

# Short Vix

## Backtest Summary

Returns (Non Compounded)	1054.37%
Number of Trades	29
Average Return / Median Return	36.35% / 35.74%
Average Hold / Median Hold	73 Days / 49 Days
Maximum Hold / Minimum Hold	246 Days / 3 Days
Greatest Return: Buy / Sell (by %)	2018-02-05 / 2018-02-14
Frequency of Increment	~ 23%
Percent Profitable	100%
Short Costs	Not Applied

### Comments

The strategy seems to work well in market crashes as can be seen in Fig. 1 (most positions are opened in recognizable market crashes: notably 2001, 2008 and 2020). The data used is market close data - this suggests entries and exits could in fact be better and more precise (closer to their intended targets). The average hold time (hold is defined as time in days from initiating the position to selling the entire stake) might seem a bit long on average - 73 days - though the median is much smaller - 49 days. See the excel sheet with paper trades to determine whether these are acceptable hold periods.

### Extensions

The strategy can be tuned with parameter optimization (or guess and check) if this is desired, the parameters are - purchase trigger price, incremental increase, decrease target, position multiplier, and number of position increments. I can either implement a mathematical optimization program to see what the best parameters would have been (maximize returns) for past data, or you can try a method of plugging in values and calculating the resulting returns - if desirable I can implement quickly.

