Why? The purpose to sell vol is to capitalize on high volatility. Selling volatility when there is high volatility is obvious, however, the direction of when/where to sell volatility is always an ongoing question.

Background:
Using a strategy that pulls out outliers based on the amount of movement per day and entering into an options position in the opposite direction has proven to not be profitable, especially in long positions. The strategy has entered into long options positions in the underlying, which is negatively impacted by vega. In order to capitalize on the increased vega, the best positions would be negative gamma positions, favoring the direction of the underlying.

Contrary to my initial hypothesis of entering into long positions to capitalize on large moves by entering into a positions in the opposite direction, this does not seem to be the case. This is especially the case in long puts; if a given underlying "shoots" up, the likelihood of it retracting is unlikely; it is not expected to return to the previous volatility measure of 3mo any time soon. However, in the case of long calls, it seems that stocks that suffer a large hit, are more likely to recover somewhat and "eat" up some of the large moves that it lost.

What does this mean?
I believe this means that it may be more beneficial to in most all cases, sell expensive vol. When the underlying continues to go against our favor, exit the position, otherwise, stay in the position as the implied volatility decays and then exit the position. The downsides to this means that you would be required to have the capital/stock that is necessary in order to maintain the short option position.

Method of Calculating Strike and Entry
The method of calculating the strike will be by using Out-The-Money (OTM) options. Expiry will be 10 days out. This is to capitalize on options that are expiring soon and have the most amount of activity. Positions will be realized quickly, and exited if the underlying goes against the positions bias. Only enter into position if the current volatility is more than the average volatility. We only want to sell relatively expensive volatility on outliers in the market. This will ensure a higher profit margin.

Calculation
TBD

Method of Calculating Exit

- Stop Loss: **If** the underlying moves more than 3% against the position, it will be exited.
- Stop Loss: If the option's price moves more than 16% against the position, it will be exited.
- Take Profit: If the option's position moves more than 20% initiate a trailing take profit.
- Take Profit: After IV crush has had its effect, and no longer is moving favorably. Continuously compare daily volatility moves and underlying percentage moves. If it starts to wane, then exit position.

Variables to Track
Underlying Price
Option Price
Black Scholes Option Price
Implied Volatility
Record Date
Delta
Gamma
Theta
Daily Volatility In Underlying (Underlying Percentage Move)