Sampling notes, Line P cruise 2024-002, 23 January to 9 February 2024

CTD/Rosettes:

258 files, 0001 to 0140.

0 stand-alone CTD.

46 rosette casts.

0 cast needed two files.

0 file not needed.

CTD 1515 used from cast 0001 to 0032, CTD 0506 used for the rest of the cruise.

Seasave version 7.26.7.121

Configuration files:

2024-002 primary 09p-1515 11Jan2024.xmlcon

2024-002 secondary 9p-0506 11Jan2024.xmlcon

2024-002 secondary 9p-0506 11Jan2024\_stripped.xlmcon

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 (60?) seconds longer. Then the cast would start.

For all the rosette casts that had oxygen samples:

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.

For all the rosettes casts that had no oxygen samples:

All Niskin bottles had a wait time of 30 seconds.

With the exception of DMS cast 14 (P4) where most Niskin had a wait time of 60 seconds.

Problems with CTD:

Everything seemed to be going well!

CTD swap after sea-cable broke.

Files 0047 and 0049 are “non-files”. (Event 47 was used for TM cast).

File 0057 – Seamount: downcast speed of 0.5 m/s.

Niskins & Samples at CTD/Rosette casts:

Cast 0001 – SI: all bottles got closed but no sampling was done, no CHE file needed.

Cast 0022 – P7: 23 bottles got closed at 2000 but they are not on the sampling log and are NOT needed in the CHE file.

Cast 0026 – P10: 23 bottles got closed at 2000 but they are not on the sampling log and are NOT needed in the CHE file.

Cast 0048 – P26: this was just to test the rosette after retermination. The CTD cast is needed but no CHE file needed.

Cast 0049 – P26: cast to test CTD, please process.

Cast 0076 – P20 DMS: the P16 sheet got printed so all the labels said station P16. Most got corrected but if there are any doubt with sample numbers not matching chances are that it was from station P20.

Cast 0090 – P26 deep: a bottle was closed by error at 2570 dbar. Since it wasn’t noted until after the 2000 dbar got closed, bottles 6, 7 and 8 are “off” pressure and no bottle got closed at 1250 dbar to put them back in sync.

File names – Headers:

Cast 0014 – P4 DMS: wrong depth in header, should be 1330 not 754.

Cast 0020 – P6: please check depth of 3005?

Cast 0057: called Seamount in logbook and sampling log but “Gibson near” in file. Let’s call it Seamount everywhere.

Casts 0096 – P14 and 0098 – P13: please check depth. 4060 for P13 is definitely not right.

Cast 0106 – CPE1: station name CPE01 should be renamed CPE1.

Cast 0120 – 3: Depth written in book as 323 and in file as 232. Should be 323.

Casts with no PAR sensor (the sampling logs don’t all have the correct information):

0019 – P5; 0028 – P12 deep; 0050 – P26 deep; 0057 – Seamount; 0064 – P25; 0066 – P24; 0070 – P22; 0072 – P21; 0074 – P20 deep; 0083 – P18; 0090 – P16 deep; 0094 – P15; 0096 – P14.

Cast out of order:

0022 – P7; 0026 – P10.

Casts with no Niskin closed:

Quite a few …

Loops:

See loops log.

JF1, JF3, and JF4 are the only ones with nuts, all the others only have 1 Sal, 2 Chl.

Loop 5009 (at P5) should be renamed Loop5019.

Loop P17 (event 87) should be renamed Loop87.

TSG:

Many issues …

See “TSG files.docx” document in directory.