

Re: UW Temperature Data - stream temps 2018-2020

2 messages

Jackie L. Carter <jlcarter@uw.edu>
To: Rebecca Shaftel <rsshaftel@alaska.edu>

Mon, Nov 16, 2020 at 2:35 PM

Hi Becky,

There is one 2018-2020 location that I don't have location data for (Nerka Dead Moose Creek). I've asked Daniel to point me to the spot on the map - he's swamped at the moment so it may be awhile before he gets back to me. In the meantime, here are the correct 2018-2020 stream temp data. I removed all the lake temps and I'll send them separately. The file name is the same, I added a tab with the linked names and lat/longs for locations without IDs.

If you're not in a rush for the lake temps, I'll wait until I have the CTD in hand and can download and clean up the rest of the 2020 data so I can just send you one big current dataset.

I'll be back in touch as soon as I get some guidance on the locations of Dead Moose Creek as well as Lynx Creek Middle and Lynx Creek Beach.

Jackie

On Fri, Nov 13, 2020 at 5:22 PM Jackie Carter < jlcarter@uw.edu> wrote:

Whew, panic averted, I'm pretty happy to hear you don't have lake data mixed in! I'll send the wood river lake profiles when I send the reorganized 2018-2020 datasets.

Jackie

Sent from my iPhone

On Nov 13, 2020, at 5:17 PM, Rebecca Shaftel <rsshaftel@alaska.edu> wrote:

Hi Jackie,

Thank you for all of this information! With regards to lake data, one of our projects with Daniel will include growth potential models for juvenile sockeye salmon so lake temperature profiles would be great. I don't believe I have any lake data pre-2017 based on everything we have figured out so far. So, complete datasets for lakes would be fantastic if it's not too much trouble.

Thanks again! Becky

Rebecca Shaftel | Aquatic Ecologist

Ph: (907) 786-4965

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On Fri, Nov 13, 2020 at 3:04 PM Jackie L. Carter <jlcarter@uw.edu> wrote: Hi Becky.

I hope this data request/email thread isn't getting overwhelming and confusing! I apologize if it is, because I'm maybe about to add some more confusion...

I may have answered my own question by looking back at a more complete UW IDs metadata file and this might not be the problematic situation I initially thought it was (I was worried that limno data got lumped into stream locations because some of the UW site names are very similar, i.e. Ice Creek for stream temps and Ice for the limno site off Ice Creek). But I see that AKOATS does have explicit IDs for Aleknagik Limno, Beverley Limno, etc.

Question/s to you: Do you want the limno profile data, and do you already have these profiles from the AKOATS datasets (pre-2017)? They would be site names like Beverley 1 thru 6 or Aleknagik Agulowak or Aleknagik Ice or Aleknagik Bear Bay Pt or possibly just Aleknagik Limno, Beverley Limno, etc.

Based on the list of station names if the uw_sites file, you are not currently working with the limno profiles?

If you are currently working with the limno data and they have been lumped into that list of ~64 sites in the uw_site file, we probably have some more cleanup and organization to do. Let me know if this is the case and we should talk on the phone to work out what happened/what to do. Worst case scenario, I just send you all the original files with links to the AKOATS IDs.

In the meantime, I'll need to re-send you the 2018-2020 data. In my rush to clean it up and get it to you, I did the exact thing I was worried about above and renamed some limno sites the same name as stream sites! Whoops. This shouldn't take too long, I'll try to do it this evening or tomorrow. And I will include a file that links names to AKOATS ID, as well as lat/longs for anything unclear/additional.

Please clarify your current possession/use of the limno profiles and stay tuned for a correct version of the 2018-2020 data :)

jackie

On Fri, Nov 13, 2020 at 3:24 PM Jackie L. Carter < jlcarter@uw.edu> wrote:

Responses below in **bold** and in the attached files. I'll be sending another email shortly addressing my comment in red. (You guys are the first external group to request all this temperature data and there are always problems that aren't noticeable until someone starts using the data!)

- I don't see an entry for Chamee Creek in AKOATS -- can we get a lat/long for that site? Chamee Creek and Coffee Creek are the same location, someone changed the name at some point in the databook, which made its way into the database. You can rename Coffee as Chamee, Chamee seems to be how Daniel is referring to that stream currently. Lat/longs are in the uw_sites excel file, but Chamee/Coffee is AKOATS_ID 1936 if you need additional metadata info
- There are 7 StationNames in the LynxCreekALL file. It's not clear to me how to link these StationNames to AKOATS_IDs or if additional lat/longs are needed. I'm attaching the file in case that helps. I have added approximate Lat/Longs for most of these locations to the List of Station Names tab in the uw_sites excel file. I have also streamlined the names in the LynxCreekALL.csv file, so that there are now just 5 sites at Lynx Creek (LynxLakeOutlet, ColdTributary, LynxCreek, LynxMiddle, LynxBeach). Depending on your overarching question, you might consider just using the Lynx Creek site and ignoring the LakeOutlet and ColdTributary data (and definitely the Middle and Beach data I think these were deployed as part of a grad project and it may take me awhile to figure out where exactly they were). The LynxCreek site is more comparable to all the other streams, where there is a single logger near the bottom of the stream that implicitly integrates all incoming side channels/ground water/lakes/ponds/etc.
- We don't have a data file for Aleknagik Bear Creek for data through 2017 (I see it in the 2018-2020 file). If that site was established prior to 2018, can you provide the older data as well? I thought it was weird that I didn't see this site in the list of AKOATS locations. We have data going waaaay back. I've attached it, but you may want to verify that it didn't somehow get combined with Nerka Bear Creek. I'm 99% sure I sent it separately when I was sending data to Sue and Marcus.
- For the data from 2018-2020, can you also provide a sheet that links the AKOATS_IDs to the StationNames? If they aren't in AKOATS, a lat/long would be great. *I'm going to send you what I have right now, which is all the other stuff/answers, and keep working on this one.* See next email for the potential problems I discovered while matching IDs to locations and filling in coordinates.

One other observation -- there are some AKOATS points that are really close together and have similar site names indicating they might represent the same site that just got moved slightly upstream or downstream over time.... You can combine all these into the same metadata location for each similar site/location (i.e. the two Lynx Cold Trib locations, even though they map far apart, are technically the same place). Daniel doesn't take GPS coordinates every time he deploys a logger. I just drop a pin on Google Earth to get a rough location when coordinates are required and then all subsequent years are associated with that location (provided I save and name the pin!). Loggers are placed in the same general location every year, but move around from year to year as the channel/debris/etc shift.

On Mon, Nov 9, 2020 at 5:10 PM Rebecca Shaftel <rsshaftel@alaska.edu> wrote: Hi Jackie,

Thank you for the additional location information on sites that hadn't previously been entered into AKOATs. I looked at all of your notes and I have a few more questions. I realized that some of the data files have multiple StationNames within them, which I'm assuming should each be linked to an entry in AKOATS or a lat/long. I'm sorry I didn't catch that before. I modified the uw sites workbook by adding a sheet that lists all the StationNames in each data file. I put notes some notes in that worksheet, but I'll also write them out here:

- I don't see an entry for Chamee Creek in AKOATS -- can we get a lat/long for that site?
- There are 7 StationNames in the LynxCreekALL file. It's not clear to me how to link these StationNames to AKOATS_IDs or if additional lat/longs are needed. I'm attaching the file in case that helps.
- We don't have a data file for Alegnagik Bear Creek for data through 2017 (I see it in the 2018-2020 file). If that site was established prior to 2018, can you provide the older data as well?
- For the data from 2018-2020, can you also provide a sheet that links the AKOATS_IDs to the StationNames? If they aren't in AKOATS, a lat/long would be great.

One other observation -- there are some AKOATS points that are really close together and have similar site names indicating they might represent the same site that just got moved slightly upstream or downstream over time. We're importing these data into a database where we can track multiple lat/longs per site, but that only makes sense if we know the year when the site moved so that the data are correctly attributed to a location. The sites that are very close, but have multiple metadata records in AKOATS include Pfifer Creek, Silver Salmon Creek, Nerka Bear Creek, and also Lynx Creek/Lynx Creek - bottom. I can clean up these entries a few ways -- delete the earlier version and associate the metadata from the second record to the data file, or associate data from one time period (e.g. 2008-2013) with one record and associate data from a second time period with the second location (e.g. 2014-2020). Please let me know what you prefer.

Thanks for all your help connecting data to locations. If anything I've requested is cumbersome and there is an easier way to do this, please let me know! Becky

Rebecca Shaftel | Aquatic Ecologist

Ph: (907) 786-4965

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On Fri, Nov 6, 2020 at 1:56 PM Jackie L. Carter < jlcarter@uw.edu> wrote: | Hi Becky,

Here are the data and some additional metadata and clarifications. If anything needs further clarification, let me know. Two big things I noticed - it's possible that Aleknagik Bear Creek and Nerka Bear Creek were combined in the AKOATS files. There are some detailed notes in the metadata file regarding site IDs and what I noticed. If you find that maybe you need the separate temp data files for each stream, let me know. They'll be easy to pull out. A similar thing may have happened with Lynx Creek. Detailed notes in the metadata file, but short story: there are typically 3 temp loggers in Lynx Creek, one at the outlet of a warm lake the feeds the stream (Lynx Upper, Lynx Lake Trib...), one in a super cold trib that is just downstream of the

lake (Cold Trib, Lynx cold trib...), and one near the bottom of the stream that gives an 'integrated' temperature picture (Lynx Creek, Lynx lower, ...). It looks like everything may have been combined in the LynxCreekAll. If you would like original files from that stream, or just the files from the lower location, let me know. Jackie

On Thu, Nov 5, 2020 at 12:43 PM Rebecca Shaftel rsshaftel@alaska.edu wrote:

Ok, glad that is figure out! My understanding from Marcus is that the seq_ID is his internal ID for new sites and the ID can be used by the data contributor if they have a project ID code.

That all sounds great, thank you for getting these IDs and the temperature data over so quickly.

Becky

Rebecca Shaftel | Aquatic Ecologist

Rebecca Snaπei | Aquatic Ecolog

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On Thu, Nov 5, 2020 at 11:28 AM Jackie L. Carter < jlcarter@uw.edu> wrote:

Ah, I see - your person updated with the seq_ID and I was looking at the ID, so not too weird after all. I will fill this file in and send lat/longs and some other explanations of data things I'm noticing as I look at this. I'll try to have this and the 2018-2020 update stream temps to you later today, tomorrow at the latest. Thanks for your patience! iackie

On Thu, Nov 5, 2020 at 12:18 PM Rebecca Shaftel <rsshaftel@alaska.edu> wrote: Hi Jackie,

Yes, here is the AKOATS working file that Marcus shared with me. Maybe he doesn't provide the internal AKOATS IDs when he sends this out to folks? I can ask him. You should be able to filter on your name to make it easier to work with.

Thank you! Becky

Rebecca Shaftel | Aquatic Ecologist

Ph: (907) 786-4965

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On Thu, Nov 5, 2020 at 11:04 AM Jackie L. Carter < jlcarter@uw.edu> wrote: | Hi Becky,

I just looked at the file you sent and something is weird, probably on my end. Those IDs aren't even close to the IDs I have in the file Marcus would send every year for me to update! I'm having a hard time navigating the AKOATS site - do you have a file with all the actual AKOATS IDs that were used to create the file you just sent (I can wade through the whole thing and pick out UW sites if you want to send a big list) or a link to where I can download a file?

Thanks Jackie

On Wed, Nov 4, 2020 at 3:08 PM Rebecca Shaftel <rsshaftel@alaska.edu> wrote: Hi Jackie,

Congrats on your test result -- I've still got one in daycare so I've been through the same thing. :)

- 1) We can wait on the lake data from the Wood River system if that is ok with you. More data now is better.
- 2) I asked someone here to try to match your file names to your AKOATS entries and it looks like there were questions for 12/51 (see attached file). Would you mind checking these for us and clarifying which are in AKOATS and also provide lat/longs for the 8 not in AKOATS?

Let me know if that makes sense and seems reasonable.

Thanks, Becky

Rebecca Shaftel | Aquatic Ecologist

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On Wed, Nov 4, 2020 at 1:13 PM Jackie L. Carter <jlcarter@uw.edu> wrote: Hi Becky.

Kid was covid negative, as expected, back in daycare, and I'm free! I've been looking into these data today and wanted to ask you a couple questions.

- 1) The CTD unit used to take lake temperature profiles for 4 of the 5 lakes in the Wood River system is still on a barge coming back from AK. I'm not sure when it will be here, i.e. when I can get the 2020 data off of it. Would you like the updated stream and Lake Aleknagik data post-2017 prior to receiving the complete lake profiles, or would you like them all at once?
- 2) I have AKOATS IDs for all but 8 of the sites you have listed. Maybe the most efficient thing for me to do will be to send you the metadata file I submitted to AKOATS. It's pretty easy to match site names to that file, then you'll just have it all in one place (as well as the AKOATS IDs for all but the missing 8). Does that work for you? I don't want to add complications, I know compiling and analyzing all these files is complicated enough!

Let me know what you prefer Jackie

On Sat, Oct 31, 2020 at 1:15 PM Rebecca Shaftel rsshaftel@alaska.edu wrote:

Hi Jackie - next week would be great! Good luck with your kiddo and I hope you get a - result.

Becky

Sent from my iPhone

On Oct 30, 2020, at 9:32 PM, Jackie L. Carter < jlcarter@uw.edu> wrote:

Hi Becky,

Yes, I can definitely help with this, hopefully next week. I'll need to go in to my office to run the database queries and I currently have a sick kid, waiting on results of a covid test before I can take her back to daycare. The post-2017 data transfer will be no problem. As for the files you already have, I can update the file you attached with the AKOATS IDs that I have on file. If you don't have data from me by the end of next week, please send me another email and remind me! Jackie On Tue, Oct 27, 2020 at 4:48 PM Rebecca Shaftel <rsshaftel@alaska.edu> wrote: Hi Jackie, I am working on several projects in Bristol Bay in collaboration with Daniel and I was hoping to include UW temperature datasets from lakes and streams. I have a large set of data files from 51 sites through 2017 that I believe were aggregated as part of the SASAP project. But, I don't have a way to link the files to their AKOATS IDs to get the site metadata. I'm attaching a csv of the file names for the data that I already have. I would also like to include any data post-2017 that are available and ready to share. Please let me know if you have time to help with this data request and if you have any questions. Thanks, Becky Rebecca Shaftel | Aquatic Ecologist Ph: (907) 786-4965 Alaska Center for Conservation Science University of Alaska Anchorage 3211 Providence Dr. Anchorage, AK 99508 Beatrice McDonald Hall, Room 108

3

forRS_UAA_2018-2020_WoodRiverStreamAndLakeTemps.xlsx 13715K

Rebecca Shaftel <rsshaftel@alaska.edu>
To: "Jackie L. Carter" < jlcarter@uw.edu>

Mon, Nov 16, 2020 at 3:11 PM

Hi Jackie,

Thank you so much for getting all the stream data organized and sent over. Your idea of passing along all the lake temperatures at once sounds fine. Can you remind me when you think that might be so that I have an idea for project planning?

Thanks again, Becky

Rebecca Shaftel | Aquatic Ecologist Ph: (907) 786-4965

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