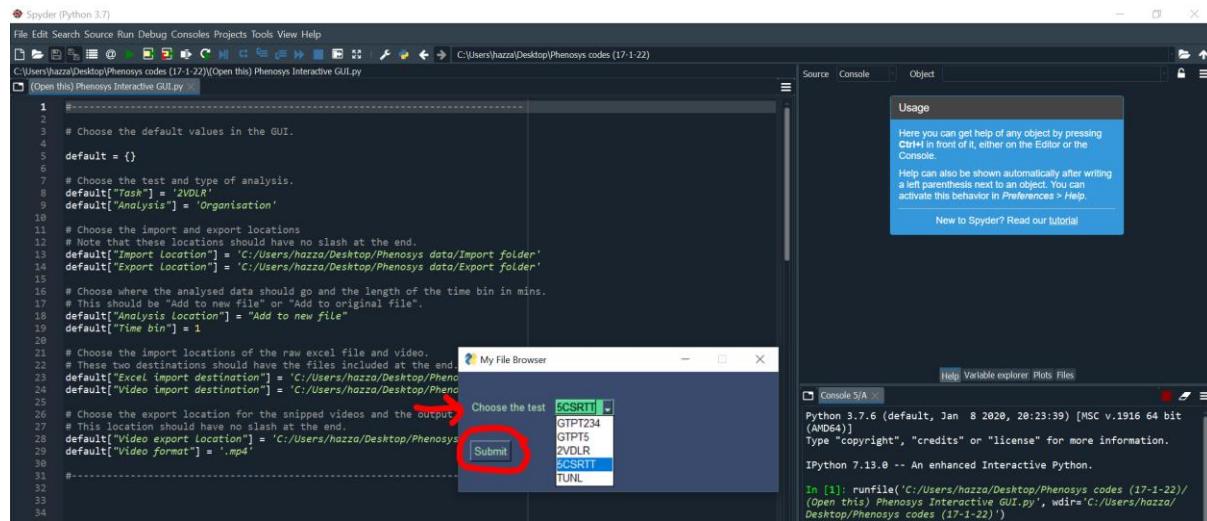


Guide to the PhenoSys Codes

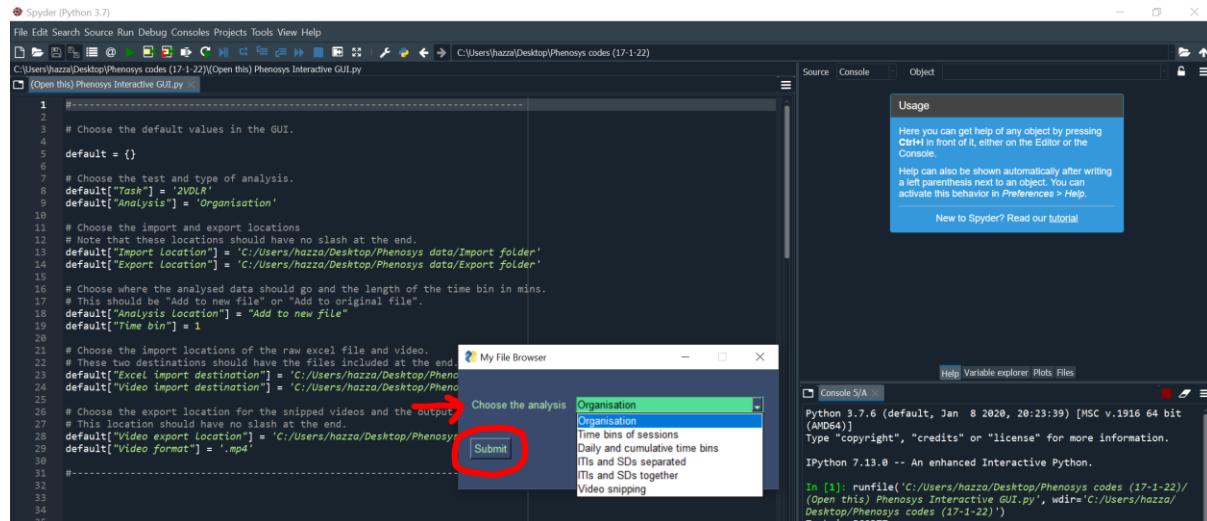
Purpose: the output excel files from the PhenoSys Touchscreen Chamber System are large (~5 MB) and manually extracting the relevant data is time consuming. These codes automatically organise the data into sessions, time bins, inter-trial intervals or stimulus durations.

The recorded videos of the rodent in the Touchscreen Chamber are also large (~400 GB). This code can import the video and corresponding excel file, find the start and end times of the sessions and create sub-clips from the original video. This facilitates video analysis and reduces the overall size of the files.

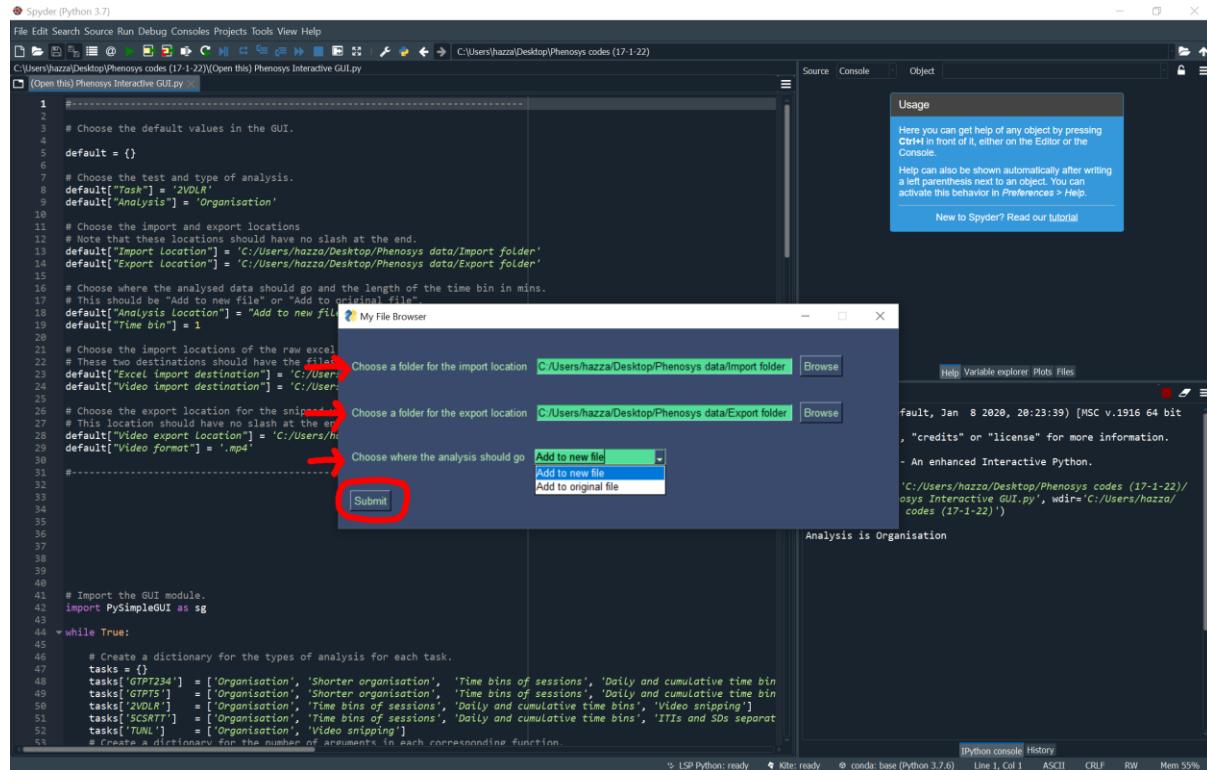
1. Choose the type of test and click “submit”. Information about these types of tests can be found at the end of the guide.



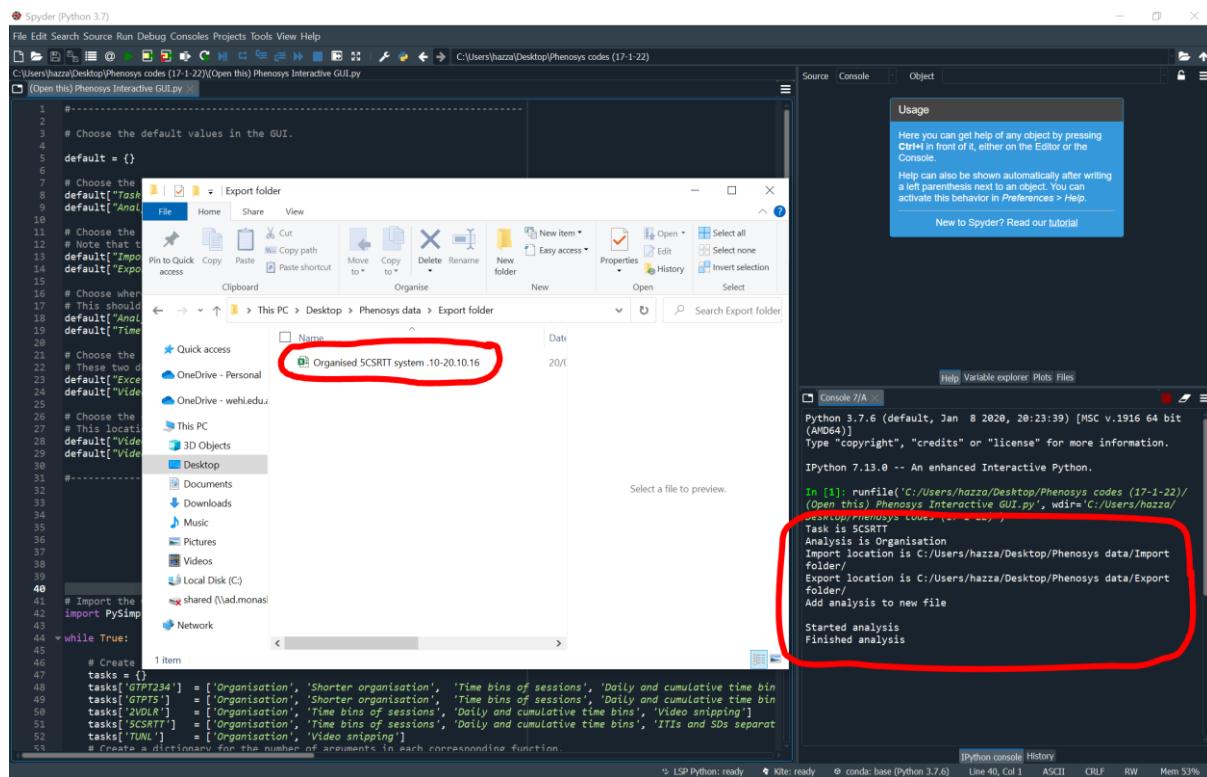
2. Choose the type of analysis and click “submit”. Information about these types of analysis can be found at the end of this guide.



3. Fill in the options for analysis and then click submit. These include:
- An import location for the raw excel file.
 - An export location for the analysed file.
 - Where the analysis should go. This is in a new file or in a new sheet added to the original file.
 - Time bin in minutes (if present).



4. After a while, the analysed file will be in the export location. In the console to the right, you can also double check your settings.



Overall sheet

- Every analysed excel file has this at the start.
- This contains the time stamps and corresponding mouse names for each trial (start exp, positive, etc.)
- They have been sorted first by their ID label and then by the date and time.
- The different types of analysis are then performed on this sheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	DateTime	IdRFID	IdLabel	MsgValue1	MsgValue2	MsgValue3																
2	2020-09-28 13:52:08	041A716F/Red 1		start exp																		
3	2020-09-28 13:53:43	041A716F/Red 1		positive																		
4	2020-09-28 13:54:15	041A716F/Red 1		incorrect																		
5	2020-09-28 13:54:46	041A716F/Red 1		incorrect																		
6	2020-09-28 13:55:29	041A716F/Red 1		omission																		
7	2020-09-28 13:56:16	041A716F/Red 1		incorrect																		
8	2020-09-28 13:56:50	041A716F/Red 1		incorrect																		
9	2020-09-28 13:57:54	041A716F/Red 1		omission																		
10	2020-09-28 13:58:39	041A716F/Red 1		omission																		
11	2020-09-28 13:59:10	041A716F/Red 1		omission																		
12	2020-09-28 13:59:49	041A716F/Red 1		omission																		
13	2020-09-28 14:00:50	041A716F/Red 1		omission																		
14	2020-09-28 14:01:34	041A716F/Red 1		omission																		
15	2020-09-28 14:02:10	041A716F/Red 1		incorrect																		
16	2020-09-28 14:03:04	041A716F/Red 1		omission																		
17	2020-09-28 14:03:42	041A716F/Red 1		omission																		
18	2020-09-28 14:04:23	041A716F/Red 1		omission																		
19	2020-09-28 14:06:37	041A716F/Red 1		omission																		
20	2020-09-28 14:07:21	041A716F/Red 1		omission																		
21	2020-09-28 14:12:16	041A716F/Red 1		omission																		
22	2020-09-28 14:13:12	041A716F/Red 1		omission																		
23	2020-09-28 14:13:49	041A716F/Red 1		omission																		
24	2020-09-28 14:14:19	041A716F/Red 1		omission																		
25	2020-09-28 14:15:22	041A716F/Red 1		omission																		
26	2020-09-28 14:17:03	041A716F/Red 1		omission																		
27	2020-09-28 14:18:26	041A716F/Red 1		omission																		
28	2020-09-28 14:19:21	041A716F/Red 1		omission																		
29	2020-09-28 14:20:13	041A716F/Red 1		omission																		
30	2020-09-28 14:22:00	041A716F/Red 1		end exp																		
31	2020-09-28 15:32:52	041A716F/Red 1		start exp																		
32	2020-09-28 15:33:29	041A716F/Red 1		omission																		
33	2020-09-28 15:34:11	041A716F/Red 1		omission																		
34	2020-09-28 15:34:47	041A716F/Red 1		omission																		

Analysis: shorter organisation

- This analysis is simpler than creating the overall sheet.
- It keeps all the columns from the raw data file, but deletes rows that do not contain 'start exp', 'end exp', 'positive' and 'wrong'. The rows are then sorted in this order: 'outLabel', 'IdRFID' and 'DateTime'.

Screenshot of Microsoft Excel showing a data sheet titled '(Example) Sorted GTPTS-20.11.10'. The table contains 33 rows of data across 17 columns. The columns are labeled A through Q. Columns A and B are highlighted with red boxes. Columns M and N are also highlighted with red boxes. The data includes various numerical values and codes such as 'CondMod1' and 'out1'.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	DateTime	2	idRFID	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2020-11-10 10:31:42	041A3194F4	test	CondMod1	852	852	1	0	100	100	100 out1	positive				
3	2020-11-10 10:33:40	041A3194F4	test	CondMod1	435	435	1	0	100	300	100 out1	positive				
4	2020-11-10 12:45:54	041A3194F7	78	CondMod1	1121	1121	1	0	100	200	100 out1	positive				
5	2020-11-10 12:54:13	041A3194F7	78	CondMod1	2325	2325	1	0	100	600	100 out1	positive				
6	2020-11-10 13:29:12	041A318C82	76	CondMod1	1003	1003	1	0	100	100	100 out1	positive				
7	2020-11-10 13:30:28	041A318C82	76	CondMod1	831	831	1	0	100	200	100 out1	positive				
8	2020-11-10 13:31:02	041A318C82	76	CondMod1	998	998	1	0	100	300	100 out1	positive				
9	2020-11-10 13:32:09	041A318C82	76	CondMod1	1048	1048	1	0	100	400	100 out1	positive				
10	2020-11-10 13:35:45	041A318C82	76	CondMod1	865	865	1	0	100	600	100 out1	positive				
11	2020-11-10 13:36:16	041A318C82	76	CondMod1	955	955	1	0	100	700	100 out1	positive				
12	2020-11-10 13:36:52	041A318C82	76	CondMod1	1024	1024	1	0	100	800	100 out1	positive				
13	2020-11-10 13:39:40	041A318C82	76	CondMod1	968	968	1	0	100	900	100 out1	positive				
14	2020-11-10 13:40:09	041A318C82	76	CondMod1	1036	1036	1	0	100	1000	100 out1	positive				
15	2020-11-10 13:49:47	041A3192C2	79	CondMod1	1109	1109	1	0	100	200	100 out1	positive				
16	2020-11-10 13:50:30	041A3192C2	79	CondMod1	1027	1027	1	0	100	300	100 out1	positive				
17	2020-11-10 13:51:05	041A3192C2	79	CondMod1	922	922	1	0	100	400	100 out1	positive				
18	2020-11-10 13:52:31	041A3192C2	79	CondMod1	1153	1153	1	0	100	500	100 out1	positive				
19	2020-11-10 13:53:13	041A3192C2	79	CondMod1	863	863	1	0	100	600	100 out1	positive				
20	2020-11-10 13:54:14	041A3192C2	79	CondMod1	1006	1006	1	0	100	700	100 out1	positive				
21	2020-11-10 13:55:04	041A3192C2	79	CondMod1	1098	1098	1	0	100	800	100 out1	positive				
22	2020-11-10 13:55:42	041A3192C2	79	CondMod1	850	850	1	0	100	900	100 out1	positive				
23	2020-11-10 13:57:17	041A3192C2	79	CondMod1	1745	1745	1	0	100	1000	100 out1	positive				
24	2020-11-10 14:04:49	041A319584	77	CondMod1	1473	1473	1	0	100	100	100 out1	positive				
25	2020-11-10 14:05:36	041A319584	77	CondMod1	885	885	1	0	100	200	100 out1	positive				
26	2020-11-10 14:07:17	041A319584	77	CondMod1	996	996	1	0	100	300	100 out1	positive				
27	2020-11-10 14:07:46	041A319584	77	CondMod1	1110	1110	1	0	100	400	100 out1	positive				
28	2020-11-10 14:08:24	041A319584	77	CondMod1	7050	7050	1	0	100	500	100 out1	positive				
29	2020-11-10 14:09:07	041A319584	77	CondMod1	833	833	1	0	100	600	100 out1	positive				
30	2020-11-10 14:10:00	041A319584	77	CondMod1	926	926	1	0	100	700	100 out1	positive				
31	2020-11-10 14:14:35	041A319584	77	CondMod1	917	917	1	0	100	900	100 out1	positive				
32	2020-11-10 14:15:05	041A319584	77	CondMod1	979	979	1	0	100	1000	100 out1	positive				
33	2020-11-10 14:33:37	041A3194F7	78	CondMod1	1022	1022	1	0	100	1000	100 out1	positive				

Analysis: organisation

- Each session is organised into 2 columns. The first column contains the trials and statistics, and the second column contains the time stamps for each trial.
- On the far-right side, there are the total statistics for all the sessions in the sheet.
- Each sheet represents one mouse.

Screenshot of Microsoft Excel showing a data sheet titled 'Organised 2VDLR-20.09.28'. The table contains 34 rows of data across 17 columns. The columns are labeled A through Q. Column A is highlighted with a red box. Column N is also highlighted with a red box. The data includes various numerical values and codes such as 'Start exp total', 'Omission total', and 'Positive total'. A red box highlights the range from N1 to O12. A red box highlights the range from A1 to C1. A red box highlights the range from N13 to N34. Red arrows point from the text 'Total of all sessions for this mouse' to the highlighted ranges. Red text at the bottom right says 'Trials Corresponding time stamps'.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Number of start exp trials	1	1	1	1	1	1	1	1	1	1	1	Start exp total	6				
2	Number of omission trials	21	14	12	10	6	4	6	4	2	1	1	Omission total	67				
3	Number of positive trials	1	4	5	4	1	1	1	1	1	1	1	Positive total	17				
4	Number of incorrect trials	5	3	1	10	6	3	3	3	3	1	1	Incorrect total	28				
5	Number of end exp trials	1	1	1	1	1	1	1	1	1	1	1	End exp total	6				
6	Number of trials (P+I+O)	27	21	18	24	13	9	9	9	9	9	9	Total number of trials (P+I+O)	112				
7	Proportion positive of P+I (%)	16.66667	57.14286	83.33333	28.57143	14.28571	40											
8	Proportion incorrect of P+I (%)	83.33333	42.85714	16.66667	71.42857	85.71429	60											
9	P+I Total (%)	100	100	100	100	100	100											
10	Proportion positive of P+I+O (%)	3.703704	19.04762	27.77778	16.66667	7.692308	22.22222											
11	Proportion incorrect of P+I+O (%)	18.51852	14.28571	5.555556	41.66667	46.15385	33.33333											
12	Proportion omitted of P+I+O (%)	77.77778	66.66667	66.66667	41.66667	46.15385	44.44444											
13	P+I+O Total (%)	100	100	100	100	100	100											
14	Length of session (mins)	30.00018	30.00017	30.00017	30.00018	30.00017	30.00015											
15	1 session	start exp #####																
16		positive #####	omission #####	positive #####														
17		incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####						
18		incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####						
19		omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	incorrect #####	positive #####						
20		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
21		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
22		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
23		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
24		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
25		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
26		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
27		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
28		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
29		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
30		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
31		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
32		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
33		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						
34		omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####	positive #####	omission #####	incorrect #####	omission #####						

Analysis: time bins of sessions

- The first row is when the first session begins. Each subsequent row contains the trial information for 1 min, 2 min, 3 min, etc. after the start of the session.
- When a new session starts, the trial counts start again from 0. Information is also not included about the time between 2 sessions.

Time Bins of Sessions for 2VDLR-20.09.28

A1	Session number	Time bins (date)	Time bins (mins)	ID Label	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
					start exp	positive	omission	incorrect	end exp			PI total	PIO total	Proportion P of PI (%)	Proportion I of PI (%)	Total of PI Proportions (%)	Proportion P of PI	
1	Session number	Time bins (date)	Time bins (mins)	ID Label	D	E	F	G	H	I	J	K	L	M	N	O	P	
2	1	2020-09-28 13:52:08	0 Red 1		1	0	0	0	0			0	0	0	0	0	0	
3	1	2020-09-28 13:53:08	1 Red 1		1	0	0	0	0			0	0	0	0	0	0	
4	1	2020-09-28 13:54:08	2 Red 1		1	1	0	0	0			1	1	100	0	100	100	
5	1	2020-09-28 13:55:08	3 Red 1		1	1	0	2	0			3	3	33.333333333	66.666666667	100	33.333333333	
6	1	2020-09-28 13:56:08	4 Red 1		1	1	1	2	0			3	4	33.333333333	66.666666667	100	33.333333333	
7	1	2020-09-28 13:57:08	5 Red 1		1	1	1	4	0			5	6	20	80	100	16.666666667	
8	1	2020-09-28 13:58:08	6 Red 1		1	1	2	4	0			5	7	20	80	100	14.285714286	
9	1	2020-09-28 13:59:08	7 Red 1		1	1	3	4	0			5	8	20	80	100	100	
10	1	2020-09-28 14:00:08	8 Red 1		1	1	5	4	0			5	10	20	80	100	100	
11	1	2020-09-28 14:01:08	9 Red 1		1	1	6	4	0			5	11	20	80	100	9.090909091	
12	1	2020-09-28 14:02:08	10 Red 1		1	1	7	4	0			5	12	20	80	100	8.333333333	
13	1	2020-09-28 14:03:08	11 Red 1		1	1	8	5	0			6	14	16.666666667	83.333333333	100	7.142857143	
14	1	2020-09-28 14:04:08	12 Red 1		1	1	9	5	0			6	15	16.666666667	83.333333333	100	6.666666667	
15	1	2020-09-28 14:05:08	13 Red 1		1	1	10	5	0			6	16	16.666666667	83.333333333	100	100	
16	1	2020-09-28 14:06:08	14 Red 1		1	1	10	5	0			6	16	16.666666667	83.333333333	100	100	
17	1	2020-09-28 14:07:08	15 Red 1		1	1	11	5	0			6	17	16.666666667	83.333333333	100	5.882352941	
18	1	2020-09-28 14:08:08	16 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
19	1	2020-09-28 14:09:08	17 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	100	
20	1	2020-09-28 14:10:08	18 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
21	1	2020-09-28 14:11:08	19 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
22	1	2020-09-28 14:12:08	20 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
23	1	2020-09-28 14:13:08	21 Red 1		1	1	13	5	0			6	19	16.666666667	83.333333333	100	5.263157895	
24	1	2020-09-28 14:14:08	22 Red 1		1	1	15	5	0			6	21	16.666666667	83.333333333	100	4.761904762	
25	1	2020-09-28 14:15:08	23 Red 1		1	1	16	5	0			6	22	16.666666667	83.333333333	100	4.545454545	
26	1	2020-09-28 14:16:08	24 Red 1		1	1	17	5	0			6	23	16.666666667	83.333333333	100	4.347826087	
27	1	2020-09-28 14:17:08	25 Red 1		1	1	18	5	0			6	24	16.666666667	83.333333333	100	4.166666667	
28	1	2020-09-28 14:18:08	26 Red 1		1	1	18	5	0			6	24	16.666666667	83.333333333	100	4.166666667	
29	1	2020-09-28 14:19:08	27 Red 1		1	1	19	5	0			6	25	16.666666667	83.333333333	100	100	
30	1	2020-09-28 14:20:08	28 Red 1		1	1	--	--	--			6	26	16.666666667	83.333333333	100	3.846153846	
31	1	2020-09-28 14:21:08	29 Red 1		1	1	--	--	--			6	27	16.666666667	83.333333333	100	3.703703704	
32	1	2020-09-28 14:22:08	30 Red 1		1	1	--	--	--			6	27	16.666666667	83.333333333	100	3.703703704	
33	1	2020-09-28 14:23:08	31 Red 1		1	1	21	5	1			6	27	16.666666667	83.333333333	100	3.703703704	
34																		
35	2	2020-09-28 15:33:08	1 Red 1		1	0	0	0	0			0	0	0	0	0	0	
36	2	2020-09-28 15:34:08	2 Red 1		1	0	1	0	0			0	1	0	0	0	0	
37	2	2020-09-28 15:35:08	3 Red 1		1	0	2	0	0			0	2	0	0	0	0	

The sessions are in boxes

The trial counts start from the beginning for a new session

Analysis: daily and cumulative time bins

- This analysis is the same as the previous one, except the trial counts do not restart at 0 at the beginning of a new session.

Time Bins Overall for 2VDLR-20.09.28

A1	Session number	Time bins (date)	Time bins (mins)	ID Label	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
					start exp	positive	omission	incorrect	end exp			PI total	PIO total	Proportion P of PI (%)	Proportion I of PI (%)	Total of PI Proportions (%)	Proportion P of PI	
1	Session number	Time bins (date)	Time bins (mins)	ID Label	D	E	F	G	H	I	J	K	L	M	N	O	P	
2	1	2020-09-28 13:52:08	0 Red 1		1	0	0	0	0			0	0	0	0	0	0	
3	1	2020-09-28 13:53:08	1 Red 1		1	0	0	0	0			0	0	0	0	0	0	
4	1	2020-09-28 13:54:08	2 Red 1		1	1	0	0	0			1	1	100	0	100	100	
5	1	2020-09-28 13:55:08	3 Red 1		1	1	0	2	0			3	3	33.333333333	66.666666667	100	33.333333333	
6	1	2020-09-28 13:56:08	4 Red 1		1	1	1	2	0			3	4	33.333333333	66.666666667	100	33.333333333	
7	1	2020-09-28 13:57:08	5 Red 1		1	1	1	4	0			5	6	20	80	100	16.666666667	
8	1	2020-09-28 13:58:08	6 Red 1		1	1	2	4	0			5	7	20	80	100	14.285714286	
9	1	2020-09-28 13:59:08	7 Red 1		1	1	3	4	0			5	8	20	80	100	100	
10	1	2020-09-28 14:00:08	8 Red 1		1	1	5	4	0			5	10	20	80	100	100	
11	1	2020-09-28 14:01:08	9 Red 1		1	1	6	4	0			5	11	20	80	100	9.090909091	
12	1	2020-09-28 14:02:08	10 Red 1		1	1	7	4	0			5	12	20	80	100	8.333333333	
13	1	2020-09-28 14:03:08	11 Red 1		1	1	8	5	0			6	14	16.666666667	83.333333333	100	7.142857143	
14	1	2020-09-28 14:04:08	12 Red 1		1	1	9	5	0			6	15	16.666666667	83.333333333	100	6.666666667	
15	1	2020-09-28 14:05:08	13 Red 1		1	1	10	5	0			6	16	16.666666667	83.333333333	100	100	
16	1	2020-09-28 14:06:08	14 Red 1		1	1	10	5	0			6	16	16.666666667	83.333333333	100	100	
17	1	2020-09-28 14:07:08	15 Red 1		1	1	11	5	0			6	17	16.666666667	83.333333333	100	5.882352941	
18	1	2020-09-28 14:08:08	16 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
19	1	2020-09-28 14:09:08	17 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	100	
20	1	2020-09-28 14:10:08	18 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
21	1	2020-09-28 14:11:08	19 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
22	1	2020-09-28 14:12:08	20 Red 1		1	1	12	5	0			6	18	16.666666667	83.333333333	100	5.555555556	
23	1	2020-09-28 14:13:08	21 Red 1		1	1	13	5	0			6	19	16.666666667	83.333333333	100	5.263157895	
24	1	2020-09-28 14:14:08	22 Red 1		1	1	15	5	0			6	21	16.666666667	83.333333333	100	4.761904762	
25	1	2020-09-28 14:15:08	23 Red 1		1	1	16	5	0			6	22	16.666666667	83.333333333	100	4.545454545	
26	1	2020-09-28 14:16:08	24 Red 1		1	1	17	5	0			6	23	16.666666667	83.3			

Analysis: ITIs and SDs separated

- ITI stands for inter-trial interval and SD stands for stimulus duration.
 - The columns refer to either ITIs or SDs and the rows refer to statistics for a given session.

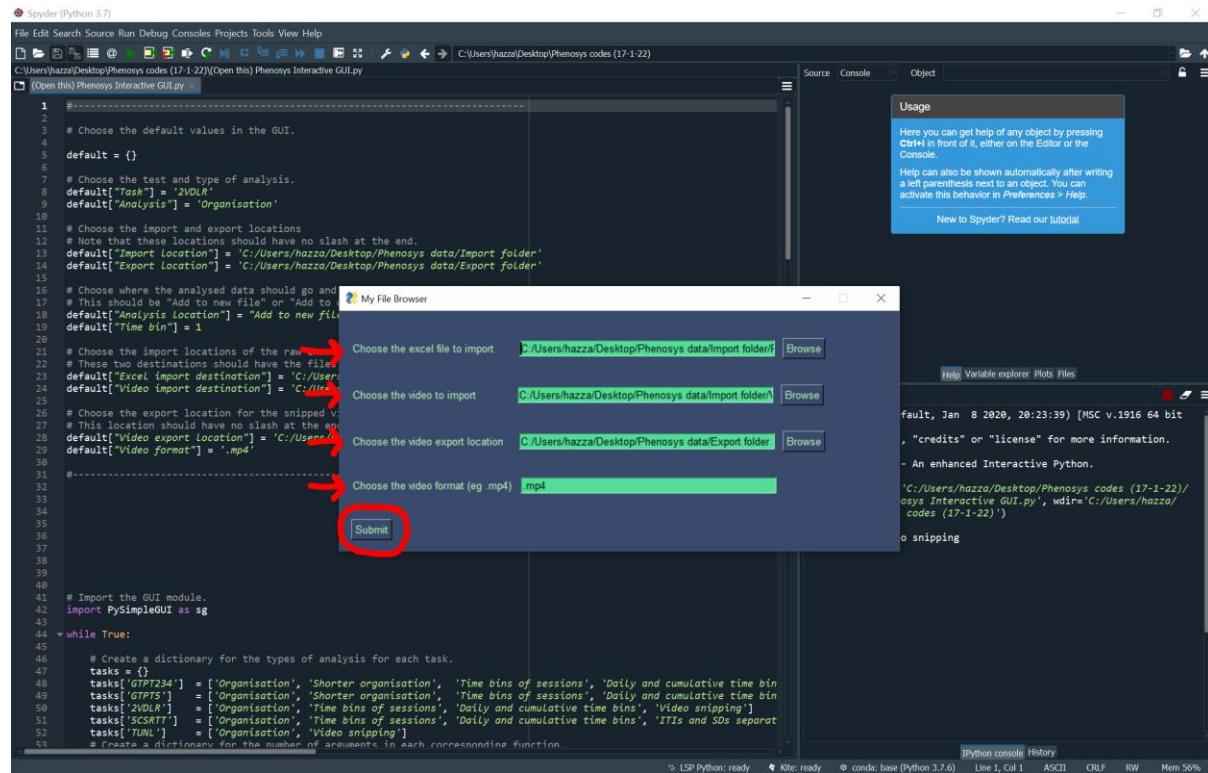
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Session number	ITI (s)	2	5	8	10	12		Stimulus duration (present time) (ms)	250	500	1000	2000	4000	8000	
1	Session number															
2	Session 1	Number of correct trials	6	14	4	3	3		Number of correct trials	0	0	30	0	0	0	
3		Number of incorrect trials	1	1	2	2	1		Number of incorrect trials	0	0	7	0	0	0	
4		Number of omission trials	3	6	1	2	1		Number of omission trials	0	0	13	0	0	0	
5		Number of premature responses	1	1	1	1	3		Number of premature responses	0	0	0	0	0	0	
6		Number of perseverative responses	0	1	3	3	3		Number of perseverative responses	0	0	0	0	0	0	
7		Number of trials (C+I+O)	10	21	7	7	5		Number of trials (C+I+O)	0	0	50	0	0	0	
8		Sum of latencies	6735.108	18895.01	5155.157	4388.863	3396.864		Sum of latencies	0	0	38571	0	0	0	
9		Number of latencies	6	14	4	3	3		Number of latencies	0	0	30	0	0	0	
10		Average latency	1122.518	1349.644	1288.789	1462.594	1132.288		Average latency	0	0	1285.7	0	0	0	
11		Proportion correct of C+I (%)	85.71429	93.33333	66.66667	60	75		Proportion correct of C+I (%)	0	0	81.0108	0	0	0	
12		Proportion incorrect of C+I (%)	14.28571	6.666667	33.33333	40	25		Proportion incorrect of C+I (%)	0	0	18.91892	0	0	0	
13		C+I Total (%)	100	100	100	100	100		C+I Total (%)	0	0	100	0	0	0	
14		Proportion correct of C+I+O (%)	66.666667	57.14286	42.85714	60			Proportion correct of C+I+O (%)	0	0	60	0	0	0	
15		Proportion incorrect of C+I+O (%)	10	47.61905	28.57143	28.57143	20			Proportion incorrect of C+I+O (%)	0	0	14	0	0	0
16		Proportion omitted of C+I+O (%)	30	28.57143	14.28571	28.57143	20			Proportion omitted of C+I+O (%)	0	0	26	0	0	0
17		C+I+O Total (%)	100	100	100	100	100		C+I+O Total (%)	0	0	100	0	0	0	
18		Proportion premature of C+I+O+P+P (%)	9.090909	4.347826	9.090909	9.090909	27.27273		Proportion premature of C+I+O+P+P (%)	0	0	0	0	0	0	
19		Proportion perseverative of C+I+O+P+P (%)	0	4.347826	27.27273	27.27273	27.27273		Proportion perseverative of C+I+O+P+P (%)	0	0	0	0	0	0	
20																
21	Session 2	Number of correct trials	5	10	5	6	4		Number of correct trials	0	0	30	0	0	0	
22		Number of incorrect trials	0	3	1	0	2		Number of incorrect trials	0	0	6	0	0	0	
23		Number of omission trials	3	1	1	0	1		Number of omission trials	0	0	6	0	0	0	
24		Number of premature responses	0	1	0	0	0		Number of premature responses	0	0	0	0	0	0	
25		Number of perseverative responses	0	0	0	1	0		Number of perseverative responses	0	0	0	0	0	0	
26		Number of trials (C+I+O)	8	14	7	6	7		Number of trials (C+I+O)	0	0	42	0	0	0	
27		Sum of latencies	6444.48	12433.05	5706.102	7904.404	5043.654		Sum of latencies	0	0	37531.69	0	0	0	
28		Number of latencies	5	10	5	6	4		Number of latencies	0	0	30	0	0	0	
29		Average latency	1288.896	1243.305	1141.22	1317.401	1260.913		Average latency	0	0	1251.056	0	0	0	
30		Proportion correct of C+I (%)	100	76.92308	83.33333	100	66.66667		Proportion correct of C+I (%)	0	0	83.33333	0	0	0	
31		Proportion incorrect of C+I (%)	0	23.07692	16.66667	0	33.33333		Proportion incorrect of C+I (%)	0	0	16.66667	0	0	0	
32		C+I Total (%)	100	100	100	100	100		C+I Total (%)	0	0	100	0	0	0	
33		Proportion correct of C+I+O (%)	62.5	71.42857	71.42857	100	57.14286		Proportion correct of C+I+O (%)	0	0	71.42857	0	0	0	
34		Proportion incorrect of C+I+O (%)	0	21.42857	14.28571	0	28.57143		Proportion incorrect of C+I+O (%)	0	0	14.28571	0	0	0	

Analysis: ITIs and SDs together

- This analysis is the same as “organisation”, except it contains extra columns for the values of ITIs, SDs and present times.

Analysis: video snipping

- The purpose of this analysis is to split a video for a whole experiment into smaller videos that show the mouse during each session. The raw excel file contains the time stamps about when these sessions start in the video, so that needs to be imported.
- Here are the options to select:
 - An import location for the raw video.
 - An import location for the raw excel file.
 - An export location for the snipped videos.
 - A format for the exported videos.



Types of tests

Test: 2VDLR

- Types of trials
 - Positive
 - Incorrect
 - Omission

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
	Date	Time																			
1	DateTime		IdRFID	Idlabel	SystemMsg	MsgValue1	MsgValue2	MsgValue3													
2	2020-09-28	13:52:08	041A716FBE	Red 1	start exp																
3	2020-09-28	13:53:43	041A716FBE	Red 1	positive																
4	2020-09-28	13:54:15	041A716FBE	Red 1	incorrect																
5	2020-09-28	13:54:41	041A716FBE	Red 1	incorrect																
6	2020-09-28	13:55:29	041A716FBE	Red 1	omission																
7	2020-09-28	13:56:16	041A716FBE	Red 1	incorrect																
8	2020-09-28	13:56:50	041A716FBE	Red 1	incorrect																
9	2020-09-28	13:57:54	041A716FBE	Red 1	omission																
10	2020-09-28	13:58:39	041A716FBE	Red 1	omission																
11	2020-09-28	13:59:10	041A716FBE	Red 1	omission																
12	2020-09-28	13:59:49	041A716FBE	Red 1	omission																
13	2020-09-28	14:00:50	041A716FBE	Red 1	omission																
14	2020-09-28	14:01:34	041A716FBE	Red 1	omission																
15	2020-09-28	14:02:10	041A716FBE	Red 1	incorrect																
16	2020-09-28	14:03:04	041A716FBE	Red 1	omission																
17	2020-09-28	14:03:42	041A716FBE	Red 1	omission																
18	2020-09-28	14:04:23	041A716FBE	Red 1	omission																
19	2020-09-28	14:06:37	041A716FBE	Red 1	omission																
20	2020-09-28	14:07:21	041A716FBE	Red 1	omission																
21	2020-09-28	14:12:16	041A716FBE	Red 1	omission																
22	2020-09-28	14:13:12	041A716FBE	Red 1	omission																
23	2020-09-28	14:13:49	041A716FBE	Red 1	omission																
24	2020-09-28	14:14:19	041A716FBE	Red 1	omission																
25	2020-09-28	14:15:22	041A716FBE	Red 1	omission																
26	2020-09-28	14:17:03	041A716FBE	Red 1	omission																
27	2020-09-28	14:18:26	041A716FBE	Red 1	omission																
28	2020-09-28	14:19:21	041A716FBE	Red 1	omission																
29	2020-09-28	14:20:13	041A716FBE	Red 1	omission																
30	2020-09-28	14:22:08	041A716FBE	Red 1	end exp																
31	2020-09-28	15:32:52	041A716FBE	Red 1	start exp																
32	2020-09-28	15:33:29	041A716FBE	Red 1	omission																
33	2020-09-28	15:34:11	041A716FBE	Red 1	omission																
34	2020-09-28	15:34:47	041A716FBE	Red 1	omission																

Test: 5CSRTT

- Types of trials
 - Correct
 - Incorrect
 - Omission
 - Premature
 - Perseverative
- More statistics
 - ITI: this is the inter-trial interval.
 - Stimulus duration: this is also called the present time.
 - Latency: this is recorded after a correct trial.
- Note that between the types of 5CSRTT analysis, correct trials may be renamed as positive. Perseverative trials, ITIs, stimulus durations and latencies may not be included.

Test: GTPT234

- Types of trials
 - Positive

Test: GTPTS

- Types of trials
 - Positive
 - Positive (WP): this is a positive trial that happens after a wrong trial
 - Wrong
 - Wrong (WW): this is a wrong trial that happens after another wrong trial

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Date	Time		SystemMsg	MsgValue	MsgValue	MsgValue													
2	2020-11-10	13:27:05	041A318C	76	start exp															
3	2020-11-10	13:29:12	041A318C	76	positive															
4	2020-11-10	13:30:28	041A318C	76	positive															
5	2020-11-10	13:31:02	041A318C	76	positive															
6	2020-11-10	13:32:09	041A318C	76	positive															
7	2020-11-10	13:32:50	041A318C	76	wrong															
8	2020-11-10	13:34:58	041A318C	76	positive (WP)															
9	2020-11-10	13:35:45	041A318C	76	positive															
10	2020-11-10	13:36:16	041A318C	76	wrong															
11	2020-11-10	13:36:52	041A318C	76	wrong (WW)															
12	2020-11-10	13:39:44	041A318C	76	positive (WP)															
13	2020-11-10	13:40:00	041A318C	76	positive															
14	2020-11-10	13:40:10	041A318C	76	end exp															
15	2020-11-10	14:51:11	041A318C	76	start exp															
16	2020-11-10	14:51:31	041A318C	76	positive															
17	2020-11-10	14:52:01	041A318C	76	positive															
18	2020-11-10	14:52:34	041A318C	76	wrong															
19	2020-11-10	14:53:20	041A318C	76	wrong (WW)															
20	2020-11-10	14:53:50	041A318C	76	positive (WP)															
21	2020-11-10	14:54:35	041A318C	76	positive															
22	2020-11-10	14:55:00	041A318C	76	positive															
23	2020-11-10	14:55:47	041A318C	76	positive															
24	2020-11-10	14:59:55	041A318C	76	wrong															
25	2020-11-10	15:01:26	041A318C	76	positive (WP)															
26	2020-11-10	15:03:52	041A318C	76	wrong															
27	2020-11-10	15:05:44	041A318C	76	positive (WP)															
28	2020-11-10	15:05:46	041A318C	76	end exp															
29	2020-11-10	16:55:52	041A318C	76	start exp															
30	2020-11-10	16:56:02	041A318C	76	wrong															
31	2020-11-10	16:56:51	041A318C	76	positive (WP)															
32	2020-11-10	16:57:25	041A318C	76	positive															
33	2020-11-10	16:57:55	041A318C	76	positive															
34	2020-11-10	16:58:35	041A318C	76	positive															

Test: TUNL

- Types of trials
 - Positive
 - Start choice: this precedes a right or wrong choice
 - Right choice
 - Right choice for each image position: these trials will be counted for every unique image position found in the raw data file. For example, this could be right choice 5 1.
 - Right choice with correction: if the previous choice was a wrong choice and the image position stayed the same, this is a right choice with correction.
 - Right choice without correction: if both the conditions above are not true, this is a right choice without correction.
 - Wrong choice
 - Wrong choice for each image position: these trials will be counted for every unique image position found in the raw data file. For example, this could be wrong choice 5 1.

- Wrong choice with correction: if the previous choice was a wrong choice and the image position stayed the same, this is a wrong choice with correction.
 - Wrong choice without correction: if both the conditions above are not true, this is a right choice without correction.