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# ListDer Research Short Dated Index Options In 2023

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## Short Dated Index Options In 2023

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#### **Outline**

- S&P 500 (SPX, XSP, SPY)
- Nasdaq-100 (NDX, XND, QQQ)
- 2023 Price Action
- Contact / Questions

#### S&P 500 (SPX, XSP, SPY)

- Daily PM expiring options available since mid 2022
- SPX and XSP are cash settled markets while SPY is physically settled
- Well over half of daily S&P 500 related option volume is concentrated in contracts with very little time to expiration

## Nasdaq-100 (NDX, XND, QQQ)

- Daily PM expiring options available since mid 2022
- NDX and XND are cash settled markets while QQQ is physically settled
- XND is 1/100<sup>th</sup> the value of NDX
- QQQ is approximately equal to NDX divided by 41

#### **Index Option Price Action**

#### Method -

- Gather mid-point pricing for ATM index options on the close with between one and five days to expiration
- Price long and short straddle using mid-point pricing including 2.00 points for slippage and commissions
- Straddle held into PM settlement
- Relevant price action in indexes plus straddle cost as a percent of market also tracked

| 2023 1-Day Short ATM Straddle P/L By Month |        |         |        |         |
|--|--------|---------|--------|---------|
| Month                                      | Max    | Min     | Avg    | Total   |
| Jan  | +63.78 | (43.16) | +0.13  | +2.58   |
| Feb  | +64.07 | (47.66) | +3.98  | +75.54  |
| Mar  | +42.61 | (44.88) | (0.60) | (13.88) |
| Apr  | +31.04 | (56.95) | +3.87  | +73.50  |
| May  | +33.23 | (38.25) | (0.66) | (14.57) |
| Jun  | +30.61 | (37.22) | (4.48) | (94.06) |
| Jul  | +30.80 | (20.44) | +1.51  | +30.21  |
| Aug  | +34.93 | (43.76) | (2.39) | (55.02) |
| Sep  | +30.66 | (44.75) | +0.38  | +7.69   |
| Oct  | +30.34 | (33.45) | (1.16) | (24.33) |
| Nov  | +18.65 | (54.40) | (1.98) | (41.58) |
| Dec  | +22.69 | (55.45) | (2.05) | (41.09) |
| Year                                       | +64.07 | (56.95) | (0.38) | (95.01) |

| 2023 1-Day Long ATM Straddle P/L By Month |        |         |        |          |
|---|--------|---------|--------|----------|
| Month                                     | Max    | Min     | Avg    | Total    |
| Jan                                       | +39.16 | (67.78) | (4.13) | (82.58)  |
| Feb                                       | +43.66 | (68.07) | (7.98) | (151.54) |
| Mar                                       | +40.88 | (46.61) | (3.40) | (78.12)  |
| Apr                                       | +52.95 | (35.04) | (7.87) | (149.50) |
| May                                       | +34.25 | (37.23) | (3.34) | (73.43)  |
| Jun                                       | +33.22 | (34.61) | +0.48  | +10.06   |
| Jul                                       | +16.44 | (34.80) | (5.51) | (110.21) |
| Aug                                       | +39.76 | (38.93) | (1.61) | (36.98)  |
| Sep                                       | +40.75 | (34.66) | (4.38) | (87.69)  |
| Oct                                       | +29.45 | (34.34) | (2.84) | (59.67)  |
| Nov                                       | +50.40 | (22.65) | (2.02) | (42.42)  |
| Dec                                       | +51.45 | (26.69) | (1.95) | (38.91)  |
| Year                                      | +52.95 | (68.07) | (3.62) | (900.99) |





| 2023 2-Day Short ATM Straddle P/L By Month |        |         |        |          |
|--|--------|---------|--------|----------|
| Month                                      | Max    | Min     | Avg    | Total    |
| Jan  | +55.46 | (76.81) | +4.78  | +95.55   |
| Feb  | +60.80 | (40.50) | +5.79  | +109.96  |
| Mar  | +62.27 | (74.16) | +4.72  | +108.64  |
| Apr  | +38.66 | (75.28) | +2.46  | +46.69   |
| May  | +33.14 | (55.45) | (1.45) | (31.92)  |
| Jun  | +24.70 | (63.17) | (5.45) | (114.36) |
| Jul  | +34.13 | (31.94) | (3.25) | (65.09)  |
| Aug  | +40.65 | (55.23) | (2.03) | (46.73)  |
| Sep  | +40.46 | (78.10) | +0.94  | +18.86   |
| Oct  | +36.69 | (68.67) | (5.17) | (108.66) |
| Nov  | +23.78 | (74.29) | (6.84) | (143.64) |
| Dec  | +31.93 | (45.64) | (2.67) | (53.32)  |
| Year                                       | +62.27 | (78.10) | (0.74) | (184.02) |

| 2023 2-Day Long ATM Straddle P/L By Month |        |         |        |          |
|---|--------|---------|--------|----------|
| Month                                     | Max    | Min     | Avg    | Total    |
| Jan                                       | +72.81 | (59.46) | (8.78) | (175.55) |
| Feb                                       | +36.50 | (64.80) | (9.79) | (185.96) |
| Mar                                       | +70.16 | (66.27) | (8.72) | (200.64) |
| Apr                                       | +71.28 | (42.66) | (6.46) | (122.69) |
| May                                       | +51.45 | (37.14) | (2.55) | (56.08)  |
| Jun                                       | +59.17 | (28.70) | +1.45  | +30.36   |
| Jul                                       | +27.94 | (38.13) | (0.75) | (14.91)  |
| Aug                                       | +51.23 | (44.65) | (1.97) | (45.27)  |
| Sep                                       | +74.10 | (44.46) | (4.94) | (98.86)  |
| Oct                                       | +64.67 | (40.69) | +1.17  | +24.66   |
| Nov                                       | +70.29 | (27.78) | +2.84  | +59.64   |
| Dec                                       | +41.64 | (35.93) | (1.33) | (26.68)  |
| Year                                      | +74.10 | (66.27) | (3.26) | (811.98) |





| 2023 3-Day Short ATM Straddle P/L By Month |        |          |         |          |
|--|--------|----------|---------|----------|
| Month                                      | Max    | Min      | Avg     | Total    |
| Jan  | +72.73 | (65.25)  | +6.96   | +139.26  |
| Feb  | +57.68 | (99.01)  | +11.96  | +227.22  |
| Mar  | +90.79 | (85.51)  | +13.72  | +315.56  |
| Apr  | +47.00 | (46.13)  | +11.04  | +209.71  |
| May  | +46.12 | (62.47)  | (0.63)  | (13.76)  |
| Jun  | +38.63 | (45.29)  | (6.54)  | (137.31) |
| Jul  | +29.22 | (60.24)  | (4.28)  | (85.64)  |
| Aug  | +58.71 | (79.34)  | (2.18)  | (50.19)  |
| Sep  | +47.80 | (84.00)  | +1.16   | +23.16   |
| Oct  | +49.91 | (98.29)  | +0.36   | +7.63    |
| Nov  | +30.99 | (103.10) | (16.33) | (342.84) |
| Dec  | +38.63 | (54.69)  | (0.04)  | (0.82)   |
| Year                                       | +90.79 | (103.10) | +1.17   | +291.98  |

| 2023 3-Day Long ATM Straddle P/L By Month |        |         |         |           |
|---|--------|---------|---------|-----------|
| Month                                     | Max    | Min     | Avg     | Total     |
| Jan                                       | +61.25 | (76.73) | (10.96) | (219.26)  |
| Feb                                       | +95.01 | (61.68) | (15.96) | (303.22)  |
| Mar                                       | +81.51 | (94.79) | (17.72) | (407.56)  |
| Apr                                       | +42.13 | (51.00) | (15.04) | (285.71)  |
| May                                       | +58.47 | (50.12) | (3.37)  | (74.24)   |
| Jun                                       | +41.29 | (42.63) | +2.54   | +53.31    |
| Jul                                       | +56.24 | (33.22) | +0.28   | +5.64     |
| Aug                                       | +75.34 | (62.71) | (1.82)  | (41.81)   |
| Sep                                       | +80.00 | (51.80) | (5.16)  | (103.16)  |
| Oct                                       | +94.29 | (53.91) | (4.36)  | (91.63)   |
| Nov                                       | +99.10 | (34.99) | +12.33  | +258.84   |
| Dec                                       | +50.69 | (42.63) | (3.96)  | (79.18)   |
| Year                                      | +99.10 | (94.79) | (5.17)  | (1287.98) |

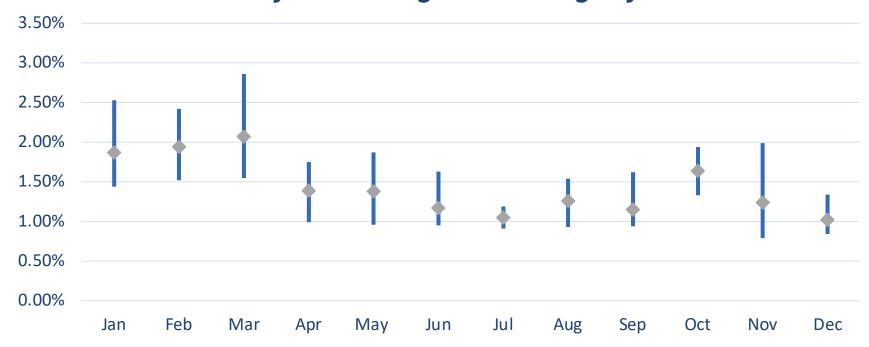




| 2023 4-Day Short ATM Straddle P/L By Month |        |          |         |          |
|--|--------|----------|---------|----------|
| Month                                      | Max    | Min      | Avg     | Total    |
| Jan  | +58.63 | (82.66)  | +5.36   | +107.14  |
| Feb  | +93.69 | (90.60)  | +14.86  | +282.27  |
| Mar  | +76.48 | (121.06) | +12.95  | +297.90  |
| Apr  | +67.45 | (89.86)  | +17.11  | +325.02  |
| May  | +50.67 | (50.93)  | +6.81   | +149.88  |
| Jun  | +38.34 | (80.33)  | (9.76)  | (205.05) |
| Jul  | +47.69 | (64.74)  | +0.46   | +9.10    |
| Aug  | +56.24 | (77.67)  | +2.16   | +49.69   |
| Sep  | +46.68 | (87.74)  | (5.74)  | (114.72) |
| Oct  | +65.65 | (96.36)  | +3.94   | +82.66   |
| Nov  | +34.97 | (122.78) | (26.02) | (546.37) |
| Dec  | +34.97 | (62.84)  | (4.23)  | (84.52)  |
| Year                                       | +93.69 | (122.78) | +1.42   | +353.00  |

| 2023 4-Day Long ATM Straddle P/L By Month |         |         |         |           |
|---|---------|---------|---------|-----------|
| Month                                     | Max     | Min     | Avg     | Total     |
| Jan                                       | +78.66  | (62.63) | (9.36)  | (187.14)  |
| Feb                                       | +86.60  | (97.69) | (18.86) | (358.27)  |
| Mar                                       | +117.06 | (80.48) | (16.95) | (389.90)  |
| Apr                                       | +85.86  | (71.45) | (21.11) | (401.02)  |
| May                                       | +46.93  | (54.67) | (10.81) | (237.88)  |
| Jun                                       | +76.33  | (42.34) | +5.76   | +121.05   |
| Jul                                       | +60.74  | (51.69) | (4.46)  | (89.10)   |
| Aug                                       | +73.67  | (60.24) | (6.16)  | (141.69)  |
| Sep                                       | +83.74  | (50.68) | +1.74   | +34.72    |
| Oct                                       | +92.36  | (69.65) | (7.94)  | (166.66)  |
| Nov                                       | +118.78 | (38.97) | +22.02  | +462.37   |
| Dec                                       | +58.84  | (38.97) | +0.23   | +4.52     |
| Year                                      | +118.78 | (97.69) | (5.42)  | (1349.00) |

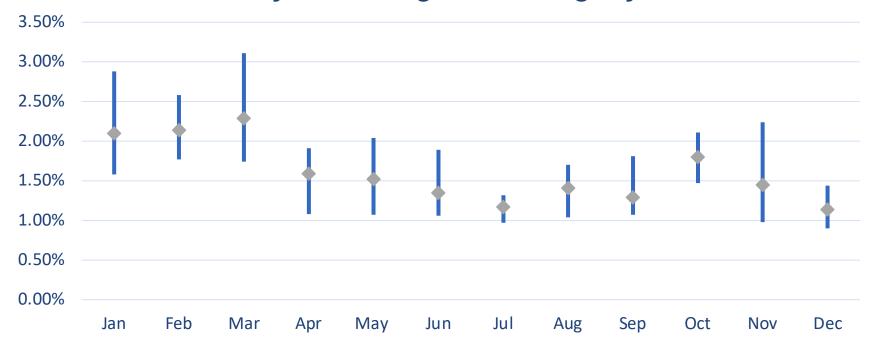




| 2023 5-Day Short ATM Straddle P/L By Month |        |          |         |          |
|--|--------|----------|---------|----------|
| Month                                      | Max    | Min      | Avg     | Total    |
| Jan  | +88.74 | (92.63)  | +14.91  | +298.26  |
| Feb  | +92.99 | (69.70)  | +12.53  | +238.10  |
| Mar  | +90.42 | (121.49) | +16.58  | +381.43  |
| Apr  | +71.51 | (70.66)  | +14.88  | +282.71  |
| May  | +71.07 | (15.33)  | +24.41  | +536.97  |
| Jun  | +53.94 | (82.54)  | (11.59) | (243.48) |
| Jul  | +55.29 | (78.94)  | (1.45)  | (29.03)  |
| Aug  | +65.74 | (63.91)  | +1.87   | +42.99   |
| Sep  | +50.06 | (129.00) | (11.96) | (239.23) |
| Oct  | +66.85 | (93.81)  | (1.75)  | (36.66)  |
| Nov  | +36.67 | (152.99) | (33.58) | (705.28) |
| Dec  | +47.69 | (96.39)  | (4.20)  | (84.05)  |
| Year                                       | +92.99 | (152.99) | +1.78   | +442.73  |

| 2023 5-Day Long ATM Straddle P/L By Month |         |         |         |           |
|---|---------|---------|---------|-----------|
| Month                                     | Max     | Min     | Avg     | Total     |
| Jan                                       | +88.63  | (92.74) | (18.91) | (378.26)  |
| Feb                                       | +65.70  | (96.99) | (16.53) | (314.10)  |
| Mar                                       | +117.49 | (94.42) | (20.58) | (473.43)  |
| Apr                                       | +66.66  | (75.51) | (18.88) | (358.71)  |
| May                                       | +11.33  | (75.07) | (28.41) | (624.97)  |
| Jun                                       | +78.54  | (57.94) | +7.59   | +159.48   |
| Jul                                       | +74.94  | (59.29) | (2.55)  | (50.97)   |
| Aug                                       | +59.91  | (69.74) | (5.87)  | (134.99)  |
| Sep                                       | +125.00 | (54.06) | +7.96   | +159.23   |
| Oct                                       | +89.81  | (70.85) | (2.25)  | (47.34)   |
| Nov                                       | +148.99 | (40.67) | +29.58  | +621.28   |
| Dec                                       | +92.39  | (51.69) | +0.20   | +4.05     |
| Year                                      | +148.99 | (96.99) | (5.78)  | (1438.73) |





- 1-day and 2-day expirations were priced very efficiently in 2023
- ATM straddles expiring in 3, 4, and 5-days were overpriced even when accounting for slippage
- We are exploring iron condors, iron butterflies, and calendar spreads (buying longer dated expirations and selling shorter dated) based on the initial results

| 2023 1-Day Short ATM Straddle P/L By Month |         |          |         |          |
|--|---------|----------|---------|----------|
| Month                                      | Max     | Min      | Avg     | Total    |
| Jan  | +225.89 | (134.79) | +4.75   | +90.26   |
| Feb  | +212.16 | (289.29) | (7.93)  | (142.71) |
| Mar  | +133.44 | (167.34) | +4.51   | +99.13   |
| Apr  | +141.33 | (227.98) | +18.32  | +329.75  |
| May  | +109.26 | (238.96) | (16.29) | (342.08) |
| Jun  | +121.35 | (159.51) | (9.37)  | (187.40) |
| Jul  | +125.01 | (231.96) | +17.62  | +334.71  |
| Aug  | +152.51 | (249.06) | (16.13) | (354.92) |
| Sep  | +138.06 | (149.66) | +22.32  | +424.17  |
| Oct  | +119.40 | (233.26) | (9.90)  | (198.02) |
| Nov  | +104.12 | (230.52) | (4.85)  | (97.09)  |
| Dec  | +98.13  | (178.29) | (5.18)  | (98.33)  |
| Year                                       | +225.89 | (289.29) | (0.60)  | (142.53) |

| 2023 1-Day Long ATM Straddle P/L By Month |         |          |         |          |
|---|---------|----------|---------|----------|
| Month                                     | Max     | Min      | Avg     | Total    |
| Jan                                       | +130.79 | (229.89) | (8.75)  | (166.26) |
| Feb                                       | +285.29 | (216.16) | +3.93   | +70.71   |
| Mar                                       | +163.34 | (137.44) | (8.51)  | (187.13) |
| Apr                                       | +223.98 | (145.33) | (22.32) | (401.75) |
| May                                       | +234.96 | (113.26) | +12.29  | +258.08  |
| Jun                                       | +155.51 | (125.35) | +5.37   | +107.40  |
| Jul                                       | +227.96 | (129.01) | (21.62) | (410.71) |
| Aug                                       | +245.06 | (156.51) | +12.13  | +266.92  |
| Sep                                       | +145.66 | (142.06) | (26.32) | (500.17) |
| Oct                                       | +229.26 | (123.40) | +5.90   | +118.02  |
| Nov                                       | +226.52 | (108.12) | +0.85   | +17.09   |
| Dec                                       | +174.29 | (102.13) | +1.18   | +22.33   |
| Year                                      | +285.79 | (229.89) | (3.40)  | (805.47) |





| 2023 2-Day Short ATM Straddle P/L By Month |         |          |         |          |
|--|---------|----------|---------|----------|
| Month                                      | Max     | Min      | Avg     | Total    |
| Jan  | +175.57 | (399.39) | +2.26   | +42.99   |
| Feb  | +196.82 | (435.04) | +5.53   | +99.49   |
| Mar  | +277.85 | (189.74) | +23.81  | +523.91  |
| Apr  | +138.56 | (246.84) | +17.12  | +308.18  |
| May  | +180.14 | (525.41) | (31.04) | (651.92) |
| Jun  | +151.31 | (184.28) | +6.03   | +120.58  |
| Jul  | +190.59 | (298.33) | (6.77)  | (128.57) |
| Aug  | +189.15 | (241.61) | (3.58)  | (78.75)  |
| Sep  | +174.11 | (314.51) | +29.04  | +551.78  |
| Oct  | +176.93 | (438.48) | +1.24   | +24.72   |
| Nov  | +137.09 | (291.05) | (18.70) | (373.95) |
| Dec  | +146.87 | (141.22) | (5.22)  | (99.09)  |
| Year                                       | +277.85 | (525.41) | +1.43   | +339.37  |

| 2023 2-Day Long ATM Straddle P/L By Month |         |          |         |           |  |
|---|---------|----------|---------|-----------|--|
| Month                                     | Max     | Min      | Avg     | Total     |  |
| Jan                                       | +395.39 | (179.57) | (6.26)  | (118.99)  |  |
| Feb                                       | +431.04 | (200.82) | (9.53)  | (171.49)  |  |
| Mar                                       | +185.74 | (281.85) | (27.81) | (611.91)  |  |
| Apr                                       | +242.84 | (142.56) | (21.12) | (380.18)  |  |
| May                                       | +521.41 | (184.14) | +27.04  | +567.92   |  |
| Jun                                       | +180.28 | (155.31) | (10.03) | (200.58)  |  |
| Jul                                       | +294.33 | (194.59) | +2.77   | +52.57    |  |
| Aug                                       | +237.61 | (193.15) | (0.42)  | (9.25)    |  |
| Sep                                       | +310.51 | (178.11) | (33.04) | (627.78)  |  |
| Oct                                       | +434.48 | (180.93) | (5.24)  | (104.72)  |  |
| Nov                                       | +287.05 | (141.09) | +14.70  | +293.95   |  |
| Dec                                       | +137.22 | (150.87) | +1.22   | +23.09    |  |
| Year                                      | +521.41 | (281.85) | (5.43)  | (1287.37) |  |





| 2023 3-Day Short ATM Straddle P/L By Month |         |          |         |           |  |
|--|---------|----------|---------|-----------|--|
| Month                                      | Max     | Min      | Avg     | Total     |  |
| Jan  | +196.56 | (338.24) | (0.55)  | (10.46)   |  |
| Feb  | +322.13 | (589.24) | +53.56  | +964.14   |  |
| Mar  | +311.70 | (357.10) | +42.93  | +944.54   |  |
| Apr  | +223.45 | (259.89) | +57.18  | +1029.17  |  |
| May  | +163.36 | (527.54) | (48.82) | (1025.18) |  |
| Jun  | +194.65 | (281.20) | +11.13  | +222.68   |  |
| Jul  | +256.42 | (314.38) | (13.15) | (249.83)  |  |
| Aug  | +237.87 | (304.96) | (15.37) | (338.21)  |  |
| Sep  | +184.06 | (320.16) | +40.85  | +776.19   |  |
| Oct  | +257.95 | (317.58) | +30.11  | +602.20   |  |
| Nov  | +190.52 | (413.99) | (45.57) | (911.42)  |  |
| Dec  | +156.73 | (253.62) | (8.09)  | (153.65)  |  |
| Year                                       | +322.13 | (589.24) | +7.81   | +1850.17  |  |

| 2023 3-Day Long ATM Straddle P/L By Month |         |          |         |           |  |
|---|---------|----------|---------|-----------|--|
| Month                                     | Max     | Min      | Avg     | Total     |  |
| Jan                                       | +334.24 | (200.56) | (3.45)  | (65.54)   |  |
| Feb                                       | +585.24 | (326.13) | (57.56) | (1036.14) |  |
| Mar                                       | +353.10 | (315.70) | (46.93) | (1032.54) |  |
| Apr                                       | +255.89 | (227.45) | (61.18) | (1101.17) |  |
| May                                       | +523.54 | (167.36) | 44.82   | 941.18    |  |
| Jun                                       | +277.20 | (198.65) | (15.13) | (302.68)  |  |
| Jul                                       | +310.38 | (260.42) | +9.15   | +173.83   |  |
| Aug                                       | +300.96 | (241.87) | +11.37  | +250.21   |  |
| Sep                                       | +316.16 | (188.06) | (44.85) | (852.19)  |  |
| Oct                                       | +313.58 | (261.95) | (34.11) | (682.20)  |  |
| Nov                                       | +409.99 | (194.52) | +41.57  | +831.42   |  |
| Dec                                       | +249.62 | (160.73) | +4.09   | +77.65    |  |
| Year                                      | +585.24 | (326.13) | (11.81) | (2798.71) |  |





| 2023 4-Day Short ATM Straddle P/L By Month |         |          |         |           |  |
|--|---------|----------|---------|-----------|--|
| Month                                      | Max     | Min      | Avg     | Total     |  |
| Jan  | +268.67 | (375.37) | (9.15)  | (173.94)  |  |
| Feb  | +378.52 | (347.58) | +47.87  | +861.72   |  |
| Mar  | +346.80 | (330.23) | +53.17  | +1169.79  |  |
| Apr  | +237.40 | (281.05) | +75.62  | +1361.17  |  |
| May  | +216.52 | (460.54) | (48.41) | (1016.53) |  |
| Jun  | +192.55 | (357.38) | +2.40   | +48.05    |  |
| Jul  | +290.94 | (334.03) | (8.65)  | (164.40)  |  |
| Aug  | +288.82 | (333.33) | +37.97  | +835.27   |  |
| Sep  | +284.83 | (281.85) | +24.11  | +458.15   |  |
| Oct  | +308.02 | (238.75) | +53.09  | +1061.76  |  |
| Nov  | +184.10 | (433.44) | (86.77) | (1735.43) |  |
| Dec  | +182.61 | (321.65) | (1.95)  | (37.04)   |  |
| Year                                       | +378.52 | (460.54) | +11.26  | +2668.57  |  |

| 2023 4-Day Long ATM Straddle P/L By Month |         |          |         |           |  |
|---|---------|----------|---------|-----------|--|
| Month                                     | Max     | Min      | Avg     | Total     |  |
| Jan                                       | +371.37 | (272.67) | +5.15   | +97.94    |  |
| Feb                                       | +343.58 | (382.52) | (51.87) | (933.72)  |  |
| Mar                                       | +326.23 | (350.80) | (57.17) | (1257.79) |  |
| Apr                                       | +277.05 | (241.40) | (79.62) | (1433.17) |  |
| May                                       | +456.54 | (220.52) | +44.41  | +932.53   |  |
| Jun                                       | +353.38 | (196.55) | (6.40)  | (128.05)  |  |
| Jul                                       | +330.03 | (294.94) | +4.65   | +88.40    |  |
| Aug                                       | +329.33 | (292.82) | (41.97) | (923.27)  |  |
| Sep                                       | +277.85 | (288.83) | (28.11) | (534.15)  |  |
| Oct                                       | +234.75 | (312.02) | (57.09) | (1141.76) |  |
| Nov                                       | +429.44 | (188.10) | +82.77  | +1655.43  |  |
| Dec                                       | +317.65 | (186.61) | (2.05)  | (38.96)   |  |
| Year                                      | +456.54 | (382.52) | (15.26) | (3616.57) |  |





| 2023 5-Day Short ATM Straddle P/L By Month |         |          |          |           |  |
|--|---------|----------|----------|-----------|--|
| Month                                      | Max     | Min      | Avg      | Total     |  |
| Jan  | +289.02 | (478.28) | (2.41)   | (45.75)   |  |
| Feb  | +381.27 | (407.34) | +25.01   | +450.21   |  |
| Mar  | +327.23 | (223.36) | +78.69   | +1731.23  |  |
| Apr  | +286.23 | (204.23) | +77.90   | +1402.24  |  |
| May  | +280.87 | (329.34) | (5.15)   | (108.21)  |  |
| Jun  | +298.30 | (549.26) | +17.79   | +355.88   |  |
| Jul  | +351.33 | (437.70) | (22.86)  | (434.37)  |  |
| Aug  | +242.91 | (339.92) | +38.11   | +838.34   |  |
| Sep  | +318.58 | (528.46) | (4.52)   | (85.92)   |  |
| Oct  | +328.43 | (285.93) | +24.23   | +484.68   |  |
| Nov  | +230.63 | (540.22) | (123.55) | (2471.03) |  |
| Dec  | +200.62 | (482.92) | (11.07)  | (210.37)  |  |
| Year                                       | +381.27 | (549.26) | +8.05    | +1906.93  |  |

| 2023 5-Day Long ATM Straddle P/L By Month |         |          |         |           |  |
|---|---------|----------|---------|-----------|--|
| Month                                     | Max     | Min      | Avg     | Total     |  |
| Jan                                       | +474.28 | (293.02) | (1.59)  | (30.25)   |  |
| Feb                                       | +403.34 | (385.27) | (29.01) | (522.21)  |  |
| Mar                                       | +219.36 | (331.23) | (82.69) | (1819.23) |  |
| Apr                                       | +200.23 | (290.23) | (81.90) | (1474.24) |  |
| May                                       | +325.34 | (284.87) | +1.15   | +24.21    |  |
| Jun                                       | +545.26 | (302.30) | (21.79) | (435.88)  |  |
| Jul                                       | +433.70 | (355.33) | +18.86  | +358.37   |  |
| Aug                                       | +335.92 | (246.91) | (42.11) | (926.34)  |  |
| Sep                                       | +524.46 | (322.58) | +0.52   | +9.92     |  |
| Oct                                       | +281.93 | (332.43) | (28.23) | (564.68)  |  |
| Nov                                       | +536.22 | (234.63) | +119.55 | +2391.03  |  |
| Dec                                       | +478.92 | (204.62) | +7.07   | +134.37   |  |
| Year                                      | +545.26 | (385.27) | (12.05) | (2854.93) |  |





#### **Summary**

- All but 1-day ATM straddles were overpriced in 2023
- We plan on testing iron condors, iron butterflies, and calendar spreads buying longer dated options
- In the past we had a systematic approach to trading NDX using VOLQ, with the retirement of VOLQ we are incorporating the ATM straddle premiums to choose strikes

#### **Questions / Contact**

Questions?

(Any market related topic is fine)

**Contact** 

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