



THE UNIFIED MODEL PARTNERSHIP –

SUCCESSFULLY REDUCING THE RISKS FROM WEATHER AND CLIMATE



REDUCING THE RISKS FROM WEATHER AND CLIMATE: THE GLOBAL UNIFIED MODEL PARTNERSHIP

Tuesday 5 March 2019: Te Papa, Wellington

Morning agenda

0815	Registration	
0845	Mana whenua mihi whakatau – Welcome from the indigenous people of Wellington; Taranaki Whānui ki te Upoko o te Ika	
0915	Our changing planet – weather and climate risk	<i>NIWA video</i>
	Welcome addresses	<i>John Morgan, NIWA CEO, Helen Smith, Deputy British High Commissioner</i>
	The Unified Model partnership and challenges ahead	<i>Jon Petch, UK Met Office</i>
1000	Signing ceremony: the next 5 years of partnership	
1020	Morning tea	
	Session 1: National effort to reduce the risks of weather and climate underpinned by the UM partnership	
	10-minute presentations	
	<i>Questions and discussion at the end of the session</i>	<i>Chair: Michael Uddstrom</i>
1100	New Zealand – Better decisions: advancing New Zealand's climate and weather story	<i>Sam Dean</i>
	United Kingdom – Reducing UK weather/climate impacts through improved predictions	<i>Dale Barker</i>
	Australia – Science, service and collaboration: a decade of ACCESS	<i>Helen Cleugh</i>
	India – Seamless prediction for days-to-season	<i>E.N. Rajagopal</i>
	Republic of Korea – Challenges of summer heat waves and tropical cyclones	<i>Hyun-Suk Kang</i>
	United States Air Force – Weather forecasting for US military operations	<i>Jeff Cetola</i>
	Singapore – Predicting intense precipitation events	<i>Erland Kallen</i>
	South Africa – Weather forecasting for southern Africa	<i>Mary-Jane Bopape</i>
	Poland – 21 years of forecasting severe weather at ICM	<i>Marek Michalewicz</i>
1240	Panel discussion	All speakers in this session
1300	Lunch	

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Afternoon agenda

Session 2: Services and user needs		<i>Chair: Sam Dean</i>
1400	Using Earth System Modelling to improve climate projections for New Zealand	<i>Mike Williams</i>
1415	Fire weather for emergency response	<i>Tim Mitchell</i>
1430	Air quality forecasting with the ACCESS system	<i>Martin Cope</i>
1445	Advanced flood forecasting: integrating weather and hydrological forecasting science	<i>Céline Cattoën-Gilbert</i>
1500	Discussion	
Session 3: Science with the Unified Model		<i>Chair: Helen Cleugh</i>
1510	Why did NIWA choose the Unified Model? Looking back, looking forward.	<i>Michael Uddstrom</i>
1530	The role of satellites in delivering services using the UM	<i>John Eyre</i>
1545	Unified Model for climate extreme research in Australia	<i>Todd Lane</i>
1600	Afternoon tea	
1630	ACCESS simulations for CMIP6 (earth system science)	<i>Tilo Ziehn</i>
Session 4: Science with the Unified Model: early career scientists		<i>Chair: Jon Petch</i>
1640	Australia – Chemistry in ACCESS	<i>Matt Woodhouse</i>
1650	UK – Impact of microwave spectroscopy in RTTOV on satellite DA	<i>Emma Turner</i>
1700	Republic of Korea – The impact of aerosols on cloud microphysics and dynamics in deep convective clouds	<i>Juwan Kim</i>
1710	New Zealand – Improving the cloud-radiation relation in the Unified Model	<i>Vidya Varma</i>
1720	India – Dust radiative forcing during a smog episode over Delhi, India: double radiation call approach	<i>Timmy Francis</i>
Session 5: Closing words		<i>Chair: John Morgan</i>
1730	Closing words from UK, NZ, India, Australia and Republic of Korea visitors	

GLOBAL UNIFIED MODEL PARTNERSHIP

The global Unified Model Partnership brings together institutes from nine countries that use and develop the Unified Model – a world-leading seamless modelling system. The system underpins their weather and climate science and services to reduce the risk from weather and climate.

The United Kingdom, New Zealand, Australia, India and the Republic of Korea are core signatories and Singapore, South Africa, Poland, and the United States Air Force are associate members.

The need for accurate and precise weather and climate forecasting is unprecedented, with global changes in weather patterns, increasing frequency and severity of climatic events, and increased exposure to risk as the world's population grows.

The Unified Model is one of the world's foremost weather and climate forecasting collaborations. In its global form it can provide information on weather systems around the world and the links between them. In its regional form it can focus down and provide information on detailed weather and climate impacts at the kilometre scale.



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