

IMPROVE Data and RHR Metrics



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IMPROVE Steering Committee
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IMPROVE Data and Network

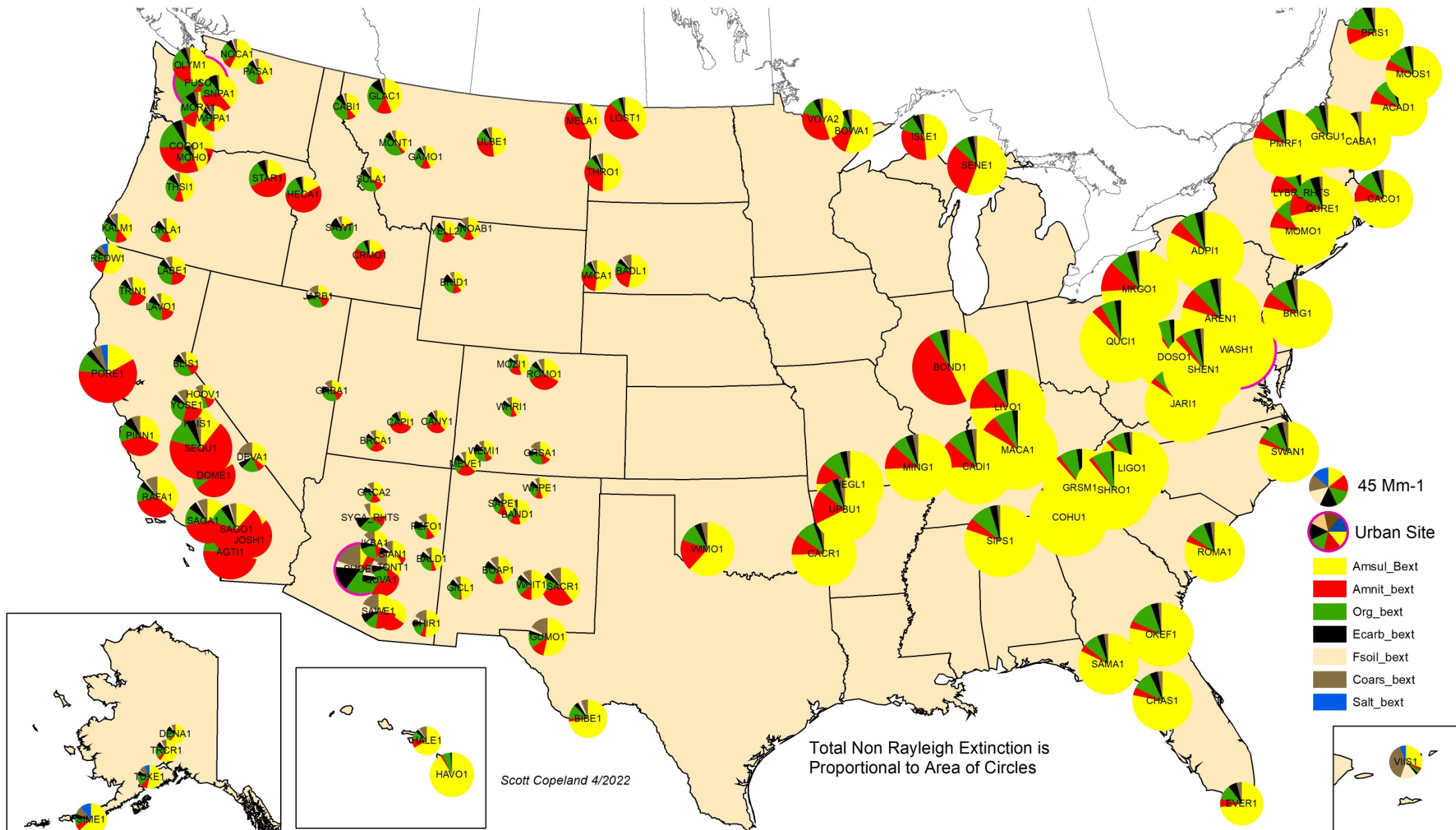
- Latest IMPROVE data delivered is December 2022. RHR metrics through 2022 posted on my Google Drive, and available through FED now.
- First “SD” Short Duration sample delivered 12/25/22

MT	ECf	OCf	NO3f	SO4f	Chlf	ModA ET
52	5	12	4	1.6	0.9	239

- A number of FS sites are offline for a various reasons, no operator, inaccessible location, etc.

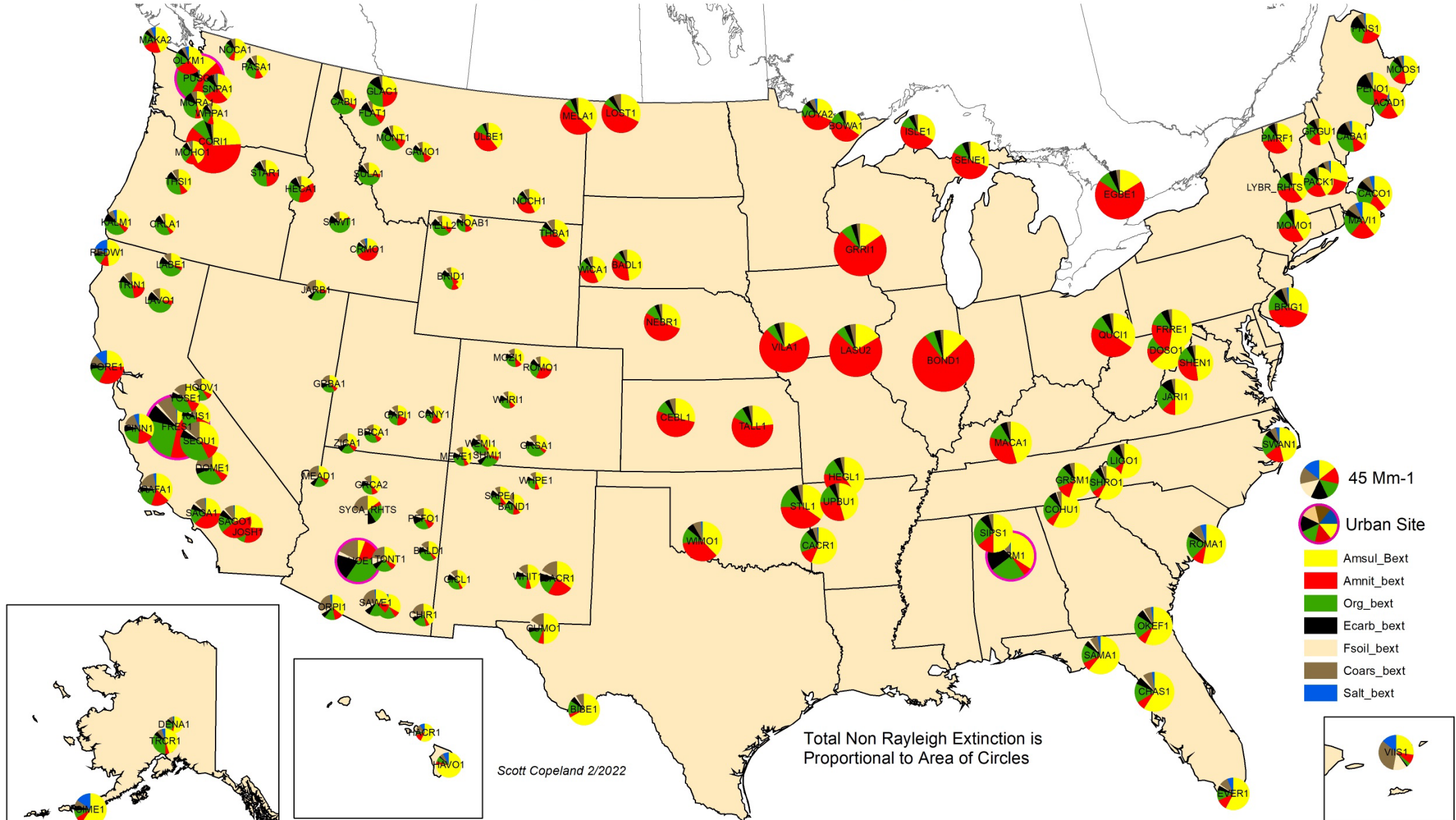
IMPROVE Data - 2002 Second IMPROVE Algorithm

Non Rayleigh Mean of 20% Most Impaired



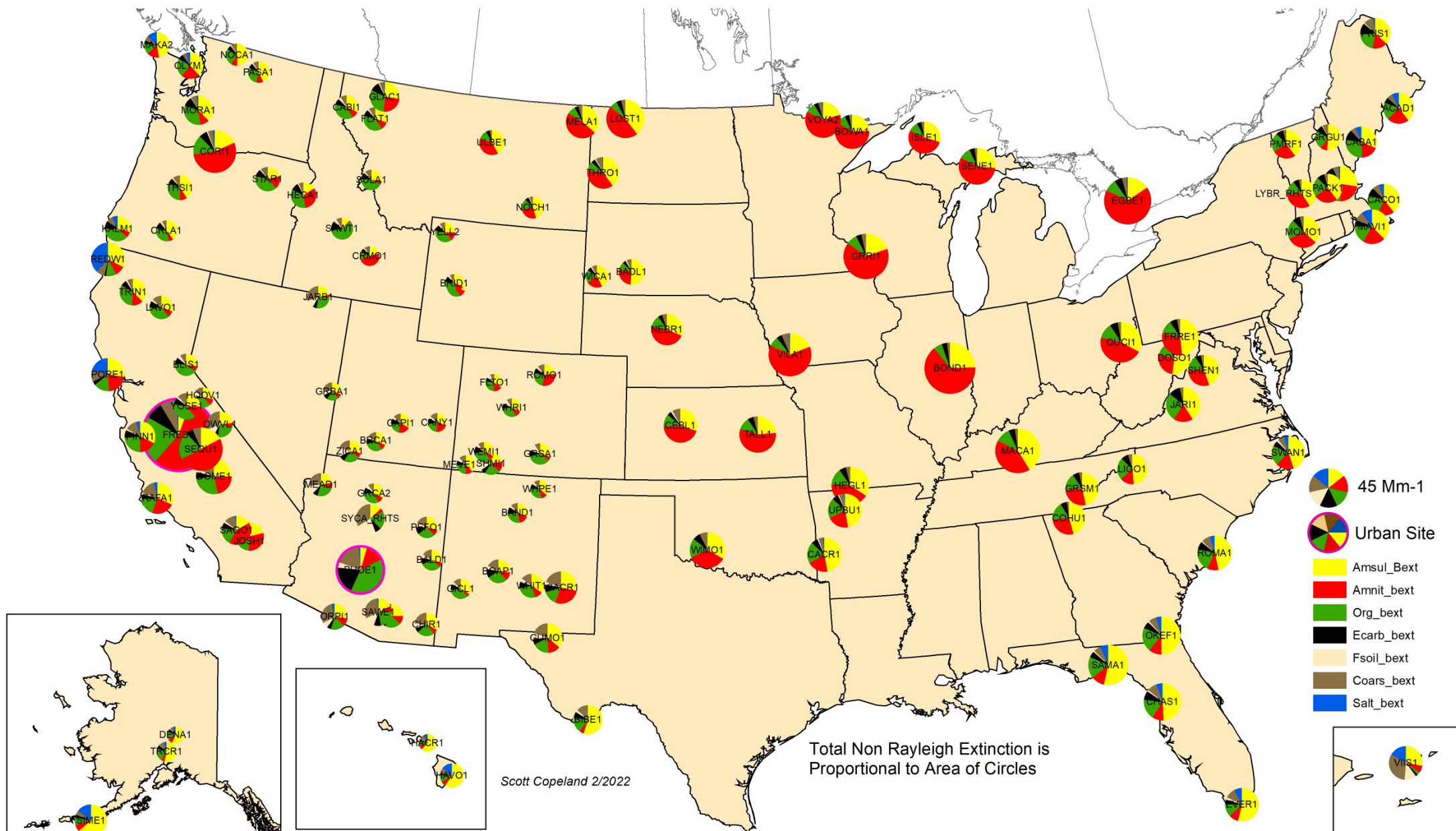
IMPROVE Data - 2019 Second IMPROVE Algorithm

Non Rayleigh Mean of 20% Most Impaired



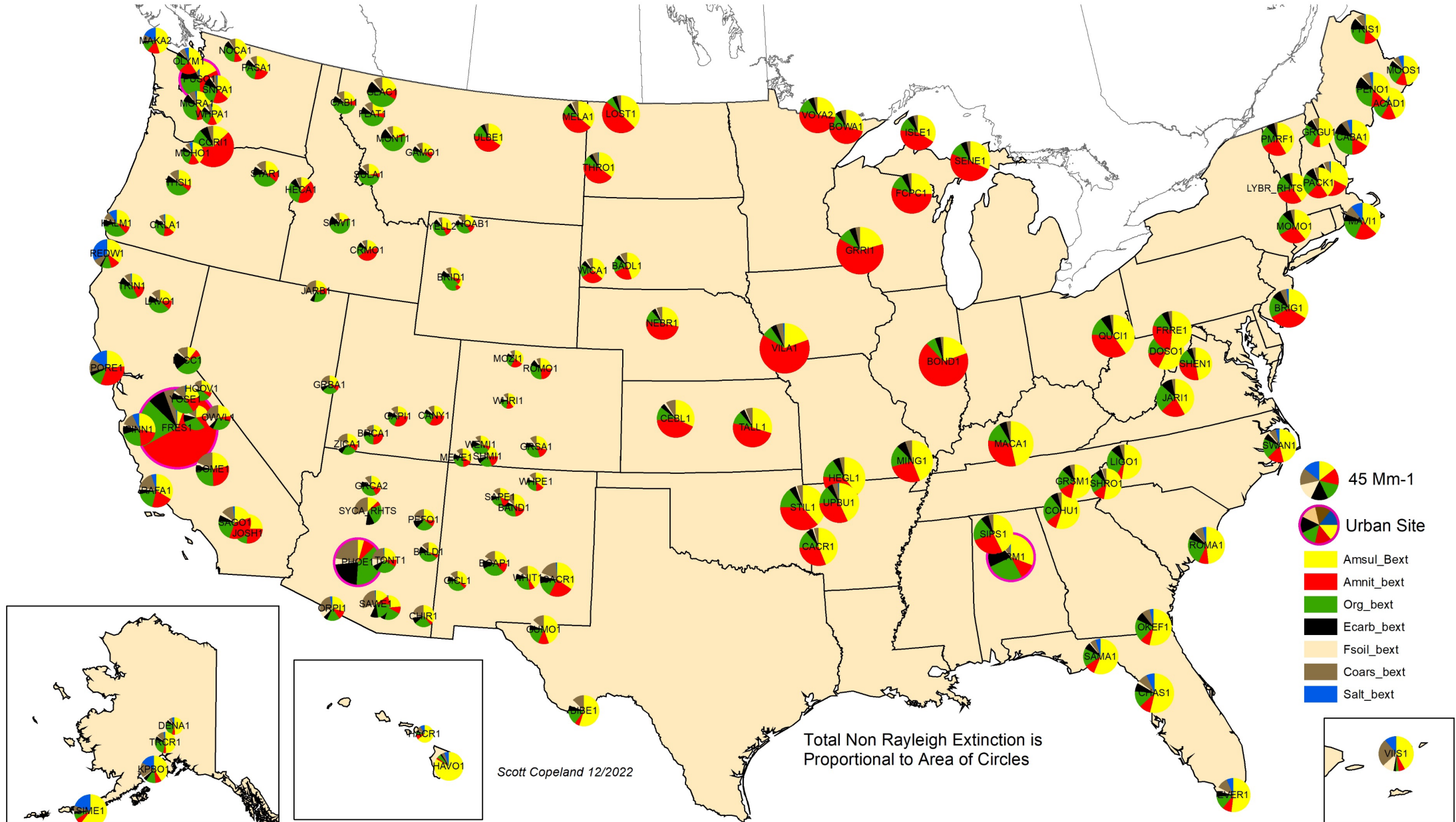
IMPROVE Data - 2020 Second IMPROVE Algorithm

Non Rayleigh Mean of 20% Most Impaired



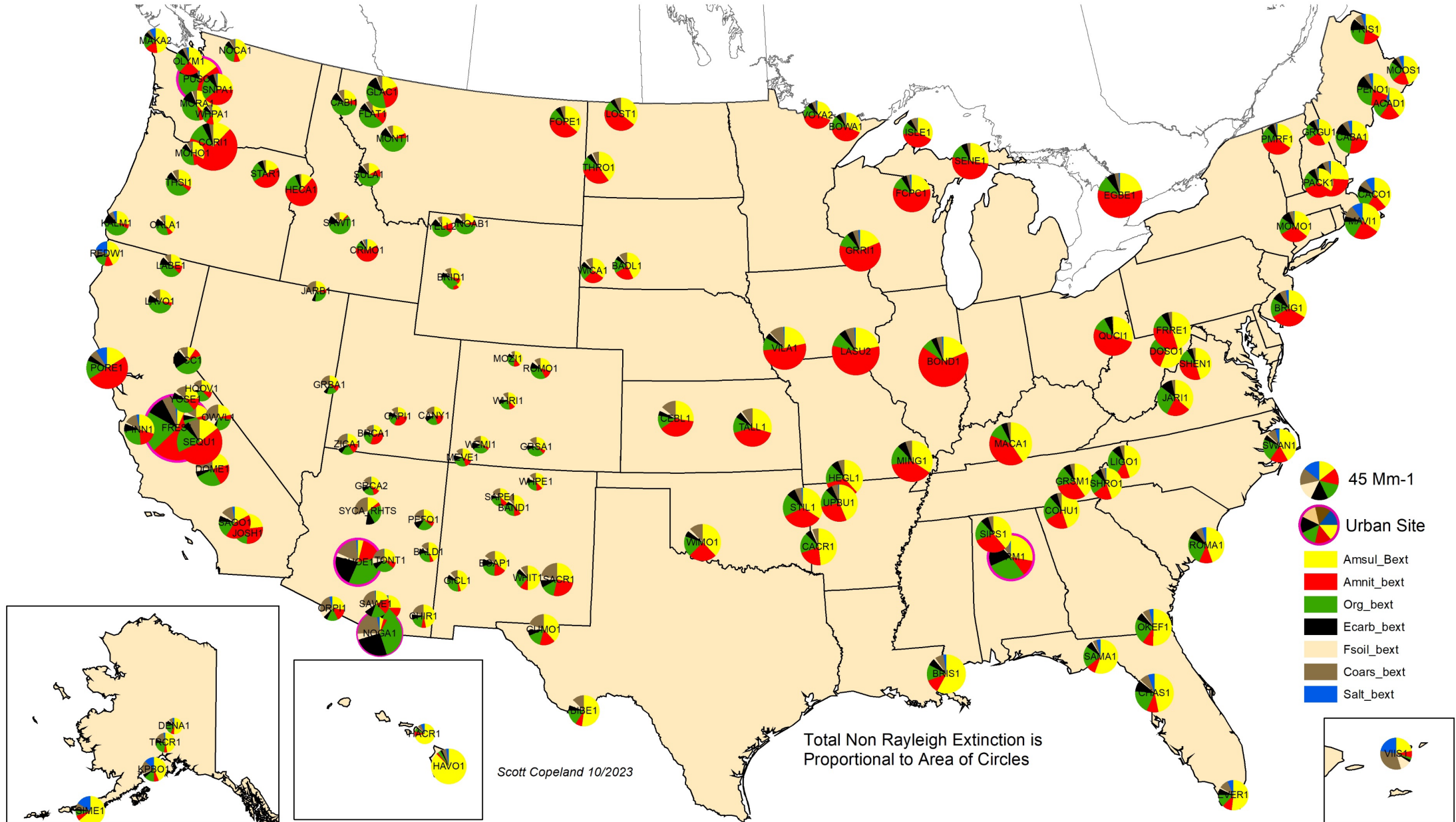
IMPROVE Data - 2021 Second IMPROVE Algorithm

Non Rayleigh Mean of 20% Most Impaired



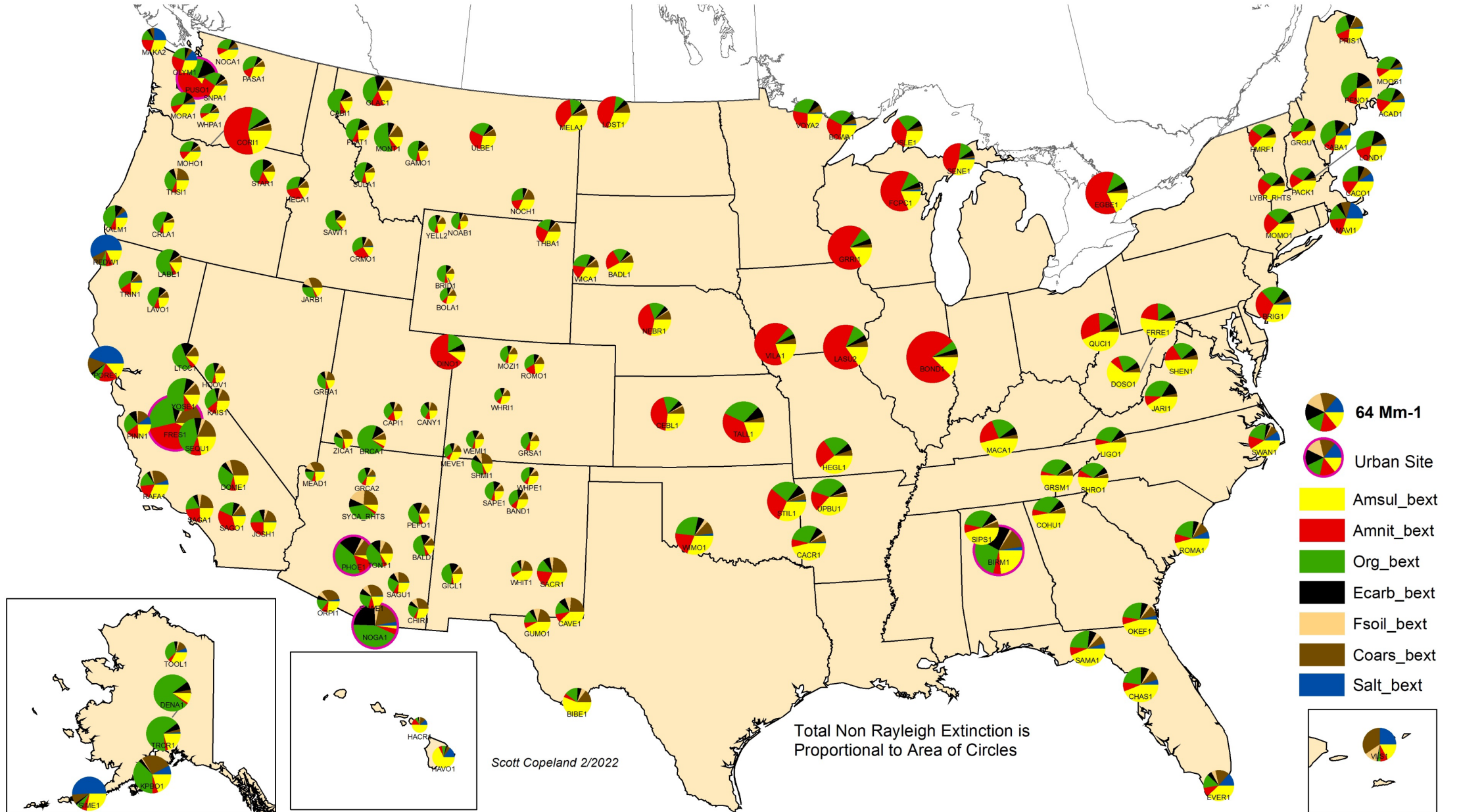
IMPROVE Data - 2022 Second IMPROVE Algorithm

Non Rayleigh Mean of 20% Most Impaired



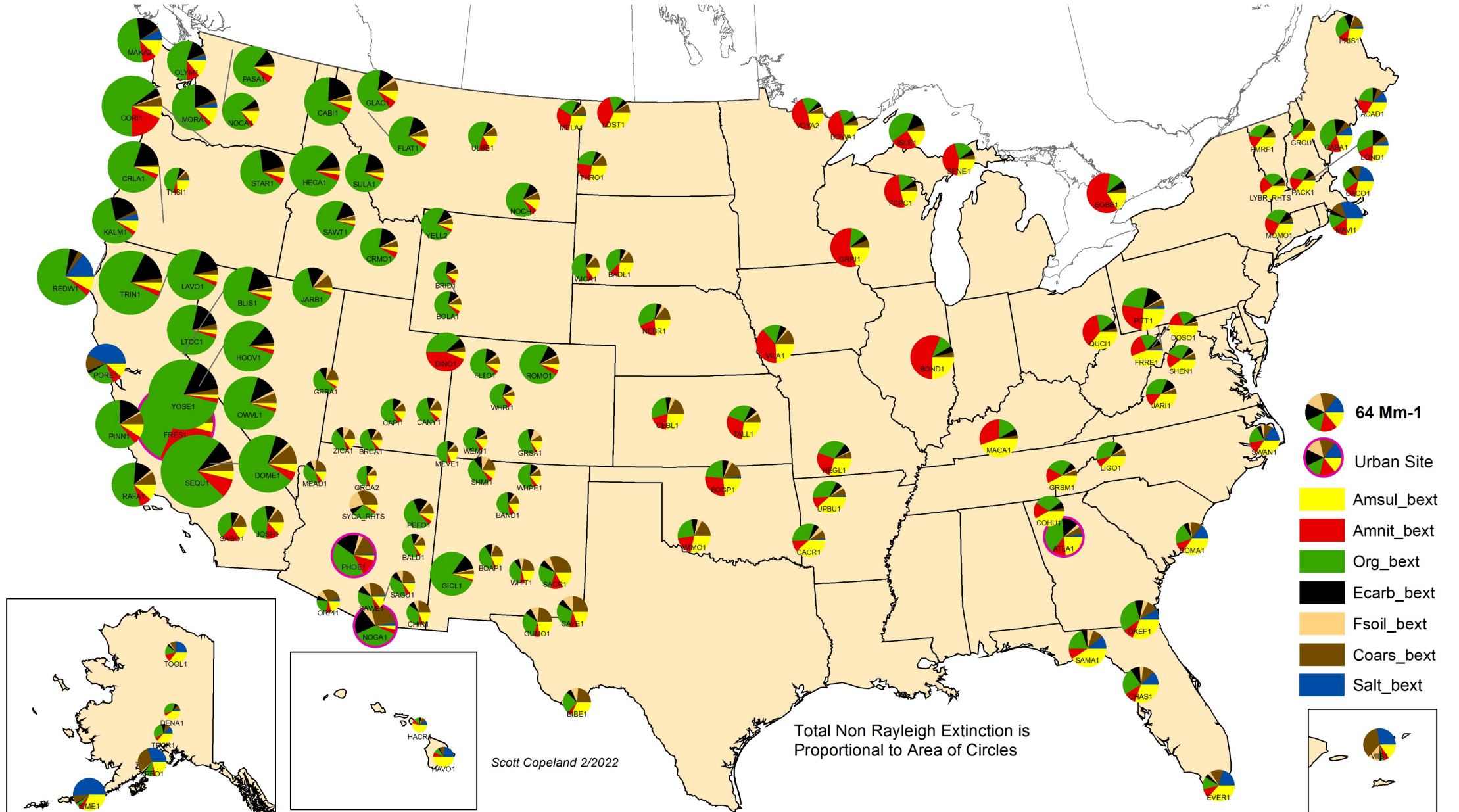
IMPROVE Data - 2019 Second IMPROVE Algorithm

Non Rayleigh Mean of Hazeiest 20%



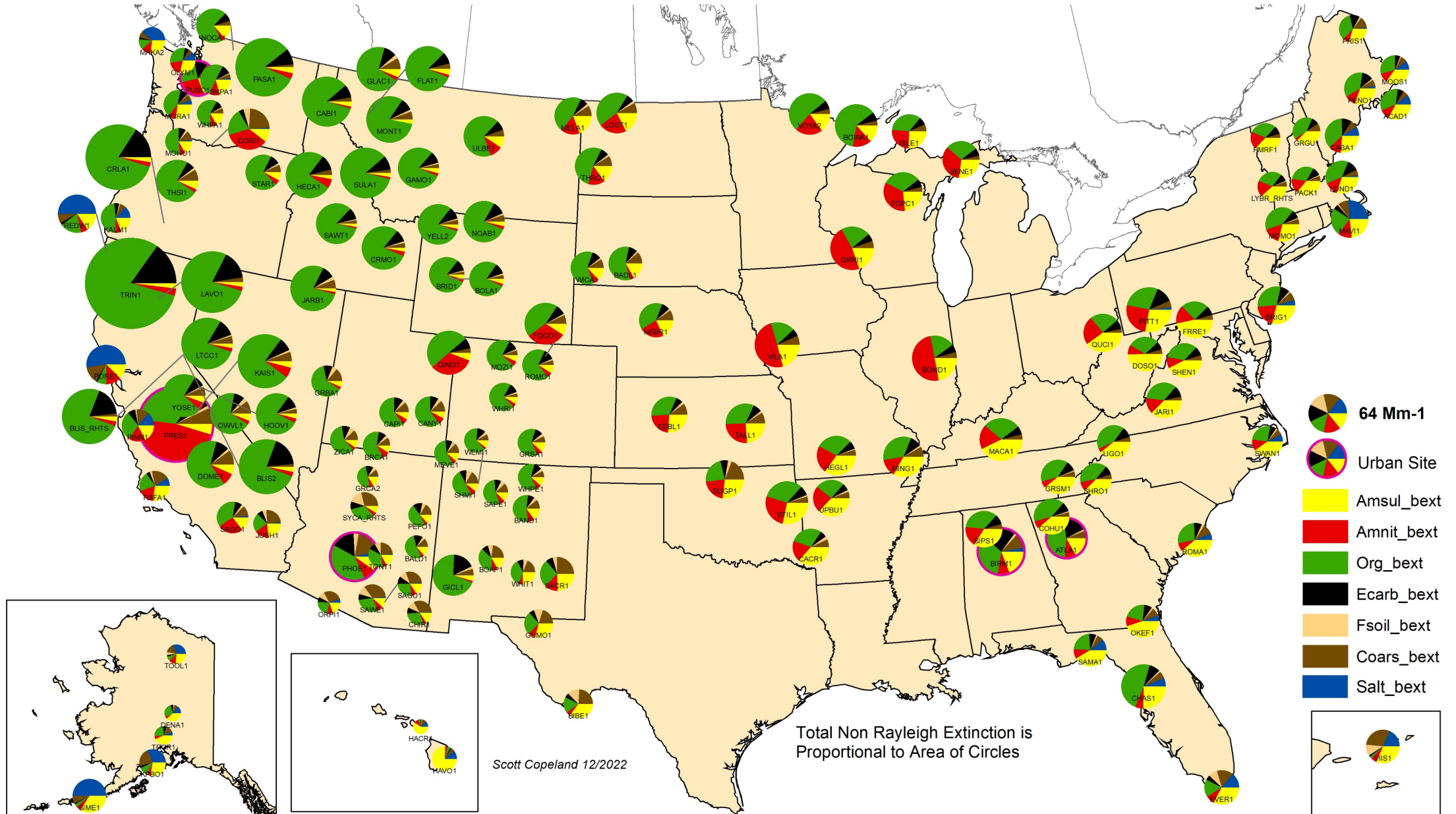
IMPROVE Data - 2020 Second IMPROVE Algorithm

Non Rayleigh Mean of Hazeiest 20%



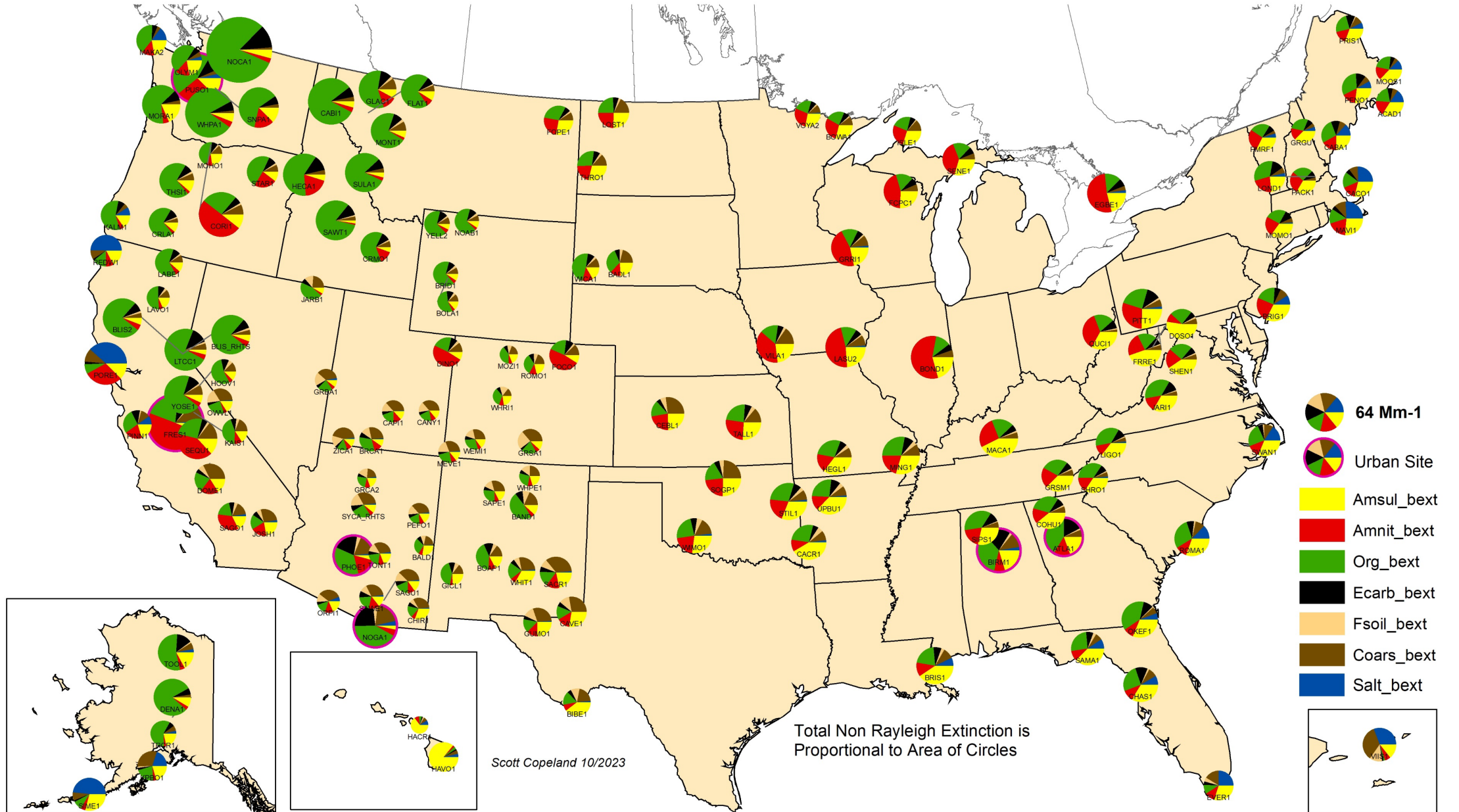
IMPROVE Data - 2021 Second IMPROVE Algorithm

Non Rayleigh Mean of Haziest 20%



IMPROVE Data - 2022 Second IMPROVE Algorithm

Non Rayleigh Mean of Hazeiest 20%



Regional Haze Maps and Metrics

- Impairment metrics here:

<https://drive.google.com/drive/folders/0Bxfj1vyyXeDYWVpfeUo4NEYtTU0?resourcekey=0-d0Bn5HHHEkgbiHZvIQWaLQ&usp=sharing>

- Haziest Day metrics here:

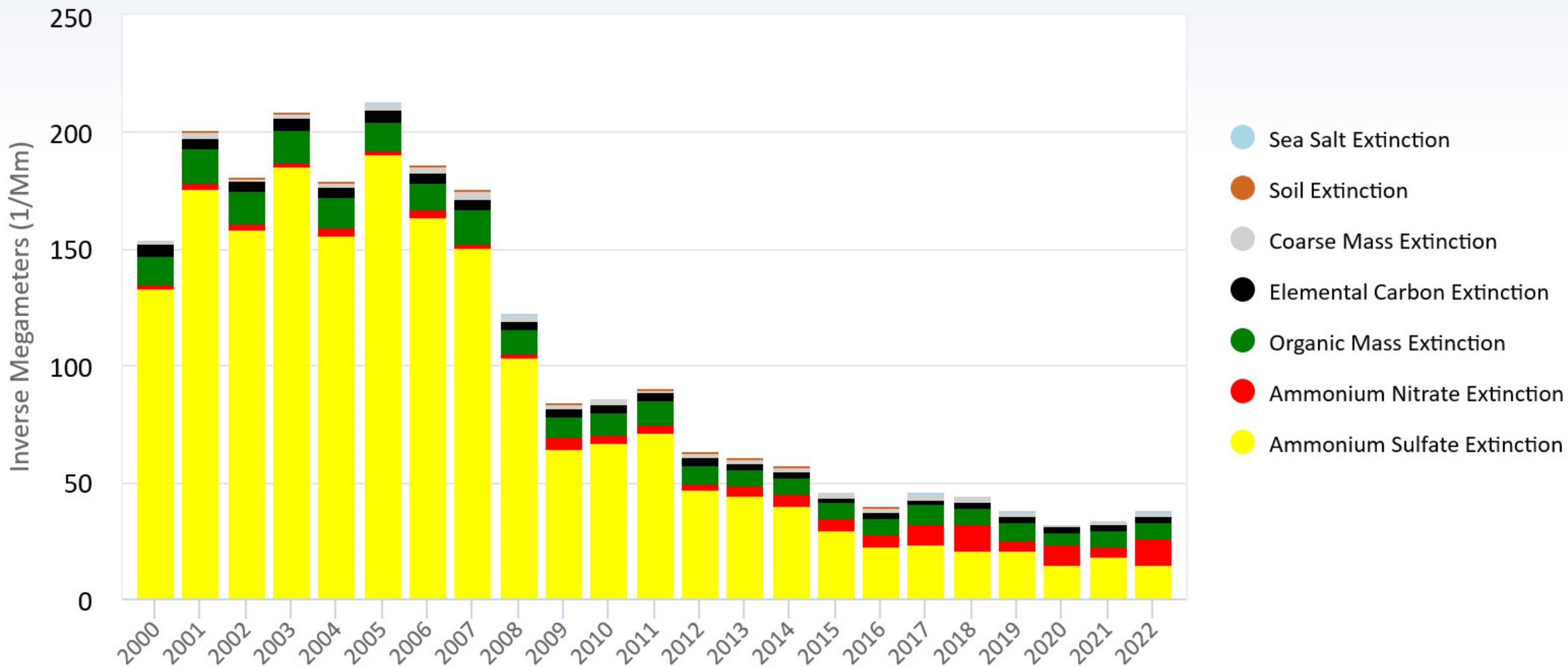
<https://drive.google.com/drive/folders/0Bxfj1vyyXeDYTjNLellwUUx0TTg?resourcekey=0-yt0EY9maDLhRmcE8s5tC6A&usp=sharing>

- History of RHR metric changes since 10/2019.

https://docs.google.com/presentation/d/11g4oBh6zoY--RN7f0TmzDTc2hohTorvW/edit?usp=drive_link&oid=116534812255078445612&rt=pof=true&sd=true

Annual Extinction Composition on the Most Impaired Days - Great Smoky Mountains NP

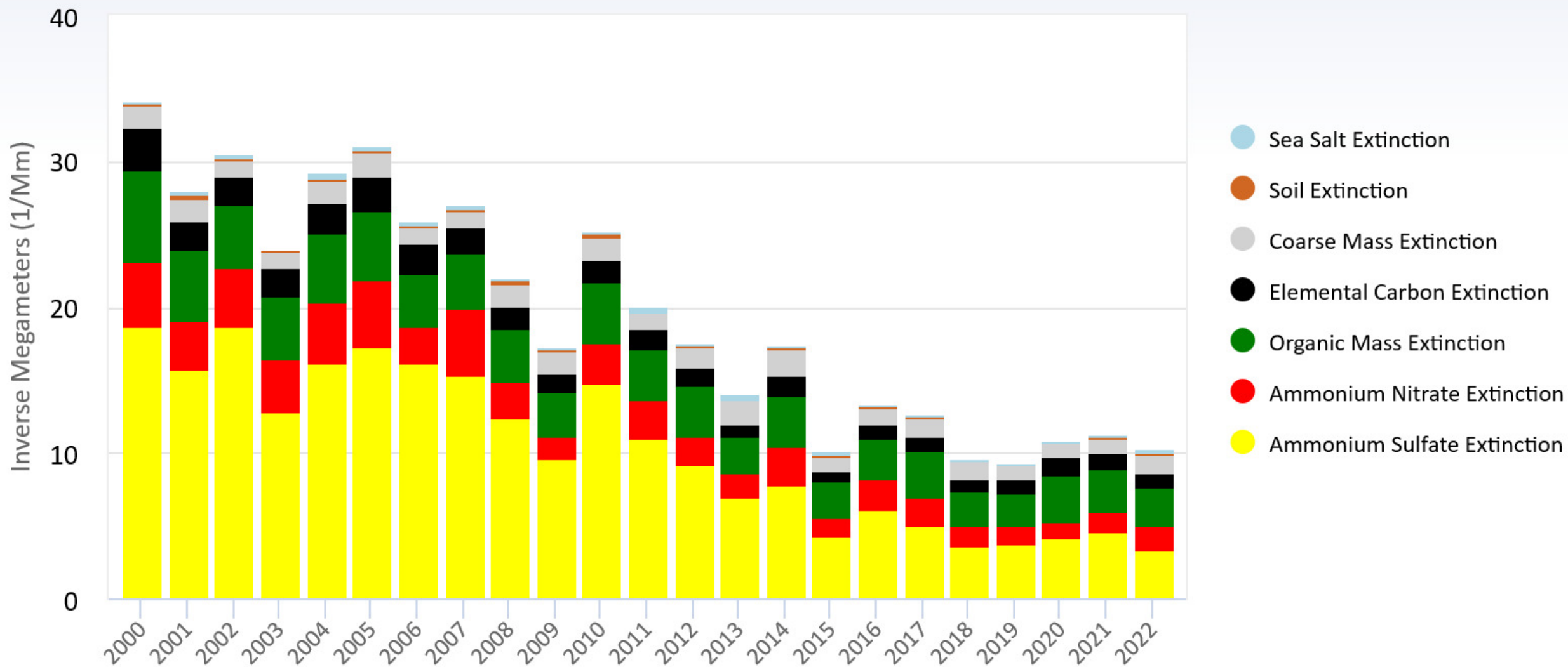
2000 - 2022



IMPROVE Monitor: Great Smoky Mountains NP (GRSM1)

Annual Extinction Composition on the Clearest Days - Great Smoky Mountains NP

2000 - 2022



Number of "valid" IMPROVE samples by year (459884 total)

