

CARBOCHANGE

Final Meeting: Agenda

Monday, 19 January 2015

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| CARBOCHANGE Final Meeting <i>(Radisson Blu Hotel Norge, Nedre Ole Bulls Plass 4, 5807 Bergen, Norway)</i> | | |
| 17:45-19:00 | Reception desk | |
| 18:00-19:00 | Icebreaker reception | |

Tuesday, 20 January 2015

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| CARBOCHANGE Final Meeting <i>(Alvøen, ground floor)</i> | | |
| 08:30-09:00 | Reception desk | |
| Meeting SESSION 1 – Welcome and status Chair: Christoph Heinze <i>(Alvøen, ground floor)</i> | | |
| 09:00-09:05 | Short welcome on behalf of the consortium | Christoph Heinze |
| 09:05-09:20 | Welcome on behalf of UiB | Anne Lise Fimreite |
| 09:20-09:50 | CARBOCHANGE overview | Christoph Heinze |

Tuesday, 20 January 2015 (ctd.)

| Meeting SESSION 2 – Core themes and overarching activities Chair: Nicolas Gruber <i>(Alvøen, ground floor)</i> | | |
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| 09:50-10:05 | Core theme 1: Key processes and feedbacks, future scenarios, and vulnerabilities | Nicolas Gruber (Marion Gehlen) |
| 10:05-10:20 | Core theme 2: Observing systems of ocean carbon changes | Andrew Watson (Aida Ríos) |
| 10:20-10:35 | Core theme 3: Data model integration | Fortunat Joos (Nicolas Metz) |
| 10:35-11:00 | Coffee break | |
| 11:00-11:20 | Overarching activity: Global synthesis and synergies with international projects | Andrew Manning (C. Le Quéré) |
| 11:20-11:40 | GLODAPv2: Ten years in the making | Robert Key |
| 11:40-12:00 | SOCAT | Dorothee Bakker |

12:00-13:30 Lunch break (*Ole Bull restaurant, 1st floor*)

| Science-policy event on 10 years of ocean carbon and climate research in Bergen <i>(Alvøen, ground floor)</i> | | |
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| 13:30-13:40 | Opening | Christoph Heinze |
| 13:40-14:40 | (i) The ocean's importance for global carbon cycling and climate | Andrew Watson |
| | (ii) How climate change and rising CO ₂ affect marine resources | Are Olsen |
| | (iii) Lessons learned for Earth's future - how to preserve the oceans | Fortunat Joos |

Tuesday, 20 January 2015 (ctd.)

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| 14:40-15:30 | Panel discussion on multiple climate mitigation targets with: Andrew Watson (The University of Exeter, UK) Are Olsen (Bjerknes Centre, Norway) Tatiana Ilyina (MPG, Germany) Fortunat Joos (University of Bern, Switzerland) Precious Mongwe (CSIR, South Africa) Robert Key (Princeton University, USA) Aida Ríos (CSIC, Spain) | moderator: Christoph Heinze |
| 15:30-16:00 | Refreshments | |
| 16:00-17:00 | SOCAT meeting | Dorothee Bakker |
| 17:00-18:00 | Panel Meetings (<i>rooms will be announced on-site</i>) Gender Panel Outreach Panel | Tatiana Ilyina Stefanie Meyer |

Wednesday, 21 January 2015

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| CARBOCHANGE Final Meeting (Alvøen, ground floor) | | |
| 09:00-09:45 | Scientific key note : How carbon isotopes help to establish ocean carbon budgets | Virginie Racapé |
| Meeting SESSION 3 – WP overview Chair: Laurent Bopp (Alvøen, ground floor) | | |
| 09:45-10:15 | WP1 : Biochemical processes and feedbacks (i) Rising atmospheric CO ₂ leads to large impact of biology on Southern Ocean CO ₂ uptake via changes of the Revelle factor (ii) pH monitoring in the Mediterranean Outflow: observational data and modelling approach | Judith Hauck, Christoph Völker Emma Huertas |

Wednesday, 21 January 2015 (ctd.)

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| 10:15-10:45 | Coffee break | |
| 10:45-11:15 | WP2: Physical processes and feedbacks | |
| | (i) Spatiotemporal decomposition of meridional carbon transport in the Southern Ocean | James Orr |
| | (ii) Eddies and carbon in the Southern Ocean | Heiner Dietze |
| 11:15-11:45 | WP3: Future scenarios under different emission curves and vulnerability analysis | |
| | (i) Understanding the effects and limits of increasing spatial resolution in HAMOCC-MPIOM hindcasts | Tatiana Ilyina |
| | (ii) Outlook and perspectives | Ian Totterdell, Laurent Bopp |

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| 12:00-13:30 | Lunch break (<i>Ole Bull restaurant, 1st floor</i>) | |
| 13:30-14:00 | poster session (<i>Alvøen, ground floor</i>) | |

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| Meeting SESSION 3 ctd. – WP overview | | |
| Chair: Judith Hauck | | |
| <i>(Alvøen, ground floor)</i> | | |
| 14:00-14:30 | WP4: Surface observing system | |
| | (i) Highlights of WP4 | Ute Schuster, Jacqueline Boutin |
| 14:30-15:00 | WP5: Deep ocean, time series, choke points | |
| | (i) Highlights of WP5 | Aida Ríos, Mario Hoppema |
| Meeting SESSION 3 ctd. – WP overview | | |
| Chair: Tatiana Ilyina | | |
| <i>(Alvøen, ground floor)</i> | | |
| 15:00-15:30 | WP6: Systematic model calibration using observational data | |
| | (i) A Monte-Carlo type assimilation of alkalinity (TA*) data to constrain modern ocean CaCO ₃ export and dissolution | Gianna Battaglia |

Wednesday, 21 January 2015 (ctd.)

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| | (ii) Outlook and perspectives | Laurent Bertino, Marko Scholze |
| 15:30-16:00 | Coffee break | |
| 16:00-16:30 | WP7: Data-model and model-model comparison (i) Inconsistent strategies to spin up models in CMIP5 and effects on model performance assessment (ii) Comparison of ocean carbon cycle models in the framework of CMIP6 | Laurent Bopp James Orr |
| Meeting SESSION 3 ctd. – WP overview Chair: Ingunn Skjelvan <i>(Alvøen, ground floor)</i> | | |
| 16:30-17:00 | WP8: Global synthesis and outreach to policy makers (i) New ocean sink simulations with NorESM-OC (ii) GLODAP2 science (iii) $p\text{CO}_2$ variability in the tropical eastern Pacific Ocean using SOCAT $p\text{CO}_2$ and SMOS sea surface salinity | Jörg Schwinger Are Olsen Christopher Brown |
| 17:00-17:25 | WP9: Data and information management (i) Update on observational data management (ii) Update on model output data management | Benjamin Pfeil James Orr |
| 17:25-17:45 | WP10: Management of the project (i) Financial status & reporting (ii) Scientific status & reporting | Hege Høiland Stefanie Meyer |
| 17:45-18:00 | Benthic CO_2 and alkalinity sources in the North Sea, inferred from Radium and stable carbon isotopes | Helmuth Thomas |
| 19:00 | Conference Dinner <i>(Hotel Norge, room will be announced on-site)</i> | |

Thursday, 22 January 2015**CARBOCHANGE Final Meeting***(Alvøen, ground floor)*

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| 09:00-09:45 | Scientific key note : Challenges for the next generation of ocean carbon cycle models | Keith Lindsay |
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Meeting SESSION 4 – Final discussions*(Alvøen, ground floor; break-out rooms will be announced on-site)*

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| 09:45-12:00 | Break-out group meetings (urgent issues, synthesis projects) |
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| <i>(10:45-11:15</i> | <i>Coffee break)</i> |
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| 12:00-13:30 | Lunch break <i>(Ole Bull restaurant, 1st floor)</i> |
| 13:30-14:30 | poster session <i>(Alvøen, ground floor)</i> & SSC/IAB meetings <i>(break-out room)</i> |

Meeting SESSION 4 ctd. – Final discussions*(Alvøen, ground floor; break-out rooms will be announced on-site)*

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| 13:30-14:00 | SSC meets IAB |
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| 14:00-14:30 | SSC meeting |
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| 14:30-16:00 | Member's General Assembly: Overarching activity: Global synthesis and synergies with international projects Messages from panels and WPs Summary of IAB feedback Status on synthesis papers Open discussion and future perspectives | Andrew Manning (C. Le Quéré) |
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| 16:00-16:30 | Coffee break |
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| 16:00-18:00 | Discussion on future perspectives |
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