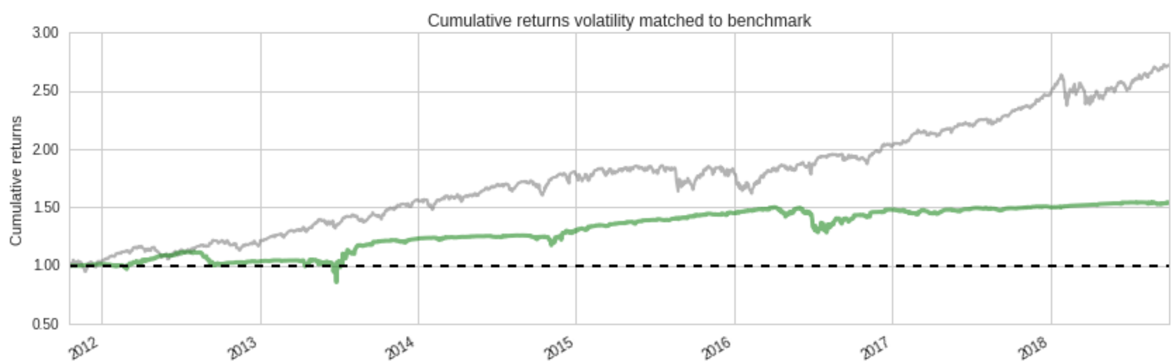
```
100% Time: 0:00:02|############################################################
#|

/build/src/qexec_repo/qexec/research/results.py:1359: UserWarning: None of th
is algorithm's positions were covered by the risk model. Performance attribut
ion could not be generated.
  warnings.warn(NO_POSITIONS_RISK_MODEL_MSG)
```

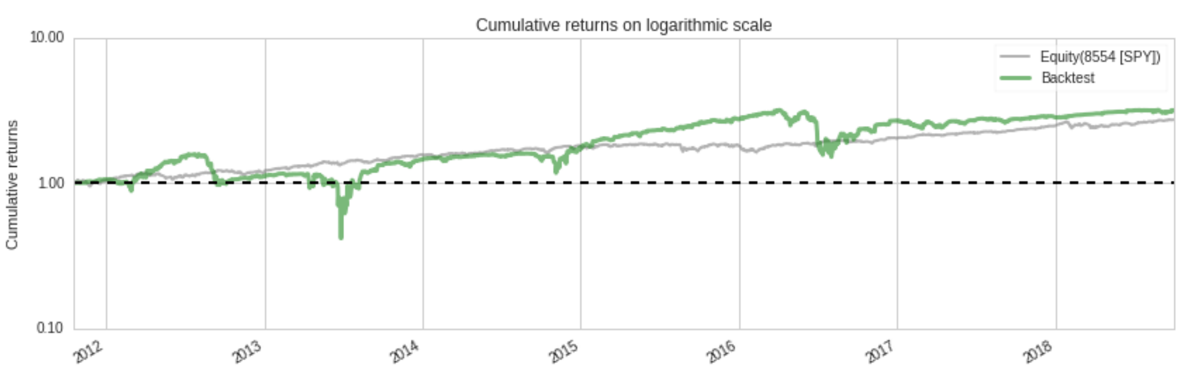
Start date	2011-10-19
End date	2018-10-01
Total months	83

	Backtest
Annual return	18.0%
Cumulative returns	215.8%
Annual volatility	54.6%
Sharpe ratio	0.55
Calmar ratio	0.24
Stability	0.83
Max drawdown	-73.7%
Omega ratio	1.22
Sortino ratio	0.97
Skew	8.46
Kurtosis	242.08
Tail ratio	1.15
Daily value at risk	-6.8%
Gross leverage	1.61
Daily turnover	1.1%
Alpha	0.31
Beta	-0.06

Worst drawdown periods	Net drawdown in %	Peak date	Valley date	Recovery date	Duration
0	73.68	2012-08-02	2013-06-27	2014-08-01	522
1	52.44	2016-04-04	2016-08-02	2018-08-27	626
2	26.99	2014-08-15	2014-11-05	2014-12-01	77
3	16.99	2012-01-06	2012-02-28	2012-03-06	43
4	6.52	2012-03-22	2012-04-02	2012-04-04	10

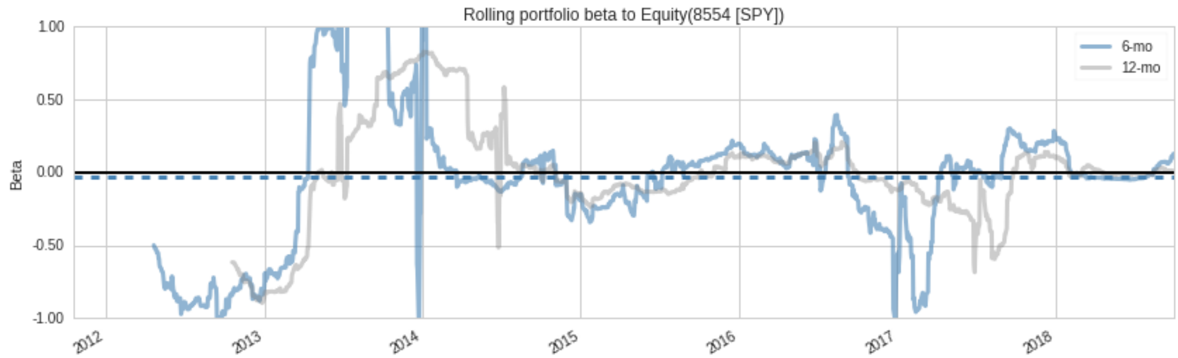

Cumulative returns
Equity(8554 [SPY])
Backtest
Cumulative returns
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
2012
2013
2014
2015
2016
2017
2018

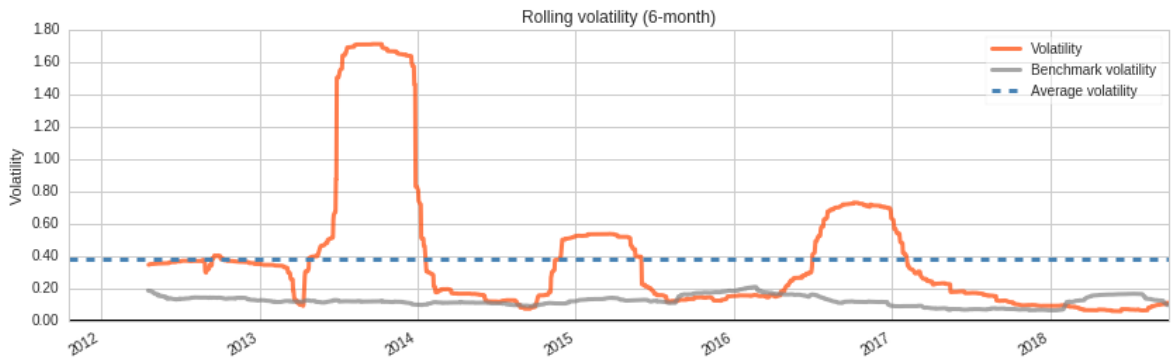

Cumulative returns volatility matched to benchmark
Cumulative returns
3.00
2.50
2.00
1.50
1.00
0.50
2012
2013
2014
2015
2016
2017
2018

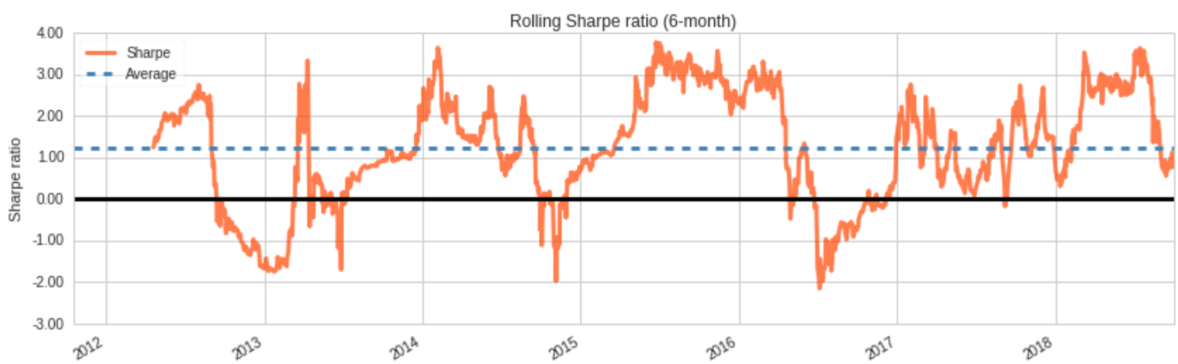

Cumulative returns on logarithmic scale
Equity(8554 [SPY])
Backtest
Cumulative returns
10.00
1.00
0.10
2012
2013
2014
2015
2016
2017
2018

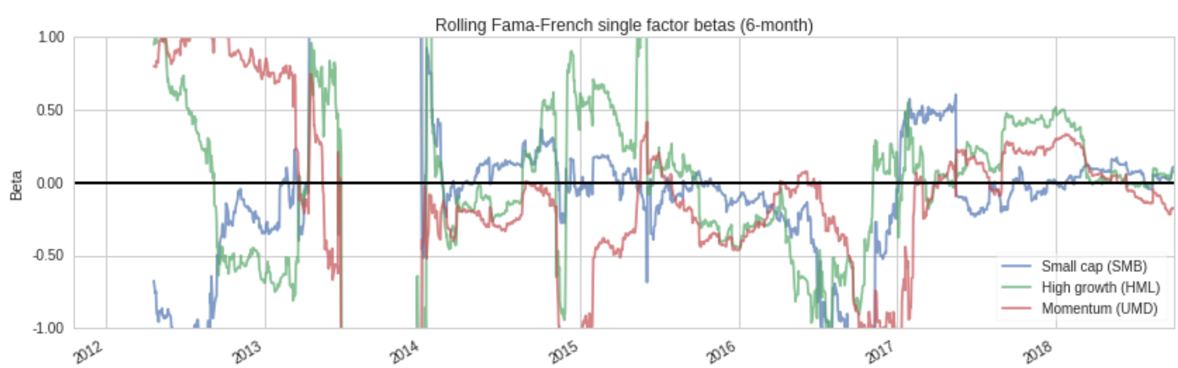

Returns
Returns
1.0
0.8
0.6
0.4
0.2

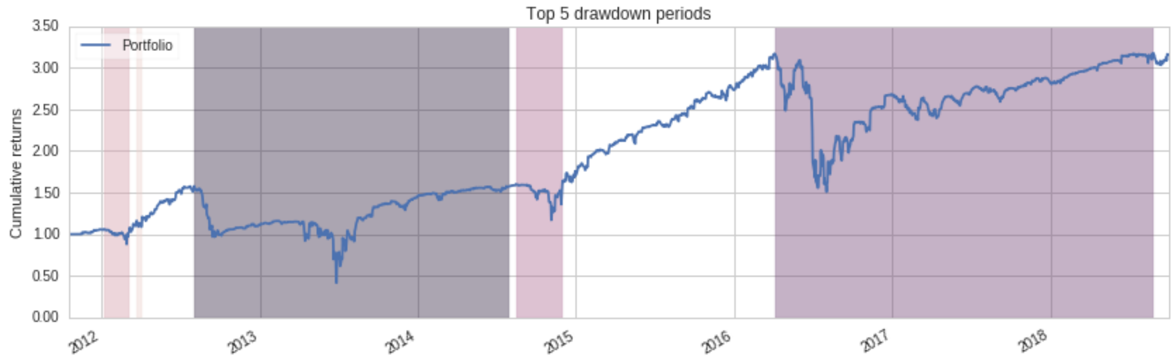

0.0
-0.2
-0.4
2012
2013
2014
2015
2016
2017
2018

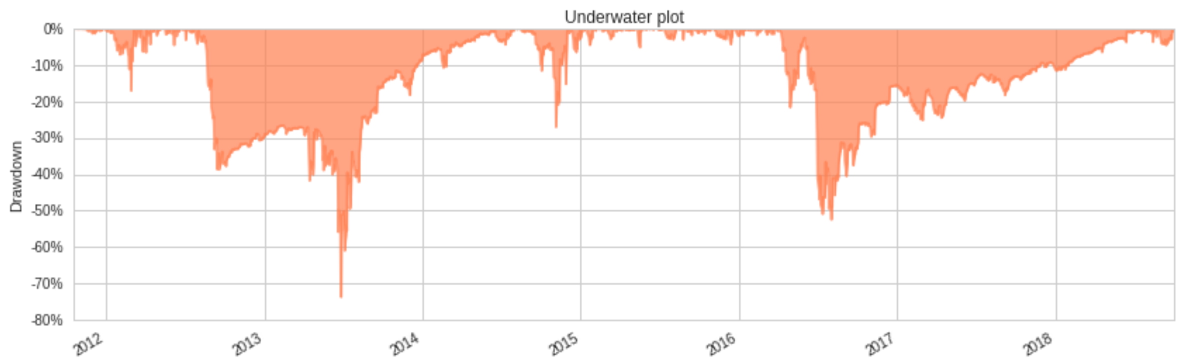

Rolling portfolio beta to Equity(8554 [SPY])
6-mo
12-mo
Beta
1.00
0.50
0.00
-0.50
-1.00
2012
2013
2014
2015
2016
2017
2018

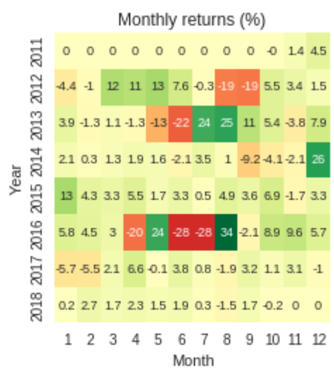

Rolling volatility (6-month)
Volatility
Benchmark volatility
Average volatility
Volatility
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
2012
2013
2014
2015
2016
2017
2018

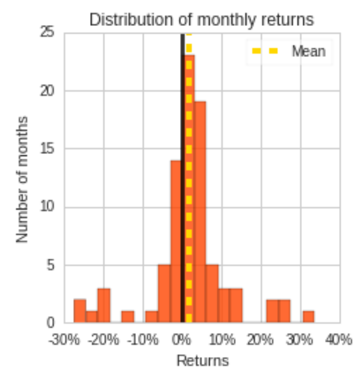

Rolling Sharpe ratio (6-month)
Sharpe
Average
Sharpe ratio
4.00
3.00
2.00
1.00
0.00
-1.00
-2.00
-3.00
2012
2013
2014
2015
2016
2017
2018

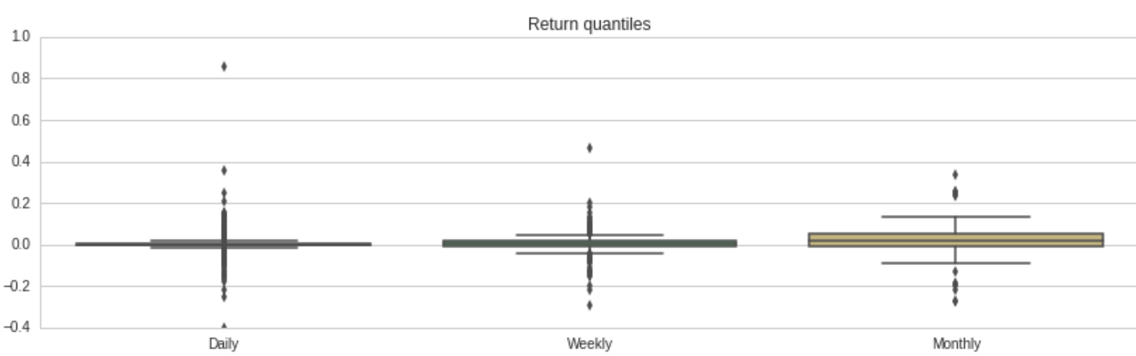

Rolling Fama-French single factor betas (6-month)
Small cap (SMB)
High growth (HML)
Momentum (UMD)
Beta
1.00
0.50
0.00
-0.50
-1.00
2012
2013
2014
2015
2016
2017
2018





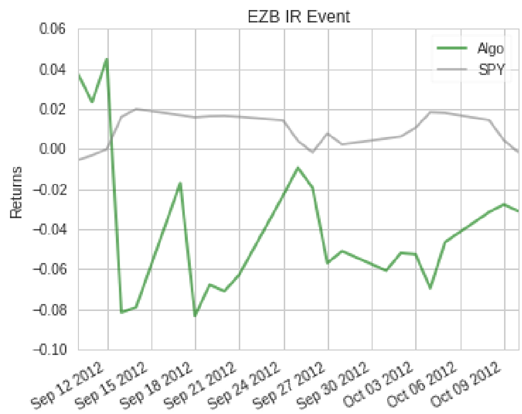


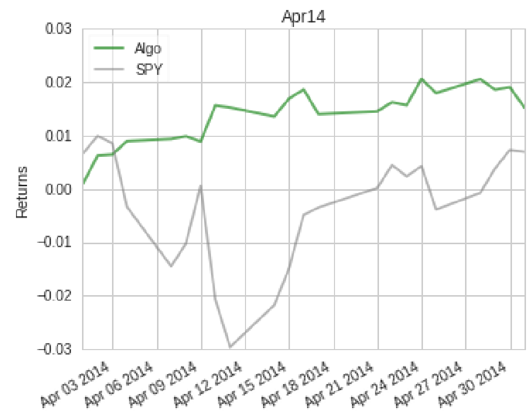


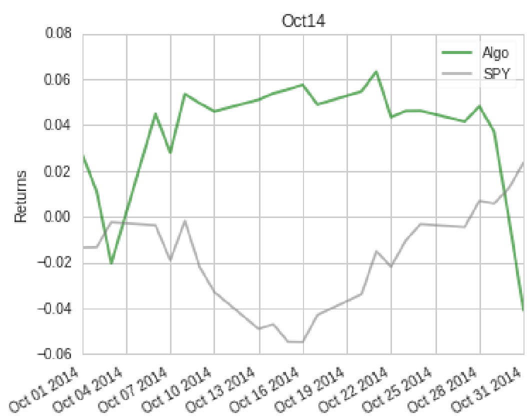


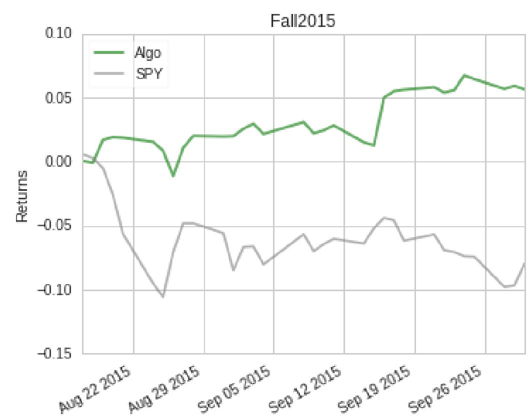

```
/usr/local/lib/python2.7/dist-packages/numpy/lib/function_base.py:3834: Runti
meWarning: Invalid value encountered in percentile
  RuntimeWarning)
```

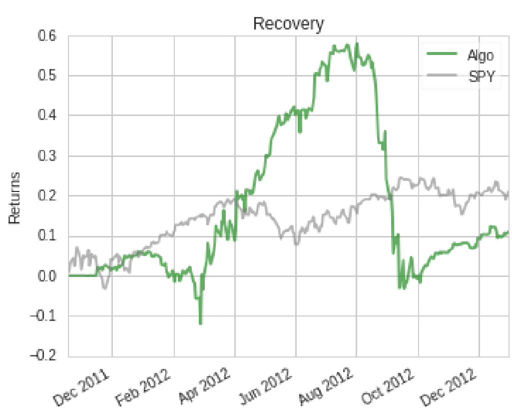
Stress Events	mean	min	max
EZB IR Event	-0.07%	-12.09%	6.72%
Apr14	0.07%	-0.45%	0.67%
Oct14	-0.16%	-4.06%	6.66%
Fall2015	0.18%	-1.95%	3.69%
Recovery	0.06%	-12.09%	14.01%
New Normal	0.13%	-39.95%	85.70%









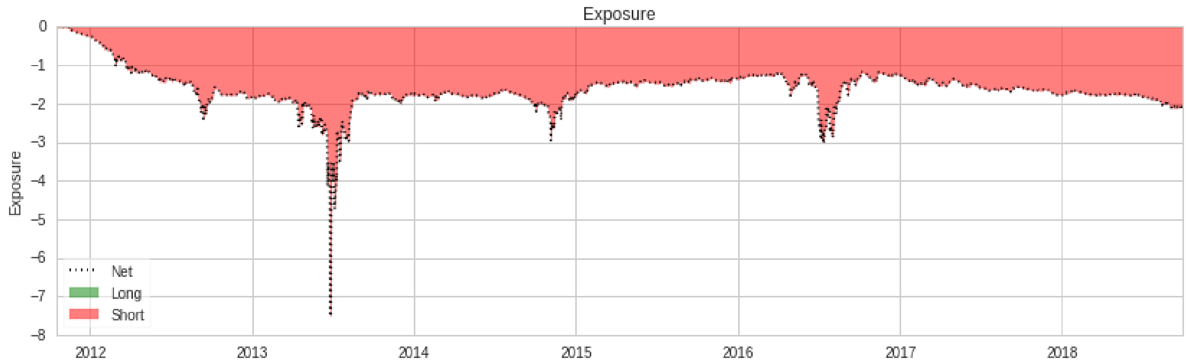


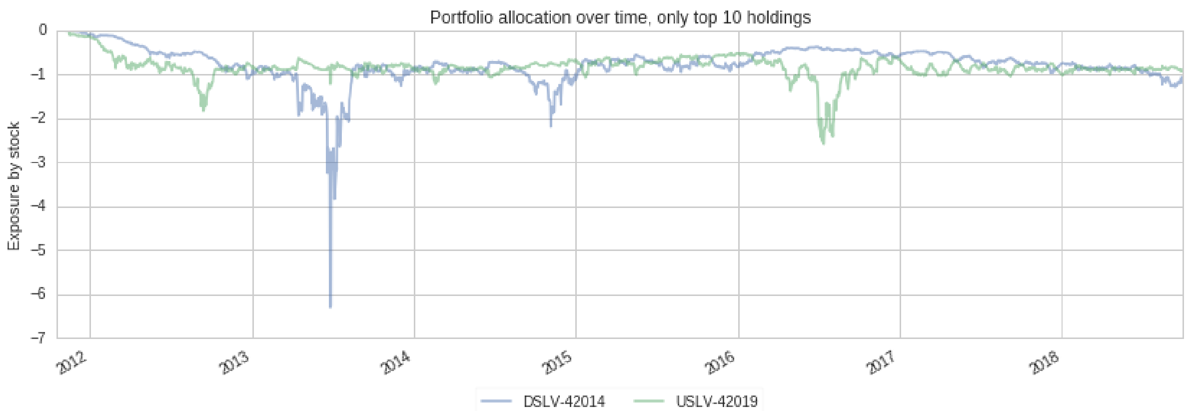
Top 10 long positions of all time	max

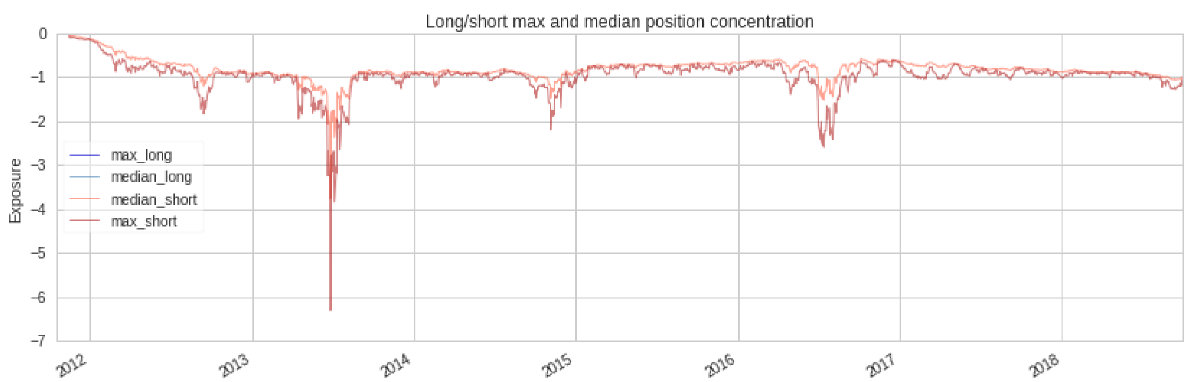
Top 10 short positions of all time	max
DSLV-42014	-630.40%
USLV-42019	-259.04%

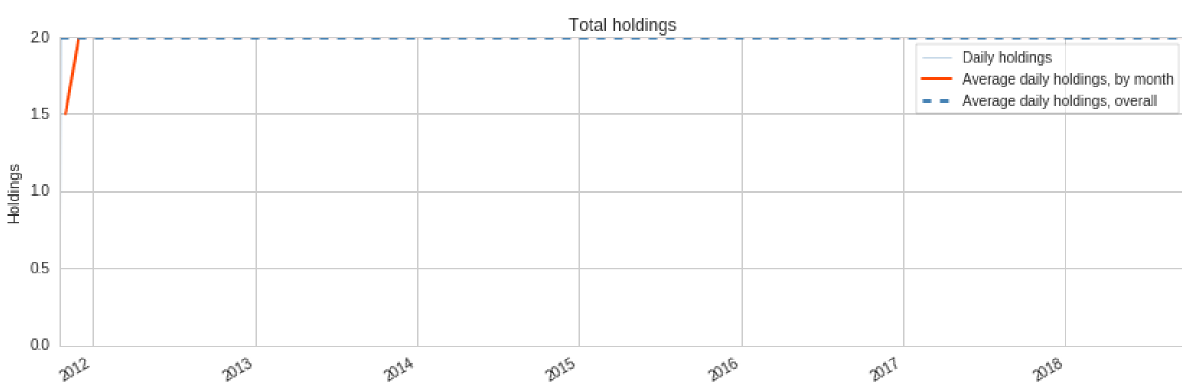
Top 10 positions of all time	max
DSLV-42014	630.40%
USLV-42019	259.04%

All positions ever held	max
DSLV-42014	630.40%
USLV-42019	259.04%

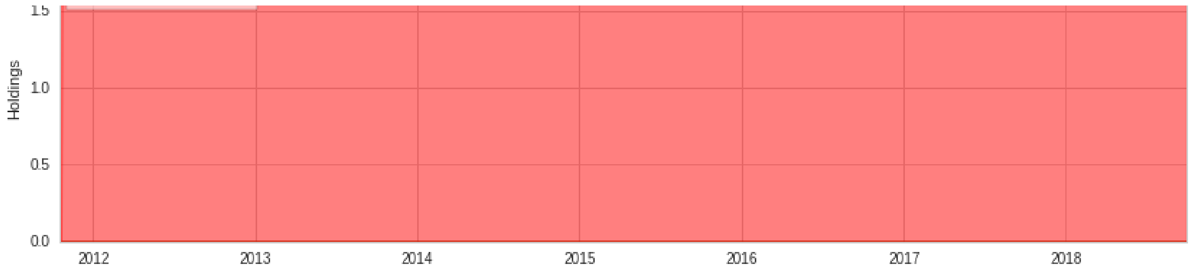

Exposure
Exposure
Net
Long
Short
2012
2013
2014
2015
2016
2017
2018

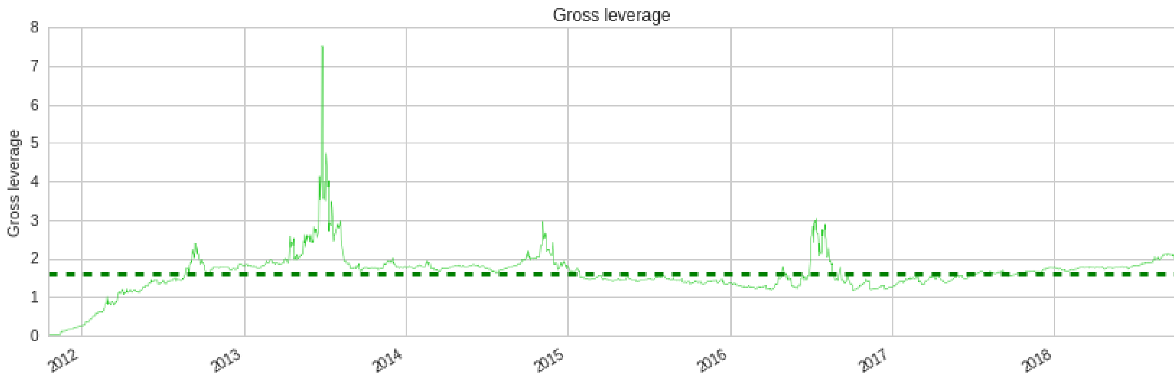

Portfolio allocation over time, only top 10 holdings
Exposure by stock
DSLV-42014
USLV-42019

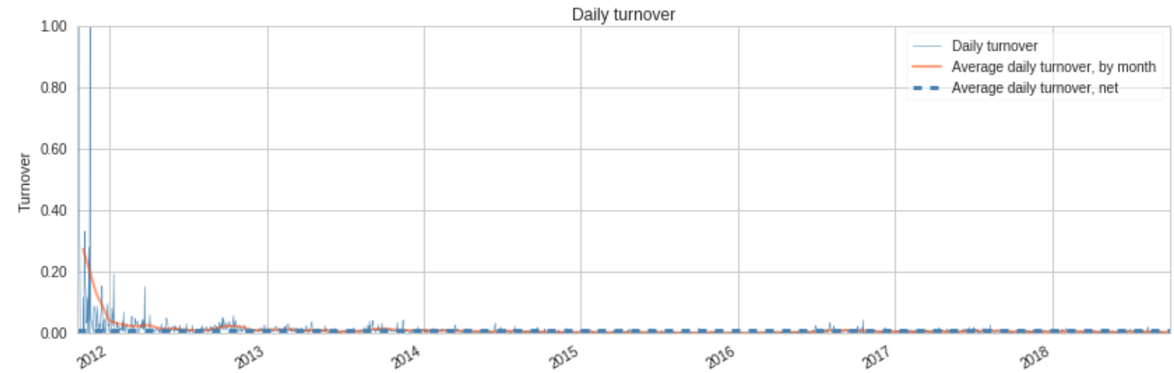

Long/short max and median position concentration
Exposure
max_long
median_long
median_short
max_short


Total holdings
Holdings
Daily holdings
Average daily holdings, by month
Average daily holdings, overall

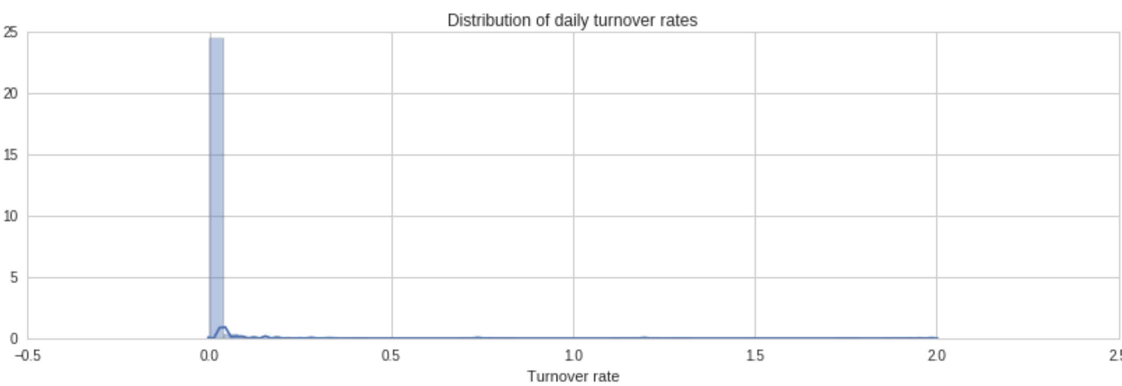

Long and short holdings
Long (max: 0, min: 0)
Short (max: 2, min: 0)
Overlap

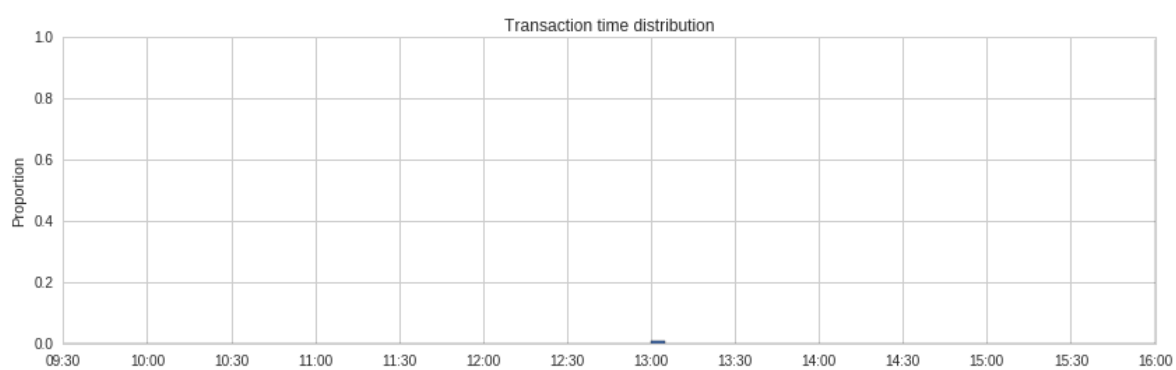

Holdings
1.5
1.0
0.5
0.0
2012
2013
2014
2015
2016
2017
2018


Gross leverage
Gross leverage
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
2017
2018


Daily turnover
Turnover
Daily turnover
Average daily turnover, by month
Average daily turnover, net
1.00
0.80
0.60
0.40
0.20
0.00
2012
2013
2014
2015
2016
2017
2018


Daily trading volume
Amount of shares traded
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2012
2013
2014
2015
2016
2017
2018


Distribution of daily turnover rates
Turnover rate
25
20
15
10
5
0
−0.5
0.0
0.5
1.0
1.5
2.0
2.5


Transaction time distribution
Proportion
1.0
0.8
0.6
0.4
0.2
0.0
09:30
10:00
10:30
11:00
11:30
12:00
12:30
13:00
13:30
14:00
14:30
15:00
15:30
16:00

In [ ]: