

Program of the annual MetSociety conference 25.11.-27.11.2019

Monday			Tuesday			Wednesday		
Registration	07:15-08:15							
Opening	08:15-08:30							
Keynote	08:30-09:15	Hon James Shaw (Climate Change Minister)	Keynote	08:30-09:15	Nick Brown (Auckland City Council)	Keynote	08:30-09:15	Darryn Waugh (Johns Hopkins University) The impact of the ozone hole on tropospheric and ocean climate
Presentation	09:15-09:30	Sara Mikaloff-Fletcher: CarbonWatch-NZ: A bird's eye view of New Zealand's Greenhouse Gas Emissions and Uptake	Presentation	09:15-09:30	Fulong Lu: Extreme Heavy Rain in Westland, Nov 2018 and Mar 2019	Dedicated	09:15-09:30	
Presentation	09:30-09:45	Jocelyn Turnbull: Development of A Full Carbon Budget for Auckland	Presentation	09:30-09:45	Mark Schwarz: Diagnostic and Predictability Assessments of Absolutely Unstable Heavy Rainfall Events	Poster	09:30-09:45	
Presentation	09:45-10:00	Tony Bromley: What's happening in the New Zealand atmosphere?	Presentation	09:45-10:00	Sally Potter: Overview of the Resilience to Nature's Challenges: Weather & Wildfire theme research plan	Session	09:45-10:00	
Tea	10:00-10:30		Presentation	10:00-10:15	Rob Bell: The anatomy of past and future extreme storm-tide events for Aotearoa-NZ coastal areas	Tea	10:00-10:30	
Presentation	10:30-10:45	Ben Liley: Solar energy - how much is in Aotearoa's zero-carbon future?	Tea	10:15-10:45		Presentation	10:30-10:45	George Slim (Office of PMCSA)
Presentation	10:45-11:00	Farnaz Pourzand: The Impact of Climate Change and Drought Persistence on Farmland Values in New Zealand	Presentation	10:45-11:00	Graeme Smart: WMO Coastal Inundation Forecasting Demonstration Projects	Presentation	10:45-11:00	Hamish Prince: 40-years of Atmospheric Rivers in New Zealand
Presentation	11:00-11:15	Dáithí Stone: The impact of greenhouse gas emissions on recent low pasture supply events	Presentation	11:00-11:15	Pierre Foucaud: How to deal with a climate change sceptic	Presentation	11:00-11:15	Morgan Bennet: Climatology of vapour transport associated with New Zealand droughts
Presentation	11:15-11:30	Jacob Pastor: Future liabilities of insurance and climate change: a quantification case study from New Zealand	Presentation	11:15-11:30	Stephanie Rail: Communicating severe weather information via MetService digital channels	Presentation	11:15-11:30	Roger Davies: The tropopause perspective in climate modelling: why cloud heights really matter
Presentation	11:30-11:45	Jen Purdie: The projected impacts of climate changes to lake inflows and wind on electricity supply and demand in NZ	Presentation	11:30-11:45	David Johnston: The World Meteorology Organisation's HIWeather Programme: an overview	Presentation	11:30-11:45	Tra Dinh: On the Causal Relationship between the Moist Diabatic Circulation and Cloud Rapid Adjustment to Increasing CO2
Presentation	11:45-12:00	Sam Dean: Assessing the Impact of Climate Change on Flood Risk	Presentation	11:45-12:00	Erick Brenstrum: What the Historians Say	Presentation	11:45-12:00	Beatriz Reboredo: Scale sensitivity of the Gill circulation
Lunch	12:00-13:00		Lunch	12:00-13:00		Lunch	12:00-13:00	
Keynote	13:00-13:45	Kay Harrison (Climate Change Ambassador)	Keynote	13:00-13:45	Kevin Trenberth (NCAR & University of Auckland) Mitigating and living with 'natural' hazards	Presentation	13:00-13:15	Rachel Corran: Atmospheric radiocarbon Southern Hemisphere latitudinal gradient over recent decades
Presentation	13:45-14:00	Dave Frame: Emergence, Attribution and Extremes Programme	Presentation	13:45-14:00	Geoff Austin: The History of Radar and its Transformation into a tool for Meteorology and Hydrology	Presentation	13:15-13:30	Ethan Dale: The 2019 Christchurch MAPM (Mapping Air Pollution eMissions) air quality monitoring field campaign
Presentation	14:00-14:15	Jordis Tradowsky: The Extreme Weather Event Real-time Attribution Machine (EWEAM) – An Overview	Presentation	14:00-14:15	Stuart Moore: South Island West Coast Rainfall – insights from radar and high resolution NWP	Presentation	13:30-13:45	Kim Dirks: Arsenic in hair as a marker of exposure to smoke from the burning of treated wood in domestic fireplaces
Presentation	14:15-14:30	Suzanne Rosier: Emerging patterns of change in New Zealand's extreme rainfall with anthropogenic climate influence: projections from the 'weather@home ANZ' modelling system.	Presentation	14:15-14:30	Sijin Zhang: New Zealand High-Resolution Rapid-Refresh Forecasting System	Pecha	13:45	
Presentation	14:30-14:45	Brett Mullan: Future Heavy-Rainfall Events in Bay of Plenty and changes in associated Storm Tracks	Presentation	14:30-14:45	John Nicol: WIVERN: A New Satellite-borne Radar Concept to Provide Global In-Cloud Winds	Pecha	-	7 Pecha Kucha (6 min each)
Presentation	14:45-15:00	Kyle Clem: Record warming at the South Pole consistent with natural variability	Presentation	14:45-14:55	Nathanael Meila: The 2018 Tolaga Bay Queen's Birthday Flood: A Meteorological Analysis	Pecha	14:30	
Presentation	15:00-15:15	Kevin Trenberth: Marine heat wave in the Tasman Sea and meridional ocean heat transports	Presentation	14:55-15:05	Kate Prebble: Spatial Sampling Scale Implications for Rainfall Induced Landslide Forecasting	Awards	14:30-15:00	
Tea	15:15-15:40		Presentation	15:05-15:15	Luke Sutherland-Stacey: Progress in Regional Radar Quantitative Precipitation Estimation in New Zealand			
Presentation	15:40-15:55	Guang Zeng: Participation in CMIP6 AerChemMIP project – modelling composition changes and their associated radiative effects	Tea	15:15-15:45				
Presentation	15:55-16:10	Neelesh Rampal: On the factors controlling boundary layer cloud albedo	Pecha	15:45				
Presentation	16:10-16:25	Olaf Morgenstern: New Zealand climate projections: Where do we come from, where do we go?	Pecha		10 Pecha Kucha			
Presentation	16:25-16:40	Erik Behrens: Meridional Oceanic Heat Transport Influences Marine Heatwaves in the Tasman Sea on Interannual to Decadal Timescales	Pecha		(6 min each)			
Presentation	16:40-16:55	Nariefa Abraham: Understanding the atmospheric controls on the recent and unprecedented retreat of glaciers in the Southern Alps	Pecha	16:45				
Presentation	16:55-17:10	Shane Bilish: The dynamics of marginal snow cover: Observations and implications for water resource management in a warmer world						
MetSociety AGM		17:15-18:15	Conference Dinner		From 18:00			

Pecha Kucha rapid fire 6 min presentations

Tuesday

No	Presenter	Title
1	Ben Liley	Success of Montreal Protocol demonstrated by comparing UV measurements with "World Avoided" from chemistry-climate models
2	Elke Louw	The provision of Maritime Safety Information for New Zealand waters
3	James Lunny	World Meteorological Organization (WMO) Reform
4	Rosa Trancoso	Advanced satellite products at MetService: GEOCAT and VOLCAT
5	Sara Harrison	Data Needs for Impact-based Forecasting and Warning Systems in New Zealand: Exploring the production, sharing and management of impact data from severe weather events
6	Greg Bodeker	A simple approach to identifying the surface meteorological fields associated with extreme weather events through thresholding against the HWE Catalogue
7	Chris Webster	Rolls, Streets, Waves and More... 2-D Structures in the Planetary Boundary Layer
8	Neal Osborne	An Investigation into Severe Aircraft Icing, East Coast of South Island, 27 April 2019
9	Tui McInnes	The Ashburton Tornado of 18 November 2018
10	Stuart Moore	Towards a convection-permitting ensemble forecasting system for New Zealand

Wednesday

No	Presenter	Title
1	Jonny Williams	Extreme climate modelling; delivering climate projections out to 2100
2	Vidya Varma	Improving the simulation of clouds and related radiation biases in a global climate model
3	Nick Edkins	1D vs. 2D Radiative-Convective Equilibrium
4	Hamish Jolleyman	Spatial patterns of changes in Antarctic sea ice extent
5	Hinrich Schaefer	Radiocarbon clues on fossil methane emissions
6	Dave Pollard	Travels with an EM27, total column GHG measurements below 45 degrees south
7	Jamie Halla	Monitoring Shipping Emissions using DOAS

Poster Presentations

No	Presenter	Title
1	Abha Sood	Drought intensification in regional climate projection over New Zealand
2	Beata Bukosa	The imprint of ENSO on total column greenhouse gas measurements
3	David Johnston	HIWeather Citizen Science Initiative
4	David Johnston	Communicating Weather Uncertainty
5	Farnaz Pourzand	Droughts and Farms' Financial Performance: A Farm-Level Study in New Zealand
6	Hinrich Schaefer	Scientific Data: a journal for your scientific data?
7	James Lunny	Severe Weather Forecasting and Disaster Risk Reduction Demonstration Project (SWFDDP) of the South Pacific
8	Leroy Bird	A machine learning approach to inferring the existence of extreme events in meteorological fields
9	Matt Shepherd	An analysis of precipitation extremes in New Zealand using two case studies: Auckland and Whataroa
10	Mike Harvey	On-board cloud radar project to characterize the role of marine micro-organisms emissions on the atmospheric properties of clouds
11	Peter Sperlich	Where is the missing CO ₂ ? A regional multi-species approach to trace the fate of atmospheric CO ₂ in Fiordland National Park, New Zealand.
12	Sally Potter	Overview of the Resilience to Nature's Challenges: Weather & Wildfire theme research plan
13	Stephen Stuart	A convection-permitting regional climate model for the Southern Alps of New Zealand
14	Sylvia Nichol	Communicating Baring Head's daily CO ₂ values
15	Tony Bromley	Picton Air Quality Study 2019-2020: current status
16	Tristan O'Hanlon	Clouds over the Southern Ocean in the CMIP6 AMIP model outputs
17	Waren Soriano	Rainfall Changes over New Zealand
18	Yang Yang	BIAS CORRECTION FOR SIMULATED SOIL MOISTURE USING MOS: LINEAR REGRESSION VS. CDF MATCHING
19	Dáithí Stone	Diagnosing the anthropogenic influence on precipitation over Aotearoa New Zealand
20	Jacob Pastor	A New Method for Assessing Floods' Economic Risk using Insurance Claim Data