Sampling notes, Line P cruise 2022-008, 9 August to 25 August 2022

CTD/Rosettes:

46 files, 0001 to 0107.

0 stand-alone CTD.

42 rosette casts (SI only a test cast)

0 cast needed two files.

0 file not needed.

CTD 0443 used for the whole cruise.

Seasave version 7.26.7.121

Configuration file:

The config file 443 Aug2022\_rosette.xmlcon was used during the whole cruise but was wrong for casts 0001 to 0027.

Standard procedure:

The rosette was brought to the surface. Pumps were turned ON. The rosette was brought down to 10m and kept there for 30 seconds. Once back at the surface, the data started to be archived, with the rosette at the surface for 30 seconds longer. Then the cast would start.

For ALL rosette casts:

Niskin bottles closed from 0 to 400 dbar (both included) had a wait time of 60 seconds.

All Niskin bottles deeper than 400 dbar had a wait time of 30 seconds.

Problems with CTD:

Casts 0001 to 0027: Fluorometer 3982 was being used but Fluorometer 3641 was written in the config file. The sensor was swapped between 0027 and 0028, 3982 was removed and 3641 was installed. The config file stayed the same (since 3641 was already there).

So files 0001 to 0027 have the wrong Fluorometer in the config file.

File 0016 – P3: there’s a “glitch” at the beginning of the file (made the conversion tricky).

Niskins & Samples at CTD/Rosette casts:

Cast 0001 – SI: all 24 Niskins closed only for testing, no sampling done, no CHE file needed.

Cast 0002 – Haro59: this cast should have been out-of-order, but all Niskins were closed in order. The bottle number on the labels were corrected to the correct numbers **but the sample numbers did not get corrected. Sample numbers should match bottle numbers.**

Cast 0006 – JF2: sample 32, Niskin 17 not needed, not closed.

Cast 0048 – P13: two bottles closed, bottle 4 at 2005 m NOT needed, it doesn’t need to be in the CHE file.

Cast 0064 – P19: two bottles closed, let’s put the 2005 bottle in the CHE file since it has a sample number.

Cast 0082 – P35: the .bl file contains 1 entry but my .btl file has 2 bottles?

Cast 0093 – PA-016: bottle 3 closed out of the water so samples came from bottle 4; bottle 3 not needed in CHE file.

File names – Headers:

Cast 0001: wrong station name, should be SI, not SI-01 (we were not at a specific station).

Cast 0016: wrong station name, should be P3 not P4.

Cast 0017 – P4: wrong depth, should be 1324 not 809.

Cast 0028 – P6: wrong depth, should be 2537 not 2087.

Cast 0037: wrong station name, should be P12 not P11. Wrong depth, should be 3218 not 3010.

Casts 0038 and 0039: wrong station name, should be P12 not P11.

Cast 0040 – P13: wrong file name, should be 0048 not 0040.

Cast 0061: wrong station name, should be P17 not P18. Wrong depth, should be ~3640 not the 4136.

Casts 0064 and 0066: correct depth in the header, wrong on sampling log.

Cast 0092: wrong station name, should be P26, not P26 –Deep cast.

Casts with no PAR sensor:

0038 – P12 Deep; 0038 – P12 UVic; 0049 – P14; 0051 – P15; 0057 – P16 Deep; 0061 – P17; 0062 – P18; 0067 – P20 Deep; 0066 – P20 UVic; 0077 – P22; 0078 – P23; 0080 – P24; 0092 – P26 Deep; 0093 – PA-016.

Cast out of order:

0006 – JF2; 0013 – P2 DMS; 0017 – P4 UVic; 0035 – P10; 0039 – P12 UVic; 0048 – P13 (but one bottle not needed, see Niskins & Samples notes); 0053 – P16 DMS & UVic; 0064 – P19; 0068 – P20 UVic; 0084 – P26 UVic.

Casts with no Niskin closed:

0012 – La Perouse Mooring: CTD data only, no bottles.

Loops:

See loops log.

TSG:

We used the SBE-45. Files are in a new format, one long file (divided by 24-hr data).

Data missing from 23:35:20 13-Aug-22 to 15:16:05 17-Aug-22.