

Arctic sea ice reduction: the evidence, models and global impacts – further discussion

Incorporating the UK Arctic sea ice meeting

Wednesday 24 – Thursday 25 September 2014

Organised by Professor Daniel Feltham, Dr Sheldon Bacon, Dr Mark Brandon and Professor Emeritus Julian Hunt FRS

THE
ROYAL
SOCIETY

DAY 1				DAY 2			
SESSION 1: The evidence for Arctic sea ice reduction Chair: Mark Brandon		SESSION 2: Climate system understanding of sea ice Chair: Danny Feltham		SESSION 3: The processes controlling sea ice evolution Chair: Danny Feltham		SESSION 4: The impacts of Arctic sea ice loss Chair: Sheldon Bacon	
08:55	Welcome by organisers						
09:00	Ron Kwok Satellite evidence for Arctic sea ice change	13:30	Jeff Ridley The behaviour of Arctic sea ice in HadGEM3	09:00	Pierre Rampal Sea ice deformation and drift in the new model neXtSIM	13:30	Kaj Riska Impacts on navigation of Arctic sea ice change
09:25	Sebastian Gerland Observations of Arctic sea ice and snow thickness changes	13:55	Jinlun Zhang Sea ice changes in climate and future changes	09:25	Michel Tsamados Improved sea ice dynamics in models	13:55	Jennifer Francis The impact of Arctic sea ice loss on extreme weather
09:50	Jeremy Wilkinson Field evidence for changes in the sea ice cover	14:20	Ed Hawkins Predictability of seasonal-to-decadal changes in Arctic sea ice	09:50	Jennifer Hutchings Mechanical processes controlling sea ice evolution	14:20	David Thomas Impact of sea ice loss on the carbon cycle from a biogeochemical perspective
10:15	Marcel Nicolaus Changes, variability, and seasonality of sea ice energy budgets	14:45	Wieslaw Maslowski Processes and interactions involved in Arctic sea ice change	10:15	Vernon Squire Wave-sea ice interaction and future changes	14:45	Gavin Schmidt Paleo-climate insights into Arctic sea ice loss and impacts
10:40	Coffee	15:10	John Wettlaufer Mathematical and observational understanding stochastic dynamics of sea ice	10:40	Coffee	15:10	Bruno Tremblay Arctic sea ice decline – an ocean mechanism
11:10	Jerome Weiss Evidence for changes in the sea ice cover	15:35	Climate discussion Why do we care about sea ice reduction?	11:10	Andrew Wells Modelling fluid flows through porous sea ice: brine drainage and biogeochemical transport	15:35	Impacts discussion What are the impacts and how should we plan for them?
11:35	Evidence discussion Do we need more evidence?	16:10	Poster session and tea	11:35	Sea ice physics discussion What more sea ice physics do we need?	16:10	Wrap up discussion
12:10	LUNCH		CLOSE	12:10	LUNCH		CLOSE

Draft programme – correct as of 01/09/2014 – subject to change