AMS 2017 Annual Meeting Proposed Session Topic Summary

Conference	Session topic
BOSARTSYMP	middle latitudes and tropics
BOSARTSYMP	convective scale
BOSARTSYMP	mesoscale
BOSARTSYMP	_synoptic/planetary scales
Bob Houze Symposium	cloud dynamic and physical processes
Bob Houze Symposium	mesoscale and tropical meteorology
Rob Houzo Symposium	the role of mesoscale convective systems and
Bob Houze Symposium	precipitation in global weather and climate
33rd Conf on EIPT	Advancements in Information Systems Technology
	APIs and Web Services for Accessing, Integrating and
33rd Conf on EIPT	Using Weather, Water, Climate and Societal
	Information via Desktop and Mobile Platforms
33rd Conf on EIPT	AWIPS System Updates
22rd Conf on FIRT	Communication Technologies for Accessing and
33rd Conf on EIPT	Distributing Climate, Weather and Hydrological Data
33rd Conf on EIPT	Crowdsourcing Data and Data Portals
	Disseminating Earth Science and Climate Information
33rd Conf on EIPT	for Better Decision Making
33rd Conf on EIPT	Mapping and GIS for Weather and Climate
33rd Conf on EIPT	QuasiOperational Products You Can Use Now
33rd Conf on EIPT	Radar Technologies and Applications
	Visualization Techniques for Climatology and
33rd Conf on EIPT	Meteorology
33rd Conf on EIPT	Software Engineering and Cyberinfrastructure
33rd Conf on EIPT	Weather and the Roads
33rd Conf on EIPT	International Applications: Global Initiatives for Multi-
	Hazard Impact Based Science to Services including
	Volcanic Ash (Joint with ARAM, USINT)
33rd Conf on EIPT	International Applications: Sharing Environmental Big
	Data (Joint with USINT)
33rd Conf on EIPT	Economic Impacts and Value of Improved Forecast
	Information (Joint with SOCIETY)
22nd Comf on FIRT	
33rd Conf on EIPT	Research to Operations: Transitioning from Science to
	Service (Joint with R2O, SOCIETY)
33rd Conf on EIPT	Weather Information at Our Fingertips (Joint with R2O)

33rd Conf on EIPT Weather Observing Systems Via Airborne Platforms

(Joint with ARAM)

33rd Conf on EIPT The NOAA Big DataCRADAs. An Update and a Look at

the Opportunities They Pose for the AMS Community

and Its Members (Joint with AI, SOCIETY)

31HYDRO Hydrometeorological extremes 31HYDRO Drought analysis and prediction

31HYDRO Flood prediction, analysis, decision support, & managem 31HYDRO Hydrometeorological applications, products and services

31HYDRO Innovative water cycle observations

31HYDRO Advances in evaporation and evaporative demand

31HYDRO Remote sensing applications in hydrology
31HYDRO Land data assimilation techniques and systems
Integrated metrics and benchmarking for next

generation hydro/land surface modeling of the water

31HYDRO cycle

28 WAF

31HYDRO Land-atmosphere interactions 31HYDRO Regional climate modeling

31HYDRO Precipitation processes and observations for atmospheric

31HYDRO Other Topics in Hydrology

Weather phenomena (Winter weather; Tropical

weather; Severe storms; mesoscale meteorology; High

28 WAF impact local weather)

Forecasting techniques (Aviation forecasting; Hydrologic forecasting; Fire weather analysis and

forecasting; Impact of new data types and

28 WAF observational platforms)

Forecasting tools (New applications; Satellite applications; Quantitative precipitation forecasts; Testbed, proving ground, and research-to-operations activities; Observational and NWP tools to facilitate

28 WAF decision support services, including social media)

Societal impacts of weather (Impacts of extreme

weather events on society, economy, and public health; Linkages between weather analysis, forecasting, NWP, impact-based decision support services derived from these topics, and continued preparation of NOAA's

"Weather-Ready Nation")

Results from recent field campaigns: OLYMPEX, WFIP,

PECAN, SHOUT, VORTEX-SE, TCI-ONR, and others

24 NWP Data assimilation techniques

Model development and application (Forecast verification methods and performance; Updates on global and mesoscale models; Improving model performance and efficiency; New or improved

parameterizations; Local application of regional models; Regional climate downscaling approaches or short-

24 NWP range climate prediction)

New ensemble generation or probabilistic-based

24 NWP forecasting techniques

Ronald W. Przybylinski Memorial Session on Elevated

28 WAF/24 NWP Convection

28 WAF/24 NWP

Obtaining, assimilating, and modeling with new and unique observational datasets, (Joint 21 IOAS-AOLS)

Polar numerical weather prediction and modeling (Joint

28 WAF/24 NWP with the 14 Polar)

26 Education Innovations in University Instruction

26 Education K-12 Edjucation
26 Education Higher Education
26 Education Informal Education

Observing Systems: atmosphere, ocean and land

21 IOAS/AOLS surface, in situ and remote

21 IOAS/AOLS Comparisons with other observing systems

Data Assimilation: New developments in methodology; research and operational applications on all spatial and

21 IOAS/AOLS temporal scales

Numerical analysis and prediction experiments

involving observations: data impact and observation

21 IOAS/AOLS sensitivity tests

21 IOAS/AOLS Observing System Simulation Experiments (OSSEs)

Field Experiments: observational and assimilation

21 IOAS/AOLS results

18 ARAM	Weather Impacts to Aviation, Range and Aerospace Operations (Convection, Icing, Space Weather, Turbulence, Volcanic Ash, Wake Vortices, Wind Shear, Winter Weather) Weather Information Integrated into DSTs on the Ground and in the Air (ATM-Weather Integration, Decision Support Tools, Weather Technology in the
18 ARAM	Cockpit [WTIC]) Traditional and Non-Traditional Non-Aircraft Sensors
18 ARAM	and Observation Capabilities (Sensors and Observation Capabilities, Satellites, Radar, Lightning)
18 ARAM	Traditional and Non-Traditional Aircraft Sensors and Observation Capabilities (Aircraft-Based Observations)
	Advances in Numerical Weather Prediction, Ensemble Modeling and the Use of Artificial Intelligence Techniques in Support of Aviation, Range and
18 ARAM	Aerospace Operations (NWP, Ensemble Modeling, AI) What's Weather Worth to Aviation, Range and
18 ARAM	Aerospace Decision-Makers (Benefits Assessment) Outside the (Aviation) Box – Impacts of Weather on Range, Aerospace, Commercial Spaceport and UAS Operations (Range, Aerospace, Commercial Spaceport
18 ARAM	and UAS) The Framework We Rely On – NextGen and International Programmatic, Policy and Regulatory
18 ARAM	Updates (NextGen, International, PP&R) The Little Guys – Most Vulnerable to Weather Impacts
18 ARAM	(GA Operations) Coastal Climate: Sea level rise, coastal flooding and
15 Coastal	impacts of melting sea-ice
15 Coastal	Big Data in the Coastal Environment Novel Observational Techniques: Data assimilation, Unmanned observations, regional networks, coastal
15 Coastal	data needs
15 Coastal	Social Science: Tools, Methods and Applications
15 Coastal 15 Coastal	Ecological and Biological coupled forecasting Case studies

	Joint Session (with STAC Committee on Hydrology): Regional and coastal hydrodynamic model coupling,
15 Coastal	including hydrological impacts
15 History	History of meteorology and atmospheric sciences Early History of Global Measurements of the Earth
15 History	Radiation Budget and Clouds
14SpaceWx	How space weather changed the world – almost
14SpaceWx	Major Scientific Challenges in Space Weather
14SpaceWx	Moving the Space Weather Action Plan (SWAP) Forward
14SpaceWx	Observational Platforms for Space Weather
14SpaceWx	The Scientific Uses of CubeSats
13 GOES-R	Algorithm Development
13 GOES-R	Calibration and Validation
	Direct Broadcast Capabilities for Polar-orbiting and
	Geostationary Satellites and Their Use in Support of
13 GOES-R	Societal Needs
	Education, Training, and User Readiness for the GOES-R
13 GOES-R	Series
	Education, Training, and User Readiness for the JPSS
13 GOES-R	Series
	Enterprise Ground Architectures and the Research to
	Operations Process: Tools, Technologies, and
13 GOES-R	Experiences
13 GOES-R	NOAA Satellite Data Operations
	Program Overviews and Status for New Operational
13 GOES-R	Environmental Systems (Invited)
13 GOES-R	Satellite Testbeds and Proving Ground Activities
13 GOES-R	Societal Benefits of Satellite Data Applications
	Ensuring the Data Continuity from the Environmental
13 GOES-R	Satellite Constellation
	User Readiness for New Operational Environmental
13 GOES-R	Satellite Systems
	Advances in CubeSats and SmallSats to Improve Earth
13 GOES-R	Science and Weather Forecasting
	Advances in Satellite Observations and Earth Science
13 GOES-R	and Observing Technologies

12 Society	session ideas from anyone with an interest in the intersection of weather, climate, and society, especially including original research in social and behavioral sciences and public policy related to weather or climate.
12 Cociety	societal responses, risk and resilience in the face of climate variability, extreme weather, and climate
12 Society	change communicating weather and climate information, risks
12 Society	and uncertainty: research and applications policy and decision making at the weather, climate and
12 Society	society Interface
12 Society	Extreme Weather, Health and Communities
9 Aerosol	aerosol interactions with shallow clouds
9 Aerosol	aerosol-deep convection interactions
9 Aerosol	soil dust lofting, transport, and warm and cold cloud interactions
3 Actosor	aerosols, clouds, and precipitation from DOE ARM
9 Aerosol	observations
	polar clouds and climate (Joint Session with Polar
9 Aerosol	Meteorology and Oceanography)
9 Aerosol	aerosol indirect effects and climate variability in CMIP6 (Joint Session with Climate Variability and Change) Observation and forecast requirements to support high
8 Wx,Climate, Water and the New Energy Economy	penetration of renewable generation sources on a regional and national scale
8 Wx,Climate, Water and the New	Climate data and modeling applied to long-term
Energy Economy	renewable energy resource development
	Understanding geographic variability and correlation of
8 Wx,Climate, Water and the New	renewable fuel sources (e.g., wind, solar, hydro) on
Energy Economy 8 Wx,Climate, Water and the New	hourly, daily, monthly, seasonal and annual time scales Strategies on the geographical distribution of
Energy Economy	renewable generation sources at a national scale
8 Wx,Climate, Water and the New	Software applications linking weather to energy
Energy Economy	decision support
8 Wx,Climate, Water and the New	
Energy Economy	Energy applications for weather/climate data
8 Wx,Climate, Water and the New	Big data analytics providing decision support within the
Energy Economy	energy sector

8 Wx,Climate, Water and the New Energy Economy 8 Wx,Climate, Water and the New Energy Economy	Remote sensing techniques for wind energy assessment and forecasting Statistical and artificial intelligence/machine learning applications in the energy sector Lidar Applications to the Energy Sector (Joint between the Eighth Conference on Weather, Climate, Water and
8 Wx,Climate, Water and the New Energy Economy 8 Wx,Climate, Water and the New Energy Economy 8 Environment and Health 8 Environment and Health	the New Energy Economy and the Eighth Symposium on Lidar Atmospheric Applications) Statistical and artificial intelligence/machine learning applications in the energy sector El Niño and Health + Core Science Lecture NASA Earth Observations and Climate Change Climate change, extreme weather, and infectious disease transmission: Emerging links and opportunities for adaptation and research
8 Environment and Health	Staying Alive: Integrated Modeling of Health System and Urban infrastructure Responses to Extreme
8 Environment and Health	Weather Events Applying a Systems-level Approach to the Phytobiome:
8 Environment and Health	Can We Create a Better Future? Climate change and associated diverse health impacts:
8 Environment and Health	highlights of ongoing research at CDC
8 Environment and Health	Climate Services and Integration of Data – ENACTS Extreme Heat I: Understanding the Social, Physiological, and Climatological Mechanisms Driving Health
8 Environment and Health	Outcomes in Extreme Heat Extreme Heat II: The National Integrated Heat Health Information System (NIHHIS): Domestic and International Partnerships for Building Resilience to
8 Environment and Health	Extreme Heat
8 Environment and Health	Environment & Health at the AMS:
8 Lidar 8 Lidar	Lidar observations (e.g. wind, aerosol, and water vapor) as model assimilation inputs and verification data-sets Lidar observations of aerosols, winds, clouds and trace gases - with applications to air quality and climate studies:
o Liudi	Lidar Networks: Making lidar data accessible to
8 Lidar	decision makers and the public

New lidar technologies for atmospheric applications:

8 Lidar from instrumentation to data distribution
8 Lidar pplications to the energy sector

Space-based lidar observations - past, present, and planned, including the CALIPSO Mission and its impact

8 Lidar on AMS community interests.

8 Lidar Polar lidar observations

The Coupling of Lightning to Cloud Processes (Cloud microphysics and electrification; Thunderstorm kinematics, dynamics and lightning; Lightning within organized midlatitude, tropical and wintertime cloud systems; Utility and Impact of Lightning Data in operations; Lightning and Atmospheric chemistry;

8 Lightning Lightning and numerical weather prediction)

Societal and structural hazards of lightning (Safety for events, outdoor activities, and other population groups; Protection of the built environment; Preparedness and

8 Lightning education)

Lightning Detection Technology, Sensor

Intercomparisons, and Applications (photography and videography; sensor development and validation; lightning physics; space-based sensors: new

observations and validation plans)

8 Lightning Lightning climatologies

7 Python Modeling

7 Python Time series analysis

7 Python Air quality

7 Python Satellite data processing 7 Python In-situ data analysis

7 Python GIS

8 Lightning

7 Python Python as a software integration platform

7 Python Visualization 7 Python Gridding

7 Python Model intercomparison and ensembles 7 Python Data intensive computation and big data

7 Python Teaching and learning Python

7 Python Connecting Python with other languages

Development of innovative methods for assimilating satellite observations for environmental analysis and

5JCSDA prediction;

Assessment of the impact of satellite data on numerical

5JCSDA weather prediction (NWP) skill;

Development of common tools and infrastructure to enhance and accelerate satellite data assimilation

5JCSDA efforts in operational systems;

Successful transitions of research to operational

5JCSDA assimilation of satellite data;

Assimilation of satellite data to improve the analysis and forecast of land surfaces, oceans, and air quality.

Societal impacts of the MJO, including the agricultural

5MJO and energy sectors

5MJO Tropical–extratropical interactions with the MJO

5MJO MJO modulation of tropical cyclones

5MJO Methods for identification and prediction of the MJO

Analysis of observations from the DYNAMO/CINDY field

5MJO campaign

5JCSDA

5MJO Representation of the MJO in numerical models
5MJO Theoretical studies of the MJO's dynamics

5MJO Climate change and the MJO 5MJO Air—sea interactions in the MJO

University/Student AMS Chapter contributions to

building a WRN...outreach events on campus or in local

5R2O communities.

Decision Support Services and the Tools to Enable

5R2O Forecasters

Early Warning, Decision Support and Societal Benefits of 3-4 Week forecasts and seasonal/sub-seasonal

5R2O outlooks

Water prediction advances to build a "water-ready

5R2O nation"

3HPC Data assimilation, research, theory and practice

Data analysis: Big Data Analytics in the

3HPC ocean/weather/climate enterprise

Model evolution and creation: The role of continuous

3HPC model improvement

3HPC HPC challenges in Research to Operations

The role of coprocessors in new and existing

3HPC geophysical models

3HPC Is it time to consider breaking the Fortran/C mold?

3D Visualization tools associated with high performance

3HPC systems, research and operations?

3HPC Modeling in the cloud

Challenges for weather, water and climate modeling

3HPC at exascale

3HPC Storage architectures to support HPC

Advances in software environments and tools for

3HPC exploiting HPC

Advancing and Leveraging Research into Operations, and Operations Feedback into Research Between and

2US-International Partnerships Among International Partners

Joint Research and Coordinated Observations in

Hydrometeorology, Extremes and High-Impact Events

2US-International Partnerships in the US and Asia

Innovative Academic/Public/Private Partnerships

Within and Across Economic Sectors between US and

2US-International Partnerships Asia

Working Toward a More Weather, Water and Climate-

2US-International Partnerships Ready World—Issues and Opportunities

Integration of In-situ and Satellite-derived Observations into Data Assimilation and Weather, Water and Climate Modeling Systems for the Improvement of Forecasts

2US-International Partnerships

IMPACTS2016

Global Weather Impacts

IMPACTS2016 US Weather Impacts session

GREEN SYMP high performance or next generation green buildings

GREEN SYMP integrated design

GREEN SYMP the economics of building green

GREEN SYMP sustainability management and governance

GREEN SYMP drivers of change

GREEN SYMP siting, materials, water, and waste

a/o 4/27 waiting on cosponsors confirmation BW

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c, land surface, and hydrological modeling