11th IICWG Data Assimilation Workshop
Norwegian Meteorological Institute (Oslo, Norway), 21-23 March 2023

start	stop	mins.		Speaker	Affiliation
			Day 1: Tuesday, March 21, 2023		
8:30	9:00	30	**Registration**		
9:00	9:30	30	**Welcome, Introductions, Practicalities**	**Organizing Committee**	
9:30	10:00	30	Towards drift-aware products for sea ice freeboard and thickness, retrieved from satellite altimetry	Robert Ricker	NORCE
10:00	10:30	30	Sea ice thickness and volume evolution over the past 30 years	Marion Bocquet	LEGOS
10:30	11:00	30	Coffee Break - Posters		
11:00	11:30	30	Year-round satellite sea ice thickness for the Arctic and its potential for seasonal forecasting	Jack Landy	UiT The Arctic University of Norway
11:30	12:00	30	Assimilation of ice thickness observations at ECCC	Mark Buehner	Environment and Climate Change Canada
12:00	12:30	30	Improving the Met Office's Forecast Ocean Assimilation Model (FOAM) with the assimilation of satellite-derived sea-ice thickness data from CryoSat-2 and SMOS in the Arctic	Davi Mignac Carneiro	Met Office
12:30	13:30	60	Lunch		
13:30	14:00	30	A satellite era reanalysis of the Arctic sea ice cover utilising year-round observations of sea ice thickness	Nicholas Williams	NERSC
14:00	14:30	30	Modelling the evolution of Arctic multiyear sea ice over 2000-2018	Heather Regan	NERSC
14:30	15:00	30	Sea ice assimilation within ECMWF's next generation ocean and sea ice reanalysis, and beyond	Phil Browne	ECMWF
15:00	15:30	30	Coffee Break - Posters		
15:30	16:00	30	Assimilation of sea-ice remotely-sensed observations for global ocean analysis/Reanalysis	*ANDREA CIPOLLONE*	Euro-Mediterranean Center on Climate Change (CMCC)
16:00	16:30	30	Deep learning for surrogate modelling of neXtSIM	Charlotte Durand	CEREA, ENPC
16:30	17:00	30	Sensitivity Analysis and Machine Learning of a Sea Ice Melt Pond Parametrisation	Simon Driscoll	University of Reading
17:00	17:30	30	Fusion of satellite SAR and passive microwave radiometer observations for automatic sea ice mapping using convolutional neural networks	Tore Wulf	DMI
17:30	17:45	15	Short break		
17:45	19:45	120	**POSTER SESSION 1 - Social Event**		
			Day 2: Wednesday, March 22, 2023		
9:00	9:30	30	Sea Ice Age Climate Data Record	Anton Korosov	NERSC
9:30	10:00	30	A Climate Record of Wave-Affected Marginal Ice Zone in the Atlantic Arctic based on CryoSat-2	Shiming Xu	Tsinghua University
10:00	10:30	30	Sea-ice mechanical weakening by ocean currents and winds: Observations and statistics	Sascha Willmes	University Trier
10:30	11:00	30	Coffee Break - Posters		
11:00	11:30	30	Advancements in Ice Products from SAR for Analysis and Model Utilization	Sean Helfrich	NOAA
11:30	12:00	30	Effects of damage on the scaling laws of viscous-plastic sea ice	Antoine Savard	McGill University
12:00	12:30	30	A coupled ice-ocean framework to investigate the impact of sea-ice deformation in the winter sea-ice mass balance in the Arctic.	Guillaume Boutin	NERSC
12:30	13:30	60	Lunch		
13:30	14:00	30	A new brittle rheology and numerical framework for large-scale sea-ice models	Einar Örn Ólason	NERSC
14:00	14:30	30	Sea-ice deformation derived from the RADARSAT Constellation Mission and Sentinel-1 SAR Imagery at 24- and 72-hr intervals from 2017 to 2021	Amélie Bouchat	McGill University
14:30	15:00	30	The RADARSAT Constellation Mission data assimilation in ECCC ice prediction system	Alexander Komarov	Environment and Climate Change Canada
15:00	15:30	30	Coffee Break - Posters		
15:30	16:00	30	Resolution Enhanced Sea Ice Concentration from Passive Microwave	Jozef Jan Rusin	Norwegian Meteorological Institute
16:00	16:30	30	Data assimilation of SIC satellite observations in the Barents Sea region	Marina Duran Moro	Norwegian Meteorological Institute
16:30	17:00	30	Impact of coupling complexity within the ECMWF forecast systems	Sarah Keeley	European Centre for Medium-Range Weather Forecasts
17:00	19:00	120	**POSTER SESSION 2 - Social Event**		
			Day 3: Thursday, March 23, 2023		
9:00	9:30	30	Assessment of sea ice simulations in an operational model system for the North and Baltic Sea	*XIN LI*	German Federal Maritime and Hydrographic Agency (BSH)
9:30	10:00	30	An ensemble prediction system for the ocean state and sea ice cover in the Barents Sea	Johannes Röhrs	Norwegian Meteorological Institute
10:00	10:30	30	Progress of the Arctic sea ice forecast at the Danish Meteorological Institute	Till Andreas Soya Rasmussen	DMI
10:30	11:00	30	Coffee Break - Posters		
11:00	11:30	30	A multi-model comparison of September Arctic sea ice seasonal prediction skill	Mitch Bushuk	NOAA Geophysical Fluid Dynamics Laboratory
11:30	12:00	30	Data Assimilation for Lagrangian Sea Ice Models	Christopher K Jones	RENCI, University of North Carolina
12:00	12:30	30	Predicting Lagrangian trajectories for drifting objects in the Marginal Ice Zone	Graig Sutherland	Environment and Climate Change Canada
12:30	13:30	60	Lunch		

13:30	**14:00**	30	Deformation forecasts from the Sea Ice Drift Forecast Experiment (SIDFEx)	Valentin Ludwig	AWI
14:00	**14:30**	30	Fully automated navigation support for vessels in the Arctic: An application and validation example of ice type mapping during the CIRFA cruise 2022	Johannes Lohse	UiT The Arctic University of Norway
14:30	**15:00**	30	Pan-Arctic Sea Ice-Atmosphere Drag Coefficients Derived from ICESat-2 Topography Data	Alexander Mchedlishvili	Institute of Environmental Physics, University of Bremen
15:00	**15:30**	30	Coffee Break - Posters		
15:30	**16:00**	30	High-resolution winter Arctic sea ice profiling with NASA's ICESat-2	*ALEK PETTY*	University of Maryland/NASA GSFC
16:00	**16:30**	30	The OceanMAPS v4 sea-ice forecast demonstration project mk 2	Stewart Allen	Bureau of Meteorology
16:30	**17:00**	30	Subseasonal Arctic Sea ice predictions in a UFS-based System	*YANYUN LIU*	ERT Inc @ NOAA/NCEP/CPC
17:00	**17:30**	30	**Summary, Wrap up of sessions**		
17:30			Adjourn		

	Poster ID	**Board no.**	**Poster Session - in all coffe breaks posters will be available throughout the workshop**		
POSTER SESSION 1	**p01**	1	Recent development of the Combined Optimal Interpolation and Nudging method in assimilating the AMSR2 sea ice concentration (SIC) in SHAPS	Keguang Wang	Norwegian Meteorological Institute
	p02	2	Observation impact on the multi-variate state and parameter estimation of Maxwell-Elasto-Brittle rheology model	Yumeng Chen	University of Reading
	p03	3	Assimilating observations of deformation to improve short-term ensemble forecasts of sea ice features	Yue Ying	NERSC
	p04	4	Insights of the coupling between sea ice and atmosphere by assimilation of sea ice thickness from CS2SMOS	Jiping Xie	NERSC
	p05	5	NorCPM's new seasonal prediction skill in regional Arctic sea ice	Yiguo Wang	NERSC
	p06	6	Improve short-term sea ice predictability using deformation observations	Anton Korosov	NERSC
	p07	7	Improving sea-ice representation through data assimilation in a global NEMO model	Aliette Chenal	Mercator Ocean
	p08	8	Reconstruction of Arctic sea ice thickness (2000-2010) based on a hybrid machine learning and data assimilation approach	Léo Edel	NERSC
	p09	9	Collecting ground truth observations of the Marginal Ice Zone: recent deployments, data use, and outstanding questions	Jean Rabault	Norwegian Meteorological Institute
	p10	10	Linking scales of sea ice surface topography: evaluation of ICESat-2 measurements with coincident helicopter laser scanning during MOSAiC	Robert Ricker	NORCE
	p11	11	Quantifying the effect of snow-ice formation on SnowModel-LG product that is used in sea ice altimetry applications	Ioanna Merkouriadi	FMI
	p12	12	Machine Learning for Sea Ice Challenge (AutoICE)	David Arthurs	PolarView
	p13	13	Extension of CCI sea ice climate time series with historical satellite data	Wiebke Margitta Kolbe	DTU
	p14	14	Sea ice thickness from CryoSat2 freeboard assimilation	Imke Sievers	DMI
	p15	15	Combining automated sea-ice and iceberg observations	Jørgen Buus-Hinkler	DMI
	p16	16	Synoptic variability in satellite radar altimeter-derived sea ice thickness	Carmen Nab	University College London
	p17	17	Incorporating sea ice into a nearshore wind wave transformation model (Hornsund, Svalbard)	Zuzanna Swirad	Department of Polar and Marine Research
	p18	18	Moving the dominant scattering horizon in the Met Office's Forecast Ocean Assimilation Model (FOAM)	Carmen Nab	University College London
	p19	19	In-situ sea ice, iceberg and ocean drift observations in the Greenland Sea	Catherine Taelman	UiT The Arctic University of Norway
	p20	20	Exploring Arctic Sea Ice Thickness Retrievals from Satellite Altimeters	Amy Swiggs	University of Leeds
	p21	21	Methodology for prediction of ice conditions based on SAR images and sea ice drift	Anna Telegina	UiT The Arctic University of Norway
	p22	22	Measuring uncertainty in sea ice edge across different observational datasets	Bimochan Niraula	AWI
	p23	23	Inter-analyst comparison of ice chart ice edges	Matilde Brandt Kreiner	DMI
	p24	24	Sea Ice in a Climate Perspective and Monitored with Satellites	Signe Aaboe	Norwegian Meteorological Institute
	p25	25	Patterns and mechanisms of low-frequency Arctic sea ice variability	Jakob Dörr	University of Bergen
	p26	26	Sea ice thickness estimation based on X-band HH-polarized SAR imagery and background information	Juha Karvonen	FMI
POSTER SESSION 2	**p27**	1	Rapid Ice Loss Events in the Arctic	Massonnet François	UCLouvain
	p28	2	Melt ponds representation in Arctic and their influences on Arctic sea ice	Caixin Wang	Norwegian Meteorological Institute
	p29	3	Wave impact on sea ice dynamics in the marginal ice zone using a coupled wave—sea-ice model	Guillaume Boutin	NERSC
	p30	4	Deep learning of subgrid-scale parametrisations for sea-ice models	Tobias Finn	ENPC
	p31	5	The sea-ice dynamics simulated by the Viscous-Plastic and Maxwell Elasto-Brittle models	Mathieu Plante	Environment and Climate Change Canada
	p32	6	Implementation of form drag scheme into NEMO sea ice model SI3	David Schroeder	University of Reading
	p33	7	Assessment of SMRT simulated microwave brightness temperatures over snow and sea ice in Arctic regions	Suman Singha	DMI
	p34	8	Antarctic sea ice concentration and area patterns in CMIP5 and CMIP6	Ronald B. Souza	INPE
	p35	9	Ice-Free conditions and Polar Amplification under Paris Agreement thresholds using Climate Models	Fernanda Casagrande	INPE
	p36	10	On the impact of sea ice forcing from CFOSAT on wave forecast in polar oceans	Aouf Lotfi	Meteo France
	p37	11	SITool (v1.0) – a new evaluation tool for large-scale sea ice simulations: application to CMIP6 OMIP	Xia Lin	UCLouvain
	p38	12	Initial Results from SAR-Based Validation of Sea Ice Drift Forecast Models	Martin Bathmann	DLR
	p39	13	Intrinsic and practical predictability of sea ice kinematic features estimated from neXtSIM ensemble forecasts	Stephanie Leroux	IGE
	p40	14	Navy ESPC Sea Ice Assimilation: Present Capabilities and Planned Enhancements	Richard Allard	NRL

p41	15	The COSI (Calibration of Sea-Ice forecasts) project	Cyril Palerme	Norwegian Meteorological Institute
p42	16	Developing a deep learning forecasting system for short term and high resolution prediction of sea ice concentration	Are Frode Kvanum	Norwegian Meteorological Institute
p43	17	Sub-daily Antarctic sea-ice variability estimates using swath-based retrieval methods	Wayne de Jager	University of Cape Town
p44	18	Seasonal prediction of NorCPM in the regional Antarctic sea ice	Xiu YW	Sun Yat-sen University
p45	19	Polarimetric decomposition for an unsupervised ice separation approach using the CFAR method	Muhammad Amjad Iqbal	University POLITEHNICA of Bucharest
p46	20	Evaluating the sea ice concentration retrievals considering different radiative transfer schemes for correcting the brightness temperatures from atmospheric contribution	Fabrizio Baordo	DMI
p47	21	Investigating the use of Convolutional Neural Networks for Automatic Sea Ice Concentration at MET-Norway	Frode Dinessen	Norwegian Meteorological Institute

CAPITALIZED ITALICS: online

Sea ice data assimilation (methods and results)	**DA**
Sea ice observations and uncertainties	**OBS**
Sea ice model parameterizations and coupling to ocean and atmosphere models	**MOD**
Verification approaches for sea ice analyses and forecasts & Recent research to sea ice operation transfer—Automated prediction systems	**VER**
Recent research to sea ice operation transfer—Automated prediction systems	**R2O**