

MIAX PEARL Appendix A

Obvious and Catastrophic Errors During Limit and Straddle States

For the month of January 2019, the MIAX PEARL Exchange collected the following dataset containing the data for each Straddle and Limit State in optionable stocks.

Stock Symbol	Option Symbol	Trade Date	LULD Start Time	Straddle Limit Indicator	Executed Volume	TW Avg MBBO Spread	TW Avg Quote Bid Size	TW Avg Quote Ask Size	High Execution Price	Low Execution Price	Trades Reviewed for Error	Price Change GT 30 PCT in LULD	Price Change GT 30 PCT After LULD
SRPT	SRPT-2019-02-15-C-120.00	01/07/2019	11:31:03 AM	STRADDLE	3	3.29	0.48	0.16	5.2	5.2	N/A	0	0
PCG	PCG-2019-02-15-P-3.00	01/15/2019	09:36:13 AM	LIMIT	5	0.12	0	0	0.4	0.4	N/A	0	0
PCG	PCG-2019-01-18-P-3.00	01/15/2019	09:39:45 AM	LIMIT	1	0.14	0	0	0.1	0.1	N/A	0	0
PCG	PCG-2019-01-18-P-4.00	01/15/2019	09:40:00 AM	STRADDLE	1	0.1	0	0	0.2	0.2	N/A	0	0
PCG	PCG-2019-01-18-P-5.00	01/15/2019	09:40:00 AM	STRADDLE	44	0.15	0	0	0.35	0.35	N/A	0	0
PCG	PCG-2020-01-17-P-8.00	01/24/2019	03:14:03 PM	STRADDLE	3	9.84	0	0.01	3.1	3.1	N/A	0	0
PCG	PCG-2019-01-25-P-6.00	01/24/2019	03:14:03 PM	STRADDLE	61	0.1	0	0.02	0.05	0.05	N/A	0	0
PCG	PCG-2019-03-01-P-6.00	01/24/2019	03:14:03 PM	STRADDLE	1	0.35	0	1.69	0.7	0.7	N/A	0	0
PCG	PCG-2019-01-25-C-7.50	01/24/2019	03:14:03 PM	STRADDLE	28	2.95	0.33	0.62	0.75	0.75	N/A	1	0
PCG	PCG-2019-01-25-C-8.00	01/24/2019	03:14:03 PM	STRADDLE	6	4.84	0	0.02	0.3	0.3	N/A	1	0
PCG	PCG-2019-02-15-C-8.00	01/24/2019	03:14:03 PM	STRADDLE	10	0.55	0	0.03	1.2	1.2	N/A	1	0
PCG	PCG-2019-02-01-P-6.00	01/24/2019	03:21:06 PM	STRADDLE	18	0.84	0	1.64	0.25	0.25	N/A	0	0
PCG	PCG-2019-01-25-P-5.00	01/24/2019	03:21:06 PM	STRADDLE	27	0.08	0	1	0.05	0.05	N/A	0	0
PCG	PCG-2019-01-25-P-7.00	01/24/2019	03:21:07 PM	STRADDLE	1	0.05	0	0.03	0.05	0.05	N/A	1	0
PCG	PCG-2019-01-25-C-32.00	01/24/2019	03:28:38 PM	STRADDLE	100	0.5	0	0	0.05	0.05	N/A	0	0
PCG	PCG-2019-02-15-P-13.00	01/24/2019	03:28:46 PM	STRADDLE	7	4.01	0	0	3.6	3.6	N/A	0	0
PCG	PCG-2019-03-15-P-5.00	01/24/2019	03:28:46 PM	STRADDLE	5	4.5	0	0	0.5	0.5	N/A	0	0
PCG	PCG-2019-03-15-P-6.00	01/24/2019	03:28:46 PM	STRADDLE	2	2.43	0.07	0	0.8	0.8	N/A	0	0
PCG	PCG-2019-01-25-C-25.00	01/24/2019	03:28:49 PM	LIMIT	1	3.53	0	0	0.1	0.1	N/A	1	1

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PCG	PCG-2019-06-21-P-6.00	01/24/2019	03:28:49 PM	LIMIT	10	3.65	0.04	0.04	1.4	1.4	N/A	0	0
PCG	PCG-2019-02-01-P-10.00	01/28/2019	11:06:43 AM	STRADDLE	2	0.79	0	0	0.35	0.35	N/A	0	0
PCG	PCG-2019-03-15-C-35.00	01/28/2019	11:06:44 AM	STRADDLE	10	2.49	0	0.1	0.05	0.05	N/A	0	0
PCG	PCG-2019-02-01-P-8.00	01/28/2019	11:18:05 AM	STRADDLE	1	0.2	0	0.05	0.3	0.3	N/A	1	1
PCG	PCG-2019-02-01-P-10.50	01/28/2019	11:18:05 AM	STRADDLE	1	0.79	0.01	0.08	0.65	0.65	N/A	0	0
PCG	PCG-2019-02-01-C-13.00	01/28/2019	11:18:05 AM	STRADDLE	2	4.93	0	0	1.15	1.15	N/A	1	0