

GOS2022112: O2 - calibration

- We include bottles collected below 45 m depth and with O2-concentrations above 15 $\mu\text{mol/kg}$.
- Data points with which do not meet the criteria $\text{mean}(\text{Winkler-O2CTD}) - 2 \times \text{std}(\text{Winkler-O2CTD}) < \text{Winkler-O2CTD} < \text{mean}(\text{Winkler-O2CTD}) + 2 \times \text{std}(\text{Winkler-O2CTD})$ are flagged as potentially bad (3).
- Doubles (two samples from the same Niskin bottle) with a difference between the samples larger than 3 $\mu\text{mol/kg}$ are excluded from the regression (unless one is flagged in the step above).
- Doubles with a difference with a difference smaller than 2 $\mu\text{mol/kg}$ are merged, using their mean value.
- We then do a linear regression using the remaining Winkler-O2CTD datapoints, and exclude points with an error larger than $2.5 \times \text{rmse}$. This step is repeated until either no more points are removed or the root mean square error is smaller than 2 $\mu\text{mol/kg}$.

For this cruise:

There is a total of 29 samples to start with

There's a total of 29 samples before the regression.

Line Number [36] is removed during the regression.

There's a total of 28 samples in the final regression: (1.0544, 0.22)



