



Workshop on

“Examination of existing approaches for construction of regional carbon budgets for both land and ocean areas”

together with the 1st workshop of

REgional Carbon Cycle Assessment and Processes (RECCAP)

6-8 October 2010

(9:00 to 18:00, three days)

Viterbo, Italy

**COordination action Carbon Observation System (COCOS)
Global Carbon Project (GCP)**

Agenda, draft 5

DAY 1

09:00

- **Welcome**
- **Objectives of the workshop:** Pep Canadell / Riccardo Valentini / Toste Tanhua
- **COCOS objectives:** Han Dolman
- **RECCAP objectives:** Philippe Ciais, Pep Canadell

09:45

METHODOLOGY

Top down and bottom up components (short presentations and discussion)

- RECCAP Soft Protocol for regional carbon budgets: Philippe Ciais (France), Canadell
- Carbon budget uncertainties: how to measure them and express them. Ian Enting (Australia)
- Delivery of data: Bob Key (USA)
- An inverse modelling approach combining SeaWiifs and MODIS products, in-situ production data, trap data, and large data sets on DIC, dissolved nutrients and O₂: Reiner Schlitzer (Germany)
- Mapping time-varying distribution of anthropogenic carbon (Samar Khatiwala)

13:00

Lunch

14:00

GLOBAL MODEL EFFORTS CONTRIBUTING TO REGIONAL SYNTHESSES

10 minutes talk + 10 minutes discussion

- **Global atmospheric CO₂ inversions:** Kevin Gurney (USA), Rachel Law (Australia), Philippe Peylin (France)
- **Global modelled terrestrial sources and sinks:** Stephen Sitch (UK), Pierre Friedlingstein (France)

- **Global fire emissions:** Guido van der Werf (The Netherlands)
- **Global modelled oceans sources and sinks:** Corinne Lequere (UK)
- **Interior ocean inversions:** Niki Gruber (Switzerland)

15:30

REGIONAL SYNTHESSES

10 minutes talk + 10 minutes discussion

- **Arctic tundra:** David McGuire (Alaska, USA), Torben Christensen
- **Arctic Ocean:** Nick Bates (Bermuda)
- **Russia:** Han Dolman (The Netherlands) et al.
- **Nordic Seas:** Are Olsen (Norway)

17:00

- Break out: Land regional budgets

17:00

- Break out session: Ocean regional budgets

18:00

END OF DAY

DAY 2

09:00

REGIONAL SYNTHESSES (continuation)

10 minutes talk + 10 minutes discussion

- **North America** (US, Canada, Mexico): Mac Post (US), Ken Devis (USA), Werner Kurz (Canada), Ben de Jong (Mexico).
- **North Atlantic:** Ute Schuster (UK)
- **Europe:** Sebastian Luysart (Belgium), Philippe Ciais (France)
- **South Atlantic:** Aida Rios (Spain), Mario Hoppema (Germany)
- **Africa Continental:** Riccardo Valentini (Italy), Bob Scholes (South Africa), Yadvinder Malhi (UK)

12:00

- Break out session: Land regional budgets

12:00

- Break out session: Ocean regional budgets

13:00

Lunch

- **East Asia** (Two Koreas, Mongolia, China, Japan): Shilong Piao (China)
- **North Pacific Ocean:** M. Ishii (Tsukuba, Japan), R. Feely (NOAA, USA)
- **Indian Ocean:** Nicolas MetzI (France), V. Sharma (India), Marta Alvarez (Spain).
- **South Asia sub-continent (India):** tba
- **Southeast Asia:** tba

17:00

- Break out session: Land regional budgets

17:00

- Break out session: Ocean regional budgets

18:00

END OF DAY

DAY 3

09:00

REGIONAL SYNTHESSES (continuation)

10 minutes talk + 10 minutes discussion

- **Australia Continental:** Vanessa Haverd and Mike Raupach (Australia)
- **Southern Ocean:** Andrew Lenton (CSIRO, Australia), Bronte Tilbrook (CSIRO,

- Australia)
- **South America:** Emanuel Gloor (UK), Umberto Roach (Brazil)
- **South Pacific Ocean:** Chris Sabine (USA)

Break

GLOBAL DATA EFFORTS CONTRIBUTING TO REGIONAL SYNTHESSES

10 min. talks + 10 discussion

- **Global ocean surface CO₂:** Taro Takahashi (Columbia University, USA), Rik Wanninkhof (NOAA, USA).
- **Global ocean carbon storage:** Samar Khatiwala (Columbia University, USA), Toste Tanhua (Kiel, Germany)
- **Rivers and lateral fluxes (globe):** Peter Raymond (USA)
- **Coastal Ocean:** Alberto Borges (Belgium)
- **Marginal Seas:** Kitack Lee (Korea), Toste Tanhua (Germany).

13:00

Lunch

14:00

Discussion towards final carbon budgets: Land

14:00

Discussion towards final carbon budgets: Ocean

14:00

Discussion towards final syntheses: Global

16:00

Plenary

Reports on key issues for land, ocean and global syntheses.
General discussion

17:00

Next Steps

- Timetable (meetings, deadlines, drafts)
- Publications and other products
- Others

18:00

END OF MEETING