TDEP Measurement Workshop

April 29, 2024 Madison, Wisconsin

TDep Zoom Registration link

https://uwmadison.zoom.us/meeting/register/tJYocOutrT0pHN34VYpeiwDC0cjpx7ZK9dmt#/registration

Commencement

- 8:30-8:40 Welcome & Introductions by Kristi Morris (NPS)
- 8:40-9:20 Keynote Address: Atmospheric reduced nitrogen: sources, transformations, effects, and management Charles Driscoll (Syracuse University)

9:20-9:35 TDEP reactive N total deposition products – data gaps and needs – Greg Beachley (EPA)

Panel 1: Reduced Nitrogen Ambient and Dry Deposition Measurements

Discuss the state of the science of reduced N measurements; monitoring gaps and priorities and needs for development and implementation of these methods.

9:35-9:55	Panel overview: regulatory and scientific needs for NH ₃	Bret Schichtel (NPS)
	measurements	
9:55-10:10	Break with coffee provided	
10:10-10:30	Ground-based reduced nitrogen (NH _x , NH ₃ , NH ₄)	Jason O'Brien (ECCC)
	monitoring, passives, filter-based, and continuous	
10:30-10:50	Satellite measurements of ammonia	Rui Wang (Princeton)
10:50-11:10	Process-level high-resolution deposition measurements	Da Pan (CSU) & Vladislav I. Sevostianov
		(Princeton)
11:10-11:30	Low-cost dry deposition measurements	John Walker (EPA)
		Additional panelist: Mike Bell (NPS)
11:30-12:15	Discussion facilitated by Bret Schichtel	
	• What are the primary monitoring gaps?	
	• How can current national networks evolve to address these gaps?	
	 How can the new/refined monitoring be used to improve the TDEP maps for critical loads assessments? 	

12:15-1:30 Lunch

TDEP Measurement Workshop

April 29, 2024 Madison, Wisconsin

Panel 2: Total Nitrogen (N) & Phosphorous (P) Measurements

Discuss the needs for additional and refined total N and P measurements and monitoring gaps and priorities. Measuring the missing and poorly quantified components, e.g. organic N

1:30-1:50	Panel overview: regulatory and scientific needs for	Mike Bell and Emmi Felker Quinn (NPS)	
	total N & P measurements		
1:50-2:05	NADP total wet N & P (SNiPiT)	David Gay and Katie Blaydes (NADP)	
2:05-2:25	Organic N ambient and deposition measurements	Nate Topie (WSP) & Ryan Fulgham (EPA)	
2:25-2:45	Reactive nitrogen in wildfire plumes: observation	Emily Fischer (CSU)	
	capabilities and challenges		
2:45-3:05	P deposition measurements - virtual	Janice Brahney (Utah State)	
3:05-3:25	Ambient P measurements, leveraging routine monitoring	Nicole Hyslop (UC Davis)	
	programs		
3:25 - 3:55	Break with beverages & refreshments		
3:55-4:40	Discussion facilitated by Mike Bell (NPS)		
	What are the primary monitoring gaps?		
	How can current national networks evolve to address these gaps?		
	• How can the new/refined monitoring be used to improve the TDEP maps for critical loads		
	assessments?		

Wrap Up

4:40-5:00 Group discussion and reflection on the two panel sessions – Bret Schichtel & Kristi Morris (NPS)

Happy Hour – TBD