

Sylvan Crossword Report - Edition 3

12/8/21 - 7/23/22

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7/23/2022

1) Introduction



Barnes with the best fashion sense in the house

Hey friends, more crossword graphs incoming! This has been months in the coming, so I appreciate everyone's patience and sticking by my side. This report is bigger and better than ever, if you ignore the fact that I barely did anything except plug in the new data and wrote significantly less than the first 2 reports, simply because I didn't have the time and didn't really want to. But here we go!

This installment covers from 12/8/21 - 7/23/22 (228 days), with the first report covering up to 12/28/21 and the second report covering up to 2/14/22.

As is probably expected, there has been a noticeable decline in the average number of solvers per puzzle. This leads to probably unexpected results, such as yours truly absolutely climbing up the power rankings. I don't have anything else really to add about this except don't yell at me for my disproportionate amount of top-3 finishes.

This report will be structured as follows:

1. Introduction
2. Methodology
3. Summary
4. Profiles
5. Declarations of Funding and Competing Interests
6. Acknowledgements
7. Appendix: Summary Stats and Graphs for Each Weekday

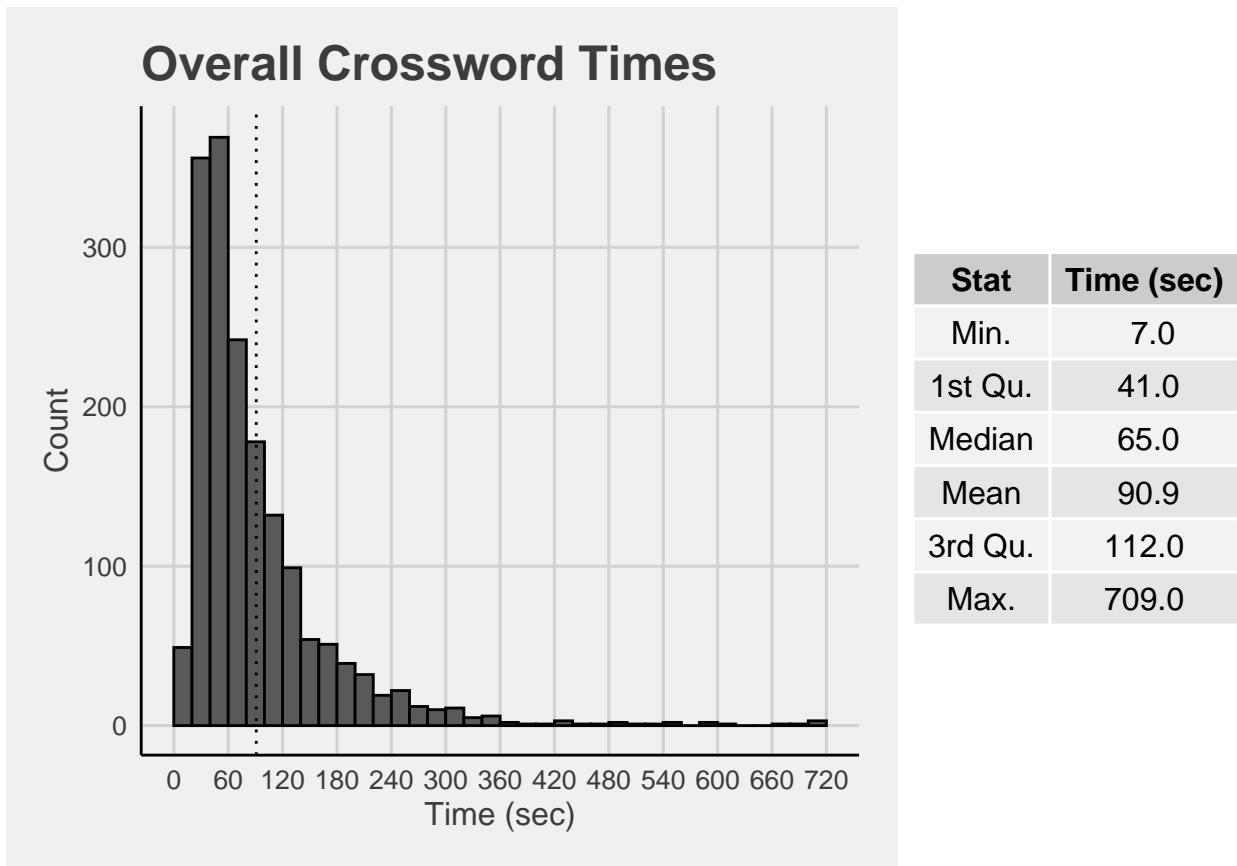
With all that being said, let's get it rolling!

2) Methodology

Just go look at the the Methodology section in the first 2 reports if you're really that interested.

3) Summary

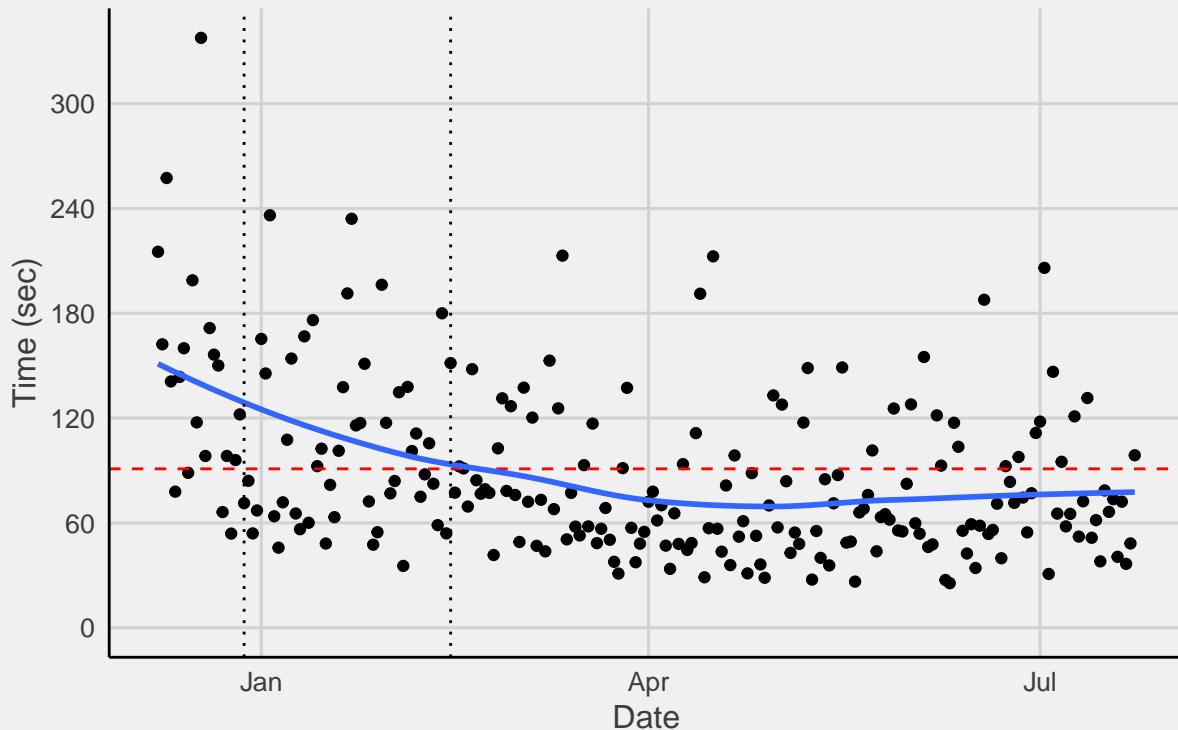
3.1) Overall Trends



As a unit, crossword times are improving, with the median improving from 82 to 65 seconds, the mean dropping from 112.3 to 90.9 seconds, and the lower and upper quartiles dipping from 48.8 to 41 seconds and 140 to 112 seconds, respectively.

We also have a new record minimum score, with addieavery's previous record of 11 seconds on 1/5 being bested 4 times, all by liam, with his 7-second solve on 4/24 taking top spot.

Overall Crossword Times by Date

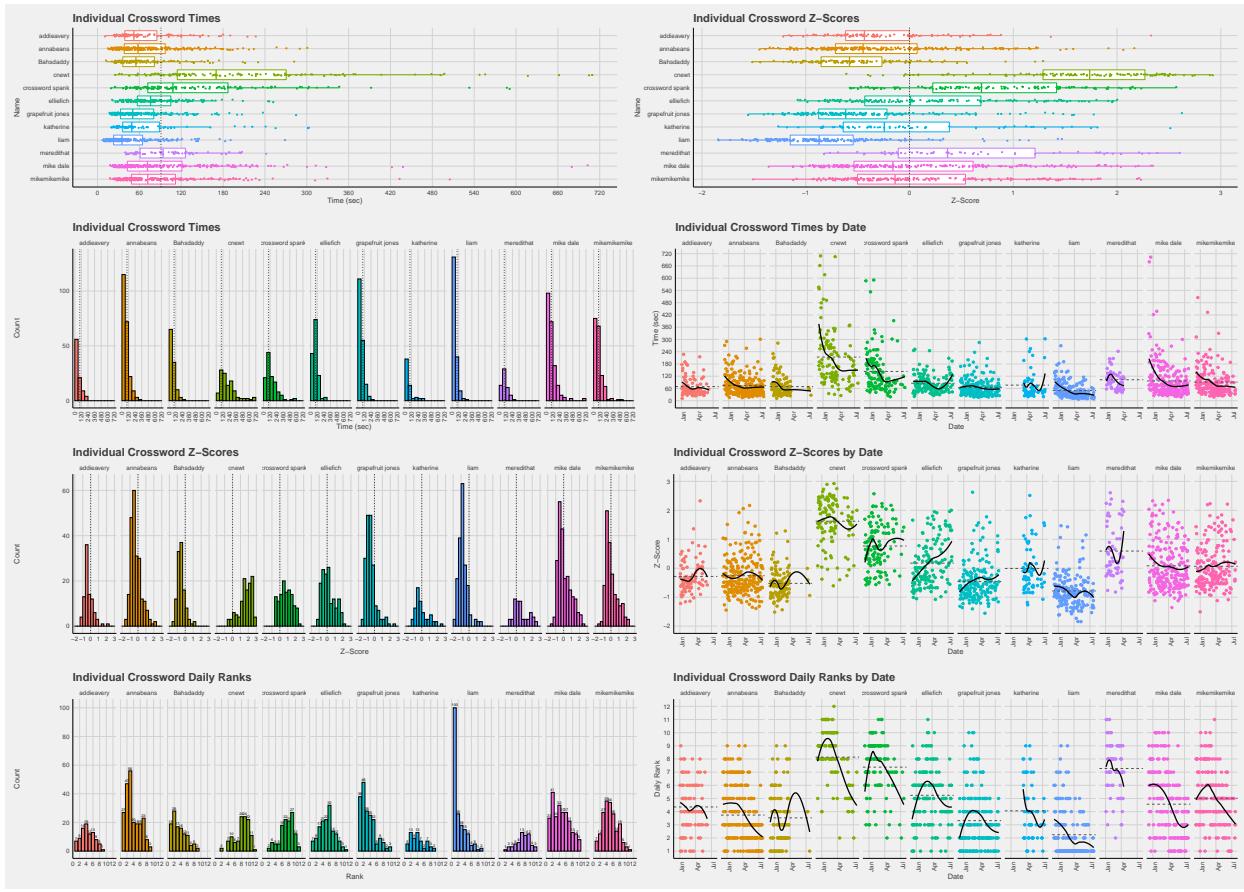


Overall Best Week

Date	Weekday	Time	Week Avg	Time
2022-04-24	Sunday	31.1	51.1	
2022-04-25	Monday	88.5	51.1	
2022-04-26	Tuesday	52.6	51.1	
2022-04-27	Wednesday	36.2	51.1	
2022-04-28	Thursday	28.6	51.1	
2022-04-29	Friday	70.0	51.1	
2022-04-30	Saturday	133.0	51.1	

We continue to improve as a whole!

3.2) Individuals' Scores



When looking at the Individual Crossword Daily Ranks by Date plot in the bottom-right, most people's average rank is plummeting simply due to the decreasing number of solvers per puzzle, although if you want to exercise extreme cognitive dissonance maybe we're all getting impossibly better simultaneously!

Note that in the above boxplots and histograms, the dotted lines represent the overall average, while in the scatterplots, the dashed lines represent each participant's personal average.

Rankings of Each Player

Name	1	2	3	4	5	6	7	8	9	10	11	12	N/A	Total Score
annabean	27	47	56	20	19	19	23	8	3	0	0	0	6	2056
liam	100	26	18	15	12	4	5	1	2	0	0	0	45	1968
mike dale	23	41	24	32	27	27	21	13	12	8	0	0	0	1923
grapefruit jones	38	48	28	25	22	5	9	6	2	3	0	0	42	1801
mikemikemike	7	12	27	35	34	26	14	19	6	3	1	0	44	1469
elliefich	7	9	17	21	22	32	14	12	7	3	1	0	83	1125
Bahsdaddy	19	28	17	16	12	11	4	5	2	0	0	0	114	1080
addieavery	7	9	16	19	12	13	8	5	1	0	0	0	138	778
crossword spank	0	2	6	5	5	18	22	21	27	12	3	0	107	680
cnewt	0	2	0	7	10	6	7	24	24	22	11	1	114	554
katherine	5	13	9	13	7	2	7	3	2	0	0	0	167	545
meredithat	0	1	3	3	5	6	13	11	12	4	3	0	167	349

The above table displays the number of times each player has finished at each rank, with the **Total Score** column being the sum of points if a 1st-place finish gets 12 points, 2nd-place gets 11, ..., 12th-place gets 1 point.

annabean is officially our smartest friend. Congrats!!

3.3) Improvements in Most Recent Period

This section will explore performance before (inclusive) and after 02/14/22, which is the final date in which data was included for Edition 2.

Change in Average Time

Name	Avg Time Pre-02/14	Avg Time Post-02/14	Change In Time
addieavery	81.3	60.2	-21.1
annabean	93.2	65.5	-27.6
Bahsdaddy	79.0	54.0	-25.0
cnewt	266.3	170.9	-95.4
crossword spank	171.7	110.4	-61.2
elliefich	93.9	81.1	-12.8
grapefruit jones	68.5	62.2	-6.2
katherine		76.4	
liam	70.0	37.1	-32.9
meredithat	121.8	80.2	-41.6
mike dale	144.2	76.1	-68.1
mikemikemike	116.3	76.5	-39.7

The biggest improvement in times once again goes to cnewt, with an average 95-second improvement in this third period.

Change in Average Z-Score

Name	Avg Z-Score Pre-02/14	Avg Z-Score Post-02/14	Change In Z-Score
addieavery	-0.39	-0.20	0.19
annabean	-0.31	-0.23	0.08
Bahsdaddy	-0.55	-0.49	0.06
cnewt	1.70	1.56	-0.14
crossword spank	0.74	0.79	0.05
elliefich	-0.20	0.38	0.57
grapefruit jones	-0.64	-0.35	0.29
katherine		-0.01	
liam	-0.66	-0.86	-0.20
meredithat	0.69	0.48	-0.21
mike dale	0.27	0.00	-0.26
mikemikemike	-0.05	0.13	0.18

mike dale holds the biggest improvement in z-scores, with an average of a 0.26 improvement per puzzle.

Change in Average Rank

Name	Avg Rank Pre-02/14	Avg Rank Post-02/14	Change In Rank
addieavery	4.6	4.2	-0.3
annabean	4.5	3.4	-1.1
Bahsdaddy	3.5	3.5	0.0
cnewt	9.0	7.5	-1.5
crossword spank	7.6	7.1	-0.4
elliefich	4.9	5.4	0.5
grapefruit jones	3.2	3.4	0.2
katherine		4.1	
liam	3.0	1.8	-1.2
meredithat	7.7	6.8	-1.0
mike dale	6.0	3.9	-2.1
mikemikemike	5.5	4.7	-0.8

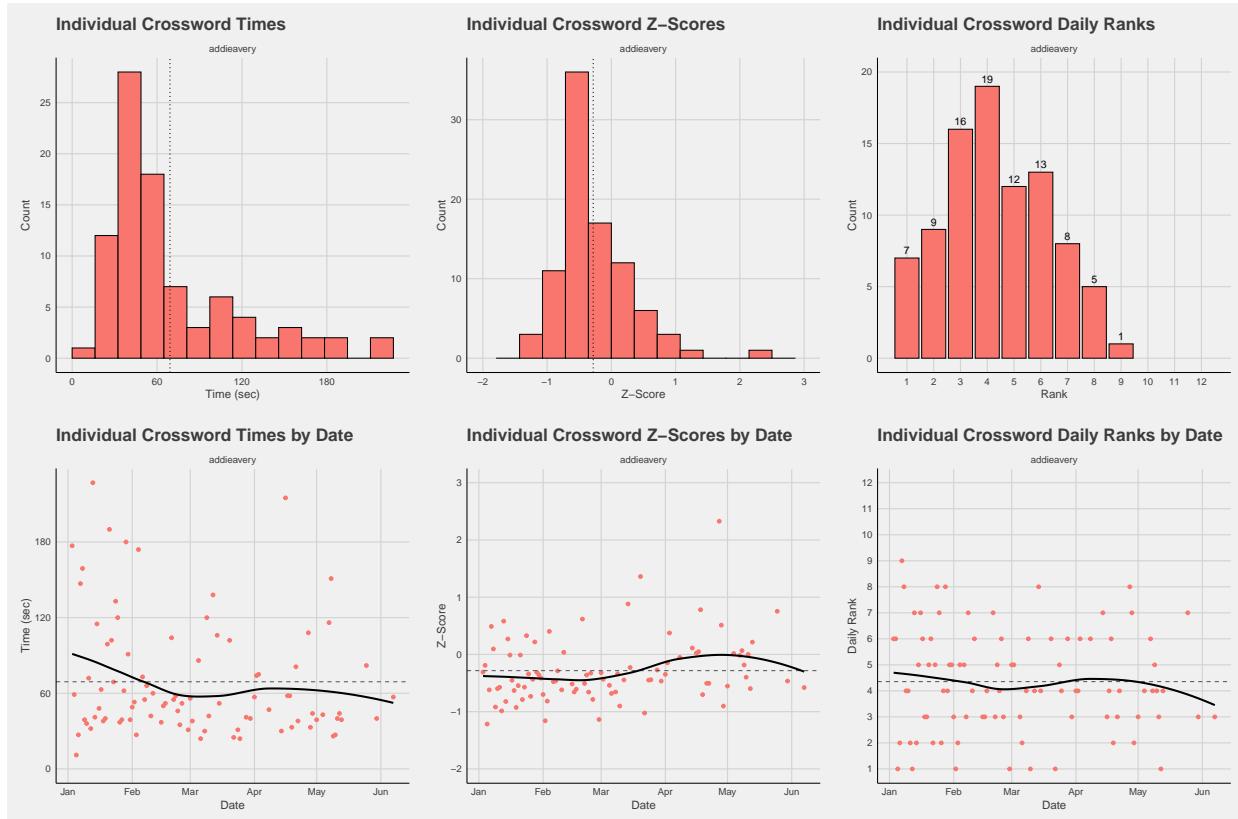
In terms of rank, mike dale showed the biggest average movement up the standings, with an average improvement per day of 2.1. Yay for doing the puzzle everyday!!

4) Profiles

As with Editions 1 and 2, everyone has their own page in this report with their own statistics and graphs. Due to lack of time and motivation, I have not included individualized analyses for y'all's pages this time, although maybe if there is significant backlash I will next time.

Note that in all the plots in this section, the dotted and dashed lines represent the person's personal average.

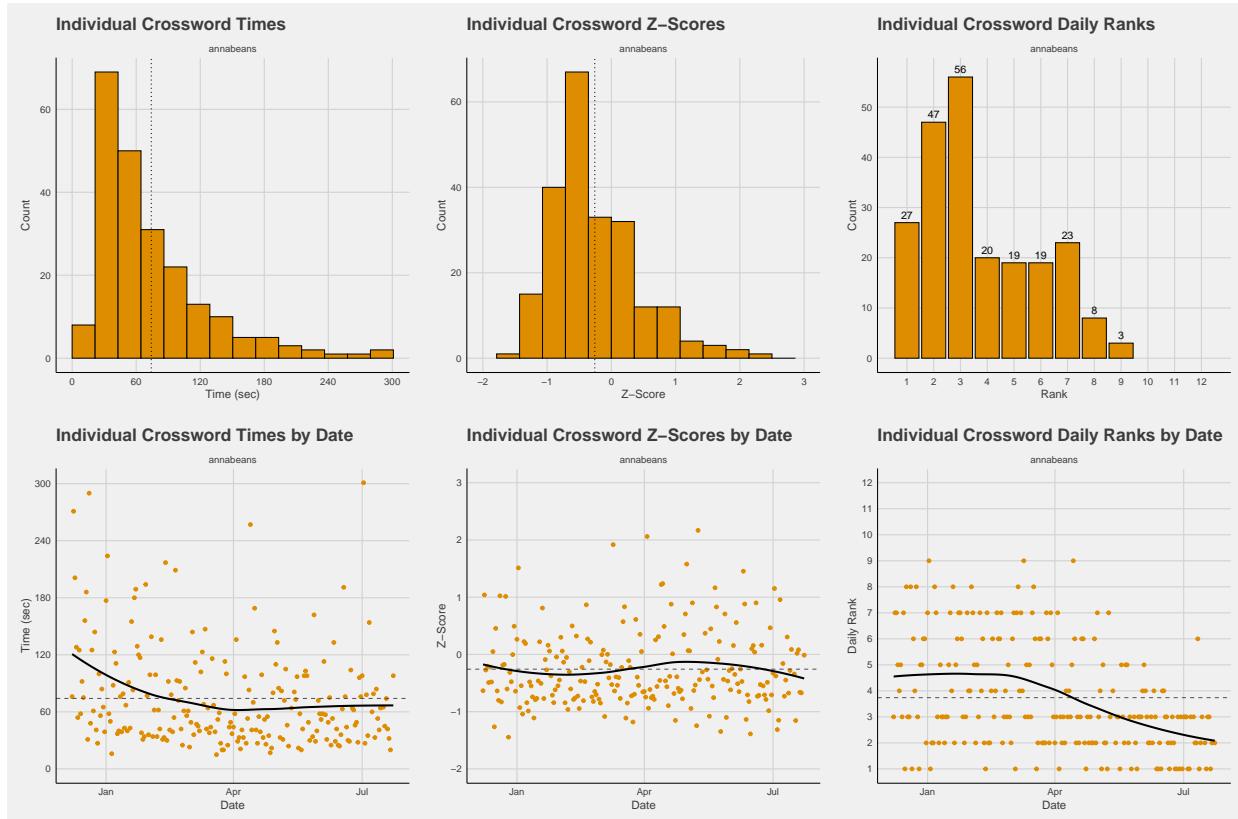
4.1) addieavery



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	11.00	39.00	52.00	69.12	64.94	85	227.00
Z-Score	-1.22	-0.62	-0.43	-0.28	-0.32	0	2.33
Rank	1.00	3.00	4.00	4.36		6	9.00

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-01-16	Sunday	48	82.86	-0.01	-0.48	7	4.57	
2022-01-17	Monday	63	82.86	-0.45	-0.48	6	4.57	
2022-01-18	Tuesday	38	82.86	-0.63	-0.48	3	4.57	
2022-01-19	Wednesday	40	82.86	-0.93	-0.48	3	4.57	
2022-01-20	Thursday	99	82.86	-0.55	-0.48	5	4.57	
2022-01-21	Friday	190	82.86	-0.01	-0.48	6	4.57	
2022-01-22	Saturday	102	82.86	-0.79	-0.48	2	4.57	

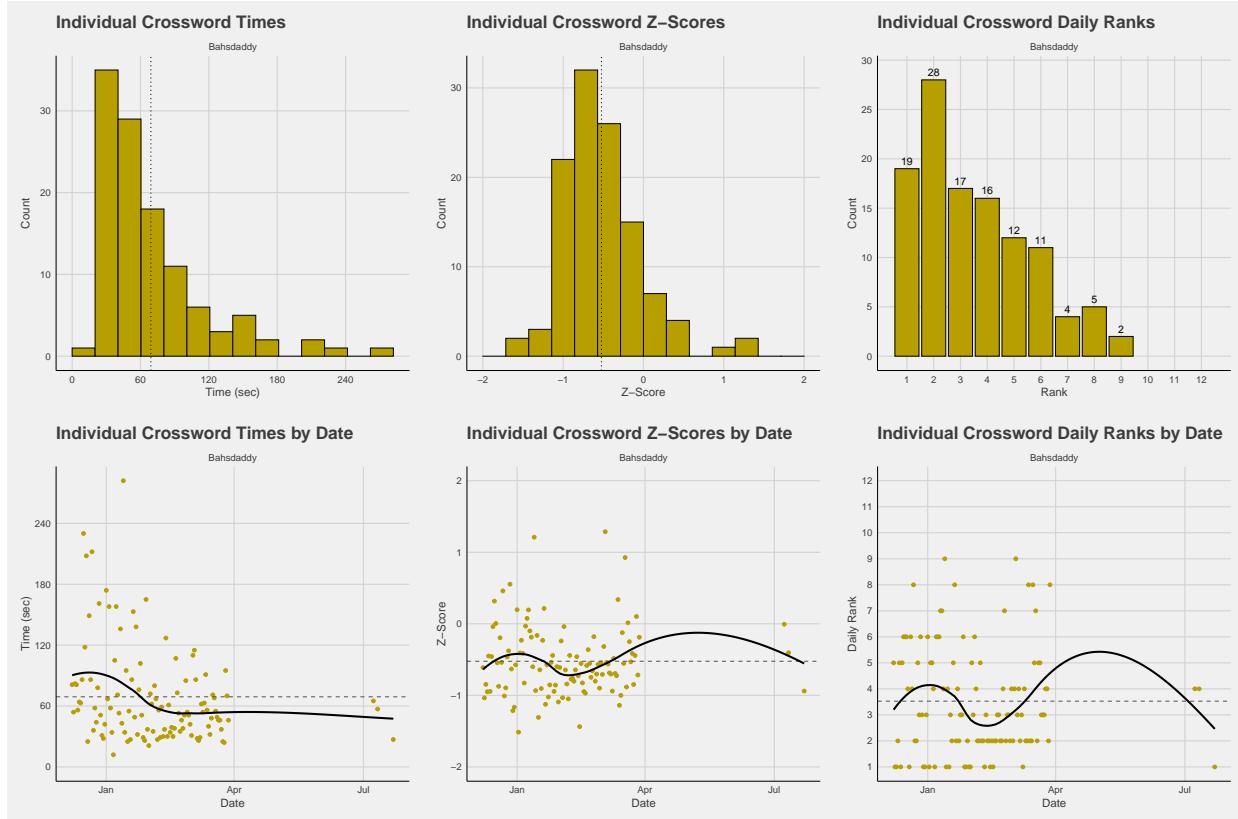
4.2) annabeans



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	15.00	38.25	58.00	74.12	68.47	97.00	301.00
Z-Score	-1.45	-0.71	-0.45	-0.26	-0.30	0.07	2.17
Rank	1.00	2.00	3.00	3.74	5.00	9.00	

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-01-09	Sunday	37	54.43	-0.99	-0.78	2		3
2022-01-10	Monday	40	54.43	-0.48	-0.78	5		3
2022-01-11	Tuesday	76	54.43	-0.55	-0.78	3		3
2022-01-12	Wednesday	39	54.43	-0.74	-0.78	3		3
2022-01-13	Thursday	79	54.43	-1.11	-0.78	2		3
2022-01-14	Friday	43	54.43	-0.79	-0.78	3		3
2022-01-15	Saturday	67	54.43	-0.77	-0.78	3		3

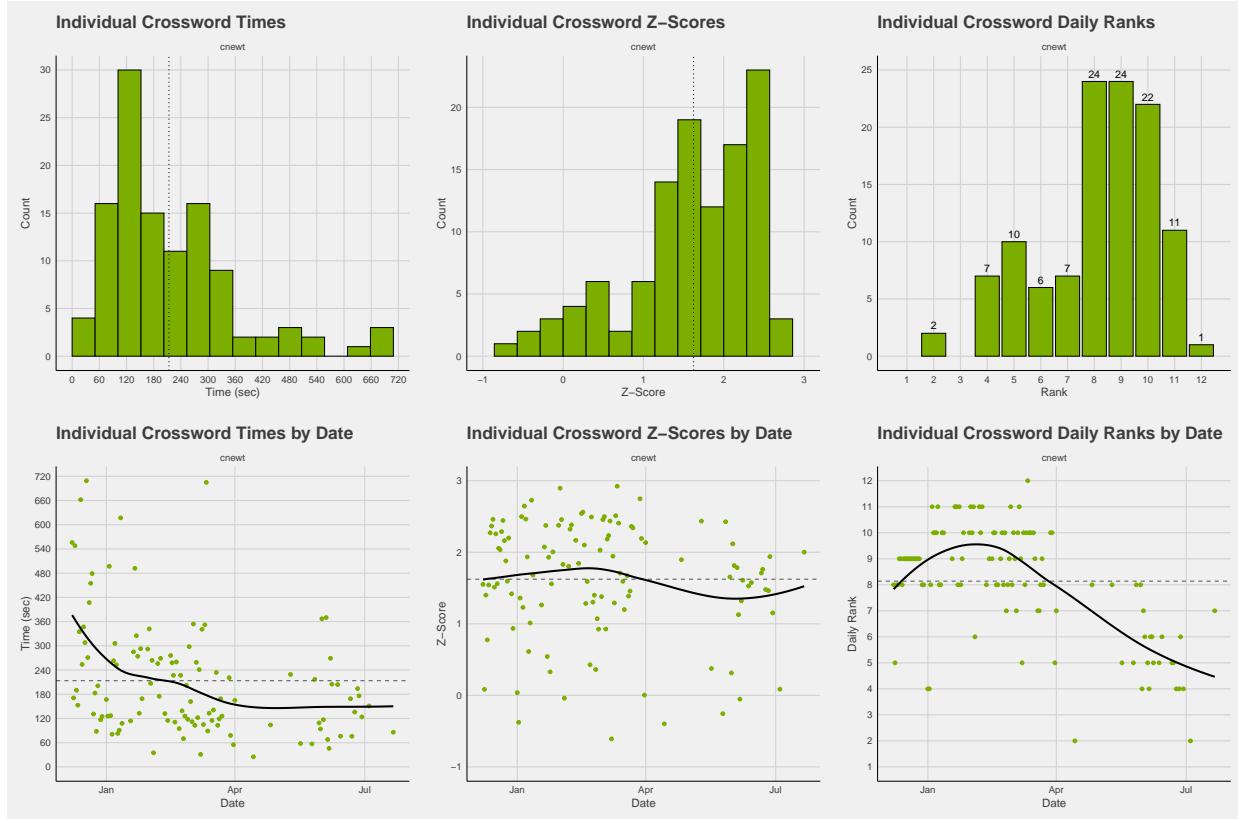
4.3) Bahsdaddy



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	12.00	36.25	55.00	69.09	64.07	81.75	282.00
Z-Score	-1.51	-0.85	-0.58	-0.52	-0.55	-0.27	1.29
Rank	1.00	2.00	3.00	3.53	5.00	9.00	

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-02-13	Sunday	30	48.43	-0.73	-0.86	2	1.86	
2022-02-14	Monday	61	48.43	-1.44	-0.86	1	1.86	
2022-02-15	Tuesday	34	48.43	-0.55	-0.86	2	1.86	
2022-02-16	Wednesday	39	48.43	-0.83	-0.86	1	1.86	
2022-02-17	Thursday	30	48.43	-0.95	-0.86	2	1.86	
2022-02-18	Friday	38	48.43	-0.97	-0.86	2	1.86	
2022-02-19	Saturday	107	48.43	-0.58	-0.86	3	1.86	

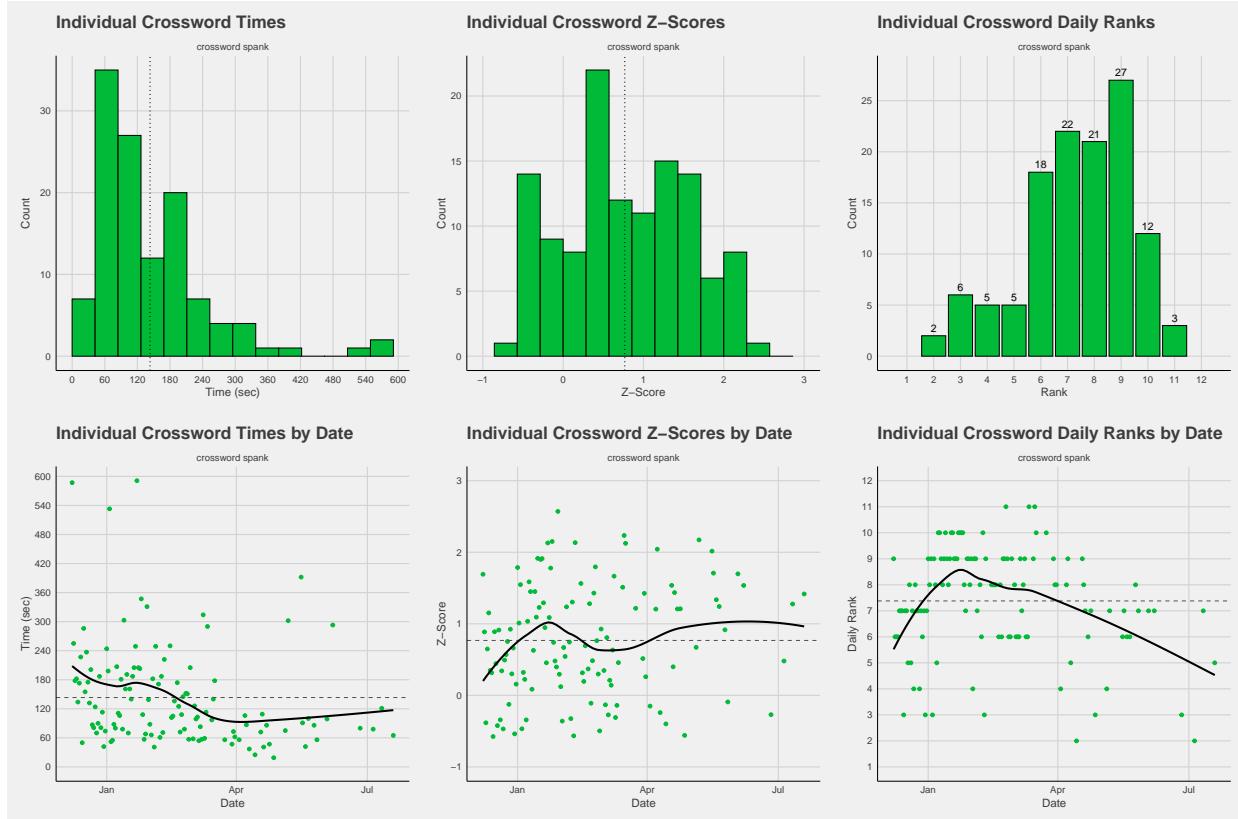
4.4) cnewt



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	25.00	114.25	170.00	213.60	201.05	270.50	709.00
Z-Score	-0.61	1.29	1.74	1.62	1.66	2.27	2.92
Rank	2.00	7.00	9.00	8.14		10.00	12.00

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-01-02	Sunday	126	236.14	-0.38	1.68	4	9.14	
2022-01-03	Monday	497	236.14	1.36	1.68	8	9.14	
2022-01-04	Tuesday	127	236.14	2.50	1.68	11	9.14	
2022-01-05	Wednesday	81	236.14	1.23	1.68	10	9.14	
2022-01-06	Thursday	263	236.14	2.65	1.68	10	9.14	
2022-01-07	Friday	306	236.14	2.46	1.68	10	9.14	
2022-01-08	Saturday	253	236.14	1.94	1.68	11	9.14	

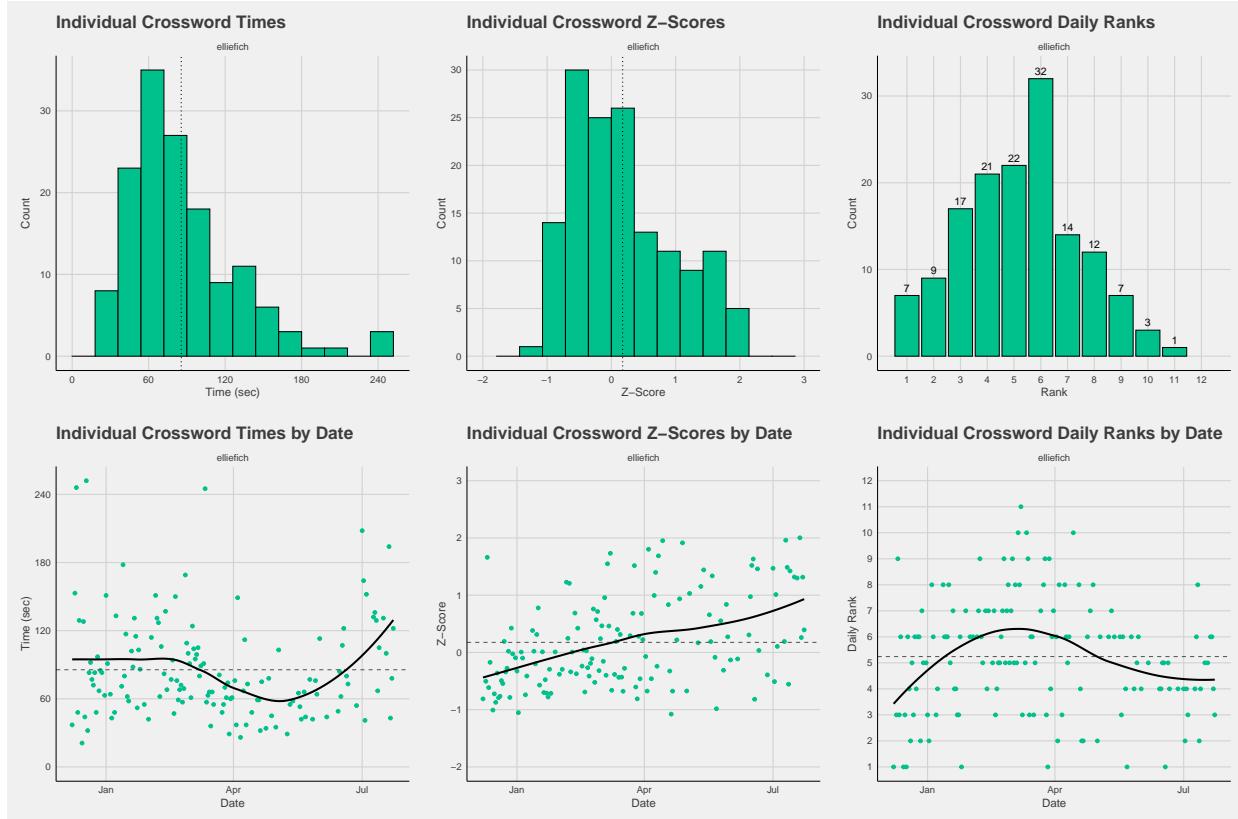
4.5) crossword spank



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	19.00	72.00	108.00	143.32	131.71	187.00	591.00
Z-Score	-0.58	0.22	0.69	0.77	0.76	1.42	2.57
Rank	2.00	6.00	8.00	7.38		9.00	11.00

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2021-12-12	Sunday	134	180.29	1.15	0.31	7	6.14	
2021-12-13	Monday	173	180.29	0.35	0.31	7	6.14	
2021-12-14	Tuesday	227	180.29	0.32	0.31	7	6.14	
2021-12-15	Wednesday	50	180.29	-0.58	0.31	3	6.14	
2021-12-16	Thursday	286	180.29	0.89	0.31	7	6.14	
2021-12-17	Friday	155	180.29	0.44	0.31	7	6.14	
2021-12-18	Saturday	237	180.29	-0.42	0.31	5	6.14	

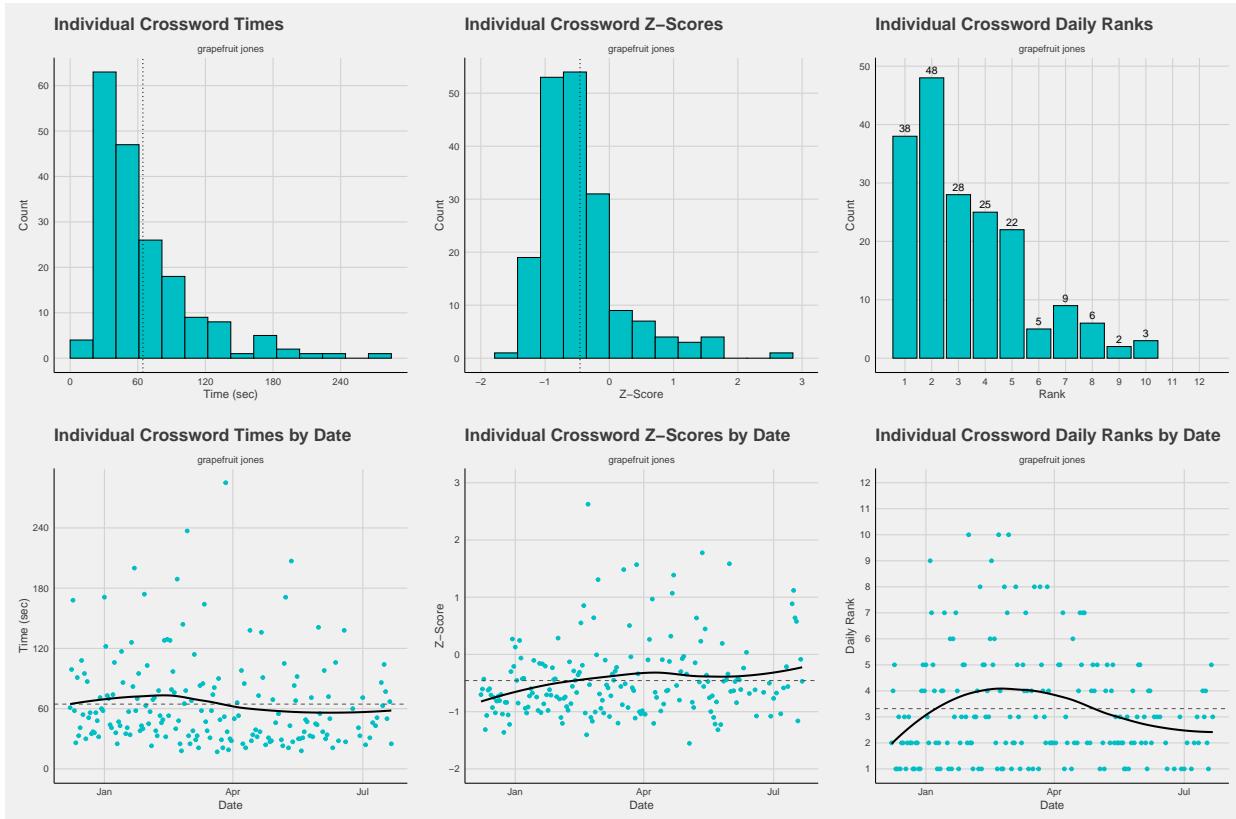
4.6) elliefich



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	21.00	57.00	76.00	85.57	81.77	105.00	252
Z-Score	-1.08	-0.43	0.01	0.18	0.15	0.69	2
Rank	1.00	4.00	5.00	5.24		7.00	11

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2021-12-19	Sunday	32	69.57	-0.79	-0.43	4	4.29	
2021-12-20	Monday	83	69.57	-0.77	-0.43	2	4.29	
2021-12-21	Tuesday	92	69.57	-0.49	-0.43	5	4.29	
2021-12-22	Wednesday	77	69.57	-0.54	-0.43	3	4.29	
2021-12-23	Thursday	72	69.57	0.19	-0.43	6	4.29	
2021-12-24	Friday	83	69.57	-0.34	-0.43	4	4.29	
2021-12-25	Saturday	48	69.57	-0.28	-0.43	6	4.29	

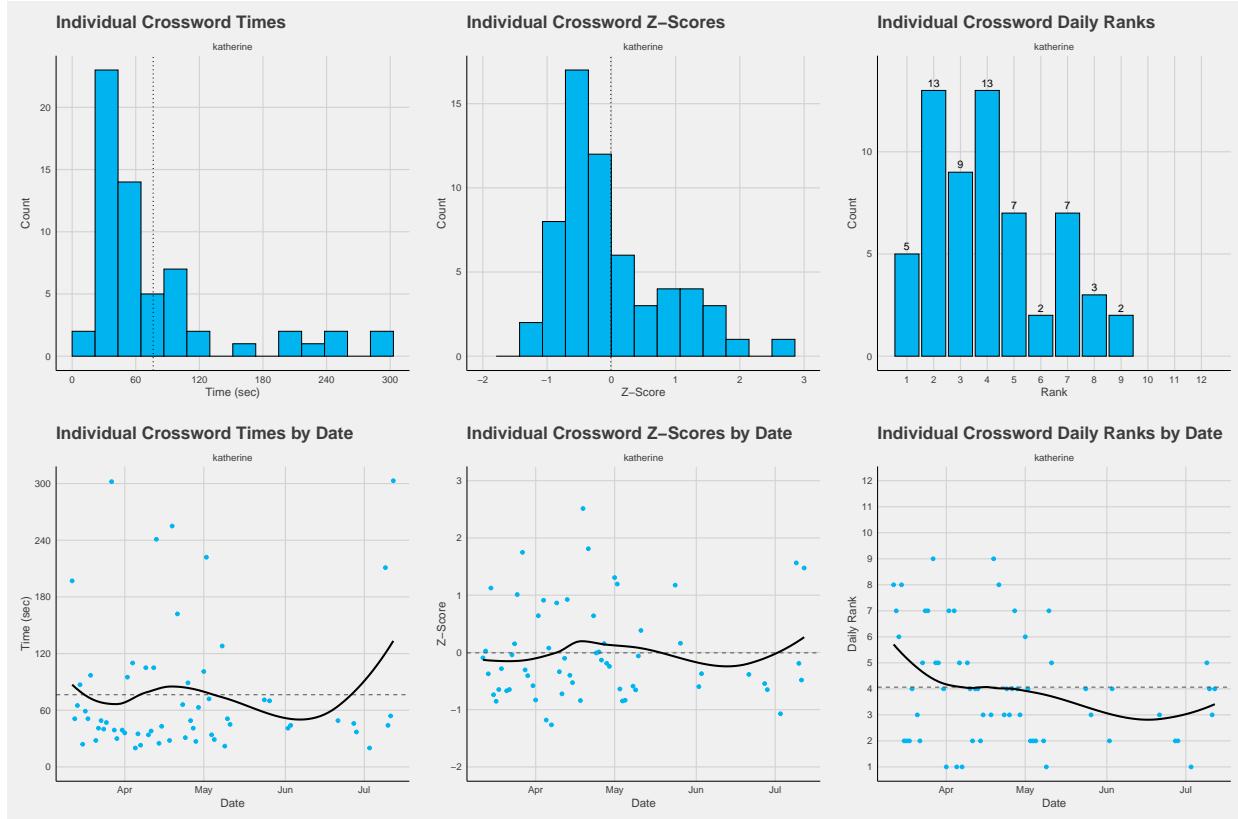
4.7) grapefruit jones



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	17.00	33.00	50.50	64.52	59.65	80.50	285.00
Z-Score	-1.55	-0.88	-0.62	-0.46	-0.52	-0.22	2.62
Rank	1.00	2.00	3.00	3.32		4.75	10.00

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2021-12-19	Sunday	30	47.43	-0.81		-0.9	2	1.86
2021-12-20	Monday	87	47.43	-0.73		-0.9	3	1.86
2021-12-21	Tuesday	51	47.43	-0.81		-0.9	2	1.86
2021-12-22	Wednesday	56	47.43	-0.70		-0.9	2	1.86
2021-12-23	Thursday	35	47.43	-1.04		-0.9	1	1.86
2021-12-24	Friday	37	47.43	-1.36		-0.9	1	1.86
2021-12-25	Saturday	36	47.43	-0.84		-0.9	2	1.86

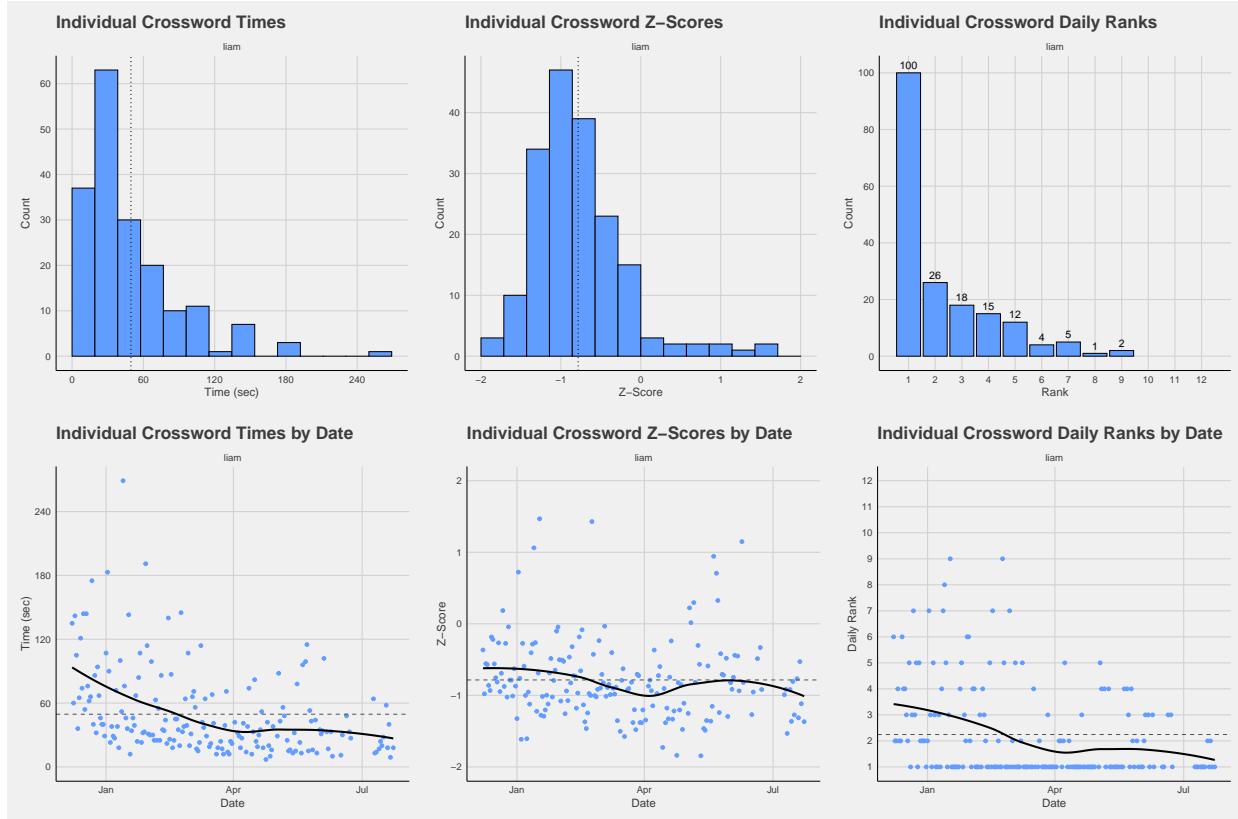
4.8) katherine



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	20.00	36.00	49.00	76.41	67.98	89.00	303.00
Z-Score	-1.27	-0.64	-0.24	-0.01	-0.06	0.38	2.51
Rank	1.00	2.00	4.00	4.07	5.00	9.00	

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-03-13	Sunday	51	62	0.03	-0.25	7	4.43	
2022-03-14	Monday	65	62	-0.37	-0.25	6	4.43	
2022-03-15	Tuesday	87	62	1.12	-0.25	8	4.43	
2022-03-16	Wednesday	24	62	-0.74	-0.25	2	4.43	
2022-03-17	Thursday	59	62	-0.85	-0.25	2	4.43	
2022-03-18	Friday	51	62	-0.65	-0.25	2	4.43	
2022-03-19	Saturday	97	62	-0.28	-0.25	4	4.43	

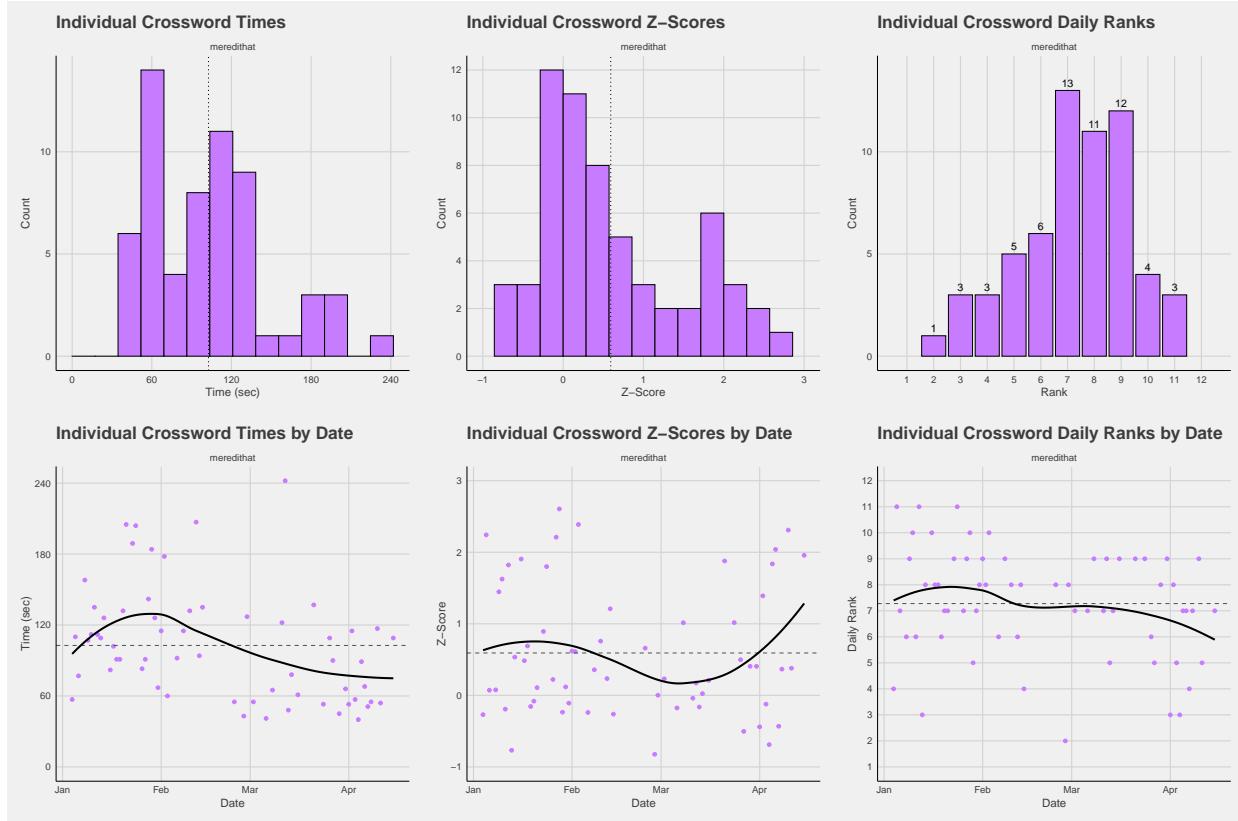
4.9) liam



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	7.00	23.00	35.00	49.54	45.05	64.50	269.00
Z-Score	-1.84	-1.15	-0.87	-0.78	-0.83	-0.54	1.47
Rank	1.00	1.00	1.00	2.25		3.00	9.00

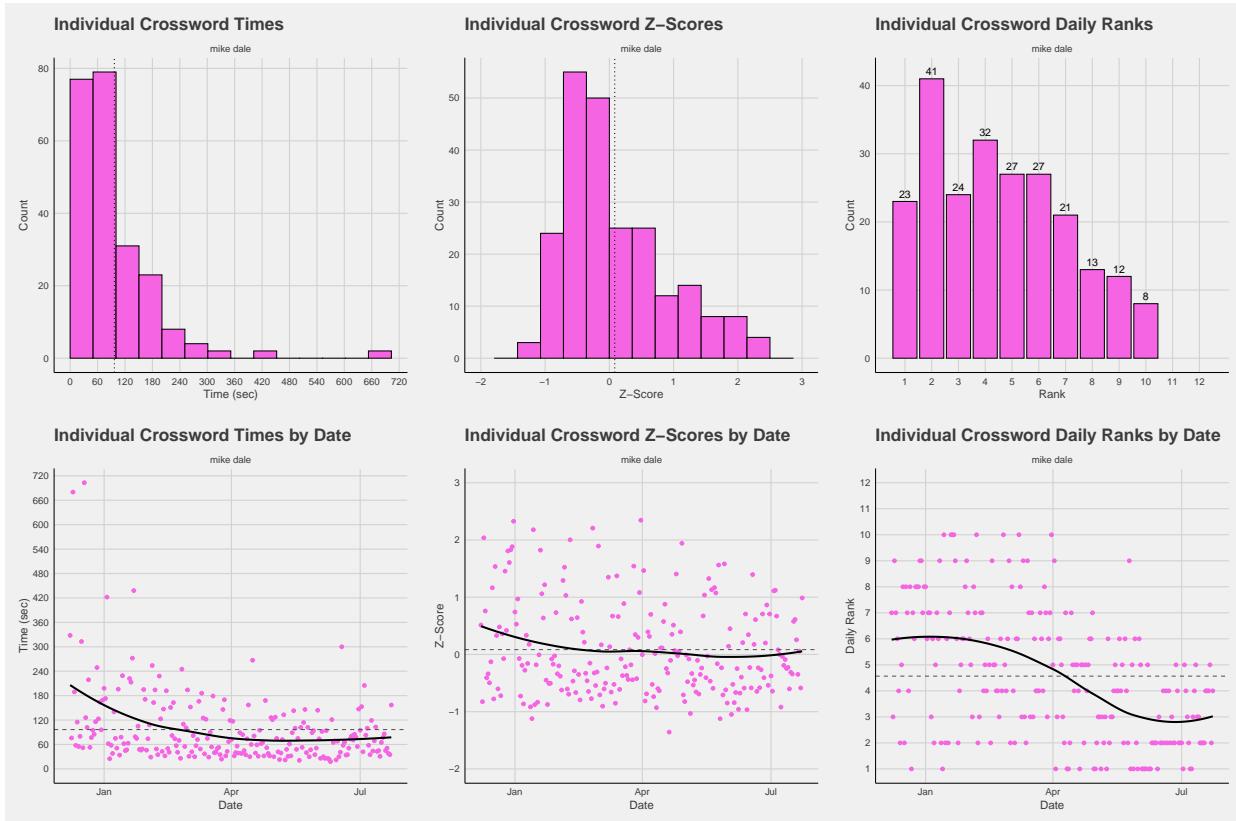
Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2022-03-06	Sunday	17	44.57	-0.89	-0.84	1	1.71	
2022-03-07	Monday	15	44.57	-0.85	-0.84	1	1.71	
2022-03-08	Tuesday	23	44.57	-0.99	-0.84	2	1.71	
2022-03-09	Wednesday	114	44.57	-0.40	-0.84	5	1.71	
2022-03-10	Thursday	42	44.57	-0.90	-0.84	1	1.71	
2022-03-11	Friday	37	44.57	-0.98	-0.84	1	1.71	
2022-03-12	Saturday	64	44.57	-0.89	-0.84	1	1.71	

4.10) meredithat



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	40.00	61.00	94.00	102.70	99.76	126.00	242.00
Z-Score	-0.82	-0.11	0.37	0.59	0.57	1.21	2.61
Rank	2.00	6.00	7.00	7.28		9.00	11.00

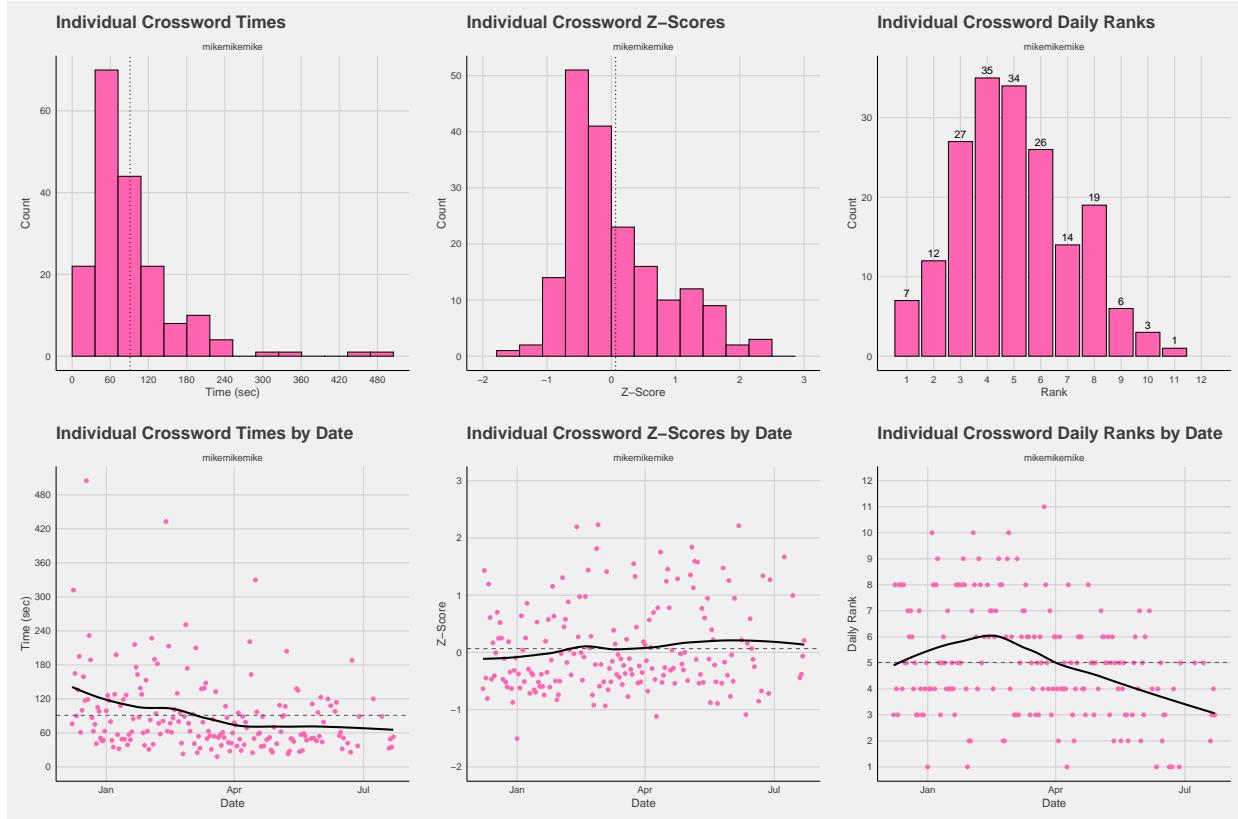
4.11) mike dale



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	18.00	42.75	71.50	96.67	85.23	121.00	703.00
Z-Score	-1.36	-0.54	-0.16	0.08	0.04	0.61	2.34
Rank	1.00	2.00	4.00	4.57		6.00	10.00

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Z-Score	Rank
2022-06-05	Sunday	30	48.43	-0.84	-0.51	1	1.86	
2022-06-06	Monday	26	48.43	-0.66	-0.51	1	1.86	
2022-06-07	Tuesday	94	48.43	-0.25	-0.51	5	1.86	
2022-06-08	Wednesday	26	48.43	-0.96	-0.51	1	1.86	
2022-06-09	Thursday	24	48.43	-0.68	-0.51	1	1.86	
2022-06-10	Friday	18	48.43	-0.40	-0.51	2	1.86	
2022-06-11	Saturday	121	48.43	0.21	-0.51	2	1.86	

4.12) mikemikemike



Metric	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
Time	18.00	48.75	72.00	90.99	83.10	111.75	505.00
Z-Score	-1.51	-0.50	-0.14	0.07	0.03	0.54	2.23
Rank	1.00	3.75	5.00	5.02	6.00	11.00	

Date	Weekday	Time	Week Avg		Week Avg		Week Avg	
			Time	Z-Score	Z-Score	Rank	Rank	Rank
2021-12-26	Sunday	105	72.71	0.19	-0.51	7	3.86	
2021-12-27	Monday	98	72.71	-0.34	-0.51	4	3.86	
2021-12-28	Tuesday	51	72.71	-0.63	-0.51	3	3.86	
2021-12-29	Wednesday	46	72.71	-0.87	-0.51	3	3.86	
2021-12-30	Thursday	47	72.71	-0.31	-0.51	4	3.86	
2021-12-31	Friday	63	72.71	-0.09	-0.51	5	3.86	
2022-01-01	Saturday	99	72.71	-1.51	-0.51	1	3.86	

5) Declarations of Funding and Competing Interests

I am in the pockets of all the prominent DC lobbyists. I have absolutely no morals and values to speak of.

6) Acknowledgements

This one goes out to my sister Hannah because she turned 8 yesterday (7/22), and because she is my best friend in the whole wide world. Shame on y'all for not wishing her a happy birthday.

7) Appendix: Summary Stats Tables and

7.1) Summary Stats and Graphs for Each Weekday

The following tables give each person's quartiles with respect to time, z-score, and daily rank. These are the same data presented individually in each person's subsection of the "Profiles" Section.

7.1.1) Summary Stats for Time

Name	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
addieavery	11	39.0	52.0	69.1	64.9	85.0	227
annabeans	15	38.2	58.0	74.1	68.5	97.0	301
Bahsdaddy	12	36.2	55.0	69.1	64.1	81.8	282
cnewt	25	114.2	170.0	213.6	201.0	270.5	709
crossword spank	19	72.0	108.0	143.3	131.7	187.0	591
elliefich	21	57.0	76.0	85.6	81.8	105.0	252
grapefruit jones	17	33.0	50.5	64.5	59.7	80.5	285
katherine	20	36.0	49.0	76.4	68.0	89.0	303
liam	7	23.0	35.0	49.5	45.1	64.5	269
meredithat	40	61.0	94.0	102.7	99.8	126.0	242
mike dale	18	42.8	71.5	96.7	85.2	121.0	703
mikemikemike	18	48.8	72.0	91.0	83.1	111.8	505

7.1.2) Summary Stats for Z-Score

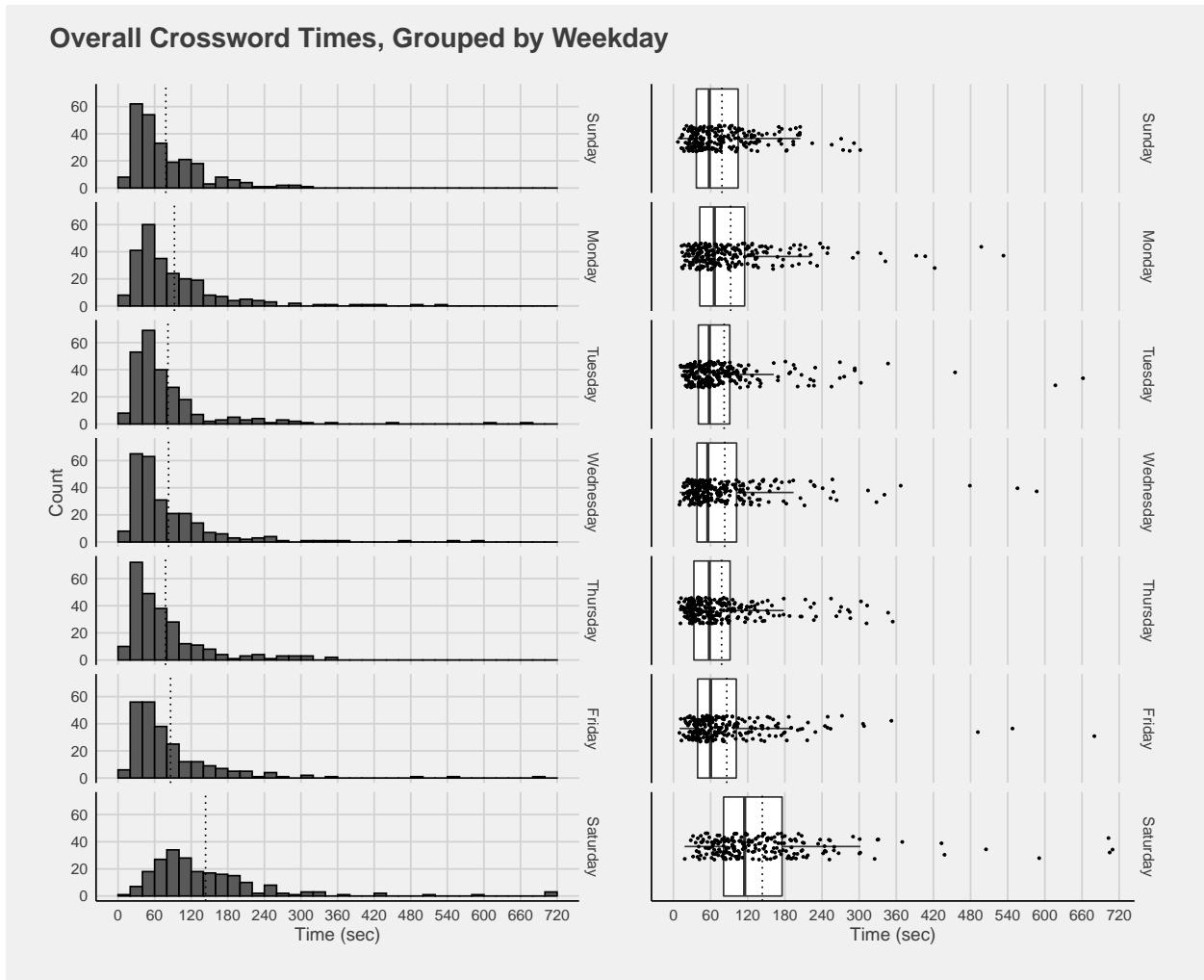
Name	Min.	1st Qu.	Median	Mean	Trimmed Mean	3rd Qu.	Max.
addieavery	-1.22	-0.62	-0.43	-0.28	-0.32	0.00	2.33
annabeans	-1.45	-0.71	-0.45	-0.26	-0.30	0.07	2.17
Bahsdaddy	-1.51	-0.85	-0.58	-0.52	-0.55	-0.27	1.29
cnewt	-0.61	1.29	1.74	1.62	1.66	2.27	2.92
crossword spank	-0.58	0.22	0.69	0.77	0.76	1.42	2.57
elliefich	-1.08	-0.43	0.01	0.18	0.15	0.69	2.00
grapefruit jones	-1.55	-0.88	-0.62	-0.46	-0.52	-0.22	2.62
katherine	-1.27	-0.64	-0.24	-0.01	-0.06	0.38	2.51
liam	-1.84	-1.15	-0.87	-0.78	-0.83	-0.54	1.47
meredithat	-0.82	-0.11	0.37	0.59	0.57	1.21	2.61
mike dale	-1.36	-0.54	-0.16	0.08	0.04	0.61	2.34
mikemikemike	-1.51	-0.50	-0.14	0.07	0.03	0.54	2.23

7.1.3) Summary Stats for Rank

Name	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
addieavery	1	3.0	4	4.4	6.0	9
annabean	1	2.0	3	3.7	5.0	9
Bahsdaddy	1	2.0	3	3.5	5.0	9
cnewt	2	7.0	9	8.1	10.0	12
crossword spank	2	6.0	8	7.4	9.0	11
elliefich	1	4.0	5	5.2	7.0	11
grapefruit jones	1	2.0	3	3.3	4.8	10
katherine	1	2.0	4	4.1	5.0	9
liam	1	1.0	1	2.2	3.0	9
meredithat	2	6.0	7	7.3	9.0	11
mike dale	1	2.0	4	4.6	6.0	10
mikemikemike	1	3.8	5	5.0	6.0	11

7.2) Graphs for Each Weekday

7.2.1) Distribution of Overall Times



7.2.2) Distribution of Individual Ranks

