

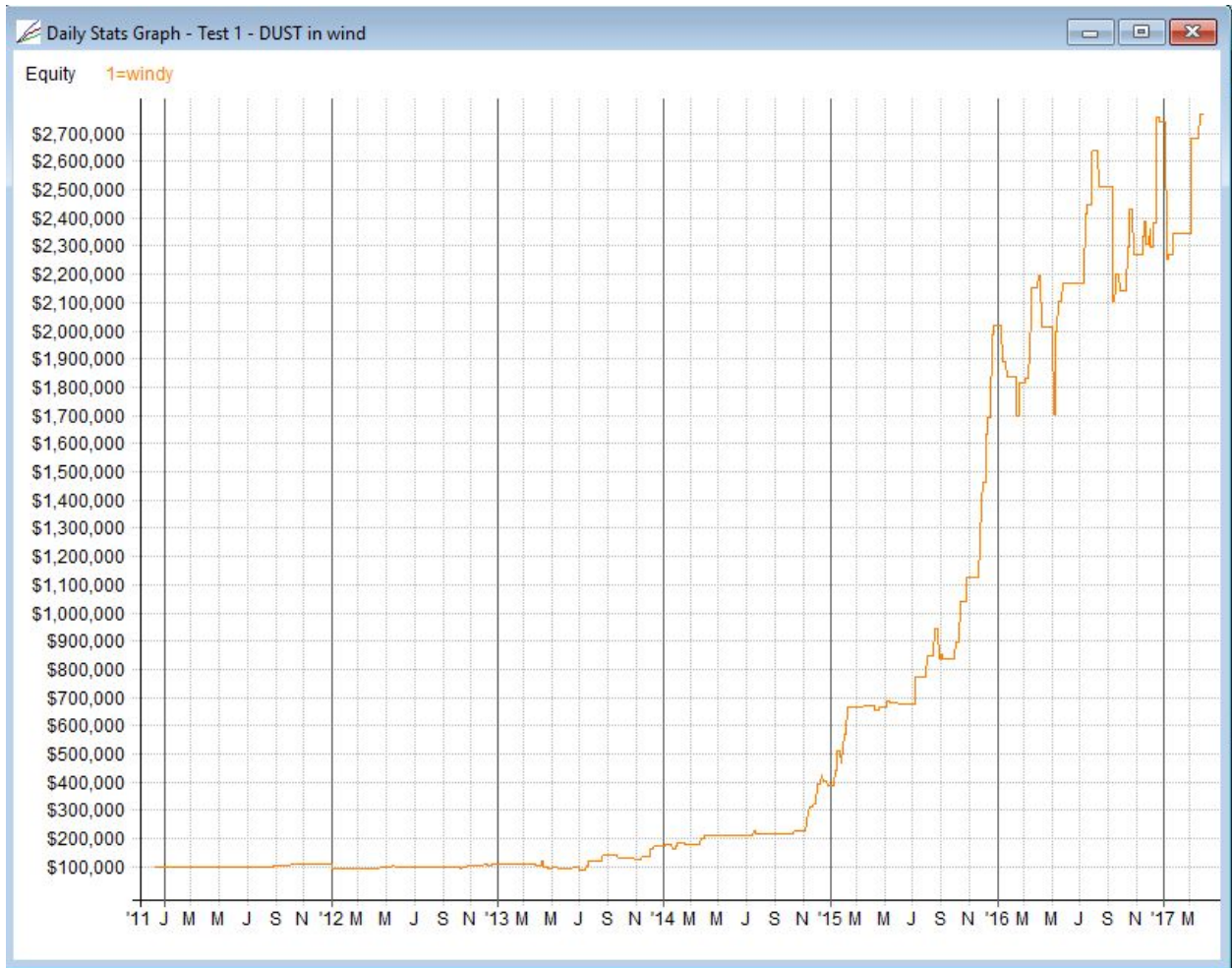
The “DUST in Wind” system trades the 3x leveraged long/short pair of ETFs, NUGT and DUST. It’s called “DUST in Wind” because a) it was originally developed just on DUST, and b) there’s an old rock song called “Dust in the Wind”.

NUGT (long) and DUST (short) are ETFs of gold miner stocks, with a 3x leverage. They are highly volatile! Set your position size accordingly. That said, they still have a very strong Sharpe Ratio, and a stellar CAR/MDD (also known as MAR) ratio. Well worth trading.

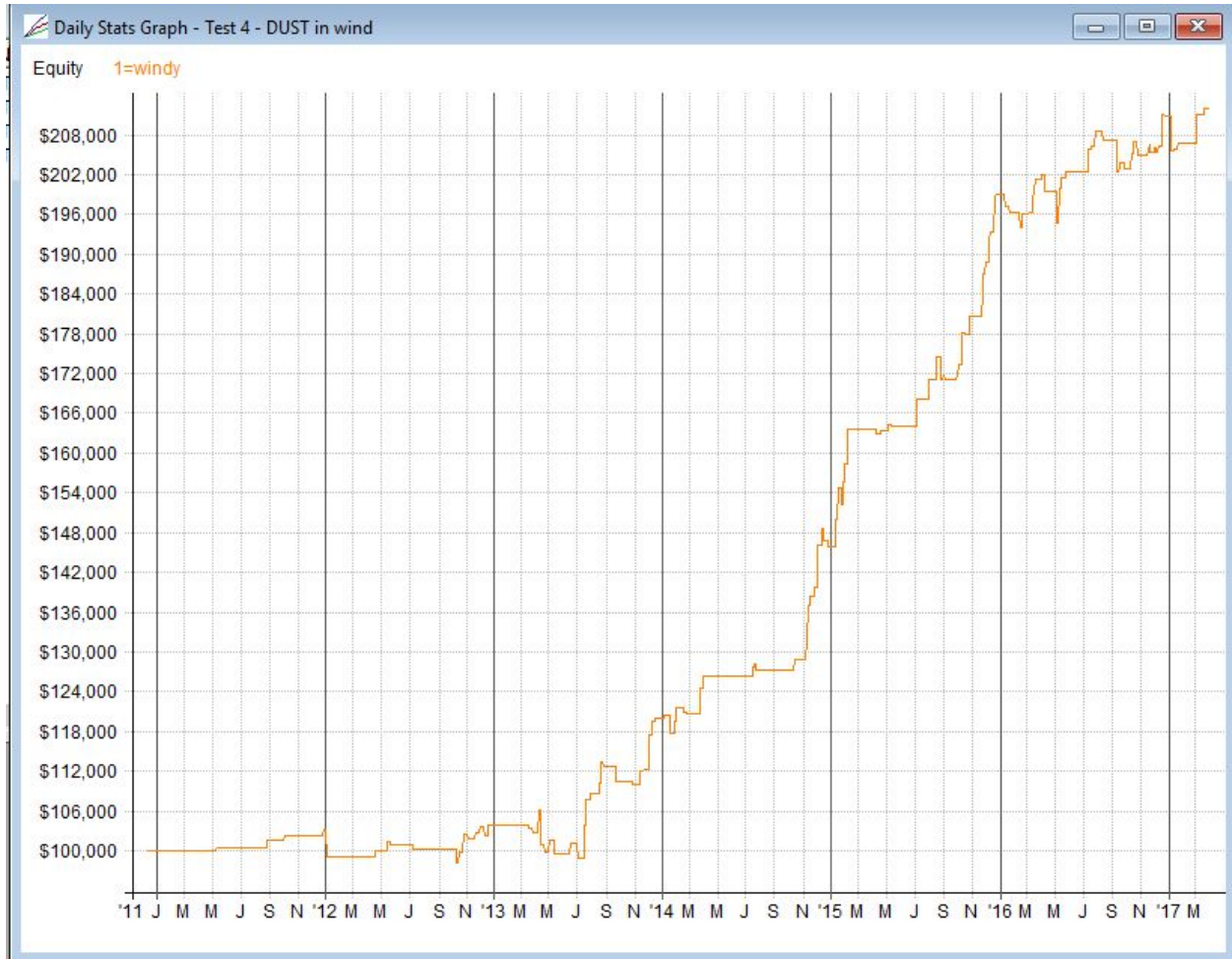
This system was designed specifically for these leveraged ETFs, which didn’t start trading until the end of 2010. That’s not a lot of data. I believe the in-sample optimization period was 2010-2013, and the out-of-sample data was 2014-2015. I’m not exactly sure, and that’s because I developed this system and put it to use back at the start of 2016. I simply don’t remember the exact dates I used for IS and OOS testing..

The good news however is that this system has had (at the time of this writing) **a full fifteen months of actual live trading!** Results have continued to impress. The fact that it was developed on DUST, and translated well to the long ETF NUGT, is also a sign that the system is robust.

On the next page is an equity graph, showing the growth of \$100,000.



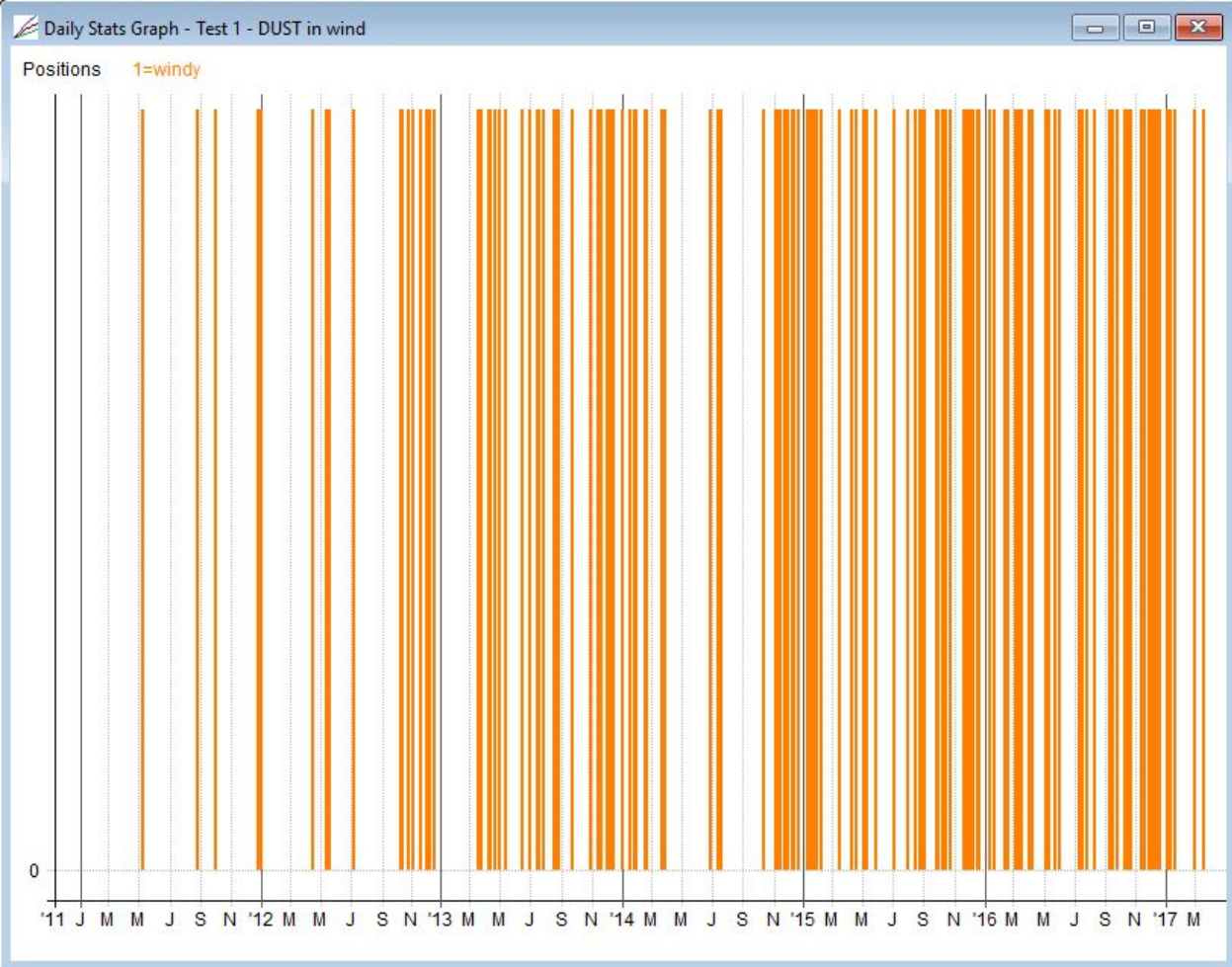
If you're like me, you look at that and say "Yeah right. I don't believe it" The equity growth is geometric. It also makes the first two years a little hard to see. Instead of compounding returns, here's what a fixed position of \$30,000 per trade would look like.



The first two years were essentially flat, and didn't trade frequently.

Which brings me to another point: the trades are getting more frequent. These ETFs are very popular with retail investors, and I suspect that the popularity accounts for the increased volatility, which in turn increases our trades and our returns.

Position entries show that trades are more frequent.



On the next page, the nerdy details of the combined IS/OSS period.

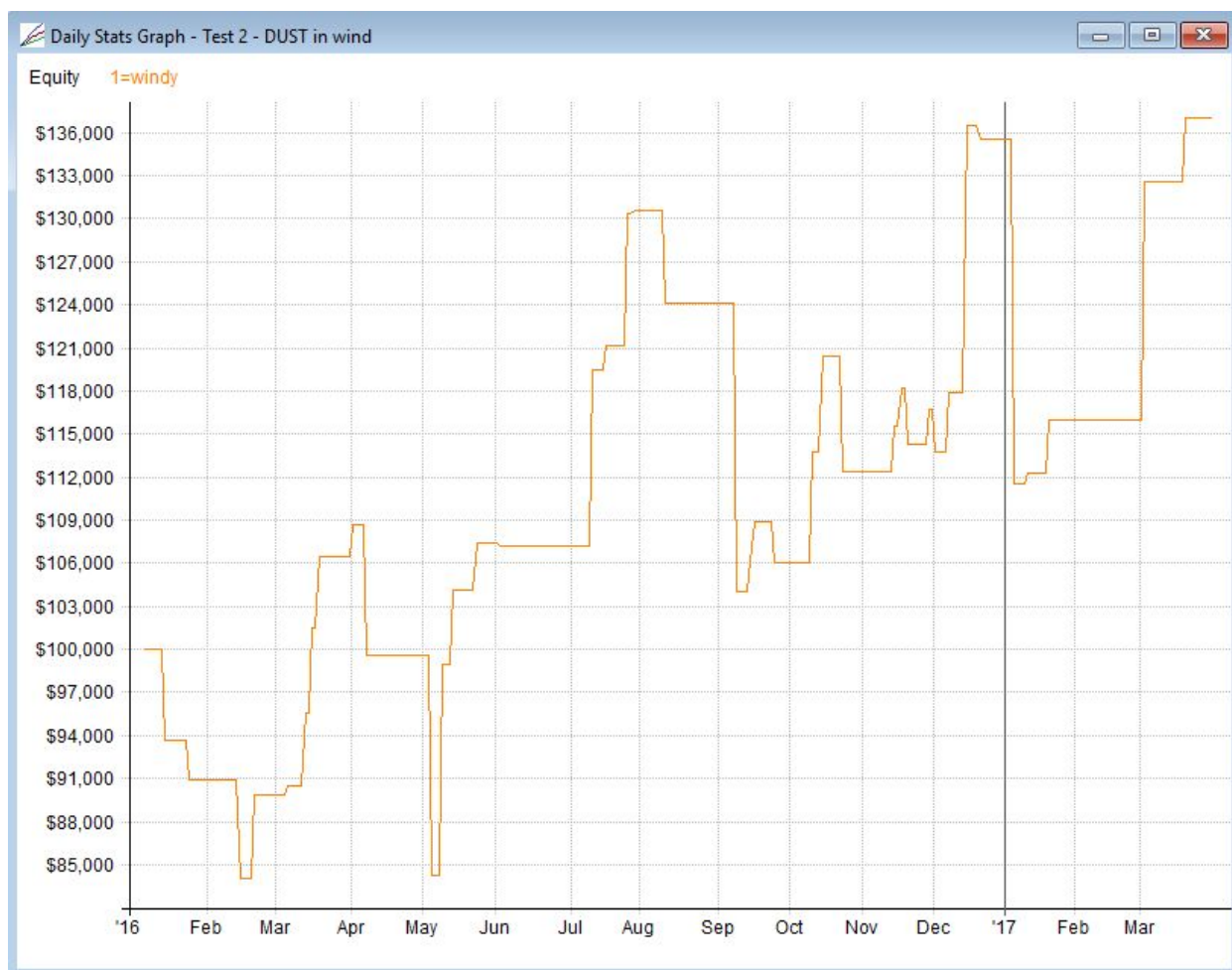
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Test 1 - DUST in wind - Summary Report - combined IS/OSS period (returns reinvested)

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	DUST in wind
Periods	1,587
NetProfit	<b>\$2,670,496.85</b>
CAR	69.46%
MaxDD	<b>23.52%</b>
CARMDD	<b>2.95</b>
Sharpe	<b>1.61</b>
Exits	130
AvgDays	1.00
Wins	87
Losses	42
PctWins	<b>66.92%</b>
AvgWin	\$40,300.58
AvgLoss	\$19,758.29
Expectancy	\$20,542.28
ProfitFactor	2.04
WinLen	1.00
LossLen	1.00
TradeLen	1.00
Skipped	0.00%

As mentioned, I've been trading this since January 2016. Here are the results (not including commissions) of the system in live trading. Yes there are a lot of ups and downs, but the end result has been very pleasing.



As you can see, it's very possible to trade for six months and be right back where you started, or even down (depending on luck). If you're going to trade this system, start with a small position size and stick take all the trades for a 9-12 months (unless your account has a drawdown more than 23%, in which case consider reducing position size or staying out for awhile).

Stats of live trading on the next page.

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Test 2 - DUST in wind - Summary Report - "true" out of sample period (live trading)

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	windy
Periods	313
NetProfit	<b>\$37,083.63</b>
CAR	28.91%
MaxDD	22.47%
CARMDD	<b>1.29</b>
Sharpe	0.80
Exits	40
AvgDays	1.00
Wins	26
Losses	14
PctWins	65.00%
AvgWin	\$3,671.42
AvgLoss	\$2,744.33
Expectancy	\$927.09
ProfitFactor	1.34
WinLen	1.00
LossLen	1.00
TradeLen	1.00
Skipped	0.00%



Due to the leveraged nature of these ETFs, they are volatile and drawdowns are significant percentage-wise. This is why it's important to manage your position size properly. Max DD was just over 23%. Determine how much money you're willing to lose before you'd abandon the system as broken (hey, it happens to most systems at some point!). Divide that dollar loss amount by 0.23, and there's your starting position size.

You could also consider the largest single-trade losses instead. There were two 17% losers, a 16%, and 15% and a 13% loser (the five worst trades). None of those were in a row.

On the plus side, the five biggest winners were 21% and four trades of 17%.

Here's a drawdown graph.

