ODF File Exists but QAT does not

No ODF files for event in CTD archive

BiolSums is missing bottle data that can be found elsewhere in the cruise data folder

Will fix in code, but haven’t yet (includes cruise accounting issues)

Typos in data input files

No action required

Other

Resolved

I am seeing many cases where QAT pressure and BiolSums nominal depth are VERY far apart – ask? e,g, BCD2005669. List:

* BCD1999668 – 205418 - 205420, depth 60, 70 and 80, pressure 49
* BCD2001669 - 171194, depth 95, pressure 60
* BCD2002669 – 46329, depth 95, pressure 74.5
* BCD2003669 – 241237, depth 95, pressure 73.5
* BCD2004669 – 241305, depth 95, pressure 76
* BCD2005669 – 241355, depth 95, pressure 45

Salinity Data in BioChem but not in BiolSums:

* BCD1999666
* BCD1999668 – ignored “Lost”
* BCD1999669 – couldn’t find salinity data
* BCD2000666 – couldn’t find salinity data
* BCD2000668 – couldn’t find salinity data
* BCD2000669 – couldn’t find salinity data
* BCD2004669 – Caution, salinity from carlainfo. Lots of extra data, maybe from other missions?
* BCD2005668 – Caution, salinity from carlainfo
* BCD2009669 – couldn’t find salinity data

New Nutrient Data

* BCD2000669

Pending IML Email

1. IML-2000-062, Dec 8 2000, IDs 213391-213399

BCD2000666

1. IML-2004-061, Nov 15 2004, IDs 279039-279048

BCD2004666

1. BCD1999666 - QAT sample IDs are not in BiolSums - 201211-201220
   1. These IDs are in BiolSums but are removed because they are accounted for in PAR1998078. This should be fine but I may ask someone about it to be on the safe side.
2. BCD1999668 - BiolSums sample IDs are not in QAT - 219399-219408, 205431-205440
   1. CTD depth sensor was defective for 205431-205440 so the cast was not used
   2. 219399-219408 belong to NED99041, no QAT, ODF collected
   3. \*\* Depth sensor defective, down cast not used for 205451-205460, but there is still QAT data (up cast?). No ODF data.
   4. Various time discrepancies between QAT and ODF – Events 5, 9, and 10. Event 6 is listed as event 5. The event 6 data is repeated event 5 data, so the QAT data for event 6 was removed.
3. BCD1999669 - BiolSums sample IDs are not in QAT - 213224-213228, 213243-213247, 213262-213266, 213127-213131
   1. 4 CTD casts are missing from BiolSums according to ODF, and 4 casts are in BiolSums but not in ODF. These casts all have different dates. This is mentioned in the BiolSums readme but no solution is posed other than maybe they were taken bottles only, but CTD logs say that CTD casts were taken for all 4 sets.
   2. 19 ODF files but only 14 QAT files – missing 1, 4, 5, 6, and 18
   3. 213127-213131 are from ODF 18. Inna’s document says there should be 15 QAT files but there are only 14, I think this one may have gone missing on accident somehow. ODF 18 collected
   4. 213262-213266 are from July 14th 1999, for which there is no ODF file. If there was one, it would be between 8 and 9. Event number is 21
   5. 213243-213247 are from June 14, 1999, for which there is no ODF file. Event number is 20
   6. 213224-213228 are from May 13, 1999, for which there is no ODF file. Event number is 22
   7. All three are labelled with “Jim Martin CTD 19”
4. BCD2000666 - QAT sample IDs are not in BiolSums - 231321-231340. BiolSums sample IDs are not in QAT - 213321-213340 (TYPO), 213361-213370, 213391-213399
   1. Confirmed QAT typo with CTD logs and fixed in code
   2. 213361-213370 the CTD didn’t save the cast, so there is no CTD data
   3. 213391-213399 belong to [HUD]2000068, no QAT or ODF
   4. Need to add back in 2 previously accounted for casts:
      1. 213341-213350, originally part of PAR2000002, already included in data, I just needed to remove it from the accounted for file, which I’ve done
      2. 213371-213380, CTD log says these are part of HUD2000050. Found ODF in ARC, no sign of a QAT file anywhere that I could see.
5. BCD2000668 - 10 BiolSums sample IDs are not in QAT - IDs 210981-210990
   1. 210981-210990 belong to NED2000045, no QAT, ODF collected
6. BCD2000669 - Discrepancies in BiolSum vs QAT time and depth, BCS created
   1. QAT/ODF time discrepancies in events 2, 3, 4, 5, and 19. QAT is correct for 2, 3, and 4, ODF is correct for 5 (time) and 19 (date).
   2. Depth fixed by code – QAT pressure replaces nominal depth in outliers
   3. Found extra nutrient data (NH3 and NO2). Added to BiolSums, recreated BCD
7. BCD2001666 - Record without bottle data assigned CTD gear sequence 90000065. 10 BiolSum sample IDs are not in QAT - IDs 188524-188533
   1. 188524-188533 belong to [HUD]2001072. No CTD data in data by year and cruise or CTD archive, maybe somewhere else? IML cruise. – DOUBLE CHECK THIS CRUISE NUMBER – IML data is archived by IML, data was added to accounted for cruises
8. BCD2001668 - 43 5 digit sample IDs, BCS created
   1. Looks like no issues
9. BCD2001669 - 1 ID is named CTD only, missing columns. 3 records without bottle data assigned CTD gear sequence 90000065. IDs in BiolSums but not QAT: 171182-171186, 234505, 234525-234529, 234544-234548.
   1. ODF archive is missing ODF files 8, 16, and 18
   2. 171182-171186 are in event 8, has no CTD data – CTD log says battery failed on CTD
   3. 234525-234529 are in event 16, CTD log mentions “CTD time not set right or \_\_\_\_ CTD time?” (I can’t make it out exactly)
   4. 234544-234548 are in event 18 – CTD log states “CTD pressure sensor failed so cast is ASC. File and depth approximate”, CTD data missing may be intentional?
   5. 234505 should be part of event 13, may be a mistake in QAT creation
10. BCD2002666 - QAT sample IDs 234851-234900 are not in BiolSums
    1. BiolSums is heavily outdated, only contains data for the first half of the year. Missing bottle data found in Stn2\_chlsum\_2002\_dec.xls. Careful for potential cases where data is accounted for.
    2. Lots of missing QAT data after BiolSums was updated
       1. Several casts belong to reboot cruises – I’ve added these to “accounted for dates and cruises.csv”
       2. 234881-2348890 belongs to [HUD]2002054, ODF collected
       3. 258001-258010 and 258461-258470 belong to NED2002037, ODFs collected
       4. 258843-258852 belong to NED2002040, ODFs collected
       5. 245209-245218 belong to NED2002051, ODF collected
11. BCD2002668 - BiolSums sample IDs 174251-174260 and 256393-256402 are not in QAT
    1. 174251-174260 CTD log mentions 3 batfail errors on CTD with voltage and the ODF is missing. This may be intentional but I will highlight it red for now.
    2. 256393-256402 belong to NED2002051, no QAT, ODF collected
12. BCD2002669 - 10 records without bottle data assigned CTD gear sequence 90000065. IDs 234657-234661 and 234665-234669 are in QAT but not BiolSums. IDs 234568-234572 are in BiolSums but not QAT.
    1. 234568-234572 contain no data and are absent from the CTD log. Remove? May require further investigation
    2. BiolSums is outdated - 234657-234661 and 234665-234669 say that bottles were taken according to CTD log but there is no data in BiolSums. I found data for these IDs in Prince5\_chlsum2002\_more.xls
    3. After BiolSums correction, 234273-234677 are missing from QAT. The CTD log is very confusing, sampling was done on Dec 31 and Jan 3, but it is not clear what was done when and what should be included in which year. Neither year contains QAT data for these IDs – Moved Dec 31 2002669 data to Jan 3 2003669
13. BCD2003666 - BiolSums IDs 261101-261110 are not in QAT
    1. These IDs are in MAT2003014. There is an ODF file but not a QAT file. This is sort of its own cruise but not really? Not sure if this is meant to go to fixed stations or not, I assume so but if so it’s going to be a weird exception. No QAT, ODF collected
    2. The Matthew event number is 1, which already exists elsewhere in the cruise
    3. Also need to add IDs 267301-267310 from HUD2003067 – note there is an event number conflict – ODF and QAT collected
14. BCD2003668 - BiolSums IDs are not in QAT: 302027-302032, 263390-263399
    1. 302027-302032 is missing from CTD log, listed as IML data in BiolSums. Ask Diana if this should be removed – sounds like IML took the data. Could ask IML for data, could leave as null CTD data. Send Diana information with BiolSums, she can contact IML – IML data is archived by IML, data added to accounted for cruises.
    2. 263390-263399 is part of NED2003052 despite BiolSums listing Templeman as the vessel, no QAT, ODF collected
15. BCD2003669 - 3 records without bottle data assigned CTD gear sequence 90000065 (CTD Only IDs), CTD Only IDs fail cross-check (not in QAT)
    1. Coding changes should fix this
16. BCD2004666 - A couple of test IDs. Removed and created BCS. No other issues.
    1. No further investigations
17. BCD2004668 - IDs in BiolSums missing from QAT - 271946-271955
    1. 271946-271955 are part of TEL2004534, no QAT, ODF collected
18. BCD2004669 - IDs in QAT missing from BiolSums - 241311-241315
    1. BiolSums is outdated - 241311-241315 bottle data is in Prince5\_chlsum\_2004\_July2005.xls
19. BCD2005666 - 1 depth cross-check issue between BiolSums and QAT. BCS created.
    1. Should be fixed by new code
20. BCD2005668 - IDs in BiolSums missing from QAT - 287415-287424, 260751-260760
    1. No CTD for 260751-260760 according to CTD log
    2. 287415-287424 belong to TEL2005607, QAT collected, ODF collected
21. BCD2005669 - Mission end date off by a year. 2 BiolSums vs QAT depth outliers.
    1. Should be fixed in new code – mission dates are hard coded and QAT pressure replaces BiolSums nominal depth for outliers
22. BCD2006666 - IDs in BiolSums missing from QAT - 261071-261081
    1. There is an ODF file but not a QAT file in MAT2006059 matching the date of the missing sample IDs. This is sort of its own cruise but not really? Not sure if this is meant to go to fixed stations or not, I assume so but if so it’s going to be a weird exception.
    2. 261081 should be part of event 7
23. BCD2006668 - IDs in QAT missing from BiolSums - 259251-259260. IDs in BiolSums missing from QAT - 295251-295260, 304156-304165
    1. 259251-259260 and 295251-295260 seems like an obvious typo. 295 is correct according to CTD log, will fix in code
    2. 304156-304165 belong to TEL2006678, QAT collected, ODF collected
24. BCD2006669 - IDs in BiolSums missing from QAT - 241376-241380. IDs in QAT missing from BiolSums - 241371-241375
    1. 241371-241375 are from Dec 2005 and the data in QAT for these IDs matches 241376-241380 (Jan 2006). QAT IDs are scratched out and replaced with BiolSums IDs in CTD log. I believe this to be an ID typo in QAT.
25. BCD2007666 - IDs in BiolSums missing from QAT - 306531-306540. IDs in QAT missing from BiolSums - 310454-310465
    1. 306531-306540 - ODF and hex files exist but no QAT file was made, likely because the naming convention is different from the other files
    2. 310454-310465 belong to HUD2007011, which is a reboot cruise, so this data can be deleted from QAT (code already does this, no edit required
26. BCD2007668 - IDs in BiolSums missing from QAT - 307546-307555.
    1. 307546-307555 belong to TEL2007749, no QAT, ODF collected
27. BCD2007669 - 3 depth cross-check issues between BiolSums and QAT. BCS created.
    1. Code should fix this now
28. BCD2008666 - IDs in BiolSums missing from QAT - 321001-321010.
    1. CTD log says “CTD CAST = BAD!”, seems likely that the QAT missing is intentional. Event numbers don’t leave a space for this event and the only number that would make sense from the CTD logs is 1 (which is already taken) so I’m not sure what its event number should be
29. BCD2008668 - IDs in BiolSums missing from QAT - 321877-321886.
    1. 321877-321886 belong to TEL2008815, no QAT, ODF collected
30. BCD2008669 - IDs in BiolSums missing from QAT - 239796-239800, 239831-239835. IDs in QAT missing from BiolSums - 242831-238835, 239791-239795
    1. 239791-239795 are from Dec 2007 and the data in QAT for these IDs matches 239796-239800 (Jan 2008). QAT IDs are scratched out and replaced with BiolSums IDs in CTD log. I believe this to be an ID typo in QAT.
    2. 242831-242835 looks like some kind of excel scaling error in BiolSums where the first 3 numbers of the ID go from 238-242. QAT IDs match CTD log, should be correct.
31. BCD2009666 - IDs in BiolSums missing from QAT - 306601-306620, 306661-306670
    1. 306661-306670 are from January 2010 and are also in BCD2010666, they should be removed from BiolSums
    2. Not sure where the hex files are for 306601-306620 but there are ODF files so it should be possible to make QAT files
    3. 1 cast has typos in QAT latitude
32. BCD2009668 - No issues, BCS created.
    1. No investigations required
33. BCD2009669 - 3 depth check outliers b/w BiolSums and QAT. Depth check came up as BCD2000669 - Potential bug? Title error or was 2000669 plotted?
    1. Will check on depth check title, depth outliers should be fixed by code changes
34. BCD2010666 - IDs in BiolSums missing from QAT - 306711-306720.
    1. CTD failure, 306711-306720 don’t have CTD data
    2. Adding 367025-367034, ODF and QAT collected
35. BCD2010669 - IDs in BiolSums missing from QAT - 240822-240825.
    1. QAT has this event mistyped – should be 240821-240825, but is 240821-240817 instead.
36. BCD2011666 - 10 start time discrepancies, all by 1 day. 1 latitude discrepancy, typo b/w 44 and 43. BCS created.
    1. Will fix typos in code
37. BCD2011669 - IDs in BiolSums missing from QAT – 22169.
    1. Looks like a QAT creation error, this ID should be in QAT but isn’t. All other IDs from the same event are present. Not a concatenation error – also missing from base QAT
38. BCD2012666 - 1 depth discrepancy, 1 longitude discrepancy (likely typo), 275 day difference in mission end date. BCS created.
    1. Will fix typos in code
39. BCD2012669 - 2 depth discrepancies. 33 5 digit sample IDs. 275 day difference in mission end date. BCS created.
    1. 5 digit sample IDs are caused by IDs that start with 0 which are removed in excel, I’ll ask Diana about this
40. BCD2013666 - 1 depth discrepancy. BCS created.
    1. Depth discrepancies should be fixed by new code
41. BCD2013669 - IDs in BiolSums missing from QAT - 370571-370575.
    1. CTD had battery failure but there’s still an ODF file. I’m not sure if this data missing from QAT is intentional or not due to the battery failure.