

The Sixth Argo Science Workshop (ASW-6)
 “The Argo Program in 2020 and beyond: Challenges and opportunities”

Hitotsubashi Hall, Tokyo, Japan

October 22-24, 2018

Provisional Program

<i>Day 1: October 22, Monday</i>		
9:30- Registration		
10:00-10:30 Opening Session		
10:00-10:10	Welcoming Remarks	A.Taira (JAMSTEC President)
10:10-10:20	Opening Address	K.Nagaoka (State Minister, MEXT)
10:20-10:30	Workshop Objectives	T. Suga (JAMSTEC/TU, JP)
10:30-13:00 Session 1: Core Argo (Chair: B. King)		
10:30-11:00	[Keynote] On the future of Argo: An overview of the OceanObs'19 Argo White Paper	D. Roemmich (SIO, US)
11:00-11:30 Coffee Break		
11:30-12:00	[Keynote] The scientific accomplishments of core-Argo	S. Riser (UW, US)
12:00-12:20	[Invited] Evaluation of the global Argo array based ocean data assimilation and prediction systems	Y. Fujii (JMA, JP)
12:20-12:40	[Invited] Interannual variability of upper ocean water masses as inferred from Argo array	N. Kolodziejczyk (Ifremer, FR)
12:40-13:00	Deep convection in the 2016 and 2017 Weddell Sea polynyas	E. Campbell (UW, US)
13:00-14:30 Lunch Break		
14:30-16:10 Session 2: Deep Argo (Chair: S. Hosoda)		
14:30-15:00	[Keynote] Deep Argo: White Paper summary and key Points	N. Zilberman (SIO, US)
15:00-15:30	[Keynote] Key science questions for Deep Argo	G. Johnson (PMEL, US)
15:30-15:50	[Invited] Deep ocean state estimation with new float data	S. Masuda (JAMSTEC, JP)
15:50-16:10	[Invited] ISOW spreading and mixing from the Charlie Gibbs Fracture Zone as revealed by Deep-Argo floats	V. Thierry (Ifremer, FR)
16:10-17:50 Poster Session with Coffee		
18:00-20:00 Reception		
<i>Day 2: October 23, Tuesday</i>		
9:20-11:00 Session 3: BGC Argo (Chair: T. Ross)		
9:20-9:50	[Keynote] Planning for a Biogeochemical-Argo array	K. Johnson (MBARI, US)

9:50-10:20	[Keynote] Biogeochemical Argo floats in the Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) experiment	L. Talley (SIO, US)
10:20-10:40	[Invited] Time-series observation of biogeochemical parameters in the subtropical western North Pacific	T. Fujiki (JAMSTEC,JP)
10:40-11:00	Bio-optics on Argo to understand marine biogeochemistry	E. Organelli (LOV, FR)
11:00-11:30 Coffee Break		
11:30-13:00 Session 4: Data System (Chair: T. Yoshida)		
11:30-12:00	[Keynote] Data System: White Paper summary and key points (TBC)	M. Scanderbeg (SIO, US)
12:00-12:20	[Invited] JCOMMOPS Monitoring for Argo and beyond	M. Belbeoch (JCOMOPS)
12:20-12:40	[Invited] Machine Learning of Argo QC	G. Maze (Ifremer, FR)
12:40-13:00	[Invited] BioGeoChemical (BGC) Argo data management	C. Schmechtig (CNLS, FR)
13:00-14:30 Lunch Break		
14:30-15:30 Dr. Stephen Piotrowicz Memorial Session (Chair: TBC)		
14:30-15:00	[Keynote] Issues and challenges for sustaining Core Argo and for implementing Deep Argo and BGC Argo	S. Wijffels (WHOI, US)
15:00-15:30	Panel discussion on issues and challenges for sustainability and growth of Argo	
15:30-18:00 Poster Session with Coffee		
<i>Day 3: October 24, Wednesday</i>		
9:20-10:20 Session 5: ArgoMix and other extensions (Chair: S. Purkey)		
9:20-9:45	[Keynote] ArgoMix: White Paper summary and key points (TBC)	M. Alford (SIO, US)
9:45-10:05	[Invited] Global mapping of abyssal turbulence intensity using Deep Argo floats	T. Hibiya (UT, JP)
10:05-10:20	Discussion	
10:20-10:50 Coffee Break		
10:50-12:20 Session 6: End User Engagement (Chair: S. Riser)		
10:50-11:20	[Invited] Impacts of Argo floats on the global monitoring and forecasting systems at Mercator Ocean	F. Gasparin (Mercator, FR)
11:20-11:50	[Invited] Ocean Reanalysis dataset using Argo float data and application for fisheries	Y. Ishikawa (JAMSTEC, JP)
11:50-12:20	Deployment planning – myth and reality	P. Oke (CSIRO, AU)
12:20-13:50 Lunch Break		
13:50-14:50 Round Table Discussion		
13:50-14:50	“Future of Argo”	
14:50-15:00 Closing Session		

14:50-15:00	Closing Remarks	K. Hanawa (TU, JP)
16:00-18:00 Public Lecture		
	What's Argo? Introduction of the international Argo programme and Japan's contribution	T. Suga
	Observing ocean health with Biogeochemical-Argo	K. Johnson
	Ocean warming: Observing Earth's energy imbalance with Argo	G. Johnson

Poster presentation

Session 1: Core Argo		
1P02	Quantitative Assessment of Assimilating Argo Profiles for Improving Ocean Model Initialization in Coupled Tropical Cyclone Prediction Systems	George Halliwell
1P03	Monitoring of the spatiotemporal variability of marine environment and oceanic conditions in western North Pacific	Toshiya Nakano
1P04	An improved pressure compensation factor for RBRargo 2000 dbar combined conductivity-temperature cells	Greg Johnson
1P05	Changes on the isopycnal surfaces captured by the Argo float array in the North Pacific after 2000	Shinya Kouketsu
1P06	Heat and salt content anomalies associated with eddies in the Mozambique Channel using Argo and satellite altimetry data	Vincent Faure
1P07	Properties, formation, and dissipation of the North Pacific eastern subtropical mode water and its impact on interannual spiciness anomalies	Shota Katsura
1P08	Global gridded temperature and salinity mappings and their applications using a large amount of Argo profiling data	Shigeki Hosoda
1P09	Subduction and advection processes of the North Pacific Tropical Water investigated using the particle-tracking method applied to the Argo gridded data	Hahako Ito
1P10	Detailed glider observations of water-mass properties in the central Japan Sea off Sado Island, Japan	Taku Wagawa
1P11	Enhanced warming of the subtropical mode water in the North Pacific and North Atlantic	Shusaku Sugimoto
1P12	The Leeuwin Current System and South Australian Current System based on a climatological, high-resolution gridded hydrography	Ryo Furue
1P13	Development of simple CTD calibration method for Argo float	Mizue Hirano
1P14	Utilize a legacy of under-ice Argo with the positional interpolation along isobath	Kaihe Yamazaki

1P15	Three-dimensional evolutions of water mass anomalies in the upper North Pacific based on Argo data	Tong Wang
1P16	The long-term trends and variabilities of the upper ocean stratification of the global ocean based on the observational profiles	Ryohei Yamaguchi
1P17	Coastal upwelling events along the southern coasts of Sumatra and Java observed by Argo floats	Takanori Horii
1P18	Interannual variability of cold air outbreaks over the Northwestern Pacific Ocean	Mizuki Iida
1P19	Interannual to decadal volume variability of the upper ocean water masses over the ARGO array	Esther Portela Rodriguez
1P20	Recent progress on statistical analysis of Argo data	Mikael Kuusela
1P21	South Atlantic Meridional Overturning Circulation Variations during the Past 24 Years and its Role in Ocean Heat Content Changes	Molly Baringer
1P22	Sea surface cooling induced by extratropical cyclones in the subtropical North Pacific	Fumiaki Kobashi
Session 2: Deep Argo		
2P01	Impact of Argo observing system enhancements using the multi observations component of CMEMS	Stephanie Guinehut
2P02	Rapid volume reduction in Antarctic Bottom Water off the Adélie/George V Land coast observed by deep floats	Taiyo Kobayashi
2P03	Evaluation of data quality of SBE41CP CTD sensor on deep floats: Fresh bias with pressure dependency	Taiyo Kobayashi
2P04	Observing internal waves in the eastern subtropical north Atlantic with Deep Argo	Cassandra Henderson
2P05	Time-dependent pressure-induced effect on optical oxygen sensors used for Argo floats	Hiroshi Uchida
Session 3: BGC Argo		
3P01	Estimating Oxygen in the Southern Ocean using Argo Temperature and Salinity	Donata Giglio
3P02	Validation of an ocean biogeochemical model using a global dataset of BGC-Argo floats	Alexandre Mignot
3P03	Partitioning particulate carbon export into three distinct pathways using BGC Argo floats	Joan Llort
3P04	Development of autonomous continuous pH-alkalinity analyzer deployable to BGC-Argo float	Hajime Kayane
3P05	Biogeochemical property variability relative to the Kerguelen Plateau mixing hotspot and ACC frontal zones	Isabella Rosso
3P06	Impact of nutrient observation data on GCM assimilation with a lower trophic ecosystem mode	Takashi Setou
3P07	Following the Argo footprints: using existing Argo trajectories to predict future float positions and determine optimal deployment locations to constrain temperature, salinity, and biogeochemical variables	Paul Chamberlain
3P08	The use of float oxygen data to indicate changes in the amount of Indian Ocean water entering the Atlantic Overturning Circulation	Brian King

3P09	Performance of RINKO FT optical dissolved oxygen sensors attached to Argo floats	Shinichi Takai
3P10	Oxygen and nutrient changes on the isopycnal surfaces inferred by the Argo float array in the North Pacific after 2000	Shinya Kouketsu
3P11	Spatio-temporal variability of sea surface pCO ₂ and nutrient in the tropical Pacific from 1981 to 2015	Sayaka Yasunaka
3P12	Quasi-Real-Time and High-Resolution Spatiotemporal Distribution of Ocean Anthropogenic CO ₂ in the subarctic North Pacific	Bofeng Li
3P13	Multi-decadal changes in dissolved inorganic substances in the Estimated Ocean State for Climate Research (ESTOC) which integrated BGC Argo data	Toshimasa Doi
3P14	BGC Argo developments in Canada: Planning and initial deployments	Tetjana Ross
3P15	Glider observations of the western subtropical North Pacific in springs 2016 – 2018	Katsuya Toyama
3P16	Biogeochemical float observations in the Kuroshio recirculation gyre during the spring transition	Ryuichiro Inoue
3P17	Evaluation of simulated biogeochemical variables from multi-resolution coupled ecosystem model with BGC-Argo float in Arabian Sea: A case study during TC Ockhi	V. P. Thangaprakash
3P18	Simulated Arrays of Biogeochemical Profiling Floats in CBIOMES	Gael Forget
Session 4: Data System		
4P01	Delayed mode Data QC Database and Pacific ARC activities	Fumihiko Akazawa
4P02	A website for seamless navigation of the Argo dataset	Megan Scanderbeg
4P03	Status of ARGO program at NIMS and data application	Hyeong-jun Jo
4P04	Present status of the JMA activity as the DAC	Masaomi Takahashi
Session 5: ArgoMix and other extensions		
5P01	EarthScope-Oceans: An Autonomous Global Observation Platform	Masayuki Obayashi
5P02	Experimental observation for the shallow Argo program in the Yellow Sea, Korea	KiRyong KANG
5P03	Development of the Wave-Argo	Takuji Waseda
5P04	Toward understanding temporal and spatial variability of vertical mixing in the thermocline of the North Pacific	Ryuichiro Inoue
5P05	EM-APEX floats: velocity plus dissipation to identify mechanisms of downscale energy transfer	Zoltan Szuts
5P06	High vertical wavenumber thermohaline interleaving structures in the Kuroshio Extension Front observed by a Microstructure Float	Takeyoshi Nagai
5P07	Observing Mixing using Argo: Past, Present, and Future	Caitlin Whalen
5P08	Motivating Argo to fully monitor abyssal warming and mixing	Sarah Purkey

Session 6: End User Engagement		
6P01	The strategy for evolution of Argo in Europe	Claire Gourcuff