

Ocean Sci. Discuss., referee comment RC1
<https://doi.org/10.5194/os-2021-17-RC1>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on os-2021-17

Anonymous Referee #1

Referee comment on "Observation system simulation experiments in the Atlantic Ocean for enhanced surface ocean $p\text{CO}_2$ reconstructions" by Anna Denvil-Sommer et al., Ocean Sci. Discuss., <https://doi.org/10.5194/os-2021-17-RC1>, 2021

This study conducts Observation System Simulation Experiments for an optimal observation system of surface ocean $p\text{CO}_2$. The results give an important information to future observational strategy. The manuscript is well organized and the description is easy to follow. Followings are just a few points to be possibly improved.

The authors mentioned the analysis period is from 2008 to 2010. But they also mentioned data for the period 2001-2010 from SOCAT were used (line 96 and Table 1). How the data in 2001-2007 were used?

In Figure 1, the same color bar in all panels would be better to easily compare data numbers from respective data source and to avoid unnecessary white space.

Labels on horizontal axes in Figures 7g, 7h, 8g and 8h are different from those in the other panels.