

ICOS SWEDEN ANNUAL WORKSHOP VISBY 17-18 AUGUST 2015

Fresh water and marine water as sinks and sources for atmospheric greenhouse gases



ICOS Sweden is an infrastructure for research on greenhouse gases in northerly terrestrial and marine ecosystems. The 2015 workshop focuses on fresh water and marine water as sinks and sources for atmospheric greenhouse gases.

Sea and lake systems are essential components of the global carbon cycle and there is a need to further assess their roles as sinks/sources for atmospheric carbon in a changing climate. The links between physical and biogeochemical processes are complex, but important for a better system understanding.

ICOS Sweden Annual Workshop, Visby 17-18 August 2015

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Program:

Monday 17/8

- 10.00-11.00 *Registration and coffee*
- 11.00-11.30 Anders Lindroth: Presentation of ICOS RI and ICOS Sweden
- 11.30-12.00 Anna Rutgersson: Presentation of Östergarnsholm station
- 12.00-13.00 *Lunch*
- 13.00-19.00 Östergarnsholm station visit
- 20.00 *Hosted dinner in Visby*

Tuesday 18/8

Scientific meeting

Chair: Anders Lindroth

- 8.00-8.30 *Registration and coffee*
- 8.30-9.00 Invited speaker: Hermann W. Bange: The ocean as a source of N₂O and CH₄
- 9.00-9.20 Ivan Mammarella: Benefits and challenges of long-term eddy covariance measurements over lakes
- 9.20-9.40 David Bastviken: How to measure freshwater greenhouse gas fluxes?
– Learnings from repeated measurements on multiple lakes and from new optical sensor network approaches
- 9.40-10.00 Marcus Wallin: Scaling GHG emissions from streams – a reappraisal of the headwater emissions of Sweden
- 10.00-10.30 *Coffee break*
- 10.30-10.50 Eva Podgrajsek: Enhanced lake gas fluxes during night
- 10.50-11.10 Ann-Sofi Smedman: Östergarnsholm twenty years anniversary
- 11.10-11.30 Erik Sahlee: Air-sea CO₂ exchange in a Baltic Sea basin during coastal upwelling
- 11.30-12.00 Discussion on the ICOS RI lake protocol.
- 12.00-13.00 *Lunch*
- 13.00-13.30 Invited speaker: Dorothee Bakker: *In situ* ocean observations and their synthesis enable quantification of the ocean carbon sink and ocean acidification

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Tuesday 18/8

Scientific meeting (continued)

13.30-13.50 Lauri Laakso: Future plans for marine observatories in Europe

13.50-14.10 Monica Mårtensson: Measurements of size resolved primary marine aerosols

14.10-15.00 *Coffee and poster session*

15.00- 15.20 Anna Rutgersson: Air-Sea CO₂ exchange in the Baltic Sea

15.20-15.40 Ivan Bogoev: Instrument-induced biases in turbulent CO₂ flux measurements

15.40-16.00 Hans Bergström: Comparison of CO₂ fluxes measured in dried and un-dried air

16.00-16.30 Discussion on flux measurement corrections.

16.30-16.45 Sum up and conclusions

Venue:

Room E31, Cramérgatan 3 Uppsala University — Campus Gotland in Visby (same house as Almedal Library), , and the Östergarnsholm island and surroundings for station visit.

We recommend that you book your accomodation in good time! If you have questions please contact Maj-Lena Linderson at scientific.coordinator@icos-sweden.se.

Registration:

The program with oral presentations is now set and the registration is closed.

If you would like to participate without presentation at the workshop, please contact Maj-Lena Linderson at scientific.coordinator@icos-sweden.se.

Getting there:

Campus Gotland is located close to the beautiful Visby marina and well-known park Almedalen. Map on next page.

Address: Cramérgatan 3, Visby +46 (0)498-108200

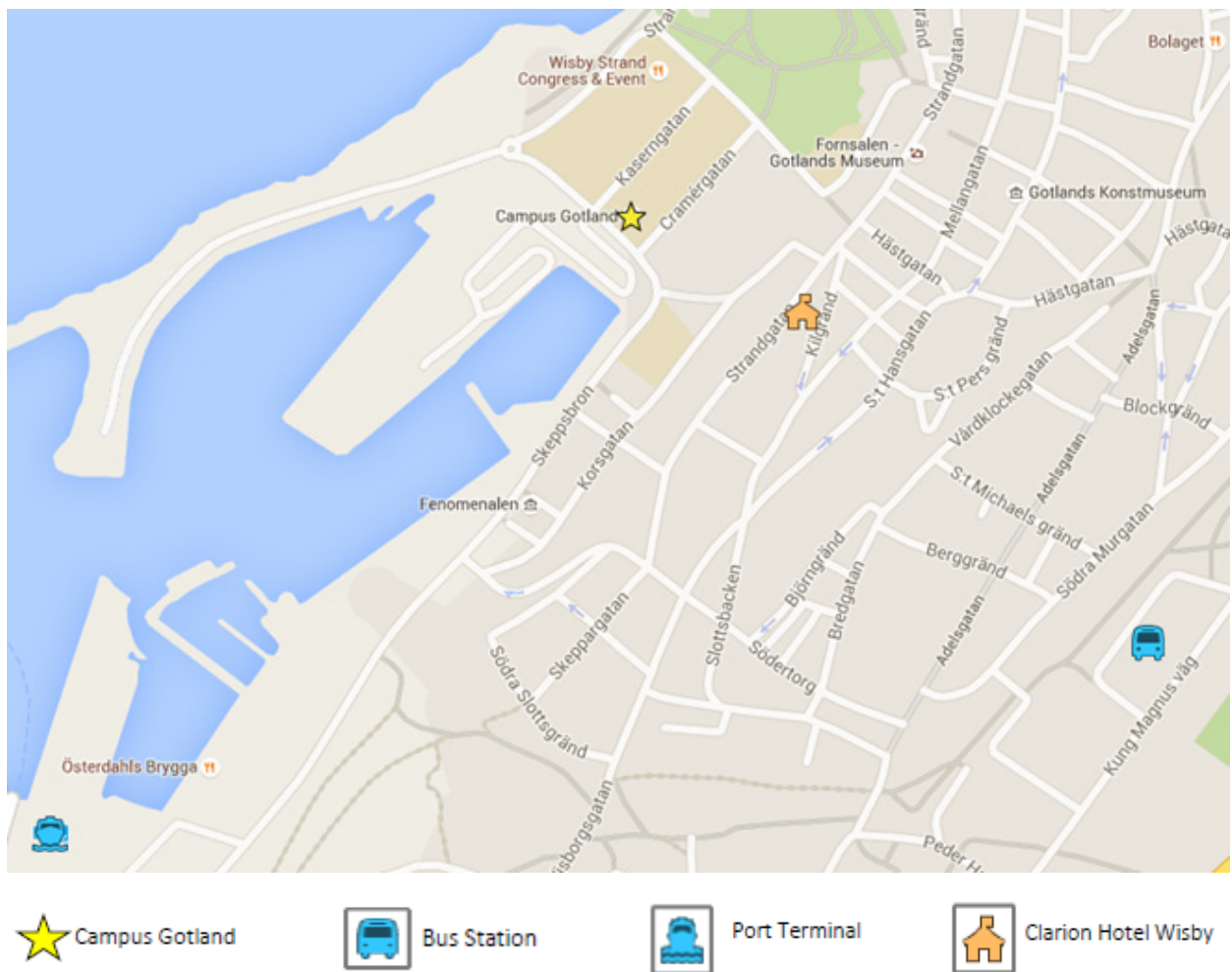
Airport coaches: Take bus nr 61 or 62 to Visby bus station and change to connecting bus nr 90 to "Visby Hamnterminal" and take a short walk to Campus Gotland.

By foot from Visby bus station: Walking distance from Visby bus station is 900 meters right through the beautiful inner city of Visby.

Alternatives: Both taxi station and car rental in direct connection to the airport.

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ICOS RI – Integrated Carbon Observation System Research Infrastructure – is a European research infrastructure to quantify and understand the greenhouse gas balance of the European continent and of adjacent regions. ICOS is a collaboration of 17 European countries and will provide long-term observations (20+ years).

ICOS Sweden is the Swedish contribution to this European effort and is a cooperation of Lund University (host), University of Gothenburg, Swedish University of Agricultural Sciences, Stockholm University, Uppsala University, and Swedish Polar Research Secretariat. The measurement sites are located at seven different sites, from north to south: Abisko-Stordalen (subarctic mire), Degerö (boreal mire), Svartberget (boreal pine and spruce forest), Norunda (boreal pine and spruce forest), Östergarnsholm (marine station), Lanna (agricultural land), and Hyltemossa (spruce forest).

Webpage: <http://www.icos-sweden.se/>



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