

Monday 10 June 2024

- 09:00 - 12:00** **Registration, Reveljen - Big Room**
- 10:00 - 12:00** **European Glider Community side meeting, with coffee, Dockyard Hotel - Room A**

Chairs: Pierre Testor, Carlos Barrera
- 12:00 - 13:00** **Lunch, Reveljen - Big Room**
- 13:00 - 13:30** **Opening and Housekeeping, Reveljen - Big Room**
- 13:30 - 15:00** **Oral session 1: Bold New Directions for Ocean Gliders, Reveljen - Big Room**
- 13:30 - 13:45 Monitoring a growing international program, the challenges raised by OceanGliders
Victor Turpin^{1, 2, 3}
¹ OceanOPS
² GOOS
³ WMO
- 13:45 - 14:00 Underwater Glider User Group (UG2): Progress, Next Steps, and Opportunities for Global Collaboration
Georgia Coward¹, Cassie Wilson¹, Nicholas Rome¹
¹ Center for Ocean Leadership- University Corporation for Atmospheric Research, United States
- 14:00 - 14:15 The Petrel-X Hadal Glider: Present Status and Future Plans
Peng Wang^{1, 2}, Yanhui Wang^{1, 2}, Shuxin Wang^{1, 2}, Shaoqiong Yang^{1, 2}, Mouhua Ren¹, Wendong Niu^{1, 2}
¹ Key Laboratory Mechanism Theory and Equipment Design of Ministry of Education, School of Mechanical Engineering, Tianjin University, Tianjin 300350, China
² The Joint Laboratory of Ocean Observing and Detection, Laoshan Laboratory, Qingdao, Shandong, 266237, China
- 14:15 - 14:30 A new way to explore shallow waters: SeaExplorer Shallow
Jeremy Sitbon¹
¹ Alseamar
- 14:30 - 14:45 Overview of the upcoming Sentinel Circumnavigation Mission
Shea Quinn¹
¹ Teledyne
- 14:45 - 15:00 Towards a hydrogen fuel cell power supply for ocean gliders
Lucas Merckelbach¹, Prokopios Georgopoulos²
¹ Helmholtz Zentrum Hereon, Institute of Coastal Dynamics, Max-Planck-Str. 1,

21502, Geesthacht, Germany

² Helmholtz Zentrum Hereon, Institute of Membrane Research, Max-Planck-Str. 1,
21502, Geesthacht, Germany

15:00 - 15:30 **Coffee break, Reveljen - Big Room**

15:30 - 17:00 **Oral session 2: Glider observations at high latitudes, Reveljen - Big Room**

15:30 - 15:45 New insights from a multi-glider survey on the Ross Sea Continental Shelf in Antarctica

Naomi Krauzig¹, Pierpaolo Falco¹, Giannetta Fusco², Giuseppe Aulicino², Giorgio Budillon², Yuri Cotroneo², Diana Di Luccio², Simone Di Palma², Massimiliano Esposito², Antonino Ian Ferola², Laura Fortunato², Alberto Greco², Andrea Molino², Enrico Zambianchi², Angela Garzia^{1,3}, Pasquale Castagno⁴, Elena Mauri⁵, Stefano Kuchler⁵, Alessandro Bubbi⁵, Piero Zuppelli⁵, Silvina Julieta Logarzo⁵, Annunziata Pirro⁵, Riccardo Martellucci⁵, Christian Saggese⁵, Jasmin McInerney⁶, Cassandra Elmer⁶, Craig Stewart⁶, Eleanor Haigh⁶, Craig Stevens^{6,7}

¹ Department of Life and Environmental Sciences, Marche Polytechnic University & CoNISMa, Ancona, Italy

² Department of Science and Technology, University Parthenope of Naples & CoNISMa, Naples, Italy

³ Department of Civil, Constructional and Environmental Engineering, Sapienza University, Rome, Italy

⁴ Department of Mathematics, Computer Science, Physics and Earth Science, University of Messina, Messina, Italy

⁵ National Institute of Oceanography and Applied Geophysics (OGS), Trieste, Italy

⁶ National Institute of Water and Atmospheric Research, Wellington, New Zealand

⁷ Department of Physics, University of Auckland, Auckland, New Zealand

15:45 - 16:00 Under-ice Assessment of the Arctic Marginal Ice Zone with an Autonomous Underwater Glider

Richard Camilli¹, Ted Maksym¹, Amy Phung¹, Gideon Billings^{1,2}, Stefano Suman¹, Angelos Mallios³

¹ Applied Ocean Physics & Engineering Department, Woods Hole Oceanographic Institution, Woods Hole, MA 02543, USA

² Australian Centre for Field Robotics, University of Sydney, NSW, Australia

³ Ploa Technology Consultants S.L., C/Pic de Peguera 11, Parc UdG, 17003 Girona, Spain

16:00 - 16:15 Glider observations of cyclonic cones in the Antarctic and Mediterranean Sea: formation mechanism and deep impact on the circulation

Annunziata Pirro¹, Daniela Flocco², Riccardo Martellucci¹, Milena Menna¹, Silvina Julieta Logarzo¹, Pasquale Castagno³, Angela Garzia⁴, Naomi Krauzig⁴, Pierpaolo Falco⁴, Enrico Zambianchi⁵, Elena Mauri¹

¹ National Institute of Oceanography and Applied Geophysics (OGS), Trieste, Italy

² Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse (DiSTAR), University of Naples Federico II, Naples, Italy

³ Department of Mathematics, Computer Science, Physics and Earth Science,
University of Messina, Messina, Italy

⁴ Department of Life and Environmental Sciences, Marche Polytechnic University
& CoNISM, Ancona, Italy

⁵ Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse, University of
Naples Federico II, Napoli, Italy

16:15 - 16:30 Physical and biogeochemical conditions during unprecedented high fluorescence
observations in the Ross Sea

Esther Portela^{1,2}, Karen Heywood², Meredith Grace Meyer³, Walker Smith^{4,5}

¹ LOPS/IRD, (Plouzane, France)

² University of East Anglia, Norwich, United Kingdom

³ University of North Carolina, U.S.A

⁴ Shanghai Jiao Tong University, School of Oceanography, Shanghai, China

⁵ Virginia Institute of Marine Science, Biological Sciences, Gloucester Point, VA,
United States

16:30 - 16:45 Accidental observations of a surface-water intrusion beneath the Ross Ice Shelf

Peter Sheehan¹, Karen Heywood¹

¹ University of East Anglia, School of Environmental Sciences

16:45 - 17:00 Glider-observed fine-scale fronts in the Southern Ocean and links to air-sea fluxes
of heat and carbon

**Sebastiaan Swart¹, Marcel du Plessis¹, Isabelle Giddy¹, Sarah Nicholson², Johan
Edholm¹, Louise Biddle³, Craig Lee⁴, Geoff Shilling⁴**

¹ Department of Marine Sciences, University of Gothenburg, Sweden

² SOCCO, CSIR, Cape Town, South Africa

³ VOTO, Gothenburg, Sweden

⁴ APL, University of Washington, Seattle, USA

**17:30 - 19:30 Conference Icebreaker, Reveljen - Big
Room**

Tuesday 11 June 2024

**09:00 - 10:15 Oral session 3: Flagship glider sustained lines and networks 1, Reveljen - Big
Room**

09:00 - 09:15 ABACUS 2014-2024: Ten years of the repeated glider monitoring line across the
western Mediterranean Sea

**Yuri Cotroneo¹, Giuseppe Aulicino¹, Giannetta Fusco¹, Simon Ruiz², Ananda
Pascual², Pierre Testor³, Pierre Cauchy⁴, Nikolaos Zarokanellos⁵, Albert
Miralles⁵, Mohamed Zerrouki⁶, Joaquín Tintoré⁵, Giorgio Budillon¹**

¹ University of Naples "Parthenope", Naples, Italy

² Instituto Mediterráneo de Estudios Avanzados IMEDEA(CSIC-UIB), Mallorca,
Spain

³ Laboratoire d'Océanographie et de Climatologie : Expérimentation et Approche
Numérique IPSL, Université Pierre & Marie Curie, Paris, France

⁴ Institut des Sciences de la Mer de Rimouski (ISMER) , Université du Québec à Rimouski (UQAR), Rimouski, Canada

⁵ Balearic Islands Coastal Observing and Forecasting System (SOCIB), Palma, Spain

⁶ National School for Marine Sciences and Coastal Management, Algiers, Algeria

09:15 - 09:30 Hydrography, hydrodynamics and biogeochemistry of the North Aegean Sea Trough through seasonal glider missions

GEORGIOS SYLAIOS¹, NIKOLAOS KOKKOS¹, KONSTANTINOS ZACHOPOULOS¹, PAVLOS VIDORIS², NIKOLAOS KAMIDIS², MANOS KOUTRAKIS²

¹ Laboratory of Ecological Engineering and Technology, Department of Environmental Engineering, Democritus University of Thrace, 67100 Xanthi, Greece

² Institute of Fisheries Research, ELGO-DIMITRA, Nea Peramos, 64 007 Kavala, Greece

09:30 - 09:45 The PAA noramic mission: the first European Atlantic area international multi-platform ocean monitoring mission

Carlos Barrera¹, Francisco Campuzano², Susan Hartman³, Alan Berry⁴, Paulo Oliveira⁵, Inês Martins⁶, Daniel Hayes⁷, Kieran Adlum⁸, Filipa Carvalho³, Ramiro Neves⁹

¹ Oceanic Platform of the Canary Islands

² +ATLANTIC CoLAB

³ National Oceanographic Centre

⁴ Marine Institute

⁵ Instituto Portugues do Mar e da Atmosfera

⁶ Instituto Hidrográfico

⁷ Cyprus Subsea Limited

⁸ P&O Maritime Logistics

⁹ Instituto Superior Técnico

09:45 - 10:00 Delivering continuous glider operations in the North Sea

Robyn Owen¹, Emma Gardner¹, Jon Turton², Simon Good², Mark Worsfold², Jim Trice²

¹ National Oceanography Centre, British Oceanographic Data Centre, UK

² The Meteorological Office, UK

10:00 - 10:15 Intensified internal tides in Explorer and Dangeard Canyons (Celtic Sea shelf edge) observed by a deep ocean glider

Rob Hall¹, Veerle Huvenne²

¹ Centre for Ocean and Atmospheric Sciences, School of Environmental Sciences, University of East Anglia, Norwich, UK

² Ocean BioGeosciences, National Oceanography Centre, Southampton, UK

10:15 - 10:45 **Coffee Break, Reveljen - Big**

Room

10:45 - 12:00 Oral session 4: Flagship glider sustained lines and networks, Reveljen - Big Room

10:45 - 11:00 Exploratory Glider Deployments Reveal Changes in the Upper Oceanic Water Masses of the Caribbean Through-Flow

Joe Gradone¹, Travis Miles¹, Scott Glenn¹, Doug Wilson^{2, 3}

¹ Center for Ocean Observing Leadership, Department of Marine and Coastal Sciences, School of Environmental and Biological Sciences, Rutgers University, New Brunswick, New Jersey, USA

² University of the Virgin Islands, Center for Marine and Environmental Studies, Charlotte Amalie West, St. Thomas, US Virgin Islands, USA

³ Ocean and Coastal Observing – Virgin Islands, Inc.

11:00 - 11:15 Warming and lateral shift of the Gulf Stream from in situ observations since 2001

Robert Todd¹, Alice Ren¹

¹ Woods Hole Oceanographic Institution

11:15 - 11:30 The 2023-2024 El Niño in the California Current System as observed by the California Underwater Glider Network

Daniel Rudnick¹

¹ Scripps Institution of Oceanography

11:30 - 11:45 Networked Autonomous Systems for Persistent, Year-Round Arctic Observing – the Arctic Mobile Observing System Program

Craig M. Lee¹, Luc Rainville¹, Jason I. Gobat¹, Sarah Webster¹, Lee Freitag²

¹ Applied Physics Laboratory, University of Washington, Seattle, USA

² Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution, Wood Holes, USA

11:45 - 12:00 Observations of extreme events on the continental shelf regions of Australia using ocean gliders

Charitha Pattiratchi¹, Jessica Benthuyssen²

¹ The University of Western Australia, Oceans Graduate School and UWA Oceans Institute, Australia

² Australian Institute of Marine Science, Perth, Australia

12:00 - 13:30 Lunch with poster session, Reveljen - Big Room

13:30 - 14:00 ALSEAMAR Workshop, Reveljen - Big Room

14:00 - 15:00 Oral session 5:, Reveljen - Big Room

14:00 - 14:15 Southern Ocean surface warming variability linked to extended interstorm periods

Marcel du Plessis¹, Sarah Nicholson², Isabelle Giddy¹, Pedro Monteiro³, Sebastiaan Swart^{1, 4}

¹ University of Gothenburg, Department of Marine Science, Sweden

² Southern Ocean Carbon-Climate Observatory, CSIR, South Africa

³ School for Climate Studies, Stellenbosch University, Stellenbosch, South Africa

⁴ University of Cape Town, Department of Oceanography, South Africa

14:15 - 14:30 Air-sea Heat Flux Uncertainties From A Sailing USV

Johan Edholm¹, Marcel du Plessis¹, Sebastiaan Swart¹

¹ Department of Marine Sciences, University of Gothenburg

14:30 - 14:45 Glider observations across the scales of the ocean dynamics during BioSWOT-Med

Anthony Bosse¹, Tancrède Maytie², Ilker Fer³, Robin Rolland⁴, Yannis Cuypers⁴, Pascale Bouruet-Aubertot⁴, Louise Rousselet⁴, Sven Gastauer⁵, Mark Ohman⁶, Pierre Testor⁴, Andrea Doglioli¹, Francesco d'Ovidio⁴

¹ Aix Marseille Univ., Univ. de Toulon, CNRS, IRD, OSU Institut PYTHEAS, MIO, Marseille, France

² ENSTA Bretagne, Brest

³ Geophysical Institute, University of Bergen, Bergen, Norway

⁴ Laboratoire d'Océanographie et du Climat, Sorbonne Univ., CNRS, IRD, MNHN, IPSL, Paris, France

⁵ Thünen Institute of Sea Fisheries, Bremerhaven, Germany

⁶ Integrative Oceanography Division, Scripps Institution of Oceanography, La Jolla, CA, USA

14:45 - 15:00 Glider and SWOT satellite comparisons in the Cape Basin during the SWOT fast repeat phase

Solange Coadou Chaventon^{1,2}, Sebastiaan Swart^{2,3}, Sabrina Speich¹

¹ Laboratoire de Météorologie Dynamique (IPSL), Ecole Normale Supérieure (PSL), Paris, France

² Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden

³ Department of Oceanography, University of Cape Town, Cape Town, South Africa

15:00 - 16:00 Coffee with Poster session, Reveljen - Big Room

15:00 - 15:02 Autosub Long Range - a complementary capability to underwater gliders

Alexander Phillips¹, Robert Templeton¹, Philip Bagley¹

¹ National Oceanography Centre, UK

15:02 - 15:04 Enhancement of a ship-based monitoring program with gliders

Melany Belzile¹, Dave Hebert¹, Clark Richards¹

¹ Bedford Institute of Oceanography, Fisheries and Oceans Canada, Dartmouth (NS), Canada

15:04 - 15:06 Seaglider observations of mixing across the Antarctic Slope Front

Viktoria Nikolaus¹, Karen Heywood¹, Rob Hall¹, Yixi Zheng¹

¹ Centre for Ocean and Atmospheric Sciences, School of Environmental Sciences, University of East Anglia

- 15:06 - 15:08 Results from Under Ice Antarctic Glider operations at NOC featuring new BSD systems
Ben Allsup¹, Yaomei Wang¹
¹ National Oceanography Centre
- 15:08 - 15:10 Fifteen of glider monitoring in the NW Mediterranean by MOOSE
Anthony Bosse¹, Pierre Testor², Laurent Coppola^{3, 4}
¹ Aix Marseille Univ., Univ. de Toulon, CNRS, IRD, OSU PYTHEAS, MIO, Marseille, France
² Laboratoire d'Océanographie et du Climat, Sorbonne Univ., CNRS, IRD, MNHN, IPSL, Paris, France
³ Sorbonne Université, CNRS, Laboratoire d'Océanographie de Villefranche (LOV), Villefranche-sur-Mer, France
⁴ Sorbonne Université, CNRS, Observatoire des Sciences de l'Univers (OSU) Station Marines (STAMAR), Paris, France
- 15:10 - 15:12 The adventure towards a Glider Lab edification – First steps
Inês Martins¹, João Vitorino¹, Teotónio Barroqueiro¹, Luisa Lamas¹, Carlos Fernandes¹, Carlos Barrera²
¹ Instituto Hidrográfico
² PLOCAN
- 15:12 - 15:14 Exploring Water Mass Properties in the West Mediterranean: Insights from Glider-Based Microstructure Data
Florian Kokoszka¹, Katrin Schroeder², Mireno Borghini³, Jacopo Chiggiato², Albert Miralles⁴, Manuel Rubio⁴, Mélanie Juza⁴, Nikolaos Zarokanellos⁴
¹ Consiglio Nazionale delle Ricerche – Istituto di Scienze Marine (CNR-ISMAR), Napoli, Italy
² Consiglio Nazionale delle Ricerche – Istituto di Scienze Marine (CNR-ISMAR), Venice, Italy
³ Consiglio Nazionale delle Ricerche – Istituto di Scienze Marine (CNR-ISMAR), Lerici, Italy
⁴ SOCIB, Balearic Islands Coastal Observing and Forecasting System, Palma, Spain
- 15:14 - 15:16 Determining nutrient and oxygen fluxes from SeaExplorer microstructure data in the Cape Basin
Mauro Pinto-Juica¹, Anneke M. M. ten Doeschate², Bastien Y. Queste¹
¹ Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden
² Rockland Scientific International Inc., Victoria, BC, Canada
- 15:16 - 15:18 Sustained hydrographic monitoring of the Nordic Seas using underwater gliders
Fiona Elliott¹, Ailin Brakstad¹, Ilker Fer¹, Kjetil Våge¹
¹ Geophysical Institute, University of Bergen and the Bjerknes Centre for Climate

Research, Bergen, Norway

- 15:18 - 15:20 Glider operations in polar regions: lessons from the 2024 Antarctic field season
Jasmin McInerney¹, Naomi Krauzig², Pierpaolo Falco², Giannetta Fusco³, Giuseppe Aulicino³, Giorgio Budillon³, Yuri Cotroneo³, Diana Di Luccio³, Simone Di Palma³, Massimiliano Esposito³, Antonino Ian Ferola³, Laura Fortunato³, Alberto Greco³, Andrea Molino³, Angela Garzia^{2, 4}, Elena Mauri⁵, Stefano Kuchler⁵, Alessandro Bubbi⁵, Piero Zuppelli⁵, Julietta Logarzo⁵, Riccardo Martelucci⁵, Christian Saggese⁵, Annunziata Pirro⁵, Pasquale Castagno⁶, Cassandra Elmer¹, Craig Stewart¹, Eleanor Haigh¹, Kenneth Larrieu^{7, 8}, Alexander Forrest^{7, 8}, Wonsang Lee⁹, Craig Stevens^{1, 10}
¹ National Institute of Water and Atmospheric Research, Wellington, New Zealand
² Department of Life and Environmental Sciences, Marche Polytechnic University & CoNISMa, Ancona, Italy
³ Department of Science and Technology, University Parthenope of Naples & CoNISMa, Naples, Italy
⁴ Department of Civil, Constructional and Environmental Engineering, Sapienza University, Rome, Italy
⁵ National Institute of Oceanography and Applied Geophysics (OGS), Trieste, Italy
⁶ Department of Mathematics, Computer Science, Physics and Earth Science, University of Messina, Messina, Italy
⁷ Civil and Environmental Engineering, University of California Davis, Davis, USA
⁸ Tahoe Environmental Research Center, University of California Davis, Incline Village, USA
⁹ Korea Polar Research Institute, Incheon, South Korea
¹⁰ Department of Physics, University of Auckland, Auckland, New Zealand
- 15:20 - 15:22 Repeated and Sustained Sectional Observations off the East Coast of South Korea using Underwater Gliders
JongJin Park^{1, 2}, Gyuchang Lim², Yunchang Kwak², Heonwook Ha², Hyunsik Jo², Giboem Park², RaeEun Lim², Jaewon Lee²
¹ Department of Oceanography, Kyungpook National University, Daegu, Republic of Korea
² Center for Korea Autonomous Ocean observing System, Kyungpook Institute of Oceanography, Kyungpook National University, Daegu, Republic of Korea
- 15:22 - 15:24 Uncrewed Surface Vehicles (USV) technologies in support to the European Ocean Observing System (EOOS) strategic framework
Carlos Barrera¹, Joao Tasso², Christoph Waldmann³, James Burris⁴, Jose Luis Rada⁵, Andres Cianca¹, Meghan Cronin⁶, Ruth Patterson⁷, joaquin Hernandez-Brito¹
¹ PLOCAN
² FEUP-LSTS
³ UB-MARUM
⁴ NOC
⁵ MITMA-DGMM

⁶ NOAA

⁷ Charles Darwing University

- 15:24 - 15:26 Structure, transport and variability of the Norwegian Atlantic Current along the Svinøy line from repeated glider transects
Ilker Fer¹, **Fiona Elliott¹**, **Ailin Brakstad¹**
¹ Geophysical Institute, University of Bergen, Bergen, Norway
- 15:26 - 15:28 Wave, current and turbulence measurements from autonomous platforms
Anders Tengberg¹, **Harald Tholo¹**, **Jostein Hovdenes¹**
¹ Aanderaa-Xylem, Bergen, Norway
- 15:28 - 15:30 Long Time Series of Microstructure Measurements from Seagliders
Luc Rainville¹, **Craig Lee¹**, **Jason Gobat¹**, **Geoff Shilling¹**, **Fabian Wolk²**, **Peter Stern²**, **John Wells²**, **Annake Ten Doeschante²**
¹ Applied Physics Laboratory, University of Washington, Seattle, USA
² Rockland Scientific, Victoria, Canada
- 15:30 - 15:32 Aligning SOCIB Glider Activities with International Best Practices and FAIR Principles: Advancing Operational and Scientific Excellence.
Albert Miralles¹, **Nikolaos Zarokanellos¹**, **Manuel Rubio¹**, **Patricia Rivera¹**, **Miguel Charcos¹**, **Juan Gabriel Fernández¹**, **Benjamin Casas¹**, **Joaquin Tintore^{1,2}**
¹ SOCIB
² IMEDEA
- 15:32 - 15:34 USV Gobelijn: a Long-Range USV to transform glider operations and strategies
Wieter Boone¹, **Roeland Develter¹**, **Frederik-Willem Fourie¹**, **Kobus Langedock¹**, **Eirik Moholt²**, **Jérémy Sitbon³**, **Chantal Martens¹**, **Hans Pirlet¹**, **Leandro Ponsoni¹**
¹ Flanders Marine Institute (VLIZ), Marine Robotics Centre, Belgium
² Maritime Robotics AS, Norway
³ Alseamar, France
- 15:34 - 15:36 Glider missions in the Cretan Sea: 5 years of observations
Evi Bourma¹, **Natalia Stamataki¹**, **Gerasimi Anastasopoulou¹**, **Dionysios Ballas¹**, **George Petihakis¹**, **Leonidas Perivoliotis¹**
¹ Institute of Oceanography, Hellenic Centre for Marine Research, Anavyssos, GR-190 13 -, Greece;
- 15:36 - 15:38 Dense water formation and circulation in the western Nordic Seas from repeated glider transects
Ailin Brakstad¹, **Kjetil Våge¹**, **Erika Giorgi¹**, **Ilker Fer¹**, **Fiona Elliott¹**
¹ Geophysical Institute, University of Bergen and the Bjerknes Centre for Climate Research, Bergen, Norway

- 15:38 - 15:40 Detection of acoustically tagged animals from glider mounted receivers
Adam Comeau¹, **Jude van der Meer¹**, **Fred Whoriskey²**
¹ Dalhousie University, Canada
² Ocean Tracking Network, Canada
- 15:40 - 16:00 Analysing Finnish glider data with unsupervised machine learning algorithms
Kimmo Tikka¹, **Ivia Closset¹**, **Laura Tuomi¹**
¹ Finnish Meteorological Institute
- 16:00 - 17:00 Oral session 6:, Reveljen - Big Room**
- 16:00 - 16:15 Investigating Glider-Based Measurement for Passive Acoustic Survey Mission
Khaled Helal¹, **Nicolai von Oppeln-Bronikowski²**, **Lorenzo Moro³**
¹ Ph.D. Candidate in Ocean and Naval Architecture Engineering Department, Faculty of Engineering and Applied Science, Memorial University
² Engineer in the Department of Physics and Physical Oceanography, Faculty of Science, Memorial University
³ Associate Professor and Department Head of Ocean and Naval Architectur, Faculty of Engineering and Applied Science, Memorial University
- 16:15 - 16:30 Adaptive Sampling of Wind and Rain from Passive Acoustics on Seaglidrs
Luc Rainville¹, **Geoff Shilling¹**, **Craig Lee¹**, **Jason Gobat¹**
¹ Applied Physics Laboratory, University of Washington, Seattle, USA
- 16:30 - 16:45 Near and under ice soundscape in the Ross Sea Polynya, observed from a Passive Acoustic Monitoring glider
Pierre Cauchy¹, **Karen Heywood²**, **Ester Portela²**, **Alexa Hasselman³**
¹ Institut des sciences de la mer (ISMER), Université du Québec à Rimouski (UQAR)
² University of East Anglia (UEA)
³ NOAA
- 16:45 - 17:00 The SeaExplorer a versatile platform for Passive Acoustic Monitoring: a focus on a new user-friendly acoustic payload for scientists
REMI EMMETIERE¹, **MARC MICHAU¹**, **JEREMY SITBON¹**, **FLORIAN BODRERO¹**, **YANN LEPAGE¹**
¹ ALSEAMAR

Wednesday 12 June 2024

- 09:00 - 10:15 Oral Session 7:, Reveljen - Big Room**
- 09:00 - 09:15 Elevated CDOM in bottom boundary layer and water column during physical benthic disturbance experiments
Joe O'Callaghan^{1, 2}, **Malcolm Clark³**, **Scott Nodder³**, **Charine Collins³**
¹ Oceanly Science Limited
² University of Auckland, Department of Physics, Auckland, Aotearoa New

Zealand

³ National Institute for Water and Atmospheric Research, Wellington, Aotearoa
New Zealand

- 09:15 - 09:30 Novel, high resolution pH measurements in front of a vulnerable ice shelf in West Antarctica using an underwater glider.
Daisy D. Pickup¹, Dorothee C. E. Bakker¹, Karen J. Heywood¹, Emily Hammermeister^{2, 3}, Socratis Loucaides², Yixi Zheng¹, Gareth A. Lee¹, Patricia L. Yager⁴, Bastien Y. Queste⁵, Rob A. Hall¹
¹ School of Environmental Sciences, University of East Anglia, UK
² Ocean Technology and Engineering, National Oceanography Centre Southampton, UK
³ School of Ocean and Earth Science, University of Southampton, UK
⁴ Department of Marine Sciences, University of Georgia, USA
⁵ Department of Marine Sciences, University of Gothenburg, Sweden
- 09:30 - 09:45 Glider observations unveil winter phytoplankton dynamics in the southern Adriatic Sea
Tal Ozer¹, Elena Mauri¹, Annunziata Pirro¹, Riccardo Martellucci¹, Silvina Julieta Logarzo¹
¹ National Institute of Oceanography and Applied Geophysics (OGS), Sgonico, Italy
- 09:45 - 10:00 Seasonal changes in chlorophyll a concentrations, phytoplankton biomass and primary production in the Baltic Sea based on monitoring and glider data.
Joanna Paczkowska^{1, 2}, Chiara Monforte¹, Louise Biddle^{1, 2}, Bastien Queste^{1, 2}
¹ Voice of the Ocean Foundation, Skeppet Arans Vag 19, 42671 Vastra Frolunda, Sweden
² Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden
- 10:00 - 10:15 Seasonal evolutions of plankton distributions and particles in the Thracian Sea
Félix Margirier¹, Camille Pierini¹, Laurent Beguery¹, Nikolaos Kokkos², Georgios Sylaios²
¹ ALSEAMAR, Rousset, France
² Laboratory of Ecological Engineering and Technology, Department of Environmental Engineering, Democritus University of Thrace, 67100 Xanthi, Greece
- 10:15 - 10:45 Coffee Break, Reveljen - Big Room**
- 10:45 - 12:00 Oral Session 8:, Reveljen - Big Room**
- 10:45 - 11:00 Glider/UVP coupling, a major asset for studying the biological carbon pump? Early feedback from the APERO campaign
Elisabeth CHEVILLON¹, Anthony BOSSE², Bruno ZAKARDJIAN¹, Lionel GUIDI³, Alexandre ACCARDO³, Nagib BHAIRY², Jean-Luc FUDA², Marc

PICHERAL³, Christopher LUNEAU⁴, Paul DASI⁵

¹ Université de Toulon - Mediterranean Institute of Oceanography (MIO) - France

² Aix Marseille Université - Mediterranean Institute of Oceanography (MIO) - France

³ CNRS - Laboratoire d'océanologie de Villefranche (LOV) - France

⁴ Aix Marseille Université - Observatoire des sciences de l'univers PYTHEAS - France

⁵ CNRS - Division Technique de l'Institut des Sciences de l'Univers (DT-INSU) - France

- 11:00 - 11:15 Glider data reveals a productive Ross Sea bloom driven by substantial primary production with moderate physical fluxes impacting the carbon budget
Meredith G. Meyer¹, Esther Portela², Walker O. Smith Jr.^{3, 4}, Karen Heywood¹
¹ Centre for Ocean and Atmospheric Sciences, School of Environmental Sciences, University of East Anglia, Norwich, United Kingdom
² Institute d'Océanographie Européenne de la Mer, Plouzané, France
³ Virginia Institute of Marine Science, William & Mary, Williamsburg, VA, USA
⁴ School of Oceanography, Shanghai Jiao Tong University, Shanghai, China
- 11:15 - 11:30 Investigating the biological carbon pump in the northern Benguela upwelling system oxygen deficient zone
Hans Hilder¹, Elisa Lovechio¹, Stephanie Henson¹, Nathan Briggs¹, Filipa Carvalho¹
¹ National Oceanography Centre Southampton
- 11:30 - 11:45 Ecosystem monitoring by underwater gliders off the northeast coast of Japan
Takahiro Tanaka¹, Daisuke Hasegawa¹, Takeshi Okunishi¹
¹ Japan Fisheries Research and Education Agency
- 11:45 - 12:00 Monitoring pelagic communities of the Barents Sea with a novel Bioglider
Pierre Priou¹, Geir Pedersen², Emilia Trudnowska³, Ehsan Abdi⁴, Sünnje Basedow⁵, Lionel Camus¹, Jerome Coindat⁶, Peer Fietzek⁷, Daniel Hayes⁴, Laurent Mortier^{8, 9}, Marc Picheral¹⁰, Yves Poncon⁸, Virginie Ramasco¹, Paul Renaud^{1, 11}, Morten Thorstensen¹
¹ Akvaplan-niva
² Institute of Marine Research Bergen
³ Institute of Oceanology Polish Academy of Sciences
⁴ Cyprus Subsea
⁵ UiT The Arctic University of Norway
⁶ Hydroptic
⁷ Kongsberg Discovery
⁸ LOCEAN Sorbonne Université
⁹ U2IS ENSTA Paris IPP
¹⁰ Laboratoire d'Océanographie de Villefranche Sorbonne Université
¹¹ UNIS The University Centre in Svalbard

- 12:00 - 13:30** **Lunch sponsored by Teledyne, Reveljen - Big Room**
- 13:30 - 14:00** **TELEDYNE Workshop, Reveljen - Big Room**
- 14:00 - 15:00** **Oral session 9:, Reveljen - Big Room**
- 14:00 - 14:15 GROOM II - Designing the technical framework of a future MAS European Research Infrastructure
Alvaro Lorenzo Lopez¹, Laurent Mortier², João Sousa³, Izzat Kamarudzaman¹, Renato Mendes³, Pedro Gonçalves³, Pierre Testor⁴, Ailin Brakstad⁵
¹ National Oceanography Centre (NOC)
² ENSTA
³ INEGI(LSTS)
⁴ CNRS
⁵ University of Bergen
- 14:15 - 14:30 Towards OceanGliders Best Practices and Standards
Pierre Testor¹
¹ CNRS/LOCEAN - Sorbonne Universités (Campus Pierre et Marie Curie, Paris 06)-CNRS-IRD-MNHN, UMR 7159, Laboratoire d'Océanographie et de Climatologie (LOCEAN), Institut Pierre Simon Laplace, France
- 14:30 - 14:45 The OG1.0 Era: A global community format for ocean gliders
Emma Gardner¹, Victor Turpin², Daniel Hayes³, Justin Buck¹, Guilherme Castelhão⁴, Pierre Testor⁵, Callum Rollo⁶, Jennifer Sevadjian⁴
¹ National Oceanography Centre, British Oceanographic Data Centre, UK
² OceanGliders Technical Coordinator at OceanOPS, Brest, France
³ Cyprus Subsea Consulting and Services C.S.C.S. Ltd, Cyprus
⁴ Scripps Institution of Oceanography - UC San Diego, USA
⁵ National Centre for Scientific Research
⁶ Voice of the Ocean Foundation, Sweden
- 14:45 - 15:00 Introducing the GOOS OCG Cross-Network Data Implementation Strategy
Kevin O'Brien¹, Mathieu Belbeoch², Emma Heslop³
¹ University of Washington/CICOES, NOAA/PMEL, GOOS OCG
² OceanOPS
³ GOOS Project Office
- 15:00 - 15:30** **Coffee Break, Reveljen - Big Room**
- 15:30 - 17:00** **The Future of Data Management for Marine Autonomous Systems: Ocean Gliders, Reveljen - Big Room**
- 15:30 - 17:00** **OceanGliders BOON: Coordinated sampling along ocean boundaries, Dockyard Hotel - Room A**
- 15:30 - 17:00** **Measuring velocities from gliders: flight models, dive averaged currents and ADCPs, Dockyard Hotel - Room B**

15:30 - 17:00 **Technical meet'n'greet with workshop visit: an opportunity for technical staff to share tips, tricks, VOTO Office**

18:00 - 23:00 **Conference dinner,**
Universeum

Thursday 13 June 2024

09:00 - 10:15 **Oral session 10: Advancing the knowledge of ocean turbulence using gliders,**
Reveljen - Big Room

09:00 - 09:15 Overlapping turbulent boundary layers in a strongly-forced coastal sea
Arnaud Valcarcel^{1, 2, 3}, Craig Stevens^{2, 4}, Joanne O'Callaghan^{3, 4}, Sutara Suanda⁵

¹ University of Otago, Dunedin, Department of Marine Science, Aotearoa New Zealand

² National Institute for Water and Atmospheric Research, Ocean Observations, Wellington, Aotearoa New Zealand

³ Ocealy Science Limited, Wellington, Aotearoa New Zealand

⁴ University of Auckland, Department of Physics, Auckland, Aotearoa New Zealand

⁵ University of North Carolina in Wilmington, Department of Physics and Physical Oceanography, Wilmington, USA

09:15 - 09:30 Observations of eddy merging into the Lofoten Vortex in the Norwegian Sea
Gillian Damerell¹, Anthony Bosse², Ilker Fer¹

¹ Geophysical Institute, University of Bergen, and Bjerknes Centre for Climate Research, Bergen, Norway

² Mediterranean Institute of Oceanography, Aix-Marseille University, France

09:30 - 09:45 Dissipation measurements near the marginal ice zone northwest of Svalbard using a glider

Ilker Fer¹, Fiona Elliott¹

¹ Geophysical Institute, University of Bergen, Bergen, Norway

09:45 - 10:00 Turbulent Vertical Velocities in Labrador Sea Convection
Louis Clement¹, Lucas Merckelbach², Eleanor Frajka-Williams³

¹ National Oceanography Centre, Southampton, UK

² Institute of Coastal Research, Helmholtz-Zentrum Geesthacht, Geesthacht, Germany

³ University of Hamburg, Hamburg, Germany

10:00 - 10:15 Microstructure turbulence, Acoustic Doppler current, and passive acoustic observations in the Nordic Seas using underwater gliders

Donglai Gong¹, Laur Ferris¹, Ricardo Bourdon¹, Jack Slater¹

¹ Virginia Institute of Marine Science - William & Mary

10:15 - 10:45 **Coffee Break, Reveljen - Big**
Room

- 10:45 - 12:00 Oral session 11: Advancing the knowledge of ocean turbulence using gliders, Reveljen - Big Room**
- 10:45 - 11:00 Entrainment, subduction, and mixing of the coastal water at the Kuroshio Front
Daisuke Hasegawa¹, Takahiro Tanaka¹
¹ Japan Fisheries Research and Education Agency
- 11:00 - 11:15 Mixing and rolling with ocean gliders
Dennis Stanley¹, Charitha Pattiratchi¹, Ivica Janekovic¹
¹ The University of Western Australia, Oceans Graduate School and The UWA Oceans Institute, Australia
- 11:15 - 11:30 Submesoscale features associated with mesoscale dynamics in a stratified estuary
Urmaz Lips¹, Kai Salm¹, Taavi Liblik¹, Germo Väli¹, Nelli Rünk¹, Inga Lips²
¹ Tallinn University of Technology, Department of Marine Systems, Estonia
² EuroGOOS AISBL, Belgium
- 11:30 - 11:45 Glider Observations and Modeling of dissolved Methane from Nord Stream Leaks
Martin Mohrmann^{1,2}, Louise C. Biddle^{1,2}, Gregor Rehder³, Henry C. Bittig³, Bastien Y. Queste²
¹ Voice of the Ocean Foundation, Skeppet Ärans Väg 19, Västra Frölunda, 426 71, Sweden.
² Department of Marine Science, University of Gothenburg, Box 463,9 Göteborg, 405 30, Sweden.
³ Leibniz-Institute for Baltic Sea Research, Seestrasse 15, Rostock, D-18119, Germany.
- 11:45 - 12:00 Real-time and Continuous Monitoring of Magmatic Fluid Emissions in the Mayotte Sea using a SeaExplorer Glider
Alexandre Heumann^{1,2}, Félix Margirier¹, Laurent Beguery¹, Emmanuel Rinnert³, Carla Scalabrin³, Pascale Lherminier⁴
¹ ALSEAMAR
² University of Western Brittany
³ IFREMER, Geo-Ocean
⁴ IFREMER, LOPS
- 12:00 - 13:30 Lunch sponsored by Rockland, Reveljen - Big Room**
- 13:30 - 14:00 ROCKLAND Workshop, Reveljen - Big Room**
- 14:00 - 15:00 Oral session 12: Water mass transformation, Reveljen - Big Room**
- 14:00 - 14:15 Atmospheric and oceanic forcing of coastal deoxygenation along a western boundary
Juliane Wihsgott¹, Matthew Palmer¹, Alex Poulton², Ekaterina Popova³, Mike Roberts^{4,5}
¹ Plymouth Marine Laboratory, UK

² The Lyell Centre for Earth and Marine Sciences, Heriot-Watt University, Edinburgh, UK

³ National Oceanography Centre, Southampton, UK

⁴ Nelson Mandela University, Port Elizabeth, South Africa

⁵ University of Southampton, UK

14:15 - 14:30 Investigating oxygen variability from winter glider deployments in two distinct regions of the Labrador Sea

Nicolai von Oppeln-Bronikowski¹, Jannes Koelling², Eleanor Frajka-Williams³, Brad de Young¹

¹ Memorial University

² University of Washington

³ University of Hamburg

14:30 - 14:45 ADCP-based Oxygen Transport by Persian Gulf Water within the Upper Arabian Sea Oxygen Minimum Zone

Estel Font, Sebastiaan Swart¹, Gerd Bruss², Peter M.F. Sheehan³, Karen J. Heywood³, Bastien Y. Queste¹

¹ Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden

² Department of Marine Science and Fisheries, Sultan Qaboos University, Muscat, Oman

³ Centre for Ocean and Atmospheric Sciences, School of Environmental Science, University of East Anglia, Norwich, United Kingdom

14:45 - 15:00 Water Mass Transport from Arabian Sea to Bay of Bengal: a study utilizing Slocum G3 deep glider data.

Saraswathy Sabu, Abhisek Chatterjee¹, Aneesh Lotliker¹, Suresh

Kumar¹, Thangaprakash V P¹, Pattabhi Rama Rao E¹, Srinivasa Kumar T¹

¹ Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, India

15:00 - 16:00 Coffee with Poster session, Reveljen - Big Room

15:00 - 15:02 Trial of underwater glider operation under strong tides in the East China

JongJin Park^{1,2}, **Yumi Song²**, Heonwook Ha², Hyunsik Jo², Giboem Park², RaeEun Lim², Jaewon Lee²

¹ School of Earth System Science, Kyungpook National University, Daegu, Republic of Korea

² Center for Korea Autonomous Ocean observing System, Kyungpook Institute of Oceanography, Kyungpook National University, Daegu, Republic of Korea

15:02 - 15:04 University of the Virgin Islands Ocean Glider Laboratory: A new regional glider capability in the Caribbean Sea, Activities and Results

Doug Wilson¹

¹ University of the Virgin Islands

- 15:04 - 15:06 Innovative glider-based approaches to assess air-sea CO₂ fluxes in the Ligurian sea
PACO STIL¹, *Félix MARGIRIER², Laurence BEAUMONT³, Laurent BEGUERY², Laurent COPPOLA¹*
¹ Villefranche-sur-Mer oceanographic laboratory (LOV)
² ALSEAMAR (Rousset)
³ Technical division (INSU)
- 15:06 - 15:08 The study of Air-Sea Interactions and Mixed Layer Heat Budget in the Tropical North Atlantic with a Multi-Platform Observational Approach.
Elizabeth Siddle¹, *Karen Heywood¹, Benjamin Webber¹, Sarah Heasman²*
¹ Centre for Ocean and Atmospheric Sciences, School of Environmental Sciences, University of East Anglia
² AutoNaut Ltd.
- 15:08 - 15:10 Should we assimilate raw or processed data from moving platforms inside tide dominated region and 4D-Var DA system?
Ivica Janekovic¹, *Charitha Pattiaratchi¹*
¹ Ocean Graduate School and the UWA Oceans Institute The University of Western Australia Cnr Fairway and Service Road 4, M470 Crawley WA 6009, AUSTRALIA
- 15:10 - 15:12 Mapping slocum glider energy use
Jude van der Meer¹, *Adam Comeau¹*
¹ Dalhousie University, Biology, Canada
- 15:12 - 15:14 Using Seagliders to understand influences of tidal mixing on estuarine circulation in Puget Sound (Washington, United States)
Catherine Kohlman¹, *Lydia Kelley¹, Jackson Page-Roth¹, Caleb Flaim¹, Fritz Stahr¹, Charles Eriksen¹, Rick Rupan¹, Sasha Seroy¹*
¹ University of Washington
- 15:14 - 15:16 Study on ocean response to Typhoon Maysak using a position-keeping underwater glider
Inha Seo¹, JongJin Park^{1, 2}, *BongJoon Kim¹, Yunchang Kwak²*
¹ Department of Oceanography, Kyungpook National University, Daegu, Republic of Korea
² Center for Korea Autonomous Ocean observing System, Kyungpook Institute of Oceanography, Kyungpook National University, Daegu, Republic of Korea
- 15:16 - 15:18 Understanding Ecopuck chlorophyll fluorescence from Slocum gliders using laboratory observations and in situ field comparisons with HPLC data
Paul Thomson^{1, 2}, *Charitha Pattiaratchi^{1, 2}*
¹ The University of Western Australia, Oceans Graduate School, Australia
² The Integrated Marine Observing System (IMOS), Australia

- 15:18 - 15:20 PLOCAN Glider School – A decade of training and international engagement on ocean-glider technologies
Carlos Barrera¹, *Eduardo Caudet¹, Joaquin Hernandez-Brito¹*
¹ PLOCAN
- 15:20 - 15:22 Repeated Sectional Observations in the Seychelles-Chagos Thermocline Ridge Using Underwater Gliders
BongJoon Kim^{1, 2}, JongJin Park^{1, 3, 2}, Yunchang Kwak^{3, 2}, Heonwook Ha^{3, 2}, Hyunsik Jo^{3, 2}, Giboem Park^{3, 2}, Dong-Jin Kang⁴
¹ Department of Oceanography, Kyungpook National University, Daegu, Republic of Korea
² OceanObs Co., Ltd, Deagu, Republic of Korea
³ Center for Korea Autonomous Ocean observing System, Kyungpook Institute of Oceanography, Kyungpook National University, Daegu, Republic of Korea
⁴ Korea Institute of Ocean Science & Technology, Busan, Republic of Korea
- 15:22 - 15:24 A multi-robot approach as force multiplier for studying geomorphological and physical oceanographic processes off the Northern Catalan coast.
Roeland Develter¹, *Wieter Boone¹, Pere Puig², David Amblas³, Anna Sanchez-Vidal³, Marta Arjona-Camas^{3, 4}, Fred Fourie¹, Kobus Langedock¹, Chiara Monforte⁵, Cecilia Cabrera Molina², Luisa Gonçalves de Freitas³, Ruth Durán², Helena Fos Serdà³, Leandro Ponsoni¹*
¹ Flanders Marine Institute
² Institut de Ciències del Mar
³ University of Barcelona
⁴ CEFREM-CNRS-UPVD
⁵ Voice of the Ocean
- 15:24 - 15:26 Microglider for Swarm Operation as a Seafloor Node Data Recovery System
JAVIER BUSQUETS-MATAIX¹, *MANUEL CABRAL¹, SAMIR MOUFAKKIR¹, VICENTE DANVILA¹, DAVID BUSQUETS¹, JOSE-VICENTE BUSQUETS¹, VICTOR ESPINOSA¹*
¹ Universitat Politècnica de Valencia
- 15:26 - 15:28 Lateral mixing around a convective patch in the Labrador Sea
Emelie Breunig^{1, 2}, *Eleanor Frajka-Williams¹, Louis Clément³*
¹ Institute of Oceanography, Universität Hamburg, DE
² Max Planck Institute for Meteorology, DE
³ National Oceanography Centre, UK
- 15:28 - 15:30 Sustained, Autonomous Observations Beneath Dotson Ice Shelf
Craig M. Lee¹, *Luc Rainville¹, Jason I. Gobat¹, Pierre Dutrieux², Geoff Shilling¹, James Girton¹, Knut Christianson³, Sang-Hoon Lee⁴*
¹ Applied Physics Laboratory, University of Washington, Seattle, USA
² British Antarctic Survey, Cambridge, United Kingdom
³ Earth and Environmental Science, University of Washington, Seattle, USA

⁴ Korean Polar Research Institute, Incheon, Republic of Korea

15:30 - 15:32 Microcredentials to support the development of the ocean workforce

Josh Kohut¹, **Liesl Hotaling²**, **Hans VanSumeren³**

¹ Rutgers University

² Marine Technology Society

³ Northwestern Michigan College

15:32 - 15:34 Tips Tricks and homebrew tools . little things that will make your life easier from 15 yrs of operating gliders

Dennis Stanley¹

¹ University of Western Australia

15:34 - 15:36 Extreme ocean mixing in coastal seas

Arnaud Valcarcel^{1, 2}, **Craig Stevens^{3, 4}**, **Joanne O'Callaghan^{2, 4}**, **Sutara Suanda⁵**, **Glenn Carter⁶**, **Cynthia Bluteau⁷**, **Fiona Elliott⁸**

¹ University of Otago, Department of Marine Science, Dunedin, Aotearoa New Zealand

² Oceanly Science Limited, Wellington, Aotearoa New Zealand

³ National Institute of Water and Atmospheric research, Ocean Observations, Wellington, Aotearoa New Zealand

⁴ University of Auckland, Department of Physics, Auckland, Aotearoa New Zealand

⁵ University of North Carolina in Wilmington, Department of Physics and Physical Oceanography, Wilmington, USA

⁶ University of Hawai'i at Manoa, Department of Oceanography, Honolulu, State of Hawai'i

⁷ Institute of Ocean Sciences, Fisheries and Oceans Canada, Sidney, British Columbia, Canada

⁸ University of Bergen, Geophysical Institute, Bergen, Norway

15:36 - 15:38 Applications of ocean gliders for climate change monitoring of Essential Ocean Variables (EOVs) in the Northeast Atlantic

Céline Burin¹, **Peter Croot¹**

¹ Earth and Ocean Sciences, School of Natural Sciences and Ryan Institute, University of Galway

15:38 - 15:40 New web applications supporting UK glider data assembly centre near-real time operations

Jordan Atherton¹, **Emma Gardner¹**, **Robyn Owen¹**

¹ National Oceanography Centre, British Oceanographic Data Centre, UK

15:40 - 16:00 A new microstructure sensor for ocean gliders

Lucas Merckelbach¹, **Heinz Schelwat²**, **Gerd Seidel²**

¹ Helmholtz Zentrum Hereon, Institute of Coastal Dynamics, Max-Planck-Str. 1,

21502, Geesthacht, Germany

² Sea and Sun Technologies GmbH, Arndstr 9-13, Trappenkamp, Germany

16:00 - 17:00 Oral session 13: Gliders in the Ocean Observing puzzle, Reveljen - Big Room

16:00 - 16:15 Glider observations in the Western Mediterranean Sea: their assimilation and impact assessment using four analysis and forecasting systems

Ali Aydogdu¹, Romain Escudier², Jaime Hernandez-Lasceras^{1, 3}, Carolina Amadio⁴, Jenny Pistoia¹, Gianpiero Cossarini⁴, Baptiste Mourre³, Elisabeth Remy²

¹ Euro-Mediterranean Center on Climate Change (CMCC)

² Mercator Ocean International (MOi)

³ Sistema d'observació i predicció costaner de les Illes Balears (SOCIB)

⁴ Istituto nazionale di oceanografia e di geofisica sperimentale (OGS)

16:15 - 16:30 CLOINet: adaptive sampling and ocean state reconstructions through remote-sensing, in-situ sparse observations and deep learning

Eugenio Cutolo^{1, 2}, Simon Ruiz², Ronan Fablet¹, Nikolaos D. Zarokanellos³, Carlos Granero¹

¹ IMT Atlantique, CNRS UMR Lab-STICC, INRIA team Odyssey, Brest, France

² IMEDEA (CSIC-UIB), Esporles, Spain

³ Balearic Islands Coastal Observing and Forecasting System (SOCIB), Palma, Spain

16:30 - 16:45 Using a digital twin to Bring researchers closer to ocean glider observations

Justin Buck¹, Alvaro Lopez¹, Nick Hawes², Jeff Poulton¹, Charlotte Williams¹, Ashley Morris¹, Bruno Lacerda², Alexandra Kokkinaki¹

¹ National Oceanography Centre, UK

² Oxford Robotics Institute, University of Oxford, UK

16:45 - 17:00 Integrated studies from glider and multiplatform observations in the SE Bay of Biscay

Ivan Manso-Narvarte¹, Asier Nieto¹, Guillermo Boyra¹, Guy-Aurèle Fievet¹, Almudena Fontan¹, Marina Chifflet¹, Ainhua Caballero¹, Udane Martinez¹, Beatriz Sobradillo¹, Anna Rubio¹

¹ AZTI Marine Research, Basque Research and Technology Alliance (BRTA), Pasaia, 20110, Spain

Friday 14 June 2024

09:00 - 10:30 Oral session 14: Increasing glider native capabilities, Reveljen - Big Room

09:00 - 09:15 ECO-Gliders: An autonomous-based oceanographic and ecological mission to inform offshore wind development

Josh Kohut¹, Grace Saba¹

¹ Rutgers University Center for Ocean Observing Leadership

09:15 - 09:30 Sustainable ocean monitoring for industrial applications: a synergistic approach

using autonomous vehicles

*Virginie Ramasco¹, **Pierre Priou¹**, Katherine Dunning¹, Morten Thorstensen¹, Peygham Ghaffari¹, Peer Fietzek², Daniel Hayes³, Orens Pasqueron de Fommervault⁴, Harald Lura⁵, Lionel Camus¹, Salve Dahle¹*

¹ Akvaplan-niva

² Kongsberg Discovery

³ Cyprus Subsea

⁴ Alseamar

⁵ ConocoPhillips

- 09:30 - 09:45 Integrating Advanced Payloads with Underwater Gliders
Daniel Hayes¹, Sergey Vekli¹, Rana Abualhaija¹, Jerald Reodica¹, Loizos Groutas¹, Ehsan Abdi²
¹ Cyprus Subsea Consulting and Services C.S.C.S. Ltd, Cyprus
² Akvaplan-Niva, Norway

- 09:45 - 10:00 The Nortek AD2CP-Glider
Ketil Horn¹
¹ Nortek Group

- 10:00 - 10:15 Getting the best of your RBR instruments: state-of-the-art post-processing for RBR CTDs and optodes.
Mathieu Dever¹, Jean-Michel Leconte¹, Taylor Rushton¹
¹ RBR

- 10:15 - 10:30 In Situ Data Processing of Microstructure Turbulence from Gliders
Judah Goldberg¹, Jean-Philippe Juteau¹, Pat Welch², Romain Tricarico¹
¹ Rockland Scientific, Canada
² Oregon State University, College of Earth Ocean and Atmospheric Sciences, USA

- 10:30 - 11:00 Coffee Break, Reveljen - Big Room**

- 11:00 - 12:15 Oral session 15: Increasing glider native capabilities, Reveljen - Big Room**

- 11:00 - 11:15 The RBR value: A new generation of glider sensors.
Jon Taylor¹
¹ RBR Global

- 11:15 - 11:30 Towards radioactivity monitoring in confined environments
Angelos Mallios¹, Emanuele Coccolo², Sergey Yakovlev², David Cabecinhas³, Luis Sebastião³, Pedro Batista³, Antonio Pascoal³, Eduardo Cunha³, Francisco Branco³, Christos Antoniou⁴, Simon Vellas⁴, Panagiotis Mertikas⁴, Valsamis Ntouskos⁴, Konstantinos Karantzas⁴, Ioannis Madesis⁵, Varvara Lagaki⁵, Georgios Siltzovialis⁵, Theodoros Mertzimekis⁵, Richard Camilli⁶
¹ Ploa Technology Consultants S.L., C/Pic de Peguera 11, Parc UdG, 17003

Girona, Spain

² EvoLogics GmbH, Wagner-Régeny-Straße 4, 12489 Berlin, Germany

³ Institute for Systems and Robotics, Laboratory for Robotics and Engineering Systems, Instituto Superior Técnico, Universidade de Lisboa, Portugal

⁴ Remote Sensing Lab, National Technical University of Athens, Greece

⁵ Department of Physics, National and Kapodistrian University of Athens, Zografou Campus, Athens, Greece

⁶ Applied Ocean Physics & Engineering, Woods Hole Oceanographic Institution, Woods Hole, MA 02543, USA

- 11:30 - 11:45 Modern Command and Control: The future of interoperability of heterogeneous fleets of Marine Autonomous Systems
Ashley Morris¹, *Alvaro Lorenzo-Lopez¹, Dan Jones¹, Trishna Saeharaseelan¹, James Kirk¹, Owain Jones¹, Izzat Kamarudzaman¹*
¹ National Oceanography Centre
- 11:45 - 12:00 Backseat Sensing on Slocum Gliders: A modular microcontroller based architecture for rapid sensor and autonomy integration; performance in the field.
Justin Shapiro¹
¹ Applied Physics Laboratory, University of Washington
- 12:00 - 12:15 A backseat driver system for Slocum gliders operated under ice
Yaomei Wang¹, *Benjamin Allsup¹, Alexander B Phillips¹, Georgios Salavasidis¹*
¹ Marine Autonomous and Robotic Systems, National Oceanography Centre, European Way, Southampton, SO14 3ZH, United Kingdom
- 12:15 - 12:30 **Wrap up, thanks and closing remarks, Reveljen - Big Room**
- 12:30 - 13:30 **Lunch, Reveljen - Big Room**