

Observations for ocean climate: A community-wide synthesis of surface ocean CO₂ observations -- the Surface Ocean CO₂ Atlas (SOCAT)

Steve Hankin[†]; Heather Koyuk

[†] NOAA / Pacific Marine Environmental Laboratory, USA

Leading author: steven.c.hankin@noaa.gov

The Surface Ocean CO₂ Atlas (SOCAT) project is an international effort to establish a comprehensive global surface CO₂ data set, based upon agreed data and metadata formats and quality-control procedures. The published SOCAT collection will be a carefully curated data resource, available as i) a collection of individual cruise files with metadata; ii) a comprehensive database of surface CO₂ observations that may be visualized and subsetted on demand through a Web portal; and iii) a simple monthly gridded dataset that is derived from the collection, also accompanied by on-line tools for visualization, analysis and subsetting. The SOCAT collections are intended to serve the widest feasible range of user communities. Further details of SOCAT are available from other posters in this session. In this poster we discuss the challenges, the community agreements and the specialized software tools that have been developed in order to coordinate the quality control effort over a far-flung community and provide access to the evolving collection.