Agenda

Northeast Regional Operational Workshop XIX Albany, New York

NanoFab South Conference Center, Room 103, 255 Fuller Road Wednesday, November 7, 2018

8:05 am

Welcoming Remarks & Conference Logistics

Raymond G. O'Keefe, Meteorologist In Charge Joseph P. Villani, NROW XIX Steering Committee Chair National Weather Service, Albany, New York

Session A – Severe Weather I (8:15 am to 9:55 am)

8:15 am

The 15 May 2018 Northeast U.S. Significant Severe Weather Outbreak

Joseph E. Cebulko

NOAA/NWS Weather Forecast Office, Albany, New York

8:35 am

Differences Between High-Shear / Low-CAPE Environments in the Northeast US Favoring Straight-Line Damaging Winds vs Tornadoes

Michael E. Main

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

8:55 am

The Use of Collapsing Specific Differential Phase Columns to Predict Significant Severe Thunderstorm Wind Damage across the Northeastern United States

Brian J. Frugis

NOAA/NWS Weather Forecast Office, Albany, New York

9:15 am

Evaluating the Effects of Terrain-Channeled, Low-Level Flow on Convective Organization

William Flamholtz

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

9:35 am

A Mesonet-Based Approach to Convective Cold Pools and Severe Thunderstorm Forecasting

Daniel Reese

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

9:55 am

Morning Break

SUNY Albany AMS selling Refreshments in NanoFab South Conference Center Rotunda

Session B – Winter Weather I (10:15 am to 11:35 am)

10:15 am

The 2 March 2018 Winter Storm in eastern New York

Michael Evans

NOAA/NWS Weather Forecast Office, Albany, New York

10:35 am

Forecasting the Inland Extent of Lake Effect Snow Bands Downwind of Lake Ontario

Joseph P. Villani

NOAA/NWS Weather Forecast Office, Albany, New York

10:55 am

The Influence of Boundary Layer Mixing on a Northeast Coastal Cyclone

Matthew Vaughan

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

11:15 am

Applying Forecast Track Diagnostics in High-Impact Northeast Winter Storms: Climatology and Case Analysis

Tomer Burg

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

11:35 am – 12:55 pm

Lunch

<u>Session C – Hydrology/Flooding/Tropical</u> (12:55 pm to 2:35 pm)

12:55 pm

The Mid-January 2018 Floods and Ice Jam Event

Neal M. Strauss

NOAA/NWS Northeast River Forecast Center, Boston/Norton, Massachusetts

1:15 pm

Cumulative Extreme Weather Events and Subsequent High-Impact Flooding in Southern Japan in Early July 2018

David R. Vallee

NOAA/NWS Northeast River Forecast Center, Boston/Norton, Massachusetts

1:35 pm

The 4 January 2018 Bomb Cyclone Record Breaking Coastal Flood Event

Frank Nocera

NOAA/NWS, Weather Forecast Office, Boston/Norton, Massachusetts

1:55 pm

Utilizing Dual-Polarization Instantaneous Precipitation Rate to Predict Flash Flooding

Aaron Reynolds and David Zaff

NOAA/NWS Weather Forecast Office, Buffalo, New York

2:15 pm

An Investigation of North Atlantic TC Ensemble Forecasts with Large Cross-track Errors

Nicholas Leonardo

School of Marine and Atmospheric Sciences

Stony Brook University, Stony Brook, New York

2:35 pm

Break: SUNY Albany AMS selling Refreshments in Nano South Conference Center Rotunda

Session D – Numerical Weather Predication and Applications

(2:55 pm to 4:35 pm)

2:55 pm

FV3GFS Official Evaluation Results for the Northeast U.S.

Alicia M. Bentley

I. M. Systems Group and NOAA/NWS/NCEP/EMC, College Park, Maryland

3:15 pm

A Sensitivity Analysis of WRF-Simulated Cold Air Damming Using Variable Parameterization Schema

Morgan M. Simms

NOAA/NWS, Weather Forecast Office, Newport/Morehead City, North Carolina

3:35 pm

CSTAR Update: Better Use of Ensembles in the Forecast Process: Scenario-Based Tools for Predictability Studies and Hazardous Weather Communication

Brian A. Colle

School of Marine and Atmospheric Sciences

Stony Brook University, Stony Brook, New York

3:55 pm

An Examination of Physical Approaches to Wind Gust Forecasting in New York City

Joshua Feldman

School of Marine and Atmospheric Sciences

Stony Brook University, Stony Brook, New York

4:15 pm

Validation of the WRF PBL over Long Island Sound during the LISTOS Experiment

Keenan Fryer

School of Marine and Atmospheric Sciences

Stony Brook University, Stony Brook, New York

NROW XIX Key Note Presentation

4:35 pm

Innovation in the Age of Autoforecasts

Greg Carbin

Chief of Forecast Operations

NOAA/NWS/NCEP, Weather Prediction Center, College Park, Maryland

5:35 pm

Wrap up

Joseph P. Villani

5:40 pm

Adjourn

6:30-9:00 pm

CSTAR Dinner at Brown's Brewing Company (Trojan Room) for participants in UAlbany–NWS CSTAR VI 417 River Street, Troy, New York 518-273-2337

Agenda

Northeast Regional Operational Workshop XIX Albany, New York

Nano South Conference Center, Room 103, 255 Fuller Road Thursday, November 8, 2018

8:10 am

Opening Remarks

Raymond G. O'Keefe, Meteorologist In Charge Joseph P. Villani, NROW XIX Steering Committee Chair National Weather Service, Albany, New York

Session E – High Impact Weather Events/Messaging (8:15 am to 9:55 am)

8:15 am

The High–Impact, Multi-Hazard Storm of 29 December 1948 – 1 January 1949 In New York and New England

Stephen DiRienzo

NOAA/NWS Weather Forecast Office, Albany, New York

8:35 am

Retrospective Analysis of the 31 May 1998 Northeastern U.S. Severe Weather Outbreak

Kevin S. Lipton

NOAA/NWS Weather Forecast Office, Albany, New York

8:55 am

The Christmas Day 2017 Snow and Damaging Wind Storm

Joseph W. DelliCarpini

NOAA/NWS, Weather Forecast Office, Boston/Norton, Massachusetts

9:15 am

Development of a Wind Extremes Forecast System for Transmission System Outage Prediction

Jeffrey M. Freedman

Atmospheric Sciences Research Center

University at Albany, State University of New York, Albany, New York

9:35 am

Communicating Hurricane Risk with Virtual Reality: Strategies for Improving Warnings

Jase Bernhardt

Department of Geology, Environment and Sustainability

Hofstra University, Hempstead, New York

9:55 am

Break: SUNY Albany AMS selling Refreshments in NanoFeb South Conference

Center Rotunda

Session F – Winter Weather II (10:15 am to 11:55 am)

10:15 am

Operational Implementation of NWS Snow Squall Warnings for Winter 2018–19

Peter C. Banacos

NOAA/NWS Weather Forecast Office, Burlington, Vermont

10:35 am

Snow Squall Warnings: Operational Best Practices from 15 Years of Decision Support Services

Gregory A. DeVoir

NOAA/NWS Weather Forecast Office, State College, Pennsylvania

10:55 am

Convection-Permitting Ensemble Forecasts of the 10–12 December 2013 Lake-Effect Snow Event: Sensitivity to Microphysical Parameterizations

W. Massey Bartolini

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

11:15 am

Convection-Permitting Ensemble Forecasts of the 10–12 December 2013 Lake-Effect Snow Event: Sensitivity to Surface and Boundary Layer Parameterizations Justin R. Minder

Justin K. Minuel

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

11:35 am

The 11-12 December 2008 Ice Storm across the Northeastern United States

John S. Quinlan

NOAA/NWS Weather Forecast Office, Albany, New York

11:55 am – 1:15 pm

Lunch

<u>Session G – Climatology/Observations</u> (1:15 pm to 2:35 pm)

1:15 pm

Preliminary Evaluation of Data from the GOES-16 Geostationary Lightning Mapper

Alan M. Cope

NOAA/NWS Weather Forecast Office, Mount Holly, New Jersey

1:35 pm

A Review of New York State Mesonet Site Properties and WMO Siting Criteria

Jerry Brotzge

New York State Mesonet

University at Albany, State University of New York, Albany, New York

1:55 pm

Comparisons of New York State Mesonet and ASOS Temperature data

Junhong (June) Wang

New York State Mesonet

University at Albany, State University of New York, Albany, New York

2:15 pm

Understanding Differences Between New York State Mesonet and ASOS Wind Observations

Alex Gallagher

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

Poster Session - NanoFab South Rotunda (2:35 pm to 3:05 pm)

2:35 pm

Microphysical Influences on Ensemble Members in the 15–16 December 2013 OWLeS Case

Jessica Blair

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

An Integrated Modeling and Observing System for the Study of the Ecology of Lake George in the Jefferson Project

Anthony P. Praino

IBM Thomas J. Watson Research Center, Yorktown Heights, New York

Machine Learning Methods to Predict Wind Energy Availability using New York State Mesonet Data (2018)

Aleks Siemenn

Atmospheric Sciences Research Center

University at Albany, State University of New York, Albany, New York

Large Scale Observational and Model Analysis of the Unusual 2015–2016 El Niño Event: Implications for California Precipitation

Chelsea Snide

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

LISTOS 2018: How Land–Water Interactions Affect Ozone Transport in the Long Island Sound Area

Brennan J. Stutsrim

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

Analyzing the Role of Low-Level Forcing in Significant Severe Weather Outbreaks in the Eastern U.S.

Joseph E. Cebulko

NOAA/NWS Weather Forecast Office, Albany, New York

Session H – Severe Weather II (3:05 pm to 4:45 pm)

3:05 pm

Widespread Damaging Wind Severe Thunderstorm Event of 4 May 2018 across the NWS Albany, NY County Warning Area

Christina Speciale

NOAA/NWS Weather Forecast Office, Albany, New York

3:25 pm

Improving Tornado Detection and Lead Time:

The July/August Tornadoes of 2018 in Southern New England

Joseph W. DelliCarpini

NOAA/NWS Weather Forecast Office, Boston/Norton, Massachusetts

3:45 pm

Correlating Trends in Flash Extent Density to Tornadogenesis for Supercells in the Northeastern United States

Michael L. Jurewicz, Sr.

NOAA/NWS Weather Forecast Office, Binghamton, New York

4:05 pm

Albany Forecast Area Significant Hail Climatology and Case Studies

Thomas A. Wasula

NOAA/NWS Weather Forecast Office, Albany, New York

4:25 pm

Examining Terrain Effects on the 31 May 1998 Mechanicville, New York Supercell

Luke LeBel

Department of Atmospheric and Environmental Sciences

University at Albany, State University of New York, Albany, New York

4:45 pm – Wrap Up/Adjourn

Joseph P. Villani

NROW XX is scheduled November 6–7, 2019