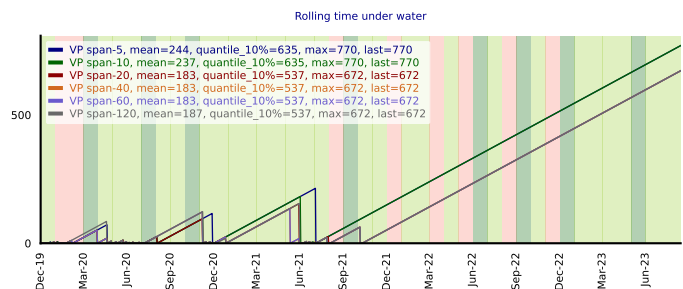


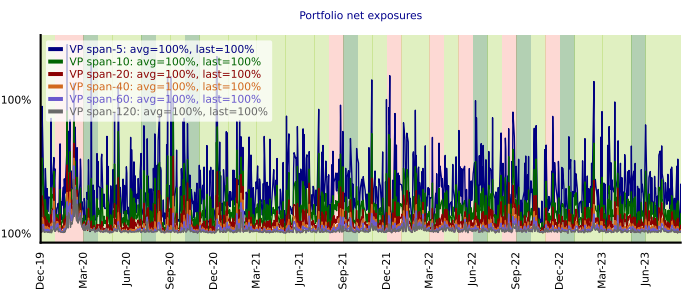
RA performance table: 31Dec2019 - 12Sep2023

	Total	P.a.	Vol	Ex. Sharpe	MaxDD	Skew	An Alpha	Beta	R2
SPY	46.5%	10.9%	21.1%	0.43	-34%	-1.3	-0.0%	1.00	100%
VP span-5	-3.6%	-1.0%	10.0%	-0.25	-23%	-0.7	-5.9%	0.38	59%
VP span-10	0.0%	0.0%	9.9%	-0.16	-22%	-0.7	-5.0%	0.38	60%
VP span-20	2.4%	0.6%	9.9%	-0.09	-22%	-0.7	-4.4%	0.39	60%
VP span-40	3.7%	1.0%	9.9%	-0.06	-22%	-0.8	-4.1%	0.39	61%
VP span-60	3.9%	1.0%	10.0%	-0.05	-22%	-0.8	-4.1%	0.39	62%
VP span-120	3.5%	0.9%	10.1%	-0.06	-22%	-0.8	-4.3%	0.40	62%



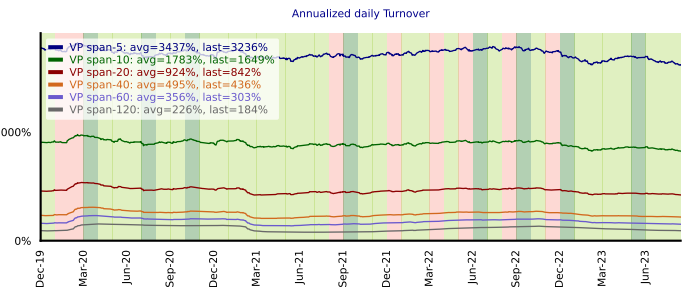
QE returns

	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	total
VP span-5	-2%	8%	2%	3%	-5%	4%	-2%	2%	-5%	-10%	-6%	3%	6%	2%	-1%	-4%
VP span-10	-1%	8%	2%	3%	-4%	4%	-1%	2%	-5%	-10%	-6%	4%	6%	2%	-1%	0%
VP span-20	-1%	8%	3%	3%	-4%	4%	-1%	2%	-5%	-10%	-6%	4%	7%	2%	-1%	2%
VP span-40	-1%	9%	3%	3%	-4%	4%	-1%	2%	-5%	-10%	-7%	4%	7%	2%	-1%	4%
VP span-60	-2%	9%	3%	3%	-4%	4%	-1%	2%	-5%	-10%	-7%	4%	7%	2%	-1%	4%
VP span-120	-2%	9%	4%	3%	-4%	4%	-0%	2%	-5%	-10%	-6%	4%	7%	1%	-1%	3%

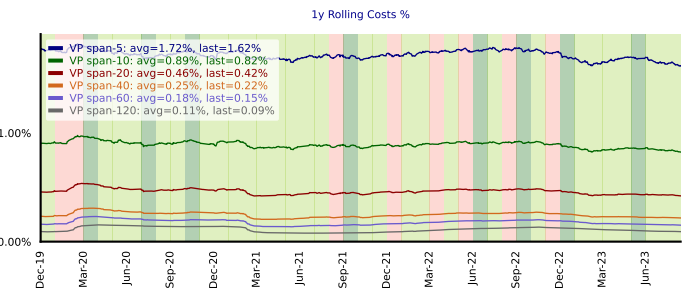
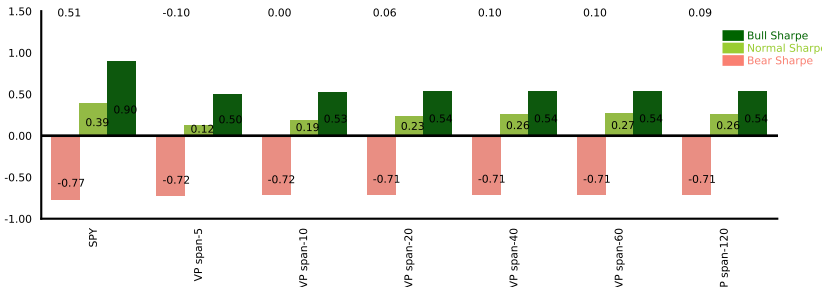


Correlation of W-WED returns

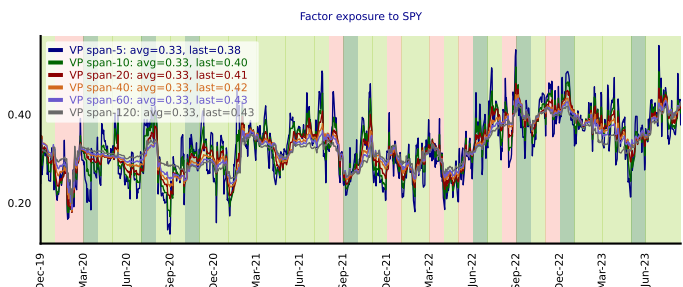
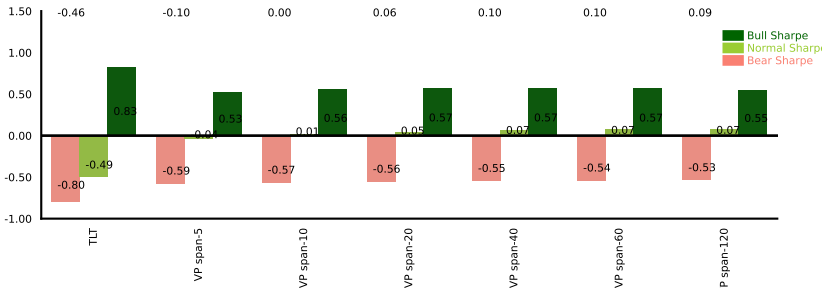
	VP span-5	VP span-10	VP span-20	VP span-40	VP span-60	VP span-120
VP span-5	100%	100%	99%	99%	99%	99%
VP span-10	100%	100%	100%	100%	100%	100%
VP span-20	99%	100%	100%	100%	100%	100%
VP span-40	99%	100%	100%	100%	100%	100%
VP span-60	99%	100%	100%	100%	100%	100%
VP span-120	99%	100%	100%	100%	100%	100%



Sharpe ratio decomposition by Strategies to SPY Bear/Normal/Bull regimes



Sharpe ratio decomposition by Strategies to TLT Bear/Normal/Bull regimes



Factor exposure to TLT

