Sampling notes, Line P cruise 2021-008, 24 August to 7 September 2021

CTD/Rosettes:

44 files, 0003 to 0090.

0 stand-alone CTD.

41 rosette casts.

3 casts with no bottles. For 0022, see notes below.

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 Aug 2021\_main.xmlcon was used for all casts.

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.

Most Niskins were “soaked” for 30 seconds, some Niskins where the S and O gradients were important were soaked for 60 seconds. Those are indicated on the sampling logs.

Problems with CTD:

Files 0001, 0038, 0056 were not CTD events (0001 was cancelled b/o faulty pylon, 0038 and 0056 were Trace Metal casts).

Cast 0037, P12 – Deep: it seems that something got stuck in the primary pump at 1180 on the way down. The Oxygen signal was bad for the rest of the downcast, and not quite right for most of the upcast. The primary salinity is also bad for the downcast but seems ok on the upcast. The secondary salinity seems fine.

Niskins & Samples at CTD/Rosette casts:

Cast 0003 – Haro59: all 24 Niskins closed for testing, only Niskin 1 has actual samples.

Cast 0008 – P1: DICs got sampled last.

Cast 0022 – P6: Niskin 1 got closed on cast 0022, but it was still open when the rosette came out of the water. So cast 0023 was done down to 50 dbar and Niskin 2 got closed and sampled. Please keep both casts (one as CTD only, one as CTD and CHE).

Cast 0044 – P15: Niskin 2 was closed at 2005 just for bulk water. It was added at the last minute, does not have a sample number; not needed in the CHE file.

Cast 0049 – P16 DMS: Niskin 11 was closed at 25 m by mistake. 20 m to surface samples came from Niskin 12-17 instead of 11-16.

Cast 0051 – P17: Niskin 22 was added during the cast and didn’t get a sample number. Please use 9283 on this cast (not at P18) and add to CHE file.

File names – Headers:

Cast 0039: station name (P12) and water depth (3234) missing from header.

Casts 0055, 0057, 0069: station name “20”, the P is missing.

Casts 0075, 0077, 0079: water depth 4233 should be 4250 (sounder adjusted later)

Casts with no PAR sensor:

0037 – P12 Deep; 0039 – P12 UVic; 0040 – P13; 0042 – P14; 0044 – P15; 0046 – P16 Deep;

0052 – P18; 0057 – P20 Deep; 0063 – P22; 0068 – P24; 0070 – P25; 0077 – P26 Deep; 0079 – P26 UVic; 0081 – PA-015.

Casts out of order:

0044 – P15; 0061 – P21.

Casts with no Niskin closed:

0001 – SI03 (test cast).

0022 – P6: Niskin closed in the file but did not close on the rosette.

0089 – P2 and 0090 – P1: ctd cast only, no water sample.

Loops:

See loops log.

TSG:

We used the SBE-45. All files in SCS format.

Fluorometer was cleaned on 24 August 2021 before sailing.