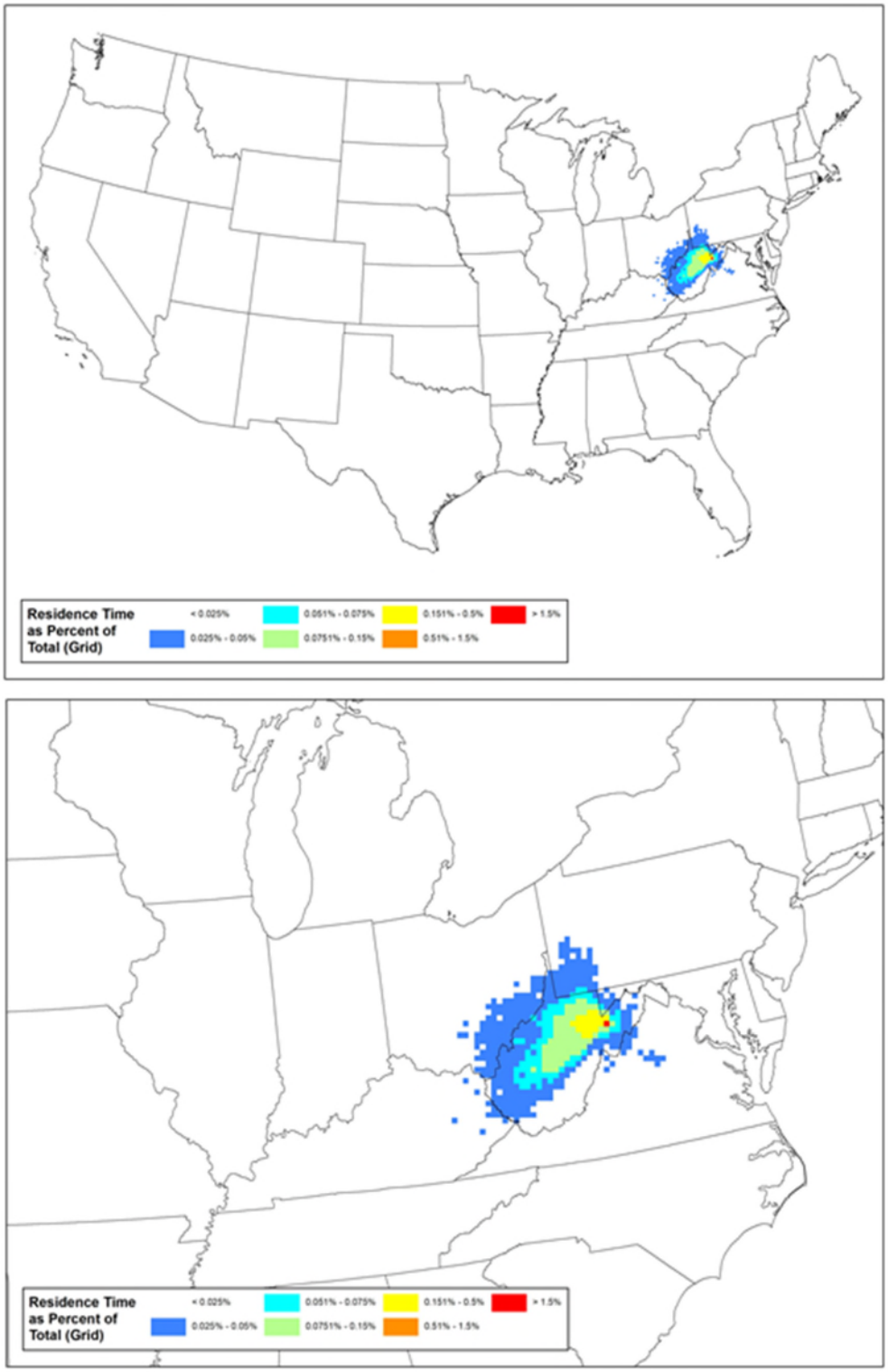


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

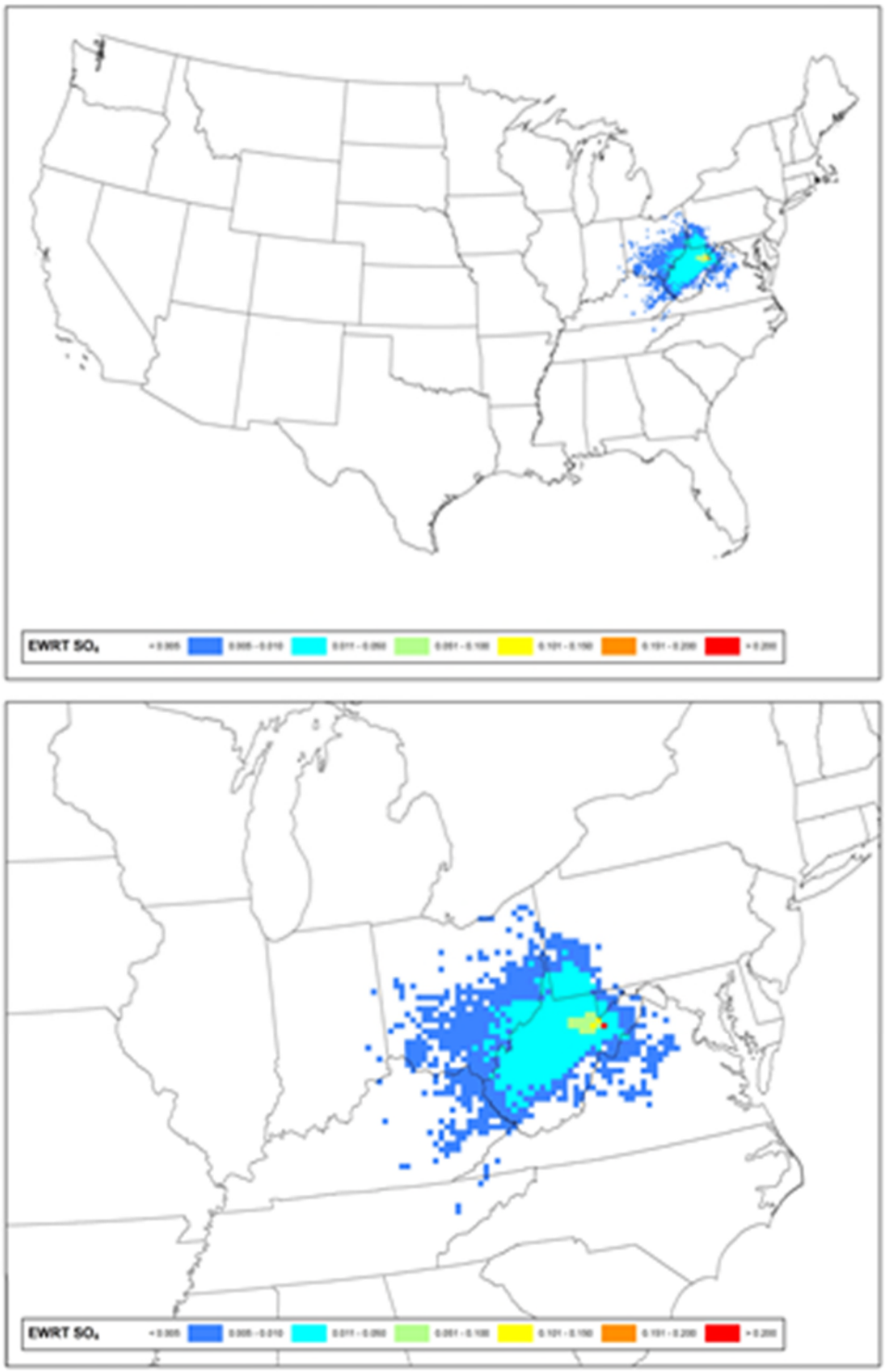


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area - Full View (top) and Class I Zoom (bottom)

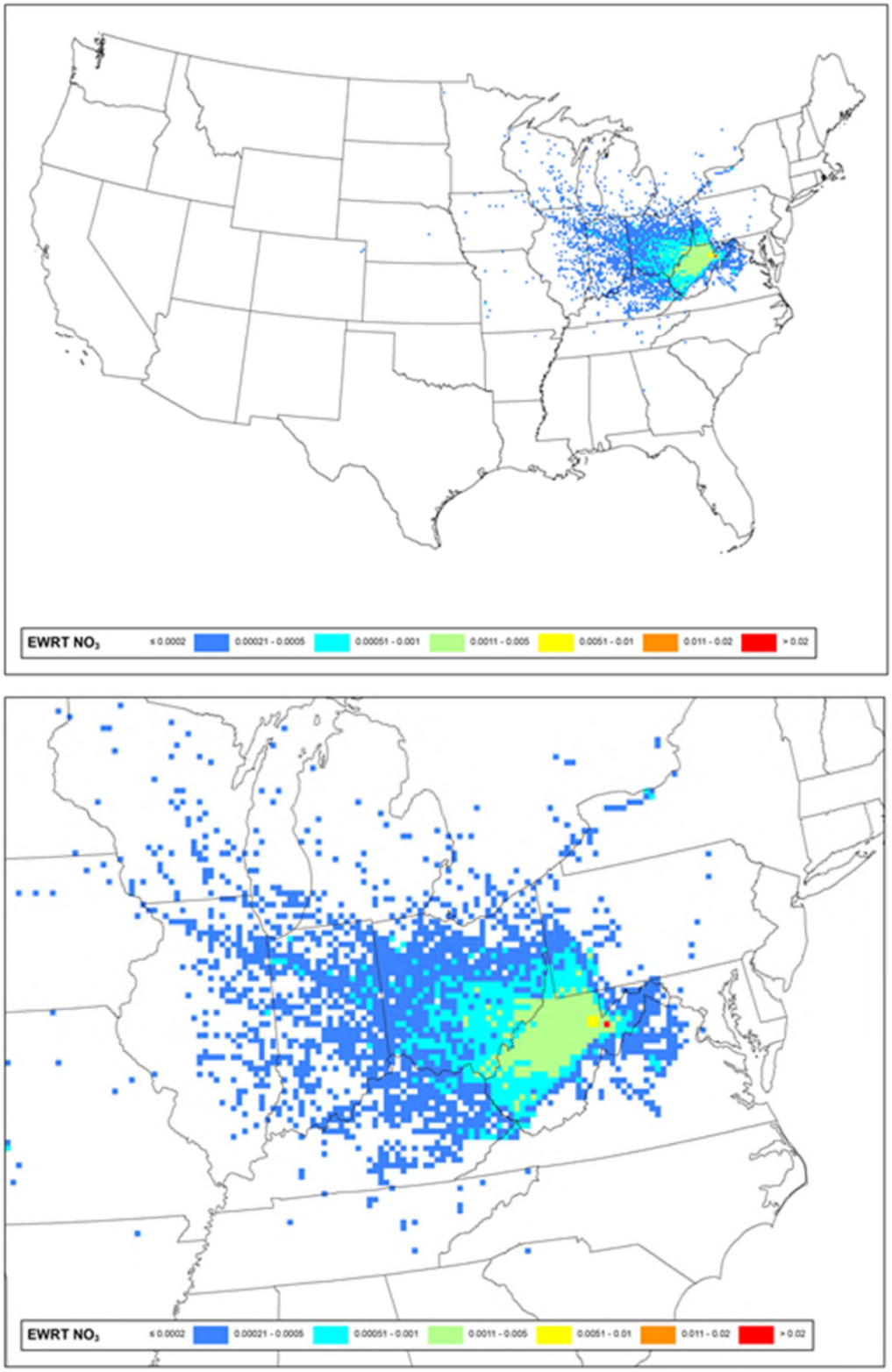


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Dolly Sods Wilderness Area - Full View (top) and Class I Zoom (bottom)

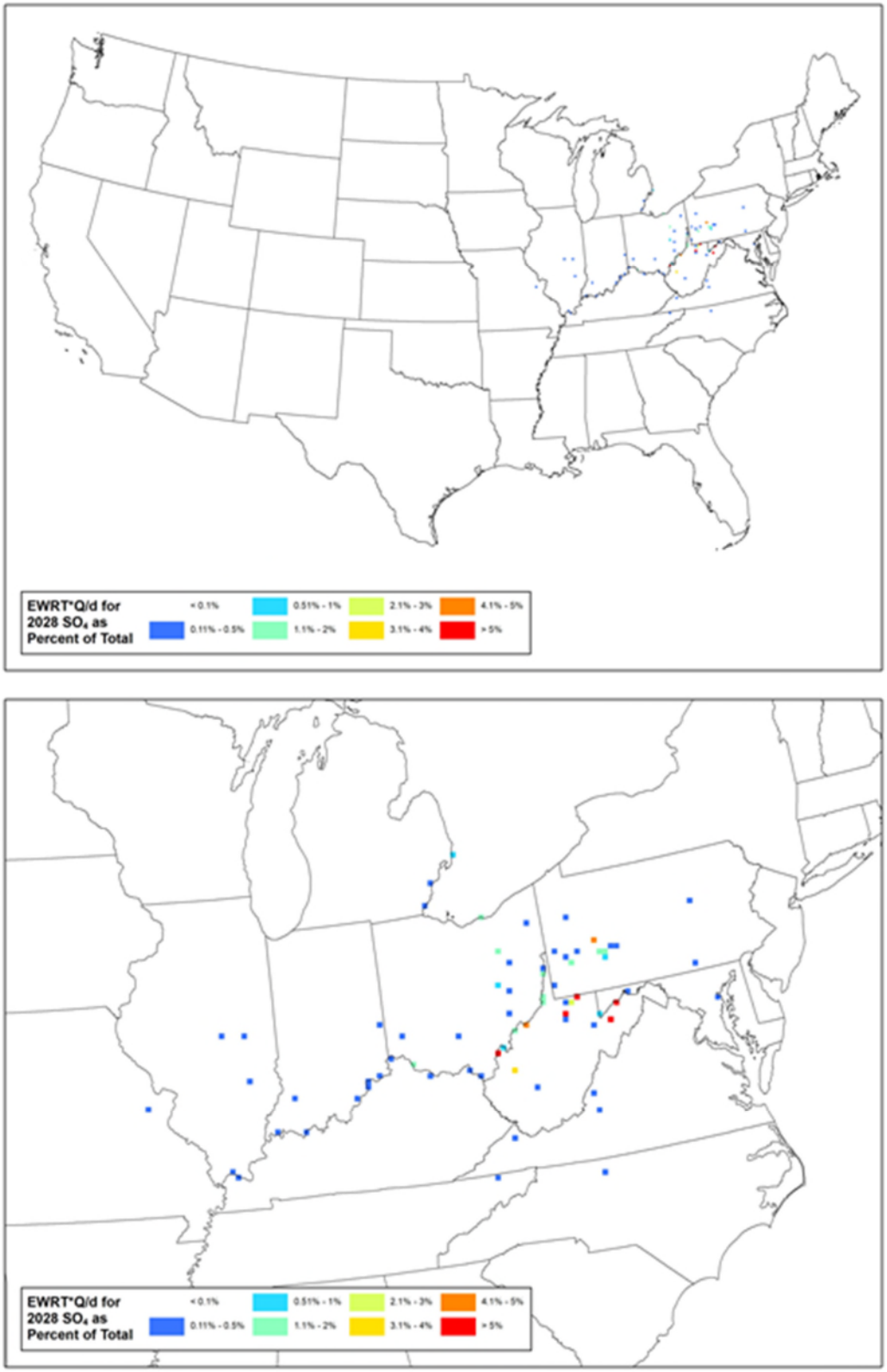


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

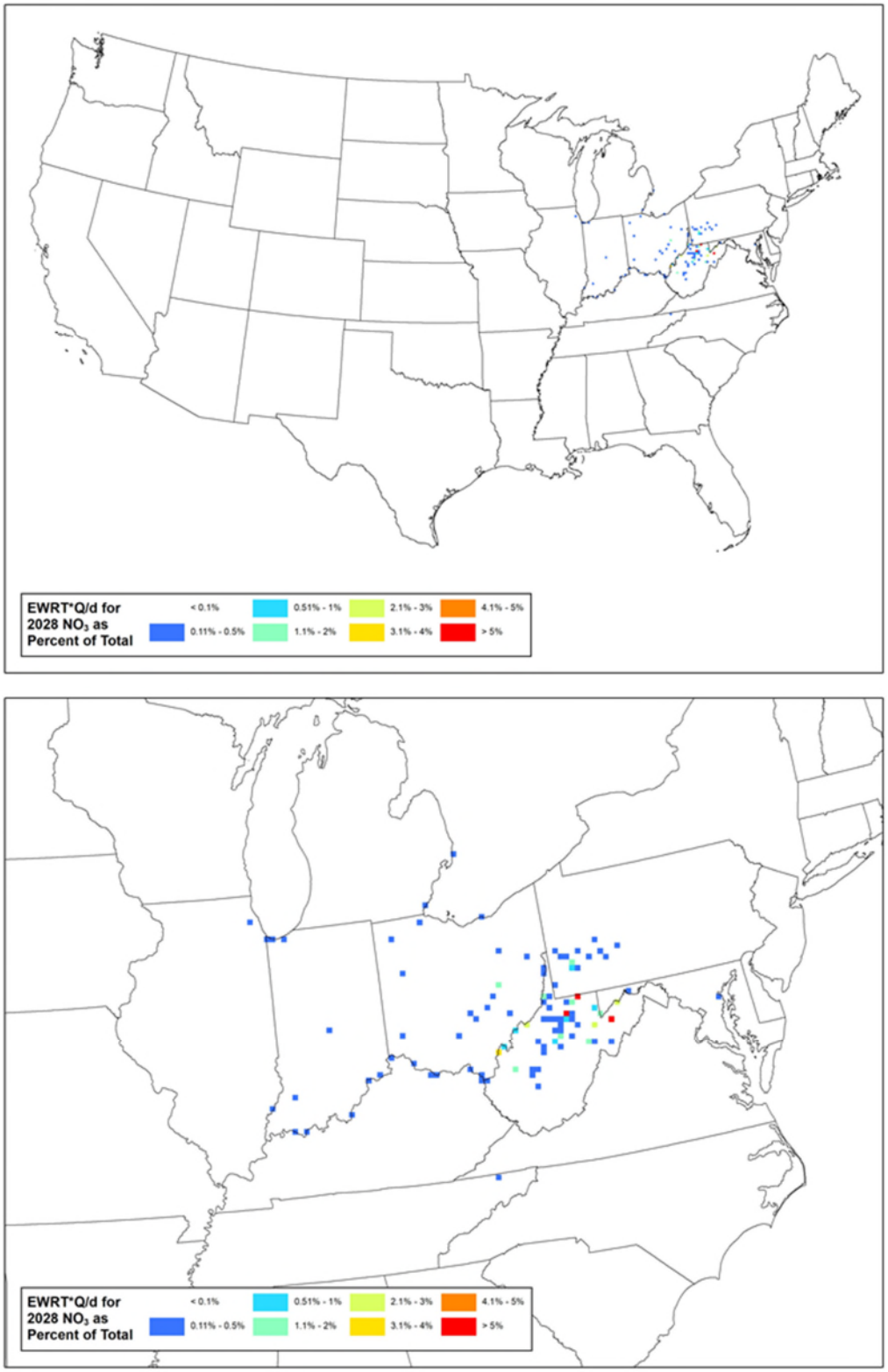


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

Otter Creek Wilderness Area

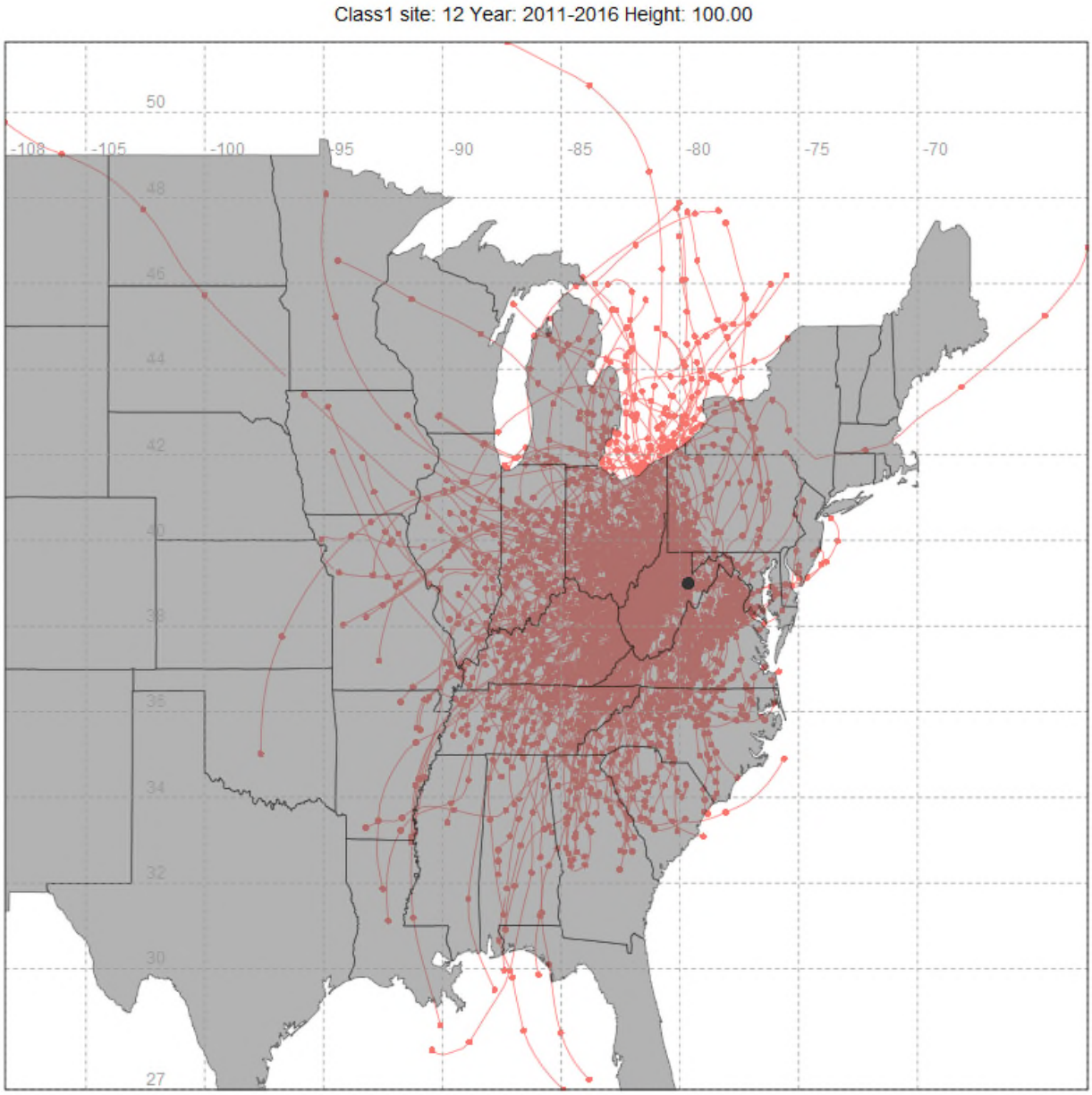


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Otter Creek Wilderness Area

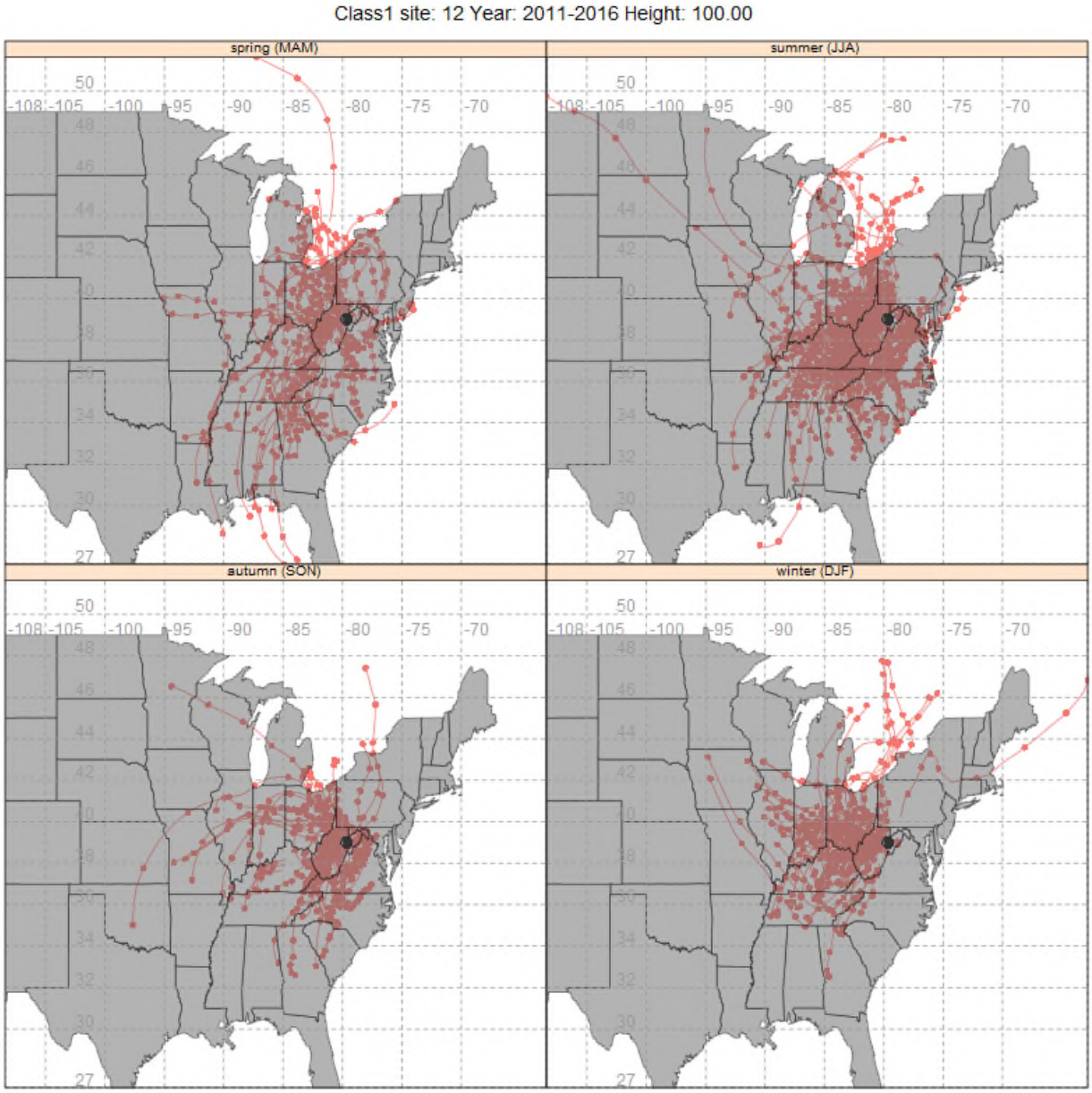


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Otter Creek Wilderness Area

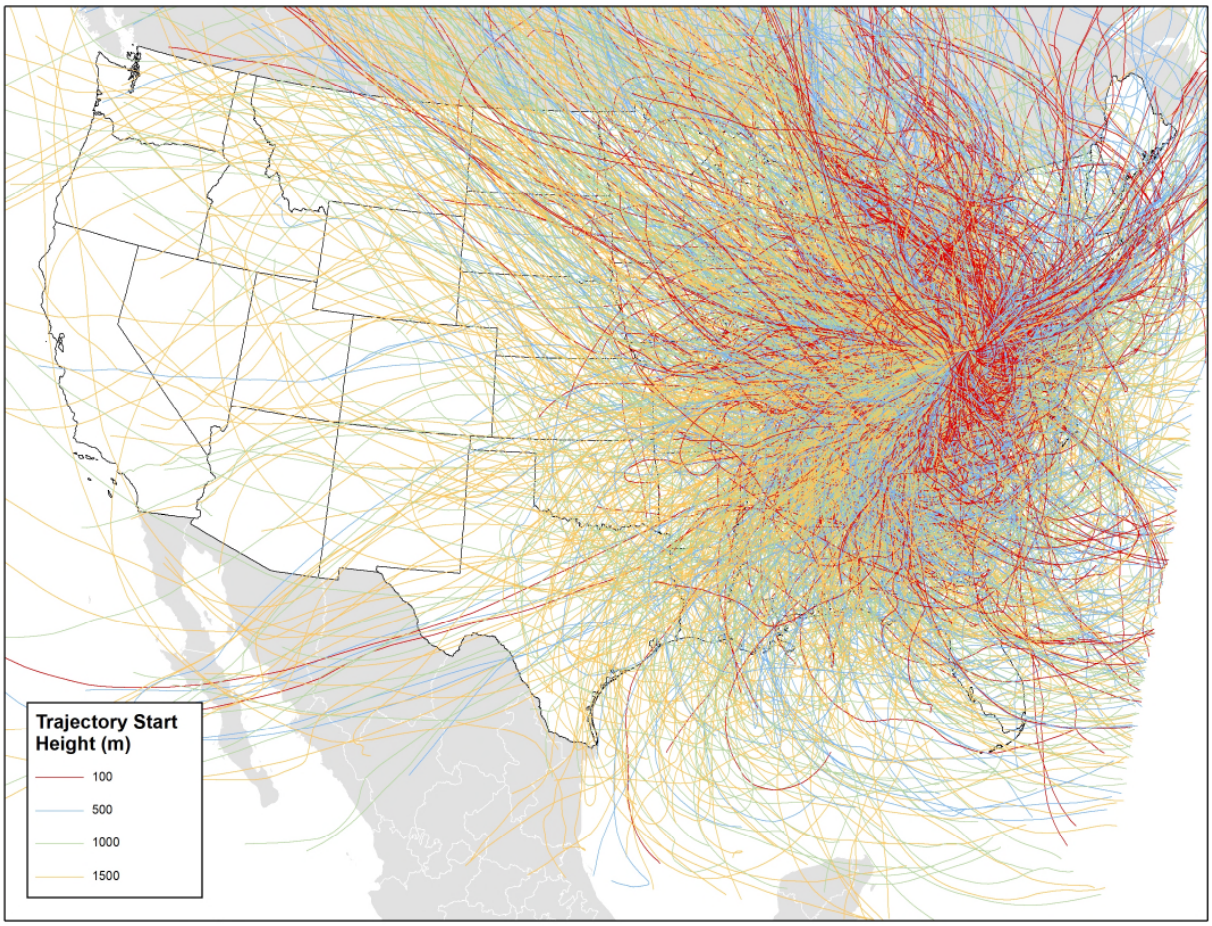
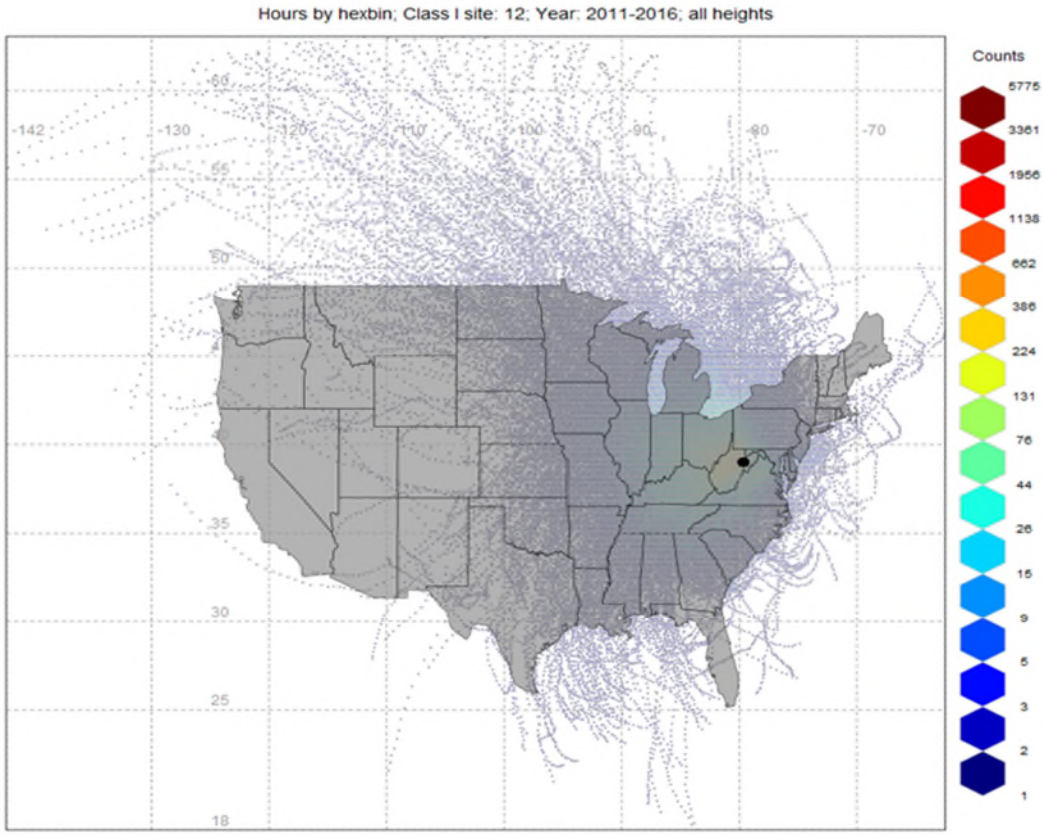


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Otter Creek Wilderness Area



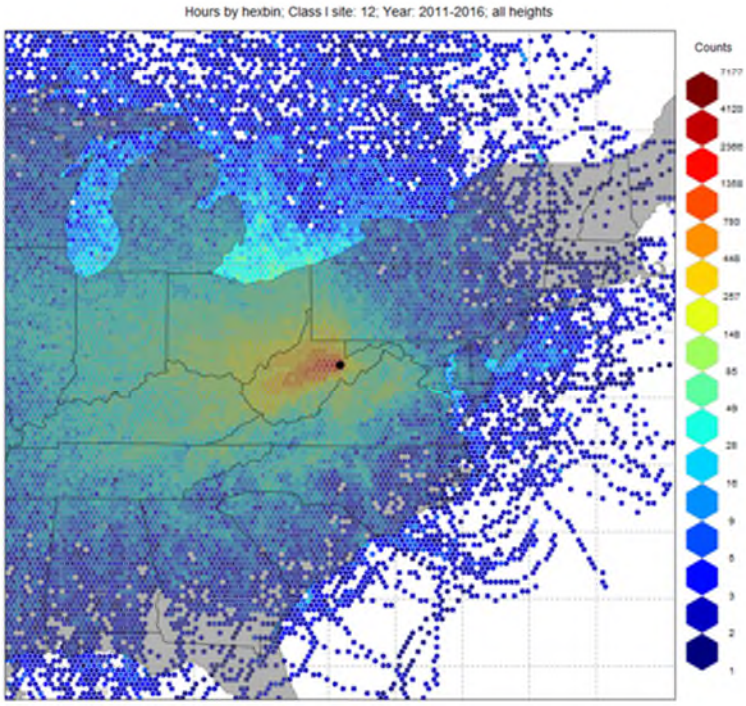
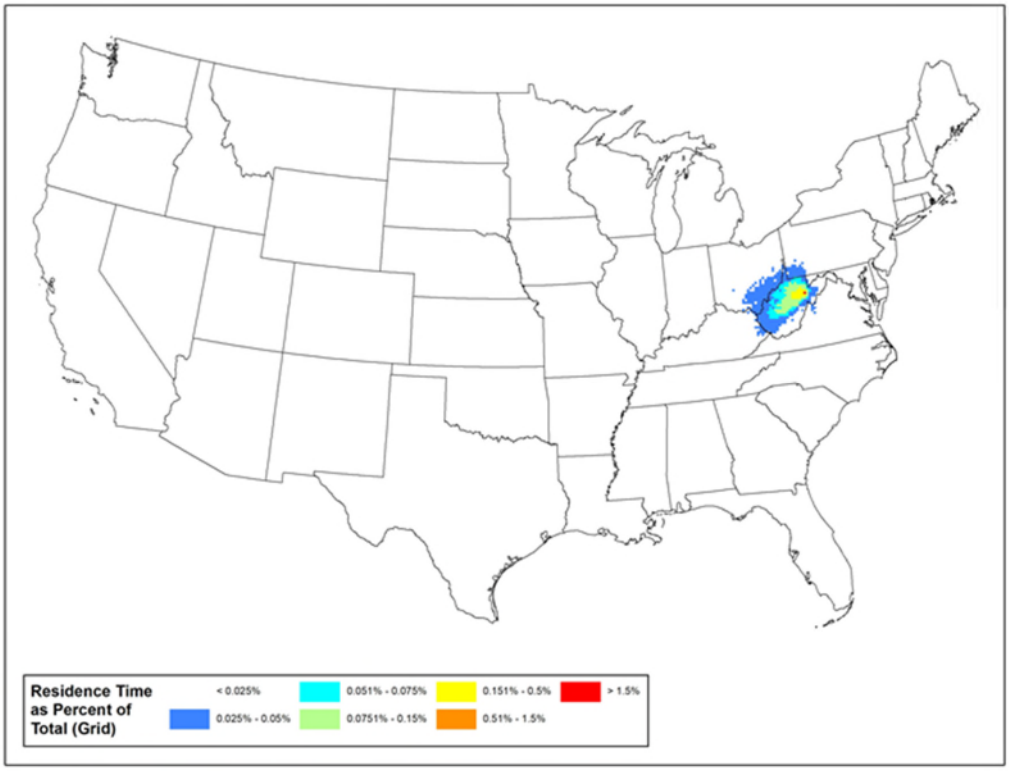


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)



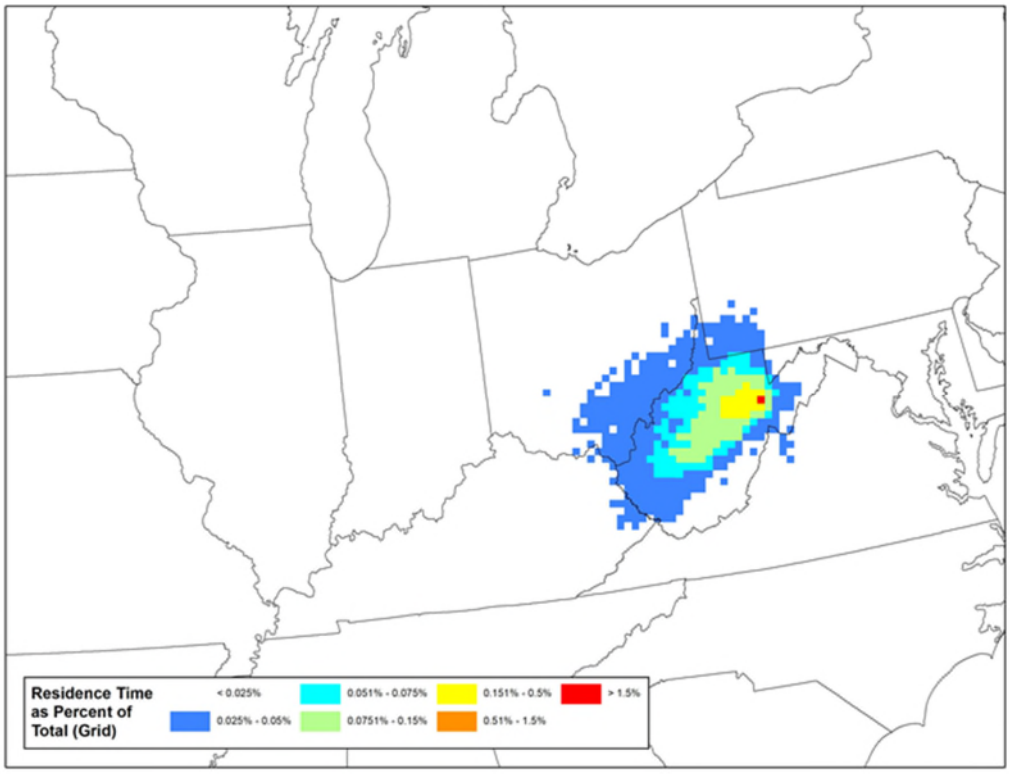


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

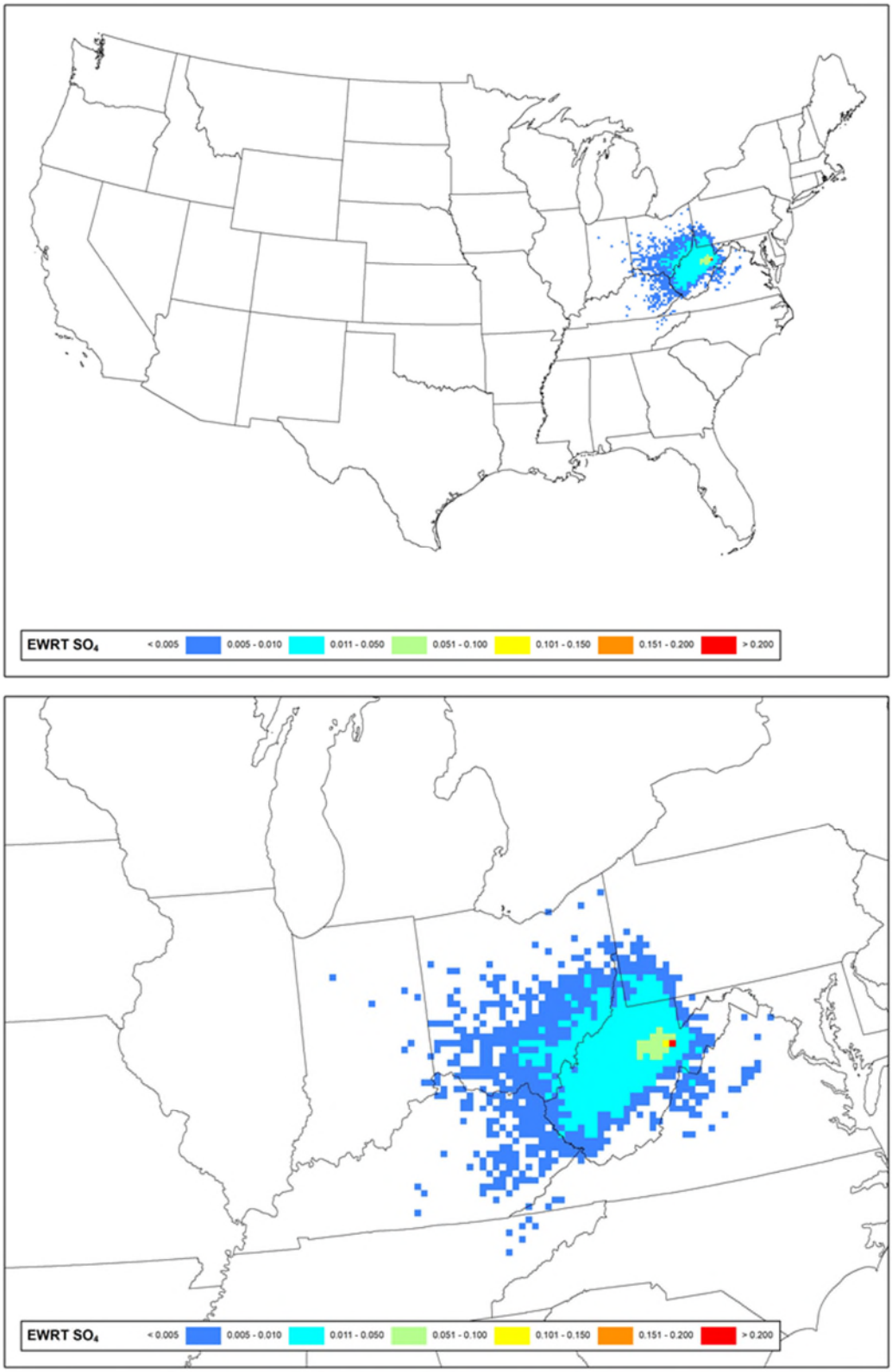
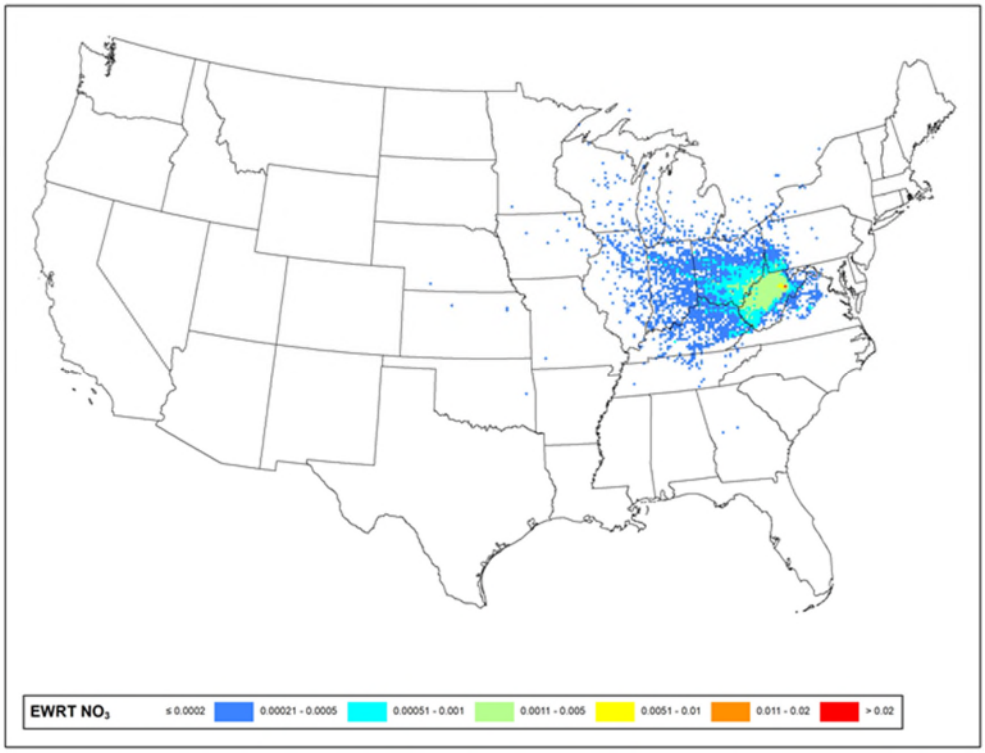


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)



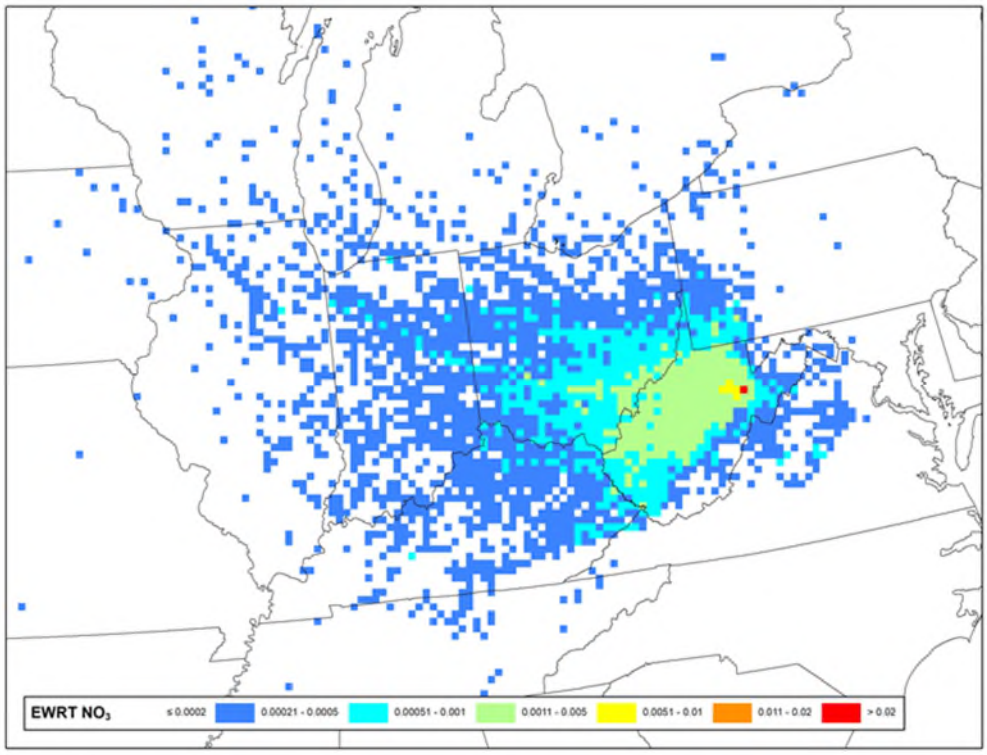


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Otter Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

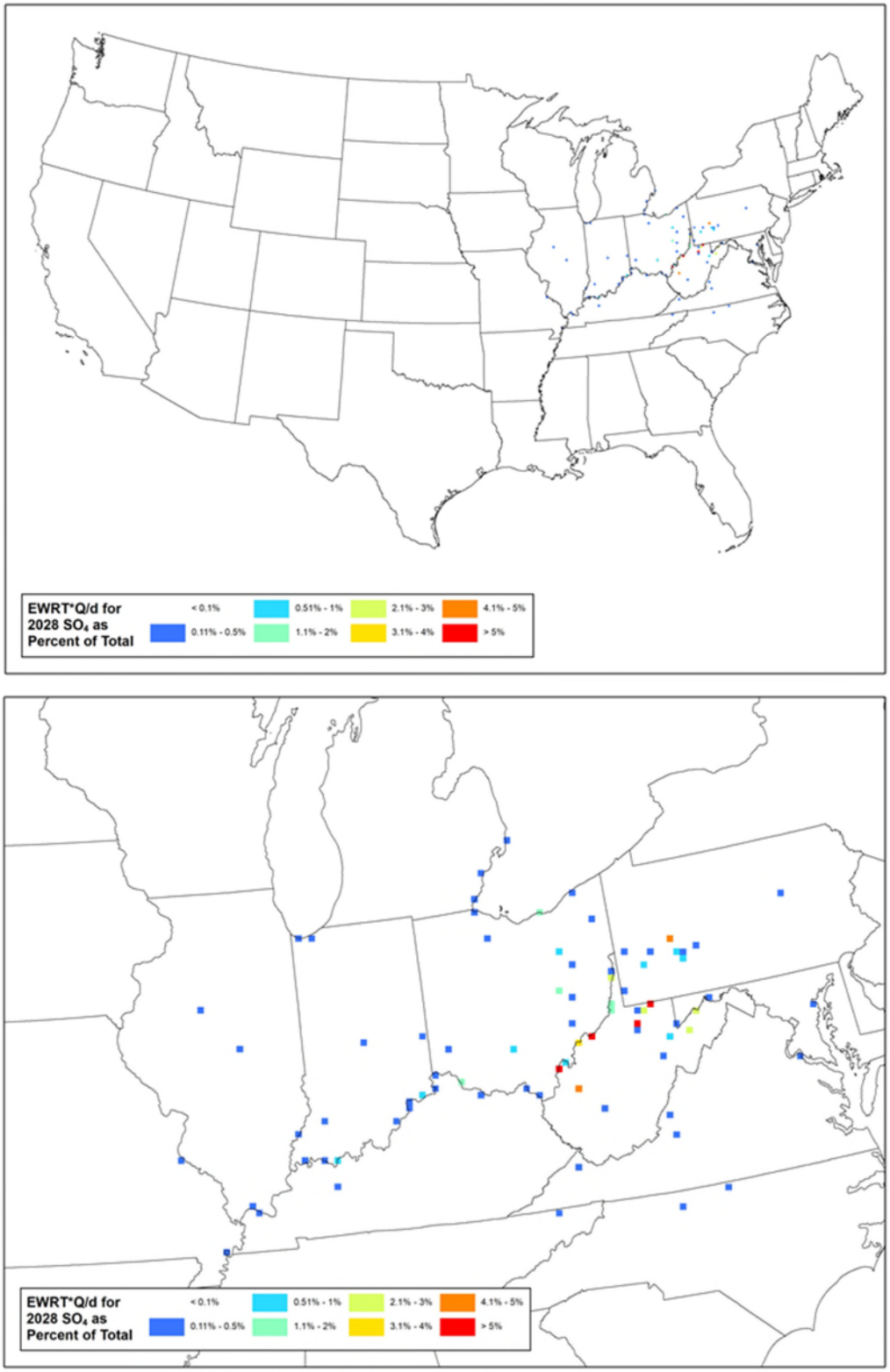


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

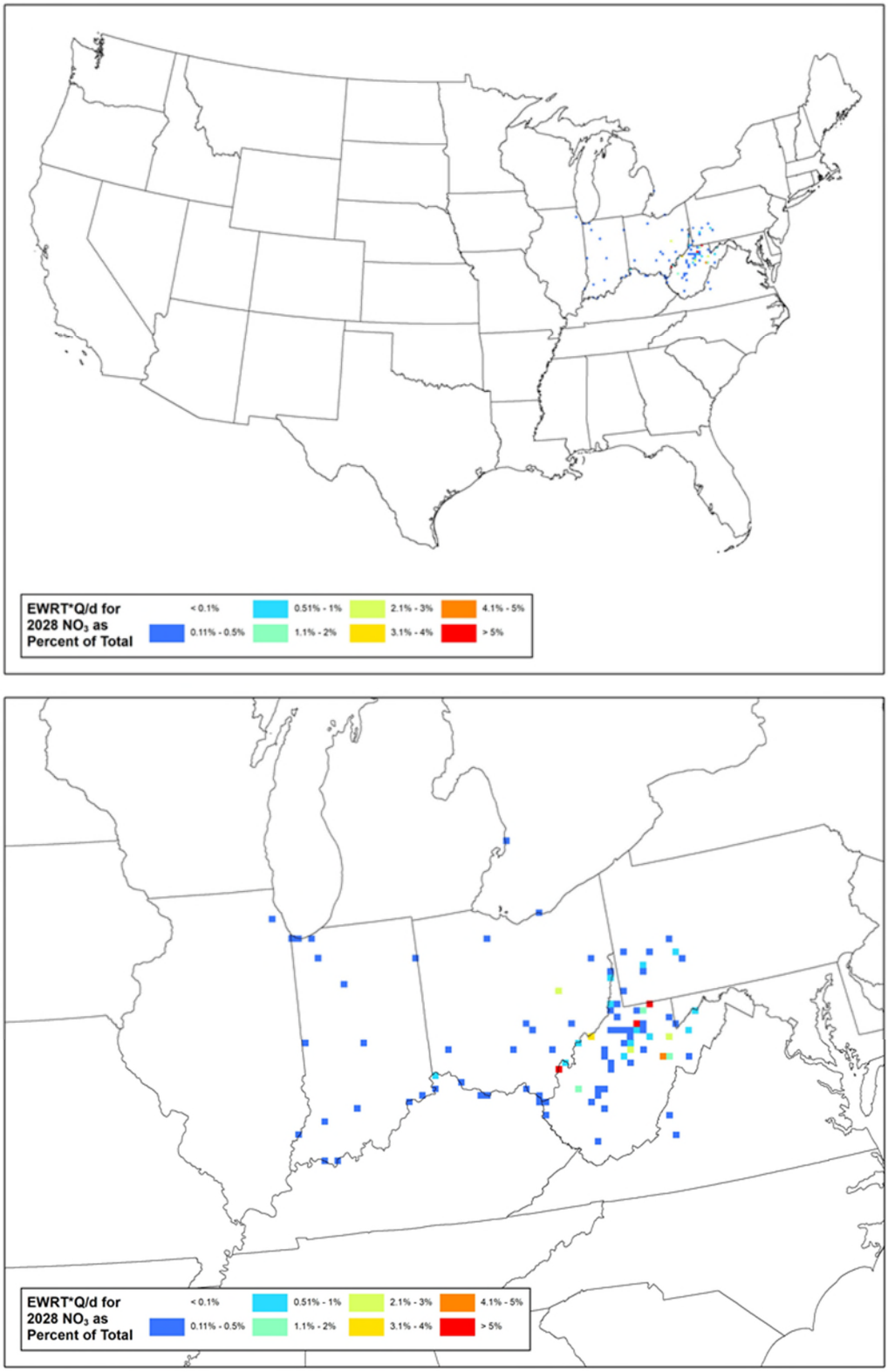


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

Everglades National Park

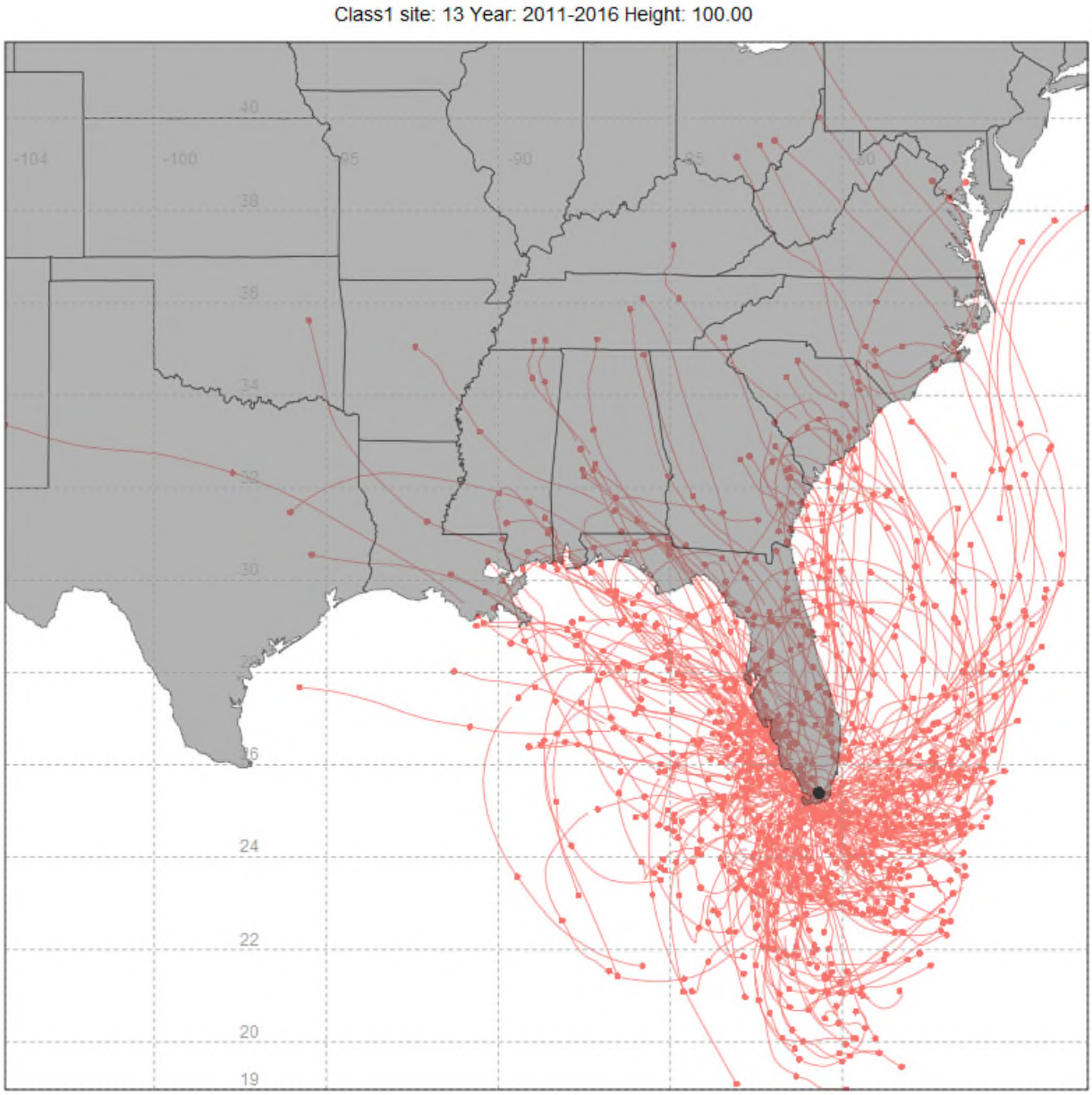


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Everglades National Park

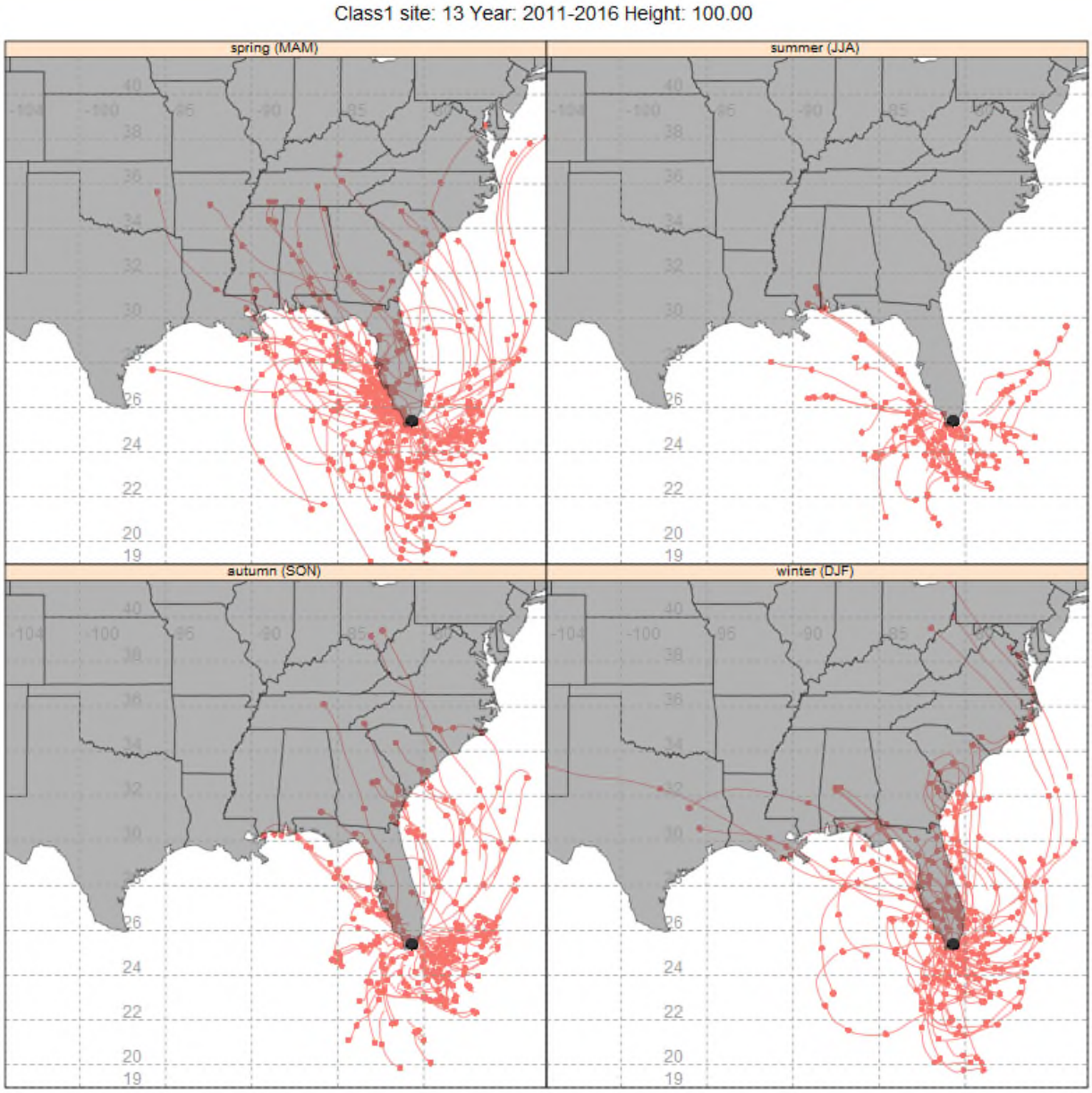


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Everglades National Park

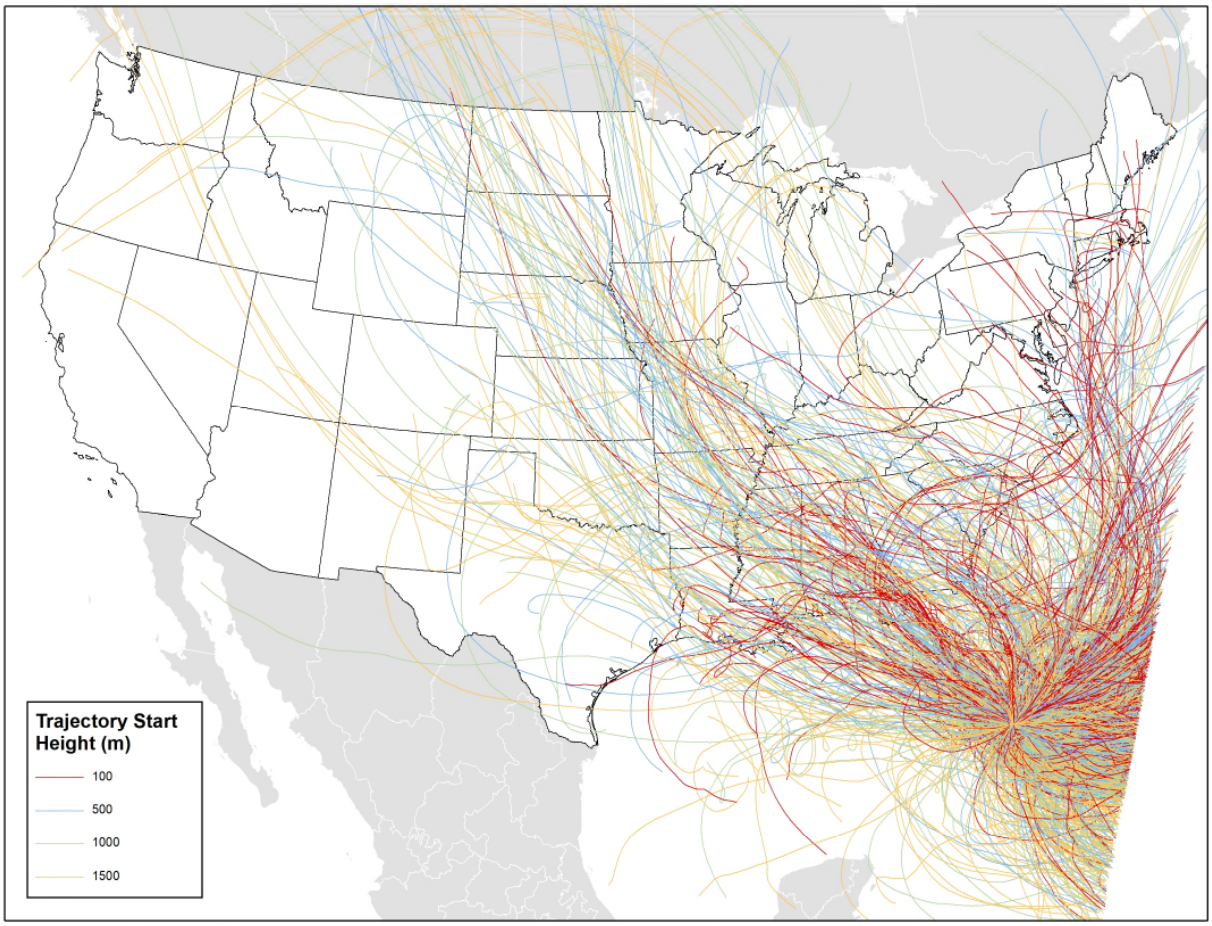


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Everglades National Park

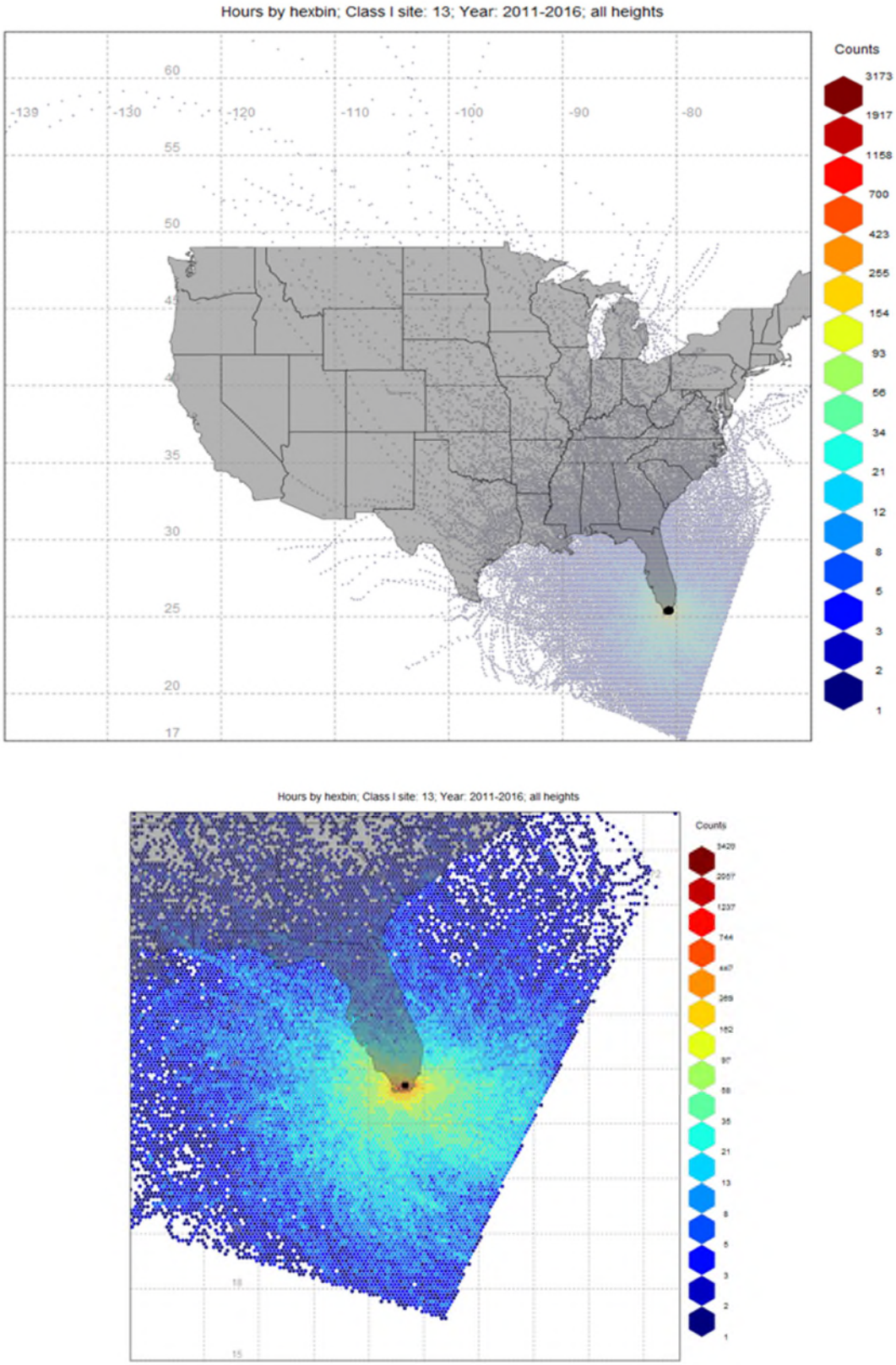


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

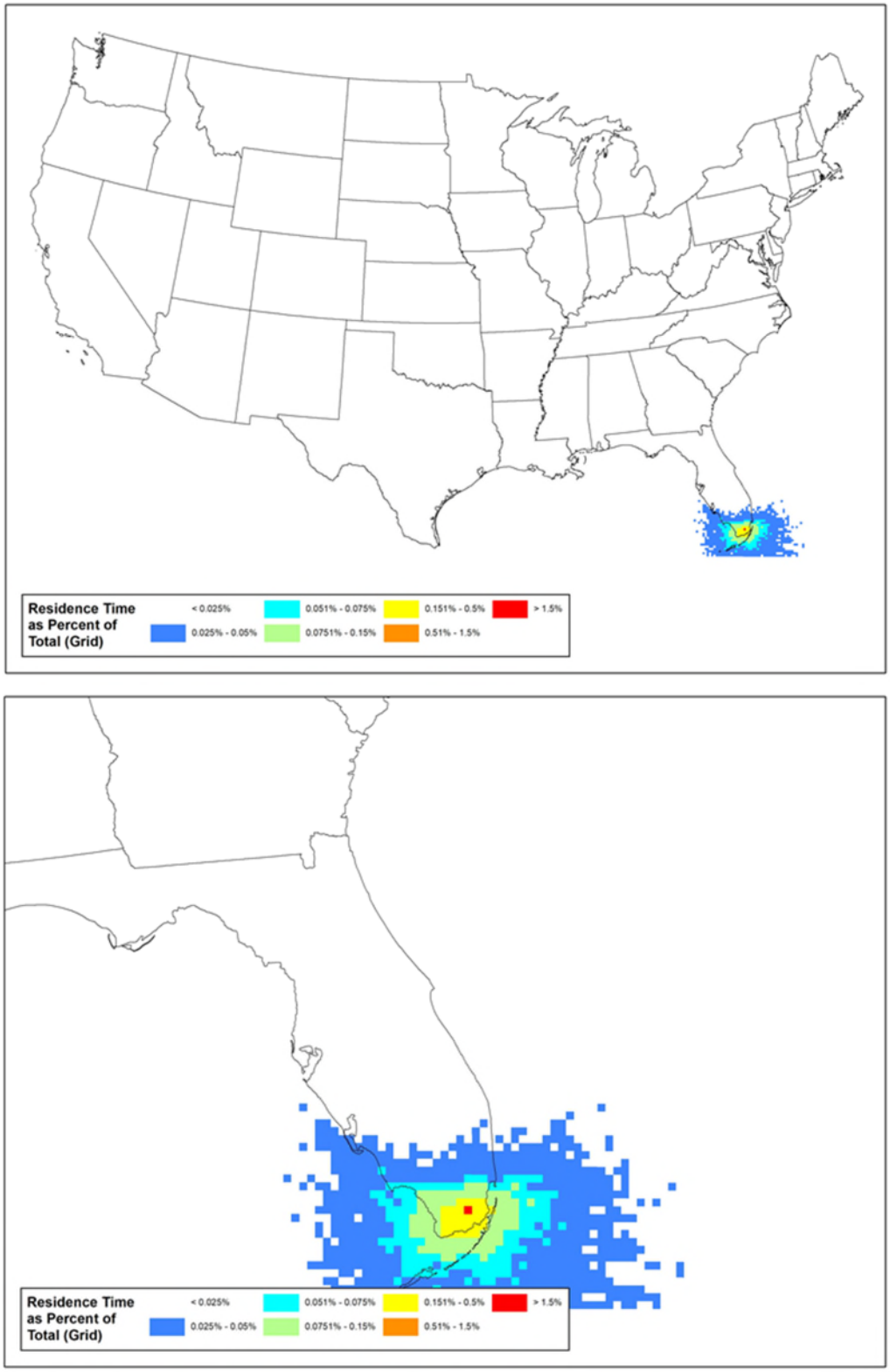


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Everglades National Park – Full View (top) and Class I Zoom (bottom)

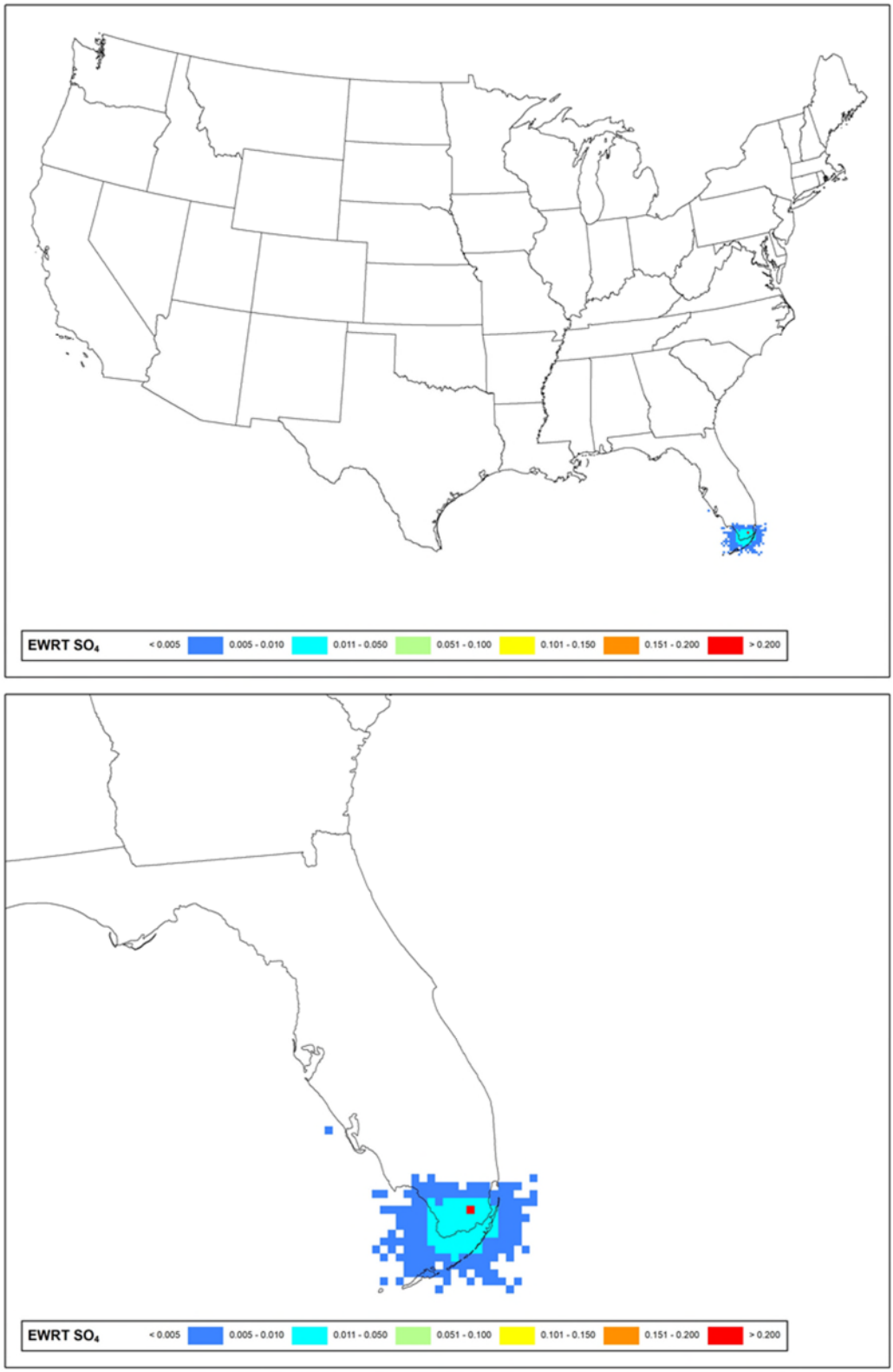


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Everglades National Park - Full View (top) and Class I Zoom (bottom)

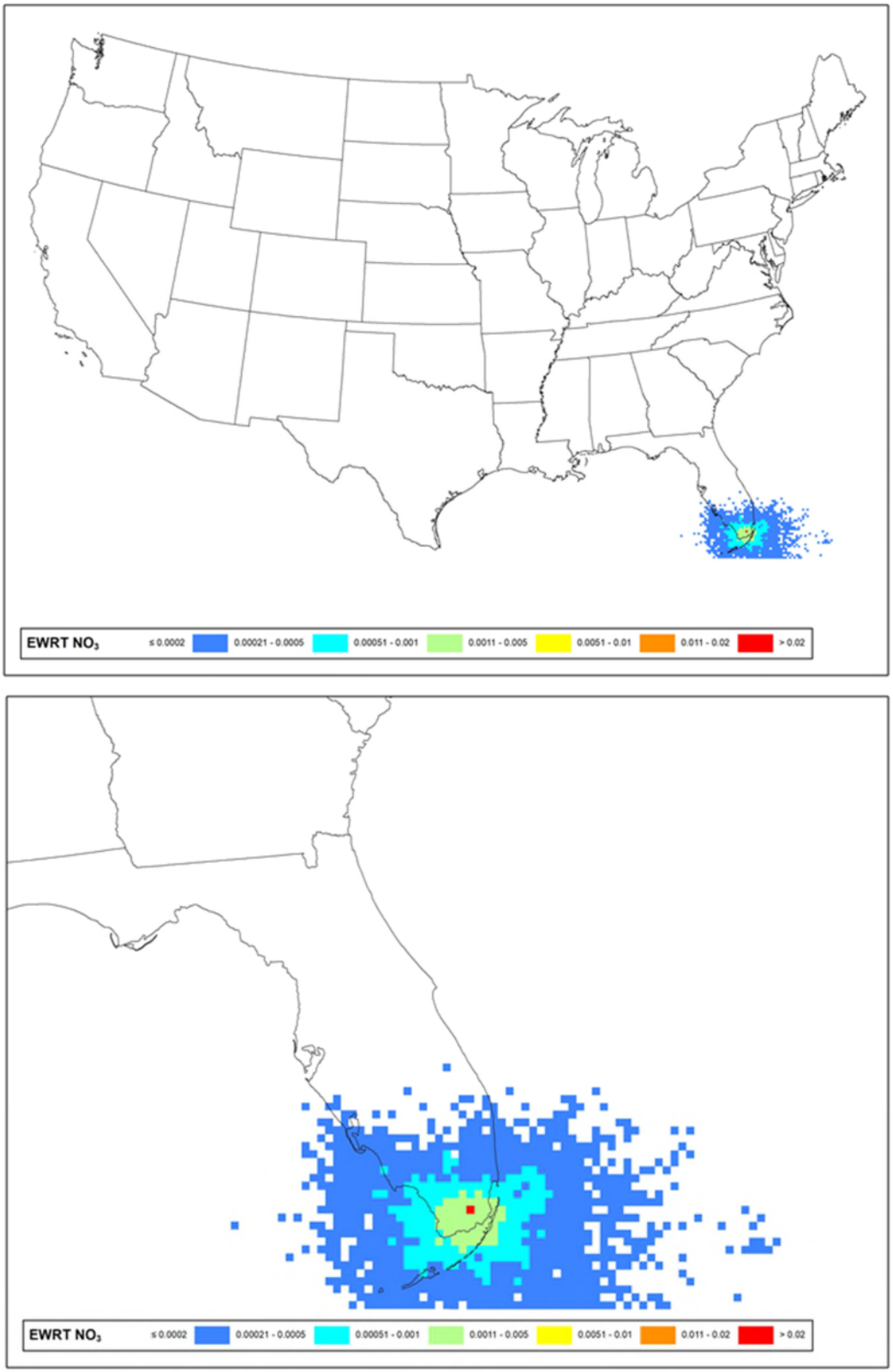


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Everglades National Park - Full View (top) and Class I Zoom (bottom)

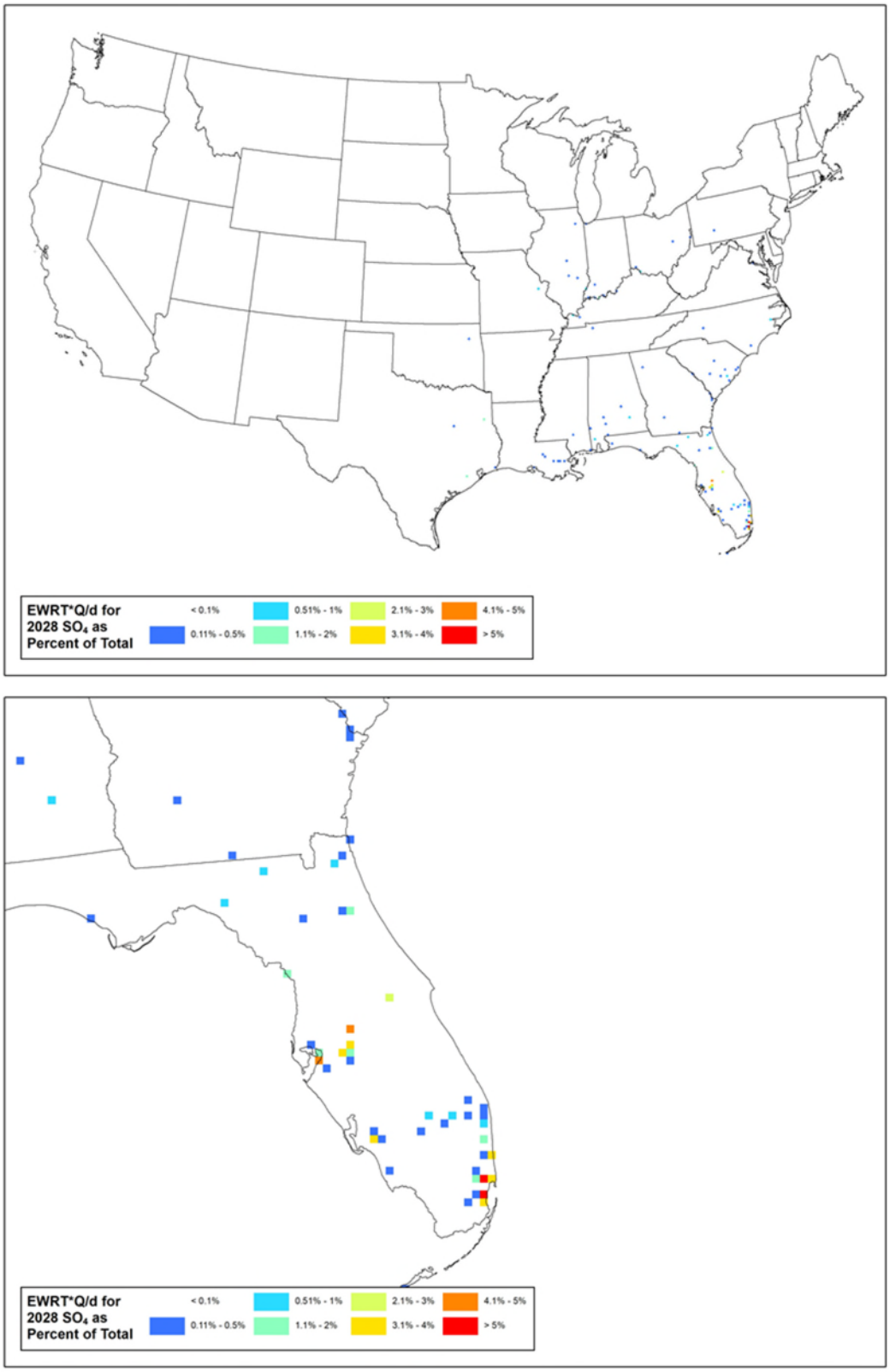


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

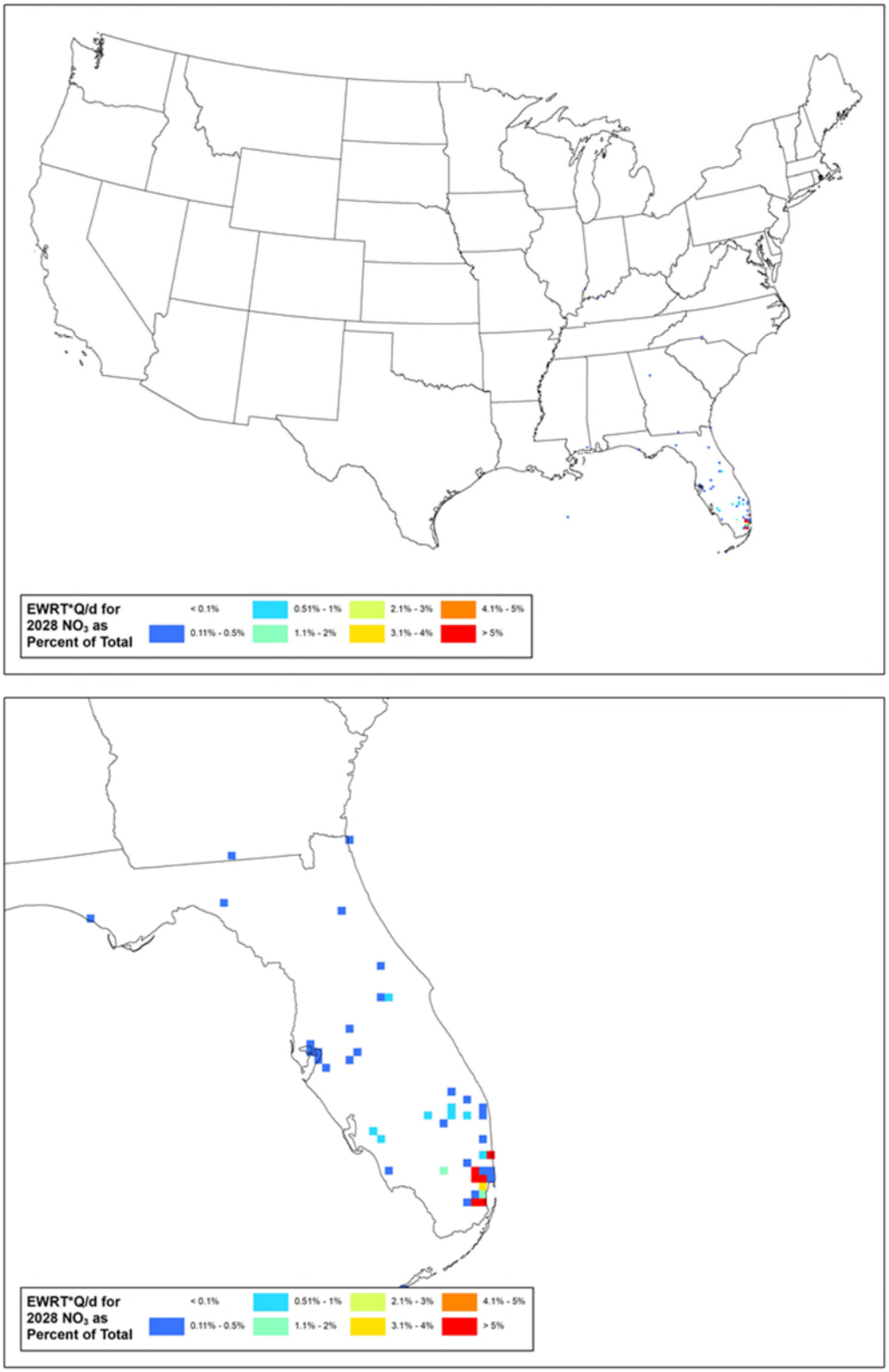


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

Great Smoky Mountains National Park

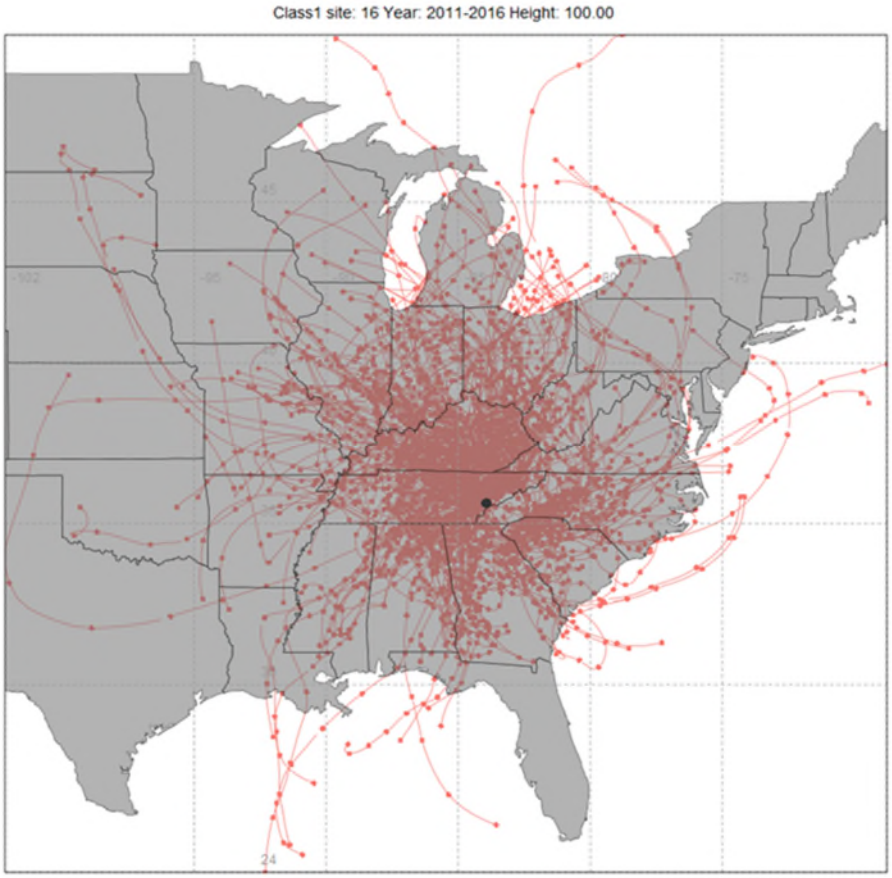


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Great Smoky Mountains National Park

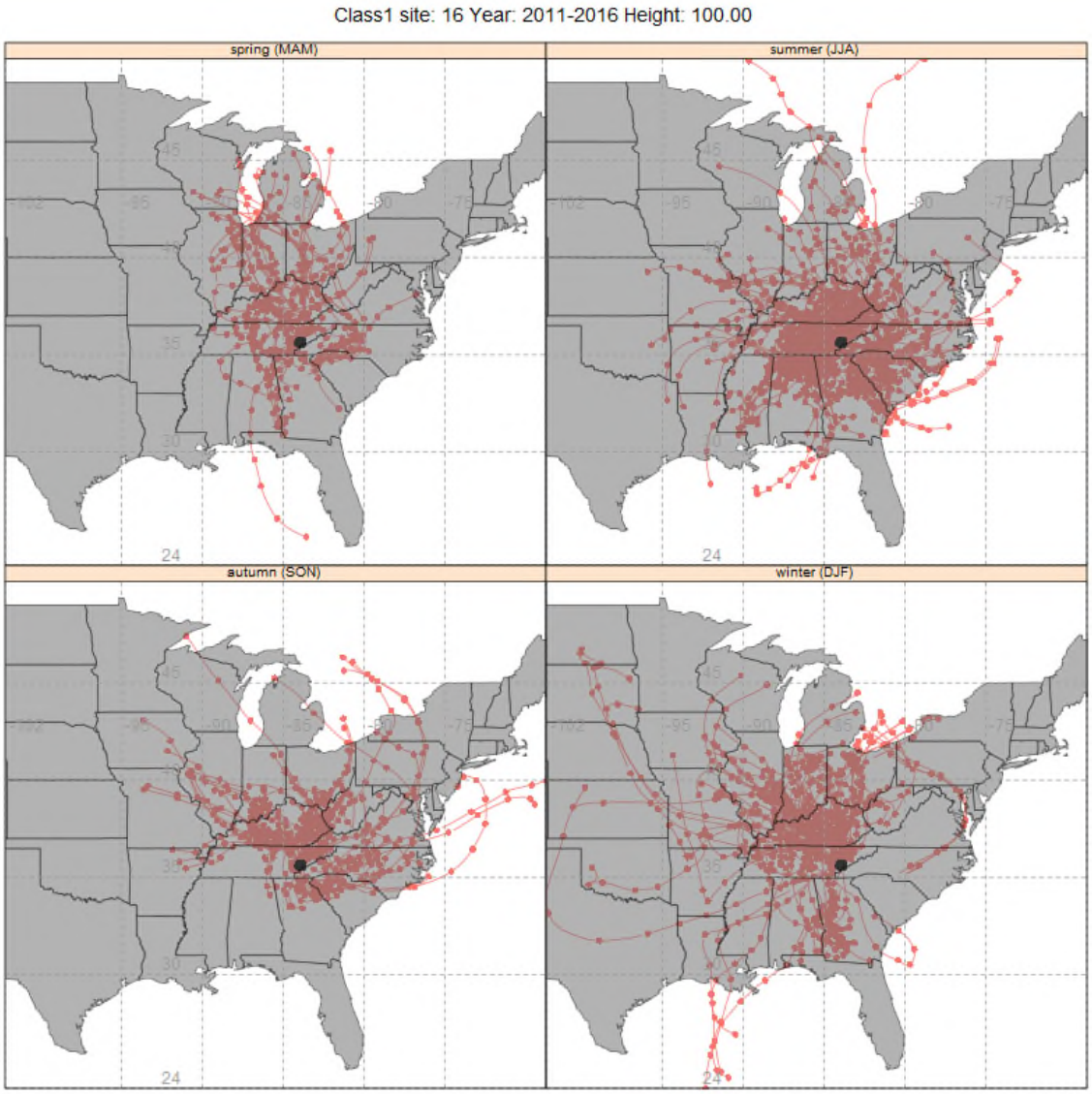


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Great Smoky Mountains National Park

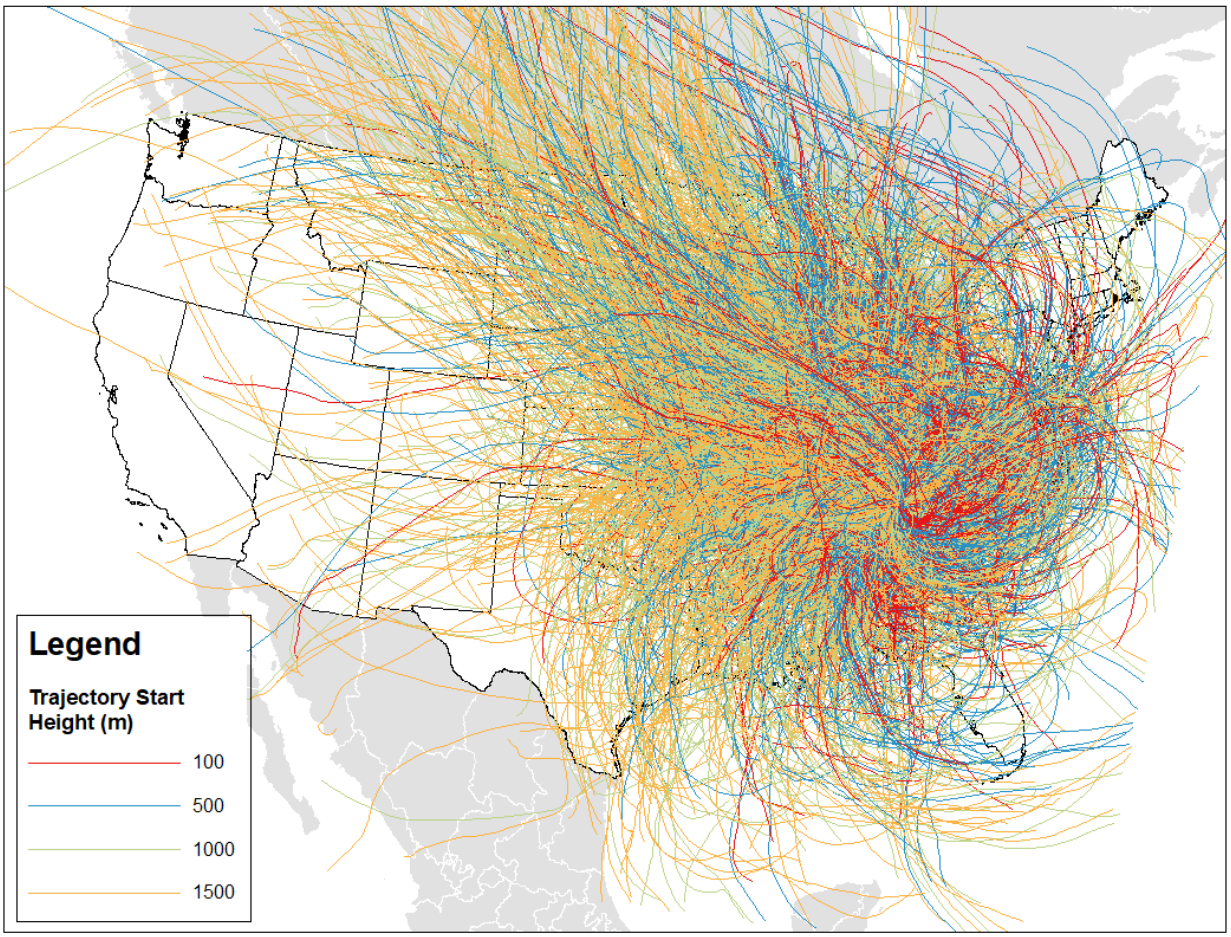
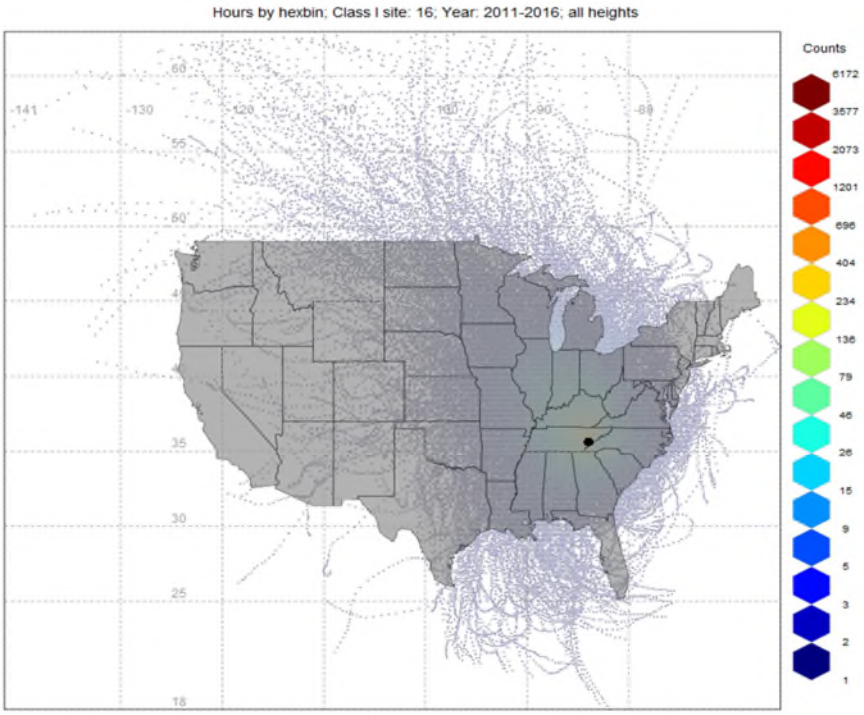


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Great Smoky Mountains National Park



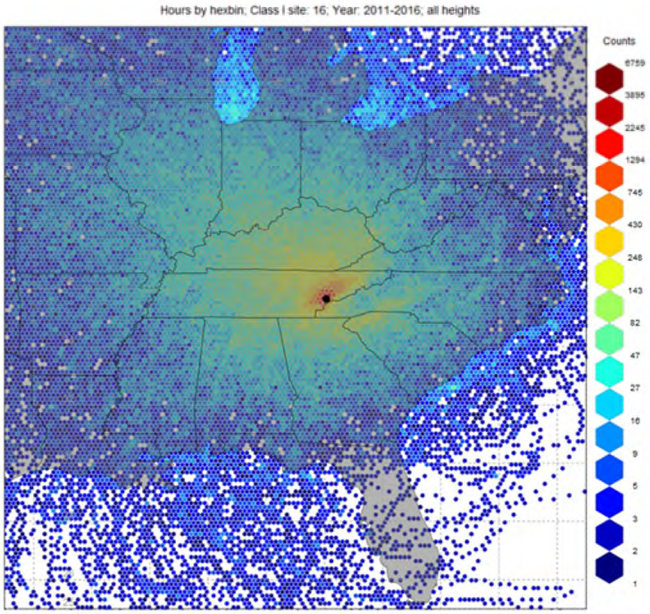
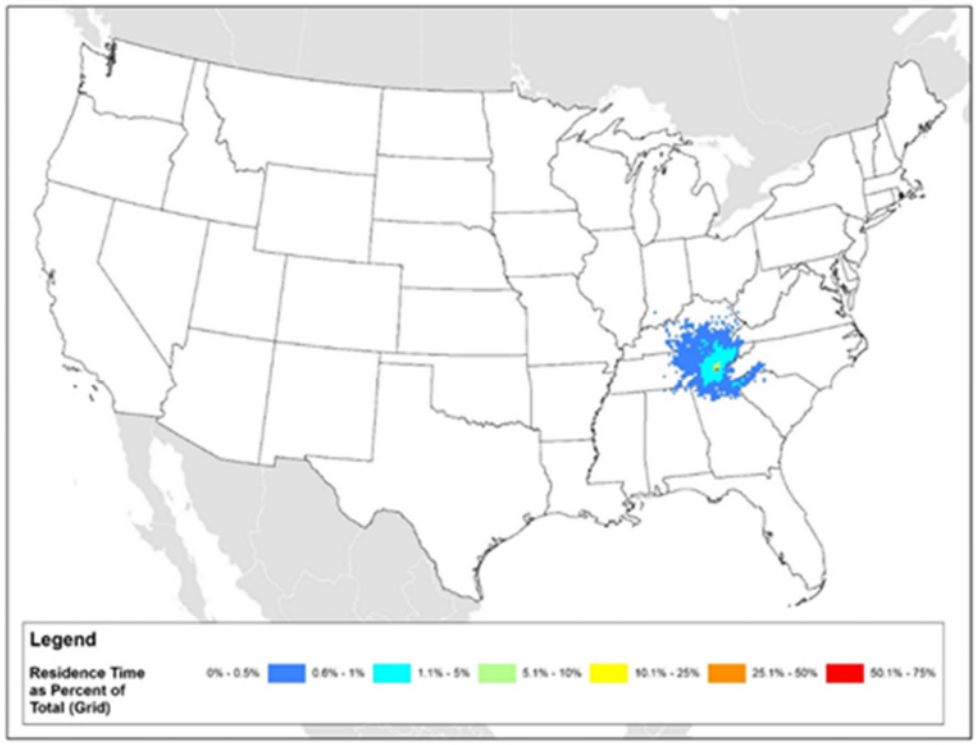


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)



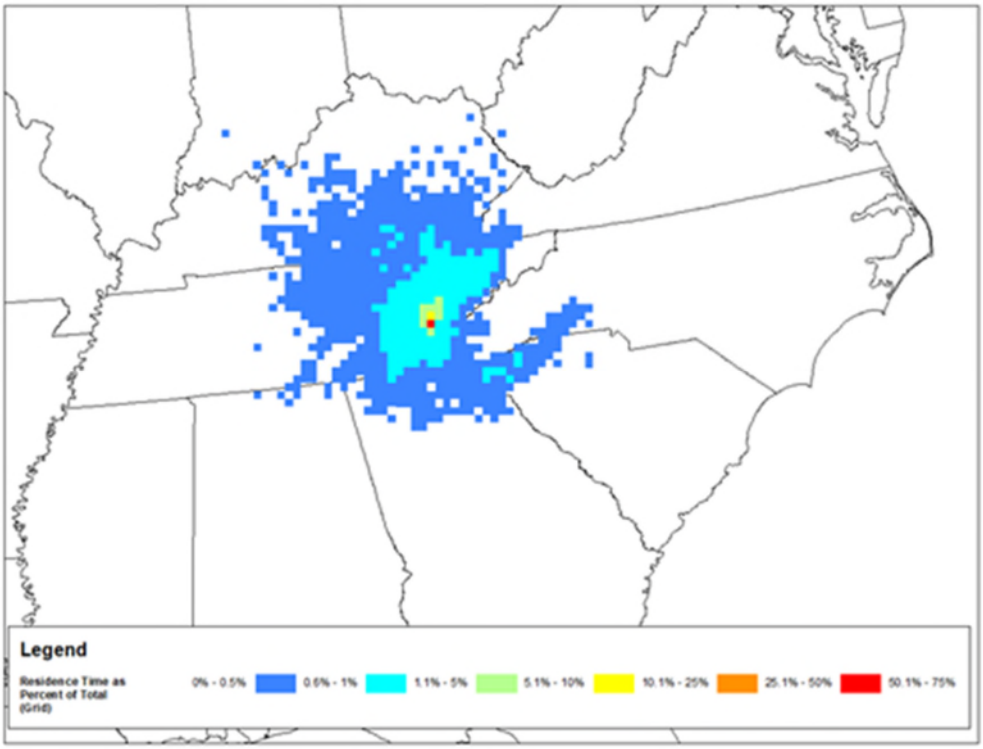


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

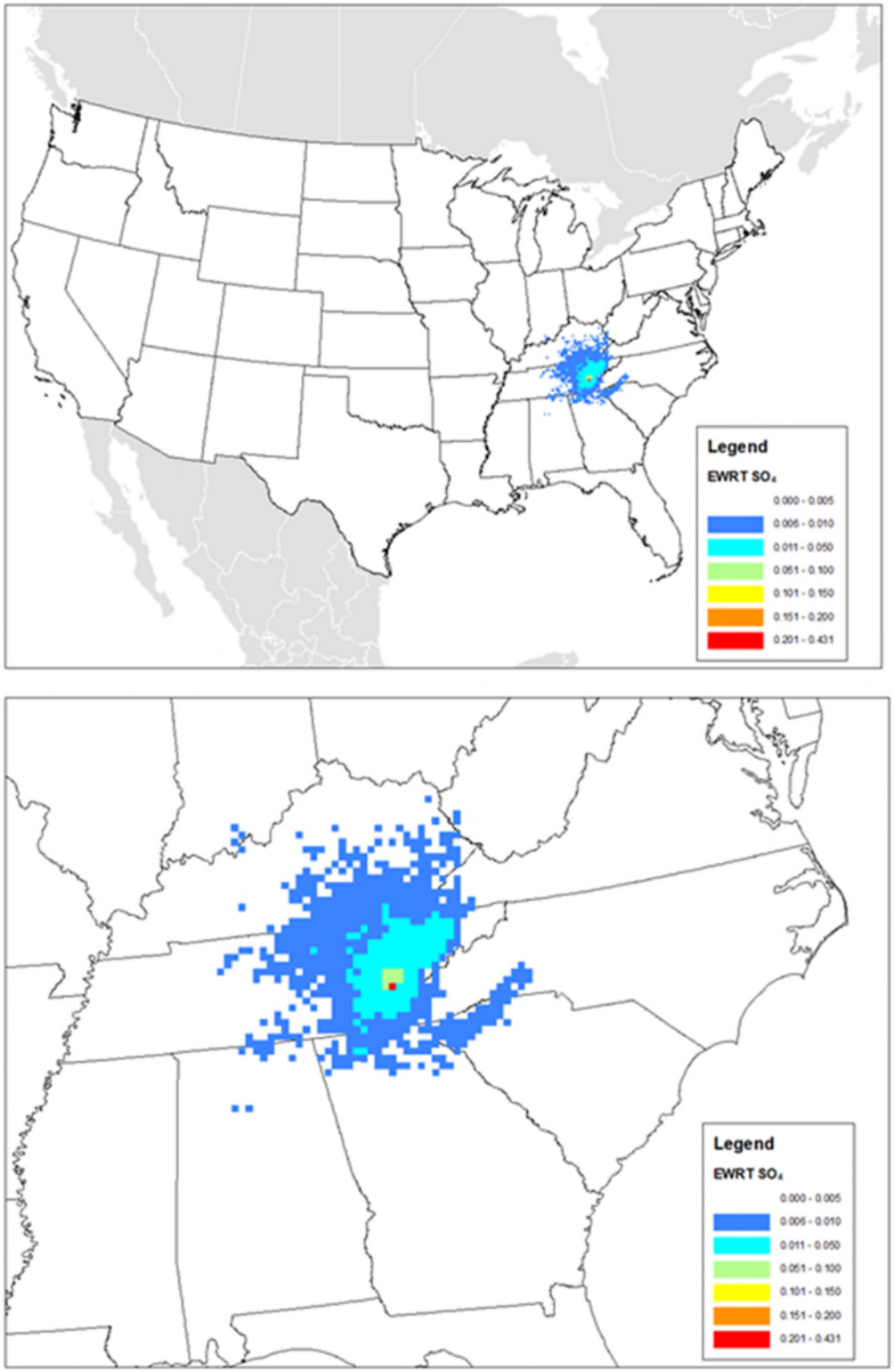


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park - Full View (top) and Class I Zoom (bottom)

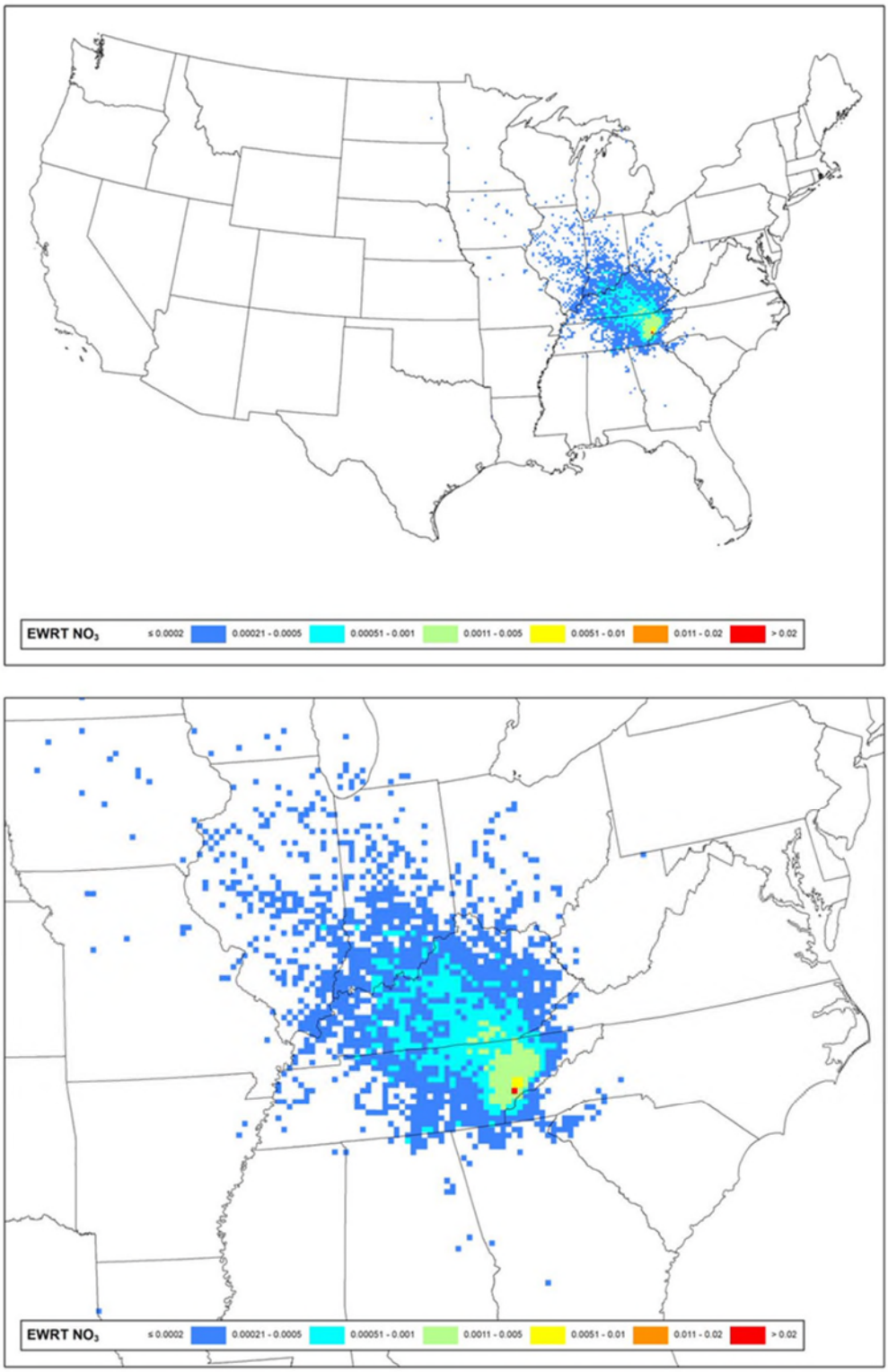


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Great Smoky Mountains National Park - Full View (top) and Class I Zoom (bottom)

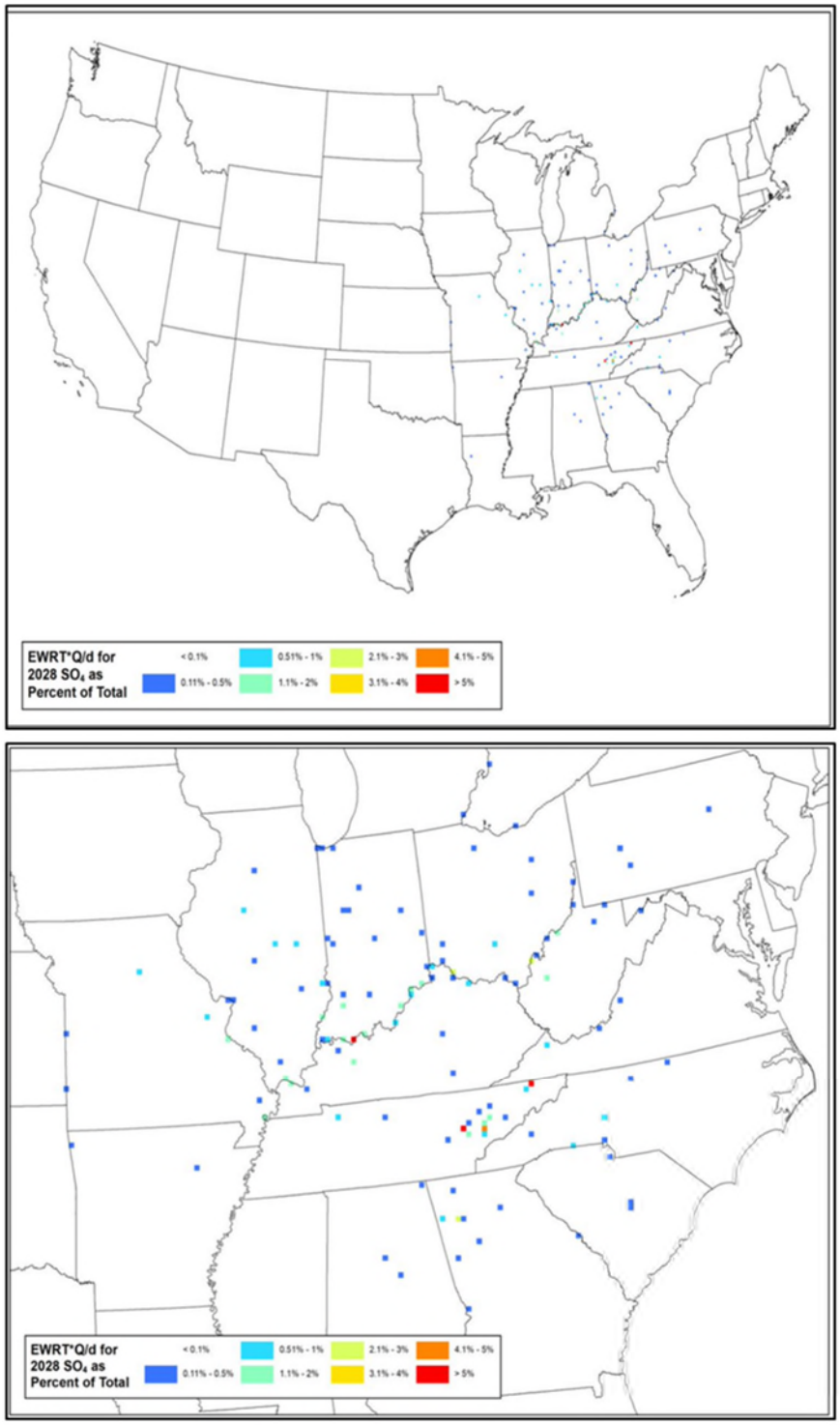


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

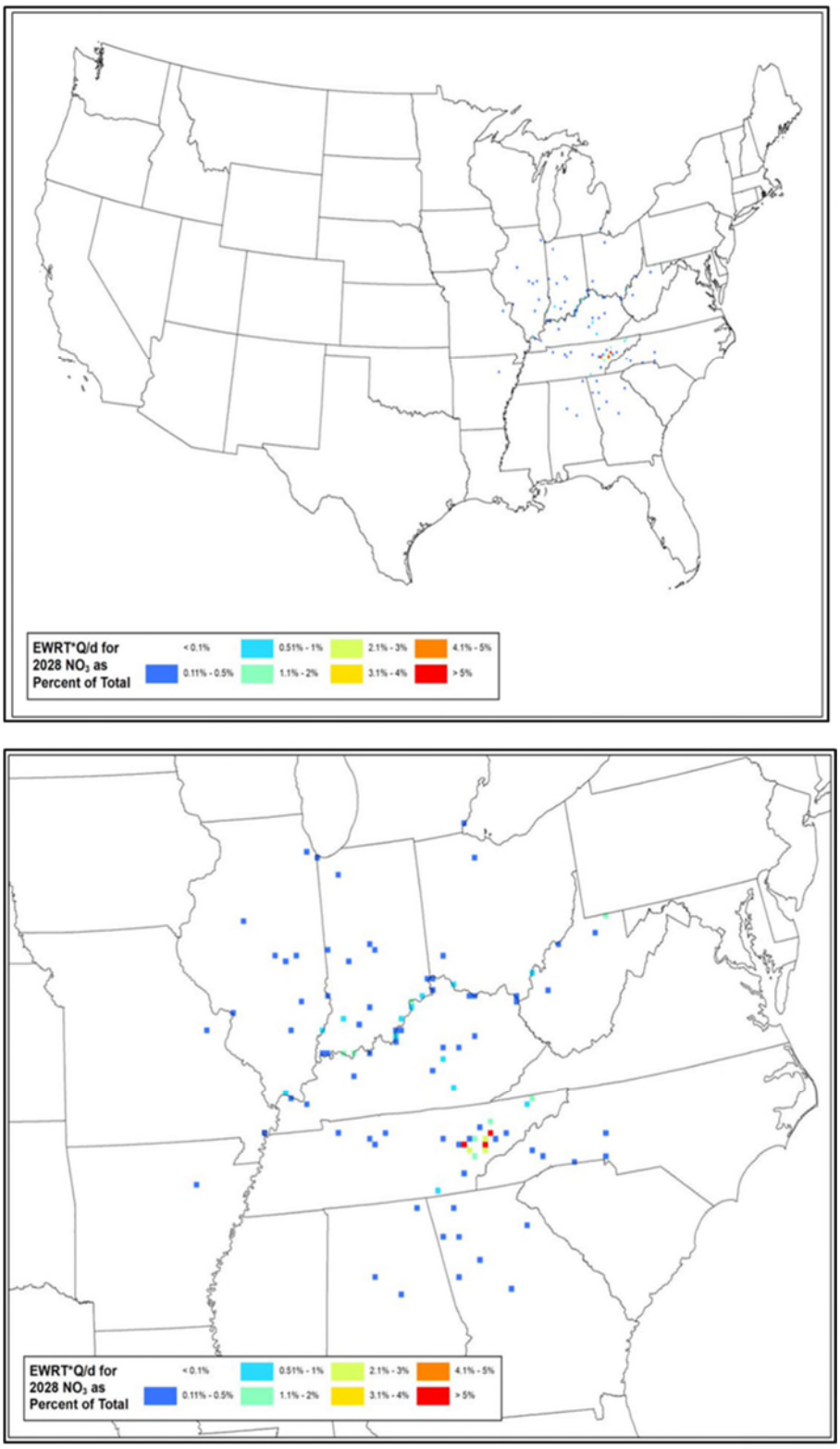


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

Joyce Kilmer/Slickrock Wilderness Area

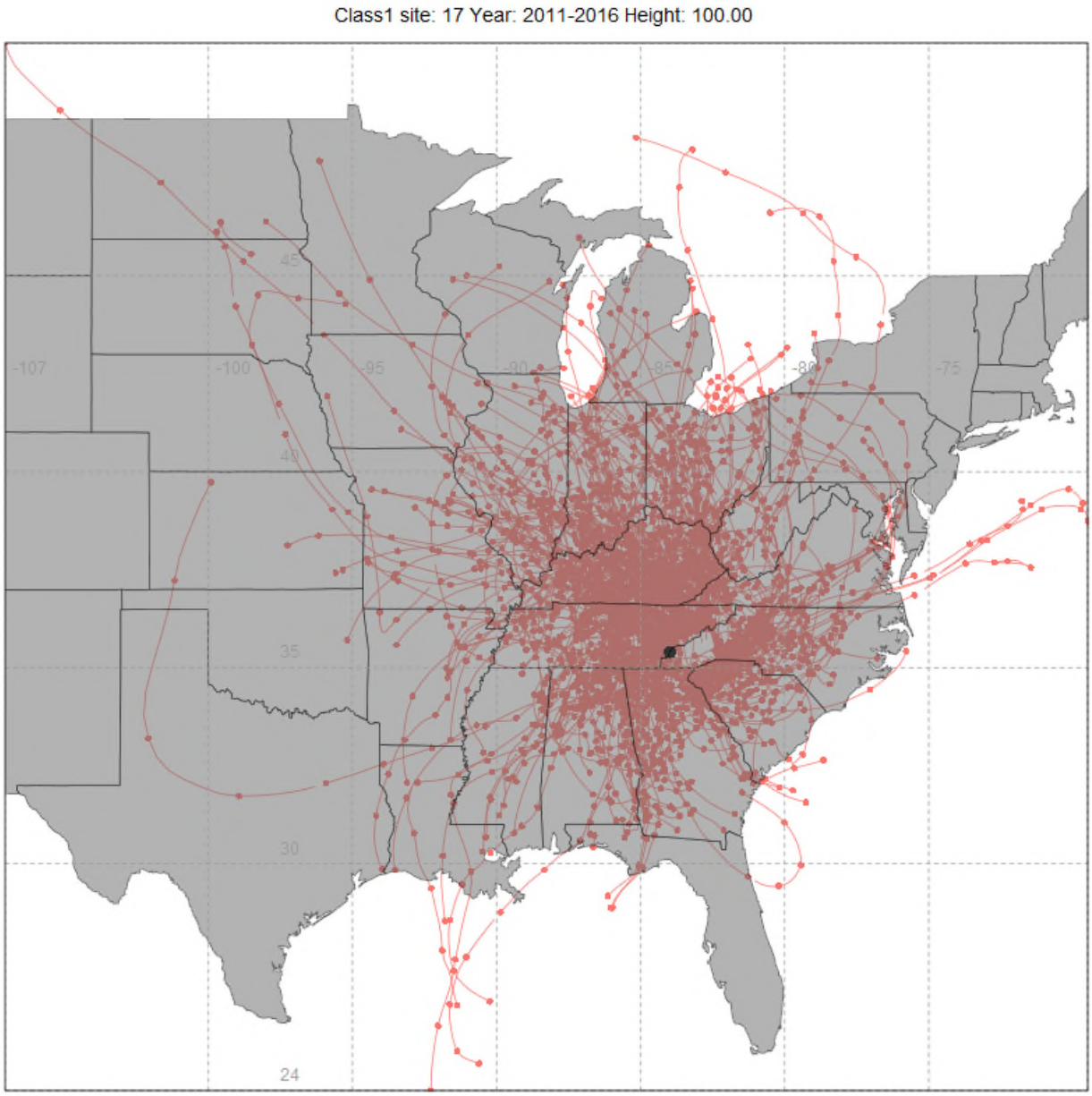


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Joyce Kilmer/Slickrock Wilderness Area

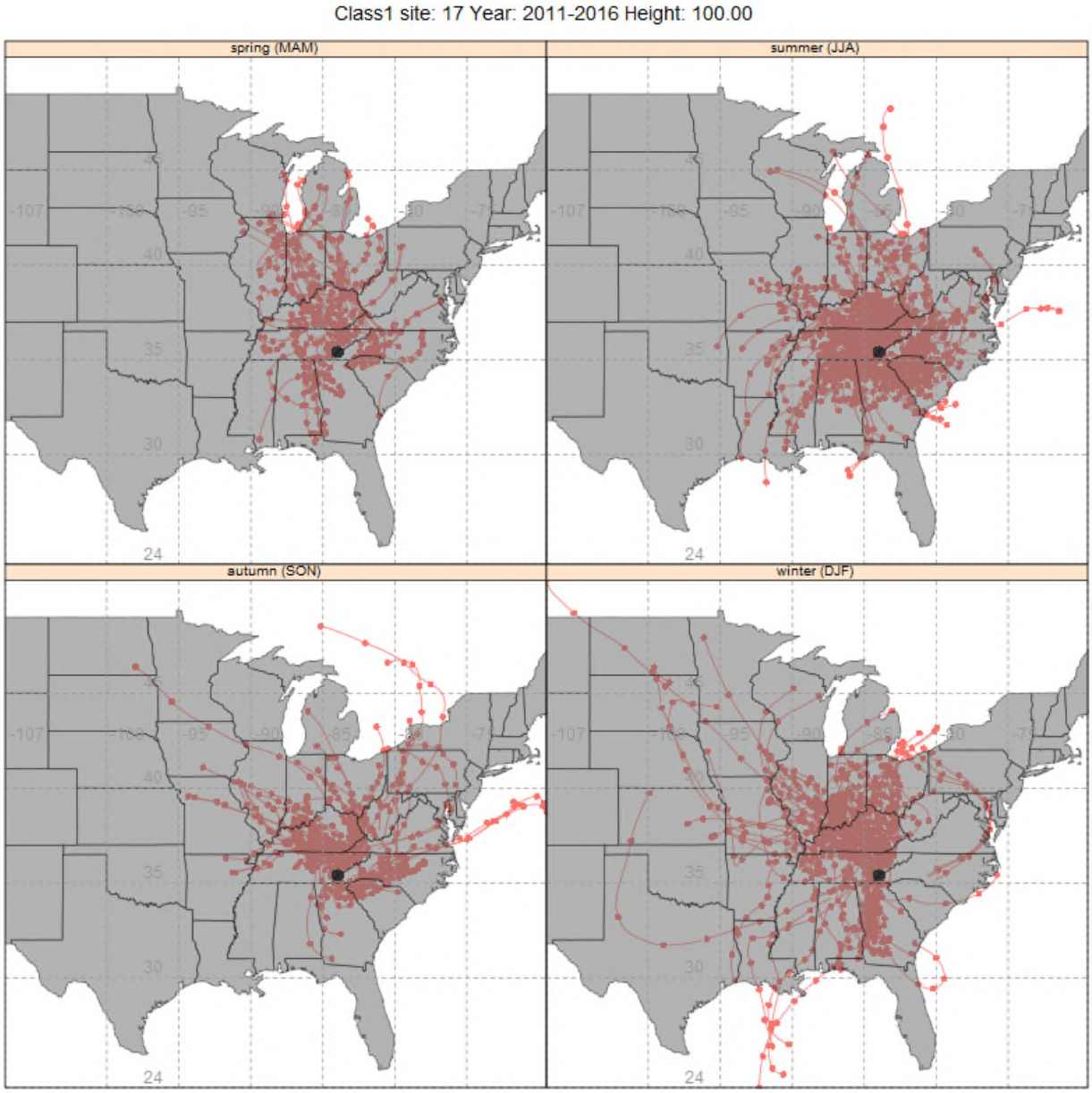


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Joyce Kilmer/Slickrock Wilderness Area

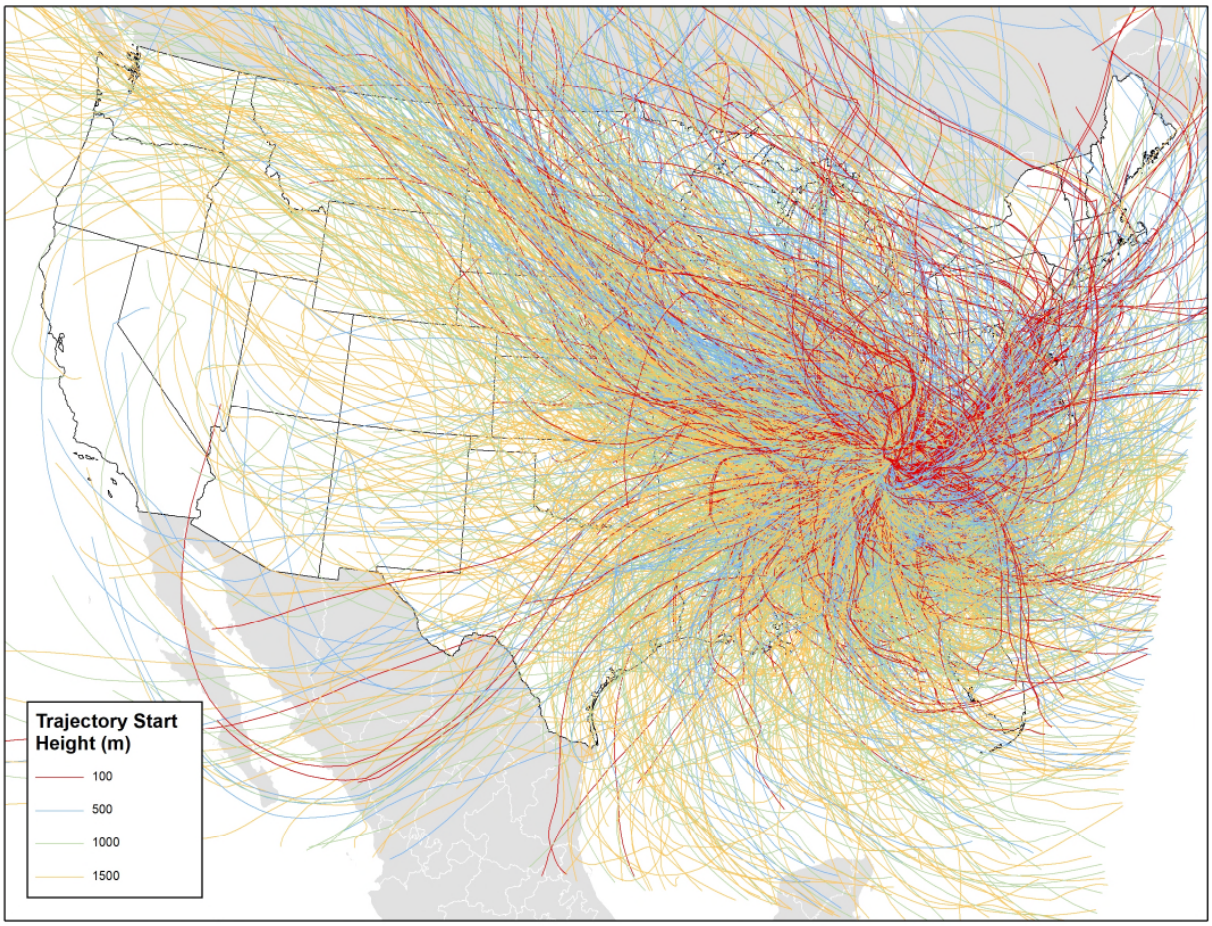
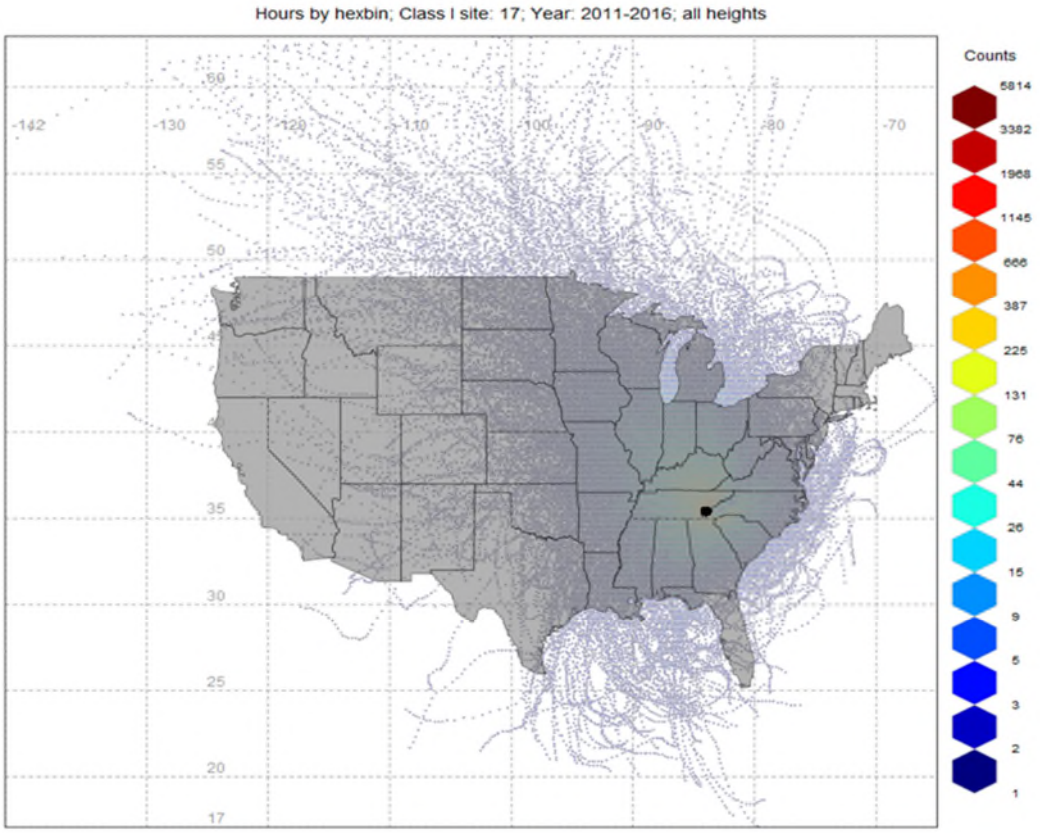


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Joyce Kilmer/Slickrock Wilderness Area



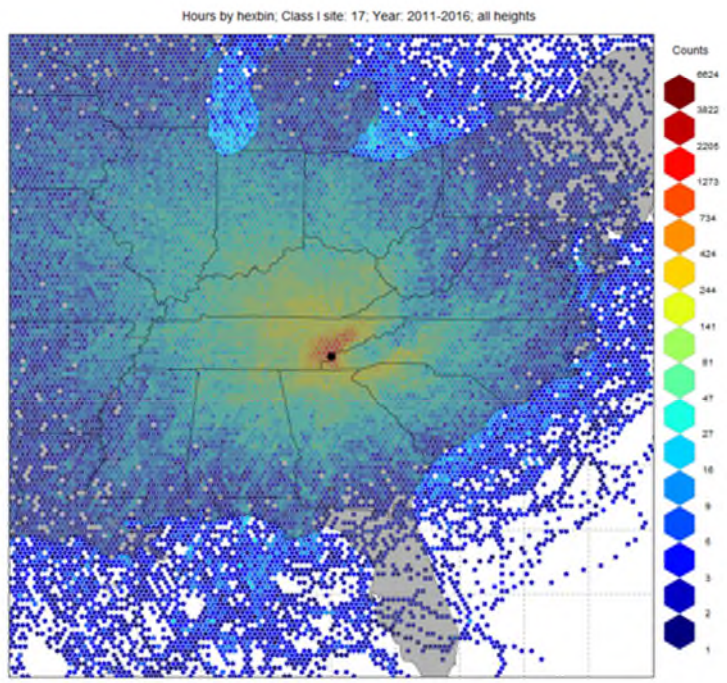


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

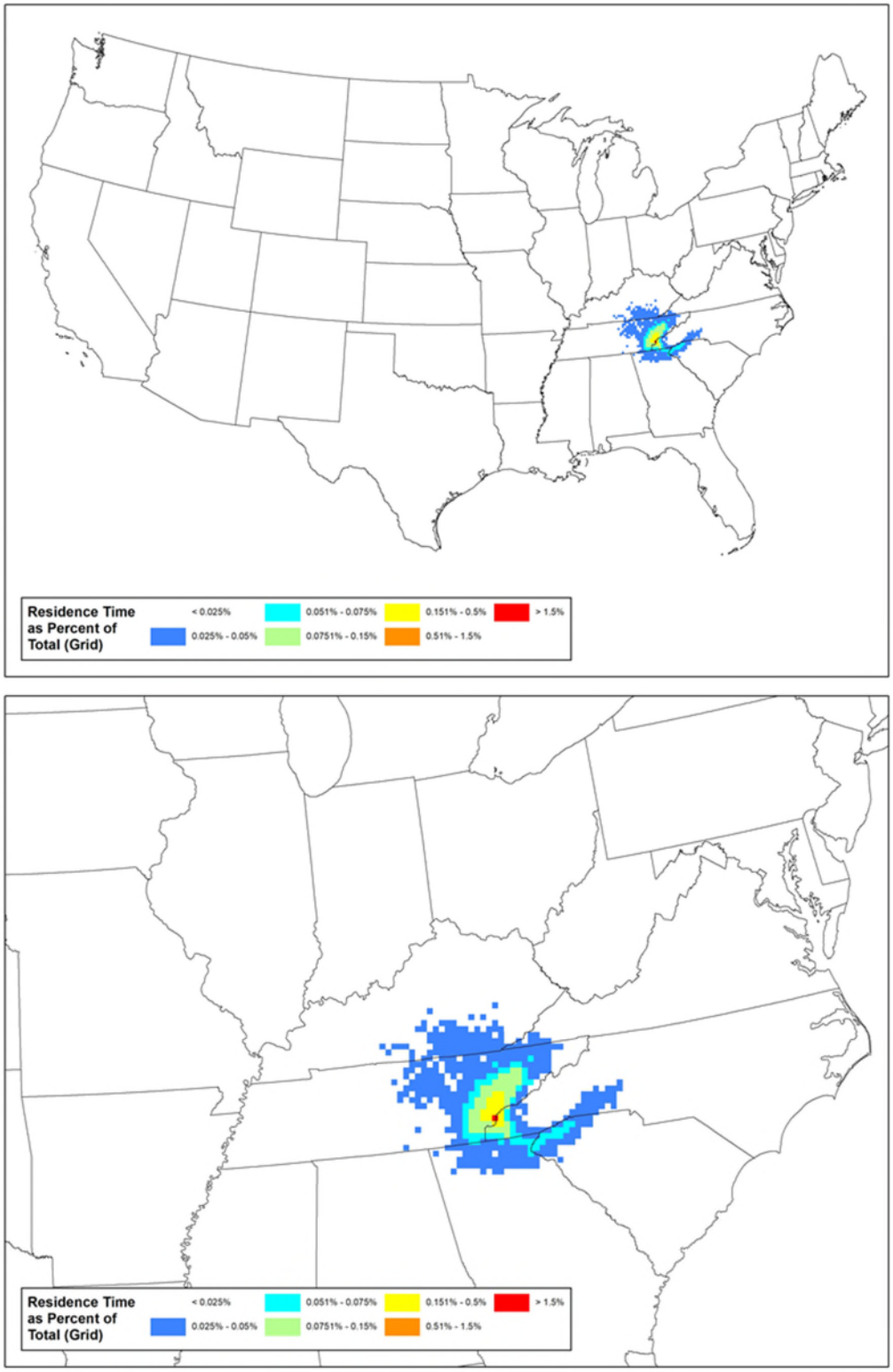


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

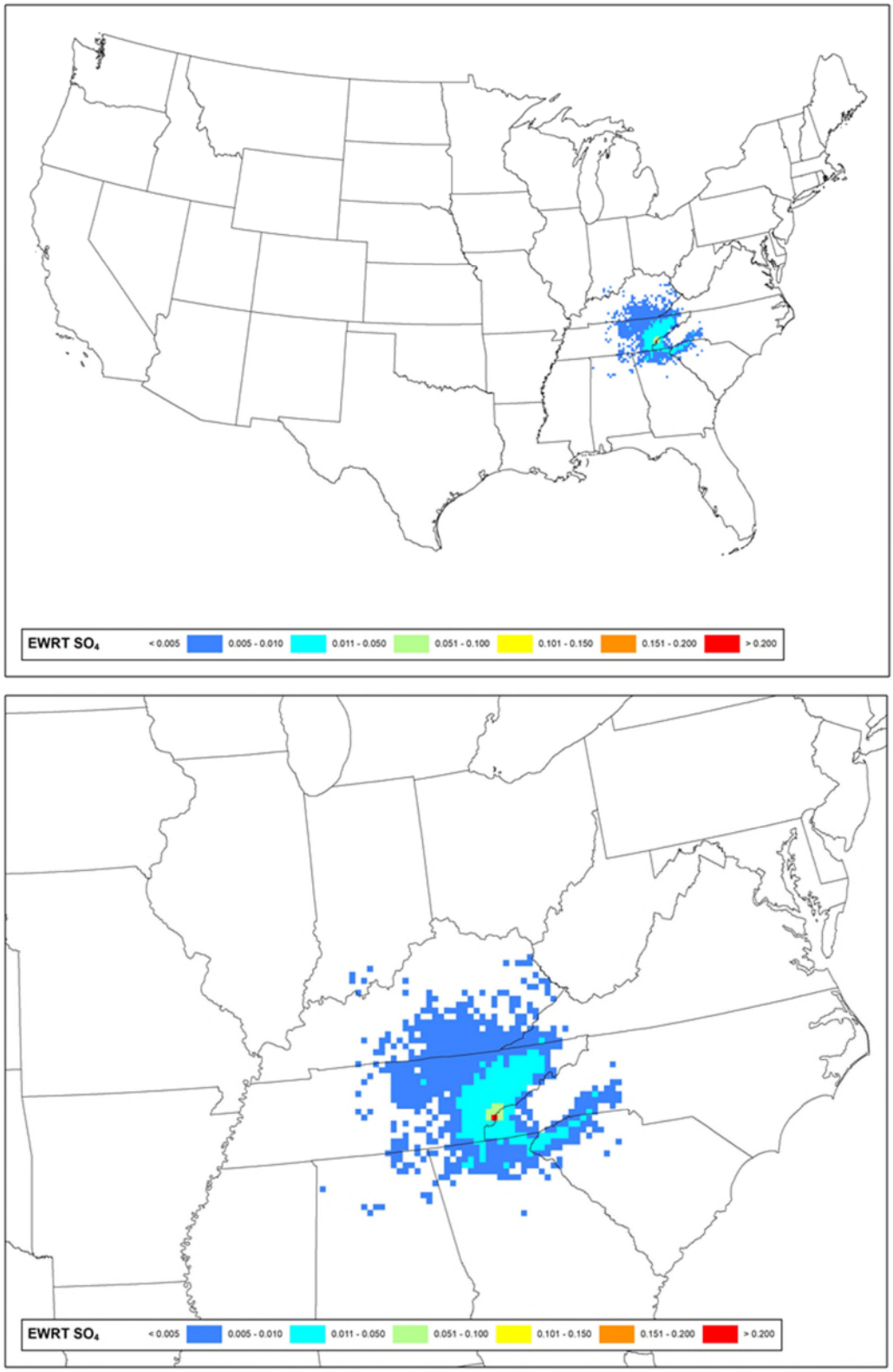


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area - Full View (top) and Class I Zoom (bottom)

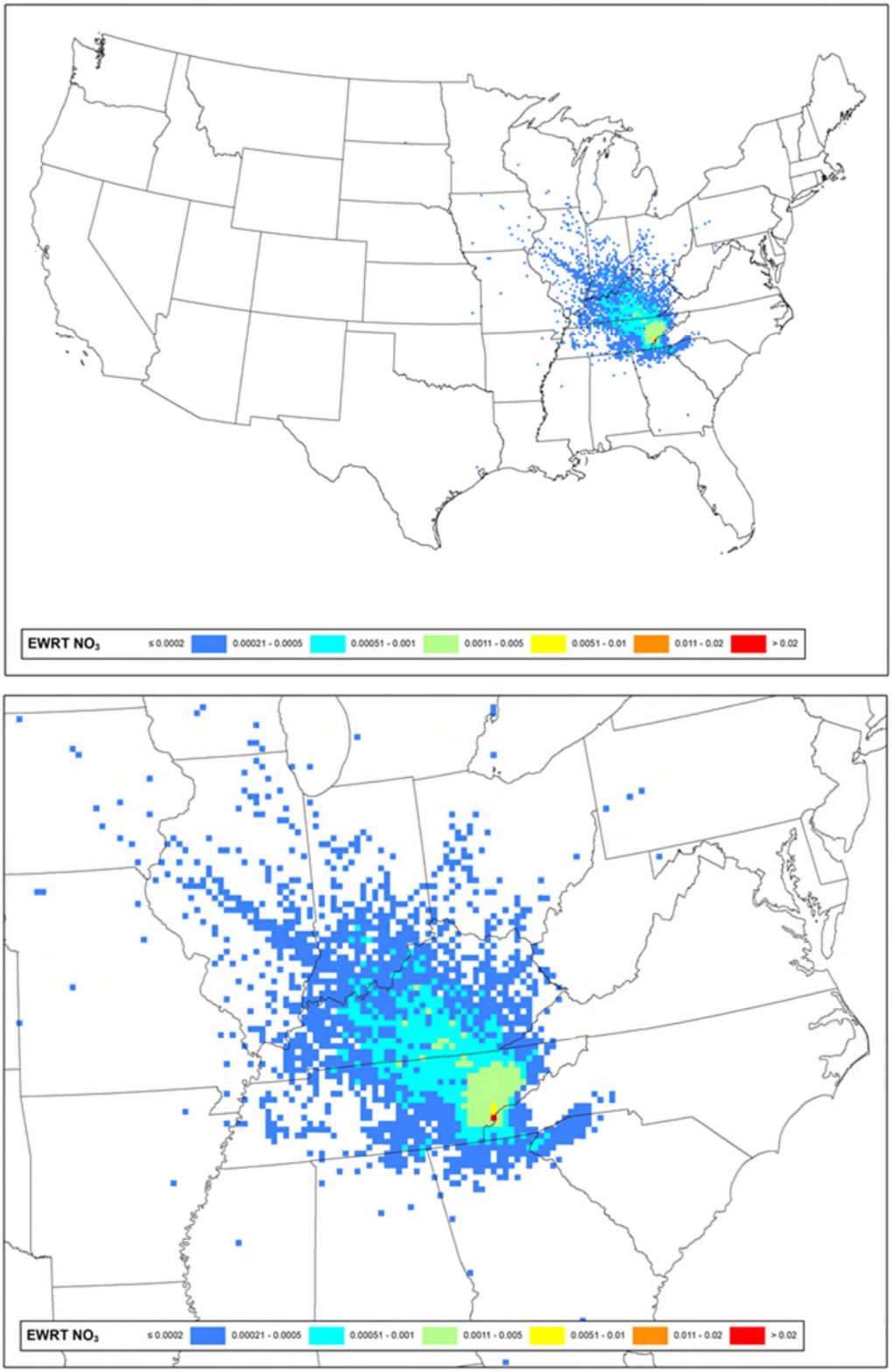


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area - Full View (top) and Class I Zoom (bottom)

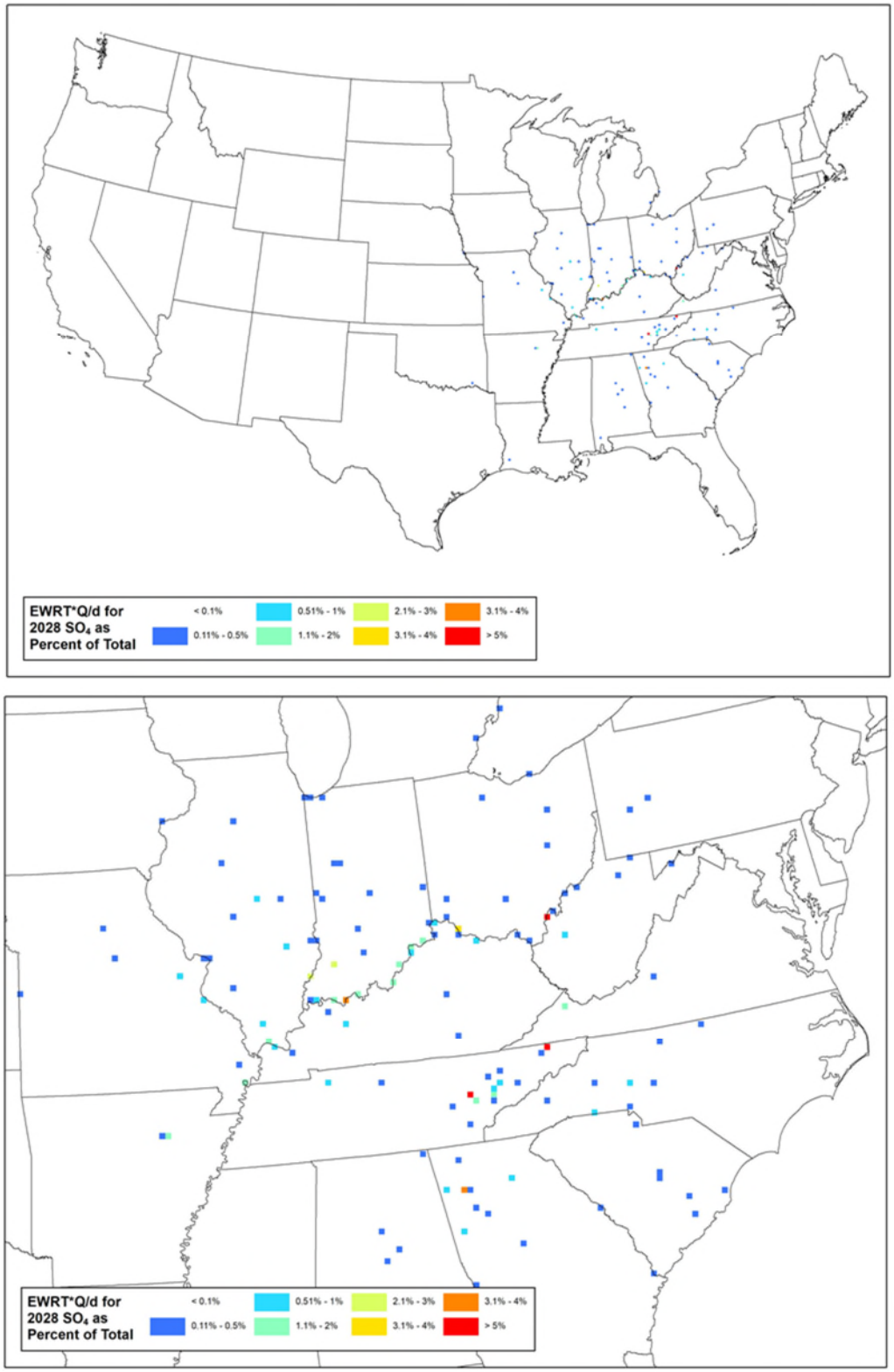


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

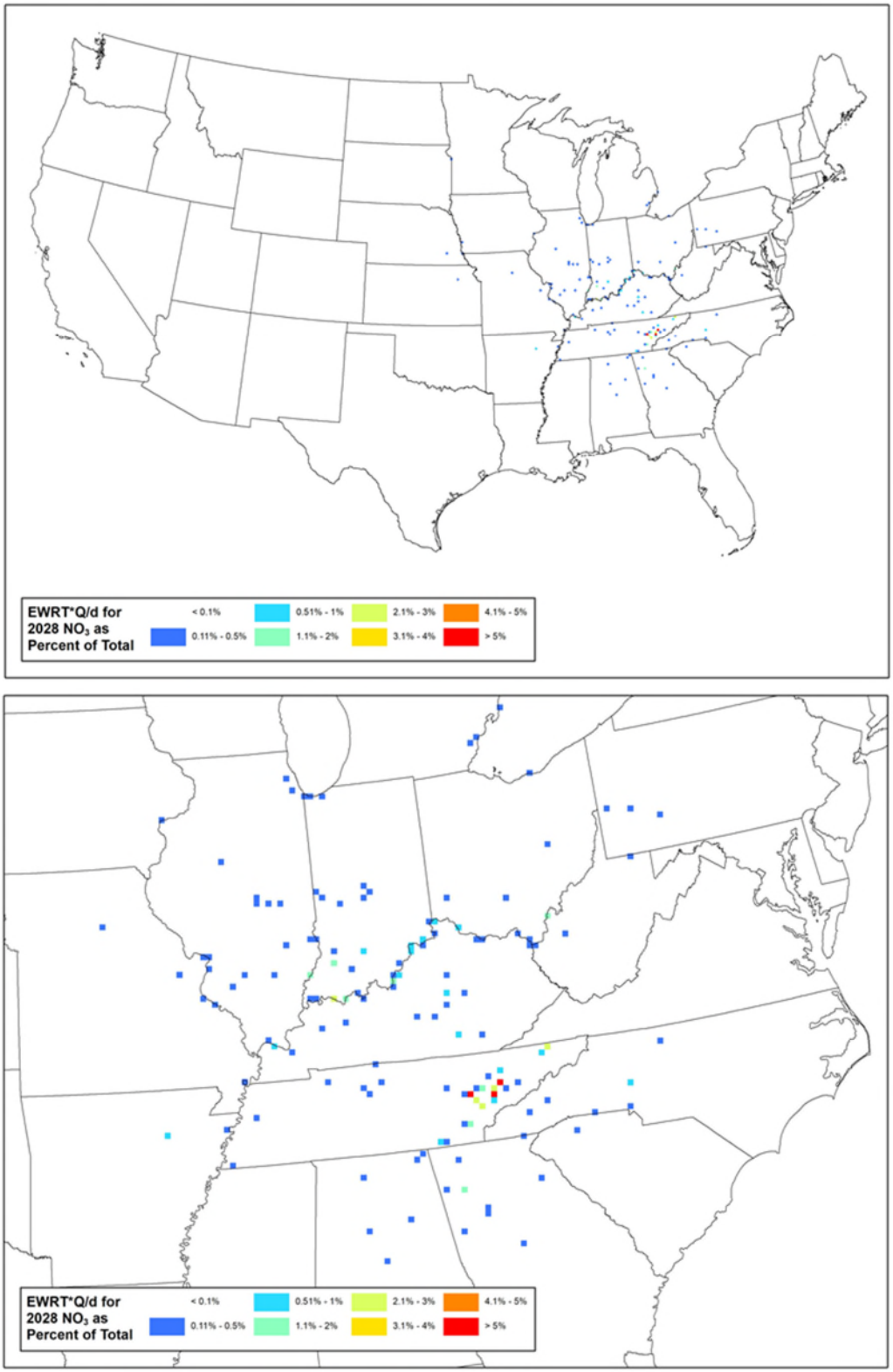


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area– Full View (top) and Class I Zoom (bottom)

Hercules Glade Wilderness Area

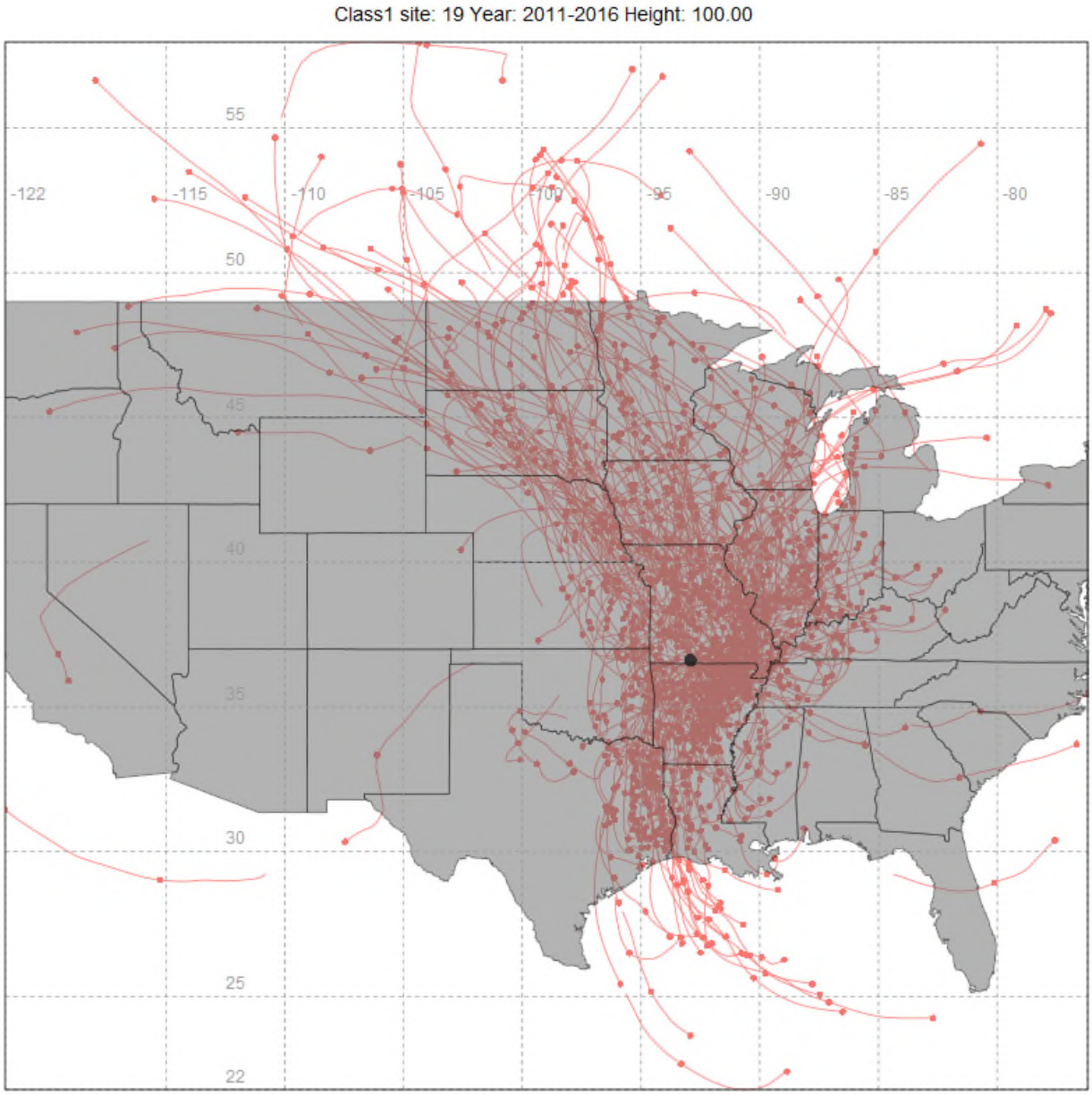


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Hercules Glade Wilderness Area

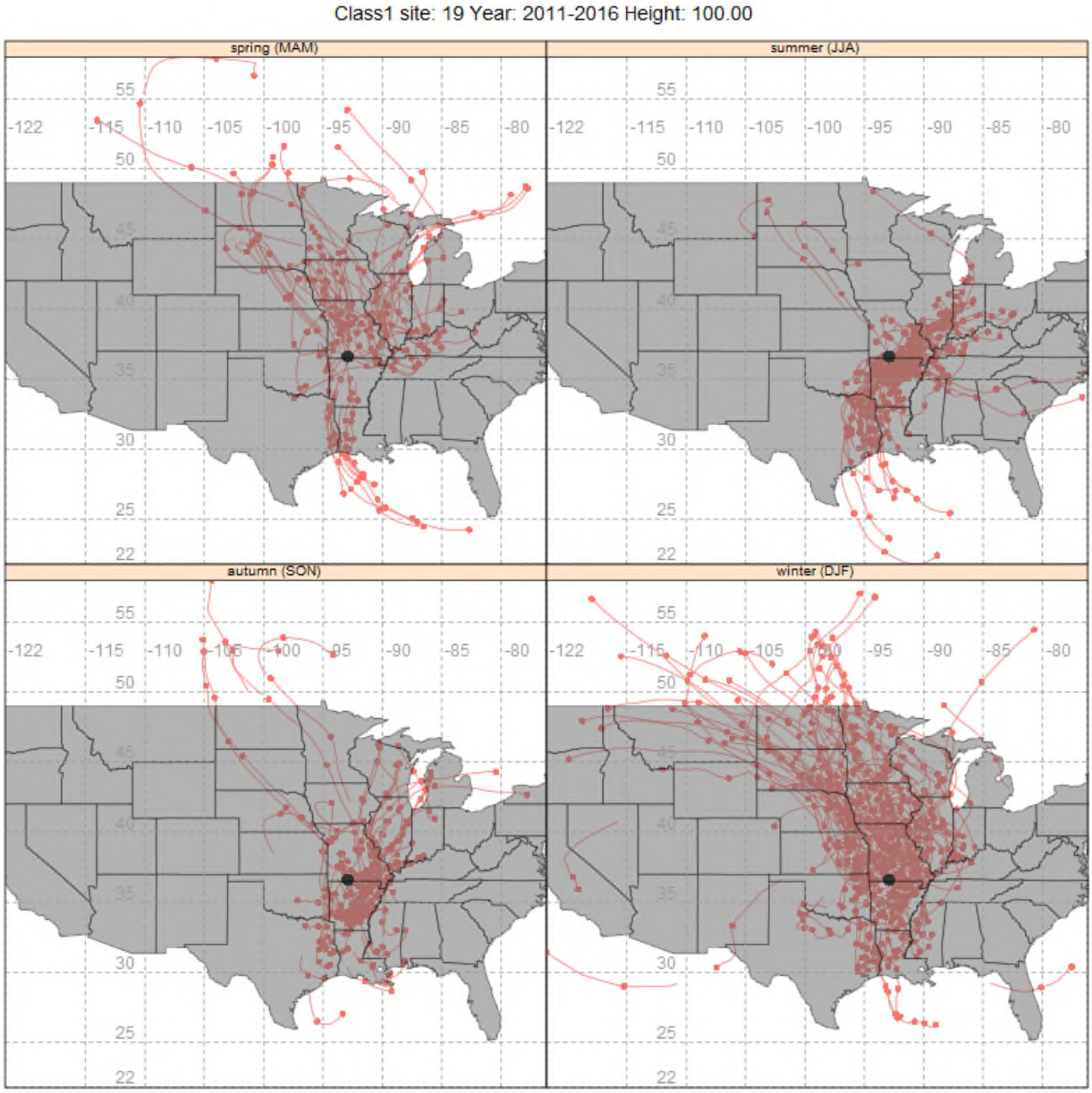


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Hercules Glade Wilderness Area

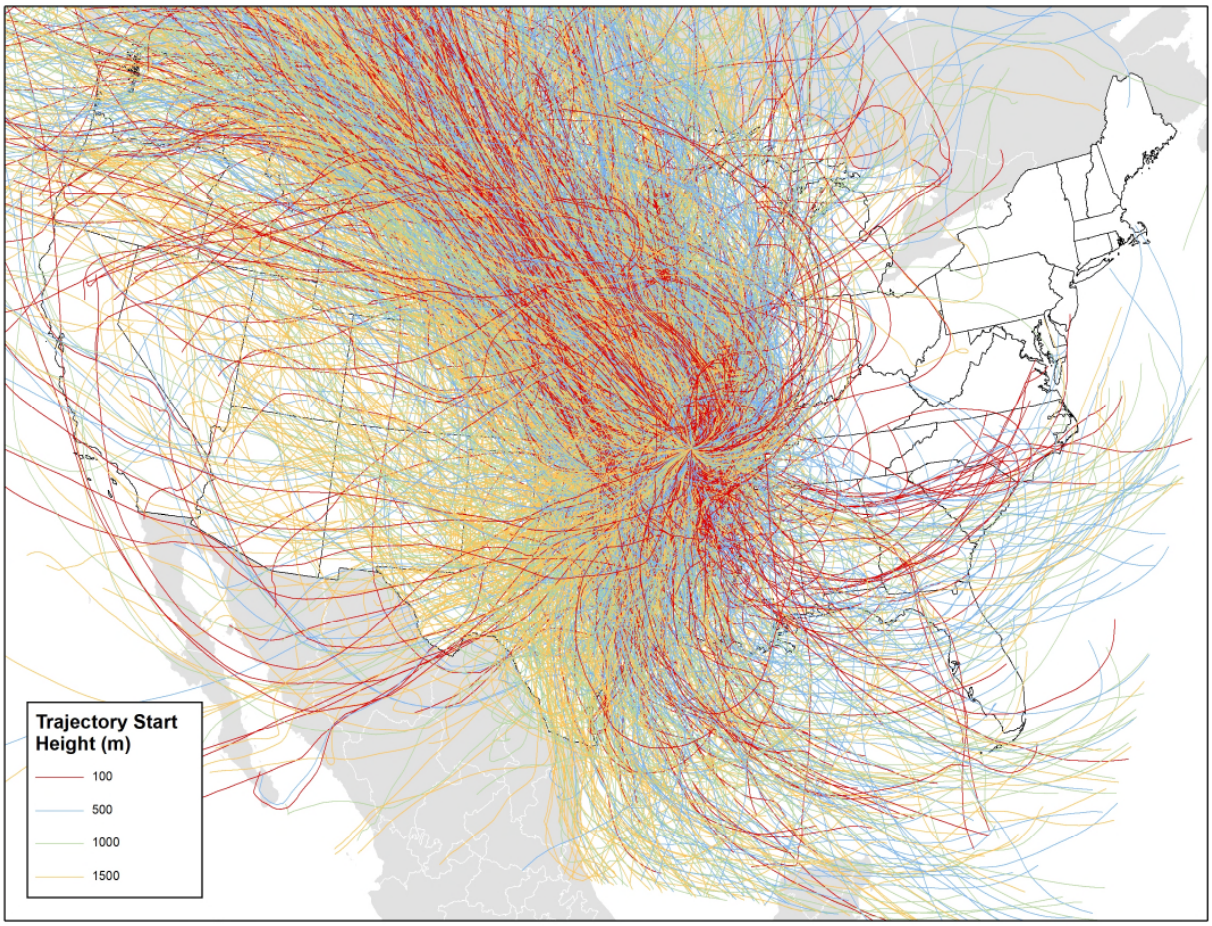
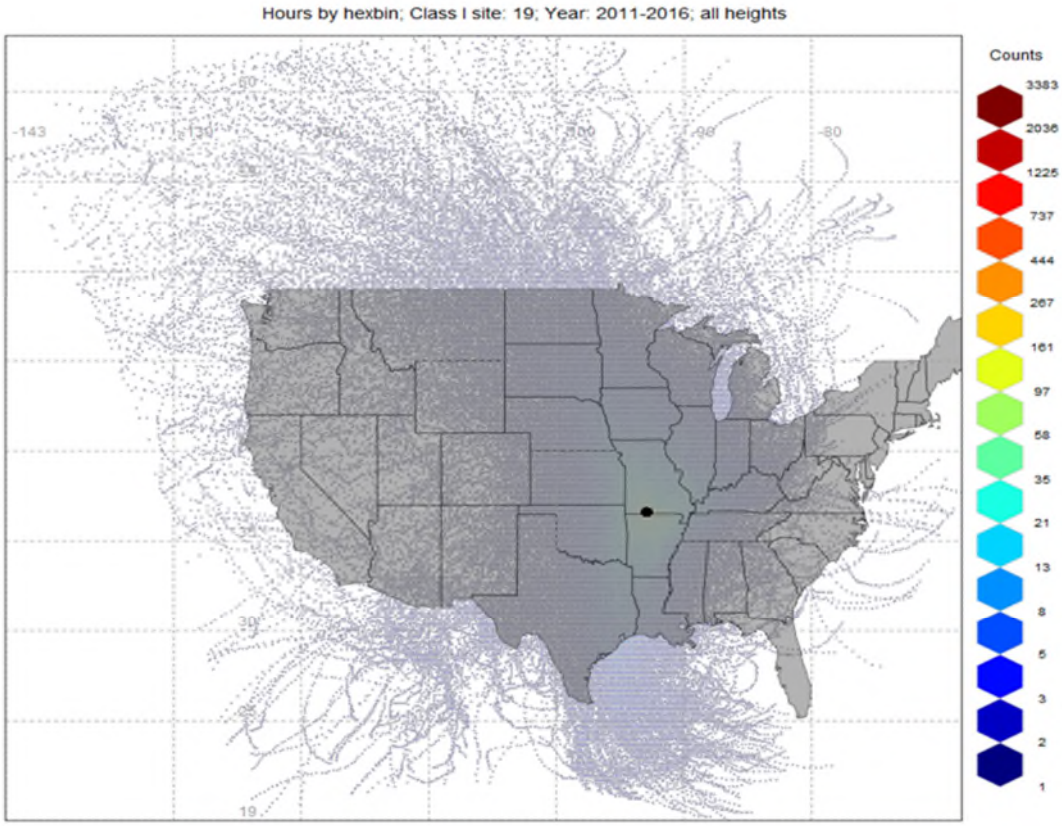


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Hercules Glade Wilderness Area



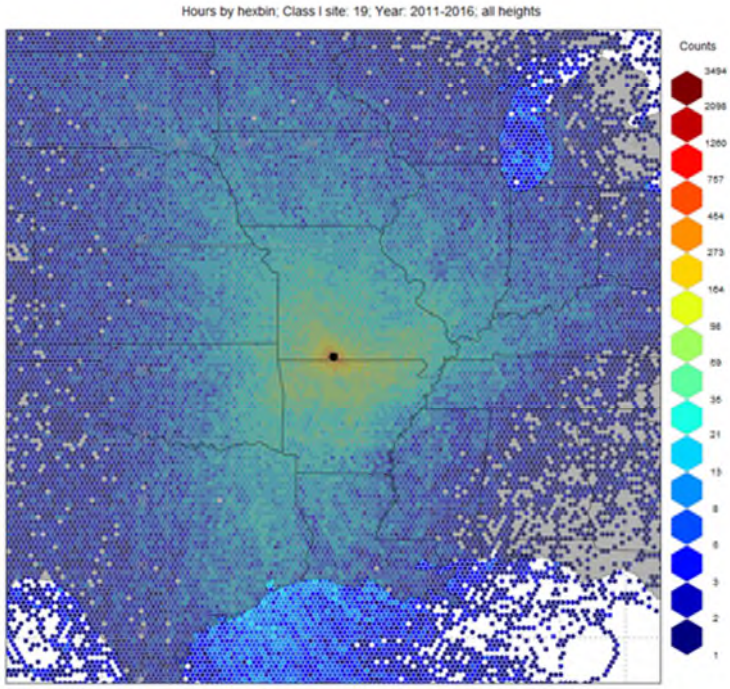


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)

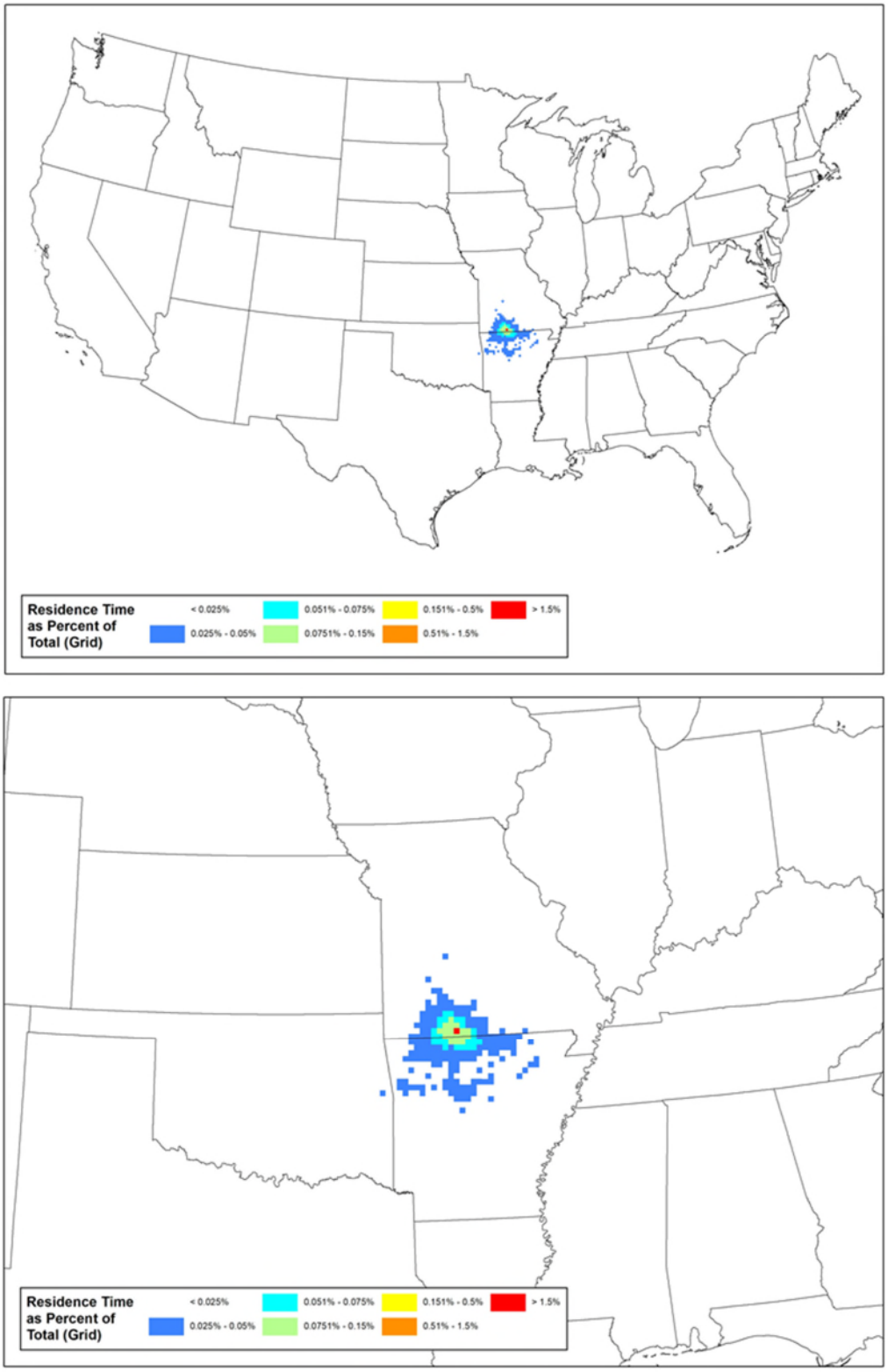


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)

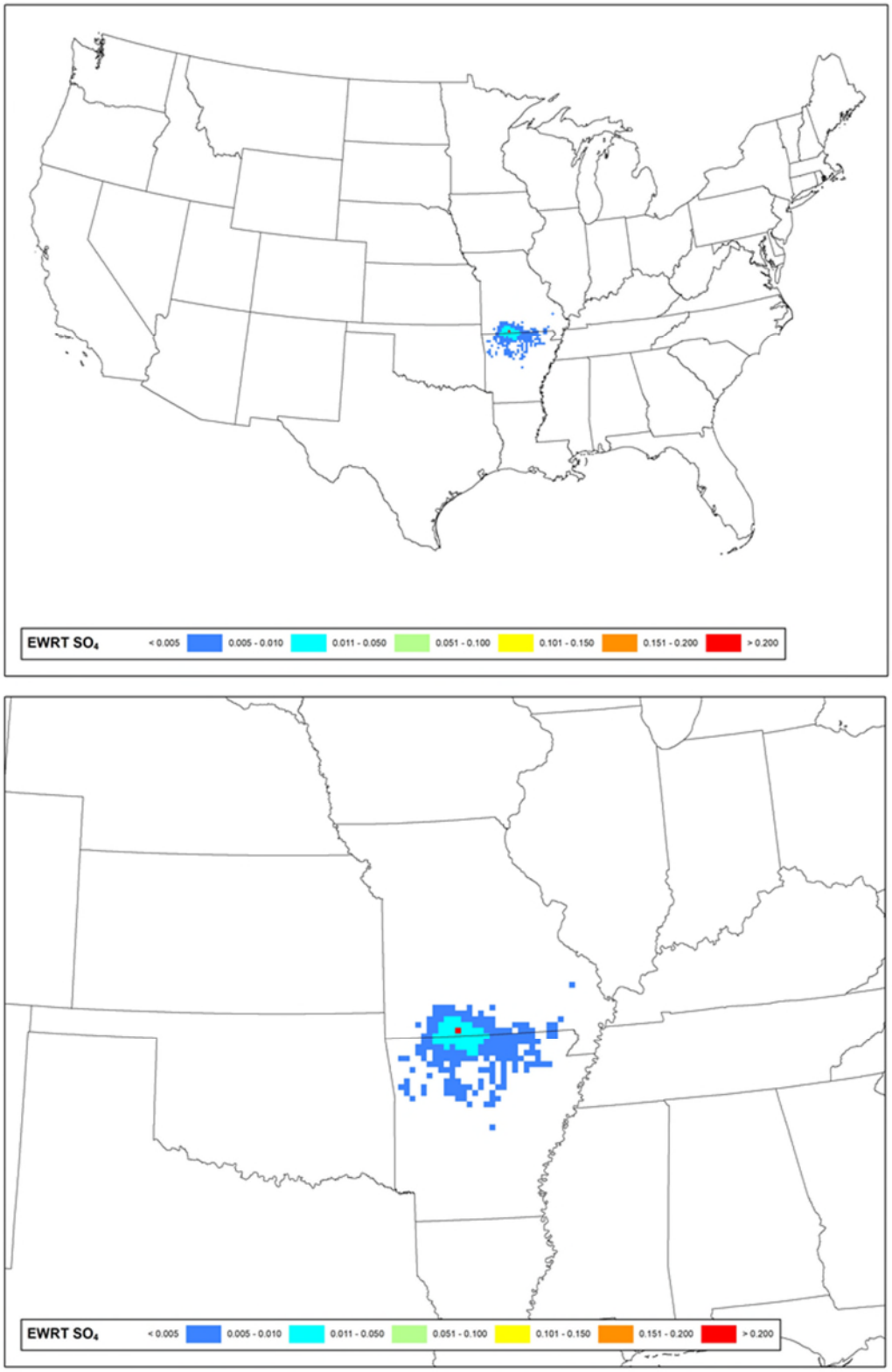


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area - Full View (top) and Class I Zoom (bottom)

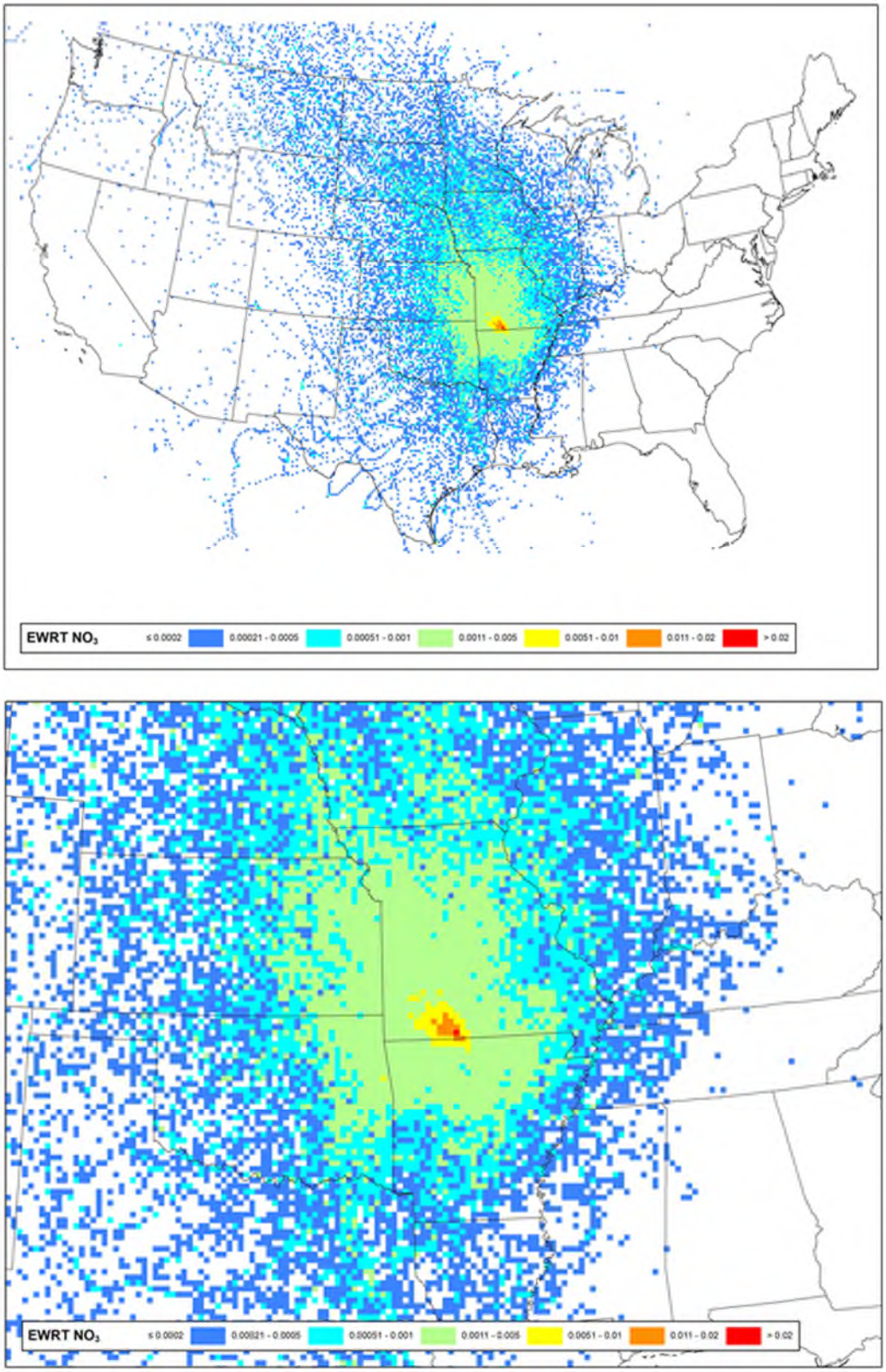


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Hercules Glade Wilderness Area - Full View (top) and Class I Zoom (bottom)

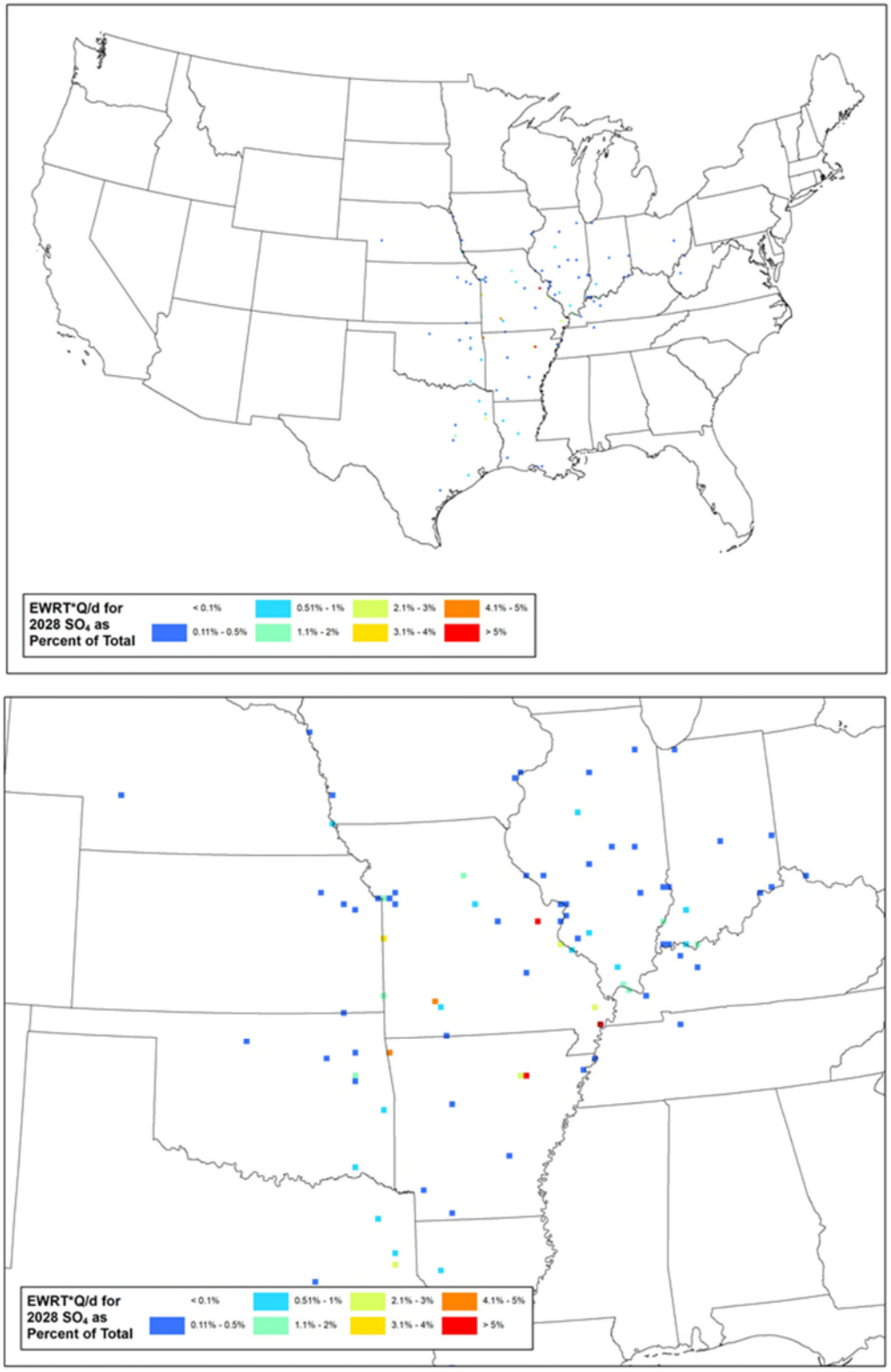
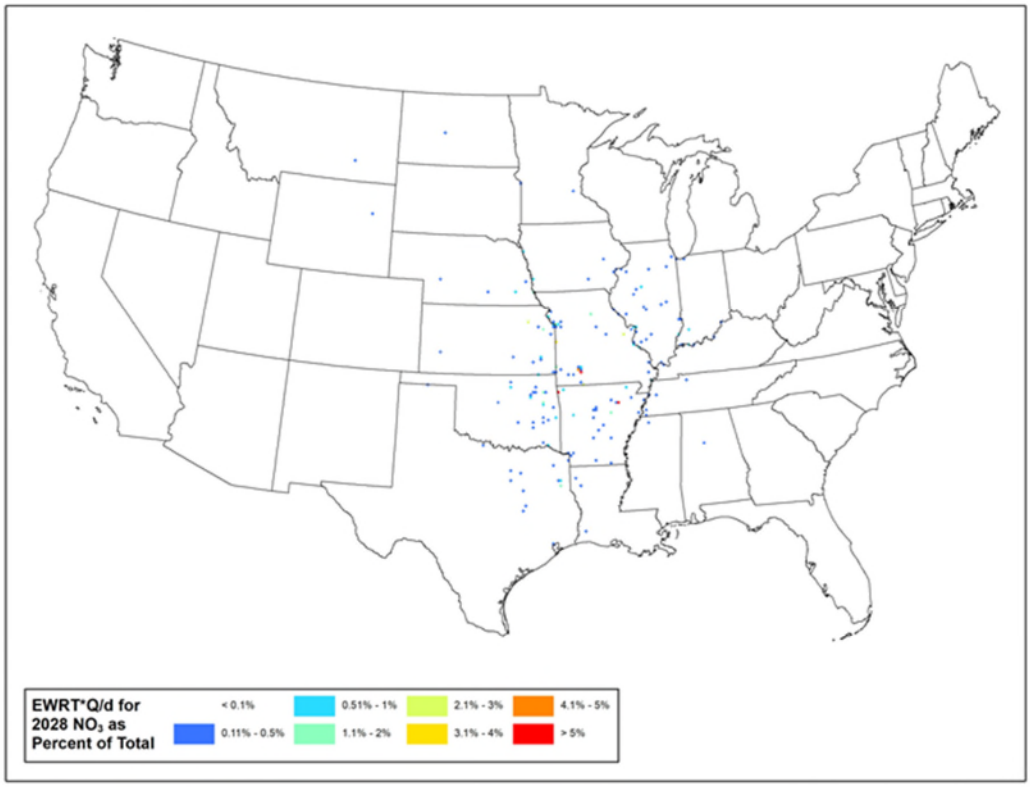


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)



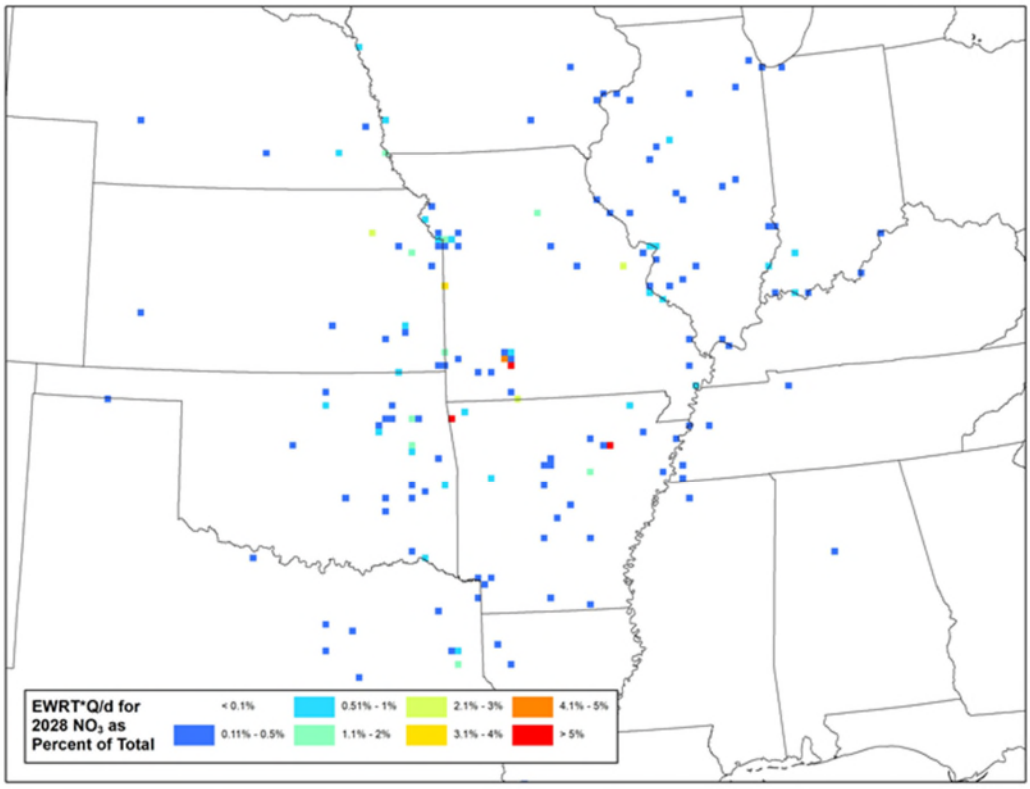


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area– Full View (top) and Class I Zoom (bottom)

James River Face Wilderness Area

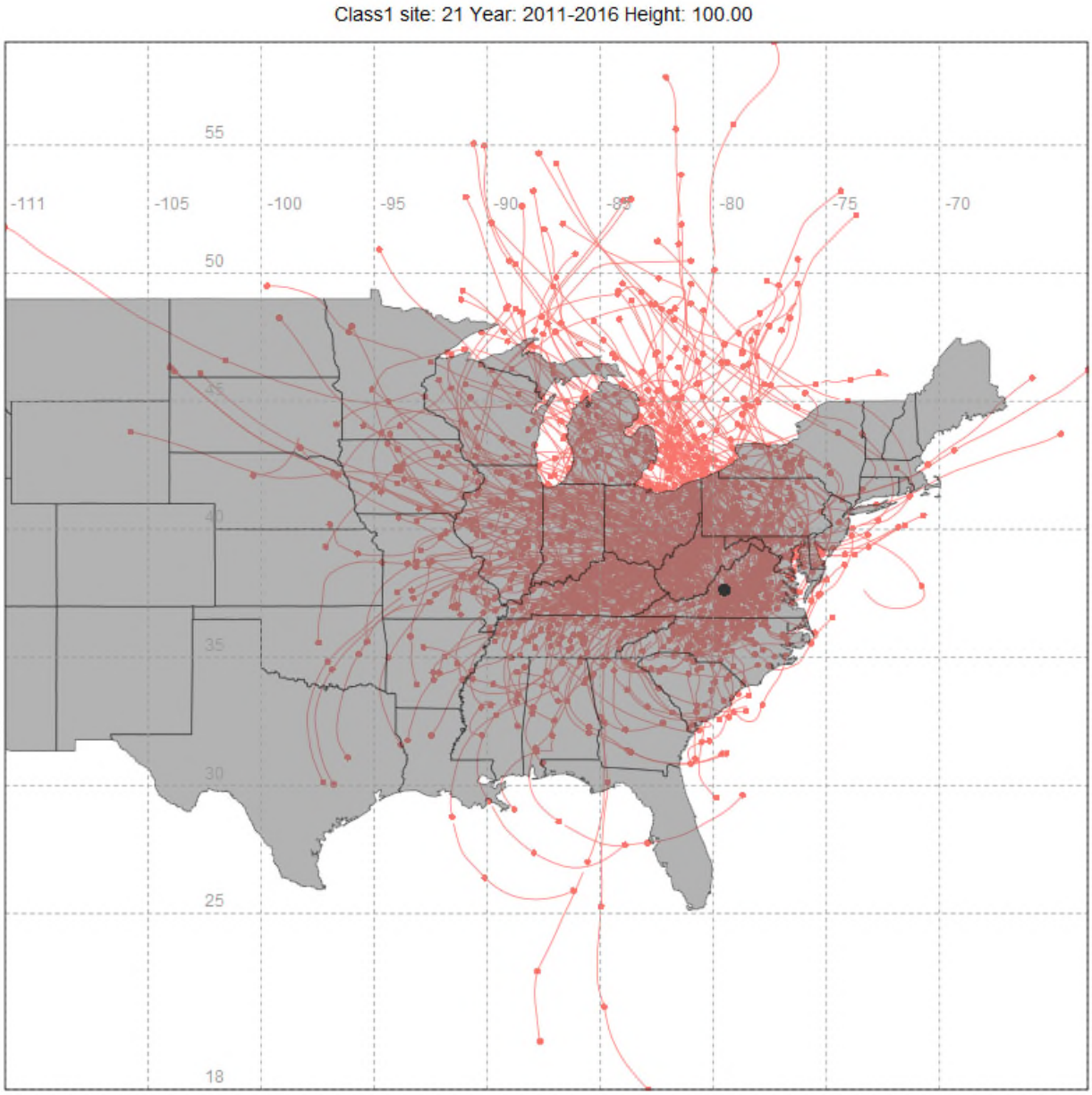


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from James River Face Wilderness Area

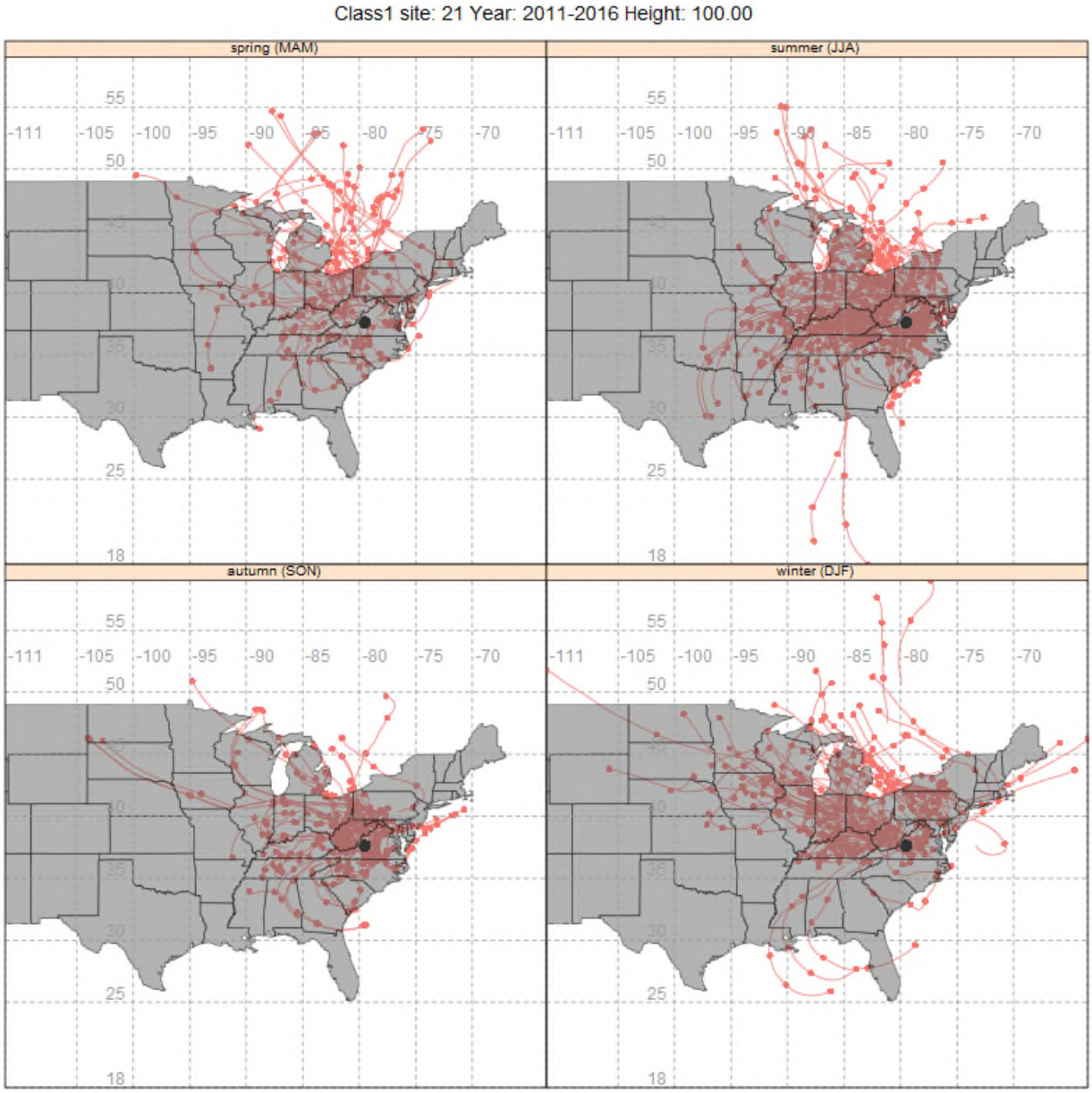


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from James River Face Wilderness Area

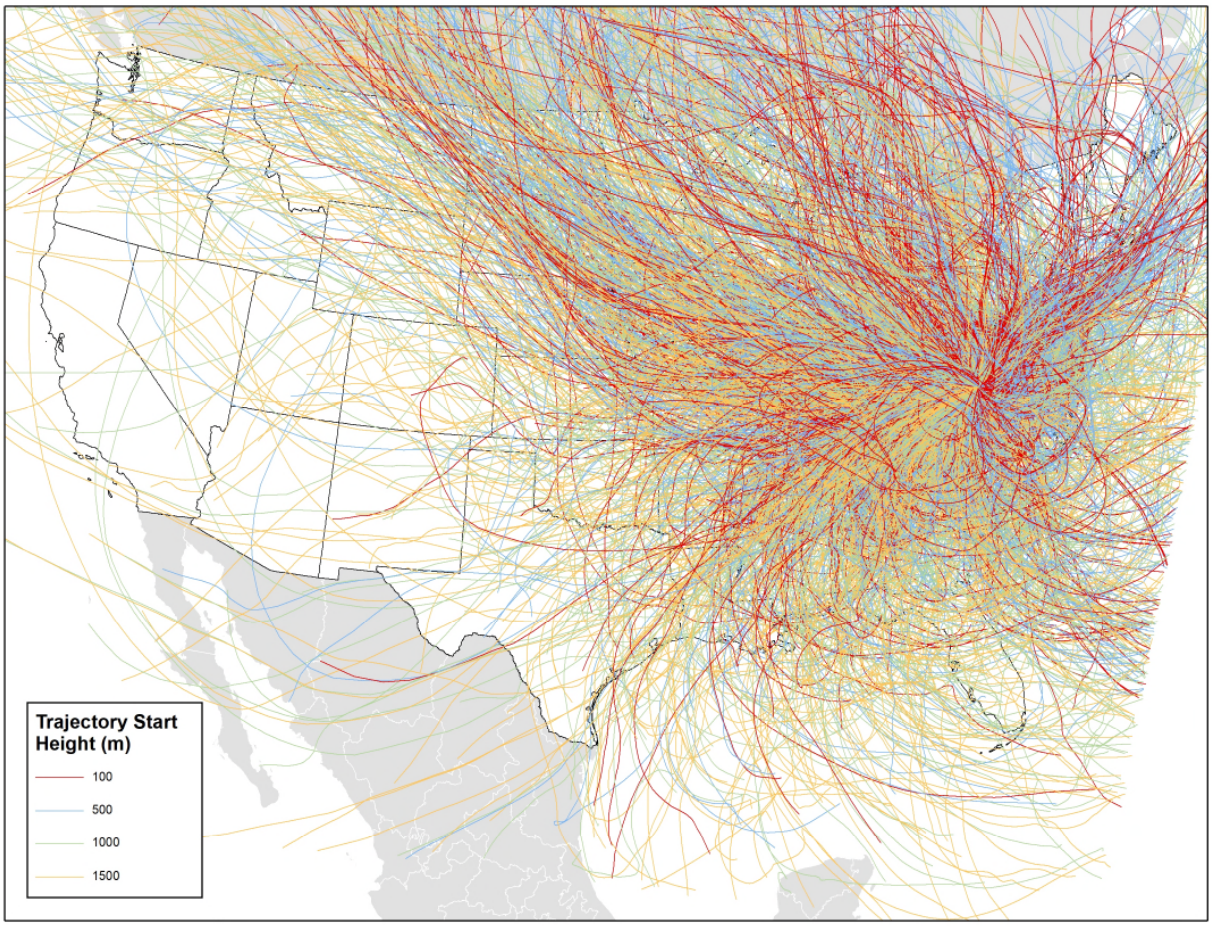


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from James River Face Wilderness Area

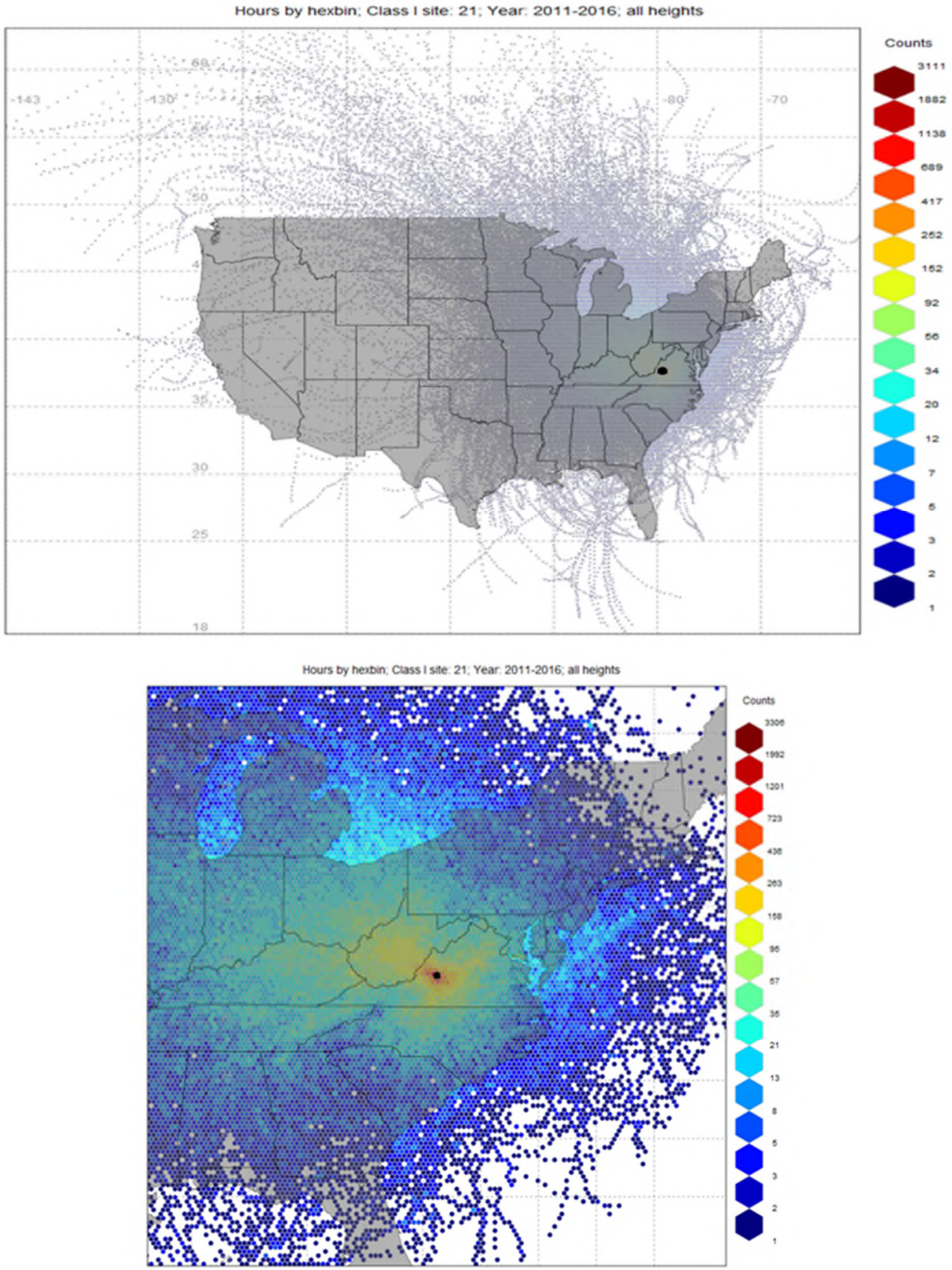


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

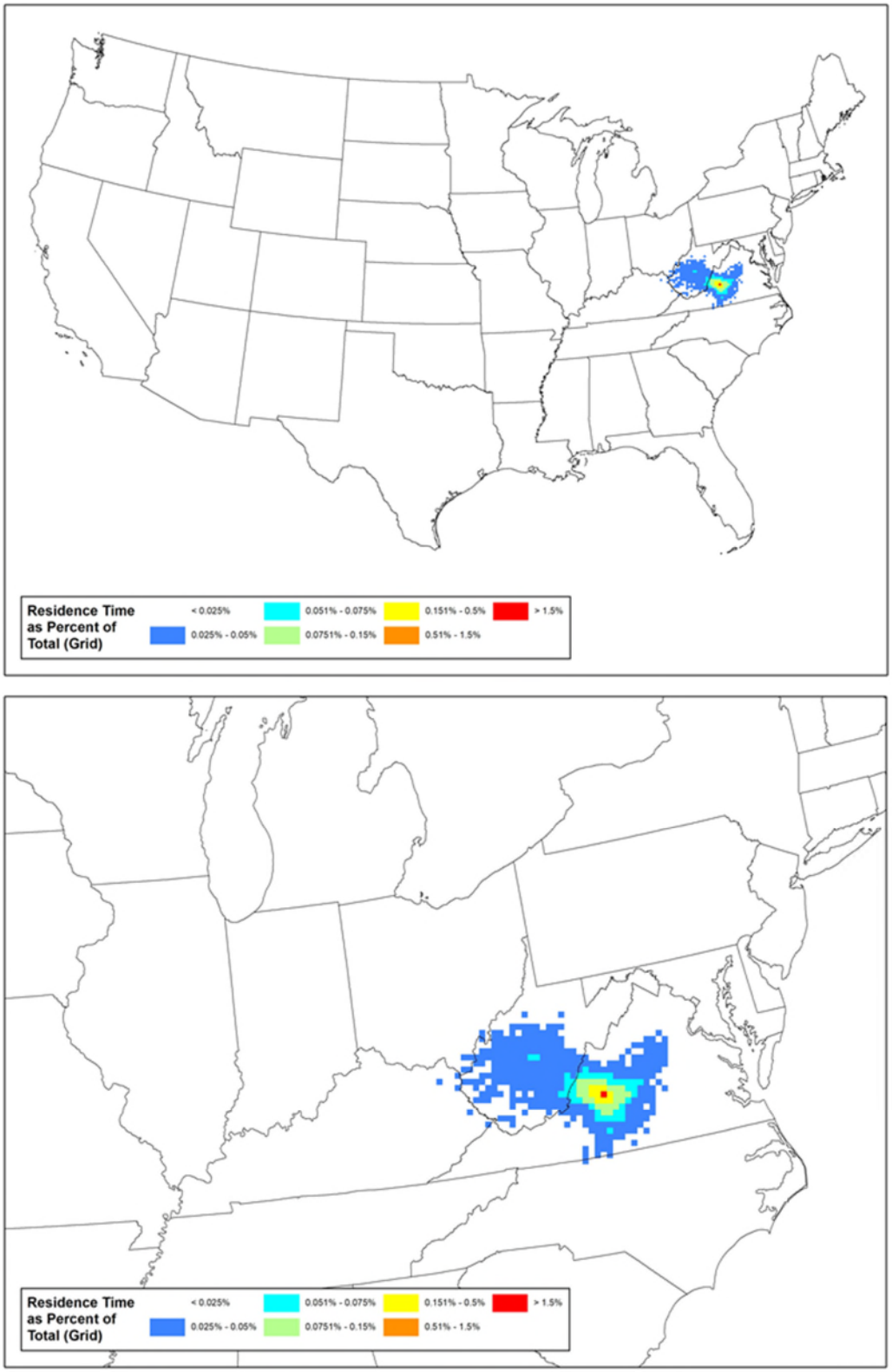


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

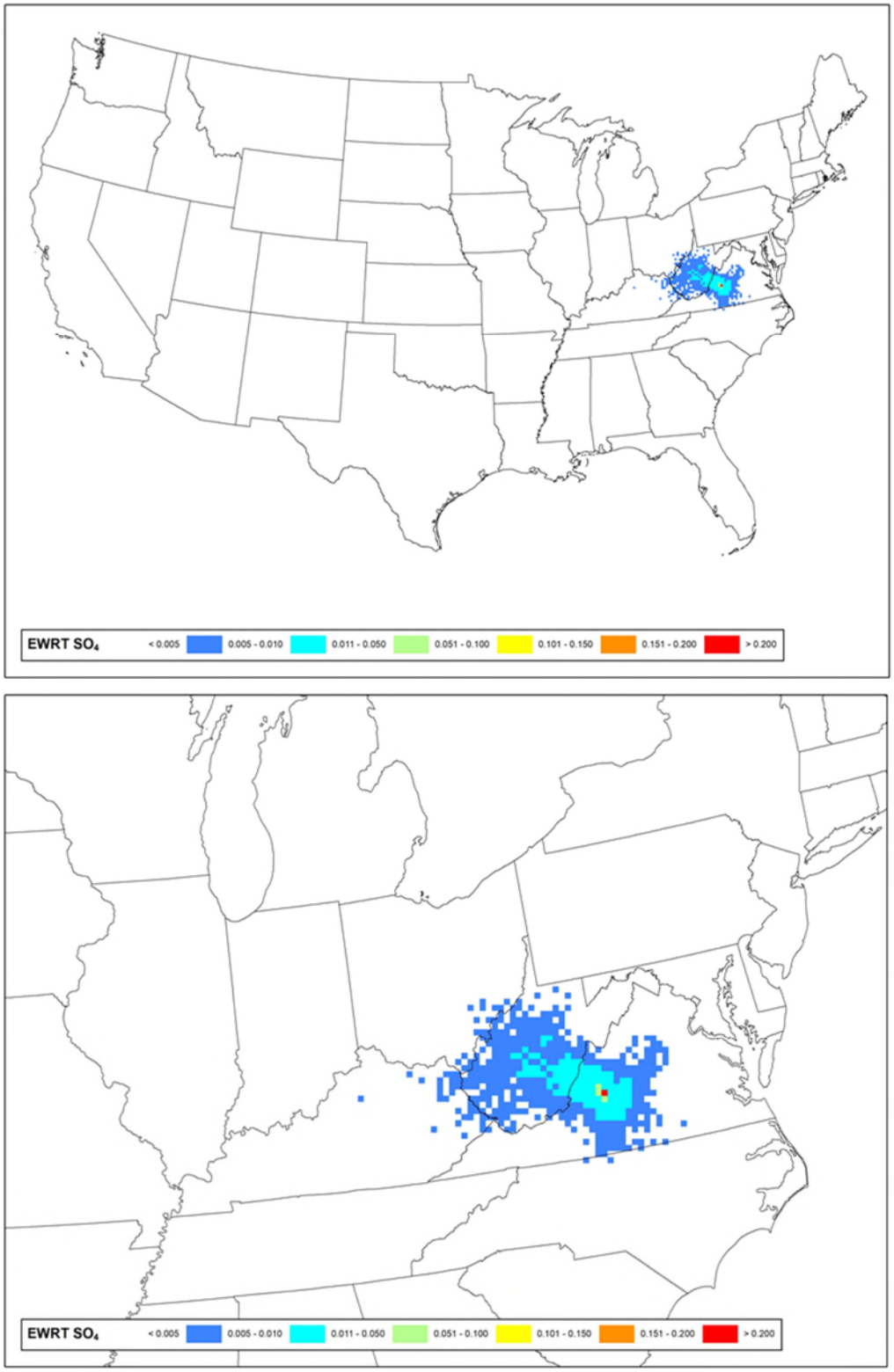


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area - Full View (top) and Class I Zoom (bottom)

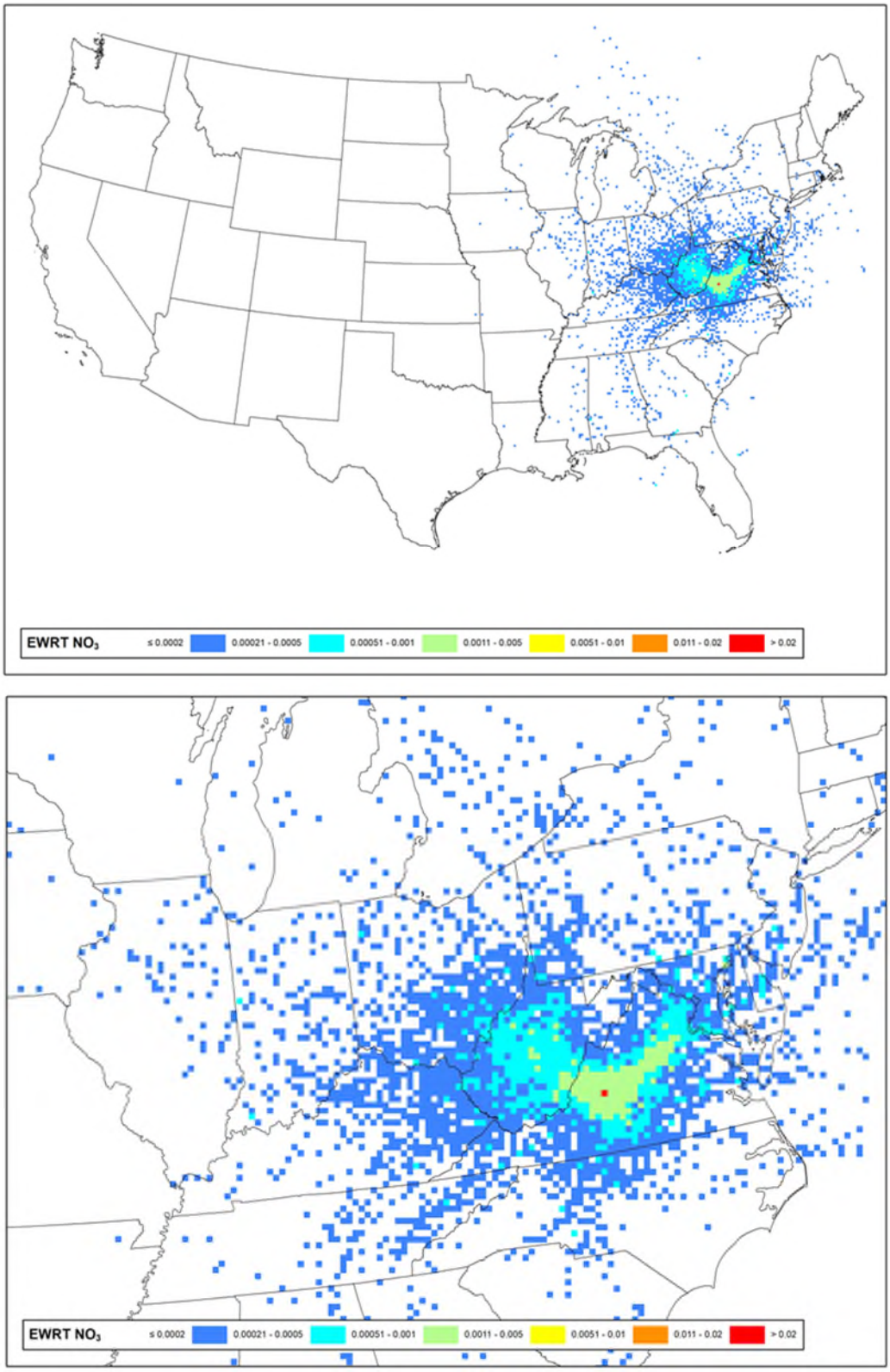


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for James River Face Wilderness Area - Full View (top) and Class I Zoom (bottom)

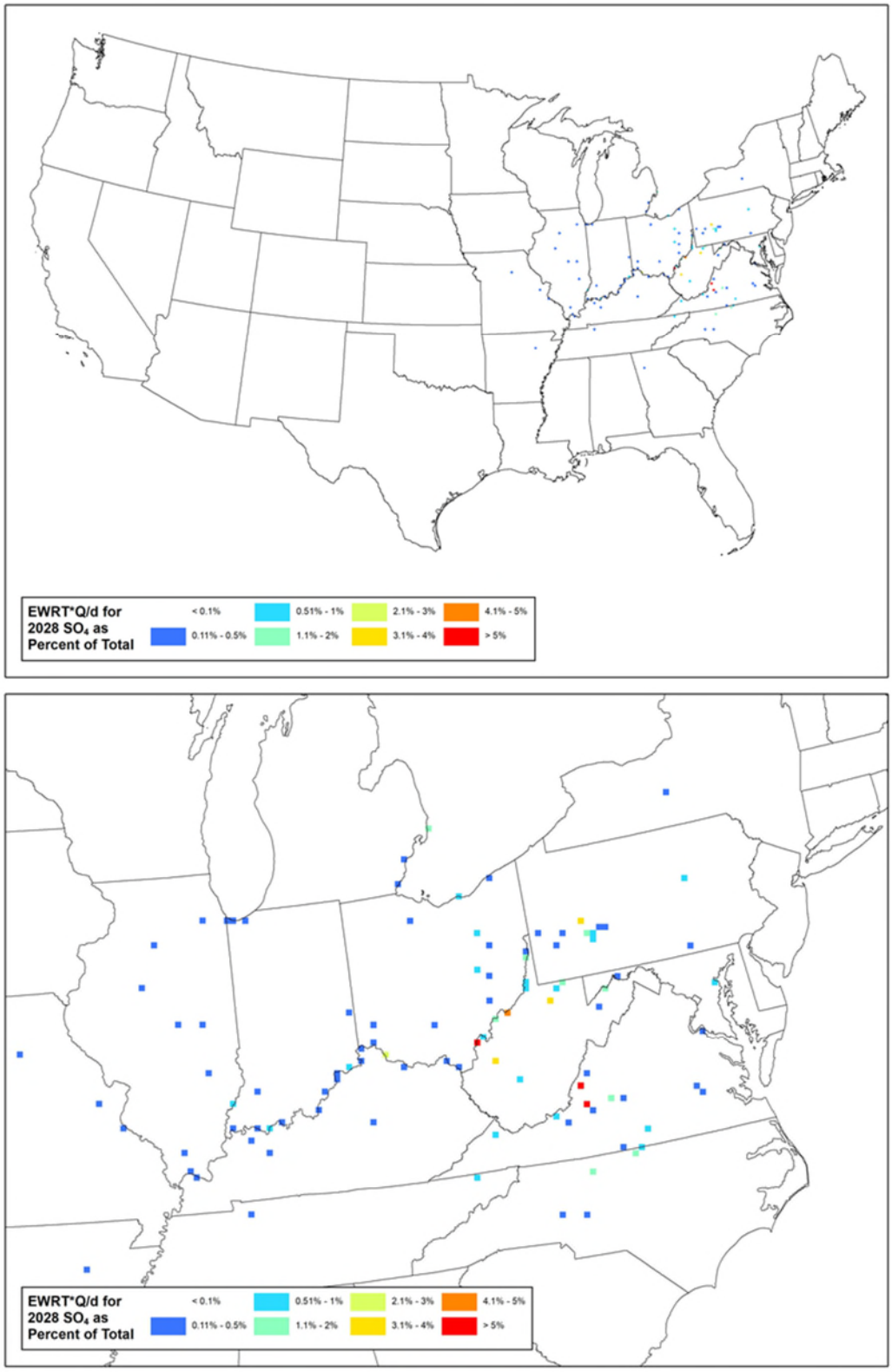


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

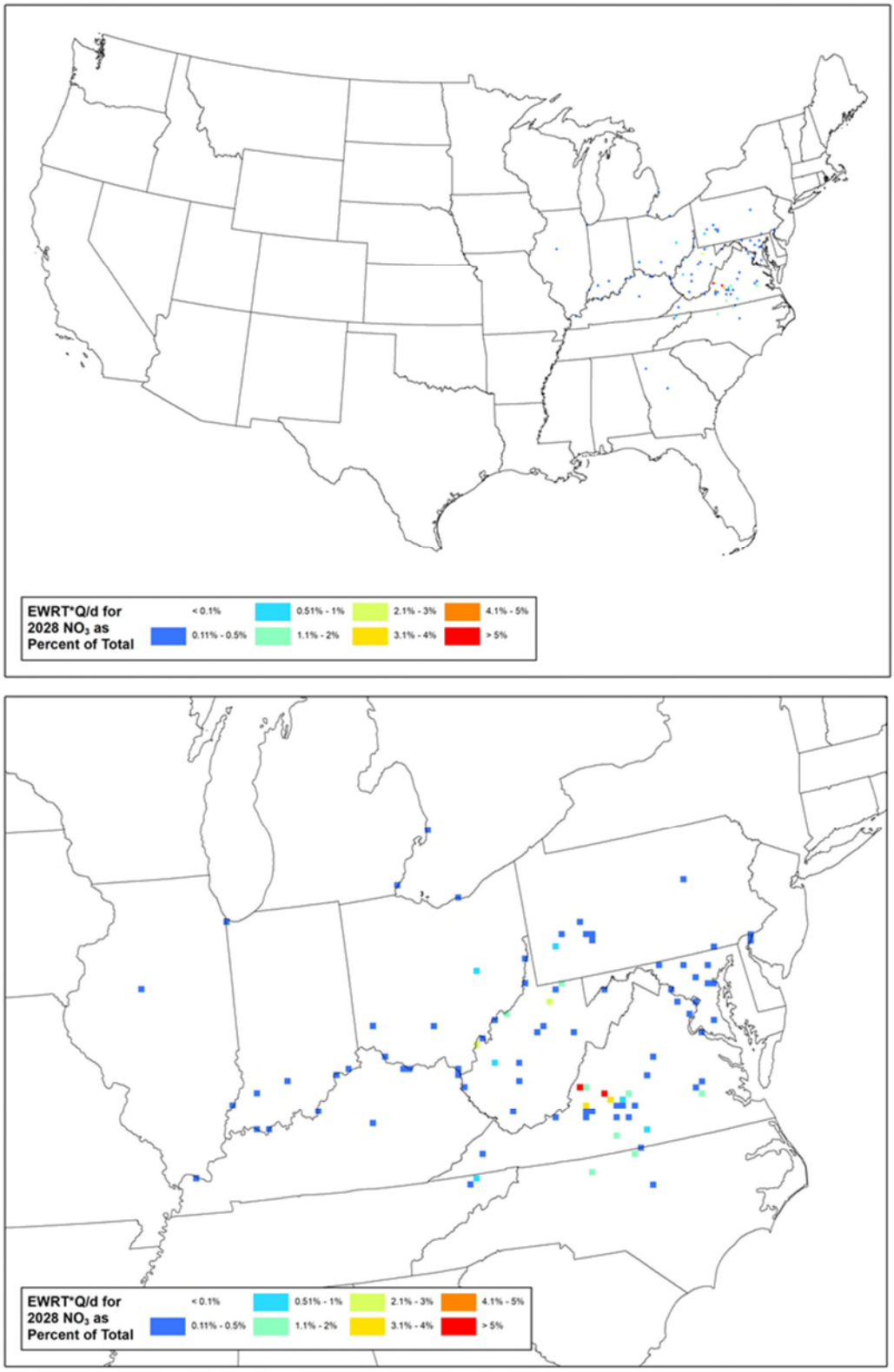


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area– Full View (top) and Class I Zoom (bottom)

Linville Gorge Wilderness Area

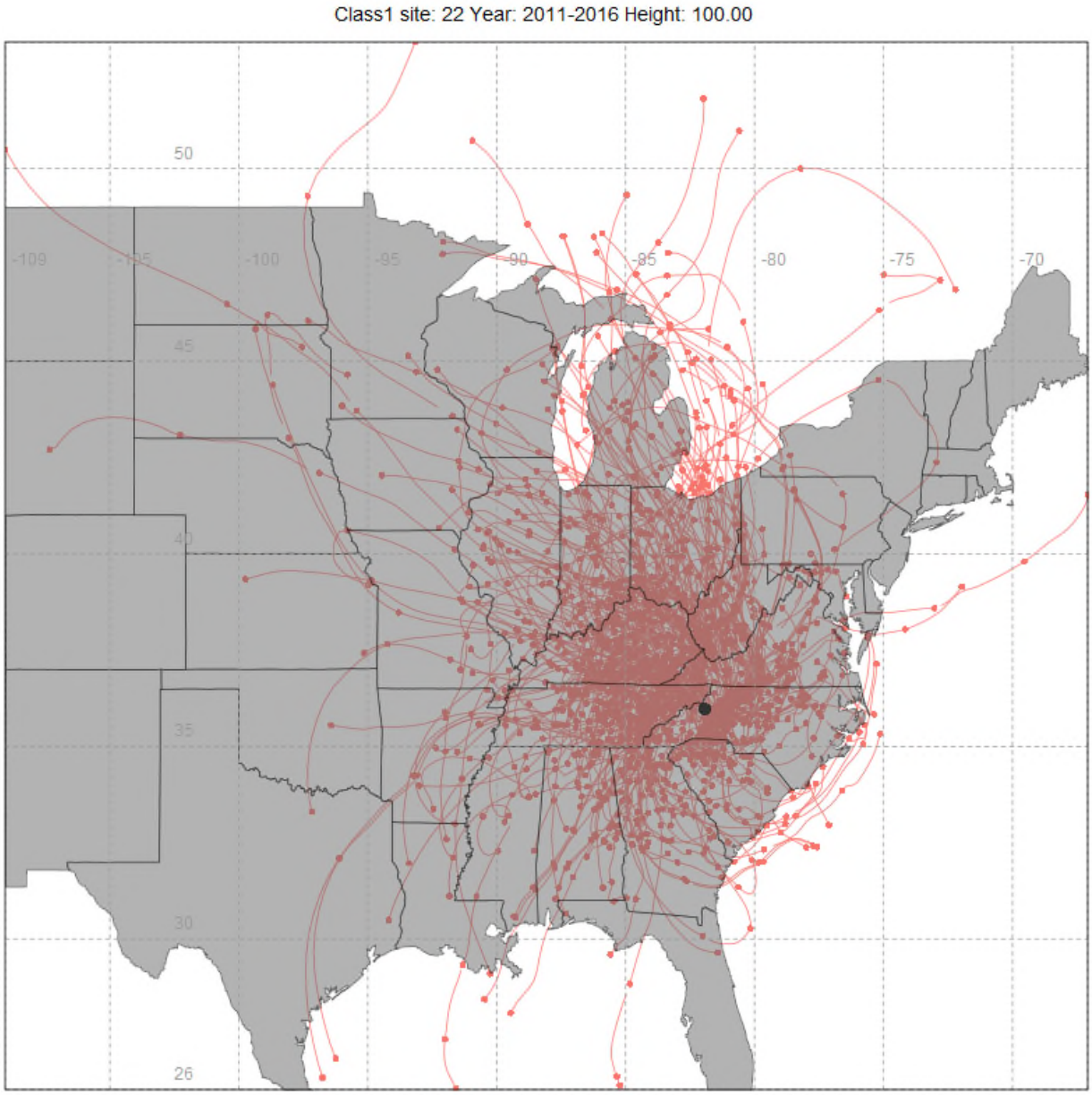


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Linville Gorge Wilderness Area

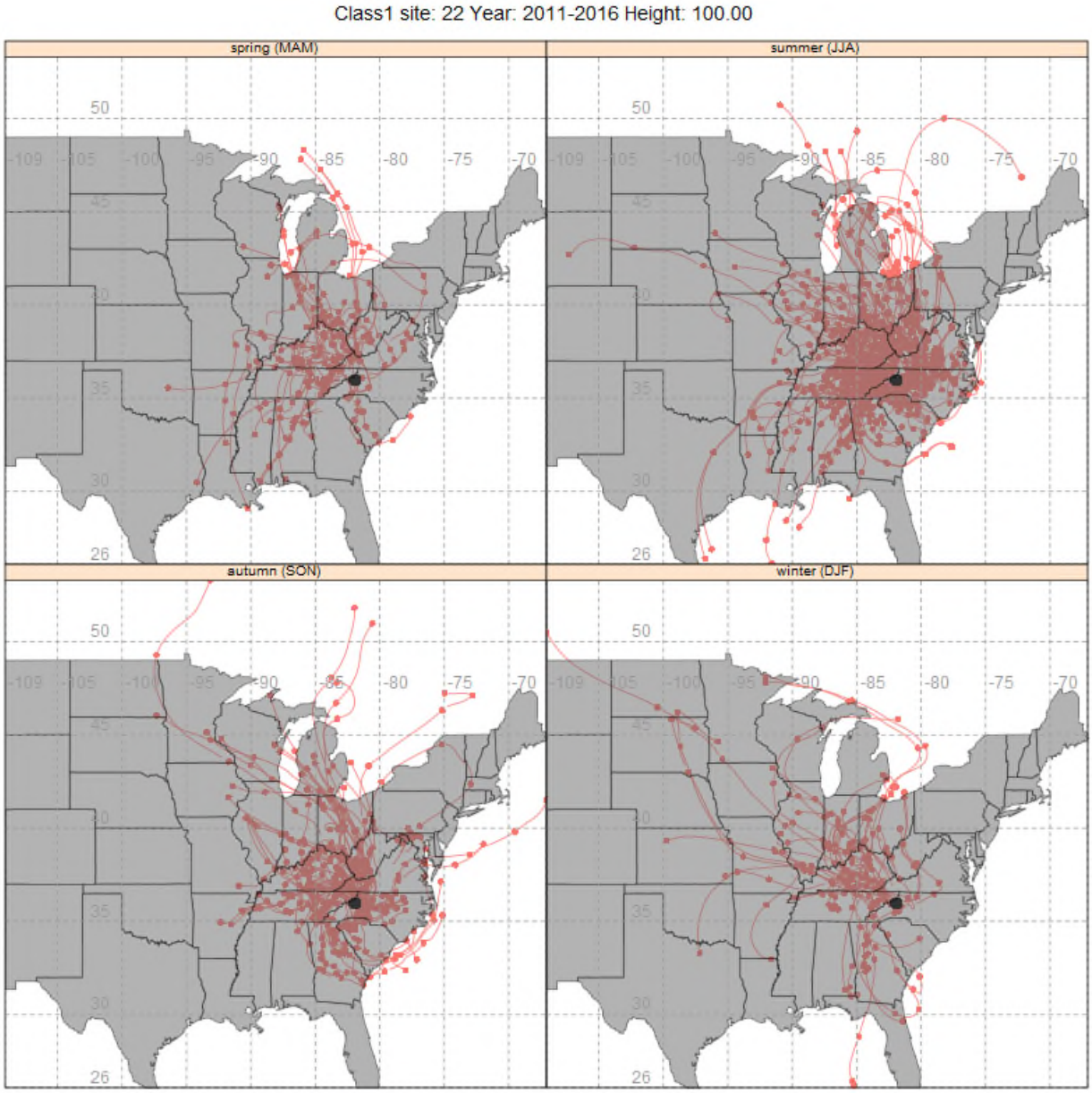


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Linville Gorge Wilderness Area

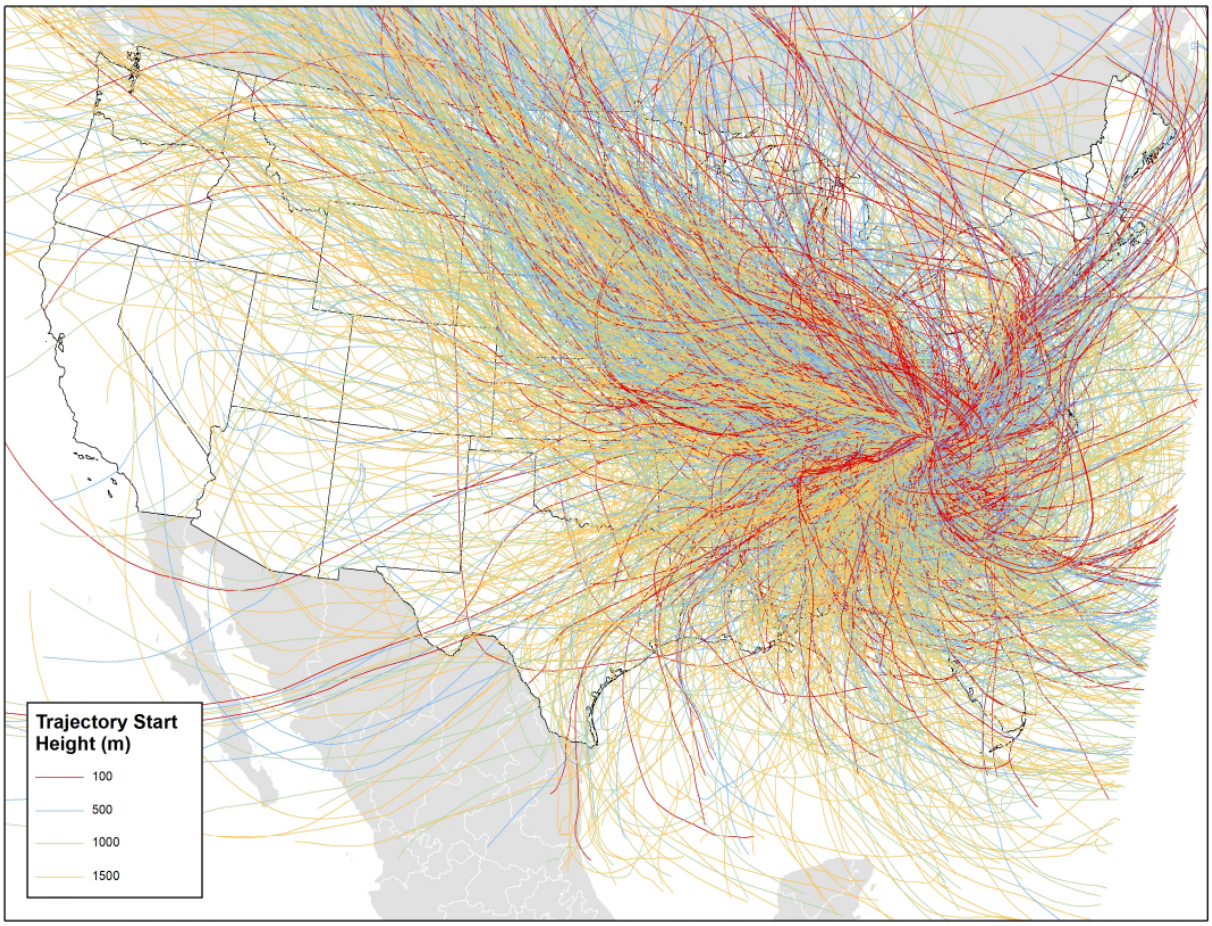


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Linville Gorge Wilderness Area

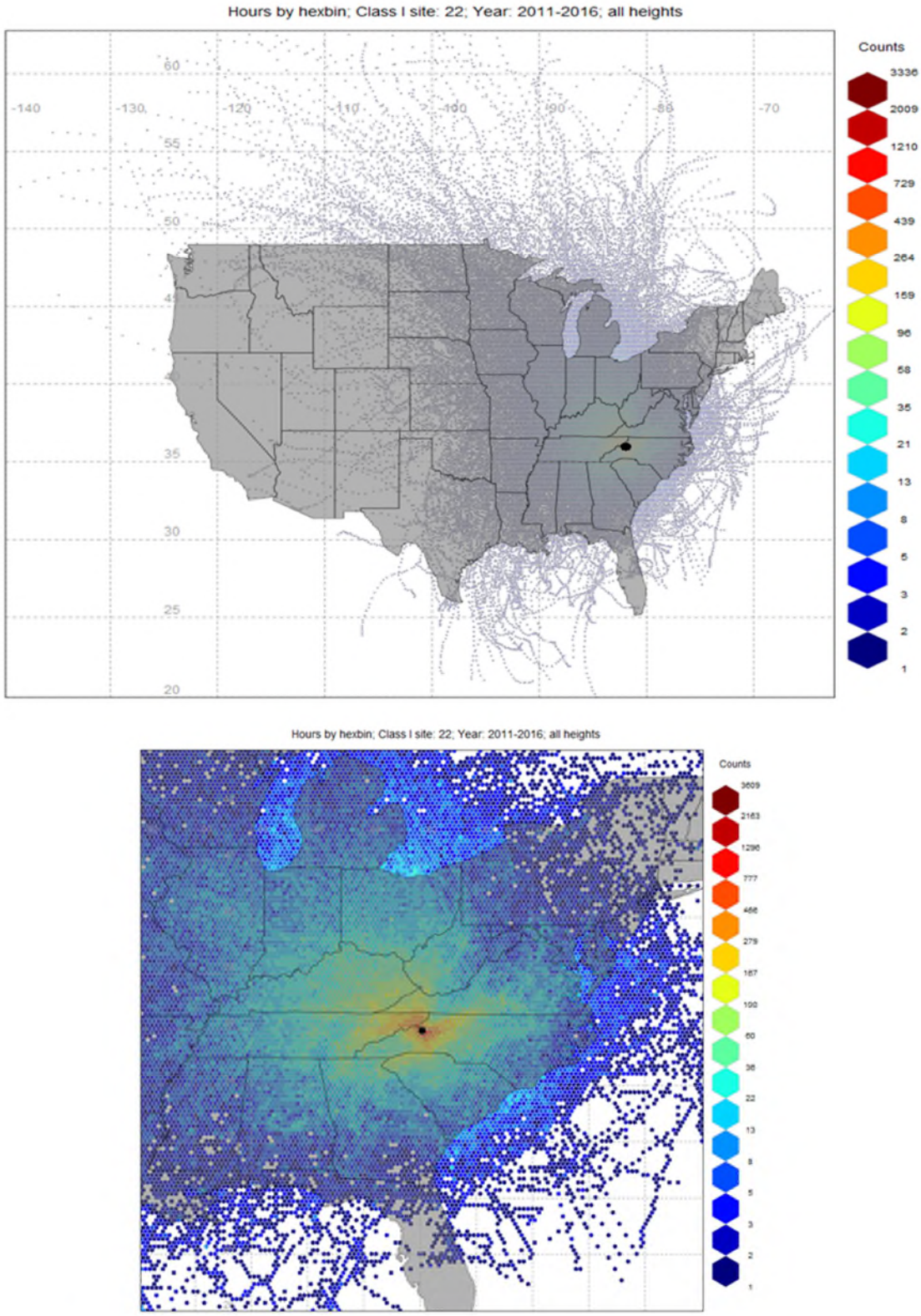


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

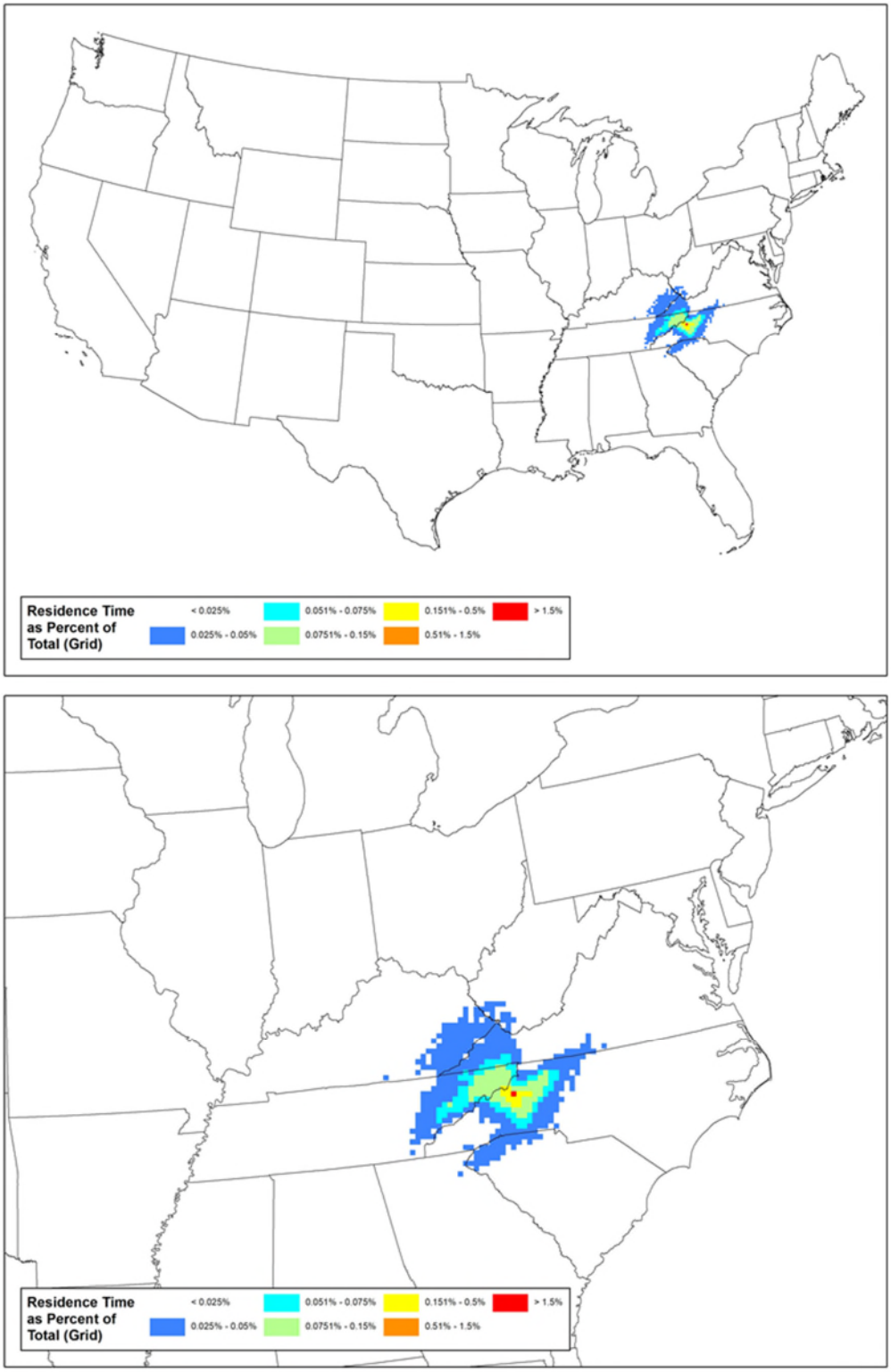


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

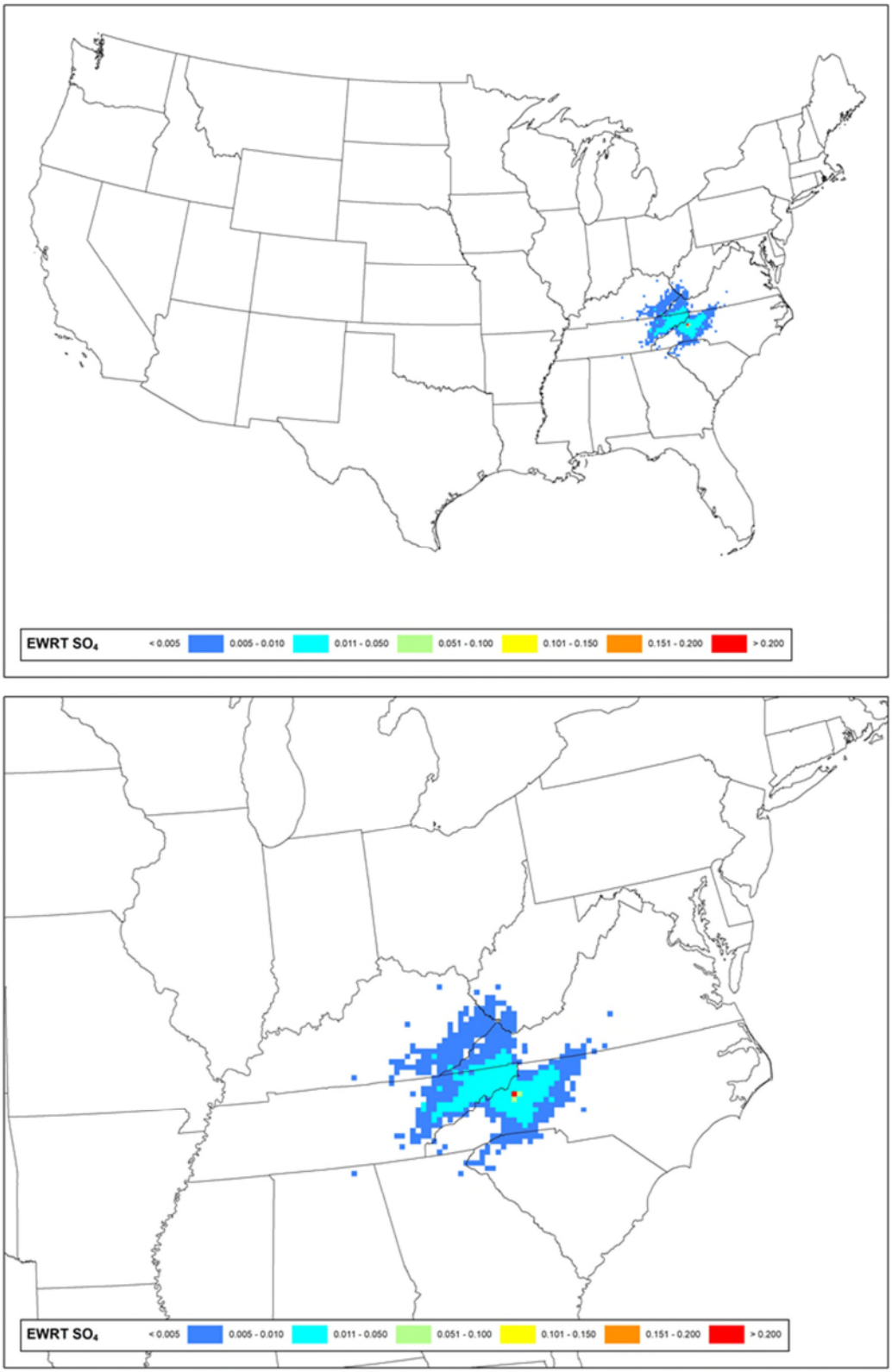


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area - Full View (top) and Class I Zoom (bottom)

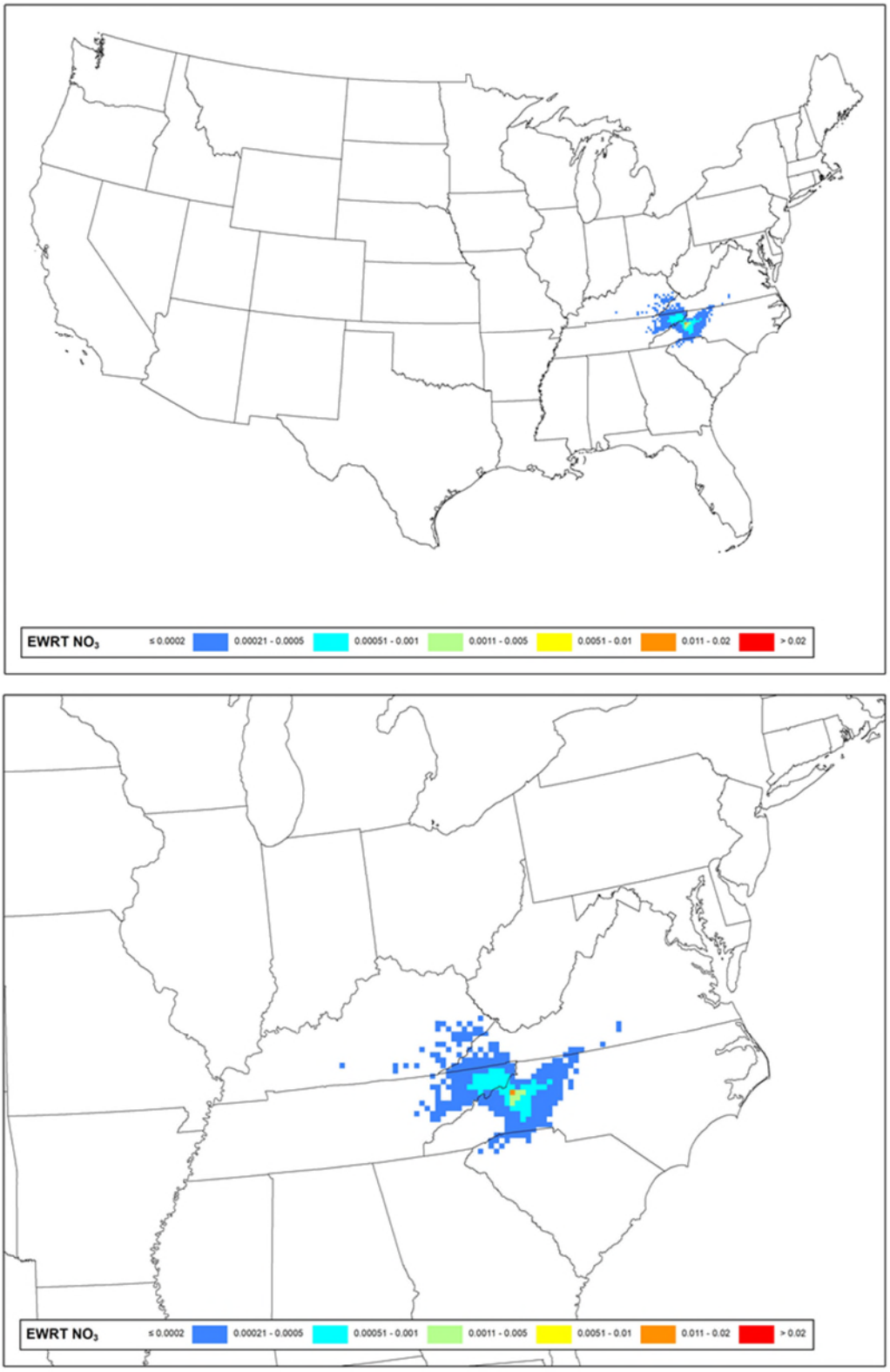


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Linville Gorge Wilderness Area - Full View (top) and Class I Zoom (bottom)

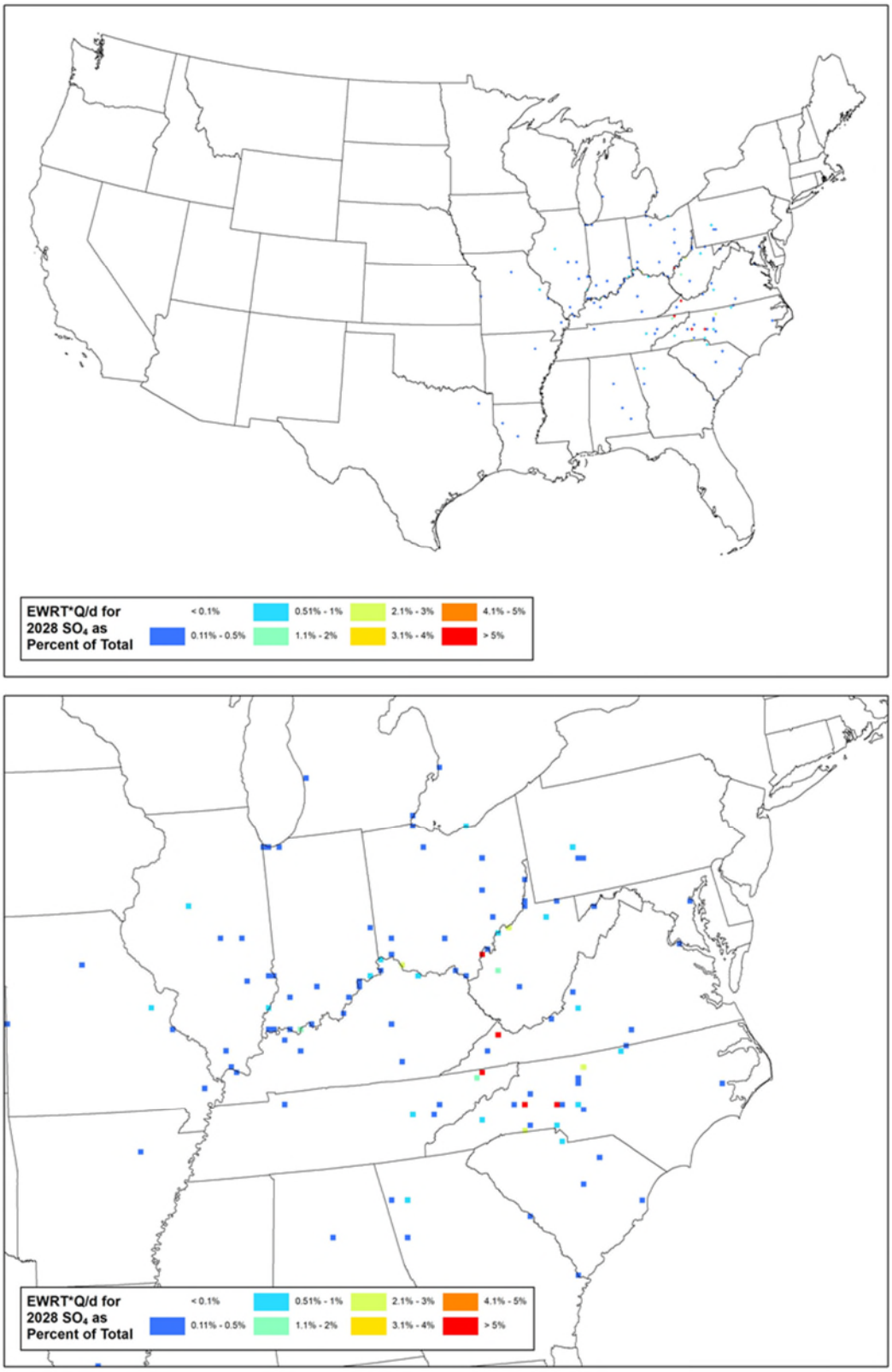


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

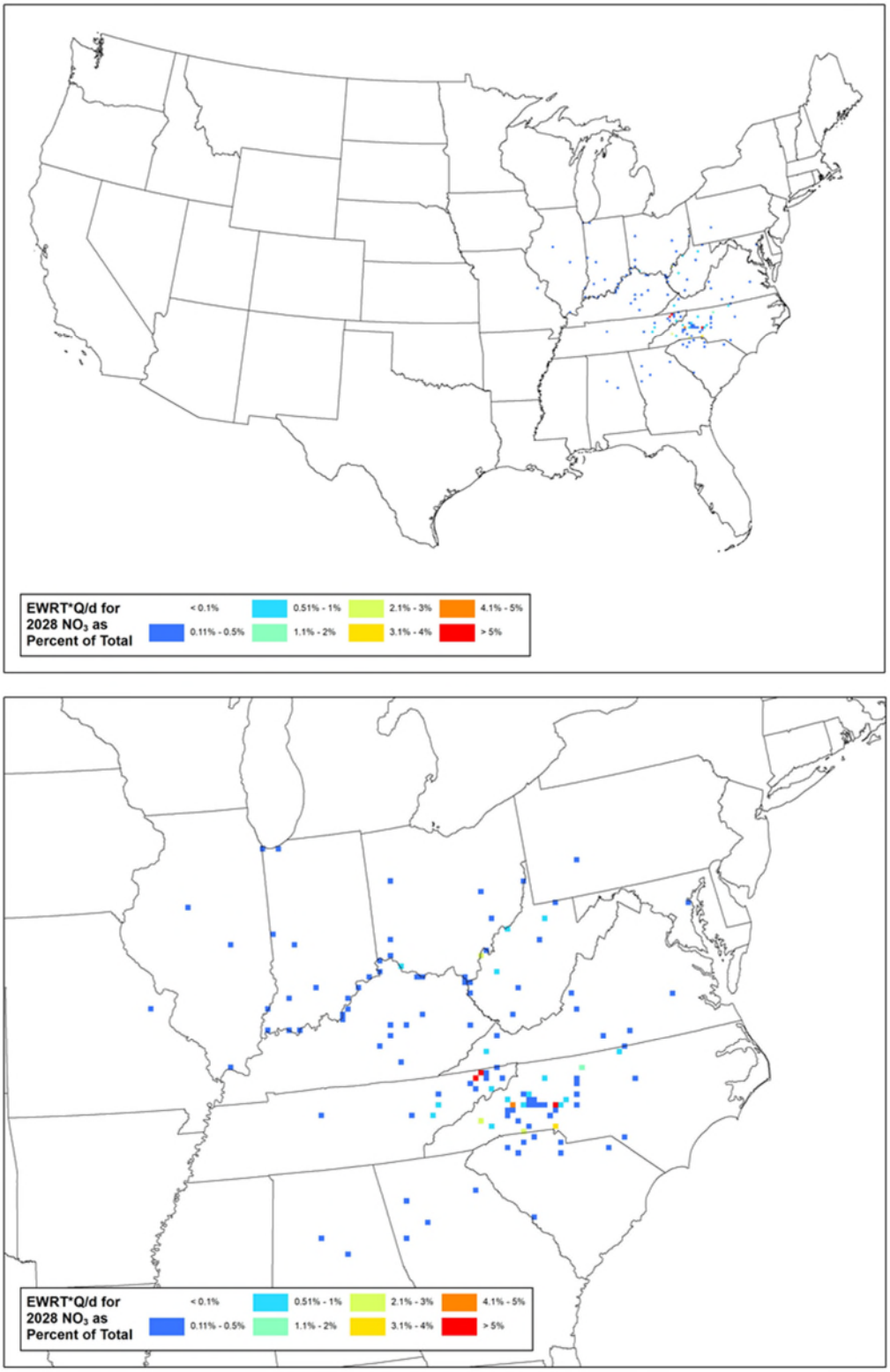


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area– Full View (top) and Class I Zoom (bottom)

Mammoth Cave National Park

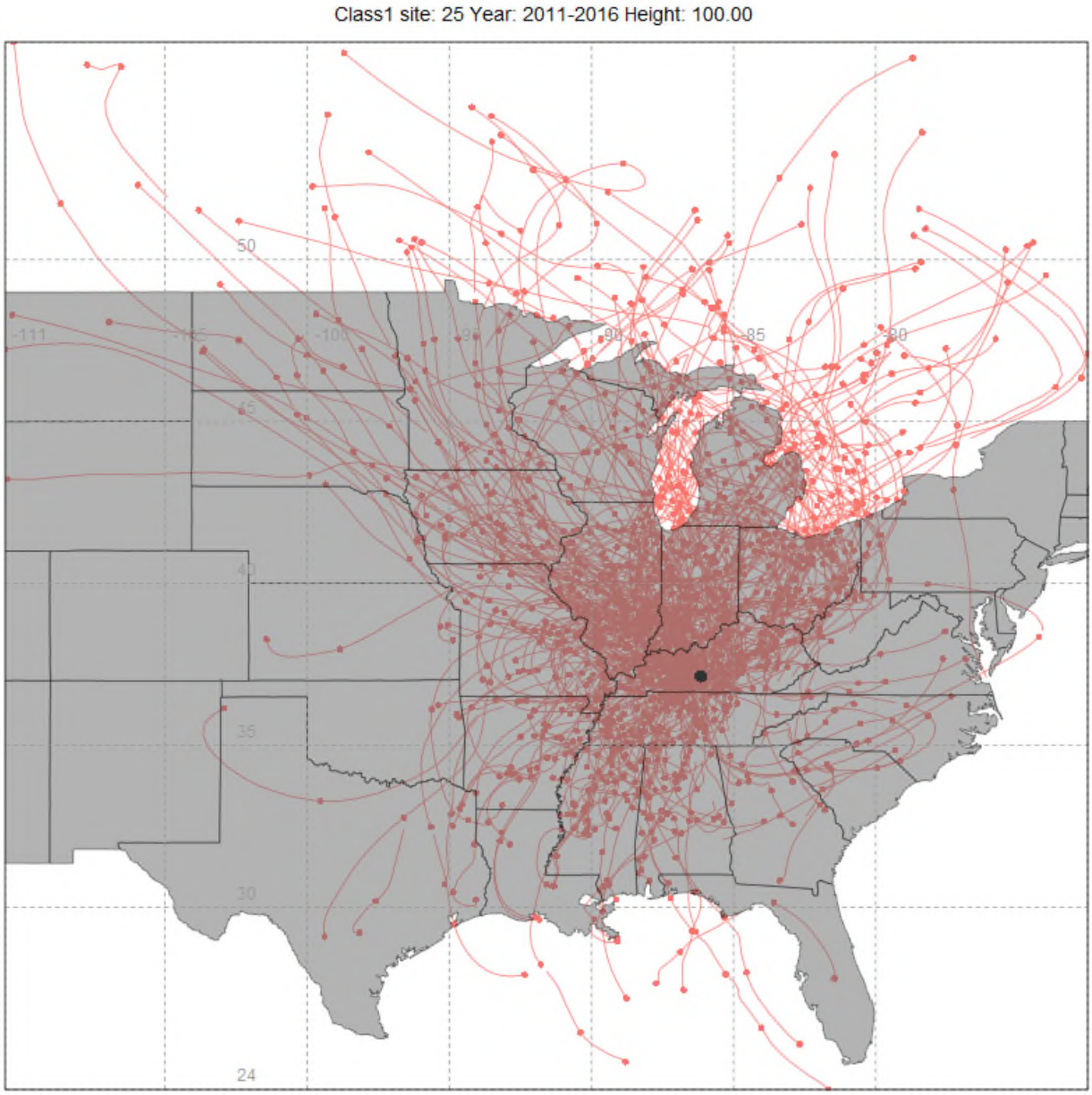


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Mammoth Cave National Park

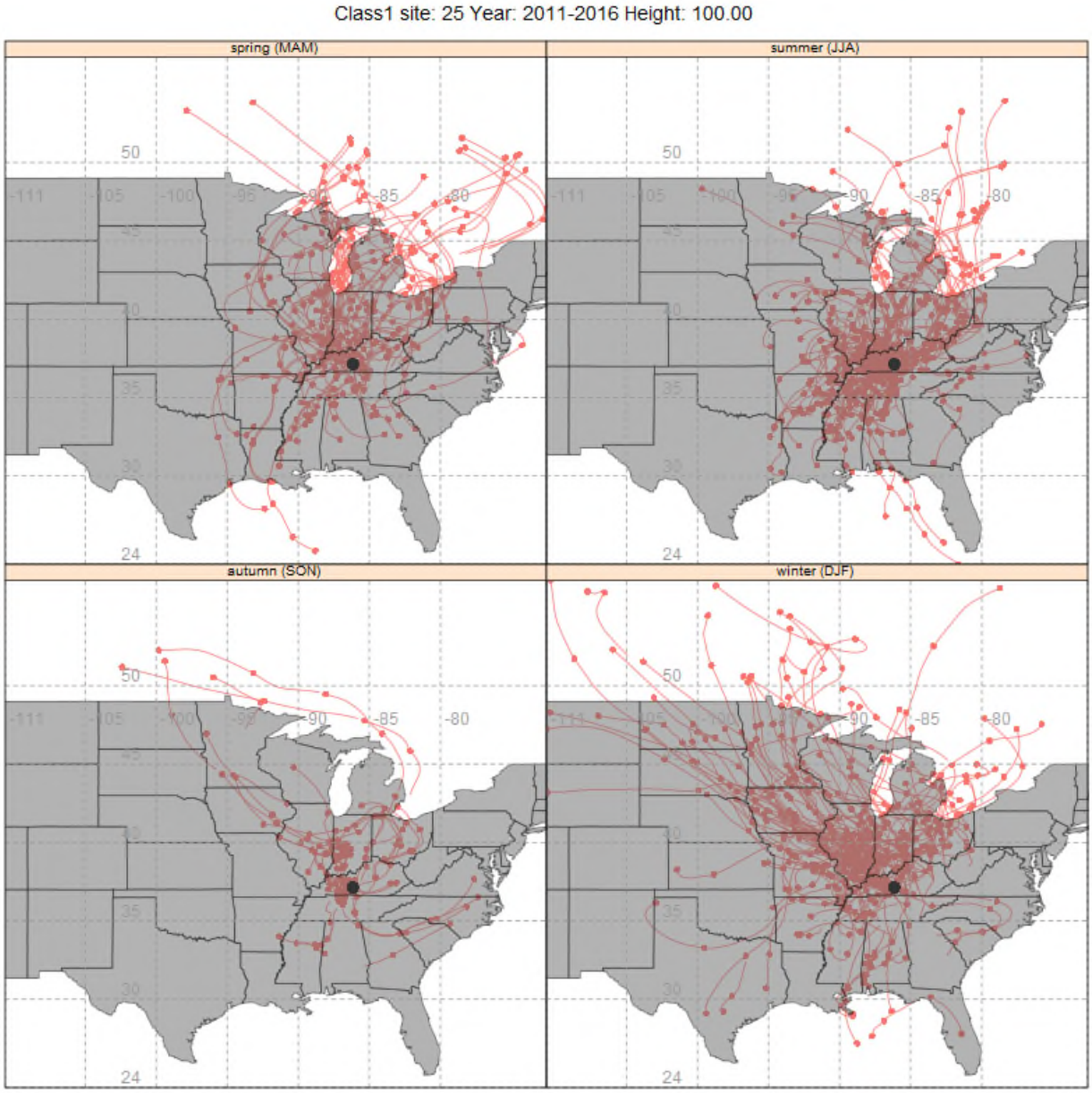


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Mammoth Cave National Park

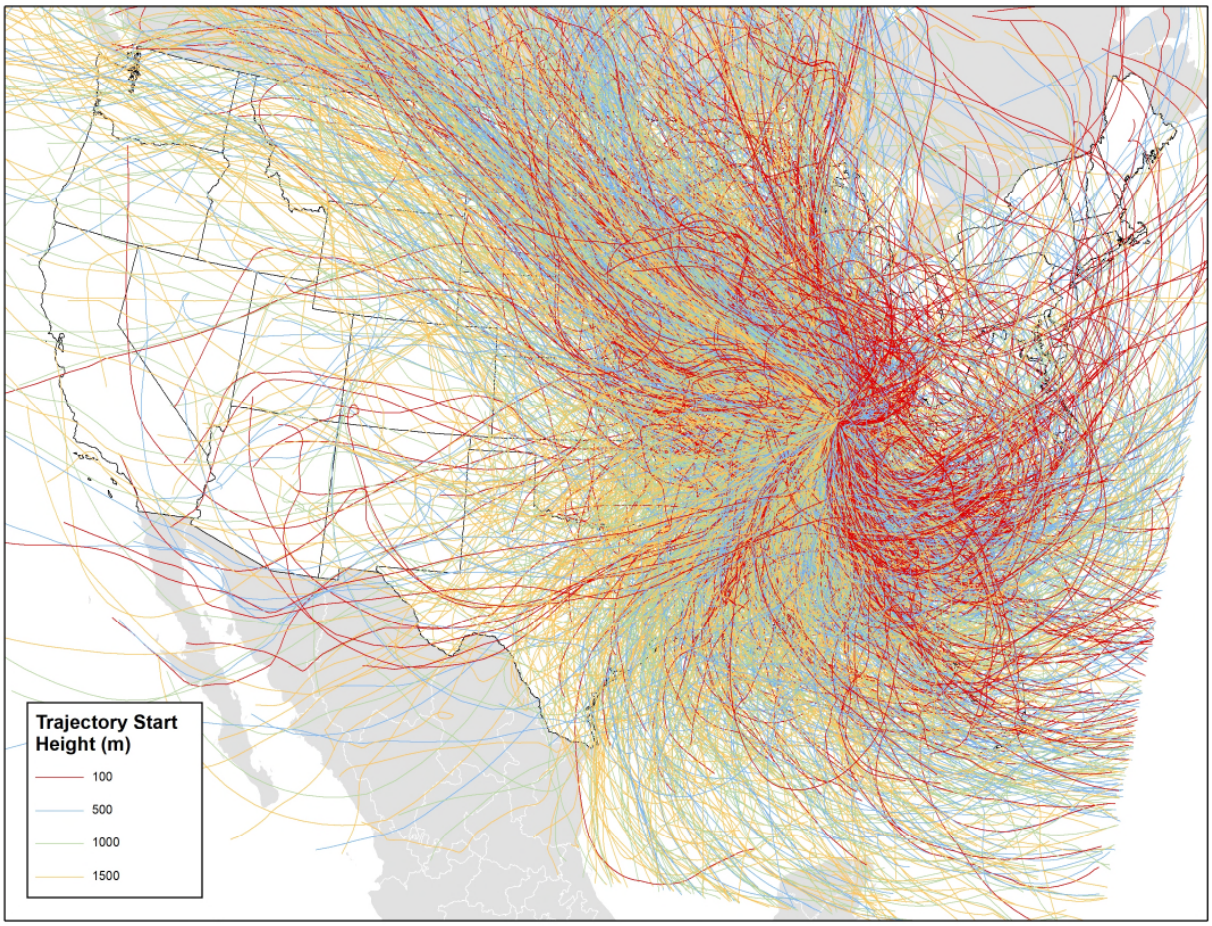
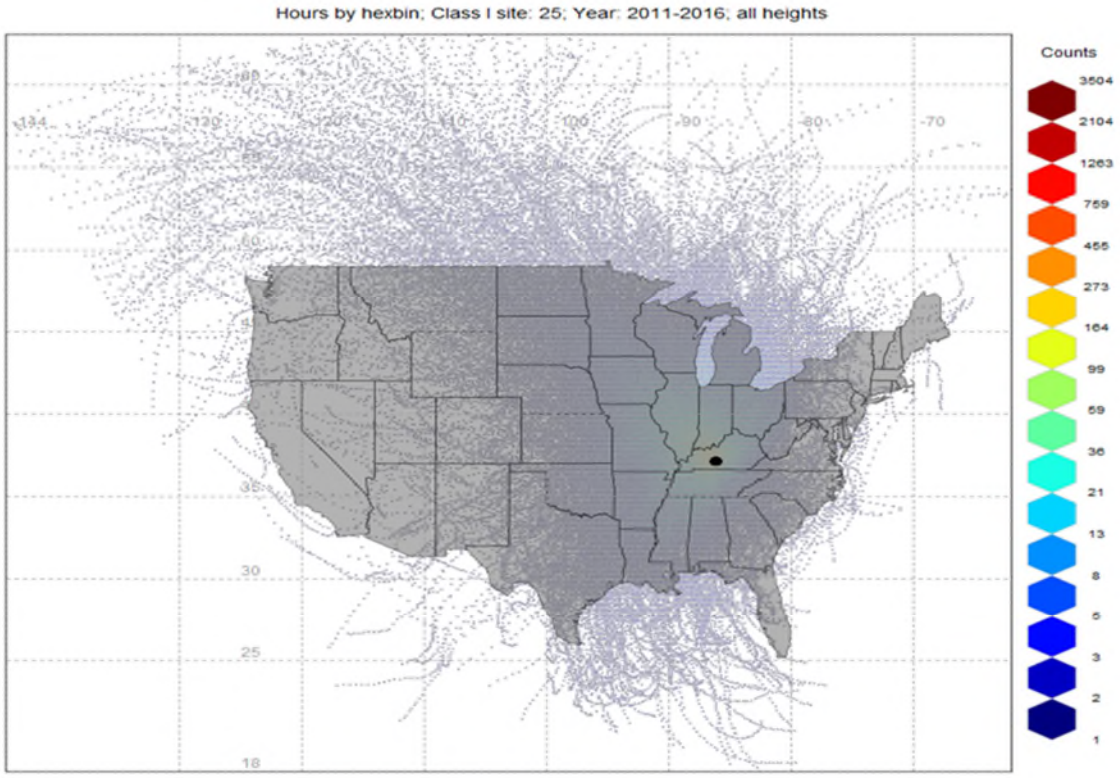


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Mammoth Cave National Park



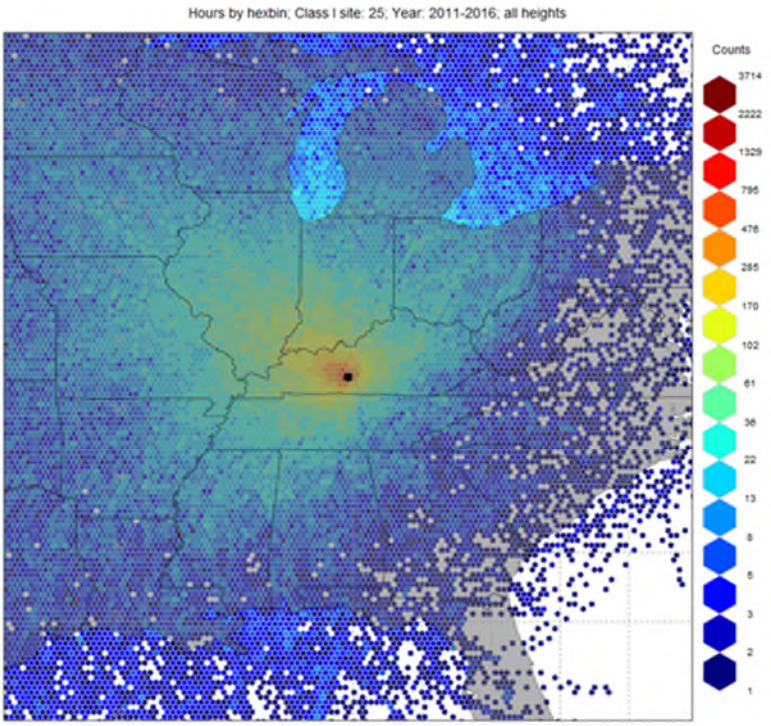


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

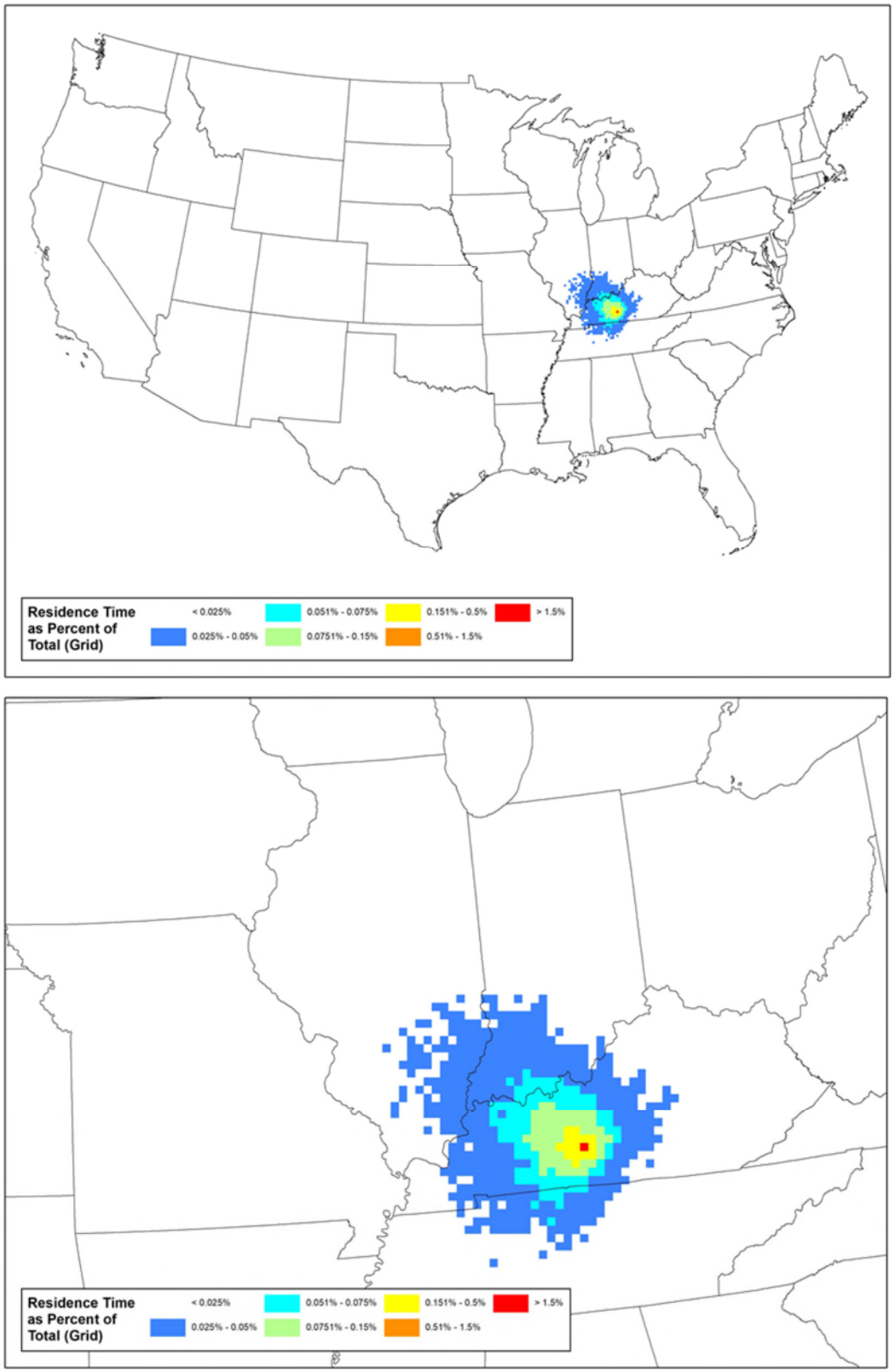


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

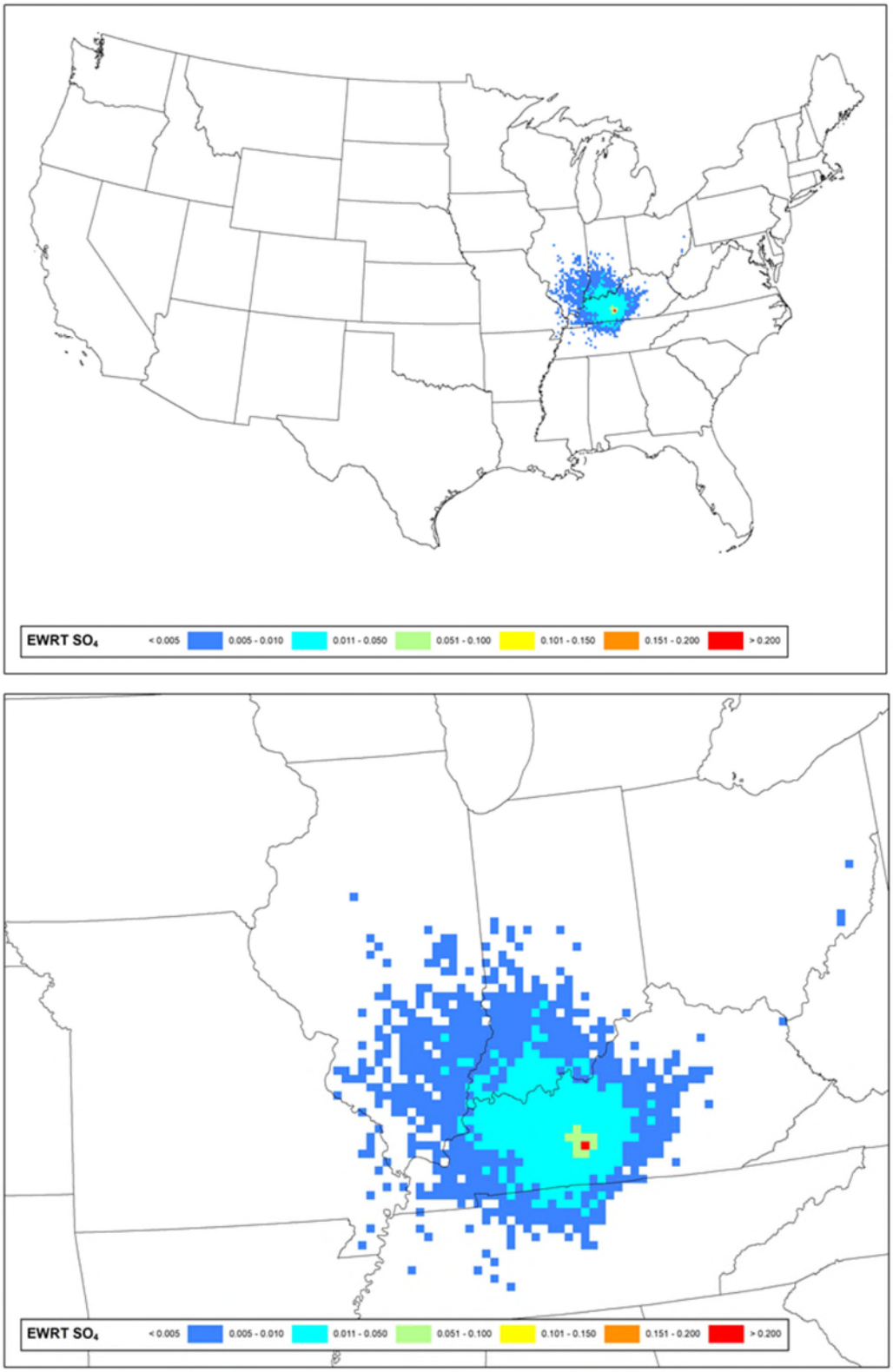


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park - Full View (top) and Class I Zoom (bottom)

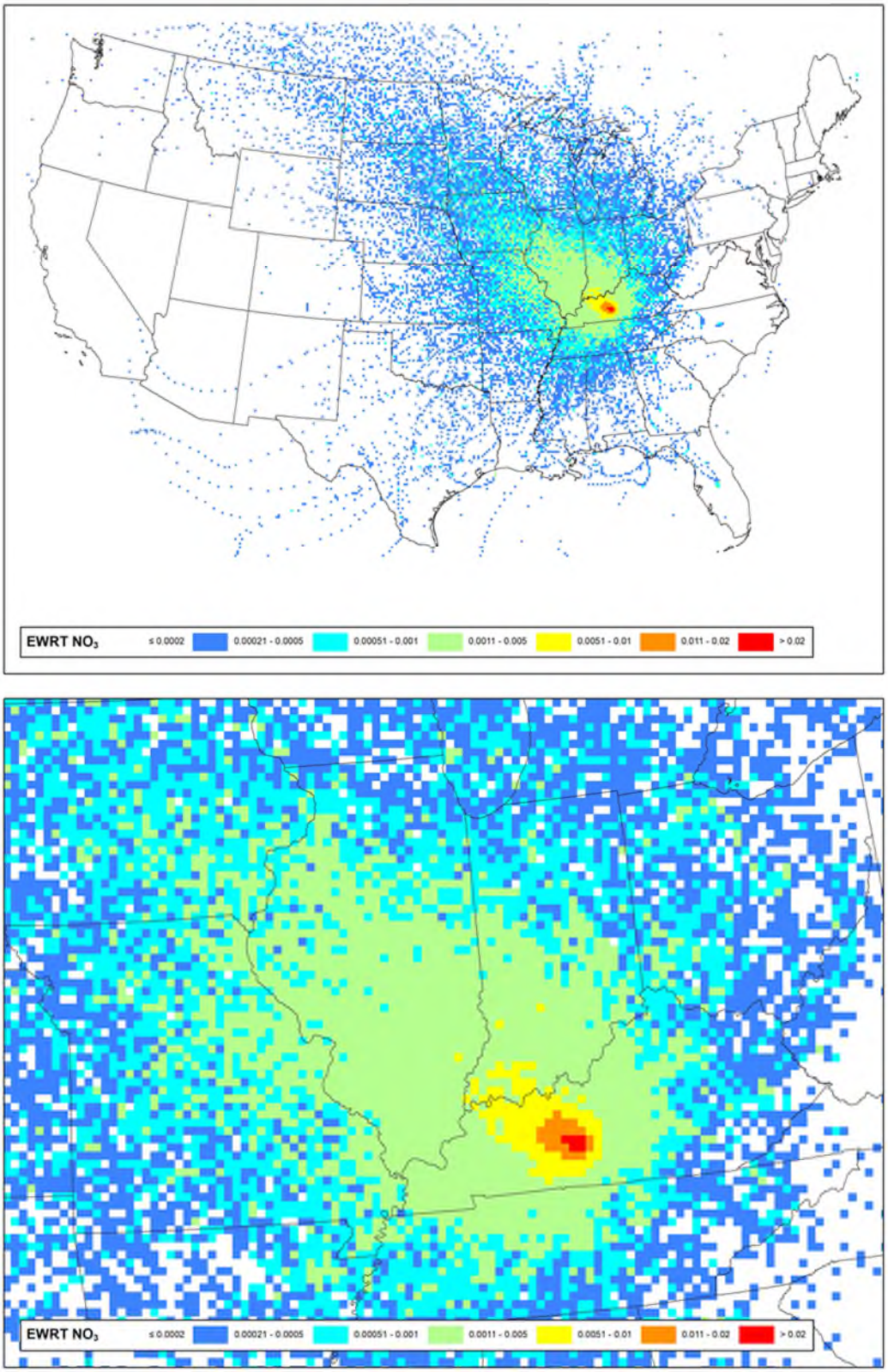


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Mammoth Cave National Park - Full View (top) and Class I Zoom (bottom)

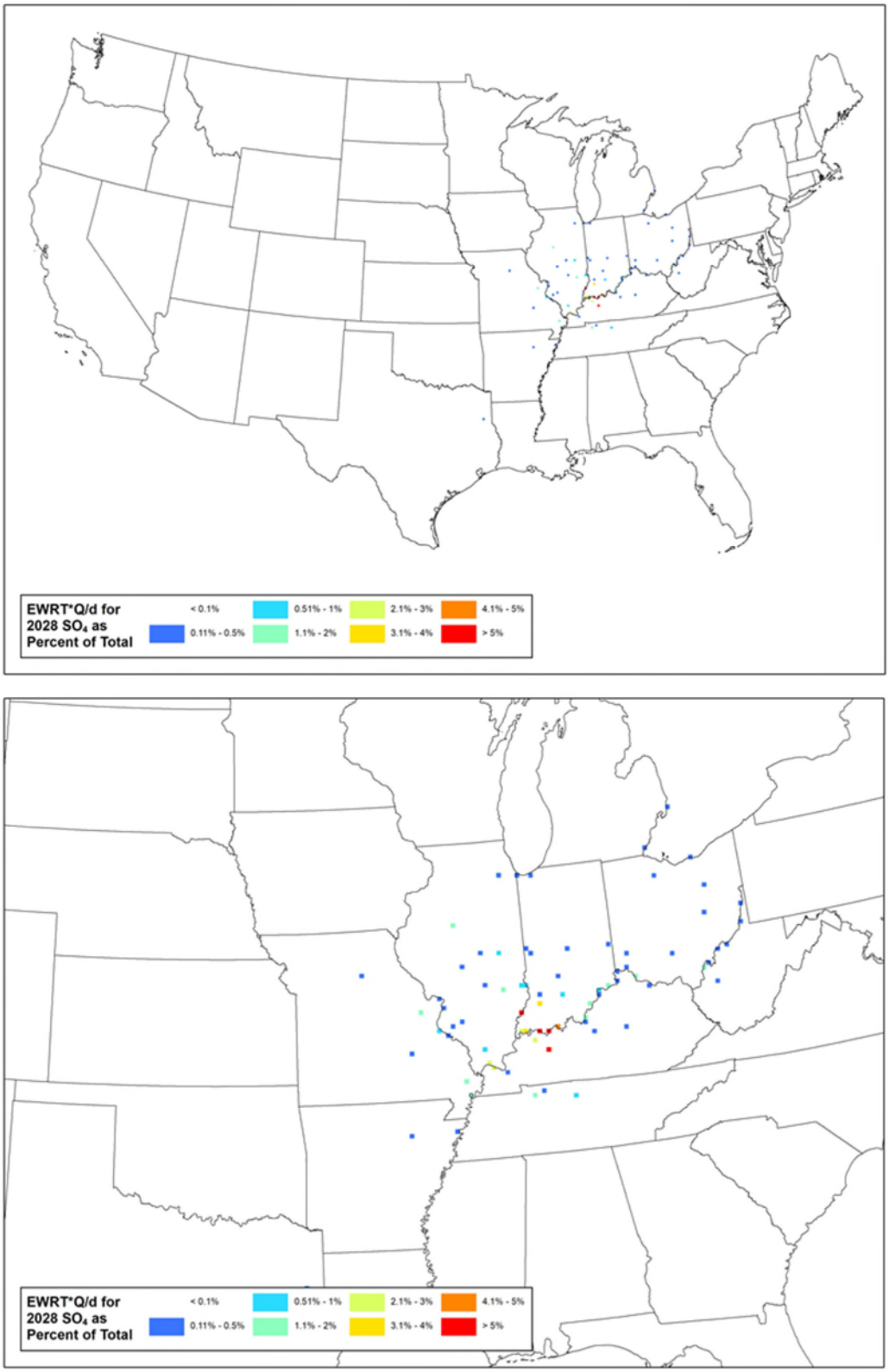


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

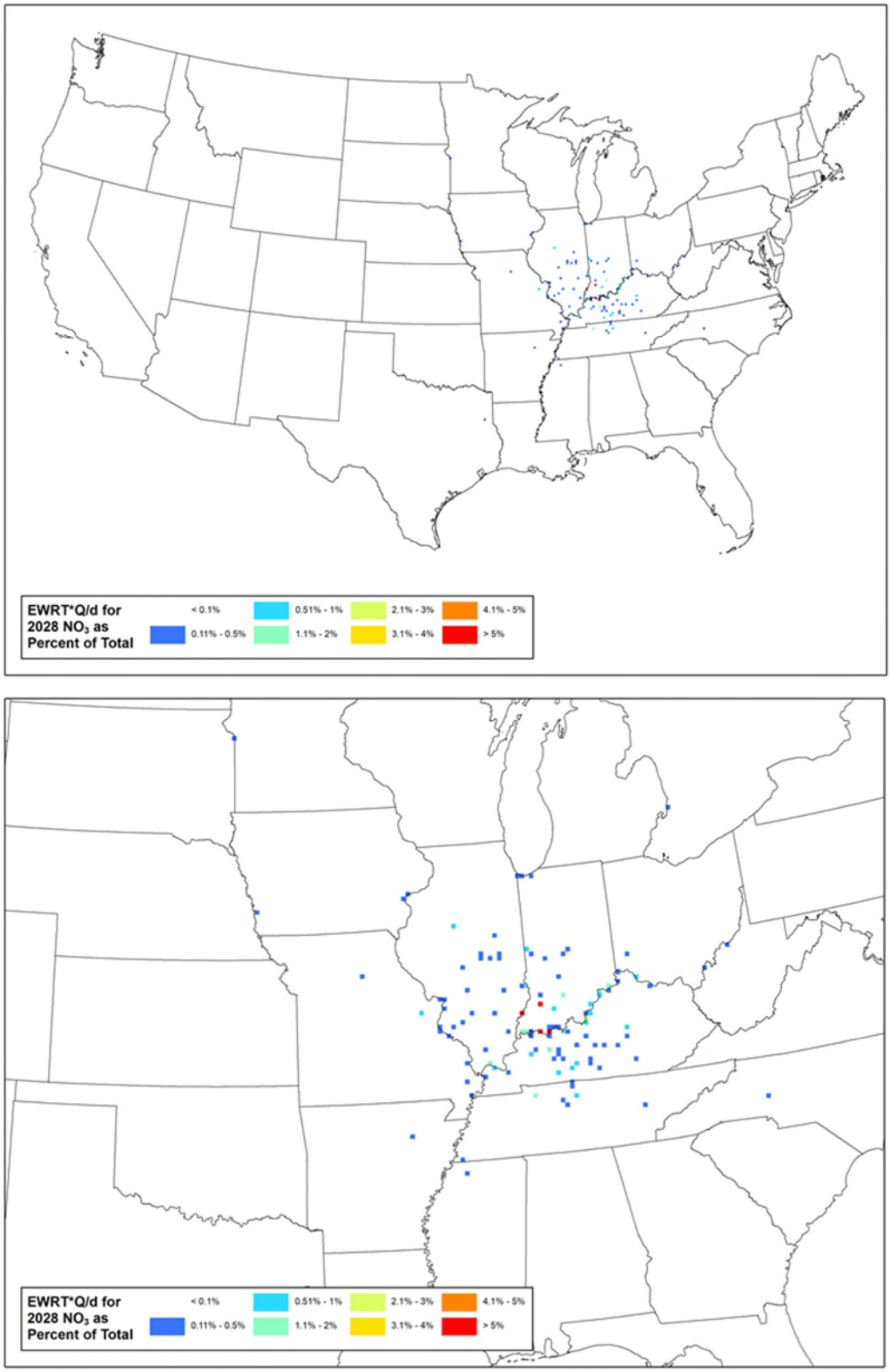


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park– Full View (top) and Class I Zoom (bottom)

Mingo Wilderness Area

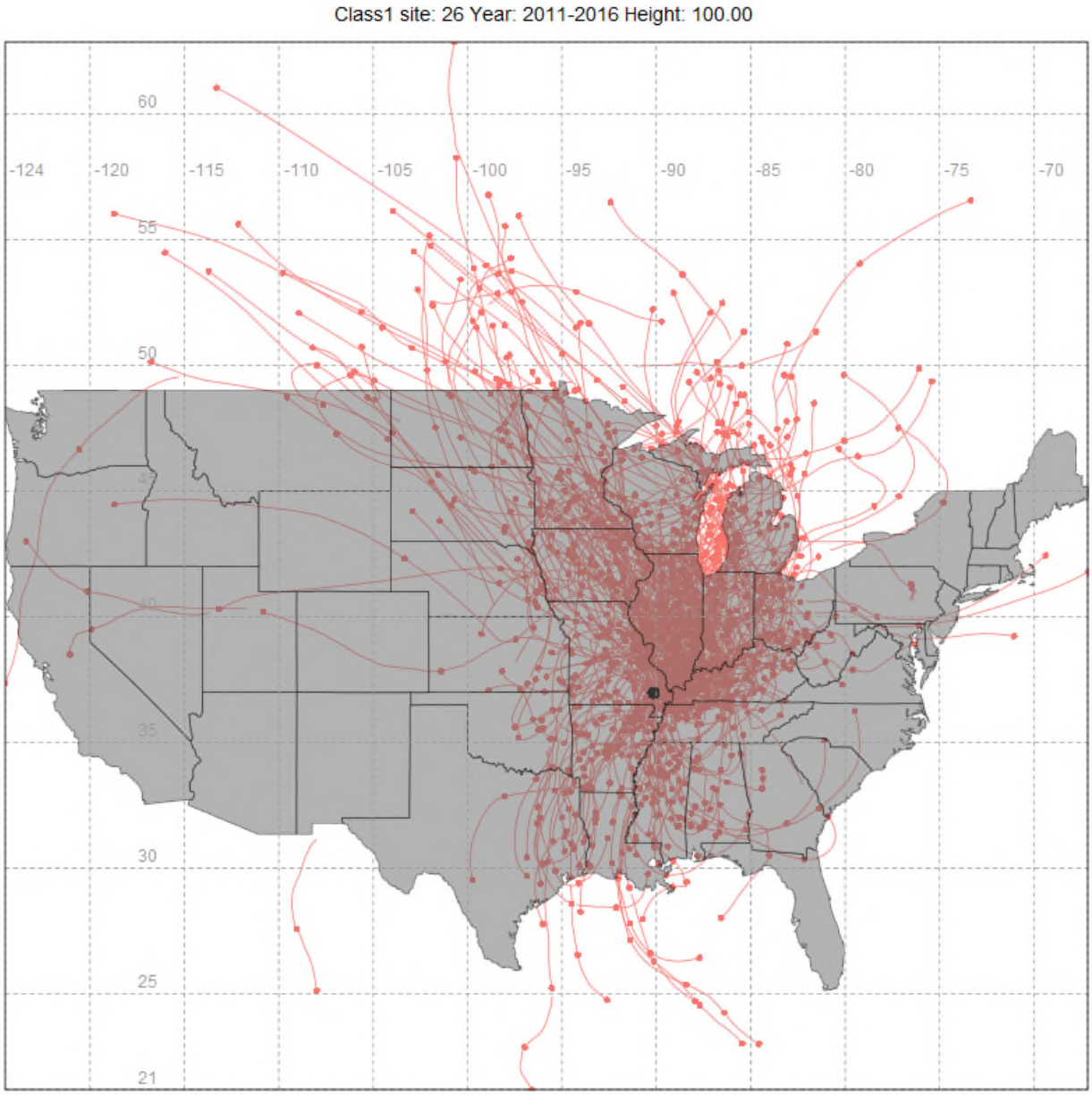


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Mingo Wilderness Area

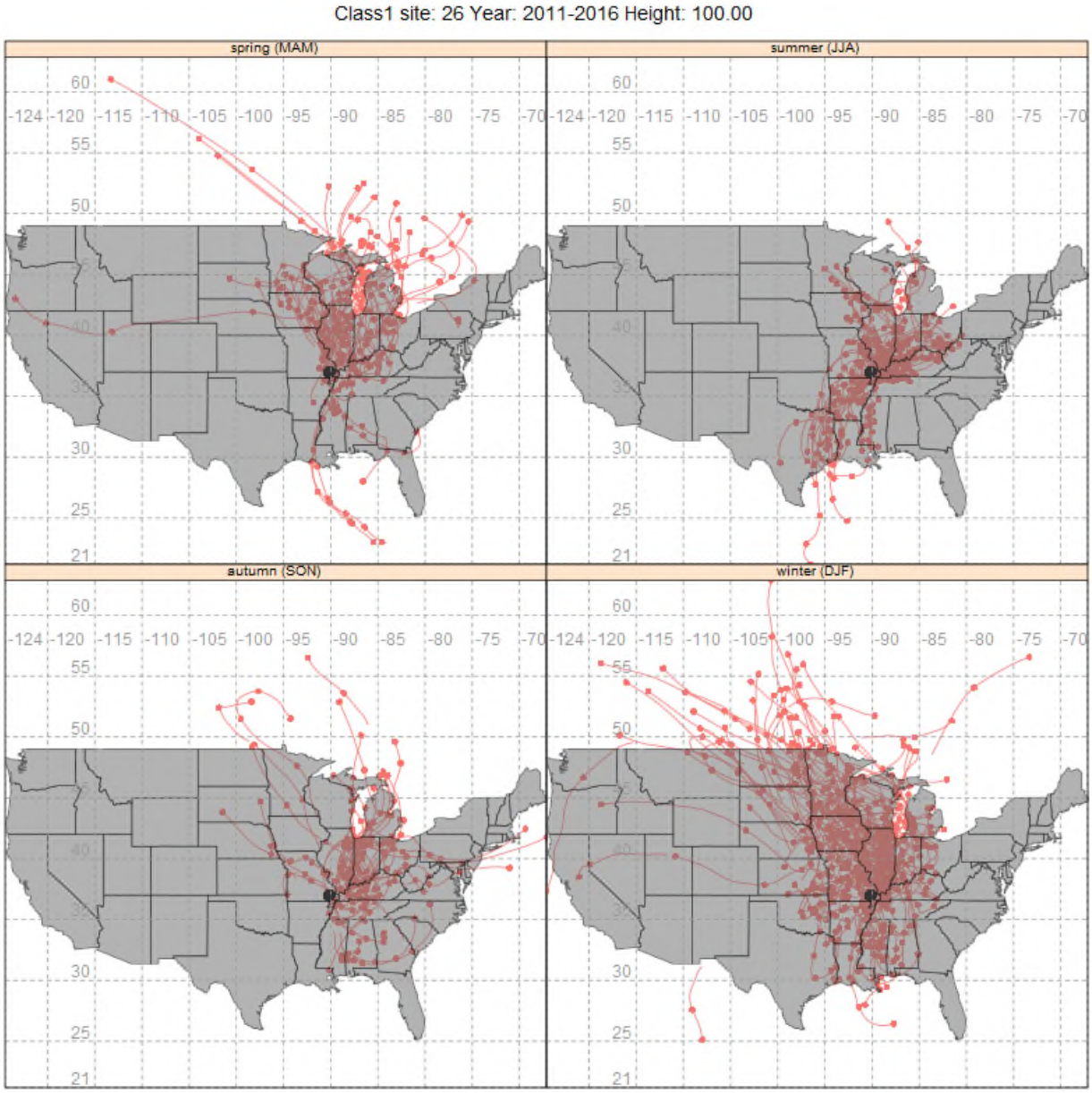


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Mingo Wilderness Area

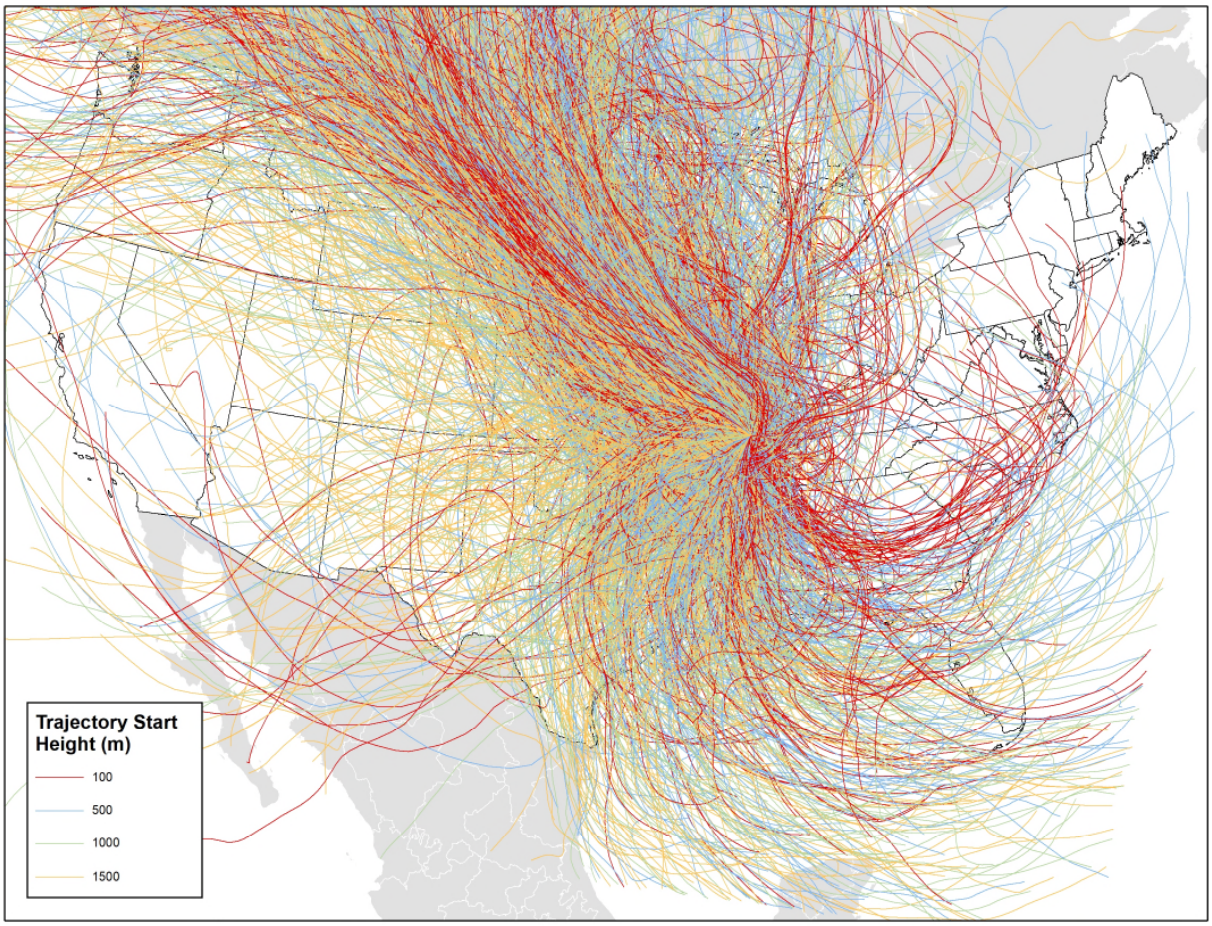


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Mingo Wilderness Area

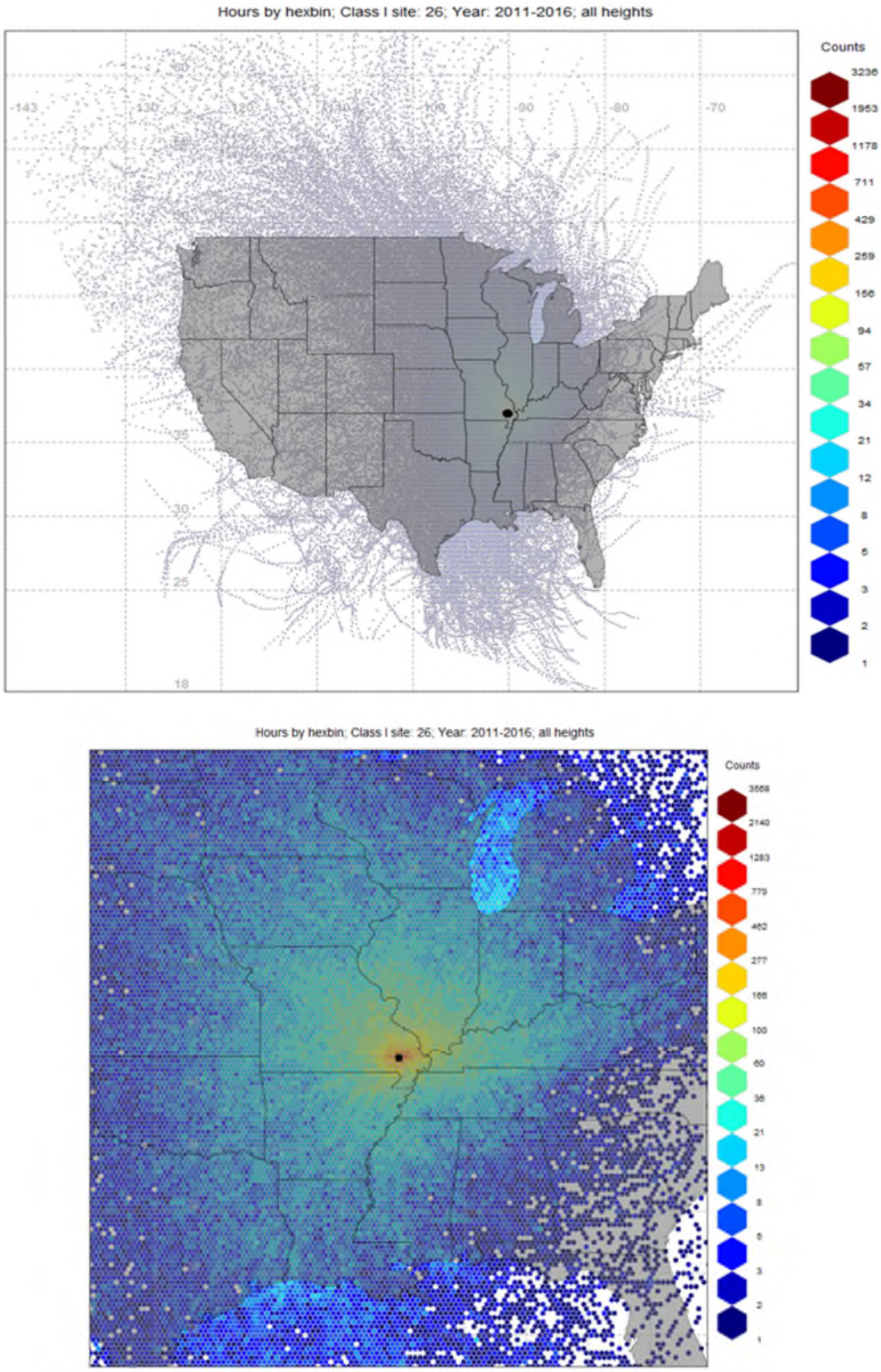


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

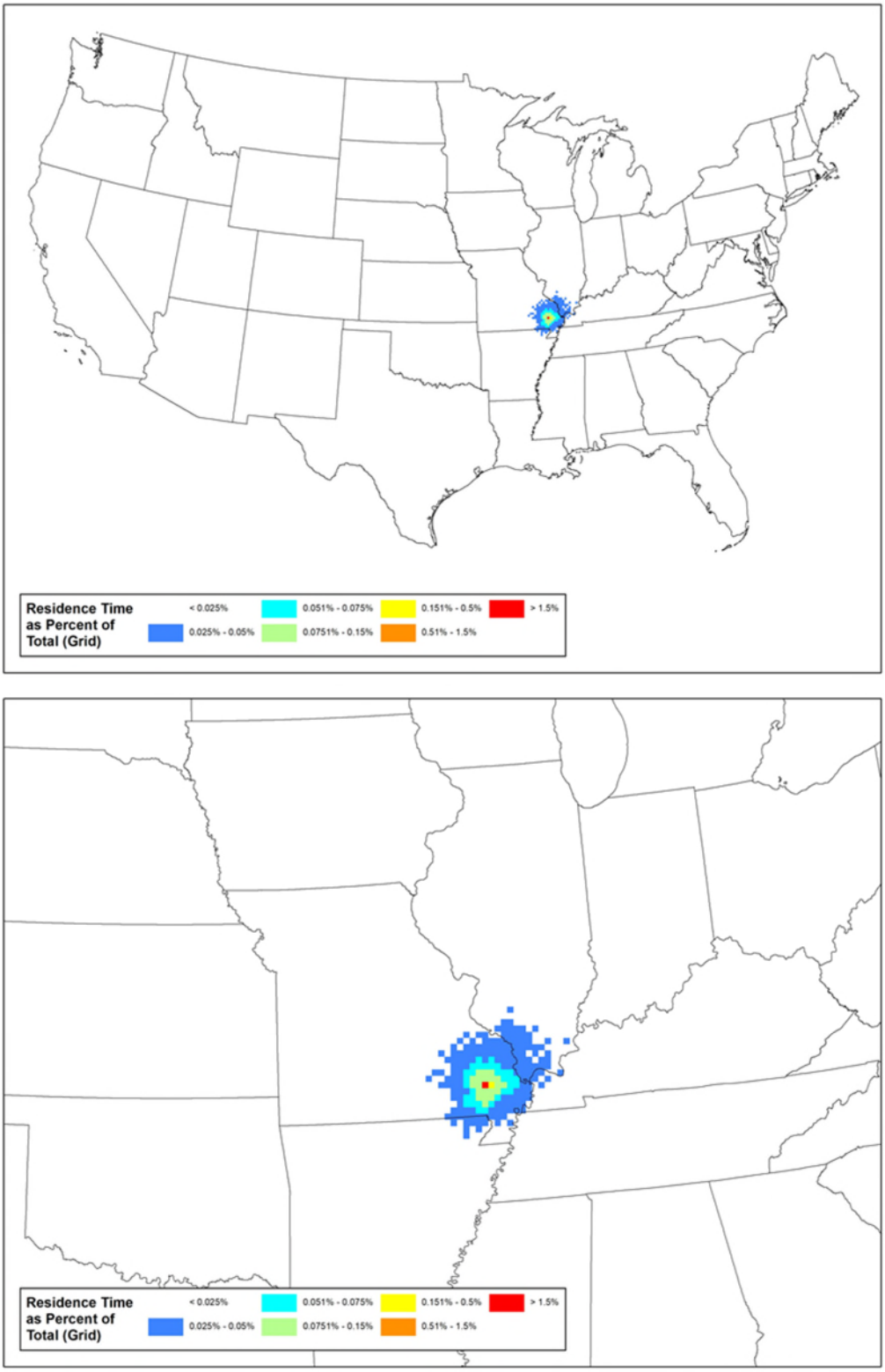


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

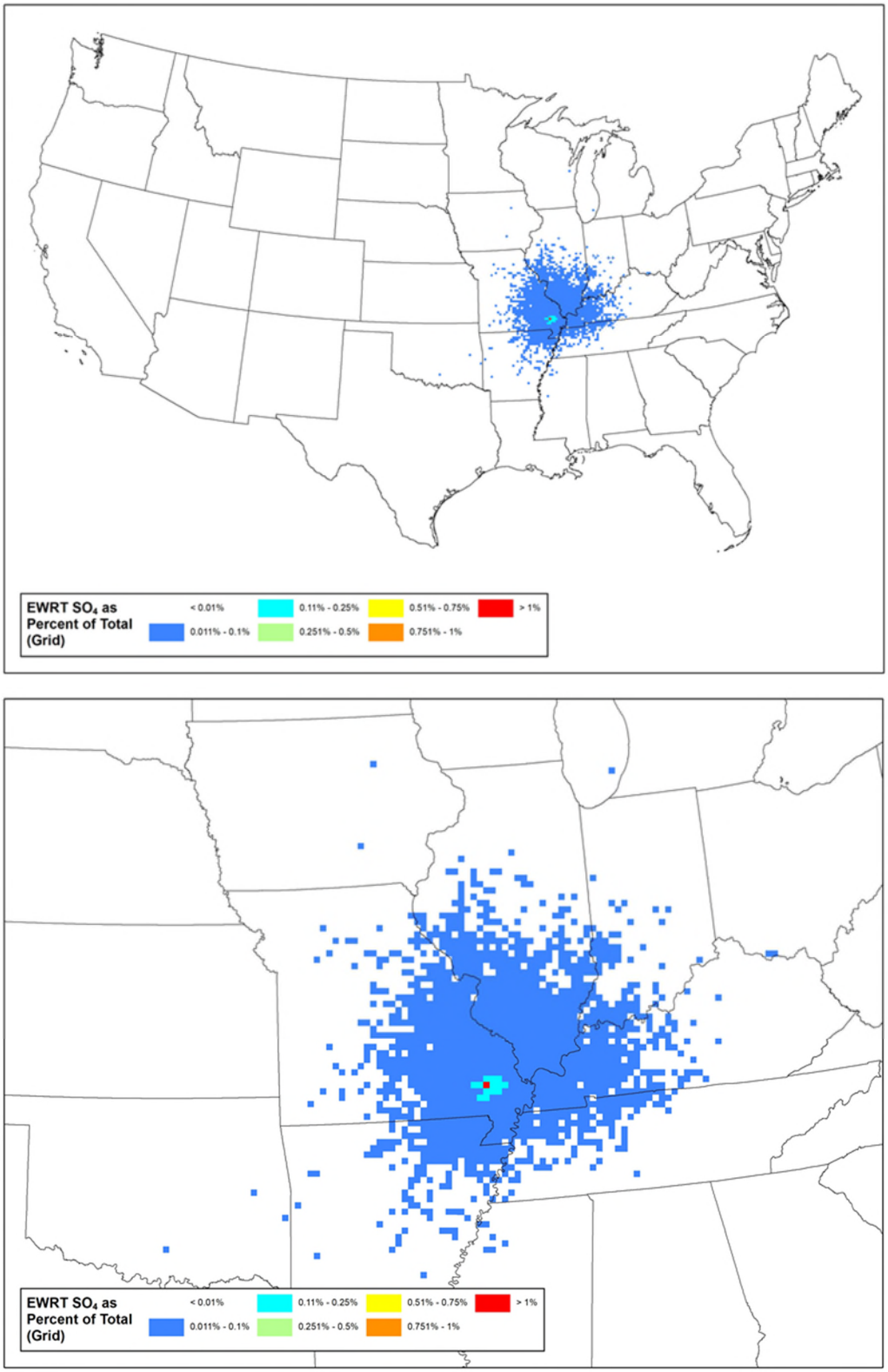
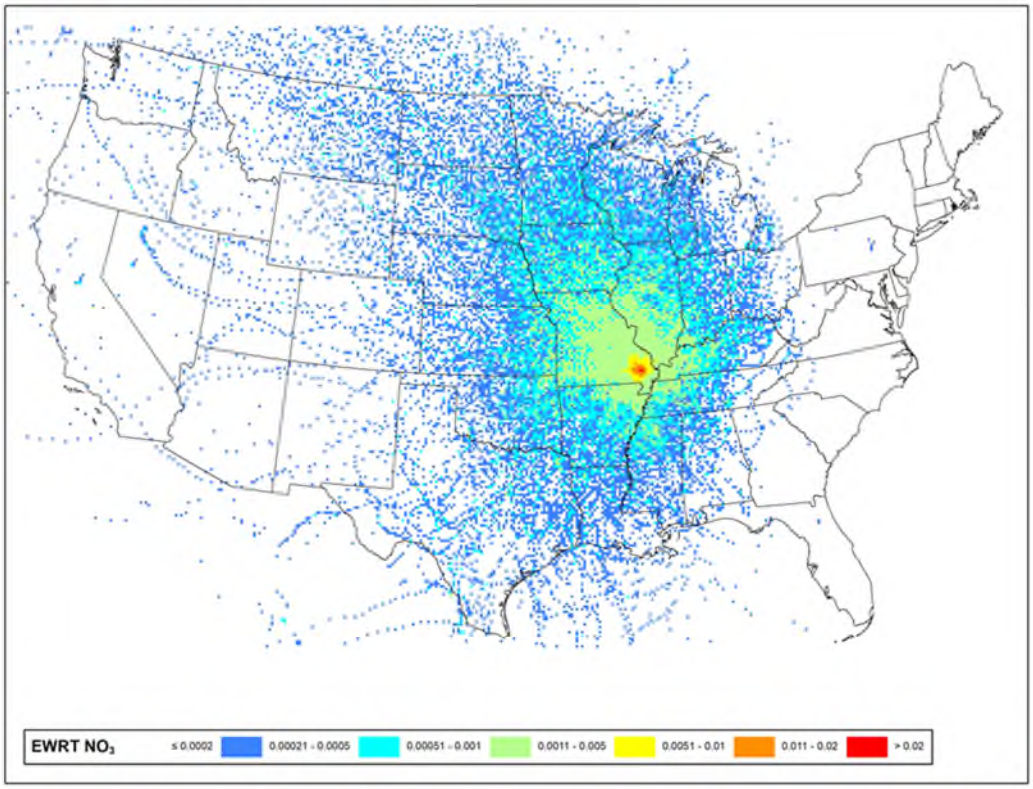


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area - Full View (top) and Class I Zoom (bottom)



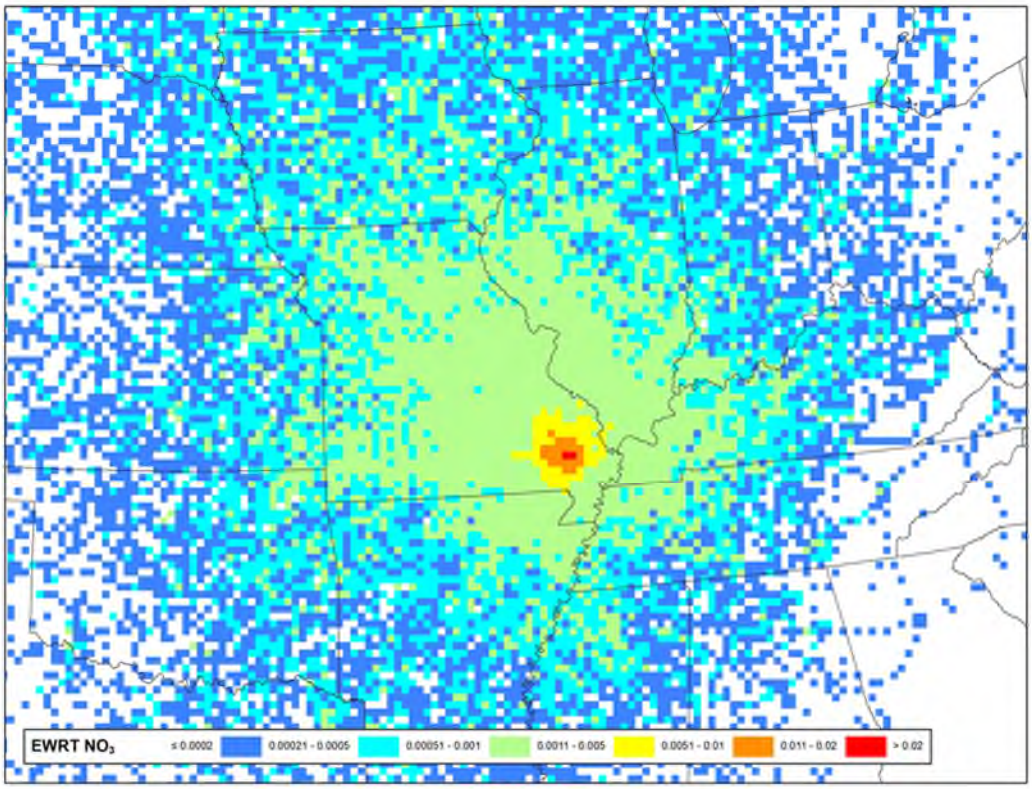


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Mingo Wilderness Area - Full View (top) and Class I Zoom (bottom)

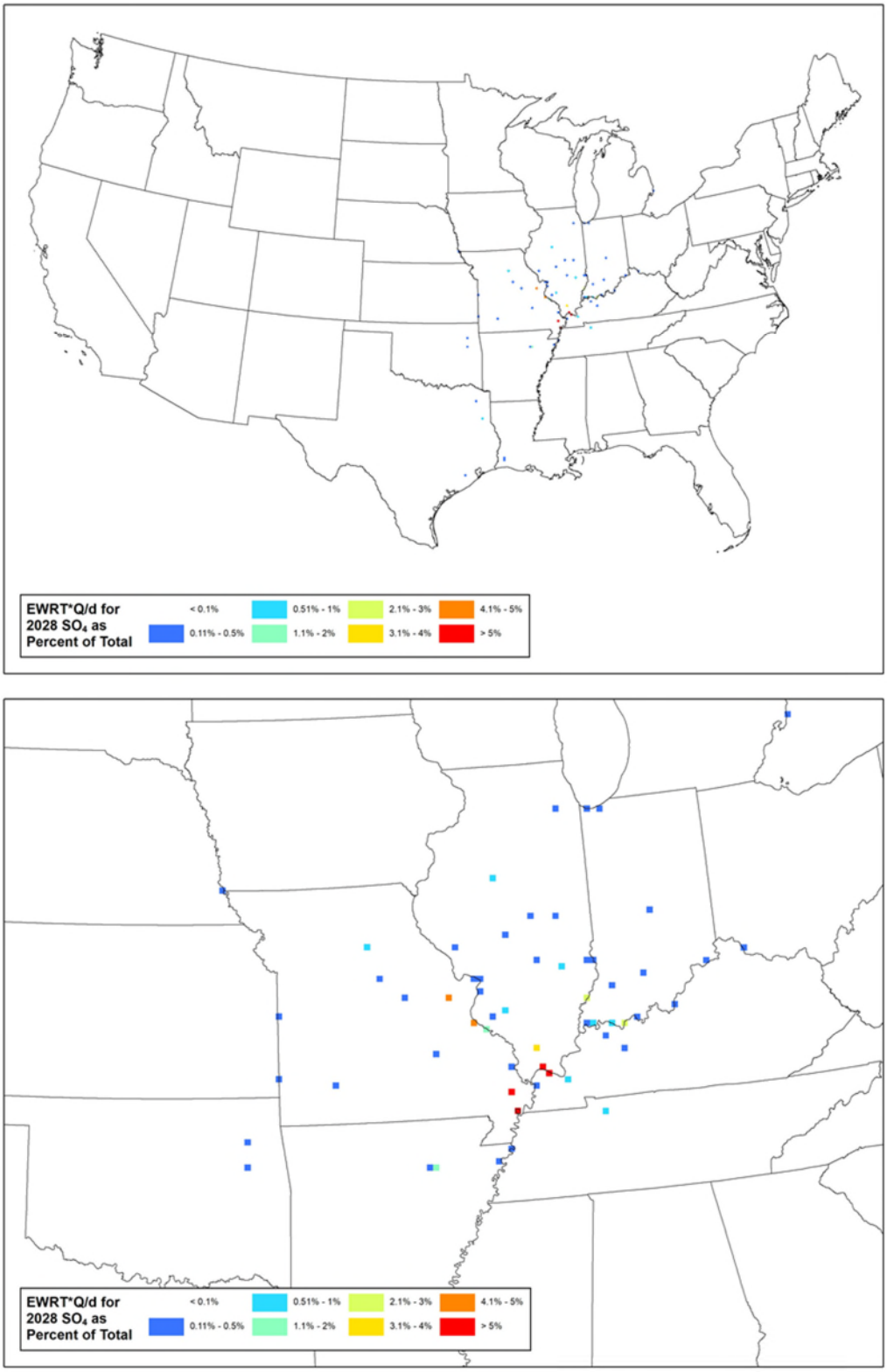


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

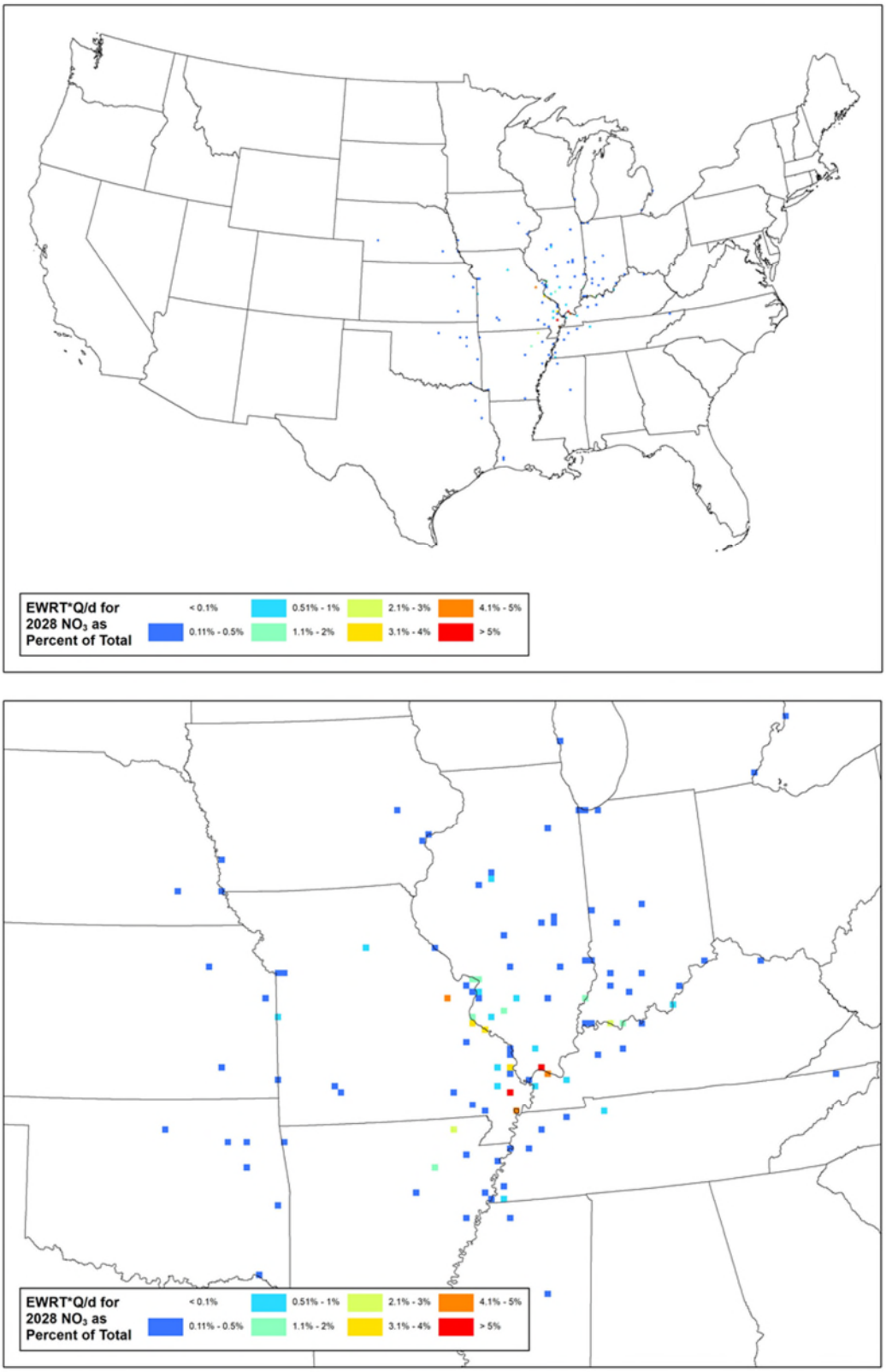


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area– Full View (top) and Class I Zoom (bottom)

Okefenokee Wilderness Area

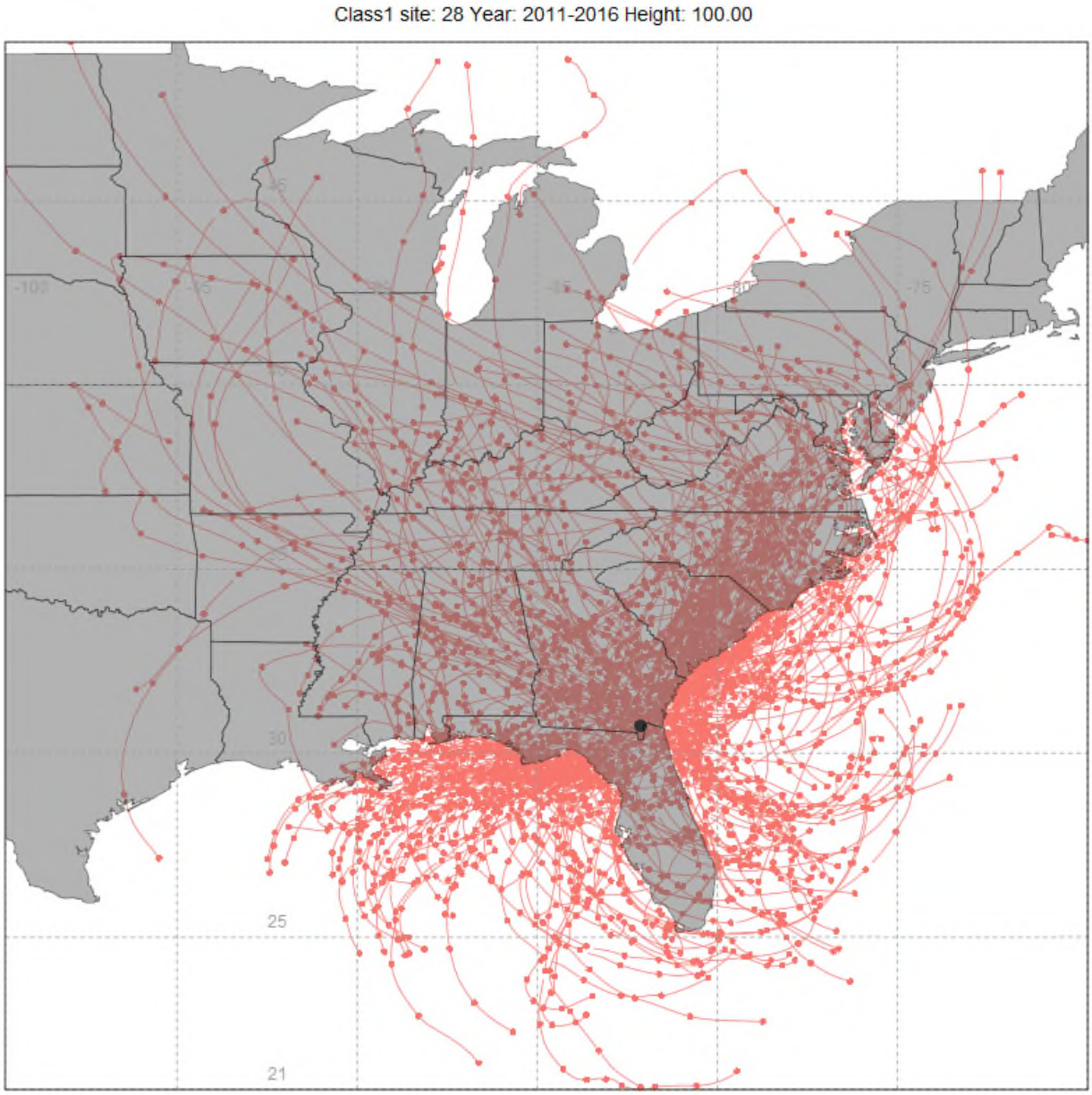


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Okefenokee Wilderness Area

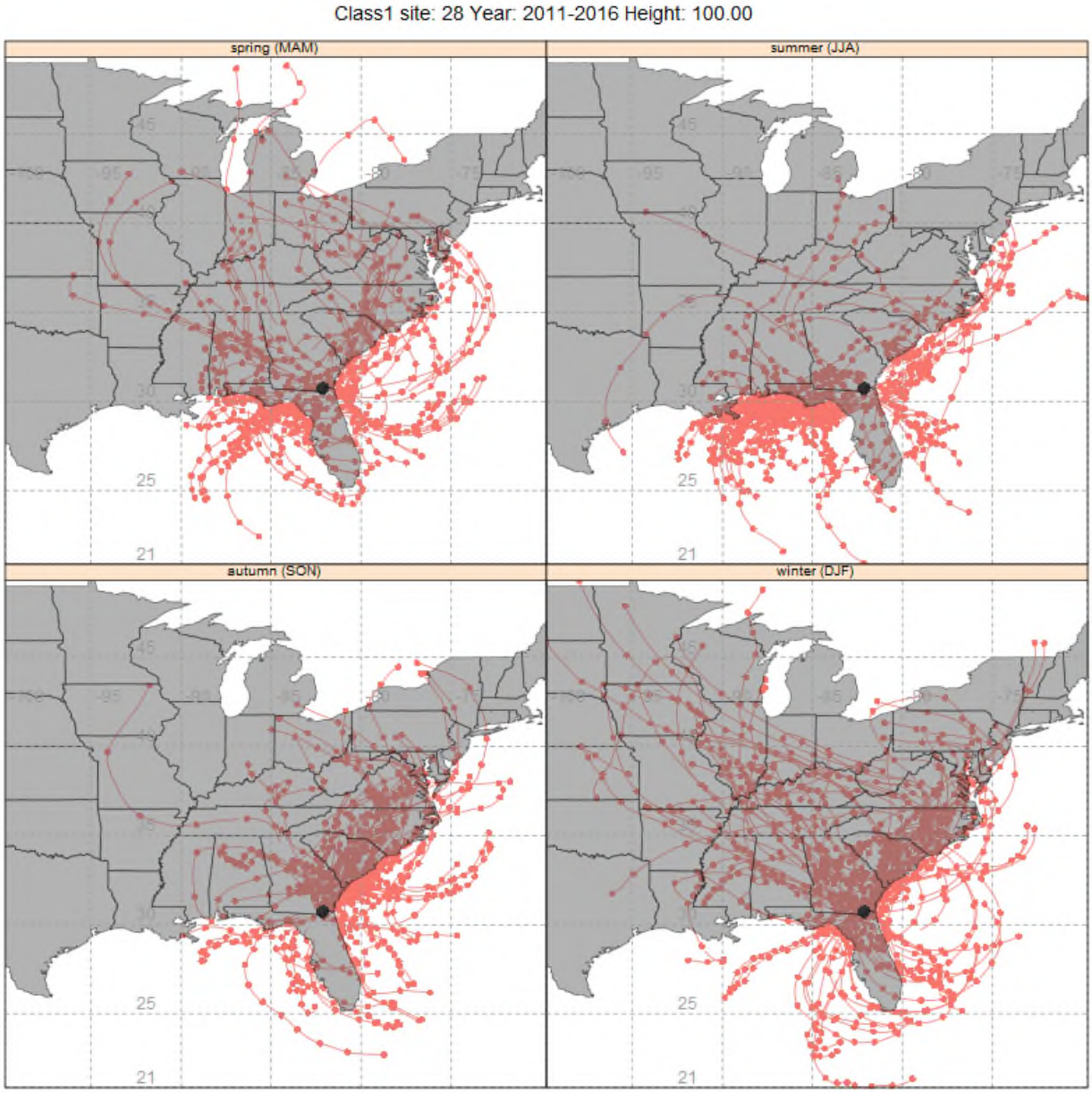


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Okefenokee Wilderness Area

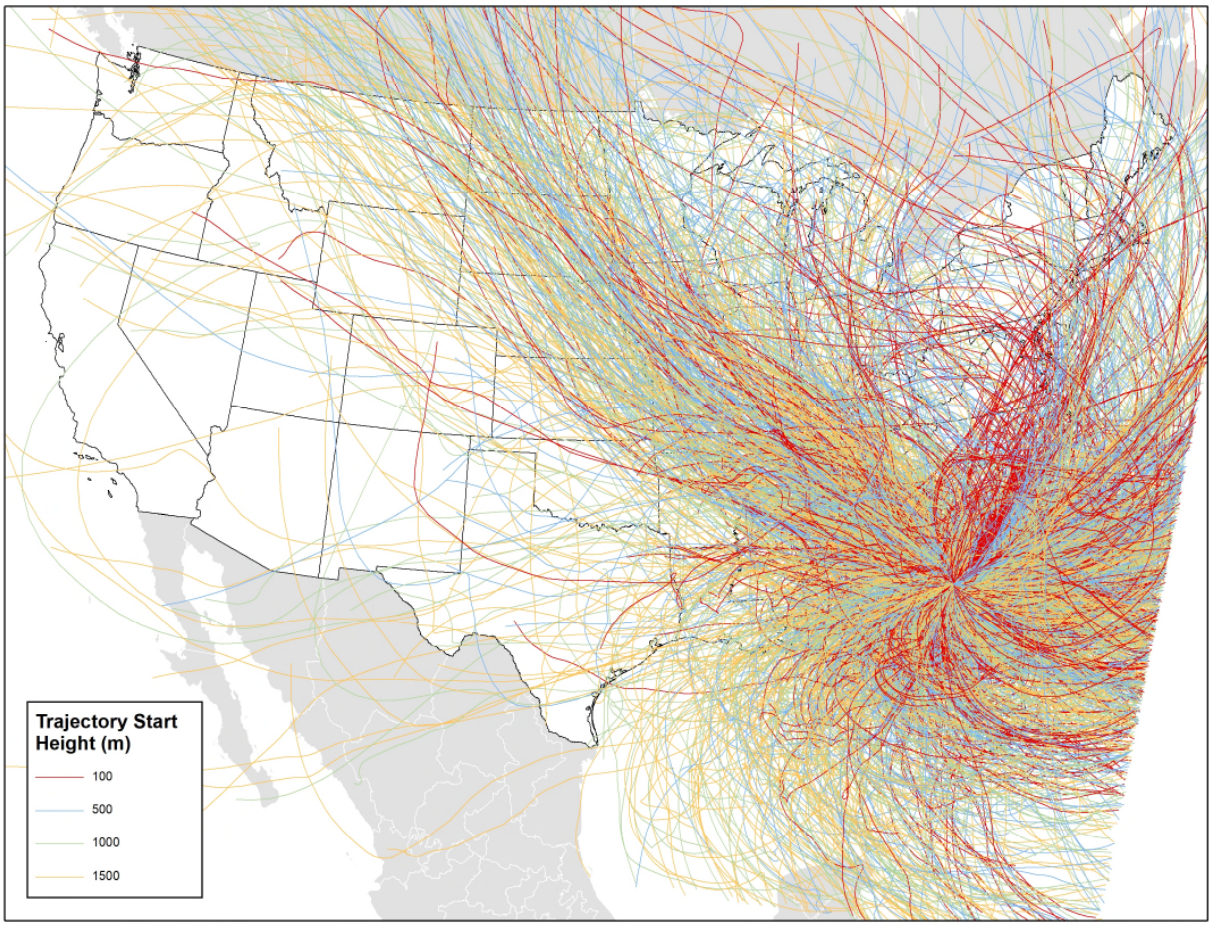
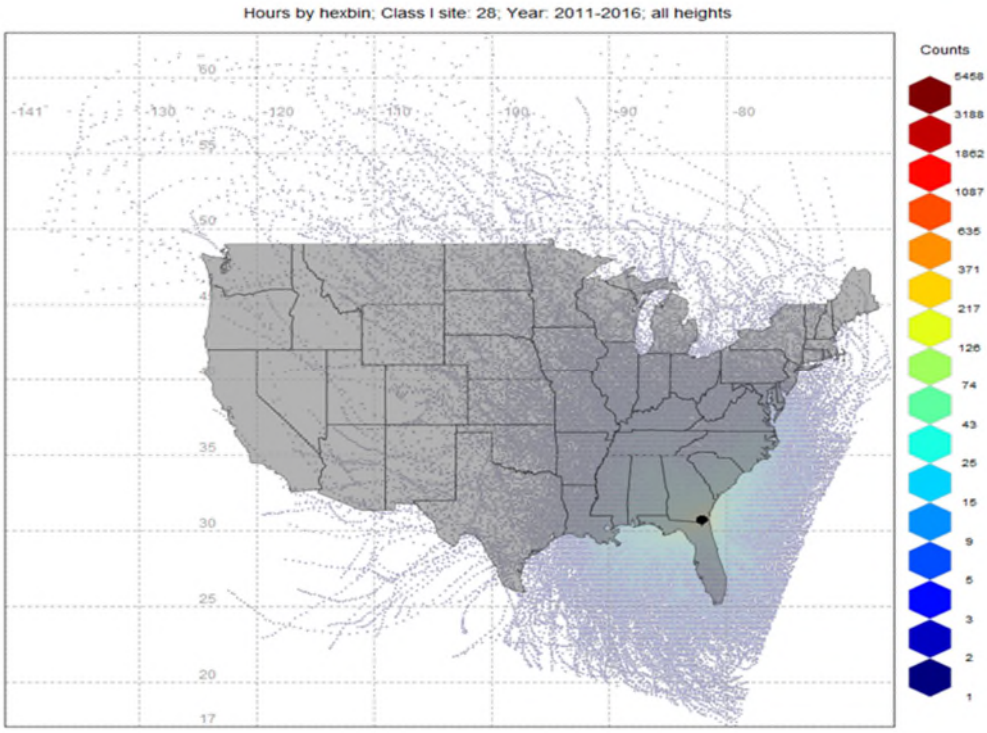


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Okefenokee Wilderness Area



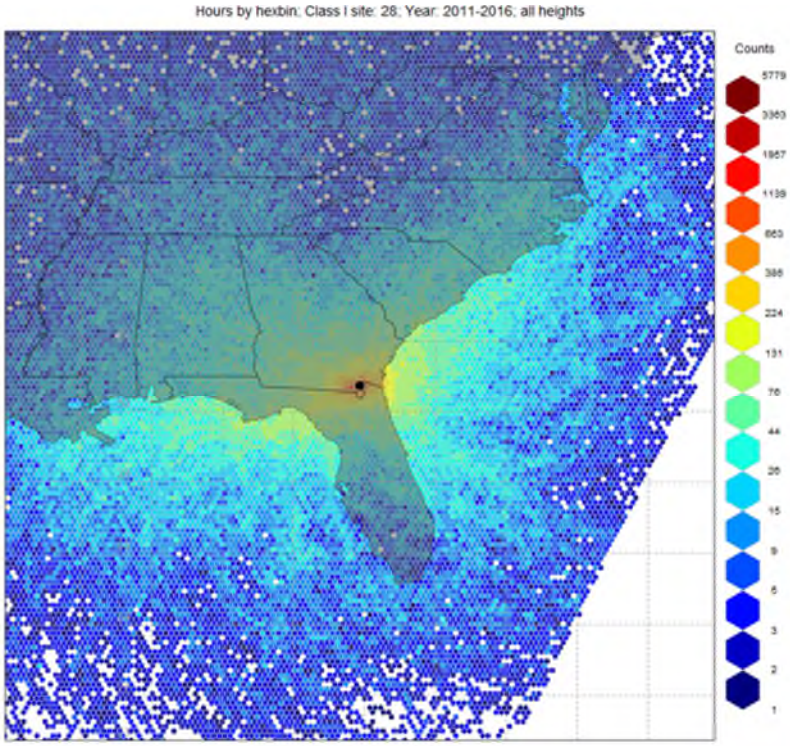


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

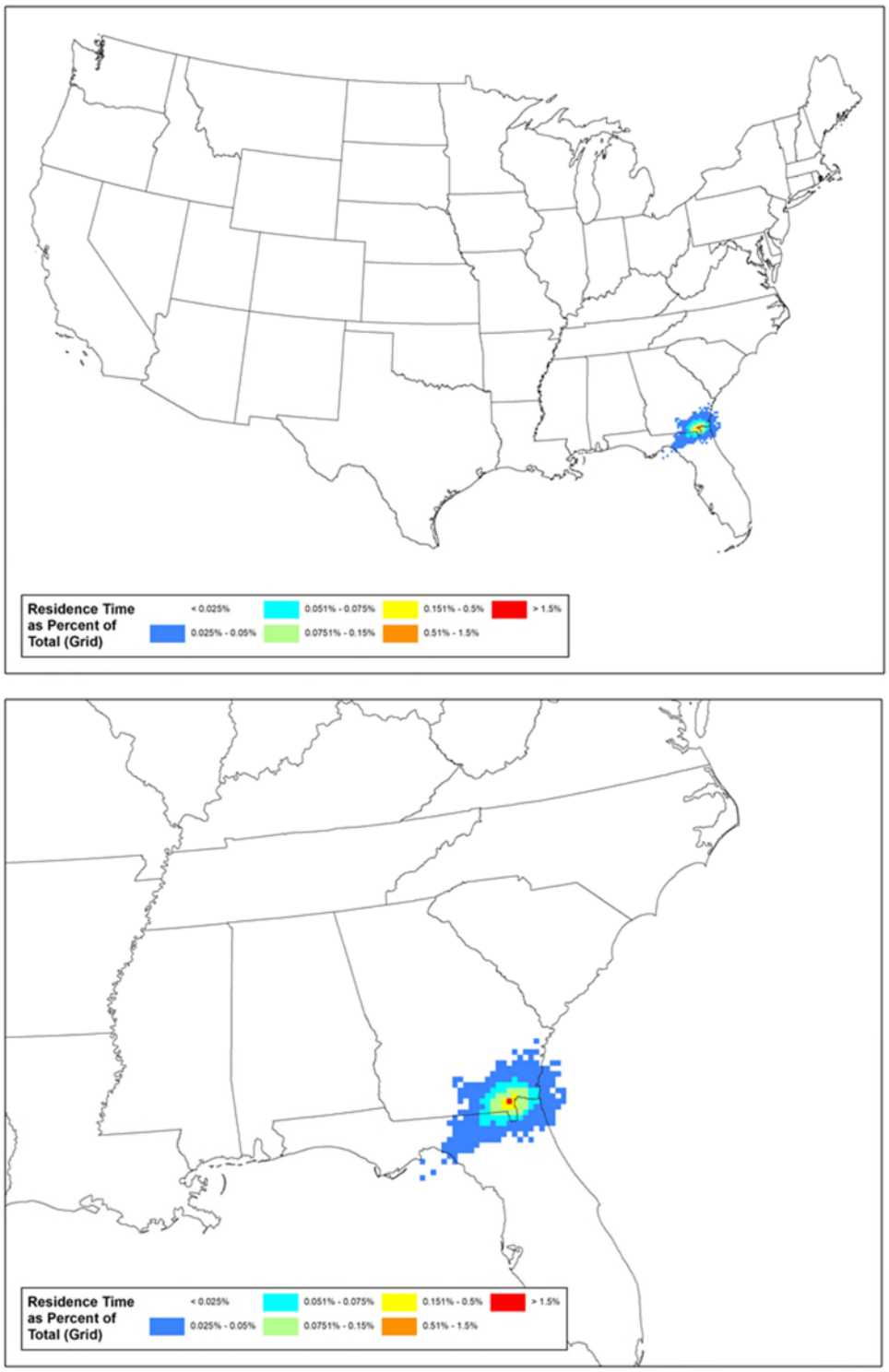


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

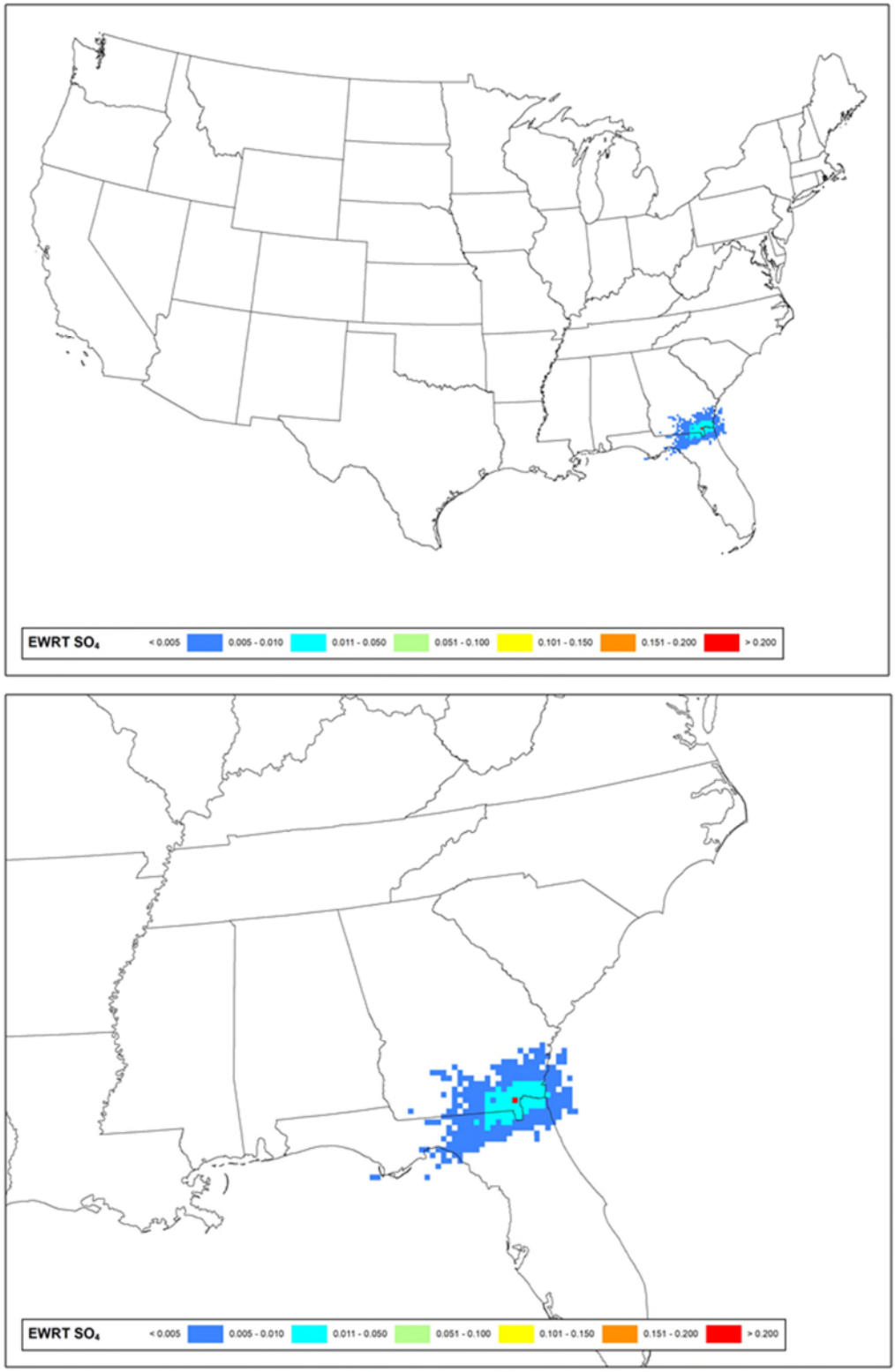


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area - Full View (top) and Class I Zoom (bottom)

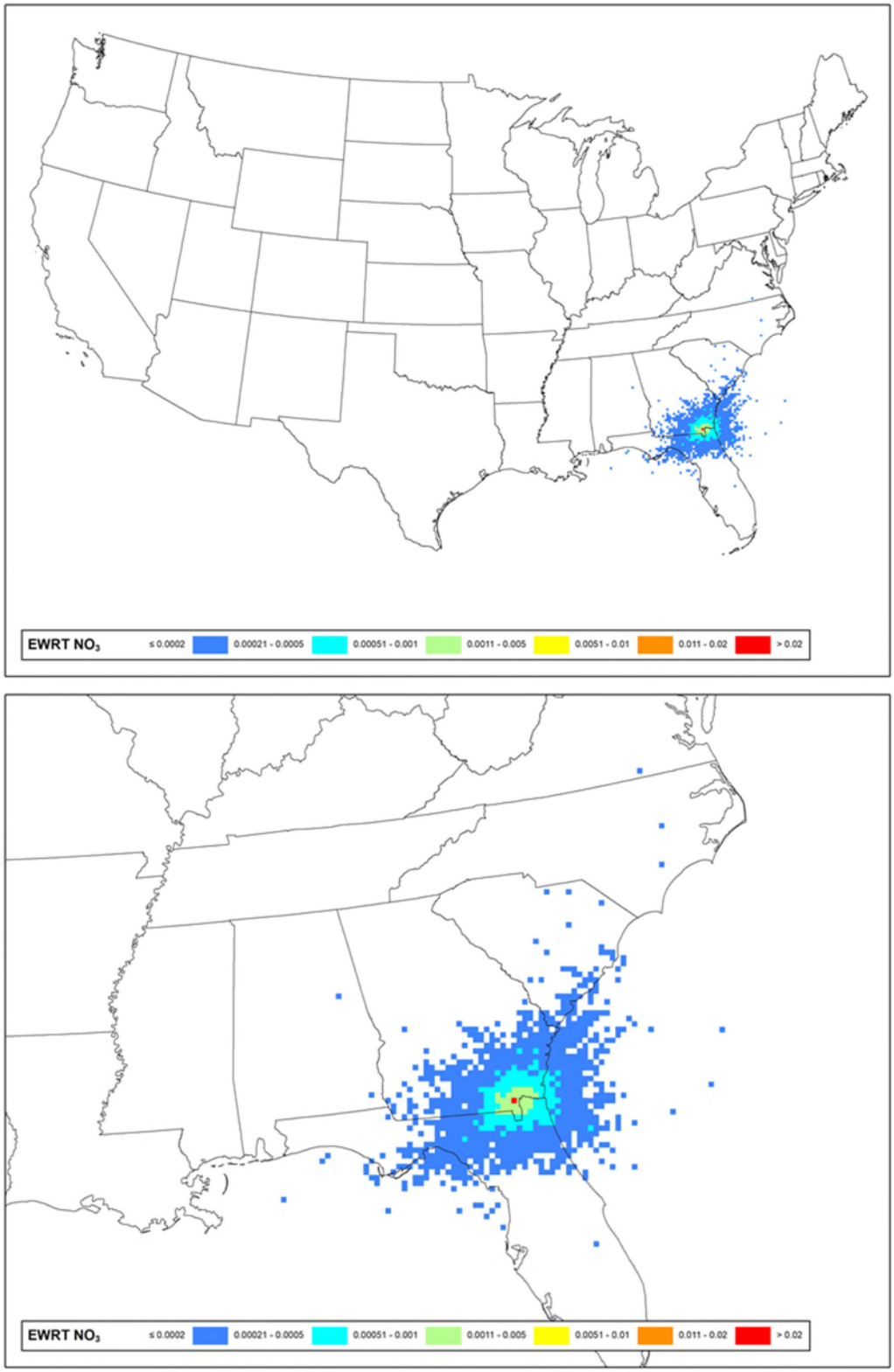


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Okefenokee Wilderness Area - Full View (top) and Class I Zoom (bottom)

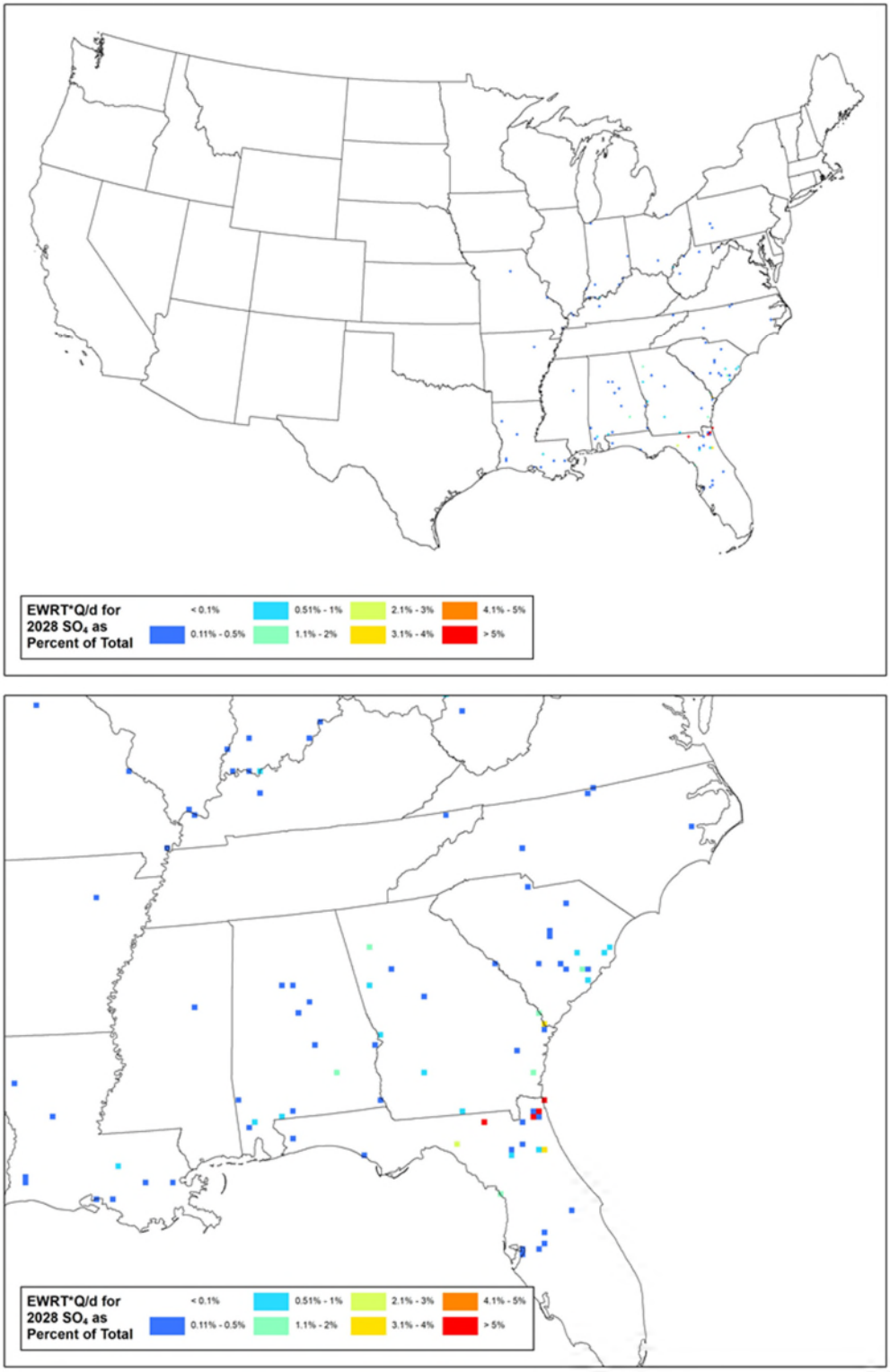


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

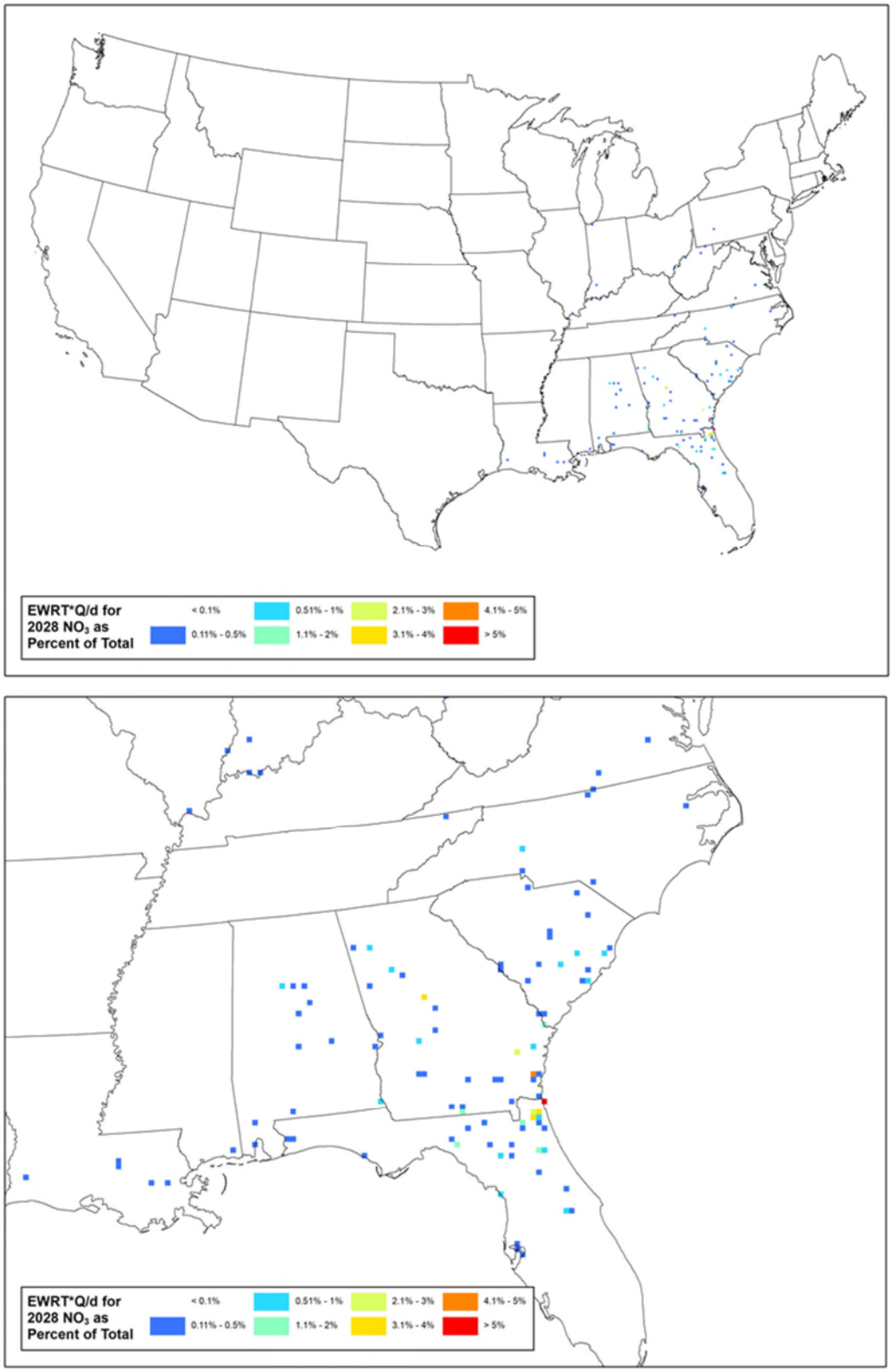


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

Wolf Island Wilderness Area

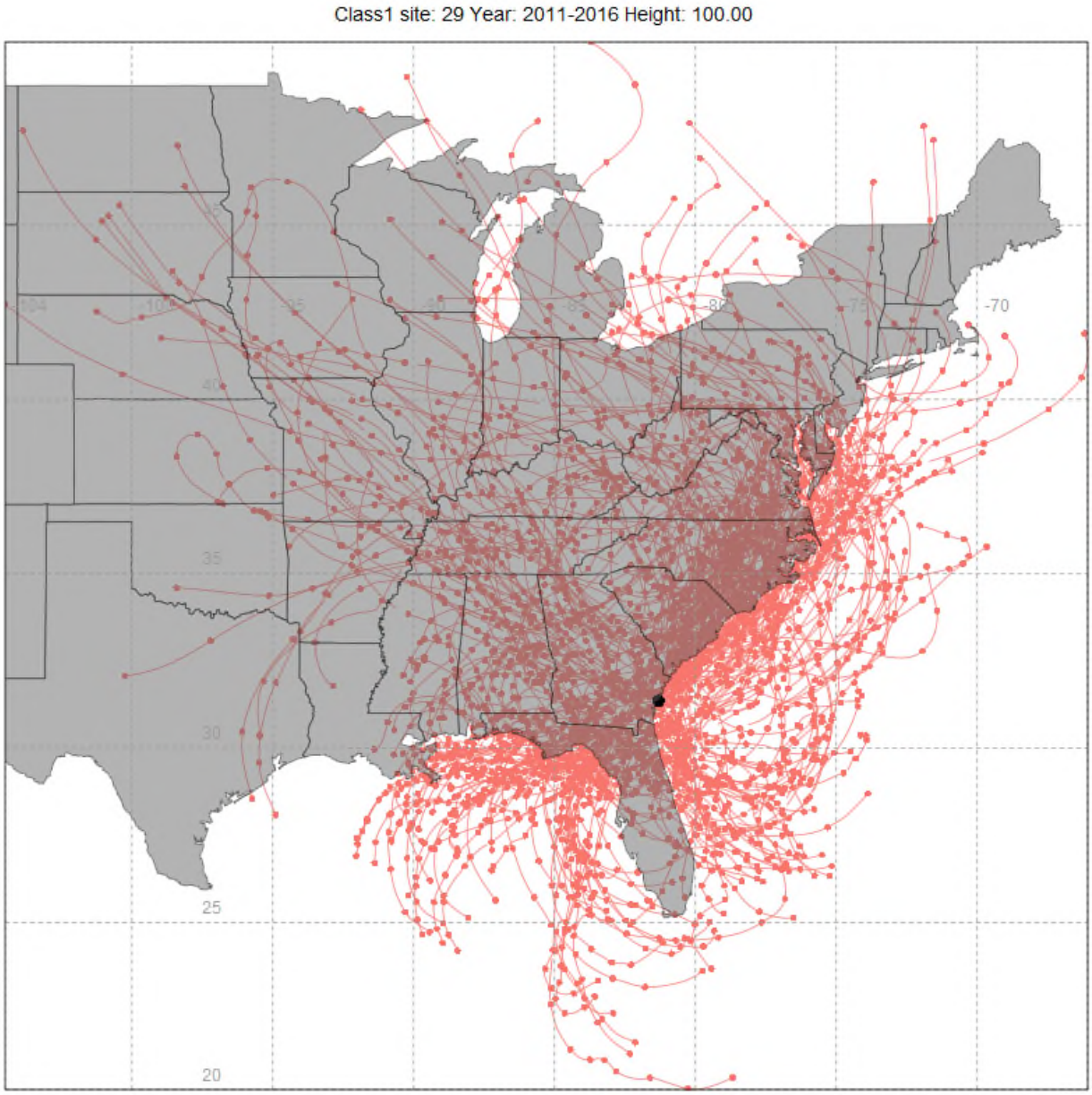


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Wolf Island Wilderness Area

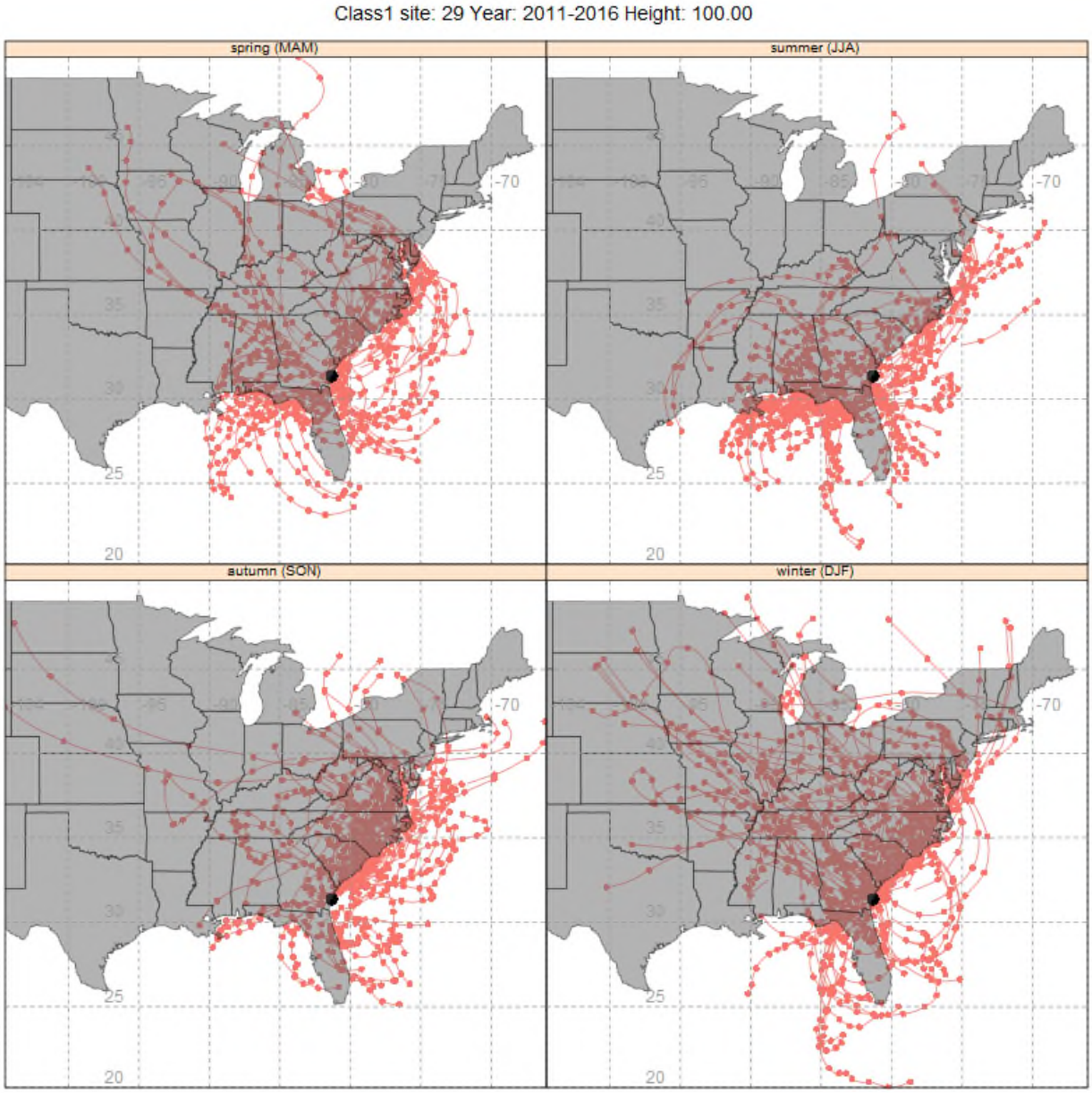


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Wolf Island Wilderness Area

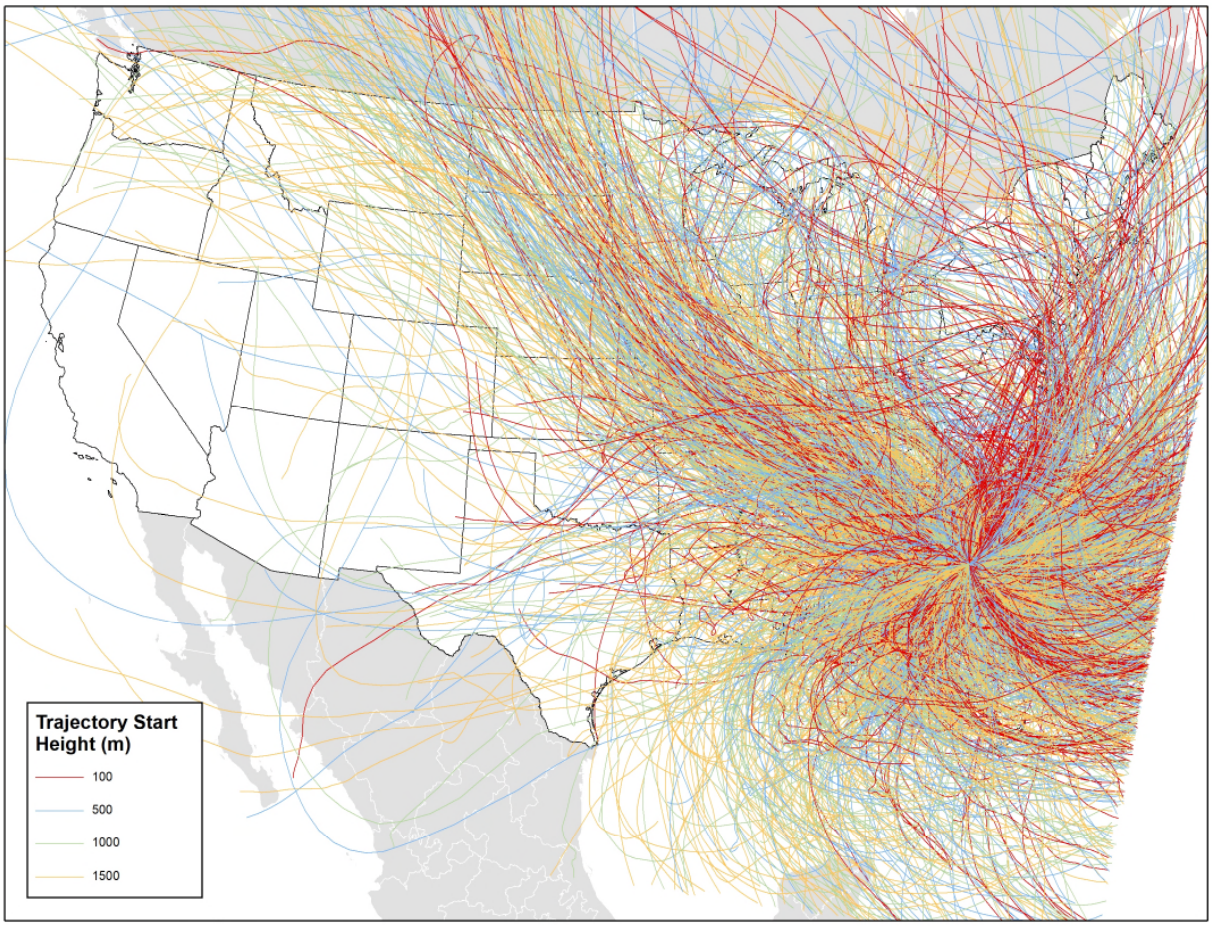


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Wolf Island Wilderness Area

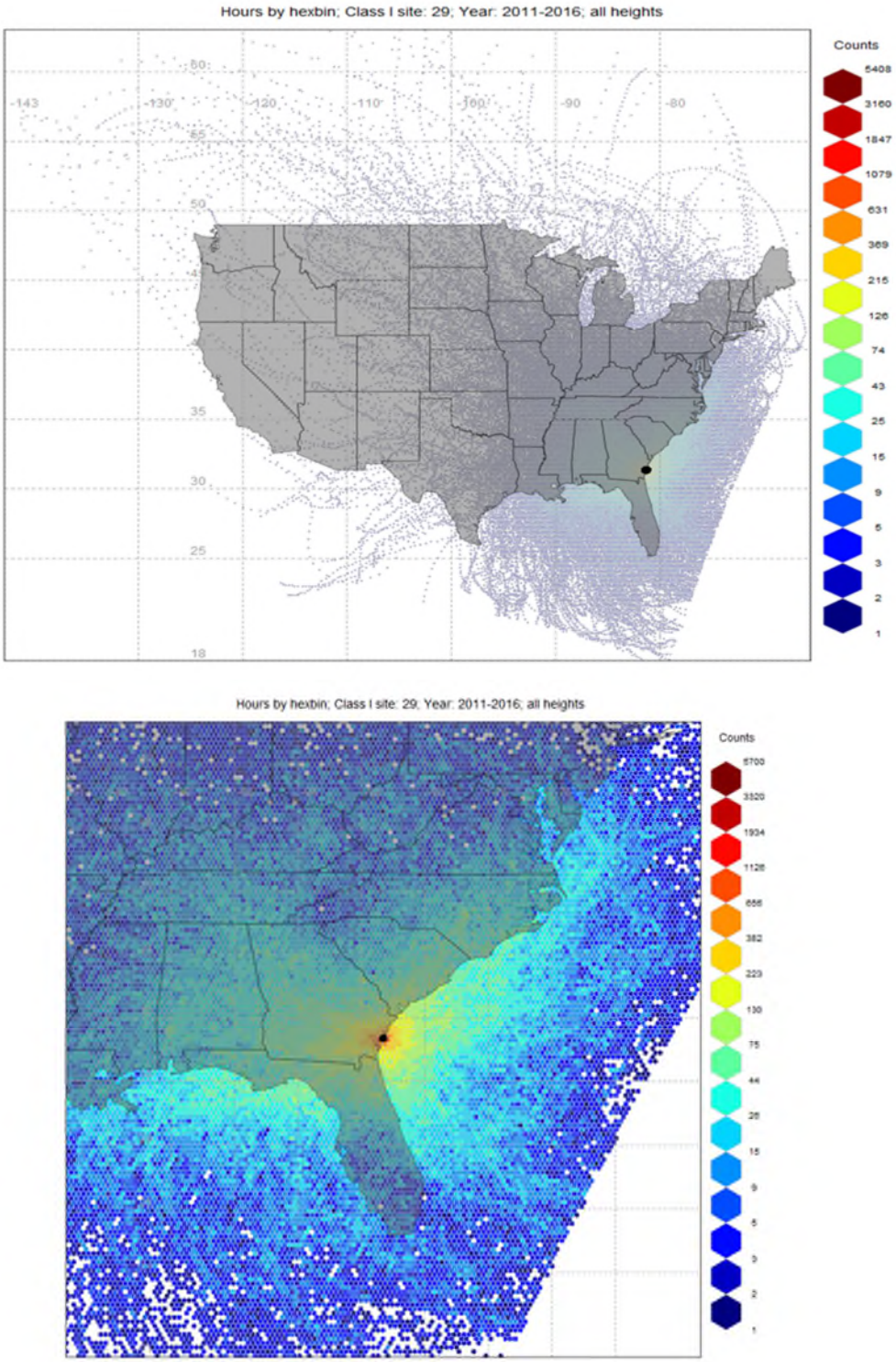


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

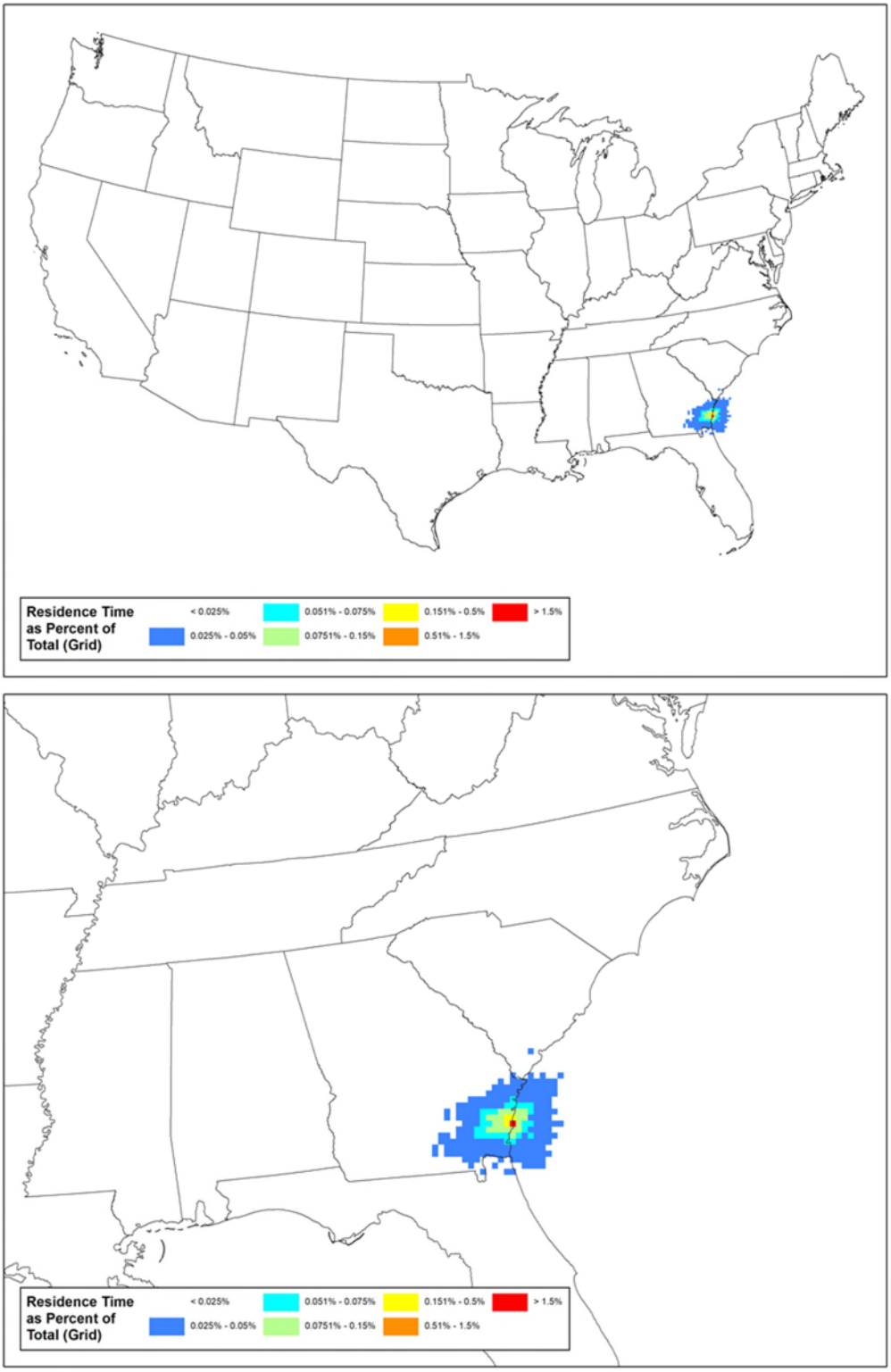


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

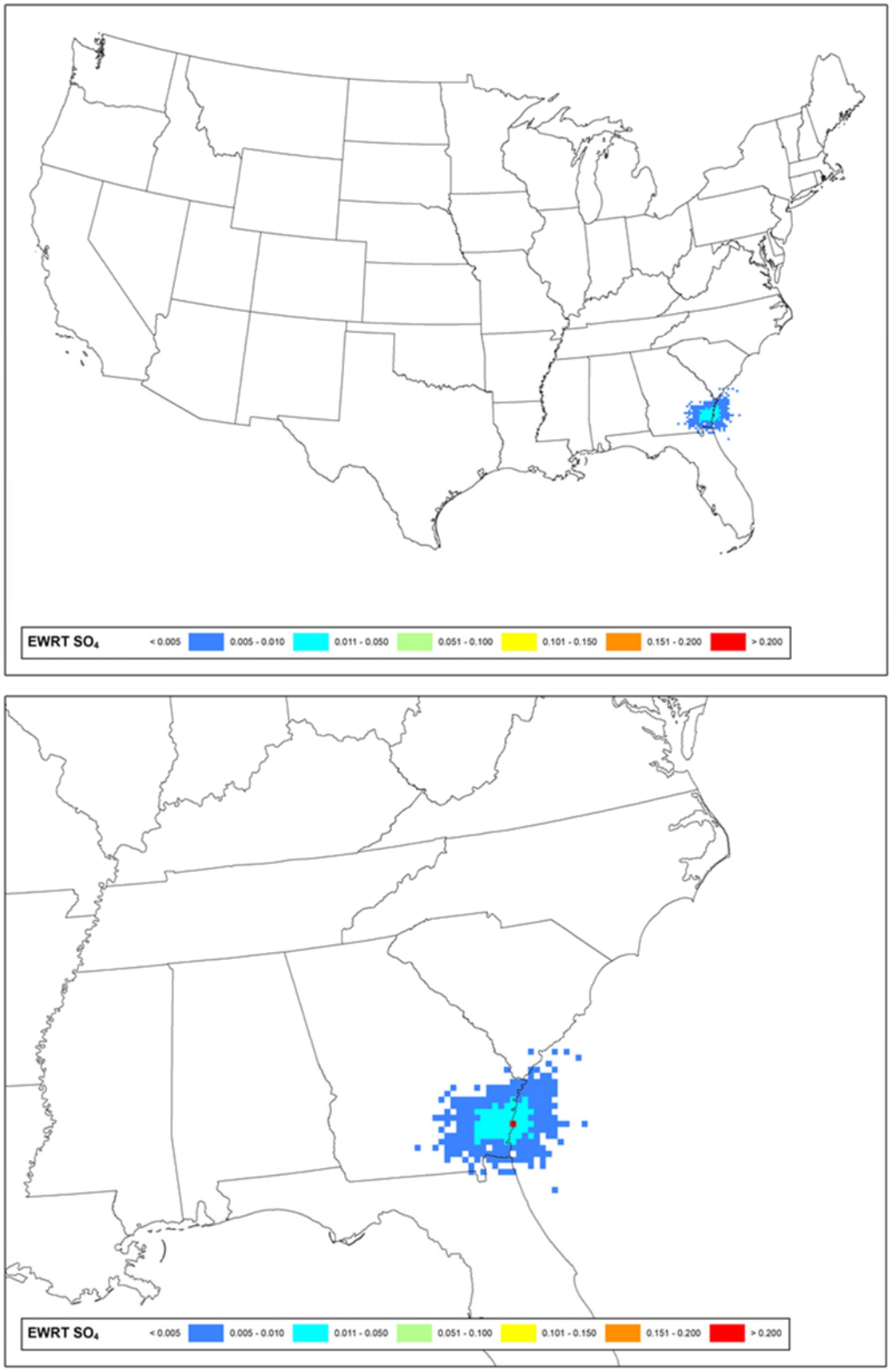


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area - Full View (top) and Class I Zoom (bottom)

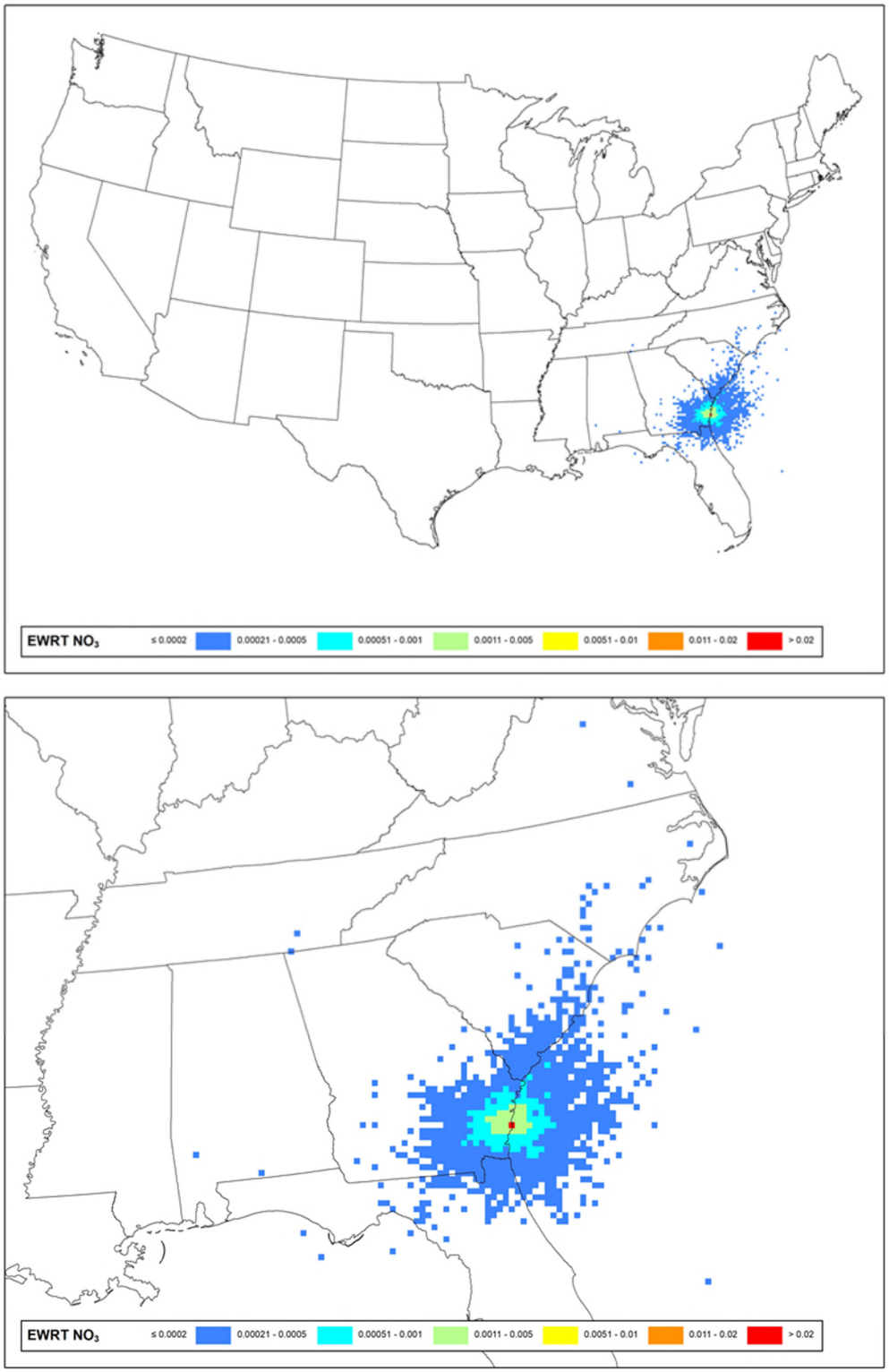


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Wolf Island Wilderness Area - Full View (top) and Class I Zoom (bottom)

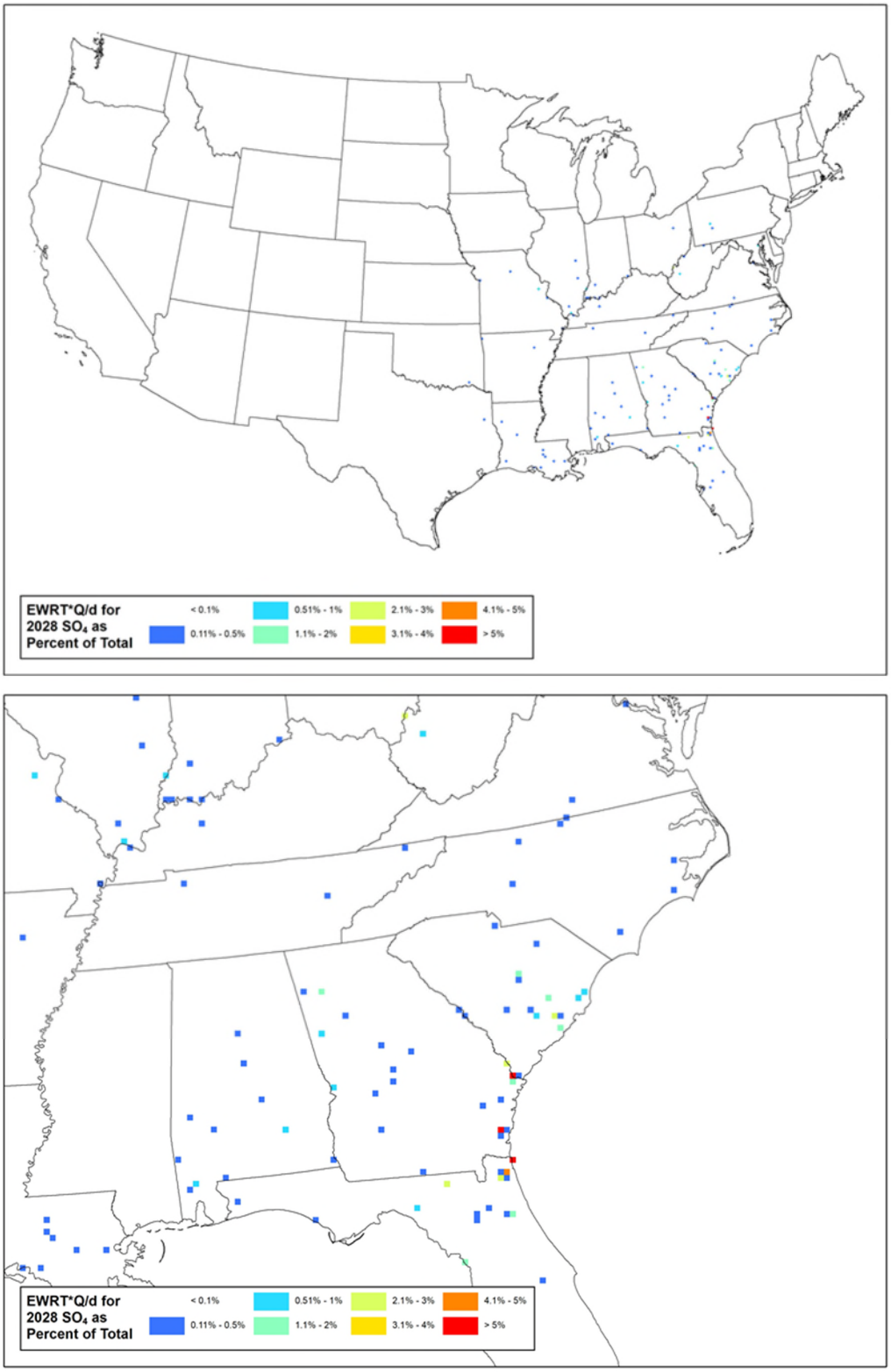


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

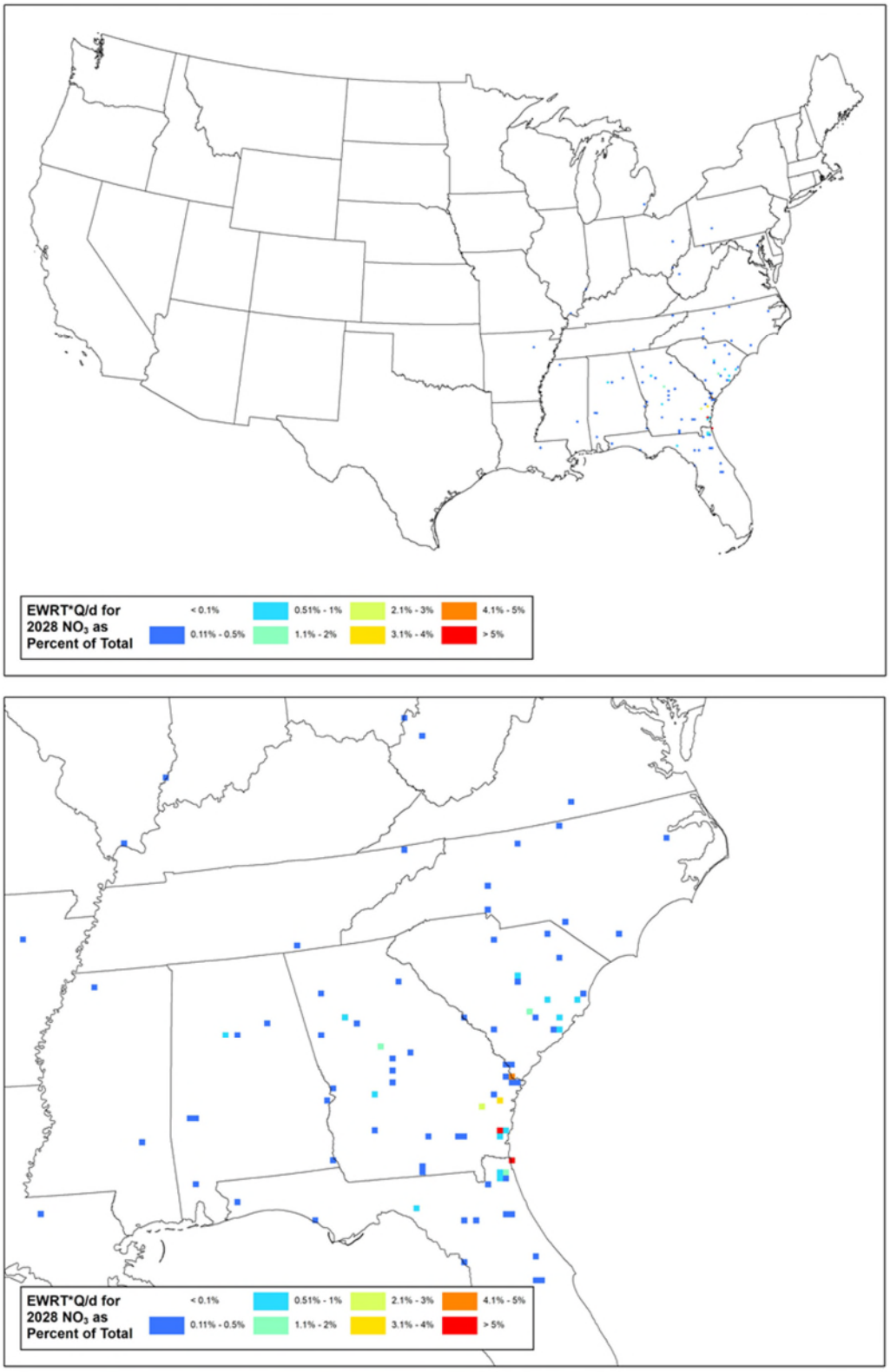


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

Cape Romain Wilderness Area

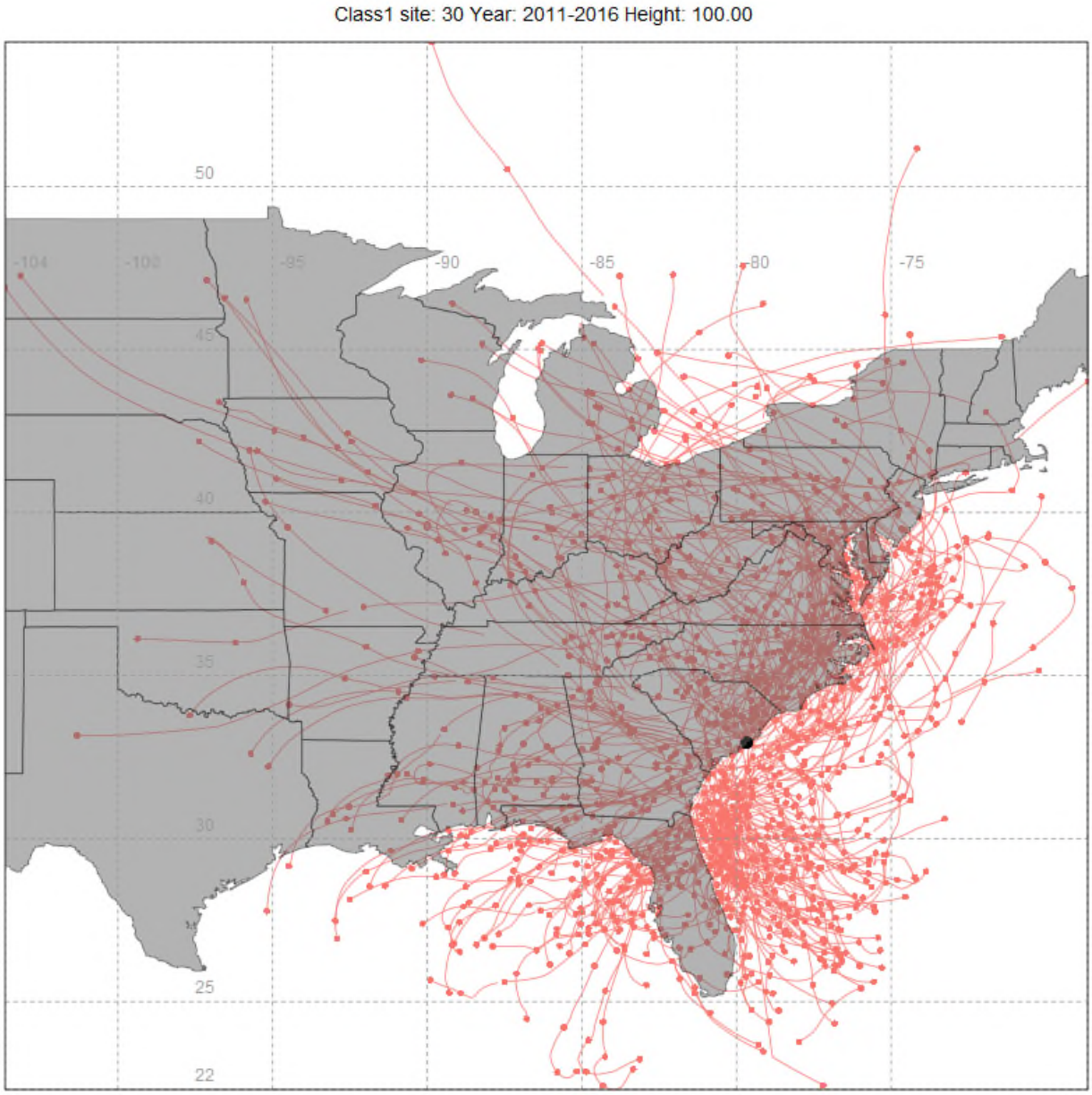


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Cape Romain Wilderness Area

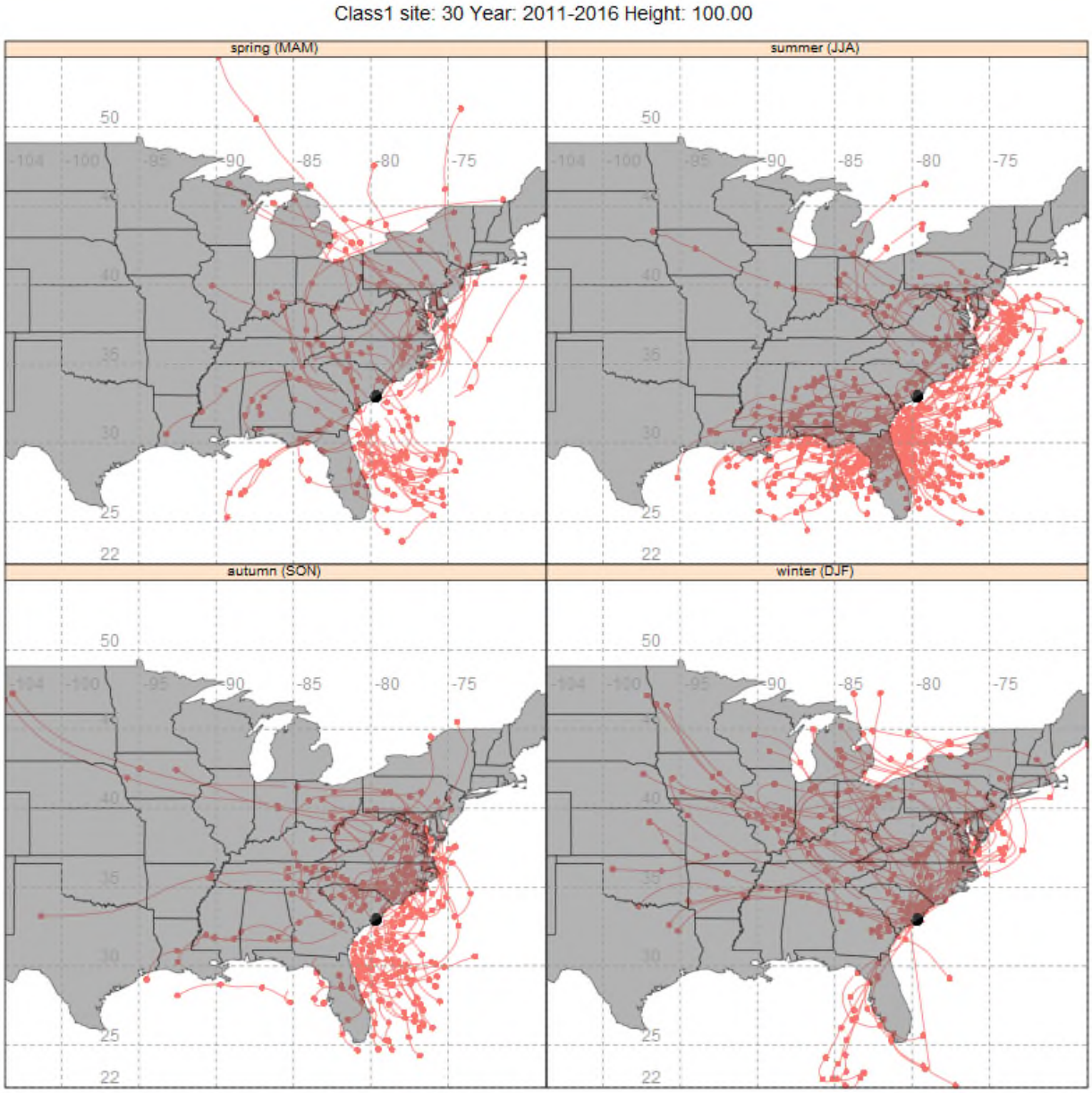


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Cape Romain Wilderness Area

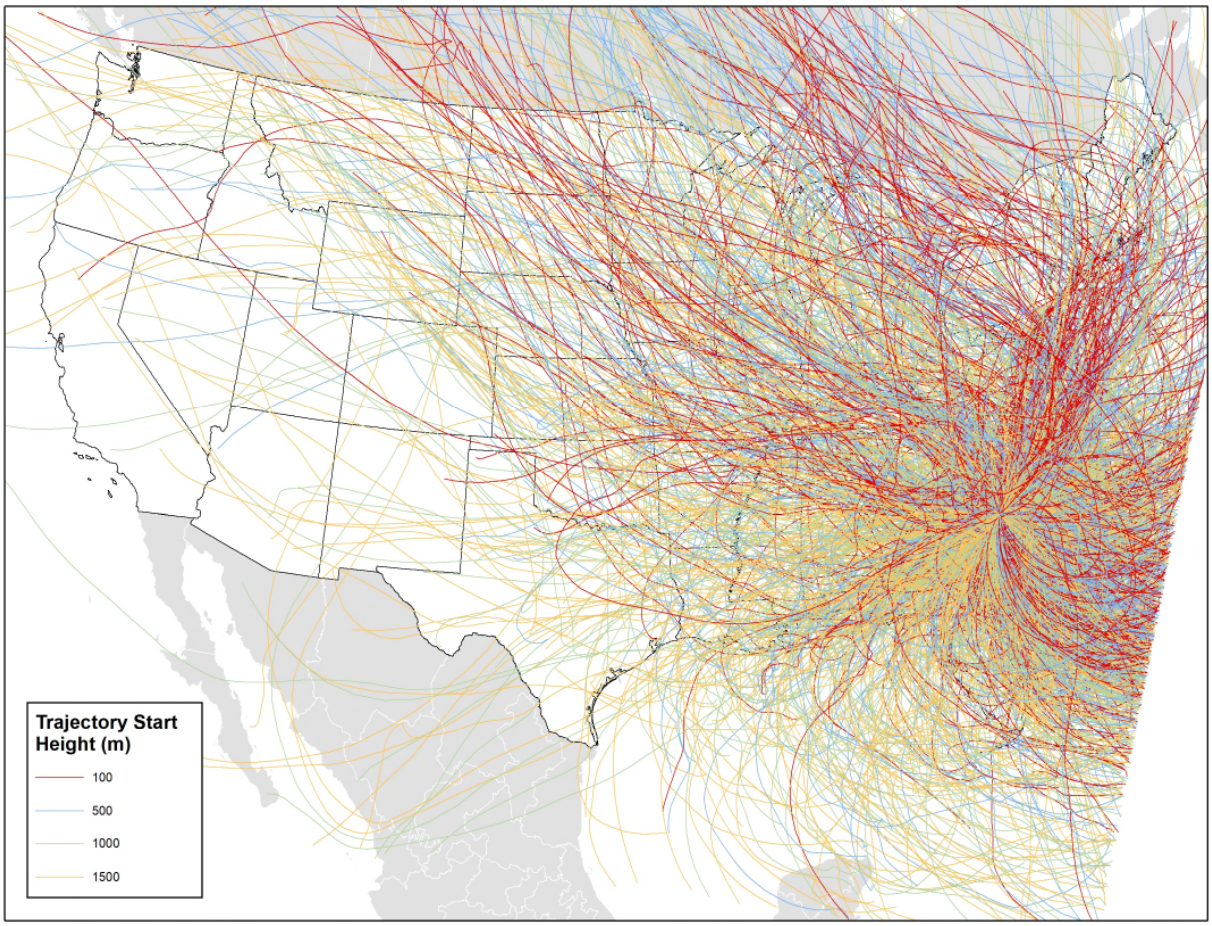


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Cape Romain Wilderness Area

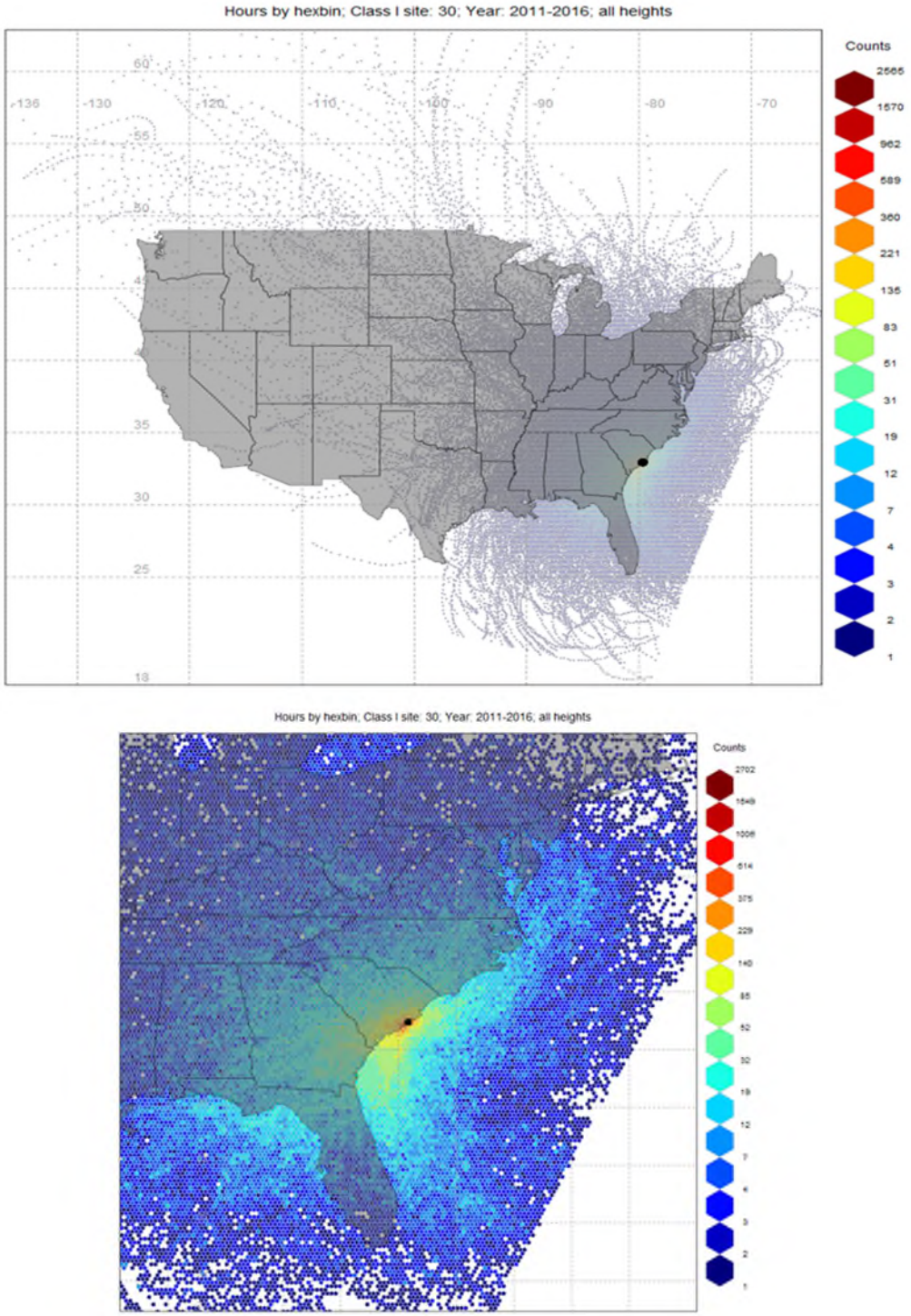


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

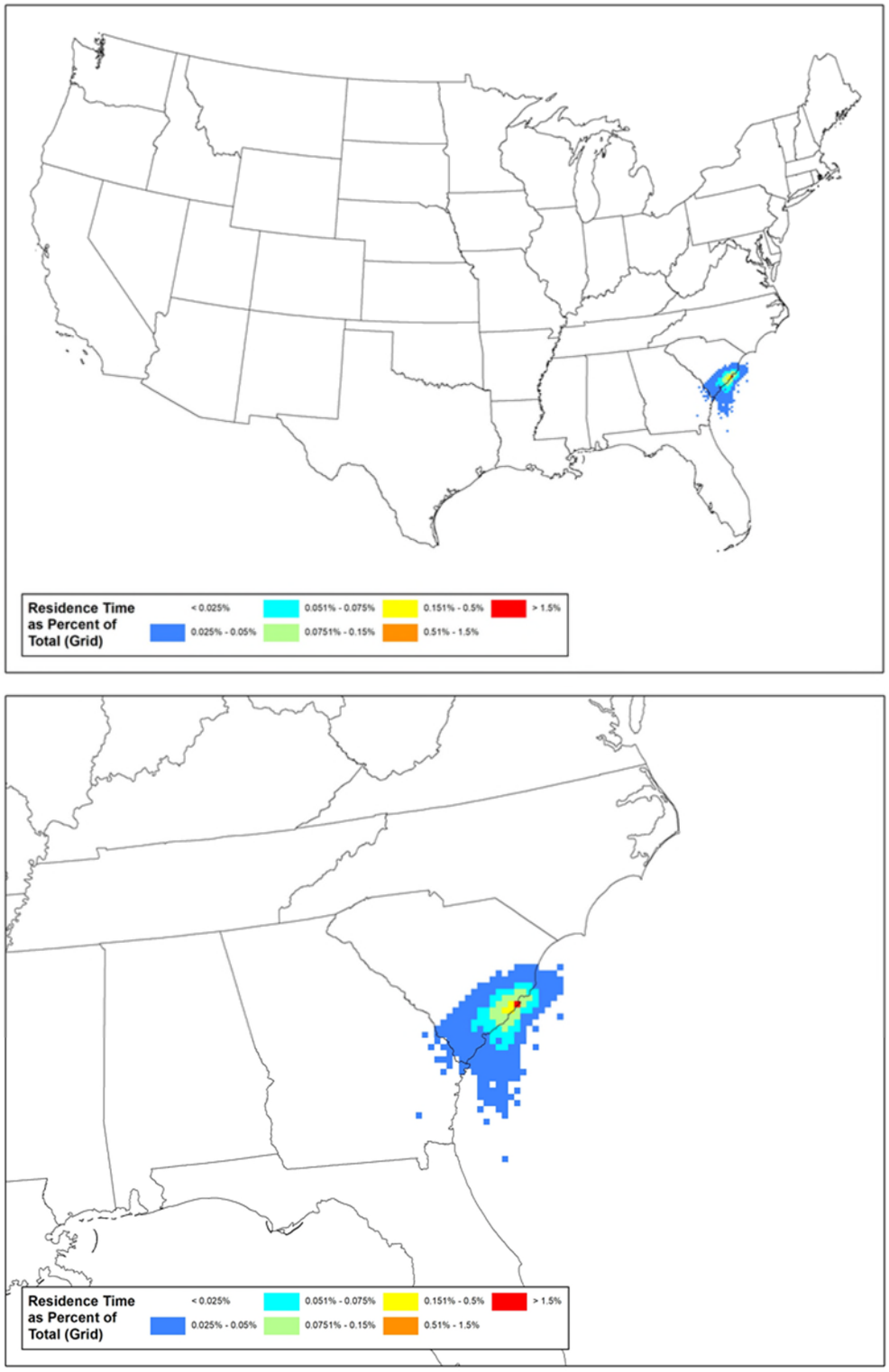


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

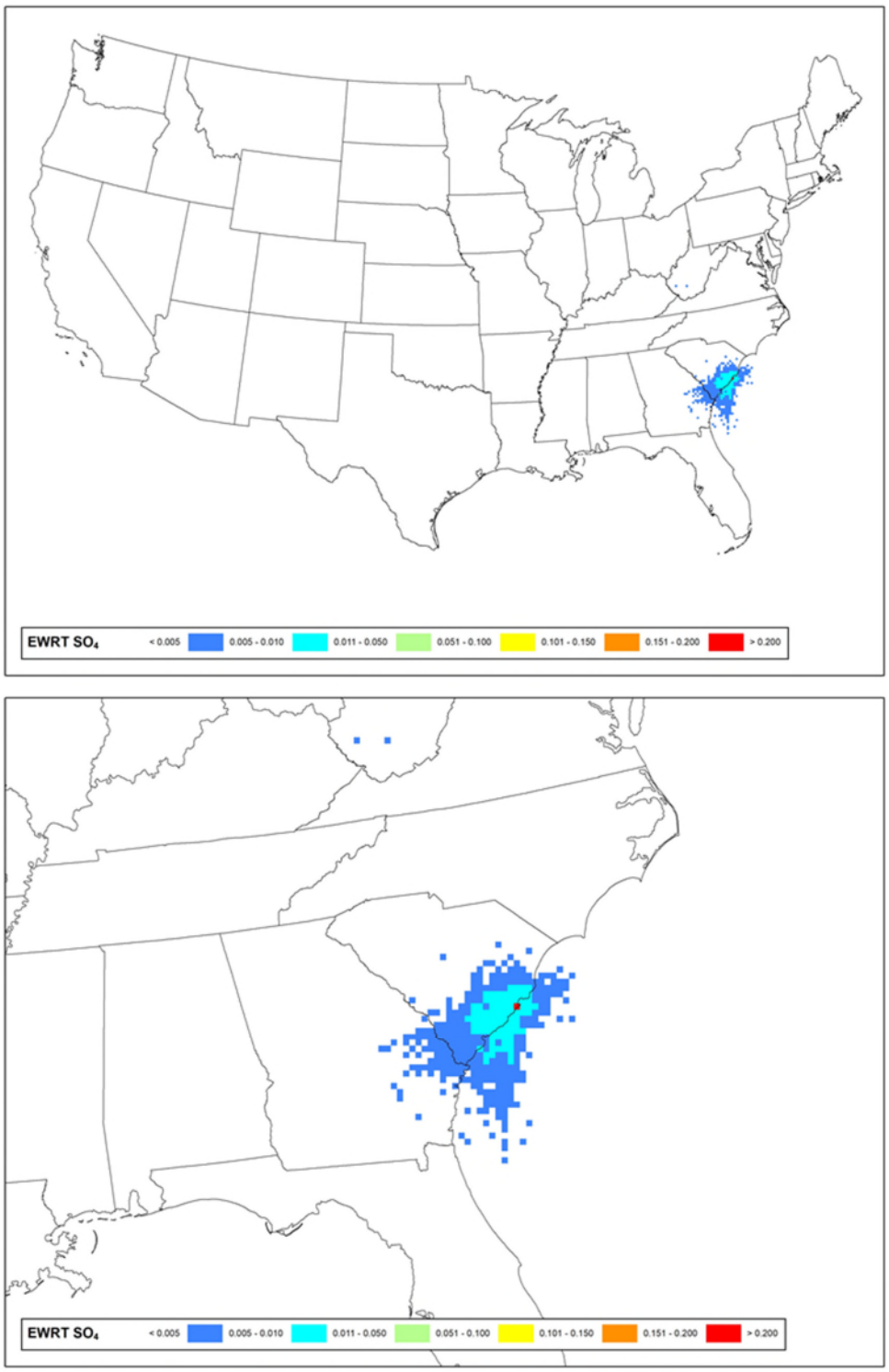


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area - Full View (top) and Class I Zoom (bottom)

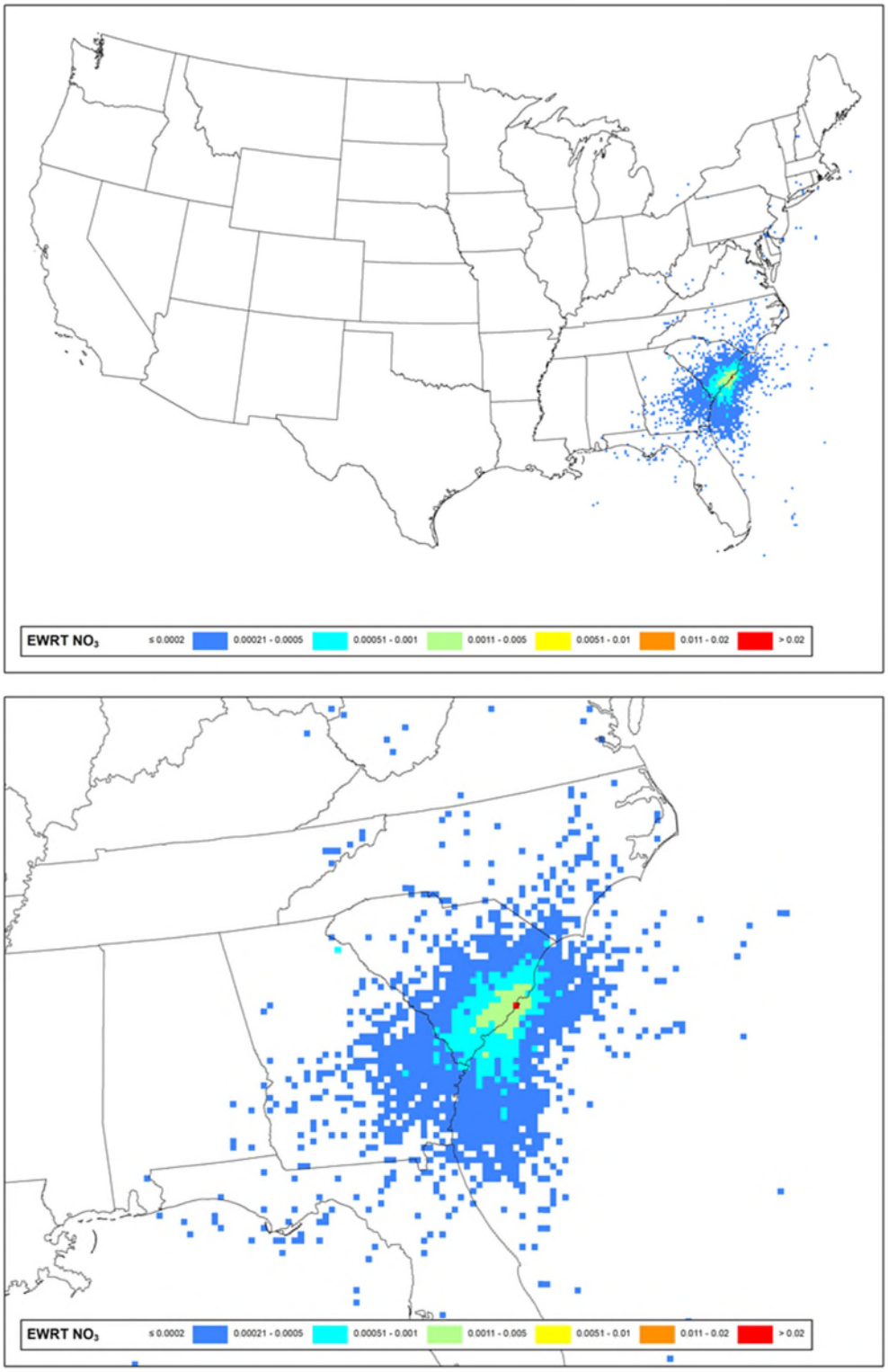


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Cape Romain Wilderness Area - Full View (top) and Class I Zoom (bottom)

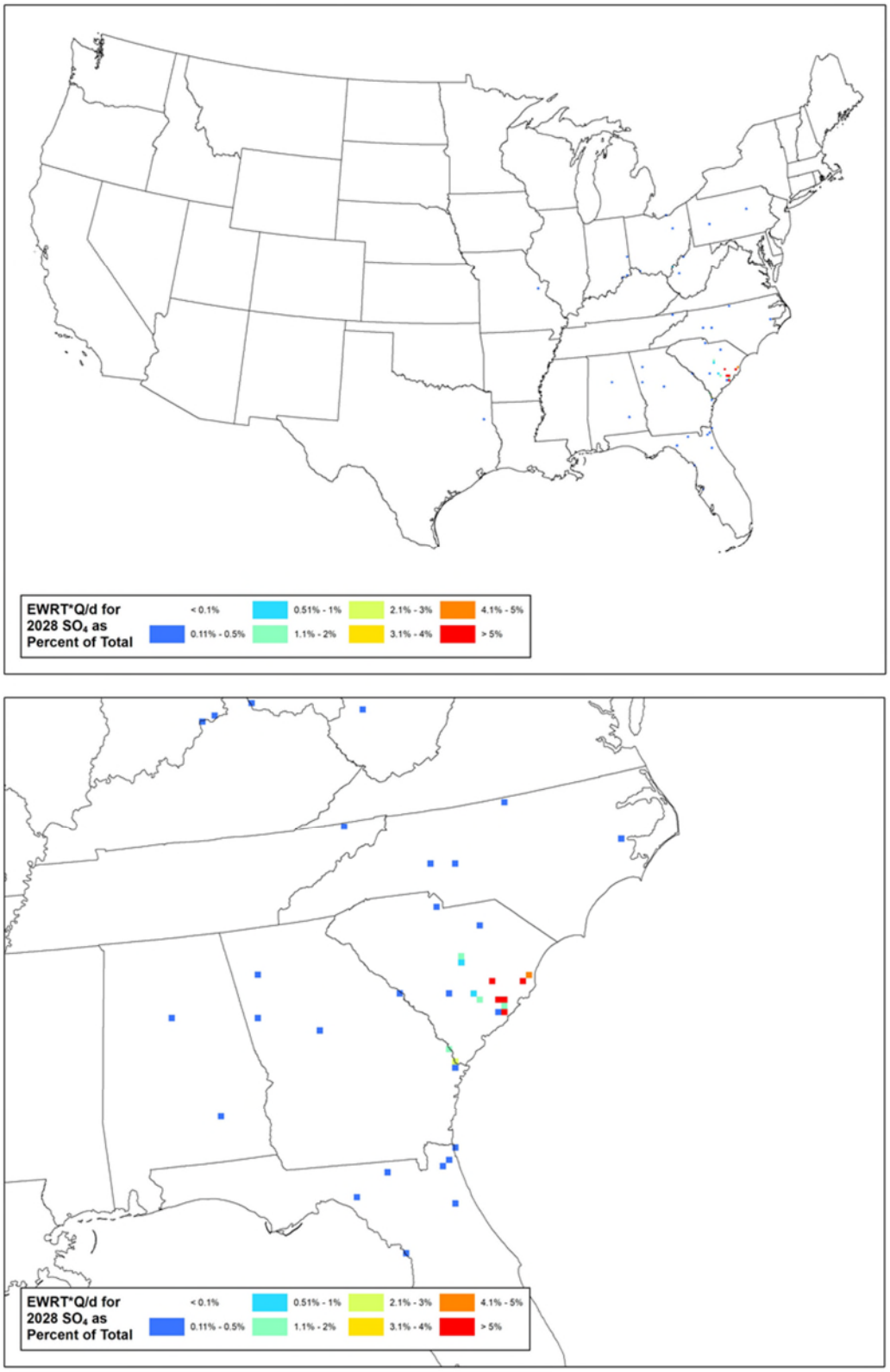


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

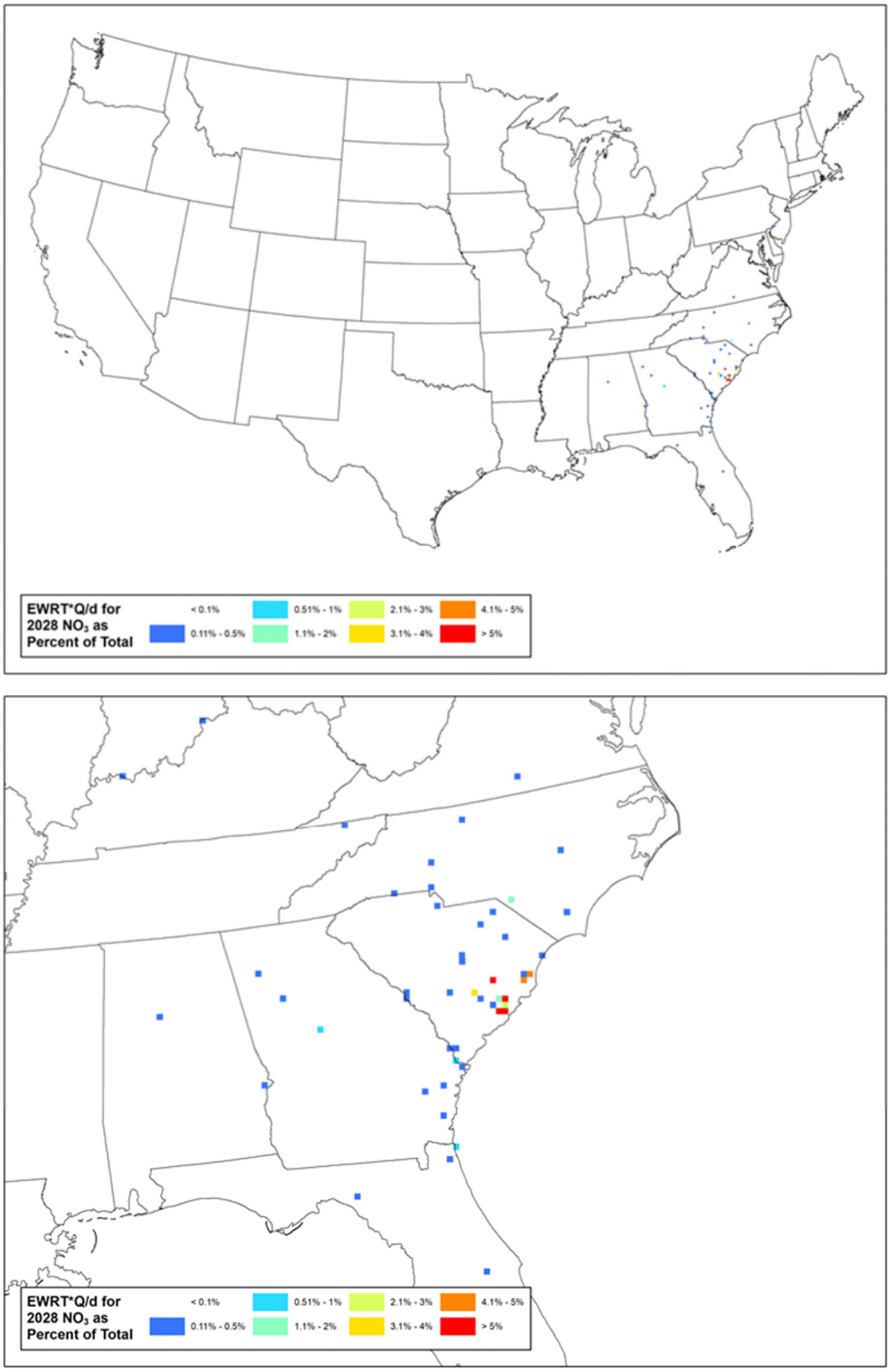


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

St Marks Wilderness Area

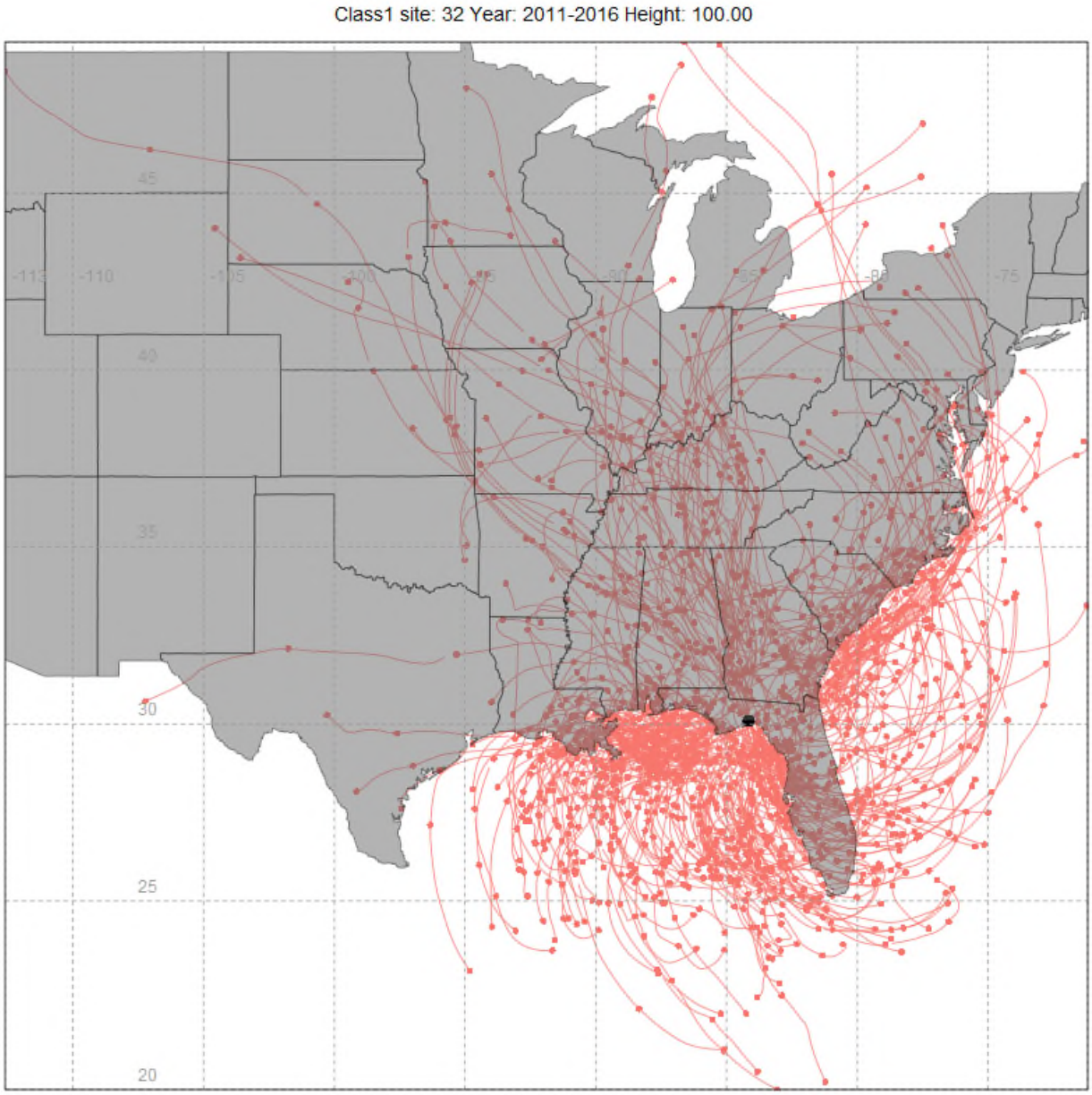


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from St Marks Wilderness Area

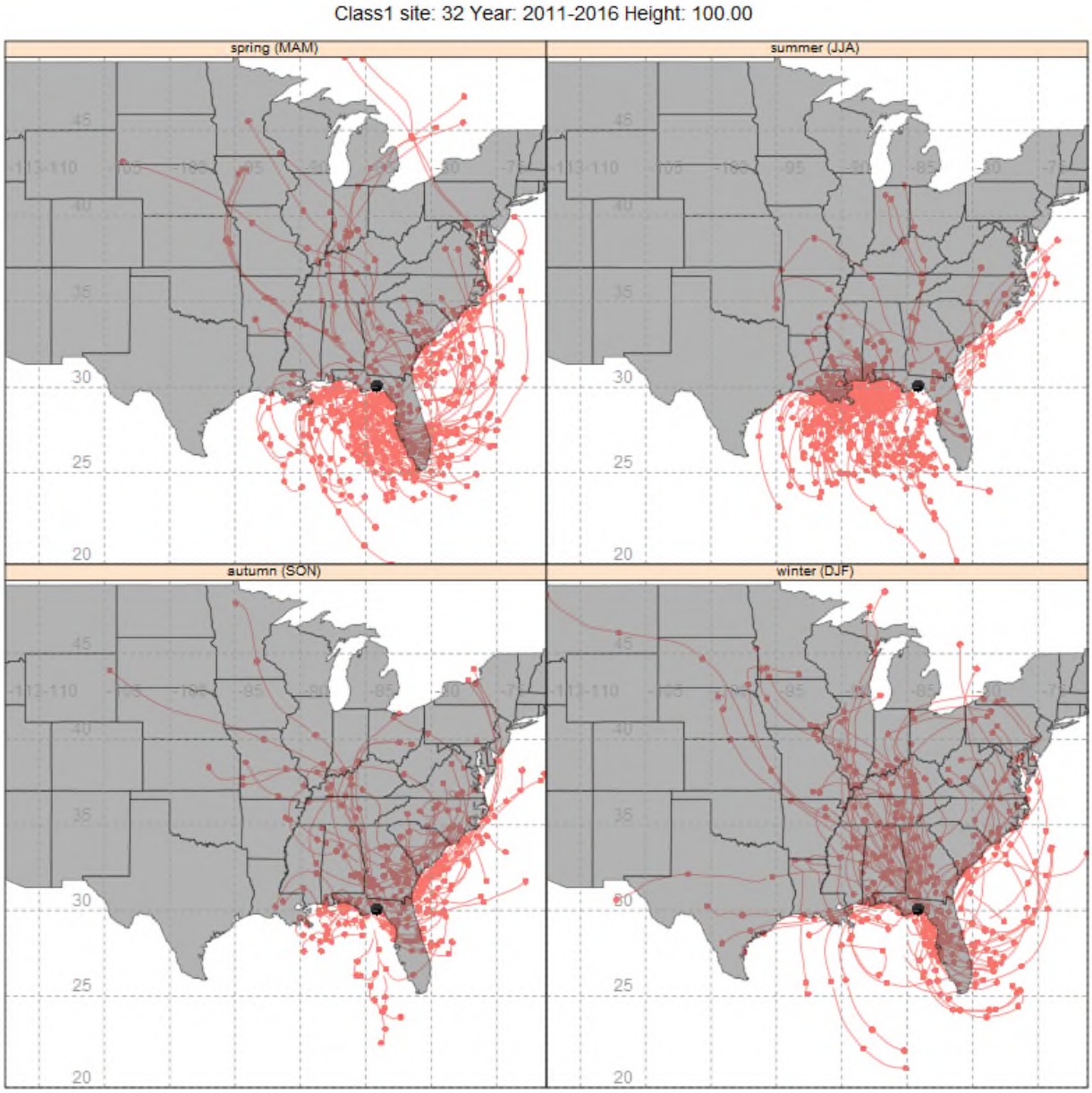


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from St Marks Wilderness Area

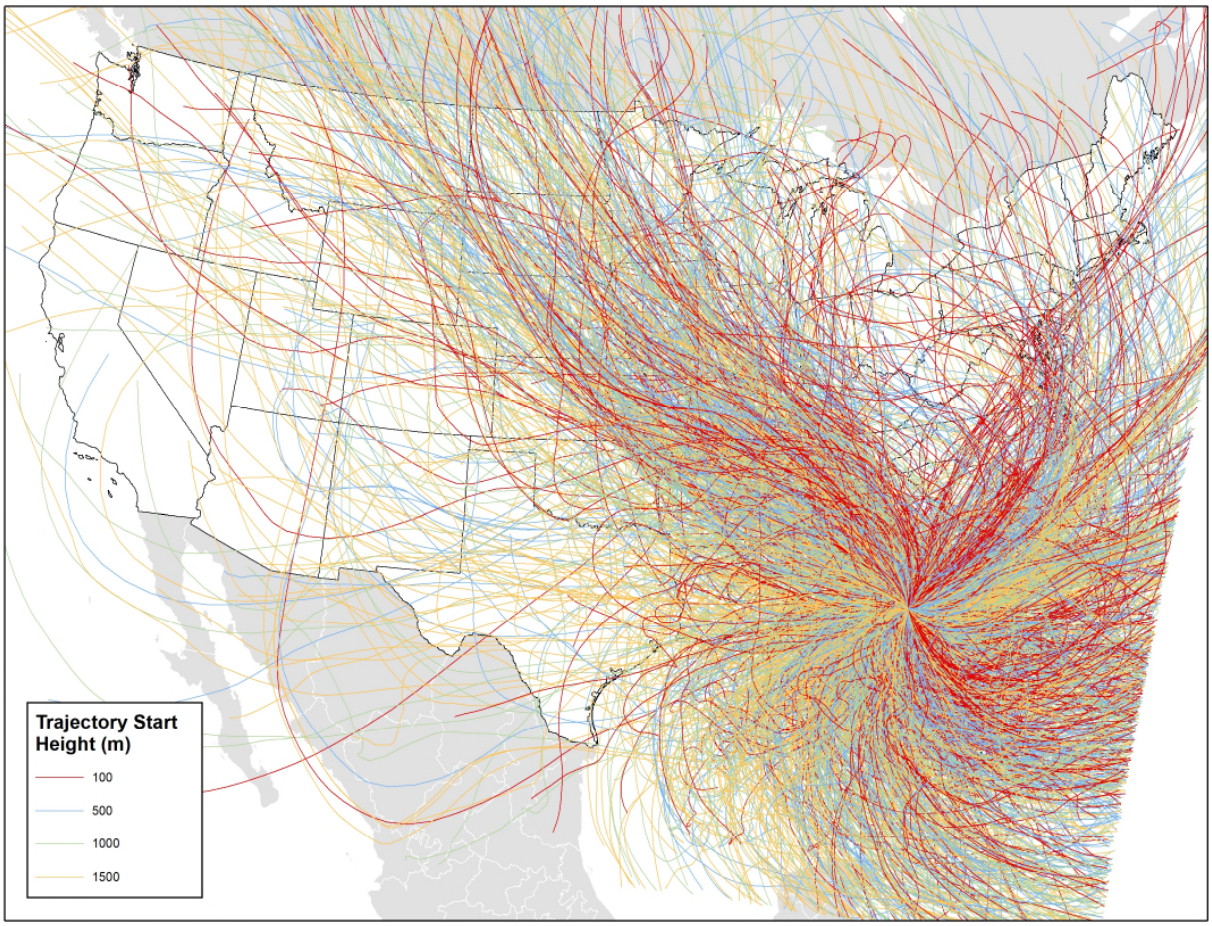
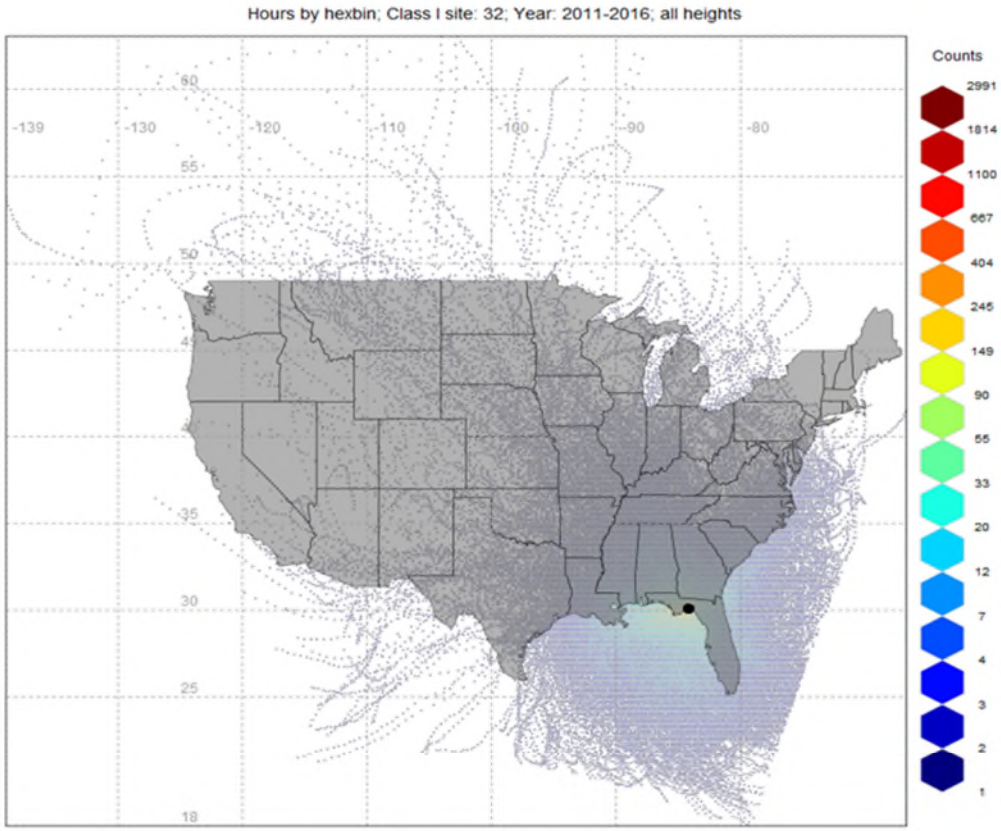


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from St Marks Wilderness Area



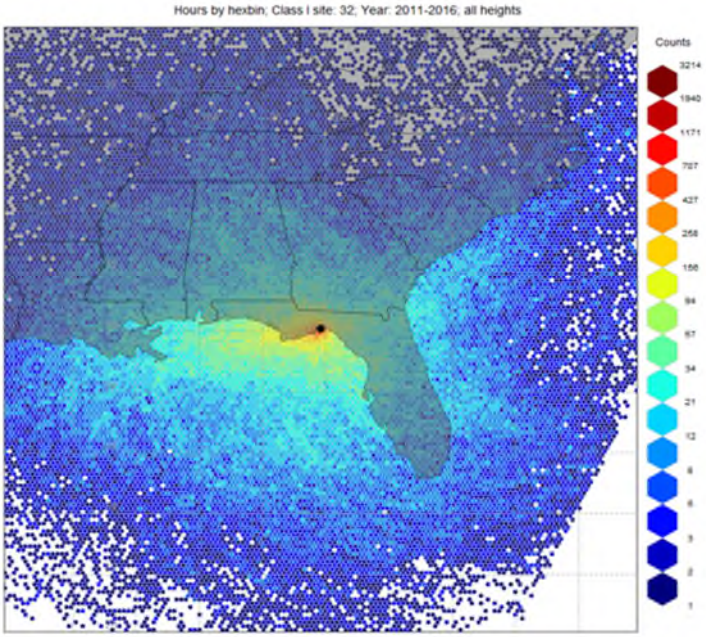


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

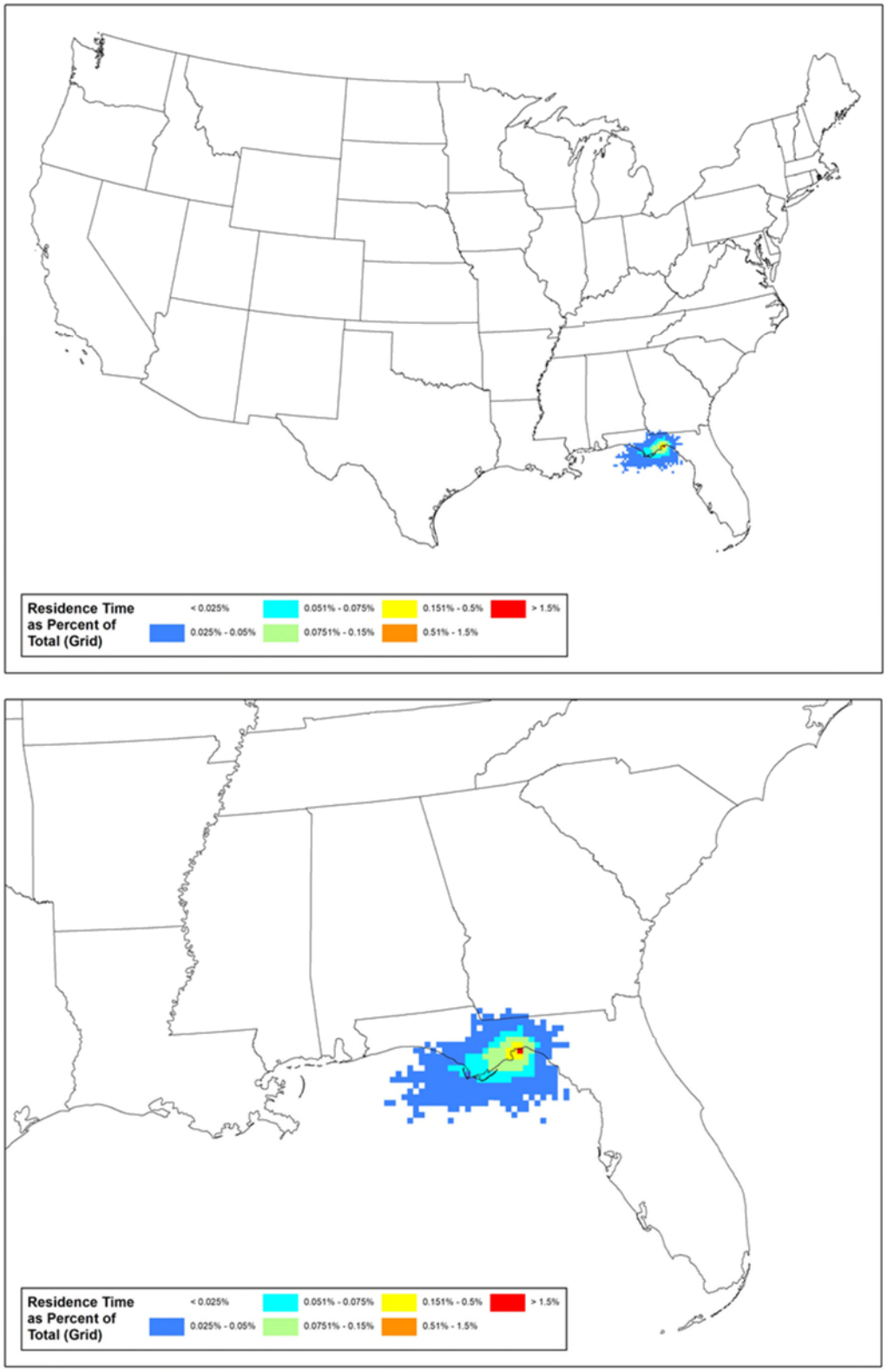


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

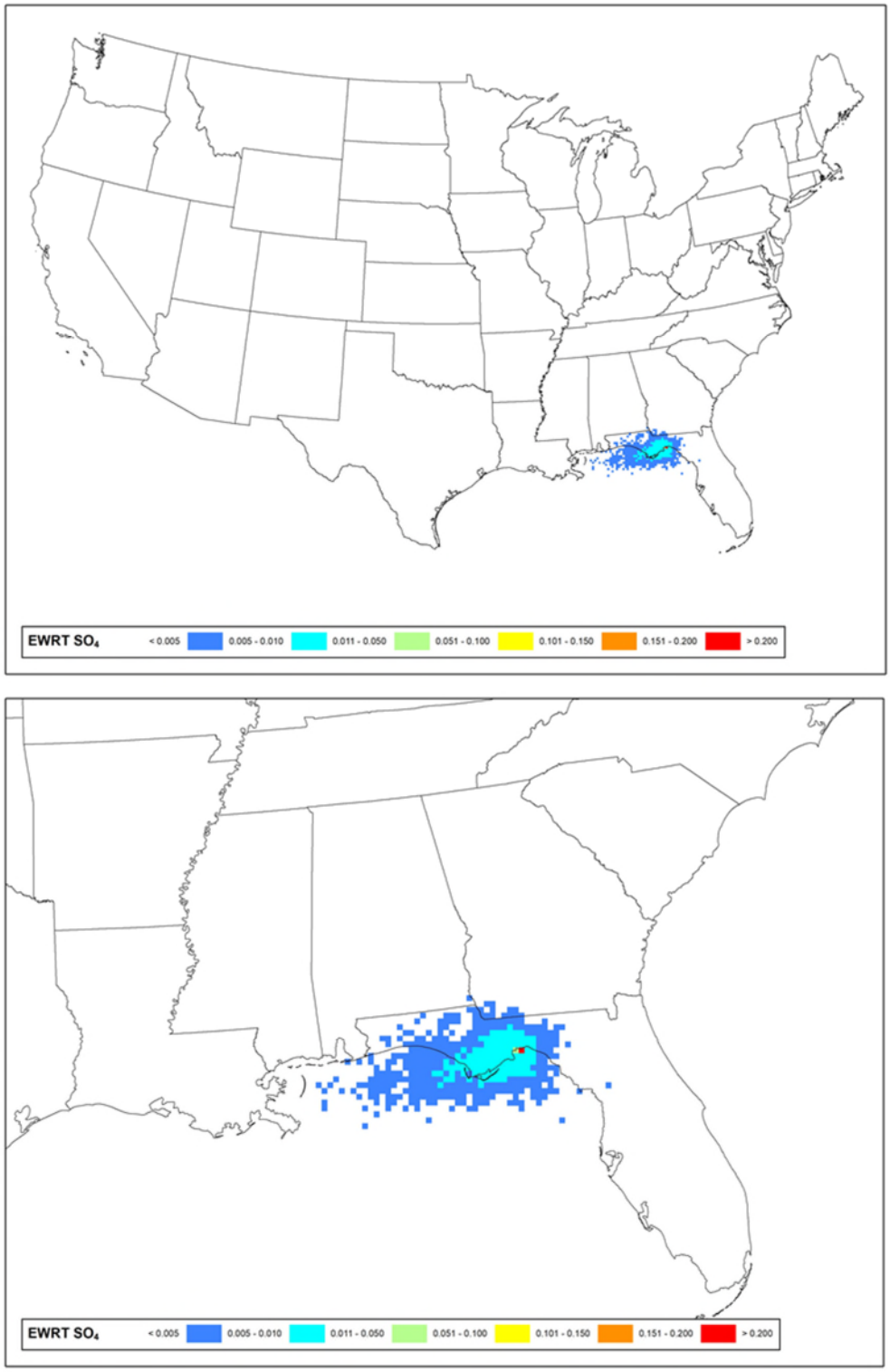


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area - Full View (top) and Class I Zoom (bottom)

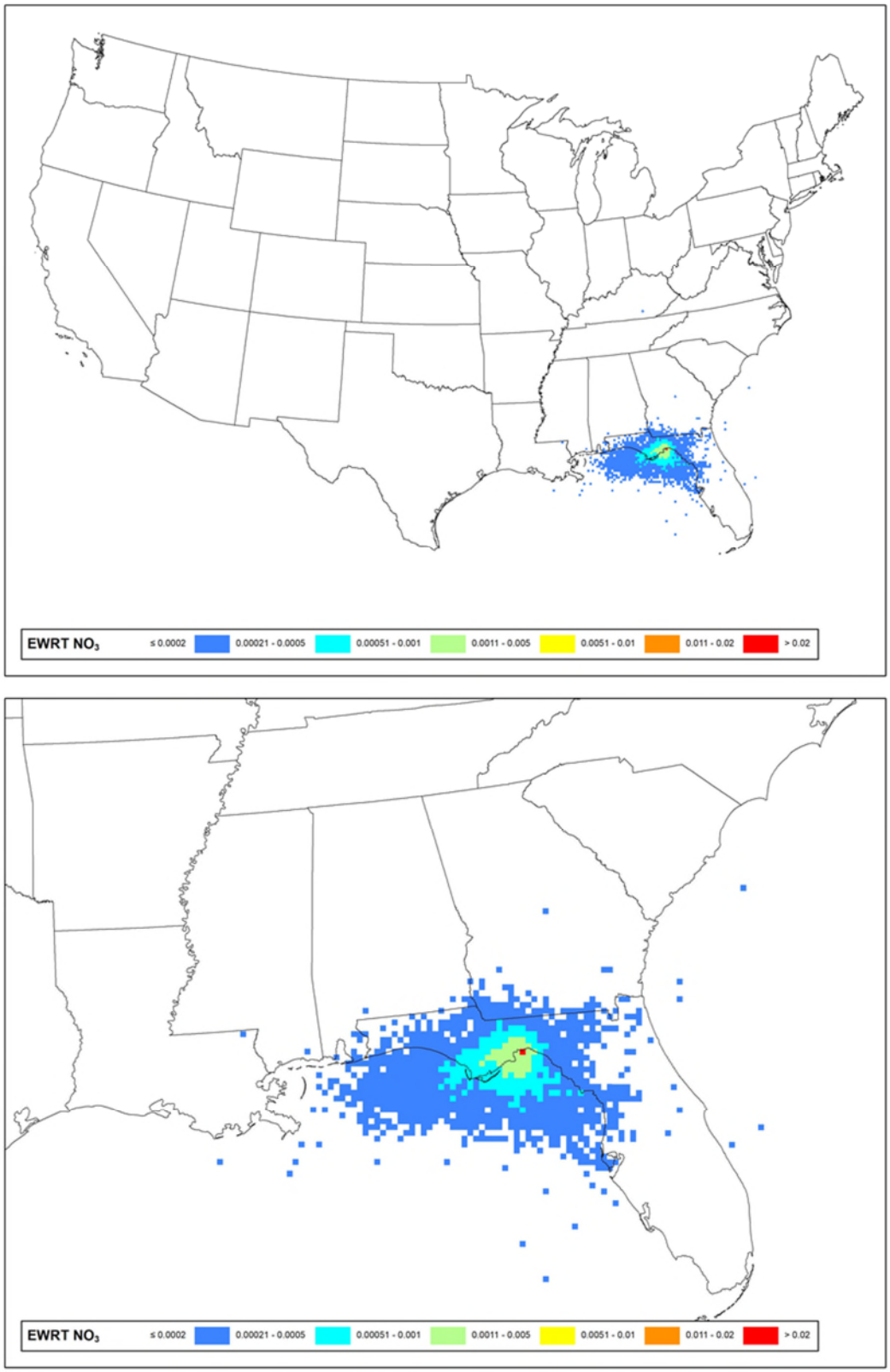


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for St Marks Wilderness Area - Full View (top) and Class I Zoom (bottom)

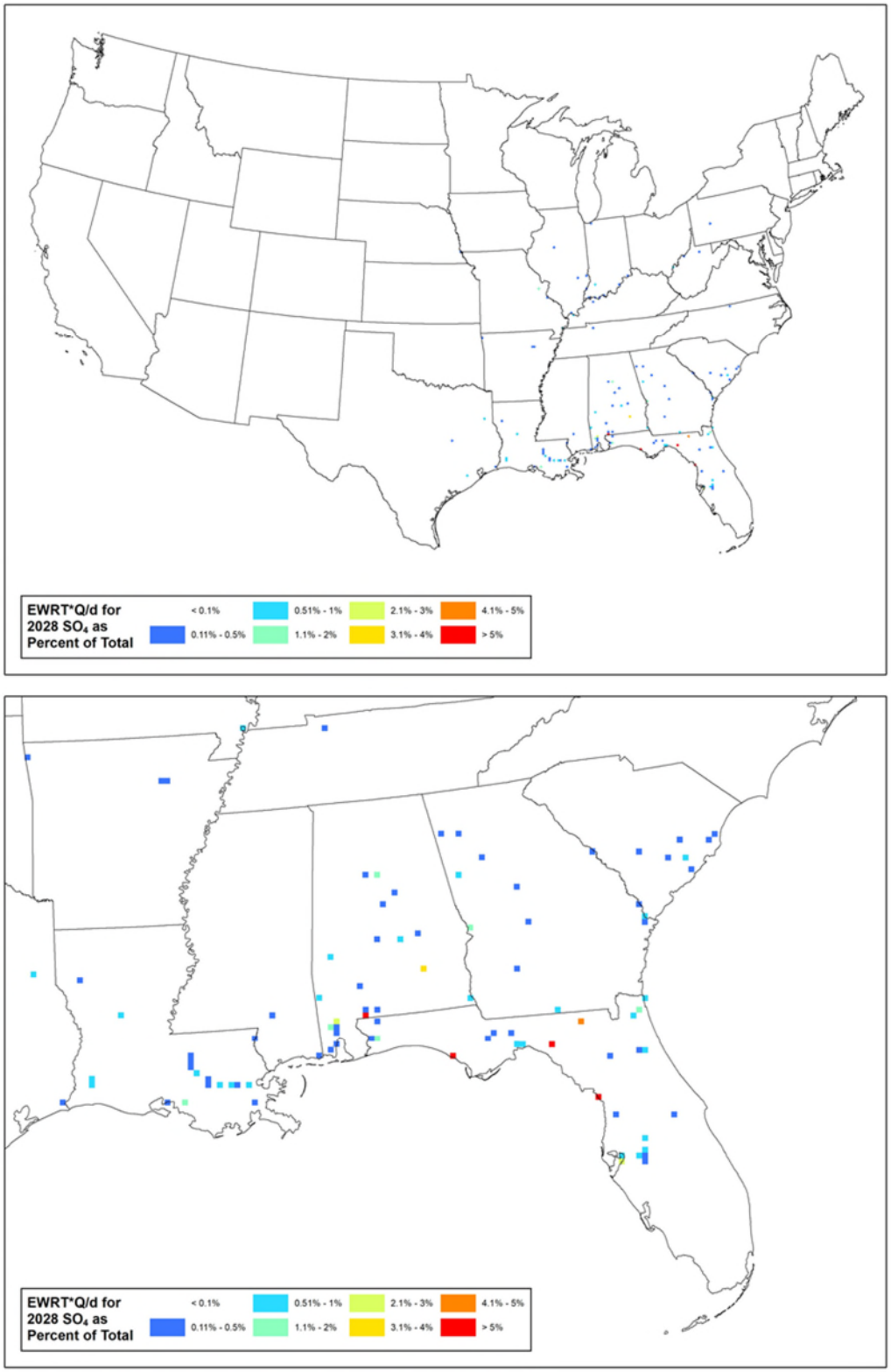


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

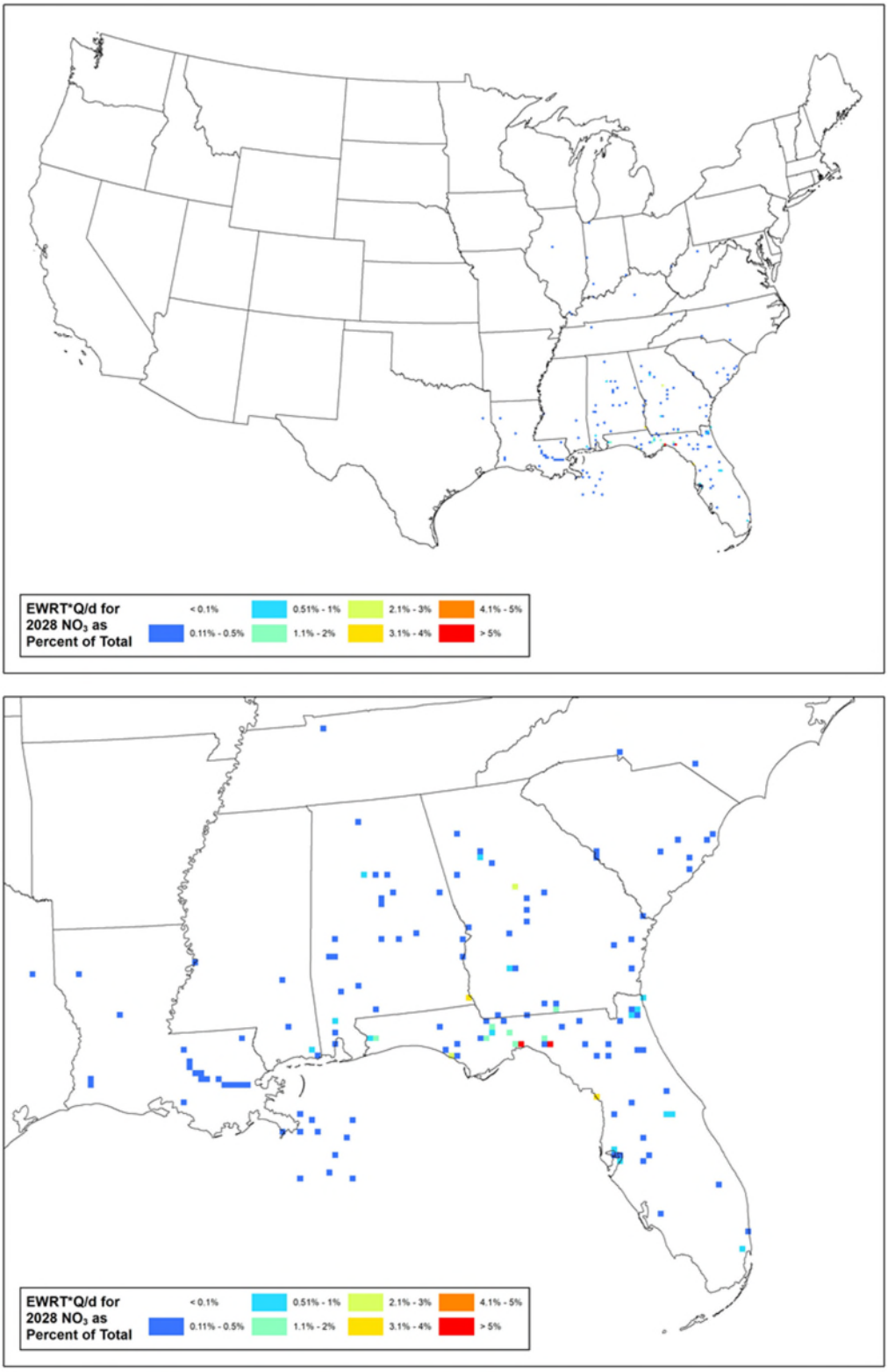


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

Shenandoah National Park

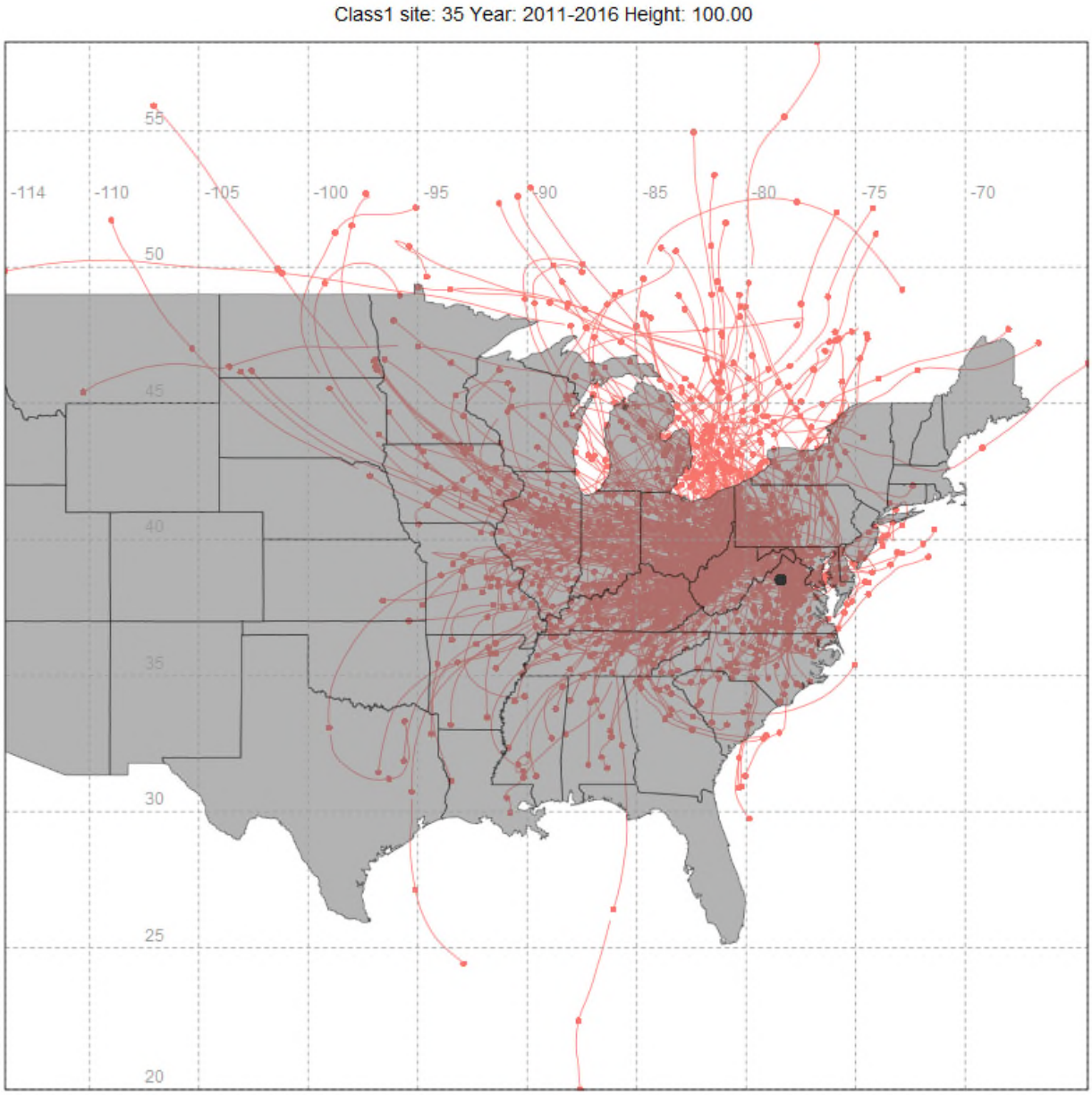


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Shenandoah National Park

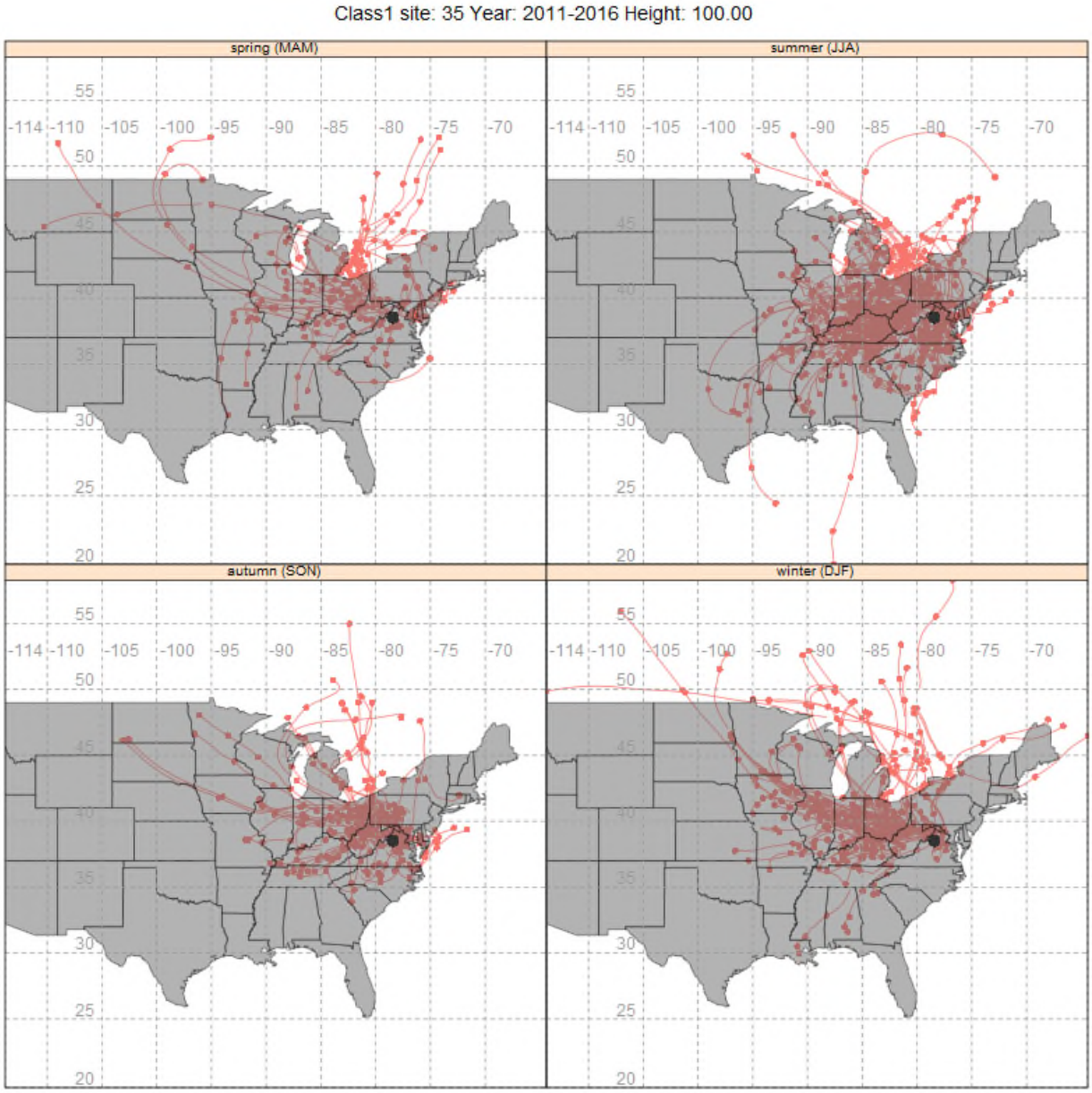


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Shenandoah National Park

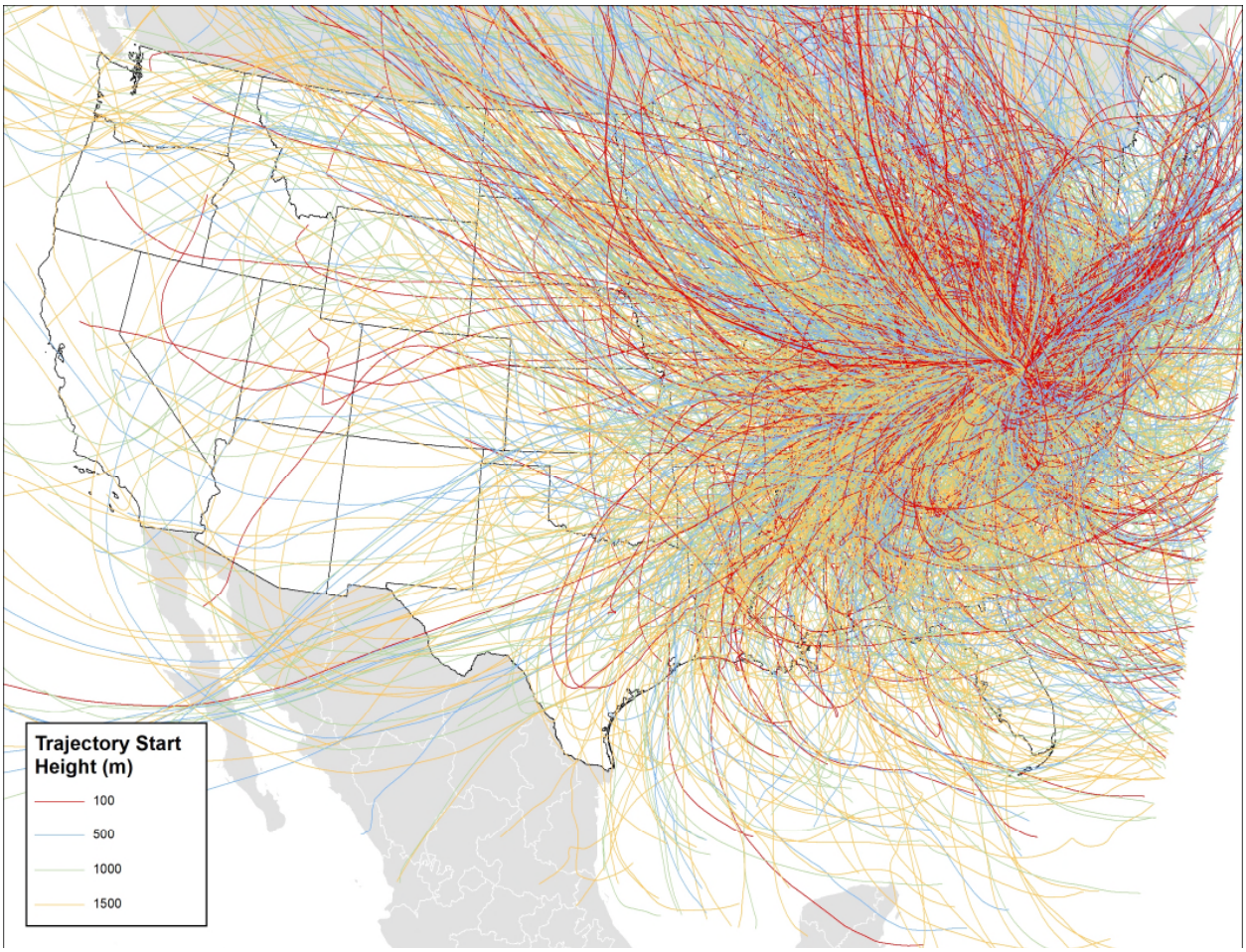


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shenandoah National Park

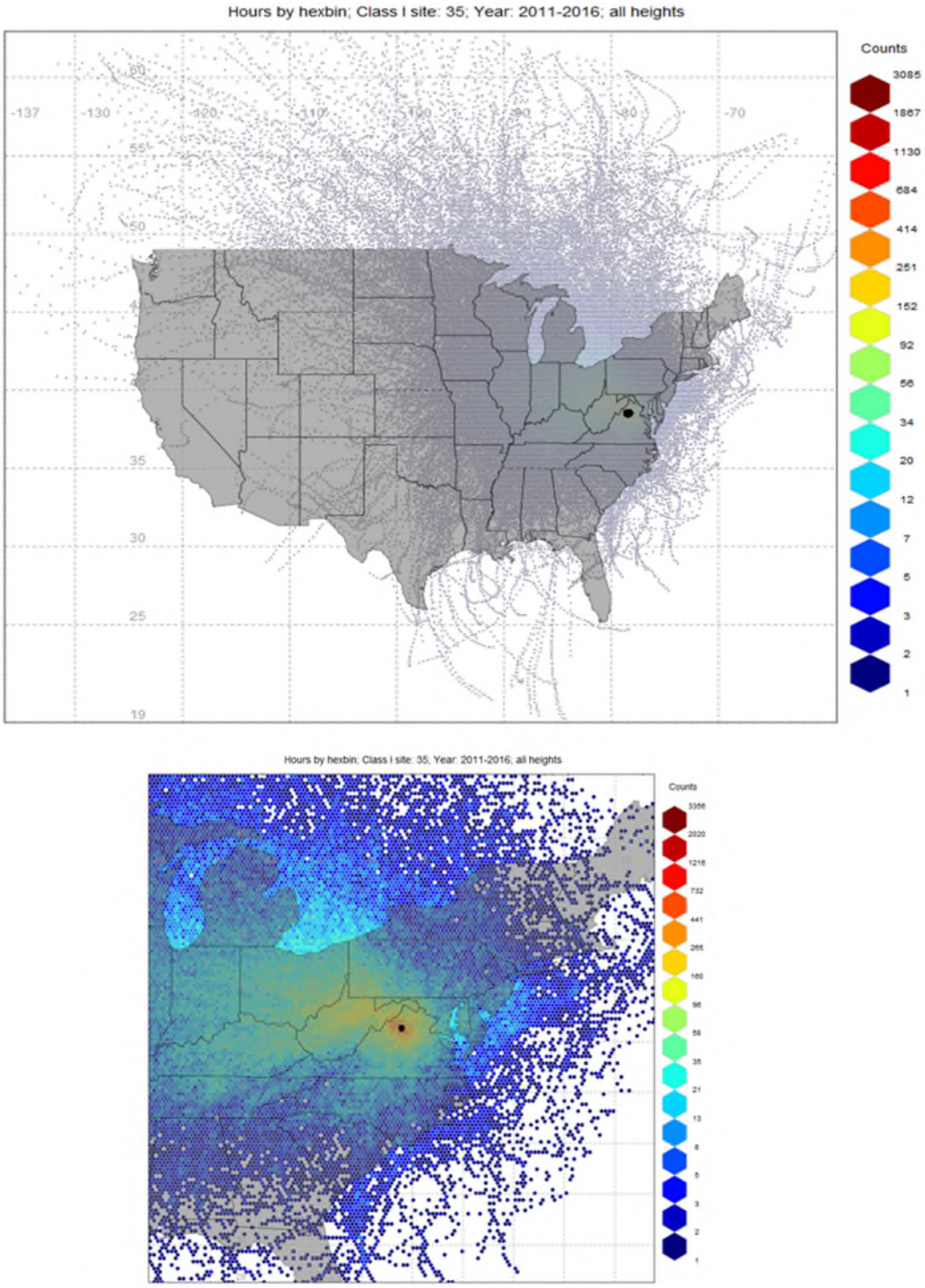


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

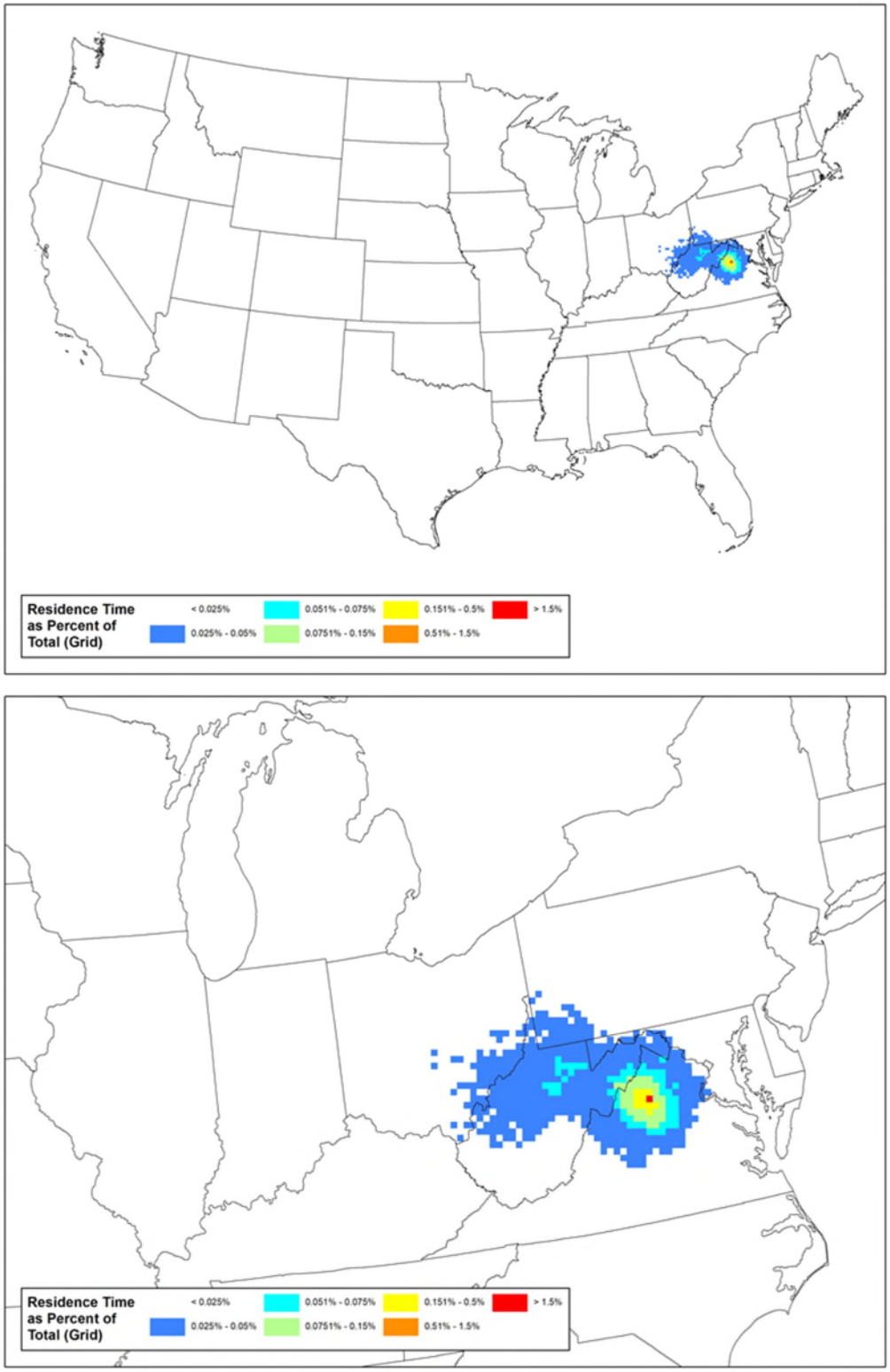


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

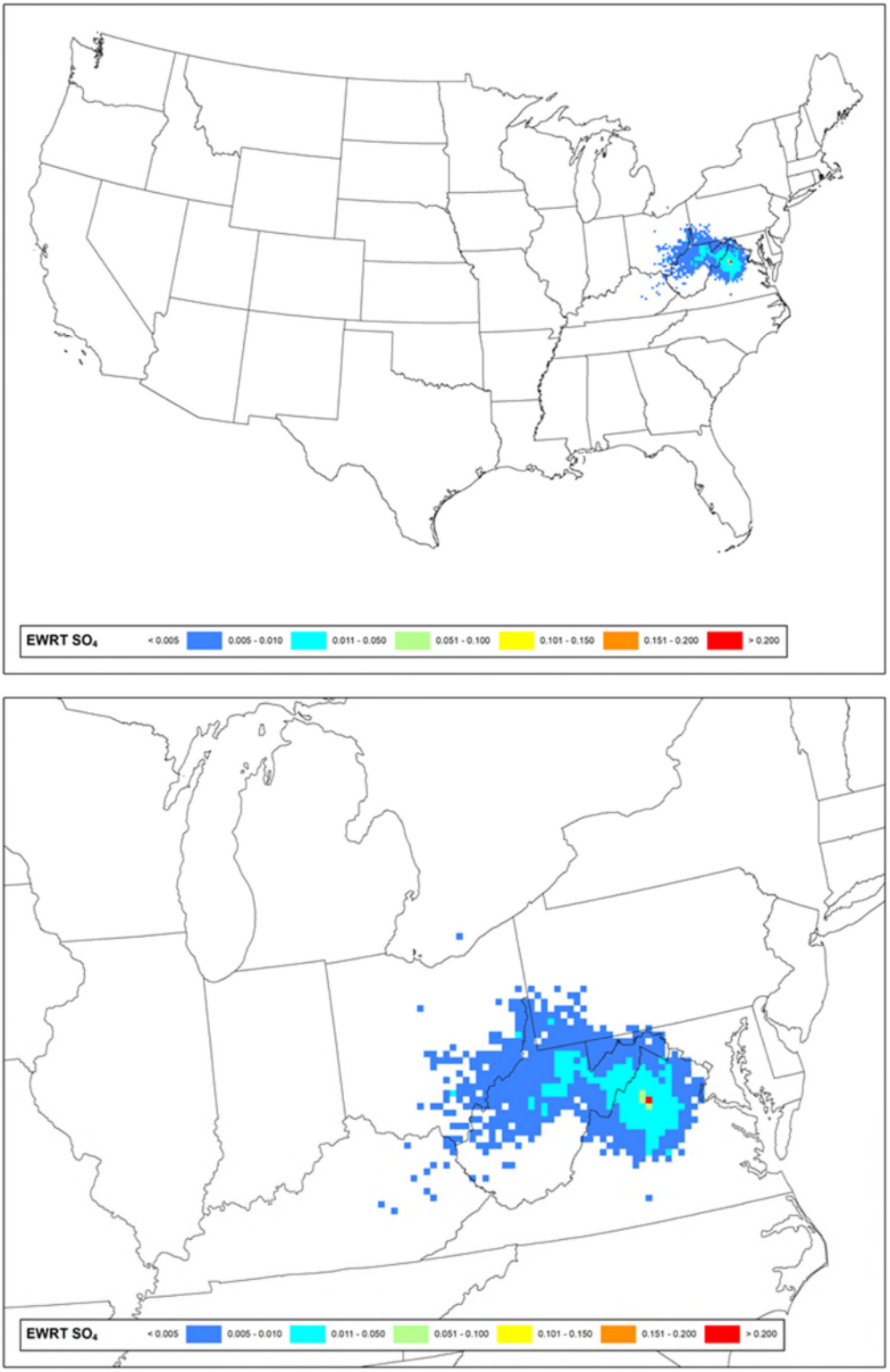


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Shenandoah National Park - Full View (top) and Class I Zoom (bottom)

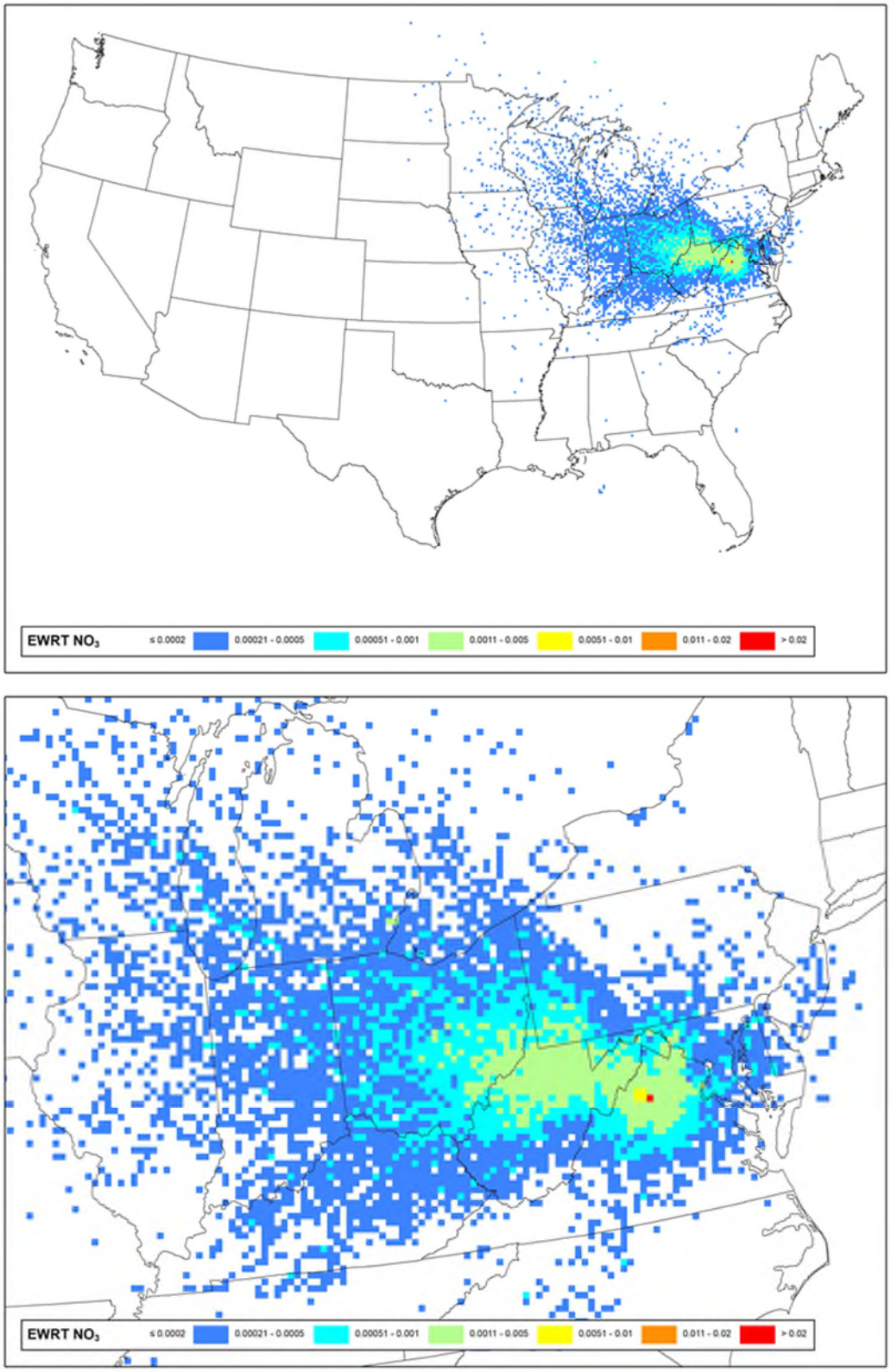


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Shenandoah National Park - Full View (top) and Class I Zoom (bottom)

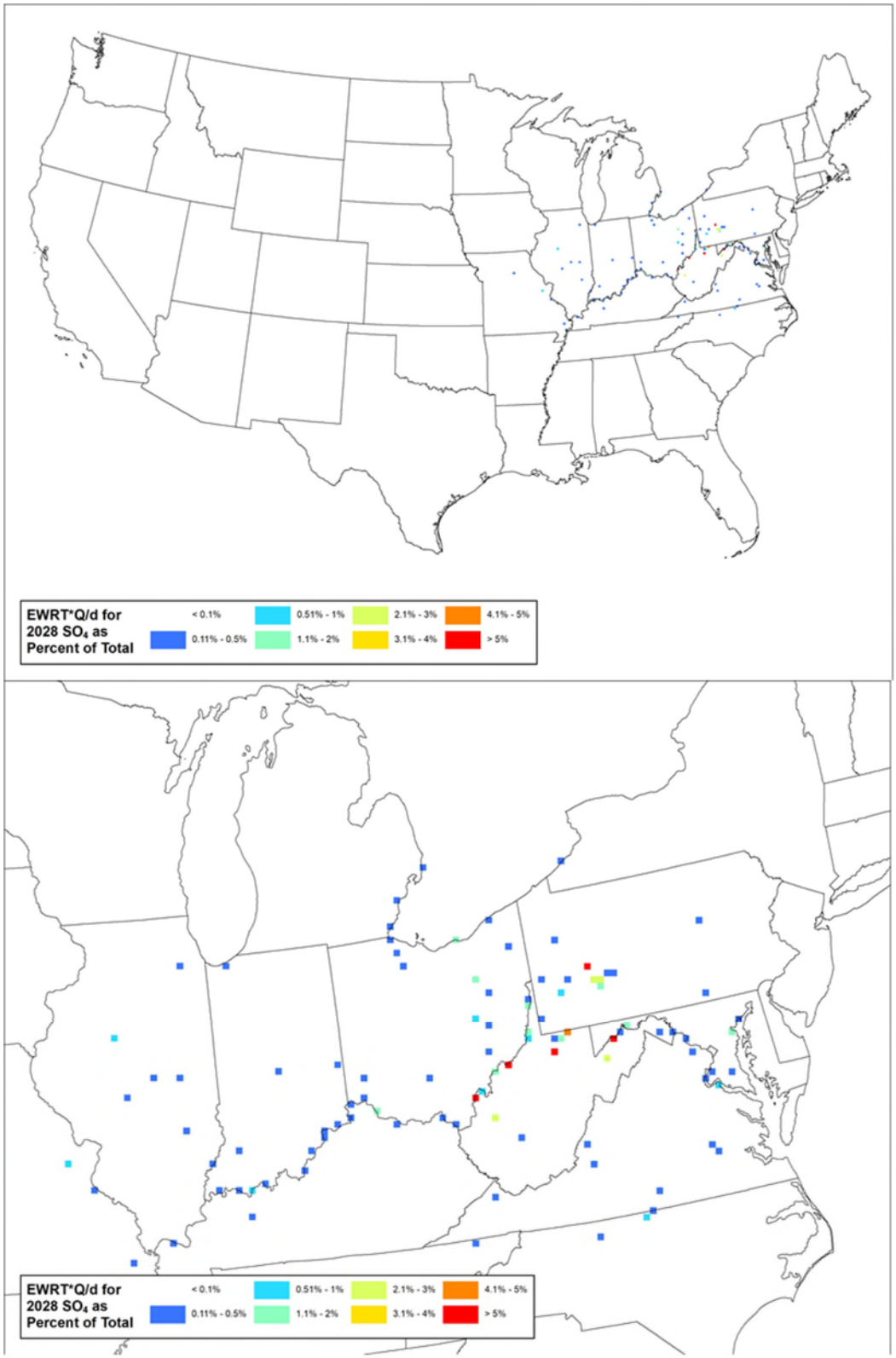


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

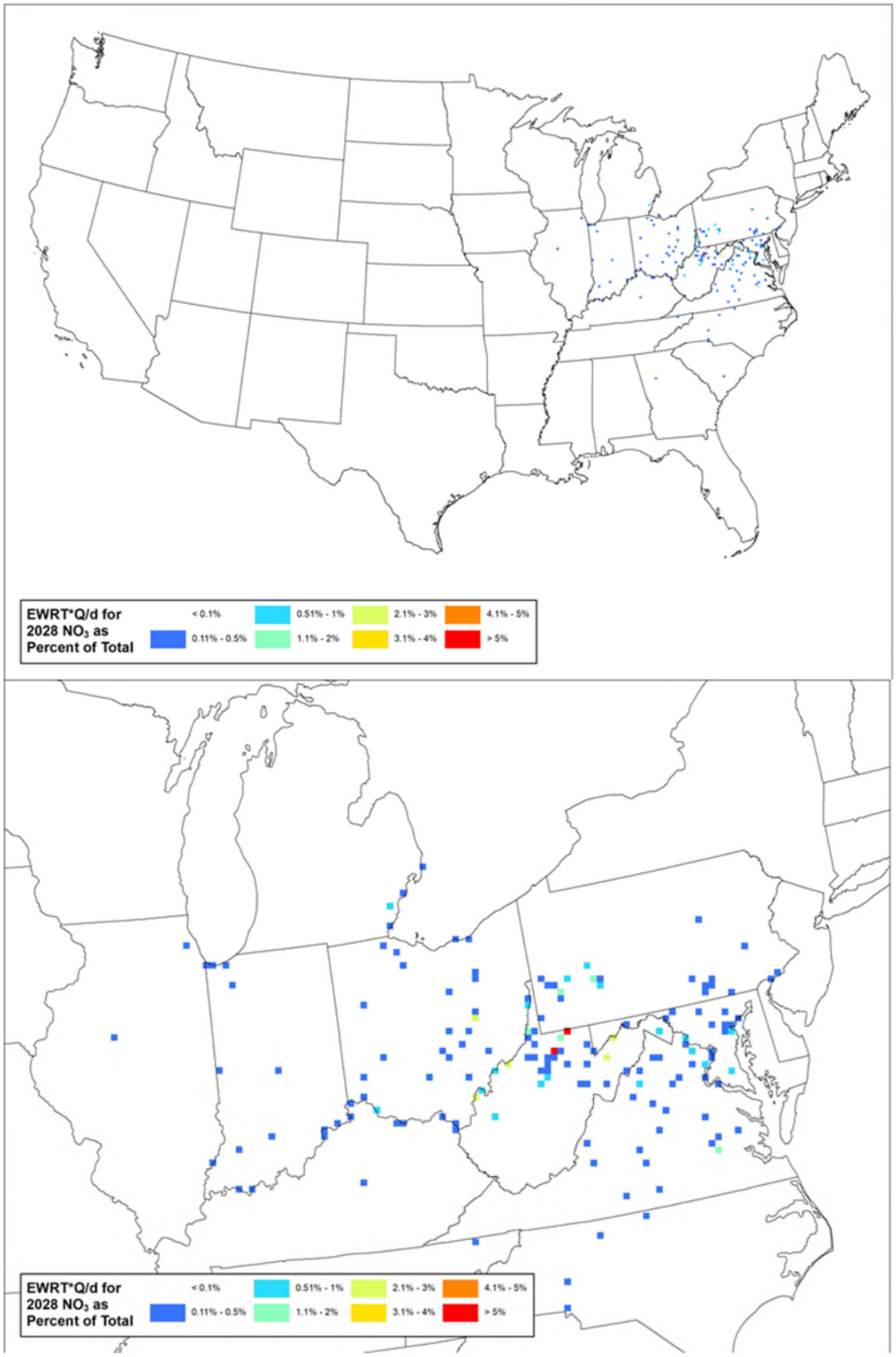


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

Shining Rock Wilderness Area

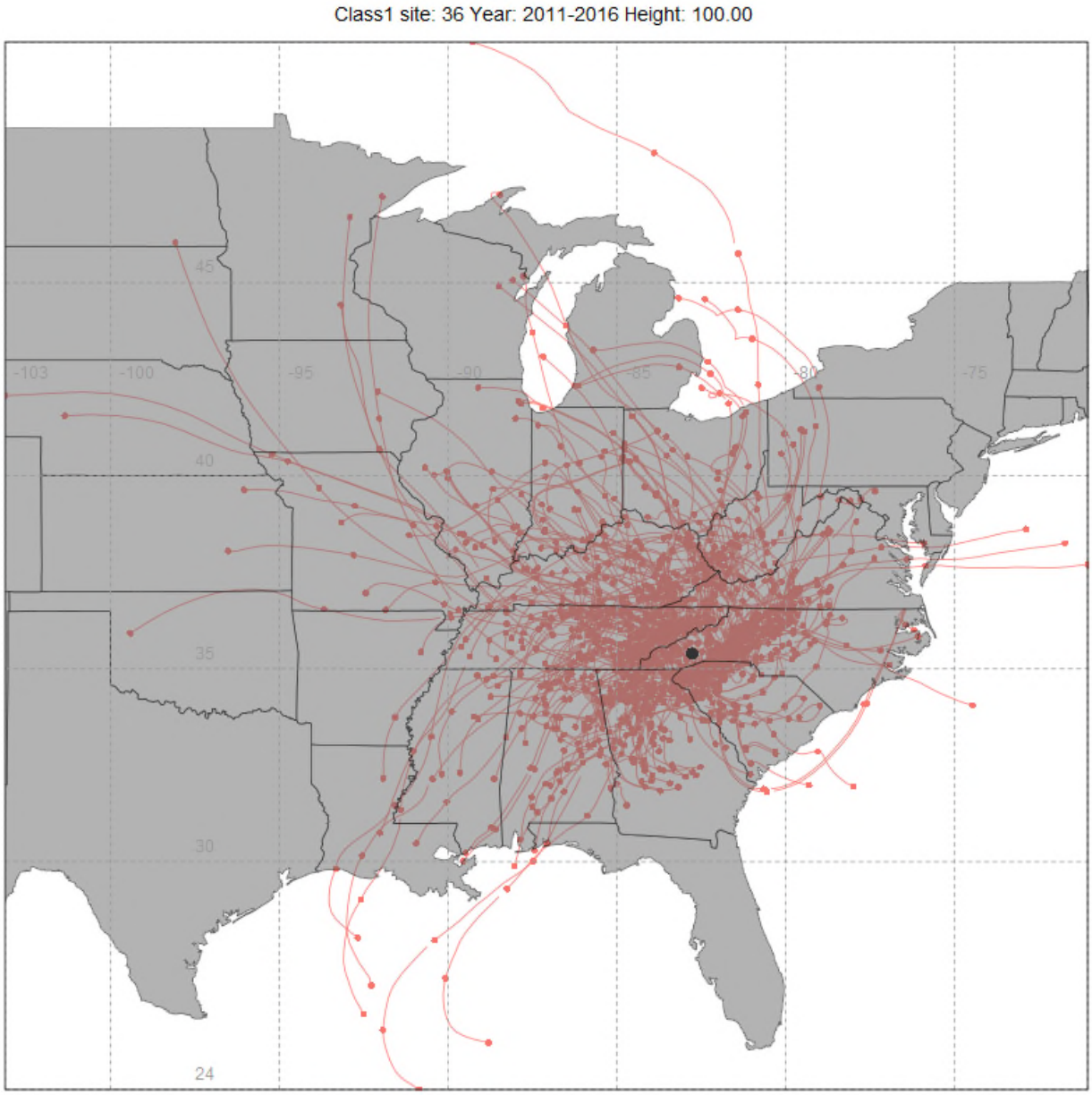


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Shining Rock Wilderness Area

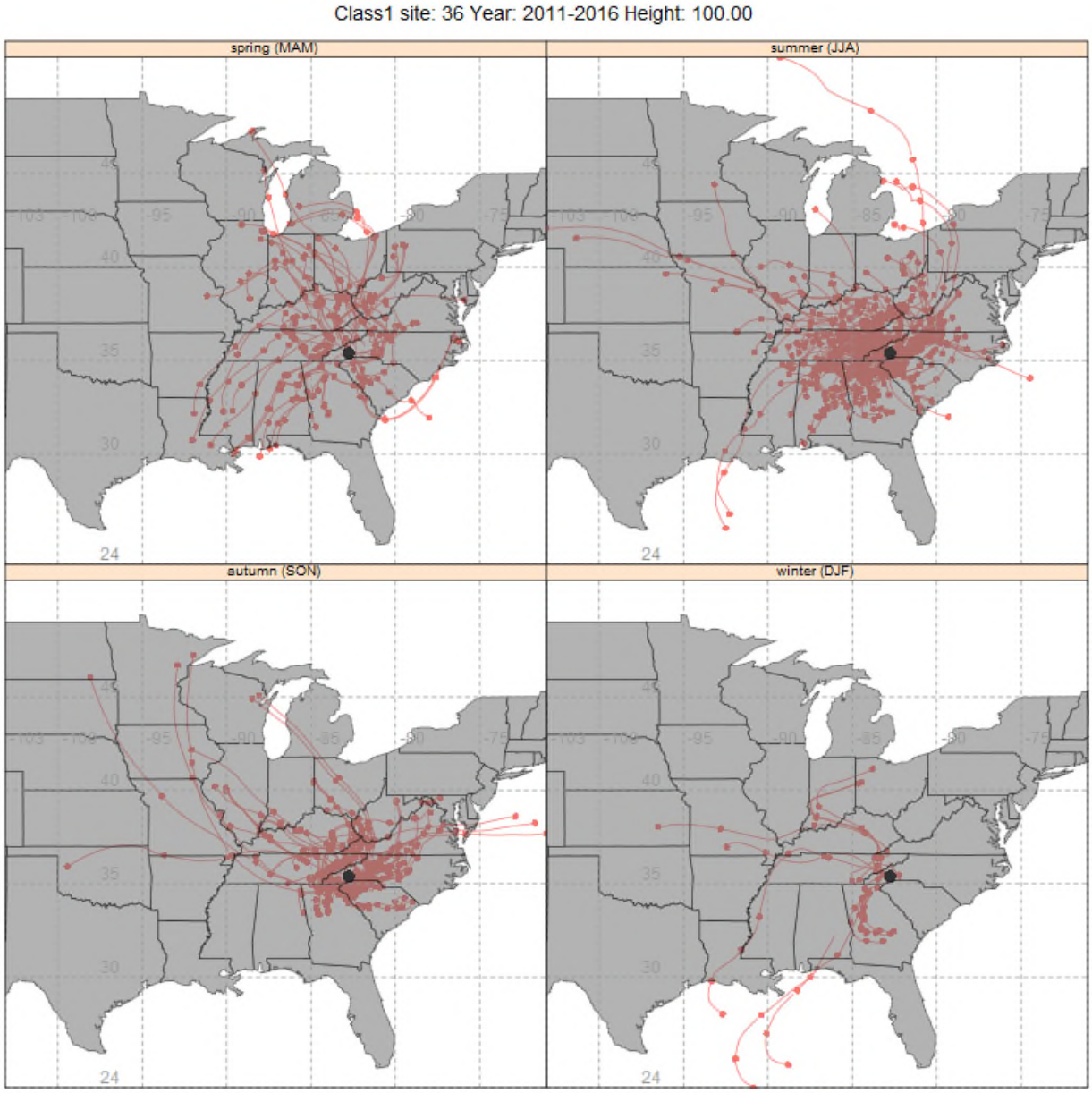


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Shining Rock Wilderness Area

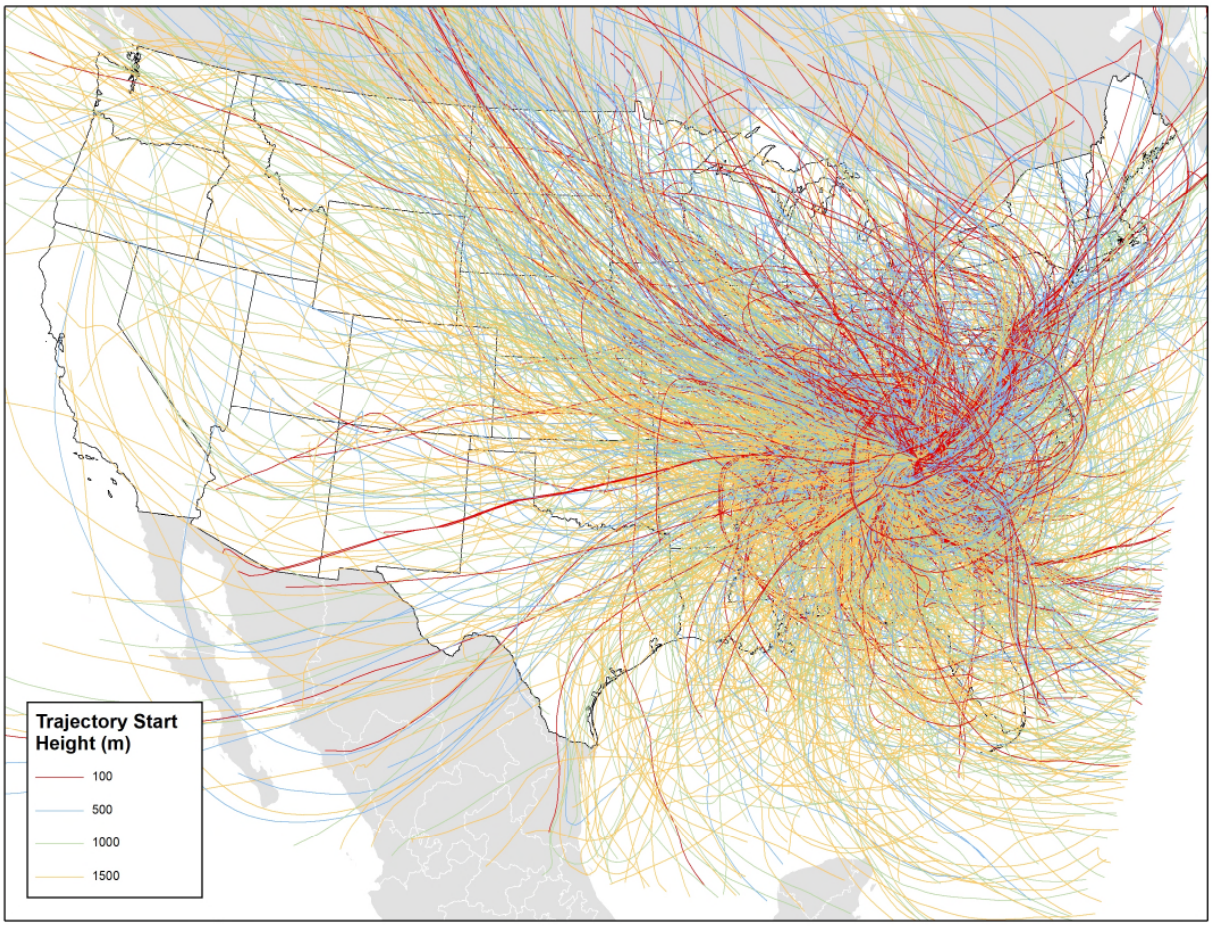


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shining Rock Wilderness Area

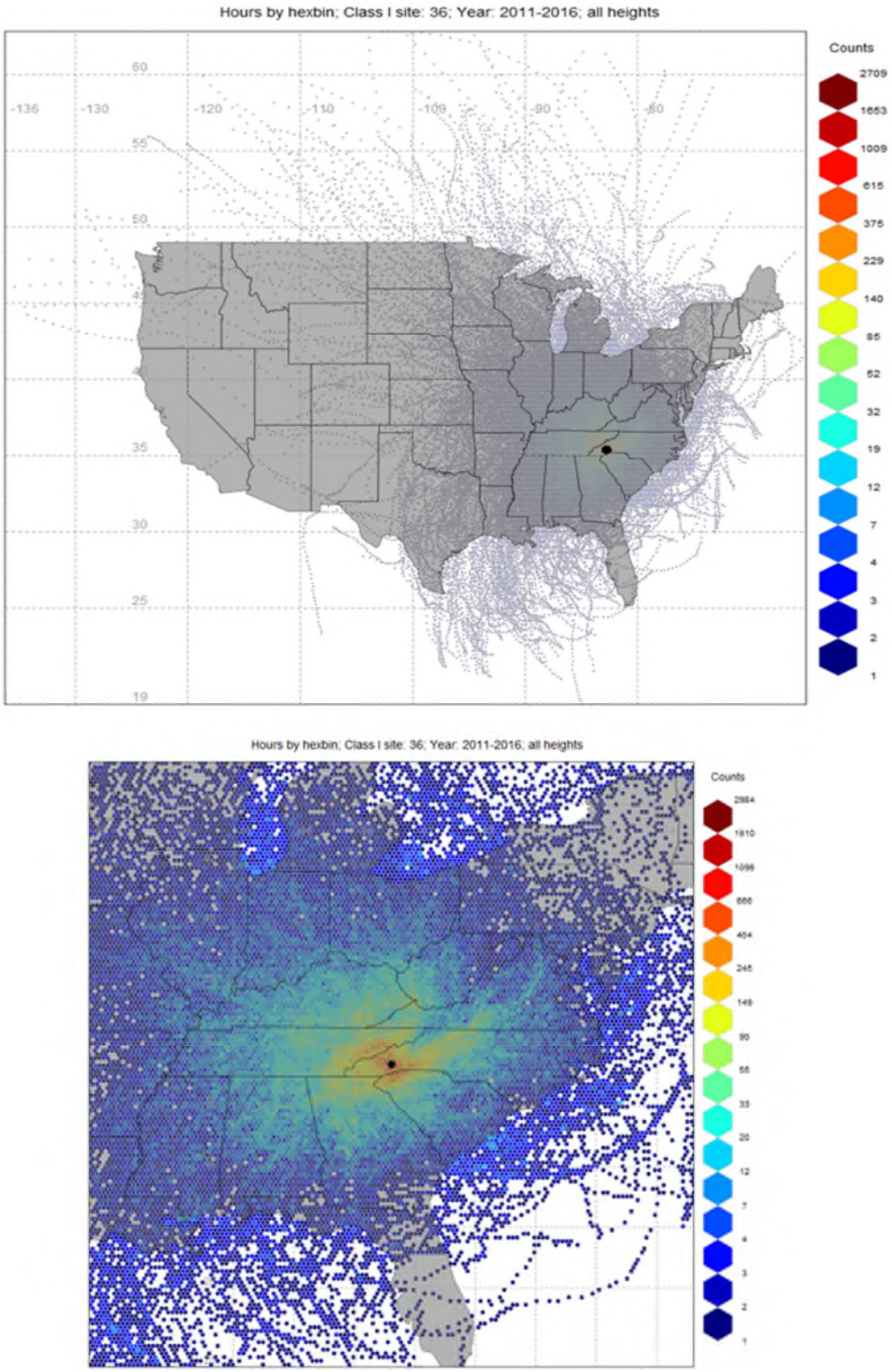


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

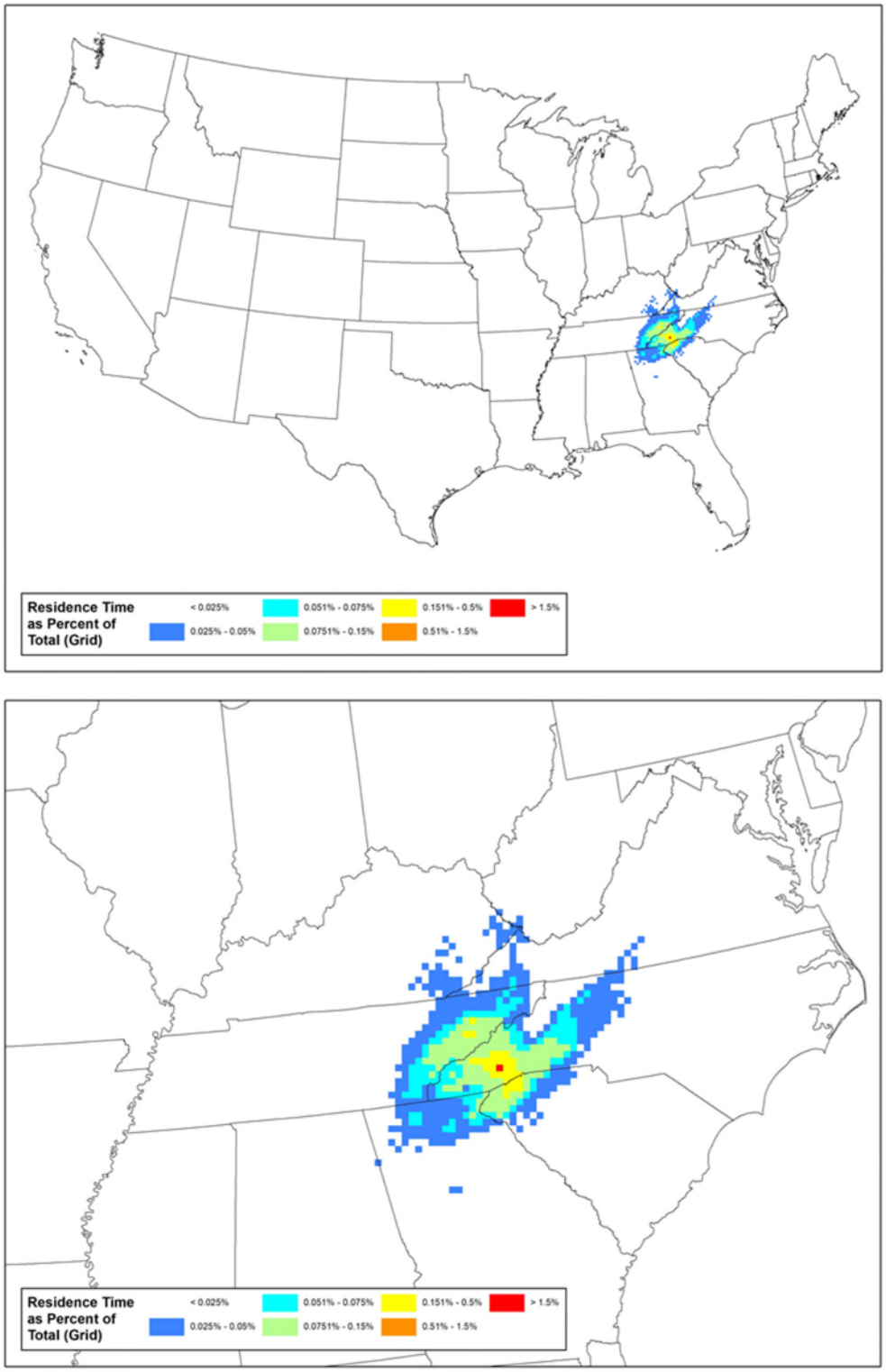


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

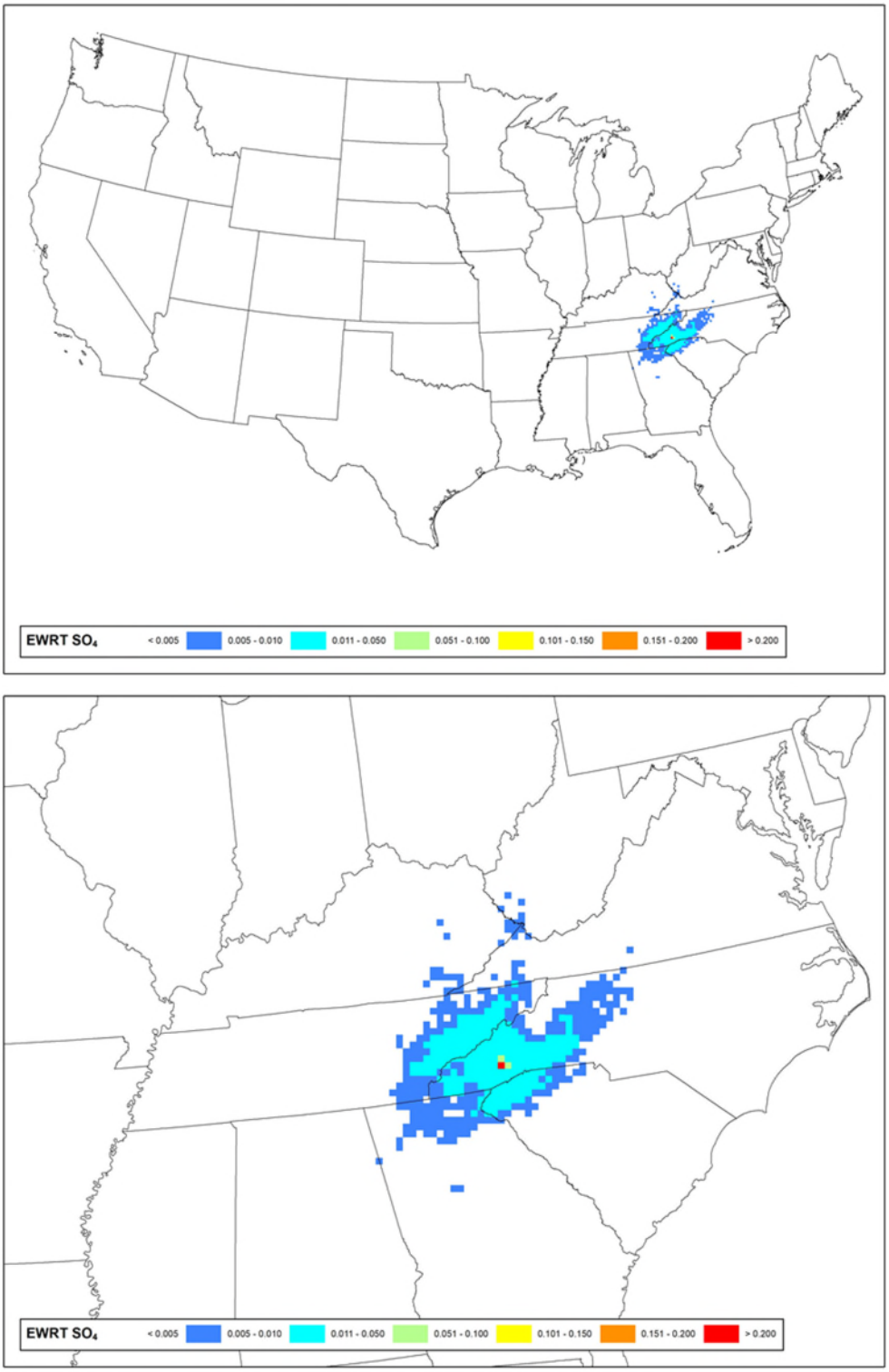


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area - Full View (top) and Class I Zoom (bottom)

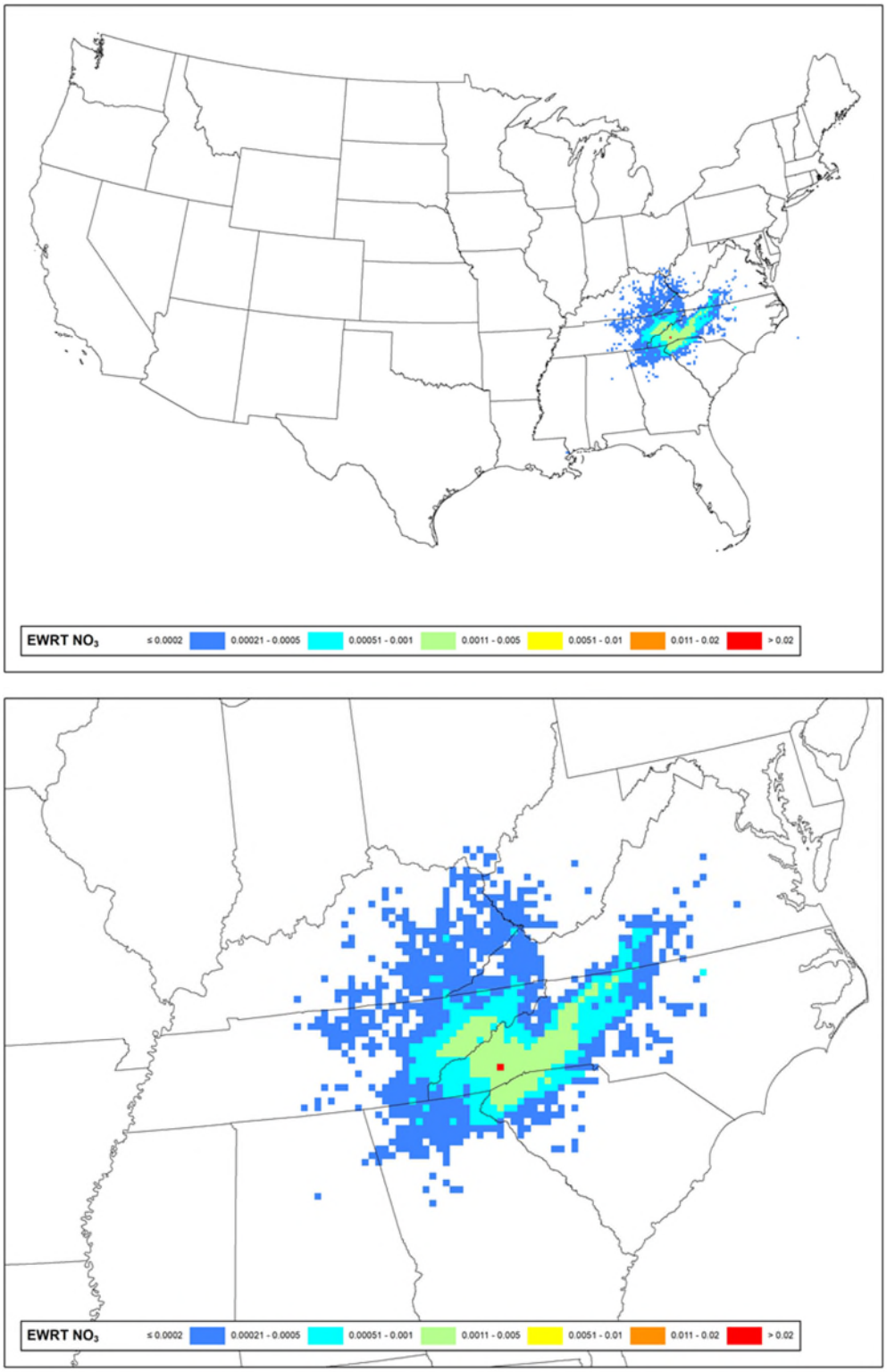


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Shining Rock Wilderness Area - Full View (top) and Class I Zoom (bottom)

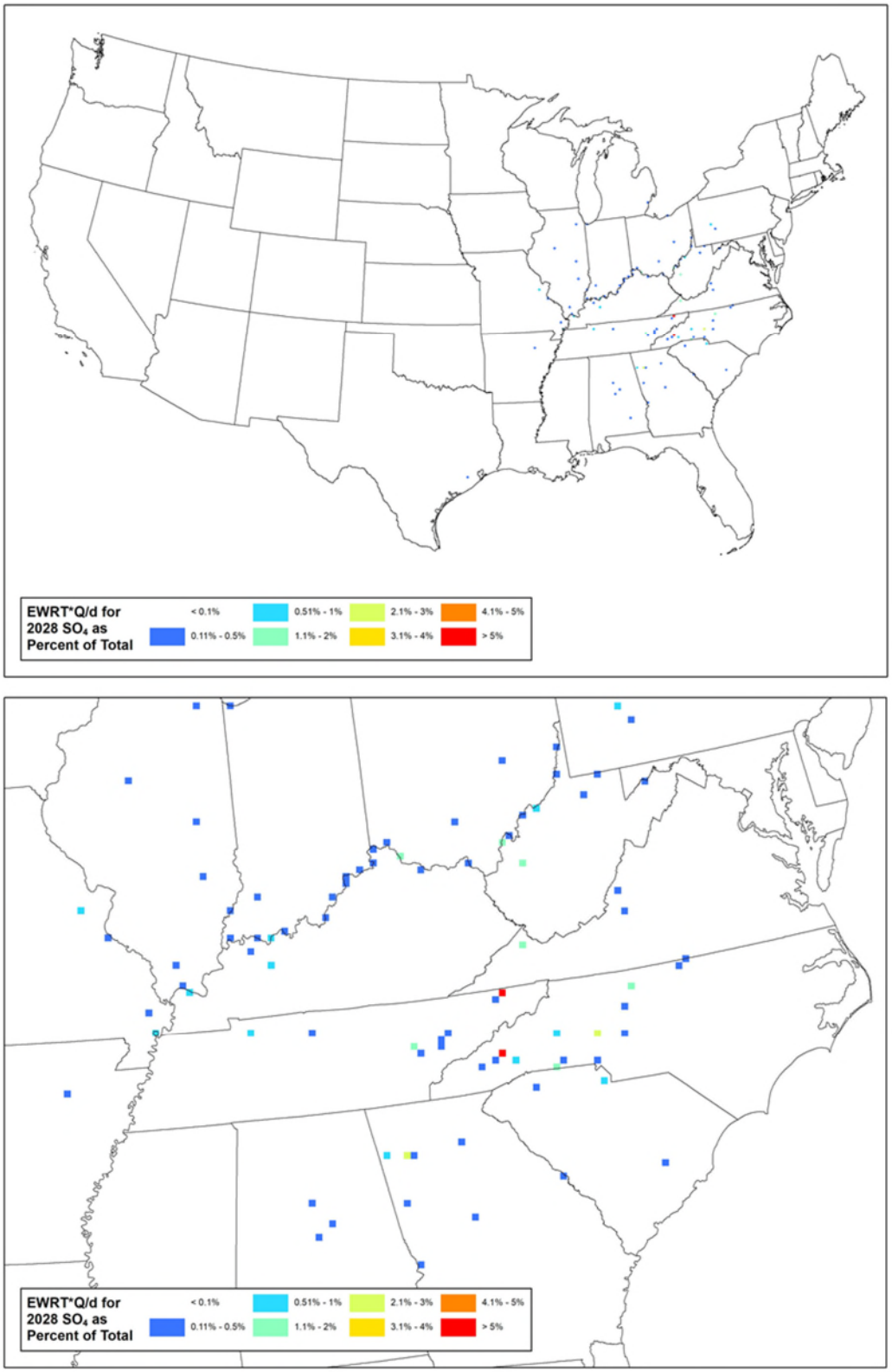


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

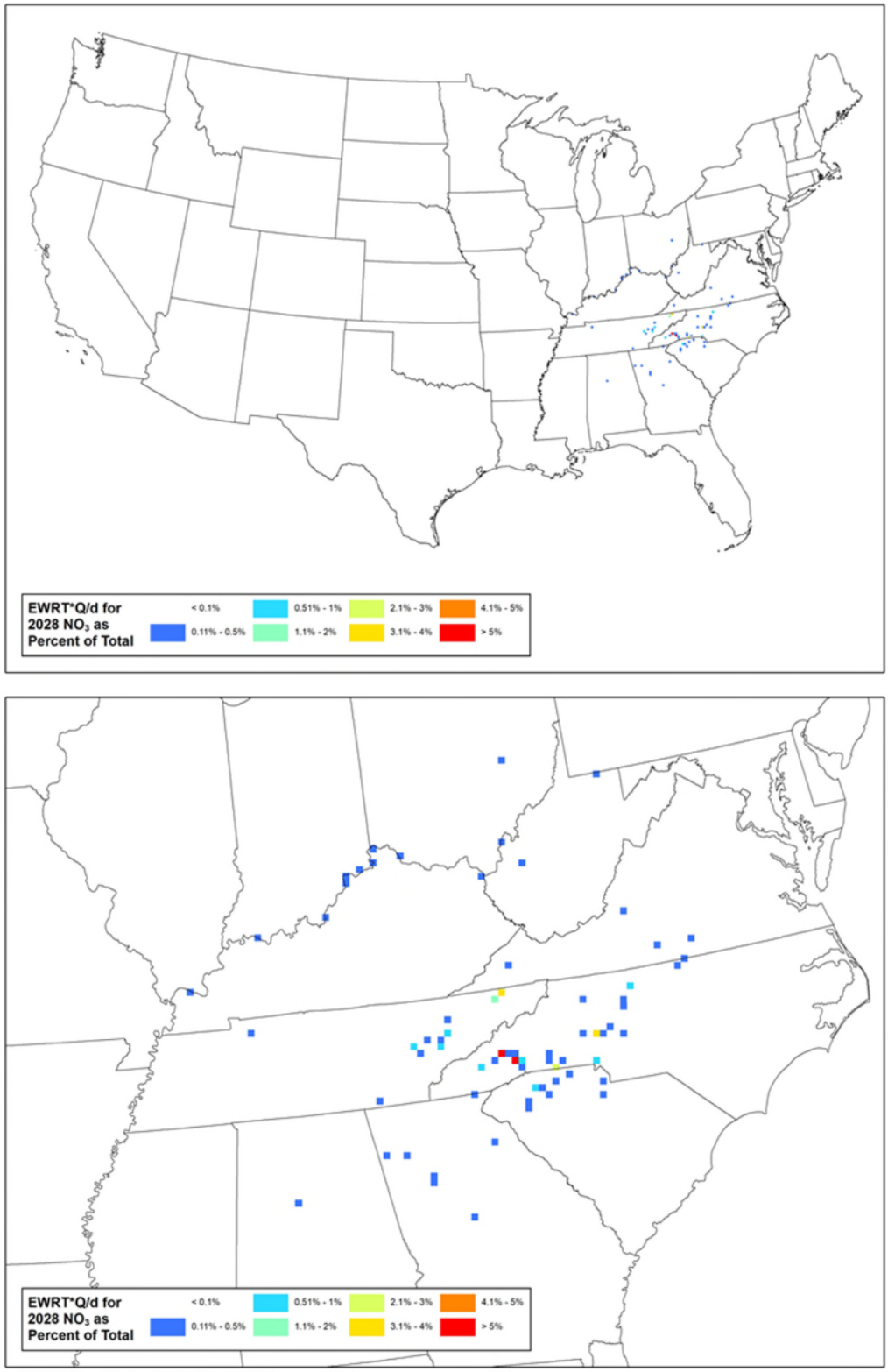


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

Sipsey Wilderness Area

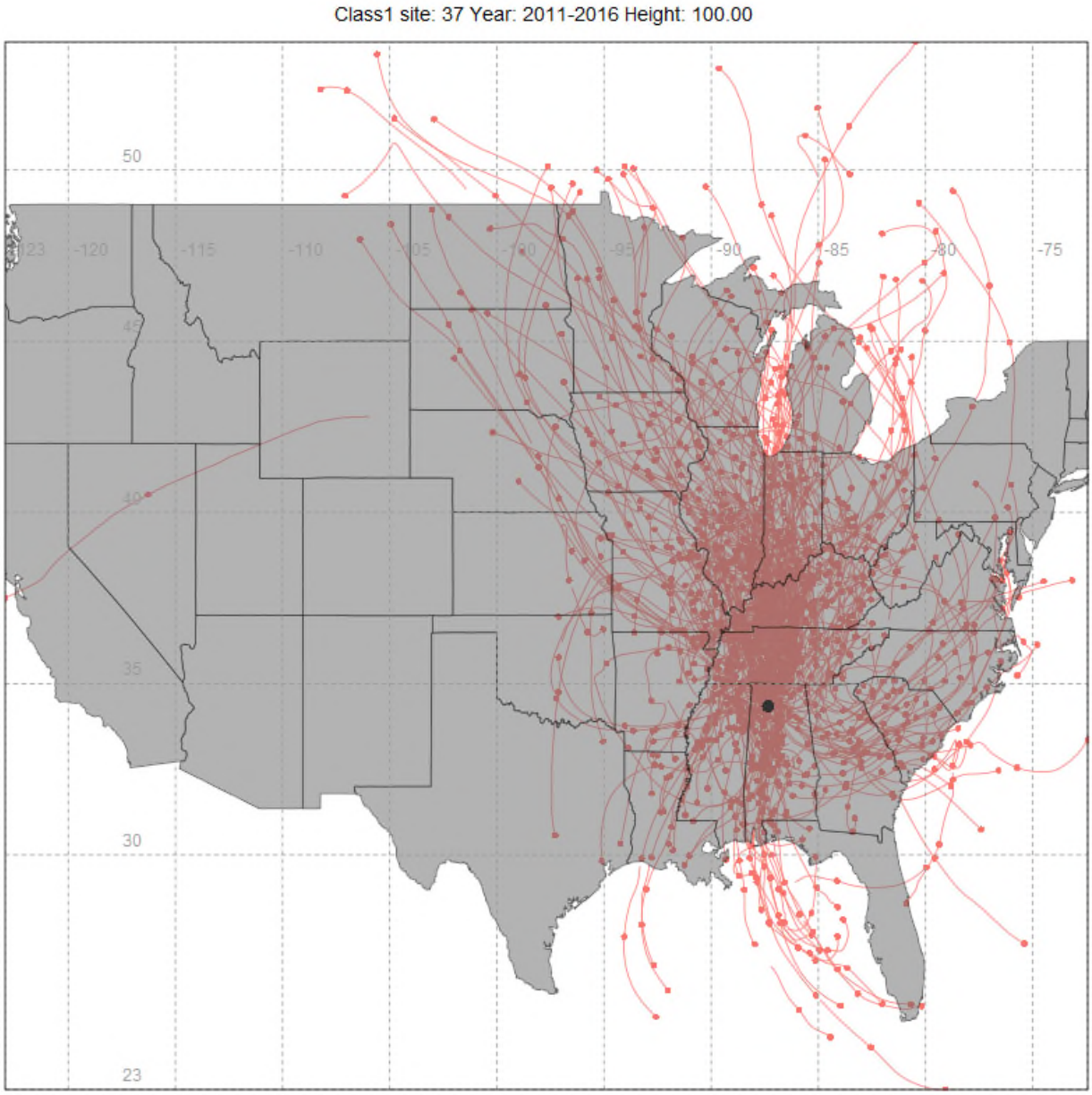


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Sipsey Wilderness Area

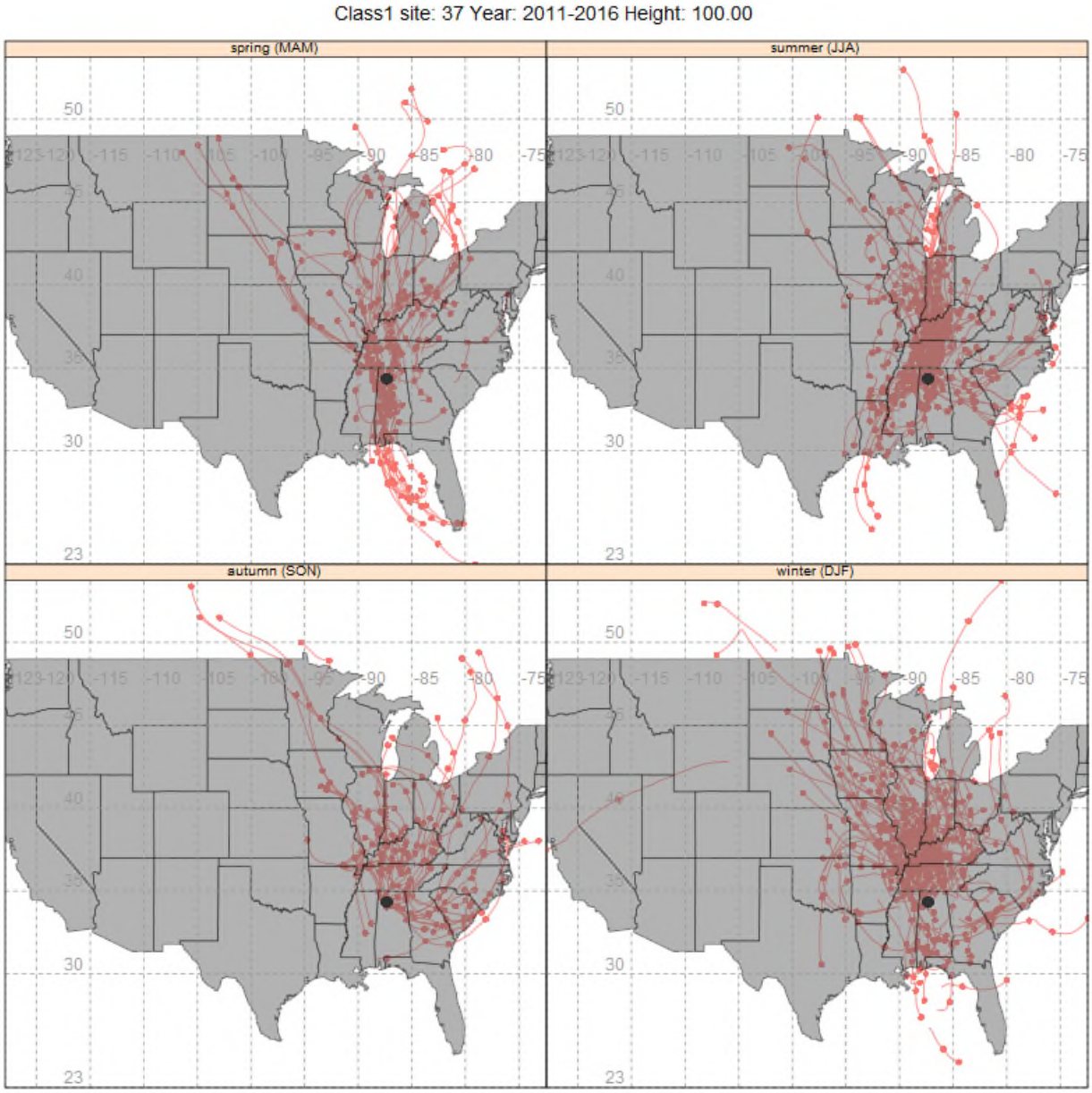


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Sipsey Wilderness Area

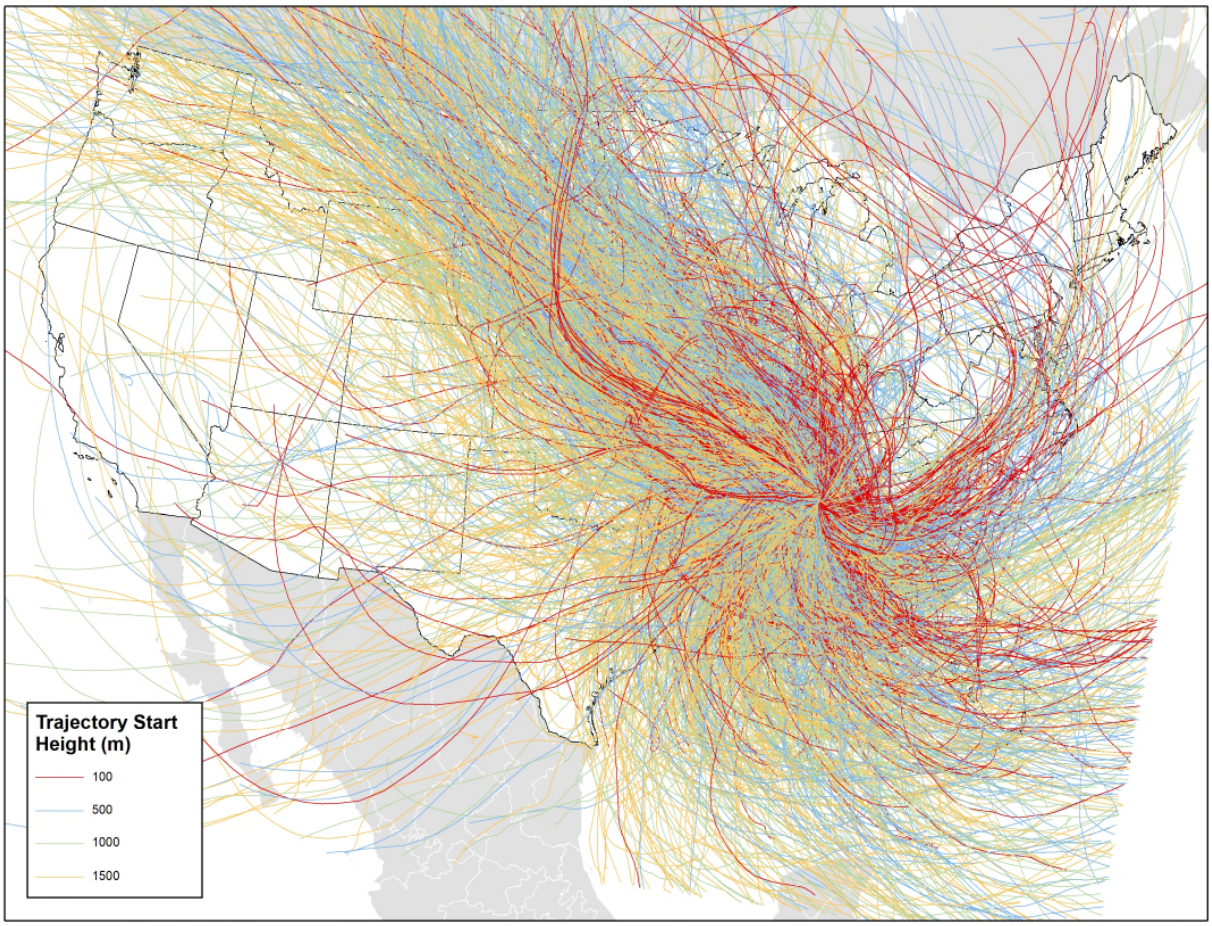


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Sipsey Wilderness Area

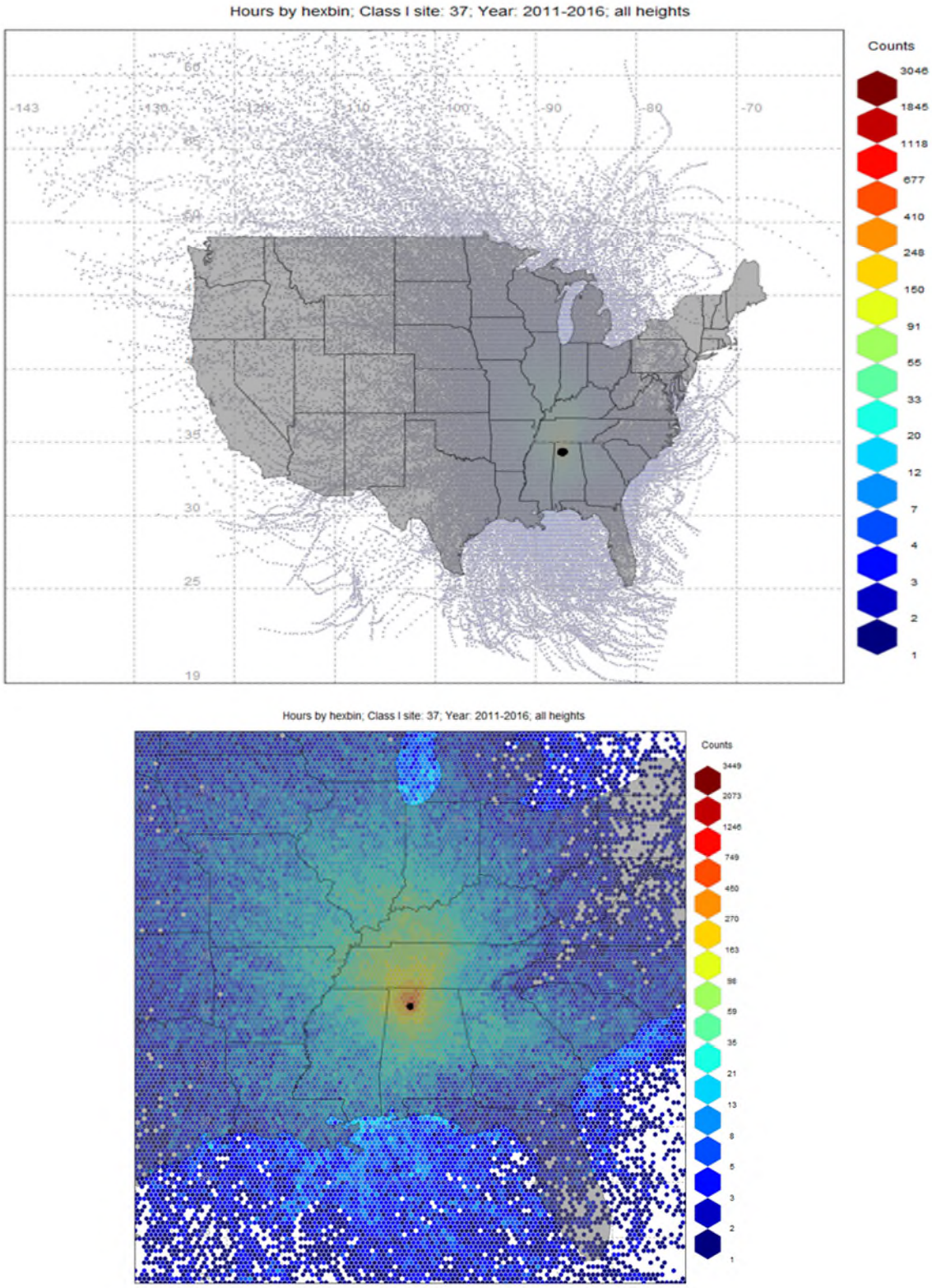


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

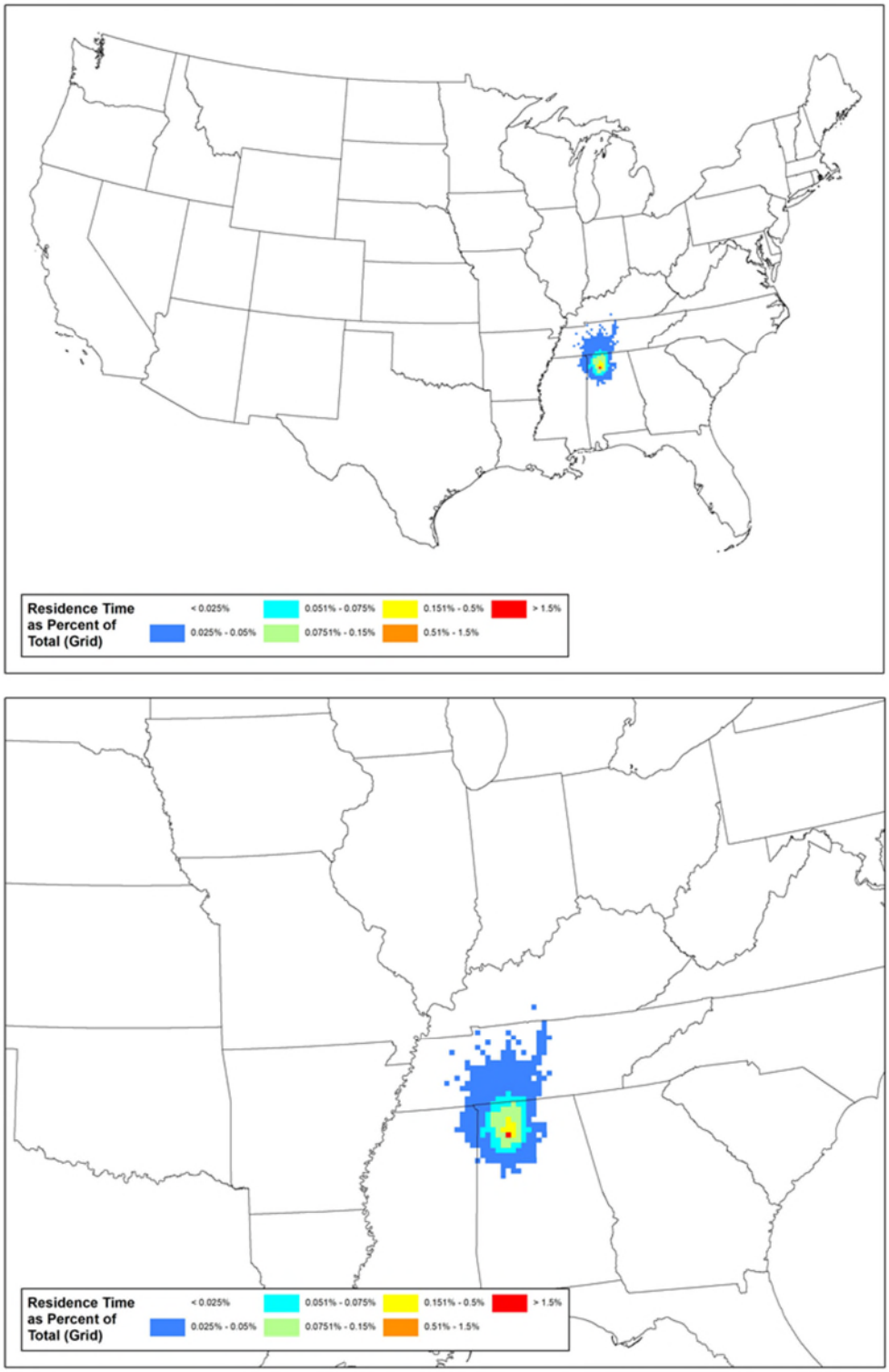


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

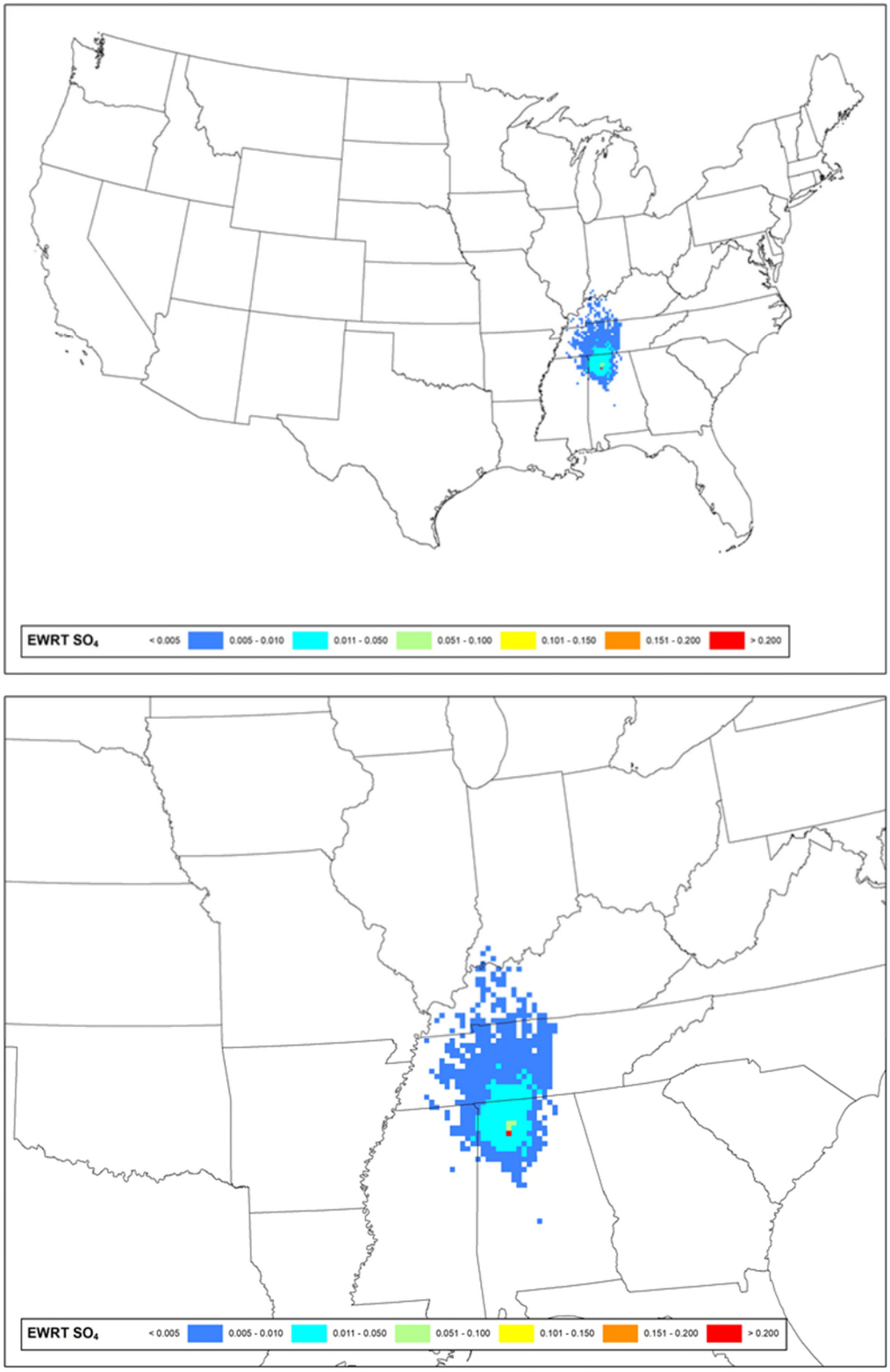


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area - Full View (top) and Class I Zoom (bottom)

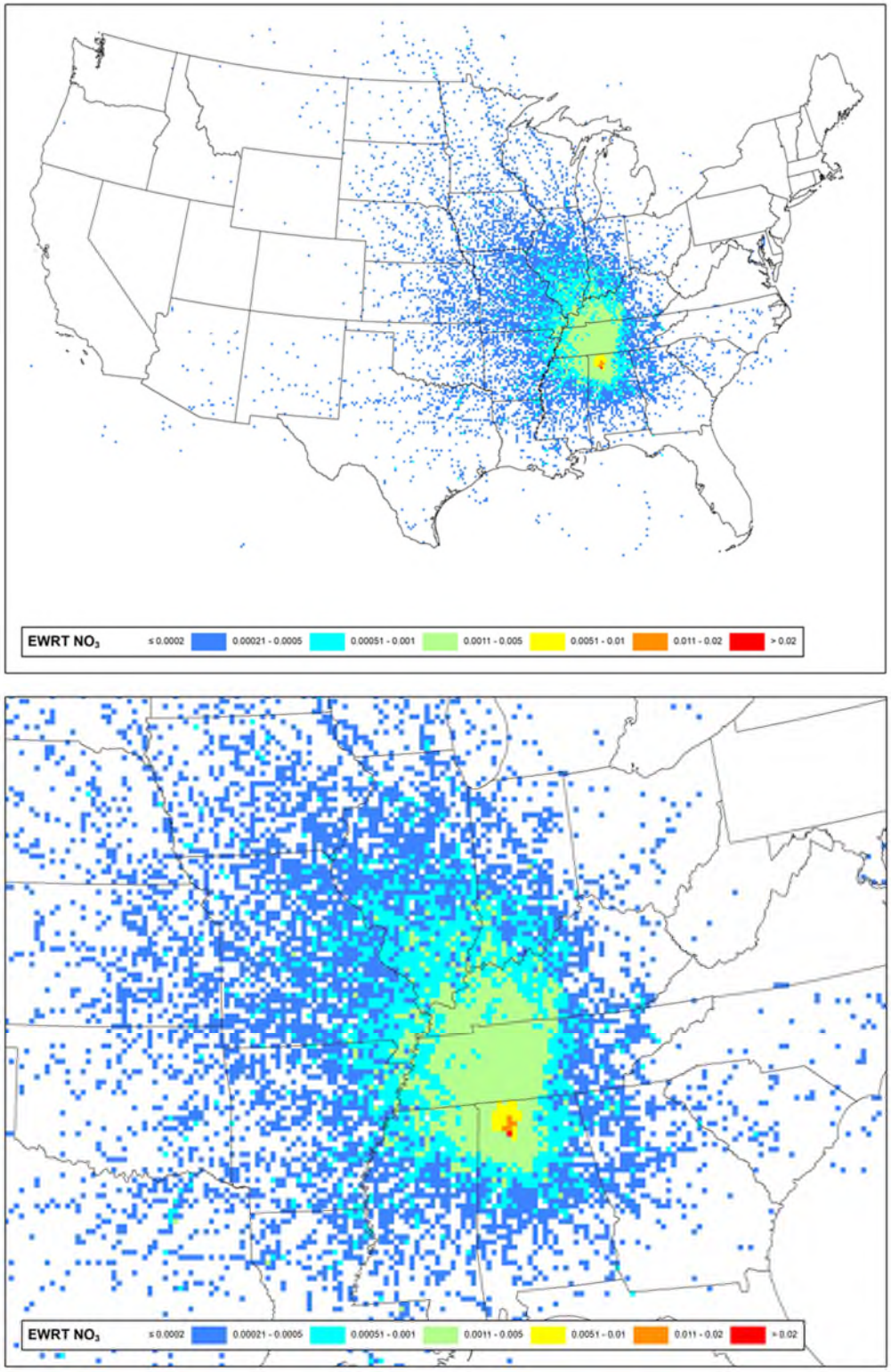


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Sipsey Wilderness Area - Full View (top) and Class I Zoom (bottom)

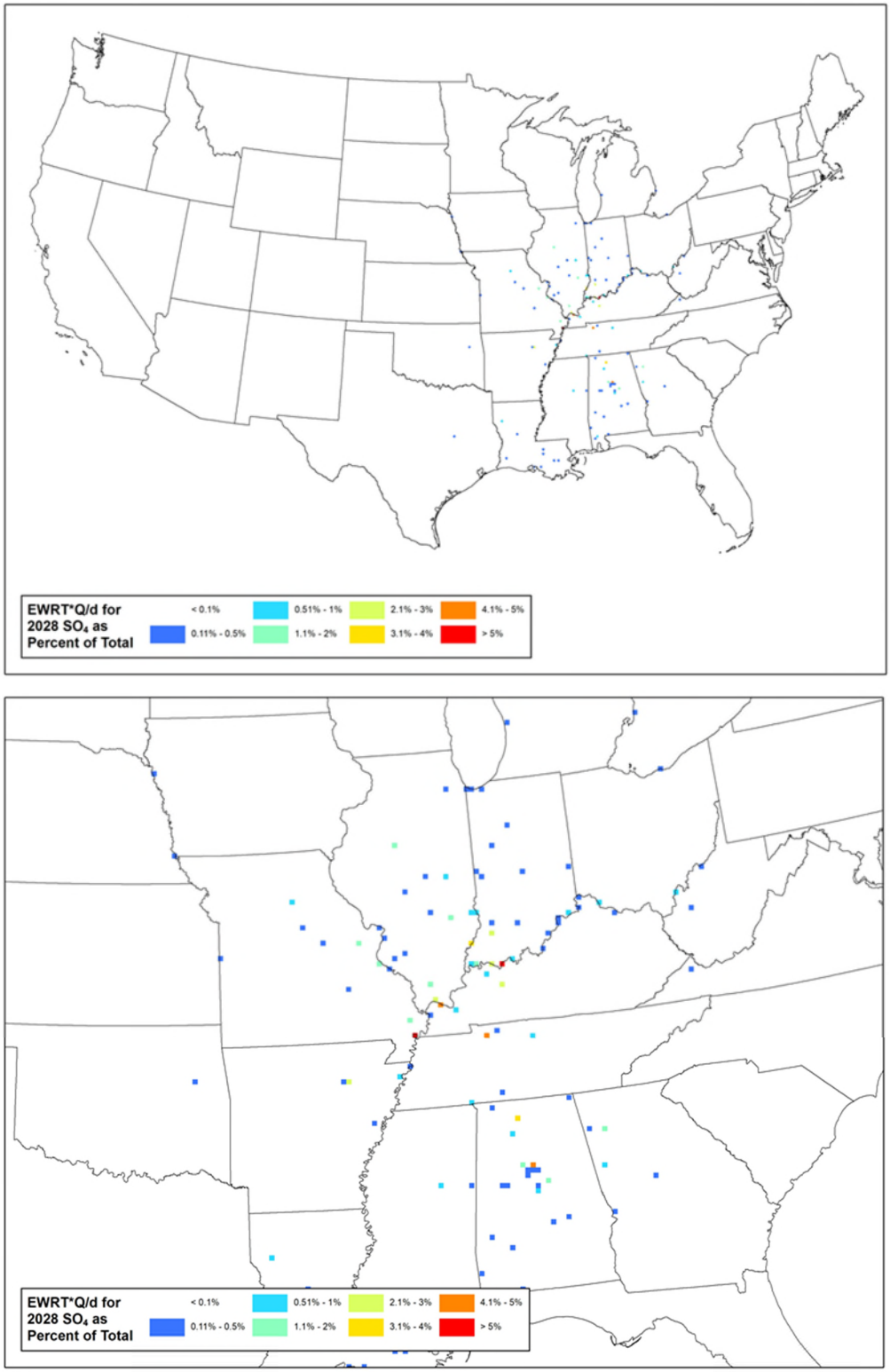
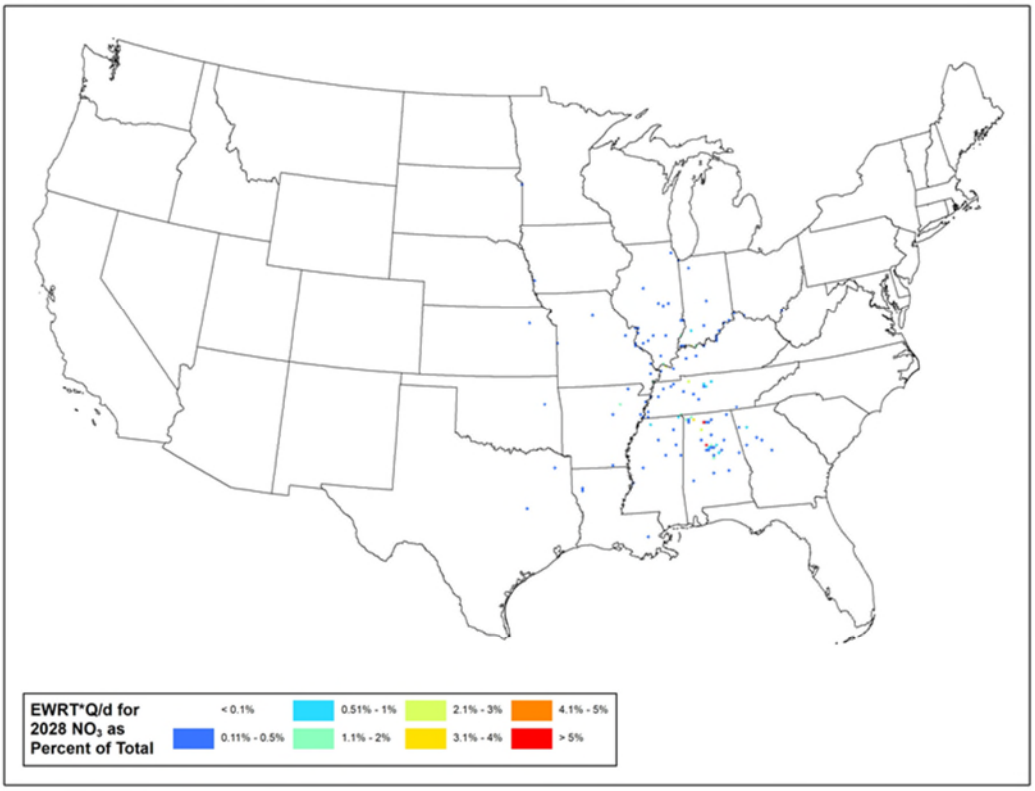


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)



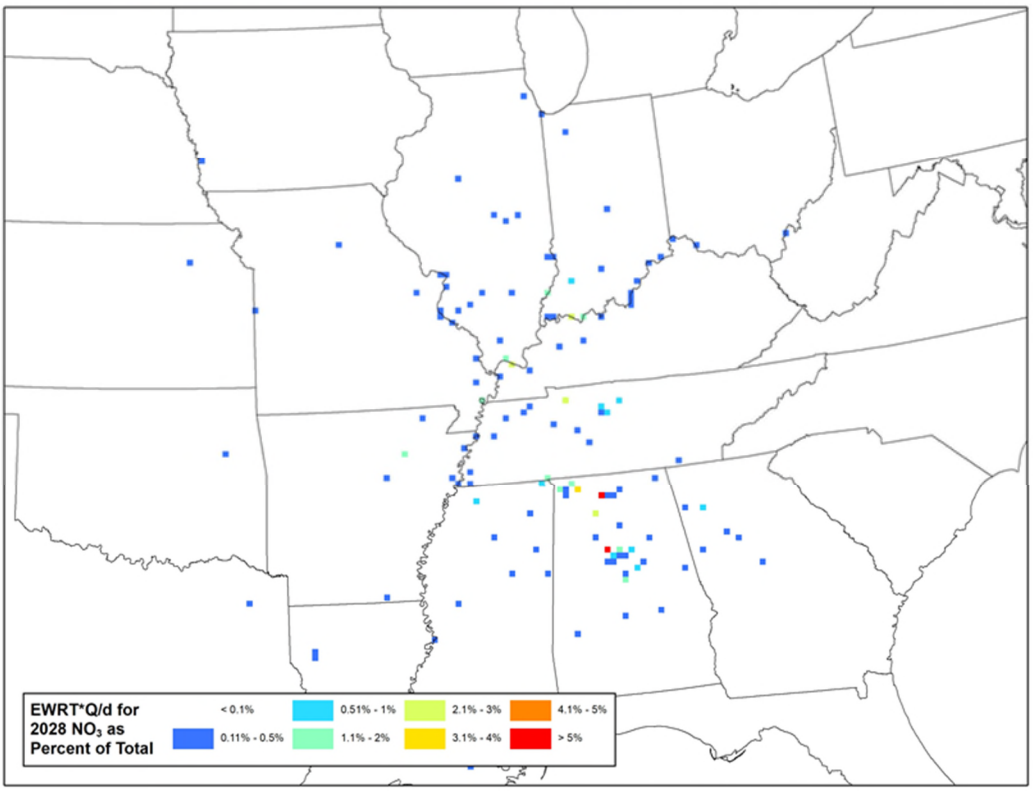


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

Swanquarter Wilderness Area

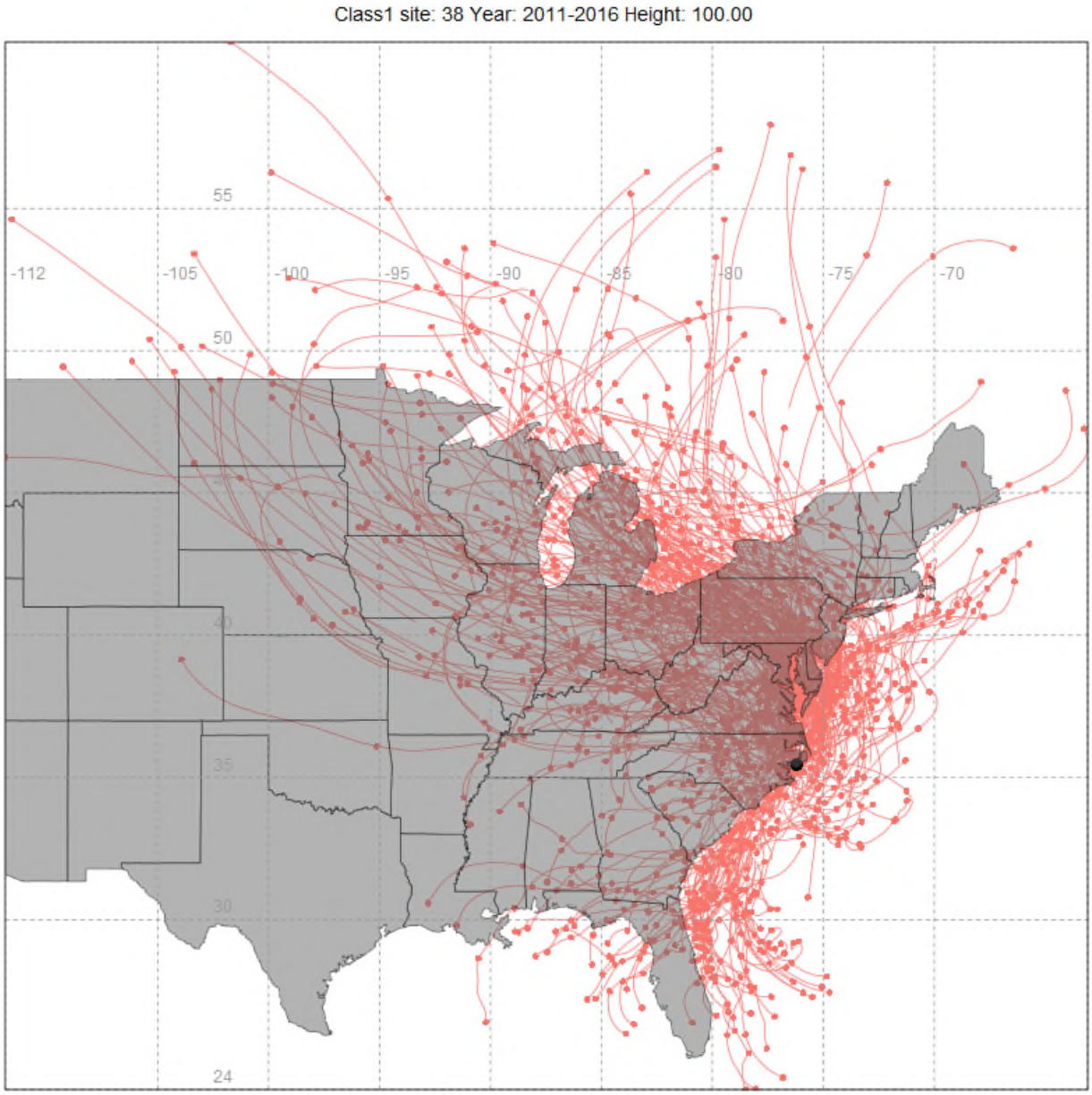


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Swanquarter Wilderness Area

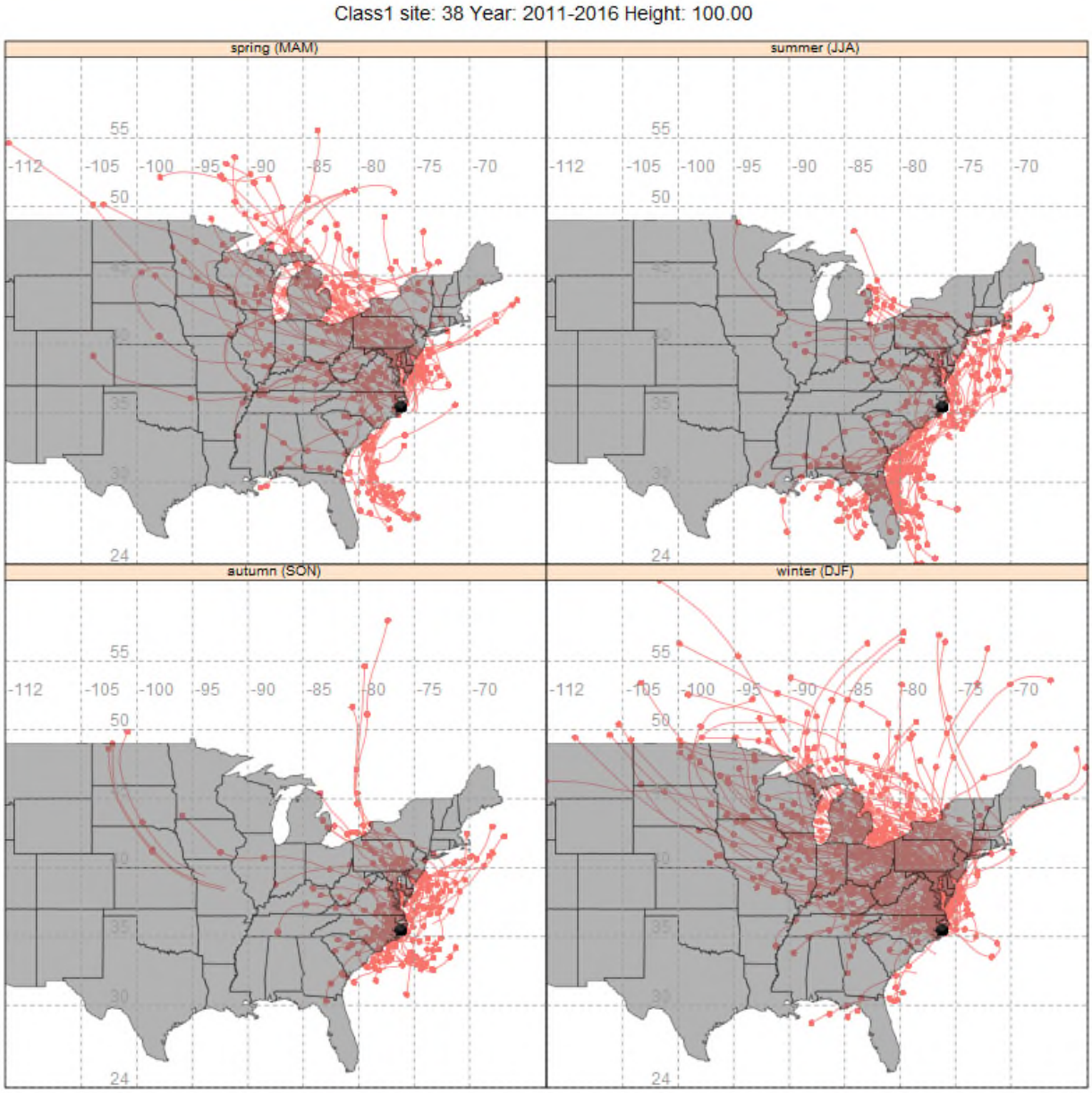


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Swanquarter Wilderness Area

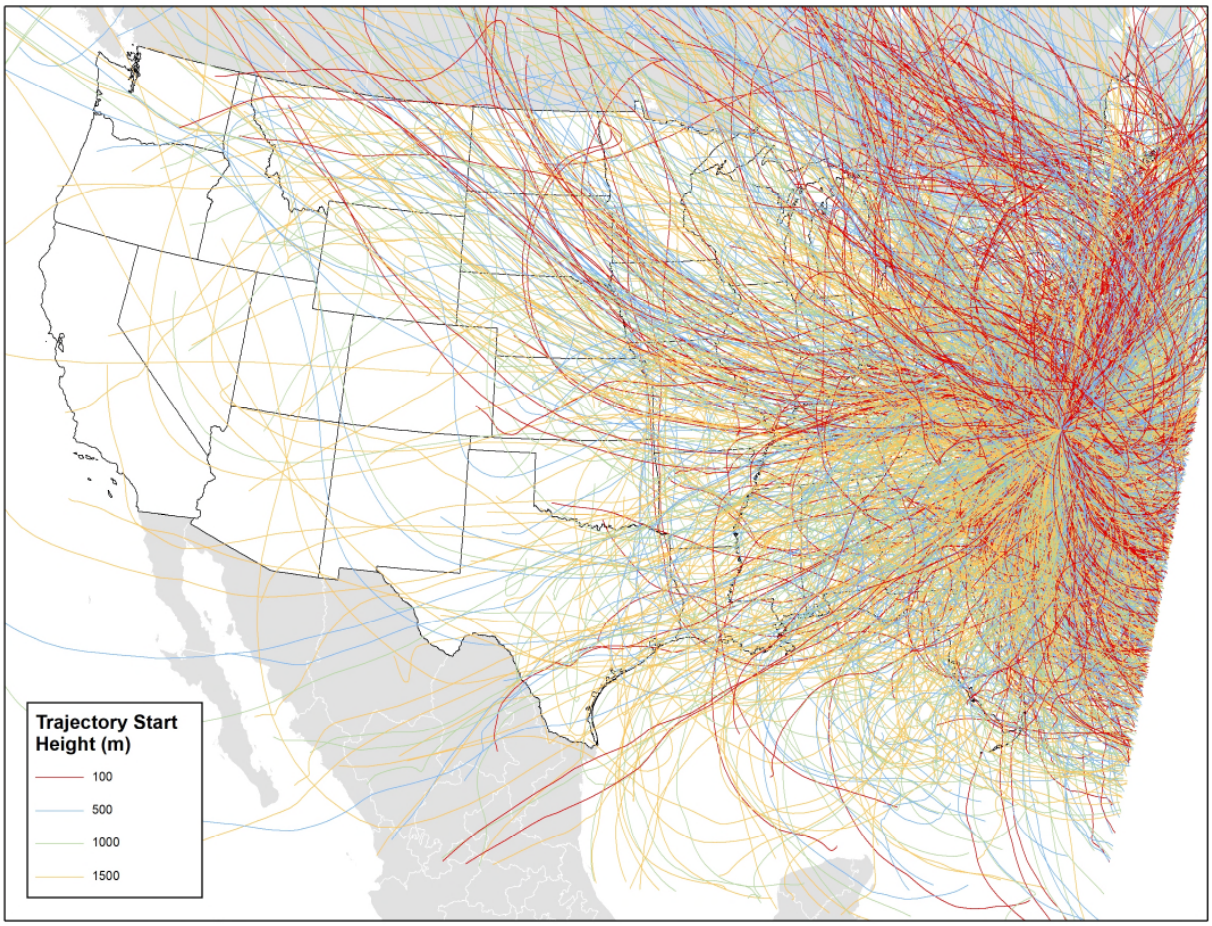


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Swanquarter Wilderness Area

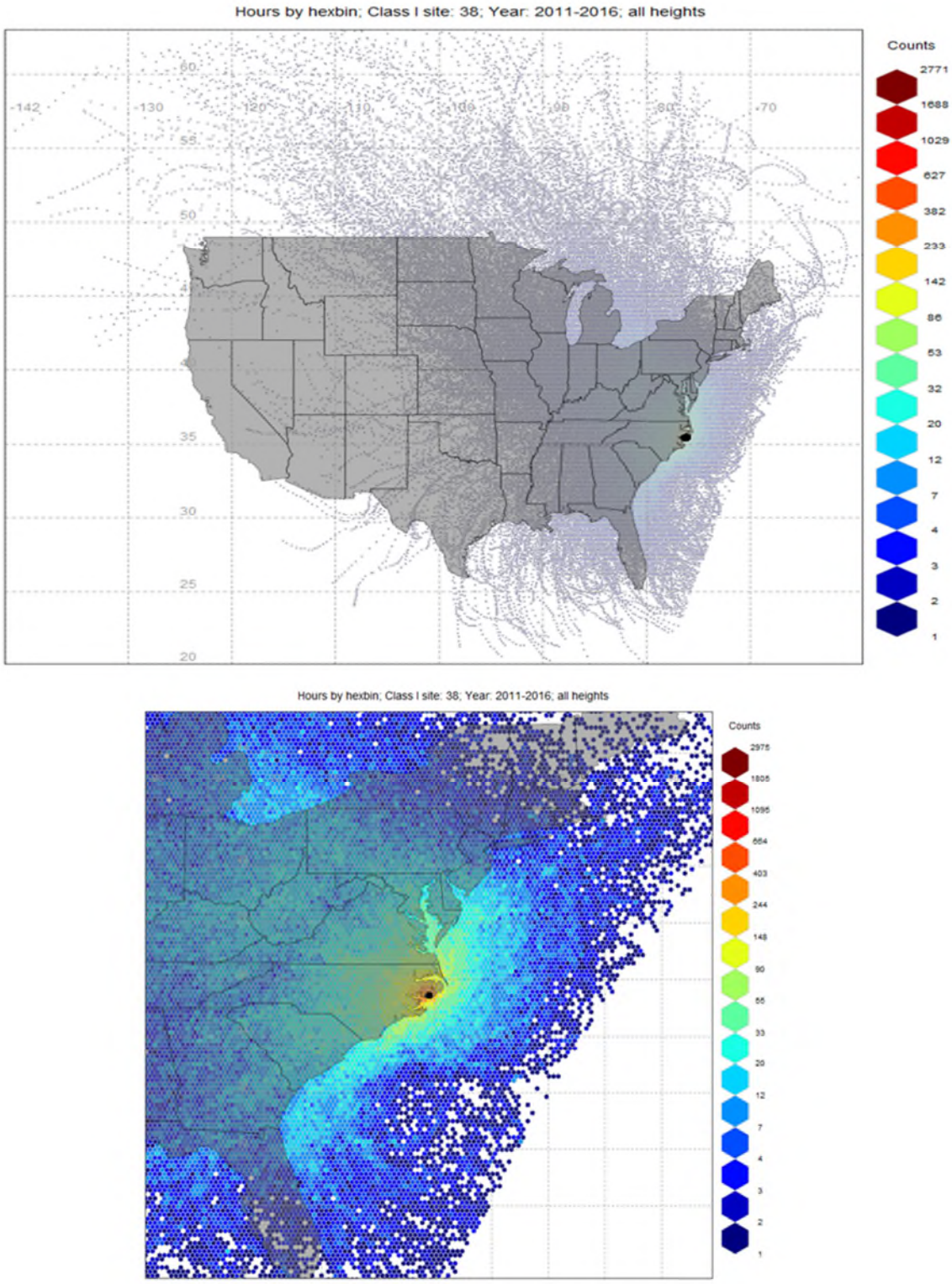


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

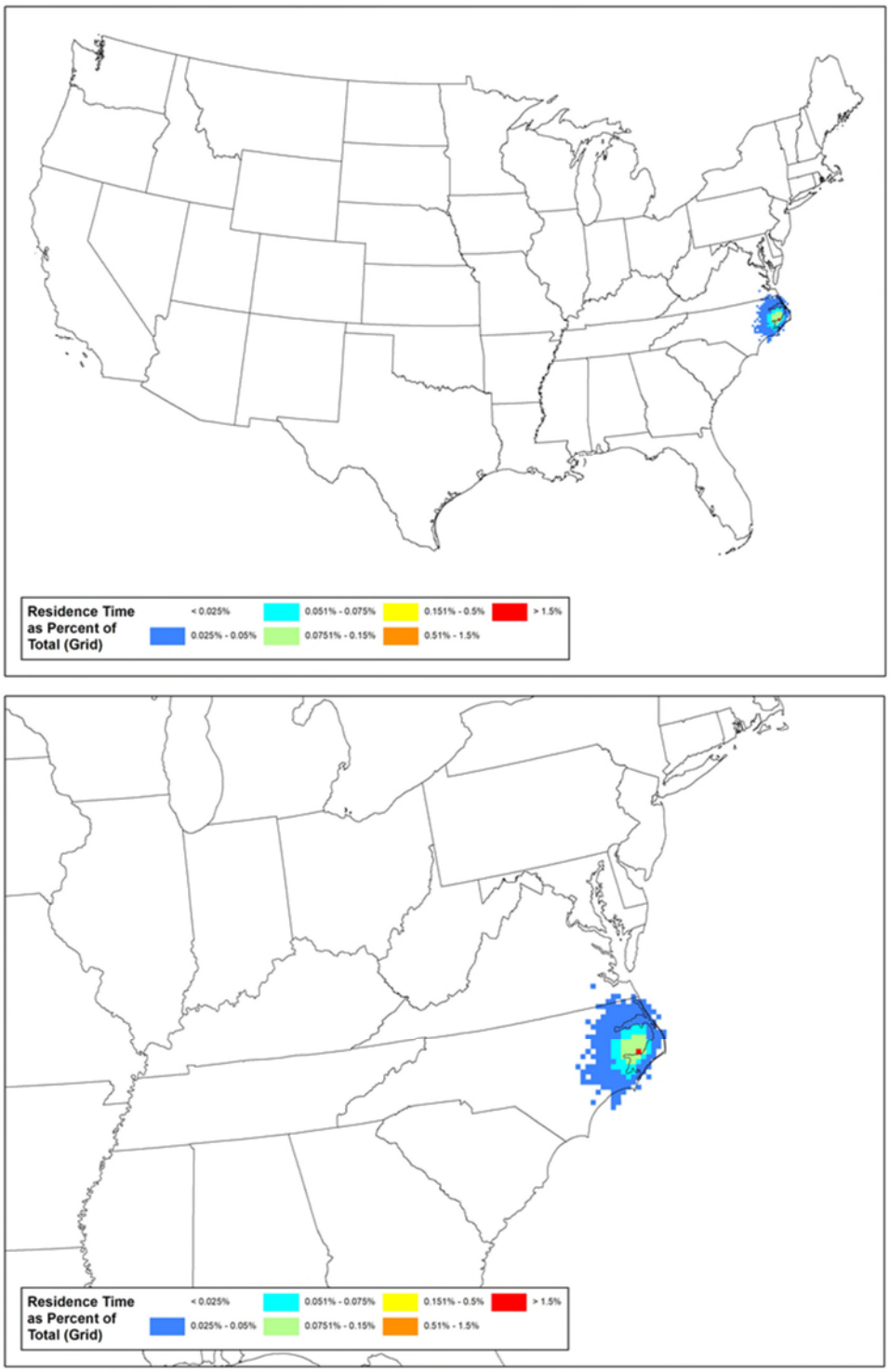


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

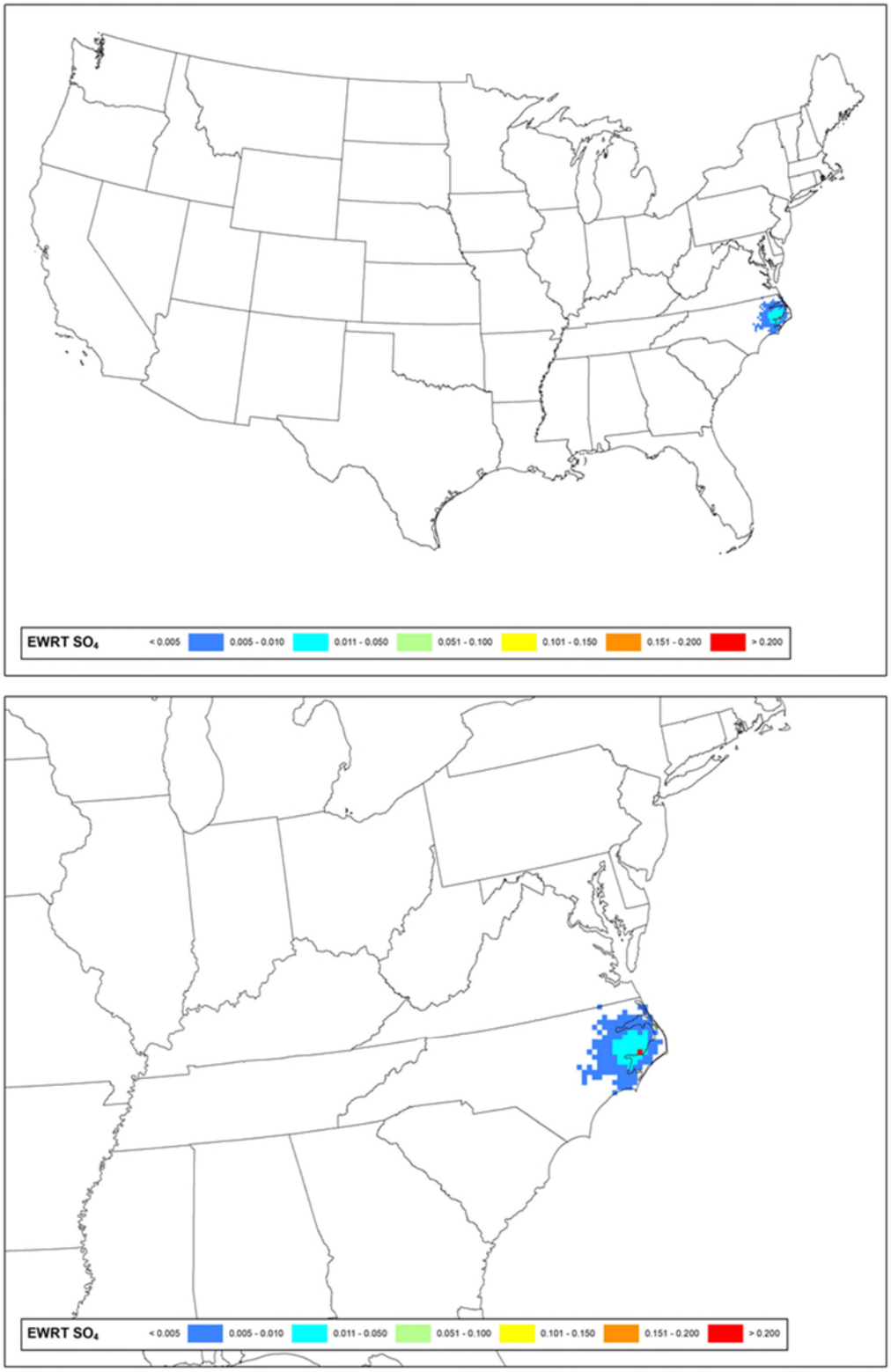


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area - Full View (top) and Class I Zoom (bottom)

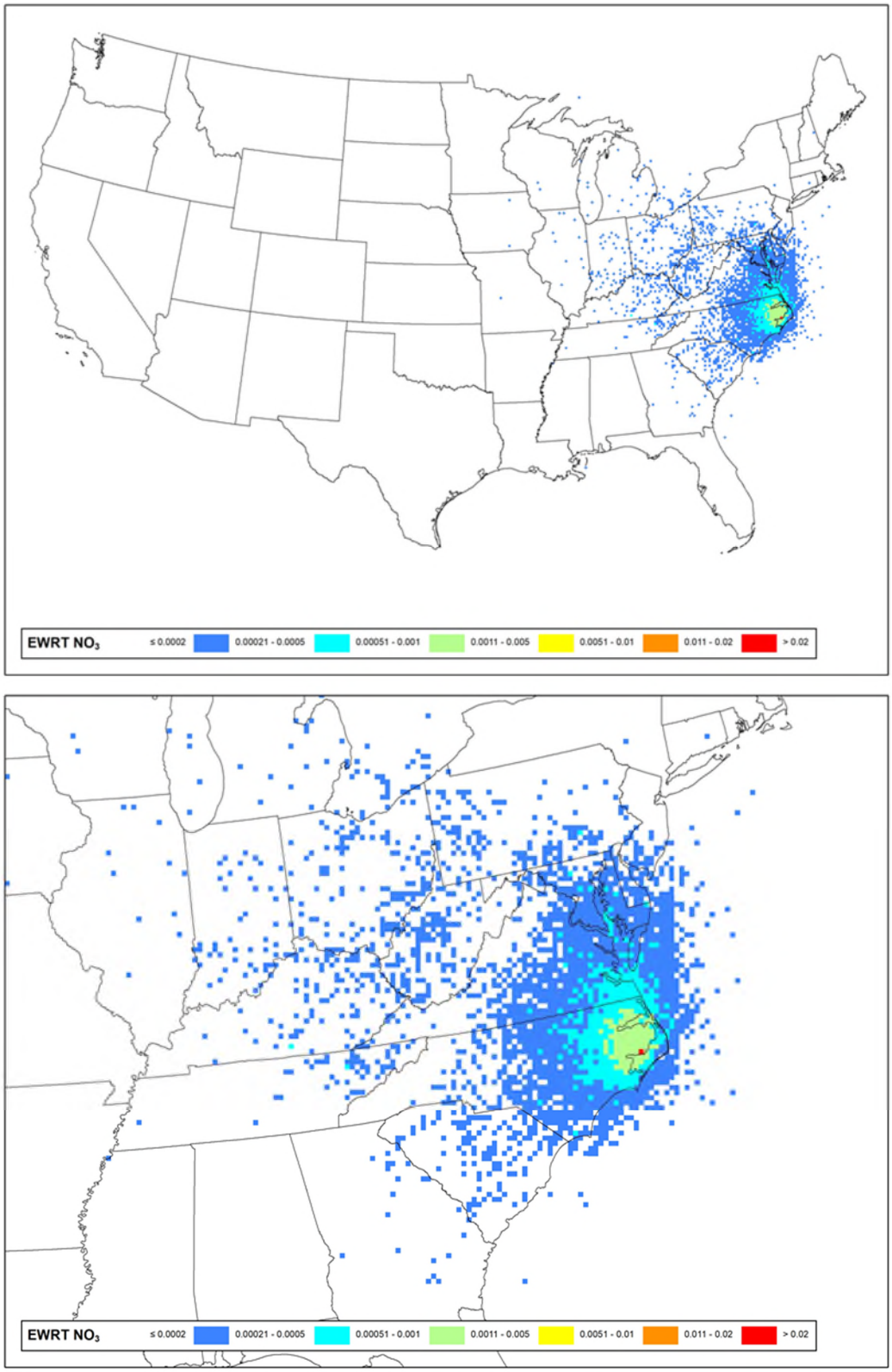


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Swanquarter Wilderness Area - Full View (top) and Class I Zoom (bottom)

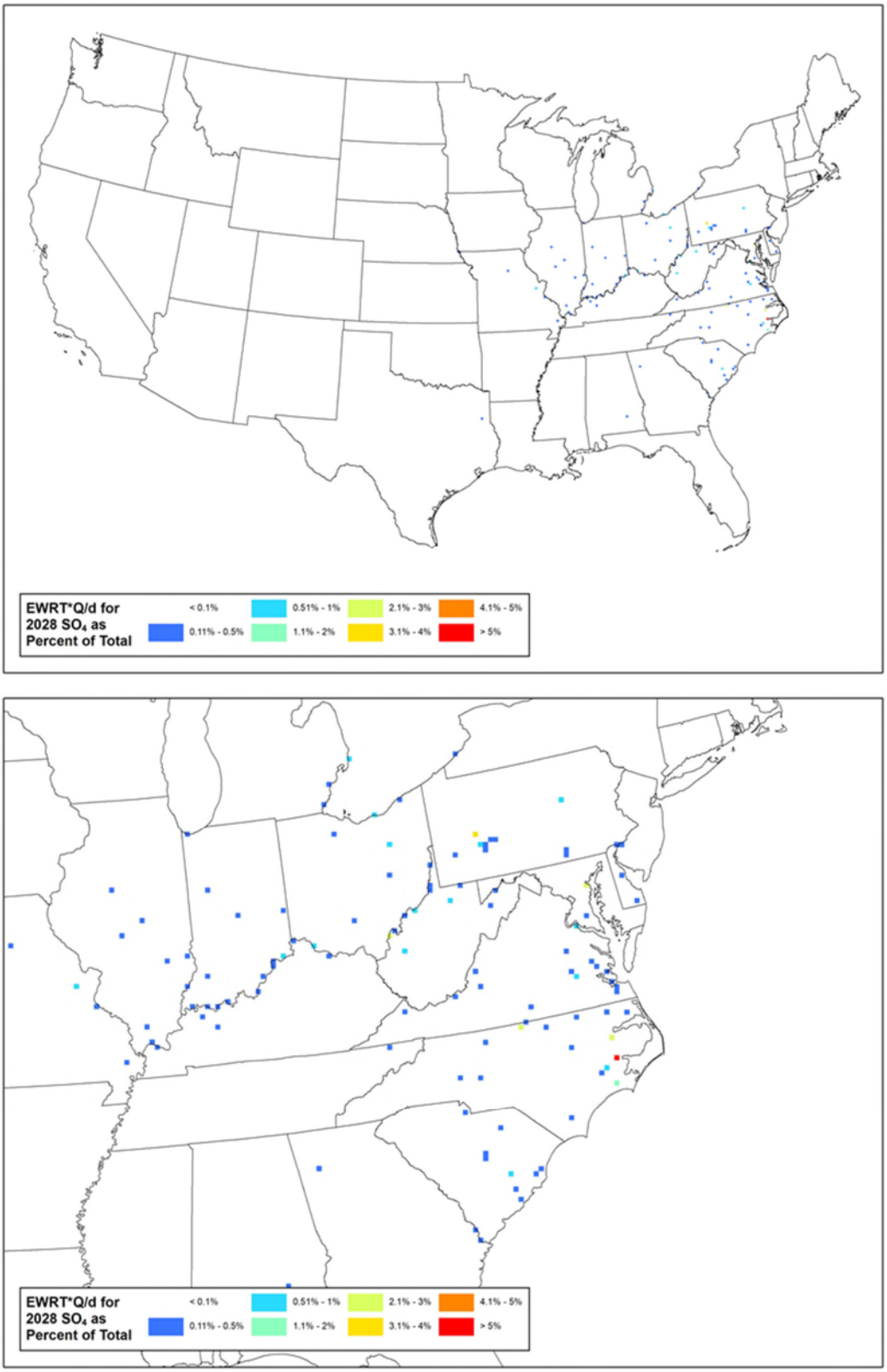


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

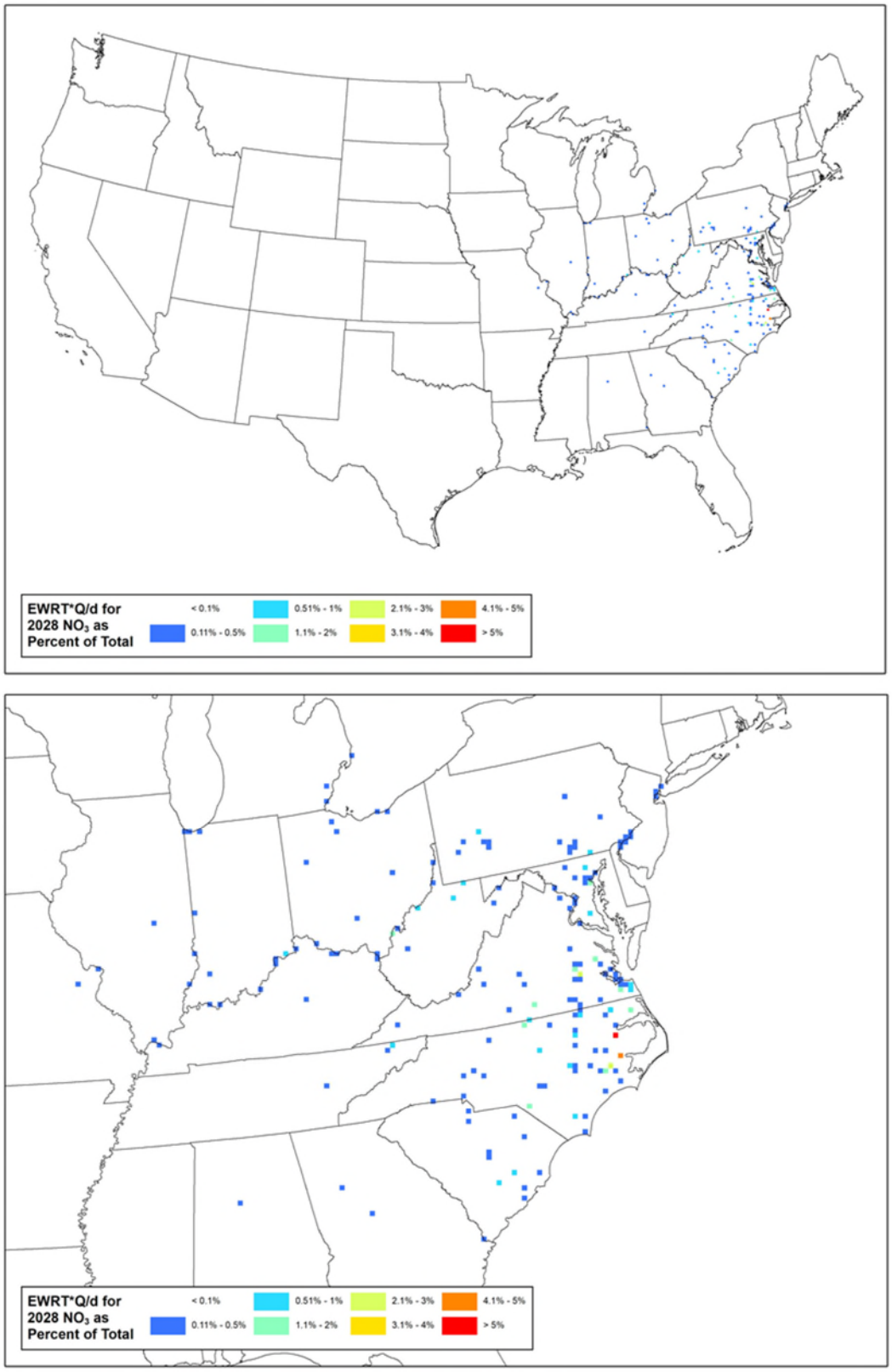


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

Upper Buffalo Wilderness Area

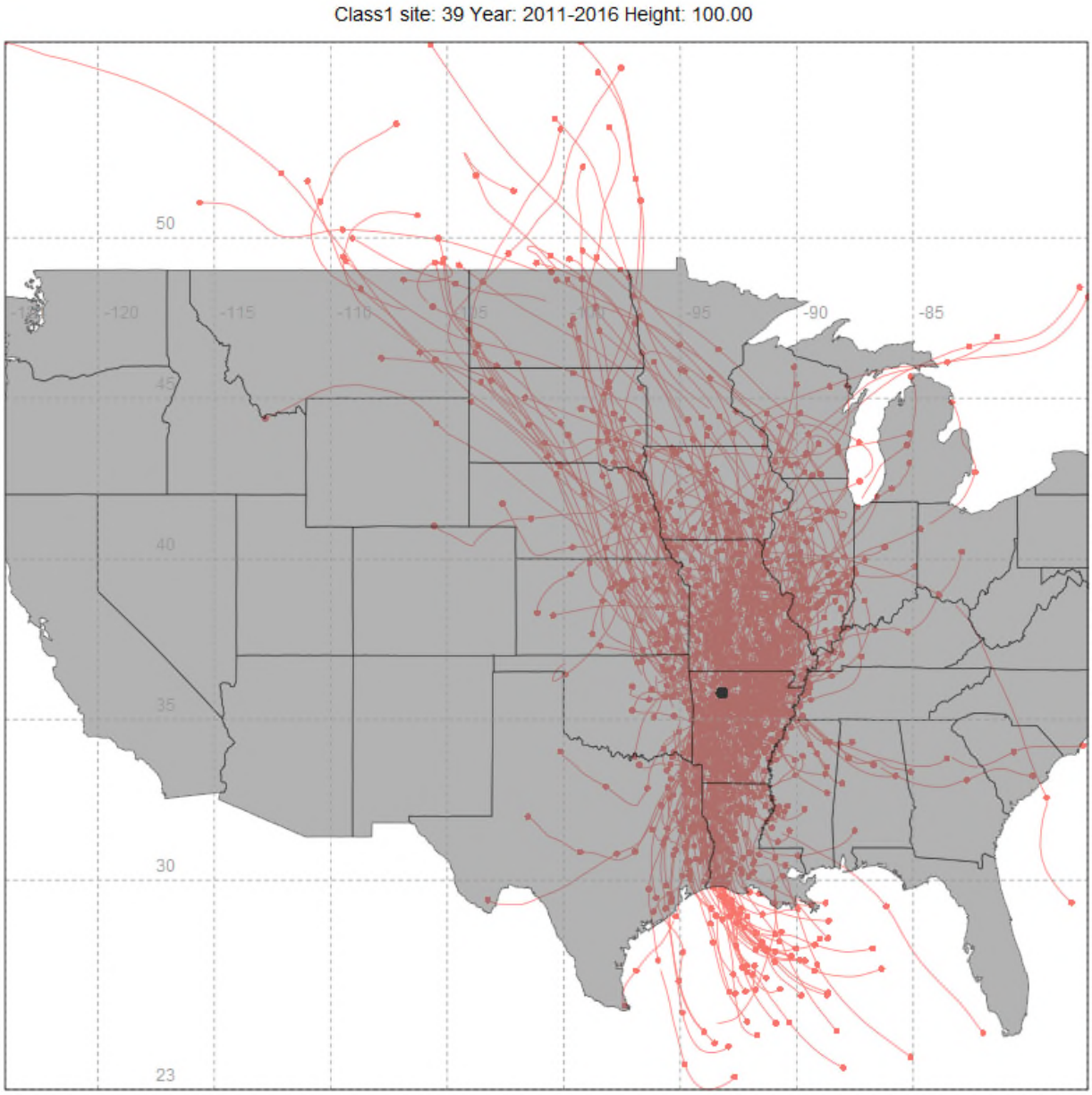


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Upper Buffalo Wilderness Area

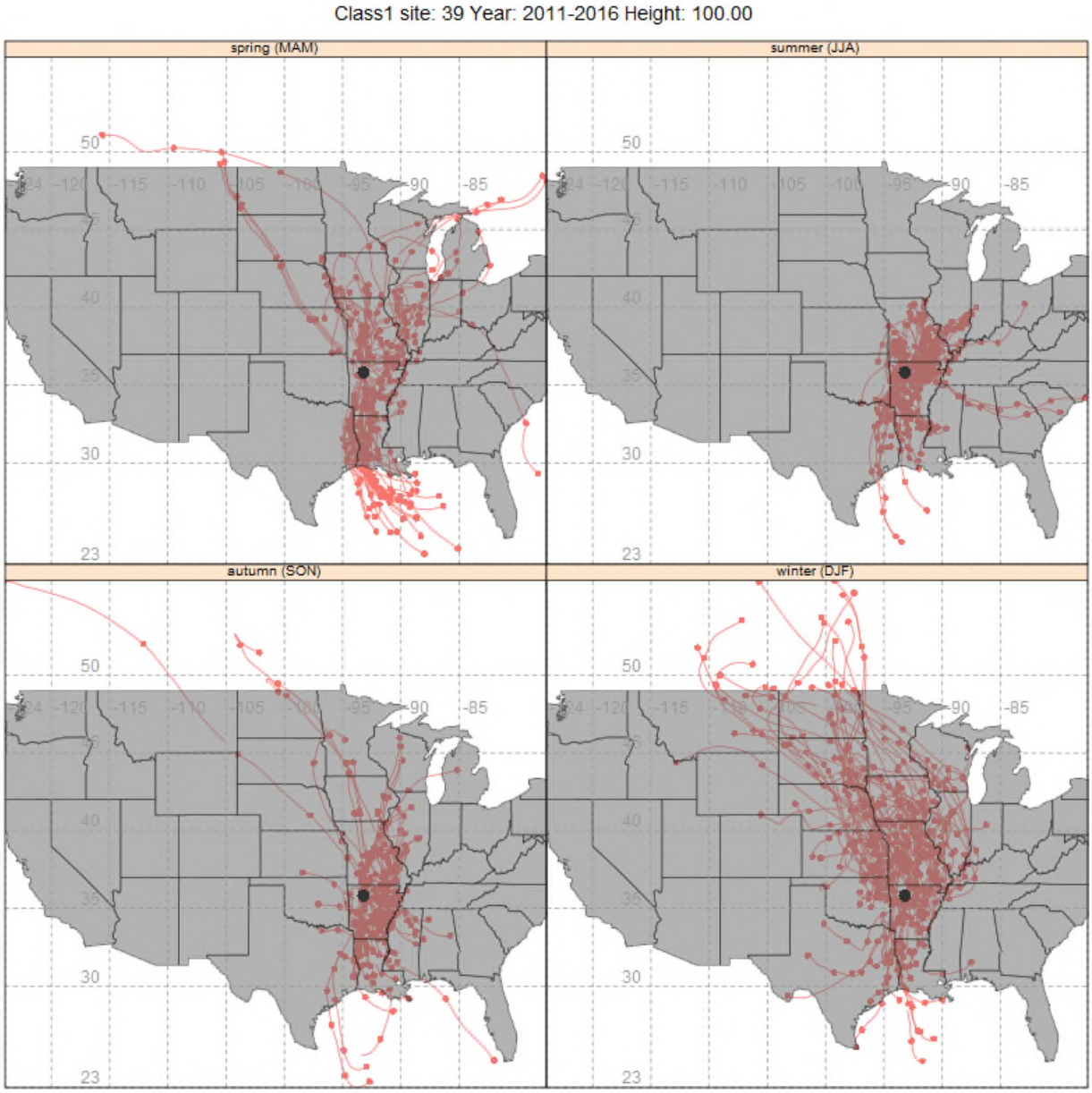


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Upper Buffalo Wilderness Area

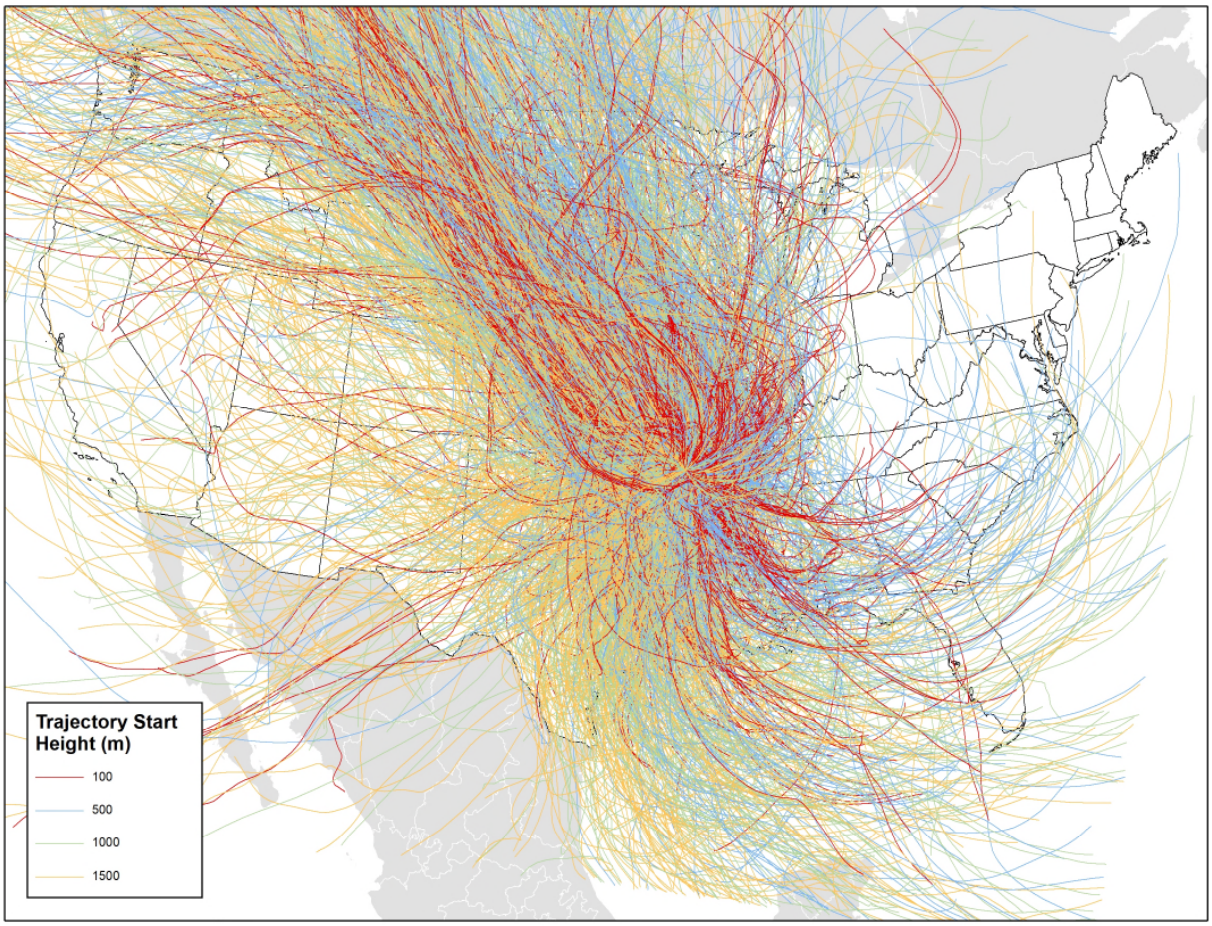
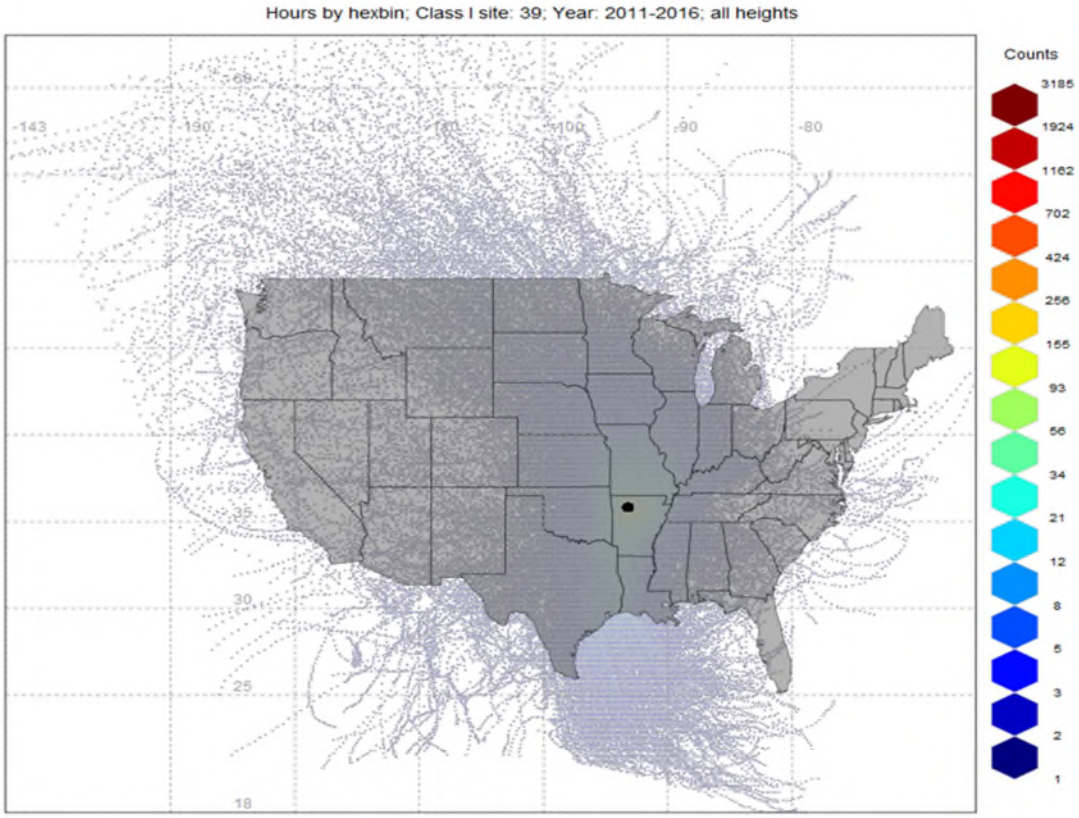


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Upper Buffalo Wilderness Area



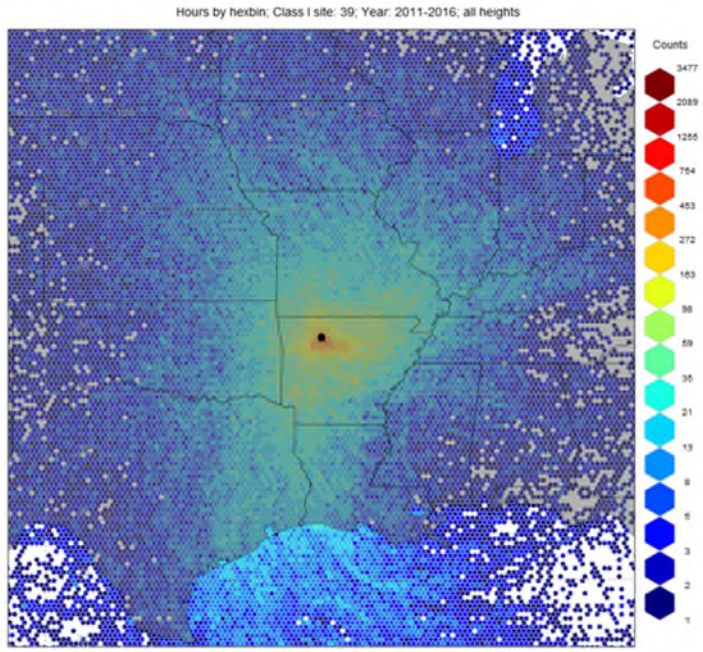


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

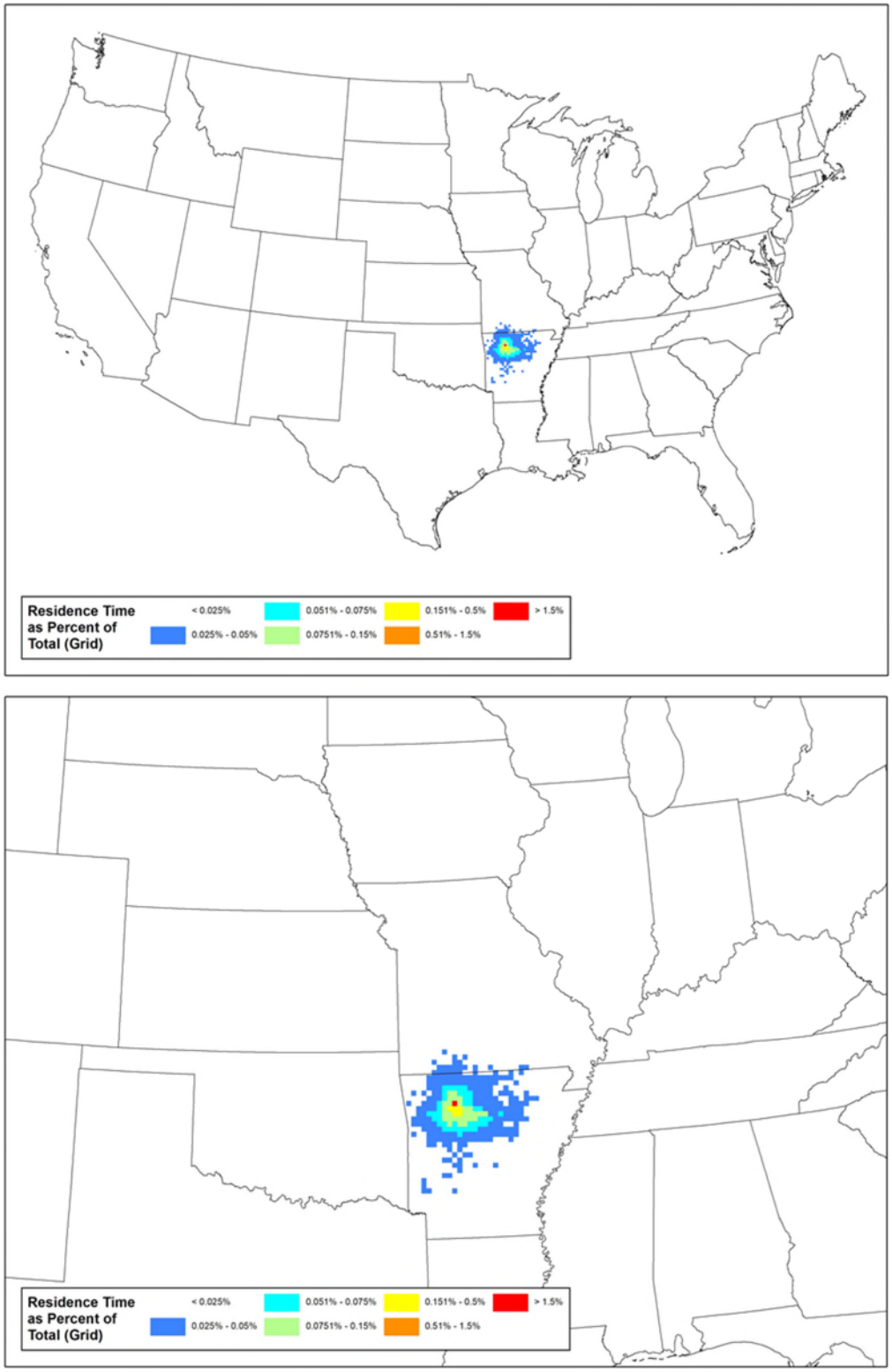


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

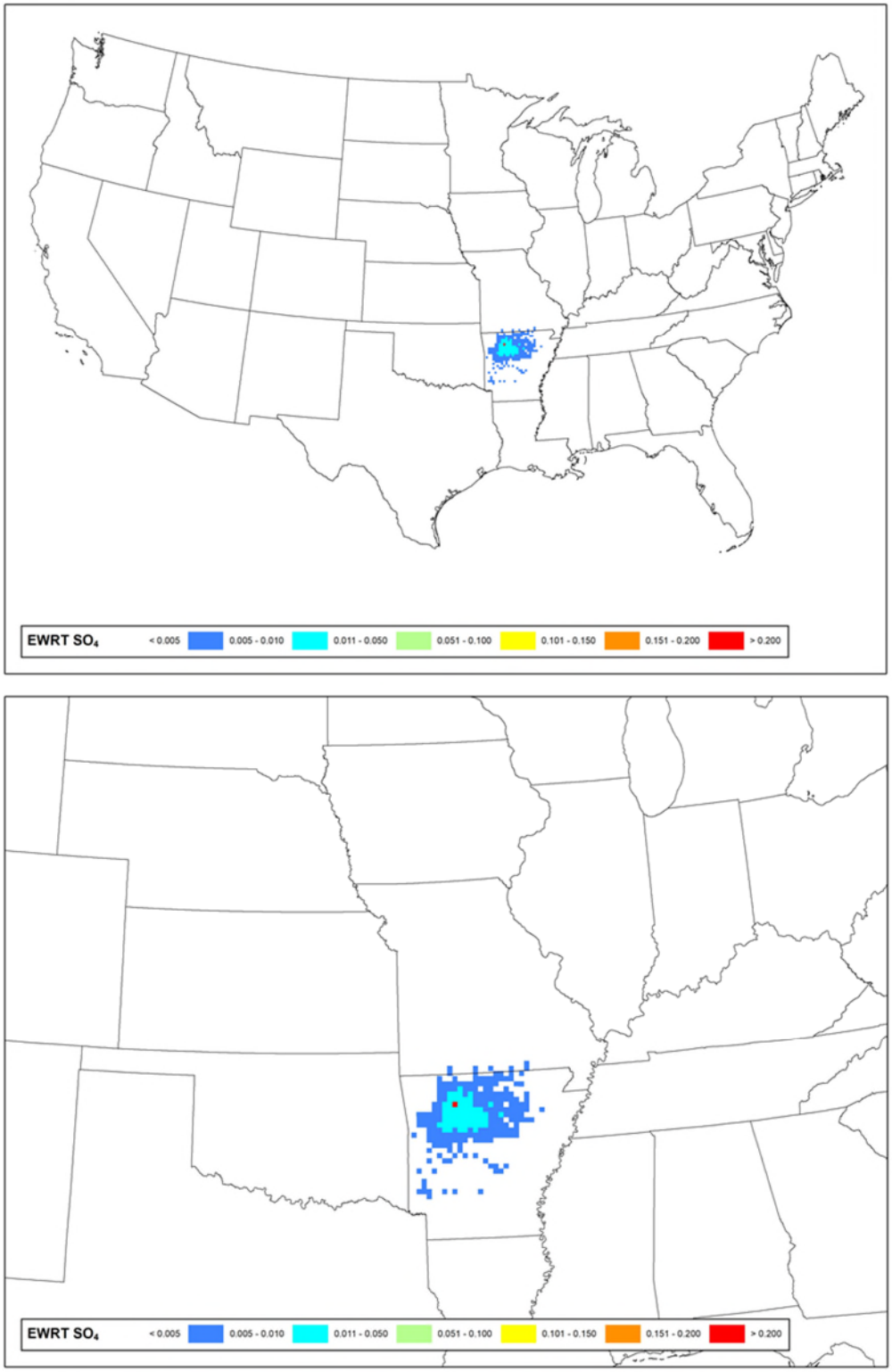


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area - Full View (top) and Class I Zoom (bottom)

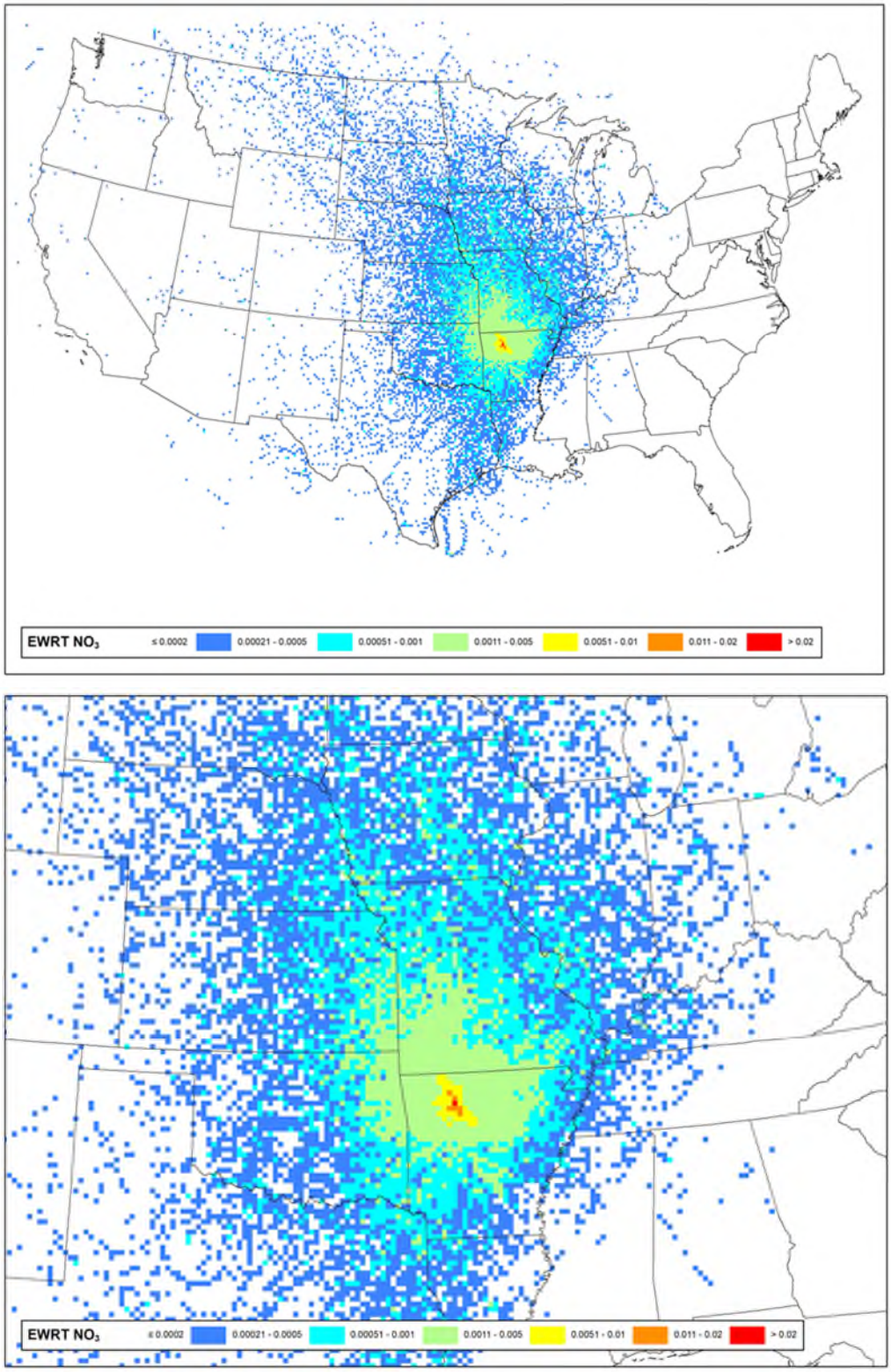
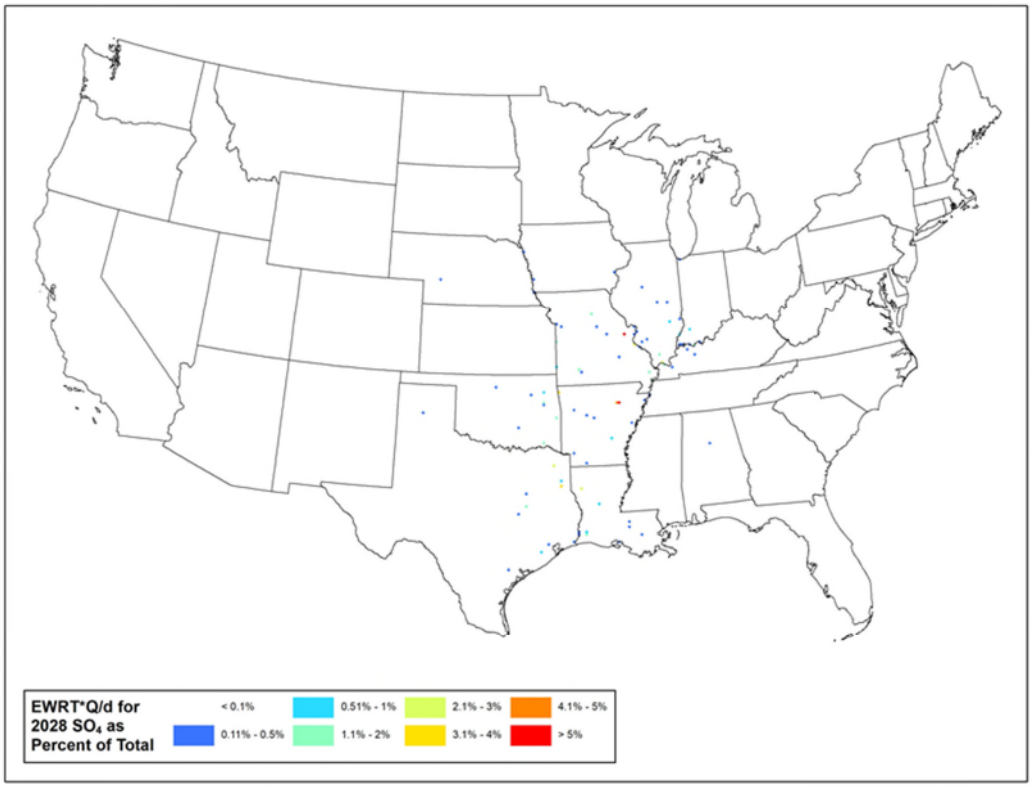


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Upper Buffalo Wilderness Area - Full View (top) and Class I Zoom (bottom)



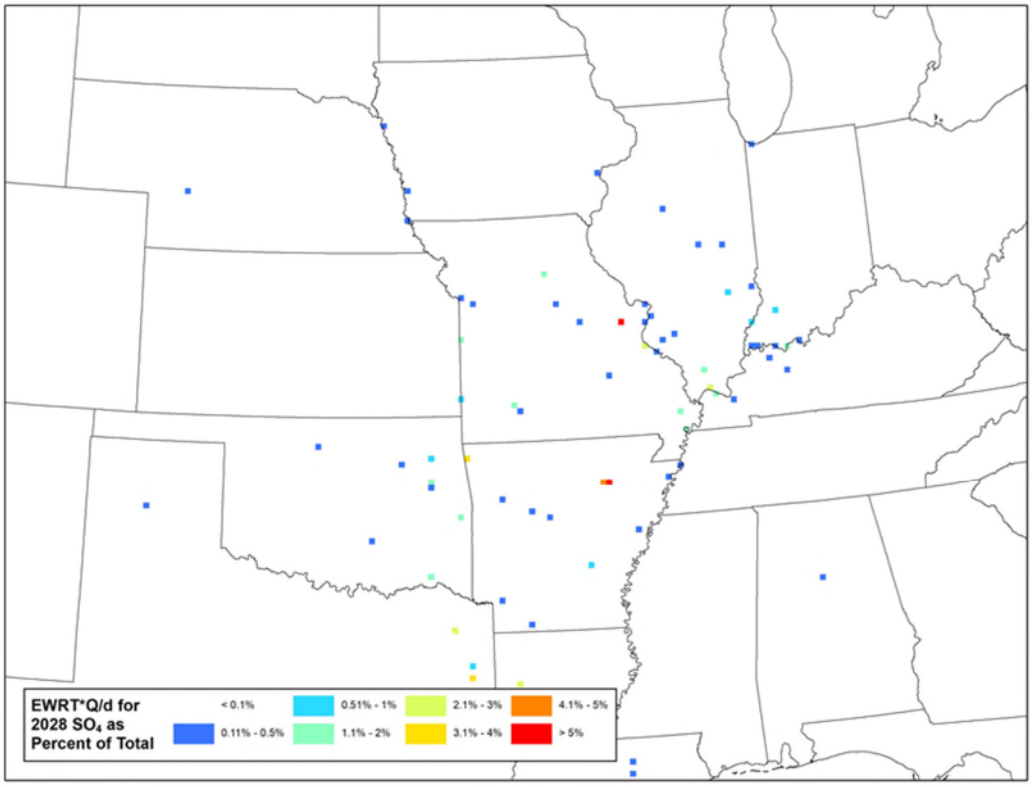


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

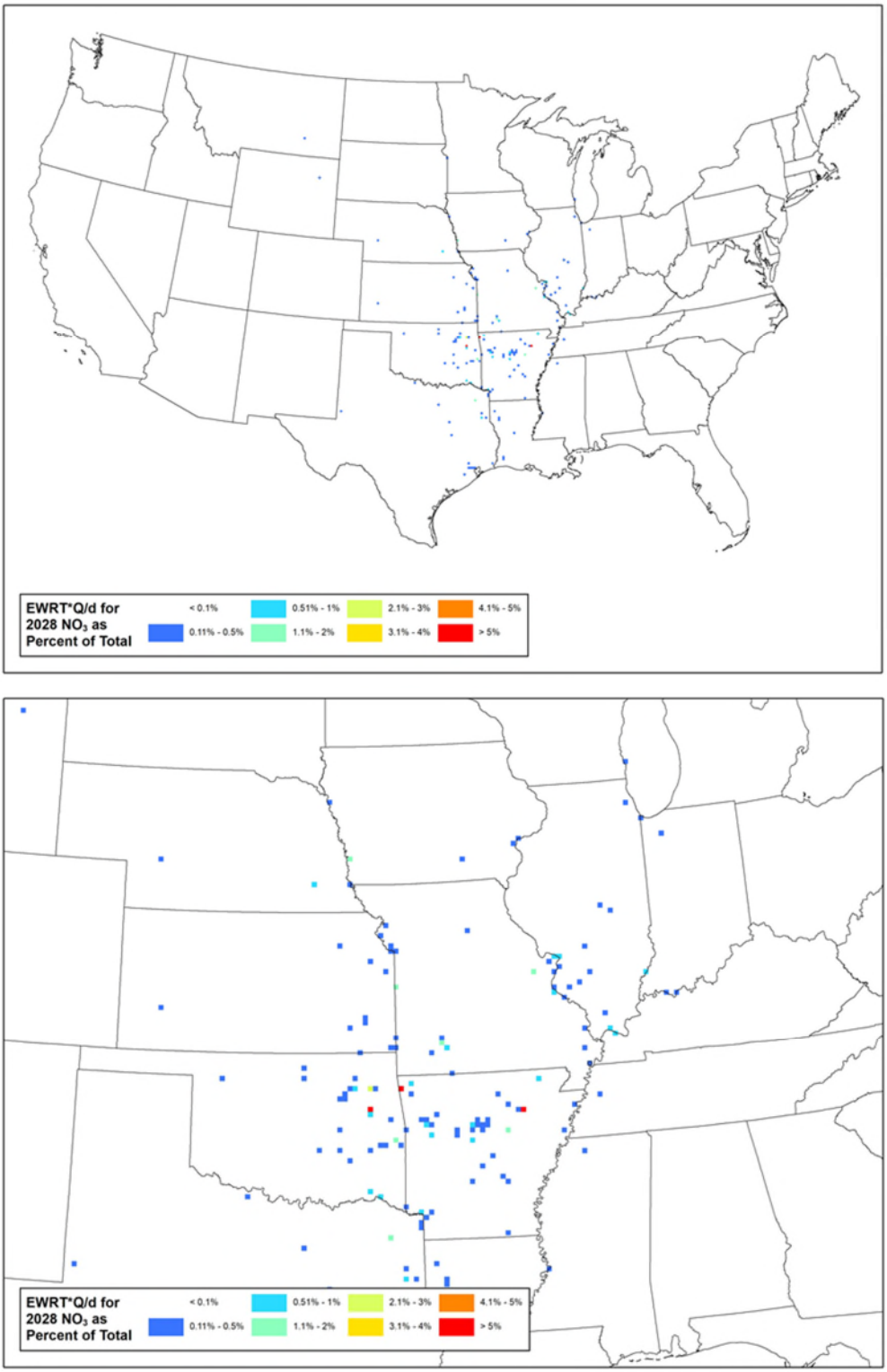


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d*EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)