

N.Metzl, 12 May 2009

Report of the SOLAS-IMBER Carbon Working Group 1: Surface Ocean Systems (SIC-SOS)

Since the start of the project (ICDC7, Broomfield, Oct. 2005) the SIC-SOS group identified several priorities related to (i) science issues arising in the SOLAS-IMBER Carbon implementation plan (Joint SOLAS-IMBER Ocean Carbon research) and confirmed at the SOCOVV meeting (April 2007) and (ii) the international organization and construction of a new sea surface CO₂ data-base, the so-called SOCAT (Surface Ocean Carbon Atlas) that should be publicly available by the end of 2009.

SIC-SOS group activities since several months are listed below:

1 Following the SOCOVV meeting (April 2007), a Deep Sea Research II special issue has been developed. Although we encountered several problems with the new Elsevier Electronic System (recalled that this issue was the first DSR II using the EES), all manuscripts, including an introductory paper, are available online since several months. The special Issue is now in press. The members of the SIC-SOS group were very active on this issue as lead authors (Borges, Beaugrand, Metzl), co-authors (Bakker, Bates, Metzl), co-editor (Bakker, Metzl) and reviewers (anonymous). Sylvie Roy from IMBER (2007-2008) helped a lot to follow this issue since months and she regularly resolved, in a diplomatic way, many problems with the editor, the publisher and several authors. The DSR II issues (about 100 copies) will be sent at LOCEAN/Paris France, and N.Metzl will forward the book for all SOCOVV participants.

2 The SOCAT* data base was identified as a priority for the SIC-SOS activity. During the SOCOVV meeting, regional PIs were identified (Figure 1). The SIC-SOS members involved in the SOCAT groups are: D.Bakker (Global, Southern Ocean, Atlantic), A. Borges (Coastal), N.Metzl (Global, Southern Ocean, Indian Ocean, North Atlantic). In the last 18 months, several meetings have been organized, some with support from IOCCP, SOLAS, IMBER.

- SOCAT meeting organized in Dec. 2007 (Bremen, Germany, in the frame of CARBOOCEAN annual meeting, Chair, D. Bakker)
- SOCAT meeting organized in June 2008 (Paris, France, mainly for SOCAT Quality Control, QC2). SIC-SOS members participants (D. Bakker, A. Borges and N. Metzl)
- SOCAT meeting organized in January 2009, Coastal group (Kiel, Germany, mainly organization for Science and QC2), report available (see Figure 2), SIC-SOS member participants (A. Borges, co-Chair of the group)
- SOCAT meeting organized in March 2009, Pacific group (Tsukuba, Japan, mainly organization for Science and QC2), report soon available (SIC-SOS members were not available for this Pacific group meeting)
- SOCAT meeting will be organized in June 2009, Atlantic/Southern Ocean/Indian groups (Norwich, mainly organization for Science and QC2). SIC-SOS members will participate (D. Bakker, local host at UEA, and N.Metzl)

** The SOCAT data base has been assembled by Are Olsen (BCCR, UNIFOB AS Bergen) and Benjamin Pfeil (Carbocean, Bergen) in close collaboration with Alex Kozyr (CDIAC)*

3 A White Paper on surface CO₂ observations has been circulating in our community since several months (PI, U. Schuster and P. Monteiro); this will be submitted to OCEANOBS09 (Sept. 2009, Venezia). SIC-SOS members, A.Borges and N. Metzl, were involved in this White Paper.

4 In the frame of SOCAT project, as well as individual research, SIC-SOS members submitted several abstracts to ICDC8 (Sept, Jena); this was a target for delivering preliminary analysis from SOCAT data-base.

5 From ICDC7 to ICDC8: the SIC-SOS group was formed during the ICDC7 meeting in 2005 (Broomfield, Co, USA). This year, Sept 2009, ICDC8 will be organized in Jena (Germany). This would be a very nice opportunity to move forward and open new windows, new doors and new ideas. As a Chair of SIC-SOS group since 2005, I would be pleased to stay as a member of the SIC-SOS group and also very pleased if someone else would Chair this group.

Recall Members of the SIC-SOS, as of 2005

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