# **Appendix D-2**

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

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### **Brigantine Wilderness Area**

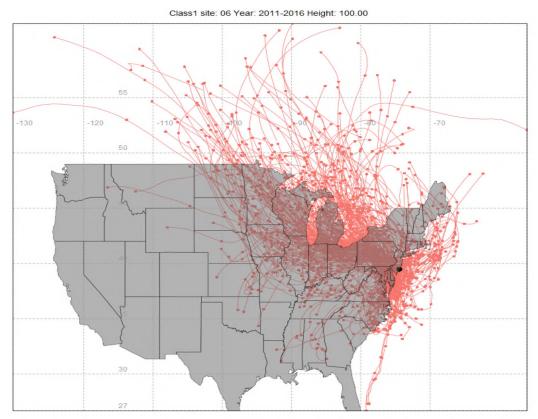


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Brigantine Wilderness Area

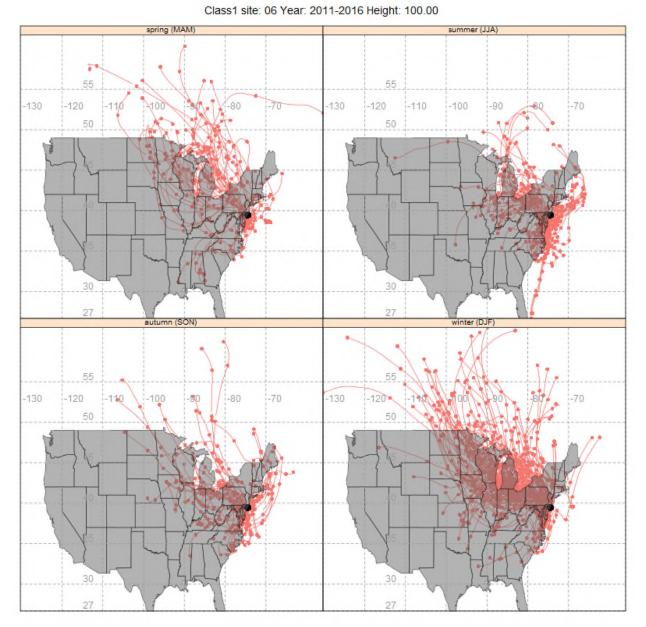


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Brigantine Wilderness Area

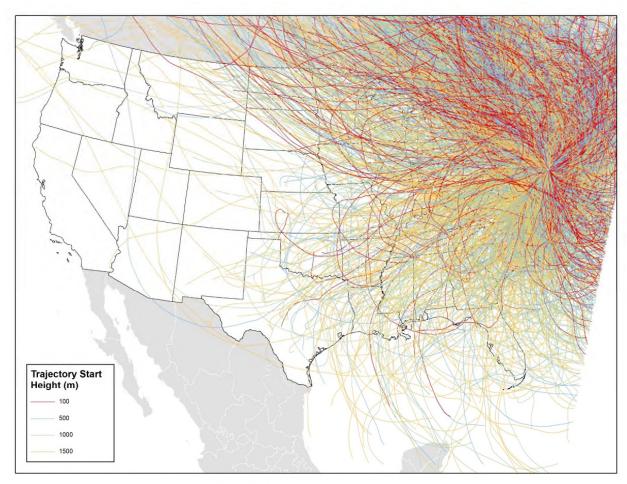


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Brigantine Wilderness Area

Hours by hexbin; Class I site: 06; Year: 2011-2016; all heights

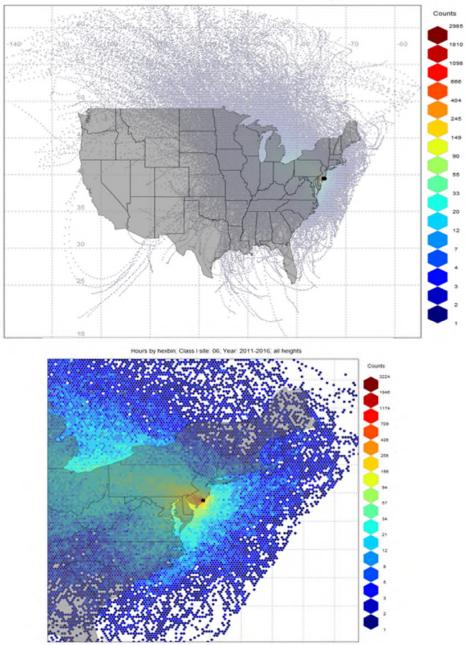


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

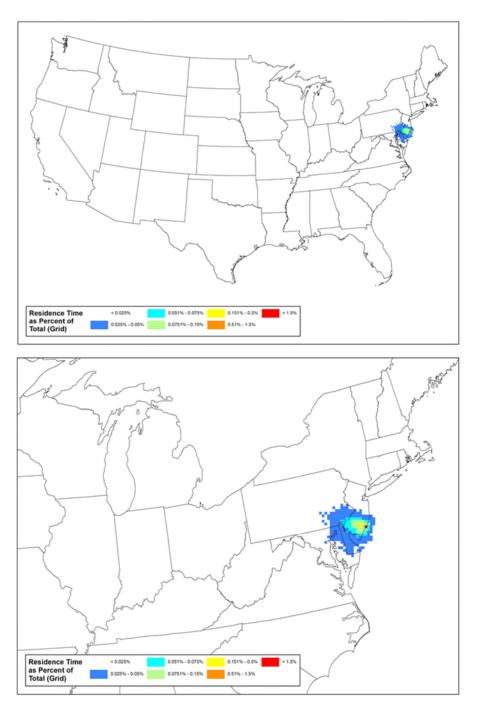
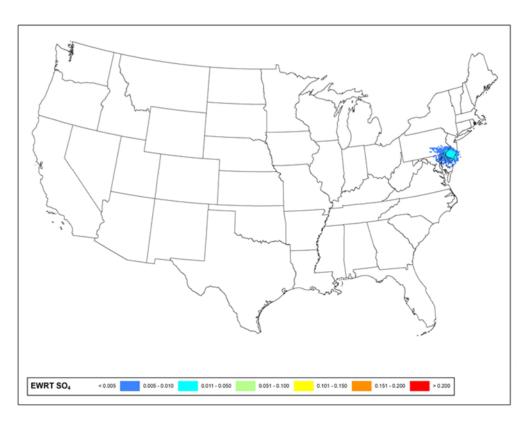


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)



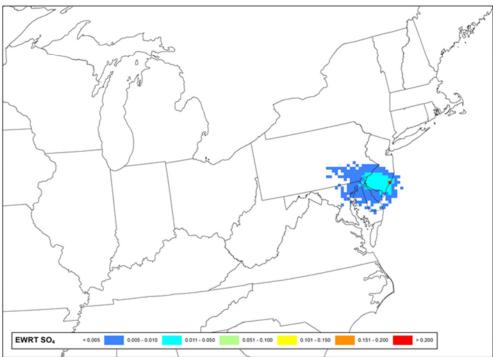


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area - Full View (top) and Class I Zoom (bottom)

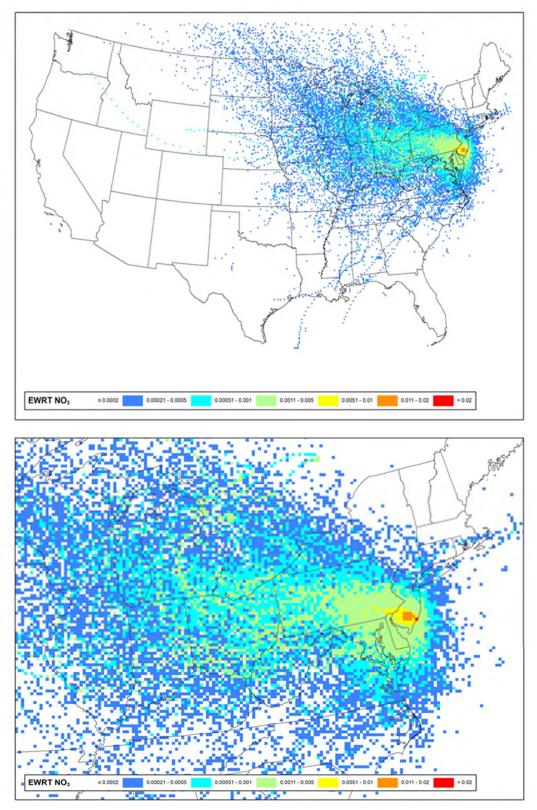


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Brigantine Wilderness Area - Full View (top) and Class I Zoom (bottom)

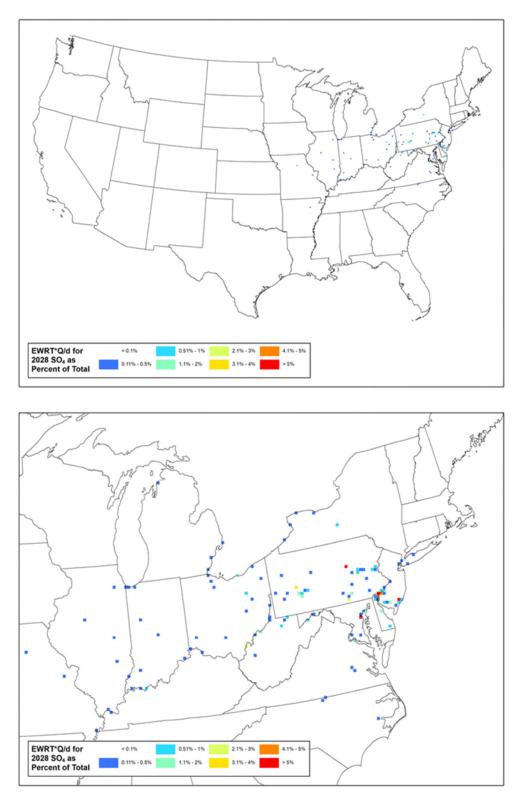


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

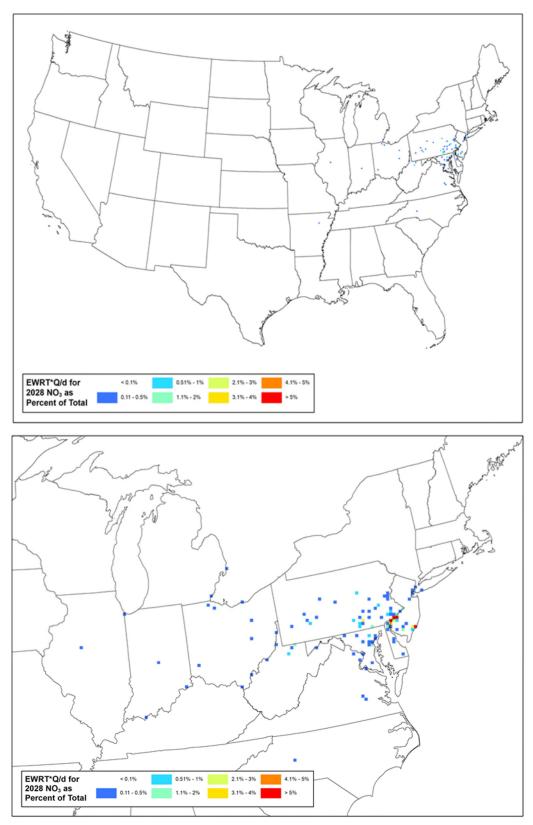
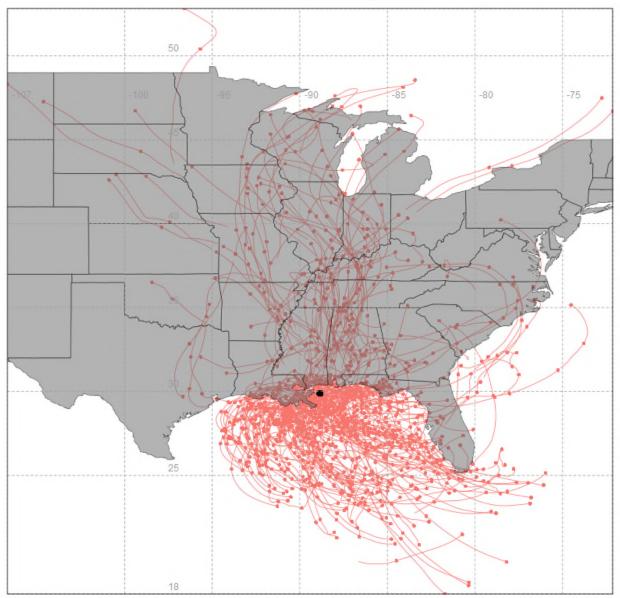


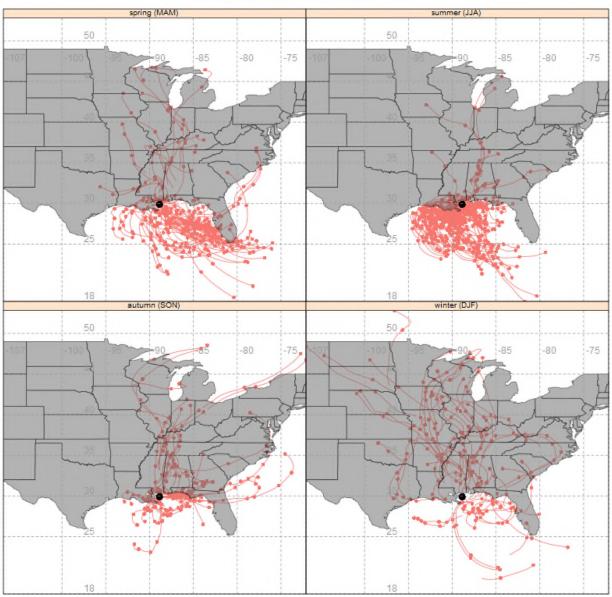
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Brigantine Wilderness Area – Full View (top) and Class I Zoom (bottom)

#### **Breton Wilderness Area**



Class1 site: 07 Year: 2011-2016 Height: 100.00

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



Class1 site: 07 Year: 2011-2016 Height: 100.00

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

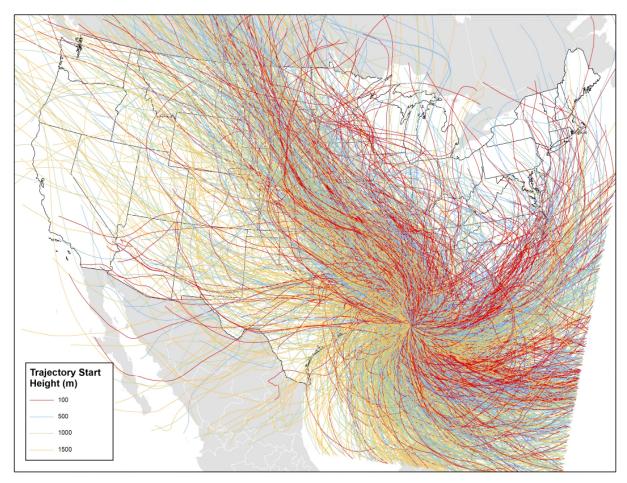
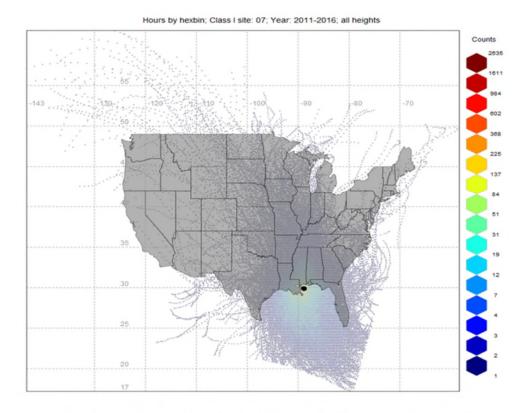


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Breton Wilderness Area



Hours by hexbin; Class I site: 07; Year: 2011-2016; all heights

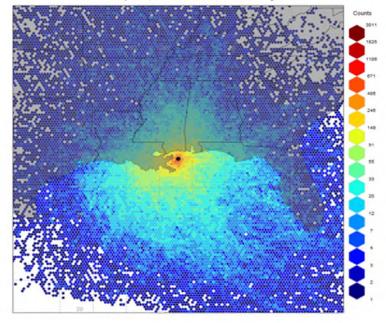


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

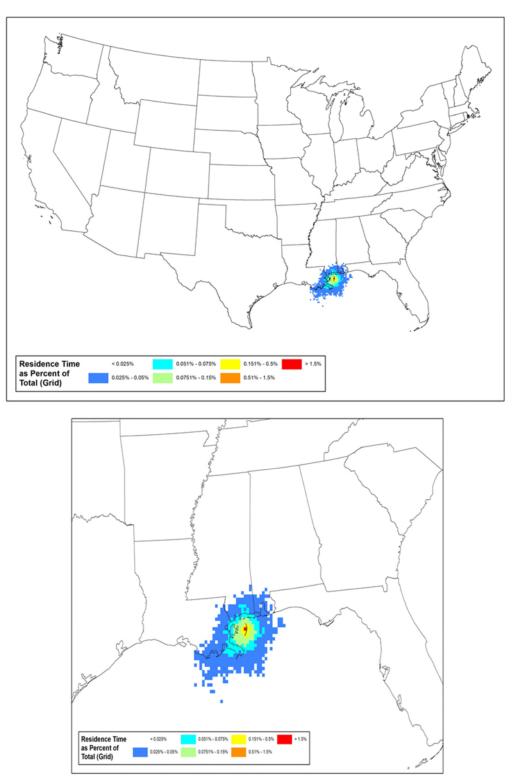


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

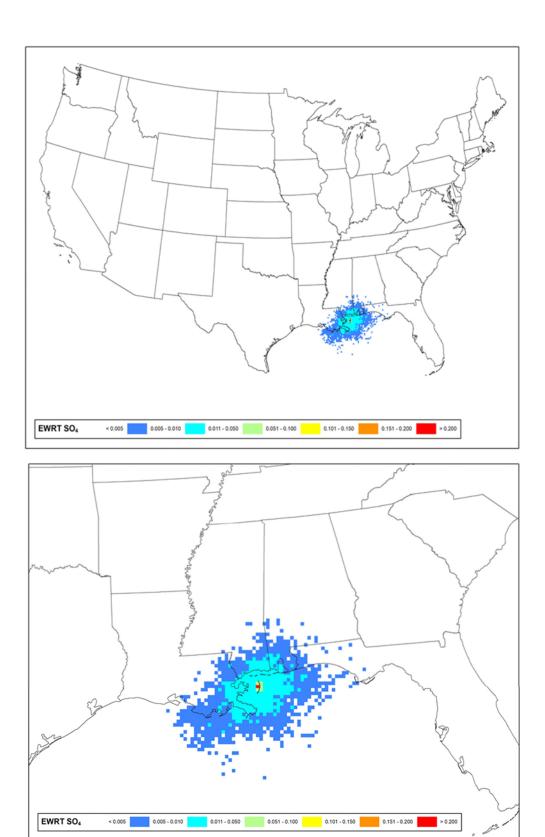
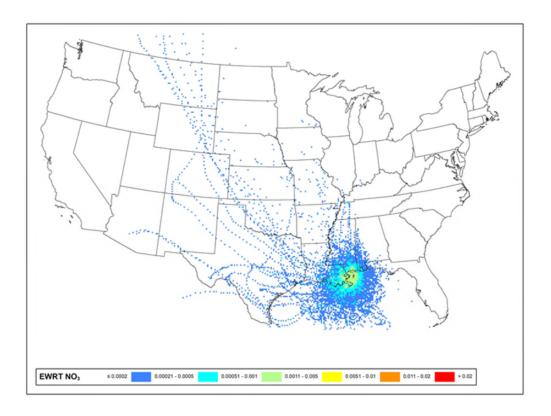


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area - Full View (top) and Class I Zoom (bottom)



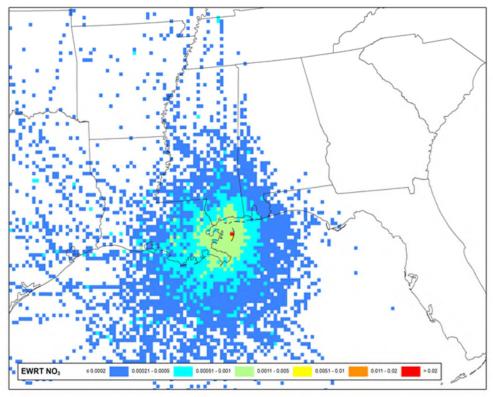


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Breton Wilderness Area - Full View (top) and Class I Zoom (bottom)

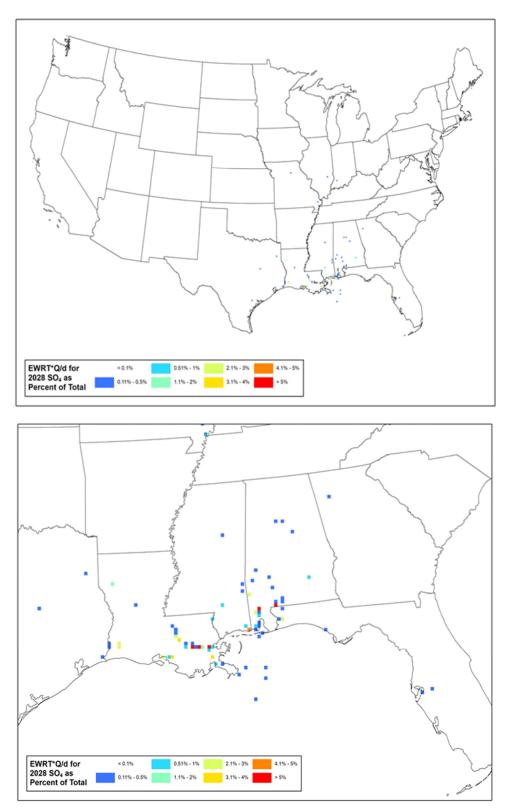


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

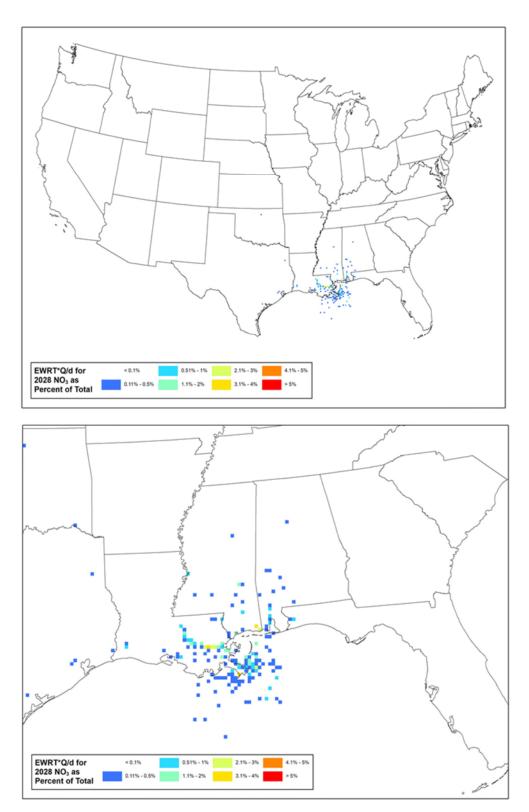
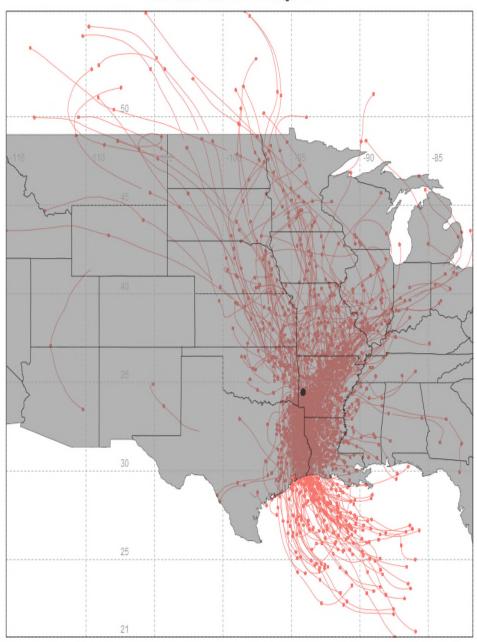


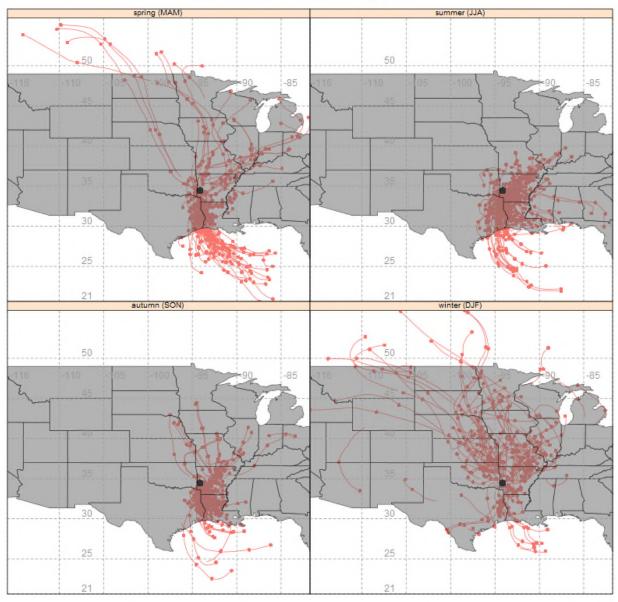
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Breton Wilderness Area – Full View (top) and Class I Zoom (bottom)

## **Caney Creek Wilderness Area**



Class1 site: 08 Year: 2011-2016 Height: 100.00

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



Class1 site: 08 Year: 2011-2016 Height: 100.00

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

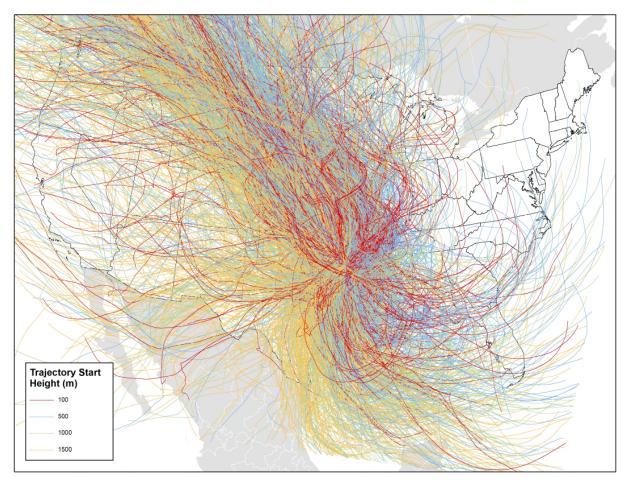


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Caney Creek Wilderness Area

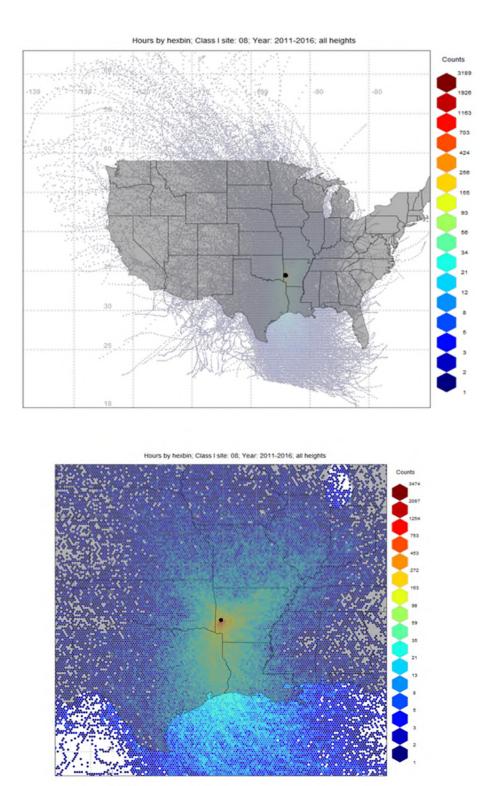
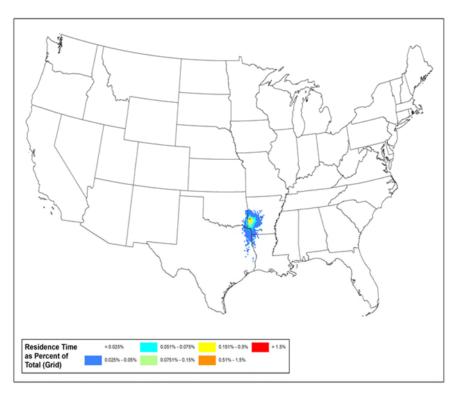


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)



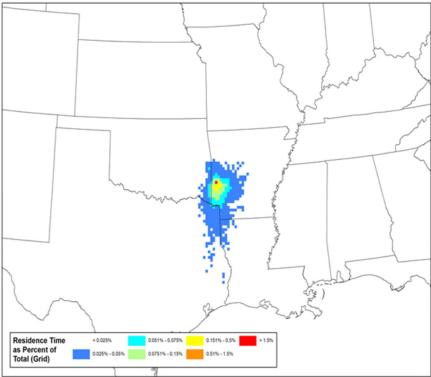


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

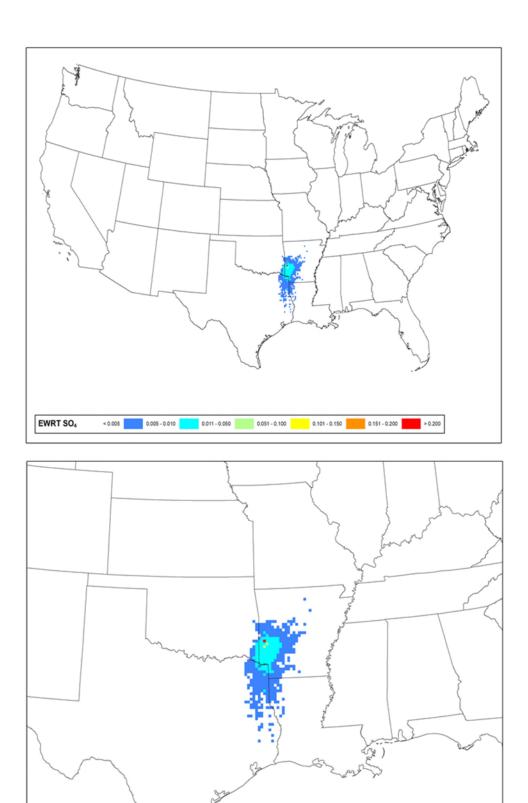


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

0.011 - 0.050

0.051 - 0.100

0.151 - 0.200

> 0.200

0.101 - 0.150

EWRT SO4

< 0.005

0.005 - 0.010

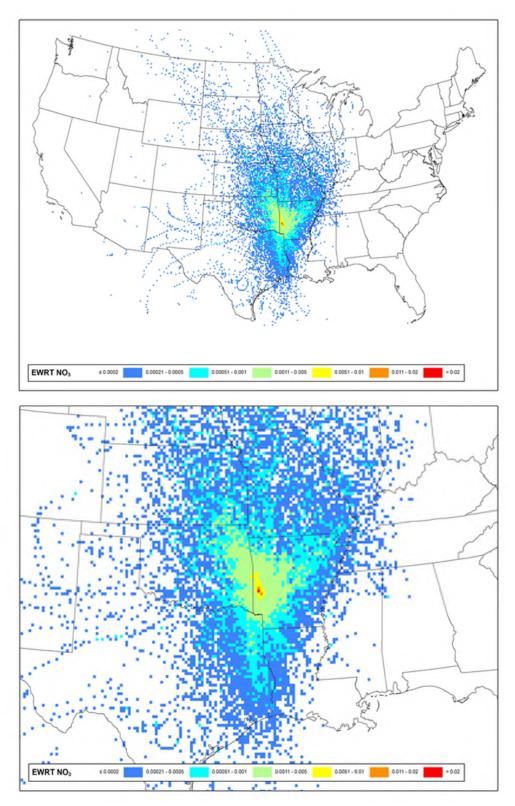


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Caney Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

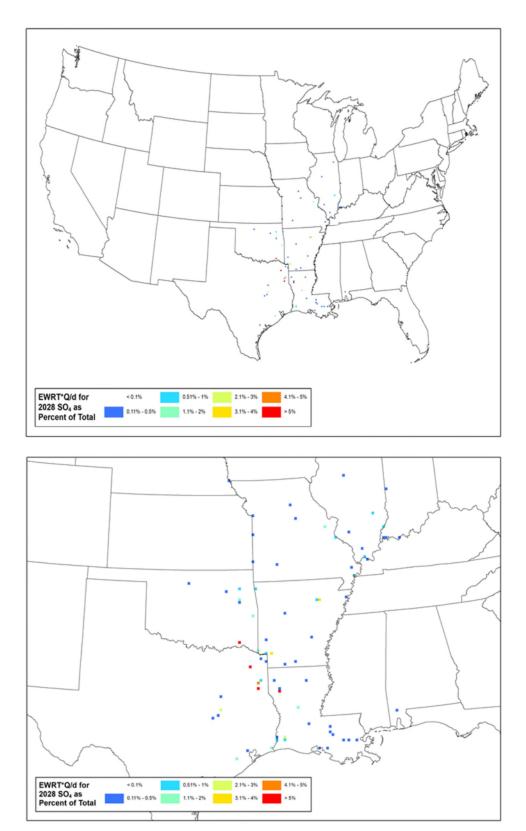


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

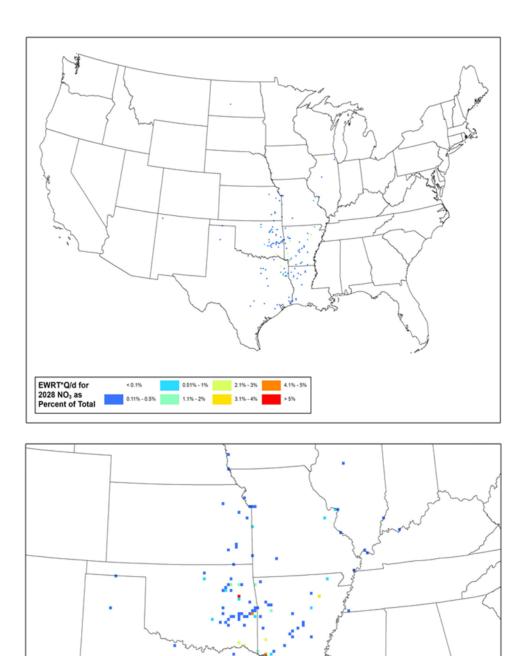


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Caney Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

4.1% - 5%

> 5%

2.1% - 3%

3.1% - 4%

EWRT\*Q/d for 2028 NO<sub>3</sub> as Percent of Total

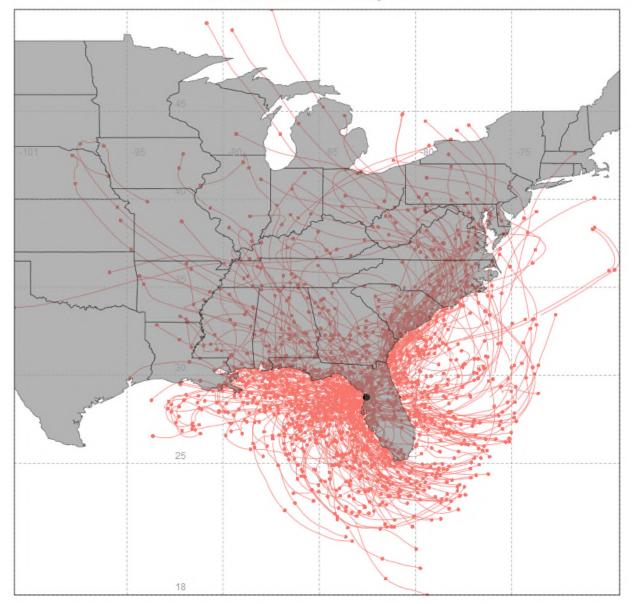
< 0.1%

0.11% - 0.5%

0.51% - 1%

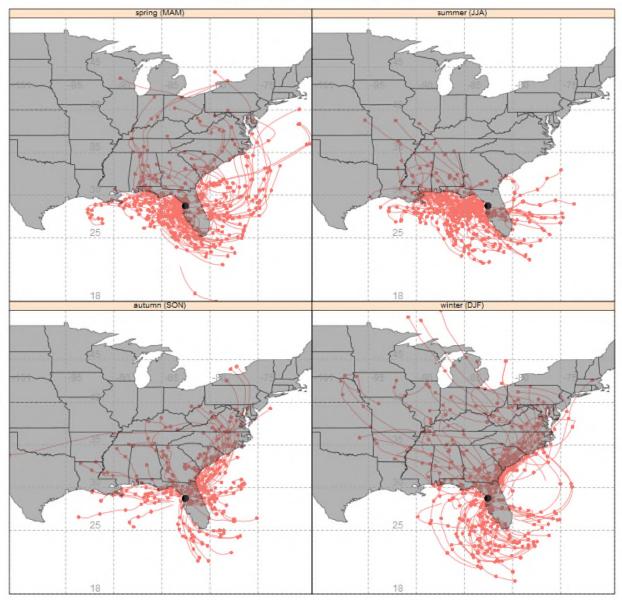
1.1% - 2%

### Chassahowitza Wilderness Area



Class1 site: 09 Year: 2011-2016 Height: 100.00

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



Class1 site: 09 Year: 2011-2016 Height: 100.00

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

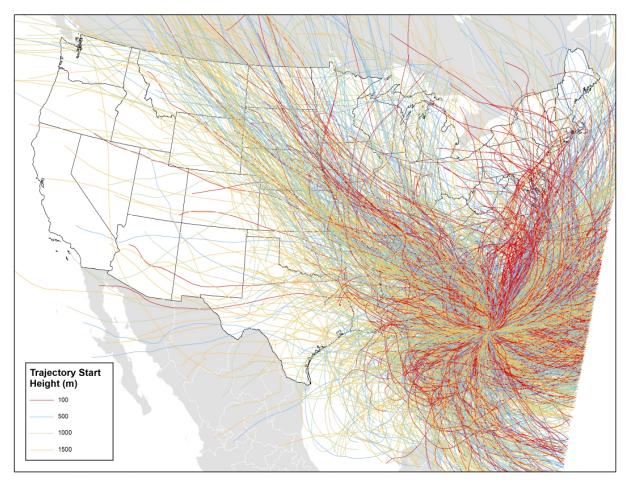


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Chassahowitza Wilderness Area

Hours by hexbin; Class I site: 09; Year: 2011-2016; all heights

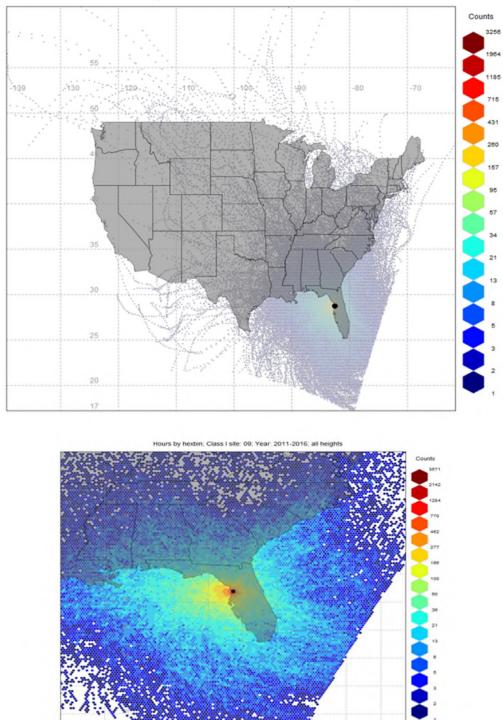


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

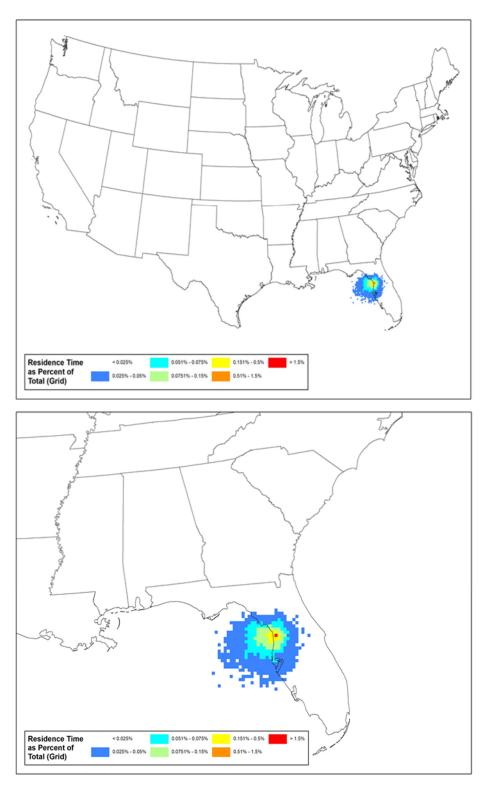


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

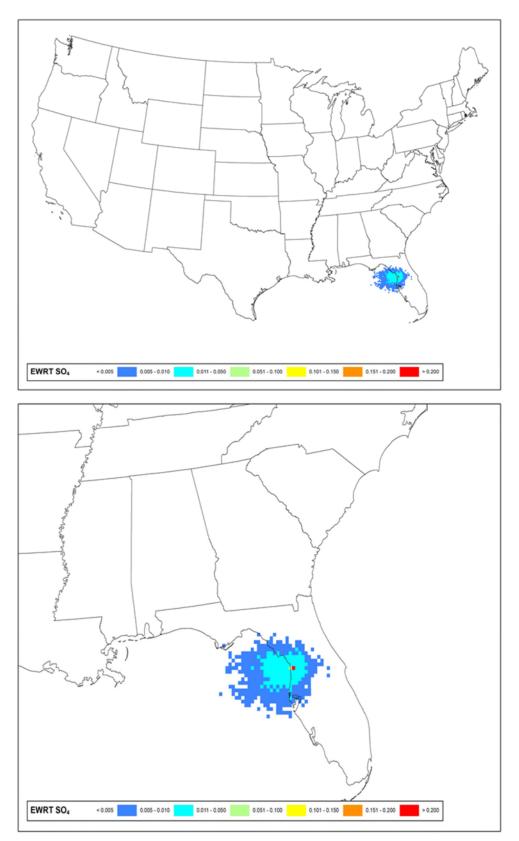


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area - Full View (top) and Class I Zoom (bottom)

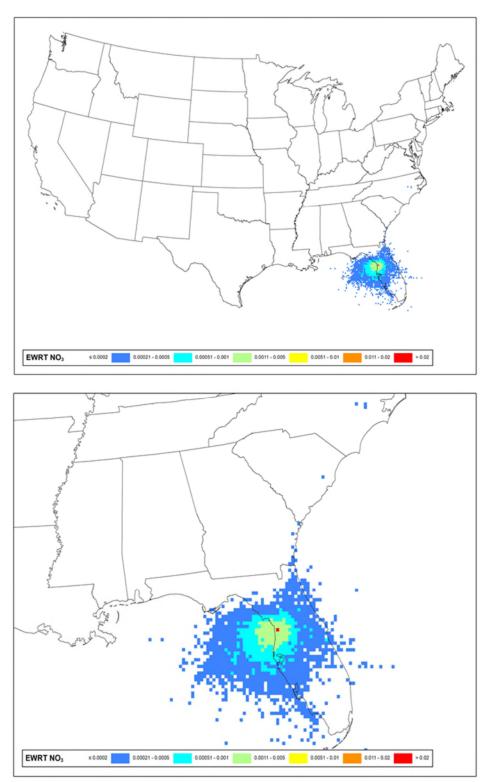


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Chassahowitza Wilderness Area - Full View (top) and Class I Zoom (bottom)

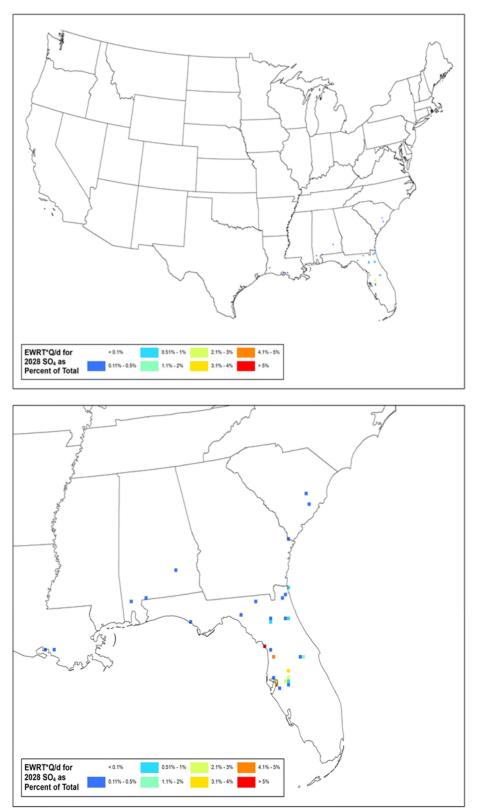


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

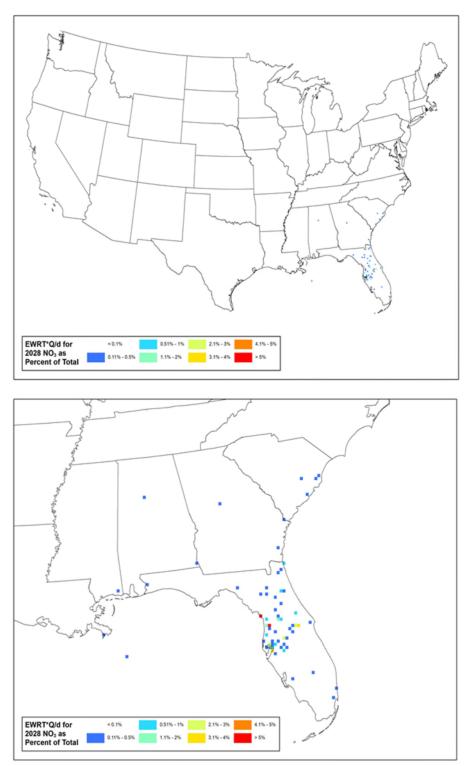
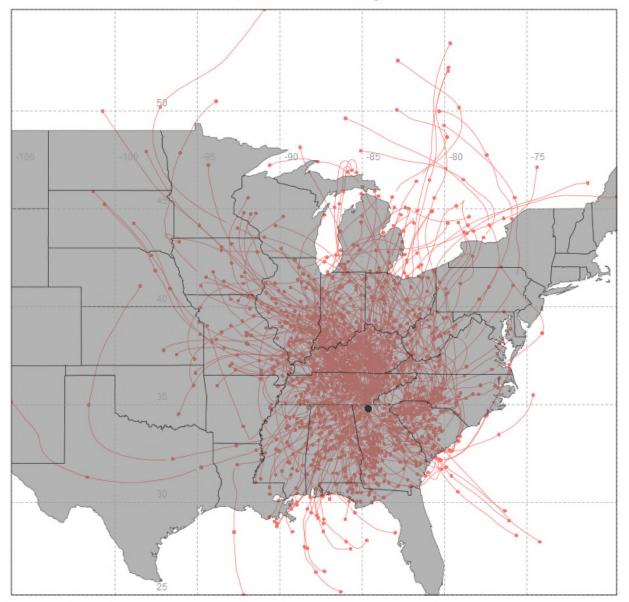


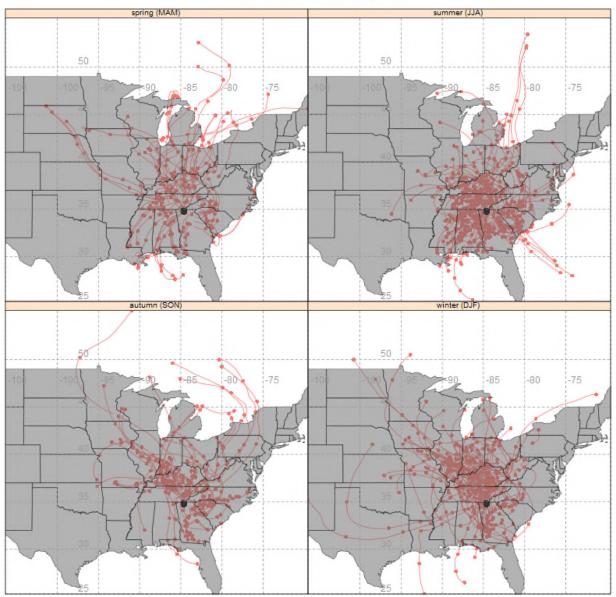
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Chassahowitza Wilderness Area – Full View (top) and Class I Zoom (bottom)

### Cohutta Wilderness Area



#### Class1 site: 10 Year: 2011-2016 Height: 100.00

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



Class1 site: 10 Year: 2011-2016 Height: 100.00

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

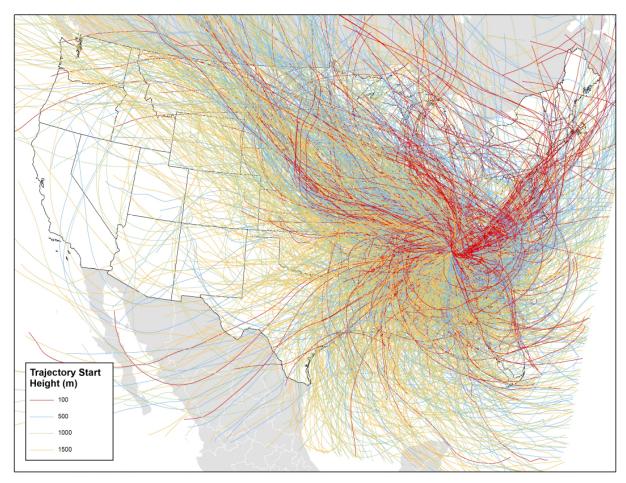
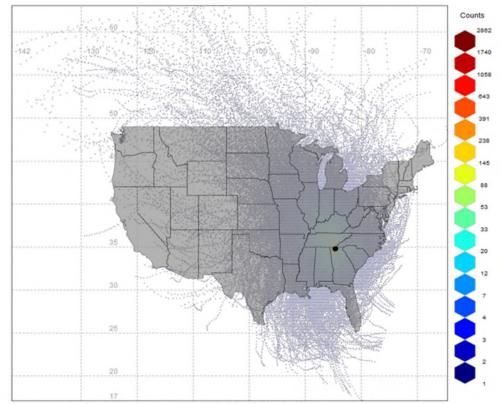


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Cohutta Wilderness Area

Hours by hexbin; Class I site: 10; Year: 2011-2016; all heights



iours by hexbin; Class I site: 10; Year: 2011-2016; all heigh

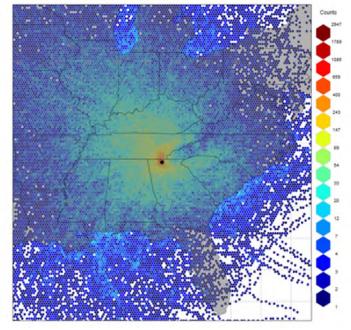


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

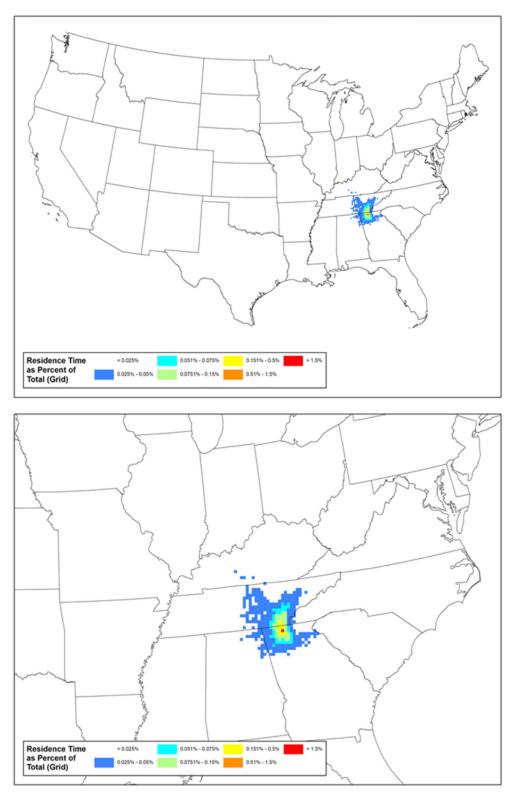


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

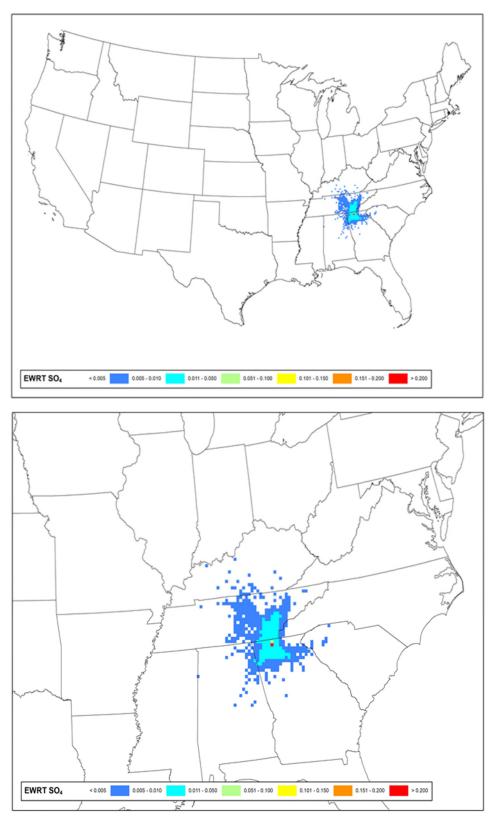


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area - Full View (top) and Class I Zoom (bottom)

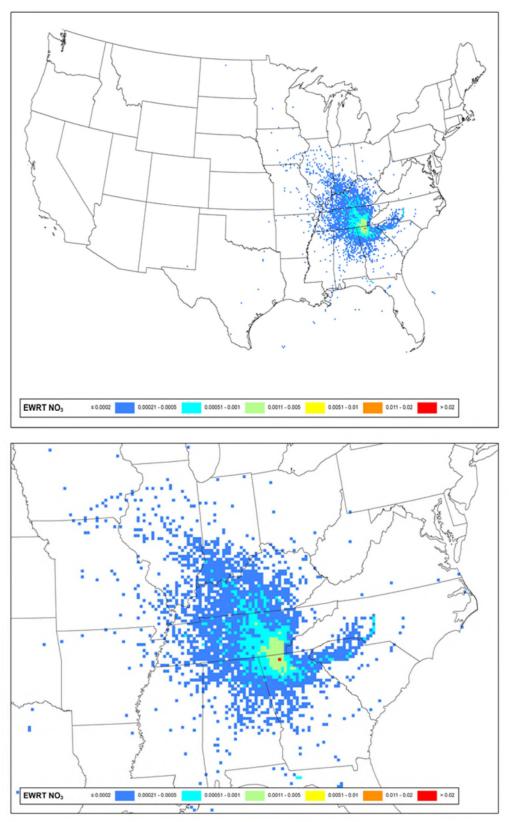


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Cohutta Wilderness Area - Full View (top) and Class I Zoom (bottom)

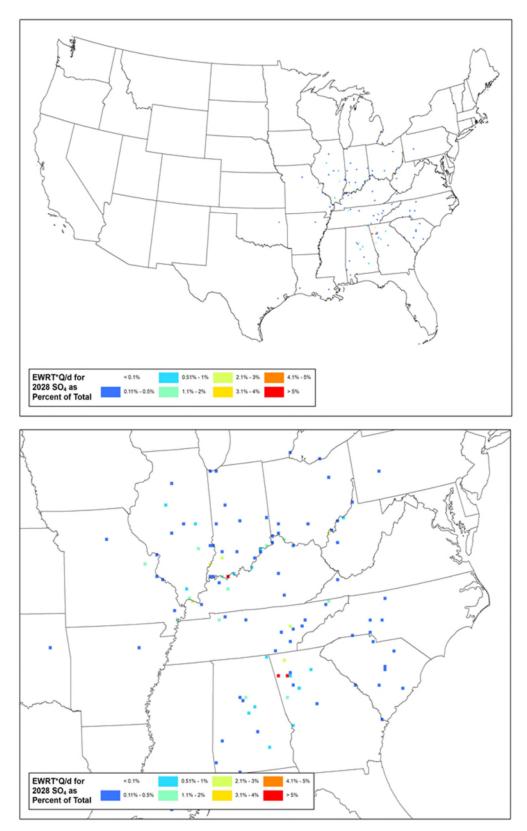


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

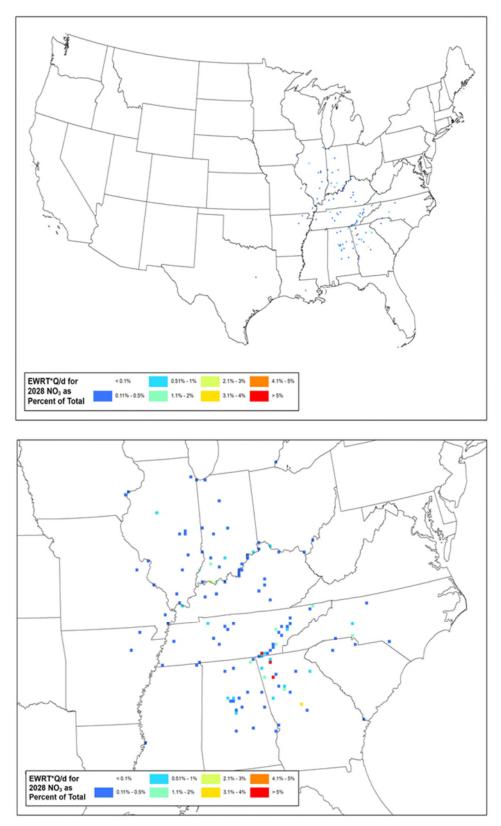
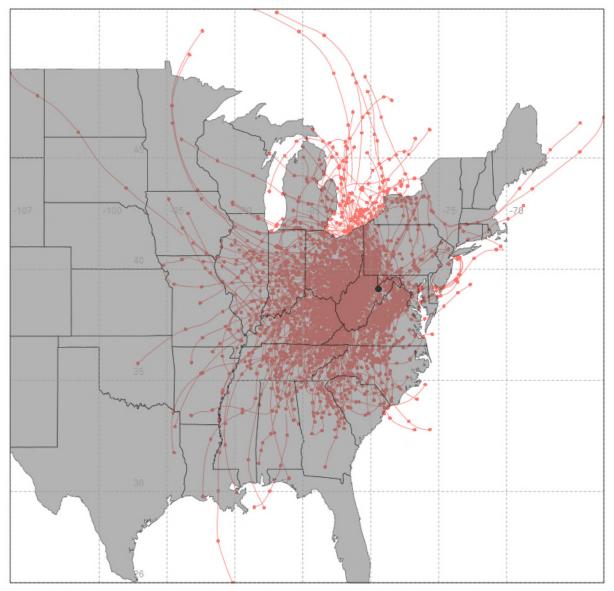


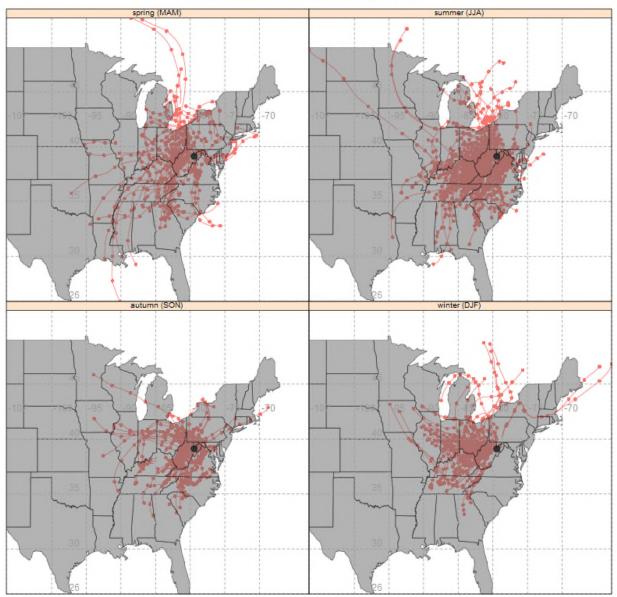
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Cohutta Wilderness Area – Full View (top) and Class I Zoom (bottom)

## **Dolly Sods Wilderness Area**



Class1 site: 11 Year: 2011-2016 Height: 100.00

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



Class1 site: 11 Year: 2011-2016 Height: 100.00

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

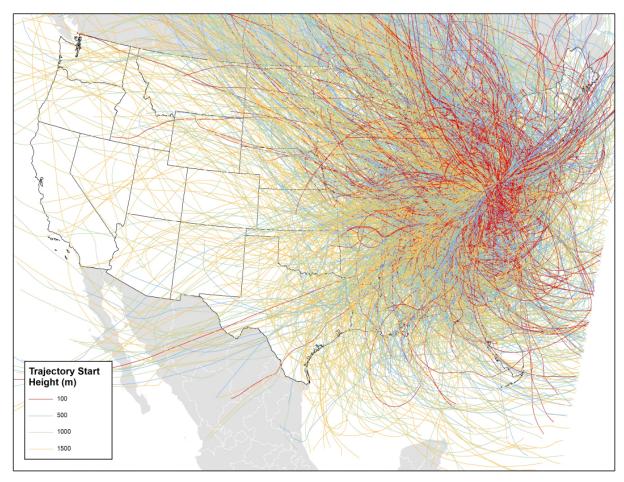
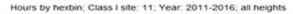
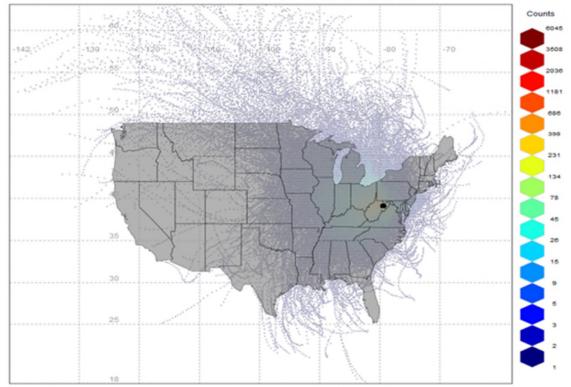


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Dolly Sods Wilderness Area





#### Hours by hexbin; Class I site: 11; Year: 2011-2016; all heights

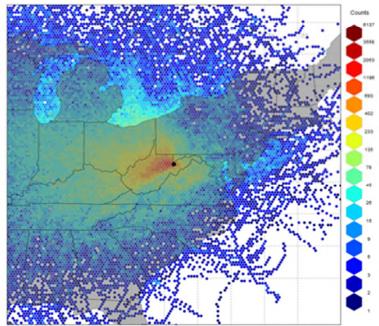


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

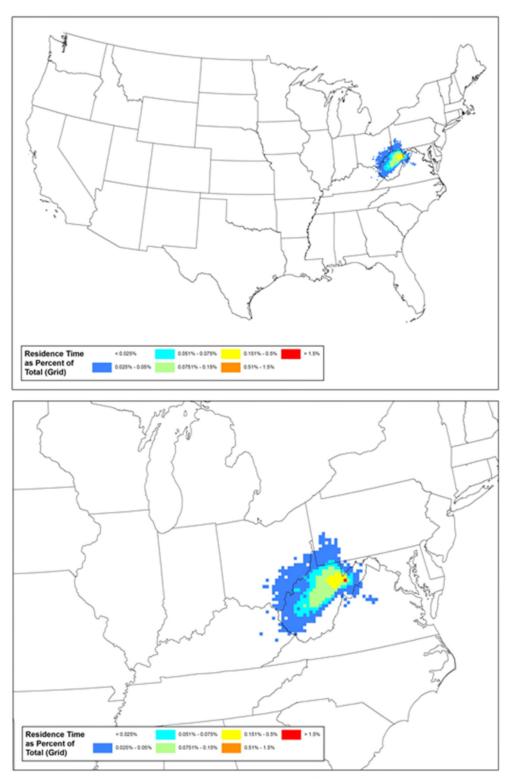


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

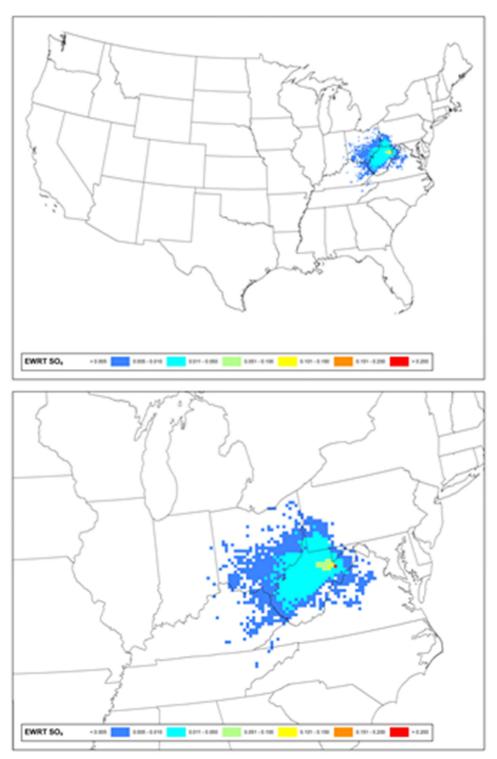


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area - Full View (top) and Class I Zoom (bottom)

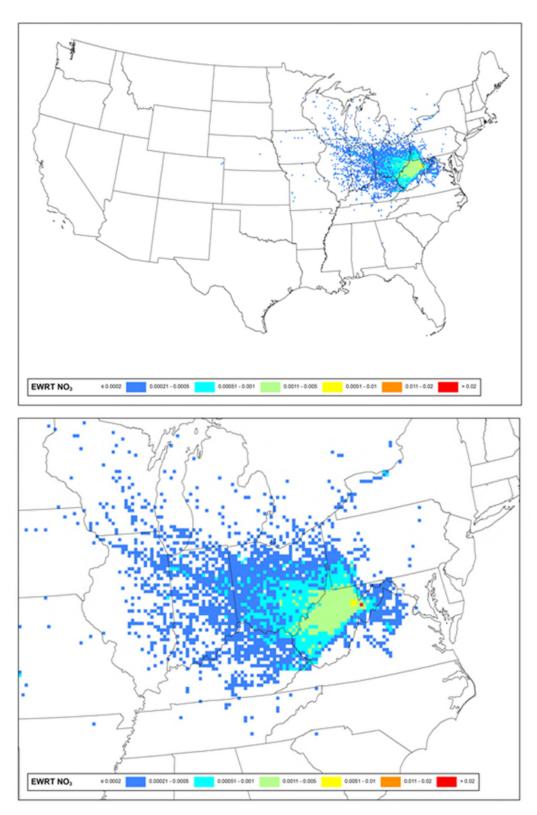


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Dolly Sods Wilderness Area - Full View (top) and Class I Zoom (bottom)

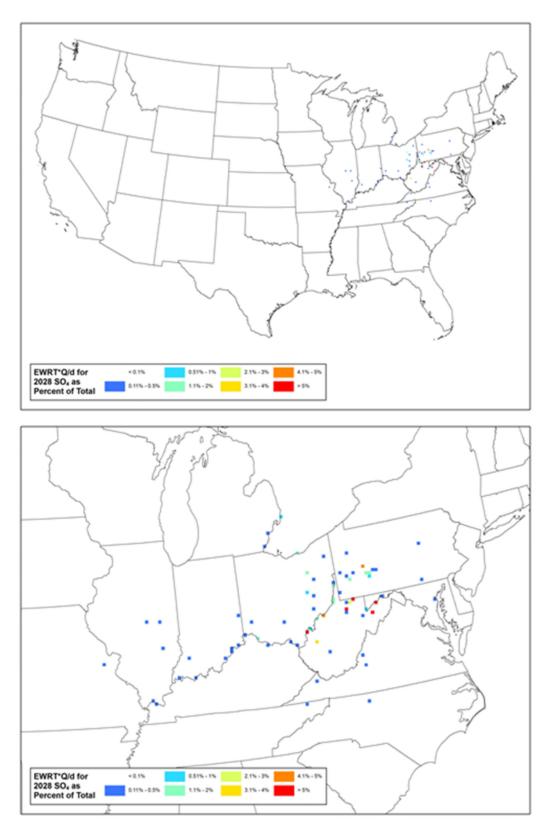


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

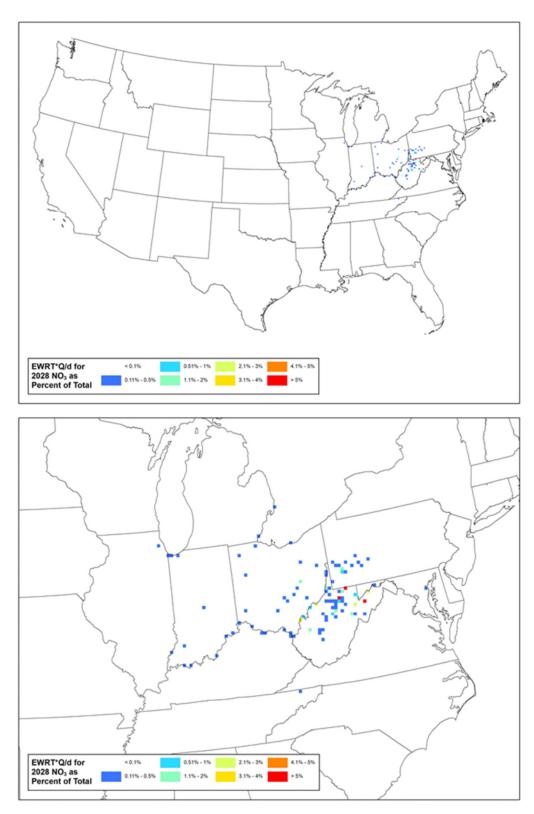
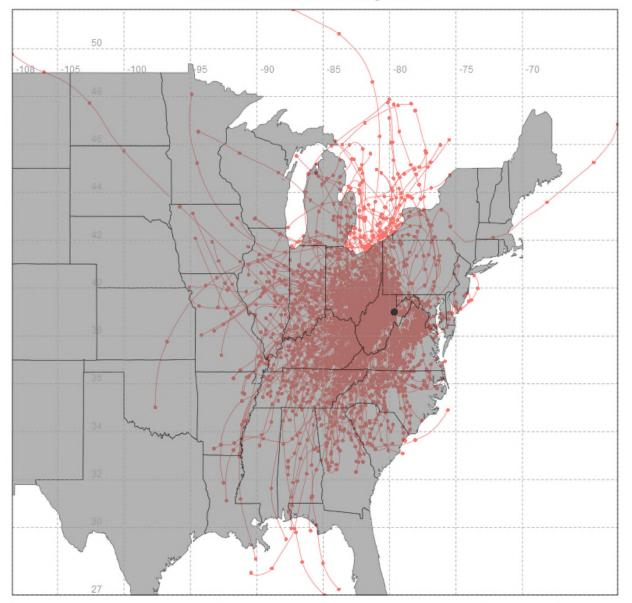


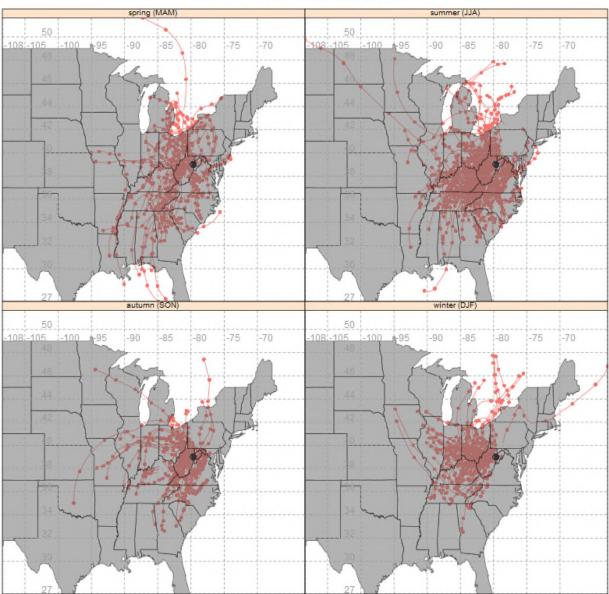
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Dolly Sods Wilderness Area – Full View (top) and Class I Zoom (bottom)

## **Otter Creek Wilderness Area**



Class1 site: 12 Year: 2011-2016 Height: 100.00

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



Class1 site: 12 Year: 2011-2016 Height: 100.00

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

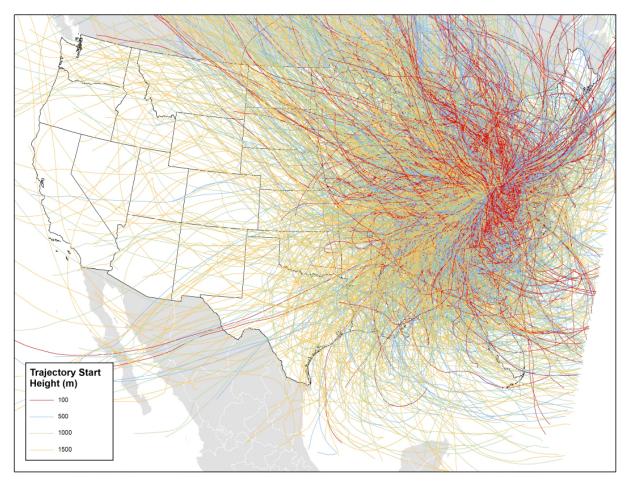
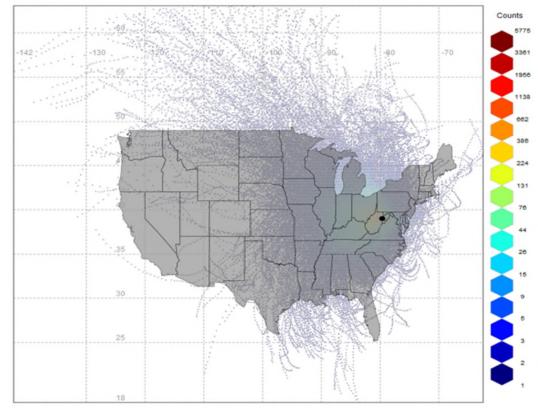


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Otter Creek Wilderness Area

Hours by hexbin; Class I site: 12; Year: 2011-2016; all heights



#### Hours by hexbin; Class I site: 12; Year: 2011-2016; all heights

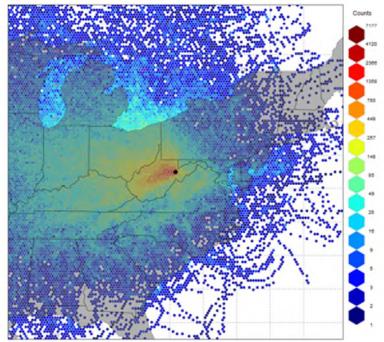


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

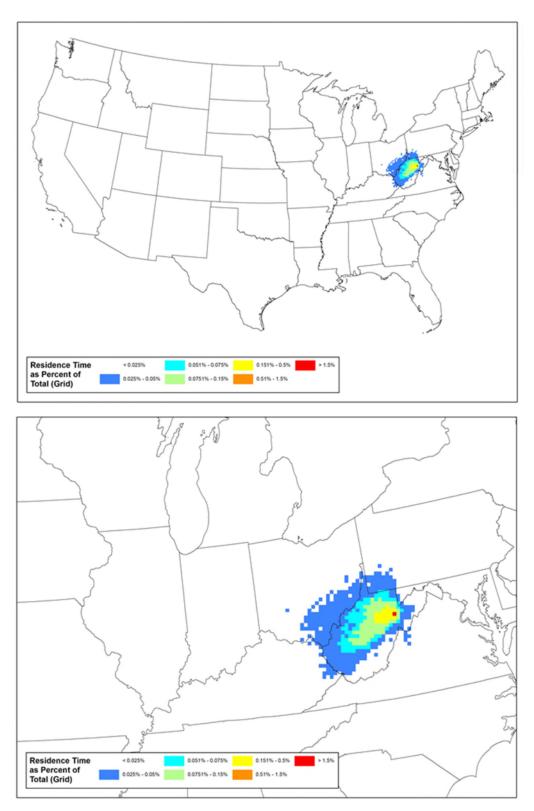


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

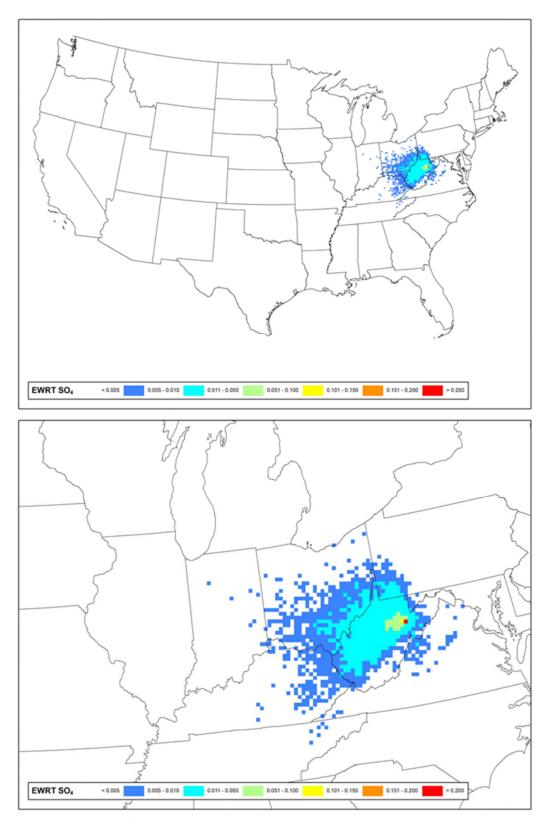


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

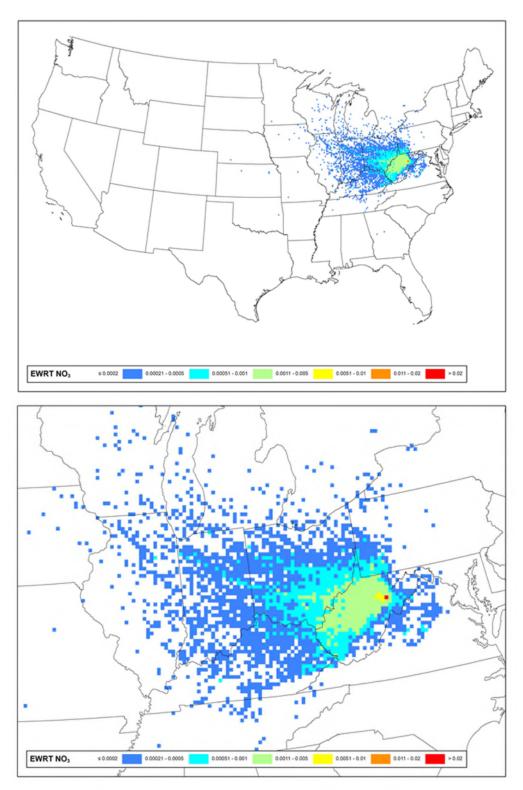


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Otter Creek Wilderness Area - Full View (top) and Class I Zoom (bottom)

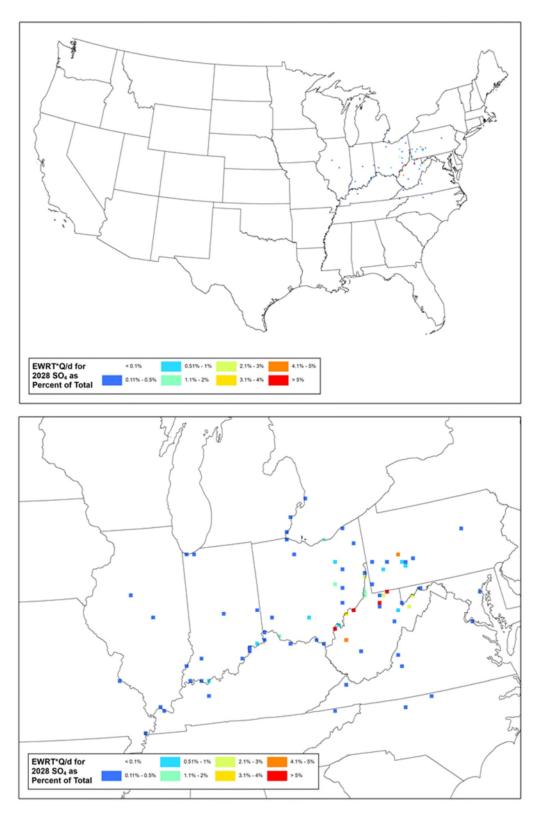


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

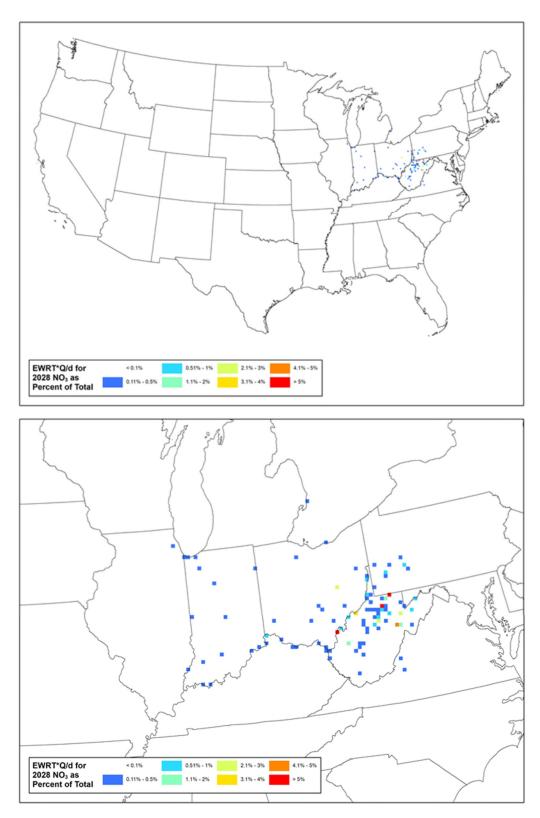
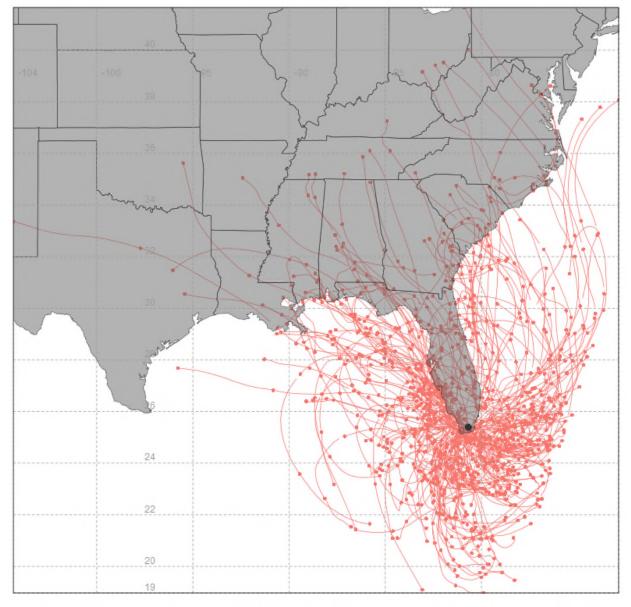


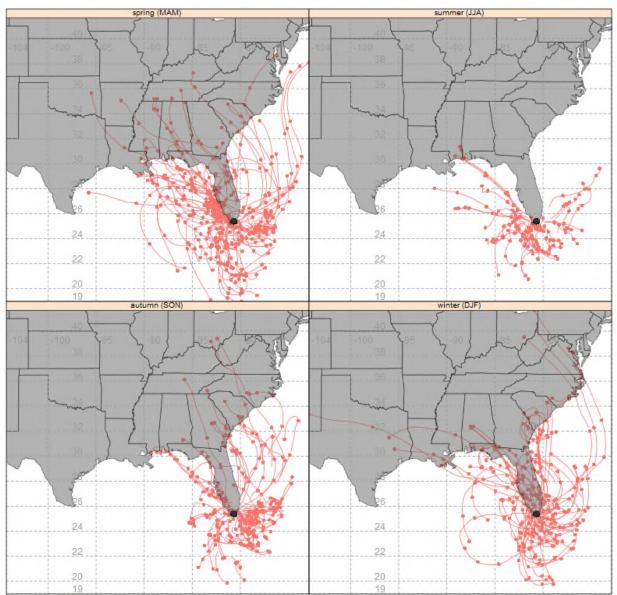
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Otter Creek Wilderness Area – Full View (top) and Class I Zoom (bottom)

# **Everglades National Park**



#### Class1 site: 13 Year: 2011-2016 Height: 100.00

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



Class1 site: 13 Year: 2011-2016 Height: 100.00

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

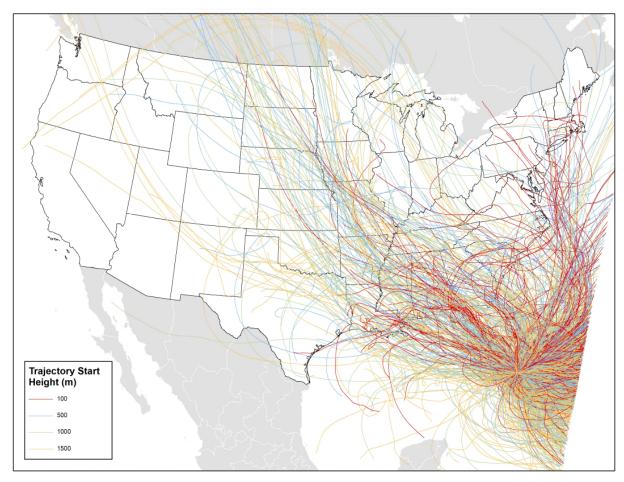
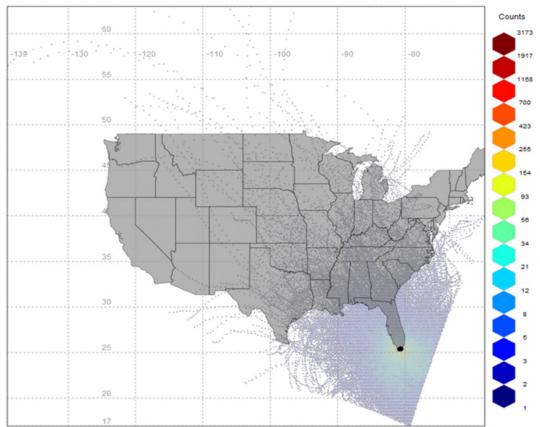


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Everglades National Park



Hours by hexbin; Class I site: 13; Year: 2011-2016; all heights

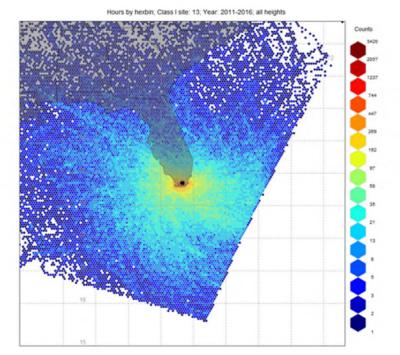


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

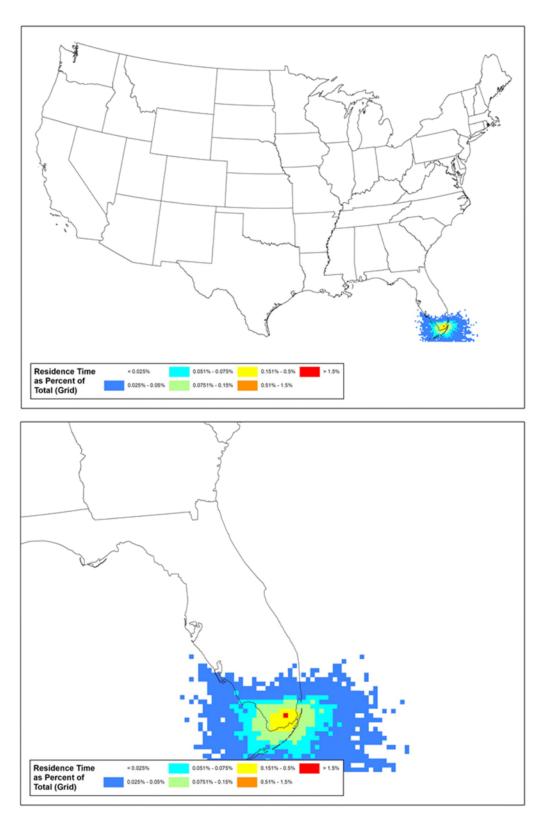


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Everglades National Park – Full View (top) and Class I Zoom (bottom)

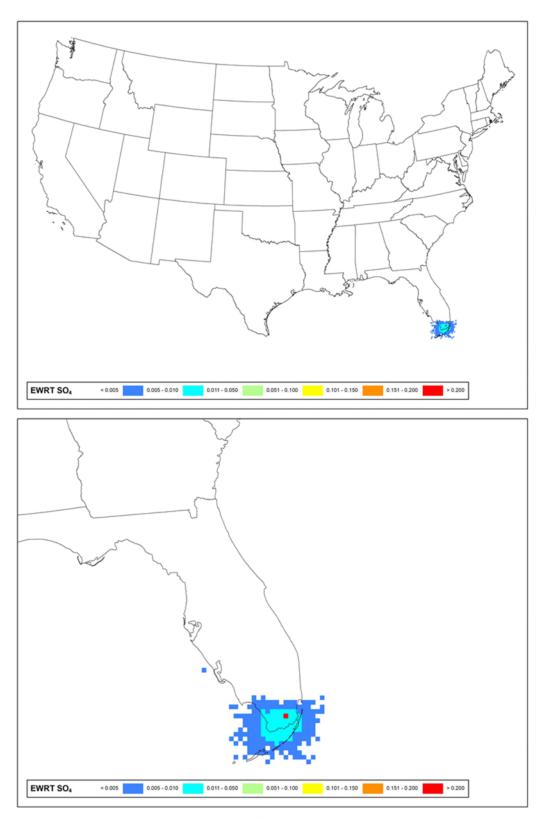


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Everglades National Park - Full View (top) and Class I Zoom (bottom)

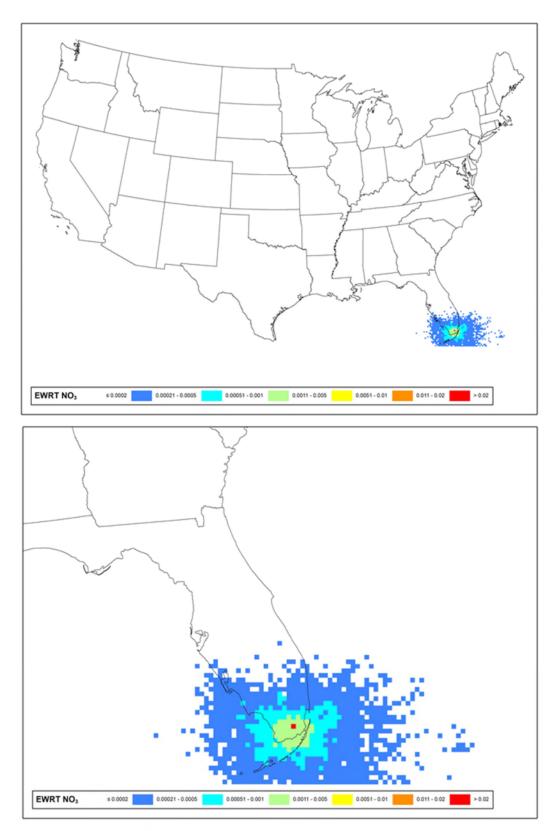


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Everglades National Park - Full View (top) and Class I Zoom (bottom)

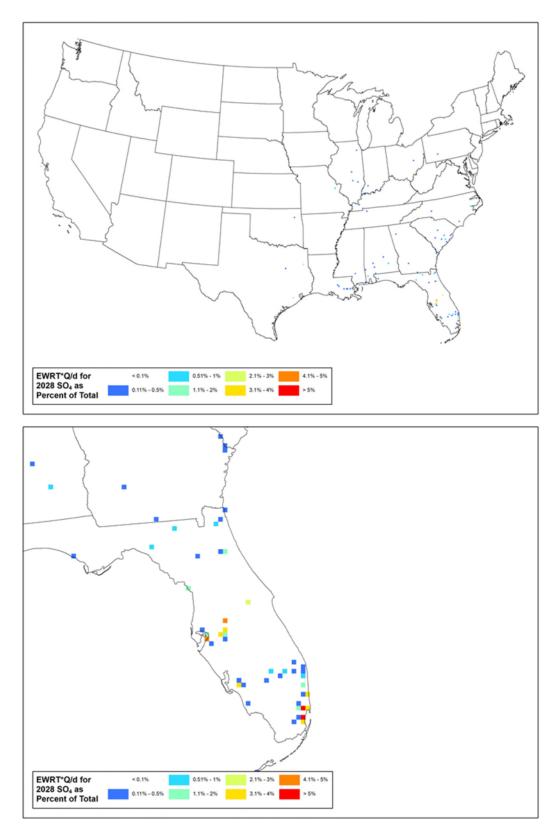


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

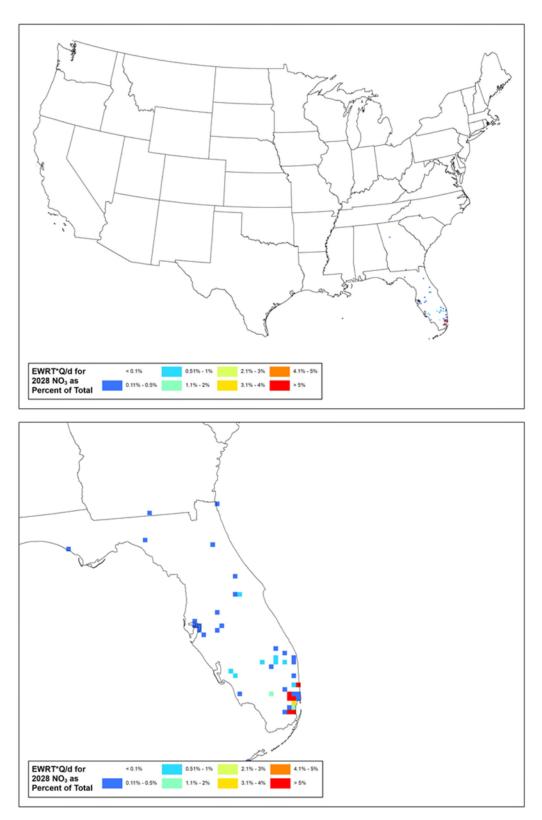


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Everglades National Park – Full View (top) and Class I Zoom (bottom)

# **Great Smoky Mountains National Park**

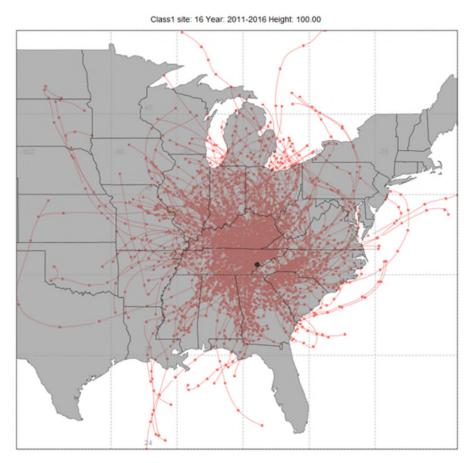
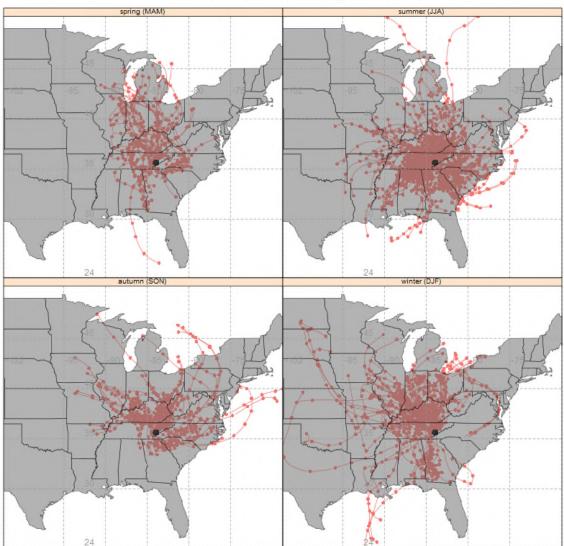


Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Great Smoky Mountains National Park



Class1 site: 16 Year: 2011-2016 Height: 100.00

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

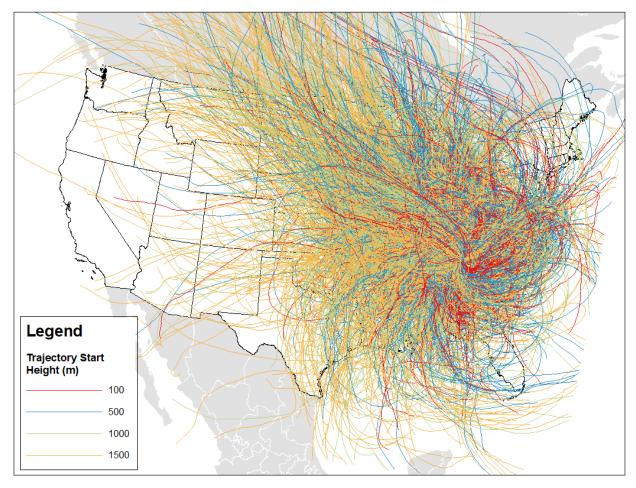


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Great Smoky Mountains National Park

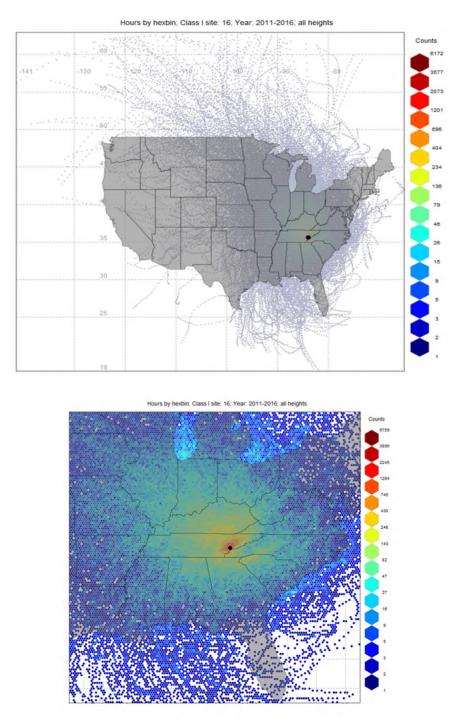
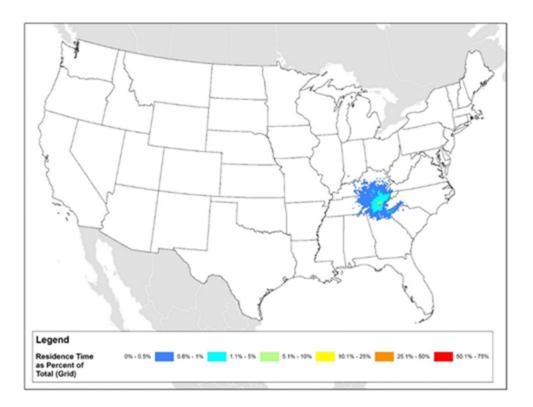


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)



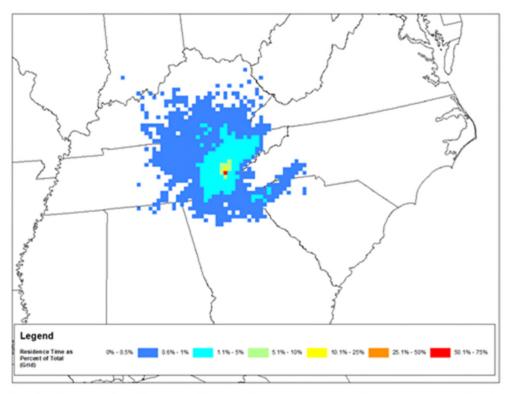


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

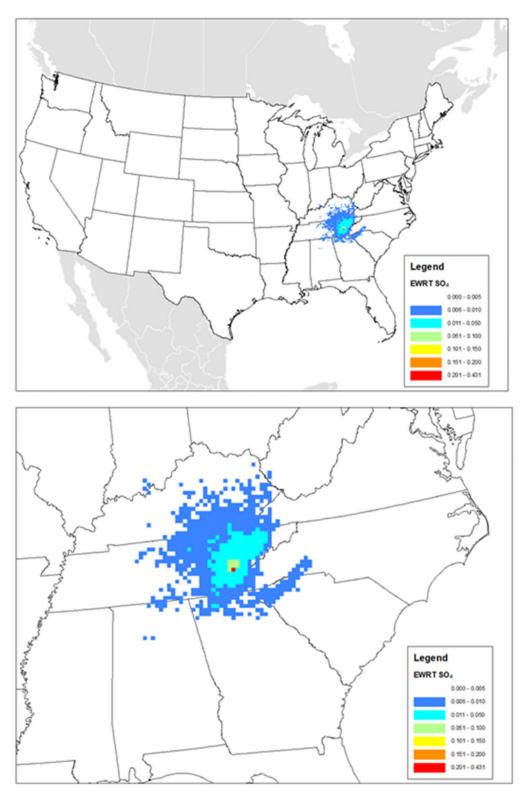


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park - Full View (top) and Class I Zoom (bottom)

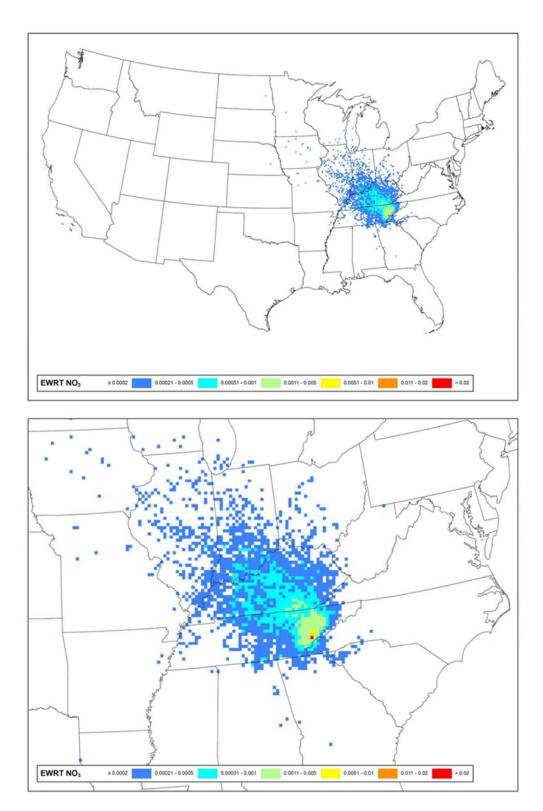


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Great Smoky Mountains National Park - Full View (top) and Class I Zoom (bottom)

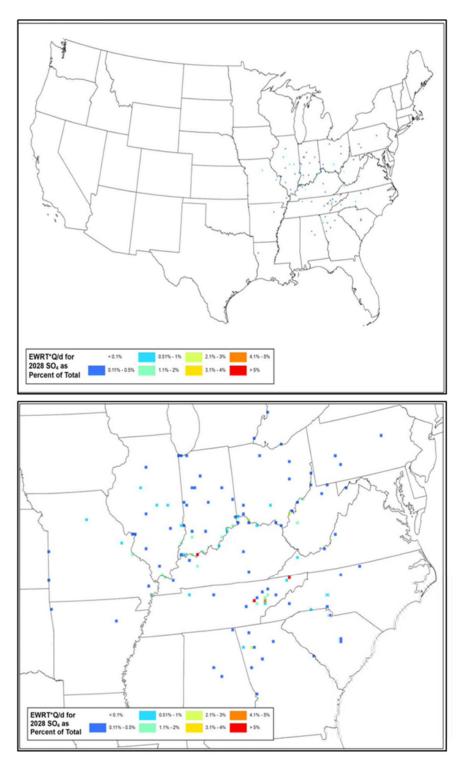


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

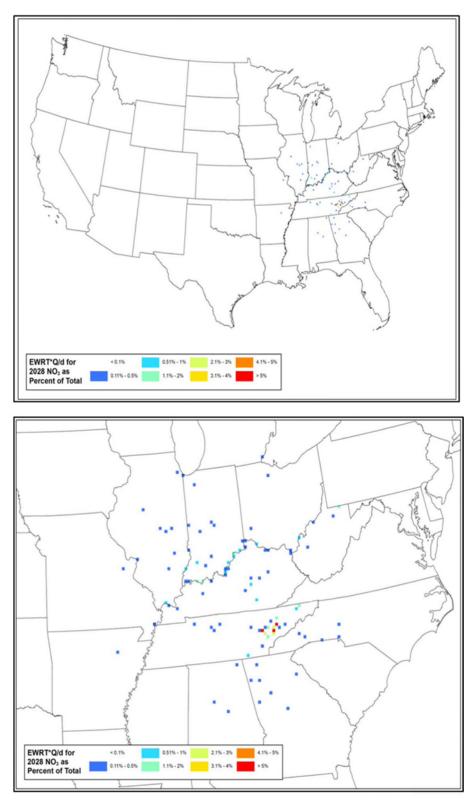
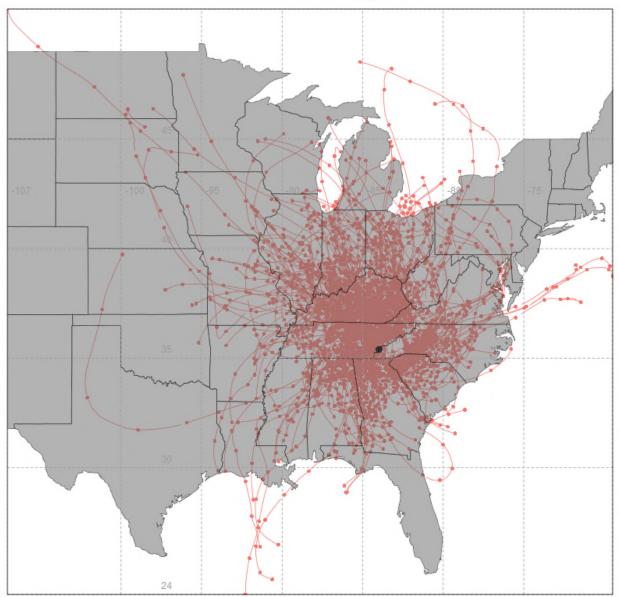


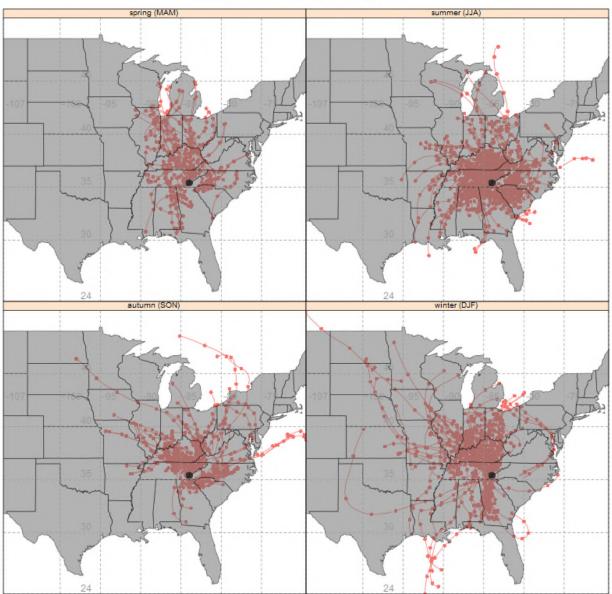
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Great Smoky Mountains National Park – Full View (top) and Class I Zoom (bottom)

# Joyce Kilmer/Slickrock Wilderness Area



Class1 site: 17 Year: 2011-2016 Height: 100.00

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



Class1 site: 17 Year: 2011-2016 Height: 100.00

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

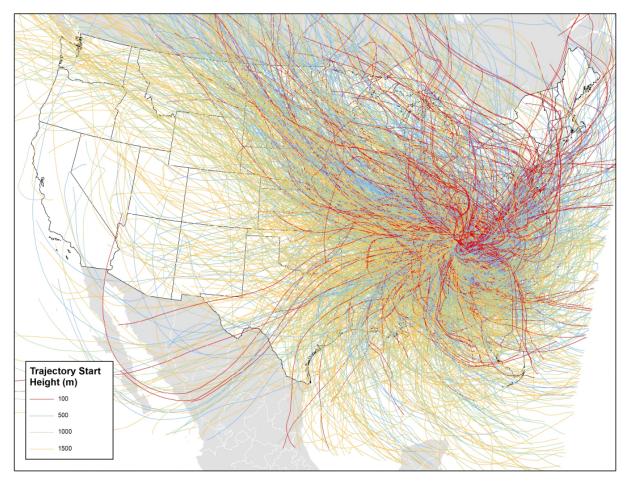
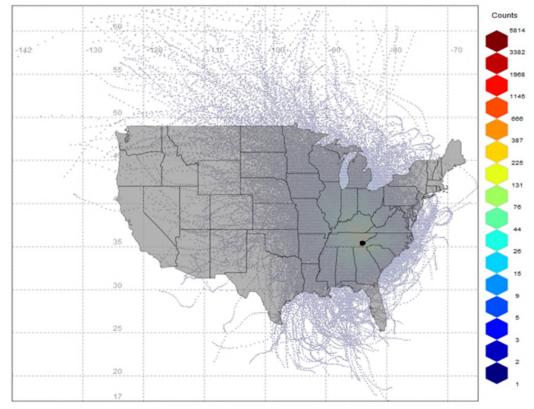


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Joyce Kilmer/Slickrock Wilderness Area

Hours by hexbin; Class I site: 17; Year: 2011-2016; all heights



#### Hours by hexbin; Class I site: 17; Year: 2011-2016; all heights

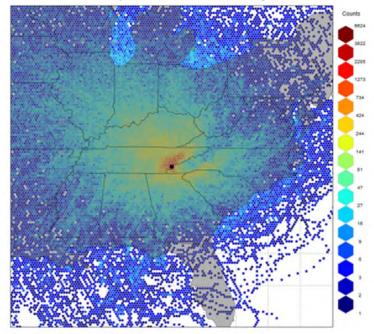


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

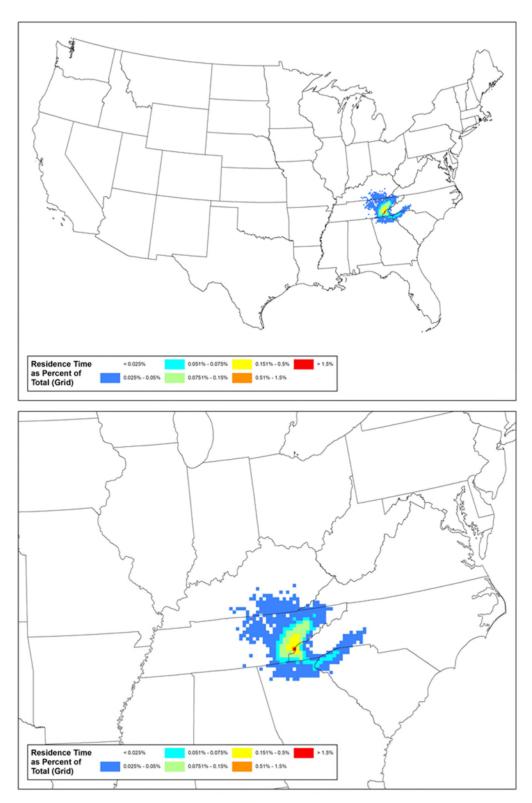


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

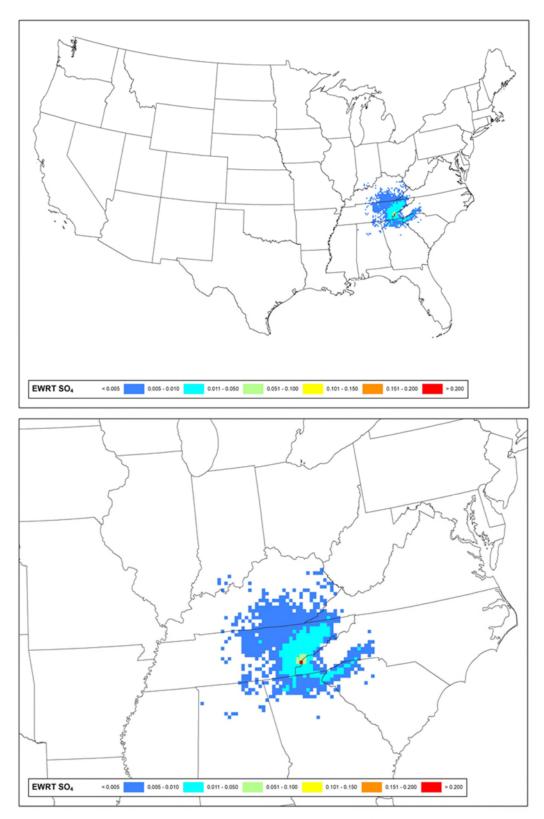


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area - Full View (top) and Class I Zoom (bottom)

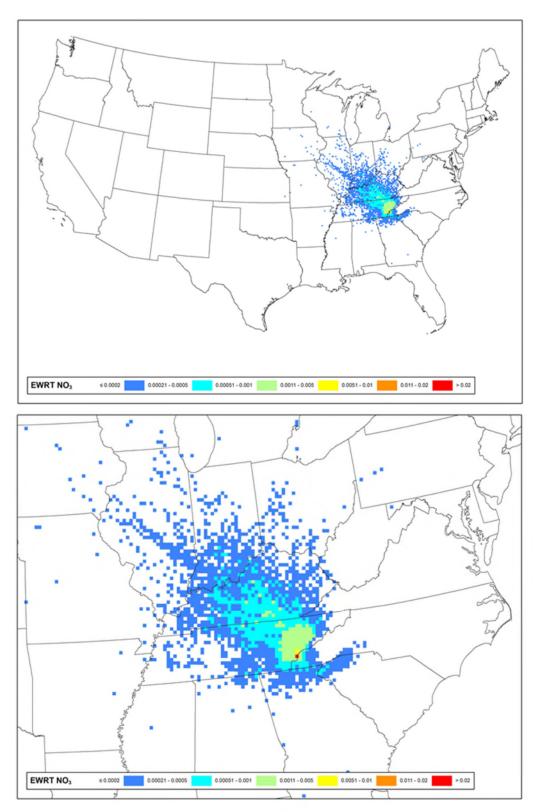


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area - Full View (top) and Class I Zoom (bottom)

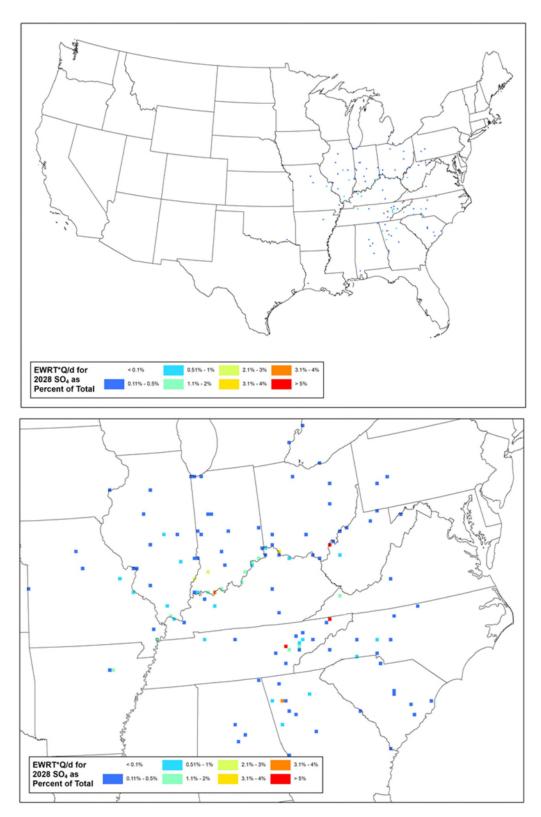


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area – Full View (top) and Class I Zoom (bottom)

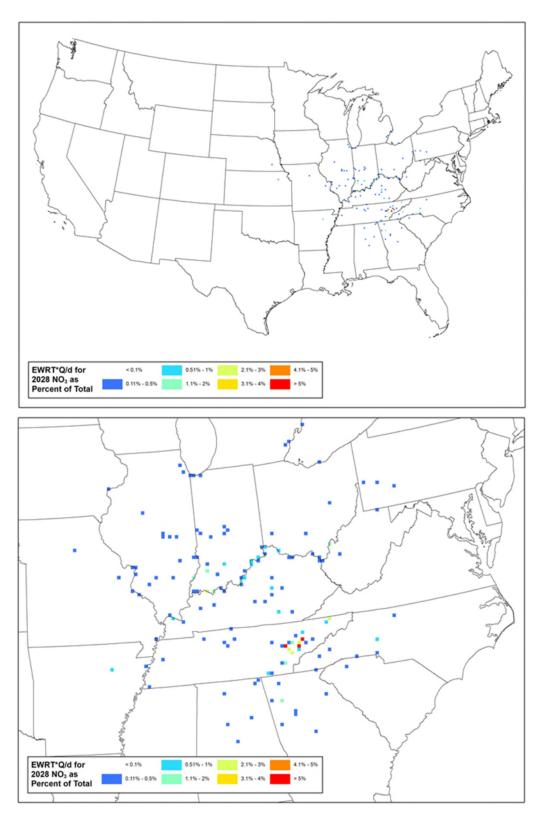
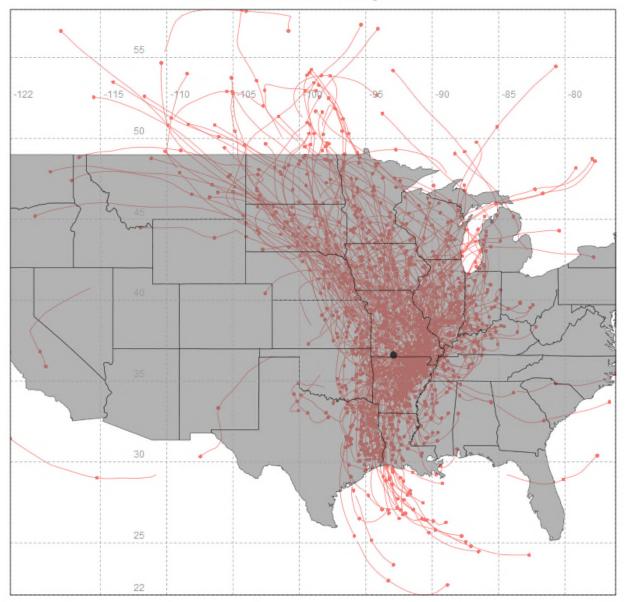


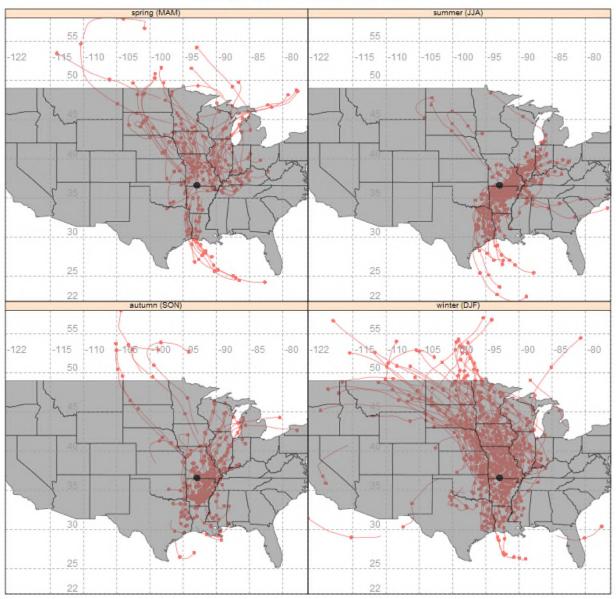
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Joyce Kilmer/Slickrock Wilderness Area– Full View (top) and Class I Zoom (bottom)

## Hercules Glade Wilderness Area



Class1 site: 19 Year: 2011-2016 Height: 100.00

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



Class1 site: 19 Year: 2011-2016 Height: 100.00

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

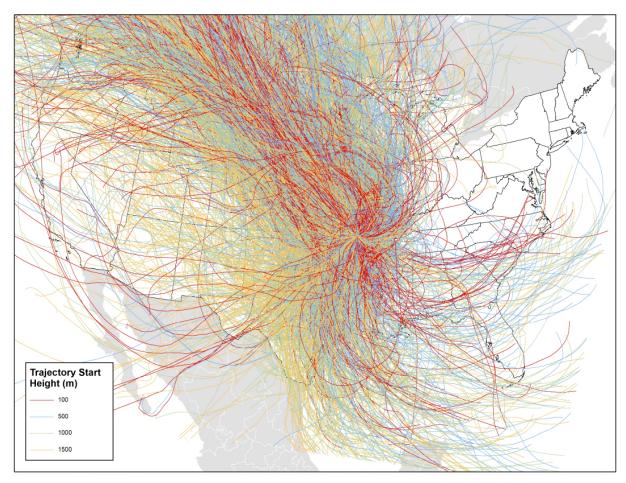


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Hercules Glade Wilderness Area

Hours by hexbin; Class I site: 19; Year: 2011-2016; all heights

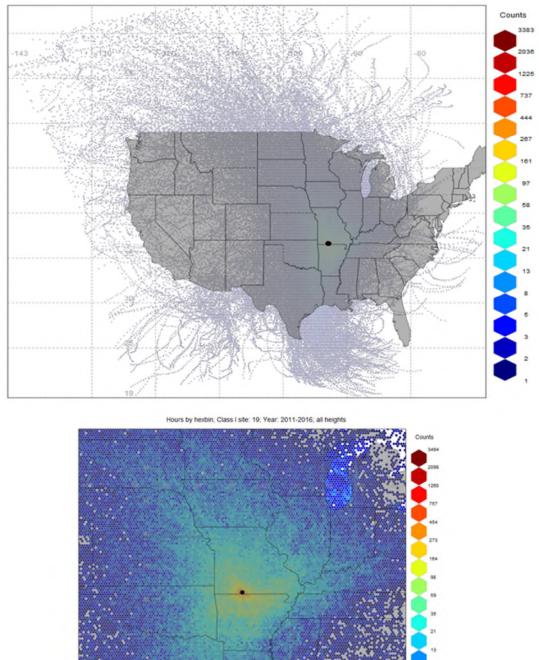


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)

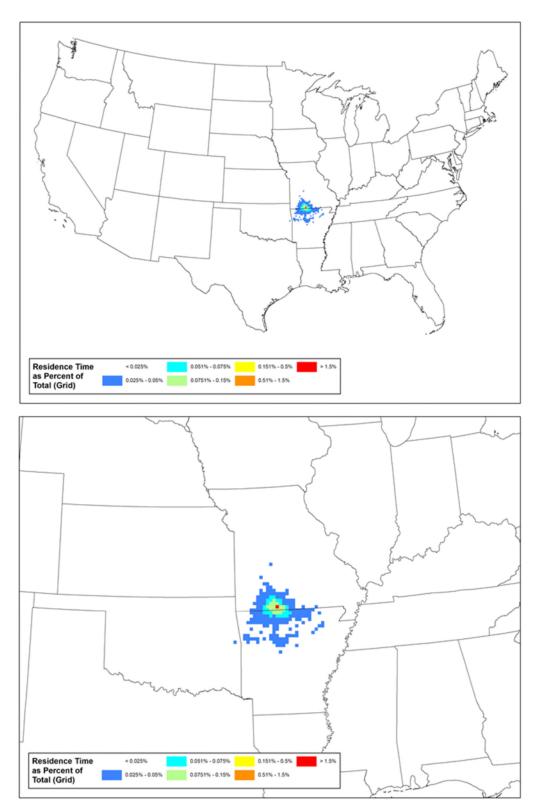


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)

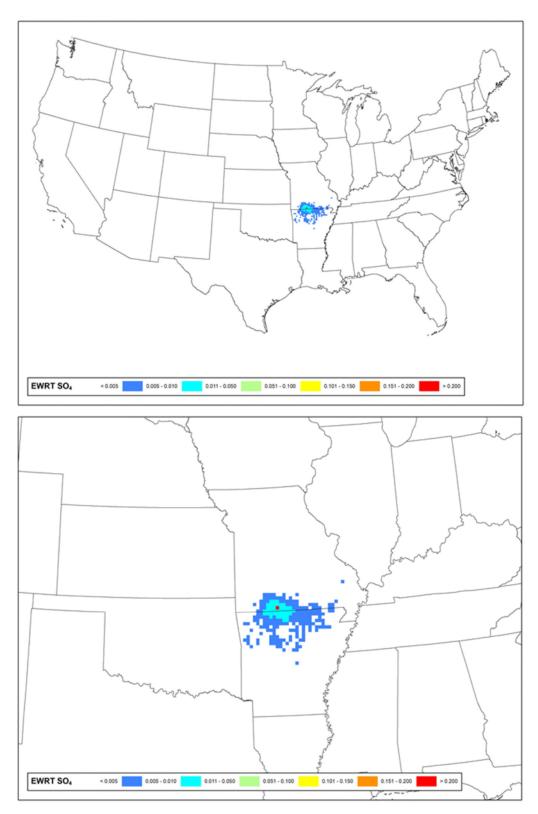


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area - Full View (top) and Class I Zoom (bottom)

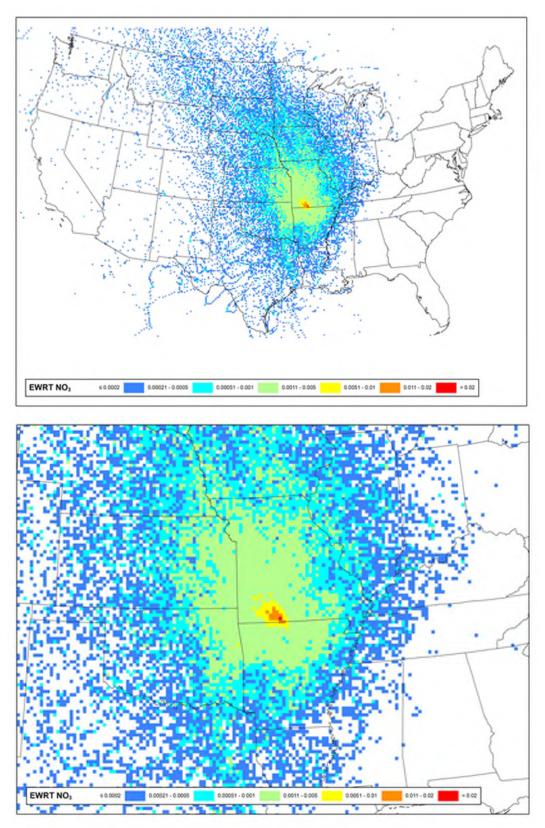


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Hercules Glade Wilderness Area - Full View (top) and Class I Zoom (bottom)

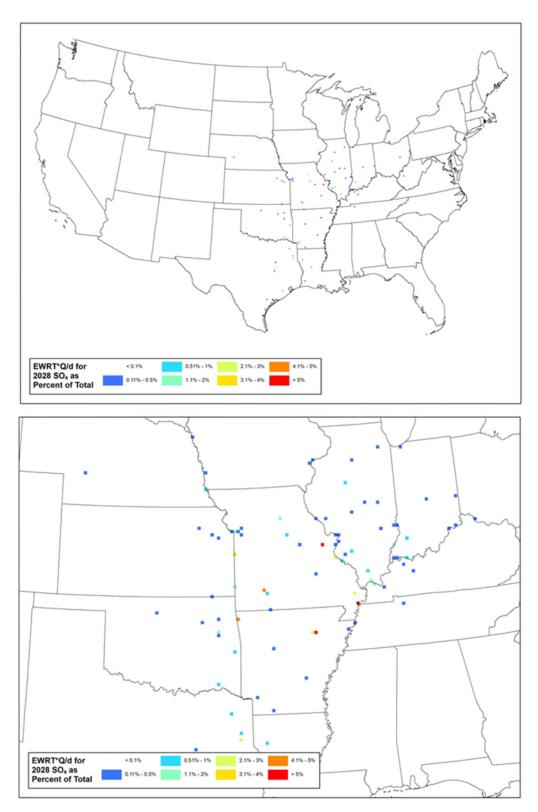


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area – Full View (top) and Class I Zoom (bottom)

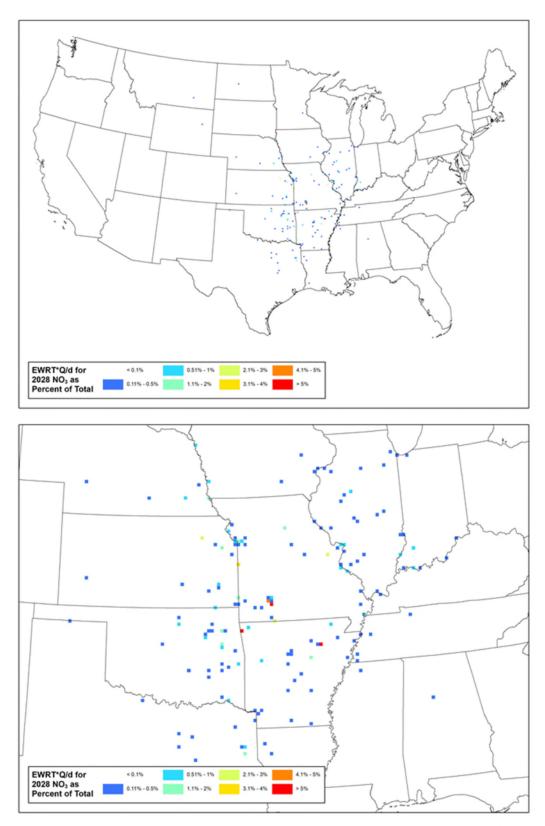
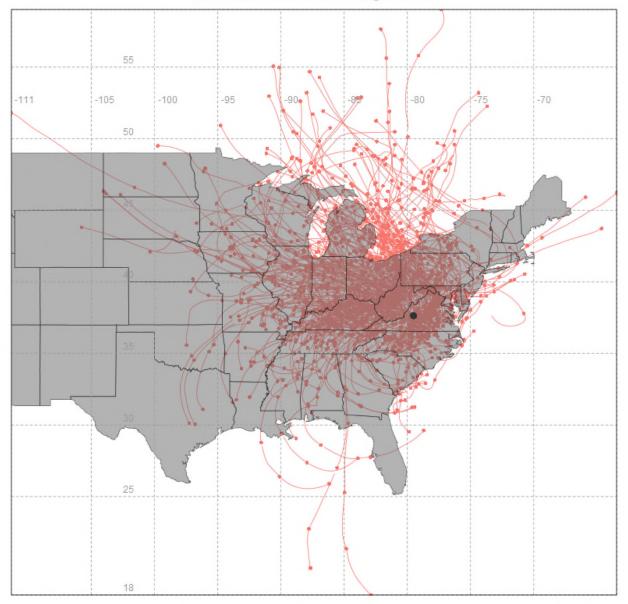


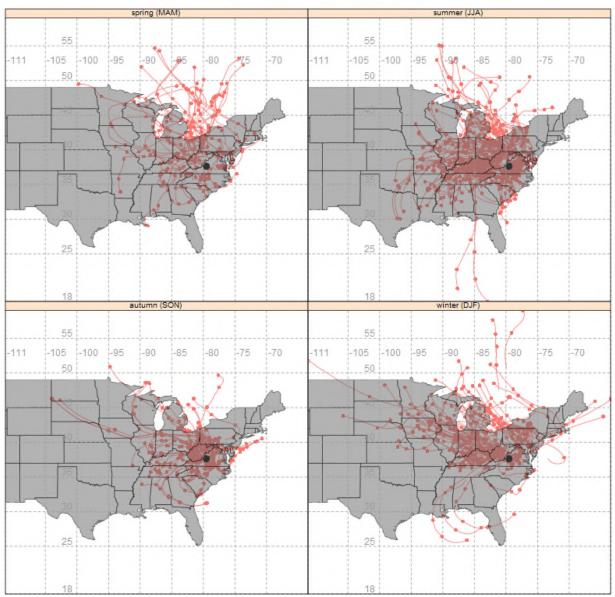
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Hercules Glade Wilderness Area– Full View (top) and Class I Zoom (bottom)

## James River Face Wilderness Area



Class1 site: 21 Year: 2011-2016 Height: 100.00

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



#### Class1 site: 21 Year: 2011-2016 Height: 100.00

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

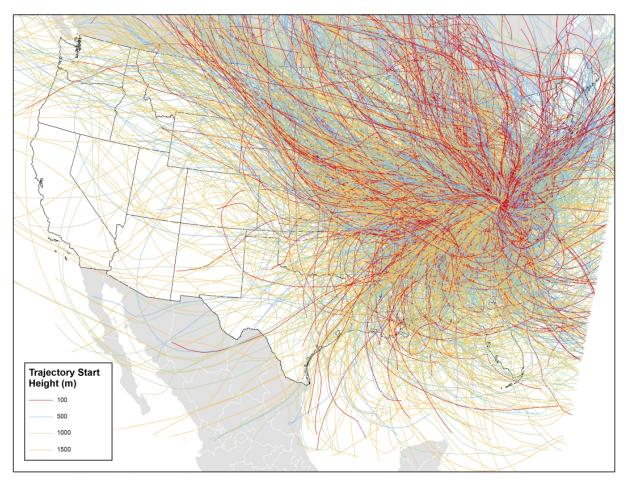
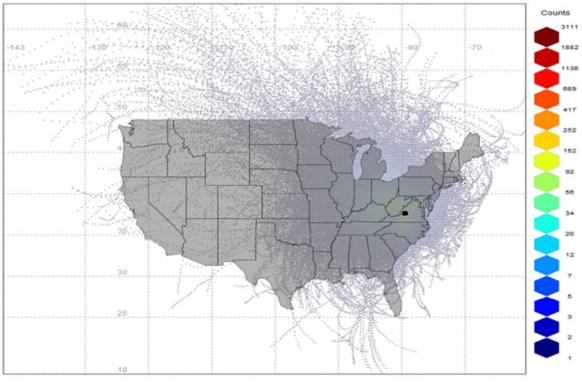


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from James River Face Wilderness Area





Hours by hexbin; Class I site: 21; Year: 2011-2016; all heights

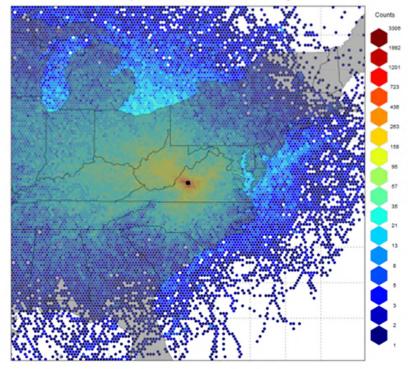


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

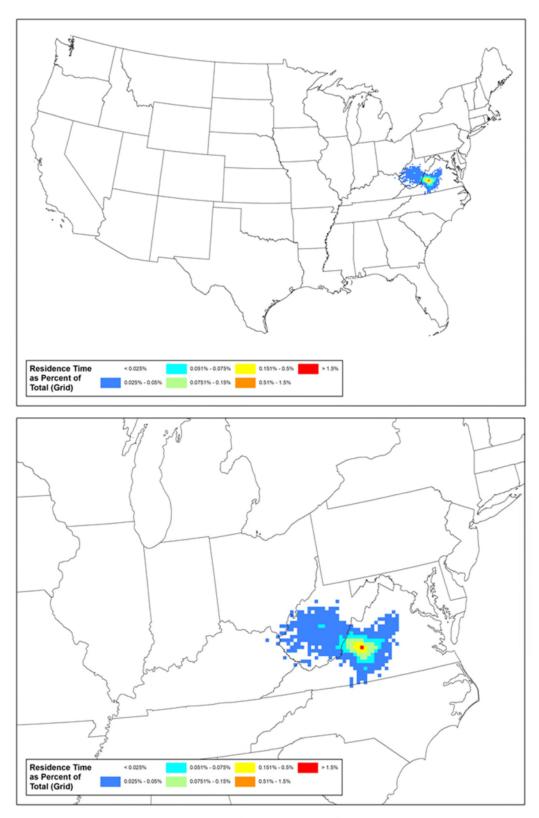


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

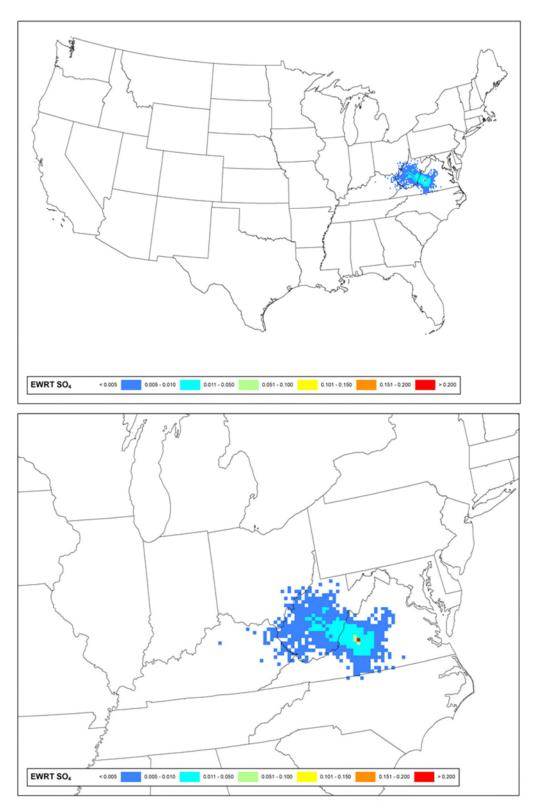


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area - Full View (top) and Class I Zoom (bottom)

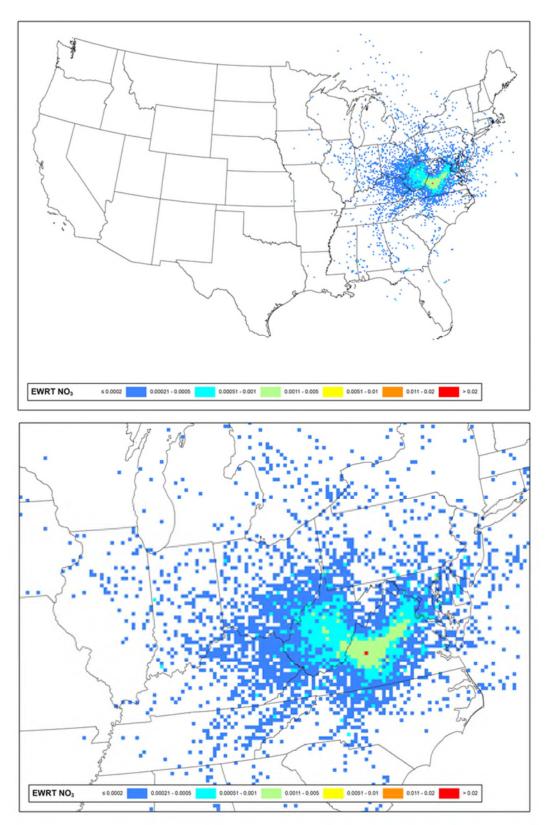


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for James River Face Wilderness Area - Full View (top) and Class I Zoom (bottom)

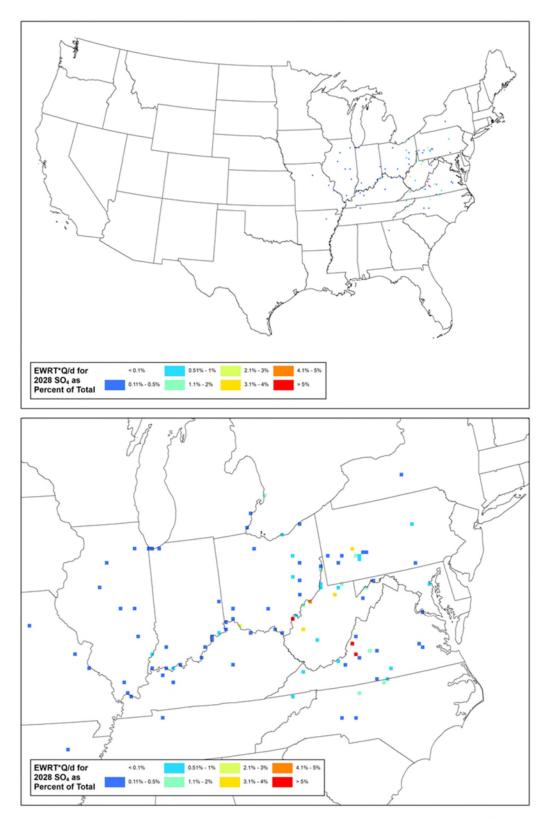


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area – Full View (top) and Class I Zoom (bottom)

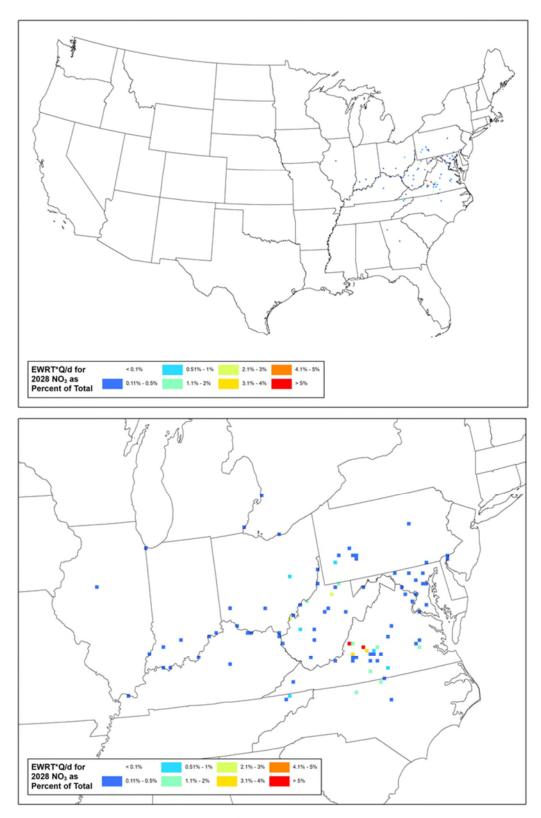
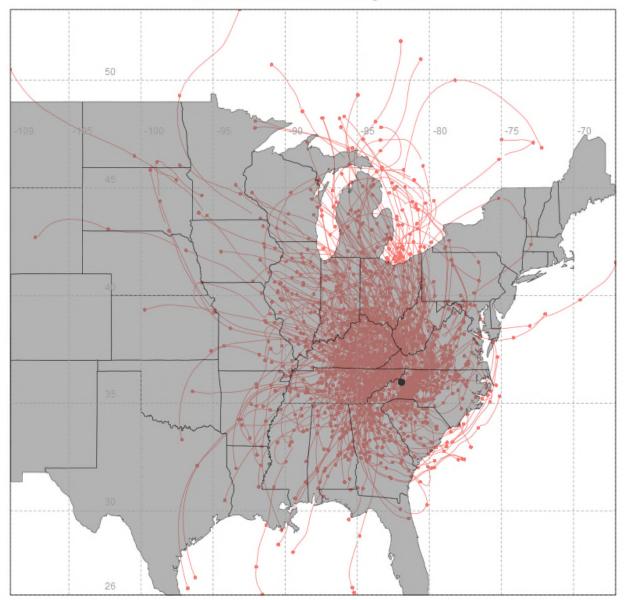


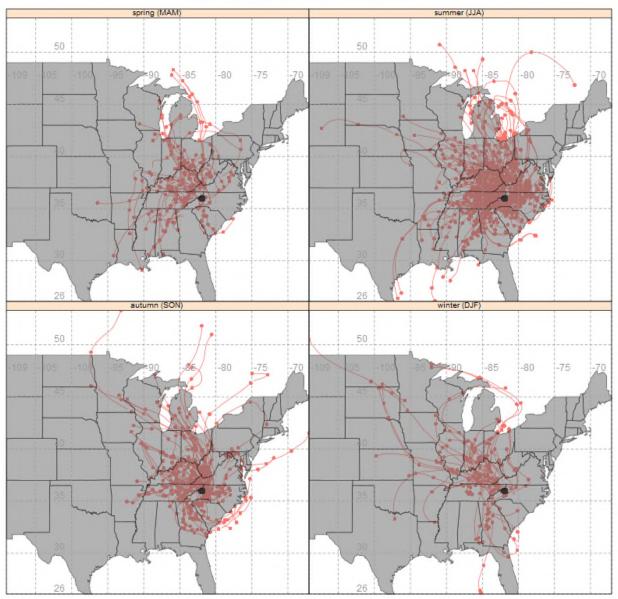
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for James River Face Wilderness Area– Full View (top) and Class I Zoom (bottom)

# Linville Gorge Wilderness Area



Class1 site: 22 Year: 2011-2016 Height: 100.00

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



Class1 site: 22 Year: 2011-2016 Height: 100.00

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

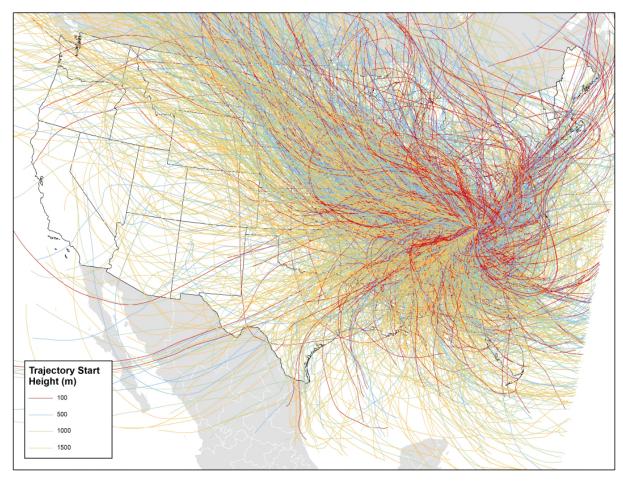
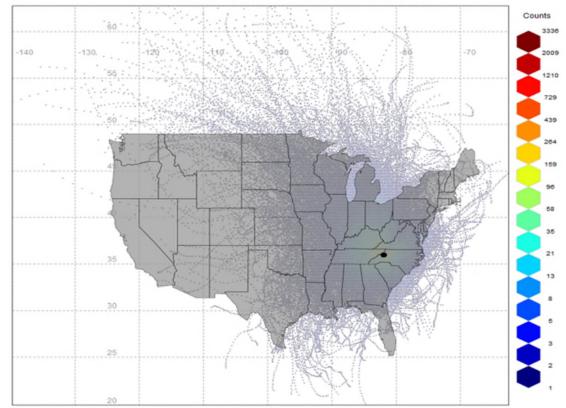


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Linville Gorge Wilderness Area

Hours by hexbin; Class I site: 22; Year: 2011-2016; all heights



#### Hours by hexbin; Class I site: 22; Year: 2011-2016; all heights

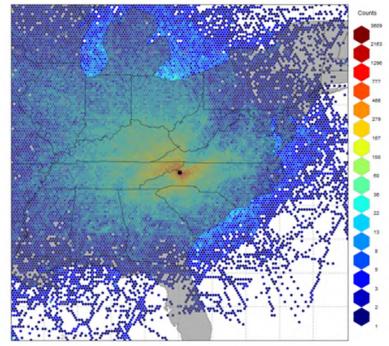


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

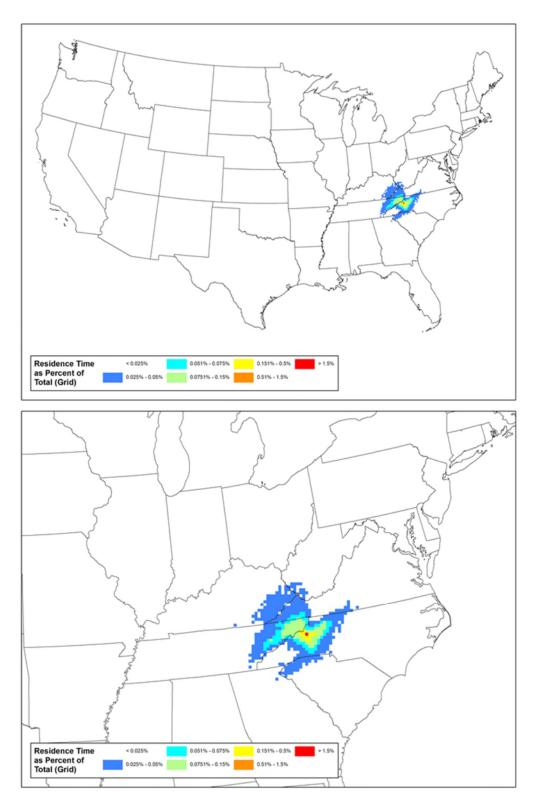


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

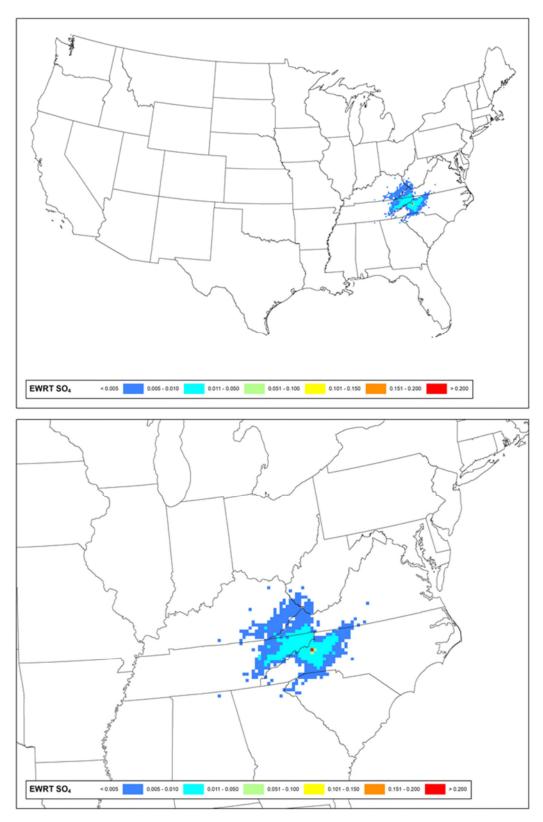


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area - Full View (top) and Class I Zoom (bottom)

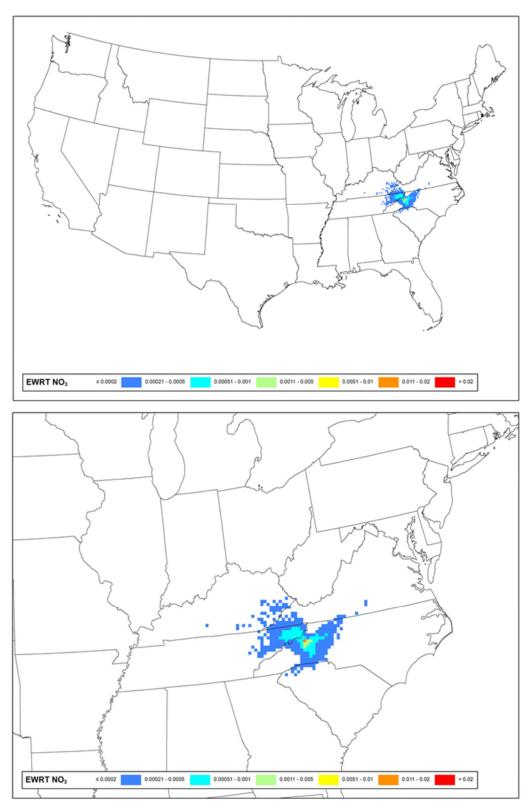


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Linville Gorge Wilderness Area - Full View (top) and Class I Zoom (bottom)

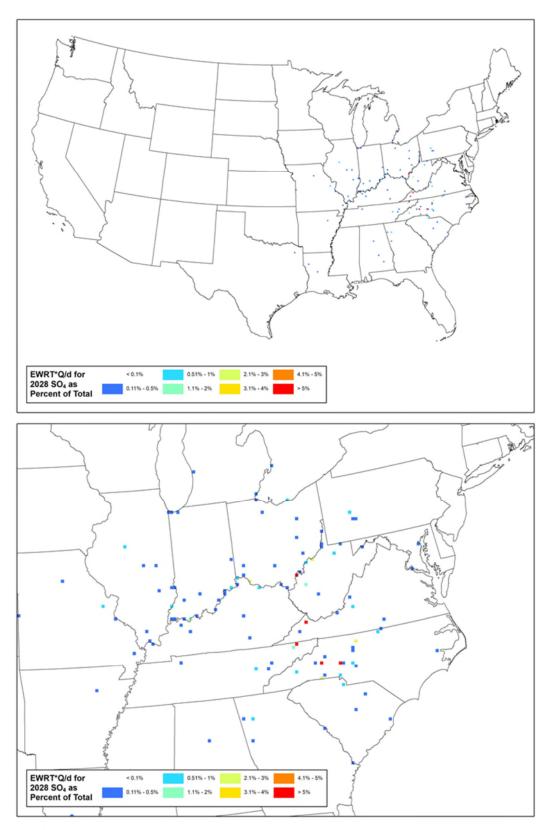


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)

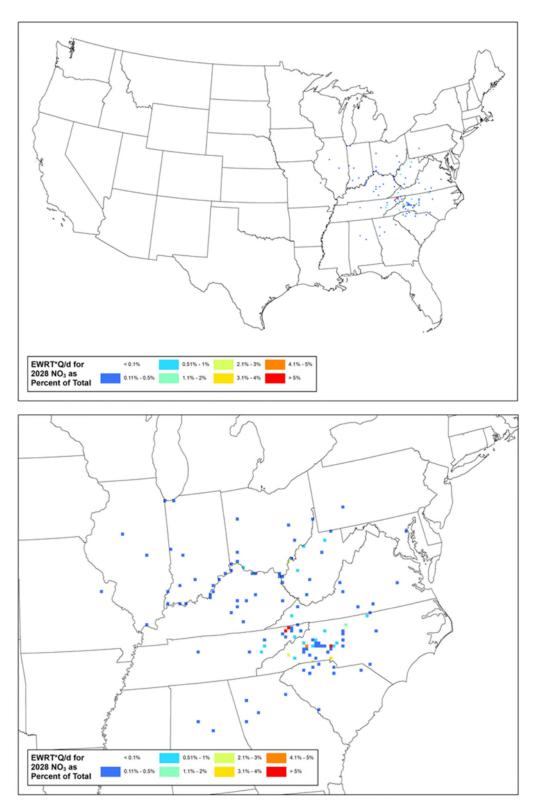
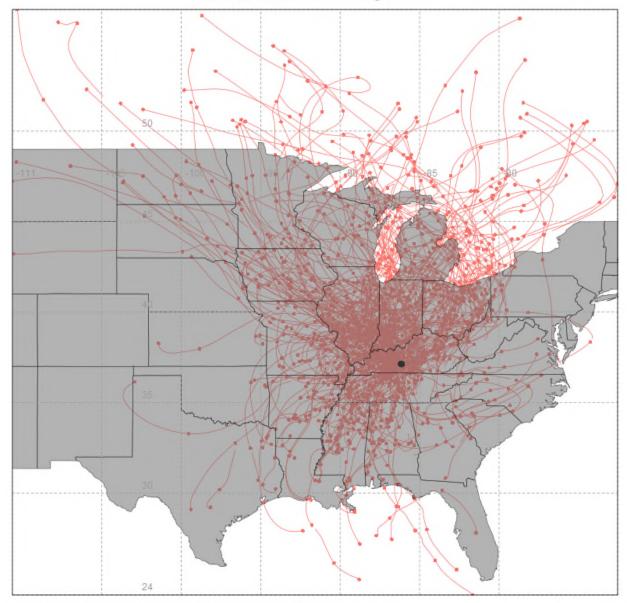


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area– Full View (top) and Class I Zoom (bottom)

## Mammoth Cave National Park



Class1 site: 25 Year: 2011-2016 Height: 100.00

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

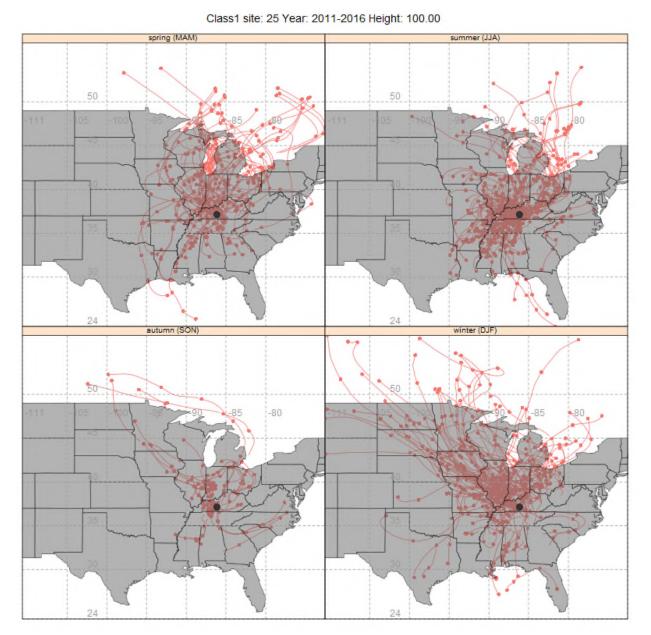


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Mammoth Cave National Park

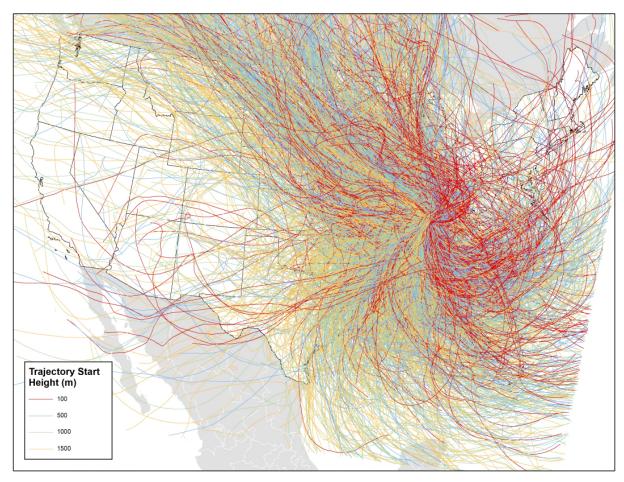
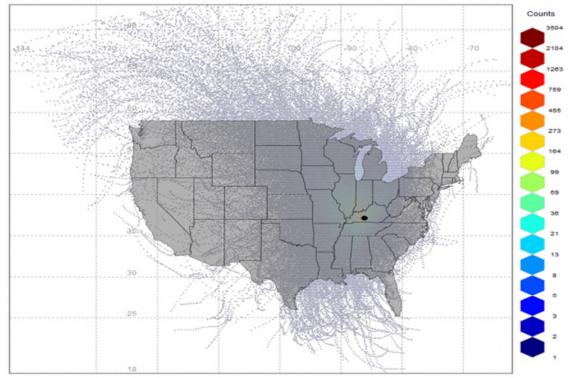


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Mammoth Cave National Park

Hours by hexbin; Class I site: 25; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 25; Year: 2011-2016; all heights

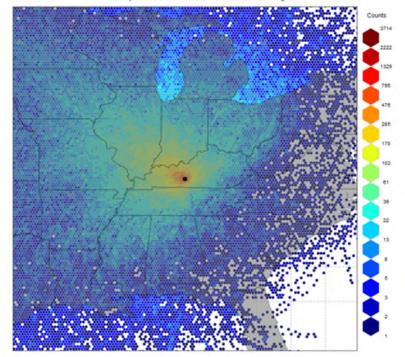


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

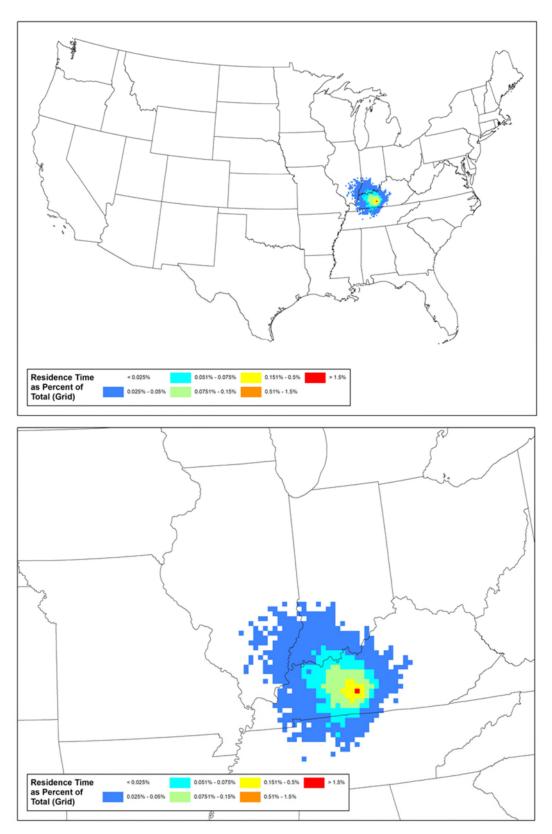


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

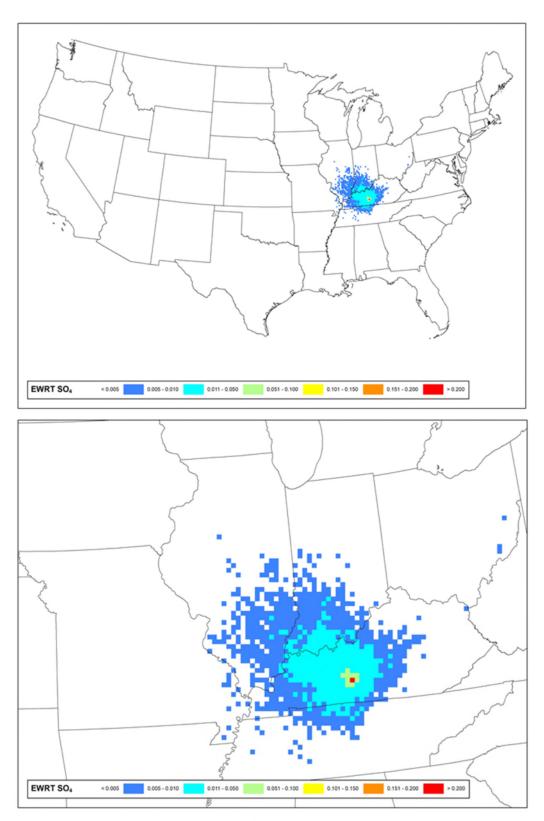


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park - Full View (top) and Class I Zoom (bottom)

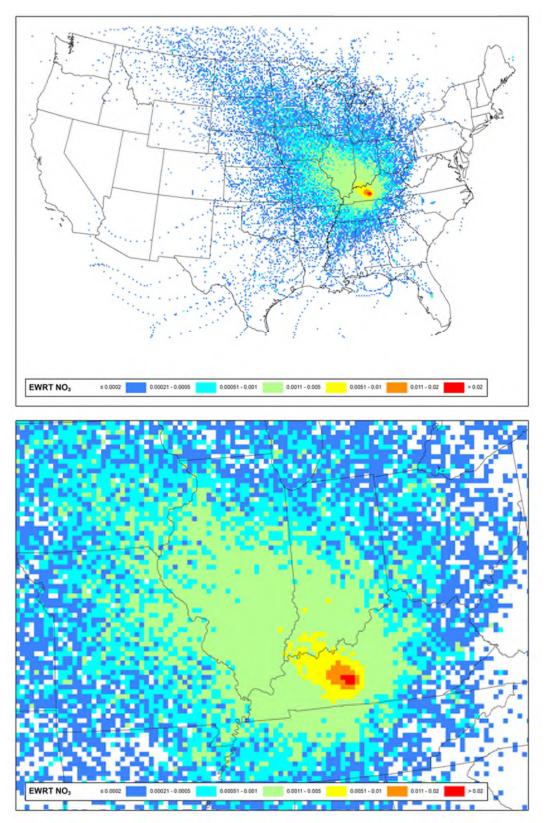


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Mammoth Cave National Park - Full View (top) and Class I Zoom (bottom)

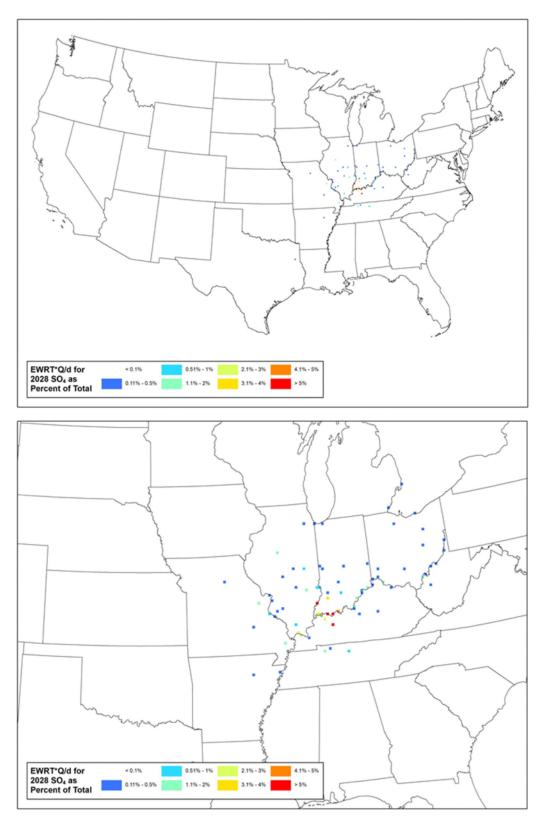


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)

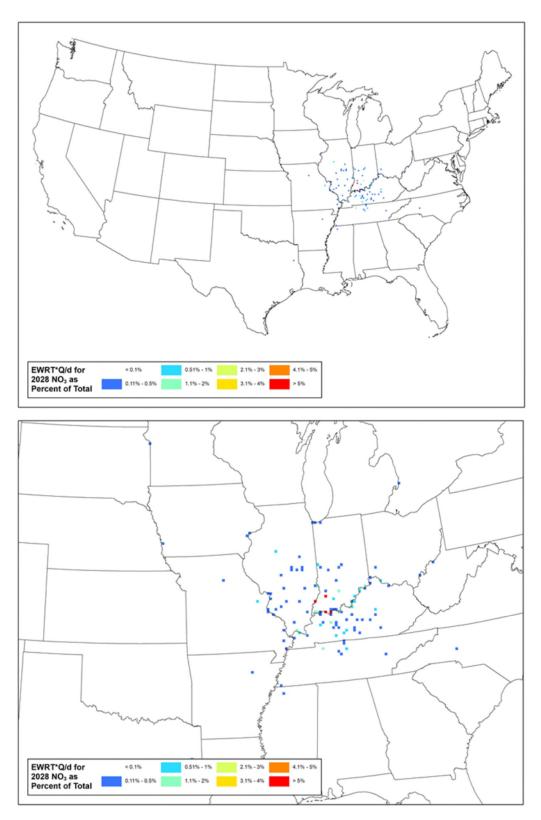
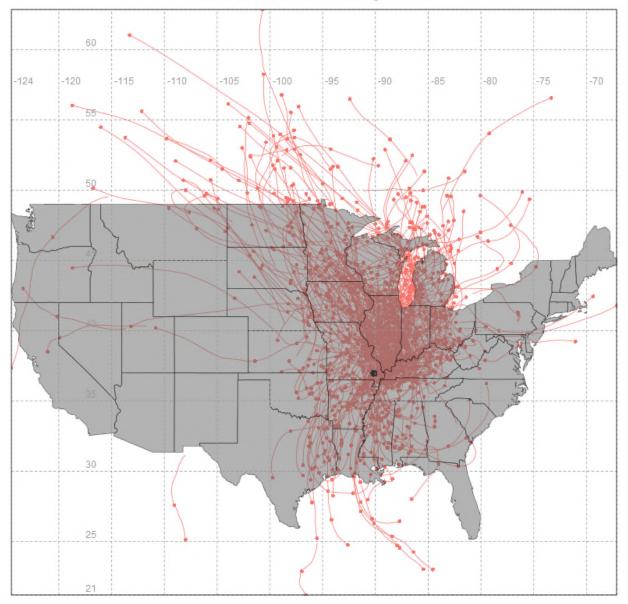


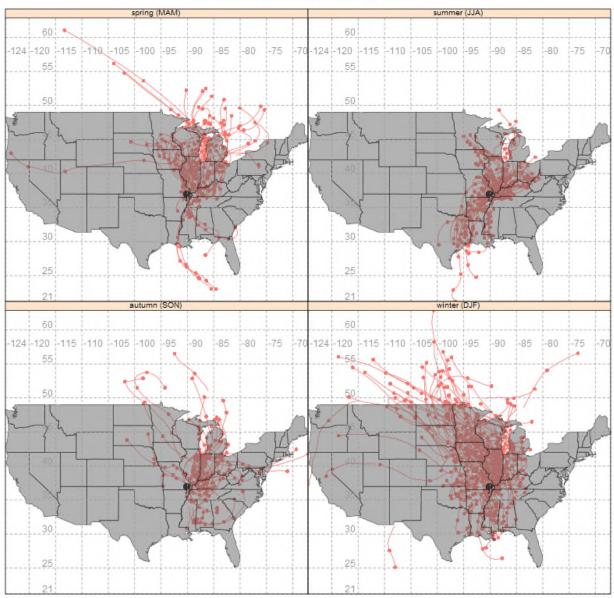
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Mammoth Cave National Park– Full View (top) and Class I Zoom (bottom)

# Mingo Wilderness Area



Class1 site: 26 Year: 2011-2016 Height: 100.00

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



Class1 site: 26 Year: 2011-2016 Height: 100.00

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

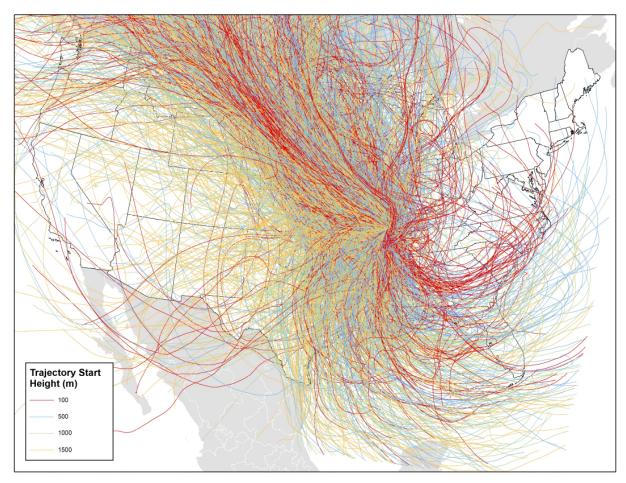


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Mingo Wilderness Area

Hours by hexbin; Class I site: 26; Year: 2011-2016; all heights

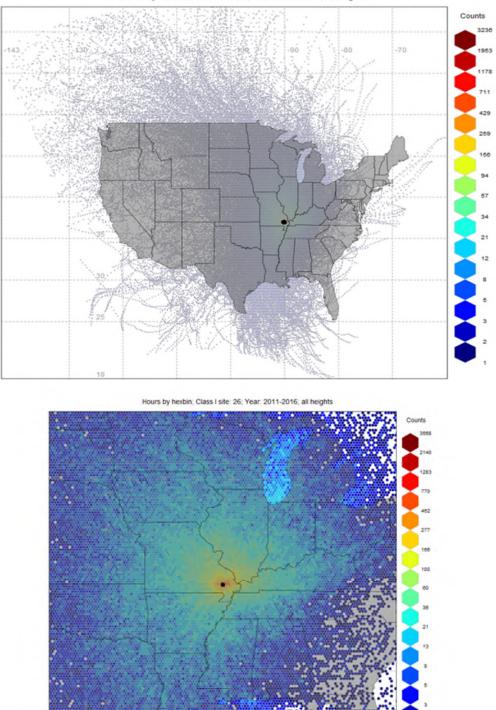


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

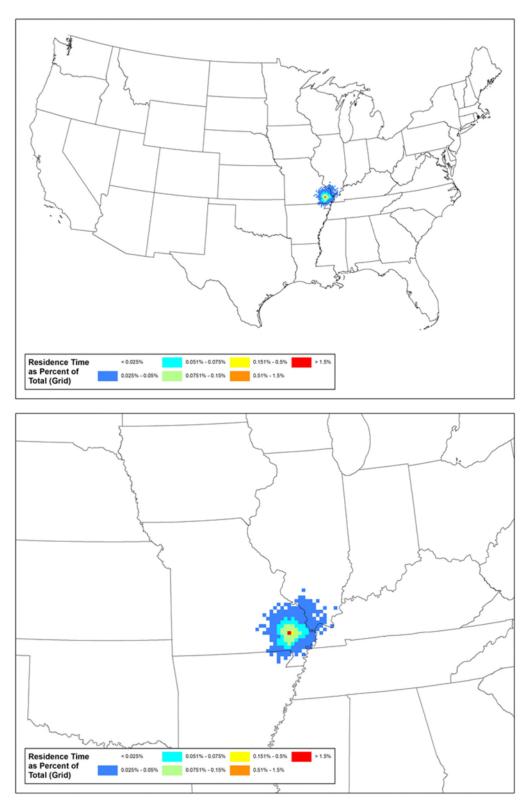


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

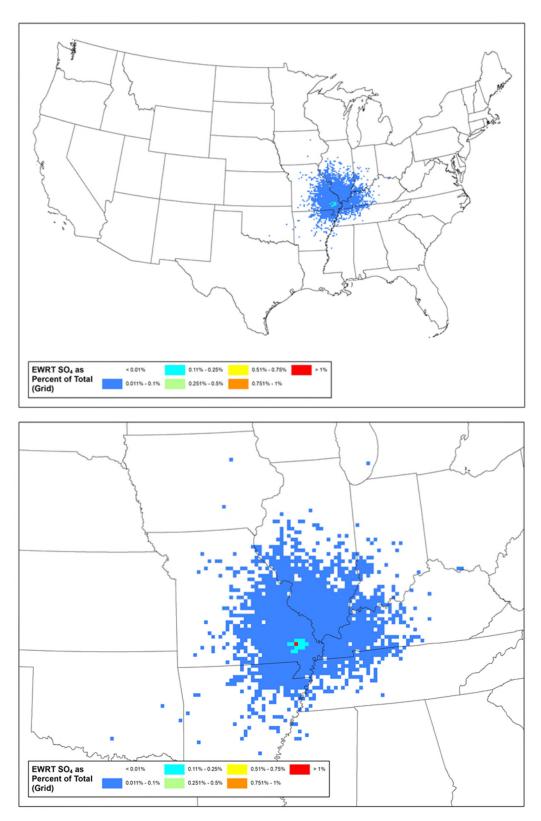


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area - Full View (top) and Class I Zoom (bottom)

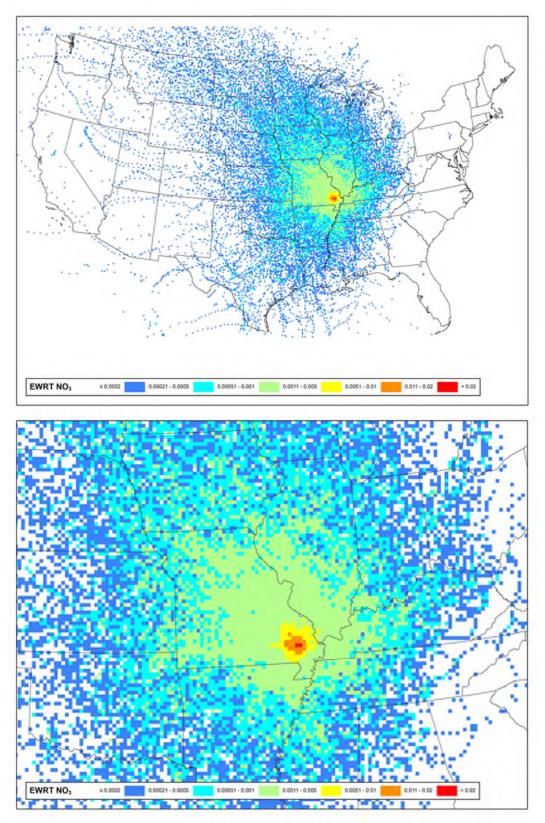


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Mingo Wilderness Area - Full View (top) and Class I Zoom (bottom)

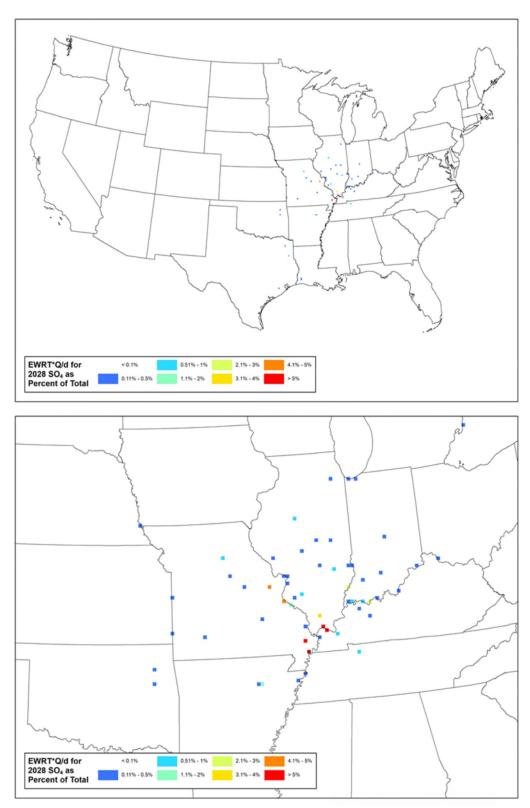


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area – Full View (top) and Class I Zoom (bottom)

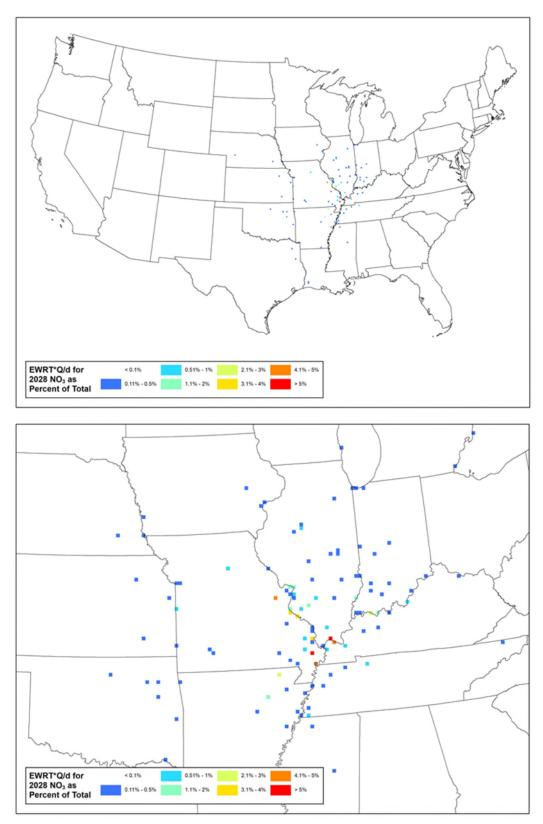
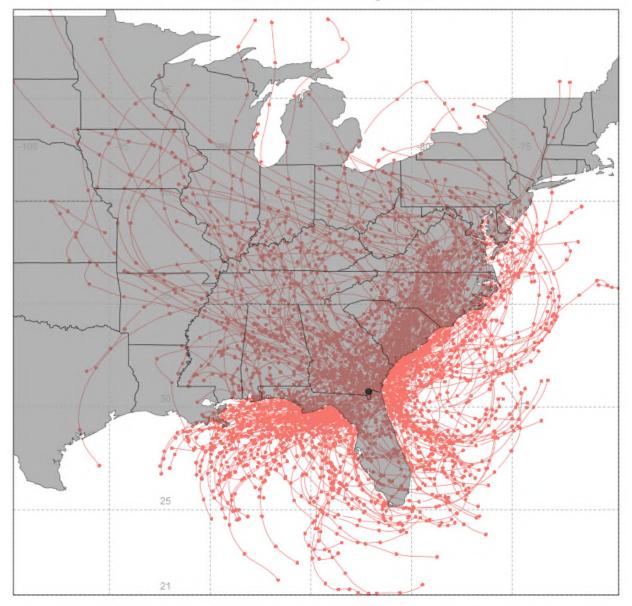


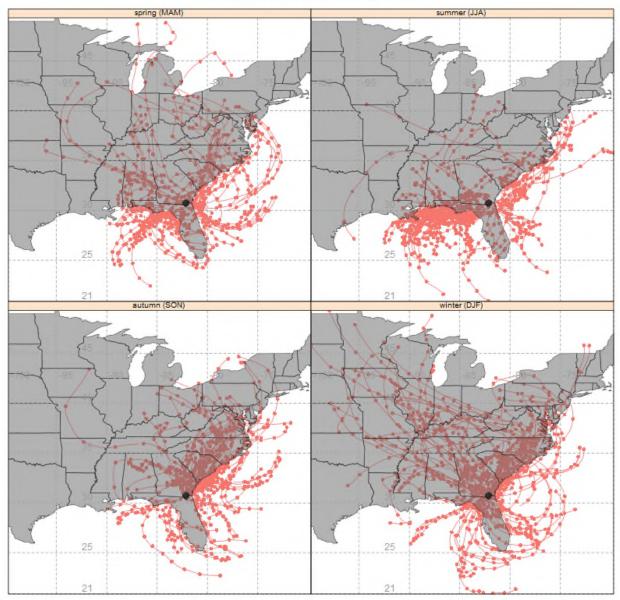
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Mingo Wilderness Area– Full View (top) and Class I Zoom (bottom)

## **Okefenokee Wilderness Area**



Class1 site: 28 Year: 2011-2016 Height: 100.00

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



#### Class1 site: 28 Year: 2011-2016 Height: 100.00

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

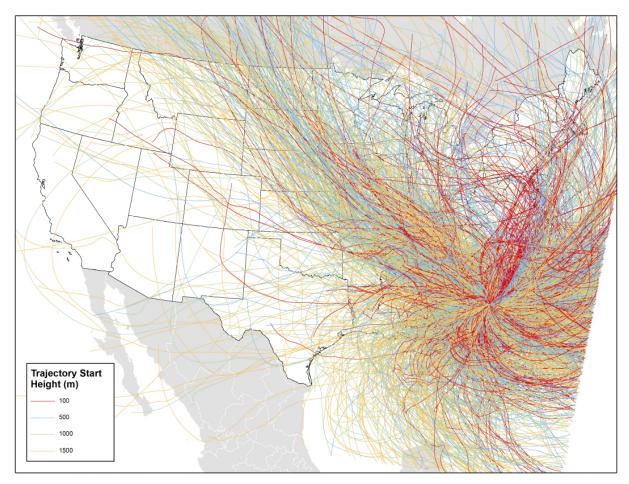


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Okefenokee Wilderness Area

Hours by hexbin; Class I site: 28; Year: 2011-2016; all heights

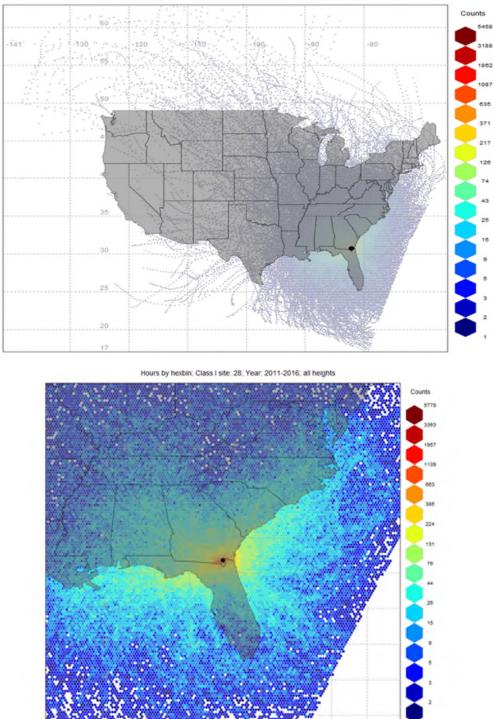


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

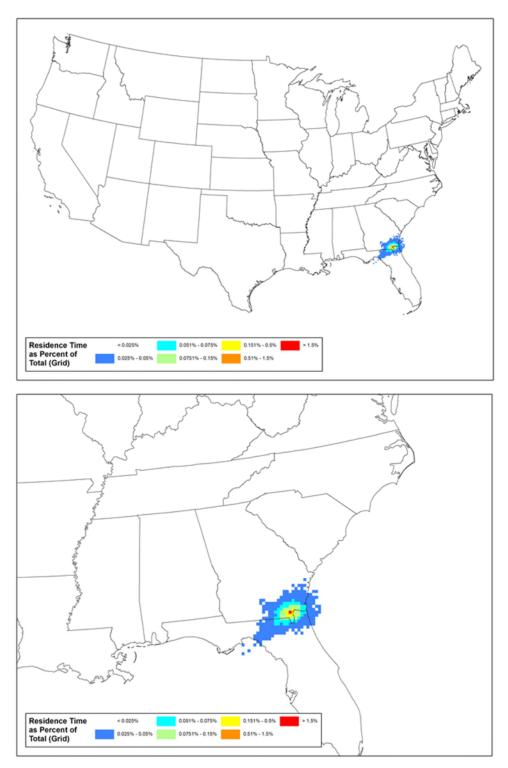


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

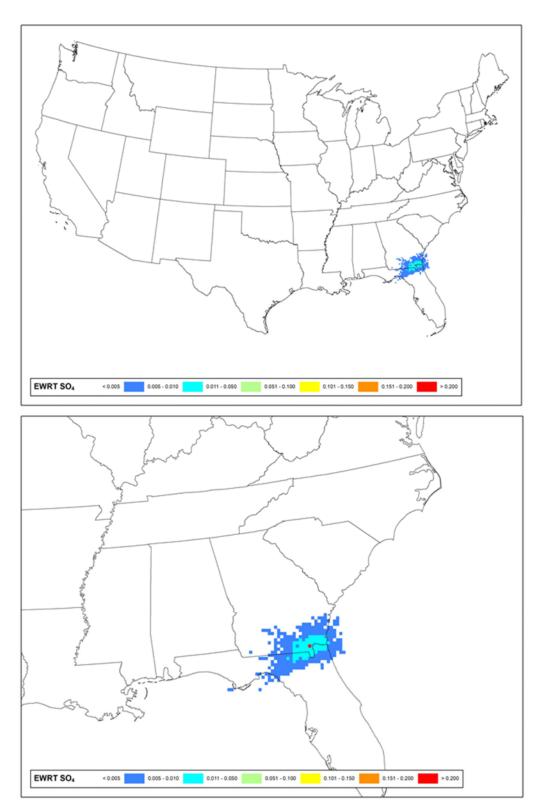


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area - Full View (top) and Class I Zoom (bottom)

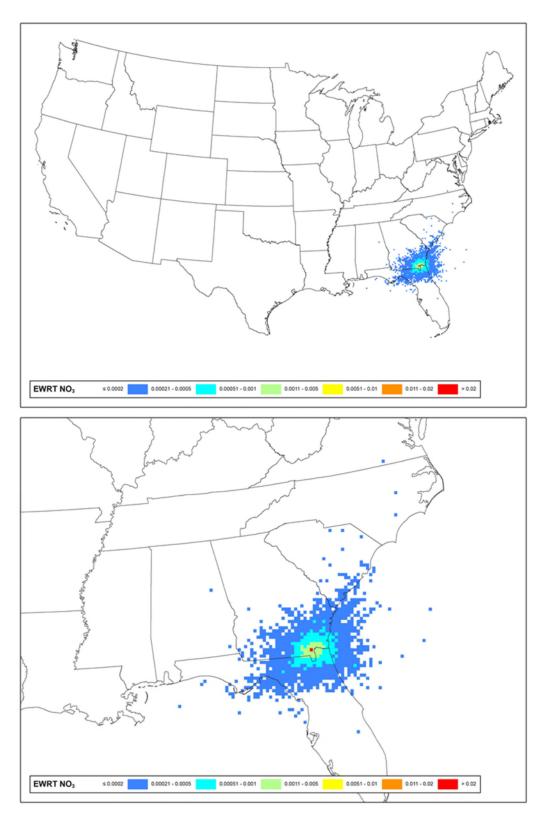


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Okefenokee Wilderness Area - Full View (top) and Class I Zoom (bottom)

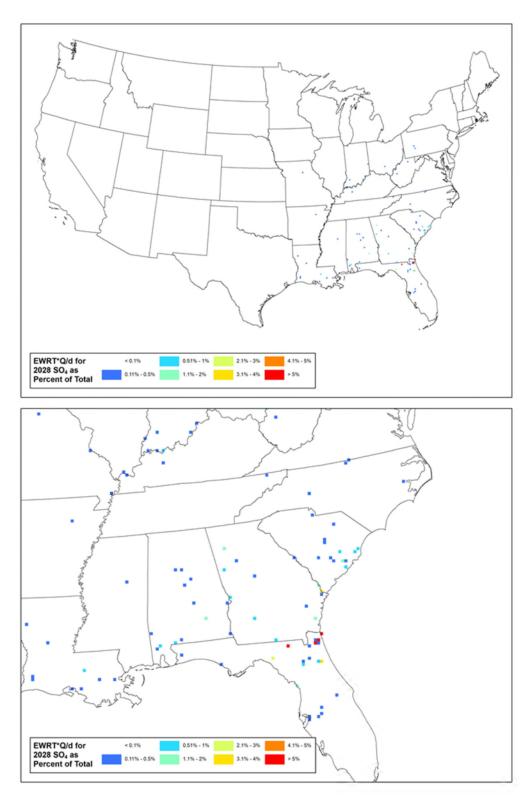


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

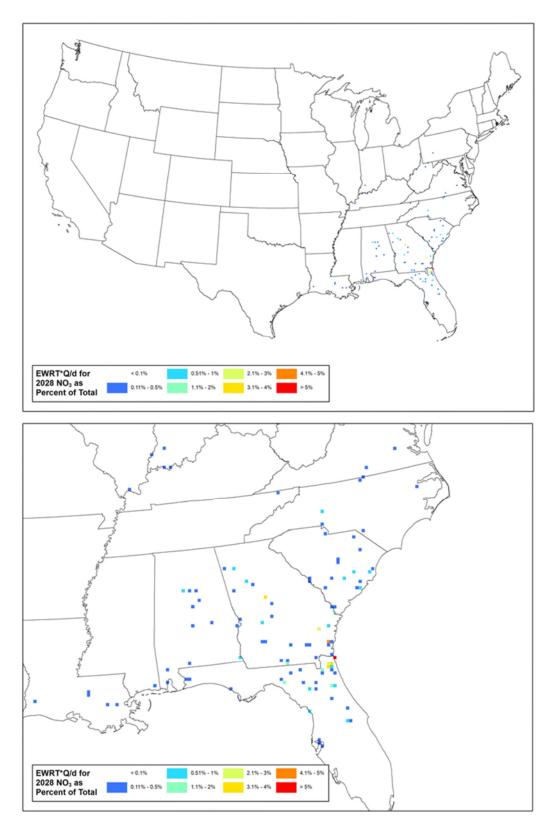
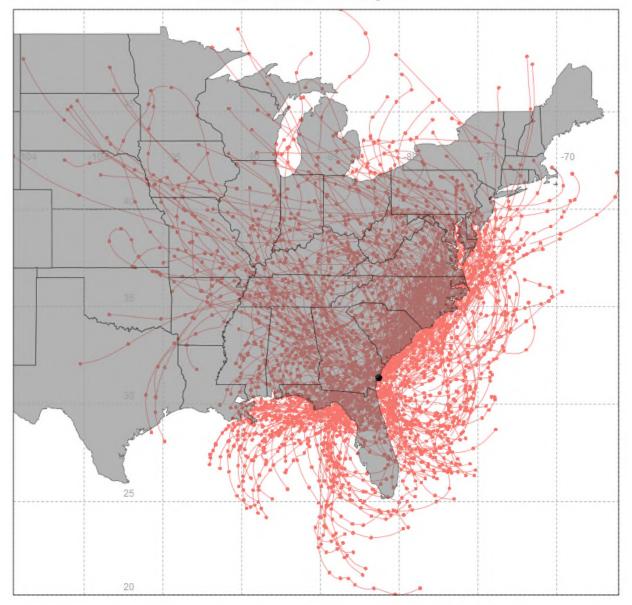


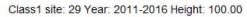
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)

## Wolf Island Wilderness Area



Class1 site: 29 Year: 2011-2016 Height: 100.00

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



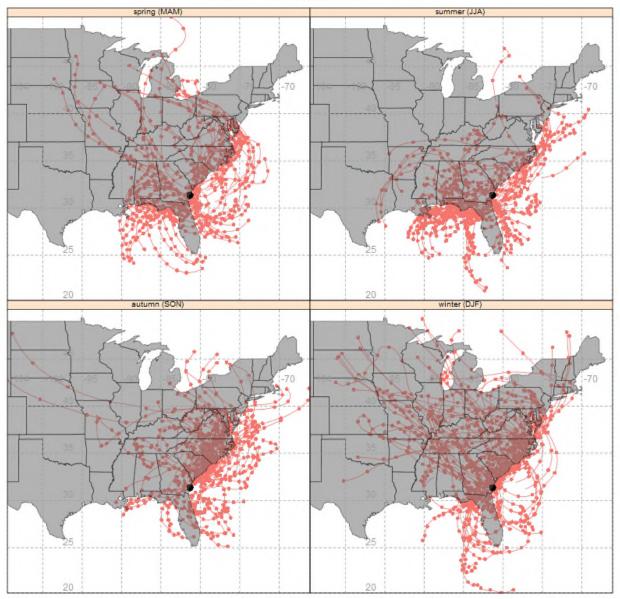


Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Wolf Island Wilderness Area

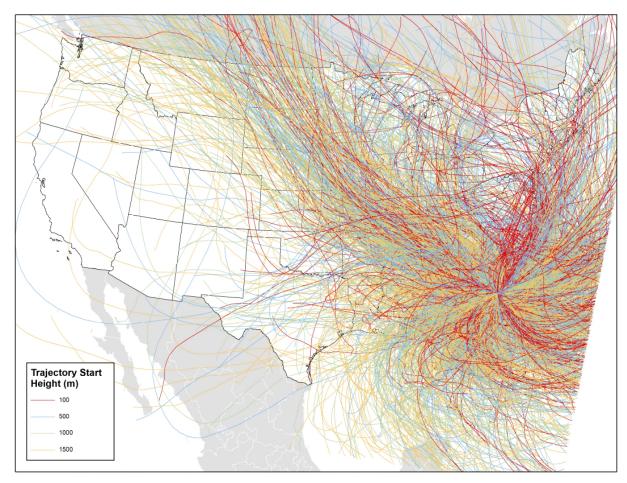


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Wolf Island Wilderness Area

Hours by hexbin; Class I site: 29; Year: 2011-2016; all heights

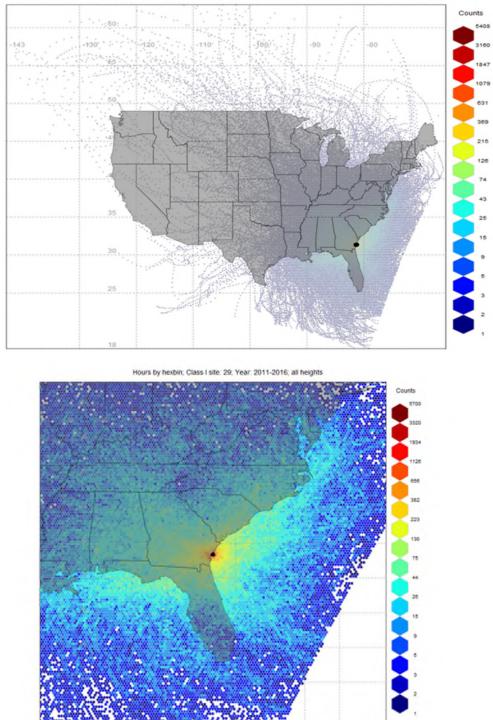


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

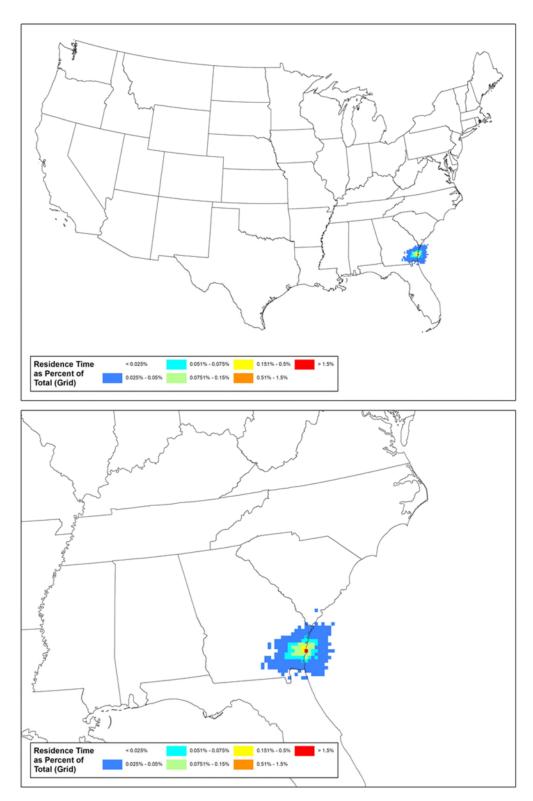


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

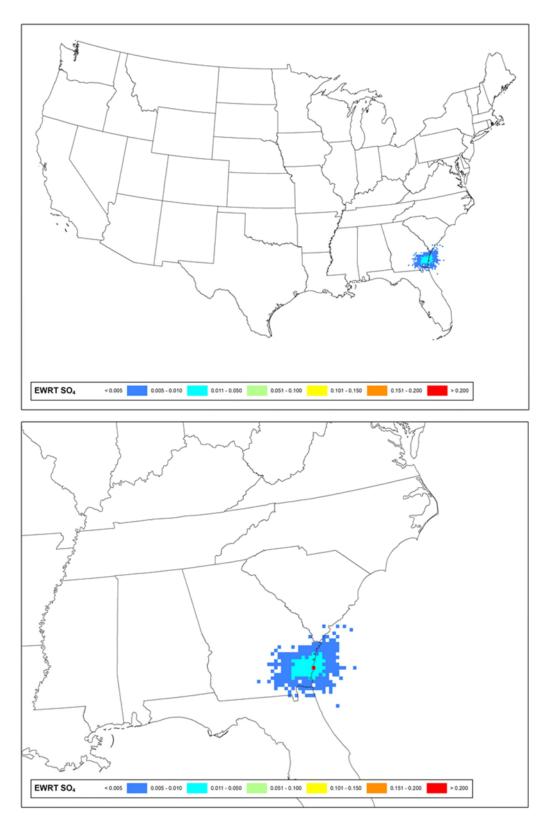


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area - Full View (top) and Class I Zoom (bottom)

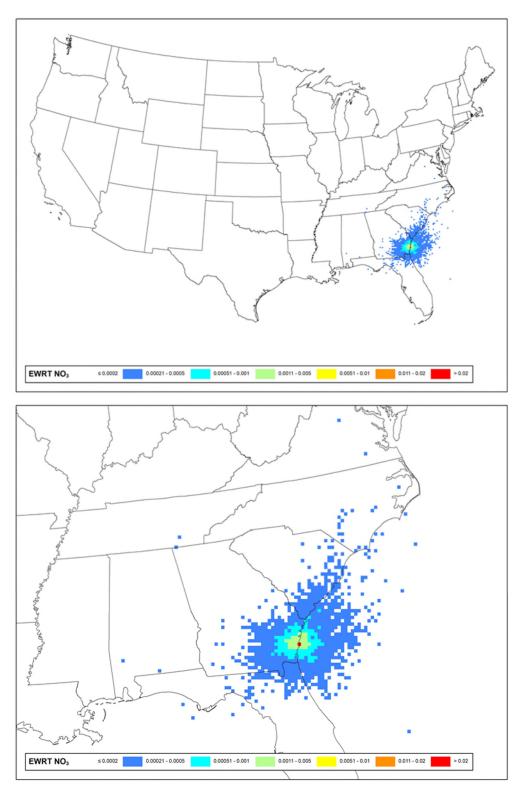


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Wolf Island Wilderness Area - Full View (top) and Class I Zoom (bottom)

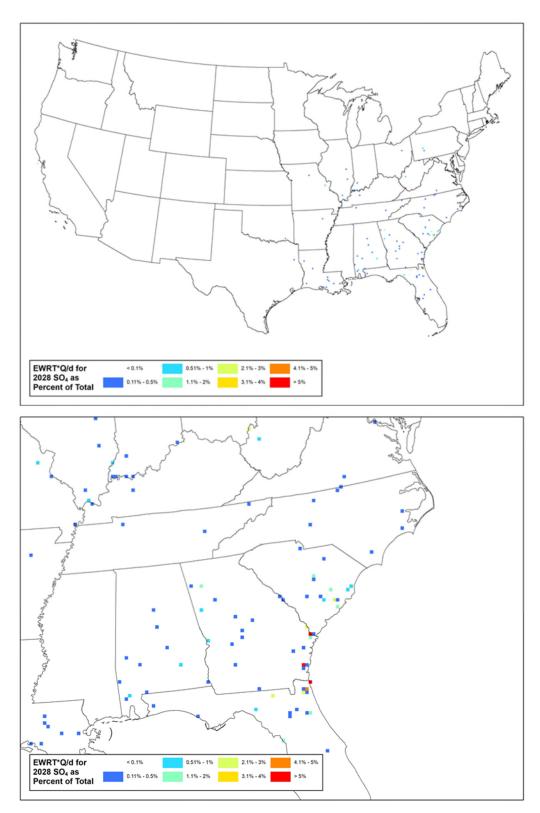


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

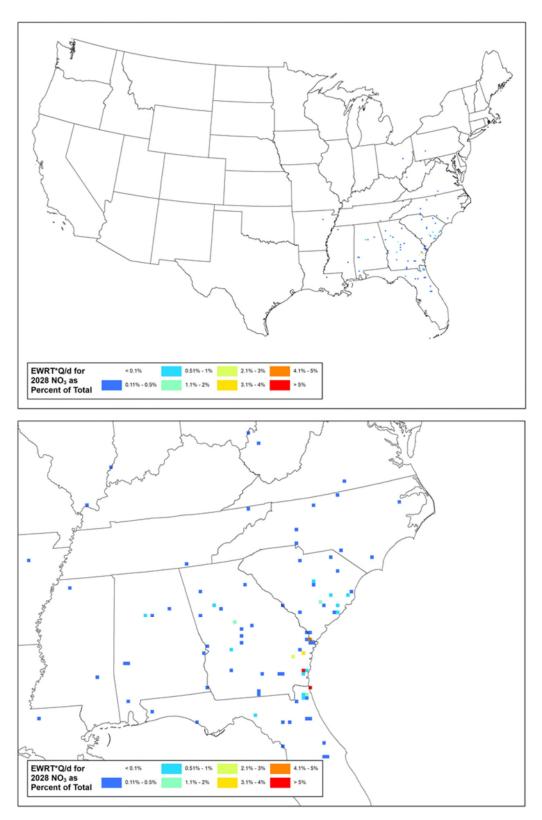
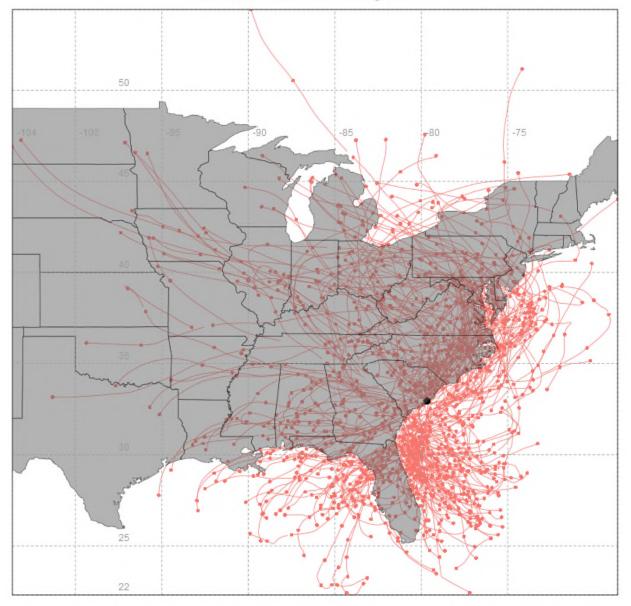


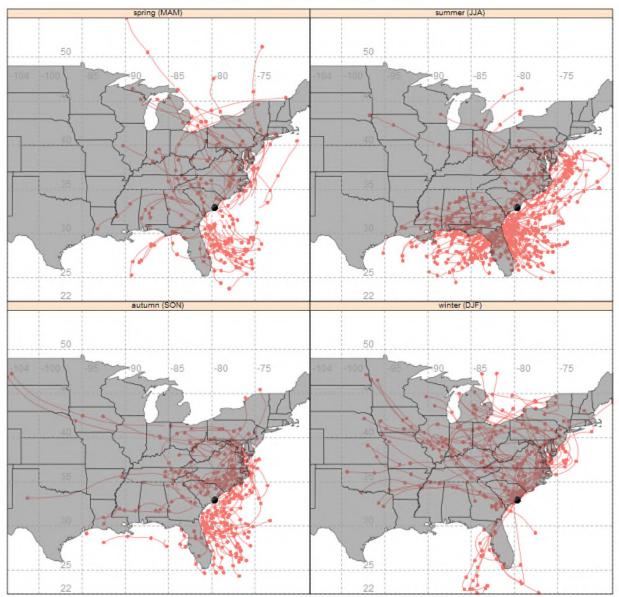
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)

## **Cape Romain Wilderness Area**



Class1 site: 30 Year: 2011-2016 Height: 100.00

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



Class1 site: 30 Year: 2011-2016 Height: 100.00

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

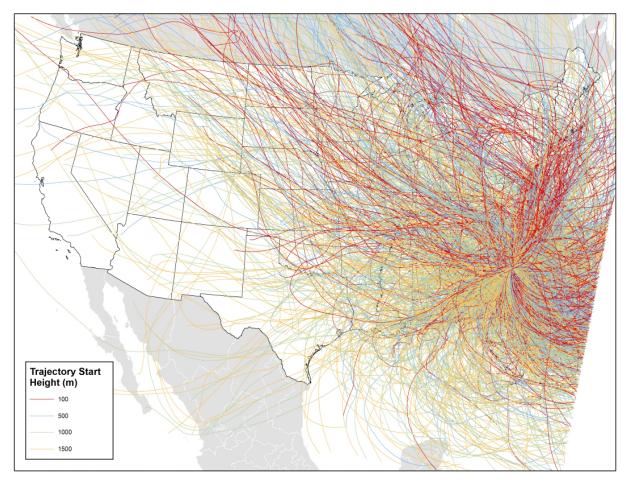


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Cape Romain Wilderness Area

Hours by hexbin; Class I site: 30; Year: 2011-2016; all heights

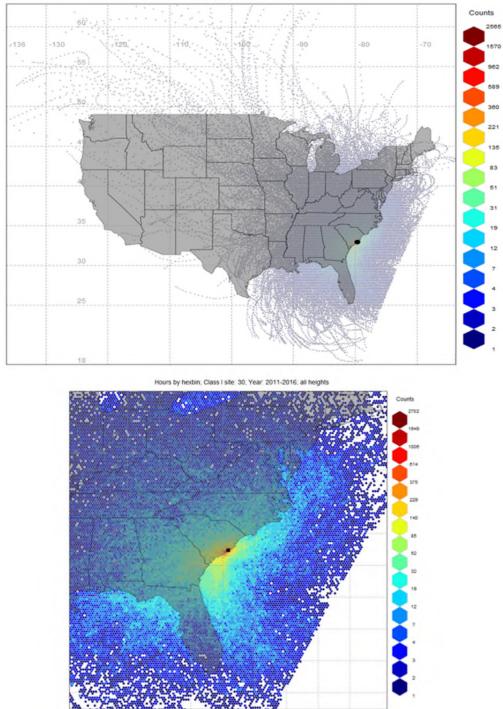


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

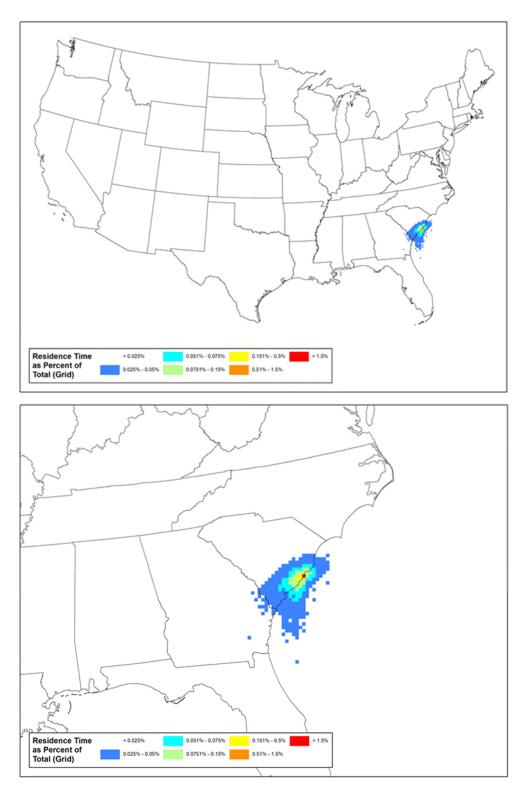


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

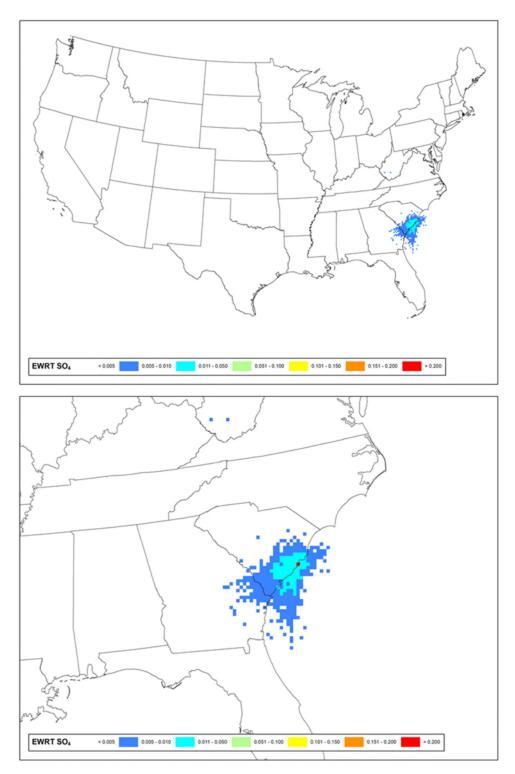


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area - Full View (top) and Class I Zoom (bottom)

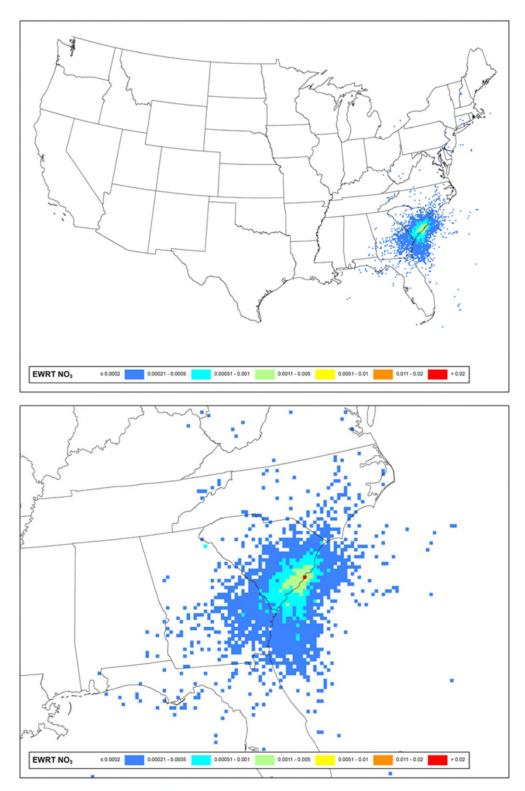


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Cape Romain Wilderness Area - Full View (top) and Class I Zoom (bottom)

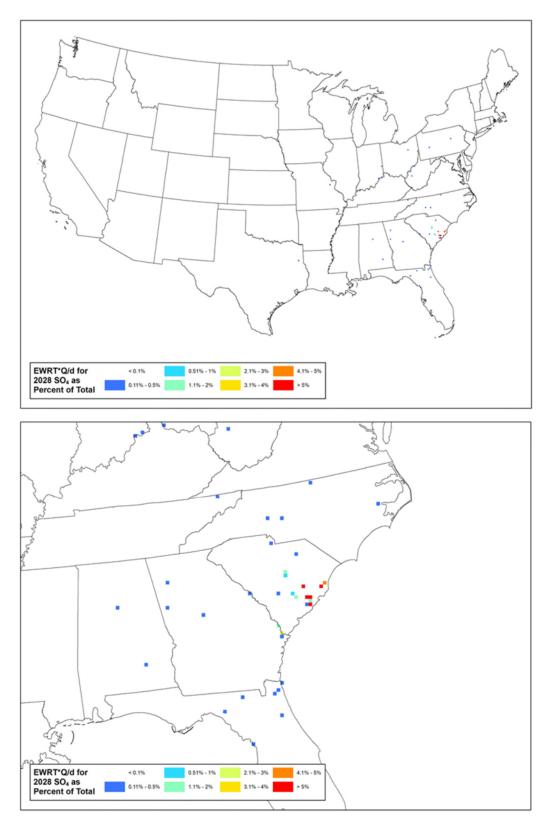


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

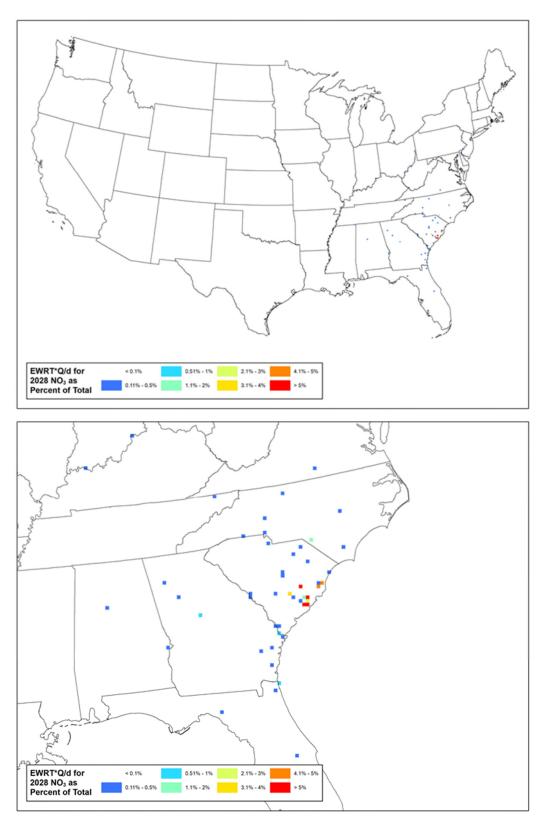
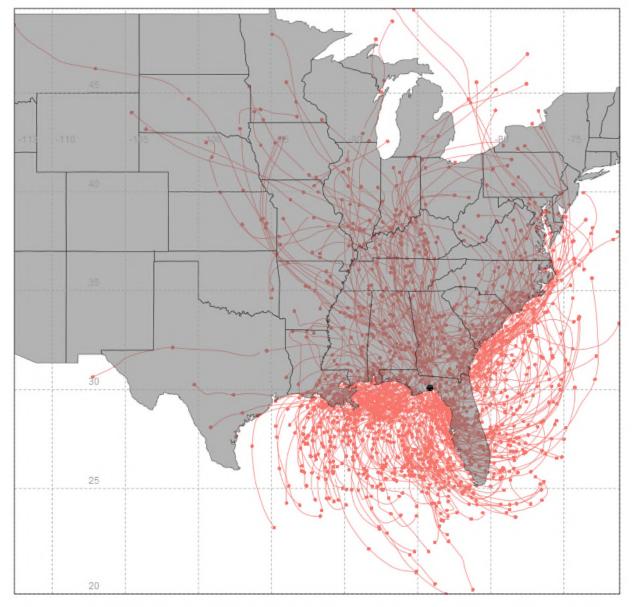


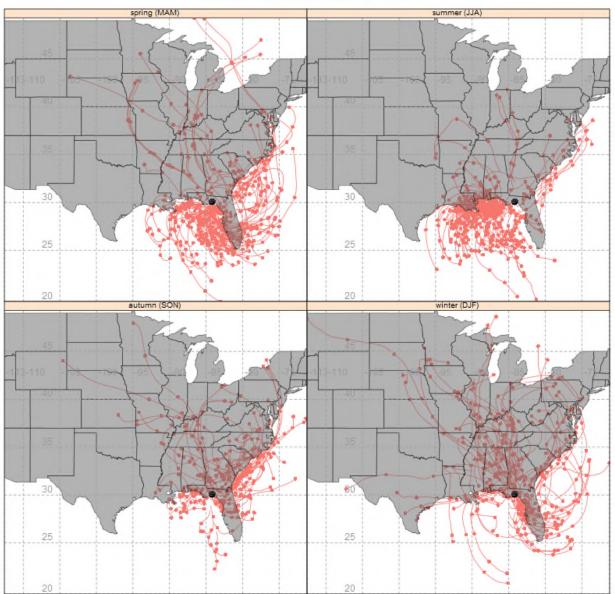
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)

## St Marks Wilderness Area



Class1 site: 32 Year: 2011-2016 Height: 100.00

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



Class1 site: 32 Year: 2011-2016 Height: 100.00

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

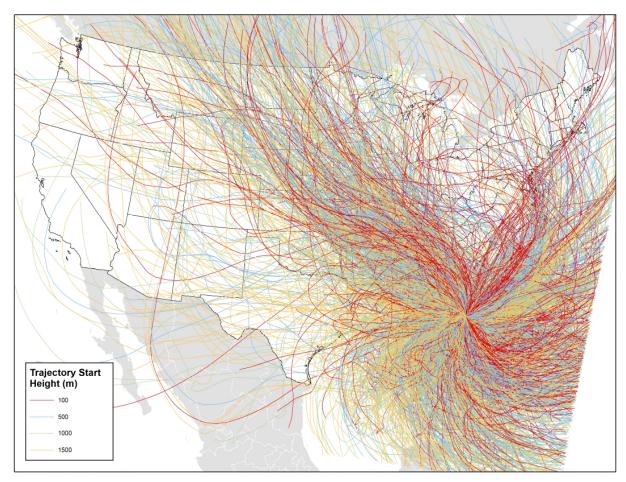
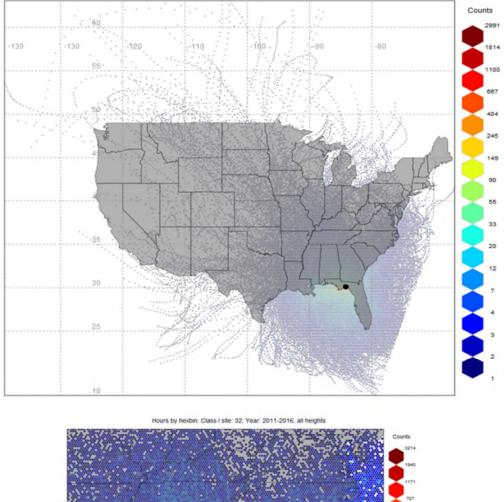


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from St Marks Wilderness Area

Hours by hexbin; Class I site: 32; Year: 2011-2016; all heights



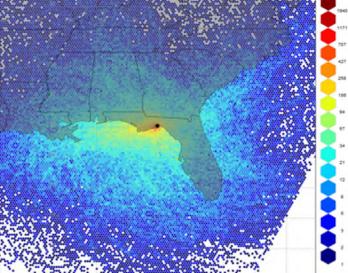


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

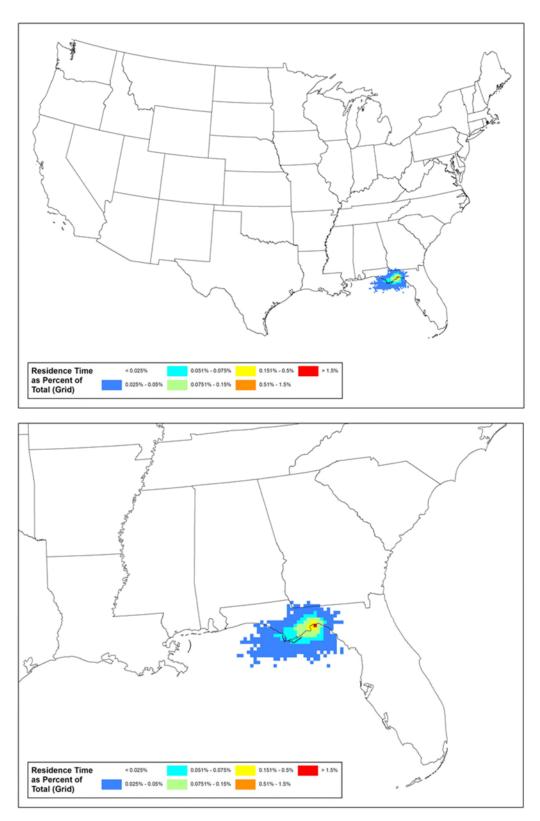


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

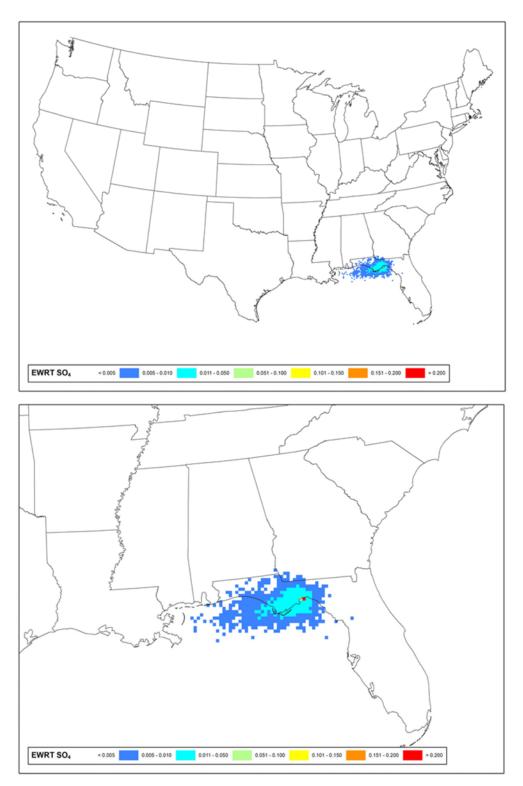


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area - Full View (top) and Class I Zoom (bottom)

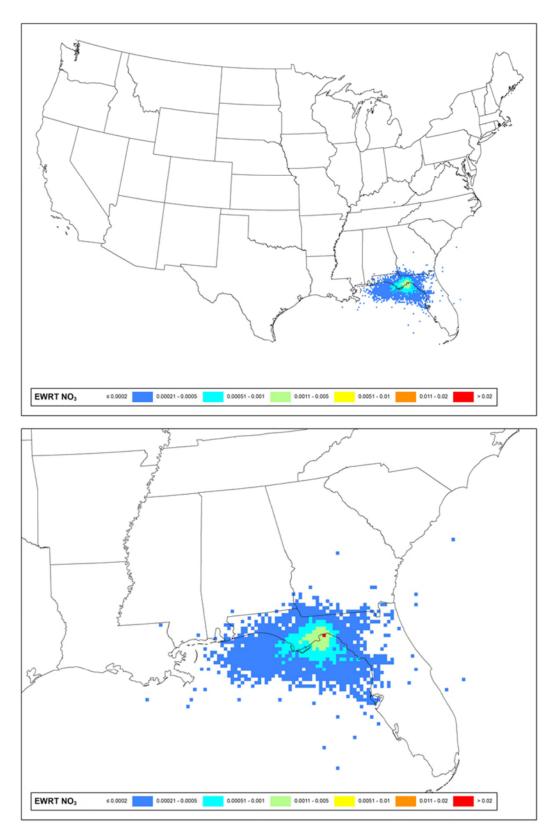


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for St Marks Wilderness Area - Full View (top) and Class I Zoom (bottom)

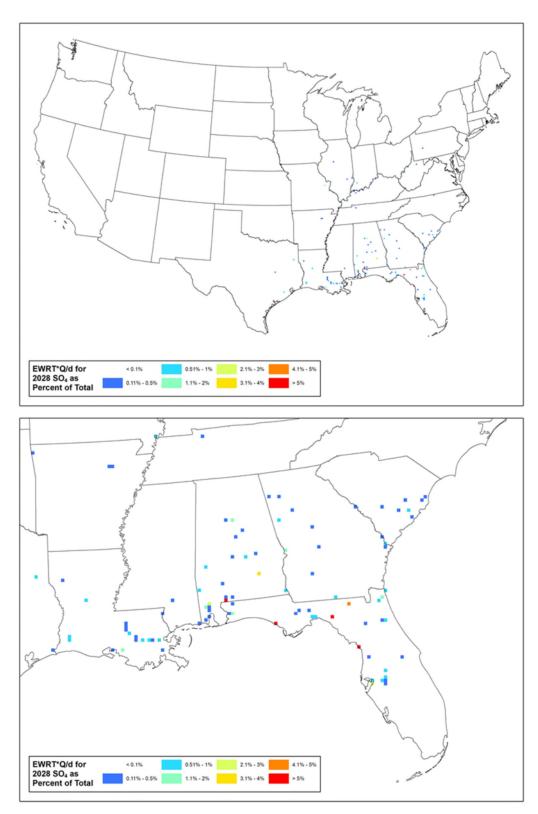


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

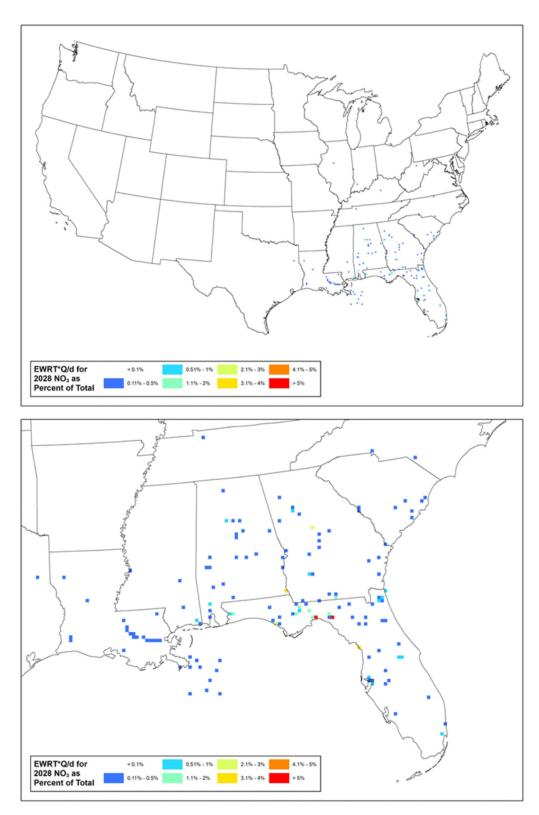
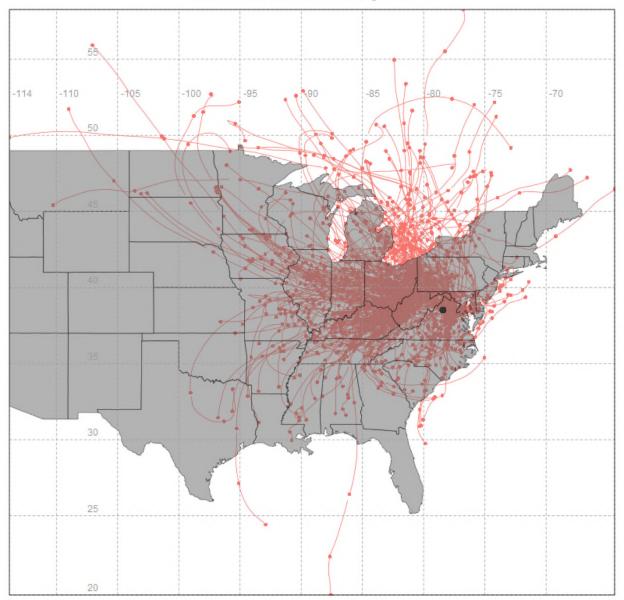


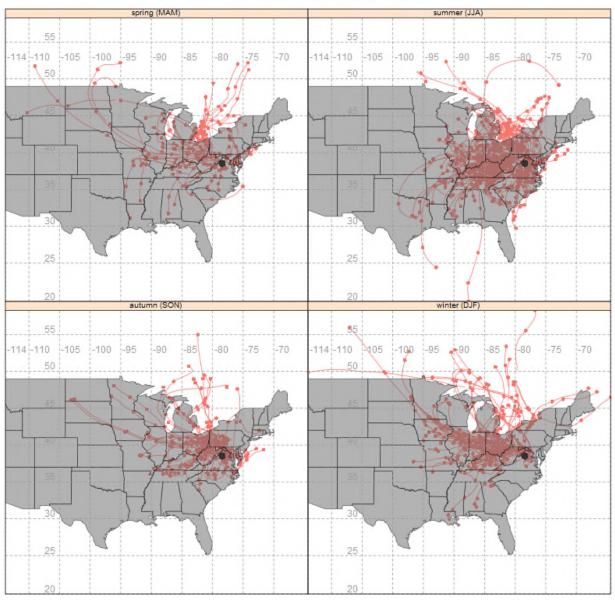
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)

## Shenandoah National Park



Class1 site: 35 Year: 2011-2016 Height: 100.00

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



Class1 site: 35 Year: 2011-2016 Height: 100.00

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

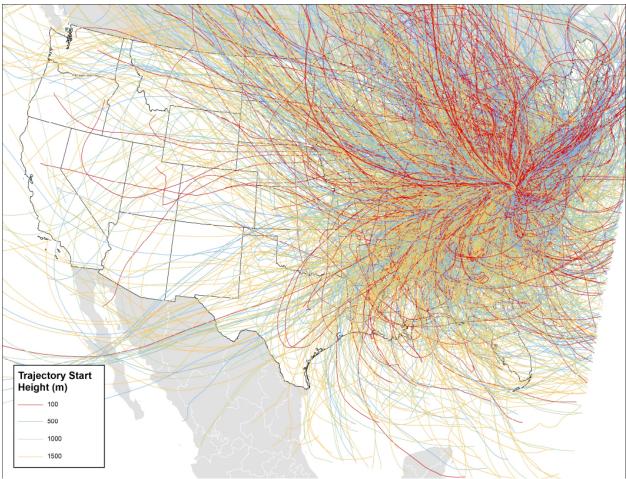


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shenandoah National Park

Hours by hexbin; Class I site: 35; Year: 2011-2016; all heights

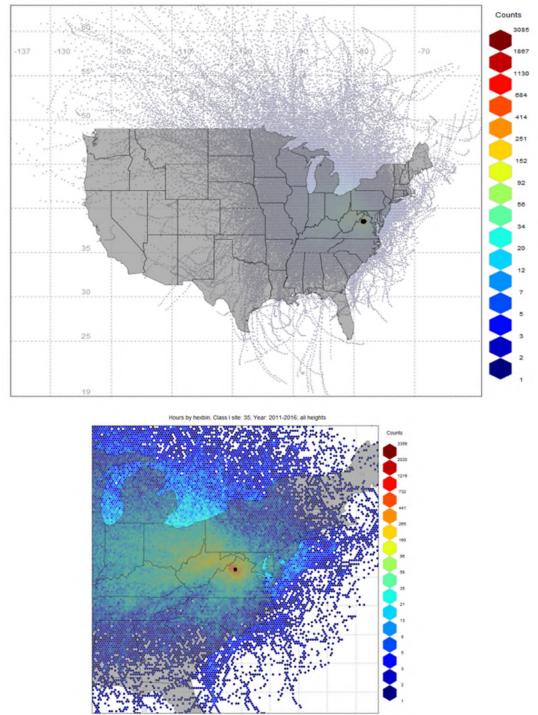


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

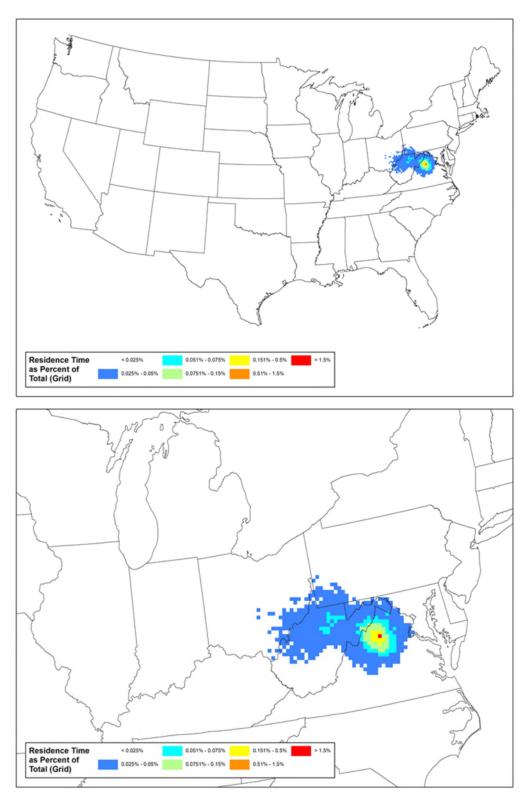


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

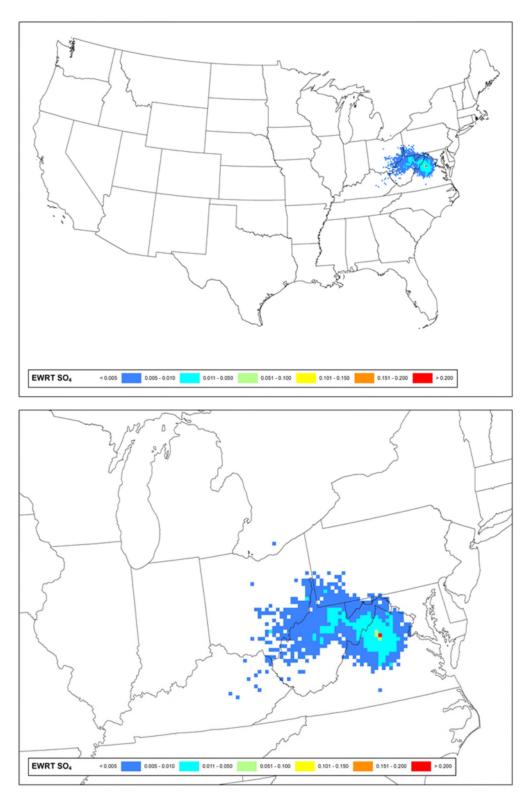


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Shenandoah National Park - Full View (top) and Class I Zoom (bottom)

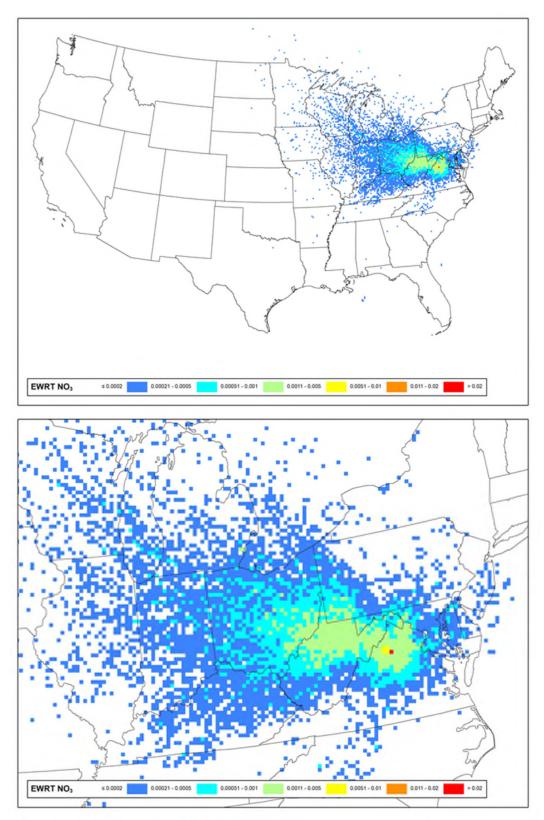


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Shenandoah National Park - Full View (top) and Class I Zoom (bottom)

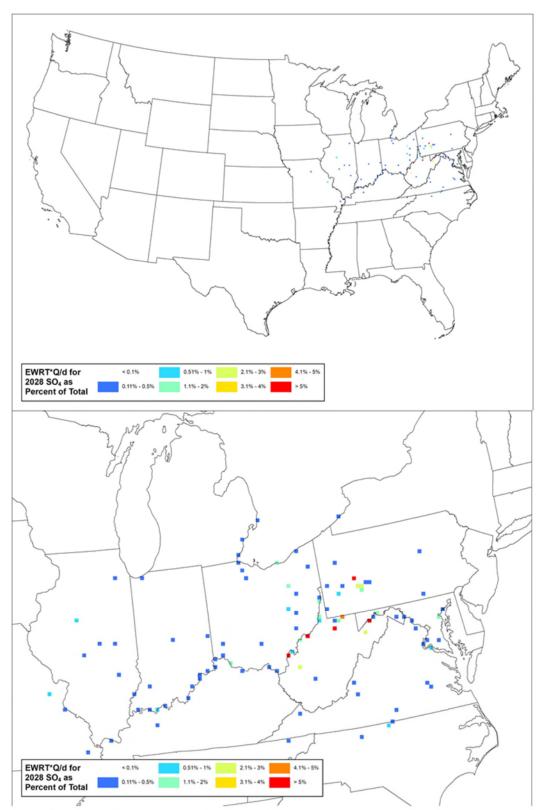


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

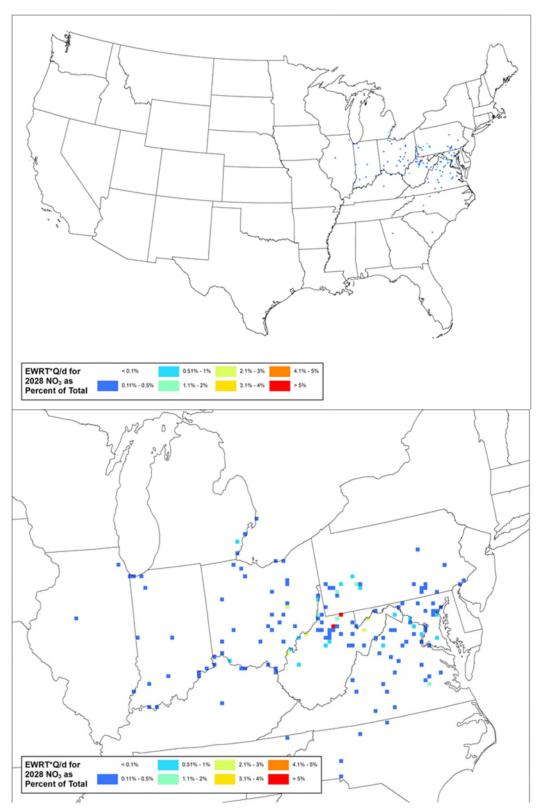
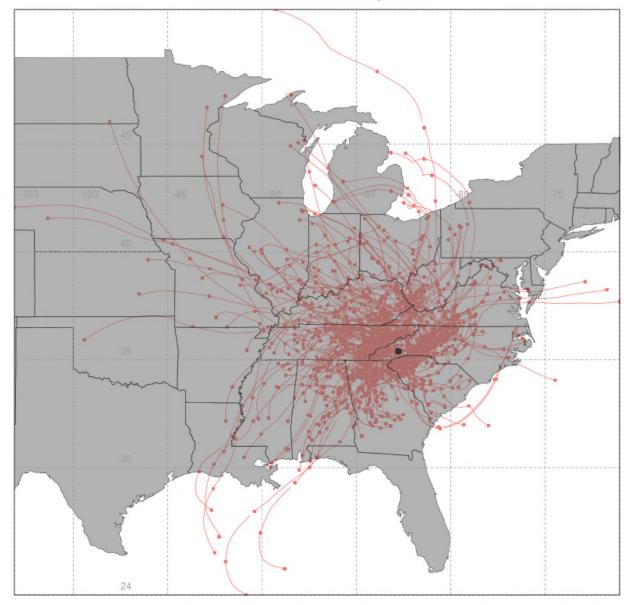


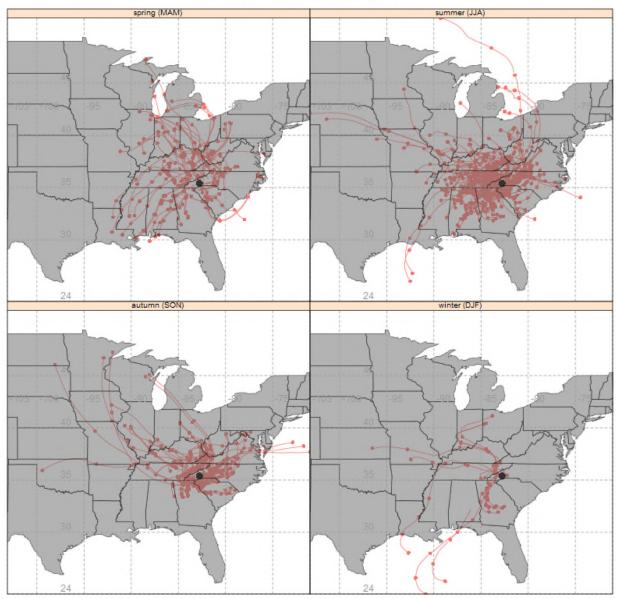
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)

## Shining Rock Wilderness Area



Class1 site: 36 Year: 2011-2016 Height: 100.00

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



Class1 site: 36 Year: 2011-2016 Height: 100.00

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

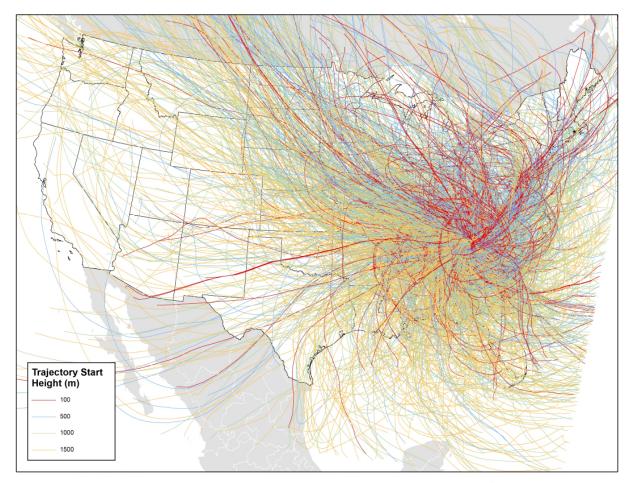


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shining Rock Wilderness Area

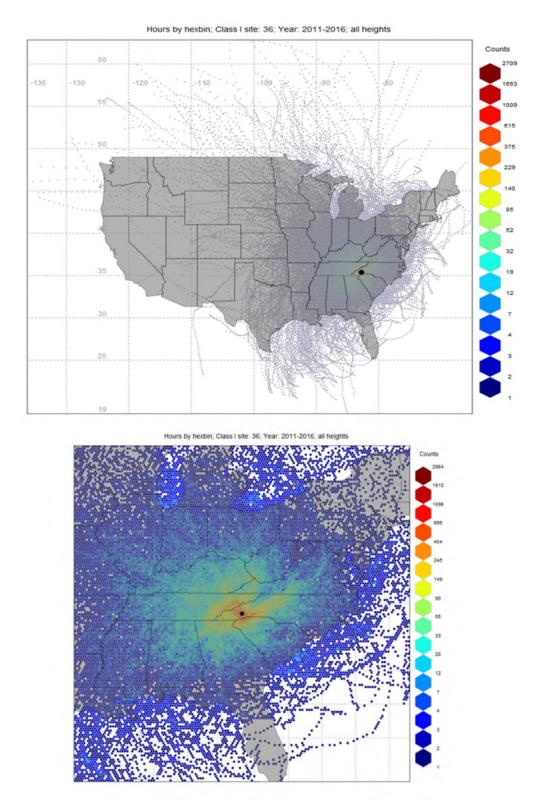


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

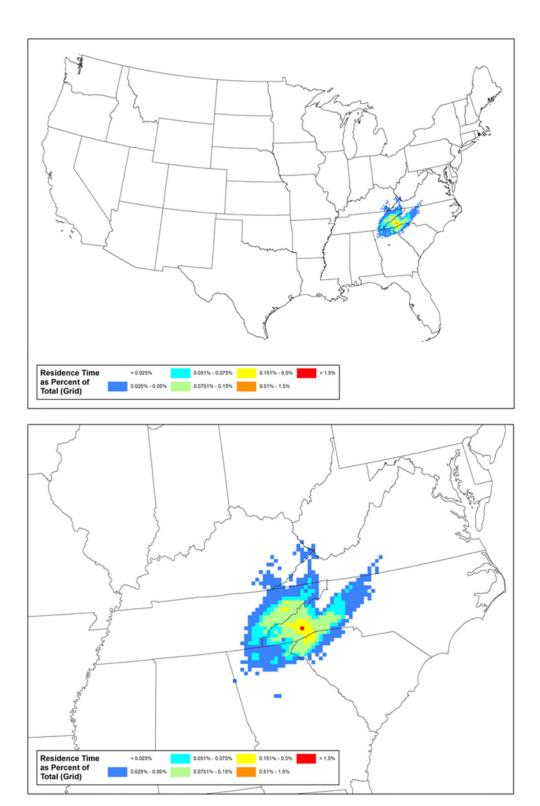


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

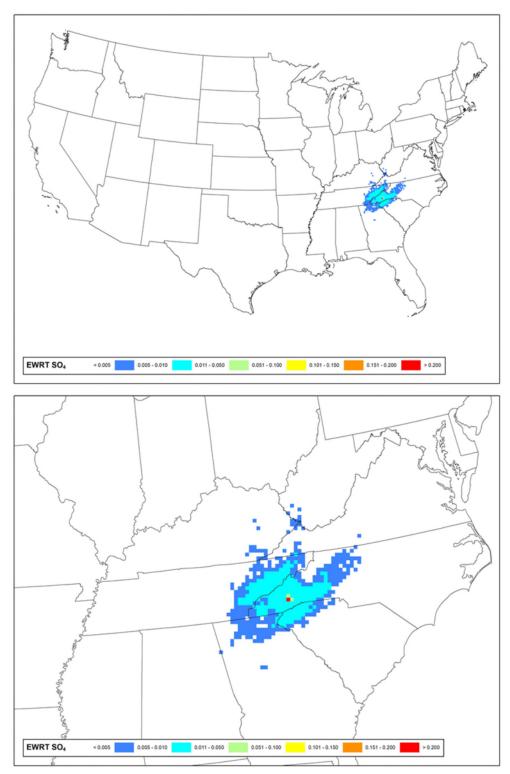


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area - Full View (top) and Class I Zoom (bottom)

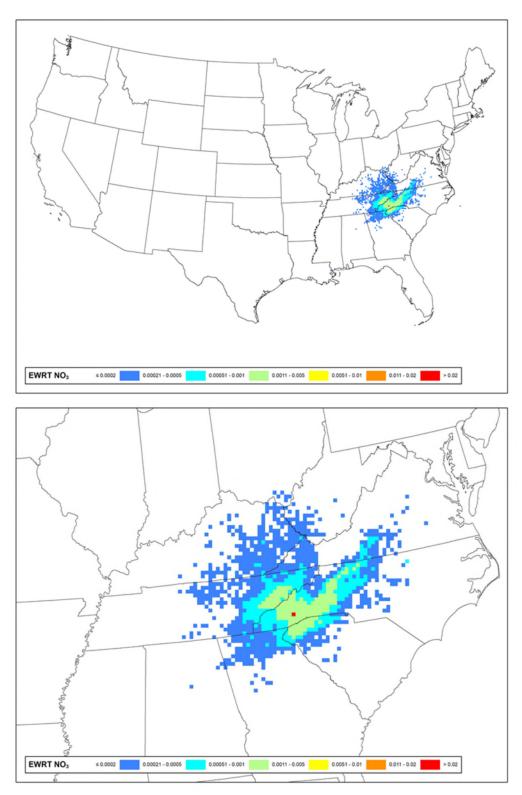


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Shining Rock Wilderness Area - Full View (top) and Class I Zoom (bottom)

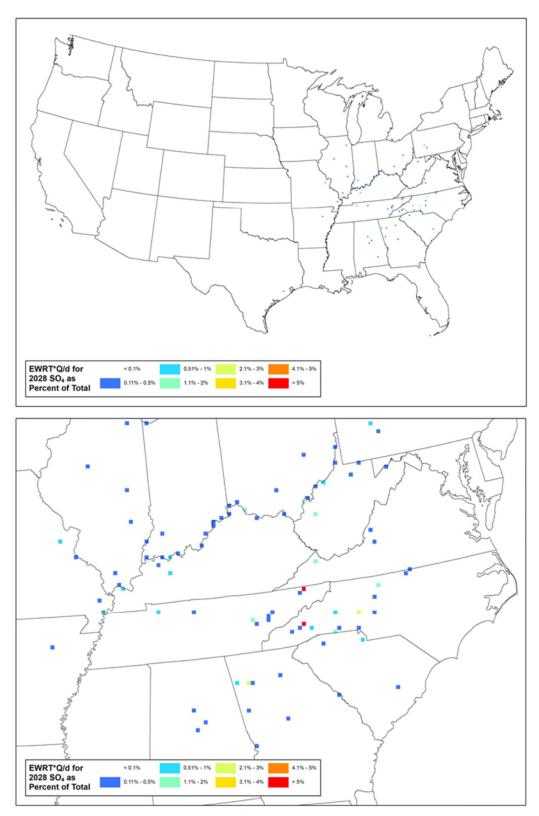


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

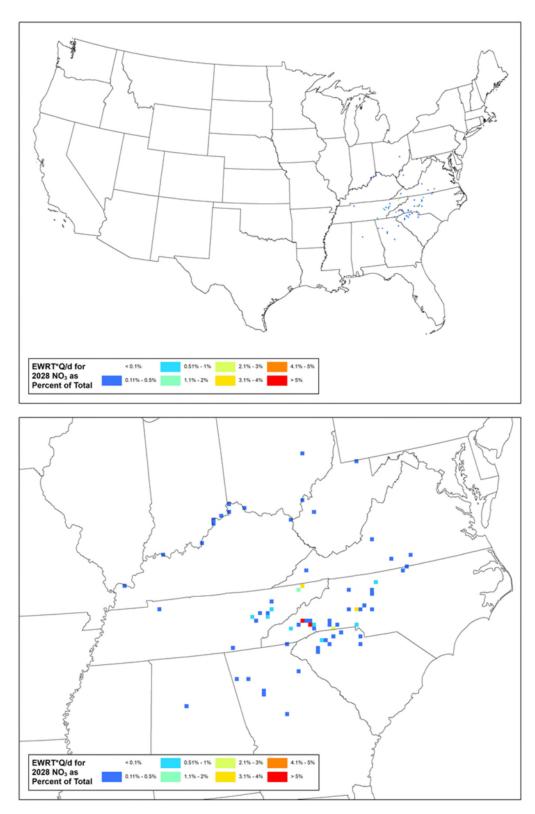
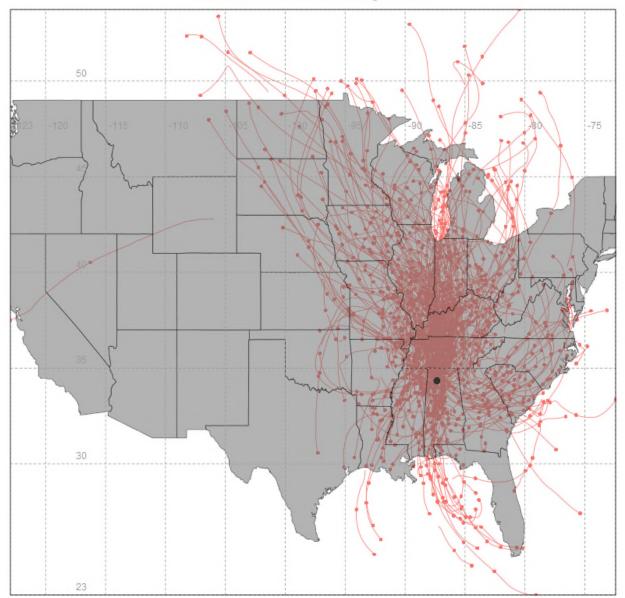


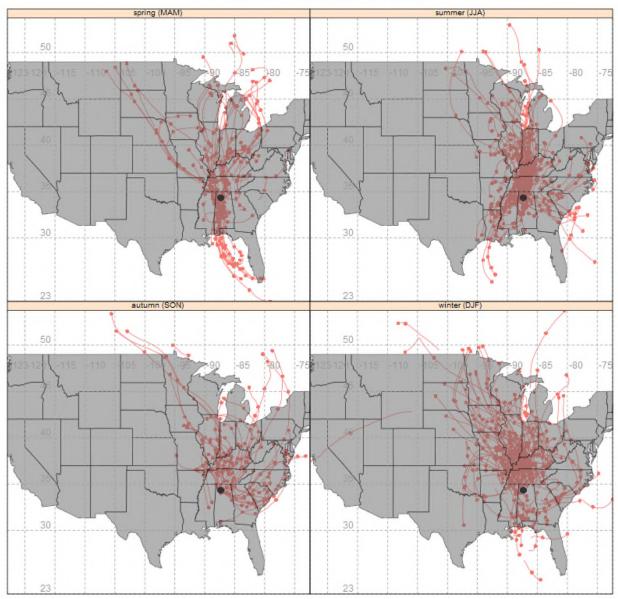
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Shining Rock Wilderness Area – Full View (top) and Class I Zoom (bottom)

# Sipsey Wilderness Area



Class1 site: 37 Year: 2011-2016 Height: 100.00

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



Class1 site: 37 Year: 2011-2016 Height: 100.00

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

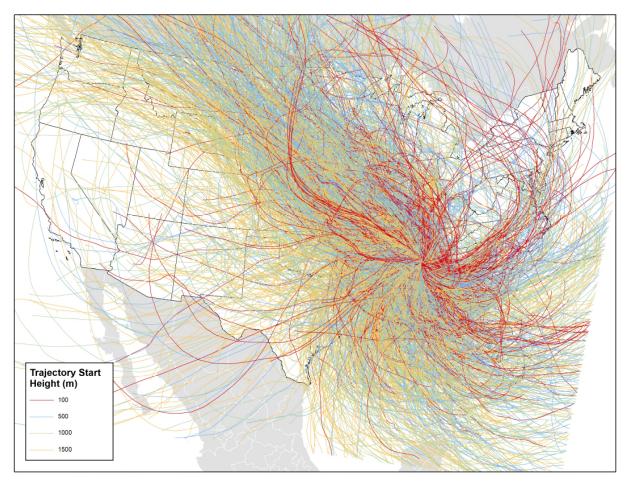
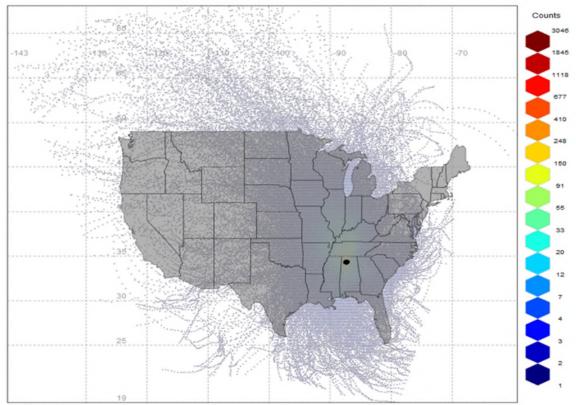


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Sipsey Wilderness Area

Hours by hexbin; Class I site: 37; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 37; Year: 2011-2016; all heights

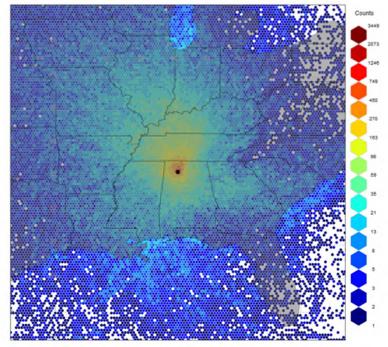


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

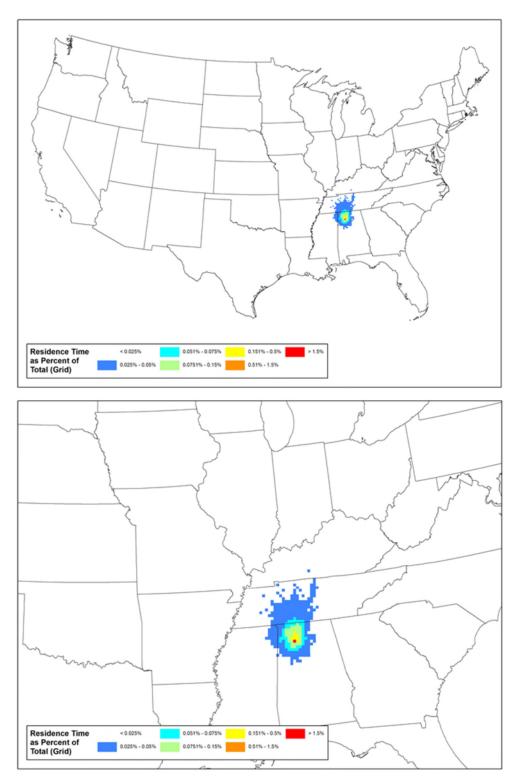


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

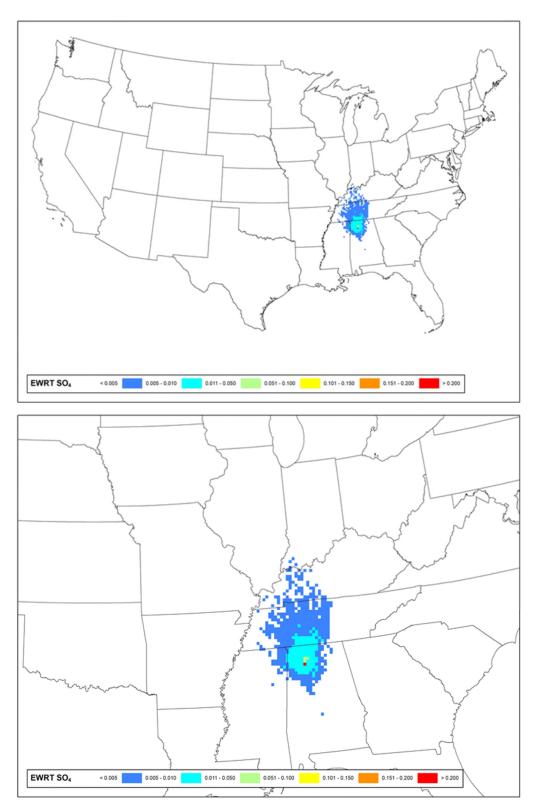


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area - Full View (top) and Class I Zoom (bottom)

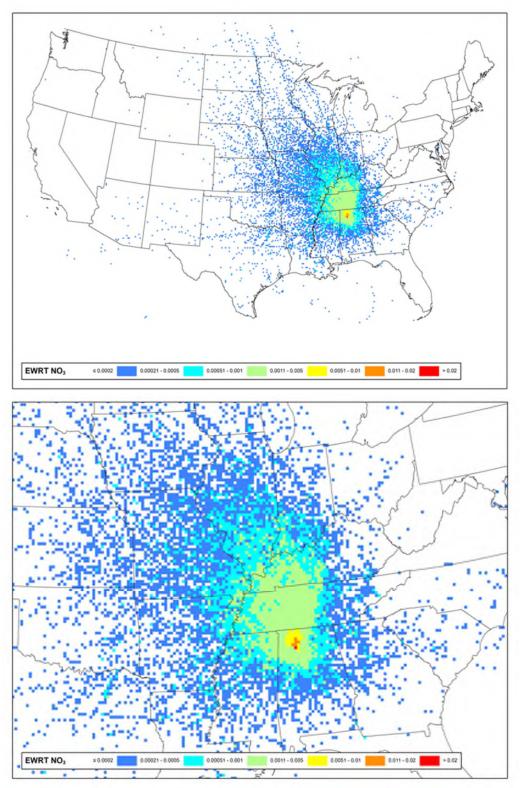


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Sipsey Wilderness Area - Full View (top) and Class I Zoom (bottom)

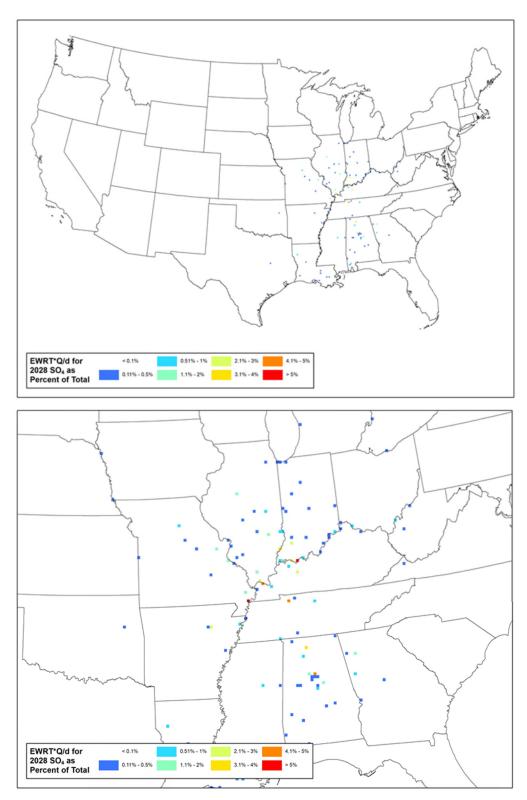


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

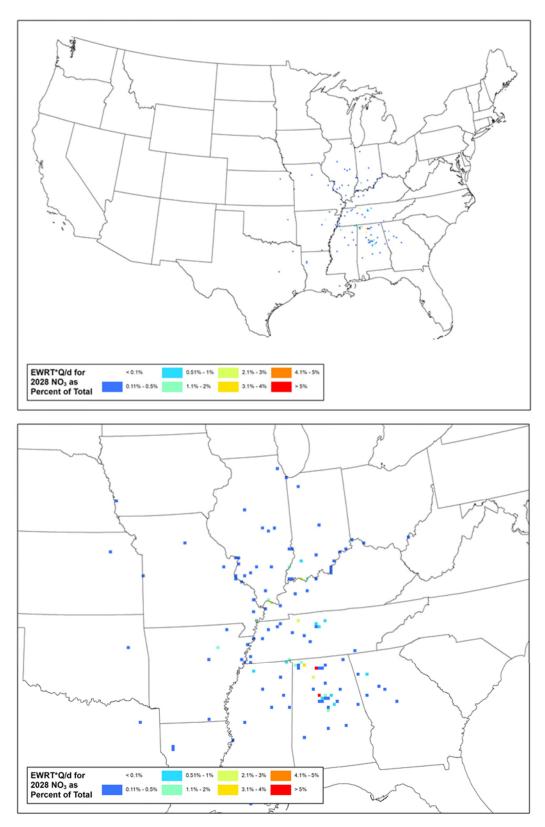
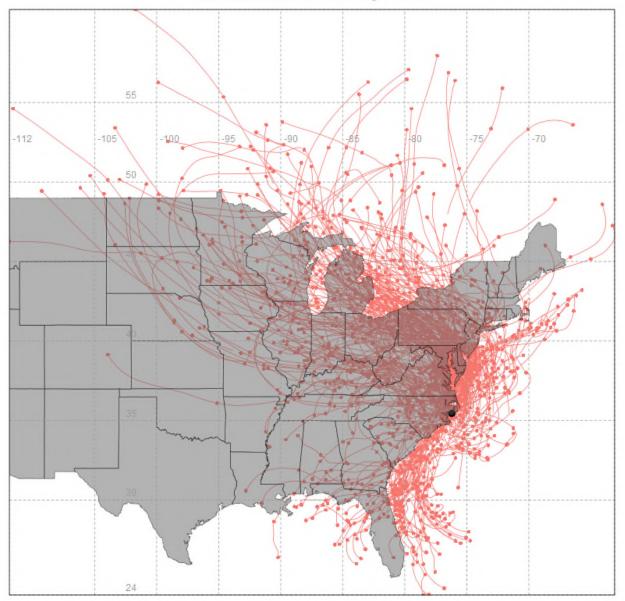


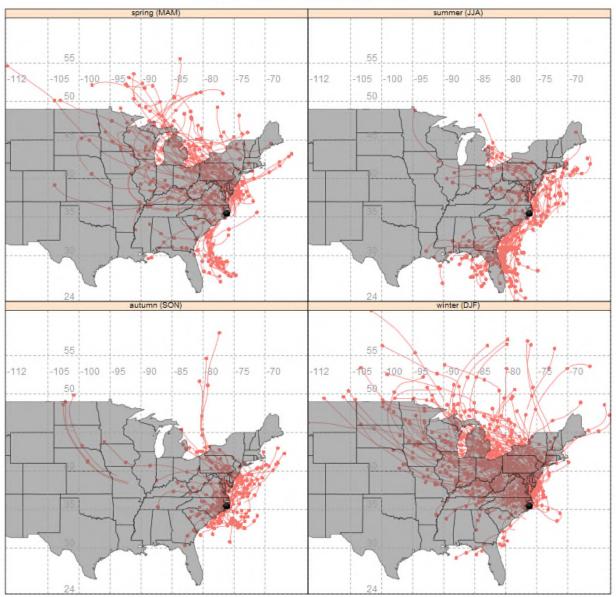
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)

# Swanquarter Wilderness Area



#### Class1 site: 38 Year: 2011-2016 Height: 100.00

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



Class1 site: 38 Year: 2011-2016 Height: 100.00

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

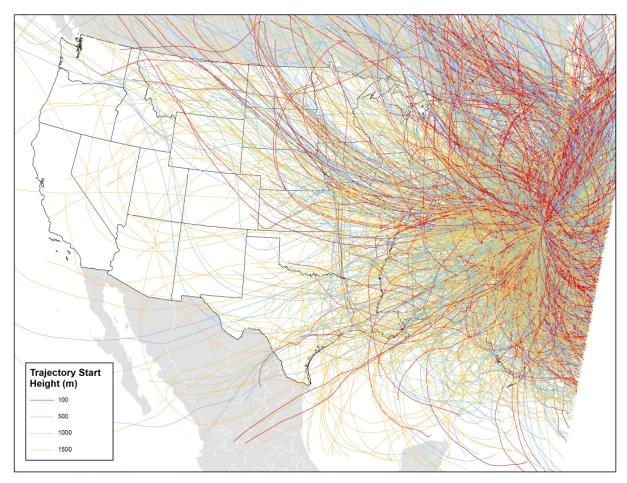
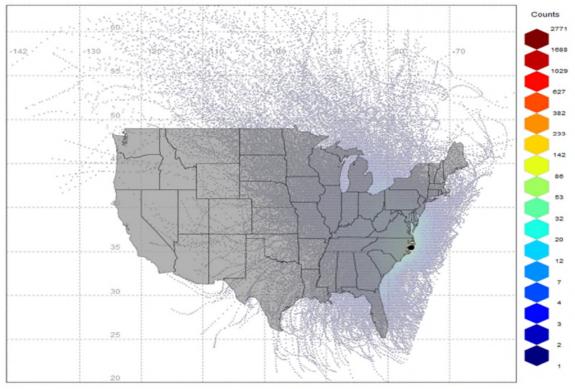


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Swanquarter Wilderness Area

Hours by hexbin; Class I site: 38; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 38; Year: 2011-2016; all heights

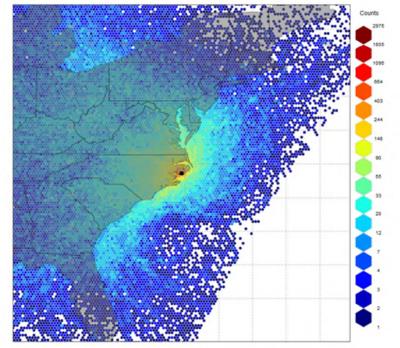


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

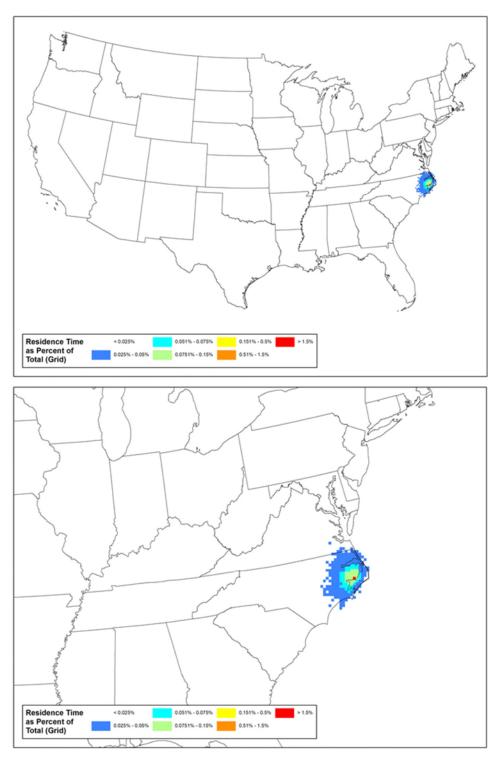


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

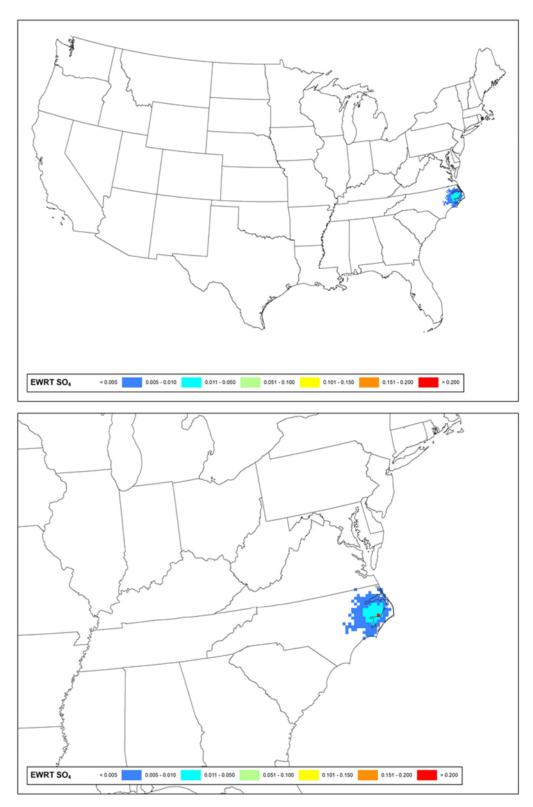


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area - Full View (top) and Class I Zoom (bottom)

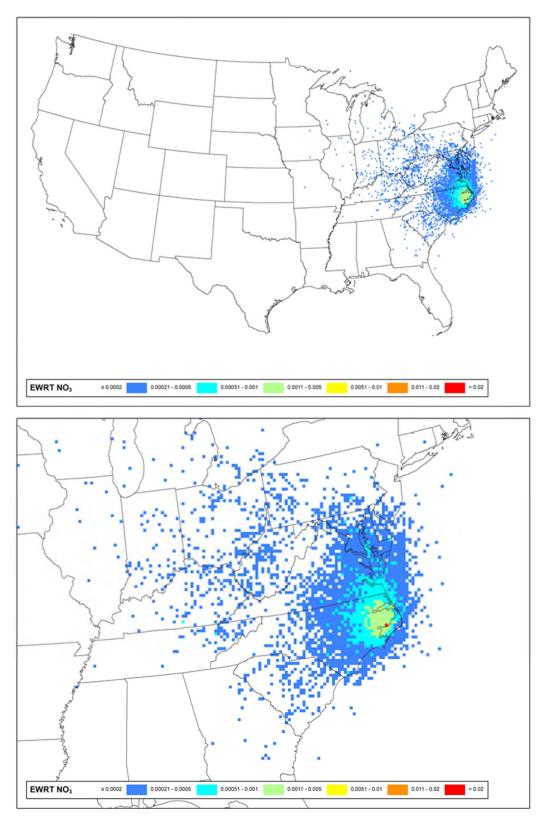


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Swanquarter Wilderness Area - Full View (top) and Class I Zoom (bottom)

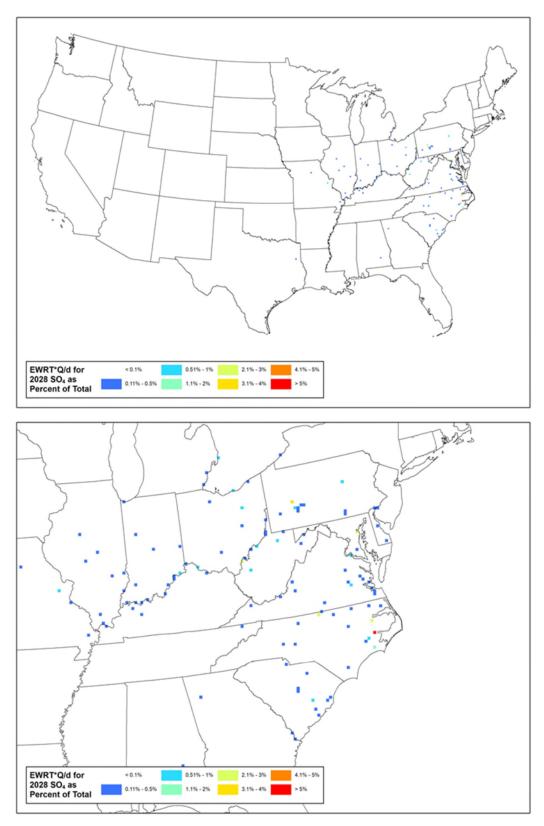


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

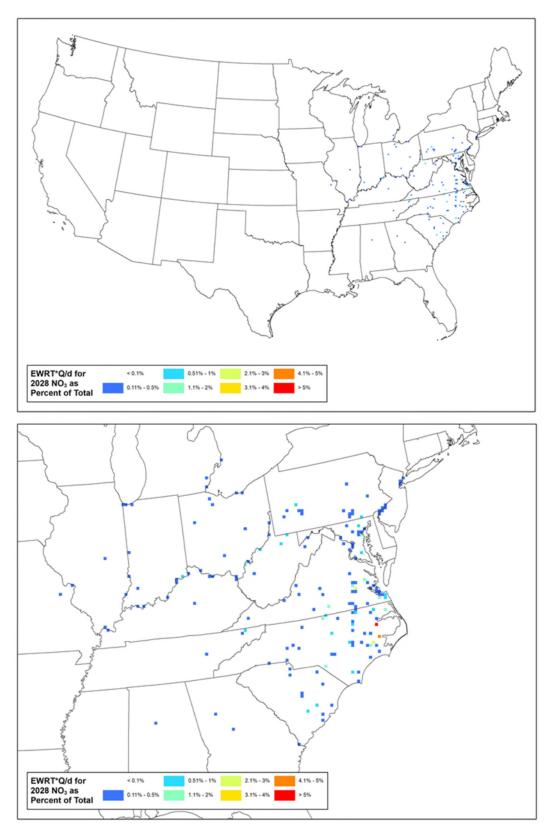
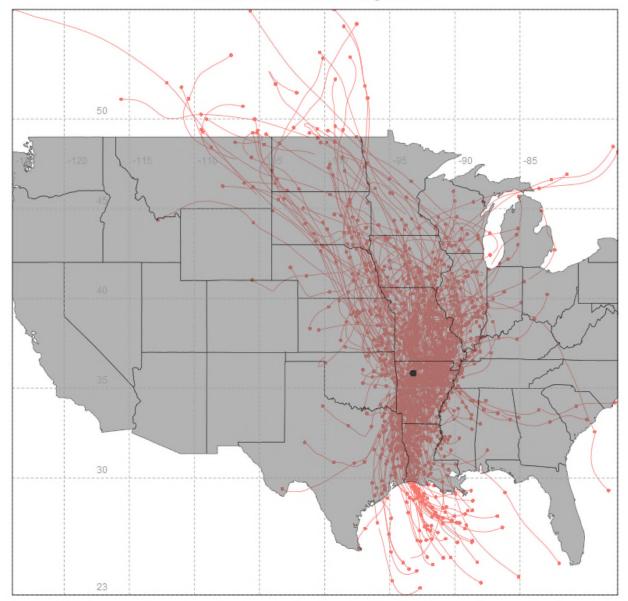


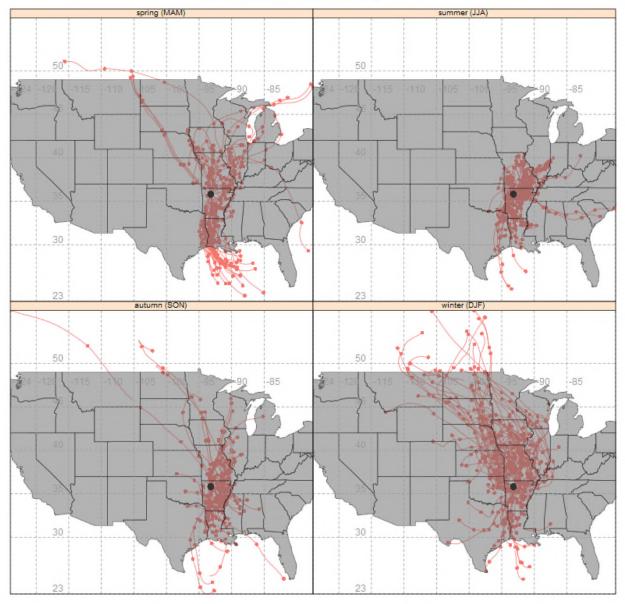
Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)

# Upper Buffalo Wilderness Area



Class1 site: 39 Year: 2011-2016 Height: 100.00

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



Class1 site: 39 Year: 2011-2016 Height: 100.00

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

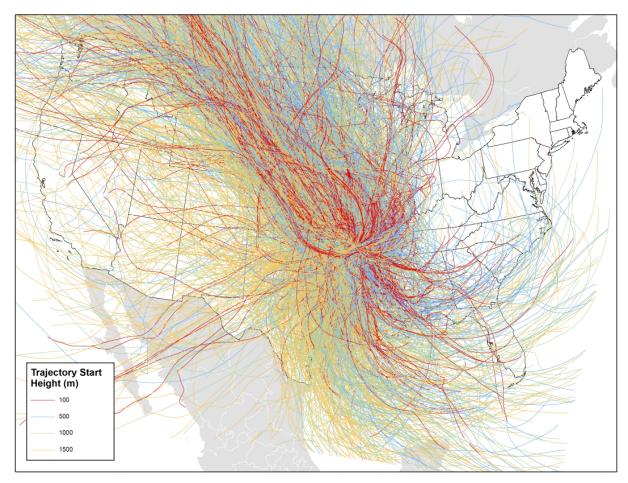


Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Upper Buffalo Wilderness Area



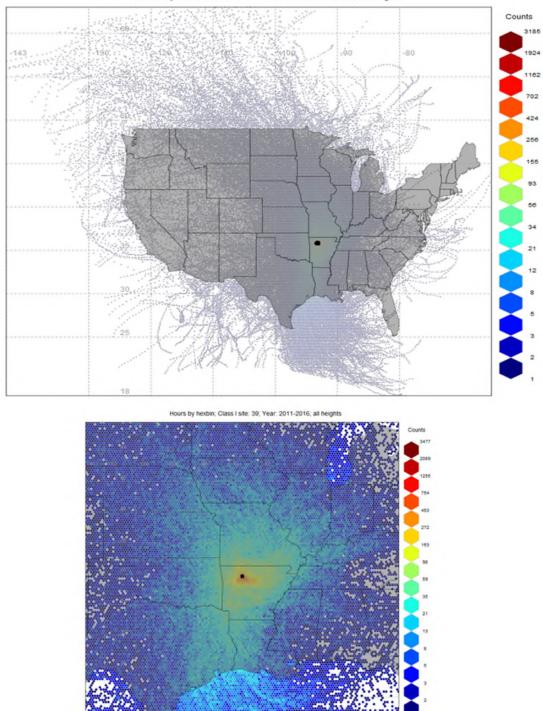


Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

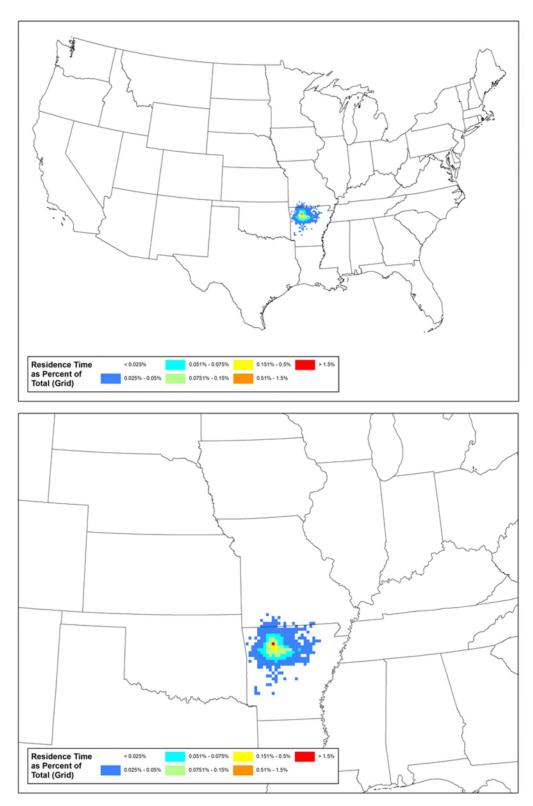


Figure 5: Residence Time (% of Total Counts per 12km Modeling Grid Cell for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

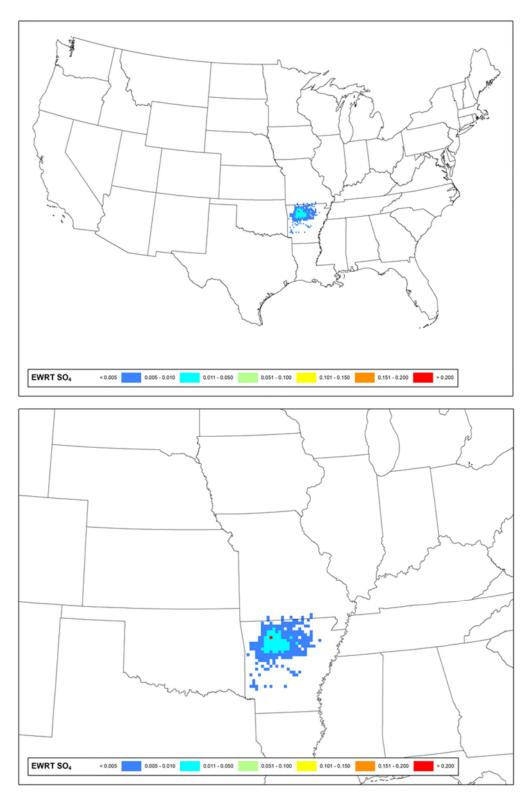


Figure 6: Sulfate Extinction Weighted Residence Time (Sulfate EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area - Full View (top) and Class I Zoom (bottom)

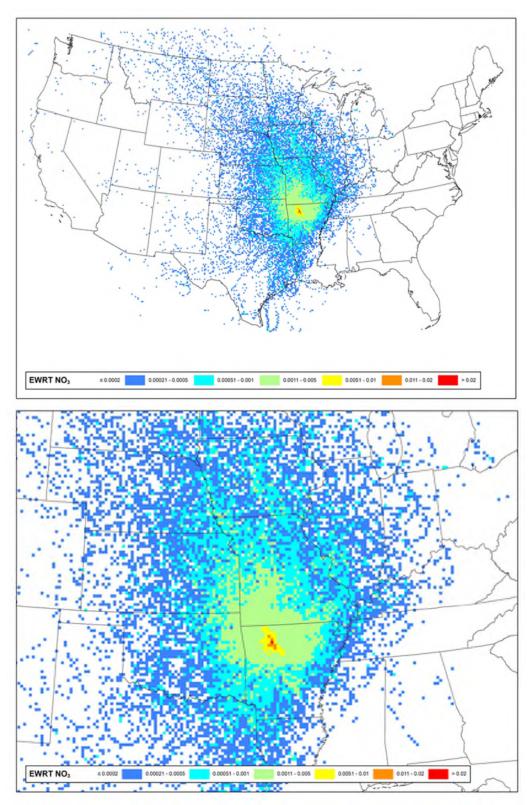


Figure 7: Nitrate Extinction Weighted Residence Time (Nitrate EWRT per 12-km Modeling Grid Cell) for Upper Buffalo Wilderness Area - Full View (top) and Class I Zoom (bottom)

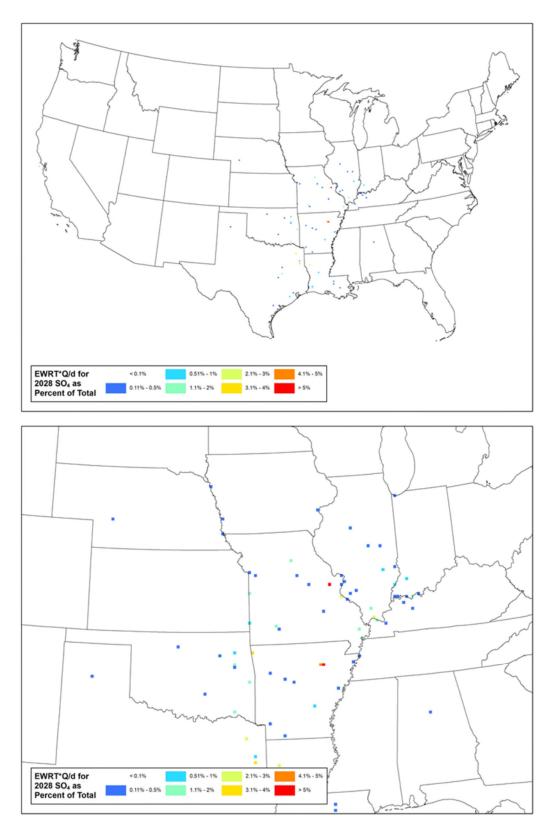


Figure 8: Sulfate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)

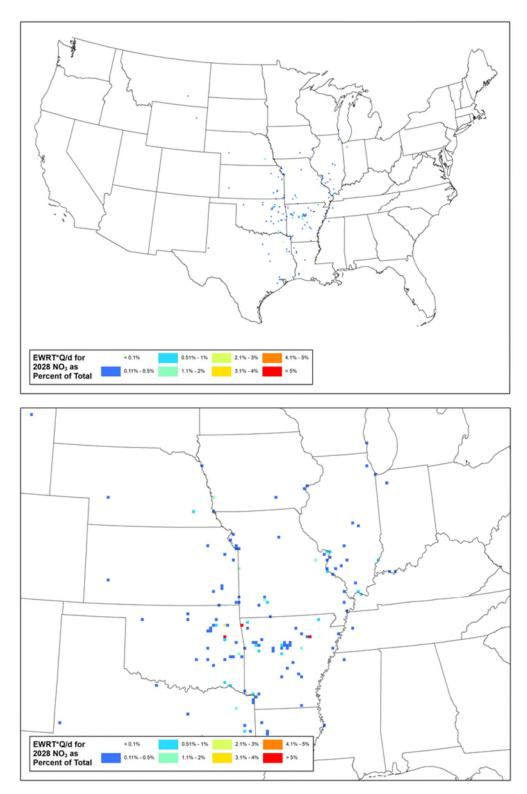


Figure 9: Nitrate Emissions/Distance Extinction Weighted Residence Time (% of Total Q/d\*EWRT per 12km Modeling Grid Cell) for Upper Buffalo Wilderness Area – Full View (top) and Class I Zoom (bottom)