GEOHAB 2013 | Rome Italy
6 - 10 May 2013
Programme
General Information

Registration will be open daily from 8.30 to 17.00.

The workshop will be held in the Marconi Hall on the 1st floor of the building accessing from its main entrance on piazzale Aldo Moro, 7.

Scientific sessions will take place in the Aula Convegni on basement floor of the building, entering from its left side on via dei Marrucini.

Coffee breaks and poster sessions will take place in the Arangio Ruiz hall which is located next to the Aula Convegni on the basement floor.

Monday 6 May 2013

09.30-18.00  Workshop: Multibeam Backscatter – State of the Technology, Tools & Techniques

Organizers: Erin Heffron and Moe Doucet, QPS; Craig Brown, McGregor GeoScience Ltd., Geoffroy Lamarche and Arne Pallentin, NIWA; Rhys Cooper and Alan Stevenson, BGS.

Workshop Themes:
- What is backscatter?
- What do users and data providers want to get from backscatter?
- What can be expected from backscatter?
- What are the potentials and limitations of existing tools?

18.00  Ice breaker party
Tuesday 7 May 2013

08.30-09.30  GeoHab 2013 Conference Opening

Session MARINE POLICIES

Linking science to marine policies for conservation

09.30-09.45  Peter T. Harris, Miles McMillan-Lawler, Elaine K. Baker and Jonas Rupp
Global seafloor geomorphic features map: applications for ocean conservation and management

09.45-10.00  Fionnuala McBreen and Nicola Church
The differing requirements for habitat maps for UK marine conservation

10.00-10.15  Riikka Venesjärvi, George Gogoberidze, Miina Karjalainen, Anu Kaskela, Kirsi Kostamo, Aarno Kotilainen, Ari Laine, Annukka Lehikoinen, Varpu Mitikka, Marina Orlova, Minna Ronkainen, Daria Ryabchuk & TOPCONS partners
Marine spatial planning tool for the conservation of the most sensitive underwater areas in the Eastern Baltic Sea

10.15-10.30  G.V. Ungureanu, A.V. Lazar, R. Lazar, A.D. Balahura, A.D. Ionescu, D. Micu and V. Nita
Habitat mapping of Romanian marine SCI Natura 2000 sites

10.30-11.00  coffee break

11.00-11.15  Genoveva Gonzalez Mirelis, Pål Buhl-Mortensen and Lene Buhl-Mortensen
Modelling habitats of special interest in support of spatial management: Vulnerable benthic habitats of Norway

11.15-11.30  Cordelia H. Moore, Andrew Heyward, Ben Radford and Mike Cappo
Species distribution modelling as a management tool to protect vulnerable species

11.30-11.45  Mary Young, Dan Malone and Mark Carr
Using species distribution models to evaluate the placement of California marine protected areas

11.45-12.00  Michelle Linklater, Colin Woodroffe, Brendan Brooke, Sarah Hamylton, Scott Nichol and Alan Jordan
Submerged reef structures and benthic habitats surrounding the Balls Pyramid shelf, Southwest Pacific Ocean: Implications for reef development beyond the modern boundary for coral reef growth

12.00-12.15  Alan Jordan, Peter Davies, Tim Ingleton, Stefan Williams, Michelle Linklater, Edwina Foulsham, Bob Creese
Seabed mapping to support new marine estate governance arrangements in New South Wales, Australia

12.15-12.30  Christian K. Wilson
The perfect habitat map

12.30-12.45  Massimo Di Stefano and Scott Gallagher
An open source approach to Exploring seafloor habitats: Geospatial data analysis using IPython Notebook with GRASS & R

12.45-14.00  lunch
Session COMPLEX AREAS

Habitat mapping in geologically complex areas

14.00-14.15  Jess Hillman, Andrew Gorman, Arne Pallentin, Geoffroy Lamarche and Ingo Pecher
Predictive mapping of seafloor depressions on the Chatham Rise using supervised classification of backscatter data

14.15-14.30  Michela Angiolillo, Simonepietro Canese, Michela Giusti, Sabrina Agnesi and Leonardo Tunesi
Rocky mesophotic assemblages of the Eastern coast of Giglio Island (Tuscany Archipelago, Tyrrhenian Sea): a biodiversity hotspot

14.30-14.45  Marzia Rovere, Fabiano Gamberi, Heba Rashed, Alessandra Mercorella, Elena Pecchioni, Orlando Vaselli, Elisa Leidi and Andrea Gallerani
Multibeam backscatter-driven investigations reveal previously unknown cold seeps in the southeastern Tyrrhenian Sea

Geohabitat mapping in the Aegean and Ionian Seas, Mediterranean Sea: a pilot study for the sustainable management of the coastal resources

15.00-15.15  H. Gary Greene and J. Vaughn Barrie
Hazards and Habitats – Construction and Destruction of Marine Benthic Habitats in the Pacific NW of USA and Canada

15.15-15.45  coffee break

Session TECHNOLOGY

Advances in Technology and Methodology for Mapping Habitats

15.45-16.00  Tim Le Bas, David Sear and Paul Baggaley
Ultra-high resolution acoustic survey in turbid waters. Initial results from Britain’s Atlantis – Dunwich town.

16.00-16.15  Alix Laferriere, Arne Pallentin and Geoffroy Lamarche
Validation of supervised segmentation and classification of backscatter data of Barrett’s Reef, Wellington South Coast, using drop-camera videos.

16.15-16.30  Gill Scott, Xavier Monteys, Paul Harris, Janine Guinan and Peter Hung
Seabed characterisation for predictive grain-size mapping using multibeam backscatter data and spatially weighted regression models

16.30-16.45  Erin Heffron, Moe Doucet, Craig J. Brown, Geoffroy Lamarche and Rhys Cooper

16.45-17.00  L. Fillinger and T. Funke
Surface area determination in underwater video transects: how 3-D modelling can help

17.00-18.00  POSTER SESSION
Session MARINE POLICIES

Araújo, T. C. M, Camargo, J. M. R. and Maida, M.
Application of side scan sonar images as a tool for the management of the coastal protected area Costa dos Corais – northeast Brazil

Björkman Ulrika and Gammal Johanna
Marine Spatial Planning - from the seafloor to the decision maker’s desk

Nicola Church, Amy Ridgway, Alice Cornwaite and Hannah Carr
Using scientific evidence to underpin advice on UK Marine Protected Areas – an MCZ example

Guy Cochrane
Use of the Coastal and Marine Ecological Classification Standard (CMECS) in Glacier Bay National Park, Alaska

M. Conti, A. Barbano, S. D’Angelo and A. Fiorentino
A map of the morphological characteristics of the Italian seas

Vincenzo Di Martino and Bessy Stancanelli
Marine benthic cartography of two interesting marine areas in the S - E Sicily: s.i.c. ITA090027 and ITA090028

Ezhova E., Sharton A. and Volodina A.
Mapping of macroalgae species and communities distribution in South-Eastern Baltic Sea (Russian EEZ) for conservation purposes

Rich Ford and Jenny Black
Habitat mappings application in assessing benthic impacts from fishing in New Zealand

C. Heinrich, H.-C. Reimers and K. Schwarzer
Application of hydro-acoustic techniques for broad scale seafloor classification and monitoring in the context of the Marine Strategy Framework Directive

Aarno T. Kotilainen, Anu M. Kaskela, Frank Herings, Kirsi Kostamo, Ari O. Laine, Minna Ronkainen, Miina Karjalainen and TOPCONS Partners
Information on seabed geology and biology – a solid base for marine spatial planning: The Baltic Sea Case

Rikk Kvitek and Mary Young
Completion of and lessons from the 6000 km2 California Seafloor Mapping Project: Why it was done, how it was done, what we learned, and how the data are being used.

Ari O. Laine, Miina Karjalainen, Anu Kaskela, Kirsi Kostamo, Aarno Kotilainen, Varpu Mitikka, Marina Orlova, Minna Ronkainen, Daria Ryabchuk, Riikka Venesjärvi and TOPCONS partners
TOPCONS - Transboundary tools for spatial planning and conservation of the Gulf of Finland, the Baltic Sea

David Limpenny, Carole Kelly, Neil Golding, Chris Pirie, Roger Proudfoot,
UK Marine Conservation Zone - Data and Evidence Collection Programme

Eimear O’Keefe and Fergal McGrath
Kenmare River EUNIS Habitat Map and Reef Profile

Session COMPLEX AREAS

Alex C. Bastos, Rodrigo L. Moura, Gilberto M. Amado-Filho, Daniele P. Dagostini, Ronaldo B. Francini-Filho, Arthur Z. Güth, Paulo Y. G. Sumida, Michel Mahiques, and Fabiano L. Thompson
Sinkhole-like features (Buracas) as an Important Marine Habitat in the Abrolhos Bank
Bracchi V.A., Savini A., Marchese F., Basso D. and Corselli C.
Shallow water carbonate buildings in the Mediterranean Sea: geomorphological expression of coralligenous habitat

F.L. Chiocci, D. Ridente and D. Casalbore
From multibeam seafloor mapping to standard cartography of geomorphic features. Problems from a Mediterranean perspective

Ranko Crmarić, Igor Felja and Mladen Juračić
Neretva River delta - clastic delta in a karst environment (Adriatic Sea, Croatia)

Letizia Di Bella, Alivernini Mauro and Antonio Faugno
Benthic foraminifera from Terracina basin: preliminary data of environmental characterization

José Maria Landim Dominguez
Quaternary Evolution and Geodiversity at the Eastern Brazil Shelf

Jens Greinert
Spatially corrected gas flux estimates using seafloor backscatter: Example from a seep area in the Black Sea

Ingrassia M., Martorelli E., Bosman A., Danovaro R., Lombardi S., Rastelli E., Corinaldesi C., Dell’Anno A. and Chiocci F.L.
First evidence of active cold seep offshore Zannone Island: a possible new shallow-water habitat in the Tyrrhenian Sea (Italy)

Anu M. Kaskela, Aarno T. Kotilainen, Igor Neevin and TOPCONS Partners
Use of Multibeam Sonar Backscatter Data for Surface Substrate Mapping in Complex Marine Area, a Case Study in the Northern Baltic Sea

Tom Kwasnitschka Virtual Fieldwork on the Seafloor: Close Range Photogrammetry from ROV Imagery
M. Prampolini, F. Foglini, A. Pasuto, M. Soldati and C. Tonelli
Geological habitat mapping for coastal geohazard management Coupling terrestrial and marine datasets in the NW area of Malta

Daria Ryabchuk, Vladimir Zhamoida, Marina Orlova, Igor Neevin, Aleksandr Sergeev and Nickolay Kovalchuk
Spatial variation of marine landscapes abiotic components in the eastern gulf of finland (baltic sea)

Session TECHNOLOGY

Norm Campbell, Simon Collings, Lisa-Marie Harrison, John Keesing, Damian Thomson, Gordon Keith (CSIRO); Paul Kennedy, Dariusz Lejtman, Mark Sinclair, Hugh Parker and Mark Penley (Fugro)
A comparison of EM3002 multibeam backscatter and LiDAR reflectivity for separating seafloor classes

Norm Campbell, Simon Collings, Simon Allen, Thomas Heege and Marcus Bindel
A comparison of depths derived from WorldView 2 spectral data with those from a LiDAR survey and a single-beam echosounder

Simon Collings, Norm Campbell, Simon Allen and John Keesing
Seabed discrimination based on WorldView 2 size-adjusted log spectral bands

Simon Collings, Norm Campbell, Lisa-Marie Harrison (CSIRO); Dariusz Lejtman, Mark Sinclair, Hugh Parker and Mark Penley
Seamless reflectivity mosaics from LiDAR waveform data

Markus Diesing, Sophie Green, Murray Lark, David Stephens, Heather Stewart and Dayton Dove
The MAREMAP Acoustic Data Interpretation Workshop: Results and Implications
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<td>08.30-08.45</td>
<td>Myriam Lacharité, Anna Metaxas and Peter Lawton</td>
<td>An object-based semi-automated method to assess fine-scale benthic complexity in deep-water continental shelf habitats</td>
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<td>08.45-09.00</td>
<td>Anette Bäck and Michael Tuldahl</td>
<td>Lidar-based mapping of ecological values in shallow marine areas</td>
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<td>09.00-09.15</td>
<td>Terje Thorsnes, Harald Brunstad, Petter Lågstad, Shyam Chand, Aivo Lepland and Arnfinn Karlsen</td>
<td>Using hullborne multibeam systems, autonomous underwater vehicles (AUVs), Synthetic Aperture Sonar (SAS) and optical systems to map habitats associated with gas seepage</td>
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### Session NATIONAL PROGRAMMES

#### National Seabed Mapping Programmes

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<td>09.15-09.30</td>
<td>Alan Stevenson, Russell Wynn and John Howe</td>
<td>The UK Marine Environmental Mapping Programme (MAREMAP)</td>
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<td>09.30-09.45</td>
<td>Margaret Dolan, Terje Thorsnes, Sigrid Elvenes, Valérie Bellec, Lilja Rún Bjarnadóttir</td>
<td>Mapping the rest of Norway’s seabed in under 100 years – how can we do it?</td>
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<td>09.45-10.00</td>
<td>Anu Kaskela, Jyrki Hämäläinen and Kimmo Alvi</td>
<td>Geological inventories of FINMARINET project</td>
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<td>10.00-10.15</td>
<td>Ruggero M. Capperucci, Peter Holler, Adam Kubicki, Alexander Bartholomä</td>
<td>Developing new concepts for environmental monitoring: the WIMO Project (Germany)</td>
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<td>10.15-10.45</td>
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<td>10.45-11.00</td>
<td>Claudia Propp, Jennifer Valerius and Manfred Zeiler</td>
<td>Understanding the seabed: full coverage sediment mapping and modeling of morpho- and sediment dynamics in the German EEZ</td>
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<td>11.00-11.15</td>
<td>Ahuva Almogi-Labin, Orit Hyams-Kaphzan, Rani Calvo, Simona Avnaim-Katav, R., Hadar Elyashiv and Barak Herut</td>
<td>Sediment and habitat characterization of the Israeli Mediterranean shelf</td>
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<td>11.30-11.45</td>
<td>Rachel Przeslawski, Scott Nichol, Johnathan Kool, Kim Picard, Lynda Radke, Justy Siwabessy, Andrew Heyward, Marcus Stowar, Jamie Colquhoun, Phil Bouchet, Tom Letessier and Jessica Meeuwig</td>
<td>Benthic habitat mapping to support marine reserve management in Australia: A case study from the tropical carbonate shelf of the Timor Sea.</td>
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11.45-12.00  Martin Isaeus  
*Modeling species distributions and biological conservation values for coastal zone management*

**Session MULTIDISCIPLINARY**

**Multidisciplinary and multiscalar approaches to habitat mapping**

12.00-12.15 Vincent Lecours, Rodolphe Devillers, Evan N. Edinger, Craig J. Brown and Vanessa L. Lucieer  
*Exploring the role spatial scale plays in marine habitat mapping using multiscale geomorphometric analyses*

12.15-12.30 Thijs Christiaan van Son, Rune Halvorsen, Karl Norling, Torgeir Bakke, Maria Kaurin and Fredrik Melsom  
*Identification of fine-scale ecoclines describing species-environment relationships in a marine sediment system*

12.30-14.00 lunch

14.00-14.15 Zhi Huang and Scott Nichol  
*A continental-scale classification of submarine canyons for the Australian margin: a first-order approach using morphometrics, shape and location*

14.15-14.30 Dario Fiorentino, Roland Pesch, Carmen-Pia Günther, Winfried Schröder and Bastian Schuchardt  
*Multi-step Approach to Validate a Seascape Classification at Three Levels of Spatial Resolution with the Beta-Diversity Distribution of Benthic Assemblages in the North Sea*

*Habitat mapping and morphological characterization of extremely shallow environments through spectral and textural analysis of high resolution bathymetric and backscatter data*

14.45-15.00 Silvia N. Bourguignon, Alex E. da Silva, Valéria S Quarema and Alex C. Bastos  
*The Influence of Long-Term Sedimentary Regimes on Seabed Marine Habitat Distribution (Eastern Brazilian Shelf)*

15.00-15.15 Helenice Vital and Viviane Testa  
*Large – scale seabed character and habitats of northern Rio Grande do Norte inner and middle shelf, NE Brazil*

15.15-15.45 coffee break

15.45-16.00 Anne-Cathrin Wölfl, Chai Heng Lim, H. Christian Hass, Karsten Lettmann, Gerhard Kuhn and Jörg-Olaf Wolff  
*Detection of factors that control the marine habitat distribution in a periglacial environment (Potter Cove, King George Island, Antarctica)*

16.00-16.15 Alessandro Cau, Maria C. Follesa, Rita Cannas, Flavio Sacco, Paolo E. Orrù, Samuele Todde and Enrico Paliaga  
*Multidisciplinary and multiscalar approach for a sustainable management of Red Coral (Corallium rubrum, L. 1758) from the island of Sardinia (West Mediterranean Sea).*

16.15-16.30 Oscar Pizarro, Claudio Lo Iacono, Asher Bender, Daniel Steinberg, Matthew Johnson-Roberson, Stefan Williams, Jon Henderson and Jeff Royal  
*Opportunistic Habitat Mapping from Archeological Surveys in the Egadi Islands, western Sicily (Mediterranean Sea)*
16.30-16.45 Crescenzo Violante, Aniello Aloia, Loredana Battaglini, Silvana D’Angelo, Floriana Di Stefano, Maria Lettieri, Andrea Fiorentino and Giovanni Fulvio Russo
The submerged landscape and habitats off the Cilento coast (Eastern Tyrrhenian Sea) – Linking geo- and bio-diversity at different scale in a European Geopark

Predicting the occurrence of Natura 2000 habitat Reefs in complex archipelago areas of the Northern Baltic Sea

17.00-18.00 POSTER SESSION

19.30-23.00 Conference Dinner
## Session TECHNOLOGY

**S.Elvenses, M.F.J. Dolan, V.K. Bellec and P.B. Mortensen**  
Using alternative bathymetry data to complement multibeam echo-sounder data in sediment and biotope mapping

**Ibon Galparsoro, Marc Roche and Koen Degrendele**  
Supervised and unsupervised classification of sediment types on marine shallow waters using multibeam echosounder data and in situ sampling

**Heege T., Hartmann K. and Critchley D.**  
Evaluation of Satellite Derived Bathymetry Surveys conducted worldwide

**Kristjan Herkül, Jonne Kotta, Tiit Kutser and Ele Vahtmäe**  
Relating remotely sensed optical variability to marine benthic biodiversity

**C. McGonigle and J. Collier**  
Predicting seafloor sediment properties from acoustic backscatter: a comparative evaluation of three methods

**Johan Nyberg and Anna Apler**  
Using hydroacoustic methods to detect and map fibrous sediments

**Arne Pallentin and Geoffroy Lamarche**  
Shallow water multibeam data collected with a mid-water system. How well does it work?

**Pettersson Asa**  
Remote grain size analysis through backscatter data – implications from the southern Baltic Sea

**Kristina Pikelj, Danijela Bogner, Stipe Muslim, Mladen Juračić and Vjekoslav Tičina**  
Seabed mapping in a mixed carbonate-siliciclastic Eastern Adriatic shelf using a quantitative split-beam echo sounder

**F.S. Rende, T. Bacci, S. Canese, C. Maggi, O. Nonnis, M. Penna, L. Rossi, B. Trabucco and A.M. Cicero**  
Underwater photogrammetry: an integrative method for mapping marine seagrasses on seafloor

**Roche Marc, Degrendele Koen & De Mol Lies**  
Constrains and limitations of multibeam echosounders Backscatter Strength measurements for monitoring the seabed. Surveyor and geologist point of view

**Schneider v. Deimling and Wilhelm Weinrebe**  
A low frequency multibeam assessment: subbottom mapping of shallow gas by enhanced penetration and angular response anomaly

**Timm Schoening, Melanie Bergmann and Tim W. Nattkemper**  
A machine-learning system for the automated detection of megafauna and its applicability to unseen footage

**David Stephens and Markus Diesing**  
Comparing supervised classification methods for prediction of substrate type using multibeam acoustic and legacy grain-size data

**Helena Strömberg, Sara Claesson and Duncan Mallace**  
The use of statistical methods for identification and classification of habitats from hydrographic data of different instruments.

**PA. Zapata-Ramírez, G. Landi, M. Palma, D. Ferraris, M. Ponti, U. Pantaleo, M. Meidinger, V. Markantonatou, S. Coppo and C. Cerrano**  
The visualization of geographical dataset on mobile devices using Augmented Reality application based: a case of study from Liguria Region
**Session NATIONAL PROGRAMMES**

Zyad Al-Hamdani and Jørn Bo Jensen  
*Implementing downscaling concept in mapping shallow waters marine habitats*

Paloma Passos Avena and José Maria Landim Dominguez  
*Marine Habitat Mapping on the Continental Shelf off Salvador, Bahia, Brazil*

*The morphology of south Pernambuco continental shelf, northeastern Brazil*

MAREMAP Partners  
*Marine Environmental Mapping Programme – The UK approach to delivery of common geoscientific objectives in marine mapping*

Gordon Keith and Rudy Kloser  
*Seabed multi-beam backscatter mapping of the Australian continental margin.*

Luke Edwards, Dr Stefan Williams, Mat Wyatt, Dr Jenni Harrison, Lachlan Toohey, Mark Gray, Dan Marrable, Ariell Friedman, Daniel Steinberg and Ben Radford  
*CATAMI (Collaborative and Annotation Tools for the Analysis of Marine Imagery and video) – Unlocking the potential of marine imagery*

Terje Thorsnes, Margaret Dolan, Valérie Bellec, Reidulf Boe, Sigrid Elvenes and Lilja Rún Bjarnadóttir  
*MAREANO - an integrated national seabed mapping programme providing knowledge for ocean management*

Markku Viitasalo, Penina Blankett, Anna-Leena Downie, Jan Ekebom, Michael Haldin, Kirsi Kostamo and Minna Ronkainen  
*Mapping of Marine Biodiversity in the Baltic Sea: Experiences from a first year of comprehensive inventories in the Finnish sea areas*

Helenice Vital, José M Landim Dominguez, Alex C Bastos, Roberto L Barcellos, Tereza C. M. Araújo, George Satander S Freire, Valdir A V Manso, Carmen R Parisoto Guimarães and Odete F M Silveira  
*Geodiversity and biodiversity of substrates in the continental shelf, Working Group 2.1 – INCT AMBTROPIC, Brazil*

**Session MULTIDISCIPLINARY**

*The coastal plain and seafloor mapping of an oceanic island sheltered coast – The case of Sueste Bay, Fernando de Noronha, South Atlantic, Brazil.*

Ruggiero M. Capperucci, Winny Adolph, Dorothee Hodapp, Richard Jung, Alena Schmidt, Peter Holler, Alexander Bartholomä, Manfred Ehlers, Uwe Sörgel, Helmut Hillebrand and Hubert Farke  
*From 630 km to the ground: a new multiscale approach to scientific habitat monitoring of intertidal and subtidal areas*

Carol Cotterill, Helen Miller, Jon Bull and Justin Dix  
*Holocene pollution signals and associated changes in the benthic habitat of a freshwater lake: A case study from Windermere, UK*

Andrea Deiana, Giacomo Deiana, Florian Holon, Augusto Navone, Paolo E. Orrù, Pieraugusto Panzalis, Enrico Paliaga and Samuele Todde  
*High-resolution survey for Coralligenous habitat mapping applied to environmental assessment and management of a Marine Protected Area (Tavolara - Punta Coda Cavallo / NE Sardinia - Italy)*

Margaret Dolan and Vanessa Lucieer  
*The new wave of bathymetry data – uses and limitations for marine benthic habitat mapping and geomorphology.*

Yael Leshno, Yael Edelman-Furstenberg and Chaim Benjamiini  
*Tracking coastal anthropogenic modification using live-dead mollusk assemblages (Israeli Mediterranean)*
Session ENVIRONMENTAL ASSESSMENT

Geoscience Characterization of the Seabed for Environmental Assessment

08.30-08.45  Oyvind Fjukmoen  
Sensitivity Mapping at Small Scales: Input to Risk Based Decision Support for the Oil and Gas Industry

08.45-09.00  Carol Cotterill, David Long, Dayton Dove, Tor Inge Tjelta, Leo James, C. F. Forsberg, S. Mulley and Callum Duffy  
Dogger Bank: Quantifying the temporal evolution in landscapes for a marine renewable energy development.

09.00-09.15  Kerstin Jerosch, Michael Schlüter, Torben Gentz and Roi Martinez  
Spatial modeling to predict and quantify areas of free gas in surficial sediments of the Belt Sea, Baltic Sea

09.15-09.30  Bryony Pearce  
High Resolution, Time-Series Acoustic Surveys Identify Ecological Benefits of Windfarm Developments

Session DEEP SEA

Deep-Sea Habitats

09.30-09.45  Jennifer M. Durden, Henry Ruhl, Brian J. Bett, David S. M. Billett, Veerle A. I. Huvenne, Katleen Robert and Daniel O. B. Jones  
The importance of abyssal hill features in the spatial variation of invertebrate megabenthic communities

09.45-10.00  Geraint Harris-Bryant, Paul Collins, Kevin O’Connell, Jennifer Love, Joanna McCall, Dr Claire Goodwin and Andrew Griffith  
A deep sea dilemma: a practical method for assessing the conservation importance of deep sea sponge communities

10.00-10.15  Veerle A.I. Huvenne, Tim P. Le Bas, Nils Piechaud, Kerry Howell, Steve D. McPhail and Doug G. Masson  
Monitoring of deep-water conservation areas through AUV sidescan sonar mapping: checking the status of the Darwin cold-water coral mounds after 8 years of protection

10.15-10.45  coffee break

10.45-11.00  Alessandro Cau, Maria. C. Follesa, Rita Cannas, Angelo Cau, Giacomo Deiana, Paolo E. Orrù and Enrico M. Paliaga  
Habitat mapping in upper bathyal seabed: target species in soft sediments (Isidella elongata Esper, 1788) and hard surfaces (Leiopathes glaberrima Pallas, 1766) (SW Sardinian margin – West Mediterranean Sea)

11.00-11.15  Fernando Tempeira, José Nuno Pereira, Chris Yesson, Andreia Braga Henriques, Filipe Porteiro, Valentina Matos, Miguel Souto, Brigitte Guillaumont and Ricardo Serrão Santos  
Deep-sea biotope cataloguing and mapping in the Azores (NE Atlantic)
Session PREDICTIVE

Predictive Habitat Modeling

11.15-11.30  Nils Piechaud, Kerry Howell, Jaime Davies, Rebecca Ross and Heather Stewart
Mapping the distribution of deep-sea Vulnerable Marine Ecosystems: an assessment of different modelling methods

11.30-11.45  Vanessa Lucieer, Zhi Huang, Justy Siwabessy, Keith Hayes
How robust are your prediction derivatives? Error propagation modelling for seafloor terrain analysis of multibeam bathymetric data using dynamic simulation tools

11.45-12.00  Nicola Church
Predictive modeling of the distribution of the OSPAR threatened and/or declining listed marine habitat “Sea-pens and burrowing megafaunal communities” in UK waters

12.00-12.15  Mireia Valle, Guillem Chust, Andrea del Campo, Joxe Mikel Garmendia, Ángel Borja and Javier Franco
Coupling hydromorphologic and habitat models to project changes in seagrass distribution under two sea level rise scenarios

12.15-12.30  Lisa Wedding and Mary Yoklavich
Predictive Mapping of Groundfish Species to Advance Stock Assessments

12.30-14.00  lunch

14.00-14.15  Rengstorf, A., Mohn, C., Wisz, M., Brown, C. and A. Grehan
Quantification and predictive modelling of local-scale relationships between cold-water corals and hydrodynamic settings on the Irish continental slope

14.15-14.30  Ben Radford, Andrew Heyward, Ross Jones, Jamie Colquhoun, Cordelia Moore, Mike Cappo, Mark Case and Marcus Stowar
Reefs better heard than seen. "Mapping mesophotic reef habitats using generalised assemblage models and sparse hydroacoustic data"

14.30-14.45  Sophie Barton, Richard Wysoczanski and Geoffroy Lamarche
Predictive substrate and benthic habitat mapping in the active volcanic environment of the Kermadec arc

Predictive habitat modeling as a tool in the Norwegian seabed mapping program

15.00-15.30  coffee break

15.30-16.30  POSTER SESSION

16.30-18.00  GEOHAB ANNUAL GENERAL MEETING
**Poster Sessions**

**Session MULTIDISCIPLINARY**

An integrated approach to map the rocky outcrop habitats (tegnûe) offshore Chioggia, Northern Adriatic Sea.

Moab Praxedes Gomes and Helenice Vital
Side-scan Sonar and Surface Sediment Investigation of a Mixed Carbonate-Siliciclastic Shelf: Açú Incised Valley area, NE Brazil

Ruth Gutperlet, Ruggero M. Capperucci, Henning Reiss, Alexander Bartholomä and Ingrid Kröncke
Macrofauna and sediment changes in a construction area

C. Heinrich, H.-C. Reimers and K. Schwarzer
Application of hydro-acoustic techniques for broad scale seafloor classification and monitoring in the context of the Marine Strategy Framework Directive

Daniel Ierodiaconou, Adam Miller, Mohammed Ali Jalali, Alex Rattray, Jacquomo Monk and Alexandre Schimel
Multidisciplinary approach to shallow water habitat mapping for fisheries management

R.W.E. Clark and J.W.C. James Black
Bream nesting habitat in the English Channel, U.K.

Markert E., Holler P., Kröncke I. and Bartholomä A.
The influence of benthic macrofauna on hydroacoustic methods.

Mary L. da S. Nogueira, Patrícia P. B. Eichler, Helenice Vital, Luisa Cardoso Marinho and Miguel Evelim Penha Borges
Mapping northern continental shelf of Rio Grande do Norte state and associated foraminifera habitats (Areia Branca, NE Brazil, tropical Atlantic).

Enrico Miccadei, Tommaso Piacentini, Fabio Vallarola, Cesare Crocetti and Adriano De Ascentiis
Geomorphological features of coastal dunes in the Marine Protected Area "Torre Cerrano" (central Adriatic coast, Abruzzo, Italy)

Pierdomenico M., Martorelli E., Guida V., Macelloni L. and Chiocci F.L.
Benthic Habitat Mapping at Hudson Canyon head by integrated analysis of acoustic and groundtruth data: insights for the definition of approaches and methodologies

Guilherme Cherem Schwarz Pierri, Guido Grimaldi, Helenice Vital and Tatiana Silva Leite
Morphology of the submerged reefs of Barreirinhas (NE Brazil) and associated benthic biodiversity

Richter P.P.; Schwarzer K., Heinrich C., Reimers H.-C. and Zeiler M.
The Quaternary development as a trigger for the distribution of habitats in the North Sea and the Baltic Seas

**Session DEEP SEA**

Valérie K. Bellec, Reidulv Bøe, Leif Rise, Margaret Dolan and Terje Thorsnes
Revealing habitats, surficial geology and seabed processes of Norway's continental slope and deep sea plain

Jaime Davies, Brigitte Guillaumont, Inge van den Beld, Fernando Tempera, Agostina Vertino, Steinunn Hilma Ólafsdóttir, Chris Smith, Jan Helge Fosså, Alessandra Savini, Anna Rengstorf, Christophe Bayle, Jean-François Bourillet, Sophie Arnaud-Haond, Lenaick Menot and Anthony Grehan
A cold-water coral biota classification scheme for ecosystem based management of the deep sea

Di Bella Letizia, Frezza Virgilio, Conte Aida Maria, Carboni Maria Gabriella, Chiocci Francesco Latino and FAIVI Team
Foraminiferal assemblages in active volcanic area of Azores Islands
Anthony Grehan, Laurent de Chambure, Alessandra Savini, Jean-Francois Bourillet, Anna Rengstorf, Tina Kutti, Jan Helge Fossa, Steinunn Olafsdottir and Fernando Tempera
Developing tools and methodologies to promote ecosystem based management of deep-sea resources - some key outputs from the EU FP7 'CoralFISH' project

Khaira Ismail, Veerle A.I. Huvenne, Paul A. Tyler and Doug G. Masson
Multiscale Analysis of Abiotic Parameters For Automated Deep Sea Habitat Mapping

Tomas Lundälv, Damien Guihen and Martin White
ROV-documentation of drastic population decline in the poriferan Geodia barretti in the Skagerrak in response to temperature extremes

Deep-sea benthic habitat mapping in the Italian seas in the framework of the RITMARE Project: a 5-year perspective for the definition of best procedures for habitat mapping in complex areas

Xavier Monteys, Janine Guinan, Peter Hung and Fabio Sacchetti
Deepwater seabed characterisation, Rockall Trough, west of Ireland

Savini A., Vertino A., Marchese F., Beuck L. and Freiwald A.
The role of habitat mapping in deep-sea ecosystem-based management: an Ionian Sea (Mediterranean) case study

Heather A. Stewart, Jaime S. Davies, Janine Guinan and Kerry L. Howell
Mini-mounds of the Explorer and Dangaard Canyons – were they once thriving cold-water coral reef?

Chiara Tessarolo, Cesare Corselli, Gert J. De
Lange Modeling a MED-Ridge brine lake: a multivariate approach on Urania Anoxic basin

Session PREDICTIVE

Luis Bentes, Pedro Monteiro, Frederico Oliveira, Carlos Afonso, Dulce Mata Chacón, José L. Sanz Alonso, Ricardo Aguillar and Jorge M.S. Gonçalves
Predicting coral gardens habitats in the Southwest coast of Portugal

Gundersen H., Bekkby T., Norling K., Rygg B. and Walday M.
Spatial predictive modeling of reference conditions for soft sediment benthic macroinvertebrate indices in Norwegian coastal waters

Rebecca E. Ross and Kerry L. Howell
Use of predictive habitat modelling to assess the distribution and extent of the current protection of “listed” deep-sea habitats

Claudio Lo Iacono, Rita Gonzalez-Villanueva, Andrea Gori, Covadonga Orejas and Josep Maria Gili
High-resolution predictive mapping of Cold Water Coral species in the Cap de Creus Canyon (northwest Mediterranean)

Pedro Monteiro, Luis Bentes, Frederico Oliveira, Carlos M. Afonso and Jorge M.S. Gonçalves
Predicting “sea finger” (Alcyonium acaule, Octocorallia) suitable habitat in shallow water off south coast of Portugal

Katleen Robert, Veerle A.I. Huvenne and Daniel O.B. Jones
Internal and external validation of predictive habitat maps: why we need independent data even if it is deep, and tricky to obtain

Minna Ronkainen, Anna-Leena Downie, Henna Rinne, Kirsi Kostamo and Pasi Laihonen
Predictive modelling of aquatic vegetation in Baltic Sea
Field trip time schedule:
Departure: Roma, CNR h. 8.30

1 STOP h. 11.00 at OASI DI BURANO
visit 2 hours
h. 13.00-14.00 lunch

2 STOP: h. 14.30 at MONTE ARGENTARIO
stop 30 min at viewpoint

3 STOP: h. 16.00 at TUSCANIA
free visit of the town h.1.00
h. 17.00 departure from Tuscania

4 STOP: h. 18.00 at LAGO DI VICO
on the way back to Rome stop by Vico lake to observe the geomorphology of a volcanic basin.

Departure time is at 8.30 from the CNR Headquarters, where we will come back in the evening (before 20.00)
SCIENTIFIC COMMITTEE

Andrea Fiorentino (Chair, Geological Survey of Italy - ISPRA)
Silvana D’Angelo (Co-Chair, Geological Survey of Italy - ISPRA)
Crescenzo Violante (Sponsor chair, IAMC – CNR Napoli)
H. Gary Greene (SeaDoc Society/Tombolo)
Daniel Ierodiaconou (Deakin University Australia)
Claudio Lo Iacono (CSIC, Barcelona, NOC Southampton)
Alan Stevenson (British Geological Survey)
Leonardo Tunesi (Marine Habitat and Biodiversity Protection - ISPRA)

ORGANISING COMMITTEE

Andrea Fiorentino (Chair, Geological Survey of Italy - ISPRA)
Silvana D’Angelo (Co-Chair, Geological Survey of Italy - ISPRA)
Crescenzo Violante (Sponsor chair, IAMC – CNR Napoli)
Marco Pantaloni (Field-trip leader, Geological Survey of Italy - ISPRA)
Silvana Falcetti (Field trip guide editing, Geological Survey of Italy - ISPRA)
Susanna Garroni (Accompanying people programme)
Alessia Marinelli (Graphic Project, Communication office - ISPRA)
Rossella Sisti (Organization responsible, Communication office - ISPRA)
Sabrina Arata Farris (Organization support, Communication office - ISPRA)