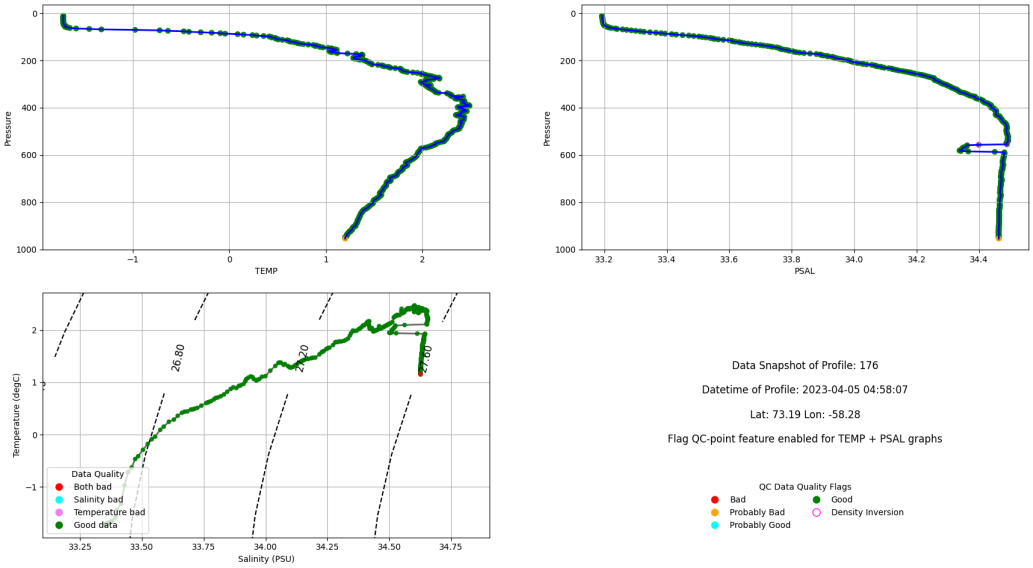
Density Inversion Test

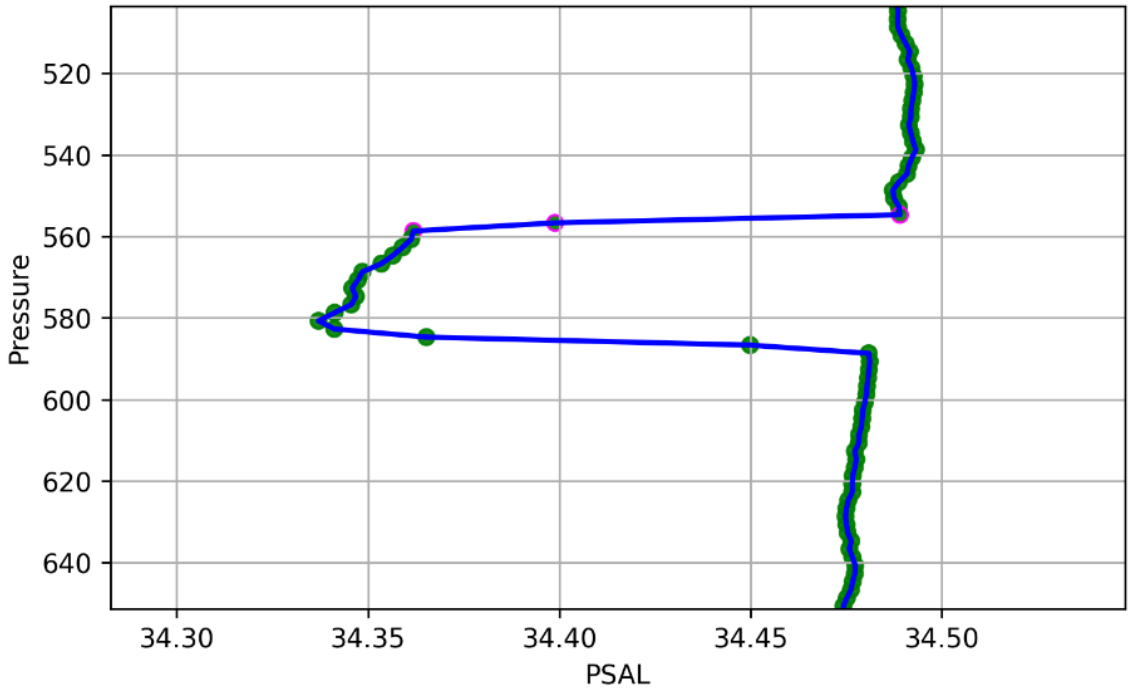
This test is meant to serve as a **guide** to help users determine bad salinity values. This test will initially flag all density inversion values with a pink outline. By clicking on an inversion value and marking it with an orange or red QC-flag (probably bad/ bad), the density inversion test will run again, excluding values marked as bad.

Run the “manipulate_data_flags” module with the file “F9186_176.nc” to see this example.

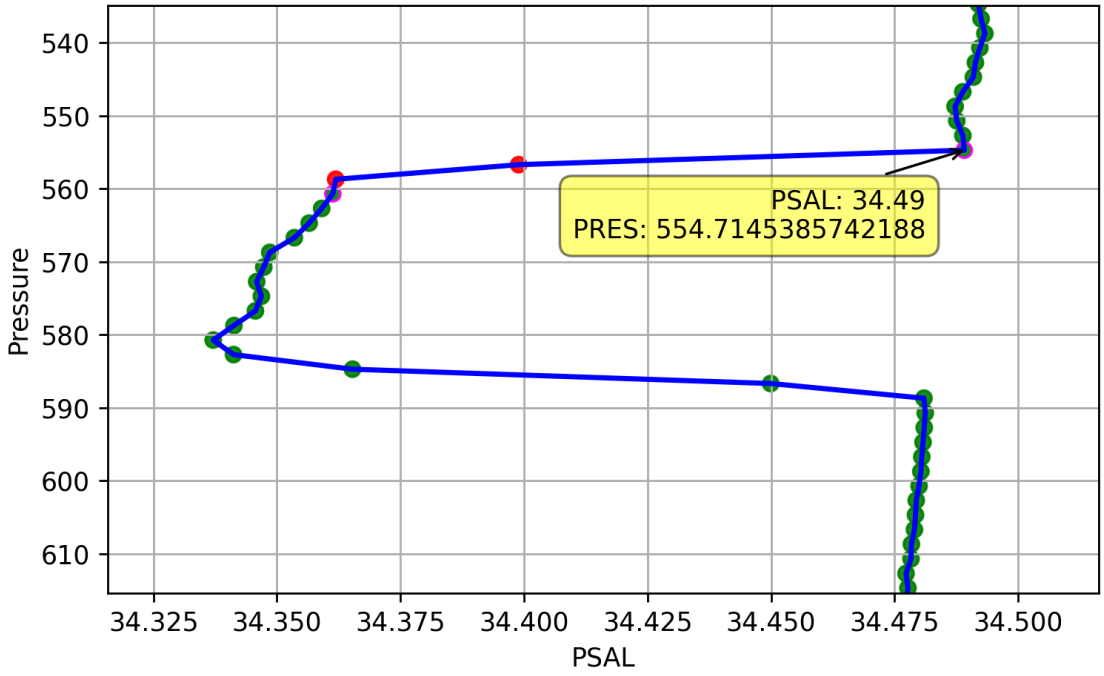
Datasnap shot graph:



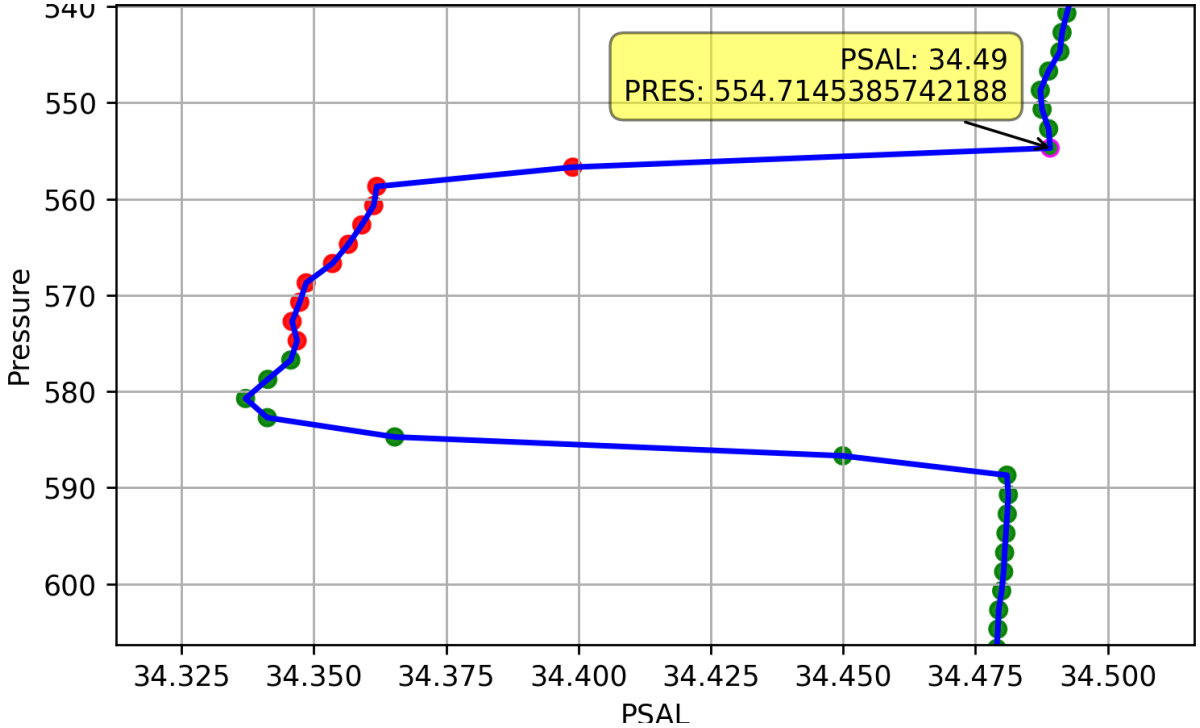
Zoomed in on salinity inversions (outlined with a circle):



Clicking a density inversion and marking it as probably bad/ bad:



In this example, the test initially identifies three points as inversions. Through visual QC, we determine that the hovered point is good. As a result, we mark the other two points as bad, which prompts the test to run again—revealing another inversion. We can chase these inversion points till here:



Now, the next 6 points are still obviously bad, but the test fails to find any inversions between the hovered over point and the next good point, thus no circles are highlighted.

This test is meant to serve as a guide, by clicking on the hovered point first, this function will keep finding “inversions” in the wrong direction: