



FALL MEETING
Washington, D.C. | 10-14 Dec 2018

NO_x and the City

PAUL J. MILLER

NORTHEAST STATES FOR COORDINATED AIR USE MANAGEMENT (NESCAUM)

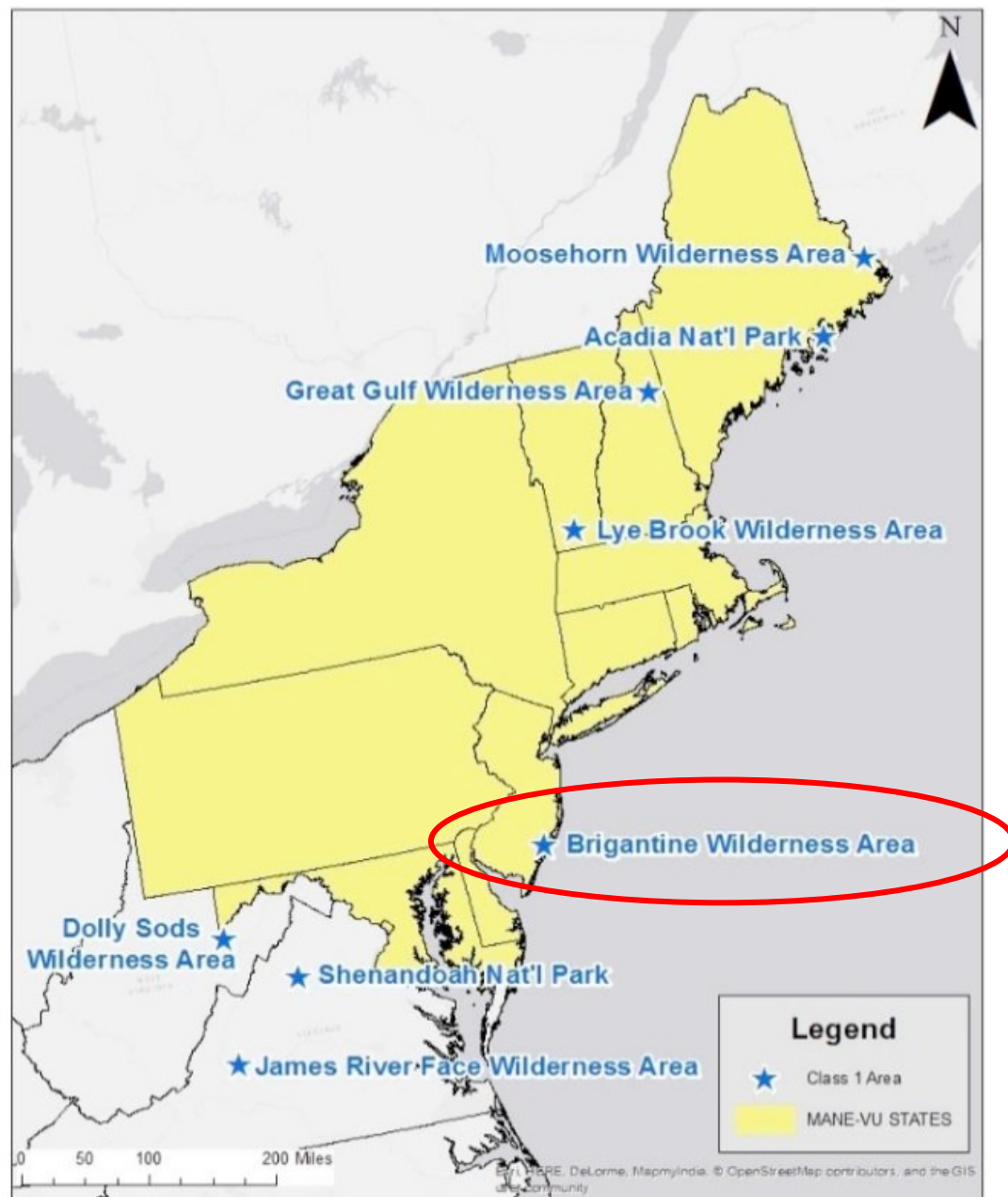
HAQASTA5

PHOENIX, AZ

JANUARY 3, 2019

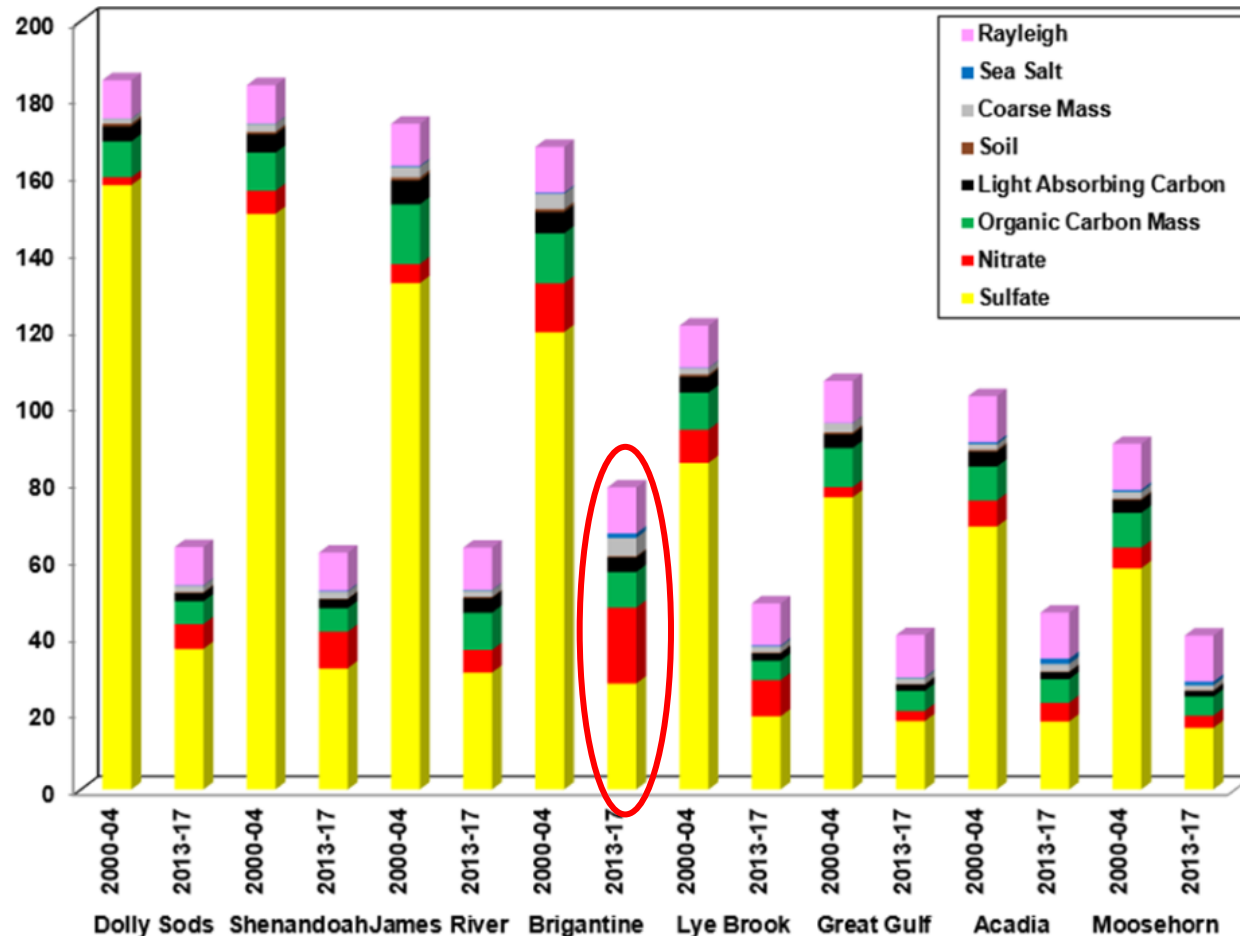
Mid-Atlantic/Northeast Visibility Union (MANE-VU) Status

- State SIPs are currently being written and will be submitted well before 2021
- Sulfates and nitrates are the dominant RH species in MANE-VU region
 - Nitrate share growing as sulfate decreasing
- OCM, LAC and CM are near natural conditions; occasional long range transport of wildfire smoke



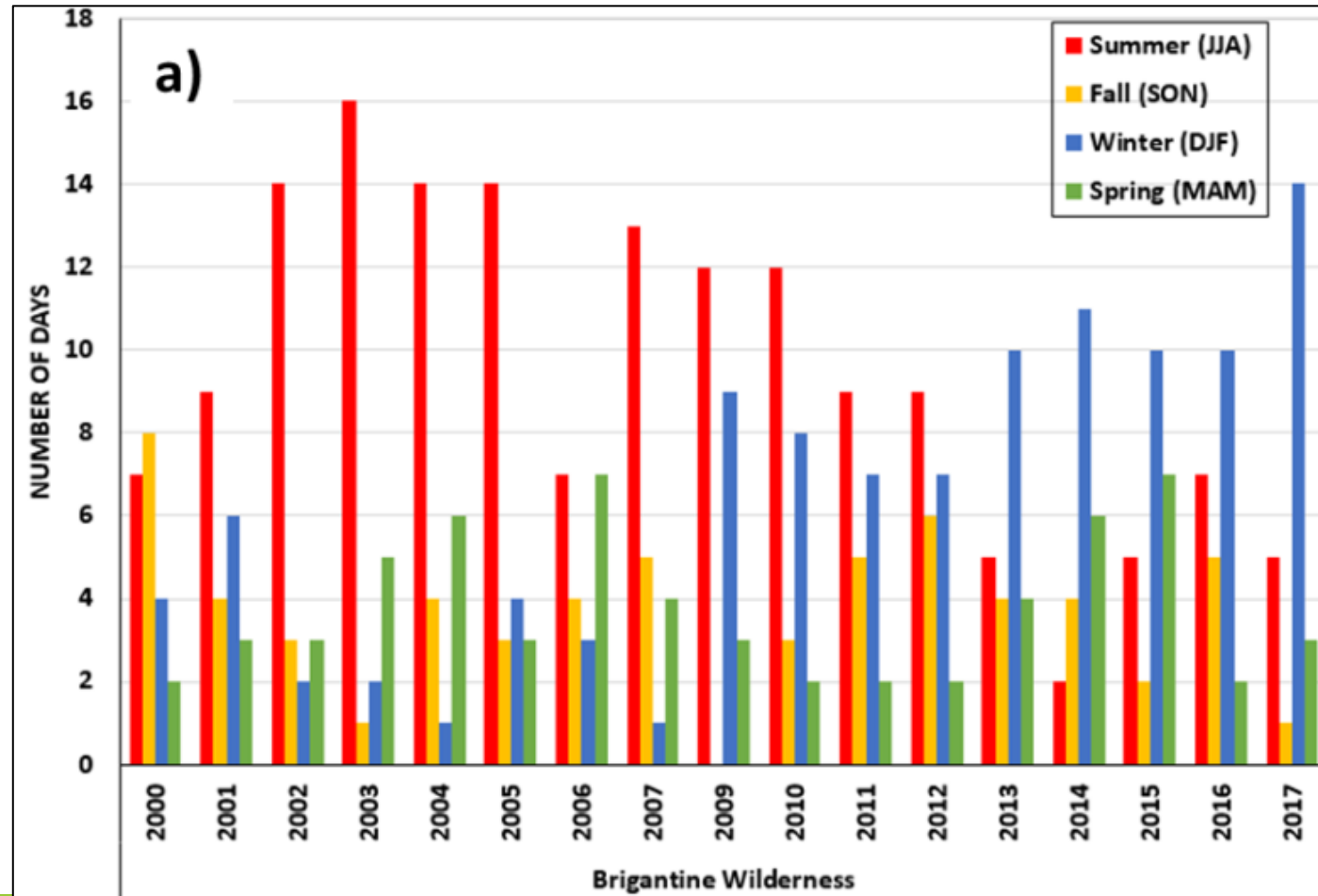
Class I Sites in MANE-VU and to West

20% Most Impaired Visibility Days: 2000-04 vs. 2013-17

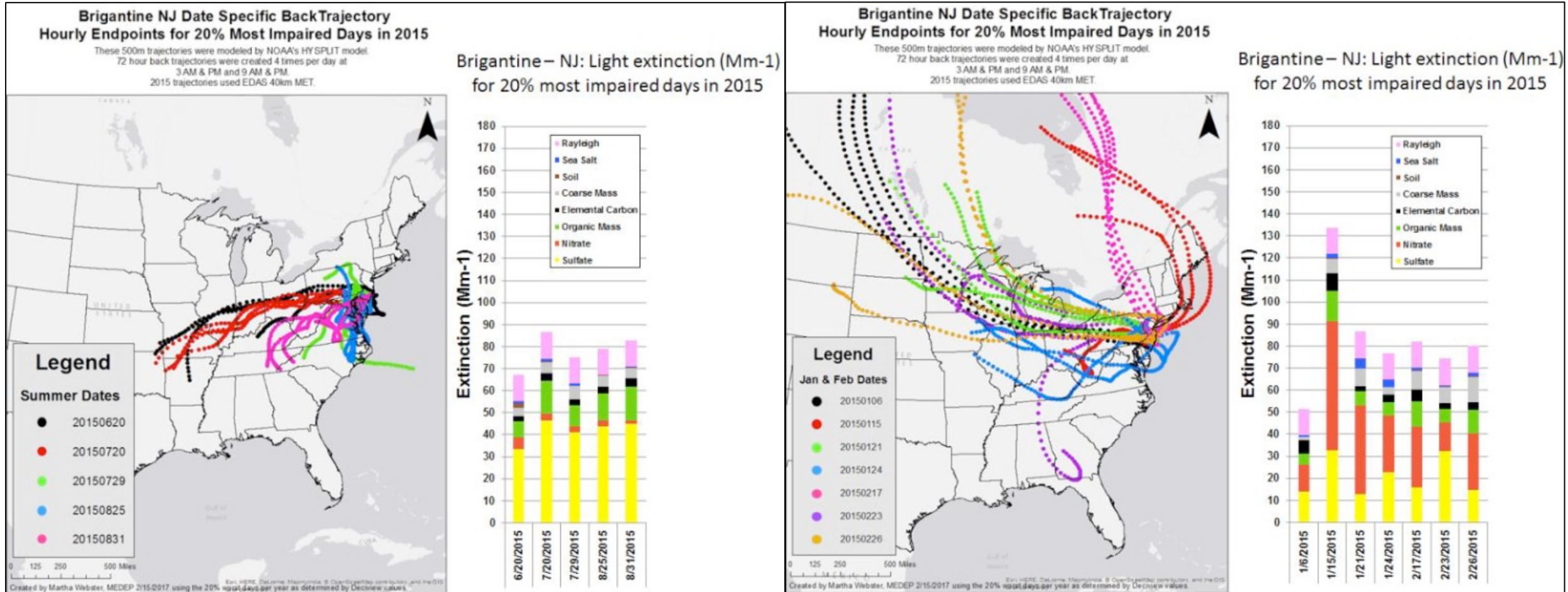


- Brigantine now more impaired than Class I areas closer to large coal power plants
- Has largest nitrate share

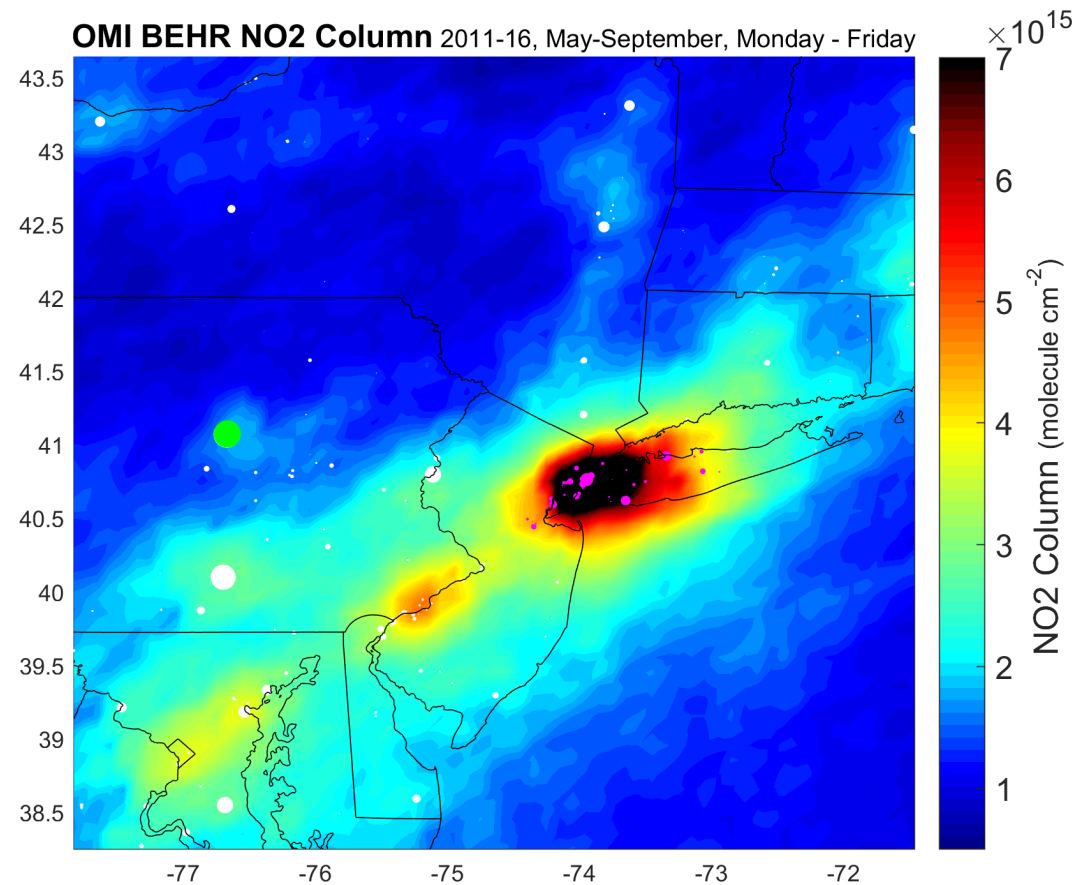
Brigantine 20% Most Impaired Days by Season 2000-2017



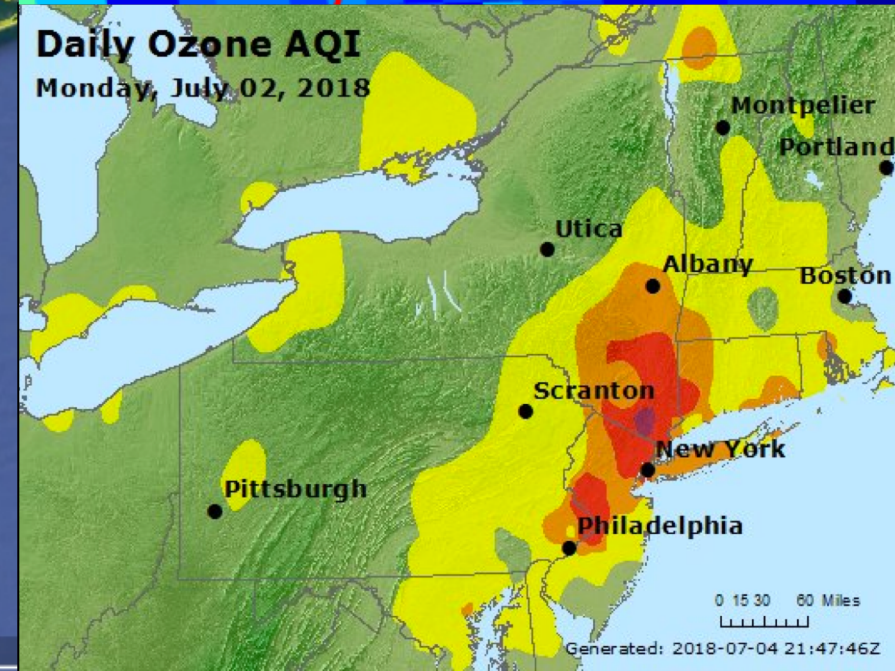
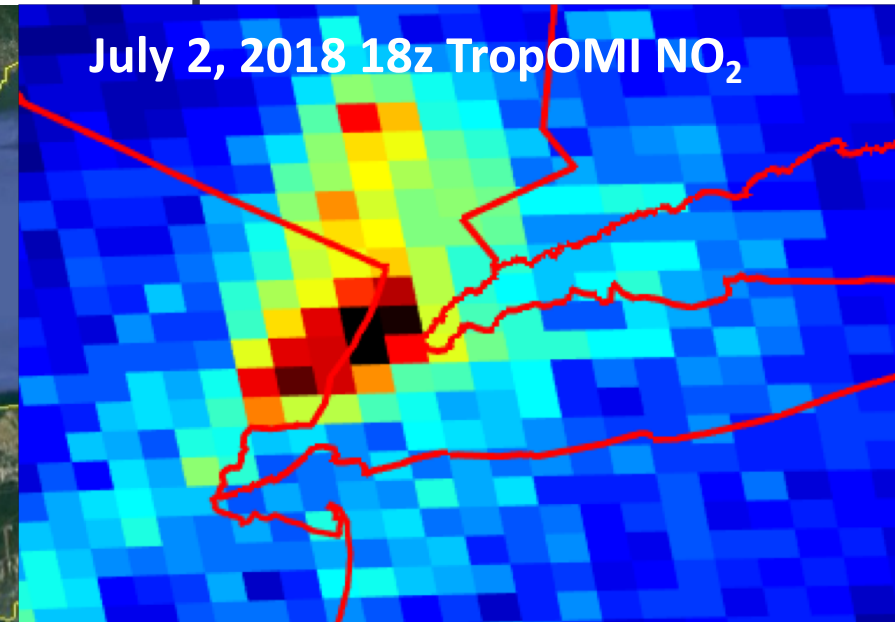
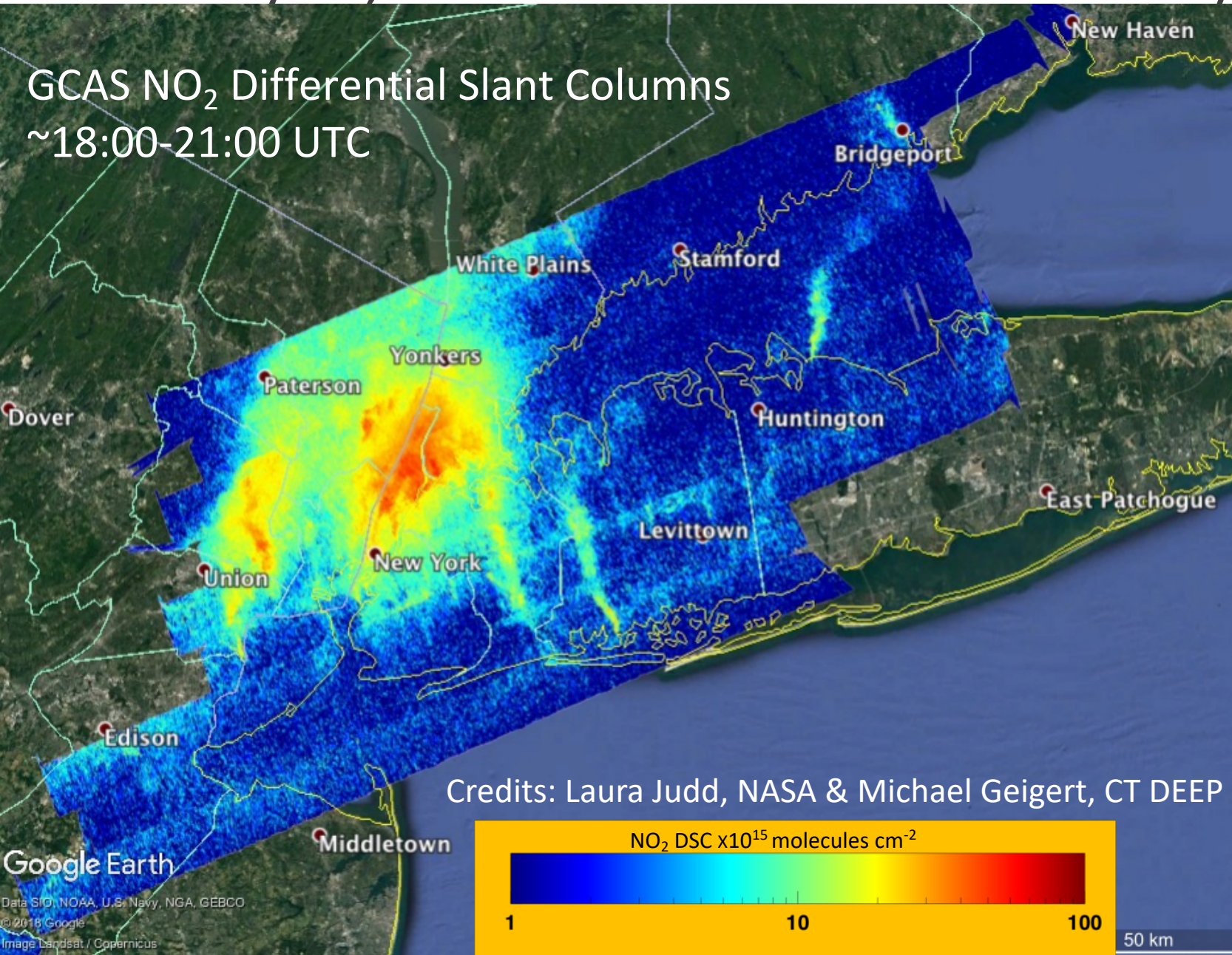
Summer/Winter 2015 Trajectories on 20% Most Impaired Days



A NYC NO₂ “Volcano” – OMI



July 2, 2018 Afternoon GCAS/TropOMI

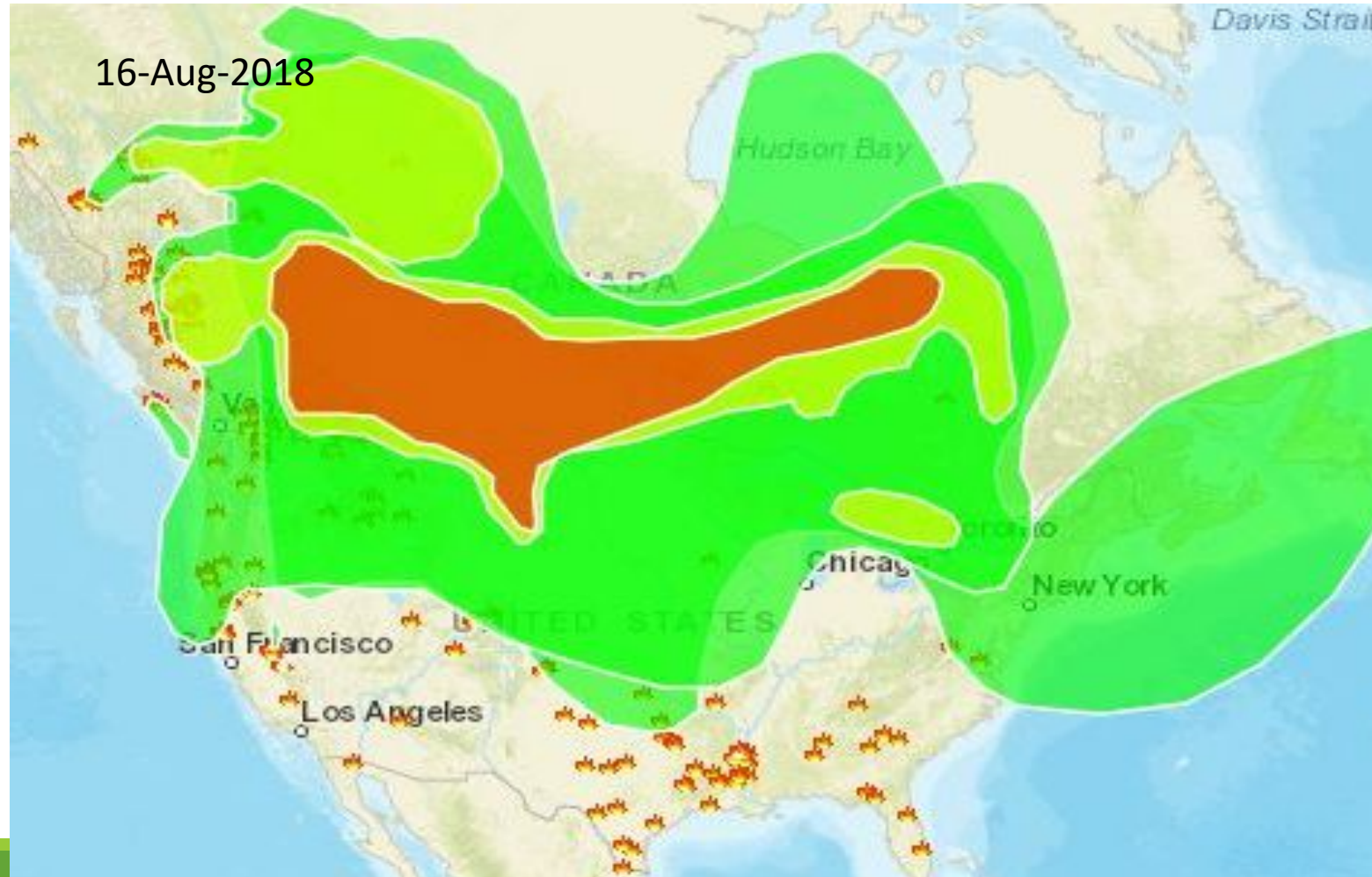


Haze Questions

- Is winter nitrate from the NYC plume?
- Or is it “local” in NJ?
- Does Ohio Valley NO_x have impact?

Smoke

Western Smoke Plumes in Summer 2018



July 2, 2018 Compared to Clean Day



LISTOS Data Archive in Development

 NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION

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*Airborne Science Data
for Atmospheric Composition*

LISTOS – Long Island Sound Tropospheric Ozone Study 2018

[Data Archive: LISTOS 2018](#) 

Relevant Data / Links

[Quicklook Reports \[public\] :](#)
View / Upload Images & Data --
Aircraft, Ground, Mobile, etc.

[File Sharing \[private\]:](#) 
Forecasts, Telecons, Reports, etc.

[Forecast Products . . .](#)

[Meteorology Links . . .](#)

[AirNow](#) 

[ICARTT Data Format Document](#)

Data Upload Tools

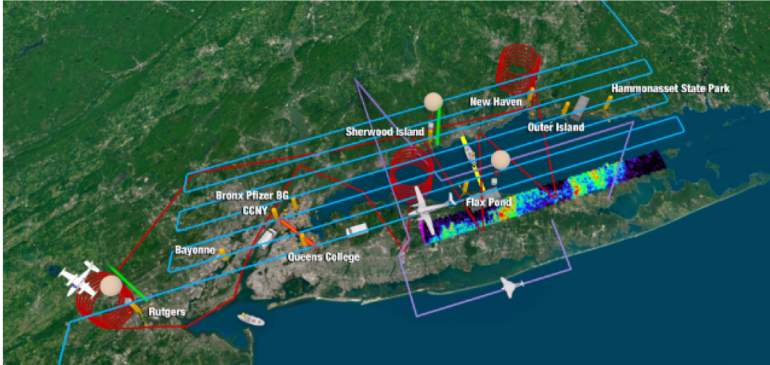
[Steps for submitting data to the Archive](#)

[Data Submittal / Scanning](#) 
» [Help FScan](#)

[Register PI dataIDs](#) 

Mission Overview:

The Long Island Sound Tropospheric Ozone Study (LISTOS) is a multi-agency collaborative study focusing on Long Island Sound and the surrounding coastlines that continue to suffer from poor air quality exacerbated by land/water circulations. The primary measurement operations are planned between June-September 2018 and include, but not limited to, in situ and remotely sensing instrumentation integrated aboard three aircrafts, a network of ground sites, mobile vehicle and boat measurements.



The website is located at:

<https://www-air.larc.nasa.gov/missions/listos/index.html>

Thank you

Paul J. Miller

Executive Director

NESCAUM

617-259-2016

[pmiller\[at\]nescaum.org](mailto:pmiller[at]nescaum.org)