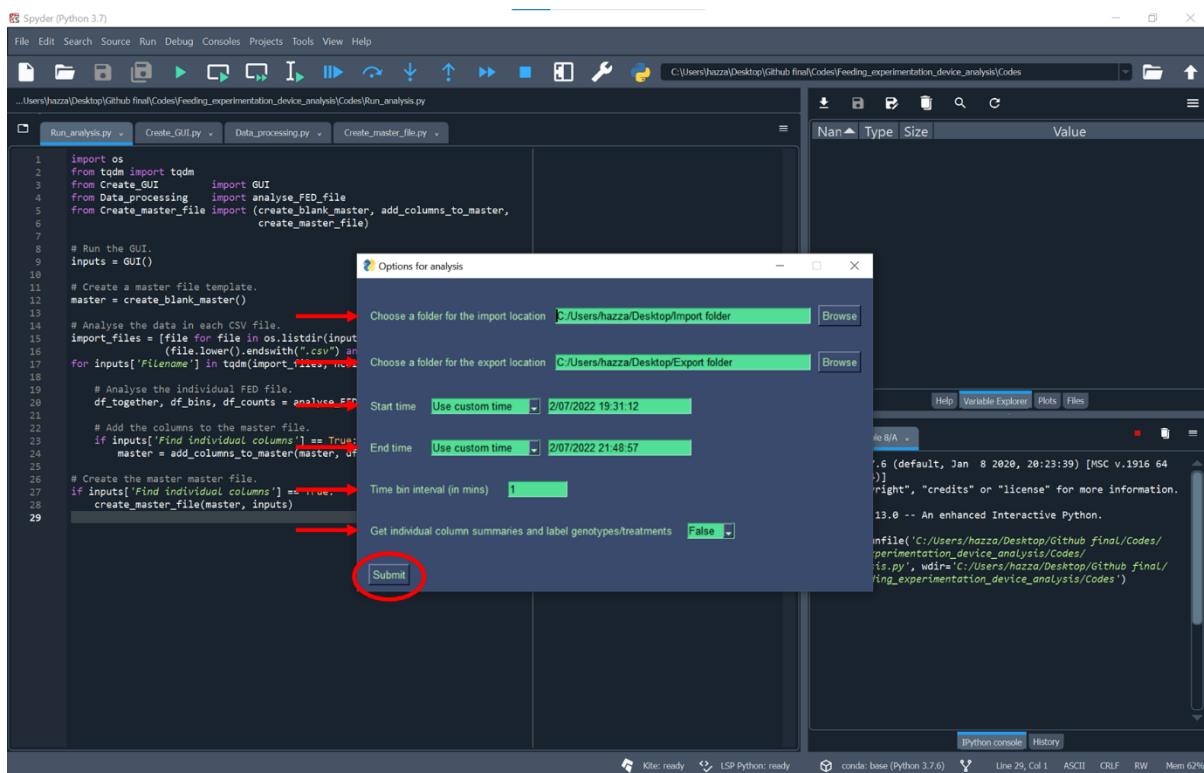


Guide to the FED code

Purpose: the CSV output from the FED shows the timestamps of each event, like a nose poke or pellet retrieval. This code:

- Converts this output into a time binned file. It also adds another sheet with the time stamps of all pellet count changes.
- Creates a master file that combines all the “Left poke count” columns from the raw FED files into one sheet. It does the same thing for the other column types as well. The columns are then sorted by genotype and treatment.

1. Select all the options for time bins analysis and click “submit”. Here is an explanation of all the options:

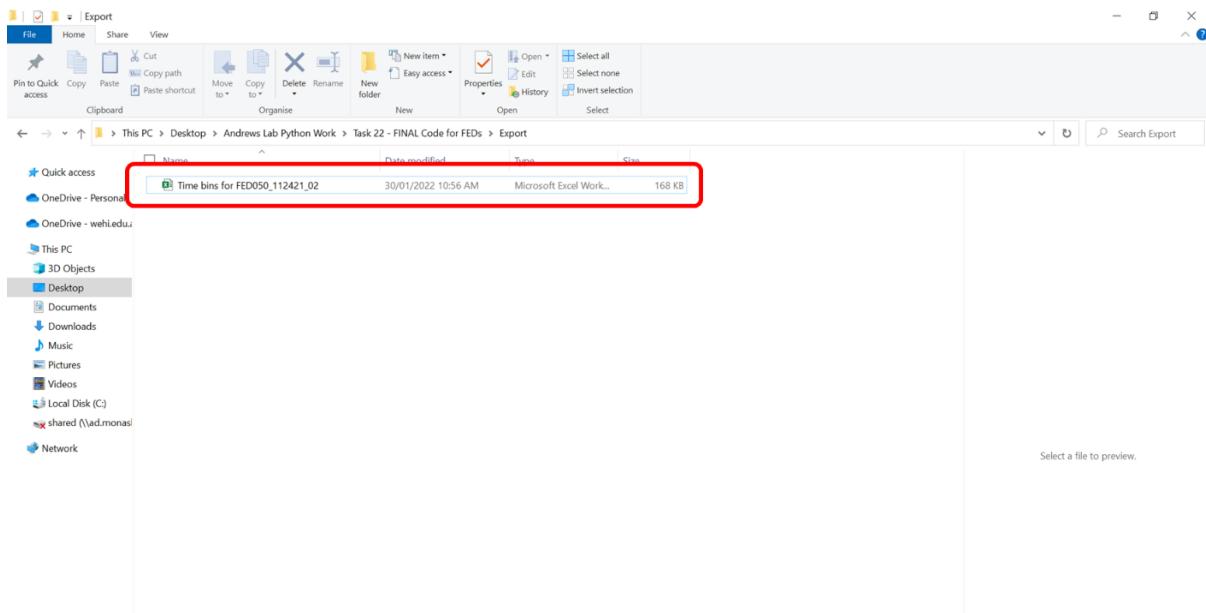


- **Import location:** the import location is a folder that contains the raw FEDs data. The code will analyse each CSV file in the folder.
- **Export location:** the export location is a folder for the time binned files.
- **Start time:** There are 3 options for entering the start time.
 - “Use custom time” specifies the date and time exactly. The time points from the raw data CSV file can also be copied directly.
 - “Use first timestamp” uses the time of the first row in the raw CSV file.
 - “Use initiation poke” finds the start time using the method in the image below.
- **End time:** There are 2 options for entering the end time:
 - “Use custom time” specifies the date and time exactly. The time points from the raw data CSV file can also be copied directly.
 - “Use last timestamp” uses the time of the last row in the raw CSV file.

A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
1 MM:DD:YYYY hh:mm:ss	Device_Number	Battery_Voltage	D	E	F	G	H	J	K	L	M	N	O	P	Q
2 6/28/2021 13:21:18	13	4.14	Active Poke	Left	0	Count	Retrieval_Time								
3 6/28/2021 14:18:17	13	4.13	0	1 Poke	Left	0	0 nan								
4 6/28/2021 14:25:23	13	4.13	0	1 Poke	Left	0	0 nan								
5 6/28/2021 14:36:49	13	4.12	0	1 Poke	Left	0	1 nan								
6 6/28/2021 14:41:02	13	4.12	0	1 Poke	Left	1	2 nan								
7 Use this time point as the start time	13	4.13	0	1 Poke	Left	2	3	1 nan							
8	13	4.09	1	1 Pellet	Left	2	3	2	30						
9	13	4.12	0	1 Poke	Left	2	4	2 nan							
10 6/28/2021 15:00:01	13	4.12	0	1 Poke	Left	3	4	2 nan							
11 6/28/2021 15:00:08	13	4.09	1	1 Pellet	Left	3	4	3	5						
12 6/28/2021 15:35	13	4.11	0	1 Poke	Left	3	5	3 nan							
13 6/28/2021 15:57	13	4.11	0	1 Poke	Left	3	6	3 nan							
14 6/28/2021 15:28:45	13	4.12	0	1 Poke	Left	4	6	3 nan							
15 6/28/2021 15:28:49	13	4.1	1	1 Pellet	Left	4	6	4	2						
16 6/28/2021 15:31:38	13	4.12	0	1 Poke	Left	4	7	4 nan							
17 6/28/2021 15:33:17	13	4.11	0	1 Poke	Left	5	7	4 nan							
18 6/28/2021 15:33:21	13	4.1	1	1 Pellet	Left	5	7	5	2						
19 6/28/2021 15:36:53	13	4.12	0	1 Poke	Left	5	8	5 nan							
20 6/28/2021 15:46:59	13	4.11	0	1 Poke	Left	5	9	5 nan							
21 6/28/2021 15:47:04	13	4.11	0	1 Poke	Left	5	10	5 nan							
22 6/28/2021 15:47:32	13	4.11	0	1 Poke	Left	6	10	5 nan							
23 6/28/2021 15:47:47	13	4.08	2	1 Pellet	Left	6	10	6	12						
24 6/28/2021 15:56:31	13	4.11	0	1 Poke	Left	7	10	6 nan							
25 6/28/2021 15:56:35	13	4.09	1	1 Pellet	Left	7	10	7	2						
26 6/28/2021 16:00:16	13	4.11	0	1 Poke	Left	8	10	7 nan							
Use the last time point present for the end time	13	4.09	1	1 Pellet	Left	8	10	8	2						
6/28/2021 16:09:17	13	4.11	0	1 Poke	Left	9	10	8 nan							
6/28/2021 16:12:44	13	4.11	0	1 Poke	Left	9	10	9	2						
6/28/2021 16:12:48	13	4.09	1	1 Pellet	Left	10	11	10 nan	1						
						11	11	11	1						

- Time bin interval (mins):** the time bin length can be any whole number or decimal in minutes.
- Get individual column summaries:** make a master excel file that combines the data for each column across many files. The sheets are “left poke count”, “right poke count”, ... See step 9 onwards for an explanation of this option.

2. Go to the export location to find the time binned file.



3. Here is the exported data.

- The time bins 0, 1, 2, ... refer to $t = 0$ mins, $0 < t \leq 1$ mins, $1 < t \leq 2$ mins, ... These are the rows in yellow. The sheet **Time bins** only contains these rows.
- Whenever a pellet count changes, the exact time point is shown as a decimal. The time points 4.28, 4.3, 4.33, ... refer to $t = 4.28$ mins, $t = 4.3$ mins, $t = 4.33$ mins, ... These rows are shown in red and the sheet **Pellet count changes** only contains these rows.
- The sheet **All data** contains the rows from both these sheets together.

All data sheet

Screenshot of an Excel spreadsheet titled "Time bins for FED050_112421_02". The table has 17 columns and 34 rows of data. The columns are labeled: Date, Time, Time bins (mins), Library Version, Session Type, Motor Turns, FR, Left Poke Count, Right Poke Count, Pellet Count, Pellet Count Change, Block Pellet Count, Retrieval Time, Interpellet Interval, and Poke Time. Rows 1 through 6 are yellow, indicating time bins. Rows 7 through 34 are red, indicating pellet count changes. The "All data" tab is selected at the bottom.

	Date	Time	Time bins (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time	C
2	2021-11-24	11:55:20	0	1.11.0	Free_feed	1	0	0	0	1	1	0	4.55	0	0	
3	2021-11-24	11:56:20	1	1.11.0	Free_feed	0	0	0	1	0	0	0	0	0	0	
4	2021-11-24	11:57:20	2	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	
5	2021-11-24	11:58:20	3	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	
6	2021-11-24	11:59:20	4	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	
7	2021-11-24	11:59:37	4.283333333	1.11.0	Free_feed	2	0	0	0	2	1	0	60	257	0	
8	2021-11-24	11:59:38	4.3	1.11.0	Free_feed	1	0	0	0	3	1	0	0.18	1	0	
9	2021-11-24	11:59:40	4.333333333	1.11.0	Free_feed	1	0	0	0	4	1	0	0.18	2	0	
10	2021-11-24	11:59:44	4.4	1.11.0	Free_feed	1	0	0	0	5	1	0	2.65	4	0	
11	2021-11-24	11:59:45	4.416666667	1.11.0	Free_feed	1	0	0	0	6	1	0	0.18	1	0	
12	2021-11-24	11:59:46	4.433333333	1.11.0	Free_feed	1	0	0	0	7	1	0	0.44	1	0	
13	2021-11-24	12:00:20	5	1.11.0	Free_feed	1	0	0	0	7	0	0	0.44	1	0	
14	2021-11-24	12:01:20	6	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
15	2021-11-24	12:02:20	7	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
16	2021-11-24	12:03:20	8	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
17	2021-11-24	12:04:20	9	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
18	2021-11-24	12:05:20	10	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
19	2021-11-24	12:06:20	11	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
20	2021-11-24	12:07:20	12	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	
21	2021-11-24	12:07:30	12.166666667	1.11.0	Free_feed	1	0	0	0	8	1	0	60	464	0	
22	2021-11-24	12:07:36	12.266666667	1.11.0	Free_feed	1	0	0	0	9	1	0	5.31	6	0	
23	2021-11-24	12:07:38	12.3	1.11.0	Free_feed	1	0	0	0	10	1	0	0.88	2	0	
24	2021-11-24	12:08:20	13	1.11.0	Free_feed	1	0	0	0	10	0	0	0.88	2	0	
25	2021-11-24	12:09:20	14	1.11.0	Free_feed	0	0	0	0	10	0	0	0	2	0	
26	2021-11-24	12:10:20	15	1.11.0	Free_feed	0	0	0	0	10	0	0	0	2	0	
27	2021-11-24	12:11:14	15.9	1.11.0	Free_feed	1	0	0	0	11	1	0	60	216	0	
28	2021-11-24	12:11:20	16	1.11.0	Free_feed	1	0	0	0	11	0	0	60	216	0	
29	2021-11-24	12:12:20	17	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	
30	2021-11-24	12:13:20	18	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	
31	2021-11-24	12:14:20	19	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	
32	2021-11-24	12:15:20	20	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	
33	2021-11-24	12:16:20	21	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	
34	2021-11-24	12:16:29	21.15	1.11.0	Free_feed	1	0	0	0	12	1	0	60	315	0	

Time bins sheet

Time bins for FED050_112421_02

	Date	Time	Time bins (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time
2	2021-11-24	11:55:20	0 1.11.0	Free_feed	1 0	0	0	1	1	0	4.55	0	0	0	0
3	2021-11-24	11:56:20	1 1.	Free_feed	0 0	0	0	1	0	0	0	0	0	0	0
4	2021-11-24	11:57:20	2 1.	Free_feed	0 0	0	0	1	0	0	0	0	0	0	0
5	2021-11-24	11:58:20	3 1.	Free_feed	0 0	0	0	1	0	0	0	0	0	0	0
6	2021-11-24	11:59:20	4 1.11.0	Free_feed	0 0	0	0	1	0	0	0	0	0	0	0
7	2021-11-24	12:00:20	5 1.11.0	Free_feed	1 0	0	0	7	6	0	0.44	1	0	0	0
8	2021-11-24	12:01:20	6 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
9	2021-11-24	12:02:20	7 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
10	2021-11-24	12:03:20	8 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
11	2021-11-24	12:04:20	9 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
12	2021-11-24	12:05:20	10 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
13	2021-11-24	12:06:20	11 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
14	2021-11-24	12:07:20	12 1.11.0	Free_feed	0 0	0	0	7	0	0	0	0	1	0	0
15	2021-11-24	12:08:20	13 1.11.0	Free_feed	1 0	0	0	10	3	0	0.88	2	0	0	0
16	2021-11-24	12:09:20	14 1.11.0	Free_feed	0 0	0	0	10	0	0	0	0	2	0	0
17	2021-11-24	12:10:20	15 1.11.0	Free_feed	0 0	0	0	10	0	0	0	0	2	0	0
18	2021-11-24	12:11:20	16 1.11.0	Free_feed	1 0	0	0	11	1	0	60	216	0	0	0
19	2021-11-24	12:12:20	17 1.11.0	Free_feed	0 0	0	0	11	0	0	0	0	216	0	0
20	2021-11-24	12:13:20	18 1.11.0	Free_feed	0 0	0	0	11	0	0	0	0	216	0	0
21	2021-11-24	12:14:20	19 1.11.0	Free_feed	0 0	0	0	11	0	0	0	0	216	0	0
22	2021-11-24	12:15:20	20 1.11.0	Free_feed	0 0	0	0	11	0	0	0	0	216	0	0
23	2021-11-24	12:16:20	21 1.11.0	Free_feed	0 0	0	0	11	0	0	0	0	216	0	0
24	2021-11-24	12:17:20	22 1.11.0	Free_feed	1 0	0	0	14	3	0	0.06	6	0	0	0
25	2021-11-24	12:18:20	23 1.11.0	Free_feed	0 0	0	0	14	0	0	0	0	6	0	0
26	2021-11-24	12:19:20	24 1.11.0	Free_feed	0 0	0	0	14	0	0	0	0	6	0	0
27	2021-11-24	12:20:20	25 1.11.0	Free_feed	1 0	0	0	15	1	0	60	188	0	0	0
28	2021-11-24	12:21:20	26 1.11.0	Free_feed	1 0	0	0	16	1	0	57.12	58	0	0	0
29	2021-11-24	12:22:20	27 1.11.0	Free_feed	11 0	0	0	17	1	0	49.71	79	0	0	0
30	2021-11-24	12:23:20	28 1.11.0	Free_feed	0 0	0	0	17	0	0	0	0	79	0	0
31	2021-11-24	12:24:20	29 1.11.0	Free_feed	0 0	0	0	17	0	0	0	0	79	0	0
32	2021-11-24	12:25:20	30 1.11.0	Free_feed	0 0	0	0	17	0	0	0	0	79	0	0
33	2021-11-24	12:26:20	31 1.11.0	Free_feed	0 0	0	0	17	0	0	0	0	79	0	0
34	2021-11-24	12:27:20	32 1.11.0	Free_feed	0 0	0	0	17	0	0	0	0	79	0	0

This sheet only
contains the time
points of each
pellet count change

Pellet count changes sheet

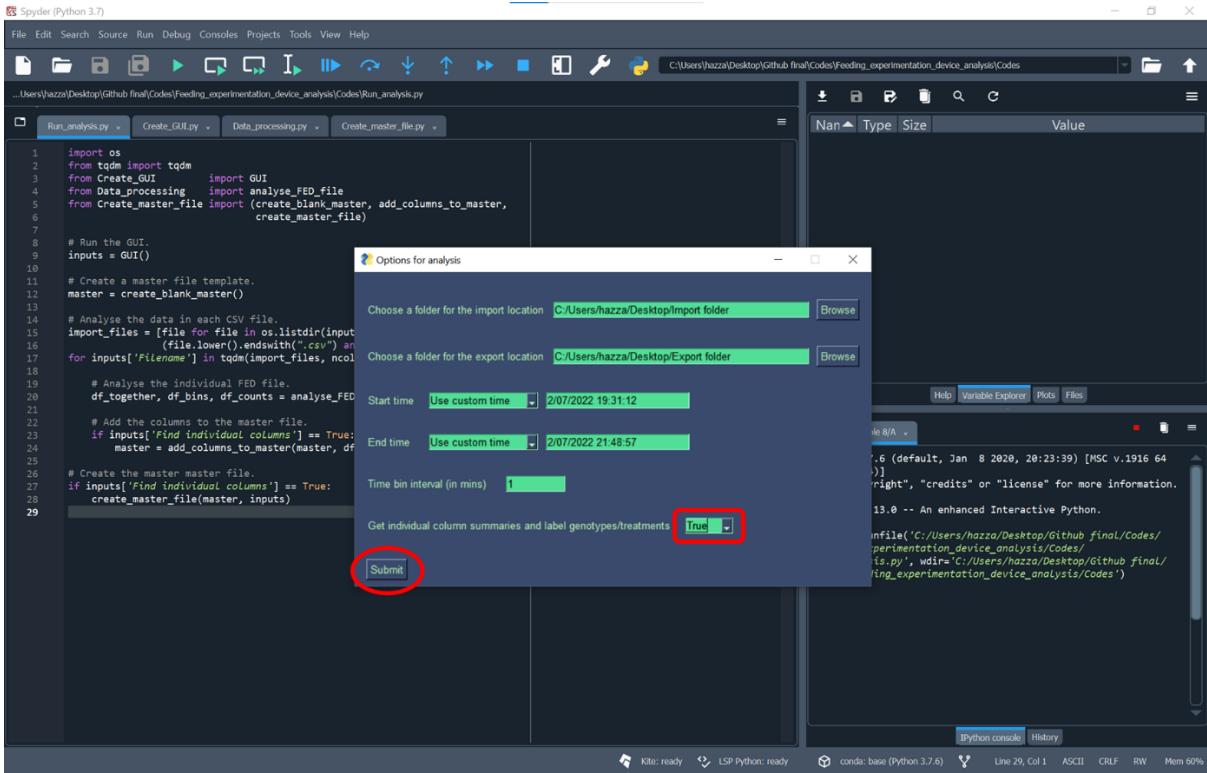
Time bins for FED050_112421_02

	Date	Time	Time (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time
2	2021-11-24	11:55:20	0 1.11.0	Free_feed	1 0	0	0	1	1	0	4.55	0	0	0	0
3	2021-11-24	11:59:37	4.28333333 1.11.0	Free_feed	2 0	0	0	2	1	0	60	257	0	0	0
4	2021-11-24	11:59:38	4.3 1.11.0	Free_feed	1 0	0	0	3	1	0	0.18	1	0	0	0
5	2021-11-24	11:59:40	4.33333333 1.11.0	Free_feed	1 0	0	0	4	1	0	0.18	2	0	0	0
6	2021-11-24	11:59:44	4.4 1.11.0	Free_feed	1 0	0	0	5	1	0	2.65	4	0	0	0
7	2021-11-24	11:59:45	4.41666667 1.11.0	Free_feed	1 0	0	0	6	1	0	0.18	1	0	0	0
8	2021-11-24	11:59:45	4.43333333 1.11.0	Free_feed	1 0	0	0	7	1	0	0.44	1	0	0	0
9	2021-11-24	12:07:30	12.16666667 1.11.0	Free_feed	1 0	0	0	8	1	0	60	464	0	0	0
10	2021-11-24	12:07:36	12.26666667 1.11.0	Free_feed	1 0	0	0	9	1	0	5.31	6	0	0	0
11	2021-11-24	12:07:38	12.3 1.11.0	Free_feed	1 0	0	0	10	1	0	0.88	2	0	0	0
12	2021-11-24	12:11:14	15.9 1.11.0	Free_feed	1 0	0	0	11	1	0	60	216	0	0	0
13	2021-11-24	12:16:29	21.15 1.11.0	Free_feed	1 0	0	0	12	1	0	60	315	0	0	0
14	2021-11-24	12:16:31	21.18333333 1.11.0	Free_feed	1 0	0	0	13	1	0	0.06	2	0	0	0
15	2021-11-24	12:16:37	21.28333333 1.11.0	Free_feed	1 0	0	0	14	1	0	0.06	6	0	0	0
16	2021-11-24	12:19:45	24.41666667 1.11.0	Free_feed	1 0	0	0	15	1	0	60	188	0	0	0
17	2021-11-24	12:20:43	25.38333333 1.11.0	Free_feed	1 0	0	0	16	1	0	57.12	58	0	0	0
18	2021-11-24	12:22:02	26.7 1.11.0	Free_feed	11 0	0	0	17	1	0	49.71	79	0	0	0
19	2021-11-24	12:27:45	32.41666667 1.11.0	Free_feed	2 0	0	0	18	1	0	60	343	0	0	0
20	2021-11-24	12:32:11	36.85 1.11.0	Free_feed	1 0	0	0	19	1	0	60	266	0	0	0
21	2021-11-24	12:36:17	40.95 1.11.0	Free_feed	1 0	0	0	20	1	0	60	246	0	0	0
22	2021-11-24	12:36:50	41.5 1.11.0	Free_feed	6 0	0	0	21	1	0	14.94	33	0	0	0
23	2021-11-24	12:47:28	52.13333333 1.11.0	Free_feed	1 0	0	0	22	1	0	60	638	0	0	0
24	2021-11-24	12:47:58	52.63333333 1.11.0	Free_feed	2 0	0	0	23	1	0	20.27	30	0	0	0
25	2021-11-24	12:49:31	54.18333333 1.11.0	Free_feed	2 0	0	0	24	1	0	60	93	0	0	0
26	2021-11-24	12:50:24	55.06666667 1.11.0	Free_feed	1 0	0	0	25	1	0	47.4	53	0	0	0
27	2021-11-24	12:50:32	55.2 1.11.0	Free_feed	1 0	0	0	26	1	0	0.75	8	0	0	0
28	2021-11-24	12:54:14	58.9 1.11.0	Free_feed	2 0	0	0	27	1	0	60	221	0	0	0
29	2021-11-24	12:58:10	62.83333333 1.11.0	Free_feed	1 0	0	0	28	1	0	60	237	0	0	0
30	2021-11-24	12:59:25	64.08333333 1.11.0	Free_feed	1 0	0	0	29	1	0	60	75	0	0	0
31	2021-11-24	12:59:49	64.48333333 1.11.0	Free_feed	1 0	0	0	30	1	0	17.48	24	0	0	0
32	2021-11-24	13:09:24	74.06666667 1.11.0	Free_feed	1 0	0	0	31	1	0	60	575	0	0	0
33	2021-11-24	13:14:51	79.51666667 1.11.0	Free_feed	1 0	0	0	32	1	0	60	327	0	0	0
34	2021-11-24	13:15:19	79.98333333 1.11.0	Free_feed	2 0	0	0	33	1	0	25.73	28	0	0	0

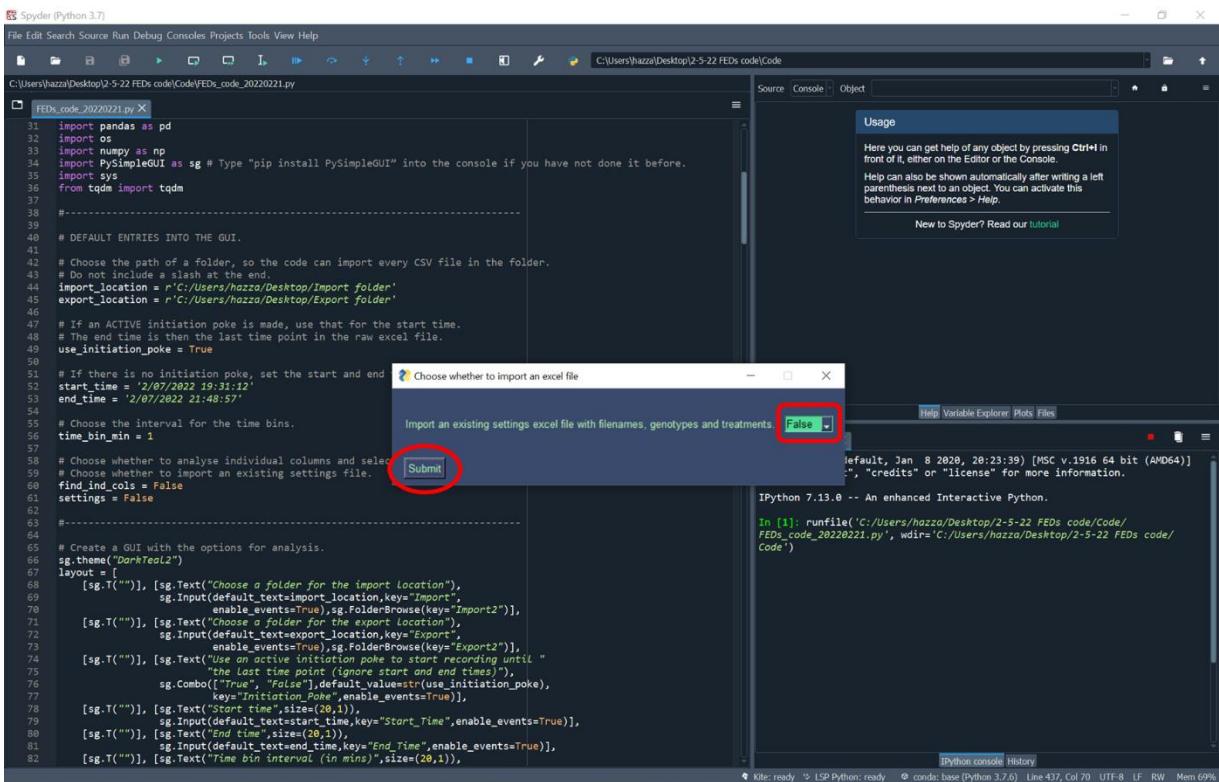
This sheet only
contains the time
points of each
pellet count change

All data | time bins | Pellet count changes | Accessibility: Good to go

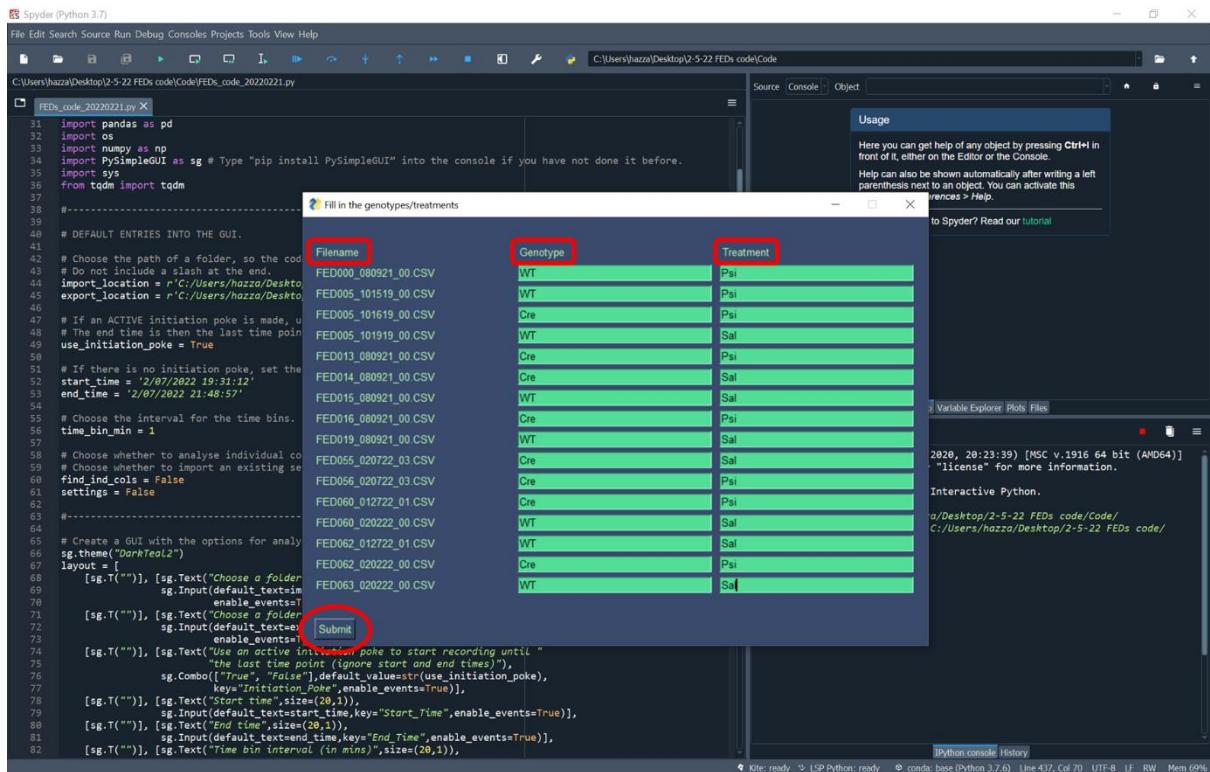
4. The option “get individual columns summaries” at the start of the GUI can also be used to create a master excel file, that combines the columns from all excel files. Note that the raw FED files should still be imported, not the time binned files.



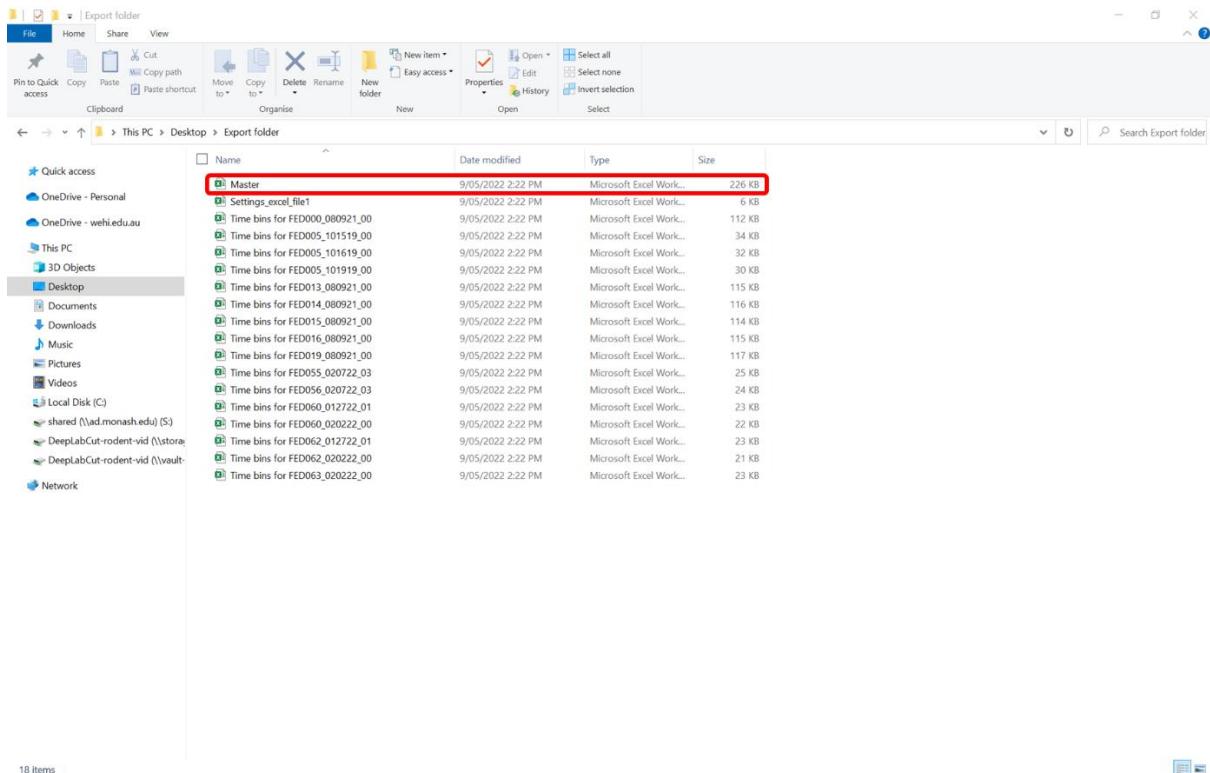
5. Set this option to False, if you want to put in the genotypes and treatments in the built-in GUI. Setting this option to True will be explained from step 14 onwards.



6. Put in the genotypes and treatments. These entries can also be left blank.



7. The individual excel files will be sorted into time bins and a “Master.xlsx” file will also be created.



8. Here is the Master.xlsx file. There is a sheet for every column in the raw data files. For example, in the “Left poke count” sheet selected below:

- The far left column is the time bins in minutes.
- Every other column is the “Left poke count” column from each of the imported files.
- The columns are also sorted by genotype and then treatment.
- This is the same for every sheet/column type.

9. Another thing that is exported is the “settings_excel_file.xlsx”. Note that every time a settings excel file is created, a unique number is added to the end, so you will never overwrite this file.

10. This saves the options for the genotypes and treatments.

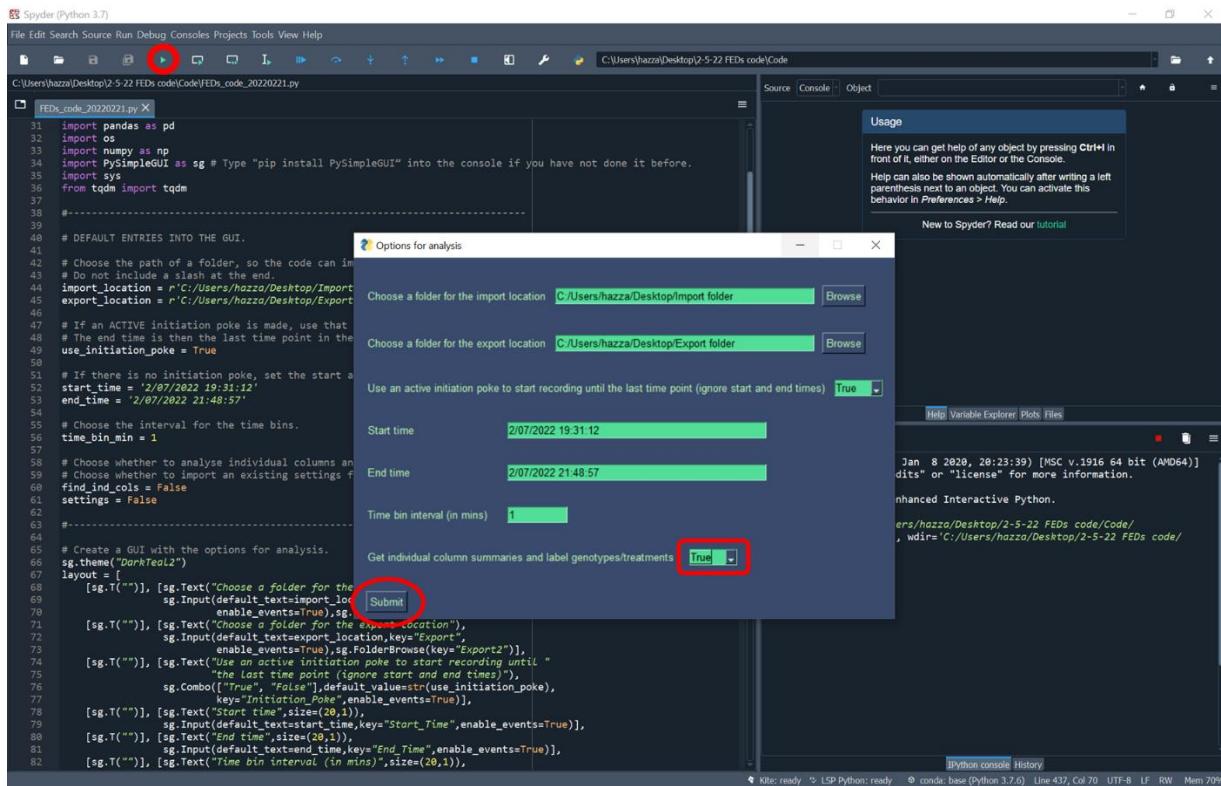
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Filename	Genotype	Treatment																		
2	FED000_080921_00.CSV	WT	Psi																		
3	FED005_101519_00.CSV	WT	Psi																		
4	FED005_101619_00.CSV	Cre	Psi																		
5	FED005_101919_00.CSV	WT	Sal																		
6	FED013_080921_00.CSV	Cre	Psi																		
7	FED014_080921_00.CSV	Cre	Sal																		
8	FED015_080921_00.CSV	WT	Sal																		
9	FED016_080921_00.CSV	Cre	Psi																		
10	FED019_080921_00.CSV	WT	Sal																		
11	FED055_020722_03.CSV	Cre	Sal																		
12	FED056_020722_03.CSV	Cre	Psi																		
13	FED060_012722_01.CSV	Cre	Psi																		
14	FED060_020222_00.CSV	WT	Sal																		
15	FED062_012722_01.CSV	WT	Sal																		
16	FED062_020222_00.CSV	Cre	Psi																		
17	FED063_020222_00.CSV	WT	Sal																		
18																					
19																					
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34																					

11. The filenames, genotypes and treatments can also be edited and re-imported. Note that the bold text and borders are not important for reading the file.

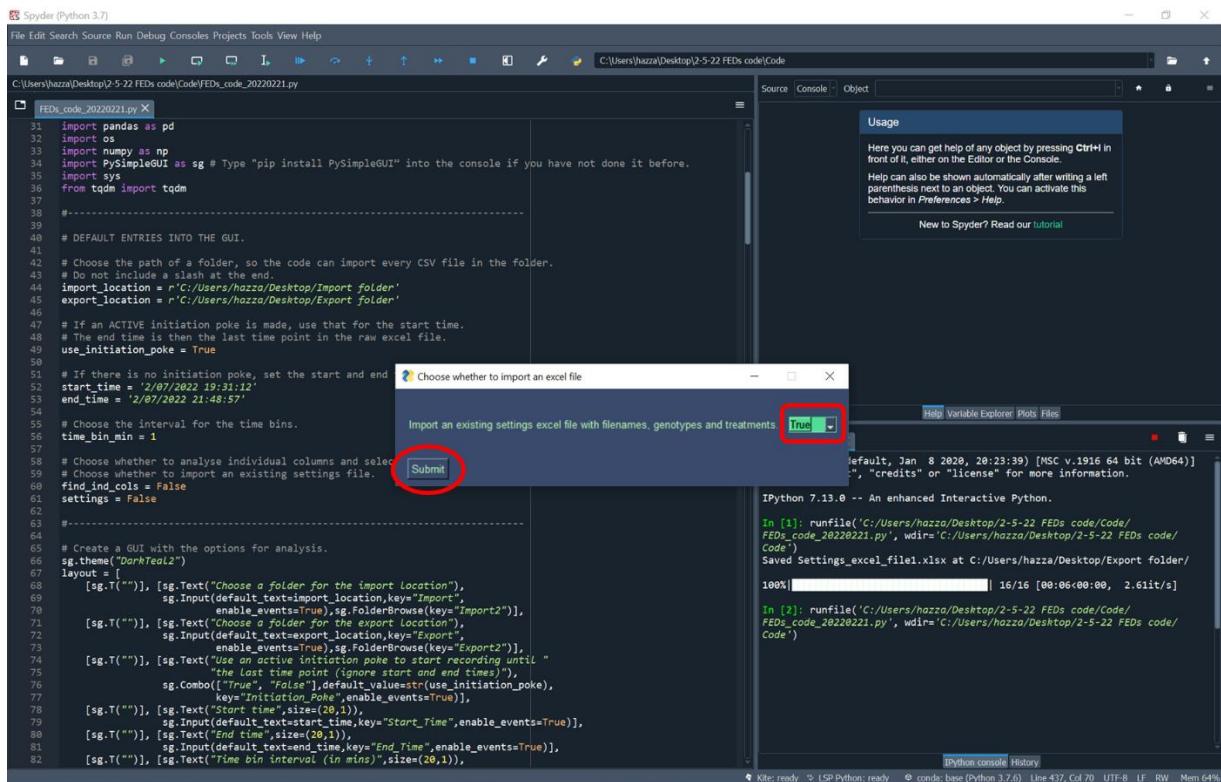
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Filename	Genotype	Treatment																		
2	FED000_080921_00.CSV	HET	Ghr																		
3	FED005_101519_00.CSV	HOM	Ghr																		
4	FED005_101619_00.CSV	HOM	Sal																		
5	FED005_101919_00.CSV	HOM	Sal																		
6	FED013_080921_00.CSV	HET	Ghr																		
7	FED014_080921_00.CSV	HOM	Ghr																		
8	FED015_080921_00.CSV	HOM	Ghr																		
9	FED016_080921_00.CSV	HET	Sal																		
10	FED019_080921_00.CSV	HET	Sal																		
11	FED055_020722_03.CSV	HET	Sal																		
12	FED056_020722_03.CSV	HOM	Ghr																		
13	FED060_012722_01.CSV	HET	Sal																		
14	FED060_020222_00.CSV	HOM	Ghr																		
15	FED062_012722_01.CSV	HOM	Sal																		
16	FED062_020222_00.CSV	HOM	Sal																		
17	FED063_020222_00.CSV	HET	Ghr																		
18																					
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Edited

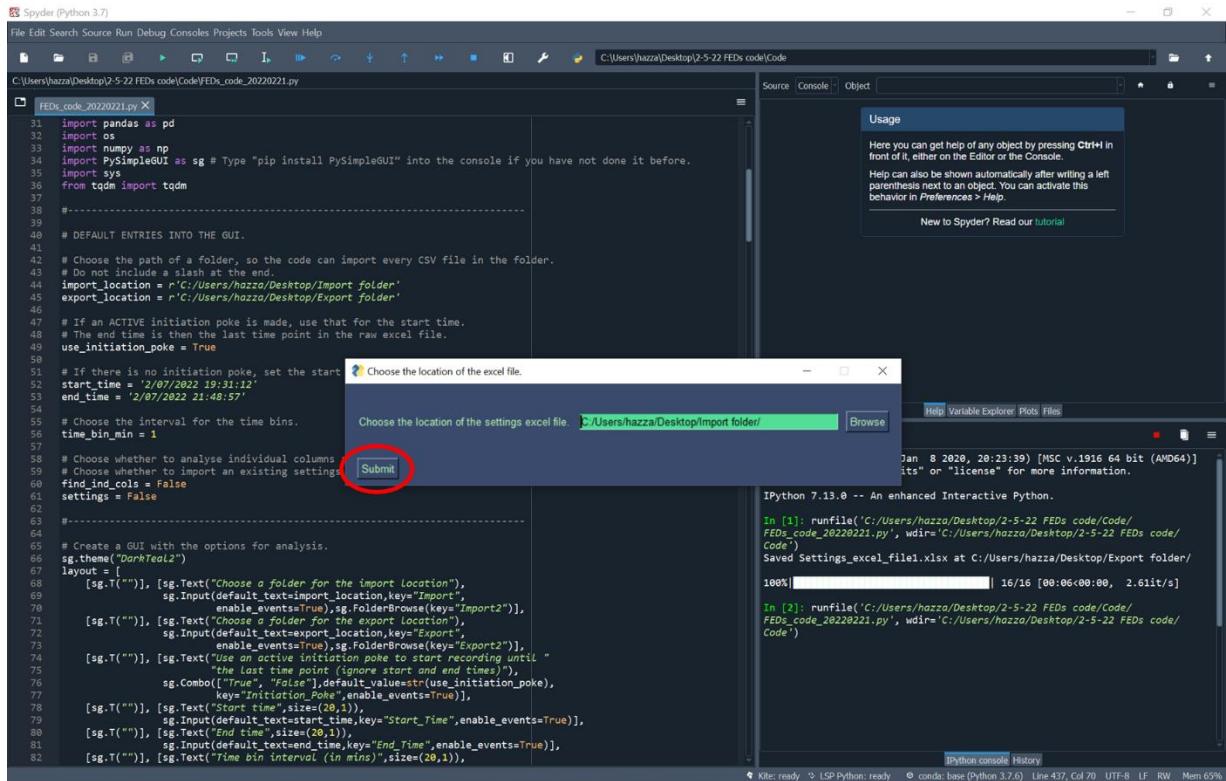
12. Re-run the code by pressing the green triangle and ensure “get individual column summaries” is set to True.



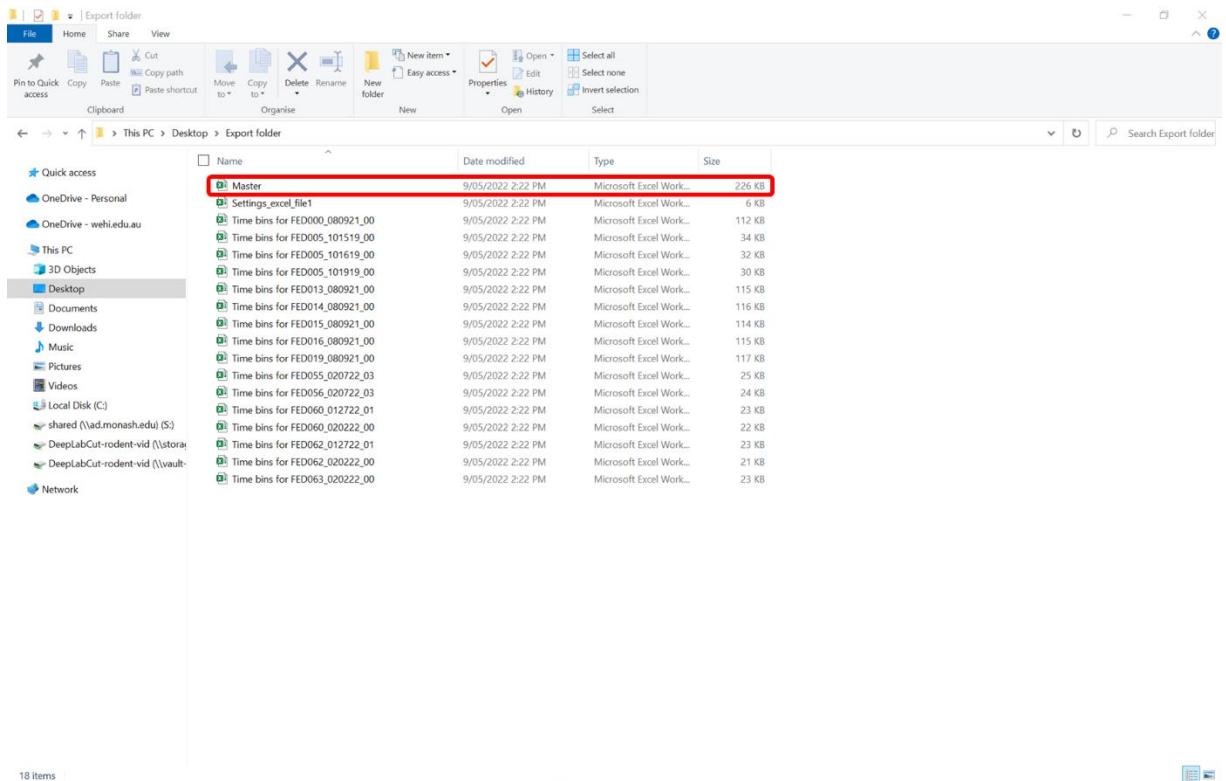
13. Set “import an existing settings excel file” to True.



14. Choose the location of the settings excel file and click submit.



15. Now when you go into the re-exported Master.xlsx file...



16. The genotypes and treatments are edited.

Screenshot of Microsoft Excel showing a data table titled "Time bins (mins)" with columns for Genotype (HET, HOM) and Treatment (Ghr, Sal) across various time bins. The table includes a header row and a row labeled "Edited". The "Edited" row has a red border around the "Treatment" column and the last three columns of each row. The "Session Type" dropdown at the bottom is set to "Left Poke Count".

Time bins (mins)																		
1	080921_080921_020222_080921_080921_020722_012722_101519_080921_080921_020722_020222_101619_101919_012722_020222_00.CSV																	
2	Genotype	HET	HET	HET	HET	HET	HET	HOM	HOM	HOM	HOM	HOM	HOM	R	S	T	U	V
3	Treatment	Ghr	Ghr	Ghr	Sal	Sal	Sal	Ghr	Ghr	Ghr	Ghr	Ghr	Ghr					
4	0	1	1	1	1	1	1	3	1	1	1	1	3	5	1	1		
5	1	2	2	5	2	1	1	3	3	1	2	1	8	3	5	1	5	
6	2	4	4	8	2	1	1	4	6	2	4	1	10	3	10	2	8	
7	3	4	8	12	3	2	1	4	9	3	6	2	15	3	15	3	10	
8	4	4	8	20	4	7	2	6	12	3	8	2	22	3	20	5	12	
9	5	8	14	26	8	10	3	7	12	3	13	2	25	3	25	14	15	
10	6	8	16	30	14	12	4	7	15	3	15	4	25	3	25	15	20	
11	7	8	16	34	15	14	5	7	15	4	18	5	26	3	25	15	20	
12	8	13	19	35	15	21	5	8	15	7	23	5	26	3	25	15	20	
13	9	14	23	40	16	22	5	9	15	9	32	6	26	3	30	15	21	
14	10	23	24	42	24	23	8	9	15	9	36	6	30	3	30	15	25	
15	11	23	24	45	31	23	10	9	15	10	44	6	30	3	30	16	25	
16	12	33	25	46	31	23	10	10	15	14	44	7	30	3	30	16	25	
17	13	34	30	46	32	27	12	10	15	15	50	10	30	3	30	17	25	
18	14	35	31	46	35	31	17	10	15	15	50	10	33	6	30	18	27	
19	15	35	31	50	35	36	17	10	15	15	50	10	33	9	30	22	27	
20	16	35	31	54	35	43	18	10	15	20	50	10	33	9	30	22	28	
21	17	39	31	55	38	43	19	10	15	23	52	11	33	12	30	23	30	
22	18	45	31	55	50	44	19	10	15	23	54	12	33	12	30	24	31	
23	19	48	31	55	57	50	19	19	15	25	65	12	33	12	30	24	31	
24	20	49	35	55	64	50	19	19	15	26	70	12	33	12	30	24	31	
25	21	49	35	55	64	56	19	19	15	35	73	12	33	12	30	24	31	
26	22	49	35	55	64	62	24	19	15	36	76	12	35	12	30	24	31	
27	23	50	35	55	64	65	24	19	15	36	76	12	35	12	30	25	32	
28	24	50	35	55	65	69	24	19	15	45	78	12	35	12	30	25	32	
29	25	50	35	55	68	70	24	19	15	50	84	12	35	12	30	25	32	
30	26	50	35	55	68	71	24	19	18	50	95	12	35	12	30	25	35	
31	27	51	35	55	73	75	24	19	18	50	95	12	35	12	30	25	35	
32	28	57	48	55	79	80	24	19	18	50	100	14	35	12	30	25	35	
33	29	59	50	55	79	90	25	19	18	51	101	14	35	12	30	25	40	
34	30	61	50	60	84	93	26	19	18	60	103	14	35	12	30	25	40	

Left Poke Count