

# Regional and Global Model Analysis (RGMA) Principal Investigators (PI) Virtual Meeting

October 13–16, 2020

## Agenda

**Website:** <https://web.cvent.com/event/038818ee-f227-4b6a-863d-4b5086d3283e/summary>

**Google Drive:** <https://drive.google.com/drive/folders/1ACoxFY8Bre0vqj2BFh-ejdIloTkVZgse?usp=sharing>

**Slack:** <https://doergma2020pimeeting.slack.com/>

Tuesday, October 13, 2020	
<b>11:00 Welcome, Introductions and Expectations</b>	
11:00	Sharlene Weatherwax, Associate Director of Science for BER
11:10	Gary Geernaert, Director of Earth and Environmental Systems Sciences Division
11:20	Renu Joseph, Program Manager for Regional and Global Model Analysis
11:35	Cristiana Stan, IPA for Earth and Environmental System Modeling
<b>11:45 Project Overviews 1.1   Co-Chairs: Daehyun Kim, Colin Zarzycki</b>	
11:45	WACCEM - Water Cycle and Climate Extremes Modeling L. Ruby Leung
12:00	Monsoon Extremes: Impacts, Metrics, and Synoptic-Scale William Boos
12:10	RUBISCO - Reducing Uncertainties in Biogeochemical Forrest Hoffman
12:25	Evaluating the Influence of Plants on Hydrologic Cycling: Abigail Swann
12:35	ICOM - Integrated Coastal Modeling Ian Kraucunas
12:50	Modeling Arctic Storms and Impacts on Diminishing Sea Ice John Walsh
<b>13:00 Early Break</b>	
<b>13:30 Breakout Groups 1</b>	
<b>1.1 Convection and Surface-Atmosphere Interactions Leads: Ruby Leung, Gabe</b>	
<a href="https://drive.google.com/drive/folders/15MmoO83QCftSqE_cbdaRRkAA_fkJ1gP?usp=sharing">https://drive.google.com/drive/folders/15MmoO83QCftSqE_cbdaRRkAA_fkJ1gP?usp=sharing</a>	
13:30	Whitepaper overview Ruby Leung, Gabe Kooperman
<b>Data and Analysis</b>	
13:45	Development of a Global High-resolution Mesoscale Convective Zhe Feng
13:50	Global Mesoscale Convective System Latent Heating Nana Liu
13:55	Toward an Improved Estimate of Climate Sensitivity and its Robert Junod
14:00	The propagating environments for the initiation of summertime FengFei Song
14:05	Different rainfall characteristics in MCS and non-MCS events Huancui Hu
14:10	Diagnosing the August 2020 Midwest Derecho Binod Pokharel
14:15	The Globally Coherent Pattern of Autumn Monsoon Precipitation Nandini Ramesh
14:20	The Association Between Extreme Rainfall Events and Forest Robinson Negron-Juarez
14:25	Discussion
<b>Model Development, Sensitivity, and Evaluation</b>	
15:05	Conservation of dry air, water, and energy in CAM and its impact Bryce Harrop
15:10	3D-Land Energy Exchanges: Harnessing High Resolution Yu Gu
15:15	Resolution-Sensitivity of the Hydrological Cycle over North Koichi Sakaguchi
15:20	WRF Modelling of Deep Convection and Hail Rebecca Barthelmie
15:25	A framework for dynamical downscaling of CMIP6 simulations in Stefan Rahimi
<b>1.2 Ecosystem responses and feedbacks Leads: Forrest Hoffman,</b>	
<a href="https://drive.google.com/drive/folders/1av_McS4fWzQrtMvi4floGux7GnuJIRN1?usp=sharing">https://drive.google.com/drive/folders/1av_McS4fWzQrtMvi4floGux7GnuJIRN1?usp=sharing</a>	
13:30	Introduction and Charge Forrest Hoffman, Dave
<b>High Latitudes</b>	
13:36	Non-growing season plant nutrient uptake controls Arctic tundra William Riley
<b>Disturbance</b>	
13:42	Biophysical climate impacts of deforestation accelerate tropical Yue Li
13:48	Quantifying the drivers and predictability of seasonal changes in Jiafu Mao

<b>Soil Carbon</b>		
13:54	The age distribution of global soil carbon inferred from	Zheng Shi
14:00	Deriving functional relationships between environmental factors	Umakant Mishra
<b>Extremes</b>		
14:06	Detection and Attribution of Climate-Driven Extremes in Net	Bharat Sharma
<b>Climate-Carbon Cycle Sensitivity</b>		
14:12	Climate sensitivity and biogeochemical feedback	Min Xu
14:18	Carbon and climate dynamics of CMIP6 models in SSP	Charlie Koven
<b>Land-Atmosphere Carbon Exchange</b>		
14:24	Country-level land carbon sink and its causing components by	Lifen Jiang
14:30	Benchmarking large-scale carbon fluxes in the CMIP6 ensemble	Gretchen Keppel-Aleks
<b>Plant Physiology</b>		
14:36	Plant Physiology Increases the Magnitude and Spread of the	Claire Zarakas
14:42	Short-term favorable weather conditions affect long-term trends	Kuang-Yu Chang
<b>Marine Biogeochemistry</b>		
14:48	The impact of a changing environment on Arctic Marine	Georgiana Gibson
14:54	Evaluation of CMIP5 and CMIP6 models with the IOMB system:	Weiwei Fu
15:00	Variability in the biophysical environment of the Pacific Arctic	Clement Kinney
<b>Uncertainty</b>		
15:06	Reducing uncertainty in CMIP6 model projections with transfer	Qing Zhu
15:12	Treatment of Observational Uncertainty in ILAMB	Nathan Collier
15:18	Different numerical implementations imply uncertain model	Jinyun Tang
<b>Carbon and Water Feedbacks from Rising Carbon Dioxide</b>		
15:24	Prospectus for a workshop on CO2 fertilization feedbacks	Nate McDowell
<b>1.3 Coastal system land-atmosphere-ocean interactions</b>		<b>Leads: Joel Rowland, Kartik</b>
<a href="https://drive.google.com/drive/folders/1z6H_TZY_mEsoLK5z81rUcrei9MWQUro?usp=sharing">https://drive.google.com/drive/folders/1z6H_TZY_mEsoLK5z81rUcrei9MWQUro?usp=sharing</a>		
13:30	Breakout Introduction and Overview	Joel Rowland
<b>Atmospheric Challenges and Gaps</b>		
13:40	Landfalling Tropical Cyclones and Their Coastal Impacts	Shuyi Chen
13:45	Summer extreme precipitation over the Mid-Atlantic coastal	Yun Qian
13:50	Quantifying changes in extreme precipitation associated with	Keevin Reed
13:55	Increasing near-coastal Tropical Cyclone activity along the U.S.	Karthik Balaguru
14:00	Hydrological extremes and large-scale meteorological patterns	Colin Zarzycki
14:05	Discussion	
<b>Terrestrial Fluxes to Coast Challenges and Gaps</b>		
14:20	Changing seasonality in North American high latitude rivers	Katrina Bennett
14:25	Reduced model for the functional behavior of arctic riverine	Amadini Mendis Jayasinghe
14:30	Arctic Aquatic Carbon Cycling: Model Component and	Scott Elliott
14:35	An integrated hydro-physiographic metadata archive for pan-	Kurt Solander
14:40	Discussion	
<b>Coastal Dynamics Challenges and Gaps</b>		
14:55	Future Changes in the Relationship Between Tropical Cyclones	Christina Patricola
15:00	Classifying coastal environments on Alaska's North Slope	Anastasia Piliouras
15:05	Leveraging Arctic Coastal Erosion (ACE) Model Results at Drew	Diana Bull
15:10	The impact of flooding on permafrost	Elchin Jafarov
15:15	Discussion	
<b>1.4 Synoptic to intraseasonal-scale interactions</b>		<b>Leads: Bill Boos, Jian Lu</b>
<a href="https://drive.google.com/drive/folders/1iEyHOWpTlev_9dEh4xCdGvPjSGaNYBBA?usp=sharing">https://drive.google.com/drive/folders/1iEyHOWpTlev_9dEh4xCdGvPjSGaNYBBA?usp=sharing</a>		
13:30	Whitepaper overview	William Boos and Jian Lu
<b>Intraseasonal Variability &amp; the MJO</b>		

13:40	Amplified Madden–Julian oscillation impacts in the Pacific–North	Da Yang
13:47	Madden-Julian Oscillation in E3SMv1	Daehyun Kang
13:54	MJO modulation of tropical cyclogenesis in the DOE E3SMv1	Yumin Moon
14:01	QBO – MJO Connection in CMIP6 Models	Julie Caron
14:08	Evidence for coupling between the subseasonal oscillations in	Jian Lu
14:15	Why did the Madden-Julian Oscillation improve in the Met Office	Nicholas Klingaman
14:25	Discussion	
<b>Synoptic-Scale Phenomena</b>		
14:35	Tropical cyclones: controls on TC seeds and role of radiative	Gabriel Vecchi
14:42	Windstorms in the Northeastern United States	Sarah Pryor
14:49	Meteorological environments associated with California wildfires	Lu Dong
14:56	Applying Machine Learning to Associate Precipitation Extremes	Katie Dagon
15:03	Emergence of seasonal delay of tropical rainfall during 1979-	Fengfei Song
15:10	Discussion	
15:30	<b>Late Break</b>	
16:00	<b>Breakout Groups 1 (continued)</b>	
<b>1.1 Convection and surface-atmosphere interactions</b>		<b>Leads: Ruby Leung, Gabe</b>
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16:00	Summertime convection and surface climate over the Central	Hongchen Qin
16:05	Evaluation of precipitation characteristics in global convection	His-Yen Ma
16:10	Evaluation of Mesoscale Convective Systems in Climate	Zhe Feng
16:15	A relationship between the vertical structure of convection and	Samson Hagos
16:20	SSP-based land use change scenarios: a critical uncertainty in	Melissa Bukovsky
16:25	Discussion on model development, sensitivity, and evaluation	
<b>1.2 Ecosystem responses and feedbacks</b>		<b>Leads: Forrest Hoffman,</b>
<a href="https://drive.google.com/drive/folders/1av_McS4fWzQrtMvi4floGux7GnuJlRN1?usp=sharing">https://drive.google.com/drive/folders/1av_McS4fWzQrtMvi4floGux7GnuJlRN1?usp=sharing</a>		
16:00	Proposed changes to white paper, common simulation interests,	Forrest Hoffman, Dave
<b>1.3 Coastal system land-atmosphere-ocean interactions</b>		<b>Leads: Joel Rowland, Kartik</b>
<a href="https://drive.google.com/drive/folders/1z6H_TZY_rnEsoLK5z81rUcrei9MWQUro?usp=sharing">https://drive.google.com/drive/folders/1z6H_TZY_rnEsoLK5z81rUcrei9MWQUro?usp=sharing</a>		
<b>Three Parallel Discussion Subgroups</b>		
16:00	Atmospheric Discussion of Challenges and Gaps	Group Discussion
16:00	Terrestrial Fluxes to Coast Discussion of Challenges	Group Discussion
16:00	Coastal Dynamics Discussion of Challenges and Gaps	Group Discussion
<b>Whole Group Reports</b>		
16:45	Atmospheric Discussion of Challenges and Gaps	Report
16:50	Terrestrial Fluxes to Coast Discussion of Challenges	Report
16:55	Coastal Dynamics Discussion of Challenges and Gaps	Report
<b>1.4 Synoptic to intraseasonal-scale interactions</b>		<b>Leads: Bill Boos, Jian Lu</b>
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16:00	Sources of subseasonal-to-seasonal predictability of	Huanping Huang
16:07	Seasonal streamflow forecast using Long Short-Term Memory	Chaopeng Shen
16:14	System identification techniques for detection of teleconnections	Ben Kravitz
16:21	Precipitation Variability across Time Scales in CMIP 5 and 6	Min-Seop Ahn
16:28	Uncertainties in Atmospheric River Life Cycles by Detection	Yang Zhou
16:35	Discussion	
17:00	<b>Project Overviews 1.2   Co-Chairs: Charlie Koven, Samson Hagos</b>	
17:00	Assessing the Influence of Background State and Climate	Ram Saravanan
17:10	Extreme Drought, Heat and Wildfire Impacts on Coastal Water	Trevor Keenan
17:20	Vegetation Dynamical Responses on Multivariate Extremes in	Charles Koven
17:30	Ocean Physical-Biogeochemical Interactions in the CMIP6 and	Takamitsu Ito

17:40	Coupling of Land and Atmospheric Subgrid Parameterizations	Nathaniel Chaney
17:50	3-D Land Energy and Moisture Exchanges: Harnessing High	Kuo-Nan Liou
18:00 <b>Adjourn</b>		

**Wednesday, October 14, 2020**

<b>11:00 Introduction to Other EESM Activities</b>		
11:00	Multisector Dynamics Linkages with RGMA	Robert Vallario, Program
11:10	Data Management Linkages with RGMA	Jay Hnilo, Program Manager
11:20	Earth System Model Development Linkages with RGMA	Xujing Davis, Program
11:25	The Energy Exascale Earth System Model (E3SM) Phase 2	David Bader
11:35	Vision for a Machine Learning Framework Enabling End-To-End	Nicki Hickmon & Team

<b>11:45 Project Overviews 2.1   Co-Chairs: Yaga Richter, Kevin Reed</b>		
11:45	CASCADE - Calibrated and Systematic Characterization,	William Collins
12:00	Simulating Extreme Precipitation in the United States in the	Gabriel Kooperman
12:10	HiLAT - High-Latitude Application and Testing of Earth System	Wilbert Weijer
12:25	Influence of Antarctic and Greenland Continental Shelf	Julie McClean
12:35	InteRFACE - Interdisciplinary Research for Arctic Coastal	Joel Rowland
12:50	Variability and Change in Tropical Cyclone Characteristics:	Christina Patricola

**13:00 Early Break**

**13:30 Breakout Groups 2**

<b>2.1 Extremes and impacts</b>		<b>Leads: Angie Pendergrass,</b>
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13:30	Introduction and White Paper Overview	Kevin Reed, Angeline
<b>Extremes I</b>		<b>Lead: Jesse Norris</b>
13:40	Quantitative Precipitation Estimation of Extremes over the	Edward Molter
13:45	Evaluation of extreme subdaily precipitation in high-resolution	Michael Wehner
13:50	Quantifying the influence of natural climate variability on in situ	Mark Risser
13:55	Probabilistic Detection of Atmospheric Rivers Across Climate	Ankur Mahesh
14:00	Anthropogenic influence on historical extreme precipitation over	Gavin Madakumbura
14:05	Linking hails and tornadoes to mesoscale convective systems: a	Jingyu Wang
14:10	Discussion	
<b>Extremes II</b>		<b>Lead: Kevin Reed</b>
14:30	Impact of tropical cyclones on the climate	Hui Li
14:35	Identification, predictability and future projections of large-scale	Abhishekh Srivastava
14:40	Precipitation Morphology in the Western United States: Its	Xiaodong Chen
14:45	The Shifting Scales of Western US Landfalling Atmospheric	Alan Rhoades
14:50	Examination of Miracle Spring Precipitation under the warmer	Binod Pokharel
14:55	Discussion	

<b>2.2 Cloud and cloud-aerosol interactions and feedbacks</b>		<b>Leads: Steve Klein, Hui Su,</b>
<a href="https://drive.google.com/drive/folders/1hCsEttqv0t7zZk0PHew7j4mfIS7Qt8K?usp=sharing">https://drive.google.com/drive/folders/1hCsEttqv0t7zZk0PHew7j4mfIS7Qt8K?usp=sharing</a>		
13:30	Welcome	Steve Klein, Hui Su, Jiwen
13:32	Introduction to the Whitepaper and What We Want to get from	Steve Klein and Jiwen Fan
13:45	Clouds feedbacks in the WCRP Assessment	Steve Klein
13:50	Validation of CMIP5 Tropical Fast Feedback Processes and	Roy Spencer
13:55	Cloud feedbacks cause higher climate sensitivity in CMIP6.	Mark Zelinka
14:00	Observational constraints on decadal low cloud feedbacks	Timothy Myers
14:05	Spurious Late Historical-Era Warming in CESM2 and Other	John Fasullo
14:10	Cloud feedbacks in E3SM: Do atmosphere-only experiments	Yi Qin
14:15	The impact of cloud radiative effects on the distribution of	Brian Medeiros
14:20	Revisiting a potential relationship between global-mean	Angeline Pendergrass

14:25	Precipitation-radiation-circulation feedback processes	William Lau
14:30	Impact of atmospheric processes on mechanisms of Southern	Ariel Morrison
14:35	Roles of aerosol, cloud and associated radiative feedbacks in	Hailong Wang
14:40	A modeling examination of cloud seeding conditions under the	Binod Pokharel
14:45	Anthropogenic aerosol impacts on deep convective clouds and	Yuwei Zhang
14:50	The tug-of-war between regional warming and anthropogenic	Simon Wang
14:55	Using CESM-RESFire to Understand Climate-Fire-Ecosystem	Yufei Zou
15:00	Discussion: Q&A for Lightning Talks	Group Discussion
<b>2.3 Multi-year Earth system variability, predictability, and prediction</b>		<b>Leads: Ben Kirtman, Jerry</b>
<a href="https://drive.google.com/drive/folders/11I4ClauUKti7MCi64Jj1Ap0k3BSEzC2?usp=sharing">https://drive.google.com/drive/folders/11I4ClauUKti7MCi64Jj1Ap0k3BSEzC2?usp=sharing</a>		
13:30	Surface Climate Decadal Predictability in a Multi-Model	Haiyan Teng
13:36	Mining Large Climate Model Datasets to Make Multi-Year	Matt Newman
13:42	Partitioning climate projection uncertainty with multiple Large	Flavio Lehner
13:48	Machine Learning as a Tool for Climate Predictability Studies &	Balu Nadiga
13:54	Deep Learning for Creating Surrogate Models of Precipitation in	Ben Kravitz
14:00	Are newer climate models better in simulating extratropical	Jiwoo Lee
14:06	Role of AMOC in transient climate response to greenhouse gas	Aixue Hu
14:12	The impacts of tropical-extratropical coupling on Pacific climate	Yingying Zhao
14:18	Enhanced interactions of Kuroshio Extension with tropical	Youngji Joh
14:24	Colorado River water supply is predictable on multi-year	Simon Wang
14:30	Connection between seasonal and future precipitation sensitivity	Di Chen
14:36	Correcting the double-ITCZ bias dials down future precipitation	Lu Dong
14:42	Identifiable decadal signatures of greenhouse gases and	Celine Bonfils
14:48	Evaluating hydrologic sensitivity in CMIP6: internal variability	Jesse Norris
14:54	Anthropogenic Influences on African Easterly Waves	Emily Bercos-Hickey
15:00	Multi-frequency analysis of simulated versus observed variability	Giuliana Pallotta Goldhahn
15:06	Natural variability can explain model-satellite differences in	Stephen Po-Chedley
15:12	Mult-year Predictions of Snow Water Equivalent over North	Rachel Mccrary
15:18	Visualizing Drivers Associated with West Coast Atmospheric	Naomi Goldenson
15:24	Deep Learning Forecasting of High-Latitude Climate Variability	Tarun Verma
<b>2.4 High latitude processes and feedbacks</b>		<b>Leads: Wilbert Weijer,</b>
<a href="https://drive.google.com/drive/folders/1I8UzzOIPMin-95DgqyWUJB0GMnWkm8X4?usp=sharing">https://drive.google.com/drive/folders/1I8UzzOIPMin-95DgqyWUJB0GMnWkm8X4?usp=sharing</a>		
13:30	Introduction and breakout overview	Wilbert Weijer
<b>High/low-latitude linkages</b>		
13:45	How does the atmospheric response to sea-ice decline compare	Gudrun Magnusdottir
13:52	Are 100 ensemble members enough to capture the remote	Yannick Peings
13:59	Understanding the role of ocean-atmosphere interactions on the	Tien-Yiao Hsu
14:06	Q&A	
14:13	Opposite responses of the dry and moist eddy heat transport	Alexandre Audette
14:20	Latent Heating and Large Scale Transport Cause Arctic	Fajber Robert
14:27	Transport of Heat Across the Greenland Continental Shelf by	Theresa Morrison
14:34	Q&A	
14:41	The role of oceanic and atmospheric feedbacks in the response	Oluwayemi Garuba
14:48	CMIP6 Models Predict Significant 21st Century Decline of the	Wilbert Weijer
14:55	Q&A	
15:02	Labrador Sea freshening linked to the Beaufort Gyre freshwater	Jiaxu Zhang
15:09	An evaluation of the E3SM-Arctic Ocean/Sea Ice Regionally	Milena Veneziani
15:16	Using Machine Learning to Explore Teleconnections from Lower	Balu Nadiga
15:23	Q&A	
<b>High-latitude processes</b>		

13:45	Unraveling driving forces explaining significant reduction in	Rudong Zhang
13:52	Assessing prior emergent constraints on surface albedo	Chad Thackeray
13:59	An assesment of pan-Arctic sea ice and regional limitations in	Matthew Watts
14:06	Q&A	
14:13	Evaluating the sea ice volume solution in a high-resolution	Detelina Ivanova
14:20	The role of sea ice physics in modeling and prediction of Arctic	Wieslaw Maslowski
14:27	Regional Arctic System Model: An approach for dynamical	Wieslaw Maslowski
14:34	Q&A	
14:41	Modeling Studies on Blowing Snow Processes Associated with	Jing Zhang
14:48	An Arctic Summer Intense Storm and its Role in Accelerating	Xiangdong Zhang
14:55	Understanding the Evolution of Polynyas Along Northern	Younjoo Lee
15:02	Q&A	
15:09	Arctic deltas modify riverine fluxes	Anastasia Piliouras
15:16	Water balance response of permafrost-affected watersheds to	Vladimir Alexeev
15:23	Q&A	
15:30	<b>Late Break</b>	
16:00	<b>Breakout Groups 2 (continued)</b>	
	<b>2.1 Extremes and impacts</b>	<b>Leads: Angie Pendergrass,</b>
	<a href="https://drive.google.com/drive/folders/163e-CMX_q1XI-G9H46GHuoZiURwAxgOS?usp=sharing">https://drive.google.com/drive/folders/163e-CMX_q1XI-G9H46GHuoZiURwAxgOS?usp=sharing</a>	
	<b>Extremes III</b>	<b>Lead: Angie Pendergrass</b>
16:00	Revolutionizing large-scale parameter calibration for land	Chaopeng Shen
16:05	Quantifying the coherence of deficit (droughts) and excess	Naresh Devineni
16:10	Increased floods and droughts in the US Midwest from warming-	Wenyu Zhou
16:15	Using Object-Based Methods to Evaluate 36-Month Drought	Brandon Fisel
16:20	How important are Large-Scale Climate Influences on the	Antionietta Capotondi
16:25	The Continuum of Northeast Pacific Marine Heatwaves and	Tongtong Xu
16:30	Discussion	
	<b>2.2 Cloud and cloud-aerosol interactions and feedbacks</b>	<b>Leads: Steve Klein, Hui Su,</b>
	<a href="https://drive.google.com/drive/folders/1hCsEttqv0t7zZk0PHew7i4mflfS7Qt8K?usp=sharing">https://drive.google.com/drive/folders/1hCsEttqv0t7zZk0PHew7i4mflfS7Qt8K?usp=sharing</a>	
16:00	Discussion of Whitepaper	Group Discussion
	<b>2.3 Multi-year Earth system variability, predictability, and prediction</b>	<b>Leads: Ben Kirtman, Jerry</b>
	<a href="https://drive.google.com/drive/folders/114ClaluUKtl7MCI64JjJ1Ap0k3BSEzC?usp=sharing">https://drive.google.com/drive/folders/114ClaluUKtl7MCI64JjJ1Ap0k3BSEzC?usp=sharing</a>	
16:00	Causes of recent changes in extreme wildfire in California's	Yen-Heng Lin
16:06	Whitepaper overview and discussion	
	<b>2.4 High latitude processes and feedbacks</b>	<b>Leads: Wilbert Weijer,</b>
	<a href="https://drive.google.com/drive/folders/1i8UzzOIPMln-95DqiyWUB0GMnWkm8X4?usp=sharing">https://drive.google.com/drive/folders/1i8UzzOIPMln-95DqiyWUB0GMnWkm8X4?usp=sharing</a>	
16:00	Whitepaper discussion	Moderators: Wilbert Weijer,
17:00	<b>Project Overviews 2.2   Co-Chairs: Steve Klein, Travis O'Brien</b>	
17:00	The Role of Deep Convection and Large-scale Circulation in	Hui Su
17:10	Investigating Cloud Feedbacks in Earth System Models	Brian Soden
17:20	Toward an Improved Estimate of Climate Sensitivity and Its	John Christy
17:30	Understanding Severe Convective Storms in the United States	Jiwen Fan
17:40	Precipitation relation to its thermodynamic environment in	David Neelin
17:50		
18:00	<b>Adjourn</b>	

**Thursday, October 15, 2020**

11:00	<b>Breakout Group 1 Reports   Co-Chairs: Jiwen Fan, Naresh Devineni</b>	
11:00	Convection and surface-atmosphere interactions	
11:10	Ecosystem responses and feedbacks	

11:20 Coastal system land-atmosphere-ocean interactions	
11:30 Synoptic to intraseasonal-scale interactions	
<b>11:45 Project Overviews 3.1   Co-Chairs: Chris Patricola, Daehyun Kim</b>	
11:45 HyperFACETS - A Framework for Improving Analysis and	Paul Ullrich
12:00 Understanding Dynamics and Thermodynamics of ENSO and Its	Fei-Fei Jin
12:10 CATALYST - Cooperative Agreement to Analyze Variability,	Gerald Meehl
12:25 Madden-Julian Oscillation, Tropical Cyclones, and Precipitation	Daehyun Kim
12:35 PCMDI - An Earth System Model Evaluation Project	Stephen Klein
12:50 Mechanisms of Pacific Decadal Variability in ESMs	Emanuele Di Lorenzo
<b>13:00 Early Break</b>	
<b>13:30 Updates from Working Groups, Model Intercomparison Projects, and Collaborative Activities   Co-</b>	
13:30 CMIP6 Hackathon and Follow-on Activities	Wilbert Weijer, Forrest
13:50 Atmospheric River Tracking Method Intercomparison Project	Christine Shields, Travis
14:10 RUBISCO Soil Carbon Dynamics Working Group	Umakant Mishra
14:20 RUBISCO-AmeriFlux Working Group	Trevor Keenan
14:30 Precipitation Metrics Workshop & Working Group	Peter Gleckler, Ruby Leung,
14:50 Coordinated Model Evaluation Capabilities (CMEC)	Paul Ullrich, Forrest Hoffman,
15:10 Coordinating E3SM Simulations	Ruby Leung
<b>15:30 Late Break</b>	
<b>16:00 Cross-Cutting Datasets and Analysis Tools   Co-Chairs: Paul Ullrich, Hailong Wang</b>	
16:00 CMIP6: A status update and future prospects	Karl Taylor
16:10 A First Look at the Energy Exascale Earth System Model	Samantha Stevenson
16:20 ESGF: A community resource for planet-scale data distribution	Sasha Ames
16:30 Towards Community-Based Objective Summaries of Earth	Peter Gleckler
16:40 The Community Land Model (CLM5) Parameter Perturbation	David Lawrence
<b>17:00 Project Overviews 3.2   Co-Chairs: Wilbert Weijer, Charlotte DeMott</b>	
17:00 Decadal Prediction and Predictability of Extremes in Ocean	Ben Kirtman
17:10 Reducing Uncertainty of Polar to Midlatitude Linkages Using	Gudrun Magnusdottir
17:20 The Atlantic Multidecadal Oscillation: Key Drivers and Climate	Young-Oh Kwon
17:30 Atlantic Meridional Overturning Circulation (AMOC)	Wei Cheng
17:40 Collaborative Research: Understanding Air-Sea Feedbacks to	Charlotte DeMott
17:50	
<b>18:00 Adjourn</b>	

<b>Friday, October 16, 2020</b>	
<b>11:00 Awards and Acknowledgements</b>	
<b>11:15 Breakout Group 2 Reports   Co-Chairs: Trevor Keenan, Hui Su</b>	
11:15 Extremes and impacts	
11:25 Cloud and cloud-aerosol interactions and feedbacks	
11:35 Multi-year Earth system variability, predictability, and prediction	
11:45 High latitude processes and feedbacks	
<b>12:00 Artificial Intelligence-Machine Learning Panel   Co-Chairs: Bill Collins, Balu Nadiga, Alex Hall</b>	
<b>13:00 Adjourn</b>	