

ACSIS Summer Meeting July 2021

Monday 12th July 2021		
09.30-09.40	Welcome by the chair of the organising committee	Scott Osprey (NCAS)
09.40-10.00	ACSIS update	Rowan Sutton (NCAS)
10.00-10.30	Climate keynote: <i>The atmosphere-ocean response to aerosol effects over the North Atlantic</i>	Stephanie Fiedler (Uo Köln)
10.30-10.45	Break	
Session 1: Climate		Chair: Hua Lu (BAS)
10.45-11.00	Interactions between the Stratospheric Polar Vortex and Atlantic circulation on seasonal and Multi-decadal timescales	Oscar Dimdore-Miles (Uo Oxford)
11.00-11.15	Increasing hurricane intensity/potential intensity in the subtropical Atlantic from an ocean heat content perspective 1955-2019	Samantha Hallam (ICARUS)
11.15-11.30	How does anthropogenic aerosol forcing drive a strengthening of the AMOC in CMIP6 historical simulations?	Jon Robson (NCAS)
11.30-11.45	The impact of aerosol forcing on ocean heat content	Emma Boland (BAS)
11.45-12.00	Systematic early-winter North Atlantic jet latitude biases in CMIP: implications for simulated regional atmosphere-ocean coupling	Tom Bracegirdle (BAS)
12.00-12.15	The role of process representation in uncertainty in the North Atlantic region in CMIP6	Laura Wilcox (NCAS)
12.15-13.15	Lunch	
Session 2: Poster introductions		Chair: Isobel Lawrence (CPOM)
13.15-13.18	Flow Regimes in the Upper Stratosphere as a Precursor of Stratosphere-Troposphere Coupling in the Northern Winter	Hua Lu (BAS)
13.18-13.21	Teleconnections between the tropical stratosphere and the North Atlantic in Climate Models	Scott Osprey (NCAS)
13.21-13.24	Contrasting the recent equatorward trend of the summertime North Atlantic jet with future climate projections	Ben Harvey (NCAS)
13.24-13.27	Effect of stratospheric ozone depletion on tropospheric composition in the north Atlantic region	Paul Griffiths (NCAS)
13.27-13.30	Tropospheric Ozone in the North Atlantic: Comparison of UM-UKCA and remote sensing observations for 2005-2018	Maria Russo (NCAS)
13.30-13.33	Recent improvements to stratospheric ozone in the UKESM1 model in preparation for CCM22	Luke Abraham (NCAS)
13.33-13.36	The Impact of Atlantic Multidecadal Variability in a Coupled Climate Model Ensemble	Dan Hodson (NCAS)
13.36-13.39	The role of the North Atlantic Ocean in the climate system	Ben Moat (NOC)
13.39-13.42	Seasonal differences in the persistence of SST's Response to the North Atlantic Jet Stream	Jennifer Mecking (NOC)
Session 3: Ice/Ocean		Chair: Leon Hermanson (Met Office)
13.45-14.00	Labrador Slope Water Connects the Subarctic with the Gulf Stream	Adrian New (NOC)
14.00-14.15	Formation regions and pathways for dense water in the North Atlantic Subpolar Gyre	Alex Megann (NOC)
14.15-14.30	Using mixed layer heat budgets to determine the drivers of the 2015 North Atlantic cold anomaly in ocean state estimates	Rachael Sanders (BAS)
14.30-14.45	Break	
14.45-15.00	Future evolution of an eddy rich ocean associated with enhanced east Atlantic storminess in a coupled model projection	Jeremy Grist (NOC)
15.00-15.15	The role of ocean heat transport from the Atlantic into the Arctic Ocean on sea ice variability	David Schroeder (CPOM)
15.15-15.30	Sulphate-aerosol forced North Atlantic decadal variability in HadGEM3-GC3.1	Michael Lai (Uo Reading)
15.30-16.00	Ocean keynote: <i>The Role of Labrador Sea Water in Subpolar North Atlantic Decadal Variability and Pre</i>	Stephen Yeager (NCAR)
16.00-	Informal breakout discussion	

Tuesday 13th July 2021		
Session 4: Composition		Chair: Maria Russo (NCAS)
10.00-10.30	Composition keynote: <i>Observations of remote Atlantic air: Implications for the global atmosphere</i>	Lucy Carpenter (Uo York)
10.30-10.45	The Impact of Wildfires on the North Atlantic Chemistry and Climate System	Alex Archibald (NCAS)
10.45-11.00	Drivers of composition change in the North Atlantic	James Keeble (NCAS)
11.00-11.15	Aircraft observations of novel marine trace gases during ACSIS	Emily Matthews (Uo Manchester)
11.15-11.30	Break	
11.30-11.45	What controls the historical timeseries of shortwave fluxes in the North Atlantic?	Daniel Grosvenor (NCAS)
11.45-12.00	Air-sea exchange of acetone, acetaldehyde, DMS and isoprene at a UK coastal site	Daniel Phillips (PML)
12.00-12.15	Variability in ozone uptake by the Atlantic Ocean	Mingxi Yang (PML)
12.15-13.15	Lunch	
13.15-13.45	Synthesis keynote: <i>Effects of Arctic amplification on midlatitude climate and extreme weather: progress and future directions</i>	James Screen (Uo Exeter)
13.45-14.30	Session 5: Poster discussion (parallel session for each of 3 themes)	
Parallel session 1: Climate		Chair: Laura Wilcox (NCAS)
	Flow Regimes in the Upper Stratosphere as a Precursor of Stratosphere-Troposphere Coupling in the Northern Winter	Hua Lu (BAS)
	Teleconnections between the tropical stratosphere and the North Atlantic in Climate Models	Scott Osprey (NCAS)

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	Contrasting the recent equatorward trend of the summertime North Atlantic jet with future climate projections	Ben Harvey (NCAS)
	Parallel session 2: Composition	Chair: Mingxi Yang (PML)
	Effect of stratospheric ozone depletion on tropospheric composition in the north Atlantic region	Paul Griffiths (NCAS)
	Tropospheric Ozone in the North Atlantic: Comparison of UM-UKCA and remote sensing observations for 2005-2018	Maria Russo (NCAS)
	Recent improvements to stratospheric ozone in the UKESM1 model in preparation for CCM12022	Luke Abraham (NCAS)
	Parallel session 3: Ice/Ocean	Chair: Alex Megann (NOC)
	The Impact of Atlantic Multidecadal Variability in a Coupled Climate Model Ensemble	Dan Hodson (NCAS)
	The role of the North Atlantic Ocean in the climate system	Ben Moat (NOC)
	Seasonal differences in the persistence of SSTs Response to the North Atlantic Jet Stream	Jennifer Mecking (NOG)
14:30-15:30	Plenary discussion	Chairs: <i>TBC</i>